



TECHNICAL SPECIFICATIONS AS460

DESCRIPTION

A 2-way mid/high system (passive mid/high crossover) in a trapezoidal enclosure. Includes a horn-loaded 10-in MF cone and a 1.4-in exit/44mm voice coil HF compression driver on a 60 x 45 constant directivity horn.

APPLICATION

The AS460 provides the mid/high performance capabilities of the 60° (h) AS Series systems in a separate mid/high module. It can be used as a stand-alone system for speech-only applications or, together with an AS415, AS422 or AS625 LF module, it provides full range performance in a flexible, modular, multi-enclosure format. Includes comprehensive 3/8"-16 mounting/suspension points. Six year warranty.

Applications include:

- Stadiums
- Arenas
- Dance Clubs
- Theaters
- Performing Arts Centers
- Houses of Worship

DESCRIPTIVE DATA

Part Number	999671
Product Group	I
System Configuration	2-way, Mid/High
Powering Configuration(s)	Passive MF/HF Crossover
MF Subsystem & Loading	1x 10-in, Horn-Loaded
HF Subsystem & Loading	1x 1.4-in exit/44mm voice coil Compression Driver on Constant Directivity Horn
Recommended High-Pass Frequency (24 dB/Octave)	200 Hz
Cabinet Type (shape)	Trapezoidal
Enclosure Materials	Baltic Birch Plywood
Finish	Black Polyurethane
Connectors	2-Terminal Barrier Strip
Suspension Hardware	(12) 3/8"-16 Threaded Mounting/ Suspension Points (3 each Top and Bottom, 2 on Sides and Back)
Grill	Powder Coated Perforated Steel
Options	104001 3/8"-16 Eyebolt (FC300B)



NOMINAL DATA

Frequency Response (1 Watt @ 1m)

±3 dB	250 Hz to 17 kHz
-10 dB	115 Hz

Axial Sensitivity (dB SPL, 1 Watt @ 1m)

Passive MF/HF	105
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Impedance (Ohms)

Passive MF/HF	8
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Power Handling, AES Standard (Watts)

Passive MF/HF	360
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Calculated Maximum Output (dB SPL @ 1m)

Passive MF/HF Peak	136.6
Passive MF/HF Long term	130.6

Nominal Coverage Angle/-6 dB points (degrees)

Horizontal	60
Vertical	45

Dimensions

	inches	millimeters
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Height	22.50	572
Width (Front)	24.63	626
Width (Rear)	14.04	357
Depth	19.75	502
Trapezoid Angle	15 degrees per side	

Weights

	pounds	kilograms
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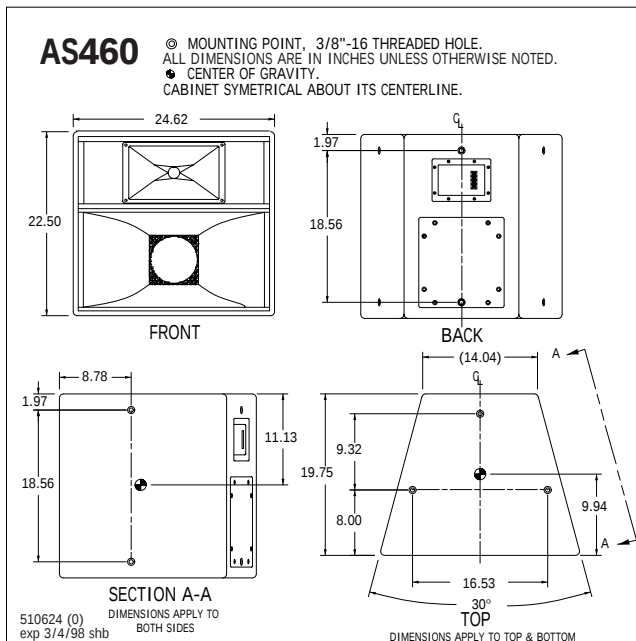
Net Weight	83	37.8
Shipping Weight	92	41.9





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DIMENSIONAL DRAWING



SERVICE ITEMS

MF: Complete Cone Driver

EAW Part No. 804021

HF: Complete Compression Driver/Tweeter

EAW Part No. 803039

MF: Recone Assembly

EAW Part No. 460010

HF: Diaphragm Assembly

EAW Part No. 806019

Filter/Crossover Network: Complete Assembly

EAW Part No. 225338

ARCHITECTURAL SPECIFICATIONS

The passive mid/high loudspeaker systems shall incorporate a 10-in MF cone and a 1.4-in exit/44mm voice coil HF compression driver.

The MF driver shall be loaded into a midrange horn constructed of 3mm birch plywood backed with high density polyurethane foam. The HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 60° (h) x 45° (v). An internal passive filter network shall provide fourth order acoustical crossover and system equalization.

System frequency response shall vary no more than ± 3 dB from 250 Hz to 17 kHz measured on axis. The system shall produce a Sound Pressure Level (SPL) of 105 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 136.6 dB SPL on axis at 1 meter. The system shall handle 360 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 15mm thickness void-free cross-grain-laminated Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in black polyurethane. Input connectors shall be 2-terminal barrier strip. Twelve (12) 3/8"-16 threaded mounting/suspension points (3 each top and bottom, 2 on each side and back) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grill.

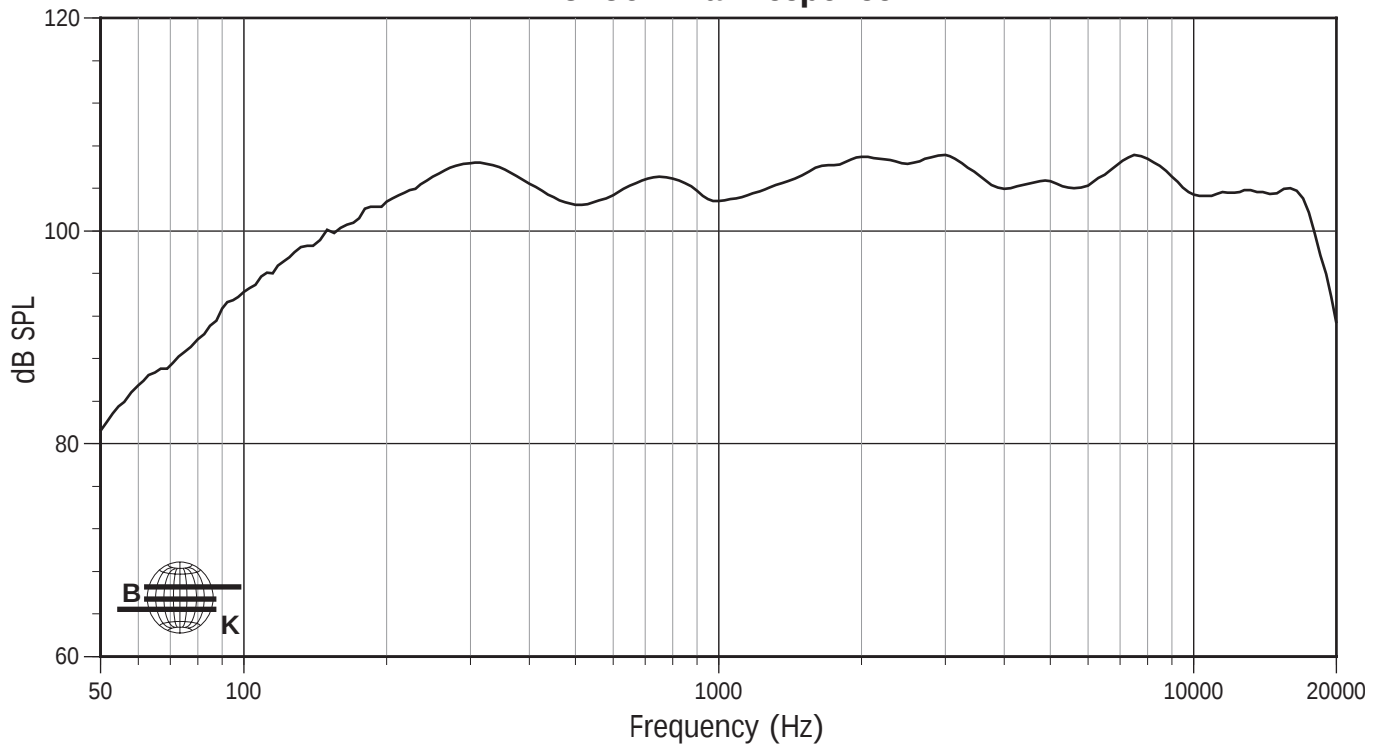
The mid/high loudspeaker shall be the EAW model AS460.



PERFORMANCE SPECIFICATIONS AS460

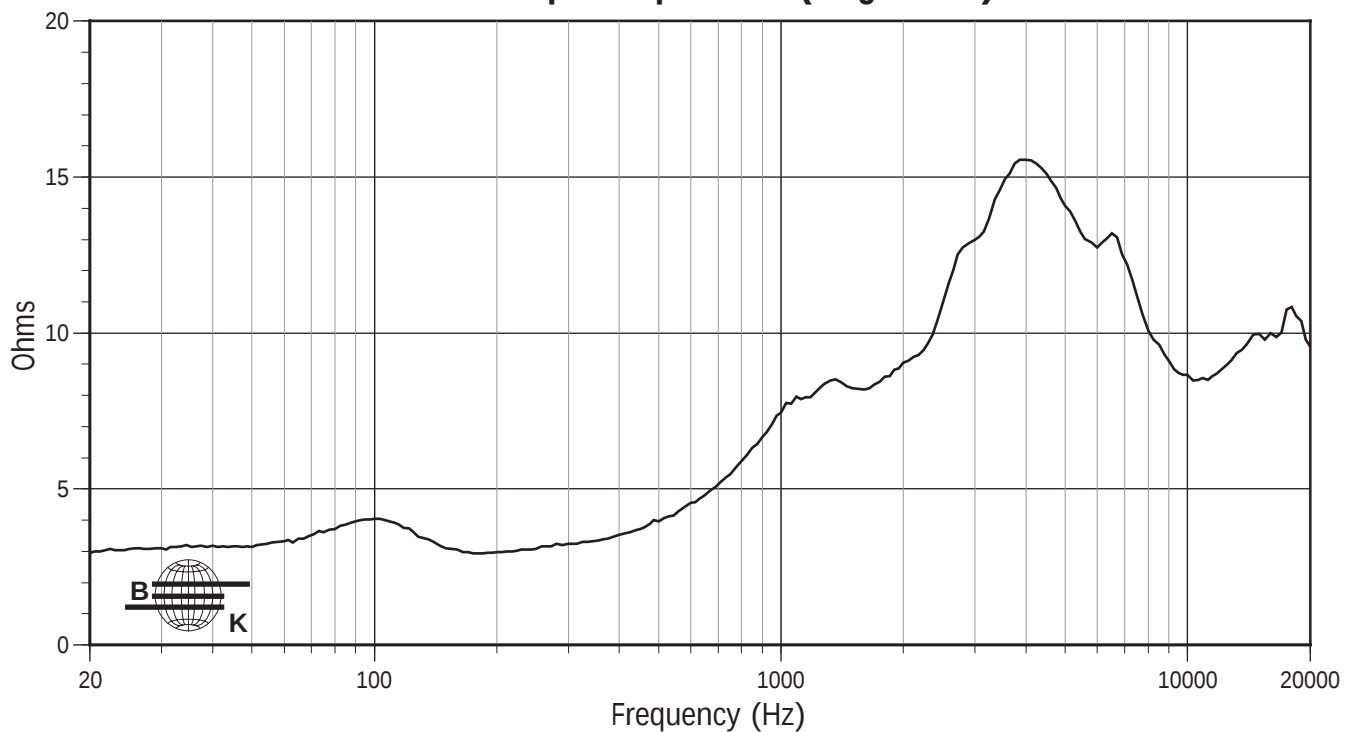
FREQUENCY RESPONSE

AS460 Axial Response



INPUT IMPEDANCE

AS460 Input Impedance (Magnitude)

