



4895

Three-Way High Directivity Horn Loaded Positionable Array Element

HLA Series

Key Features:

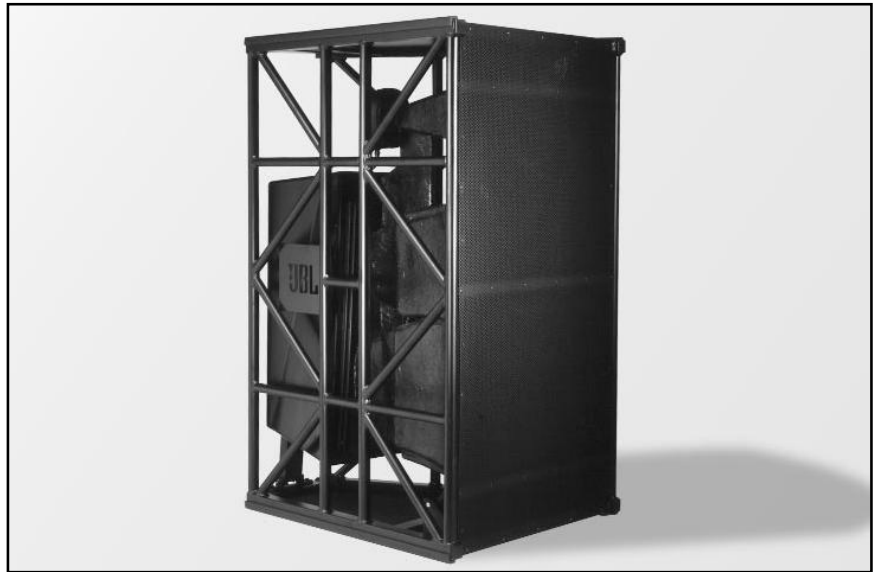
- ▶ **High Technology Transducers**
DCD™, Differential Drive®, Direct Cooled™, Cone Transducers for Very Low Weight and High Output
- ▶ **Patented SpaceFrame™ Ideal Array Element Design²**
Trapezoidal Aluminum SpaceFrame™ with Positionable Waveguide allows Quick Setup and Precise Coverage of Any Venue with One Type of System
- ▶ **MultiBand Waveguide™**
Optimized Aperture™ Design provides Wideband, Controlled Coverage with Very Low Distortion
- ▶ **Simple Rigging System**
Three components; Grid, Connecting Bar, Lifting Bar

HLA Systems

JBL's commitment to providing audio professionals the highest technology through innovation is demonstrated by each component of the 4895. JBL's transducer research and engineering expertise has delivered a radically new type of motor topology that provides a new, higher level of performance from cone transducers that are one-third the weight of previous designs, and are capable of higher continuous SPL through DCD™ (Direct Cooled™, Differential Drive®).

A trapezoidal aluminum patented² Spaceframe™ is used in place of wood for an increase in structural rigidity while reducing weight. The proven Optimized Aperture™ design is applied to a MultiBand Waveguide™ to complete the leading-edge technologies in this unique system.

Instead of incrementally improving existing system designs, JBL engineers took a different approach. Carefully analyzing how to provide each listener in an audience better sound, a highly-directive array element was envisioned that would be far easier to set up and use. Replacing wood boxes with an aluminum SpaceFrame reduced weight while also providing an ergonomic platform for a user-positionable waveguide. This allows arrays to be constructed with vertical coverage of 30° to 60° from a single model of speaker unit and one simple connecting bar for rigging. A clean, continuous array with improved appearance and sight-line is the result.



The Optimized Aperture, MultiBand Waveguide is powered by Direct Cooled, Differential Drive transducers. These new-generation loudspeakers use a dual-gap neodymium motor with dual voice coils for increased output at all power levels. Additional benefits of this design include doubled power handling, very low weight, improved high frequency response, and minimized power compression. Power handling is further improved by positioning the integral heatsinks into a thermal channel outside the rear of the transducer chamber "magazine".

