

CCM10P - Cinema Speaker

Report of CCM10P Speaker

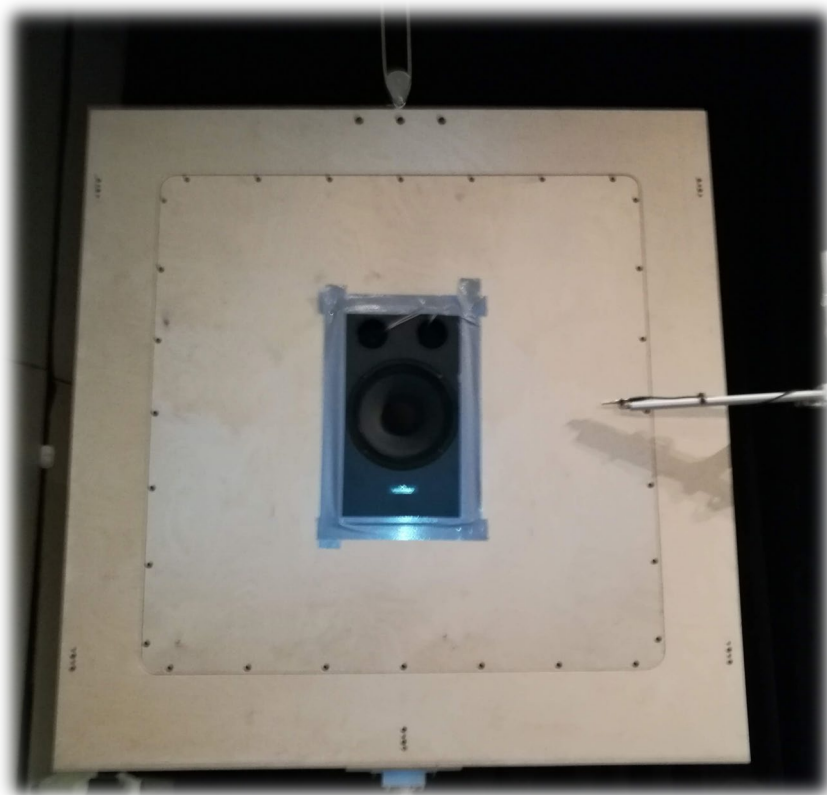
ASCENDO

Date	Author	Changes	Version
06/05/2022	GL		V1

Summary

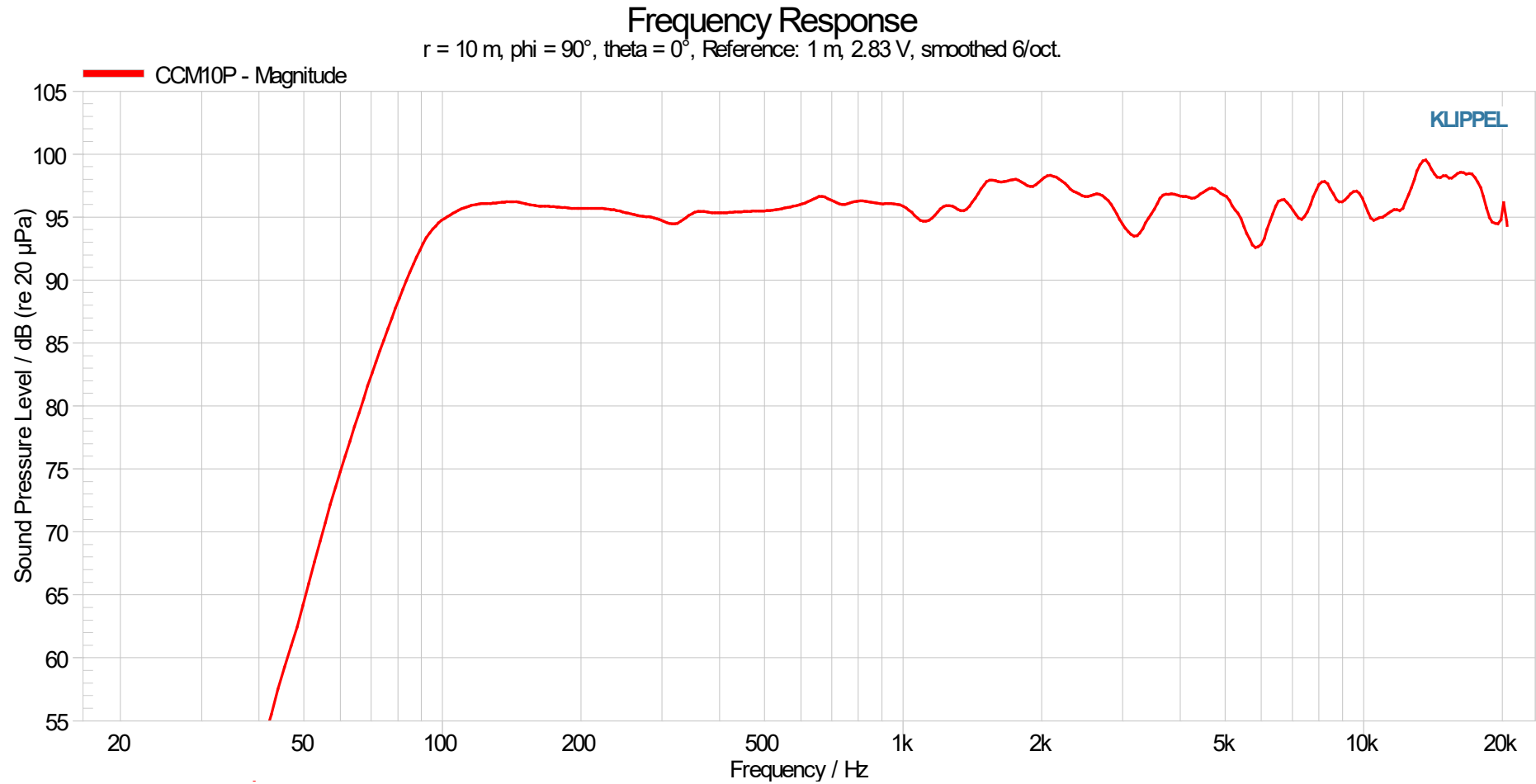
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1. Pictures of measurements



