



# TECHNICAL SPECIFICATIONS ASR695

## 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 90 x 45 constant directivity horn.

## APPLICATION

The ASR695 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	999676
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

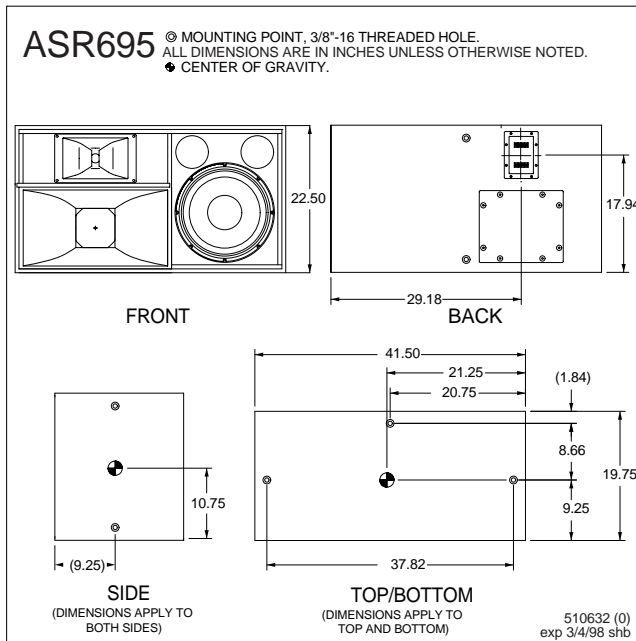
<b>Frequency Response (1 Watt @ 1m)</b>		
±3 dB	47 Hz to 17 kHz	
-10 dB	40 Hz	
<b>Axial Sensitivity (dB SPL, 1 Watt @ 1m)</b>		
Passive MF/HF	105	
LF	97	
<b>Impedance (Ohms)</b>		
Passive MF/HF	8	
LF	8	
<b>Power Handling, AES Standard (Watts)</b>		
Passive MF/HF	360	
LF	600	
<b>Calculated Maximum Output (dB SPL @ 1m)</b>		
Passive MF/HF Peak	136.6	
LF Peak	130.8	
Passive MF/HF Long term	130.6	
LF Long Term	124.8	
<b>Nominal Coverage Angle/-6 dB points (degrees)</b>		
Horizontal	90	
Vertical	45	
<b>Dimensions</b>		
	<b>inches</b>	<b>millimeters</b>
Height	22.50	572
Width	41.50	1054
Depth	19.75	502
<b>Weights</b>		
	<b>pounds</b>	<b>kilograms</b>
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 90° (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  $\pm 3$  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 ASR695.

## SERVICE ITEMS

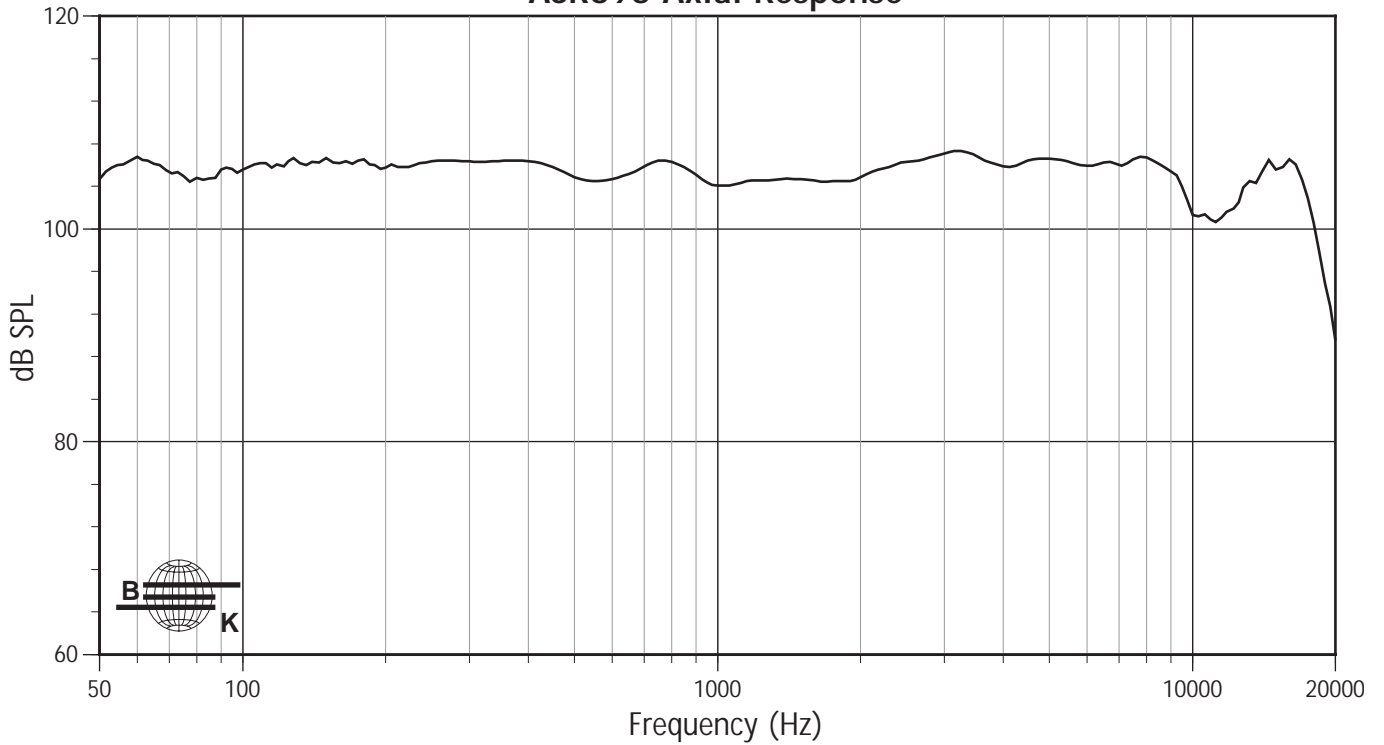
<b>LF: Complete Cone Driver</b>	EAW Part No.	804081
<b>MF: Complete Cone Driver</b>	EAW Part No.	804021
<b>HF: Complete Compression Driver/Tweeter</b>	EAW Part No.	803039
<b>LF: Recone Assembly</b>	EAW Part No.	460059
<b>MF: Recone Assembly</b>	EAW Part No.	460010
<b>HF: Diaphragm Assembly</b>	EAW Part No.	806019
<b>Filter/Crossover Network: Complete Assembly</b>	EAW Part No.	255346