Product Specifications:

System

Frequency Response (±3 dB) ¹ :	110 Hz-18 kHz
Hor. Coverage Angle (-6 dB):	40° average, 315 Hz to 16 kHz
Vert. Coverage Angle (-6 dB):	30° average, 315 Hz to 16 kHz
Directivity Index (DI)/Factor (Q):	13.5/23 average, 315 Hz to 16 kHz
Maximum Peak Output:	140 dB @ 1m
Recommended Controller:	DSC280, Multiple HLA 4895 Tunings in Memory

Transducers

Low Frequency:	2254J, 355 mm (14 in) dia., 76 mm (3 in) DCD™ Differential Drive™, Direct Cooled™
Nominal Impedance:	16 Ohms
Input Power Rating:	600 W, AES
Sensitivity:	107 dB, 1 W, @ 1 m (3.3 ft) (In waveguide)
Mid Frequency:	2251J, 355 mm (10 in) dia., 76 mm (3 in) DCD™ Differential Drive™, Direct Cooled™
Nominal Impedance:	16 Ohms
Input Power Rating:	400 W, AES
Sensitivity:	107 dB, 1 W, @ 1 m (3.3 ft) (In waveguide)
High Frequency:	2451SL, 100 mm (4 in) Titanium diaphragm and voice coil dia., 38 mm (1.5 in) throat dia.
Input Power Rating:	16 Ohms
Input Power Rating:	75 W, AES
Sensitivity:	116 dB, 1 W, @ 1 m (3.3 ft) (In waveguide)

Waveguide/SpaceFrame™

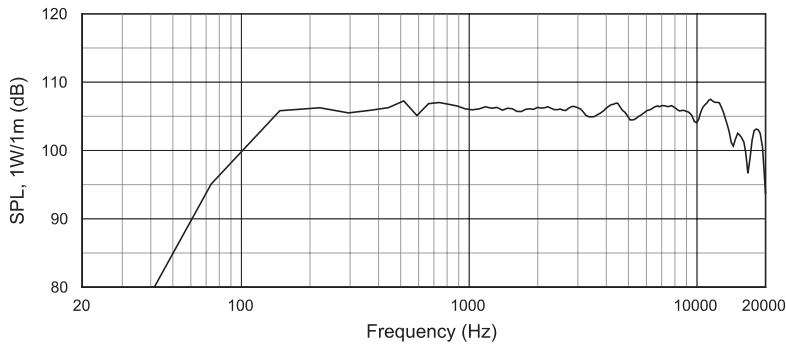
Waveguide/SpaceFrame™	Trapezoidal, 15° Side Angle, 6061, T6 A1 Aimable waveguide (Quick Locking, 15°)
Flying System:	I Beam Connecting Bar, Lifting Bar
Grille:	Black Perforated, Foam Backed
Input Connectors:	NL8, or Options
Dimensions (HxWxD):	1333 mm x 838 mm x 889 mm (52.5 in x 33 in x 35 in)
Net Weight:	104.5 kg (230 lbs)
Shipping Weight:	113.6 kg (250 lbs)

¹For 4 units arrayed together.

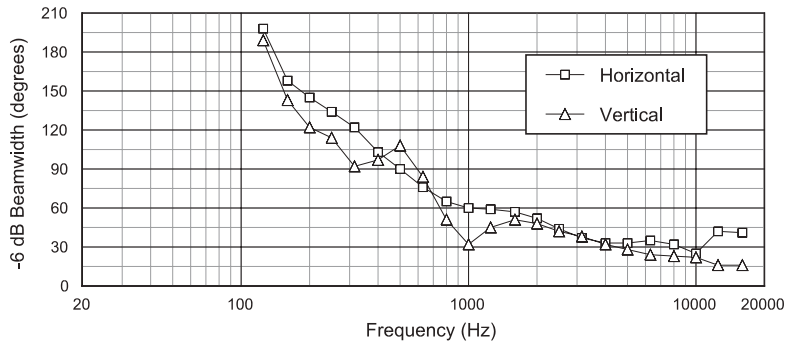
²U.S. Patent #5,602,366. Foreign patents pending.

JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.

