

# THE 15 Be PRO

## ACTIVE

### ON WALL

## ASCENDO

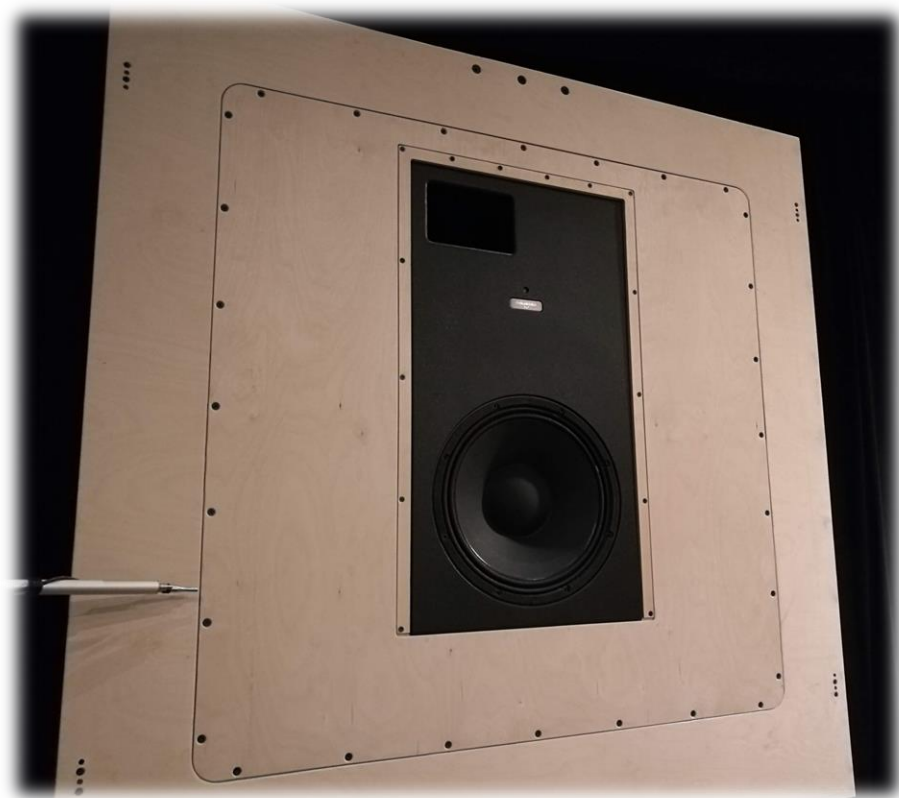
---

Date	Author	Changes	Version
10/11/2021	GL		V1
20/11/2021	GL	THD BURST SCALE	V1_REV1

## Summary

1. Pictures of measurements .....	3
2. Frequency Response .....	4
3. Contour Plot .....	5
3.1. Horizontal .....	5
3.2. Vertical.....	6
4. CEA2034 Spinorama .....	7
4.1. Directivity Index.....	8
4.2. In-Room response .....	9
4.3. Early reflections.....	10
4.4. Horizontal Reflections .....	11
4.5. Vertical Reflections.....	12
4.6. Horizontal Frequency Response.....	13
4.7. Vertical Frequency Response .....	14
5. Harmonic Distortion .....	15
6. MTON Max SPL – 1s Stimulus.....	16
6.1. Results .....	16
6.2. Compression Chart .....	17
6.3. Multi Tone Distortion Chart .....	18
7. CEA2010B .....	19
7.1. Max Peak SPL.....	19
7.2. Max Peak Voltage .....	20
7.3. THD on Burst.....	21