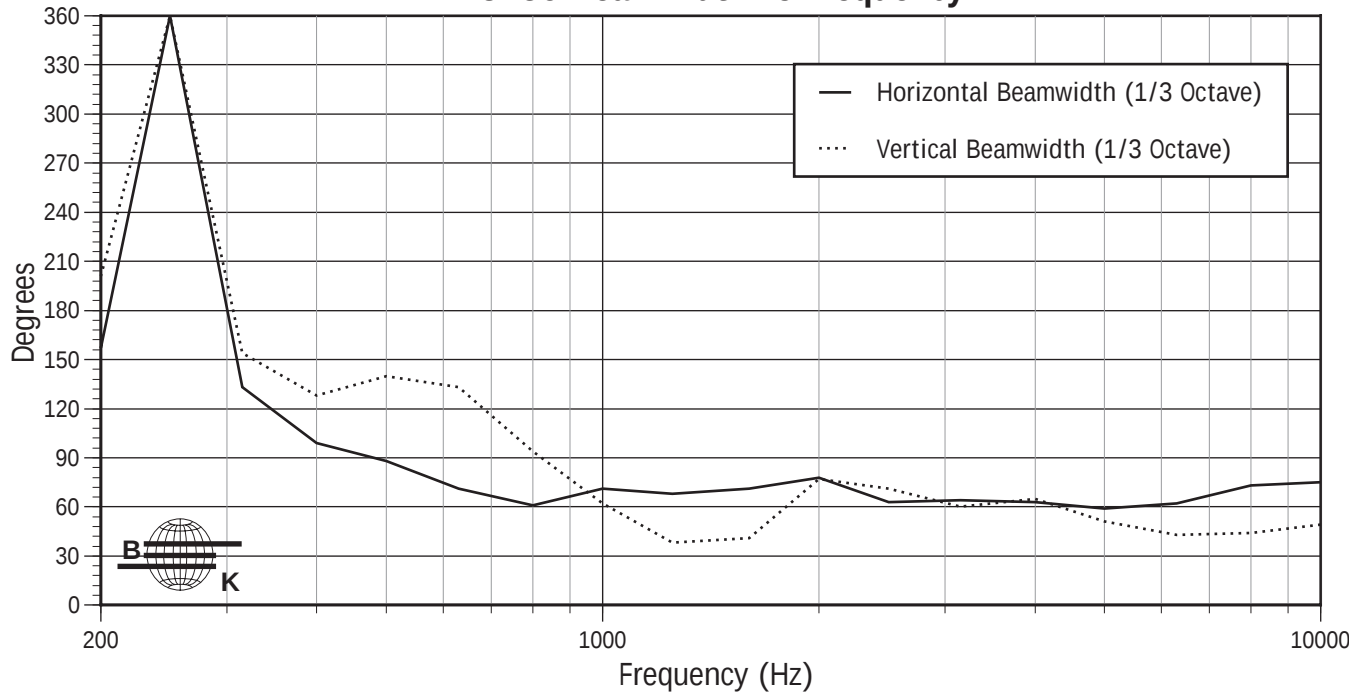




PERFORMANCE SPECIFICATIONS AS460

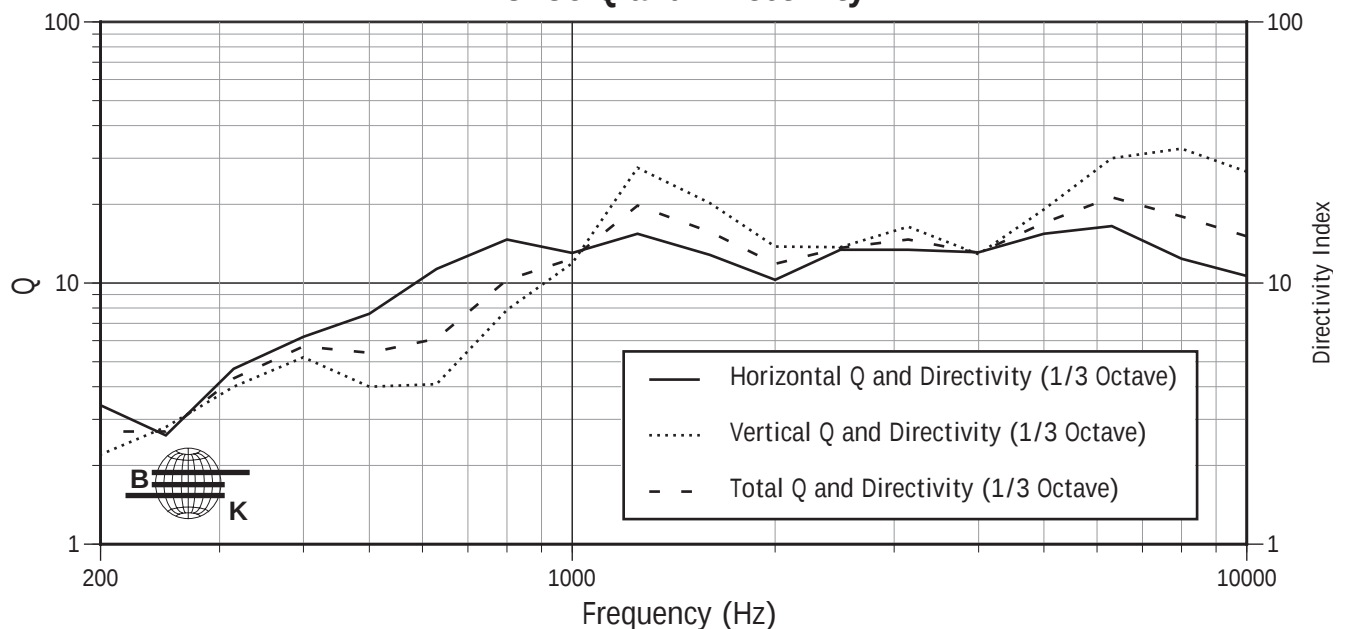
BEAMWIDTH

AS460 Beamwidth vs Frequency



Q & DIRECTIVITY INDEX (DI)

AS460 Q and Directivity





PERFORMANCE SPECIFICATIONS AS460

Q & DIR & BEAMWIDTH BY FREQUENCY

Frequency	Hor Beamwidth	Ver Beamwidth	Hor Q & Dir	Ver Q & Dir	Tot Q & Dir
100	360	360	1	1.4	1.2
125	360	360	1.2	1.3	1.3
160	360	360	2.4	2.3	2.4
200	157	201	3.4	2.2	2.7
250	360	360	2.6	2.8	2.7
315	133	154	4.7	4	4.3
400	99	128	6.2	5.2	5.7
500	88	140	7.6	4	5.4
630	71	133	11.3	4.1	6.1
800	61	94	14.7	7.9	10.3
1000	71	62	13	11.9	12.4
1250	68	38	15.4	27.6	19.8
1600	71	41	12.8	20.2	15.7
2000	78	77	10.3	13.8	11.8
2500	63	71	13.4	13.7	13.6
3150	64	60	13.4	16.4	14.7
4000	63	65	13.1	12.9	13
5000	59	51	15.4	19.1	17
6300	62	43	16.5	30.1	21.3
8000	73	44	12.4	32.7	18
10000	75	49	10.6	26.7	15.1
12500	60	31	17.5	63	27.3
16000	51	34	24.3	48	32.3
20000	39	39	35.6	45.1	39.5

