



#### Description

The SSE 15 is designed for professional permanent installations where cabinets must be flown in order to cover as much area as possible. The SSE 15 is designed for arraying on stage, churches auditoriums or theme parks. The horn has a coverage pattern of 90° in the horizontal axis and 40° in the vertical axis. The highs are generated using the highly acclaimed Peavey 14T titanium compression driver. The Sound Guard IV tweeter protection network is built in for driver protection. The low end is produced using the Peavey 15" woofer with 2.5" (64 mm) voice coil. Connections are made using a 4-pin twist-lock connector or a paralleled two-position terminal block for additional cabinets. The SSE 15 incorporates flying points on the top and bottom for the utilization of the Peavey VersaMount 70 mounting bracket.

The SSE 15 is constructed with a special grade of high density 13 mm birch plywood and covered with a durable acrylic polyurethane. This finish makes the enclosure presentable in any application. The SSE 15 is available in black or white finishes. The SSE 15 is engineered for public address and a wide range of musical applications.

#### Features:

- Two-way sound reinforcement enclosure
- Designed for permanent install
- Full-range, wide-band production from 74 Hz to 17 kHz
- Available in black or white finishes
- Peavey 15" woofer with 2.5" (64 mm) voice coil
- Peavey 14T™ titanium diaphragm compression driver
- Sound Guard™ IV tweeter protection network
- Seven flying points (six M10 for suspension and one M6 for angle adjustment)
- Mounting point for VersaMount™ 70 bracket
- 13 mm birch plywood construction

Frequency response, 1 meter on-axis, swept-sine in anechoic environment:  
74 Hz to 17 kHz (±3 dB)

Usable low frequency limit (-10 dB point):  
54 Hz

Power handling:  
Full range:  
500 Watts program  
1,000 Watts peak

Sound pressure level, 1 Watt, 1 meter in anechoic environment:  
Full range:  
98 dB SPL (2.83 V input)

Maximum sound pressure level (1 meter):  
Full range:  
122 dB SPL continuous  
128 dB SPL peak

Radiation angle measured at -6 dB



# SANCTUARY SERIES™

### point of polar response:

- 500 Hz to 1.6 kHz:
  - Horiz. 90° ± 20°
  - Vert. 95° ± 30°
- 1.6 kHz to 5 kHz:
  - Horiz. 70° ± 20°
  - Vert. 60° ± 35°
- 5 kHz to 16 kHz:
  - Horiz. 90° ± 15°
  - Vert. 40° ± 10°

Directivity factor, Q (Mean):  
10.86 ± 6.7

Directivity index, Di (Mean):  
9.57 dB ± 2.6 dB

Transducer complement:  
Low frequency section:  
Peavey Heavy Duty 15" woofer

High frequency section:  
Peavey 14T™ titanium diaphragm  
compression driver on a 90° x 40°  
constant directivity horn

Box tuning frequency:  
Low frequency section:  
74 Hz

### Harmonic distortion:

- 1% rated power
- Second harmonic:
  - 100 Hz: 2.81%
  - 1 kHz: 0.13%
- Third harmonic:
  - 100 Hz: 1.0%
  - 1 kHz: 0.18%

- 10% rated power
- Second harmonic:
  - 100 Hz: 8.91%
  - 1 kHz: 0.56%
- Third harmonic:
  - 100 Hz: 5.62%
  - 1 kHz: 0.32%

Electro-acoustic crossover frequency  
(internal passive):  
2.8 kHz

Impedance (Z):  
Full range:  
Nominal: 8 Ω  
Minimum: 5.4 Ω

Input Connection:  
One (1) 4-pin twist-lock connector in  
parallel with one (1) two-position  
terminal strip

Enclosure materials and finish:  
Trapezoidal, dado-joined 13 mm birch  
finished with a textured acrylic  
polyurethane. Also includes a full-length  
metal grille covered with acoustical  
grade grille cloth. Available in black  
or white finishes.

### Mounting provisions:

- (6) M10 threaded mounting  
suspension points (three each top and  
one each side and back). Use only  
forged shoulder machinery eye bolt,  
DIN 580, ASTM A489, or BGV-C1 spec.
- (1) M6 x 1.0mm threaded mounting point  
on back bottom for angle adjustments.
- (4) M6 x 1.0mm threaded mounting points  
on bottom to accommodate use of  
Versamount™ 70 adjustable mounting  
bracket.  
DO NOT suspend this unit upside down  
using VersaMount™ system.

