



Report of THE6 PRO PASSIVE CEILING

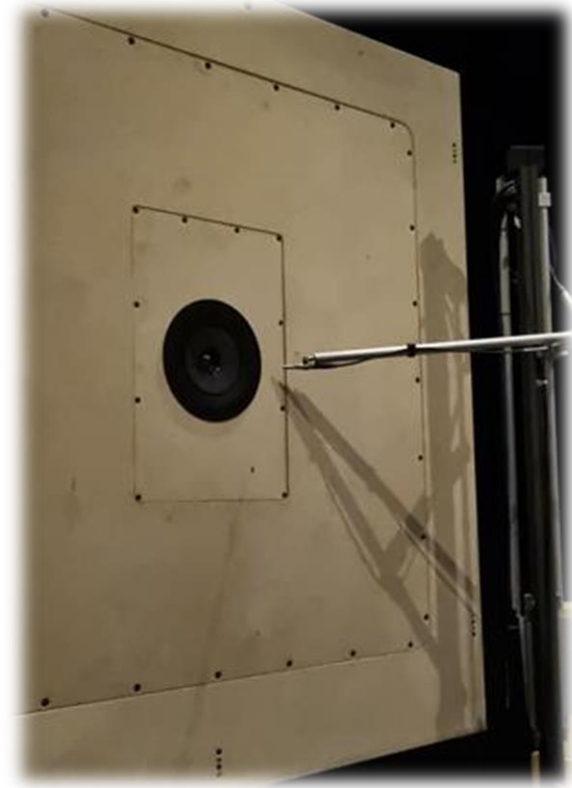
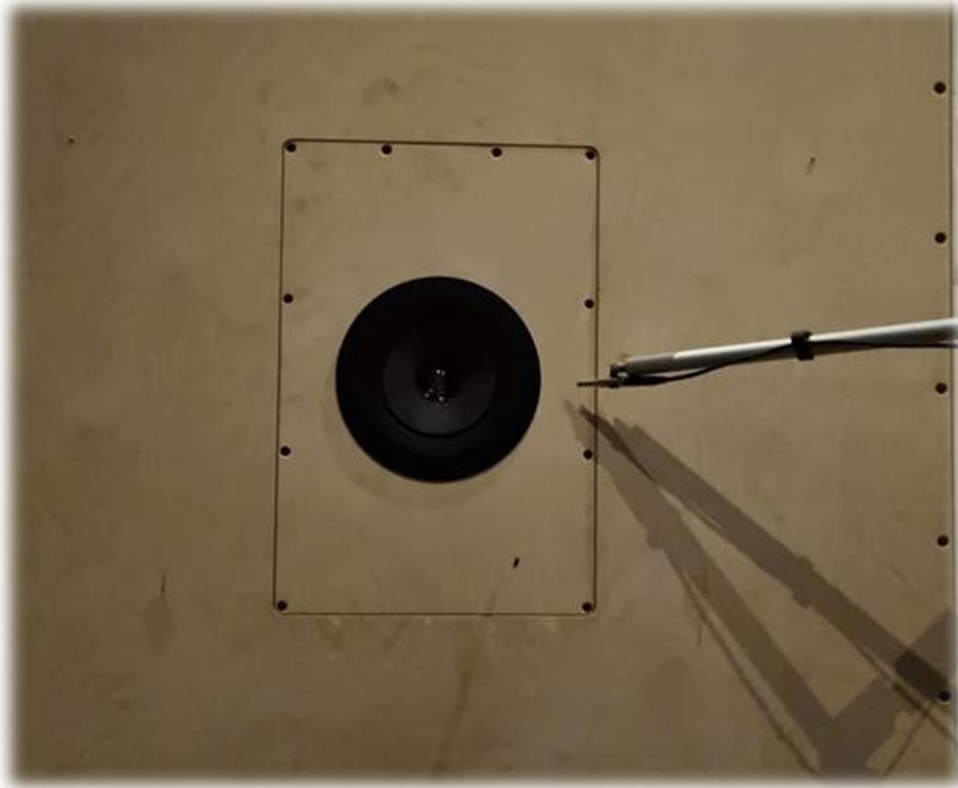
ASCENDO

Date	Author	Changes	Version
20/10/2023	GL		V1
30/10/2023	GL	Impedence Curve Added	V2

Summary

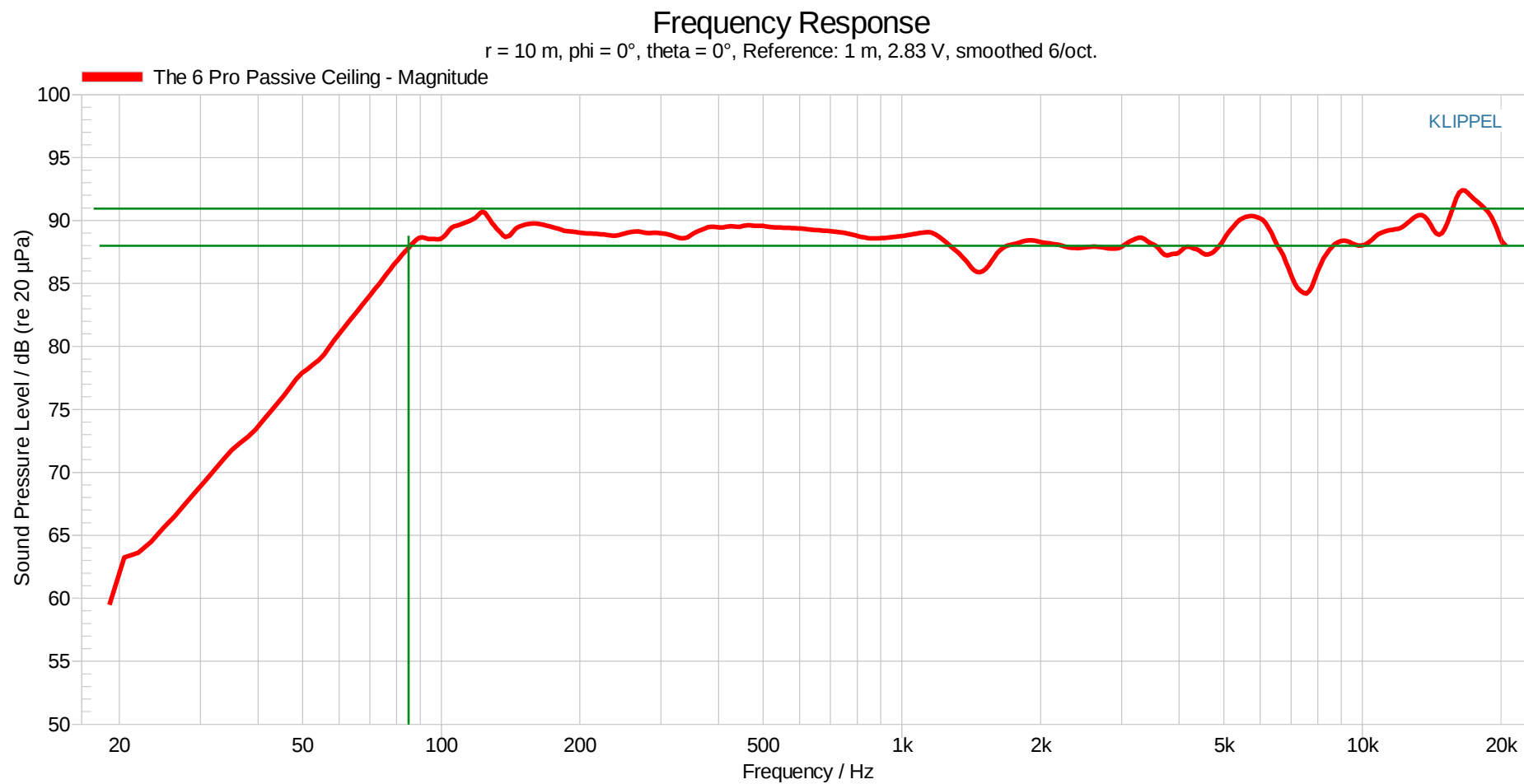
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1. Pictures of measurements

