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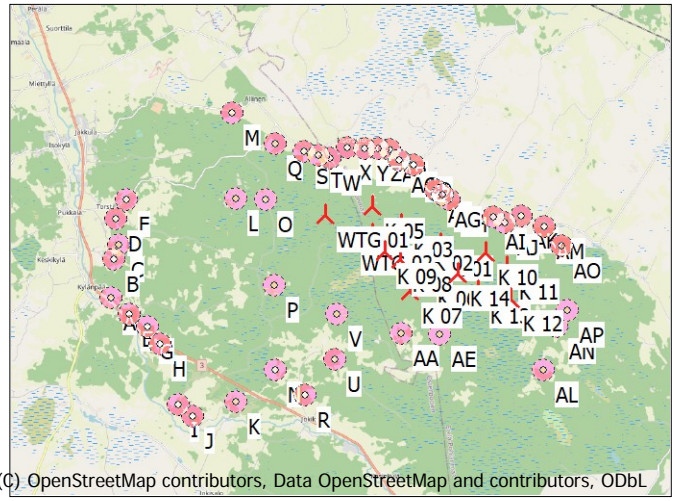
Benjamin Stjernberg / b.stjernberg@prokon.net
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Main Result

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

Calculation is done according to Finnish guideline " Ympäristöhallinnon ohjeita 2 | 2014 " from the Ministry of the Environment of Finland

All coordinates are in
Finish TM ETRS-TM35FIN-ETRS89




Scale 1:200 000

New WTG  Noise sensitive area

## WTGs

| | East | North | Z | Row data/Description | WTG type Valid | Manufact. | Type-generator | Power, rated | Rotor diameter | Hub height | Noise data Creator | Name | Wind speed | LwA,ref | Uncertainty |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | [m] | | | | | [kW] | [m] | [m] | | | [m/s] | [dB(A)] | [dB(A)] |
| K 01 | 258 892,0 | 6 984 359,0 | 45,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 02 | 258 361,0 | 6 984 512,0 | 52,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 149,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 03 | 257 878,0 | 6 984 922,0 | 48,3 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 04 | 257 087,0 | 6 984 720,0 | 50,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 05 | 257 163,0 | 6 985 462,0 | 49,2 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 06 | 258 414,0 | 6 983 575,0 | 52,5 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 148,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 07 | 257 962,0 | 6 983 145,0 | 54,9 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 149,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 08 | 257 766,0 | 6 984 006,0 | 52,5 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 149,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 09 | 257 382,0 | 6 984 262,0 | 50,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 10 | 260 052,0 | 6 984 010,0 | 50,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 11 | 260 574,0 | 6 983 589,0 | 45,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 12 | 260 637,0 | 6 982 769,0 | 47,5 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 13 | 259 773,0 | 6 983 040,0 | 51,0 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| K 14 | 259 278,0 | 6 983 511,0 | 52,5 | NORDEX N163/6.X-6800 6800 1... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 107,2 | 2,0 |
| WTG 01 | 255 892,0 | 6 985 353,0 | 50,0 | NORDEX N175/6.X-6800 6800 1... | Yes | NORDEX | N175/6.X-6800-6 800 | 6 800 | 175,0 | 171,5 | USER | Mode 0 - Third Octaves - 106,9 dB(A) (STE) | 8,0 | 106,9 | 2,0 |
| WTG 02 | 256 462,0 | 6 984 661,0 | 50,0 | NORDEX N175/6.X-6800 6800 1... | Yes | NORDEX | N175/6.X-6800-6 800 | 6 800 | 175,0 | 171,5 | USER | Mode 0 - Third Octaves - 106,9 dB(A) (STE) | 8,0 | 106,9 | 2,0 |

# Calculation Results

## Sound level

| Noise sensitive area No. | Name | East | North | Z | Immission height | Demands Noise | Sound level From WTGs | Uncertainty margin | WTG+Uncertainty margin | Distance to noise demand | Demands fulfilled ? Noise | 2 dB penalty applied for one or more WTGs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | [m] | [m] | [dB(A)] | [dB(A)] | [dB] | [dB(A)] | [m] | | |
| A | Noise sensitive point: Finnish normal frequency - User defined (131) | 250 049,0 | 6 983 575,0 | 30,7 | 4,0 | 40,0 | 20,6 | 2,0 | 22,6 | 5 241 | Yes | No |
| B | Noise sensitive point: Finnish normal frequency - User defined (130) | 250 198,0 | 6 984 576,0 | 26,7 | 4,0 | 40,0 | 20,9 | 2,0 | 22,9 | 4 899 | Yes | No |
| C | Noise sensitive point: Finnish normal frequency - User defined (129) | 250 341,0 | 6 984 961,0 | 25,5 | 4,0 | 40,0 | 21,2 | 2,0 | 23,2 | 4 722 | Yes | No |
| D | Noise sensitive point: Finnish normal frequency - User defined (128) | 250 343,0 | 6 985 667,0 | 26,2 | 4,0 | 40,0 | 21,0 | 2,0 | 23,0 | 4 723 | Yes | No |
| E | Noise sensitive point: Finnish normal frequency - User defined (127) | 250 494,0 | 6 983 108,0 | 30,4 | 4,0 | 40,0 | 21,2 | 2,0 | 23,2 | 4 964 | Yes | No |
| F | Noise sensitive point: Finnish normal frequency - User defined (126) | 250 645,0 | 6 986 141,0 | 27,5 | 4,0 | 40,0 | 21,4 | 2,0 | 23,4 | 4 476 | Yes | No |
| G | Noise sensitive point: Finnish normal frequency - User defined (125) | 250 968,0 | 6 982 726,0 | 35,0 | 4,0 | 40,0 | 21,8 | 2,0 | 23,8 | 4 678 | Yes | No |
| H | Noise sensitive point: Finnish normal frequency - User defined (124) | 251 226,0 | 6 982 266,0 | 32,5 | 4,0 | 40,0 | 21,9 | 2,0 | 23,9 | 4 662 | Yes | No |
| I | Noise sensitive point: Finnish normal frequency - User defined (123) | 251 592,0 | 6 980 644,0 | 35,9 | 4,0 | 40,0 | 21,3 | 2,0 | 23,3 | 5 274 | Yes | No |
| J | Noise sensitive point: Finnish normal frequency - User defined (122) | 251 960,0 | 6 980 299,0 | 35,0 | 4,0 | 40,0 | 21,5 | 2,0 | 23,5 | 5 227 | Yes | No |
| K | Noise sensitive point: Finnish normal frequency - User defined (121) | 253 131,0 | 6 980 587,0 | 42,5 | 4,0 | 40,0 | 23,4 | 2,0 | 25,4 | 4 202 | Yes | No |
| L | Noise sensitive point: Finnish normal frequency - User defined (120) | 253 546,0 | 6 985 931,0 | 45,0 | 4,0 | 40,0 | 28,5 | 2,0 | 30,5 | 1 590 | Yes | No |
| M | Noise sensitive point: Finnish normal frequency - User defined (119) | 253 607,0 | 6 988 208,0 | 22,5 | 4,0 | 40,0 | 24,9 | 2,0 | 26,9 | 2 828 | Yes | No |
| N | Noise sensitive point: Finnish normal frequency - User defined (118) | 254 248,0 | 6 981 332,0 | 42,5 | 4,0 | 40,0 | 26,3 | 2,0 | 28,3 | 2 908 | Yes | No |
| O | Noise sensitive point: Finnish normal frequency - User defined (117) | 254 339,0 | 6 985 826,0 | 55,0 | 4,0 | 40,0 | 32,1 | 2,0 | 34,1 | 799 | Yes | No |
| P | Noise sensitive point: Finnish normal frequency - User defined (116) | 254 373,0 | 6 983 560,0 | 45,0 | 4,0 | 40,0 | 30,8 | 2,0 | 32,8 | 1 301 | Yes | No |
| Q | Noise sensitive point: Finnish normal frequency - User defined (115) | 254 693,0 | 6 987 302,0 | 28,9 | 4,0 | 40,0 | 29,3 | 2,0 | 31,3 | 1 453 | Yes | No |
| R | Noise sensitive point: Finnish normal frequency - User defined (114) | 255 007,0 | 6 980 631,0 | 40,0 | 4,0 | 40,0 | 26,3 | 2,0 | 28,3 | 2 891 | Yes | No |
| S | Noise sensitive point: Finnish normal frequency - User defined (113) | 255 437,0 | 6 987 054,0 | 29,5 | 4,0 | 40,0 | 32,0 | 2,0 | 34,0 | 902 | Yes | No |
| T | Noise sensitive point: Finnish normal frequency - User defined (112) | 255 814,0 | 6 986 908,0 | 28,4 | 4,0 | 40,0 | 33,5 | 2,0 | 35,5 | 666 | Yes | No |
| U | Noise sensitive point: Finnish normal frequency - User defined (111) | 255 826,0 | 6 981 493,0 | 40,8 | 4,0 | 40,0 | 29,8 | 2,0 | 31,8 | 1 703 | Yes | No |
| V | Noise sensitive point: Finnish normal frequency - User defined (110) | 255 991,0 | 6 982 694,0 | 43,4 | 4,0 | 40,0 | 34,0 | 2,0 | 36,0 | 743 | Yes | No |
| W | Noise sensitive point: Finnish normal frequency - User defined (109) | 256 145,0 | 6 986 833,0 | 25,0 | 4,0 | 40,0 | 34,4 | 2,0 | 36,4 | 549 | Yes | No |
| X | Noise sensitive point: Finnish normal frequency - User defined (108) | 256 601,0 | 6 987 078,0 | 25,0 | 4,0 | 40,0 | 33,5 | 2,0 | 35,5 | 727 | Yes | No |
| Y | Noise sensitive point: Finnish normal frequency - User defined (107) | 257 040,0 | 6 987 001,0 | 27,5 | 4,0 | 40,0 | 34,1 | 2,0 | 36,1 | 600 | Yes | No |
| Z | Noise sensitive point: Finnish normal frequency - User defined (106) | 257 405,0 | 6 986 979,0 | 28,1 | 4,0 | 40,0 | 34,1 | 2,0 | 36,1 | 595 | Yes | No |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Main Result

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

*...continued from previous page*

| Noise sensitive area | | | | | | Demands | Sound level | | | | Demands fulfilled ? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Name | East | North | Z | Immission height | Noise | From WTGs | Uncertainty margin | WTG+Uncertainty margin | Distance to noise demand | Noise | 2 dB penalty applied for one or more WTGs |
| | | | | [m] | [m] | [dB(A)] | [dB(A)] | [dB] | [dB(A)] | [m] | | |
| AA | Noise sensitive point: Finnish normal frequency - User defined (105) | 257 676,0 | 6 982 066,0 | 49,8 | 4,0 | 40,0 | 36,6 | 2,0 | 38,6 | 183 | Yes | No |
| AB | Noise sensitive point: Finnish normal frequency - User defined (104) | 257 698,0 | 6 986 934,0 | 27,5 | 4,0 | 40,0 | 34,1 | 2,0 | 36,1 | 607 | Yes | No |
| AC | Noise sensitive point: Finnish normal frequency - User defined (103) | 257 931,0 | 6 986 612,0 | 27,5 | 4,0 | 40,0 | 35,5 | 2,0 | 37,5 | 375 | Yes | No |
| AD | Noise sensitive point: Finnish normal frequency - User defined (102) | 258 308,0 | 6 986 493,0 | 29,9 | 4,0 | 40,0 | 35,4 | 2,0 | 37,4 | 419 | Yes | No |
| AE | Noise sensitive point: Finnish normal frequency - User defined (101) | 258 674,0 | 6 981 951,0 | 52,2 | 4,0 | 40,0 | 36,6 | 2,0 | 38,6 | 232 | Yes | No |
| AF | Noise sensitive point: Finnish normal frequency - User defined (99) | 258 840,0 | 6 985 771,0 | 30,0 | 4,0 | 40,0 | 37,9 | 2,0 | 39,9 | 20 | Yes | No |
| AG | Noise sensitive point: Finnish normal frequency - User defined (100) | 259 027,3 | 6 985 623,4 | 32,1 | 4,0 | 40,0 | 38,1 | 2,0 | 40,1 | -18 | **No** | No |
| AH | Noise sensitive point: Finnish normal frequency - User defined (98) | 259 178,0 | 6 985 473,0 | 37,3 | 4,0 | 40,0 | 38,5 | 2,0 | 40,5 | -74 | **No** | No |
| AI | Noise sensitive point: Finnish normal frequency - User defined (97) | 260 319,0 | 6 984 939,0 | 44,5 | 4,0 | 40,0 | 38,3 | 2,0 | 40,3 | -34 | **No** | No |
| AJ | Noise sensitive point: Finnish normal frequency - User defined (96) | 260 630,0 | 6 984 768,0 | 35,9 | 4,0 | 40,0 | 38,3 | 2,0 | 40,3 | -34 | **No** | No |
| AK | Noise sensitive point: Finnish normal frequency - User defined (95) | 261 049,0 | 6 984 913,0 | 35,0 | 4,0 | 40,0 | 35,6 | 2,0 | 37,6 | 329 | Yes | No |
| AL | Noise sensitive point: Finnish normal frequency - User defined (94) | 261 344,0 | 6 980 808,0 | 48,3 | 4,0 | 40,0 | 29,9 | 2,0 | 31,9 | 1 268 | Yes | No |
| AM | Noise sensitive point: Finnish normal frequency - User defined (93) | 261 661,0 | 6 984 584,0 | 36,9 | 4,0 | 40,0 | 34,1 | 2,0 | 36,1 | 542 | Yes | No |
| AN | Noise sensitive point: Finnish normal frequency - User defined (92) | 261 796,0 | 6 981 916,0 | 47,5 | 4,0 | 40,0 | 33,0 | 2,0 | 35,0 | 629 | Yes | No |
| AO | Noise sensitive point: Finnish normal frequency - User defined (91) | 262 098,0 | 6 984 032,0 | 39,6 | 4,0 | 40,0 | 33,1 | 2,0 | 35,1 | 682 | Yes | No |
| AP | Noise sensitive point: Finnish normal frequency - User defined (90) | 262 110,0 | 6 982 324,0 | 50,0 | 4,0 | 40,0 | 32,6 | 2,0 | 34,6 | 710 | Yes | No |

## Distances (m)

| | WTG | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NSA | K 01 | K 02 | K 03 | K 04 | K 05 | K 06 | K 07 | K 08 | K 09 | K 10 | K 11 | K 12 | K 13 | K 14 | WTG 01 | WTG 02 |
| A | 8872 | 8359 | 7938 | 7126 | 7355 | 8359 | 7919 | 7724 | 7360 | 10006 | 10518 | 10611 | 9732 | 9223 | 6103 | 6500 |
| B | 8691 | 8158 | 7682 | 6886 | 7016 | 8271 | 7889 | 7584 | 7186 | 9863 | 10416 | 10587 | 9691 | 9136 | 5743 | 6260 |
| C | 8566 | 8027 | 7532 | 6746 | 6836 | 8185 | 7829 | 7481 | 7071 | 9751 | 10317 | 10520 | 9619 | 9048 | 5561 | 6124 |
| D | 8642 | 8095 | 7566 | 6805 | 6818 | 8332 | 8020 | 7601 | 7173 | 9843 | 10433 | 10687 | 9782 | 9185 | 5554 | 6197 |
| E | 8485 | 7986 | 7598 | 6782 | 7067 | 7928 | 7463 | 7322 | 6979 | 9594 | 10085 | 10142 | 9273 | 8787 | 5842 | 6162 |
| F | 8431 | 7881 | 7330 | 6592 | 6549 | 8176 | 7901 | 7429 | 6989 | 9639 | 10245 | 10538 | 9634 | 9018 | 5302 | 5998 |
| G | 8085 | 7600 | 7246 | 6431 | 6768 | 7489 | 7002 | 6913 | 6591 | 9168 | 9638 | 9662 | 8805 | 8341 | 5577 | 5821 |
| H | 7941 | 7475 | 7158 | 6350 | 6738 | 7301 | 6788 | 6763 | 6467 | 8990 | 9435 | 9418 | 8576 | 8142 | 5591 | 5754 |
| I | 8185 | 7791 | 7598 | 6837 | 7360 | 7420 | 6839 | 7025 | 6823 | 9099 | 9446 | 9285 | 8519 | 8198 | 6372 | 6309 |
| J | 8028 | 7658 | 7504 | 6765 | 7325 | 7233 | 6638 | 6884 | 6711 | 8896 | 9215 | 9016 | 8274 | 7986 | 6399 | 6264 |
| K | 6881 | 6535 | 6424 | 5717 | 6322 | 6065 | 5463 | 5756 | 5615 | 7716 | 8020 | 7811 | 7076 | 6802 | 5504 | 5259 |
| L | 5569 | 5016 | 4445 | 3740 | 3645 | 5404 | 5218 | 4635 | 4180 | 6779 | 7403 | 7759 | 6861 | 6218 | 2414 | 3178 |
| M | 6534 | 6018 | 5385 | 4924 | 4490 | 6672 | 6674 | 5908 | 5457 | 7686 | 8353 | 8882 | 8040 | 7359 | 3654 | 4550 |
| N | 5540 | 5195 | 5102 | 4417 | 5052 | 4728 | 4130 | 4416 | 4287 | 6388 | 6712 | 6544 | 5779 | 5478 | 4341 | 3995 |
| O | 4780 | 4228 | 3650 | 2960 | 2845 | 4652 | 4504 | 3878 | 3419 | 5991 | 6620 | 6996 | 6102 | 5451 | 1622 | 2420 |
| P | 4586 | 4097 | 3758 | 2949 | 3374 | 4038 | 3610 | 3420 | 3088 | 5693 | 6197 | 6309 | 5421 | 4902 | 2348 | 2360 |
| Q | 5124 | 4605 | 3973 | 3519 | 3078 | 5263 | 5285 | 4503 | 4056 | 6285 | 6950 | 7470 | 6627 | 5945 | 2287 | 3177 |
| R | 5381 | 5126 | 5159 | 4584 | 5287 | 4500 | 3877 | 4356 | 4336 | 6068 | 6300 | 6018 | 5337 | 5148 | 4801 | 4282 |
| S | 4379 | 3872 | 3239 | 2856 | 2346 | 4576 | 4650 | 3833 | 3400 | 5525 | 6192 | 6734 | 5905 | 5222 | 1760 | 2601 |
| T | 3994 | 3494 | 2862 | 2530 | 1976 | 4224 | 4330 | 3495 | 3074 | 5131 | 5799 | 6351 | 5531 | 4848 | 1556 | 2337 |
| U | 4194 | 3939 | 3993 | 3462 | 4185 | 3319 | 2698 | 3173 | 3174 | 4915 | 5187 | 4974 | 4237 | 3996 | 3858 | 3229 |
| V | 3343 | 2985 | 2918 | 2302 | 3004 | 2576 | 2021 | 2206 | 2095 | 4266 | 4666 | 4644 | 3795 | 3385 | 2659 | 2021 |
| W | 3694 | 3207 | 2578 | 2312 | 1706 | 3968 | 4109 | 3257 | 2851 | 4817 | 5486 | 6054 | 5245 | 4563 | 1500 | 2194 |
| X | 3553 | 3109 | 2504 | 2406 | 1710 | 3942 | 4159 | 3283 | 2920 | 4614 | 5284 | 5900 | 5131 | 4457 | 1864 | 2419 |
| Y | 3224 | 2816 | 2240 | 2280 | 1543 | 3689 | 3962 | 3080 | 2758 | 4242 | 4909 | 5550 | 4809 | 4143 | 2007 | 2409 |
| Z | 3011 | 2644 | 2109 | 2280 | 1535 | 3548 | 3872 | 2993 | 2715 | 3975 | 4637 | 5304 | 4593 | 3939 | 2220 | 2501 |
| AA | 2594 | 2538 | 2861 | 2717 | 3432 | 1679 | 1116 | 1941 | 2214 | 3068 | 3272 | 3041 | 2311 | 2156 | 3737 | 2863 |
| AB | 2836 | 2509 | 2019 | 2295 | 1565 | 3432 | 3796 | 2927 | 2689 | 3751 | 4408 | 5094 | 4409 | 3768 | 2399 | 2586 |
| AC | 2448 | 2142 | 1690 | 2070 | 1382 | 3073 | 3465 | 2609 | 2412 | 3355 | 4013 | 4697 | 4016 | 3379 | 2395 | 2441 |
| AD | 2211 | 1980 | 1628 | 2151 | 1540 | 2918 | 3364 | 2544 | 2414 | 3032 | 3681 | 4389 | 3748 | 3134 | 2670 | 2599 |
| AE | 2416 | 2578 | 3074 | 3189 | 3820 | 1644 | 1389 | 2245 | 2646 | 2476 | 2507 | 2125 | 1546 | 1672 | 4392 | 3496 |
| AF | 1412 | 1346 | 1282 | 2043 | 1704 | 2235 | 2767 | 2065 | 2097 | 2136 | 2785 | 3496 | 2884 | 2301 | 2975 | 2623 |
| AG | 1271 | 1295 | 1345 | 2139 | 1870 | 2137 | 2696 | 2050 | 2134 | 1910 | 2554 | 3275 | 2687 | 2126 | 3145 | 2738 |
| AH | 1149 | 1261 | 1411 | 2221 | 2014 | 2045 | 2625 | 2035 | 2165 | 1703 | 2343 | 3070 | 2503 | 1963 | 3286 | 2833 |
| AI | 1539 | 2003 | 2439 | 3237 | 3197 | 2341 | 2960 | 2716 | 3012 | 966 | 1373 | 2192 | 1975 | 1766 | 4443 | 3864 |
| AJ | 1784 | 2282 | 2754 | 3541 | 3533 | 2515 | 3121 | 2962 | 3285 | 953 | 1180 | 1998 | 1928 | 1845 | 4771 | 4167 |
| AK | 2226 | 2716 | 3169 | 3964 | 3922 | 2953 | 3555 | 3404 | 3722 | 1344 | 1406 | 2182 | 2265 | 2257 | 5172 | 4591 |
| AL | 4312 | 4753 | 5376 | 5778 | 6252 | 4027 | 4108 | 4796 | 5253 | 3451 | 2884 | 2083 | 2728 | 3400 | 7093 | 6215 |
| AM | 2776 | 3299 | 3796 | 4573 | 4580 | 3398 | 3966 | 3935 | 4288 | 1707 | 1473 | 2083 | 2437 | 2612 | 5816 | 5196 |
| AN | 3792 | 4303 | 4935 | 5477 | 5830 | 3765 | 4024 | 4537 | 4995 | 2723 | 2070 | 1438 | 2313 | 2979 | 6827 | 5995 |
| AO | 3221 | 3765 | 4310 | 5055 | 5135 | 3710 | 4227 | 4329 | 4719 | 2045 | 1586 | 1930 | 2526 | 2866 | 6341 | 5667 |
| AP | 3805 | 4338 | 4963 | 5562 | 5854 | 3899 | 4226 | 4655 | 5106 | 2659 | 1989 | 1538 | 2443 | 3069 | 6912 | 6108 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Assumptions

Calculated L(DW) = LWA,ref + K + Dc - (Adiv + Aatm + Agr + Abar + Amisc) - Cmet
(when calculated with ground attenuation, then Dc = Domega)

| | |
|---|---|
| LWA,ref: | Sound pressure level at WTG |
| K: | Pure tone |
| Dc: | Directivity correction |
| Adiv: | the attenuation due to geometrical divergence |
| Aatm: | the attenuation due to atmospheric absorption |
| Agr: | the attenuation due to ground effect |
| Abar: | the attenuation due to a barrier |
| Amisc: | the attenuation due to miscellaneous other effects |
| Cmet: | Meteorological correction |

## Calculation Results

### Noise sensitive area: A Noise sensitive point: Finnish normal frequency - User defined (131)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 8 872 | 8 873 | 0 | 7,06 | 2,00 | **9,06** | 107,2 | 0,00 | 89,96 | - | - | 0,00 | 0,00 | - |
| K 02 | 8 359 | 8 360 | 0 | 7,77 | 2,00 | **9,77** | 107,2 | 0,00 | 89,44 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 938 | 7 940 | 0 | 8,38 | 2,00 | **10,38** | 107,2 | 0,00 | 89,00 | - | - | 0,00 | 0,00 | - |
| K 04 | 7 126 | 7 127 | 0 | 9,65 | 2,00 | **11,65** | 107,2 | 0,00 | 88,06 | - | - | 0,00 | 0,00 | - |
| K 05 | 7 355 | 7 357 | 0 | 9,28 | 2,00 | **11,28** | 107,2 | 0,00 | 88,33 | - | - | 0,00 | 0,00 | - |
| K 06 | 8 359 | 8 361 | 0 | 7,78 | 2,00 | **9,78** | 107,2 | 0,00 | 89,44 | - | - | 0,00 | 0,00 | - |
| K 07 | 7 919 | 7 921 | 0 | 8,41 | 2,00 | **10,41** | 107,2 | 0,00 | 88,98 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 724 | 7 725 | 0 | 8,71 | 2,00 | **10,71** | 107,2 | 0,00 | 88,76 | - | - | 0,00 | 0,00 | - |
| K 09 | 7 360 | 7 362 | 0 | 9,27 | 2,00 | **11,27** | 107,2 | 0,00 | 88,34 | - | - | 0,00 | 0,00 | - |
| K 10 | 10 006 | 10 007 | 0 | 5,62 | 2,00 | **7,62** | 107,2 | 0,00 | 91,01 | - | - | 0,00 | 0,00 | - |
| K 11 | 10 518 | 10 519 | 0 | 5,02 | 2,00 | **7,02** | 107,2 | 0,00 | 91,44 | - | - | 0,00 | 0,00 | - |
| K 12 | 10 611 | 10 613 | 0 | 4,91 | 2,00 | **6,91** | 107,2 | 0,00 | 91,52 | - | - | 0,00 | 0,00 | - |
| K 13 | 9 732 | 9 733 | 0 | 5,95 | 2,00 | **7,95** | 107,2 | 0,00 | 90,77 | - | - | 0,00 | 0,00 | - |
| K 14 | 9 223 | 9 224 | 0 | 6,59 | 2,00 | **8,59** | 107,2 | 0,00 | 90,30 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 6 103 | 6 106 | 0 | 12,35 | 2,00 | **14,35** | 106,9 | 0,00 | 86,72 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 500 | 6 502 | 0 | 11,62 | 2,00 | **13,62** | 106,9 | 0,00 | 87,26 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **22,59** | | | | | | | | |

*- Data undefined due to calculation with octave data*

### Noise sensitive area: B Noise sensitive point: Finnish normal frequency - User defined (130)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 8 691 | 8 692 | 0 | 7,30 | 2,00 | **9,30** | 107,2 | 0,00 | 89,78 | - | - | 0,00 | 0,00 | - |
| K 02 | 8 158 | 8 159 | 0 | 8,06 | 2,00 | **10,06** | 107,2 | 0,00 | 89,23 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 682 | 7 684 | 0 | 8,76 | 2,00 | **10,76** | 107,2 | 0,00 | 88,71 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 886 | 6 888 | 0 | 10,05 | 2,00 | **12,05** | 107,2 | 0,00 | 87,76 | - | - | 0,00 | 0,00 | - |
| K 05 | 7 016 | 7 018 | 0 | 9,83 | 2,00 | **11,83** | 107,2 | 0,00 | 87,92 | - | - | 0,00 | 0,00 | - |
| K 06 | 8 271 | 8 273 | 0 | 7,91 | 2,00 | **9,91** | 107,2 | 0,00 | 89,35 | - | - | 0,00 | 0,00 | - |
| K 07 | 7 889 | 7 891 | 0 | 8,46 | 2,00 | **10,46** | 107,2 | 0,00 | 88,94 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 584 | 7 586 | 0 | 8,92 | 2,00 | **10,92** | 107,2 | 0,00 | 88,60 | - | - | 0,00 | 0,00 | - |
| K 09 | 7 186 | 7 188 | 0 | 9,55 | 2,00 | **11,55** | 107,2 | 0,00 | 88,13 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 863 | 9 865 | 0 | 5,79 | 2,00 | **7,79** | 107,2 | 0,00 | 90,88 | - | - | 0,00 | 0,00 | - |
| K 11 | 10 416 | 10 417 | 0 | 5,13 | 2,00 | **7,13** | 107,2 | 0,00 | 91,35 | - | - | 0,00 | 0,00 | - |
| K 12 | 10 587 | 10 588 | 0 | 4,94 | 2,00 | **6,94** | 107,2 | 0,00 | 91,50 | - | - | 0,00 | 0,00 | - |
| K 13 | 9 691 | 9 692 | 0 | 6,00 | 2,00 | **8,00** | 107,2 | 0,00 | 90,73 | - | - | 0,00 | 0,00 | - |
| K 14 | 9 136 | 9 138 | 0 | 6,71 | 2,00 | **8,71** | 107,2 | 0,00 | 90,22 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 743 | 5 746 | 0 | 13,04 | 2,00 | **15,04** | 106,9 | 0,00 | 86,19 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 260 | 6 263 | 0 | 12,05 | 2,00 | **14,05** | 106,9 | 0,00 | 86,94 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **22,94** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: C Noise sensitive point: Finnish normal frequency - User defined (129)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 8 566 | 8 568 | 0 | 7,48 | 2,00 | **9,48** | 107,2 | 0,00 | 89,66 | - | - | 0,00 | 0,00 | - |
| K 02 | 8 027 | 8 029 | 0 | 8,25 | 2,00 | **10,25** | 107,2 | 0,00 | 89,09 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 532 | 7 534 | 0 | 9,00 | 2,00 | **11,00** | 107,2 | 0,00 | 88,54 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 746 | 6 748 | 0 | 10,29 | 2,00 | **12,29** | 107,2 | 0,00 | 87,58 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 836 | 6 838 | 0 | 10,13 | 2,00 | **12,13** | 107,2 | 0,00 | 87,70 | - | - | 0,00 | 0,00 | - |
| K 06 | 8 185 | 8 187 | 0 | 8,03 | 2,00 | **10,03** | 107,2 | 0,00 | 89,26 | - | - | 0,00 | 0,00 | - |
| K 07 | 7 829 | 7 831 | 0 | 8,55 | 2,00 | **10,55** | 107,2 | 0,00 | 88,88 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 481 | 7 483 | 0 | 9,08 | 2,00 | **11,08** | 107,2 | 0,00 | 88,48 | - | - | 0,00 | 0,00 | - |
| K 09 | 7 071 | 7 073 | 0 | 9,74 | 2,00 | **11,74** | 107,2 | 0,00 | 87,99 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 751 | 9 752 | 0 | 5,93 | 2,00 | **7,93** | 107,2 | 0,00 | 90,78 | - | - | 0,00 | 0,00 | - |
| K 11 | 10 317 | 10 319 | 0 | 5,25 | 2,00 | **7,25** | 107,2 | 0,00 | 91,27 | - | - | 0,00 | 0,00 | - |
| K 12 | 10 520 | 10 521 | 0 | 5,01 | 2,00 | **7,01** | 107,2 | 0,00 | 91,44 | - | - | 0,00 | 0,00 | - |
| K 13 | 9 619 | 9 621 | 0 | 6,09 | 2,00 | **8,09** | 107,2 | 0,00 | 90,66 | - | - | 0,00 | 0,00 | - |
| K 14 | 9 048 | 9 049 | 0 | 6,82 | 2,00 | **8,82** | 107,2 | 0,00 | 90,13 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 561 | 5 564 | 0 | 13,41 | 2,00 | **15,41** | 106,9 | 0,00 | 85,91 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 124 | 6 127 | 0 | 12,31 | 2,00 | **14,31** | 106,9 | 0,00 | 86,75 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,16** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: D Noise sensitive point: Finnish normal frequency - User defined (128)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 8 642 | 8 644 | 0 | 7,37 | 2,00 | **9,37** | 107,2 | 0,00 | 89,73 | - | - | 0,00 | 0,00 | - |
| K 02 | 8 095 | 8 097 | 0 | 8,15 | 2,00 | **10,15** | 107,2 | 0,00 | 89,17 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 566 | 7 568 | 0 | 8,94 | 2,00 | **10,94** | 107,2 | 0,00 | 88,58 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 805 | 6 808 | 0 | 10,18 | 2,00 | **12,18** | 107,2 | 0,00 | 87,66 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 818 | 6 820 | 0 | 10,16 | 2,00 | **12,16** | 107,2 | 0,00 | 87,68 | - | - | 0,00 | 0,00 | - |
| K 06 | 8 332 | 8 334 | 0 | 7,82 | 2,00 | **9,82** | 107,2 | 0,00 | 89,42 | - | - | 0,00 | 0,00 | - |
| K 07 | 8 020 | 8 022 | 0 | 8,26 | 2,00 | **10,26** | 107,2 | 0,00 | 89,09 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 601 | 7 603 | 0 | 8,90 | 2,00 | **10,90** | 107,2 | 0,00 | 88,62 | - | - | 0,00 | 0,00 | - |
| K 09 | 7 173 | 7 175 | 0 | 9,57 | 2,00 | **11,57** | 107,2 | 0,00 | 88,12 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 843 | 9 844 | 0 | 5,81 | 2,00 | **7,81** | 107,2 | 0,00 | 90,86 | - | - | 0,00 | 0,00 | - |
| K 11 | 10 433 | 10 434 | 0 | 5,11 | 2,00 | **7,11** | 107,2 | 0,00 | 91,37 | - | - | 0,00 | 0,00 | - |
| K 12 | 10 687 | 10 688 | 0 | 4,82 | 2,00 | **6,82** | 107,2 | 0,00 | 91,58 | - | - | 0,00 | 0,00 | - |
| K 13 | 9 782 | 9 784 | 0 | 5,89 | 2,00 | **7,89** | 107,2 | 0,00 | 90,81 | - | - | 0,00 | 0,00 | - |
| K 14 | 9 185 | 9 187 | 0 | 6,64 | 2,00 | **8,64** | 107,2 | 0,00 | 90,26 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 554 | 5 557 | 0 | 13,42 | 2,00 | **15,42** | 106,9 | 0,00 | 85,90 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 197 | 6 200 | 0 | 12,17 | 2,00 | **14,17** | 106,9 | 0,00 | 86,85 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,05** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: E Noise sensitive point: Finnish normal frequency - User defined (127)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 8 485 | 8 486 | 0 | 7,59 | 2,00 | **9,59** | 107,2 | 0,00 | 89,57 | - | - | 0,00 | 0,00 | - |
| K 02 | 7 986 | 7 987 | 0 | 8,31 | 2,00 | **10,31** | 107,2 | 0,00 | 89,05 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 598 | 7 600 | 0 | 8,89 | 2,00 | **10,89** | 107,2 | 0,00 | 88,62 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 782 | 6 784 | 0 | 10,22 | 2,00 | **12,22** | 107,2 | 0,00 | 87,63 | - | - | 0,00 | 0,00 | - |
| K 05 | 7 067 | 7 069 | 0 | 9,74 | 2,00 | **11,74** | 107,2 | 0,00 | 87,99 | - | - | 0,00 | 0,00 | - |
| K 06 | 7 928 | 7 930 | 0 | 8,41 | 2,00 | **10,41** | 107,2 | 0,00 | 88,99 | - | - | 0,00 | 0,00 | - |
| K 07 | 7 463 | 7 465 | 0 | 9,11 | 2,00 | **11,11** | 107,2 | 0,00 | 88,46 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 322 | 7 324 | 0 | 9,34 | 2,00 | **11,34** | 107,2 | 0,00 | 88,30 | - | - | 0,00 | 0,00 | - |
| K 09 | 6 979 | 6 981 | 0 | 9,89 | 2,00 | **11,89** | 107,2 | 0,00 | 87,88 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 594 | 9 595 | 0 | 6,12 | 2,00 | **8,12** | 107,2 | 0,00 | 90,64 | - | - | 0,00 | 0,00 | - |
| K 11 | 10 085 | 10 086 | 0 | 5,52 | 2,00 | **7,52** | 107,2 | 0,00 | 91,07 | - | - | 0,00 | 0,00 | - |
| K 12 | 10 142 | 10 143 | 0 | 5,45 | 2,00 | **7,45** | 107,2 | 0,00 | 91,12 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 9 273 | 9 274 | 0 | 6,53 | 2,00 | **8,53** | 107,2 | 0,00 | 90,35 | - | - | 0,00 | 0,00 | - |
| K 14 | 8 787 | 8 789 | 0 | 7,17 | 2,00 | **9,17** | 107,2 | 0,00 | 89,88 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 842 | 5 845 | 0 | 12,85 | 2,00 | **14,85** | 106,9 | 0,00 | 86,34 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 162 | 6 165 | 0 | 12,24 | 2,00 | **14,24** | 106,9 | 0,00 | 86,80 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,16** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: F Noise sensitive point: Finnish normal frequency - User defined (126)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 8 431 | 8 433 | 0 | 7,66 | 2,00 | **9,66** | 107,2 | 0,00 | 89,52 | - | - | 0,00 | 0,00 | - |
| K 02 | 7 881 | 7 882 | 0 | 8,47 | 2,00 | **10,47** | 107,2 | 0,00 | 88,93 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 330 | 7 332 | 0 | 9,32 | 2,00 | **11,32** | 107,2 | 0,00 | 88,30 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 592 | 6 594 | 0 | 10,55 | 2,00 | **12,55** | 107,2 | 0,00 | 87,38 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 549 | 6 551 | 0 | 10,63 | 2,00 | **12,63** | 107,2 | 0,00 | 87,33 | - | - | 0,00 | 0,00 | - |
| K 06 | 8 176 | 8 178 | 0 | 8,04 | 2,00 | **10,04** | 107,2 | 0,00 | 89,25 | - | - | 0,00 | 0,00 | - |
| K 07 | 7 901 | 7 903 | 0 | 8,44 | 2,00 | **10,44** | 107,2 | 0,00 | 88,96 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 429 | 7 431 | 0 | 9,17 | 2,00 | **11,17** | 107,2 | 0,00 | 88,42 | - | - | 0,00 | 0,00 | - |
| K 09 | 6 989 | 6 991 | 0 | 9,87 | 2,00 | **11,87** | 107,2 | 0,00 | 87,89 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 639 | 9 640 | 0 | 6,07 | 2,00 | **8,07** | 107,2 | 0,00 | 90,68 | - | - | 0,00 | 0,00 | - |
| K 11 | 10 245 | 10 246 | 0 | 5,33 | 2,00 | **7,33** | 107,2 | 0,00 | 91,21 | - | - | 0,00 | 0,00 | - |
| K 12 | 10 538 | 10 540 | 0 | 4,99 | 2,00 | **6,99** | 107,2 | 0,00 | 91,46 | - | - | 0,00 | 0,00 | - |
| K 13 | 9 634 | 9 635 | 0 | 6,07 | 2,00 | **8,07** | 107,2 | 0,00 | 90,68 | - | - | 0,00 | 0,00 | - |
| K 14 | 9 018 | 9 020 | 0 | 6,86 | 2,00 | **8,86** | 107,2 | 0,00 | 90,10 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 302 | 5 306 | 0 | 13,95 | 2,00 | **15,95** | 106,9 | 0,00 | 85,49 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 998 | 6 001 | 0 | 12,55 | 2,00 | **14,55** | 106,9 | 0,00 | 86,56 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,40** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: G Noise sensitive point: Finnish normal frequency - User defined (125)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 8 085 | 8 086 | 0 | 8,16 | 2,00 | **10,16** | 107,2 | 0,00 | 89,16 | - | - | 0,00 | 0,00 | - |
| K 02 | 7 600 | 7 602 | 0 | 8,90 | 2,00 | **10,90** | 107,2 | 0,00 | 88,62 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 246 | 7 247 | 0 | 9,45 | 2,00 | **11,45** | 107,2 | 0,00 | 88,20 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 431 | 6 433 | 0 | 10,84 | 2,00 | **12,84** | 107,2 | 0,00 | 87,17 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 768 | 6 769 | 0 | 10,25 | 2,00 | **12,25** | 107,2 | 0,00 | 87,61 | - | - | 0,00 | 0,00 | - |
| K 06 | 7 489 | 7 491 | 0 | 9,08 | 2,00 | **11,08** | 107,2 | 0,00 | 88,49 | - | - | 0,00 | 0,00 | - |
| K 07 | 7 002 | 7 004 | 0 | 9,86 | 2,00 | **11,86** | 107,2 | 0,00 | 87,91 | - | - | 0,00 | 0,00 | - |
| K 08 | 6 913 | 6 915 | 0 | 10,01 | 2,00 | **12,01** | 107,2 | 0,00 | 87,80 | - | - | 0,00 | 0,00 | - |
| K 09 | 6 591 | 6 593 | 0 | 10,56 | 2,00 | **12,56** | 107,2 | 0,00 | 87,38 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 168 | 9 169 | 0 | 6,67 | 2,00 | **8,67** | 107,2 | 0,00 | 90,25 | - | - | 0,00 | 0,00 | - |
| K 11 | 9 638 | 9 639 | 0 | 6,07 | 2,00 | **8,07** | 107,2 | 0,00 | 90,68 | - | - | 0,00 | 0,00 | - |
| K 12 | 9 662 | 9 664 | 0 | 6,04 | 2,00 | **8,04** | 107,2 | 0,00 | 90,70 | - | - | 0,00 | 0,00 | - |
| K 13 | 8 805 | 8 806 | 0 | 7,15 | 2,00 | **9,15** | 107,2 | 0,00 | 89,90 | - | - | 0,00 | 0,00 | - |
| K 14 | 8 341 | 8 343 | 0 | 7,79 | 2,00 | **9,79** | 107,2 | 0,00 | 89,43 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 577 | 5 580 | 0 | 13,38 | 2,00 | **15,38** | 106,9 | 0,00 | 85,93 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 821 | 5 824 | 0 | 12,89 | 2,00 | **14,89** | 106,9 | 0,00 | 86,30 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,77** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: H Noise sensitive point: Finnish normal frequency - User defined (124)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 7 941 | 7 943 | 0 | 8,37 | 2,00 | **10,37** | 107,2 | 0,00 | 89,00 | - | - | 0,00 | 0,00 | - |
| K 02 | 7 475 | 7 477 | 0 | 9,09 | 2,00 | **11,09** | 107,2 | 0,00 | 88,47 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 158 | 7 160 | 0 | 9,59 | 2,00 | **11,59** | 107,2 | 0,00 | 88,10 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 350 | 6 352 | 0 | 10,99 | 2,00 | **12,99** | 107,2 | 0,00 | 87,06 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 738 | 6 740 | 0 | 10,30 | 2,00 | **12,30** | 107,2 | 0,00 | 87,57 | - | - | 0,00 | 0,00 | - |
| K 06 | 7 301 | 7 303 | 0 | 9,38 | 2,00 | **11,38** | 107,2 | 0,00 | 88,27 | - | - | 0,00 | 0,00 | - |
| K 07 | 6 788 | 6 790 | 0 | 10,22 | 2,00 | **12,22** | 107,2 | 0,00 | 87,64 | - | - | 0,00 | 0,00 | - |
| K 08 | 6 763 | 6 765 | 0 | 10,27 | 2,00 | **12,27** | 107,2 | 0,00 | 87,61 | - | - | 0,00 | 0,00 | - |
| K 09 | 6 467 | 6 469 | 0 | 10,78 | 2,00 | **12,78** | 107,2 | 0,00 | 87,22 | - | - | 0,00 | 0,00 | - |
| K 10 | 8 990 | 8 992 | 0 | 6,90 | 2,00 | **8,90** | 107,2 | 0,00 | 90,08 | - | - | 0,00 | 0,00 | - |
| K 11 | 9 435 | 9 436 | 0 | 6,32 | 2,00 | **8,32** | 107,2 | 0,00 | 90,50 | - | - | 0,00 | 0,00 | - |
| K 12 | 9 418 | 9 419 | 0 | 6,34 | 2,00 | **8,34** | 107,2 | 0,00 | 90,48 | - | - | 0,00 | 0,00 | - |
| K 13 | 8 576 | 8 578 | 0 | 7,46 | 2,00 | **9,46** | 107,2 | 0,00 | 89,67 | - | - | 0,00 | 0,00 | - |
| K 14 | 8 142 | 8 144 | 0 | 8,08 | 2,00 | **10,08** | 107,2 | 0,00 | 89,22 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 591 | 5 594 | 0 | 13,35 | 2,00 | **15,35** | 106,9 | 0,00 | 85,95 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 754 | 5 757 | 0 | 13,02 | 2,00 | **15,02** | 106,9 | 0,00 | 86,20 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,94** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: I Noise sensitive point: Finnish normal frequency - User defined (123)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 8 185 | 8 187 | 0 | 8,02 | 2,00 | **10,02** | 107,2 | 0,00 | 89,26 | - | - | 0,00 | 0,00 | - |
| K 02 | 7 791 | 7 792 | 0 | 8,61 | 2,00 | **10,61** | 107,2 | 0,00 | 88,83 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 598 | 7 600 | 0 | 8,89 | 2,00 | **10,89** | 107,2 | 0,00 | 88,62 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 837 | 6 839 | 0 | 10,13 | 2,00 | **12,13** | 107,2 | 0,00 | 87,70 | - | - | 0,00 | 0,00 | - |
| K 05 | 7 360 | 7 362 | 0 | 9,27 | 2,00 | **11,27** | 107,2 | 0,00 | 88,34 | - | - | 0,00 | 0,00 | - |
| K 06 | 7 420 | 7 422 | 0 | 9,19 | 2,00 | **11,19** | 107,2 | 0,00 | 88,41 | - | - | 0,00 | 0,00 | - |
| K 07 | 6 839 | 6 841 | 0 | 10,14 | 2,00 | **12,14** | 107,2 | 0,00 | 87,70 | - | - | 0,00 | 0,00 | - |
| K 08 | 7 025 | 7 027 | 0 | 9,82 | 2,00 | **11,82** | 107,2 | 0,00 | 87,94 | - | - | 0,00 | 0,00 | - |
| K 09 | 6 823 | 6 825 | 0 | 10,15 | 2,00 | **12,15** | 107,2 | 0,00 | 87,68 | - | - | 0,00 | 0,00 | - |
| K 10 | 9 099 | 9 100 | 0 | 6,76 | 2,00 | **8,76** | 107,2 | 0,00 | 90,18 | - | - | 0,00 | 0,00 | - |
| K 11 | 9 446 | 9 447 | 0 | 6,31 | 2,00 | **8,31** | 107,2 | 0,00 | 90,51 | - | - | 0,00 | 0,00 | - |
| K 12 | 9 285 | 9 286 | 0 | 6,51 | 2,00 | **8,51** | 107,2 | 0,00 | 90,36 | - | - | 0,00 | 0,00 | - |
| K 13 | 8 519 | 8 520 | 0 | 7,54 | 2,00 | **9,54** | 107,2 | 0,00 | 89,61 | - | - | 0,00 | 0,00 | - |
| K 14 | 8 198 | 8 199 | 0 | 8,00 | 2,00 | **10,00** | 107,2 | 0,00 | 89,28 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 6 372 | 6 375 | 0 | 11,85 | 2,00 | **13,85** | 106,9 | 0,00 | 87,09 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 309 | 6 311 | 0 | 11,97 | 2,00 | **13,97** | 106,9 | 0,00 | 87,00 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,31** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: J Noise sensitive point: Finnish normal frequency - User defined (122)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 8 028 | 8 029 | 0 | 8,25 | 2,00 | **10,25** | 107,2 | 0,00 | 89,09 | - | - | 0,00 | 0,00 | - |
| K 02 | 7 658 | 7 659 | 0 | 8,81 | 2,00 | **10,81** | 107,2 | 0,00 | 88,68 | - | - | 0,00 | 0,00 | - |
| K 03 | 7 504 | 7 506 | 0 | 9,04 | 2,00 | **11,04** | 107,2 | 0,00 | 88,51 | - | - | 0,00 | 0,00 | - |
| K 04 | 6 765 | 6 767 | 0 | 10,25 | 2,00 | **12,25** | 107,2 | 0,00 | 87,61 | - | - | 0,00 | 0,00 | - |
| K 05 | 7 325 | 7 327 | 0 | 9,32 | 2,00 | **11,32** | 107,2 | 0,00 | 88,30 | - | - | 0,00 | 0,00 | - |
| K 06 | 7 233 | 7 235 | 0 | 9,49 | 2,00 | **11,49** | 107,2 | 0,00 | 88,19 | - | - | 0,00 | 0,00 | - |
| K 07 | 6 638 | 6 640 | 0 | 10,48 | 2,00 | **12,48** | 107,2 | 0,00 | 87,44 | - | - | 0,00 | 0,00 | - |
| K 08 | 6 884 | 6 886 | 0 | 10,06 | 2,00 | **12,06** | 107,2 | 0,00 | 87,76 | - | - | 0,00 | 0,00 | - |
| K 09 | 6 711 | 6 713 | 0 | 10,35 | 2,00 | **12,35** | 107,2 | 0,00 | 87,54 | - | - | 0,00 | 0,00 | - |
| K 10 | 8 896 | 8 898 | 0 | 7,03 | 2,00 | **9,03** | 107,2 | 0,00 | 89,99 | - | - | 0,00 | 0,00 | - |
| K 11 | 9 215 | 9 216 | 0 | 6,61 | 2,00 | **8,61** | 107,2 | 0,00 | 90,29 | - | - | 0,00 | 0,00 | - |
| K 12 | 9 016 | 9 017 | 0 | 6,87 | 2,00 | **8,87** | 107,2 | 0,00 | 90,10 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 8 274 | 8 276 | 0 | 7,89 | 2,00 | **9,89** | 107,2 | 0,00 | 89,36 | - | - | 0,00 | 0,00 | - |
| K 14 | 7 986 | 7 988 | 0 | 8,31 | 2,00 | **10,31** | 107,2 | 0,00 | 89,05 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 6 399 | 6 402 | 0 | 11,80 | 2,00 | **13,80** | 106,9 | 0,00 | 87,13 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 264 | 6 267 | 0 | 12,05 | 2,00 | **14,05** | 106,9 | 0,00 | 86,94 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **23,49** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: K Noise sensitive point: Finnish normal frequency - User defined (121)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 6 881 | 6 883 | 0 | 10,06 | 2,00 | **12,06** | 107,2 | 0,00 | 87,76 | - | - | 0,00 | 0,00 | - |
| K 02 | 6 535 | 6 536 | 0 | 10,67 | 2,00 | **12,67** | 107,2 | 0,00 | 87,31 | - | - | 0,00 | 0,00 | - |
| K 03 | 6 424 | 6 426 | 0 | 10,85 | 2,00 | **12,85** | 107,2 | 0,00 | 87,16 | - | - | 0,00 | 0,00 | - |
| K 04 | 5 717 | 5 719 | 0 | 12,20 | 2,00 | **14,20** | 107,2 | 0,00 | 86,15 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 322 | 6 324 | 0 | 11,04 | 2,00 | **13,04** | 107,2 | 0,00 | 87,02 | - | - | 0,00 | 0,00 | - |
| K 06 | 6 065 | 6 067 | 0 | 11,54 | 2,00 | **13,54** | 107,2 | 0,00 | 86,66 | - | - | 0,00 | 0,00 | - |
| K 07 | 5 463 | 5 465 | 0 | 12,73 | 2,00 | **14,73** | 107,2 | 0,00 | 85,75 | - | - | 0,00 | 0,00 | - |
| K 08 | 5 756 | 5 758 | 0 | 12,13 | 2,00 | **14,13** | 107,2 | 0,00 | 86,21 | - | - | 0,00 | 0,00 | - |
| K 09 | 5 615 | 5 618 | 0 | 12,40 | 2,00 | **14,40** | 107,2 | 0,00 | 85,99 | - | - | 0,00 | 0,00 | - |
| K 10 | 7 716 | 7 718 | 0 | 8,71 | 2,00 | **10,71** | 107,2 | 0,00 | 88,75 | - | - | 0,00 | 0,00 | - |
| K 11 | 8 020 | 8 022 | 0 | 8,26 | 2,00 | **10,26** | 107,2 | 0,00 | 89,09 | - | - | 0,00 | 0,00 | - |
| K 12 | 7 811 | 7 813 | 0 | 8,57 | 2,00 | **10,57** | 107,2 | 0,00 | 88,86 | - | - | 0,00 | 0,00 | - |
| K 13 | 7 076 | 7 077 | 0 | 9,73 | 2,00 | **11,73** | 107,2 | 0,00 | 88,00 | - | - | 0,00 | 0,00 | - |
| K 14 | 6 802 | 6 804 | 0 | 10,19 | 2,00 | **12,19** | 107,2 | 0,00 | 87,66 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 504 | 5 507 | 0 | 13,53 | 2,00 | **15,53** | 106,9 | 0,00 | 85,82 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 259 | 5 262 | 0 | 14,04 | 2,00 | **16,04** | 106,9 | 0,00 | 85,42 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **25,40** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: L Noise sensitive point: Finnish normal frequency - User defined (120)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 5 569 | 5 570 | 0 | 12,50 | 2,00 | **14,50** | 107,2 | 0,00 | 85,92 | - | - | 0,00 | 0,00 | - |
| K 02 | 5 016 | 5 019 | 0 | 13,69 | 2,00 | **15,69** | 107,2 | 0,00 | 85,01 | - | - | 0,00 | 0,00 | - |
| K 03 | 4 445 | 4 447 | 0 | 15,11 | 2,00 | **17,11** | 107,2 | 0,00 | 83,96 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 740 | 3 743 | 0 | 17,37 | 2,00 | **19,37** | 107,2 | 0,00 | 82,46 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 645 | 3 648 | 0 | 17,70 | 2,00 | **19,70** | 107,2 | 0,00 | 82,24 | - | - | 0,00 | 0,00 | - |
| K 06 | 5 404 | 5 407 | 0 | 12,86 | 2,00 | **14,86** | 107,2 | 0,00 | 85,66 | - | - | 0,00 | 0,00 | - |
| K 07 | 5 218 | 5 220 | 0 | 13,25 | 2,00 | **15,25** | 107,2 | 0,00 | 85,35 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 635 | 4 638 | 0 | 14,58 | 2,00 | **16,58** | 107,2 | 0,00 | 84,33 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 180 | 4 183 | 0 | 15,91 | 2,00 | **17,91** | 107,2 | 0,00 | 83,43 | - | - | 0,00 | 0,00 | - |
| K 10 | 6 779 | 6 781 | 0 | 10,23 | 2,00 | **12,23** | 107,2 | 0,00 | 87,63 | - | - | 0,00 | 0,00 | - |
| K 11 | 7 403 | 7 404 | 0 | 9,20 | 2,00 | **11,20** | 107,2 | 0,00 | 88,39 | - | - | 0,00 | 0,00 | - |
| K 12 | 7 759 | 7 760 | 0 | 8,65 | 2,00 | **10,65** | 107,2 | 0,00 | 88,80 | - | - | 0,00 | 0,00 | - |
| K 13 | 6 861 | 6 862 | 0 | 10,09 | 2,00 | **12,09** | 107,2 | 0,00 | 87,73 | - | - | 0,00 | 0,00 | - |
| K 14 | 6 218 | 6 220 | 0 | 11,23 | 2,00 | **13,23** | 107,2 | 0,00 | 86,88 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 414 | 2 421 | 0 | 24,06 | 2,00 | **26,06** | 106,9 | 0,00 | 78,68 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 3 178 | 3 183 | 0 | 20,61 | 2,00 | **22,61** | 106,9 | 0,00 | 81,06 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **30,54** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: M Noise sensitive point: Finnish normal frequency - User defined (119)

Wind speed: 8,0 m/s
**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 6 534 | 6 536 | 0 | 10,66 | 2,00 | **12,66** | 107,2 | 0,00 | 87,31 | - | - | 0,00 | 0,00 | - |
| K 02 | 6 018 | 6 020 | 0 | 11,62 | 2,00 | **13,62** | 107,2 | 0,00 | 86,59 | - | - | 0,00 | 0,00 | - |
| K 03 | 5 385 | 5 388 | 0 | 12,88 | 2,00 | **14,88** | 107,2 | 0,00 | 85,63 | - | - | 0,00 | 0,00 | - |
| K 04 | 4 924 | 4 927 | 0 | 13,89 | 2,00 | **15,89** | 107,2 | 0,00 | 84,85 | - | - | 0,00 | 0,00 | - |
| K 05 | 4 490 | 4 493 | 0 | 14,98 | 2,00 | **16,98** | 107,2 | 0,00 | 84,05 | - | - | 0,00 | 0,00 | - |
| K 06 | 6 672 | 6 674 | 0 | 10,43 | 2,00 | **12,43** | 107,2 | 0,00 | 87,49 | - | - | 0,00 | 0,00 | - |
| K 07 | 6 674 | 6 676 | 0 | 10,42 | 2,00 | **12,42** | 107,2 | 0,00 | 87,49 | - | - | 0,00 | 0,00 | - |
| K 08 | 5 908 | 5 911 | 0 | 11,83 | 2,00 | **13,83** | 107,2 | 0,00 | 86,43 | - | - | 0,00 | 0,00 | - |
| K 09 | 5 457 | 5 460 | 0 | 12,73 | 2,00 | **14,73** | 107,2 | 0,00 | 85,74 | - | - | 0,00 | 0,00 | - |
| K 10 | 7 686 | 7 688 | 0 | 8,76 | 2,00 | **10,76** | 107,2 | 0,00 | 88,72 | - | - | 0,00 | 0,00 | - |
| K 11 | 8 353 | 8 355 | 0 | 7,77 | 2,00 | **9,77** | 107,2 | 0,00 | 89,44 | - | - | 0,00 | 0,00 | - |
| K 12 | 8 882 | 8 884 | 0 | 7,04 | 2,00 | **9,04** | 107,2 | 0,00 | 89,97 | - | - | 0,00 | 0,00 | - |
| K 13 | 8 040 | 8 042 | 0 | 8,23 | 2,00 | **10,23** | 107,2 | 0,00 | 89,11 | - | - | 0,00 | 0,00 | - |
| K 14 | 7 359 | 7 361 | 0 | 9,27 | 2,00 | **11,27** | 107,2 | 0,00 | 88,34 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 3 654 | 3 659 | 0 | 18,81 | 2,00 | **20,81** | 106,9 | 0,00 | 82,27 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 4 550 | 4 554 | 0 | 15,95 | 2,00 | **17,95** | 106,9 | 0,00 | 84,17 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **26,87** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: N Noise sensitive point: Finnish normal frequency - User defined (118)

Wind speed: 8,0 m/s
**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 5 540 | 5 542 | 0 | 12,56 | 2,00 | **14,56** | 107,2 | 0,00 | 85,87 | - | - | 0,00 | 0,00 | - |
| K 02 | 5 195 | 5 198 | 0 | 13,30 | 2,00 | **15,30** | 107,2 | 0,00 | 85,32 | - | - | 0,00 | 0,00 | - |
| K 03 | 5 102 | 5 104 | 0 | 13,49 | 2,00 | **15,49** | 107,2 | 0,00 | 85,16 | - | - | 0,00 | 0,00 | - |
| K 04 | 4 417 | 4 420 | 0 | 15,19 | 2,00 | **17,19** | 107,2 | 0,00 | 83,91 | - | - | 0,00 | 0,00 | - |
| K 05 | 5 052 | 5 054 | 0 | 13,60 | 2,00 | **15,60** | 107,2 | 0,00 | 85,07 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 728 | 4 731 | 0 | 14,37 | 2,00 | **16,37** | 107,2 | 0,00 | 84,50 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 130 | 4 133 | 0 | 16,07 | 2,00 | **18,07** | 107,2 | 0,00 | 83,33 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 416 | 4 419 | 0 | 15,20 | 2,00 | **17,20** | 107,2 | 0,00 | 83,91 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 287 | 4 290 | 0 | 15,58 | 2,00 | **17,58** | 107,2 | 0,00 | 83,65 | - | - | 0,00 | 0,00 | - |
| K 10 | 6 388 | 6 390 | 0 | 10,92 | 2,00 | **12,92** | 107,2 | 0,00 | 87,11 | - | - | 0,00 | 0,00 | - |
| K 11 | 6 712 | 6 714 | 0 | 10,35 | 2,00 | **12,35** | 107,2 | 0,00 | 87,54 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 544 | 6 546 | 0 | 10,64 | 2,00 | **12,64** | 107,2 | 0,00 | 87,32 | - | - | 0,00 | 0,00 | - |
| K 13 | 5 779 | 5 781 | 0 | 12,07 | 2,00 | **14,07** | 107,2 | 0,00 | 86,24 | - | - | 0,00 | 0,00 | - |
| K 14 | 5 478 | 5 480 | 0 | 12,68 | 2,00 | **14,68** | 107,2 | 0,00 | 85,78 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 4 341 | 4 345 | 0 | 16,57 | 2,00 | **18,57** | 106,9 | 0,00 | 83,76 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 3 995 | 3 999 | 0 | 17,65 | 2,00 | **19,65** | 106,9 | 0,00 | 83,04 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **28,31** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: O Noise sensitive point: Finnish normal frequency - User defined (117)

Wind speed: 8,0 m/s
**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 4 780 | 4 782 | 0 | 14,22 | 2,00 | **16,22** | 107,2 | 0,00 | 84,59 | - | - | 0,00 | 0,00 | - |
| K 02 | 4 228 | 4 231 | 0 | 15,77 | 2,00 | **17,77** | 107,2 | 0,00 | 83,53 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 650 | 3 653 | 0 | 17,68 | 2,00 | **19,68** | 107,2 | 0,00 | 82,25 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 960 | 2 964 | 0 | 20,39 | 2,00 | **22,39** | 107,2 | 0,00 | 80,44 | - | - | 0,00 | 0,00 | - |
| K 05 | 2 845 | 2 849 | 0 | 20,90 | 2,00 | **22,90** | 107,2 | 0,00 | 80,09 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 652 | 4 654 | 0 | 14,55 | 2,00 | **16,55** | 107,2 | 0,00 | 84,36 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 504 | 4 506 | 0 | 14,94 | 2,00 | **16,94** | 107,2 | 0,00 | 84,08 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 878 | 3 880 | 0 | 16,90 | 2,00 | **18,90** | 107,2 | 0,00 | 82,78 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 419 | 3 422 | 0 | 18,53 | 2,00 | **20,53** | 107,2 | 0,00 | 81,69 | - | - | 0,00 | 0,00 | - |
| K 10 | 5 991 | 5 992 | 0 | 11,66 | 2,00 | **13,66** | 107,2 | 0,00 | 86,55 | - | - | 0,00 | 0,00 | - |
| K 11 | 6 620 | 6 621 | 0 | 10,51 | 2,00 | **12,51** | 107,2 | 0,00 | 87,42 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 996 | 6 997 | 0 | 9,86 | 2,00 | **11,86** | 107,2 | 0,00 | 87,90 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 6 102 | 6 104 | 0 | 11,45 | 2,00 | **13,45** | 107,2 | 0,00 | 86,71 | - | - | 0,00 | 0,00 | - |
| K 14 | 5 451 | 5 453 | 0 | 12,74 | 2,00 | **14,74** | 107,2 | 0,00 | 85,73 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 1 622 | 1 630 | 0 | 28,85 | 2,00 | **30,85** | 106,9 | 0,00 | 75,25 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 420 | 2 425 | 0 | 24,04 | 2,00 | **26,04** | 106,9 | 0,00 | 78,70 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **34,11** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: P Noise sensitive point: Finnish normal frequency - User defined (116)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 4 586 | 4 588 | 0 | 14,70 | 2,00 | **16,70** | 107,2 | 0,00 | 84,23 | - | - | 0,00 | 0,00 | - |
| K 02 | 4 097 | 4 100 | 0 | 16,18 | 2,00 | **18,18** | 107,2 | 0,00 | 83,26 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 758 | 3 761 | 0 | 17,30 | 2,00 | **19,30** | 107,2 | 0,00 | 82,51 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 949 | 2 953 | 0 | 20,44 | 2,00 | **22,44** | 107,2 | 0,00 | 80,41 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 374 | 3 378 | 0 | 18,70 | 2,00 | **20,70** | 107,2 | 0,00 | 81,57 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 038 | 4 041 | 0 | 16,37 | 2,00 | **18,37** | 107,2 | 0,00 | 83,13 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 610 | 3 614 | 0 | 17,82 | 2,00 | **19,82** | 107,2 | 0,00 | 82,16 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 420 | 3 423 | 0 | 18,53 | 2,00 | **20,53** | 107,2 | 0,00 | 81,69 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 088 | 3 091 | 0 | 19,85 | 2,00 | **21,85** | 107,2 | 0,00 | 80,80 | - | - | 0,00 | 0,00 | - |
| K 10 | 5 693 | 5 695 | 0 | 12,25 | 2,00 | **14,25** | 107,2 | 0,00 | 86,11 | - | - | 0,00 | 0,00 | - |
| K 11 | 6 197 | 6 199 | 0 | 11,27 | 2,00 | **13,27** | 107,2 | 0,00 | 86,85 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 309 | 6 311 | 0 | 11,06 | 2,00 | **13,06** | 107,2 | 0,00 | 87,00 | - | - | 0,00 | 0,00 | - |
| K 13 | 5 421 | 5 423 | 0 | 12,80 | 2,00 | **14,80** | 107,2 | 0,00 | 85,69 | - | - | 0,00 | 0,00 | - |
| K 14 | 4 902 | 4 904 | 0 | 13,94 | 2,00 | **15,94** | 107,2 | 0,00 | 84,81 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 348 | 2 355 | 0 | 24,40 | 2,00 | **26,40** | 106,9 | 0,00 | 78,44 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 360 | 2 366 | 0 | 24,34 | 2,00 | **26,34** | 106,9 | 0,00 | 78,48 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **32,85** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: Q Noise sensitive point: Finnish normal frequency - User defined (115)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 5 124 | 5 127 | 0 | 13,44 | 2,00 | **15,44** | 107,2 | 0,00 | 85,20 | - | - | 0,00 | 0,00 | - |
| K 02 | 4 605 | 4 608 | 0 | 14,65 | 2,00 | **16,65** | 107,2 | 0,00 | 84,27 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 973 | 3 977 | 0 | 16,58 | 2,00 | **18,58** | 107,2 | 0,00 | 82,99 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 519 | 3 523 | 0 | 18,16 | 2,00 | **20,16** | 107,2 | 0,00 | 81,94 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 078 | 3 082 | 0 | 19,88 | 2,00 | **21,88** | 107,2 | 0,00 | 80,78 | - | - | 0,00 | 0,00 | - |
| K 06 | 5 263 | 5 266 | 0 | 13,16 | 2,00 | **15,16** | 107,2 | 0,00 | 85,43 | - | - | 0,00 | 0,00 | - |
| K 07 | 5 285 | 5 288 | 0 | 13,10 | 2,00 | **15,10** | 107,2 | 0,00 | 85,47 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 503 | 4 506 | 0 | 14,94 | 2,00 | **16,94** | 107,2 | 0,00 | 84,08 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 056 | 4 059 | 0 | 16,31 | 2,00 | **18,31** | 107,2 | 0,00 | 83,17 | - | - | 0,00 | 0,00 | - |
| K 10 | 6 285 | 6 287 | 0 | 11,11 | 2,00 | **13,11** | 107,2 | 0,00 | 86,97 | - | - | 0,00 | 0,00 | - |
| K 11 | 6 950 | 6 952 | 0 | 9,94 | 2,00 | **11,94** | 107,2 | 0,00 | 87,84 | - | - | 0,00 | 0,00 | - |
| K 12 | 7 470 | 7 472 | 0 | 9,09 | 2,00 | **11,09** | 107,2 | 0,00 | 88,47 | - | - | 0,00 | 0,00 | - |
| K 13 | 6 627 | 6 629 | 0 | 10,49 | 2,00 | **12,49** | 107,2 | 0,00 | 87,43 | - | - | 0,00 | 0,00 | - |
| K 14 | 5 945 | 5 948 | 0 | 11,75 | 2,00 | **13,75** | 107,2 | 0,00 | 86,49 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 287 | 2 294 | 0 | 24,72 | 2,00 | **26,72** | 106,9 | 0,00 | 78,21 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 3 177 | 3 182 | 0 | 20,61 | 2,00 | **22,61** | 106,9 | 0,00 | 81,05 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **31,26** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: R Noise sensitive point: Finnish normal frequency - User defined (114)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | WTG+Uncertainty margin | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 5 381 | 5 383 | 0 | 12,89 | 2,00 | **14,89** | 107,2 | 0,00 | 85,62 | - | - | 0,00 | 0,00 | - |
| K 02 | 5 126 | 5 128 | 0 | 13,45 | 2,00 | **15,45** | 107,2 | 0,00 | 85,20 | - | - | 0,00 | 0,00 | - |
| K 03 | 5 159 | 5 162 | 0 | 13,36 | 2,00 | **15,36** | 107,2 | 0,00 | 85,26 | - | - | 0,00 | 0,00 | - |
| K 04 | 4 584 | 4 587 | 0 | 14,71 | 2,00 | **16,71** | 107,2 | 0,00 | 84,23 | - | - | 0,00 | 0,00 | - |
| K 05 | 5 287 | 5 289 | 0 | 13,09 | 2,00 | **15,09** | 107,2 | 0,00 | 85,47 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 500 | 4 502 | 0 | 14,95 | 2,00 | **16,95** | 107,2 | 0,00 | 84,07 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 877 | 3 880 | 0 | 16,90 | 2,00 | **18,90** | 107,2 | 0,00 | 82,78 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 356 | 4 359 | 0 | 15,38 | 2,00 | **17,38** | 107,2 | 0,00 | 83,79 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 336 | 4 339 | 0 | 15,44 | 2,00 | **17,44** | 107,2 | 0,00 | 83,75 | - | - | 0,00 | 0,00 | - |
| K 10 | 6 068 | 6 070 | 0 | 11,51 | 2,00 | **13,51** | 107,2 | 0,00 | 86,66 | - | - | 0,00 | 0,00 | - |
| K 11 | 6 300 | 6 302 | 0 | 11,08 | 2,00 | **13,08** | 107,2 | 0,00 | 86,99 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 018 | 6 020 | 0 | 11,61 | 2,00 | **13,61** | 107,2 | 0,00 | 86,59 | - | - | 0,00 | 0,00 | - |
| K 13 | 5 337 | 5 339 | 0 | 12,98 | 2,00 | **14,98** | 107,2 | 0,00 | 85,55 | - | - | 0,00 | 0,00 | - |
| K 14 | 5 148 | 5 150 | 0 | 13,39 | 2,00 | **15,39** | 107,2 | 0,00 | 85,24 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 4 801 | 4 804 | 0 | 15,25 | 2,00 | **17,25** | 106,9 | 0,00 | 84,63 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 4 282 | 4 285 | 0 | 16,75 | 2,00 | **18,75** | 106,9 | 0,00 | 83,64 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **28,30** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: S Noise sensitive point: Finnish normal frequency - User defined (113)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | WTG+Uncertainty margin | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 4 379 | 4 382 | 0 | 15,31 | 2,00 | **17,31** | 107,2 | 0,00 | 83,83 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 872 | 3 875 | 0 | 16,91 | 2,00 | **18,91** | 107,2 | 0,00 | 82,77 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 239 | 3 243 | 0 | 19,23 | 2,00 | **21,23** | 107,2 | 0,00 | 81,22 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 856 | 2 861 | 0 | 20,84 | 2,00 | **22,84** | 107,2 | 0,00 | 80,13 | - | - | 0,00 | 0,00 | - |
| K 05 | 2 346 | 2 352 | 0 | 23,34 | 2,00 | **25,34** | 107,2 | 0,00 | 78,43 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 576 | 4 579 | 0 | 14,73 | 2,00 | **16,73** | 107,2 | 0,00 | 84,22 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 650 | 4 654 | 0 | 14,54 | 2,00 | **16,54** | 107,2 | 0,00 | 84,36 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 833 | 3 837 | 0 | 17,04 | 2,00 | **19,04** | 107,2 | 0,00 | 82,68 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 400 | 3 404 | 0 | 18,60 | 2,00 | **20,60** | 107,2 | 0,00 | 81,64 | - | - | 0,00 | 0,00 | - |
| K 10 | 5 525 | 5 527 | 0 | 12,59 | 2,00 | **14,59** | 107,2 | 0,00 | 85,85 | - | - | 0,00 | 0,00 | - |
| K 11 | 6 192 | 6 194 | 0 | 11,28 | 2,00 | **13,28** | 107,2 | 0,00 | 86,84 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 734 | 6 736 | 0 | 10,31 | 2,00 | **12,31** | 107,2 | 0,00 | 87,57 | - | - | 0,00 | 0,00 | - |
| K 13 | 5 905 | 5 907 | 0 | 11,83 | 2,00 | **13,83** | 107,2 | 0,00 | 86,43 | - | - | 0,00 | 0,00 | - |
| K 14 | 5 222 | 5 225 | 0 | 13,23 | 2,00 | **15,23** | 107,2 | 0,00 | 85,36 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 1 760 | 1 770 | 0 | 27,88 | 2,00 | **29,88** | 106,9 | 0,00 | 75,96 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 601 | 2 608 | 0 | 23,13 | 2,00 | **25,13** | 106,9 | 0,00 | 79,33 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **33,99** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: T Noise sensitive point: Finnish normal frequency - User defined (112)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | WTG+Uncertainty margin | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 994 | 3 997 | 0 | 16,51 | 2,00 | **18,51** | 107,2 | 0,00 | 83,03 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 494 | 3 499 | 0 | 18,24 | 2,00 | **20,24** | 107,2 | 0,00 | 81,88 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 862 | 2 867 | 0 | 20,82 | 2,00 | **22,82** | 107,2 | 0,00 | 80,15 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 530 | 2 535 | 0 | 22,39 | 2,00 | **24,39** | 107,2 | 0,00 | 79,08 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 976 | 1 983 | 0 | 25,48 | 2,00 | **27,48** | 107,2 | 0,00 | 76,95 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 224 | 4 228 | 0 | 15,78 | 2,00 | **17,78** | 107,2 | 0,00 | 83,52 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 330 | 4 333 | 0 | 15,45 | 2,00 | **17,45** | 107,2 | 0,00 | 83,74 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 495 | 3 499 | 0 | 18,24 | 2,00 | **20,24** | 107,2 | 0,00 | 81,88 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 074 | 3 078 | 0 | 19,90 | 2,00 | **21,90** | 107,2 | 0,00 | 80,77 | - | - | 0,00 | 0,00 | - |
| K 10 | 5 131 | 5 133 | 0 | 13,43 | 2,00 | **15,43** | 107,2 | 0,00 | 85,21 | - | - | 0,00 | 0,00 | - |
| K 11 | 5 799 | 5 801 | 0 | 12,03 | 2,00 | **14,03** | 107,2 | 0,00 | 86,27 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 351 | 6 353 | 0 | 10,99 | 2,00 | **12,99** | 107,2 | 0,00 | 87,06 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 5 531 | 5 534 | 0 | 12,57 | 2,00 | **14,57** | 107,2 | 0,00 | 85,86 | - | - | 0,00 | 0,00 | - |
| K 14 | 4 848 | 4 851 | 0 | 14,06 | 2,00 | **16,06** | 107,2 | 0,00 | 84,72 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 1 556 | 1 567 | 0 | 29,32 | 2,00 | **31,32** | 106,9 | 0,00 | 74,90 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 337 | 2 345 | 0 | 24,46 | 2,00 | **26,46** | 106,9 | 0,00 | 78,40 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **35,47** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: U Noise sensitive point: Finnish normal frequency - User defined (111)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 4 194 | 4 197 | 0 | 15,87 | 2,00 | **17,87** | 107,2 | 0,00 | 83,46 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 939 | 3 943 | 0 | 16,69 | 2,00 | **18,69** | 107,2 | 0,00 | 82,92 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 993 | 3 996 | 0 | 16,51 | 2,00 | **18,51** | 107,2 | 0,00 | 83,03 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 462 | 3 466 | 0 | 18,37 | 2,00 | **20,37** | 107,2 | 0,00 | 81,80 | - | - | 0,00 | 0,00 | - |
| K 05 | 4 185 | 4 188 | 0 | 15,90 | 2,00 | **17,90** | 107,2 | 0,00 | 83,44 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 319 | 3 323 | 0 | 18,91 | 2,00 | **20,91** | 107,2 | 0,00 | 81,43 | - | - | 0,00 | 0,00 | - |
| K 07 | 2 698 | 2 703 | 0 | 21,57 | 2,00 | **23,57** | 107,2 | 0,00 | 79,64 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 173 | 3 176 | 0 | 19,50 | 2,00 | **21,50** | 107,2 | 0,00 | 81,04 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 174 | 3 178 | 0 | 19,49 | 2,00 | **21,49** | 107,2 | 0,00 | 81,04 | - | - | 0,00 | 0,00 | - |
| K 10 | 4 915 | 4 918 | 0 | 13,91 | 2,00 | **15,91** | 107,2 | 0,00 | 84,84 | - | - | 0,00 | 0,00 | - |
| K 11 | 5 187 | 5 189 | 0 | 13,30 | 2,00 | **15,30** | 107,2 | 0,00 | 85,30 | - | - | 0,00 | 0,00 | - |
| K 12 | 4 974 | 4 976 | 0 | 13,78 | 2,00 | **15,78** | 107,2 | 0,00 | 84,94 | - | - | 0,00 | 0,00 | - |
| K 13 | 4 237 | 4 239 | 0 | 15,74 | 2,00 | **17,74** | 107,2 | 0,00 | 83,55 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 996 | 3 999 | 0 | 16,50 | 2,00 | **18,50** | 107,2 | 0,00 | 83,04 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 3 858 | 3 862 | 0 | 18,11 | 2,00 | **20,11** | 106,9 | 0,00 | 82,74 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 3 229 | 3 234 | 0 | 20,40 | 2,00 | **22,40** | 106,9 | 0,00 | 81,19 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **31,84** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: V Noise sensitive point: Finnish normal frequency - User defined (110)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 343 | 3 346 | 0 | 18,82 | 2,00 | **20,82** | 107,2 | 0,00 | 81,49 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 985 | 2 989 | 0 | 20,28 | 2,00 | **22,28** | 107,2 | 0,00 | 80,51 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 918 | 2 922 | 0 | 20,57 | 2,00 | **22,57** | 107,2 | 0,00 | 80,31 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 302 | 2 307 | 0 | 23,59 | 2,00 | **25,59** | 107,2 | 0,00 | 78,26 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 004 | 3 008 | 0 | 20,20 | 2,00 | **22,20** | 107,2 | 0,00 | 80,56 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 576 | 2 581 | 0 | 22,16 | 2,00 | **24,16** | 107,2 | 0,00 | 79,24 | - | - | 0,00 | 0,00 | - |
| K 07 | 2 021 | 2 027 | 0 | 25,21 | 2,00 | **27,21** | 107,2 | 0,00 | 77,14 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 206 | 2 211 | 0 | 24,12 | 2,00 | **26,12** | 107,2 | 0,00 | 77,89 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 095 | 2 100 | 0 | 24,77 | 2,00 | **26,77** | 107,2 | 0,00 | 77,45 | - | - | 0,00 | 0,00 | - |
| K 10 | 4 266 | 4 269 | 0 | 15,65 | 2,00 | **17,65** | 107,2 | 0,00 | 83,61 | - | - | 0,00 | 0,00 | - |
| K 11 | 4 666 | 4 669 | 0 | 14,49 | 2,00 | **16,49** | 107,2 | 0,00 | 84,38 | - | - | 0,00 | 0,00 | - |
| K 12 | 4 644 | 4 646 | 0 | 14,54 | 2,00 | **16,54** | 107,2 | 0,00 | 84,34 | - | - | 0,00 | 0,00 | - |
| K 13 | 3 795 | 3 798 | 0 | 17,17 | 2,00 | **19,17** | 107,2 | 0,00 | 82,59 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 385 | 3 388 | 0 | 18,66 | 2,00 | **20,66** | 107,2 | 0,00 | 81,60 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 659 | 2 665 | 0 | 22,86 | 2,00 | **24,86** | 106,9 | 0,00 | 79,51 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 021 | 2 029 | 0 | 26,23 | 2,00 | **28,23** | 106,9 | 0,00 | 77,14 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **36,01** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: W Noise sensitive point: Finnish normal frequency - User defined (109)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 694 | 3 698 | 0 | 17,52 | 2,00 | **19,52** | 107,2 | 0,00 | 82,36 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 207 | 3 211 | 0 | 19,35 | 2,00 | **21,35** | 107,2 | 0,00 | 81,13 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 578 | 2 584 | 0 | 22,15 | 2,00 | **24,15** | 107,2 | 0,00 | 79,24 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 312 | 2 318 | 0 | 23,52 | 2,00 | **25,52** | 107,2 | 0,00 | 78,30 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 706 | 1 715 | 0 | 27,28 | 2,00 | **29,28** | 107,2 | 0,00 | 75,69 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 968 | 3 971 | 0 | 16,59 | 2,00 | **18,59** | 107,2 | 0,00 | 82,98 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 109 | 4 112 | 0 | 16,14 | 2,00 | **18,14** | 107,2 | 0,00 | 83,28 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 257 | 3 261 | 0 | 19,16 | 2,00 | **21,16** | 107,2 | 0,00 | 81,27 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 851 | 2 856 | 0 | 20,87 | 2,00 | **22,87** | 107,2 | 0,00 | 80,12 | - | - | 0,00 | 0,00 | - |
| K 10 | 4 817 | 4 820 | 0 | 14,13 | 2,00 | **16,13** | 107,2 | 0,00 | 84,66 | - | - | 0,00 | 0,00 | - |
| K 11 | 5 486 | 5 489 | 0 | 12,67 | 2,00 | **14,67** | 107,2 | 0,00 | 85,79 | - | - | 0,00 | 0,00 | - |
| K 12 | 6 054 | 6 056 | 0 | 11,54 | 2,00 | **13,54** | 107,2 | 0,00 | 86,64 | - | - | 0,00 | 0,00 | - |
| K 13 | 5 245 | 5 248 | 0 | 13,18 | 2,00 | **15,18** | 107,2 | 0,00 | 85,40 | - | - | 0,00 | 0,00 | - |
| K 14 | 4 563 | 4 567 | 0 | 14,77 | 2,00 | **16,77** | 107,2 | 0,00 | 84,19 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 1 500 | 1 513 | 0 | 29,73 | 2,00 | **31,73** | 106,9 | 0,00 | 74,60 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 194 | 2 202 | 0 | 25,23 | 2,00 | **27,23** | 106,9 | 0,00 | 77,86 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **36,38** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: X Noise sensitive point: Finnish normal frequency - User defined (108)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 553 | 3 557 | 0 | 18,03 | 2,00 | **20,03** | 107,2 | 0,00 | 82,02 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 109 | 3 114 | 0 | 19,75 | 2,00 | **21,75** | 107,2 | 0,00 | 80,87 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 504 | 2 510 | 0 | 22,52 | 2,00 | **24,52** | 107,2 | 0,00 | 78,99 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 406 | 2 412 | 0 | 23,02 | 2,00 | **25,02** | 107,2 | 0,00 | 78,65 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 710 | 1 718 | 0 | 27,26 | 2,00 | **29,26** | 107,2 | 0,00 | 75,70 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 942 | 3 945 | 0 | 16,68 | 2,00 | **18,68** | 107,2 | 0,00 | 82,92 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 159 | 4 163 | 0 | 15,98 | 2,00 | **17,98** | 107,2 | 0,00 | 83,39 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 283 | 3 288 | 0 | 19,05 | 2,00 | **21,05** | 107,2 | 0,00 | 81,34 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 920 | 2 925 | 0 | 20,56 | 2,00 | **22,56** | 107,2 | 0,00 | 80,32 | - | - | 0,00 | 0,00 | - |
| K 10 | 4 614 | 4 618 | 0 | 14,62 | 2,00 | **16,62** | 107,2 | 0,00 | 84,29 | - | - | 0,00 | 0,00 | - |
| K 11 | 5 284 | 5 287 | 0 | 13,09 | 2,00 | **15,09** | 107,2 | 0,00 | 85,46 | - | - | 0,00 | 0,00 | - |
| K 12 | 5 900 | 5 902 | 0 | 11,84 | 2,00 | **13,84** | 107,2 | 0,00 | 86,42 | - | - | 0,00 | 0,00 | - |
| K 13 | 5 131 | 5 134 | 0 | 13,42 | 2,00 | **15,42** | 107,2 | 0,00 | 85,21 | - | - | 0,00 | 0,00 | - |
| K 14 | 4 457 | 4 460 | 0 | 15,08 | 2,00 | **17,08** | 107,2 | 0,00 | 83,99 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 1 864 | 1 874 | 0 | 27,19 | 2,00 | **29,19** | 106,9 | 0,00 | 76,45 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 419 | 2 427 | 0 | 24,03 | 2,00 | **26,03** | 106,9 | 0,00 | 78,70 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **35,51** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: Y Noise sensitive point: Finnish normal frequency - User defined (107)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 224 | 3 228 | 0 | 19,29 | 2,00 | **21,29** | 107,2 | 0,00 | 81,18 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 816 | 2 821 | 0 | 21,02 | 2,00 | **23,02** | 107,2 | 0,00 | 80,01 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 240 | 2 246 | 0 | 23,92 | 2,00 | **25,92** | 107,2 | 0,00 | 78,03 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 280 | 2 286 | 0 | 23,70 | 2,00 | **25,70** | 107,2 | 0,00 | 78,18 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 543 | 1 552 | 0 | 28,50 | 2,00 | **30,50** | 107,2 | 0,00 | 74,82 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 689 | 3 693 | 0 | 17,54 | 2,00 | **19,54** | 107,2 | 0,00 | 82,35 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 962 | 3 966 | 0 | 16,61 | 2,00 | **18,61** | 107,2 | 0,00 | 82,97 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 080 | 3 084 | 0 | 19,88 | 2,00 | **21,88** | 107,2 | 0,00 | 80,78 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 758 | 2 764 | 0 | 21,29 | 2,00 | **23,29** | 107,2 | 0,00 | 79,83 | - | - | 0,00 | 0,00 | - |
| K 10 | 4 242 | 4 245 | 0 | 15,72 | 2,00 | **17,72** | 107,2 | 0,00 | 83,56 | - | - | 0,00 | 0,00 | - |
| K 11 | 4 909 | 4 912 | 0 | 13,92 | 2,00 | **15,92** | 107,2 | 0,00 | 84,82 | - | - | 0,00 | 0,00 | - |
| K 12 | 5 550 | 5 553 | 0 | 12,53 | 2,00 | **14,53** | 107,2 | 0,00 | 85,89 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 4 809 | 4 812 | 0 | 14,15 | 2,00 | **16,15** | 107,2 | 0,00 | 84,65 | - | - | 0,00 | 0,00 | - |
| K 14 | 4 143 | 4 147 | 0 | 16,03 | 2,00 | **18,03** | 107,2 | 0,00 | 83,35 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 007 | 2 016 | 0 | 26,31 | 2,00 | **28,31** | 106,9 | 0,00 | 77,09 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 409 | 2 416 | 0 | 24,08 | 2,00 | **26,08** | 106,9 | 0,00 | 78,66 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **36,09** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: Z Noise sensitive point: Finnish normal frequency - User defined (106)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 011 | 3 015 | 0 | 20,17 | 2,00 | **22,17** | 107,2 | 0,00 | 80,59 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 644 | 2 649 | 0 | 21,83 | 2,00 | **23,83** | 107,2 | 0,00 | 79,46 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 109 | 2 116 | 0 | 24,67 | 2,00 | **26,67** | 107,2 | 0,00 | 77,51 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 280 | 2 286 | 0 | 23,70 | 2,00 | **25,70** | 107,2 | 0,00 | 78,18 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 535 | 1 544 | 0 | 28,56 | 2,00 | **30,56** | 107,2 | 0,00 | 74,77 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 548 | 3 552 | 0 | 18,05 | 2,00 | **20,05** | 107,2 | 0,00 | 82,01 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 872 | 3 875 | 0 | 16,91 | 2,00 | **18,91** | 107,2 | 0,00 | 82,77 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 993 | 2 998 | 0 | 20,24 | 2,00 | **22,24** | 107,2 | 0,00 | 80,54 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 715 | 2 720 | 0 | 21,49 | 2,00 | **23,49** | 107,2 | 0,00 | 79,69 | - | - | 0,00 | 0,00 | - |
| K 10 | 3 975 | 3 979 | 0 | 16,57 | 2,00 | **18,57** | 107,2 | 0,00 | 82,99 | - | - | 0,00 | 0,00 | - |
| K 11 | 4 637 | 4 640 | 0 | 14,56 | 2,00 | **16,56** | 107,2 | 0,00 | 84,33 | - | - | 0,00 | 0,00 | - |
| K 12 | 5 304 | 5 307 | 0 | 13,05 | 2,00 | **15,05** | 107,2 | 0,00 | 85,50 | - | - | 0,00 | 0,00 | - |
| K 13 | 4 593 | 4 596 | 0 | 14,68 | 2,00 | **16,68** | 107,2 | 0,00 | 84,25 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 939 | 3 943 | 0 | 16,69 | 2,00 | **18,69** | 107,2 | 0,00 | 82,92 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 220 | 2 228 | 0 | 25,09 | 2,00 | **27,09** | 106,9 | 0,00 | 77,96 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 501 | 2 508 | 0 | 23,62 | 2,00 | **25,62** | 106,9 | 0,00 | 78,99 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **36,13** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AA Noise sensitive point: Finnish normal frequency - User defined (105)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 2 594 | 2 598 | 0 | 22,08 | 2,00 | **24,08** | 107,2 | 0,00 | 79,29 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 538 | 2 543 | 0 | 22,35 | 2,00 | **24,35** | 107,2 | 0,00 | 79,11 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 861 | 2 865 | 0 | 20,83 | 2,00 | **22,83** | 107,2 | 0,00 | 80,14 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 717 | 2 721 | 0 | 21,49 | 2,00 | **23,49** | 107,2 | 0,00 | 79,69 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 432 | 3 435 | 0 | 18,48 | 2,00 | **20,48** | 107,2 | 0,00 | 81,72 | - | - | 0,00 | 0,00 | - |
| K 06 | 1 679 | 1 685 | 0 | 27,50 | 2,00 | **29,50** | 107,2 | 0,00 | 75,53 | - | - | 0,00 | 0,00 | - |
| K 07 | 1 116 | 1 126 | 0 | 32,34 | 2,00 | **34,34** | 107,2 | 0,00 | 72,03 | - | - | 0,00 | 0,00 | - |
| K 08 | 1 941 | 1 946 | 0 | 25,72 | 2,00 | **27,72** | 107,2 | 0,00 | 76,78 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 214 | 2 219 | 0 | 24,08 | 2,00 | **26,08** | 107,2 | 0,00 | 77,92 | - | - | 0,00 | 0,00 | - |
| K 10 | 3 068 | 3 071 | 0 | 19,93 | 2,00 | **21,93** | 107,2 | 0,00 | 80,75 | - | - | 0,00 | 0,00 | - |
| K 11 | 3 272 | 3 275 | 0 | 19,10 | 2,00 | **21,10** | 107,2 | 0,00 | 81,30 | - | - | 0,00 | 0,00 | - |
| K 12 | 3 041 | 3 045 | 0 | 20,04 | 2,00 | **22,04** | 107,2 | 0,00 | 80,67 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 311 | 2 315 | 0 | 23,54 | 2,00 | **25,54** | 107,2 | 0,00 | 78,29 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 156 | 2 161 | 0 | 24,41 | 2,00 | **26,41** | 107,2 | 0,00 | 77,69 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 3 737 | 3 741 | 0 | 18,52 | 2,00 | **20,52** | 106,9 | 0,00 | 82,46 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 863 | 2 868 | 0 | 21,93 | 2,00 | **23,93** | 106,9 | 0,00 | 80,15 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **38,61** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: AB Noise sensitive point: Finnish normal frequency - User defined (104)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 2 836 | 2 841 | 0 | 20,93 | 2,00 | **22,93** | 107,2 | 0,00 | 80,07 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 509 | 2 515 | 0 | 22,49 | 2,00 | **24,49** | 107,2 | 0,00 | 79,01 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 019 | 2 026 | 0 | 25,22 | 2,00 | **27,22** | 107,2 | 0,00 | 77,13 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 295 | 2 301 | 0 | 23,62 | 2,00 | **25,62** | 107,2 | 0,00 | 78,24 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 565 | 1 574 | 0 | 28,33 | 2,00 | **30,33** | 107,2 | 0,00 | 74,94 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 432 | 3 436 | 0 | 18,48 | 2,00 | **20,48** | 107,2 | 0,00 | 81,72 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 796 | 3 800 | 0 | 17,17 | 2,00 | **19,17** | 107,2 | 0,00 | 82,59 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 927 | 2 932 | 0 | 20,53 | 2,00 | **22,53** | 107,2 | 0,00 | 80,34 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 689 | 2 694 | 0 | 21,61 | 2,00 | **23,61** | 107,2 | 0,00 | 79,61 | - | - | 0,00 | 0,00 | - |
| K 10 | 3 751 | 3 755 | 0 | 17,32 | 2,00 | **19,32** | 107,2 | 0,00 | 82,49 | - | - | 0,00 | 0,00 | - |
| K 11 | 4 408 | 4 412 | 0 | 15,22 | 2,00 | **17,22** | 107,2 | 0,00 | 83,89 | - | - | 0,00 | 0,00 | - |
| K 12 | 5 094 | 5 097 | 0 | 13,51 | 2,00 | **15,51** | 107,2 | 0,00 | 85,15 | - | - | 0,00 | 0,00 | - |
| K 13 | 4 409 | 4 413 | 0 | 15,22 | 2,00 | **17,22** | 107,2 | 0,00 | 83,89 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 768 | 3 771 | 0 | 17,27 | 2,00 | **19,27** | 107,2 | 0,00 | 82,53 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 399 | 2 406 | 0 | 24,14 | 2,00 | **26,14** | 106,9 | 0,00 | 78,63 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 586 | 2 593 | 0 | 23,20 | 2,00 | **25,20** | 106,9 | 0,00 | 79,27 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **36,13** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AC Noise sensitive point: Finnish normal frequency - User defined (103)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 2 448 | 2 453 | 0 | 22,81 | 2,00 | **24,81** | 107,2 | 0,00 | 78,79 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 142 | 2 149 | 0 | 24,48 | 2,00 | **26,48** | 107,2 | 0,00 | 77,64 | - | - | 0,00 | 0,00 | - |
| K 03 | 1 690 | 1 698 | 0 | 27,41 | 2,00 | **29,41** | 107,2 | 0,00 | 75,60 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 070 | 2 077 | 0 | 24,91 | 2,00 | **26,91** | 107,2 | 0,00 | 77,35 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 382 | 1 392 | 0 | 29,82 | 2,00 | **31,82** | 107,2 | 0,00 | 73,87 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 073 | 3 078 | 0 | 19,90 | 2,00 | **21,90** | 107,2 | 0,00 | 80,76 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 465 | 3 469 | 0 | 18,35 | 2,00 | **20,35** | 107,2 | 0,00 | 81,80 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 609 | 2 615 | 0 | 21,99 | 2,00 | **23,99** | 107,2 | 0,00 | 79,35 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 412 | 2 418 | 0 | 22,99 | 2,00 | **24,99** | 107,2 | 0,00 | 78,67 | - | - | 0,00 | 0,00 | - |
| K 10 | 3 355 | 3 359 | 0 | 18,77 | 2,00 | **20,77** | 107,2 | 0,00 | 81,52 | - | - | 0,00 | 0,00 | - |
| K 11 | 4 013 | 4 016 | 0 | 16,45 | 2,00 | **18,45** | 107,2 | 0,00 | 83,08 | - | - | 0,00 | 0,00 | - |
| K 12 | 4 697 | 4 700 | 0 | 14,42 | 2,00 | **16,42** | 107,2 | 0,00 | 84,44 | - | - | 0,00 | 0,00 | - |
| K 13 | 4 016 | 4 020 | 0 | 16,44 | 2,00 | **18,44** | 107,2 | 0,00 | 83,08 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 379 | 3 383 | 0 | 18,68 | 2,00 | **20,68** | 107,2 | 0,00 | 81,59 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 395 | 2 402 | 0 | 24,16 | 2,00 | **26,16** | 106,9 | 0,00 | 78,61 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 441 | 2 448 | 0 | 23,92 | 2,00 | **25,92** | 106,9 | 0,00 | 78,78 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **37,55** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AD Noise sensitive point: Finnish normal frequency - User defined (102)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 2 211 | 2 217 | 0 | 24,09 | 2,00 | **26,09** | 107,2 | 0,00 | 77,91 | - | - | 0,00 | 0,00 | - |
| K 02 | 1 980 | 1 987 | 0 | 25,46 | 2,00 | **27,46** | 107,2 | 0,00 | 76,97 | - | - | 0,00 | 0,00 | - |
| K 03 | 1 628 | 1 636 | 0 | 27,86 | 2,00 | **29,86** | 107,2 | 0,00 | 75,28 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 151 | 2 158 | 0 | 24,43 | 2,00 | **26,43** | 107,2 | 0,00 | 77,68 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 540 | 1 549 | 0 | 28,53 | 2,00 | **30,53** | 107,2 | 0,00 | 74,80 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 918 | 2 923 | 0 | 20,57 | 2,00 | **22,57** | 107,2 | 0,00 | 80,32 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 364 | 3 368 | 0 | 18,74 | 2,00 | **20,74** | 107,2 | 0,00 | 81,55 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 544 | 2 549 | 0 | 22,32 | 2,00 | **24,32** | 107,2 | 0,00 | 79,13 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 414 | 2 420 | 0 | 22,98 | 2,00 | **24,98** | 107,2 | 0,00 | 78,68 | - | - | 0,00 | 0,00 | - |
| K 10 | 3 032 | 3 037 | 0 | 20,08 | 2,00 | **22,08** | 107,2 | 0,00 | 80,65 | - | - | 0,00 | 0,00 | - |
| K 11 | 3 681 | 3 685 | 0 | 17,57 | 2,00 | **19,57** | 107,2 | 0,00 | 82,33 | - | - | 0,00 | 0,00 | - |
| K 12 | 4 389 | 4 392 | 0 | 15,28 | 2,00 | **17,28** | 107,2 | 0,00 | 83,85 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 3 748 | 3 752 | 0 | 17,33 | 2,00 | **19,33** | 107,2 | 0,00 | 82,49 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 134 | 3 138 | 0 | 19,65 | 2,00 | **21,65** | 107,2 | 0,00 | 80,93 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 670 | 2 676 | 0 | 22,81 | 2,00 | **24,81** | 106,9 | 0,00 | 79,55 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 599 | 2 606 | 0 | 23,14 | 2,00 | **25,14** | 106,9 | 0,00 | 79,32 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **37,44** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AE Noise sensitive point: Finnish normal frequency - User defined (101)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 2 416 | 2 420 | 0 | 22,98 | 2,00 | **24,98** | 107,2 | 0,00 | 78,68 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 578 | 2 582 | 0 | 22,15 | 2,00 | **24,15** | 107,2 | 0,00 | 79,24 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 074 | 3 077 | 0 | 19,91 | 2,00 | **21,91** | 107,2 | 0,00 | 80,76 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 189 | 3 193 | 0 | 19,43 | 2,00 | **21,43** | 107,2 | 0,00 | 81,08 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 820 | 3 822 | 0 | 17,09 | 2,00 | **19,09** | 107,2 | 0,00 | 82,65 | - | - | 0,00 | 0,00 | - |
| K 06 | 1 644 | 1 650 | 0 | 27,76 | 2,00 | **29,76** | 107,2 | 0,00 | 75,35 | - | - | 0,00 | 0,00 | - |
| K 07 | 1 389 | 1 397 | 0 | 29,78 | 2,00 | **31,78** | 107,2 | 0,00 | 73,90 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 245 | 2 250 | 0 | 23,90 | 2,00 | **25,90** | 107,2 | 0,00 | 78,04 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 646 | 2 650 | 0 | 21,83 | 2,00 | **23,83** | 107,2 | 0,00 | 79,46 | - | - | 0,00 | 0,00 | - |
| K 10 | 2 476 | 2 480 | 0 | 22,67 | 2,00 | **24,67** | 107,2 | 0,00 | 78,89 | - | - | 0,00 | 0,00 | - |
| K 11 | 2 507 | 2 511 | 0 | 22,51 | 2,00 | **24,51** | 107,2 | 0,00 | 79,00 | - | - | 0,00 | 0,00 | - |
| K 12 | 2 125 | 2 130 | 0 | 24,59 | 2,00 | **26,59** | 107,2 | 0,00 | 77,57 | - | - | 0,00 | 0,00 | - |
| K 13 | 1 546 | 1 553 | 0 | 28,50 | 2,00 | **30,50** | 107,2 | 0,00 | 74,82 | - | - | 0,00 | 0,00 | - |
| K 14 | 1 672 | 1 678 | 0 | 27,55 | 2,00 | **29,55** | 107,2 | 0,00 | 75,50 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 4 392 | 4 395 | 0 | 16,42 | 2,00 | **18,42** | 106,9 | 0,00 | 83,86 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 3 496 | 3 500 | 0 | 19,39 | 2,00 | **21,39** | 106,9 | 0,00 | 81,88 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **38,63** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AF Noise sensitive point: Finnish normal frequency - User defined (99)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 1 412 | 1 421 | 0 | 29,57 | 2,00 | **31,57** | 107,2 | 0,00 | 74,05 | - | - | 0,00 | 0,00 | - |
| K 02 | 1 346 | 1 357 | 0 | 30,13 | 2,00 | **32,13** | 107,2 | 0,00 | 73,65 | - | - | 0,00 | 0,00 | - |
| K 03 | 1 282 | 1 293 | 0 | 30,71 | 2,00 | **32,71** | 107,2 | 0,00 | 73,23 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 043 | 2 049 | 0 | 25,07 | 2,00 | **27,07** | 107,2 | 0,00 | 77,23 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 704 | 1 712 | 0 | 27,30 | 2,00 | **29,30** | 107,2 | 0,00 | 75,67 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 235 | 2 242 | 0 | 23,95 | 2,00 | **25,95** | 107,2 | 0,00 | 78,01 | - | - | 0,00 | 0,00 | - |
| K 07 | 2 767 | 2 772 | 0 | 21,25 | 2,00 | **23,25** | 107,2 | 0,00 | 79,86 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 065 | 2 072 | 0 | 24,94 | 2,00 | **26,94** | 107,2 | 0,00 | 77,33 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 097 | 2 103 | 0 | 24,75 | 2,00 | **26,75** | 107,2 | 0,00 | 77,46 | - | - | 0,00 | 0,00 | - |
| K 10 | 2 136 | 2 143 | 0 | 24,52 | 2,00 | **26,52** | 107,2 | 0,00 | 77,62 | - | - | 0,00 | 0,00 | - |
| K 11 | 2 785 | 2 790 | 0 | 21,17 | 2,00 | **23,17** | 107,2 | 0,00 | 79,91 | - | - | 0,00 | 0,00 | - |
| K 12 | 3 496 | 3 500 | 0 | 18,24 | 2,00 | **20,24** | 107,2 | 0,00 | 81,88 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 884 | 2 889 | 0 | 20,72 | 2,00 | **22,72** | 107,2 | 0,00 | 80,21 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 301 | 2 307 | 0 | 23,59 | 2,00 | **25,59** | 107,2 | 0,00 | 78,26 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 2 975 | 2 981 | 0 | 21,44 | 2,00 | **23,44** | 106,9 | 0,00 | 80,49 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 623 | 2 629 | 0 | 23,03 | 2,00 | **25,03** | 106,9 | 0,00 | 79,40 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **39,87** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: AG Noise sensitive point: Finnish normal frequency - User defined (100)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | WTG+Uncertainty margin | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 1 271 | 1 281 | 0 | 30,82 | 2,00 | **32,82** | 107,2 | 0,00 | 73,15 | - | - | 0,00 | 0,00 | - |
| K 02 | 1 295 | 1 305 | 0 | 30,59 | 2,00 | **32,59** | 107,2 | 0,00 | 73,32 | - | - | 0,00 | 0,00 | - |
| K 03 | 1 345 | 1 355 | 0 | 30,14 | 2,00 | **32,14** | 107,2 | 0,00 | 73,64 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 139 | 2 145 | 0 | 24,50 | 2,00 | **26,50** | 107,2 | 0,00 | 77,63 | - | - | 0,00 | 0,00 | - |
| K 05 | 1 870 | 1 877 | 0 | 26,17 | 2,00 | **28,17** | 107,2 | 0,00 | 76,47 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 137 | 2 143 | 0 | 24,51 | 2,00 | **26,51** | 107,2 | 0,00 | 77,62 | - | - | 0,00 | 0,00 | - |
| K 07 | 2 696 | 2 701 | 0 | 21,58 | 2,00 | **23,58** | 107,2 | 0,00 | 79,63 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 050 | 2 056 | 0 | 25,03 | 2,00 | **27,03** | 107,2 | 0,00 | 77,26 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 134 | 2 140 | 0 | 24,53 | 2,00 | **26,53** | 107,2 | 0,00 | 77,61 | - | - | 0,00 | 0,00 | - |
| K 10 | 1 910 | 1 917 | 0 | 25,91 | 2,00 | **27,91** | 107,2 | 0,00 | 76,65 | - | - | 0,00 | 0,00 | - |
| K 11 | 2 554 | 2 559 | 0 | 22,27 | 2,00 | **24,27** | 107,2 | 0,00 | 79,16 | - | - | 0,00 | 0,00 | - |
| K 12 | 3 275 | 3 279 | 0 | 19,09 | 2,00 | **21,09** | 107,2 | 0,00 | 81,31 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 687 | 2 692 | 0 | 21,62 | 2,00 | **23,62** | 107,2 | 0,00 | 79,60 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 126 | 2 132 | 0 | 24,58 | 2,00 | **26,58** | 107,2 | 0,00 | 77,58 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 3 145 | 3 150 | 0 | 20,74 | 2,00 | **22,74** | 106,9 | 0,00 | 80,97 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 738 | 2 744 | 0 | 22,49 | 2,00 | **24,49** | 106,9 | 0,00 | 79,77 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **40,11** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AH Noise sensitive point: Finnish normal frequency - User defined (98)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | WTG+Uncertainty margin | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 1 149 | 1 160 | 0 | 31,99 | 2,00 | **33,99** | 107,2 | 0,00 | 72,29 | - | - | 0,00 | 0,00 | - |
| K 02 | 1 261 | 1 271 | 0 | 30,91 | 2,00 | **32,91** | 107,2 | 0,00 | 73,08 | - | - | 0,00 | 0,00 | - |
| K 03 | 1 411 | 1 420 | 0 | 29,58 | 2,00 | **31,58** | 107,2 | 0,00 | 74,04 | - | - | 0,00 | 0,00 | - |
| K 04 | 2 221 | 2 227 | 0 | 24,03 | 2,00 | **26,03** | 107,2 | 0,00 | 77,95 | - | - | 0,00 | 0,00 | - |
| K 05 | 2 014 | 2 020 | 0 | 25,26 | 2,00 | **27,26** | 107,2 | 0,00 | 77,11 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 045 | 2 051 | 0 | 25,07 | 2,00 | **27,07** | 107,2 | 0,00 | 77,24 | - | - | 0,00 | 0,00 | - |
| K 07 | 2 625 | 2 630 | 0 | 21,92 | 2,00 | **23,92** | 107,2 | 0,00 | 79,40 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 035 | 2 041 | 0 | 25,12 | 2,00 | **27,12** | 107,2 | 0,00 | 77,20 | - | - | 0,00 | 0,00 | - |
| K 09 | 2 165 | 2 171 | 0 | 24,35 | 2,00 | **26,35** | 107,2 | 0,00 | 77,73 | - | - | 0,00 | 0,00 | - |
| K 10 | 1 703 | 1 710 | 0 | 27,32 | 2,00 | **29,32** | 107,2 | 0,00 | 75,66 | - | - | 0,00 | 0,00 | - |
| K 11 | 2 343 | 2 348 | 0 | 23,36 | 2,00 | **25,36** | 107,2 | 0,00 | 78,42 | - | - | 0,00 | 0,00 | - |
| K 12 | 3 070 | 3 074 | 0 | 19,92 | 2,00 | **21,92** | 107,2 | 0,00 | 80,76 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 503 | 2 508 | 0 | 22,53 | 2,00 | **24,53** | 107,2 | 0,00 | 78,99 | - | - | 0,00 | 0,00 | - |
| K 14 | 1 963 | 1 970 | 0 | 25,57 | 2,00 | **27,57** | 107,2 | 0,00 | 76,89 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 3 286 | 3 291 | 0 | 20,18 | 2,00 | **22,18** | 106,9 | 0,00 | 81,35 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 2 833 | 2 839 | 0 | 22,06 | 2,00 | **24,06** | 106,9 | 0,00 | 80,06 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **40,48** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AI Noise sensitive point: Finnish normal frequency - User defined (97)

