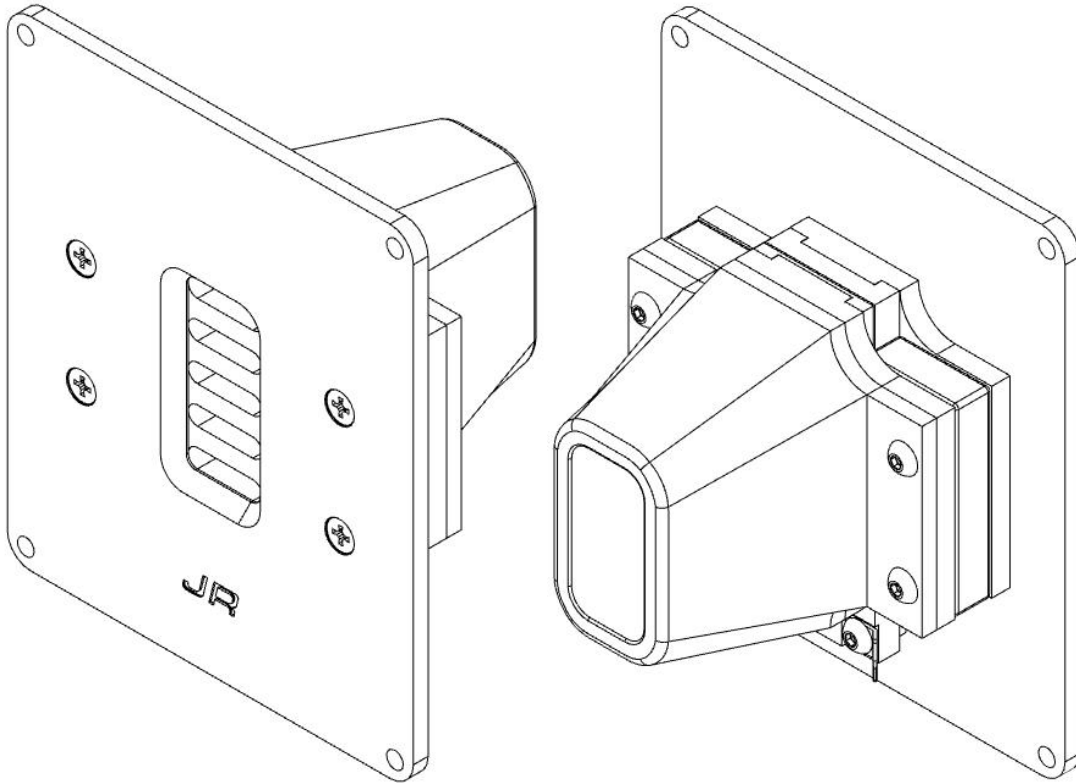




AMT1-4



Features:

- Based on Oskar Heil's Air Motion Transformer (AMT) principle.
- Damped kapton-aluminium laminate diaphragm.
- Narrow diaphragm for wide and smooth dispersion at high frequencies.
- Wide bandwidth, usable from 1,3 kHz up.
- Strong, symmetric and flat magnetic field for low harmonic distortion.
- Very low levels of distortion from the motor system.
- Flat impedance, +/- 0,1 Ohm variation over the whole bandwidth.
- Well damped rear chamber, removable for dipole use.

Specifications:

Nominal impedance	Znom	4,00	Ω
DC resistance	Re	5,00	Ω
Inductance at 1 kHz	Le	0,02	mH
Effective piston area ¹	Sd	9,00	cm ²
Actual piston area ²	-	39,90	cm ²
Moving mass	Mms	2,00	g
Free air resonance	Fs	1,30	kHz
Sensitivity, 1W/1M	SPL	86,00	dB
Force factor	Bl	1,99	Tm
Magnetic flux density	B	0,67	T
Long term-power handling ³	-	20,00	W
Short term-power handling ³	-	50,00	W
Weight		0,76	kg

¹ Based on the size of the front opening of 20 x 45 mm.

² The actual moving area of the diaphragm, excluding the bends of the folds.

³ Tested according to IEC 268-5, using a 12 dB/oct Butterworth filter at 2 kHz..

General measurement notes:

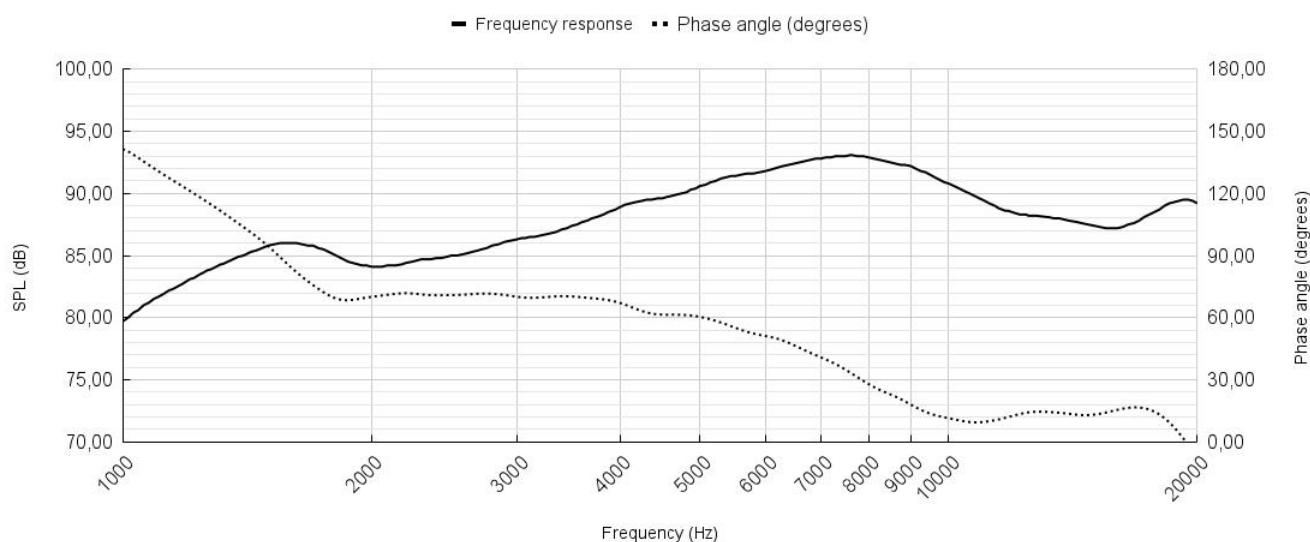
- All electrical measurements are done in free air.
- All acoustical measurements are done with the driver mounted centered on a 0,6x0,8m baffle unless otherwise specified with the measurement result.
- The test baffle is simple and without round-overs. Any frequency response ripple more narrow than roughly 1/3 oct is caused by diffraction.
- Watts are used to simplify power related measurements. Used test voltages are specified in table 1.