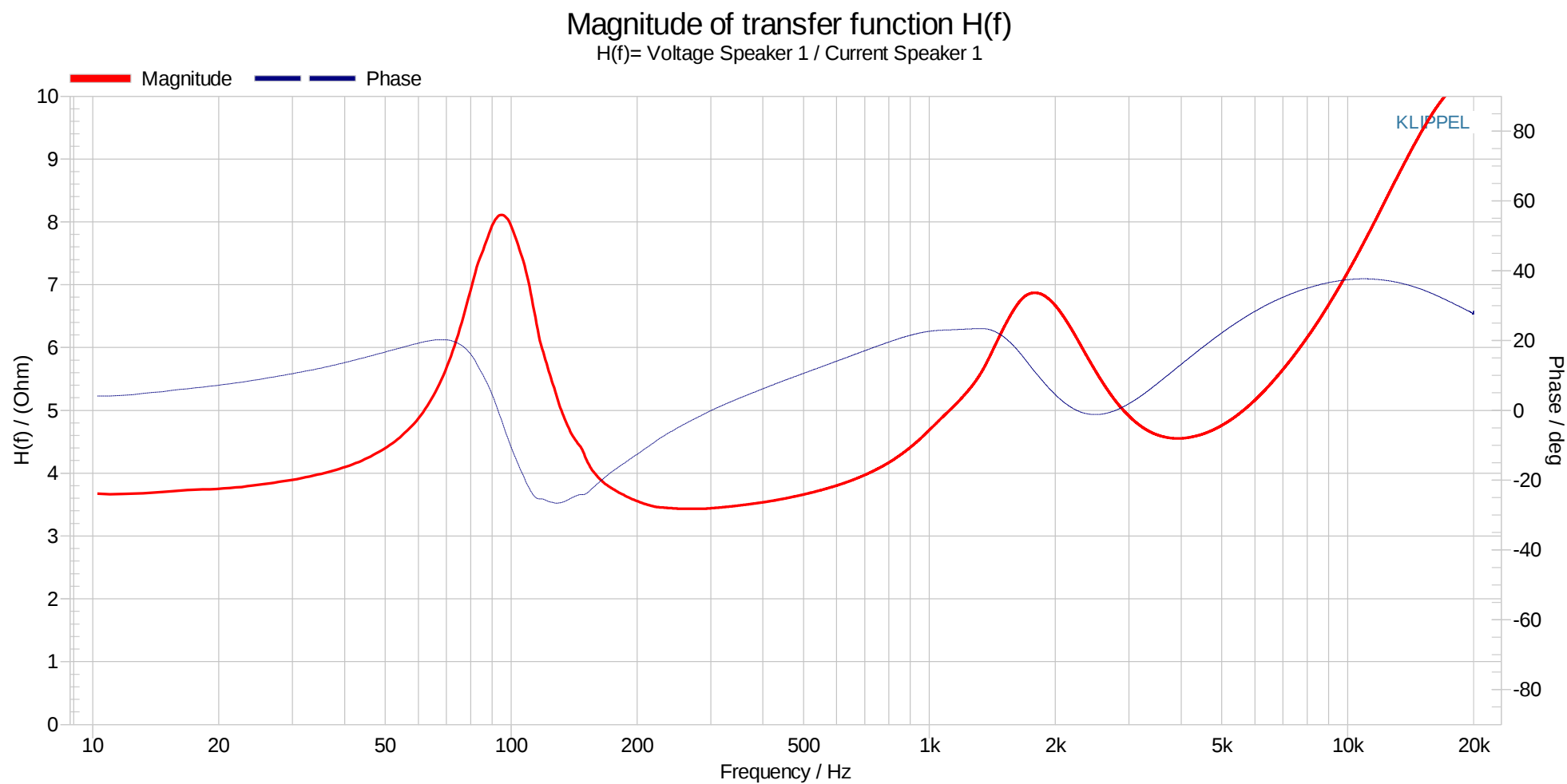


2. Frequency Response

2,83v @1m – 1/6 oct. Smoothing



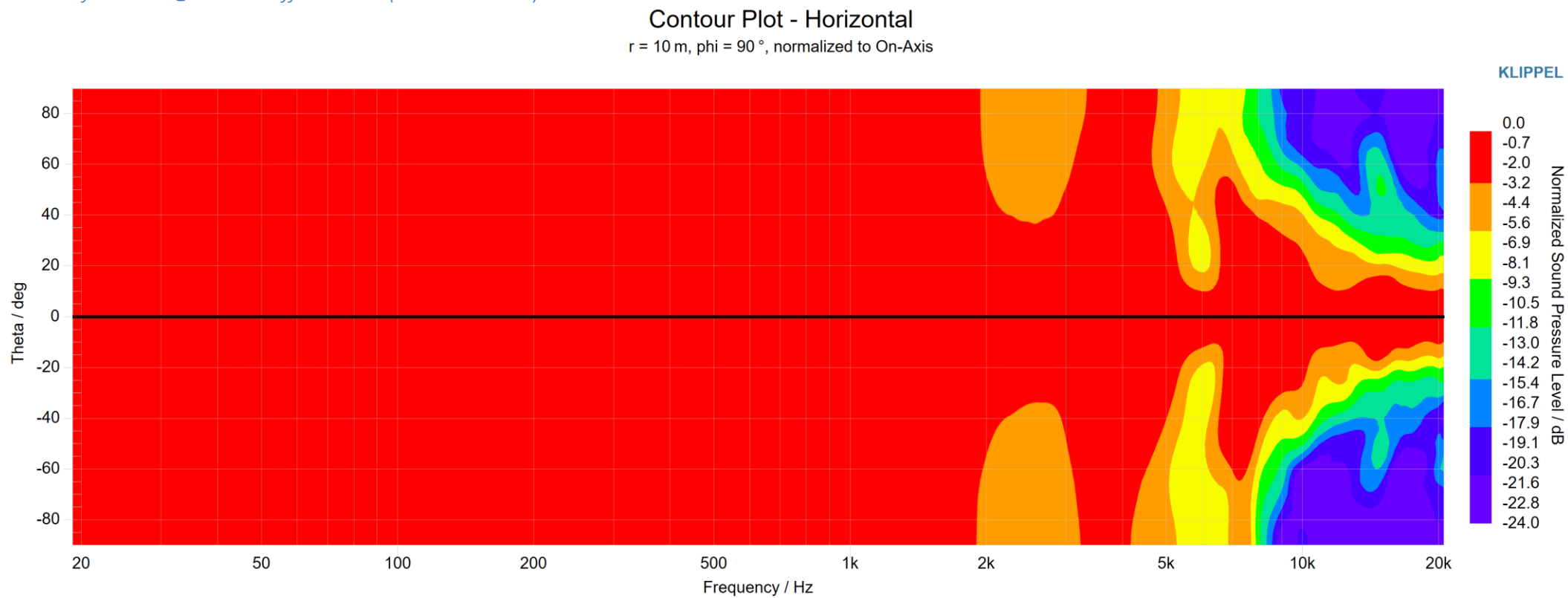
3. Impedance Curve



4. Contour Plot

4.1. Horizontal

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



Normalized on Axis – 1/6 oct. Smoothing

4.2. Vertical

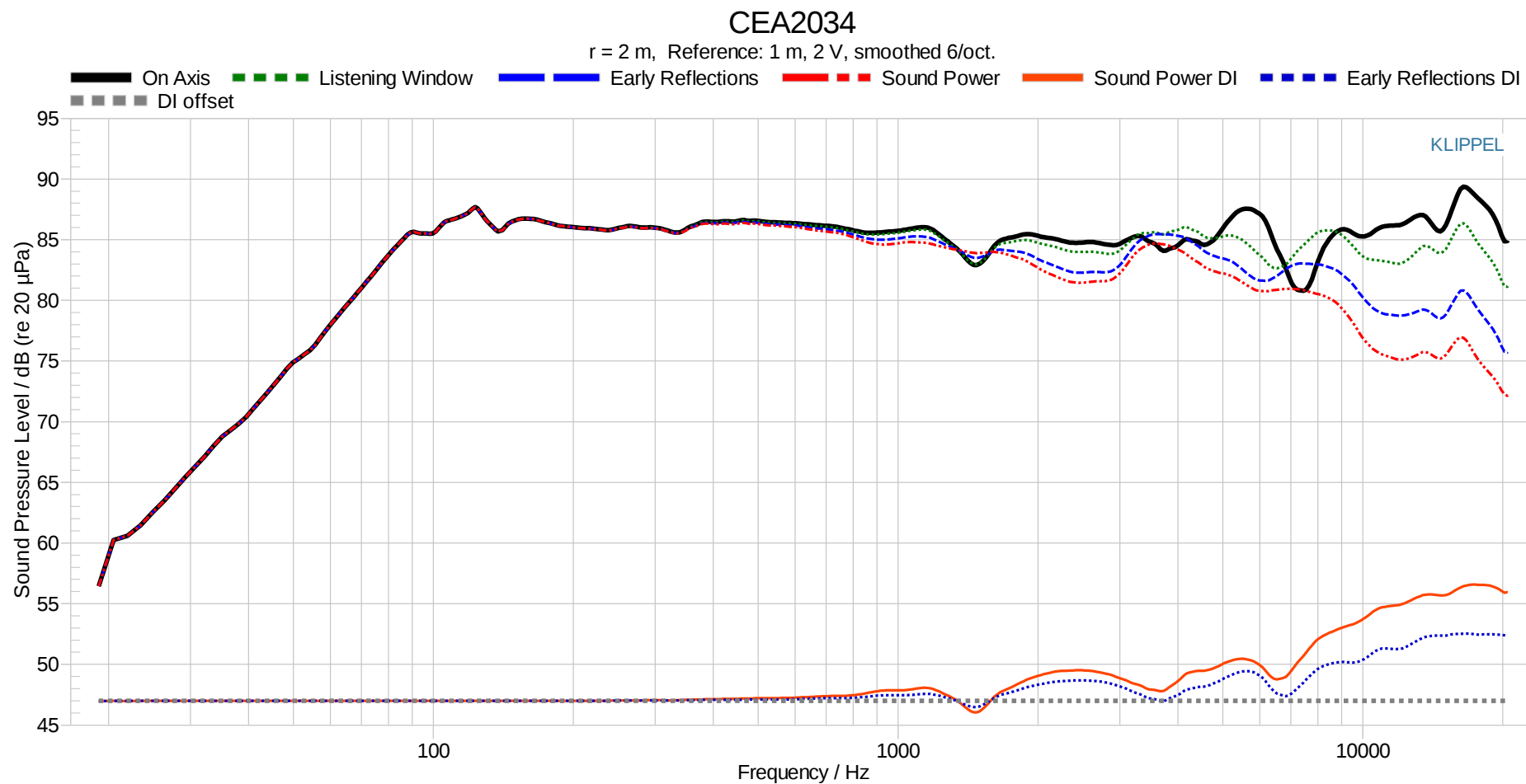
Referenced @10m – Baffle loaded (2π steradians)



