

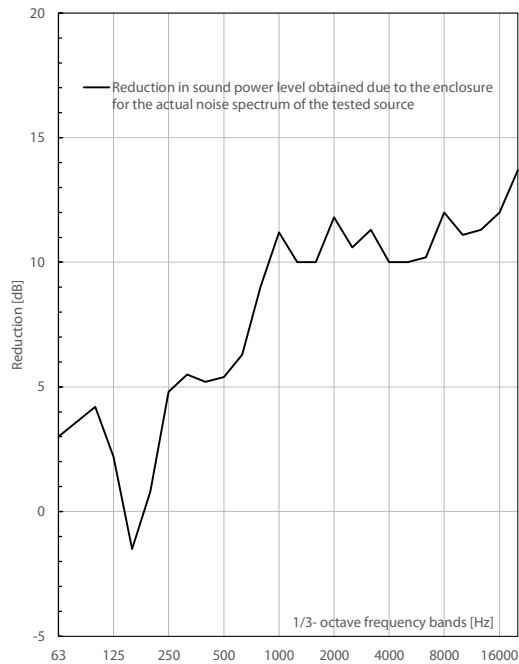
NOISE LAB
TEST REPORT Number A-2024LAB-057-3.4-45555

L_w **DETERMINATION OF SOUND POWER LEVELS**

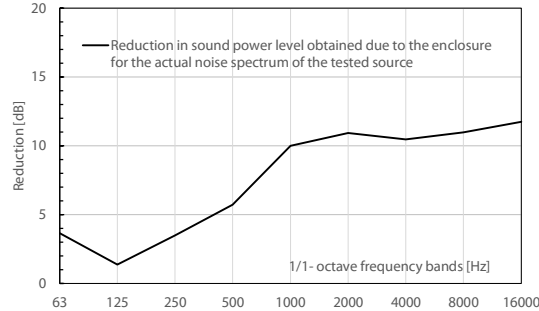
Client: Alode **Date of test:** 20/09/2024

Description:
Sound source: Reference Sound Source Nor278
Enclosure: Alode Zen - Vs0b0

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	68,2	63,3	-4,9
63	69,5	66,5	-3,0
80	72,9	69,3	-3,6
100	78,3	74,1	-4,2
125	77,4	75,2	-2,2
160	76,5	78,0	1,5
200	73,6	72,8	-0,8
250	74,8	70,0	-4,8
315	75,0	69,5	-5,5
400	75,1	69,9	-5,2
500	75,2	69,8	-5,4
630	77,1	70,8	-6,3
800	79,3	70,3	-9,0
1000	79,7	68,5	-11,2
1250	78,5	68,5	-10,0
1600	79,9	69,9	-10,0
2000	84,0	72,2	-11,8
2500	84,3	73,7	-10,6
3150	84,4	73,1	-11,3
4000	83,6	73,6	-10,0
5000	82,8	72,8	-10,0
6300	82,4	72,2	-10,2
8000	81,7	69,7	-12,0
10000	79,0	67,9	-11,1
12500	75,2	63,9	-11,3
16000	71,7	59,7	-12,0
20000	68,7	55,0	-13,7



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	75,4	71,8	-3,6
125	82,2	80,9	-1,4
250	79,3	75,8	-3,5
500	80,7	75,0	-5,7
1000	84,0	74,0	-10,0
2000	87,9	77,0	-10,9
4000	88,4	78,0	-10,5
8000	86,0	75,1	-11,0
16000	77,4	65,7	-11,7



Sound power levels in accordance with ISO 3744:2010:

L_w (Reference sound source without enclosure) = 93,8 dB
 L_w (Reference sound source with enclosure) = 85,8 dB

Reduction in sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 8,0 dB

L_{wA} (Reference sound source without enclosure) = 93,7 dB(A)
 L_{wA} (Reference sound source with enclosure) = 83,4 dB(A)

Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 10,3 dB(A)

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

Measurement no.: 3.4
Date of test report: 11/10/2024

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