



## **PS110 ND2**

**10" Point Source**

1 x 10NTLW2000 + ND2T





# PS110 ND2 | SPEAKERS

## 10NTLW2000 8Ω

### SPECIFICATIONS

Nominal Diameter	260 mm (10.0 in)
Nominal Impedance	8 Ω
Minimum Impedance	5.8 Ω
Nominal Power Handling <sup>1</sup>	350 W
Continuous Power Handling <sup>2</sup>	700 W
Sensitivity <sup>3</sup>	98.5 dB
Frequency Range	60 - 5000 Hz
Voice Coil Diameter	51 mm (2.01 in)
Winding Material	aluminum
Winding Depth	13.0 mm (0.51 in)
Magnetic Gap Depth	8.5 mm (0.33 in)

### PARAMETERS<sup>4</sup>

Resonance Frequency	57 Hz
Re	5.2 Ω
Qes	0.22
Qms	7.6
Qts	0.22
Vas	31.0 dm <sup>3</sup> (1.09 ft <sup>3</sup> )
Sd	346.0 cm <sup>2</sup> (53.63 in <sup>2</sup> )
η <sub>o</sub>	2.8 %
Xmax	4.4 mm
Xvar	6.5 mm
Mms	38.0 g
Bl	17.9 Txm
Le	0.63 mH
EBP	259 Hz

### KEY FEATURES

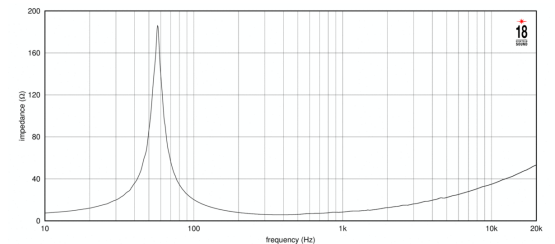
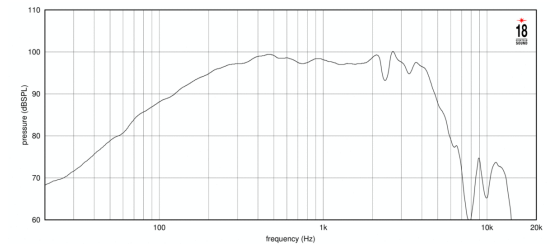
- Dual Gap Technology
- 98 dB SPL 1W / 1m average sensitivity
- 51 mm (2 in) CCAW voice coil
- 350 W AES power handling
- Extremely balanced BL shape for maximum SPL
- Optimized thermal conductivity
- Maximum linearity and inductance symmetry for extended mid-band clarity
- Ideal for two-ways and line array applications

### DESIGN

Surround Shape	M-roll
Cone Shape	Straight
Magnet Material	Neo
Woofer Cone Treatment	Weather protected
Recommended Enclosure	14.0 dm <sup>3</sup> (0.49 ft <sup>3</sup> )
Recommended Tuning	70 Hz

### MOUNTING AND SHIPPING INFO

Overall Diameter	310 mm (12.2 in)
Bolt Circle Diameter	295 mm (11.61 in)
Baffle Cutout Diameter	282.0 mm (11.1 in)
Depth	193 mm (7.6 in)
Flange and Gasket Thickness	13 mm (0.53 in)
Net Weight	4.7 kg (10.36 lb)
Shipping Weight	5.5 kg (12.13 lb)



1. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.  
 2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.  
 3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.  
 4. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.



# PS110 ND2 | SPEAKERS

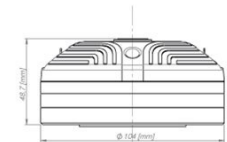
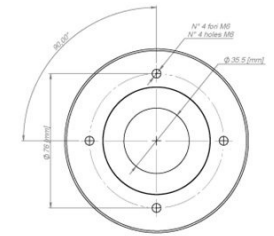
## ND2T 8Ω

### SPECIFICATIONS

Throat Diameter	36 mm (1.4 in)
Nominal Impedance	8 Ω
Minimum Impedance	7.9 Ω
Nominal Power Handling <sup>1</sup>	80 W
Continuous Power Handling <sup>2</sup>	160 W
Sensitivity <sup>3</sup>	110.0 dB
Frequency Range	0.8 - 20.0 kHz
Recommended Crossover <sup>4</sup>	1.2 kHz
Voice Coil Diameter	61 mm (2.4 in)
Winding Material	Aluminum
Diaphragm Material	Titanium
Flux Density	2.0 T
Magnet Material	Neodymium

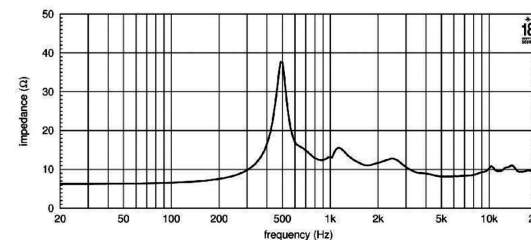
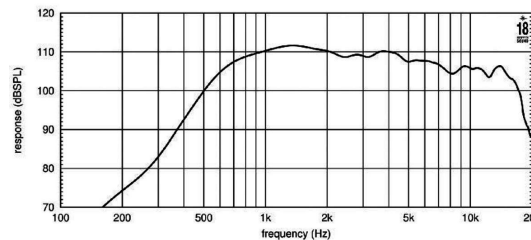
### KEY FEATURES

- 110 dB SPL 1W-1m average sensitivity
- 1.4 inch exit throat
- 160W maximum program power handling
- Proprietary tangerine radial phase plug design
- Edge-wound 61mm (2.4 in) aluminum voice coil
- Pure titanium diaphragm assembly
- Neodymium ring magnetic structure
- Copper ring for reduced distortion and increased output
- Self-centering d-kit for accurate and fast servicing
- 16 Ohm version available



### MOUNTING AND SHIPPING INFO

Overall Diameter	104 mm (4.09 in)
Depth	76 mm (2.99 in)
Net Weight	1.5 kg ( lb)
Shipping Box	165 x 165 x 150 mm (6.50x6.50x5.91 in)



1. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz Power calculated on rated nominal impedance.  
 2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.  
 3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.  
 4. 12 dB/oct. or higher slope high-pass filter.



# PS110 ND2 | HORNS

## XR1496C

90° (h) x 60° (v) constant coverage

### KEY FEATURES

- 1.4 inch throat entry
- High damping composite structure
- Uniform on-axis and off-axis frequency response
- 90° x 60° horizontal and vertical constant coverage
- Very low distortion at high sound pressure
- Optimized weight thanks to composite material structure

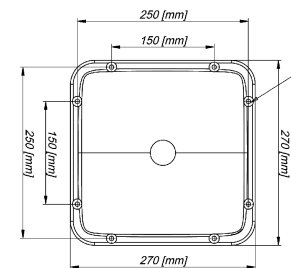
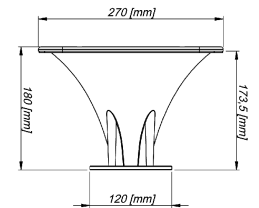
### SPECIFICATIONS

Throat Diameter 35,5 mm (1,4 in)  
 Horizontal Coverage -6db 90° (15-10) avg range (1,25kHz - 12,5kHz)  
 Vertical Coverage -6db 60° (18-12) avg range (1,25kHz - 12,5kHz)  
 Directivity Index 9dB (1.8-1,2) average range (1,25kHz - 12,5kHz)  
 Usable Frequency Range Above 800 Hz  
 Recomm. Xover Frequency 800 Hz or more  
 Material Composite material



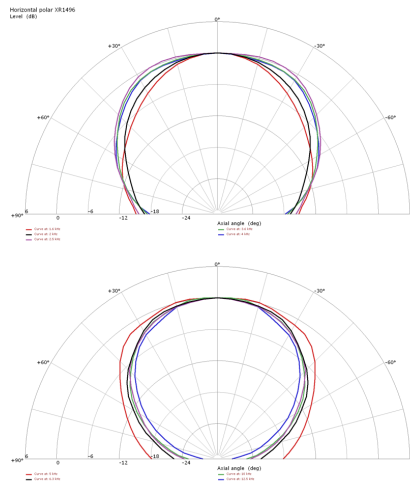
### MOUNTING AND SHIPPING INFO

Baffle Cutout Dimension 240x240x180 mm (9.45x9.45x7.09 in)  
 Net Weight 1.4 kg (3.09 lb)

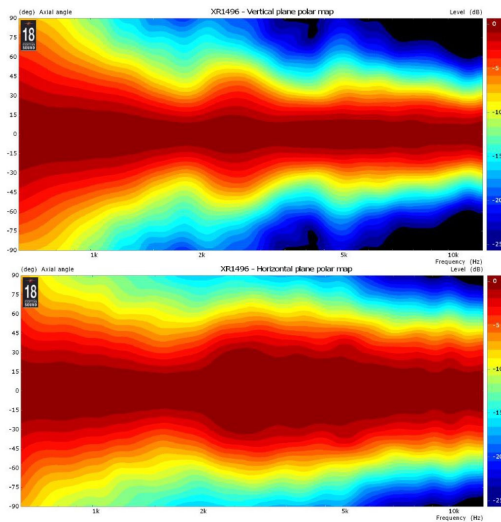
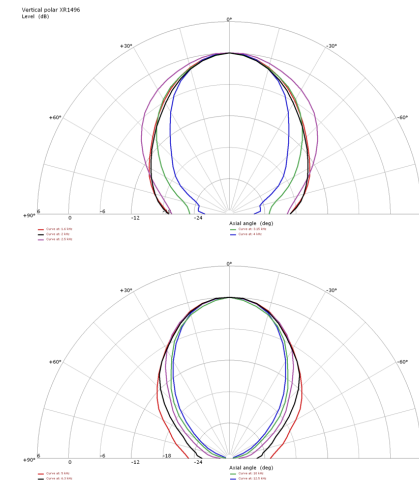


nr 8 holes for railhead screws M8

### HORIZONTAL 1/3 OCTAVE POLAR PLOTS



### VERTICAL 1/3 OCTAVE POLAR PLOTS





# PS110 ND2 | HORNS

## XR1464C

60° (h) x 40° (v) constant coverage

### KEY FEATURES

- 1.4 inch throat entry
- High damping composite structure
- Uniform on-axis and off-axis frequency response
- 60° x 40° horizontal and vertical constant coverage
- Very low distortion at high sound pressure
- Optimized weight thanks to composite material structure

### SPECIFICATIONS

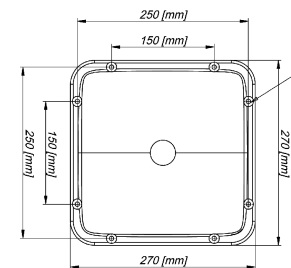
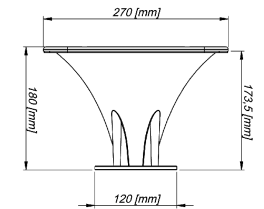
Throat Diameter  
Horizontal Coverage -6db  
Vertical Coverage -6db  
Directivity Index  
Usable Frequency Range  
Recomm. Xover Frequency  
Material

35,5 mm (1,4 in)  
60° (10-2) avg range (1,25kHz - 12,5kHz)  
40° (25-0) avg range (1,25kHz - 12,5kHz)  
11dB (2-1) average range (1,25kHz - 12,5kHz)  
Above 800 Hz  
800 Hz or more  
Composite material



