EXPERIENCE SOUND

PERFORMANCE REPORT

MX-30 MAIN LCR

KRIX
EXPERIENCE SOUND

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OVERVIEW

Featuring commercial cinema components, the Krix MX-30 provides a crisp, clear, realistic sound, with such power and precision it will make your hair stand on end.

Created for larger home cinemas measuring five to fourteen metres long, the MX-30 features five modules, all of which are the same height and slim-line depth for easy installation into one cavity. The front baffle of each module is covered with an acoustic absorbent material to absorb any sound reflecting off the back of the screen or the room itself. This assists greatly with the acoustic treatment of the room to ensure better intelligibility and overall sound performance.

TRANSDUCERS:

Low frequency - Single 380mm (15″) high stiffness paper cone driver with 75mm (3″) voice coil of optimal length for increased linear excursion, wound on high temperature apical former and powerful vented magnet assembly designed for low distortion.

High frequency - A Krix patented designed 90° x 40° short throw horn with 25mm (1″) throat, 35mm (1.4″) compression driver, ferrite magnet, coated titanium diaphragm and polyimide surround

LOW FREQUENCY ENCLOSURE:

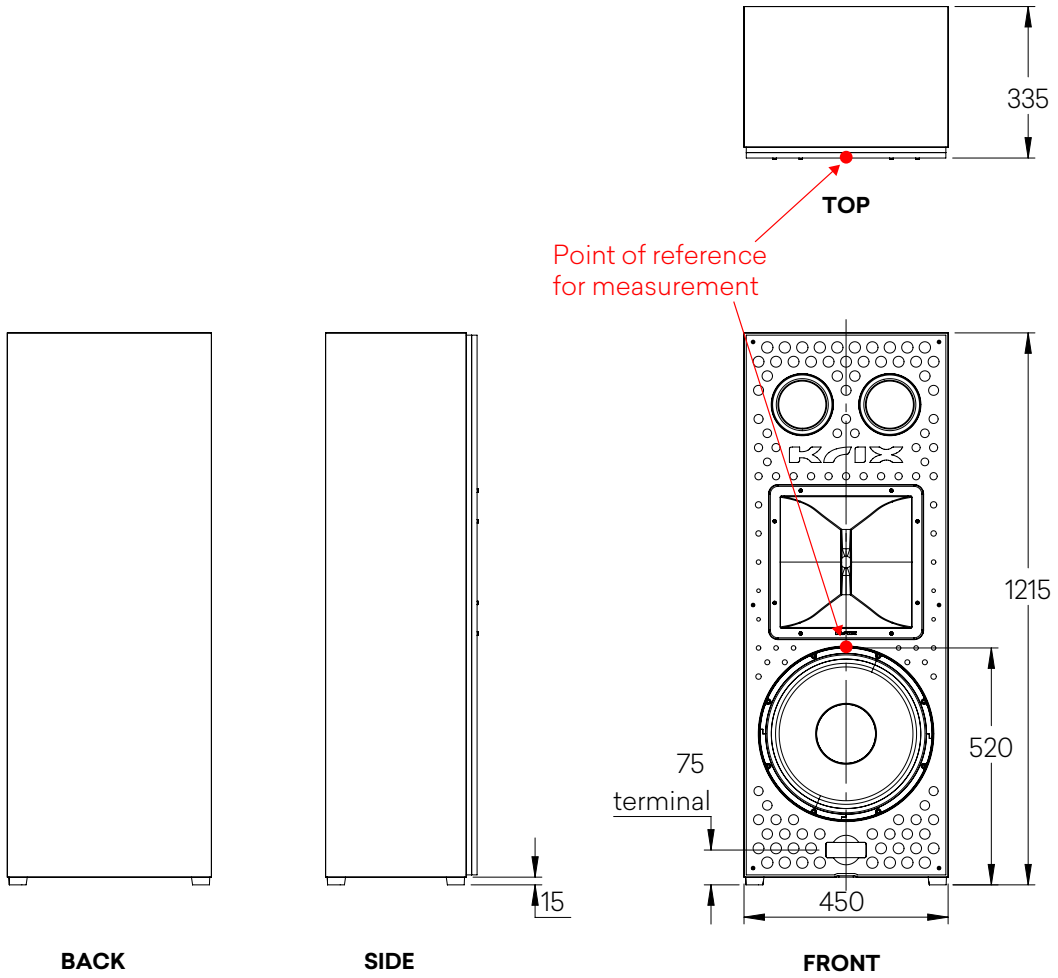
Vented B4 alignment tuned to 36 Hz, internal bracing, optimally damped with polyester fibre, MDF cinema black finish.

Complete MX-30 system shown, three MX-30 main LCR and two MX-30 subwoofers.