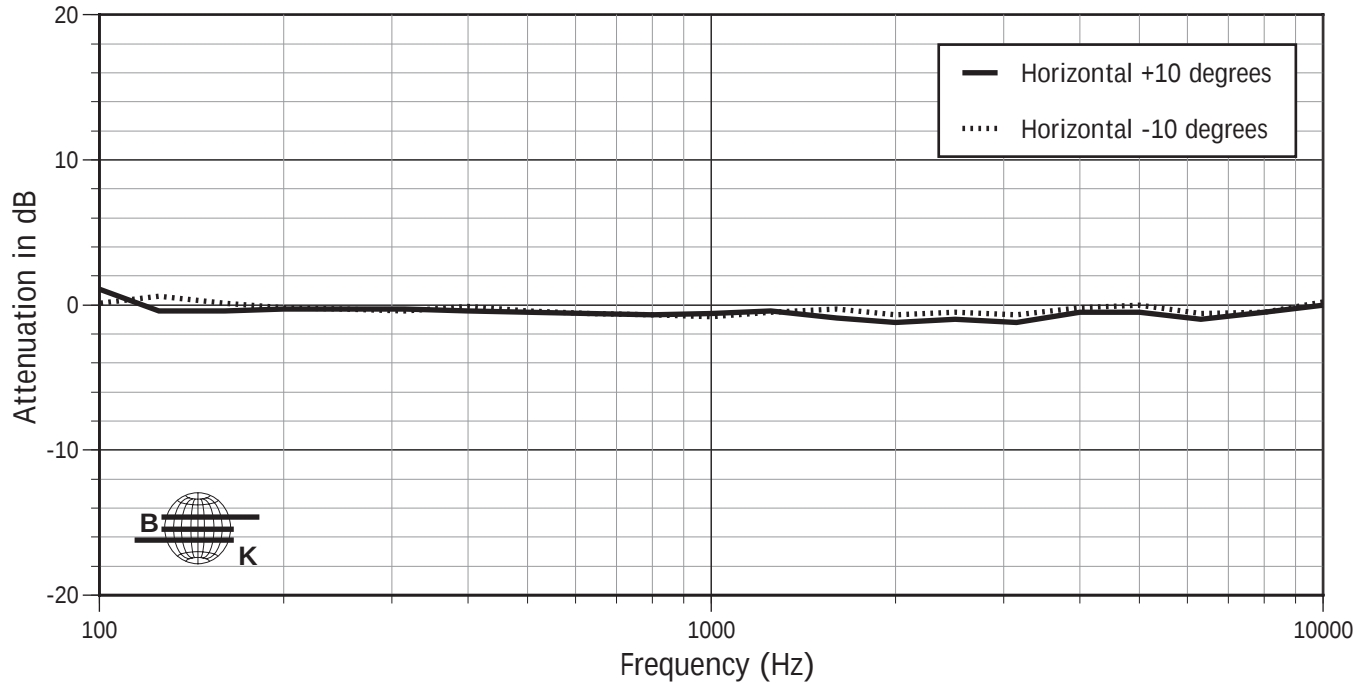


PERFORMANCE SPECIFICATIONS AS460

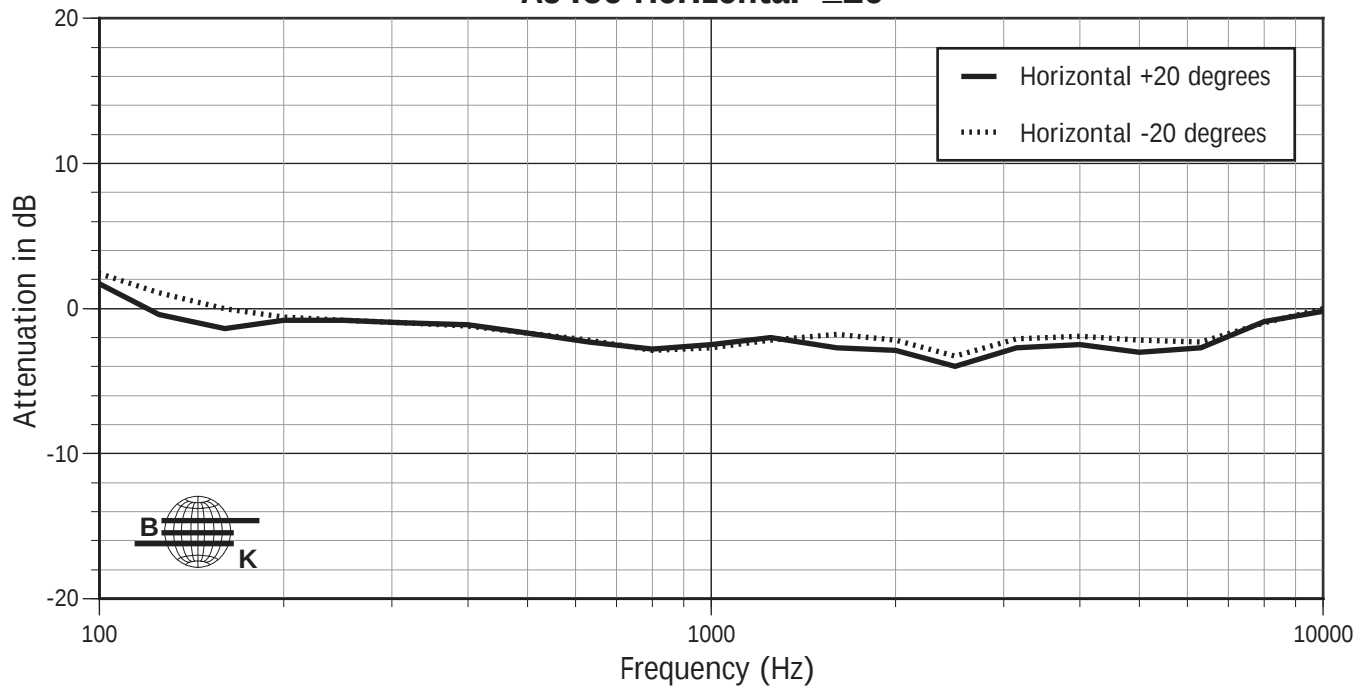
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS460 Horizontal $\pm 10^\circ$



AS460 Horizontal $\pm 20^\circ$

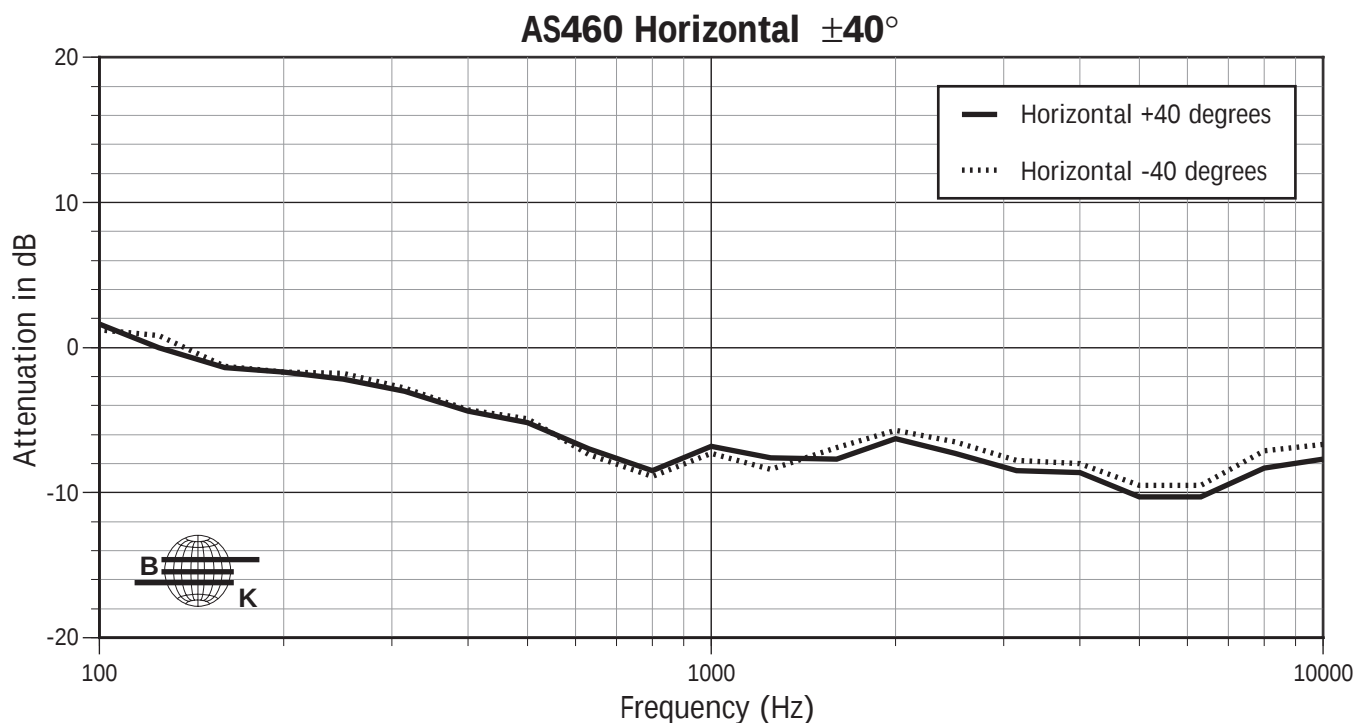
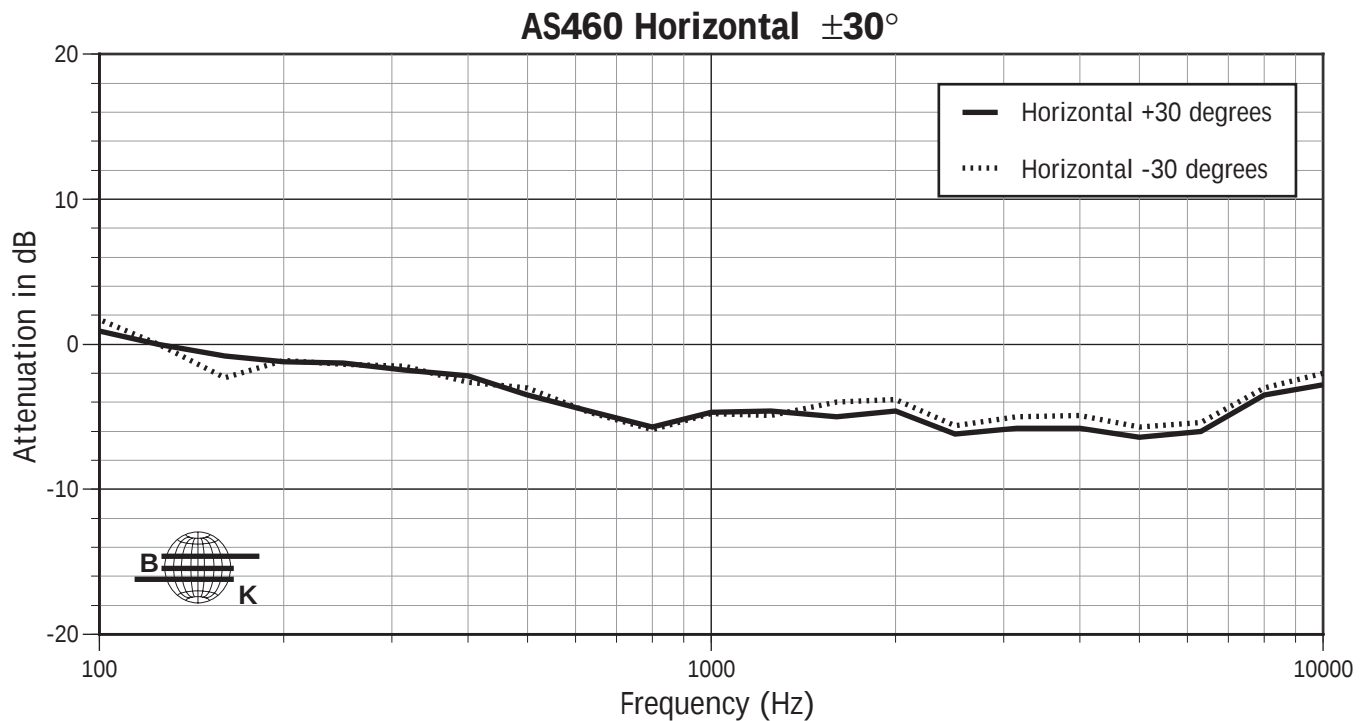




