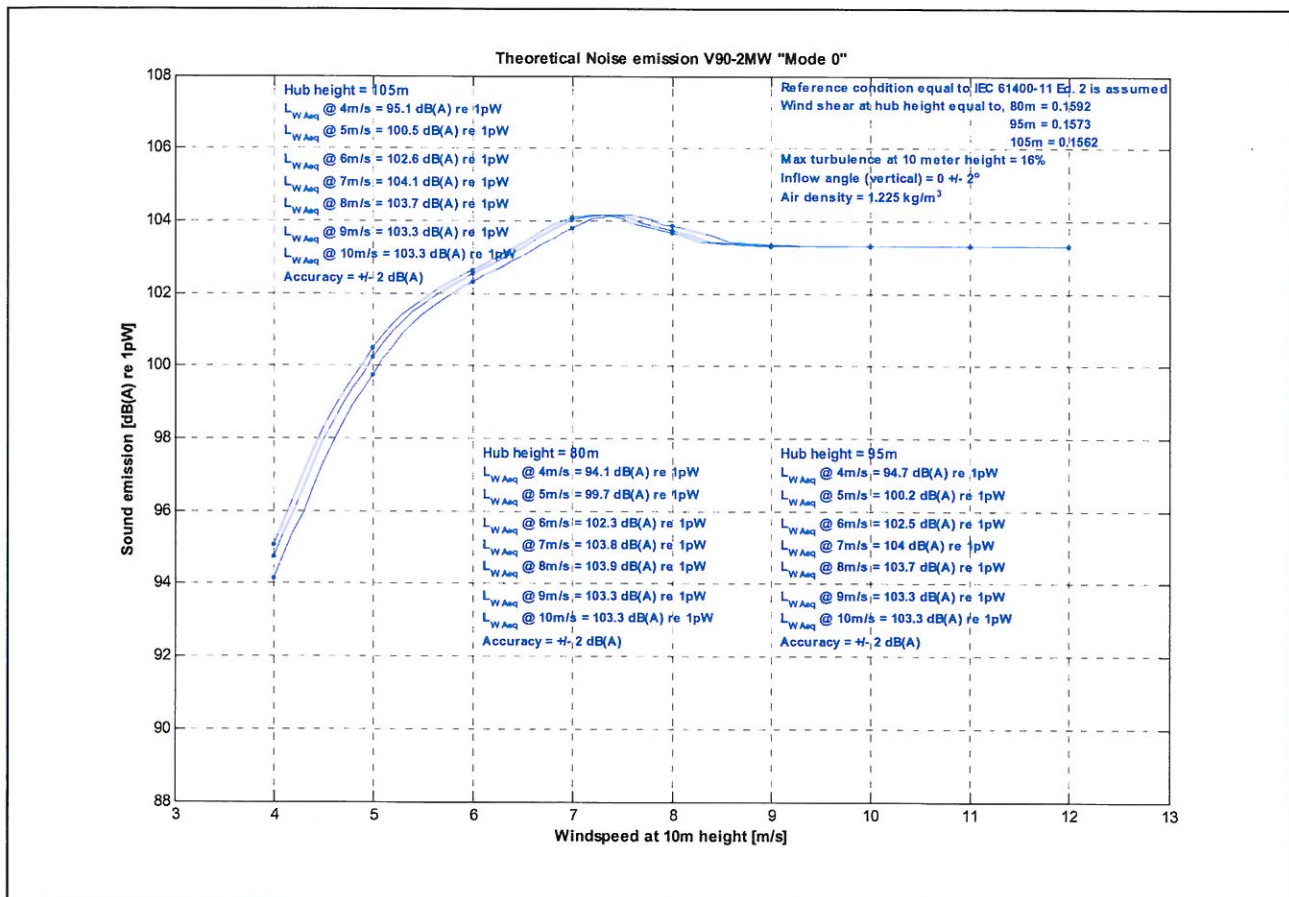


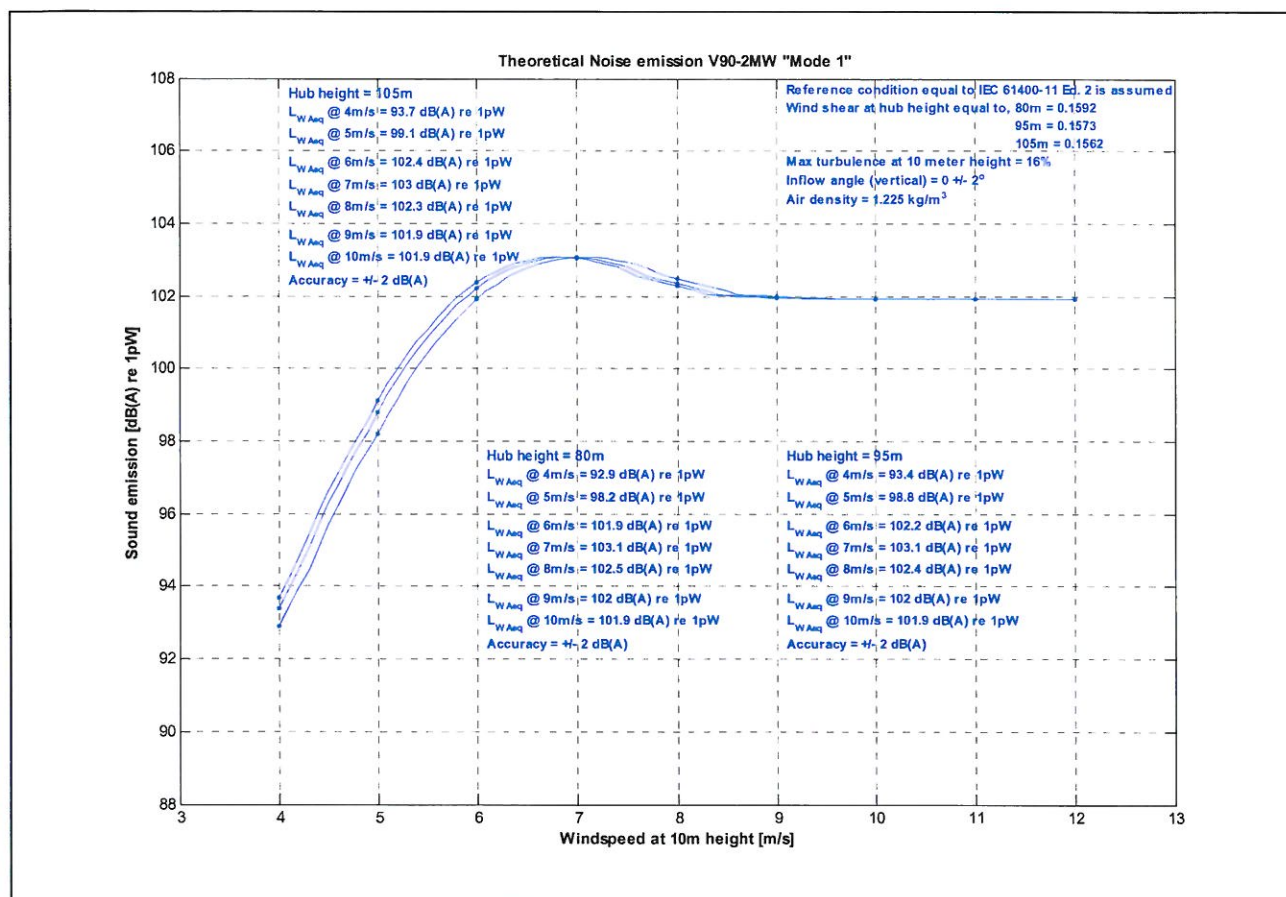


### Theoretical Sound Power Level at Hub Height, V90-2MW "Mode 0"

Conditions for Sound Power Level

Verification standard : IEC 61400-11 Ed. 2  
 Wind shear as described in table below.  
 Max turbulence at 10 meter height: 16%  
 Inflow angle (vertical):  $0 \pm 2^\circ$   
 Air density:  $1.225 \text{ kg/m}^3$   
 Accuracy:  $\pm 2$  dB(A)

| Hub height                                                     | HH 80 m      | HH 95 m      | HH 105 m     |  |
|----------------------------------------------------------------|--------------|--------------|--------------|--|
| Wind shear                                                     | 0.1592       | 0.1573       | 0.1562       |  |
| Verification Report: "Theoretical"                             |              |              |              |  |
|                                                                | dB(A) re 1pW | dB(A) re 1pW | dB(A) re 1pW |  |
| $L_{WA}$ @ 4m/s (10 meter above ground)                        | 94.1         | 94.7         | 95.1         |  |
| $L_{WA}$ @ 5m/s (10 meter above ground)                        | 99.7         | 100.2        | 100.5        |  |
