



TECHNICAL SPECIFICATIONS UB82

DESCRIPTION

A 2-way passive full range system in a compact vented rectangular enclosure. Includes 2x 8-in woofer and a 1-in exit compression driver on a 90 x 70 constant directivity horn.

APPLICATIONS

The UB82 provides very high output and wideband response in distributed applications. Powerful enough to supplement touring concert rigs in stage lip areas. Comprehensive mounting/suspension points. Six year warranty.

Applications include:

- Ballroom Events
- MultiMedia
- Boardrooms
- Small HOW's
- Large Retail Spaces (distributed)

DESCRIPTIVE DATA

Part Number	999044
Product Group	I
LF Subsystem & Loading	2x 8-in Cone, Vented
HF Subsystem & Loading	1x 1-in Compression Driver on Constant Directivity Horn
System Configuration	2-way, Full Range
Powering Configuration(s)	Passive LF/HF Crossover
Recommended High-Pass Frequency (24 dB/Octave)	40Hz
Cabinet Type (shape)	Rectangular
Enclosure Materials	Baltic Birch Plywood
Finish	Black Catalyzed Polyurethane
Connectors	2x Neutrik NL4 Speakon 2-pin Terminal Strip
Suspension Hardware	(10) 3/8"-16 Threaded Mounting/ Suspension Points (2 each top and bottom, 3 per side)
Grill	Vinyl Coated Perforated Steel
Wall Mount	980011



NOMINAL DATA

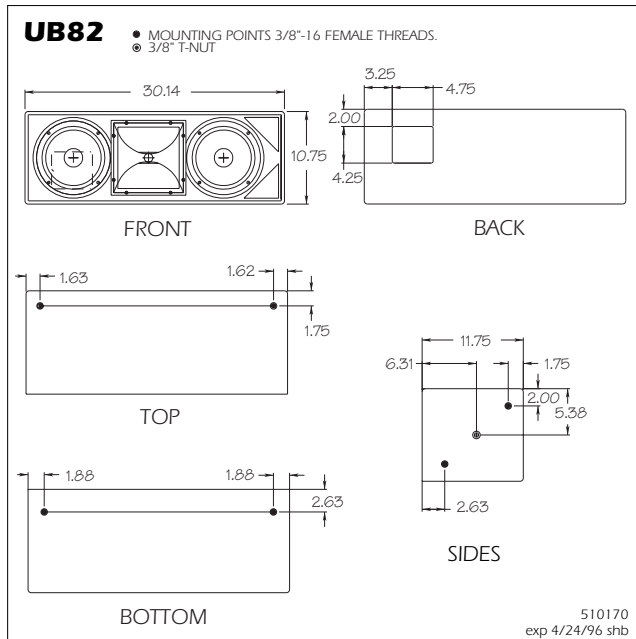
Frequency Response (Hz)	± 3 dB	62Hz to 20kHz	
	-10 dB	42Hz	
Axial Sensitivity (dB SPL/1 Watt/1m)	95		
Impedance (Ohms)	4		
Power Handling (Watts)	AES Standard 400		
Calculated Maximum Output (dB SPL, @ 1m)	Peak	127.0	
	Long Term	121.0	
Nominal Coverage Angle / -6 dB points (degrees)	Horizontal	90	
	Vertical	70	
Dimensions	Height	inches 10.75	millimeters 273
	Width	30.13	765
	Depth	11.75	298
Weights	Net Weight	pounds 47	kilograms 21.4
	Shipping Weight	53	24.1





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DIMENSIONAL DRAWING



SERVICE ITEMS

LF: Complete Cone Driver

EAW Part No. (2)804016

HF: Complete Compression Driver/Tweeter

EAW Part No. 803005

Filter/Crossover Network: Complete Assembly

EAW Part No. 225047

ARCHITECTURAL SPECIFICATIONS

The two-way full range loudspeaker systems shall incorporate 2x 8-in LF transducers and a 1-in exit compression driver HF transducer.

The LF drivers shall be mounted in a vented enclosure tuned for optimum low frequency response. The HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 90° (h) x 70° (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 62 Hz to 20 kHz measured on axis. The loudspeaker shall produce a Sound Pressure Level (SPL) of 95 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 127 SPL on axis at 1 meter. The loudspeaker shall handle 400 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 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 catalyzed polyurethane. Input connectors shall be 2-terminal barrier strip and dual Neutrik NL4 Speakon. A total of ten 3/8"-16 threaded mounting/suspension points (2 each top and bottom, 3 per side) shall be provided. The front of the loudspeaker shall be covered with a vinyl coated perforated steel grill.

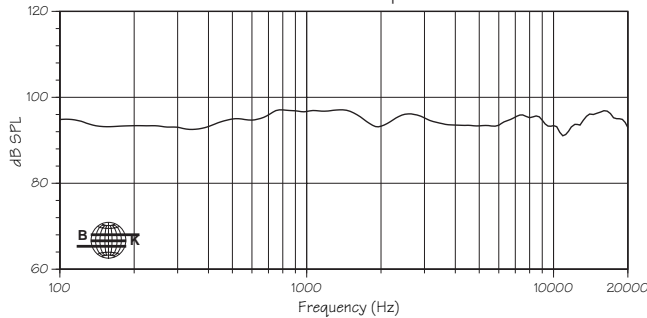
The two-way full range loudspeaker shall be the EAW model UB82.



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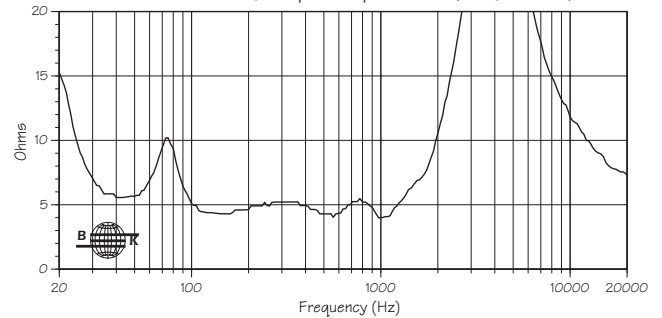
FREQUENCY RESPONSE

UB82 Axial Response



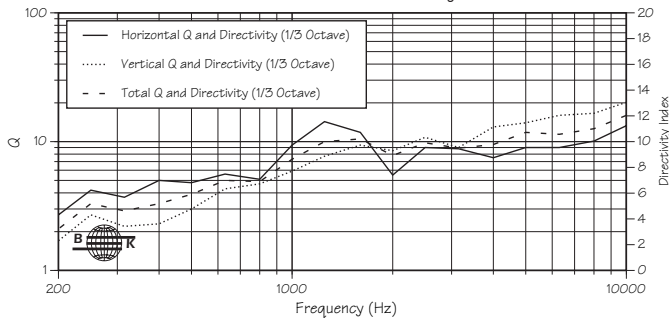
INPUT IMPEDANCE

UB82 Full Range Input Impedance (Magnitude)



Q & DIRECTIVITY INDEX (DI)

