



JF50 Technical Specifications

APPLICATIONS

The JF50's extremely small size, smooth frequency response, broad, even coverage pattern and surprisingly high output capabilities make it a natural candidate for applications where aesthetic requirements or space allowances make it almost impossible to locate a loudspeaker, but high quality sound is nonetheless a high priority.

- Trade Show Exhibits
- Houses of Worship
- High-Output Distributed Systems*
- Underbalcony and Delay Fills
- High Quality Background/Foreground Music Systems
- Hotels
- Boardrooms
- Theme Parks
- Stage Lip Systems

SPECIFICATIONS

Frequency Response

±3 dB	100 Hz to 18 kHz
-10 dB	67 Hz

Axial Sensitivity

SPL 1w @ 1m	94 dB
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Impedance

Nominal	16Ω
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Power Handling

AES	300 Watts
100 Hour Sine Wave	120 Watts

Maximum Output

Long Term	112 dB SPL
Peak	119 dB SPL

Nominal Coverage Angles (-6 dB)

Horizontal	120 degrees
Vertical	80 degrees

Additional Descriptive Data

LF Subsystem	2 x 5.25" Vented
HF Subsystem	1 x 1" soft dome
Powering Mode	Passive
Finish	Black Catalyzed Polyurethane Coating
Connectors	Neutrik NL4 SpeakOn® Connector and 2-pin Barrier Strip
Grill	Vinyl Coated Perforated Steel

Dimensions & Weights

Height	16.5 in (419 mm)
Width	6.25 in (159 mm)
Depth	6.0 in (152 mm)
Back Width	4.22 in (107 mm)
Net Weight	15.5 lbs. (7.0 kg)
Shipping Weight	17.5 lbs. (7.9 kg)

OTHER RELEVANT DOCUMENTS

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



ARCHITECTURAL SPECS

The two-way full range loudspeaker system shall incorporate two 5.25-inch cone low frequency transducers 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 94 dB SPL (LF); 100 hour sine wave Power Handling of 120 Watts , AES method Power Handling of 300 Watts; Horizontal coverage of 120 degrees between 6dB down points; Vertical coverage of 80 degrees between 6dB down points.

The system's two low frequency drivers shall be loaded into a single 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 trapezoidal 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.

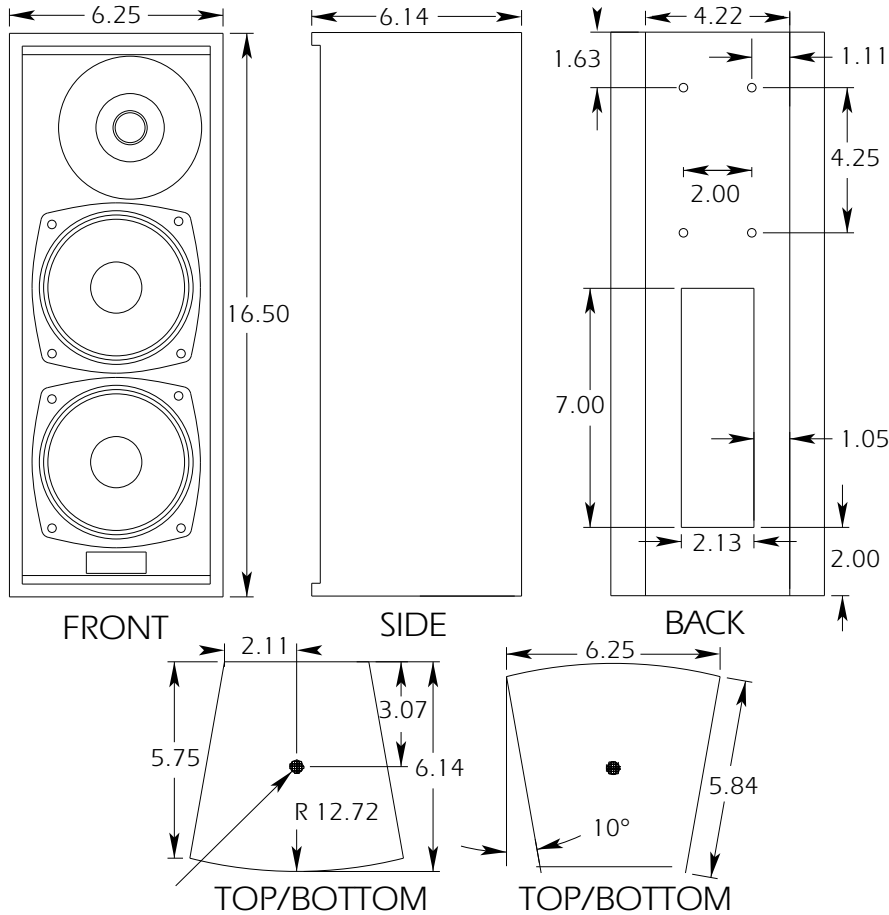
The two-way full range loudspeaker system shall be the EAW model JF50.



DIMENSIONAL DRAWING

JF50

- MOUNTING POINTS 3/18"-16 T-NUTS WELDED TO ALUMINUM PLATE
 - MOUNTING POINTS 1/4"-20 T-NUTS FOR OMNIMOUNT SERIES 75
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



INPUT PLATE

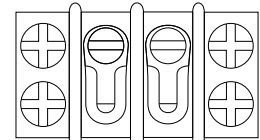


JF-50

SOUND REINFORCEMENT SYSTEM

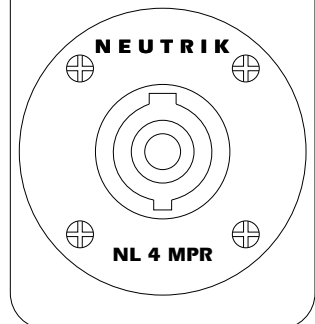
NO.