## 1. Pictures of measurements

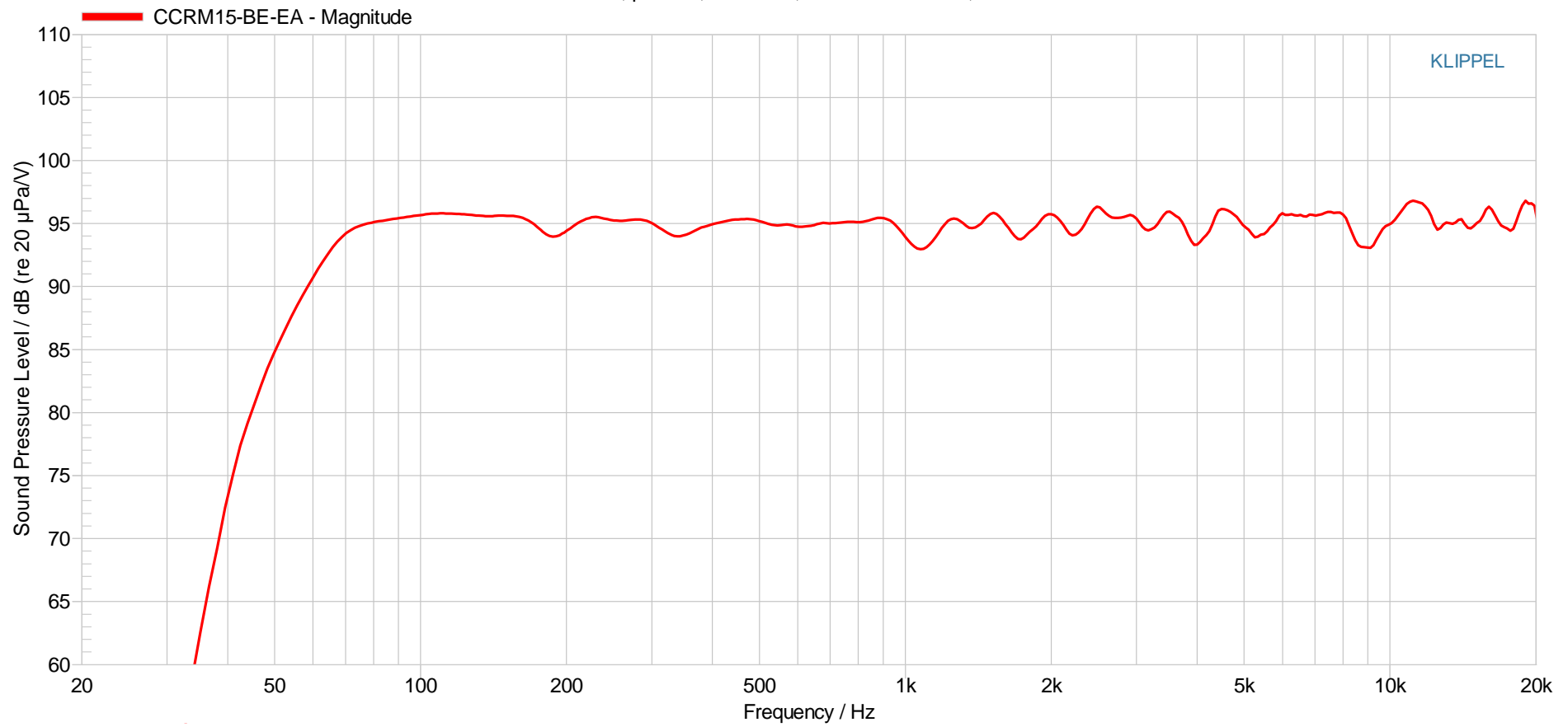


## 2. Frequency Response

2,83v @1m – 1/6 oct. Smoothing

### H(f) Magnitude + Phase

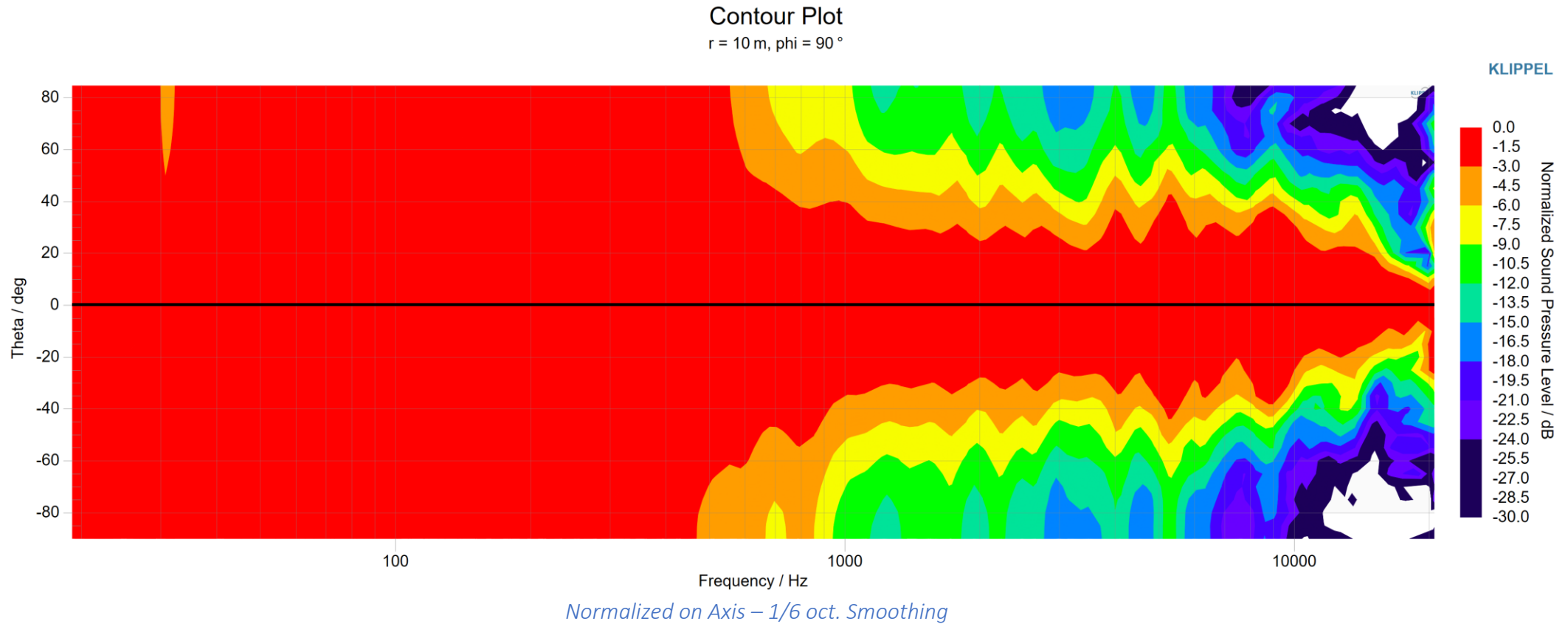
r = 10 m, phi = 0°, theta = 0°, Reference: 1.00 m, 2.83 V



### 3. Contour Plot

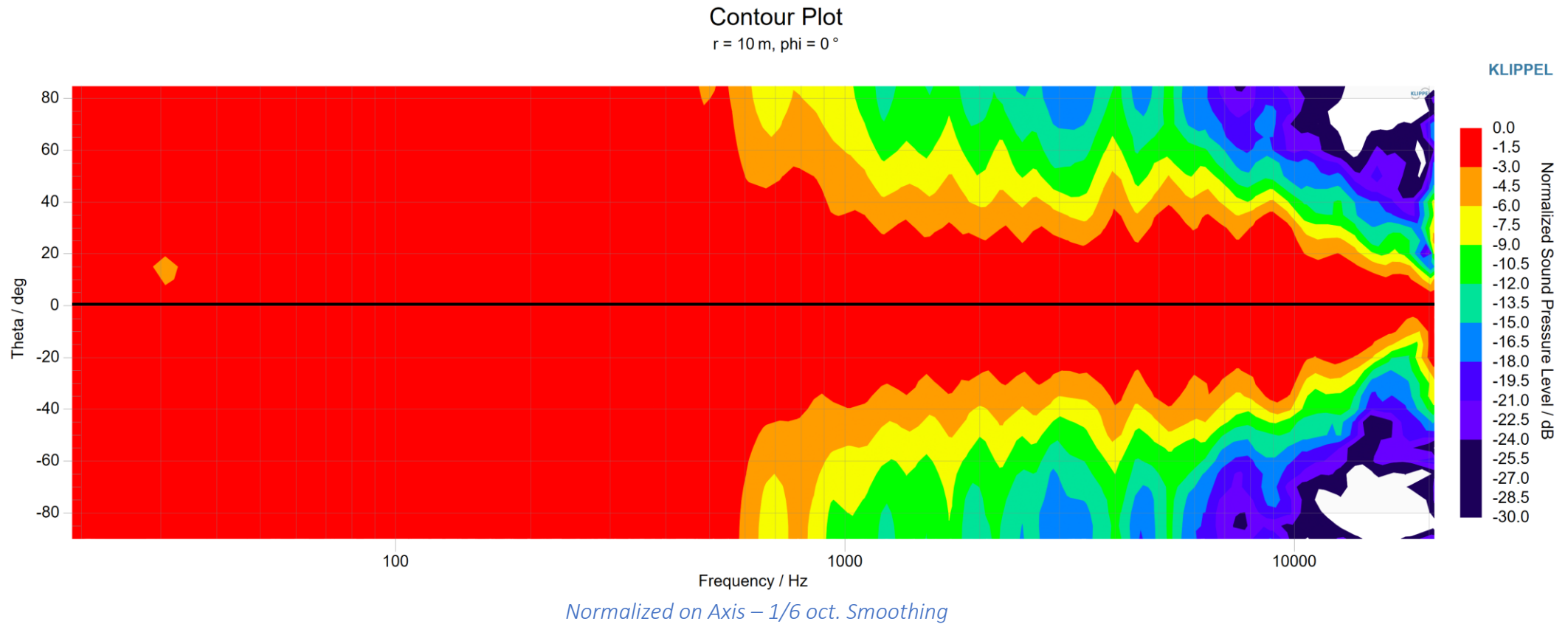
#### 3.1. Horizontal

Referenced @10m – Baffle loaded ( $2\pi$  steradians)