2. Frequency Response

2,83v @1m – 1/6 oct. Smoothing



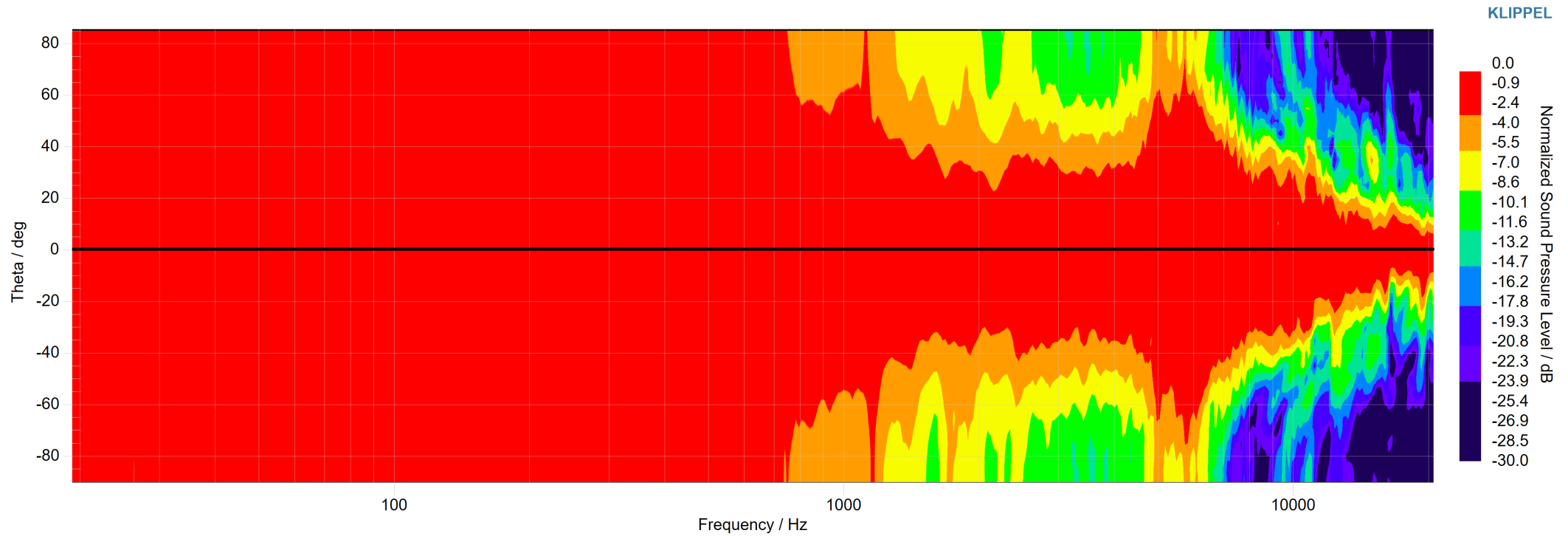
3. Contour Plot

3.1. Horizontal

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

Contour Plot - Horizontal

$r = 10\text{ m}$, $\phi = 90^\circ$, normalized to On-Axis



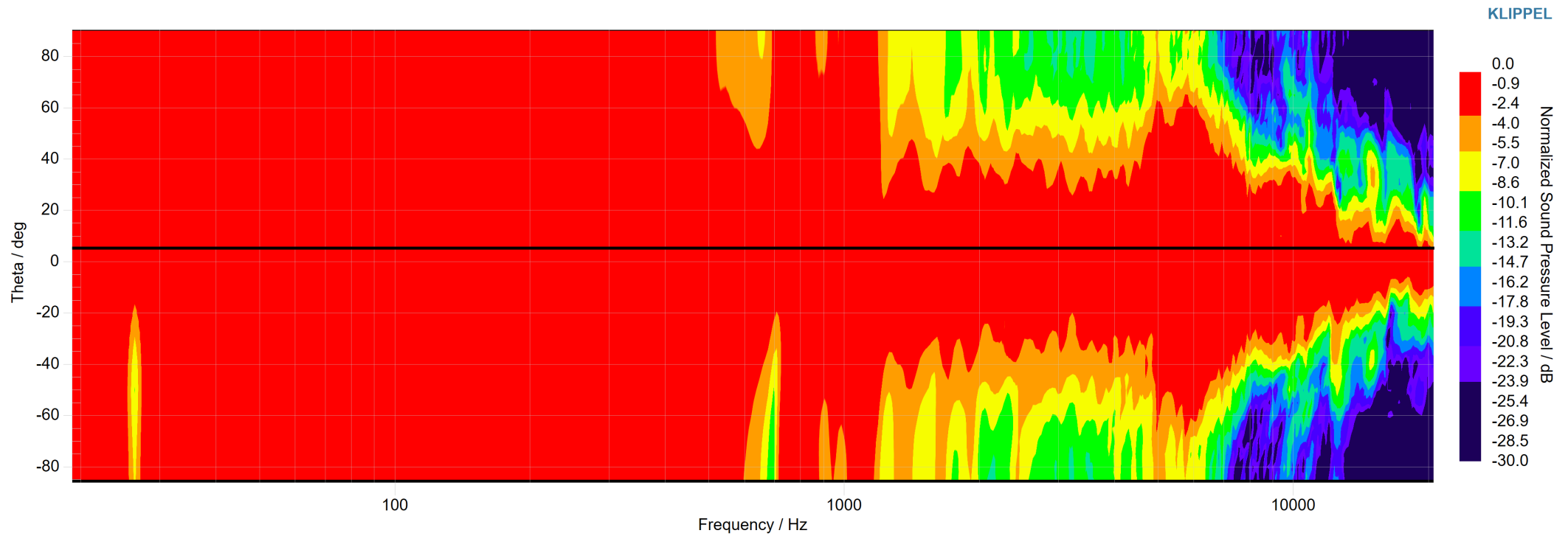
Normalized on Axis – 1/6 oct. Smoothing

3.2. Vertical

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

Contour Plot - Vertical

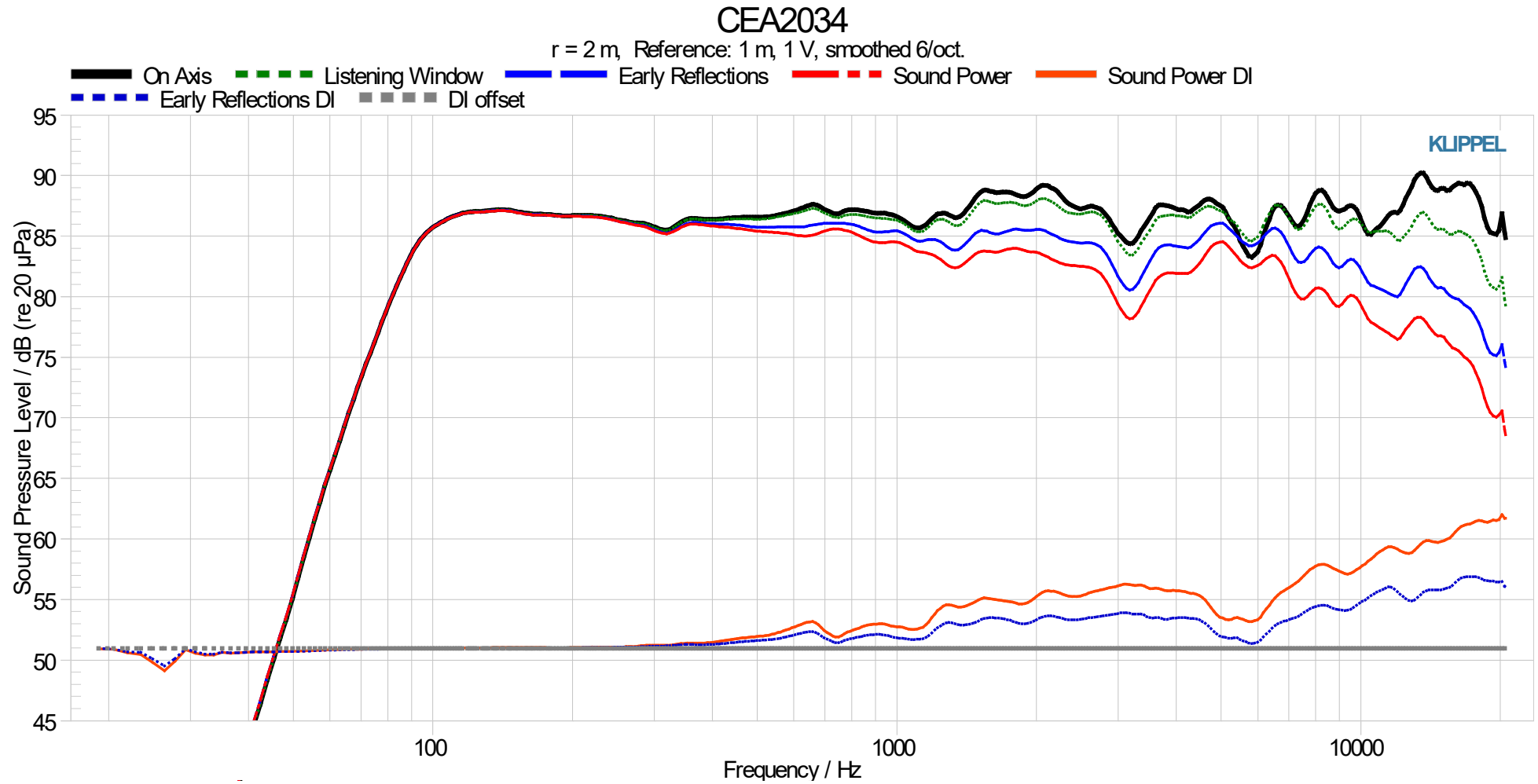
$r = 10$ m, $\phi = 0^\circ$, normalized to On-Axis



