

FAP33T-W

FAP Strategy III Series 3" Full Range Ceiling Loudspeaker



FAP33T-W

Features

- 70.7V/100V and 6Ω Operation
- Patented **Safety First Mounting System** Enables Installation without Drill or Screwdriver
- Improved Waveguide Provides up to 135° Dispersion
- Ported Enclosure Provides Enhanced Low-Frequency Response
- 4-Pole Detachable "Phoenix" Style Connector Allows Easy Pre-Wiring and Is Convenient for Daisy Chaining Additional Strategy Series Full Range Loudspeakers or Subwoofers

General Description

The FAP33T-W's 135° dispersion angle can reduce the number of loudspeakers necessary to achieve coverage in distributed systems with low ceilings. High quality construction 3" coaxial cone type driver includes a 20mm voice coil and high efficiency composite cone with polymer coated cloth surround. A high sensitivity of 89.7dB average means less power may be required to achieve the desired SPL.

This loudspeaker is factory assembled in an optimally tuned and ported deep drawn enclosure and includes a specially designed 16-watt low saturation 70.7V / 100V transformer. A convenient front mounted selector switch allows tap selection without the need to remove the loudspeaker from the ceiling. This switch also includes a transformer bypass setting for 6Ω direct coupled operation.

Three years of development has produced the most innovative, easily installed, and safety-secure ceiling loudspeakers in the professional audio market. Patented **Safety First Mounting System** protects from over-torquing the mounting doglegs during installation and potentially cracking or breaking the mounting system. The results are NO install tools required, NO over-torqued doglegs, NO rusted screws and QUICK installation.

- Front Mounted Tap Selector Switch for Easy System Tuning Adjustments Include Transformer Bypass Setting for 6Ω Direct Coupled Operation
- Easy Installation in Drop Tile or Sheetrock Ceilings Via C-Ring / V-Rail Tile Bridge (Included)
- Safety Listed to UL1480 and UL2043

Applications

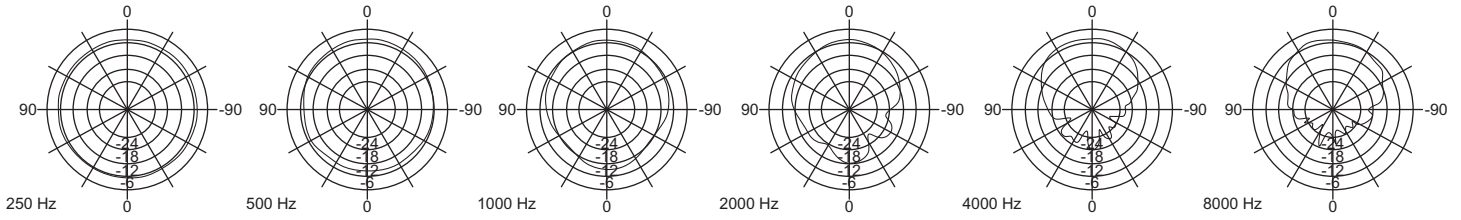
Retail stores, restaurants, recreational facilities, hotels, convention centers, and casinos have all changed their thinking on how an in-ceiling loudspeaker should perform. For many years, good enough was a loudspeaker that just played dull and lifeless sound. In today's world, good enough is no longer accepted because building owners want to increase their customer's experience by providing them the best of everything - including superb sound. The improved waveguide design provides wider coverage than previous models. The benefit is cost savings due to fewer loudspeakers required, while still maintaining uniform sound throughout. The front port has been optimized to enhance low-frequency response and provide deeper bass. Additionally, the FAP33T-W is safety listed to both UL1480 and UL2043.

In-ceiling loudspeakers are subjected to various climate and humidity environments. Competitive offerings use steel screws that easily rust and fail due to humidity exposure. The FAP33T-W provides corrosion-free, no-worry operation, since it uses no metal screws holding the doglegs in position.