Wind speed: 8,0 m/s

| WTG No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | WTG+Uncertainty margin | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 1 539 | 1 546 | 0 | 28,55 | 2,00 | **30,55** | 107,2 | 0,00 | 74,79 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 003 | 2 009 | 0 | 25,33 | 2,00 | **27,33** | 107,2 | 0,00 | 77,06 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 439 | 2 444 | 0 | 22,86 | 2,00 | **24,86** | 107,2 | 0,00 | 78,76 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 237 | 3 241 | 0 | 19,24 | 2,00 | **21,24** | 107,2 | 0,00 | 81,21 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 197 | 3 200 | 0 | 19,40 | 2,00 | **21,40** | 107,2 | 0,00 | 81,10 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 341 | 2 346 | 0 | 23,37 | 2,00 | **25,37** | 107,2 | 0,00 | 78,41 | - | - | 0,00 | 0,00 | - |
| K 07 | 2 960 | 2 964 | 0 | 20,39 | 2,00 | **22,39** | 107,2 | 0,00 | 80,44 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 716 | 2 721 | 0 | 21,49 | 2,00 | **23,49** | 107,2 | 0,00 | 79,69 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 012 | 3 016 | 0 | 20,17 | 2,00 | **22,17** | 107,2 | 0,00 | 80,59 | - | - | 0,00 | 0,00 | - |
| K 10 | 966 | 978 | 0 | 33,98 | 2,00 | **35,98** | 107,2 | 0,00 | 70,81 | - | - | 0,00 | 0,00 | - |
| K 11 | 1 373 | 1 381 | 0 | 29,92 | 2,00 | **31,92** | 107,2 | 0,00 | 73,80 | - | - | 0,00 | 0,00 | - |
| K 12 | 2 192 | 2 197 | 0 | 24,20 | 2,00 | **26,20** | 107,2 | 0,00 | 77,84 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 1 975 | 1 981 | 0 | 25,50 | 2,00 | **27,50** | 107,2 | 0,00 | 76,94 | - | - | 0,00 | 0,00 | - |
| K 14 | 1 766 | 1 773 | 0 | 26,87 | 2,00 | **28,87** | 107,2 | 0,00 | 75,97 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 4 443 | 4 447 | 0 | 16,26 | 2,00 | **18,26** | 106,9 | 0,00 | 83,96 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 3 864 | 3 868 | 0 | 18,09 | 2,00 | **20,09** | 106,9 | 0,00 | 82,75 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **40,25** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AJ Noise sensitive point: Finnish normal frequency - User defined (96)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 1 784 | 1 791 | 0 | 26,75 | 2,00 | **28,75** | 107,2 | 0,00 | 76,06 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 282 | 2 288 | 0 | 23,69 | 2,00 | **25,69** | 107,2 | 0,00 | 78,19 | - | - | 0,00 | 0,00 | - |
| K 03 | 2 754 | 2 759 | 0 | 21,31 | 2,00 | **23,31** | 107,2 | 0,00 | 79,82 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 541 | 3 545 | 0 | 18,08 | 2,00 | **20,08** | 107,2 | 0,00 | 81,99 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 533 | 3 537 | 0 | 18,10 | 2,00 | **20,10** | 107,2 | 0,00 | 81,97 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 515 | 2 520 | 0 | 22,47 | 2,00 | **24,47** | 107,2 | 0,00 | 79,03 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 121 | 3 125 | 0 | 19,71 | 2,00 | **21,71** | 107,2 | 0,00 | 80,90 | - | - | 0,00 | 0,00 | - |
| K 08 | 2 962 | 2 966 | 0 | 20,38 | 2,00 | **22,38** | 107,2 | 0,00 | 80,44 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 285 | 3 289 | 0 | 19,05 | 2,00 | **21,05** | 107,2 | 0,00 | 81,34 | - | - | 0,00 | 0,00 | - |
| K 10 | 953 | 966 | 0 | 34,12 | 2,00 | **36,12** | 107,2 | 0,00 | 70,70 | - | - | 0,00 | 0,00 | - |
| K 11 | 1 180 | 1 190 | 0 | 31,69 | 2,00 | **33,69** | 107,2 | 0,00 | 72,51 | - | - | 0,00 | 0,00 | - |
| K 12 | 1 998 | 2 004 | 0 | 25,35 | 2,00 | **27,35** | 107,2 | 0,00 | 77,04 | - | - | 0,00 | 0,00 | - |
| K 13 | 1 928 | 1 934 | 0 | 25,79 | 2,00 | **27,79** | 107,2 | 0,00 | 76,73 | - | - | 0,00 | 0,00 | - |
| K 14 | 1 845 | 1 852 | 0 | 26,33 | 2,00 | **28,33** | 107,2 | 0,00 | 76,35 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 4 771 | 4 774 | 0 | 15,33 | 2,00 | **17,33** | 106,9 | 0,00 | 84,58 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 4 167 | 4 171 | 0 | 17,11 | 2,00 | **19,11** | 106,9 | 0,00 | 83,40 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **40,28** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AK Noise sensitive point: Finnish normal frequency - User defined (95)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 2 226 | 2 231 | 0 | 24,01 | 2,00 | **26,01** | 107,2 | 0,00 | 77,97 | - | - | 0,00 | 0,00 | - |
| K 02 | 2 716 | 2 721 | 0 | 21,49 | 2,00 | **23,49** | 107,2 | 0,00 | 79,69 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 169 | 3 173 | 0 | 19,51 | 2,00 | **21,51** | 107,2 | 0,00 | 81,03 | - | - | 0,00 | 0,00 | - |
| K 04 | 3 964 | 3 967 | 0 | 16,61 | 2,00 | **18,61** | 107,2 | 0,00 | 82,97 | - | - | 0,00 | 0,00 | - |
| K 05 | 3 922 | 3 925 | 0 | 16,75 | 2,00 | **18,75** | 107,2 | 0,00 | 82,88 | - | - | 0,00 | 0,00 | - |
| K 06 | 2 953 | 2 958 | 0 | 20,42 | 2,00 | **22,42** | 107,2 | 0,00 | 80,42 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 555 | 3 559 | 0 | 18,02 | 2,00 | **20,02** | 107,2 | 0,00 | 82,03 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 404 | 3 408 | 0 | 18,59 | 2,00 | **20,59** | 107,2 | 0,00 | 81,65 | - | - | 0,00 | 0,00 | - |
| K 09 | 3 722 | 3 725 | 0 | 17,43 | 2,00 | **19,43** | 107,2 | 0,00 | 82,42 | - | - | 0,00 | 0,00 | - |
| K 10 | 1 344 | 1 354 | 0 | 30,15 | 2,00 | **32,15** | 107,2 | 0,00 | 73,63 | - | - | 0,00 | 0,00 | - |
| K 11 | 1 406 | 1 414 | 0 | 29,63 | 2,00 | **31,63** | 107,2 | 0,00 | 74,01 | - | - | 0,00 | 0,00 | - |
| K 12 | 2 182 | 2 188 | 0 | 24,26 | 2,00 | **26,26** | 107,2 | 0,00 | 77,80 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 265 | 2 271 | 0 | 23,79 | 2,00 | **25,79** | 107,2 | 0,00 | 78,12 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 257 | 2 263 | 0 | 23,83 | 2,00 | **25,83** | 107,2 | 0,00 | 78,09 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 172 | 5 176 | 0 | 14,26 | 2,00 | **16,26** | 106,9 | 0,00 | 85,28 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 4 591 | 4 594 | 0 | 15,83 | 2,00 | **17,83** | 106,9 | 0,00 | 84,24 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **37,61** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

## Noise sensitive area: AL Noise sensitive point: Finnish normal frequency - User defined (94)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 4 312 | 4 315 | 0 | 15,51 | 2,00 | **17,51** | 107,2 | 0,00 | 83,70 | - | - | 0,00 | 0,00 | - |
| K 02 | 4 753 | 4 755 | 0 | 14,30 | 2,00 | **16,30** | 107,2 | 0,00 | 84,54 | - | - | 0,00 | 0,00 | - |
| K 03 | 5 376 | 5 378 | 0 | 12,90 | 2,00 | **14,90** | 107,2 | 0,00 | 85,61 | - | - | 0,00 | 0,00 | - |
| K 04 | 5 778 | 5 780 | 0 | 12,08 | 2,00 | **14,08** | 107,2 | 0,00 | 86,24 | - | - | 0,00 | 0,00 | - |
| K 05 | 6 252 | 6 254 | 0 | 11,17 | 2,00 | **13,17** | 107,2 | 0,00 | 86,92 | - | - | 0,00 | 0,00 | - |
| K 06 | 4 027 | 4 030 | 0 | 16,40 | 2,00 | **18,40** | 107,2 | 0,00 | 83,11 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 108 | 4 111 | 0 | 16,14 | 2,00 | **18,14** | 107,2 | 0,00 | 83,28 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 796 | 4 798 | 0 | 14,20 | 2,00 | **16,20** | 107,2 | 0,00 | 84,62 | - | - | 0,00 | 0,00 | - |
| K 09 | 5 253 | 5 255 | 0 | 13,16 | 2,00 | **15,16** | 107,2 | 0,00 | 85,41 | - | - | 0,00 | 0,00 | - |
| K 10 | 3 451 | 3 454 | 0 | 18,41 | 2,00 | **20,41** | 107,2 | 0,00 | 81,77 | - | - | 0,00 | 0,00 | - |
| K 11 | 2 884 | 2 887 | 0 | 20,73 | 2,00 | **22,73** | 107,2 | 0,00 | 80,21 | - | - | 0,00 | 0,00 | - |
| K 12 | 2 083 | 2 088 | 0 | 24,84 | 2,00 | **26,84** | 107,2 | 0,00 | 77,40 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 728 | 2 732 | 0 | 21,44 | 2,00 | **23,44** | 107,2 | 0,00 | 79,73 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 400 | 3 403 | 0 | 18,60 | 2,00 | **20,60** | 107,2 | 0,00 | 81,64 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 7 093 | 7 095 | 0 | 10,60 | 2,00 | **12,60** | 106,9 | 0,00 | 88,02 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 215 | 6 217 | 0 | 12,14 | 2,00 | **14,14** | 106,9 | 0,00 | 86,87 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **31,89** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AM Noise sensitive point: Finnish normal frequency - User defined (93)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 2 776 | 2 781 | 0 | 21,21 | 2,00 | **23,21** | 107,2 | 0,00 | 79,88 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 299 | 3 303 | 0 | 18,99 | 2,00 | **20,99** | 107,2 | 0,00 | 81,38 | - | - | 0,00 | 0,00 | - |
| K 03 | 3 796 | 3 799 | 0 | 17,17 | 2,00 | **19,17** | 107,2 | 0,00 | 82,59 | - | - | 0,00 | 0,00 | - |
| K 04 | 4 573 | 4 576 | 0 | 14,74 | 2,00 | **16,74** | 107,2 | 0,00 | 84,21 | - | - | 0,00 | 0,00 | - |
| K 05 | 4 580 | 4 583 | 0 | 14,72 | 2,00 | **16,72** | 107,2 | 0,00 | 84,22 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 398 | 3 402 | 0 | 18,61 | 2,00 | **20,61** | 107,2 | 0,00 | 81,63 | - | - | 0,00 | 0,00 | - |
| K 07 | 3 966 | 3 970 | 0 | 16,60 | 2,00 | **18,60** | 107,2 | 0,00 | 82,98 | - | - | 0,00 | 0,00 | - |
| K 08 | 3 935 | 3 938 | 0 | 16,70 | 2,00 | **18,70** | 107,2 | 0,00 | 82,91 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 288 | 4 291 | 0 | 15,58 | 2,00 | **17,58** | 107,2 | 0,00 | 83,65 | - | - | 0,00 | 0,00 | - |
| K 10 | 1 707 | 1 715 | 0 | 27,29 | 2,00 | **29,29** | 107,2 | 0,00 | 75,68 | - | - | 0,00 | 0,00 | - |
| K 11 | 1 473 | 1 481 | 0 | 29,07 | 2,00 | **31,07** | 107,2 | 0,00 | 74,41 | - | - | 0,00 | 0,00 | - |
| K 12 | 2 083 | 2 089 | 0 | 24,84 | 2,00 | **26,84** | 107,2 | 0,00 | 77,40 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 437 | 2 443 | 0 | 22,86 | 2,00 | **24,86** | 107,2 | 0,00 | 78,76 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 612 | 2 617 | 0 | 21,99 | 2,00 | **23,99** | 107,2 | 0,00 | 79,36 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 5 816 | 5 819 | 0 | 12,90 | 2,00 | **14,90** | 106,9 | 0,00 | 86,30 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 196 | 5 199 | 0 | 14,20 | 2,00 | **16,20** | 106,9 | 0,00 | 85,32 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **36,10** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AN Noise sensitive point: Finnish normal frequency - User defined (92)

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Penalty [dB] | From WTGs [dB(A)] | Uncertainty margin [dB] | **WTG+Uncertainty margin [dB]** | LwA,ref [dB(A)] | Dc [dB] | Adiv [dB] | Aatm [dB] | Agr [dB] | Abar [dB] | Amisc [dB] | A [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K 01 | 3 792 | 3 795 | 0 | 17,19 | 2,00 | **19,19** | 107,2 | 0,00 | 82,58 | - | - | 0,00 | 0,00 | - |
| K 02 | 4 303 | 4 305 | 0 | 15,54 | 2,00 | **17,54** | 107,2 | 0,00 | 83,68 | - | - | 0,00 | 0,00 | - |
| K 03 | 4 935 | 4 937 | 0 | 13,86 | 2,00 | **15,86** | 107,2 | 0,00 | 84,87 | - | - | 0,00 | 0,00 | - |
| K 04 | 5 477 | 5 479 | 0 | 12,69 | 2,00 | **14,69** | 107,2 | 0,00 | 85,77 | - | - | 0,00 | 0,00 | - |
| K 05 | 5 830 | 5 832 | 0 | 11,97 | 2,00 | **13,97** | 107,2 | 0,00 | 86,32 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 765 | 3 767 | 0 | 17,28 | 2,00 | **19,28** | 107,2 | 0,00 | 82,52 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 024 | 4 026 | 0 | 16,41 | 2,00 | **18,41** | 107,2 | 0,00 | 83,10 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 537 | 4 539 | 0 | 14,85 | 2,00 | **16,85** | 107,2 | 0,00 | 84,14 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 995 | 4 998 | 0 | 13,73 | 2,00 | **15,73** | 107,2 | 0,00 | 84,98 | - | - | 0,00 | 0,00 | - |
| K 10 | 2 723 | 2 727 | 0 | 21,46 | 2,00 | **23,46** | 107,2 | 0,00 | 79,72 | - | - | 0,00 | 0,00 | - |
| K 11 | 2 070 | 2 075 | 0 | 24,92 | 2,00 | **26,92** | 107,2 | 0,00 | 77,34 | - | - | 0,00 | 0,00 | - |
| K 12 | 1 438 | 1 446 | 0 | 29,36 | 2,00 | **31,36** | 107,2 | 0,00 | 74,20 | - | - | 0,00 | 0,00 | - |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** ISO 9613-2 Finland 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 13 | 2 313 | 2 318 | 0 | 23,53 | 2,00 | **25,53** | 107,2 | 0,00 | 78,30 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 979 | 2 983 | 0 | 20,31 | 2,00 | **22,31** | 107,2 | 0,00 | 80,49 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 6 827 | 6 829 | 0 | 11,05 | 2,00 | **13,05** | 106,9 | 0,00 | 87,69 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 995 | 5 997 | 0 | 12,55 | 2,00 | **14,55** | 106,9 | 0,00 | 86,56 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **34,96** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AO Noise sensitive point: Finnish normal frequency - User defined (91)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 221 | 3 224 | 0 | 19,30 | 2,00 | **21,30** | 107,2 | 0,00 | 81,17 | - | - | 0,00 | 0,00 | - |
| K 02 | 3 765 | 3 769 | 0 | 17,28 | 2,00 | **19,28** | 107,2 | 0,00 | 82,52 | - | - | 0,00 | 0,00 | - |
| K 03 | 4 310 | 4 313 | 0 | 15,52 | 2,00 | **17,52** | 107,2 | 0,00 | 83,70 | - | - | 0,00 | 0,00 | - |
| K 04 | 5 055 | 5 057 | 0 | 13,59 | 2,00 | **15,59** | 107,2 | 0,00 | 85,08 | - | - | 0,00 | 0,00 | - |
| K 05 | 5 135 | 5 137 | 0 | 13,42 | 2,00 | **15,42** | 107,2 | 0,00 | 85,21 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 710 | 3 713 | 0 | 17,47 | 2,00 | **19,47** | 107,2 | 0,00 | 82,39 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 227 | 4 230 | 0 | 15,77 | 2,00 | **17,77** | 107,2 | 0,00 | 83,53 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 329 | 4 332 | 0 | 15,46 | 2,00 | **17,46** | 107,2 | 0,00 | 83,73 | - | - | 0,00 | 0,00 | - |
| K 09 | 4 719 | 4 721 | 0 | 14,37 | 2,00 | **16,37** | 107,2 | 0,00 | 84,48 | - | - | 0,00 | 0,00 | - |
| K 10 | 2 045 | 2 051 | 0 | 25,07 | 2,00 | **27,07** | 107,2 | 0,00 | 77,24 | - | - | 0,00 | 0,00 | - |
| K 11 | 1 586 | 1 593 | 0 | 28,18 | 2,00 | **30,18** | 107,2 | 0,00 | 75,05 | - | - | 0,00 | 0,00 | - |
| K 12 | 1 930 | 1 936 | 0 | 25,78 | 2,00 | **27,78** | 107,2 | 0,00 | 76,74 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 526 | 2 531 | 0 | 22,41 | 2,00 | **24,41** | 107,2 | 0,00 | 79,07 | - | - | 0,00 | 0,00 | - |
| K 14 | 2 866 | 2 870 | 0 | 20,80 | 2,00 | **22,80** | 107,2 | 0,00 | 80,16 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 6 341 | 6 343 | 0 | 11,91 | 2,00 | **13,91** | 106,9 | 0,00 | 87,05 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 5 667 | 5 670 | 0 | 13,20 | 2,00 | **15,20** | 106,9 | 0,00 | 86,07 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **35,15** | | | | | | | | |

*- Data undefined due to calculation with octave data*

## Noise sensitive area: AP Noise sensitive point: Finnish normal frequency - User defined (90)

Wind speed: 8,0 m/s

**WTG**

| No. | Distance | Sound distance | Penalty | From WTGs | Uncertainty margin | **WTG+Uncertainty margin** | LwA,ref | Dc | Adiv | Aatm | Agr | Abar | Amisc | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [m] | [m] | [dB] | [dB(A)] | [dB] | **[dB]** | [dB(A)] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] | [dB] |
| K 01 | 3 805 | 3 808 | 0 | 17,14 | 2,00 | **19,14** | 107,2 | 0,00 | 82,61 | - | - | 0,00 | 0,00 | - |
| K 02 | 4 338 | 4 340 | 0 | 15,43 | 2,00 | **17,43** | 107,2 | 0,00 | 83,75 | - | - | 0,00 | 0,00 | - |
| K 03 | 4 963 | 4 965 | 0 | 13,80 | 2,00 | **15,80** | 107,2 | 0,00 | 84,92 | - | - | 0,00 | 0,00 | - |
| K 04 | 5 562 | 5 563 | 0 | 12,51 | 2,00 | **14,51** | 107,2 | 0,00 | 85,91 | - | - | 0,00 | 0,00 | - |
| K 05 | 5 854 | 5 856 | 0 | 11,93 | 2,00 | **13,93** | 107,2 | 0,00 | 86,35 | - | - | 0,00 | 0,00 | - |
| K 06 | 3 899 | 3 902 | 0 | 16,82 | 2,00 | **18,82** | 107,2 | 0,00 | 82,83 | - | - | 0,00 | 0,00 | - |
| K 07 | 4 226 | 4 228 | 0 | 15,77 | 2,00 | **17,77** | 107,2 | 0,00 | 83,52 | - | - | 0,00 | 0,00 | - |
| K 08 | 4 655 | 4 658 | 0 | 14,53 | 2,00 | **16,53** | 107,2 | 0,00 | 84,36 | - | - | 0,00 | 0,00 | - |
| K 09 | 5 106 | 5 109 | 0 | 13,48 | 2,00 | **15,48** | 107,2 | 0,00 | 85,17 | - | - | 0,00 | 0,00 | - |
| K 10 | 2 659 | 2 663 | 0 | 21,76 | 2,00 | **23,76** | 107,2 | 0,00 | 79,51 | - | - | 0,00 | 0,00 | - |
| K 11 | 1 989 | 1 994 | 0 | 25,42 | 2,00 | **27,42** | 107,2 | 0,00 | 76,99 | - | - | 0,00 | 0,00 | - |
| K 12 | 1 538 | 1 544 | 0 | 28,56 | 2,00 | **30,56** | 107,2 | 0,00 | 74,78 | - | - | 0,00 | 0,00 | - |
| K 13 | 2 443 | 2 447 | 0 | 22,84 | 2,00 | **24,84** | 107,2 | 0,00 | 78,77 | - | - | 0,00 | 0,00 | - |
| K 14 | 3 069 | 3 072 | 0 | 19,93 | 2,00 | **21,93** | 107,2 | 0,00 | 80,75 | - | - | 0,00 | 0,00 | - |
| WTG 01 | 6 912 | 6 914 | 0 | 10,90 | 2,00 | **12,90** | 106,9 | 0,00 | 87,79 | - | - | 0,00 | 0,00 | - |
| WTG 02 | 6 108 | 6 111 | 0 | 12,34 | 2,00 | **14,34** | 106,9 | 0,00 | 86,72 | - | - | 0,00 | 0,00 | - |
| Sum | | | | | | **34,59** | | | | | | | | |

*- Data undefined due to calculation with octave data*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

**Noise calculation model:**
ISO 9613-2 Finland
**Wind speed (at 10 m height):**
8,0 m/s
**Ground attenuation:**
General, Ground factor: 0,4
**Meteorological coefficient, C0:**
Selected option: Fixed value: 0,0 dB
**Type of demand in calculation:**
1: WTG noise is compared to demand (DK, DE, SE, NL etc.)
**Noise values in calculation:**
All noise values are mean values (Lwa) (Normal)
**Pure tones:**
Pure tones penalty is added to total noise impact at receptors
Noise sensitive area
**Height above ground level, when no value in NSA object:**
4,0 m; Don't allow override of model height with height from NSA object
**Uncertainty margin:**
Uncertainty added to source noise level of the WTGs in the calculation
**Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive.:**
0,0 dB(A)
**Octave data required**
Frequency dependent air absorption

| 63 | 125 | 250 | 500 | 1 000 | 2 000 | 4 000 | 8 000 |
|---|---|---|---|---|---|---|---|
| [dB/km] | [dB/km] | [dB/km] | [dB/km] | [dB/km] | [dB/km] | [dB/km] | [dB/km] |
| 0,10 | 0,38 | 1,12 | 2,36 | 4,08 | 8,78 | 26,60 | 95,00 |

All coordinates are in
Finish TM ETRS-TM35FIN-ETRS89

**WTG:** NORDEX N175/6.X-6800 6800 175.0 !-!
**Noise:** Mode 0 - Third Octaves - 106,9 dB(A) (STE)

| Source | Source/Date | Creator | Edited |
|---|---|---|---|
| F008_278_A19_IN Revision 03 | 13/10/2023 | USER | 19/11/2024 16.13 |

| | | | | | | Octave data | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Status | Hub height [m] | Wind speed [m/s] | LwA,ref [dB(A)] | Uncertainty [dB(A)] | Pure tones | 63 [dB] | 125 [dB] | 250 [dB] | 500 [dB] | 1000 [dB] | 2000 [dB] | 4000 [dB] | 8000 [dB] |
| From Windcat | 171,5 | 8,0 | 106,9 | 2,0 | No | 89,7 | 96,5 | 99,9 | 100,4 | 101,3 | 99,2 | 89,9 | 73,4 |

**WTG:** NORDEX N163/6.X-6800 6800 163.0 !-!
**Noise:** Mode 1 - Third Octaves - 107,2 dB(A)* (STE)

| Source | Source/Date | Creator | Edited |
|---|---|---|---|
| F008_277_A19_IN, Rev. 0 | 30/03/2021 | USER | 29/11/2024 10.23 |

für Nabenhöhen 138 m, 159 m und 164 m

Mode 1 ist die offene Fahrweise (wie früher Mode 0)

Oktavbanddaten in der 2. Nachkommastelle vor dem Einfügen (aus Excel) angepaßt, um Rundungsfehler zu beheben:
500 Hz: + 0,02
1000 Hz: + 0,03
2000 Hz: + 0,03
4000 Hz: + 0,03
8000 Hz: + 0,03

| | | | | | | Octave data | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Status | Hub height [m] | Wind speed [m/s] | LwA,ref [dB(A)] | Uncertainty [dB(A)] | Pure tones | 63 [dB] | 125 [dB] | 250 [dB] | 500 [dB] | 1000 [dB] | 2000 [dB] | 4000 [dB] | 8000 [dB] |
| From Windcat | 150,5 | 8,0 | 107,2 | 2,0 | No | 88,4 | 96,0 | 98,1 | 99,3 | 101,1 | 101,8 | 96,2 | 81,8 |
| From Windcat | 149,5 | 8,0 | 107,2 | 2,0 | No | 88,4 | 96,0 | 98,1 | 99,3 | 101,1 | 101,8 | 96,2 | 81,8 |
| From Windcat | 148,5 | 8,0 | 107,2 | 2,0 | No | 88,4 | 96,0 | 98,1 | 99,3 | 101,1 | 101,8 | 96,2 | 81,8 |

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## DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: A Noise sensitive point: Finnish normal frequency - User defined (131)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: B Noise sensitive point: Finnish normal frequency - User defined (130)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: C Noise sensitive point: Finnish normal frequency - User defined (129)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: D Noise sensitive point: Finnish normal frequency - User defined (128)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: E Noise sensitive point: Finnish normal frequency - User defined (127)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: F Noise sensitive point: Finnish normal frequency - User defined (126)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: G Noise sensitive point: Finnish normal frequency - User defined (125)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: H Noise sensitive point: Finnish normal frequency - User defined (124)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**

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# DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: I Noise sensitive point: Finnish normal frequency - User defined (123)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: J Noise sensitive point: Finnish normal frequency - User defined (122)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: K Noise sensitive point: Finnish normal frequency - User defined (121)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: L Noise sensitive point: Finnish normal frequency - User defined (120)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: M Noise sensitive point: Finnish normal frequency - User defined (119)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: N Noise sensitive point: Finnish normal frequency - User defined (118)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: O Noise sensitive point: Finnish normal frequency - User defined (117)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

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29/11/2024 10.24/4.0.552

## DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: P Noise sensitive point: Finnish normal frequency - User defined (116)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: Q Noise sensitive point: Finnish normal frequency - User defined (115)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: R Noise sensitive point: Finnish normal frequency - User defined (114)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: S Noise sensitive point: Finnish normal frequency - User defined (113)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: T Noise sensitive point: Finnish normal frequency - User defined (112)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: U Noise sensitive point: Finnish normal frequency - User defined (111)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: V Noise sensitive point: Finnish normal frequency - User defined (110)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: W Noise sensitive point: Finnish normal frequency - User defined (109)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**

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# DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: X Noise sensitive point: Finnish normal frequency - User defined (108)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: Y Noise sensitive point: Finnish normal frequency - User defined (107)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: Z Noise sensitive point: Finnish normal frequency - User defined (106)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AA Noise sensitive point: Finnish normal frequency - User defined (105)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AB Noise sensitive point: Finnish normal frequency - User defined (104)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AC Noise sensitive point: Finnish normal frequency - User defined (103)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AD Noise sensitive point: Finnish normal frequency - User defined (102)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

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# DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: AE Noise sensitive point: Finnish normal frequency - User defined (101)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AF Noise sensitive point: Finnish normal frequency - User defined (99)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AG Noise sensitive point: Finnish normal frequency - User defined (100)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AH Noise sensitive point: Finnish normal frequency - User defined (98)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AI Noise sensitive point: Finnish normal frequency - User defined (97)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AJ Noise sensitive point: Finnish normal frequency - User defined (96)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AK Noise sensitive point: Finnish normal frequency - User defined (95)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AL Noise sensitive point: Finnish normal frequency - User defined (94)
**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**

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## DECIBEL - Assumptions for noise calculation

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)

**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AM Noise sensitive point: Finnish normal frequency - User defined (93)

**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AN Noise sensitive point: Finnish normal frequency - User defined (92)

**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AO Noise sensitive point: Finnish normal frequency - User defined (91)

**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

### Noise sensitive area: AP Noise sensitive point: Finnish normal frequency - User defined (90)

**Predefined calculation standard:**
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:** 40,0 dB(A)
**No distance demand**
**Pure tone penalty:** 0 dB

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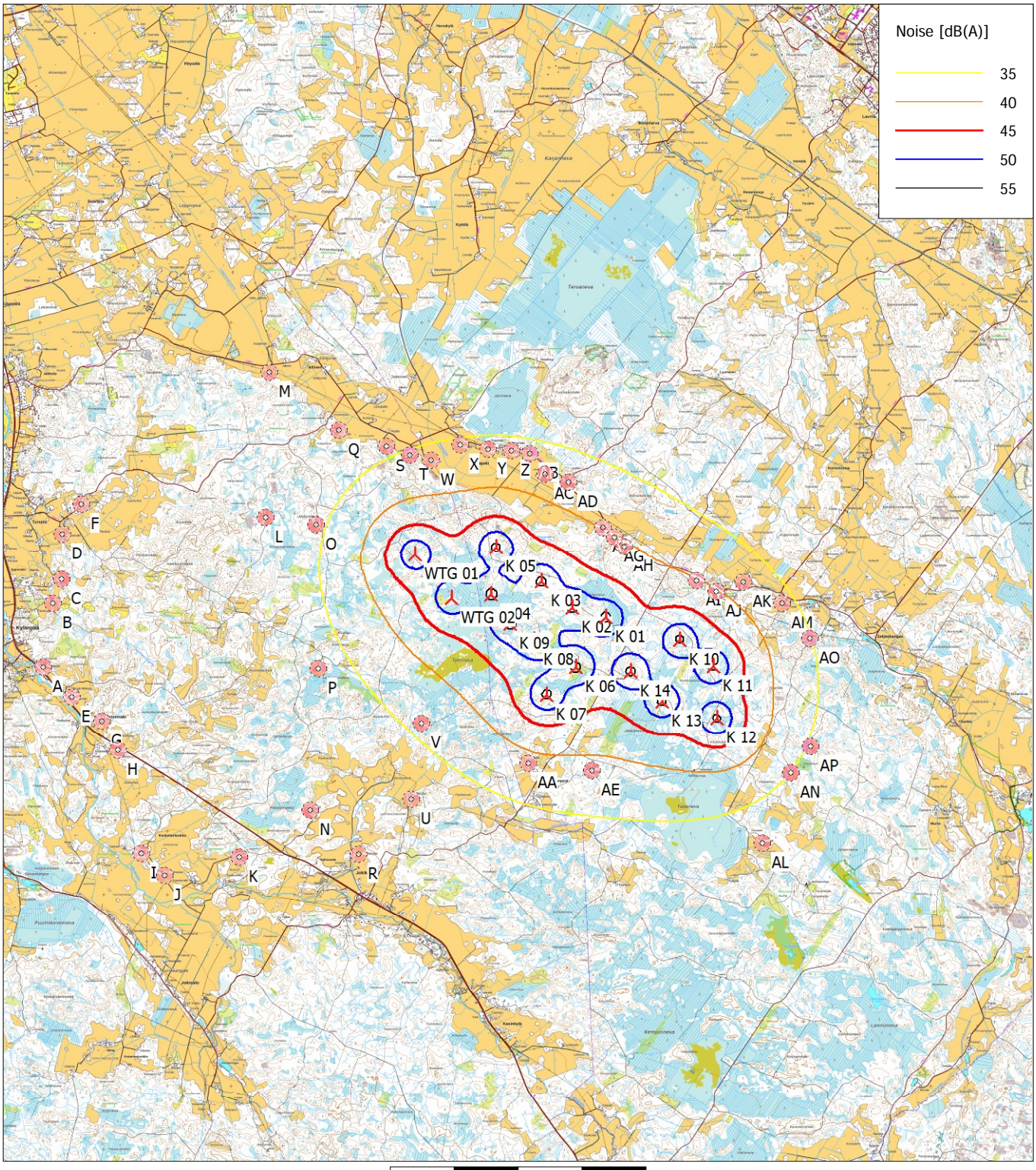
# DECIBEL - Map 8,0 m/s

**Calculation:** 16 x WTG : 2 x N175 (106,9dB + 2dB) rev07 + 14 x N163 (107,2dB + 2dB)




Map: Peruskartta 5/2023 , Print scale 1:90 000, Map center Finish TM ETRS-TM35FIN-ETRS89 East: 256 593,0 North: 6 984 238,5

New WTG  Noise sensitive area

Noise calculation model: ISO 9613-2 Finland. Wind speed: 8,0 m/s
Height above sea level from active line object

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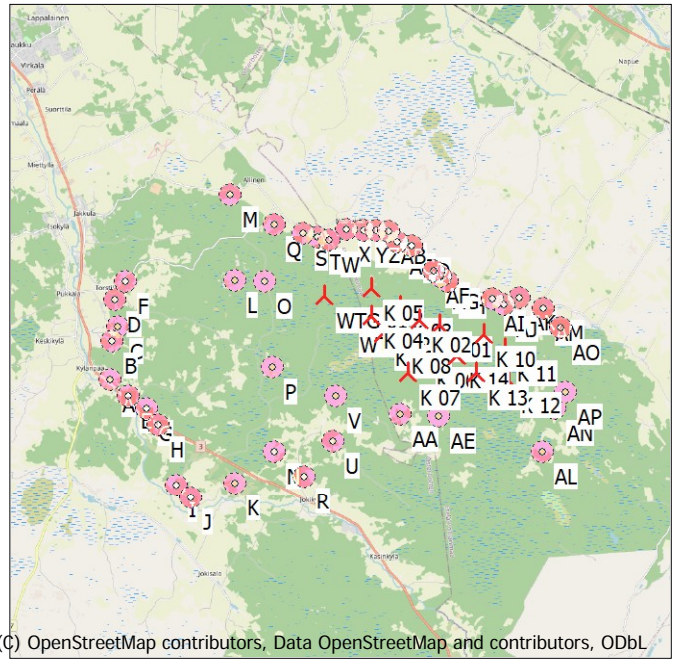
# DECIBEL - Main Result

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

**Noise calculation model:**
Finland Low frequency
**Wind speed (at 10 m height):**
8,0 m/s
**Spectral distribution:**
From 20,0 Hz to 200,0 Hz
**Meteorological coefficient, C0:**
Selected option: Fixed value: 0,0 dB
**Type of demand in calculation:**
1: WTG noise is compared to demand (DK, DE, SE, NL etc.)
**Noise values in calculation:**
All noise values are mean values (Lwa) (Normal)
**Pure tones:**
Pure tone penalty is subtracted from demand
Model: 5,0 dB(A)
**Height above ground level, when no value in NSA object:**
4,0 m; Don't allow override of model height with height from NSA object
**Uncertainty margin:**
0,0 dB; Uncertainty margin in NSA has priority
**Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive.:**
0,0 dB(A)

All coordinates are in
Finish TM ETRS-TM35FIN-ETRS89




All coordinates are in
Finish TM ETRS-TM35FIN-ETRS89

## WTGs

| | East | North | Z | Row data/Description | WTG type Valid | Manufact. | Type-generator | Power, rated | Rotor diameter | Hub height | Noise data Creator | Name | Wind speed | LwA,ref | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | [m] | | | | | [kW] | [m] | [m] | | | [m/s] | [dB(A)] | |
| K 01 | 258 892,0 | 6 984 359,0 | 45,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 02 | 258 361,0 | 6 984 512,0 | 52,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 149,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 03 | 257 878,0 | 6 984 922,0 | 48,3 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 04 | 257 087,0 | 6 984 720,0 | 50,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 05 | 257 163,0 | 6 985 462,0 | 49,2 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 06 | 258 414,0 | 6 983 575,0 | 52,5 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 148,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 07 | 257 962,0 | 6 983 145,0 | 54,9 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 149,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 08 | 257 766,0 | 6 984 006,0 | 52,5 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 149,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 09 | 257 382,0 | 6 984 262,0 | 50,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 10 | 260 052,0 | 6 984 010,0 | 50,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 11 | 260 574,0 | 6 983 589,0 | 45,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 12 | 260 637,0 | 6 982 769,0 | 47,5 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 13 | 259 773,0 | 6 983 040,0 | 51,0 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| K 14 | 259 278,0 | 6 983 511,0 | 52,5 | NORDEX N163/6.X-6800 6800 ... | Yes | NORDEX | N163/6.X-6800-6 800 | 6 800 | 163,0 | 150,5 | USER | Mode 1 - Third Octaves - 107,2 dB(A)* (STE) | 8,0 | 98,3 | f |
| WTG 01 | 255 892,0 | 6 985 353,0 | 50,0 | NORDEX N175/6.X-6800 6800 ... | Yes | NORDEX | N175/6.X-6800-6 800 | 6 800 | 175,0 | 171,5 | USER | Mode 0 - Third Octaves - 106,9 dB(A) (STE) | 8,0 | 99,2 | |
| WTG 02 | 256 462,0 | 6 984 661,0 | 50,0 | NORDEX N175/6.X-6800 6800 ... | Yes | NORDEX | N175/6.X-6800-6 800 | 6 800 | 175,0 | 171,5 | USER | Mode 0 - Third Octaves - 106,9 dB(A) (STE) | 8,0 | 99,2 | |

**f) From other hub height**

# Calculation Results

## Sound level

| Noise sensitive area No. | Name | East | North | Z | Immission height | Most critical demand Frequency | Noise | Predicted sound level WTG noise | Demands fulfilled ? Noise |
|---|---|---|---|---|---|---|---|---|---|
| | | | | [m] | [m] | [Hz] | [dB] | [dB] | |
| A | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (173) | 250 049,0 | 6 983 575,0 | 30,7 | 4,0 | 50,0 | 44,0 | 25,8 | Yes |
| B | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (172) | 250 198,0 | 6 984 576,0 | 26,7 | 4,0 | 50,0 | 44,0 | 26,1 | Yes |
| C | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (171) | 250 341,0 | 6 984 961,0 | 25,5 | 4,0 | 50,0 | 44,0 | 26,3 | Yes |
| D | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (170) | 250 343,0 | 6 985 667,0 | 26,2 | 4,0 | 50,0 | 44,0 | 26,2 | Yes |
| E | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (169) | 250 494,0 | 6 983 108,0 | 30,4 | 4,0 | 50,0 | 44,0 | 26,3 | Yes |
| F | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (168) | 250 645,0 | 6 986 141,0 | 27,5 | 4,0 | 50,0 | 44,0 | 26,4 | Yes |
| G | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (167) | 250 968,0 | 6 982 726,0 | 35,0 | 4,0 | 50,0 | 44,0 | 26,8 | Yes |
| H | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (166) | 251 226,0 | 6 982 266,0 | 32,5 | 4,0 | 50,0 | 44,0 | 26,9 | Yes |
| I | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (165) | 251 592,0 | 6 980 644,0 | 35,9 | 4,0 | 50,0 | 44,0 | 26,5 | Yes |
| J | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (164) | 251 960,0 | 6 980 299,0 | 35,0 | 4,0 | 50,0 | 44,0 | 26,6 | Yes |
| K | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (163) | 253 131,0 | 6 980 587,0 | 42,5 | 4,0 | 50,0 | 44,0 | 28,1 | Yes |
| L | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (162) | 253 546,0 | 6 985 931,0 | 45,0 | 4,0 | 50,0 | 44,0 | 31,3 | Yes |
| M | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (161) | 253 607,0 | 6 988 208,0 | 22,5 | 4,0 | 50,0 | 44,0 | 28,9 | Yes |
| N | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (160) | 254 248,0 | 6 981 332,0 | 42,5 | 4,0 | 50,0 | 44,0 | 30,3 | Yes |
| O | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (159) | 254 339,0 | 6 985 826,0 | 55,0 | 4,0 | 50,0 | 44,0 | 33,6 | Yes |
| P | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (158) | 254 373,0 | 6 983 560,0 | 45,0 | 4,0 | 50,0 | 44,0 | 33,1 | Yes |
| Q | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (157) | 254 693,0 | 6 987 302,0 | 28,9 | 4,0 | 50,0 | 44,0 | 31,9 | Yes |
| R | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (156) | 255 007,0 | 6 980 631,0 | 40,0 | 4,0 | 50,0 | 44,0 | 30,3 | Yes |
| S | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (155) | 255 437,0 | 6 987 054,0 | 29,5 | 4,0 | 50,0 | 44,0 | 33,7 | Yes |
| T | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (154) | 255 814,0 | 6 986 908,0 | 28,4 | 4,0 | 50,0 | 44,0 | 34,7 | Yes |
| U | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (153) | 255 826,0 | 6 981 493,0 | 40,8 | 4,0 | 50,0 | 44,0 | 32,8 | Yes |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Main Result

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

*...continued from previous page*

| Noise sensitive area | | | | | | Most critical demand | Predicted sound level | | Demands fulfilled ? |
|---|---|---|---|---|---|---|---|---|---|
| No. | Name | East | North | Z | Immission height | Frequency | Noise | WTG noise | Noise |
| | | | | [m] | [m] | [Hz] | [dB] | [dB] | |
| V | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (152) | 255 991,0 | 6 982 694,0 | 43,4 | 4,0 | 50,0 | 44,0 | 35,6 | Yes |
| W | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (151) | 256 145,0 | 6 986 833,0 | 25,0 | 4,0 | 50,0 | 44,0 | 35,4 | Yes |
| X | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (150) | 256 601,0 | 6 987 078,0 | 25,0 | 4,0 | 50,0 | 44,0 | 34,9 | Yes |
| Y | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (149) | 257 040,0 | 6 987 001,0 | 27,5 | 4,0 | 50,0 | 44,0 | 35,4 | Yes |
| Z | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (148) | 257 405,0 | 6 986 979,0 | 28,1 | 4,0 | 50,0 | 44,0 | 35,5 | Yes |
| AA | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (147) | 257 676,0 | 6 982 066,0 | 49,8 | 4,0 | 50,0 | 44,0 | 37,3 | Yes |
| AB | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (146) | 257 698,0 | 6 986 934,0 | 27,5 | 4,0 | 50,0 | 44,0 | 35,5 | Yes |
| AC | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (145) | 257 931,0 | 6 986 612,0 | 27,5 | 4,0 | 50,0 | 44,0 | 36,5 | Yes |
| AD | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (144) | 258 308,0 | 6 986 493,0 | 29,9 | 4,0 | 50,0 | 44,0 | 36,6 | Yes |
| AE | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (143) | 258 674,0 | 6 981 951,0 | 52,2 | 4,0 | 50,0 | 44,0 | 37,4 | Yes |
| AF | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (141) | 258 840,0 | 6 985 771,0 | 30,0 | 4,0 | 50,0 | 44,0 | 38,3 | Yes |
| AG | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (142) | 259 027,3 | 6 985 623,4 | 32,1 | 4,0 | 50,0 | 44,0 | 38,5 | Yes |
| AH | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (140) | 259 178,0 | 6 985 473,0 | 37,3 | 4,0 | 50,0 | 44,0 | 38,7 | Yes |
| AI | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (139) | 260 319,0 | 6 984 939,0 | 44,5 | 4,0 | 50,0 | 44,0 | 38,3 | Yes |
| AJ | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (138) | 260 630,0 | 6 984 768,0 | 35,9 | 4,0 | 50,0 | 44,0 | 38,2 | Yes |
| AK | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (137) | 261 049,0 | 6 984 913,0 | 35,0 | 4,0 | 50,0 | 44,0 | 36,5 | Yes |
| AL | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (136) | 261 344,0 | 6 980 808,0 | 48,3 | 4,0 | 50,0 | 44,0 | 32,5 | Yes |
| AM | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (135) | 261 661,0 | 6 984 584,0 | 36,9 | 4,0 | 50,0 | 44,0 | 35,4 | Yes |
| AN | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (134) | 261 796,0 | 6 981 916,0 | 47,5 | 4,0 | 50,0 | 44,0 | 34,4 | Yes |
| AO | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (133) | 262 098,0 | 6 984 032,0 | 39,6 | 4,0 | 50,0 | 44,0 | 34,7 | Yes |
| AP | Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (132) | 262 110,0 | 6 982 324,0 | 50,0 | 4,0 | 50,0 | 44,0 | 34,1 | Yes |

***)Spectral distribution, please see details in report "Detailed results"**

## Distances (m)

| | WTG | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NSA | K 01 | K 02 | K 03 | K 04 | K 05 | K 06 | K 07 | K 08 | K 09 | K 10 | K 11 | K 12 | K 13 | K 14 | WTG 01 | WTG 02 |
| A | 8872 | 8359 | 7938 | 7126 | 7355 | 8359 | 7919 | 7724 | 7360 | 10006 | 10518 | 10611 | 9732 | 9223 | 6103 | 6500 |
| B | 8691 | 8158 | 7682 | 6886 | 7016 | 8271 | 7889 | 7584 | 7186 | 9863 | 10416 | 10587 | 9691 | 9136 | 5743 | 6260 |
| C | 8566 | 8027 | 7532 | 6746 | 6836 | 8185 | 7829 | 7481 | 7071 | 9751 | 10317 | 10520 | 9619 | 9048 | 5561 | 6124 |
| D | 8642 | 8095 | 7566 | 6805 | 6818 | 8332 | 8020 | 7601 | 7173 | 9843 | 10433 | 10687 | 9782 | 9185 | 5554 | 6197 |
| E | 8485 | 7986 | 7598 | 6782 | 7067 | 7928 | 7463 | 7322 | 6979 | 9594 | 10085 | 10142 | 9273 | 8787 | 5842 | 6162 |
| F | 8431 | 7881 | 7330 | 6592 | 6549 | 8176 | 7901 | 7429 | 6989 | 9639 | 10245 | 10538 | 9634 | 9018 | 5302 | 5998 |
| G | 8085 | 7600 | 7246 | 6431 | 6768 | 7489 | 7002 | 6913 | 6591 | 9168 | 9638 | 9662 | 8805 | 8341 | 5577 | 5821 |
| H | 7941 | 7475 | 7158 | 6350 | 6738 | 7301 | 6788 | 6763 | 6467 | 8990 | 9435 | 9418 | 8576 | 8142 | 5591 | 5754 |
| I | 8185 | 7791 | 7598 | 6837 | 7360 | 7420 | 6839 | 7025 | 6823 | 9099 | 9446 | 9285 | 8519 | 8198 | 6372 | 6309 |
| J | 8028 | 7658 | 7504 | 6765 | 7325 | 7233 | 6638 | 6884 | 6711 | 8896 | 9215 | 9016 | 8274 | 7986 | 6399 | 6264 |
| K | 6881 | 6535 | 6424 | 5717 | 6322 | 6065 | 5463 | 5756 | 5615 | 7716 | 8020 | 7811 | 7076 | 6802 | 5504 | 5259 |
| L | 5569 | 5016 | 4445 | 3740 | 3645 | 5404 | 5218 | 4635 | 4180 | 6779 | 7403 | 7759 | 6861 | 6218 | 2414 | 3178 |
| M | 6534 | 6018 | 5385 | 4924 | 4490 | 6672 | 6674 | 5908 | 5457 | 7686 | 8353 | 8882 | 8040 | 7359 | 3654 | 4550 |
| N | 5540 | 5195 | 5102 | 4417 | 5052 | 4728 | 4130 | 4416 | 4287 | 6388 | 6712 | 6544 | 5779 | 5478 | 4341 | 3995 |
| O | 4780 | 4228 | 3650 | 2960 | 2845 | 4652 | 4504 | 3878 | 3419 | 5991 | 6620 | 6996 | 6102 | 5451 | 1622 | 2420 |
| P | 4586 | 4097 | 3758 | 2949 | 3374 | 4038 | 3610 | 3420 | 3088 | 5693 | 6197 | 6309 | 5421 | 4902 | 2348 | 2360 |
| Q | 5124 | 4605 | 3973 | 3519 | 3078 | 5263 | 5285 | 4503 | 4056 | 6285 | 6950 | 7470 | 6627 | 5945 | 2287 | 3177 |
| R | 5381 | 5126 | 5159 | 4584 | 5287 | 4500 | 3877 | 4356 | 4336 | 6068 | 6300 | 6018 | 5337 | 5148 | 4801 | 4282 |
| S | 4379 | 3872 | 3239 | 2856 | 2346 | 4576 | 4650 | 3833 | 3400 | 5525 | 6192 | 6734 | 5905 | 5222 | 1760 | 2601 |
| T | 3994 | 3494 | 2862 | 2530 | 1976 | 4224 | 4330 | 3495 | 3074 | 5131 | 5799 | 6351 | 5531 | 4848 | 1556 | 2337 |
| U | 4194 | 3939 | 3993 | 3462 | 4185 | 3319 | 2698 | 3173 | 3174 | 4915 | 5187 | 4974 | 4237 | 3996 | 3858 | 3229 |
| V | 3343 | 2985 | 2918 | 2302 | 3004 | 2576 | 2021 | 2206 | 2095 | 4266 | 4666 | 4644 | 3795 | 3385 | 2659 | 2021 |
| W | 3694 | 3207 | 2578 | 2312 | 1706 | 3968 | 4109 | 3257 | 2851 | 4817 | 5486 | 6054 | 5245 | 4563 | 1500 | 2194 |
| X | 3553 | 3109 | 2504 | 2406 | 1710 | 3942 | 4159 | 3283 | 2920 | 4614 | 5284 | 5900 | 5131 | 4457 | 1864 | 2419 |
| Y | 3224 | 2816 | 2240 | 2280 | 1543 | 3689 | 3962 | 3080 | 2758 | 4242 | 4909 | 5550 | 4809 | 4143 | 2007 | 2409 |
| Z | 3011 | 2644 | 2109 | 2280 | 1535 | 3548 | 3872 | 2993 | 2715 | 3975 | 4637 | 5304 | 4593 | 3939 | 2220 | 2501 |
| AA | 2594 | 2538 | 2861 | 2717 | 3432 | 1679 | 1116 | 1941 | 2214 | 3068 | 3272 | 3041 | 2311 | 2156 | 3737 | 2863 |
| AB | 2836 | 2509 | 2019 | 2295 | 1565 | 3432 | 3796 | 2927 | 2689 | 3751 | 4408 | 5094 | 4409 | 3768 | 2399 | 2586 |
| AC | 2448 | 2142 | 1690 | 2070 | 1382 | 3073 | 3465 | 2609 | 2412 | 3355 | 4013 | 4697 | 4016 | 3379 | 2395 | 2441 |
| AD | 2211 | 1980 | 1628 | 2151 | 1540 | 2918 | 3364 | 2544 | 2414 | 3032 | 3681 | 4389 | 3748 | 3134 | 2670 | 2599 |
| AE | 2416 | 2578 | 3074 | 3189 | 3820 | 1644 | 1389 | 2245 | 2646 | 2476 | 2507 | 2125 | 1546 | 1672 | 4392 | 3496 |
| AF | 1412 | 1346 | 1282 | 2043 | 1704 | 2235 | 2767 | 2065 | 2097 | 2136 | 2785 | 3496 | 2884 | 2301 | 2975 | 2623 |
| AG | 1271 | 1295 | 1345 | 2139 | 1870 | 2137 | 2696 | 2050 | 2134 | 1910 | 2554 | 3275 | 2687 | 2126 | 3145 | 2738 |
| AH | 1149 | 1261 | 1411 | 2221 | 2014 | 2045 | 2625 | 2035 | 2165 | 1703 | 2343 | 3070 | 2503 | 1963 | 3286 | 2833 |
| AI | 1539 | 2003 | 2439 | 3237 | 3197 | 2341 | 2960 | 2716 | 3012 | 966 | 1373 | 2192 | 1975 | 1766 | 4443 | 3864 |
| AJ | 1784 | 2282 | 2754 | 3541 | 3533 | 2515 | 3121 | 2962 | 3285 | 953 | 1180 | 1998 | 1928 | 1845 | 4771 | 4167 |
| AK | 2226 | 2716 | 3169 | 3964 | 3922 | 2953 | 3555 | 3404 | 3722 | 1344 | 1406 | 2182 | 2265 | 2257 | 5172 | 4591 |
| AL | 4312 | 4753 | 5376 | 5778 | 6252 | 4027 | 4108 | 4796 | 5253 | 3451 | 2884 | 2083 | 2728 | 3400 | 7093 | 6215 |
| AM | 2776 | 3299 | 3796 | 4573 | 4580 | 3398 | 3966 | 3935 | 4288 | 1707 | 1473 | 2083 | 2437 | 2612 | 5816 | 5196 |
| AN | 3792 | 4303 | 4935 | 5477 | 5830 | 3765 | 4024 | 4537 | 4995 | 2723 | 2070 | 1438 | 2313 | 2979 | 6827 | 5995 |
| AO | 3221 | 3765 | 4310 | 5055 | 5135 | 3710 | 4227 | 4329 | 4719 | 2045 | 1586 | 1930 | 2526 | 2866 | 6341 | 5667 |
| AP | 3805 | 4338 | 4963 | 5562 | 5854 | 3899 | 4226 | 4655 | 5106 | 2659 | 1989 | 1538 | 2443 | 3069 | 6912 | 6108 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

## Assumptions

Cmet: Meteorological correction

## Calculation Results

**Noise sensitive area: A Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (173)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 872 | 8 873 | | | | | | |
| K 01 | | | 20 | **28,84** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **25,36** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 01 | | | 32 | **21,17** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 01 | | | 40 | **16,89** | 78,0 | 0,44 | 5,00 | 10,30 |
| K 01 | | | 50 | **12,82** | 80,0 | 0,62 | 4,70 | 11,50 |
| K 01 | | | 63 | **9,56** | 83,0 | 0,98 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,02** | 86,0 | 1,42 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,12** | 89,0 | 2,22 | 3,00 | 16,80 |
| K 01 | | | 125 | **-2,23** | 92,0 | 3,37 | 1,80 | 18,80 |
| K 01 | | | 160 | **-10,72** | 92,0 | 5,06 | 0,00 | 21,10 |
| K 01 | | | 200 | **-16,14** | 93,0 | 7,28 | 0,00 | 22,80 |
| K 02 | 8 359 | 8 360 | | | | | | |
| K 02 | | | 20 | **29,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **25,89** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 02 | | | 32 | **21,70** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 02 | | | 40 | **17,44** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 02 | | | 50 | **13,37** | 80,0 | 0,59 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,14** | 83,0 | 0,92 | 4,30 | 13,00 |
| K 02 | | | 80 | **6,62** | 86,0 | 1,34 | 3,70 | 14,80 |
| K 02 | | | 100 | **2,77** | 89,0 | 2,09 | 3,00 | 16,80 |
| K 02 | | | 125 | **-1,52** | 92,0 | 3,18 | 1,80 | 18,80 |
| K 02 | | | 160 | **-9,91** | 92,0 | 4,77 | 0,00 | 21,10 |
| K 02 | | | 200 | **-15,20** | 93,0 | 6,86 | 0,00 | 22,80 |
| K 03 | 7 938 | 7 940 | | | | | | |
| K 03 | | | 20 | **29,80** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,34** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,17** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 03 | | | 40 | **17,91** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 03 | | | 50 | **13,85** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 03 | | | 63 | **10,63** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,13** | 86,0 | 1,27 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,32** | 89,0 | 1,99 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,91** | 92,0 | 3,02 | 1,80 | 18,80 |
| K 03 | | | 160 | **-9,22** | 92,0 | 4,53 | 0,00 | 21,10 |
| K 03 | | | 200 | **-14,41** | 93,0 | 6,51 | 0,00 | 22,80 |
| K 04 | 7 126 | 7 127 | | | | | | |
| K 04 | | | 20 | **30,74** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,30** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,13** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 04 | | | 40 | **18,88** | 78,0 | 0,36 | 5,00 | 10,30 |
| K 04 | | | 50 | **14,84** | 80,0 | 0,50 | 4,70 | 11,50 |
| K 04 | | | 63 | **11,66** | 83,0 | 0,78 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,20** | 86,0 | 1,14 | 3,70 | 14,80 |
| K 04 | | | 100 | **4,46** | 89,0 | 1,78 | 3,00 | 16,80 |
| K 04 | | | 125 | **0,33** | 92,0 | 2,71 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,82** | 92,0 | 4,06 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,80** | 93,0 | 5,84 | 0,00 | 22,80 |
| K 05 | 7 355 | 7 357 | | | | | | |
| K 05 | | | 20 | **30,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,02** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 05 | | | 32 | **22,85** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 05 | | | 40 | **18,60** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 05 | | | 50 | **14,55** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 05 | | | 63 | **11,36** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 05 | | | 80 | **7,89** | 86,0 | 1,18 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,13** | 89,0 | 1,84 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 125 | **-0,03** | 92,0 | 2,80 | 1,80 | 18,80 |
| K 05 | | | 160 | **-8,23** | 92,0 | 4,19 | 0,00 | 21,10 |
| K 05 | | | 200 | **-13,27** | 93,0 | 6,03 | 0,00 | 22,80 |
| K 06 | 8 359 | 8 361 | | | | | | |
| K 06 | | | 20 | **29,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **25,89** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 06 | | | 32 | **21,70** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 06 | | | 40 | **17,44** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 06 | | | 50 | **13,37** | 80,0 | 0,59 | 4,70 | 11,50 |
| K 06 | | | 63 | **10,14** | 83,0 | 0,92 | 4,30 | 13,00 |
| K 06 | | | 80 | **6,62** | 86,0 | 1,34 | 3,70 | 14,80 |
| K 06 | | | 100 | **2,76** | 89,0 | 2,09 | 3,00 | 16,80 |
| K 06 | | | 125 | **-1,52** | 92,0 | 3,18 | 1,80 | 18,80 |
| K 06 | | | 160 | **-9,91** | 92,0 | 4,77 | 0,00 | 21,10 |
| K 06 | | | 200 | **-15,20** | 93,0 | 6,86 | 0,00 | 22,80 |
| K 07 | 7 919 | 7 921 | | | | | | |
| K 07 | | | 20 | **29,82** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **26,37** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 07 | | | 32 | **22,19** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 07 | | | 40 | **17,93** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 07 | | | 50 | **13,87** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 07 | | | 63 | **10,65** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 07 | | | 80 | **7,16** | 86,0 | 1,27 | 3,70 | 14,80 |
| K 07 | | | 100 | **3,34** | 89,0 | 1,98 | 3,00 | 16,80 |
| K 07 | | | 125 | **-0,89** | 92,0 | 3,01 | 1,80 | 18,80 |
| K 07 | | | 160 | **-9,19** | 92,0 | 4,51 | 0,00 | 21,10 |
| K 07 | | | 200 | **-14,37** | 93,0 | 6,50 | 0,00 | 22,80 |
| K 08 | 7 724 | 7 725 | | | | | | |
| K 08 | | | 20 | **30,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **26,59** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 08 | | | 32 | **22,41** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 08 | | | 40 | **18,16** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,10** | 80,0 | 0,54 | 4,70 | 11,50 |
| K 08 | | | 63 | **10,89** | 83,0 | 0,85 | 4,30 | 13,00 |
| K 08 | | | 80 | **7,41** | 86,0 | 1,24 | 3,70 | 14,80 |
| K 08 | | | 100 | **3,61** | 89,0 | 1,93 | 3,00 | 16,80 |
| K 08 | | | 125 | **-0,59** | 92,0 | 2,94 | 1,80 | 18,80 |
| K 08 | | | 160 | **-8,86** | 92,0 | 4,40 | 0,00 | 21,10 |
| K 08 | | | 200 | **-13,99** | 93,0 | 6,33 | 0,00 | 22,80 |
| K 09 | 7 360 | 7 362 | | | | | | |
| K 09 | | | 20 | **30,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,01** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 09 | | | 32 | **22,84** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 09 | | | 40 | **18,59** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 09 | | | 50 | **14,54** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 09 | | | 63 | **11,35** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 09 | | | 80 | **7,88** | 86,0 | 1,18 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,12** | 89,0 | 1,84 | 3,00 | 16,80 |
| K 09 | | | 125 | **-0,04** | 92,0 | 2,80 | 1,80 | 18,80 |
| K 09 | | | 160 | **-8,24** | 92,0 | 4,20 | 0,00 | 21,10 |
| K 09 | | | 200 | **-13,28** | 93,0 | 6,04 | 0,00 | 22,80 |
| K 10 | 10 006 | 10 007 | | | | | | |
| K 10 | | | 20 | **27,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **24,29** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,09** | 76,0 | 0,30 | 5,20 | 9,20 |
| K 10 | | | 40 | **15,79** | 78,0 | 0,50 | 5,00 | 10,30 |
| K 10 | | | 50 | **11,69** | 80,0 | 0,70 | 4,70 | 11,50 |
| K 10 | | | 63 | **8,39** | 83,0 | 1,10 | 4,30 | 13,00 |
| K 10 | | | 80 | **4,79** | 86,0 | 1,60 | 3,70 | 14,80 |
| K 10 | | | 100 | **0,79** | 89,0 | 2,50 | 3,00 | 16,80 |
| K 10 | | | 125 | **-3,71** | 92,0 | 3,80 | 1,80 | 18,80 |
| K 10 | | | 160 | **-12,41** | 92,0 | 5,70 | 0,00 | 21,10 |
| K 10 | | | 200 | **-18,11** | 93,0 | 8,21 | 0,00 | 22,80 |
| K 11 | 10 518 | 10 519 | | | | | | |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 20 | **27,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **23,85** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 11 | | | 32 | **19,64** | 76,0 | 0,32 | 5,20 | 9,20 |
| K 11 | | | 40 | **15,33** | 78,0 | 0,53 | 5,00 | 10,30 |
| K 11 | | | 50 | **11,22** | 80,0 | 0,74 | 4,70 | 11,50 |
| K 11 | | | 63 | **7,90** | 83,0 | 1,16 | 4,30 | 13,00 |
| K 11 | | | 80 | **4,28** | 86,0 | 1,68 | 3,70 | 14,80 |
| K 11 | | | 100 | **0,23** | 89,0 | 2,63 | 3,00 | 16,80 |
| K 11 | | | 125 | **-4,34** | 92,0 | 4,00 | 1,80 | 18,80 |
| K 11 | | | 160 | **-13,14** | 92,0 | 6,00 | 0,00 | 21,10 |
| K 11 | | | 200 | **-18,97** | 93,0 | 8,63 | 0,00 | 22,80 |
| K 12 | 10 611 | 10 613 | | | | | | |
| K 12 | | | 20 | **27,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **23,77** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 12 | | | 32 | **19,57** | 76,0 | 0,32 | 5,20 | 9,20 |
| K 12 | | | 40 | **15,25** | 78,0 | 0,53 | 5,00 | 10,30 |
| K 12 | | | 50 | **11,14** | 80,0 | 0,74 | 4,70 | 11,50 |
| K 12 | | | 63 | **7,82** | 83,0 | 1,17 | 4,30 | 13,00 |
| K 12 | | | 80 | **4,19** | 86,0 | 1,70 | 3,70 | 14,80 |
| K 12 | | | 100 | **0,13** | 89,0 | 2,65 | 3,00 | 16,80 |
| K 12 | | | 125 | **-4,45** | 92,0 | 4,03 | 1,80 | 18,80 |
| K 12 | | | 160 | **-13,27** | 92,0 | 6,05 | 0,00 | 21,10 |
| K 12 | | | 200 | **-19,12** | 93,0 | 8,70 | 0,00 | 22,80 |
| K 13 | 9 732 | 9 733 | | | | | | |
| K 13 | | | 20 | **28,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **24,54** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 13 | | | 32 | **20,34** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,05** | 78,0 | 0,49 | 5,00 | 10,30 |
| K 13 | | | 50 | **11,95** | 80,0 | 0,68 | 4,70 | 11,50 |
| K 13 | | | 63 | **8,66** | 83,0 | 1,07 | 4,30 | 13,00 |
| K 13 | | | 80 | **5,08** | 86,0 | 1,56 | 3,70 | 14,80 |
| K 13 | | | 100 | **1,10** | 89,0 | 2,43 | 3,00 | 16,80 |
| K 13 | | | 125 | **-3,36** | 92,0 | 3,70 | 1,80 | 18,80 |
| K 13 | | | 160 | **-12,01** | 92,0 | 5,55 | 0,00 | 21,10 |
| K 13 | | | 200 | **-17,65** | 93,0 | 7,98 | 0,00 | 22,80 |
| K 14 | 9 223 | 9 224 | | | | | | |
| K 14 | | | 20 | **28,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,02** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 14 | | | 32 | **20,82** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 14 | | | 40 | **16,54** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 14 | | | 50 | **12,46** | 80,0 | 0,65 | 4,70 | 11,50 |
| K 14 | | | 63 | **9,19** | 83,0 | 1,01 | 4,30 | 13,00 |
| K 14 | | | 80 | **5,63** | 86,0 | 1,48 | 3,70 | 14,80 |
| K 14 | | | 100 | **1,70** | 89,0 | 2,31 | 3,00 | 16,80 |
| K 14 | | | 125 | **-2,70** | 92,0 | 3,51 | 1,80 | 18,80 |
| K 14 | | | 160 | **-11,26** | 92,0 | 5,26 | 0,00 | 21,10 |
| K 14 | | | 200 | **-16,76** | 93,0 | 7,56 | 0,00 | 22,80 |
| WTG 01 | 6 103 | 6 106 | | | | | | |
| WTG 01 | | | 20 | **33,58** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,16** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **25,60** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **20,58** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **16,56** | 80,3 | 0,43 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **14,71** | 84,6 | 0,67 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,01** | 87,3 | 0,98 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **5,96** | 88,9 | 1,53 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **1,56** | 91,5 | 2,32 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-4,40** | 93,5 | 3,48 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-9,12** | 94,5 | 5,01 | 0,00 | 22,80 |
| WTG 02 | 6 500 | 6 502 | | | | | | |
| WTG 02 | | | 20 | **33,04** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **29,61** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,04** | 77,1 | 0,20 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,01** | 78,3 | 0,33 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 50 | **15,98** | 80,3 | 0,46 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,12** | 84,6 | 0,72 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,40** | 87,3 | 1,04 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,31** | 88,9 | 1,63 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **0,87** | 91,5 | 2,47 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-5,17** | 93,5 | 3,71 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,99** | 94,5 | 5,33 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,08** | | | | |
| Sum | | | 25 | **38,62** | | | | |
| Sum | | | 32 | **34,34** | | | | |
| Sum | | | 40 | **29,90** | | | | |
| Sum | | | 50 | **25,84** | | | | |
| Sum | | | 63 | **22,95** | | | | |
| Sum | | | 80 | **19,38** | | | | |
| Sum | | | 100 | **15,23** | | | | |
| Sum | | | 125 | **10,93** | | | | |
| Sum | | | 160 | **3,19** | | | | |
| Sum | | | 200 | **-1,90** | | | | |

**Noise sensitive area: B Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (172)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 691 | 8 692 | | | | | | |
| K 01 | | | 20 | **29,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **25,54** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 01 | | | 32 | **21,36** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,08** | 78,0 | 0,43 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,01** | 80,0 | 0,61 | 4,70 | 11,50 |
| K 01 | | | 63 | **9,76** | 83,0 | 0,96 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,23** | 86,0 | 1,39 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,34** | 89,0 | 2,17 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,99** | 92,0 | 3,30 | 1,80 | 18,80 |
| K 01 | | | 160 | **-10,44** | 92,0 | 4,95 | 0,00 | 21,10 |
| K 01 | | | 200 | **-15,81** | 93,0 | 7,13 | 0,00 | 22,80 |
| K 02 | 8 158 | 8 159 | | | | | | |
| K 02 | | | 20 | **29,57** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,10** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 02 | | | 32 | **21,92** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 02 | | | 40 | **17,66** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 02 | | | 50 | **13,60** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,37** | 83,0 | 0,90 | 4,30 | 13,00 |
| K 02 | | | 80 | **6,86** | 86,0 | 1,31 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,03** | 89,0 | 2,04 | 3,00 | 16,80 |
| K 02 | | | 125 | **-1,23** | 92,0 | 3,10 | 1,80 | 18,80 |
| K 02 | | | 160 | **-9,58** | 92,0 | 4,65 | 0,00 | 21,10 |
| K 02 | | | 200 | **-14,82** | 93,0 | 6,69 | 0,00 | 22,80 |
| K 03 | 7 682 | 7 684 | | | | | | |
| K 03 | | | 20 | **30,09** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,63** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,46** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,20** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,15** | 80,0 | 0,54 | 4,70 | 11,50 |
| K 03 | | | 63 | **10,94** | 83,0 | 0,85 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,46** | 86,0 | 1,23 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,67** | 89,0 | 1,92 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,53** | 92,0 | 2,92 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,79** | 92,0 | 4,38 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,91** | 93,0 | 6,30 | 0,00 | 22,80 |
| K 04 | 6 886 | 6 888 | | | | | | |
| K 04 | | | 20 | **31,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,60** | 73,7 | 0,14 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 32 | **23,43** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,19** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,16** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 04 | | | 63 | **11,98** | 83,0 | 0,76 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,54** | 86,0 | 1,10 | 3,70 | 14,80 |
| K 04 | | | 100 | **4,82** | 89,0 | 1,72 | 3,00 | 16,80 |
| K 04 | | | 125 | **0,72** | 92,0 | 2,62 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,39** | 92,0 | 3,93 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,31** | 93,0 | 5,65 | 0,00 | 22,80 |
| K 05 | 7 016 | 7 018 | | | | | | |
| K 05 | | | 20 | **30,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,44** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,26** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,02** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 05 | | | 50 | **14,98** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 05 | | | 63 | **11,80** | 83,0 | 0,77 | 4,30 | 13,00 |
| K 05 | | | 80 | **8,35** | 86,0 | 1,12 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,62** | 89,0 | 1,75 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,51** | 92,0 | 2,67 | 1,80 | 18,80 |
| K 05 | | | 160 | **-7,62** | 92,0 | 4,00 | 0,00 | 21,10 |
| K 05 | | | 200 | **-12,58** | 93,0 | 5,75 | 0,00 | 22,80 |
| K 06 | 8 271 | 8 273 | | | | | | |
| K 06 | | | 20 | **29,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **25,98** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 06 | | | 32 | **21,80** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 06 | | | 40 | **17,53** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 06 | | | 50 | **13,47** | 80,0 | 0,58 | 4,70 | 11,50 |
| K 06 | | | 63 | **10,24** | 83,0 | 0,91 | 4,30 | 13,00 |
| K 06 | | | 80 | **6,72** | 86,0 | 1,32 | 3,70 | 14,80 |
| K 06 | | | 100 | **2,88** | 89,0 | 2,07 | 3,00 | 16,80 |
| K 06 | | | 125 | **-1,40** | 92,0 | 3,14 | 1,80 | 18,80 |
| K 06 | | | 160 | **-9,77** | 92,0 | 4,72 | 0,00 | 21,10 |
| K 06 | | | 200 | **-15,04** | 93,0 | 6,78 | 0,00 | 22,80 |
| K 07 | 7 889 | 7 891 | | | | | | |
| K 07 | | | 20 | **29,86** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **26,40** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 07 | | | 32 | **22,22** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 07 | | | 40 | **17,96** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 07 | | | 50 | **13,90** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 07 | | | 63 | **10,69** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 07 | | | 80 | **7,19** | 86,0 | 1,26 | 3,70 | 14,80 |
| K 07 | | | 100 | **3,38** | 89,0 | 1,97 | 3,00 | 16,80 |
| K 07 | | | 125 | **-0,84** | 92,0 | 3,00 | 1,80 | 18,80 |
| K 07 | | | 160 | **-9,14** | 92,0 | 4,50 | 0,00 | 21,10 |
| K 07 | | | 200 | **-14,31** | 93,0 | 6,47 | 0,00 | 22,80 |
| K 08 | 7 584 | 7 586 | | | | | | |
| K 08 | | | 20 | **30,20** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **26,75** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 08 | | | 32 | **22,57** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 08 | | | 40 | **18,32** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,27** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,07** | 83,0 | 0,83 | 4,30 | 13,00 |
| K 08 | | | 80 | **7,59** | 86,0 | 1,21 | 3,70 | 14,80 |
| K 08 | | | 100 | **3,80** | 89,0 | 1,90 | 3,00 | 16,80 |
| K 08 | | | 125 | **-0,38** | 92,0 | 2,88 | 1,80 | 18,80 |
| K 08 | | | 160 | **-8,62** | 92,0 | 4,32 | 0,00 | 21,10 |
| K 08 | | | 200 | **-13,72** | 93,0 | 6,22 | 0,00 | 22,80 |
| K 09 | 7 186 | 7 188 | | | | | | |
| K 09 | | | 20 | **30,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,22** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,05** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 09 | | | 40 | **18,81** | 78,0 | 0,36 | 5,00 | 10,30 |
| K 09 | | | 50 | **14,76** | 80,0 | 0,50 | 4,70 | 11,50 |
| K 09 | | | 63 | **11,58** | 83,0 | 0,79 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 09 | | | 80 | **8,12** | 86,0 | 1,15 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,37** | 89,0 | 1,80 | 3,00 | 16,80 |
| K 09 | | | 125 | **0,24** | 92,0 | 2,73 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,93** | 92,0 | 4,10 | 0,00 | 21,10 |
| K 09 | | | 200 | **-12,93** | 93,0 | 5,89 | 0,00 | 22,80 |
| K 10 | 9 863 | 9 865 | | | | | | |
| K 10 | | | 20 | **27,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **24,42** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,22** | 76,0 | 0,30 | 5,20 | 9,20 |
| K 10 | | | 40 | **15,92** | 78,0 | 0,49 | 5,00 | 10,30 |
| K 10 | | | 50 | **11,83** | 80,0 | 0,69 | 4,70 | 11,50 |
| K 10 | | | 63 | **8,53** | 83,0 | 1,09 | 4,30 | 13,00 |
| K 10 | | | 80 | **4,94** | 86,0 | 1,58 | 3,70 | 14,80 |
| K 10 | | | 100 | **0,95** | 89,0 | 2,47 | 3,00 | 16,80 |
| K 10 | | | 125 | **-3,53** | 92,0 | 3,75 | 1,80 | 18,80 |
| K 10 | | | 160 | **-12,20** | 92,0 | 5,62 | 0,00 | 21,10 |
| K 10 | | | 200 | **-17,87** | 93,0 | 8,09 | 0,00 | 22,80 |
| K 11 | 10 416 | 10 417 | | | | | | |
| K 11 | | | 20 | **27,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **23,94** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 11 | | | 32 | **19,73** | 76,0 | 0,31 | 5,20 | 9,20 |
| K 11 | | | 40 | **15,42** | 78,0 | 0,52 | 5,00 | 10,30 |
| K 11 | | | 50 | **11,32** | 80,0 | 0,73 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,00** | 83,0 | 1,15 | 4,30 | 13,00 |
| K 11 | | | 80 | **4,38** | 86,0 | 1,67 | 3,70 | 14,80 |
| K 11 | | | 100 | **0,34** | 89,0 | 2,60 | 3,00 | 16,80 |
| K 11 | | | 125 | **-4,21** | 92,0 | 3,96 | 1,80 | 18,80 |
| K 11 | | | 160 | **-12,99** | 92,0 | 5,94 | 0,00 | 21,10 |
| K 11 | | | 200 | **-18,80** | 93,0 | 8,54 | 0,00 | 22,80 |
| K 12 | 10 587 | 10 588 | | | | | | |
| K 12 | | | 20 | **27,30** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **23,79** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 12 | | | 32 | **19,59** | 76,0 | 0,32 | 5,20 | 9,20 |
| K 12 | | | 40 | **15,27** | 78,0 | 0,53 | 5,00 | 10,30 |
| K 12 | | | 50 | **11,16** | 80,0 | 0,74 | 4,70 | 11,50 |
| K 12 | | | 63 | **7,84** | 83,0 | 1,16 | 4,30 | 13,00 |
| K 12 | | | 80 | **4,21** | 86,0 | 1,69 | 3,70 | 14,80 |
| K 12 | | | 100 | **0,16** | 89,0 | 2,65 | 3,00 | 16,80 |
| K 12 | | | 125 | **-4,42** | 92,0 | 4,02 | 1,80 | 18,80 |
| K 12 | | | 160 | **-13,23** | 92,0 | 6,04 | 0,00 | 21,10 |
| K 12 | | | 200 | **-19,08** | 93,0 | 8,68 | 0,00 | 22,80 |
| K 13 | 9 691 | 9 692 | | | | | | |
| K 13 | | | 20 | **28,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **24,58** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 13 | | | 32 | **20,38** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,09** | 78,0 | 0,48 | 5,00 | 10,30 |
| K 13 | | | 50 | **11,99** | 80,0 | 0,68 | 4,70 | 11,50 |
| K 13 | | | 63 | **8,71** | 83,0 | 1,07 | 4,30 | 13,00 |
| K 13 | | | 80 | **5,12** | 86,0 | 1,55 | 3,70 | 14,80 |
| K 13 | | | 100 | **1,15** | 89,0 | 2,42 | 3,00 | 16,80 |
| K 13 | | | 125 | **-3,31** | 92,0 | 3,68 | 1,80 | 18,80 |
| K 13 | | | 160 | **-11,95** | 92,0 | 5,52 | 0,00 | 21,10 |
| K 13 | | | 200 | **-17,58** | 93,0 | 7,95 | 0,00 | 22,80 |
| K 14 | 9 136 | 9 138 | | | | | | |
| K 14 | | | 20 | **28,58** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,10** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 14 | | | 32 | **20,91** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 14 | | | 40 | **16,63** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 14 | | | 50 | **12,54** | 80,0 | 0,64 | 4,70 | 11,50 |
| K 14 | | | 63 | **9,28** | 83,0 | 1,01 | 4,30 | 13,00 |
| K 14 | | | 80 | **5,72** | 86,0 | 1,46 | 3,70 | 14,80 |
| K 14 | | | 100 | **1,80** | 89,0 | 2,28 | 3,00 | 16,80 |
| K 14 | | | 125 | **-2,59** | 92,0 | 3,47 | 1,80 | 18,80 |
| K 14 | | | 160 | **-11,12** | 92,0 | 5,21 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 200 | **-16,61** | 93,0 | 7,49 | 0,00 | 22,80 |
| WTG 01 | 5 743 | 5 746 | | | | | | |
| WTG 01 | | | 20 | **34,11** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,70** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,14** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,13** | 78,3 | 0,29 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,11** | 80,3 | 0,40 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,28** | 84,6 | 0,63 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,59** | 87,3 | 0,92 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,58** | 88,9 | 1,44 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,23** | 91,5 | 2,18 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,66** | 93,5 | 3,28 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-8,30** | 94,5 | 4,71 | 0,00 | 22,80 |
| WTG 02 | 6 260 | 6 263 | | | | | | |
| WTG 02 | | | 20 | **33,36** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **29,94** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,38** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,35** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,33** | 80,3 | 0,44 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,48** | 84,6 | 0,69 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,76** | 87,3 | 1,00 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,70** | 88,9 | 1,57 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,28** | 91,5 | 2,38 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,71** | 93,5 | 3,57 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,47** | 94,5 | 5,14 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,33** | | | | |
| Sum | | | 25 | **38,88** | | | | |
| Sum | | | 32 | **34,59** | | | | |
| Sum | | | 40 | **30,14** | | | | |
| Sum | | | 50 | **26,09** | | | | |
| Sum | | | 63 | **23,23** | | | | |
| Sum | | | 80 | **19,67** | | | | |
| Sum | | | 100 | **15,52** | | | | |
| Sum | | | 125 | **11,24** | | | | |
| Sum | | | 160 | **3,58** | | | | |
| Sum | | | 200 | **-1,44** | | | | |