MADE IN USA



INPUT

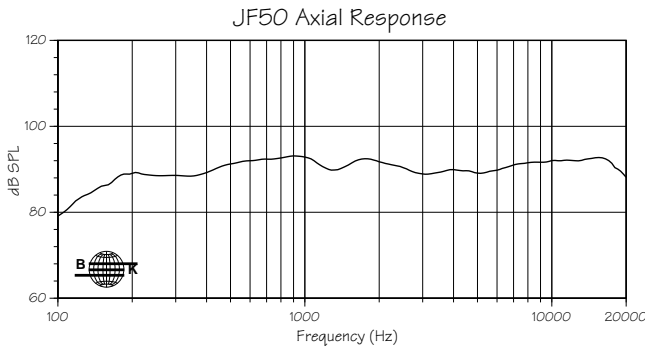
PIN 1-...-
PIN 1+...+



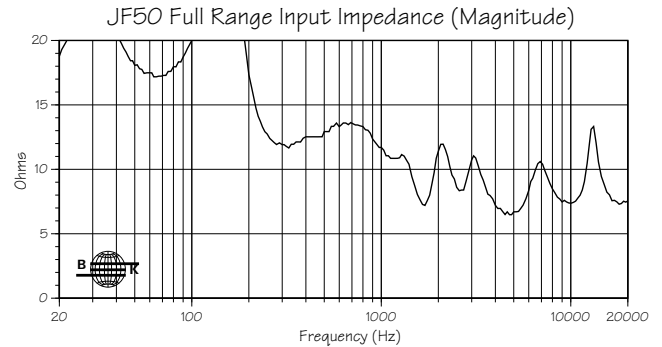


Performance Data JF50

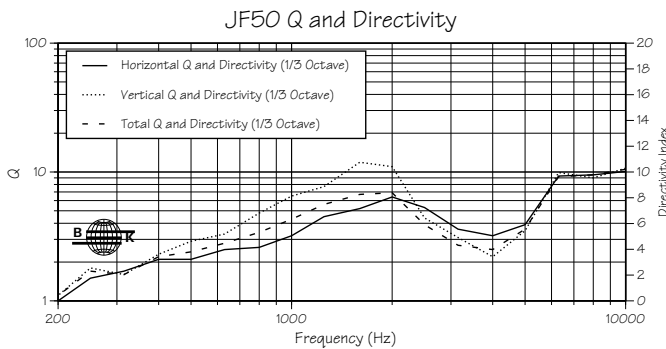
FREQUENCY RESPONSE



INPUT IMPEDANCE



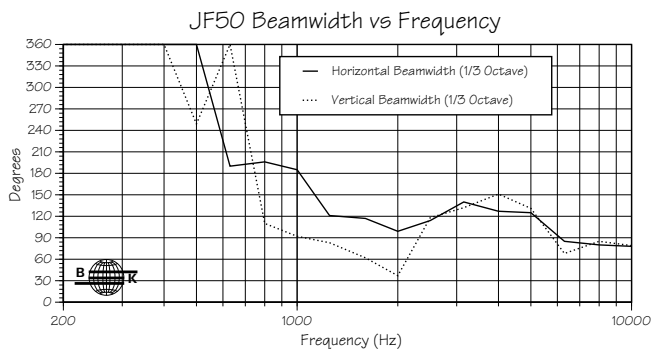
Q & DIRECTIVITY INDEX (DI)



Q & BEAMWIDTH BY FREQUENCY

Freq	Hor Q	Ver Q	Tot Q	Hor Beamwidth	Ver Beamwidth
100	1.2	1.3	1.2	360	360
125	1.1	1.2	1.1	360	360
160	1.4	1.7	1.6	360	360
200	1	1.1	1.1	360	360
250	1.5	1.8	1.7	360	360
315	1.7	1.6	1.6	360	360
400	2.1	2.3	2.2	360	360
500	2.1	2.9	2.4	360	249
630	2.5	3.3	2.8	190	360
800	2.6	4.8	3.4	196	110
1000	3.2	6.5	4.3	185	92
1250	4.5	7.7	5.6	121	83
1600	5.2	11.9	6.7	117	62
2000	6.4	11	6.9	99	37
2500	5.3	4.4	3.9	114	118
3150	3.6	3.1	2.7	140	132
4000	3.2	2.2	2.5	127	151
5000	3.9	3.5	3.6	125	131
6300	9.3	9.9	9.2	85	68
8000	9.5	9	9.5	80	85
10000	10.1	10.7	10.5	78	79
12500	21.2	20.2	20.7	50	51
16000	29	32.4	30.6	38	38
20000	18.4	18.5	18.0	45	45

BEAMWIDTH

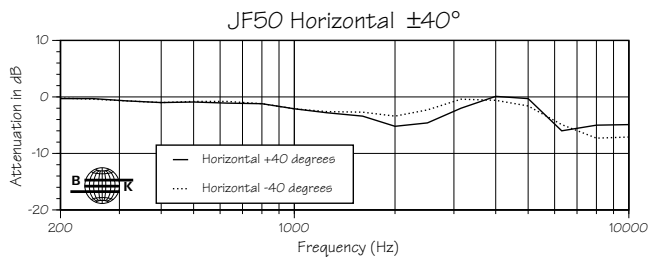
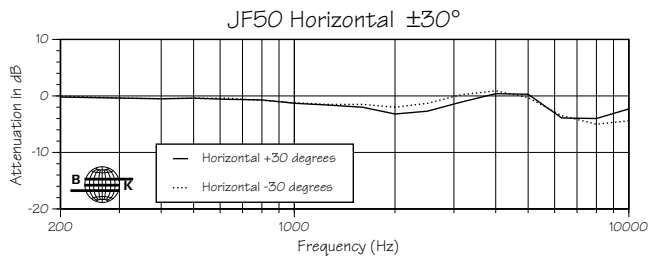
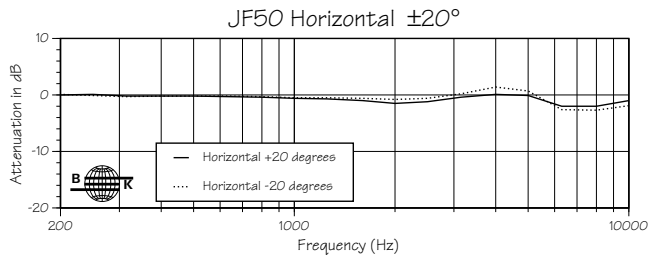
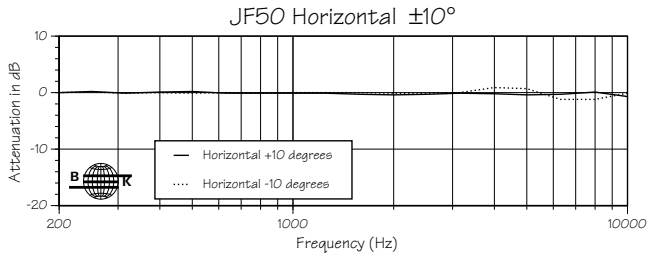




Performance Data JF50

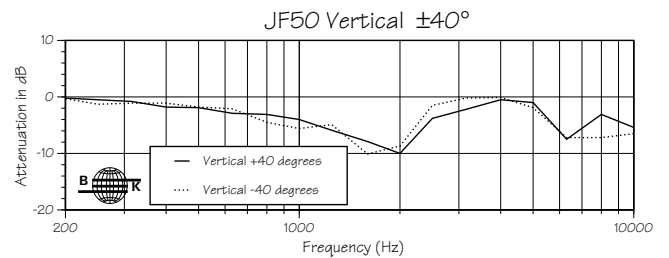
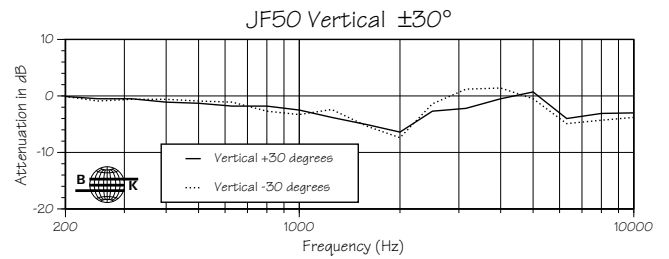
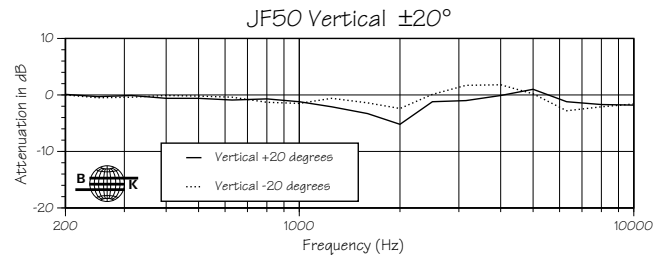
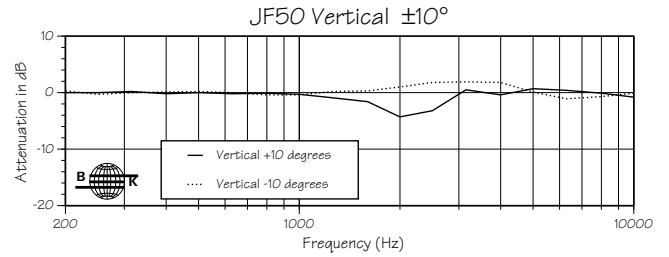
HORIZONTAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



