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

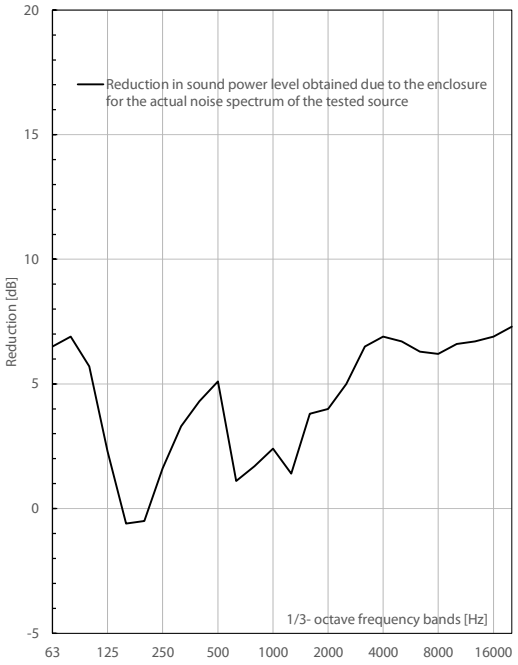
NOISE LAB
TEST REPORT Number A-2024LAB-057-4.5-45555

L_W DETERMINATION OF SOUND POWER LEVELS

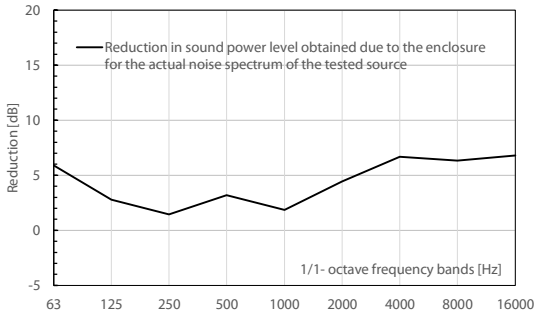
Client: **Alode** Date of test: 20/09/2024

Description:
Sound source: **Reference Sound Source Nor278**
Enclosure: **Alode: Harmony VMs2W1**

frequency	reference sound source without enclosure	reference sound source with enclosure	reduction in sound power level obtained due to the enclosure
f [Hz]	1/3 octave L_W [dB]	1/3 octave L_W [dB]	1/3 octave L_W [dB]
50	69,4	66,8	-2,6
63	72,1	65,6	-6,5
80	75,8	68,9	-6,9
100	80,7	75,0	-5,7
125	79,4	77,1	-2,3
160	76,0	76,6	0,6
200	75,1	75,6	0,5
250	76,2	74,6	-1,6
315	77,0	73,7	-3,3
400	76,8	72,5	-4,3
500	75,5	70,4	-5,1
630	75,7	74,6	-1,1
800	77,6	75,9	-1,7
1000	78,8	76,4	-2,4
1250	78,1	76,7	-1,4
1600	80,3	76,5	-3,8
2000	83,3	79,3	-4,0
2500	85,1	80,1	-5,0
3150	84,5	78,0	-6,5
4000	83,4	76,5	-6,9
5000	82,6	75,9	-6,7
6300	82,0	75,7	-6,3
8000	80,9	74,7	-6,2
10000	78,9	72,3	-6,6
12500	76,1	69,4	-6,7
16000	72,2	65,3	-6,9
20000	68,5	61,2	-7,3



frequency	reference sound source without enclosure	reference sound source with enclosure	reduction in sound power level obtained due to the enclosure
f [Hz]	1/1 octave L_W [dB]	1/1 octave L_W [dB]	1/1 octave L_W [dB]
63	78,0	72,1	-5,9
125	83,9	81,1	-2,8
250	80,9	79,5	-1,5
500	80,8	77,6	-3,2
1000	83,0	81,1	-1,8
2000	88,1	83,7	-4,4
4000	88,3	81,7	-6,7
8000	85,6	79,2	-6,3
16000	78,1	71,3	-6,8



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) = 94,0 dB
L_w (Reference sound source with enclosure) = 89,5 dB

Reduction in sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = **4,5 dB**

L_{wA} (Reference sound source without enclosure) = 93,6 dB(A)
L_{wA} (Reference sound source with enclosure) = 88,7 dB(A)

Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = **4,9 dB(A)**

Measurement no.: 4.5
Date of test report: 11/10/2024
Test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Lab-engineer: Gert-Jan Loobuyck