Power (W)	1	2	4	8	16	32	64
Voltage (V)	2,17	3,1	4,34	6,2	8,68	12,3	17,4

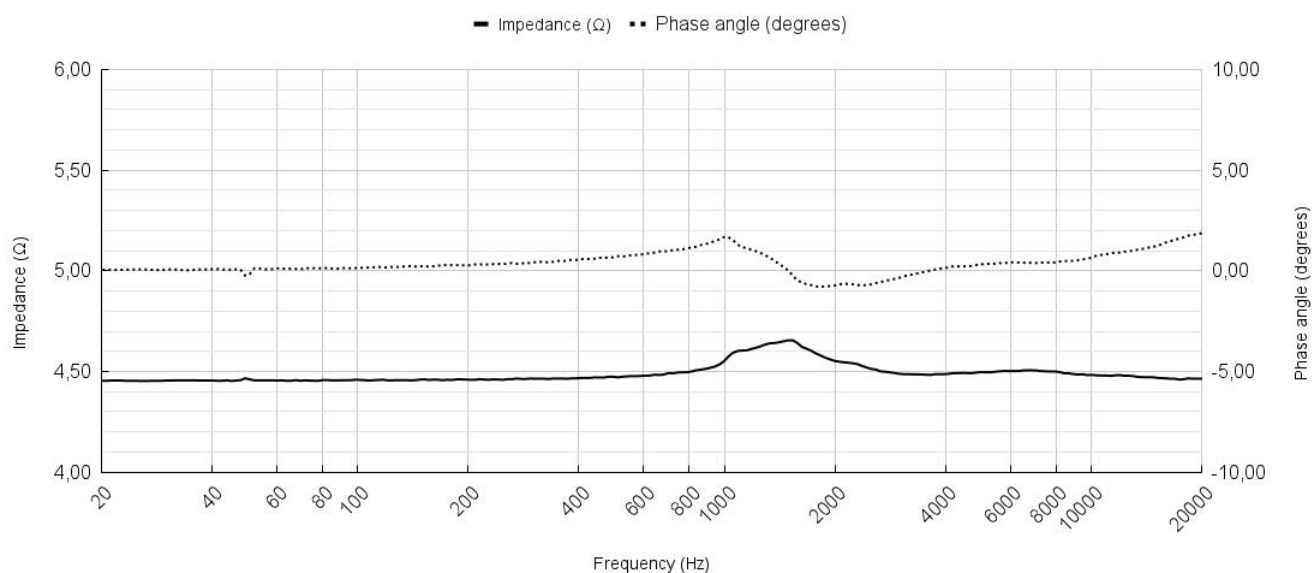
Table 1

Frequency response and phase at 1W, 1M

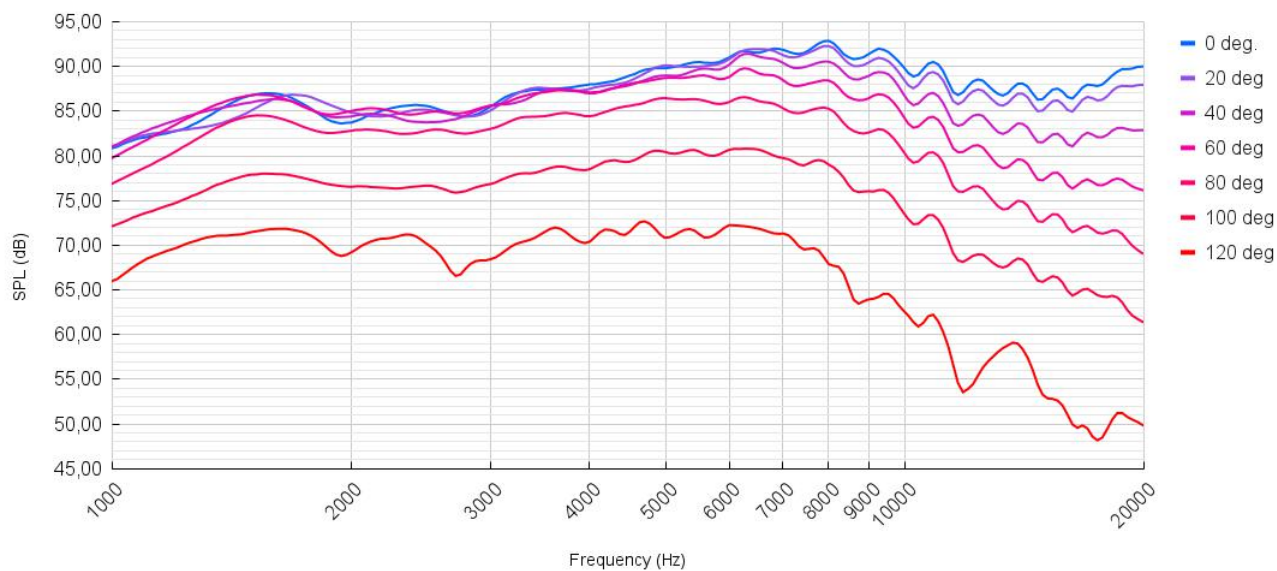
Measurement method optimized to rule out effects of baffle step, baffle diffraction and lab acoustics. Meant to reveal the actual frequency response of the tweeter itself.