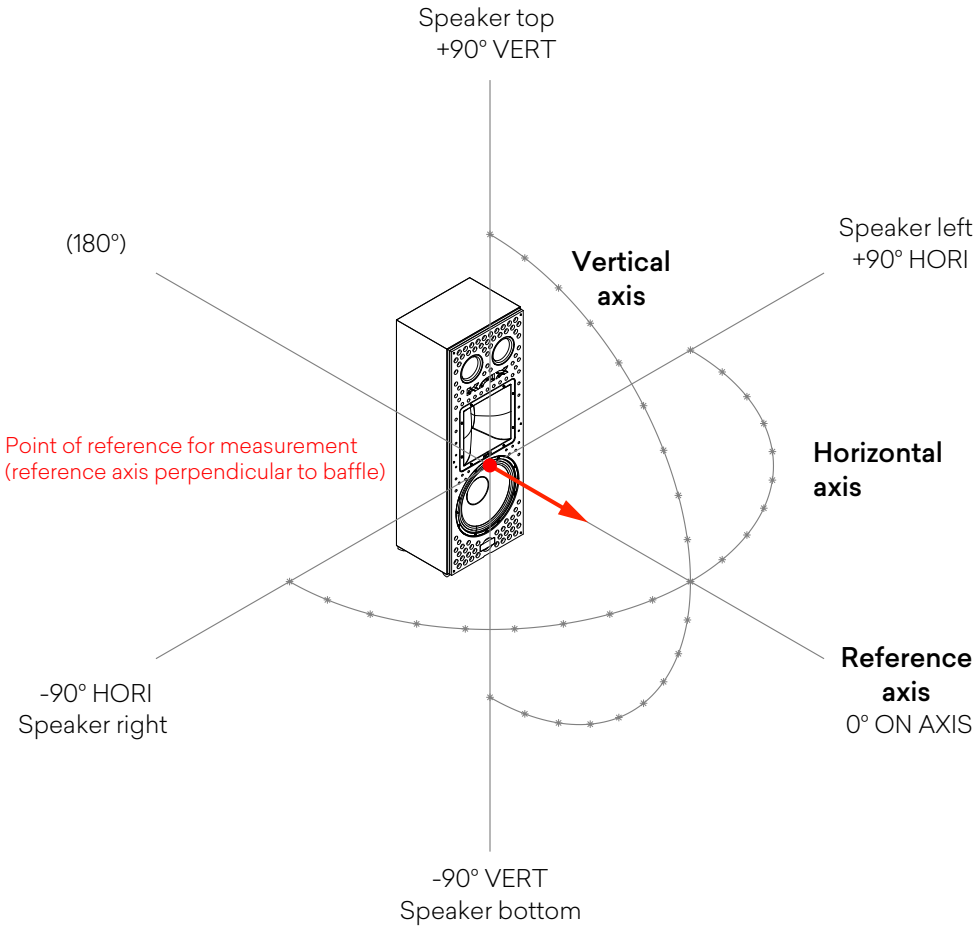
PHYSICAL CHARACTERISTICS

SIZE: 1215H x 450W x 335D mm

WEIGHT: 48kg



MEASUREMENT REFERENCE AXES

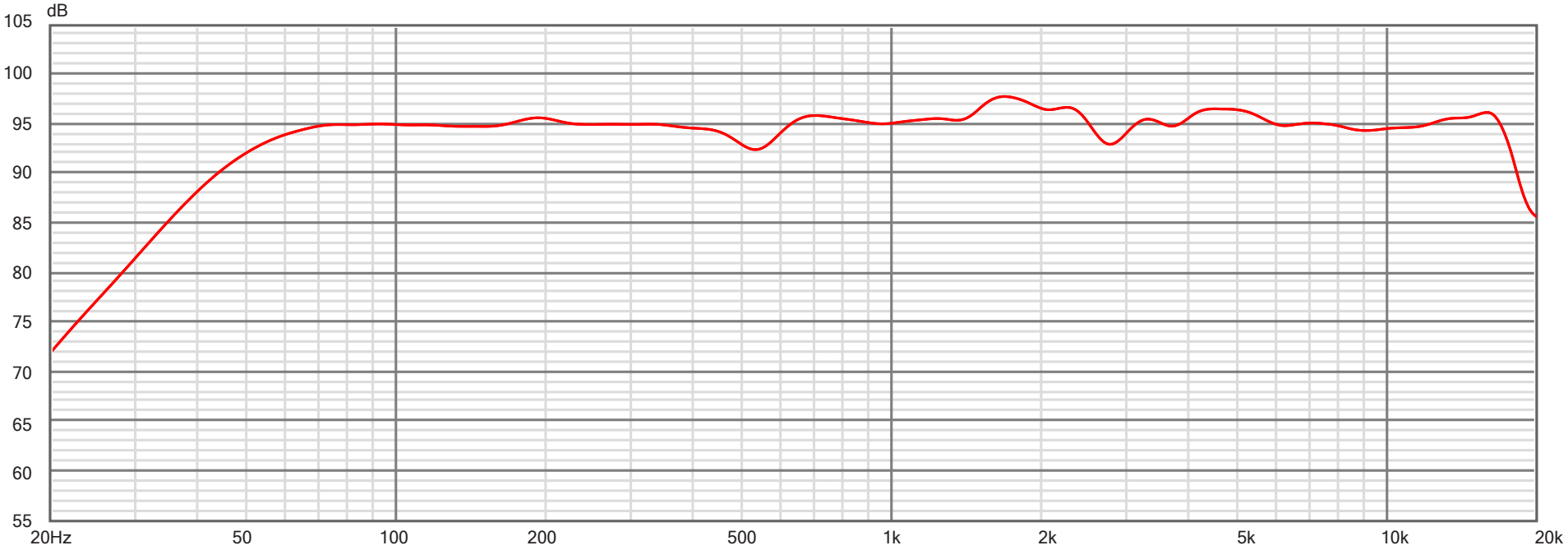


KRIX
EXPERIENCE SOUND

SOUND OUTPUT CHARACTERISTICS

MAXIMUM SOUND LEVEL CAPABILITY - LONG TERM:	124dB at 1 metre, calculated from sensitivity and power rating	**Conditions of measurement:** Half space on tower Baffle 2.1 by 2.1 metres
MAXIMUM SOUND LEVEL CAPABILITY - SHORT TERM:	AES75 maximum linear sound output – t.b.a.	