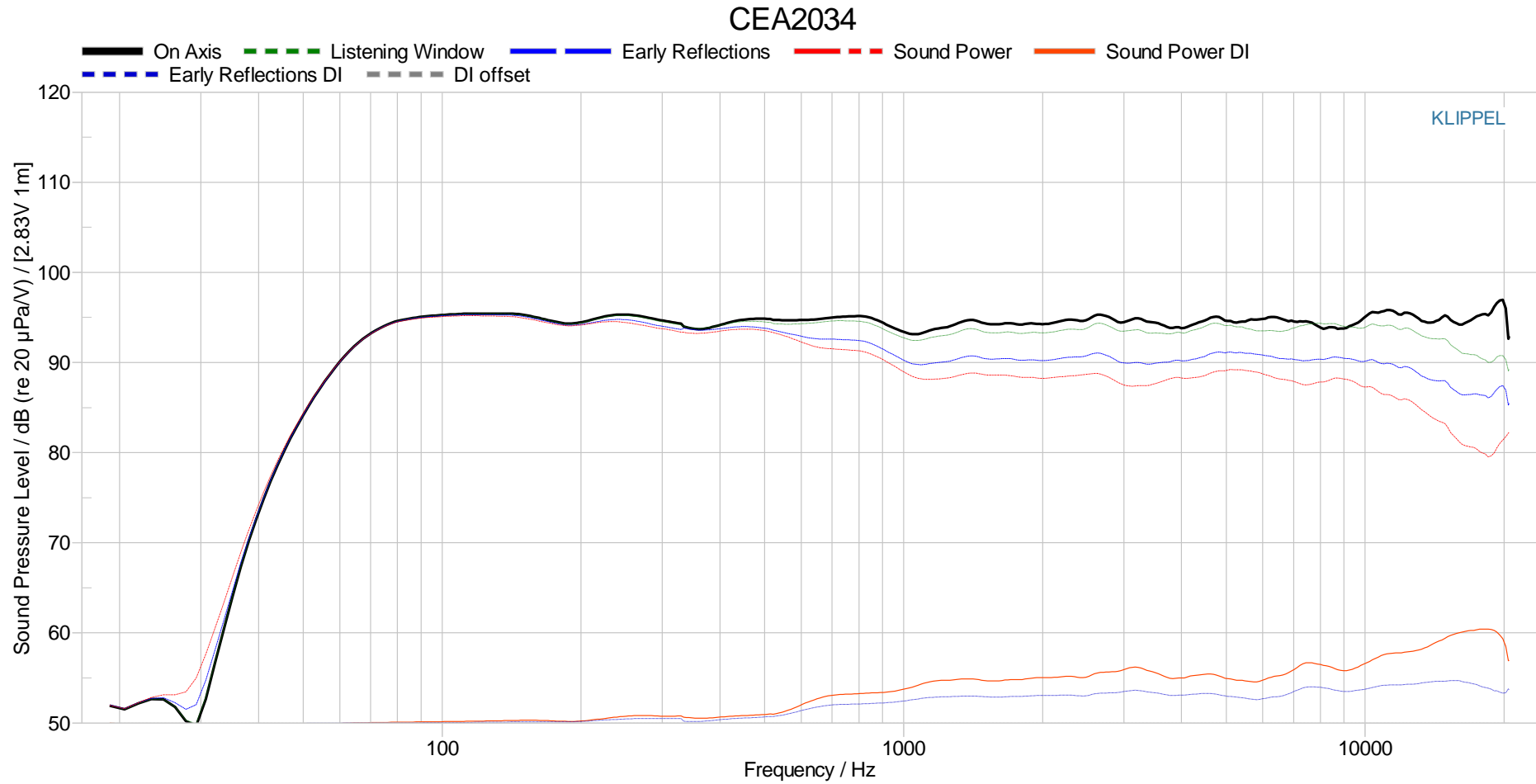
### 3.2. Vertical

Referenced @10m – Baffle loaded ( $2\pi$  steradians)