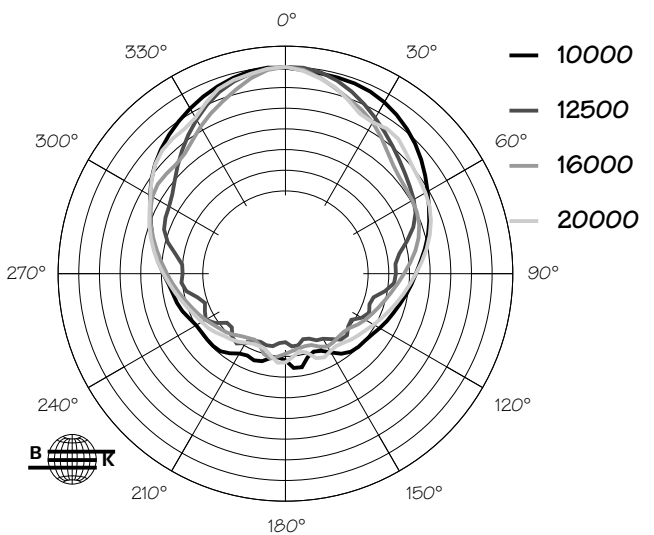
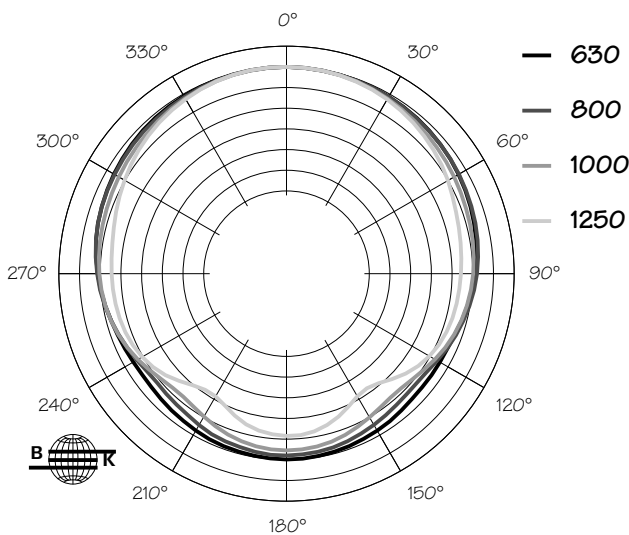
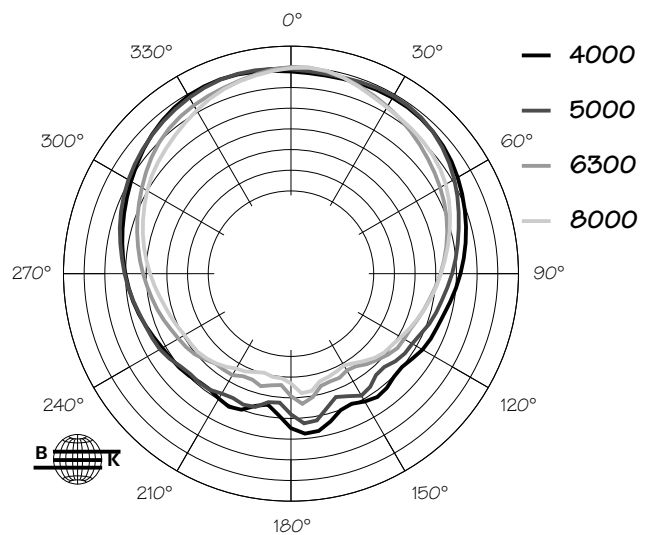
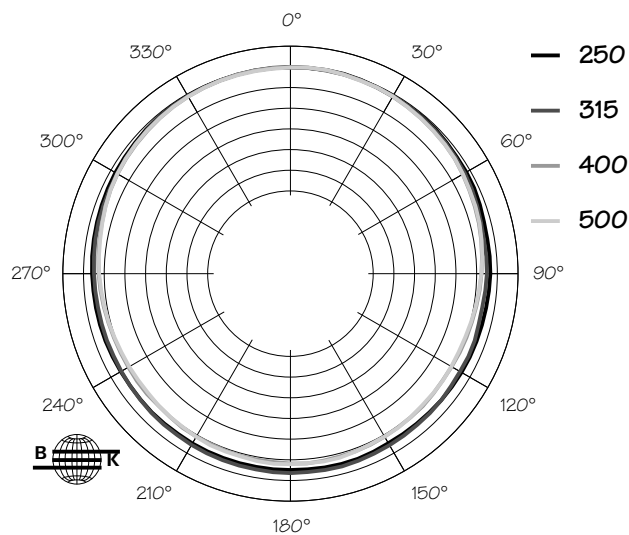
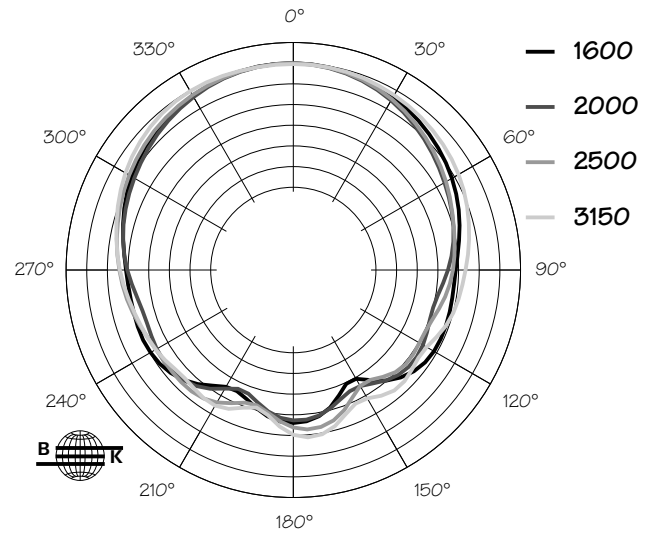
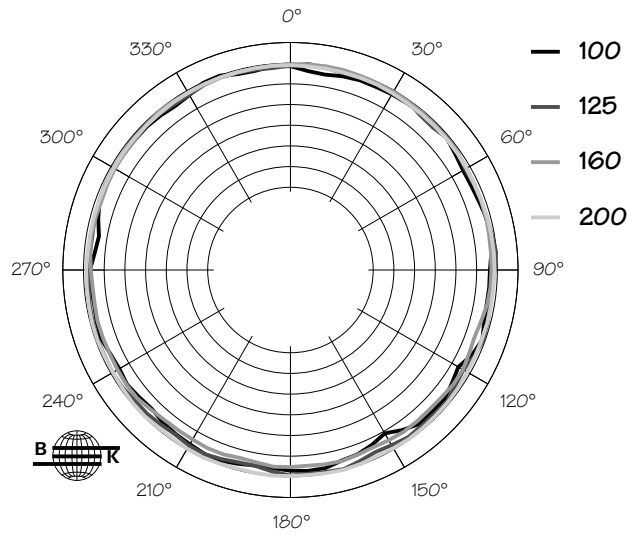
VERTICAL OFF-AXIS RESPONSE

On-axis response normalized to 0 dB.



