

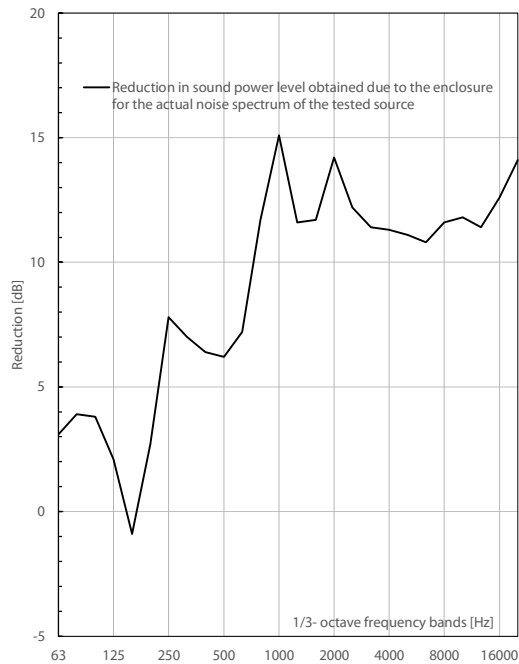
NOISE LAB
TEST REPORT Number A-2024LAB-057-3.5-45555

L_w **DETERMINATION OF SOUND POWER LEVELS**

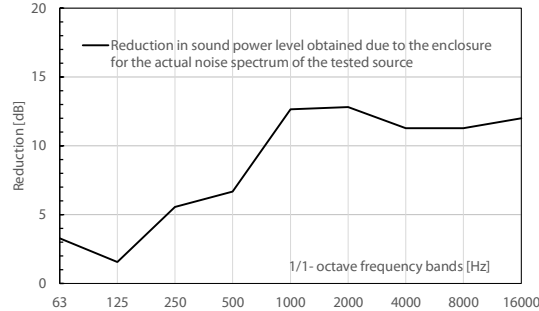
Client: Alode **Date of test:** 20/09/2024

Description:
Sound source: Reference Sound Source Nor278
Enclosure: Zen Vs0b1

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	66,2	-2,0
63	69,5	66,4	-3,1
80	72,9	69,0	-3,9
100	78,3	74,5	-3,8
125	77,4	75,3	-2,1
160	76,5	77,4	0,9
200	73,6	70,9	-2,7
250	74,8	67,0	-7,8
315	75,0	68,0	-7,0
400	75,1	68,7	-6,4
500	75,2	69,0	-6,2
630	77,1	69,9	-7,2
800	79,3	67,6	-11,7
1000	79,7	64,6	-15,1
1250	78,5	66,9	-11,6
1600	79,9	68,2	-11,7
2000	84,0	69,8	-14,2
2500	84,3	72,1	-12,2
3150	84,4	73,0	-11,4
4000	83,6	72,3	-11,3
5000	82,8	71,7	-11,1
6300	82,4	71,6	-10,8
8000	81,7	70,1	-11,6
10000	79,0	67,2	-11,8
12500	75,2	63,8	-11,4
16000	71,7	59,1	-12,6
20000	68,7	54,6	-14,1



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	75,4	72,2	-3,3
125	82,2	80,7	-1,6
250	79,3	73,7	-5,5
500	80,7	74,0	-6,7
1000	84,0	71,3	-12,7
2000	87,9	75,1	-12,8
4000	88,4	77,1	-11,3
8000	86,0	74,8	-11,3
16000	77,4	65,4	-12,0



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) = 85,0 dB

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

L_{wA} (Reference sound source without enclosure) = 93,7 dB(A)
 L_{wA} (Reference sound source with enclosure) = 82,2 dB(A)

Reduction in the A-weighted sound power level obtained due to the enclosure for the actual noise spectrum of the tested source: = 11,5 dB(A)

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

Measurement no.: 3.5
 Date of test report: 11/10/2024

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