# PERFORMANCE SPECIFICATIONS ASR695

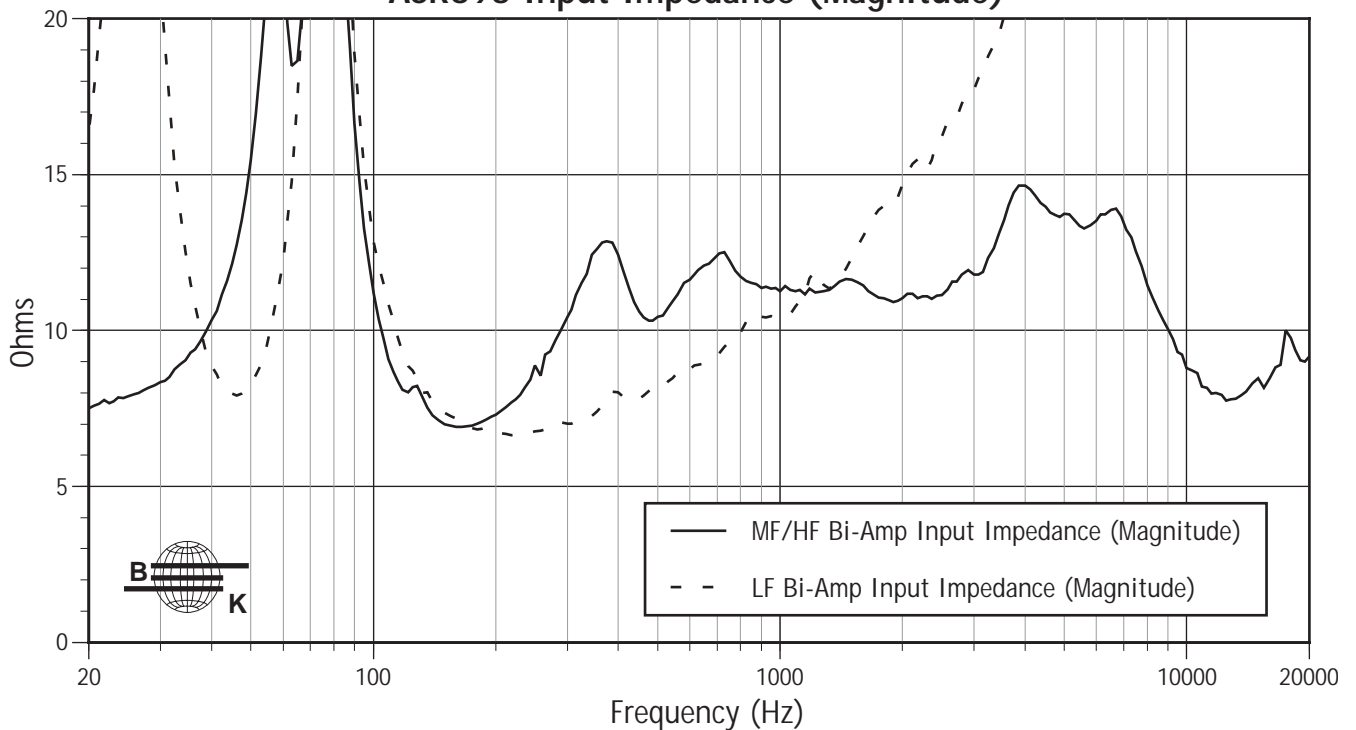
## FREQUENCY RESPONSE

### ASR695 Axial Response



## INPUT IMPEDANCE

### ASR695 Input Impedance (Magnitude)

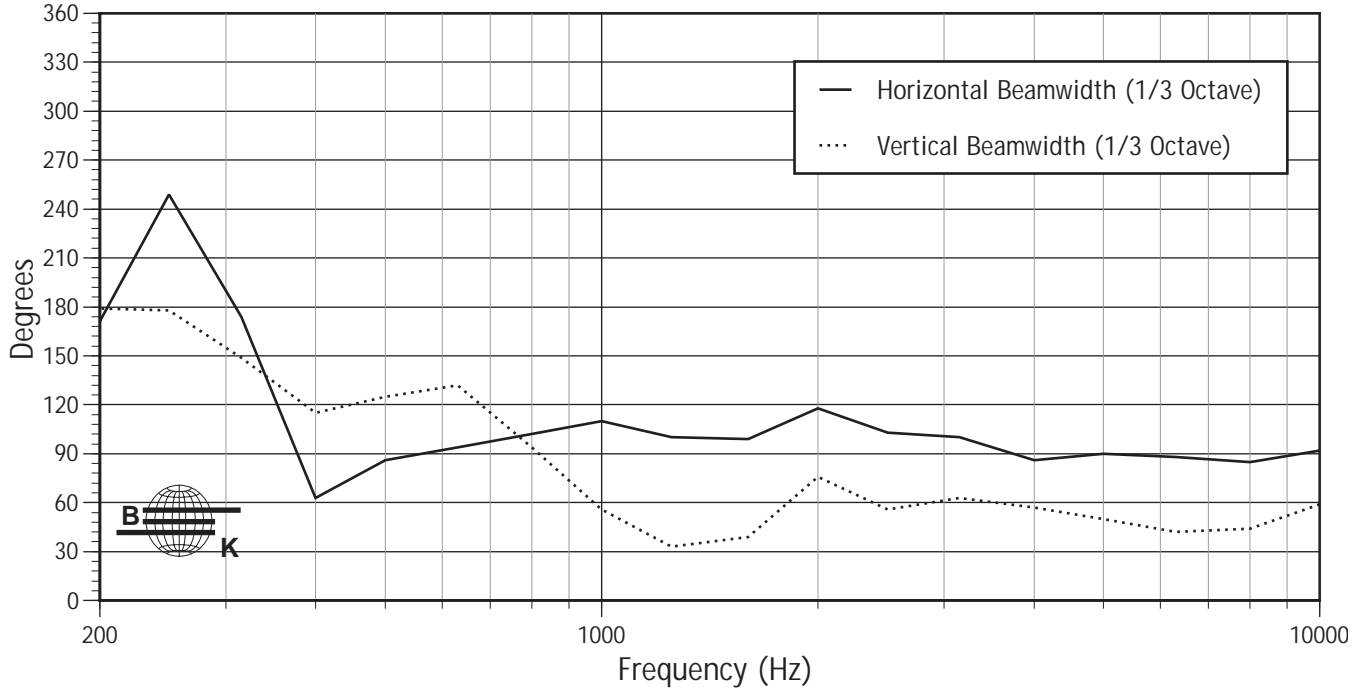




# PERFORMANCE SPECIFICATIONS ASR695

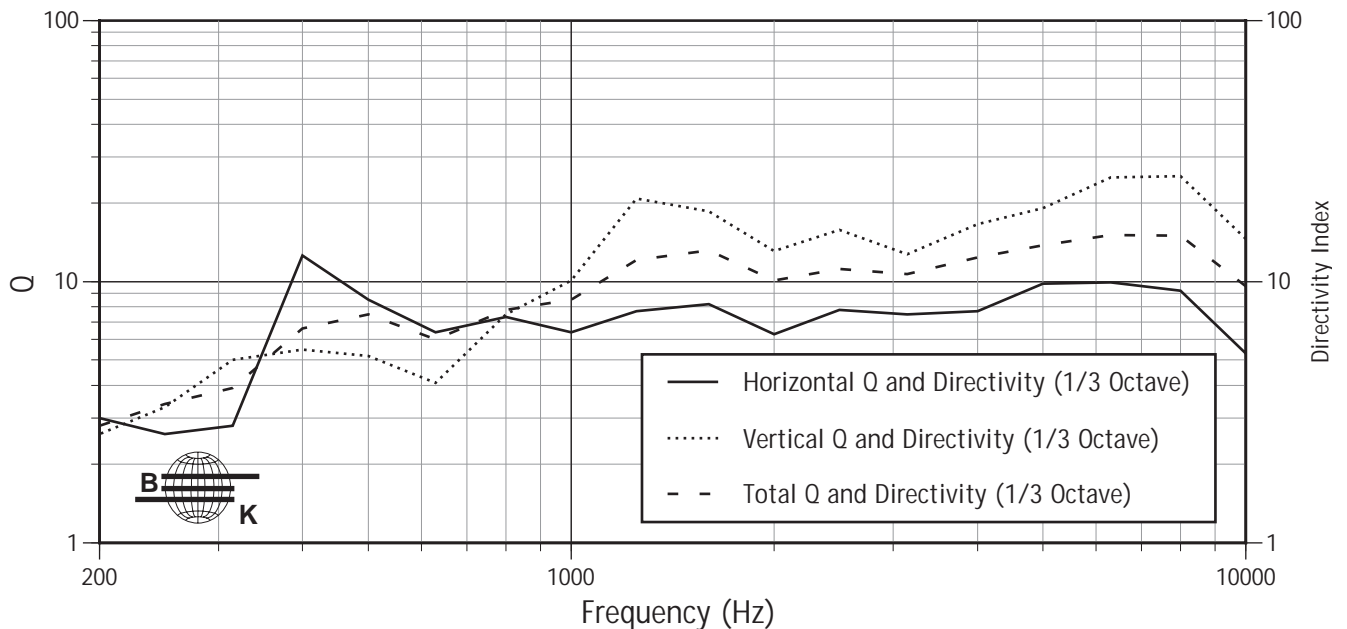
## BEAMWIDTH

### ASR690 Beamwidth vs Frequency



## Q & DIRECTIVITY INDEX (DI)

### ASR695 Q and Directivity





# PERFORMANCE SPECIFICATIONS ASR695

## Q & DIRECTIVITY & BEAMWIDTH BY FREQUENCY

Frequency	Hor Beamwidth	Ver Beamwidth	Hor Q & Dir	Ver Q & Dir	Tot Q & Dir
100	360	360	1.5	1.9	1.7
125	360	360	1.6	1.6	1.6
160	360	360	2.8	2.7	3.0
200	171	179	3	2.6	2.8
250	249	178	2.6	3.3	3.4
315	174	149	2.8	5	3.9
400	63	115	12.6	5.5	6.6
500	86	125	8.5	5.2	7.5
630	94	132	6.4	4.1	6.0
800	102	94	7.3	7.5	7.8
1000	110	56	6.4	10.1	8.5
1250	100	33	7.7	20.8	12.1
1600	99	39	8.2	18.6	13.2
2000	118	76	6.3	13.1	10.1
2500	103	56	7.8	15.8	11.2
3150	100	63	7.5	12.7	10.7
4000	86	57	7.7	16.6	12.4
5000	90	50	9.8	19.1	13.8
6300	88	42	9.9	25	15.1
8000	85	44	9.2	25.4	15.0
10000	92	59	5.3	14.6	9.6
12500	84	48	12.7	24.2	17.3
16000	36	36	33.5	38.3	33.5
20000	40	39	29.1	37.1	30.2

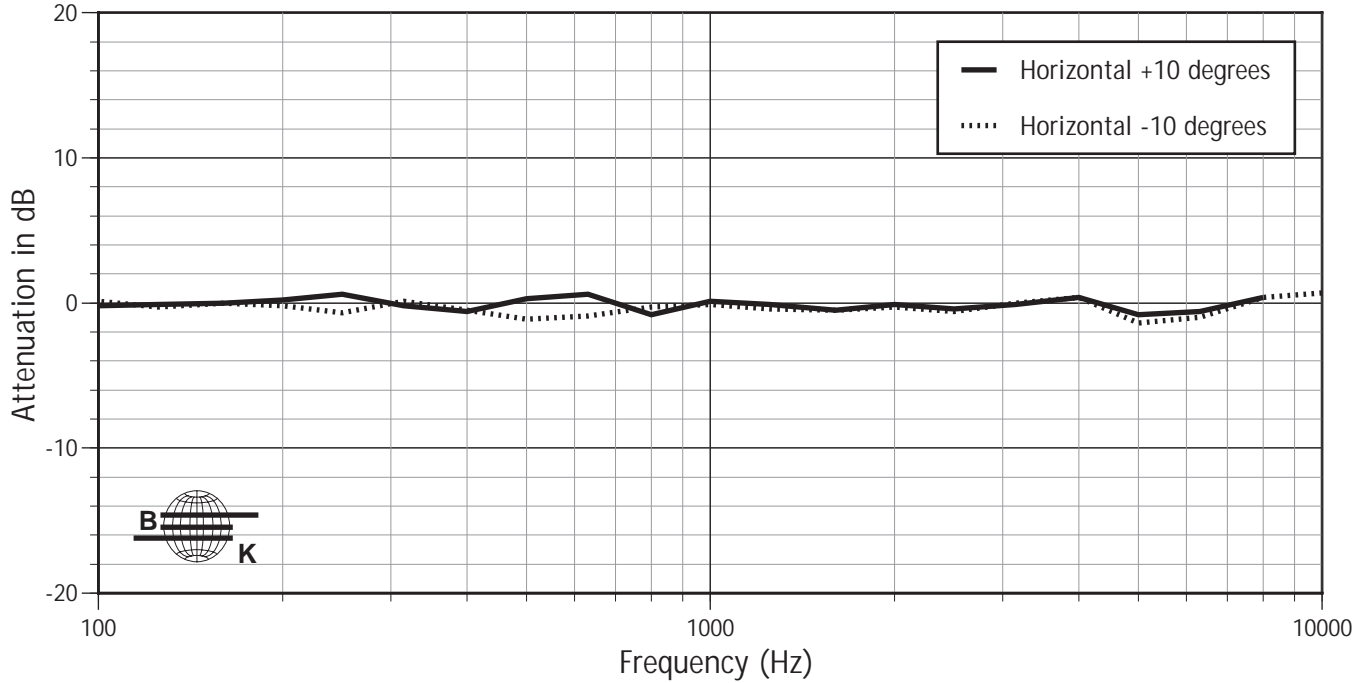


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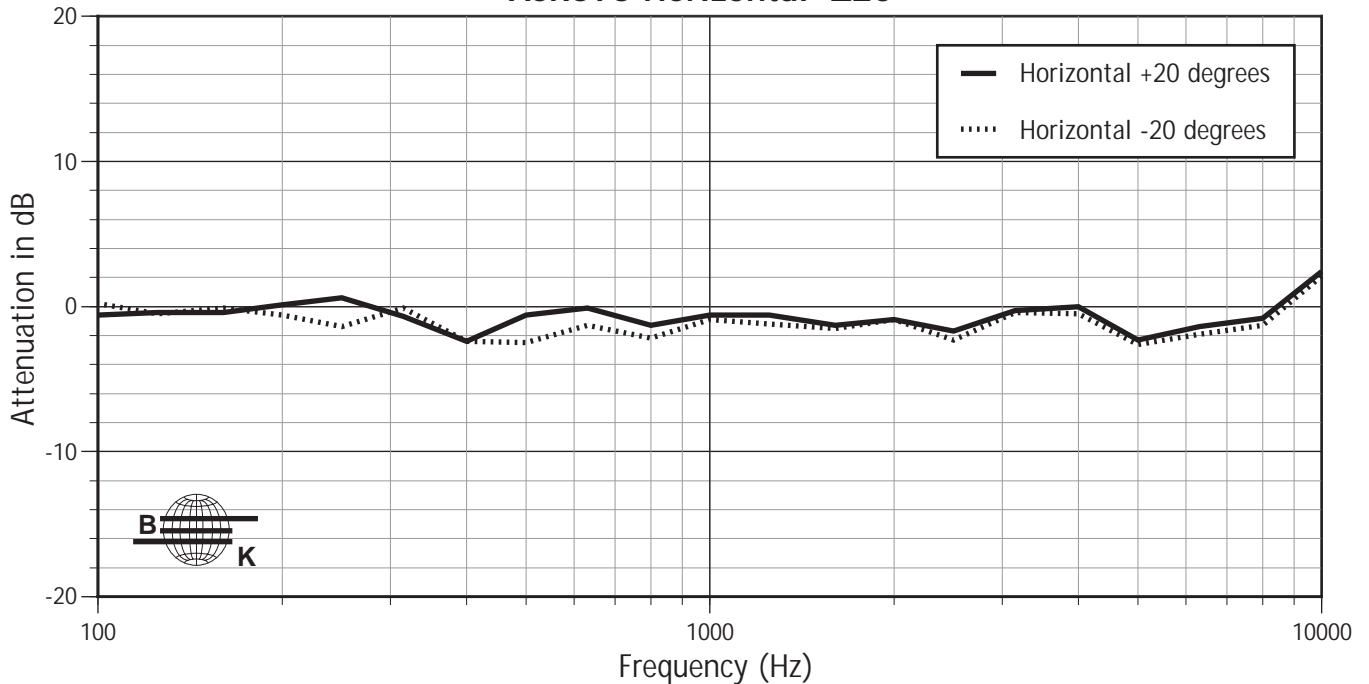
## HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