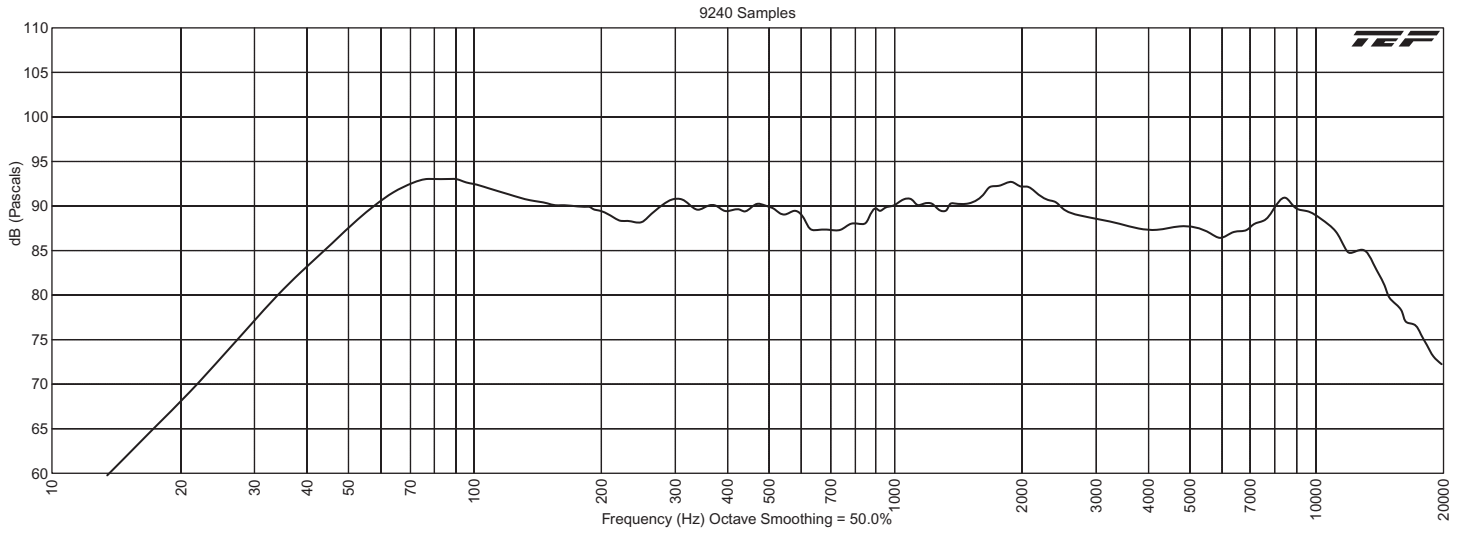
System	
Type	Full Range, Ceiling Loudspeaker
Operation Mode	Non-Powered Passive
Operating Range (-10db)	90Hz
Frequency Response (+/- 5dB)	110Hz - 12kHz
Vertical Coverage	130° 800Hz - 4kHz
Horizontal Coverage	130° 800Hz - 4kHz
Max Input Ratings (6Ω)	25W Continuous, 50W Program 12.5 Volts RMS, 21.2 Volts Peak
Transformer Taps - 70V	16W, 8W, 4W, 2W and Low Impedance (6Ω)
Transformer Taps - 100V	16W, 8W, 4W and Low Impedance (6Ω)
Directivity Factor (Q)	13.98 @ 2kHz
Directivity Factor (DI)	11.45 @ 2kHz
Input Sensitivity at 1W/1m	89.7dB
Max SPL at 1 m (Passive)	104 dB Continuous / 108 dB Peak
Recommended Signal Processing	90Hz High Pass Filter
Recommended Power Amplification	120W at 6Ω
Transducers	
LF Transducer Qty and Size	1 x 3"
LF Voice Coil Size	20 mm
MF Transducer Qty and Size	N/A
MF Voice Coil Size	N/A
HF Transducer Qty and Size	N/A
HF Voice Coil Size	N/A
Maximum Output	104 dB SPL / 108 dB SPL (peak 6Ω)
Nominal Impedance	6Ω
Minimum Impedance	5.2Ω @ 600Hz
Crossover Frequency	N/A
Driver Protection	N/A
Enclosure	
Color	White (RAL 9016)
Enclosure Material	Powder Coated CRS
Grille Material	Powder Coated CRS, White Finish (RAL9016), Paintable
Baffle Material	UL94V-0 PC
Mount Material	Zinc Plated CRS
Input Connection	4-Position PHX Type Connector
Controls	Front-Face Power Taps / Low Impedance Selector Switch
Mounting/Rigging Provisions	Patented Safety First Mounting System
Safety Features	1 Safety Hang Point
Safety Agency Ratings	UL Listed to Comply with UL1480, UL2043 and CSA60065. Suitable for Use in Air Handling Spaces per NFPA 70 and NFPA 90.
Ingress Protection	IP-21
Environmental Testing	Humidity: MIL-STD-810G / High and Low Temperature: -20° and 70° C
Cutout Diameter	7.625" (193.7 mm)
Logo	White Removable
Product Dimensions (HxWxD)	8.78" (223 mm) x 8.78" (223 mm) x 5.39" (136.9 mm)
Shipping Dimensions (HxWxD)	12.9" (328 mm) x 28" (711 mm) x 10.55" (268 mm)
Net Weight	Unit w/ C-Ring = 4.14 lbs (1.88 kg) 2V-rails = 2.1 lbs (.95 kg)
Shipping Weight	18.12 lbs (8.22 kg) Shipped in Pairs
Warranty Coverage	
Warranty Period	5 Years

