



TECHNICAL SPECIFICATIONS JF80

DESCRIPTION

A 2-way full range system (passive LF/HF crossover) in a compact vented trapezoidal enclosure. Includes 2x 6.5-in woofers and a 1-in exit compression driver on a Wave Guide Plate™.

APPLICATIONS

The JF80 is engineered for exceptional performance in the nearfield from a compact enclosure. Surprisingly high output, exceptional fidelity. Very effective as a fill/delay elements in larger overall systems or for foreground/background music reproduction. Six year warranty.

Applications include:

- Band PA
- MultiMedia
- Small Retail Spaces
- Presentation Suite
- Small HOW's
- Theaters

DESCRIPTIVE DATA

Part Number	999519
Product Group	J
LF Subsystem & Loading	2x 6.5-in Cones
HF Subsystem & Loading	1-in Exit Compression Driver on Wave Guide Plate™
System Configuration	2-way, Full Range
Powering Configuration(s)	Passive LF/HF Crossover
Recommended High-Pass Frequency (24 dB/Octave)	70Hz
Cabinet Type (shape)	Trapezoidal
Enclosure Materials	Baltic Birch Plywood
Finish	Black Catalyzed Polyurethane
Connectors	2x Neutrik NL4 Speakon 2-Terminal Barrier Strip
Suspension Hardware	(6) 1/4"-20 Threaded Mounting/ Suspension Points (1 each top and bottom plus 4 back for Omnimount Series 100), (2) 5/16"-18 threaded points for external Ultimate Brand standmount adapter
Grill	Vinyl Coated Perforated Steel
Options	980002 Wallmount Bracket



NOMINAL DATA

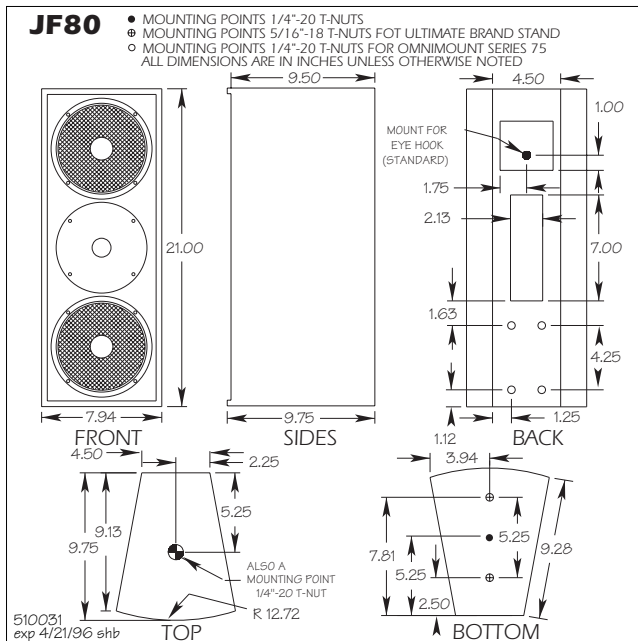
Frequency Response (Hz)		
±3 dB	85Hz to 18kHz	
-10 dB	50Hz	
Axial Sensitivity (dB SPL/1 Watt/1m)		
93		
Impedance (Ohms)		
8		
Power Handling (Watts)		
AES Standard	460	
Calculated Maximum Output (dB SPL, @ 1m)		
Peak	125.6	
Long Term	119.6	
Nominal Coverage Angle / -6 dB points (degrees)		
Horizontal	100	
Vertical	80	
Recommended Complementary Systems		
Sub	SB150 / SB180	
Dimensions		
	inches	millimeters
Height	20.9375	532
Width	7.8125	198
Depth	9.75	248
Back Width	4.5	114
Trapezoid Angle	10 degrees per side	
Weights		
	pounds	kilograms
Net Weight	25	11.4
Shipping Weight (per pair)	62	28.2





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DIMENSIONAL DRAWING



SERVICE ITEMS

LF: Complete Cone Driver	EAW Part No.	804003
HF: Complete Compression Driver/Tweeter	EAW Part No.	803005
HF: Diaphragm Assembly	EAW Part No.	806015
Filter/Crossover Network: Complete Assembly	EAW Part No.	225004

ARCHITECTURAL SPECIFICATIONS

The two-way full range loudspeaker systems shall incorporate 2x 6.5-in LF transducers and a 1-in exit compression driver HF transducer.

The HF driver shall be loaded on an axis-symmetrical wave guide plate with a nominal coverage pattern of 100° (h) x 80° (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 85 Hz to 18 kHz measured on axis. The loudspeaker shall produce a Sound Pressure Level (SPL) of 93 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 125.6 SPL on axis at 1 meter. The loudspeaker shall handle 460 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 catalyzed polyurethane. Input connectors shall be 2-terminal barrier strip and dual Neutrik NL4 Speakon. The following mounting/suspension shall be provided: two 1/4"-20 threaded mounting/suspension points (1 each top and bottom); four 1/4"-20 threaded mounting/suspension points on back to attach an Omnimount Series 100; two 5/16"-18 threaded mounting/suspension points (bottom) for external Ultimate Brand standmount adapter. The front of the loudspeaker shall be covered with a vinyl coated perforated steel grill backed with open cell foam to protect against dust.

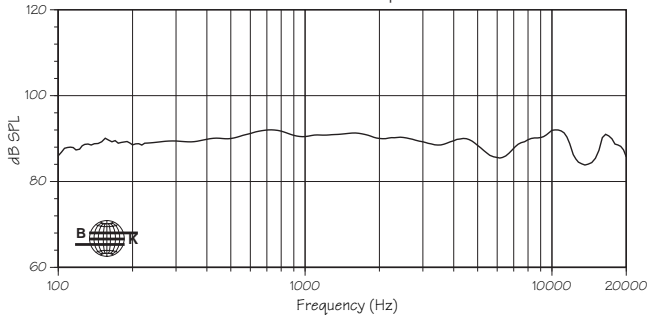
The two-way full range loudspeaker shall be the EAW model JF80.



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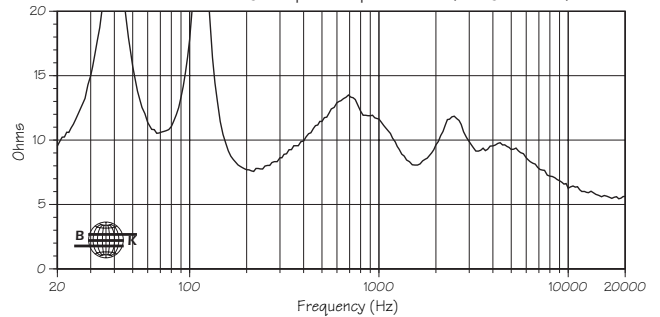
FREQUENCY RESPONSE

JF80 Axial Response



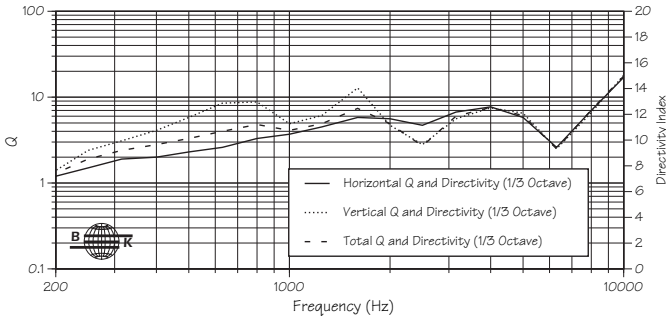
INPUT IMPEDANCE

JF80 Full Range Input Impedance (Magnitude)