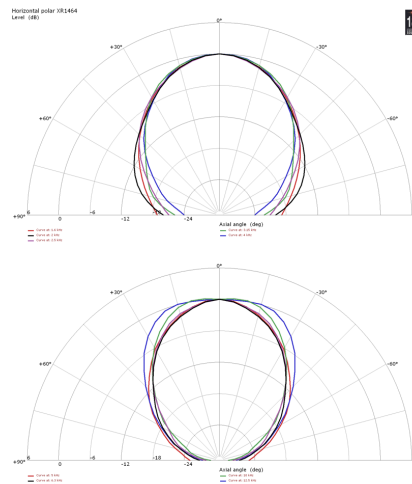
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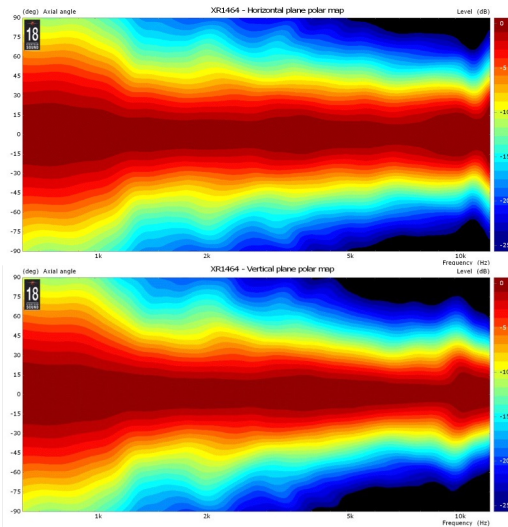
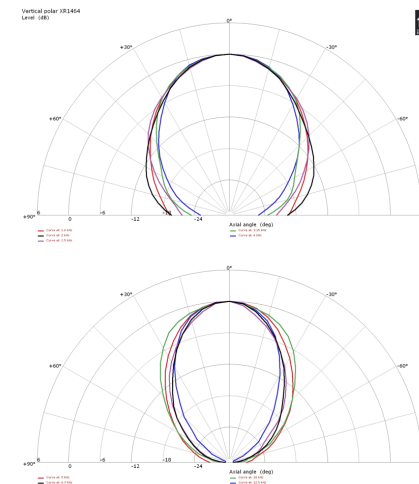


nr 8 holes for railhead screws M8

#### HORIZONTAL 1/3 OCTAVE POLAR PLOTS



#### VERTICAL 1/3 OCTAVE POLAR PLOTS





# PS110 ND2 | BILL OF MATERIALS

- 1x 10NTLW2000 – 8 ohm
- 1x ND2T – 8 ohm
- 1x XR1496C or XR1464
- 16x M5 Wood T-Nuts
- 8x M5 Hex socket head ISO 4762 with washer and grower
- 8x M5 Hex sochet CTSK head ISO 10642
- 2x Neutrik NL4MP
- Edilfiber damping material 30mm - 30kg/m<sup>3</sup>
- Wood: 15mm Birch plywood



