



TECHNICAL SPECIFICATIONS AS660i

DESCRIPTION

A biamplified 3-way full range system (passive mid/high crossover) in a trapezoidal enclosure. Includes 2x 12-in woofers (separated vertically to create a dipolar array), 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 AS660i is engineered for use in permanent installations. Dipolar array technology provides effective vertical pattern control to 200 Hz while maintaining a 36-in enclosure height. Excellent for use directly above a microphone position. 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	999718
Product Group	I
System Configuration	3-way, Full Range
Powering Configuration(s)	Biamplified (passive MF/HF crossover)
LF Subsystem & Loading	2x 12-in, Vented, Dipolar Array
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)	50 Hz
System Crossover	320 Hz
Cabinet Type (shape)	Trapezoidal
Enclosure Materials	Baltic Birch Plywood
Finish	Black Polyurethane
Connectors	2x 2-Terminal Barrier Strip
Suspension Hardware	(11) 3/8"-16 Threaded Mounting/Suspension Points (3 on Top, 2 each Bottom, Back and Sides)
Grill	Powder Coated Perforated Steel



NOMINAL DATA

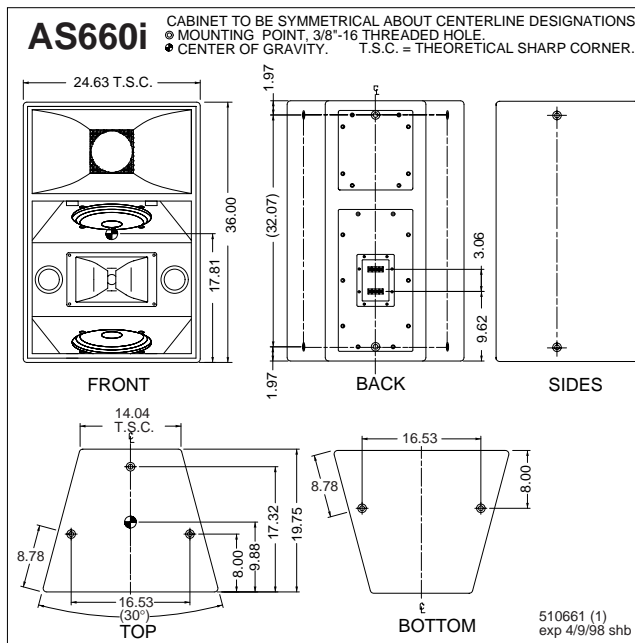
Frequency Response (1 Watt @ 1m)		
±3 dB	70 Hz to 17 kHz	
-10 dB	50 Hz	
Axial Sensitivity (dB SPL, 1 Watt @ 1m)		
Passive MF/HF	105	
LF	100	
Impedance (Ohms)		
Passive MF/HF	8	
LF	4	
Power Handling, AES Standard (Watts)		
Passive MF/HF	360	
LF	800	
Calculated Maximum Output (dB SPL @ 1m)		
Passive MF/HF Peak	136.6	
LF Peak	135.0	
Passive MF/HF Long term	130.6	
LF Long Term	129.0	
Nominal Coverage Angle/-6 dB points (degrees)		
Horizontal	60	
Vertical	45	
Dimensions		
	inches	millimeters
Height	36.00	914
Width (Front)	24.63	626
Width (Rear)	14.01	356
Depth	19.75	502
Trapezoid Angle	15 degrees per side	
Weights		
	pounds	kilograms
Net Weight	149	67.8
Shipping Weight	155	70.5





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DIMENSIONAL DRAWING



Options 104001 3/8"-16 Eyebolt (FC300B)

SERVICE ITEMS

LF: Complete Cone Driver	EAW Part No. 804051
MF: Complete Cone Driver	EAW Part No. 804021
HF: Complete Compression Driver/Tweeter	EAW Part No. 803039
LF: Recone Assembly	EAW Part No. 460048
MF: Recone Assembly	EAW Part No. 460010
HF: Diaphragm Assembly	EAW Part No. 806019
Filter/Crossover Network: Complete Assembly	EAW Part No. 225366

ARCHITECTURAL SPECIFICATIONS

The biamplified 3-way full range loudspeaker systems shall incorporate 2x 12-in LF transducers, a 10-in MF cone and a 1.4-in exit/44mm voice coil HF compression driver.

The LF drivers shall be mounted in slanted baffles and separated to create a dipolar array. 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 between the MF and HF sub-systems.

System frequency response shall vary no more than ± 3 dB from 70 Hz to 17 kHz measured on axis. The mid/high section 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 low frequency section shall produce a Sound Pressure Level (SPL) of 100 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 135.0 dB SPL on axis at 1 meter. The mid/high section shall handle 360 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms. The low frequency section shall handle 800 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 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 2x 2-terminal barrier strips. Eleven (11) 3/8"-16 threaded mounting/suspension points (3 on top, 2 each on bottom, back and sides) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grill.

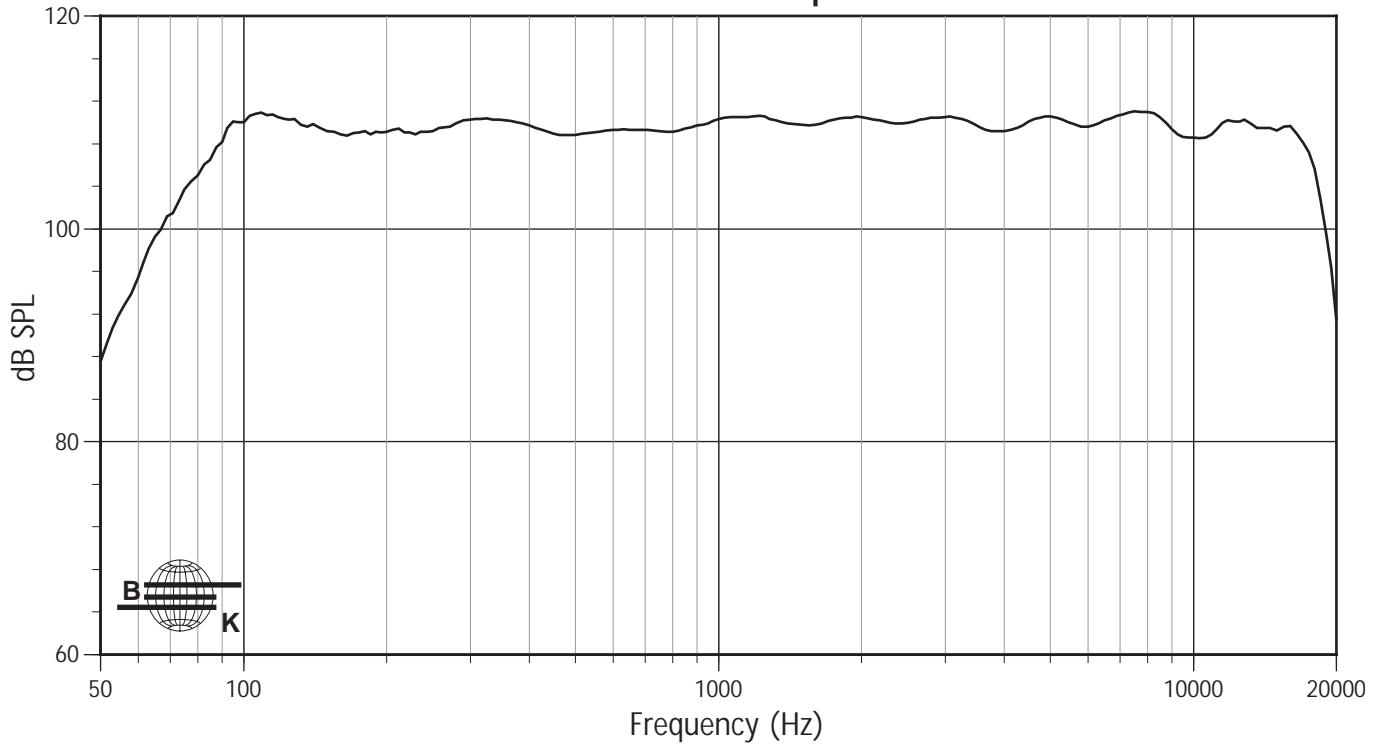
The biamplified 3-way full range loudspeaker shall be the EAW model AS660i.



PERFORMANCE SPECIFICATIONS AS660i

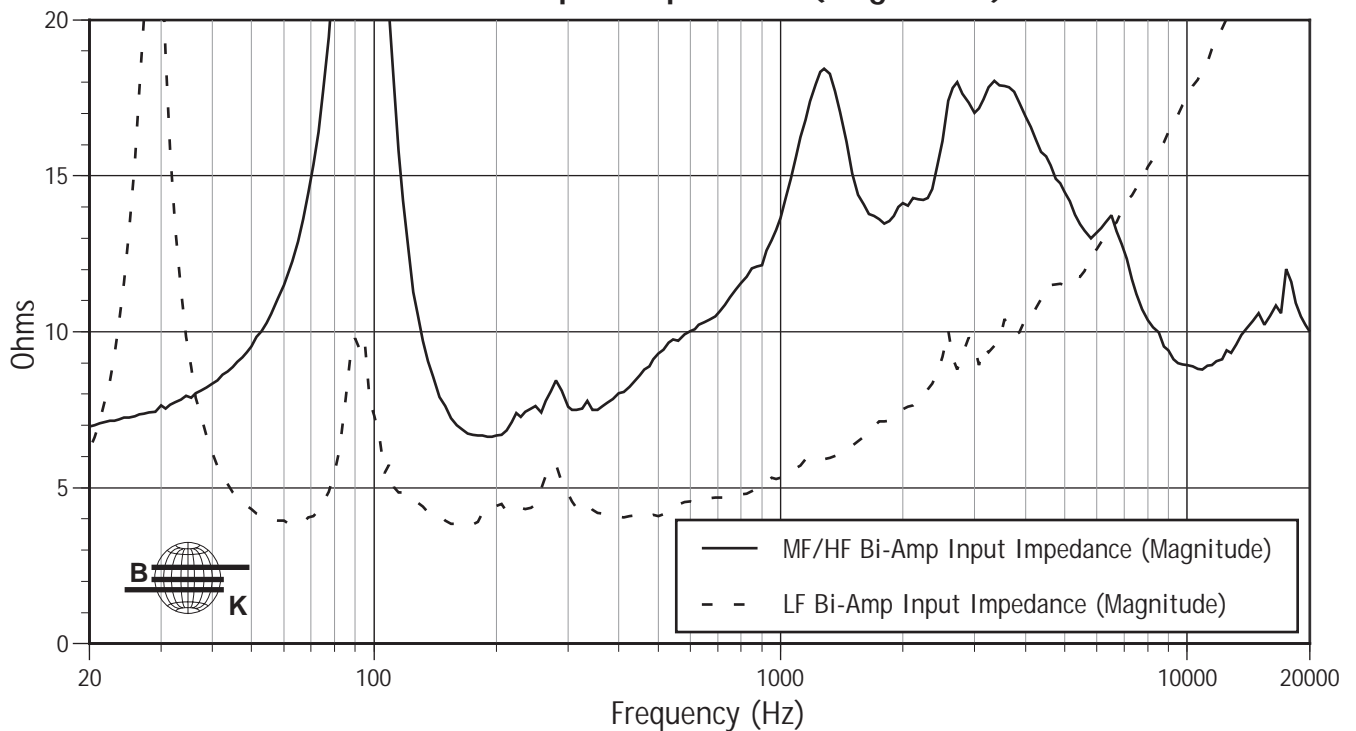
FREQUENCY RESPONSE

AS660i Axial Response



INPUT IMPEDANCE

AS660i Input Impedance (Magnitude)