Q & DIRECTIVITY INDEX (DI)

JF80 Q and Directivity

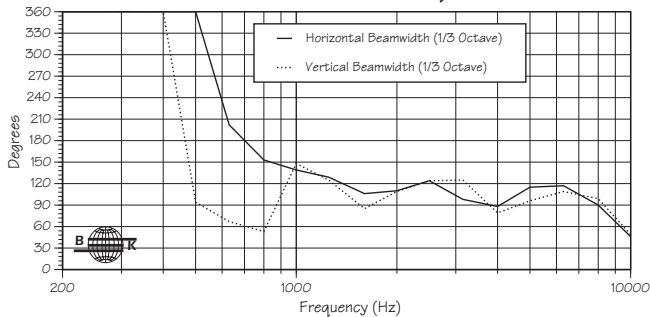


Q & BEAMWIDTH BY FREQUENCY

Freq	Hor Q & Dir	Ver Q & Dir	Tot Q & Dir	Hor Beamwidth	Ver Beamwidth
100	1	0.8	0.7	360	360
125	1.3	1.2	1.2	360	360
160	1.4	1.8	1.6	360	360
200	1.2	1.4	1.3	360	360
250	1.5	2.4	1.9	360	360
315	1.9	3.1	2.4	360	360
400	2	4.1	2.8	360	360
500	2.3	5.8	3.3	360	94
630	2.6	8.5	4	202	67
800	3.3	8.8	4.8	153	53
1000	3.7	4.9	4.1	139	148
1250	4.5	6.1	4.9	129	125
1600	5.8	12.8	7.4	106	85
2000	5.6	4.7	4.9	110	109
2500	4.7	2.8	2.7	124	124
3150	6.7	5.6	6	98	125
4000	7.7	7.5	7.6	88	79
5000	5.8	6.5	6.1	115	96
6300	2.6	2.5	2.5	117	109
8000	7	6.6	7.1	90	99
10000	17	18	17.6	46	49
12500	9.6	9.5	9.6	88	88
16000	16.2	14.8	15.3	61	65
20000	17.7	16.7	17.3	52	55

BEAMWIDTH

JF80 Beamwidth vs Frequency

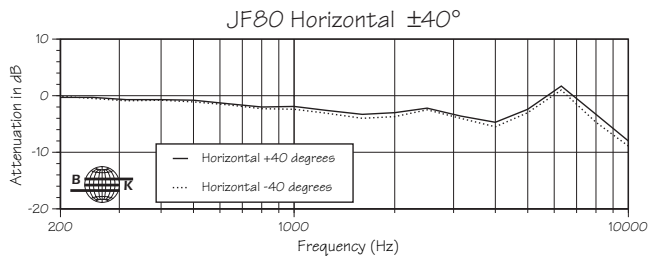
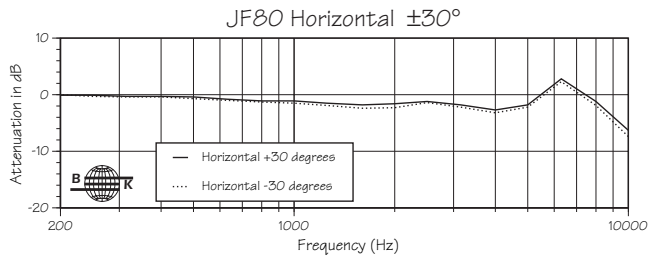
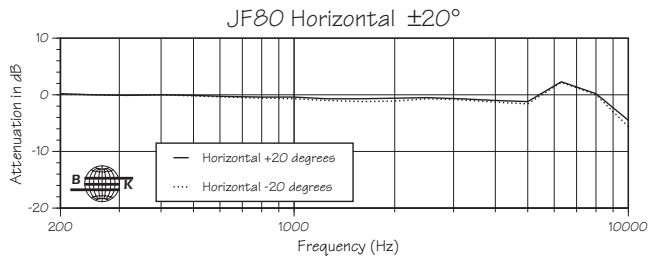
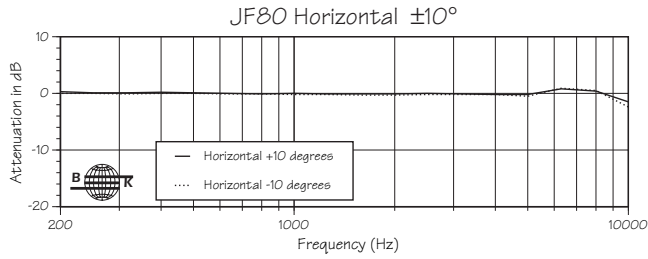




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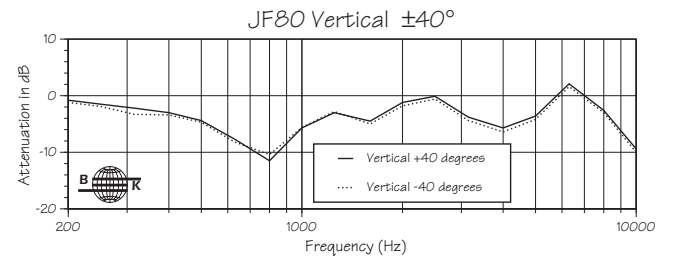
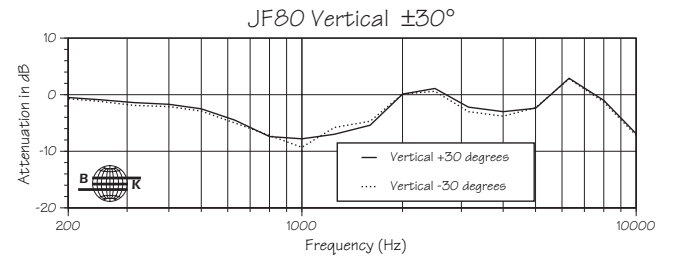
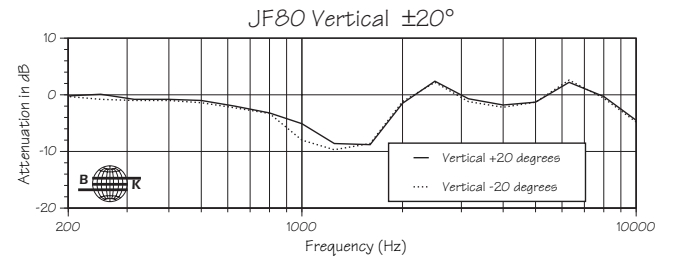
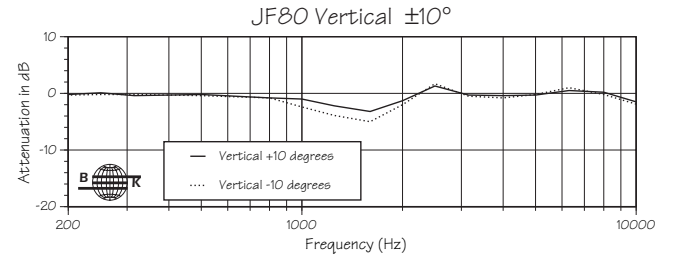
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