**Conditions of measurement:** Half space on tower Baffle 2.1 by 2.1 metres
BANDWIDTH AT 2.83V (0dBW):	Low frequency response (-6dB) 42Hz	High frequency response (-6dB) 18kHz
SENSITIVITY:	97.5dB 2.83Vrms at 1m 97.5dB 1 Watt at 1m	**Conditions of measurement:** Measured at 2m referred to 1m

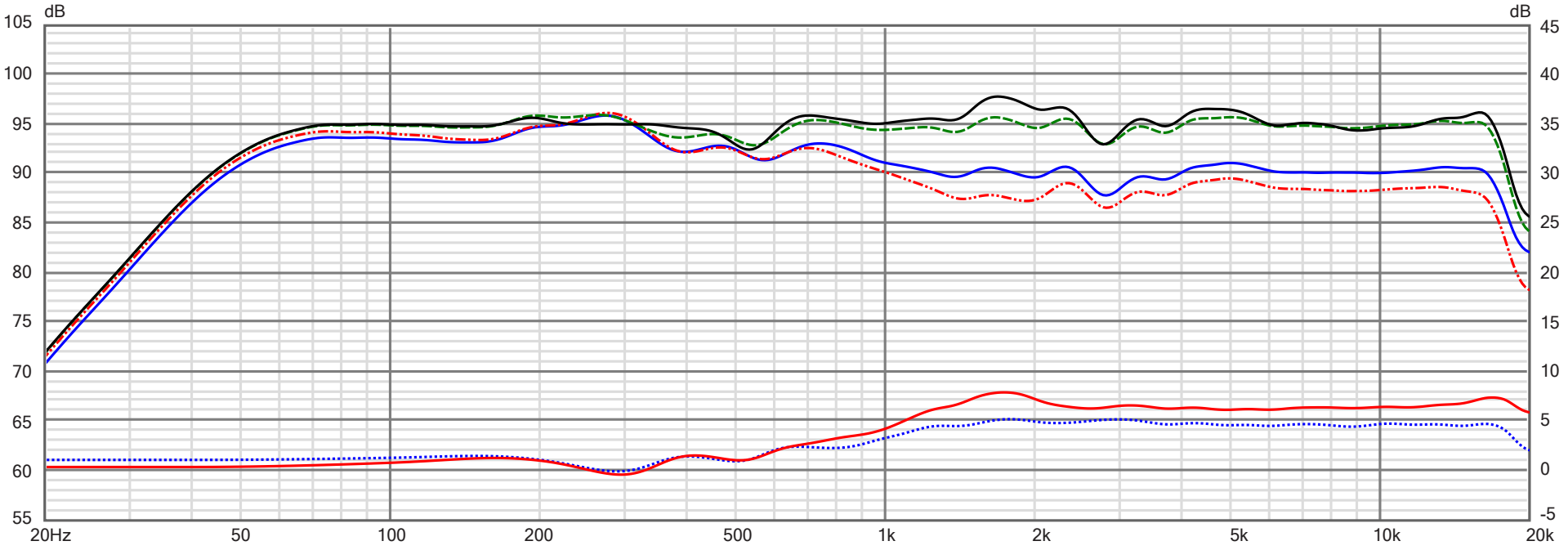
REFERENCE AXIS FREQUENCY RESPONSE:



NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre. Near field low frequency response merged at 300Hz.

