



ASCENDO

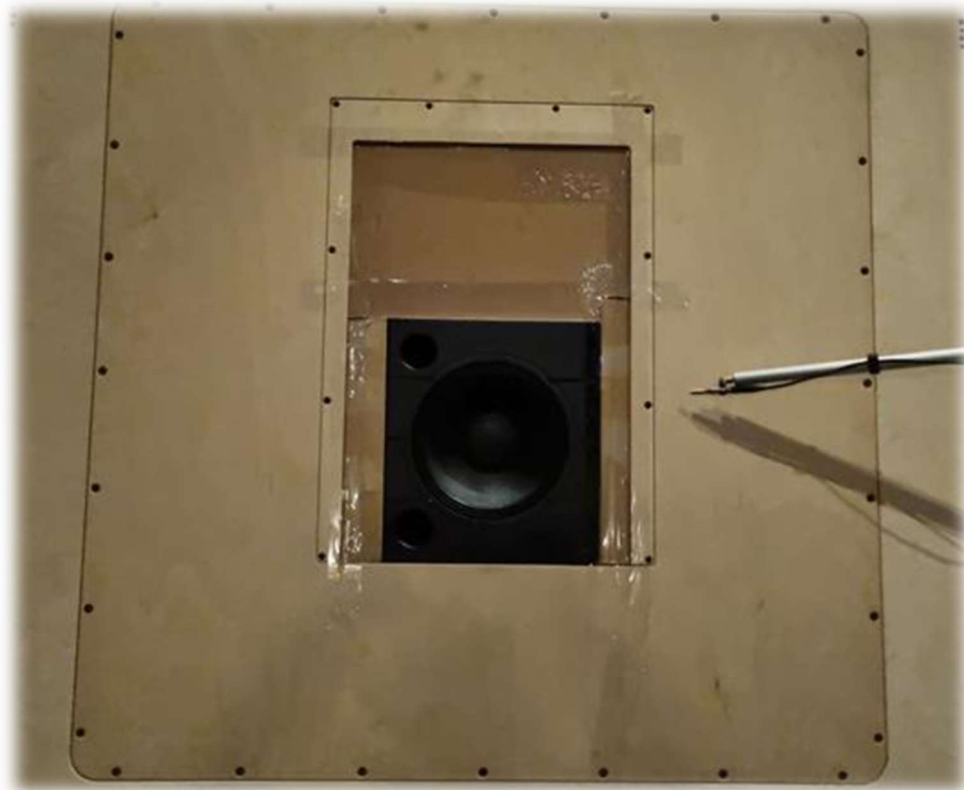
Report of THE 10 Passive Wedge Speaker

Date	Author	Changes	Version
09/02/2024	GL		V0

Summary

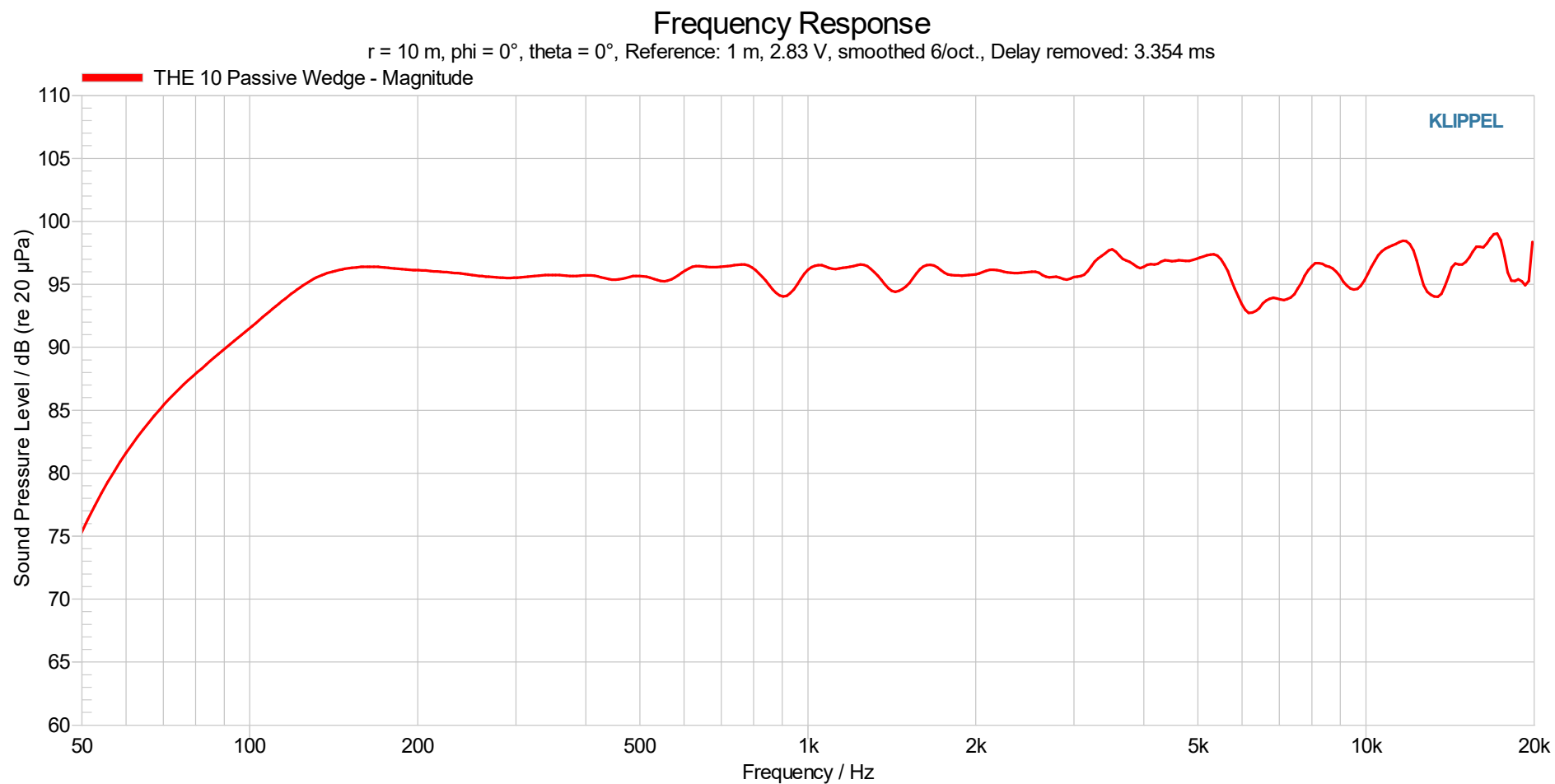
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1. Pictures of measurements