VERTICAL OFF-AXIS RESPONSE

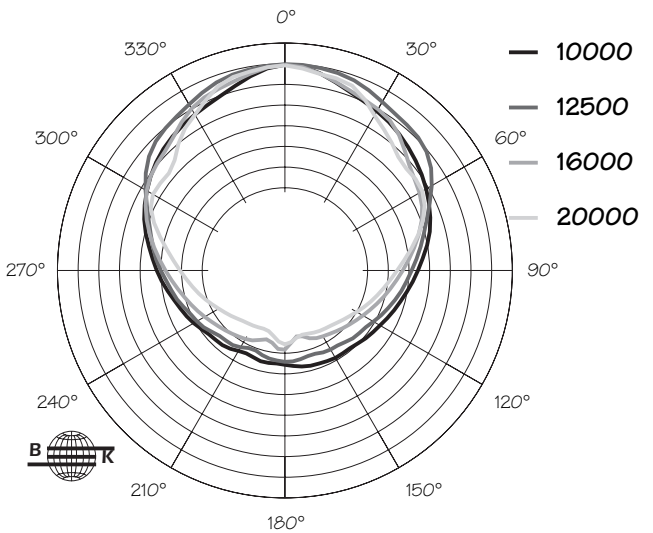
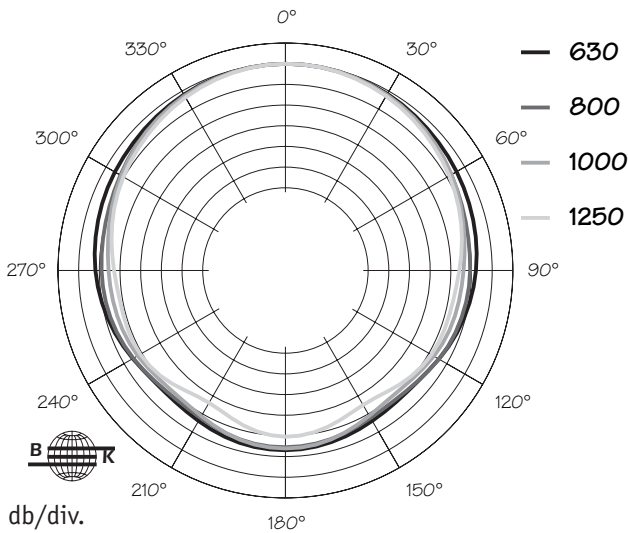
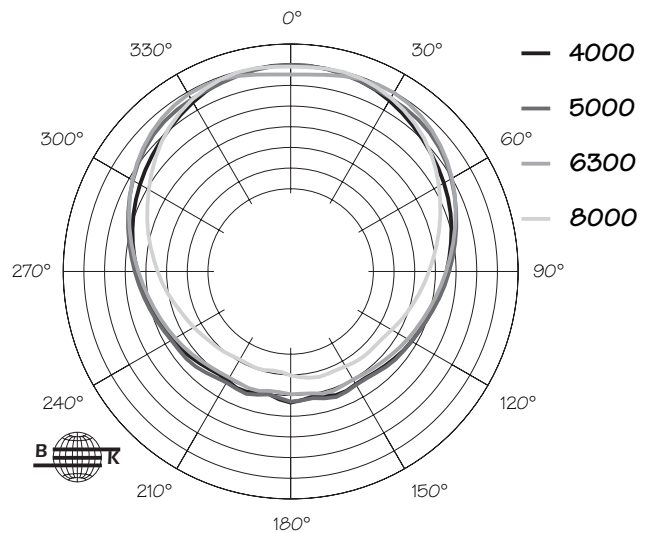
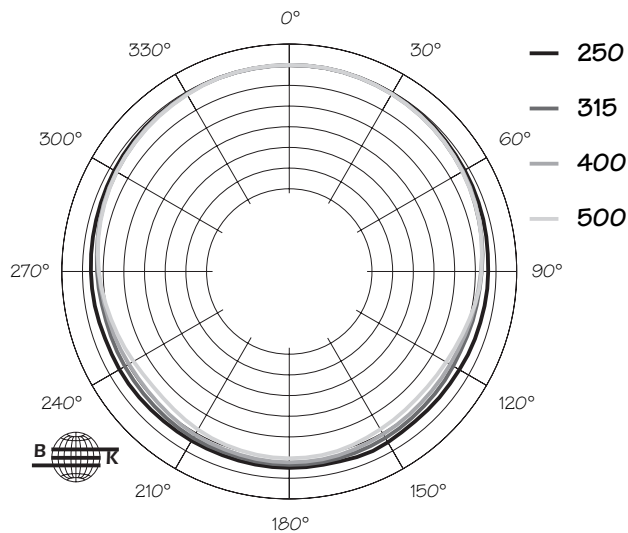
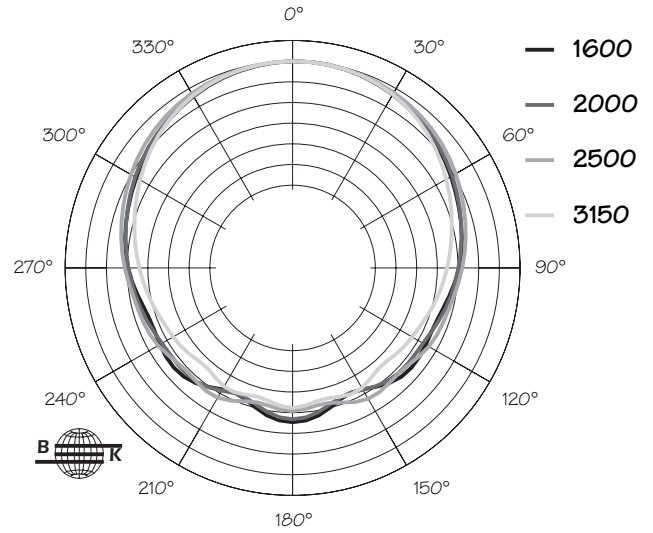
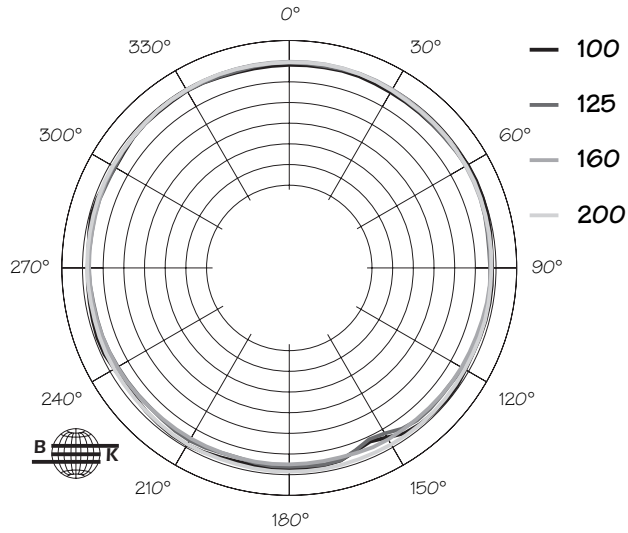
On-axis response normalized to 0 dB.