PERFORMANCE SPECIFICATIONS AS460

HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



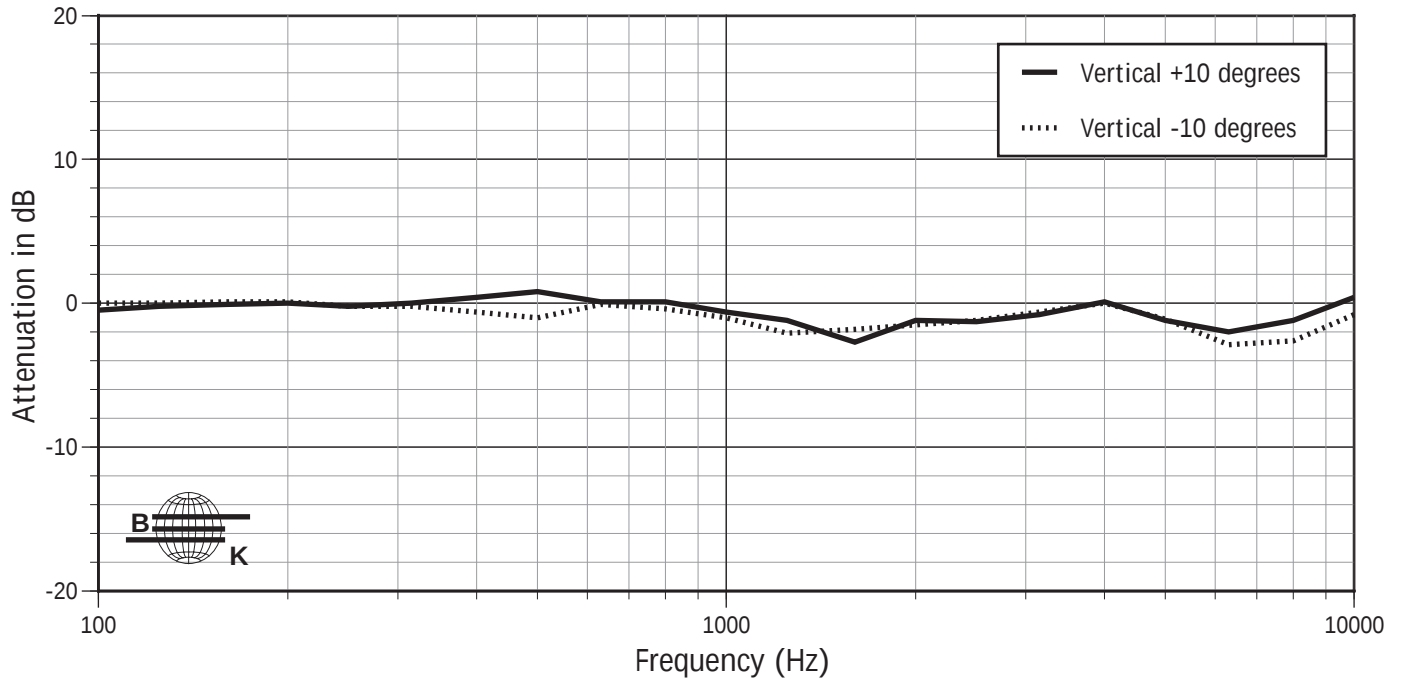


PERFORMANCE SPECIFICATIONS AS460

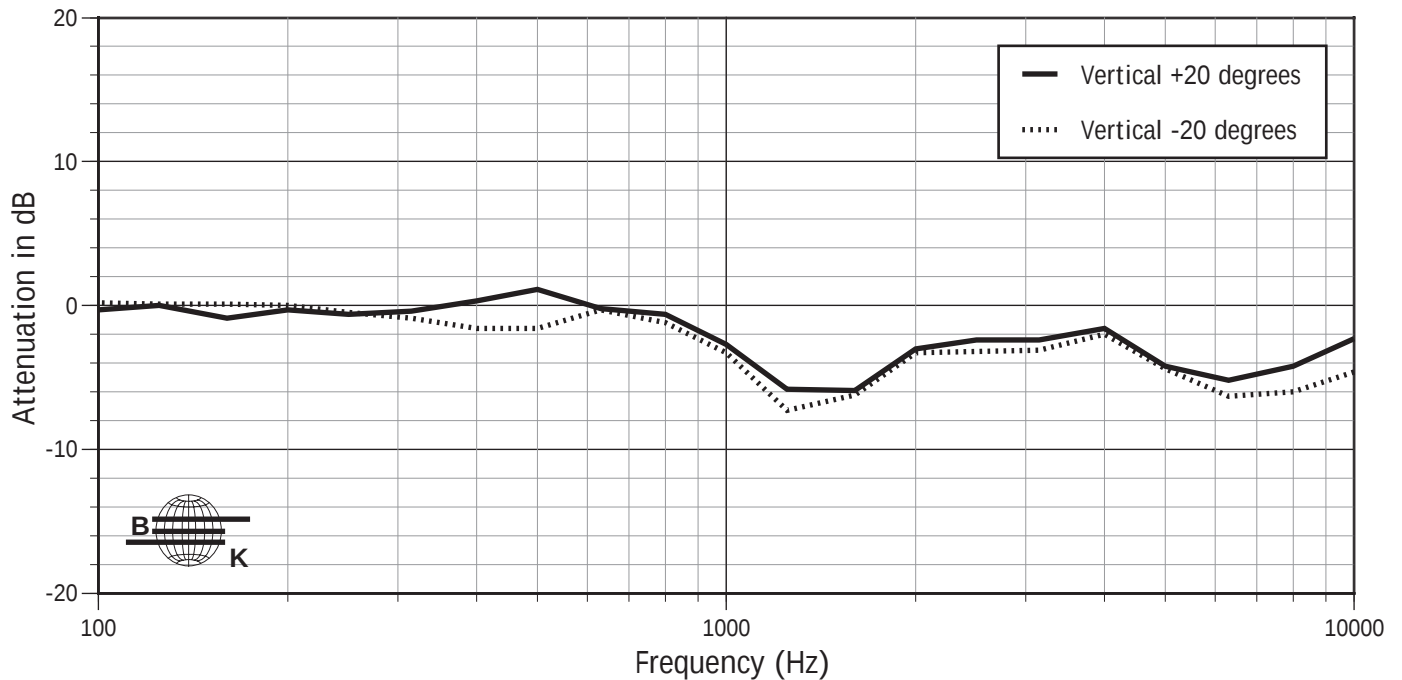
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS460 Vertical $\pm 10^\circ$



AS460 Vertical $\pm 20^\circ$



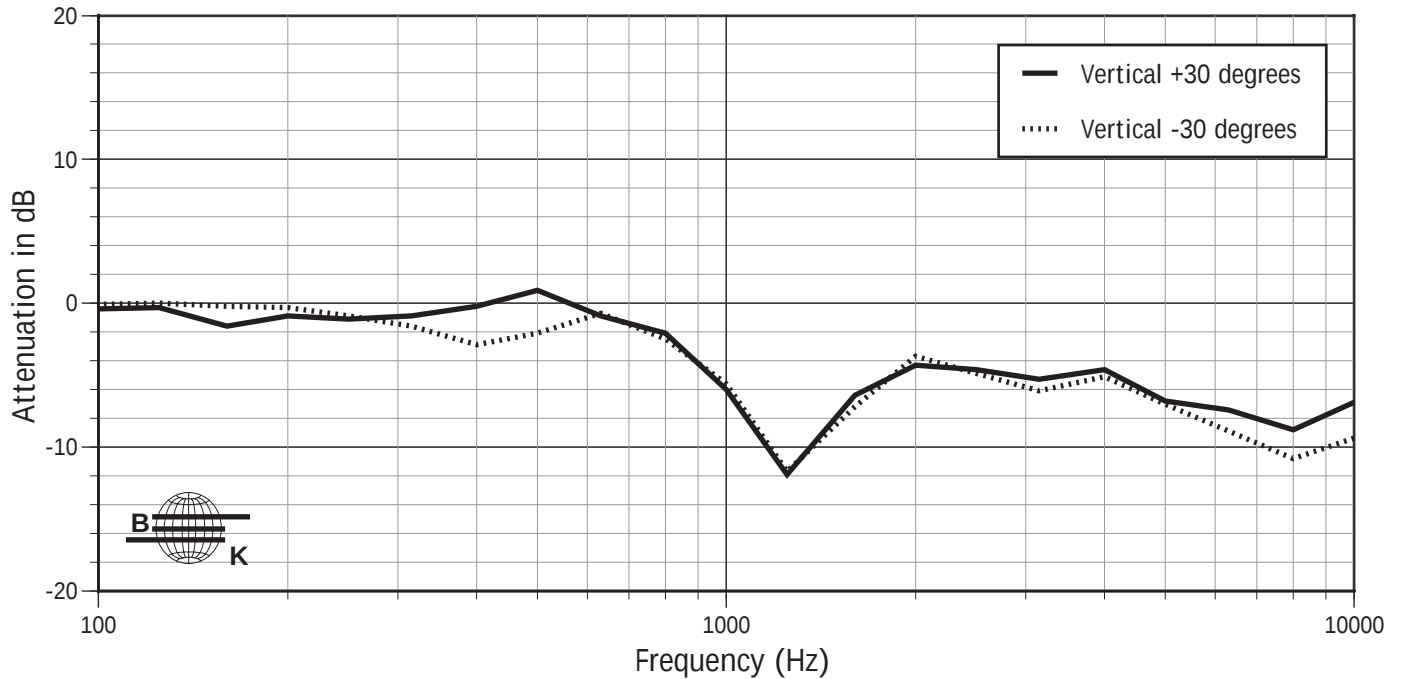


PERFORMANCE SPECIFICATIONS AS460

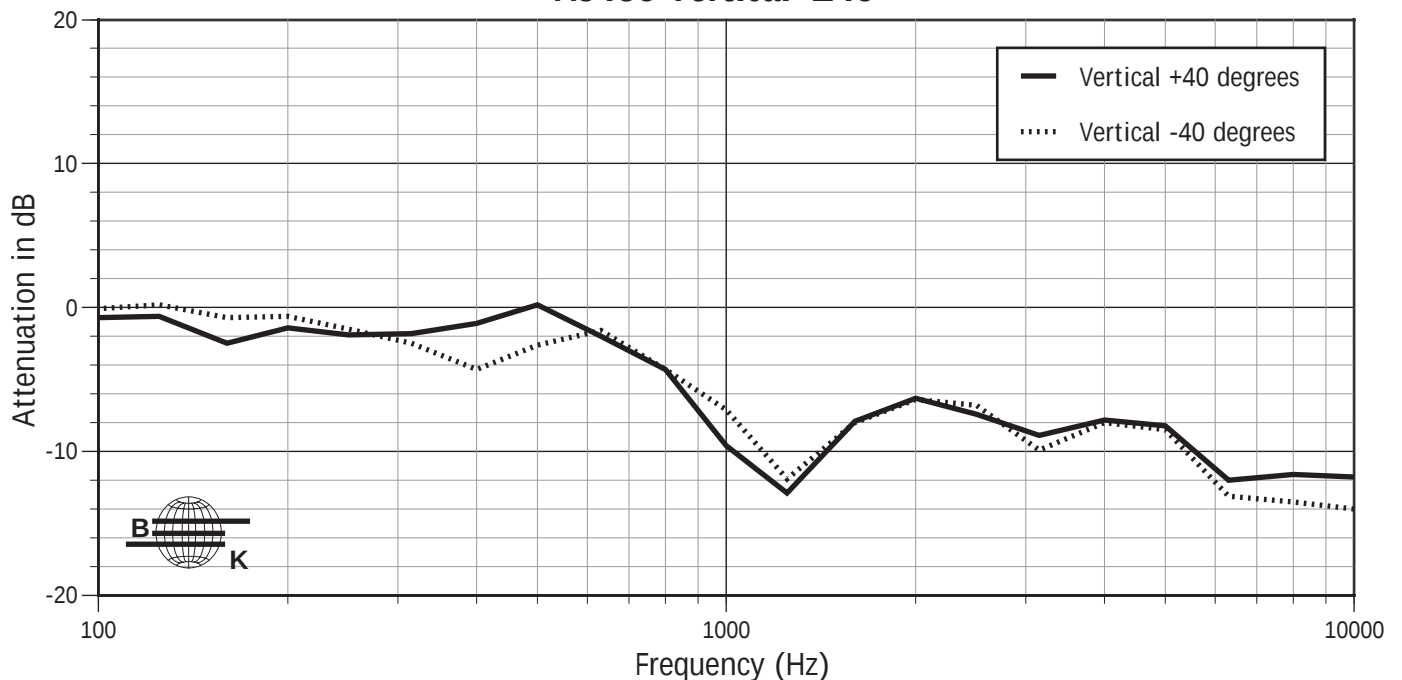
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS460 Vertical $\pm 30^\circ$