# **PS110 ND2**

Version with XR1496C Horn

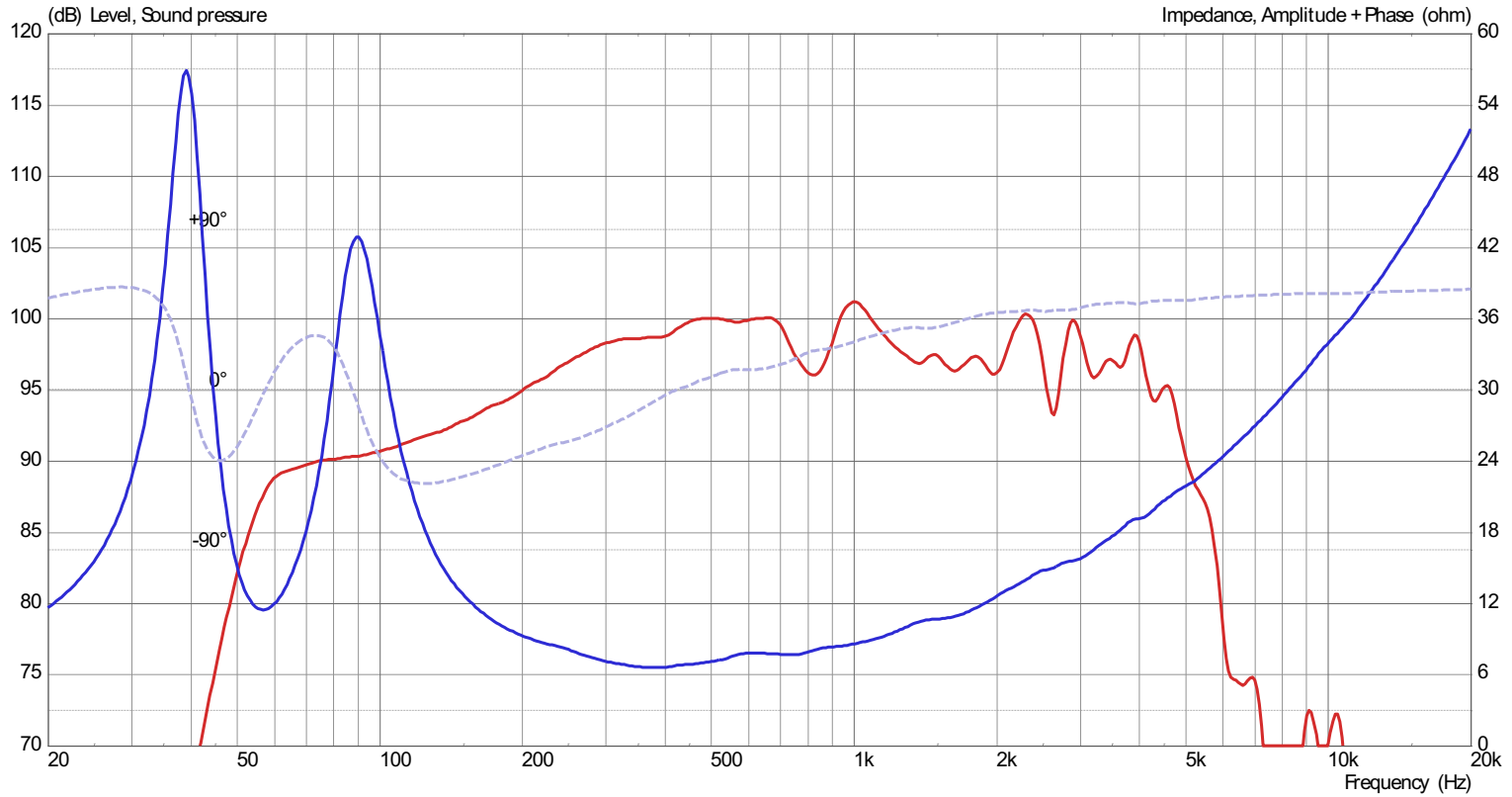


# PS110 ND2 | MEASUREMENTS

Frequency response & Impedance response

Sensitivity 2.83V @1m

With Preset



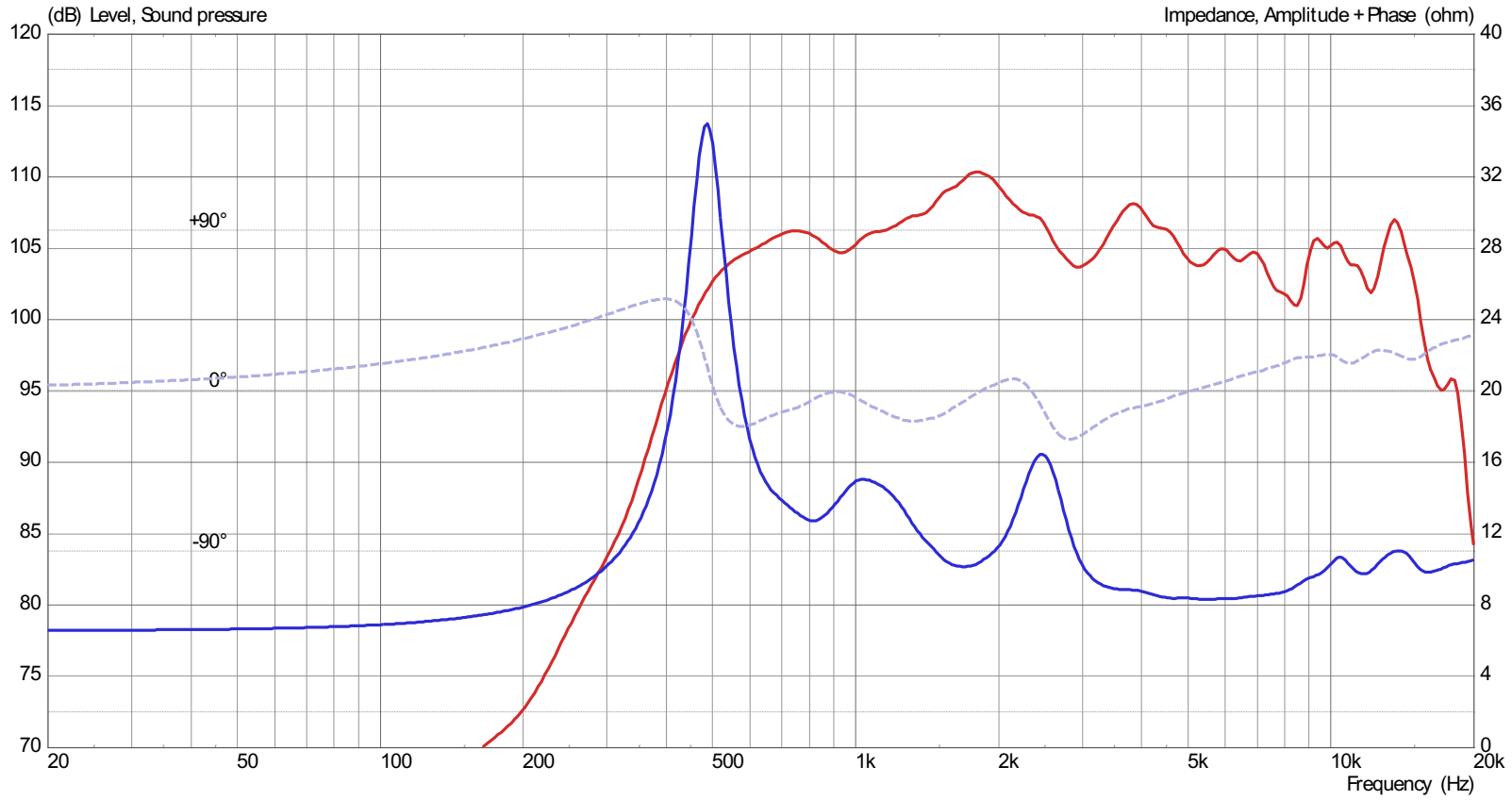




# PS110 ND2 | MEASUREMENTS

Frequency response & Impedance response

Full-Space HF sensitivity 1w/1m – ND2T on XR1496C

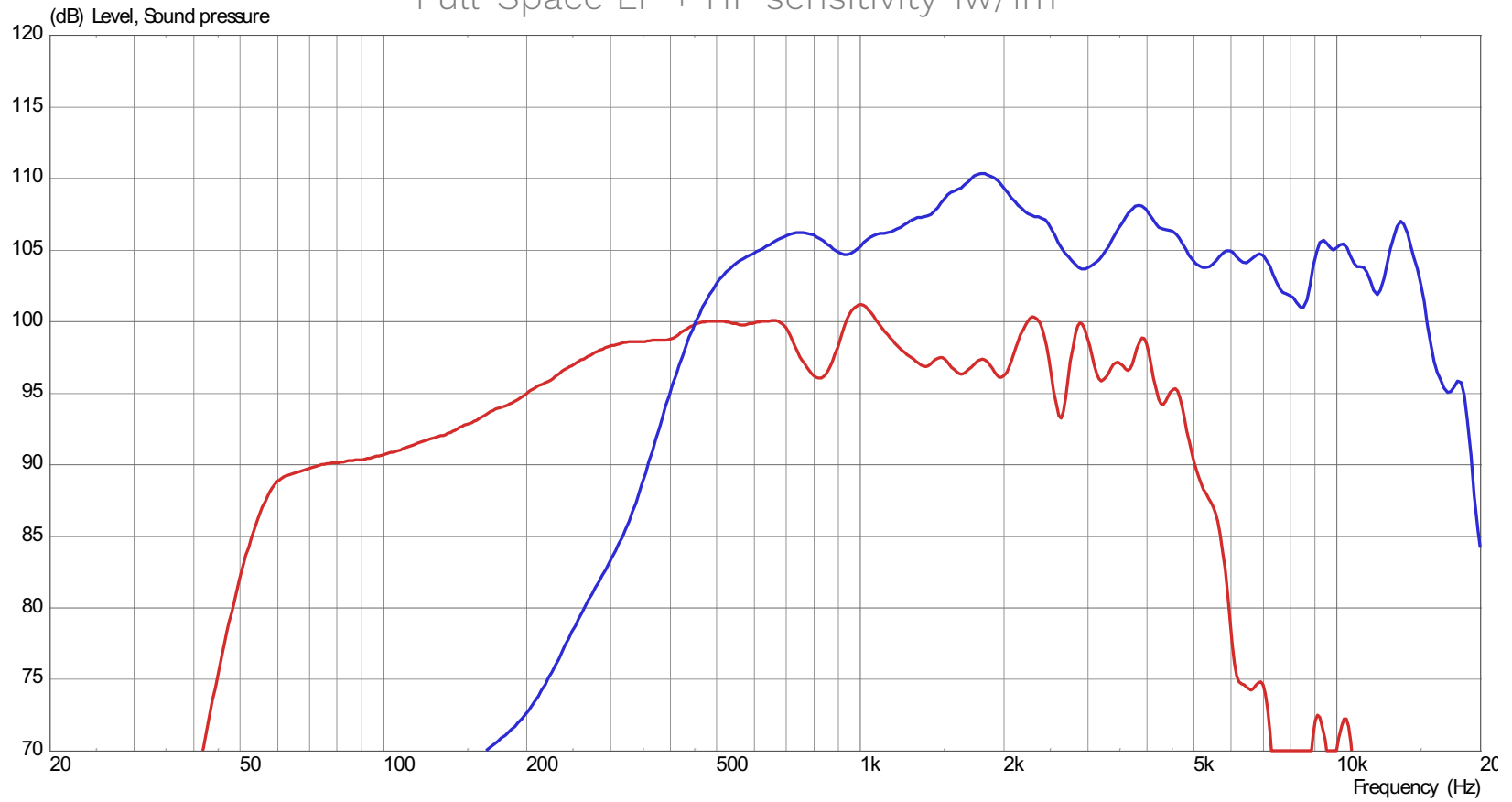




# PS110 ND2 | MEASUREMENTS

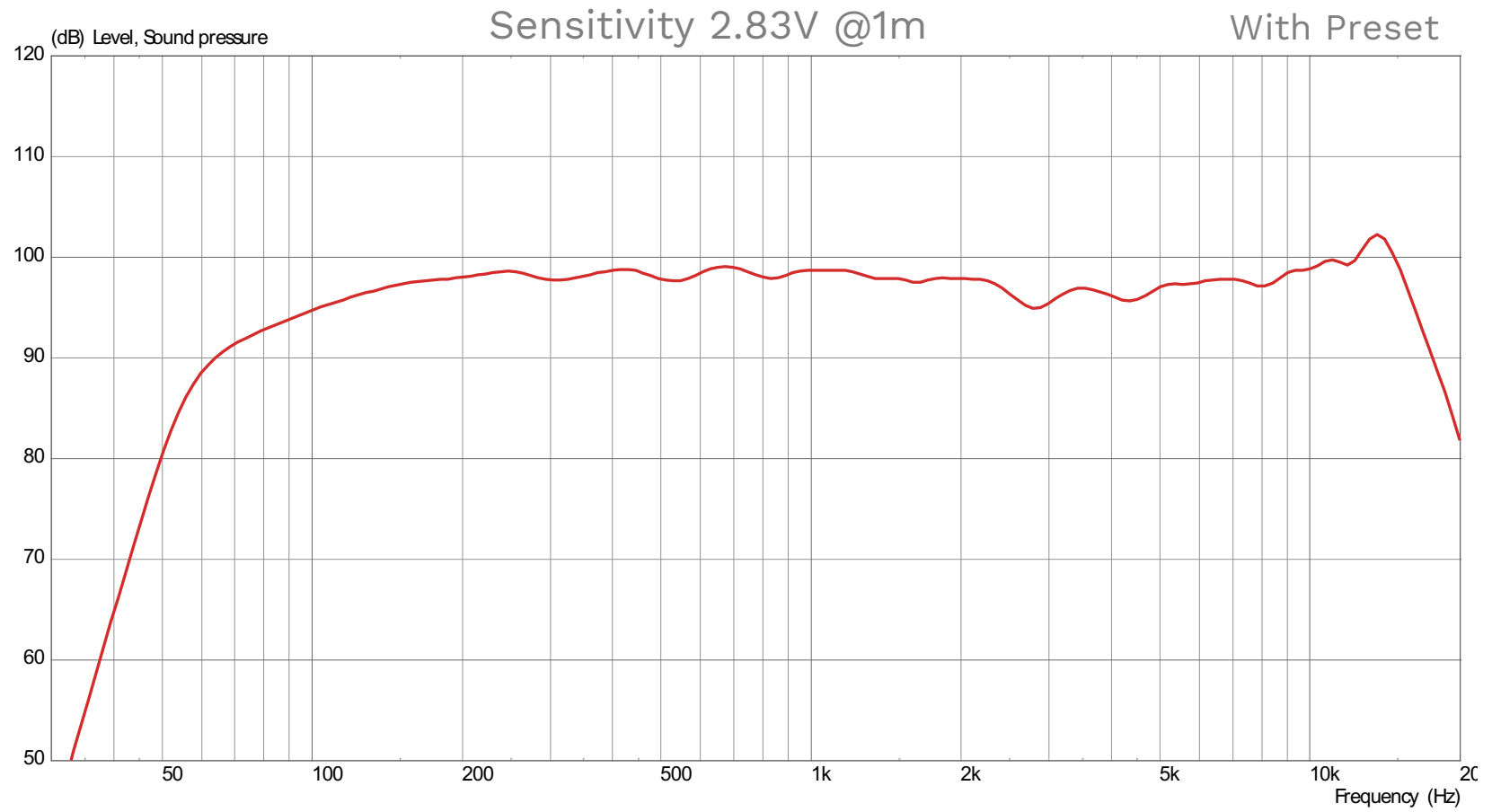
Frequency response