| $L_{WA}$ @ 6m/s (10 meter above ground)                        | 102.3        | 102.5        | 102.6        |  |
| $L_{WA}$ @ 7m/s (10 meter above ground)                        | 103.8        | 104.0        | 104.1        |  |
| $L_{WA}$ @ 8m/s (10 meter above ground)                        | 103.9        | 103.7        | 103.7        |  |
| $L_{WA}$ @ 9m/s (10 meter above ground)                        | 103.3        | 103.3        | 103.3        |  |
| $L_{WA}$ @ 10m/s (10 meter above ground)                       | 103.3        | 103.3        | 103.3        |  |
| $L_{WA}$ @ 11m/s (10 meter above ground)                       | 103.3        | 103.3        | 103.3        |  |
| $L_{WA}$ @ 12m/s (10 meter above ground)                       | 103.3        | 103.3        | 103.3        |  |
| $L_{WA}$ @ 95% Rated Power<br>(7.9 m/s, 10 meter above ground) | 103.9        |              |              |  |
| $L_{WA}$ @ 95% Rated Power<br>(7.7 m/s, 10 meter above ground) |              | 103.9        |              |  |
| $L_{WA}$ @ 95% Rated Power<br>(7.6 m/s, 10 meter above ground) |              |              | 103.9        |  |