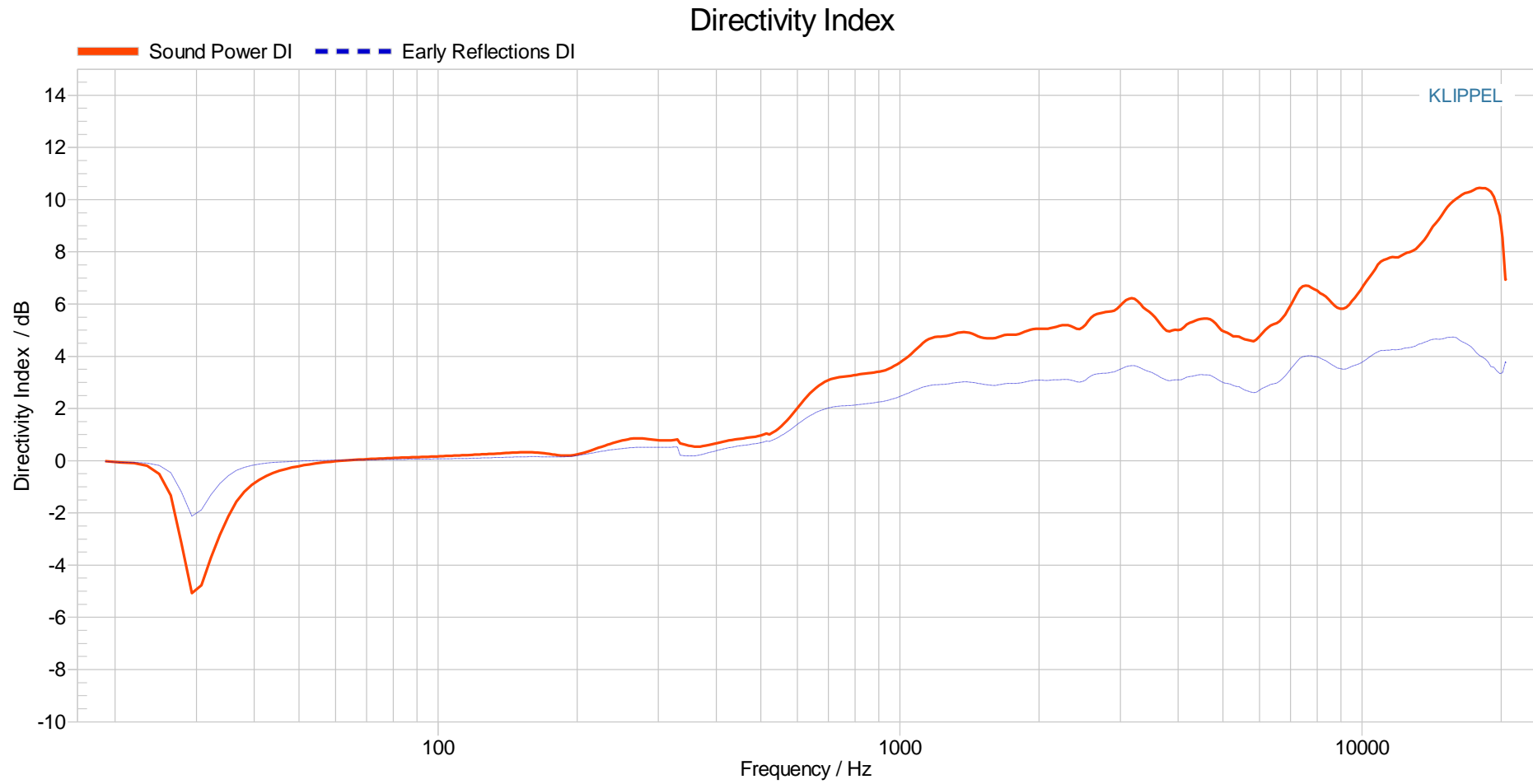
## 4. CEA2034 Spinorama

2,83v @1m – 1/6 oct. Smoothing



## 4.1. Directivity Index

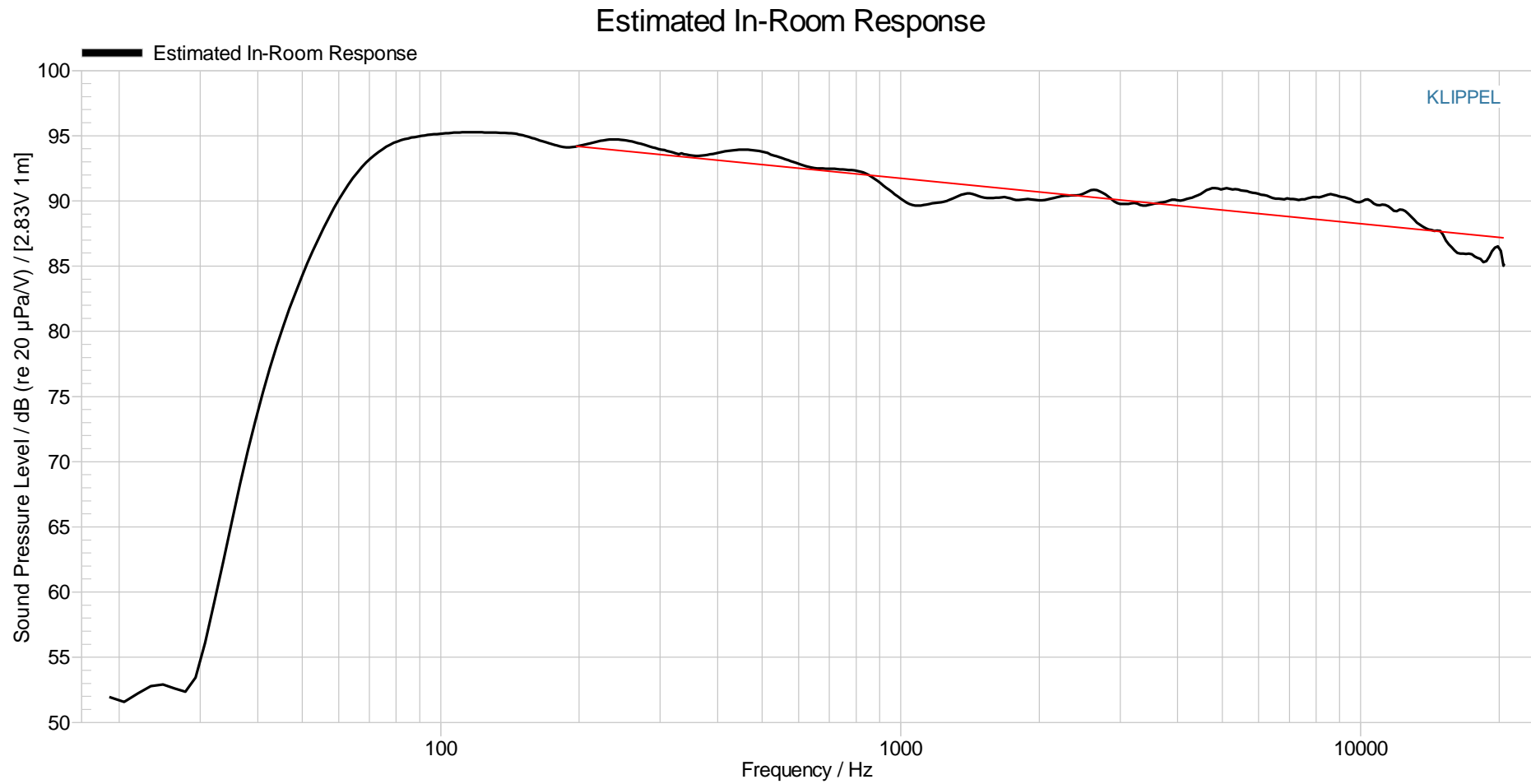
*1/6 oct. Smoothing*





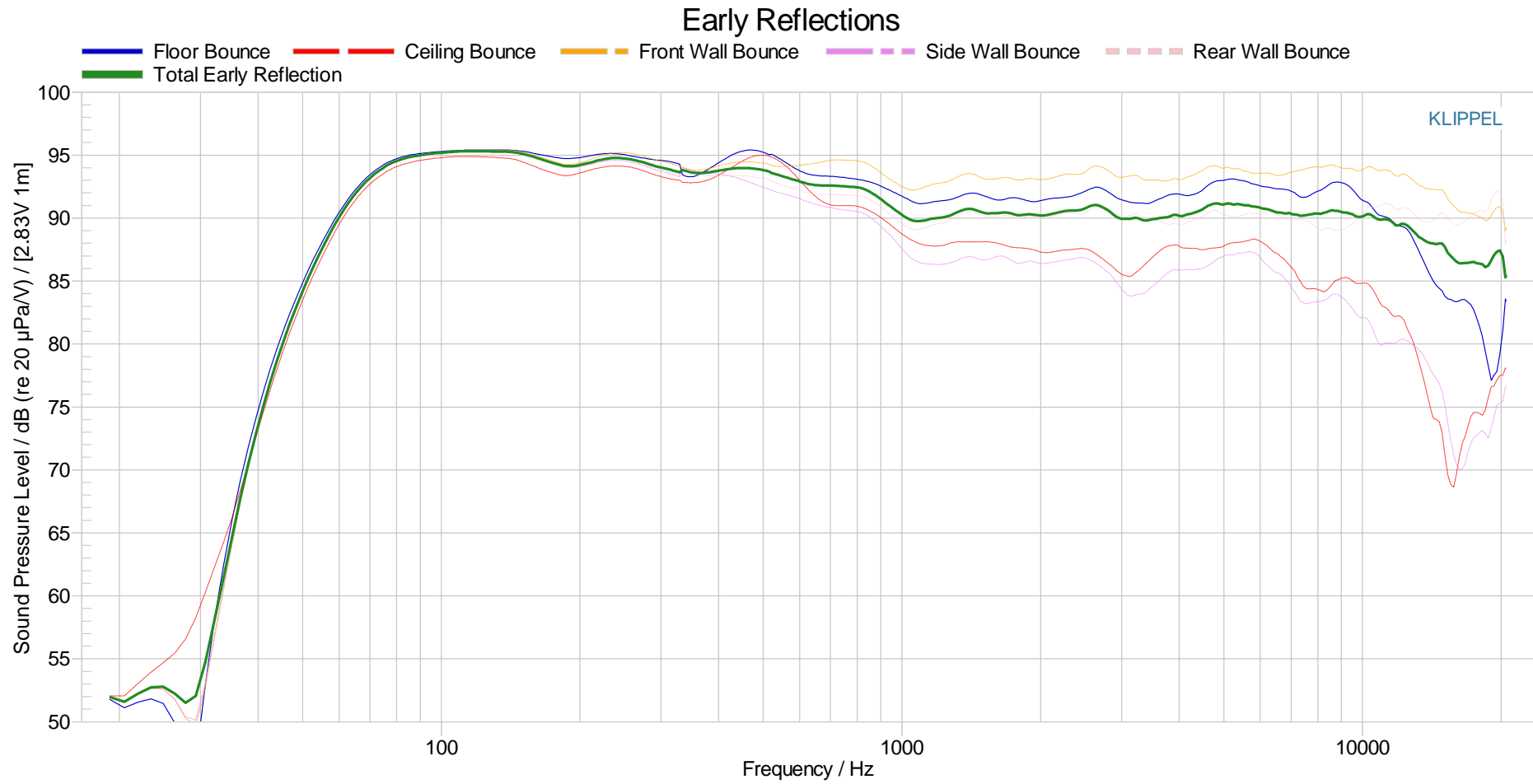
## 4.2. In-Room response

*1/6 oct. Smoothing*



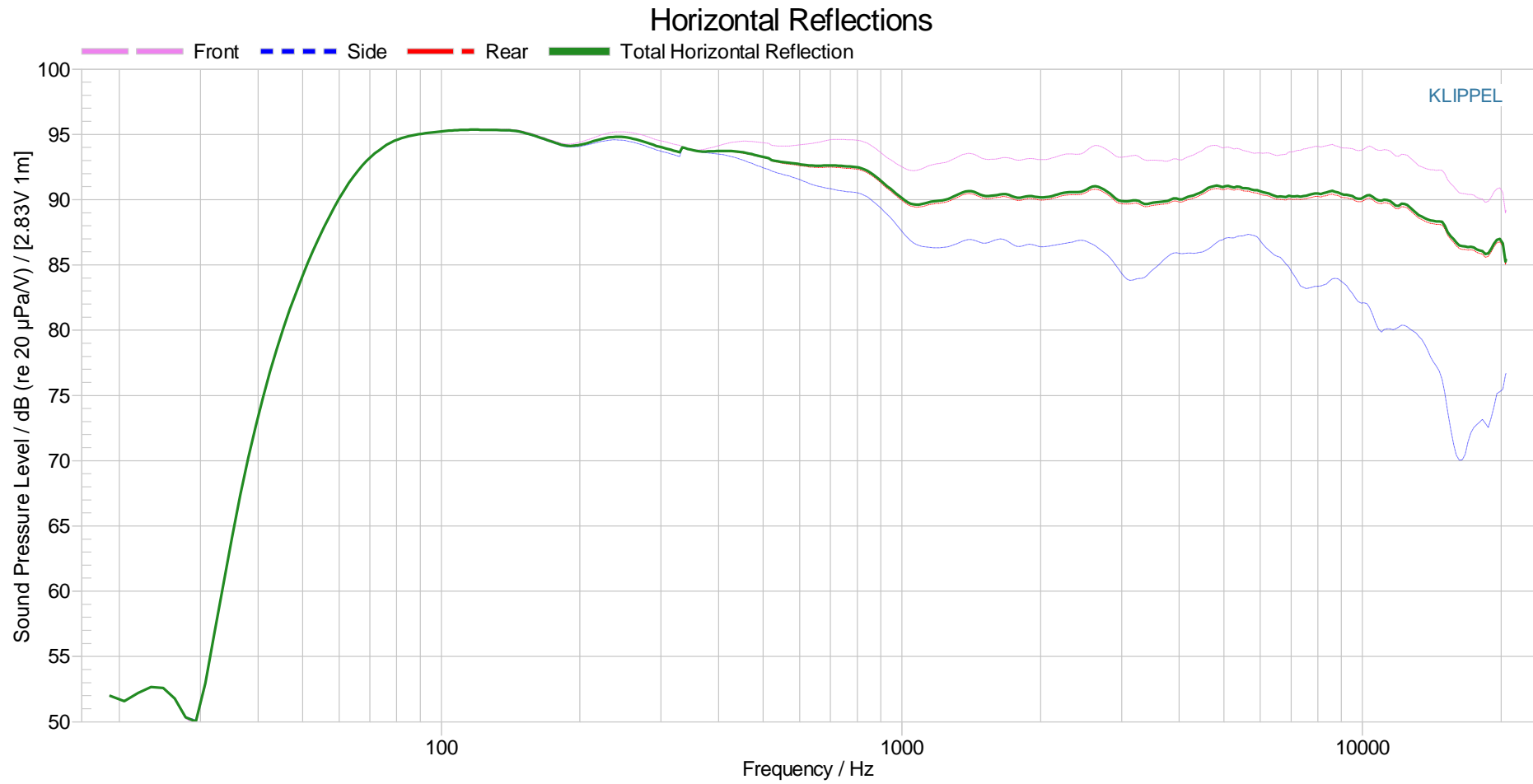
## 4.3. Early reflections

*1/6 oct. Smoothing*



