Daidalos Peutz bouwfysisch ingenieursbureau
Vital Decosterstraat 67A – bus 1
B-3000 Leuven
Belgium
VAT: BE 0454.276.239
www.daidalospeutz.be

daidalos peutz
laboratory of acoustics

BELAC N° 451-TEST
NBN EN ISO 17025:2017
EA MLA signatory

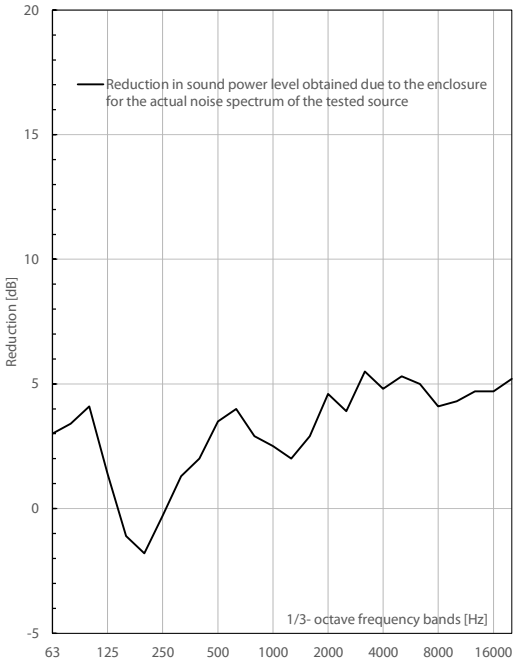
NOISE LAB
TEST REPORT Number A-2024LAB-057-2.2-45555

L_W DETERMINATION OF SOUND POWER LEVELS

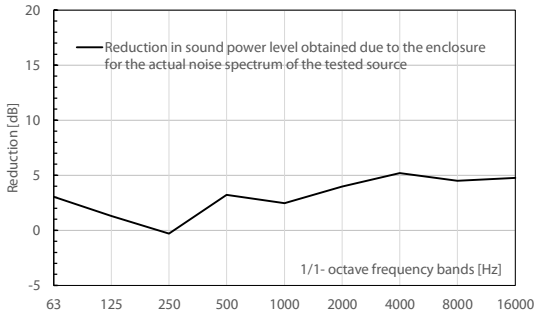
Client: **Alode** Date of test: 20/09/2024

Description:
Sound source: **Reference Sound Source Nor278**
Enclosure: **Alode: Harmony Ms2w0**

frequency	reference sound source		reduction in sound power level obtained due to the enclosure
	without enclosure	with enclosure	
f [Hz]	1/3 octave L_W [dB]	1/3 octave L_W [dB]	1/3 octave L_W [dB]
50	68,2	66,0	-2,2
63	69,5	66,5	-3,0
80	72,9	69,5	-3,4
100	78,3	74,2	-4,1
125	77,4	76,0	-1,4
160	76,5	77,6	1,1
200	73,6	75,4	1,8
250	74,8	75,1	0,3
315	75,0	73,7	-1,3
400	75,1	73,1	-2,0
500	75,2	71,7	-3,5
630	77,1	73,1	-4,0
800	79,3	76,4	-2,9
1000	79,7	77,2	-2,5
1250	78,5	76,5	-2,0
1600	79,9	77,0	-2,9
2000	84,0	79,4	-4,6
2500	84,3	80,4	-3,9
3150	84,4	78,9	-5,5
4000	83,6	78,8	-4,8
5000	82,8	77,5	-5,3
6300	82,4	77,4	-5,0
8000	81,7	77,6	-4,1
10000	79,0	74,7	-4,3
12500	75,2	70,5	-4,7
16000	71,7	67,0	-4,7
20000	68,7	63,5	-5,2



frequency	reference sound source		reduction in sound power level obtained due to the enclosure
	without enclosure	with enclosure	
f [Hz]	1/1 octave L_W [dB]	1/1 octave L_W [dB]	1/1 octave L_W [dB]
63	75,4	72,4	-3,0
125	82,2	80,9	-1,3
250	79,3	79,6	0,3
500	80,7	77,5	-3,2
1000	84,0	81,5	-2,5
2000	87,9	83,9	-4,0
4000	88,4	83,2	-5,2
8000	86,0	81,5	-4,5
16000	77,4	72,7	-4,8



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) = 93,8 dB
L_w (Reference sound source with enclosure) = 90,2 dB

Reduction in sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = **3,6 dB**

L_{wA} (Reference sound source without enclosure) = 93,7 dB(A)
L_{wA} (Reference sound source with enclosure) = 89,5 dB(A)

Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = **4,2 dB(A)**

Measurement no.: 2.2
Date of test report: 11/10/2024
Test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Lab-engineer: Gert-Jan Loobuyck