Impedance response

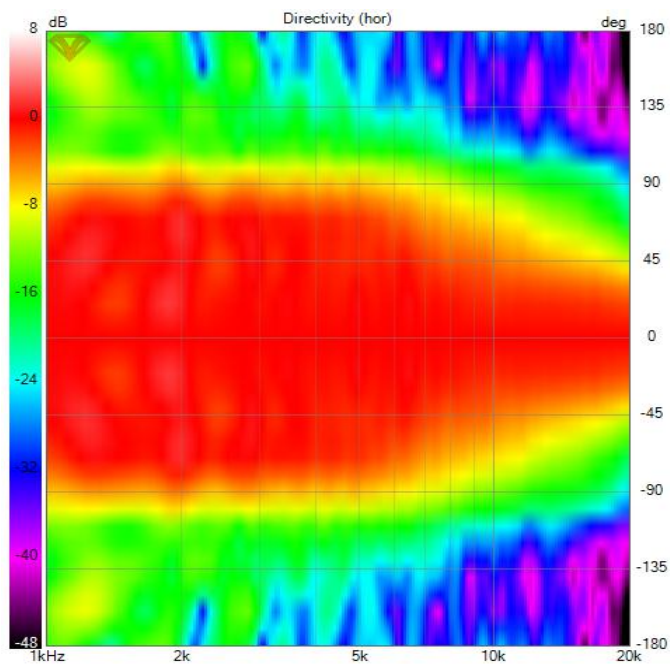
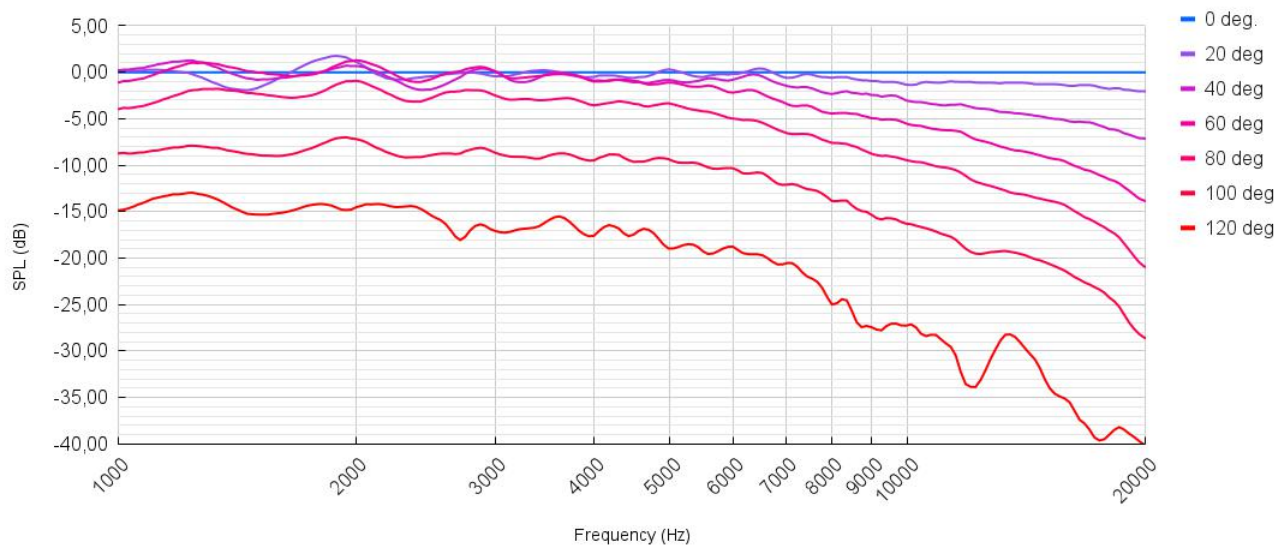


Axial frequency response at 1W, 1M, horizontal

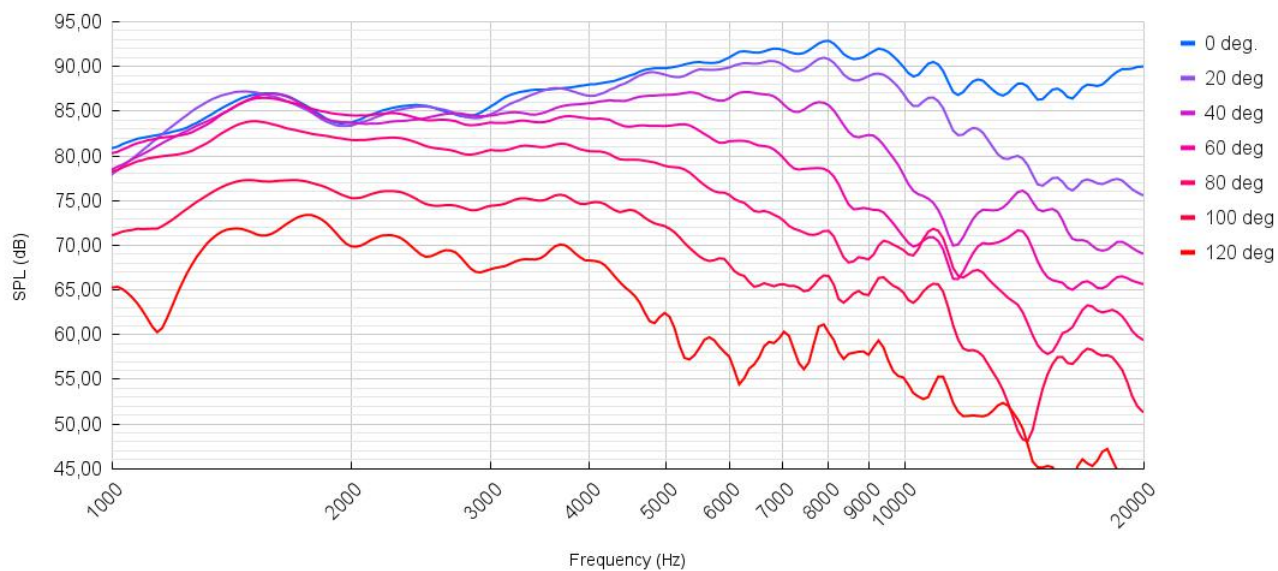


Axial frequency response at 1W, 1M, horizontal, normalized

Normalized to the 0 degree measurement result.

