



TECHNICAL SPECIFICATIONS ASR665

DESCRIPTION

A biamplified 3-way full range system (passive mid/high crossover) in a rectangular enclosure. Includes a 15-in woofer (vented), 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 ASR665 is engineered for use in permanent installations. The low profile 22.5-in enclosure height lets it be used in applications where loudspeaker mounting space is limited. 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	999675
Product Group	I
System Configuration	3-way, Full Range
Powering Configuration(s)	Biamplified (passive MF/HF crossover)
LF Subsystem & Loading	1x 15-in, Vented
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)	40 Hz
System Crossover	320 Hz
Cabinet Type (shape)	Rectangular
Enclosure Materials	Baltic Birch Plywood
Finish	Black Polyurethane
Connectors	2 x 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

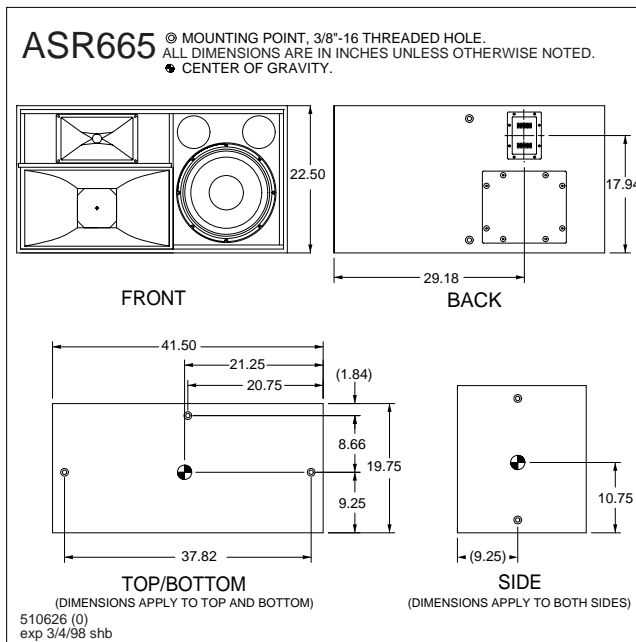
Frequency Response (1 Watt @ 1m)		
±3 dB	47 Hz to 17 kHz	
-10 dB	40 Hz	
Axial Sensitivity (dB SPL, 1 Watt @ 1m)		
Passive MF/HF	105	
LF	97	
Impedance (Ohms)		
Passive MF/HF	8	
LF	8	
Power Handling, AES Standard (Watts)		
Passive MF/HF	360	
LF	600	
Calculated Maximum Output (dB SPL @ 1m)		
Passive MF/HF Peak	136.6	
LF Peak	130.8	
Passive MF/HF Long term	130.6	
LF Long Term	124.8	
Nominal Coverage Angle/-6 dB points (degrees)		
Horizontal	60	
Vertical	45	
Dimensions		
	inches	millimeters
Height	22.50	572
Width	41.50	1054
Depth	19.75	502
Weights		
	pounds	kilograms
Net Weight	152	69.2
Shipping Weight	170	77.4





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DIMENSIONAL DRAWING



ARCHITECTURAL SPECIFICATIONS

The biamplified 3-way full range loudspeaker systems shall incorporate a 15-in LF transducer, a 10-in MF cone and a 1.4-in exit/44mm voice coil HF compression driver.

The LF driver shall be mounted in a vented enclosure tuned for optimum low frequency response. 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 subsystems.

System frequency response shall vary no more than ± 3 dB from 47 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 97 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 130.8 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 600 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be rectangular 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 4-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 biamplified 3-way full range loudspeaker shall be the EAW model ASR665.

SERVICE ITEMS

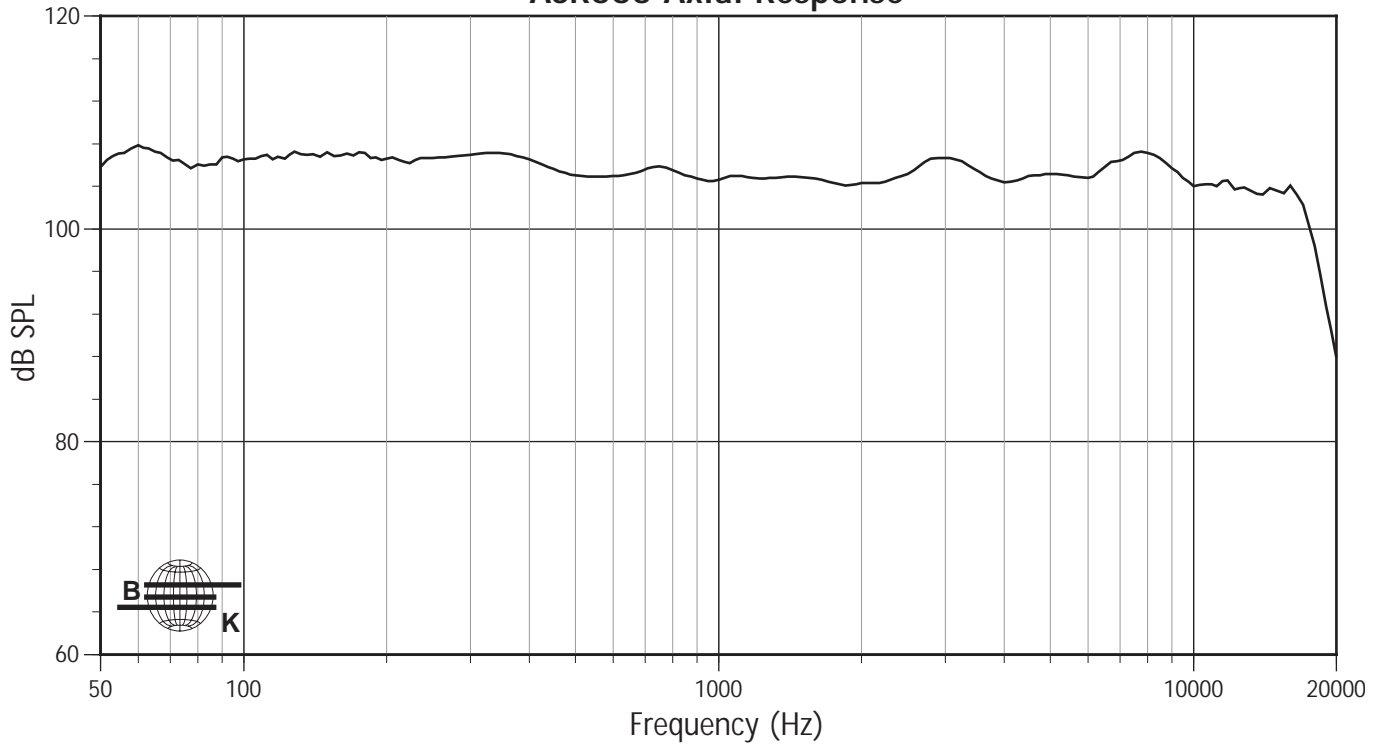
LF: Complete Cone Driver	EAW Part No. 804081
MF: Complete Cone Driver	EAW Part No. 804021
HF: Complete Compression Driver/Tweeter	EAW Part No. 803039
LF: Recone Assembly	EAW Part No. 46059
MF: Recone Assembly	EAW Part No. 460010
HF: Diaphragm Assembly	EAW Part No. 806019
Filter/Crossover Network: Complete Assemble	EAW Part No. 255341



PERFORMANCE SPECIFICATIONS ASR665

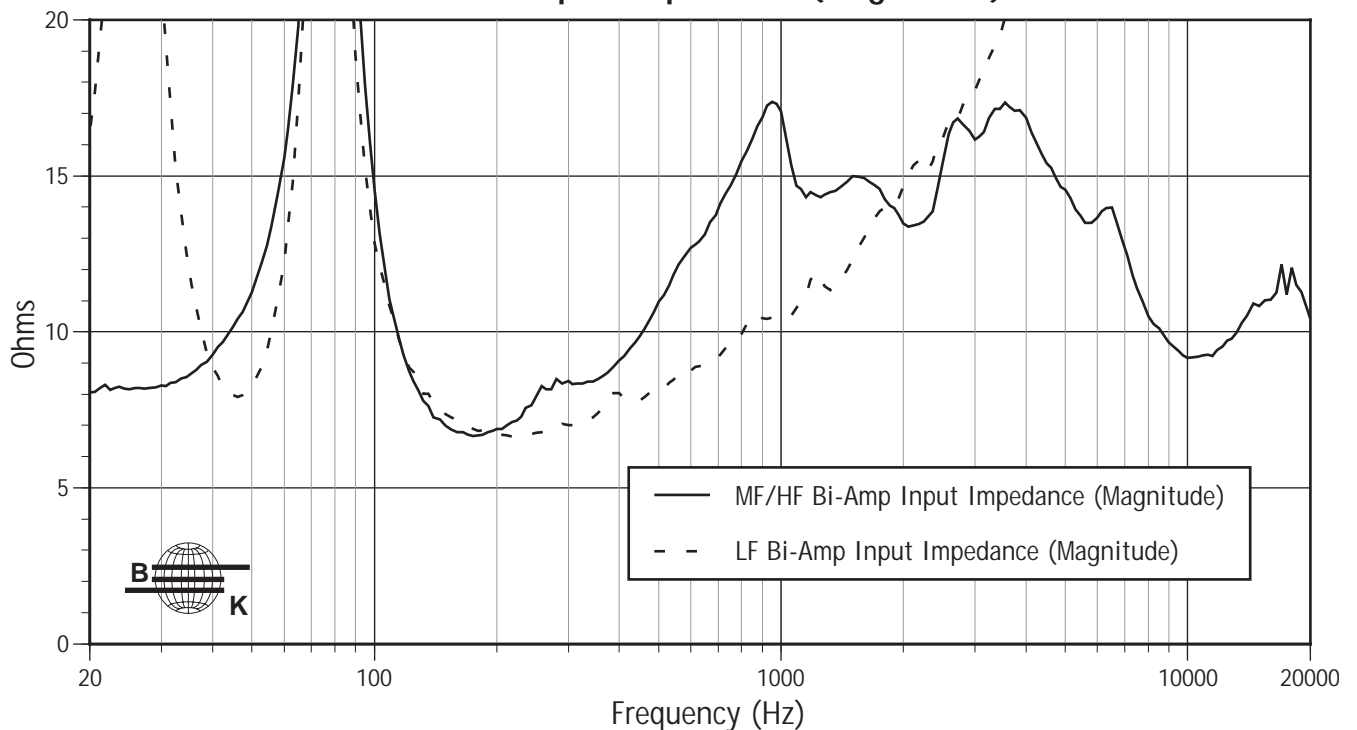
FREQUENCY RESPONSE

ASR665 Axial Response



INPUT IMPEDANCE

ASR665 Input Impedance (Magnitude)