Full-Space LF + HF sensitivity 1w/1m



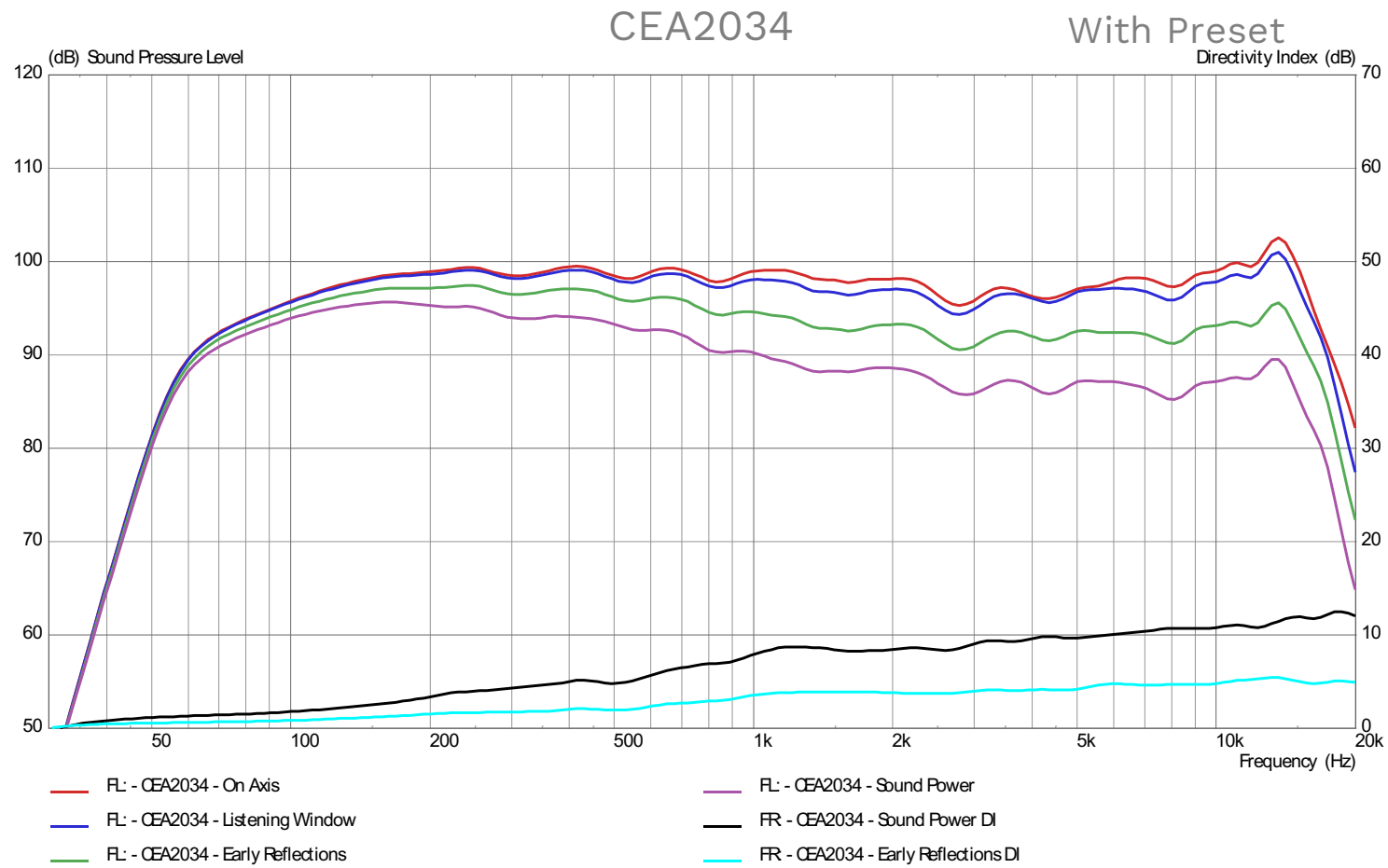


# PS110 ND2 | MEASUREMENTS





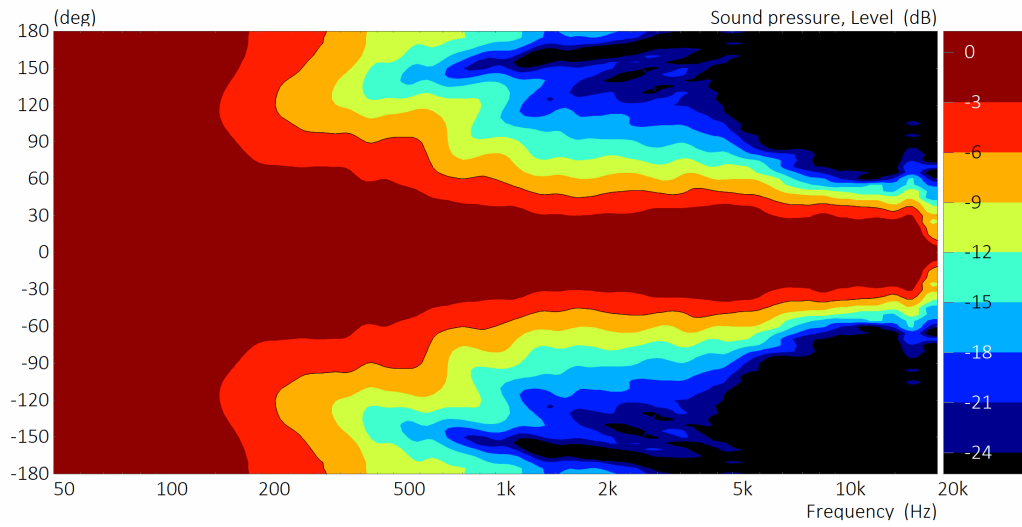
# PS110 ND2 | MEASUREMENTS



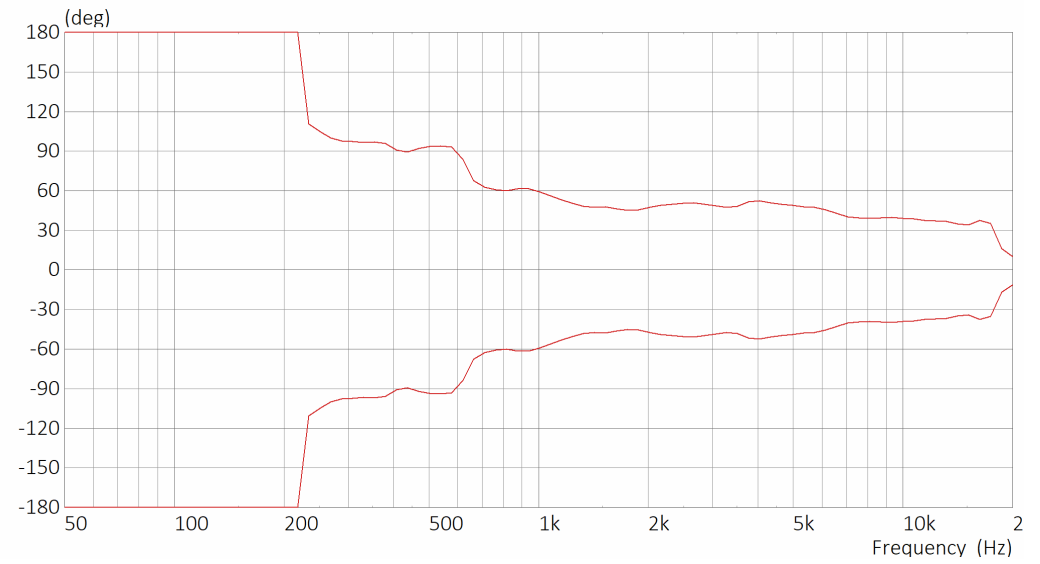


# PS110 ND2 | MEASUREMENTS

### Horizontal Contour



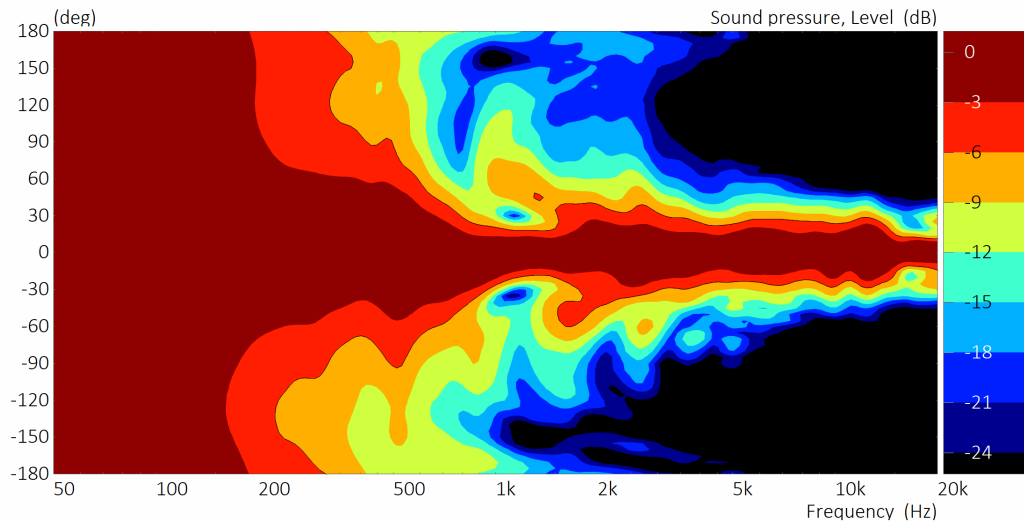
### -6dB Beamwidth



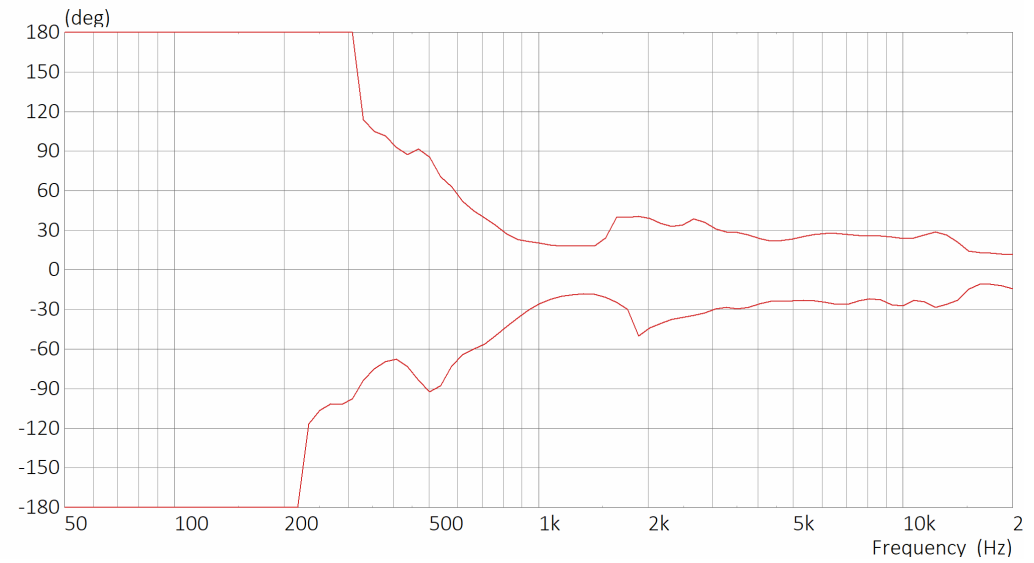


# PS110 ND2 | MEASUREMENTS

## Vertical Contour



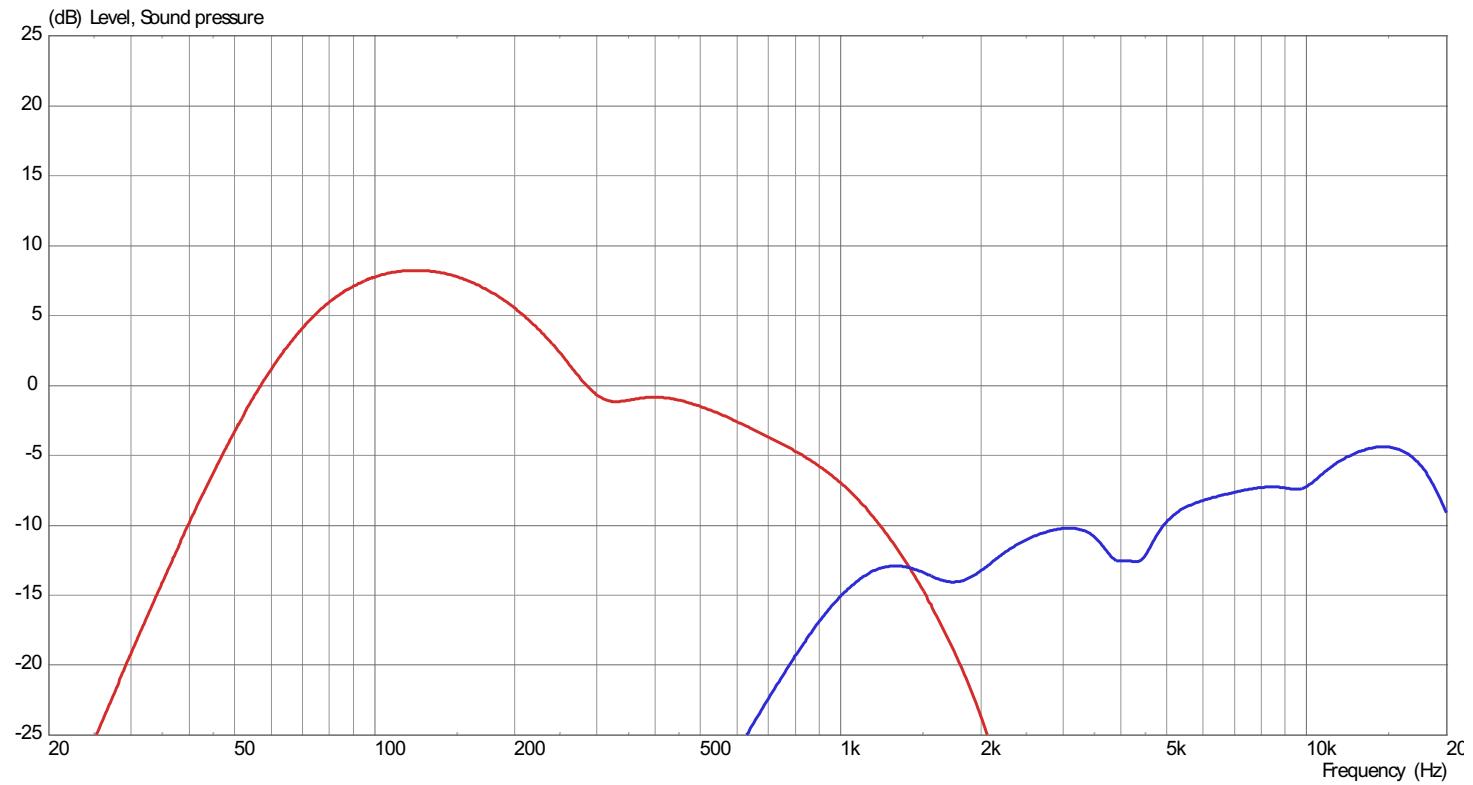