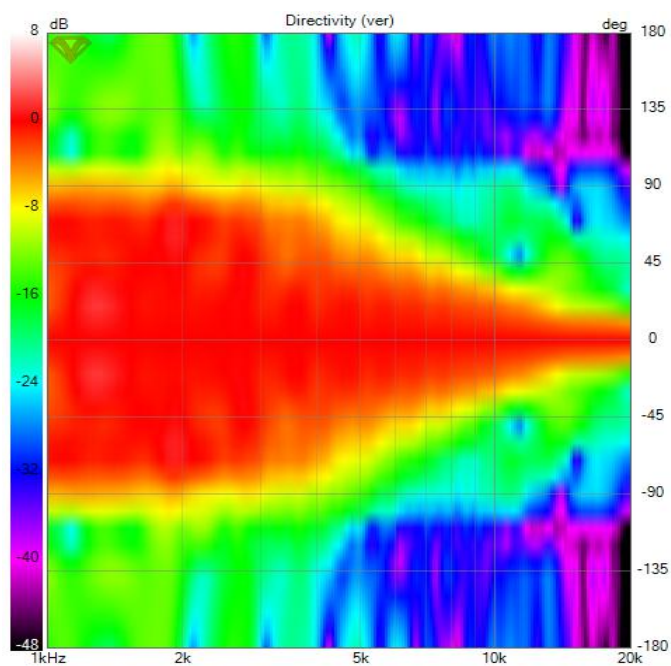
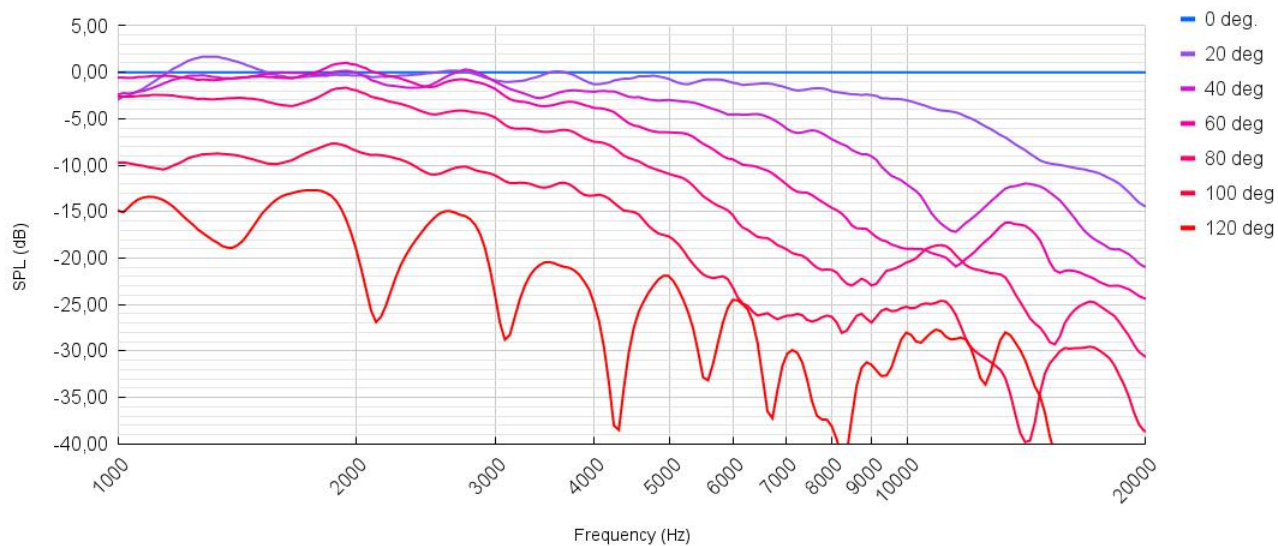


Axial frequency response at 1W, 1M, vertical

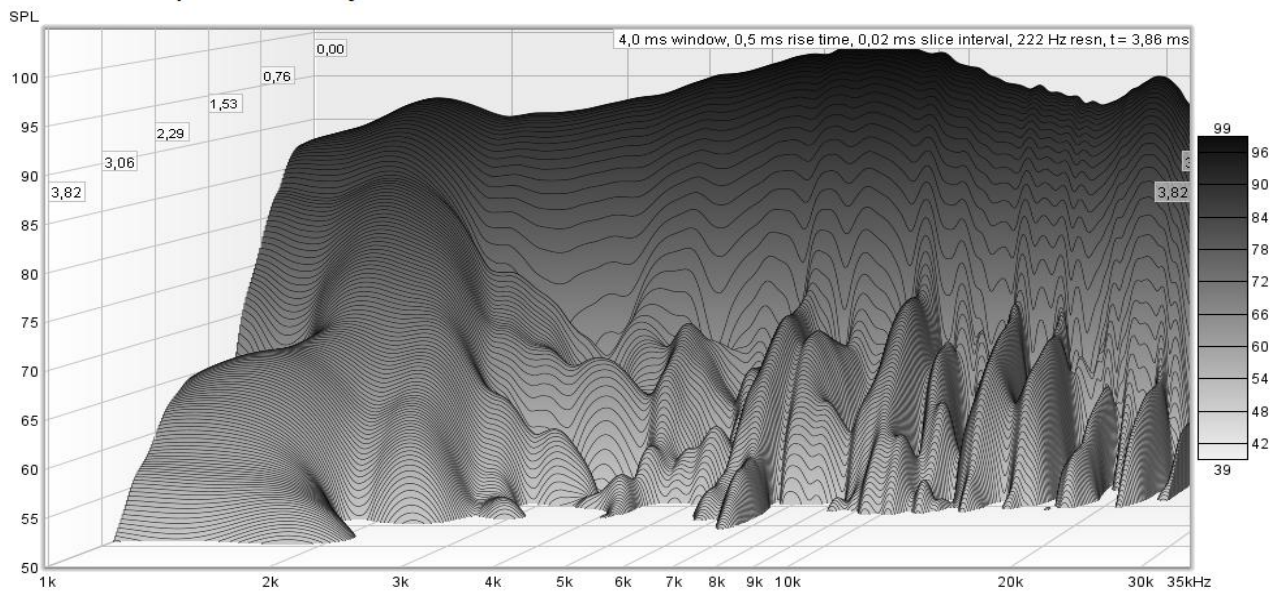


Axial frequency response at 1W, 1M, vertical, normalized

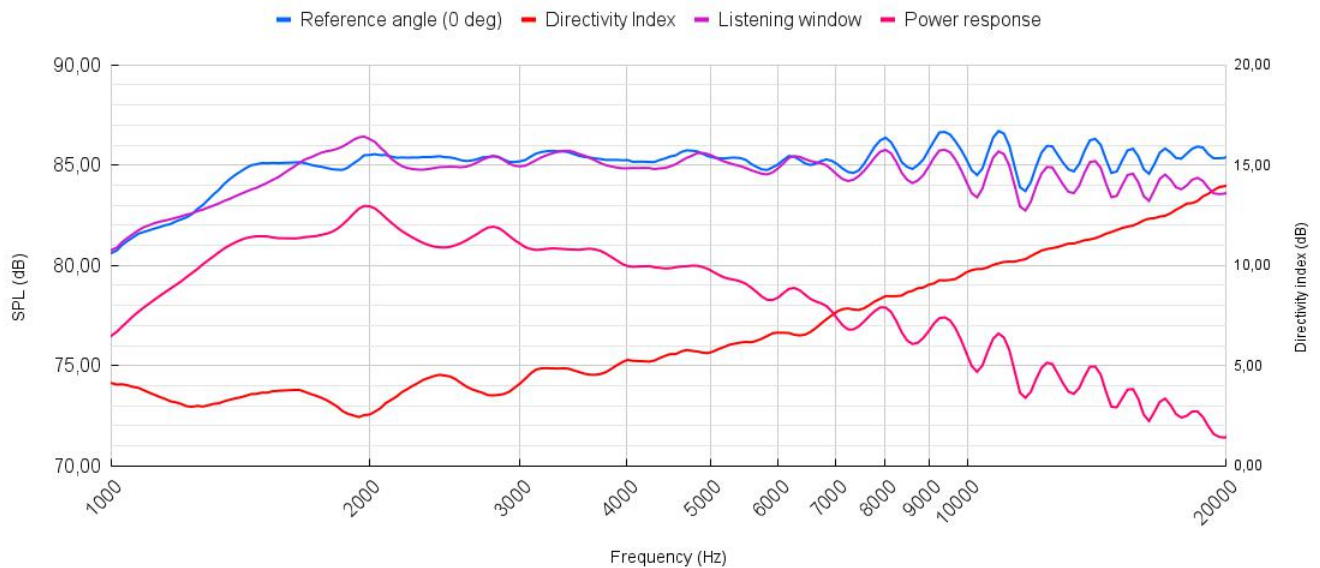
Normalized to the 0 degree measurement result.