Normalized on Axis – 1/6 oct. Smoothing

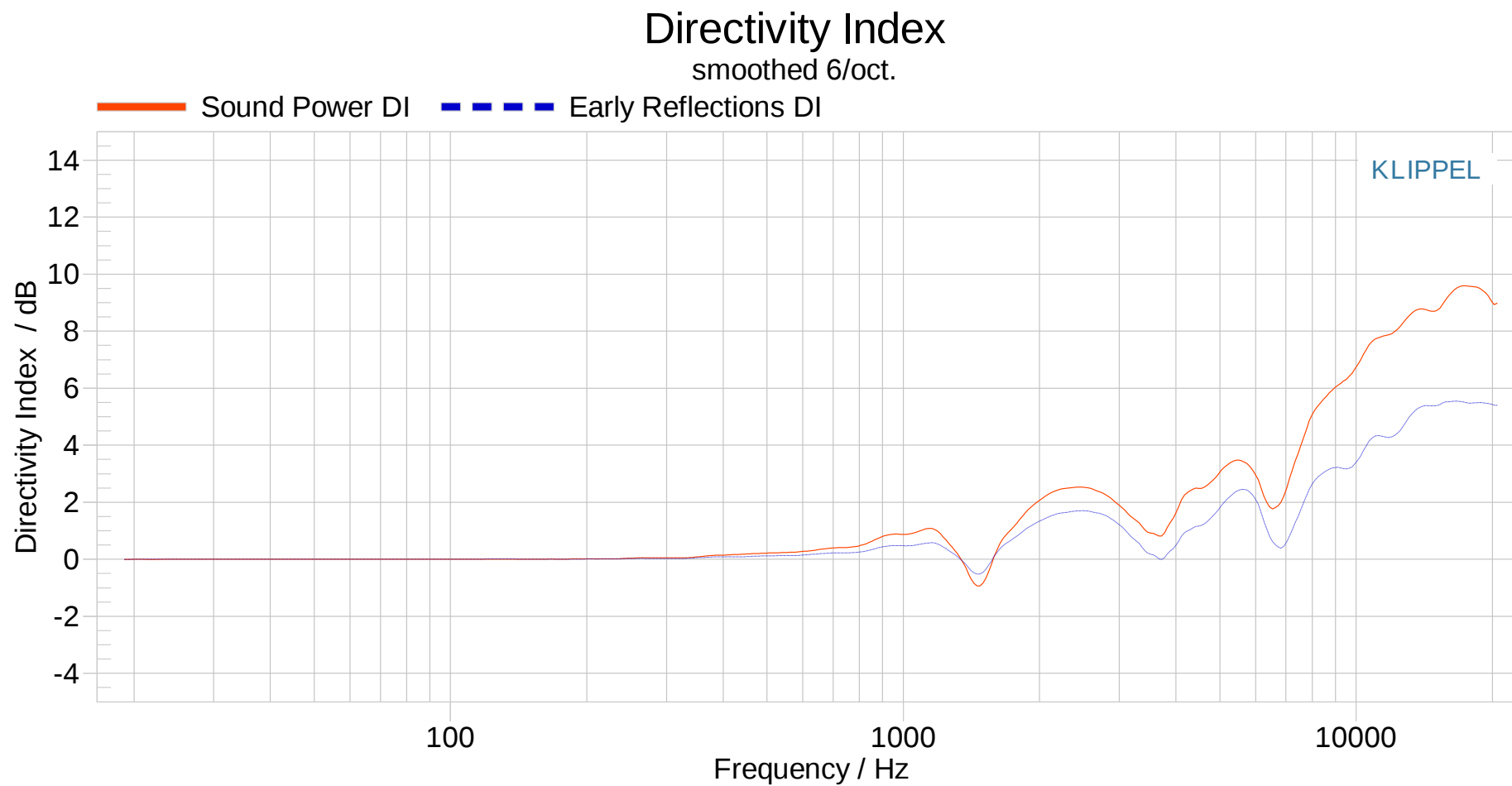
5. CEA2034 Spinorama

2,83v @1m – 1/6 oct. Smoothing



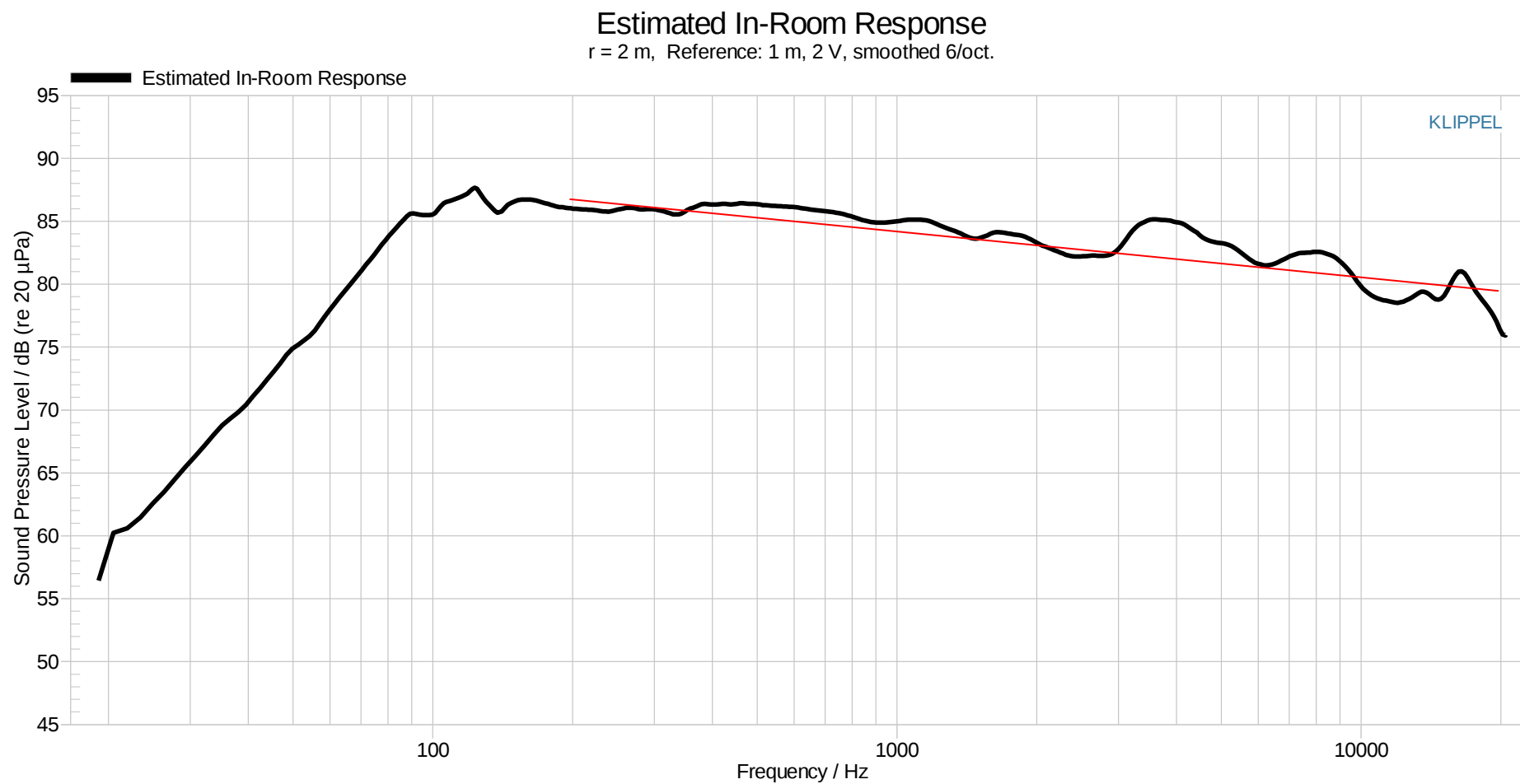
5.1. Directivity Index

1/6 oct. Smoothing



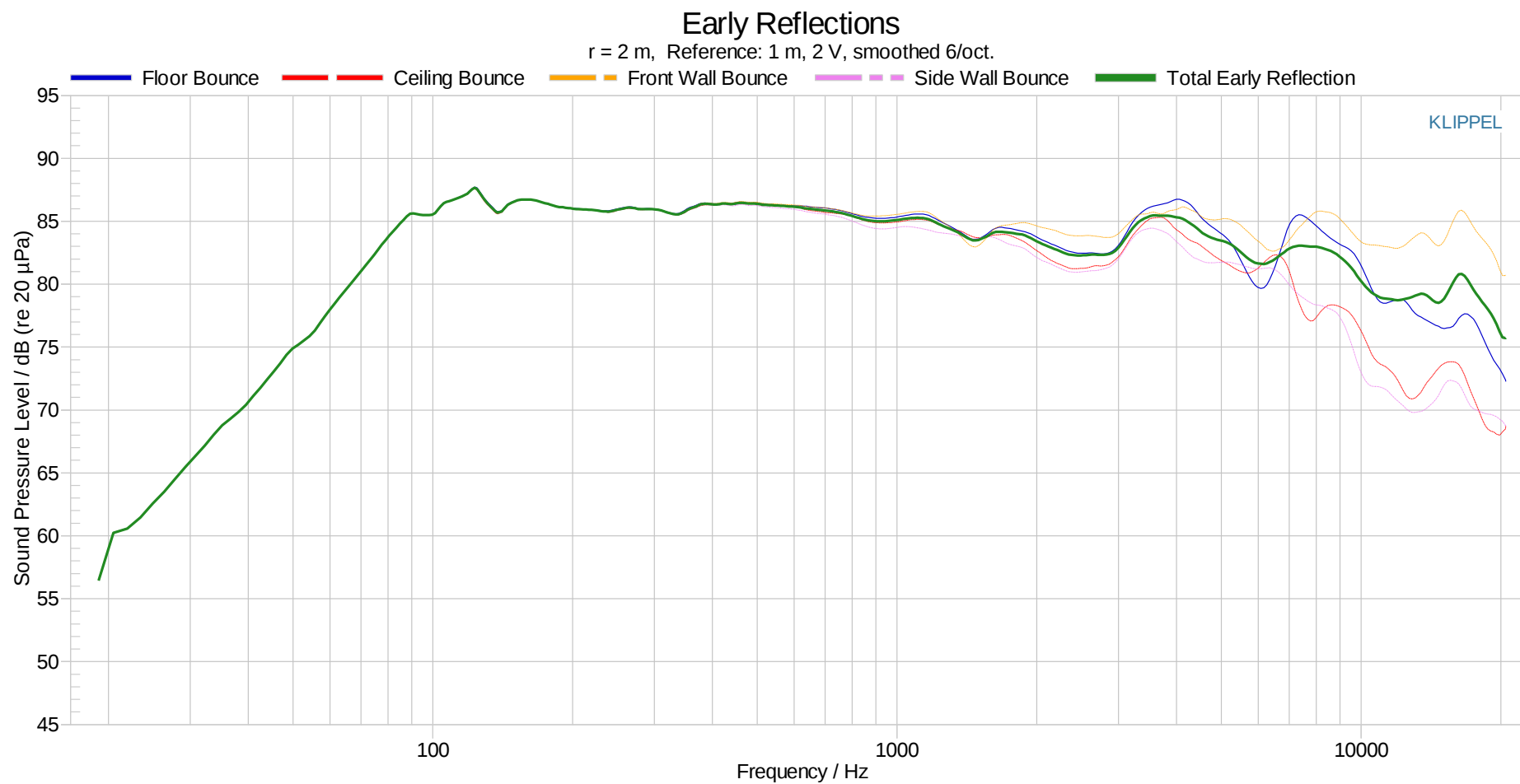
5.2. In-Room response

1/6 oct. Smoothing



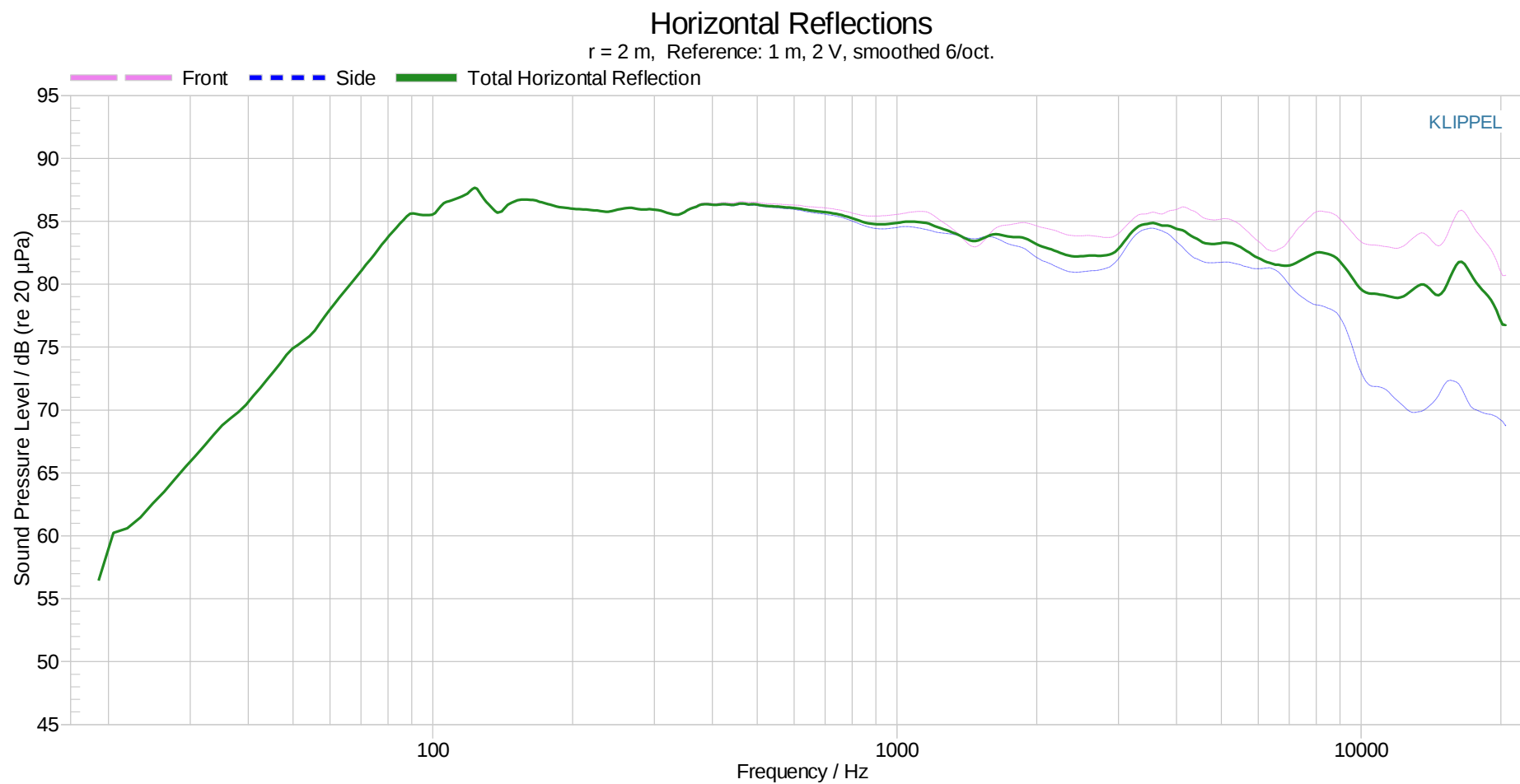
5.3. Early reflections