### Theoretical Sound Power Level at Hub Height, V90-2MW "Mode 1"

Conditions for Sound Power Level

Verification standard : IEC 61400-11 Ed. 2

Wind shear as described in table below.

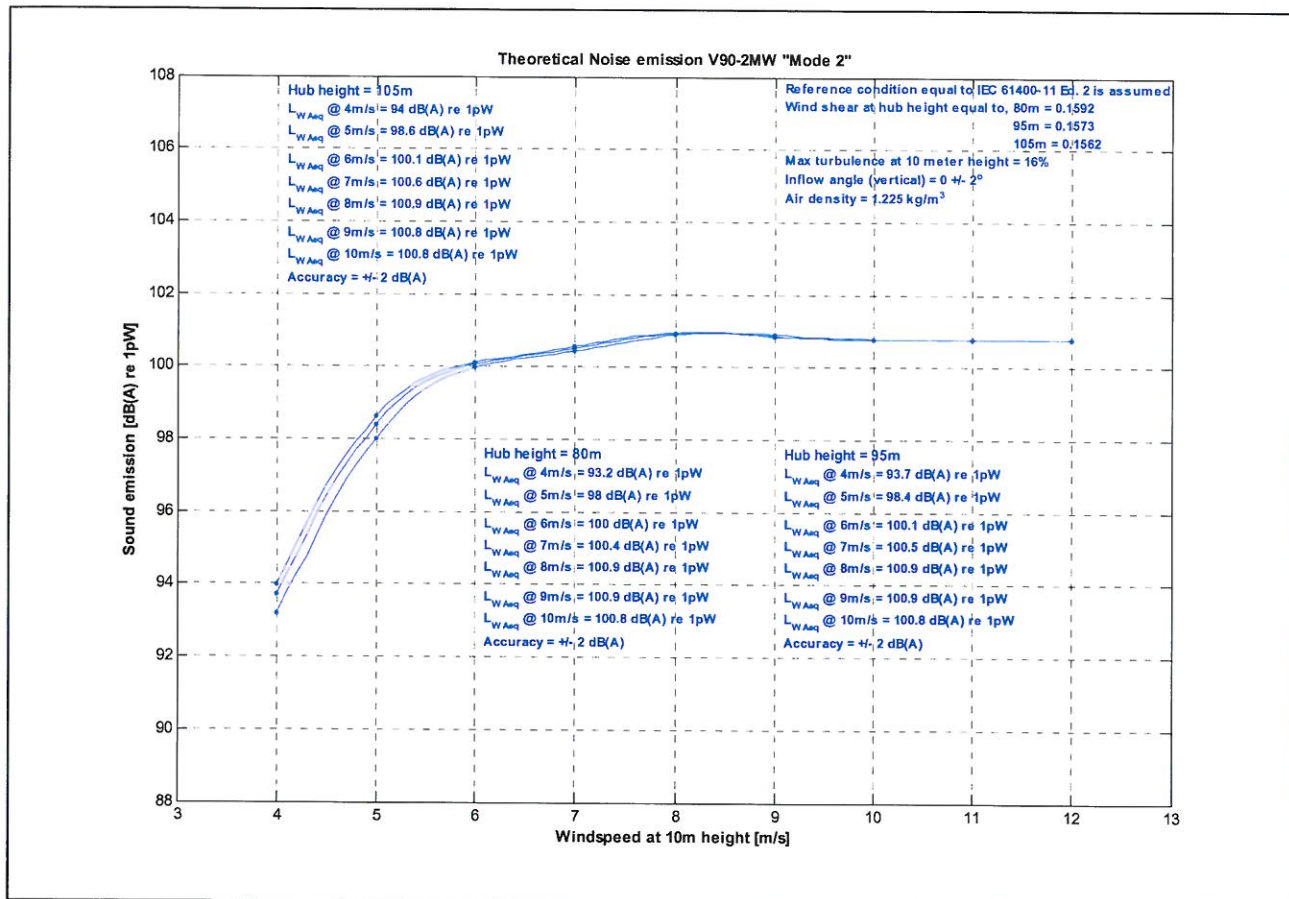
Max turbulence at 10 meter height: 16%

Inflow angle (vertical):  $0 \pm 2^\circ$

Air density:  $1.225 \text{ kg/m}^3$

Accuracy:  $\pm 2$  dB(A)