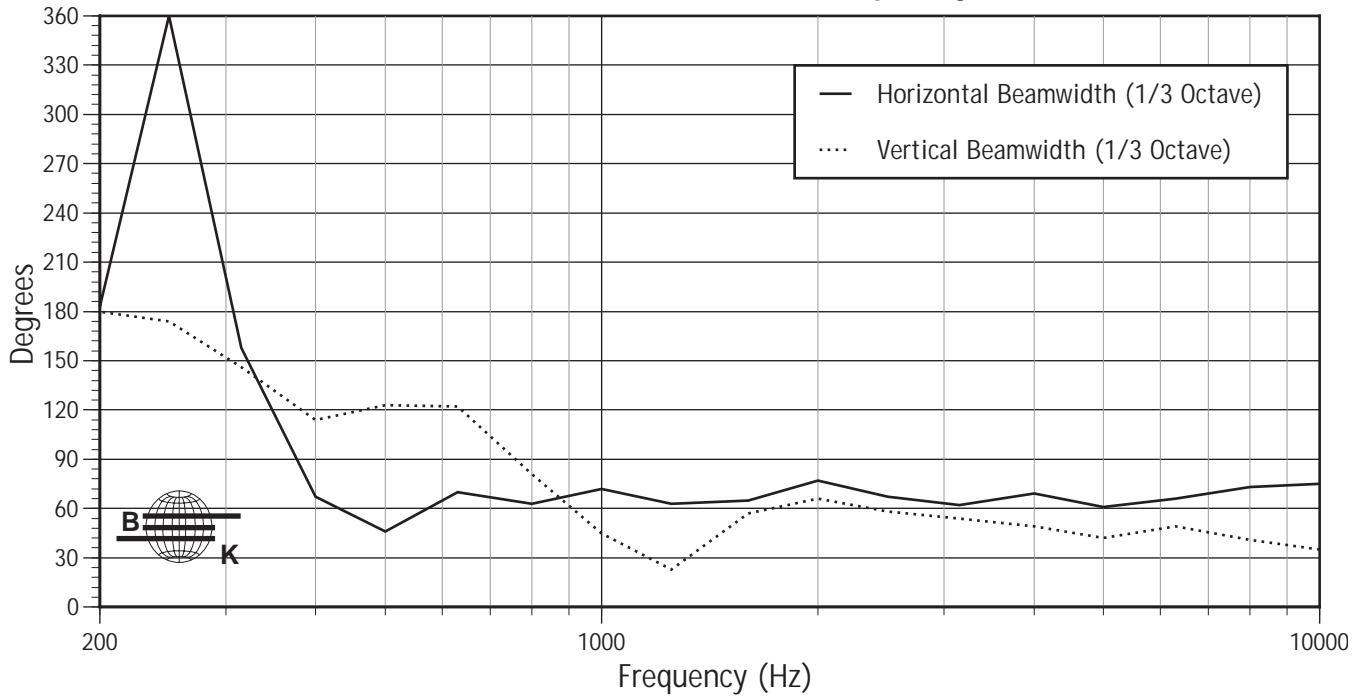




PERFORMANCE SPECIFICATIONS ASR665

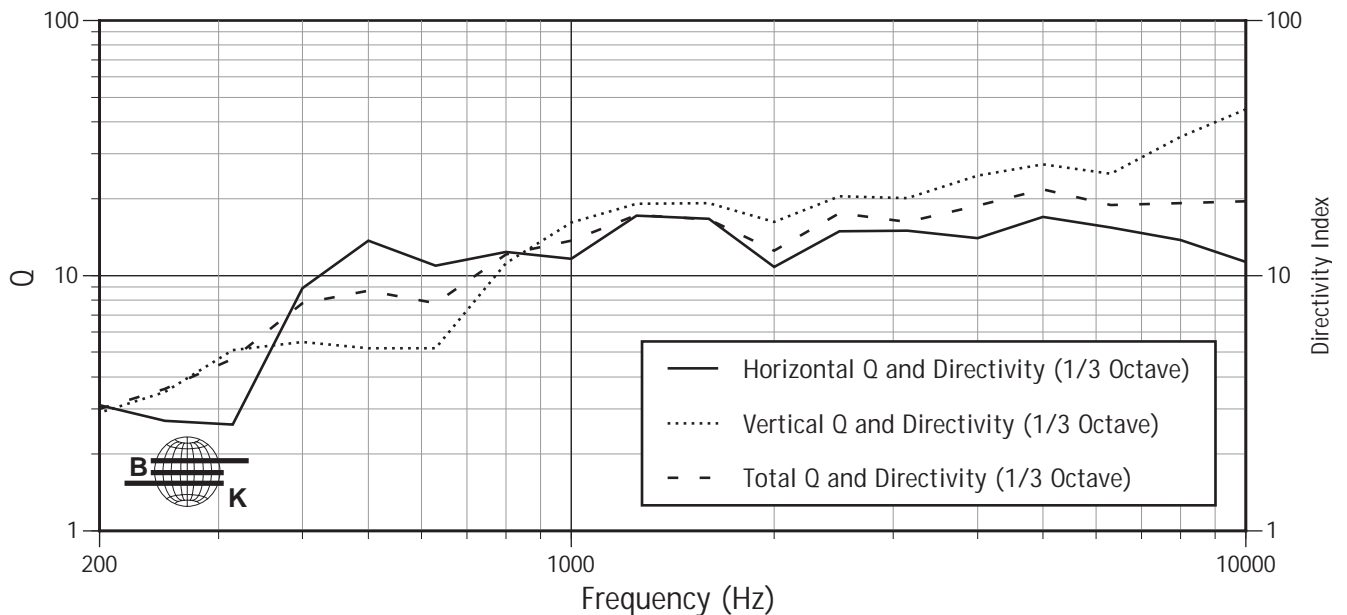
BEAMWIDTH

ASR665 Beamwidth vs Frequency



Q & DIRECTIVITY INDEX (DI)

ASR665 Q and Directivity





PERFORMANCE SPECIFICATIONS ASR665

Q & DIRECTIVITY & BEAMWIDTH BY FREQUENCY

Frequency	Hor Beamwidth	Ver Beamwidth	Hor Q & Dir	Ver Q & Dir	Tot Q & Dir
100	360	360	1.6	1.9	1.7
125	360	360	1.7	1.7	1.6
160	360	181	2.3	3.4	3.2
200	183	180	3.1	2.9	3
250	360	174	2.7	3.5	3.6
315	158	146	2.6	5.1	4.7
400	67	114	8.9	5.5	7.8
500	46	123	13.7	5.2	8.7
630	70	122	10.9	5.2	7.8
800	63	81	12.4	11.2	12.1
1000	72	45	11.6	16.1	13.7
1250	63	23	17.2	19.1	17.3
1600	65	57	16.7	19.2	16.6
2000	77	66	10.8	16.2	12.5
2500	67	58	14.9	20.5	17.6
3150	62	54	15	20.1	16.2
4000	69	49	14	24.7	18.8
5000	61	42	17	27.2	21.8
6300	66	49	15.4	25.1	18.9
8000	73	41	13.8	35	19.2
10000	75	35	11.3	44.9	19.5
12500	62	18	16.4	79.1	21.5
16000	54	23	21.3	52.3	27.3
20000	51	31	22.5	49.2	31.7