### ASR695 Horizontal $\pm 10^\circ$



### ASR695 Horizontal $\pm 20^\circ$



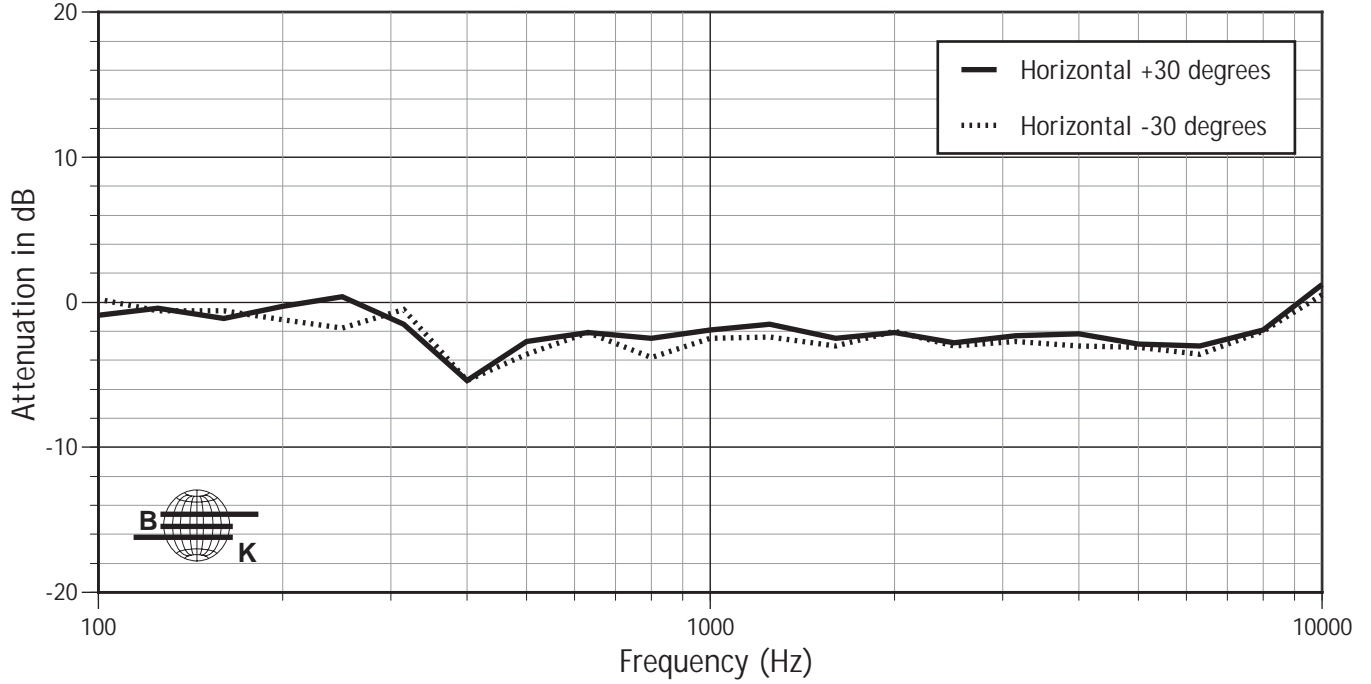


# PERFORMANCE SPECIFICATIONS ASR695

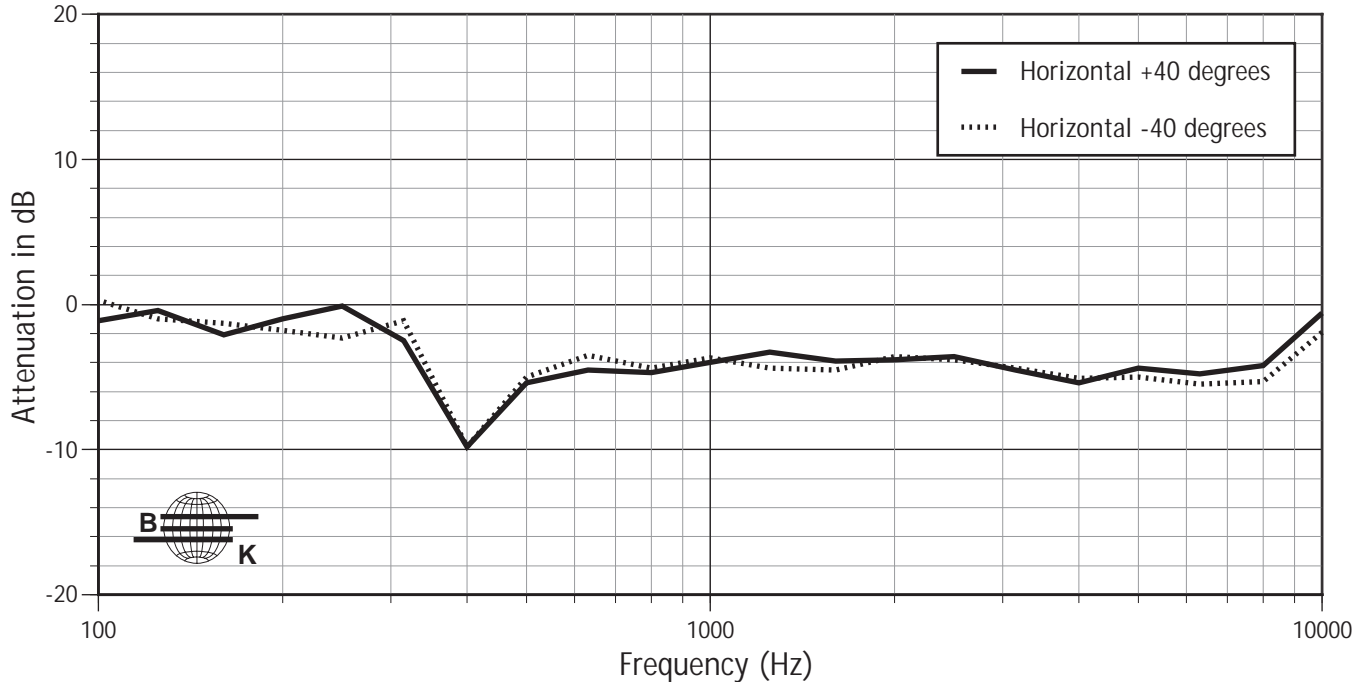
## HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