### Dimensions (H x W x D):

- Front:  
27" x 18" x 17.75"  
686 mm x 467 mm x 451 mm
- Rear:  
27" x 12.14" x 17.75"  
686 mm x 308 mm x 451 mm

Net Weight:  
42 lbs. (19 kg)

### Frequency response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the SSE 15 is measured at a distance of 1 meter using a 1 Watt (into the nominal impedance) swept-sine input signal. As shown in figure 1, the selected drivers in the SSE 15 combine to give a smooth frequency response from 74 Hz to 17 kHz.

### Directivity

Beamwidth is derived from the -6 dB points from the polar plots (see figure 3) which are measured in a whole-space anechoic environment. Q and Directivity Index are plotted for the on-axis measurement position. These are specifications that provide a reference to the coverage characteristics of the unit. These parameters provide insight for proper placement and installation in the chosen environment. The blending of the components of the SSE 15 exhibit a desirable beamwidth and directivity (figures 3 & 4) suitable for sound reinforcement applications.

### Power handling

There are many different approaches to power handling ratings. Peavey rates this loudspeaker system's power handling using a full-range form of the AES Standard 2-1984. Using audio band 20 Hz to 20 kHz pink noise with peaks of four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high technology music. This rating is contingent upon having a minimum of 3 dB of amplifier headroom available.

### Harmonic distortion

Second and third harmonic distortions vs. frequency are plotted in figures 5 & 6 for two power levels. Ten percent (10%) of rated input power and either one percent (1%) of rated input power or 1 Watt, whichever is greater. Distortion is read from the graph as the difference between the fundamental signal (frequency response) and the desired harmonic. As an example, a distortion curve that is down 40 dB from the fundamental is equivalent to 1% distortion.

### Mounting

Caution: Before attempting to suspend or mount this speaker, consult a certified structural engineer. The speaker may fall due to improper installation, resulting in serious injury and property damage. DO NOT suspend or mount any other product or device from this enclosure. Maximum enclosure angle 45°. Use only Grade 8.8 Metric hardware or better. All associated rigging is the responsibility of others.

### Architectural and Engineering Specifications

The loudspeaker system shall have an operating bandwidth of 74 Hz to 17 kHz. The nominal output level shall be 98 dB when measured at a distance of one meter with an input of one Watt. The nominal impedance shall be 8 Ohms. The maximum program power handling shall be 500 Watts with a peak power input of at least 1000 Watts and a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90° in the horizontal plane and 40° in the vertical plane. The outside dimensions shall be 27" high by 18" wide by 17.75" deep. The weight shall be 42 lbs. The loudspeaker system shall be a SSE 15 model.

NOTE: Features and specifications subject to change without notice.

