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

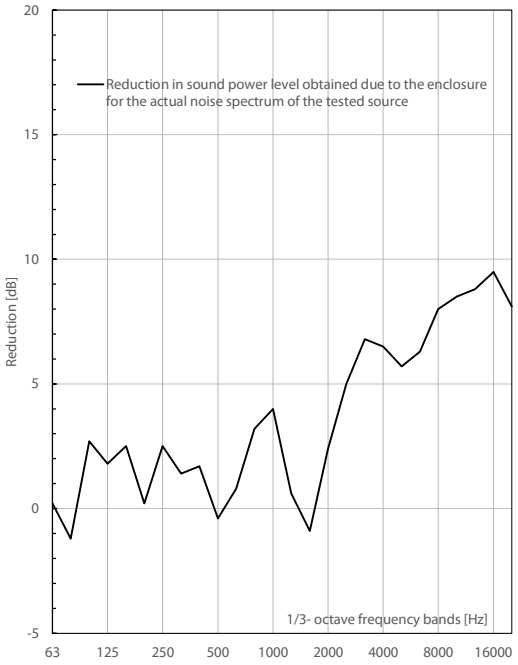
NOISE LAB
TEST REPORT Number A-2024LAB-057-1.4-45555

L_W DETERMINATION OF SOUND POWER LEVELS

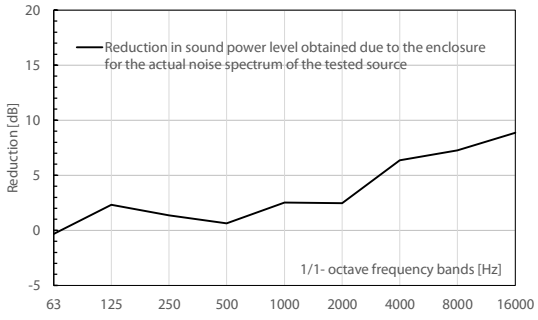
Client: **Alode** Date of test: 20/09/2024

Description:
Sound source: **Reference Sound Source Nor278**
Enclosure: **Alode: Harmony Vs1**

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	65,5	-2,7
63	69,5	69,3	-0,2
80	72,9	74,1	1,2
100	78,3	75,6	-2,7
125	77,4	75,6	-1,8
160	76,5	74,0	-2,5
200	73,6	73,4	-0,2
250	74,8	72,3	-2,5
315	75,0	73,6	-1,4
400	75,1	73,4	-1,7
500	75,2	75,6	0,4
630	77,1	76,3	-0,8
800	79,3	76,1	-3,2
1000	79,7	75,7	-4,0
1250	78,5	77,9	-0,6
1600	79,9	80,8	0,9
2000	84,0	81,6	-2,4
2500	84,3	79,3	-5,0
3150	84,4	77,6	-6,8
4000	83,6	77,1	-6,5
5000	82,8	77,1	-5,7
6300	82,4	76,1	-6,3
8000	81,7	73,7	-8,0
10000	79,0	70,5	-8,5
12500	75,2	66,4	-8,8
16000	71,7	62,2	-9,5
20000	68,7	60,6	-8,1



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	75,8	0,3
125	82,2	79,9	-2,3
250	79,3	77,9	-1,4
500	80,7	80,0	-0,6
1000	84,0	81,4	-2,5
2000	87,9	85,4	-2,5
4000	88,4	82,0	-6,4
8000	86,0	78,8	-7,3
16000	77,4	68,6	-8,9



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) = 90,1 dB

Reduction in sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = **3,7 dB**

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

Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = **4,0 dB(A)**

Measurement no.: 1.4
Date of test report: 11/10/2024
Test institute: Daidalos Peutz Laboratory of Acoustics, Hooglede, Belgium
Lab-engineer: Gert-Jan Loobuyck