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HORIZONTAL 1/3 OCTAVE POLAR DATA

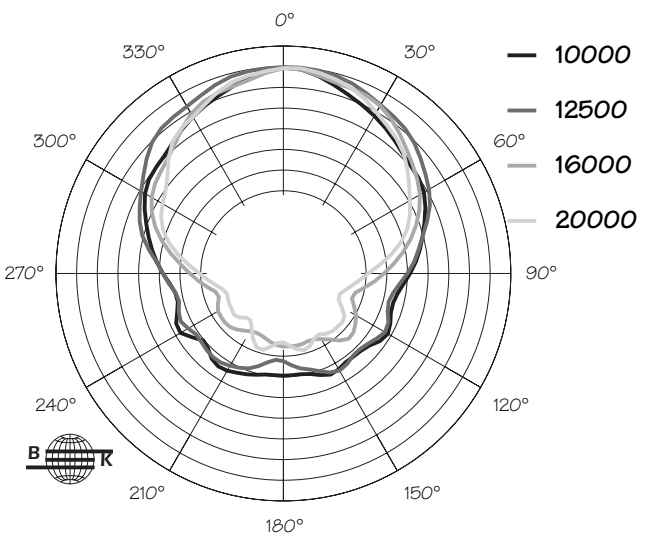
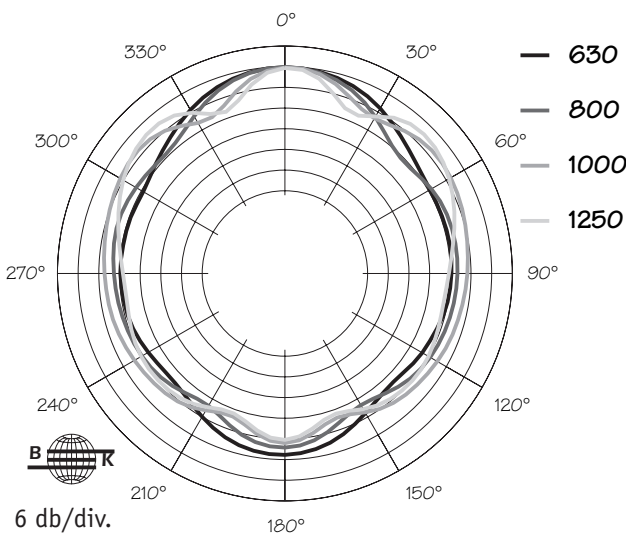
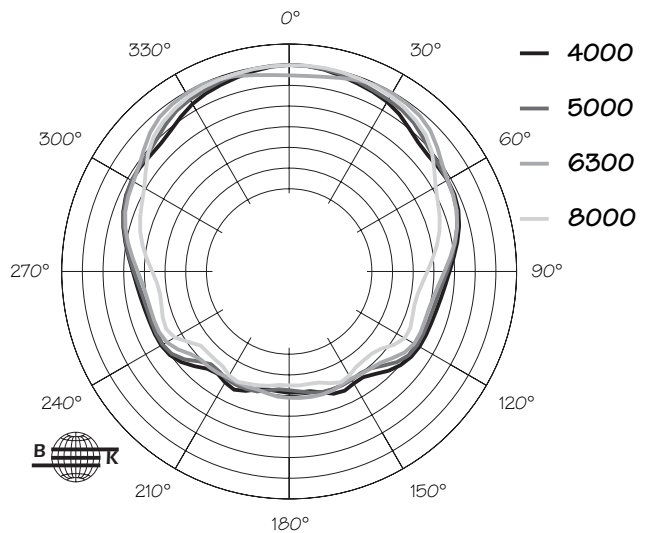
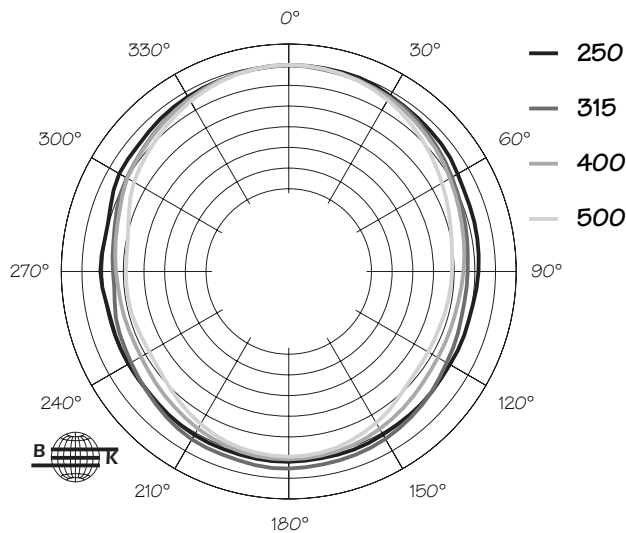
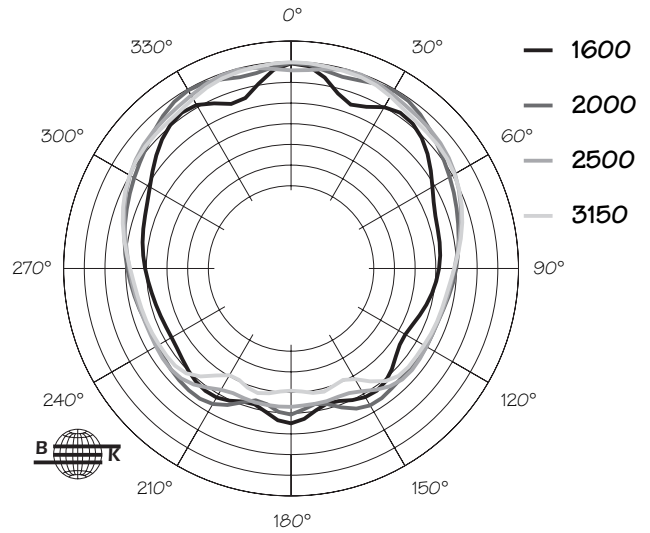
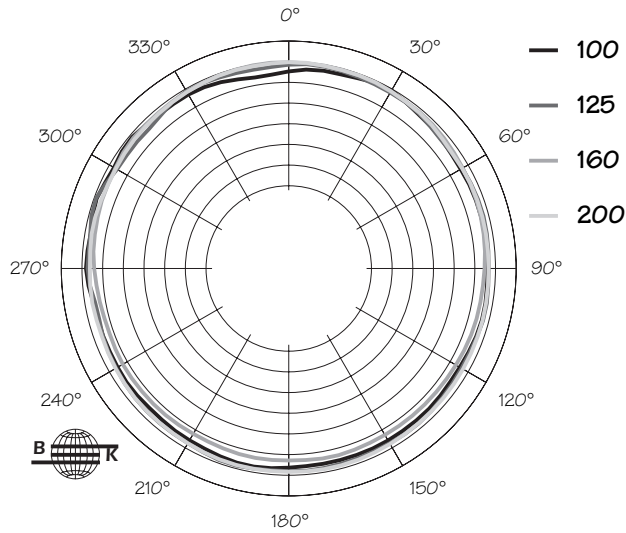


6 db/div.