### ASR695 Horizontal $\pm 30^\circ$



### ASR695 Horizontal $\pm 40^\circ$



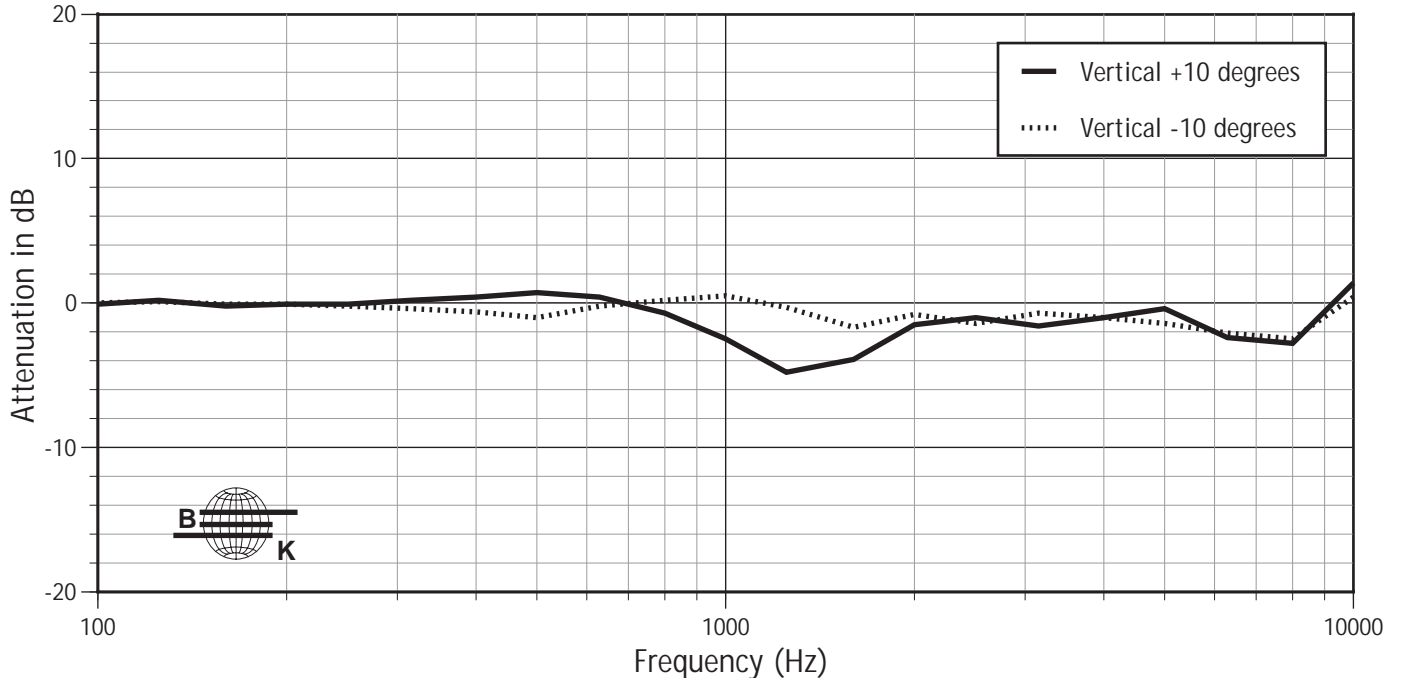


# PERFORMANCE SPECIFICATIONS ASR695

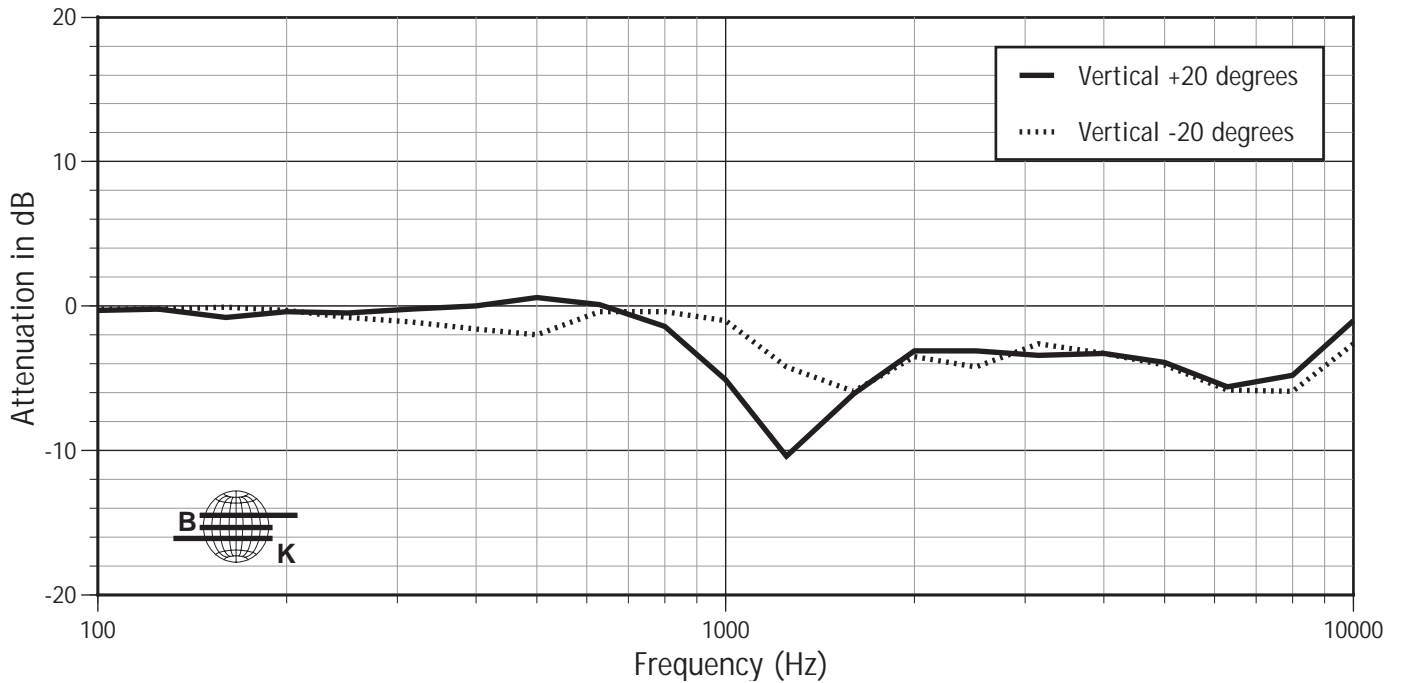
## VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

### ASR695 Vertical $\pm 10^\circ$



### ASR695 Vertical $\pm 20^\circ$



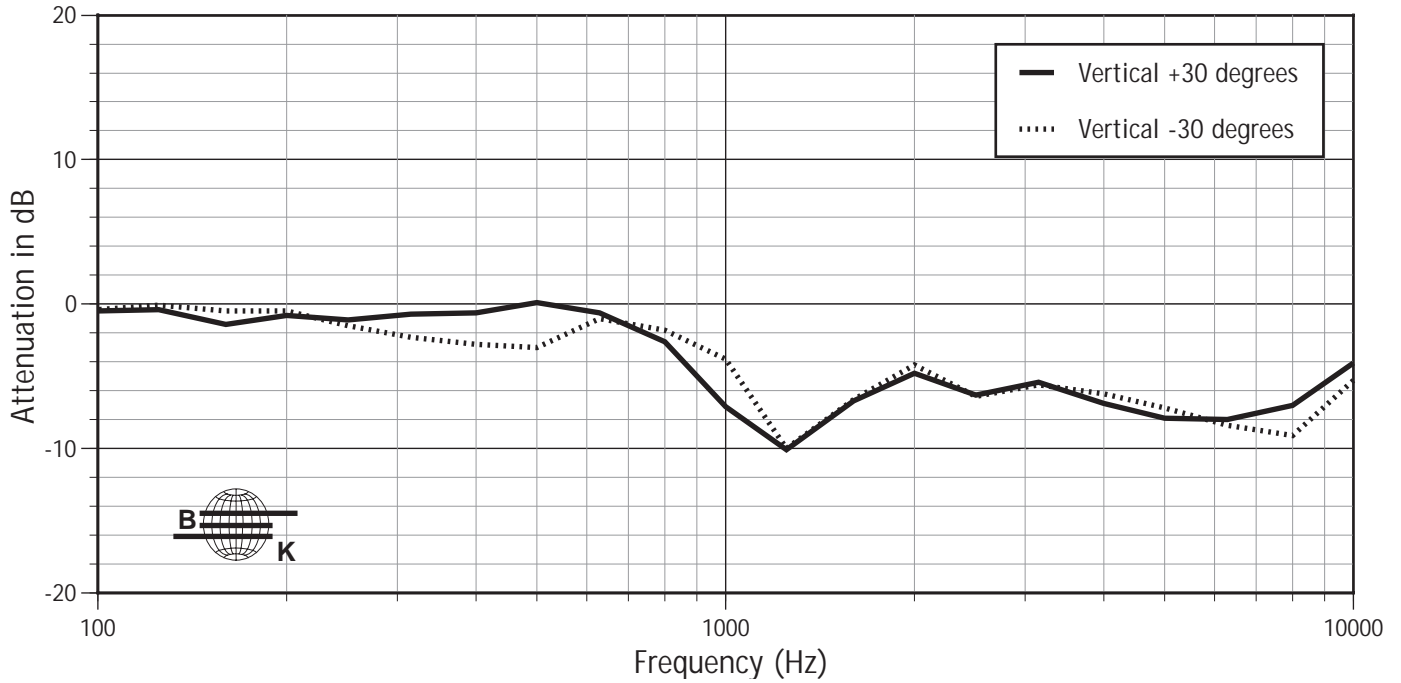


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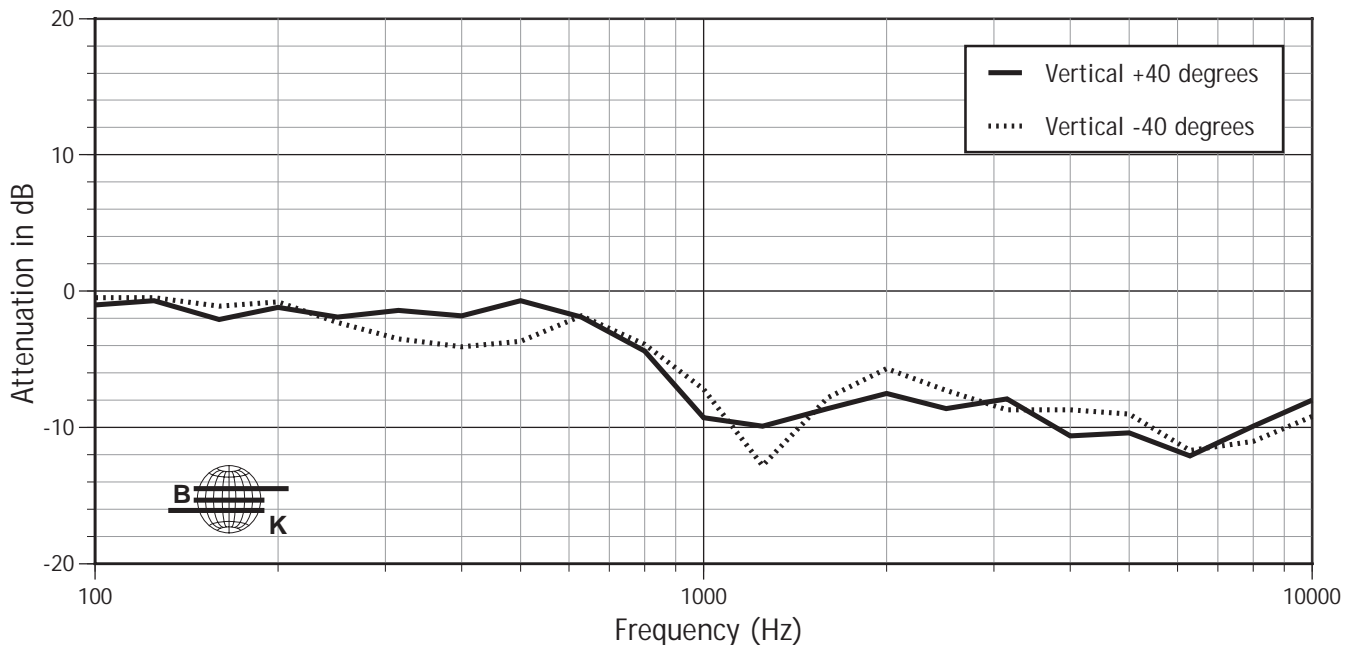
## VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.