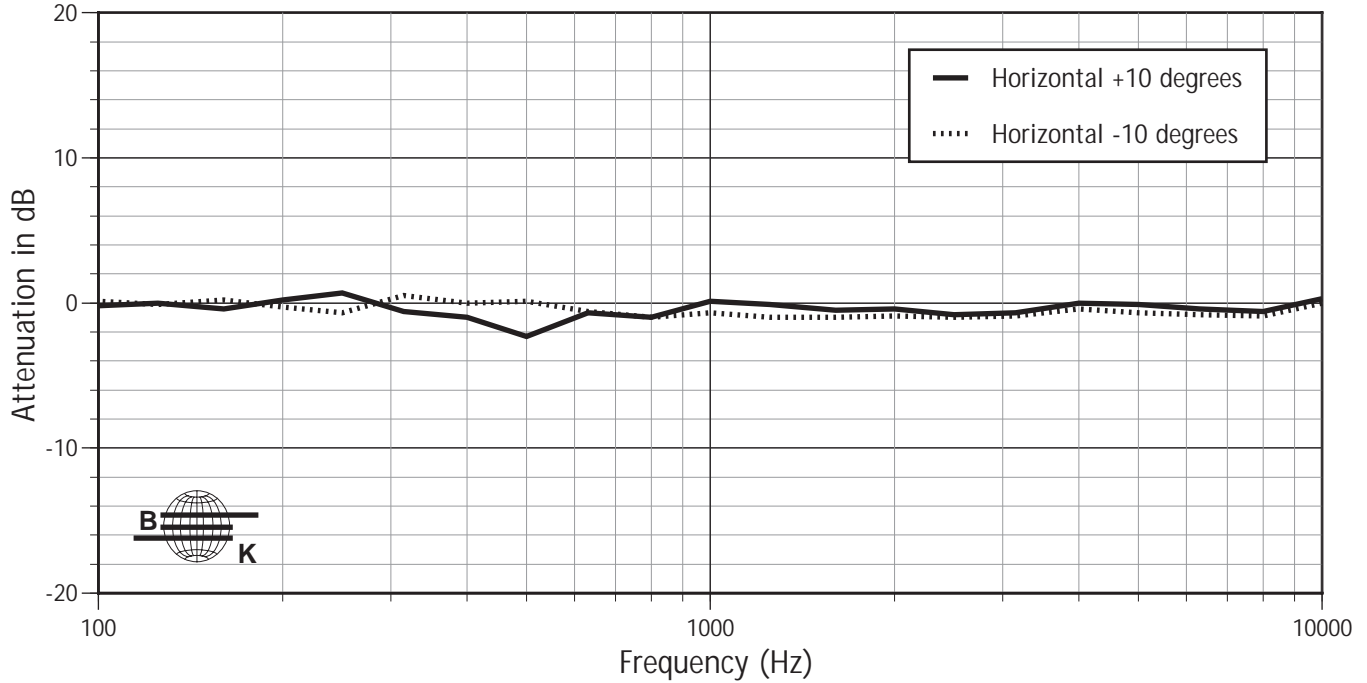


PERFORMANCE SPECIFICATIONS ASR665

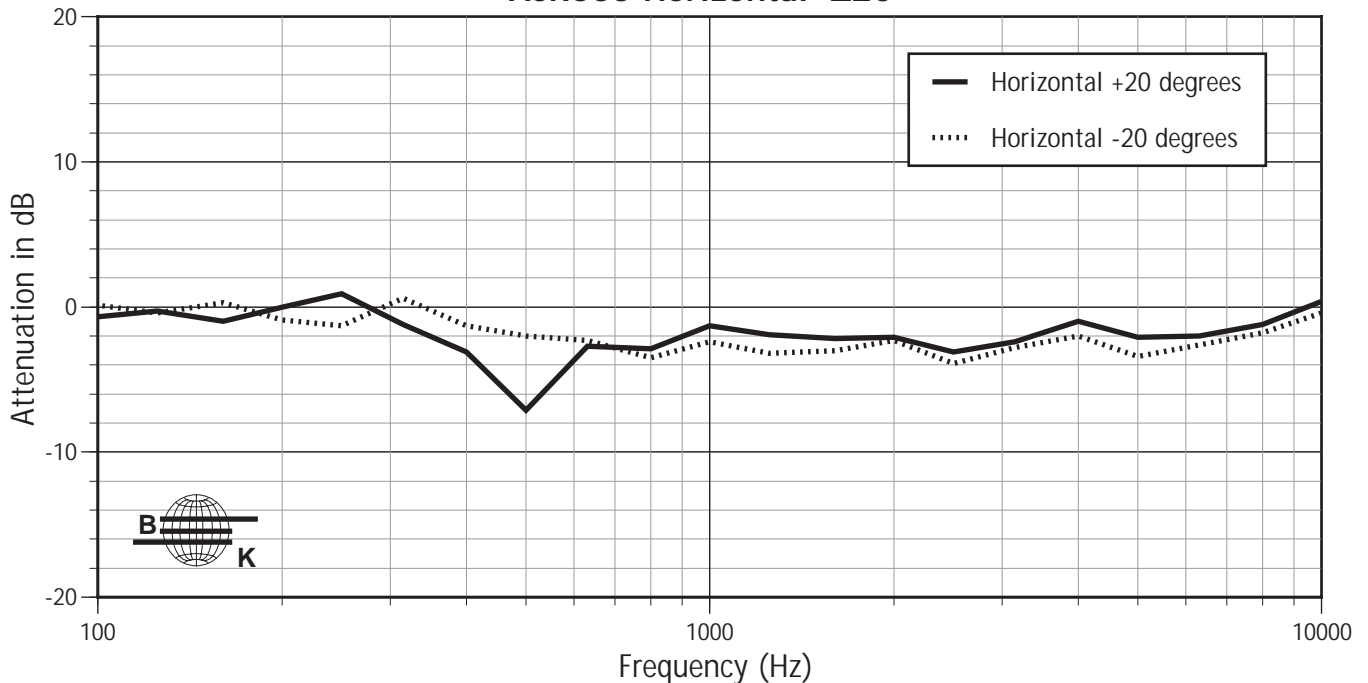
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

ASR665 Horizontal $\pm 10^\circ$



ASR665 Horizontal $\pm 20^\circ$



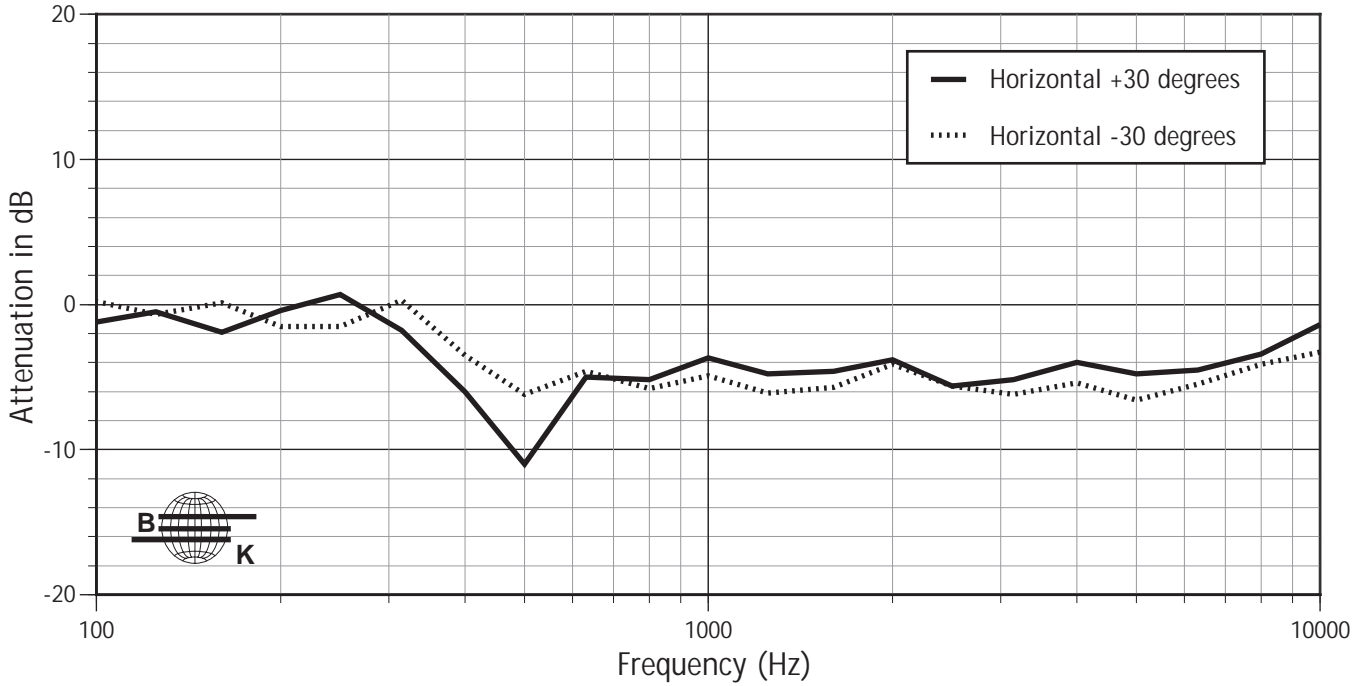


PERFORMANCE SPECIFICATIONS ASR665

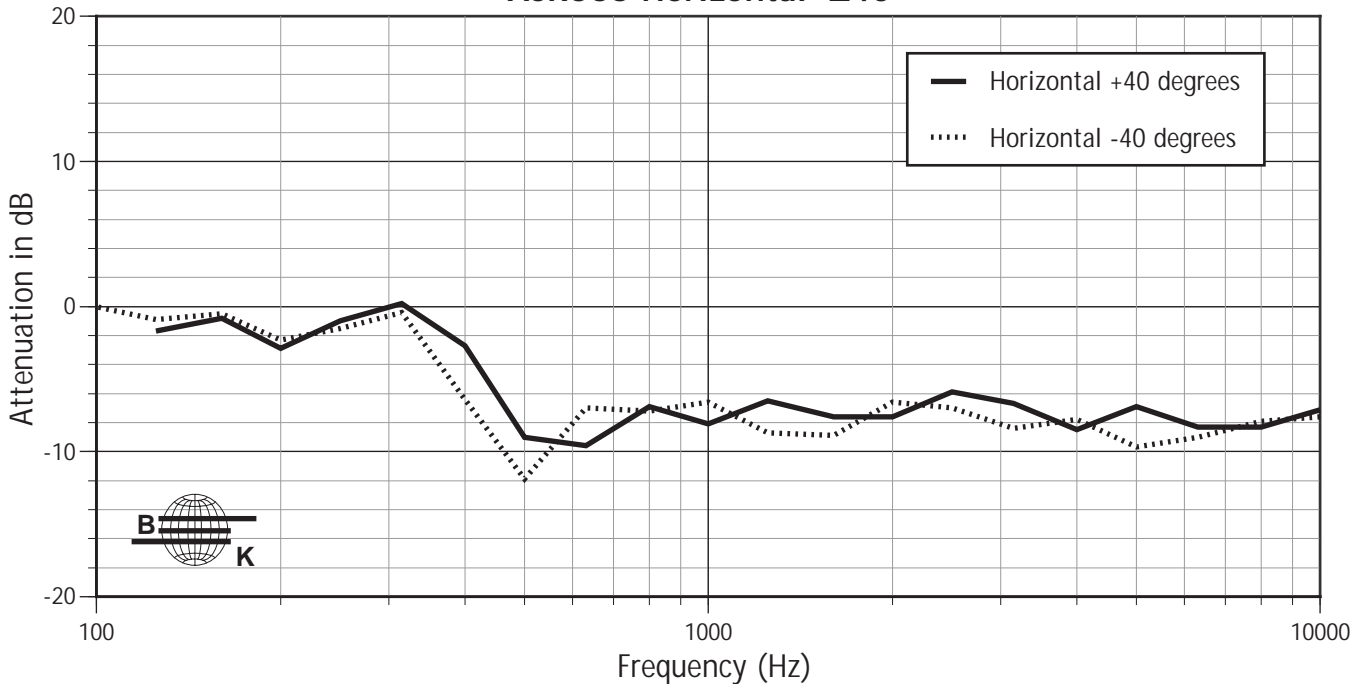
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