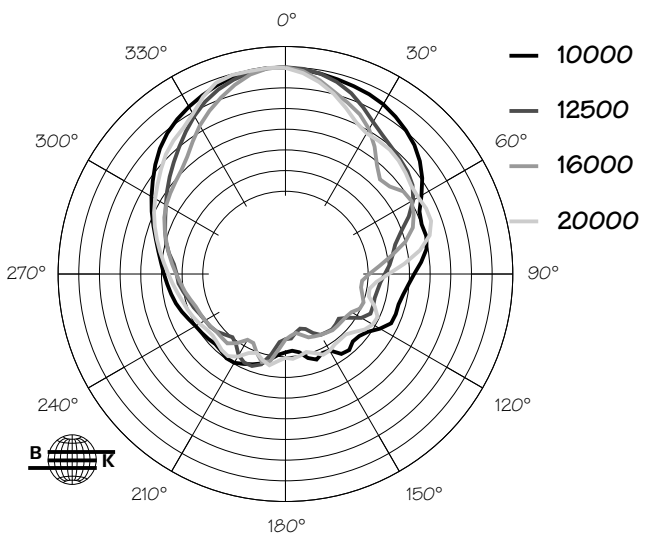
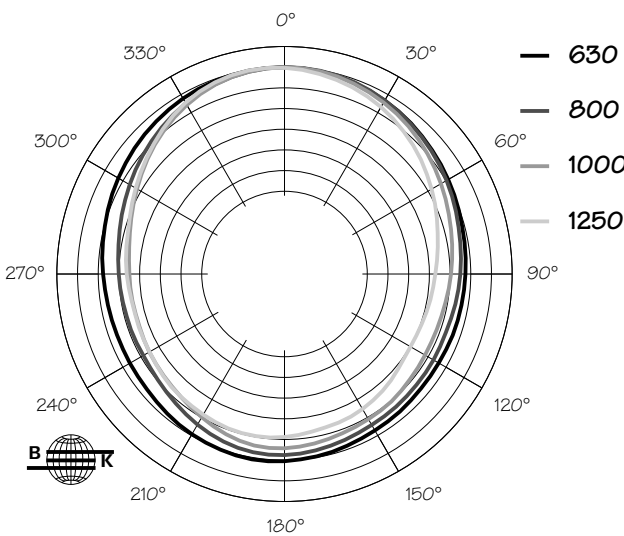
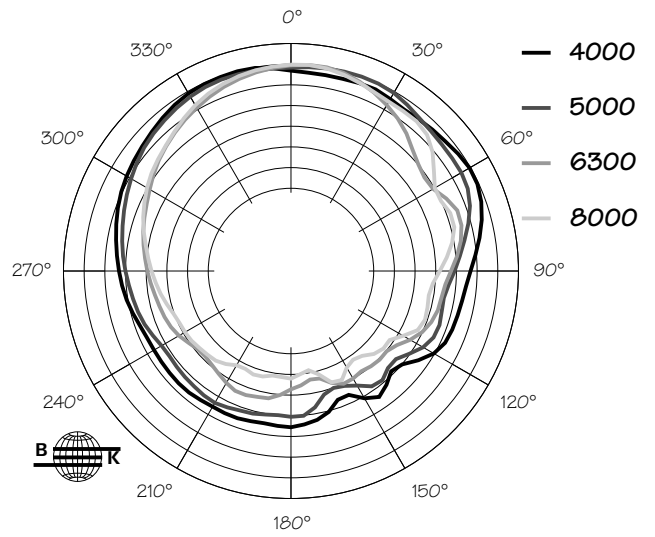
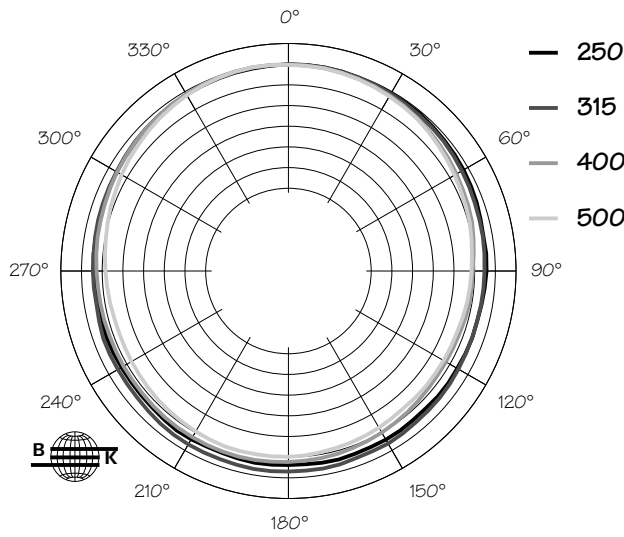
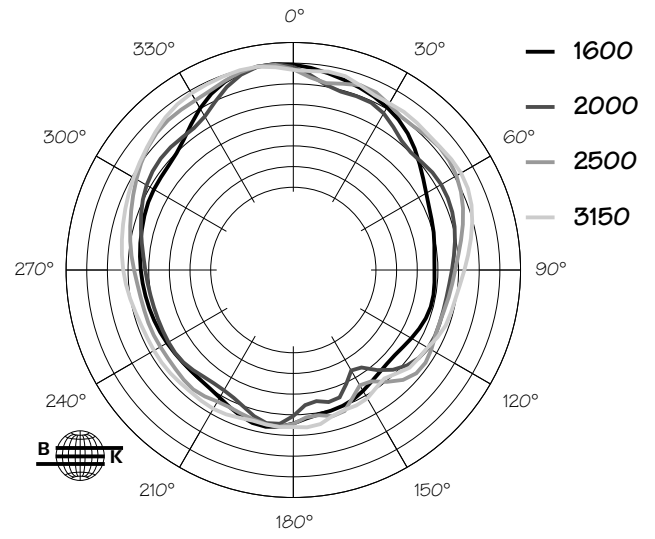
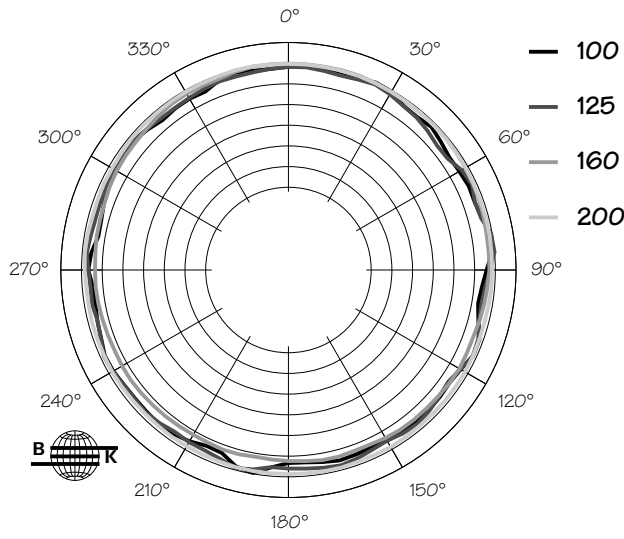