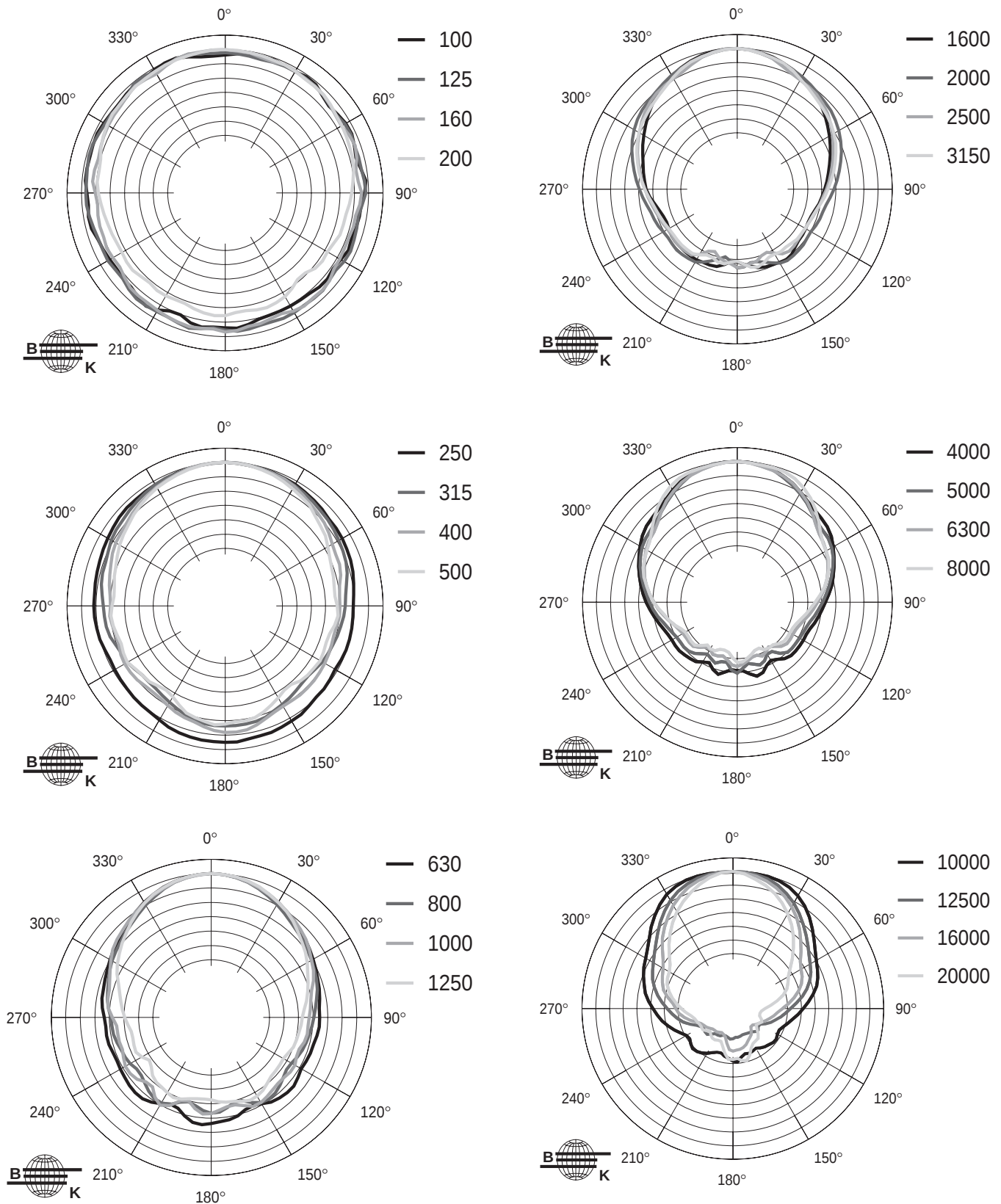


AS460 Vertical $\pm 40^\circ$



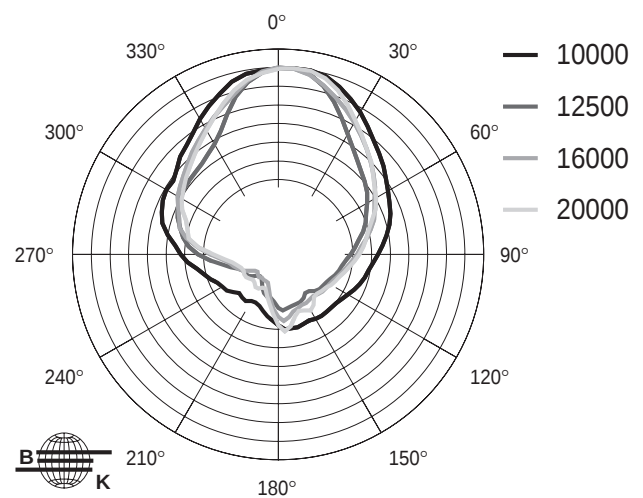
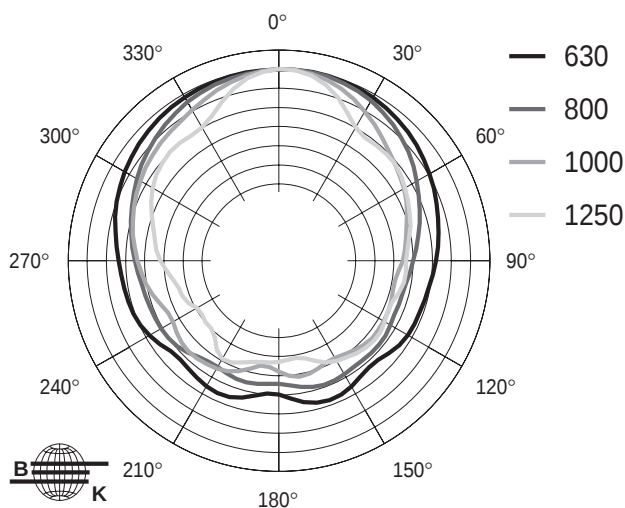
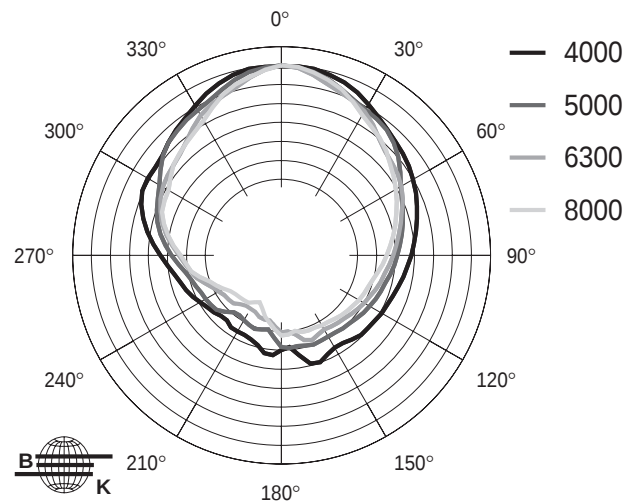
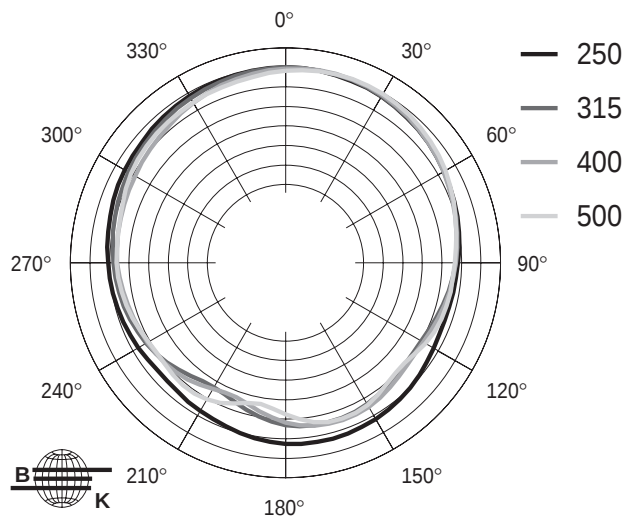
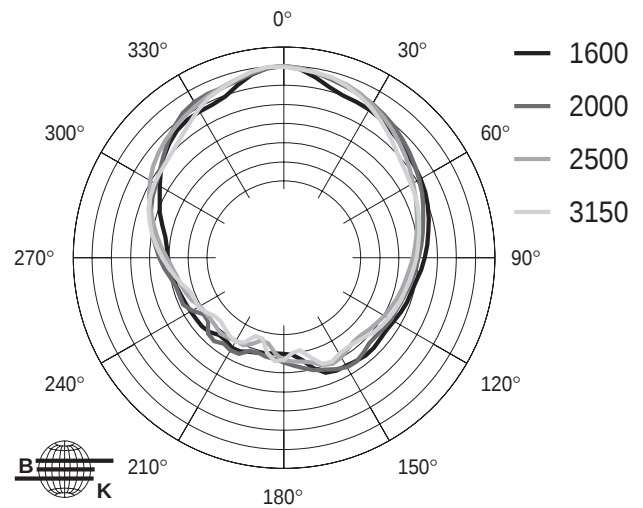
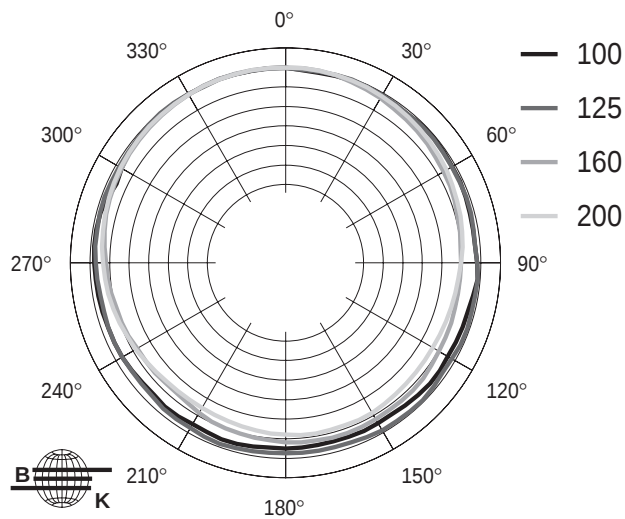