### ASR695 Vertical $\pm 30^\circ$

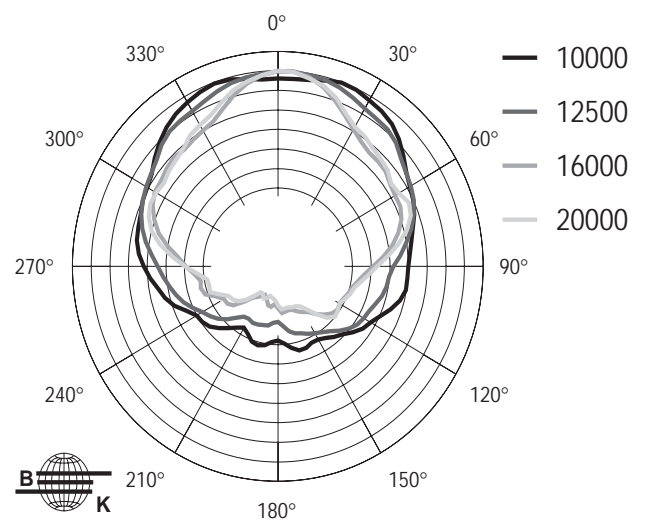
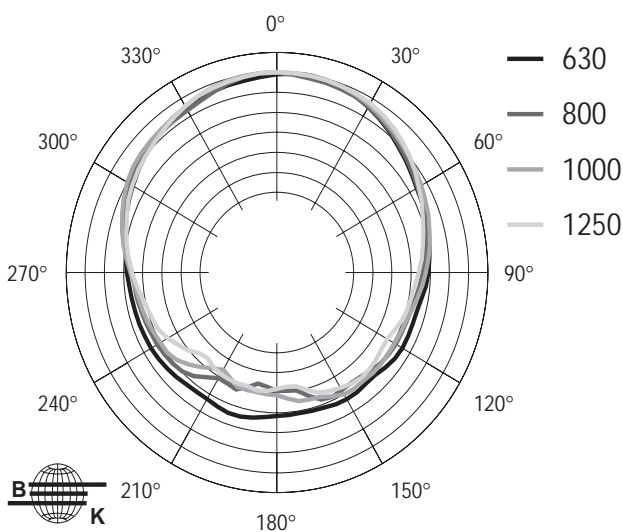
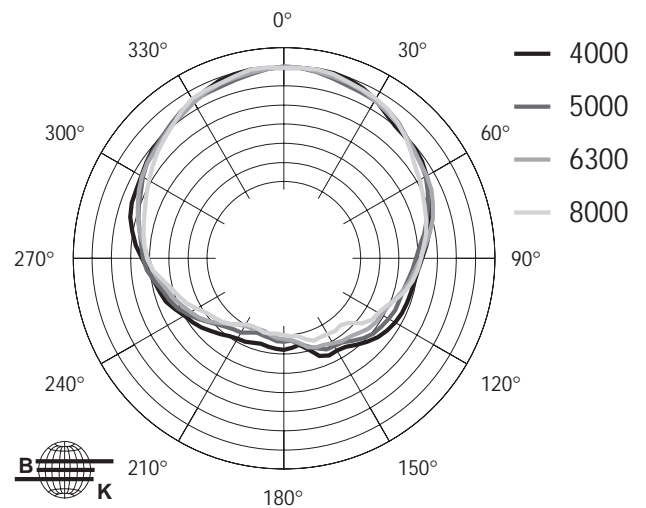
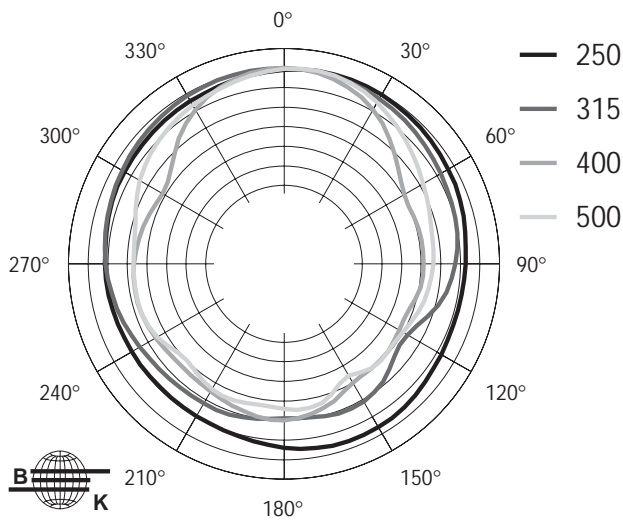
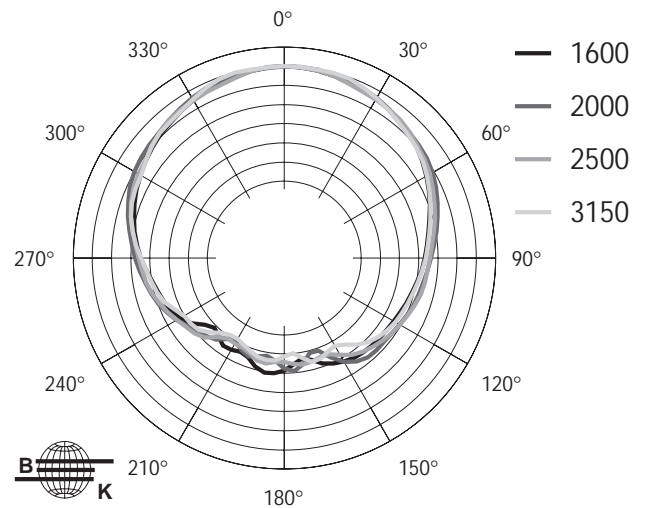
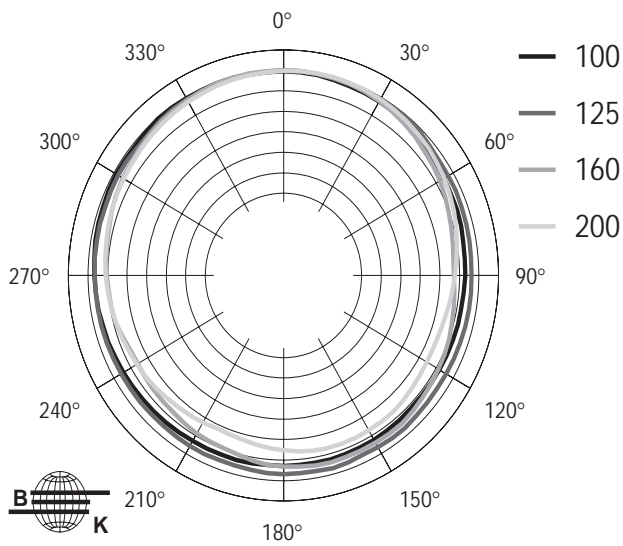


### ASR695 Vertical $\pm 40^\circ$





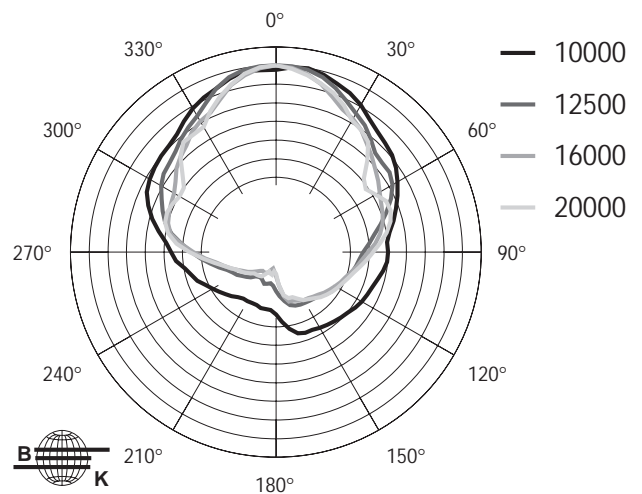
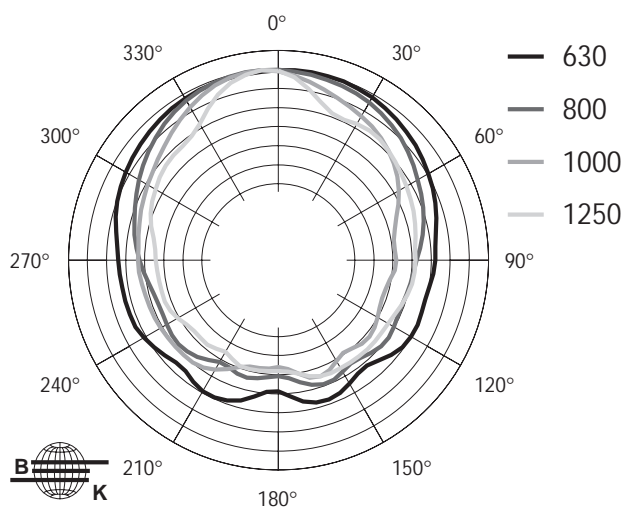
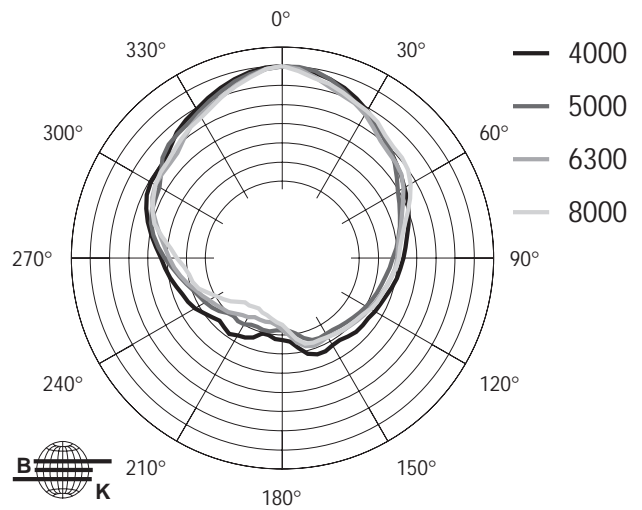
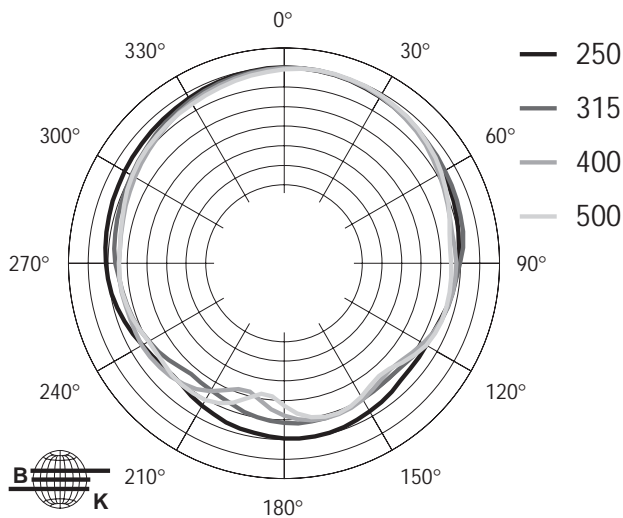
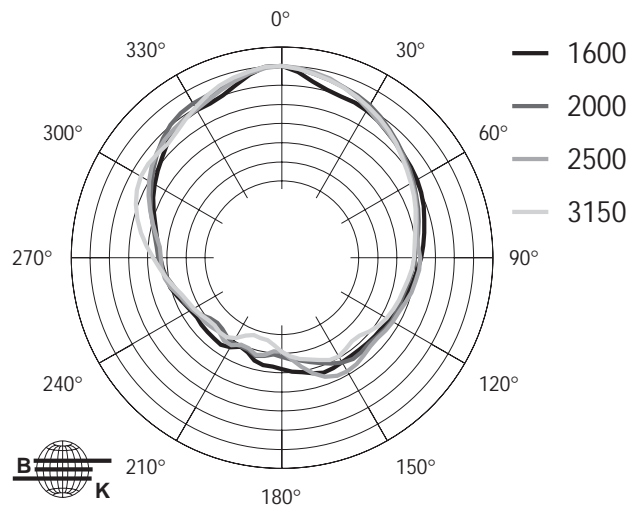
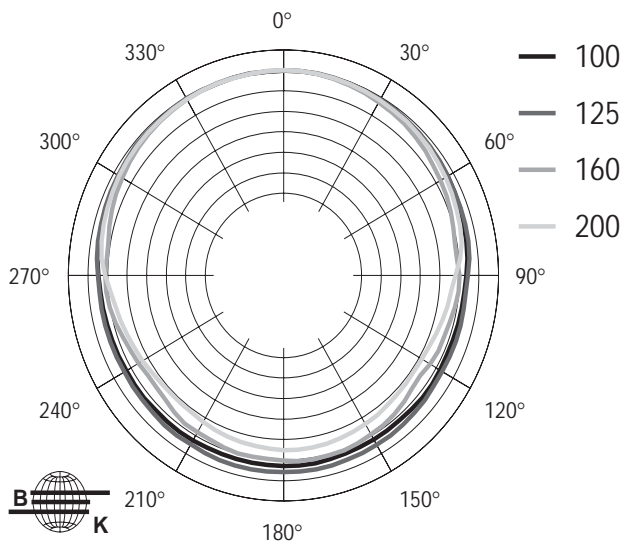
# HORIZONTAL 1/3 OCTAVE POLAR DATA ASR695



6 db/div.