## -6dB Beamwidth





# PS110 ND2 | PROCESSING

LF & HF



Transfer Function



# **PS110 ND2**

Version with XR1464C Horn



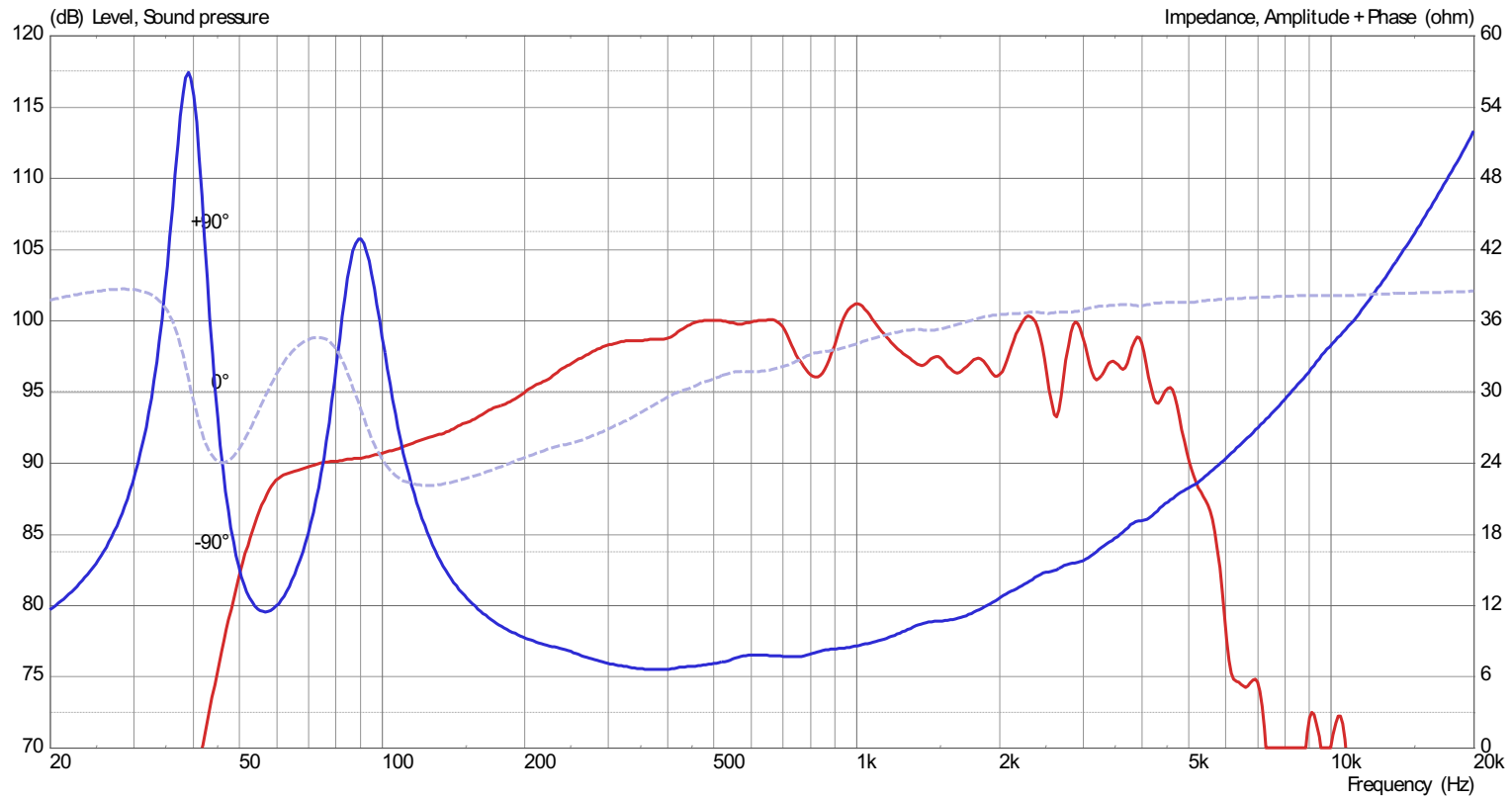


# PS110 ND2 | MEASUREMENTS

Frequency response & Impedance response

Sensitivity 2.83V @1m

With Preset

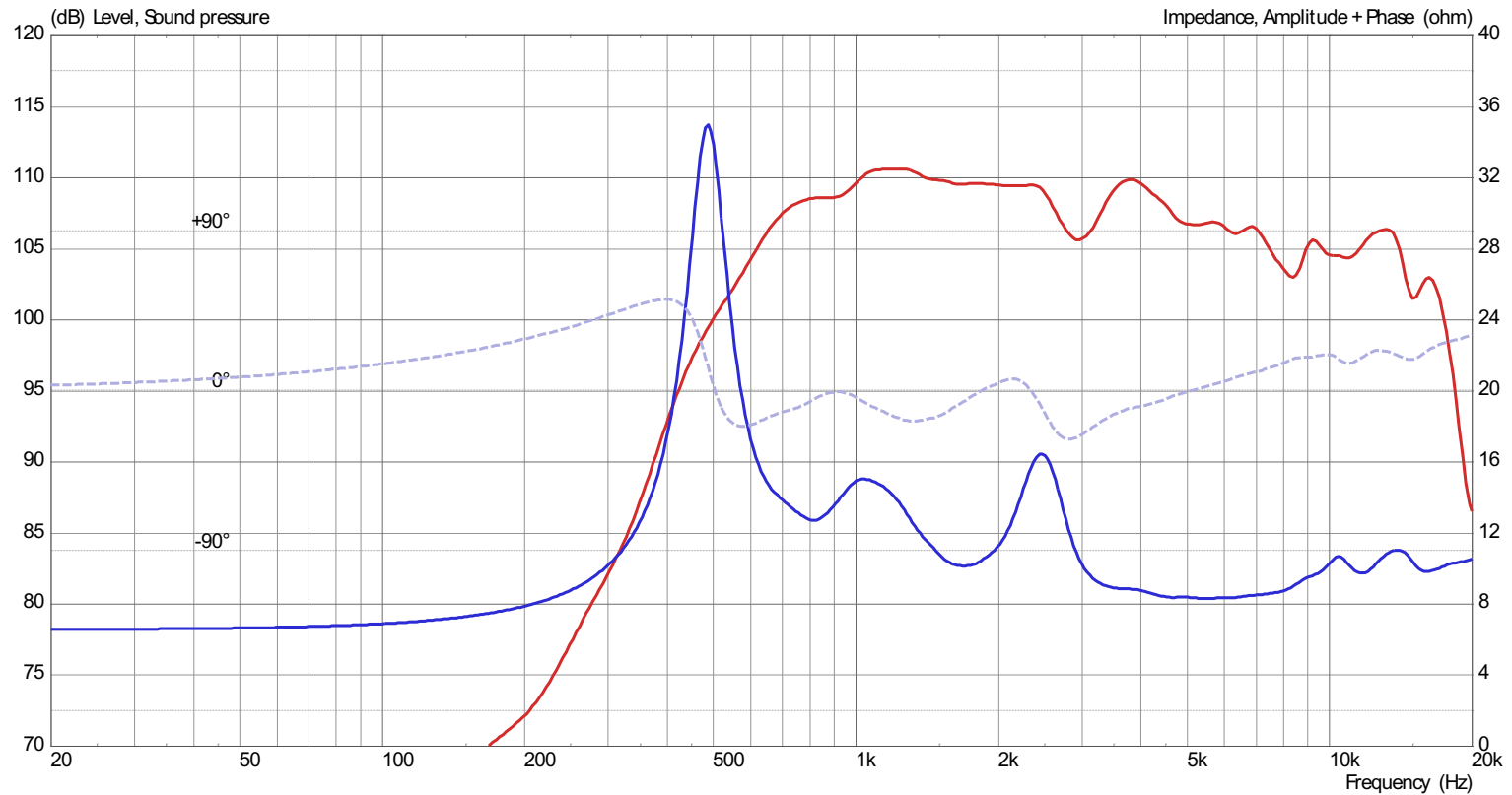




# PS110 ND2 | MEASUREMENTS

Frequency response & Impedance response

Full-Space HF sensitivity 1w/1m – ND2T on XR1464C

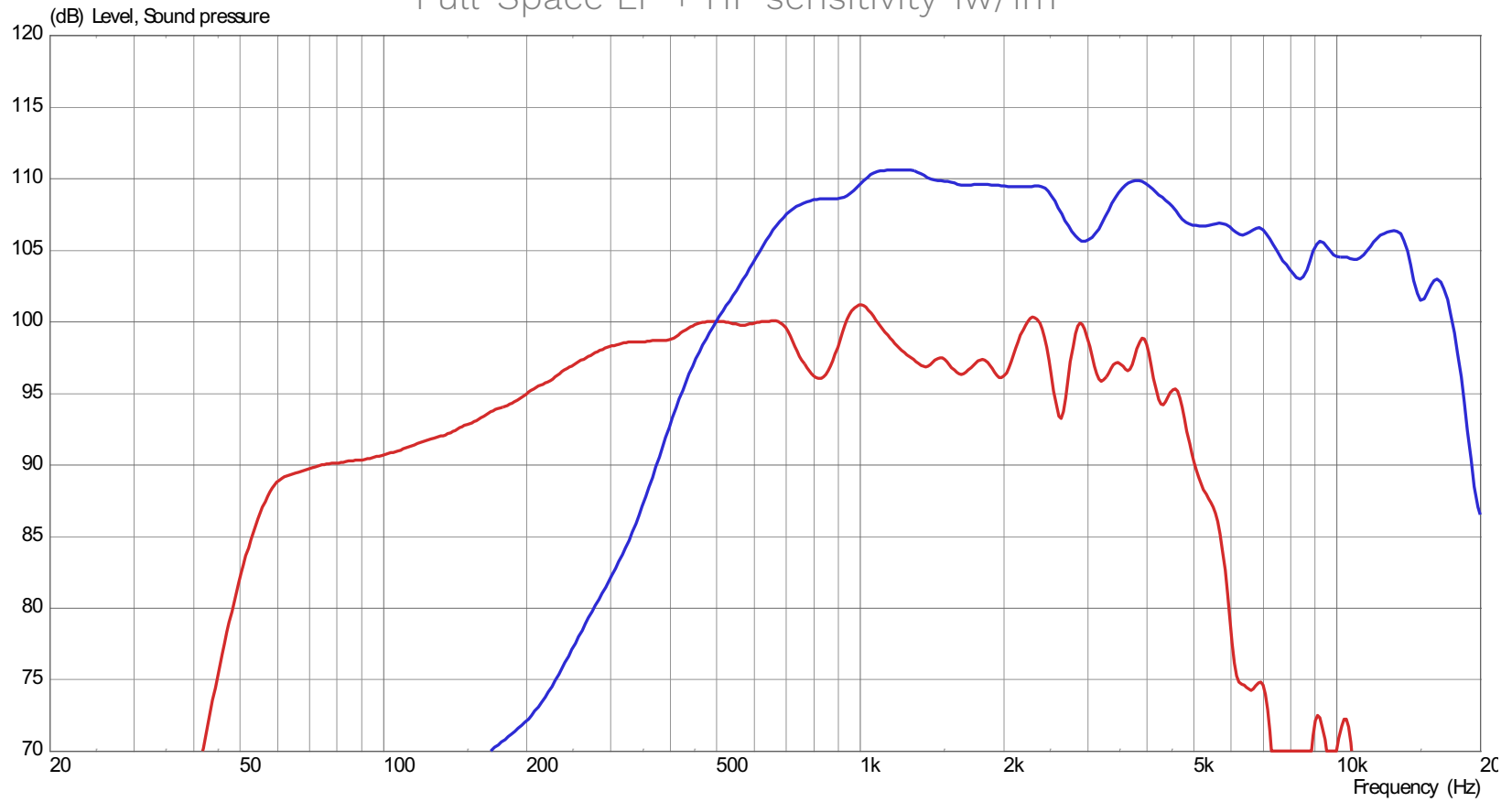




