

Take Your Speaker Design to The Next Level with the Next-Generation of Radian Planar Ribbon Drivers! Originally designed for cinema speakers and installed vertical arrays, the detail and clarity of the original LT2 Planar Ribbon driver and corresponding waveguide made it popular in hifi and home theater applications. Now, adding to the performance improvements, Radian introduced new cosmetically improved models to be used in open-baffle and visible configurations.



LT2.2

HF Planar Ribbon Transducer

Speakers based on drivers with thin-film diaphragms deliver exceptional sound quality in mid- and high-frequency ranges. Radian Planar Ribbon drivers embody the latest advancements and production know-how based on nearly four decades of experience in the development of this technology for a wide range of applications.

At the heart of Radian's planar ribbon series lays a symmetric push-pull, FEA-optimized magnetic structure based on very high MGO energy neodymium magnets with very even magnetic flux distribution. A lot of care has been applied to the metal parts design to minimize stray flux, maximize efficiency, and reduce and even eliminate distortion related to the magnetic structure. Special focus has been given to the mechanical design to ensure dimensional stability, longevity, and toughness of the drivers for the most demanding applications.

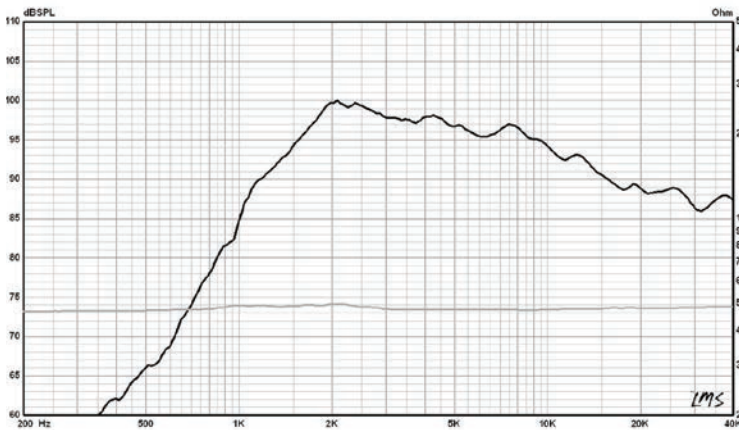
The LT2.2 is a high-frequency planar ribbon transducer with an extended frequency response effective from 12 kHz – 40 kHz, matched to a corresponding LT2.2-WG 120° × 60° waveguide. Optional configurations are available for custom orders, including weatherproofing, raw driver without waveguide for custom mounting, and open back version with dipole radiation pattern.

LT2.2 Unique Attributes:

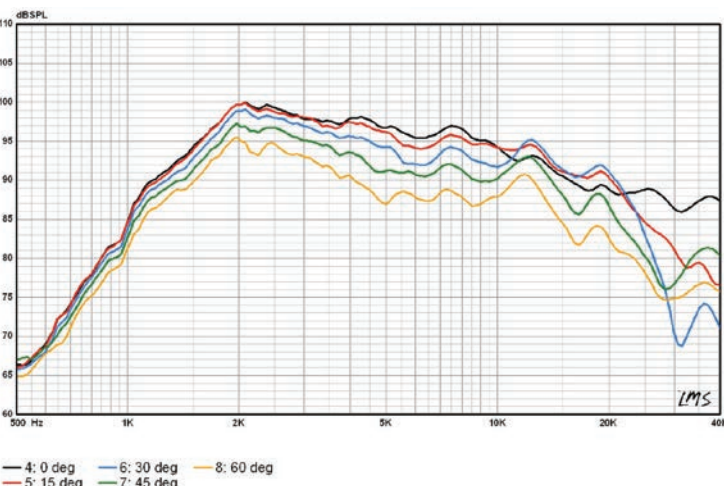
- Proprietary design with Neo magnets Kapton diaphragm
- High sensitivity and flat resistive impedance
- Extremely low distortion due to absence of voice coil inductance and related intermodulation effects
- Exceptional sonic transparency and resolution surpassing conventional HF drivers
- Wide and even horizontal dispersion
- Reliable design, successfully proven in long term operations in residential and commercial applications
- Optimized for line arrays with maximized ratio of radiating slots to total driver length
- Optional configurations available for custom orders: weatherproof version, open back version with dipole radiation pattern

Specifications

Nominal size	2.80"/71mm
Radiating configuration Closed back (with rear cup)	standard
Dipole (open back)/ custom cup	optional
Rated impedance	5 Ω
Power handling, AES ¹	20 W
Long-term maximum power, IEC ¹	30 W
Short-term maximum power, IEC ¹	60 W
Sensitivity, 1W/1m, on waveguide ²	96 dB
Effective frequency range ³	1.2 kHz – 40 kHz
Horizontal coverage angle ⁴	120 deg
Vertical coverage angle ⁴	60 deg
Diaphragm	Kapton
Current carrying conductors	Aluminum foil
Displacement limit for VC	0.5 mm
Minimum impedance = Re (inductive component is absent)	Impedance is predominantly constant @ Re=4.1 Ω
Magnet material	Neodymium
Driver plates material	Powder coated steel
Recommended minimum XO point with waveguide 12 dB/oct. 6dB/oct.	2 kHz 4 kHz
Net weight	59 g (0.13 lb.)