1/6 oct. Smoothing



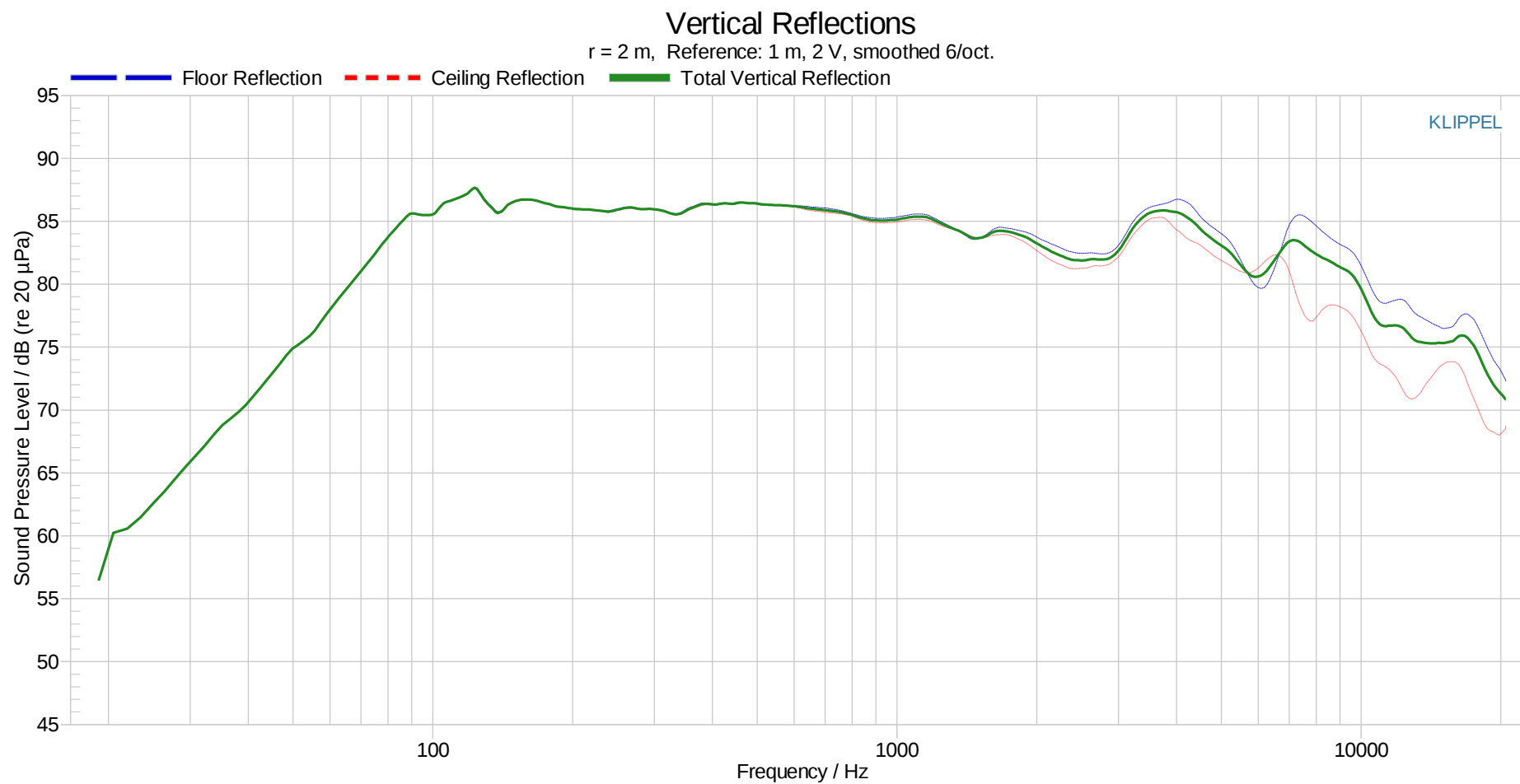
5.4. Horizontal Reflections

1/6 oct. Smoothing



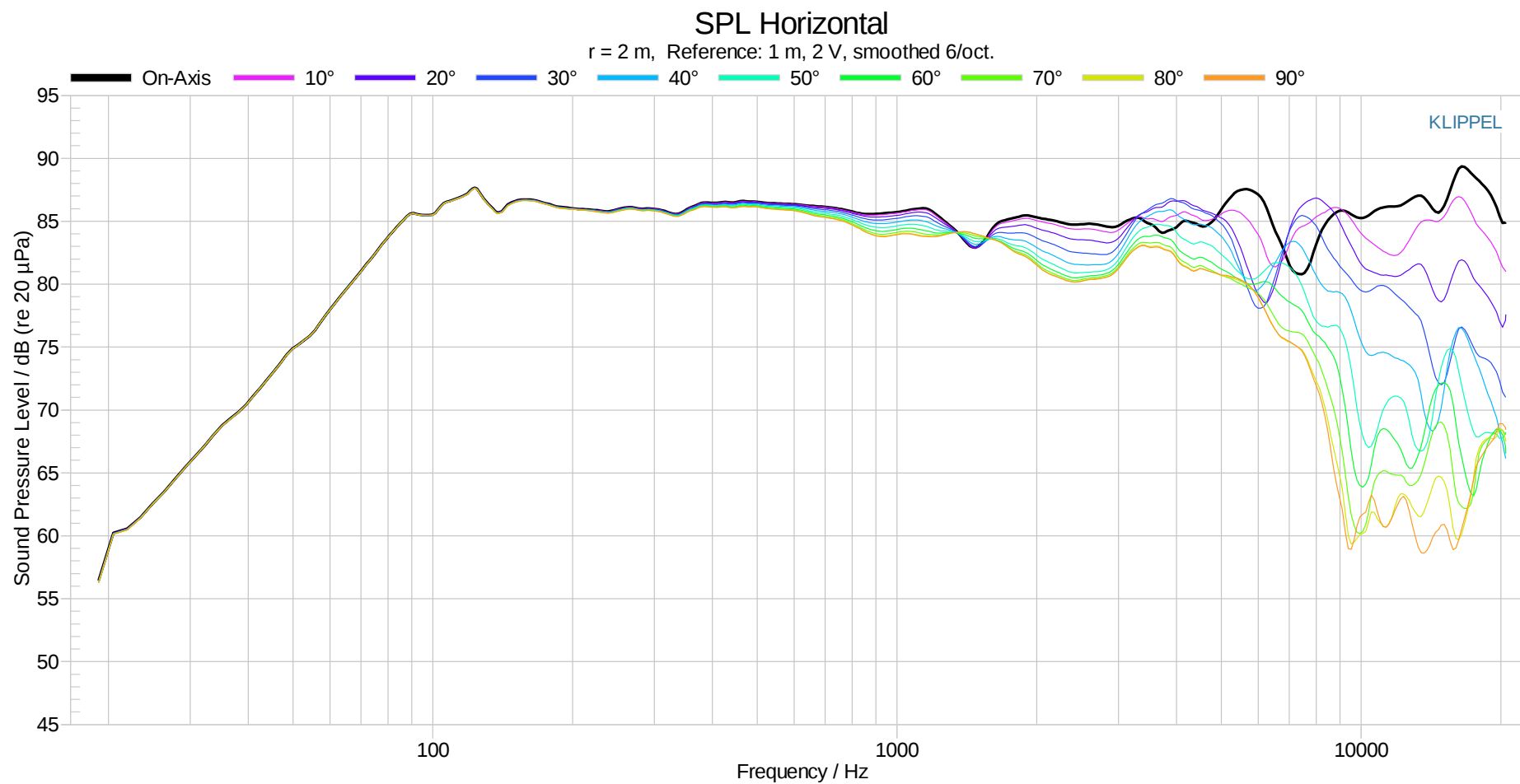
5.5. Vertical Reflections

1/6 oct. Smoothing



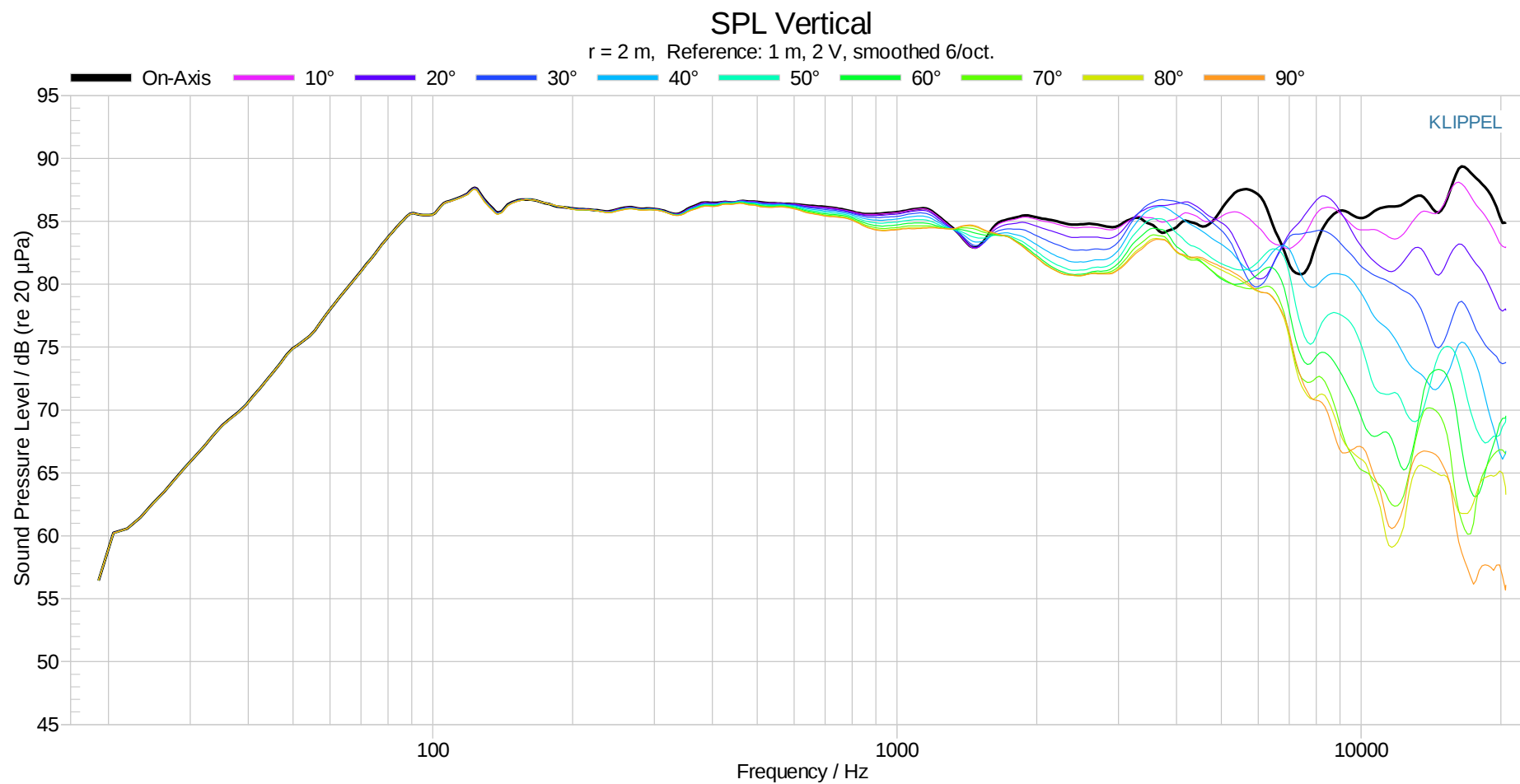
5.6. Horizontal Frequency Response

1/6 oct. Smoothing



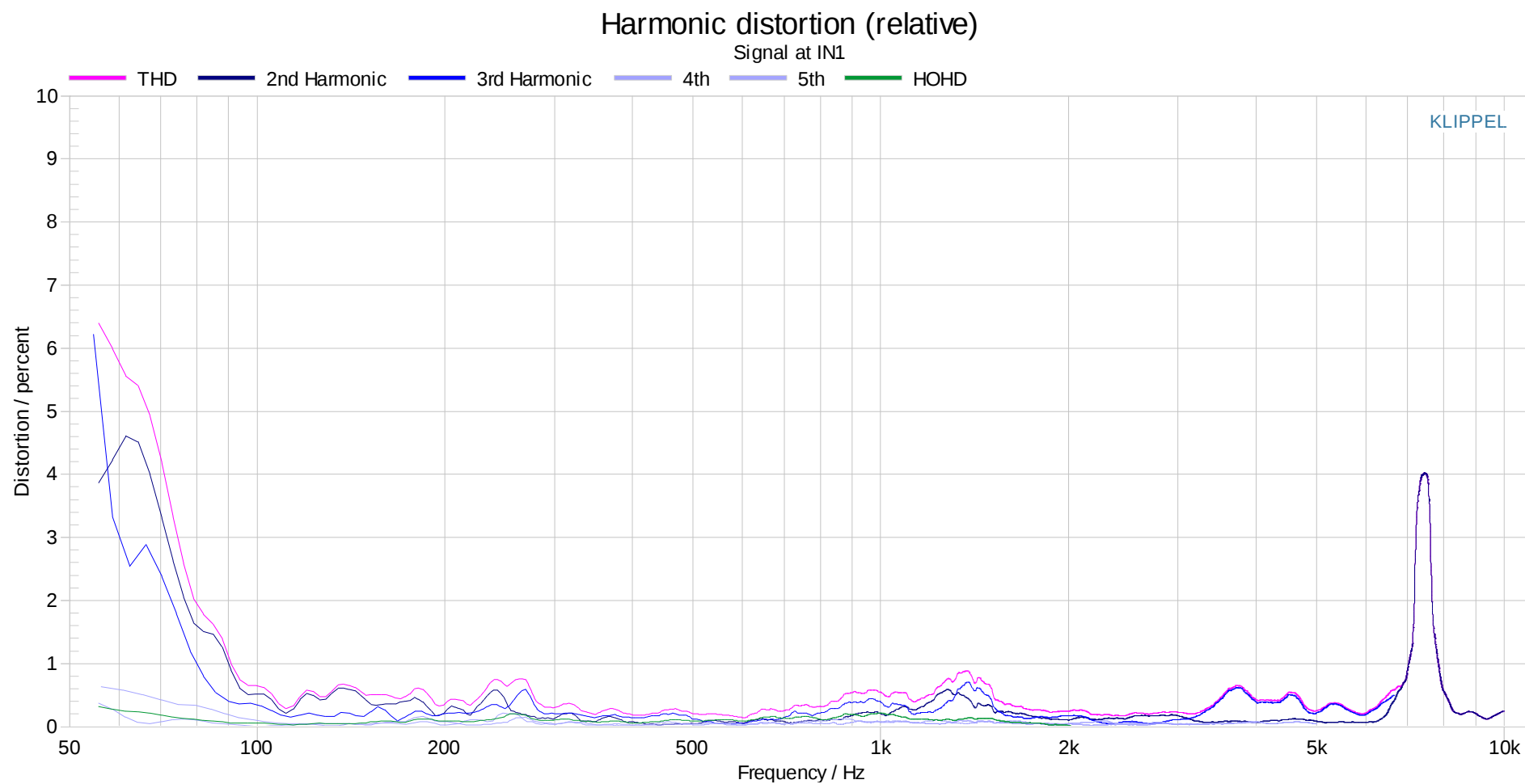
5.7. Vertical Frequency Response