ASR665 Horizontal $\pm 30^\circ$



ASR665 Horizontal $\pm 40^\circ$



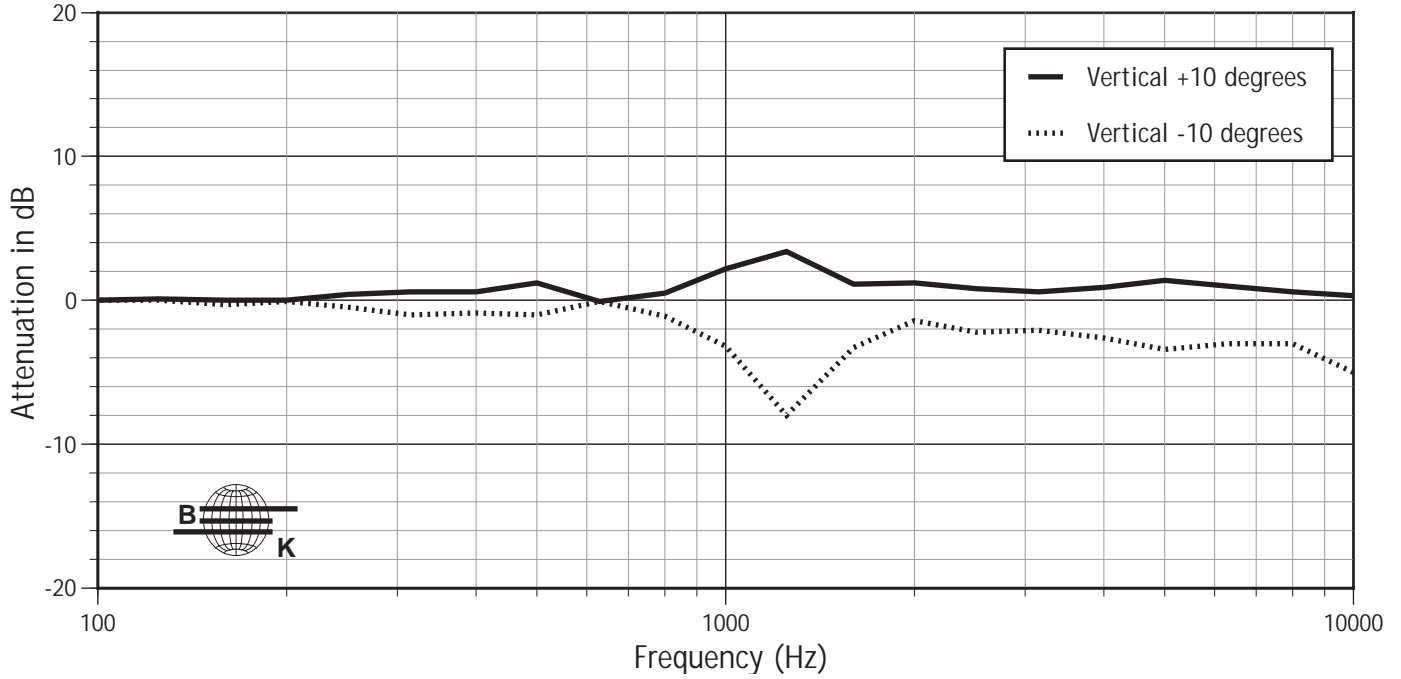


PERFORMANCE SPECIFICATIONS ASR665

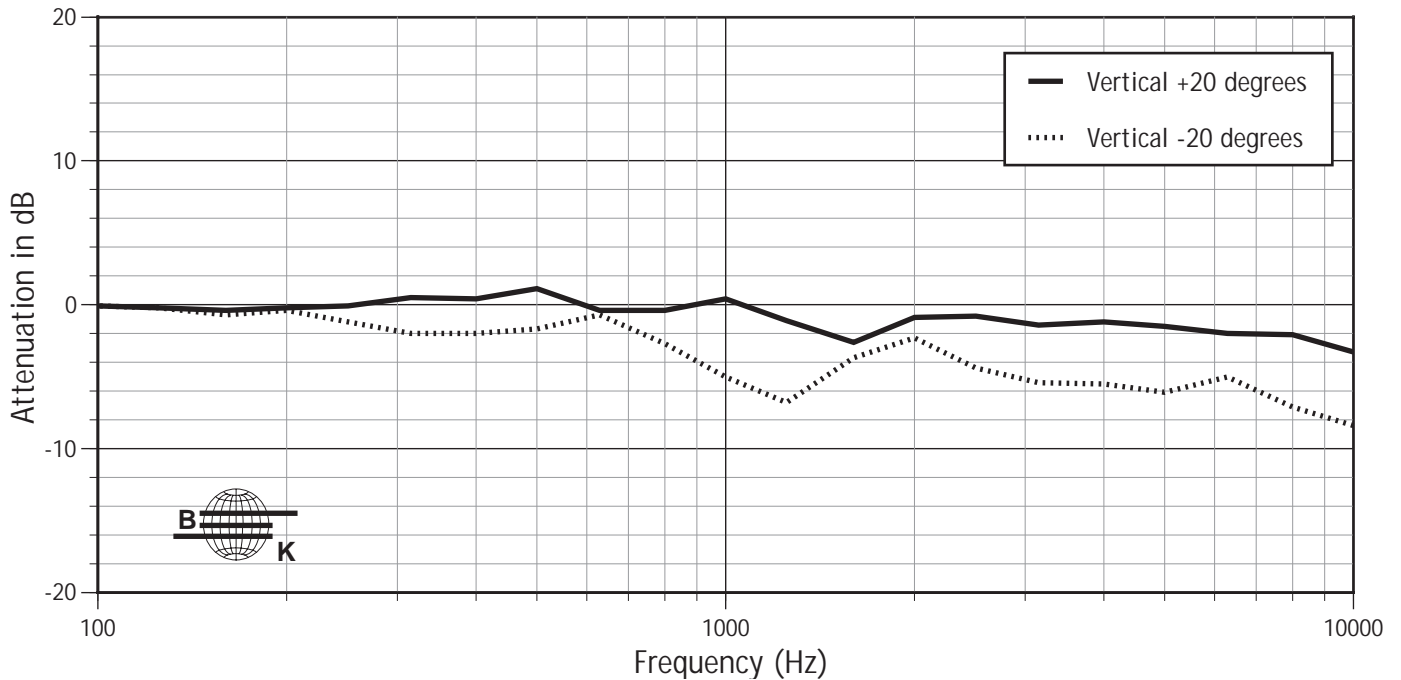
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

ASR665 Vertical $\pm 10^\circ$



ASR665 Vertical $\pm 20^\circ$



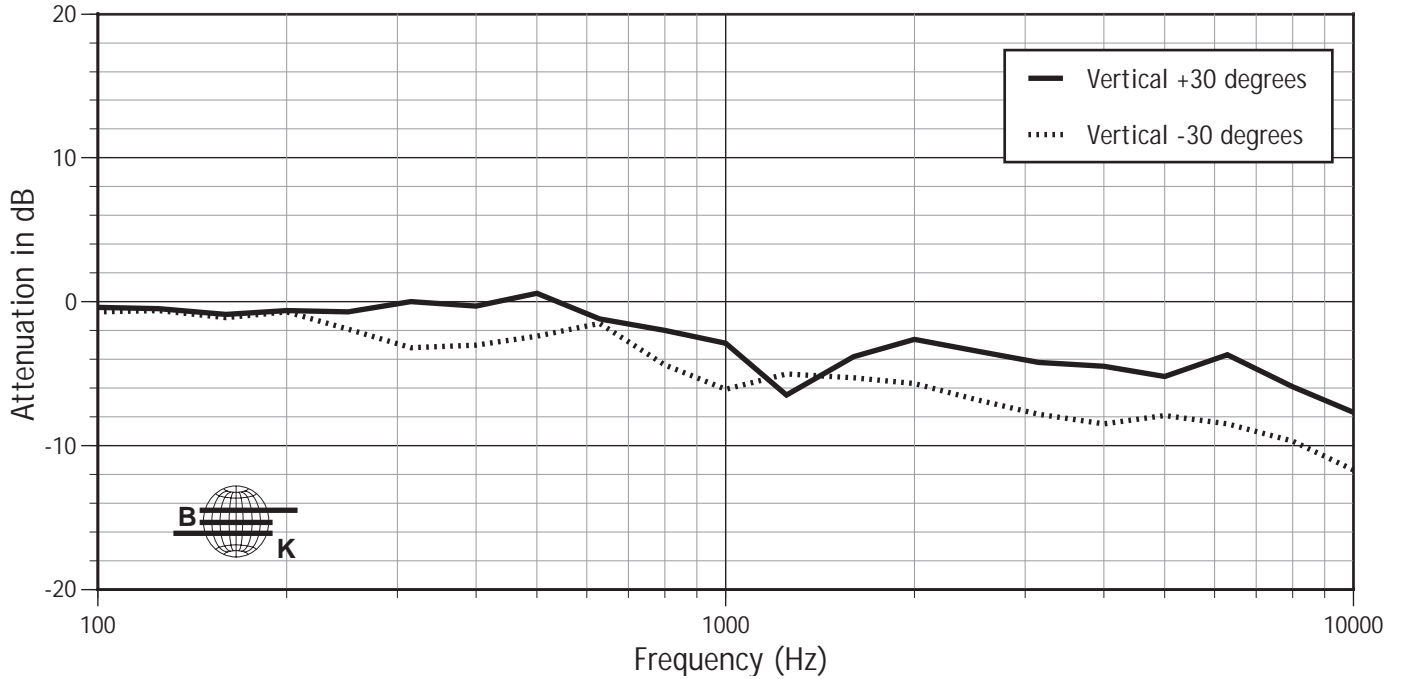


PERFORMANCE SPECIFICATIONS ASR665

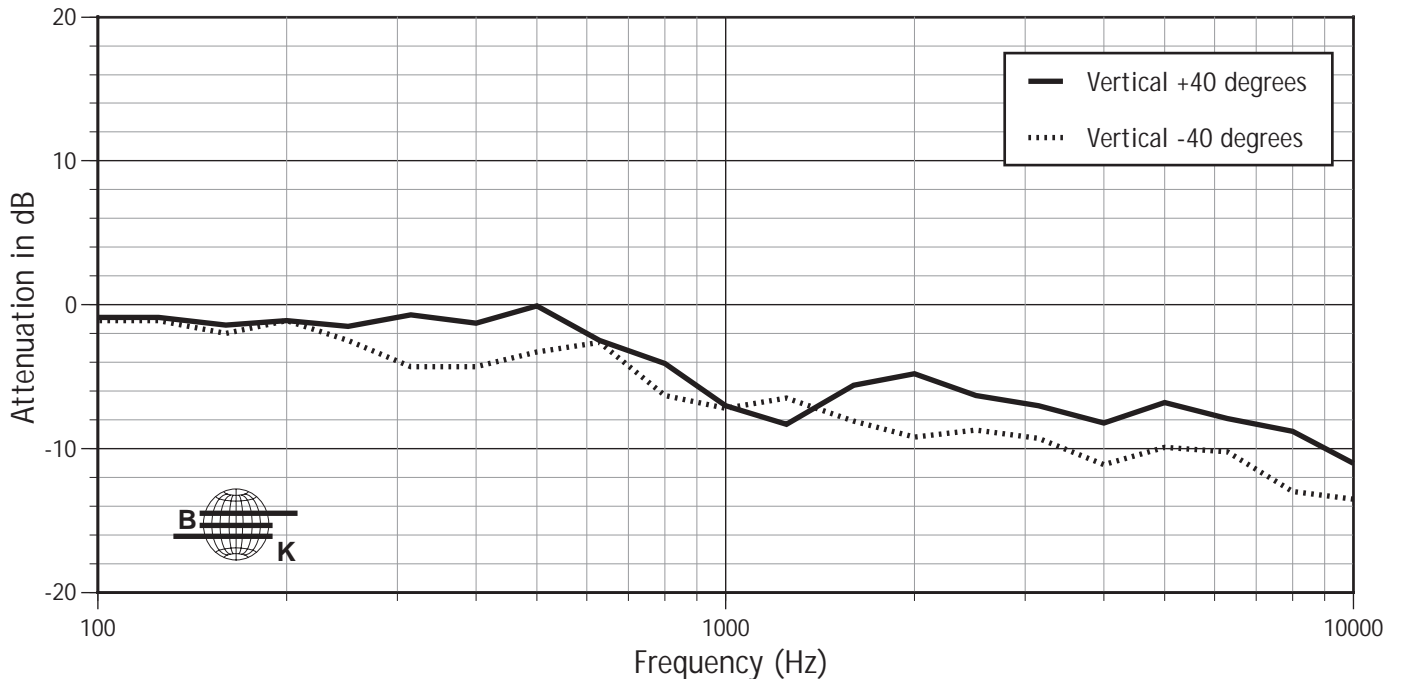
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