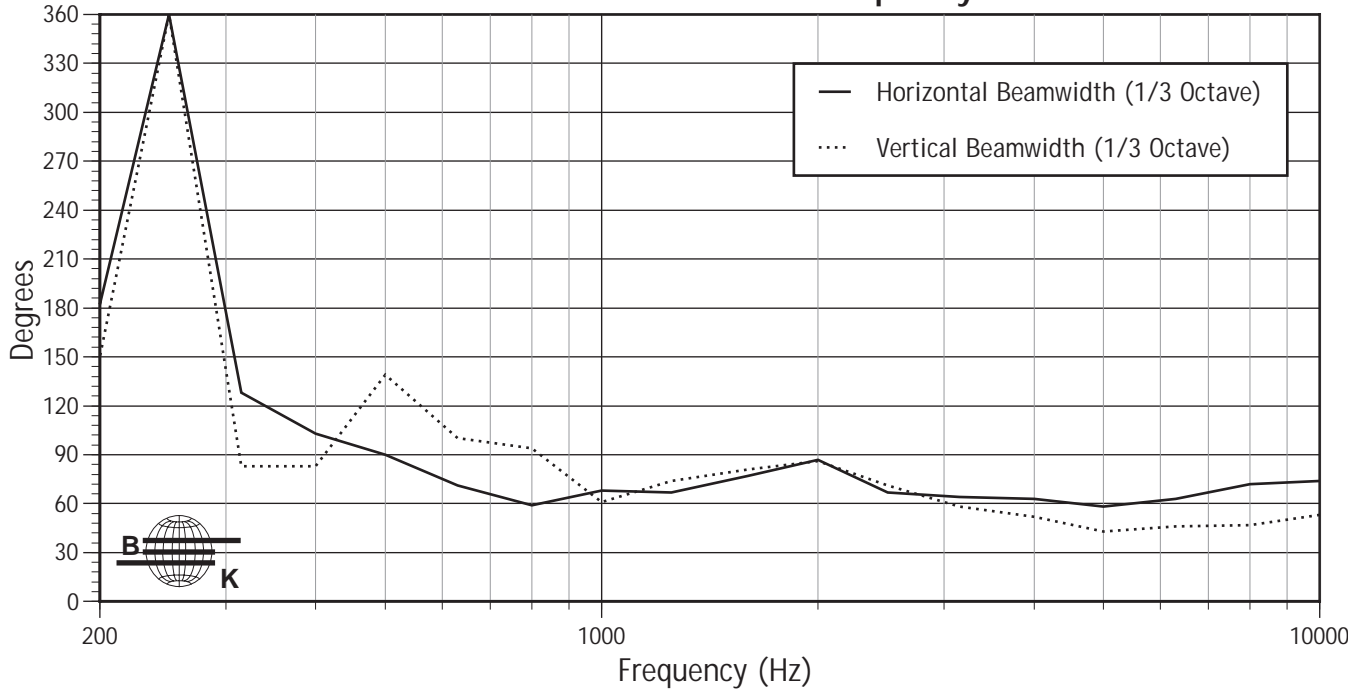




PERFORMANCE SPECIFICATIONS AS660i

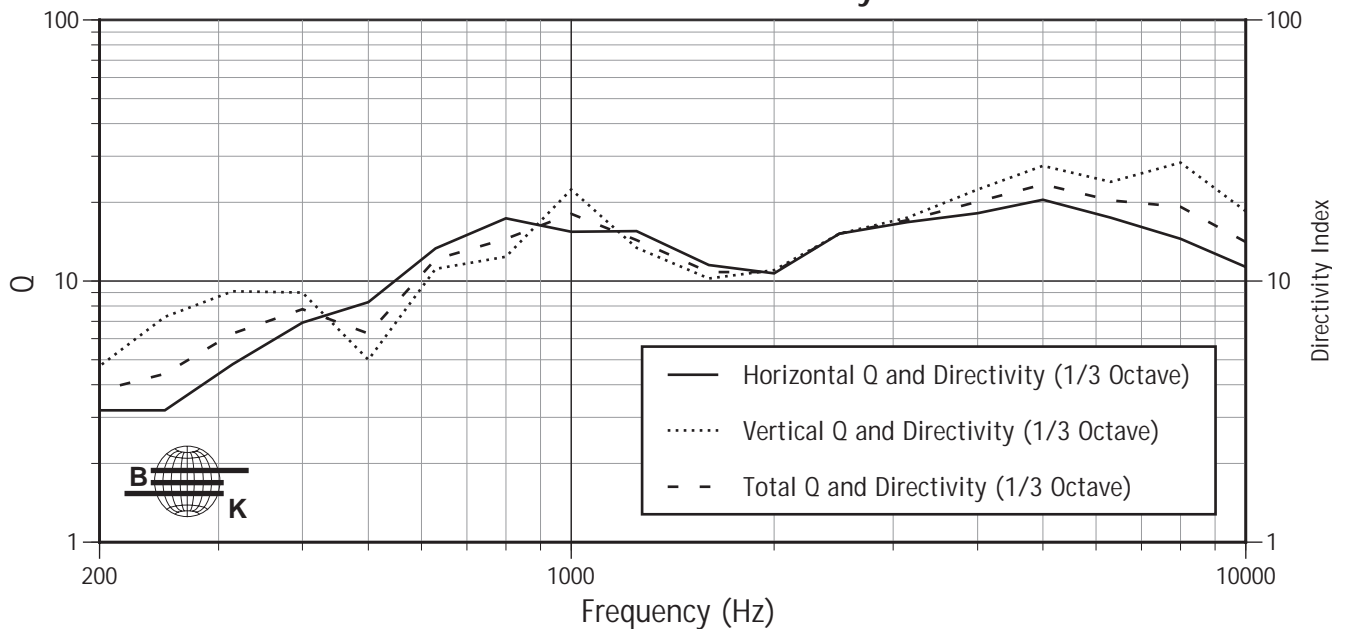
BEAMWIDTH

AS660i Beamwidth vs Frequency



Q & DIRECTIVITY INDEX (DI)

AS660i Q and Directivity





Q & BEAMWIDTH BY FREQUENCY

Frequency	Hor Beamwidth	Ver Beamwidth	Hor Q & Dir	Ver Q & Dir	Tot Q & Dir
125	360	360	1.8	1.9	1.8
160	360	360	2.4	3.4	2.8
200	182	150	3.2	4.7	3.8
250	360	360	3.2	7.3	4.4
315	128	83	4.8	9.1	6.3
400	103	83	6.9	9	7.8
500	90	139	8.3	5	6.3
630	71	100	13.3	11.1	12.1
800	59	94	17.4	12.4	14.5
1000	68	61	15.4	22.4	18.1
1250	67	74	15.5	13.4	14.3
1600	77	81	11.5	10.2	10.8
2000	87	86	10.7	11	10.8
2500	67	71	15.2	15.2	15.2
3150	64	58	16.8	17.5	17.1
4000	63	52	18.2	22.4	20.1
5000	58	43	20.4	27.6	23.4
6300	63	46	17.5	24	20.3
8000	72	47	14.5	28.3	19.2
10000	74	53	11.3	18.5	14.1
12500	69	27	14.4	67.1	24.1
16000	54	36	23.1	47.8	31.1
20000	51	41	26.1	46.2	33.4