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

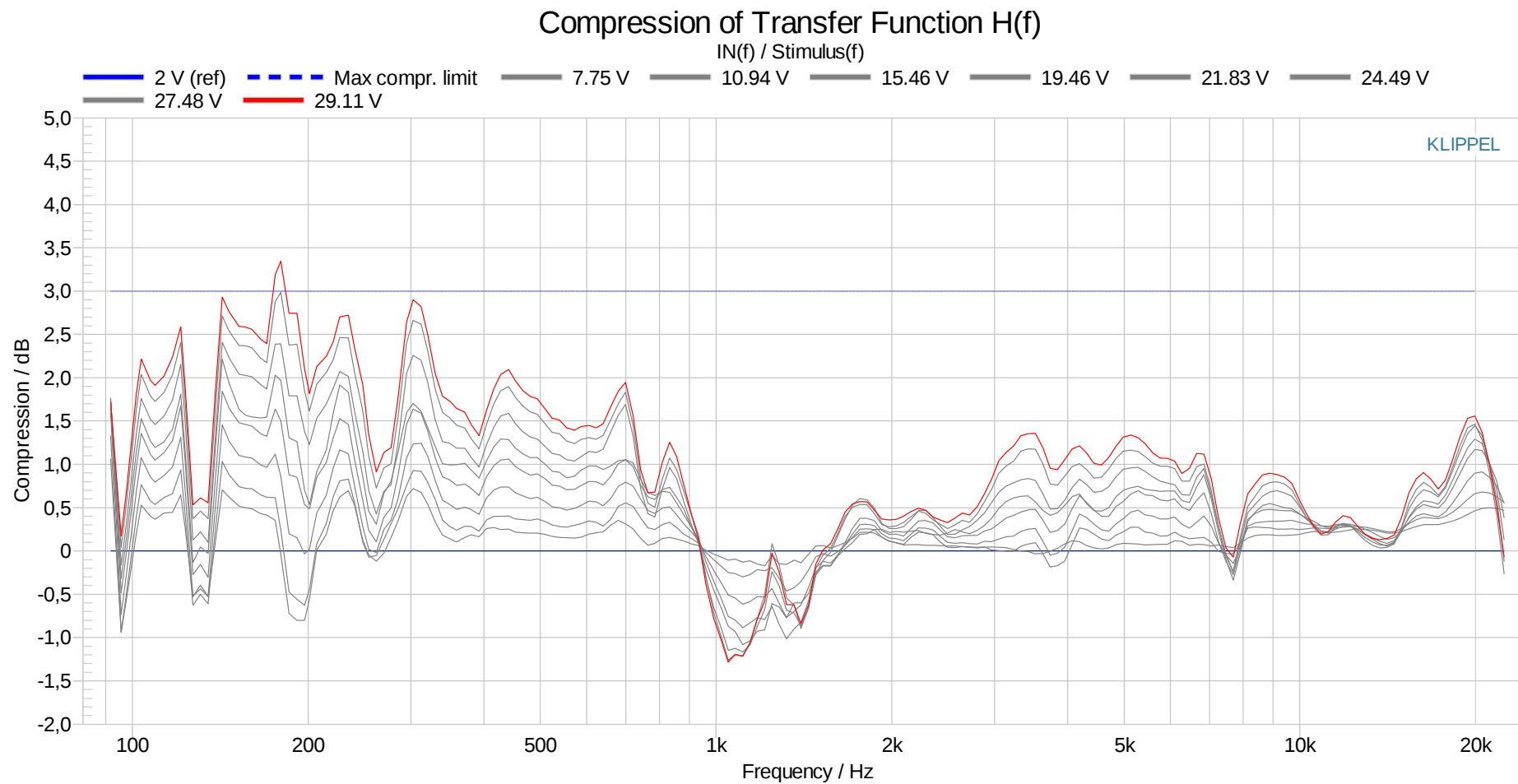
Parameter	Value	Unit	Description
$U_{\max}$	27.48	V	Root mean square of stimulus.
$SPL_{\max}$	103.68	dB	Sum level of fundamentals in microphone signal.
$C_{\max}$	2.98	dB	Max compression in the frequency range 92 - 19945 Hz.
$RMD_{\max}$	-21.78 (8.1)	dB (%)	Maximum multi-tone distortion of microphone signal relative to mean value.
TMDR	-20.69 (9.2)	dB (%)	Total multi-tone distortion ratio of microphone signal.

Stimulus properties

Parameter	Value	Unit	Description
$f_{\min}$	91.8	Hz	Lowest multi-tone frequency line
$f_{\max}$	22386.72	Hz	Highest multi-tone frequency line
t	0.51	s	Signal duration
K	3.02	-	Kurtosis
C	12.63	dB	Crest factor