UB82 Q and Directivity

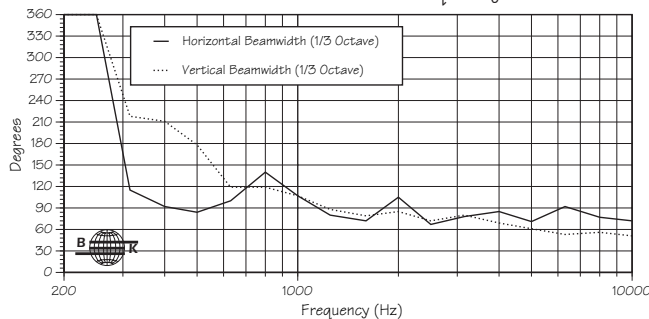


Q & BEAMWIDTH BY FREQUENCY

Freq	Hor Q	Ver Q	Tot Q	Hor Beamwidth	Ver Beamwidth
100	1.5	1.4	1.5	360	360
125	1.1	1.1	1.1	360	360
160	3.5	2.4	2.9	360	215
200	2.7	1.7	2.1	360	360
250	4.2	2.7	3.3	360	360
315	3.7	2.2	2.9	115	218
400	5	2.3	3.3	92	211
500	4.8	3	3.9	84	178
630	5.6	4.3	5	100	119
800	5.1	4.7	4.9	140	119
1000	9.4	5.9	7.3	107	107
1250	14.3	7.7	10	80	88
1600	11.8	9.4	10.5	72	79
2000	5.5	8.5	7.8	105	85
2500	9	10.8	9.8	67	72
3150	8.8	9	8.9	78	80
4000	7.5	13	9.5	85	69
5000	9	14	11.8	71	61
6300	9	16	11.4	92	53
8000	10.1	16.6	12.6	77	56
10000	13.3	20.2	16	72	51
12500	12.9	20	15.6	65	50
16000	24.4	22.6	23.4	40	45
20000	16	17.8	17.3	48	56

BEAMWIDTH

UB82 Beamwidth vs Frequency

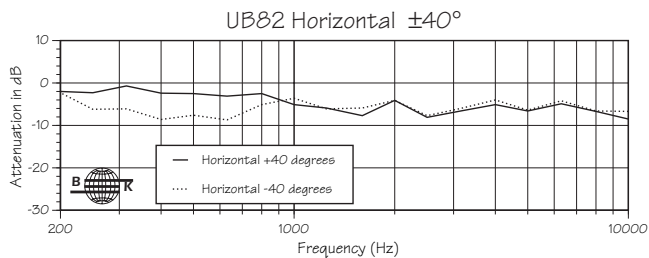
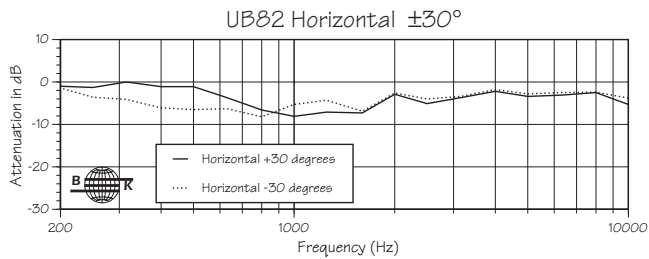
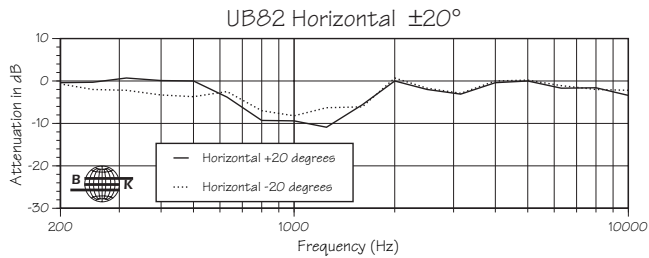
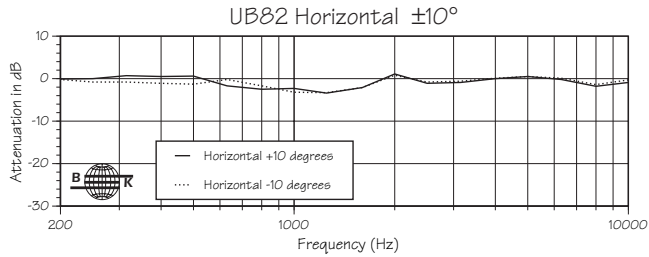




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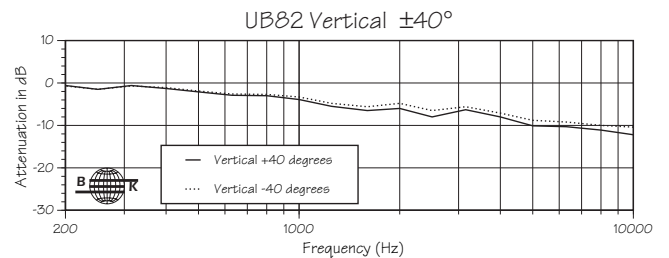
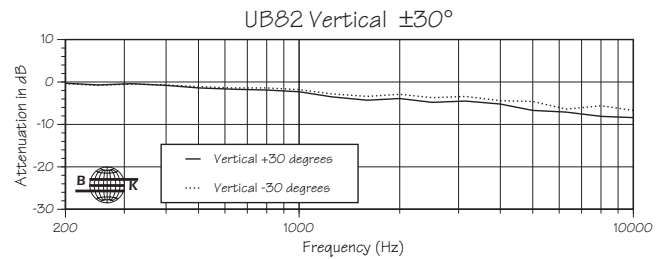
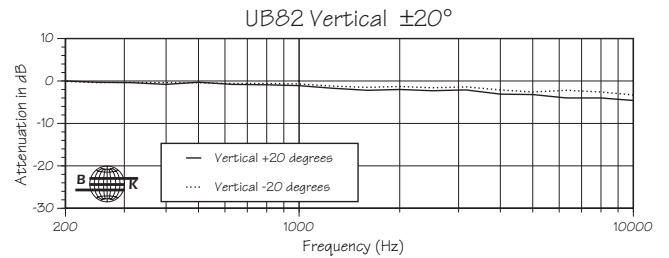
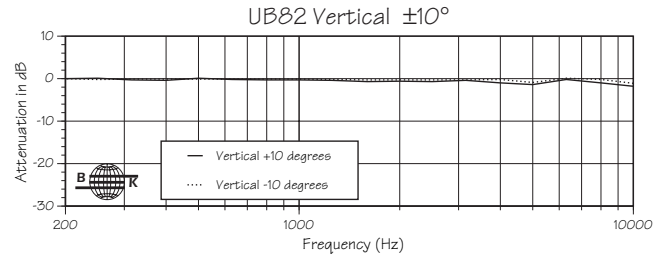
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