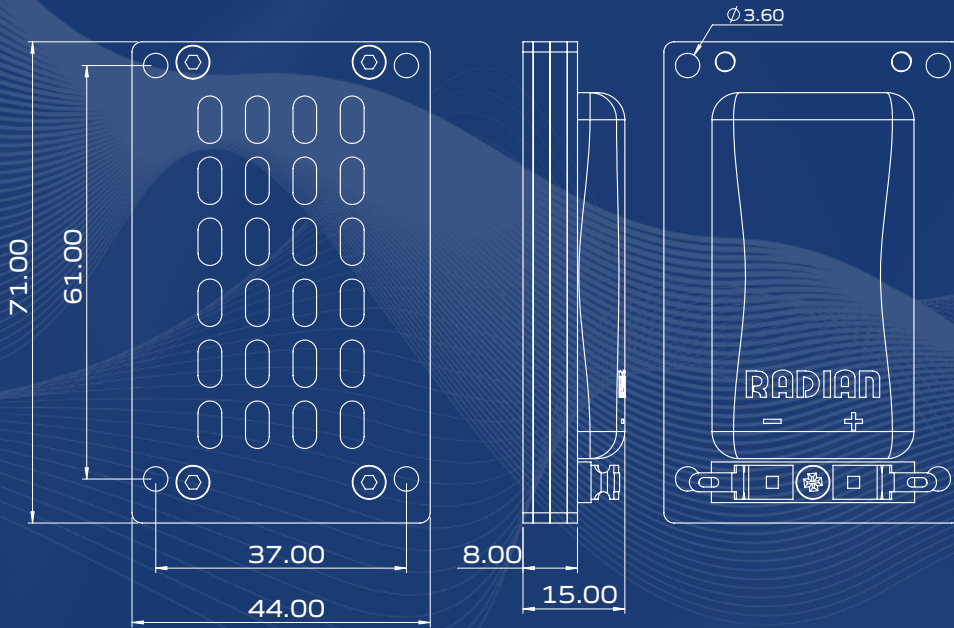
LT2.2 with Waveguide SPL graph on-axis



LT2.2 with Waveguide, set of SPL graphs, horizontal directivity

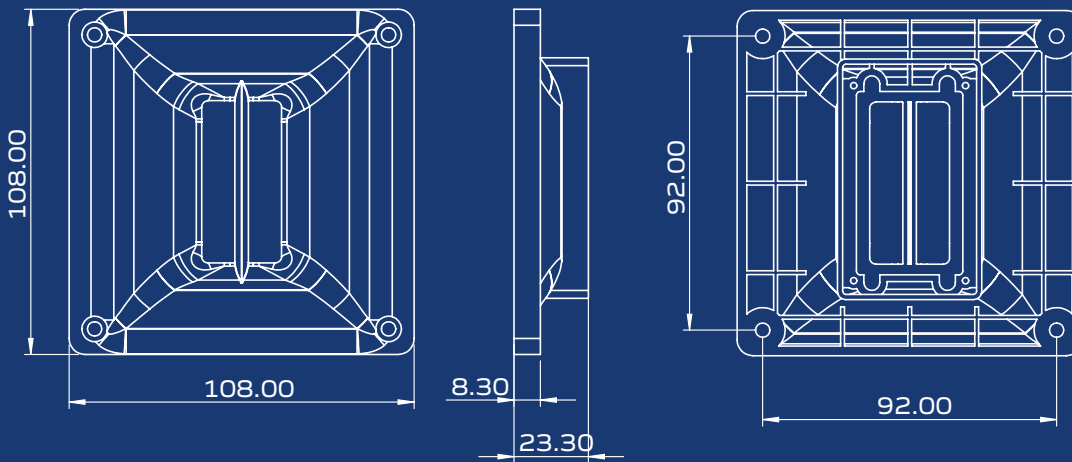
LT2.2 HF Planar Ribbon

Dimensions (mm)

