

**NOISE LAB**  
**TEST REPORT Number A-2024LAB-057-2.3-45555**

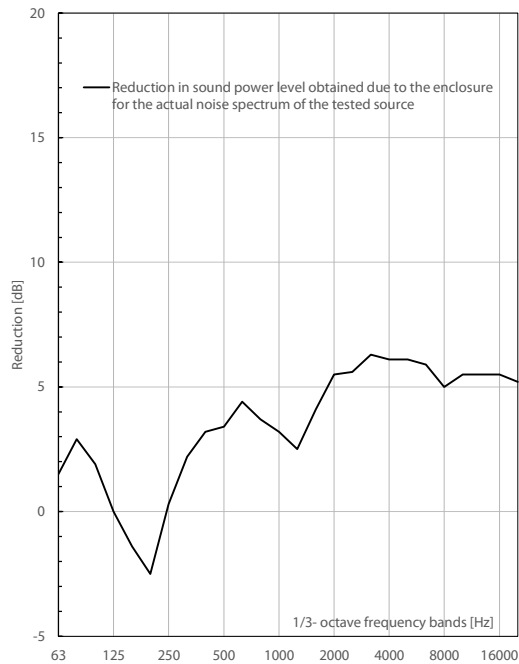
**L<sub>w</sub>**

**DETERMINATION OF SOUND POWER LEVELS**

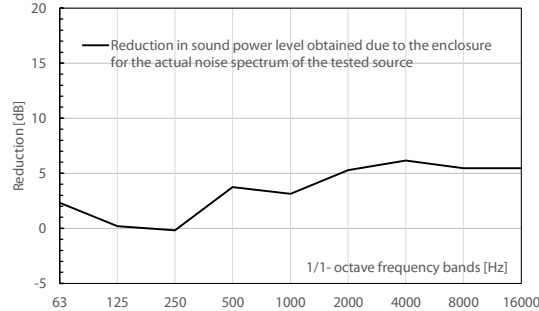
**Client:** Alode **Date of test:** 20/09/2024

**Description:**  
**Sound source:** Reference Sound Source Nor278  
**Enclosure:** Alode: Harmony Ms2w1

frequency f [Hz]	reference sound source		reduction in sound power level obtained due to the enclosure  1/3 octave L <sub>w</sub> [dB]
	without enclosure 1/3 octave L <sub>w</sub> [dB]	with enclosure 1/3 octave L <sub>w</sub> [dB]	
50	68,2	66,3	-1,9
63	69,5	68,0	-1,5
80	72,9	70,0	-2,9
100	78,3	76,4	-1,9
125	77,4	77,4	0,0
160	76,5	77,9	1,4
200	73,6	76,1	2,5
250	74,8	74,5	-0,3
315	75,0	72,8	-2,2
400	75,1	71,9	-3,2
500	75,2	71,8	-3,4
630	77,1	72,7	-4,4
800	79,3	75,6	-3,7
1000	79,7	76,5	-3,2
1250	78,5	76,0	-2,5
1600	79,9	75,8	-4,1
2000	84,0	78,5	-5,5
2500	84,3	78,7	-5,6
3150	84,4	78,1	-6,3
4000	83,6	77,5	-6,1
5000	82,8	76,7	-6,1
6300	82,4	76,5	-5,9
8000	81,7	76,7	-5,0
10000	79,0	73,5	-5,5
12500	75,2	69,7	-5,5
16000	71,7	66,2	-5,5
20000	68,7	63,5	-5,2



frequency f [Hz]	reference sound source		reduction in sound power level obtained due to the enclosure  1/1 octave L <sub>w</sub> [dB]
	without enclosure 1/1 octave L <sub>w</sub> [dB]	with enclosure 1/1 octave L <sub>w</sub> [dB]	
63	75,4	73,1	-2,3
125	82,2	82,0	-0,2
250	79,3	79,4	0,2
500	80,7	76,9	-3,7
1000	84,0	80,8	-3,1
2000	87,9	82,6	-5,3
4000	88,4	82,2	-6,2
8000	86,0	80,6	-5,5
16000	77,4	72,0	-5,5



Sound power levels in accordance with ISO 3744:2010:

L<sub>w</sub> (Reference sound source without enclosure) = 93,8 dB  
 L<sub>w</sub> (Reference sound source with enclosure) = 89,6 dB

Reduction in sound power level obtained due to the enclosure  
 for the actual noise spectrum of the tested source: = 4,2 dB

L<sub>wA</sub> (Reference sound source without enclosure) = 93,7 dB(A)  
 L<sub>wA</sub> (Reference sound source with enclosure) = 88,5 dB(A)

Reduction in the A-weighted sound power level obtained due to the enclosure  
 for the actual noise spectrum of the tested source: = 5,2 dB(A)

Evaluation based on laboratory measurement results obtained by an engineering method:

Measurement no.: 2.3  
 Date of test report: 11/10/2024

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