ASR665 Vertical $\pm 30^\circ$

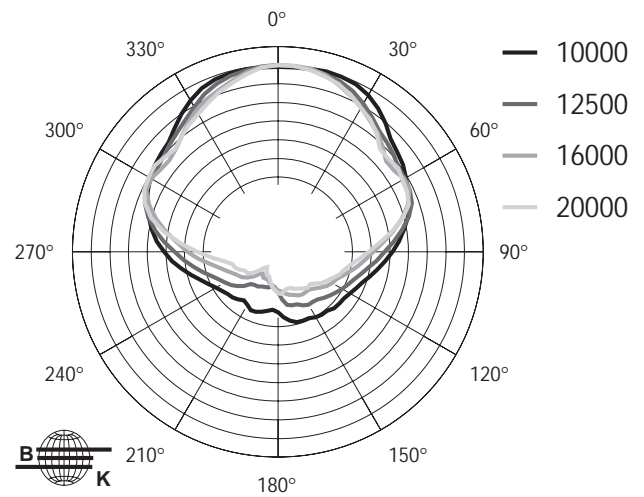
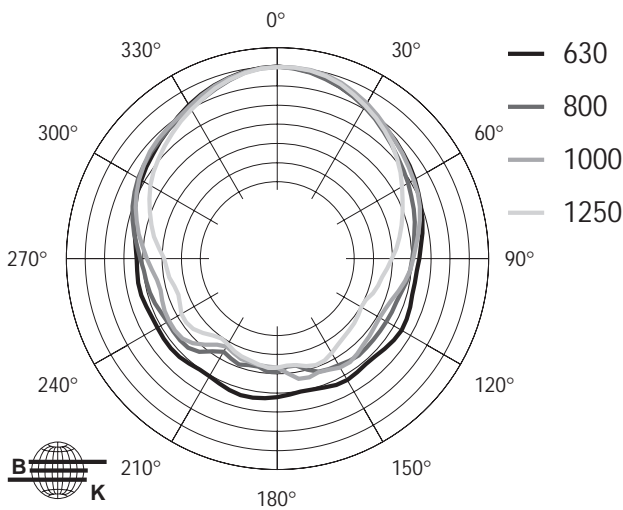
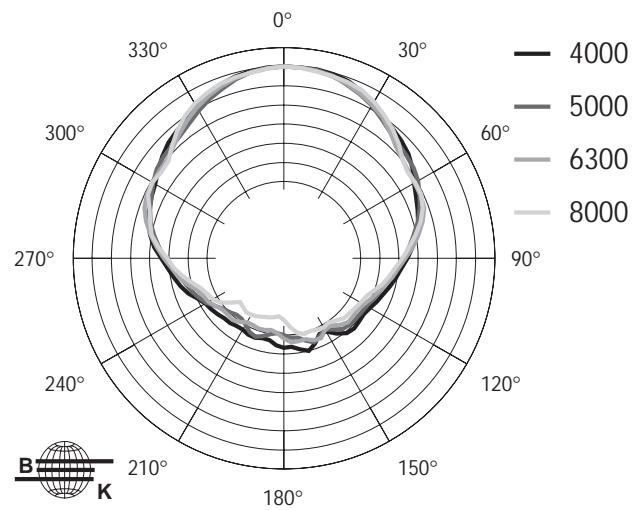
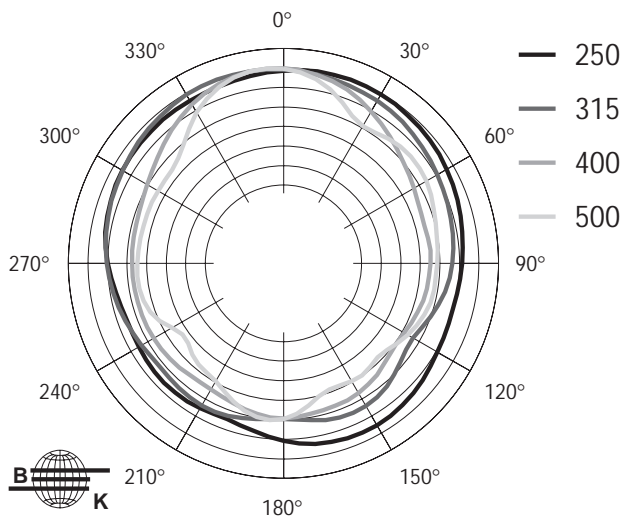
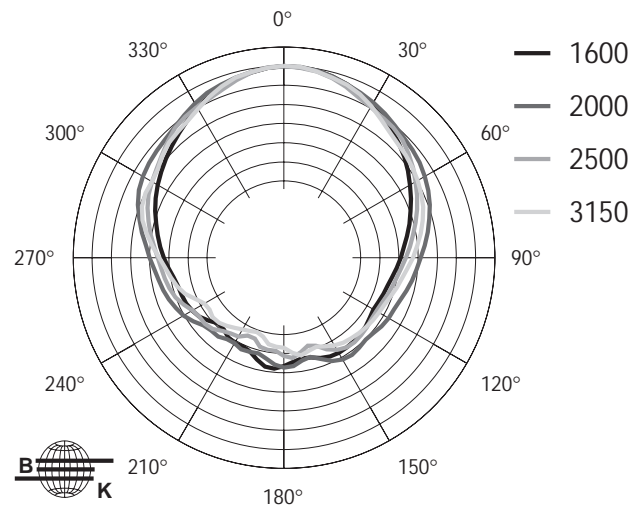
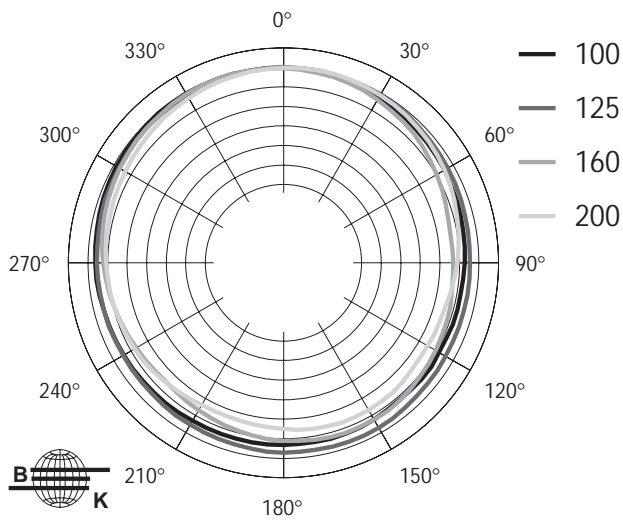


ASR665 Vertical $\pm 40^\circ$





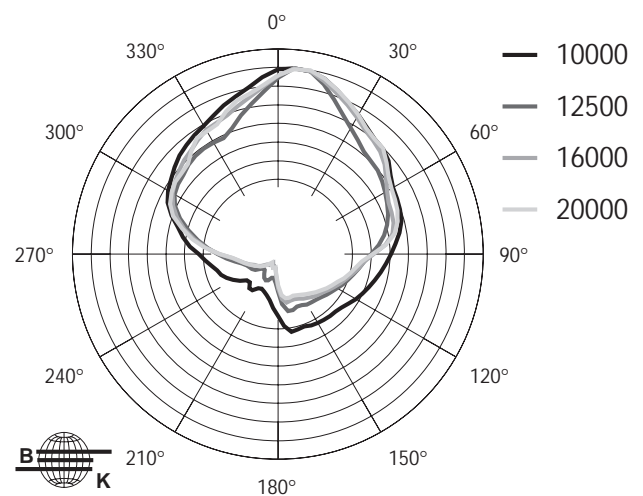
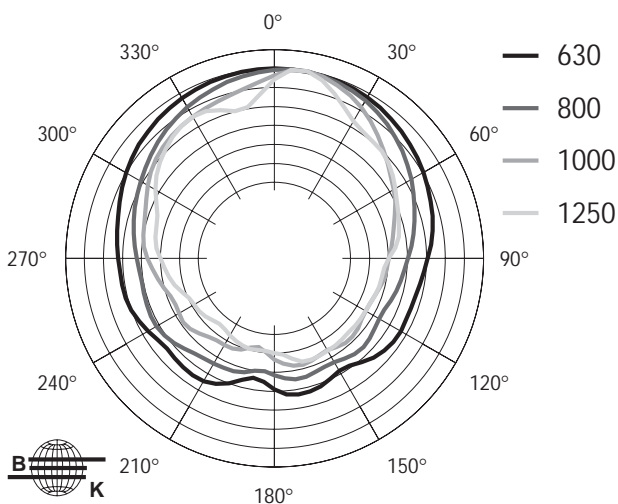
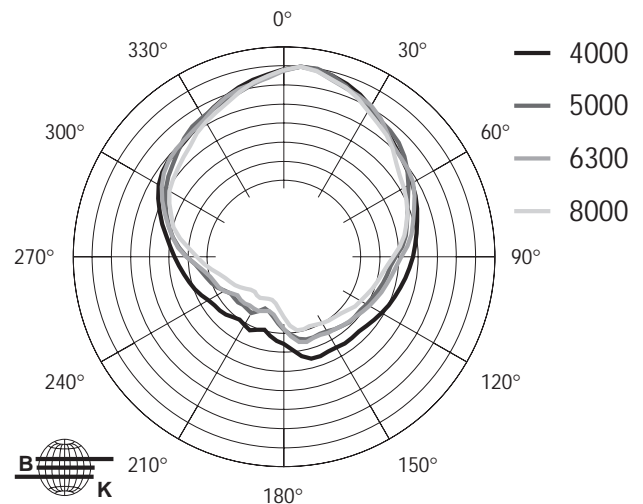
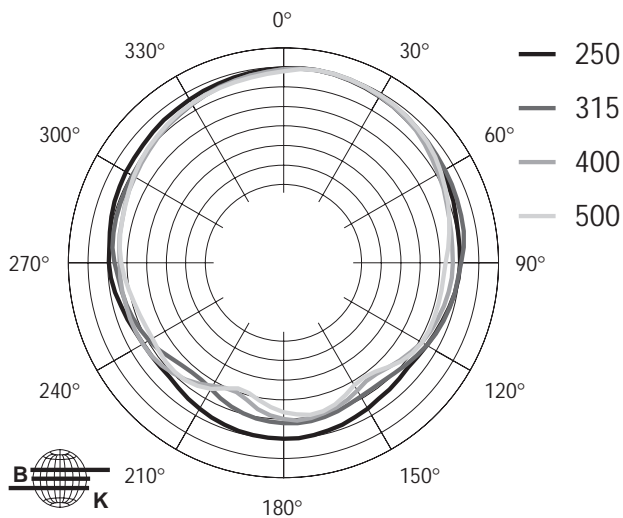
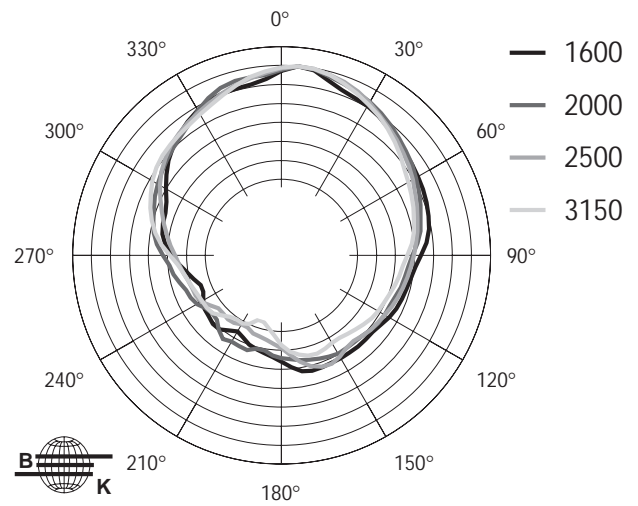
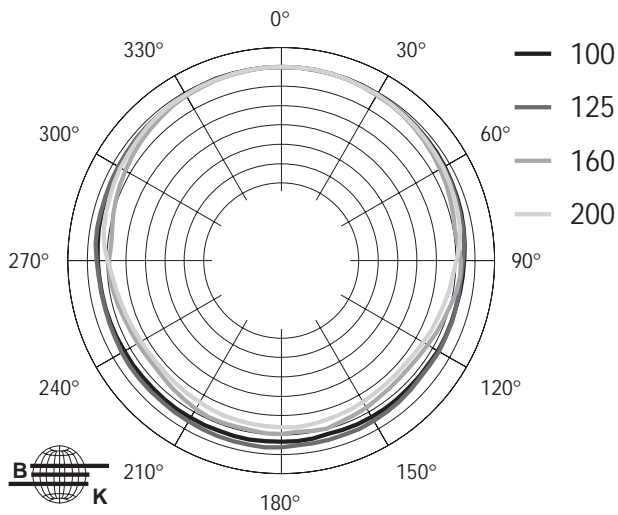
HORIZONTAL 1/3 OCTAVE POLAR DATA ASR665



6 db/div.