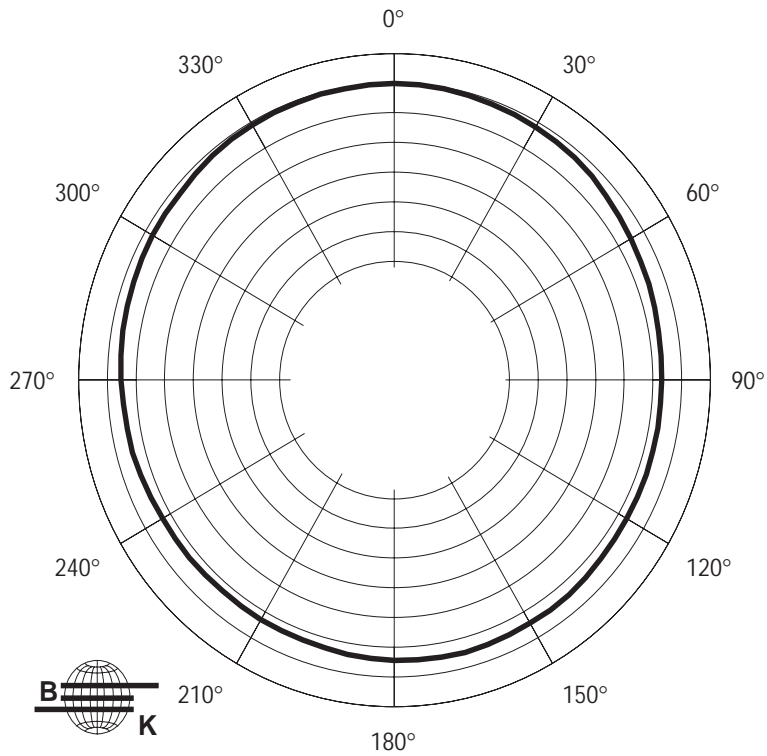
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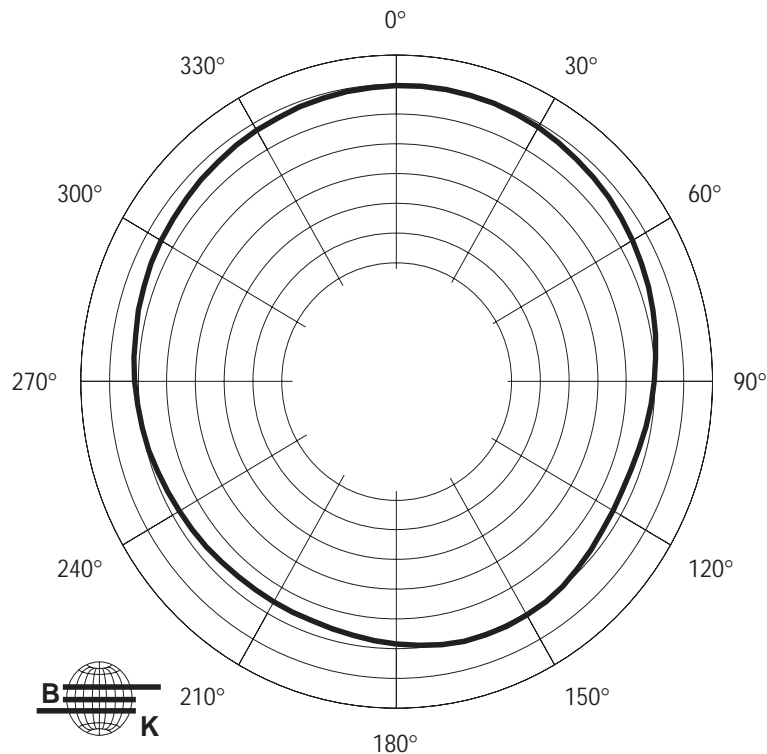


# HORIZONTAL OCTAVE POLAR DATA ASR695

## ASR695 125 Hz Horizontal Octave Polar Data



## ASR695 250 Hz Horizontal Octave Polar Data

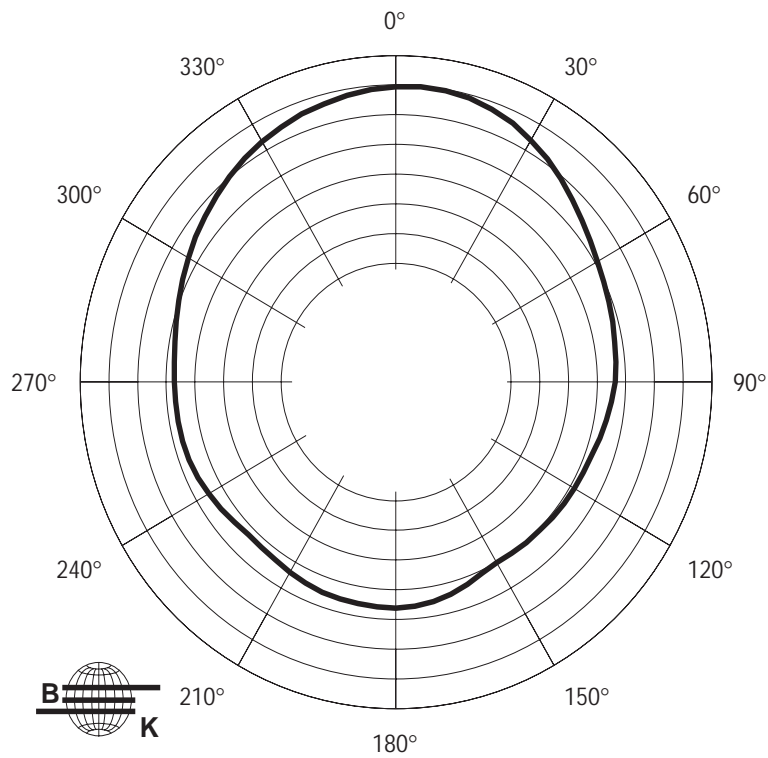


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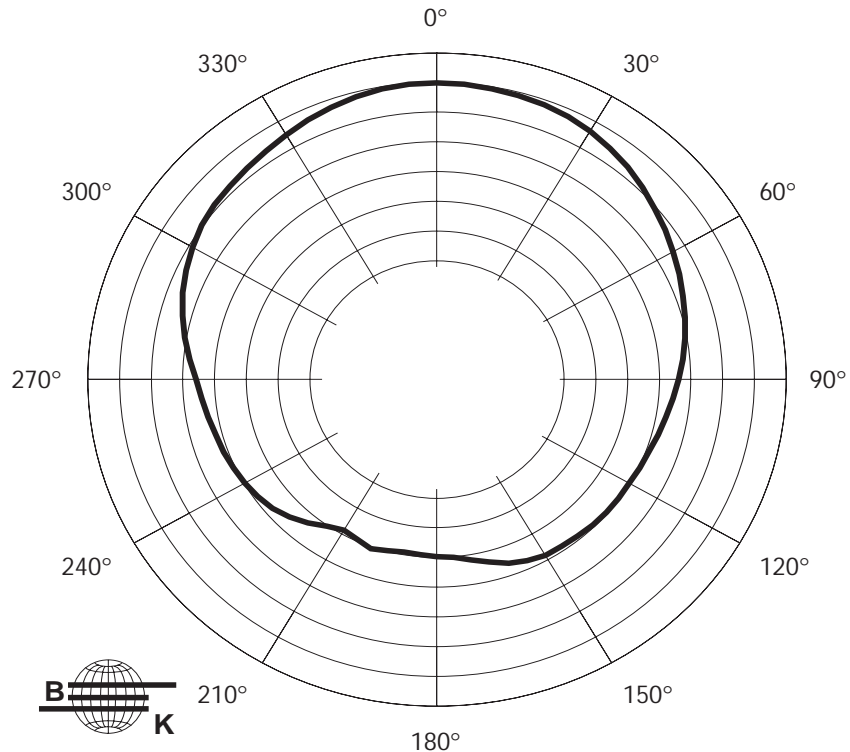