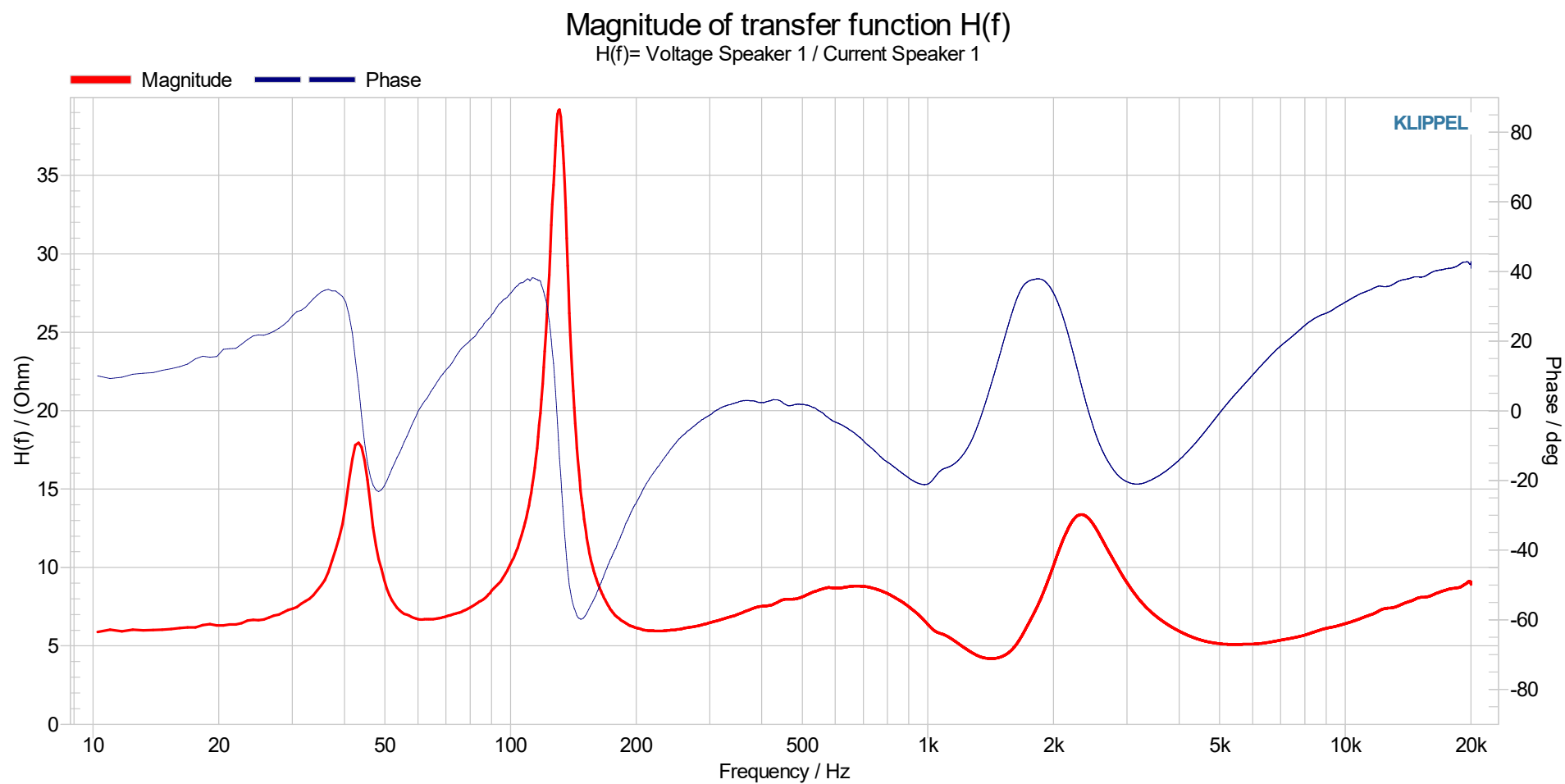
2. Frequency Response

2,83v @1m – 1/6 oct. Smoothing



3. Impedance Curve

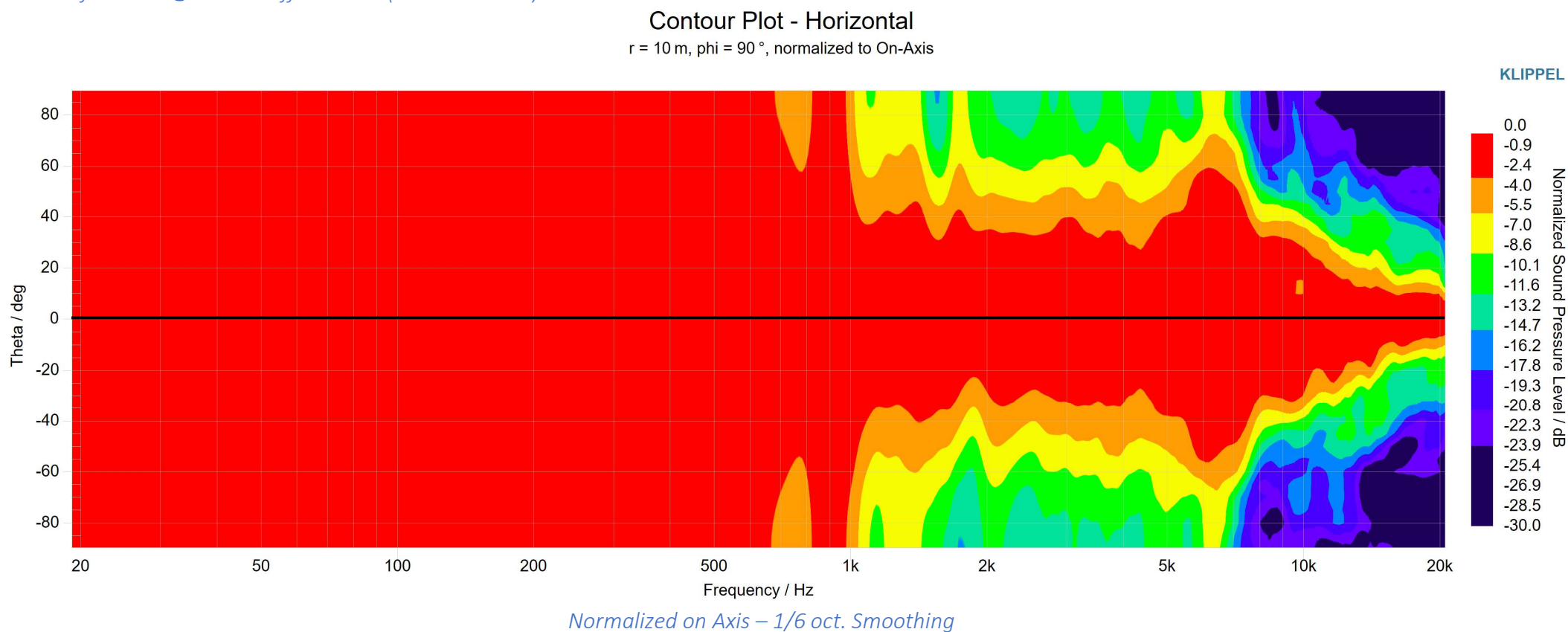
1v – No. Smoothing



4. Contour Plot

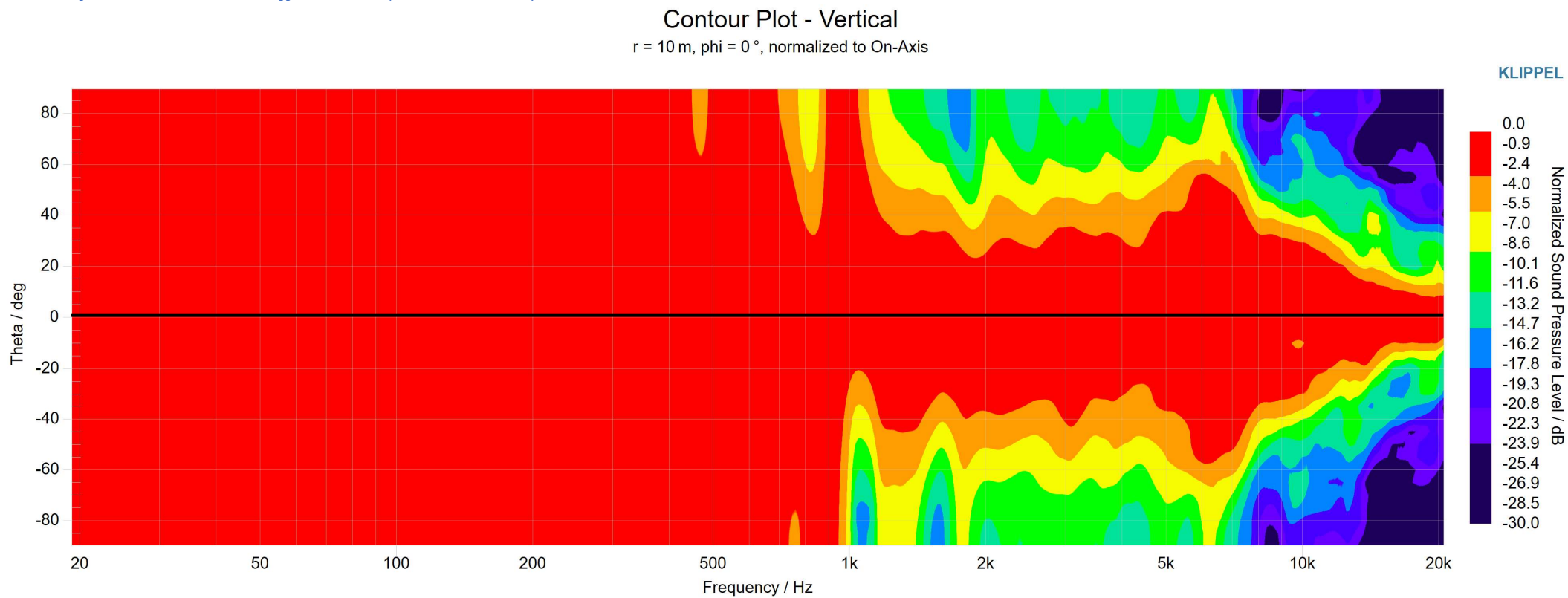
4.1. Horizontal

Referenced @10m – Baffle loaded (2π steradians)