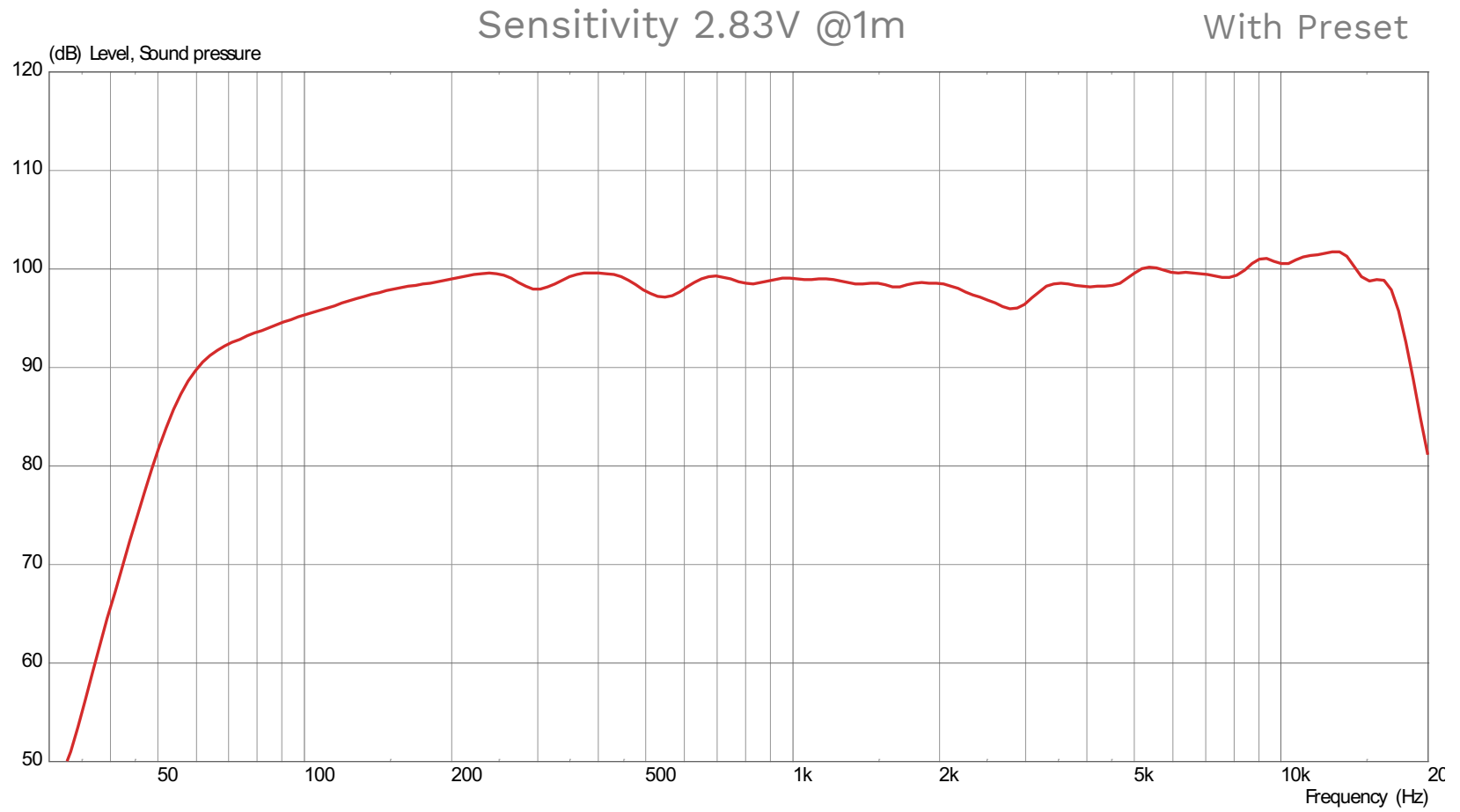
# PS110 ND2 | MEASUREMENTS

Frequency response & Impedance response

Full-Space LF + HF sensitivity 1w/1m

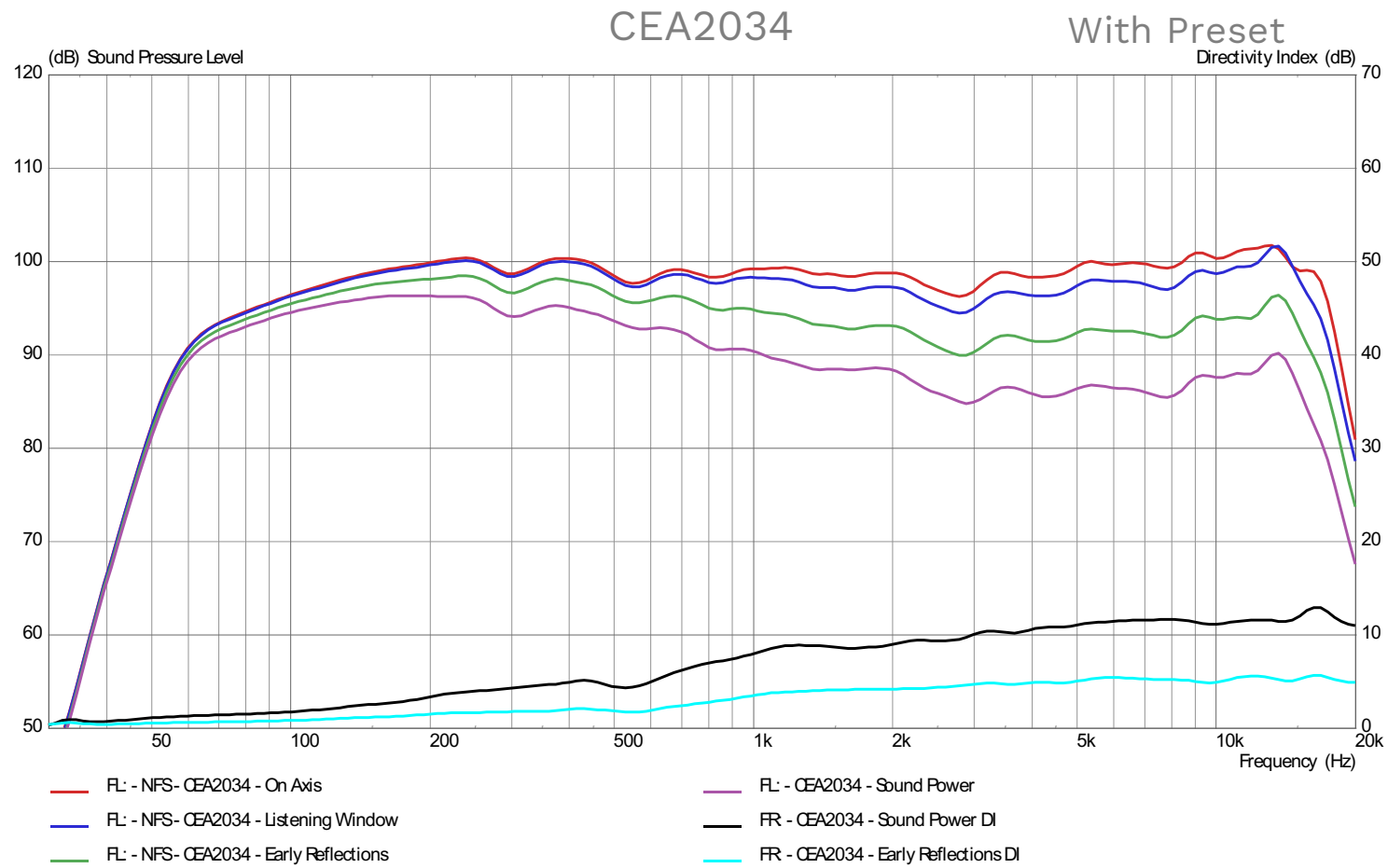


# PS110 ND2 | MEASUREMENTS





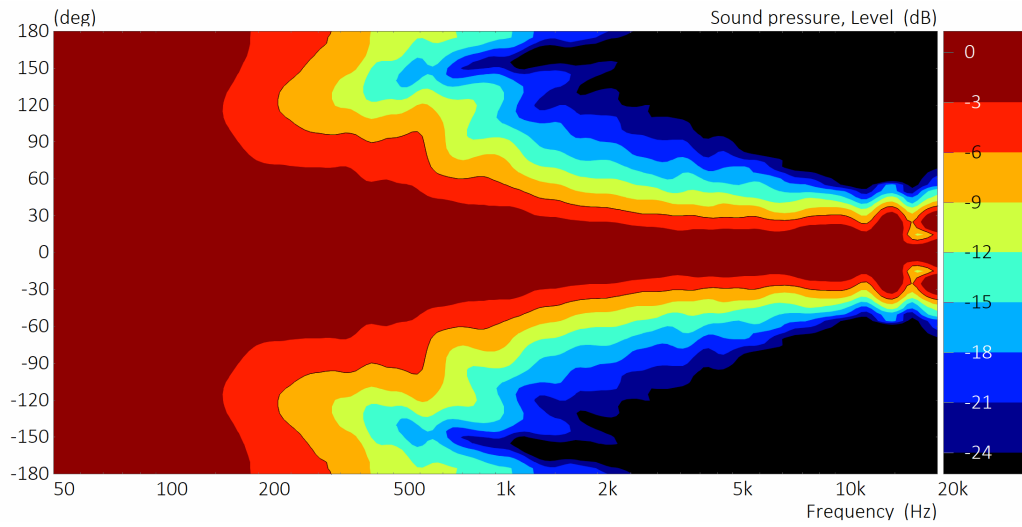
# PS110 ND2 | MEASUREMENTS



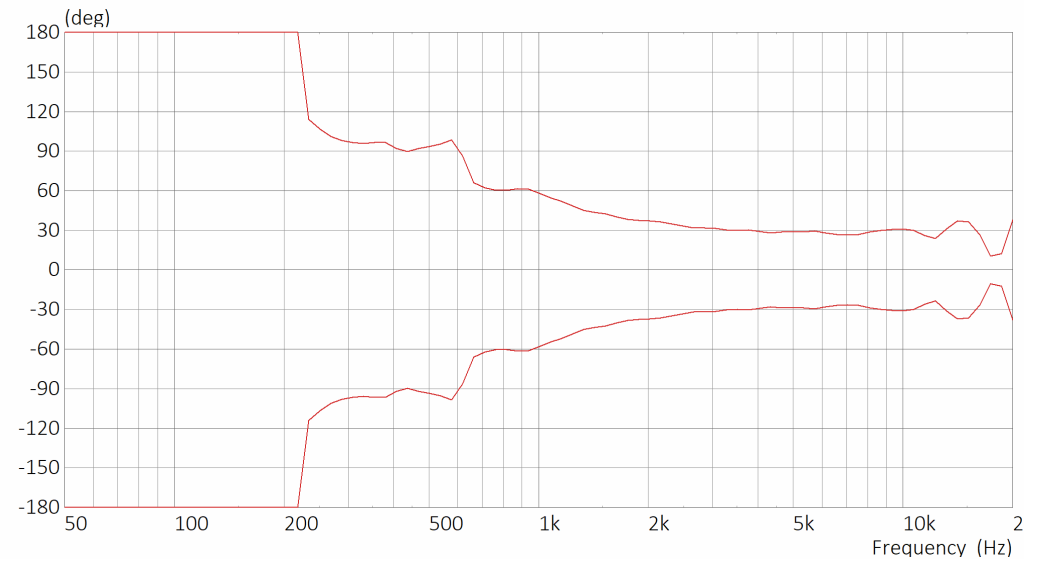


# PS110 ND2 | MEASUREMENTS

## Horizontal Contour



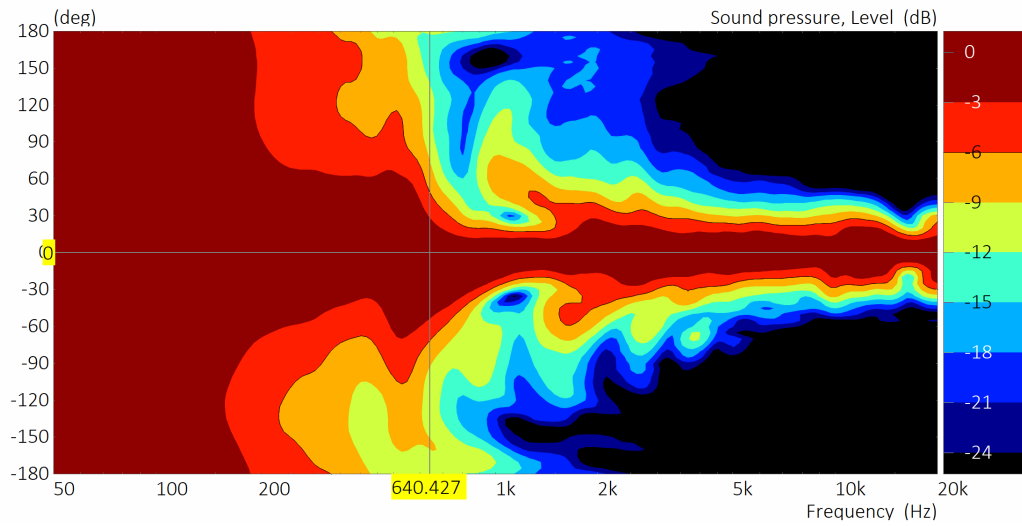
## -6dB Beamwidth



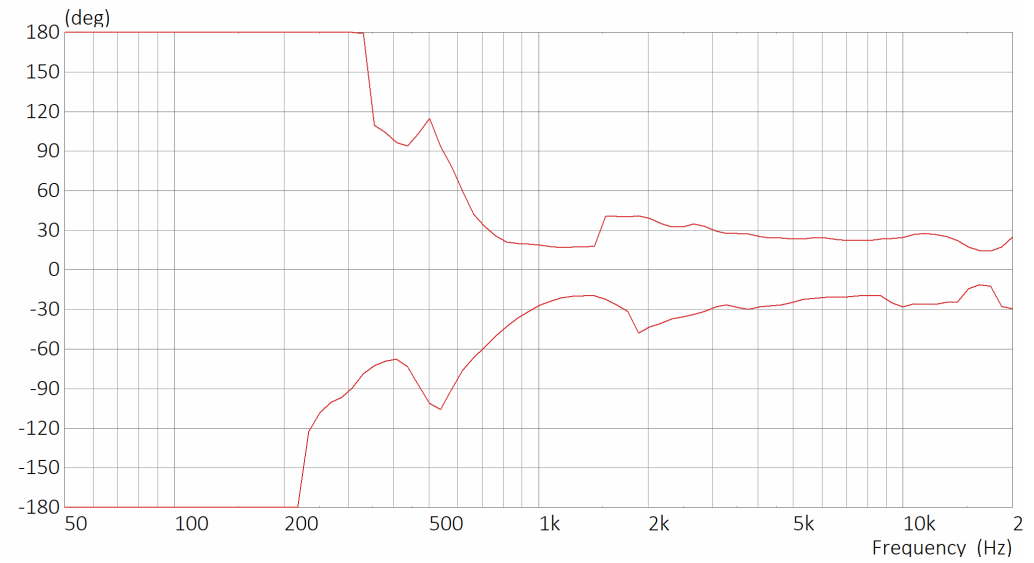


