



Report of THE12 PASSIVE ON WALL

ASCENDO

Date	Author	Changes	Version
15/06/2023	GL		V1
01/11/2023	GL		V2

Summary

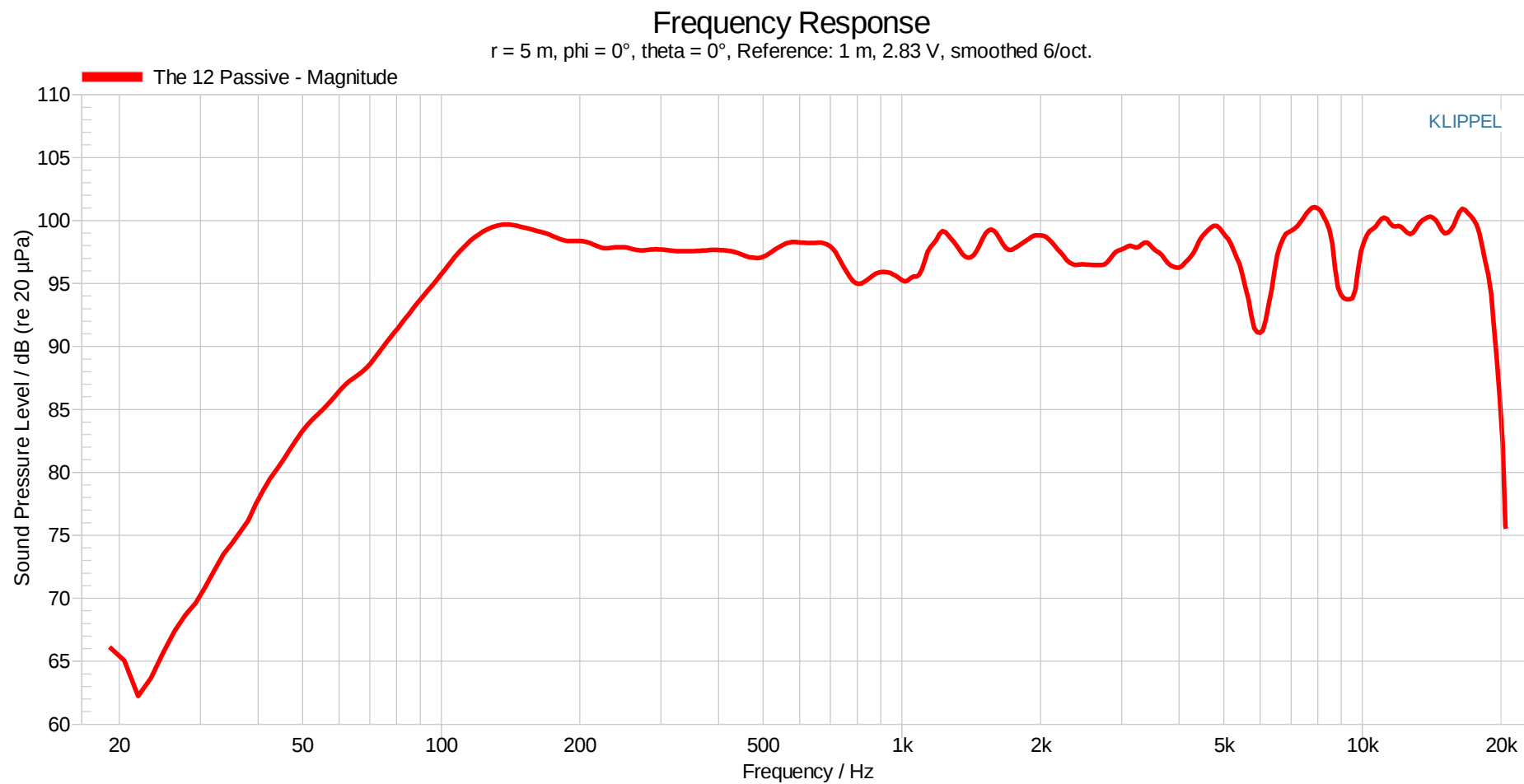
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1. Pictures of measurements