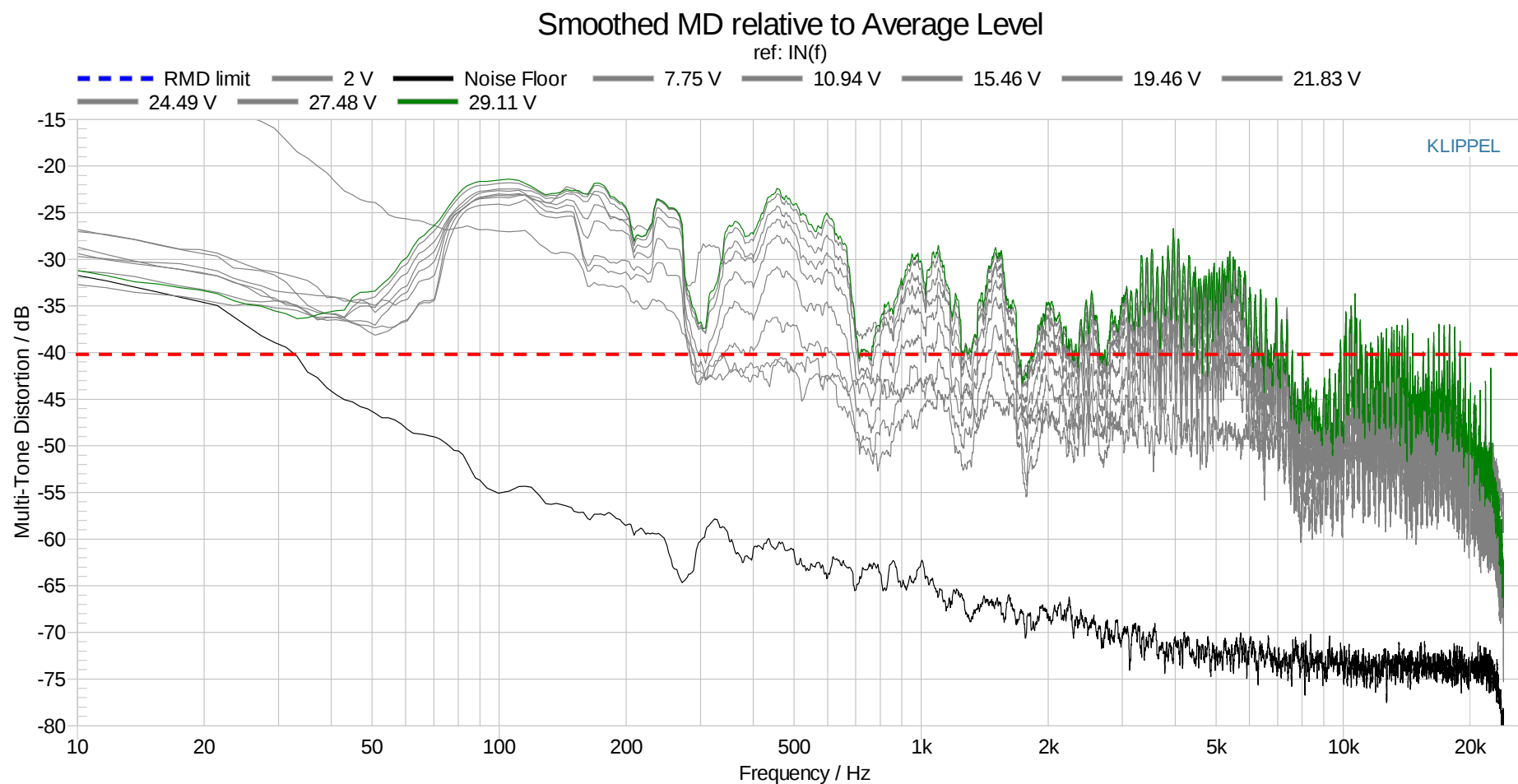
7.2. Compression Chart

-32dB Voltage Values – 1/6 Smoothing



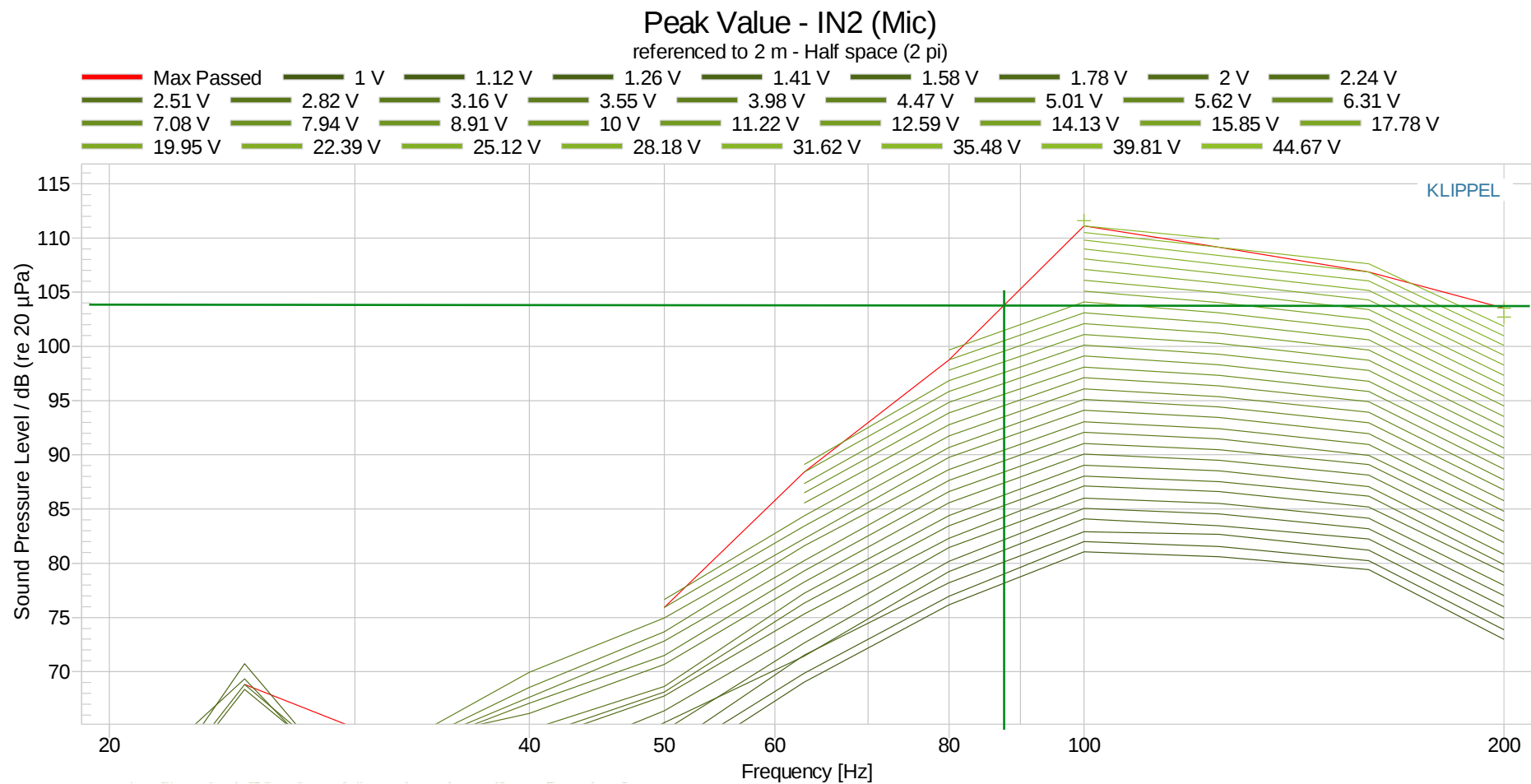
7.3. Multi Tone Distortion Chart