HORIZONTAL 1/3 OCTAVE POLAR DATA AS460





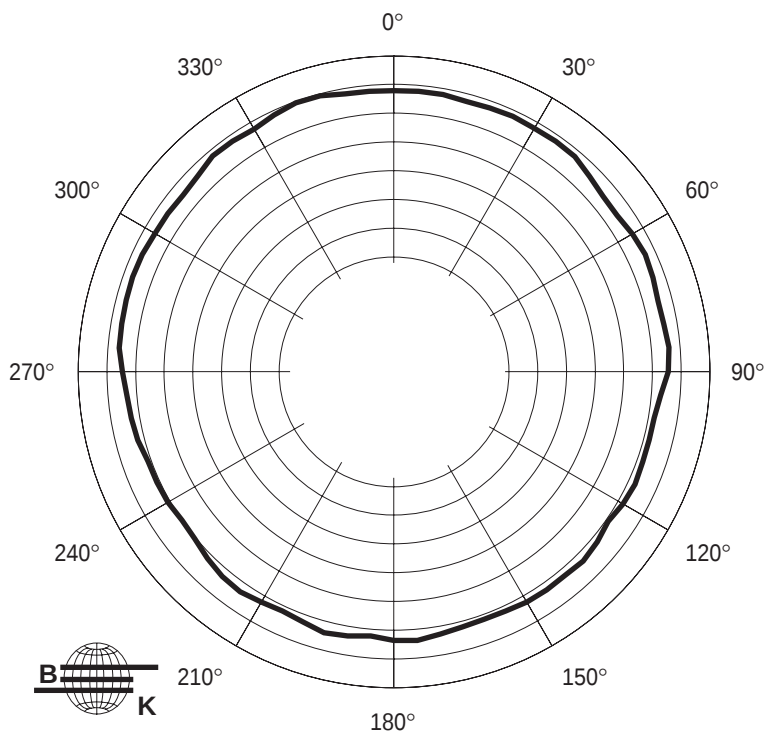
VERTICAL 1/3 OCTAVE POLAR DATA AS460



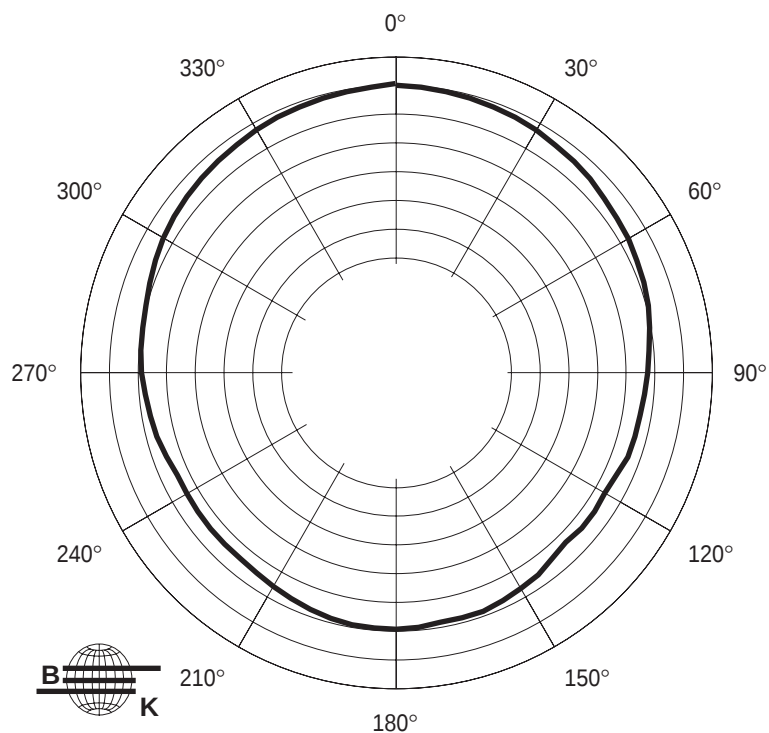


HORIZONTAL OCTAVE POLAR DATA AS460

AS460 125 Hz Horizontal Octave Polar Data



AS460 250 Hz Horizontal Octave Polar Data

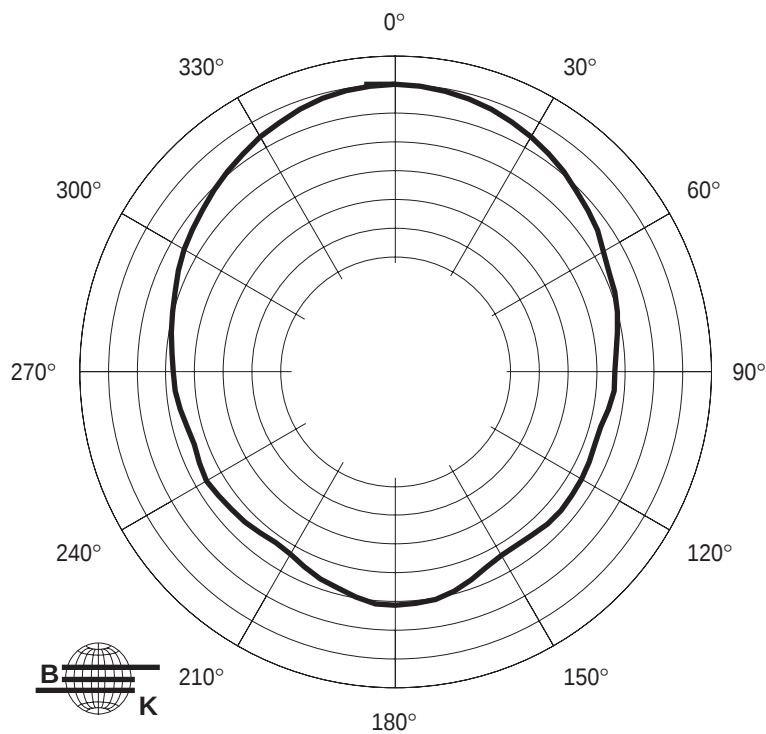


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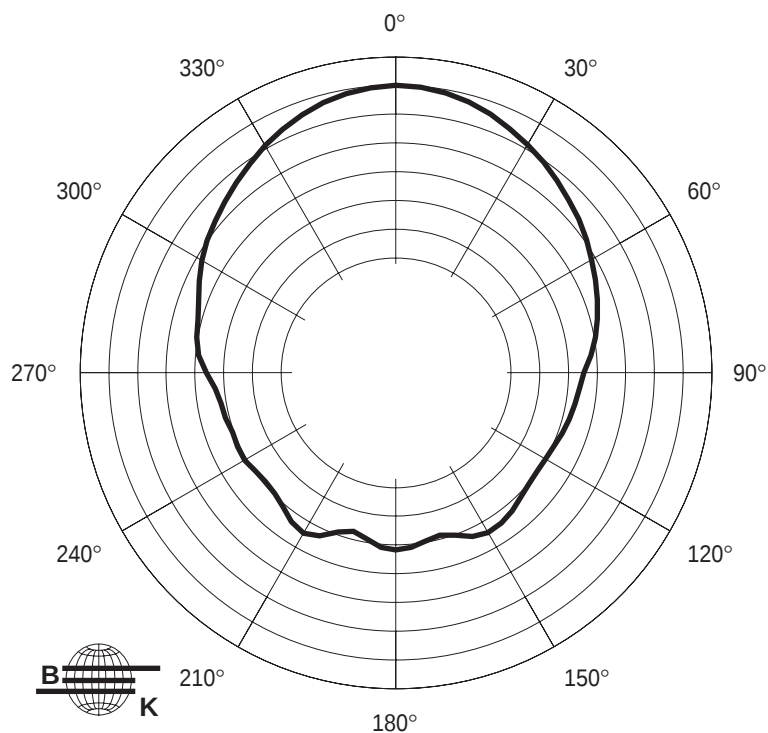