TECHNICAL SPECIFICATIONS JF80

VERTICAL 1/3 OCTAVE POLAR DATA

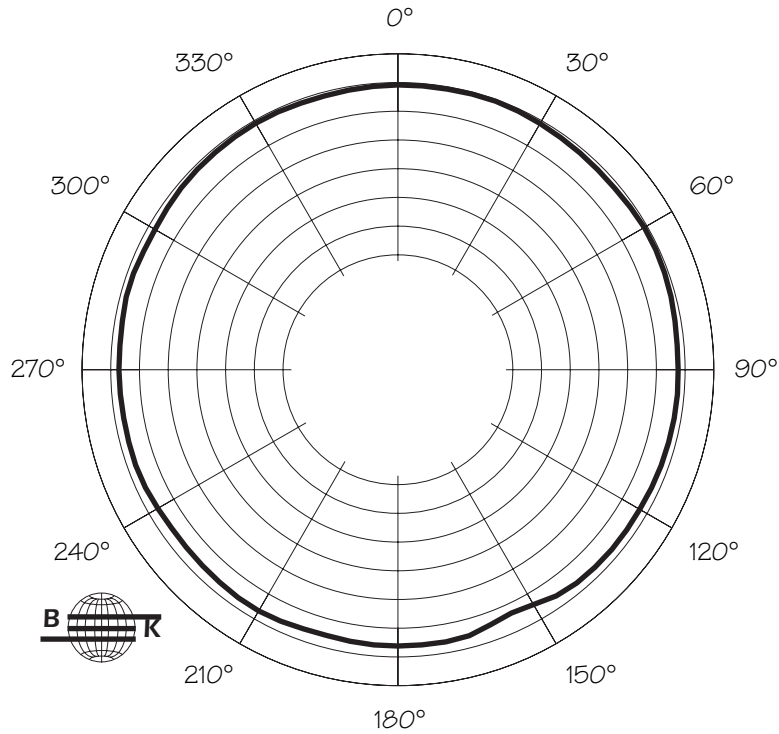




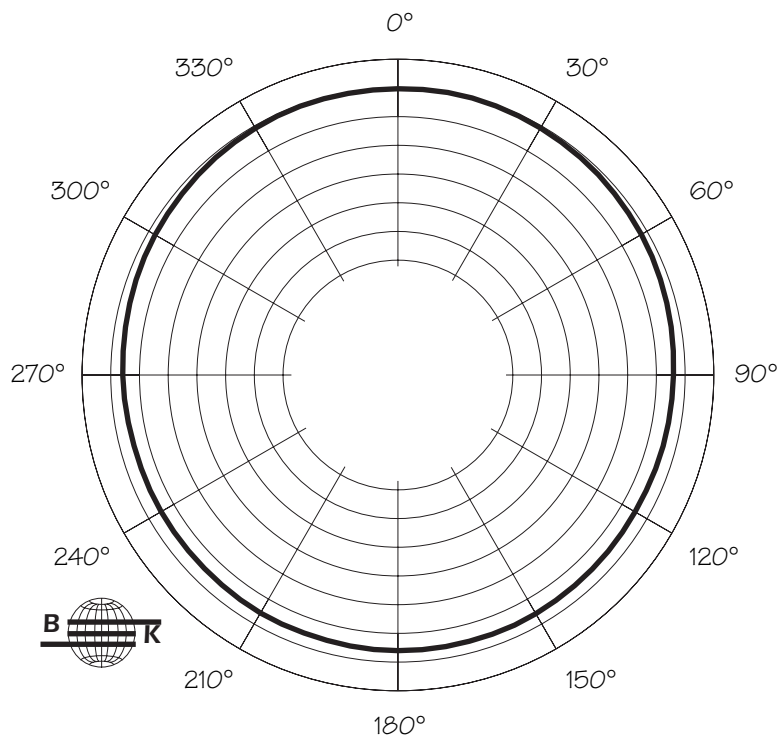
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HORIZONTAL OCTAVE POLAR DATA

JF80 125 Hz Horizontal Octave Polar Data



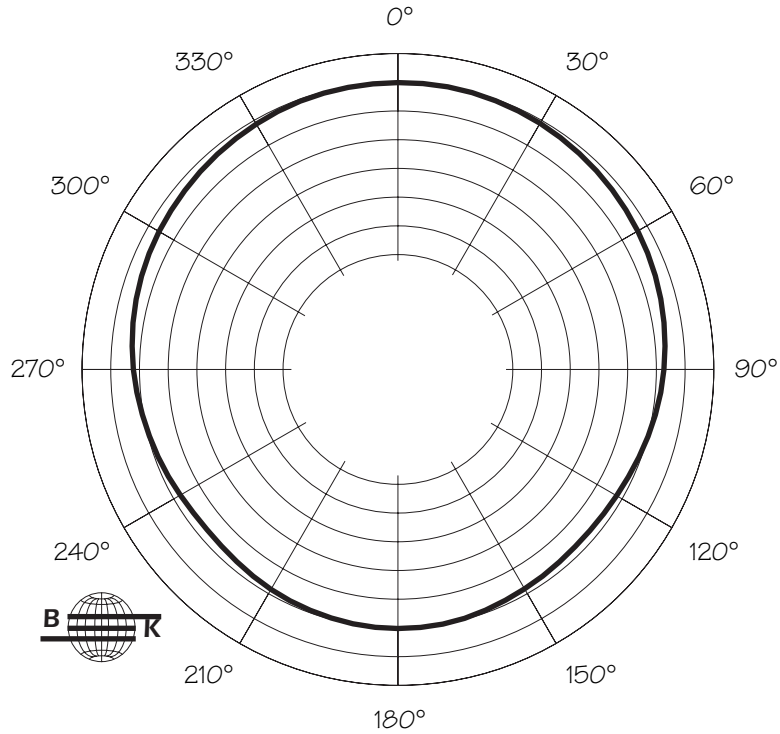
JF80 250 Hz Horizontal Octave Polar Data