# HORIZONTAL OCTAVE POLAR DATA ASR695

## ASR695 500 Hz Horizontal Octave Polar Data



## ASR695 1000 Hz Horizontal Octave Polar Data

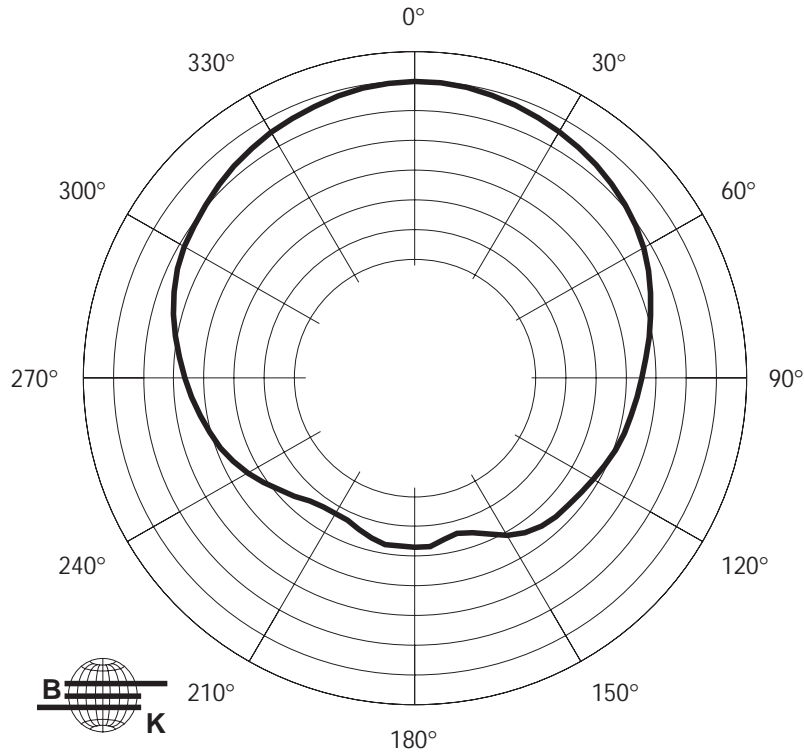


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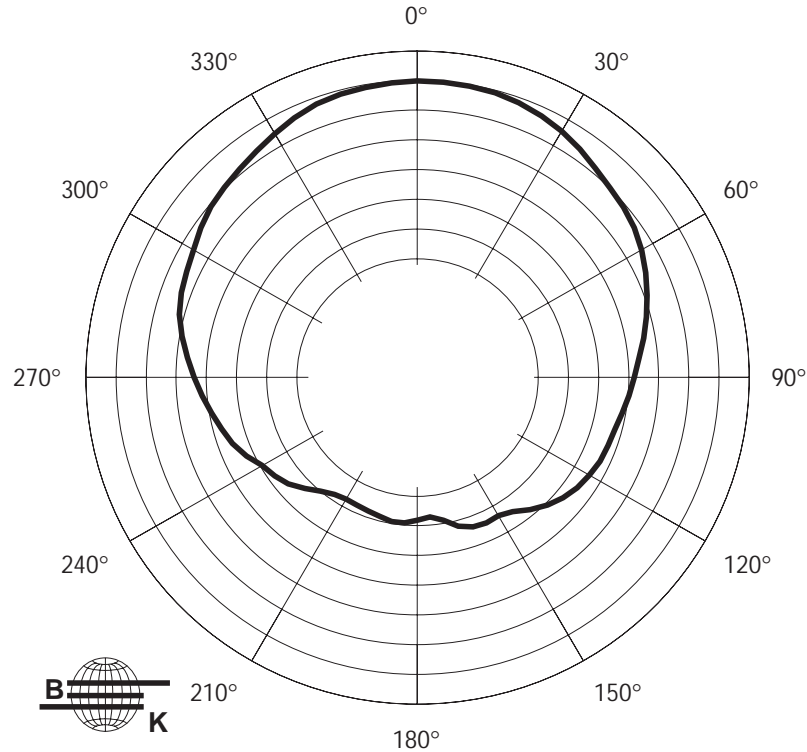


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## ASR695 2000 Hz Horizontal Octave Polar Data



## ASR695 4000 Hz Horizontal Octave Polar Data

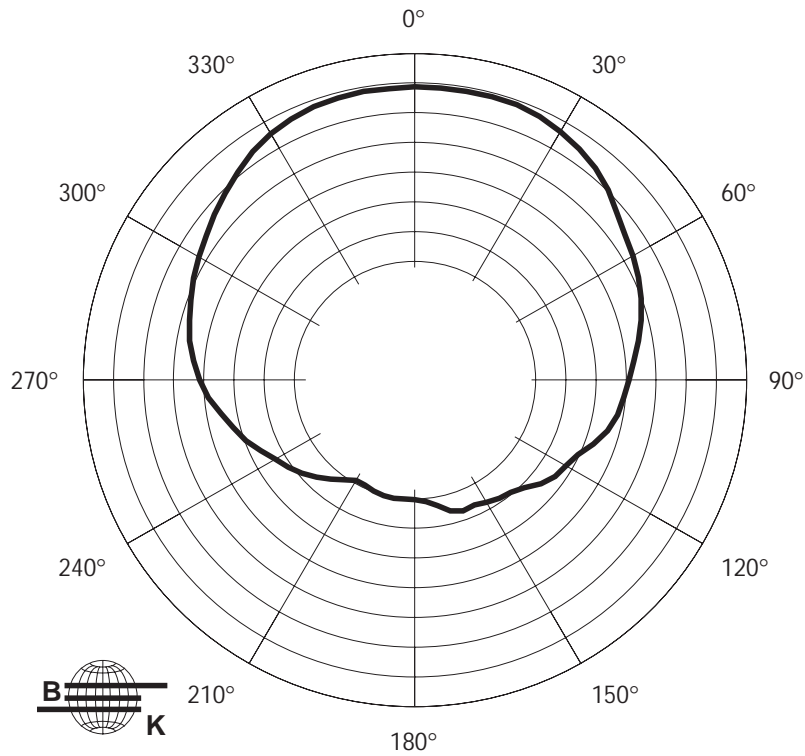


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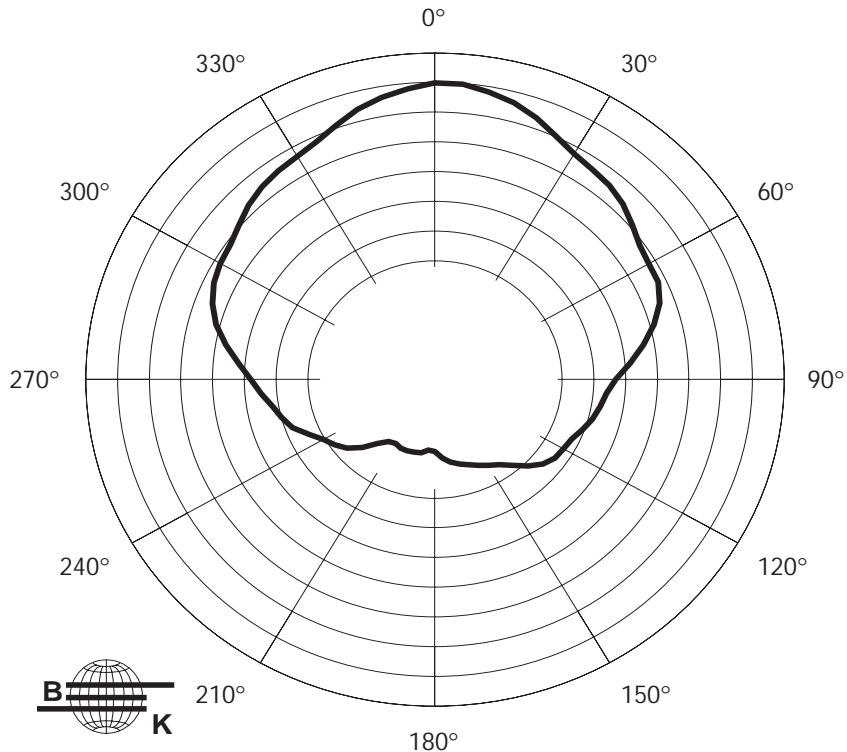


# HORIZONTAL OCTAVE POLAR DATA ASR695

## ASR695 8000 Hz Horizontal Octave Polar Data



## ASR695 16000 Hz Horizontal Octave Polar Data

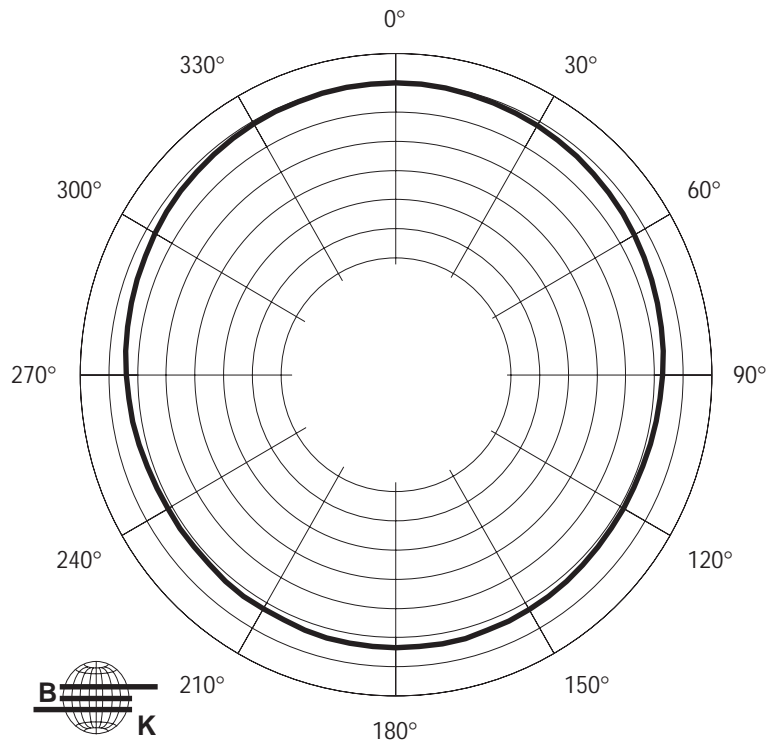


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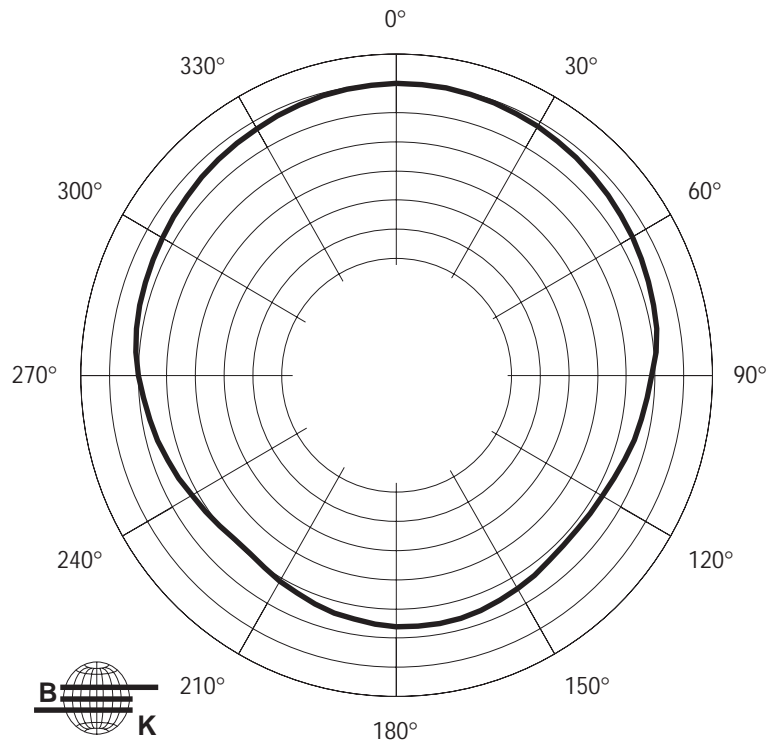