DIRECTIVITY RESPONSE CTA-2034

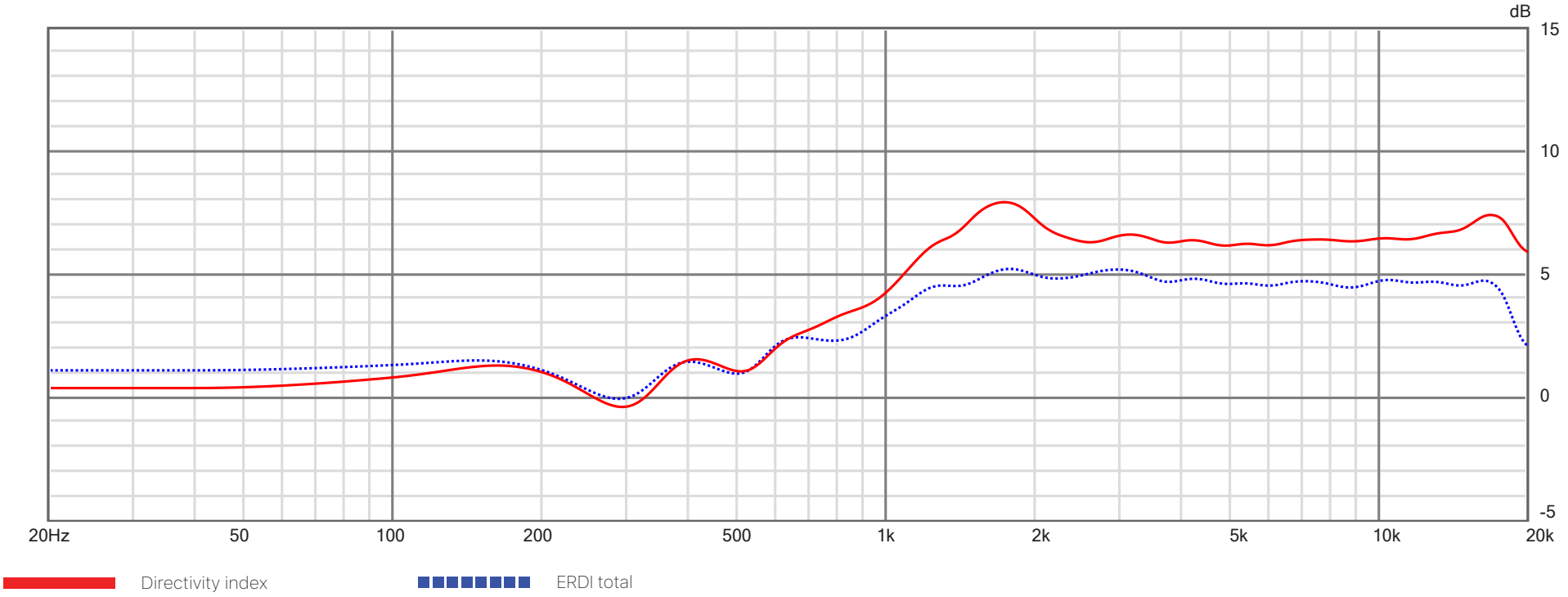
COMPOSITE RESPONSE CURVES:



NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre.
Near field low frequency response merged at 300Hz.
Measurements are in accordance with the ANSI/CTA-2034-B (Formerly ANSI/CEA-2034-A).

DIRECTIVITY RESPONSE CTA-2034

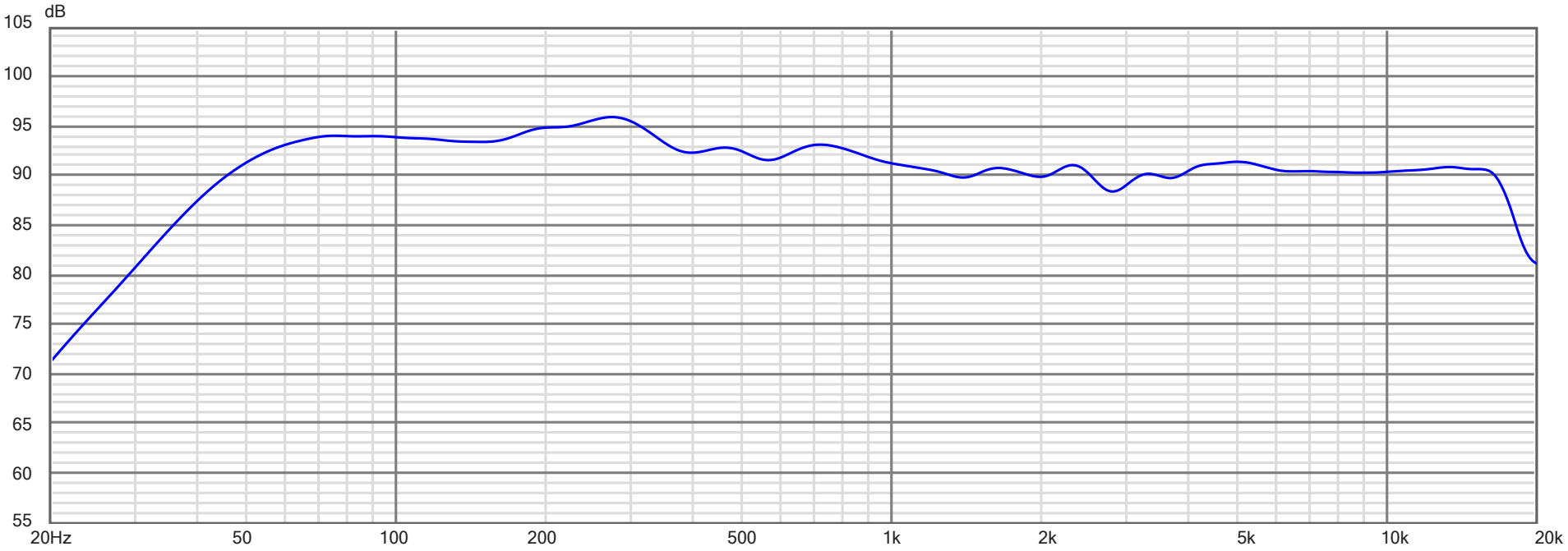
DIRECTIVITY INDEX:



NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre.
Near field low frequency response merged at 300Hz.
Measurements are in accordance with the ANSI/CTA-2034-B (Formerly ANSI/CEA-2034-A).