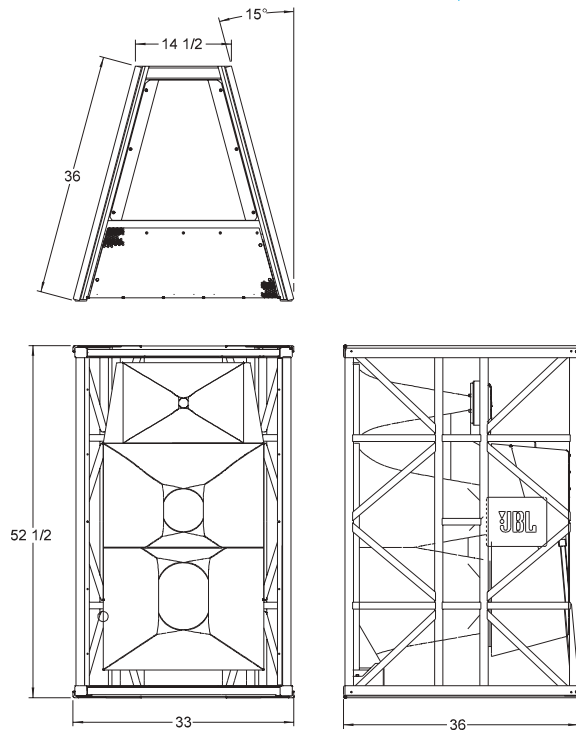
► 4895 Three-Way High Directivity Horn Loaded Positionable Array Element



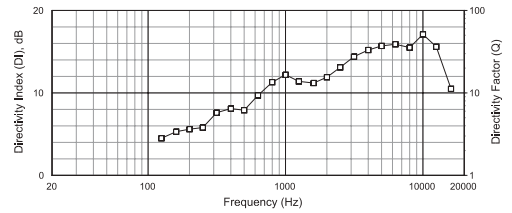
Frequency Response (1W, 1m)



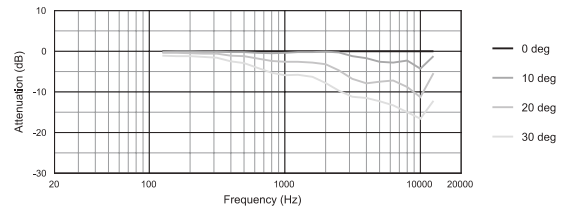
Beamwidth



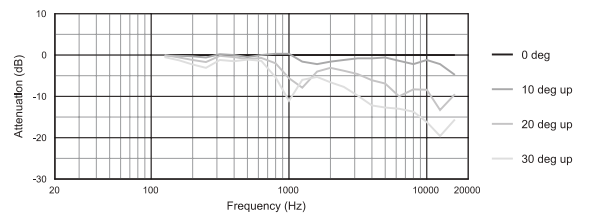
Directivity Index, Q



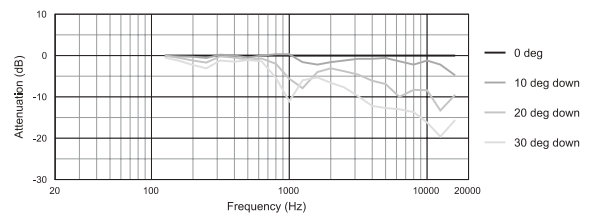
Horizontal Off Axis Frequency Response



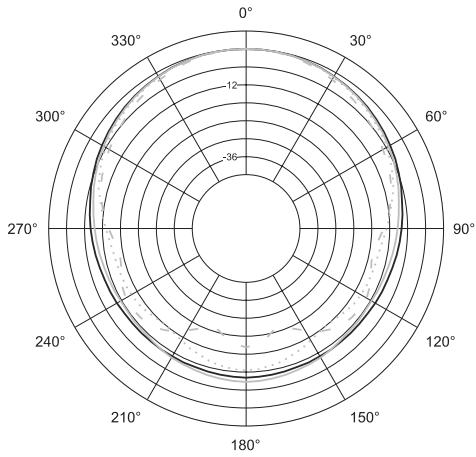
Vertical Off Axis Frequency Response (up)