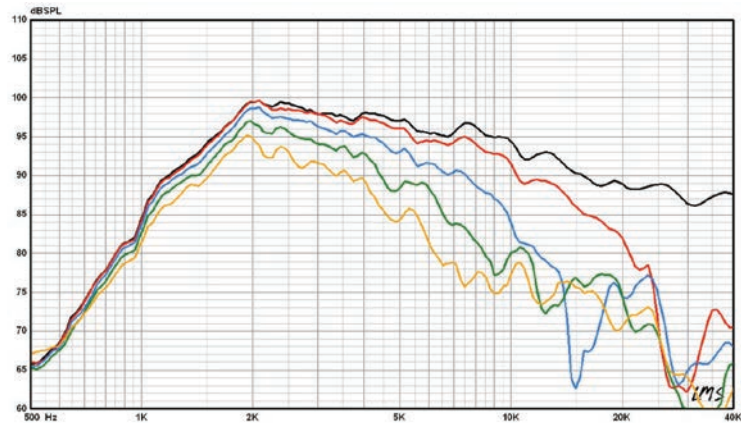


LT2.2-WG HF Waveguide

Dimensions (mm)



NOTE:
Back cavity
of LT2.2-WG waveguide
is different from
the original LT2WG.



LT2.2 SPL graphs, vertical directivity

1. AES refers to AES2-1984 Rev.2003. IEC refers to IEC 60268-5. AES power handling tested using IEC60268-1 noise signal for duration of 2 hours in effective frequency range in free air.
2. Specified number is calculated based on measured response data at 1m/2.83V averaged within 2.0 kHz - 10 kHz range. Driver mounted on a shallow waveguide 100x100x20 mm size and tested in 15x30 cm baffle.
3. Measured in accordance with IEC 60268-5, defined at -10 dB below 1W/1m sensitivity SPL level.
4. Horizontal coverage angle defined at -6dB, averaged on octave band center points in 2 kHz-20 kHz range. Vertical coverage is defined for 2-12.5 kHz range.



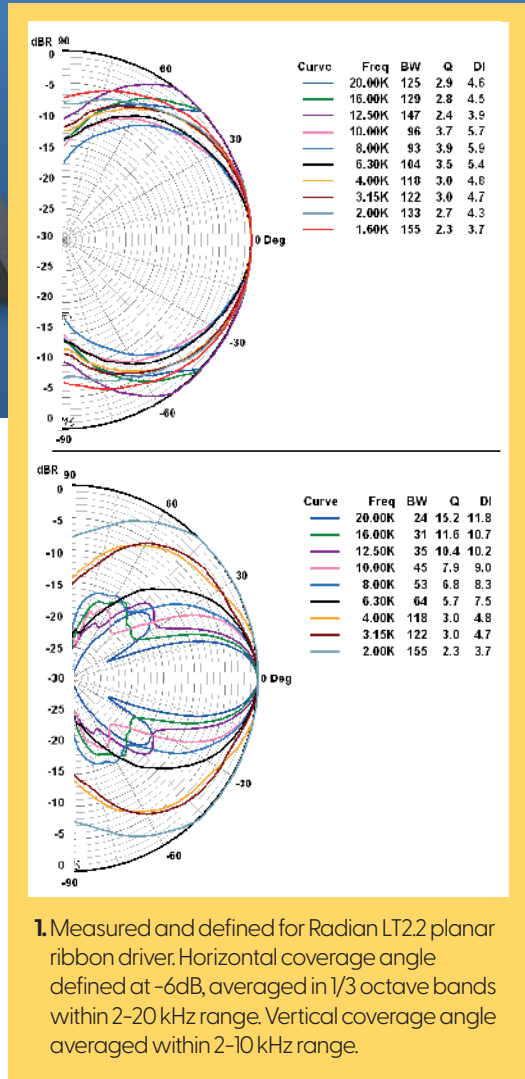
LT2.2-WG

HF Waveguide

- Constant Directivity Design in Horizontal Plane With Minimized Boundary Diffraction Effects
- Structurally Reinforced, High Strength Polymer With Excellent Dimensional Stability
- Rotatable at 90 Degrees

Specifications

Overall size	108x108x24.8 mm (4.25x4.25x0.98 in)
Material	composite polymer
Horizontal coverage	120°
Vertical coverage	60°
Flange thickness	9.0 mm (0.35 in)
Net weight	68 g (0.15 lbs.)



1. Measured and defined for Radian LT2.2 planar ribbon driver. Horizontal coverage angle defined at -6dB, averaged in 1/3 octave bands within 2-20 kHz range. Vertical coverage angle averaged within 2-10 kHz range.

Discover Our Expanded Planar Ribbon Driver Family



Radian Audio Engineering Inc.,

2720 Kimball Ave., Pomona, CA 91767

Phone: 1-714-288-8900 E-mail: info@radianaudio.com www.radianaudio.com