Normalized on Axis – 1/6 oct. Smoothing

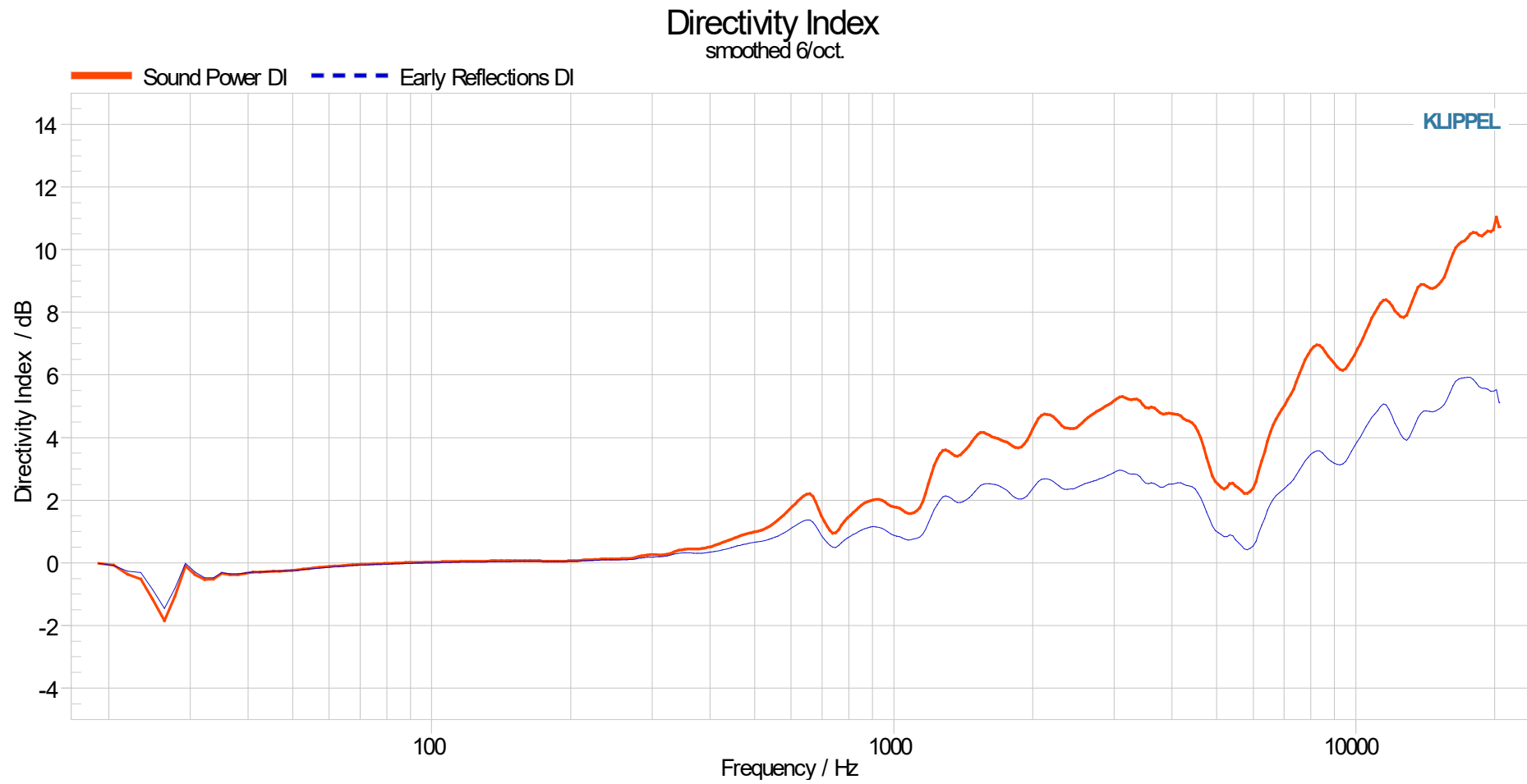
4. CEA2034 Spinorama

2,83v @1m – 1/6 oct. Smoothing



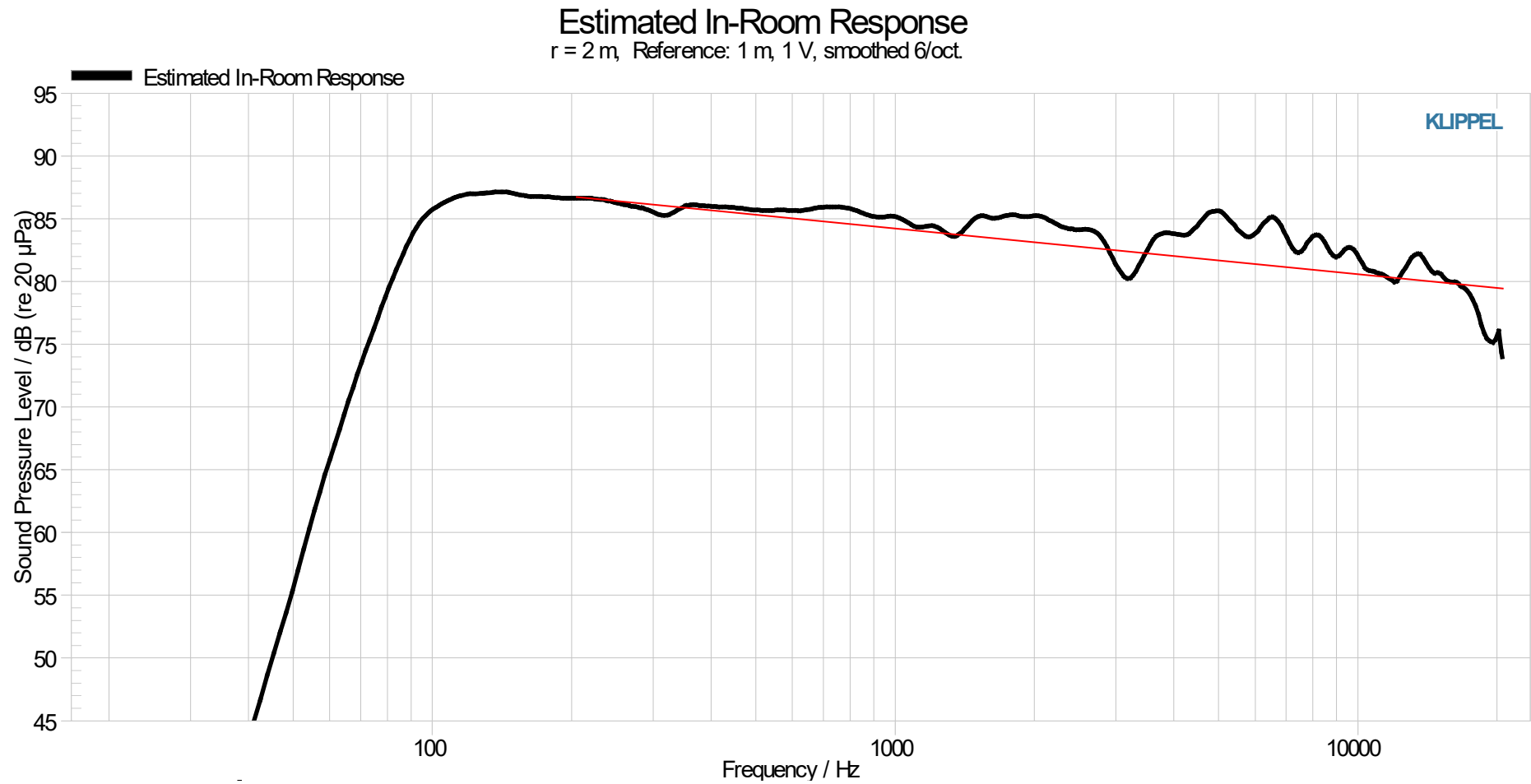
4.1. Directivity Index

1/6 oct. Smoothing



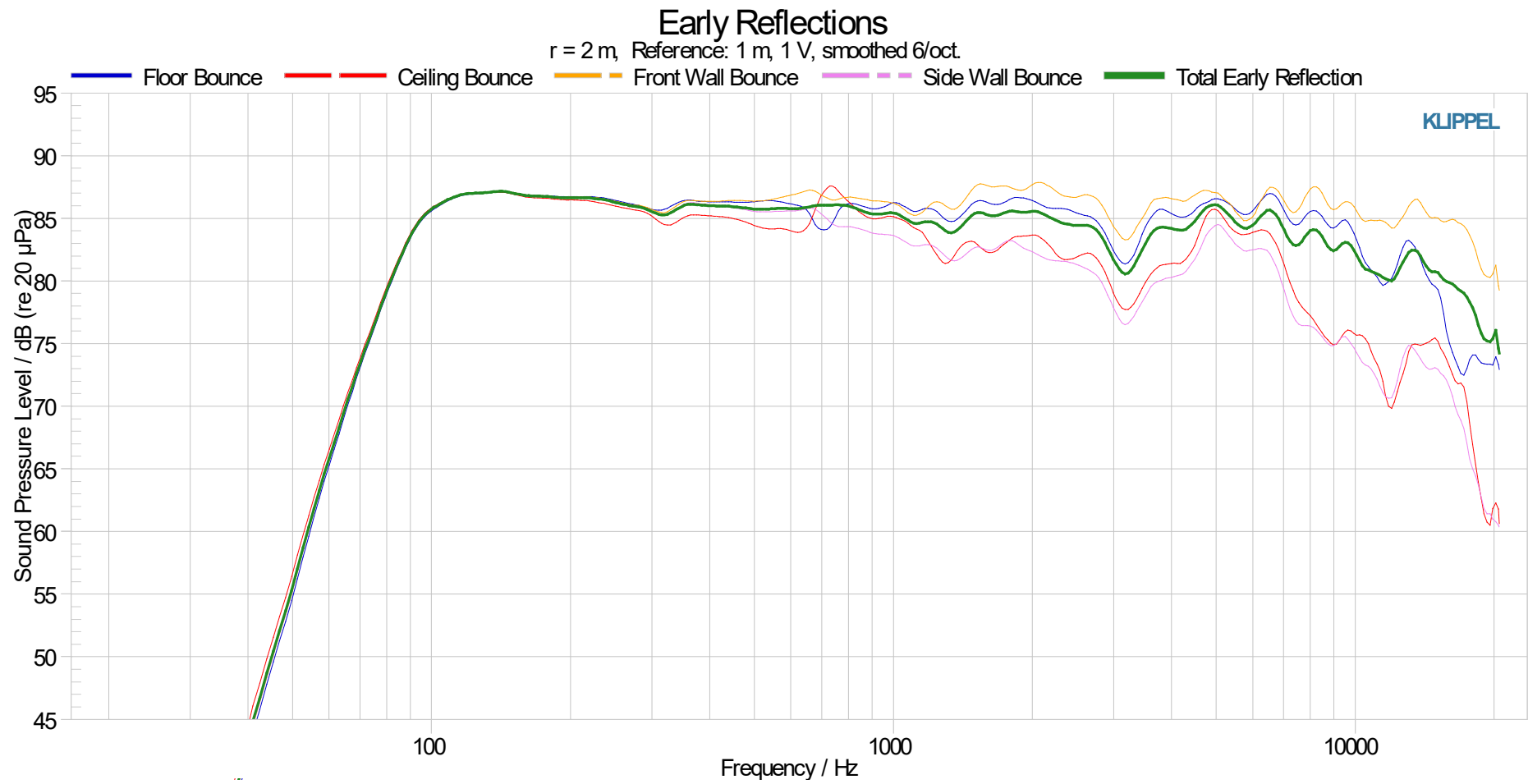