4.2. Vertical

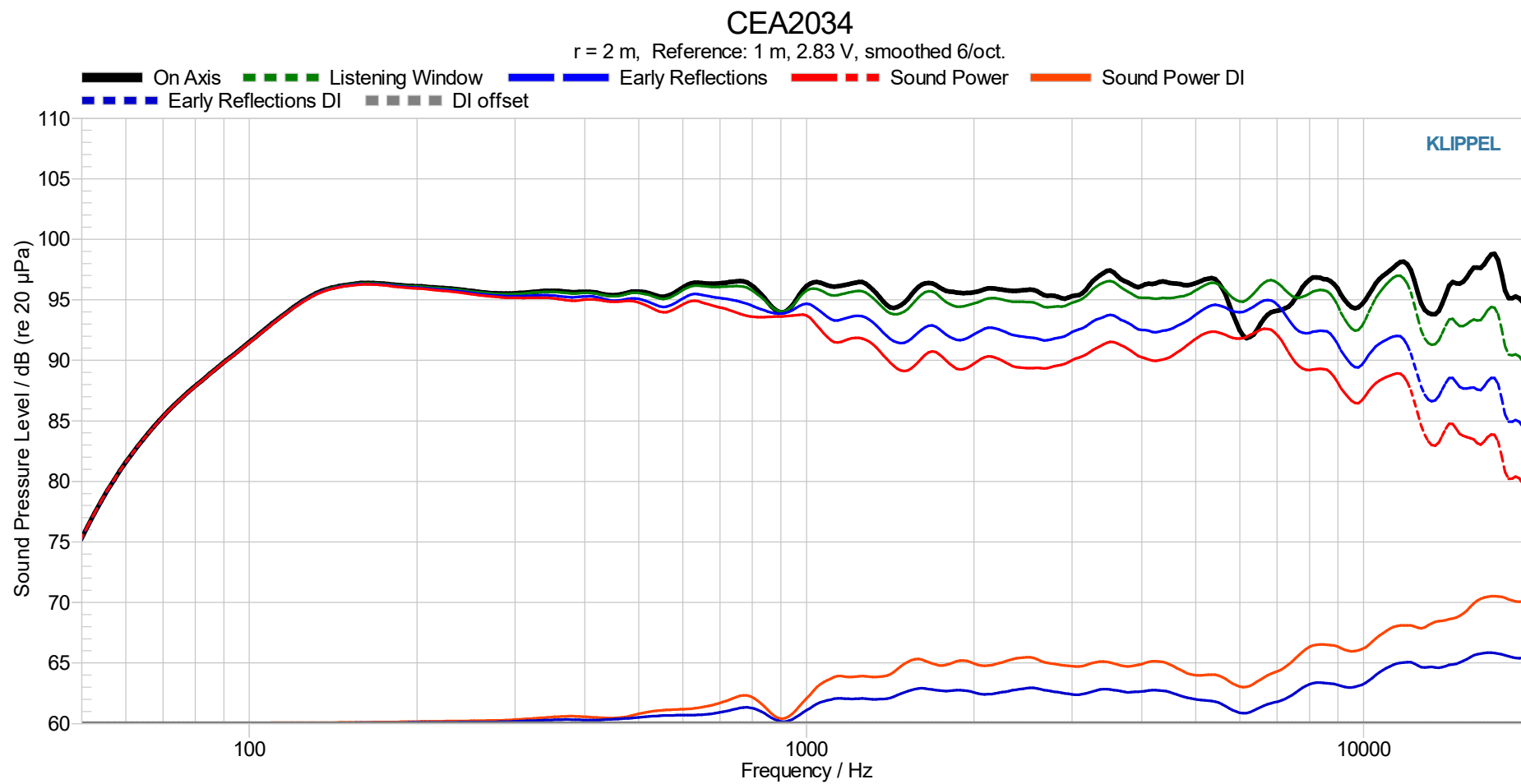
Referenced @10m – Baffle loaded (2π steradians)