Cumulative spectral decay

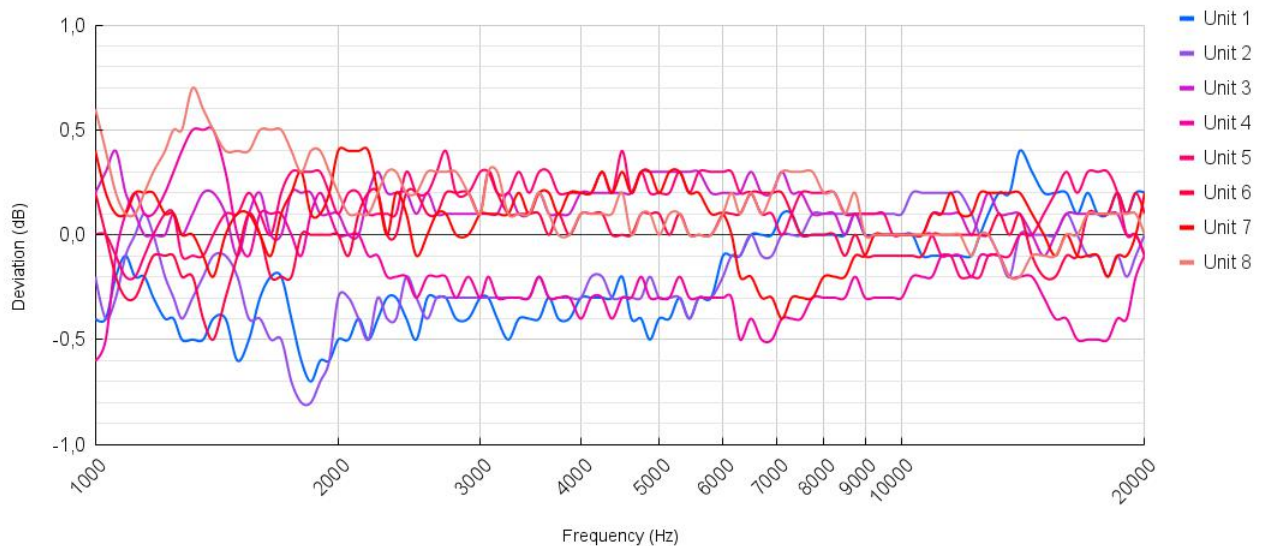


Power and directivity index, with EQ for "flat" 0 degree frequency response



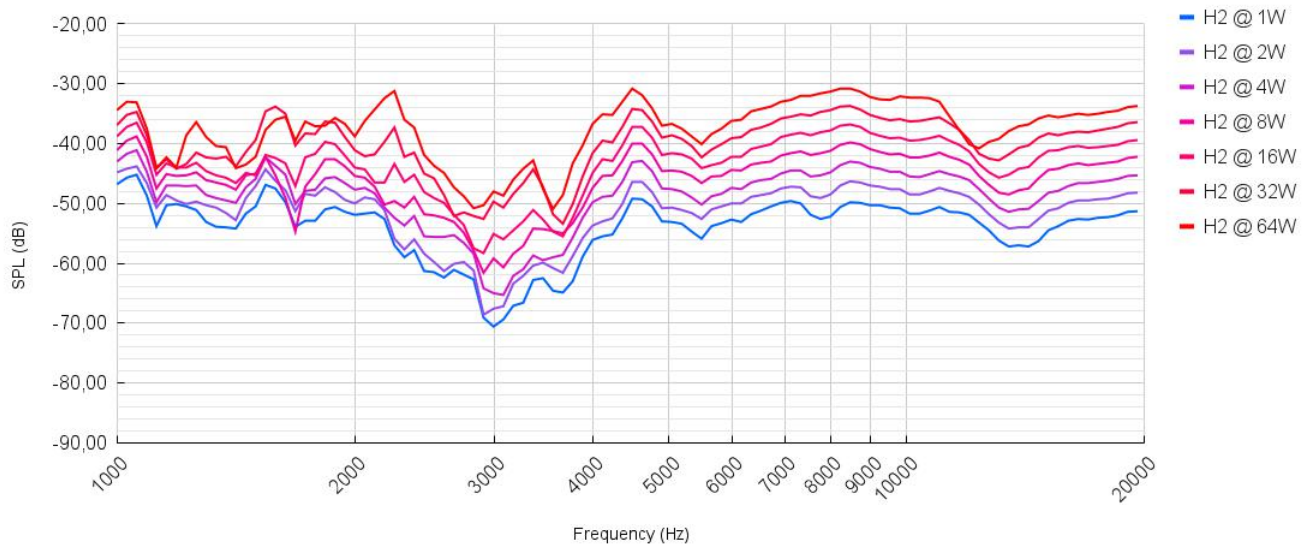
Frequency response batch deviation

Frequency response of 8 units, normalized to the average of frequency response of the 8 units.