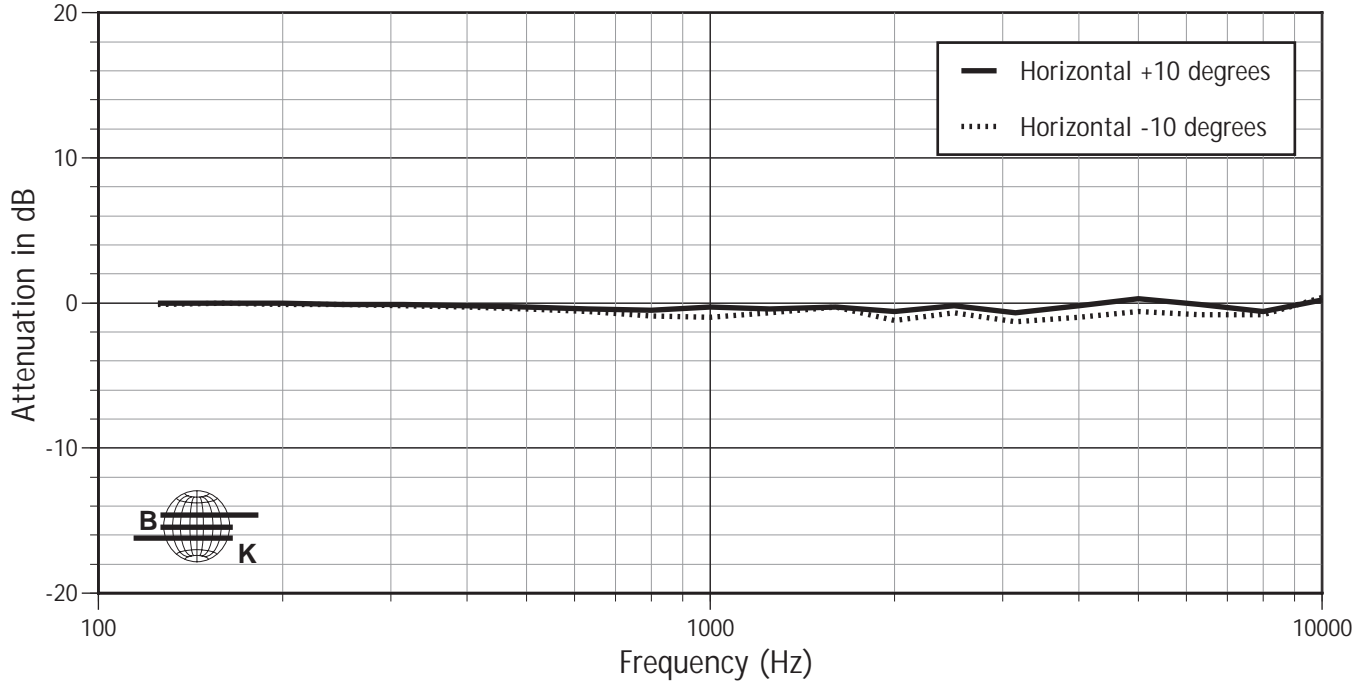


PERFORMANCE SPECIFICATIONS AS660i

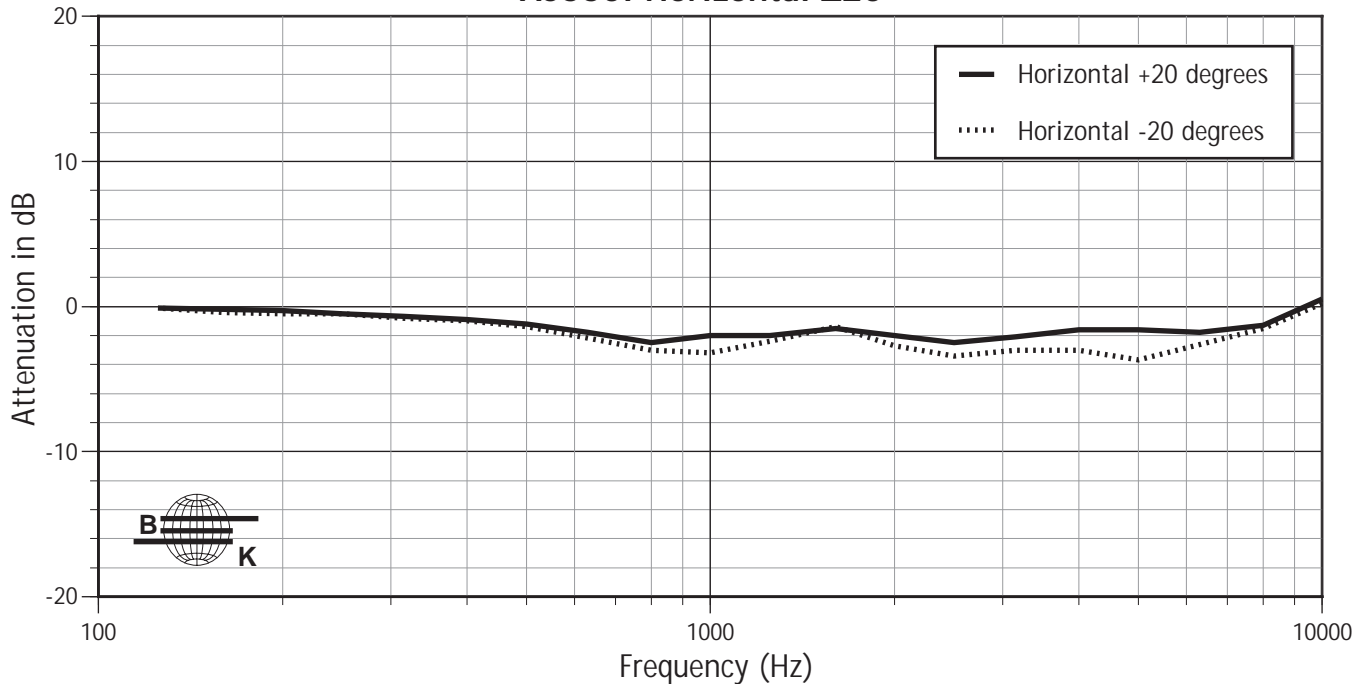
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS660i Horizontal $\pm 10^\circ$



AS660i Horizontal $\pm 20^\circ$



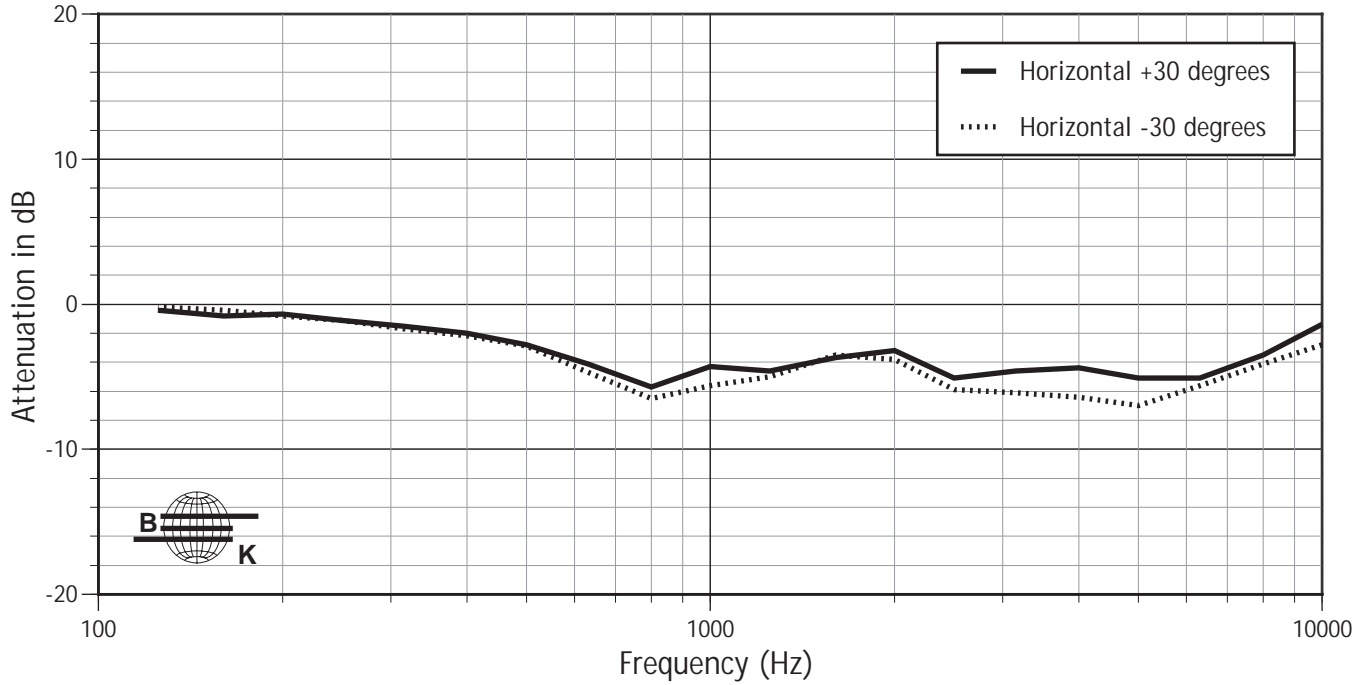


PERFORMANCE SPECIFICATIONS AS660i

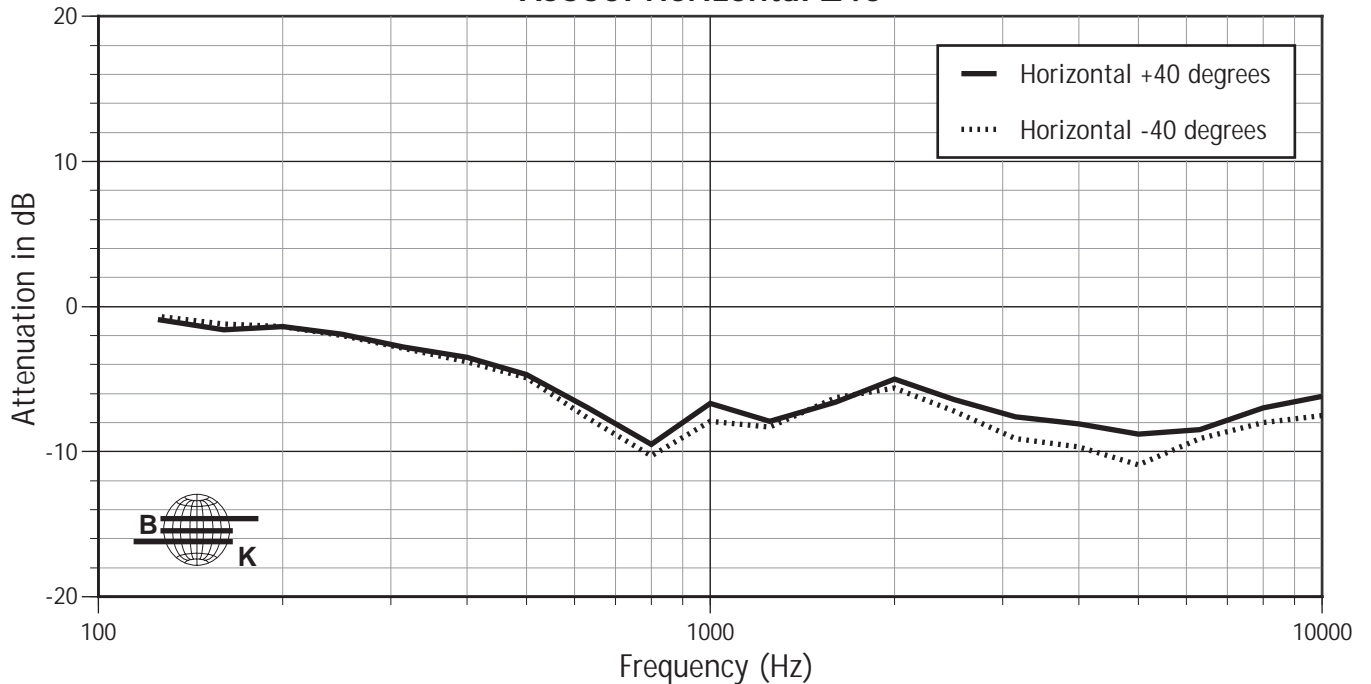
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS660i Horizontal $\pm 30^\circ$