**Noise sensitive area: C Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (171)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 566 | 8 568 | | | | | | |
| K 01 | | | 20 | **29,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **25,67** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 01 | | | 32 | **21,49** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,21** | 78,0 | 0,43 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,14** | 80,0 | 0,60 | 4,70 | 11,50 |
| K 01 | | | 63 | **9,90** | 83,0 | 0,94 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,37** | 86,0 | 1,37 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,50** | 89,0 | 2,14 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,81** | 92,0 | 3,26 | 1,80 | 18,80 |
| K 01 | | | 160 | **-10,24** | 92,0 | 4,88 | 0,00 | 21,10 |
| K 01 | | | 200 | **-15,58** | 93,0 | 7,03 | 0,00 | 22,80 |
| K 02 | 8 027 | 8 029 | | | | | | |
| K 02 | | | 20 | **29,71** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,25** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,07** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 02 | | | 40 | **17,81** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 02 | | | 50 | **13,74** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,52** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,02** | 86,0 | 1,28 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,20** | 89,0 | 2,01 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 125 | **-1,04** | 92,0 | 3,05 | 1,80 | 18,80 |
| K 02 | | | 160 | **-9,37** | 92,0 | 4,58 | 0,00 | 21,10 |
| K 02 | | | 200 | **-14,58** | 93,0 | 6,58 | 0,00 | 22,80 |
| K 03 | 7 532 | 7 534 | | | | | | |
| K 03 | | | 20 | **30,26** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,81** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,63** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,38** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,33** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,13** | 83,0 | 0,83 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,65** | 86,0 | 1,21 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,88** | 89,0 | 1,88 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,30** | 92,0 | 2,86 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,53** | 92,0 | 4,29 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,62** | 93,0 | 6,18 | 0,00 | 22,80 |
| K 04 | 6 746 | 6 748 | | | | | | |
| K 04 | | | 20 | **31,22** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,78** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,61** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,38** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,34** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,17** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,74** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 04 | | | 100 | **5,03** | 89,0 | 1,69 | 3,00 | 16,80 |
| K 04 | | | 125 | **0,95** | 92,0 | 2,56 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,13** | 92,0 | 3,85 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,02** | 93,0 | 5,53 | 0,00 | 22,80 |
| K 05 | 6 836 | 6 838 | | | | | | |
| K 05 | | | 20 | **31,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,67** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,50** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,26** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 05 | | | 50 | **15,22** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,05** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 05 | | | 80 | **8,61** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,89** | 89,0 | 1,71 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,80** | 92,0 | 2,60 | 1,80 | 18,80 |
| K 05 | | | 160 | **-7,30** | 92,0 | 3,90 | 0,00 | 21,10 |
| K 05 | | | 200 | **-12,21** | 93,0 | 5,61 | 0,00 | 22,80 |
| K 06 | 8 185 | 8 187 | | | | | | |
| K 06 | | | 20 | **29,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **26,07** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 06 | | | 32 | **21,89** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 06 | | | 40 | **17,63** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 06 | | | 50 | **13,56** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 06 | | | 63 | **10,34** | 83,0 | 0,90 | 4,30 | 13,00 |
| K 06 | | | 80 | **6,83** | 86,0 | 1,31 | 3,70 | 14,80 |
| K 06 | | | 100 | **2,99** | 89,0 | 2,05 | 3,00 | 16,80 |
| K 06 | | | 125 | **-1,27** | 92,0 | 3,11 | 1,80 | 18,80 |
| K 06 | | | 160 | **-9,63** | 92,0 | 4,67 | 0,00 | 21,10 |
| K 06 | | | 200 | **-14,88** | 93,0 | 6,71 | 0,00 | 22,80 |
| K 07 | 7 829 | 7 831 | | | | | | |
| K 07 | | | 20 | **29,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **26,47** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 07 | | | 32 | **22,29** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 07 | | | 40 | **18,03** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 07 | | | 50 | **13,98** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 07 | | | 63 | **10,76** | 83,0 | 0,86 | 4,30 | 13,00 |
| K 07 | | | 80 | **7,27** | 86,0 | 1,25 | 3,70 | 14,80 |
| K 07 | | | 100 | **3,47** | 89,0 | 1,96 | 3,00 | 16,80 |
| K 07 | | | 125 | **-0,75** | 92,0 | 2,98 | 1,80 | 18,80 |
| K 07 | | | 160 | **-9,04** | 92,0 | 4,46 | 0,00 | 21,10 |
| K 07 | | | 200 | **-14,20** | 93,0 | 6,42 | 0,00 | 22,80 |
| K 08 | 7 481 | 7 483 | | | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 20 | **30,32** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **26,87** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 08 | | | 32 | **22,69** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 08 | | | 40 | **18,44** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,39** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,20** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 08 | | | 80 | **7,72** | 86,0 | 1,20 | 3,70 | 14,80 |
| K 08 | | | 100 | **3,95** | 89,0 | 1,87 | 3,00 | 16,80 |
| K 08 | | | 125 | **-0,22** | 92,0 | 2,84 | 1,80 | 18,80 |
| K 08 | | | 160 | **-8,45** | 92,0 | 4,27 | 0,00 | 21,10 |
| K 08 | | | 200 | **-13,52** | 93,0 | 6,14 | 0,00 | 22,80 |
| K 09 | 7 071 | 7 073 | | | | | | |
| K 09 | | | 20 | **30,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,37** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,20** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 09 | | | 40 | **18,95** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 09 | | | 50 | **14,91** | 80,0 | 0,50 | 4,70 | 11,50 |
| K 09 | | | 63 | **11,73** | 83,0 | 0,78 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,28** | 86,0 | 1,13 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,54** | 89,0 | 1,77 | 3,00 | 16,80 |
| K 09 | | | 125 | **0,42** | 92,0 | 2,69 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,72** | 92,0 | 4,03 | 0,00 | 21,10 |
| K 09 | | | 200 | **-12,69** | 93,0 | 5,80 | 0,00 | 22,80 |
| K 10 | 9 751 | 9 752 | | | | | | |
| K 10 | | | 20 | **28,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **24,52** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,33** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,03** | 78,0 | 0,49 | 5,00 | 10,30 |
| K 10 | | | 50 | **11,94** | 80,0 | 0,68 | 4,70 | 11,50 |
| K 10 | | | 63 | **8,65** | 83,0 | 1,07 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,06** | 86,0 | 1,56 | 3,70 | 14,80 |
| K 10 | | | 100 | **1,08** | 89,0 | 2,44 | 3,00 | 16,80 |
| K 10 | | | 125 | **-3,39** | 92,0 | 3,71 | 1,80 | 18,80 |
| K 10 | | | 160 | **-12,04** | 92,0 | 5,56 | 0,00 | 21,10 |
| K 10 | | | 200 | **-17,68** | 93,0 | 8,00 | 0,00 | 22,80 |
| K 11 | 10 317 | 10 319 | | | | | | |
| K 11 | | | 20 | **27,53** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **24,02** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 11 | | | 32 | **19,82** | 76,0 | 0,31 | 5,20 | 9,20 |
| K 11 | | | 40 | **15,51** | 78,0 | 0,52 | 5,00 | 10,30 |
| K 11 | | | 50 | **11,41** | 80,0 | 0,72 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,09** | 83,0 | 1,14 | 4,30 | 13,00 |
| K 11 | | | 80 | **4,48** | 86,0 | 1,65 | 3,70 | 14,80 |
| K 11 | | | 100 | **0,45** | 89,0 | 2,58 | 3,00 | 16,80 |
| K 11 | | | 125 | **-4,09** | 92,0 | 3,92 | 1,80 | 18,80 |
| K 11 | | | 160 | **-12,85** | 92,0 | 5,88 | 0,00 | 21,10 |
| K 11 | | | 200 | **-18,63** | 93,0 | 8,46 | 0,00 | 22,80 |
| K 12 | 10 520 | 10 521 | | | | | | |
| K 12 | | | 20 | **27,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **23,85** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 12 | | | 32 | **19,64** | 76,0 | 0,32 | 5,20 | 9,20 |
| K 12 | | | 40 | **15,33** | 78,0 | 0,53 | 5,00 | 10,30 |
| K 12 | | | 50 | **11,22** | 80,0 | 0,74 | 4,70 | 11,50 |
| K 12 | | | 63 | **7,90** | 83,0 | 1,16 | 4,30 | 13,00 |
| K 12 | | | 80 | **4,28** | 86,0 | 1,68 | 3,70 | 14,80 |
| K 12 | | | 100 | **0,23** | 89,0 | 2,63 | 3,00 | 16,80 |
| K 12 | | | 125 | **-4,34** | 92,0 | 4,00 | 1,80 | 18,80 |
| K 12 | | | 160 | **-13,14** | 92,0 | 6,00 | 0,00 | 21,10 |
| K 12 | | | 200 | **-18,97** | 93,0 | 8,63 | 0,00 | 22,80 |
| K 13 | 9 619 | 9 621 | | | | | | |
| K 13 | | | 20 | **28,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **24,64** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 13 | | | 32 | **20,45** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,15** | 78,0 | 0,48 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 50 | **12,06** | 80,0 | 0,67 | 4,70 | 11,50 |
| K 13 | | | 63 | **8,78** | 83,0 | 1,06 | 4,30 | 13,00 |
| K 13 | | | 80 | **5,20** | 86,0 | 1,54 | 3,70 | 14,80 |
| K 13 | | | 100 | **1,23** | 89,0 | 2,41 | 3,00 | 16,80 |
| K 13 | | | 125 | **-3,22** | 92,0 | 3,66 | 1,80 | 18,80 |
| K 13 | | | 160 | **-11,85** | 92,0 | 5,48 | 0,00 | 21,10 |
| K 13 | | | 200 | **-17,45** | 93,0 | 7,89 | 0,00 | 22,80 |
| K 14 | 9 048 | 9 049 | | | | | | |
| K 14 | | | 20 | **28,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,19** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 14 | | | 32 | **21,00** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 14 | | | 40 | **16,72** | 78,0 | 0,45 | 5,00 | 10,30 |
| K 14 | | | 50 | **12,63** | 80,0 | 0,63 | 4,70 | 11,50 |
| K 14 | | | 63 | **9,37** | 83,0 | 1,00 | 4,30 | 13,00 |
| K 14 | | | 80 | **5,82** | 86,0 | 1,45 | 3,70 | 14,80 |
| K 14 | | | 100 | **1,91** | 89,0 | 2,26 | 3,00 | 16,80 |
| K 14 | | | 125 | **-2,47** | 92,0 | 3,44 | 1,80 | 18,80 |
| K 14 | | | 160 | **-10,99** | 92,0 | 5,16 | 0,00 | 21,10 |
| K 14 | | | 200 | **-16,45** | 93,0 | 7,42 | 0,00 | 22,80 |
| WTG 01 | 5 561 | 5 564 | | | | | | |
| WTG 01 | | | 20 | **34,39** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,98** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,43** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,41** | 78,3 | 0,28 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,40** | 80,3 | 0,39 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,58** | 84,6 | 0,61 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,90** | 87,3 | 0,89 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,90** | 88,9 | 1,39 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,58** | 91,5 | 2,11 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,28** | 93,5 | 3,17 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-7,87** | 94,5 | 4,56 | 0,00 | 22,80 |
| WTG 02 | 6 124 | 6 127 | | | | | | |
| WTG 02 | | | 20 | **33,55** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,13** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,57** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,55** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,53** | 80,3 | 0,43 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,68** | 84,6 | 0,67 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,97** | 87,3 | 0,98 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,92** | 88,9 | 1,53 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,53** | 91,5 | 2,33 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,44** | 93,5 | 3,49 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,17** | 94,5 | 5,02 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,49** | | | | |
| Sum | | | 25 | **39,04** | | | | |
| Sum | | | 32 | **34,76** | | | | |
| Sum | | | 40 | **30,31** | | | | |
| Sum | | | 50 | **26,25** | | | | |
| Sum | | | 63 | **23,40** | | | | |
| Sum | | | 80 | **19,85** | | | | |
| Sum | | | 100 | **15,71** | | | | |
| Sum | | | 125 | **11,45** | | | | |
| Sum | | | 160 | **3,83** | | | | |
| Sum | | | 200 | **-1,16** | | | | |

**Noise sensitive area: D Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (170)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 642 | 8 644 | | | | | | |
| K 01 | | | 20 | **29,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **25,59** | 73,7 | 0,17 | 5,40 | 8,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | | | 32 | **21,41** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,13** | 78,0 | 0,43 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,06** | 80,0 | 0,61 | 4,70 | 11,50 |
| K 01 | | | 63 | **9,81** | 83,0 | 0,95 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,28** | 86,0 | 1,38 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,40** | 89,0 | 2,16 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,92** | 92,0 | 3,28 | 1,80 | 18,80 |
| K 01 | | | 160 | **-10,36** | 92,0 | 4,93 | 0,00 | 21,10 |
| K 01 | | | 200 | **-15,72** | 93,0 | 7,09 | 0,00 | 22,80 |
| K 02 | 8 095 | 8 097 | | | | | | |
| K 02 | | | 20 | **29,63** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,17** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 02 | | | 32 | **21,99** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 02 | | | 40 | **17,73** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 02 | | | 50 | **13,67** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,44** | 83,0 | 0,89 | 4,30 | 13,00 |
| K 02 | | | 80 | **6,94** | 86,0 | 1,30 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,11** | 89,0 | 2,02 | 3,00 | 16,80 |
| K 02 | | | 125 | **-1,14** | 92,0 | 3,08 | 1,80 | 18,80 |
| K 02 | | | 160 | **-9,48** | 92,0 | 4,62 | 0,00 | 21,10 |
| K 02 | | | 200 | **-14,71** | 93,0 | 6,64 | 0,00 | 22,80 |
| K 03 | 7 566 | 7 568 | | | | | | |
| K 03 | | | 20 | **30,22** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,77** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,59** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,34** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,29** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,09** | 83,0 | 0,83 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,61** | 86,0 | 1,21 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,83** | 89,0 | 1,89 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,36** | 92,0 | 2,88 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,59** | 92,0 | 4,31 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,69** | 93,0 | 6,21 | 0,00 | 22,80 |
| K 04 | 6 805 | 6 808 | | | | | | |
| K 04 | | | 20 | **31,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,70** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,54** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,30** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,26** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,09** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,65** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 04 | | | 100 | **4,94** | 89,0 | 1,70 | 3,00 | 16,80 |
| K 04 | | | 125 | **0,85** | 92,0 | 2,59 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,24** | 92,0 | 3,88 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,14** | 93,0 | 5,58 | 0,00 | 22,80 |
| K 05 | 6 818 | 6 820 | | | | | | |
| K 05 | | | 20 | **31,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,69** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,52** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,28** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 05 | | | 50 | **15,25** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,07** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 05 | | | 80 | **8,63** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,92** | 89,0 | 1,71 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,83** | 92,0 | 2,59 | 1,80 | 18,80 |
| K 05 | | | 160 | **-7,26** | 92,0 | 3,89 | 0,00 | 21,10 |
| K 05 | | | 200 | **-12,17** | 93,0 | 5,59 | 0,00 | 22,80 |
| K 06 | 8 332 | 8 334 | | | | | | |
| K 06 | | | 20 | **29,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **25,92** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 06 | | | 32 | **21,73** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 06 | | | 40 | **17,47** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 06 | | | 50 | **13,40** | 80,0 | 0,58 | 4,70 | 11,50 |
| K 06 | | | 63 | **10,17** | 83,0 | 0,92 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 06 | | | 80 | **6,65** | 86,0 | 1,33 | 3,70 | 14,80 |
| K 06 | | | 100 | **2,80** | 89,0 | 2,08 | 3,00 | 16,80 |
| K 06 | | | 125 | **-1,48** | 92,0 | 3,17 | 1,80 | 18,80 |
| K 06 | | | 160 | **-9,87** | 92,0 | 4,75 | 0,00 | 21,10 |
| K 06 | | | 200 | **-15,15** | 93,0 | 6,83 | 0,00 | 22,80 |
| K 07 | 8 020 | 8 022 | | | | | | |
| K 07 | | | 20 | **29,71** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **26,25** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 07 | | | 32 | **22,07** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 07 | | | 40 | **17,81** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 07 | | | 50 | **13,75** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 07 | | | 63 | **10,53** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 07 | | | 80 | **7,03** | 86,0 | 1,28 | 3,70 | 14,80 |
| K 07 | | | 100 | **3,21** | 89,0 | 2,01 | 3,00 | 16,80 |
| K 07 | | | 125 | **-1,03** | 92,0 | 3,05 | 1,80 | 18,80 |
| K 07 | | | 160 | **-9,36** | 92,0 | 4,57 | 0,00 | 21,10 |
| K 07 | | | 200 | **-14,56** | 93,0 | 6,58 | 0,00 | 22,80 |
| K 08 | 7 601 | 7 603 | | | | | | |
| K 08 | | | 20 | **30,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **26,73** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 08 | | | 32 | **22,55** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 08 | | | 40 | **18,30** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,25** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,04** | 83,0 | 0,84 | 4,30 | 13,00 |
| K 08 | | | 80 | **7,56** | 86,0 | 1,22 | 3,70 | 14,80 |
| K 08 | | | 100 | **3,78** | 89,0 | 1,90 | 3,00 | 16,80 |
| K 08 | | | 125 | **-0,41** | 92,0 | 2,89 | 1,80 | 18,80 |
| K 08 | | | 160 | **-8,65** | 92,0 | 4,33 | 0,00 | 21,10 |
| K 08 | | | 200 | **-13,75** | 93,0 | 6,23 | 0,00 | 22,80 |
| K 09 | 7 173 | 7 175 | | | | | | |
| K 09 | | | 20 | **30,68** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,24** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,07** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 09 | | | 40 | **18,82** | 78,0 | 0,36 | 5,00 | 10,30 |
| K 09 | | | 50 | **14,78** | 80,0 | 0,50 | 4,70 | 11,50 |
| K 09 | | | 63 | **11,59** | 83,0 | 0,79 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,14** | 86,0 | 1,15 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,39** | 89,0 | 1,79 | 3,00 | 16,80 |
| K 09 | | | 125 | **0,26** | 92,0 | 2,73 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,91** | 92,0 | 4,09 | 0,00 | 21,10 |
| K 09 | | | 200 | **-12,90** | 93,0 | 5,88 | 0,00 | 22,80 |
| K 10 | 9 843 | 9 844 | | | | | | |
| K 10 | | | 20 | **27,94** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **24,44** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,24** | 76,0 | 0,30 | 5,20 | 9,20 |
| K 10 | | | 40 | **15,94** | 78,0 | 0,49 | 5,00 | 10,30 |
| K 10 | | | 50 | **11,85** | 80,0 | 0,69 | 4,70 | 11,50 |
| K 10 | | | 63 | **8,55** | 83,0 | 1,08 | 4,30 | 13,00 |
| K 10 | | | 80 | **4,96** | 86,0 | 1,58 | 3,70 | 14,80 |
| K 10 | | | 100 | **0,98** | 89,0 | 2,46 | 3,00 | 16,80 |
| K 10 | | | 125 | **-3,50** | 92,0 | 3,74 | 1,80 | 18,80 |
| K 10 | | | 160 | **-12,17** | 92,0 | 5,61 | 0,00 | 21,10 |
| K 10 | | | 200 | **-17,84** | 93,0 | 8,07 | 0,00 | 22,80 |
| K 11 | 10 433 | 10 434 | | | | | | |
| K 11 | | | 20 | **27,43** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **23,92** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 11 | | | 32 | **19,72** | 76,0 | 0,31 | 5,20 | 9,20 |
| K 11 | | | 40 | **15,41** | 78,0 | 0,52 | 5,00 | 10,30 |
| K 11 | | | 50 | **11,30** | 80,0 | 0,73 | 4,70 | 11,50 |
| K 11 | | | 63 | **7,98** | 83,0 | 1,15 | 4,30 | 13,00 |
| K 11 | | | 80 | **4,36** | 86,0 | 1,67 | 3,70 | 14,80 |
| K 11 | | | 100 | **0,32** | 89,0 | 2,61 | 3,00 | 16,80 |
| K 11 | | | 125 | **-4,23** | 92,0 | 3,96 | 1,80 | 18,80 |
| K 11 | | | 160 | **-13,02** | 92,0 | 5,95 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 200 | **-18,82** | 93,0 | 8,56 | 0,00 | 22,80 |
| K 12 | 10 687 | 10 688 | | | | | | |
| K 12 | | | 20 | **27,22** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **23,71** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 12 | | | 32 | **19,50** | 76,0 | 0,32 | 5,20 | 9,20 |
| K 12 | | | 40 | **15,19** | 78,0 | 0,53 | 5,00 | 10,30 |
| K 12 | | | 50 | **11,07** | 80,0 | 0,75 | 4,70 | 11,50 |
| K 12 | | | 63 | **7,75** | 83,0 | 1,18 | 4,30 | 13,00 |
| K 12 | | | 80 | **4,11** | 86,0 | 1,71 | 3,70 | 14,80 |
| K 12 | | | 100 | **0,05** | 89,0 | 2,67 | 3,00 | 16,80 |
| K 12 | | | 125 | **-4,54** | 92,0 | 4,06 | 1,80 | 18,80 |
| K 12 | | | 160 | **-13,37** | 92,0 | 6,09 | 0,00 | 21,10 |
| K 12 | | | 200 | **-19,24** | 93,0 | 8,76 | 0,00 | 22,80 |
| K 13 | 9 782 | 9 784 | | | | | | |
| K 13 | | | 20 | **27,99** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **24,49** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 13 | | | 32 | **20,30** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,00** | 78,0 | 0,49 | 5,00 | 10,30 |
| K 13 | | | 50 | **11,90** | 80,0 | 0,68 | 4,70 | 11,50 |
| K 13 | | | 63 | **8,61** | 83,0 | 1,08 | 4,30 | 13,00 |
| K 13 | | | 80 | **5,02** | 86,0 | 1,57 | 3,70 | 14,80 |
| K 13 | | | 100 | **1,04** | 89,0 | 2,45 | 3,00 | 16,80 |
| K 13 | | | 125 | **-3,43** | 92,0 | 3,72 | 1,80 | 18,80 |
| K 13 | | | 160 | **-12,09** | 92,0 | 5,58 | 0,00 | 21,10 |
| K 13 | | | 200 | **-17,73** | 93,0 | 8,02 | 0,00 | 22,80 |
| K 14 | 9 185 | 9 187 | | | | | | |
| K 14 | | | 20 | **28,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,05** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 14 | | | 32 | **20,86** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 14 | | | 40 | **16,58** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 14 | | | 50 | **12,49** | 80,0 | 0,64 | 4,70 | 11,50 |
| K 14 | | | 63 | **9,23** | 83,0 | 1,01 | 4,30 | 13,00 |
| K 14 | | | 80 | **5,67** | 86,0 | 1,47 | 3,70 | 14,80 |
| K 14 | | | 100 | **1,74** | 89,0 | 2,30 | 3,00 | 16,80 |
| K 14 | | | 125 | **-2,65** | 92,0 | 3,49 | 1,80 | 18,80 |
| K 14 | | | 160 | **-11,20** | 92,0 | 5,24 | 0,00 | 21,10 |
| K 14 | | | 200 | **-16,70** | 93,0 | 7,53 | 0,00 | 22,80 |
| WTG 01 | 5 554 | 5 557 | | | | | | |
| WTG 01 | | | 20 | **34,40** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,99** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,44** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,42** | 78,3 | 0,28 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,41** | 80,3 | 0,39 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,59** | 84,6 | 0,61 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,91** | 87,3 | 0,89 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,91** | 88,9 | 1,39 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,59** | 91,5 | 2,11 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,26** | 93,5 | 3,17 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-7,85** | 94,5 | 4,56 | 0,00 | 22,80 |
| WTG 02 | 6 197 | 6 200 | | | | | | |
| WTG 02 | | | 20 | **33,45** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,03** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,47** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,44** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,42** | 80,3 | 0,43 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,57** | 84,6 | 0,68 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,86** | 87,3 | 0,99 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,80** | 88,9 | 1,55 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,40** | 91,5 | 2,36 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,58** | 93,5 | 3,53 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,33** | 94,5 | 5,08 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,41** | | | | |
| Sum | | | 25 | **38,96** | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| Sum | | | 32 | **34,67** | | | | |
| Sum | | | 40 | **30,22** | | | | |
| Sum | | | 50 | **26,17** | | | | |
| Sum | | | 63 | **23,32** | | | | |
| Sum | | | 80 | **19,75** | | | | |
| Sum | | | 100 | **15,61** | | | | |
| Sum | | | 125 | **11,33** | | | | |
| Sum | | | 160 | **3,71** | | | | |
| Sum | | | 200 | **-1,28** | | | | |

**Noise sensitive area: E Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (169)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 485 | 8 486 | | | | | | |
| K 01 | | | 20 | **29,23** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **25,76** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 01 | | | 32 | **21,57** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,30** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,23** | 80,0 | 0,59 | 4,70 | 11,50 |
| K 01 | | | 63 | **9,99** | 83,0 | 0,93 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,47** | 86,0 | 1,36 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,60** | 89,0 | 2,12 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,70** | 92,0 | 3,22 | 1,80 | 18,80 |
| K 01 | | | 160 | **-10,11** | 92,0 | 4,84 | 0,00 | 21,10 |
| K 01 | | | 200 | **-15,43** | 93,0 | 6,96 | 0,00 | 22,80 |
| K 02 | 7 986 | 7 987 | | | | | | |
| K 02 | | | 20 | **29,75** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,29** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,11** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 02 | | | 40 | **17,85** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 02 | | | 50 | **13,79** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,57** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,07** | 86,0 | 1,28 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,25** | 89,0 | 2,00 | 3,00 | 16,80 |
| K 02 | | | 125 | **-0,98** | 92,0 | 3,04 | 1,80 | 18,80 |
| K 02 | | | 160 | **-9,30** | 92,0 | 4,55 | 0,00 | 21,10 |
| K 02 | | | 200 | **-14,50** | 93,0 | 6,55 | 0,00 | 22,80 |
| K 03 | 7 598 | 7 600 | | | | | | |
| K 03 | | | 20 | **30,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,73** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,56** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,30** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,25** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,05** | 83,0 | 0,84 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,57** | 86,0 | 1,22 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,78** | 89,0 | 1,90 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,40** | 92,0 | 2,89 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,65** | 92,0 | 4,33 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,75** | 93,0 | 6,23 | 0,00 | 22,80 |
| K 04 | 6 782 | 6 784 | | | | | | |
| K 04 | | | 20 | **31,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,73** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,57** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,33** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,29** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,12** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,68** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 04 | | | 100 | **4,97** | 89,0 | 1,70 | 3,00 | 16,80 |
| K 04 | | | 125 | **0,89** | 92,0 | 2,58 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,20** | 92,0 | 3,87 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,09** | 93,0 | 5,56 | 0,00 | 22,80 |
| K 05 | 7 067 | 7 069 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 20 | **30,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,37** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,20** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 05 | | | 40 | **18,96** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 05 | | | 50 | **14,92** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 05 | | | 63 | **11,73** | 83,0 | 0,78 | 4,30 | 13,00 |
| K 05 | | | 80 | **8,28** | 86,0 | 1,13 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,55** | 89,0 | 1,77 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,43** | 92,0 | 2,69 | 1,80 | 18,80 |
| K 05 | | | 160 | **-7,72** | 92,0 | 4,03 | 0,00 | 21,10 |
| K 05 | | | 200 | **-12,68** | 93,0 | 5,80 | 0,00 | 22,80 |
| K 06 | 7 928 | 7 930 | | | | | | |
| K 06 | | | 20 | **29,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **26,36** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 06 | | | 32 | **22,18** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 06 | | | 40 | **17,92** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 06 | | | 50 | **13,86** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 06 | | | 63 | **10,64** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 06 | | | 80 | **7,15** | 86,0 | 1,27 | 3,70 | 14,80 |
| K 06 | | | 100 | **3,33** | 89,0 | 1,98 | 3,00 | 16,80 |
| K 06 | | | 125 | **-0,90** | 92,0 | 3,01 | 1,80 | 18,80 |
| K 06 | | | 160 | **-9,21** | 92,0 | 4,52 | 0,00 | 21,10 |
| K 06 | | | 200 | **-14,39** | 93,0 | 6,50 | 0,00 | 22,80 |
| K 07 | 7 463 | 7 465 | | | | | | |
| K 07 | | | 20 | **30,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **26,89** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 07 | | | 32 | **22,72** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 07 | | | 40 | **18,47** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 07 | | | 50 | **14,42** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 07 | | | 63 | **11,22** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 07 | | | 80 | **7,75** | 86,0 | 1,19 | 3,70 | 14,80 |
| K 07 | | | 100 | **3,97** | 89,0 | 1,87 | 3,00 | 16,80 |
| K 07 | | | 125 | **-0,20** | 92,0 | 2,84 | 1,80 | 18,80 |
| K 07 | | | 160 | **-8,42** | 92,0 | 4,25 | 0,00 | 21,10 |
| K 07 | | | 200 | **-13,48** | 93,0 | 6,12 | 0,00 | 22,80 |
| K 08 | 7 322 | 7 324 | | | | | | |
| K 08 | | | 20 | **30,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **27,06** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 08 | | | 32 | **22,89** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 08 | | | 40 | **18,64** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,59** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,40** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 08 | | | 80 | **7,93** | 86,0 | 1,17 | 3,70 | 14,80 |
| K 08 | | | 100 | **4,17** | 89,0 | 1,83 | 3,00 | 16,80 |
| K 08 | | | 125 | **0,02** | 92,0 | 2,78 | 1,80 | 18,80 |
| K 08 | | | 160 | **-8,17** | 92,0 | 4,17 | 0,00 | 21,10 |
| K 08 | | | 200 | **-13,20** | 93,0 | 6,01 | 0,00 | 22,80 |
| K 09 | 6 979 | 6 981 | | | | | | |
| K 09 | | | 20 | **30,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,48** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,31** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 09 | | | 40 | **19,07** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 09 | | | 50 | **15,03** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 09 | | | 63 | **11,85** | 83,0 | 0,77 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,40** | 86,0 | 1,12 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,68** | 89,0 | 1,75 | 3,00 | 16,80 |
| K 09 | | | 125 | **0,57** | 92,0 | 2,65 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,56** | 92,0 | 3,98 | 0,00 | 21,10 |
| K 09 | | | 200 | **-12,50** | 93,0 | 5,72 | 0,00 | 22,80 |
| K 10 | 9 594 | 9 595 | | | | | | |
| K 10 | | | 20 | **28,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **24,67** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,47** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,18** | 78,0 | 0,48 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 50 | **12,09** | 80,0 | 0,67 | 4,70 | 11,50 |
| K 10 | | | 63 | **8,80** | 83,0 | 1,06 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,22** | 86,0 | 1,54 | 3,70 | 14,80 |
| K 10 | | | 100 | **1,26** | 89,0 | 2,40 | 3,00 | 16,80 |
| K 10 | | | 125 | **-3,19** | 92,0 | 3,65 | 1,80 | 18,80 |
| K 10 | | | 160 | **-11,81** | 92,0 | 5,47 | 0,00 | 21,10 |
| K 10 | | | 200 | **-17,41** | 93,0 | 7,87 | 0,00 | 22,80 |
| K 11 | 10 085 | 10 086 | | | | | | |
| K 11 | | | 20 | **27,73** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **24,22** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 11 | | | 32 | **20,02** | 76,0 | 0,30 | 5,20 | 9,20 |
| K 11 | | | 40 | **15,72** | 78,0 | 0,50 | 5,00 | 10,30 |
| K 11 | | | 50 | **11,62** | 80,0 | 0,71 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,32** | 83,0 | 1,11 | 4,30 | 13,00 |
| K 11 | | | 80 | **4,71** | 86,0 | 1,61 | 3,70 | 14,80 |
| K 11 | | | 100 | **0,70** | 89,0 | 2,52 | 3,00 | 16,80 |
| K 11 | | | 125 | **-3,81** | 92,0 | 3,83 | 1,80 | 18,80 |
| K 11 | | | 160 | **-12,52** | 92,0 | 5,75 | 0,00 | 21,10 |
| K 11 | | | 200 | **-18,24** | 93,0 | 8,27 | 0,00 | 22,80 |
| K 12 | 10 142 | 10 143 | | | | | | |
| K 12 | | | 20 | **27,68** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **24,17** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 12 | | | 32 | **19,97** | 76,0 | 0,30 | 5,20 | 9,20 |
| K 12 | | | 40 | **15,67** | 78,0 | 0,51 | 5,00 | 10,30 |
| K 12 | | | 50 | **11,57** | 80,0 | 0,71 | 4,70 | 11,50 |
| K 12 | | | 63 | **8,26** | 83,0 | 1,12 | 4,30 | 13,00 |
| K 12 | | | 80 | **4,65** | 86,0 | 1,62 | 3,70 | 14,80 |
| K 12 | | | 100 | **0,64** | 89,0 | 2,54 | 3,00 | 16,80 |
| K 12 | | | 125 | **-3,88** | 92,0 | 3,85 | 1,80 | 18,80 |
| K 12 | | | 160 | **-12,60** | 92,0 | 5,78 | 0,00 | 21,10 |
| K 12 | | | 200 | **-18,34** | 93,0 | 8,32 | 0,00 | 22,80 |
| K 13 | 9 273 | 9 274 | | | | | | |
| K 13 | | | 20 | **28,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **24,97** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 13 | | | 32 | **20,78** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,49** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 13 | | | 50 | **12,41** | 80,0 | 0,65 | 4,70 | 11,50 |
| K 13 | | | 63 | **9,13** | 83,0 | 1,02 | 4,30 | 13,00 |
| K 13 | | | 80 | **5,57** | 86,0 | 1,48 | 3,70 | 14,80 |
| K 13 | | | 100 | **1,64** | 89,0 | 2,32 | 3,00 | 16,80 |
| K 13 | | | 125 | **-2,77** | 92,0 | 3,52 | 1,80 | 18,80 |
| K 13 | | | 160 | **-11,33** | 92,0 | 5,29 | 0,00 | 21,10 |
| K 13 | | | 200 | **-16,85** | 93,0 | 7,60 | 0,00 | 22,80 |
| K 14 | 8 787 | 8 789 | | | | | | |
| K 14 | | | 20 | **28,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,45** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 14 | | | 32 | **21,26** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 14 | | | 40 | **16,98** | 78,0 | 0,44 | 5,00 | 10,30 |
| K 14 | | | 50 | **12,91** | 80,0 | 0,62 | 4,70 | 11,50 |
| K 14 | | | 63 | **9,65** | 83,0 | 0,97 | 4,30 | 13,00 |
| K 14 | | | 80 | **6,12** | 86,0 | 1,41 | 3,70 | 14,80 |
| K 14 | | | 100 | **2,22** | 89,0 | 2,20 | 3,00 | 16,80 |
| K 14 | | | 125 | **-2,12** | 92,0 | 3,34 | 1,80 | 18,80 |
| K 14 | | | 160 | **-10,59** | 92,0 | 5,01 | 0,00 | 21,10 |
| K 14 | | | 200 | **-15,99** | 93,0 | 7,21 | 0,00 | 22,80 |
| WTG 01 | 5 842 | 5 845 | | | | | | |
| WTG 01 | | | 20 | **33,96** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,55** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **25,99** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **20,97** | 78,3 | 0,29 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **16,95** | 80,3 | 0,41 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,12** | 84,6 | 0,64 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,43** | 87,3 | 0,94 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,40** | 88,9 | 1,46 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 01 | | | 125 | **2,04** | 91,5 | 2,22 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,87** | 93,5 | 3,33 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-8,53** | 94,5 | 4,79 | 0,00 | 22,80 |
| WTG 02 | 6 162 | 6 165 | | | | | | |
| WTG 02 | | | 20 | **33,50** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,08** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,52** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,49** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,47** | 80,3 | 0,43 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,62** | 84,6 | 0,68 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,91** | 87,3 | 0,99 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,86** | 88,9 | 1,54 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,46** | 91,5 | 2,34 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,51** | 93,5 | 3,51 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,25** | 94,5 | 5,06 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,50** | | | | |
| Sum | | | 25 | **39,05** | | | | |
| Sum | | | 32 | **34,77** | | | | |
| Sum | | | 40 | **30,33** | | | | |
| Sum | | | 50 | **26,28** | | | | |
| Sum | | | 63 | **23,41** | | | | |
| Sum | | | 80 | **19,86** | | | | |
| Sum | | | 100 | **15,74** | | | | |
| Sum | | | 125 | **11,49** | | | | |
| Sum | | | 160 | **3,81** | | | | |
| Sum | | | 200 | **-1,19** | | | | |

**Noise sensitive area: F Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (168)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 431 | 8 433 | | | | | | |
| K 01 | | | 20 | **29,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **25,81** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 01 | | | 32 | **21,63** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,36** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,29** | 80,0 | 0,59 | 4,70 | 11,50 |
| K 01 | | | 63 | **10,05** | 83,0 | 0,93 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,53** | 86,0 | 1,35 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,67** | 89,0 | 2,11 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,62** | 92,0 | 3,20 | 1,80 | 18,80 |
| K 01 | | | 160 | **-10,03** | 92,0 | 4,81 | 0,00 | 21,10 |
| K 01 | | | 200 | **-15,33** | 93,0 | 6,92 | 0,00 | 22,80 |
| K 02 | 7 881 | 7 882 | | | | | | |
| K 02 | | | 20 | **29,87** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,41** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,23** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 02 | | | 40 | **17,97** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 02 | | | 50 | **13,92** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,70** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,21** | 86,0 | 1,26 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,40** | 89,0 | 1,97 | 3,00 | 16,80 |
| K 02 | | | 125 | **-0,83** | 92,0 | 3,00 | 1,80 | 18,80 |
| K 02 | | | 160 | **-9,13** | 92,0 | 4,49 | 0,00 | 21,10 |
| K 02 | | | 200 | **-14,30** | 93,0 | 6,46 | 0,00 | 22,80 |
| K 03 | 7 330 | 7 332 | | | | | | |
| K 03 | | | 20 | **30,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **27,05** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,88** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,63** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,58** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,39** | 83,0 | 0,81 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 03 | | | 80 | **7,92** | 86,0 | 1,17 | 3,70 | 14,80 |
| K 03 | | | 100 | **4,16** | 89,0 | 1,83 | 3,00 | 16,80 |
| K 03 | | | 125 | **0,01** | 92,0 | 2,79 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,18** | 92,0 | 4,18 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,22** | 93,0 | 6,01 | 0,00 | 22,80 |
| K 04 | 6 592 | 6 594 | | | | | | |
| K 04 | | | 20 | **31,42** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,98** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,82** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,59** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,55** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,39** | 83,0 | 0,73 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,96** | 86,0 | 1,06 | 3,70 | 14,80 |
| K 04 | | | 100 | **5,27** | 89,0 | 1,65 | 3,00 | 16,80 |
| K 04 | | | 125 | **1,21** | 92,0 | 2,51 | 1,80 | 18,80 |
| K 04 | | | 160 | **-6,84** | 92,0 | 3,76 | 0,00 | 21,10 |
| K 04 | | | 200 | **-11,69** | 93,0 | 5,41 | 0,00 | 22,80 |
| K 05 | 6 549 | 6 551 | | | | | | |
| K 05 | | | 20 | **31,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **28,04** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,88** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,65** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 05 | | | 50 | **15,62** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,45** | 83,0 | 0,72 | 4,30 | 13,00 |
| K 05 | | | 80 | **9,03** | 86,0 | 1,05 | 3,70 | 14,80 |
| K 05 | | | 100 | **5,34** | 89,0 | 1,64 | 3,00 | 16,80 |
| K 05 | | | 125 | **1,28** | 92,0 | 2,49 | 1,80 | 18,80 |
| K 05 | | | 160 | **-6,76** | 92,0 | 3,73 | 0,00 | 21,10 |
| K 05 | | | 200 | **-11,60** | 93,0 | 5,37 | 0,00 | 22,80 |
| K 06 | 8 176 | 8 178 | | | | | | |
| K 06 | | | 20 | **29,55** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **26,08** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 06 | | | 32 | **21,90** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 06 | | | 40 | **17,64** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 06 | | | 50 | **13,57** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 06 | | | 63 | **10,35** | 83,0 | 0,90 | 4,30 | 13,00 |
| K 06 | | | 80 | **6,84** | 86,0 | 1,31 | 3,70 | 14,80 |
| K 06 | | | 100 | **3,00** | 89,0 | 2,04 | 3,00 | 16,80 |
| K 06 | | | 125 | **-1,26** | 92,0 | 3,11 | 1,80 | 18,80 |
| K 06 | | | 160 | **-9,61** | 92,0 | 4,66 | 0,00 | 21,10 |
| K 06 | | | 200 | **-14,86** | 93,0 | 6,71 | 0,00 | 22,80 |
| K 07 | 7 901 | 7 903 | | | | | | |
| K 07 | | | 20 | **29,84** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **26,39** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 07 | | | 32 | **22,21** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 07 | | | 40 | **17,95** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 07 | | | 50 | **13,89** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 07 | | | 63 | **10,67** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 07 | | | 80 | **7,18** | 86,0 | 1,26 | 3,70 | 14,80 |
| K 07 | | | 100 | **3,37** | 89,0 | 1,98 | 3,00 | 16,80 |
| K 07 | | | 125 | **-0,86** | 92,0 | 3,00 | 1,80 | 18,80 |
| K 07 | | | 160 | **-9,16** | 92,0 | 4,50 | 0,00 | 21,10 |
| K 07 | | | 200 | **-14,34** | 93,0 | 6,48 | 0,00 | 22,80 |
| K 08 | 7 429 | 7 431 | | | | | | |
| K 08 | | | 20 | **30,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **26,93** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 08 | | | 32 | **22,76** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 08 | | | 40 | **18,51** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,46** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,26** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 08 | | | 80 | **7,79** | 86,0 | 1,19 | 3,70 | 14,80 |
| K 08 | | | 100 | **4,02** | 89,0 | 1,86 | 3,00 | 16,80 |
| K 08 | | | 125 | **-0,14** | 92,0 | 2,82 | 1,80 | 18,80 |
| K 08 | | | 160 | **-8,36** | 92,0 | 4,24 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 200 | **-13,41** | 93,0 | 6,09 | 0,00 | 22,80 |
| K 09 | 6 989 | 6 991 | | | | | | |
| K 09 | | | 20 | **30,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,47** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,30** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 09 | | | 40 | **19,06** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 09 | | | 50 | **15,02** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 09 | | | 63 | **11,84** | 83,0 | 0,77 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,39** | 86,0 | 1,12 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,66** | 89,0 | 1,75 | 3,00 | 16,80 |
| K 09 | | | 125 | **0,55** | 92,0 | 2,66 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,58** | 92,0 | 3,99 | 0,00 | 21,10 |
| K 09 | | | 200 | **-12,52** | 93,0 | 5,73 | 0,00 | 22,80 |
| K 10 | 9 639 | 9 640 | | | | | | |
| K 10 | | | 20 | **28,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **24,63** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,43** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,14** | 78,0 | 0,48 | 5,00 | 10,30 |
| K 10 | | | 50 | **12,04** | 80,0 | 0,67 | 4,70 | 11,50 |
| K 10 | | | 63 | **8,76** | 83,0 | 1,06 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,18** | 86,0 | 1,54 | 3,70 | 14,80 |
| K 10 | | | 100 | **1,21** | 89,0 | 2,41 | 3,00 | 16,80 |
| K 10 | | | 125 | **-3,24** | 92,0 | 3,66 | 1,80 | 18,80 |
| K 10 | | | 160 | **-11,88** | 92,0 | 5,49 | 0,00 | 21,10 |
| K 10 | | | 200 | **-17,49** | 93,0 | 7,90 | 0,00 | 22,80 |
| K 11 | 10 245 | 10 246 | | | | | | |
| K 11 | | | 20 | **27,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **24,08** | 73,7 | 0,20 | 5,40 | 8,30 |
| K 11 | | | 32 | **19,88** | 76,0 | 0,31 | 5,20 | 9,20 |
| K 11 | | | 40 | **15,58** | 78,0 | 0,51 | 5,00 | 10,30 |
| K 11 | | | 50 | **11,47** | 80,0 | 0,72 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,16** | 83,0 | 1,13 | 4,30 | 13,00 |
| K 11 | | | 80 | **4,55** | 86,0 | 1,64 | 3,70 | 14,80 |
| K 11 | | | 100 | **0,53** | 89,0 | 2,56 | 3,00 | 16,80 |
| K 11 | | | 125 | **-4,00** | 92,0 | 3,89 | 1,80 | 18,80 |
| K 11 | | | 160 | **-12,75** | 92,0 | 5,84 | 0,00 | 21,10 |
| K 11 | | | 200 | **-18,51** | 93,0 | 8,40 | 0,00 | 22,80 |
| K 12 | 10 538 | 10 540 | | | | | | |
| K 12 | | | 20 | **27,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **23,83** | 73,7 | 0,21 | 5,40 | 8,30 |
| K 12 | | | 32 | **19,63** | 76,0 | 0,32 | 5,20 | 9,20 |
| K 12 | | | 40 | **15,32** | 78,0 | 0,53 | 5,00 | 10,30 |
| K 12 | | | 50 | **11,21** | 80,0 | 0,74 | 4,70 | 11,50 |
| K 12 | | | 63 | **7,88** | 83,0 | 1,16 | 4,30 | 13,00 |
| K 12 | | | 80 | **4,26** | 86,0 | 1,69 | 3,70 | 14,80 |
| K 12 | | | 100 | **0,21** | 89,0 | 2,63 | 3,00 | 16,80 |
| K 12 | | | 125 | **-4,36** | 92,0 | 4,01 | 1,80 | 18,80 |
| K 12 | | | 160 | **-13,16** | 92,0 | 6,01 | 0,00 | 21,10 |
| K 12 | | | 200 | **-19,00** | 93,0 | 8,64 | 0,00 | 22,80 |
| K 13 | 9 634 | 9 635 | | | | | | |
| K 13 | | | 20 | **28,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **24,63** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 13 | | | 32 | **20,43** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,14** | 78,0 | 0,48 | 5,00 | 10,30 |
| K 13 | | | 50 | **12,05** | 80,0 | 0,67 | 4,70 | 11,50 |
| K 13 | | | 63 | **8,76** | 83,0 | 1,06 | 4,30 | 13,00 |
| K 13 | | | 80 | **5,18** | 86,0 | 1,54 | 3,70 | 14,80 |
| K 13 | | | 100 | **1,21** | 89,0 | 2,41 | 3,00 | 16,80 |
| K 13 | | | 125 | **-3,24** | 92,0 | 3,66 | 1,80 | 18,80 |
| K 13 | | | 160 | **-11,87** | 92,0 | 5,49 | 0,00 | 21,10 |
| K 13 | | | 200 | **-17,48** | 93,0 | 7,90 | 0,00 | 22,80 |
| K 14 | 9 018 | 9 020 | | | | | | |
| K 14 | | | 20 | **28,70** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,22** | 73,7 | 0,18 | 5,40 | 8,30 |

*To be continued on next page...*

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 32 | **21,03** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 14 | | | 40 | **16,74** | 78,0 | 0,45 | 5,00 | 10,30 |
| K 14 | | | 50 | **12,66** | 80,0 | 0,63 | 4,70 | 11,50 |
| K 14 | | | 63 | **9,40** | 83,0 | 0,99 | 4,30 | 13,00 |
| K 14 | | | 80 | **5,85** | 86,0 | 1,44 | 3,70 | 14,80 |
| K 14 | | | 100 | **1,94** | 89,0 | 2,26 | 3,00 | 16,80 |
| K 14 | | | 125 | **-2,43** | 92,0 | 3,43 | 1,80 | 18,80 |
| K 14 | | | 160 | **-10,95** | 92,0 | 5,14 | 0,00 | 21,10 |
| K 14 | | | 200 | **-16,40** | 93,0 | 7,40 | 0,00 | 22,80 |
| WTG 01 | 5 302 | 5 306 | | | | | | |
| WTG 01 | | | 20 | **34,81** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **31,40** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,85** | 77,1 | 0,16 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,84** | 78,3 | 0,27 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,83** | 80,3 | 0,37 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **16,02** | 84,6 | 0,58 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **12,36** | 87,3 | 0,85 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **7,38** | 88,9 | 1,33 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **3,09** | 91,5 | 2,02 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-2,72** | 93,5 | 3,02 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-7,25** | 94,5 | 4,35 | 0,00 | 22,80 |
| WTG 02 | 5 998 | 6 001 | | | | | | |
| WTG 02 | | | 20 | **33,74** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,32** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,76** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,74** | 78,3 | 0,30 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,72** | 80,3 | 0,42 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,88** | 84,6 | 0,66 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **11,18** | 87,3 | 0,96 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **6,14** | 88,9 | 1,50 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,75** | 91,5 | 2,28 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,19** | 93,5 | 3,42 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-8,89** | 94,5 | 4,92 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,66** | | | | |
| Sum | | | 25 | **39,22** | | | | |
| Sum | | | 32 | **34,93** | | | | |
| Sum | | | 40 | **30,48** | | | | |
| Sum | | | 50 | **26,43** | | | | |
| Sum | | | 63 | **23,60** | | | | |
| Sum | | | 80 | **20,05** | | | | |
| Sum | | | 100 | **15,91** | | | | |
| Sum | | | 125 | **11,66** | | | | |
| Sum | | | 160 | **4,10** | | | | |
| Sum | | | 200 | **-0,83** | | | | |

**Noise sensitive area: G Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (167)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 085 | 8 086 | | | | | | |
| K 01 | | | 20 | **29,64** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **26,18** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 01 | | | 32 | **22,00** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,74** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,68** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 01 | | | 63 | **10,46** | 83,0 | 0,89 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,95** | 86,0 | 1,29 | 3,70 | 14,80 |
| K 01 | | | 100 | **3,12** | 89,0 | 2,02 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,13** | 92,0 | 3,07 | 1,80 | 18,80 |
| K 01 | | | 160 | **-9,46** | 92,0 | 4,61 | 0,00 | 21,10 |
| K 01 | | | 200 | **-14,69** | 93,0 | 6,63 | 0,00 | 22,80 |
| K 02 | 7 600 | 7 602 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 20 | **30,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,73** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,55** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 02 | | | 40 | **18,30** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 02 | | | 50 | **14,25** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 02 | | | 63 | **11,05** | 83,0 | 0,84 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,56** | 86,0 | 1,22 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,78** | 89,0 | 1,90 | 3,00 | 16,80 |
| K 02 | | | 125 | **-0,41** | 92,0 | 2,89 | 1,80 | 18,80 |
| K 02 | | | 160 | **-8,65** | 92,0 | 4,33 | 0,00 | 21,10 |
| K 02 | | | 200 | **-13,75** | 93,0 | 6,23 | 0,00 | 22,80 |
| K 03 | 7 246 | 7 247 | | | | | | |
| K 03 | | | 20 | **30,60** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **27,15** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,98** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,73** | 78,0 | 0,36 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,69** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,50** | 83,0 | 0,80 | 4,30 | 13,00 |
| K 03 | | | 80 | **8,04** | 86,0 | 1,16 | 3,70 | 14,80 |
| K 03 | | | 100 | **4,28** | 89,0 | 1,81 | 3,00 | 16,80 |
| K 03 | | | 125 | **0,14** | 92,0 | 2,75 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,03** | 92,0 | 4,13 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,05** | 93,0 | 5,94 | 0,00 | 22,80 |
| K 04 | 6 431 | 6 433 | | | | | | |
| K 04 | | | 20 | **31,63** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **28,20** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 04 | | | 32 | **24,04** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,81** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,78** | 80,0 | 0,45 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,62** | 83,0 | 0,71 | 4,30 | 13,00 |
| K 04 | | | 80 | **9,20** | 86,0 | 1,03 | 3,70 | 14,80 |
| K 04 | | | 100 | **5,52** | 89,0 | 1,61 | 3,00 | 16,80 |
| K 04 | | | 125 | **1,49** | 92,0 | 2,44 | 1,80 | 18,80 |
| K 04 | | | 160 | **-6,54** | 92,0 | 3,67 | 0,00 | 21,10 |
| K 04 | | | 200 | **-11,34** | 93,0 | 5,28 | 0,00 | 22,80 |
| K 05 | 6 768 | 6 769 | | | | | | |
| K 05 | | | 20 | **31,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,75** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,59** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,35** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 05 | | | 50 | **15,32** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,14** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 05 | | | 80 | **8,71** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 05 | | | 100 | **5,00** | 89,0 | 1,69 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,92** | 92,0 | 2,57 | 1,80 | 18,80 |
| K 05 | | | 160 | **-7,17** | 92,0 | 3,86 | 0,00 | 21,10 |
| K 05 | | | 200 | **-12,06** | 93,0 | 5,55 | 0,00 | 22,80 |
| K 06 | 7 489 | 7 491 | | | | | | |
| K 06 | | | 20 | **30,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **26,86** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 06 | | | 32 | **22,68** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 06 | | | 40 | **18,43** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 06 | | | 50 | **14,39** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 06 | | | 63 | **11,19** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 06 | | | 80 | **7,71** | 86,0 | 1,20 | 3,70 | 14,80 |
| K 06 | | | 100 | **3,94** | 89,0 | 1,87 | 3,00 | 16,80 |
| K 06 | | | 125 | **-0,24** | 92,0 | 2,85 | 1,80 | 18,80 |
| K 06 | | | 160 | **-8,46** | 92,0 | 4,27 | 0,00 | 21,10 |
| K 06 | | | 200 | **-13,53** | 93,0 | 6,14 | 0,00 | 22,80 |
| K 07 | 7 002 | 7 004 | | | | | | |
| K 07 | | | 20 | **30,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **27,45** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 07 | | | 32 | **23,28** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 07 | | | 40 | **19,04** | 78,0 | 0,35 | 5,00 | 10,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 50 | **15,00** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 07 | | | 63 | **11,82** | 83,0 | 0,77 | 4,30 | 13,00 |
| K 07 | | | 80 | **8,37** | 86,0 | 1,12 | 3,70 | 14,80 |
| K 07 | | | 100 | **4,64** | 89,0 | 1,75 | 3,00 | 16,80 |
| K 07 | | | 125 | **0,53** | 92,0 | 2,66 | 1,80 | 18,80 |
| K 07 | | | 160 | **-7,60** | 92,0 | 3,99 | 0,00 | 21,10 |
| K 07 | | | 200 | **-12,55** | 93,0 | 5,74 | 0,00 | 22,80 |
| K 08 | 6 913 | 6 915 | | | | | | |
| K 08 | | | 20 | **31,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **27,57** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 08 | | | 32 | **23,40** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 08 | | | 40 | **19,16** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 08 | | | 50 | **15,12** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,94** | 83,0 | 0,76 | 4,30 | 13,00 |
| K 08 | | | 80 | **8,50** | 86,0 | 1,11 | 3,70 | 14,80 |
| K 08 | | | 100 | **4,78** | 89,0 | 1,73 | 3,00 | 16,80 |
| K 08 | | | 125 | **0,68** | 92,0 | 2,63 | 1,80 | 18,80 |
| K 08 | | | 160 | **-7,44** | 92,0 | 3,94 | 0,00 | 21,10 |
| K 08 | | | 200 | **-12,37** | 93,0 | 5,67 | 0,00 | 22,80 |
| K 09 | 6 591 | 6 593 | | | | | | |
| K 09 | | | 20 | **31,42** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,99** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,82** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 09 | | | 40 | **19,59** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 09 | | | 50 | **15,56** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 09 | | | 63 | **12,39** | 83,0 | 0,73 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,96** | 86,0 | 1,05 | 3,70 | 14,80 |
| K 09 | | | 100 | **5,27** | 89,0 | 1,65 | 3,00 | 16,80 |
| K 09 | | | 125 | **1,21** | 92,0 | 2,51 | 1,80 | 18,80 |
| K 09 | | | 160 | **-6,84** | 92,0 | 3,76 | 0,00 | 21,10 |
| K 09 | | | 200 | **-11,69** | 93,0 | 5,41 | 0,00 | 22,80 |
| K 10 | 9 168 | 9 169 | | | | | | |
| K 10 | | | 20 | **28,55** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **25,07** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,88** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,59** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 10 | | | 50 | **12,51** | 80,0 | 0,64 | 4,70 | 11,50 |
| K 10 | | | 63 | **9,24** | 83,0 | 1,01 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,69** | 86,0 | 1,47 | 3,70 | 14,80 |
| K 10 | | | 100 | **1,76** | 89,0 | 2,29 | 3,00 | 16,80 |
| K 10 | | | 125 | **-2,63** | 92,0 | 3,48 | 1,80 | 18,80 |
| K 10 | | | 160 | **-11,17** | 92,0 | 5,23 | 0,00 | 21,10 |
| K 10 | | | 200 | **-16,67** | 93,0 | 7,52 | 0,00 | 22,80 |
| K 11 | 9 638 | 9 639 | | | | | | |
| K 11 | | | 20 | **28,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **24,63** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 11 | | | 32 | **20,43** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 11 | | | 40 | **16,14** | 78,0 | 0,48 | 5,00 | 10,30 |
| K 11 | | | 50 | **12,04** | 80,0 | 0,67 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,76** | 83,0 | 1,06 | 4,30 | 13,00 |
| K 11 | | | 80 | **5,18** | 86,0 | 1,54 | 3,70 | 14,80 |
| K 11 | | | 100 | **1,21** | 89,0 | 2,41 | 3,00 | 16,80 |
| K 11 | | | 125 | **-3,24** | 92,0 | 3,66 | 1,80 | 18,80 |
| K 11 | | | 160 | **-11,88** | 92,0 | 5,49 | 0,00 | 21,10 |
| K 11 | | | 200 | **-17,49** | 93,0 | 7,90 | 0,00 | 22,80 |
| K 12 | 9 662 | 9 664 | | | | | | |
| K 12 | | | 20 | **28,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **24,60** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 12 | | | 32 | **20,41** | 76,0 | 0,29 | 5,20 | 9,20 |
| K 12 | | | 40 | **16,11** | 78,0 | 0,48 | 5,00 | 10,30 |
| K 12 | | | 50 | **12,02** | 80,0 | 0,68 | 4,70 | 11,50 |
| K 12 | | | 63 | **8,73** | 83,0 | 1,06 | 4,30 | 13,00 |
| K 12 | | | 80 | **5,15** | 86,0 | 1,55 | 3,70 | 14,80 |
| K 12 | | | 100 | **1,18** | 89,0 | 2,42 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 12 | | | 125 | **-3,28** | 92,0 | 3,67 | 1,80 | 18,80 |
| K 12 | | | 160 | **-11,91** | 92,0 | 5,51 | 0,00 | 21,10 |
| K 12 | | | 200 | **-17,53** | 93,0 | 7,92 | 0,00 | 22,80 |
| K 13 | 8 805 | 8 806 | | | | | | |
| K 13 | | | 20 | **28,90** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **25,43** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 13 | | | 32 | **21,24** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 13 | | | 40 | **16,96** | 78,0 | 0,44 | 5,00 | 10,30 |
| K 13 | | | 50 | **12,89** | 80,0 | 0,62 | 4,70 | 11,50 |
| K 13 | | | 63 | **9,64** | 83,0 | 0,97 | 4,30 | 13,00 |
| K 13 | | | 80 | **6,10** | 86,0 | 1,41 | 3,70 | 14,80 |
| K 13 | | | 100 | **2,20** | 89,0 | 2,20 | 3,00 | 16,80 |
| K 13 | | | 125 | **-2,14** | 92,0 | 3,35 | 1,80 | 18,80 |
| K 13 | | | 160 | **-10,62** | 92,0 | 5,02 | 0,00 | 21,10 |
| K 13 | | | 200 | **-16,02** | 93,0 | 7,22 | 0,00 | 22,80 |
| K 14 | 8 341 | 8 343 | | | | | | |
| K 14 | | | 20 | **29,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **25,91** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 14 | | | 32 | **21,72** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 14 | | | 40 | **17,46** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 14 | | | 50 | **13,39** | 80,0 | 0,58 | 4,70 | 11,50 |
| K 14 | | | 63 | **10,16** | 83,0 | 0,92 | 4,30 | 13,00 |
| K 14 | | | 80 | **6,64** | 86,0 | 1,33 | 3,70 | 14,80 |
| K 14 | | | 100 | **2,79** | 89,0 | 2,09 | 3,00 | 16,80 |
| K 14 | | | 125 | **-1,50** | 92,0 | 3,17 | 1,80 | 18,80 |
| K 14 | | | 160 | **-9,88** | 92,0 | 4,76 | 0,00 | 21,10 |
| K 14 | | | 200 | **-15,17** | 93,0 | 6,84 | 0,00 | 22,80 |
| WTG 01 | 5 577 | 5 580 | | | | | | |
| WTG 01 | | | 20 | **34,37** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,96** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,40** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,39** | 78,3 | 0,28 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,38** | 80,3 | 0,39 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,55** | 84,6 | 0,61 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,87** | 87,3 | 0,89 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,87** | 88,9 | 1,40 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,55** | 91,5 | 2,12 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,31** | 93,5 | 3,18 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-7,91** | 94,5 | 4,58 | 0,00 | 22,80 |
| WTG 02 | 5 821 | 5 824 | | | | | | |
| WTG 02 | | | 20 | **34,00** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,58** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **26,02** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **21,01** | 78,3 | 0,29 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,99** | 80,3 | 0,41 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **15,16** | 84,6 | 0,64 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **11,46** | 87,3 | 0,93 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **6,44** | 88,9 | 1,46 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **2,08** | 91,5 | 2,21 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-3,82** | 93,5 | 3,32 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-8,48** | 94,5 | 4,78 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,95** | | | | |
| Sum | | | 25 | **39,51** | | | | |
| Sum | | | 32 | **35,24** | | | | |
| Sum | | | 40 | **30,80** | | | | |
| Sum | | | 50 | **26,76** | | | | |
| Sum | | | 63 | **23,90** | | | | |
| Sum | | | 80 | **20,37** | | | | |
| Sum | | | 100 | **16,29** | | | | |
| Sum | | | 125 | **12,08** | | | | |
| Sum | | | 160 | **4,47** | | | | |
| Sum | | | 200 | **-0,44** | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**Noise sensitive area: H Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (166)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 7 941 | 7 943 | | | | | | |
| K 01 | | | 20 | **29,80** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **26,34** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 01 | | | 32 | **22,16** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,90** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,84** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 01 | | | 63 | **10,63** | 83,0 | 0,87 | 4,30 | 13,00 |
| K 01 | | | 80 | **7,13** | 86,0 | 1,27 | 3,70 | 14,80 |
| K 01 | | | 100 | **3,31** | 89,0 | 1,99 | 3,00 | 16,80 |
| K 01 | | | 125 | **-0,92** | 92,0 | 3,02 | 1,80 | 18,80 |
| K 01 | | | 160 | **-9,23** | 92,0 | 4,53 | 0,00 | 21,10 |
| K 01 | | | 200 | **-14,41** | 93,0 | 6,51 | 0,00 | 22,80 |
| K 02 | 7 475 | 7 477 | | | | | | |
| K 02 | | | 20 | **30,33** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,88** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,70** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 02 | | | 40 | **18,45** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 02 | | | 50 | **14,40** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 02 | | | 63 | **11,20** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,73** | 86,0 | 1,20 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,96** | 89,0 | 1,87 | 3,00 | 16,80 |
| K 02 | | | 125 | **-0,22** | 92,0 | 2,84 | 1,80 | 18,80 |
| K 02 | | | 160 | **-8,44** | 92,0 | 4,26 | 0,00 | 21,10 |
| K 02 | | | 200 | **-13,51** | 93,0 | 6,13 | 0,00 | 22,80 |
| K 03 | 7 158 | 7 160 | | | | | | |
| K 03 | | | 20 | **30,70** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **27,26** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 03 | | | 32 | **23,09** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,84** | 78,0 | 0,36 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,80** | 80,0 | 0,50 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,61** | 83,0 | 0,79 | 4,30 | 13,00 |
| K 03 | | | 80 | **8,16** | 86,0 | 1,15 | 3,70 | 14,80 |
| K 03 | | | 100 | **4,41** | 89,0 | 1,79 | 3,00 | 16,80 |
| K 03 | | | 125 | **0,28** | 92,0 | 2,72 | 1,80 | 18,80 |
| K 03 | | | 160 | **-7,88** | 92,0 | 4,08 | 0,00 | 21,10 |
| K 03 | | | 200 | **-12,87** | 93,0 | 5,87 | 0,00 | 22,80 |
| K 04 | 6 350 | 6 352 | | | | | | |
| K 04 | | | 20 | **31,74** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **28,32** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 04 | | | 32 | **24,15** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,92** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,90** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,74** | 83,0 | 0,70 | 4,30 | 13,00 |
| K 04 | | | 80 | **9,33** | 86,0 | 1,02 | 3,70 | 14,80 |
| K 04 | | | 100 | **5,65** | 89,0 | 1,59 | 3,00 | 16,80 |
| K 04 | | | 125 | **1,63** | 92,0 | 2,41 | 1,80 | 18,80 |
| K 04 | | | 160 | **-6,38** | 92,0 | 3,62 | 0,00 | 21,10 |
| K 04 | | | 200 | **-11,17** | 93,0 | 5,21 | 0,00 | 22,80 |
| K 05 | 6 738 | 6 740 | | | | | | |
| K 05 | | | 20 | **31,23** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,79** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 05 | | | 32 | **23,62** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,39** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 05 | | | 50 | **15,36** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,19** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 05 | | | 80 | **8,75** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 05 | | | 100 | **5,04** | 89,0 | 1,68 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,97** | 92,0 | 2,56 | 1,80 | 18,80 |
| K 05 | | | 160 | **-7,11** | 92,0 | 3,84 | 0,00 | 21,10 |
| K 05 | | | 200 | **-12,00** | 93,0 | 5,53 | 0,00 | 22,80 |
| K 06 | 7 301 | 7 303 | | | | | | |
| K 06 | | | 20 | **30,53** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **27,08** | 73,7 | 0,15 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 06 | | | 32 | **22,91** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 06 | | | 40 | **18,66** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 06 | | | 50 | **14,62** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 06 | | | 63 | **11,43** | 83,0 | 0,80 | 4,30 | 13,00 |
| K 06 | | | 80 | **7,96** | 86,0 | 1,17 | 3,70 | 14,80 |
| K 06 | | | 100 | **4,20** | 89,0 | 1,83 | 3,00 | 16,80 |
| K 06 | | | 125 | **0,05** | 92,0 | 2,78 | 1,80 | 18,80 |
| K 06 | | | 160 | **-8,13** | 92,0 | 4,16 | 0,00 | 21,10 |
| K 06 | | | 200 | **-13,16** | 93,0 | 5,99 | 0,00 | 22,80 |
| K 07 | 6 788 | 6 790 | | | | | | |
| K 07 | | | 20 | **31,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **27,73** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 07 | | | 32 | **23,56** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 07 | | | 40 | **19,32** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 07 | | | 50 | **15,29** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 07 | | | 63 | **12,12** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 07 | | | 80 | **8,68** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 07 | | | 100 | **4,96** | 89,0 | 1,70 | 3,00 | 16,80 |
| K 07 | | | 125 | **0,88** | 92,0 | 2,58 | 1,80 | 18,80 |
| K 07 | | | 160 | **-7,21** | 92,0 | 3,87 | 0,00 | 21,10 |
| K 07 | | | 200 | **-12,11** | 93,0 | 5,57 | 0,00 | 22,80 |
| K 08 | 6 763 | 6 765 | | | | | | |
| K 08 | | | 20 | **31,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **27,76** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 08 | | | 32 | **23,59** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 08 | | | 40 | **19,36** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 08 | | | 50 | **15,32** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 08 | | | 63 | **12,15** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 08 | | | 80 | **8,71** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 08 | | | 100 | **5,00** | 89,0 | 1,69 | 3,00 | 16,80 |
| K 08 | | | 125 | **0,92** | 92,0 | 2,57 | 1,80 | 18,80 |
| K 08 | | | 160 | **-7,16** | 92,0 | 3,86 | 0,00 | 21,10 |
| K 08 | | | 200 | **-12,05** | 93,0 | 5,55 | 0,00 | 22,80 |
| K 09 | 6 467 | 6 469 | | | | | | |
| K 09 | | | 20 | **31,58** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **28,15** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,99** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 09 | | | 40 | **19,76** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 09 | | | 50 | **15,73** | 80,0 | 0,45 | 4,70 | 11,50 |
| K 09 | | | 63 | **12,57** | 83,0 | 0,71 | 4,30 | 13,00 |
| K 09 | | | 80 | **9,15** | 86,0 | 1,04 | 3,70 | 14,80 |
| K 09 | | | 100 | **5,47** | 89,0 | 1,62 | 3,00 | 16,80 |
| K 09 | | | 125 | **1,42** | 92,0 | 2,46 | 1,80 | 18,80 |
| K 09 | | | 160 | **-6,60** | 92,0 | 3,69 | 0,00 | 21,10 |
| K 09 | | | 200 | **-11,42** | 93,0 | 5,30 | 0,00 | 22,80 |
| K 10 | 8 990 | 8 992 | | | | | | |
| K 10 | | | 20 | **28,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **25,24** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 10 | | | 32 | **21,05** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,77** | 78,0 | 0,45 | 5,00 | 10,30 |
| K 10 | | | 50 | **12,69** | 80,0 | 0,63 | 4,70 | 11,50 |
| K 10 | | | 63 | **9,43** | 83,0 | 0,99 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,88** | 86,0 | 1,44 | 3,70 | 14,80 |
| K 10 | | | 100 | **1,97** | 89,0 | 2,25 | 3,00 | 16,80 |
| K 10 | | | 125 | **-2,39** | 92,0 | 3,42 | 1,80 | 18,80 |
| K 10 | | | 160 | **-10,90** | 92,0 | 5,13 | 0,00 | 21,10 |
| K 10 | | | 200 | **-16,35** | 93,0 | 7,37 | 0,00 | 22,80 |
| K 11 | 9 435 | 9 436 | | | | | | |
| K 11 | | | 20 | **28,30** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **24,82** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 11 | | | 32 | **20,62** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 11 | | | 40 | **16,33** | 78,0 | 0,47 | 5,00 | 10,30 |
| K 11 | | | 50 | **12,24** | 80,0 | 0,66 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,97** | 83,0 | 1,04 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 80 | **5,39** | 86,0 | 1,51 | 3,70 | 14,80 |
| K 11 | | | 100 | **1,45** | 89,0 | 2,36 | 3,00 | 16,80 |
| K 11 | | | 125 | **-2,98** | 92,0 | 3,59 | 1,80 | 18,80 |
| K 11 | | | 160 | **-11,57** | 92,0 | 5,38 | 0,00 | 21,10 |
| K 11 | | | 200 | **-17,13** | 93,0 | 7,74 | 0,00 | 22,80 |
| K 12 | 9 418 | 9 419 | | | | | | |
| K 12 | | | 20 | **28,32** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **24,83** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 12 | | | 32 | **20,64** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 12 | | | 40 | **16,35** | 78,0 | 0,47 | 5,00 | 10,30 |
| K 12 | | | 50 | **12,26** | 80,0 | 0,66 | 4,70 | 11,50 |
| K 12 | | | 63 | **8,98** | 83,0 | 1,04 | 4,30 | 13,00 |
| K 12 | | | 80 | **5,41** | 86,0 | 1,51 | 3,70 | 14,80 |
| K 12 | | | 100 | **1,46** | 89,0 | 2,35 | 3,00 | 16,80 |
| K 12 | | | 125 | **-2,96** | 92,0 | 3,58 | 1,80 | 18,80 |
| K 12 | | | 160 | **-11,55** | 92,0 | 5,37 | 0,00 | 21,10 |
| K 12 | | | 200 | **-17,10** | 93,0 | 7,72 | 0,00 | 22,80 |
| K 13 | 8 576 | 8 578 | | | | | | |
| K 13 | | | 20 | **29,13** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **25,66** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 13 | | | 32 | **21,48** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 13 | | | 40 | **17,20** | 78,0 | 0,43 | 5,00 | 10,30 |
| K 13 | | | 50 | **13,13** | 80,0 | 0,60 | 4,70 | 11,50 |
| K 13 | | | 63 | **9,89** | 83,0 | 0,94 | 4,30 | 13,00 |
| K 13 | | | 80 | **6,36** | 86,0 | 1,37 | 3,70 | 14,80 |
| K 13 | | | 100 | **2,49** | 89,0 | 2,14 | 3,00 | 16,80 |
| K 13 | | | 125 | **-1,83** | 92,0 | 3,26 | 1,80 | 18,80 |
| K 13 | | | 160 | **-10,26** | 92,0 | 4,89 | 0,00 | 21,10 |
| K 13 | | | 200 | **-15,60** | 93,0 | 7,03 | 0,00 | 22,80 |
| K 14 | 8 142 | 8 144 | | | | | | |
| K 14 | | | 20 | **29,58** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **26,12** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 14 | | | 32 | **21,94** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 14 | | | 40 | **17,68** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 14 | | | 50 | **13,61** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 14 | | | 63 | **10,39** | 83,0 | 0,90 | 4,30 | 13,00 |
| K 14 | | | 80 | **6,88** | 86,0 | 1,30 | 3,70 | 14,80 |
| K 14 | | | 100 | **3,05** | 89,0 | 2,04 | 3,00 | 16,80 |
| K 14 | | | 125 | **-1,21** | 92,0 | 3,09 | 1,80 | 18,80 |
| K 14 | | | 160 | **-9,56** | 92,0 | 4,64 | 0,00 | 21,10 |
| K 14 | | | 200 | **-14,79** | 93,0 | 6,68 | 0,00 | 22,80 |
| WTG 01 | 5 591 | 5 594 | | | | | | |
| WTG 01 | | | 20 | **34,35** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,93** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,38** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,37** | 78,3 | 0,28 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,35** | 80,3 | 0,39 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,53** | 84,6 | 0,62 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,85** | 87,3 | 0,90 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,85** | 88,9 | 1,40 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,52** | 91,5 | 2,13 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,34** | 93,5 | 3,19 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-7,94** | 94,5 | 4,59 | 0,00 | 22,80 |
| WTG 02 | 5 754 | 5 757 | | | | | | |
| WTG 02 | | | 20 | **34,10** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,68** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **26,12** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **21,11** | 78,3 | 0,29 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **17,09** | 80,3 | 0,40 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **15,26** | 84,6 | 0,63 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **11,58** | 87,3 | 0,92 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **6,56** | 88,9 | 1,44 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **2,21** | 91,5 | 2,19 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-3,68** | 93,5 | 3,28 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 200 | **-8,32** | 94,5 | 4,72 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **43,08** | | | | |
| Sum | | | 25 | **39,64** | | | | |
| Sum | | | 32 | **35,37** | | | | |
| Sum | | | 40 | **30,95** | | | | |
| Sum | | | 50 | **26,91** | | | | |
| Sum | | | 63 | **24,05** | | | | |
| Sum | | | 80 | **20,52** | | | | |
| Sum | | | 100 | **16,46** | | | | |
| Sum | | | 125 | **12,26** | | | | |
| Sum | | | 160 | **4,66** | | | | |
| Sum | | | 200 | **-0,24** | | | | |

**Noise sensitive area: I Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (165)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 185 | 8 187 | | | | | | |
| K 01 | | | 20 | **29,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **26,07** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 01 | | | 32 | **21,89** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,63** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,56** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 01 | | | 63 | **10,34** | 83,0 | 0,90 | 4,30 | 13,00 |
| K 01 | | | 80 | **6,83** | 86,0 | 1,31 | 3,70 | 14,80 |
| K 01 | | | 100 | **2,99** | 89,0 | 2,05 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,27** | 92,0 | 3,11 | 1,80 | 18,80 |
| K 01 | | | 160 | **-9,63** | 92,0 | 4,67 | 0,00 | 21,10 |
| K 01 | | | 200 | **-14,88** | 93,0 | 6,71 | 0,00 | 22,80 |
| K 02 | 7 791 | 7 792 | | | | | | |
| K 02 | | | 20 | **29,97** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,51** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,33** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 02 | | | 40 | **18,08** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 02 | | | 50 | **14,02** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,81** | 83,0 | 0,86 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,32** | 86,0 | 1,25 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,52** | 89,0 | 1,95 | 3,00 | 16,80 |
| K 02 | | | 125 | **-0,69** | 92,0 | 2,96 | 1,80 | 18,80 |
| K 02 | | | 160 | **-8,98** | 92,0 | 4,44 | 0,00 | 21,10 |
| K 02 | | | 200 | **-14,12** | 93,0 | 6,39 | 0,00 | 22,80 |
| K 03 | 7 598 | 7 600 | | | | | | |
| K 03 | | | 20 | **30,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,73** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 03 | | | 32 | **22,56** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,30** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,25** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,05** | 83,0 | 0,84 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,57** | 86,0 | 1,22 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,78** | 89,0 | 1,90 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,40** | 92,0 | 2,89 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,65** | 92,0 | 4,33 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,75** | 93,0 | 6,23 | 0,00 | 22,80 |
| K 04 | 6 837 | 6 839 | | | | | | |
| K 04 | | | 20 | **31,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,66** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,50** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,26** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,22** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,05** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,61** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 04 | | | 100 | **4,89** | 89,0 | 1,71 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 125 | **0,80** | 92,0 | 2,60 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,30** | 92,0 | 3,90 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,21** | 93,0 | 5,61 | 0,00 | 22,80 |
| K 05 | 7 360 | 7 362 | | | | | | |
| K 05 | | | 20 | **30,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,01** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 05 | | | 32 | **22,84** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 05 | | | 40 | **18,59** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 05 | | | 50 | **14,54** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 05 | | | 63 | **11,35** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 05 | | | 80 | **7,88** | 86,0 | 1,18 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,12** | 89,0 | 1,84 | 3,00 | 16,80 |
| K 05 | | | 125 | **-0,04** | 92,0 | 2,80 | 1,80 | 18,80 |
| K 05 | | | 160 | **-8,24** | 92,0 | 4,20 | 0,00 | 21,10 |
| K 05 | | | 200 | **-13,28** | 93,0 | 6,04 | 0,00 | 22,80 |
| K 06 | 7 420 | 7 422 | | | | | | |
| K 06 | | | 20 | **30,39** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **26,94** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 06 | | | 32 | **22,77** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 06 | | | 40 | **18,52** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 06 | | | 50 | **14,47** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 06 | | | 63 | **11,27** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 06 | | | 80 | **7,80** | 86,0 | 1,19 | 3,70 | 14,80 |
| K 06 | | | 100 | **4,03** | 89,0 | 1,86 | 3,00 | 16,80 |
| K 06 | | | 125 | **-0,13** | 92,0 | 2,82 | 1,80 | 18,80 |
| K 06 | | | 160 | **-8,34** | 92,0 | 4,23 | 0,00 | 21,10 |
| K 06 | | | 200 | **-13,40** | 93,0 | 6,09 | 0,00 | 22,80 |
| K 07 | 6 839 | 6 841 | | | | | | |
| K 07 | | | 20 | **31,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **27,66** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 07 | | | 32 | **23,49** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 07 | | | 40 | **19,26** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 07 | | | 50 | **15,22** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 07 | | | 63 | **12,05** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 07 | | | 80 | **8,60** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 07 | | | 100 | **4,89** | 89,0 | 1,71 | 3,00 | 16,80 |
| K 07 | | | 125 | **0,80** | 92,0 | 2,60 | 1,80 | 18,80 |
| K 07 | | | 160 | **-7,30** | 92,0 | 3,90 | 0,00 | 21,10 |
| K 07 | | | 200 | **-12,21** | 93,0 | 5,61 | 0,00 | 22,80 |
| K 08 | 7 025 | 7 027 | | | | | | |
| K 08 | | | 20 | **30,86** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **27,42** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 08 | | | 32 | **23,25** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 08 | | | 40 | **19,01** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 08 | | | 50 | **14,97** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,79** | 83,0 | 0,77 | 4,30 | 13,00 |
| K 08 | | | 80 | **8,34** | 86,0 | 1,12 | 3,70 | 14,80 |
| K 08 | | | 100 | **4,61** | 89,0 | 1,76 | 3,00 | 16,80 |
| K 08 | | | 125 | **0,49** | 92,0 | 2,67 | 1,80 | 18,80 |
| K 08 | | | 160 | **-7,64** | 92,0 | 4,01 | 0,00 | 21,10 |
| K 08 | | | 200 | **-12,60** | 93,0 | 5,76 | 0,00 | 22,80 |
| K 09 | 6 823 | 6 825 | | | | | | |
| K 09 | | | 20 | **31,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,68** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,51** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 09 | | | 40 | **19,28** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 09 | | | 50 | **15,24** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 09 | | | 63 | **12,07** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,63** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 09 | | | 100 | **4,91** | 89,0 | 1,71 | 3,00 | 16,80 |
| K 09 | | | 125 | **0,83** | 92,0 | 2,59 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,27** | 92,0 | 3,89 | 0,00 | 21,10 |
| K 09 | | | 200 | **-12,18** | 93,0 | 5,60 | 0,00 | 22,80 |
| K 10 | 9 099 | 9 100 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 20 | **28,62** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **25,14** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 10 | | | 32 | **20,95** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,66** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 10 | | | 50 | **12,58** | 80,0 | 0,64 | 4,70 | 11,50 |
| K 10 | | | 63 | **9,32** | 83,0 | 1,00 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,76** | 86,0 | 1,46 | 3,70 | 14,80 |
| K 10 | | | 100 | **1,84** | 89,0 | 2,28 | 3,00 | 16,80 |
| K 10 | | | 125 | **-2,54** | 92,0 | 3,46 | 1,80 | 18,80 |
| K 10 | | | 160 | **-11,07** | 92,0 | 5,19 | 0,00 | 21,10 |
| K 10 | | | 200 | **-16,54** | 93,0 | 7,46 | 0,00 | 22,80 |
| K 11 | 9 446 | 9 447 | | | | | | |
| K 11 | | | 20 | **28,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **24,80** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 11 | | | 32 | **20,61** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 11 | | | 40 | **16,32** | 78,0 | 0,47 | 5,00 | 10,30 |
| K 11 | | | 50 | **12,23** | 80,0 | 0,66 | 4,70 | 11,50 |
| K 11 | | | 63 | **8,95** | 83,0 | 1,04 | 4,30 | 13,00 |
| K 11 | | | 80 | **5,38** | 86,0 | 1,51 | 3,70 | 14,80 |
| K 11 | | | 100 | **1,43** | 89,0 | 2,36 | 3,00 | 16,80 |
| K 11 | | | 125 | **-3,00** | 92,0 | 3,59 | 1,80 | 18,80 |
| K 11 | | | 160 | **-11,59** | 92,0 | 5,38 | 0,00 | 21,10 |
| K 11 | | | 200 | **-17,15** | 93,0 | 7,75 | 0,00 | 22,80 |
| K 12 | 9 285 | 9 286 | | | | | | |
| K 12 | | | 20 | **28,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **24,96** | 73,7 | 0,19 | 5,40 | 8,30 |
| K 12 | | | 32 | **20,76** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 12 | | | 40 | **16,48** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 12 | | | 50 | **12,39** | 80,0 | 0,65 | 4,70 | 11,50 |
| K 12 | | | 63 | **9,12** | 83,0 | 1,02 | 4,30 | 13,00 |
| K 12 | | | 80 | **5,56** | 86,0 | 1,49 | 3,70 | 14,80 |
| K 12 | | | 100 | **1,62** | 89,0 | 2,32 | 3,00 | 16,80 |
| K 12 | | | 125 | **-2,79** | 92,0 | 3,53 | 1,80 | 18,80 |
| K 12 | | | 160 | **-11,35** | 92,0 | 5,29 | 0,00 | 21,10 |
| K 12 | | | 200 | **-16,87** | 93,0 | 7,61 | 0,00 | 22,80 |
| K 13 | 8 519 | 8 520 | | | | | | |
| K 13 | | | 20 | **29,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **25,72** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 13 | | | 32 | **21,54** | 76,0 | 0,26 | 5,20 | 9,20 |
| K 13 | | | 40 | **17,26** | 78,0 | 0,43 | 5,00 | 10,30 |
| K 13 | | | 50 | **13,19** | 80,0 | 0,60 | 4,70 | 11,50 |
| K 13 | | | 63 | **9,95** | 83,0 | 0,94 | 4,30 | 13,00 |
| K 13 | | | 80 | **6,43** | 86,0 | 1,36 | 3,70 | 14,80 |
| K 13 | | | 100 | **2,56** | 89,0 | 2,13 | 3,00 | 16,80 |
| K 13 | | | 125 | **-1,75** | 92,0 | 3,24 | 1,80 | 18,80 |
| K 13 | | | 160 | **-10,17** | 92,0 | 4,86 | 0,00 | 21,10 |
| K 13 | | | 200 | **-15,50** | 93,0 | 6,99 | 0,00 | 22,80 |
| K 14 | 8 198 | 8 199 | | | | | | |
| K 14 | | | 20 | **29,52** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **26,06** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 14 | | | 32 | **21,88** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 14 | | | 40 | **17,61** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 14 | | | 50 | **13,55** | 80,0 | 0,57 | 4,70 | 11,50 |
| K 14 | | | 63 | **10,32** | 83,0 | 0,90 | 4,30 | 13,00 |
| K 14 | | | 80 | **6,81** | 86,0 | 1,31 | 3,70 | 14,80 |
| K 14 | | | 100 | **2,97** | 89,0 | 2,05 | 3,00 | 16,80 |
| K 14 | | | 125 | **-1,29** | 92,0 | 3,12 | 1,80 | 18,80 |
| K 14 | | | 160 | **-9,65** | 92,0 | 4,67 | 0,00 | 21,10 |
| K 14 | | | 200 | **-14,90** | 93,0 | 6,72 | 0,00 | 22,80 |
| WTG 01 | 6 372 | 6 375 | | | | | | |
| WTG 01 | | | 20 | **33,21** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **29,78** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **25,22** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **20,19** | 78,3 | 0,32 | 5,00 | 10,30 |

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 01 | | | 50 | **16,16** | 80,3 | 0,45 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **14,31** | 84,6 | 0,70 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **10,59** | 87,3 | 1,02 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **5,52** | 88,9 | 1,59 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **1,09** | 91,5 | 2,42 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-4,92** | 93,5 | 3,63 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-9,72** | 94,5 | 5,23 | 0,00 | 22,80 |
| WTG 02 | 6 309 | 6 311 | | | | | | |
| WTG 02 | | | 20 | **33,30** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **29,87** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,31** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,28** | 78,3 | 0,32 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,26** | 80,3 | 0,44 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,40** | 84,6 | 0,69 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,69** | 87,3 | 1,01 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,62** | 88,9 | 1,58 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,20** | 91,5 | 2,40 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,80** | 93,5 | 3,60 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,58** | 94,5 | 5,18 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,62** | | | | |
| Sum | | | 25 | **39,17** | | | | |
| Sum | | | 32 | **34,91** | | | | |
| Sum | | | 40 | **30,50** | | | | |
| Sum | | | 50 | **26,45** | | | | |
| Sum | | | 63 | **23,53** | | | | |
| Sum | | | 80 | **20,00** | | | | |
| Sum | | | 100 | **15,94** | | | | |
| Sum | | | 125 | **11,70** | | | | |
| Sum | | | 160 | **3,94** | | | | |
| Sum | | | 200 | **-1,07** | | | | |

**Noise sensitive area: J Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (164)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 8 028 | 8 029 | | | | | | |
| K 01 | | | 20 | **29,71** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **26,25** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 01 | | | 32 | **22,07** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 01 | | | 40 | **17,80** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 01 | | | 50 | **13,74** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 01 | | | 63 | **10,52** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 01 | | | 80 | **7,02** | 86,0 | 1,28 | 3,70 | 14,80 |
| K 01 | | | 100 | **3,20** | 89,0 | 2,01 | 3,00 | 16,80 |
| K 01 | | | 125 | **-1,04** | 92,0 | 3,05 | 1,80 | 18,80 |
| K 01 | | | 160 | **-9,37** | 92,0 | 4,58 | 0,00 | 21,10 |
| K 01 | | | 200 | **-14,58** | 93,0 | 6,58 | 0,00 | 22,80 |
| K 02 | 7 658 | 7 659 | | | | | | |
| K 02 | | | 20 | **30,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **26,66** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 02 | | | 32 | **22,49** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 02 | | | 40 | **18,23** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 02 | | | 50 | **14,18** | 80,0 | 0,54 | 4,70 | 11,50 |
| K 02 | | | 63 | **10,97** | 83,0 | 0,84 | 4,30 | 13,00 |
| K 02 | | | 80 | **7,49** | 86,0 | 1,23 | 3,70 | 14,80 |
| K 02 | | | 100 | **3,70** | 89,0 | 1,91 | 3,00 | 16,80 |
| K 02 | | | 125 | **-0,49** | 92,0 | 2,91 | 1,80 | 18,80 |
| K 02 | | | 160 | **-8,75** | 92,0 | 4,37 | 0,00 | 21,10 |
| K 02 | | | 200 | **-13,86** | 93,0 | 6,28 | 0,00 | 22,80 |
| K 03 | 7 504 | 7 506 | | | | | | |
| K 03 | | | 20 | **30,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **26,84** | 73,7 | 0,15 | 5,40 | 8,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 03 | | | 32 | **22,67** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 03 | | | 40 | **18,42** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 03 | | | 50 | **14,37** | 80,0 | 0,53 | 4,70 | 11,50 |
| K 03 | | | 63 | **11,17** | 83,0 | 0,83 | 4,30 | 13,00 |
| K 03 | | | 80 | **7,69** | 86,0 | 1,20 | 3,70 | 14,80 |
| K 03 | | | 100 | **3,92** | 89,0 | 1,88 | 3,00 | 16,80 |
| K 03 | | | 125 | **-0,26** | 92,0 | 2,85 | 1,80 | 18,80 |
| K 03 | | | 160 | **-8,49** | 92,0 | 4,28 | 0,00 | 21,10 |
| K 03 | | | 200 | **-13,56** | 93,0 | 6,16 | 0,00 | 22,80 |
| K 04 | 6 765 | 6 767 | | | | | | |
| K 04 | | | 20 | **31,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **27,76** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 04 | | | 32 | **23,59** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 04 | | | 40 | **19,35** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 04 | | | 50 | **15,32** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 04 | | | 63 | **12,15** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 04 | | | 80 | **8,71** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 04 | | | 100 | **5,00** | 89,0 | 1,69 | 3,00 | 16,80 |
| K 04 | | | 125 | **0,92** | 92,0 | 2,57 | 1,80 | 18,80 |
| K 04 | | | 160 | **-7,17** | 92,0 | 3,86 | 0,00 | 21,10 |
| K 04 | | | 200 | **-12,06** | 93,0 | 5,55 | 0,00 | 22,80 |
| K 05 | 7 325 | 7 327 | | | | | | |
| K 05 | | | 20 | **30,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **27,06** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 05 | | | 32 | **22,88** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 05 | | | 40 | **18,64** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 05 | | | 50 | **14,59** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 05 | | | 63 | **11,40** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 05 | | | 80 | **7,93** | 86,0 | 1,17 | 3,70 | 14,80 |
| K 05 | | | 100 | **4,17** | 89,0 | 1,83 | 3,00 | 16,80 |
| K 05 | | | 125 | **0,02** | 92,0 | 2,78 | 1,80 | 18,80 |
| K 05 | | | 160 | **-8,17** | 92,0 | 4,18 | 0,00 | 21,10 |
| K 05 | | | 200 | **-13,21** | 93,0 | 6,01 | 0,00 | 22,80 |
| K 06 | 7 233 | 7 235 | | | | | | |
| K 06 | | | 20 | **30,61** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **27,17** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 06 | | | 32 | **22,99** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 06 | | | 40 | **18,75** | 78,0 | 0,36 | 5,00 | 10,30 |
| K 06 | | | 50 | **14,71** | 80,0 | 0,51 | 4,70 | 11,50 |
| K 06 | | | 63 | **11,52** | 83,0 | 0,80 | 4,30 | 13,00 |
| K 06 | | | 80 | **8,05** | 86,0 | 1,16 | 3,70 | 14,80 |
| K 06 | | | 100 | **4,30** | 89,0 | 1,81 | 3,00 | 16,80 |
| K 06 | | | 125 | **0,16** | 92,0 | 2,75 | 1,80 | 18,80 |
| K 06 | | | 160 | **-8,01** | 92,0 | 4,12 | 0,00 | 21,10 |
| K 06 | | | 200 | **-13,02** | 93,0 | 5,93 | 0,00 | 22,80 |
| K 07 | 6 638 | 6 640 | | | | | | |
| K 07 | | | 20 | **31,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **27,92** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 07 | | | 32 | **23,76** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 07 | | | 40 | **19,52** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 07 | | | 50 | **15,49** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 07 | | | 63 | **12,33** | 83,0 | 0,73 | 4,30 | 13,00 |
| K 07 | | | 80 | **8,89** | 86,0 | 1,06 | 3,70 | 14,80 |
| K 07 | | | 100 | **5,20** | 89,0 | 1,66 | 3,00 | 16,80 |
| K 07 | | | 125 | **1,13** | 92,0 | 2,52 | 1,80 | 18,80 |
| K 07 | | | 160 | **-6,93** | 92,0 | 3,78 | 0,00 | 21,10 |
| K 07 | | | 200 | **-11,79** | 93,0 | 5,44 | 0,00 | 22,80 |
| K 08 | 6 884 | 6 886 | | | | | | |
| K 08 | | | 20 | **31,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **27,60** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 08 | | | 32 | **23,43** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 08 | | | 40 | **19,20** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 08 | | | 50 | **15,16** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 08 | | | 63 | **11,98** | 83,0 | 0,76 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 80 | **8,54** | 86,0 | 1,10 | 3,70 | 14,80 |
| K 08 | | | 100 | **4,82** | 89,0 | 1,72 | 3,00 | 16,80 |
| K 08 | | | 125 | **0,72** | 92,0 | 2,62 | 1,80 | 18,80 |
| K 08 | | | 160 | **-7,38** | 92,0 | 3,92 | 0,00 | 21,10 |
| K 08 | | | 200 | **-12,31** | 93,0 | 5,65 | 0,00 | 22,80 |
| K 09 | 6 711 | 6 713 | | | | | | |
| K 09 | | | 20 | **31,26** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **27,83** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 09 | | | 32 | **23,66** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 09 | | | 40 | **19,43** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 09 | | | 50 | **15,39** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 09 | | | 63 | **12,22** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 09 | | | 80 | **8,79** | 86,0 | 1,07 | 3,70 | 14,80 |
| K 09 | | | 100 | **5,08** | 89,0 | 1,68 | 3,00 | 16,80 |
| K 09 | | | 125 | **1,01** | 92,0 | 2,55 | 1,80 | 18,80 |
| K 09 | | | 160 | **-7,07** | 92,0 | 3,83 | 0,00 | 21,10 |
| K 09 | | | 200 | **-11,94** | 93,0 | 5,50 | 0,00 | 22,80 |
| K 10 | 8 896 | 8 898 | | | | | | |
| K 10 | | | 20 | **28,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **25,34** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 10 | | | 32 | **21,15** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 10 | | | 40 | **16,87** | 78,0 | 0,44 | 5,00 | 10,30 |
| K 10 | | | 50 | **12,79** | 80,0 | 0,62 | 4,70 | 11,50 |
| K 10 | | | 63 | **9,54** | 83,0 | 0,98 | 4,30 | 13,00 |
| K 10 | | | 80 | **5,99** | 86,0 | 1,42 | 3,70 | 14,80 |
| K 10 | | | 100 | **2,09** | 89,0 | 2,22 | 3,00 | 16,80 |
| K 10 | | | 125 | **-2,27** | 92,0 | 3,38 | 1,80 | 18,80 |
| K 10 | | | 160 | **-10,76** | 92,0 | 5,07 | 0,00 | 21,10 |
| K 10 | | | 200 | **-16,18** | 93,0 | 7,30 | 0,00 | 22,80 |
| K 11 | 9 215 | 9 216 | | | | | | |
| K 11 | | | 20 | **28,51** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **25,02** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 11 | | | 32 | **20,83** | 76,0 | 0,28 | 5,20 | 9,20 |
| K 11 | | | 40 | **16,55** | 78,0 | 0,46 | 5,00 | 10,30 |
| K 11 | | | 50 | **12,46** | 80,0 | 0,65 | 4,70 | 11,50 |
| K 11 | | | 63 | **9,20** | 83,0 | 1,01 | 4,30 | 13,00 |
| K 11 | | | 80 | **5,63** | 86,0 | 1,47 | 3,70 | 14,80 |
| K 11 | | | 100 | **1,71** | 89,0 | 2,30 | 3,00 | 16,80 |
| K 11 | | | 125 | **-2,69** | 92,0 | 3,50 | 1,80 | 18,80 |
| K 11 | | | 160 | **-11,24** | 92,0 | 5,25 | 0,00 | 21,10 |
| K 11 | | | 200 | **-16,75** | 93,0 | 7,56 | 0,00 | 22,80 |
| K 12 | 9 016 | 9 017 | | | | | | |
| K 12 | | | 20 | **28,70** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **25,22** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 12 | | | 32 | **21,03** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 12 | | | 40 | **16,75** | 78,0 | 0,45 | 5,00 | 10,30 |
| K 12 | | | 50 | **12,67** | 80,0 | 0,63 | 4,70 | 11,50 |
| K 12 | | | 63 | **9,41** | 83,0 | 0,99 | 4,30 | 13,00 |
| K 12 | | | 80 | **5,86** | 86,0 | 1,44 | 3,70 | 14,80 |
| K 12 | | | 100 | **1,94** | 89,0 | 2,25 | 3,00 | 16,80 |
| K 12 | | | 125 | **-2,43** | 92,0 | 3,43 | 1,80 | 18,80 |
| K 12 | | | 160 | **-10,94** | 92,0 | 5,14 | 0,00 | 21,10 |
| K 12 | | | 200 | **-16,40** | 93,0 | 7,39 | 0,00 | 22,80 |
| K 13 | 8 274 | 8 276 | | | | | | |
| K 13 | | | 20 | **29,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **25,98** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 13 | | | 32 | **21,80** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 13 | | | 40 | **17,53** | 78,0 | 0,41 | 5,00 | 10,30 |
| K 13 | | | 50 | **13,46** | 80,0 | 0,58 | 4,70 | 11,50 |
| K 13 | | | 63 | **10,23** | 83,0 | 0,91 | 4,30 | 13,00 |
| K 13 | | | 80 | **6,72** | 86,0 | 1,32 | 3,70 | 14,80 |
| K 13 | | | 100 | **2,87** | 89,0 | 2,07 | 3,00 | 16,80 |
| K 13 | | | 125 | **-1,40** | 92,0 | 3,14 | 1,80 | 18,80 |
| K 13 | | | 160 | **-9,77** | 92,0 | 4,72 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 200 | **-15,04** | 93,0 | 6,79 | 0,00 | 22,80 |
| K 14 | 7 986 | 7 988 | | | | | | |
| K 14 | | | 20 | **29,75** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **26,29** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 14 | | | 32 | **22,11** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 14 | | | 40 | **17,85** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 14 | | | 50 | **13,79** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 14 | | | 63 | **10,57** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 14 | | | 80 | **7,07** | 86,0 | 1,28 | 3,70 | 14,80 |
| K 14 | | | 100 | **3,25** | 89,0 | 2,00 | 3,00 | 16,80 |
| K 14 | | | 125 | **-0,98** | 92,0 | 3,04 | 1,80 | 18,80 |
| K 14 | | | 160 | **-9,30** | 92,0 | 4,55 | 0,00 | 21,10 |
| K 14 | | | 200 | **-14,50** | 93,0 | 6,55 | 0,00 | 22,80 |
| WTG 01 | 6 399 | 6 402 | | | | | | |
| WTG 01 | | | 20 | **33,17** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **29,75** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **25,18** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **20,15** | 78,3 | 0,32 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **16,13** | 80,3 | 0,45 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **14,27** | 84,6 | 0,70 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **10,55** | 87,3 | 1,02 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **5,47** | 88,9 | 1,60 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **1,04** | 91,5 | 2,43 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-4,97** | 93,5 | 3,65 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-9,77** | 94,5 | 5,25 | 0,00 | 22,80 |
| WTG 02 | 6 264 | 6 267 | | | | | | |
| WTG 02 | | | 20 | **33,36** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **29,93** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,37** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,35** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,32** | 80,3 | 0,44 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,47** | 84,6 | 0,69 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,76** | 87,3 | 1,00 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,69** | 88,9 | 1,57 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,28** | 91,5 | 2,38 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,71** | 93,5 | 3,57 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,48** | 94,5 | 5,14 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **42,76** | | | | |
| Sum | | | 25 | **39,31** | | | | |
| Sum | | | 32 | **35,05** | | | | |
| Sum | | | 40 | **30,65** | | | | |
| Sum | | | 50 | **26,60** | | | | |
| Sum | | | 63 | **23,68** | | | | |
| Sum | | | 80 | **20,15** | | | | |
| Sum | | | 100 | **16,12** | | | | |
| Sum | | | 125 | **11,90** | | | | |
| Sum | | | 160 | **4,14** | | | | |
| Sum | | | 200 | **-0,85** | | | | |