DIRECTIVITY RESPONSE CTA-2034

ESTIMATED IN ROOM RESPONSE:

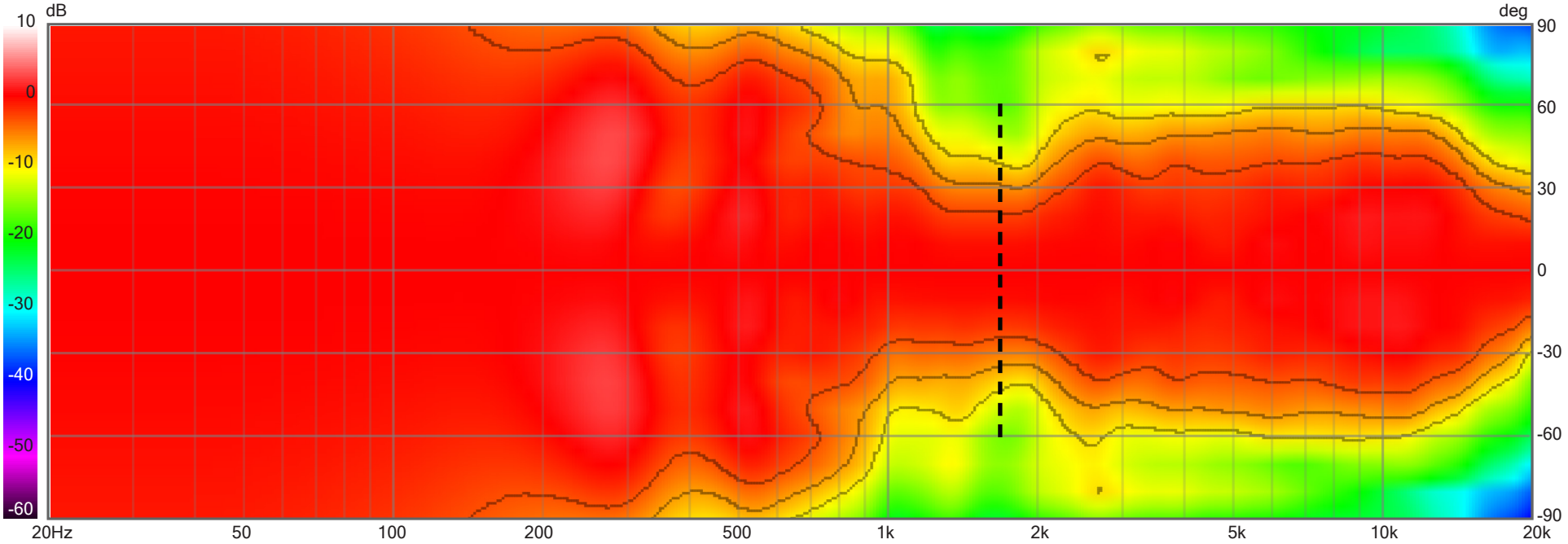


Estimated in room response

NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre. Near field low frequency response merged at 300Hz.
In room response is calculated using the measured on and off axis frequency responses based on a weighted average of 12% listening window, 44% early reflections and 44% sound power.
Measurements are in accordance with the ANSI/CTA-2034-B (Formerly ANSI/CEA-2034-A).

DIRECTIVITY CONTOUR MAP

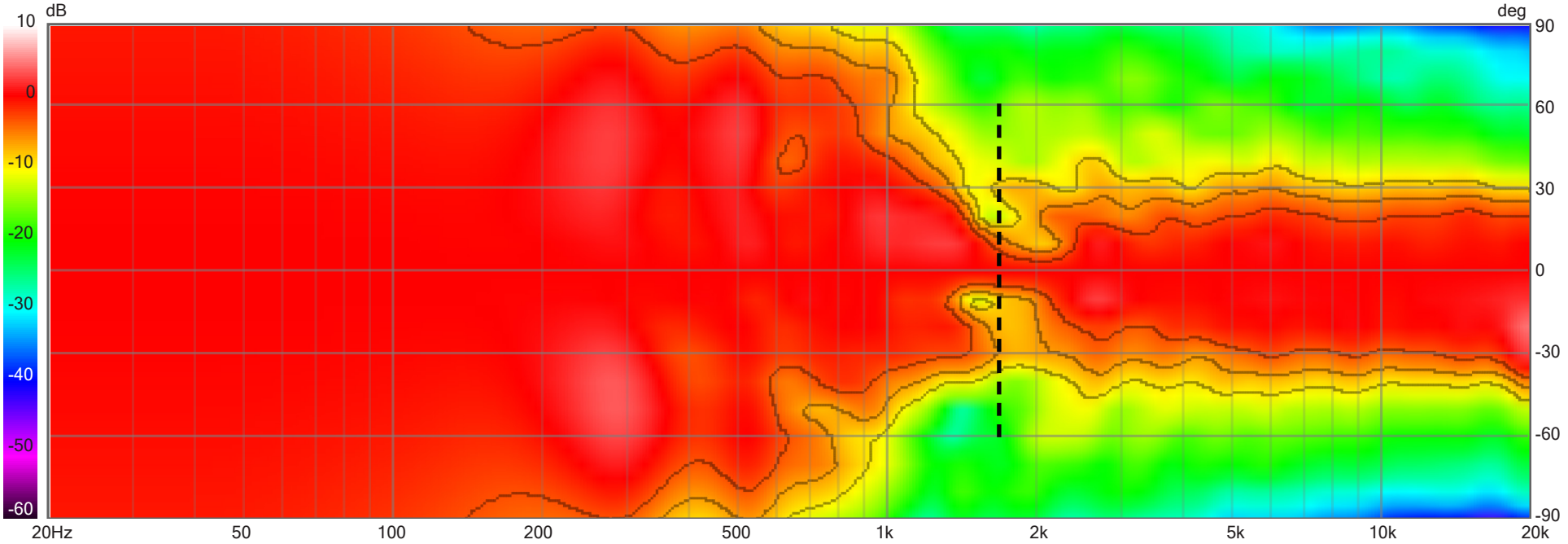
HORIZONTAL DIRECTIVITY:



NOTES: Half space, baffle 2.1 by 2.1 metres. Normalised to on axis response. Zero degrees represents reference axis.
Sixth octave smoothed, contour lines -3dB -6dB -9dB.
Crossover frequency shown as dotted line.