AS660i Horizontal $\pm 40^\circ$



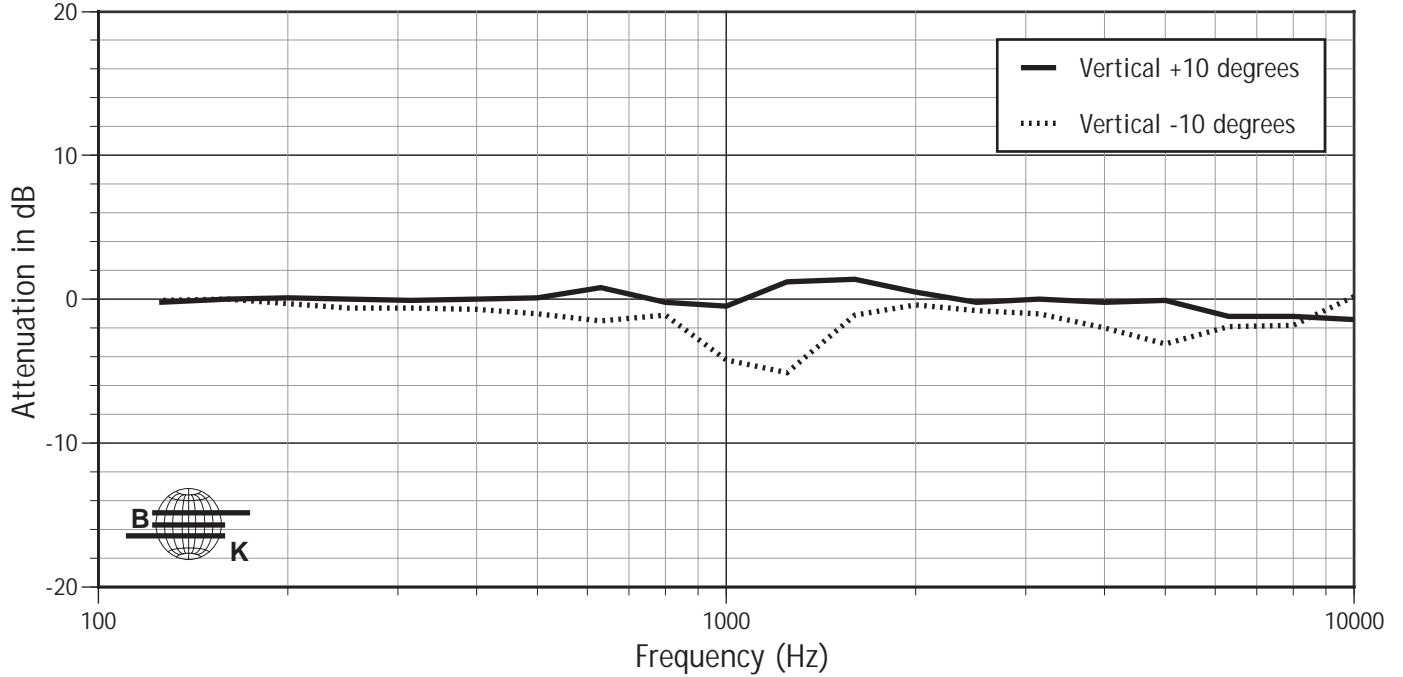


PERFORMANCE SPECIFICATIONS AS660i

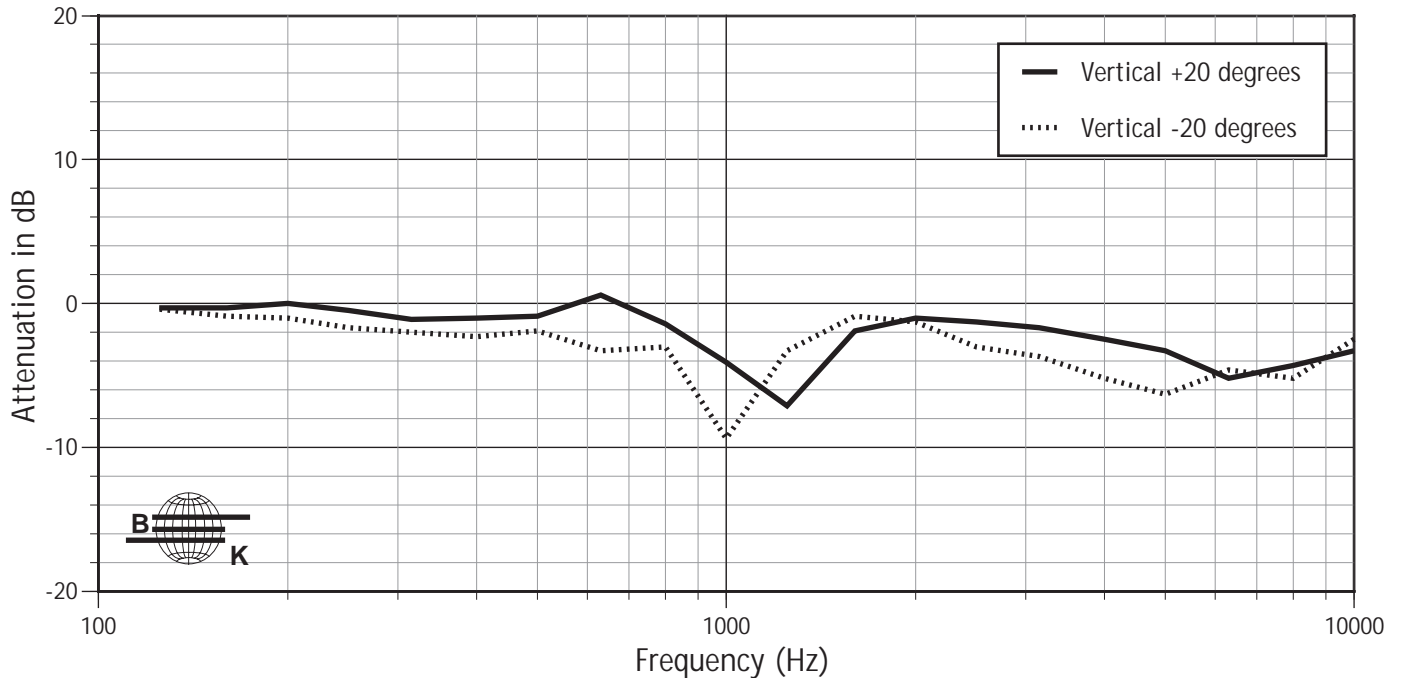
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS660i Vertical $\pm 10^\circ$



AS660i Vertical $\pm 20^\circ$



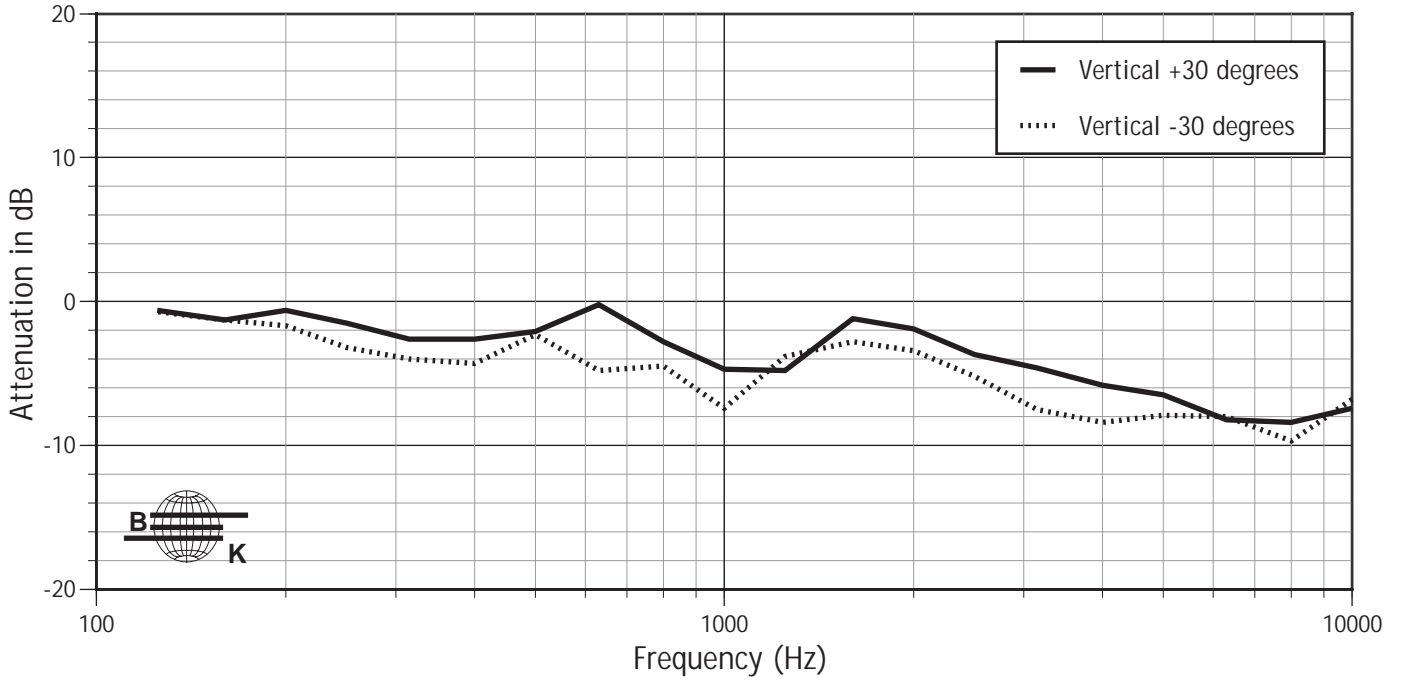


PERFORMANCE SPECIFICATIONS AS660i

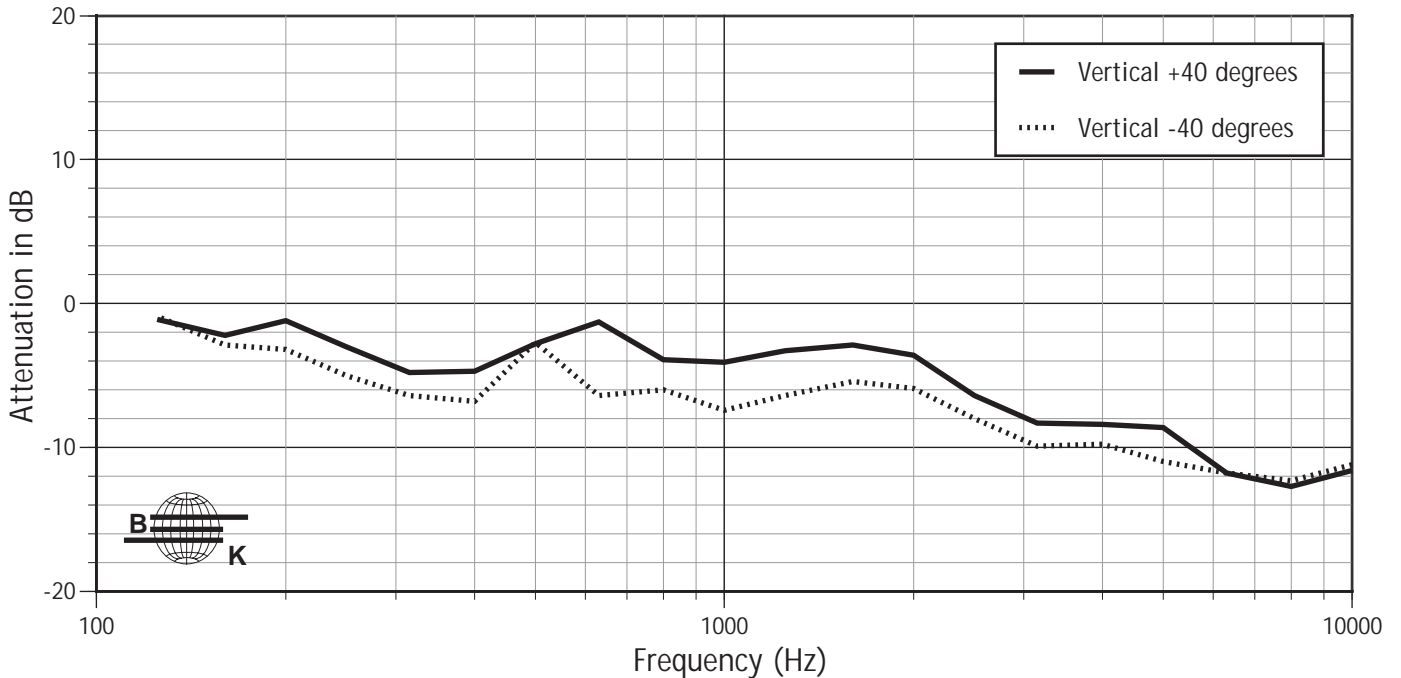
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