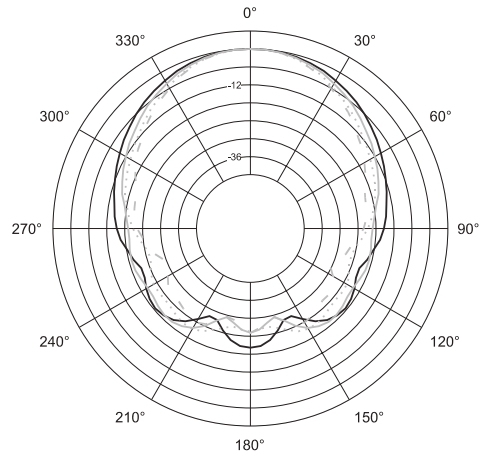
Vertical Off Axis Frequency Response (down)



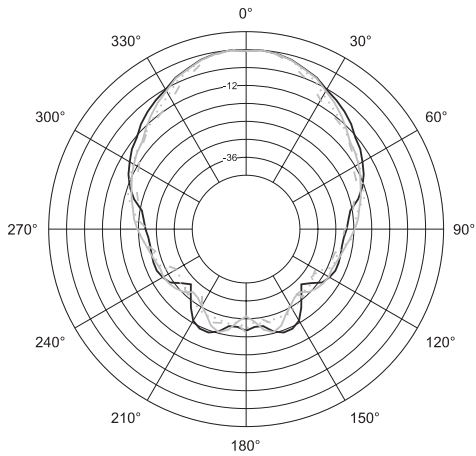
Horizontal 1/3 Octave Polars



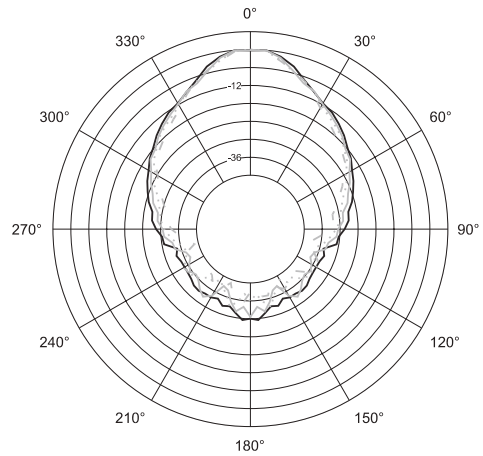
- 200Hz
- 250Hz
- 315Hz
- - - 400Hz



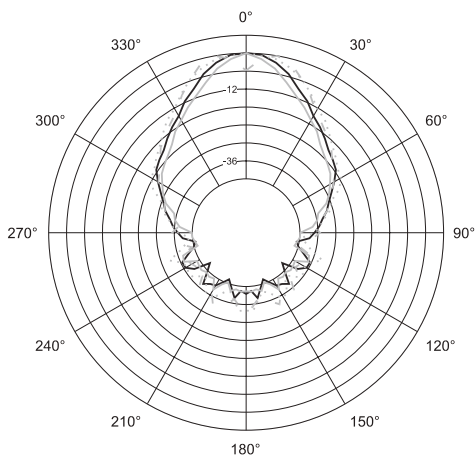
- 500Hz
- 630Hz
- 800Hz
- - - 1kHz



- 1.25kHz
- 1.6kHz
- 2kHz
- - - 2.5kHz



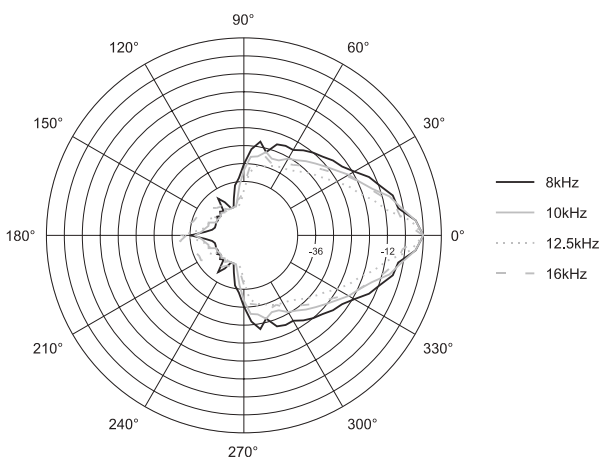
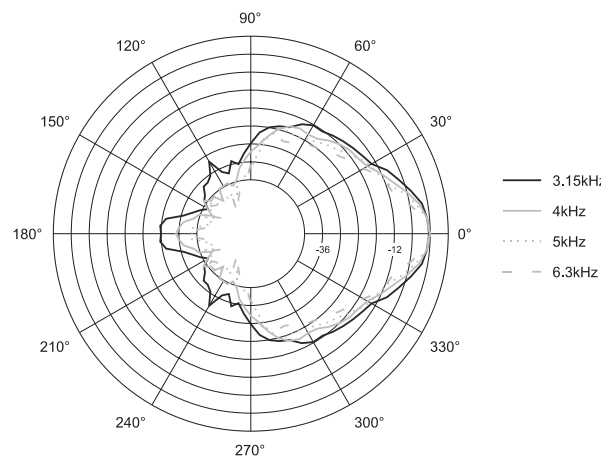