WARRANTY INFORMATION AVAILABLE ONLINE

### Amplitude Response (1W 1m On-Axis)

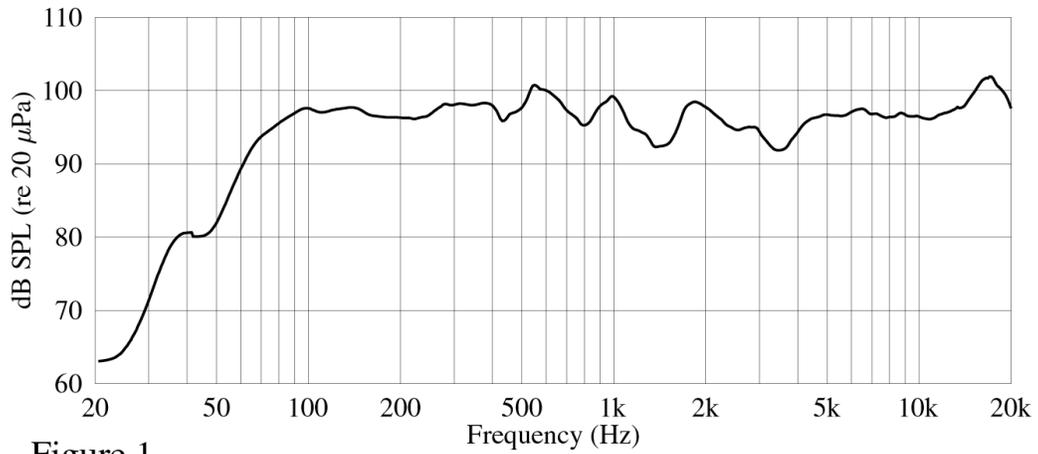


Figure 1

### Impedance

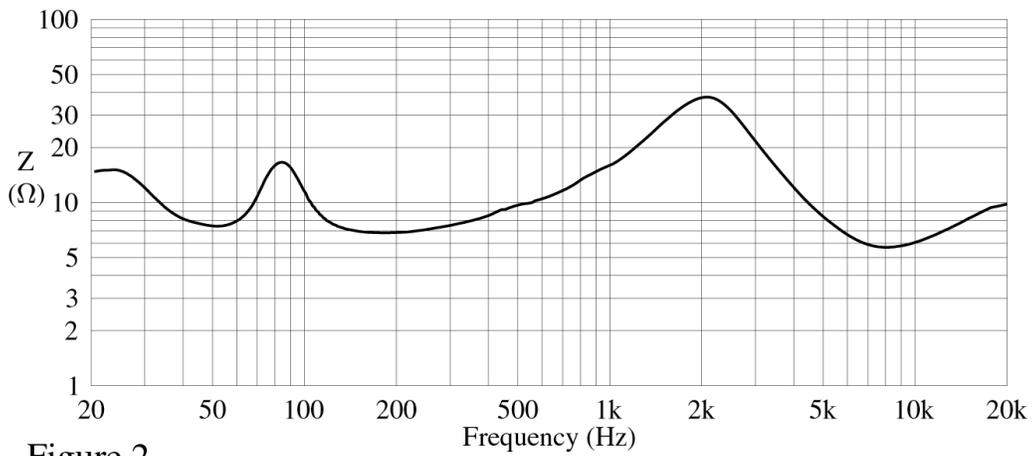


Figure 2