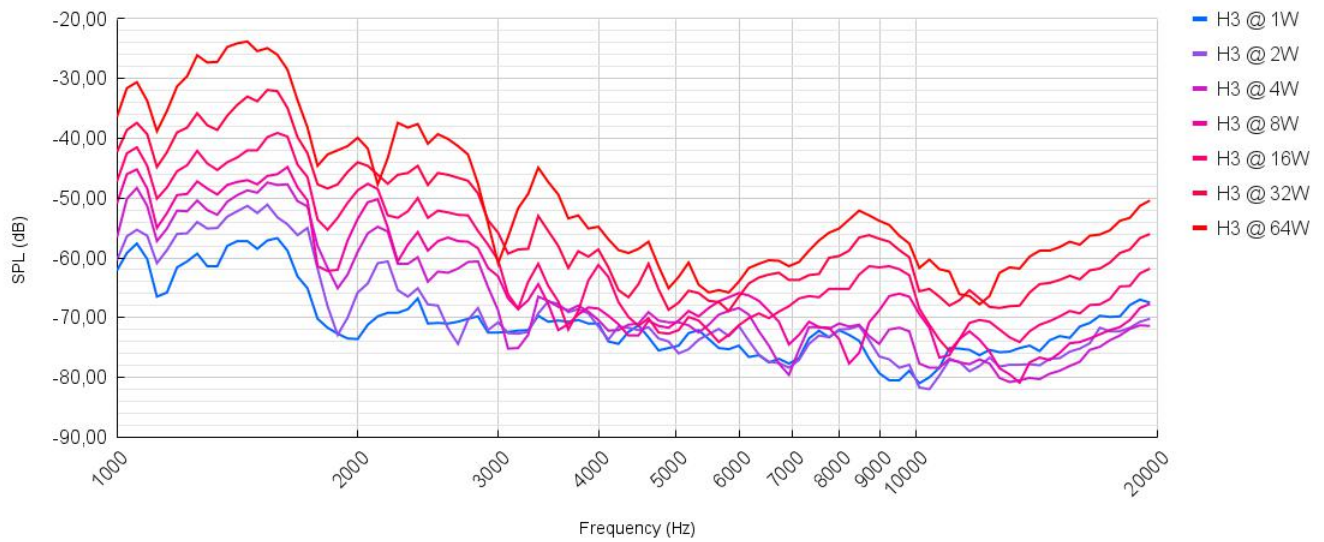
Sound pressure harmonic distortion, second harmonic

Second harmonic vs. power, relative to fundamental, at 50cm distance



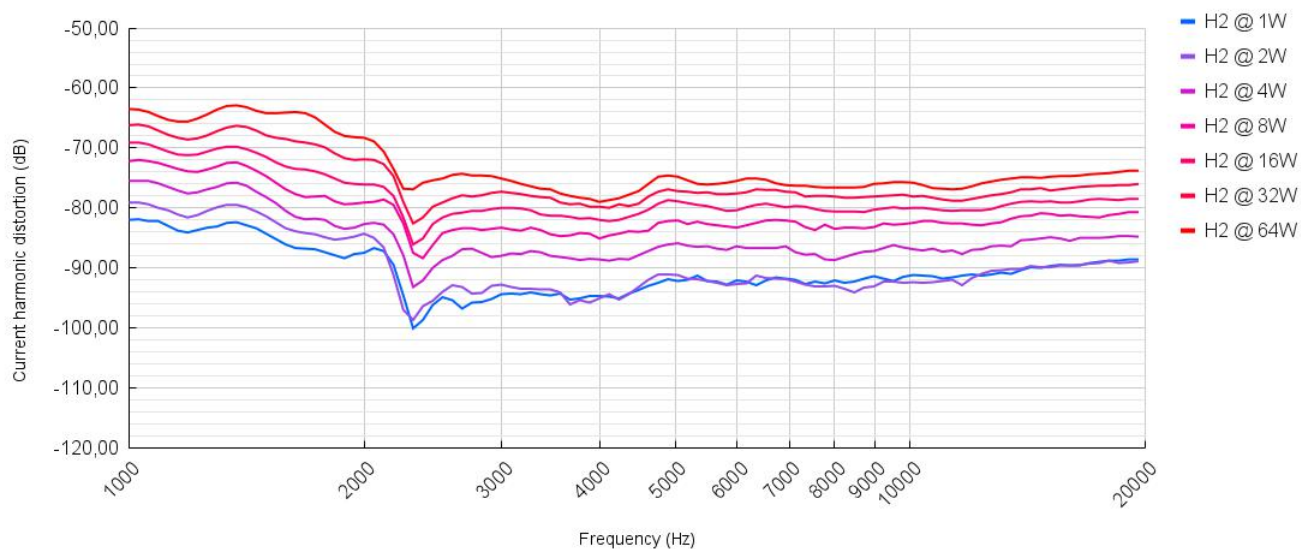
Sound pressure harmonic distortion, third harmonic

Third harmonic vs. power, relative to fundamental, at 50cm distance



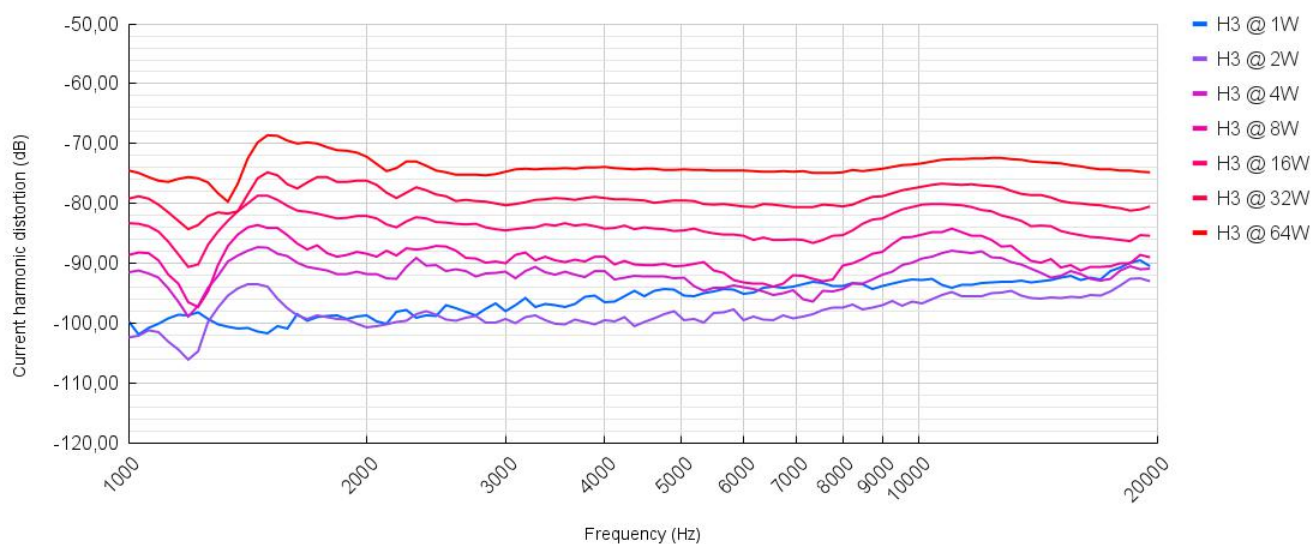
Current harmonic distortion, second harmonic