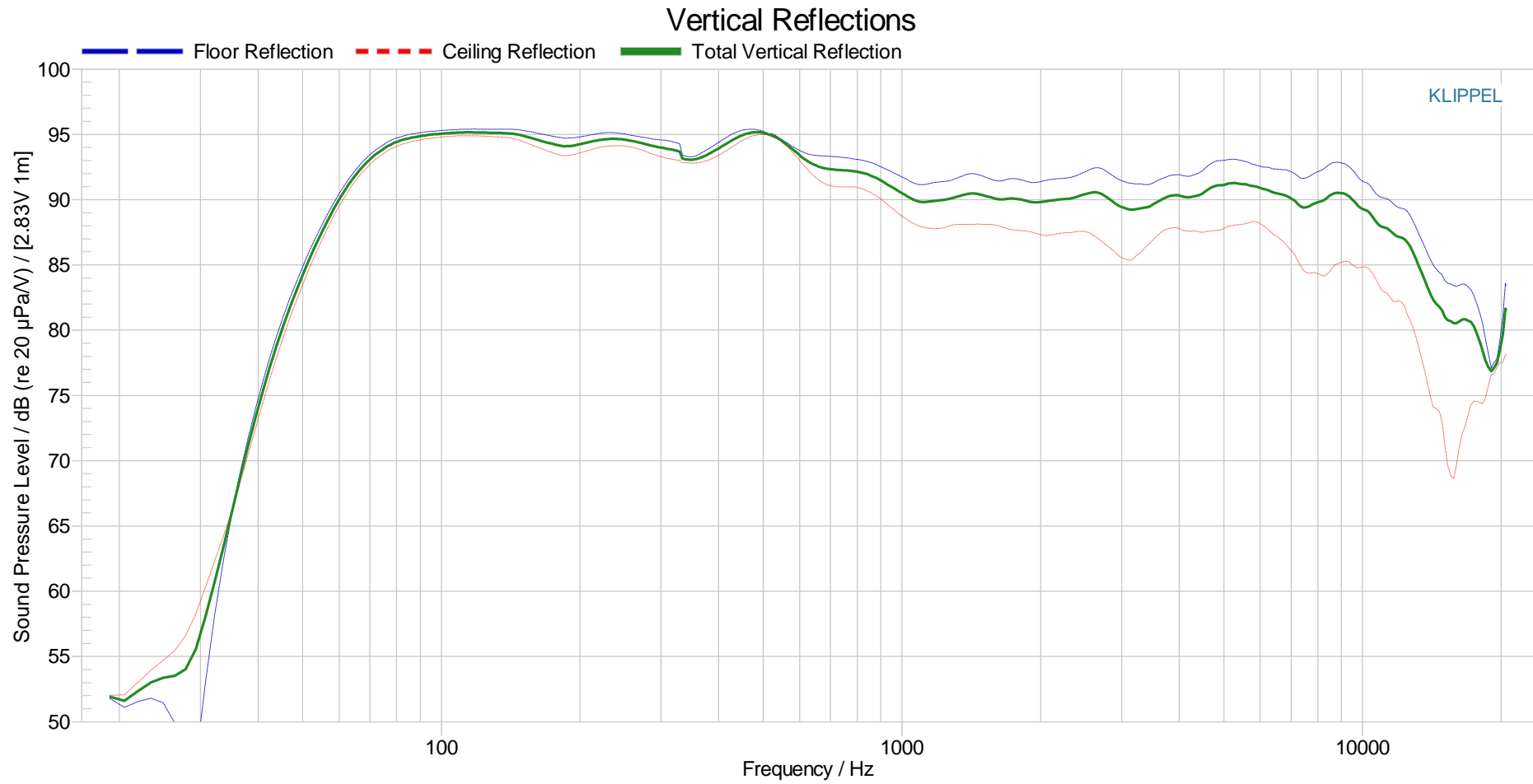
## 4.4. Horizontal Reflections

*1/6 oct. Smoothing*



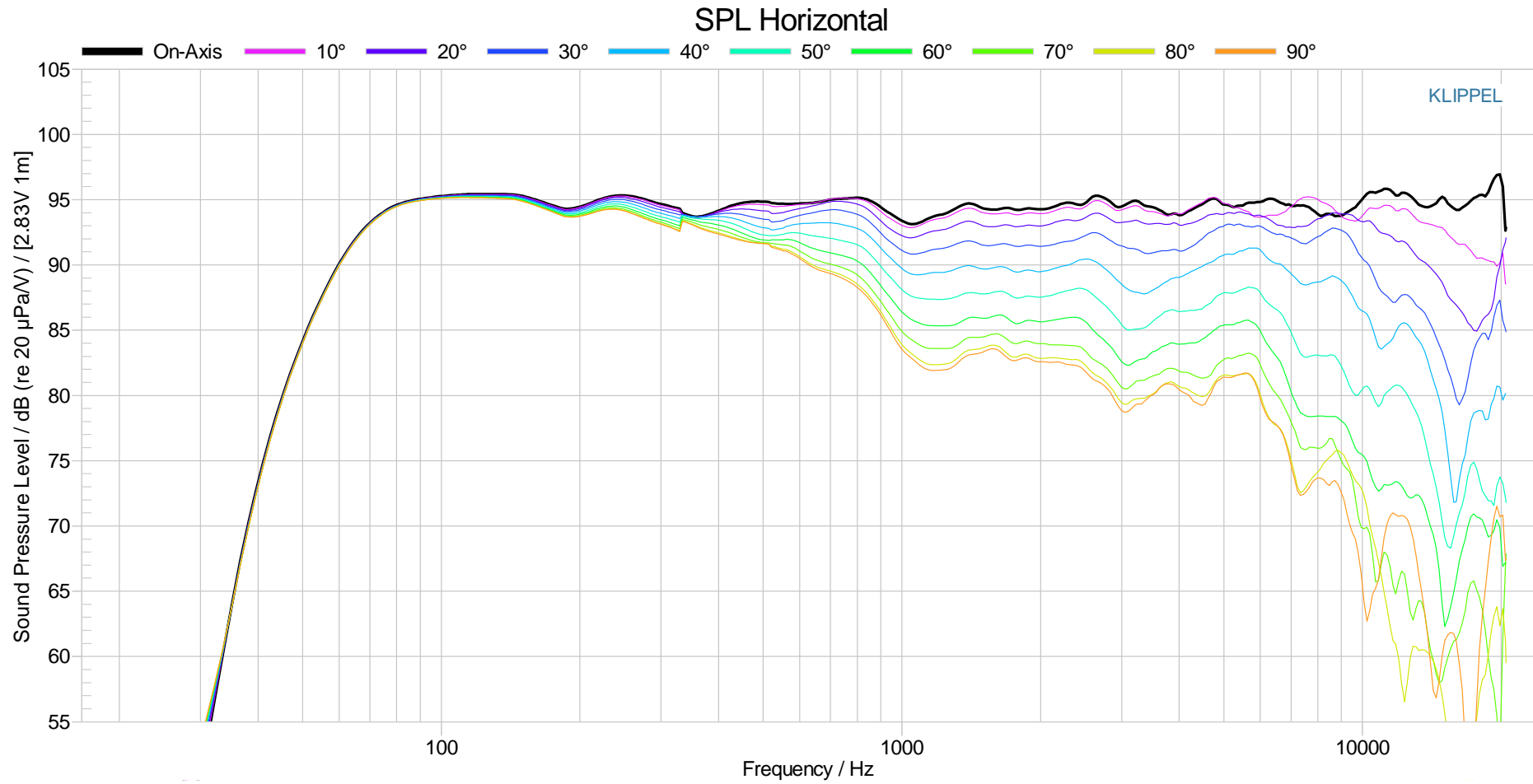
## 4.5. Vertical Reflections

*1/6 oct. Smoothing*



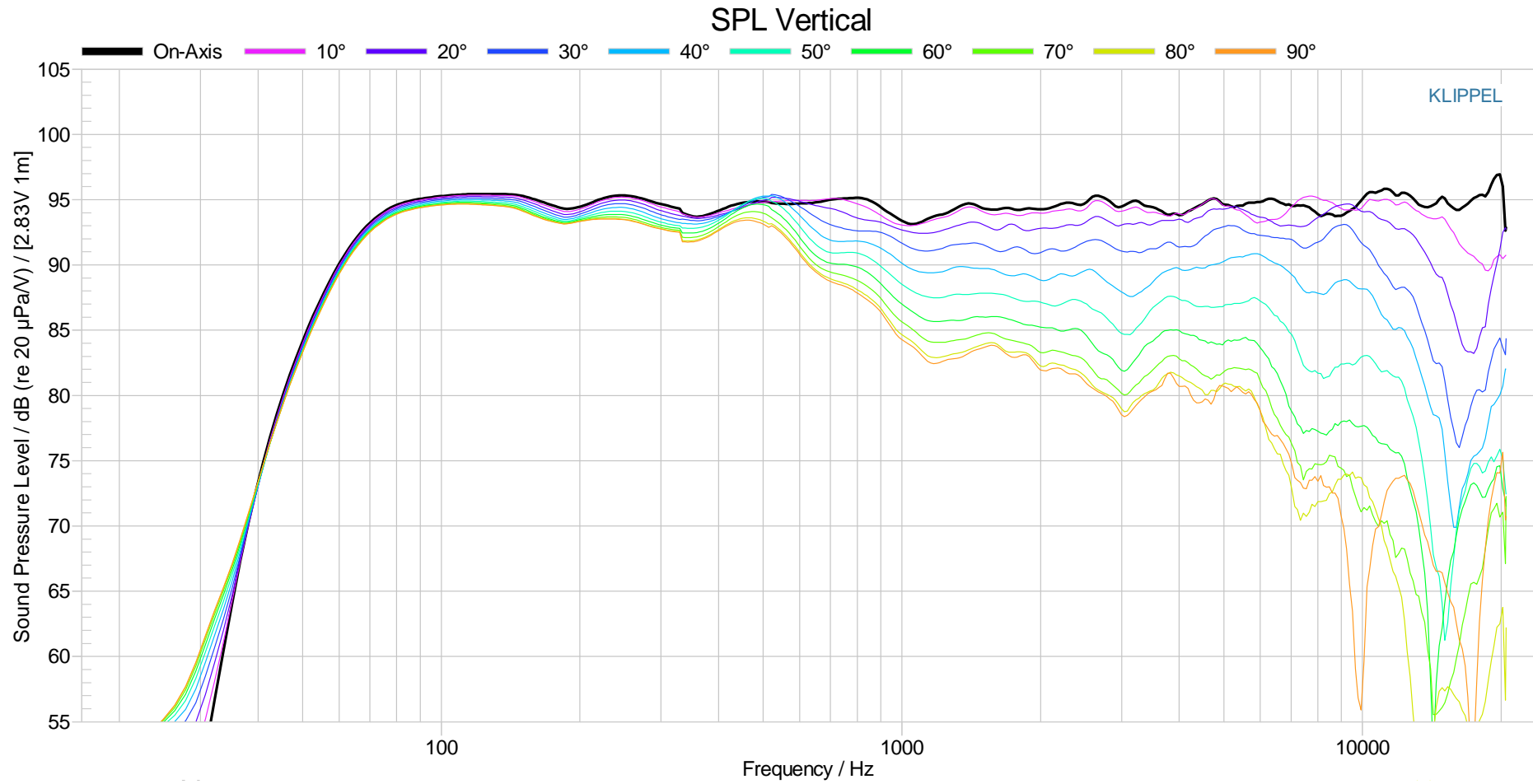
## 4.6. Horizontal Frequency Response

*1/6 oct. Smoothing*



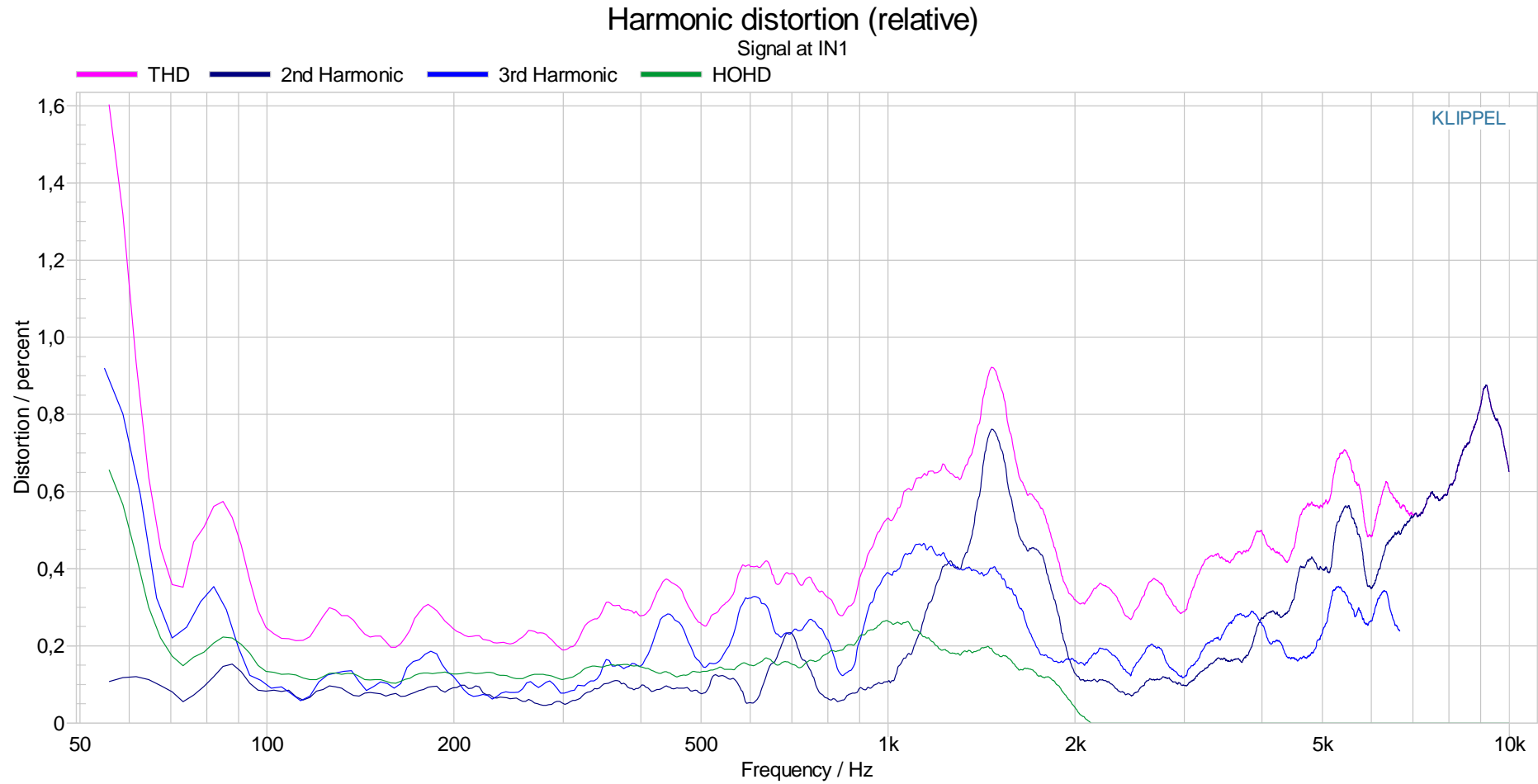
## 4.7. Vertical Frequency Response

*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
$U_{\max}$	2.52	V	Root mean square of stimulus.
$SPL_{\max}$	124.78	dB	Sum level of fundamentals in microphone signal.
$C_{\max}$	2.82	dB	Max compression in the frequency range 61 - 19557 Hz.
$MTD_{\max}$	-20.5	dB	Maximum multi-tone distortion of microphone signal relative to mean value.