DIRECTIVITY CONTOUR MAP

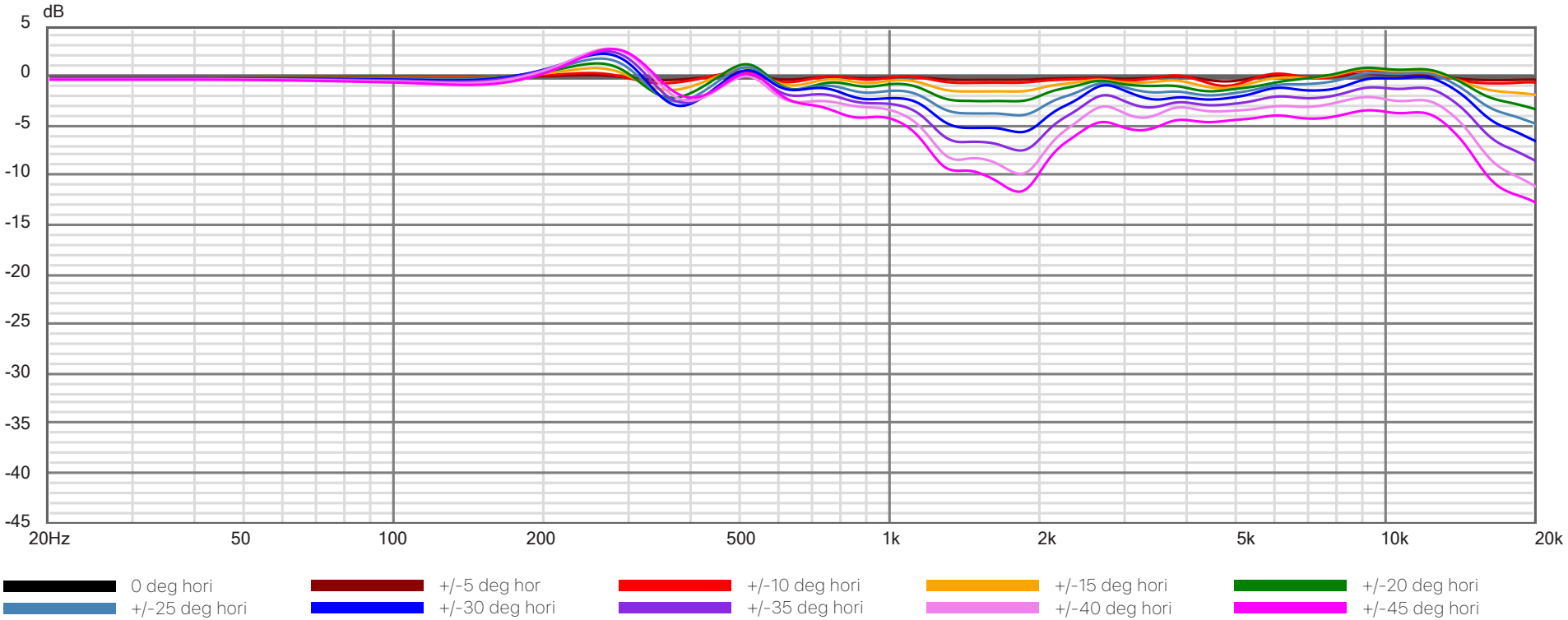
VERTICAL DIRECTIVITY:



NOTES: Half space, baffle 2.1 by 2.1 metres. Normalised to on axis response. Zero degrees represents reference axis.
Sixth octave smoothed, contour lines -3dB, -6dB, -9dB.
Crossover frequency shown as dotted line.