Horizontal 1/3 Octave Polar Data JF50





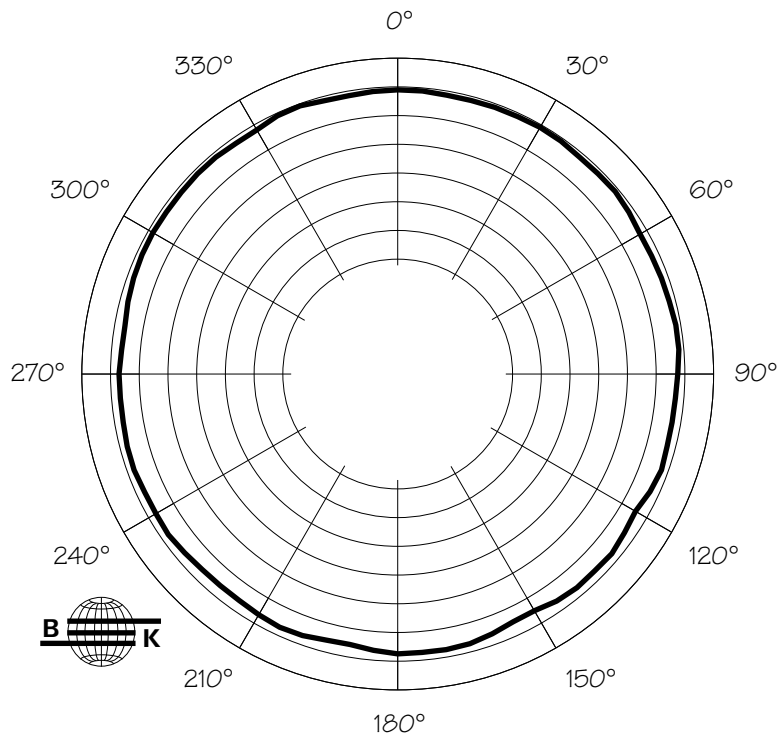
Vertical 1/3 Octave Polar Data JF50



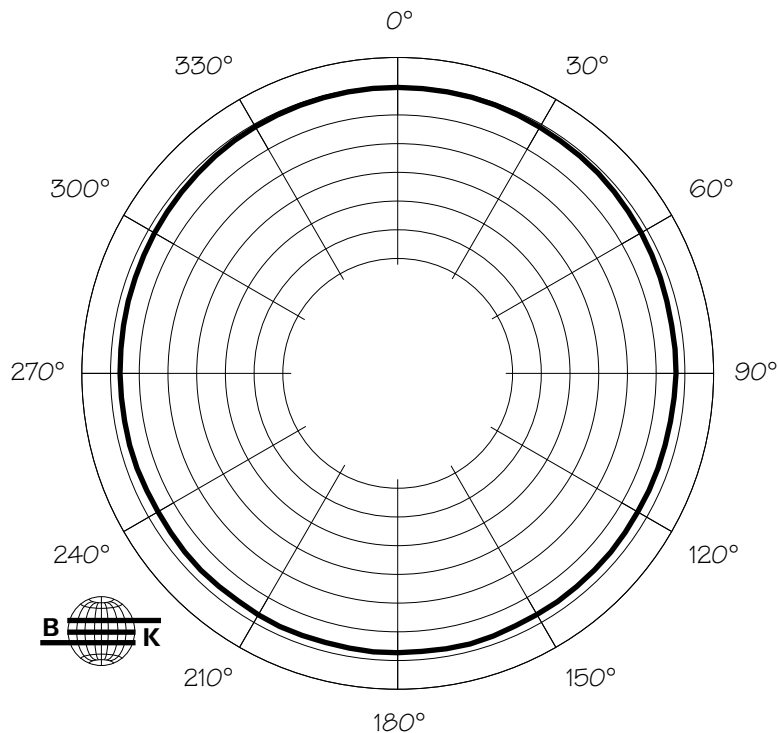


Horizontal Octave Polar Data JF50

JF50 125 Hz Horizontal Octave Polar Data



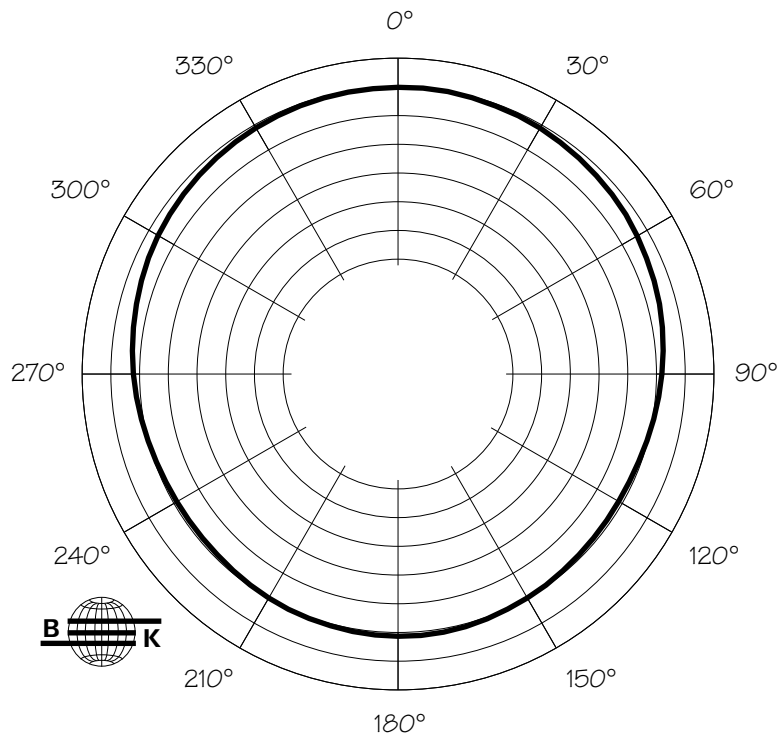
JF50 250 Hz Horizontal Octave Polar Data