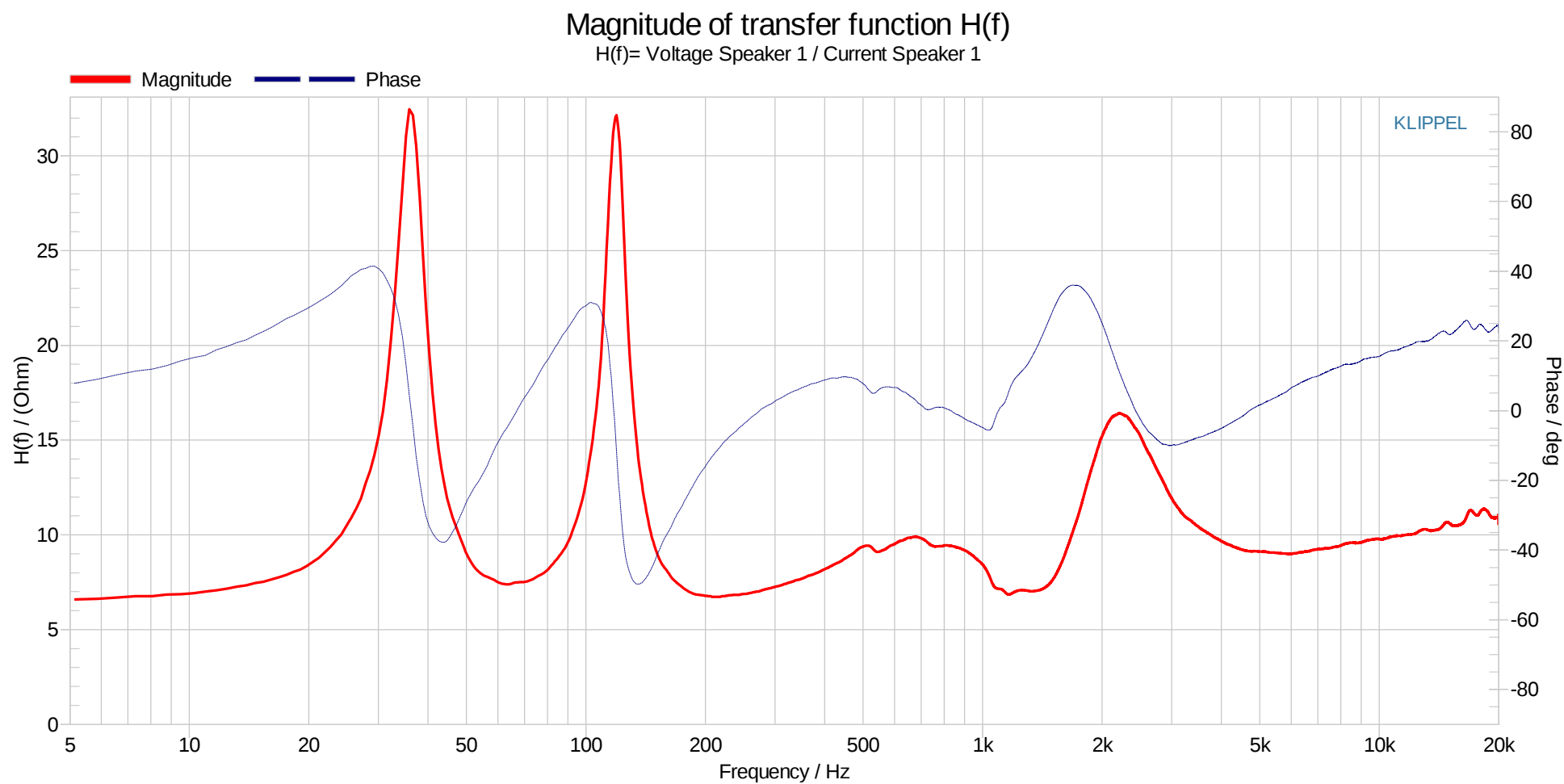
2. Frequency Response

2,83v @1m – 1/6 oct. Smoothing



3. Impedance Curve

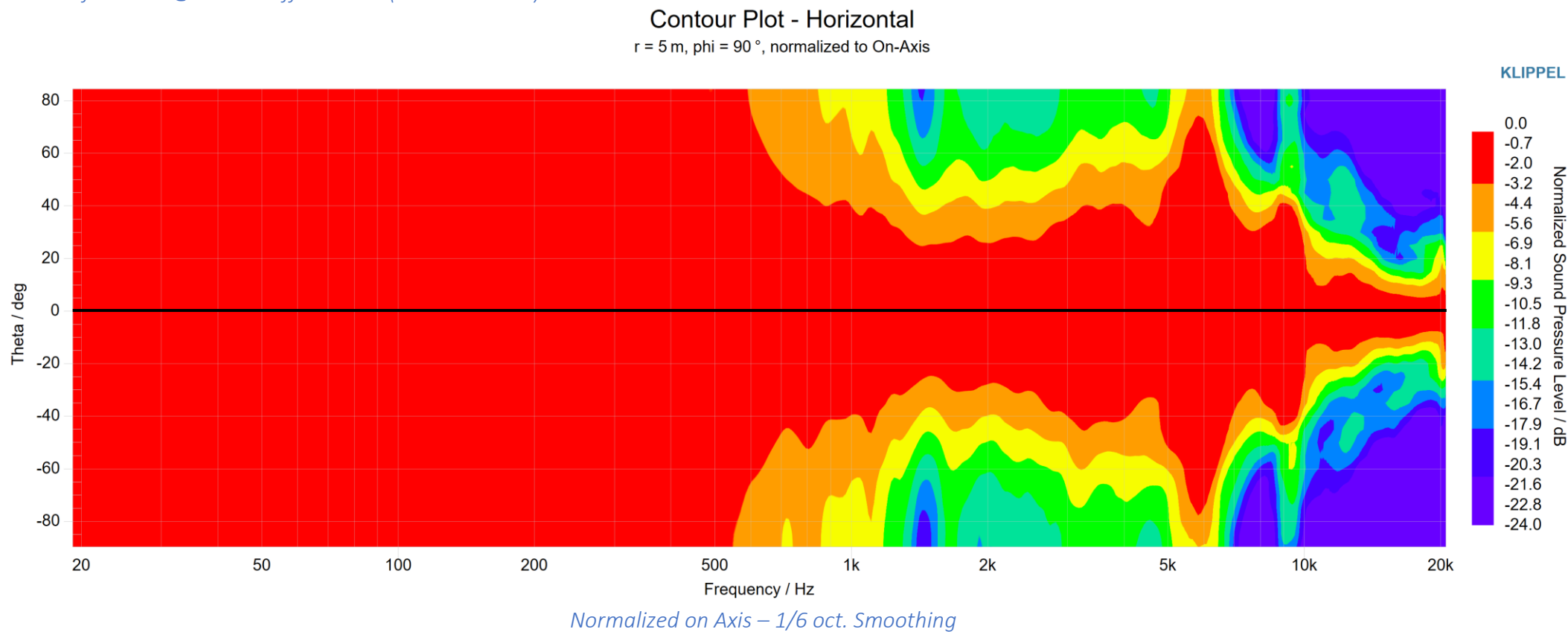
2,83v @1m – No Smoothing



4. Contour Plot

4.1. Horizontal

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



4.2. Vertical

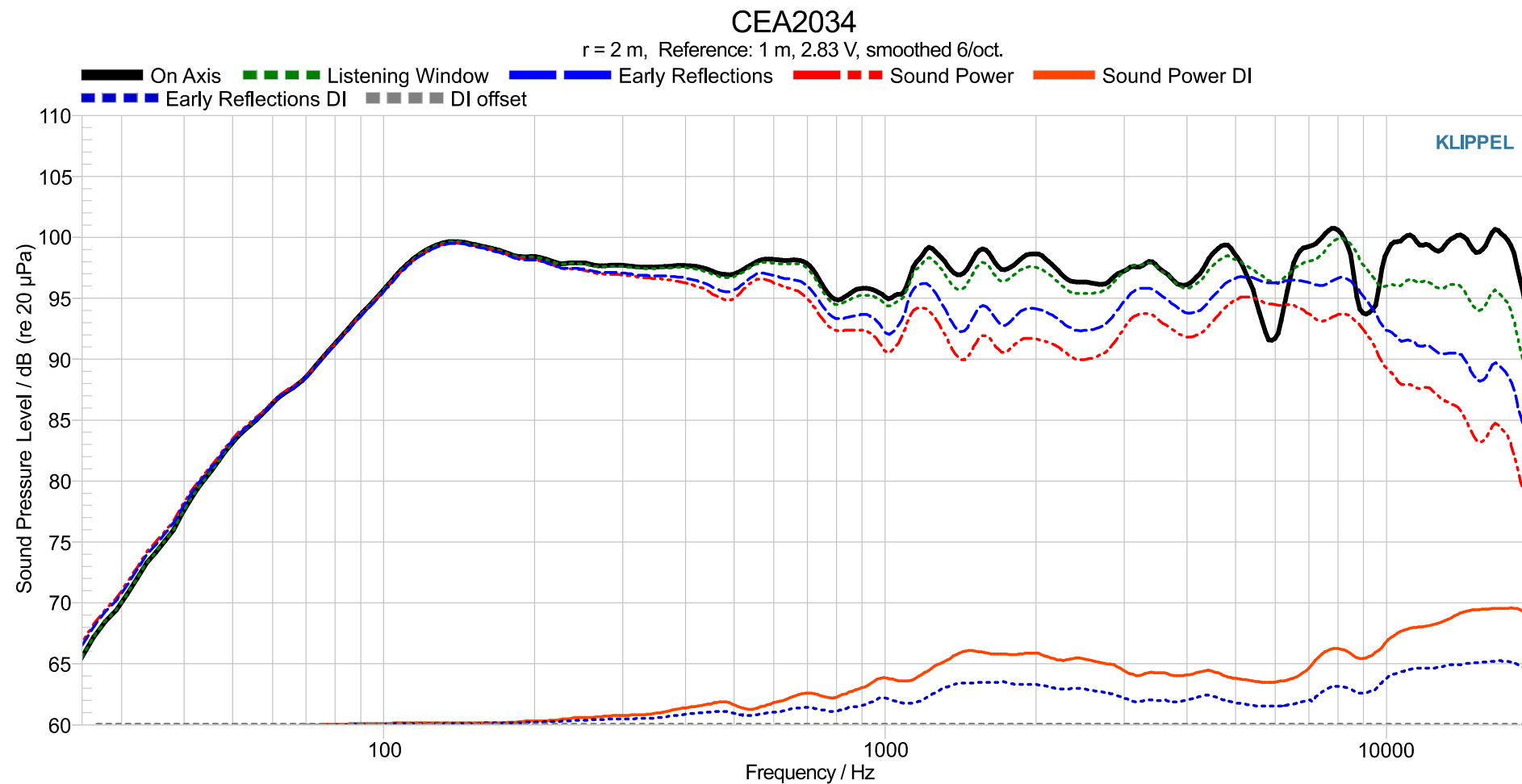
Referenced @10m – Baffle loaded (2π steradians)