# PS110 ND2 | MEASUREMENTS

## Vertical Contour



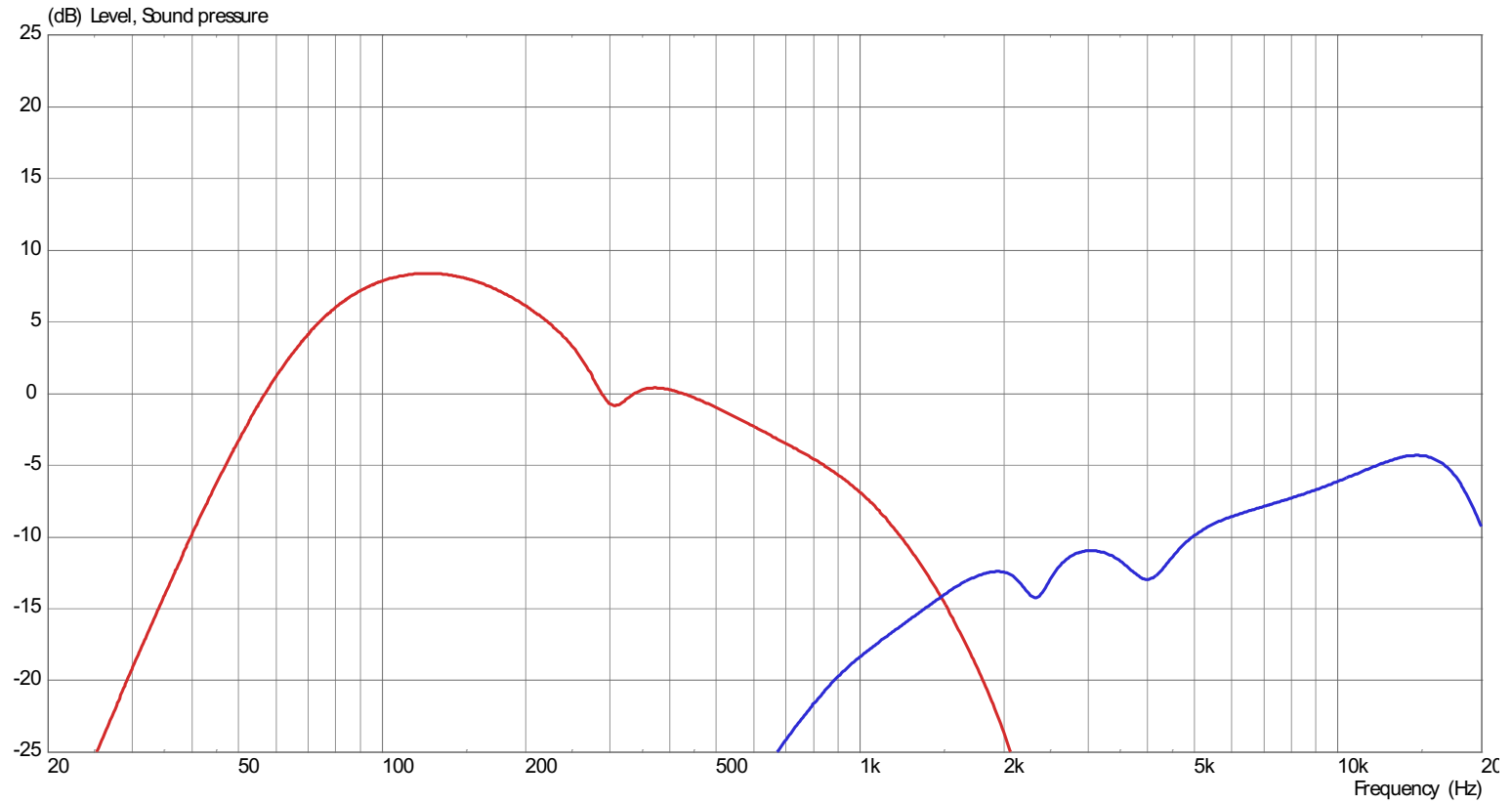
## -6dB Beamwidth





# PS110 ND2 | PROCESSING

LF & HF



Transfer Function





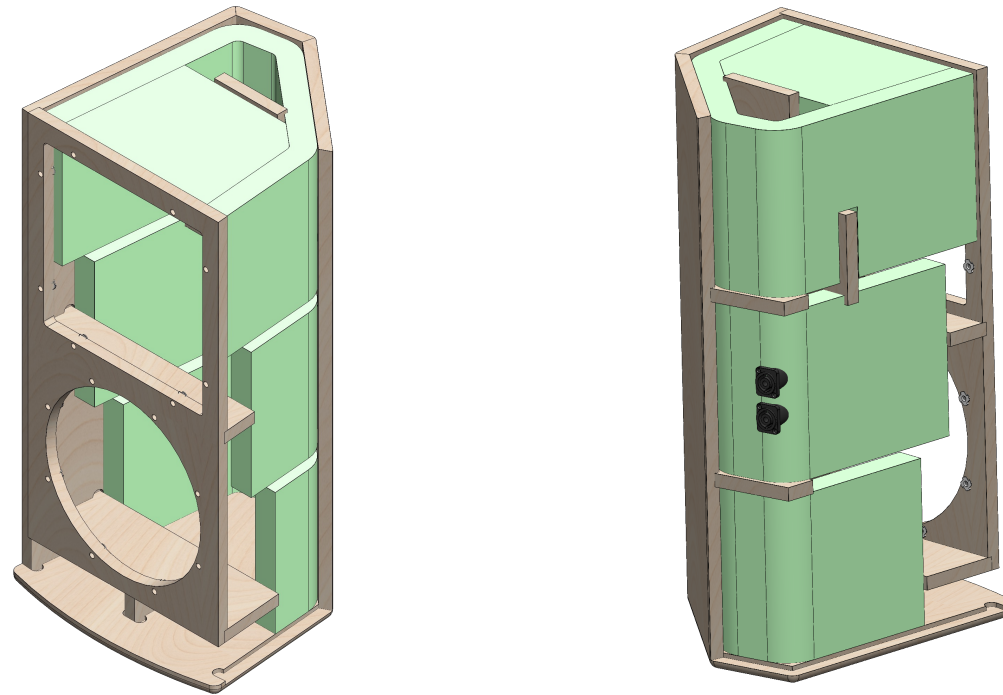
# **PS110 ND2**

Assembly Information



# PS110 ND2 | DAMPING MATERIAL

Edilfiber (Polyester) 30kg/m<sup>3</sup> – 30mm thick

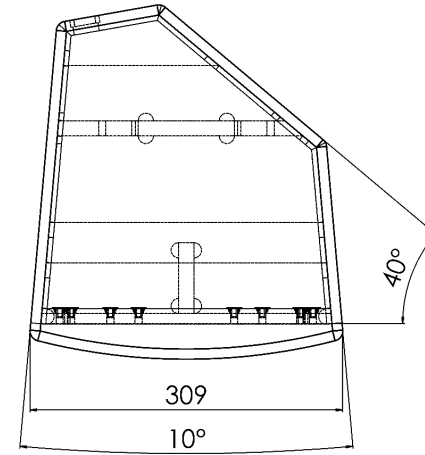
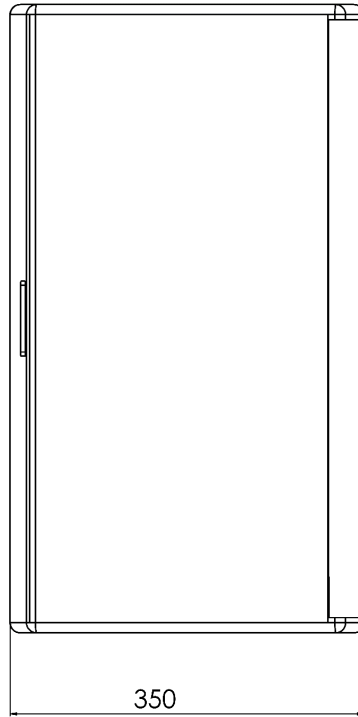
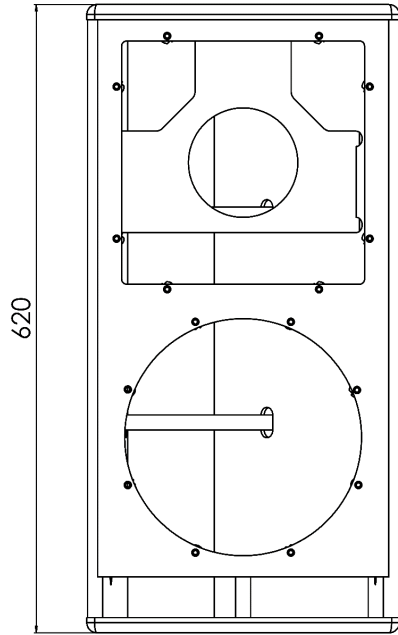