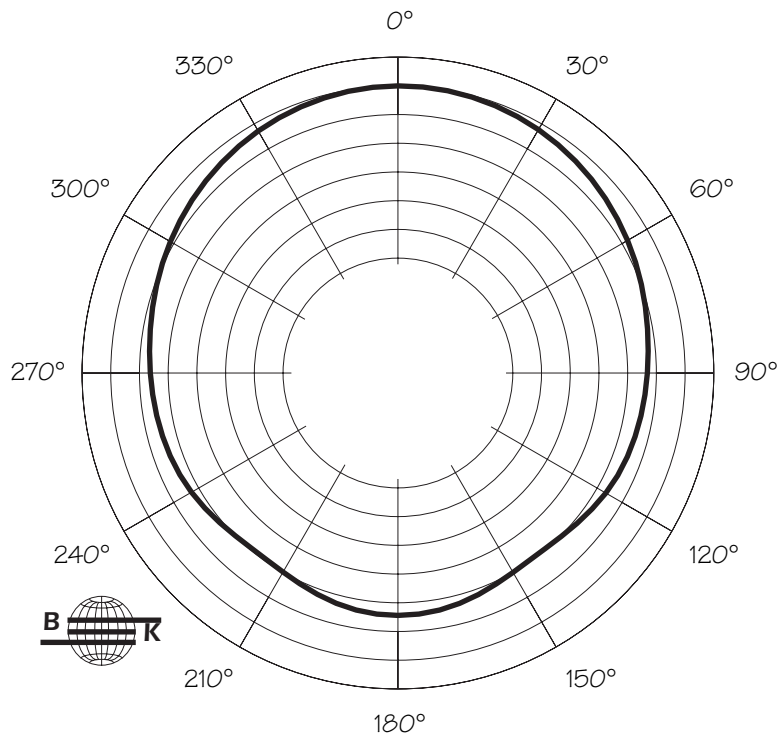


HORIZONTAL OCTAVE POLAR DATA

JF80 500 Hz Horizontal Octave Polar Data



JF80 1000 Hz Horizontal Octave Polar Data

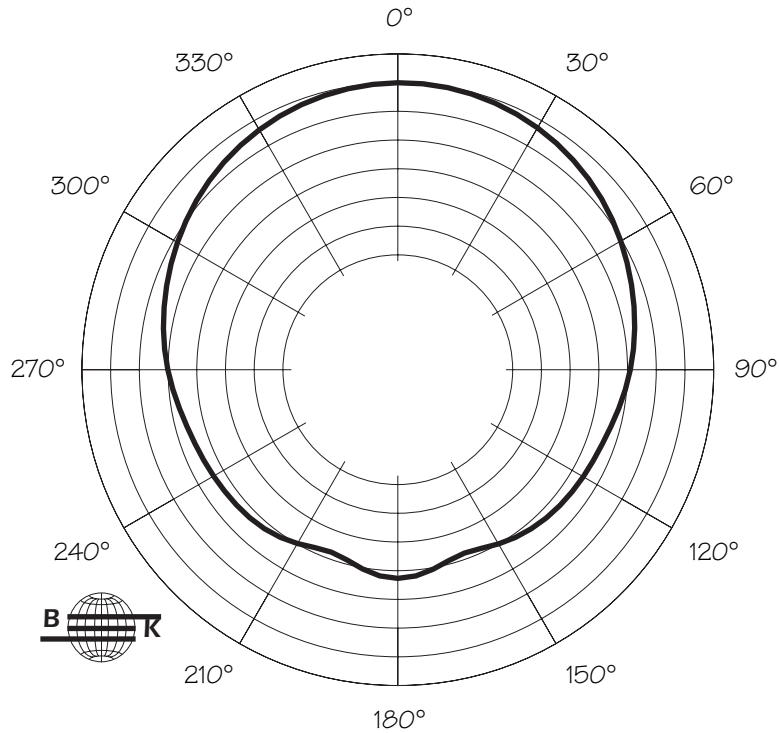




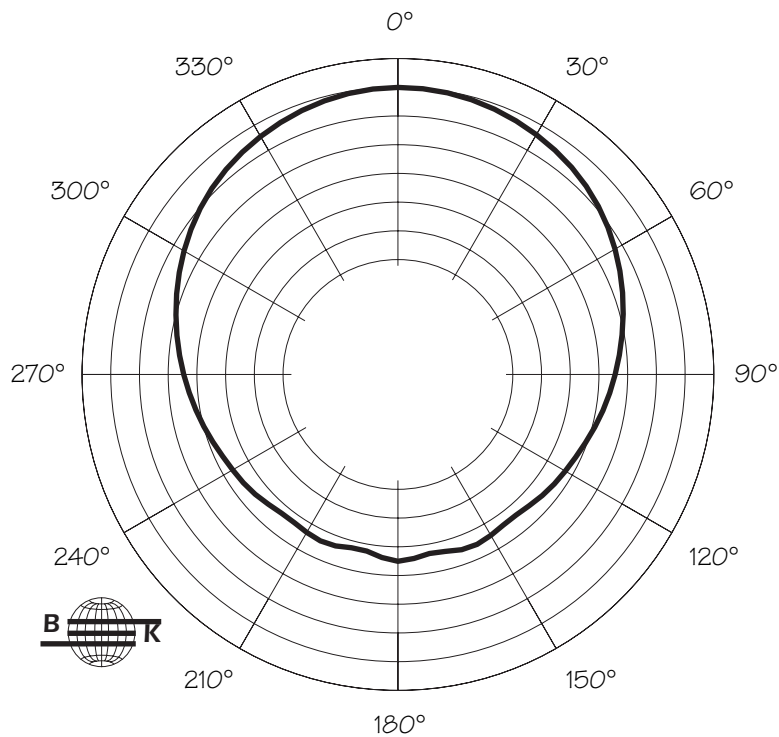
TECHNICAL SPECIFICATIONS JF80

HORIZONTAL OCTAVE POLAR DATA

JF80 2000 Hz Horizontal Octave Polar Data



JF80 4000 Hz Horizontal Octave Polar Data

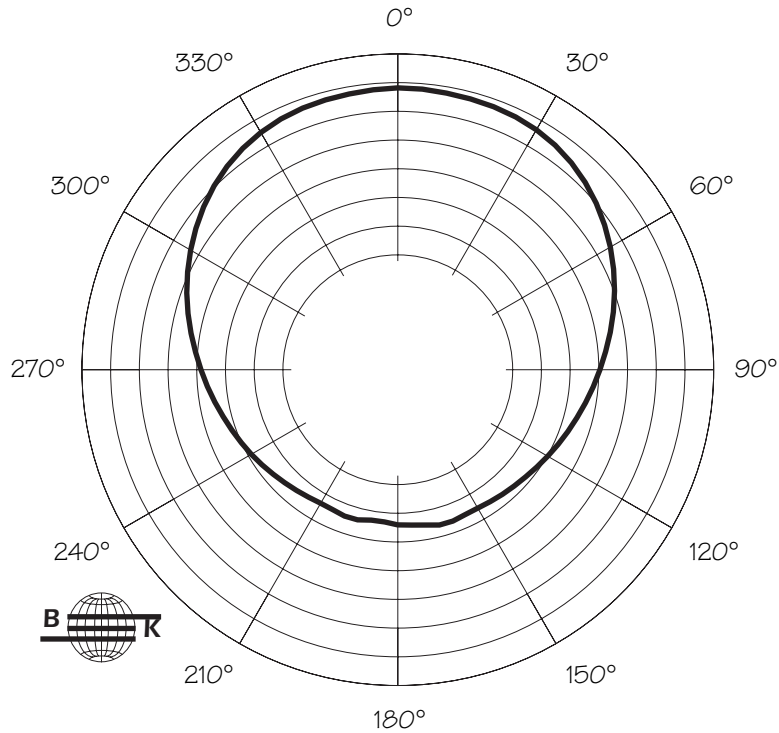




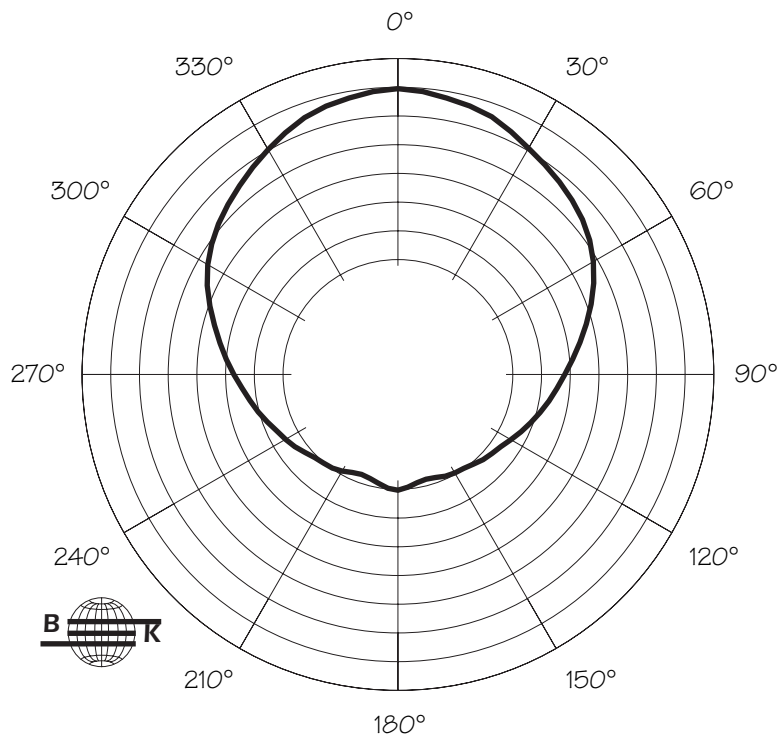