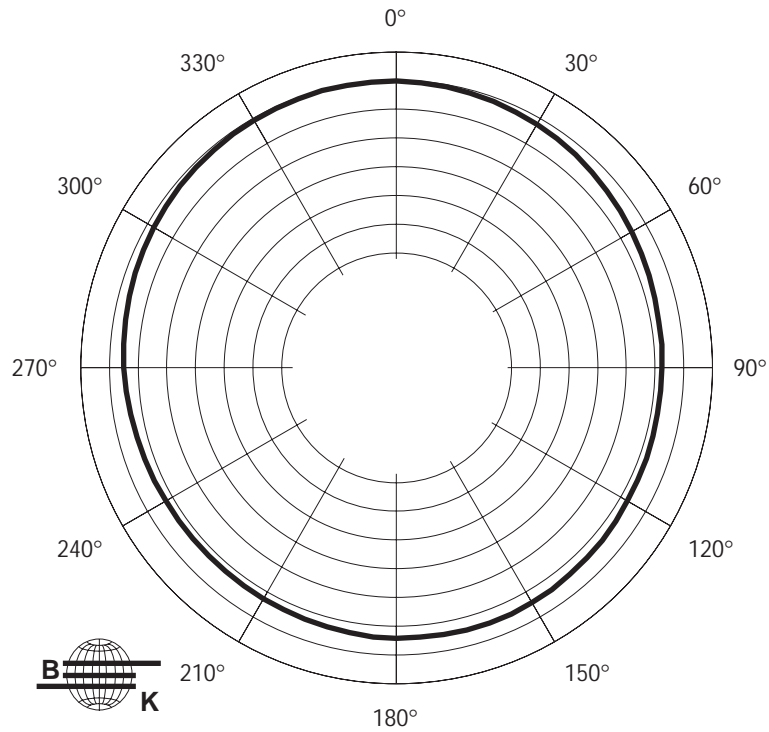
VERTICAL 1/3 OCTAVE POLAR DATA ASR665



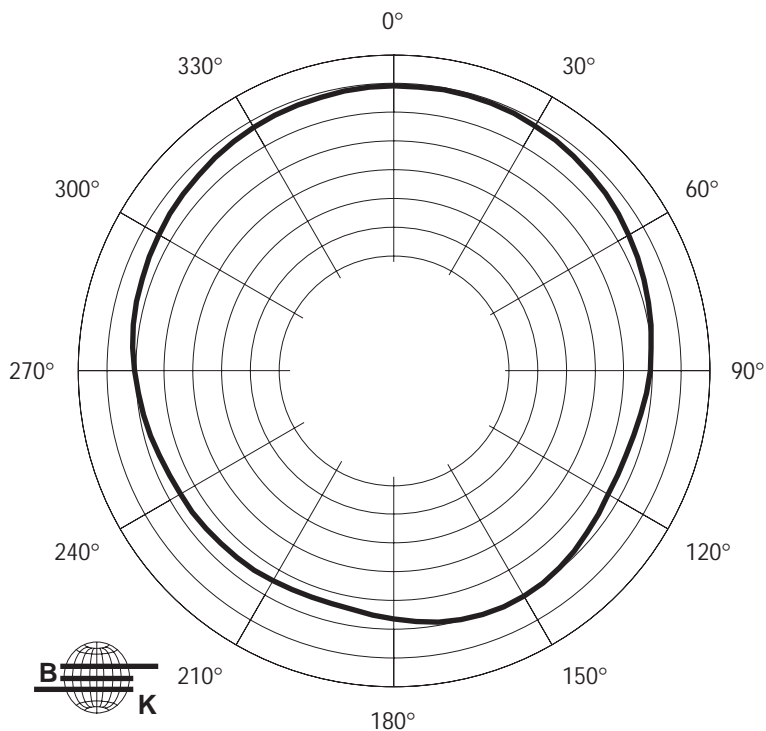


HORIZONTAL OCTAVE POLAR DATA ASR665

ASR665 125 Hz Horizontal Octave Polar Data



ASR665 250 Hz Horizontal Octave Polar Data

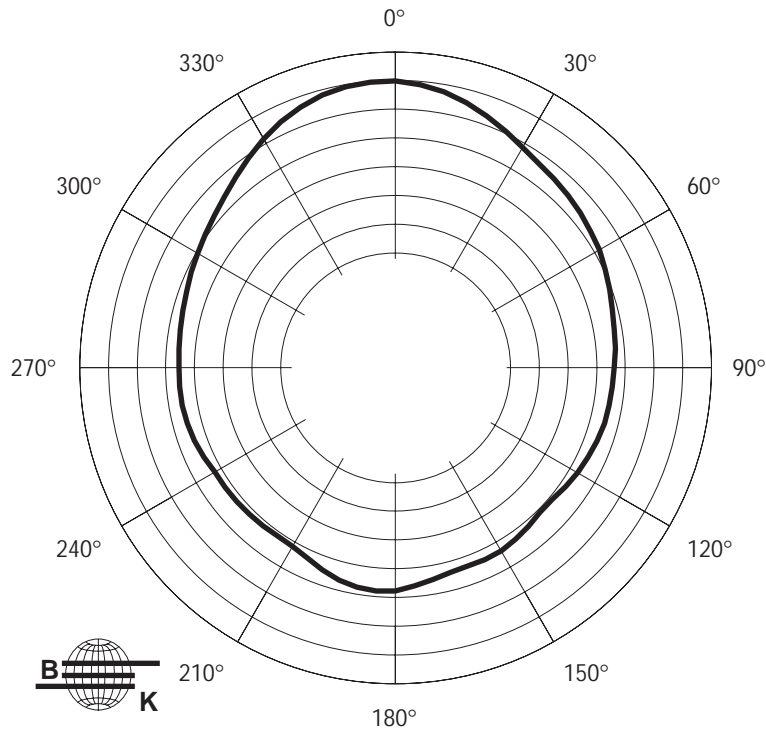


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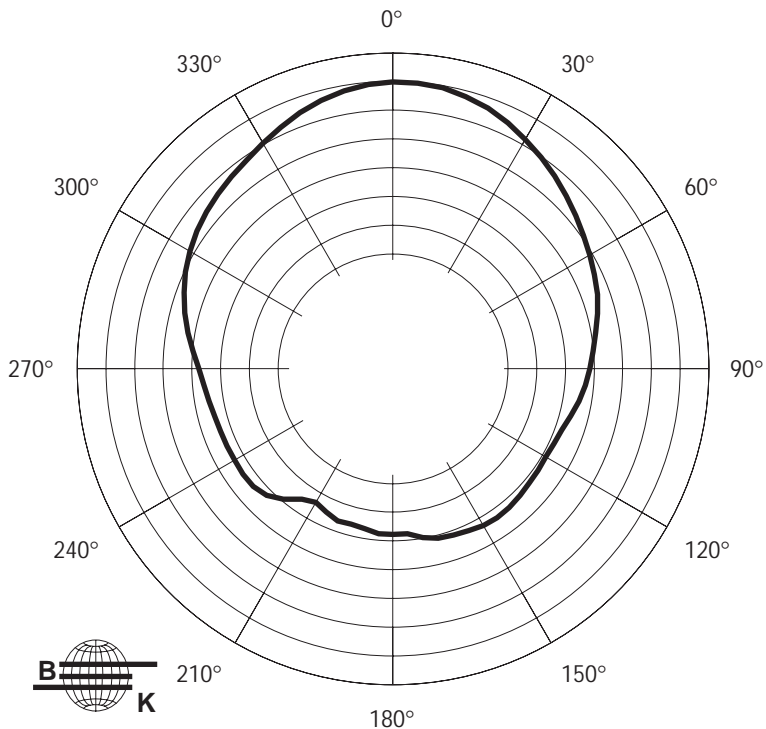