AS660i Vertical $\pm 30^\circ$

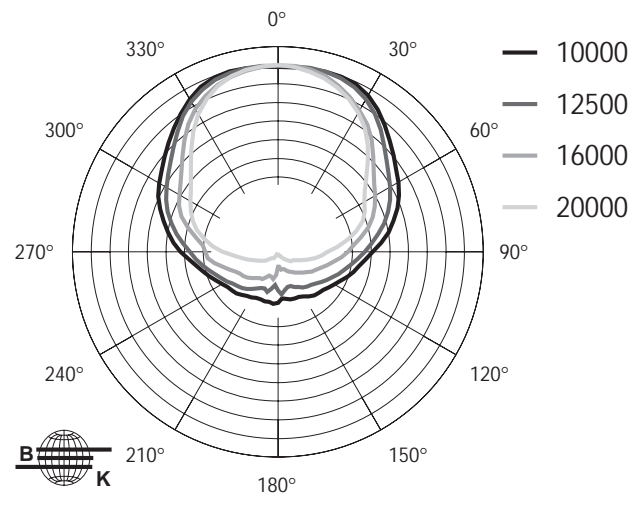
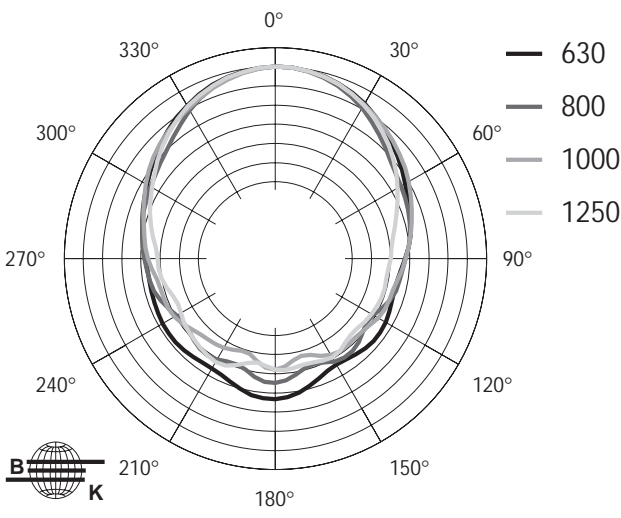
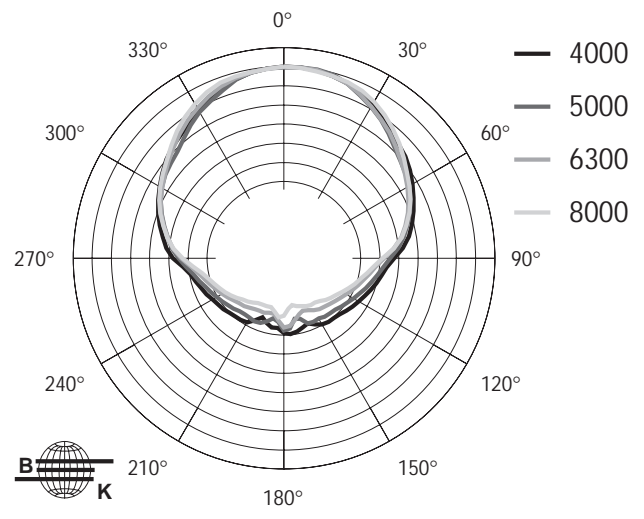
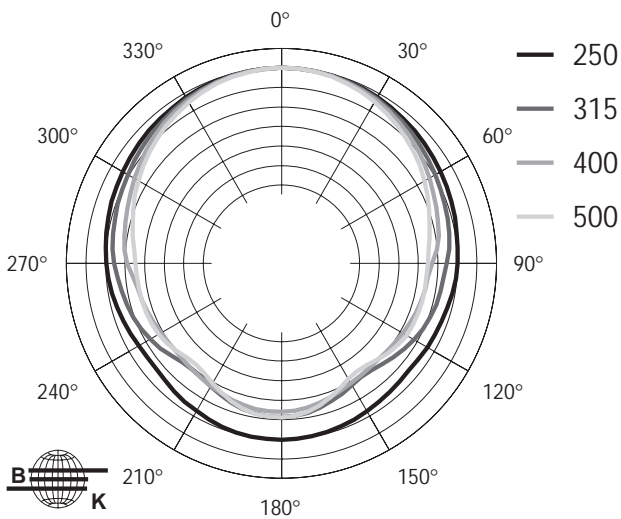
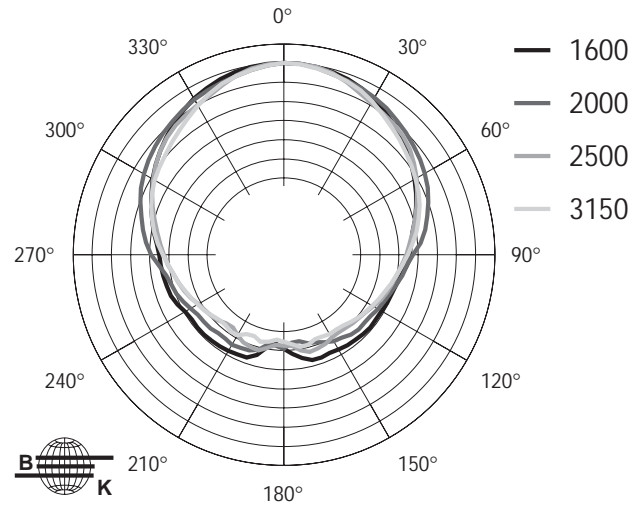
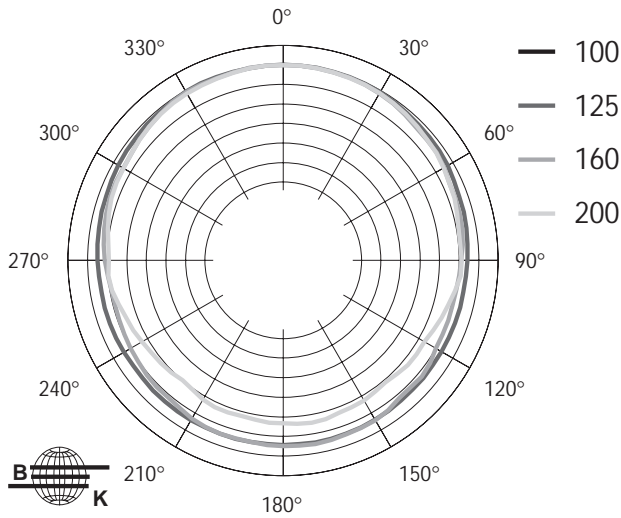


AS660i Vertical $\pm 40^\circ$





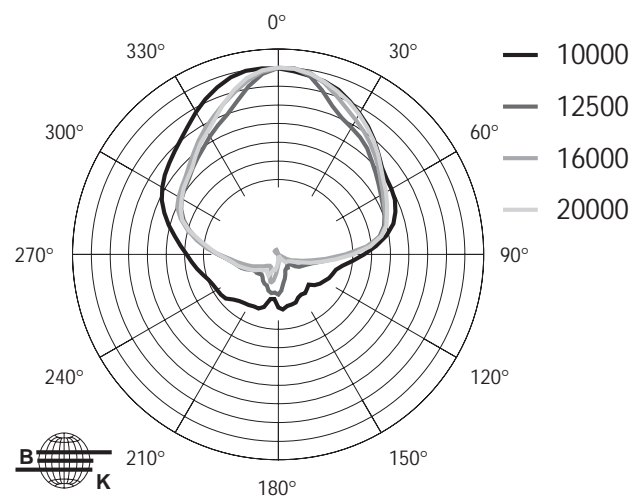
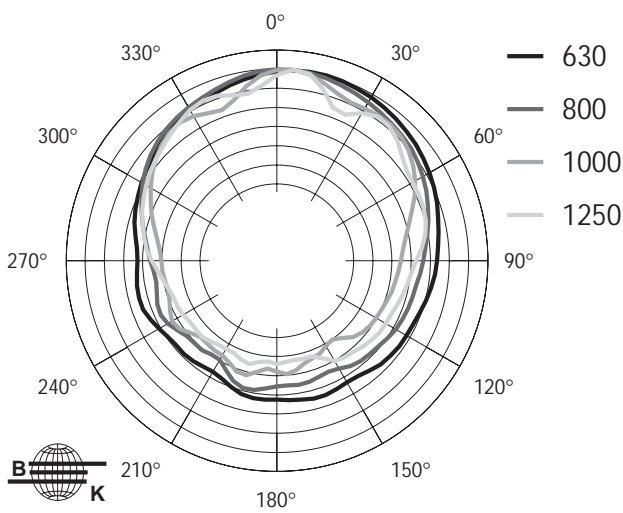
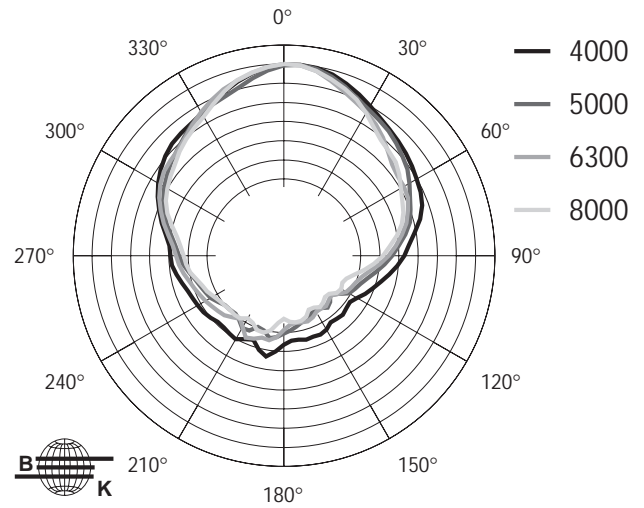
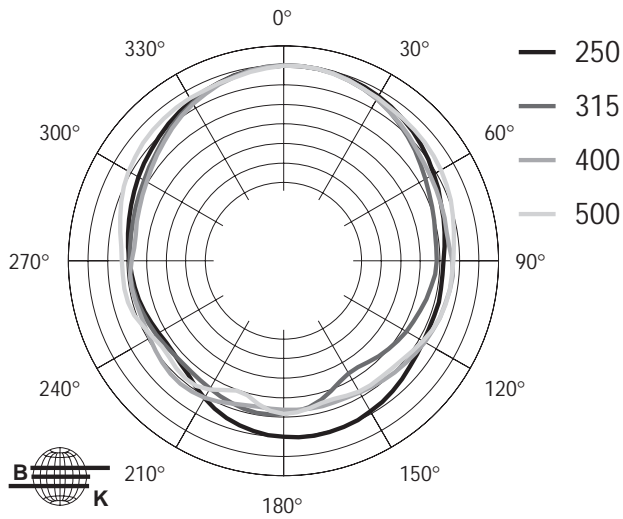
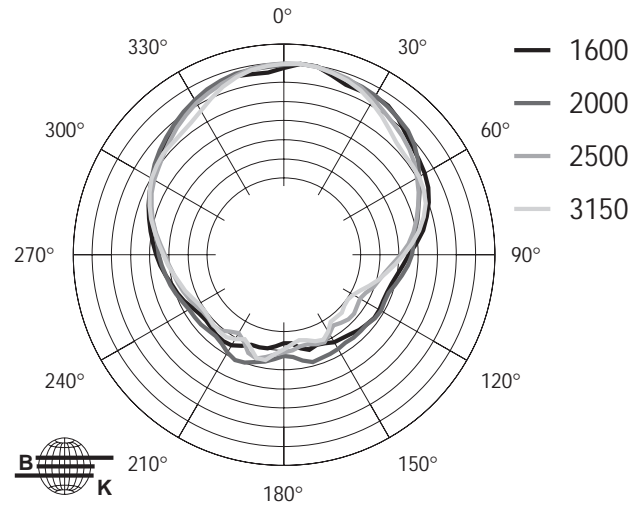
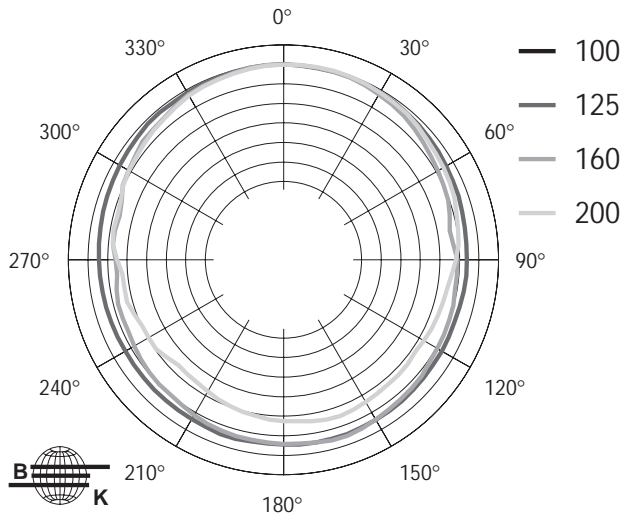
HORIZONTAL 1/3 OCTAVE POLAR DATA AS660i