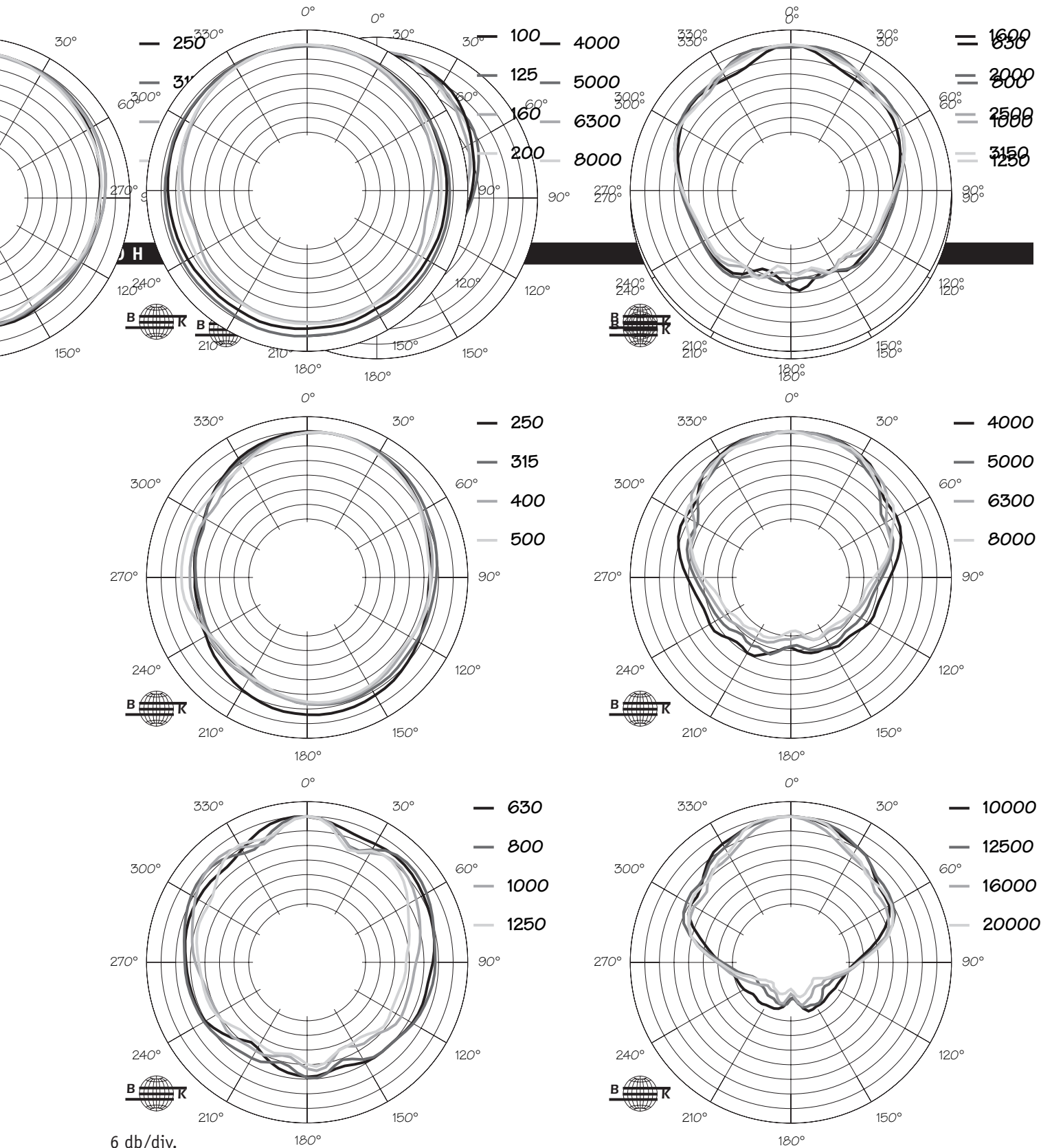
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.