NOTES:

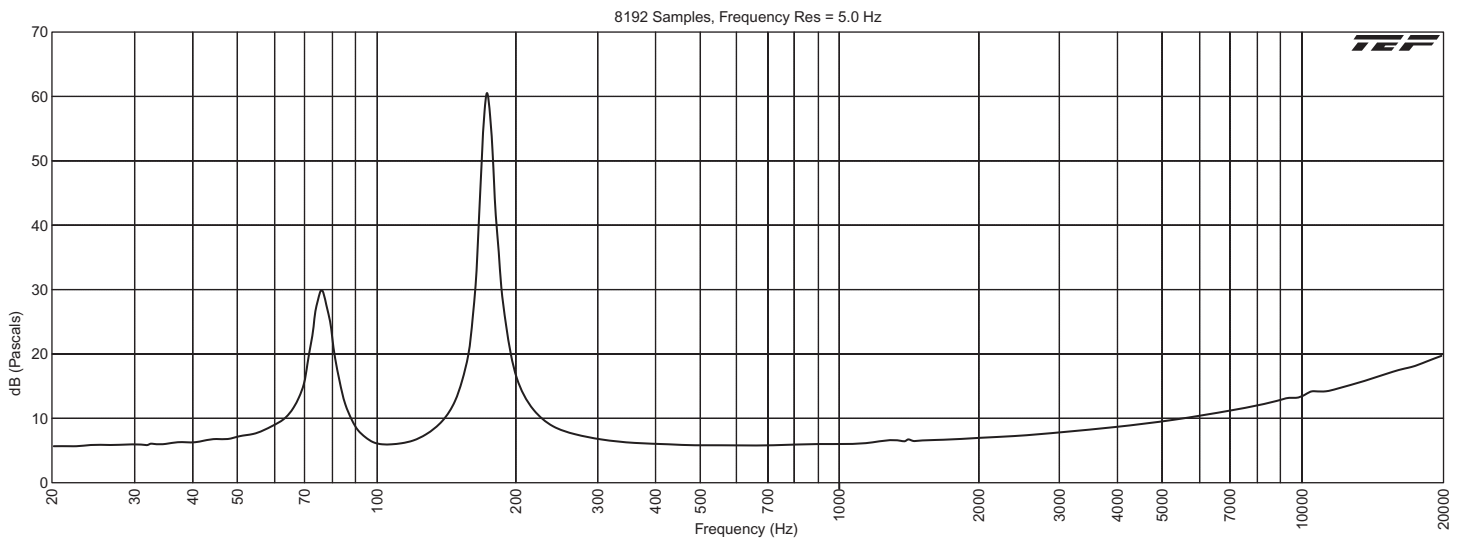
1. Sensitivity: Half space, 1 meter, 2.83 volts RMS.
2. Power: All power figures are calculated using the rated nominal impedance.
3. Frequency response and sensitivity are half-space measurements.