6 db/div.



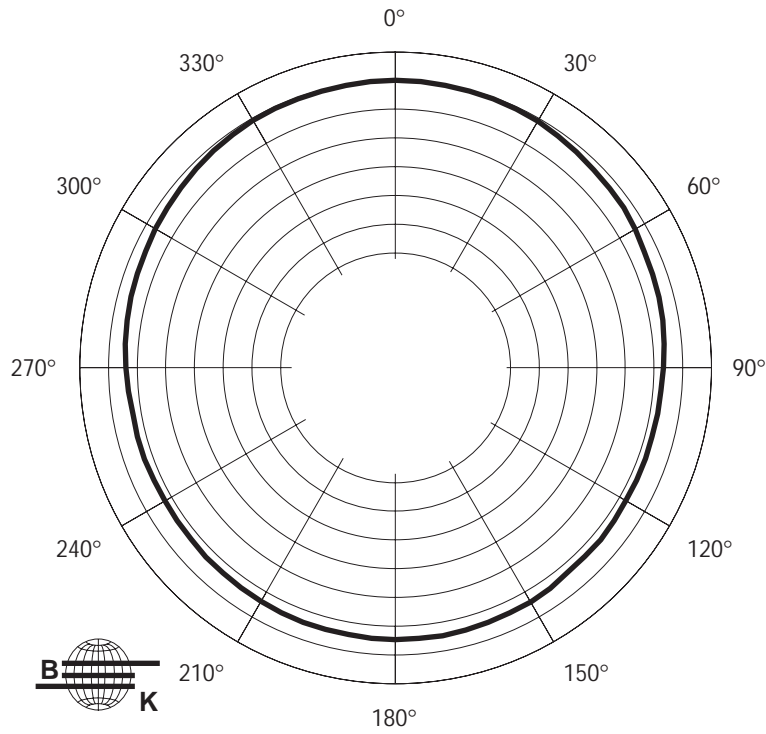
VERTICAL 1/3 OCTAVE POLAR DATA AS660i



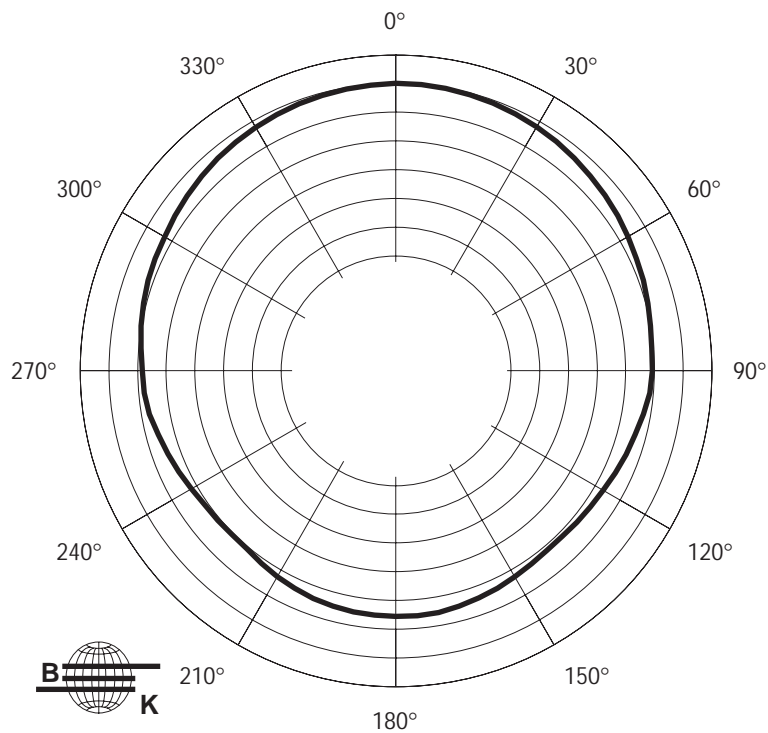


HORIZONTAL OCTAVE POLAR DATA AS660i

AS660i 125 Hz Horizontal Octave Polar Data



AS660i 250 Hz Horizontal Octave Polar Data

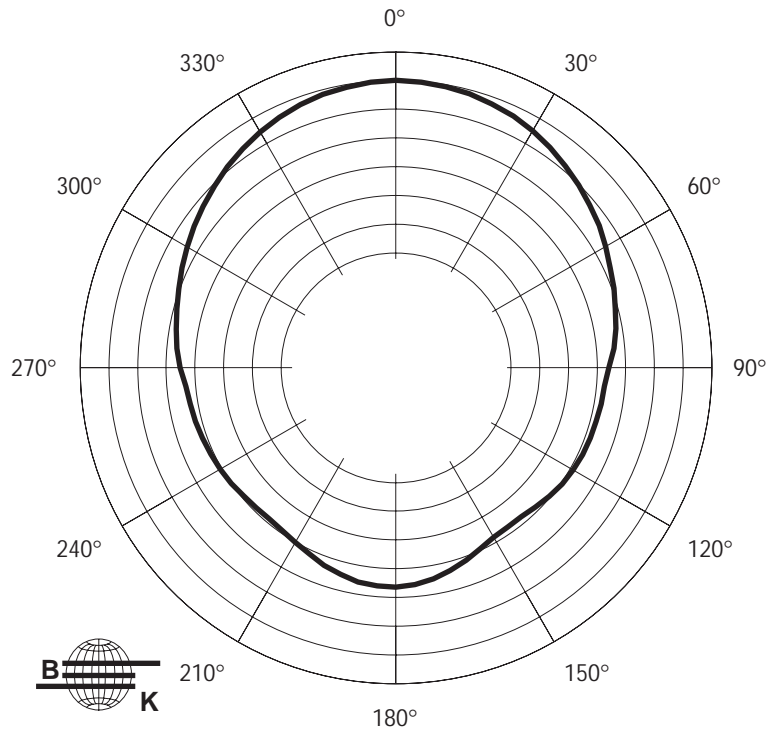


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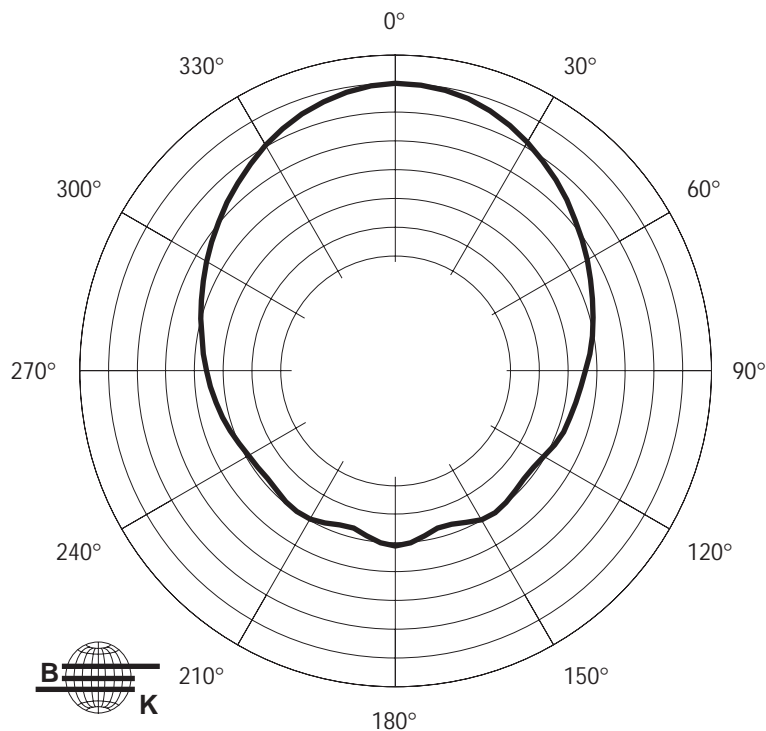