Normalized on Axis – 1/6 oct. Smoothing

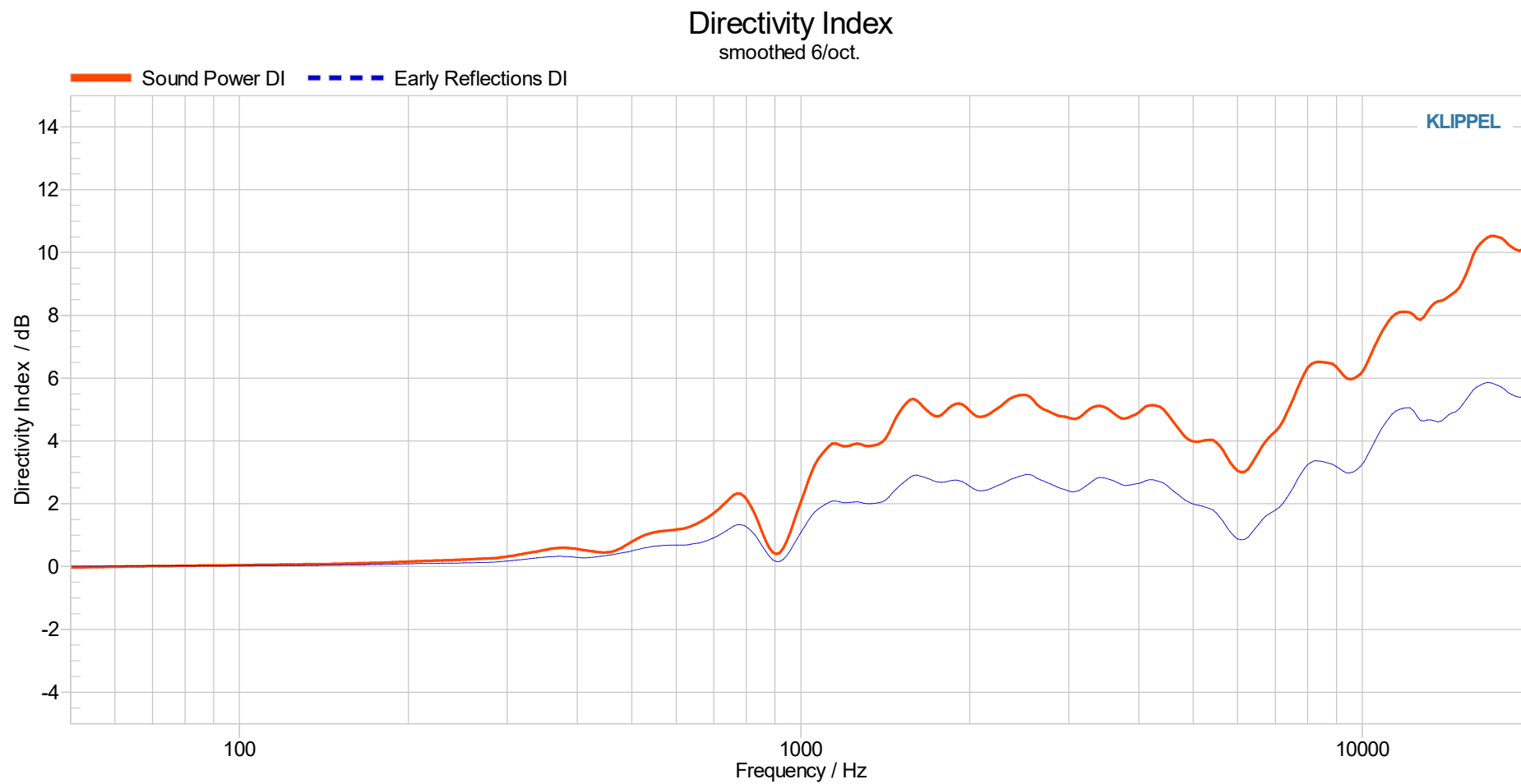
5. CEA2034 Spinorama

2,83v @1m – 1/6 oct. Smoothing



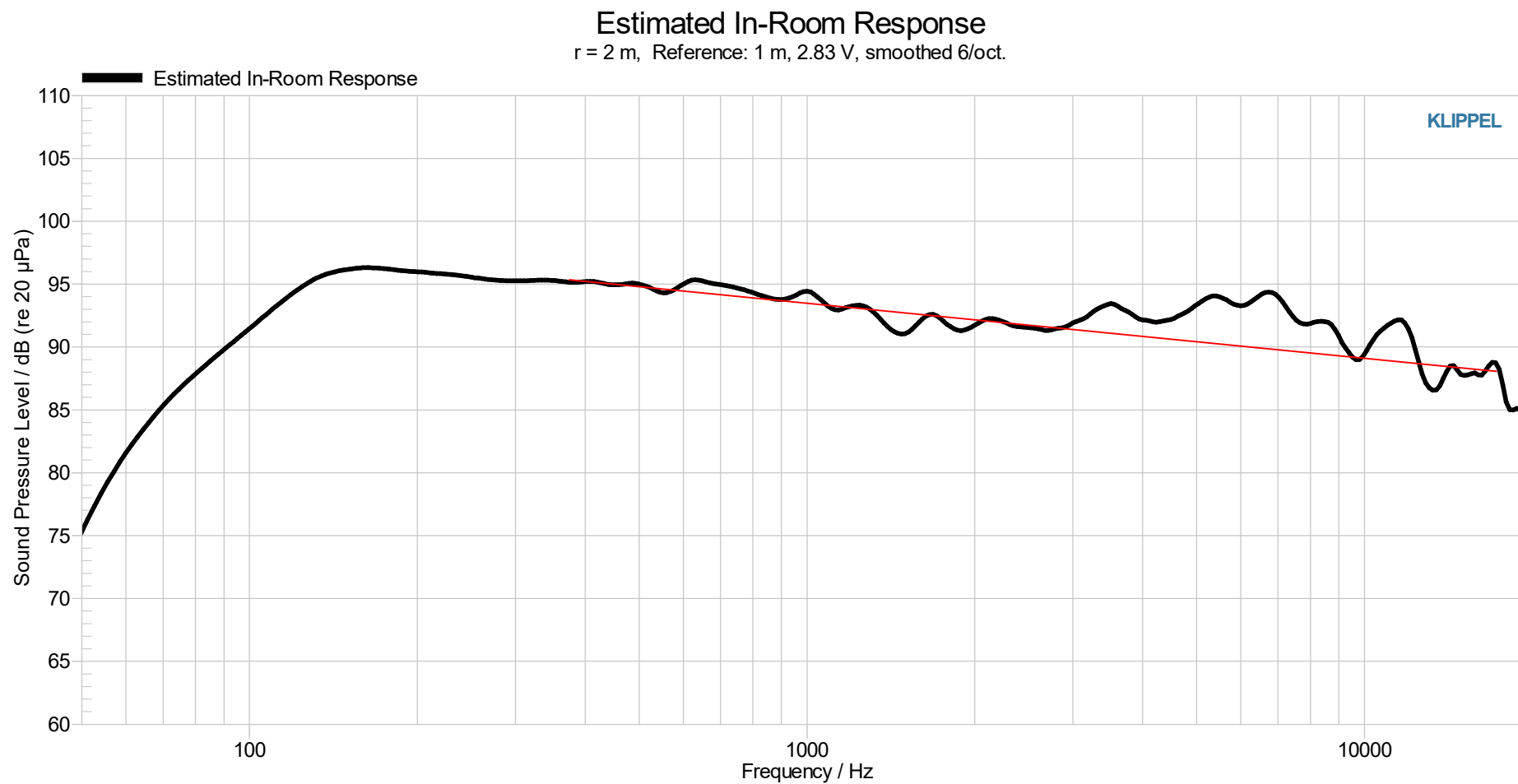
5.1. Directivity Index

1/6 oct. Smoothing



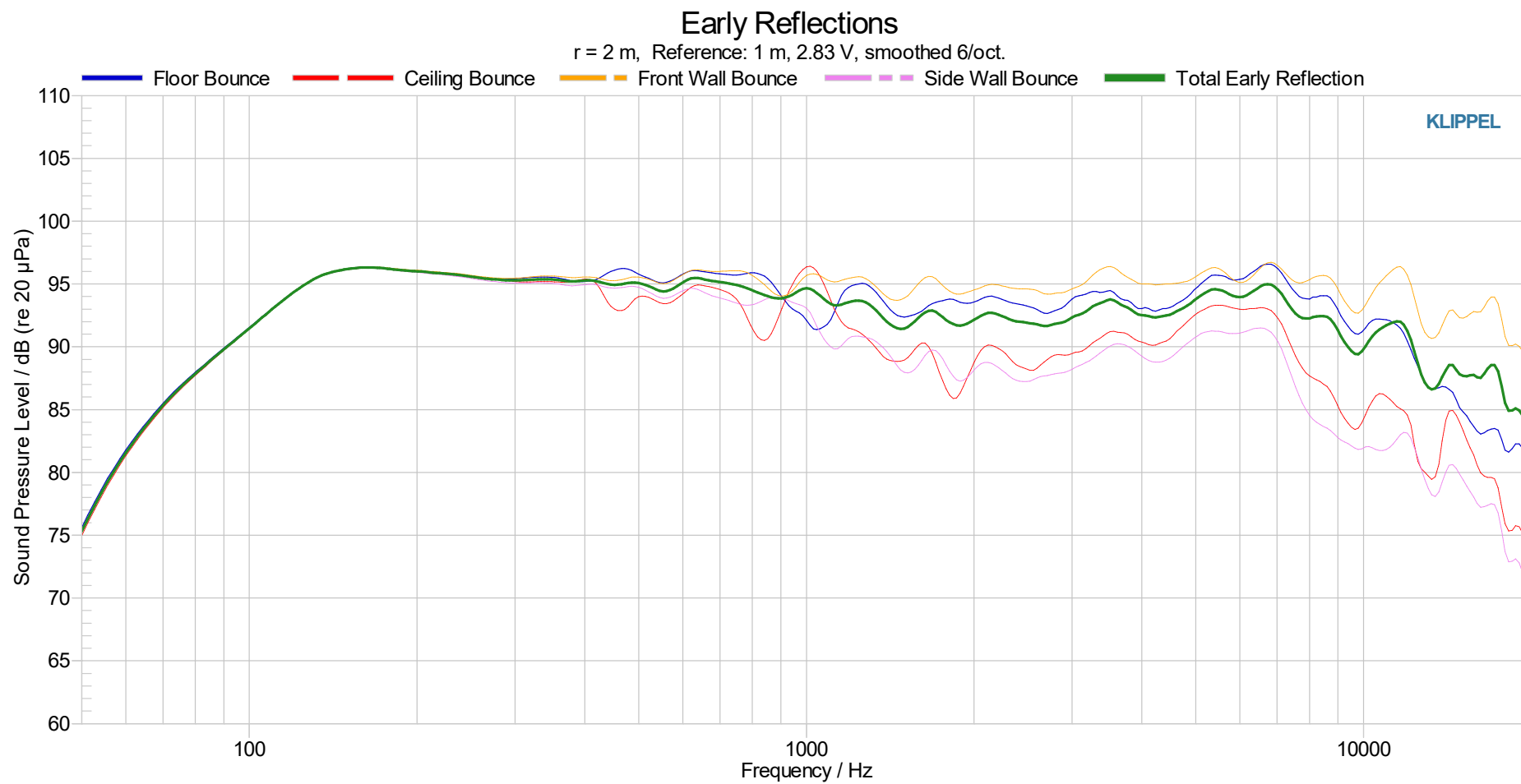
5.2. In-Room response

1/6 oct. Smoothing



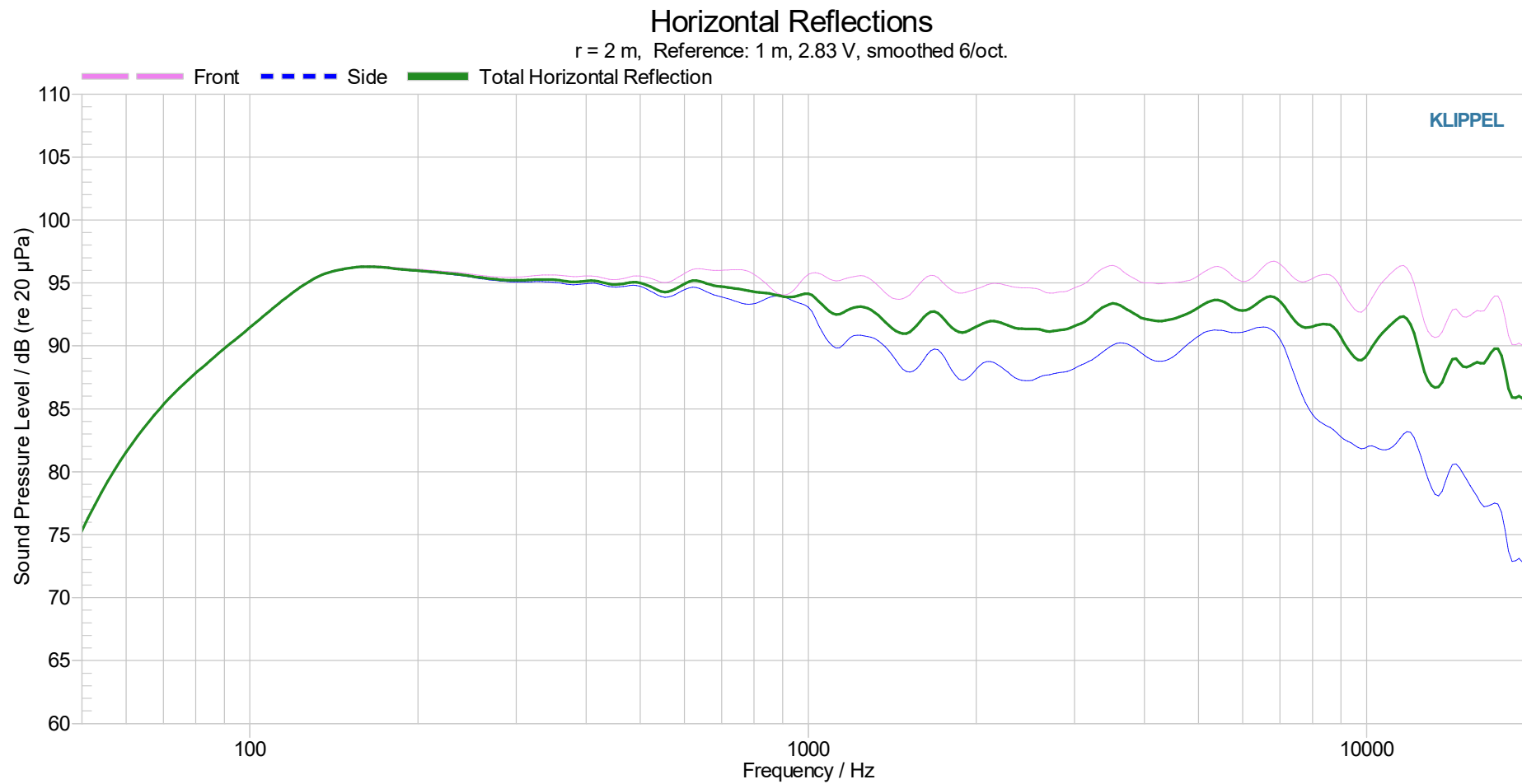
5.3. Early reflections

1/6 oct. Smoothing



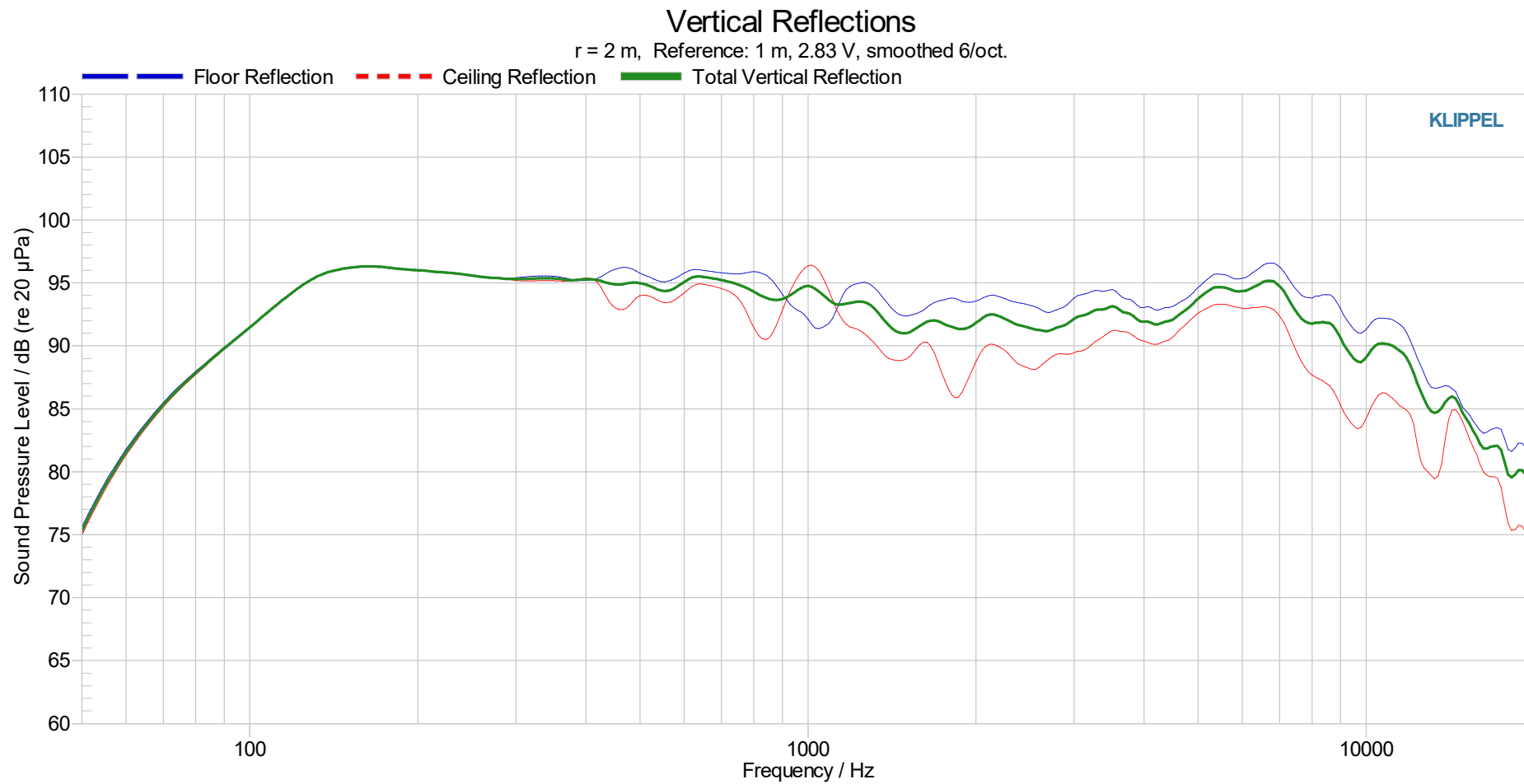