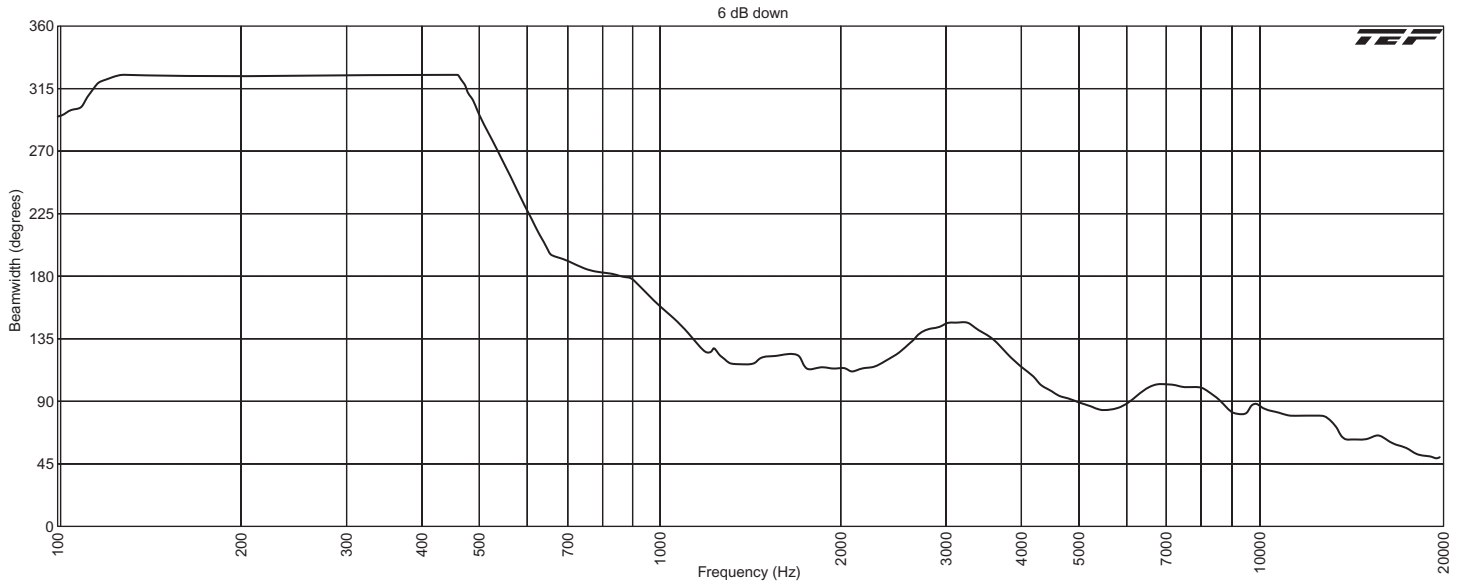
Frequency Response



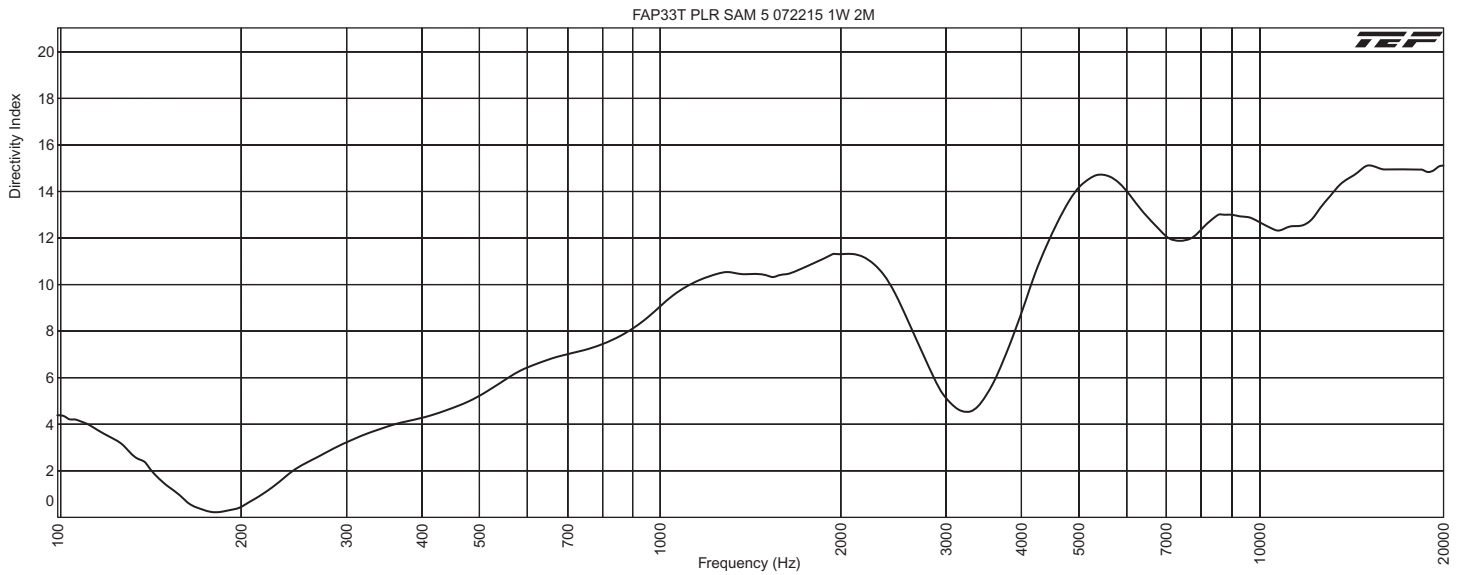
Impedance vs. Frequency Response



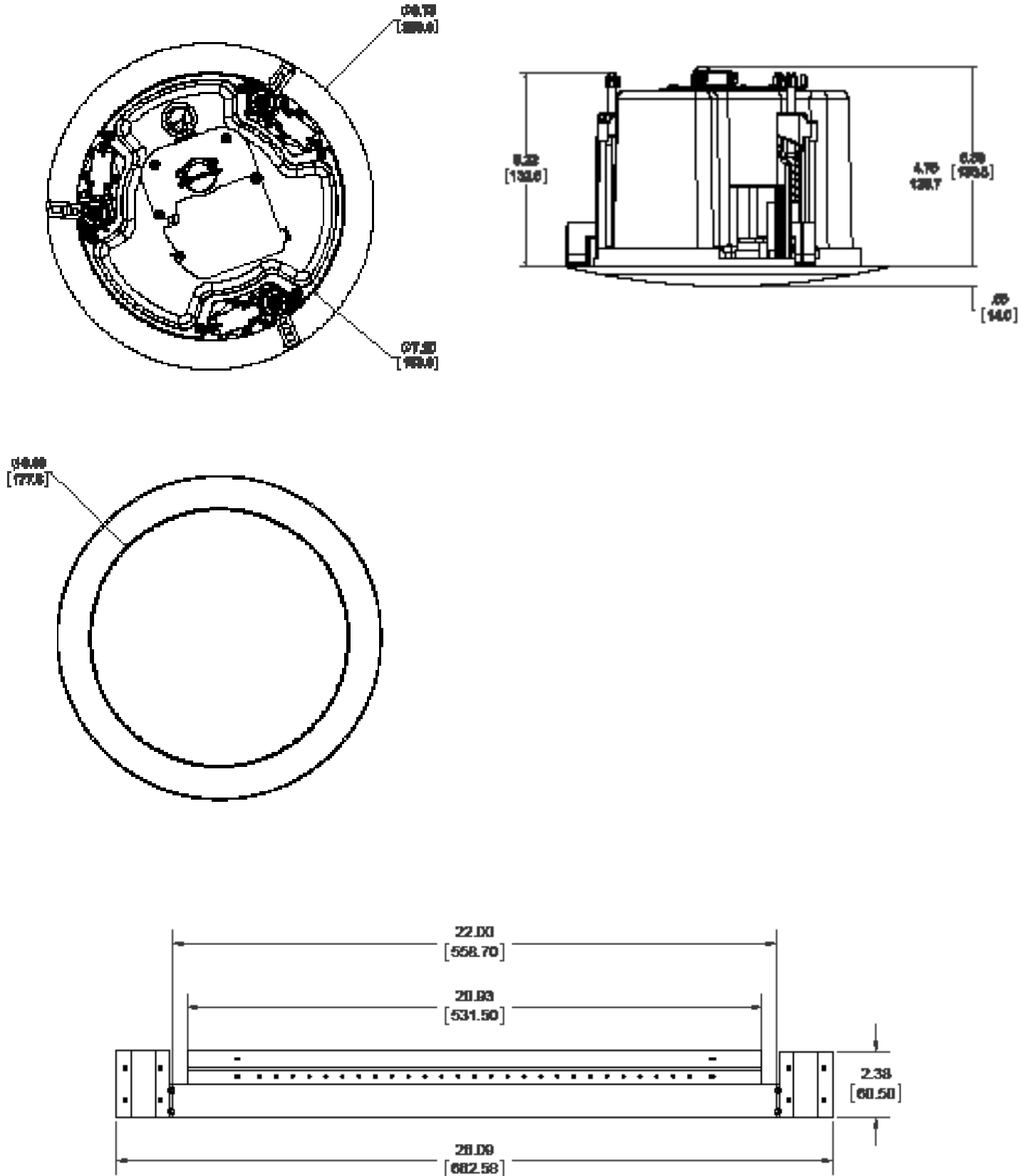
Beamwidth vs. Frequency Response



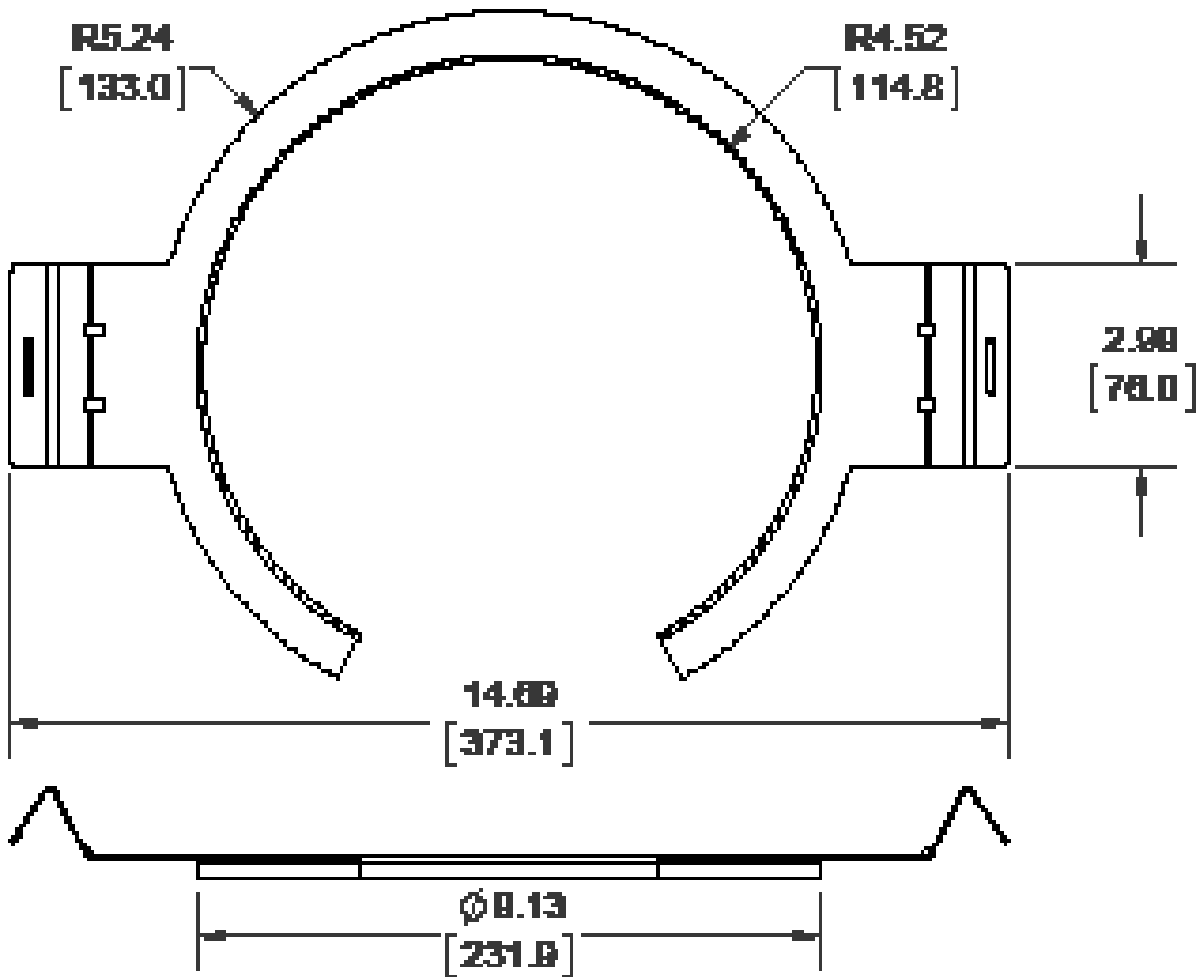
Directivity Index/Q vs. Frequency



Dimensional Drawings



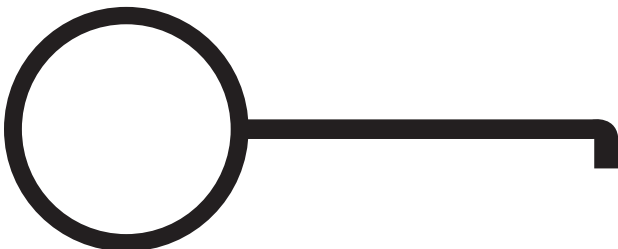
Included Accessories



Quick Release Tool



Grill Puller



Architect and Engineer Specifications

The loudspeaker system shall be Atlas Sound FAP33T-W. System shall include a high performance 3" loudspeaker, bass reflex enclosure and press-fit grille for conventional ceiling installation. Frequency response for the system shall be 85Hz to 12kHz. Sensitivity shall average 89.7 dB @ 1W/1m.

