

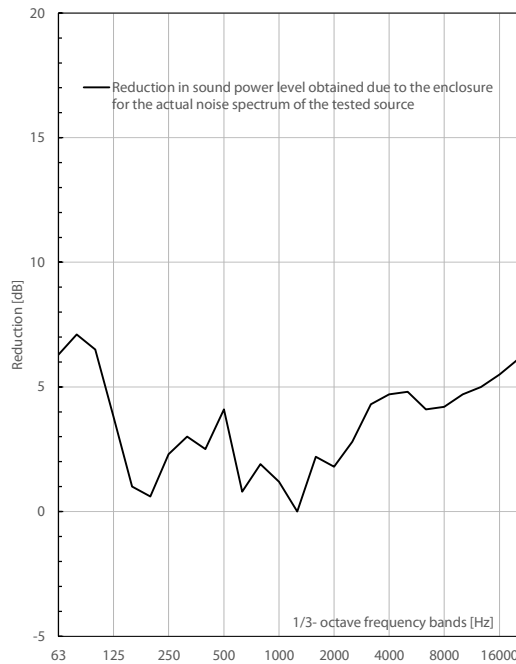
NOISE LAB
TEST REPORT Number A-2024LAB-057-4.2-45555

L_w **DETERMINATION OF SOUND POWER LEVELS**

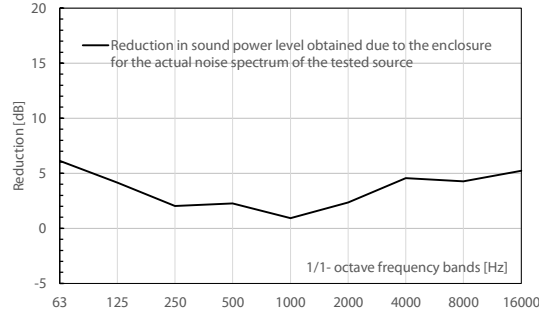
Client: Alode **Date of test:** 20/09/2024

Description:
Sound source: Reference Sound Source Nor278
Enclosure: Alode: Harmony VMs2W0

frequency f [Hz]	reference sound source		reduction in sound power level obtained due to the enclosure 1/3 octave L _w [dB]
	without enclosure 1/3 octave L _w [dB]	with enclosure 1/3 octave L _w [dB]	
50	69,4	66,1	-3,3
63	72,1	65,8	-6,3
80	75,8	68,7	-7,1
100	80,7	74,2	-6,5
125	79,4	75,6	-3,8
160	76,0	75,0	-1,0
200	75,1	74,5	-0,6
250	76,2	73,9	-2,3
315	77,0	74,0	-3,0
400	76,8	74,3	-2,5
500	75,5	71,4	-4,1
630	75,7	74,9	-0,8
800	77,6	75,7	-1,9
1000	78,8	77,6	-1,2
1250	78,1	78,1	0,0
1600	80,3	78,1	-2,2
2000	83,3	81,5	-1,8
2500	85,1	82,3	-2,8
3150	84,5	80,2	-4,3
4000	83,4	78,7	-4,7
5000	82,6	77,8	-4,8
6300	82,0	77,9	-4,1
8000	80,9	76,7	-4,2
10000	78,9	74,2	-4,7
12500	76,1	71,1	-5,0
16000	72,2	66,7	-5,5
20000	68,5	62,4	-6,1



frequency f [Hz]	reference sound source		reduction in sound power level obtained due to the enclosure 1/1 octave L _w [dB]
	without enclosure 1/1 octave L _w [dB]	with enclosure 1/1 octave L _w [dB]	
63	78,0	71,8	-6,1
125	83,9	79,7	-4,1
250	80,9	78,9	-2,0
500	80,8	78,6	-2,3
1000	83,0	82,0	-0,9
2000	88,1	85,7	-2,3
4000	88,3	83,8	-4,6
8000	85,6	81,3	-4,3
16000	78,1	72,9	-5,2



Sound power levels in accordance with ISO 3744:2010:

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

L_w (Reference sound source without enclosure) = 94,0 dB
 L_w (Reference sound source with enclosure) = 90,7 dB
 Reduction in sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 3,3 dB
 L_{wA} (Reference sound source without enclosure) = 93,6 dB(A)
 L_{wA} (Reference sound source with enclosure) = 90,5 dB(A)
 Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 3,1 dB(A)

Measurement no.: 4.2
 Date of test report: 11/10/2024

Test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
 Lab-engineer: Gert-Jan Loobuyck