Normalized on Axis – 1/6 oct. Smoothing

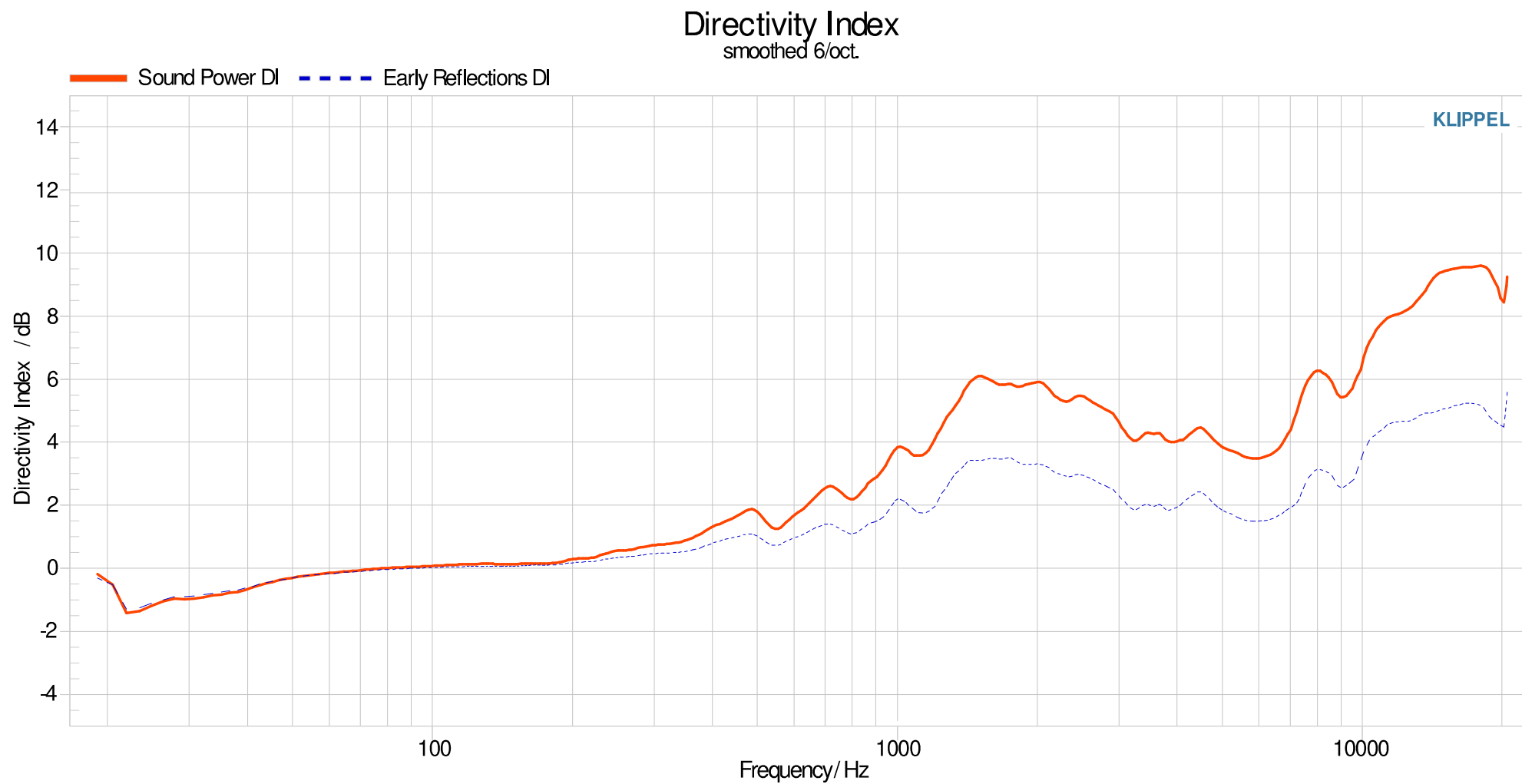
5. CEA2034 Spinorama

2,83v @1m – 1/6 oct. Smoothing



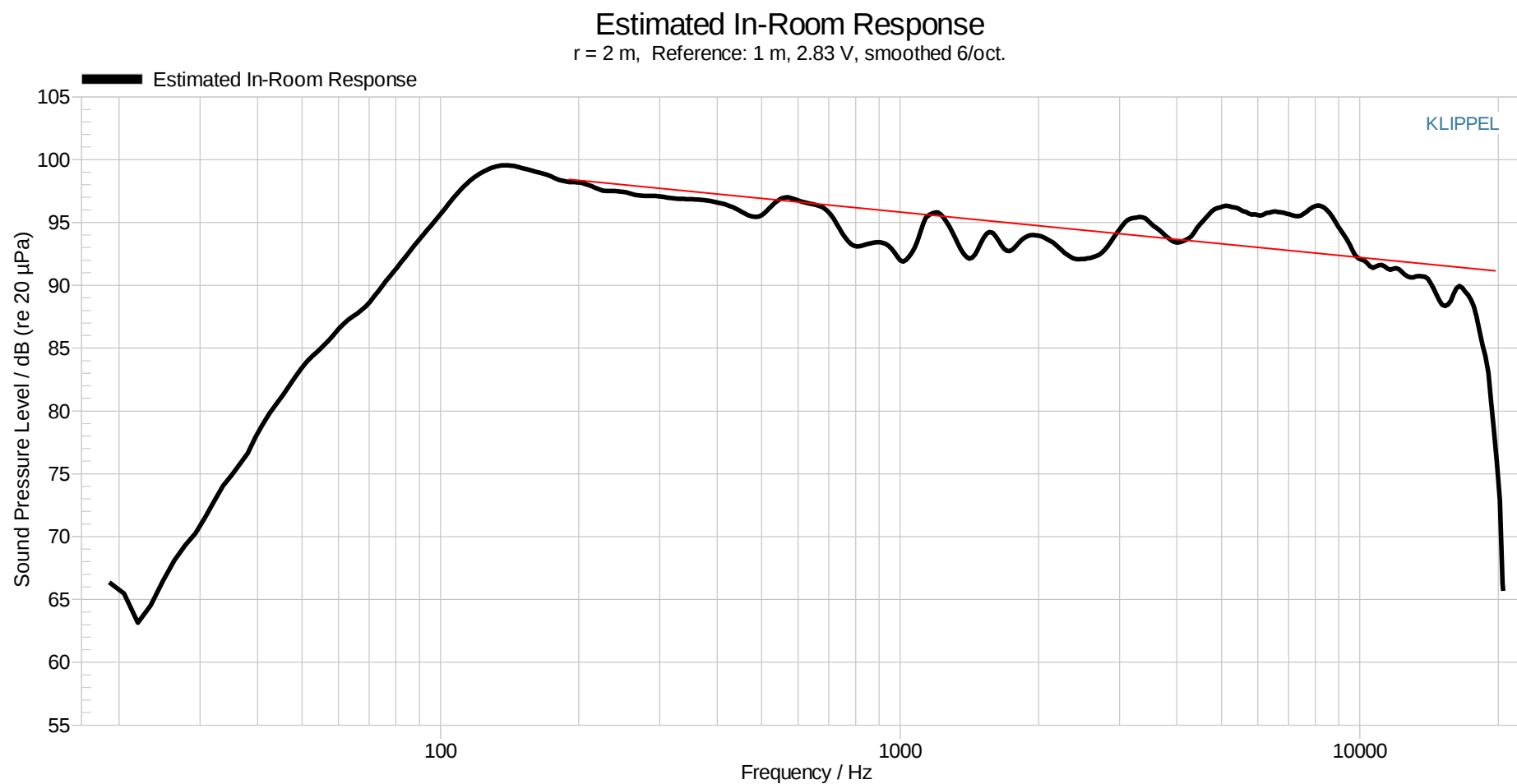
5.1. Directivity Index

1/6 oct. Smoothing



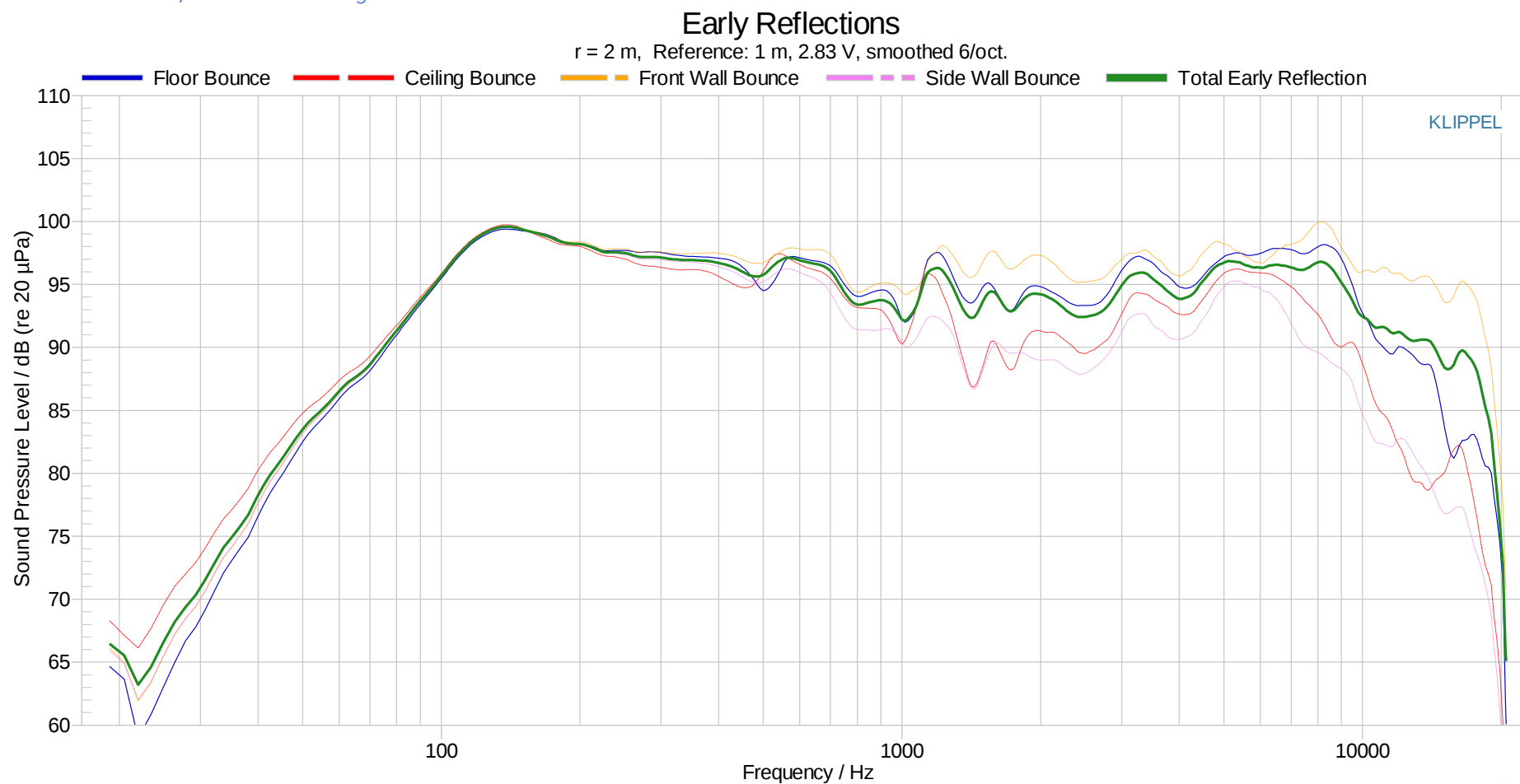
5.2. In-Room response