5.4. Horizontal Reflections

1/6 oct. Smoothing



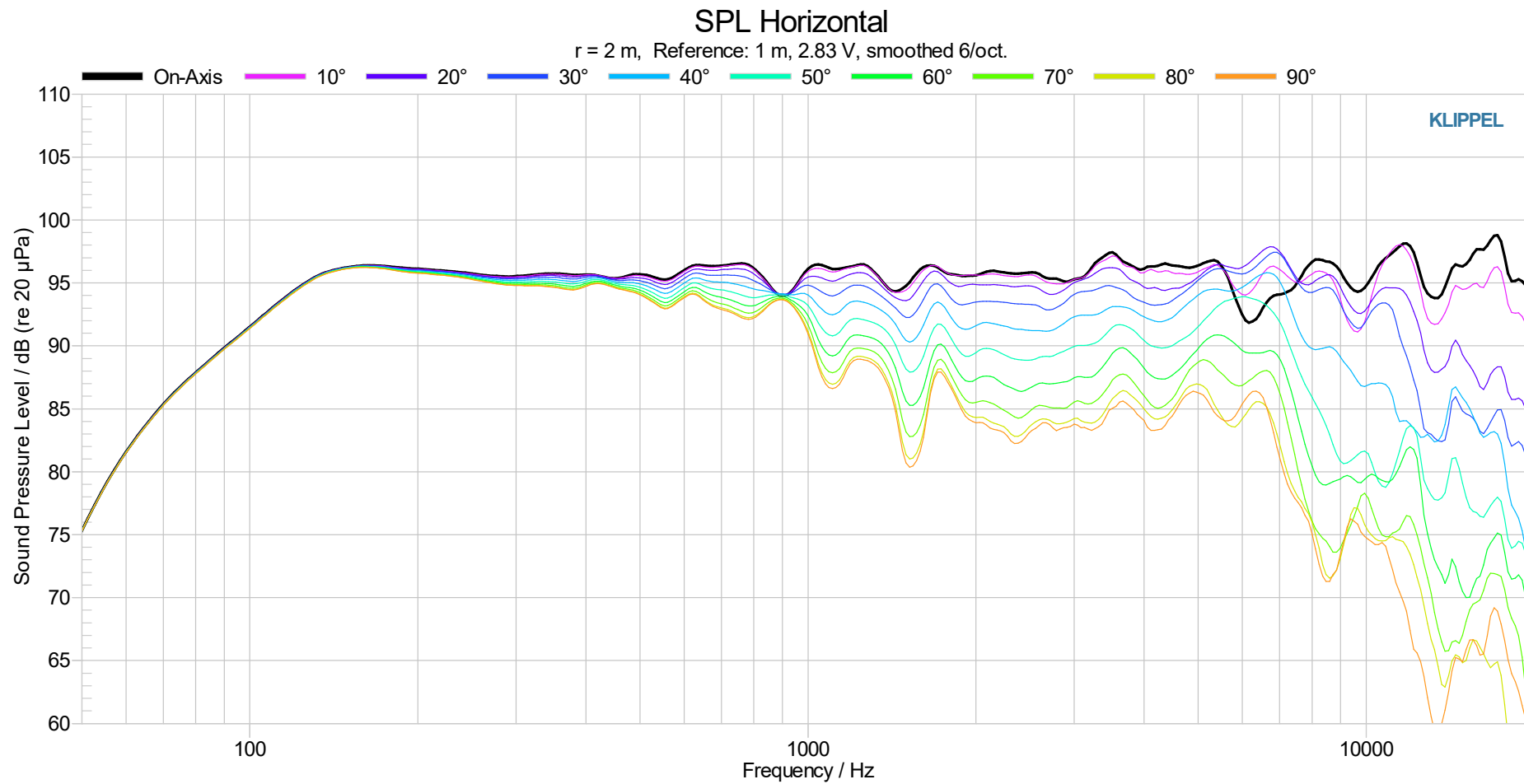
5.5. Vertical Reflections

1/6 oct. Smoothing



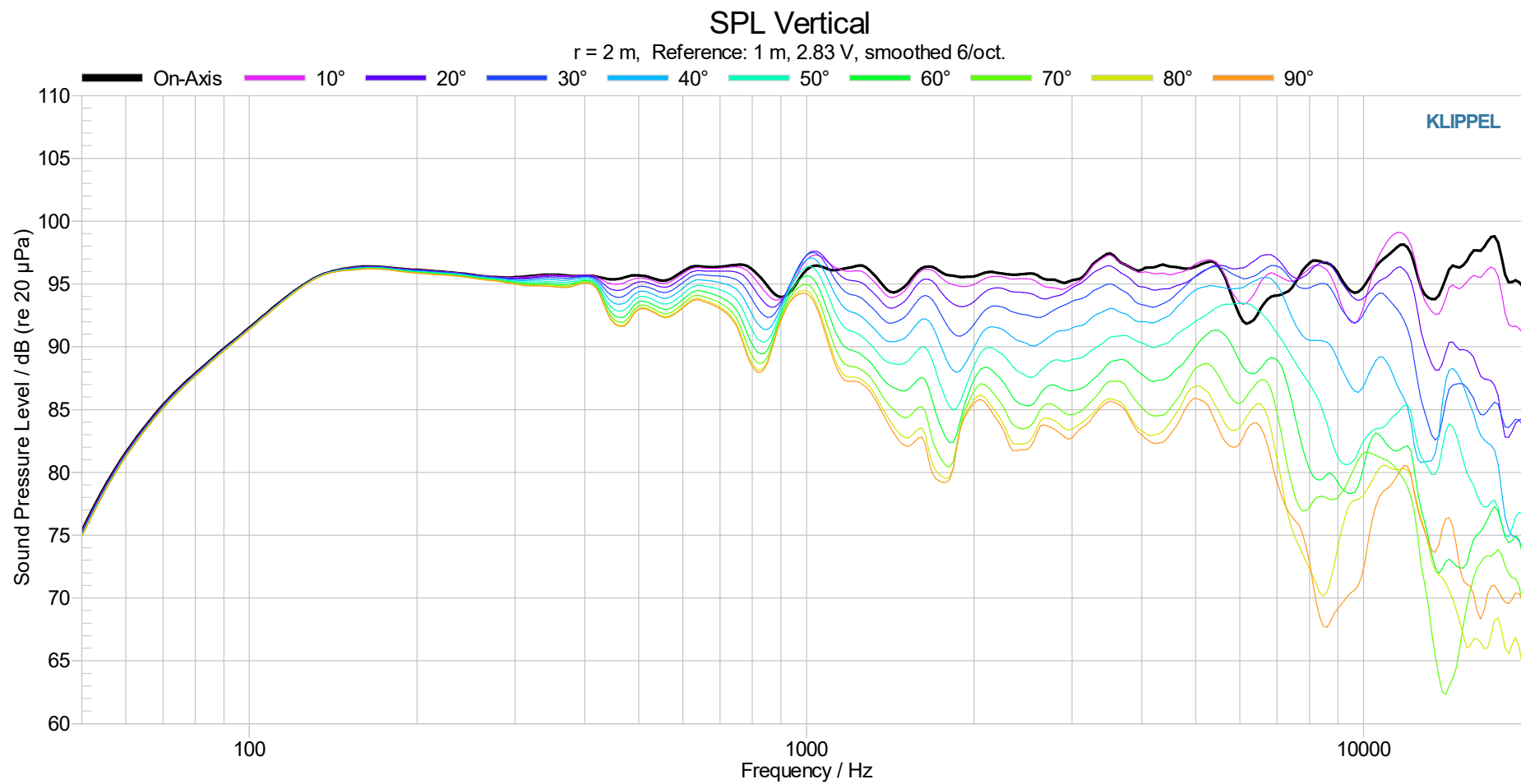
5.6. Horizontal Frequency Response

1/6 oct. Smoothing



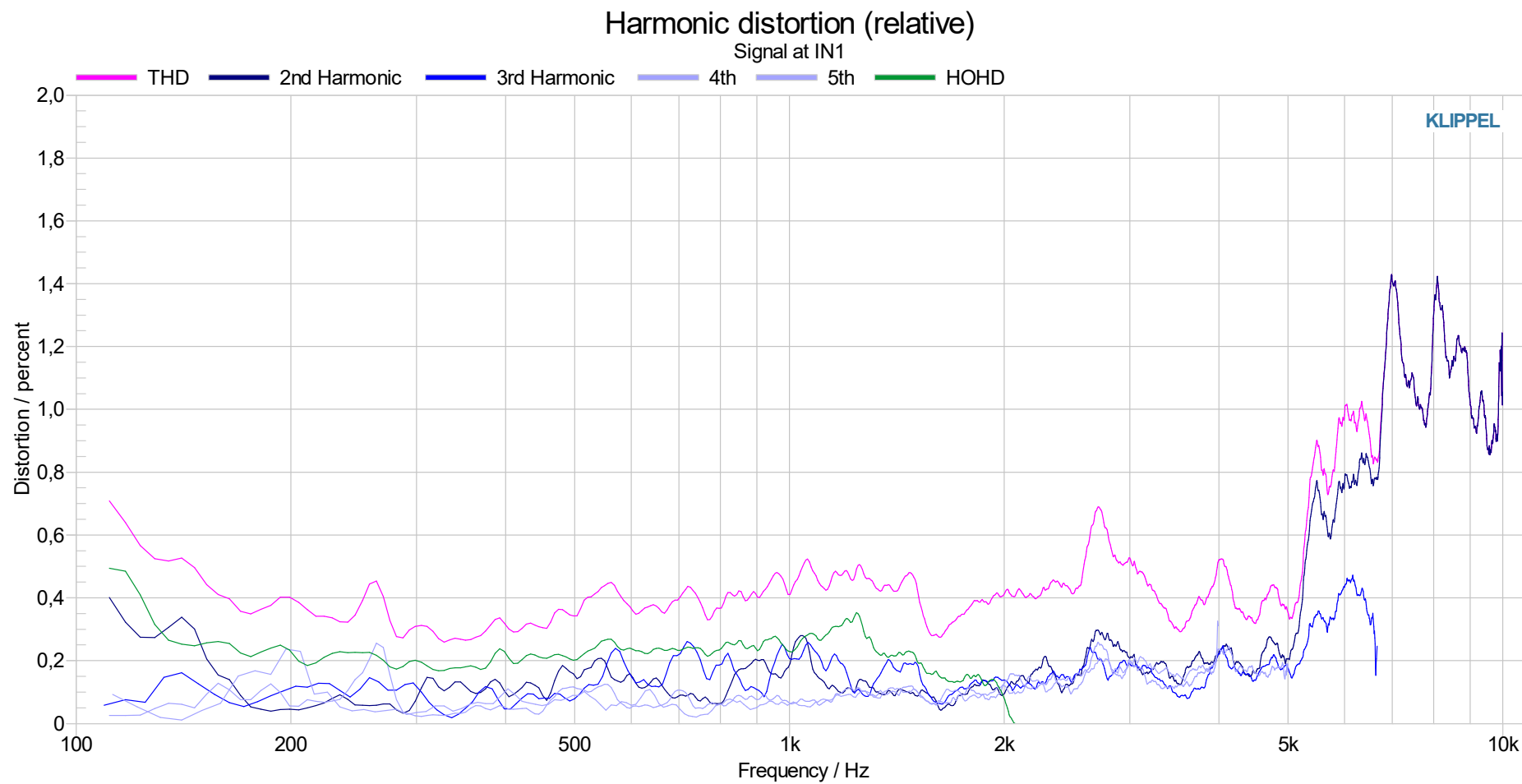
5.7. Vertical Frequency Response

1/6 oct. Smoothing



6. Harmonic Distortion

1/6 oct. Smoothing – +7dBu Stimulus