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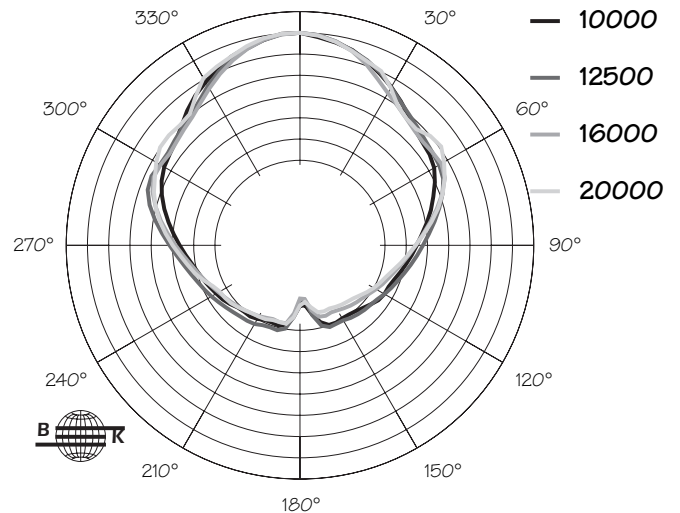
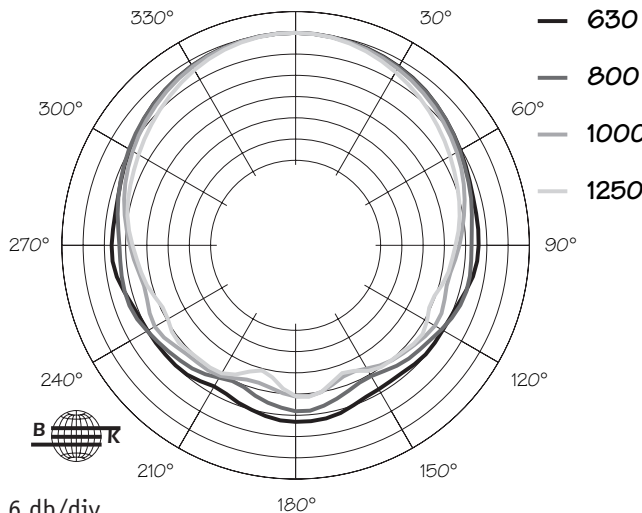
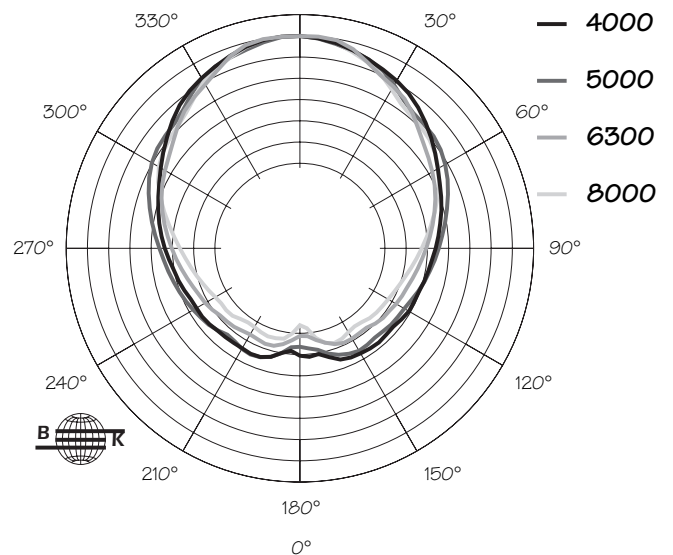
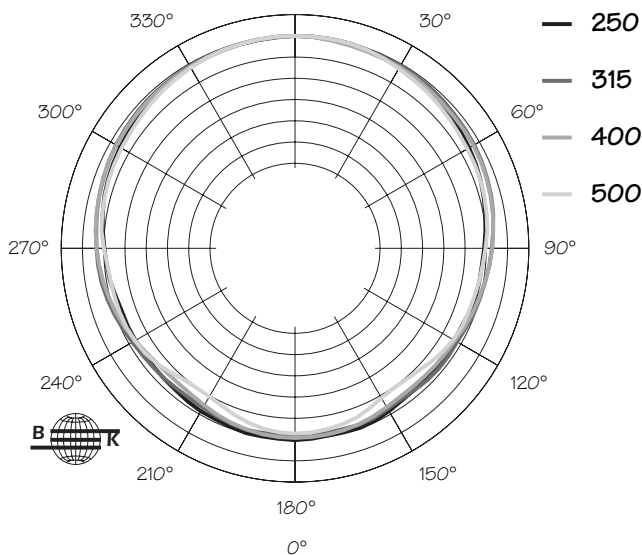
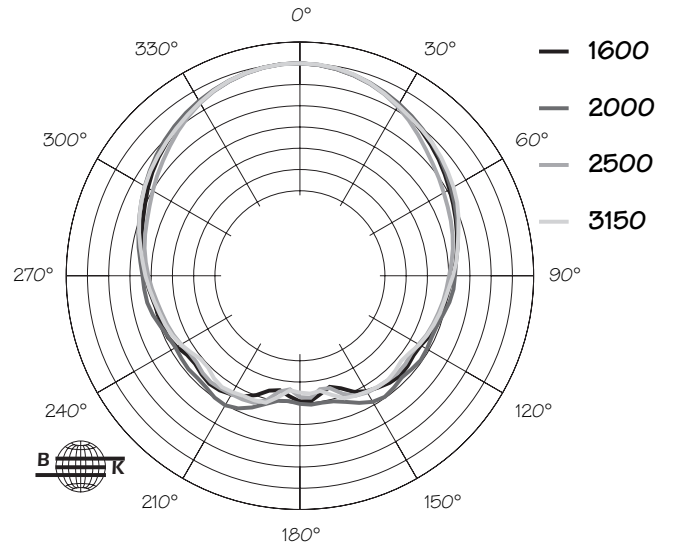
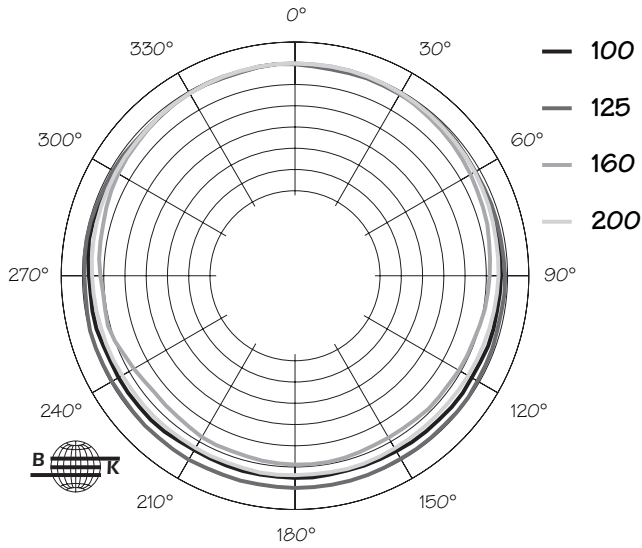


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VERTICAL 1/3 OCTAVE POLAR DATA UB82

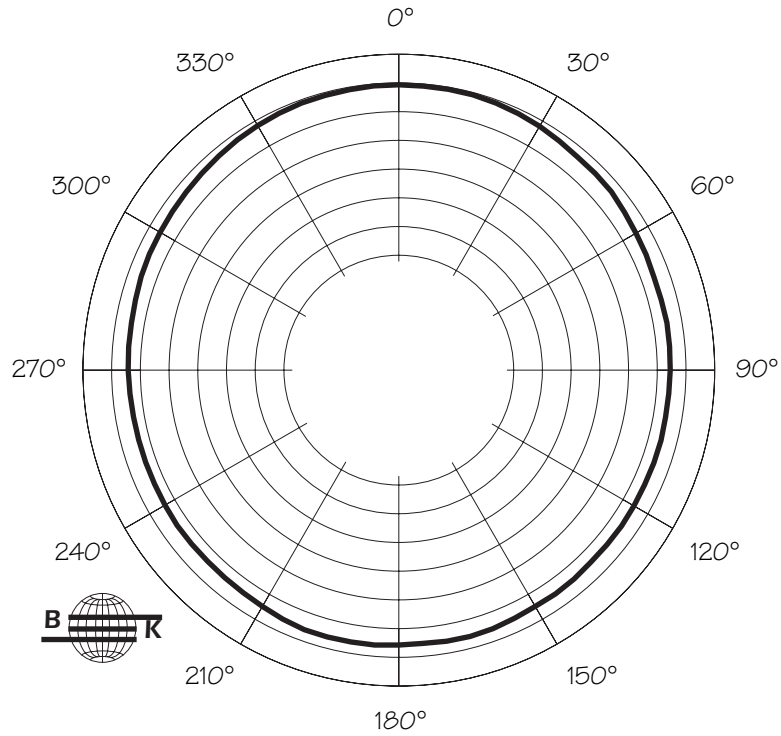


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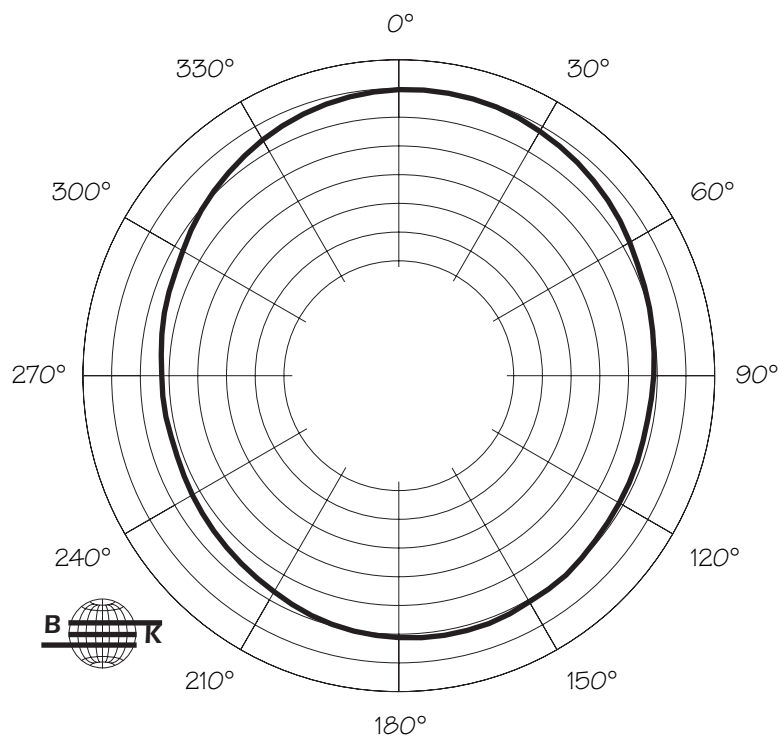