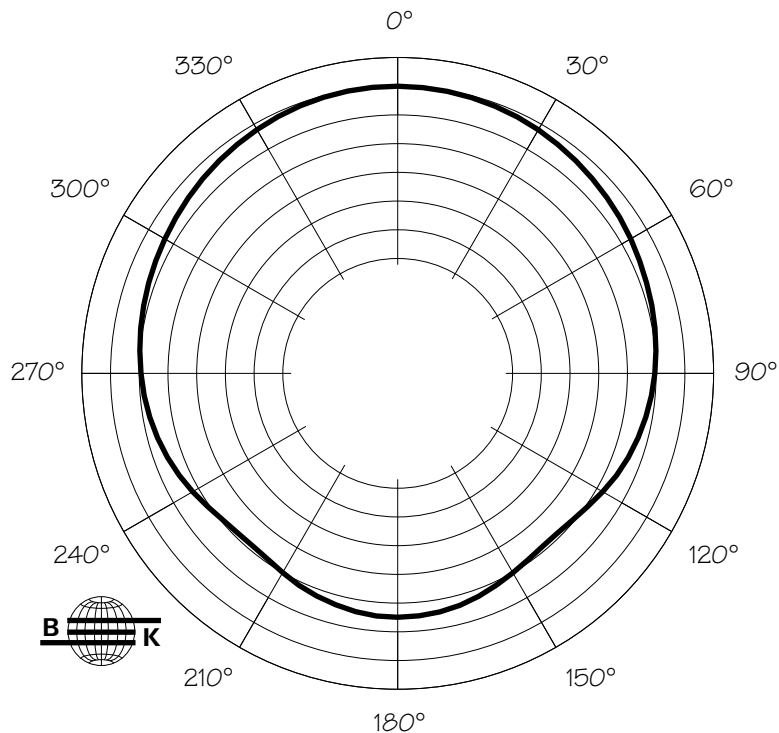


Horizontal Octave Polar Data JF50

JF50 500 Hz Horizontal Octave Polar Data



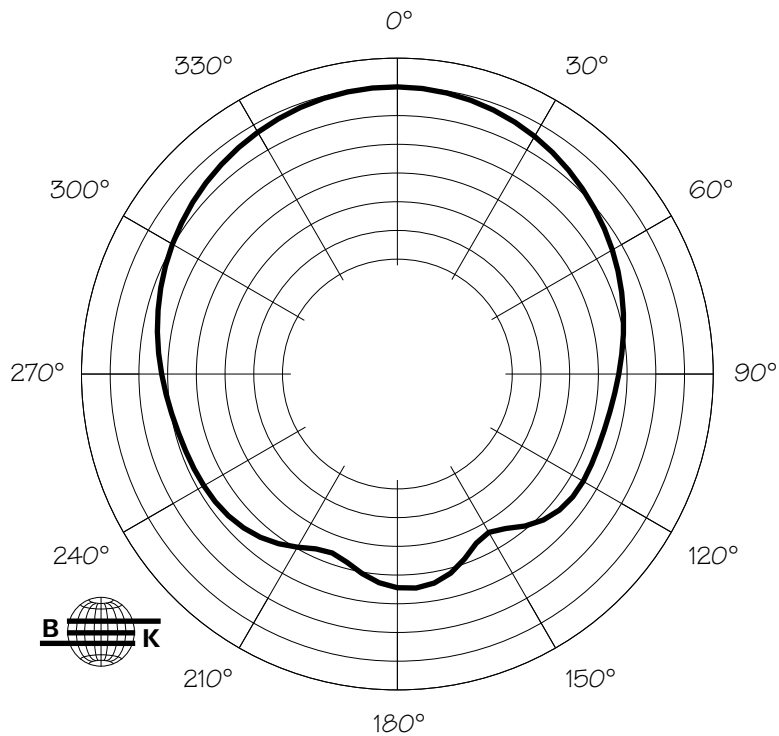
JF50 1000 Hz Horizontal Octave Polar Data



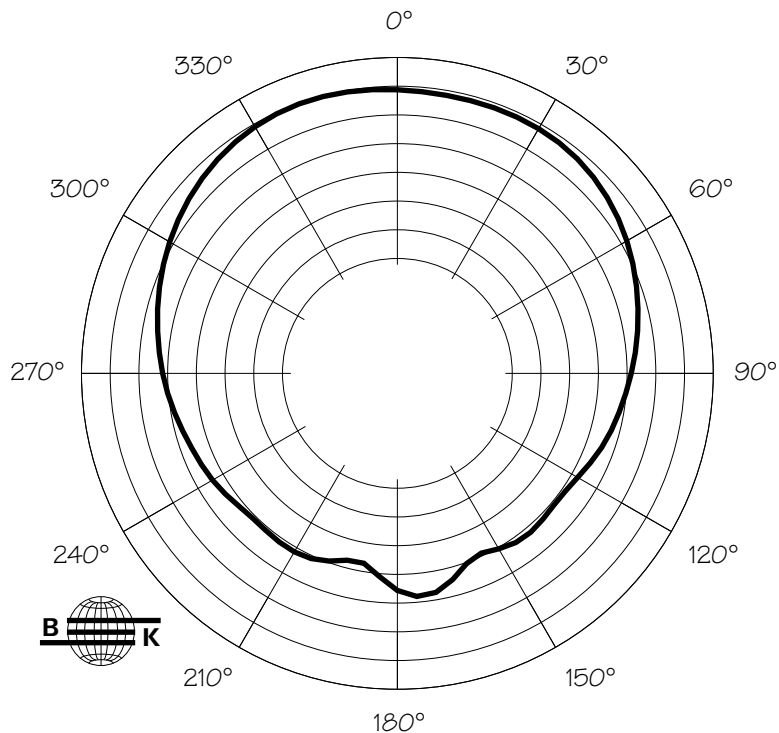


Horizontal Octave Polar Data JF50

JF50 2000 Hz Horizontal Octave Polar Data



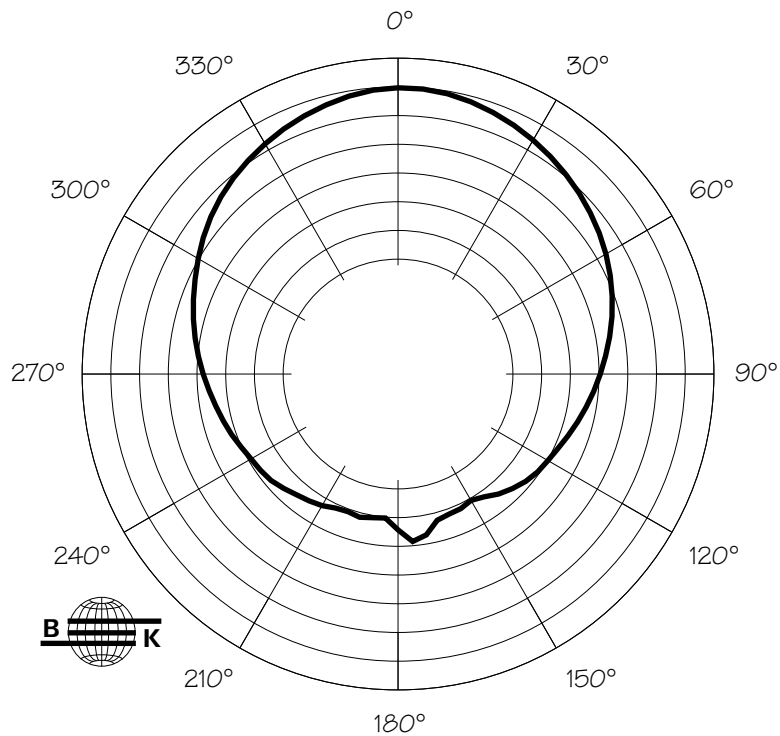
JF50 4000 Hz Horizontal Octave Polar Data



