

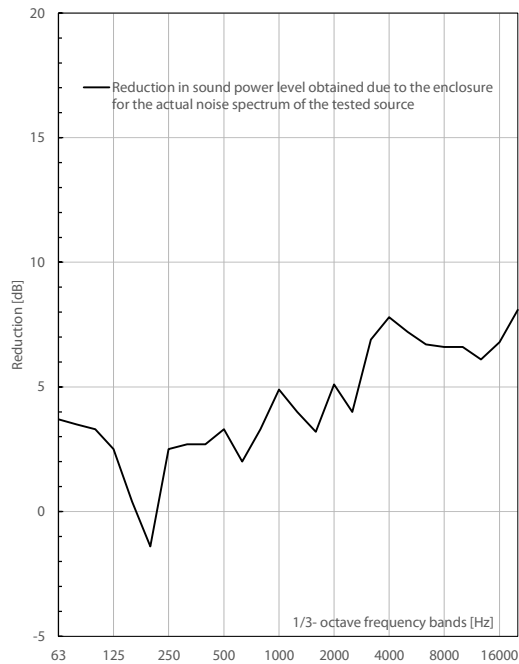
**NOISE LAB**  
**TEST REPORT Number A-2024LAB-057-1.3-45555**

**L<sub>w</sub>** **DETERMINATION OF SOUND POWER LEVELS**

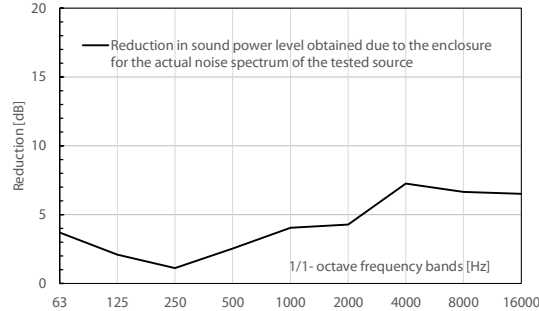
**Client:** Alode **Date of test:** 20/09/2024

**Description:**  
**Sound source:** Reference Sound Source Nor278  
**Enclosure:** Alode: Harmony Vs0

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	63,9	-4,3
63	69,5	65,8	-3,7
80	72,9	69,4	-3,5
100	78,3	75,0	-3,3
125	77,4	74,9	-2,5
160	76,5	76,1	-0,4
200	73,6	75,0	1,4
250	74,8	72,3	-2,5
315	75,0	72,3	-2,7
400	75,1	72,4	-2,7
500	75,2	71,9	-3,3
630	77,1	75,1	-2,0
800	79,3	76,0	-3,3
1000	79,7	74,8	-4,9
1250	78,5	74,5	-4,0
1600	79,9	76,7	-3,2
2000	84,0	78,9	-5,1
2500	84,3	80,3	-4,0
3150	84,4	77,5	-6,9
4000	83,6	75,8	-7,8
5000	82,8	75,6	-7,2
6300	82,4	75,7	-6,7
8000	81,7	75,1	-6,6
10000	79,0	72,4	-6,6
12500	75,2	69,1	-6,1
16000	71,7	64,9	-6,8
20000	68,7	60,6	-8,1



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	71,8	-3,7
125	82,2	80,1	-2,1
250	79,3	78,2	-1,1
500	80,7	78,1	-2,5
1000	84,0	79,9	-4,0
2000	87,9	83,6	-4,3
4000	88,4	81,2	-7,3
8000	86,0	79,4	-6,6
16000	77,4	70,9	-6,5



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) = 89,1 dB  
**Reduction in sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 4,7 dB**  
 L<sub>wA</sub> (Reference sound source without enclosure) = 93,7 dB(A)  
 L<sub>wA</sub> (Reference sound source with enclosure) = 88,4 dB(A)  
**Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 5,3 dB(A)**

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

**Measurement no.:** 1.3 **Test institute:** Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium  
**Date of test report:** 11/10/2024 **Lab-engineer:** Gert-Jan Loobuyck