1/6 oct. Smoothing



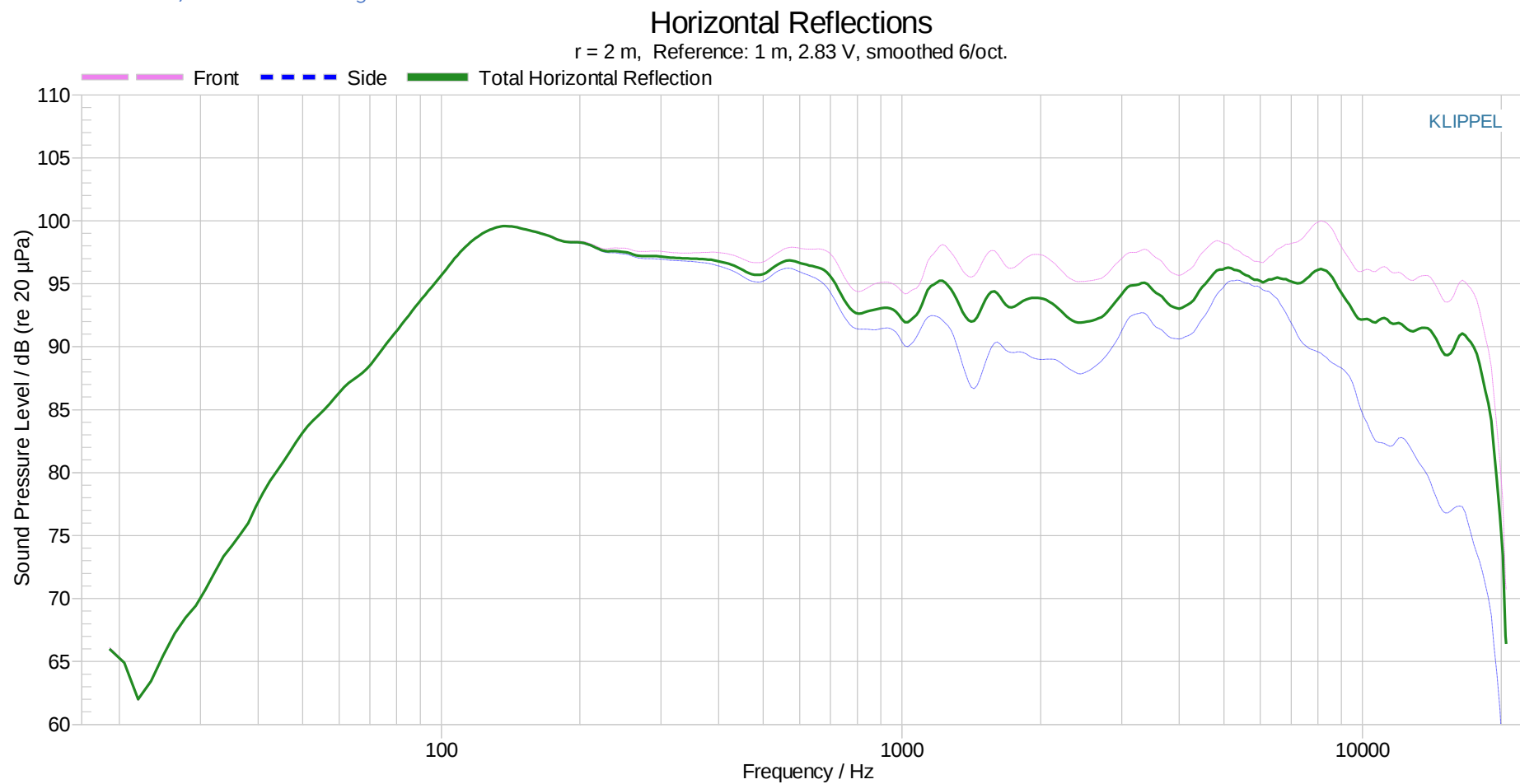
5.3. Early reflections

1/6 oct. Smoothing



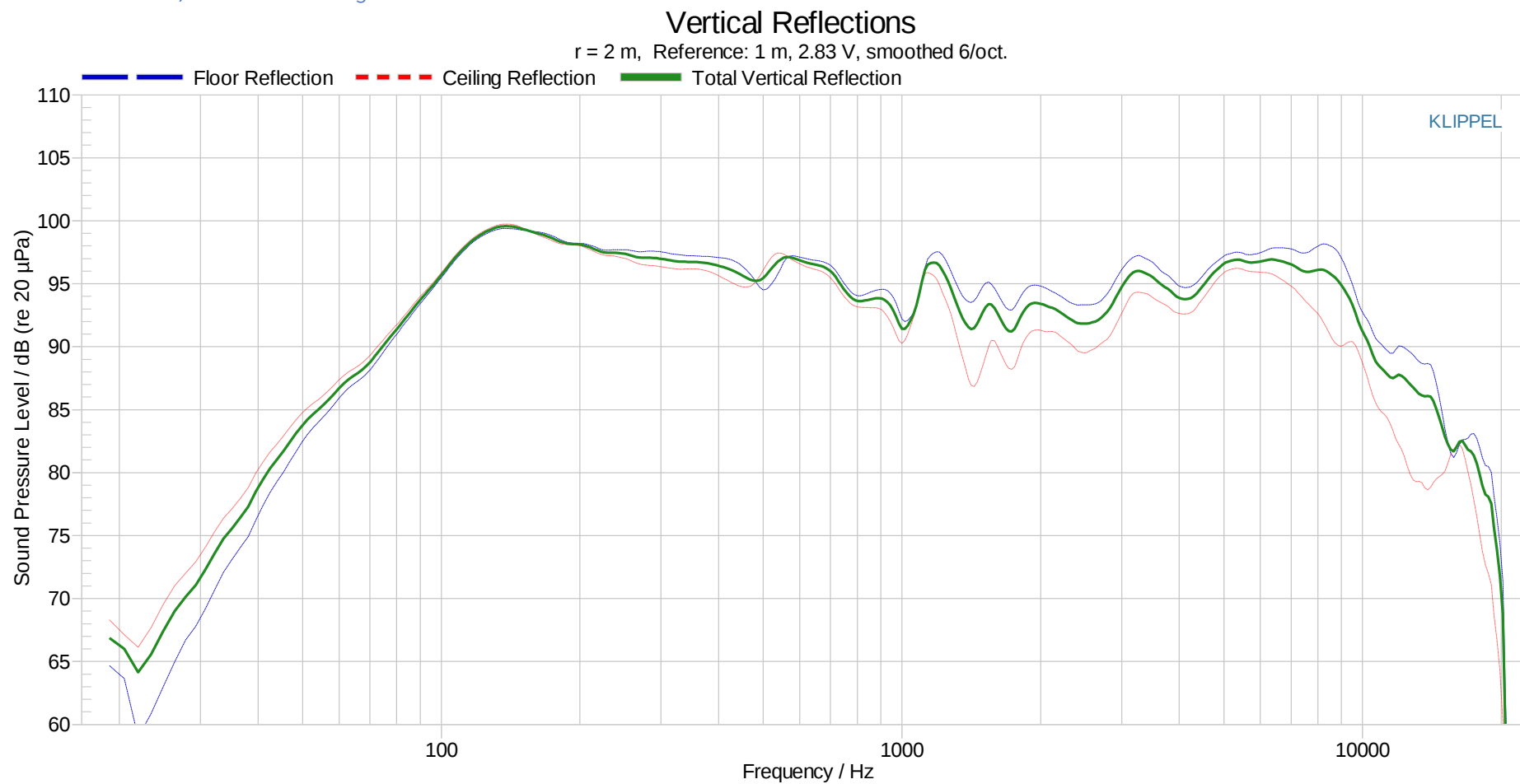
5.4. Horizontal Reflections

1/6 oct. Smoothing



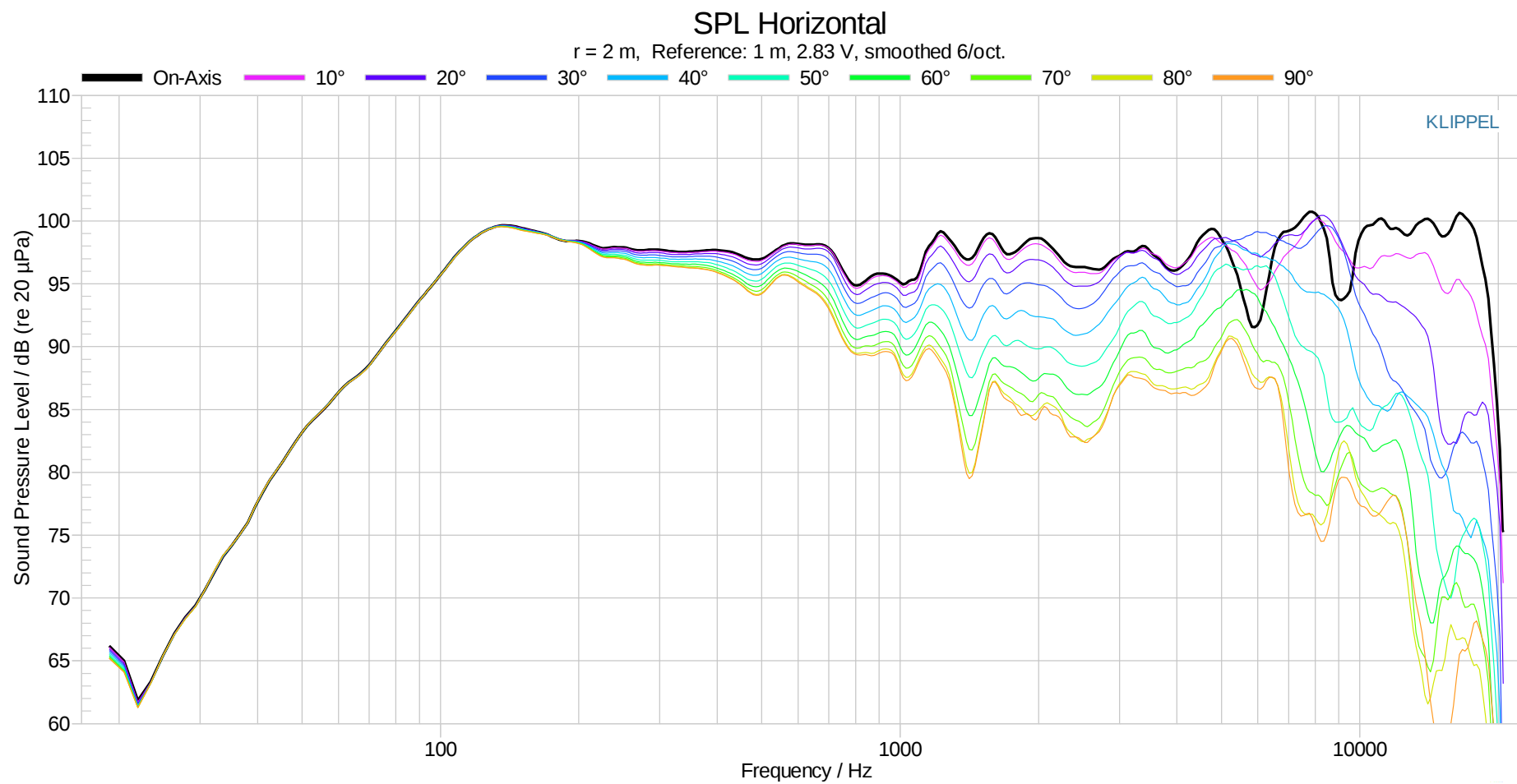
5.5. Vertical Reflections

1/6 oct. Smoothing