7. MTON Max SPL – 1s Stimulus

7.1. Results

Results of last passed measurement

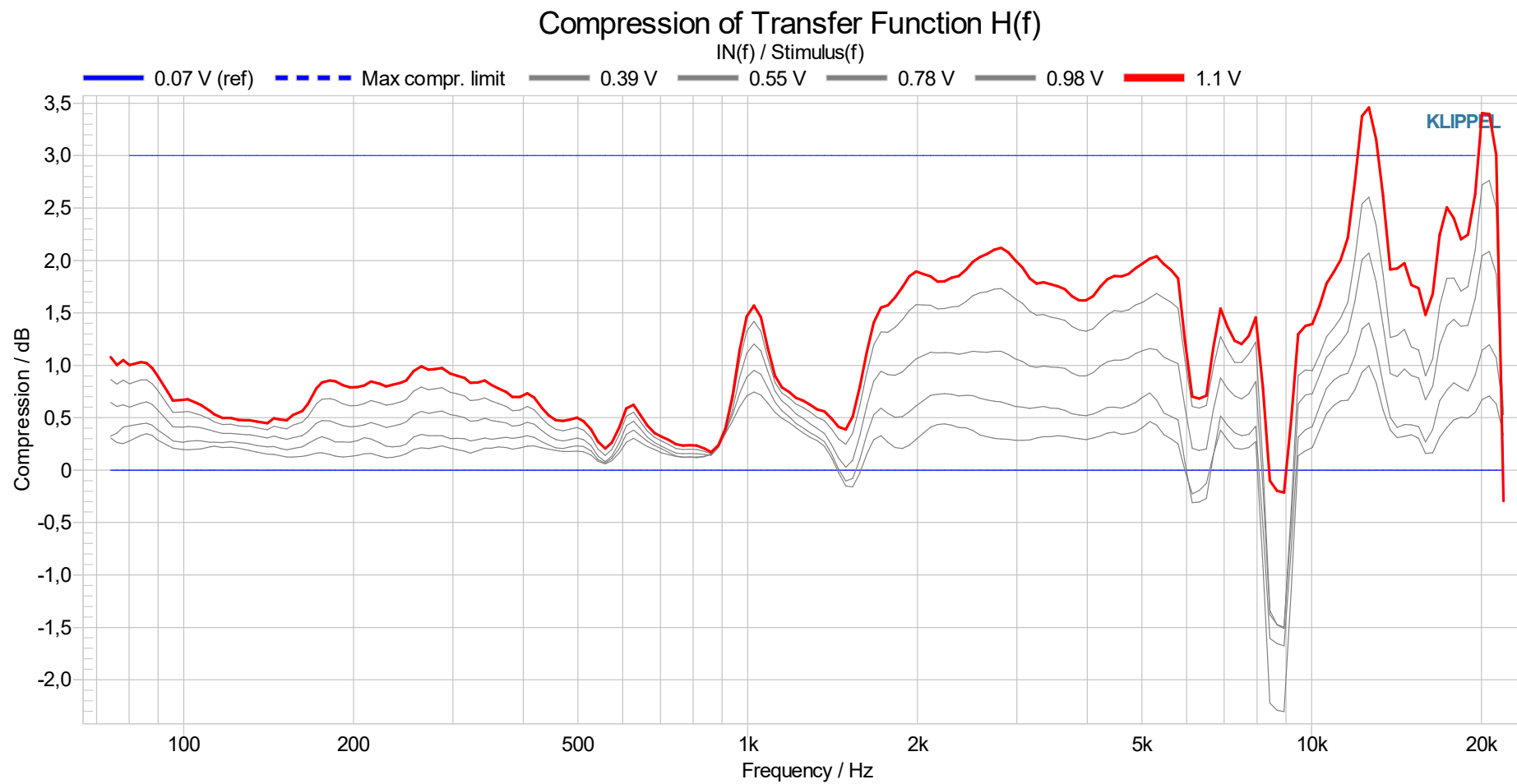
Parameter	Value	Unit	Description
$U_{\max}$	0.98	V	Root mean square of stimulus.
$SPL_{\max}$	117.44	dB	Sum level of fundamentals in microphone signal.
Eff. Freq. Range	90 - 5471	Hz	Effective frequency range (freq. response > SPL value - 10 dB).
$C_{\max}$	2.6	dB	Max compression in the frequency range 80 - 19494 Hz.
$RMD_{\max}$	16.38 (659.4)	dB (%)	Maximum spectral multi-tone distortion ratio of microphone signal.
TMDR	-20.89 (9)	dB (%)	Total multi-tone distortion ratio of microphone signal.

Stimulus properties

Parameter	Value	Unit	Description
$f_{\min}$	74.22	Hz	Lowest multi-tone frequency line
$f_{\max}$	21880.86	Hz	Highest multi-tone frequency line
t	0.51	s	Signal duration
K	2.95	-	Kurtosis
C	12.59	dB	Crest factor