| Hub height                                                  | HH 80 m      | HH 95 m      | HH 105 m     |  |
|-------------------------------------------------------------|--------------|--------------|--------------|--|
| Wind shear                                                  | 0.1592       | 0.1573       | 0.1562       |  |
| Verification Report: "Theoretical"                          |              |              |              |  |
|                                                             | dB(A) re 1pW | dB(A) re 1pW | dB(A) re 1pW |  |
| $L_{WA}$ @ 4m/s (10 meter above ground)                     | 92.9         | 93.4         | 93.7         |  |
| $L_{WA}$ @ 5m/s (10 meter above ground)                     | 98.2         | 98.8         | 99.1         |  |
| $L_{WA}$ @ 6m/s (10 meter above ground)                     | 101.9        | 102.2        | 102.4        |  |
| $L_{WA}$ @ 7m/s (10 meter above ground)                     | 103.1        | 103.1        | 103.0        |  |
| $L_{WA}$ @ 8m/s (10 meter above ground)                     | 102.5        | 102.4        | 102.3        |  |
| $L_{WA}$ @ 9m/s (10 meter above ground)                     | 102.0        | 102.0        | 101.9        |  |
| $L_{WA}$ @ 10m/s (10 meter above ground)                    | 101.9        | 101.9        | 101.9        |  |
| $L_{WA}$ @ 11m/s (10 meter above ground)                    | 101.9        | 101.9        | 101.9        |  |
| $L_{WA}$ @ 12m/s (10 meter above ground)                    | 101.9        | 101.9        | 101.9        |  |
| $L_{WA}$ @ 95% Rated Power (8.1 m/s, 10 meter above ground) | 102.4        |              |              |  |
| $L_{WA}$ @ 95% Rated Power (7.9 m/s, 10 meter above ground) |              | 102.4        |              |  |
| $L_{WA}$ @ 95% Rated Power (7.8 m/s, 10 meter above ground) |              |              | 102.4        |  |



### Theoretical Sound Power Level at Hub Height, V90-2MW "Mode 2"

Conditions for Sound Power Level

Verification standard : IEC 61400-11 Ed. 2  
 Wind shear as described in table below.  
 Max turbulence at 10 meter height: 16%  
 Inflow angle (vertical):  $0 \pm 2^\circ$   
 Air density:  $1.225 \text{ kg/m}^3$   
 Accuracy:  $\pm 2$  dB(A)

| Hub height                                                     | HH 80 m      | HH 95 m      | HH 105 m     |  |
|----------------------------------------------------------------|--------------|--------------|--------------|--|
| Wind shear                                                     | 0.1592       | 0.1573       | 0.1562       |  |
| Verification Report: "Theoretical"                             |              |              |              |  |
|                                                                | dB(A) re 1pW | dB(A) re 1pW | dB(A) re 1pW |  |
| $L_{WA}$ @ 4m/s (10 meter above ground)                        | 93.2         | 93.7         | 94.0         |  |
| $L_{WA}$ @ 5m/s (10 meter above ground)                        | 98.0         | 98.4         | 98.6         |  |
| $L_{WA}$ @ 6m/s (10 meter above ground)                        | 100.0        | 100.1        | 100.1        |  |
| $L_{WA}$ @ 7m/s (10 meter above ground)                        | 100.4        | 100.5        | 100.6        |  |
| $L_{WA}$ @ 8m/s (10 meter above ground)                        | 100.9        | 100.9        | 100.9        |  |
| $L_{WA}$ @ 9m/s (10 meter above ground)                        | 100.9        | 100.9        | 100.8        |  |
| $L_{WA}$ @ 10m/s (10 meter above ground)                       | 100.8        | 100.8        | 100.8        |  |
| $L_{WA}$ @ 11m/s (10 meter above ground)                       | 100.8        | 100.8        | 100.8        |  |
| $L_{WA}$ @ 12m/s (10 meter above ground)                       | 100.8        | 100.8        | 100.8        |  |
| $L_{WA}$ @ 95% Rated Power<br>(8.8 m/s, 10 meter above ground) | 100.9        |              |              |  |
| $L_{WA}$ @ 95% Rated Power<br>(8.6 m/s, 10 meter above ground) |              | 100.9        |              |  |
| $L_{WA}$ @ 95% Rated Power<br>(8.5 m/s, 10 meter above ground) |              |              | 100.9        |  |