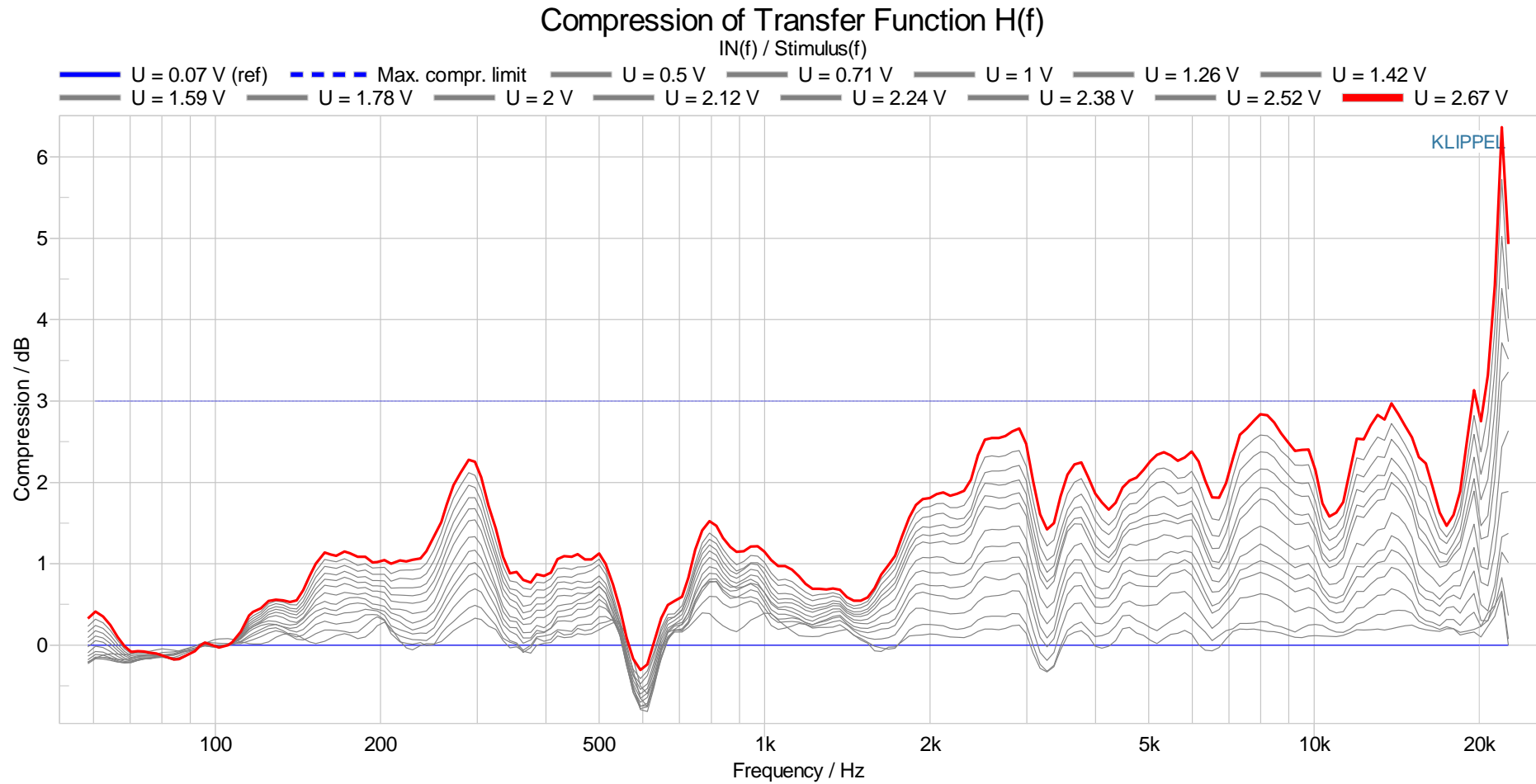
#### Stimulus properties

Parameter	Value	Unit	Description
$f_{\min}$	58.59	Hz	Lowest multi-tone frequency line
$f_{\max}$	22595.7	Hz	Highest multi-tone frequency line
$t$	0.51	s	Signal duration
$K$	3.01	-	Kurtosis
$C$	11.69	dB	Crest factor