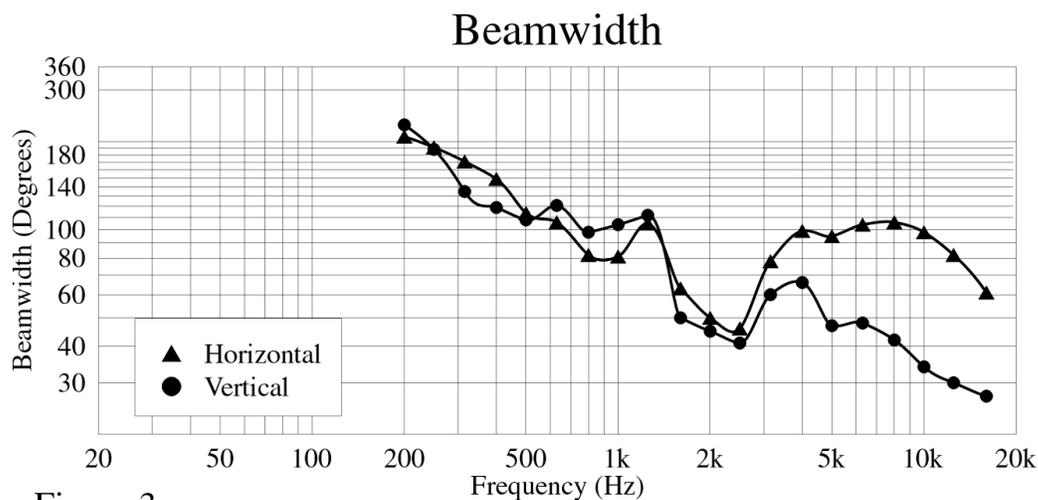


Figure 3

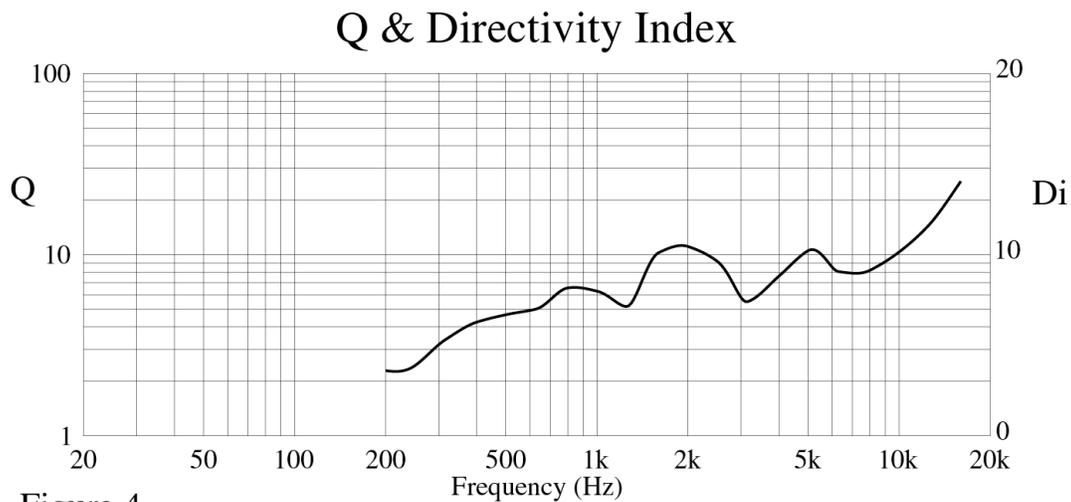


Figure 4

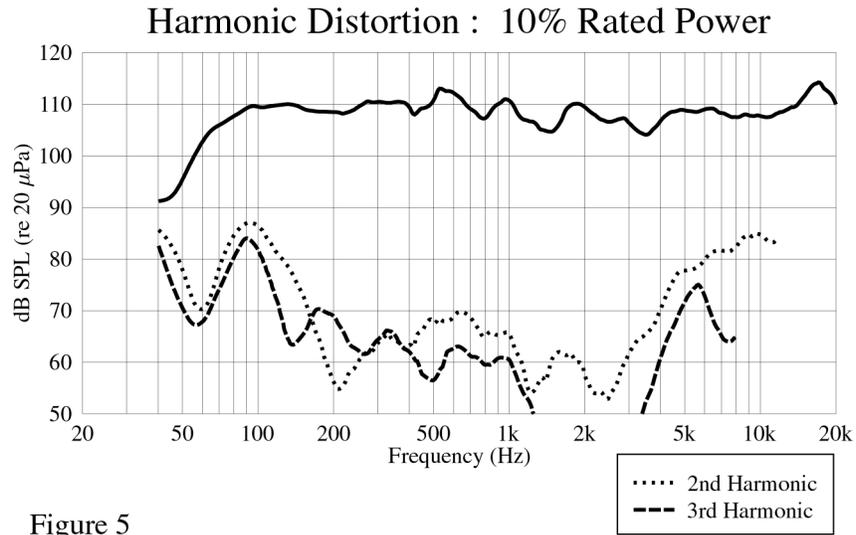


Figure 5

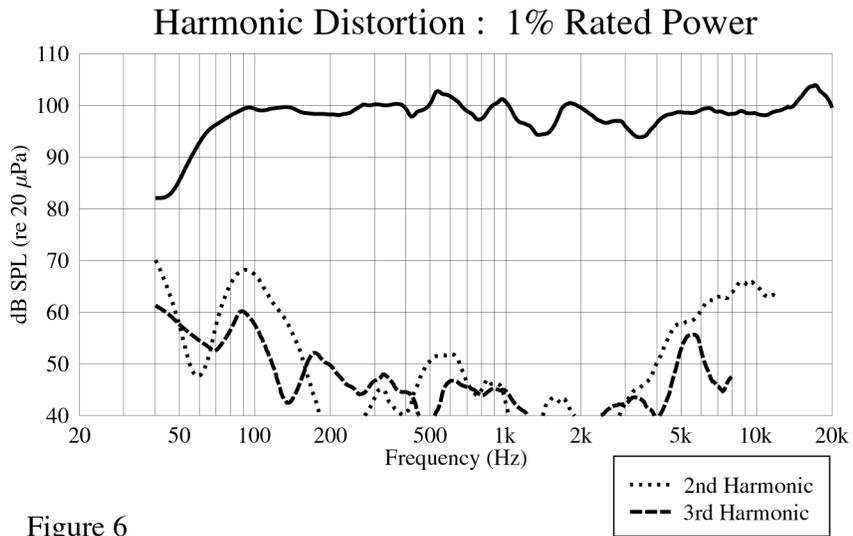
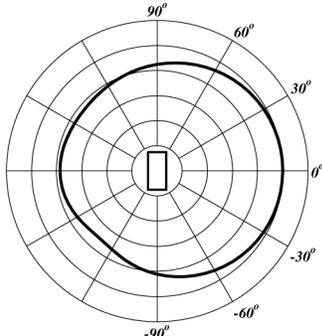