HORIZONTAL FREQUENCY RESPONSE

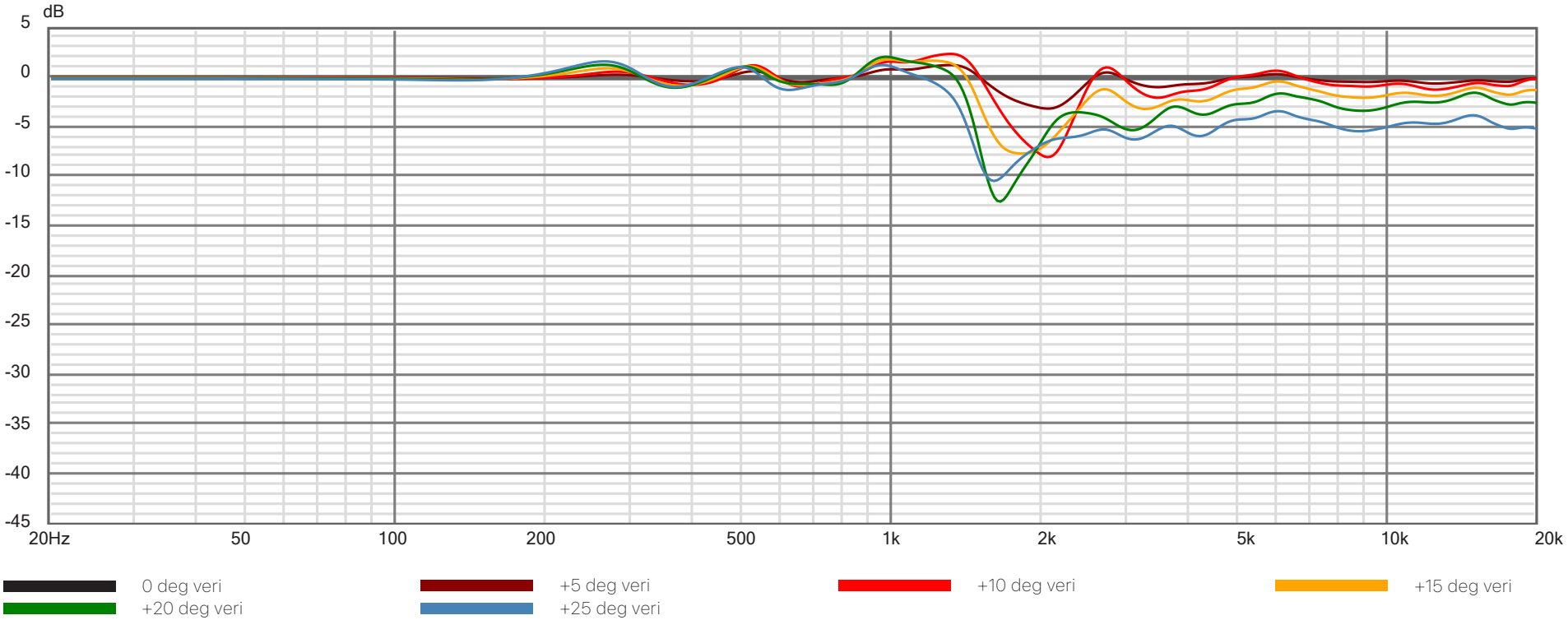
OFF AXIS:



NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre.
Speaker left and speaker right measurements are symmetrical.

VERTICAL FREQUENCY RESPONSE

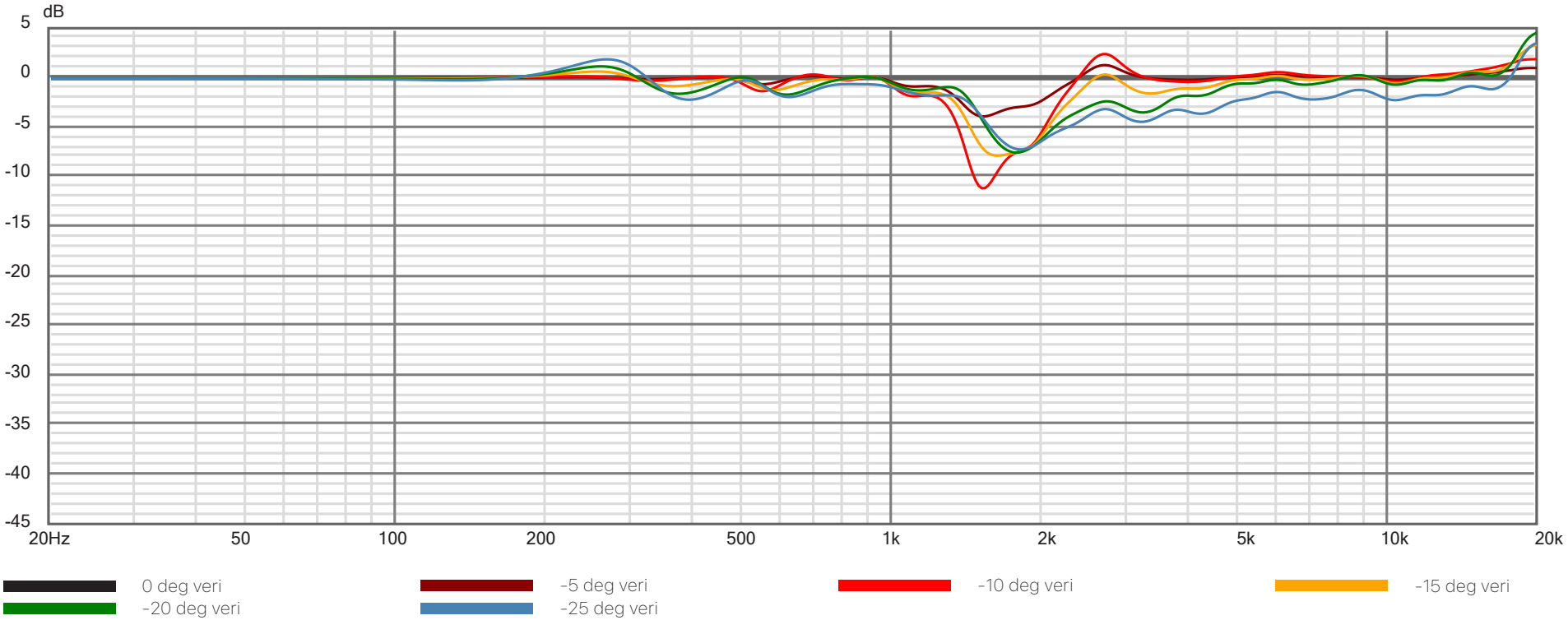
OFF AXIS ABOVE:



NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre.