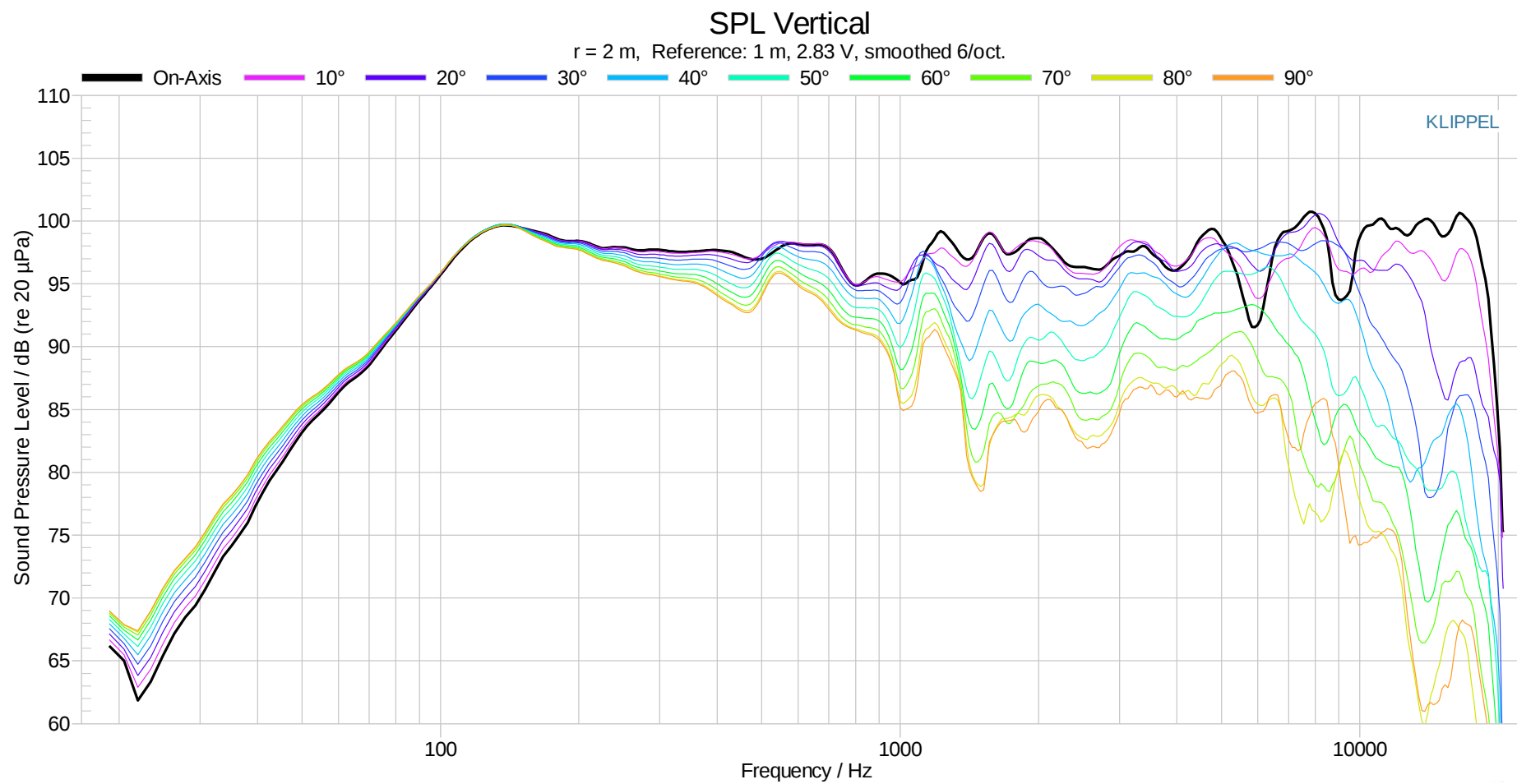
5.6. Horizontal Frequency Response

1/6 oct. Smoothing



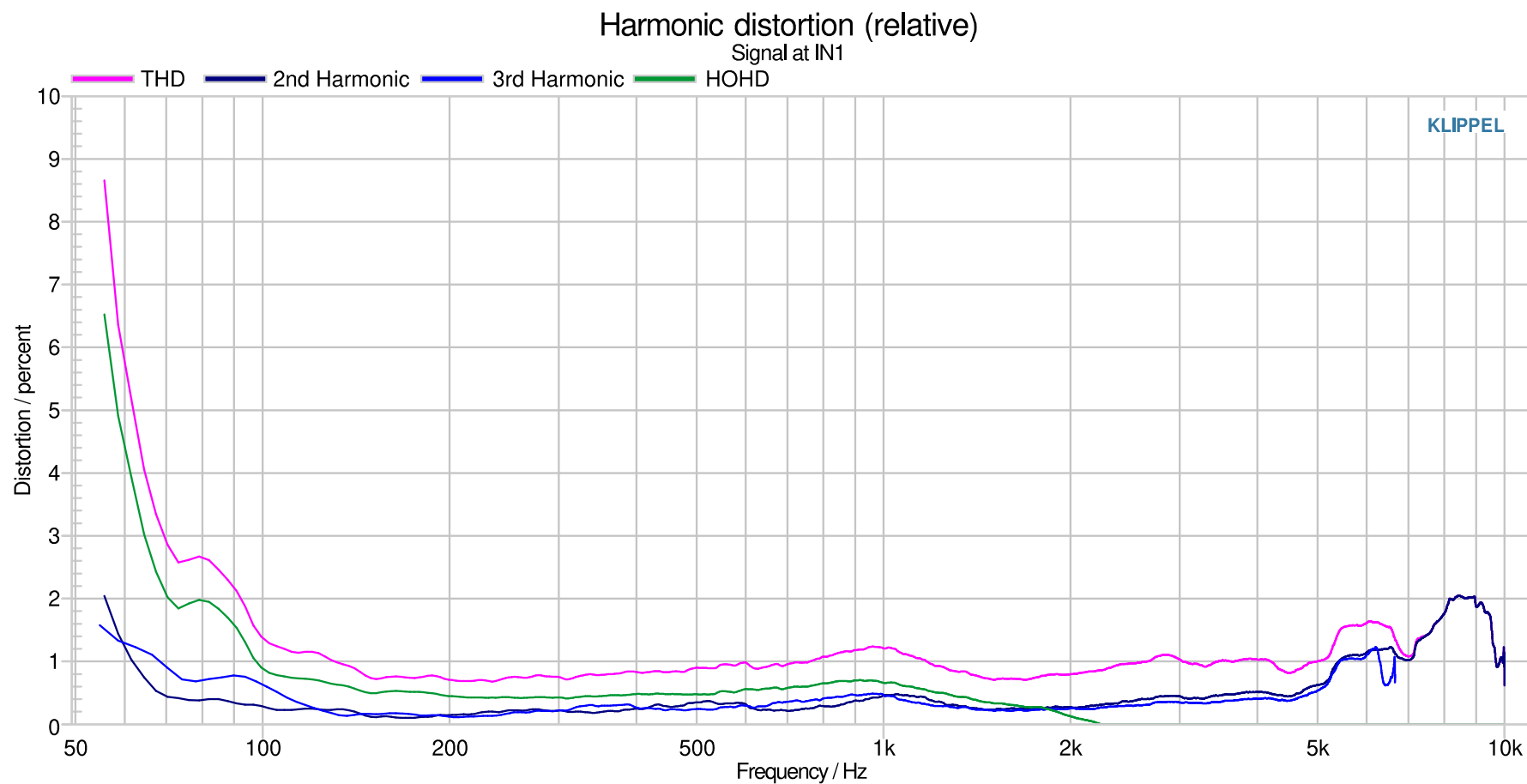
5.7. Vertical Frequency Response

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

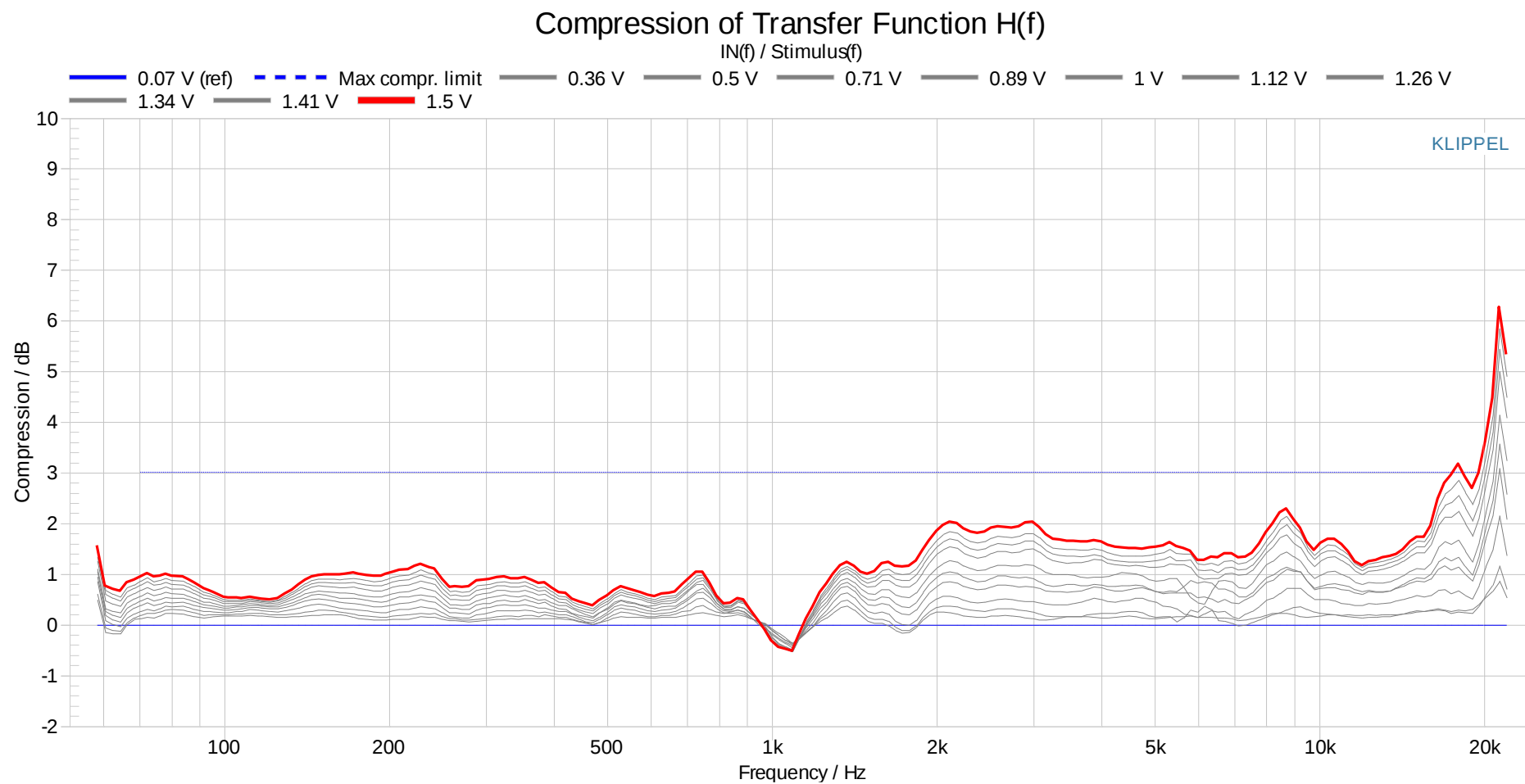
Parameter	Value	Unit	Description
$U_{\max}$	1.41	V	Root mean square of stimulus.
$SPL_{\max}$	121.25	dB	Sum level of fundamentals in microphone signal.
$C_{\max}$	2.86	dB	Max compression in the frequency range 70 - 19557 Hz.
$RMD_{\max}$	-24.27 (6.1)	dB (%)	Maximum multi-tone distortion of microphone signal relative to mean value.
TMDR	-16.06 (15.7)	dB (%)	Total multi-tone distortion ratio of microphone signal.

Stimulus properties

Parameter	Value	Unit	Description
$f_{\min}$	58.59	Hz	Lowest multi-tone frequency line
$f_{\max}$	21951.17	Hz	Highest multi-tone frequency line
t	0.51	s	Signal duration
K	3	-	Kurtosis
C	11.79	dB	Crest factor