HORIZONTAL OCTAVE POLAR DATA AS460

AS460 500 Hz Horizontal Octave Polar Data



AS460 1000 Hz Horizontal Octave Polar Data

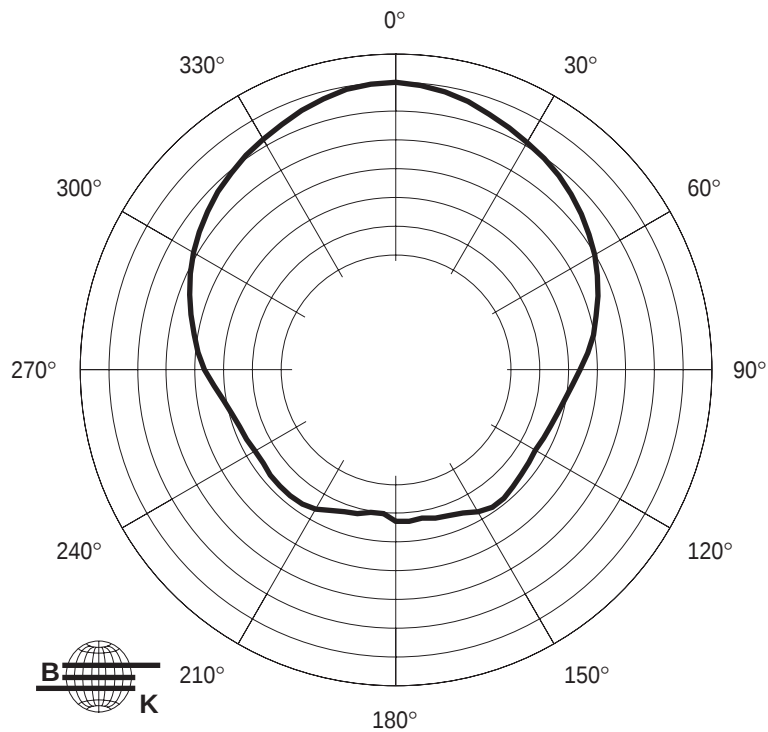


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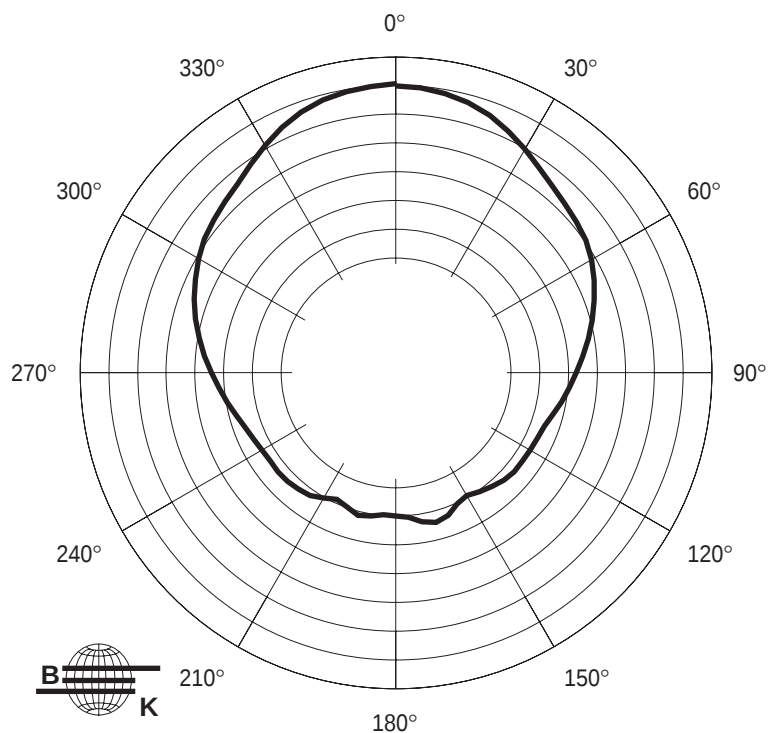


HORIZONTAL OCTAVE POLAR DATA AS460

AS460 2000 Hz Horizontal Octave Polar Data



AS460 4000 Hz Horizontal Octave Polar Data

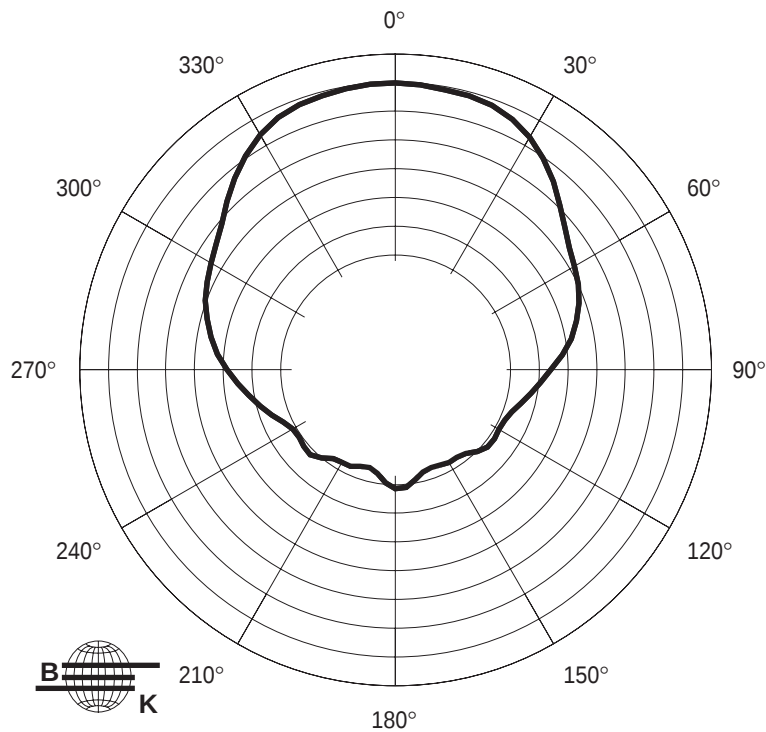


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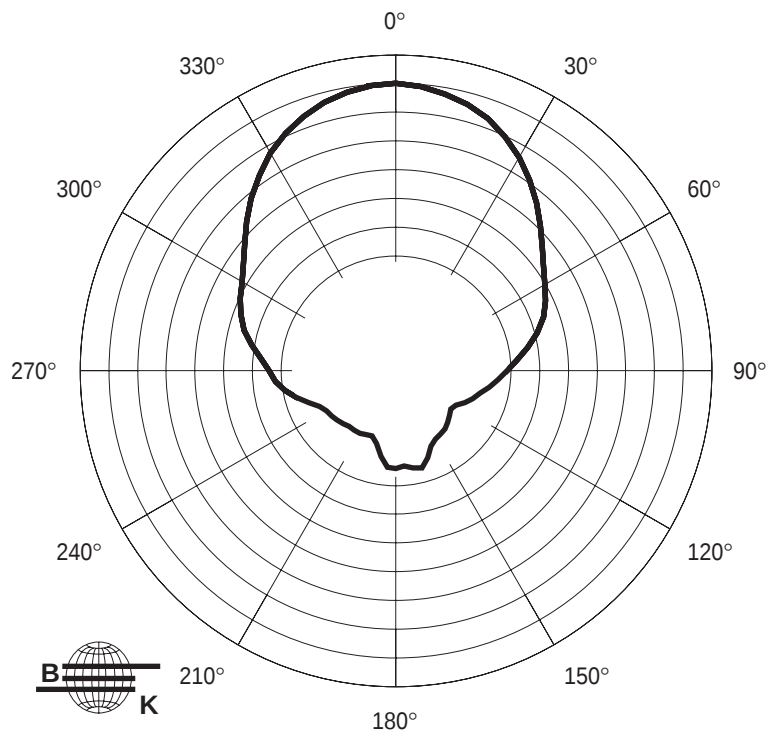


HORIZONTAL OCTAVE POLAR DATA AS460

AS460 8000 Hz Horizontal Octave Polar Data



AS460 16000 Hz Horizontal Octave Polar Data

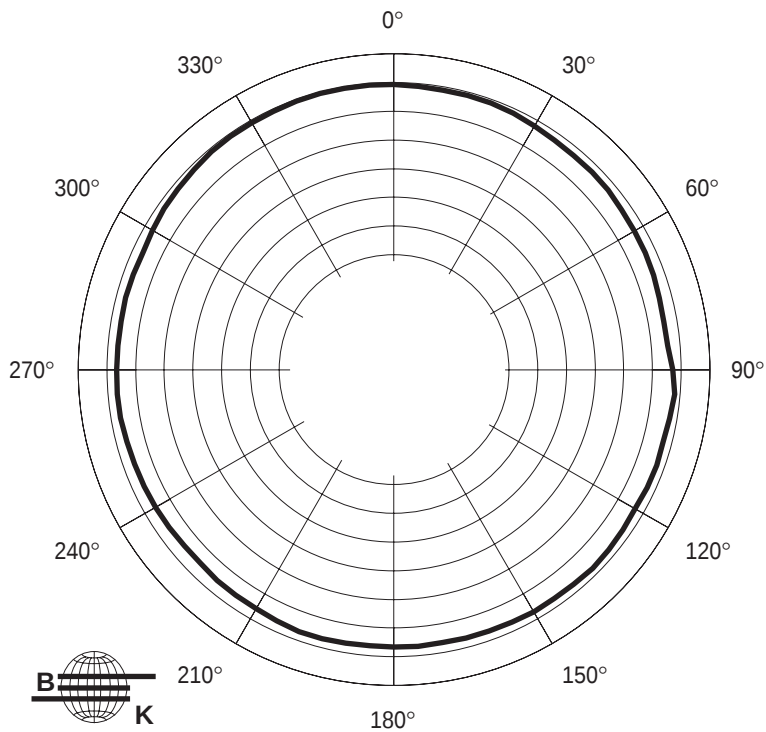


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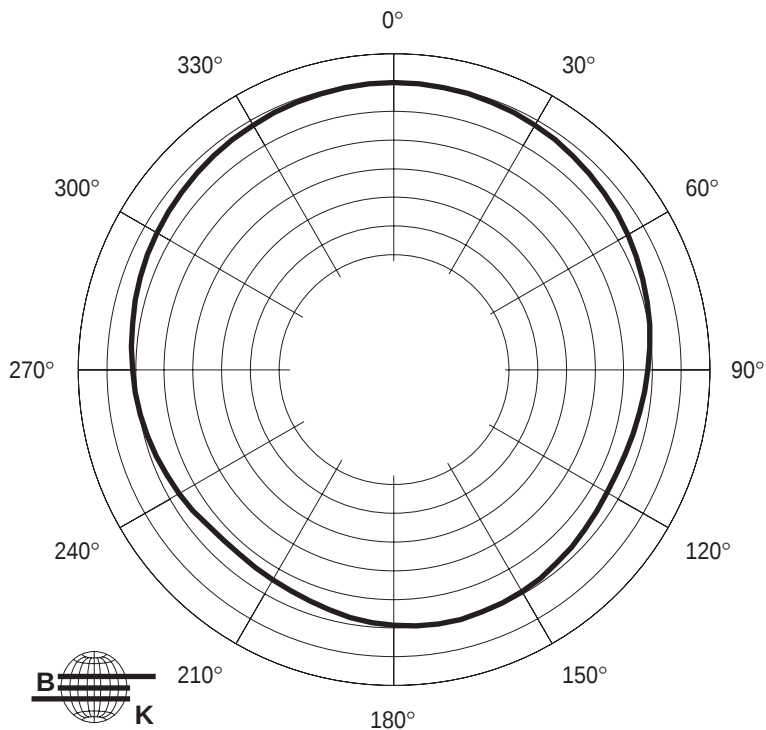