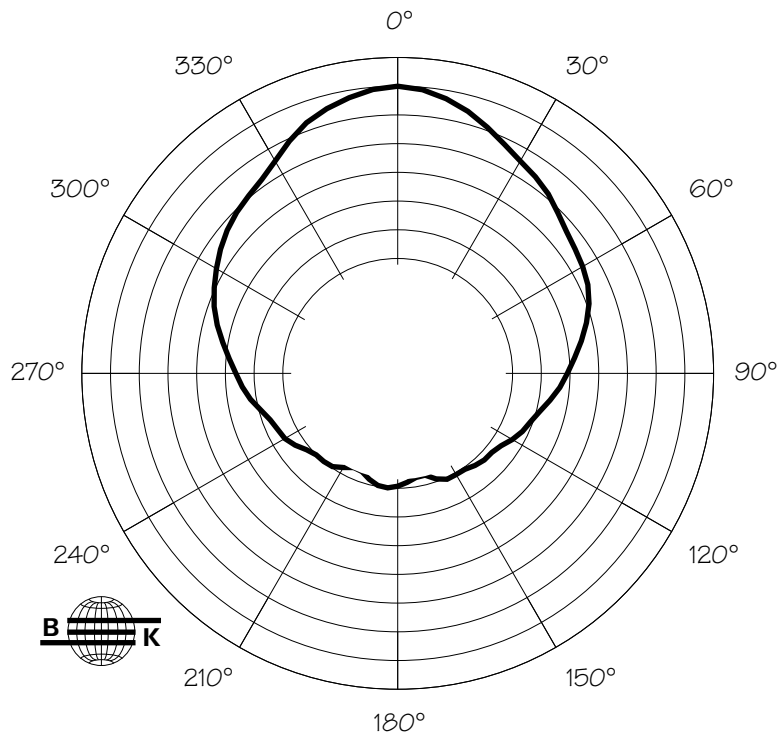


Horizontal Octave Polar Data JF50

JF50 8000 Hz Horizontal Octave Polar Data



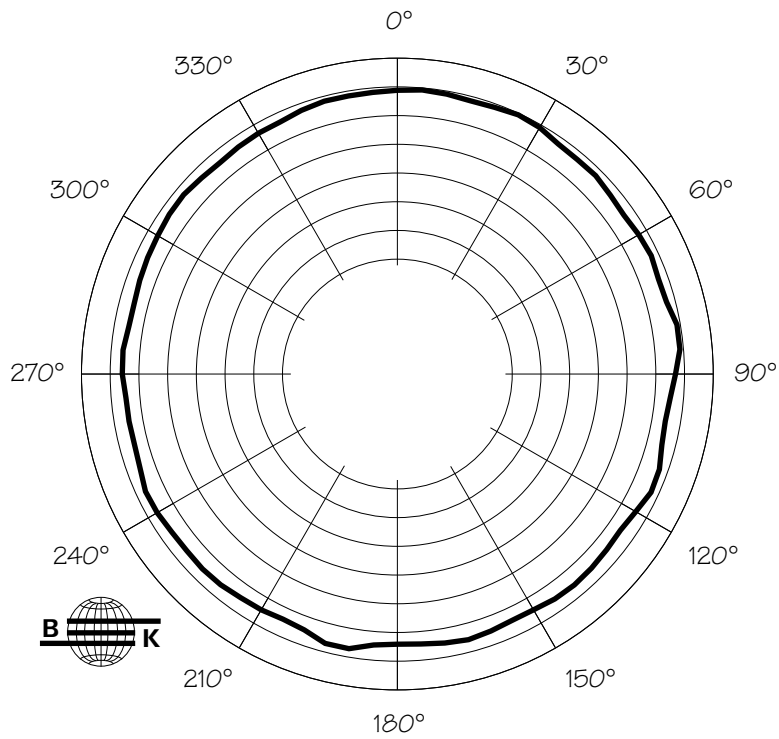
JF50 16000 Hz Horizontal Octave Polar Data