4.2. In-Room response

1/6 oct. Smoothing



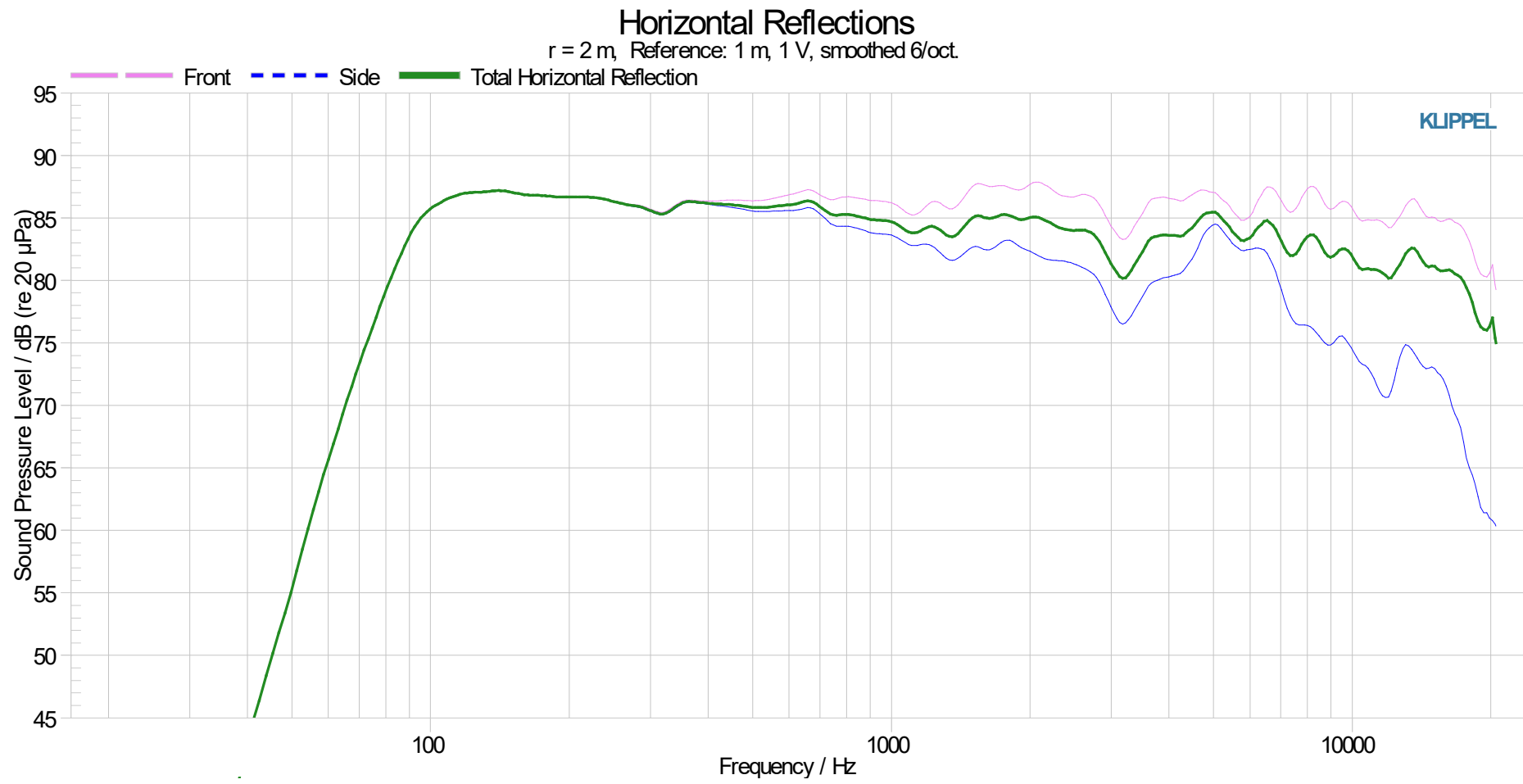
4.3. Early reflections

1/6 oct. Smoothing



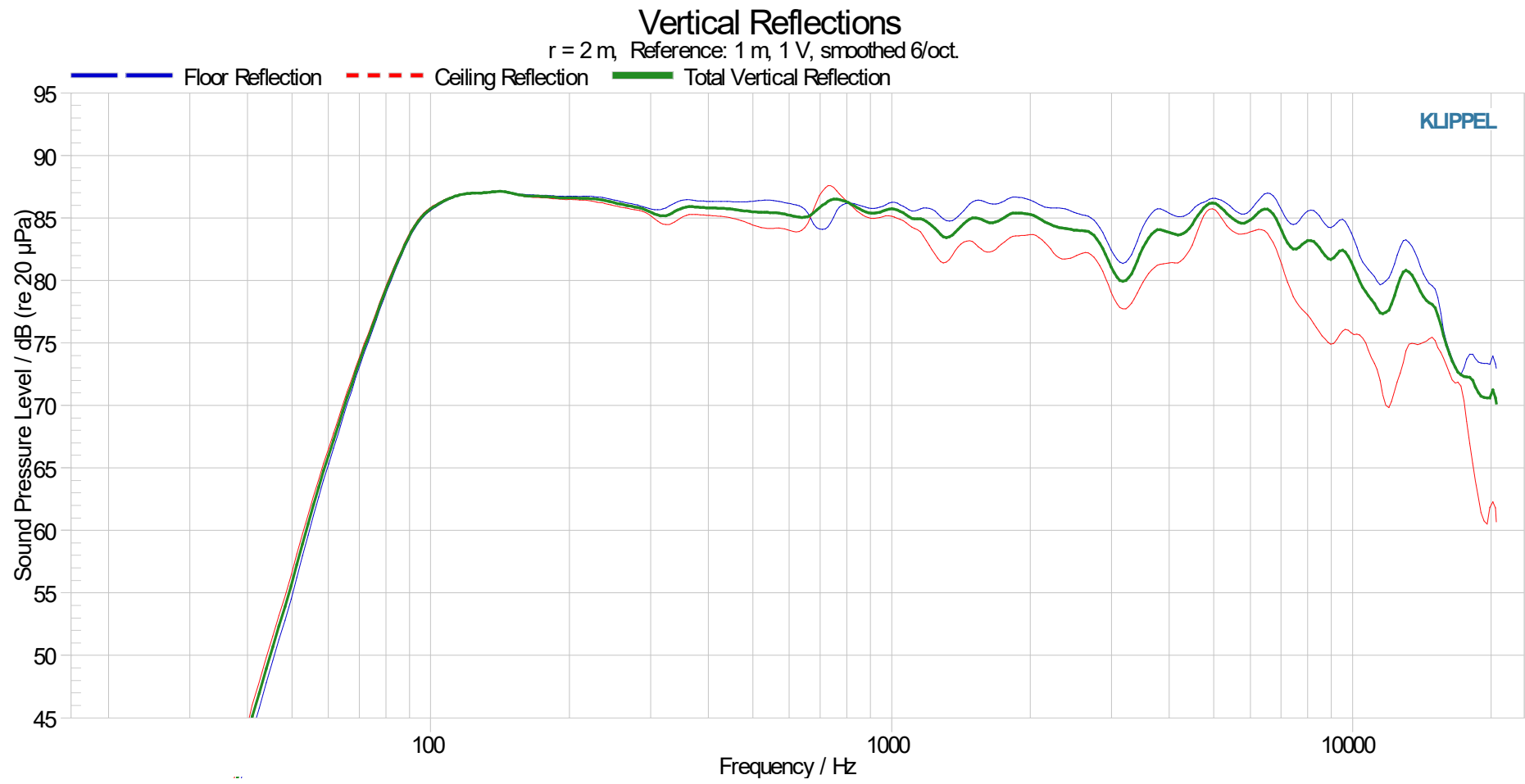
4.4. Horizontal Reflections

1/6 oct. Smoothing



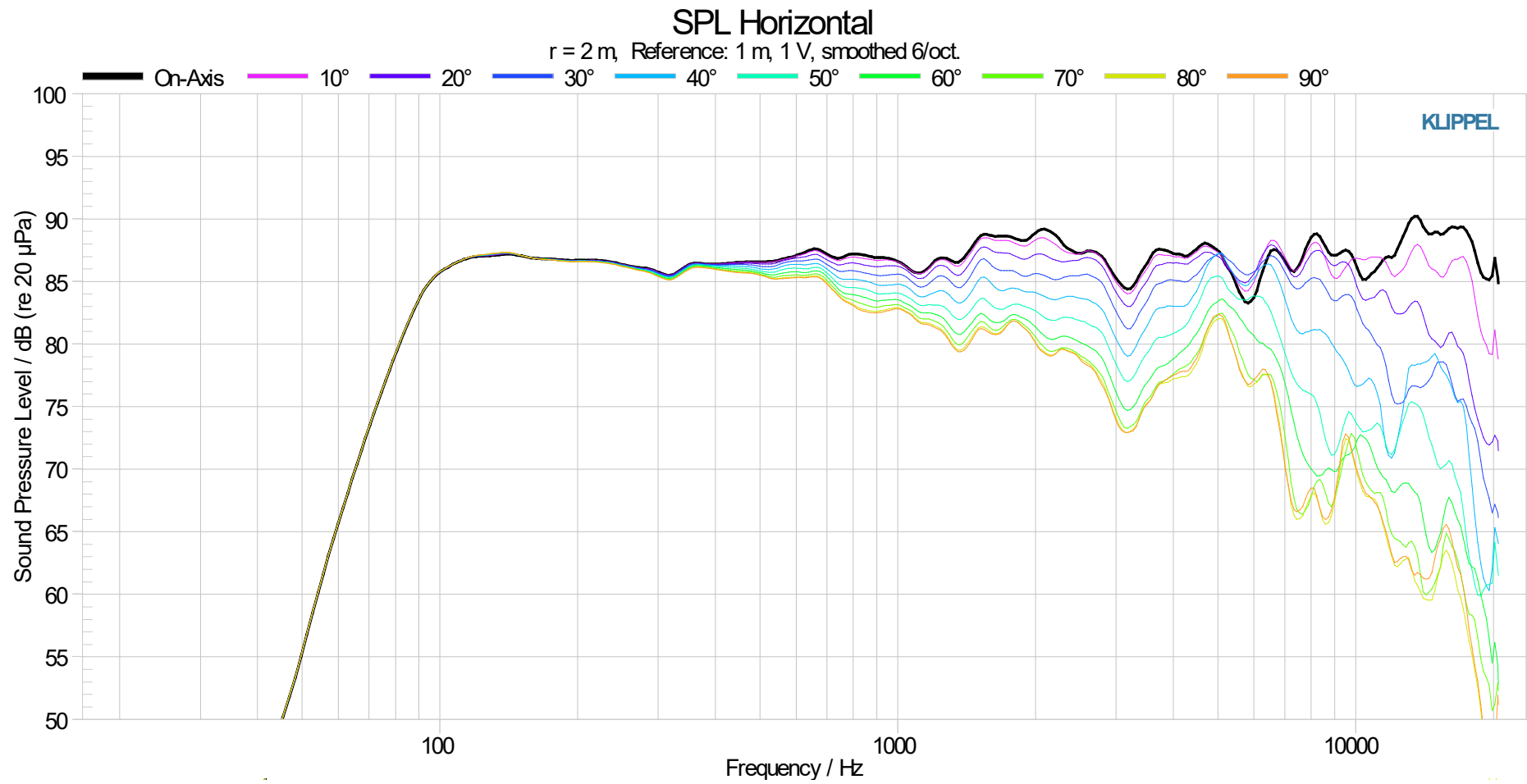