HORIZONTAL OCTAVE POLAR DATA UB82

UB82 125 Hz Horizontal Octave Polar Data



UB82 250 Hz Horizontal Octave Polar Data

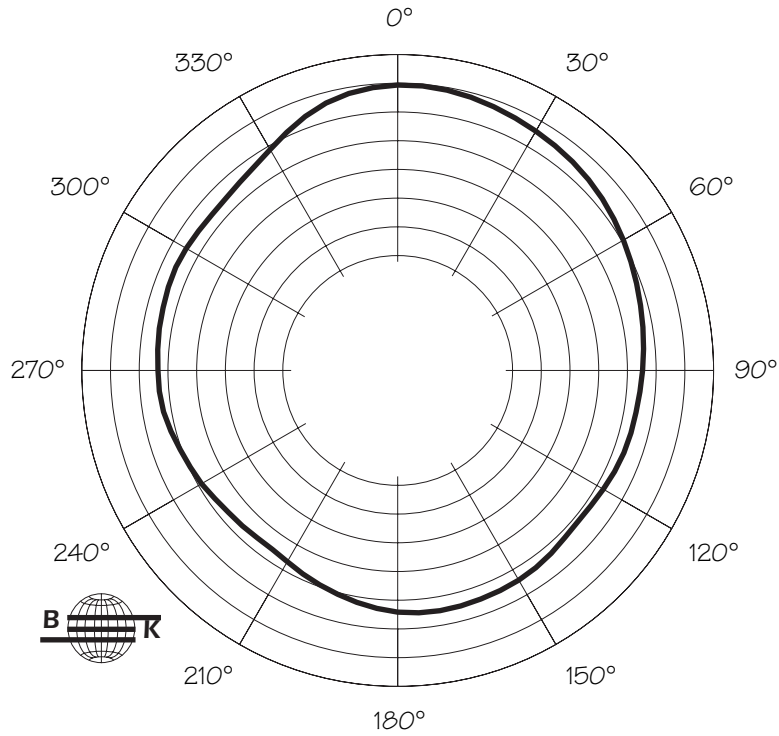


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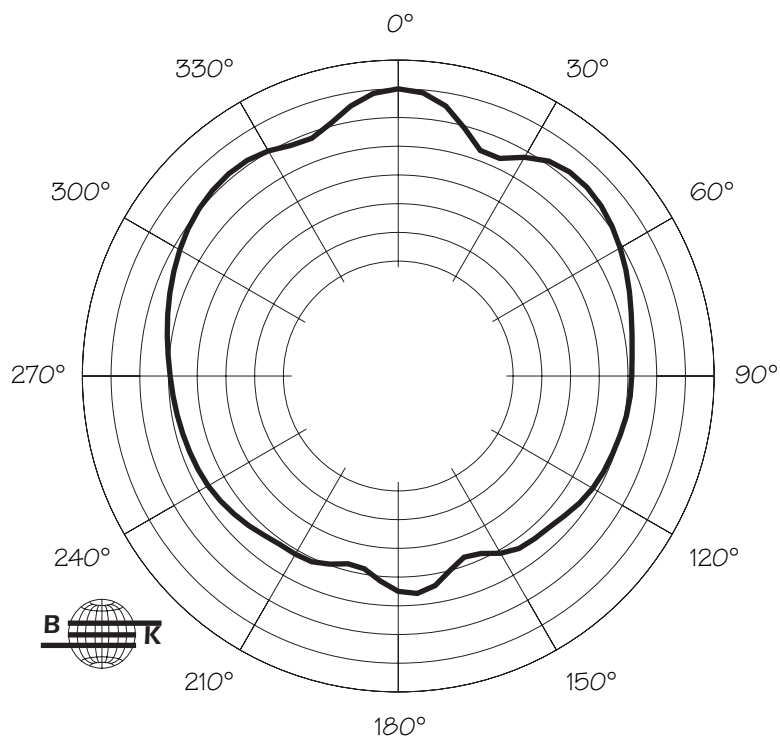