HORIZONTAL OCTAVE POLAR DATA AS660i

AS660i 500 Hz Horizontal Octave Polar Data



AS660i 1000 Hz Horizontal Octave Polar Data

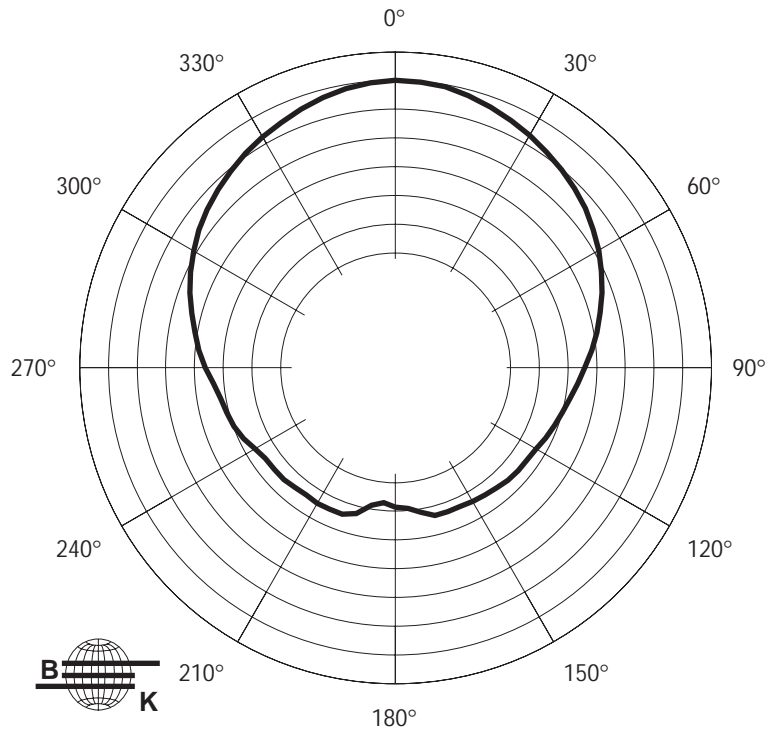


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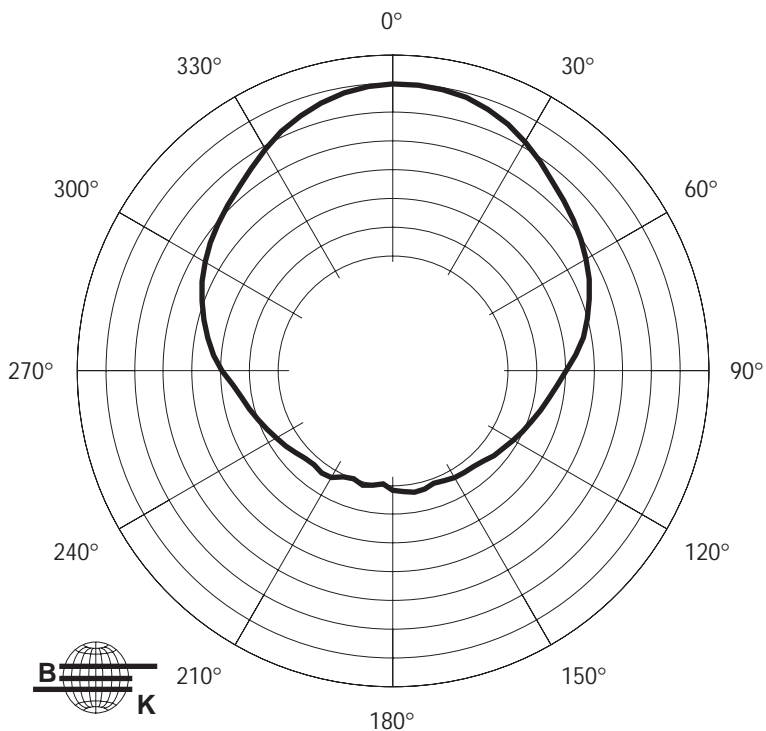


HORIZONTAL OCTAVE POLAR DATA AS660i

AS660i 2000 Hz Horizontal Octave Polar Data



AS660i 4000 Hz Horizontal Octave Polar Data

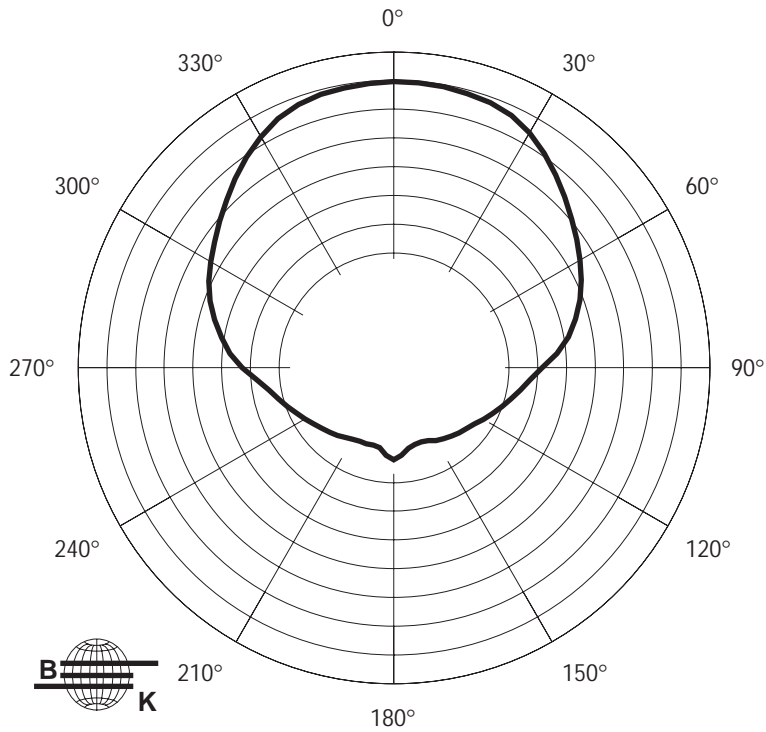


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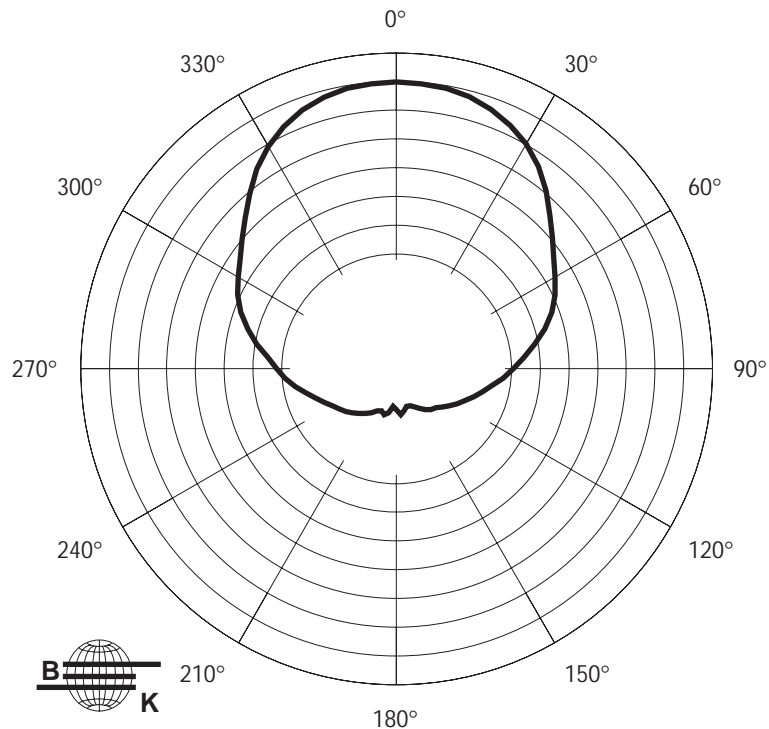


HORIZONTAL OCTAVE POLAR DATA AS660i

AS660i 8000 Hz Horizontal Octave Polar Data



AS660i 16000 Hz Horizontal Octave Polar Data

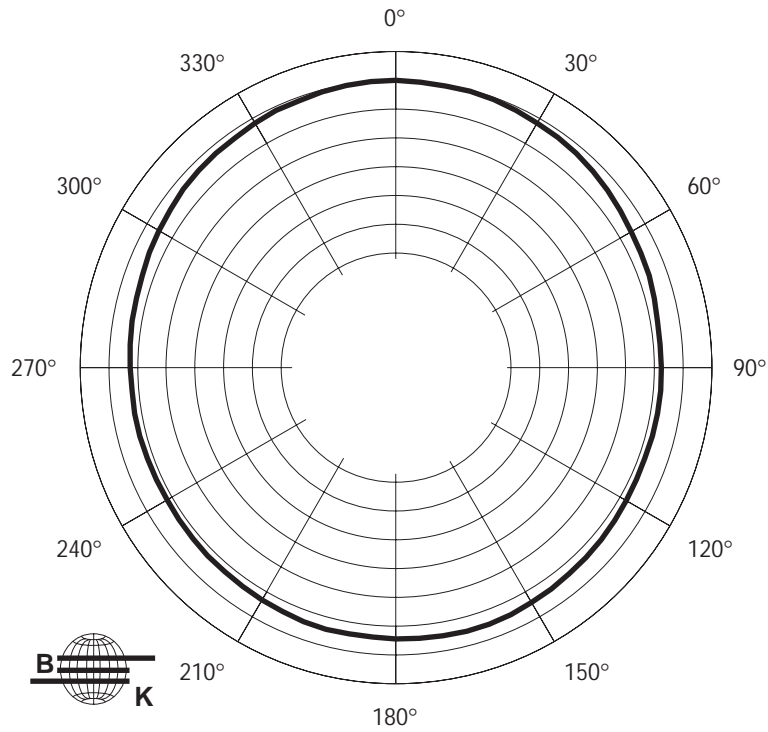


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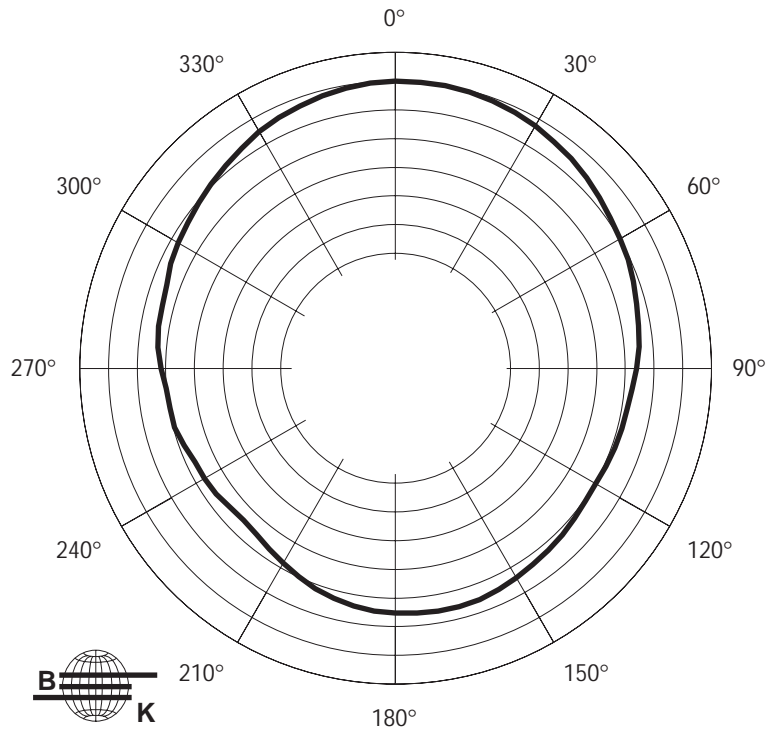