Follow carefully the quantity and positioning



# PS110 ND2 | DIMENSIONS

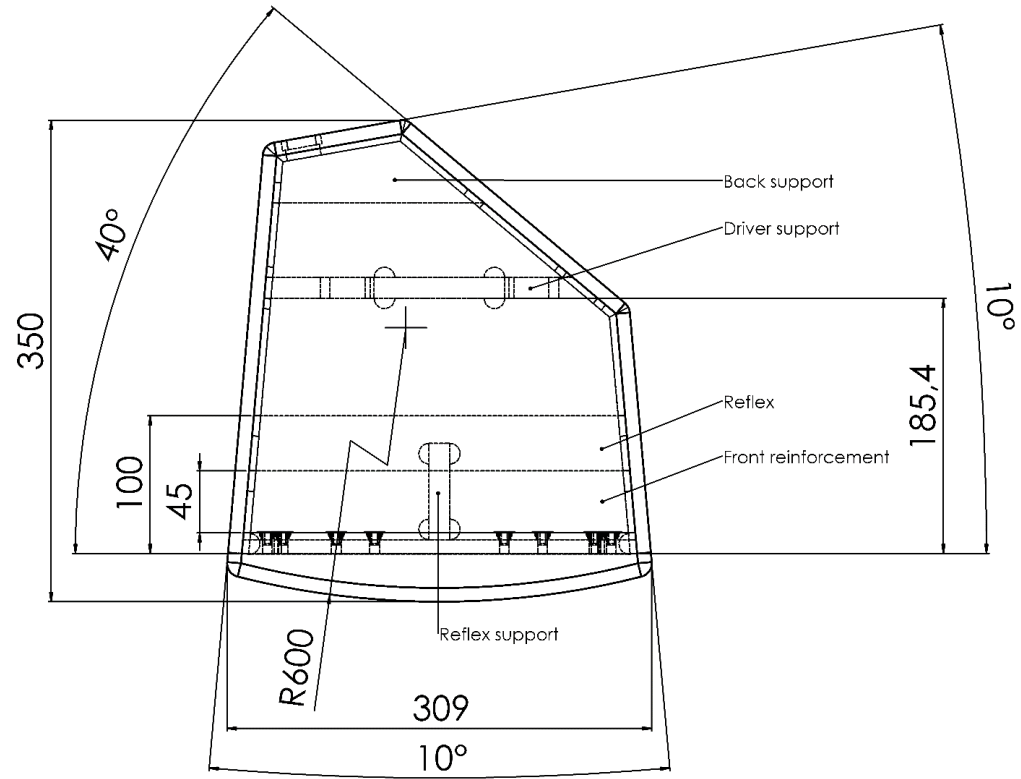
Total dimensions





# PS110 ND2 | DIMENSIONS

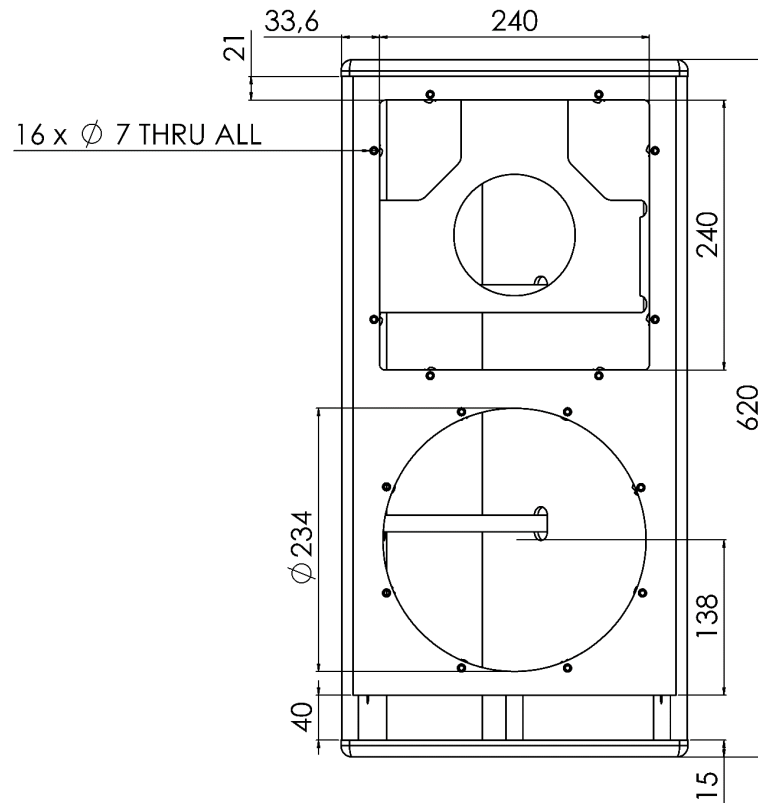
Top View





# PS110 ND2 | DIMENSIONS

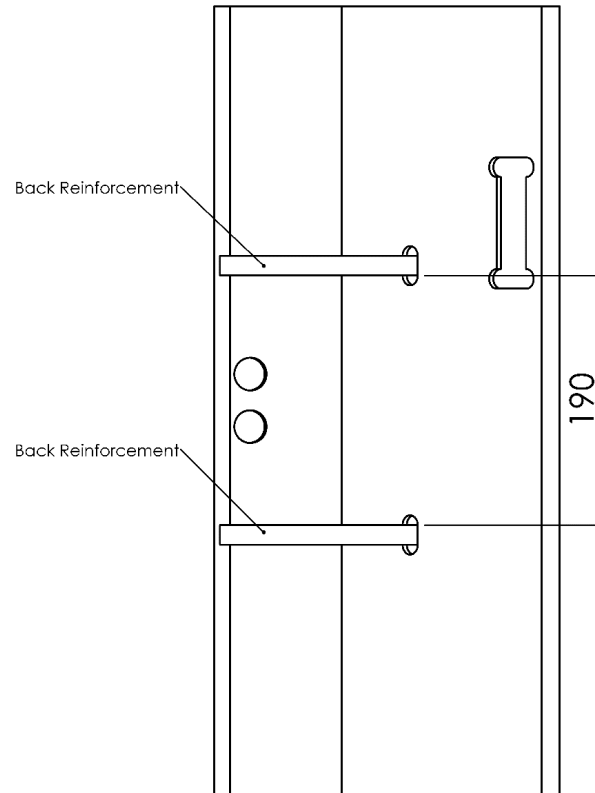
Front View





# PS110 ND2 | DIMENSIONS

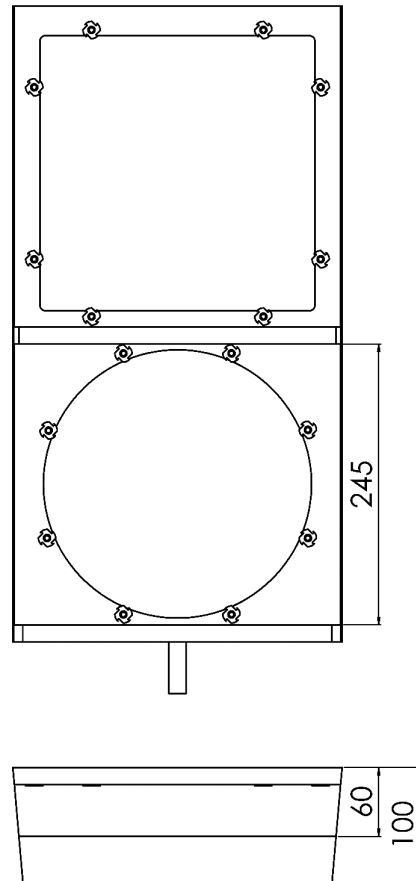
Back View





# PS110 ND2 | DIMENSIONS

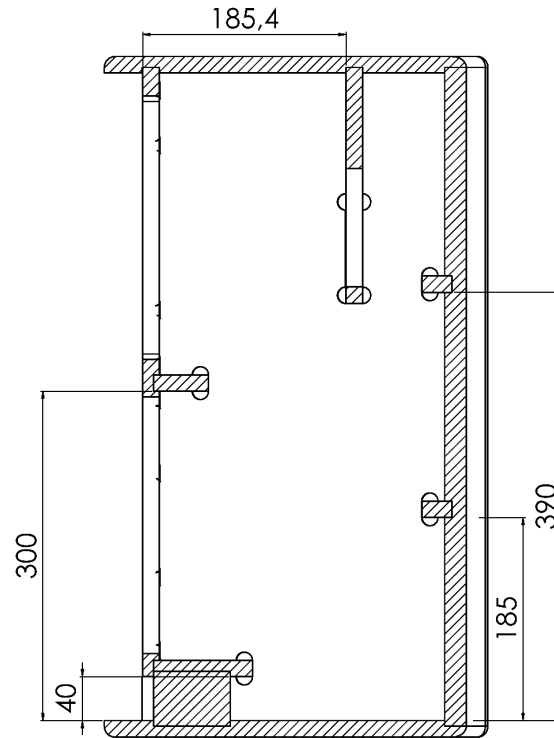
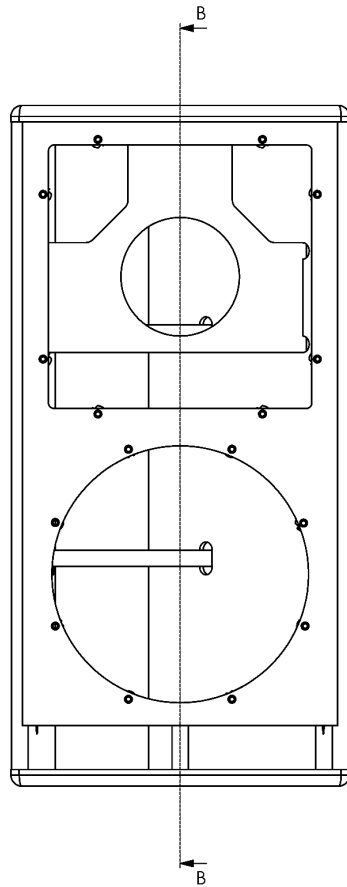
Baffle View





# PS110 ND2 | DIMENSIONS

Side View

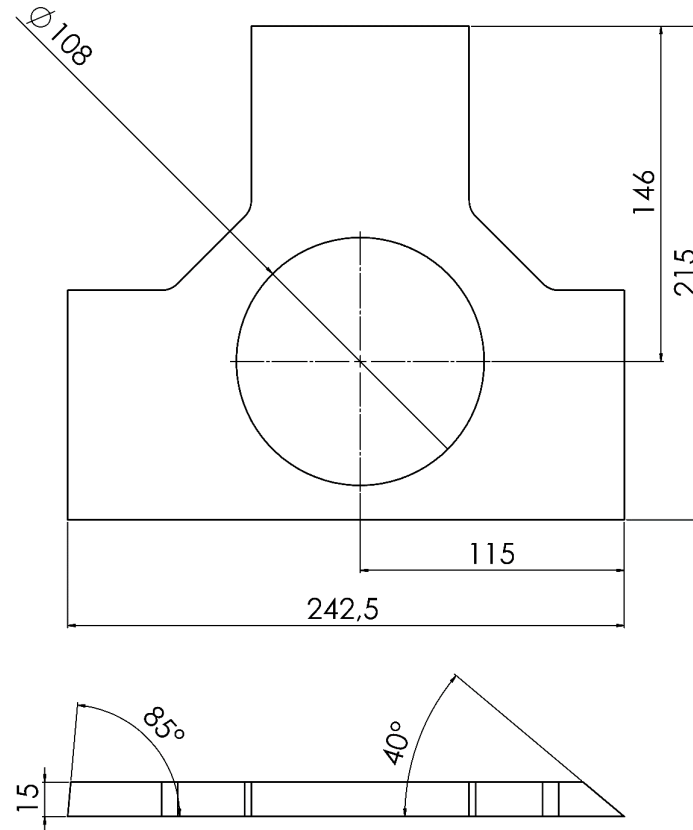






# PS110 ND2 | DIMENSIONS

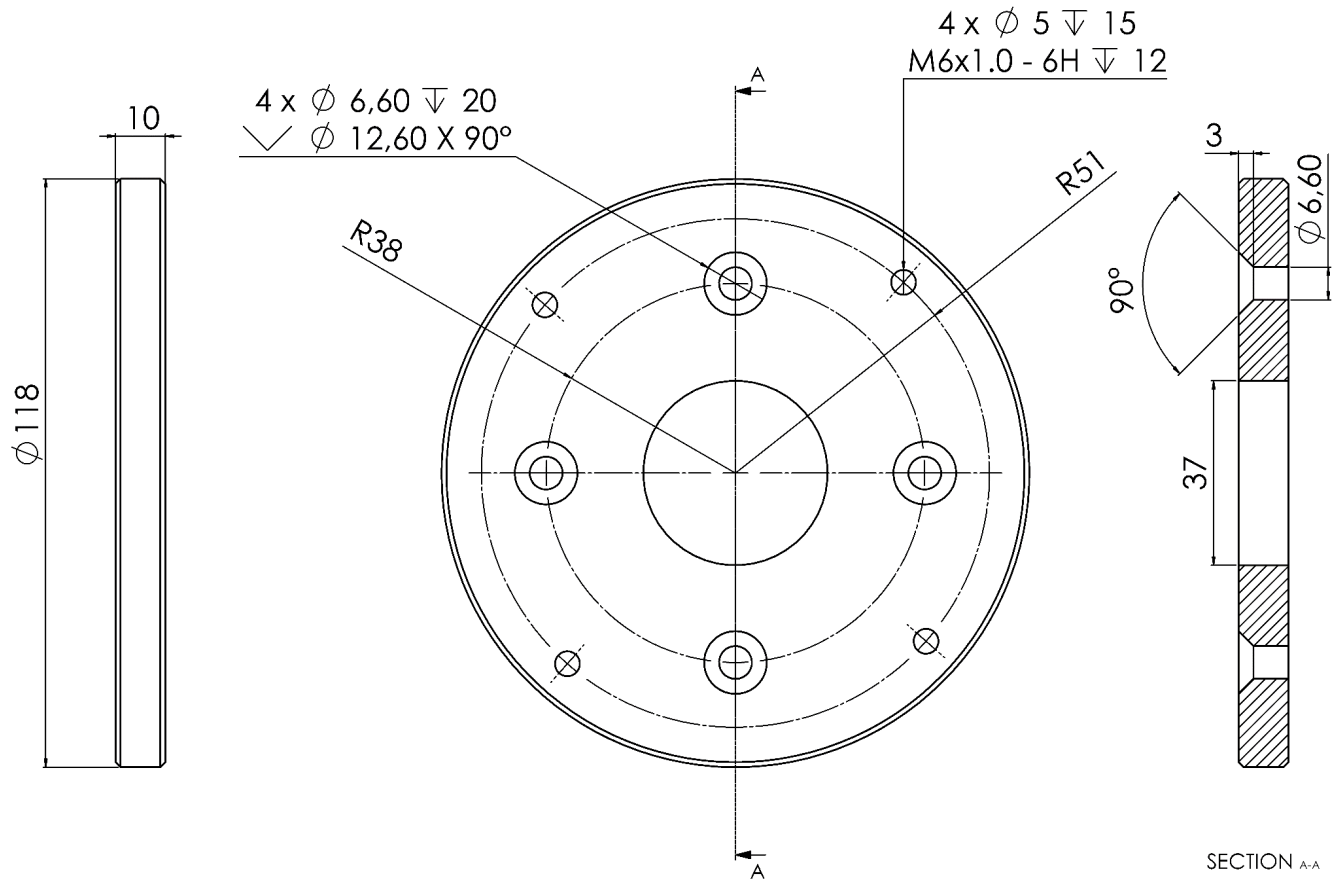
HF Driver Support





# PS110 ND2 | DIMENSIONS

ND2T Adaptor – Aluminum EN AW-1060





# **PS110 ND2** | NOTES