HORIZONTAL OCTAVE POLAR DATA UB82

UB82 500 Hz Horizontal Octave Polar Data



UB82 1000 Hz Horizontal Octave Polar Data

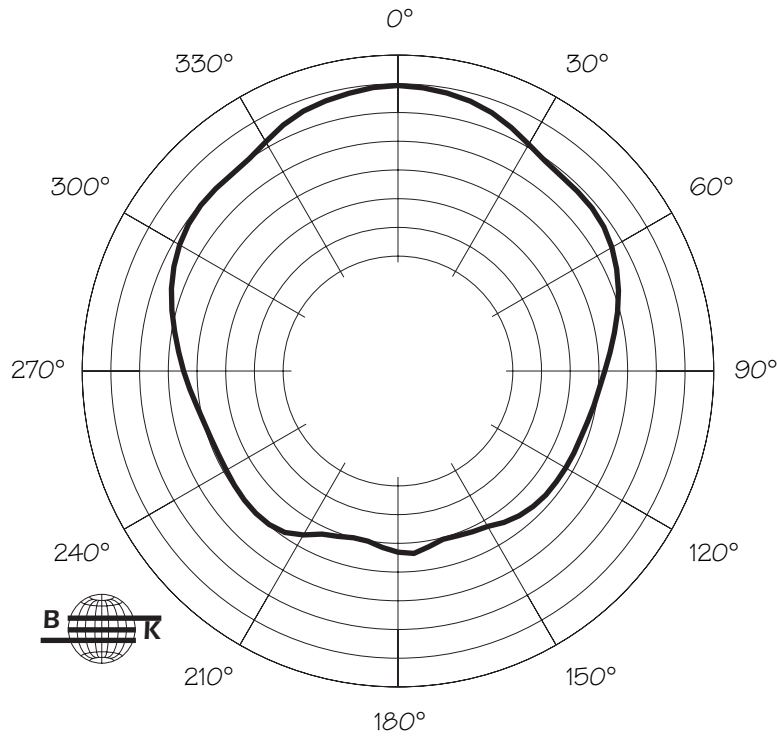


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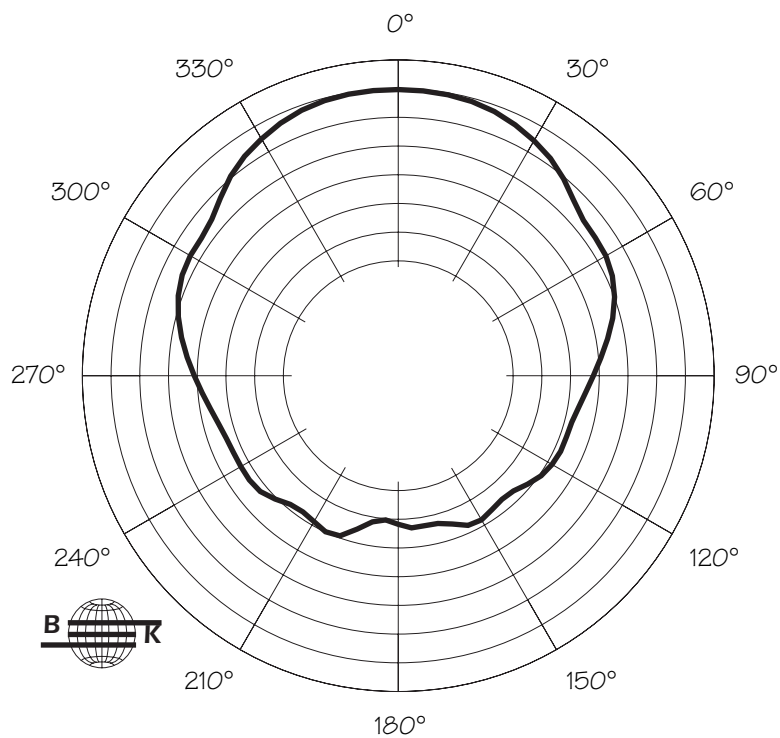


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UB82 2000 Hz Horizontal Octave Polar Data



UB82 4000 Hz Horizontal Octave Polar Data

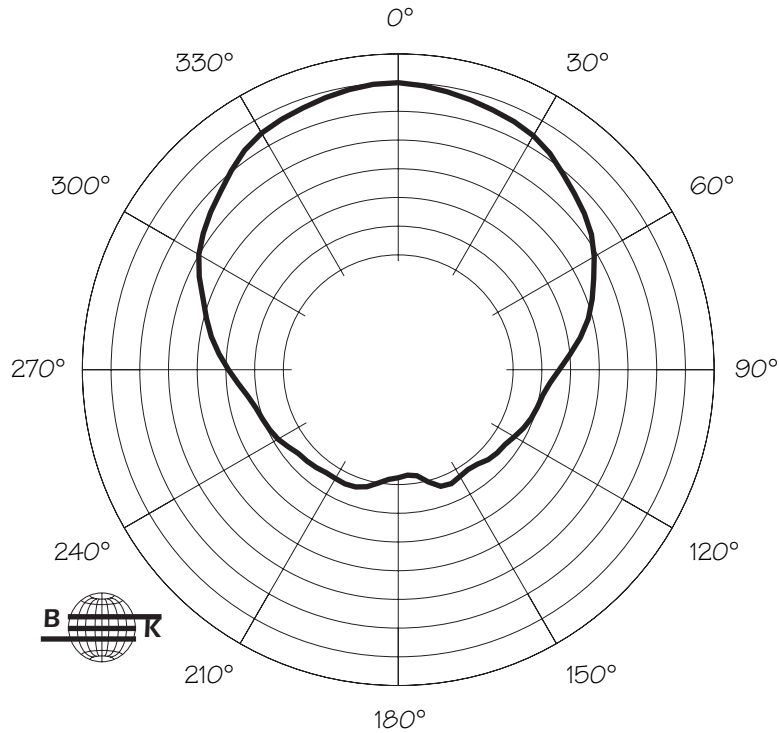


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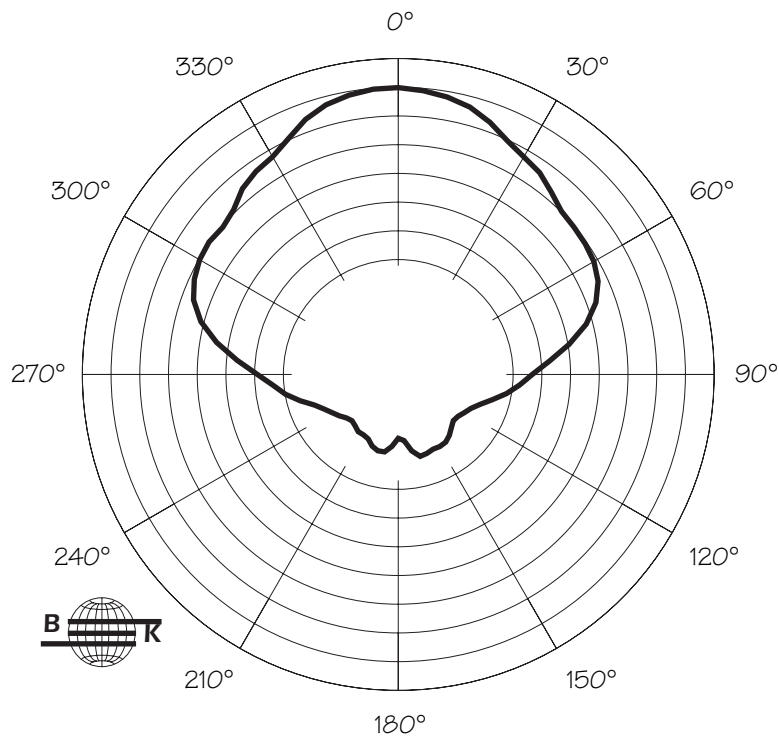