VERTICAL OCTAVE POLAR DATA AS660i

AS660i 125 Hz Vertical Octave Polar Data



AS660i 250 Hz Vertical Octave Polar Data

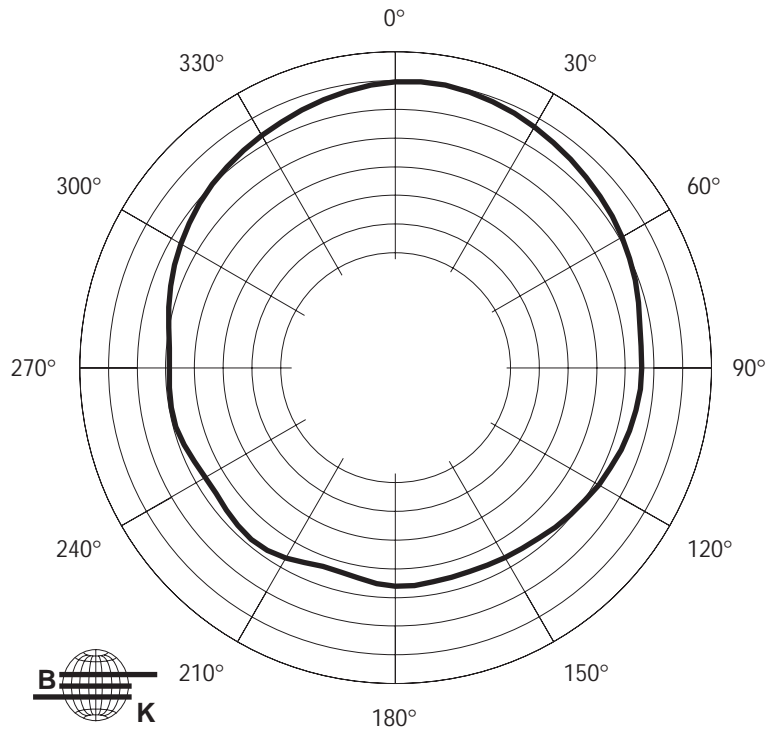


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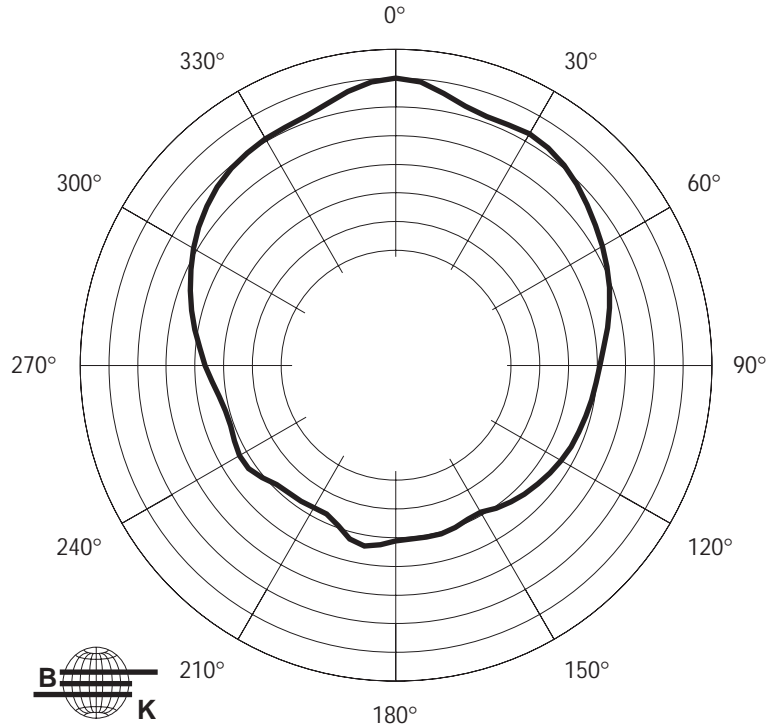


VERTICAL OCTAVE POLAR DATA AS660i

AS660i 500 Hz Vertical Octave Polar Data



AS660i 1000 Hz Vertical Octave Polar Data

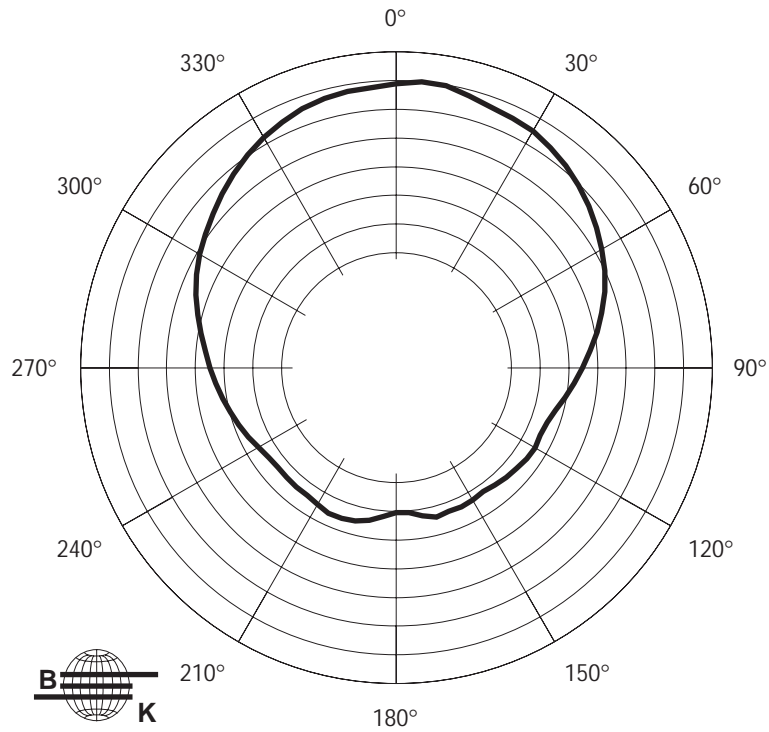


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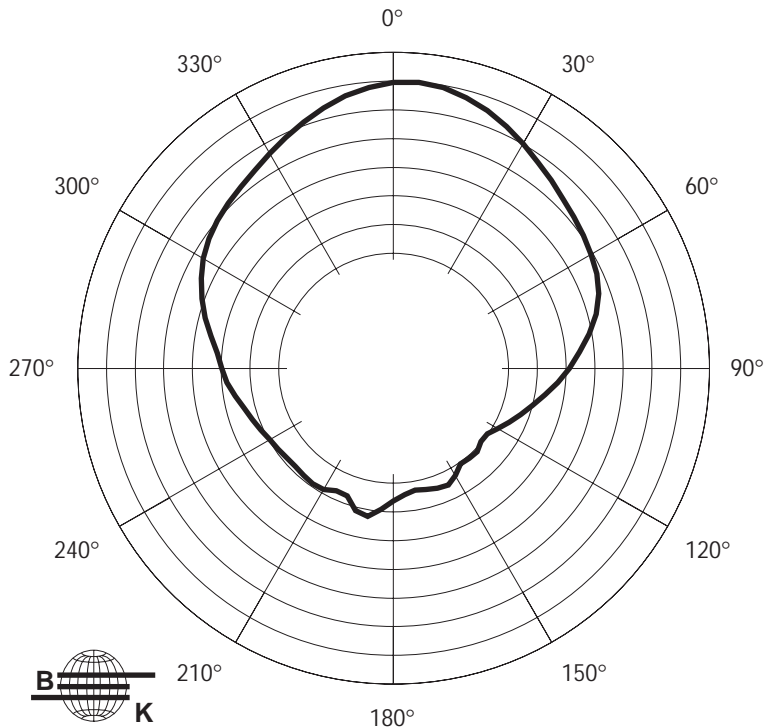


VERTICAL OCTAVE POLAR DATA AS660i

AS660i 2000 Hz Vertical Octave Polar Data



AS660i 4000 Hz Vertical Octave Polar Data

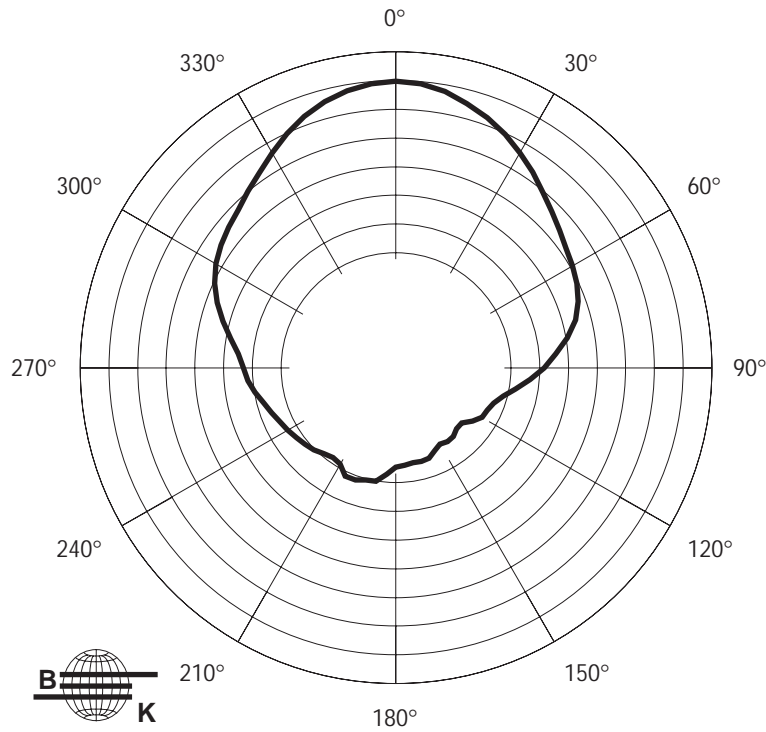


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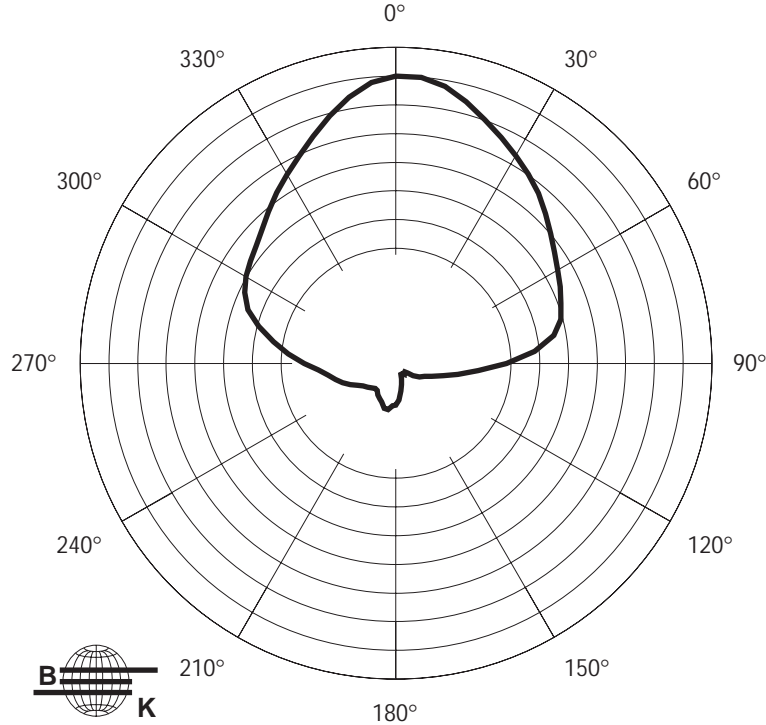


VERTICAL OCTAVE POLAR DATA AS660i

AS660 8000 Hz Vertical Octave Polar Data



AS660i 16000 Hz Vertical Octave Polar Data



6 db/div.