**Noise sensitive area: K Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (163)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 6 881 | 6 883 | | | | | | |
| K 01 | | | 20 | **31,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **27,61** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 01 | | | 32 | **23,44** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 01 | | | 40 | **19,20** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 01 | | | 50 | **15,16** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 01 | | | 63 | **11,99** | 83,0 | 0,76 | 4,30 | 13,00 |
| K 01 | | | 80 | **8,54** | 86,0 | 1,10 | 3,70 | 14,80 |
| K 01 | | | 100 | **4,82** | 89,0 | 1,72 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | | | 125 | **0,73** | 92,0 | 2,62 | 1,80 | 18,80 |
| K 01 | | | 160 | **-7,38** | 92,0 | 3,92 | 0,00 | 21,10 |
| K 01 | | | 200 | **-12,30** | 93,0 | 5,64 | 0,00 | 22,80 |
| K 02 | 6 535 | 6 536 | | | | | | |
| K 02 | | | 20 | **31,49** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **28,06** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 02 | | | 32 | **23,90** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 02 | | | 40 | **19,67** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 02 | | | 50 | **15,64** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 02 | | | 63 | **12,47** | 83,0 | 0,72 | 4,30 | 13,00 |
| K 02 | | | 80 | **9,05** | 86,0 | 1,05 | 3,70 | 14,80 |
| K 02 | | | 100 | **5,36** | 89,0 | 1,63 | 3,00 | 16,80 |
| K 02 | | | 125 | **1,31** | 92,0 | 2,48 | 1,80 | 18,80 |
| K 02 | | | 160 | **-6,73** | 92,0 | 3,73 | 0,00 | 21,10 |
| K 02 | | | 200 | **-11,57** | 93,0 | 5,36 | 0,00 | 22,80 |
| K 03 | 6 424 | 6 426 | | | | | | |
| K 03 | | | 20 | **31,64** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **28,21** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 03 | | | 32 | **24,05** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 03 | | | 40 | **19,82** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 03 | | | 50 | **15,79** | 80,0 | 0,45 | 4,70 | 11,50 |
| K 03 | | | 63 | **12,63** | 83,0 | 0,71 | 4,30 | 13,00 |
| K 03 | | | 80 | **9,21** | 86,0 | 1,03 | 3,70 | 14,80 |
| K 03 | | | 100 | **5,53** | 89,0 | 1,61 | 3,00 | 16,80 |
| K 03 | | | 125 | **1,50** | 92,0 | 2,44 | 1,80 | 18,80 |
| K 03 | | | 160 | **-6,52** | 92,0 | 3,66 | 0,00 | 21,10 |
| K 03 | | | 200 | **-11,33** | 93,0 | 5,27 | 0,00 | 22,80 |
| K 04 | 5 717 | 5 719 | | | | | | |
| K 04 | | | 20 | **32,65** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **29,24** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 04 | | | 32 | **25,08** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 04 | | | 40 | **20,87** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 04 | | | 50 | **16,85** | 80,0 | 0,40 | 4,70 | 11,50 |
| K 04 | | | 63 | **13,72** | 83,0 | 0,63 | 4,30 | 13,00 |
| K 04 | | | 80 | **10,34** | 86,0 | 0,92 | 3,70 | 14,80 |
| K 04 | | | 100 | **6,72** | 89,0 | 1,43 | 3,00 | 16,80 |
| K 04 | | | 125 | **2,78** | 92,0 | 2,17 | 1,80 | 18,80 |
| K 04 | | | 160 | **-5,11** | 92,0 | 3,26 | 0,00 | 21,10 |
| K 04 | | | 200 | **-9,74** | 93,0 | 4,69 | 0,00 | 22,80 |
| K 05 | 6 322 | 6 324 | | | | | | |
| K 05 | | | 20 | **31,78** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **28,35** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 05 | | | 32 | **24,19** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 05 | | | 40 | **19,96** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 05 | | | 50 | **15,94** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,78** | 83,0 | 0,70 | 4,30 | 13,00 |
| K 05 | | | 80 | **9,37** | 86,0 | 1,01 | 3,70 | 14,80 |
| K 05 | | | 100 | **5,70** | 89,0 | 1,58 | 3,00 | 16,80 |
| K 05 | | | 125 | **1,68** | 92,0 | 2,40 | 1,80 | 18,80 |
| K 05 | | | 160 | **-6,32** | 92,0 | 3,60 | 0,00 | 21,10 |
| K 05 | | | 200 | **-11,11** | 93,0 | 5,19 | 0,00 | 22,80 |
| K 06 | 6 065 | 6 067 | | | | | | |
| K 06 | | | 20 | **32,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **28,72** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 06 | | | 32 | **24,56** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 06 | | | 40 | **20,34** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 06 | | | 50 | **16,32** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 06 | | | 63 | **13,17** | 83,0 | 0,67 | 4,30 | 13,00 |
| K 06 | | | 80 | **9,77** | 86,0 | 0,97 | 3,70 | 14,80 |
| K 06 | | | 100 | **6,12** | 89,0 | 1,52 | 3,00 | 16,80 |
| K 06 | | | 125 | **2,13** | 92,0 | 2,31 | 1,80 | 18,80 |
| K 06 | | | 160 | **-5,82** | 92,0 | 3,46 | 0,00 | 21,10 |
| K 06 | | | 200 | **-10,54** | 93,0 | 4,98 | 0,00 | 22,80 |
| K 07 | 5 463 | 5 465 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 20 | **33,05** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **29,64** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 07 | | | 32 | **25,48** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 07 | | | 40 | **21,28** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 07 | | | 50 | **17,27** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 07 | | | 63 | **14,15** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 07 | | | 80 | **10,77** | 86,0 | 0,87 | 3,70 | 14,80 |
| K 07 | | | 100 | **7,18** | 89,0 | 1,37 | 3,00 | 16,80 |
| K 07 | | | 125 | **3,27** | 92,0 | 2,08 | 1,80 | 18,80 |
| K 07 | | | 160 | **-4,57** | 92,0 | 3,12 | 0,00 | 21,10 |
| K 07 | | | 200 | **-9,13** | 93,0 | 4,48 | 0,00 | 22,80 |
| K 08 | 5 756 | 5 758 | | | | | | |
| K 08 | | | 20 | **32,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **29,18** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 08 | | | 32 | **25,02** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 08 | | | 40 | **20,81** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 08 | | | 50 | **16,79** | 80,0 | 0,40 | 4,70 | 11,50 |
| K 08 | | | 63 | **13,66** | 83,0 | 0,63 | 4,30 | 13,00 |
| K 08 | | | 80 | **10,27** | 86,0 | 0,92 | 3,70 | 14,80 |
| K 08 | | | 100 | **6,66** | 89,0 | 1,44 | 3,00 | 16,80 |
| K 08 | | | 125 | **2,71** | 92,0 | 2,19 | 1,80 | 18,80 |
| K 08 | | | 160 | **-5,19** | 92,0 | 3,28 | 0,00 | 21,10 |
| K 08 | | | 200 | **-9,83** | 93,0 | 4,72 | 0,00 | 22,80 |
| K 09 | 5 615 | 5 618 | | | | | | |
| K 09 | | | 20 | **32,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **29,40** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 09 | | | 32 | **25,24** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 09 | | | 40 | **21,03** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 09 | | | 50 | **17,02** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 09 | | | 63 | **13,89** | 83,0 | 0,62 | 4,30 | 13,00 |
| K 09 | | | 80 | **10,51** | 86,0 | 0,90 | 3,70 | 14,80 |
| K 09 | | | 100 | **6,90** | 89,0 | 1,40 | 3,00 | 16,80 |
| K 09 | | | 125 | **2,97** | 92,0 | 2,13 | 1,80 | 18,80 |
| K 09 | | | 160 | **-4,89** | 92,0 | 3,20 | 0,00 | 21,10 |
| K 09 | | | 200 | **-9,50** | 93,0 | 4,61 | 0,00 | 22,80 |
| K 10 | 7 716 | 7 718 | | | | | | |
| K 10 | | | 20 | **30,05** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **26,60** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 10 | | | 32 | **22,42** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 10 | | | 40 | **18,16** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 10 | | | 50 | **14,11** | 80,0 | 0,54 | 4,70 | 11,50 |
| K 10 | | | 63 | **10,90** | 83,0 | 0,85 | 4,30 | 13,00 |
| K 10 | | | 80 | **7,42** | 86,0 | 1,23 | 3,70 | 14,80 |
| K 10 | | | 100 | **3,62** | 89,0 | 1,93 | 3,00 | 16,80 |
| K 10 | | | 125 | **-0,58** | 92,0 | 2,93 | 1,80 | 18,80 |
| K 10 | | | 160 | **-8,85** | 92,0 | 4,40 | 0,00 | 21,10 |
| K 10 | | | 200 | **-13,98** | 93,0 | 6,33 | 0,00 | 22,80 |
| K 11 | 8 020 | 8 022 | | | | | | |
| K 11 | | | 20 | **29,71** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **26,25** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 11 | | | 32 | **22,07** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 11 | | | 40 | **17,81** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 11 | | | 50 | **13,75** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 11 | | | 63 | **10,53** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 11 | | | 80 | **7,03** | 86,0 | 1,28 | 3,70 | 14,80 |
| K 11 | | | 100 | **3,21** | 89,0 | 2,01 | 3,00 | 16,80 |
| K 11 | | | 125 | **-1,03** | 92,0 | 3,05 | 1,80 | 18,80 |
| K 11 | | | 160 | **-9,36** | 92,0 | 4,57 | 0,00 | 21,10 |
| K 11 | | | 200 | **-14,56** | 93,0 | 6,58 | 0,00 | 22,80 |
| K 12 | 7 811 | 7 813 | | | | | | |
| K 12 | | | 20 | **29,94** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **26,49** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 12 | | | 32 | **22,31** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 12 | | | 40 | **18,05** | 78,0 | 0,39 | 5,00 | 10,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 12 | | | 50 | **14,00** | 80,0 | 0,55 | 4,70 | 11,50 |
| K 12 | | | 63 | **10,78** | 83,0 | 0,86 | 4,30 | 13,00 |
| K 12 | | | 80 | **7,29** | 86,0 | 1,25 | 3,70 | 14,80 |
| K 12 | | | 100 | **3,49** | 89,0 | 1,95 | 3,00 | 16,80 |
| K 12 | | | 125 | **-0,73** | 92,0 | 2,97 | 1,80 | 18,80 |
| K 12 | | | 160 | **-9,01** | 92,0 | 4,45 | 0,00 | 21,10 |
| K 12 | | | 200 | **-14,16** | 93,0 | 6,41 | 0,00 | 22,80 |
| K 13 | 7 076 | 7 077 | | | | | | |
| K 13 | | | 20 | **30,80** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **27,36** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 13 | | | 32 | **23,19** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 13 | | | 40 | **18,95** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 13 | | | 50 | **14,91** | 80,0 | 0,50 | 4,70 | 11,50 |
| K 13 | | | 63 | **11,72** | 83,0 | 0,78 | 4,30 | 13,00 |
| K 13 | | | 80 | **8,27** | 86,0 | 1,13 | 3,70 | 14,80 |
| K 13 | | | 100 | **4,53** | 89,0 | 1,77 | 3,00 | 16,80 |
| K 13 | | | 125 | **0,41** | 92,0 | 2,69 | 1,80 | 18,80 |
| K 13 | | | 160 | **-7,73** | 92,0 | 4,03 | 0,00 | 21,10 |
| K 13 | | | 200 | **-12,70** | 93,0 | 5,80 | 0,00 | 22,80 |
| K 14 | 6 802 | 6 804 | | | | | | |
| K 14 | | | 20 | **31,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **27,71** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 14 | | | 32 | **23,54** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 14 | | | 40 | **19,30** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 14 | | | 50 | **15,27** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 14 | | | 63 | **12,10** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 14 | | | 80 | **8,66** | 86,0 | 1,09 | 3,70 | 14,80 |
| K 14 | | | 100 | **4,94** | 89,0 | 1,70 | 3,00 | 16,80 |
| K 14 | | | 125 | **0,86** | 92,0 | 2,59 | 1,80 | 18,80 |
| K 14 | | | 160 | **-7,23** | 92,0 | 3,88 | 0,00 | 21,10 |
| K 14 | | | 200 | **-12,13** | 93,0 | 5,58 | 0,00 | 22,80 |
| WTG 01 | 5 504 | 5 507 | | | | | | |
| WTG 01 | | | 20 | **34,48** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **31,07** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,52** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,51** | 78,3 | 0,28 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,50** | 80,3 | 0,39 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,68** | 84,6 | 0,61 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **12,00** | 87,3 | 0,88 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **7,01** | 88,9 | 1,38 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,69** | 91,5 | 2,09 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,16** | 93,5 | 3,14 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-7,73** | 94,5 | 4,52 | 0,00 | 22,80 |
| WTG 02 | 5 259 | 5 262 | | | | | | |
| WTG 02 | | | 20 | **34,88** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **31,47** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **26,92** | 77,1 | 0,16 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **21,91** | 78,3 | 0,26 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **17,91** | 80,3 | 0,37 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **16,10** | 84,6 | 0,58 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **12,44** | 87,3 | 0,84 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **7,46** | 88,9 | 1,32 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **3,18** | 91,5 | 2,00 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-2,62** | 93,5 | 3,00 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-7,14** | 94,5 | 4,31 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **44,18** | | | | |
| Sum | | | 25 | **40,76** | | | | |
| Sum | | | 32 | **36,51** | | | | |
| Sum | | | 40 | **32,13** | | | | |
| Sum | | | 50 | **28,11** | | | | |
| Sum | | | 63 | **25,23** | | | | |
| Sum | | | 80 | **21,75** | | | | |
| Sum | | | 100 | **17,82** | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| Sum | | | 125 | **13,74** | | | | |
| Sum | | | 160 | **6,19** | | | | |
| Sum | | | 200 | **1,47** | | | | |

**Noise sensitive area: L Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (162)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 5 569 | 5 570 | | | | | | |
| K 01 | | | 20 | **32,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **29,47** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 01 | | | 32 | **25,32** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 01 | | | 40 | **21,10** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 01 | | | 50 | **17,09** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 01 | | | 63 | **13,97** | 83,0 | 0,61 | 4,30 | 13,00 |
| K 01 | | | 80 | **10,59** | 86,0 | 0,89 | 3,70 | 14,80 |
| K 01 | | | 100 | **6,99** | 89,0 | 1,39 | 3,00 | 16,80 |
| K 01 | | | 125 | **3,07** | 92,0 | 2,12 | 1,80 | 18,80 |
| K 01 | | | 160 | **-4,79** | 92,0 | 3,18 | 0,00 | 21,10 |
| K 01 | | | 200 | **-9,39** | 93,0 | 4,57 | 0,00 | 22,80 |
| K 02 | 5 016 | 5 019 | | | | | | |
| K 02 | | | 20 | **33,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **30,39** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 02 | | | 32 | **26,24** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 02 | | | 40 | **22,04** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 02 | | | 50 | **18,04** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 02 | | | 63 | **14,94** | 83,0 | 0,55 | 4,30 | 13,00 |
| K 02 | | | 80 | **11,59** | 86,0 | 0,80 | 3,70 | 14,80 |
| K 02 | | | 100 | **8,03** | 89,0 | 1,25 | 3,00 | 16,80 |
| K 02 | | | 125 | **4,18** | 92,0 | 1,91 | 1,80 | 18,80 |
| K 02 | | | 160 | **-3,57** | 92,0 | 2,86 | 0,00 | 21,10 |
| K 02 | | | 200 | **-8,03** | 93,0 | 4,12 | 0,00 | 22,80 |
| K 03 | 4 445 | 4 447 | | | | | | |
| K 03 | | | 20 | **34,84** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **31,45** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 03 | | | 32 | **27,30** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 03 | | | 40 | **23,12** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 03 | | | 50 | **19,13** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 03 | | | 63 | **16,05** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 03 | | | 80 | **12,73** | 86,0 | 0,71 | 3,70 | 14,80 |
| K 03 | | | 100 | **9,23** | 89,0 | 1,11 | 3,00 | 16,80 |
| K 03 | | | 125 | **5,45** | 92,0 | 1,69 | 1,80 | 18,80 |
| K 03 | | | 160 | **-2,20** | 92,0 | 2,54 | 0,00 | 21,10 |
| K 03 | | | 200 | **-6,51** | 93,0 | 3,65 | 0,00 | 22,80 |
| K 04 | 3 740 | 3 743 | | | | | | |
| K 04 | | | 20 | **36,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **32,96** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 04 | | | 32 | **28,82** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 04 | | | 40 | **24,65** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 04 | | | 50 | **20,67** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 04 | | | 63 | **17,62** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 04 | | | 80 | **14,34** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 04 | | | 100 | **10,90** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 04 | | | 125 | **7,21** | 92,0 | 1,42 | 1,80 | 18,80 |
| K 04 | | | 160 | **-0,30** | 92,0 | 2,13 | 0,00 | 21,10 |
| K 04 | | | 200 | **-4,43** | 93,0 | 3,07 | 0,00 | 22,80 |
| K 05 | 3 645 | 3 648 | | | | | | |
| K 05 | | | 20 | **36,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **33,19** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 05 | | | 32 | **29,05** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 05 | | | 40 | **24,88** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 05 | | | 50 | **20,90** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 05 | | | 63 | **17,86** | 83,0 | 0,40 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 80 | **14,58** | 86,0 | 0,58 | 3,70 | 14,80 |
| K 05 | | | 100 | **11,15** | 89,0 | 0,91 | 3,00 | 16,80 |
| K 05 | | | 125 | **7,47** | 92,0 | 1,39 | 1,80 | 18,80 |
| K 05 | | | 160 | **-0,02** | 92,0 | 2,08 | 0,00 | 21,10 |
| K 05 | | | 200 | **-4,13** | 93,0 | 2,99 | 0,00 | 22,80 |
| K 06 | 5 404 | 5 407 | | | | | | |
| K 06 | | | 20 | **33,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **29,73** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 06 | | | 32 | **25,58** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 06 | | | 40 | **21,37** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 06 | | | 50 | **17,36** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 06 | | | 63 | **14,25** | 83,0 | 0,59 | 4,30 | 13,00 |
| K 06 | | | 80 | **10,88** | 86,0 | 0,87 | 3,70 | 14,80 |
| K 06 | | | 100 | **7,29** | 89,0 | 1,35 | 3,00 | 16,80 |
| K 06 | | | 125 | **3,39** | 92,0 | 2,05 | 1,80 | 18,80 |
| K 06 | | | 160 | **-4,44** | 92,0 | 3,08 | 0,00 | 21,10 |
| K 06 | | | 200 | **-8,99** | 93,0 | 4,43 | 0,00 | 22,80 |
| K 07 | 5 218 | 5 220 | | | | | | |
| K 07 | | | 20 | **33,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **30,04** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 07 | | | 32 | **25,89** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 07 | | | 40 | **21,69** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 07 | | | 50 | **17,68** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 07 | | | 63 | **14,57** | 83,0 | 0,57 | 4,30 | 13,00 |
| K 07 | | | 80 | **11,21** | 86,0 | 0,84 | 3,70 | 14,80 |
| K 07 | | | 100 | **7,64** | 89,0 | 1,31 | 3,00 | 16,80 |
| K 07 | | | 125 | **3,76** | 92,0 | 1,98 | 1,80 | 18,80 |
| K 07 | | | 160 | **-4,03** | 92,0 | 2,98 | 0,00 | 21,10 |
| K 07 | | | 200 | **-8,53** | 93,0 | 4,28 | 0,00 | 22,80 |
| K 08 | 4 635 | 4 638 | | | | | | |
| K 08 | | | 20 | **34,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,08** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **26,93** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 08 | | | 40 | **22,74** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 08 | | | 50 | **18,75** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 08 | | | 63 | **15,66** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 08 | | | 80 | **12,33** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 08 | | | 100 | **8,81** | 89,0 | 1,16 | 3,00 | 16,80 |
| K 08 | | | 125 | **5,01** | 92,0 | 1,76 | 1,80 | 18,80 |
| K 08 | | | 160 | **-2,67** | 92,0 | 2,64 | 0,00 | 21,10 |
| K 08 | | | 200 | **-7,03** | 93,0 | 3,80 | 0,00 | 22,80 |
| K 09 | 4 180 | 4 183 | | | | | | |
| K 09 | | | 20 | **35,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **31,99** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 09 | | | 32 | **27,84** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 09 | | | 40 | **23,66** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 09 | | | 50 | **19,68** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 09 | | | 63 | **16,61** | 83,0 | 0,46 | 4,30 | 13,00 |
| K 09 | | | 80 | **13,30** | 86,0 | 0,67 | 3,70 | 14,80 |
| K 09 | | | 100 | **9,82** | 89,0 | 1,05 | 3,00 | 16,80 |
| K 09 | | | 125 | **6,08** | 92,0 | 1,59 | 1,80 | 18,80 |
| K 09 | | | 160 | **-1,51** | 92,0 | 2,38 | 0,00 | 21,10 |
| K 09 | | | 200 | **-5,76** | 93,0 | 3,43 | 0,00 | 22,80 |
| K 10 | 6 779 | 6 781 | | | | | | |
| K 10 | | | 20 | **31,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **27,74** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 10 | | | 32 | **23,57** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 10 | | | 40 | **19,34** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 10 | | | 50 | **15,30** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 10 | | | 63 | **12,13** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 10 | | | 80 | **8,69** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 10 | | | 100 | **4,98** | 89,0 | 1,70 | 3,00 | 16,80 |
| K 10 | | | 125 | **0,90** | 92,0 | 2,58 | 1,80 | 18,80 |
| K 10 | | | 160 | **-7,19** | 92,0 | 3,87 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 200 | **-12,09** | 93,0 | 5,56 | 0,00 | 22,80 |
| K 11 | 7 403 | 7 404 | | | | | | |
| K 11 | | | 20 | **30,41** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **26,96** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 11 | | | 32 | **22,79** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 11 | | | 40 | **18,54** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 11 | | | 50 | **14,49** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 11 | | | 63 | **11,30** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 11 | | | 80 | **7,83** | 86,0 | 1,18 | 3,70 | 14,80 |
| K 11 | | | 100 | **4,06** | 89,0 | 1,85 | 3,00 | 16,80 |
| K 11 | | | 125 | **-0,10** | 92,0 | 2,81 | 1,80 | 18,80 |
| K 11 | | | 160 | **-8,31** | 92,0 | 4,22 | 0,00 | 21,10 |
| K 11 | | | 200 | **-13,36** | 93,0 | 6,07 | 0,00 | 22,80 |
| K 12 | 7 759 | 7 760 | | | | | | |
| K 12 | | | 20 | **30,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **26,55** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 12 | | | 32 | **22,37** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 12 | | | 40 | **18,11** | 78,0 | 0,39 | 5,00 | 10,30 |
| K 12 | | | 50 | **14,06** | 80,0 | 0,54 | 4,70 | 11,50 |
| K 12 | | | 63 | **10,85** | 83,0 | 0,85 | 4,30 | 13,00 |
| K 12 | | | 80 | **7,36** | 86,0 | 1,24 | 3,70 | 14,80 |
| K 12 | | | 100 | **3,56** | 89,0 | 1,94 | 3,00 | 16,80 |
| K 12 | | | 125 | **-0,65** | 92,0 | 2,95 | 1,80 | 18,80 |
| K 12 | | | 160 | **-8,92** | 92,0 | 4,42 | 0,00 | 21,10 |
| K 12 | | | 200 | **-14,06** | 93,0 | 6,36 | 0,00 | 22,80 |
| K 13 | 6 861 | 6 862 | | | | | | |
| K 13 | | | 20 | **31,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **27,63** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 13 | | | 32 | **23,46** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 13 | | | 40 | **19,23** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 13 | | | 50 | **15,19** | 80,0 | 0,48 | 4,70 | 11,50 |
| K 13 | | | 63 | **12,02** | 83,0 | 0,75 | 4,30 | 13,00 |
| K 13 | | | 80 | **8,57** | 86,0 | 1,10 | 3,70 | 14,80 |
| K 13 | | | 100 | **4,85** | 89,0 | 1,72 | 3,00 | 16,80 |
| K 13 | | | 125 | **0,76** | 92,0 | 2,61 | 1,80 | 18,80 |
| K 13 | | | 160 | **-7,34** | 92,0 | 3,91 | 0,00 | 21,10 |
| K 13 | | | 200 | **-12,26** | 93,0 | 5,63 | 0,00 | 22,80 |
| K 14 | 6 218 | 6 220 | | | | | | |
| K 14 | | | 20 | **31,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **28,50** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 14 | | | 32 | **24,34** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 14 | | | 40 | **20,11** | 78,0 | 0,31 | 5,00 | 10,30 |
| K 14 | | | 50 | **16,09** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 14 | | | 63 | **12,94** | 83,0 | 0,68 | 4,30 | 13,00 |
| K 14 | | | 80 | **9,53** | 86,0 | 1,00 | 3,70 | 14,80 |
| K 14 | | | 100 | **5,87** | 89,0 | 1,55 | 3,00 | 16,80 |
| K 14 | | | 125 | **1,86** | 92,0 | 2,36 | 1,80 | 18,80 |
| K 14 | | | 160 | **-6,12** | 92,0 | 3,55 | 0,00 | 21,10 |
| K 14 | | | 200 | **-10,88** | 93,0 | 5,10 | 0,00 | 22,80 |
| WTG 01 | 2 414 | 2 421 | | | | | | |
| WTG 01 | | | 20 | **41,62** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **38,27** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **33,75** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **28,80** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **24,85** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **23,16** | 84,6 | 0,27 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **19,63** | 87,3 | 0,39 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **14,92** | 88,9 | 0,61 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **11,00** | 91,5 | 0,92 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **5,74** | 93,5 | 1,38 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **1,94** | 94,5 | 1,98 | 0,00 | 22,80 |
| WTG 02 | 3 178 | 3 183 | | | | | | |
| WTG 02 | | | 20 | **39,24** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **35,88** | 75,2 | 0,06 | 5,40 | 8,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 32 | **31,35** | 77,1 | 0,10 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **26,38** | 78,3 | 0,16 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **22,42** | 80,3 | 0,22 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **20,69** | 84,6 | 0,35 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **17,13** | 87,3 | 0,51 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **12,35** | 88,9 | 0,80 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **8,33** | 91,5 | 1,21 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **2,93** | 93,5 | 1,81 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-1,07** | 94,5 | 2,61 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **47,47** | | | | |
| Sum | | | 25 | **44,09** | | | | |
| Sum | | | 32 | **39,79** | | | | |
| Sum | | | 40 | **35,31** | | | | |
| Sum | | | 50 | **31,33** | | | | |
| Sum | | | 63 | **28,78** | | | | |
| Sum | | | 80 | **25,35** | | | | |
| Sum | | | 100 | **21,35** | | | | |
| Sum | | | 125 | **17,48** | | | | |
| Sum | | | 160 | **10,76** | | | | |
| Sum | | | 200 | **6,63** | | | | |

**Noise sensitive area: M Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (161)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 6 534 | 6 536 | | | | | | |
| K 01 | | | 20 | **31,49** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **28,06** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 01 | | | 32 | **23,90** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 01 | | | 40 | **19,67** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 01 | | | 50 | **15,64** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 01 | | | 63 | **12,48** | 83,0 | 0,72 | 4,30 | 13,00 |
| K 01 | | | 80 | **9,05** | 86,0 | 1,05 | 3,70 | 14,80 |
| K 01 | | | 100 | **5,36** | 89,0 | 1,63 | 3,00 | 16,80 |
| K 01 | | | 125 | **1,31** | 92,0 | 2,48 | 1,80 | 18,80 |
| K 01 | | | 160 | **-6,73** | 92,0 | 3,73 | 0,00 | 21,10 |
| K 01 | | | 200 | **-11,57** | 93,0 | 5,36 | 0,00 | 22,80 |
| K 02 | 6 018 | 6 020 | | | | | | |
| K 02 | | | 20 | **32,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **28,79** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 02 | | | 32 | **24,63** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 02 | | | 40 | **20,41** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 02 | | | 50 | **16,39** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 02 | | | 63 | **13,25** | 83,0 | 0,66 | 4,30 | 13,00 |
| K 02 | | | 80 | **9,84** | 86,0 | 0,96 | 3,70 | 14,80 |
| K 02 | | | 100 | **6,20** | 89,0 | 1,51 | 3,00 | 16,80 |
| K 02 | | | 125 | **2,22** | 92,0 | 2,29 | 1,80 | 18,80 |
| K 02 | | | 160 | **-5,72** | 92,0 | 3,43 | 0,00 | 21,10 |
| K 02 | | | 200 | **-10,43** | 93,0 | 4,94 | 0,00 | 22,80 |
| K 03 | 5 385 | 5 388 | | | | | | |
| K 03 | | | 20 | **33,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **29,76** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 03 | | | 32 | **25,61** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 03 | | | 40 | **21,40** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 03 | | | 50 | **17,39** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 03 | | | 63 | **14,28** | 83,0 | 0,59 | 4,30 | 13,00 |
| K 03 | | | 80 | **10,91** | 86,0 | 0,86 | 3,70 | 14,80 |
| K 03 | | | 100 | **7,32** | 89,0 | 1,35 | 3,00 | 16,80 |
| K 03 | | | 125 | **3,42** | 92,0 | 2,05 | 1,80 | 18,80 |
| K 03 | | | 160 | **-4,40** | 92,0 | 3,07 | 0,00 | 21,10 |
| K 03 | | | 200 | **-8,95** | 93,0 | 4,42 | 0,00 | 22,80 |
| K 04 | 4 924 | 4 927 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 20 | **33,95** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **30,55** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 04 | | | 32 | **26,40** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 04 | | | 40 | **22,20** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 04 | | | 50 | **18,20** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 04 | | | 63 | **15,11** | 83,0 | 0,54 | 4,30 | 13,00 |
| K 04 | | | 80 | **11,76** | 86,0 | 0,79 | 3,70 | 14,80 |
| K 04 | | | 100 | **8,22** | 89,0 | 1,23 | 3,00 | 16,80 |
| K 04 | | | 125 | **4,38** | 92,0 | 1,87 | 1,80 | 18,80 |
| K 04 | | | 160 | **-3,36** | 92,0 | 2,81 | 0,00 | 21,10 |
| K 04 | | | 200 | **-7,79** | 93,0 | 4,04 | 0,00 | 22,80 |
| K 05 | 4 490 | 4 493 | | | | | | |
| K 05 | | | 20 | **34,75** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **31,36** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 05 | | | 32 | **27,21** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 05 | | | 40 | **23,02** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 05 | | | 50 | **19,03** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 05 | | | 63 | **15,95** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 05 | | | 80 | **12,63** | 86,0 | 0,72 | 3,70 | 14,80 |
| K 05 | | | 100 | **9,13** | 89,0 | 1,12 | 3,00 | 16,80 |
| K 05 | | | 125 | **5,34** | 92,0 | 1,71 | 1,80 | 18,80 |
| K 05 | | | 160 | **-2,31** | 92,0 | 2,56 | 0,00 | 21,10 |
| K 05 | | | 200 | **-6,64** | 93,0 | 3,68 | 0,00 | 22,80 |
| K 06 | 6 672 | 6 674 | | | | | | |
| K 06 | | | 20 | **31,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **27,88** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 06 | | | 32 | **23,71** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 06 | | | 40 | **19,48** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 06 | | | 50 | **15,45** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 06 | | | 63 | **12,28** | 83,0 | 0,73 | 4,30 | 13,00 |
| K 06 | | | 80 | **8,84** | 86,0 | 1,07 | 3,70 | 14,80 |
| K 06 | | | 100 | **5,14** | 89,0 | 1,67 | 3,00 | 16,80 |
| K 06 | | | 125 | **1,08** | 92,0 | 2,54 | 1,80 | 18,80 |
| K 06 | | | 160 | **-6,99** | 92,0 | 3,80 | 0,00 | 21,10 |
| K 06 | | | 200 | **-11,86** | 93,0 | 5,47 | 0,00 | 22,80 |
| K 07 | 6 674 | 6 676 | | | | | | |
| K 07 | | | 20 | **31,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **27,88** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 07 | | | 32 | **23,71** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 07 | | | 40 | **19,48** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 07 | | | 50 | **15,44** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 07 | | | 63 | **12,28** | 83,0 | 0,73 | 4,30 | 13,00 |
| K 07 | | | 80 | **8,84** | 86,0 | 1,07 | 3,70 | 14,80 |
| K 07 | | | 100 | **5,14** | 89,0 | 1,67 | 3,00 | 16,80 |
| K 07 | | | 125 | **1,07** | 92,0 | 2,54 | 1,80 | 18,80 |
| K 07 | | | 160 | **-7,00** | 92,0 | 3,81 | 0,00 | 21,10 |
| K 07 | | | 200 | **-11,86** | 93,0 | 5,47 | 0,00 | 22,80 |
| K 08 | 5 908 | 5 911 | | | | | | |
| K 08 | | | 20 | **32,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **28,95** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 08 | | | 32 | **24,79** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 08 | | | 40 | **20,57** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 08 | | | 50 | **16,55** | 80,0 | 0,41 | 4,70 | 11,50 |
| K 08 | | | 63 | **13,42** | 83,0 | 0,65 | 4,30 | 13,00 |
| K 08 | | | 80 | **10,02** | 86,0 | 0,95 | 3,70 | 14,80 |
| K 08 | | | 100 | **6,39** | 89,0 | 1,48 | 3,00 | 16,80 |
| K 08 | | | 125 | **2,42** | 92,0 | 2,25 | 1,80 | 18,80 |
| K 08 | | | 160 | **-5,50** | 92,0 | 3,37 | 0,00 | 21,10 |
| K 08 | | | 200 | **-10,18** | 93,0 | 4,85 | 0,00 | 22,80 |
| K 09 | 5 457 | 5 460 | | | | | | |
| K 09 | | | 20 | **33,06** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **29,65** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 09 | | | 32 | **25,49** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 09 | | | 40 | **21,28** | 78,0 | 0,27 | 5,00 | 10,30 |

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 09 | | | 50 | **17,27** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 09 | | | 63 | **14,16** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 09 | | | 80 | **10,78** | 86,0 | 0,87 | 3,70 | 14,80 |
| K 09 | | | 100 | **7,19** | 89,0 | 1,36 | 3,00 | 16,80 |
| K 09 | | | 125 | **3,28** | 92,0 | 2,07 | 1,80 | 18,80 |
| K 09 | | | 160 | **-4,56** | 92,0 | 3,11 | 0,00 | 21,10 |
| K 09 | | | 200 | **-9,12** | 93,0 | 4,48 | 0,00 | 22,80 |
| K 10 | 7 686 | 7 688 | | | | | | |
| K 10 | | | 20 | **30,08** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **26,63** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 10 | | | 32 | **22,45** | 76,0 | 0,23 | 5,20 | 9,20 |
| K 10 | | | 40 | **18,20** | 78,0 | 0,38 | 5,00 | 10,30 |
| K 10 | | | 50 | **14,15** | 80,0 | 0,54 | 4,70 | 11,50 |
| K 10 | | | 63 | **10,94** | 83,0 | 0,85 | 4,30 | 13,00 |
| K 10 | | | 80 | **7,45** | 86,0 | 1,23 | 3,70 | 14,80 |
| K 10 | | | 100 | **3,66** | 89,0 | 1,92 | 3,00 | 16,80 |
| K 10 | | | 125 | **-0,54** | 92,0 | 2,92 | 1,80 | 18,80 |
| K 10 | | | 160 | **-8,80** | 92,0 | 4,38 | 0,00 | 21,10 |
| K 10 | | | 200 | **-13,92** | 93,0 | 6,30 | 0,00 | 22,80 |
| K 11 | 8 353 | 8 355 | | | | | | |
| K 11 | | | 20 | **29,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **25,89** | 73,7 | 0,17 | 5,40 | 8,30 |
| K 11 | | | 32 | **21,71** | 76,0 | 0,25 | 5,20 | 9,20 |
| K 11 | | | 40 | **17,44** | 78,0 | 0,42 | 5,00 | 10,30 |
| K 11 | | | 50 | **13,38** | 80,0 | 0,58 | 4,70 | 11,50 |
| K 11 | | | 63 | **10,14** | 83,0 | 0,92 | 4,30 | 13,00 |
| K 11 | | | 80 | **6,62** | 86,0 | 1,34 | 3,70 | 14,80 |
| K 11 | | | 100 | **2,77** | 89,0 | 2,09 | 3,00 | 16,80 |
| K 11 | | | 125 | **-1,51** | 92,0 | 3,17 | 1,80 | 18,80 |
| K 11 | | | 160 | **-9,90** | 92,0 | 4,76 | 0,00 | 21,10 |
| K 11 | | | 200 | **-15,19** | 93,0 | 6,85 | 0,00 | 22,80 |
| K 12 | 8 882 | 8 884 | | | | | | |
| K 12 | | | 20 | **28,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **25,35** | 73,7 | 0,18 | 5,40 | 8,30 |
| K 12 | | | 32 | **21,16** | 76,0 | 0,27 | 5,20 | 9,20 |
| K 12 | | | 40 | **16,88** | 78,0 | 0,44 | 5,00 | 10,30 |
| K 12 | | | 50 | **12,81** | 80,0 | 0,62 | 4,70 | 11,50 |
| K 12 | | | 63 | **9,55** | 83,0 | 0,98 | 4,30 | 13,00 |
| K 12 | | | 80 | **6,01** | 86,0 | 1,42 | 3,70 | 14,80 |
| K 12 | | | 100 | **2,11** | 89,0 | 2,22 | 3,00 | 16,80 |
| K 12 | | | 125 | **-2,25** | 92,0 | 3,38 | 1,80 | 18,80 |
| K 12 | | | 160 | **-10,74** | 92,0 | 5,06 | 0,00 | 21,10 |
| K 12 | | | 200 | **-16,16** | 93,0 | 7,28 | 0,00 | 22,80 |
| K 13 | 8 040 | 8 042 | | | | | | |
| K 13 | | | 20 | **29,69** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **26,23** | 73,7 | 0,16 | 5,40 | 8,30 |
| K 13 | | | 32 | **22,05** | 76,0 | 0,24 | 5,20 | 9,20 |
| K 13 | | | 40 | **17,79** | 78,0 | 0,40 | 5,00 | 10,30 |
| K 13 | | | 50 | **13,73** | 80,0 | 0,56 | 4,70 | 11,50 |
| K 13 | | | 63 | **10,51** | 83,0 | 0,88 | 4,30 | 13,00 |
| K 13 | | | 80 | **7,01** | 86,0 | 1,29 | 3,70 | 14,80 |
| K 13 | | | 100 | **3,18** | 89,0 | 2,01 | 3,00 | 16,80 |
| K 13 | | | 125 | **-1,06** | 92,0 | 3,06 | 1,80 | 18,80 |
| K 13 | | | 160 | **-9,39** | 92,0 | 4,58 | 0,00 | 21,10 |
| K 13 | | | 200 | **-14,60** | 93,0 | 6,59 | 0,00 | 22,80 |
| K 14 | 7 359 | 7 361 | | | | | | |
| K 14 | | | 20 | **30,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **27,01** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 14 | | | 32 | **22,84** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 14 | | | 40 | **18,59** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 14 | | | 50 | **14,55** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 14 | | | 63 | **11,35** | 83,0 | 0,81 | 4,30 | 13,00 |
| K 14 | | | 80 | **7,88** | 86,0 | 1,18 | 3,70 | 14,80 |
| K 14 | | | 100 | **4,12** | 89,0 | 1,84 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 125 | **-0,04** | 92,0 | 2,80 | 1,80 | 18,80 |
| K 14 | | | 160 | **-8,23** | 92,0 | 4,20 | 0,00 | 21,10 |
| K 14 | | | 200 | **-13,27** | 93,0 | 6,04 | 0,00 | 22,80 |
| WTG 01 | 3 654 | 3 659 | | | | | | |
| WTG 01 | | | 20 | **38,03** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **34,66** | 75,2 | 0,07 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **30,12** | 77,1 | 0,11 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **25,15** | 78,3 | 0,18 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **21,18** | 80,3 | 0,26 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **19,43** | 84,6 | 0,40 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **15,85** | 87,3 | 0,59 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **11,02** | 88,9 | 0,91 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **6,94** | 91,5 | 1,39 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **1,45** | 93,5 | 2,09 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-2,67** | 94,5 | 3,00 | 0,00 | 22,80 |
| WTG 02 | 4 550 | 4 554 | | | | | | |
| WTG 02 | | | 20 | **36,13** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **32,74** | 75,2 | 0,09 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **28,19** | 77,1 | 0,14 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **23,20** | 78,3 | 0,23 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **19,21** | 80,3 | 0,32 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **17,43** | 84,6 | 0,50 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **13,80** | 87,3 | 0,73 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **8,89** | 88,9 | 1,14 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **4,70** | 91,5 | 1,73 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-0,96** | 93,5 | 2,60 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-5,30** | 94,5 | 3,73 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **45,08** | | | | |
| Sum | | | 25 | **41,67** | | | | |
| Sum | | | 32 | **37,39** | | | | |
| Sum | | | 40 | **32,95** | | | | |
| Sum | | | 50 | **28,94** | | | | |
| Sum | | | 63 | **26,22** | | | | |
| Sum | | | 80 | **22,75** | | | | |
| Sum | | | 100 | **18,74** | | | | |
| Sum | | | 125 | **14,72** | | | | |
| Sum | | | 160 | **7,56** | | | | |
| Sum | | | 200 | **3,08** | | | | |

**Noise sensitive area: N Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (160)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 5 540 | 5 542 | | | | | | |
| K 01 | | | 20 | **32,93** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **29,52** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 01 | | | 32 | **25,36** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 01 | | | 40 | **21,15** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 01 | | | 50 | **17,14** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 01 | | | 63 | **14,02** | 83,0 | 0,61 | 4,30 | 13,00 |
| K 01 | | | 80 | **10,64** | 86,0 | 0,89 | 3,70 | 14,80 |
| K 01 | | | 100 | **7,04** | 89,0 | 1,39 | 3,00 | 16,80 |
| K 01 | | | 125 | **3,12** | 92,0 | 2,11 | 1,80 | 18,80 |
| K 01 | | | 160 | **-4,73** | 92,0 | 3,16 | 0,00 | 21,10 |
| K 01 | | | 200 | **-9,32** | 93,0 | 4,54 | 0,00 | 22,80 |
| K 02 | 5 195 | 5 198 | | | | | | |
| K 02 | | | 20 | **33,48** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **30,08** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 02 | | | 32 | **25,93** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 02 | | | 40 | **21,72** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 02 | | | 50 | **17,72** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 02 | | | 63 | **14,61** | 83,0 | 0,57 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 80 | **11,25** | 86,0 | 0,83 | 3,70 | 14,80 |
| K 02 | | | 100 | **7,68** | 89,0 | 1,30 | 3,00 | 16,80 |
| K 02 | | | 125 | **3,81** | 92,0 | 1,98 | 1,80 | 18,80 |
| K 02 | | | 160 | **-3,98** | 92,0 | 2,96 | 0,00 | 21,10 |
| K 02 | | | 200 | **-8,48** | 93,0 | 4,26 | 0,00 | 22,80 |
| K 03 | 5 102 | 5 104 | | | | | | |
| K 03 | | | 20 | **33,64** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **30,24** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 03 | | | 32 | **26,09** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 03 | | | 40 | **21,89** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 03 | | | 50 | **17,88** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 03 | | | 63 | **14,78** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 03 | | | 80 | **11,42** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 03 | | | 100 | **7,87** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 03 | | | 125 | **4,00** | 92,0 | 1,94 | 1,80 | 18,80 |
| K 03 | | | 160 | **-3,77** | 92,0 | 2,91 | 0,00 | 21,10 |
| K 03 | | | 200 | **-8,24** | 93,0 | 4,19 | 0,00 | 22,80 |
| K 04 | 4 417 | 4 420 | | | | | | |
| K 04 | | | 20 | **34,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **31,50** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 04 | | | 32 | **27,36** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 04 | | | 40 | **23,17** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 04 | | | 50 | **19,18** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 04 | | | 63 | **16,11** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 04 | | | 80 | **12,78** | 86,0 | 0,71 | 3,70 | 14,80 |
| K 04 | | | 100 | **9,29** | 89,0 | 1,10 | 3,00 | 16,80 |
| K 04 | | | 125 | **5,51** | 92,0 | 1,68 | 1,80 | 18,80 |
| K 04 | | | 160 | **-2,13** | 92,0 | 2,52 | 0,00 | 21,10 |
| K 04 | | | 200 | **-6,43** | 93,0 | 3,62 | 0,00 | 22,80 |
| K 05 | 5 052 | 5 054 | | | | | | |
| K 05 | | | 20 | **33,73** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **30,33** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 05 | | | 32 | **26,18** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 05 | | | 40 | **21,97** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 05 | | | 50 | **17,97** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 05 | | | 63 | **14,87** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 05 | | | 80 | **11,52** | 86,0 | 0,81 | 3,70 | 14,80 |
| K 05 | | | 100 | **7,96** | 89,0 | 1,26 | 3,00 | 16,80 |
| K 05 | | | 125 | **4,11** | 92,0 | 1,92 | 1,80 | 18,80 |
| K 05 | | | 160 | **-3,65** | 92,0 | 2,88 | 0,00 | 21,10 |
| K 05 | | | 200 | **-8,12** | 93,0 | 4,14 | 0,00 | 22,80 |
| K 06 | 4 728 | 4 731 | | | | | | |
| K 06 | | | 20 | **34,30** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **30,91** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 06 | | | 32 | **26,76** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 06 | | | 40 | **22,56** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 06 | | | 50 | **18,57** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 06 | | | 63 | **15,48** | 83,0 | 0,52 | 4,30 | 13,00 |
| K 06 | | | 80 | **12,14** | 86,0 | 0,76 | 3,70 | 14,80 |
| K 06 | | | 100 | **8,62** | 89,0 | 1,18 | 3,00 | 16,80 |
| K 06 | | | 125 | **4,80** | 92,0 | 1,80 | 1,80 | 18,80 |
| K 06 | | | 160 | **-2,90** | 92,0 | 2,70 | 0,00 | 21,10 |
| K 06 | | | 200 | **-7,28** | 93,0 | 3,88 | 0,00 | 22,80 |
| K 07 | 4 130 | 4 133 | | | | | | |
| K 07 | | | 20 | **35,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,09** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **27,95** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,77** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,79** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,72** | 83,0 | 0,45 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,41** | 86,0 | 0,66 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,94** | 89,0 | 1,03 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,20** | 92,0 | 1,57 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,38** | 92,0 | 2,36 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 200 | **-5,61** | 93,0 | 3,39 | 0,00 | 22,80 |
| K 08 | 4 416 | 4 419 | | | | | | |
| K 08 | | | 20 | **34,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,51** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **27,36** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 08 | | | 40 | **23,17** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 08 | | | 50 | **19,18** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 08 | | | 63 | **16,11** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 08 | | | 80 | **12,79** | 86,0 | 0,71 | 3,70 | 14,80 |
| K 08 | | | 100 | **9,29** | 89,0 | 1,10 | 3,00 | 16,80 |
| K 08 | | | 125 | **5,52** | 92,0 | 1,68 | 1,80 | 18,80 |
| K 08 | | | 160 | **-2,12** | 92,0 | 2,52 | 0,00 | 21,10 |
| K 08 | | | 200 | **-6,43** | 93,0 | 3,62 | 0,00 | 22,80 |
| K 09 | 4 287 | 4 290 | | | | | | |
| K 09 | | | 20 | **35,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **31,76** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 09 | | | 32 | **27,62** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 09 | | | 40 | **23,44** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 09 | | | 50 | **19,45** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 09 | | | 63 | **16,38** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 09 | | | 80 | **13,06** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 09 | | | 100 | **9,58** | 89,0 | 1,07 | 3,00 | 16,80 |
| K 09 | | | 125 | **5,82** | 92,0 | 1,63 | 1,80 | 18,80 |
| K 09 | | | 160 | **-1,79** | 92,0 | 2,45 | 0,00 | 21,10 |
| K 09 | | | 200 | **-6,07** | 93,0 | 3,52 | 0,00 | 22,80 |
| K 10 | 6 388 | 6 390 | | | | | | |
| K 10 | | | 20 | **31,69** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **28,26** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 10 | | | 32 | **24,10** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 10 | | | 40 | **19,87** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 10 | | | 50 | **15,84** | 80,0 | 0,45 | 4,70 | 11,50 |
| K 10 | | | 63 | **12,69** | 83,0 | 0,70 | 4,30 | 13,00 |
| K 10 | | | 80 | **9,27** | 86,0 | 1,02 | 3,70 | 14,80 |
| K 10 | | | 100 | **5,59** | 89,0 | 1,60 | 3,00 | 16,80 |
| K 10 | | | 125 | **1,56** | 92,0 | 2,43 | 1,80 | 18,80 |
| K 10 | | | 160 | **-6,45** | 92,0 | 3,64 | 0,00 | 21,10 |
| K 10 | | | 200 | **-11,25** | 93,0 | 5,24 | 0,00 | 22,80 |
| K 11 | 6 712 | 6 714 | | | | | | |
| K 11 | | | 20 | **31,26** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **27,83** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 11 | | | 32 | **23,66** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 11 | | | 40 | **19,43** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 11 | | | 50 | **15,39** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 11 | | | 63 | **12,22** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 11 | | | 80 | **8,79** | 86,0 | 1,07 | 3,70 | 14,80 |
| K 11 | | | 100 | **5,08** | 89,0 | 1,68 | 3,00 | 16,80 |
| K 11 | | | 125 | **1,01** | 92,0 | 2,55 | 1,80 | 18,80 |
| K 11 | | | 160 | **-7,07** | 92,0 | 3,83 | 0,00 | 21,10 |
| K 11 | | | 200 | **-11,94** | 93,0 | 5,51 | 0,00 | 22,80 |
| K 12 | 6 544 | 6 546 | | | | | | |
| K 12 | | | 20 | **31,48** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **28,05** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 12 | | | 32 | **23,88** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 12 | | | 40 | **19,65** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 12 | | | 50 | **15,62** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 12 | | | 63 | **12,46** | 83,0 | 0,72 | 4,30 | 13,00 |
| K 12 | | | 80 | **9,03** | 86,0 | 1,05 | 3,70 | 14,80 |
| K 12 | | | 100 | **5,34** | 89,0 | 1,64 | 3,00 | 16,80 |
| K 12 | | | 125 | **1,29** | 92,0 | 2,49 | 1,80 | 18,80 |
| K 12 | | | 160 | **-6,75** | 92,0 | 3,73 | 0,00 | 21,10 |
| K 12 | | | 200 | **-11,59** | 93,0 | 5,37 | 0,00 | 22,80 |
| K 13 | 5 779 | 5 781 | | | | | | |
| K 13 | | | 20 | **32,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **29,14** | 73,7 | 0,12 | 5,40 | 8,30 |

*To be continued on next page...*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 32 | **24,99** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 13 | | | 40 | **20,77** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 13 | | | 50 | **16,76** | 80,0 | 0,40 | 4,70 | 11,50 |
| K 13 | | | 63 | **13,62** | 83,0 | 0,64 | 4,30 | 13,00 |
| K 13 | | | 80 | **10,23** | 86,0 | 0,92 | 3,70 | 14,80 |
| K 13 | | | 100 | **6,61** | 89,0 | 1,45 | 3,00 | 16,80 |
| K 13 | | | 125 | **2,66** | 92,0 | 2,20 | 1,80 | 18,80 |
| K 13 | | | 160 | **-5,24** | 92,0 | 3,30 | 0,00 | 21,10 |
| K 13 | | | 200 | **-9,88** | 93,0 | 4,74 | 0,00 | 22,80 |
| K 14 | 5 478 | 5 480 | | | | | | |
| K 14 | | | 20 | **33,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **29,61** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 14 | | | 32 | **25,46** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 14 | | | 40 | **21,25** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 14 | | | 50 | **17,24** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 14 | | | 63 | **14,12** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 14 | | | 80 | **10,75** | 86,0 | 0,88 | 3,70 | 14,80 |
| K 14 | | | 100 | **7,15** | 89,0 | 1,37 | 3,00 | 16,80 |
| K 14 | | | 125 | **3,24** | 92,0 | 2,08 | 1,80 | 18,80 |
| K 14 | | | 160 | **-4,60** | 92,0 | 3,12 | 0,00 | 21,10 |
| K 14 | | | 200 | **-9,17** | 93,0 | 4,49 | 0,00 | 22,80 |
| WTG 01 | 4 341 | 4 345 | | | | | | |
| WTG 01 | | | 20 | **36,54** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **33,15** | 75,2 | 0,09 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **28,61** | 77,1 | 0,13 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **23,62** | 78,3 | 0,22 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **19,64** | 80,3 | 0,30 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **17,86** | 84,6 | 0,48 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **14,25** | 87,3 | 0,70 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **9,35** | 88,9 | 1,09 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **5,19** | 91,5 | 1,65 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-0,44** | 93,5 | 2,48 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-4,72** | 94,5 | 3,56 | 0,00 | 22,80 |
| WTG 02 | 3 995 | 3 999 | | | | | | |
| WTG 02 | | | 20 | **37,26** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **33,88** | 75,2 | 0,08 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **29,34** | 77,1 | 0,12 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **24,36** | 78,3 | 0,20 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **20,38** | 80,3 | 0,28 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **18,62** | 84,6 | 0,44 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **15,02** | 87,3 | 0,64 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **10,16** | 88,9 | 1,00 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **6,04** | 91,5 | 1,52 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **0,48** | 93,5 | 2,28 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-3,72** | 94,5 | 3,28 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **46,27** | | | | |
| Sum | | | 25 | **42,88** | | | | |
| Sum | | | 32 | **38,64** | | | | |
| Sum | | | 40 | **34,28** | | | | |
| Sum | | | 50 | **30,28** | | | | |
| Sum | | | 63 | **27,47** | | | | |
| Sum | | | 80 | **24,05** | | | | |
| Sum | | | 100 | **20,23** | | | | |
| Sum | | | 125 | **16,33** | | | | |
| Sum | | | 160 | **9,04** | | | | |
| Sum | | | 200 | **4,66** | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**Noise sensitive area: O Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (159)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 4 780 | 4 782 | | | | | | |
| K 01 | | | 20 | **34,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **30,81** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 01 | | | 32 | **26,66** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 01 | | | 40 | **22,47** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 01 | | | 50 | **18,47** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 01 | | | 63 | **15,38** | 83,0 | 0,53 | 4,30 | 13,00 |
| K 01 | | | 80 | **12,04** | 86,0 | 0,77 | 3,70 | 14,80 |
| K 01 | | | 100 | **8,51** | 89,0 | 1,20 | 3,00 | 16,80 |
| K 01 | | | 125 | **4,69** | 92,0 | 1,82 | 1,80 | 18,80 |
| K 01 | | | 160 | **-3,02** | 92,0 | 2,73 | 0,00 | 21,10 |
| K 01 | | | 200 | **-7,41** | 93,0 | 3,92 | 0,00 | 22,80 |
| K 02 | 4 228 | 4 231 | | | | | | |
| K 02 | | | 20 | **35,27** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **31,89** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 02 | | | 32 | **27,74** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 02 | | | 40 | **23,56** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 02 | | | 50 | **19,58** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 02 | | | 63 | **16,51** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 02 | | | 80 | **13,19** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 02 | | | 100 | **9,71** | 89,0 | 1,06 | 3,00 | 16,80 |
| K 02 | | | 125 | **5,96** | 92,0 | 1,61 | 1,80 | 18,80 |
| K 02 | | | 160 | **-1,64** | 92,0 | 2,41 | 0,00 | 21,10 |
| K 02 | | | 200 | **-5,90** | 93,0 | 3,47 | 0,00 | 22,80 |
| K 03 | 3 650 | 3 653 | | | | | | |
| K 03 | | | 20 | **36,55** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **33,17** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 03 | | | 32 | **29,04** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 03 | | | 40 | **24,86** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 03 | | | 50 | **20,89** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 03 | | | 63 | **17,85** | 83,0 | 0,40 | 4,30 | 13,00 |
| K 03 | | | 80 | **14,56** | 86,0 | 0,58 | 3,70 | 14,80 |
| K 03 | | | 100 | **11,13** | 89,0 | 0,91 | 3,00 | 16,80 |
| K 03 | | | 125 | **7,46** | 92,0 | 1,39 | 1,80 | 18,80 |
| K 03 | | | 160 | **-0,03** | 92,0 | 2,08 | 0,00 | 21,10 |
| K 03 | | | 200 | **-4,15** | 93,0 | 3,00 | 0,00 | 22,80 |
| K 04 | 2 960 | 2 964 | | | | | | |
| K 04 | | | 20 | **38,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **35,00** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 04 | | | 32 | **30,87** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 04 | | | 40 | **26,72** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 04 | | | 50 | **22,76** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 04 | | | 63 | **19,74** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 04 | | | 80 | **16,49** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 04 | | | 100 | **13,12** | 89,0 | 0,74 | 3,00 | 16,80 |
| K 04 | | | 125 | **9,54** | 92,0 | 1,13 | 1,80 | 18,80 |
| K 04 | | | 160 | **2,17** | 92,0 | 1,69 | 0,00 | 21,10 |
| K 04 | | | 200 | **-1,77** | 93,0 | 2,43 | 0,00 | 22,80 |
| K 05 | 2 845 | 2 849 | | | | | | |
| K 05 | | | 20 | **38,71** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **35,35** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 05 | | | 32 | **31,22** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 05 | | | 40 | **27,06** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 05 | | | 50 | **23,11** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 05 | | | 63 | **20,09** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 05 | | | 80 | **16,85** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 05 | | | 100 | **13,49** | 89,0 | 0,71 | 3,00 | 16,80 |
| K 05 | | | 125 | **9,92** | 92,0 | 1,08 | 1,80 | 18,80 |
| K 05 | | | 160 | **2,58** | 92,0 | 1,62 | 0,00 | 21,10 |
| K 05 | | | 200 | **-1,33** | 93,0 | 2,34 | 0,00 | 22,80 |
| K 06 | 4 652 | 4 654 | | | | | | |
| K 06 | | | 20 | **34,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **31,05** | 73,7 | 0,09 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 06 | | | 32 | **26,90** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 06 | | | 40 | **22,71** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 06 | | | 50 | **18,72** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 06 | | | 63 | **15,63** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 06 | | | 80 | **12,30** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 06 | | | 100 | **8,78** | 89,0 | 1,16 | 3,00 | 16,80 |
| K 06 | | | 125 | **4,97** | 92,0 | 1,77 | 1,80 | 18,80 |
| K 06 | | | 160 | **-2,71** | 92,0 | 2,65 | 0,00 | 21,10 |
| K 06 | | | 200 | **-7,07** | 93,0 | 3,82 | 0,00 | 22,80 |
| K 07 | 4 504 | 4 506 | | | | | | |
| K 07 | | | 20 | **34,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **31,33** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 07 | | | 32 | **27,19** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,00** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,01** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 07 | | | 63 | **15,93** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 07 | | | 80 | **12,60** | 86,0 | 0,72 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,10** | 89,0 | 1,13 | 3,00 | 16,80 |
| K 07 | | | 125 | **5,31** | 92,0 | 1,71 | 1,80 | 18,80 |
| K 07 | | | 160 | **-2,35** | 92,0 | 2,57 | 0,00 | 21,10 |
| K 07 | | | 200 | **-6,67** | 93,0 | 3,70 | 0,00 | 22,80 |
| K 08 | 3 878 | 3 880 | | | | | | |
| K 08 | | | 20 | **36,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **32,65** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 08 | | | 32 | **28,51** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 08 | | | 40 | **24,33** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 08 | | | 50 | **20,35** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 08 | | | 63 | **17,30** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 08 | | | 80 | **14,00** | 86,0 | 0,62 | 3,70 | 14,80 |
| K 08 | | | 100 | **10,55** | 89,0 | 0,97 | 3,00 | 16,80 |
| K 08 | | | 125 | **6,85** | 92,0 | 1,47 | 1,80 | 18,80 |
| K 08 | | | 160 | **-0,69** | 92,0 | 2,21 | 0,00 | 21,10 |
| K 08 | | | 200 | **-4,86** | 93,0 | 3,18 | 0,00 | 22,80 |
| K 09 | 3 419 | 3 422 | | | | | | |
| K 09 | | | 20 | **37,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **33,75** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 09 | | | 32 | **29,61** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 09 | | | 40 | **25,44** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 09 | | | 50 | **21,47** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 09 | | | 63 | **18,44** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 09 | | | 80 | **15,17** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 09 | | | 100 | **11,76** | 89,0 | 0,86 | 3,00 | 16,80 |
| K 09 | | | 125 | **8,11** | 92,0 | 1,30 | 1,80 | 18,80 |
| K 09 | | | 160 | **0,66** | 92,0 | 1,95 | 0,00 | 21,10 |
| K 09 | | | 200 | **-3,39** | 93,0 | 2,81 | 0,00 | 22,80 |
| K 10 | 5 991 | 5 992 | | | | | | |
| K 10 | | | 20 | **32,25** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **28,83** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 10 | | | 32 | **24,67** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 10 | | | 40 | **20,45** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 10 | | | 50 | **16,43** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 10 | | | 63 | **13,29** | 83,0 | 0,66 | 4,30 | 13,00 |
| K 10 | | | 80 | **9,89** | 86,0 | 0,96 | 3,70 | 14,80 |
| K 10 | | | 100 | **6,25** | 89,0 | 1,50 | 3,00 | 16,80 |
| K 10 | | | 125 | **2,27** | 92,0 | 2,28 | 1,80 | 18,80 |
| K 10 | | | 160 | **-5,67** | 92,0 | 3,42 | 0,00 | 21,10 |
| K 10 | | | 200 | **-10,37** | 93,0 | 4,91 | 0,00 | 22,80 |
| K 11 | 6 620 | 6 621 | | | | | | |
| K 11 | | | 20 | **31,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **27,95** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 11 | | | 32 | **23,78** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 11 | | | 40 | **19,55** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 11 | | | 50 | **15,52** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 11 | | | 63 | **12,35** | 83,0 | 0,73 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 80 | **8,92** | 86,0 | 1,06 | 3,70 | 14,80 |
| K 11 | | | 100 | **5,23** | 89,0 | 1,66 | 3,00 | 16,80 |
| K 11 | | | 125 | **1,17** | 92,0 | 2,52 | 1,80 | 18,80 |
| K 11 | | | 160 | **-6,89** | 92,0 | 3,77 | 0,00 | 21,10 |
| K 11 | | | 200 | **-11,75** | 93,0 | 5,43 | 0,00 | 22,80 |
| K 12 | 6 996 | 6 997 | | | | | | |
| K 12 | | | 20 | **30,90** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **27,46** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 12 | | | 32 | **23,29** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 12 | | | 40 | **19,05** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 12 | | | 50 | **15,01** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 12 | | | 63 | **11,83** | 83,0 | 0,77 | 4,30 | 13,00 |
| K 12 | | | 80 | **8,38** | 86,0 | 1,12 | 3,70 | 14,80 |
| K 12 | | | 100 | **4,65** | 89,0 | 1,75 | 3,00 | 16,80 |
| K 12 | | | 125 | **0,54** | 92,0 | 2,66 | 1,80 | 18,80 |
| K 12 | | | 160 | **-7,59** | 92,0 | 3,99 | 0,00 | 21,10 |
| K 12 | | | 200 | **-12,54** | 93,0 | 5,74 | 0,00 | 22,80 |
| K 13 | 6 102 | 6 104 | | | | | | |
| K 13 | | | 20 | **32,09** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **28,67** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 13 | | | 32 | **24,50** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 13 | | | 40 | **20,28** | 78,0 | 0,31 | 5,00 | 10,30 |
| K 13 | | | 50 | **16,26** | 80,0 | 0,43 | 4,70 | 11,50 |
| K 13 | | | 63 | **13,12** | 83,0 | 0,67 | 4,30 | 13,00 |
| K 13 | | | 80 | **9,71** | 86,0 | 0,98 | 3,70 | 14,80 |
| K 13 | | | 100 | **6,06** | 89,0 | 1,53 | 3,00 | 16,80 |
| K 13 | | | 125 | **2,07** | 92,0 | 2,32 | 1,80 | 18,80 |
| K 13 | | | 160 | **-5,89** | 92,0 | 3,48 | 0,00 | 21,10 |
| K 13 | | | 200 | **-10,62** | 93,0 | 5,01 | 0,00 | 22,80 |
| K 14 | 5 451 | 5 453 | | | | | | |
| K 14 | | | 20 | **33,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **29,66** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 14 | | | 32 | **25,50** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 14 | | | 40 | **21,29** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 14 | | | 50 | **17,29** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 14 | | | 63 | **14,17** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 14 | | | 80 | **10,80** | 86,0 | 0,87 | 3,70 | 14,80 |
| K 14 | | | 100 | **7,20** | 89,0 | 1,36 | 3,00 | 16,80 |
| K 14 | | | 125 | **3,30** | 92,0 | 2,07 | 1,80 | 18,80 |
| K 14 | | | 160 | **-4,54** | 92,0 | 3,11 | 0,00 | 21,10 |
| K 14 | | | 200 | **-9,10** | 93,0 | 4,47 | 0,00 | 22,80 |
| WTG 01 | 1 622 | 1 630 | | | | | | |
| WTG 01 | | | 20 | **45,05** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **41,72** | 75,2 | 0,03 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **37,21** | 77,1 | 0,05 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **32,27** | 78,3 | 0,08 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **28,34** | 80,3 | 0,11 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **26,67** | 84,6 | 0,18 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **23,19** | 87,3 | 0,26 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **18,55** | 88,9 | 0,41 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **14,73** | 91,5 | 0,62 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **9,62** | 93,5 | 0,93 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **6,02** | 94,5 | 1,34 | 0,00 | 22,80 |
| WTG 02 | 2 420 | 2 425 | | | | | | |
| WTG 02 | | | 20 | **41,60** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **38,26** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,73** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,78** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,83** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **23,14** | 84,6 | 0,27 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,62** | 87,3 | 0,39 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,90** | 88,9 | 0,61 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,98** | 91,5 | 0,92 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,72** | 93,5 | 1,38 | 0,00 | 21,10 |

*To be continued on next page...*

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 200 | **1,92** | 94,5 | 1,99 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **49,74** | | | | |
| Sum | | | 25 | **46,38** | | | | |
| Sum | | | 32 | **42,05** | | | | |
| Sum | | | 40 | **37,53** | | | | |
| Sum | | | 50 | **33,57** | | | | |
| Sum | | | 63 | **31,16** | | | | |
| Sum | | | 80 | **27,76** | | | | |
| Sum | | | 100 | **23,74** | | | | |
| Sum | | | 125 | **19,97** | | | | |
| Sum | | | 160 | **13,61** | | | | |
| Sum | | | 200 | **9,73** | | | | |

**Noise sensitive area: P Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (158)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 4 586 | 4 588 | | | | | | |
| K 01 | | | 20 | **34,57** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **31,18** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 01 | | | 32 | **27,03** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 01 | | | 40 | **22,84** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 01 | | | 50 | **18,85** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 01 | | | 63 | **15,76** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 01 | | | 80 | **12,43** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 01 | | | 100 | **8,92** | 89,0 | 1,15 | 3,00 | 16,80 |
| K 01 | | | 125 | **5,12** | 92,0 | 1,74 | 1,80 | 18,80 |
| K 01 | | | 160 | **-2,55** | 92,0 | 2,62 | 0,00 | 21,10 |
| K 01 | | | 200 | **-6,90** | 93,0 | 3,76 | 0,00 | 22,80 |
| K 02 | 4 097 | 4 100 | | | | | | |
| K 02 | | | 20 | **35,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **32,16** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 02 | | | 32 | **28,02** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 02 | | | 40 | **23,84** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 02 | | | 50 | **19,86** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 02 | | | 63 | **16,79** | 83,0 | 0,45 | 4,30 | 13,00 |
| K 02 | | | 80 | **13,49** | 86,0 | 0,66 | 3,70 | 14,80 |
| K 02 | | | 100 | **10,02** | 89,0 | 1,03 | 3,00 | 16,80 |
| K 02 | | | 125 | **6,29** | 92,0 | 1,56 | 1,80 | 18,80 |
| K 02 | | | 160 | **-1,29** | 92,0 | 2,34 | 0,00 | 21,10 |
| K 02 | | | 200 | **-5,52** | 93,0 | 3,36 | 0,00 | 22,80 |
| K 03 | 3 758 | 3 761 | | | | | | |
| K 03 | | | 20 | **36,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **32,92** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 03 | | | 32 | **28,78** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 03 | | | 40 | **24,61** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 03 | | | 50 | **20,63** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 03 | | | 63 | **17,58** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 03 | | | 80 | **14,29** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 03 | | | 100 | **10,85** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 03 | | | 125 | **7,17** | 92,0 | 1,43 | 1,80 | 18,80 |
| K 03 | | | 160 | **-0,35** | 92,0 | 2,14 | 0,00 | 21,10 |
| K 03 | | | 200 | **-4,49** | 93,0 | 3,08 | 0,00 | 22,80 |
| K 04 | 2 949 | 2 953 | | | | | | |
| K 04 | | | 20 | **38,39** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **35,03** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 04 | | | 32 | **30,91** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 04 | | | 40 | **26,75** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 04 | | | 50 | **22,79** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 04 | | | 63 | **19,77** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 04 | | | 80 | **16,52** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 04 | | | 100 | **13,16** | 89,0 | 0,74 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 125 | **9,57** | 92,0 | 1,12 | 1,80 | 18,80 |
| K 04 | | | 160 | **2,21** | 92,0 | 1,68 | 0,00 | 21,10 |
| K 04 | | | 200 | **-1,73** | 93,0 | 2,42 | 0,00 | 22,80 |
| K 05 | 3 374 | 3 378 | | | | | | |
| K 05 | | | 20 | **37,23** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **33,86** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 05 | | | 32 | **29,73** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 05 | | | 40 | **25,56** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 05 | | | 50 | **21,59** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 05 | | | 63 | **18,56** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 05 | | | 80 | **15,29** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 05 | | | 100 | **11,88** | 89,0 | 0,84 | 3,00 | 16,80 |
| K 05 | | | 125 | **8,24** | 92,0 | 1,28 | 1,80 | 18,80 |
| K 05 | | | 160 | **0,80** | 92,0 | 1,93 | 0,00 | 21,10 |
| K 05 | | | 200 | **-3,24** | 93,0 | 2,77 | 0,00 | 22,80 |
| K 06 | 4 038 | 4 041 | | | | | | |
| K 06 | | | 20 | **35,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **32,29** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,15** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 06 | | | 40 | **23,97** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 06 | | | 50 | **19,99** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 06 | | | 63 | **16,93** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 06 | | | 80 | **13,62** | 86,0 | 0,65 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,16** | 89,0 | 1,01 | 3,00 | 16,80 |
| K 06 | | | 125 | **6,43** | 92,0 | 1,54 | 1,80 | 18,80 |
| K 06 | | | 160 | **-1,13** | 92,0 | 2,30 | 0,00 | 21,10 |
| K 06 | | | 200 | **-5,34** | 93,0 | 3,31 | 0,00 | 22,80 |
| K 07 | 3 610 | 3 614 | | | | | | |
| K 07 | | | 20 | **36,64** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **33,27** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 07 | | | 32 | **29,13** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,96** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,99** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 07 | | | 63 | **17,94** | 83,0 | 0,40 | 4,30 | 13,00 |
| K 07 | | | 80 | **14,66** | 86,0 | 0,58 | 3,70 | 14,80 |
| K 07 | | | 100 | **11,24** | 89,0 | 0,90 | 3,00 | 16,80 |
| K 07 | | | 125 | **7,57** | 92,0 | 1,37 | 1,80 | 18,80 |
| K 07 | | | 160 | **0,08** | 92,0 | 2,06 | 0,00 | 21,10 |
| K 07 | | | 200 | **-4,02** | 93,0 | 2,96 | 0,00 | 22,80 |
| K 08 | 3 420 | 3 423 | | | | | | |
| K 08 | | | 20 | **37,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **33,74** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 08 | | | 32 | **29,61** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 08 | | | 40 | **25,44** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 08 | | | 50 | **21,47** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 08 | | | 63 | **18,43** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 08 | | | 80 | **15,16** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 08 | | | 100 | **11,76** | 89,0 | 0,86 | 3,00 | 16,80 |
| K 08 | | | 125 | **8,11** | 92,0 | 1,30 | 1,80 | 18,80 |
| K 08 | | | 160 | **0,66** | 92,0 | 1,95 | 0,00 | 21,10 |
| K 08 | | | 200 | **-3,40** | 93,0 | 2,81 | 0,00 | 22,80 |
| K 09 | 3 088 | 3 091 | | | | | | |
| K 09 | | | 20 | **38,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **34,64** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **30,50** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 09 | | | 40 | **26,34** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 09 | | | 50 | **22,38** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 09 | | | 63 | **19,36** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 09 | | | 80 | **16,10** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 09 | | | 100 | **12,72** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 09 | | | 125 | **9,12** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 09 | | | 160 | **1,73** | 92,0 | 1,76 | 0,00 | 21,10 |
| K 09 | | | 200 | **-2,24** | 93,0 | 2,53 | 0,00 | 22,80 |
| K 10 | 5 693 | 5 695 | | | | | | |

*To be continued on next page...*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 20 | **32,69** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **29,28** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 10 | | | 32 | **25,12** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 10 | | | 40 | **20,91** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 10 | | | 50 | **16,89** | 80,0 | 0,40 | 4,70 | 11,50 |
| K 10 | | | 63 | **13,76** | 83,0 | 0,63 | 4,30 | 13,00 |
| K 10 | | | 80 | **10,38** | 86,0 | 0,91 | 3,70 | 14,80 |
| K 10 | | | 100 | **6,77** | 89,0 | 1,42 | 3,00 | 16,80 |
| K 10 | | | 125 | **2,83** | 92,0 | 2,16 | 1,80 | 18,80 |
| K 10 | | | 160 | **-5,06** | 92,0 | 3,25 | 0,00 | 21,10 |
| K 10 | | | 200 | **-9,68** | 93,0 | 4,67 | 0,00 | 22,80 |
| K 11 | 6 197 | 6 199 | | | | | | |
| K 11 | | | 20 | **31,95** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **28,53** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 11 | | | 32 | **24,37** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 11 | | | 40 | **20,14** | 78,0 | 0,31 | 5,00 | 10,30 |
| K 11 | | | 50 | **16,12** | 80,0 | 0,43 | 4,70 | 11,50 |
| K 11 | | | 63 | **12,97** | 83,0 | 0,68 | 4,30 | 13,00 |
| K 11 | | | 80 | **9,56** | 86,0 | 0,99 | 3,70 | 14,80 |
| K 11 | | | 100 | **5,90** | 89,0 | 1,55 | 3,00 | 16,80 |
| K 11 | | | 125 | **1,90** | 92,0 | 2,36 | 1,80 | 18,80 |
| K 11 | | | 160 | **-6,08** | 92,0 | 3,53 | 0,00 | 21,10 |
| K 11 | | | 200 | **-10,83** | 93,0 | 5,08 | 0,00 | 22,80 |
| K 12 | 6 309 | 6 311 | | | | | | |
| K 12 | | | 20 | **31,80** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **28,37** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 12 | | | 32 | **24,21** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 12 | | | 40 | **19,98** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 12 | | | 50 | **15,96** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 12 | | | 63 | **12,80** | 83,0 | 0,69 | 4,30 | 13,00 |
| K 12 | | | 80 | **9,39** | 86,0 | 1,01 | 3,70 | 14,80 |
| K 12 | | | 100 | **5,72** | 89,0 | 1,58 | 3,00 | 16,80 |
| K 12 | | | 125 | **1,70** | 92,0 | 2,40 | 1,80 | 18,80 |
| K 12 | | | 160 | **-6,30** | 92,0 | 3,60 | 0,00 | 21,10 |
| K 12 | | | 200 | **-11,08** | 93,0 | 5,18 | 0,00 | 22,80 |
| K 13 | 5 421 | 5 423 | | | | | | |
| K 13 | | | 20 | **33,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **29,71** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 13 | | | 32 | **25,55** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 13 | | | 40 | **21,34** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 13 | | | 50 | **17,33** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 13 | | | 63 | **14,22** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 13 | | | 80 | **10,85** | 86,0 | 0,87 | 3,70 | 14,80 |
| K 13 | | | 100 | **7,26** | 89,0 | 1,36 | 3,00 | 16,80 |
| K 13 | | | 125 | **3,35** | 92,0 | 2,06 | 1,80 | 18,80 |
| K 13 | | | 160 | **-4,48** | 92,0 | 3,09 | 0,00 | 21,10 |
| K 13 | | | 200 | **-9,03** | 93,0 | 4,45 | 0,00 | 22,80 |
| K 14 | 4 902 | 4 904 | | | | | | |
| K 14 | | | 20 | **33,99** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **30,59** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 14 | | | 32 | **26,44** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 14 | | | 40 | **22,24** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 14 | | | 50 | **18,25** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 14 | | | 63 | **15,15** | 83,0 | 0,54 | 4,30 | 13,00 |
| K 14 | | | 80 | **11,80** | 86,0 | 0,78 | 3,70 | 14,80 |
| K 14 | | | 100 | **8,26** | 89,0 | 1,23 | 3,00 | 16,80 |
| K 14 | | | 125 | **4,42** | 92,0 | 1,86 | 1,80 | 18,80 |
| K 14 | | | 160 | **-3,31** | 92,0 | 2,80 | 0,00 | 21,10 |
| K 14 | | | 200 | **-7,73** | 93,0 | 4,02 | 0,00 | 22,80 |
| WTG 01 | 2 348 | 2 355 | | | | | | |
| WTG 01 | | | 20 | **41,86** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **38,51** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **33,99** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **29,04** | 78,3 | 0,12 | 5,00 | 10,30 |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 01 | | | 50 | **25,10** | 80,3 | 0,16 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **23,40** | 84,6 | 0,26 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **19,88** | 87,3 | 0,38 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **15,17** | 88,9 | 0,59 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **11,27** | 91,5 | 0,89 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **6,02** | 93,5 | 1,34 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **2,23** | 94,5 | 1,93 | 0,00 | 22,80 |
| WTG 02 | 2 360 | 2 366 | | | | | | |
| WTG 02 | | | 20 | **41,82** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **38,47** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,95** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **29,00** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **25,05** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **23,36** | 84,6 | 0,26 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,84** | 87,3 | 0,38 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **15,13** | 88,9 | 0,59 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **11,22** | 91,5 | 0,90 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,97** | 93,5 | 1,35 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **2,18** | 94,5 | 1,94 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **49,17** | | | | |
| Sum | | | 25 | **45,81** | | | | |
| Sum | | | 32 | **41,53** | | | | |
| Sum | | | 40 | **37,10** | | | | |
| Sum | | | 50 | **33,13** | | | | |
| Sum | | | 63 | **30,55** | | | | |
| Sum | | | 80 | **27,17** | | | | |
| Sum | | | 100 | **23,29** | | | | |
| Sum | | | 125 | **19,53** | | | | |
| Sum | | | 160 | **12,81** | | | | |
| Sum | | | 200 | **8,82** | | | | |

**Noise sensitive area: Q Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (157)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 5 124 | 5 127 | | | | | | |
| K 01 | | | 20 | **33,60** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **30,20** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 01 | | | 32 | **26,05** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 01 | | | 40 | **21,85** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 01 | | | 50 | **17,84** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 01 | | | 63 | **14,74** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 01 | | | 80 | **11,38** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 01 | | | 100 | **7,82** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 01 | | | 125 | **3,95** | 92,0 | 1,95 | 1,80 | 18,80 |
| K 01 | | | 160 | **-3,82** | 92,0 | 2,92 | 0,00 | 21,10 |
| K 01 | | | 200 | **-8,30** | 93,0 | 4,20 | 0,00 | 22,80 |
| K 02 | 4 605 | 4 608 | | | | | | |
| K 02 | | | 20 | **34,53** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **31,14** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 02 | | | 32 | **26,99** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 02 | | | 40 | **22,80** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 02 | | | 50 | **18,81** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 02 | | | 63 | **15,72** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 02 | | | 80 | **12,39** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 02 | | | 100 | **8,88** | 89,0 | 1,15 | 3,00 | 16,80 |
| K 02 | | | 125 | **5,08** | 92,0 | 1,75 | 1,80 | 18,80 |
| K 02 | | | 160 | **-2,60** | 92,0 | 2,63 | 0,00 | 21,10 |
| K 02 | | | 200 | **-6,95** | 93,0 | 3,78 | 0,00 | 22,80 |
| K 03 | 3 973 | 3 977 | | | | | | |
| K 03 | | | 20 | **35,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **32,43** | 73,7 | 0,08 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 03 | | | 32 | **28,29** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 03 | | | 40 | **24,11** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 03 | | | 50 | **20,13** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 03 | | | 63 | **17,07** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 03 | | | 80 | **13,77** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 03 | | | 100 | **10,32** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 03 | | | 125 | **6,60** | 92,0 | 1,51 | 1,80 | 18,80 |
| K 03 | | | 160 | **-0,96** | 92,0 | 2,27 | 0,00 | 21,10 |
| K 03 | | | 200 | **-5,15** | 93,0 | 3,26 | 0,00 | 22,80 |
| K 04 | 3 519 | 3 523 | | | | | | |
| K 04 | | | 20 | **36,86** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **33,49** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 04 | | | 32 | **29,36** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 04 | | | 40 | **25,19** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 04 | | | 50 | **21,22** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 04 | | | 63 | **18,18** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 04 | | | 80 | **14,90** | 86,0 | 0,56 | 3,70 | 14,80 |
| K 04 | | | 100 | **11,48** | 89,0 | 0,88 | 3,00 | 16,80 |
| K 04 | | | 125 | **7,82** | 92,0 | 1,34 | 1,80 | 18,80 |
| K 04 | | | 160 | **0,35** | 92,0 | 2,01 | 0,00 | 21,10 |
| K 04 | | | 200 | **-3,73** | 93,0 | 2,89 | 0,00 | 22,80 |
| K 05 | 3 078 | 3 082 | | | | | | |
| K 05 | | | 20 | **38,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **34,66** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 05 | | | 32 | **30,53** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 05 | | | 40 | **26,37** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 05 | | | 50 | **22,41** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 05 | | | 63 | **19,38** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 05 | | | 80 | **16,13** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 05 | | | 100 | **12,75** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 05 | | | 125 | **9,15** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 05 | | | 160 | **1,77** | 92,0 | 1,76 | 0,00 | 21,10 |
| K 05 | | | 200 | **-2,21** | 93,0 | 2,53 | 0,00 | 22,80 |
| K 06 | 5 263 | 5 266 | | | | | | |
| K 06 | | | 20 | **33,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **29,97** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 06 | | | 32 | **25,81** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 06 | | | 40 | **21,61** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 06 | | | 50 | **17,60** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 06 | | | 63 | **14,49** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 06 | | | 80 | **11,13** | 86,0 | 0,84 | 3,70 | 14,80 |
| K 06 | | | 100 | **7,55** | 89,0 | 1,32 | 3,00 | 16,80 |
| K 06 | | | 125 | **3,67** | 92,0 | 2,00 | 1,80 | 18,80 |
| K 06 | | | 160 | **-4,13** | 92,0 | 3,00 | 0,00 | 21,10 |
| K 06 | | | 200 | **-8,65** | 93,0 | 4,32 | 0,00 | 22,80 |
| K 07 | 5 285 | 5 288 | | | | | | |
| K 07 | | | 20 | **33,33** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **29,93** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 07 | | | 32 | **25,78** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 07 | | | 40 | **21,57** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 07 | | | 50 | **17,56** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 07 | | | 63 | **14,45** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 07 | | | 80 | **11,09** | 86,0 | 0,85 | 3,70 | 14,80 |
| K 07 | | | 100 | **7,51** | 89,0 | 1,32 | 3,00 | 16,80 |
| K 07 | | | 125 | **3,63** | 92,0 | 2,01 | 1,80 | 18,80 |
| K 07 | | | 160 | **-4,18** | 92,0 | 3,01 | 0,00 | 21,10 |
| K 07 | | | 200 | **-8,70** | 93,0 | 4,34 | 0,00 | 22,80 |
| K 08 | 4 503 | 4 506 | | | | | | |
| K 08 | | | 20 | **34,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,33** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **27,19** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 08 | | | 40 | **23,00** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 08 | | | 50 | **19,01** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 08 | | | 63 | **15,93** | 83,0 | 0,50 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 80 | **12,60** | 86,0 | 0,72 | 3,70 | 14,80 |
| K 08 | | | 100 | **9,10** | 89,0 | 1,13 | 3,00 | 16,80 |
| K 08 | | | 125 | **5,31** | 92,0 | 1,71 | 1,80 | 18,80 |
| K 08 | | | 160 | **-2,35** | 92,0 | 2,57 | 0,00 | 21,10 |
| K 08 | | | 200 | **-6,67** | 93,0 | 3,70 | 0,00 | 22,80 |
| K 09 | 4 056 | 4 059 | | | | | | |
| K 09 | | | 20 | **35,63** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **32,25** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 09 | | | 32 | **28,11** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 09 | | | 40 | **23,93** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 09 | | | 50 | **19,95** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 09 | | | 63 | **16,88** | 83,0 | 0,45 | 4,30 | 13,00 |
| K 09 | | | 80 | **13,58** | 86,0 | 0,65 | 3,70 | 14,80 |
| K 09 | | | 100 | **10,12** | 89,0 | 1,01 | 3,00 | 16,80 |
| K 09 | | | 125 | **6,39** | 92,0 | 1,54 | 1,80 | 18,80 |
| K 09 | | | 160 | **-1,18** | 92,0 | 2,31 | 0,00 | 21,10 |
| K 09 | | | 200 | **-5,40** | 93,0 | 3,33 | 0,00 | 22,80 |
| K 10 | 6 285 | 6 287 | | | | | | |
| K 10 | | | 20 | **31,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **28,40** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 10 | | | 32 | **24,24** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 10 | | | 40 | **20,02** | 78,0 | 0,31 | 5,00 | 10,30 |
| K 10 | | | 50 | **15,99** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 10 | | | 63 | **12,84** | 83,0 | 0,69 | 4,30 | 13,00 |
| K 10 | | | 80 | **9,42** | 86,0 | 1,01 | 3,70 | 14,80 |
| K 10 | | | 100 | **5,76** | 89,0 | 1,57 | 3,00 | 16,80 |
| K 10 | | | 125 | **1,74** | 92,0 | 2,39 | 1,80 | 18,80 |
| K 10 | | | 160 | **-6,25** | 92,0 | 3,58 | 0,00 | 21,10 |
| K 10 | | | 200 | **-11,03** | 93,0 | 5,16 | 0,00 | 22,80 |
| K 11 | 6 950 | 6 952 | | | | | | |
| K 11 | | | 20 | **30,96** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **27,52** | 73,7 | 0,14 | 5,40 | 8,30 |
| K 11 | | | 32 | **23,35** | 76,0 | 0,21 | 5,20 | 9,20 |
| K 11 | | | 40 | **19,11** | 78,0 | 0,35 | 5,00 | 10,30 |
| K 11 | | | 50 | **15,07** | 80,0 | 0,49 | 4,70 | 11,50 |
| K 11 | | | 63 | **11,89** | 83,0 | 0,76 | 4,30 | 13,00 |
| K 11 | | | 80 | **8,45** | 86,0 | 1,11 | 3,70 | 14,80 |
| K 11 | | | 100 | **4,72** | 89,0 | 1,74 | 3,00 | 16,80 |
| K 11 | | | 125 | **0,62** | 92,0 | 2,64 | 1,80 | 18,80 |
| K 11 | | | 160 | **-7,51** | 92,0 | 3,96 | 0,00 | 21,10 |
| K 11 | | | 200 | **-12,44** | 93,0 | 5,70 | 0,00 | 22,80 |
| K 12 | 7 470 | 7 472 | | | | | | |
| K 12 | | | 20 | **30,33** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **26,88** | 73,7 | 0,15 | 5,40 | 8,30 |
| K 12 | | | 32 | **22,71** | 76,0 | 0,22 | 5,20 | 9,20 |
| K 12 | | | 40 | **18,46** | 78,0 | 0,37 | 5,00 | 10,30 |
| K 12 | | | 50 | **14,41** | 80,0 | 0,52 | 4,70 | 11,50 |
| K 12 | | | 63 | **11,21** | 83,0 | 0,82 | 4,30 | 13,00 |
| K 12 | | | 80 | **7,74** | 86,0 | 1,20 | 3,70 | 14,80 |
| K 12 | | | 100 | **3,96** | 89,0 | 1,87 | 3,00 | 16,80 |
| K 12 | | | 125 | **-0,21** | 92,0 | 2,84 | 1,80 | 18,80 |
| K 12 | | | 160 | **-8,43** | 92,0 | 4,26 | 0,00 | 21,10 |
| K 12 | | | 200 | **-13,50** | 93,0 | 6,13 | 0,00 | 22,80 |
| K 13 | 6 627 | 6 629 | | | | | | |
| K 13 | | | 20 | **31,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **27,94** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 13 | | | 32 | **23,77** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 13 | | | 40 | **19,54** | 78,0 | 0,33 | 5,00 | 10,30 |
| K 13 | | | 50 | **15,51** | 80,0 | 0,46 | 4,70 | 11,50 |
| K 13 | | | 63 | **12,34** | 83,0 | 0,73 | 4,30 | 13,00 |
| K 13 | | | 80 | **8,91** | 86,0 | 1,06 | 3,70 | 14,80 |
| K 13 | | | 100 | **5,21** | 89,0 | 1,66 | 3,00 | 16,80 |
| K 13 | | | 125 | **1,15** | 92,0 | 2,52 | 1,80 | 18,80 |
| K 13 | | | 160 | **-6,91** | 92,0 | 3,78 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 200 | **-11,76** | 93,0 | 5,44 | 0,00 | 22,80 |
| K 14 | 5 945 | 5 948 | | | | | | |
| K 14 | | | 20 | **32,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **28,89** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 14 | | | 32 | **24,73** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 14 | | | 40 | **20,52** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 14 | | | 50 | **16,50** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 14 | | | 63 | **13,36** | 83,0 | 0,65 | 4,30 | 13,00 |
| K 14 | | | 80 | **9,96** | 86,0 | 0,95 | 3,70 | 14,80 |
| K 14 | | | 100 | **6,33** | 89,0 | 1,49 | 3,00 | 16,80 |
| K 14 | | | 125 | **2,35** | 92,0 | 2,26 | 1,80 | 18,80 |
| K 14 | | | 160 | **-5,58** | 92,0 | 3,39 | 0,00 | 21,10 |
| K 14 | | | 200 | **-10,26** | 93,0 | 4,88 | 0,00 | 22,80 |
| WTG 01 | 2 287 | 2 294 | | | | | | |
| WTG 01 | | | 20 | **42,09** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **38,74** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **34,22** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **29,27** | 78,3 | 0,11 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **25,33** | 80,3 | 0,16 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **23,63** | 84,6 | 0,25 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **20,12** | 87,3 | 0,37 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **15,41** | 88,9 | 0,57 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **11,51** | 91,5 | 0,87 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **6,28** | 93,5 | 1,31 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **2,50** | 94,5 | 1,88 | 0,00 | 22,80 |
| WTG 02 | 3 177 | 3 182 | | | | | | |
| WTG 02 | | | 20 | **39,25** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **35,88** | 75,2 | 0,06 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **31,35** | 77,1 | 0,10 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **26,39** | 78,3 | 0,16 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **22,42** | 80,3 | 0,22 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **20,70** | 84,6 | 0,35 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **17,14** | 87,3 | 0,51 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **12,35** | 88,9 | 0,80 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **8,34** | 91,5 | 1,21 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **2,93** | 93,5 | 1,81 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-1,06** | 94,5 | 2,61 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **47,96** | | | | |
| Sum | | | 25 | **44,59** | | | | |
| Sum | | | 32 | **40,30** | | | | |
| Sum | | | 40 | **35,84** | | | | |
| Sum | | | 50 | **31,86** | | | | |
| Sum | | | 63 | **29,29** | | | | |
| Sum | | | 80 | **25,88** | | | | |
| Sum | | | 100 | **21,93** | | | | |
| Sum | | | 125 | **18,10** | | | | |
| Sum | | | 160 | **11,37** | | | | |
| Sum | | | 200 | **7,29** | | | | |