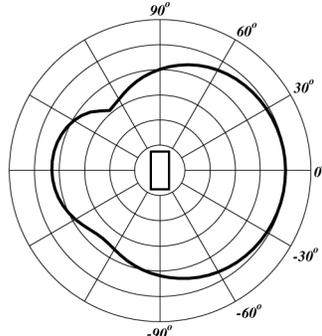
Figure 6



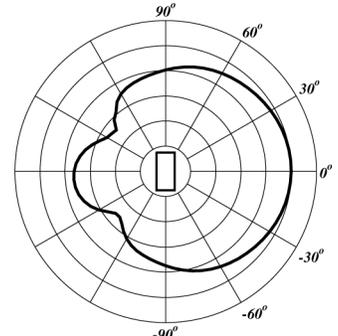
**Vertical Polar Patterns 6 dB per Division**



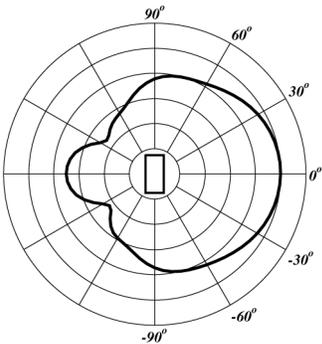
200 Hz



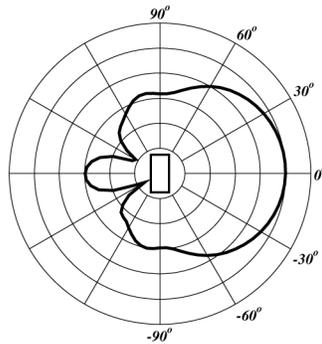
250 Hz



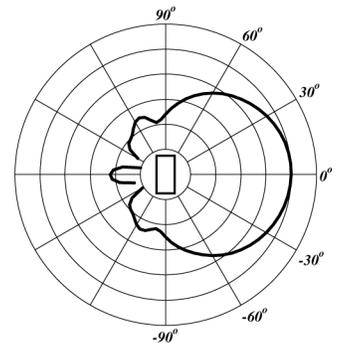
315 Hz



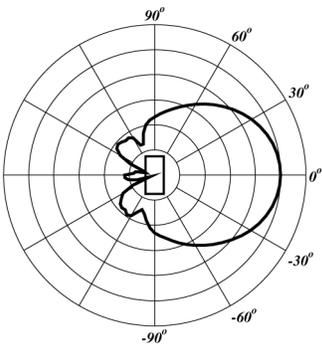
400 Hz



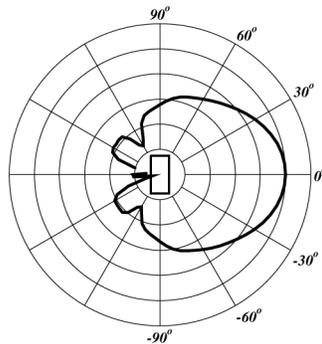
500 Hz



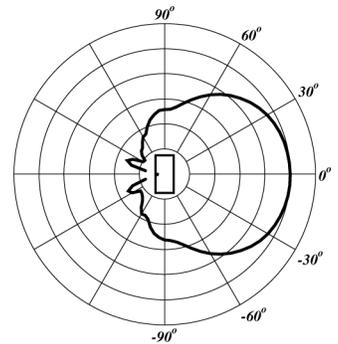
630 Hz



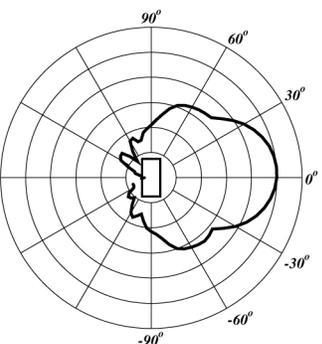
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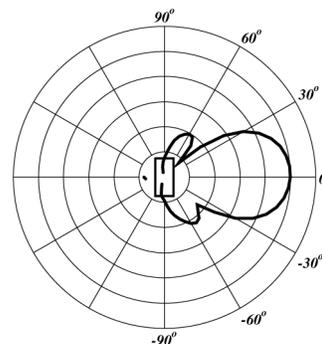
1 kHz