VERTICAL OCTAVE POLAR DATA AS460

AS460 125 Hz Vertical Octave Polar Data



AS460 250 Hz Vertical Octave Polar Data

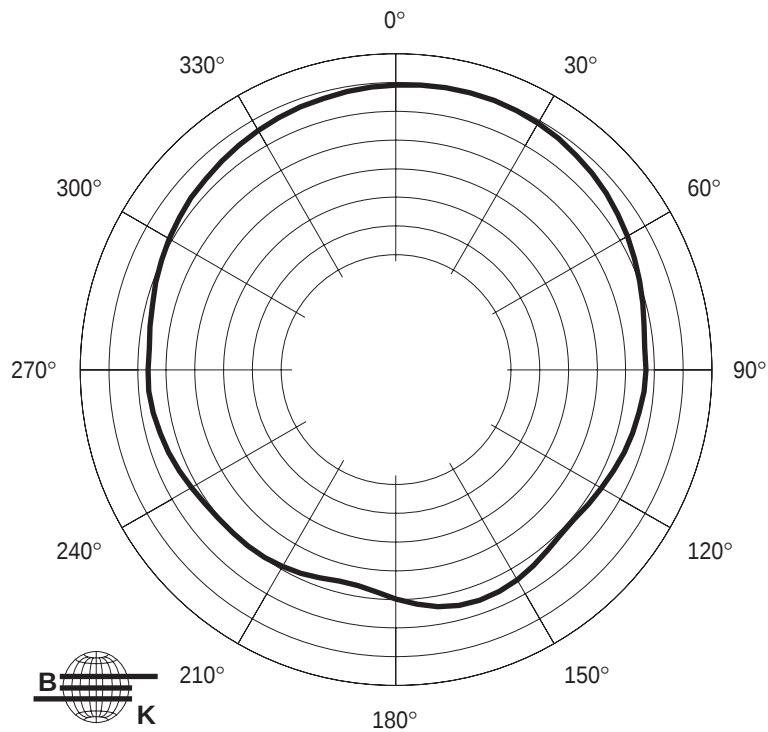


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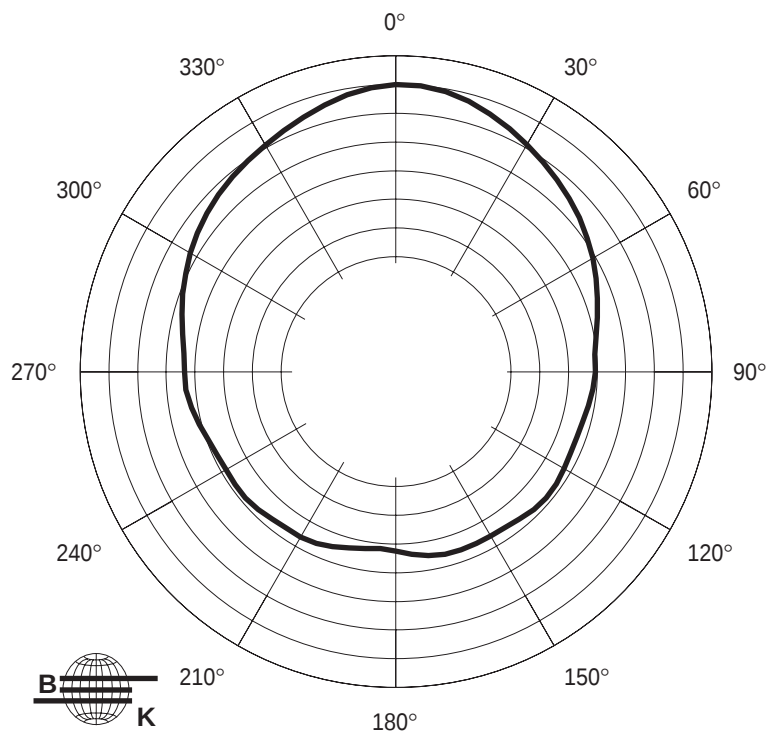


VERTICAL OCTAVE POLAR DATA AS460

AS460 500 Hz Vertical Octave Polar Data



AS460 1000 Hz Vertical Octave Polar Data

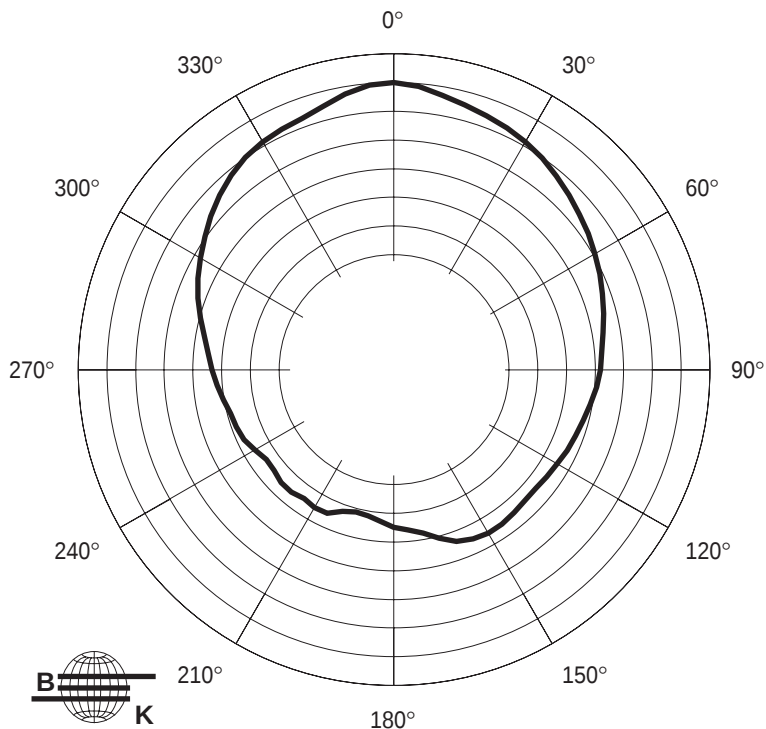


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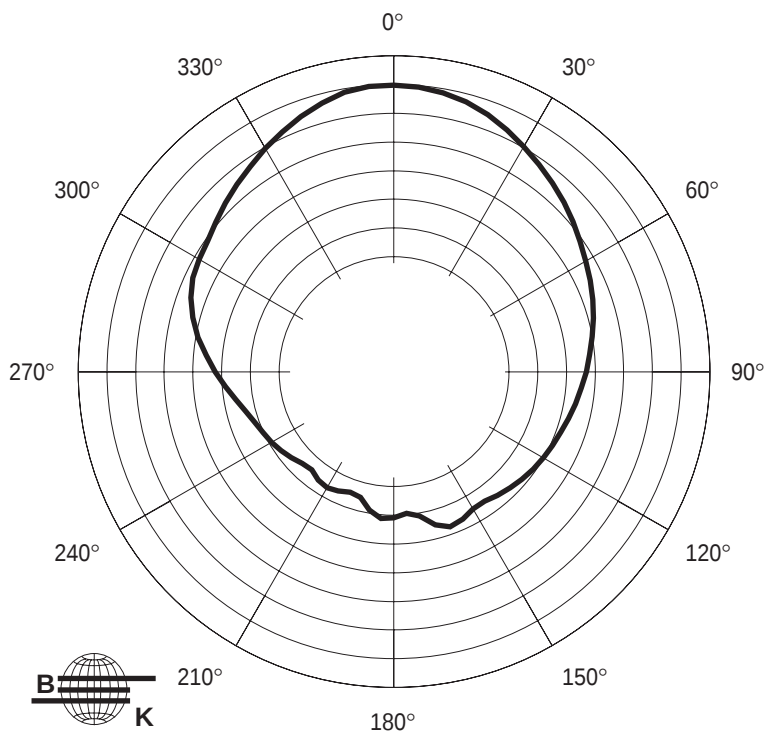


VERTICAL OCTAVE POLAR DATA AS460

AS460 2000 Hz Vertical Octave Polar Data



AS460 4000 Hz Vertical Octave Polar Data

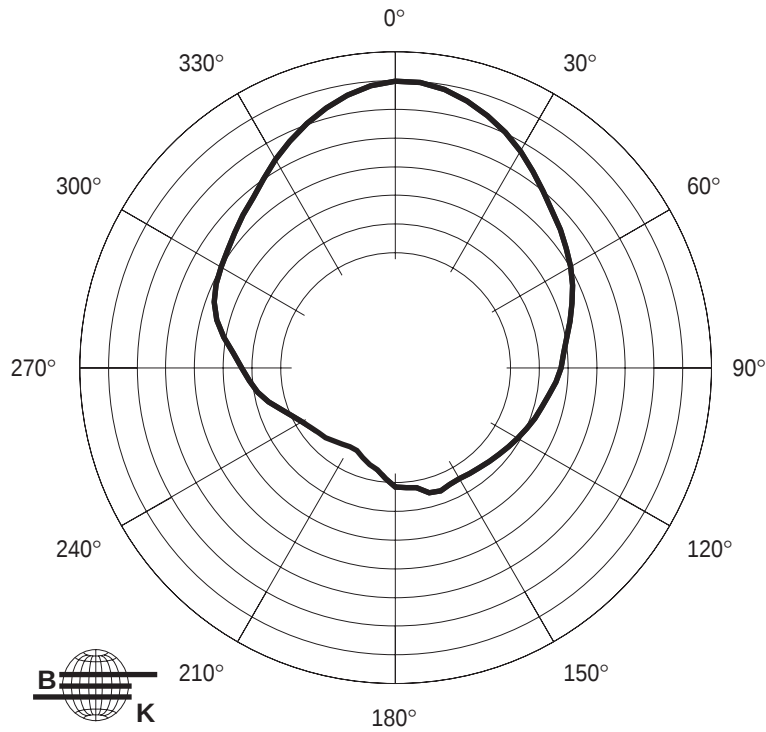


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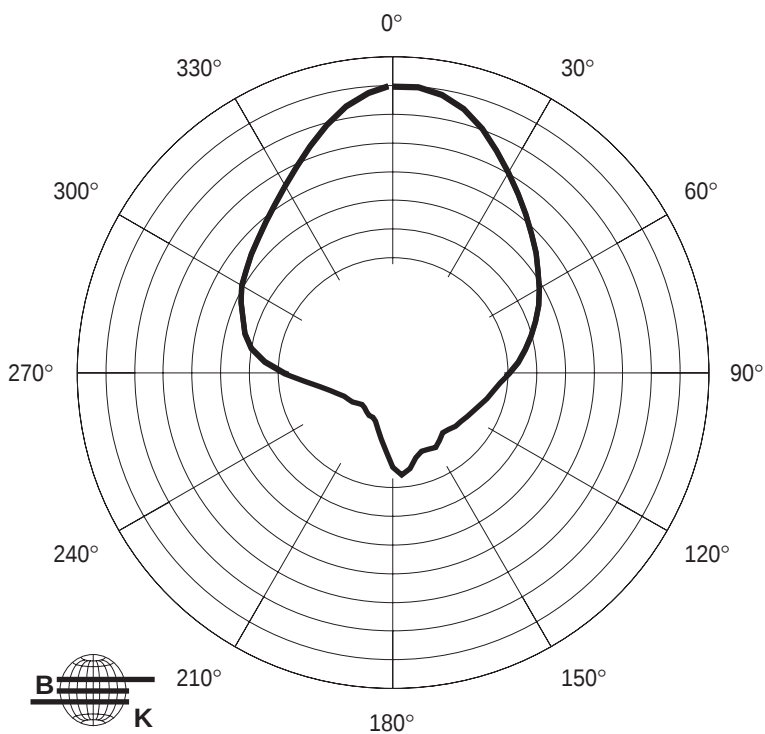


VERTICAL OCTAVE POLAR DATA AS460

AS460 8000 Hz Vertical Octave Polar Data



AS460 16000 Hz Vertical Octave Polar Data



6 db/div.