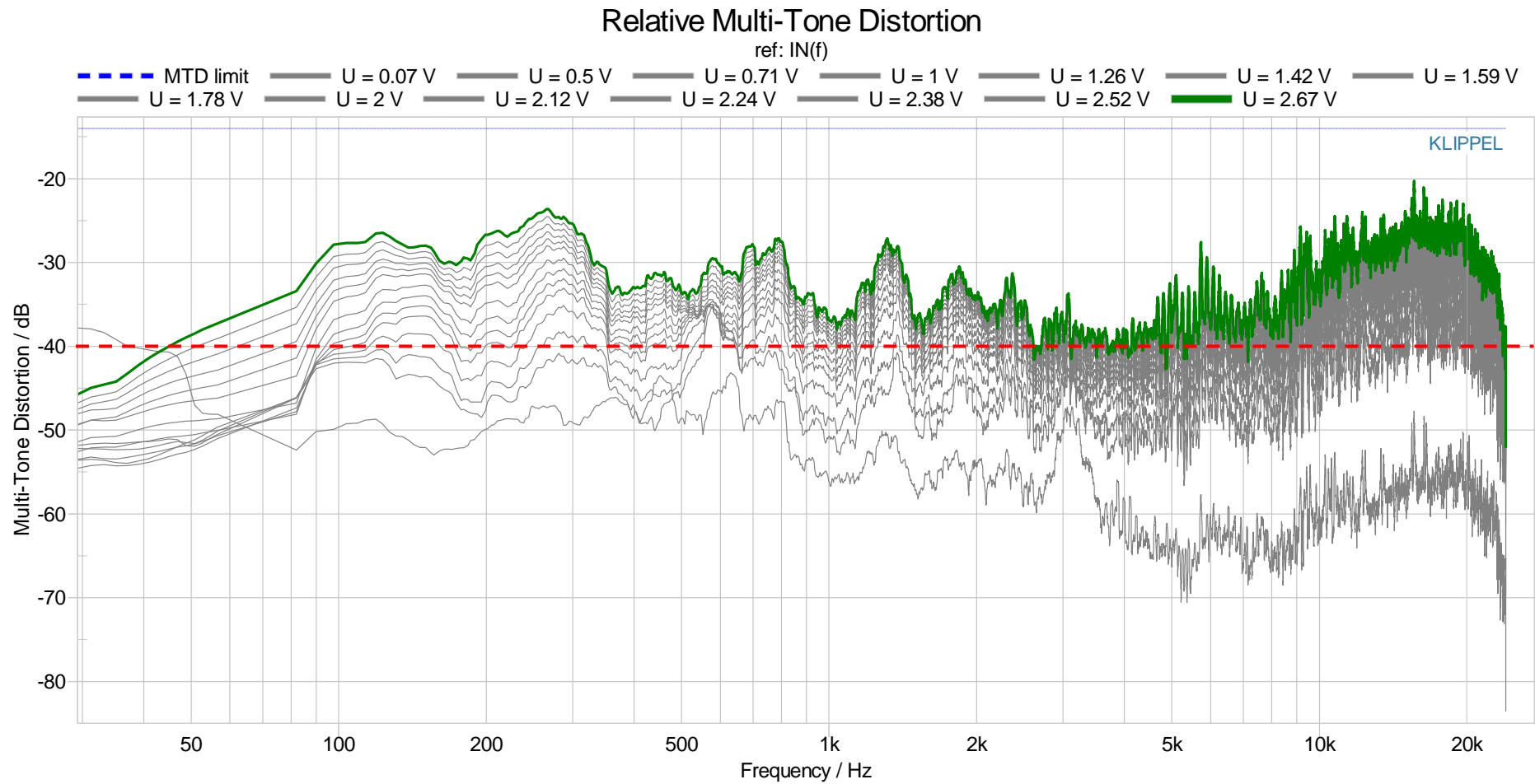
## 6.2. Compression Chart

*-32dB Voltage Values – 1/6 Smoothing*



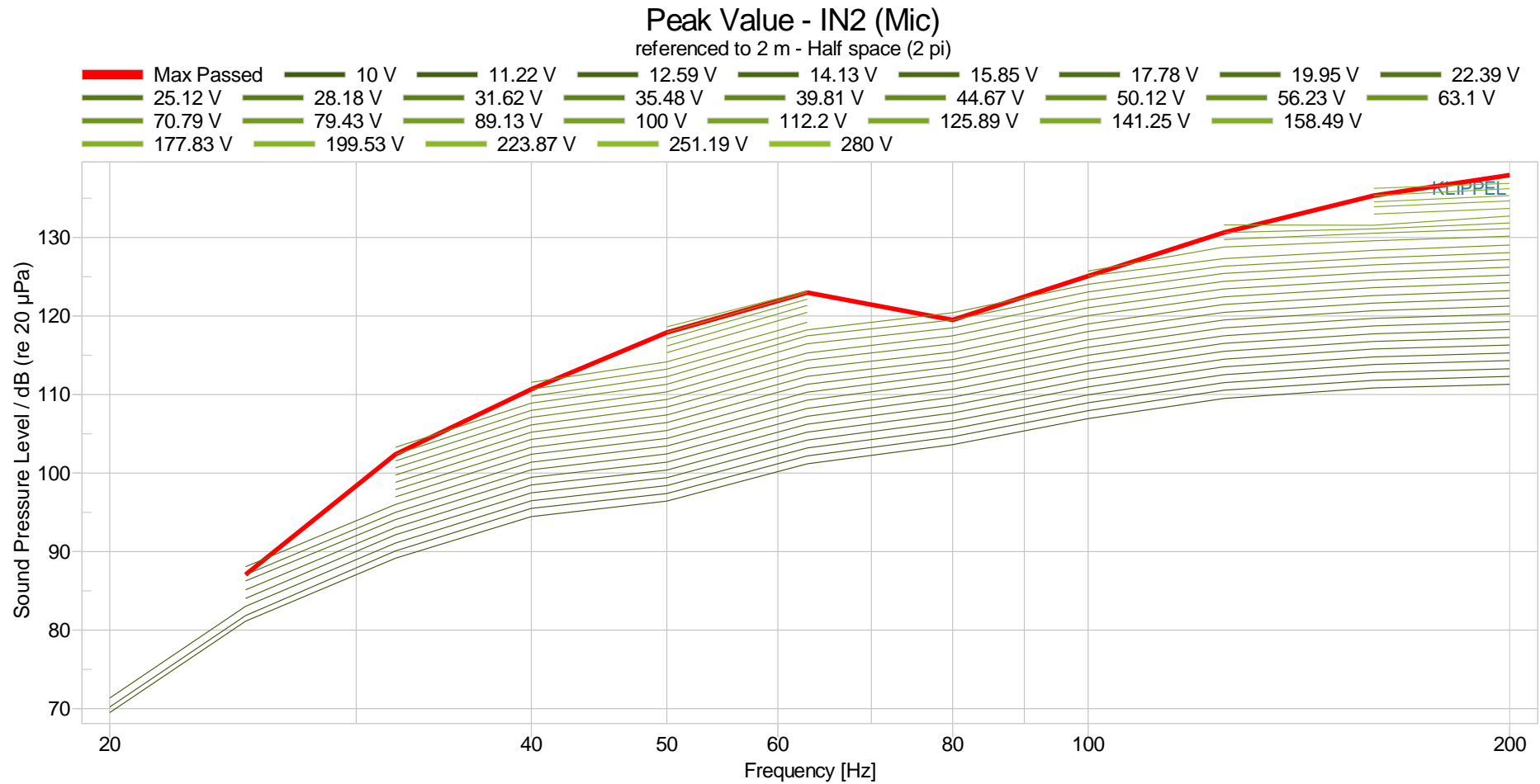
## 6.3. Multi Tone Distortion Chart

*-32dB Voltage Values – No Smoothing*



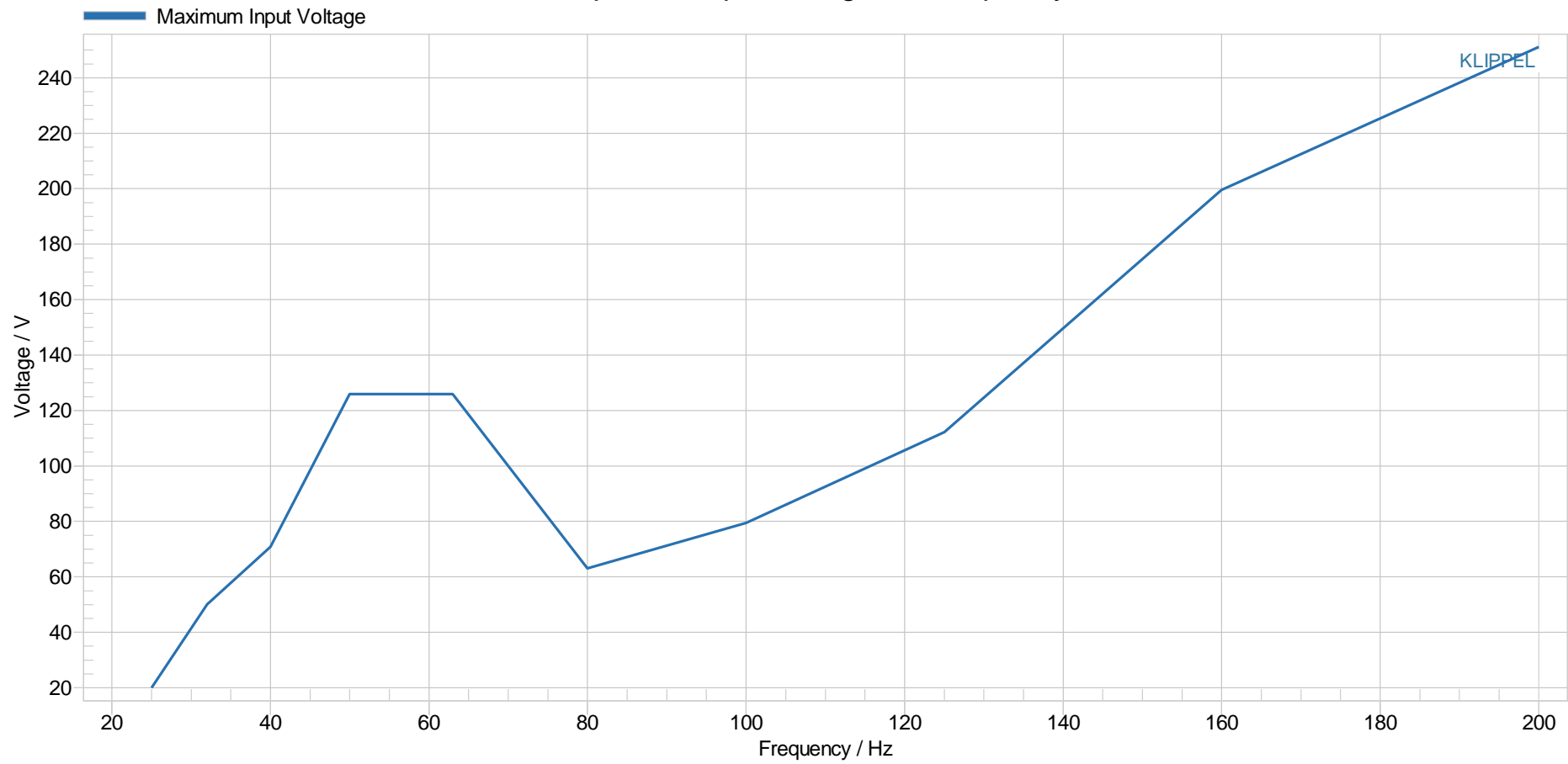
## 7. CEA2010B

### 7.1. Max Peak SPL



## 7.2. Max Peak Voltage

Maximum passed Input Voltage vs. Frequency Profile



### 7.3. THD on Burst