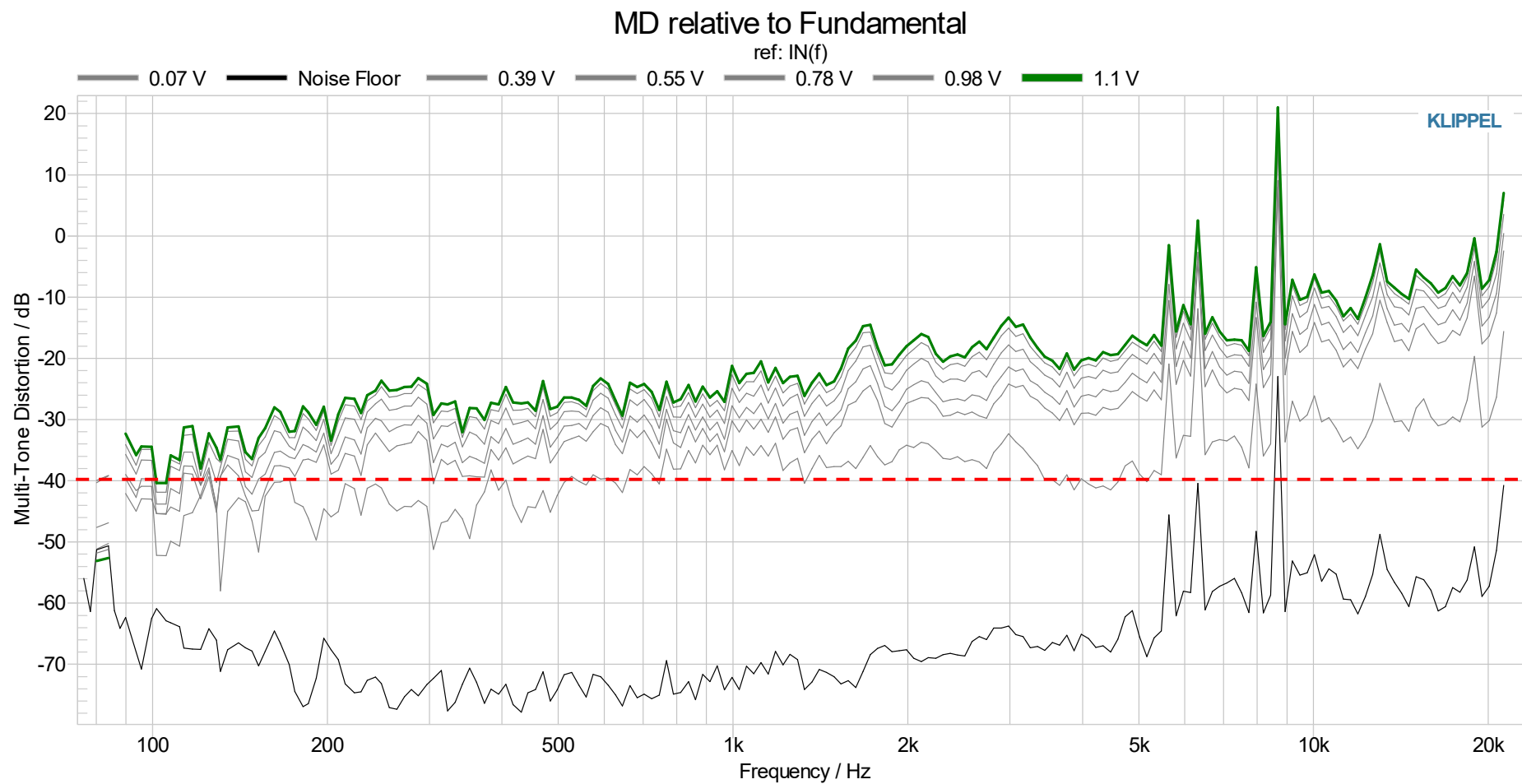
7.2. Compression Chart

-32dB Voltage Values – 1/6 Smoothing



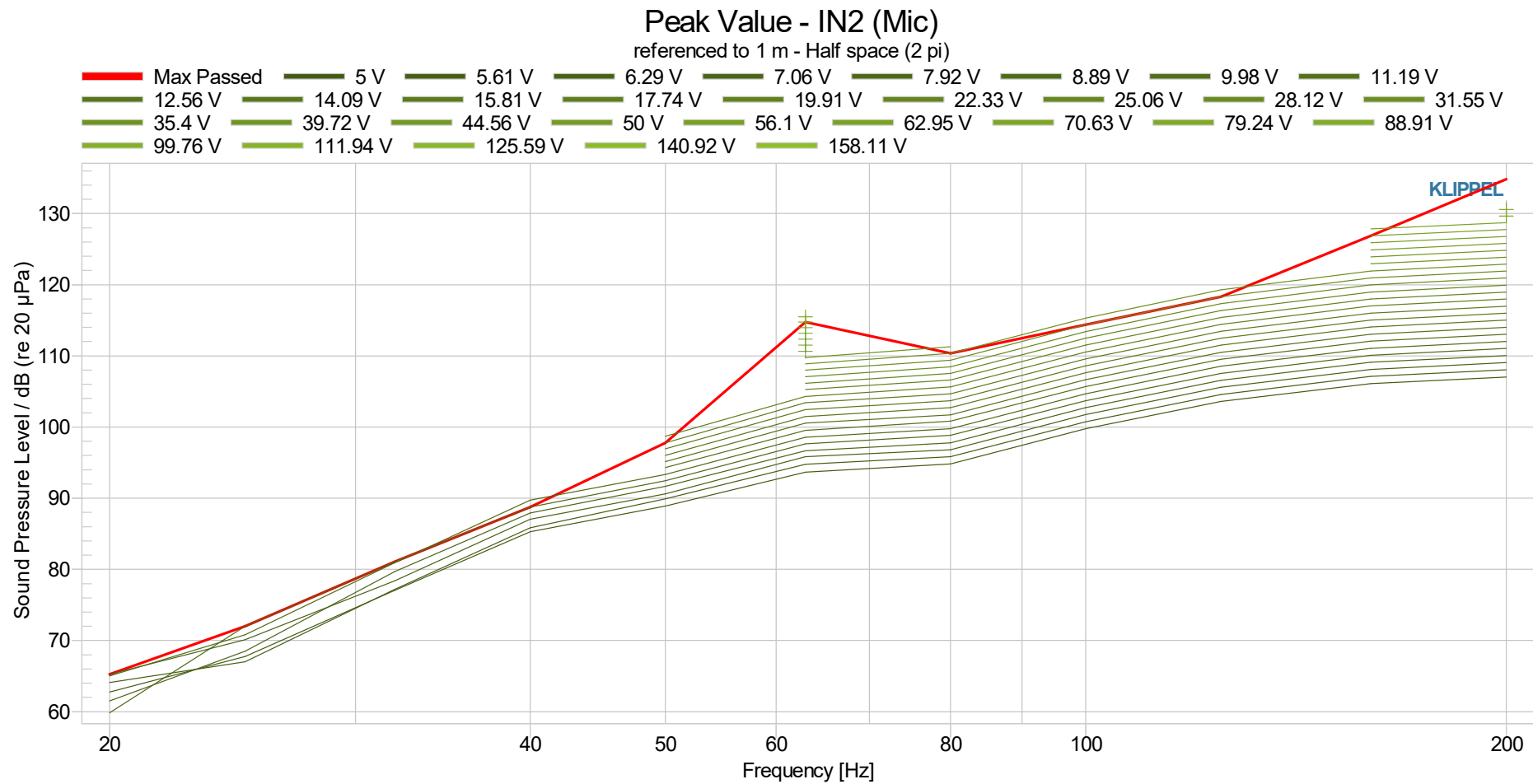
7.3. Multi Tone Distortion Chart

-32dB Voltage Values – No Smoothing



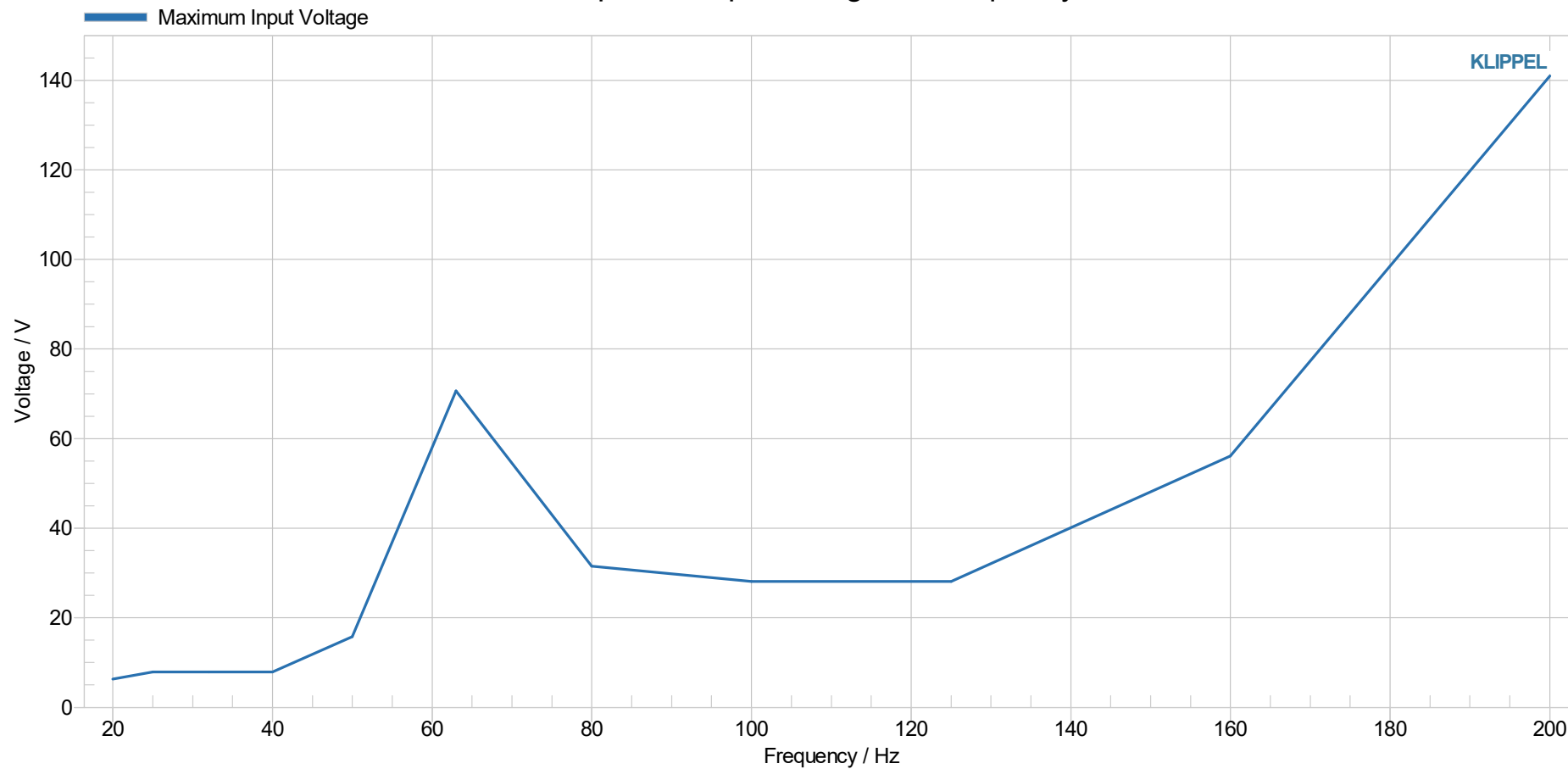
8. CEA2010B

8.1. Max Peak SPL



8.2. Max Peak Voltage

Maximum passed Input Voltage vs. Frequency Profile



8.3. THD on Burst

Total Burst Distortion - IN2 (Mic)