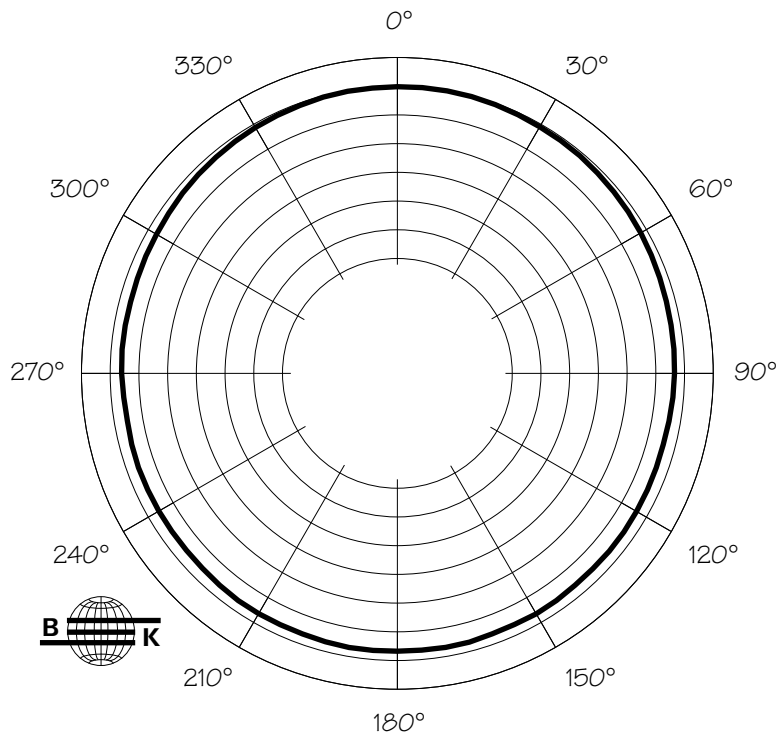


Vertical Octave Polar Data JF50

JF50 125 Hz Vertical Octave Polar Data



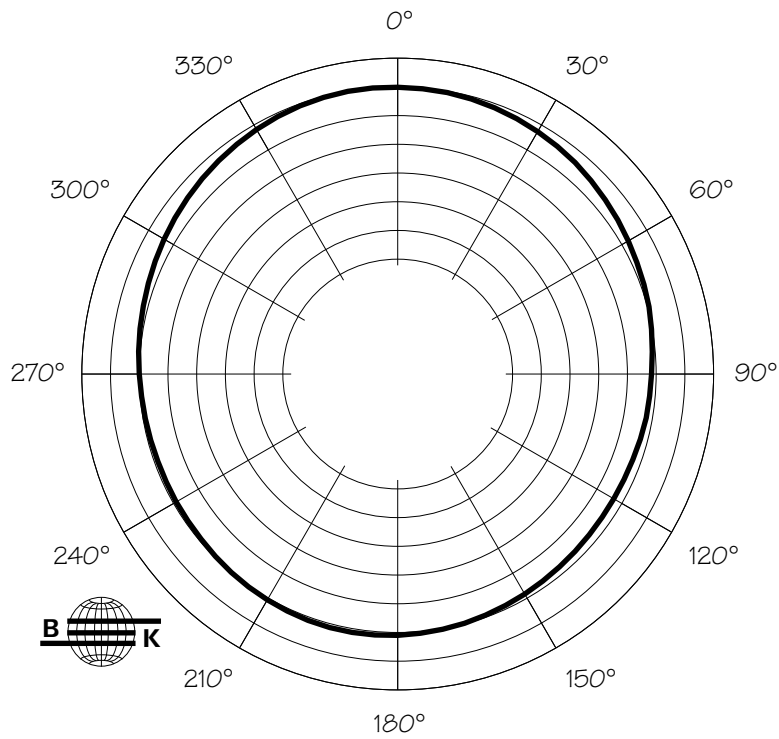
JF50 250 Hz Vertical Octave Polar Data



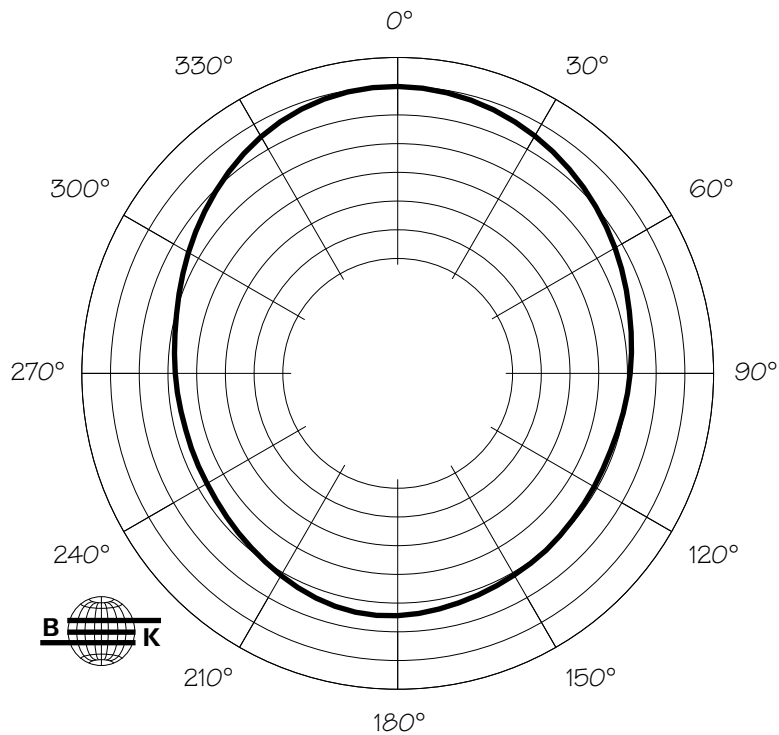


Vertical Octave Polar Data JF50

JF50 500 Hz Vertical Octave Polar Data



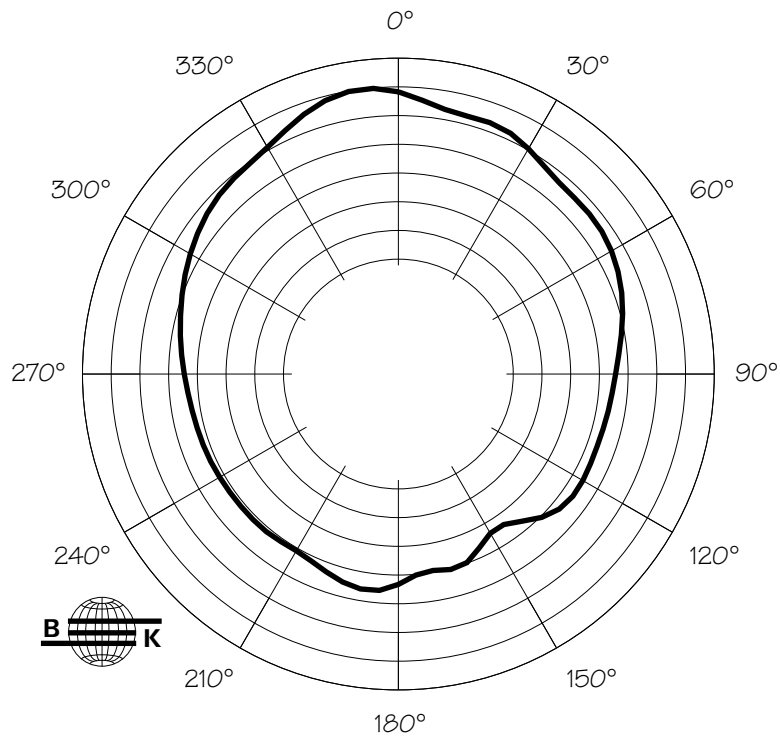
JF50 1000 Hz Vertical Octave Polar Data



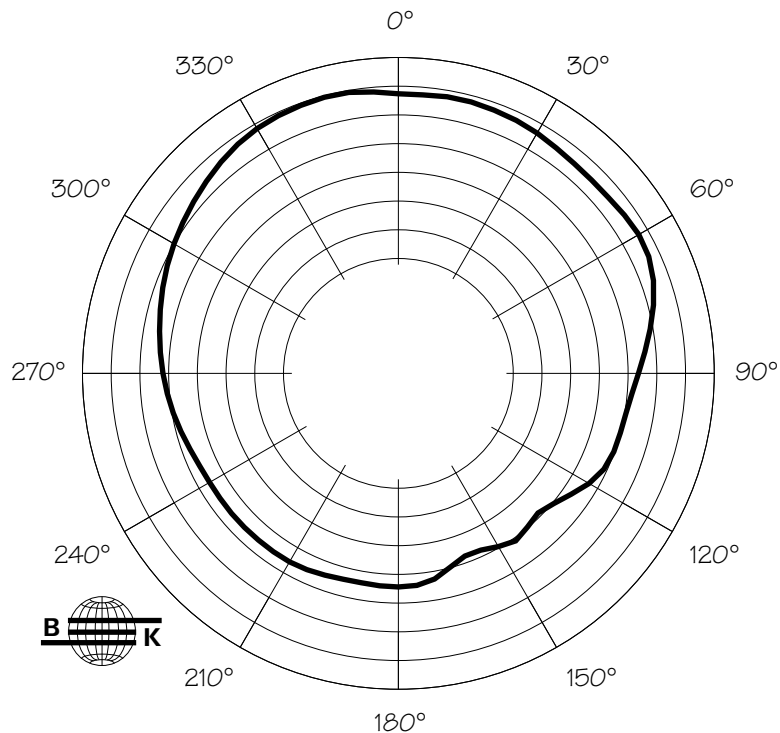


Vertical Octave Polar Data JF50

JF50 2000 Hz Vertical Octave Polar Data



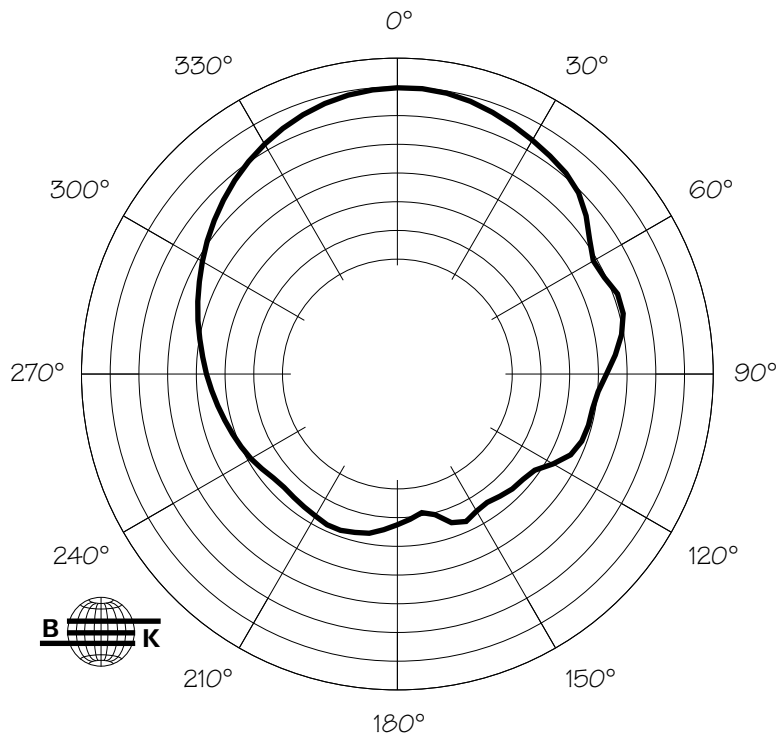
JF50 4000 Hz Vertical Octave Polar Data





Vertical Octave Polar Data JF50

JF50 8000 Hz Vertical Octave Polar Data



JF50 16000 Hz Vertical Octave Polar Data