# VERTICAL OCTAVE POLAR DATA ASR695

## ASR695 125 Hz Vertical Octave Polar Data



## ASR695 250 Hz Vertical Octave Polar Data

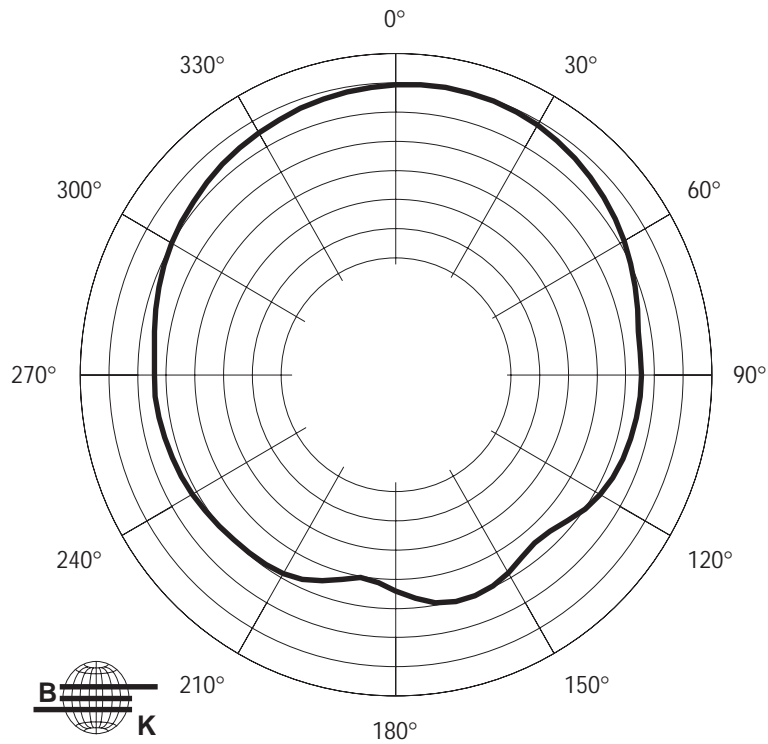


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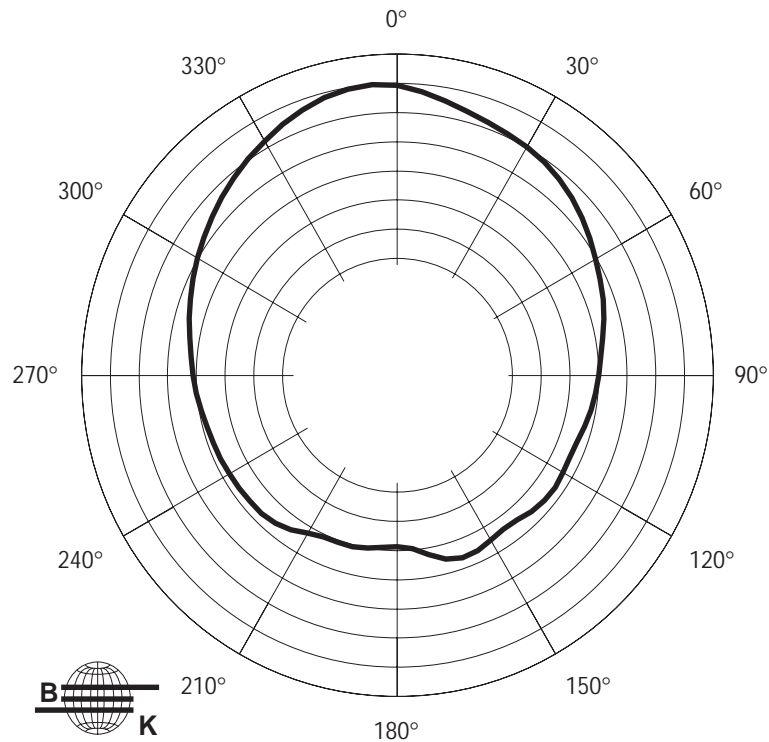


# VERTICAL OCTAVE POLAR DATA ASR695

## ASR695 500 Hz Vertical Octave Polar Data



## ASR695 1000 Hz Vertical Octave Polar Data

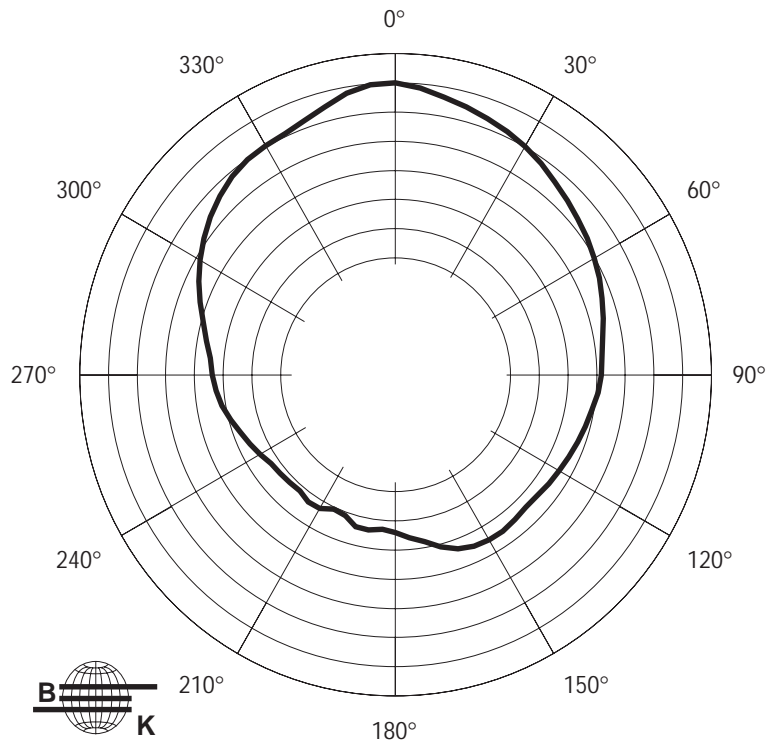


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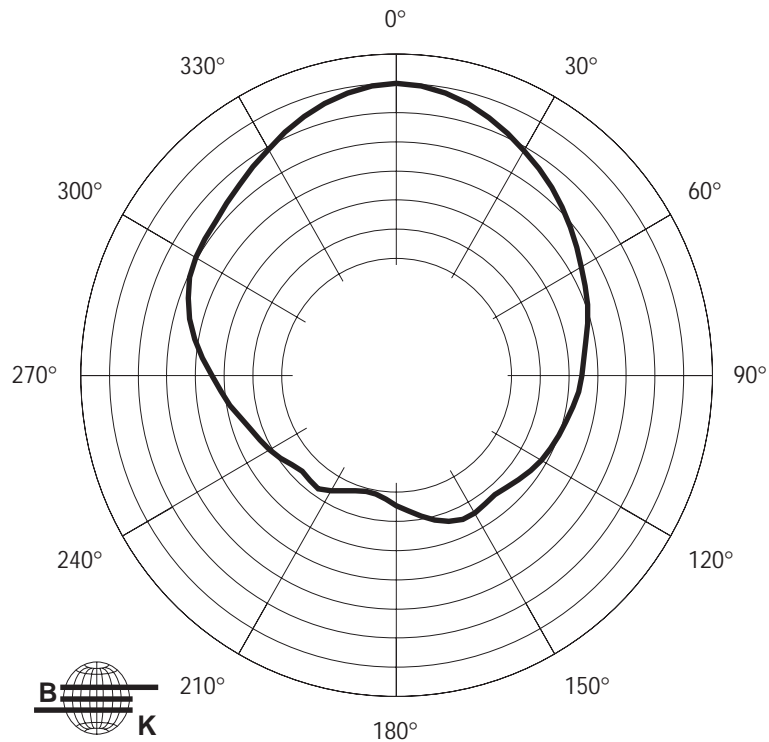


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## ASR695 2000 Hz Vertical Octave Polar Data



## ASR695 4000 Hz Vertical Octave Polar Data

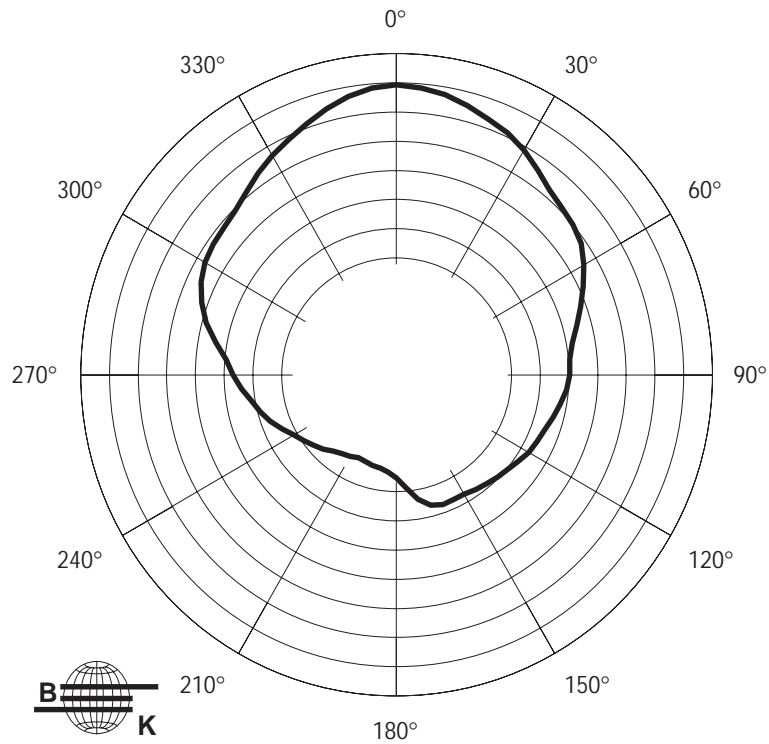


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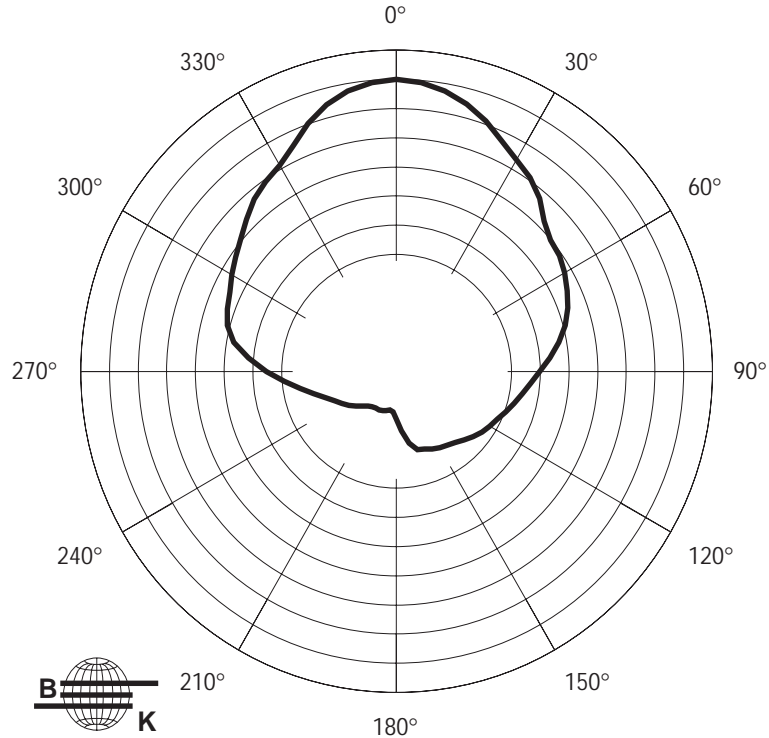


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