**Noise sensitive area: R Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (156)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 5 381 | 5 383 | | | | | | |
| K 01 | | | 20 | **33,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **29,77** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 01 | | | 32 | **25,62** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 01 | | | 40 | **21,41** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 01 | | | 50 | **17,40** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 01 | | | 63 | **14,29** | 83,0 | 0,59 | 4,30 | 13,00 |
| K 01 | | | 80 | **10,92** | 86,0 | 0,86 | 3,70 | 14,80 |
| K 01 | | | 100 | **7,33** | 89,0 | 1,35 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | | | 125 | **3,43** | 92,0 | 2,05 | 1,80 | 18,80 |
| K 01 | | | 160 | **-4,39** | 92,0 | 3,07 | 0,00 | 21,10 |
| K 01 | | | 200 | **-8,93** | 93,0 | 4,41 | 0,00 | 22,80 |
| K 02 | 5 126 | 5 128 | | | | | | |
| K 02 | | | 20 | **33,60** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **30,20** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 02 | | | 32 | **26,05** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 02 | | | 40 | **21,84** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 02 | | | 50 | **17,84** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 02 | | | 63 | **14,74** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 02 | | | 80 | **11,38** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 02 | | | 100 | **7,82** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 02 | | | 125 | **3,95** | 92,0 | 1,95 | 1,80 | 18,80 |
| K 02 | | | 160 | **-3,82** | 92,0 | 2,92 | 0,00 | 21,10 |
| K 02 | | | 200 | **-8,30** | 93,0 | 4,21 | 0,00 | 22,80 |
| K 03 | 5 159 | 5 162 | | | | | | |
| K 03 | | | 20 | **33,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **30,14** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 03 | | | 32 | **25,99** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 03 | | | 40 | **21,79** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 03 | | | 50 | **17,78** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 03 | | | 63 | **14,68** | 83,0 | 0,57 | 4,30 | 13,00 |
| K 03 | | | 80 | **11,32** | 86,0 | 0,83 | 3,70 | 14,80 |
| K 03 | | | 100 | **7,75** | 89,0 | 1,29 | 3,00 | 16,80 |
| K 03 | | | 125 | **3,88** | 92,0 | 1,96 | 1,80 | 18,80 |
| K 03 | | | 160 | **-3,90** | 92,0 | 2,94 | 0,00 | 21,10 |
| K 03 | | | 200 | **-8,39** | 93,0 | 4,23 | 0,00 | 22,80 |
| K 04 | 4 584 | 4 587 | | | | | | |
| K 04 | | | 20 | **34,57** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **31,18** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 04 | | | 32 | **27,03** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 04 | | | 40 | **22,84** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 04 | | | 50 | **18,85** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 04 | | | 63 | **15,76** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 04 | | | 80 | **12,44** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 04 | | | 100 | **8,92** | 89,0 | 1,15 | 3,00 | 16,80 |
| K 04 | | | 125 | **5,13** | 92,0 | 1,74 | 1,80 | 18,80 |
| K 04 | | | 160 | **-2,55** | 92,0 | 2,61 | 0,00 | 21,10 |
| K 04 | | | 200 | **-6,89** | 93,0 | 3,76 | 0,00 | 22,80 |
| K 05 | 5 287 | 5 289 | | | | | | |
| K 05 | | | 20 | **33,33** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **29,93** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 05 | | | 32 | **25,77** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 05 | | | 40 | **21,57** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 05 | | | 50 | **17,56** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 05 | | | 63 | **14,45** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 05 | | | 80 | **11,09** | 86,0 | 0,85 | 3,70 | 14,80 |
| K 05 | | | 100 | **7,51** | 89,0 | 1,32 | 3,00 | 16,80 |
| K 05 | | | 125 | **3,62** | 92,0 | 2,01 | 1,80 | 18,80 |
| K 05 | | | 160 | **-4,18** | 92,0 | 3,01 | 0,00 | 21,10 |
| K 05 | | | 200 | **-8,70** | 93,0 | 4,34 | 0,00 | 22,80 |
| K 06 | 4 500 | 4 502 | | | | | | |
| K 06 | | | 20 | **34,73** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **31,34** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 06 | | | 32 | **27,20** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 06 | | | 40 | **23,01** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 06 | | | 50 | **19,02** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 06 | | | 63 | **15,94** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 06 | | | 80 | **12,61** | 86,0 | 0,72 | 3,70 | 14,80 |
| K 06 | | | 100 | **9,11** | 89,0 | 1,13 | 3,00 | 16,80 |
| K 06 | | | 125 | **5,32** | 92,0 | 1,71 | 1,80 | 18,80 |
| K 06 | | | 160 | **-2,34** | 92,0 | 2,57 | 0,00 | 21,10 |
| K 06 | | | 200 | **-6,66** | 93,0 | 3,69 | 0,00 | 22,80 |
| K 07 | 3 877 | 3 880 | | | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 20 | **36,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,64** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,51** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,33** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,35** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 07 | | | 63 | **17,30** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 07 | | | 80 | **14,00** | 86,0 | 0,62 | 3,70 | 14,80 |
| K 07 | | | 100 | **10,55** | 89,0 | 0,97 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,85** | 92,0 | 1,47 | 1,80 | 18,80 |
| K 07 | | | 160 | **-0,69** | 92,0 | 2,21 | 0,00 | 21,10 |
| K 07 | | | 200 | **-4,86** | 93,0 | 3,18 | 0,00 | 22,80 |
| K 08 | 4 356 | 4 359 | | | | | | |
| K 08 | | | 20 | **35,01** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,62** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **27,48** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 08 | | | 40 | **23,29** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 08 | | | 50 | **19,31** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 08 | | | 63 | **16,23** | 83,0 | 0,48 | 4,30 | 13,00 |
| K 08 | | | 80 | **12,91** | 86,0 | 0,70 | 3,70 | 14,80 |
| K 08 | | | 100 | **9,42** | 89,0 | 1,09 | 3,00 | 16,80 |
| K 08 | | | 125 | **5,66** | 92,0 | 1,66 | 1,80 | 18,80 |
| K 08 | | | 160 | **-1,97** | 92,0 | 2,48 | 0,00 | 21,10 |
| K 08 | | | 200 | **-6,26** | 93,0 | 3,57 | 0,00 | 22,80 |
| K 09 | 4 336 | 4 339 | | | | | | |
| K 09 | | | 20 | **35,05** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **31,67** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 09 | | | 32 | **27,52** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 09 | | | 40 | **23,34** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 09 | | | 50 | **19,35** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 09 | | | 63 | **16,28** | 83,0 | 0,48 | 4,30 | 13,00 |
| K 09 | | | 80 | **12,96** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 09 | | | 100 | **9,47** | 89,0 | 1,08 | 3,00 | 16,80 |
| K 09 | | | 125 | **5,70** | 92,0 | 1,65 | 1,80 | 18,80 |
| K 09 | | | 160 | **-1,92** | 92,0 | 2,47 | 0,00 | 21,10 |
| K 09 | | | 200 | **-6,20** | 93,0 | 3,56 | 0,00 | 22,80 |
| K 10 | 6 068 | 6 070 | | | | | | |
| K 10 | | | 20 | **32,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **28,71** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 10 | | | 32 | **24,55** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 10 | | | 40 | **20,33** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 10 | | | 50 | **16,31** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 10 | | | 63 | **13,17** | 83,0 | 0,67 | 4,30 | 13,00 |
| K 10 | | | 80 | **9,77** | 86,0 | 0,97 | 3,70 | 14,80 |
| K 10 | | | 100 | **6,12** | 89,0 | 1,52 | 3,00 | 16,80 |
| K 10 | | | 125 | **2,13** | 92,0 | 2,31 | 1,80 | 18,80 |
| K 10 | | | 160 | **-5,82** | 92,0 | 3,46 | 0,00 | 21,10 |
| K 10 | | | 200 | **-10,54** | 93,0 | 4,98 | 0,00 | 22,80 |
| K 11 | 6 300 | 6 302 | | | | | | |
| K 11 | | | 20 | **31,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **28,38** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 11 | | | 32 | **24,22** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 11 | | | 40 | **20,00** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 11 | | | 50 | **15,97** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 11 | | | 63 | **12,82** | 83,0 | 0,69 | 4,30 | 13,00 |
| K 11 | | | 80 | **9,40** | 86,0 | 1,01 | 3,70 | 14,80 |
| K 11 | | | 100 | **5,74** | 89,0 | 1,58 | 3,00 | 16,80 |
| K 11 | | | 125 | **1,72** | 92,0 | 2,39 | 1,80 | 18,80 |
| K 11 | | | 160 | **-6,28** | 92,0 | 3,59 | 0,00 | 21,10 |
| K 11 | | | 200 | **-11,06** | 93,0 | 5,17 | 0,00 | 22,80 |
| K 12 | 6 018 | 6 020 | | | | | | |
| K 12 | | | 20 | **32,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **28,79** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 12 | | | 32 | **24,63** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 12 | | | 40 | **20,41** | 78,0 | 0,30 | 5,00 | 10,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 12 | | | 50 | **16,39** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 12 | | | 63 | **13,25** | 83,0 | 0,66 | 4,30 | 13,00 |
| K 12 | | | 80 | **9,84** | 86,0 | 0,96 | 3,70 | 14,80 |
| K 12 | | | 100 | **6,20** | 89,0 | 1,51 | 3,00 | 16,80 |
| K 12 | | | 125 | **2,22** | 92,0 | 2,29 | 1,80 | 18,80 |
| K 12 | | | 160 | **-5,72** | 92,0 | 3,43 | 0,00 | 21,10 |
| K 12 | | | 200 | **-10,43** | 93,0 | 4,94 | 0,00 | 22,80 |
| K 13 | 5 337 | 5 339 | | | | | | |
| K 13 | | | 20 | **33,25** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **29,84** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 13 | | | 32 | **25,69** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 13 | | | 40 | **21,48** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 13 | | | 50 | **17,48** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 13 | | | 63 | **14,36** | 83,0 | 0,59 | 4,30 | 13,00 |
| K 13 | | | 80 | **11,00** | 86,0 | 0,85 | 3,70 | 14,80 |
| K 13 | | | 100 | **7,42** | 89,0 | 1,33 | 3,00 | 16,80 |
| K 13 | | | 125 | **3,52** | 92,0 | 2,03 | 1,80 | 18,80 |
| K 13 | | | 160 | **-4,29** | 92,0 | 3,04 | 0,00 | 21,10 |
| K 13 | | | 200 | **-8,83** | 93,0 | 4,38 | 0,00 | 22,80 |
| K 14 | 5 148 | 5 150 | | | | | | |
| K 14 | | | 20 | **33,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **30,16** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 14 | | | 32 | **26,01** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 14 | | | 40 | **21,81** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 14 | | | 50 | **17,80** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 14 | | | 63 | **14,70** | 83,0 | 0,57 | 4,30 | 13,00 |
| K 14 | | | 80 | **11,34** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 14 | | | 100 | **7,78** | 89,0 | 1,29 | 3,00 | 16,80 |
| K 14 | | | 125 | **3,91** | 92,0 | 1,96 | 1,80 | 18,80 |
| K 14 | | | 160 | **-3,87** | 92,0 | 2,94 | 0,00 | 21,10 |
| K 14 | | | 200 | **-8,36** | 93,0 | 4,22 | 0,00 | 22,80 |
| WTG 01 | 4 801 | 4 804 | | | | | | |
| WTG 01 | | | 20 | **35,67** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **32,27** | 75,2 | 0,10 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **27,72** | 77,1 | 0,14 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **22,73** | 78,3 | 0,24 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **18,73** | 80,3 | 0,34 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **16,94** | 84,6 | 0,53 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **13,30** | 87,3 | 0,77 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **8,37** | 88,9 | 1,20 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **4,14** | 91,5 | 1,83 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-1,57** | 93,5 | 2,74 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-5,97** | 94,5 | 3,94 | 0,00 | 22,80 |
| WTG 02 | 4 282 | 4 285 | | | | | | |
| WTG 02 | | | 20 | **36,66** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **33,27** | 75,2 | 0,09 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **28,73** | 77,1 | 0,13 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **23,75** | 78,3 | 0,21 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **19,76** | 80,3 | 0,30 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **17,99** | 84,6 | 0,47 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **14,37** | 87,3 | 0,69 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **9,49** | 88,9 | 1,07 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **5,33** | 91,5 | 1,63 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-0,28** | 93,5 | 2,44 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-4,55** | 94,5 | 3,51 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **46,29** | | | | |
| Sum | | | 25 | **42,89** | | | | |
| Sum | | | 32 | **38,67** | | | | |
| Sum | | | 40 | **34,33** | | | | |
| Sum | | | 50 | **30,34** | | | | |
| Sum | | | 63 | **27,47** | | | | |
| Sum | | | 80 | **24,07** | | | | |
| Sum | | | 100 | **20,30** | | | | |

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| Sum | | | 125 | **16,42** | | | | |
| Sum | | | 160 | **9,04** | | | | |
| Sum | | | 200 | **4,65** | | | | |

**Noise sensitive area: S Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (155)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 4 379 | 4 382 | | | | | | |
| K 01 | | | 20 | **34,97** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **31,58** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 01 | | | 32 | **27,44** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 01 | | | 40 | **23,25** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 01 | | | 50 | **19,26** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 01 | | | 63 | **16,18** | 83,0 | 0,48 | 4,30 | 13,00 |
| K 01 | | | 80 | **12,87** | 86,0 | 0,70 | 3,70 | 14,80 |
| K 01 | | | 100 | **9,37** | 89,0 | 1,10 | 3,00 | 16,80 |
| K 01 | | | 125 | **5,60** | 92,0 | 1,67 | 1,80 | 18,80 |
| K 01 | | | 160 | **-2,03** | 92,0 | 2,50 | 0,00 | 21,10 |
| K 01 | | | 200 | **-6,33** | 93,0 | 3,59 | 0,00 | 22,80 |
| K 02 | 3 872 | 3 875 | | | | | | |
| K 02 | | | 20 | **36,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **32,66** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 02 | | | 32 | **28,52** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 02 | | | 40 | **24,34** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 02 | | | 50 | **20,36** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 02 | | | 63 | **17,31** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 02 | | | 80 | **14,01** | 86,0 | 0,62 | 3,70 | 14,80 |
| K 02 | | | 100 | **10,56** | 89,0 | 0,97 | 3,00 | 16,80 |
| K 02 | | | 125 | **6,86** | 92,0 | 1,47 | 1,80 | 18,80 |
| K 02 | | | 160 | **-0,68** | 92,0 | 2,21 | 0,00 | 21,10 |
| K 02 | | | 200 | **-4,84** | 93,0 | 3,18 | 0,00 | 22,80 |
| K 03 | 3 239 | 3 243 | | | | | | |
| K 03 | | | 20 | **37,58** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **34,22** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 03 | | | 32 | **30,08** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 03 | | | 40 | **25,92** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 03 | | | 50 | **21,95** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 03 | | | 63 | **18,92** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 03 | | | 80 | **15,66** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 03 | | | 100 | **12,27** | 89,0 | 0,81 | 3,00 | 16,80 |
| K 03 | | | 125 | **8,65** | 92,0 | 1,23 | 1,80 | 18,80 |
| K 03 | | | 160 | **1,23** | 92,0 | 1,85 | 0,00 | 21,10 |
| K 03 | | | 200 | **-2,78** | 93,0 | 2,66 | 0,00 | 22,80 |
| K 04 | 2 856 | 2 861 | | | | | | |
| K 04 | | | 20 | **38,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **35,31** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 04 | | | 32 | **31,18** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 04 | | | 40 | **27,03** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 04 | | | 50 | **23,07** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 04 | | | 63 | **20,05** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 04 | | | 80 | **16,81** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 04 | | | 100 | **13,45** | 89,0 | 0,72 | 3,00 | 16,80 |
| K 04 | | | 125 | **9,88** | 92,0 | 1,09 | 1,80 | 18,80 |
| K 04 | | | 160 | **2,54** | 92,0 | 1,63 | 0,00 | 21,10 |
| K 04 | | | 200 | **-1,38** | 93,0 | 2,35 | 0,00 | 22,80 |
| K 05 | 2 346 | 2 352 | | | | | | |
| K 05 | | | 20 | **40,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **37,02** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 05 | | | 32 | **32,90** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 05 | | | 40 | **28,75** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 05 | | | 50 | **24,81** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 05 | | | 63 | **21,81** | 83,0 | 0,26 | 4,30 | 13,00 |

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 80 | **18,59** | 86,0 | 0,38 | 3,70 | 14,80 |
| K 05 | | | 100 | **15,28** | 89,0 | 0,59 | 3,00 | 16,80 |
| K 05 | | | 125 | **11,78** | 92,0 | 0,89 | 1,80 | 18,80 |
| K 05 | | | 160 | **4,53** | 92,0 | 1,34 | 0,00 | 21,10 |
| K 05 | | | 200 | **0,74** | 93,0 | 1,93 | 0,00 | 22,80 |
| K 06 | 4 576 | 4 579 | | | | | | |
| K 06 | | | 20 | **34,58** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **31,19** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 06 | | | 32 | **27,05** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 06 | | | 40 | **22,86** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 06 | | | 50 | **18,86** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 06 | | | 63 | **15,78** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 06 | | | 80 | **12,45** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 06 | | | 100 | **8,94** | 89,0 | 1,14 | 3,00 | 16,80 |
| K 06 | | | 125 | **5,14** | 92,0 | 1,74 | 1,80 | 18,80 |
| K 06 | | | 160 | **-2,53** | 92,0 | 2,61 | 0,00 | 21,10 |
| K 06 | | | 200 | **-6,87** | 93,0 | 3,75 | 0,00 | 22,80 |
| K 07 | 4 650 | 4 654 | | | | | | |
| K 07 | | | 20 | **34,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **31,05** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 07 | | | 32 | **26,90** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 07 | | | 40 | **22,71** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 07 | | | 50 | **18,72** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 07 | | | 63 | **15,63** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 07 | | | 80 | **12,30** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 07 | | | 100 | **8,78** | 89,0 | 1,16 | 3,00 | 16,80 |
| K 07 | | | 125 | **4,98** | 92,0 | 1,77 | 1,80 | 18,80 |
| K 07 | | | 160 | **-2,71** | 92,0 | 2,65 | 0,00 | 21,10 |
| K 07 | | | 200 | **-7,07** | 93,0 | 3,82 | 0,00 | 22,80 |
| K 08 | 3 833 | 3 837 | | | | | | |
| K 08 | | | 20 | **36,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **32,74** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 08 | | | 32 | **28,60** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 08 | | | 40 | **24,43** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 08 | | | 50 | **20,45** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 08 | | | 63 | **17,40** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 08 | | | 80 | **14,11** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 08 | | | 100 | **10,66** | 89,0 | 0,96 | 3,00 | 16,80 |
| K 08 | | | 125 | **6,96** | 92,0 | 1,46 | 1,80 | 18,80 |
| K 08 | | | 160 | **-0,57** | 92,0 | 2,19 | 0,00 | 21,10 |
| K 08 | | | 200 | **-4,73** | 93,0 | 3,15 | 0,00 | 22,80 |
| K 09 | 3 400 | 3 404 | | | | | | |
| K 09 | | | 20 | **37,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **33,79** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 09 | | | 32 | **29,66** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 09 | | | 40 | **25,49** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 09 | | | 50 | **21,52** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 09 | | | 63 | **18,48** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 09 | | | 80 | **15,21** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 09 | | | 100 | **11,81** | 89,0 | 0,85 | 3,00 | 16,80 |
| K 09 | | | 125 | **8,17** | 92,0 | 1,29 | 1,80 | 18,80 |
| K 09 | | | 160 | **0,72** | 92,0 | 1,94 | 0,00 | 21,10 |
| K 09 | | | 200 | **-3,33** | 93,0 | 2,79 | 0,00 | 22,80 |
| K 10 | 5 525 | 5 527 | | | | | | |
| K 10 | | | 20 | **32,95** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **29,54** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 10 | | | 32 | **25,38** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 10 | | | 40 | **21,17** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 10 | | | 50 | **17,16** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 10 | | | 63 | **14,04** | 83,0 | 0,61 | 4,30 | 13,00 |
| K 10 | | | 80 | **10,67** | 86,0 | 0,88 | 3,70 | 14,80 |
| K 10 | | | 100 | **7,07** | 89,0 | 1,38 | 3,00 | 16,80 |
| K 10 | | | 125 | **3,15** | 92,0 | 2,10 | 1,80 | 18,80 |
| K 10 | | | 160 | **-4,70** | 92,0 | 3,15 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 200 | **-9,28** | 93,0 | 4,53 | 0,00 | 22,80 |
| K 11 | 6 192 | 6 194 | | | | | | |
| K 11 | | | 20 | **31,96** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **28,54** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 11 | | | 32 | **24,37** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 11 | | | 40 | **20,15** | 78,0 | 0,31 | 5,00 | 10,30 |
| K 11 | | | 50 | **16,13** | 80,0 | 0,43 | 4,70 | 11,50 |
| K 11 | | | 63 | **12,98** | 83,0 | 0,68 | 4,30 | 13,00 |
| K 11 | | | 80 | **9,57** | 86,0 | 0,99 | 3,70 | 14,80 |
| K 11 | | | 100 | **5,91** | 89,0 | 1,55 | 3,00 | 16,80 |
| K 11 | | | 125 | **1,91** | 92,0 | 2,35 | 1,80 | 18,80 |
| K 11 | | | 160 | **-6,07** | 92,0 | 3,53 | 0,00 | 21,10 |
| K 11 | | | 200 | **-10,82** | 93,0 | 5,08 | 0,00 | 22,80 |
| K 12 | 6 734 | 6 736 | | | | | | |
| K 12 | | | 20 | **31,23** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **27,80** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 12 | | | 32 | **23,63** | 76,0 | 0,20 | 5,20 | 9,20 |
| K 12 | | | 40 | **19,40** | 78,0 | 0,34 | 5,00 | 10,30 |
| K 12 | | | 50 | **15,36** | 80,0 | 0,47 | 4,70 | 11,50 |
| K 12 | | | 63 | **12,19** | 83,0 | 0,74 | 4,30 | 13,00 |
| K 12 | | | 80 | **8,75** | 86,0 | 1,08 | 3,70 | 14,80 |
| K 12 | | | 100 | **5,05** | 89,0 | 1,68 | 3,00 | 16,80 |
| K 12 | | | 125 | **0,97** | 92,0 | 2,56 | 1,80 | 18,80 |
| K 12 | | | 160 | **-7,11** | 92,0 | 3,84 | 0,00 | 21,10 |
| K 12 | | | 200 | **-11,99** | 93,0 | 5,52 | 0,00 | 22,80 |
| K 13 | 5 905 | 5 907 | | | | | | |
| K 13 | | | 20 | **32,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **28,95** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 13 | | | 32 | **24,80** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 13 | | | 40 | **20,58** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 13 | | | 50 | **16,56** | 80,0 | 0,41 | 4,70 | 11,50 |
| K 13 | | | 63 | **13,42** | 83,0 | 0,65 | 4,30 | 13,00 |
| K 13 | | | 80 | **10,03** | 86,0 | 0,95 | 3,70 | 14,80 |
| K 13 | | | 100 | **6,40** | 89,0 | 1,48 | 3,00 | 16,80 |
| K 13 | | | 125 | **2,43** | 92,0 | 2,24 | 1,80 | 18,80 |
| K 13 | | | 160 | **-5,49** | 92,0 | 3,37 | 0,00 | 21,10 |
| K 13 | | | 200 | **-10,17** | 93,0 | 4,84 | 0,00 | 22,80 |
| K 14 | 5 222 | 5 225 | | | | | | |
| K 14 | | | 20 | **33,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **30,03** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 14 | | | 32 | **25,88** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 14 | | | 40 | **21,68** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 14 | | | 50 | **17,67** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 14 | | | 63 | **14,56** | 83,0 | 0,57 | 4,30 | 13,00 |
| K 14 | | | 80 | **11,20** | 86,0 | 0,84 | 3,70 | 14,80 |
| K 14 | | | 100 | **7,63** | 89,0 | 1,31 | 3,00 | 16,80 |
| K 14 | | | 125 | **3,75** | 92,0 | 1,99 | 1,80 | 18,80 |
| K 14 | | | 160 | **-4,04** | 92,0 | 2,98 | 0,00 | 21,10 |
| K 14 | | | 200 | **-8,55** | 93,0 | 4,28 | 0,00 | 22,80 |
| WTG 01 | 1 760 | 1 770 | | | | | | |
| WTG 01 | | | 20 | **44,34** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **41,01** | 75,2 | 0,04 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **36,49** | 77,1 | 0,05 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **31,55** | 78,3 | 0,09 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **27,62** | 80,3 | 0,12 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **25,95** | 84,6 | 0,19 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **22,46** | 87,3 | 0,28 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **17,80** | 88,9 | 0,44 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **13,97** | 91,5 | 0,67 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **8,83** | 93,5 | 1,01 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **5,19** | 94,5 | 1,45 | 0,00 | 22,80 |
| WTG 02 | 2 601 | 2 608 | | | | | | |
| WTG 02 | | | 20 | **40,97** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **37,62** | 75,2 | 0,05 | 5,40 | 8,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 32 | **33,09** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,14** | 78,3 | 0,13 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,19** | 80,3 | 0,18 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **22,49** | 84,6 | 0,29 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **18,96** | 87,3 | 0,42 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,22** | 88,9 | 0,65 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,28** | 91,5 | 0,99 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **4,99** | 93,5 | 1,49 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,13** | 94,5 | 2,14 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **49,76** | | | | |
| Sum | | | 25 | **46,40** | | | | |
| Sum | | | 32 | **42,10** | | | | |
| Sum | | | 40 | **37,64** | | | | |
| Sum | | | 50 | **33,68** | | | | |
| Sum | | | 63 | **31,17** | | | | |
| Sum | | | 80 | **27,79** | | | | |
| Sum | | | 100 | **23,87** | | | | |
| Sum | | | 125 | **20,13** | | | | |
| Sum | | | 160 | **13,59** | | | | |
| Sum | | | 200 | **9,69** | | | | |

**Noise sensitive area: T Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (154)**

Wind speed: 8,0 m/s

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 994 | 3 997 | | | | | | |
| K 01 | | | 20 | **35,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **32,39** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 01 | | | 32 | **28,25** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 01 | | | 40 | **24,07** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 01 | | | 50 | **20,09** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 01 | | | 63 | **17,03** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 01 | | | 80 | **13,73** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 01 | | | 100 | **10,27** | 89,0 | 1,00 | 3,00 | 16,80 |
| K 01 | | | 125 | **6,55** | 92,0 | 1,52 | 1,80 | 18,80 |
| K 01 | | | 160 | **-1,01** | 92,0 | 2,28 | 0,00 | 21,10 |
| K 01 | | | 200 | **-5,21** | 93,0 | 3,28 | 0,00 | 22,80 |
| K 02 | 3 494 | 3 499 | | | | | | |
| K 02 | | | 20 | **36,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **33,55** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 02 | | | 32 | **29,42** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 02 | | | 40 | **25,25** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 02 | | | 50 | **21,28** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 02 | | | 63 | **18,24** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 02 | | | 80 | **14,96** | 86,0 | 0,56 | 3,70 | 14,80 |
| K 02 | | | 100 | **11,55** | 89,0 | 0,87 | 3,00 | 16,80 |
| K 02 | | | 125 | **7,89** | 92,0 | 1,33 | 1,80 | 18,80 |
| K 02 | | | 160 | **0,43** | 92,0 | 1,99 | 0,00 | 21,10 |
| K 02 | | | 200 | **-3,65** | 93,0 | 2,87 | 0,00 | 22,80 |
| K 03 | 2 862 | 2 867 | | | | | | |
| K 03 | | | 20 | **38,65** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **35,29** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 03 | | | 32 | **31,16** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 03 | | | 40 | **27,01** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 03 | | | 50 | **23,05** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 03 | | | 63 | **20,04** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 03 | | | 80 | **16,79** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 03 | | | 100 | **13,43** | 89,0 | 0,72 | 3,00 | 16,80 |
| K 03 | | | 125 | **9,86** | 92,0 | 1,09 | 1,80 | 18,80 |
| K 03 | | | 160 | **2,52** | 92,0 | 1,63 | 0,00 | 21,10 |
| K 03 | | | 200 | **-1,40** | 93,0 | 2,35 | 0,00 | 22,80 |
| K 04 | 2 530 | 2 535 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 20 | **39,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **36,37** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **32,24** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 04 | | | 40 | **28,09** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 04 | | | 50 | **24,14** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 04 | | | 63 | **21,14** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 04 | | | 80 | **17,91** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 04 | | | 100 | **14,59** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 04 | | | 125 | **11,06** | 92,0 | 0,96 | 1,80 | 18,80 |
| K 04 | | | 160 | **3,77** | 92,0 | 1,45 | 0,00 | 21,10 |
| K 04 | | | 200 | **-0,06** | 93,0 | 2,08 | 0,00 | 22,80 |
| K 05 | 1 976 | 1 983 | | | | | | |
| K 05 | | | 20 | **41,85** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **38,51** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 05 | | | 32 | **34,39** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 05 | | | 40 | **30,25** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 05 | | | 50 | **26,31** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 05 | | | 63 | **23,33** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 05 | | | 80 | **20,14** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 05 | | | 100 | **16,86** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 05 | | | 125 | **13,40** | 92,0 | 0,75 | 1,80 | 18,80 |
| K 05 | | | 160 | **6,22** | 92,0 | 1,13 | 0,00 | 21,10 |
| K 05 | | | 200 | **2,53** | 93,0 | 1,63 | 0,00 | 22,80 |
| K 06 | 4 224 | 4 228 | | | | | | |
| K 06 | | | 20 | **35,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **31,89** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **27,75** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 06 | | | 40 | **23,57** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 06 | | | 50 | **19,58** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 06 | | | 63 | **16,51** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 06 | | | 80 | **13,20** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 06 | | | 100 | **9,72** | 89,0 | 1,06 | 3,00 | 16,80 |
| K 06 | | | 125 | **5,97** | 92,0 | 1,61 | 1,80 | 18,80 |
| K 06 | | | 160 | **-1,63** | 92,0 | 2,41 | 0,00 | 21,10 |
| K 06 | | | 200 | **-5,89** | 93,0 | 3,47 | 0,00 | 22,80 |
| K 07 | 4 330 | 4 333 | | | | | | |
| K 07 | | | 20 | **35,06** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **31,68** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 07 | | | 32 | **27,53** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,35** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,36** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,29** | 83,0 | 0,48 | 4,30 | 13,00 |
| K 07 | | | 80 | **12,97** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,48** | 89,0 | 1,08 | 3,00 | 16,80 |
| K 07 | | | 125 | **5,72** | 92,0 | 1,65 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,91** | 92,0 | 2,47 | 0,00 | 21,10 |
| K 07 | | | 200 | **-6,19** | 93,0 | 3,55 | 0,00 | 22,80 |
| K 08 | 3 495 | 3 499 | | | | | | |
| K 08 | | | 20 | **36,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **33,55** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 08 | | | 32 | **29,42** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 08 | | | 40 | **25,25** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 08 | | | 50 | **21,28** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 08 | | | 63 | **18,24** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 08 | | | 80 | **14,96** | 86,0 | 0,56 | 3,70 | 14,80 |
| K 08 | | | 100 | **11,55** | 89,0 | 0,87 | 3,00 | 16,80 |
| K 08 | | | 125 | **7,89** | 92,0 | 1,33 | 1,80 | 18,80 |
| K 08 | | | 160 | **0,43** | 92,0 | 1,99 | 0,00 | 21,10 |
| K 08 | | | 200 | **-3,65** | 93,0 | 2,87 | 0,00 | 22,80 |
| K 09 | 3 074 | 3 078 | | | | | | |
| K 09 | | | 20 | **38,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **34,67** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **30,54** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 09 | | | 40 | **26,38** | 78,0 | 0,15 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 09 | | | 50 | **22,42** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 09 | | | 63 | **19,40** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 09 | | | 80 | **16,14** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 09 | | | 100 | **12,76** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 09 | | | 125 | **9,16** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 09 | | | 160 | **1,78** | 92,0 | 1,75 | 0,00 | 21,10 |
| K 09 | | | 200 | **-2,19** | 93,0 | 2,52 | 0,00 | 22,80 |
| K 10 | 5 131 | 5 133 | | | | | | |
| K 10 | | | 20 | **33,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **30,19** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 10 | | | 32 | **26,04** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 10 | | | 40 | **21,84** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 10 | | | 50 | **17,83** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 10 | | | 63 | **14,73** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 10 | | | 80 | **11,37** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 10 | | | 100 | **7,81** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 10 | | | 125 | **3,94** | 92,0 | 1,95 | 1,80 | 18,80 |
| K 10 | | | 160 | **-3,83** | 92,0 | 2,93 | 0,00 | 21,10 |
| K 10 | | | 200 | **-8,32** | 93,0 | 4,21 | 0,00 | 22,80 |
| K 11 | 5 799 | 5 801 | | | | | | |
| K 11 | | | 20 | **32,53** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **29,11** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 11 | | | 32 | **24,96** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 11 | | | 40 | **20,74** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 11 | | | 50 | **16,72** | 80,0 | 0,41 | 4,70 | 11,50 |
| K 11 | | | 63 | **13,59** | 83,0 | 0,64 | 4,30 | 13,00 |
| K 11 | | | 80 | **10,20** | 86,0 | 0,93 | 3,70 | 14,80 |
| K 11 | | | 100 | **6,58** | 89,0 | 1,45 | 3,00 | 16,80 |
| K 11 | | | 125 | **2,63** | 92,0 | 2,20 | 1,80 | 18,80 |
| K 11 | | | 160 | **-5,28** | 92,0 | 3,31 | 0,00 | 21,10 |
| K 11 | | | 200 | **-9,93** | 93,0 | 4,76 | 0,00 | 22,80 |
| K 12 | 6 351 | 6 353 | | | | | | |
| K 12 | | | 20 | **31,74** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **28,31** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 12 | | | 32 | **24,15** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 12 | | | 40 | **19,92** | 78,0 | 0,32 | 5,00 | 10,30 |
| K 12 | | | 50 | **15,90** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 12 | | | 63 | **12,74** | 83,0 | 0,70 | 4,30 | 13,00 |
| K 12 | | | 80 | **9,32** | 86,0 | 1,02 | 3,70 | 14,80 |
| K 12 | | | 100 | **5,65** | 89,0 | 1,59 | 3,00 | 16,80 |
| K 12 | | | 125 | **1,63** | 92,0 | 2,41 | 1,80 | 18,80 |
| K 12 | | | 160 | **-6,38** | 92,0 | 3,62 | 0,00 | 21,10 |
| K 12 | | | 200 | **-11,17** | 93,0 | 5,21 | 0,00 | 22,80 |
| K 13 | 5 531 | 5 534 | | | | | | |
| K 13 | | | 20 | **32,94** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **29,53** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 13 | | | 32 | **25,37** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 13 | | | 40 | **21,16** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 13 | | | 50 | **17,15** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 13 | | | 63 | **14,03** | 83,0 | 0,61 | 4,30 | 13,00 |
| K 13 | | | 80 | **10,65** | 86,0 | 0,89 | 3,70 | 14,80 |
| K 13 | | | 100 | **7,06** | 89,0 | 1,38 | 3,00 | 16,80 |
| K 13 | | | 125 | **3,14** | 92,0 | 2,10 | 1,80 | 18,80 |
| K 13 | | | 160 | **-4,71** | 92,0 | 3,15 | 0,00 | 21,10 |
| K 13 | | | 200 | **-9,30** | 93,0 | 4,54 | 0,00 | 22,80 |
| K 14 | 4 848 | 4 851 | | | | | | |
| K 14 | | | 20 | **34,08** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **30,69** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 14 | | | 32 | **26,54** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 14 | | | 40 | **22,34** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 14 | | | 50 | **18,34** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 14 | | | 63 | **15,25** | 83,0 | 0,53 | 4,30 | 13,00 |
| K 14 | | | 80 | **11,91** | 86,0 | 0,78 | 3,70 | 14,80 |
| K 14 | | | 100 | **8,37** | 89,0 | 1,21 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 125 | **4,54** | 92,0 | 1,84 | 1,80 | 18,80 |
| K 14 | | | 160 | **-3,18** | 92,0 | 2,77 | 0,00 | 21,10 |
| K 14 | | | 200 | **-7,60** | 93,0 | 3,98 | 0,00 | 22,80 |
| WTG 01 | 1 556 | 1 567 | | | | | | |
| WTG 01 | | | 20 | **45,40** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **42,07** | 75,2 | 0,03 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **37,55** | 77,1 | 0,05 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **32,62** | 78,3 | 0,08 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **28,69** | 80,3 | 0,11 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **27,02** | 84,6 | 0,17 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **23,55** | 87,3 | 0,25 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **18,90** | 88,9 | 0,39 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **15,10** | 91,5 | 0,60 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **10,00** | 93,5 | 0,89 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **6,41** | 94,5 | 1,29 | 0,00 | 22,80 |
| WTG 02 | 2 337 | 2 345 | | | | | | |
| WTG 02 | | | 20 | **41,90** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **38,55** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **34,03** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **29,08** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **25,13** | 80,3 | 0,16 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **23,44** | 84,6 | 0,26 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,92** | 87,3 | 0,38 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **15,21** | 88,9 | 0,59 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **11,31** | 91,5 | 0,89 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **6,06** | 93,5 | 1,34 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **2,28** | 94,5 | 1,92 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **50,75** | | | | |
| Sum | | | 25 | **47,39** | | | | |
| Sum | | | 32 | **43,10** | | | | |
| Sum | | | 40 | **38,64** | | | | |
| Sum | | | 50 | **34,69** | | | | |
| Sum | | | 63 | **32,20** | | | | |
| Sum | | | 80 | **28,84** | | | | |
| Sum | | | 100 | **24,95** | | | | |
| Sum | | | 125 | **21,26** | | | | |
| Sum | | | 160 | **14,77** | | | | |
| Sum | | | 200 | **10,95** | | | | |

**Noise sensitive area: U Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (153)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 4 194 | 4 197 | | | | | | |
| K 01 | | | 20 | **35,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **31,96** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 01 | | | 32 | **27,82** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 01 | | | 40 | **23,63** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 01 | | | 50 | **19,65** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 01 | | | 63 | **16,58** | 83,0 | 0,46 | 4,30 | 13,00 |
| K 01 | | | 80 | **13,27** | 86,0 | 0,67 | 3,70 | 14,80 |
| K 01 | | | 100 | **9,79** | 89,0 | 1,05 | 3,00 | 16,80 |
| K 01 | | | 125 | **6,05** | 92,0 | 1,59 | 1,80 | 18,80 |
| K 01 | | | 160 | **-1,55** | 92,0 | 2,39 | 0,00 | 21,10 |
| K 01 | | | 200 | **-5,80** | 93,0 | 3,44 | 0,00 | 22,80 |
| K 02 | 3 939 | 3 943 | | | | | | |
| K 02 | | | 20 | **35,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **32,51** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 02 | | | 32 | **28,37** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 02 | | | 40 | **24,19** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 02 | | | 50 | **20,21** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 02 | | | 63 | **17,15** | 83,0 | 0,43 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 80 | **13,85** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 02 | | | 100 | **10,40** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 02 | | | 125 | **6,69** | 92,0 | 1,50 | 1,80 | 18,80 |
| K 02 | | | 160 | **-0,86** | 92,0 | 2,25 | 0,00 | 21,10 |
| K 02 | | | 200 | **-5,05** | 93,0 | 3,23 | 0,00 | 22,80 |
| K 03 | 3 993 | 3 996 | | | | | | |
| K 03 | | | 20 | **35,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **32,39** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 03 | | | 32 | **28,25** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 03 | | | 40 | **24,07** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 03 | | | 50 | **20,09** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 03 | | | 63 | **17,03** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 03 | | | 80 | **13,73** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 03 | | | 100 | **10,27** | 89,0 | 1,00 | 3,00 | 16,80 |
| K 03 | | | 125 | **6,55** | 92,0 | 1,52 | 1,80 | 18,80 |
| K 03 | | | 160 | **-1,01** | 92,0 | 2,28 | 0,00 | 21,10 |
| K 03 | | | 200 | **-5,21** | 93,0 | 3,28 | 0,00 | 22,80 |
| K 04 | 3 462 | 3 466 | | | | | | |
| K 04 | | | 20 | **37,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **33,63** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 04 | | | 32 | **29,50** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 04 | | | 40 | **25,33** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 04 | | | 50 | **21,36** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 04 | | | 63 | **18,32** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 04 | | | 80 | **15,05** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 04 | | | 100 | **11,64** | 89,0 | 0,87 | 3,00 | 16,80 |
| K 04 | | | 125 | **7,99** | 92,0 | 1,32 | 1,80 | 18,80 |
| K 04 | | | 160 | **0,53** | 92,0 | 1,98 | 0,00 | 21,10 |
| K 04 | | | 200 | **-3,54** | 93,0 | 2,84 | 0,00 | 22,80 |
| K 05 | 4 185 | 4 188 | | | | | | |
| K 05 | | | 20 | **35,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **31,98** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 05 | | | 32 | **27,83** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 05 | | | 40 | **23,65** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 05 | | | 50 | **19,67** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 05 | | | 63 | **16,60** | 83,0 | 0,46 | 4,30 | 13,00 |
| K 05 | | | 80 | **13,29** | 86,0 | 0,67 | 3,70 | 14,80 |
| K 05 | | | 100 | **9,81** | 89,0 | 1,05 | 3,00 | 16,80 |
| K 05 | | | 125 | **6,07** | 92,0 | 1,59 | 1,80 | 18,80 |
| K 05 | | | 160 | **-1,53** | 92,0 | 2,39 | 0,00 | 21,10 |
| K 05 | | | 200 | **-5,77** | 93,0 | 3,43 | 0,00 | 22,80 |
| K 06 | 3 319 | 3 323 | | | | | | |
| K 06 | | | 20 | **37,37** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **34,00** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 06 | | | 32 | **29,87** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 06 | | | 40 | **25,70** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 06 | | | 50 | **21,74** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 06 | | | 63 | **18,70** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 06 | | | 80 | **15,44** | 86,0 | 0,53 | 3,70 | 14,80 |
| K 06 | | | 100 | **12,04** | 89,0 | 0,83 | 3,00 | 16,80 |
| K 06 | | | 125 | **8,41** | 92,0 | 1,26 | 1,80 | 18,80 |
| K 06 | | | 160 | **0,98** | 92,0 | 1,89 | 0,00 | 21,10 |
| K 06 | | | 200 | **-3,06** | 93,0 | 2,72 | 0,00 | 22,80 |
| K 07 | 2 698 | 2 703 | | | | | | |
| K 07 | | | 20 | **39,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **35,81** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 07 | | | 32 | **31,68** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 07 | | | 40 | **27,53** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 07 | | | 50 | **23,57** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 07 | | | 63 | **20,57** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 07 | | | 80 | **17,33** | 86,0 | 0,43 | 3,70 | 14,80 |
| K 07 | | | 100 | **13,99** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 07 | | | 125 | **10,44** | 92,0 | 1,03 | 1,80 | 18,80 |
| K 07 | | | 160 | **3,12** | 92,0 | 1,54 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 200 | **-0,75** | 93,0 | 2,22 | 0,00 | 22,80 |
| K 08 | 3 173 | 3 176 | | | | | | |
| K 08 | | | 20 | **37,76** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **34,40** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 08 | | | 32 | **30,27** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 08 | | | 40 | **26,10** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 08 | | | 50 | **22,14** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 08 | | | 63 | **19,11** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 08 | | | 80 | **15,85** | 86,0 | 0,51 | 3,70 | 14,80 |
| K 08 | | | 100 | **12,47** | 89,0 | 0,79 | 3,00 | 16,80 |
| K 08 | | | 125 | **8,85** | 92,0 | 1,21 | 1,80 | 18,80 |
| K 08 | | | 160 | **1,45** | 92,0 | 1,81 | 0,00 | 21,10 |
| K 08 | | | 200 | **-2,54** | 93,0 | 2,60 | 0,00 | 22,80 |
| K 09 | 3 174 | 3 178 | | | | | | |
| K 09 | | | 20 | **37,76** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **34,39** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **30,26** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 09 | | | 40 | **26,10** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 09 | | | 50 | **22,13** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 09 | | | 63 | **19,11** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 09 | | | 80 | **15,85** | 86,0 | 0,51 | 3,70 | 14,80 |
| K 09 | | | 100 | **12,46** | 89,0 | 0,79 | 3,00 | 16,80 |
| K 09 | | | 125 | **8,85** | 92,0 | 1,21 | 1,80 | 18,80 |
| K 09 | | | 160 | **1,45** | 92,0 | 1,81 | 0,00 | 21,10 |
| K 09 | | | 200 | **-2,55** | 93,0 | 2,61 | 0,00 | 22,80 |
| K 10 | 4 915 | 4 918 | | | | | | |
| K 10 | | | 20 | **33,96** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **30,57** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 10 | | | 32 | **26,42** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 10 | | | 40 | **22,22** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 10 | | | 50 | **18,22** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 10 | | | 63 | **15,12** | 83,0 | 0,54 | 4,30 | 13,00 |
| K 10 | | | 80 | **11,78** | 86,0 | 0,79 | 3,70 | 14,80 |
| K 10 | | | 100 | **8,23** | 89,0 | 1,23 | 3,00 | 16,80 |
| K 10 | | | 125 | **4,40** | 92,0 | 1,87 | 1,80 | 18,80 |
| K 10 | | | 160 | **-3,34** | 92,0 | 2,80 | 0,00 | 21,10 |
| K 10 | | | 200 | **-7,77** | 93,0 | 4,03 | 0,00 | 22,80 |
| K 11 | 5 187 | 5 189 | | | | | | |
| K 11 | | | 20 | **33,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **30,09** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 11 | | | 32 | **25,94** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 11 | | | 40 | **21,74** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 11 | | | 50 | **17,74** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 11 | | | 63 | **14,63** | 83,0 | 0,57 | 4,30 | 13,00 |
| K 11 | | | 80 | **11,27** | 86,0 | 0,83 | 3,70 | 14,80 |
| K 11 | | | 100 | **7,70** | 89,0 | 1,30 | 3,00 | 16,80 |
| K 11 | | | 125 | **3,83** | 92,0 | 1,97 | 1,80 | 18,80 |
| K 11 | | | 160 | **-3,96** | 92,0 | 2,96 | 0,00 | 21,10 |
| K 11 | | | 200 | **-8,46** | 93,0 | 4,25 | 0,00 | 22,80 |
| K 12 | 4 974 | 4 976 | | | | | | |
| K 12 | | | 20 | **33,86** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **30,46** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 12 | | | 32 | **26,31** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 12 | | | 40 | **22,11** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 12 | | | 50 | **18,11** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 12 | | | 63 | **15,01** | 83,0 | 0,55 | 4,30 | 13,00 |
| K 12 | | | 80 | **11,67** | 86,0 | 0,80 | 3,70 | 14,80 |
| K 12 | | | 100 | **8,12** | 89,0 | 1,24 | 3,00 | 16,80 |
| K 12 | | | 125 | **4,27** | 92,0 | 1,89 | 1,80 | 18,80 |
| K 12 | | | 160 | **-3,47** | 92,0 | 2,84 | 0,00 | 21,10 |
| K 12 | | | 200 | **-7,92** | 93,0 | 4,08 | 0,00 | 22,80 |
| K 13 | 4 237 | 4 239 | | | | | | |
| K 13 | | | 20 | **35,25** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **31,87** | 73,7 | 0,08 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 32 | **27,73** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 13 | | | 40 | **23,54** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 13 | | | 50 | **19,56** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 13 | | | 63 | **16,49** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 13 | | | 80 | **13,18** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 13 | | | 100 | **9,69** | 89,0 | 1,06 | 3,00 | 16,80 |
| K 13 | | | 125 | **5,94** | 92,0 | 1,61 | 1,80 | 18,80 |
| K 13 | | | 160 | **-1,66** | 92,0 | 2,42 | 0,00 | 21,10 |
| K 13 | | | 200 | **-5,92** | 93,0 | 3,48 | 0,00 | 22,80 |
| K 14 | 3 996 | 3 999 | | | | | | |
| K 14 | | | 20 | **35,76** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **32,38** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 14 | | | 32 | **28,24** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 14 | | | 40 | **24,06** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 14 | | | 50 | **20,08** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 14 | | | 63 | **17,02** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 14 | | | 80 | **13,72** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 14 | | | 100 | **10,26** | 89,0 | 1,00 | 3,00 | 16,80 |
| K 14 | | | 125 | **6,54** | 92,0 | 1,52 | 1,80 | 18,80 |
| K 14 | | | 160 | **-1,02** | 92,0 | 2,28 | 0,00 | 21,10 |
| K 14 | | | 200 | **-5,22** | 93,0 | 3,28 | 0,00 | 22,80 |
| WTG 01 | 3 858 | 3 862 | | | | | | |
| WTG 01 | | | 20 | **37,56** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **34,19** | 75,2 | 0,08 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **29,65** | 77,1 | 0,12 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **24,67** | 78,3 | 0,19 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **20,69** | 80,3 | 0,27 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **18,94** | 84,6 | 0,42 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **15,35** | 87,3 | 0,62 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **10,50** | 88,9 | 0,97 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **6,40** | 91,5 | 1,47 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **0,86** | 93,5 | 2,20 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-3,30** | 94,5 | 3,17 | 0,00 | 22,80 |
| WTG 02 | 3 229 | 3 234 | | | | | | |
| WTG 02 | | | 20 | **39,11** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **35,74** | 75,2 | 0,06 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **31,21** | 77,1 | 0,10 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **26,24** | 78,3 | 0,16 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **22,28** | 80,3 | 0,23 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **20,55** | 84,6 | 0,36 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **16,99** | 87,3 | 0,52 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **12,20** | 88,9 | 0,81 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **8,18** | 91,5 | 1,23 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **2,76** | 93,5 | 1,84 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-1,25** | 94,5 | 2,65 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **48,65** | | | | |
| Sum | | | 25 | **45,28** | | | | |
| Sum | | | 32 | **41,07** | | | | |
| Sum | | | 40 | **36,76** | | | | |
| Sum | | | 50 | **32,79** | | | | |
| Sum | | | 63 | **29,97** | | | | |
| Sum | | | 80 | **26,63** | | | | |
| Sum | | | 100 | **22,97** | | | | |
| Sum | | | 125 | **19,25** | | | | |
| Sum | | | 160 | **12,08** | | | | |
| Sum | | | 200 | **7,98** | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**Noise sensitive area: V Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (152)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 343 | 3 346 | | | | | | |
| K 01 | | | 20 | **37,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **33,94** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 01 | | | 32 | **29,81** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 01 | | | 40 | **25,64** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 01 | | | 50 | **21,68** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 01 | | | 63 | **18,64** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 01 | | | 80 | **15,37** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 01 | | | 100 | **11,97** | 89,0 | 0,84 | 3,00 | 16,80 |
| K 01 | | | 125 | **8,34** | 92,0 | 1,27 | 1,80 | 18,80 |
| K 01 | | | 160 | **0,90** | 92,0 | 1,91 | 0,00 | 21,10 |
| K 01 | | | 200 | **-3,13** | 93,0 | 2,74 | 0,00 | 22,80 |
| K 02 | 2 985 | 2 989 | | | | | | |
| K 02 | | | 20 | **38,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **34,93** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 02 | | | 32 | **30,80** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 02 | | | 40 | **26,64** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 02 | | | 50 | **22,68** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 02 | | | 63 | **19,66** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 02 | | | 80 | **16,41** | 86,0 | 0,48 | 3,70 | 14,80 |
| K 02 | | | 100 | **13,04** | 89,0 | 0,75 | 3,00 | 16,80 |
| K 02 | | | 125 | **9,45** | 92,0 | 1,14 | 1,80 | 18,80 |
| K 02 | | | 160 | **2,09** | 92,0 | 1,70 | 0,00 | 21,10 |
| K 02 | | | 200 | **-1,86** | 93,0 | 2,45 | 0,00 | 22,80 |
| K 03 | 2 918 | 2 922 | | | | | | |
| K 03 | | | 20 | **38,49** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **35,13** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 03 | | | 32 | **31,00** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 03 | | | 40 | **26,84** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 03 | | | 50 | **22,88** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 03 | | | 63 | **19,87** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 03 | | | 80 | **16,62** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 03 | | | 100 | **13,26** | 89,0 | 0,73 | 3,00 | 16,80 |
| K 03 | | | 125 | **9,68** | 92,0 | 1,11 | 1,80 | 18,80 |
| K 03 | | | 160 | **2,32** | 92,0 | 1,67 | 0,00 | 21,10 |
| K 03 | | | 200 | **-1,61** | 93,0 | 2,40 | 0,00 | 22,80 |
| K 04 | 2 302 | 2 307 | | | | | | |
| K 04 | | | 20 | **40,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,19** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,07** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **28,92** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 04 | | | 50 | **24,98** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 04 | | | 63 | **21,99** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 04 | | | 80 | **18,77** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,46** | 89,0 | 0,58 | 3,00 | 16,80 |
| K 04 | | | 125 | **11,96** | 92,0 | 0,88 | 1,80 | 18,80 |
| K 04 | | | 160 | **4,72** | 92,0 | 1,31 | 0,00 | 21,10 |
| K 04 | | | 200 | **0,95** | 93,0 | 1,89 | 0,00 | 22,80 |
| K 05 | 3 004 | 3 008 | | | | | | |
| K 05 | | | 20 | **38,24** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **34,88** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 05 | | | 32 | **30,75** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 05 | | | 40 | **26,58** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 05 | | | 50 | **22,62** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 05 | | | 63 | **19,60** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 05 | | | 80 | **16,35** | 86,0 | 0,48 | 3,70 | 14,80 |
| K 05 | | | 100 | **12,98** | 89,0 | 0,75 | 3,00 | 16,80 |
| K 05 | | | 125 | **9,39** | 92,0 | 1,14 | 1,80 | 18,80 |
| K 05 | | | 160 | **2,02** | 92,0 | 1,71 | 0,00 | 21,10 |
| K 05 | | | 200 | **-1,93** | 93,0 | 2,47 | 0,00 | 22,80 |
| K 06 | 2 576 | 2 581 | | | | | | |
| K 06 | | | 20 | **39,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **36,21** | 73,7 | 0,05 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 06 | | | 32 | **32,09** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 06 | | | 40 | **27,94** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 06 | | | 50 | **23,98** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 06 | | | 63 | **20,98** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 06 | | | 80 | **17,75** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 06 | | | 100 | **14,42** | 89,0 | 0,65 | 3,00 | 16,80 |
| K 06 | | | 125 | **10,88** | 92,0 | 0,98 | 1,80 | 18,80 |
| K 06 | | | 160 | **3,59** | 92,0 | 1,47 | 0,00 | 21,10 |
| K 06 | | | 200 | **-0,25** | 93,0 | 2,12 | 0,00 | 22,80 |
| K 07 | 2 021 | 2 027 | | | | | | |
| K 07 | | | 20 | **41,66** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **38,32** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 07 | | | 32 | **34,20** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 07 | | | 40 | **30,06** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 07 | | | 50 | **26,12** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 07 | | | 63 | **23,14** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 07 | | | 80 | **19,94** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 07 | | | 100 | **16,66** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 07 | | | 125 | **13,19** | 92,0 | 0,77 | 1,80 | 18,80 |
| K 07 | | | 160 | **6,01** | 92,0 | 1,16 | 0,00 | 21,10 |
| K 07 | | | 200 | **2,30** | 93,0 | 1,66 | 0,00 | 22,80 |
| K 08 | 2 206 | 2 211 | | | | | | |
| K 08 | | | 20 | **40,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **37,56** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 08 | | | 32 | **33,44** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 08 | | | 40 | **29,30** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 08 | | | 50 | **25,35** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 08 | | | 63 | **22,36** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 08 | | | 80 | **19,15** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 08 | | | 100 | **15,85** | 89,0 | 0,55 | 3,00 | 16,80 |
| K 08 | | | 125 | **12,37** | 92,0 | 0,84 | 1,80 | 18,80 |
| K 08 | | | 160 | **5,15** | 92,0 | 1,26 | 0,00 | 21,10 |
| K 08 | | | 200 | **1,39** | 93,0 | 1,81 | 0,00 | 22,80 |
| K 09 | 2 095 | 2 100 | | | | | | |
| K 09 | | | 20 | **41,35** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **38,01** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 09 | | | 32 | **33,89** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 09 | | | 40 | **29,75** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 09 | | | 50 | **25,81** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 09 | | | 63 | **22,82** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 09 | | | 80 | **19,62** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 09 | | | 100 | **16,33** | 89,0 | 0,53 | 3,00 | 16,80 |
| K 09 | | | 125 | **12,86** | 92,0 | 0,80 | 1,80 | 18,80 |
| K 09 | | | 160 | **5,66** | 92,0 | 1,20 | 0,00 | 21,10 |
| K 09 | | | 200 | **1,93** | 93,0 | 1,72 | 0,00 | 22,80 |
| K 10 | 4 266 | 4 269 | | | | | | |
| K 10 | | | 20 | **35,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **31,81** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 10 | | | 32 | **27,67** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 10 | | | 40 | **23,48** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 10 | | | 50 | **19,50** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 10 | | | 63 | **16,42** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 10 | | | 80 | **13,11** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 10 | | | 100 | **9,63** | 89,0 | 1,07 | 3,00 | 16,80 |
| K 10 | | | 125 | **5,87** | 92,0 | 1,62 | 1,80 | 18,80 |
| K 10 | | | 160 | **-1,74** | 92,0 | 2,43 | 0,00 | 21,10 |
| K 10 | | | 200 | **-6,01** | 93,0 | 3,50 | 0,00 | 22,80 |
| K 11 | 4 666 | 4 669 | | | | | | |
| K 11 | | | 20 | **34,42** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **31,02** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 11 | | | 32 | **26,88** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 11 | | | 40 | **22,68** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 11 | | | 50 | **18,69** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 11 | | | 63 | **15,60** | 83,0 | 0,51 | 4,30 | 13,00 |

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 80 | **12,27** | 86,0 | 0,75 | 3,70 | 14,80 |
| K 11 | | | 100 | **8,75** | 89,0 | 1,17 | 3,00 | 16,80 |
| K 11 | | | 125 | **4,94** | 92,0 | 1,77 | 1,80 | 18,80 |
| K 11 | | | 160 | **-2,75** | 92,0 | 2,66 | 0,00 | 21,10 |
| K 11 | | | 200 | **-7,11** | 93,0 | 3,83 | 0,00 | 22,80 |
| K 12 | 4 644 | 4 646 | | | | | | |
| K 12 | | | 20 | **34,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **31,07** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 12 | | | 32 | **26,92** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 12 | | | 40 | **22,73** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 12 | | | 50 | **18,73** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 12 | | | 63 | **15,65** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 12 | | | 80 | **12,32** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 12 | | | 100 | **8,80** | 89,0 | 1,16 | 3,00 | 16,80 |
| K 12 | | | 125 | **4,99** | 92,0 | 1,77 | 1,80 | 18,80 |
| K 12 | | | 160 | **-2,69** | 92,0 | 2,65 | 0,00 | 21,10 |
| K 12 | | | 200 | **-7,05** | 93,0 | 3,81 | 0,00 | 22,80 |
| K 13 | 3 795 | 3 798 | | | | | | |
| K 13 | | | 20 | **36,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **32,83** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 13 | | | 32 | **28,69** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 13 | | | 40 | **24,52** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 13 | | | 50 | **20,54** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 13 | | | 63 | **17,49** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 13 | | | 80 | **14,20** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 13 | | | 100 | **10,76** | 89,0 | 0,95 | 3,00 | 16,80 |
| K 13 | | | 125 | **7,06** | 92,0 | 1,44 | 1,80 | 18,80 |
| K 13 | | | 160 | **-0,46** | 92,0 | 2,17 | 0,00 | 21,10 |
| K 13 | | | 200 | **-4,61** | 93,0 | 3,11 | 0,00 | 22,80 |
| K 14 | 3 385 | 3 388 | | | | | | |
| K 14 | | | 20 | **37,20** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **33,83** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 14 | | | 32 | **29,70** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 14 | | | 40 | **25,53** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 14 | | | 50 | **21,56** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 14 | | | 63 | **18,53** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 14 | | | 80 | **15,26** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 14 | | | 100 | **11,85** | 89,0 | 0,85 | 3,00 | 16,80 |
| K 14 | | | 125 | **8,21** | 92,0 | 1,29 | 1,80 | 18,80 |
| K 14 | | | 160 | **0,77** | 92,0 | 1,93 | 0,00 | 21,10 |
| K 14 | | | 200 | **-3,28** | 93,0 | 2,78 | 0,00 | 22,80 |
| WTG 01 | 2 659 | 2 665 | | | | | | |
| WTG 01 | | | 20 | **40,79** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **37,43** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **32,91** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **27,95** | 78,3 | 0,13 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **24,00** | 80,3 | 0,19 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **22,29** | 84,6 | 0,29 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **18,76** | 87,3 | 0,43 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **14,02** | 88,9 | 0,67 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **10,07** | 91,5 | 1,01 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **4,77** | 93,5 | 1,52 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **0,90** | 94,5 | 2,19 | 0,00 | 22,80 |
| WTG 02 | 2 021 | 2 029 | | | | | | |
| WTG 02 | | | 20 | **43,16** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **39,82** | 75,2 | 0,04 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **35,29** | 77,1 | 0,06 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **30,35** | 78,3 | 0,10 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **26,41** | 80,3 | 0,14 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **24,73** | 84,6 | 0,22 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **21,23** | 87,3 | 0,32 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **16,55** | 88,9 | 0,51 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **12,68** | 91,5 | 0,77 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **7,50** | 93,5 | 1,16 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 200 | **3,79** | 94,5 | 1,66 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **51,39** | | | | |
| Sum | | | 25 | **48,04** | | | | |
| Sum | | | 32 | **43,82** | | | | |
| Sum | | | 40 | **39,51** | | | | |
| Sum | | | 50 | **35,55** | | | | |
| Sum | | | 63 | **32,83** | | | | |
| Sum | | | 80 | **29,53** | | | | |
| Sum | | | 100 | **25,90** | | | | |
| Sum | | | 125 | **22,29** | | | | |
| Sum | | | 160 | **15,42** | | | | |
| Sum | | | 200 | **11,58** | | | | |

**Noise sensitive area: W Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (151)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 694 | 3 698 | | | | | | |
| K 01 | | | 20 | **36,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **33,07** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 01 | | | 32 | **28,93** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 01 | | | 40 | **24,76** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 01 | | | 50 | **20,78** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 01 | | | 63 | **17,73** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 01 | | | 80 | **14,45** | 86,0 | 0,59 | 3,70 | 14,80 |
| K 01 | | | 100 | **11,02** | 89,0 | 0,92 | 3,00 | 16,80 |
| K 01 | | | 125 | **7,34** | 92,0 | 1,41 | 1,80 | 18,80 |
| K 01 | | | 160 | **-0,17** | 92,0 | 2,11 | 0,00 | 21,10 |
| K 01 | | | 200 | **-4,29** | 93,0 | 3,03 | 0,00 | 22,80 |
| K 02 | 3 207 | 3 211 | | | | | | |
| K 02 | | | 20 | **37,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **34,30** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 02 | | | 32 | **30,17** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 02 | | | 40 | **26,01** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 02 | | | 50 | **22,04** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 02 | | | 63 | **19,01** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 02 | | | 80 | **15,75** | 86,0 | 0,51 | 3,70 | 14,80 |
| K 02 | | | 100 | **12,36** | 89,0 | 0,80 | 3,00 | 16,80 |
| K 02 | | | 125 | **8,75** | 92,0 | 1,22 | 1,80 | 18,80 |
| K 02 | | | 160 | **1,34** | 92,0 | 1,83 | 0,00 | 21,10 |
| K 02 | | | 200 | **-2,67** | 93,0 | 2,63 | 0,00 | 22,80 |
| K 03 | 2 578 | 2 584 | | | | | | |
| K 03 | | | 20 | **39,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **36,20** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 03 | | | 32 | **32,08** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 03 | | | 40 | **27,93** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 03 | | | 50 | **23,97** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 03 | | | 63 | **20,97** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 03 | | | 80 | **17,74** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 03 | | | 100 | **14,41** | 89,0 | 0,65 | 3,00 | 16,80 |
| K 03 | | | 125 | **10,87** | 92,0 | 0,98 | 1,80 | 18,80 |
| K 03 | | | 160 | **3,58** | 92,0 | 1,47 | 0,00 | 21,10 |
| K 03 | | | 200 | **-0,26** | 93,0 | 2,12 | 0,00 | 22,80 |
| K 04 | 2 312 | 2 318 | | | | | | |
| K 04 | | | 20 | **40,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,15** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,03** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **28,88** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 04 | | | 50 | **24,93** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 04 | | | 63 | **21,94** | 83,0 | 0,26 | 4,30 | 13,00 |
| K 04 | | | 80 | **18,73** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,42** | 89,0 | 0,58 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 125 | **11,92** | 92,0 | 0,88 | 1,80 | 18,80 |
| K 04 | | | 160 | **4,68** | 92,0 | 1,32 | 0,00 | 21,10 |
| K 04 | | | 200 | **0,90** | 93,0 | 1,90 | 0,00 | 22,80 |
| K 05 | 1 706 | 1 715 | | | | | | |
| K 05 | | | 20 | **43,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **39,78** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **35,66** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **31,53** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 05 | | | 50 | **27,59** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 05 | | | 63 | **24,63** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 05 | | | 80 | **21,44** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 05 | | | 100 | **18,19** | 89,0 | 0,43 | 3,00 | 16,80 |
| K 05 | | | 125 | **14,76** | 92,0 | 0,65 | 1,80 | 18,80 |
| K 05 | | | 160 | **7,64** | 92,0 | 0,98 | 0,00 | 21,10 |
| K 05 | | | 200 | **4,01** | 93,0 | 1,41 | 0,00 | 22,80 |
| K 06 | 3 968 | 3 971 | | | | | | |
| K 06 | | | 20 | **35,82** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **32,44** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,30** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 06 | | | 40 | **24,12** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,14** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 06 | | | 63 | **17,08** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 06 | | | 80 | **13,79** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,33** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 06 | | | 125 | **6,61** | 92,0 | 1,51 | 1,80 | 18,80 |
| K 06 | | | 160 | **-0,94** | 92,0 | 2,26 | 0,00 | 21,10 |
| K 06 | | | 200 | **-5,14** | 93,0 | 3,26 | 0,00 | 22,80 |
| K 07 | 4 109 | 4 112 | | | | | | |
| K 07 | | | 20 | **35,52** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,14** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,00** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,81** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,83** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,77** | 83,0 | 0,45 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,46** | 86,0 | 0,66 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,99** | 89,0 | 1,03 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,26** | 92,0 | 1,56 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,33** | 92,0 | 2,34 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,55** | 93,0 | 3,37 | 0,00 | 22,80 |
| K 08 | 3 257 | 3 261 | | | | | | |
| K 08 | | | 20 | **37,53** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **34,17** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 08 | | | 32 | **30,03** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 08 | | | 40 | **25,87** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 08 | | | 50 | **21,90** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 08 | | | 63 | **18,87** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 08 | | | 80 | **15,61** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 08 | | | 100 | **12,22** | 89,0 | 0,82 | 3,00 | 16,80 |
| K 08 | | | 125 | **8,59** | 92,0 | 1,24 | 1,80 | 18,80 |
| K 08 | | | 160 | **1,17** | 92,0 | 1,86 | 0,00 | 21,10 |
| K 08 | | | 200 | **-2,84** | 93,0 | 2,67 | 0,00 | 22,80 |
| K 09 | 2 851 | 2 856 | | | | | | |
| K 09 | | | 20 | **38,68** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **35,33** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **31,20** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 09 | | | 40 | **27,04** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 09 | | | 50 | **23,08** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 09 | | | 63 | **20,07** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 09 | | | 80 | **16,83** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 09 | | | 100 | **13,47** | 89,0 | 0,71 | 3,00 | 16,80 |
| K 09 | | | 125 | **9,90** | 92,0 | 1,09 | 1,80 | 18,80 |
| K 09 | | | 160 | **2,56** | 92,0 | 1,63 | 0,00 | 21,10 |
| K 09 | | | 200 | **-1,36** | 93,0 | 2,34 | 0,00 | 22,80 |
| K 10 | 4 817 | 4 820 | | | | | | |

*To be continued on next page...*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 20 | **34,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **30,74** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 10 | | | 32 | **26,59** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 10 | | | 40 | **22,40** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 10 | | | 50 | **18,40** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 10 | | | 63 | **15,31** | 83,0 | 0,53 | 4,30 | 13,00 |
| K 10 | | | 80 | **11,97** | 86,0 | 0,77 | 3,70 | 14,80 |
| K 10 | | | 100 | **8,43** | 89,0 | 1,20 | 3,00 | 16,80 |
| K 10 | | | 125 | **4,61** | 92,0 | 1,83 | 1,80 | 18,80 |
| K 10 | | | 160 | **-3,11** | 92,0 | 2,75 | 0,00 | 21,10 |
| K 10 | | | 200 | **-7,51** | 93,0 | 3,95 | 0,00 | 22,80 |
| K 11 | 5 486 | 5 489 | | | | | | |
| K 11 | | | 20 | **33,01** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **29,60** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 11 | | | 32 | **25,45** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 11 | | | 40 | **21,24** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 11 | | | 50 | **17,23** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 11 | | | 63 | **14,11** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 11 | | | 80 | **10,73** | 86,0 | 0,88 | 3,70 | 14,80 |
| K 11 | | | 100 | **7,14** | 89,0 | 1,37 | 3,00 | 16,80 |
| K 11 | | | 125 | **3,22** | 92,0 | 2,09 | 1,80 | 18,80 |
| K 11 | | | 160 | **-4,62** | 92,0 | 3,13 | 0,00 | 21,10 |
| K 11 | | | 200 | **-9,19** | 93,0 | 4,50 | 0,00 | 22,80 |
| K 12 | 6 054 | 6 056 | | | | | | |
| K 12 | | | 20 | **32,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **28,74** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 12 | | | 32 | **24,57** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 12 | | | 40 | **20,35** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 12 | | | 50 | **16,33** | 80,0 | 0,42 | 4,70 | 11,50 |
| K 12 | | | 63 | **13,19** | 83,0 | 0,67 | 4,30 | 13,00 |
| K 12 | | | 80 | **9,79** | 86,0 | 0,97 | 3,70 | 14,80 |
| K 12 | | | 100 | **6,14** | 89,0 | 1,51 | 3,00 | 16,80 |
| K 12 | | | 125 | **2,16** | 92,0 | 2,30 | 1,80 | 18,80 |
| K 12 | | | 160 | **-5,80** | 92,0 | 3,45 | 0,00 | 21,10 |
| K 12 | | | 200 | **-10,51** | 93,0 | 4,97 | 0,00 | 22,80 |
| K 13 | 5 245 | 5 248 | | | | | | |
| K 13 | | | 20 | **33,40** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **30,00** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 13 | | | 32 | **25,84** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 13 | | | 40 | **21,64** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 13 | | | 50 | **17,63** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 13 | | | 63 | **14,52** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 13 | | | 80 | **11,16** | 86,0 | 0,84 | 3,70 | 14,80 |
| K 13 | | | 100 | **7,59** | 89,0 | 1,31 | 3,00 | 16,80 |
| K 13 | | | 125 | **3,71** | 92,0 | 1,99 | 1,80 | 18,80 |
| K 13 | | | 160 | **-4,09** | 92,0 | 2,99 | 0,00 | 21,10 |
| K 13 | | | 200 | **-8,60** | 93,0 | 4,30 | 0,00 | 22,80 |
| K 14 | 4 563 | 4 567 | | | | | | |
| K 14 | | | 20 | **34,61** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **31,22** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 14 | | | 32 | **27,07** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 14 | | | 40 | **22,88** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 14 | | | 50 | **18,89** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 14 | | | 63 | **15,81** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 14 | | | 80 | **12,48** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 14 | | | 100 | **8,97** | 89,0 | 1,14 | 3,00 | 16,80 |
| K 14 | | | 125 | **5,17** | 92,0 | 1,74 | 1,80 | 18,80 |
| K 14 | | | 160 | **-2,49** | 92,0 | 2,60 | 0,00 | 21,10 |
| K 14 | | | 200 | **-6,84** | 93,0 | 3,74 | 0,00 | 22,80 |
| WTG 01 | 1 500 | 1 513 | | | | | | |
| WTG 01 | | | 20 | **45,70** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **42,37** | 75,2 | 0,03 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **37,86** | 77,1 | 0,05 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **32,93** | 78,3 | 0,08 | 5,00 | 10,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 01 | | | 50 | **29,00** | 80,3 | 0,11 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **27,34** | 84,6 | 0,17 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **23,86** | 87,3 | 0,24 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **19,23** | 88,9 | 0,38 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **15,43** | 91,5 | 0,57 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **10,34** | 93,5 | 0,86 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **6,76** | 94,5 | 1,24 | 0,00 | 22,80 |
| WTG 02 | 2 194 | 2 202 | | | | | | |
| WTG 02 | | | 20 | **42,44** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **39,10** | 75,2 | 0,04 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **34,58** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **29,63** | 78,3 | 0,11 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **25,69** | 80,3 | 0,15 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **24,00** | 84,6 | 0,24 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **20,49** | 87,3 | 0,35 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **15,79** | 88,9 | 0,55 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **11,91** | 91,5 | 0,84 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **6,69** | 93,5 | 1,26 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **2,94** | 94,5 | 1,81 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **51,38** | | | | |
| Sum | | | 25 | **48,03** | | | | |
| Sum | | | 32 | **43,75** | | | | |
| Sum | | | 40 | **39,32** | | | | |
| Sum | | | 50 | **35,36** | | | | |
| Sum | | | 63 | **32,85** | | | | |
| Sum | | | 80 | **29,51** | | | | |
| Sum | | | 100 | **25,67** | | | | |
| Sum | | | 125 | **22,02** | | | | |
| Sum | | | 160 | **15,51** | | | | |
| Sum | | | 200 | **11,73** | | | | |

**Noise sensitive area: X Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (150)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 553 | 3 557 | | | | | | |
| K 01 | | | 20 | **36,78** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **33,41** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 01 | | | 32 | **29,27** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 01 | | | 40 | **25,10** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 01 | | | 50 | **21,13** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 01 | | | 63 | **18,09** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 01 | | | 80 | **14,81** | 86,0 | 0,57 | 3,70 | 14,80 |
| K 01 | | | 100 | **11,39** | 89,0 | 0,89 | 3,00 | 16,80 |
| K 01 | | | 125 | **7,73** | 92,0 | 1,35 | 1,80 | 18,80 |
| K 01 | | | 160 | **0,25** | 92,0 | 2,03 | 0,00 | 21,10 |
| K 01 | | | 200 | **-3,84** | 93,0 | 2,92 | 0,00 | 22,80 |
| K 02 | 3 109 | 3 114 | | | | | | |
| K 02 | | | 20 | **37,93** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **34,57** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 02 | | | 32 | **30,44** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 02 | | | 40 | **26,28** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 02 | | | 50 | **22,31** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 02 | | | 63 | **19,29** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 02 | | | 80 | **16,03** | 86,0 | 0,50 | 3,70 | 14,80 |
| K 02 | | | 100 | **12,65** | 89,0 | 0,78 | 3,00 | 16,80 |
| K 02 | | | 125 | **9,05** | 92,0 | 1,18 | 1,80 | 18,80 |
| K 02 | | | 160 | **1,66** | 92,0 | 1,78 | 0,00 | 21,10 |
| K 02 | | | 200 | **-2,32** | 93,0 | 2,55 | 0,00 | 22,80 |
| K 03 | 2 504 | 2 510 | | | | | | |
| K 03 | | | 20 | **39,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **36,46** | 73,7 | 0,05 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 03 | | | 32 | **32,33** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 03 | | | 40 | **28,18** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 03 | | | 50 | **24,23** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 03 | | | 63 | **21,23** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 03 | | | 80 | **18,01** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 03 | | | 100 | **14,68** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 03 | | | 125 | **11,15** | 92,0 | 0,95 | 1,80 | 18,80 |
| K 03 | | | 160 | **3,88** | 92,0 | 1,43 | 0,00 | 21,10 |
| K 03 | | | 200 | **0,05** | 93,0 | 2,06 | 0,00 | 22,80 |
| K 04 | 2 406 | 2 412 | | | | | | |
| K 04 | | | 20 | **40,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **36,80** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **32,68** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **28,53** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 04 | | | 50 | **24,58** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 04 | | | 63 | **21,59** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 04 | | | 80 | **18,37** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,05** | 89,0 | 0,60 | 3,00 | 16,80 |
| K 04 | | | 125 | **11,54** | 92,0 | 0,92 | 1,80 | 18,80 |
| K 04 | | | 160 | **4,28** | 92,0 | 1,37 | 0,00 | 21,10 |
| K 04 | | | 200 | **0,47** | 93,0 | 1,98 | 0,00 | 22,80 |
| K 05 | 1 710 | 1 718 | | | | | | |
| K 05 | | | 20 | **43,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **39,76** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **35,65** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **31,51** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 05 | | | 50 | **27,58** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 05 | | | 63 | **24,61** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 05 | | | 80 | **21,42** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 05 | | | 100 | **18,17** | 89,0 | 0,43 | 3,00 | 16,80 |
| K 05 | | | 125 | **14,75** | 92,0 | 0,65 | 1,80 | 18,80 |
| K 05 | | | 160 | **7,62** | 92,0 | 0,98 | 0,00 | 21,10 |
| K 05 | | | 200 | **3,99** | 93,0 | 1,41 | 0,00 | 22,80 |
| K 06 | 3 942 | 3 945 | | | | | | |
| K 06 | | | 20 | **35,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **32,50** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,36** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 06 | | | 40 | **24,18** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,20** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 06 | | | 63 | **17,14** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 06 | | | 80 | **13,85** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,39** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 06 | | | 125 | **6,68** | 92,0 | 1,50 | 1,80 | 18,80 |
| K 06 | | | 160 | **-0,87** | 92,0 | 2,25 | 0,00 | 21,10 |
| K 06 | | | 200 | **-5,06** | 93,0 | 3,24 | 0,00 | 22,80 |
| K 07 | 4 159 | 4 163 | | | | | | |
| K 07 | | | 20 | **35,41** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,03** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **27,89** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,70** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,72** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,65** | 83,0 | 0,46 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,35** | 86,0 | 0,67 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,87** | 89,0 | 1,04 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,13** | 92,0 | 1,58 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,46** | 92,0 | 2,37 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,70** | 93,0 | 3,41 | 0,00 | 22,80 |
| K 08 | 3 283 | 3 288 | | | | | | |
| K 08 | | | 20 | **37,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **34,10** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 08 | | | 32 | **29,96** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 08 | | | 40 | **25,80** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 08 | | | 50 | **21,83** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 08 | | | 63 | **18,80** | 83,0 | 0,36 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 80 | **15,54** | 86,0 | 0,53 | 3,70 | 14,80 |
| K 08 | | | 100 | **12,14** | 89,0 | 0,82 | 3,00 | 16,80 |
| K 08 | | | 125 | **8,51** | 92,0 | 1,25 | 1,80 | 18,80 |
| K 08 | | | 160 | **1,09** | 92,0 | 1,87 | 0,00 | 21,10 |
| K 08 | | | 200 | **-2,93** | 93,0 | 2,70 | 0,00 | 22,80 |
| K 09 | 2 920 | 2 925 | | | | | | |
| K 09 | | | 20 | **38,48** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **35,12** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **30,99** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 09 | | | 40 | **26,83** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 09 | | | 50 | **22,87** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 09 | | | 63 | **19,85** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 09 | | | 80 | **16,61** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 09 | | | 100 | **13,25** | 89,0 | 0,73 | 3,00 | 16,80 |
| K 09 | | | 125 | **9,66** | 92,0 | 1,11 | 1,80 | 18,80 |
| K 09 | | | 160 | **2,31** | 92,0 | 1,67 | 0,00 | 21,10 |
| K 09 | | | 200 | **-1,62** | 93,0 | 2,40 | 0,00 | 22,80 |
| K 10 | 4 614 | 4 618 | | | | | | |
| K 10 | | | 20 | **34,51** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **31,12** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 10 | | | 32 | **26,97** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 10 | | | 40 | **22,78** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 10 | | | 50 | **18,79** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 10 | | | 63 | **15,70** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 10 | | | 80 | **12,37** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 10 | | | 100 | **8,86** | 89,0 | 1,15 | 3,00 | 16,80 |
| K 10 | | | 125 | **5,06** | 92,0 | 1,75 | 1,80 | 18,80 |
| K 10 | | | 160 | **-2,62** | 92,0 | 2,63 | 0,00 | 21,10 |
| K 10 | | | 200 | **-6,97** | 93,0 | 3,79 | 0,00 | 22,80 |
| K 11 | 5 284 | 5 287 | | | | | | |
| K 11 | | | 20 | **33,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **29,93** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 11 | | | 32 | **25,78** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 11 | | | 40 | **21,57** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 11 | | | 50 | **17,57** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 11 | | | 63 | **14,45** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 11 | | | 80 | **11,09** | 86,0 | 0,85 | 3,70 | 14,80 |
| K 11 | | | 100 | **7,51** | 89,0 | 1,32 | 3,00 | 16,80 |
| K 11 | | | 125 | **3,63** | 92,0 | 2,01 | 1,80 | 18,80 |
| K 11 | | | 160 | **-4,18** | 92,0 | 3,01 | 0,00 | 21,10 |
| K 11 | | | 200 | **-8,70** | 93,0 | 4,34 | 0,00 | 22,80 |
| K 12 | 5 900 | 5 902 | | | | | | |
| K 12 | | | 20 | **32,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **28,96** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 12 | | | 32 | **24,80** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 12 | | | 40 | **20,58** | 78,0 | 0,30 | 5,00 | 10,30 |
| K 12 | | | 50 | **16,57** | 80,0 | 0,41 | 4,70 | 11,50 |
| K 12 | | | 63 | **13,43** | 83,0 | 0,65 | 4,30 | 13,00 |
| K 12 | | | 80 | **10,03** | 86,0 | 0,94 | 3,70 | 14,80 |
| K 12 | | | 100 | **6,40** | 89,0 | 1,48 | 3,00 | 16,80 |
| K 12 | | | 125 | **2,44** | 92,0 | 2,24 | 1,80 | 18,80 |
| K 12 | | | 160 | **-5,49** | 92,0 | 3,36 | 0,00 | 21,10 |
| K 12 | | | 200 | **-10,16** | 93,0 | 4,84 | 0,00 | 22,80 |
| K 13 | 5 131 | 5 134 | | | | | | |
| K 13 | | | 20 | **33,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **30,19** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 13 | | | 32 | **26,04** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 13 | | | 40 | **21,83** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 13 | | | 50 | **17,83** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 13 | | | 63 | **14,73** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 13 | | | 80 | **11,37** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 13 | | | 100 | **7,81** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 13 | | | 125 | **3,94** | 92,0 | 1,95 | 1,80 | 18,80 |
| K 13 | | | 160 | **-3,84** | 92,0 | 2,93 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 200 | **-8,32** | 93,0 | 4,21 | 0,00 | 22,80 |
| K 14 | 4 457 | 4 460 | | | | | | |
| K 14 | | | 20 | **34,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **31,42** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 14 | | | 32 | **27,28** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 14 | | | 40 | **23,09** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 14 | | | 50 | **19,10** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 14 | | | 63 | **16,02** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 14 | | | 80 | **12,70** | 86,0 | 0,71 | 3,70 | 14,80 |
| K 14 | | | 100 | **9,20** | 89,0 | 1,12 | 3,00 | 16,80 |
| K 14 | | | 125 | **5,42** | 92,0 | 1,69 | 1,80 | 18,80 |
| K 14 | | | 160 | **-2,23** | 92,0 | 2,54 | 0,00 | 21,10 |
| K 14 | | | 200 | **-6,54** | 93,0 | 3,66 | 0,00 | 22,80 |
| WTG 01 | 1 864 | 1 874 | | | | | | |
| WTG 01 | | | 20 | **43,85** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **40,51** | 75,2 | 0,04 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **35,99** | 77,1 | 0,06 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **31,05** | 78,3 | 0,09 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **27,12** | 80,3 | 0,13 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **25,44** | 84,6 | 0,21 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **21,95** | 87,3 | 0,30 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **17,28** | 88,9 | 0,47 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **13,43** | 91,5 | 0,71 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **8,28** | 93,5 | 1,07 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **4,61** | 94,5 | 1,54 | 0,00 | 22,80 |
| WTG 02 | 2 419 | 2 427 | | | | | | |
| WTG 02 | | | 20 | **41,60** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **38,25** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,73** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,78** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,83** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **23,13** | 84,6 | 0,27 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,61** | 87,3 | 0,39 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,89** | 88,9 | 0,61 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,98** | 91,5 | 0,92 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,72** | 93,5 | 1,38 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,91** | 94,5 | 1,99 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **50,86** | | | | |
| Sum | | | 25 | **47,51** | | | | |
| Sum | | | 32 | **43,26** | | | | |
| Sum | | | 40 | **38,88** | | | | |
| Sum | | | 50 | **34,93** | | | | |
| Sum | | | 63 | **32,30** | | | | |
| Sum | | | 80 | **28,97** | | | | |
| Sum | | | 100 | **25,23** | | | | |
| Sum | | | 125 | **21,58** | | | | |
| Sum | | | 160 | **14,86** | | | | |
| Sum | | | 200 | **11,02** | | | | |

**Noise sensitive area: Y Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (149)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 224 | 3 228 | | | | | | |
| K 01 | | | 20 | **37,62** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **34,26** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 01 | | | 32 | **30,12** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 01 | | | 40 | **25,96** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 01 | | | 50 | **21,99** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 01 | | | 63 | **18,96** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 01 | | | 80 | **15,70** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 01 | | | 100 | **12,31** | 89,0 | 0,81 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | | | 125 | **8,69** | 92,0 | 1,23 | 1,80 | 18,80 |
| K 01 | | | 160 | **1,28** | 92,0 | 1,84 | 0,00 | 21,10 |
| K 01 | | | 200 | **-2,73** | 93,0 | 2,65 | 0,00 | 22,80 |
| K 02 | 2 816 | 2 821 | | | | | | |
| K 02 | | | 20 | **38,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **35,44** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 02 | | | 32 | **31,31** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 02 | | | 40 | **27,15** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 02 | | | 50 | **23,19** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 02 | | | 63 | **20,18** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 02 | | | 80 | **16,94** | 86,0 | 0,45 | 3,70 | 14,80 |
| K 02 | | | 100 | **13,59** | 89,0 | 0,71 | 3,00 | 16,80 |
| K 02 | | | 125 | **10,02** | 92,0 | 1,07 | 1,80 | 18,80 |
| K 02 | | | 160 | **2,68** | 92,0 | 1,61 | 0,00 | 21,10 |
| K 02 | | | 200 | **-1,22** | 93,0 | 2,31 | 0,00 | 22,80 |
| K 03 | 2 240 | 2 246 | | | | | | |
| K 03 | | | 20 | **40,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **37,43** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 03 | | | 32 | **33,30** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 03 | | | 40 | **29,16** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 03 | | | 50 | **25,21** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 03 | | | 63 | **22,22** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 03 | | | 80 | **19,01** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 03 | | | 100 | **15,71** | 89,0 | 0,56 | 3,00 | 16,80 |
| K 03 | | | 125 | **12,22** | 92,0 | 0,85 | 1,80 | 18,80 |
| K 03 | | | 160 | **4,99** | 92,0 | 1,28 | 0,00 | 21,10 |
| K 03 | | | 200 | **1,23** | 93,0 | 1,84 | 0,00 | 22,80 |
| K 04 | 2 280 | 2 286 | | | | | | |
| K 04 | | | 20 | **40,62** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,27** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,15** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,00** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,06** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,07** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 04 | | | 80 | **18,85** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,55** | 89,0 | 0,57 | 3,00 | 16,80 |
| K 04 | | | 125 | **12,05** | 92,0 | 0,87 | 1,80 | 18,80 |
| K 04 | | | 160 | **4,81** | 92,0 | 1,30 | 0,00 | 21,10 |
| K 04 | | | 200 | **1,04** | 93,0 | 1,87 | 0,00 | 22,80 |
| K 05 | 1 543 | 1 552 | | | | | | |
| K 05 | | | 20 | **43,98** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **40,65** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **36,54** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **32,40** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 05 | | | 50 | **28,47** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 05 | | | 63 | **25,51** | 83,0 | 0,17 | 4,30 | 13,00 |
| K 05 | | | 80 | **22,33** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 05 | | | 100 | **19,09** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 05 | | | 125 | **15,69** | 92,0 | 0,59 | 1,80 | 18,80 |
| K 05 | | | 160 | **8,60** | 92,0 | 0,88 | 0,00 | 21,10 |
| K 05 | | | 200 | **5,01** | 93,0 | 1,27 | 0,00 | 22,80 |
| K 06 | 3 689 | 3 693 | | | | | | |
| K 06 | | | 20 | **36,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **33,08** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,94** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 06 | | | 40 | **24,77** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,79** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 06 | | | 63 | **17,75** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 06 | | | 80 | **14,46** | 86,0 | 0,59 | 3,70 | 14,80 |
| K 06 | | | 100 | **11,03** | 89,0 | 0,92 | 3,00 | 16,80 |
| K 06 | | | 125 | **7,35** | 92,0 | 1,40 | 1,80 | 18,80 |
| K 06 | | | 160 | **-0,15** | 92,0 | 2,10 | 0,00 | 21,10 |
| K 06 | | | 200 | **-4,27** | 93,0 | 3,03 | 0,00 | 22,80 |
| K 07 | 3 962 | 3 966 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 20 | **35,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,45** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,31** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,14** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,16** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 07 | | | 63 | **17,10** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,80** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 07 | | | 100 | **10,34** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,63** | 92,0 | 1,51 | 1,80 | 18,80 |
| K 07 | | | 160 | **-0,93** | 92,0 | 2,26 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,12** | 93,0 | 3,25 | 0,00 | 22,80 |
| K 08 | 3 080 | 3 084 | | | | | | |
| K 08 | | | 20 | **38,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **34,65** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 08 | | | 32 | **30,52** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 08 | | | 40 | **26,36** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 08 | | | 50 | **22,40** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 08 | | | 63 | **19,38** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 08 | | | 80 | **16,12** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 08 | | | 100 | **12,75** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 08 | | | 125 | **9,14** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 08 | | | 160 | **1,76** | 92,0 | 1,76 | 0,00 | 21,10 |
| K 08 | | | 200 | **-2,21** | 93,0 | 2,53 | 0,00 | 22,80 |
| K 09 | 2 758 | 2 764 | | | | | | |
| K 09 | | | 20 | **38,97** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **35,62** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **31,49** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 09 | | | 40 | **27,33** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 09 | | | 50 | **23,38** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 09 | | | 63 | **20,37** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 09 | | | 80 | **17,13** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 09 | | | 100 | **13,78** | 89,0 | 0,69 | 3,00 | 16,80 |
| K 09 | | | 125 | **10,22** | 92,0 | 1,05 | 1,80 | 18,80 |
| K 09 | | | 160 | **2,90** | 92,0 | 1,58 | 0,00 | 21,10 |
| K 09 | | | 200 | **-1,00** | 93,0 | 2,27 | 0,00 | 22,80 |
| K 10 | 4 242 | 4 245 | | | | | | |
| K 10 | | | 20 | **35,24** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **31,86** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 10 | | | 32 | **27,71** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 10 | | | 40 | **23,53** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 10 | | | 50 | **19,54** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 10 | | | 63 | **16,47** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 10 | | | 80 | **13,16** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 10 | | | 100 | **9,68** | 89,0 | 1,06 | 3,00 | 16,80 |
| K 10 | | | 125 | **5,93** | 92,0 | 1,61 | 1,80 | 18,80 |
| K 10 | | | 160 | **-1,68** | 92,0 | 2,42 | 0,00 | 21,10 |
| K 10 | | | 200 | **-5,94** | 93,0 | 3,48 | 0,00 | 22,80 |
| K 11 | 4 909 | 4 912 | | | | | | |
| K 11 | | | 20 | **33,98** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **30,58** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 11 | | | 32 | **26,43** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 11 | | | 40 | **22,23** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 11 | | | 50 | **18,23** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 11 | | | 63 | **15,13** | 83,0 | 0,54 | 4,30 | 13,00 |
| K 11 | | | 80 | **11,79** | 86,0 | 0,79 | 3,70 | 14,80 |
| K 11 | | | 100 | **8,25** | 89,0 | 1,23 | 3,00 | 16,80 |
| K 11 | | | 125 | **4,41** | 92,0 | 1,87 | 1,80 | 18,80 |
| K 11 | | | 160 | **-3,32** | 92,0 | 2,80 | 0,00 | 21,10 |
| K 11 | | | 200 | **-7,75** | 93,0 | 4,03 | 0,00 | 22,80 |
| K 12 | 5 550 | 5 553 | | | | | | |
| K 12 | | | 20 | **32,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **29,50** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 12 | | | 32 | **25,34** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 12 | | | 40 | **21,13** | 78,0 | 0,28 | 5,00 | 10,30 |

*To be continued on next page...*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 12 | | | 50 | **17,12** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 12 | | | 63 | **14,00** | 83,0 | 0,61 | 4,30 | 13,00 |
| K 12 | | | 80 | **10,62** | 86,0 | 0,89 | 3,70 | 14,80 |
| K 12 | | | 100 | **7,02** | 89,0 | 1,39 | 3,00 | 16,80 |
| K 12 | | | 125 | **3,10** | 92,0 | 2,11 | 1,80 | 18,80 |
| K 12 | | | 160 | **-4,76** | 92,0 | 3,17 | 0,00 | 21,10 |
| K 12 | | | 200 | **-9,34** | 93,0 | 4,55 | 0,00 | 22,80 |
| K 13 | 4 809 | 4 812 | | | | | | |
| K 13 | | | 20 | **34,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **30,76** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 13 | | | 32 | **26,61** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 13 | | | 40 | **22,41** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 13 | | | 50 | **18,42** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 13 | | | 63 | **15,32** | 83,0 | 0,53 | 4,30 | 13,00 |
| K 13 | | | 80 | **11,98** | 86,0 | 0,77 | 3,70 | 14,80 |
| K 13 | | | 100 | **8,45** | 89,0 | 1,20 | 3,00 | 16,80 |
| K 13 | | | 125 | **4,62** | 92,0 | 1,83 | 1,80 | 18,80 |
| K 13 | | | 160 | **-3,09** | 92,0 | 2,74 | 0,00 | 21,10 |
| K 13 | | | 200 | **-7,49** | 93,0 | 3,95 | 0,00 | 22,80 |
| K 14 | 4 143 | 4 147 | | | | | | |
| K 14 | | | 20 | **35,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **32,06** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 14 | | | 32 | **27,92** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 14 | | | 40 | **23,74** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 14 | | | 50 | **19,76** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 14 | | | 63 | **16,69** | 83,0 | 0,46 | 4,30 | 13,00 |
| K 14 | | | 80 | **13,38** | 86,0 | 0,66 | 3,70 | 14,80 |
| K 14 | | | 100 | **9,91** | 89,0 | 1,04 | 3,00 | 16,80 |
| K 14 | | | 125 | **6,17** | 92,0 | 1,58 | 1,80 | 18,80 |
| K 14 | | | 160 | **-1,42** | 92,0 | 2,36 | 0,00 | 21,10 |
| K 14 | | | 200 | **-5,65** | 93,0 | 3,40 | 0,00 | 22,80 |
| WTG 01 | 2 007 | 2 016 | | | | | | |
| WTG 01 | | | 20 | **43,21** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **39,87** | 75,2 | 0,04 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **35,35** | 77,1 | 0,06 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **30,41** | 78,3 | 0,10 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **26,47** | 80,3 | 0,14 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **24,79** | 84,6 | 0,22 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **21,29** | 87,3 | 0,32 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **16,61** | 88,9 | 0,50 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **12,74** | 91,5 | 0,77 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **7,56** | 93,5 | 1,15 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **3,86** | 94,5 | 1,65 | 0,00 | 22,80 |
| WTG 02 | 2 409 | 2 416 | | | | | | |
| WTG 02 | | | 20 | **41,64** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **38,29** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,76** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,82** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,87** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **23,17** | 84,6 | 0,27 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,65** | 87,3 | 0,39 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,93** | 88,9 | 0,60 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **11,02** | 91,5 | 0,92 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,76** | 93,5 | 1,38 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,96** | 94,5 | 1,98 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **51,26** | | | | |
| Sum | | | 25 | **47,91** | | | | |
| Sum | | | 32 | **43,68** | | | | |
| Sum | | | 40 | **39,34** | | | | |
| Sum | | | 50 | **35,39** | | | | |
| Sum | | | 63 | **32,71** | | | | |
| Sum | | | 80 | **29,40** | | | | |
| Sum | | | 100 | **25,74** | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| Sum | | | 125 | **22,13** | | | | |
| Sum | | | 160 | **15,32** | | | | |
| Sum | | | 200 | **11,50** | | | | |

**Noise sensitive area: Z Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (148)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 011 | 3 015 | | | | | | |
| K 01 | | | 20 | **38,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **34,85** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 01 | | | 32 | **30,72** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 01 | | | 40 | **26,56** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 01 | | | 50 | **22,60** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 01 | | | 63 | **19,58** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 01 | | | 80 | **16,33** | 86,0 | 0,48 | 3,70 | 14,80 |
| K 01 | | | 100 | **12,96** | 89,0 | 0,75 | 3,00 | 16,80 |
| K 01 | | | 125 | **9,37** | 92,0 | 1,15 | 1,80 | 18,80 |
| K 01 | | | 160 | **2,00** | 92,0 | 1,72 | 0,00 | 21,10 |
| K 01 | | | 200 | **-1,96** | 93,0 | 2,47 | 0,00 | 22,80 |
| K 02 | 2 644 | 2 649 | | | | | | |
| K 02 | | | 20 | **39,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **35,98** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 02 | | | 32 | **31,86** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 02 | | | 40 | **27,70** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 02 | | | 50 | **23,75** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 02 | | | 63 | **20,75** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 02 | | | 80 | **17,51** | 86,0 | 0,42 | 3,70 | 14,80 |
| K 02 | | | 100 | **14,17** | 89,0 | 0,66 | 3,00 | 16,80 |
| K 02 | | | 125 | **10,63** | 92,0 | 1,01 | 1,80 | 18,80 |
| K 02 | | | 160 | **3,33** | 92,0 | 1,51 | 0,00 | 21,10 |
| K 02 | | | 200 | **-0,54** | 93,0 | 2,17 | 0,00 | 22,80 |
| K 03 | 2 109 | 2 116 | | | | | | |
| K 03 | | | 20 | **41,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **37,95** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 03 | | | 32 | **33,83** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 03 | | | 40 | **29,68** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 03 | | | 50 | **25,74** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 03 | | | 63 | **22,76** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 03 | | | 80 | **19,55** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 03 | | | 100 | **16,26** | 89,0 | 0,53 | 3,00 | 16,80 |
| K 03 | | | 125 | **12,79** | 92,0 | 0,80 | 1,80 | 18,80 |
| K 03 | | | 160 | **5,58** | 92,0 | 1,21 | 0,00 | 21,10 |
| K 03 | | | 200 | **1,86** | 93,0 | 1,73 | 0,00 | 22,80 |
| K 04 | 2 280 | 2 286 | | | | | | |
| K 04 | | | 20 | **40,62** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,27** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,15** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,00** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,06** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,07** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 04 | | | 80 | **18,85** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,55** | 89,0 | 0,57 | 3,00 | 16,80 |
| K 04 | | | 125 | **12,05** | 92,0 | 0,87 | 1,80 | 18,80 |
| K 04 | | | 160 | **4,82** | 92,0 | 1,30 | 0,00 | 21,10 |
| K 04 | | | 200 | **1,04** | 93,0 | 1,87 | 0,00 | 22,80 |
| K 05 | 1 535 | 1 544 | | | | | | |
| K 05 | | | 20 | **44,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **40,69** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **36,58** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **32,45** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 05 | | | 50 | **28,52** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 05 | | | 63 | **25,56** | 83,0 | 0,17 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 80 | **22,38** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 05 | | | 100 | **19,14** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 05 | | | 125 | **15,74** | 92,0 | 0,59 | 1,80 | 18,80 |
| K 05 | | | 160 | **8,65** | 92,0 | 0,88 | 0,00 | 21,10 |
| K 05 | | | 200 | **5,06** | 93,0 | 1,27 | 0,00 | 22,80 |
| K 06 | 3 548 | 3 552 | | | | | | |
| K 06 | | | 20 | **36,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **33,42** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 06 | | | 32 | **29,28** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 06 | | | 40 | **25,11** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 06 | | | 50 | **21,14** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 06 | | | 63 | **18,10** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 06 | | | 80 | **14,82** | 86,0 | 0,57 | 3,70 | 14,80 |
| K 06 | | | 100 | **11,40** | 89,0 | 0,89 | 3,00 | 16,80 |
| K 06 | | | 125 | **7,74** | 92,0 | 1,35 | 1,80 | 18,80 |
| K 06 | | | 160 | **0,27** | 92,0 | 2,02 | 0,00 | 21,10 |
| K 06 | | | 200 | **-3,82** | 93,0 | 2,91 | 0,00 | 22,80 |
| K 07 | 3 872 | 3 875 | | | | | | |
| K 07 | | | 20 | **36,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,66** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,52** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,34** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,36** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 07 | | | 63 | **17,31** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 07 | | | 80 | **14,01** | 86,0 | 0,62 | 3,70 | 14,80 |
| K 07 | | | 100 | **10,56** | 89,0 | 0,97 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,86** | 92,0 | 1,47 | 1,80 | 18,80 |
| K 07 | | | 160 | **-0,68** | 92,0 | 2,21 | 0,00 | 21,10 |
| K 07 | | | 200 | **-4,84** | 93,0 | 3,18 | 0,00 | 22,80 |
| K 08 | 2 993 | 2 998 | | | | | | |
| K 08 | | | 20 | **38,26** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **34,90** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 08 | | | 32 | **30,77** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 08 | | | 40 | **26,61** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 08 | | | 50 | **22,65** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 08 | | | 63 | **19,63** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 08 | | | 80 | **16,38** | 86,0 | 0,48 | 3,70 | 14,80 |
| K 08 | | | 100 | **13,01** | 89,0 | 0,75 | 3,00 | 16,80 |
| K 08 | | | 125 | **9,43** | 92,0 | 1,14 | 1,80 | 18,80 |
| K 08 | | | 160 | **2,06** | 92,0 | 1,71 | 0,00 | 21,10 |
| K 08 | | | 200 | **-1,89** | 93,0 | 2,46 | 0,00 | 22,80 |
| K 09 | 2 715 | 2 720 | | | | | | |
| K 09 | | | 20 | **39,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **35,75** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 09 | | | 32 | **31,63** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 09 | | | 40 | **27,47** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 09 | | | 50 | **23,52** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 09 | | | 63 | **20,51** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 09 | | | 80 | **17,27** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 09 | | | 100 | **13,93** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 09 | | | 125 | **10,37** | 92,0 | 1,03 | 1,80 | 18,80 |
| K 09 | | | 160 | **3,06** | 92,0 | 1,55 | 0,00 | 21,10 |
| K 09 | | | 200 | **-0,82** | 93,0 | 2,23 | 0,00 | 22,80 |
| K 10 | 3 975 | 3 979 | | | | | | |
| K 10 | | | 20 | **35,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **32,43** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 10 | | | 32 | **28,29** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 10 | | | 40 | **24,11** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 10 | | | 50 | **20,13** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 10 | | | 63 | **17,07** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 10 | | | 80 | **13,77** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 10 | | | 100 | **10,31** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 10 | | | 125 | **6,59** | 92,0 | 1,51 | 1,80 | 18,80 |
| K 10 | | | 160 | **-0,96** | 92,0 | 2,27 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 200 | **-5,16** | 93,0 | 3,26 | 0,00 | 22,80 |
| K 11 | 4 637 | 4 640 | | | | | | |
| K 11 | | | 20 | **34,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **31,08** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 11 | | | 32 | **26,93** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 11 | | | 40 | **22,74** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 11 | | | 50 | **18,74** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 11 | | | 63 | **15,66** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 11 | | | 80 | **12,33** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 11 | | | 100 | **8,81** | 89,0 | 1,16 | 3,00 | 16,80 |
| K 11 | | | 125 | **5,01** | 92,0 | 1,76 | 1,80 | 18,80 |
| K 11 | | | 160 | **-2,68** | 92,0 | 2,65 | 0,00 | 21,10 |
| K 11 | | | 200 | **-7,04** | 93,0 | 3,81 | 0,00 | 22,80 |
| K 12 | 5 304 | 5 307 | | | | | | |
| K 12 | | | 20 | **33,30** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **29,90** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 12 | | | 32 | **25,74** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 12 | | | 40 | **21,54** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 12 | | | 50 | **17,53** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 12 | | | 63 | **14,42** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 12 | | | 80 | **11,05** | 86,0 | 0,85 | 3,70 | 14,80 |
| K 12 | | | 100 | **7,48** | 89,0 | 1,33 | 3,00 | 16,80 |
| K 12 | | | 125 | **3,59** | 92,0 | 2,02 | 1,80 | 18,80 |
| K 12 | | | 160 | **-4,22** | 92,0 | 3,02 | 0,00 | 21,10 |
| K 12 | | | 200 | **-8,75** | 93,0 | 4,35 | 0,00 | 22,80 |
| K 13 | 4 593 | 4 596 | | | | | | |
| K 13 | | | 20 | **34,55** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **31,16** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 13 | | | 32 | **27,01** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 13 | | | 40 | **22,82** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 13 | | | 50 | **18,83** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 13 | | | 63 | **15,75** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 13 | | | 80 | **12,42** | 86,0 | 0,74 | 3,70 | 14,80 |
| K 13 | | | 100 | **8,90** | 89,0 | 1,15 | 3,00 | 16,80 |
| K 13 | | | 125 | **5,11** | 92,0 | 1,75 | 1,80 | 18,80 |
| K 13 | | | 160 | **-2,57** | 92,0 | 2,62 | 0,00 | 21,10 |
| K 13 | | | 200 | **-6,92** | 93,0 | 3,77 | 0,00 | 22,80 |
| K 14 | 3 939 | 3 943 | | | | | | |
| K 14 | | | 20 | **35,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **32,51** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 14 | | | 32 | **28,37** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 14 | | | 40 | **24,19** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 14 | | | 50 | **20,21** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 14 | | | 63 | **17,15** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 14 | | | 80 | **13,85** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 14 | | | 100 | **10,40** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 14 | | | 125 | **6,69** | 92,0 | 1,50 | 1,80 | 18,80 |
| K 14 | | | 160 | **-0,86** | 92,0 | 2,25 | 0,00 | 21,10 |
| K 14 | | | 200 | **-5,05** | 93,0 | 3,23 | 0,00 | 22,80 |
| WTG 01 | 2 220 | 2 228 | | | | | | |
| WTG 01 | | | 20 | **42,34** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **39,00** | 75,2 | 0,04 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **34,48** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **29,53** | 78,3 | 0,11 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **25,59** | 80,3 | 0,16 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **23,90** | 84,6 | 0,25 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **20,39** | 87,3 | 0,36 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **15,69** | 88,9 | 0,56 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **11,80** | 91,5 | 0,85 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **6,57** | 93,5 | 1,27 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **2,82** | 94,5 | 1,83 | 0,00 | 22,80 |
| WTG 02 | 2 501 | 2 508 | | | | | | |
| WTG 02 | | | 20 | **41,31** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **37,96** | 75,2 | 0,05 | 5,40 | 8,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 32 | **33,44** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,49** | 78,3 | 0,13 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,54** | 80,3 | 0,18 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **22,84** | 84,6 | 0,28 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,31** | 87,3 | 0,40 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,59** | 88,9 | 0,63 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,66** | 91,5 | 0,95 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,38** | 93,5 | 1,43 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,56** | 94,5 | 2,06 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **51,31** | | | | |
| Sum | | | 25 | **47,96** | | | | |
| Sum | | | 32 | **43,75** | | | | |
| Sum | | | 40 | **39,44** | | | | |
| Sum | | | 50 | **35,48** | | | | |
| Sum | | | 63 | **32,75** | | | | |
| Sum | | | 80 | **29,45** | | | | |
| Sum | | | 100 | **25,85** | | | | |
| Sum | | | 125 | **22,25** | | | | |
| Sum | | | 160 | **15,36** | | | | |
| Sum | | | 200 | **11,54** | | | | |