HORIZONTAL OCTAVE POLAR DATA UB82

UB82 8000 Hz Horizontal Octave Polar Data



UB82 16000 Hz Horizontal Octave Polar Data

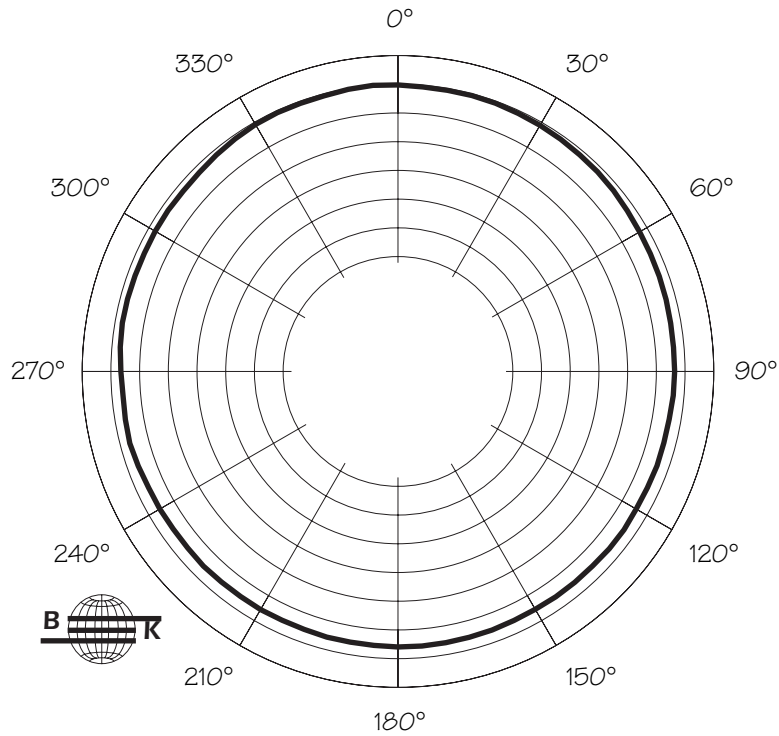


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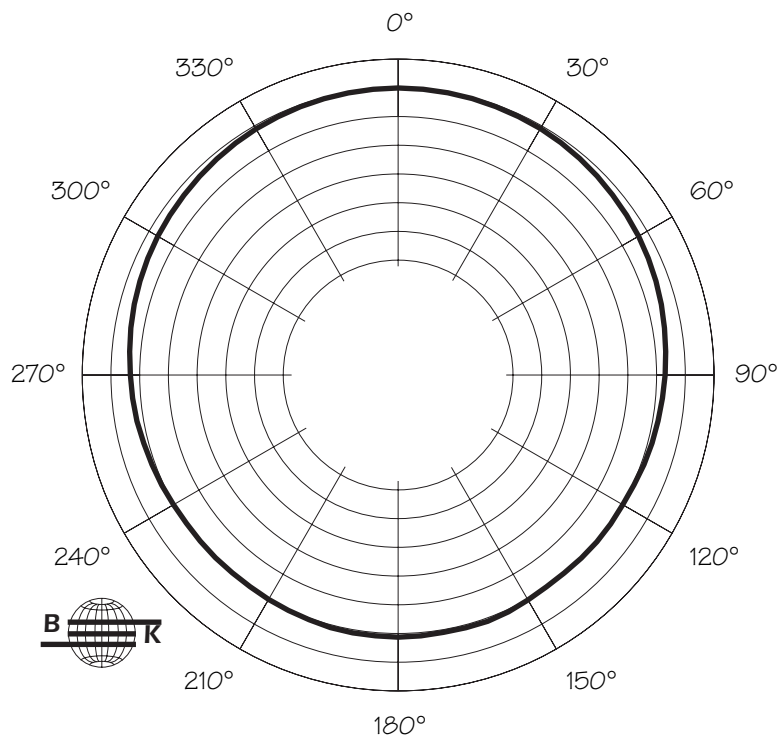


VERTICAL OCTAVE POLAR DATA UB82

UB82 125 Hz Vertical Octave Polar Data



UB82 250 Hz Vertical Octave Polar Data

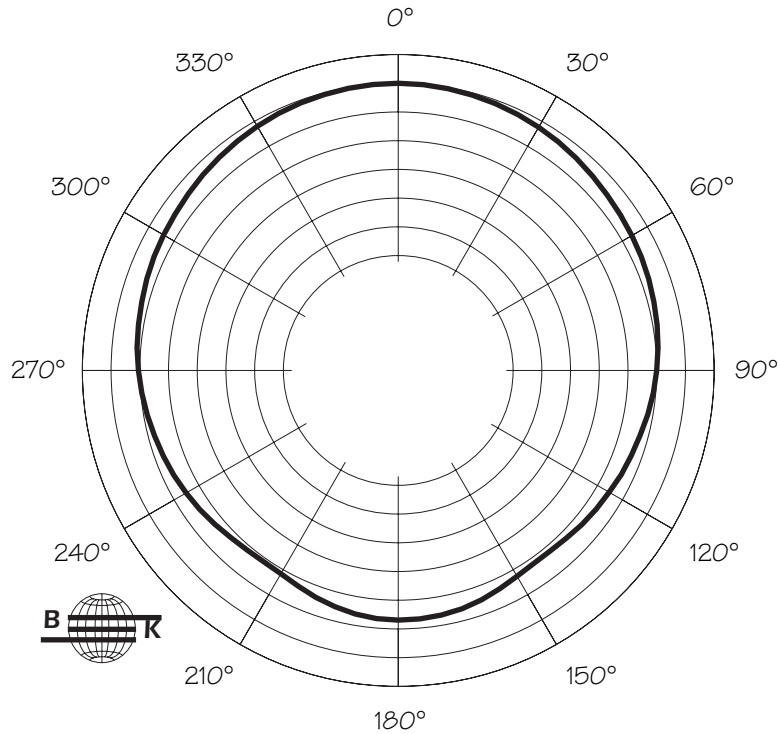


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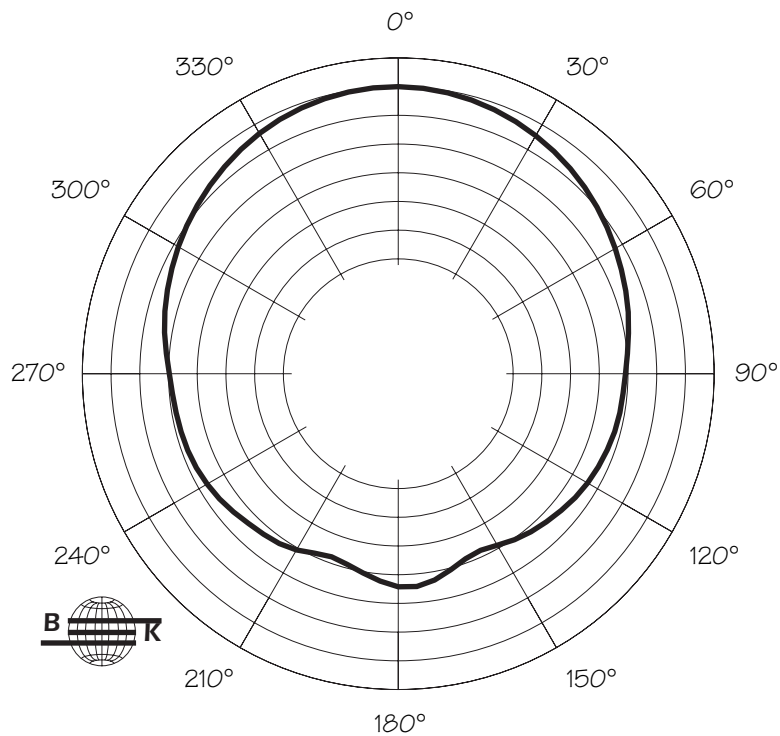