Second harmonic vs. power, relative to fundamental

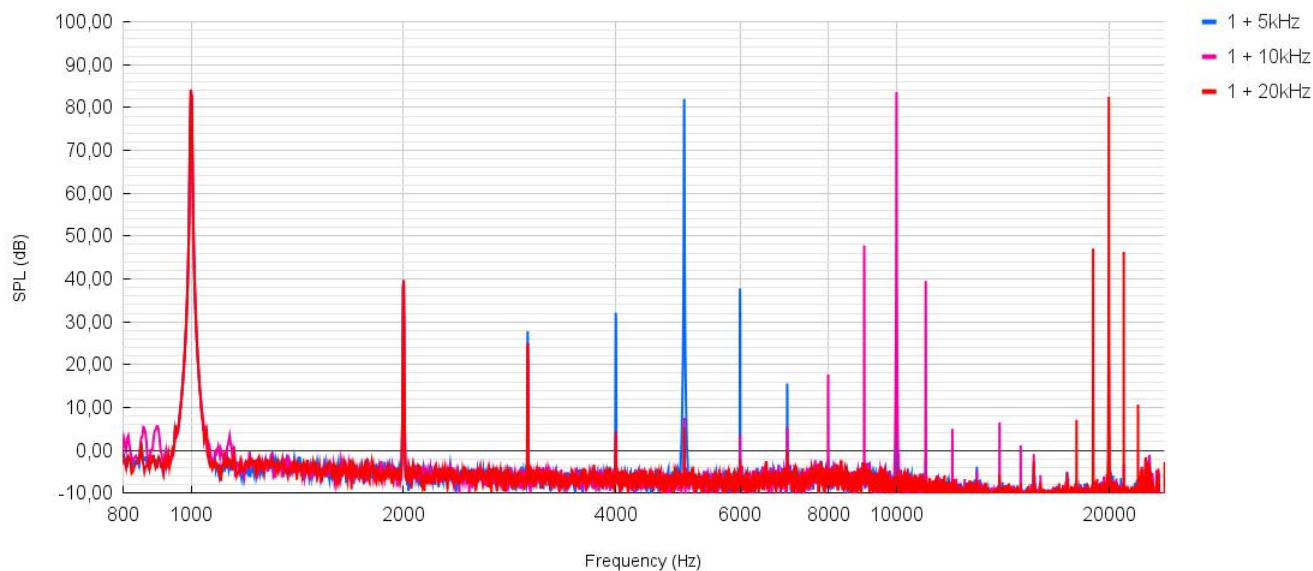


Current harmonic distortion, third harmonic

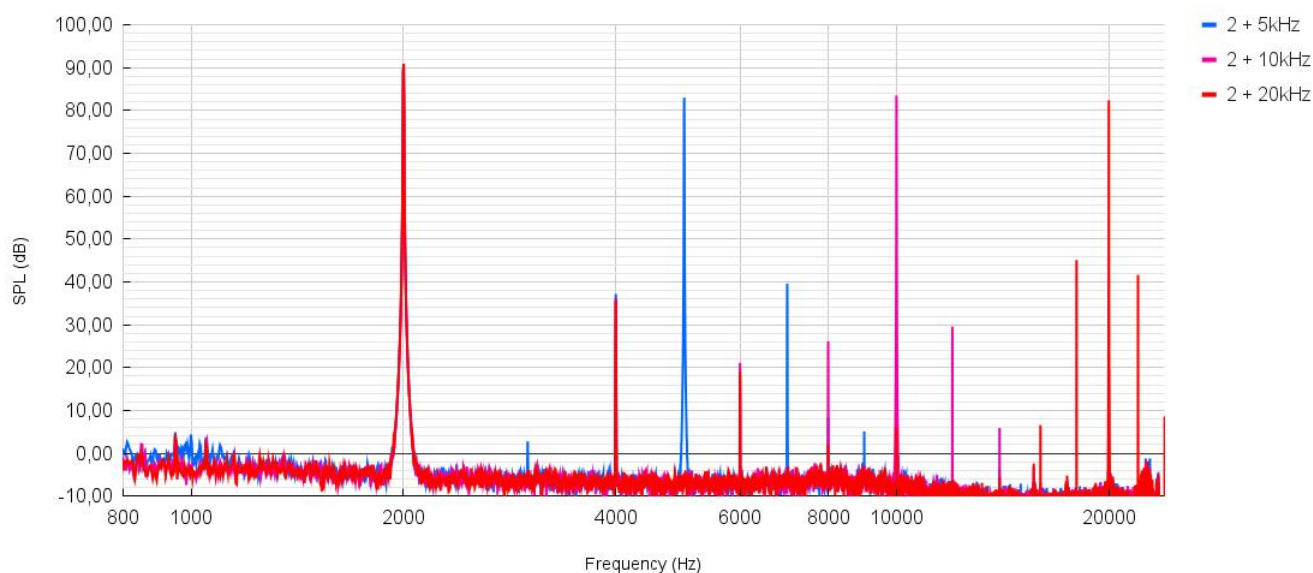
Third harmonic vs. power, relative to fundamental