4.5. Vertical Reflections

1/6 oct. Smoothing



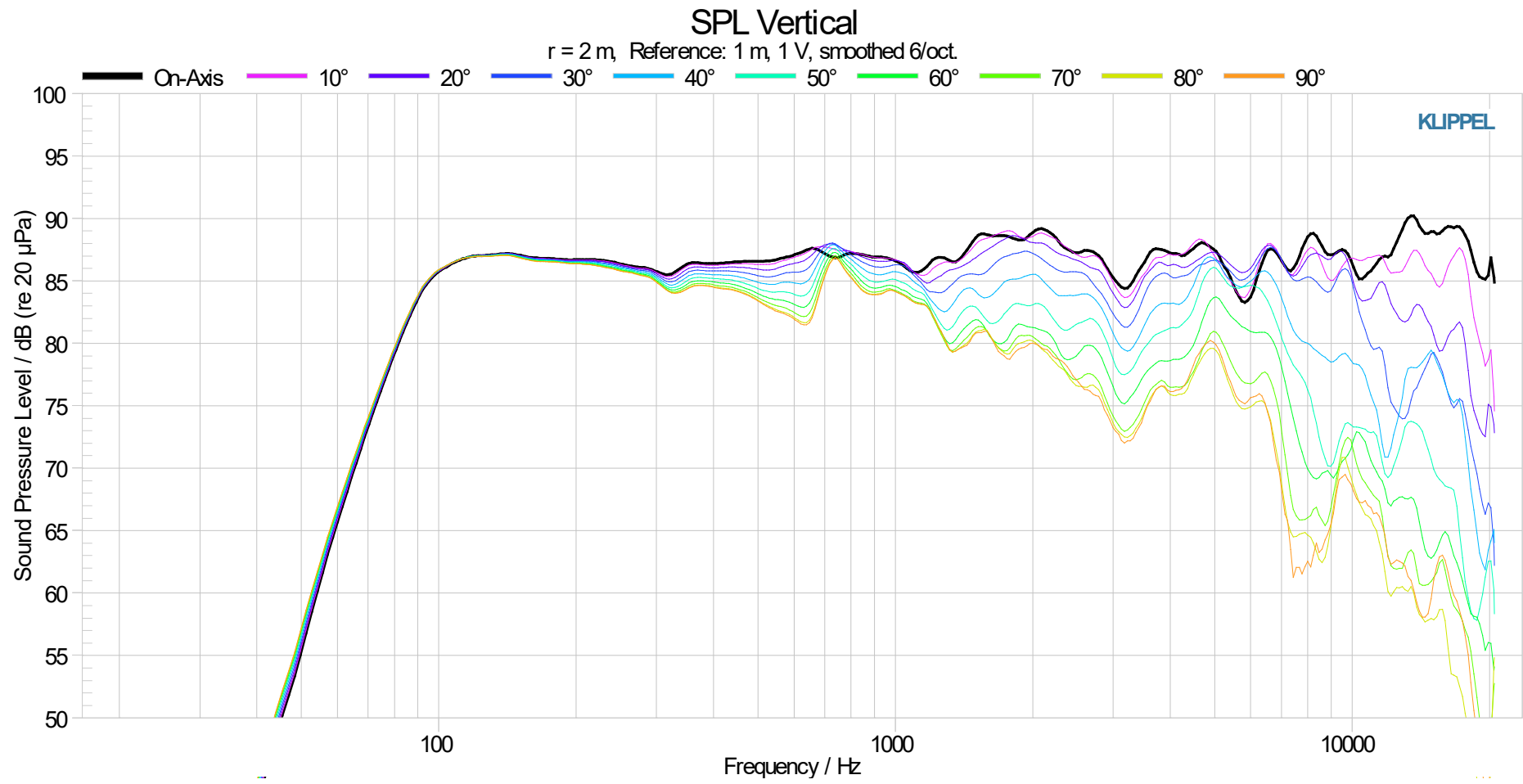
4.6. Horizontal Frequency Response

1/6 oct. Smoothing



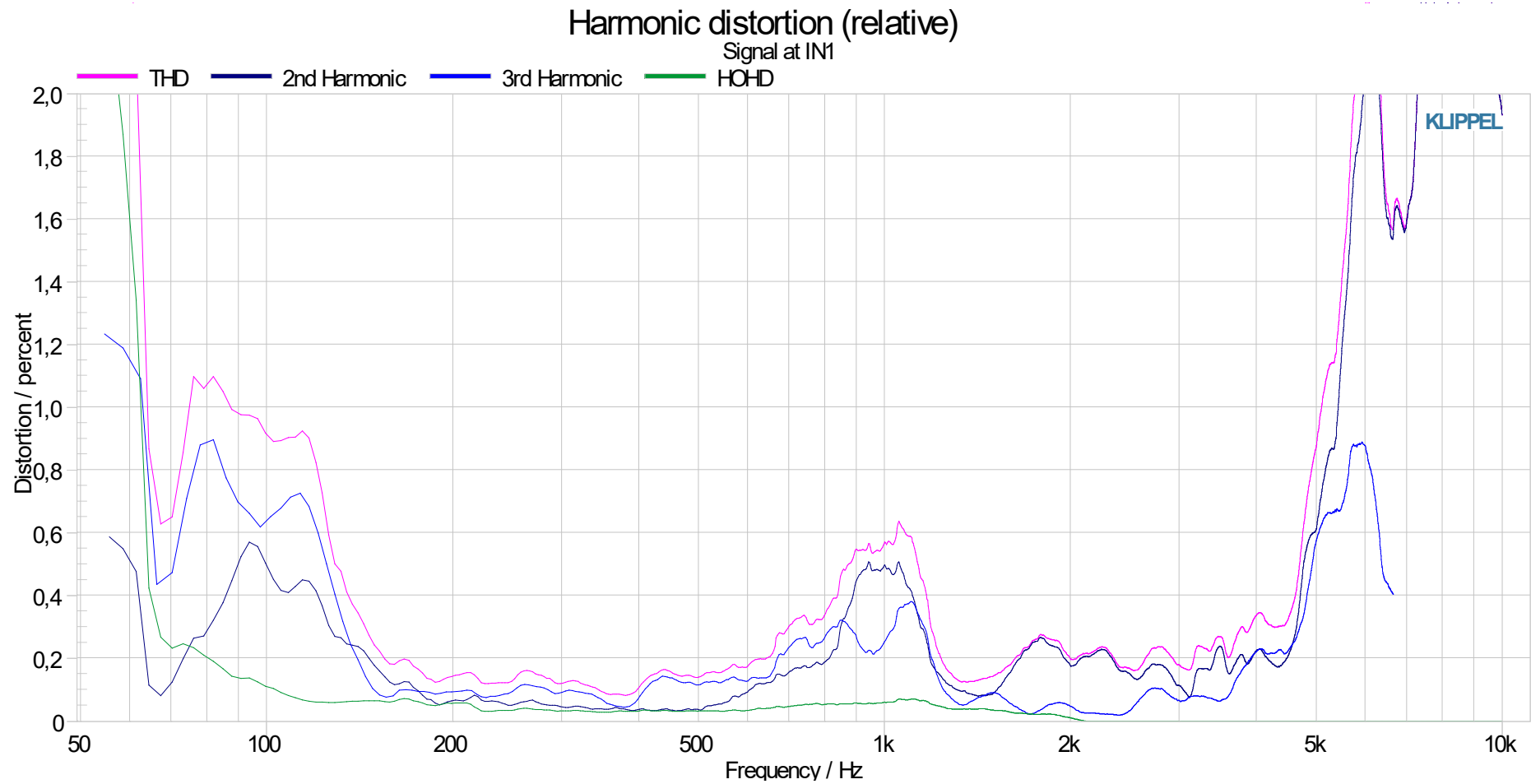
4.7. Vertical Frequency Response

1/6 oct. Smoothing



5. Harmonic Distortion