**Noise sensitive area: AA Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (147)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 594 | 2 598 | | | | | | |
| K 01 | | | 20 | **39,51** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **36,16** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 01 | | | 32 | **32,03** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 01 | | | 40 | **27,88** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 01 | | | 50 | **23,93** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 01 | | | 63 | **20,92** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 01 | | | 80 | **17,69** | 86,0 | 0,42 | 3,70 | 14,80 |
| K 01 | | | 100 | **14,36** | 89,0 | 0,65 | 3,00 | 16,80 |
| K 01 | | | 125 | **10,82** | 92,0 | 0,99 | 1,80 | 18,80 |
| K 01 | | | 160 | **3,53** | 92,0 | 1,48 | 0,00 | 21,10 |
| K 01 | | | 200 | **-0,32** | 93,0 | 2,13 | 0,00 | 22,80 |
| K 02 | 2 538 | 2 543 | | | | | | |
| K 02 | | | 20 | **39,69** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **36,34** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 02 | | | 32 | **32,22** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 02 | | | 40 | **28,07** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 02 | | | 50 | **24,12** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 02 | | | 63 | **21,11** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 02 | | | 80 | **17,89** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 02 | | | 100 | **14,56** | 89,0 | 0,64 | 3,00 | 16,80 |
| K 02 | | | 125 | **11,03** | 92,0 | 0,97 | 1,80 | 18,80 |
| K 02 | | | 160 | **3,74** | 92,0 | 1,45 | 0,00 | 21,10 |
| K 02 | | | 200 | **-0,09** | 93,0 | 2,09 | 0,00 | 22,80 |
| K 03 | 2 861 | 2 865 | | | | | | |
| K 03 | | | 20 | **38,66** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **35,30** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 03 | | | 32 | **31,17** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 03 | | | 40 | **27,01** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 03 | | | 50 | **23,06** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 03 | | | 63 | **20,04** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 03 | | | 80 | **16,80** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 03 | | | 100 | **13,44** | 89,0 | 0,72 | 3,00 | 16,80 |
| K 03 | | | 125 | **9,87** | 92,0 | 1,09 | 1,80 | 18,80 |
| K 03 | | | 160 | **2,52** | 92,0 | 1,63 | 0,00 | 21,10 |
| K 03 | | | 200 | **-1,39** | 93,0 | 2,35 | 0,00 | 22,80 |
| K 04 | 2 717 | 2 721 | | | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 20 | **39,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **35,75** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **31,62** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 04 | | | 40 | **27,47** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 04 | | | 50 | **23,52** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 04 | | | 63 | **20,51** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 04 | | | 80 | **17,27** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 04 | | | 100 | **13,93** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 04 | | | 125 | **10,37** | 92,0 | 1,03 | 1,80 | 18,80 |
| K 04 | | | 160 | **3,06** | 92,0 | 1,55 | 0,00 | 21,10 |
| K 04 | | | 200 | **-0,82** | 93,0 | 2,23 | 0,00 | 22,80 |
| K 05 | 3 432 | 3 435 | | | | | | |
| K 05 | | | 20 | **37,08** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **33,71** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 05 | | | 32 | **29,58** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 05 | | | 40 | **25,41** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 05 | | | 50 | **21,44** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 05 | | | 63 | **18,40** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 05 | | | 80 | **15,13** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 05 | | | 100 | **11,72** | 89,0 | 0,86 | 3,00 | 16,80 |
| K 05 | | | 125 | **8,08** | 92,0 | 1,31 | 1,80 | 18,80 |
| K 05 | | | 160 | **0,62** | 92,0 | 1,96 | 0,00 | 21,10 |
| K 05 | | | 200 | **-3,44** | 93,0 | 2,82 | 0,00 | 22,80 |
| K 06 | 1 679 | 1 685 | | | | | | |
| K 06 | | | 20 | **43,27** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **39,93** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 06 | | | 32 | **35,82** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 06 | | | 40 | **31,68** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 06 | | | 50 | **27,75** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 06 | | | 63 | **24,78** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 06 | | | 80 | **21,60** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 06 | | | 100 | **18,35** | 89,0 | 0,42 | 3,00 | 16,80 |
| K 06 | | | 125 | **14,93** | 92,0 | 0,64 | 1,80 | 18,80 |
| K 06 | | | 160 | **7,81** | 92,0 | 0,96 | 0,00 | 21,10 |
| K 06 | | | 200 | **4,19** | 93,0 | 1,38 | 0,00 | 22,80 |
| K 07 | 1 116 | 1 126 | | | | | | |
| K 07 | | | 20 | **46,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **43,45** | 73,7 | 0,02 | 5,40 | 8,30 |
| K 07 | | | 32 | **39,34** | 76,0 | 0,03 | 5,20 | 9,20 |
| K 07 | | | 40 | **35,22** | 78,0 | 0,06 | 5,00 | 10,30 |
| K 07 | | | 50 | **31,29** | 80,0 | 0,08 | 4,70 | 11,50 |
| K 07 | | | 63 | **28,35** | 83,0 | 0,12 | 4,30 | 13,00 |
| K 07 | | | 80 | **25,19** | 86,0 | 0,18 | 3,70 | 14,80 |
| K 07 | | | 100 | **21,99** | 89,0 | 0,28 | 3,00 | 16,80 |
| K 07 | | | 125 | **18,64** | 92,0 | 0,43 | 1,80 | 18,80 |
| K 07 | | | 160 | **11,63** | 92,0 | 0,64 | 0,00 | 21,10 |
| K 07 | | | 200 | **8,15** | 93,0 | 0,92 | 0,00 | 22,80 |
| K 08 | 1 941 | 1 946 | | | | | | |
| K 08 | | | 20 | **42,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **38,68** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 08 | | | 32 | **34,56** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 08 | | | 40 | **30,42** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 08 | | | 50 | **26,48** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 08 | | | 63 | **23,50** | 83,0 | 0,21 | 4,30 | 13,00 |
| K 08 | | | 80 | **20,30** | 86,0 | 0,31 | 3,70 | 14,80 |
| K 08 | | | 100 | **17,03** | 89,0 | 0,49 | 3,00 | 16,80 |
| K 08 | | | 125 | **13,58** | 92,0 | 0,74 | 1,80 | 18,80 |
| K 08 | | | 160 | **6,41** | 92,0 | 1,11 | 0,00 | 21,10 |
| K 08 | | | 200 | **2,72** | 93,0 | 1,60 | 0,00 | 22,80 |
| K 09 | 2 214 | 2 219 | | | | | | |
| K 09 | | | 20 | **40,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **37,53** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 09 | | | 32 | **33,41** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 09 | | | 40 | **29,27** | 78,0 | 0,11 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 09 | | | 50 | **25,32** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 09 | | | 63 | **22,33** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 09 | | | 80 | **19,12** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 09 | | | 100 | **15,82** | 89,0 | 0,55 | 3,00 | 16,80 |
| K 09 | | | 125 | **12,33** | 92,0 | 0,84 | 1,80 | 18,80 |
| K 09 | | | 160 | **5,11** | 92,0 | 1,26 | 0,00 | 21,10 |
| K 09 | | | 200 | **1,36** | 93,0 | 1,82 | 0,00 | 22,80 |
| K 10 | 3 068 | 3 071 | | | | | | |
| K 10 | | | 20 | **38,05** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **34,69** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 10 | | | 32 | **30,56** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 10 | | | 40 | **26,40** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 10 | | | 50 | **22,44** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 10 | | | 63 | **19,42** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 10 | | | 80 | **16,16** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 10 | | | 100 | **12,79** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 10 | | | 125 | **9,19** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 10 | | | 160 | **1,80** | 92,0 | 1,75 | 0,00 | 21,10 |
| K 10 | | | 200 | **-2,17** | 93,0 | 2,52 | 0,00 | 22,80 |
| K 11 | 3 272 | 3 275 | | | | | | |
| K 11 | | | 20 | **37,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **34,13** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 11 | | | 32 | **30,00** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 11 | | | 40 | **25,83** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 11 | | | 50 | **21,87** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 11 | | | 63 | **18,84** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 11 | | | 80 | **15,57** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 11 | | | 100 | **12,18** | 89,0 | 0,82 | 3,00 | 16,80 |
| K 11 | | | 125 | **8,55** | 92,0 | 1,24 | 1,80 | 18,80 |
| K 11 | | | 160 | **1,13** | 92,0 | 1,87 | 0,00 | 21,10 |
| K 11 | | | 200 | **-2,89** | 93,0 | 2,69 | 0,00 | 22,80 |
| K 12 | 3 041 | 3 045 | | | | | | |
| K 12 | | | 20 | **38,13** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **34,77** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 12 | | | 32 | **30,64** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 12 | | | 40 | **26,48** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 12 | | | 50 | **22,52** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 12 | | | 63 | **19,49** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 12 | | | 80 | **16,24** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 12 | | | 100 | **12,87** | 89,0 | 0,76 | 3,00 | 16,80 |
| K 12 | | | 125 | **9,27** | 92,0 | 1,16 | 1,80 | 18,80 |
| K 12 | | | 160 | **1,89** | 92,0 | 1,74 | 0,00 | 21,10 |
| K 12 | | | 200 | **-2,07** | 93,0 | 2,50 | 0,00 | 22,80 |
| K 13 | 2 311 | 2 315 | | | | | | |
| K 13 | | | 20 | **40,51** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **37,16** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **33,04** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 13 | | | 40 | **28,89** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 13 | | | 50 | **24,95** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 13 | | | 63 | **21,95** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 13 | | | 80 | **18,74** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 13 | | | 100 | **15,43** | 89,0 | 0,58 | 3,00 | 16,80 |
| K 13 | | | 125 | **11,93** | 92,0 | 0,88 | 1,80 | 18,80 |
| K 13 | | | 160 | **4,69** | 92,0 | 1,32 | 0,00 | 21,10 |
| K 13 | | | 200 | **0,91** | 93,0 | 1,90 | 0,00 | 22,80 |
| K 14 | 2 156 | 2 161 | | | | | | |
| K 14 | | | 20 | **41,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **37,76** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 14 | | | 32 | **33,64** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 14 | | | 40 | **29,50** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 14 | | | 50 | **25,56** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 14 | | | 63 | **22,57** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 14 | | | 80 | **19,36** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 14 | | | 100 | **16,07** | 89,0 | 0,54 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 125 | **12,59** | 92,0 | 0,82 | 1,80 | 18,80 |
| K 14 | | | 160 | **5,37** | 92,0 | 1,23 | 0,00 | 21,10 |
| K 14 | | | 200 | **1,63** | 93,0 | 1,77 | 0,00 | 22,80 |
| WTG 01 | 3 737 | 3 741 | | | | | | |
| WTG 01 | | | 20 | **37,84** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **34,47** | 75,2 | 0,07 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **29,93** | 77,1 | 0,11 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **24,95** | 78,3 | 0,19 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **20,98** | 80,3 | 0,26 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **19,23** | 84,6 | 0,41 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **15,64** | 87,3 | 0,60 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **10,80** | 88,9 | 0,94 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **6,72** | 91,5 | 1,42 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **1,21** | 93,5 | 2,13 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-2,93** | 94,5 | 3,07 | 0,00 | 22,80 |
| WTG 02 | 2 863 | 2 868 | | | | | | |
| WTG 02 | | | 20 | **40,15** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **36,79** | 75,2 | 0,06 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **32,26** | 77,1 | 0,09 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **27,31** | 78,3 | 0,14 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **23,35** | 80,3 | 0,20 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **21,63** | 84,6 | 0,32 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **18,09** | 87,3 | 0,46 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **13,33** | 88,9 | 0,72 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **9,36** | 91,5 | 1,09 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **4,01** | 93,5 | 1,63 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **0,10** | 94,5 | 2,35 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **52,90** | | | | |
| Sum | | | 25 | **49,55** | | | | |
| Sum | | | 32 | **45,40** | | | | |
| Sum | | | 40 | **41,20** | | | | |
| Sum | | | 50 | **37,26** | | | | |
| Sum | | | 63 | **34,37** | | | | |
| Sum | | | 80 | **31,14** | | | | |
| Sum | | | 100 | **27,76** | | | | |
| Sum | | | 125 | **24,26** | | | | |
| Sum | | | 160 | **17,19** | | | | |
| Sum | | | 200 | **13,48** | | | | |

**Noise sensitive area: AB Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (146)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 836 | 2 841 | | | | | | |
| K 01 | | | 20 | **38,73** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **35,37** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 01 | | | 32 | **31,24** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 01 | | | 40 | **27,09** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 01 | | | 50 | **23,13** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 01 | | | 63 | **20,12** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 01 | | | 80 | **16,88** | 86,0 | 0,45 | 3,70 | 14,80 |
| K 01 | | | 100 | **13,52** | 89,0 | 0,71 | 3,00 | 16,80 |
| K 01 | | | 125 | **9,95** | 92,0 | 1,08 | 1,80 | 18,80 |
| K 01 | | | 160 | **2,61** | 92,0 | 1,62 | 0,00 | 21,10 |
| K 01 | | | 200 | **-1,30** | 93,0 | 2,33 | 0,00 | 22,80 |
| K 02 | 2 509 | 2 515 | | | | | | |
| K 02 | | | 20 | **39,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **36,44** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 02 | | | 32 | **32,31** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 02 | | | 40 | **28,16** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 02 | | | 50 | **24,21** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 02 | | | 63 | **21,21** | 83,0 | 0,28 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 80 | **17,99** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 02 | | | 100 | **14,66** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 02 | | | 125 | **11,13** | 92,0 | 0,96 | 1,80 | 18,80 |
| K 02 | | | 160 | **3,85** | 92,0 | 1,43 | 0,00 | 21,10 |
| K 02 | | | 200 | **0,03** | 93,0 | 2,06 | 0,00 | 22,80 |
| K 03 | 2 019 | 2 026 | | | | | | |
| K 03 | | | 20 | **41,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **38,33** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 03 | | | 32 | **34,21** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 03 | | | 40 | **30,07** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 03 | | | 50 | **26,13** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 03 | | | 63 | **23,15** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 03 | | | 80 | **19,94** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 03 | | | 100 | **16,66** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 03 | | | 125 | **13,20** | 92,0 | 0,77 | 1,80 | 18,80 |
| K 03 | | | 160 | **6,01** | 92,0 | 1,15 | 0,00 | 21,10 |
| K 03 | | | 200 | **2,31** | 93,0 | 1,66 | 0,00 | 22,80 |
| K 04 | 2 295 | 2 301 | | | | | | |
| K 04 | | | 20 | **40,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,21** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,09** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **28,94** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,00** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,01** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 04 | | | 80 | **18,79** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,48** | 89,0 | 0,58 | 3,00 | 16,80 |
| K 04 | | | 125 | **11,99** | 92,0 | 0,87 | 1,80 | 18,80 |
| K 04 | | | 160 | **4,75** | 92,0 | 1,31 | 0,00 | 21,10 |
| K 04 | | | 200 | **0,97** | 93,0 | 1,89 | 0,00 | 22,80 |
| K 05 | 1 565 | 1 574 | | | | | | |
| K 05 | | | 20 | **43,86** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **40,53** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **36,41** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **32,28** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 05 | | | 50 | **28,35** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 05 | | | 63 | **25,39** | 83,0 | 0,17 | 4,30 | 13,00 |
| K 05 | | | 80 | **22,21** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 05 | | | 100 | **18,97** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 05 | | | 125 | **15,56** | 92,0 | 0,60 | 1,80 | 18,80 |
| K 05 | | | 160 | **8,46** | 92,0 | 0,90 | 0,00 | 21,10 |
| K 05 | | | 200 | **4,87** | 93,0 | 1,29 | 0,00 | 22,80 |
| K 06 | 3 432 | 3 436 | | | | | | |
| K 06 | | | 20 | **37,08** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **33,71** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 06 | | | 32 | **29,57** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 06 | | | 40 | **25,41** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 06 | | | 50 | **21,44** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 06 | | | 63 | **18,40** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 06 | | | 80 | **15,13** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 06 | | | 100 | **11,72** | 89,0 | 0,86 | 3,00 | 16,80 |
| K 06 | | | 125 | **8,07** | 92,0 | 1,31 | 1,80 | 18,80 |
| K 06 | | | 160 | **0,62** | 92,0 | 1,96 | 0,00 | 21,10 |
| K 06 | | | 200 | **-3,44** | 93,0 | 2,82 | 0,00 | 22,80 |
| K 07 | 3 796 | 3 800 | | | | | | |
| K 07 | | | 20 | **36,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,83** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,69** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,52** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,54** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 07 | | | 63 | **17,49** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 07 | | | 80 | **14,20** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 07 | | | 100 | **10,76** | 89,0 | 0,95 | 3,00 | 16,80 |
| K 07 | | | 125 | **7,06** | 92,0 | 1,44 | 1,80 | 18,80 |
| K 07 | | | 160 | **-0,46** | 92,0 | 2,17 | 0,00 | 21,10 |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 200 | **-4,61** | 93,0 | 3,12 | 0,00 | 22,80 |
| K 08 | 2 927 | 2 932 | | | | | | |
| K 08 | | | 20 | **38,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **35,10** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 08 | | | 32 | **30,97** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 08 | | | 40 | **26,81** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 08 | | | 50 | **22,85** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 08 | | | 63 | **19,83** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 08 | | | 80 | **16,59** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 08 | | | 100 | **13,22** | 89,0 | 0,73 | 3,00 | 16,80 |
| K 08 | | | 125 | **9,64** | 92,0 | 1,11 | 1,80 | 18,80 |
| K 08 | | | 160 | **2,29** | 92,0 | 1,67 | 0,00 | 21,10 |
| K 08 | | | 200 | **-1,65** | 93,0 | 2,40 | 0,00 | 22,80 |
| K 09 | 2 689 | 2 694 | | | | | | |
| K 09 | | | 20 | **39,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **35,84** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 09 | | | 32 | **31,71** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 09 | | | 40 | **27,56** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 09 | | | 50 | **23,60** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 09 | | | 63 | **20,60** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 09 | | | 80 | **17,36** | 86,0 | 0,43 | 3,70 | 14,80 |
| K 09 | | | 100 | **14,02** | 89,0 | 0,67 | 3,00 | 16,80 |
| K 09 | | | 125 | **10,47** | 92,0 | 1,02 | 1,80 | 18,80 |
| K 09 | | | 160 | **3,16** | 92,0 | 1,54 | 0,00 | 21,10 |
| K 09 | | | 200 | **-0,72** | 93,0 | 2,21 | 0,00 | 22,80 |
| K 10 | 3 751 | 3 755 | | | | | | |
| K 10 | | | 20 | **36,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **32,93** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 10 | | | 32 | **28,79** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 10 | | | 40 | **24,62** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 10 | | | 50 | **20,64** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 10 | | | 63 | **17,59** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 10 | | | 80 | **14,31** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 10 | | | 100 | **10,87** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 10 | | | 125 | **7,18** | 92,0 | 1,43 | 1,80 | 18,80 |
| K 10 | | | 160 | **-0,33** | 92,0 | 2,14 | 0,00 | 21,10 |
| K 10 | | | 200 | **-4,47** | 93,0 | 3,08 | 0,00 | 22,80 |
| K 11 | 4 408 | 4 412 | | | | | | |
| K 11 | | | 20 | **34,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **31,52** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 11 | | | 32 | **27,38** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 11 | | | 40 | **23,19** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 11 | | | 50 | **19,20** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 11 | | | 63 | **16,12** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 11 | | | 80 | **12,80** | 86,0 | 0,71 | 3,70 | 14,80 |
| K 11 | | | 100 | **9,31** | 89,0 | 1,10 | 3,00 | 16,80 |
| K 11 | | | 125 | **5,53** | 92,0 | 1,68 | 1,80 | 18,80 |
| K 11 | | | 160 | **-2,11** | 92,0 | 2,51 | 0,00 | 21,10 |
| K 11 | | | 200 | **-6,41** | 93,0 | 3,62 | 0,00 | 22,80 |
| K 12 | 5 094 | 5 097 | | | | | | |
| K 12 | | | 20 | **33,65** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **30,25** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 12 | | | 32 | **26,10** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 12 | | | 40 | **21,90** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 12 | | | 50 | **17,90** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 12 | | | 63 | **14,79** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 12 | | | 80 | **11,44** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 12 | | | 100 | **7,88** | 89,0 | 1,27 | 3,00 | 16,80 |
| K 12 | | | 125 | **4,02** | 92,0 | 1,94 | 1,80 | 18,80 |
| K 12 | | | 160 | **-3,75** | 92,0 | 2,91 | 0,00 | 21,10 |
| K 12 | | | 200 | **-8,23** | 93,0 | 4,18 | 0,00 | 22,80 |
| K 13 | 4 409 | 4 413 | | | | | | |
| K 13 | | | 20 | **34,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **31,52** | 73,7 | 0,09 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 32 | **27,37** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 13 | | | 40 | **23,19** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 13 | | | 50 | **19,20** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 13 | | | 63 | **16,12** | 83,0 | 0,49 | 4,30 | 13,00 |
| K 13 | | | 80 | **12,80** | 86,0 | 0,71 | 3,70 | 14,80 |
| K 13 | | | 100 | **9,30** | 89,0 | 1,10 | 3,00 | 16,80 |
| K 13 | | | 125 | **5,53** | 92,0 | 1,68 | 1,80 | 18,80 |
| K 13 | | | 160 | **-2,11** | 92,0 | 2,52 | 0,00 | 21,10 |
| K 13 | | | 200 | **-6,41** | 93,0 | 3,62 | 0,00 | 22,80 |
| K 14 | 3 768 | 3 771 | | | | | | |
| K 14 | | | 20 | **36,27** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **32,89** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 14 | | | 32 | **28,76** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 14 | | | 40 | **24,58** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 14 | | | 50 | **20,61** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 14 | | | 63 | **17,55** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 14 | | | 80 | **14,27** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 14 | | | 100 | **10,83** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 14 | | | 125 | **7,14** | 92,0 | 1,43 | 1,80 | 18,80 |
| K 14 | | | 160 | **-0,38** | 92,0 | 2,15 | 0,00 | 21,10 |
| K 14 | | | 200 | **-4,52** | 93,0 | 3,09 | 0,00 | 22,80 |
| WTG 01 | 2 399 | 2 406 | | | | | | |
| WTG 01 | | | 20 | **41,67** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **38,33** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **33,80** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **28,85** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **24,91** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **23,21** | 84,6 | 0,26 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **19,69** | 87,3 | 0,38 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **14,97** | 88,9 | 0,60 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **11,06** | 91,5 | 0,91 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **5,80** | 93,5 | 1,37 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **2,00** | 94,5 | 1,97 | 0,00 | 22,80 |
| WTG 02 | 2 586 | 2 593 | | | | | | |
| WTG 02 | | | 20 | **41,03** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **37,67** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,15** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,20** | 78,3 | 0,13 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,24** | 80,3 | 0,18 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **22,54** | 84,6 | 0,29 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,01** | 87,3 | 0,41 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,28** | 88,9 | 0,65 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,34** | 91,5 | 0,99 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,05** | 93,5 | 1,48 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,20** | 94,5 | 2,13 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **51,35** | | | | |
| Sum | | | 25 | **47,99** | | | | |
| Sum | | | 32 | **43,79** | | | | |
| Sum | | | 40 | **39,50** | | | | |
| Sum | | | 50 | **35,55** | | | | |
| Sum | | | 63 | **32,78** | | | | |
| Sum | | | 80 | **29,49** | | | | |
| Sum | | | 100 | **25,92** | | | | |
| Sum | | | 125 | **22,33** | | | | |
| Sum | | | 160 | **15,39** | | | | |
| Sum | | | 200 | **11,56** | | | | |

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**Noise sensitive area: AC Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (145)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 448 | 2 453 | | | | | | |
| K 01 | | | 20 | **40,01** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **36,66** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 01 | | | 32 | **32,53** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 01 | | | 40 | **28,38** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 01 | | | 50 | **24,43** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 01 | | | 63 | **21,44** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 01 | | | 80 | **18,21** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 01 | | | 100 | **14,89** | 89,0 | 0,61 | 3,00 | 16,80 |
| K 01 | | | 125 | **11,37** | 92,0 | 0,93 | 1,80 | 18,80 |
| K 01 | | | 160 | **4,11** | 92,0 | 1,40 | 0,00 | 21,10 |
| K 01 | | | 200 | **0,29** | 93,0 | 2,01 | 0,00 | 22,80 |
| K 02 | 2 142 | 2 149 | | | | | | |
| K 02 | | | 20 | **41,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **37,81** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 02 | | | 32 | **33,69** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 02 | | | 40 | **29,55** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 02 | | | 50 | **25,61** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 02 | | | 63 | **22,62** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 02 | | | 80 | **19,41** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 02 | | | 100 | **16,12** | 89,0 | 0,54 | 3,00 | 16,80 |
| K 02 | | | 125 | **12,64** | 92,0 | 0,82 | 1,80 | 18,80 |
| K 02 | | | 160 | **5,43** | 92,0 | 1,22 | 0,00 | 21,10 |
| K 02 | | | 200 | **1,69** | 93,0 | 1,76 | 0,00 | 22,80 |
| K 03 | 1 690 | 1 698 | | | | | | |
| K 03 | | | 20 | **43,20** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **39,87** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 03 | | | 32 | **35,75** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 03 | | | 40 | **31,62** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 03 | | | 50 | **27,68** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 03 | | | 63 | **24,71** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 03 | | | 80 | **21,53** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 03 | | | 100 | **18,28** | 89,0 | 0,42 | 3,00 | 16,80 |
| K 03 | | | 125 | **14,86** | 92,0 | 0,65 | 1,80 | 18,80 |
| K 03 | | | 160 | **7,73** | 92,0 | 0,97 | 0,00 | 21,10 |
| K 03 | | | 200 | **4,11** | 93,0 | 1,39 | 0,00 | 22,80 |
| K 04 | 2 070 | 2 077 | | | | | | |
| K 04 | | | 20 | **41,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **38,11** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,99** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,85** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,91** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,92** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 04 | | | 80 | **19,72** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 04 | | | 100 | **16,43** | 89,0 | 0,52 | 3,00 | 16,80 |
| K 04 | | | 125 | **12,96** | 92,0 | 0,79 | 1,80 | 18,80 |
| K 04 | | | 160 | **5,77** | 92,0 | 1,18 | 0,00 | 21,10 |
| K 04 | | | 200 | **2,05** | 93,0 | 1,70 | 0,00 | 22,80 |
| K 05 | 1 382 | 1 392 | | | | | | |
| K 05 | | | 20 | **44,93** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **41,60** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **37,48** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 05 | | | 40 | **33,36** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 05 | | | 50 | **29,43** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 05 | | | 63 | **26,47** | 83,0 | 0,15 | 4,30 | 13,00 |
| K 05 | | | 80 | **23,30** | 86,0 | 0,22 | 3,70 | 14,80 |
| K 05 | | | 100 | **20,08** | 89,0 | 0,35 | 3,00 | 16,80 |
| K 05 | | | 125 | **16,70** | 92,0 | 0,53 | 1,80 | 18,80 |
| K 05 | | | 160 | **9,63** | 92,0 | 0,79 | 0,00 | 21,10 |
| K 05 | | | 200 | **6,08** | 93,0 | 1,14 | 0,00 | 22,80 |
| K 06 | 3 073 | 3 078 | | | | | | |
| K 06 | | | 20 | **38,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **34,67** | 73,7 | 0,06 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 06 | | | 32 | **30,54** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 06 | | | 40 | **26,38** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 06 | | | 50 | **22,42** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 06 | | | 63 | **19,40** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 06 | | | 80 | **16,14** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 06 | | | 100 | **12,77** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 06 | | | 125 | **9,17** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 06 | | | 160 | **1,78** | 92,0 | 1,75 | 0,00 | 21,10 |
| K 06 | | | 200 | **-2,19** | 93,0 | 2,52 | 0,00 | 22,80 |
| K 07 | 3 465 | 3 469 | | | | | | |
| K 07 | | | 20 | **37,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **33,63** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 07 | | | 32 | **29,49** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 07 | | | 40 | **25,32** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 07 | | | 50 | **21,35** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 07 | | | 63 | **18,31** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 07 | | | 80 | **15,04** | 86,0 | 0,56 | 3,70 | 14,80 |
| K 07 | | | 100 | **11,63** | 89,0 | 0,87 | 3,00 | 16,80 |
| K 07 | | | 125 | **7,98** | 92,0 | 1,32 | 1,80 | 18,80 |
| K 07 | | | 160 | **0,52** | 92,0 | 1,98 | 0,00 | 21,10 |
| K 07 | | | 200 | **-3,55** | 93,0 | 2,84 | 0,00 | 22,80 |
| K 08 | 2 609 | 2 615 | | | | | | |
| K 08 | | | 20 | **39,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **36,10** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 08 | | | 32 | **31,97** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 08 | | | 40 | **27,82** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 08 | | | 50 | **23,87** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 08 | | | 63 | **20,86** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 08 | | | 80 | **17,63** | 86,0 | 0,42 | 3,70 | 14,80 |
| K 08 | | | 100 | **14,30** | 89,0 | 0,65 | 3,00 | 16,80 |
| K 08 | | | 125 | **10,76** | 92,0 | 0,99 | 1,80 | 18,80 |
| K 08 | | | 160 | **3,46** | 92,0 | 1,49 | 0,00 | 21,10 |
| K 08 | | | 200 | **-0,39** | 93,0 | 2,14 | 0,00 | 22,80 |
| K 09 | 2 412 | 2 418 | | | | | | |
| K 09 | | | 20 | **40,13** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **36,78** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 09 | | | 32 | **32,66** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 09 | | | 40 | **28,51** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 09 | | | 50 | **24,56** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 09 | | | 63 | **21,57** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 09 | | | 80 | **18,35** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 09 | | | 100 | **15,03** | 89,0 | 0,60 | 3,00 | 16,80 |
| K 09 | | | 125 | **11,51** | 92,0 | 0,92 | 1,80 | 18,80 |
| K 09 | | | 160 | **4,25** | 92,0 | 1,38 | 0,00 | 21,10 |
| K 09 | | | 200 | **0,45** | 93,0 | 1,98 | 0,00 | 22,80 |
| K 10 | 3 355 | 3 359 | | | | | | |
| K 10 | | | 20 | **37,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **33,91** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 10 | | | 32 | **29,78** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 10 | | | 40 | **25,61** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 10 | | | 50 | **21,64** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 10 | | | 63 | **18,61** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 10 | | | 80 | **15,34** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 10 | | | 100 | **11,94** | 89,0 | 0,84 | 3,00 | 16,80 |
| K 10 | | | 125 | **8,30** | 92,0 | 1,28 | 1,80 | 18,80 |
| K 10 | | | 160 | **0,86** | 92,0 | 1,91 | 0,00 | 21,10 |
| K 10 | | | 200 | **-3,18** | 93,0 | 2,75 | 0,00 | 22,80 |
| K 11 | 4 013 | 4 016 | | | | | | |
| K 11 | | | 20 | **35,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **32,34** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 11 | | | 32 | **28,20** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 11 | | | 40 | **24,02** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 11 | | | 50 | **20,04** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 11 | | | 63 | **16,98** | 83,0 | 0,44 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 80 | **13,68** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 11 | | | 100 | **10,22** | 89,0 | 1,00 | 3,00 | 16,80 |
| K 11 | | | 125 | **6,50** | 92,0 | 1,53 | 1,80 | 18,80 |
| K 11 | | | 160 | **-1,07** | 92,0 | 2,29 | 0,00 | 21,10 |
| K 11 | | | 200 | **-5,27** | 93,0 | 3,29 | 0,00 | 22,80 |
| K 12 | 4 697 | 4 700 | | | | | | |
| K 12 | | | 20 | **34,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **30,96** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 12 | | | 32 | **26,82** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 12 | | | 40 | **22,62** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 12 | | | 50 | **18,63** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 12 | | | 63 | **15,54** | 83,0 | 0,52 | 4,30 | 13,00 |
| K 12 | | | 80 | **12,21** | 86,0 | 0,75 | 3,70 | 14,80 |
| K 12 | | | 100 | **8,68** | 89,0 | 1,17 | 3,00 | 16,80 |
| K 12 | | | 125 | **4,87** | 92,0 | 1,79 | 1,80 | 18,80 |
| K 12 | | | 160 | **-2,82** | 92,0 | 2,68 | 0,00 | 21,10 |
| K 12 | | | 200 | **-7,20** | 93,0 | 3,85 | 0,00 | 22,80 |
| K 13 | 4 016 | 4 020 | | | | | | |
| K 13 | | | 20 | **35,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **32,34** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 13 | | | 32 | **28,20** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 13 | | | 40 | **24,01** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 13 | | | 50 | **20,03** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 13 | | | 63 | **16,97** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 13 | | | 80 | **13,67** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 13 | | | 100 | **10,21** | 89,0 | 1,00 | 3,00 | 16,80 |
| K 13 | | | 125 | **6,49** | 92,0 | 1,53 | 1,80 | 18,80 |
| K 13 | | | 160 | **-1,08** | 92,0 | 2,29 | 0,00 | 21,10 |
| K 13 | | | 200 | **-5,28** | 93,0 | 3,30 | 0,00 | 22,80 |
| K 14 | 3 379 | 3 383 | | | | | | |
| K 14 | | | 20 | **37,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **33,85** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 14 | | | 32 | **29,71** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 14 | | | 40 | **25,54** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 14 | | | 50 | **21,58** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 14 | | | 63 | **18,54** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 14 | | | 80 | **15,27** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 14 | | | 100 | **11,87** | 89,0 | 0,85 | 3,00 | 16,80 |
| K 14 | | | 125 | **8,23** | 92,0 | 1,29 | 1,80 | 18,80 |
| K 14 | | | 160 | **0,79** | 92,0 | 1,93 | 0,00 | 21,10 |
| K 14 | | | 200 | **-3,26** | 93,0 | 2,77 | 0,00 | 22,80 |
| WTG 01 | 2 395 | 2 402 | | | | | | |
| WTG 01 | | | 20 | **41,69** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **38,34** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **33,82** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **28,87** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **24,92** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **23,22** | 84,6 | 0,26 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **19,70** | 87,3 | 0,38 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **14,99** | 88,9 | 0,60 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **11,07** | 91,5 | 0,91 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **5,82** | 93,5 | 1,37 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **2,02** | 94,5 | 1,97 | 0,00 | 22,80 |
| WTG 02 | 2 441 | 2 448 | | | | | | |
| WTG 02 | | | 20 | **41,52** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **38,18** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,65** | 77,1 | 0,07 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,70** | 78,3 | 0,12 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,75** | 80,3 | 0,17 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **23,05** | 84,6 | 0,27 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **19,53** | 87,3 | 0,39 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,81** | 88,9 | 0,61 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,89** | 91,5 | 0,93 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,63** | 93,5 | 1,40 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 200 | **1,82** | 94,5 | 2,01 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **52,29** | | | | |
| Sum | | | 25 | **48,94** | | | | |
| Sum | | | 32 | **44,75** | | | | |
| Sum | | | 40 | **40,49** | | | | |
| Sum | | | 50 | **36,54** | | | | |
| Sum | | | 63 | **33,75** | | | | |
| Sum | | | 80 | **30,48** | | | | |
| Sum | | | 100 | **26,97** | | | | |
| Sum | | | 125 | **23,43** | | | | |
| Sum | | | 160 | **16,48** | | | | |
| Sum | | | 200 | **12,72** | | | | |

**Noise sensitive area: AD Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (144)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 211 | 2 217 | | | | | | |
| K 01 | | | 20 | **40,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **37,54** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 01 | | | 32 | **33,42** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 01 | | | 40 | **29,27** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 01 | | | 50 | **25,33** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 01 | | | 63 | **22,34** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 01 | | | 80 | **19,13** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 01 | | | 100 | **15,83** | 89,0 | 0,55 | 3,00 | 16,80 |
| K 01 | | | 125 | **12,34** | 92,0 | 0,84 | 1,80 | 18,80 |
| K 01 | | | 160 | **5,12** | 92,0 | 1,26 | 0,00 | 21,10 |
| K 01 | | | 200 | **1,37** | 93,0 | 1,82 | 0,00 | 22,80 |
| K 02 | 1 980 | 1 987 | | | | | | |
| K 02 | | | 20 | **41,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **38,49** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 02 | | | 32 | **34,37** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 02 | | | 40 | **30,23** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 02 | | | 50 | **26,29** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 02 | | | 63 | **23,32** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 02 | | | 80 | **20,12** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 02 | | | 100 | **16,84** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 02 | | | 125 | **13,38** | 92,0 | 0,76 | 1,80 | 18,80 |
| K 02 | | | 160 | **6,20** | 92,0 | 1,13 | 0,00 | 21,10 |
| K 02 | | | 200 | **2,50** | 93,0 | 1,63 | 0,00 | 22,80 |
| K 03 | 1 628 | 1 636 | | | | | | |
| K 03 | | | 20 | **43,52** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **40,19** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 03 | | | 32 | **36,08** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 03 | | | 40 | **31,94** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 03 | | | 50 | **28,01** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 03 | | | 63 | **25,04** | 83,0 | 0,18 | 4,30 | 13,00 |
| K 03 | | | 80 | **21,86** | 86,0 | 0,26 | 3,70 | 14,80 |
| K 03 | | | 100 | **18,62** | 89,0 | 0,41 | 3,00 | 16,80 |
| K 03 | | | 125 | **15,20** | 92,0 | 0,62 | 1,80 | 18,80 |
| K 03 | | | 160 | **8,09** | 92,0 | 0,93 | 0,00 | 21,10 |
| K 03 | | | 200 | **4,48** | 93,0 | 1,34 | 0,00 | 22,80 |
| K 04 | 2 151 | 2 158 | | | | | | |
| K 04 | | | 20 | **41,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,78** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,66** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,51** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,57** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,58** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 04 | | | 80 | **19,37** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 04 | | | 100 | **16,08** | 89,0 | 0,54 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 125 | **12,60** | 92,0 | 0,82 | 1,80 | 18,80 |
| K 04 | | | 160 | **5,39** | 92,0 | 1,23 | 0,00 | 21,10 |
| K 04 | | | 200 | **1,65** | 93,0 | 1,77 | 0,00 | 22,80 |
| K 05 | 1 540 | 1 549 | | | | | | |
| K 05 | | | 20 | **44,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **40,67** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **36,55** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **32,42** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 05 | | | 50 | **28,49** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 05 | | | 63 | **25,53** | 83,0 | 0,17 | 4,30 | 13,00 |
| K 05 | | | 80 | **22,35** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 05 | | | 100 | **19,11** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 05 | | | 125 | **15,71** | 92,0 | 0,59 | 1,80 | 18,80 |
| K 05 | | | 160 | **8,62** | 92,0 | 0,88 | 0,00 | 21,10 |
| K 05 | | | 200 | **5,03** | 93,0 | 1,27 | 0,00 | 22,80 |
| K 06 | 2 918 | 2 923 | | | | | | |
| K 06 | | | 20 | **38,48** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **35,13** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 06 | | | 32 | **31,00** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 06 | | | 40 | **26,84** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 06 | | | 50 | **22,88** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 06 | | | 63 | **19,86** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 06 | | | 80 | **16,62** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 06 | | | 100 | **13,25** | 89,0 | 0,73 | 3,00 | 16,80 |
| K 06 | | | 125 | **9,67** | 92,0 | 1,11 | 1,80 | 18,80 |
| K 06 | | | 160 | **2,32** | 92,0 | 1,67 | 0,00 | 21,10 |
| K 06 | | | 200 | **-1,61** | 93,0 | 2,40 | 0,00 | 22,80 |
| K 07 | 3 364 | 3 368 | | | | | | |
| K 07 | | | 20 | **37,25** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **33,89** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 07 | | | 32 | **29,75** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 07 | | | 40 | **25,58** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 07 | | | 50 | **21,62** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 07 | | | 63 | **18,58** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 07 | | | 80 | **15,31** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 07 | | | 100 | **11,91** | 89,0 | 0,84 | 3,00 | 16,80 |
| K 07 | | | 125 | **8,27** | 92,0 | 1,28 | 1,80 | 18,80 |
| K 07 | | | 160 | **0,83** | 92,0 | 1,92 | 0,00 | 21,10 |
| K 07 | | | 200 | **-3,21** | 93,0 | 2,76 | 0,00 | 22,80 |
| K 08 | 2 544 | 2 549 | | | | | | |
| K 08 | | | 20 | **39,67** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **36,32** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 08 | | | 32 | **32,20** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 08 | | | 40 | **28,04** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 08 | | | 50 | **24,09** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 08 | | | 63 | **21,09** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 08 | | | 80 | **17,86** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 08 | | | 100 | **14,53** | 89,0 | 0,64 | 3,00 | 16,80 |
| K 08 | | | 125 | **11,00** | 92,0 | 0,97 | 1,80 | 18,80 |
| K 08 | | | 160 | **3,72** | 92,0 | 1,45 | 0,00 | 21,10 |
| K 08 | | | 200 | **-0,12** | 93,0 | 2,09 | 0,00 | 22,80 |
| K 09 | 2 414 | 2 420 | | | | | | |
| K 09 | | | 20 | **40,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **36,78** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 09 | | | 32 | **32,65** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 09 | | | 40 | **28,50** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 09 | | | 50 | **24,56** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 09 | | | 63 | **21,56** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 09 | | | 80 | **18,34** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 09 | | | 100 | **15,02** | 89,0 | 0,60 | 3,00 | 16,80 |
| K 09 | | | 125 | **11,51** | 92,0 | 0,92 | 1,80 | 18,80 |
| K 09 | | | 160 | **4,25** | 92,0 | 1,38 | 0,00 | 21,10 |
| K 09 | | | 200 | **0,44** | 93,0 | 1,98 | 0,00 | 22,80 |
| K 10 | 3 032 | 3 037 | | | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 20 | **38,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **34,79** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 10 | | | 32 | **30,66** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 10 | | | 40 | **26,50** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 10 | | | 50 | **22,54** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 10 | | | 63 | **19,52** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 10 | | | 80 | **16,27** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 10 | | | 100 | **12,89** | 89,0 | 0,76 | 3,00 | 16,80 |
| K 10 | | | 125 | **9,30** | 92,0 | 1,15 | 1,80 | 18,80 |
| K 10 | | | 160 | **1,92** | 92,0 | 1,73 | 0,00 | 21,10 |
| K 10 | | | 200 | **-2,04** | 93,0 | 2,49 | 0,00 | 22,80 |
| K 11 | 3 681 | 3 685 | | | | | | |
| K 11 | | | 20 | **36,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **33,10** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 11 | | | 32 | **28,96** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 11 | | | 40 | **24,79** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 11 | | | 50 | **20,81** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 11 | | | 63 | **17,77** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 11 | | | 80 | **14,48** | 86,0 | 0,59 | 3,70 | 14,80 |
| K 11 | | | 100 | **11,05** | 89,0 | 0,92 | 3,00 | 16,80 |
| K 11 | | | 125 | **7,37** | 92,0 | 1,40 | 1,80 | 18,80 |
| K 11 | | | 160 | **-0,13** | 92,0 | 2,10 | 0,00 | 21,10 |
| K 11 | | | 200 | **-4,25** | 93,0 | 3,02 | 0,00 | 22,80 |
| K 12 | 4 389 | 4 392 | | | | | | |
| K 12 | | | 20 | **34,95** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **31,56** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 12 | | | 32 | **27,41** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 12 | | | 40 | **23,23** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 12 | | | 50 | **19,24** | 80,0 | 0,31 | 4,70 | 11,50 |
| K 12 | | | 63 | **16,16** | 83,0 | 0,48 | 4,30 | 13,00 |
| K 12 | | | 80 | **12,84** | 86,0 | 0,70 | 3,70 | 14,80 |
| K 12 | | | 100 | **9,35** | 89,0 | 1,10 | 3,00 | 16,80 |
| K 12 | | | 125 | **5,58** | 92,0 | 1,67 | 1,80 | 18,80 |
| K 12 | | | 160 | **-2,06** | 92,0 | 2,50 | 0,00 | 21,10 |
| K 12 | | | 200 | **-6,36** | 93,0 | 3,60 | 0,00 | 22,80 |
| K 13 | 3 748 | 3 752 | | | | | | |
| K 13 | | | 20 | **36,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **32,94** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 13 | | | 32 | **28,80** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 13 | | | 40 | **24,63** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 13 | | | 50 | **20,65** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 13 | | | 63 | **17,60** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 13 | | | 80 | **14,31** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 13 | | | 100 | **10,88** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 13 | | | 125 | **7,19** | 92,0 | 1,43 | 1,80 | 18,80 |
| K 13 | | | 160 | **-0,32** | 92,0 | 2,14 | 0,00 | 21,10 |
| K 13 | | | 200 | **-4,46** | 93,0 | 3,08 | 0,00 | 22,80 |
| K 14 | 3 134 | 3 138 | | | | | | |
| K 14 | | | 20 | **37,87** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **34,50** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 14 | | | 32 | **30,37** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 14 | | | 40 | **26,21** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 14 | | | 50 | **22,25** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 14 | | | 63 | **19,22** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 14 | | | 80 | **15,96** | 86,0 | 0,50 | 3,70 | 14,80 |
| K 14 | | | 100 | **12,58** | 89,0 | 0,78 | 3,00 | 16,80 |
| K 14 | | | 125 | **8,97** | 92,0 | 1,19 | 1,80 | 18,80 |
| K 14 | | | 160 | **1,58** | 92,0 | 1,79 | 0,00 | 21,10 |
| K 14 | | | 200 | **-2,41** | 93,0 | 2,57 | 0,00 | 22,80 |
| WTG 01 | 2 670 | 2 676 | | | | | | |
| WTG 01 | | | 20 | **40,75** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **37,40** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **32,87** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **27,92** | 78,3 | 0,13 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 01 | | | 50 | **23,96** | 80,3 | 0,19 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **22,26** | 84,6 | 0,29 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **18,72** | 87,3 | 0,43 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **13,98** | 88,9 | 0,67 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **10,03** | 91,5 | 1,02 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **4,72** | 93,5 | 1,53 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **0,86** | 94,5 | 2,19 | 0,00 | 22,80 |
| WTG 02 | 2 599 | 2 606 | | | | | | |
| WTG 02 | | | 20 | **40,98** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **37,63** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,10** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,15** | 78,3 | 0,13 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,20** | 80,3 | 0,18 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **22,49** | 84,6 | 0,29 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **18,96** | 87,3 | 0,42 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,23** | 88,9 | 0,65 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,29** | 91,5 | 0,99 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **5,00** | 93,5 | 1,49 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,14** | 94,5 | 2,14 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **52,28** | | | | |
| Sum | | | 25 | **48,93** | | | | |
| Sum | | | 32 | **44,75** | | | | |
| Sum | | | 40 | **40,51** | | | | |
| Sum | | | 50 | **36,56** | | | | |
| Sum | | | 63 | **33,73** | | | | |
| Sum | | | 80 | **30,47** | | | | |
| Sum | | | 100 | **27,00** | | | | |
| Sum | | | 125 | **23,46** | | | | |
| Sum | | | 160 | **16,45** | | | | |
| Sum | | | 200 | **12,68** | | | | |

**Noise sensitive area: AE Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (143)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 416 | 2 420 | | | | | | |
| K 01 | | | 20 | **40,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **36,77** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 01 | | | 32 | **32,65** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 01 | | | 40 | **28,50** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 01 | | | 50 | **24,55** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 01 | | | 63 | **21,56** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 01 | | | 80 | **18,34** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 01 | | | 100 | **15,02** | 89,0 | 0,61 | 3,00 | 16,80 |
| K 01 | | | 125 | **11,50** | 92,0 | 0,92 | 1,80 | 18,80 |
| K 01 | | | 160 | **4,24** | 92,0 | 1,38 | 0,00 | 21,10 |
| K 01 | | | 200 | **0,44** | 93,0 | 1,98 | 0,00 | 22,80 |
| K 02 | 2 578 | 2 582 | | | | | | |
| K 02 | | | 20 | **39,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **36,21** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 02 | | | 32 | **32,08** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 02 | | | 40 | **27,93** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 02 | | | 50 | **23,98** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 02 | | | 63 | **20,98** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 02 | | | 80 | **17,75** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 02 | | | 100 | **14,41** | 89,0 | 0,65 | 3,00 | 16,80 |
| K 02 | | | 125 | **10,88** | 92,0 | 0,98 | 1,80 | 18,80 |
| K 02 | | | 160 | **3,59** | 92,0 | 1,47 | 0,00 | 21,10 |
| K 02 | | | 200 | **-0,26** | 93,0 | 2,12 | 0,00 | 22,80 |
| K 03 | 3 074 | 3 077 | | | | | | |
| K 03 | | | 20 | **38,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **34,68** | 73,7 | 0,06 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 03 | | | 32 | **30,55** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 03 | | | 40 | **26,38** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 03 | | | 50 | **22,42** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 03 | | | 63 | **19,40** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 03 | | | 80 | **16,15** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 03 | | | 100 | **12,77** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 03 | | | 125 | **9,17** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 03 | | | 160 | **1,78** | 92,0 | 1,75 | 0,00 | 21,10 |
| K 03 | | | 200 | **-2,19** | 93,0 | 2,52 | 0,00 | 22,80 |
| K 04 | 3 189 | 3 193 | | | | | | |
| K 04 | | | 20 | **37,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **34,35** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 04 | | | 32 | **30,22** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 04 | | | 40 | **26,06** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 04 | | | 50 | **22,09** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 04 | | | 63 | **19,07** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 04 | | | 80 | **15,81** | 86,0 | 0,51 | 3,70 | 14,80 |
| K 04 | | | 100 | **12,42** | 89,0 | 0,80 | 3,00 | 16,80 |
| K 04 | | | 125 | **8,80** | 92,0 | 1,21 | 1,80 | 18,80 |
| K 04 | | | 160 | **1,40** | 92,0 | 1,82 | 0,00 | 21,10 |
| K 04 | | | 200 | **-2,60** | 93,0 | 2,62 | 0,00 | 22,80 |
| K 05 | 3 820 | 3 822 | | | | | | |
| K 05 | | | 20 | **36,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **32,78** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 05 | | | 32 | **28,64** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 05 | | | 40 | **24,46** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 05 | | | 50 | **20,49** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 05 | | | 63 | **17,43** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 05 | | | 80 | **14,14** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 05 | | | 100 | **10,70** | 89,0 | 0,96 | 3,00 | 16,80 |
| K 05 | | | 125 | **7,00** | 92,0 | 1,45 | 1,80 | 18,80 |
| K 05 | | | 160 | **-0,53** | 92,0 | 2,18 | 0,00 | 21,10 |
| K 05 | | | 200 | **-4,68** | 93,0 | 3,13 | 0,00 | 22,80 |
| K 06 | 1 644 | 1 650 | | | | | | |
| K 06 | | | 20 | **43,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **40,12** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 06 | | | 32 | **36,00** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 06 | | | 40 | **31,87** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 06 | | | 50 | **27,94** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 06 | | | 63 | **24,97** | 83,0 | 0,18 | 4,30 | 13,00 |
| K 06 | | | 80 | **21,79** | 86,0 | 0,26 | 3,70 | 14,80 |
| K 06 | | | 100 | **18,54** | 89,0 | 0,41 | 3,00 | 16,80 |
| K 06 | | | 125 | **15,12** | 92,0 | 0,63 | 1,80 | 18,80 |
| K 06 | | | 160 | **8,01** | 92,0 | 0,94 | 0,00 | 21,10 |
| K 06 | | | 200 | **4,40** | 93,0 | 1,35 | 0,00 | 22,80 |
| K 07 | 1 389 | 1 397 | | | | | | |
| K 07 | | | 20 | **44,90** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **41,57** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 07 | | | 32 | **37,45** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 07 | | | 40 | **33,33** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 07 | | | 50 | **29,40** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 07 | | | 63 | **26,44** | 83,0 | 0,15 | 4,30 | 13,00 |
| K 07 | | | 80 | **23,27** | 86,0 | 0,22 | 3,70 | 14,80 |
| K 07 | | | 100 | **20,05** | 89,0 | 0,35 | 3,00 | 16,80 |
| K 07 | | | 125 | **16,66** | 92,0 | 0,53 | 1,80 | 18,80 |
| K 07 | | | 160 | **9,60** | 92,0 | 0,80 | 0,00 | 21,10 |
| K 07 | | | 200 | **6,05** | 93,0 | 1,15 | 0,00 | 22,80 |
| K 08 | 2 245 | 2 250 | | | | | | |
| K 08 | | | 20 | **40,76** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **37,41** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 08 | | | 32 | **33,29** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 08 | | | 40 | **29,14** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 08 | | | 50 | **25,20** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 08 | | | 63 | **22,21** | 83,0 | 0,25 | 4,30 | 13,00 |

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 80 | **19,00** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 08 | | | 100 | **15,69** | 89,0 | 0,56 | 3,00 | 16,80 |
| K 08 | | | 125 | **12,20** | 92,0 | 0,85 | 1,80 | 18,80 |
| K 08 | | | 160 | **4,97** | 92,0 | 1,28 | 0,00 | 21,10 |
| K 08 | | | 200 | **1,21** | 93,0 | 1,84 | 0,00 | 22,80 |
| K 09 | 2 646 | 2 650 | | | | | | |
| K 09 | | | 20 | **39,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **35,98** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 09 | | | 32 | **31,86** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 09 | | | 40 | **27,70** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 09 | | | 50 | **23,75** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 09 | | | 63 | **20,74** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 09 | | | 80 | **17,51** | 86,0 | 0,42 | 3,70 | 14,80 |
| K 09 | | | 100 | **14,17** | 89,0 | 0,66 | 3,00 | 16,80 |
| K 09 | | | 125 | **10,63** | 92,0 | 1,01 | 1,80 | 18,80 |
| K 09 | | | 160 | **3,33** | 92,0 | 1,51 | 0,00 | 21,10 |
| K 09 | | | 200 | **-0,54** | 93,0 | 2,17 | 0,00 | 22,80 |
| K 10 | 2 476 | 2 480 | | | | | | |
| K 10 | | | 20 | **39,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **36,56** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 10 | | | 32 | **32,44** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 10 | | | 40 | **28,29** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 10 | | | 50 | **24,34** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 10 | | | 63 | **21,34** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 10 | | | 80 | **18,11** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 10 | | | 100 | **14,79** | 89,0 | 0,62 | 3,00 | 16,80 |
| K 10 | | | 125 | **11,27** | 92,0 | 0,94 | 1,80 | 18,80 |
| K 10 | | | 160 | **4,00** | 92,0 | 1,41 | 0,00 | 21,10 |
| K 10 | | | 200 | **0,18** | 93,0 | 2,03 | 0,00 | 22,80 |
| K 11 | 2 507 | 2 511 | | | | | | |
| K 11 | | | 20 | **39,80** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **36,45** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 11 | | | 32 | **32,33** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 11 | | | 40 | **28,18** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 11 | | | 50 | **24,23** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 11 | | | 63 | **21,23** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 11 | | | 80 | **18,00** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 11 | | | 100 | **14,68** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 11 | | | 125 | **11,15** | 92,0 | 0,95 | 1,80 | 18,80 |
| K 11 | | | 160 | **3,87** | 92,0 | 1,43 | 0,00 | 21,10 |
| K 11 | | | 200 | **0,04** | 93,0 | 2,06 | 0,00 | 22,80 |
| K 12 | 2 125 | 2 130 | | | | | | |
| K 12 | | | 20 | **41,23** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **37,89** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **33,77** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 12 | | | 40 | **29,63** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 12 | | | 50 | **25,68** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 12 | | | 63 | **22,70** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 12 | | | 80 | **19,49** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 12 | | | 100 | **16,20** | 89,0 | 0,53 | 3,00 | 16,80 |
| K 12 | | | 125 | **12,72** | 92,0 | 0,81 | 1,80 | 18,80 |
| K 12 | | | 160 | **5,52** | 92,0 | 1,21 | 0,00 | 21,10 |
| K 12 | | | 200 | **1,79** | 93,0 | 1,75 | 0,00 | 22,80 |
| K 13 | 1 546 | 1 553 | | | | | | |
| K 13 | | | 20 | **43,98** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **40,65** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 13 | | | 32 | **36,53** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 13 | | | 40 | **32,40** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 13 | | | 50 | **28,47** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 13 | | | 63 | **25,51** | 83,0 | 0,17 | 4,30 | 13,00 |
| K 13 | | | 80 | **22,33** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 13 | | | 100 | **19,09** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 13 | | | 125 | **15,69** | 92,0 | 0,59 | 1,80 | 18,80 |
| K 13 | | | 160 | **8,59** | 92,0 | 0,89 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 200 | **5,00** | 93,0 | 1,27 | 0,00 | 22,80 |
| K 14 | 1 672 | 1 678 | | | | | | |
| K 14 | | | 20 | **43,30** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **39,97** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 14 | | | 32 | **35,85** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 14 | | | 40 | **31,72** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 14 | | | 50 | **27,79** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 14 | | | 63 | **24,82** | 83,0 | 0,18 | 4,30 | 13,00 |
| K 14 | | | 80 | **21,63** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 14 | | | 100 | **18,38** | 89,0 | 0,42 | 3,00 | 16,80 |
| K 14 | | | 125 | **14,97** | 92,0 | 0,64 | 1,80 | 18,80 |
| K 14 | | | 160 | **7,85** | 92,0 | 0,96 | 0,00 | 21,10 |
| K 14 | | | 200 | **4,23** | 93,0 | 1,38 | 0,00 | 22,80 |
| WTG 01 | 4 392 | 4 395 | | | | | | |
| WTG 01 | | | 20 | **36,44** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **33,05** | 75,2 | 0,09 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **28,51** | 77,1 | 0,13 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **23,52** | 78,3 | 0,22 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **19,53** | 80,3 | 0,31 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **17,76** | 84,6 | 0,48 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **14,14** | 87,3 | 0,70 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **9,24** | 88,9 | 1,10 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **5,07** | 91,5 | 1,67 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-0,56** | 93,5 | 2,51 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-4,86** | 94,5 | 3,60 | 0,00 | 22,80 |
| WTG 02 | 3 496 | 3 500 | | | | | | |
| WTG 02 | | | 20 | **38,42** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **35,05** | 75,2 | 0,07 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **30,51** | 77,1 | 0,10 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **25,54** | 78,3 | 0,17 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **21,57** | 80,3 | 0,24 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **19,83** | 84,6 | 0,38 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **16,26** | 87,3 | 0,56 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **11,44** | 88,9 | 0,87 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **7,39** | 91,5 | 1,33 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **1,92** | 93,5 | 1,99 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-2,15** | 94,5 | 2,87 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **53,00** | | | | |
| Sum | | | 25 | **49,66** | | | | |
| Sum | | | 32 | **45,52** | | | | |
| Sum | | | 40 | **41,34** | | | | |
| Sum | | | 50 | **37,39** | | | | |
| Sum | | | 63 | **34,47** | | | | |
| Sum | | | 80 | **31,25** | | | | |
| Sum | | | 100 | **27,90** | | | | |
| Sum | | | 125 | **24,42** | | | | |
| Sum | | | 160 | **17,30** | | | | |
| Sum | | | 200 | **13,59** | | | | |

**Noise sensitive area: AF Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (141)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 1 412 | 1 421 | | | | | | |
| K 01 | | | 20 | **44,75** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **41,42** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 01 | | | 32 | **37,30** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 01 | | | 40 | **33,18** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 01 | | | 50 | **29,25** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 01 | | | 63 | **26,29** | 83,0 | 0,16 | 4,30 | 13,00 |
| K 01 | | | 80 | **23,12** | 86,0 | 0,23 | 3,70 | 14,80 |
| K 01 | | | 100 | **19,89** | 89,0 | 0,36 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | | | 125 | **16,51** | 92,0 | 0,54 | 1,80 | 18,80 |
| K 01 | | | 160 | **9,44** | 92,0 | 0,81 | 0,00 | 21,10 |
| K 01 | | | 200 | **5,88** | 93,0 | 1,17 | 0,00 | 22,80 |
| K 02 | 1 346 | 1 357 | | | | | | |
| K 02 | | | 20 | **45,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **41,82** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 02 | | | 32 | **37,71** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 02 | | | 40 | **33,58** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 02 | | | 50 | **29,66** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 02 | | | 63 | **26,70** | 83,0 | 0,15 | 4,30 | 13,00 |
| K 02 | | | 80 | **23,53** | 86,0 | 0,22 | 3,70 | 14,80 |
| K 02 | | | 100 | **20,31** | 89,0 | 0,34 | 3,00 | 16,80 |
| K 02 | | | 125 | **16,94** | 92,0 | 0,52 | 1,80 | 18,80 |
| K 02 | | | 160 | **9,88** | 92,0 | 0,77 | 0,00 | 21,10 |
| K 02 | | | 200 | **6,34** | 93,0 | 1,11 | 0,00 | 22,80 |
| K 03 | 1 282 | 1 293 | | | | | | |
| K 03 | | | 20 | **45,57** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **42,24** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 03 | | | 32 | **38,13** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 03 | | | 40 | **34,01** | 78,0 | 0,06 | 5,00 | 10,30 |
| K 03 | | | 50 | **30,08** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 03 | | | 63 | **27,13** | 83,0 | 0,14 | 4,30 | 13,00 |
| K 03 | | | 80 | **23,96** | 86,0 | 0,21 | 3,70 | 14,80 |
| K 03 | | | 100 | **20,75** | 89,0 | 0,32 | 3,00 | 16,80 |
| K 03 | | | 125 | **17,38** | 92,0 | 0,49 | 1,80 | 18,80 |
| K 03 | | | 160 | **10,33** | 92,0 | 0,74 | 0,00 | 21,10 |
| K 03 | | | 200 | **6,81** | 93,0 | 1,06 | 0,00 | 22,80 |
| K 04 | 2 043 | 2 049 | | | | | | |
| K 04 | | | 20 | **41,57** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **38,23** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 04 | | | 32 | **34,11** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,97** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 04 | | | 50 | **26,02** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 04 | | | 63 | **23,04** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 04 | | | 80 | **19,84** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 04 | | | 100 | **16,56** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 04 | | | 125 | **13,09** | 92,0 | 0,78 | 1,80 | 18,80 |
| K 04 | | | 160 | **5,90** | 92,0 | 1,17 | 0,00 | 21,10 |
| K 04 | | | 200 | **2,19** | 93,0 | 1,68 | 0,00 | 22,80 |
| K 05 | 1 704 | 1 712 | | | | | | |
| K 05 | | | 20 | **43,13** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **39,80** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 05 | | | 32 | **35,68** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 05 | | | 40 | **31,54** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 05 | | | 50 | **27,61** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 05 | | | 63 | **24,64** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 05 | | | 80 | **21,46** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 05 | | | 100 | **18,20** | 89,0 | 0,43 | 3,00 | 16,80 |
| K 05 | | | 125 | **14,78** | 92,0 | 0,65 | 1,80 | 18,80 |
| K 05 | | | 160 | **7,65** | 92,0 | 0,98 | 0,00 | 21,10 |
| K 05 | | | 200 | **4,03** | 93,0 | 1,40 | 0,00 | 22,80 |
| K 06 | 2 235 | 2 242 | | | | | | |
| K 06 | | | 20 | **40,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **37,44** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 06 | | | 32 | **33,32** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 06 | | | 40 | **29,18** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 06 | | | 50 | **25,23** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 06 | | | 63 | **22,24** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 06 | | | 80 | **19,03** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 06 | | | 100 | **15,73** | 89,0 | 0,56 | 3,00 | 16,80 |
| K 06 | | | 125 | **12,24** | 92,0 | 0,85 | 1,80 | 18,80 |
| K 06 | | | 160 | **5,01** | 92,0 | 1,28 | 0,00 | 21,10 |
| K 06 | | | 200 | **1,25** | 93,0 | 1,84 | 0,00 | 22,80 |
| K 07 | 2 767 | 2 772 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 20 | **38,94** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **35,59** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 07 | | | 32 | **31,46** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 07 | | | 40 | **27,30** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 07 | | | 50 | **23,35** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 07 | | | 63 | **20,34** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 07 | | | 80 | **17,10** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 07 | | | 100 | **13,75** | 89,0 | 0,69 | 3,00 | 16,80 |
| K 07 | | | 125 | **10,19** | 92,0 | 1,05 | 1,80 | 18,80 |
| K 07 | | | 160 | **2,86** | 92,0 | 1,58 | 0,00 | 21,10 |
| K 07 | | | 200 | **-1,03** | 93,0 | 2,27 | 0,00 | 22,80 |
| K 08 | 2 065 | 2 072 | | | | | | |
| K 08 | | | 20 | **41,47** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **38,13** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 08 | | | 32 | **34,01** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 08 | | | 40 | **29,87** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 08 | | | 50 | **25,93** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 08 | | | 63 | **22,95** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 08 | | | 80 | **19,74** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 08 | | | 100 | **16,46** | 89,0 | 0,52 | 3,00 | 16,80 |
| K 08 | | | 125 | **12,99** | 92,0 | 0,79 | 1,80 | 18,80 |
| K 08 | | | 160 | **5,79** | 92,0 | 1,18 | 0,00 | 21,10 |
| K 08 | | | 200 | **2,08** | 93,0 | 1,70 | 0,00 | 22,80 |
| K 09 | 2 097 | 2 103 | | | | | | |
| K 09 | | | 20 | **41,34** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **38,00** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 09 | | | 32 | **33,88** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 09 | | | 40 | **29,74** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 09 | | | 50 | **25,79** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 09 | | | 63 | **22,81** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 09 | | | 80 | **19,60** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 09 | | | 100 | **16,32** | 89,0 | 0,53 | 3,00 | 16,80 |
| K 09 | | | 125 | **12,84** | 92,0 | 0,80 | 1,80 | 18,80 |
| K 09 | | | 160 | **5,64** | 92,0 | 1,20 | 0,00 | 21,10 |
| K 09 | | | 200 | **1,92** | 93,0 | 1,72 | 0,00 | 22,80 |
| K 10 | 2 136 | 2 143 | | | | | | |
| K 10 | | | 20 | **41,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **37,84** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 10 | | | 32 | **33,72** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 10 | | | 40 | **29,57** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 10 | | | 50 | **25,63** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 10 | | | 63 | **22,64** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 10 | | | 80 | **19,44** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 10 | | | 100 | **16,14** | 89,0 | 0,54 | 3,00 | 16,80 |
| K 10 | | | 125 | **12,67** | 92,0 | 0,81 | 1,80 | 18,80 |
| K 10 | | | 160 | **5,46** | 92,0 | 1,22 | 0,00 | 21,10 |
| K 10 | | | 200 | **1,72** | 93,0 | 1,76 | 0,00 | 22,80 |
| K 11 | 2 785 | 2 790 | | | | | | |
| K 11 | | | 20 | **38,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **35,53** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 11 | | | 32 | **31,40** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 11 | | | 40 | **27,25** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 11 | | | 50 | **23,29** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 11 | | | 63 | **20,28** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 11 | | | 80 | **17,04** | 86,0 | 0,45 | 3,70 | 14,80 |
| K 11 | | | 100 | **13,69** | 89,0 | 0,70 | 3,00 | 16,80 |
| K 11 | | | 125 | **10,13** | 92,0 | 1,06 | 1,80 | 18,80 |
| K 11 | | | 160 | **2,80** | 92,0 | 1,59 | 0,00 | 21,10 |
| K 11 | | | 200 | **-1,10** | 93,0 | 2,29 | 0,00 | 22,80 |
| K 12 | 3 496 | 3 500 | | | | | | |
| K 12 | | | 20 | **36,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **33,55** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 12 | | | 32 | **29,41** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 12 | | | 40 | **25,24** | 78,0 | 0,18 | 5,00 | 10,30 |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 12 | | | 50 | **21,27** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 12 | | | 63 | **18,23** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 12 | | | 80 | **14,96** | 86,0 | 0,56 | 3,70 | 14,80 |
| K 12 | | | 100 | **11,54** | 89,0 | 0,88 | 3,00 | 16,80 |
| K 12 | | | 125 | **7,89** | 92,0 | 1,33 | 1,80 | 18,80 |
| K 12 | | | 160 | **0,42** | 92,0 | 2,00 | 0,00 | 21,10 |
| K 12 | | | 200 | **-3,65** | 93,0 | 2,87 | 0,00 | 22,80 |
| K 13 | 2 884 | 2 889 | | | | | | |
| K 13 | | | 20 | **38,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **35,23** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 13 | | | 32 | **31,10** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 13 | | | 40 | **26,94** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 13 | | | 50 | **22,98** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 13 | | | 63 | **19,97** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 13 | | | 80 | **16,72** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 13 | | | 100 | **13,36** | 89,0 | 0,72 | 3,00 | 16,80 |
| K 13 | | | 125 | **9,79** | 92,0 | 1,10 | 1,80 | 18,80 |
| K 13 | | | 160 | **2,44** | 92,0 | 1,65 | 0,00 | 21,10 |
| K 13 | | | 200 | **-1,48** | 93,0 | 2,37 | 0,00 | 22,80 |
| K 14 | 2 301 | 2 307 | | | | | | |
| K 14 | | | 20 | **40,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **37,19** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 14 | | | 32 | **33,07** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 14 | | | 40 | **28,92** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 14 | | | 50 | **24,98** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 14 | | | 63 | **21,99** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 14 | | | 80 | **18,77** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 14 | | | 100 | **15,46** | 89,0 | 0,58 | 3,00 | 16,80 |
| K 14 | | | 125 | **11,96** | 92,0 | 0,88 | 1,80 | 18,80 |
| K 14 | | | 160 | **4,73** | 92,0 | 1,31 | 0,00 | 21,10 |
| K 14 | | | 200 | **0,95** | 93,0 | 1,89 | 0,00 | 22,80 |
| WTG 01 | 2 975 | 2 981 | | | | | | |
| WTG 01 | | | 20 | **39,81** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **36,45** | 75,2 | 0,06 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **31,92** | 77,1 | 0,09 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **26,96** | 78,3 | 0,15 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **23,00** | 80,3 | 0,21 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **21,28** | 84,6 | 0,33 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **17,73** | 87,3 | 0,48 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **12,97** | 88,9 | 0,75 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **8,98** | 91,5 | 1,13 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **3,61** | 93,5 | 1,70 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-0,33** | 94,5 | 2,44 | 0,00 | 22,80 |
| WTG 02 | 2 623 | 2 629 | | | | | | |
| WTG 02 | | | 20 | **40,90** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **37,55** | 75,2 | 0,05 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **33,02** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **28,07** | 78,3 | 0,13 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **24,12** | 80,3 | 0,18 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **22,41** | 84,6 | 0,29 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **18,88** | 87,3 | 0,42 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **14,15** | 88,9 | 0,66 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **10,20** | 91,5 | 1,00 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **4,90** | 93,5 | 1,50 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **1,05** | 94,5 | 2,16 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **53,93** | | | | |
| Sum | | | 25 | **50,59** | | | | |
| Sum | | | 32 | **46,44** | | | | |
| Sum | | | 40 | **42,24** | | | | |
| Sum | | | 50 | **38,30** | | | | |
| Sum | | | 63 | **35,43** | | | | |
| Sum | | | 80 | **32,21** | | | | |
| Sum | | | 100 | **28,83** | | | | |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| Sum | | | 125 | **25,37** | | | | |
| Sum | | | 160 | **18,34** | | | | |
| Sum | | | 200 | **14,67** | | | | |

**Noise sensitive area: AG Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (142)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 1 271 | 1 281 | | | | | | |
| K 01 | | | 20 | **45,65** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **42,33** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 01 | | | 32 | **38,21** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 01 | | | 40 | **34,09** | 78,0 | 0,06 | 5,00 | 10,30 |
| K 01 | | | 50 | **30,16** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 01 | | | 63 | **27,21** | 83,0 | 0,14 | 4,30 | 13,00 |
| K 01 | | | 80 | **24,05** | 86,0 | 0,20 | 3,70 | 14,80 |
| K 01 | | | 100 | **20,83** | 89,0 | 0,32 | 3,00 | 16,80 |
| K 01 | | | 125 | **17,46** | 92,0 | 0,49 | 1,80 | 18,80 |
| K 01 | | | 160 | **10,42** | 92,0 | 0,73 | 0,00 | 21,10 |
| K 01 | | | 200 | **6,90** | 93,0 | 1,05 | 0,00 | 22,80 |
| K 02 | 1 295 | 1 305 | | | | | | |
| K 02 | | | 20 | **45,48** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **42,16** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 02 | | | 32 | **38,05** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 02 | | | 40 | **33,92** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 02 | | | 50 | **29,99** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 02 | | | 63 | **27,04** | 83,0 | 0,14 | 4,30 | 13,00 |
| K 02 | | | 80 | **23,88** | 86,0 | 0,21 | 3,70 | 14,80 |
| K 02 | | | 100 | **20,66** | 89,0 | 0,33 | 3,00 | 16,80 |
| K 02 | | | 125 | **17,29** | 92,0 | 0,50 | 1,80 | 18,80 |
| K 02 | | | 160 | **10,24** | 92,0 | 0,74 | 0,00 | 21,10 |
| K 02 | | | 200 | **6,71** | 93,0 | 1,07 | 0,00 | 22,80 |
| K 03 | 1 345 | 1 355 | | | | | | |
| K 03 | | | 20 | **45,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **41,83** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 03 | | | 32 | **37,72** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 03 | | | 40 | **33,59** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 03 | | | 50 | **29,66** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 03 | | | 63 | **26,71** | 83,0 | 0,15 | 4,30 | 13,00 |
| K 03 | | | 80 | **23,54** | 86,0 | 0,22 | 3,70 | 14,80 |
| K 03 | | | 100 | **20,32** | 89,0 | 0,34 | 3,00 | 16,80 |
| K 03 | | | 125 | **16,94** | 92,0 | 0,52 | 1,80 | 18,80 |
| K 03 | | | 160 | **9,89** | 92,0 | 0,77 | 0,00 | 21,10 |
| K 03 | | | 200 | **6,35** | 93,0 | 1,11 | 0,00 | 22,80 |
| K 04 | 2 139 | 2 145 | | | | | | |
| K 04 | | | 20 | **41,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,83** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,71** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,56** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,62** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,63** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 04 | | | 80 | **19,43** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 04 | | | 100 | **16,13** | 89,0 | 0,54 | 3,00 | 16,80 |
| K 04 | | | 125 | **12,66** | 92,0 | 0,82 | 1,80 | 18,80 |
| K 04 | | | 160 | **5,45** | 92,0 | 1,22 | 0,00 | 21,10 |
| K 04 | | | 200 | **1,71** | 93,0 | 1,76 | 0,00 | 22,80 |
| K 05 | 1 870 | 1 877 | | | | | | |
| K 05 | | | 20 | **42,33** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **38,99** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 05 | | | 32 | **34,87** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 05 | | | 40 | **30,74** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 05 | | | 50 | **26,80** | 80,0 | 0,13 | 4,70 | 11,50 |
| K 05 | | | 63 | **23,82** | 83,0 | 0,21 | 4,30 | 13,00 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 80 | **20,63** | 86,0 | 0,30 | 3,70 | 14,80 |
| K 05 | | | 100 | **17,36** | 89,0 | 0,47 | 3,00 | 16,80 |
| K 05 | | | 125 | **13,92** | 92,0 | 0,71 | 1,80 | 18,80 |
| K 05 | | | 160 | **6,76** | 92,0 | 1,07 | 0,00 | 21,10 |
| K 05 | | | 200 | **3,09** | 93,0 | 1,54 | 0,00 | 22,80 |
| K 06 | 2 137 | 2 143 | | | | | | |
| K 06 | | | 20 | **41,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **37,84** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 06 | | | 32 | **33,71** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 06 | | | 40 | **29,57** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 06 | | | 50 | **25,63** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 06 | | | 63 | **22,64** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 06 | | | 80 | **19,44** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 06 | | | 100 | **16,14** | 89,0 | 0,54 | 3,00 | 16,80 |
| K 06 | | | 125 | **12,66** | 92,0 | 0,81 | 1,80 | 18,80 |
| K 06 | | | 160 | **5,46** | 92,0 | 1,22 | 0,00 | 21,10 |
| K 06 | | | 200 | **1,72** | 93,0 | 1,76 | 0,00 | 22,80 |
| K 07 | 2 696 | 2 701 | | | | | | |
| K 07 | | | 20 | **39,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **35,82** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 07 | | | 32 | **31,69** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 07 | | | 40 | **27,53** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 07 | | | 50 | **23,58** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 07 | | | 63 | **20,57** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 07 | | | 80 | **17,34** | 86,0 | 0,43 | 3,70 | 14,80 |
| K 07 | | | 100 | **13,99** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 07 | | | 125 | **10,44** | 92,0 | 1,03 | 1,80 | 18,80 |
| K 07 | | | 160 | **3,13** | 92,0 | 1,54 | 0,00 | 21,10 |
| K 07 | | | 200 | **-0,75** | 93,0 | 2,21 | 0,00 | 22,80 |
| K 08 | 2 050 | 2 056 | | | | | | |
| K 08 | | | 20 | **41,54** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **38,20** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 08 | | | 32 | **34,08** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 08 | | | 40 | **29,94** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 08 | | | 50 | **25,99** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 08 | | | 63 | **23,01** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 08 | | | 80 | **19,81** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 08 | | | 100 | **16,52** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 08 | | | 125 | **13,06** | 92,0 | 0,78 | 1,80 | 18,80 |
| K 08 | | | 160 | **5,87** | 92,0 | 1,17 | 0,00 | 21,10 |
| K 08 | | | 200 | **2,15** | 93,0 | 1,69 | 0,00 | 22,80 |
| K 09 | 2 134 | 2 140 | | | | | | |
| K 09 | | | 20 | **41,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **37,85** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 09 | | | 32 | **33,73** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 09 | | | 40 | **29,58** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 09 | | | 50 | **25,64** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 09 | | | 63 | **22,65** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 09 | | | 80 | **19,45** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 09 | | | 100 | **16,16** | 89,0 | 0,54 | 3,00 | 16,80 |
| K 09 | | | 125 | **12,68** | 92,0 | 0,81 | 1,80 | 18,80 |
| K 09 | | | 160 | **5,47** | 92,0 | 1,22 | 0,00 | 21,10 |
| K 09 | | | 200 | **1,74** | 93,0 | 1,76 | 0,00 | 22,80 |
| K 10 | 1 910 | 1 917 | | | | | | |
| K 10 | | | 20 | **42,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **38,81** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 10 | | | 32 | **34,69** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 10 | | | 40 | **30,55** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 10 | | | 50 | **26,61** | 80,0 | 0,13 | 4,70 | 11,50 |
| K 10 | | | 63 | **23,64** | 83,0 | 0,21 | 4,30 | 13,00 |
| K 10 | | | 80 | **20,44** | 86,0 | 0,31 | 3,70 | 14,80 |
| K 10 | | | 100 | **17,17** | 89,0 | 0,48 | 3,00 | 16,80 |
| K 10 | | | 125 | **13,72** | 92,0 | 0,73 | 1,80 | 18,80 |
| K 10 | | | 160 | **6,55** | 92,0 | 1,09 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 200 | **2,88** | 93,0 | 1,57 | 0,00 | 22,80 |
| K 11 | 2 554 | 2 559 | | | | | | |
| K 11 | | | 20 | **39,64** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **36,29** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 11 | | | 32 | **32,16** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 11 | | | 40 | **28,01** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 11 | | | 50 | **24,06** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 11 | | | 63 | **21,06** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 11 | | | 80 | **17,83** | 86,0 | 0,41 | 3,70 | 14,80 |
| K 11 | | | 100 | **14,50** | 89,0 | 0,64 | 3,00 | 16,80 |
| K 11 | | | 125 | **10,97** | 92,0 | 0,97 | 1,80 | 18,80 |
| K 11 | | | 160 | **3,68** | 92,0 | 1,46 | 0,00 | 21,10 |
| K 11 | | | 200 | **-0,16** | 93,0 | 2,10 | 0,00 | 22,80 |
| K 12 | 3 275 | 3 279 | | | | | | |
| K 12 | | | 20 | **37,49** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **34,12** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 12 | | | 32 | **29,99** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 12 | | | 40 | **25,82** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 12 | | | 50 | **21,86** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 12 | | | 63 | **18,82** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 12 | | | 80 | **15,56** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 12 | | | 100 | **12,17** | 89,0 | 0,82 | 3,00 | 16,80 |
| K 12 | | | 125 | **8,54** | 92,0 | 1,25 | 1,80 | 18,80 |
| K 12 | | | 160 | **1,12** | 92,0 | 1,87 | 0,00 | 21,10 |
| K 12 | | | 200 | **-2,90** | 93,0 | 2,69 | 0,00 | 22,80 |
| K 13 | 2 687 | 2 692 | | | | | | |
| K 13 | | | 20 | **39,20** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **35,84** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **31,72** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 13 | | | 40 | **27,56** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 13 | | | 50 | **23,61** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 13 | | | 63 | **20,60** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 13 | | | 80 | **17,37** | 86,0 | 0,43 | 3,70 | 14,80 |
| K 13 | | | 100 | **14,02** | 89,0 | 0,67 | 3,00 | 16,80 |
| K 13 | | | 125 | **10,47** | 92,0 | 1,02 | 1,80 | 18,80 |
| K 13 | | | 160 | **3,16** | 92,0 | 1,53 | 0,00 | 21,10 |
| K 13 | | | 200 | **-0,71** | 93,0 | 2,21 | 0,00 | 22,80 |
| K 14 | 2 126 | 2 132 | | | | | | |
| K 14 | | | 20 | **41,22** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **37,88** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 14 | | | 32 | **33,76** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 14 | | | 40 | **29,62** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 14 | | | 50 | **25,67** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 14 | | | 63 | **22,69** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 14 | | | 80 | **19,48** | 86,0 | 0,34 | 3,70 | 14,80 |
| K 14 | | | 100 | **16,19** | 89,0 | 0,53 | 3,00 | 16,80 |
| K 14 | | | 125 | **12,71** | 92,0 | 0,81 | 1,80 | 18,80 |
| K 14 | | | 160 | **5,51** | 92,0 | 1,22 | 0,00 | 21,10 |
| K 14 | | | 200 | **1,77** | 93,0 | 1,75 | 0,00 | 22,80 |
| WTG 01 | 3 145 | 3 150 | | | | | | |
| WTG 01 | | | 20 | **39,33** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **35,97** | 75,2 | 0,06 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **31,44** | 77,1 | 0,09 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **26,48** | 78,3 | 0,16 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **22,51** | 80,3 | 0,22 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **20,79** | 84,6 | 0,35 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **17,23** | 87,3 | 0,50 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **12,45** | 88,9 | 0,79 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **8,44** | 91,5 | 1,20 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **3,04** | 93,5 | 1,80 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-0,95** | 94,5 | 2,58 | 0,00 | 22,80 |
| WTG 02 | 2 738 | 2 744 | | | | | | |
| WTG 02 | | | 20 | **40,53** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **37,18** | 75,2 | 0,05 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 32 | **32,65** | 77,1 | 0,08 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **27,69** | 78,3 | 0,14 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **23,74** | 80,3 | 0,19 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **22,03** | 84,6 | 0,30 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **18,49** | 87,3 | 0,44 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **13,75** | 88,9 | 0,69 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **9,79** | 91,5 | 1,04 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **4,47** | 93,5 | 1,56 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **0,58** | 94,5 | 2,25 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **54,09** | | | | |
| Sum | | | 25 | **50,75** | | | | |
| Sum | | | 32 | **46,60** | | | | |
| Sum | | | 40 | **42,42** | | | | |
| Sum | | | 50 | **38,48** | | | | |
| Sum | | | 63 | **35,59** | | | | |
| Sum | | | 80 | **32,37** | | | | |
| Sum | | | 100 | **29,02** | | | | |
| Sum | | | 125 | **25,56** | | | | |
| Sum | | | 160 | **18,52** | | | | |
| Sum | | | 200 | **14,86** | | | | |

**Noise sensitive area: AH Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (140)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 1 149 | 1 160 | | | | | | |
| K 01 | | | 20 | **46,51** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **43,19** | 73,7 | 0,02 | 5,40 | 8,30 |
| K 01 | | | 32 | **39,08** | 76,0 | 0,03 | 5,20 | 9,20 |
| K 01 | | | 40 | **34,96** | 78,0 | 0,06 | 5,00 | 10,30 |
| K 01 | | | 50 | **31,03** | 80,0 | 0,08 | 4,70 | 11,50 |
| K 01 | | | 63 | **28,09** | 83,0 | 0,13 | 4,30 | 13,00 |
| K 01 | | | 80 | **24,93** | 86,0 | 0,19 | 3,70 | 14,80 |
| K 01 | | | 100 | **21,72** | 89,0 | 0,29 | 3,00 | 16,80 |
| K 01 | | | 125 | **18,37** | 92,0 | 0,44 | 1,80 | 18,80 |
| K 01 | | | 160 | **11,35** | 92,0 | 0,66 | 0,00 | 21,10 |
| K 01 | | | 200 | **7,86** | 93,0 | 0,95 | 0,00 | 22,80 |
| K 02 | 1 261 | 1 271 | | | | | | |
| K 02 | | | 20 | **45,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **42,39** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 02 | | | 32 | **38,28** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 02 | | | 40 | **34,16** | 78,0 | 0,06 | 5,00 | 10,30 |
| K 02 | | | 50 | **30,23** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 02 | | | 63 | **27,28** | 83,0 | 0,14 | 4,30 | 13,00 |
| K 02 | | | 80 | **24,12** | 86,0 | 0,20 | 3,70 | 14,80 |
| K 02 | | | 100 | **20,90** | 89,0 | 0,32 | 3,00 | 16,80 |
| K 02 | | | 125 | **17,54** | 92,0 | 0,48 | 1,80 | 18,80 |
| K 02 | | | 160 | **10,50** | 92,0 | 0,72 | 0,00 | 21,10 |
| K 02 | | | 200 | **6,98** | 93,0 | 1,04 | 0,00 | 22,80 |
| K 03 | 1 411 | 1 420 | | | | | | |
| K 03 | | | 20 | **44,76** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **41,43** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 03 | | | 32 | **37,31** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 03 | | | 40 | **33,18** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 03 | | | 50 | **29,26** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 03 | | | 63 | **26,30** | 83,0 | 0,16 | 4,30 | 13,00 |
| K 03 | | | 80 | **23,13** | 86,0 | 0,23 | 3,70 | 14,80 |
| K 03 | | | 100 | **19,90** | 89,0 | 0,35 | 3,00 | 16,80 |
| K 03 | | | 125 | **16,52** | 92,0 | 0,54 | 1,80 | 18,80 |
| K 03 | | | 160 | **9,45** | 92,0 | 0,81 | 0,00 | 21,10 |
| K 03 | | | 200 | **5,89** | 93,0 | 1,16 | 0,00 | 22,80 |
| K 04 | 2 221 | 2 227 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 20 | **40,85** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **37,50** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 04 | | | 32 | **33,38** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 04 | | | 40 | **29,24** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 04 | | | 50 | **25,29** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 04 | | | 63 | **22,30** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 04 | | | 80 | **19,09** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 04 | | | 100 | **15,79** | 89,0 | 0,56 | 3,00 | 16,80 |
| K 04 | | | 125 | **12,30** | 92,0 | 0,85 | 1,80 | 18,80 |
| K 04 | | | 160 | **5,08** | 92,0 | 1,27 | 0,00 | 21,10 |
| K 04 | | | 200 | **1,32** | 93,0 | 1,83 | 0,00 | 22,80 |
| K 05 | 2 014 | 2 020 | | | | | | |
| K 05 | | | 20 | **41,69** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **38,35** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 05 | | | 32 | **34,23** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 05 | | | 40 | **30,09** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 05 | | | 50 | **26,15** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 05 | | | 63 | **23,17** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 05 | | | 80 | **19,97** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 05 | | | 100 | **16,69** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 05 | | | 125 | **13,23** | 92,0 | 0,77 | 1,80 | 18,80 |
| K 05 | | | 160 | **6,04** | 92,0 | 1,15 | 0,00 | 21,10 |
| K 05 | | | 200 | **2,34** | 93,0 | 1,66 | 0,00 | 22,80 |
| K 06 | 2 045 | 2 051 | | | | | | |
| K 06 | | | 20 | **41,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **38,22** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 06 | | | 32 | **34,10** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 06 | | | 40 | **29,96** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 06 | | | 50 | **26,02** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 06 | | | 63 | **23,04** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 06 | | | 80 | **19,83** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 06 | | | 100 | **16,55** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 06 | | | 125 | **13,08** | 92,0 | 0,78 | 1,80 | 18,80 |
| K 06 | | | 160 | **5,89** | 92,0 | 1,17 | 0,00 | 21,10 |
| K 06 | | | 200 | **2,18** | 93,0 | 1,68 | 0,00 | 22,80 |
| K 07 | 2 625 | 2 630 | | | | | | |
| K 07 | | | 20 | **39,40** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **36,05** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 07 | | | 32 | **31,92** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 07 | | | 40 | **27,77** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 07 | | | 50 | **23,82** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 07 | | | 63 | **20,81** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 07 | | | 80 | **17,58** | 86,0 | 0,42 | 3,70 | 14,80 |
| K 07 | | | 100 | **14,24** | 89,0 | 0,66 | 3,00 | 16,80 |
| K 07 | | | 125 | **10,70** | 92,0 | 1,00 | 1,80 | 18,80 |
| K 07 | | | 160 | **3,40** | 92,0 | 1,50 | 0,00 | 21,10 |
| K 07 | | | 200 | **-0,45** | 93,0 | 2,16 | 0,00 | 22,80 |
| K 08 | 2 035 | 2 041 | | | | | | |
| K 08 | | | 20 | **41,60** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **38,26** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 08 | | | 32 | **34,14** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 08 | | | 40 | **30,00** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 08 | | | 50 | **26,06** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 08 | | | 63 | **23,08** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 08 | | | 80 | **19,88** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 08 | | | 100 | **16,59** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 08 | | | 125 | **13,13** | 92,0 | 0,78 | 1,80 | 18,80 |
| K 08 | | | 160 | **5,94** | 92,0 | 1,16 | 0,00 | 21,10 |
| K 08 | | | 200 | **2,23** | 93,0 | 1,67 | 0,00 | 22,80 |
| K 09 | 2 165 | 2 171 | | | | | | |
| K 09 | | | 20 | **41,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **37,73** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 09 | | | 32 | **33,60** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 09 | | | 40 | **29,46** | 78,0 | 0,11 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 09 | | | 50 | **25,52** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 09 | | | 63 | **22,53** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 09 | | | 80 | **19,32** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 09 | | | 100 | **16,03** | 89,0 | 0,54 | 3,00 | 16,80 |
| K 09 | | | 125 | **12,54** | 92,0 | 0,82 | 1,80 | 18,80 |
| K 09 | | | 160 | **5,33** | 92,0 | 1,24 | 0,00 | 21,10 |
| K 09 | | | 200 | **1,59** | 93,0 | 1,78 | 0,00 | 22,80 |
| K 10 | 1 703 | 1 710 | | | | | | |
| K 10 | | | 20 | **43,14** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **39,80** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 10 | | | 32 | **35,69** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 10 | | | 40 | **31,55** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 10 | | | 50 | **27,62** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 10 | | | 63 | **24,65** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 10 | | | 80 | **21,46** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 10 | | | 100 | **18,21** | 89,0 | 0,43 | 3,00 | 16,80 |
| K 10 | | | 125 | **14,79** | 92,0 | 0,65 | 1,80 | 18,80 |
| K 10 | | | 160 | **7,66** | 92,0 | 0,97 | 0,00 | 21,10 |
| K 10 | | | 200 | **4,03** | 93,0 | 1,40 | 0,00 | 22,80 |
| K 11 | 2 343 | 2 348 | | | | | | |
| K 11 | | | 20 | **40,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **37,04** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 11 | | | 32 | **32,91** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 11 | | | 40 | **28,77** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 11 | | | 50 | **24,82** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 11 | | | 63 | **21,83** | 83,0 | 0,26 | 4,30 | 13,00 |
| K 11 | | | 80 | **18,61** | 86,0 | 0,38 | 3,70 | 14,80 |
| K 11 | | | 100 | **15,30** | 89,0 | 0,59 | 3,00 | 16,80 |
| K 11 | | | 125 | **11,79** | 92,0 | 0,89 | 1,80 | 18,80 |
| K 11 | | | 160 | **4,55** | 92,0 | 1,34 | 0,00 | 21,10 |
| K 11 | | | 200 | **0,76** | 93,0 | 1,93 | 0,00 | 22,80 |
| K 12 | 3 070 | 3 074 | | | | | | |
| K 12 | | | 20 | **38,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **34,68** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 12 | | | 32 | **30,55** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 12 | | | 40 | **26,39** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 12 | | | 50 | **22,43** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 12 | | | 63 | **19,41** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 12 | | | 80 | **16,15** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 12 | | | 100 | **12,78** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 12 | | | 125 | **9,18** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 12 | | | 160 | **1,79** | 92,0 | 1,75 | 0,00 | 21,10 |
| K 12 | | | 200 | **-2,18** | 93,0 | 2,52 | 0,00 | 22,80 |
| K 13 | 2 503 | 2 508 | | | | | | |
| K 13 | | | 20 | **39,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **36,46** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **32,34** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 13 | | | 40 | **28,19** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 13 | | | 50 | **24,24** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 13 | | | 63 | **21,24** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 13 | | | 80 | **18,01** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 13 | | | 100 | **14,69** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 13 | | | 125 | **11,16** | 92,0 | 0,95 | 1,80 | 18,80 |
| K 13 | | | 160 | **3,88** | 92,0 | 1,43 | 0,00 | 21,10 |
| K 13 | | | 200 | **0,06** | 93,0 | 2,06 | 0,00 | 22,80 |
| K 14 | 1 963 | 1 970 | | | | | | |
| K 14 | | | 20 | **41,91** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **38,57** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 14 | | | 32 | **34,45** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 14 | | | 40 | **30,31** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 14 | | | 50 | **26,37** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 14 | | | 63 | **23,39** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 14 | | | 80 | **20,20** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 14 | | | 100 | **16,92** | 89,0 | 0,49 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 125 | **13,46** | 92,0 | 0,75 | 1,80 | 18,80 |
| K 14 | | | 160 | **6,29** | 92,0 | 1,12 | 0,00 | 21,10 |
| K 14 | | | 200 | **2,60** | 93,0 | 1,62 | 0,00 | 22,80 |
| WTG 01 | 3 286 | 3 291 | | | | | | |
| WTG 01 | | | 20 | **38,95** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **35,59** | 75,2 | 0,07 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **31,05** | 77,1 | 0,10 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **26,09** | 78,3 | 0,16 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **22,12** | 80,3 | 0,23 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **20,39** | 84,6 | 0,36 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **16,83** | 87,3 | 0,53 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **12,03** | 88,9 | 0,82 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **8,00** | 91,5 | 1,25 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **2,58** | 93,5 | 1,88 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-1,44** | 94,5 | 2,70 | 0,00 | 22,80 |
| WTG 02 | 2 833 | 2 839 | | | | | | |
| WTG 02 | | | 20 | **40,24** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **36,88** | 75,2 | 0,06 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **32,35** | 77,1 | 0,09 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **27,40** | 78,3 | 0,14 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **23,44** | 80,3 | 0,20 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **21,73** | 84,6 | 0,31 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **18,18** | 87,3 | 0,45 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **13,43** | 88,9 | 0,71 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **9,46** | 91,5 | 1,08 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **4,12** | 93,5 | 1,62 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **0,21** | 94,5 | 2,33 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **54,32** | | | | |
| Sum | | | 25 | **50,99** | | | | |
| Sum | | | 32 | **46,84** | | | | |
| Sum | | | 40 | **42,66** | | | | |
| Sum | | | 50 | **38,72** | | | | |
| Sum | | | 63 | **35,83** | | | | |
| Sum | | | 80 | **32,62** | | | | |
| Sum | | | 100 | **29,28** | | | | |
| Sum | | | 125 | **25,83** | | | | |
| Sum | | | 160 | **18,79** | | | | |
| Sum | | | 200 | **15,14** | | | | |