TECHNICAL SPECIFICATIONS JF80

HORIZONTAL OCTAVE POLAR DATA

JF80 8000 Hz Horizontal Octave Polar Data



JF80 16000 Hz Horizontal Octave Polar Data

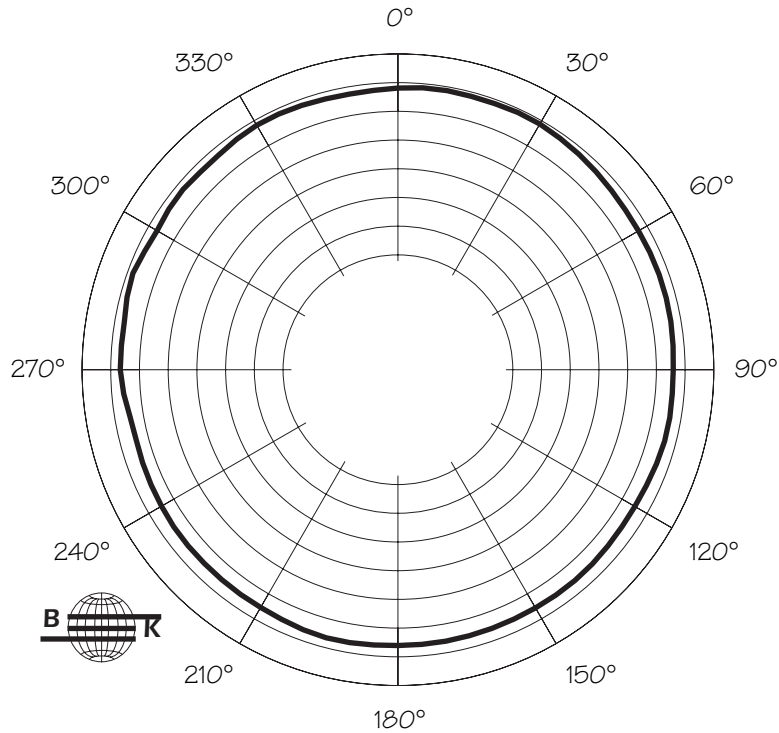




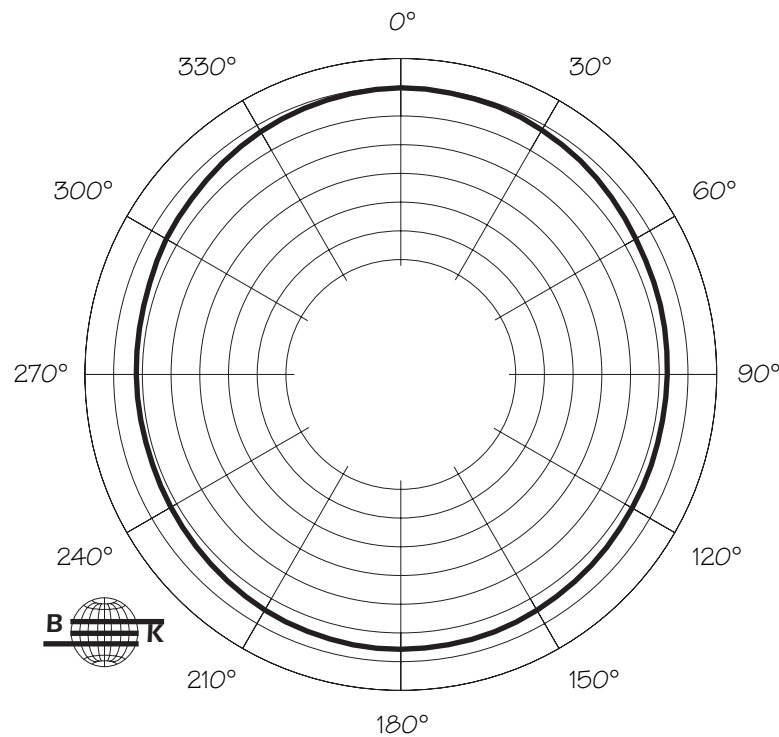
TECHNICAL SPECIFICATIONS JF80

VERTICAL OCTAVE POLAR DATA

JF80 125 Hz Vertical Octave Polar Data



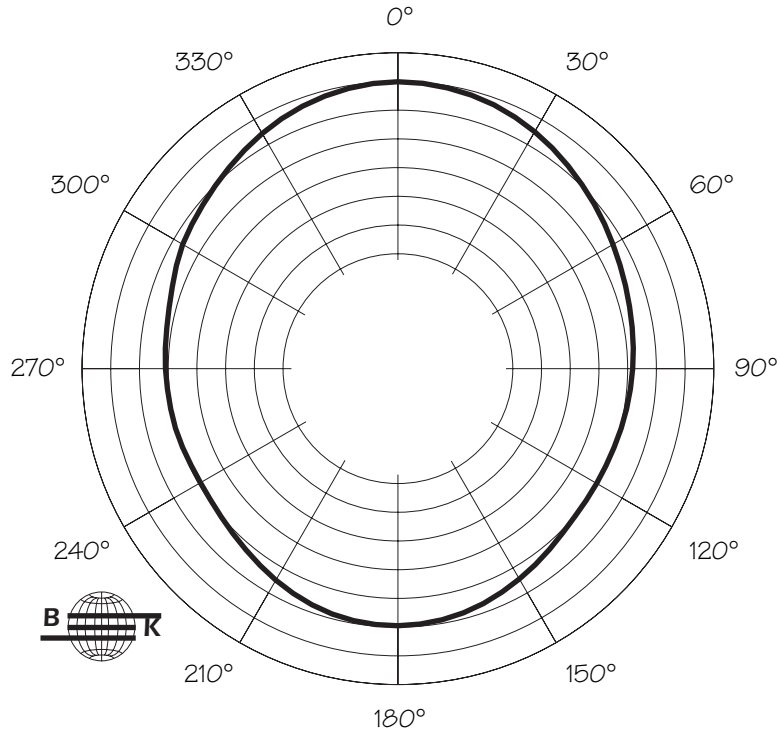
JF80 250 Hz Vertical Octave Polar Data



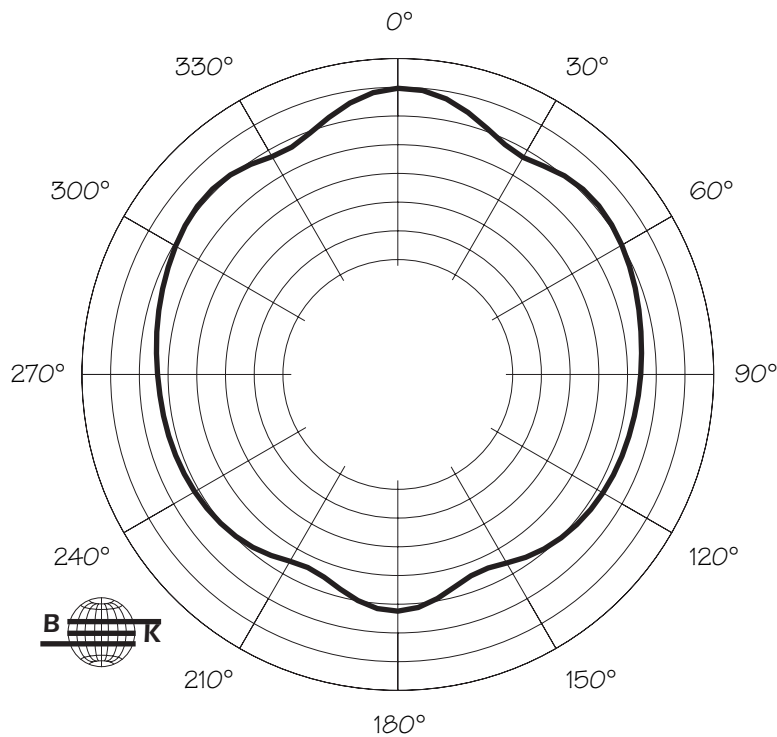


VERTICAL OCTAVE POLAR DATA