VERTICAL OCTAVE POLAR DATA UB82

UB82 500 Hz Vertical Octave Polar Data



UB82 1000 Hz Vertical Octave Polar Data

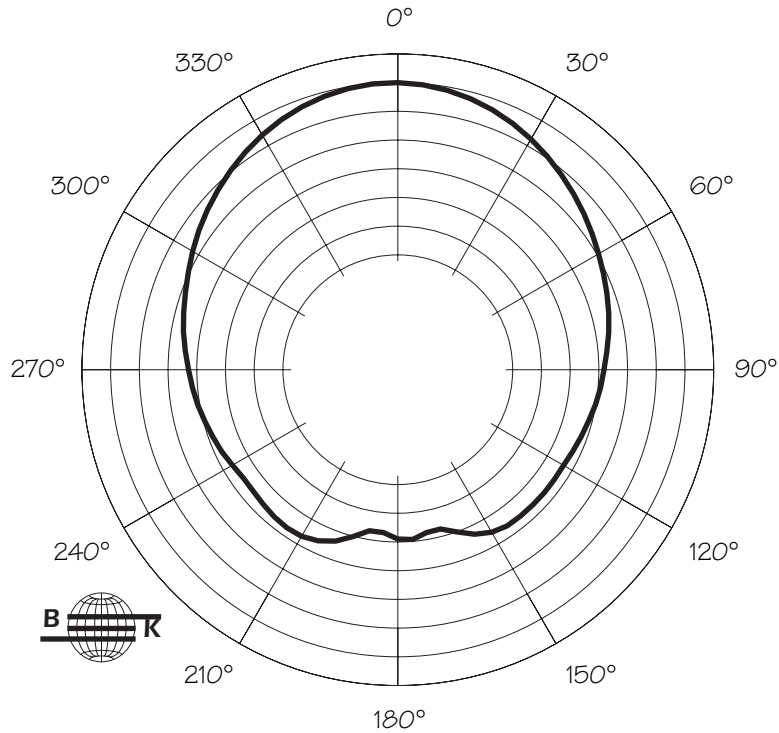


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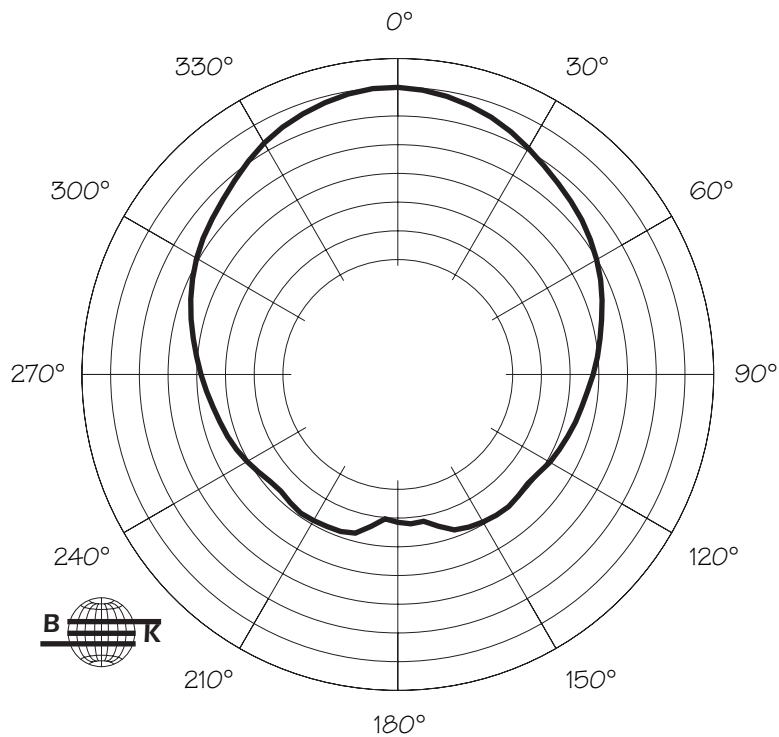


VERTICAL OCTAVE POLAR DATA UB82

UB82 2000 Hz Vertical Octave Polar Data



UB82 4000 Hz Vertical Octave Polar Data

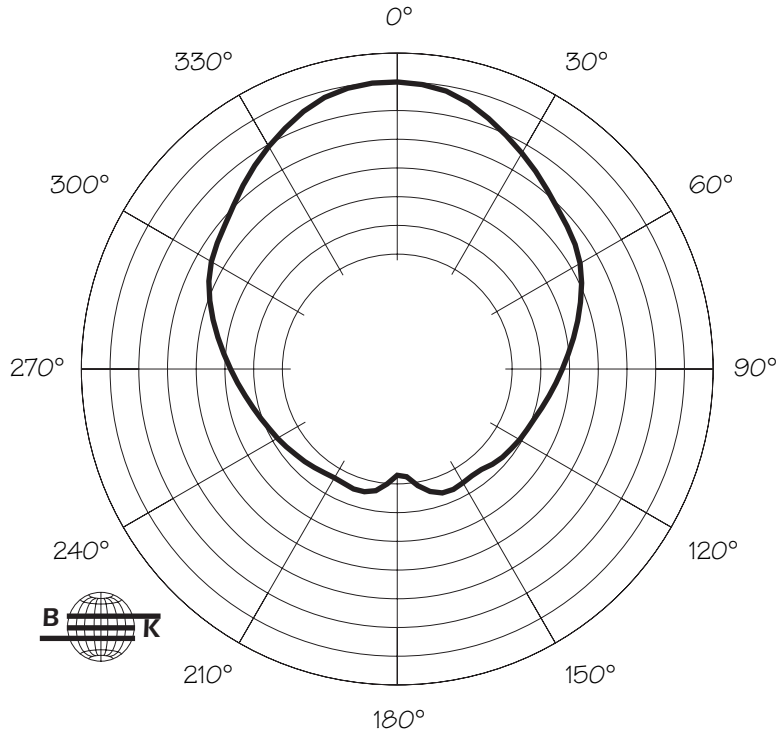


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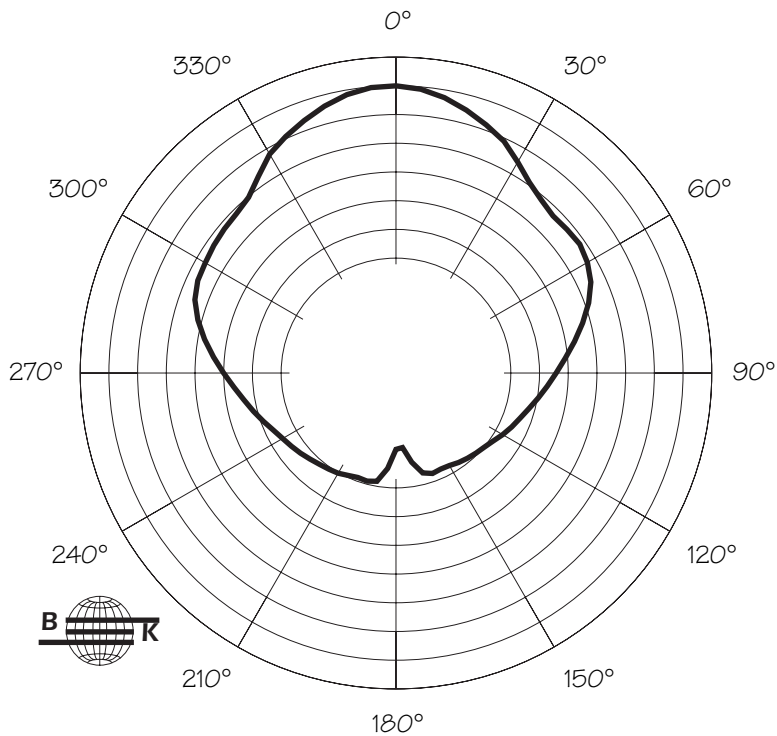


VERTICAL OCTAVE POLAR DATA UB82

UB82 8000 Hz Vertical Octave Polar Data



UB82 16000 Hz Vertical Octave Polar Data



6 db/div.