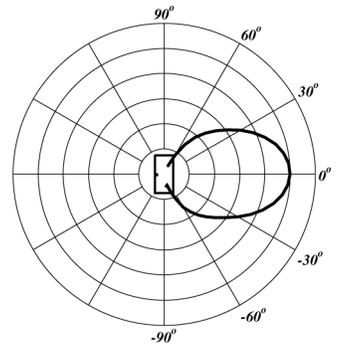
1.25 kHz



1.6 kHz

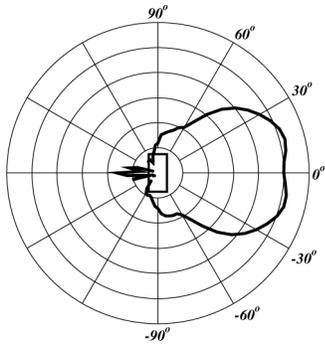


2 kHz

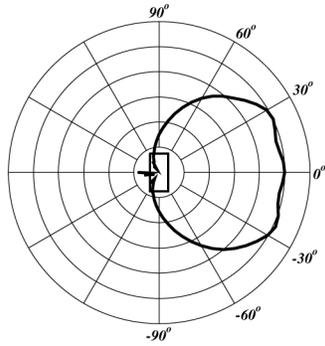


2.5 kHz

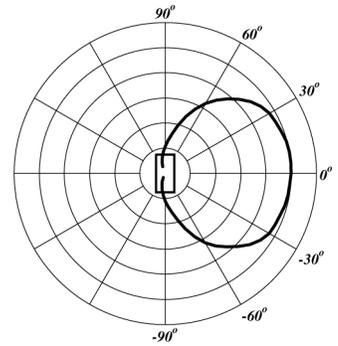
Vertical Polar Patterns 6 dB per Division