JF80 500 Hz Vertical Octave Polar Data



JF80 1000 Hz Vertical Octave Polar Data

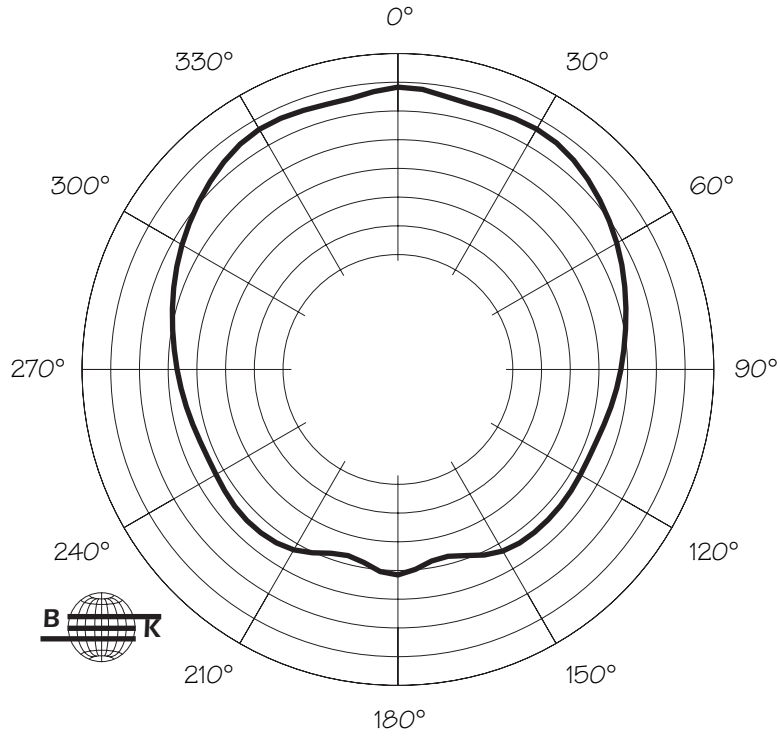




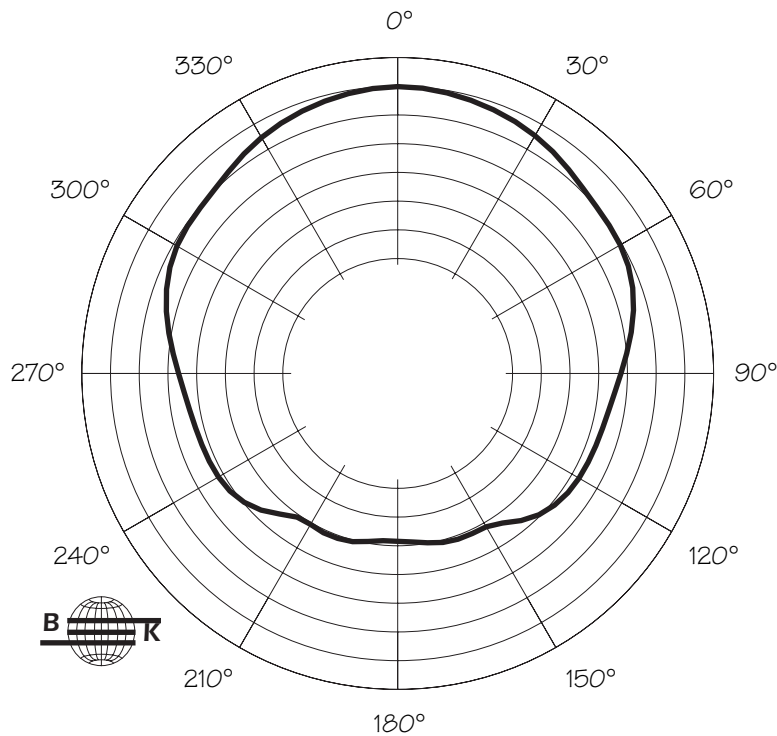
TECHNICAL SPECIFICATIONS JF80

VERTICAL OCTAVE POLAR DATA

JF80 2000 Hz Vertical Octave Polar Data



JF80 4000 Hz Vertical Octave Polar Data

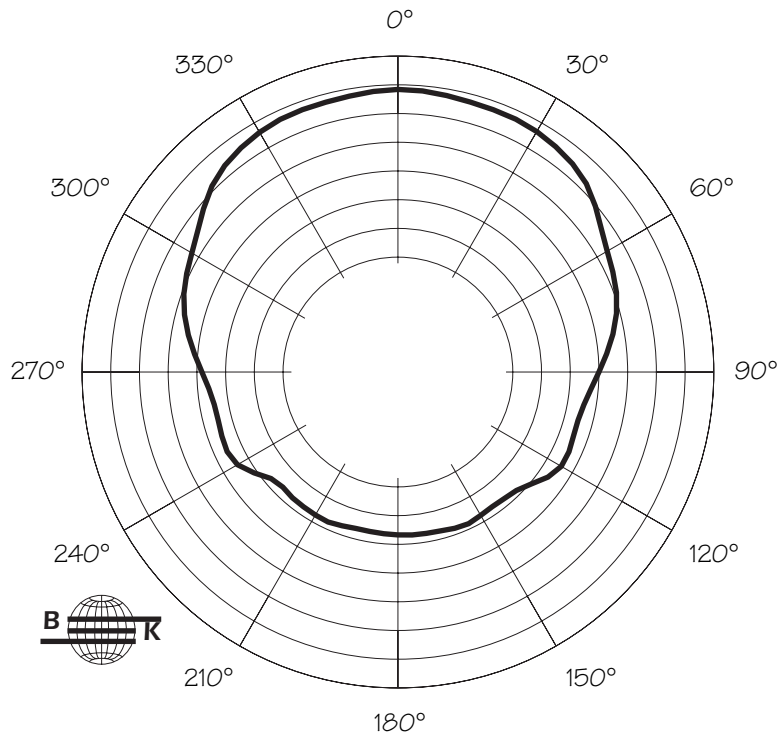




TECHNICAL SPECIFICATIONS JF80

VERTICAL OCTAVE POLAR DATA

JF80 8000 Hz Vertical Octave Polar Data



JF80 16000 Hz Vertical Octave Polar Data