-32dB Voltage Values – No Smoothing



8. CEA2010B

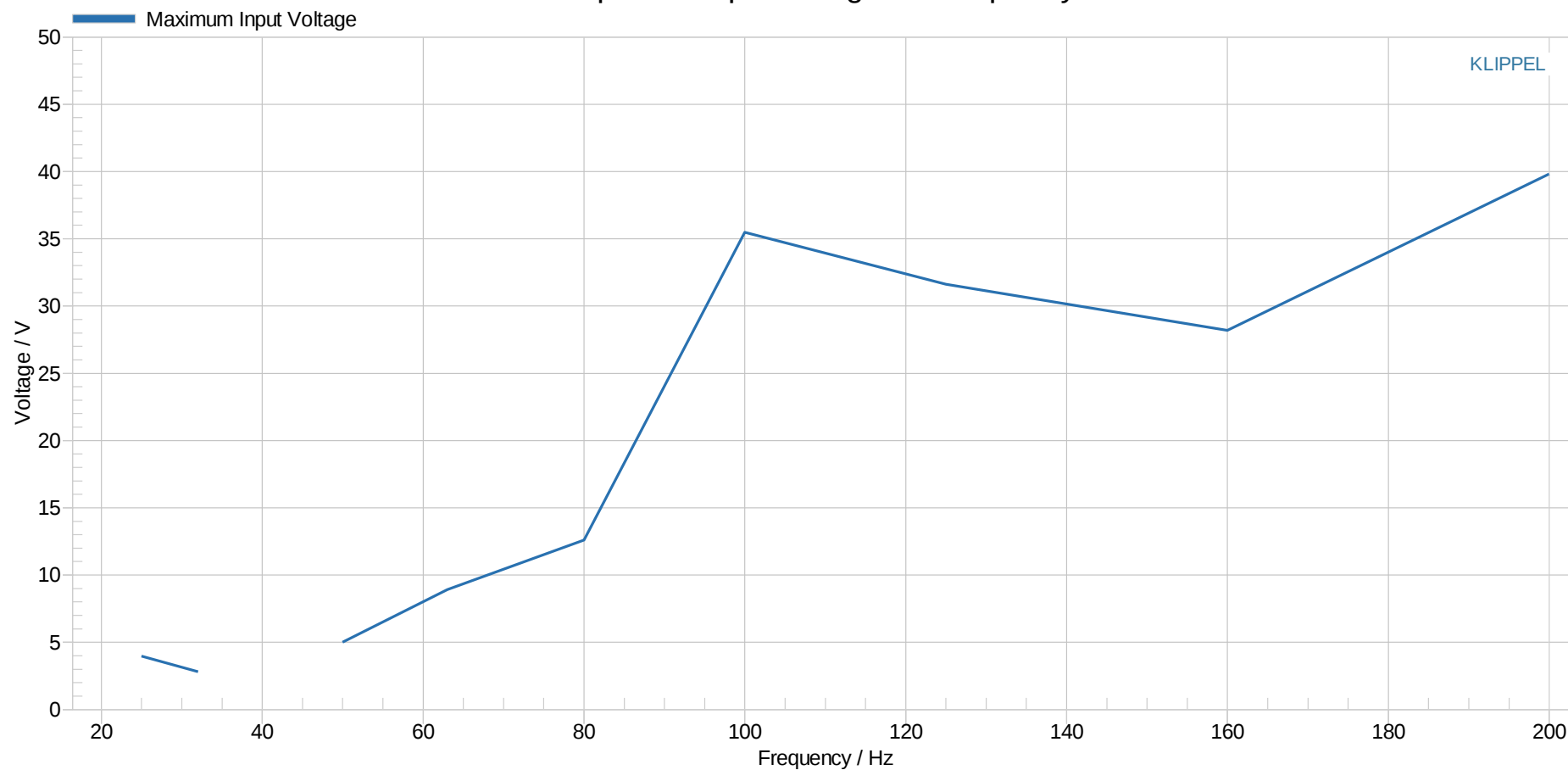
8.1. Max Peak SPL



x

8.2. Max Peak Voltage

Maximum passed Input Voltage vs. Frequency Profile



8.3. THD on Burst