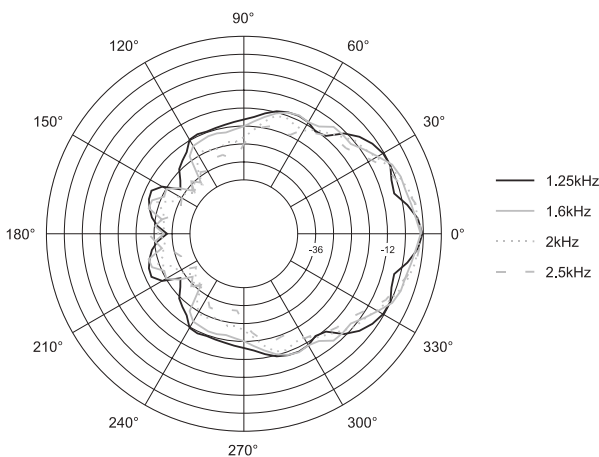
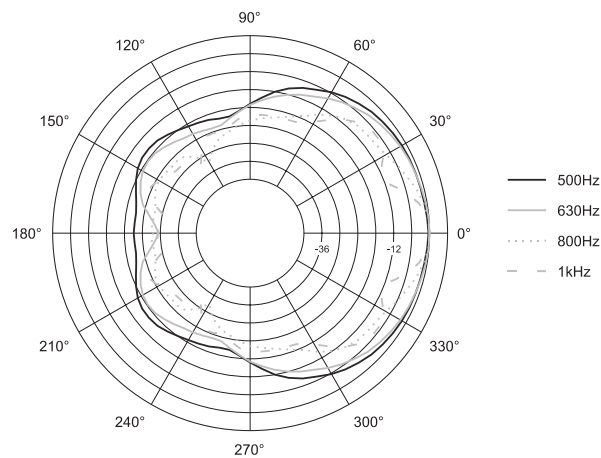
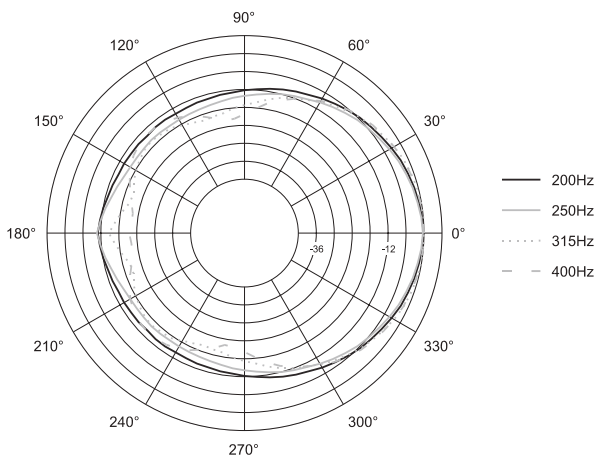
- 3.15kHz
- 4kHz
- 5kHz
- - - 6.3kHz



- 8kHz
- 10kHz
- 12.5kHz
- - - 16kHz

► 4895 Three-Way High Directivity Horn Loaded Positionable Array Element

Vertical 1/3 Octave Polars



JBL Professional
 8500 Balboa Boulevard, P.O. Box 2200
 Northridge, California 91329 U.S.A.
 A Harman International Company

SS 4895
 CRP 10M
 2/97