Loudspeaker shall be comprised of a 3" cone type driver. Cone shall be constructed of composite cone with polymer coated cloth surround. Magnet shall be a minimum of 4.1 oz. (116.2 g) and the voice coil diameter shall be .79" (20mm). Transformer shall be a 70.7V / 100V type with 2, 4, 8, and 16, watt primary taps (@70.7V) with a front mounted tap selector switch to include transformer bypass setting for 6Ω direct coupled operation.

Enclosure shall be a deep drawn steel enclosure design. Internal volume shall be 116 in³. To facilitate connection in conduit systems, enclosure shall be equipped with an access panel covering a recessed terminal cup. This cover shall provide a top access compression fitting / strain relief to facilitate flexible conduit up to 22mm outside diameter or 1" (25mm inside diameter) conduit when the compression fitting is removed.

External wiring shall be accomplished via a removable screw-down wiring connector to provide termination and pre-wiring capability before loudspeaker installation. The 4 pole connector shall facilitate in/out connections and shall be located in the recessed area behind the conduit access panel.

Seismic support eye shall be provided on top of enclosure for additional suspension point when used in drop tile ceilings. Construction of enclosure shall be a minimum of 18-gauge deep drawn galvanized metal. Loudspeaker shall include **Safety First Mounting System** to eliminate the potential for steel screws to rust and break causing the dogleg to fail and resulting in the loudspeaker falling out of the ceiling.

The system shall include a support backing plate to reinforce the ceiling material and tile support rails for use on either 2' x 4' (609mm x 1219mm) or 2' x 2' (609mm x 609mm) suspended ceiling tiles. This assembly can all be installed from beneath the ceiling tile. Overall front face diameter shall not exceed 8.78" (223 mm); overall depth from the bottom of the ceiling shall not exceed 5.39" (136.8 mm). Grilles shall be press-fit, manufactured from 24-gauge perforated steel mesh and finished in white epoxy. Round grill shall be 6.99" (177.5mm) diameter.

Loudspeaker shall be safety listed to both UL1480 and UL2043 standards.