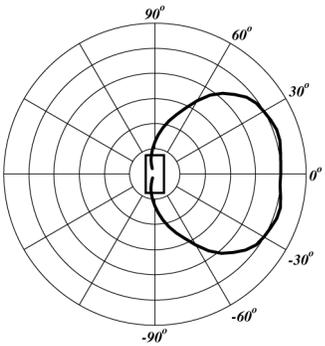
3.15 kHz



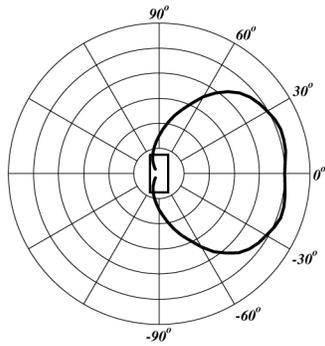
4 kHz



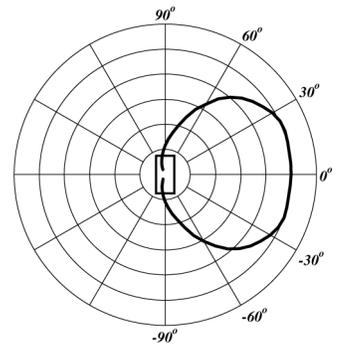
5 kHz



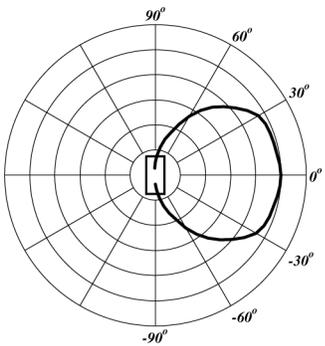
6.3 kHz



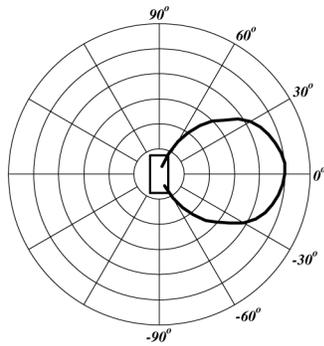
8 kHz



10 kHz



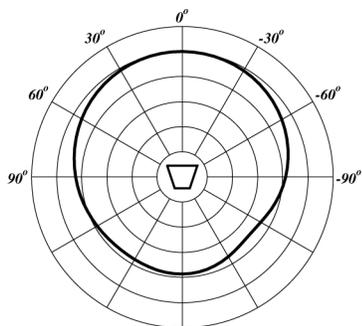
12.5 kHz



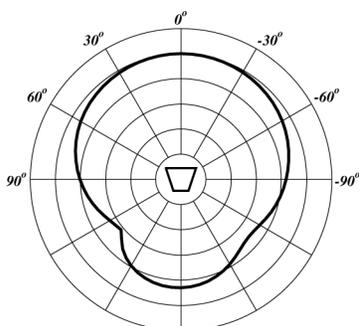
16 kHz



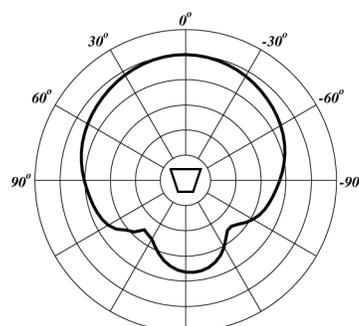
**Horizontal Polar Patterns 6 dB per Division**



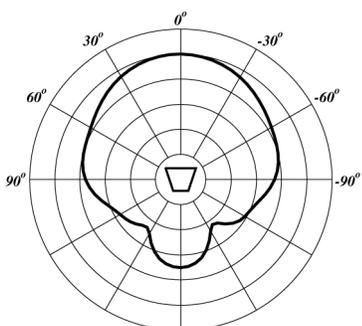
200 Hz



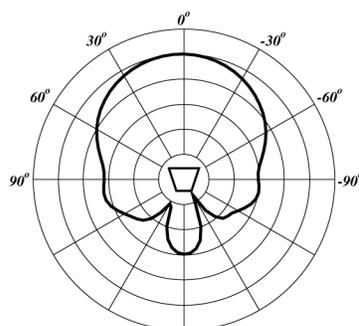
250 Hz



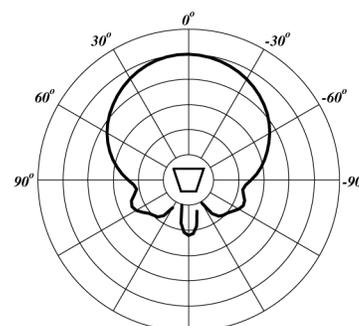
315 Hz



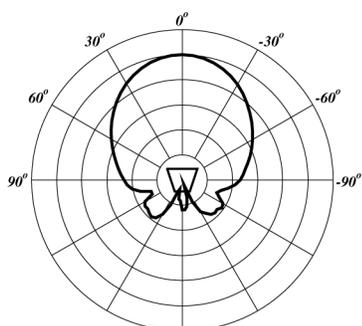
400 Hz



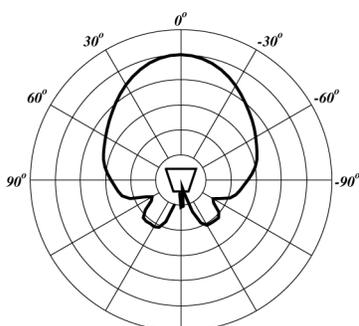
500 Hz



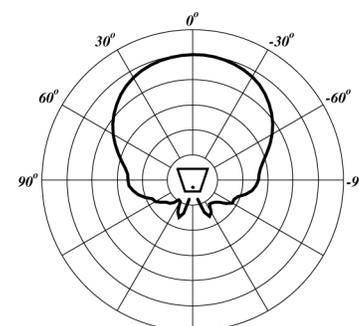
630 Hz



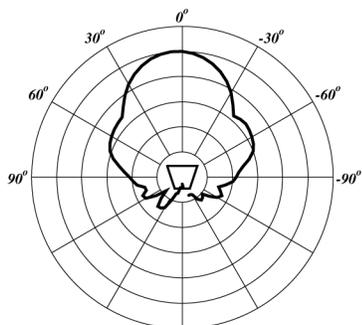
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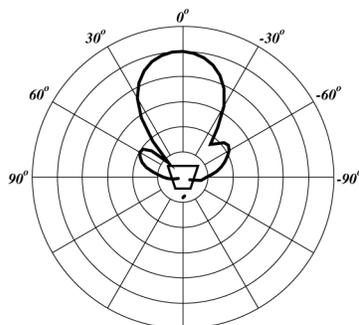
1 kHz