1/6 oct. Smoothing – 0dBu Stimulus



6. MTON Max SPL – 1s Stimulus

6.1. Results

Results of last passed measurement

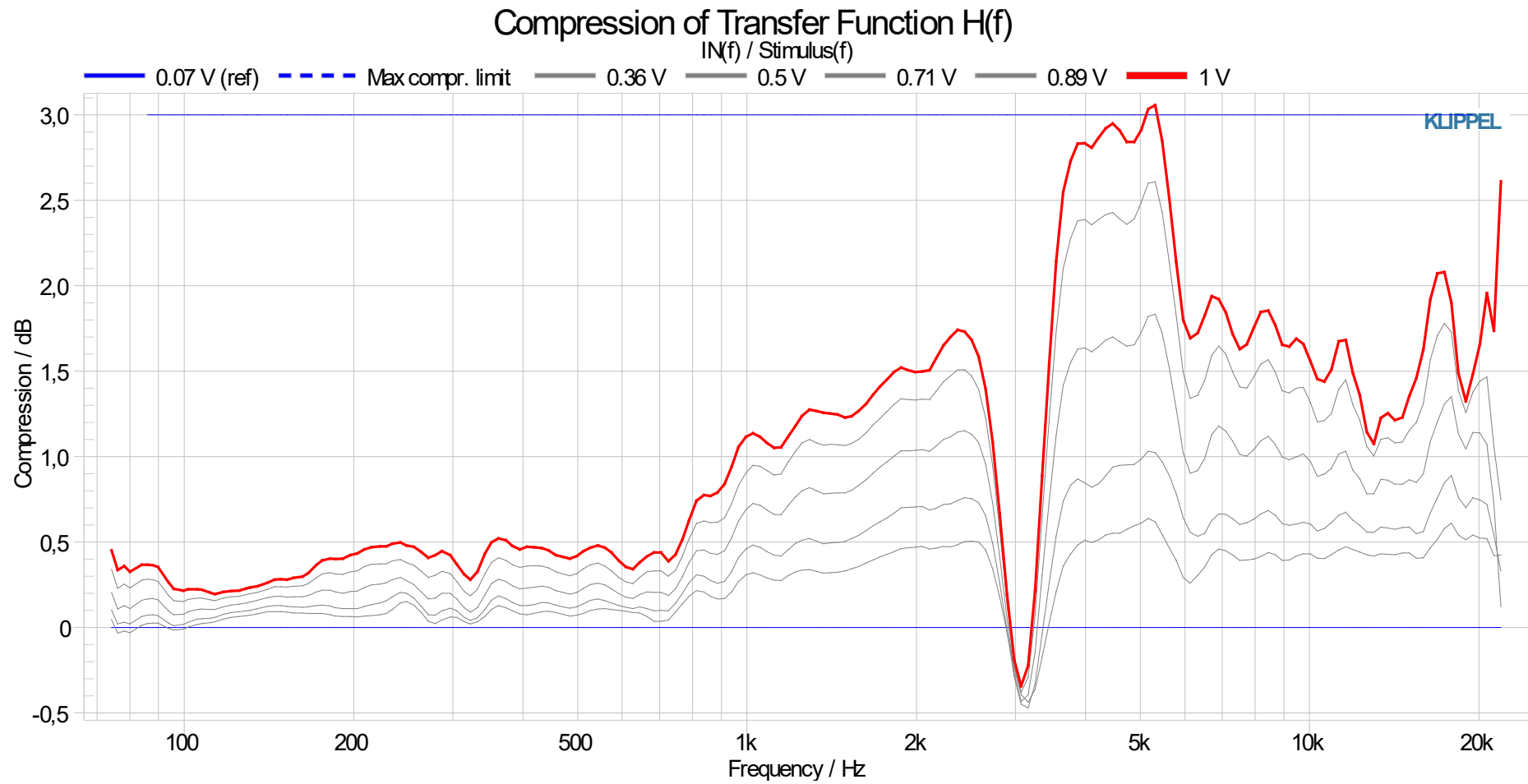
Parameter	Value	Unit	Description
U_{\max}	0.89	V	Root mean square of stimulus.
SPL_{\max}	117.27	dB	Sum level of fundamentals in microphone signal.
C_{\max}	2.61	dB	Max compression in the frequency range 86 - 19494 Hz.
RMD_{\max}	-27.25 (4.3)	dB (%)	Maximum multi-tone distortion of microphone signal relative to mean value.
TMDR	-18.53 (11.8)	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