HORIZONTAL OCTAVE POLAR DATA ASR665

ASR665 500 Hz Horizontal Octave Polar Data



ASR665 1000 Hz Horizontal Octave Polar Data

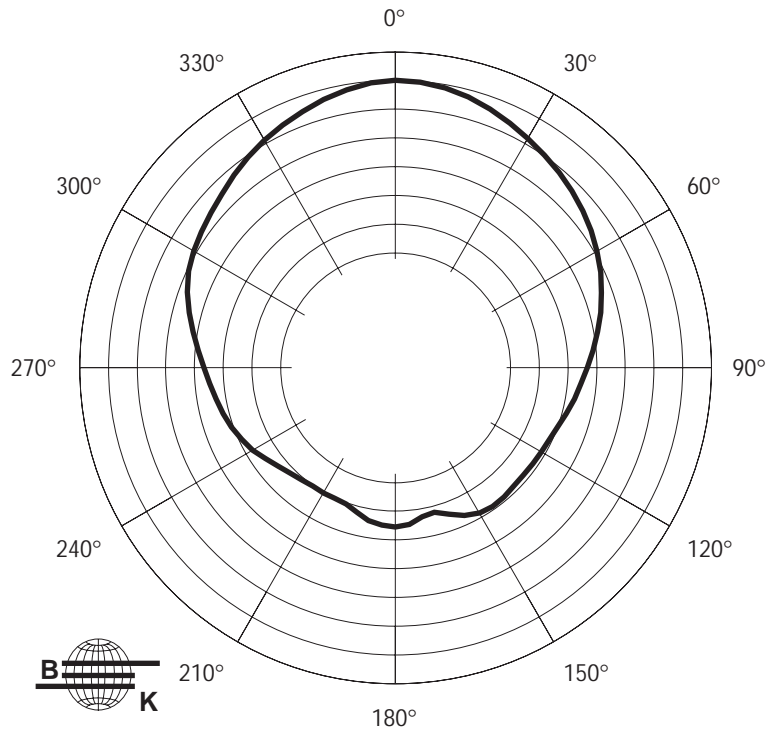


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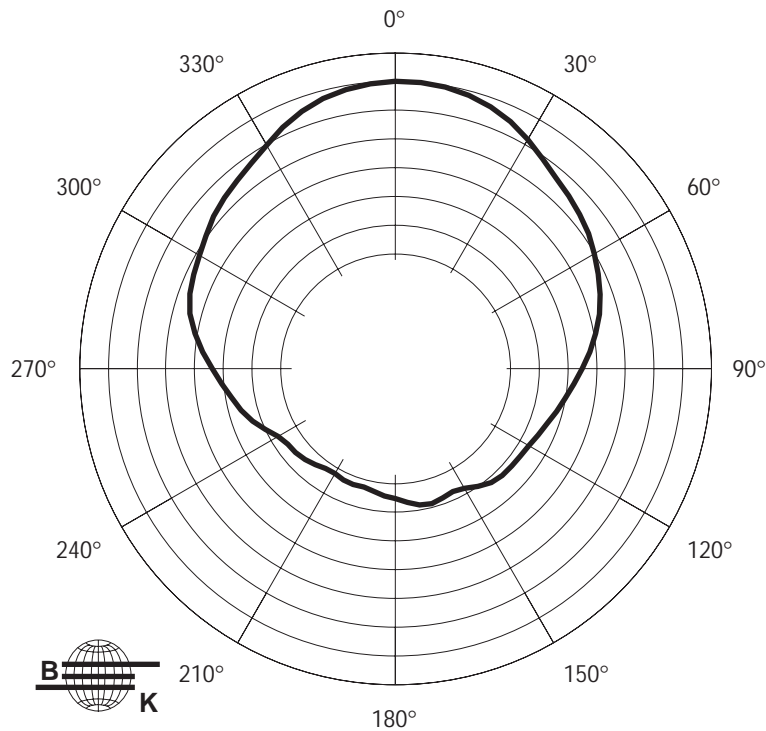


HORIZONTAL OCTAVE POLAR DATA ASR665

ASR665 2000 Hz Horizontal Octave Polar Data



ASR665 4000 Hz Horizontal Octave Polar Data

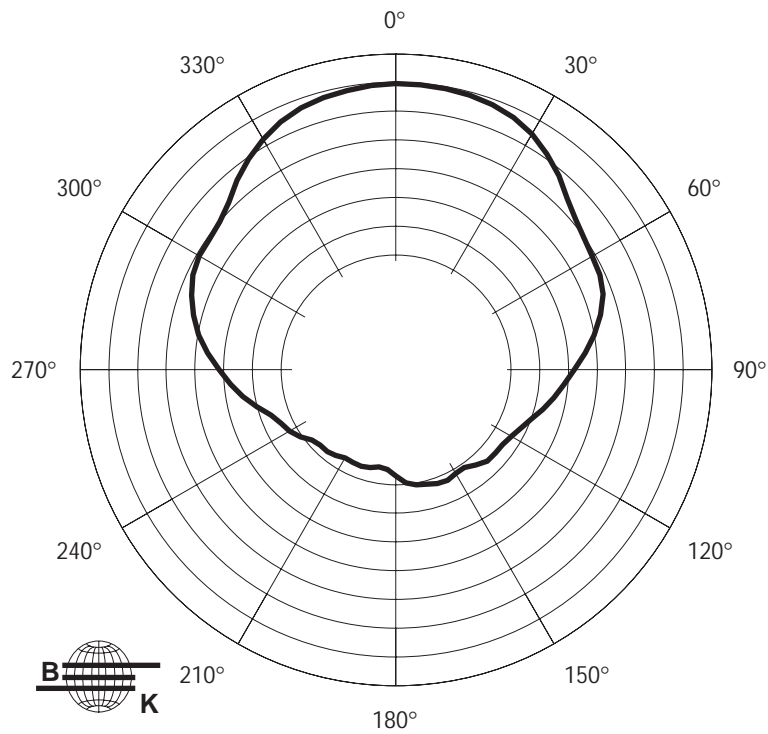


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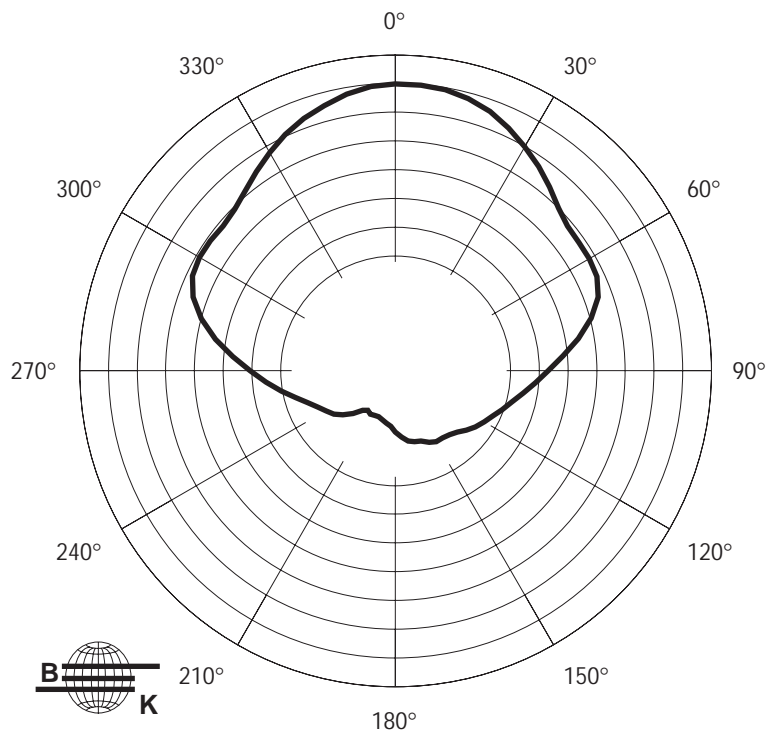


HORIZONTAL OCTAVE POLAR DATA ASR665

ASR665 8000 Hz Horizontal Octave Polar Data



ASR665 16000 Hz Horizontal Octave Polar Data

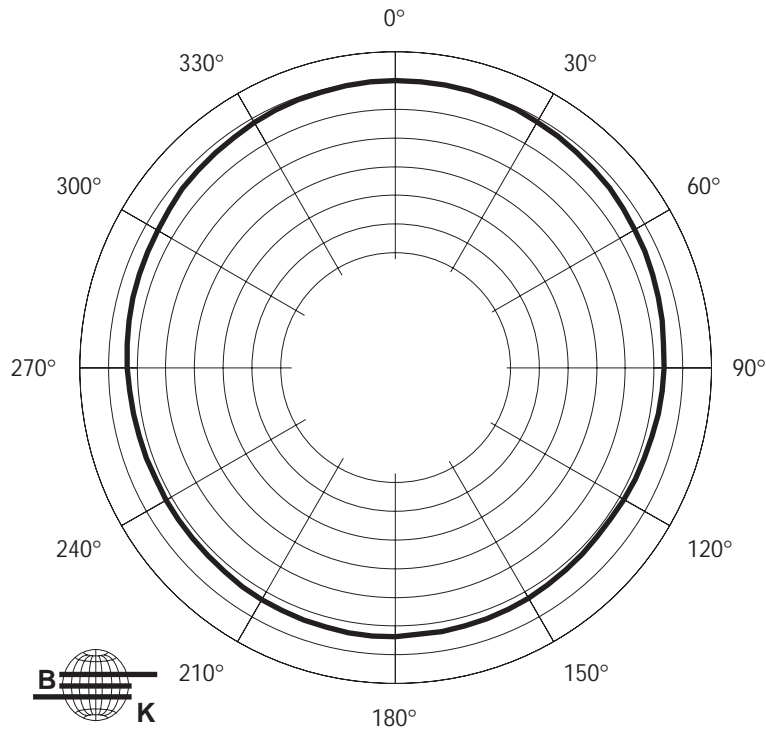


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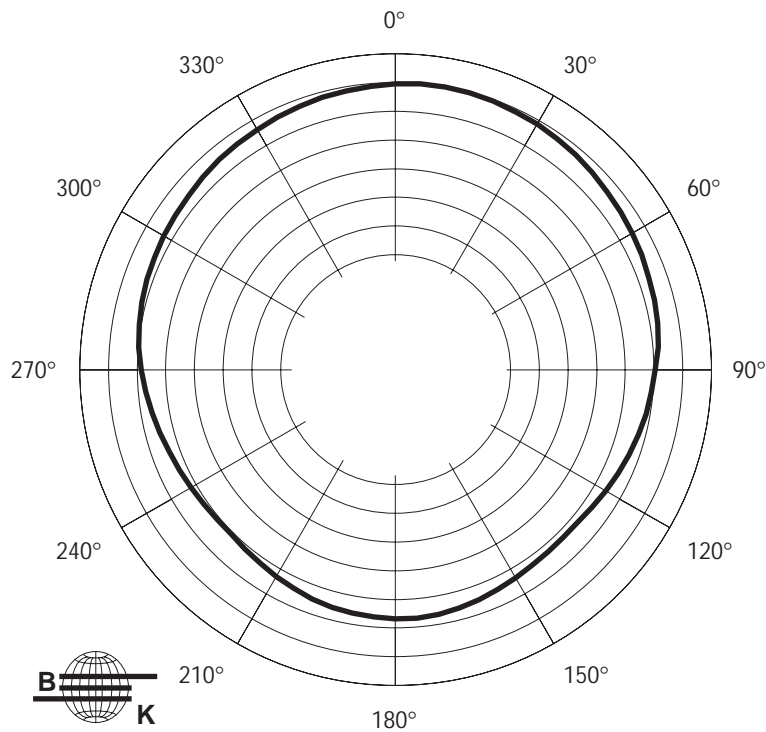