**Noise sensitive area: AI Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (139)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 1 539 | 1 546 | | | | | | |
| K 01 | | | 20 | **44,01** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **40,68** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 01 | | | 32 | **36,57** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 01 | | | 40 | **32,44** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 01 | | | 50 | **28,51** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 01 | | | 63 | **25,54** | 83,0 | 0,17 | 4,30 | 13,00 |
| K 01 | | | 80 | **22,37** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 01 | | | 100 | **19,13** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 01 | | | 125 | **15,73** | 92,0 | 0,59 | 1,80 | 18,80 |
| K 01 | | | 160 | **8,63** | 92,0 | 0,88 | 0,00 | 21,10 |
| K 01 | | | 200 | **5,05** | 93,0 | 1,27 | 0,00 | 22,80 |
| K 02 | 2 003 | 2 009 | | | | | | |
| K 02 | | | 20 | **41,74** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **38,40** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 02 | | | 32 | **34,28** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 02 | | | 40 | **30,14** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 02 | | | 50 | **26,20** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 02 | | | 63 | **23,22** | 83,0 | 0,22 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 80 | **20,02** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 02 | | | 100 | **16,74** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 02 | | | 125 | **13,28** | 92,0 | 0,76 | 1,80 | 18,80 |
| K 02 | | | 160 | **6,10** | 92,0 | 1,14 | 0,00 | 21,10 |
| K 02 | | | 200 | **2,40** | 93,0 | 1,65 | 0,00 | 22,80 |
| K 03 | 2 439 | 2 444 | | | | | | |
| K 03 | | | 20 | **40,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **36,69** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 03 | | | 32 | **32,56** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 03 | | | 40 | **28,42** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 03 | | | 50 | **24,47** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 03 | | | 63 | **21,47** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 03 | | | 80 | **18,25** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 03 | | | 100 | **14,93** | 89,0 | 0,61 | 3,00 | 16,80 |
| K 03 | | | 125 | **11,41** | 92,0 | 0,93 | 1,80 | 18,80 |
| K 03 | | | 160 | **4,14** | 92,0 | 1,39 | 0,00 | 21,10 |
| K 03 | | | 200 | **0,33** | 93,0 | 2,00 | 0,00 | 22,80 |
| K 04 | 3 237 | 3 241 | | | | | | |
| K 04 | | | 20 | **37,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **34,22** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 04 | | | 32 | **30,09** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 04 | | | 40 | **25,92** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 04 | | | 50 | **21,96** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 04 | | | 63 | **18,93** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 04 | | | 80 | **15,67** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 04 | | | 100 | **12,28** | 89,0 | 0,81 | 3,00 | 16,80 |
| K 04 | | | 125 | **8,66** | 92,0 | 1,23 | 1,80 | 18,80 |
| K 04 | | | 160 | **1,24** | 92,0 | 1,85 | 0,00 | 21,10 |
| K 04 | | | 200 | **-2,77** | 93,0 | 2,66 | 0,00 | 22,80 |
| K 05 | 3 197 | 3 200 | | | | | | |
| K 05 | | | 20 | **37,70** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **34,33** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 05 | | | 32 | **30,20** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 05 | | | 40 | **26,04** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 05 | | | 50 | **22,07** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 05 | | | 63 | **19,04** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 05 | | | 80 | **15,78** | 86,0 | 0,51 | 3,70 | 14,80 |
| K 05 | | | 100 | **12,40** | 89,0 | 0,80 | 3,00 | 16,80 |
| K 05 | | | 125 | **8,78** | 92,0 | 1,22 | 1,80 | 18,80 |
| K 05 | | | 160 | **1,37** | 92,0 | 1,82 | 0,00 | 21,10 |
| K 05 | | | 200 | **-2,63** | 93,0 | 2,62 | 0,00 | 22,80 |
| K 06 | 2 341 | 2 346 | | | | | | |
| K 06 | | | 20 | **40,39** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **37,05** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 06 | | | 32 | **32,92** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 06 | | | 40 | **28,77** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 06 | | | 50 | **24,83** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 06 | | | 63 | **21,83** | 83,0 | 0,26 | 4,30 | 13,00 |
| K 06 | | | 80 | **18,62** | 86,0 | 0,38 | 3,70 | 14,80 |
| K 06 | | | 100 | **15,31** | 89,0 | 0,59 | 3,00 | 16,80 |
| K 06 | | | 125 | **11,80** | 92,0 | 0,89 | 1,80 | 18,80 |
| K 06 | | | 160 | **4,55** | 92,0 | 1,34 | 0,00 | 21,10 |
| K 06 | | | 200 | **0,77** | 93,0 | 1,92 | 0,00 | 22,80 |
| K 07 | 2 960 | 2 964 | | | | | | |
| K 07 | | | 20 | **38,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **35,00** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 07 | | | 32 | **30,87** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 07 | | | 40 | **26,71** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 07 | | | 50 | **22,75** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 07 | | | 63 | **19,74** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 07 | | | 80 | **16,49** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 07 | | | 100 | **13,12** | 89,0 | 0,74 | 3,00 | 16,80 |
| K 07 | | | 125 | **9,54** | 92,0 | 1,13 | 1,80 | 18,80 |
| K 07 | | | 160 | **2,17** | 92,0 | 1,69 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 200 | **-1,77** | 93,0 | 2,43 | 0,00 | 22,80 |
| K 08 | 2 716 | 2 721 | | | | | | |
| K 08 | | | 20 | **39,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **35,75** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 08 | | | 32 | **31,62** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 08 | | | 40 | **27,47** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 08 | | | 50 | **23,52** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 08 | | | 63 | **20,51** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 08 | | | 80 | **17,27** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 08 | | | 100 | **13,93** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 08 | | | 125 | **10,37** | 92,0 | 1,03 | 1,80 | 18,80 |
| K 08 | | | 160 | **3,06** | 92,0 | 1,55 | 0,00 | 21,10 |
| K 08 | | | 200 | **-0,82** | 93,0 | 2,23 | 0,00 | 22,80 |
| K 09 | 3 012 | 3 016 | | | | | | |
| K 09 | | | 20 | **38,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **34,85** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 09 | | | 32 | **30,72** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 09 | | | 40 | **26,56** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 09 | | | 50 | **22,60** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 09 | | | 63 | **19,58** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 09 | | | 80 | **16,33** | 86,0 | 0,48 | 3,70 | 14,80 |
| K 09 | | | 100 | **12,96** | 89,0 | 0,75 | 3,00 | 16,80 |
| K 09 | | | 125 | **9,37** | 92,0 | 1,15 | 1,80 | 18,80 |
| K 09 | | | 160 | **1,99** | 92,0 | 1,72 | 0,00 | 21,10 |
| K 09 | | | 200 | **-1,96** | 93,0 | 2,47 | 0,00 | 22,80 |
| K 10 | 966 | 978 | | | | | | |
| K 10 | | | 20 | **47,99** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **44,67** | 73,7 | 0,02 | 5,40 | 8,30 |
| K 10 | | | 32 | **40,57** | 76,0 | 0,03 | 5,20 | 9,20 |
| K 10 | | | 40 | **36,45** | 78,0 | 0,05 | 5,00 | 10,30 |
| K 10 | | | 50 | **32,53** | 80,0 | 0,07 | 4,70 | 11,50 |
| K 10 | | | 63 | **29,59** | 83,0 | 0,11 | 4,30 | 13,00 |
| K 10 | | | 80 | **26,44** | 86,0 | 0,16 | 3,70 | 14,80 |
| K 10 | | | 100 | **23,25** | 89,0 | 0,24 | 3,00 | 16,80 |
| K 10 | | | 125 | **19,92** | 92,0 | 0,37 | 1,80 | 18,80 |
| K 10 | | | 160 | **12,94** | 92,0 | 0,56 | 0,00 | 21,10 |
| K 10 | | | 200 | **9,49** | 93,0 | 0,80 | 0,00 | 22,80 |
| K 11 | 1 373 | 1 381 | | | | | | |
| K 11 | | | 20 | **45,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **41,67** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 11 | | | 32 | **37,56** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 11 | | | 40 | **33,43** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 11 | | | 50 | **29,50** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 11 | | | 63 | **26,55** | 83,0 | 0,15 | 4,30 | 13,00 |
| K 11 | | | 80 | **23,38** | 86,0 | 0,22 | 3,70 | 14,80 |
| K 11 | | | 100 | **20,15** | 89,0 | 0,35 | 3,00 | 16,80 |
| K 11 | | | 125 | **16,77** | 92,0 | 0,52 | 1,80 | 18,80 |
| K 11 | | | 160 | **9,71** | 92,0 | 0,79 | 0,00 | 21,10 |
| K 11 | | | 200 | **6,16** | 93,0 | 1,13 | 0,00 | 22,80 |
| K 12 | 2 192 | 2 197 | | | | | | |
| K 12 | | | 20 | **40,96** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **37,62** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **33,50** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 12 | | | 40 | **29,35** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 12 | | | 50 | **25,41** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 12 | | | 63 | **22,42** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 12 | | | 80 | **19,21** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 12 | | | 100 | **15,91** | 89,0 | 0,55 | 3,00 | 16,80 |
| K 12 | | | 125 | **12,43** | 92,0 | 0,83 | 1,80 | 18,80 |
| K 12 | | | 160 | **5,21** | 92,0 | 1,25 | 0,00 | 21,10 |
| K 12 | | | 200 | **1,46** | 93,0 | 1,80 | 0,00 | 22,80 |
| K 13 | 1 975 | 1 981 | | | | | | |
| K 13 | | | 20 | **41,86** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **38,52** | 73,7 | 0,04 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 32 | **34,40** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 13 | | | 40 | **30,27** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 13 | | | 50 | **26,33** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 13 | | | 63 | **23,35** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 13 | | | 80 | **20,15** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 13 | | | 100 | **16,87** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 13 | | | 125 | **13,41** | 92,0 | 0,75 | 1,80 | 18,80 |
| K 13 | | | 160 | **6,24** | 92,0 | 1,13 | 0,00 | 21,10 |
| K 13 | | | 200 | **2,54** | 93,0 | 1,62 | 0,00 | 22,80 |
| K 14 | 1 766 | 1 773 | | | | | | |
| K 14 | | | 20 | **42,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **39,49** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 14 | | | 32 | **35,37** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 14 | | | 40 | **31,24** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 14 | | | 50 | **27,30** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 14 | | | 63 | **24,33** | 83,0 | 0,20 | 4,30 | 13,00 |
| K 14 | | | 80 | **21,14** | 86,0 | 0,28 | 3,70 | 14,80 |
| K 14 | | | 100 | **17,88** | 89,0 | 0,44 | 3,00 | 16,80 |
| K 14 | | | 125 | **14,45** | 92,0 | 0,67 | 1,80 | 18,80 |
| K 14 | | | 160 | **7,32** | 92,0 | 1,01 | 0,00 | 21,10 |
| K 14 | | | 200 | **3,67** | 93,0 | 1,45 | 0,00 | 22,80 |
| WTG 01 | 4 443 | 4 447 | | | | | | |
| WTG 01 | | | 20 | **36,34** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **32,95** | 75,2 | 0,09 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **28,41** | 77,1 | 0,13 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **23,42** | 78,3 | 0,22 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **19,43** | 80,3 | 0,31 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **17,65** | 84,6 | 0,49 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **14,03** | 87,3 | 0,71 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **9,13** | 88,9 | 1,11 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **4,95** | 91,5 | 1,69 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-0,70** | 93,5 | 2,53 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-5,01** | 94,5 | 3,65 | 0,00 | 22,80 |
| WTG 02 | 3 864 | 3 868 | | | | | | |
| WTG 02 | | | 20 | **37,55** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **34,17** | 75,2 | 0,08 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **29,63** | 77,1 | 0,12 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **24,66** | 78,3 | 0,19 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **20,68** | 80,3 | 0,27 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **18,92** | 84,6 | 0,43 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **15,33** | 87,3 | 0,62 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **10,48** | 88,9 | 0,97 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **6,38** | 91,5 | 1,47 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **0,84** | 93,5 | 2,20 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-3,32** | 94,5 | 3,17 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **53,91** | | | | |
| Sum | | | 25 | **50,57** | | | | |
| Sum | | | 32 | **46,44** | | | | |
| Sum | | | 40 | **42,28** | | | | |
| Sum | | | 50 | **38,34** | | | | |
| Sum | | | 63 | **35,41** | | | | |
| Sum | | | 80 | **32,21** | | | | |
| Sum | | | 100 | **28,90** | | | | |
| Sum | | | 125 | **25,46** | | | | |
| Sum | | | 160 | **18,37** | | | | |
| Sum | | | 200 | **14,73** | | | | |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**Noise sensitive area: AJ Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (138)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 1 784 | 1 791 | | | | | | |
| K 01 | | | 20 | **42,74** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **39,40** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 01 | | | 32 | **35,28** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 01 | | | 40 | **31,15** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 01 | | | 50 | **27,21** | 80,0 | 0,13 | 4,70 | 11,50 |
| K 01 | | | 63 | **24,24** | 83,0 | 0,20 | 4,30 | 13,00 |
| K 01 | | | 80 | **21,05** | 86,0 | 0,29 | 3,70 | 14,80 |
| K 01 | | | 100 | **17,79** | 89,0 | 0,45 | 3,00 | 16,80 |
| K 01 | | | 125 | **14,36** | 92,0 | 0,68 | 1,80 | 18,80 |
| K 01 | | | 160 | **7,22** | 92,0 | 1,02 | 0,00 | 21,10 |
| K 01 | | | 200 | **3,57** | 93,0 | 1,47 | 0,00 | 22,80 |
| K 02 | 2 282 | 2 288 | | | | | | |
| K 02 | | | 20 | **40,61** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **37,27** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 02 | | | 32 | **33,14** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 02 | | | 40 | **29,00** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 02 | | | 50 | **25,05** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 02 | | | 63 | **22,06** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 02 | | | 80 | **18,85** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 02 | | | 100 | **15,54** | 89,0 | 0,57 | 3,00 | 16,80 |
| K 02 | | | 125 | **12,04** | 92,0 | 0,87 | 1,80 | 18,80 |
| K 02 | | | 160 | **4,81** | 92,0 | 1,30 | 0,00 | 21,10 |
| K 02 | | | 200 | **1,04** | 93,0 | 1,88 | 0,00 | 22,80 |
| K 03 | 2 754 | 2 759 | | | | | | |
| K 03 | | | 20 | **38,98** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **35,63** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 03 | | | 32 | **31,50** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 03 | | | 40 | **27,35** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 03 | | | 50 | **23,39** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 03 | | | 63 | **20,38** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 03 | | | 80 | **17,14** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 03 | | | 100 | **13,79** | 89,0 | 0,69 | 3,00 | 16,80 |
| K 03 | | | 125 | **10,24** | 92,0 | 1,05 | 1,80 | 18,80 |
| K 03 | | | 160 | **2,91** | 92,0 | 1,57 | 0,00 | 21,10 |
| K 03 | | | 200 | **-0,98** | 93,0 | 2,26 | 0,00 | 22,80 |
| K 04 | 3 541 | 3 545 | | | | | | |
| K 04 | | | 20 | **36,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **33,44** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 04 | | | 32 | **29,30** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 04 | | | 40 | **25,13** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 04 | | | 50 | **21,16** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 04 | | | 63 | **18,12** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 04 | | | 80 | **14,84** | 86,0 | 0,57 | 3,70 | 14,80 |
| K 04 | | | 100 | **11,42** | 89,0 | 0,89 | 3,00 | 16,80 |
| K 04 | | | 125 | **7,76** | 92,0 | 1,35 | 1,80 | 18,80 |
| K 04 | | | 160 | **0,29** | 92,0 | 2,02 | 0,00 | 21,10 |
| K 04 | | | 200 | **-3,80** | 93,0 | 2,91 | 0,00 | 22,80 |
| K 05 | 3 533 | 3 537 | | | | | | |
| K 05 | | | 20 | **36,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **33,46** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 05 | | | 32 | **29,32** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 05 | | | 40 | **25,15** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 05 | | | 50 | **21,18** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 05 | | | 63 | **18,14** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 05 | | | 80 | **14,86** | 86,0 | 0,57 | 3,70 | 14,80 |
| K 05 | | | 100 | **11,44** | 89,0 | 0,88 | 3,00 | 16,80 |
| K 05 | | | 125 | **7,78** | 92,0 | 1,34 | 1,80 | 18,80 |
| K 05 | | | 160 | **0,31** | 92,0 | 2,02 | 0,00 | 21,10 |
| K 05 | | | 200 | **-3,77** | 93,0 | 2,90 | 0,00 | 22,80 |
| K 06 | 2 515 | 2 520 | | | | | | |
| K 06 | | | 20 | **39,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **36,42** | 73,7 | 0,05 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 06 | | | 32 | **32,30** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 06 | | | 40 | **28,15** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 06 | | | 50 | **24,19** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 06 | | | 63 | **21,19** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 06 | | | 80 | **17,97** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 06 | | | 100 | **14,64** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 06 | | | 125 | **11,11** | 92,0 | 0,96 | 1,80 | 18,80 |
| K 06 | | | 160 | **3,83** | 92,0 | 1,44 | 0,00 | 21,10 |
| K 06 | | | 200 | **0,00** | 93,0 | 2,07 | 0,00 | 22,80 |
| K 07 | 3 121 | 3 125 | | | | | | |
| K 07 | | | 20 | **37,90** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **34,54** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 07 | | | 32 | **30,41** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 07 | | | 40 | **26,25** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 07 | | | 50 | **22,28** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 07 | | | 63 | **19,26** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 07 | | | 80 | **16,00** | 86,0 | 0,50 | 3,70 | 14,80 |
| K 07 | | | 100 | **12,62** | 89,0 | 0,78 | 3,00 | 16,80 |
| K 07 | | | 125 | **9,02** | 92,0 | 1,19 | 1,80 | 18,80 |
| K 07 | | | 160 | **1,62** | 92,0 | 1,78 | 0,00 | 21,10 |
| K 07 | | | 200 | **-2,36** | 93,0 | 2,56 | 0,00 | 22,80 |
| K 08 | 2 962 | 2 966 | | | | | | |
| K 08 | | | 20 | **38,36** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **35,00** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 08 | | | 32 | **30,87** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 08 | | | 40 | **26,71** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 08 | | | 50 | **22,75** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 08 | | | 63 | **19,73** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 08 | | | 80 | **16,48** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 08 | | | 100 | **13,11** | 89,0 | 0,74 | 3,00 | 16,80 |
| K 08 | | | 125 | **9,53** | 92,0 | 1,13 | 1,80 | 18,80 |
| K 08 | | | 160 | **2,17** | 92,0 | 1,69 | 0,00 | 21,10 |
| K 08 | | | 200 | **-1,78** | 93,0 | 2,43 | 0,00 | 22,80 |
| K 09 | 3 285 | 3 289 | | | | | | |
| K 09 | | | 20 | **37,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **34,09** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 09 | | | 32 | **29,96** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 09 | | | 40 | **25,79** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 09 | | | 50 | **21,83** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 09 | | | 63 | **18,80** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 09 | | | 80 | **15,53** | 86,0 | 0,53 | 3,70 | 14,80 |
| K 09 | | | 100 | **12,14** | 89,0 | 0,82 | 3,00 | 16,80 |
| K 09 | | | 125 | **8,51** | 92,0 | 1,25 | 1,80 | 18,80 |
| K 09 | | | 160 | **1,08** | 92,0 | 1,87 | 0,00 | 21,10 |
| K 09 | | | 200 | **-2,94** | 93,0 | 2,70 | 0,00 | 22,80 |
| K 10 | 953 | 966 | | | | | | |
| K 10 | | | 20 | **48,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **44,78** | 73,7 | 0,02 | 5,40 | 8,30 |
| K 10 | | | 32 | **40,67** | 76,0 | 0,03 | 5,20 | 9,20 |
| K 10 | | | 40 | **36,55** | 78,0 | 0,05 | 5,00 | 10,30 |
| K 10 | | | 50 | **32,63** | 80,0 | 0,07 | 4,70 | 11,50 |
| K 10 | | | 63 | **29,69** | 83,0 | 0,11 | 4,30 | 13,00 |
| K 10 | | | 80 | **26,55** | 86,0 | 0,15 | 3,70 | 14,80 |
| K 10 | | | 100 | **23,36** | 89,0 | 0,24 | 3,00 | 16,80 |
| K 10 | | | 125 | **20,03** | 92,0 | 0,37 | 1,80 | 18,80 |
| K 10 | | | 160 | **13,05** | 92,0 | 0,55 | 0,00 | 21,10 |
| K 10 | | | 200 | **9,61** | 93,0 | 0,79 | 0,00 | 22,80 |
| K 11 | 1 180 | 1 190 | | | | | | |
| K 11 | | | 20 | **46,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **42,97** | 73,7 | 0,02 | 5,40 | 8,30 |
| K 11 | | | 32 | **38,85** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 11 | | | 40 | **34,73** | 78,0 | 0,06 | 5,00 | 10,30 |
| K 11 | | | 50 | **30,81** | 80,0 | 0,08 | 4,70 | 11,50 |
| K 11 | | | 63 | **27,86** | 83,0 | 0,13 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 11 | | | 80 | **24,70** | 86,0 | 0,19 | 3,70 | 14,80 |
| K 11 | | | 100 | **21,49** | 89,0 | 0,30 | 3,00 | 16,80 |
| K 11 | | | 125 | **18,14** | 92,0 | 0,45 | 1,80 | 18,80 |
| K 11 | | | 160 | **11,11** | 92,0 | 0,68 | 0,00 | 21,10 |
| K 11 | | | 200 | **7,62** | 93,0 | 0,98 | 0,00 | 22,80 |
| K 12 | 1 998 | 2 004 | | | | | | |
| K 12 | | | 20 | **41,76** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **38,42** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **34,30** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 12 | | | 40 | **30,16** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 12 | | | 50 | **26,22** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 12 | | | 63 | **23,24** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 12 | | | 80 | **20,04** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 12 | | | 100 | **16,76** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 12 | | | 125 | **13,30** | 92,0 | 0,76 | 1,80 | 18,80 |
| K 12 | | | 160 | **6,12** | 92,0 | 1,14 | 0,00 | 21,10 |
| K 12 | | | 200 | **2,42** | 93,0 | 1,64 | 0,00 | 22,80 |
| K 13 | 1 928 | 1 934 | | | | | | |
| K 13 | | | 20 | **42,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **38,73** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 13 | | | 32 | **34,61** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 13 | | | 40 | **30,47** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 13 | | | 50 | **26,53** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 13 | | | 63 | **23,56** | 83,0 | 0,21 | 4,30 | 13,00 |
| K 13 | | | 80 | **20,36** | 86,0 | 0,31 | 3,70 | 14,80 |
| K 13 | | | 100 | **17,09** | 89,0 | 0,48 | 3,00 | 16,80 |
| K 13 | | | 125 | **13,63** | 92,0 | 0,74 | 1,80 | 18,80 |
| K 13 | | | 160 | **6,47** | 92,0 | 1,10 | 0,00 | 21,10 |
| K 13 | | | 200 | **2,78** | 93,0 | 1,59 | 0,00 | 22,80 |
| K 14 | 1 845 | 1 852 | | | | | | |
| K 14 | | | 20 | **42,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **39,11** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 14 | | | 32 | **34,99** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 14 | | | 40 | **30,85** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 14 | | | 50 | **26,92** | 80,0 | 0,13 | 4,70 | 11,50 |
| K 14 | | | 63 | **23,94** | 83,0 | 0,20 | 4,30 | 13,00 |
| K 14 | | | 80 | **20,75** | 86,0 | 0,30 | 3,70 | 14,80 |
| K 14 | | | 100 | **17,48** | 89,0 | 0,46 | 3,00 | 16,80 |
| K 14 | | | 125 | **14,04** | 92,0 | 0,70 | 1,80 | 18,80 |
| K 14 | | | 160 | **6,89** | 92,0 | 1,06 | 0,00 | 21,10 |
| K 14 | | | 200 | **3,23** | 93,0 | 1,52 | 0,00 | 22,80 |
| WTG 01 | 4 771 | 4 774 | | | | | | |
| WTG 01 | | | 20 | **35,72** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **32,33** | 75,2 | 0,10 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **27,78** | 77,1 | 0,14 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **22,78** | 78,3 | 0,24 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **18,79** | 80,3 | 0,33 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **17,00** | 84,6 | 0,53 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **13,36** | 87,3 | 0,76 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **8,43** | 88,9 | 1,19 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **4,21** | 91,5 | 1,81 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-1,50** | 93,5 | 2,72 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-5,89** | 94,5 | 3,91 | 0,00 | 22,80 |
| WTG 02 | 4 167 | 4 171 | | | | | | |
| WTG 02 | | | 20 | **36,90** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **33,51** | 75,2 | 0,08 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **28,97** | 77,1 | 0,13 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **23,99** | 78,3 | 0,21 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **20,00** | 80,3 | 0,29 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **18,24** | 84,6 | 0,46 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **14,63** | 87,3 | 0,67 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **9,75** | 88,9 | 1,04 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **5,61** | 91,5 | 1,58 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **0,02** | 93,5 | 2,38 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 200 | **-4,22** | 94,5 | 3,42 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **53,81** | | | | |
| Sum | | | 25 | **50,47** | | | | |
| Sum | | | 32 | **46,34** | | | | |
| Sum | | | 40 | **42,18** | | | | |
| Sum | | | 50 | **38,24** | | | | |
| Sum | | | 63 | **35,31** | | | | |
| Sum | | | 80 | **32,11** | | | | |
| Sum | | | 100 | **28,81** | | | | |
| Sum | | | 125 | **25,38** | | | | |
| Sum | | | 160 | **18,29** | | | | |
| Sum | | | 200 | **14,66** | | | | |

**Noise sensitive area: AK Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (137)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 226 | 2 231 | | | | | | |
| K 01 | | | 20 | **40,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **37,49** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 01 | | | 32 | **33,36** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 01 | | | 40 | **29,22** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 01 | | | 50 | **25,27** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 01 | | | 63 | **22,28** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 01 | | | 80 | **19,07** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 01 | | | 100 | **15,77** | 89,0 | 0,56 | 3,00 | 16,80 |
| K 01 | | | 125 | **12,28** | 92,0 | 0,85 | 1,80 | 18,80 |
| K 01 | | | 160 | **5,06** | 92,0 | 1,27 | 0,00 | 21,10 |
| K 01 | | | 200 | **1,30** | 93,0 | 1,83 | 0,00 | 22,80 |
| K 02 | 2 716 | 2 721 | | | | | | |
| K 02 | | | 20 | **39,11** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **35,75** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 02 | | | 32 | **31,62** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 02 | | | 40 | **27,47** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 02 | | | 50 | **23,52** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 02 | | | 63 | **20,51** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 02 | | | 80 | **17,27** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 02 | | | 100 | **13,93** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 02 | | | 125 | **10,37** | 92,0 | 1,03 | 1,80 | 18,80 |
| K 02 | | | 160 | **3,06** | 92,0 | 1,55 | 0,00 | 21,10 |
| K 02 | | | 200 | **-0,83** | 93,0 | 2,23 | 0,00 | 22,80 |
| K 03 | 3 169 | 3 173 | | | | | | |
| K 03 | | | 20 | **37,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **34,41** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 03 | | | 32 | **30,28** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 03 | | | 40 | **26,11** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 03 | | | 50 | **22,15** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 03 | | | 63 | **19,12** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 03 | | | 80 | **15,86** | 86,0 | 0,51 | 3,70 | 14,80 |
| K 03 | | | 100 | **12,48** | 89,0 | 0,79 | 3,00 | 16,80 |
| K 03 | | | 125 | **8,87** | 92,0 | 1,21 | 1,80 | 18,80 |
| K 03 | | | 160 | **1,46** | 92,0 | 1,81 | 0,00 | 21,10 |
| K 03 | | | 200 | **-2,53** | 93,0 | 2,60 | 0,00 | 22,80 |
| K 04 | 3 964 | 3 967 | | | | | | |
| K 04 | | | 20 | **35,83** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **32,45** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 04 | | | 32 | **28,31** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 04 | | | 40 | **24,13** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 04 | | | 50 | **20,15** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 04 | | | 63 | **17,09** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 04 | | | 80 | **13,80** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 04 | | | 100 | **10,34** | 89,0 | 0,99 | 3,00 | 16,80 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 125 | **6,62** | 92,0 | 1,51 | 1,80 | 18,80 |
| K 04 | | | 160 | **-0,93** | 92,0 | 2,26 | 0,00 | 21,10 |
| K 04 | | | 200 | **-5,12** | 93,0 | 3,25 | 0,00 | 22,80 |
| K 05 | 3 922 | 3 925 | | | | | | |
| K 05 | | | 20 | **35,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **32,54** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 05 | | | 32 | **28,40** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 05 | | | 40 | **24,23** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 05 | | | 50 | **20,25** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 05 | | | 63 | **17,19** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 05 | | | 80 | **13,89** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 05 | | | 100 | **10,44** | 89,0 | 0,98 | 3,00 | 16,80 |
| K 05 | | | 125 | **6,73** | 92,0 | 1,49 | 1,80 | 18,80 |
| K 05 | | | 160 | **-0,81** | 92,0 | 2,24 | 0,00 | 21,10 |
| K 05 | | | 200 | **-5,00** | 93,0 | 3,22 | 0,00 | 22,80 |
| K 06 | 2 953 | 2 958 | | | | | | |
| K 06 | | | 20 | **38,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **35,02** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 06 | | | 32 | **30,89** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 06 | | | 40 | **26,73** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 06 | | | 50 | **22,77** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 06 | | | 63 | **19,76** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 06 | | | 80 | **16,51** | 86,0 | 0,47 | 3,70 | 14,80 |
| K 06 | | | 100 | **13,14** | 89,0 | 0,74 | 3,00 | 16,80 |
| K 06 | | | 125 | **9,56** | 92,0 | 1,12 | 1,80 | 18,80 |
| K 06 | | | 160 | **2,19** | 92,0 | 1,69 | 0,00 | 21,10 |
| K 06 | | | 200 | **-1,74** | 93,0 | 2,43 | 0,00 | 22,80 |
| K 07 | 3 555 | 3 559 | | | | | | |
| K 07 | | | 20 | **36,77** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **33,40** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 07 | | | 32 | **29,27** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 07 | | | 40 | **25,10** | 78,0 | 0,18 | 5,00 | 10,30 |
| K 07 | | | 50 | **21,12** | 80,0 | 0,25 | 4,70 | 11,50 |
| K 07 | | | 63 | **18,08** | 83,0 | 0,39 | 4,30 | 13,00 |
| K 07 | | | 80 | **14,80** | 86,0 | 0,57 | 3,70 | 14,80 |
| K 07 | | | 100 | **11,38** | 89,0 | 0,89 | 3,00 | 16,80 |
| K 07 | | | 125 | **7,72** | 92,0 | 1,35 | 1,80 | 18,80 |
| K 07 | | | 160 | **0,24** | 92,0 | 2,03 | 0,00 | 21,10 |
| K 07 | | | 200 | **-3,84** | 93,0 | 2,92 | 0,00 | 22,80 |
| K 08 | 3 404 | 3 408 | | | | | | |
| K 08 | | | 20 | **37,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **33,78** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 08 | | | 32 | **29,65** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 08 | | | 40 | **25,48** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 08 | | | 50 | **21,51** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 08 | | | 63 | **18,48** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 08 | | | 80 | **15,21** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 08 | | | 100 | **11,80** | 89,0 | 0,85 | 3,00 | 16,80 |
| K 08 | | | 125 | **8,16** | 92,0 | 1,29 | 1,80 | 18,80 |
| K 08 | | | 160 | **0,71** | 92,0 | 1,94 | 0,00 | 21,10 |
| K 08 | | | 200 | **-3,34** | 93,0 | 2,79 | 0,00 | 22,80 |
| K 09 | 3 722 | 3 725 | | | | | | |
| K 09 | | | 20 | **36,38** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **33,00** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 09 | | | 32 | **28,86** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 09 | | | 40 | **24,69** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 09 | | | 50 | **20,72** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 09 | | | 63 | **17,67** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 09 | | | 80 | **14,38** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 09 | | | 100 | **10,95** | 89,0 | 0,93 | 3,00 | 16,80 |
| K 09 | | | 125 | **7,26** | 92,0 | 1,42 | 1,80 | 18,80 |
| K 09 | | | 160 | **-0,25** | 92,0 | 2,12 | 0,00 | 21,10 |
| K 09 | | | 200 | **-4,38** | 93,0 | 3,05 | 0,00 | 22,80 |
| K 10 | 1 344 | 1 354 | | | | | | |

*To be continued on next page...*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 20 | **45,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **41,84** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 10 | | | 32 | **37,73** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 10 | | | 40 | **33,60** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 10 | | | 50 | **29,67** | 80,0 | 0,09 | 4,70 | 11,50 |
| K 10 | | | 63 | **26,72** | 83,0 | 0,15 | 4,30 | 13,00 |
| K 10 | | | 80 | **23,55** | 86,0 | 0,22 | 3,70 | 14,80 |
| K 10 | | | 100 | **20,33** | 89,0 | 0,34 | 3,00 | 16,80 |
| K 10 | | | 125 | **16,95** | 92,0 | 0,51 | 1,80 | 18,80 |
| K 10 | | | 160 | **9,90** | 92,0 | 0,77 | 0,00 | 21,10 |
| K 10 | | | 200 | **6,36** | 93,0 | 1,11 | 0,00 | 22,80 |
| K 11 | 1 406 | 1 414 | | | | | | |
| K 11 | | | 20 | **44,79** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **41,46** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 11 | | | 32 | **37,35** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 11 | | | 40 | **33,22** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 11 | | | 50 | **29,29** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 11 | | | 63 | **26,33** | 83,0 | 0,16 | 4,30 | 13,00 |
| K 11 | | | 80 | **23,16** | 86,0 | 0,23 | 3,70 | 14,80 |
| K 11 | | | 100 | **19,93** | 89,0 | 0,35 | 3,00 | 16,80 |
| K 11 | | | 125 | **16,55** | 92,0 | 0,54 | 1,80 | 18,80 |
| K 11 | | | 160 | **9,48** | 92,0 | 0,81 | 0,00 | 21,10 |
| K 11 | | | 200 | **5,93** | 93,0 | 1,16 | 0,00 | 22,80 |
| K 12 | 2 182 | 2 188 | | | | | | |
| K 12 | | | 20 | **41,00** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **37,66** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **33,54** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 12 | | | 40 | **29,39** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 12 | | | 50 | **25,45** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 12 | | | 63 | **22,46** | 83,0 | 0,24 | 4,30 | 13,00 |
| K 12 | | | 80 | **19,25** | 86,0 | 0,35 | 3,70 | 14,80 |
| K 12 | | | 100 | **15,95** | 89,0 | 0,55 | 3,00 | 16,80 |
| K 12 | | | 125 | **12,47** | 92,0 | 0,83 | 1,80 | 18,80 |
| K 12 | | | 160 | **5,25** | 92,0 | 1,25 | 0,00 | 21,10 |
| K 12 | | | 200 | **1,51** | 93,0 | 1,79 | 0,00 | 22,80 |
| K 13 | 2 265 | 2 271 | | | | | | |
| K 13 | | | 20 | **40,68** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **37,33** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **33,21** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 13 | | | 40 | **29,06** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 13 | | | 50 | **25,12** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 13 | | | 63 | **22,13** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 13 | | | 80 | **18,91** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 13 | | | 100 | **15,61** | 89,0 | 0,57 | 3,00 | 16,80 |
| K 13 | | | 125 | **12,11** | 92,0 | 0,86 | 1,80 | 18,80 |
| K 13 | | | 160 | **4,88** | 92,0 | 1,29 | 0,00 | 21,10 |
| K 13 | | | 200 | **1,11** | 93,0 | 1,86 | 0,00 | 22,80 |
| K 14 | 2 257 | 2 263 | | | | | | |
| K 14 | | | 20 | **40,71** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **37,36** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 14 | | | 32 | **33,24** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 14 | | | 40 | **29,09** | 78,0 | 0,11 | 5,00 | 10,30 |
| K 14 | | | 50 | **25,15** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 14 | | | 63 | **22,16** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 14 | | | 80 | **18,94** | 86,0 | 0,36 | 3,70 | 14,80 |
| K 14 | | | 100 | **15,64** | 89,0 | 0,57 | 3,00 | 16,80 |
| K 14 | | | 125 | **12,15** | 92,0 | 0,86 | 1,80 | 18,80 |
| K 14 | | | 160 | **4,92** | 92,0 | 1,29 | 0,00 | 21,10 |
| K 14 | | | 200 | **1,15** | 93,0 | 1,86 | 0,00 | 22,80 |
| WTG 01 | 5 172 | 5 176 | | | | | | |
| WTG 01 | | | 20 | **35,02** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **31,62** | 75,2 | 0,10 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **27,07** | 77,1 | 0,16 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **22,06** | 78,3 | 0,26 | 5,00 | 10,30 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 01 | | | 50 | **18,06** | 80,3 | 0,36 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **16,25** | 84,6 | 0,57 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **12,59** | 87,3 | 0,83 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **7,63** | 88,9 | 1,29 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **3,35** | 91,5 | 1,97 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-2,43** | 93,5 | 2,95 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-6,92** | 94,5 | 4,24 | 0,00 | 22,80 |
| WTG 02 | 4 591 | 4 594 | | | | | | |
| WTG 02 | | | 20 | **36,06** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **32,66** | 75,2 | 0,09 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **28,12** | 77,1 | 0,14 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **23,13** | 78,3 | 0,23 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **19,13** | 80,3 | 0,32 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **17,35** | 84,6 | 0,51 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **13,72** | 87,3 | 0,74 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **8,81** | 88,9 | 1,15 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **4,61** | 91,5 | 1,75 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-1,06** | 93,5 | 2,62 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-5,41** | 94,5 | 3,77 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **52,08** | | | | |
| Sum | | | 25 | **48,73** | | | | |
| Sum | | | 32 | **44,59** | | | | |
| Sum | | | 40 | **40,42** | | | | |
| Sum | | | 50 | **36,47** | | | | |
| Sum | | | 63 | **33,53** | | | | |
| Sum | | | 80 | **30,30** | | | | |
| Sum | | | 100 | **26,96** | | | | |
| Sum | | | 125 | **23,46** | | | | |
| Sum | | | 160 | **16,30** | | | | |
| Sum | | | 200 | **12,55** | | | | |

**Noise sensitive area: AL Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (136)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 4 312 | 4 315 | | | | | | |
| K 01 | | | 20 | **35,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **31,71** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 01 | | | 32 | **27,57** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 01 | | | 40 | **23,38** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 01 | | | 50 | **19,40** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 01 | | | 63 | **16,33** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 01 | | | 80 | **13,01** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 01 | | | 100 | **9,52** | 89,0 | 1,08 | 3,00 | 16,80 |
| K 01 | | | 125 | **5,76** | 92,0 | 1,64 | 1,80 | 18,80 |
| K 01 | | | 160 | **-1,86** | 92,0 | 2,46 | 0,00 | 21,10 |
| K 01 | | | 200 | **-6,14** | 93,0 | 3,54 | 0,00 | 22,80 |
| K 02 | 4 753 | 4 755 | | | | | | |
| K 02 | | | 20 | **34,26** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **30,86** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 02 | | | 32 | **26,71** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 02 | | | 40 | **22,52** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 02 | | | 50 | **18,52** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 02 | | | 63 | **15,43** | 83,0 | 0,52 | 4,30 | 13,00 |
| K 02 | | | 80 | **12,10** | 86,0 | 0,76 | 3,70 | 14,80 |
| K 02 | | | 100 | **8,57** | 89,0 | 1,19 | 3,00 | 16,80 |
| K 02 | | | 125 | **4,75** | 92,0 | 1,81 | 1,80 | 18,80 |
| K 02 | | | 160 | **-2,95** | 92,0 | 2,71 | 0,00 | 21,10 |
| K 02 | | | 200 | **-7,34** | 93,0 | 3,90 | 0,00 | 22,80 |
| K 03 | 5 376 | 5 378 | | | | | | |
| K 03 | | | 20 | **33,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **29,78** | 73,7 | 0,11 | 5,40 | 8,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 03 | | | 32 | **25,63** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 03 | | | 40 | **21,42** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 03 | | | 50 | **17,41** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 03 | | | 63 | **14,30** | 83,0 | 0,59 | 4,30 | 13,00 |
| K 03 | | | 80 | **10,93** | 86,0 | 0,86 | 3,70 | 14,80 |
| K 03 | | | 100 | **7,34** | 89,0 | 1,34 | 3,00 | 16,80 |
| K 03 | | | 125 | **3,44** | 92,0 | 2,04 | 1,80 | 18,80 |
| K 03 | | | 160 | **-4,38** | 92,0 | 3,07 | 0,00 | 21,10 |
| K 03 | | | 200 | **-8,92** | 93,0 | 4,41 | 0,00 | 22,80 |
| K 04 | 5 778 | 5 780 | | | | | | |
| K 04 | | | 20 | **32,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **29,15** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 04 | | | 32 | **24,99** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 04 | | | 40 | **20,77** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 04 | | | 50 | **16,76** | 80,0 | 0,40 | 4,70 | 11,50 |
| K 04 | | | 63 | **13,63** | 83,0 | 0,64 | 4,30 | 13,00 |
| K 04 | | | 80 | **10,24** | 86,0 | 0,92 | 3,70 | 14,80 |
| K 04 | | | 100 | **6,62** | 89,0 | 1,44 | 3,00 | 16,80 |
| K 04 | | | 125 | **2,67** | 92,0 | 2,20 | 1,80 | 18,80 |
| K 04 | | | 160 | **-5,23** | 92,0 | 3,29 | 0,00 | 21,10 |
| K 04 | | | 200 | **-9,88** | 93,0 | 4,74 | 0,00 | 22,80 |
| K 05 | 6 252 | 6 254 | | | | | | |
| K 05 | | | 20 | **31,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **28,45** | 73,7 | 0,13 | 5,40 | 8,30 |
| K 05 | | | 32 | **24,29** | 76,0 | 0,19 | 5,20 | 9,20 |
| K 05 | | | 40 | **20,06** | 78,0 | 0,31 | 5,00 | 10,30 |
| K 05 | | | 50 | **16,04** | 80,0 | 0,44 | 4,70 | 11,50 |
| K 05 | | | 63 | **12,89** | 83,0 | 0,69 | 4,30 | 13,00 |
| K 05 | | | 80 | **9,48** | 86,0 | 1,00 | 3,70 | 14,80 |
| K 05 | | | 100 | **5,81** | 89,0 | 1,56 | 3,00 | 16,80 |
| K 05 | | | 125 | **1,80** | 92,0 | 2,38 | 1,80 | 18,80 |
| K 05 | | | 160 | **-6,19** | 92,0 | 3,56 | 0,00 | 21,10 |
| K 05 | | | 200 | **-10,95** | 93,0 | 5,13 | 0,00 | 22,80 |
| K 06 | 4 027 | 4 030 | | | | | | |
| K 06 | | | 20 | **35,69** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **32,31** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,17** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 06 | | | 40 | **23,99** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,01** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 06 | | | 63 | **16,95** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 06 | | | 80 | **13,65** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,19** | 89,0 | 1,01 | 3,00 | 16,80 |
| K 06 | | | 125 | **6,46** | 92,0 | 1,53 | 1,80 | 18,80 |
| K 06 | | | 160 | **-1,10** | 92,0 | 2,30 | 0,00 | 21,10 |
| K 06 | | | 200 | **-5,31** | 93,0 | 3,30 | 0,00 | 22,80 |
| K 07 | 4 108 | 4 111 | | | | | | |
| K 07 | | | 20 | **35,52** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,14** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,00** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,82** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,83** | 80,0 | 0,29 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,77** | 83,0 | 0,45 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,46** | 86,0 | 0,66 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,99** | 89,0 | 1,03 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,26** | 92,0 | 1,56 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,32** | 92,0 | 2,34 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,55** | 93,0 | 3,37 | 0,00 | 22,80 |
| K 08 | 4 796 | 4 798 | | | | | | |
| K 08 | | | 20 | **34,18** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **30,78** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 08 | | | 32 | **26,63** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 08 | | | 40 | **22,44** | 78,0 | 0,24 | 5,00 | 10,30 |
| K 08 | | | 50 | **18,44** | 80,0 | 0,34 | 4,70 | 11,50 |
| K 08 | | | 63 | **15,35** | 83,0 | 0,53 | 4,30 | 13,00 |

*To be continued on next page...*

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29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 08 | | | 80 | **12,01** | 86,0 | 0,77 | 3,70 | 14,80 |
| K 08 | | | 100 | **8,48** | 89,0 | 1,20 | 3,00 | 16,80 |
| K 08 | | | 125 | **4,66** | 92,0 | 1,82 | 1,80 | 18,80 |
| K 08 | | | 160 | **-3,06** | 92,0 | 2,73 | 0,00 | 21,10 |
| K 08 | | | 200 | **-7,46** | 93,0 | 3,93 | 0,00 | 22,80 |
| K 09 | 5 253 | 5 255 | | | | | | |
| K 09 | | | 20 | **33,39** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **29,98** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 09 | | | 32 | **25,83** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 09 | | | 40 | **21,63** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 09 | | | 50 | **17,62** | 80,0 | 0,37 | 4,70 | 11,50 |
| K 09 | | | 63 | **14,51** | 83,0 | 0,58 | 4,30 | 13,00 |
| K 09 | | | 80 | **11,15** | 86,0 | 0,84 | 3,70 | 14,80 |
| K 09 | | | 100 | **7,58** | 89,0 | 1,31 | 3,00 | 16,80 |
| K 09 | | | 125 | **3,69** | 92,0 | 2,00 | 1,80 | 18,80 |
| K 09 | | | 160 | **-4,11** | 92,0 | 3,00 | 0,00 | 21,10 |
| K 09 | | | 200 | **-8,62** | 93,0 | 4,31 | 0,00 | 22,80 |
| K 10 | 3 451 | 3 454 | | | | | | |
| K 10 | | | 20 | **37,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **33,67** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 10 | | | 32 | **29,53** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 10 | | | 40 | **25,36** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 10 | | | 50 | **21,39** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 10 | | | 63 | **18,35** | 83,0 | 0,38 | 4,30 | 13,00 |
| K 10 | | | 80 | **15,08** | 86,0 | 0,55 | 3,70 | 14,80 |
| K 10 | | | 100 | **11,67** | 89,0 | 0,86 | 3,00 | 16,80 |
| K 10 | | | 125 | **8,02** | 92,0 | 1,31 | 1,80 | 18,80 |
| K 10 | | | 160 | **0,57** | 92,0 | 1,97 | 0,00 | 21,10 |
| K 10 | | | 200 | **-3,50** | 93,0 | 2,83 | 0,00 | 22,80 |
| K 11 | 2 884 | 2 887 | | | | | | |
| K 11 | | | 20 | **38,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **35,23** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 11 | | | 32 | **31,10** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 11 | | | 40 | **26,95** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 11 | | | 50 | **22,99** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 11 | | | 63 | **19,97** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 11 | | | 80 | **16,73** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 11 | | | 100 | **13,37** | 89,0 | 0,72 | 3,00 | 16,80 |
| K 11 | | | 125 | **9,79** | 92,0 | 1,10 | 1,80 | 18,80 |
| K 11 | | | 160 | **2,44** | 92,0 | 1,65 | 0,00 | 21,10 |
| K 11 | | | 200 | **-1,48** | 93,0 | 2,37 | 0,00 | 22,80 |
| K 12 | 2 083 | 2 088 | | | | | | |
| K 12 | | | 20 | **41,40** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **38,06** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **33,94** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 12 | | | 40 | **29,80** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 12 | | | 50 | **25,86** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 12 | | | 63 | **22,87** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 12 | | | 80 | **19,67** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 12 | | | 100 | **16,38** | 89,0 | 0,52 | 3,00 | 16,80 |
| K 12 | | | 125 | **12,91** | 92,0 | 0,79 | 1,80 | 18,80 |
| K 12 | | | 160 | **5,71** | 92,0 | 1,19 | 0,00 | 21,10 |
| K 12 | | | 200 | **1,99** | 93,0 | 1,71 | 0,00 | 22,80 |
| K 13 | 2 728 | 2 732 | | | | | | |
| K 13 | | | 20 | **39,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **35,72** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **31,59** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 13 | | | 40 | **27,43** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 13 | | | 50 | **23,48** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 13 | | | 63 | **20,47** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 13 | | | 80 | **17,23** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 13 | | | 100 | **13,89** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 13 | | | 125 | **10,33** | 92,0 | 1,04 | 1,80 | 18,80 |
| K 13 | | | 160 | **3,01** | 92,0 | 1,56 | 0,00 | 21,10 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 200 | **-0,87** | 93,0 | 2,24 | 0,00 | 22,80 |
| K 14 | 3 400 | 3 403 | | | | | | |
| K 14 | | | 20 | **37,16** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **33,79** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 14 | | | 32 | **29,66** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 14 | | | 40 | **25,49** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 14 | | | 50 | **21,52** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 14 | | | 63 | **18,49** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 14 | | | 80 | **15,22** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 14 | | | 100 | **11,81** | 89,0 | 0,85 | 3,00 | 16,80 |
| K 14 | | | 125 | **8,17** | 92,0 | 1,29 | 1,80 | 18,80 |
| K 14 | | | 160 | **0,72** | 92,0 | 1,94 | 0,00 | 21,10 |
| K 14 | | | 200 | **-3,33** | 93,0 | 2,79 | 0,00 | 22,80 |
| WTG 01 | 7 093 | 7 095 | | | | | | |
| WTG 01 | | | 20 | **32,28** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **28,84** | 75,2 | 0,14 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **24,27** | 77,1 | 0,21 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **19,23** | 78,3 | 0,35 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **15,18** | 80,3 | 0,50 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **13,30** | 84,6 | 0,78 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **9,55** | 87,3 | 1,14 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **4,41** | 88,9 | 1,77 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **-0,12** | 91,5 | 2,70 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-6,26** | 93,5 | 4,04 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-11,24** | 94,5 | 5,82 | 0,00 | 22,80 |
| WTG 02 | 6 215 | 6 217 | | | | | | |
| WTG 02 | | | 20 | **33,43** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,00** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,44** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,42** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,39** | 80,3 | 0,44 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,54** | 84,6 | 0,68 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **10,83** | 87,3 | 0,99 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,77** | 88,9 | 1,55 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,37** | 91,5 | 2,36 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,62** | 93,5 | 3,54 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,37** | 94,5 | 5,10 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **48,24** | | | | |
| Sum | | | 25 | **44,87** | | | | |
| Sum | | | 32 | **40,71** | | | | |
| Sum | | | 40 | **36,50** | | | | |
| Sum | | | 50 | **32,53** | | | | |
| Sum | | | 63 | **29,54** | | | | |
| Sum | | | 80 | **26,25** | | | | |
| Sum | | | 100 | **22,77** | | | | |
| Sum | | | 125 | **19,10** | | | | |
| Sum | | | 160 | **11,72** | | | | |
| Sum | | | 200 | **7,67** | | | | |

**Noise sensitive area: AM Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (135)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 2 776 | 2 781 | | | | | | |
| K 01 | | | 20 | **38,92** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **35,56** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 01 | | | 32 | **31,43** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 01 | | | 40 | **27,28** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 01 | | | 50 | **23,32** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 01 | | | 63 | **20,31** | 83,0 | 0,31 | 4,30 | 13,00 |
| K 01 | | | 80 | **17,07** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 01 | | | 100 | **13,72** | 89,0 | 0,70 | 3,00 | 16,80 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | | | 125 | **10,16** | 92,0 | 1,06 | 1,80 | 18,80 |
| K 01 | | | 160 | **2,83** | 92,0 | 1,58 | 0,00 | 21,10 |
| K 01 | | | 200 | **-1,06** | 93,0 | 2,28 | 0,00 | 22,80 |
| K 02 | 3 299 | 3 303 | | | | | | |
| K 02 | | | 20 | **37,42** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **34,06** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 02 | | | 32 | **29,92** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 02 | | | 40 | **25,76** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 02 | | | 50 | **21,79** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 02 | | | 63 | **18,76** | 83,0 | 0,36 | 4,30 | 13,00 |
| K 02 | | | 80 | **15,49** | 86,0 | 0,53 | 3,70 | 14,80 |
| K 02 | | | 100 | **12,10** | 89,0 | 0,83 | 3,00 | 16,80 |
| K 02 | | | 125 | **8,47** | 92,0 | 1,25 | 1,80 | 18,80 |
| K 02 | | | 160 | **1,04** | 92,0 | 1,88 | 0,00 | 21,10 |
| K 02 | | | 200 | **-2,99** | 93,0 | 2,71 | 0,00 | 22,80 |
| K 03 | 3 796 | 3 799 | | | | | | |
| K 03 | | | 20 | **36,21** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **32,83** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 03 | | | 32 | **28,69** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 03 | | | 40 | **24,52** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 03 | | | 50 | **20,54** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 03 | | | 63 | **17,49** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 03 | | | 80 | **14,20** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 03 | | | 100 | **10,76** | 89,0 | 0,95 | 3,00 | 16,80 |
| K 03 | | | 125 | **7,06** | 92,0 | 1,44 | 1,80 | 18,80 |
| K 03 | | | 160 | **-0,46** | 92,0 | 2,17 | 0,00 | 21,10 |
| K 03 | | | 200 | **-4,61** | 93,0 | 3,12 | 0,00 | 22,80 |
| K 04 | 4 573 | 4 576 | | | | | | |
| K 04 | | | 20 | **34,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **31,20** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 04 | | | 32 | **27,05** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 04 | | | 40 | **22,86** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 04 | | | 50 | **18,87** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 04 | | | 63 | **15,79** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 04 | | | 80 | **12,46** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 04 | | | 100 | **8,95** | 89,0 | 1,14 | 3,00 | 16,80 |
| K 04 | | | 125 | **5,15** | 92,0 | 1,74 | 1,80 | 18,80 |
| K 04 | | | 160 | **-2,52** | 92,0 | 2,61 | 0,00 | 21,10 |
| K 04 | | | 200 | **-6,86** | 93,0 | 3,75 | 0,00 | 22,80 |
| K 05 | 4 580 | 4 583 | | | | | | |
| K 05 | | | 20 | **34,58** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **31,19** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 05 | | | 32 | **27,04** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 05 | | | 40 | **22,85** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 05 | | | 50 | **18,86** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 05 | | | 63 | **15,77** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 05 | | | 80 | **12,44** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 05 | | | 100 | **8,93** | 89,0 | 1,15 | 3,00 | 16,80 |
| K 05 | | | 125 | **5,14** | 92,0 | 1,74 | 1,80 | 18,80 |
| K 05 | | | 160 | **-2,53** | 92,0 | 2,61 | 0,00 | 21,10 |
| K 05 | | | 200 | **-6,88** | 93,0 | 3,76 | 0,00 | 22,80 |
| K 06 | 3 398 | 3 402 | | | | | | |
| K 06 | | | 20 | **37,17** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **33,80** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 06 | | | 32 | **29,66** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 06 | | | 40 | **25,50** | 78,0 | 0,17 | 5,00 | 10,30 |
| K 06 | | | 50 | **21,53** | 80,0 | 0,24 | 4,70 | 11,50 |
| K 06 | | | 63 | **18,49** | 83,0 | 0,37 | 4,30 | 13,00 |
| K 06 | | | 80 | **15,22** | 86,0 | 0,54 | 3,70 | 14,80 |
| K 06 | | | 100 | **11,82** | 89,0 | 0,85 | 3,00 | 16,80 |
| K 06 | | | 125 | **8,17** | 92,0 | 1,29 | 1,80 | 18,80 |
| K 06 | | | 160 | **0,73** | 92,0 | 1,94 | 0,00 | 21,10 |
| K 06 | | | 200 | **-3,32** | 93,0 | 2,79 | 0,00 | 22,80 |
| K 07 | 3 966 | 3 970 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 20 | **35,82** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,45** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,31** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,13** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,15** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 07 | | | 63 | **17,09** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,79** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 07 | | | 100 | **10,33** | 89,0 | 0,99 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,62** | 92,0 | 1,51 | 1,80 | 18,80 |
| K 07 | | | 160 | **-0,94** | 92,0 | 2,26 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,13** | 93,0 | 3,26 | 0,00 | 22,80 |
| K 08 | 3 935 | 3 938 | | | | | | |
| K 08 | | | 20 | **35,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **32,51** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 08 | | | 32 | **28,38** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 08 | | | 40 | **24,20** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 08 | | | 50 | **20,22** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 08 | | | 63 | **17,16** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 08 | | | 80 | **13,86** | 86,0 | 0,63 | 3,70 | 14,80 |
| K 08 | | | 100 | **10,41** | 89,0 | 0,98 | 3,00 | 16,80 |
| K 08 | | | 125 | **6,70** | 92,0 | 1,50 | 1,80 | 18,80 |
| K 08 | | | 160 | **-0,85** | 92,0 | 2,24 | 0,00 | 21,10 |
| K 08 | | | 200 | **-5,04** | 93,0 | 3,23 | 0,00 | 22,80 |
| K 09 | 4 288 | 4 291 | | | | | | |
| K 09 | | | 20 | **35,15** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **31,76** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 09 | | | 32 | **27,62** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 09 | | | 40 | **23,43** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 09 | | | 50 | **19,45** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 09 | | | 63 | **16,38** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 09 | | | 80 | **13,06** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 09 | | | 100 | **9,58** | 89,0 | 1,07 | 3,00 | 16,80 |
| K 09 | | | 125 | **5,82** | 92,0 | 1,63 | 1,80 | 18,80 |
| K 09 | | | 160 | **-1,80** | 92,0 | 2,45 | 0,00 | 21,10 |
| K 09 | | | 200 | **-6,07** | 93,0 | 3,52 | 0,00 | 22,80 |
| K 10 | 1 707 | 1 715 | | | | | | |
| K 10 | | | 20 | **43,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **39,78** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 10 | | | 32 | **35,67** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 10 | | | 40 | **31,53** | 78,0 | 0,09 | 5,00 | 10,30 |
| K 10 | | | 50 | **27,60** | 80,0 | 0,12 | 4,70 | 11,50 |
| K 10 | | | 63 | **24,63** | 83,0 | 0,19 | 4,30 | 13,00 |
| K 10 | | | 80 | **21,44** | 86,0 | 0,27 | 3,70 | 14,80 |
| K 10 | | | 100 | **18,19** | 89,0 | 0,43 | 3,00 | 16,80 |
| K 10 | | | 125 | **14,76** | 92,0 | 0,65 | 1,80 | 18,80 |
| K 10 | | | 160 | **7,64** | 92,0 | 0,98 | 0,00 | 21,10 |
| K 10 | | | 200 | **4,01** | 93,0 | 1,41 | 0,00 | 22,80 |
| K 11 | 1 473 | 1 481 | | | | | | |
| K 11 | | | 20 | **44,39** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **41,06** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 11 | | | 32 | **36,95** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 11 | | | 40 | **32,82** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 11 | | | 50 | **28,89** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 11 | | | 63 | **25,93** | 83,0 | 0,16 | 4,30 | 13,00 |
| K 11 | | | 80 | **22,75** | 86,0 | 0,24 | 3,70 | 14,80 |
| K 11 | | | 100 | **19,52** | 89,0 | 0,37 | 3,00 | 16,80 |
| K 11 | | | 125 | **16,13** | 92,0 | 0,56 | 1,80 | 18,80 |
| K 11 | | | 160 | **9,05** | 92,0 | 0,84 | 0,00 | 21,10 |
| K 11 | | | 200 | **5,48** | 93,0 | 1,21 | 0,00 | 22,80 |
| K 12 | 2 083 | 2 089 | | | | | | |
| K 12 | | | 20 | **41,40** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **38,06** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **33,94** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 12 | | | 40 | **29,80** | 78,0 | 0,10 | 5,00 | 10,30 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 12 | | | 50 | **25,86** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 12 | | | 63 | **22,87** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 12 | | | 80 | **19,67** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 12 | | | 100 | **16,38** | 89,0 | 0,52 | 3,00 | 16,80 |
| K 12 | | | 125 | **12,91** | 92,0 | 0,79 | 1,80 | 18,80 |
| K 12 | | | 160 | **5,71** | 92,0 | 1,19 | 0,00 | 21,10 |
| K 12 | | | 200 | **1,99** | 93,0 | 1,71 | 0,00 | 22,80 |
| K 13 | 2 437 | 2 443 | | | | | | |
| K 13 | | | 20 | **40,04** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **36,69** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **32,57** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 13 | | | 40 | **28,42** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 13 | | | 50 | **24,47** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 13 | | | 63 | **21,47** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 13 | | | 80 | **18,25** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 13 | | | 100 | **14,93** | 89,0 | 0,61 | 3,00 | 16,80 |
| K 13 | | | 125 | **11,41** | 92,0 | 0,93 | 1,80 | 18,80 |
| K 13 | | | 160 | **4,15** | 92,0 | 1,39 | 0,00 | 21,10 |
| K 13 | | | 200 | **0,34** | 93,0 | 2,00 | 0,00 | 22,80 |
| K 14 | 2 612 | 2 617 | | | | | | |
| K 14 | | | 20 | **39,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **36,09** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 14 | | | 32 | **31,97** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 14 | | | 40 | **27,81** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 14 | | | 50 | **23,86** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 14 | | | 63 | **20,86** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 14 | | | 80 | **17,63** | 86,0 | 0,42 | 3,70 | 14,80 |
| K 14 | | | 100 | **14,29** | 89,0 | 0,65 | 3,00 | 16,80 |
| K 14 | | | 125 | **10,75** | 92,0 | 0,99 | 1,80 | 18,80 |
| K 14 | | | 160 | **3,45** | 92,0 | 1,49 | 0,00 | 21,10 |
| K 14 | | | 200 | **-0,40** | 93,0 | 2,15 | 0,00 | 22,80 |
| WTG 01 | 5 816 | 5 819 | | | | | | |
| WTG 01 | | | 20 | **34,00** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **30,59** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **26,03** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **21,01** | 78,3 | 0,29 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **17,00** | 80,3 | 0,41 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **15,16** | 84,6 | 0,64 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **11,47** | 87,3 | 0,93 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **6,45** | 88,9 | 1,45 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **2,09** | 91,5 | 2,21 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-3,81** | 93,5 | 3,32 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-8,47** | 94,5 | 4,77 | 0,00 | 22,80 |
| WTG 02 | 5 196 | 5 199 | | | | | | |
| WTG 02 | | | 20 | **34,98** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **31,58** | 75,2 | 0,10 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **27,03** | 77,1 | 0,16 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **22,02** | 78,3 | 0,26 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **18,02** | 80,3 | 0,36 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **16,21** | 84,6 | 0,57 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **12,55** | 87,3 | 0,83 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **7,58** | 88,9 | 1,30 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **3,31** | 91,5 | 1,98 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-2,48** | 93,5 | 2,96 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-6,98** | 94,5 | 4,26 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **51,00** | | | | |
| Sum | | | 25 | **47,64** | | | | |
| Sum | | | 32 | **43,50** | | | | |
| Sum | | | 40 | **39,32** | | | | |
| Sum | | | 50 | **35,37** | | | | |
| Sum | | | 63 | **32,42** | | | | |
| Sum | | | 80 | **29,17** | | | | |
| Sum | | | 100 | **25,80** | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| Sum | | | 125 | **22,27** | | | | |
| Sum | | | 160 | **15,06** | | | | |
| Sum | | | 200 | **11,25** | | | | |

**Noise sensitive area: AN Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (134)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 792 | 3 795 | | | | | | |
| K 01 | | | 20 | **36,22** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **32,84** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 01 | | | 32 | **28,70** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 01 | | | 40 | **24,53** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 01 | | | 50 | **20,55** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 01 | | | 63 | **17,50** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 01 | | | 80 | **14,21** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 01 | | | 100 | **10,77** | 89,0 | 0,95 | 3,00 | 16,80 |
| K 01 | | | 125 | **7,07** | 92,0 | 1,44 | 1,80 | 18,80 |
| K 01 | | | 160 | **-0,45** | 92,0 | 2,16 | 0,00 | 21,10 |
| K 01 | | | 200 | **-4,60** | 93,0 | 3,11 | 0,00 | 22,80 |
| K 02 | 4 303 | 4 305 | | | | | | |
| K 02 | | | 20 | **35,12** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **31,73** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 02 | | | 32 | **27,59** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 02 | | | 40 | **23,40** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 02 | | | 50 | **19,42** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 02 | | | 63 | **16,35** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 02 | | | 80 | **13,03** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 02 | | | 100 | **9,54** | 89,0 | 1,08 | 3,00 | 16,80 |
| K 02 | | | 125 | **5,78** | 92,0 | 1,64 | 1,80 | 18,80 |
| K 02 | | | 160 | **-1,83** | 92,0 | 2,45 | 0,00 | 21,10 |
| K 02 | | | 200 | **-6,11** | 93,0 | 3,53 | 0,00 | 22,80 |
| K 03 | 4 935 | 4 937 | | | | | | |
| K 03 | | | 20 | **33,93** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **30,53** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 03 | | | 32 | **26,38** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 03 | | | 40 | **22,18** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 03 | | | 50 | **18,18** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 03 | | | 63 | **15,09** | 83,0 | 0,54 | 4,30 | 13,00 |
| K 03 | | | 80 | **11,74** | 86,0 | 0,79 | 3,70 | 14,80 |
| K 03 | | | 100 | **8,20** | 89,0 | 1,23 | 3,00 | 16,80 |
| K 03 | | | 125 | **4,35** | 92,0 | 1,88 | 1,80 | 18,80 |
| K 03 | | | 160 | **-3,38** | 92,0 | 2,81 | 0,00 | 21,10 |
| K 03 | | | 200 | **-7,82** | 93,0 | 4,05 | 0,00 | 22,80 |
| K 04 | 5 477 | 5 479 | | | | | | |
| K 04 | | | 20 | **33,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **29,62** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 04 | | | 32 | **25,46** | 76,0 | 0,16 | 5,20 | 9,20 |
| K 04 | | | 40 | **21,25** | 78,0 | 0,27 | 5,00 | 10,30 |
| K 04 | | | 50 | **17,24** | 80,0 | 0,38 | 4,70 | 11,50 |
| K 04 | | | 63 | **14,12** | 83,0 | 0,60 | 4,30 | 13,00 |
| K 04 | | | 80 | **10,75** | 86,0 | 0,88 | 3,70 | 14,80 |
| K 04 | | | 100 | **7,16** | 89,0 | 1,37 | 3,00 | 16,80 |
| K 04 | | | 125 | **3,24** | 92,0 | 2,08 | 1,80 | 18,80 |
| K 04 | | | 160 | **-4,60** | 92,0 | 3,12 | 0,00 | 21,10 |
| K 04 | | | 200 | **-9,17** | 93,0 | 4,49 | 0,00 | 22,80 |
| K 05 | 5 830 | 5 832 | | | | | | |
| K 05 | | | 20 | **32,48** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **29,07** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 05 | | | 32 | **24,91** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 05 | | | 40 | **20,69** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 05 | | | 50 | **16,67** | 80,0 | 0,41 | 4,70 | 11,50 |
| K 05 | | | 63 | **13,54** | 83,0 | 0,64 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 05 | | | 80 | **10,15** | 86,0 | 0,93 | 3,70 | 14,80 |
| K 05 | | | 100 | **6,53** | 89,0 | 1,46 | 3,00 | 16,80 |
| K 05 | | | 125 | **2,57** | 92,0 | 2,22 | 1,80 | 18,80 |
| K 05 | | | 160 | **-5,34** | 92,0 | 3,32 | 0,00 | 21,10 |
| K 05 | | | 200 | **-10,00** | 93,0 | 4,78 | 0,00 | 22,80 |
| K 06 | 3 765 | 3 767 | | | | | | |
| K 06 | | | 20 | **36,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **32,90** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,77** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 06 | | | 40 | **24,59** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,62** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 06 | | | 63 | **17,56** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 06 | | | 80 | **14,28** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,84** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 06 | | | 125 | **7,15** | 92,0 | 1,43 | 1,80 | 18,80 |
| K 06 | | | 160 | **-0,37** | 92,0 | 2,15 | 0,00 | 21,10 |
| K 06 | | | 200 | **-4,51** | 93,0 | 3,09 | 0,00 | 22,80 |
| K 07 | 4 024 | 4 026 | | | | | | |
| K 07 | | | 20 | **35,70** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **32,32** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **28,18** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 07 | | | 40 | **24,00** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 07 | | | 50 | **20,02** | 80,0 | 0,28 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,96** | 83,0 | 0,44 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,66** | 86,0 | 0,64 | 3,70 | 14,80 |
| K 07 | | | 100 | **10,19** | 89,0 | 1,01 | 3,00 | 16,80 |
| K 07 | | | 125 | **6,47** | 92,0 | 1,53 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,09** | 92,0 | 2,30 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,30** | 93,0 | 3,30 | 0,00 | 22,80 |
| K 08 | 4 537 | 4 539 | | | | | | |
| K 08 | | | 20 | **34,66** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,27** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **27,12** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 08 | | | 40 | **22,93** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 08 | | | 50 | **18,94** | 80,0 | 0,32 | 4,70 | 11,50 |
| K 08 | | | 63 | **15,86** | 83,0 | 0,50 | 4,30 | 13,00 |
| K 08 | | | 80 | **12,53** | 86,0 | 0,73 | 3,70 | 14,80 |
| K 08 | | | 100 | **9,03** | 89,0 | 1,13 | 3,00 | 16,80 |
| K 08 | | | 125 | **5,24** | 92,0 | 1,72 | 1,80 | 18,80 |
| K 08 | | | 160 | **-2,43** | 92,0 | 2,59 | 0,00 | 21,10 |
| K 08 | | | 200 | **-6,76** | 93,0 | 3,72 | 0,00 | 22,80 |
| K 09 | 4 995 | 4 998 | | | | | | |
| K 09 | | | 20 | **33,82** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **30,42** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 09 | | | 32 | **26,27** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 09 | | | 40 | **22,07** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 09 | | | 50 | **18,07** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 09 | | | 63 | **14,97** | 83,0 | 0,55 | 4,30 | 13,00 |
| K 09 | | | 80 | **11,63** | 86,0 | 0,80 | 3,70 | 14,80 |
| K 09 | | | 100 | **8,08** | 89,0 | 1,25 | 3,00 | 16,80 |
| K 09 | | | 125 | **4,23** | 92,0 | 1,90 | 1,80 | 18,80 |
| K 09 | | | 160 | **-3,52** | 92,0 | 2,85 | 0,00 | 21,10 |
| K 09 | | | 200 | **-7,97** | 93,0 | 4,10 | 0,00 | 22,80 |
| K 10 | 2 723 | 2 727 | | | | | | |
| K 10 | | | 20 | **39,08** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **35,73** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 10 | | | 32 | **31,60** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 10 | | | 40 | **27,45** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 10 | | | 50 | **23,49** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 10 | | | 63 | **20,48** | 83,0 | 0,30 | 4,30 | 13,00 |
| K 10 | | | 80 | **17,25** | 86,0 | 0,44 | 3,70 | 14,80 |
| K 10 | | | 100 | **13,90** | 89,0 | 0,68 | 3,00 | 16,80 |
| K 10 | | | 125 | **10,35** | 92,0 | 1,04 | 1,80 | 18,80 |
| K 10 | | | 160 | **3,03** | 92,0 | 1,55 | 0,00 | 21,10 |

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Calculated:
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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 10 | | | 200 | **-0,85** | 93,0 | 2,24 | 0,00 | 22,80 |
| K 11 | 2 070 | 2 075 | | | | | | |
| K 11 | | | 20 | **41,46** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **38,12** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 11 | | | 32 | **34,00** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 11 | | | 40 | **29,85** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 11 | | | 50 | **25,91** | 80,0 | 0,15 | 4,70 | 11,50 |
| K 11 | | | 63 | **22,93** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 11 | | | 80 | **19,73** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 11 | | | 100 | **16,44** | 89,0 | 0,52 | 3,00 | 16,80 |
| K 11 | | | 125 | **12,97** | 92,0 | 0,79 | 1,80 | 18,80 |
| K 11 | | | 160 | **5,77** | 92,0 | 1,18 | 0,00 | 21,10 |
| K 11 | | | 200 | **2,06** | 93,0 | 1,70 | 0,00 | 22,80 |
| K 12 | 1 438 | 1 446 | | | | | | |
| K 12 | | | 20 | **44,60** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **41,27** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 12 | | | 32 | **37,16** | 76,0 | 0,04 | 5,20 | 9,20 |
| K 12 | | | 40 | **33,03** | 78,0 | 0,07 | 5,00 | 10,30 |
| K 12 | | | 50 | **29,10** | 80,0 | 0,10 | 4,70 | 11,50 |
| K 12 | | | 63 | **26,14** | 83,0 | 0,16 | 4,30 | 13,00 |
| K 12 | | | 80 | **22,97** | 86,0 | 0,23 | 3,70 | 14,80 |
| K 12 | | | 100 | **19,74** | 89,0 | 0,36 | 3,00 | 16,80 |
| K 12 | | | 125 | **16,35** | 92,0 | 0,55 | 1,80 | 18,80 |
| K 12 | | | 160 | **9,28** | 92,0 | 0,82 | 0,00 | 21,10 |
| K 12 | | | 200 | **5,71** | 93,0 | 1,19 | 0,00 | 22,80 |
| K 13 | 2 313 | 2 318 | | | | | | |
| K 13 | | | 20 | **40,50** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **37,15** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **33,03** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 13 | | | 40 | **28,88** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 13 | | | 50 | **24,94** | 80,0 | 0,16 | 4,70 | 11,50 |
| K 13 | | | 63 | **21,94** | 83,0 | 0,25 | 4,30 | 13,00 |
| K 13 | | | 80 | **18,73** | 86,0 | 0,37 | 3,70 | 14,80 |
| K 13 | | | 100 | **15,42** | 89,0 | 0,58 | 3,00 | 16,80 |
| K 13 | | | 125 | **11,92** | 92,0 | 0,88 | 1,80 | 18,80 |
| K 13 | | | 160 | **4,68** | 92,0 | 1,32 | 0,00 | 21,10 |
| K 13 | | | 200 | **0,90** | 93,0 | 1,90 | 0,00 | 22,80 |
| K 14 | 2 979 | 2 983 | | | | | | |
| K 14 | | | 20 | **38,31** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **34,95** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 14 | | | 32 | **30,82** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 14 | | | 40 | **26,66** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 14 | | | 50 | **22,70** | 80,0 | 0,21 | 4,70 | 11,50 |
| K 14 | | | 63 | **19,68** | 83,0 | 0,33 | 4,30 | 13,00 |
| K 14 | | | 80 | **16,43** | 86,0 | 0,48 | 3,70 | 14,80 |
| K 14 | | | 100 | **13,06** | 89,0 | 0,75 | 3,00 | 16,80 |
| K 14 | | | 125 | **9,47** | 92,0 | 1,13 | 1,80 | 18,80 |
| K 14 | | | 160 | **2,11** | 92,0 | 1,70 | 0,00 | 21,10 |
| K 14 | | | 200 | **-1,84** | 93,0 | 2,45 | 0,00 | 22,80 |
| WTG 01 | 6 827 | 6 829 | | | | | | |
| WTG 01 | | | 20 | **32,61** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **29,18** | 75,2 | 0,14 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **24,61** | 77,1 | 0,20 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **19,57** | 78,3 | 0,34 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **15,53** | 80,3 | 0,48 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **13,66** | 84,6 | 0,75 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **9,92** | 87,3 | 1,09 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **4,81** | 88,9 | 1,71 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **0,32** | 91,5 | 2,60 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-5,78** | 93,5 | 3,89 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-10,69** | 94,5 | 5,60 | 0,00 | 22,80 |
| WTG 02 | 5 995 | 5 997 | | | | | | |
| WTG 02 | | | 20 | **33,74** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,32** | 75,2 | 0,12 | 5,40 | 8,30 |

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| WTG 02 | | | 32 | **25,76** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,74** | 78,3 | 0,30 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,72** | 80,3 | 0,42 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,88** | 84,6 | 0,66 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **11,18** | 87,3 | 0,96 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **6,14** | 88,9 | 1,50 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,76** | 91,5 | 2,28 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,18** | 93,5 | 3,42 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-8,88** | 94,5 | 4,92 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **50,00** | | | | |
| Sum | | | 25 | **46,65** | | | | |
| Sum | | | 32 | **42,50** | | | | |
| Sum | | | 40 | **38,32** | | | | |
| Sum | | | 50 | **34,36** | | | | |
| Sum | | | 63 | **31,40** | | | | |
| Sum | | | 80 | **28,15** | | | | |
| Sum | | | 100 | **24,76** | | | | |
| Sum | | | 125 | **21,20** | | | | |
| Sum | | | 160 | **13,95** | | | | |
| Sum | | | 200 | **10,11** | | | | |

**Noise sensitive area: AO Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (133)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 221 | 3 224 | | | | | | |
| K 01 | | | 20 | **37,63** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **34,27** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 01 | | | 32 | **30,14** | 76,0 | 0,10 | 5,20 | 9,20 |
| K 01 | | | 40 | **25,97** | 78,0 | 0,16 | 5,00 | 10,30 |
| K 01 | | | 50 | **22,01** | 80,0 | 0,23 | 4,70 | 11,50 |
| K 01 | | | 63 | **18,98** | 83,0 | 0,35 | 4,30 | 13,00 |
| K 01 | | | 80 | **15,72** | 86,0 | 0,52 | 3,70 | 14,80 |
| K 01 | | | 100 | **12,33** | 89,0 | 0,81 | 3,00 | 16,80 |
| K 01 | | | 125 | **8,71** | 92,0 | 1,23 | 1,80 | 18,80 |
| K 01 | | | 160 | **1,29** | 92,0 | 1,84 | 0,00 | 21,10 |
| K 01 | | | 200 | **-2,71** | 93,0 | 2,64 | 0,00 | 22,80 |
| K 02 | 3 765 | 3 769 | | | | | | |
| K 02 | | | 20 | **36,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **32,90** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 02 | | | 32 | **28,76** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 02 | | | 40 | **24,59** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 02 | | | 50 | **20,61** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 02 | | | 63 | **17,56** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 02 | | | 80 | **14,27** | 86,0 | 0,60 | 3,70 | 14,80 |
| K 02 | | | 100 | **10,83** | 89,0 | 0,94 | 3,00 | 16,80 |
| K 02 | | | 125 | **7,14** | 92,0 | 1,43 | 1,80 | 18,80 |
| K 02 | | | 160 | **-0,37** | 92,0 | 2,15 | 0,00 | 21,10 |
| K 02 | | | 200 | **-4,51** | 93,0 | 3,09 | 0,00 | 22,80 |
| K 03 | 4 310 | 4 313 | | | | | | |
| K 03 | | | 20 | **35,10** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **31,72** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 03 | | | 32 | **27,58** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 03 | | | 40 | **23,39** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 03 | | | 50 | **19,40** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 03 | | | 63 | **16,33** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 03 | | | 80 | **13,01** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 03 | | | 100 | **9,53** | 89,0 | 1,08 | 3,00 | 16,80 |
| K 03 | | | 125 | **5,77** | 92,0 | 1,64 | 1,80 | 18,80 |
| K 03 | | | 160 | **-1,85** | 92,0 | 2,46 | 0,00 | 21,10 |
| K 03 | | | 200 | **-6,13** | 93,0 | 3,54 | 0,00 | 22,80 |
| K 04 | 5 055 | 5 057 | | | | | | |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 04 | | | 20 | **33,72** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **30,32** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 04 | | | 32 | **26,17** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 04 | | | 40 | **21,97** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 04 | | | 50 | **17,97** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 04 | | | 63 | **14,87** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 04 | | | 80 | **11,51** | 86,0 | 0,81 | 3,70 | 14,80 |
| K 04 | | | 100 | **7,96** | 89,0 | 1,26 | 3,00 | 16,80 |
| K 04 | | | 125 | **4,10** | 92,0 | 1,92 | 1,80 | 18,80 |
| K 04 | | | 160 | **-3,66** | 92,0 | 2,88 | 0,00 | 21,10 |
| K 04 | | | 200 | **-8,12** | 93,0 | 4,15 | 0,00 | 22,80 |
| K 05 | 5 135 | 5 137 | | | | | | |
| K 05 | | | 20 | **33,59** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **30,18** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 05 | | | 32 | **26,03** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 05 | | | 40 | **21,83** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 05 | | | 50 | **17,83** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 05 | | | 63 | **14,72** | 83,0 | 0,57 | 4,30 | 13,00 |
| K 05 | | | 80 | **11,36** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 05 | | | 100 | **7,80** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 05 | | | 125 | **3,93** | 92,0 | 1,95 | 1,80 | 18,80 |
| K 05 | | | 160 | **-3,84** | 92,0 | 2,93 | 0,00 | 21,10 |
| K 05 | | | 200 | **-8,33** | 93,0 | 4,21 | 0,00 | 22,80 |
| K 06 | 3 710 | 3 713 | | | | | | |
| K 06 | | | 20 | **36,41** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **33,03** | 73,7 | 0,07 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,89** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 06 | | | 40 | **24,72** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,75** | 80,0 | 0,26 | 4,70 | 11,50 |
| K 06 | | | 63 | **17,70** | 83,0 | 0,41 | 4,30 | 13,00 |
| K 06 | | | 80 | **14,41** | 86,0 | 0,59 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,98** | 89,0 | 0,93 | 3,00 | 16,80 |
| K 06 | | | 125 | **7,29** | 92,0 | 1,41 | 1,80 | 18,80 |
| K 06 | | | 160 | **-0,21** | 92,0 | 2,12 | 0,00 | 21,10 |
| K 06 | | | 200 | **-4,34** | 93,0 | 3,04 | 0,00 | 22,80 |
| K 07 | 4 227 | 4 230 | | | | | | |
| K 07 | | | 20 | **35,27** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **31,89** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **27,75** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,56** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,58** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,51** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,20** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,71** | 89,0 | 1,06 | 3,00 | 16,80 |
| K 07 | | | 125 | **5,96** | 92,0 | 1,61 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,64** | 92,0 | 2,41 | 0,00 | 21,10 |
| K 07 | | | 200 | **-5,90** | 93,0 | 3,47 | 0,00 | 22,80 |
| K 08 | 4 329 | 4 332 | | | | | | |
| K 08 | | | 20 | **35,07** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,68** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **27,54** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 08 | | | 40 | **23,35** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 08 | | | 50 | **19,36** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 08 | | | 63 | **16,29** | 83,0 | 0,48 | 4,30 | 13,00 |
| K 08 | | | 80 | **12,97** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 08 | | | 100 | **9,48** | 89,0 | 1,08 | 3,00 | 16,80 |
| K 08 | | | 125 | **5,72** | 92,0 | 1,65 | 1,80 | 18,80 |
| K 08 | | | 160 | **-1,90** | 92,0 | 2,47 | 0,00 | 21,10 |
| K 08 | | | 200 | **-6,19** | 93,0 | 3,55 | 0,00 | 22,80 |
| K 09 | 4 719 | 4 721 | | | | | | |
| K 09 | | | 20 | **34,32** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **30,92** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 09 | | | 32 | **26,78** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 09 | | | 40 | **22,58** | 78,0 | 0,24 | 5,00 | 10,30 |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 09 | | | 50 | **18,59** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 09 | | | 63 | **15,50** | 83,0 | 0,52 | 4,30 | 13,00 |
| K 09 | | | 80 | **12,16** | 86,0 | 0,76 | 3,70 | 14,80 |
| K 09 | | | 100 | **8,64** | 89,0 | 1,18 | 3,00 | 16,80 |
| K 09 | | | 125 | **4,83** | 92,0 | 1,79 | 1,80 | 18,80 |
| K 09 | | | 160 | **-2,87** | 92,0 | 2,69 | 0,00 | 21,10 |
| K 09 | | | 200 | **-7,25** | 93,0 | 3,87 | 0,00 | 22,80 |
| K 10 | 2 045 | 2 051 | | | | | | |
| K 10 | | | 20 | **41,56** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **38,22** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 10 | | | 32 | **34,10** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 10 | | | 40 | **29,96** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 10 | | | 50 | **26,02** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 10 | | | 63 | **23,04** | 83,0 | 0,23 | 4,30 | 13,00 |
| K 10 | | | 80 | **19,83** | 86,0 | 0,33 | 3,70 | 14,80 |
| K 10 | | | 100 | **16,55** | 89,0 | 0,51 | 3,00 | 16,80 |
| K 10 | | | 125 | **13,08** | 92,0 | 0,78 | 1,80 | 18,80 |
| K 10 | | | 160 | **5,89** | 92,0 | 1,17 | 0,00 | 21,10 |
| K 10 | | | 200 | **2,18** | 93,0 | 1,68 | 0,00 | 22,80 |
| K 11 | 1 586 | 1 593 | | | | | | |
| K 11 | | | 20 | **43,75** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **40,42** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 11 | | | 32 | **36,31** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 11 | | | 40 | **32,17** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 11 | | | 50 | **28,24** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 11 | | | 63 | **25,28** | 83,0 | 0,18 | 4,30 | 13,00 |
| K 11 | | | 80 | **22,10** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 11 | | | 100 | **18,86** | 89,0 | 0,40 | 3,00 | 16,80 |
| K 11 | | | 125 | **15,45** | 92,0 | 0,61 | 1,80 | 18,80 |
| K 11 | | | 160 | **8,35** | 92,0 | 0,91 | 0,00 | 21,10 |
| K 11 | | | 200 | **4,75** | 93,0 | 1,31 | 0,00 | 22,80 |
| K 12 | 1 930 | 1 936 | | | | | | |
| K 12 | | | 20 | **42,06** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **38,72** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 12 | | | 32 | **34,60** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 12 | | | 40 | **30,46** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 12 | | | 50 | **26,53** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 12 | | | 63 | **23,55** | 83,0 | 0,21 | 4,30 | 13,00 |
| K 12 | | | 80 | **20,35** | 86,0 | 0,31 | 3,70 | 14,80 |
| K 12 | | | 100 | **17,08** | 89,0 | 0,48 | 3,00 | 16,80 |
| K 12 | | | 125 | **13,63** | 92,0 | 0,74 | 1,80 | 18,80 |
| K 12 | | | 160 | **6,46** | 92,0 | 1,10 | 0,00 | 21,10 |
| K 12 | | | 200 | **2,77** | 93,0 | 1,59 | 0,00 | 22,80 |
| K 13 | 2 526 | 2 531 | | | | | | |
| K 13 | | | 20 | **39,73** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **36,38** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 13 | | | 32 | **32,26** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 13 | | | 40 | **28,11** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 13 | | | 50 | **24,16** | 80,0 | 0,18 | 4,70 | 11,50 |
| K 13 | | | 63 | **21,16** | 83,0 | 0,28 | 4,30 | 13,00 |
| K 13 | | | 80 | **17,93** | 86,0 | 0,40 | 3,70 | 14,80 |
| K 13 | | | 100 | **14,60** | 89,0 | 0,63 | 3,00 | 16,80 |
| K 13 | | | 125 | **11,07** | 92,0 | 0,96 | 1,80 | 18,80 |
| K 13 | | | 160 | **3,79** | 92,0 | 1,44 | 0,00 | 21,10 |
| K 13 | | | 200 | **-0,04** | 93,0 | 2,08 | 0,00 | 22,80 |
| K 14 | 2 866 | 2 870 | | | | | | |
| K 14 | | | 20 | **38,64** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **35,28** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 14 | | | 32 | **31,16** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 14 | | | 40 | **27,00** | 78,0 | 0,14 | 5,00 | 10,30 |
| K 14 | | | 50 | **23,04** | 80,0 | 0,20 | 4,70 | 11,50 |
| K 14 | | | 63 | **20,03** | 83,0 | 0,32 | 4,30 | 13,00 |
| K 14 | | | 80 | **16,78** | 86,0 | 0,46 | 3,70 | 14,80 |
| K 14 | | | 100 | **13,42** | 89,0 | 0,72 | 3,00 | 16,80 |

*To be continued on next page...*

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 14 | | | 125 | **9,85** | 92,0 | 1,09 | 1,80 | 18,80 |
| K 14 | | | 160 | **2,51** | 92,0 | 1,64 | 0,00 | 21,10 |
| K 14 | | | 200 | **-1,41** | 93,0 | 2,35 | 0,00 | 22,80 |
| WTG 01 | 6 341 | 6 343 | | | | | | |
| WTG 01 | | | 20 | **33,25** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **29,83** | 75,2 | 0,13 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **25,26** | 77,1 | 0,19 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **20,24** | 78,3 | 0,32 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **16,21** | 80,3 | 0,44 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **14,36** | 84,6 | 0,70 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **10,64** | 87,3 | 1,01 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **5,57** | 88,9 | 1,59 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **1,14** | 91,5 | 2,41 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-4,86** | 93,5 | 3,62 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-9,65** | 94,5 | 5,20 | 0,00 | 22,80 |
| WTG 02 | 5 667 | 5 670 | | | | | | |
| WTG 02 | | | 20 | **34,23** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,81** | 75,2 | 0,11 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **26,26** | 77,1 | 0,17 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **21,24** | 78,3 | 0,28 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **17,23** | 80,3 | 0,40 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **15,40** | 84,6 | 0,62 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **11,72** | 87,3 | 0,91 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **6,71** | 88,9 | 1,42 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **2,37** | 91,5 | 2,15 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-3,50** | 93,5 | 3,23 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-8,12** | 94,5 | 4,65 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **50,30** | | | | |
| Sum | | | 25 | **46,95** | | | | |
| Sum | | | 32 | **42,80** | | | | |
| Sum | | | 40 | **38,62** | | | | |
| Sum | | | 50 | **34,66** | | | | |
| Sum | | | 63 | **31,70** | | | | |
| Sum | | | 80 | **28,45** | | | | |
| Sum | | | 100 | **25,06** | | | | |
| Sum | | | 125 | **21,51** | | | | |
| Sum | | | 160 | **14,26** | | | | |
| Sum | | | 200 | **10,41** | | | | |