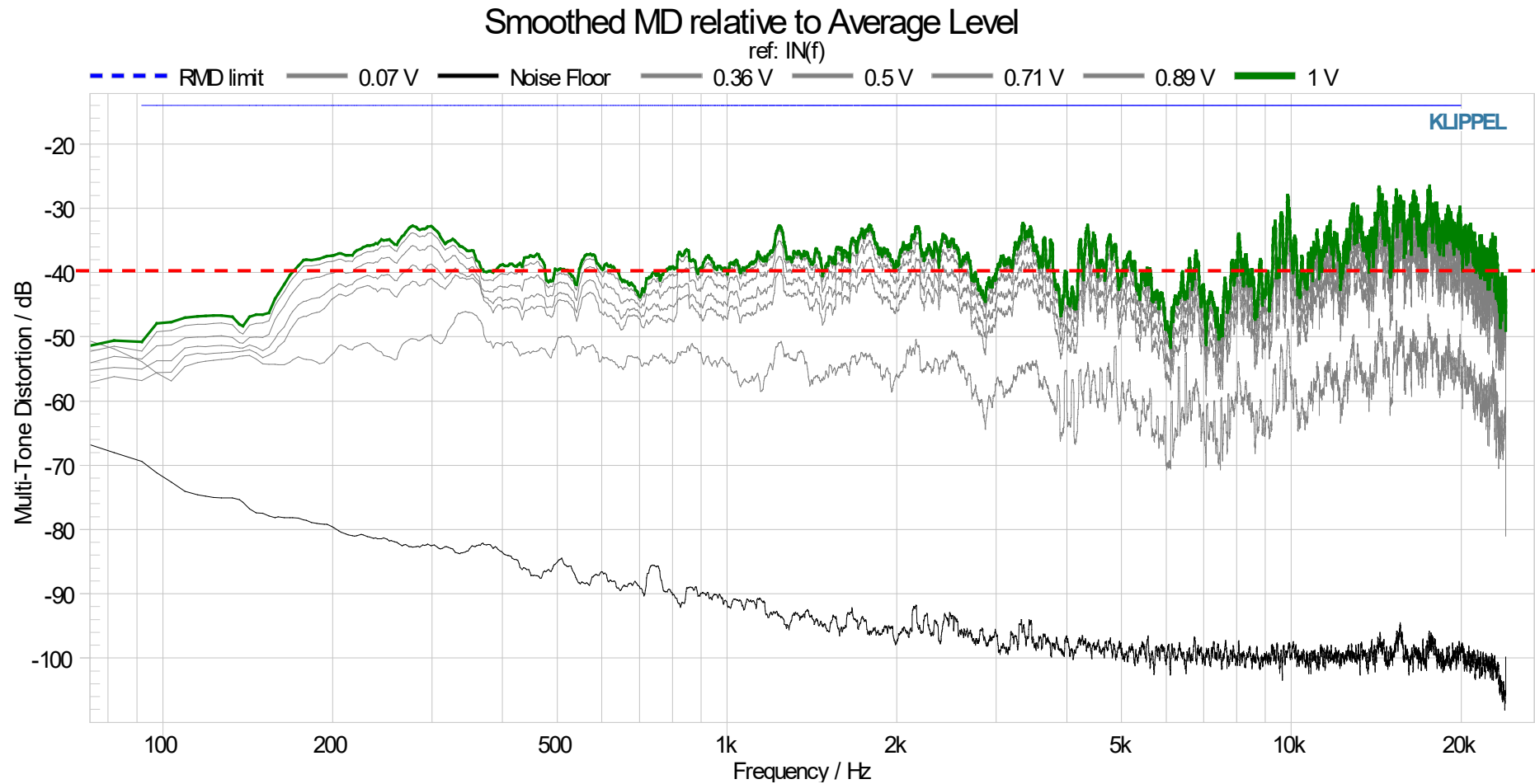
6.2. Compression Chart

-32dB Voltage Values – 1/6 Smoothing



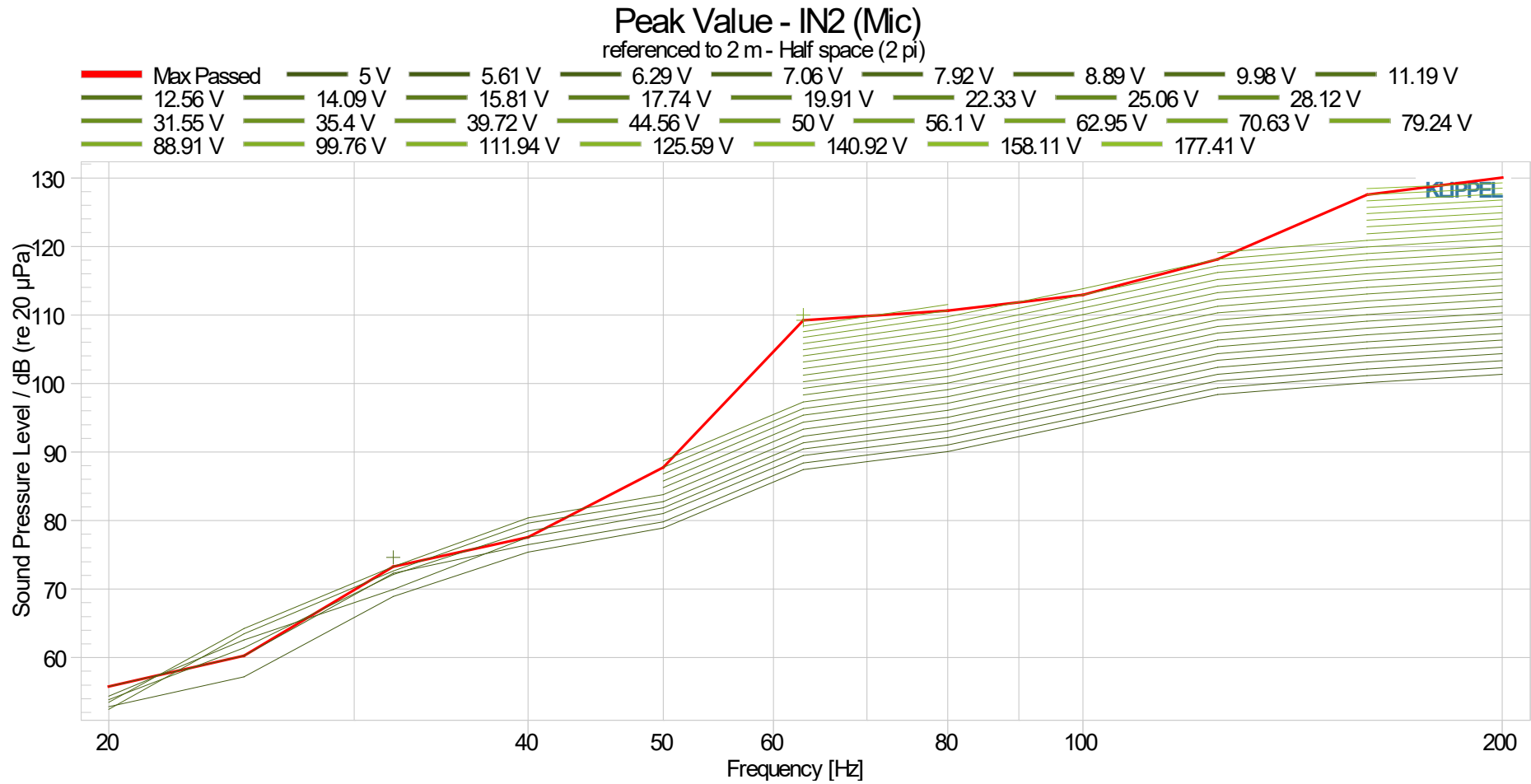
6.3. Multi Tone Distortion Chart

-32dB Voltage Values – No Smoothing

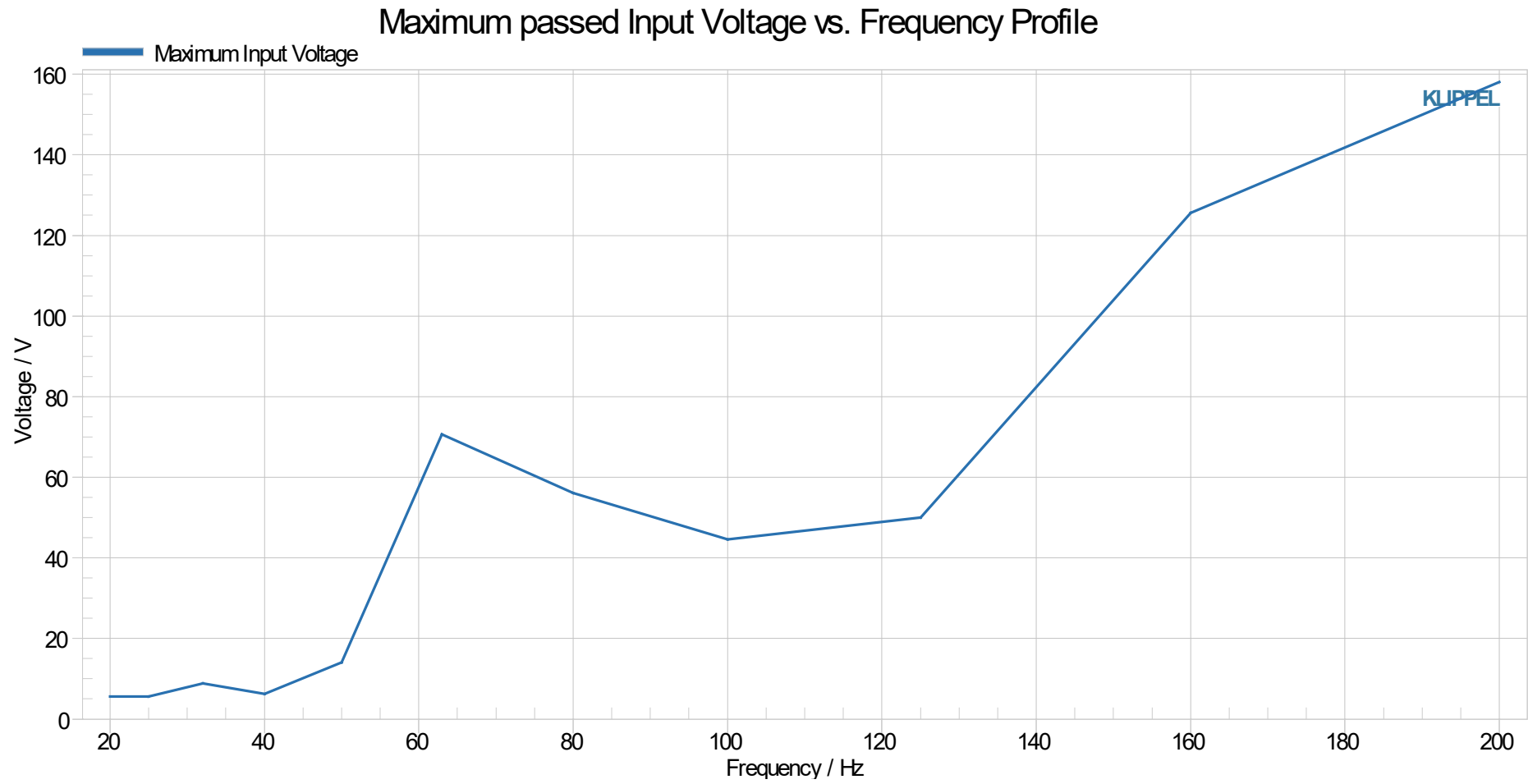


7. CEA2010B

7.1. Max Peak SPL



7.2. Max Peak Voltage



7.3. THD on Burst