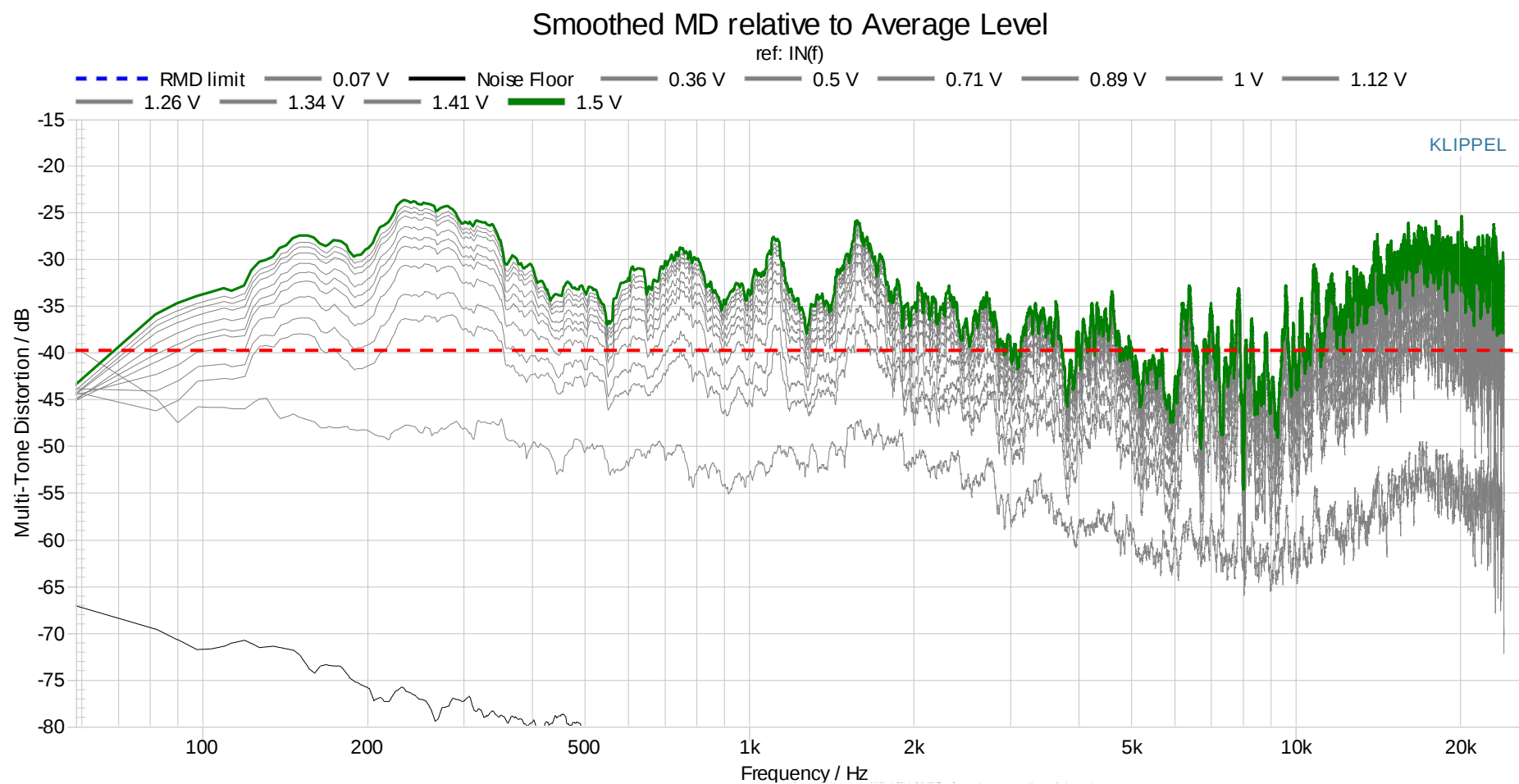
7.2. Compression Chart

-32dB Voltage Values – 1/6 Smoothing



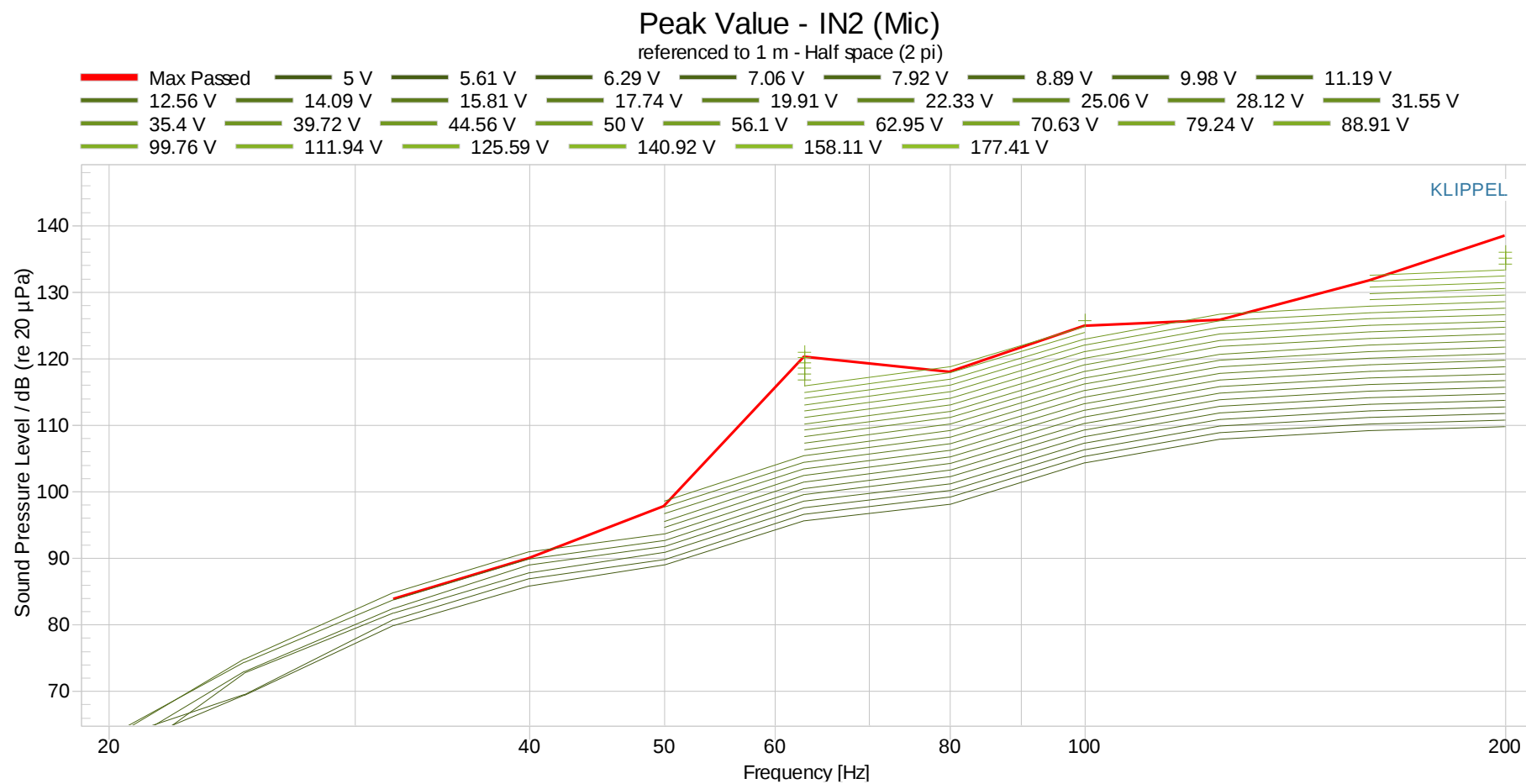
7.3. Multi Tone Distortion Chart

-32dB Voltage Values – No Smoothing

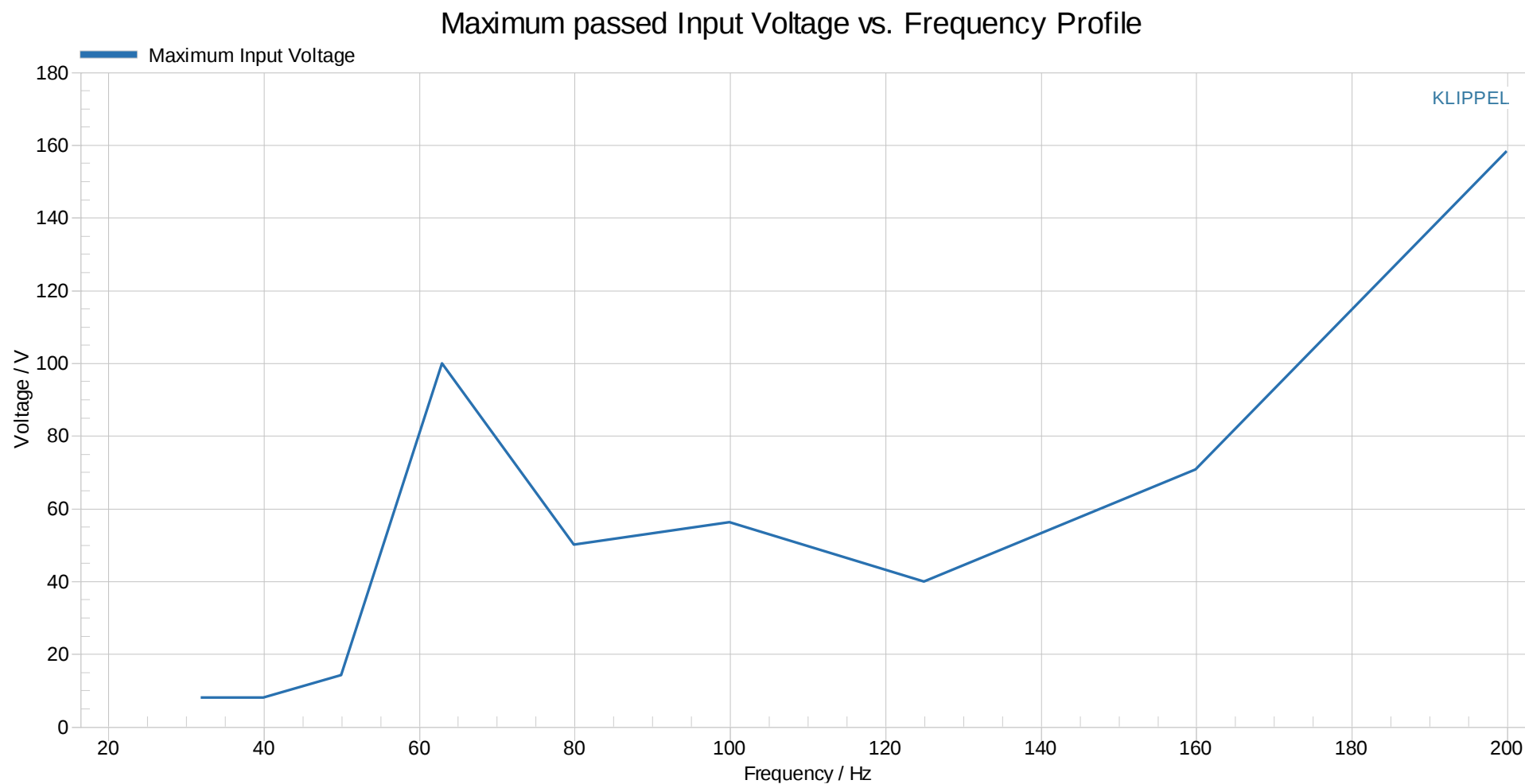


8. CEA2010B

8.1. Max Peak SPL



8.2. Max Peak Voltage



8.3. THD on Burst