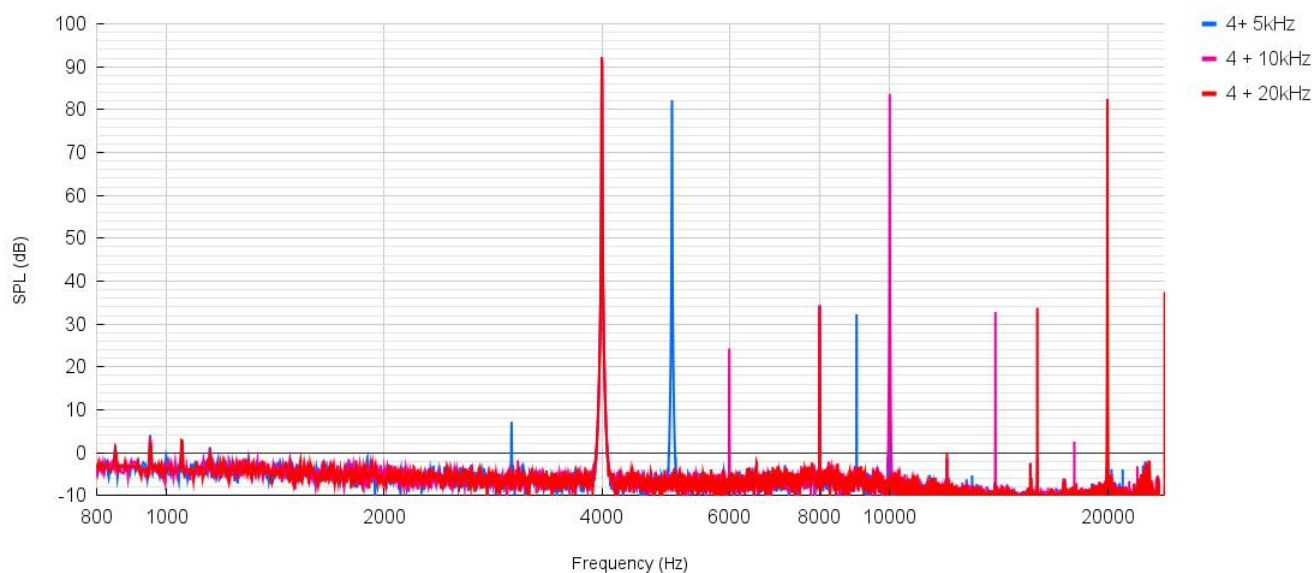
Intermodulation distortion at 1W, 1M, 1kHz modulation tone



Intermodulation distortion at 1W, 1M, 2kHz modulation tone

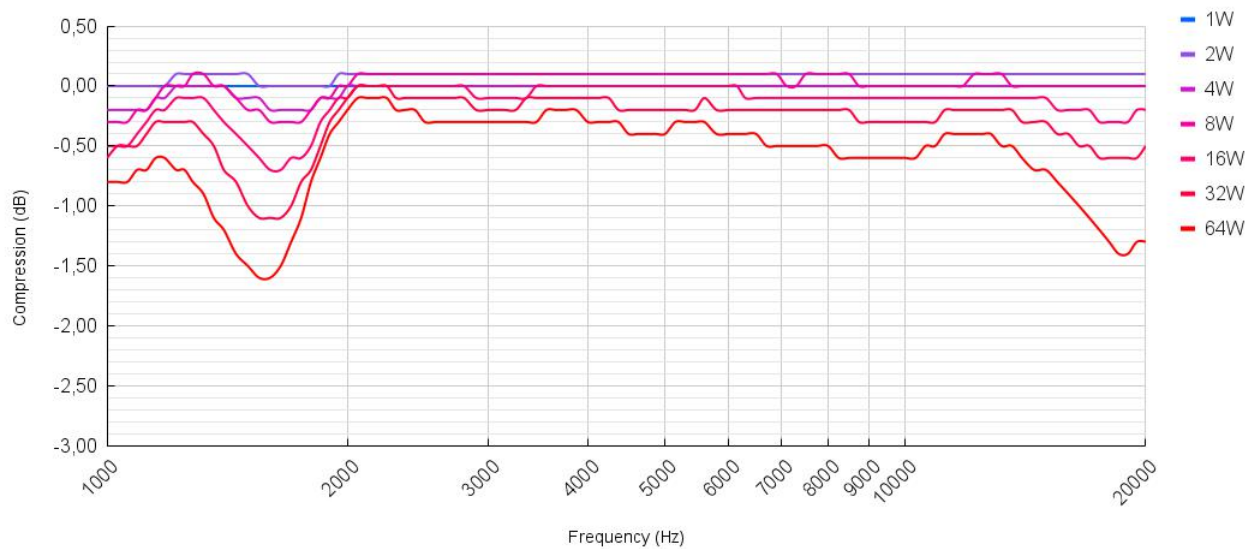


Intermodulation distortion at 1W, 1M, 4kHz modulation tone



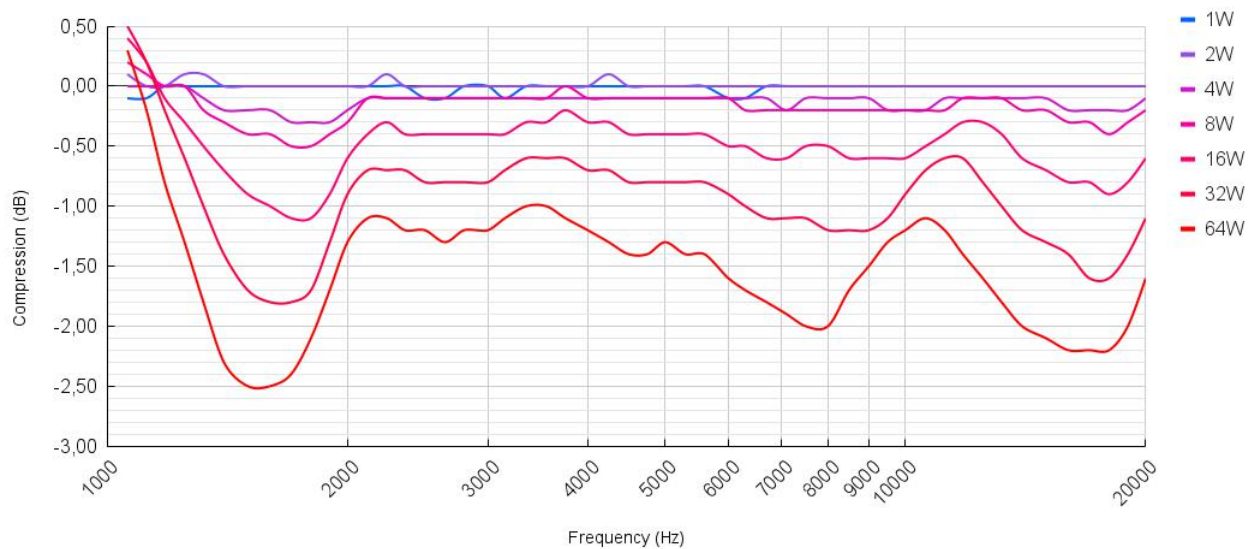
Instantaneous power compression, 0,7 second logarithmic sine sweep

0,7 second logarithmic sine sweeps played consecutively, starting with 1W. All measurements normalized to the 1W result.



Instantaneous power compression, 2,7 second logarithmic sine sweep

2,7 second logarithmic sine sweeps played consecutively, starting with 1W. All measurements normalized to the 1W result.



Dimensions:

