



Technical Specifications UB12

APPLICATIONS

The UB12 is purpose-designed for background/surround applications where sound quality cannot be sacrificed for the sake of visual unobtrusiveness. It is also an excellent choice for nearfield reproduction where extreme low frequency response is not required. Ultra-compact design and surprisingly high output make it an effective component of large-scale multimedia systems in a broad range of venues and applications.

This "micro" system is engineered for high quality distributed sound systems of all types. The vented enclosure extends effective low frequency response. A 1" soft dome tweeter produces exceptional clarity and definition. The complex crossover uses computer-optimized asymmetrical filters to smooth on-axis frequency response as well as power response.

SPECIFICATIONS

Frequency Response

±3 dB	98 Hz – 20 kHz
-10 dB	60 Hz

Axial Sensitivity

SPL 1w @ 1m:	91 dB
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Impedance

Nominal	8Ω
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Power Handling

AES	180 Watts
100 Hour Sine Wave	90 Watts

Maximum Output

Long Term	110 dB SPL
Peak	113 dB SPL

Nominal Coverage Angles (-6 dB)

Horizontal:	120 degrees
Vertical:	120 degrees

Additional Descriptive Data

LF Subsystem	1 x 5.25" Vented
HF Subsystem	1 x 1" soft-dome
Powering Mode	Passive
Finish:	Black Catalyzed Polyurethane
Connectors:	2-pin Barrier Strip
Grill:	Vinyl Coated Perforated Steel

Dimensions & Weights

Height:	10.75 in (273 mm)
Width:	6.375 in (162 mm)
Depth:	5.75 in (146 mm)
Net Weight:	9 lbs. (4.05 kg)
Shipping Weight:	10 lbs. (4.5 kg)

OTHER RELEVANT DOCUMENTS

- Group I Hardware Technical Specifications*
- Group I Price Lists
- APP Testing Procedures*
- Water Proofing Technical Specifications
- Structural/Mechanical Technical Specifications*



ARCHITECTURAL SPECS

The two-way full range loudspeaker system shall incorporate one 5.25-inch cone low frequency transducer and one 25mm soft-dome high frequency transducer. The total system shall meet the following performance criteria: Frequency Response of 100 - 18k Hz ±3 dB; Axial Sensitivity (1 W @ 1 m) of 91 dB SPL (LF); 100 hour sine wave Power Handling of 90 Watts, AES method Power Handling of 180 Watts; Horizontal coverage of 120 degrees between 6dB down points; Vertical coverage of 120 degrees between 6dB down points.

The system's low frequency driver shall be loaded into a vented enclosure that provides optimally controlled acoustic diaphragm loading. An internal passive frequency dividing network shall provide a fourth order acoustic crossover between the low and high frequency subsystems and shall incorporate system equalization. The crossover shall be designed so that maximally flat frequency response is obtained.

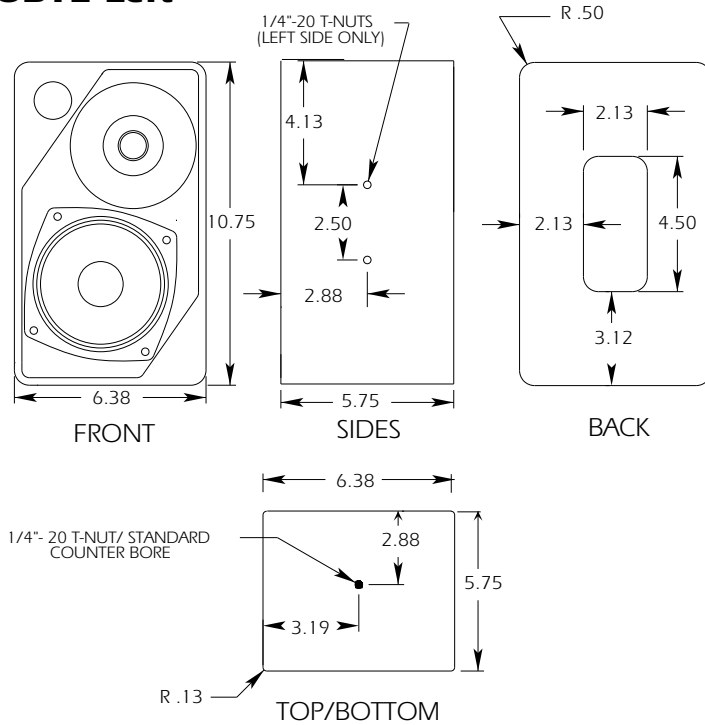
The enclosure shall be rectangular in shape and constructed of void-free cross-grain-laminated birch plywood with internal bracing. It shall be finished in a black catalyzed polyurethane coating. The front of the system shall be covered with a protective perforated steel grill assembly coated with vinyl to dampen resonance. Mounting hardware attachment points shall be located on the top and bottom of the enclosure. Attachment points for Omnimount™ brand 75 series mounting hardware shall be located on the rear of the enclosure.

The two-way full range loudspeaker system shall be the EAW model UB12.

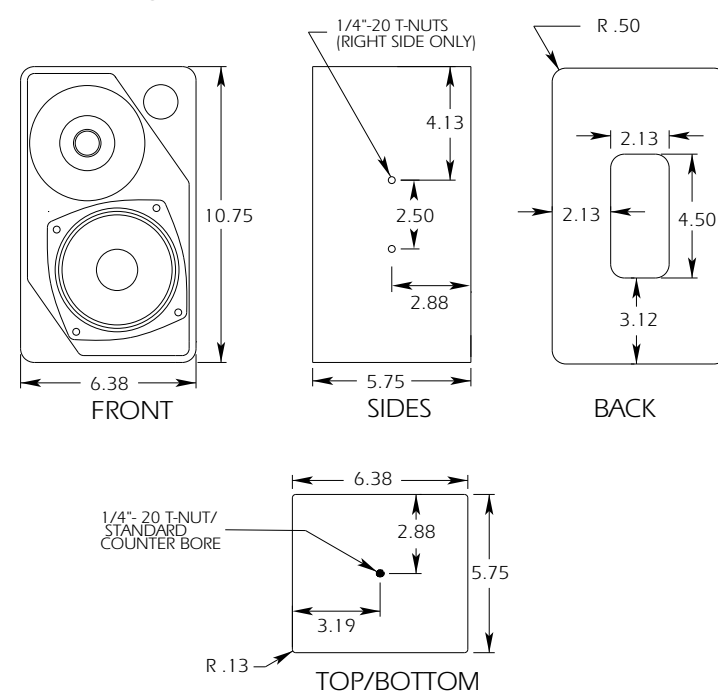


DIMENSIONAL DRAWINGS

UB12 Left



UB12 Right



INPUT PLATES



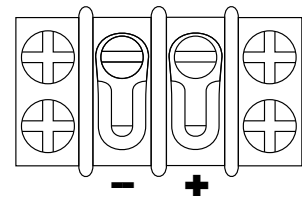
UB-12

SOUND REINFORCEMENT SYSTEM

NO.

MADE IN USA

INPUT



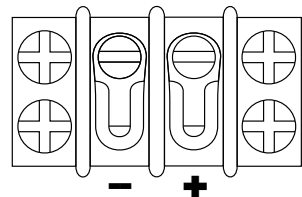
UB-12

SOUND REINFORCEMENT SYSTEM

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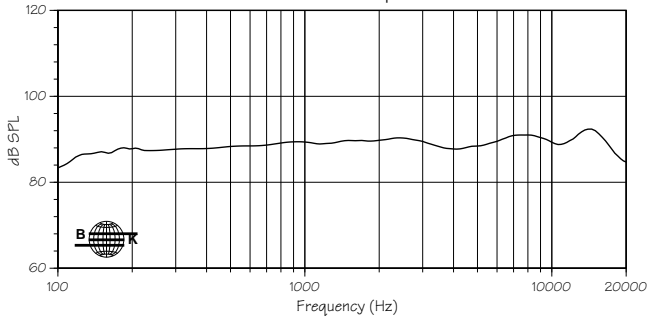




Performance Data UB12

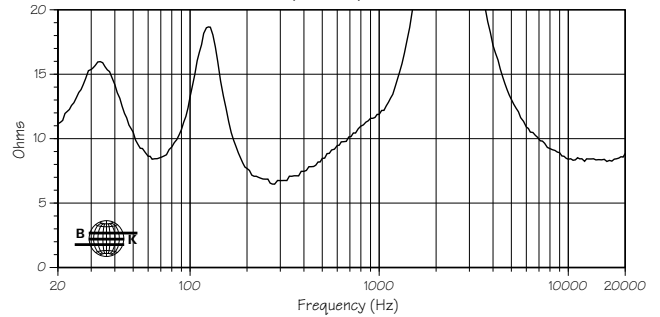
FREQUENCY RESPONSE

UB12 Axial Response



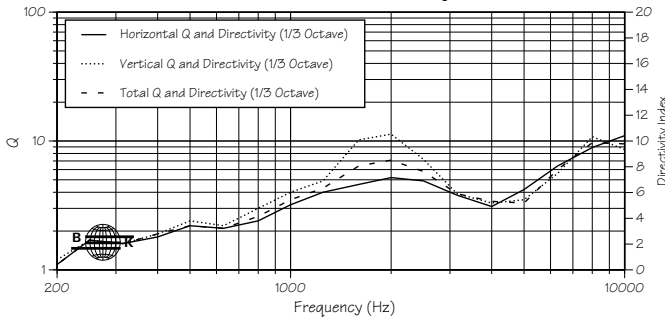
INPUT IMPEDANCE

UB12 Full Range Input Impedance (Magnitude)



Q & DIRECTIVITY INDEX (DI)

UB12 Q and Directivity

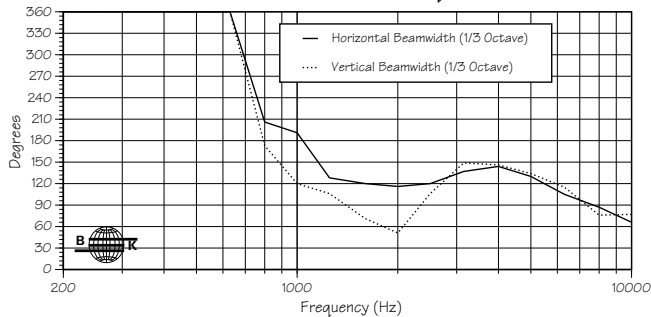


Q & BEAMWIDTH BY FREQUENCY

Freq	Hor Q	Ver Q	Tot Q	Hor Beamwidth	Ver Beamwidth
100	1.2	1.2	1.1	360	360
125	1.1	1	1	360	360
160	1.6	1.5	1.5	360	360
200	1.1	1.2	1.1	360	360
250	1.7	1.7	1.7	360	360
315	1.6	1.6	1.6	360	360
400	1.8	1.9	1.9	360	360
500	2.2	2.4	2.2	360	360
630	2.1	2.2	2.1	360	360
800	2.4	3	2.6	206	173
1000	3.2	4	3.5	191	120
1250	4	4.9	4.3	128	106
1600	4.6	10.2	6.4	120	71
2000	5.2	11.3	7.1	116	51
2500	4.9	7.2	5.8	120	106
3150	3.8	3.9	3.9	137	149
4000	3.1	3.3	3.4	144	146
5000	4.2	3.5	3.3	130	134
6300	6.4	5.6	6	105	115
8000	8.9	10.8	9.7	87	76
10000	11	8.6	9.5	66	77
12500	9.7	8.1	8.8	80	94
16000	18.7	18	18.3	56	55
20000	24.8	18.5	21.4	40	40

BEAMWIDTH

UB12 Beamwidth vs Frequency

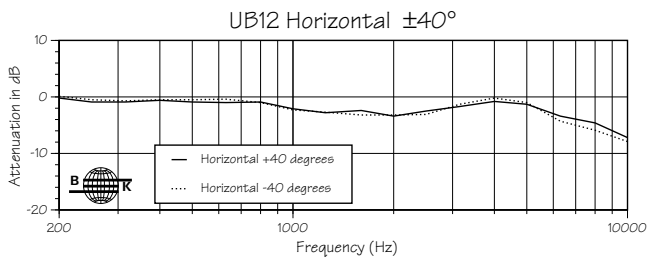
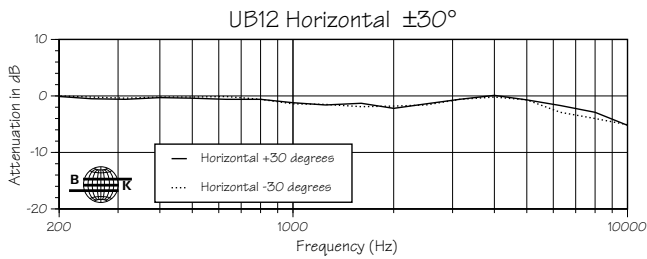
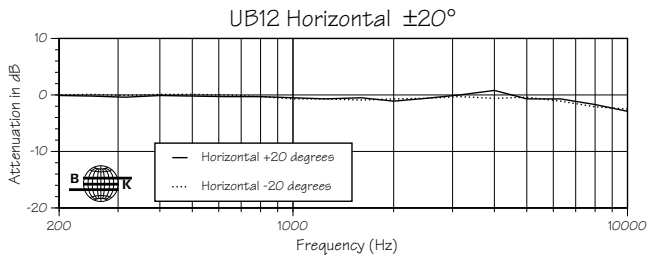
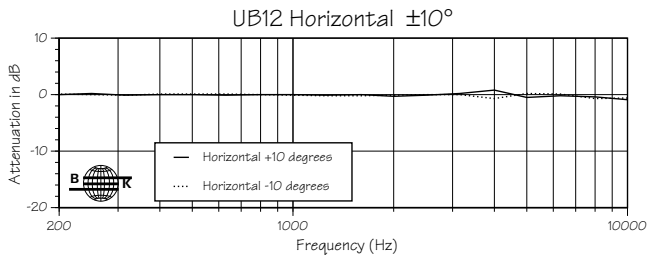




Performance Data UB12

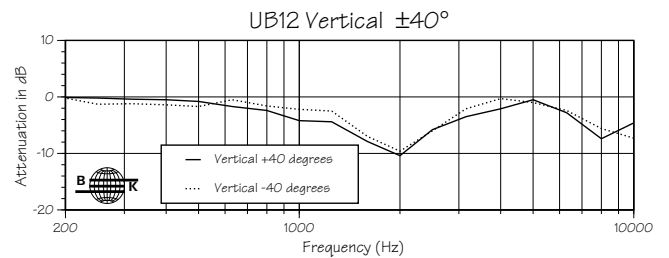
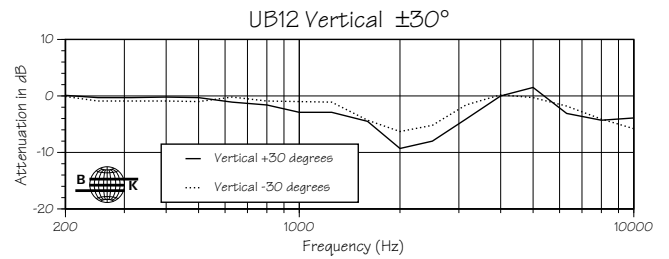
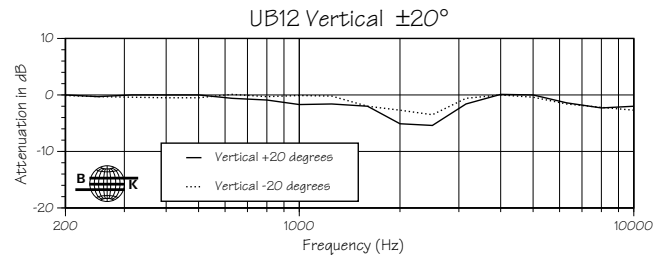
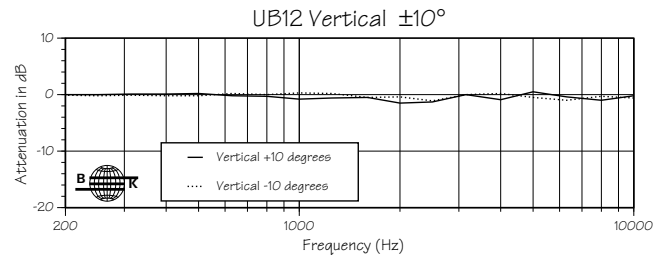
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



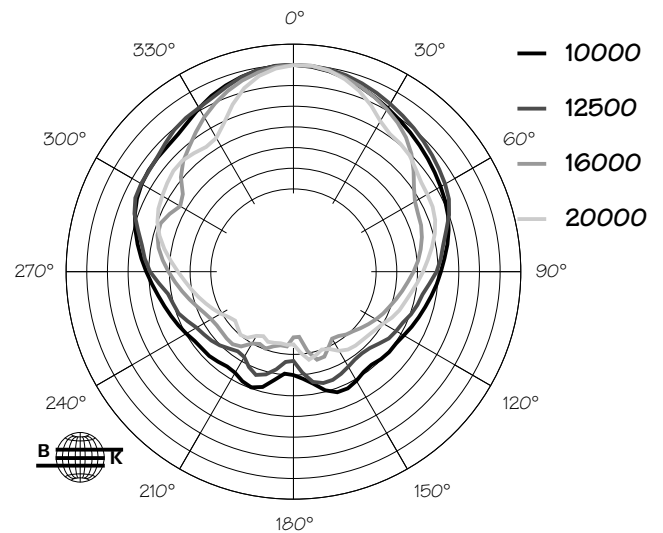
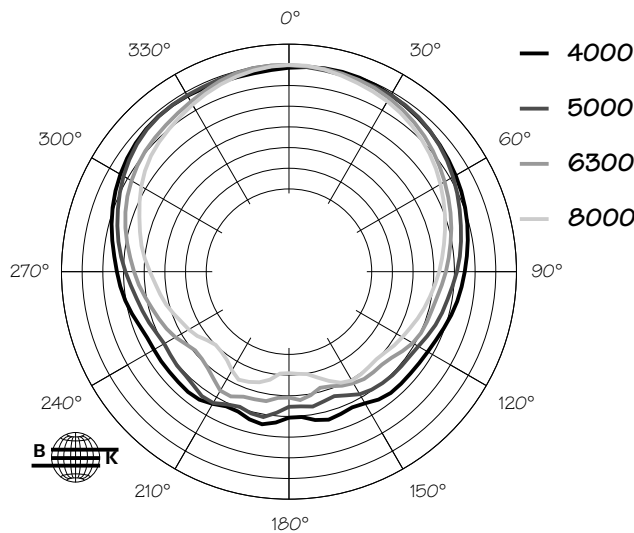
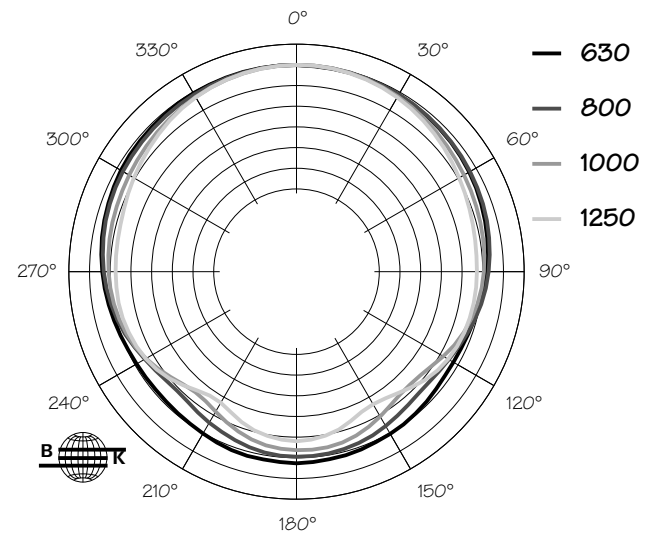
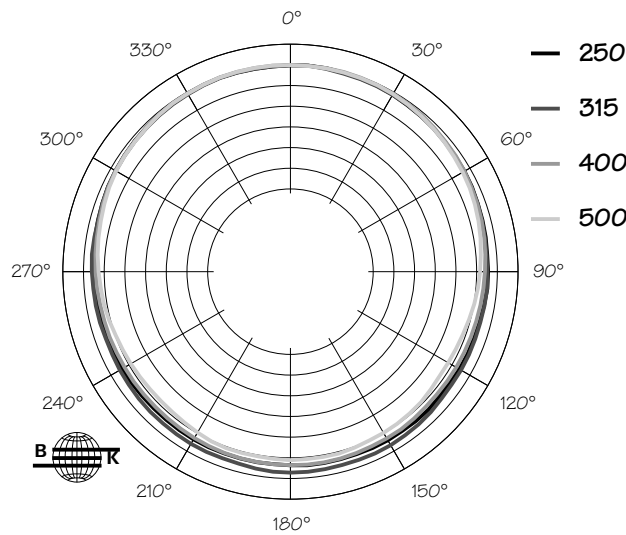
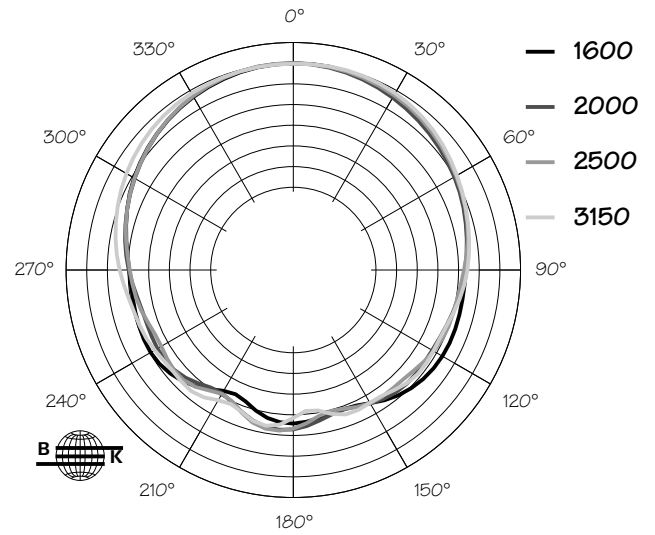
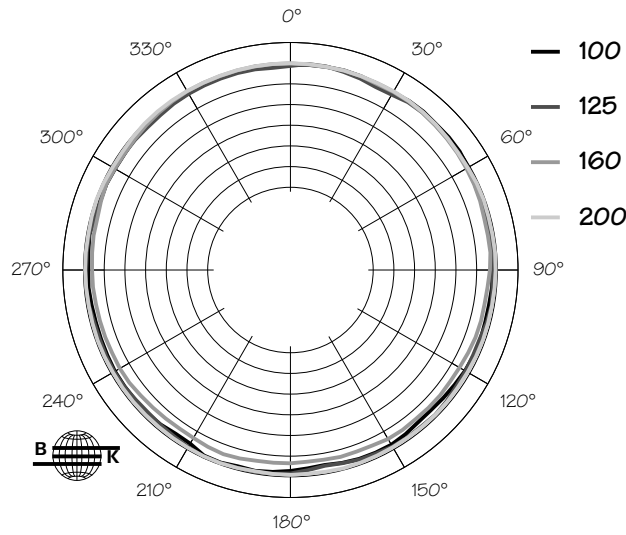
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



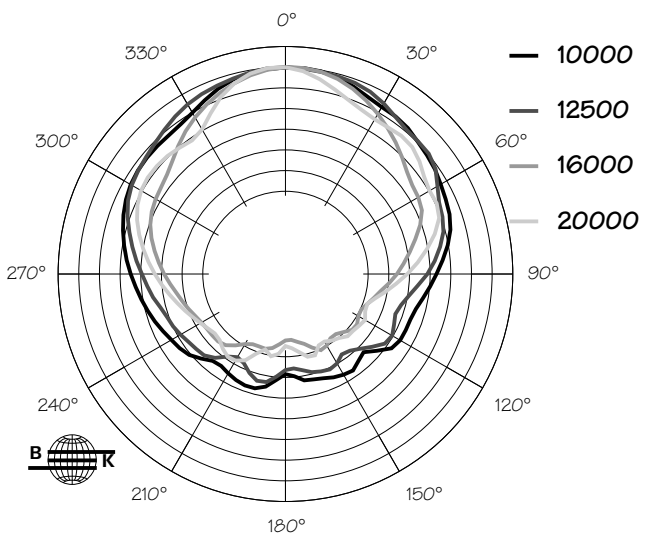
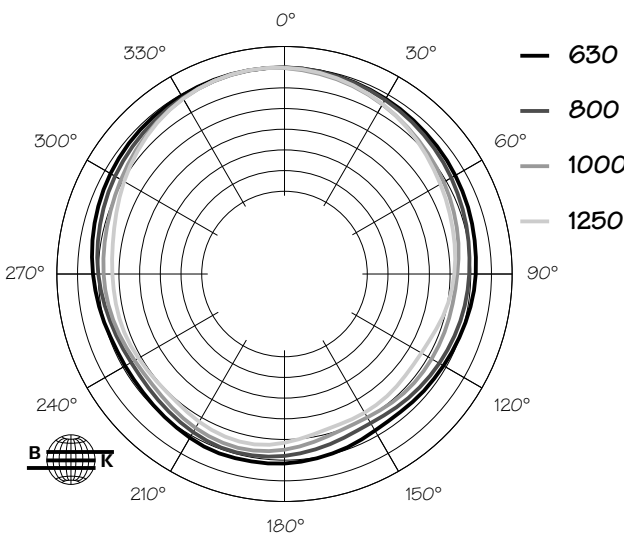
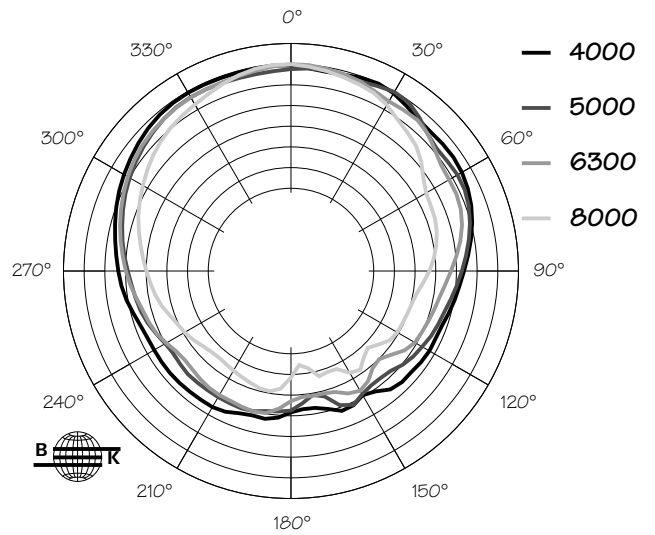
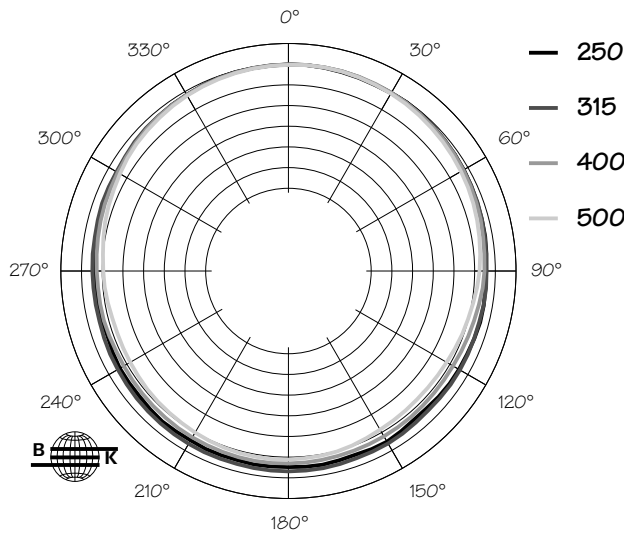
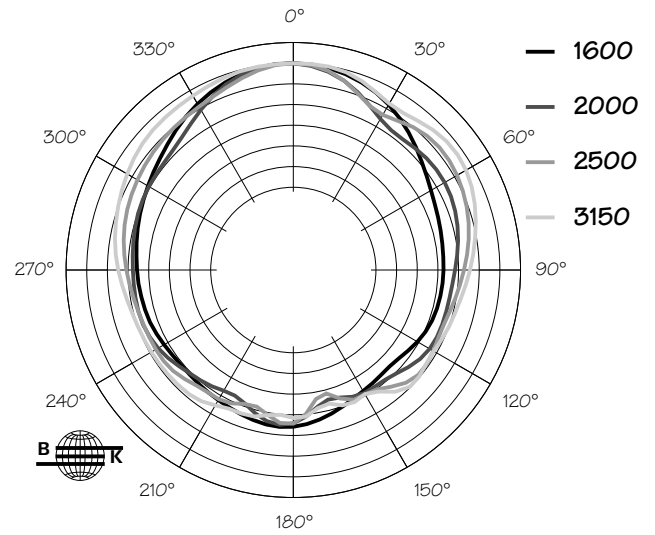
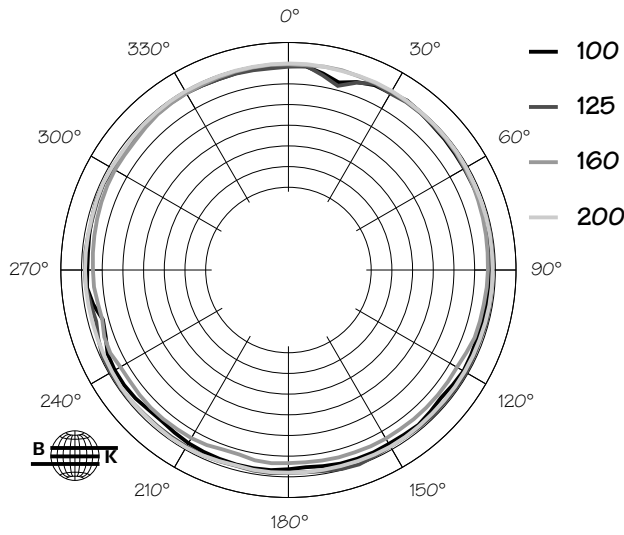


Horizontal 1/3 Octave Polar Data UB12





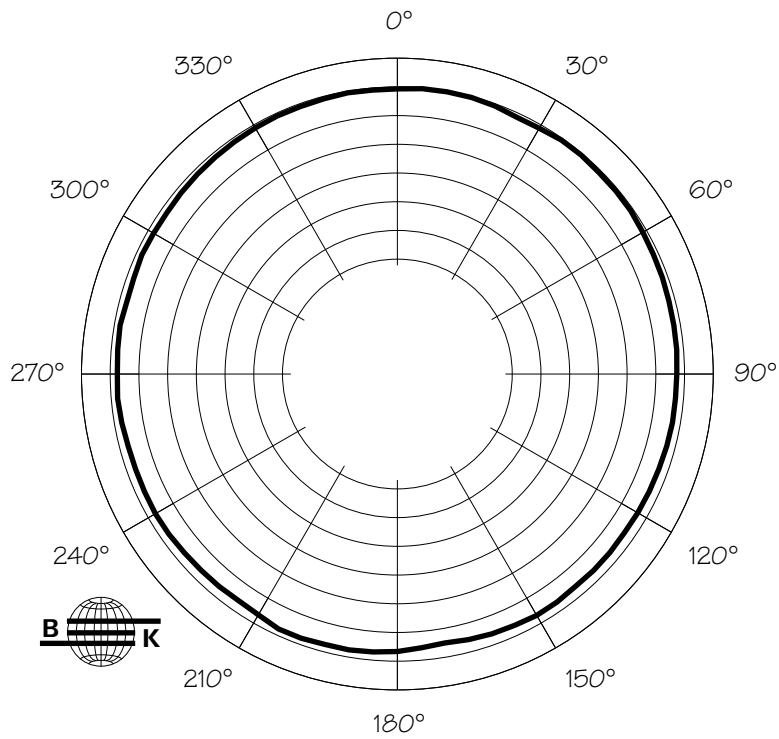
Vertical 1/3 Octave Polar Data UB12



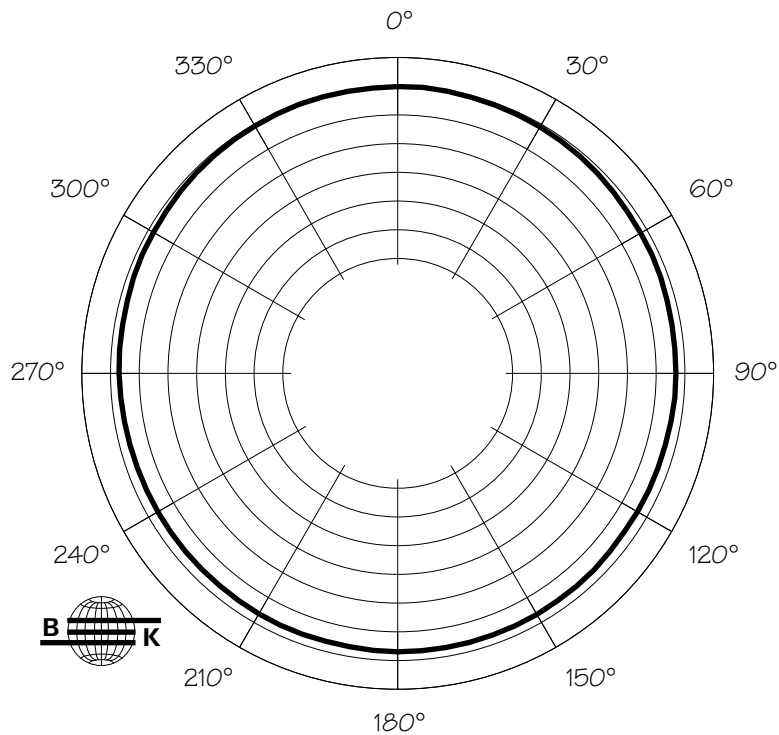


Horizontal Octave Polar Data UB12

UB12 125 Hz Horizontal Octave Polar Data



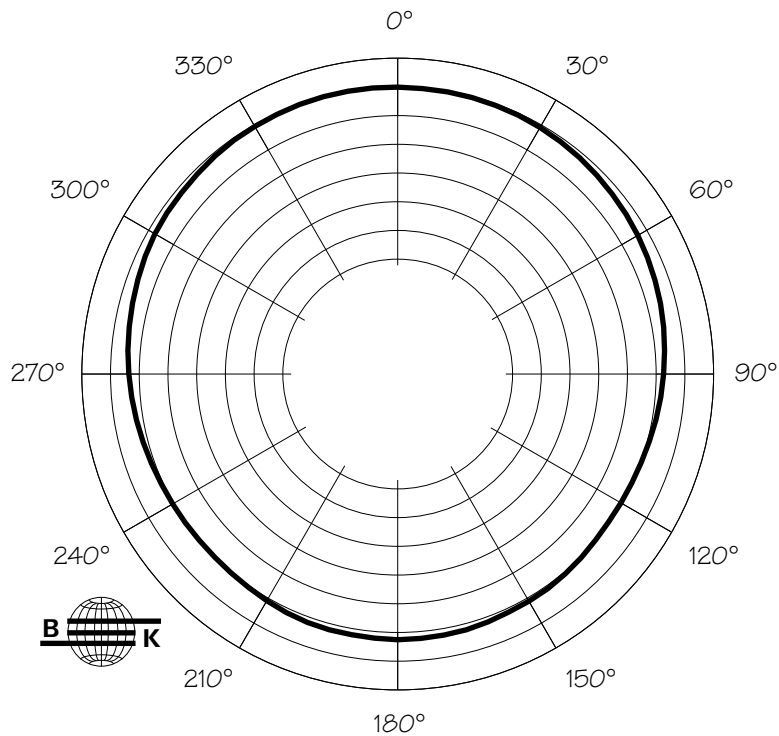
UB12 250 Hz Horizontal Octave Polar Data



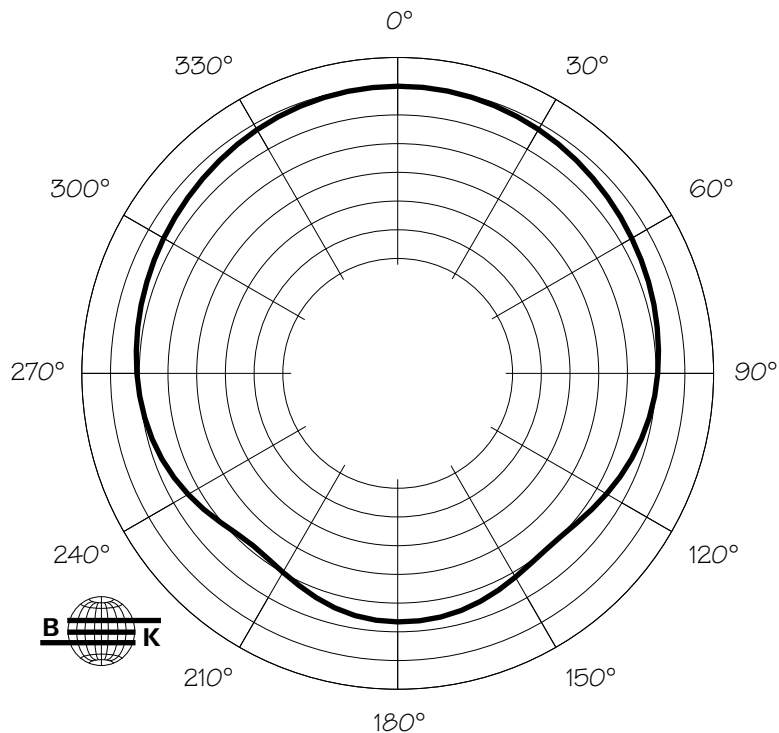


Horizontal Octave Polar Data UB12

UB12 500 Hz Horizontal Octave Polar Data



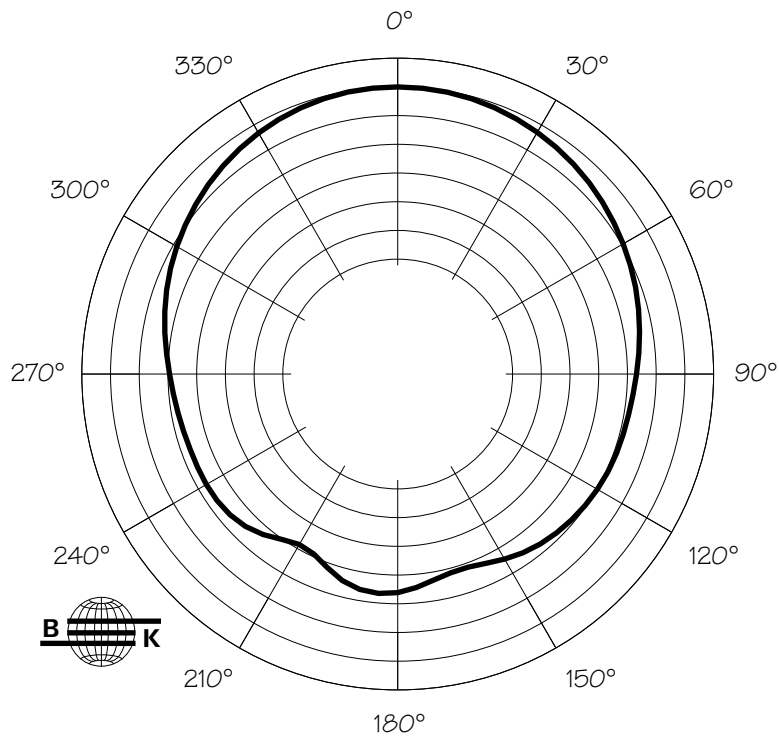
UB12 1000 Hz Horizontal Octave Polar Data



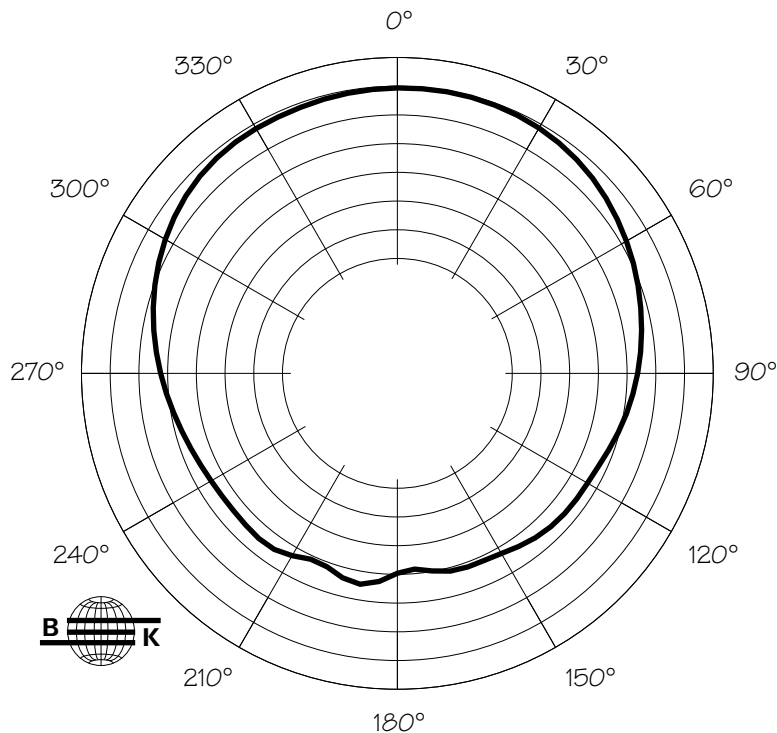


Horizontal Octave Polar Data UB12

UB12 2000 Hz Horizontal Octave Polar Data



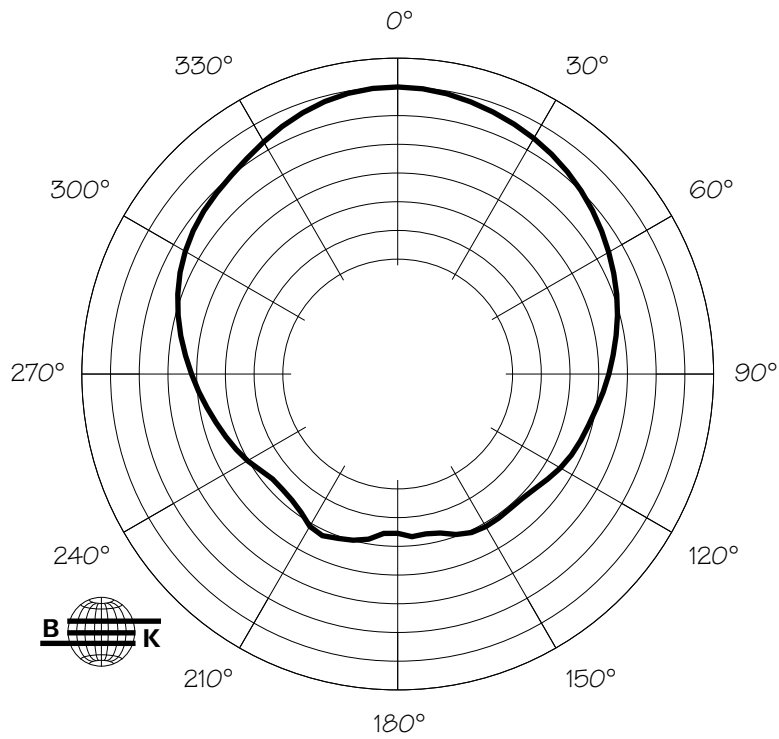
UB12 4000 Hz Horizontal Octave Polar Data



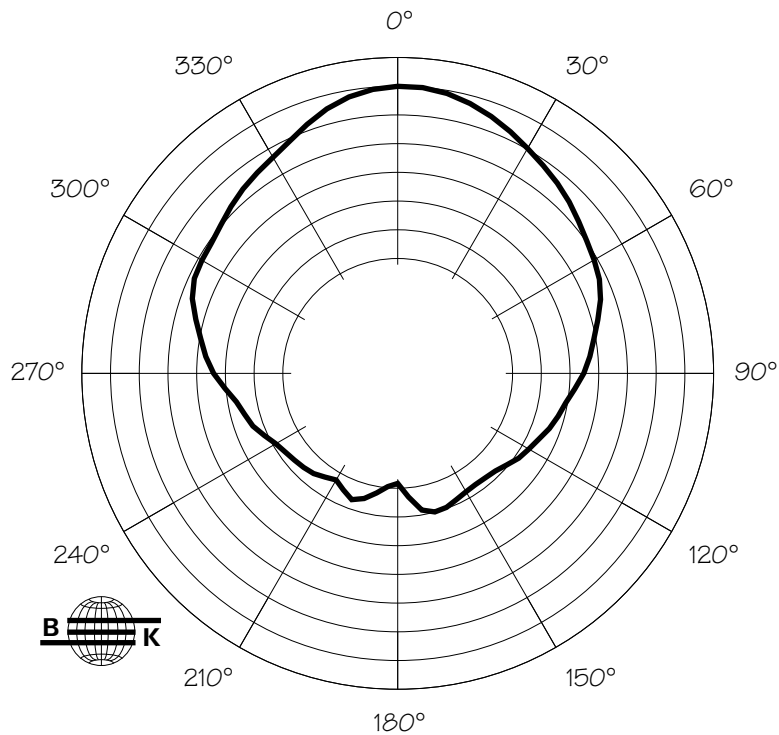


Horizontal Octave Polar Data UB12

UB12 8000 Hz Horizontal Octave Polar Data



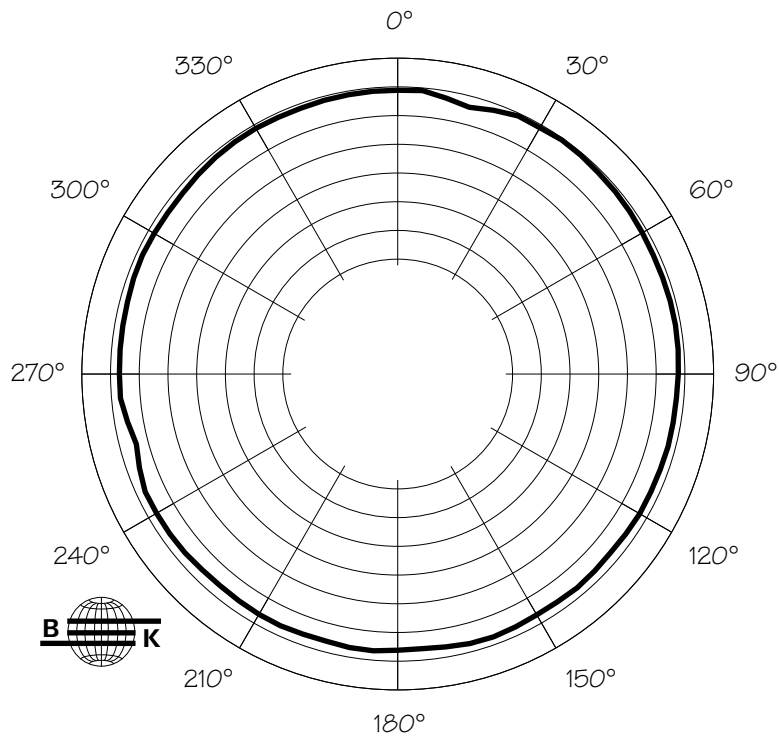
UB12 16000 Hz Horizontal Octave Polar Data



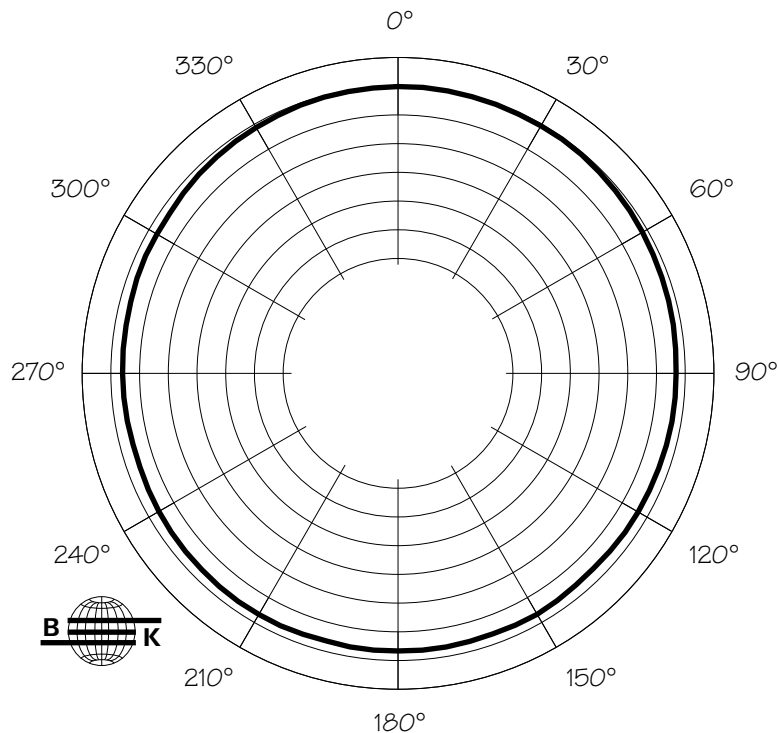


Vertical Octave Polar Data UB12

UB12 125 Hz Vertical Octave Polar Data



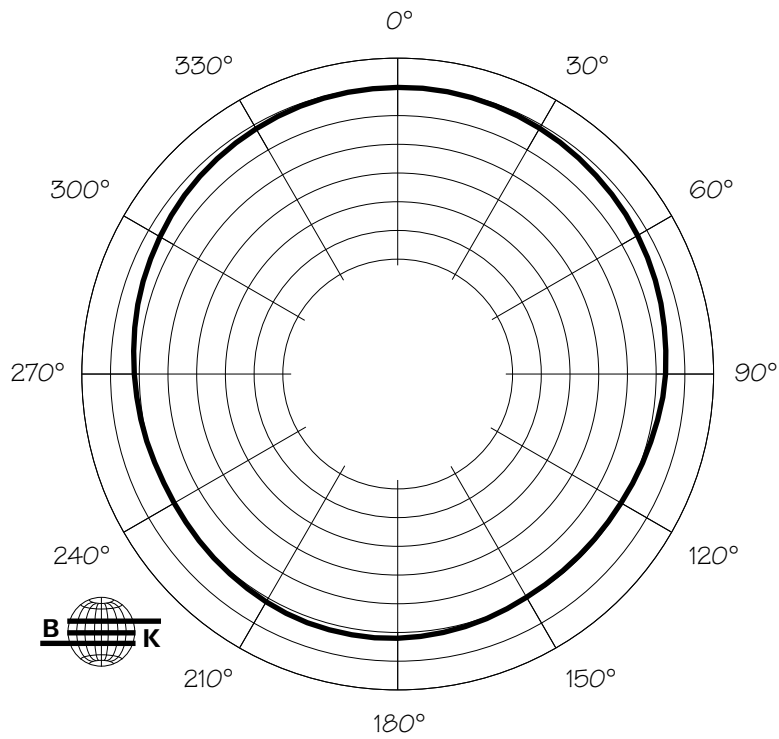
UB12 250 Hz Vertical Octave Polar Data



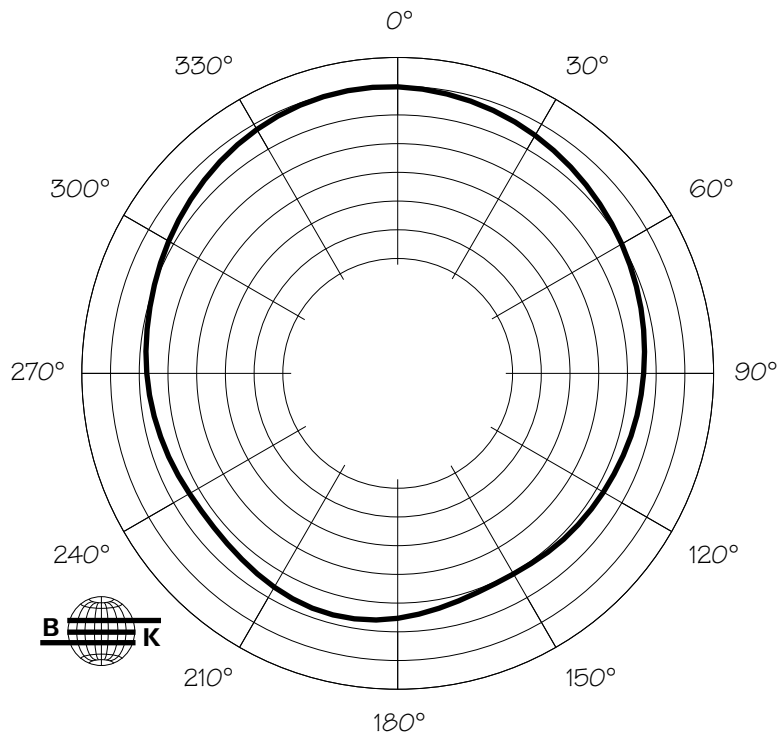


Vertical Octave Polar Data UB12

UB12 500 Hz Vertical Octave Polar Data



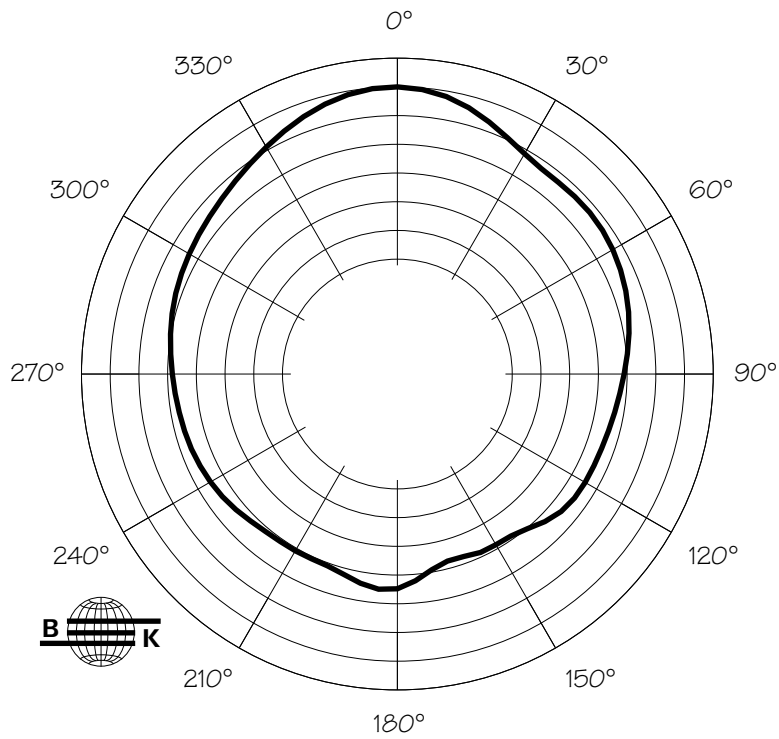
UB12 1000 Hz Vertical Octave Polar Data



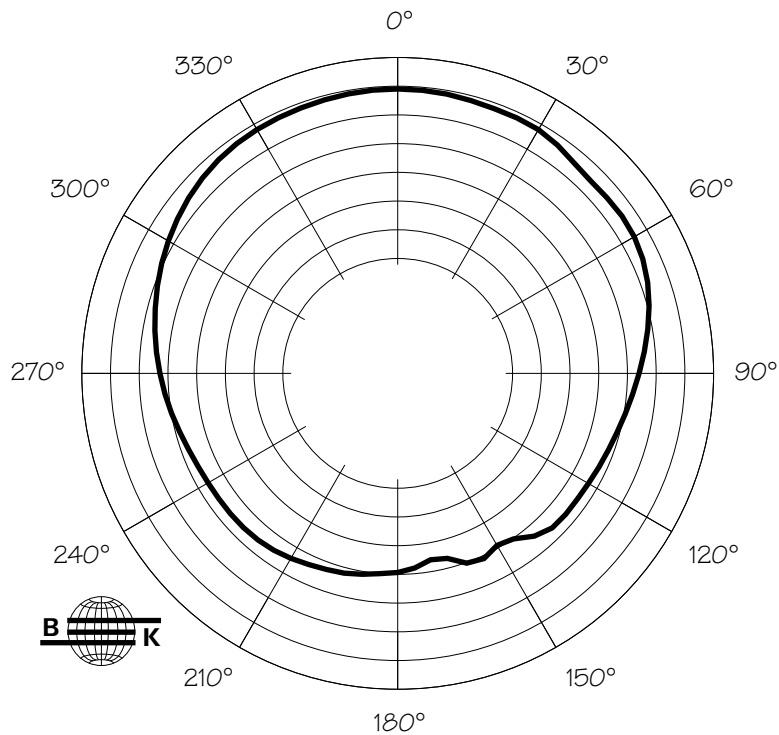


Vertical Octave Polar Data UB12

UB12 2000 Hz Vertical Octave Polar Data



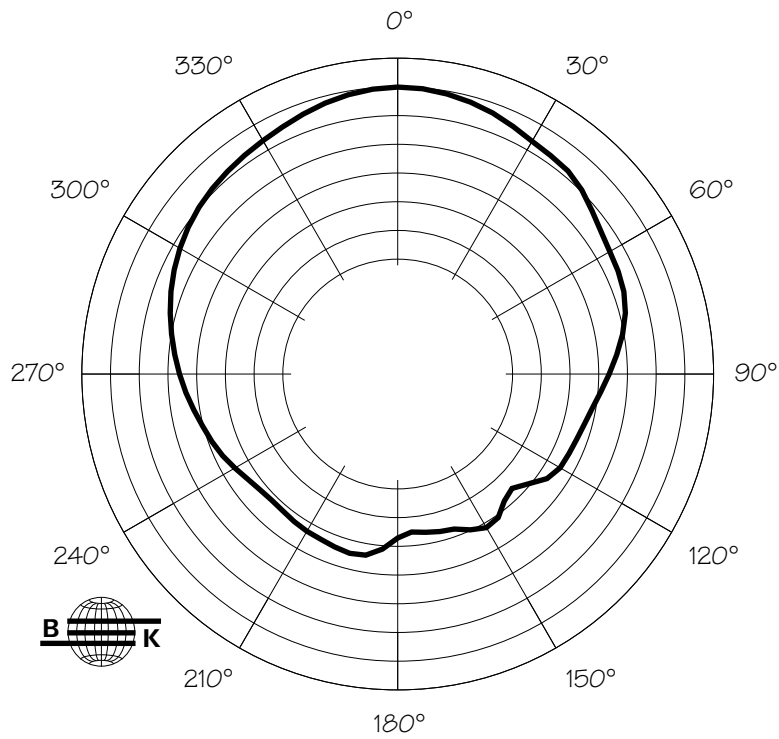
UB12 4000 Hz Vertical Octave Polar Data





Vertical Octave Polar Data UB12

UB12 8000 Hz Vertical Octave Polar Data



UB12 16000 Hz Vertical Octave Polar Data