**Noise sensitive area: AP Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (132)**

Wind speed: 8,0 m/s

**WTG**

| No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 01 | 3 805 | 3 808 | | | | | | |
| K 01 | | | 20 | **36,19** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 01 | | | 25 | **32,81** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 01 | | | 32 | **28,67** | 76,0 | 0,11 | 5,20 | 9,20 |
| K 01 | | | 40 | **24,50** | 78,0 | 0,19 | 5,00 | 10,30 |
| K 01 | | | 50 | **20,52** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 01 | | | 63 | **17,47** | 83,0 | 0,42 | 4,30 | 13,00 |
| K 01 | | | 80 | **14,18** | 86,0 | 0,61 | 3,70 | 14,80 |
| K 01 | | | 100 | **10,74** | 89,0 | 0,95 | 3,00 | 16,80 |
| K 01 | | | 125 | **7,04** | 92,0 | 1,45 | 1,80 | 18,80 |
| K 01 | | | 160 | **-0,48** | 92,0 | 2,17 | 0,00 | 21,10 |
| K 01 | | | 200 | **-4,64** | 93,0 | 3,12 | 0,00 | 22,80 |
| K 02 | 4 338 | 4 340 | | | | | | |
| K 02 | | | 20 | **35,05** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 02 | | | 25 | **31,66** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 02 | | | 32 | **27,52** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 02 | | | 40 | **23,33** | 78,0 | 0,22 | 5,00 | 10,30 |
| K 02 | | | 50 | **19,35** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 02 | | | 63 | **16,27** | 83,0 | 0,48 | 4,30 | 13,00 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 02 | | | 80 | **12,95** | 86,0 | 0,69 | 3,70 | 14,80 |
| K 02 | | | 100 | **9,46** | 89,0 | 1,09 | 3,00 | 16,80 |
| K 02 | | | 125 | **5,70** | 92,0 | 1,65 | 1,80 | 18,80 |
| K 02 | | | 160 | **-1,92** | 92,0 | 2,47 | 0,00 | 21,10 |
| K 02 | | | 200 | **-6,21** | 93,0 | 3,56 | 0,00 | 22,80 |
| K 03 | 4 963 | 4 965 | | | | | | |
| K 03 | | | 20 | **33,88** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 03 | | | 25 | **30,48** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 03 | | | 32 | **26,33** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 03 | | | 40 | **22,13** | 78,0 | 0,25 | 5,00 | 10,30 |
| K 03 | | | 50 | **18,13** | 80,0 | 0,35 | 4,70 | 11,50 |
| K 03 | | | 63 | **15,04** | 83,0 | 0,55 | 4,30 | 13,00 |
| K 03 | | | 80 | **11,69** | 86,0 | 0,79 | 3,70 | 14,80 |
| K 03 | | | 100 | **8,14** | 89,0 | 1,24 | 3,00 | 16,80 |
| K 03 | | | 125 | **4,30** | 92,0 | 1,89 | 1,80 | 18,80 |
| K 03 | | | 160 | **-3,45** | 92,0 | 2,83 | 0,00 | 21,10 |
| K 03 | | | 200 | **-7,89** | 93,0 | 4,07 | 0,00 | 22,80 |
| K 04 | 5 562 | 5 563 | | | | | | |
| K 04 | | | 20 | **32,89** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 04 | | | 25 | **29,48** | 73,7 | 0,11 | 5,40 | 8,30 |
| K 04 | | | 32 | **25,33** | 76,0 | 0,17 | 5,20 | 9,20 |
| K 04 | | | 40 | **21,11** | 78,0 | 0,28 | 5,00 | 10,30 |
| K 04 | | | 50 | **17,10** | 80,0 | 0,39 | 4,70 | 11,50 |
| K 04 | | | 63 | **13,98** | 83,0 | 0,61 | 4,30 | 13,00 |
| K 04 | | | 80 | **10,60** | 86,0 | 0,89 | 3,70 | 14,80 |
| K 04 | | | 100 | **7,00** | 89,0 | 1,39 | 3,00 | 16,80 |
| K 04 | | | 125 | **3,08** | 92,0 | 2,11 | 1,80 | 18,80 |
| K 04 | | | 160 | **-4,78** | 92,0 | 3,17 | 0,00 | 21,10 |
| K 04 | | | 200 | **-9,37** | 93,0 | 4,56 | 0,00 | 22,80 |
| K 05 | 5 854 | 5 856 | | | | | | |
| K 05 | | | 20 | **32,45** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 05 | | | 25 | **29,03** | 73,7 | 0,12 | 5,40 | 8,30 |
| K 05 | | | 32 | **24,87** | 76,0 | 0,18 | 5,20 | 9,20 |
| K 05 | | | 40 | **20,65** | 78,0 | 0,29 | 5,00 | 10,30 |
| K 05 | | | 50 | **16,64** | 80,0 | 0,41 | 4,70 | 11,50 |
| K 05 | | | 63 | **13,50** | 83,0 | 0,64 | 4,30 | 13,00 |
| K 05 | | | 80 | **10,11** | 86,0 | 0,94 | 3,70 | 14,80 |
| K 05 | | | 100 | **6,48** | 89,0 | 1,46 | 3,00 | 16,80 |
| K 05 | | | 125 | **2,52** | 92,0 | 2,23 | 1,80 | 18,80 |
| K 05 | | | 160 | **-5,39** | 92,0 | 3,34 | 0,00 | 21,10 |
| K 05 | | | 200 | **-10,05** | 93,0 | 4,80 | 0,00 | 22,80 |
| K 06 | 3 899 | 3 902 | | | | | | |
| K 06 | | | 20 | **35,97** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 06 | | | 25 | **32,60** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 06 | | | 32 | **28,46** | 76,0 | 0,12 | 5,20 | 9,20 |
| K 06 | | | 40 | **24,28** | 78,0 | 0,20 | 5,00 | 10,30 |
| K 06 | | | 50 | **20,30** | 80,0 | 0,27 | 4,70 | 11,50 |
| K 06 | | | 63 | **17,24** | 83,0 | 0,43 | 4,30 | 13,00 |
| K 06 | | | 80 | **13,95** | 86,0 | 0,62 | 3,70 | 14,80 |
| K 06 | | | 100 | **10,50** | 89,0 | 0,98 | 3,00 | 16,80 |
| K 06 | | | 125 | **6,79** | 92,0 | 1,48 | 1,80 | 18,80 |
| K 06 | | | 160 | **-0,75** | 92,0 | 2,22 | 0,00 | 21,10 |
| K 06 | | | 200 | **-4,93** | 93,0 | 3,20 | 0,00 | 22,80 |
| K 07 | 4 226 | 4 228 | | | | | | |
| K 07 | | | 20 | **35,28** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 07 | | | 25 | **31,89** | 73,7 | 0,08 | 5,40 | 8,30 |
| K 07 | | | 32 | **27,75** | 76,0 | 0,13 | 5,20 | 9,20 |
| K 07 | | | 40 | **23,57** | 78,0 | 0,21 | 5,00 | 10,30 |
| K 07 | | | 50 | **19,58** | 80,0 | 0,30 | 4,70 | 11,50 |
| K 07 | | | 63 | **16,51** | 83,0 | 0,47 | 4,30 | 13,00 |
| K 07 | | | 80 | **13,20** | 86,0 | 0,68 | 3,70 | 14,80 |
| K 07 | | | 100 | **9,72** | 89,0 | 1,06 | 3,00 | 16,80 |
| K 07 | | | 125 | **5,97** | 92,0 | 1,61 | 1,80 | 18,80 |
| K 07 | | | 160 | **-1,63** | 92,0 | 2,41 | 0,00 | 21,10 |

*To be continued on next page...*

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 07 | | | 200 | **-5,89** | 93,0 | 3,47 | 0,00 | 22,80 |
| K 08 | 4 655 | 4 658 | | | | | | |
| K 08 | | | 20 | **34,44** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 08 | | | 25 | **31,04** | 73,7 | 0,09 | 5,40 | 8,30 |
| K 08 | | | 32 | **26,90** | 76,0 | 0,14 | 5,20 | 9,20 |
| K 08 | | | 40 | **22,70** | 78,0 | 0,23 | 5,00 | 10,30 |
| K 08 | | | 50 | **18,71** | 80,0 | 0,33 | 4,70 | 11,50 |
| K 08 | | | 63 | **15,62** | 83,0 | 0,51 | 4,30 | 13,00 |
| K 08 | | | 80 | **12,29** | 86,0 | 0,75 | 3,70 | 14,80 |
| K 08 | | | 100 | **8,77** | 89,0 | 1,16 | 3,00 | 16,80 |
| K 08 | | | 125 | **4,97** | 92,0 | 1,77 | 1,80 | 18,80 |
| K 08 | | | 160 | **-2,72** | 92,0 | 2,65 | 0,00 | 21,10 |
| K 08 | | | 200 | **-7,08** | 93,0 | 3,82 | 0,00 | 22,80 |
| K 09 | 5 106 | 5 109 | | | | | | |
| K 09 | | | 20 | **33,63** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 09 | | | 25 | **30,23** | 73,7 | 0,10 | 5,40 | 8,30 |
| K 09 | | | 32 | **26,08** | 76,0 | 0,15 | 5,20 | 9,20 |
| K 09 | | | 40 | **21,88** | 78,0 | 0,26 | 5,00 | 10,30 |
| K 09 | | | 50 | **17,88** | 80,0 | 0,36 | 4,70 | 11,50 |
| K 09 | | | 63 | **14,77** | 83,0 | 0,56 | 4,30 | 13,00 |
| K 09 | | | 80 | **11,42** | 86,0 | 0,82 | 3,70 | 14,80 |
| K 09 | | | 100 | **7,86** | 89,0 | 1,28 | 3,00 | 16,80 |
| K 09 | | | 125 | **3,99** | 92,0 | 1,94 | 1,80 | 18,80 |
| K 09 | | | 160 | **-3,78** | 92,0 | 2,91 | 0,00 | 21,10 |
| K 09 | | | 200 | **-8,25** | 93,0 | 4,19 | 0,00 | 22,80 |
| K 10 | 2 659 | 2 663 | | | | | | |
| K 10 | | | 20 | **39,29** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 10 | | | 25 | **35,94** | 73,7 | 0,05 | 5,40 | 8,30 |
| K 10 | | | 32 | **31,81** | 76,0 | 0,08 | 5,20 | 9,20 |
| K 10 | | | 40 | **27,66** | 78,0 | 0,13 | 5,00 | 10,30 |
| K 10 | | | 50 | **23,71** | 80,0 | 0,19 | 4,70 | 11,50 |
| K 10 | | | 63 | **20,70** | 83,0 | 0,29 | 4,30 | 13,00 |
| K 10 | | | 80 | **17,47** | 86,0 | 0,43 | 3,70 | 14,80 |
| K 10 | | | 100 | **14,13** | 89,0 | 0,67 | 3,00 | 16,80 |
| K 10 | | | 125 | **10,58** | 92,0 | 1,01 | 1,80 | 18,80 |
| K 10 | | | 160 | **3,28** | 92,0 | 1,52 | 0,00 | 21,10 |
| K 10 | | | 200 | **-0,59** | 93,0 | 2,18 | 0,00 | 22,80 |
| K 11 | 1 989 | 1 994 | | | | | | |
| K 11 | | | 20 | **41,81** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 11 | | | 25 | **38,47** | 73,7 | 0,04 | 5,40 | 8,30 |
| K 11 | | | 32 | **34,35** | 76,0 | 0,06 | 5,20 | 9,20 |
| K 11 | | | 40 | **30,21** | 78,0 | 0,10 | 5,00 | 10,30 |
| K 11 | | | 50 | **26,27** | 80,0 | 0,14 | 4,70 | 11,50 |
| K 11 | | | 63 | **23,29** | 83,0 | 0,22 | 4,30 | 13,00 |
| K 11 | | | 80 | **20,09** | 86,0 | 0,32 | 3,70 | 14,80 |
| K 11 | | | 100 | **16,81** | 89,0 | 0,50 | 3,00 | 16,80 |
| K 11 | | | 125 | **13,35** | 92,0 | 0,76 | 1,80 | 18,80 |
| K 11 | | | 160 | **6,17** | 92,0 | 1,14 | 0,00 | 21,10 |
| K 11 | | | 200 | **2,47** | 93,0 | 1,63 | 0,00 | 22,80 |
| K 12 | 1 538 | 1 544 | | | | | | |
| K 12 | | | 20 | **44,02** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 12 | | | 25 | **40,69** | 73,7 | 0,03 | 5,40 | 8,30 |
| K 12 | | | 32 | **36,58** | 76,0 | 0,05 | 5,20 | 9,20 |
| K 12 | | | 40 | **32,45** | 78,0 | 0,08 | 5,00 | 10,30 |
| K 12 | | | 50 | **28,52** | 80,0 | 0,11 | 4,70 | 11,50 |
| K 12 | | | 63 | **25,55** | 83,0 | 0,17 | 4,30 | 13,00 |
| K 12 | | | 80 | **22,38** | 86,0 | 0,25 | 3,70 | 14,80 |
| K 12 | | | 100 | **19,14** | 89,0 | 0,39 | 3,00 | 16,80 |
| K 12 | | | 125 | **15,74** | 92,0 | 0,59 | 1,80 | 18,80 |
| K 12 | | | 160 | **8,64** | 92,0 | 0,88 | 0,00 | 21,10 |
| K 12 | | | 200 | **5,06** | 93,0 | 1,27 | 0,00 | 22,80 |
| K 13 | 2 443 | 2 447 | | | | | | |
| K 13 | | | 20 | **40,03** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 13 | | | 25 | **36,68** | 73,7 | 0,05 | 5,40 | 8,30 |

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# DECIBEL - Detailed results

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

*...continued from previous page*

| WTG No. | Distance [m] | Sound distance [m] | Frequency [Hz] | **Calculated [dB]** | LwA,ref [dB(A)] | Aatm [dB] | Agr [dB] | Lsigma [dB] |
|---|---|---|---|---|---|---|---|---|
| K 13 | | | 32 | **32,55** | 76,0 | 0,07 | 5,20 | 9,20 |
| K 13 | | | 40 | **28,40** | 78,0 | 0,12 | 5,00 | 10,30 |
| K 13 | | | 50 | **24,46** | 80,0 | 0,17 | 4,70 | 11,50 |
| K 13 | | | 63 | **21,46** | 83,0 | 0,27 | 4,30 | 13,00 |
| K 13 | | | 80 | **18,24** | 86,0 | 0,39 | 3,70 | 14,80 |
| K 13 | | | 100 | **14,92** | 89,0 | 0,61 | 3,00 | 16,80 |
| K 13 | | | 125 | **11,40** | 92,0 | 0,93 | 1,80 | 18,80 |
| K 13 | | | 160 | **4,13** | 92,0 | 1,39 | 0,00 | 21,10 |
| K 13 | | | 200 | **0,32** | 93,0 | 2,01 | 0,00 | 22,80 |
| K 14 | 3 069 | 3 072 | | | | | | |
| K 14 | | | 20 | **38,05** | 70,3 | 0,00 | 5,60 | 7,60 |
| K 14 | | | 25 | **34,69** | 73,7 | 0,06 | 5,40 | 8,30 |
| K 14 | | | 32 | **30,56** | 76,0 | 0,09 | 5,20 | 9,20 |
| K 14 | | | 40 | **26,40** | 78,0 | 0,15 | 5,00 | 10,30 |
| K 14 | | | 50 | **22,44** | 80,0 | 0,22 | 4,70 | 11,50 |
| K 14 | | | 63 | **19,41** | 83,0 | 0,34 | 4,30 | 13,00 |
| K 14 | | | 80 | **16,16** | 86,0 | 0,49 | 3,70 | 14,80 |
| K 14 | | | 100 | **12,78** | 89,0 | 0,77 | 3,00 | 16,80 |
| K 14 | | | 125 | **9,18** | 92,0 | 1,17 | 1,80 | 18,80 |
| K 14 | | | 160 | **1,80** | 92,0 | 1,75 | 0,00 | 21,10 |
| K 14 | | | 200 | **-2,17** | 93,0 | 2,52 | 0,00 | 22,80 |
| WTG 01 | 6 912 | 6 914 | | | | | | |
| WTG 01 | | | 20 | **32,51** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 01 | | | 25 | **29,07** | 75,2 | 0,14 | 5,40 | 8,30 |
| WTG 01 | | | 32 | **24,50** | 77,1 | 0,21 | 5,20 | 9,20 |
| WTG 01 | | | 40 | **19,46** | 78,3 | 0,35 | 5,00 | 10,30 |
| WTG 01 | | | 50 | **15,42** | 80,3 | 0,48 | 4,70 | 11,50 |
| WTG 01 | | | 63 | **13,54** | 84,6 | 0,76 | 4,30 | 13,00 |
| WTG 01 | | | 80 | **9,80** | 87,3 | 1,11 | 3,70 | 14,80 |
| WTG 01 | | | 100 | **4,68** | 88,9 | 1,73 | 3,00 | 16,80 |
| WTG 01 | | | 125 | **0,18** | 91,5 | 2,63 | 1,80 | 18,80 |
| WTG 01 | | | 160 | **-5,94** | 93,5 | 3,94 | 0,00 | 21,10 |
| WTG 01 | | | 200 | **-10,86** | 94,5 | 5,67 | 0,00 | 22,80 |
| WTG 02 | 6 108 | 6 111 | | | | | | |
| WTG 02 | | | 20 | **33,58** | 71,8 | 0,00 | 5,60 | 7,60 |
| WTG 02 | | | 25 | **30,16** | 75,2 | 0,12 | 5,40 | 8,30 |
| WTG 02 | | | 32 | **25,59** | 77,1 | 0,18 | 5,20 | 9,20 |
| WTG 02 | | | 40 | **20,57** | 78,3 | 0,31 | 5,00 | 10,30 |
| WTG 02 | | | 50 | **16,55** | 80,3 | 0,43 | 4,70 | 11,50 |
| WTG 02 | | | 63 | **14,71** | 84,6 | 0,67 | 4,30 | 13,00 |
| WTG 02 | | | 80 | **11,00** | 87,3 | 0,98 | 3,70 | 14,80 |
| WTG 02 | | | 100 | **5,95** | 88,9 | 1,53 | 3,00 | 16,80 |
| WTG 02 | | | 125 | **1,56** | 91,5 | 2,32 | 1,80 | 18,80 |
| WTG 02 | | | 160 | **-4,40** | 93,5 | 3,48 | 0,00 | 21,10 |
| WTG 02 | | | 200 | **-9,13** | 94,5 | 5,01 | 0,00 | 22,80 |
| Sum | | | | | | | | |
| Sum | | | 20 | **49,79** | | | | |
| Sum | | | 25 | **46,43** | | | | |
| Sum | | | 32 | **42,29** | | | | |
| Sum | | | 40 | **38,10** | | | | |
| Sum | | | 50 | **34,15** | | | | |
| Sum | | | 63 | **31,18** | | | | |
| Sum | | | 80 | **27,92** | | | | |
| Sum | | | 100 | **24,53** | | | | |
| Sum | | | 125 | **20,96** | | | | |
| Sum | | | 160 | **13,69** | | | | |
| Sum | | | 200 | **9,83** | | | | |

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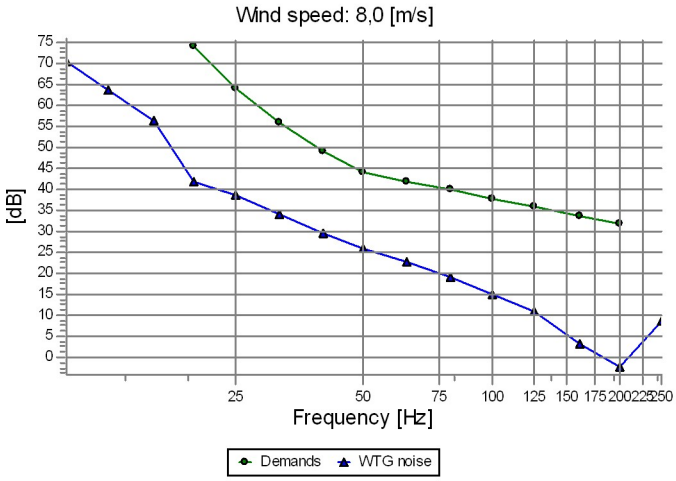
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

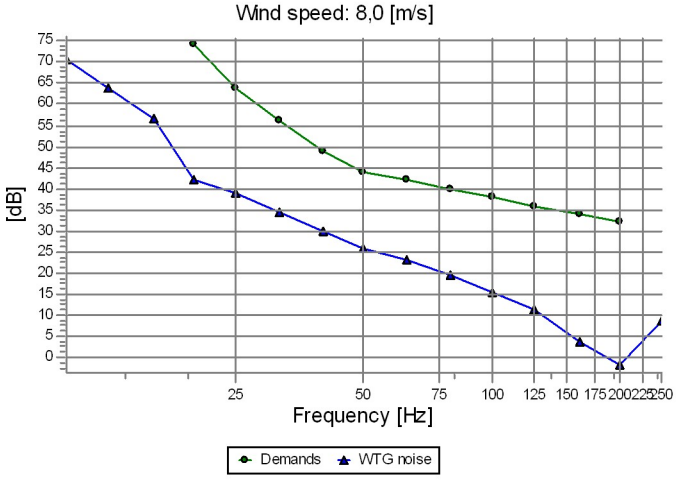
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**A Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (173)**



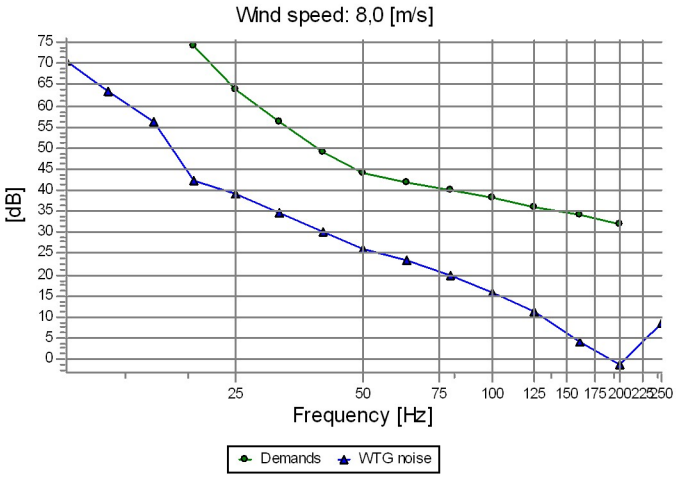

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,1 | Yes |
| 25,0 | 64,0 | 38,6 | Yes |
| 31,5 | 56,0 | 34,3 | Yes |
| 40,0 | 49,0 | 29,9 | Yes |
| 50,0 | 44,0 | 25,8 | Yes |
| 63,0 | 42,0 | 23,0 | Yes |
| 80,0 | 40,0 | 19,4 | Yes |
| 100,0 | 38,0 | 15,2 | Yes |
| 125,0 | 36,0 | 10,9 | Yes |
| 160,0 | 34,0 | 3,2 | Yes |
| 200,0 | 32,0 | -1,9 | Yes |
| 250,0 | - | 8,6 | **No** |

**B Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (172)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,3 | Yes |
| 25,0 | 64,0 | 38,9 | Yes |
| 31,5 | 56,0 | 34,6 | Yes |
| 40,0 | 49,0 | 30,1 | Yes |
| 50,0 | 44,0 | 26,1 | Yes |
| 63,0 | 42,0 | 23,2 | Yes |
| 80,0 | 40,0 | 19,7 | Yes |
| 100,0 | 38,0 | 15,5 | Yes |
| 125,0 | 36,0 | 11,2 | Yes |
| 160,0 | 34,0 | 3,6 | Yes |
| 200,0 | 32,0 | -1,4 | Yes |
| 250,0 | - | 8,6 | **No** |

**C Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (171)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,5 | Yes |
| 25,0 | 64,0 | 39,0 | Yes |
| 31,5 | 56,0 | 34,8 | Yes |
| 40,0 | 49,0 | 30,3 | Yes |
| 50,0 | 44,0 | 26,3 | Yes |
| 63,0 | 42,0 | 23,4 | Yes |
| 80,0 | 40,0 | 19,8 | Yes |
| 100,0 | 38,0 | 15,7 | Yes |
| 125,0 | 36,0 | 11,4 | Yes |
| 160,0 | 34,0 | 3,8 | Yes |
| 200,0 | 32,0 | -1,2 | Yes |
| 250,0 | - | 8,6 | **No** |

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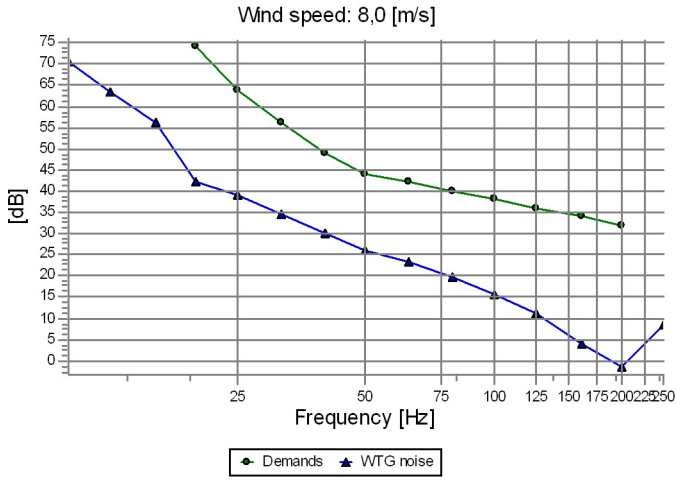
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

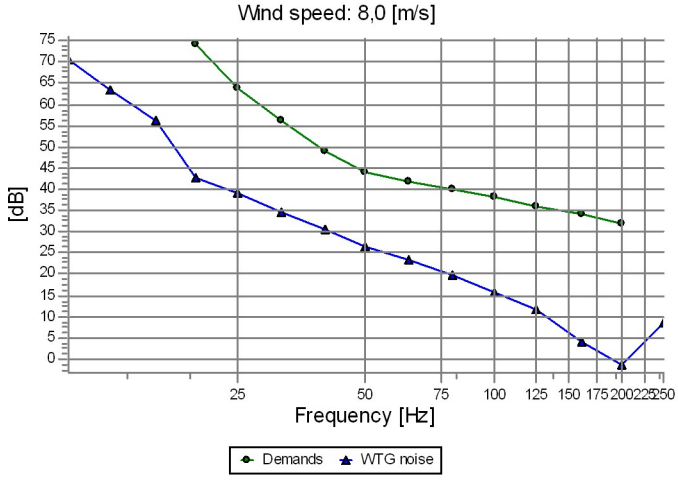
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**D Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (170)**



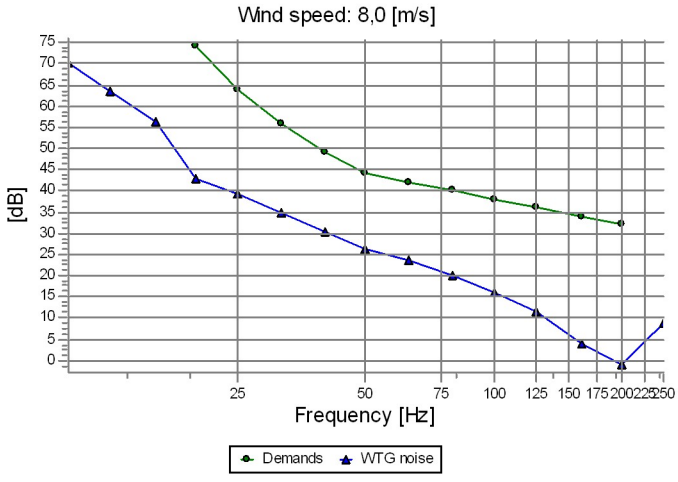

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,4 | Yes |
| 25,0 | 64,0 | 39,0 | Yes |
| 31,5 | 56,0 | 34,7 | Yes |
| 40,0 | 49,0 | 30,2 | Yes |
| 50,0 | 44,0 | 26,2 | Yes |
| 63,0 | 42,0 | 23,3 | Yes |
| 80,0 | 40,0 | 19,8 | Yes |
| 100,0 | 38,0 | 15,6 | Yes |
| 125,0 | 36,0 | 11,3 | Yes |
| 160,0 | 34,0 | 3,7 | Yes |
| 200,0 | 32,0 | -1,3 | Yes |
| 250,0 | - | 8,6 | **No** |

**E Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (169)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,5 | Yes |
| 25,0 | 64,0 | 39,1 | Yes |
| 31,5 | 56,0 | 34,8 | Yes |
| 40,0 | 49,0 | 30,3 | Yes |
| 50,0 | 44,0 | 26,3 | Yes |
| 63,0 | 42,0 | 23,4 | Yes |
| 80,0 | 40,0 | 19,9 | Yes |
| 100,0 | 38,0 | 15,7 | Yes |
| 125,0 | 36,0 | 11,5 | Yes |
| 160,0 | 34,0 | 3,8 | Yes |
| 200,0 | 32,0 | -1,2 | Yes |
| 250,0 | - | 8,6 | **No** |

**F Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (168)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,7 | Yes |
| 25,0 | 64,0 | 39,2 | Yes |
| 31,5 | 56,0 | 34,9 | Yes |
| 40,0 | 49,0 | 30,5 | Yes |
| 50,0 | 44,0 | 26,4 | Yes |
| 63,0 | 42,0 | 23,6 | Yes |
| 80,0 | 40,0 | 20,0 | Yes |
| 100,0 | 38,0 | 15,9 | Yes |
| 125,0 | 36,0 | 11,7 | Yes |
| 160,0 | 34,0 | 4,1 | Yes |
| 200,0 | 32,0 | -0,8 | Yes |
| 250,0 | - | 8,6 | **No** |

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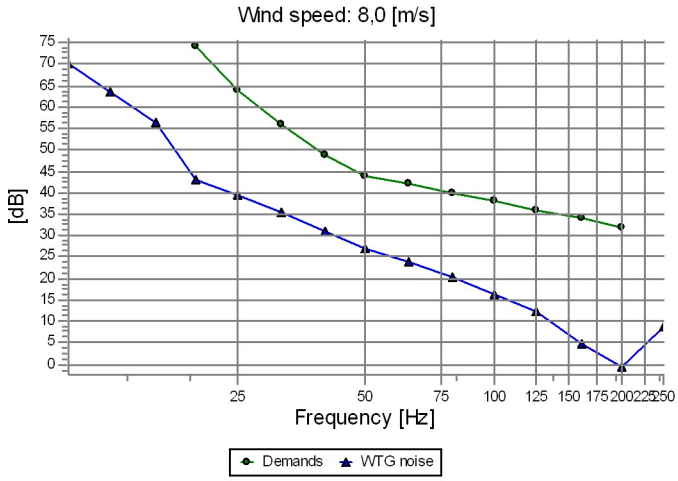
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

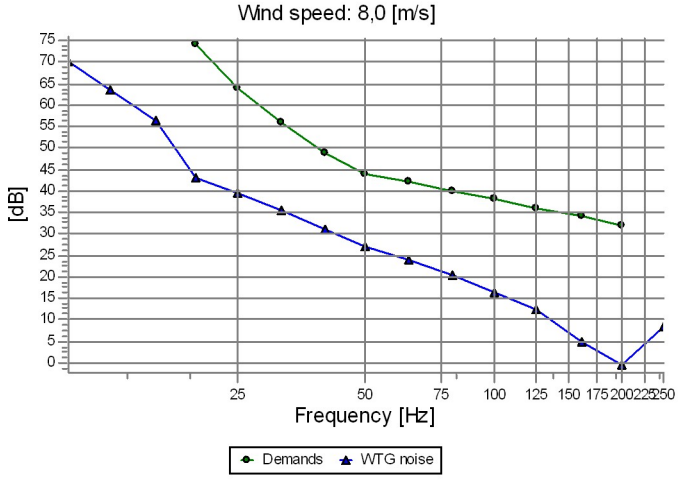
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**G Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (167)**



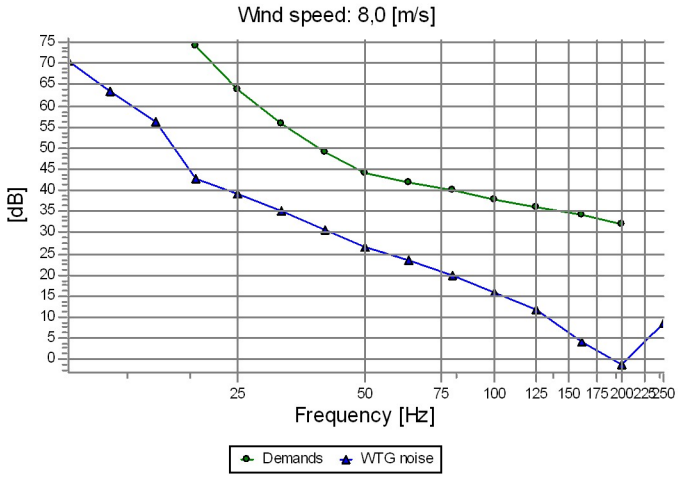

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 43,0 | Yes |
| 25,0 | 64,0 | 39,5 | Yes |
| 31,5 | 56,0 | 35,2 | Yes |
| 40,0 | 49,0 | 30,8 | Yes |
| 50,0 | 44,0 | 26,8 | Yes |
| 63,0 | 42,0 | 23,9 | Yes |
| 80,0 | 40,0 | 20,4 | Yes |
| 100,0 | 38,0 | 16,3 | Yes |
| 125,0 | 36,0 | 12,1 | Yes |
| 160,0 | 34,0 | 4,5 | Yes |
| 200,0 | 32,0 | -0,4 | Yes |
| 250,0 | - | 8,6 | **No** |

**H Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (166)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 43,1 | Yes |
| 25,0 | 64,0 | 39,6 | Yes |
| 31,5 | 56,0 | 35,4 | Yes |
| 40,0 | 49,0 | 30,9 | Yes |
| 50,0 | 44,0 | 26,9 | Yes |
| 63,0 | 42,0 | 24,0 | Yes |
| 80,0 | 40,0 | 20,5 | Yes |
| 100,0 | 38,0 | 16,5 | Yes |
| 125,0 | 36,0 | 12,3 | Yes |
| 160,0 | 34,0 | 4,7 | Yes |
| 200,0 | 32,0 | -0,2 | Yes |
| 250,0 | - | 8,6 | **No** |

**I Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (165)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,6 | Yes |
| 25,0 | 64,0 | 39,2 | Yes |
| 31,5 | 56,0 | 34,9 | Yes |
| 40,0 | 49,0 | 30,5 | Yes |
| 50,0 | 44,0 | 26,5 | Yes |
| 63,0 | 42,0 | 23,5 | Yes |
| 80,0 | 40,0 | 20,0 | Yes |
| 100,0 | 38,0 | 15,9 | Yes |
| 125,0 | 36,0 | 11,7 | Yes |
| 160,0 | 34,0 | 3,9 | Yes |
| 200,0 | 32,0 | -1,1 | Yes |
| 250,0 | - | 8,6 | **No** |

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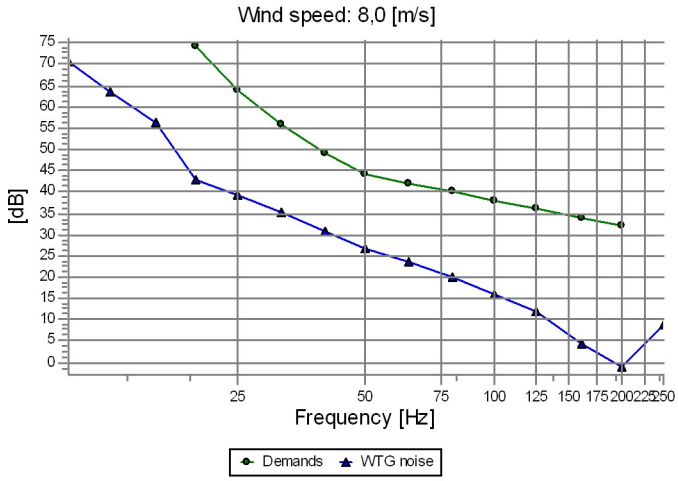
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

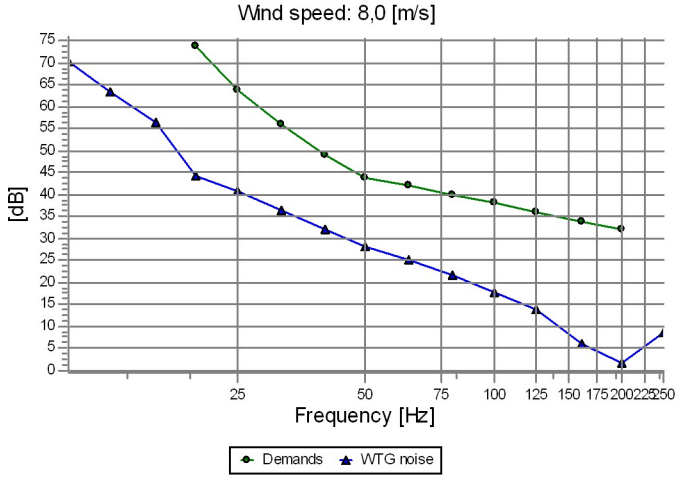
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**J Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (164)**



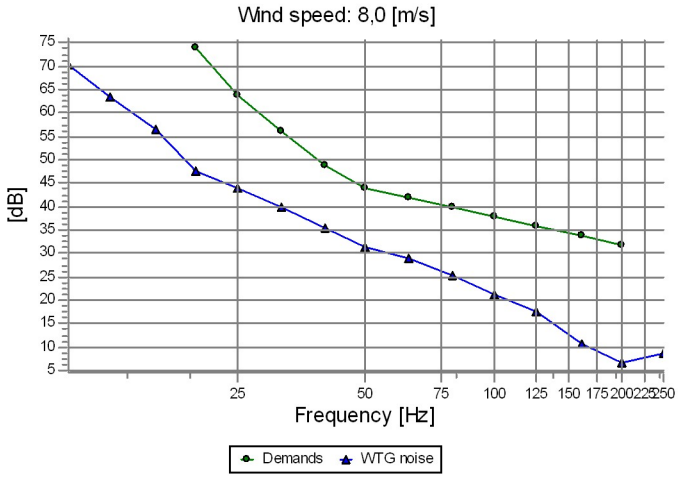

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 42,8 | Yes |
| 25,0 | 64,0 | 39,3 | Yes |
| 31,5 | 56,0 | 35,1 | Yes |
| 40,0 | 49,0 | 30,7 | Yes |
| 50,0 | 44,0 | 26,6 | Yes |
| 63,0 | 42,0 | 23,7 | Yes |
| 80,0 | 40,0 | 20,2 | Yes |
| 100,0 | 38,0 | 16,1 | Yes |
| 125,0 | 36,0 | 11,9 | Yes |
| 160,0 | 34,0 | 4,1 | Yes |
| 200,0 | 32,0 | -0,9 | Yes |
| 250,0 | - | 8,6 | **No** |

**K Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (163)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 44,2 | Yes |
| 25,0 | 64,0 | 40,8 | Yes |
| 31,5 | 56,0 | 36,5 | Yes |
| 40,0 | 49,0 | 32,1 | Yes |
| 50,0 | 44,0 | 28,1 | Yes |
| 63,0 | 42,0 | 25,2 | Yes |
| 80,0 | 40,0 | 21,8 | Yes |
| 100,0 | 38,0 | 17,8 | Yes |
| 125,0 | 36,0 | 13,7 | Yes |
| 160,0 | 34,0 | 6,2 | Yes |
| 200,0 | 32,0 | 1,5 | Yes |
| 250,0 | - | 8,6 | **No** |

**L Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (162)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 47,5 | Yes |
| 25,0 | 64,0 | 44,1 | Yes |
| 31,5 | 56,0 | 39,8 | Yes |
| 40,0 | 49,0 | 35,3 | Yes |
| 50,0 | 44,0 | 31,3 | Yes |
| 63,0 | 42,0 | 28,8 | Yes |
| 80,0 | 40,0 | 25,4 | Yes |
| 100,0 | 38,0 | 21,4 | Yes |
| 125,0 | 36,0 | 17,5 | Yes |
| 160,0 | 34,0 | 10,8 | Yes |
| 200,0 | 32,0 | 6,6 | Yes |
| 250,0 | - | 8,6 | **No** |

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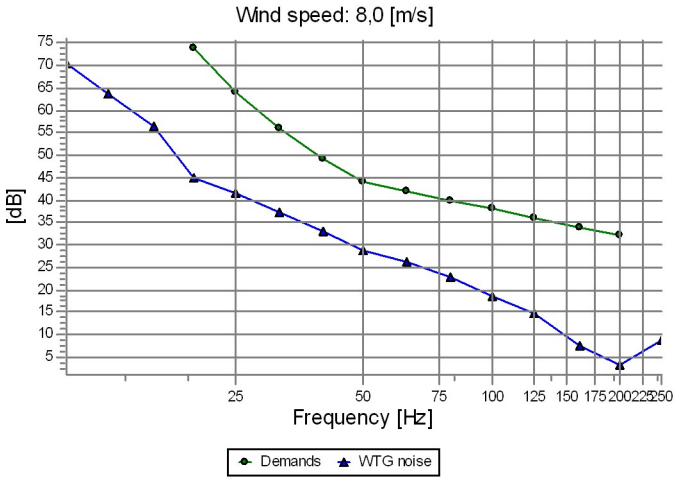
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

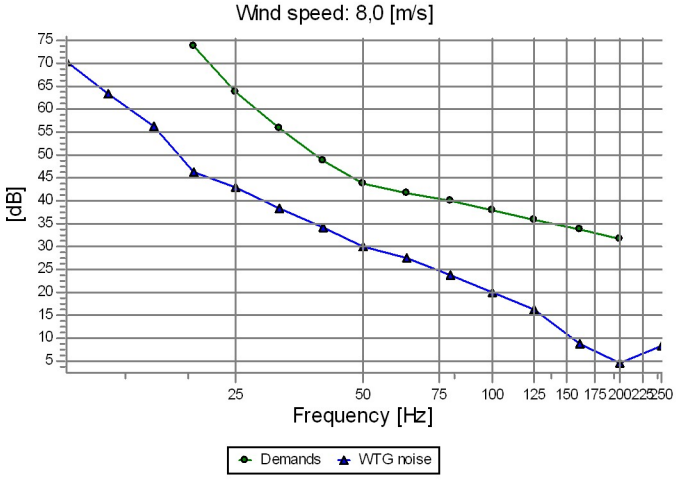
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**M Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (161)**



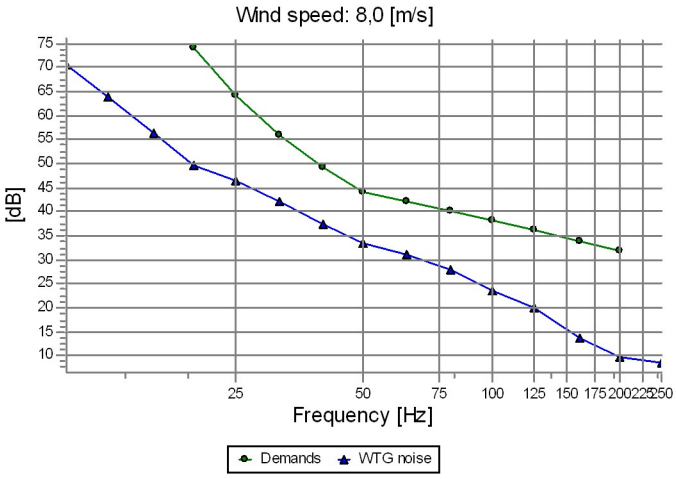

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 45,1 | Yes |
| 25,0 | 64,0 | 41,7 | Yes |
| 31,5 | 56,0 | 37,4 | Yes |
| 40,0 | 49,0 | 32,9 | Yes |
| 50,0 | 44,0 | 28,9 | Yes |
| 63,0 | 42,0 | 26,2 | Yes |
| 80,0 | 40,0 | 22,8 | Yes |
| 100,0 | 38,0 | 18,7 | Yes |
| 125,0 | 36,0 | 14,7 | Yes |
| 160,0 | 34,0 | 7,6 | Yes |
| 200,0 | 32,0 | 3,1 | Yes |
| 250,0 | - | 8,6 | **No** |

**N Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (160)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 46,3 | Yes |
| 25,0 | 64,0 | 42,9 | Yes |
| 31,5 | 56,0 | 38,6 | Yes |
| 40,0 | 49,0 | 34,3 | Yes |
| 50,0 | 44,0 | 30,3 | Yes |
| 63,0 | 42,0 | 27,5 | Yes |
| 80,0 | 40,0 | 24,1 | Yes |
| 100,0 | 38,0 | 20,2 | Yes |
| 125,0 | 36,0 | 16,3 | Yes |
| 160,0 | 34,0 | 9,0 | Yes |
| 200,0 | 32,0 | 4,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**O Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (159)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 49,7 | Yes |
| 25,0 | 64,0 | 46,4 | Yes |
| 31,5 | 56,0 | 42,1 | Yes |
| 40,0 | 49,0 | 37,5 | Yes |
| 50,0 | 44,0 | 33,6 | Yes |
| 63,0 | 42,0 | 31,2 | Yes |
| 80,0 | 40,0 | 27,8 | Yes |
| 100,0 | 38,0 | 23,7 | Yes |
| 125,0 | 36,0 | 20,0 | Yes |
| 160,0 | 34,0 | 13,6 | Yes |
| 200,0 | 32,0 | 9,7 | Yes |
| 250,0 | - | 8,6 | **No** |

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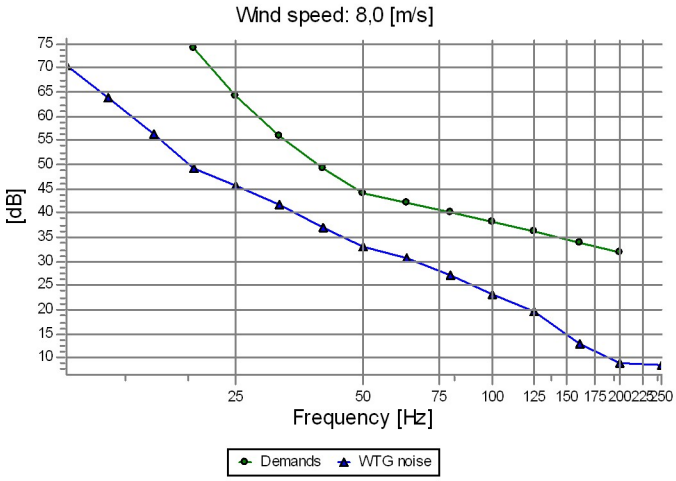
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

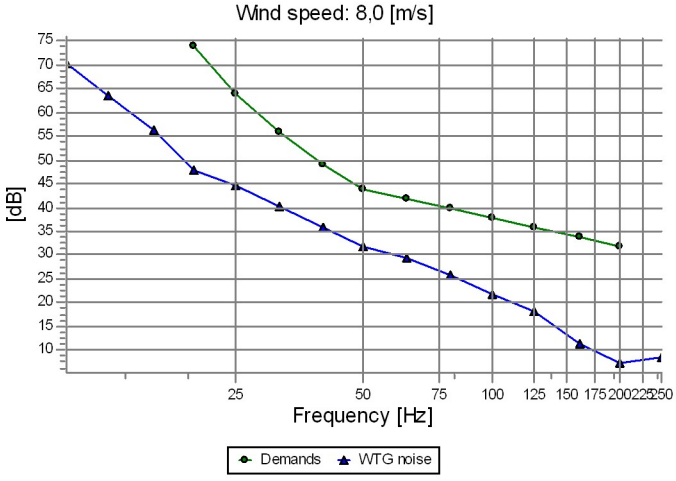
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**P Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (158)**



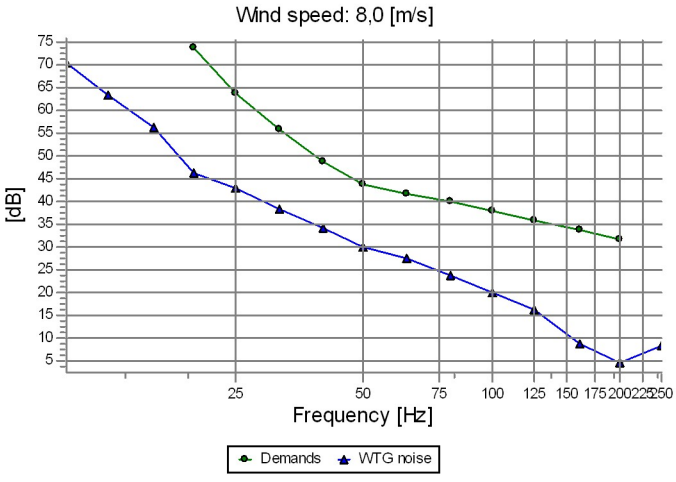

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 49,2 | Yes |
| 25,0 | 64,0 | 45,8 | Yes |
| 31,5 | 56,0 | 41,5 | Yes |
| 40,0 | 49,0 | 37,1 | Yes |
| 50,0 | 44,0 | 33,1 | Yes |
| 63,0 | 42,0 | 30,5 | Yes |
| 80,0 | 40,0 | 27,2 | Yes |
| 100,0 | 38,0 | 23,3 | Yes |
| 125,0 | 36,0 | 19,5 | Yes |
| 160,0 | 34,0 | 12,8 | Yes |
| 200,0 | 32,0 | 8,8 | Yes |
| 250,0 | - | 8,6 | **No** |

**Q Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (157)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 48,0 | Yes |
| 25,0 | 64,0 | 44,6 | Yes |
| 31,5 | 56,0 | 40,3 | Yes |
| 40,0 | 49,0 | 35,8 | Yes |
| 50,0 | 44,0 | 31,9 | Yes |
| 63,0 | 42,0 | 29,3 | Yes |
| 80,0 | 40,0 | 25,9 | Yes |
| 100,0 | 38,0 | 21,9 | Yes |
| 125,0 | 36,0 | 18,1 | Yes |
| 160,0 | 34,0 | 11,4 | Yes |
| 200,0 | 32,0 | 7,3 | Yes |
| 250,0 | - | 8,6 | **No** |

**R Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (156)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 46,3 | Yes |
| 25,0 | 64,0 | 42,9 | Yes |
| 31,5 | 56,0 | 38,7 | Yes |
| 40,0 | 49,0 | 34,3 | Yes |
| 50,0 | 44,0 | 30,3 | Yes |
| 63,0 | 42,0 | 27,5 | Yes |
| 80,0 | 40,0 | 24,1 | Yes |
| 100,0 | 38,0 | 20,3 | Yes |
| 125,0 | 36,0 | 16,4 | Yes |
| 160,0 | 34,0 | 9,0 | Yes |
| 200,0 | 32,0 | 4,6 | Yes |
| 250,0 | - | 8,6 | **No** |

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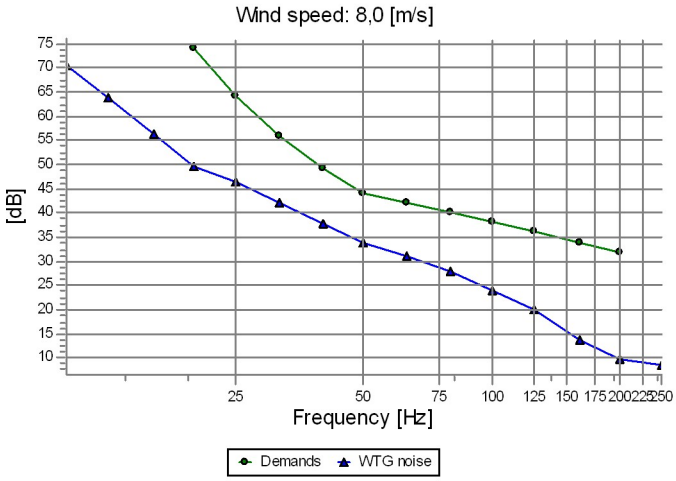
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

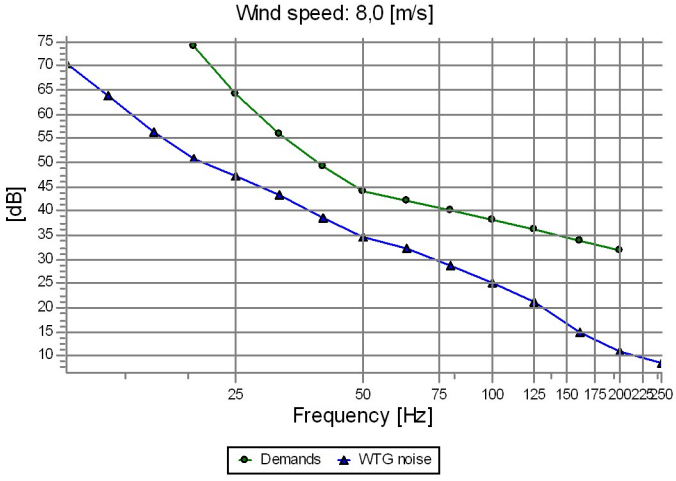
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**S Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (155)**



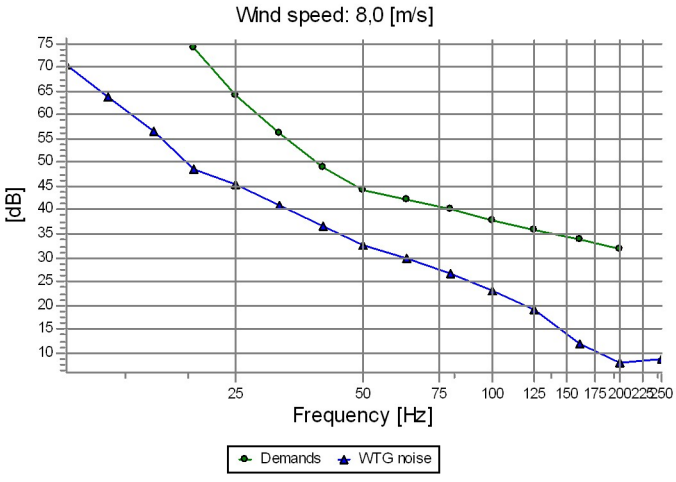

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 49,8 | Yes |
| 25,0 | 64,0 | 46,4 | Yes |
| 31,5 | 56,0 | 42,1 | Yes |
| 40,0 | 49,0 | 37,6 | Yes |
| 50,0 | 44,0 | 33,7 | Yes |
| 63,0 | 42,0 | 31,2 | Yes |
| 80,0 | 40,0 | 27,8 | Yes |
| 100,0 | 38,0 | 23,9 | Yes |
| 125,0 | 36,0 | 20,1 | Yes |
| 160,0 | 34,0 | 13,6 | Yes |
| 200,0 | 32,0 | 9,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**T Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (154)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 50,7 | Yes |
| 25,0 | 64,0 | 47,4 | Yes |
| 31,5 | 56,0 | 43,1 | Yes |
| 40,0 | 49,0 | 38,6 | Yes |
| 50,0 | 44,0 | 34,7 | Yes |
| 63,0 | 42,0 | 32,2 | Yes |
| 80,0 | 40,0 | 28,8 | Yes |
| 100,0 | 38,0 | 25,0 | Yes |
| 125,0 | 36,0 | 21,3 | Yes |
| 160,0 | 34,0 | 14,8 | Yes |
| 200,0 | 32,0 | 11,0 | Yes |
| 250,0 | - | 8,6 | **No** |

**U Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (153)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 48,7 | Yes |
| 25,0 | 64,0 | 45,3 | Yes |
| 31,5 | 56,0 | 41,1 | Yes |
| 40,0 | 49,0 | 36,8 | Yes |
| 50,0 | 44,0 | 32,8 | Yes |
| 63,0 | 42,0 | 30,0 | Yes |
| 80,0 | 40,0 | 26,6 | Yes |
| 100,0 | 38,0 | 23,0 | Yes |
| 125,0 | 36,0 | 19,2 | Yes |
| 160,0 | 34,0 | 12,1 | Yes |
| 200,0 | 32,0 | 8,0 | Yes |
| 250,0 | - | 8,6 | **No** |

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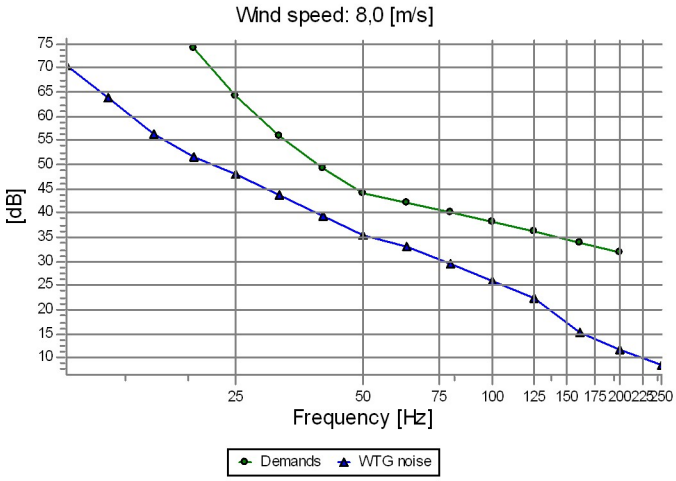
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

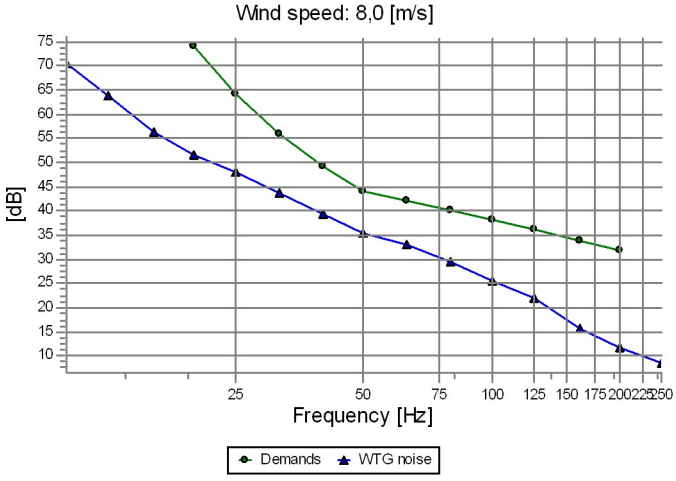
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**V Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (152)**



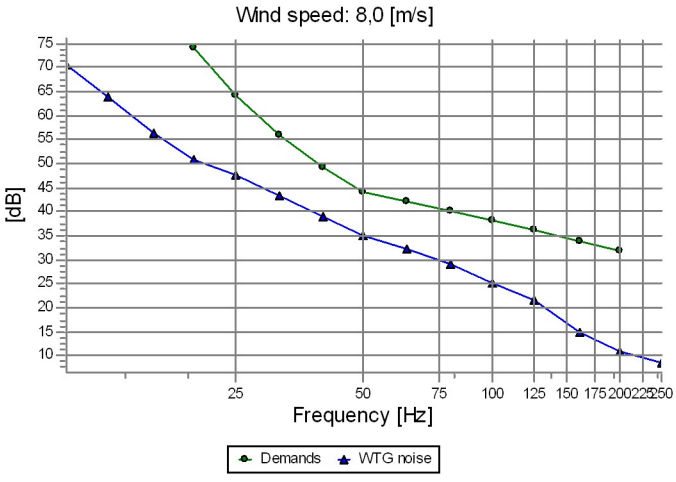

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 51,4 | Yes |
| 25,0 | 64,0 | 48,0 | Yes |
| 31,5 | 56,0 | 43,8 | Yes |
| 40,0 | 49,0 | 39,5 | Yes |
| 50,0 | 44,0 | 35,6 | Yes |
| 63,0 | 42,0 | 32,8 | Yes |
| 80,0 | 40,0 | 29,5 | Yes |
| 100,0 | 38,0 | 25,9 | Yes |
| 125,0 | 36,0 | 22,3 | Yes |
| 160,0 | 34,0 | 15,4 | Yes |
| 200,0 | 32,0 | 11,6 | Yes |
| 250,0 | - | 8,6 | **No** |

**W Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (151)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 51,4 | Yes |
| 25,0 | 64,0 | 48,0 | Yes |
| 31,5 | 56,0 | 43,8 | Yes |
| 40,0 | 49,0 | 39,3 | Yes |
| 50,0 | 44,0 | 35,4 | Yes |
| 63,0 | 42,0 | 32,9 | Yes |
| 80,0 | 40,0 | 29,5 | Yes |
| 100,0 | 38,0 | 25,7 | Yes |
| 125,0 | 36,0 | 22,0 | Yes |
| 160,0 | 34,0 | 15,5 | Yes |
| 200,0 | 32,0 | 11,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**X Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (150)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 50,9 | Yes |
| 25,0 | 64,0 | 47,5 | Yes |
| 31,5 | 56,0 | 43,3 | Yes |
| 40,0 | 49,0 | 38,9 | Yes |
| 50,0 | 44,0 | 34,9 | Yes |
| 63,0 | 42,0 | 32,3 | Yes |
| 80,0 | 40,0 | 29,0 | Yes |
| 100,0 | 38,0 | 25,2 | Yes |
| 125,0 | 36,0 | 21,6 | Yes |
| 160,0 | 34,0 | 14,9 | Yes |
| 200,0 | 32,0 | 11,0 | Yes |
| 250,0 | - | 8,6 | **No** |

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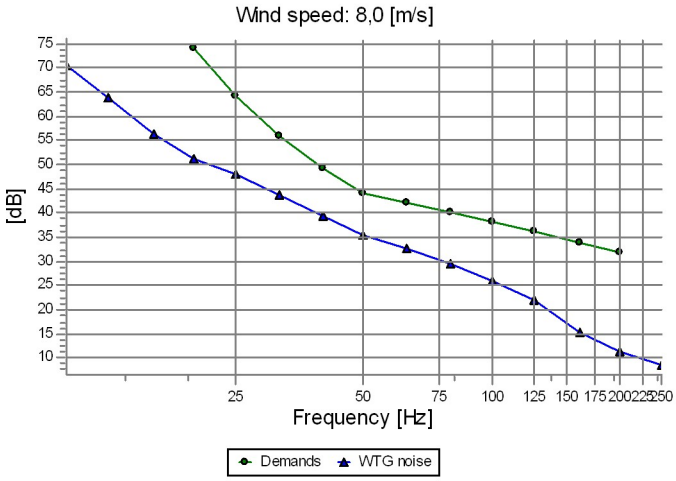
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

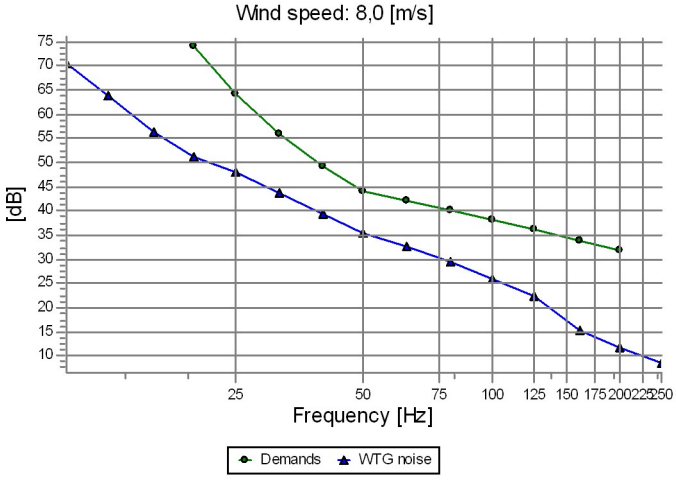
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**Y Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (149)**



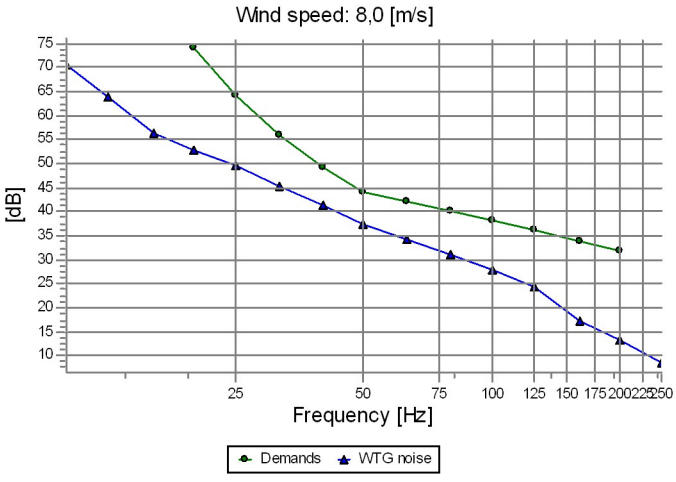

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 51,3 | Yes |
| 25,0 | 64,0 | 47,9 | Yes |
| 31,5 | 56,0 | 43,7 | Yes |
| 40,0 | 49,0 | 39,3 | Yes |
| 50,0 | 44,0 | 35,4 | Yes |
| 63,0 | 42,0 | 32,7 | Yes |
| 80,0 | 40,0 | 29,4 | Yes |
| 100,0 | 38,0 | 25,7 | Yes |
| 125,0 | 36,0 | 22,1 | Yes |
| 160,0 | 34,0 | 15,3 | Yes |
| 200,0 | 32,0 | 11,5 | Yes |
| 250,0 | - | 8,6 | **No** |

**Z Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (148)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 51,3 | Yes |
| 25,0 | 64,0 | 48,0 | Yes |
| 31,5 | 56,0 | 43,7 | Yes |
| 40,0 | 49,0 | 39,4 | Yes |
| 50,0 | 44,0 | 35,5 | Yes |
| 63,0 | 42,0 | 32,8 | Yes |
| 80,0 | 40,0 | 29,5 | Yes |
| 100,0 | 38,0 | 25,8 | Yes |
| 125,0 | 36,0 | 22,2 | Yes |
| 160,0 | 34,0 | 15,4 | Yes |
| 200,0 | 32,0 | 11,5 | Yes |
| 250,0 | - | 8,6 | **No** |

**AA Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (147)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 52,9 | Yes |
| 25,0 | 64,0 | 49,6 | Yes |
| 31,5 | 56,0 | 45,4 | Yes |
| 40,0 | 49,0 | 41,2 | Yes |
| 50,0 | 44,0 | 37,3 | Yes |
| 63,0 | 42,0 | 34,4 | Yes |
| 80,0 | 40,0 | 31,1 | Yes |
| 100,0 | 38,0 | 27,8 | Yes |
| 125,0 | 36,0 | 24,3 | Yes |
| 160,0 | 34,0 | 17,2 | Yes |
| 200,0 | 32,0 | 13,5 | Yes |
| 250,0 | - | 8,6 | **No** |

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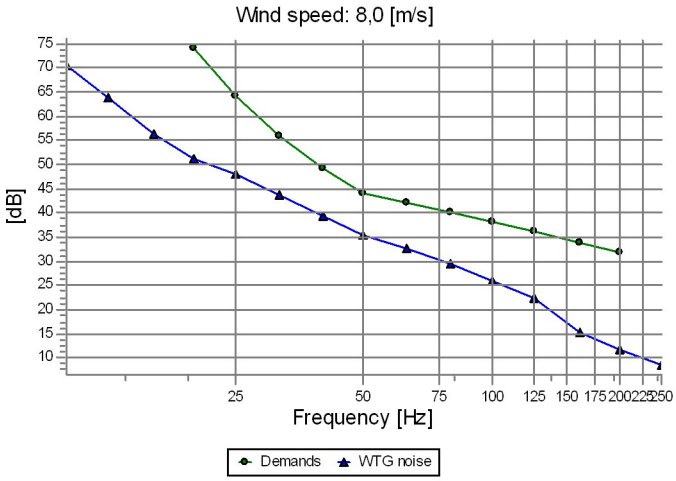
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

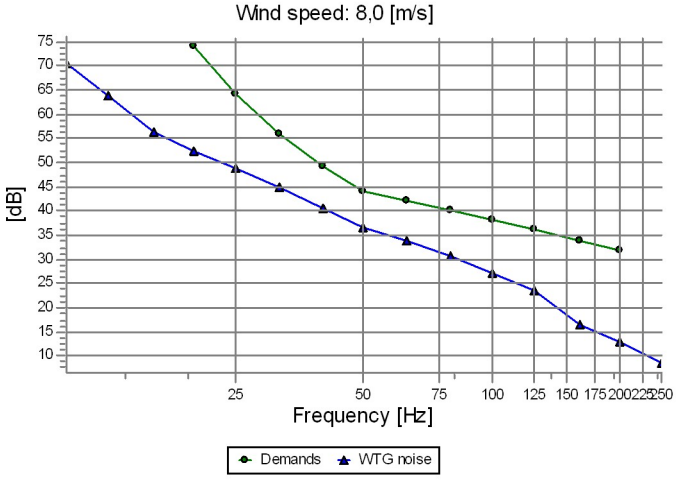
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**AB Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (146)**



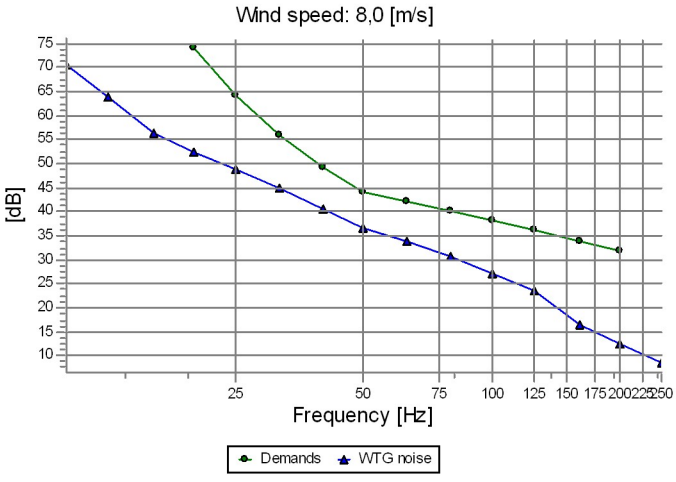

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 51,3 | Yes |
| 25,0 | 64,0 | 48,0 | Yes |
| 31,5 | 56,0 | 43,8 | Yes |
| 40,0 | 49,0 | 39,5 | Yes |
| 50,0 | 44,0 | 35,5 | Yes |
| 63,0 | 42,0 | 32,8 | Yes |
| 80,0 | 40,0 | 29,5 | Yes |
| 100,0 | 38,0 | 25,9 | Yes |
| 125,0 | 36,0 | 22,3 | Yes |
| 160,0 | 34,0 | 15,4 | Yes |
| 200,0 | 32,0 | 11,6 | Yes |
| 250,0 | - | 8,6 | **No** |

**AC Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (145)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 52,3 | Yes |
| 25,0 | 64,0 | 48,9 | Yes |
| 31,5 | 56,0 | 44,7 | Yes |
| 40,0 | 49,0 | 40,5 | Yes |
| 50,0 | 44,0 | 36,5 | Yes |
| 63,0 | 42,0 | 33,7 | Yes |
| 80,0 | 40,0 | 30,5 | Yes |
| 100,0 | 38,0 | 27,0 | Yes |
| 125,0 | 36,0 | 23,4 | Yes |
| 160,0 | 34,0 | 16,5 | Yes |
| 200,0 | 32,0 | 12,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**AD Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (144)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 52,3 | Yes |
| 25,0 | 64,0 | 48,9 | Yes |
| 31,5 | 56,0 | 44,8 | Yes |
| 40,0 | 49,0 | 40,5 | Yes |
| 50,0 | 44,0 | 36,6 | Yes |
| 63,0 | 42,0 | 33,7 | Yes |
| 80,0 | 40,0 | 30,5 | Yes |
| 100,0 | 38,0 | 27,0 | Yes |
| 125,0 | 36,0 | 23,5 | Yes |
| 160,0 | 34,0 | 16,5 | Yes |
| 200,0 | 32,0 | 12,7 | Yes |
| 250,0 | - | 8,6 | **No** |

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Calculated:
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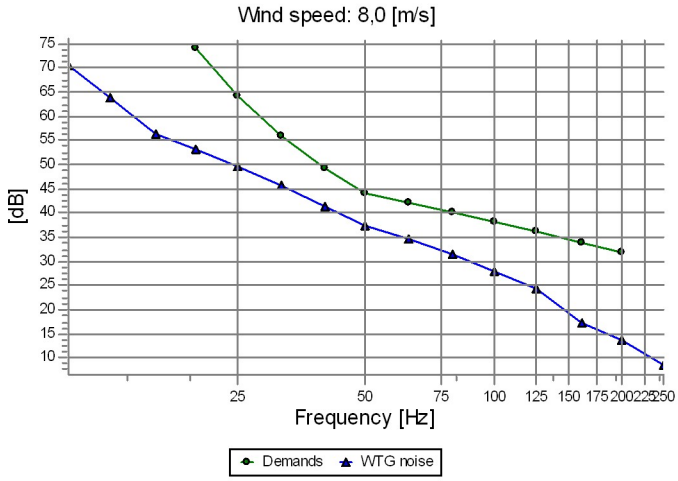
# DECIBEL - Detailed results, graphic

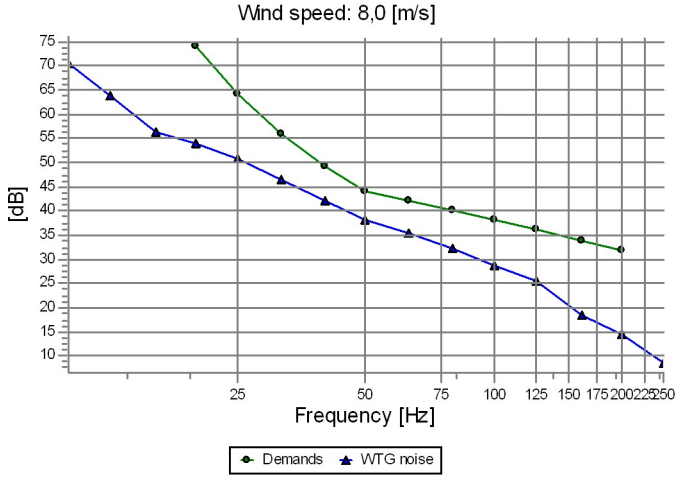
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**AE Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (143)**



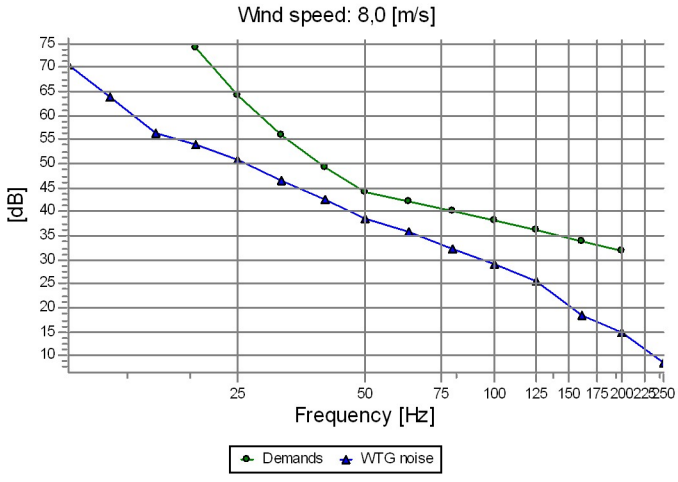

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 53,0 | Yes |
| 25,0 | 64,0 | 49,7 | Yes |
| 31,5 | 56,0 | 45,5 | Yes |
| 40,0 | 49,0 | 41,3 | Yes |
| 50,0 | 44,0 | 37,4 | Yes |
| 63,0 | 42,0 | 34,5 | Yes |
| 80,0 | 40,0 | 31,3 | Yes |
| 100,0 | 38,0 | 27,9 | Yes |
| 125,0 | 36,0 | 24,4 | Yes |
| 160,0 | 34,0 | 17,3 | Yes |
| 200,0 | 32,0 | 13,6 | Yes |
| 250,0 | - | 8,6 | **No** |

**AF Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (141)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 53,9 | Yes |
| 25,0 | 64,0 | 50,6 | Yes |
| 31,5 | 56,0 | 46,4 | Yes |
| 40,0 | 49,0 | 42,2 | Yes |
| 50,0 | 44,0 | 38,3 | Yes |
| 63,0 | 42,0 | 35,4 | Yes |
| 80,0 | 40,0 | 32,2 | Yes |
| 100,0 | 38,0 | 28,8 | Yes |
| 125,0 | 36,0 | 25,4 | Yes |
| 160,0 | 34,0 | 18,3 | Yes |
| 200,0 | 32,0 | 14,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**AG Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (142)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 54,1 | Yes |
| 25,0 | 64,0 | 50,8 | Yes |
| 31,5 | 56,0 | 46,6 | Yes |
| 40,0 | 49,0 | 42,4 | Yes |
| 50,0 | 44,0 | 38,5 | Yes |
| 63,0 | 42,0 | 35,6 | Yes |
| 80,0 | 40,0 | 32,4 | Yes |
| 100,0 | 38,0 | 29,0 | Yes |
| 125,0 | 36,0 | 25,6 | Yes |
| 160,0 | 34,0 | 18,5 | Yes |
| 200,0 | 32,0 | 14,9 | Yes |
| 250,0 | - | 8,6 | **No** |

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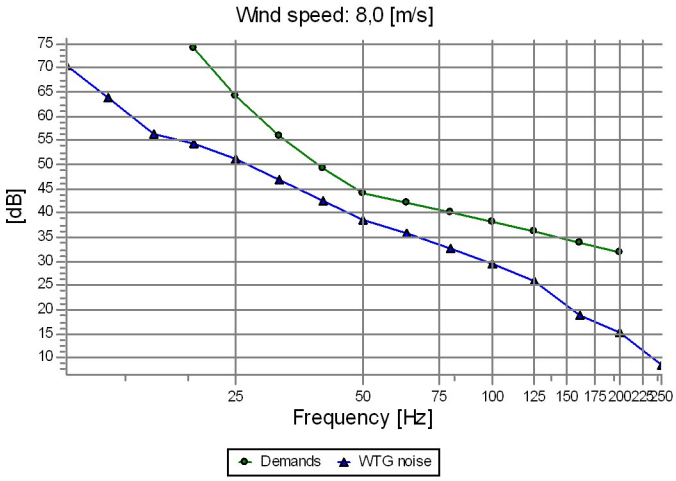
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

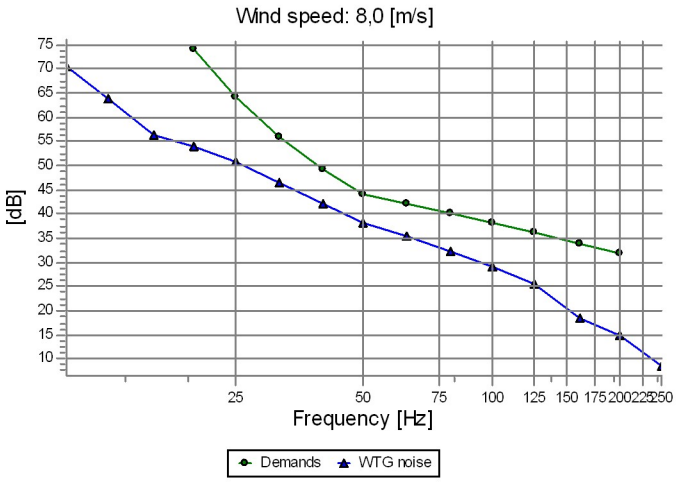
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**AH Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (140)**



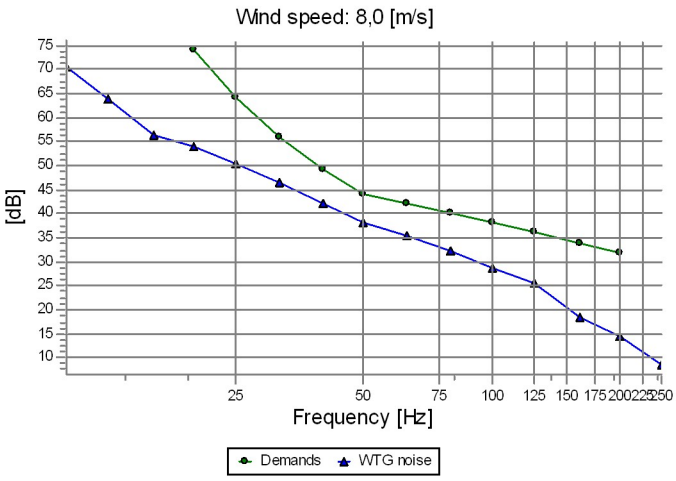

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 54,3 | Yes |
| 25,0 | 64,0 | 51,0 | Yes |
| 31,5 | 56,0 | 46,8 | Yes |
| 40,0 | 49,0 | 42,7 | Yes |
| 50,0 | 44,0 | 38,7 | Yes |
| 63,0 | 42,0 | 35,8 | Yes |
| 80,0 | 40,0 | 32,6 | Yes |
| 100,0 | 38,0 | 29,3 | Yes |
| 125,0 | 36,0 | 25,8 | Yes |
| 160,0 | 34,0 | 18,8 | Yes |
| 200,0 | 32,0 | 15,1 | Yes |
| 250,0 | - | 8,6 | **No** |

**AI Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (139)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 53,9 | Yes |
| 25,0 | 64,0 | 50,6 | Yes |
| 31,5 | 56,0 | 46,4 | Yes |
| 40,0 | 49,0 | 42,3 | Yes |
| 50,0 | 44,0 | 38,3 | Yes |
| 63,0 | 42,0 | 35,4 | Yes |
| 80,0 | 40,0 | 32,2 | Yes |
| 100,0 | 38,0 | 28,9 | Yes |
| 125,0 | 36,0 | 25,5 | Yes |
| 160,0 | 34,0 | 18,4 | Yes |
| 200,0 | 32,0 | 14,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**AJ Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (138)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 53,8 | Yes |
| 25,0 | 64,0 | 50,5 | Yes |
| 31,5 | 56,0 | 46,3 | Yes |
| 40,0 | 49,0 | 42,2 | Yes |
| 50,0 | 44,0 | 38,2 | Yes |
| 63,0 | 42,0 | 35,3 | Yes |
| 80,0 | 40,0 | 32,1 | Yes |
| 100,0 | 38,0 | 28,8 | Yes |
| 125,0 | 36,0 | 25,4 | Yes |
| 160,0 | 34,0 | 18,3 | Yes |
| 200,0 | 32,0 | 14,7 | Yes |
| 250,0 | - | 8,6 | **No** |

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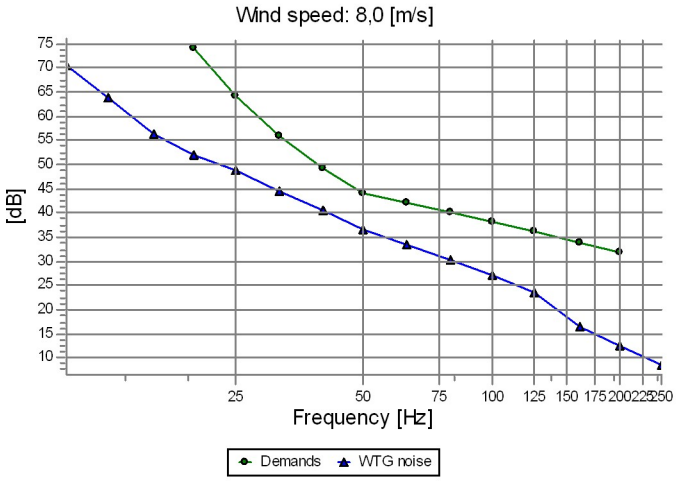
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

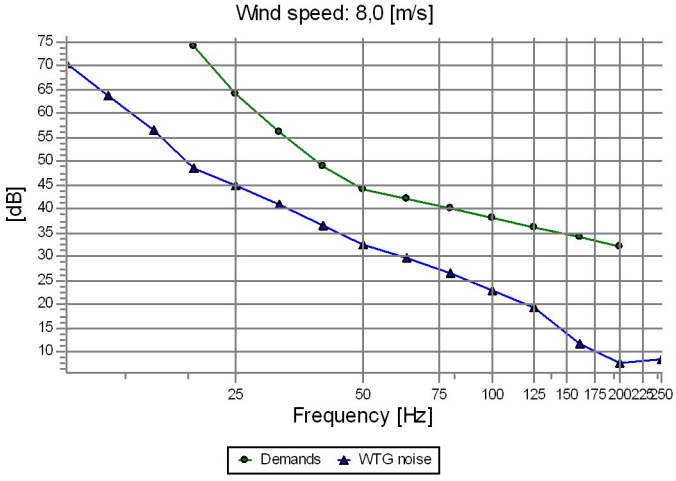
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**AK Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (137)**



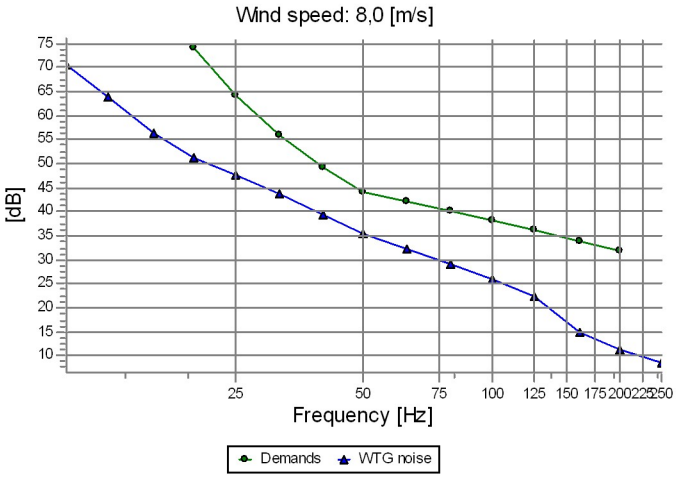

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 52,1 | Yes |
| 25,0 | 64,0 | 48,7 | Yes |
| 31,5 | 56,0 | 44,6 | Yes |
| 40,0 | 49,0 | 40,4 | Yes |
| 50,0 | 44,0 | 36,5 | Yes |
| 63,0 | 42,0 | 33,5 | Yes |
| 80,0 | 40,0 | 30,3 | Yes |
| 100,0 | 38,0 | 27,0 | Yes |
| 125,0 | 36,0 | 23,5 | Yes |
| 160,0 | 34,0 | 16,3 | Yes |
| 200,0 | 32,0 | 12,6 | Yes |
| 250,0 | - | 8,6 | **No** |

**AL Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (136)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 48,2 | Yes |
| 25,0 | 64,0 | 44,9 | Yes |
| 31,5 | 56,0 | 40,7 | Yes |
| 40,0 | 49,0 | 36,5 | Yes |
| 50,0 | 44,0 | 32,5 | Yes |
| 63,0 | 42,0 | 29,5 | Yes |
| 80,0 | 40,0 | 26,2 | Yes |
| 100,0 | 38,0 | 22,8 | Yes |
| 125,0 | 36,0 | 19,1 | Yes |
| 160,0 | 34,0 | 11,7 | Yes |
| 200,0 | 32,0 | 7,7 | Yes |
| 250,0 | - | 8,6 | **No** |

**AM Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (135)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 51,0 | Yes |
| 25,0 | 64,0 | 47,6 | Yes |
| 31,5 | 56,0 | 43,5 | Yes |
| 40,0 | 49,0 | 39,3 | Yes |
| 50,0 | 44,0 | 35,4 | Yes |
| 63,0 | 42,0 | 32,4 | Yes |
| 80,0 | 40,0 | 29,2 | Yes |
| 100,0 | 38,0 | 25,8 | Yes |
| 125,0 | 36,0 | 22,3 | Yes |
| 160,0 | 34,0 | 15,1 | Yes |
| 200,0 | 32,0 | 11,3 | Yes |
| 250,0 | - | 8,6 | **No** |

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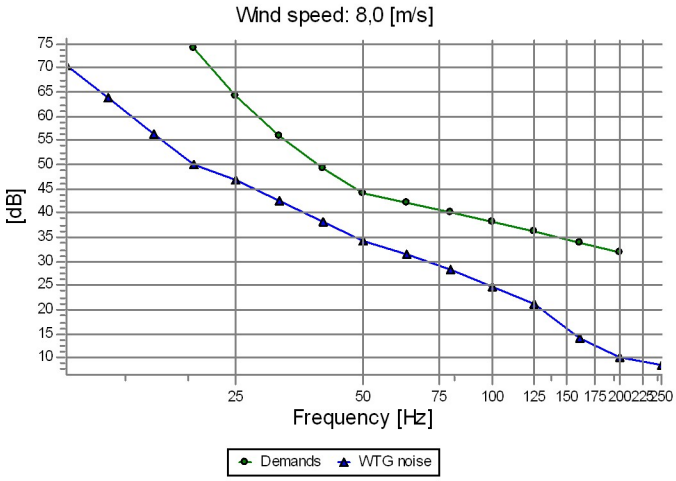
Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Detailed results, graphic

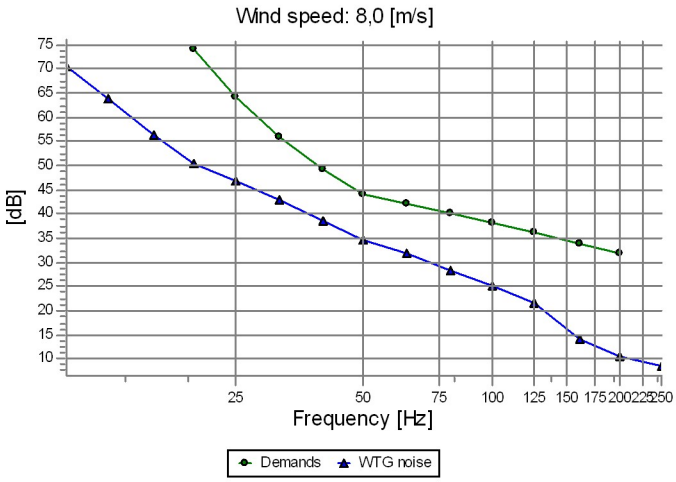
**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB) **Noise calculation model:** Finland Low frequency 8,0 m/s

**AN Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (134)**



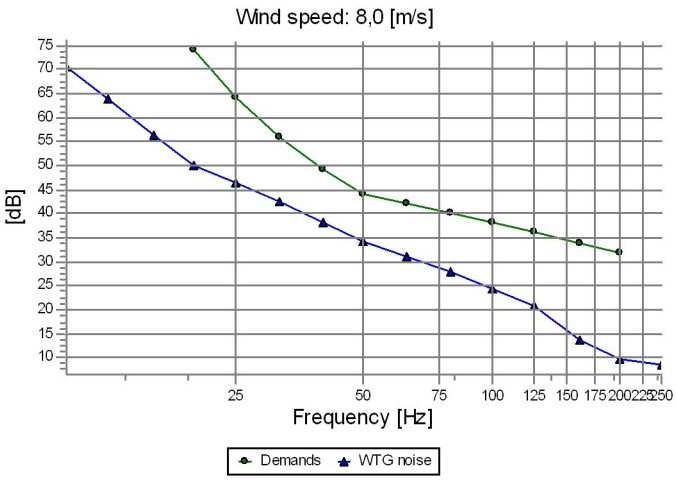

| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 50,0 | Yes |
| 25,0 | 64,0 | 46,6 | Yes |
| 31,5 | 56,0 | 42,5 | Yes |
| 40,0 | 49,0 | 38,3 | Yes |
| 50,0 | 44,0 | 34,4 | Yes |
| 63,0 | 42,0 | 31,4 | Yes |
| 80,0 | 40,0 | 28,1 | Yes |
| 100,0 | 38,0 | 24,8 | Yes |
| 125,0 | 36,0 | 21,2 | Yes |
| 160,0 | 34,0 | 13,9 | Yes |
| 200,0 | 32,0 | 10,1 | Yes |
| 250,0 | - | 8,6 | **No** |

**AO Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (133)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 50,3 | Yes |
| 25,0 | 64,0 | 46,9 | Yes |
| 31,5 | 56,0 | 42,8 | Yes |
| 40,0 | 49,0 | 38,6 | Yes |
| 50,0 | 44,0 | 34,7 | Yes |
| 63,0 | 42,0 | 31,7 | Yes |
| 80,0 | 40,0 | 28,4 | Yes |
| 100,0 | 38,0 | 25,1 | Yes |
| 125,0 | 36,0 | 21,5 | Yes |
| 160,0 | 34,0 | 14,3 | Yes |
| 200,0 | 32,0 | 10,4 | Yes |
| 250,0 | - | 8,6 | **No** |

**AP Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night (132)**




| Frequency [Hz] | Sound level Demands [dB] | WTG noise [dB] | Demands fulfilled ? |
|---|---|---|---|
| 10,0 | - | 70,4 | **No** |
| 12,5 | - | 63,6 | **No** |
| 16,0 | - | 56,4 | **No** |
| 20,0 | 74,0 | 49,8 | Yes |
| 25,0 | 64,0 | 46,4 | Yes |
| 31,5 | 56,0 | 42,3 | Yes |
| 40,0 | 49,0 | 38,1 | Yes |
| 50,0 | 44,0 | 34,1 | Yes |
| 63,0 | 42,0 | 31,2 | Yes |
| 80,0 | 40,0 | 27,9 | Yes |
| 100,0 | 38,0 | 24,5 | Yes |
| 125,0 | 36,0 | 21,0 | Yes |
| 160,0 | 34,0 | 13,7 | Yes |
| 200,0 | 32,0 | 9,8 | Yes |
| 250,0 | - | 8,6 | **No** |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

**Noise calculation model:**
Finland Low frequency
**Wind speed (at 10 m height):**
8,0 m/s
**Spectral distribution:**
From 20,0 Hz to 200,0 Hz
**Meteorological coefficient, C0:**
Selected option: Fixed value: 0,0 dB
**Type of demand in calculation:**
1: WTG noise is compared to demand (DK, DE, SE, NL etc.)
**Noise values in calculation:**
All noise values are mean values (Lwa) (Normal)
**Pure tones:**
Pure tone penalty is subtracted from demand
Model: 5,0 dB(A)
**Height above ground level, when no value in NSA object:**
4,0 m; Don't allow override of model height with height from NSA object
**Uncertainty margin:**
0,0 dB; Uncertainty margin in NSA has priority
**Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive.:**
0,0 dB(A)
**Low frequency calculation**
dLsigma

| 20,0 Hz [dB] | 25,0 Hz [dB] | 31,5 Hz [dB] | 40,0 Hz [dB] | 50,0 Hz [dB] | 63,0 Hz [dB] | 80,0 Hz [dB] | 100,0 Hz [dB] | 125,0 Hz [dB] | 160,0 Hz [dB] | 200,0 Hz [dB] |
|---|---|---|---|---|---|---|---|---|---|---|
| 7,6 | 8,3 | 9,2 | 10,3 | 11,5 | 13,0 | 14,8 | 16,8 | 18,8 | 21,1 | 22,8 |

All coordinates are in
Finish TM ETRS-TM35FIN-ETRS89

**WTG:** NORDEX N175/6.X-6800 6800 175.0 !-!
**Noise:** Mode 0 - Third Octaves - 106,9 dB(A) (STE)

| Source | Source/Date | Creator | Edited |
|---|---|---|---|
| F008_278_A19_IN Revision 03 | 13/10/2023 | USER | 19/11/2024 16.13 |

| Status | Hub height [m] | Wind speed [m/s] | LwA,ref [dB(A)] | 20,0 Hz [dB] | 25,0 Hz [dB] | 31,5 Hz [dB] | 40,0 Hz [dB] | 50,0 Hz [dB] | 63,0 Hz [dB] | 80,0 Hz [dB] | 100,0 Hz [dB] | 125,0 Hz [dB] | 160,0 Hz [dB] | 200,0 Hz [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| From Windcat | 171,5 | 8,0 | 99,2 | 71,8 | 75,2 | 77,1 | 78,3 | 80,3 | 84,6 | 87,3 | 88,9 | 91,5 | 93,5 | 94,5 |

**WTG:** NORDEX N163/6.X-6800 6800 163.0 !-!
**Noise:** Mode 1 - Third Octaves - 107,2 dB(A)* (STE)

| Source | Source/Date | Creator | Edited |
|---|---|---|---|
| F008_277_A19_IN, Rev. 0 | 30/03/2021 | USER | 19/11/2024 16.03 |

für Nabenhöhen 138 m, 159 m und 164 m

Mode 1 ist die offene Fahrweise (wie früher Mode 0)

Oktavbanddaten in der 2. Nachkommastelle vor dem Einfügen (aus Excel) angepaßt, um Rundungsfehler zu beheben:
500 Hz: + 0,02
1000 Hz: + 0,03
2000 Hz: + 0,03
4000 Hz: + 0,03
8000 Hz: + 0,03

| Status | Hub height [m] | Wind speed [m/s] | LwA,ref [dB(A)] | 20,0 Hz [dB] | 25,0 Hz [dB] | 31,5 Hz [dB] | 40,0 Hz [dB] | 50,0 Hz [dB] | 63,0 Hz [dB] | 80,0 Hz [dB] | 100,0 Hz [dB] | 125,0 Hz [dB] | 160,0 Hz [dB] | 200,0 Hz [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| From other hub height | 149,5 | 8,0 | 98,3 | 70,3 | 73,7 | 76,0 | 78,0 | 80,0 | 83,0 | 86,0 | 89,0 | 92,0 | 92,0 | 93,0 |
| From other hub height | 150,5 | 8,0 | 98,3 | 70,3 | 73,7 | 76,0 | 78,0 | 80,0 | 83,0 | 86,0 | 89,0 | 92,0 | 92,0 | 93,0 |
| From Windcat | 148,5 | 8,0 | 98,3 | 70,3 | 73,7 | 76,0 | 78,0 | 80,0 | 83,0 | 86,0 | 89,0 | 92,0 | 92,0 | 93,0 |

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

## Noise sensitive area: A Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: B Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: C Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: D Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: E Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: F Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

## Noise sensitive area: G Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: H Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: I Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: J Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: K Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: L Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

## DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: M Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: N Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: O Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: P Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: Q Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: R Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

## DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: S Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: T Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: U Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: V Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: W Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: X Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

## DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: Y Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: Z Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - night

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AA Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AB Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AC Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AD Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

## Noise sensitive area: AE Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: AF Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: AG Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: AH Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: AI Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

## Noise sensitive area: AJ Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

## DECIBEL - Assumptions for noise calculation

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)

### Noise sensitive area: AK Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AL Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AM Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AN Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AO Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

### Noise sensitive area: AP Noise sensitive point: Finnish low frequency - Residential health guide 2003, indoor - nigh

**Predefined calculation standard:** Residential health guide 2003, indoor - night
**Immission height(a.g.l.):** Use standard value from calculation model
**Uncertainty margin:** Use default value from calculation model
**No temporal binning**
**Noise demand:**

| 20,0 Hz | 25,0 Hz | 31,5 Hz | 40,0 Hz | 50,0 Hz | 63,0 Hz | 80,0 Hz | 100,0 Hz | 125,0 Hz | 160,0 Hz | 200,0 Hz |
|---|---|---|---|---|---|---|---|---|---|---|
| 74,0 dB | 64,0 dB | 56,0 dB | 49,0 dB | 44,0 dB | 42,0 dB | 40,0 dB | 38,0 dB | 36,0 dB | 34,0 dB | 32,0 dB |

**No distance demand**

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Calculated:
29/11/2024 10.24/4.0.552

# DECIBEL - Map

**Calculation:** Low Frequency 16 WTG: 2 x N175 (106,9dB + 2dB) + 14 x N163 (107,2dB + 2dB)


0 1 2 3 4 km

Map: Peruskartta 5/2023 , Print scale 1:90 000, Map center Finish TM ETRS-TM35FIN-ETRS89 East: 256 079,5 North: 6 984 253,5

New WTG  Noise sensitive area