VERTICAL FREQUENCY RESPONSE

OFF AXIS VERTICAL BELOW:



NOTES: Sixth octave smoothed, no equalisation. Baffle 2.1 by 2.1 metres. Measured at 2 metres referred to 1 metre.

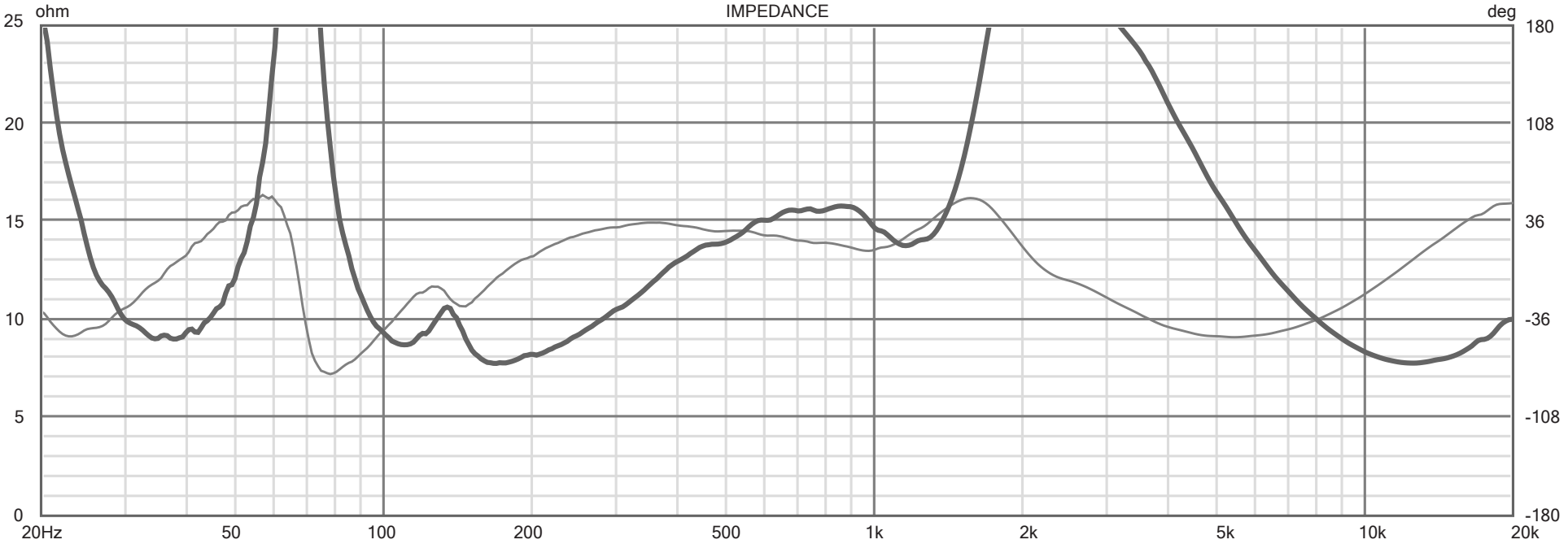
INPUT SIGNAL CHARACTERISTICS

NOMINAL ELECTRICAL INPUT IMPEDANCE: 8 Ohms

MAXIMUM INPUT POWER: Continuous: 450 Watts, Peak: 1800 Watts

MAXIMUM INPUT VOLTAGE: 60V rms (equivalent to 26.5dB ref 2.83V)

ELECTRICAL INPUT IMPEDANCE GRAPH:



Load impedance Load phase

NOTES: Min Z 8Ω at 12kHz

DRIVER POLARITY VERSUS FREQUENCY:

LF	HF
Positive	Positive

CROSSOVER FREQUENCY:

LF - HF
1600Hz passive

INPUT CONNECTOR TYPE: Nickel plated spring terminals featuring a 5mm hole to accept up to 10AWG cable.

INPUT CONNECTOR LOCATION: At rear of enclosure – refer drawing page 4.

APPENDICES:

APPENDIX 1:
CONDITIONS OF MEASUREMENT

- System mounted in baffle on rotator apparatus on tower, centre of rotation 4.5 m from floor, nearest surface 2.8m.
- test stimulus was log chirp, window 3msecs before to 17 msecs after peak of impulse response, left window Tukey 0.25, right window Blackman, nominal frequency resolution 58.82Hz.
- Ambient temperature 27° C humidity ~60%.

APPENDIX 2:
SPECIFICATION CONDITIONS

All specifications are in accordance with the AES2-2012 standard and are in a form compatible with the Dolby® Atmos™ room design tool.

- Due to continued development, specifications may change without notice.
- Manufactured and sold under US Patents 7,044,265 B2 and 2011/0153282 A1.

1. Sensitivity measurements adjusted to the nominal 2.83V input power, in 8 Ohms.
2. Maximum AES continuous power capacity (AES2-2012) band limited test signal duration of two hours.
3. RMS voltage required to deliver the maximum continuous power to the loudspeaker, IEC shaped pink noise with duration of two hours.