VERTICAL OCTAVE POLAR DATA ASR665

ASR665 125 Hz Vertical Octave Polar Data



ASR665 250 Hz Vertical Octave Polar Data

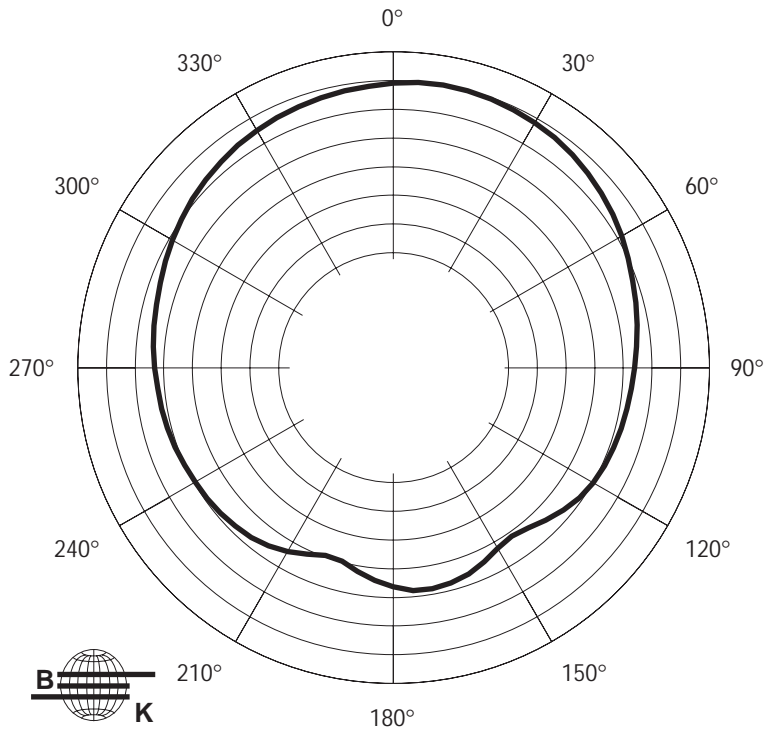


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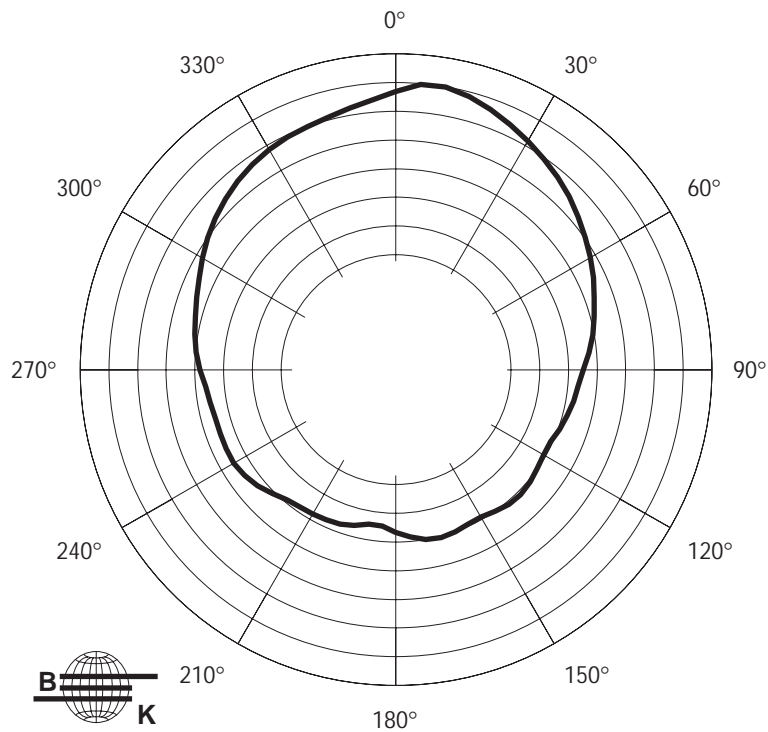


VERTICAL OCTAVE POLAR DATA ASR665

ASR665 500 Hz Vertical Octave Polar Data



ASR665 1000 Hz Vertical Octave Polar Data

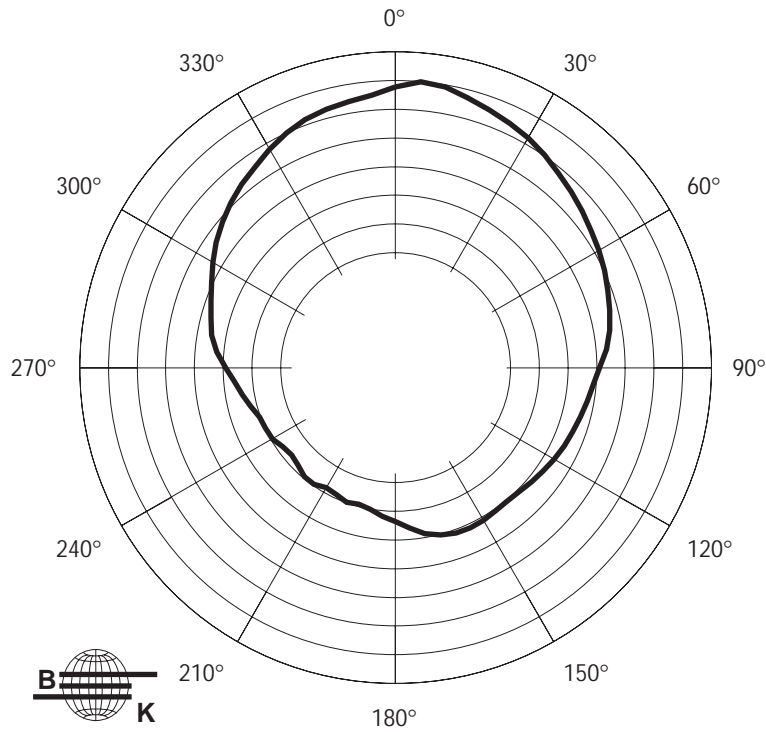


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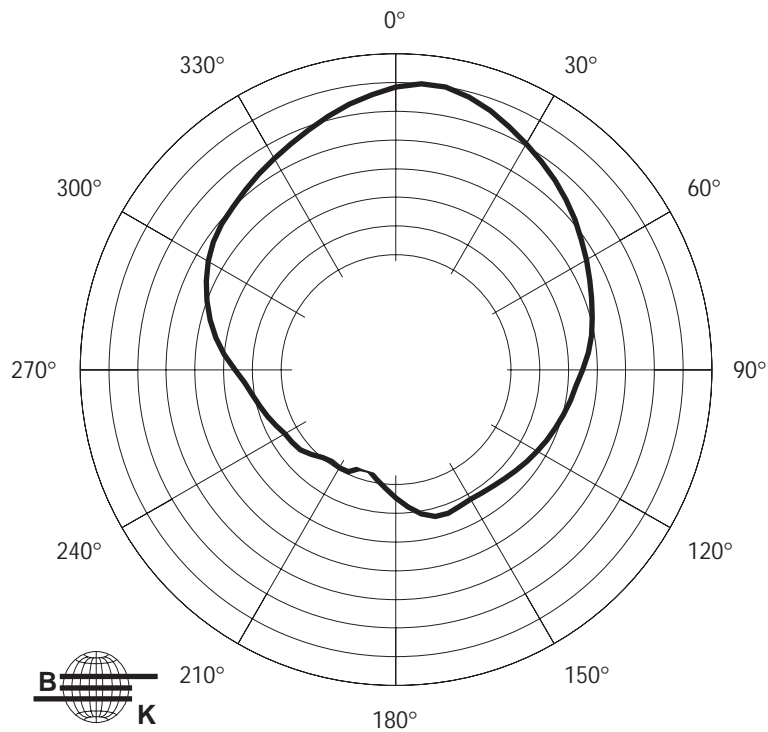


VERTICAL OCTAVE POLAR DATA ASR665

ASR665 2000 Hz Vertical Octave Polar Data



ASR665 4000 Hz Vertical Octave Polar Data

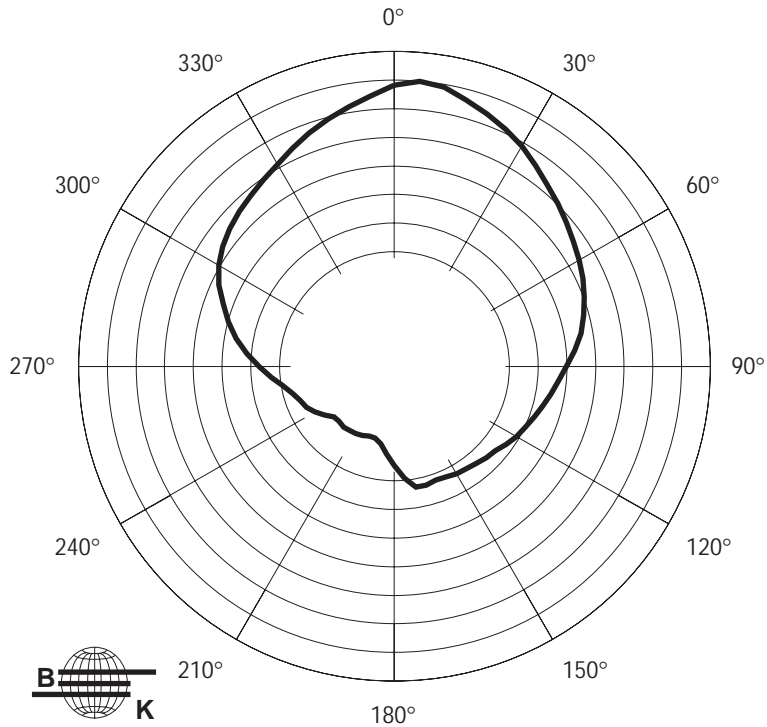


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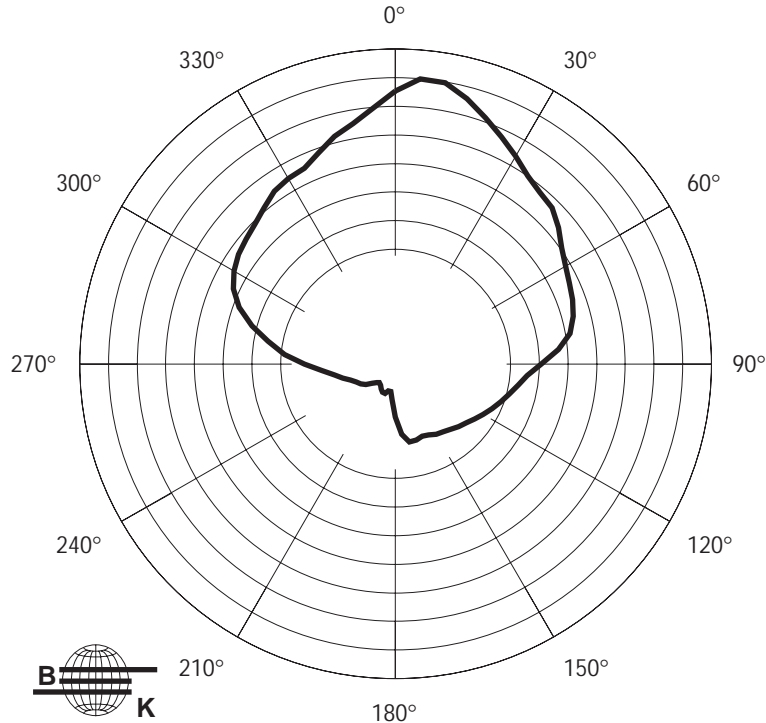


VERTICAL OCTAVE POLAR DATA ASR665

ASR6658000 Hz Vertical Octave Polar Data



ASR665 16000 Hz Vertical Octave Polar Data



6 db/div.