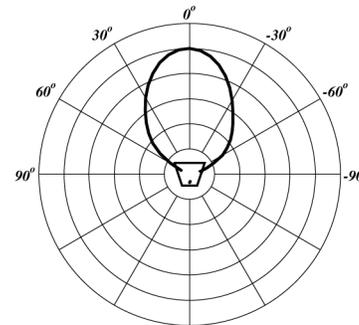
1.25 kHz



1.6 kHz

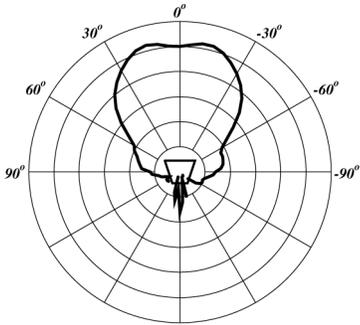


2 kHz

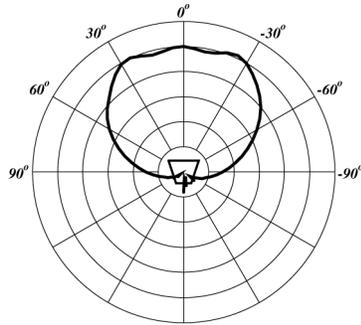


2.5 kHz

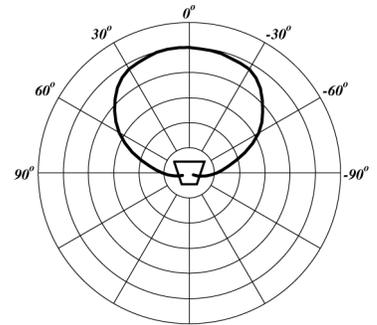
Horizontal Polar Patterns 6 dB per Division



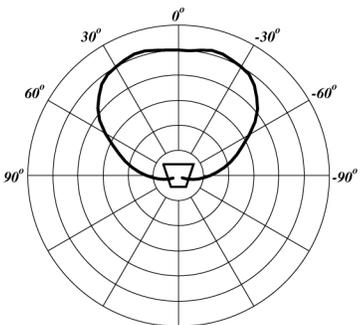
3.15 kHz



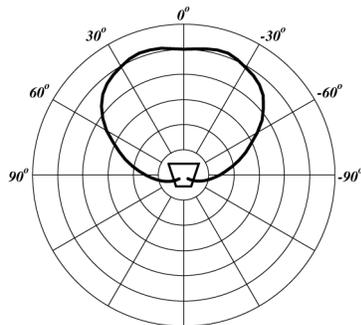
4 kHz



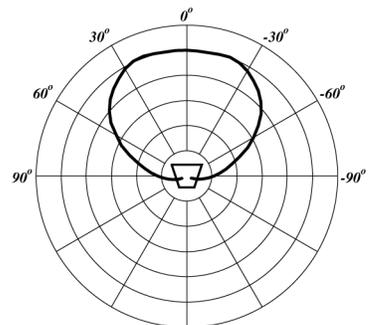
5 kHz



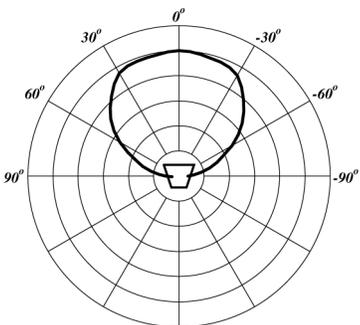
6.3 kHz



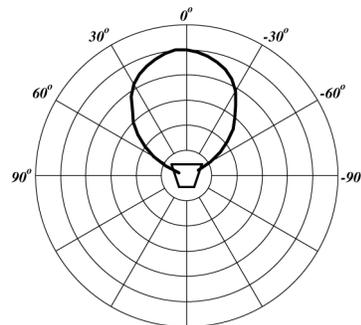
8 kHz



10 kHz



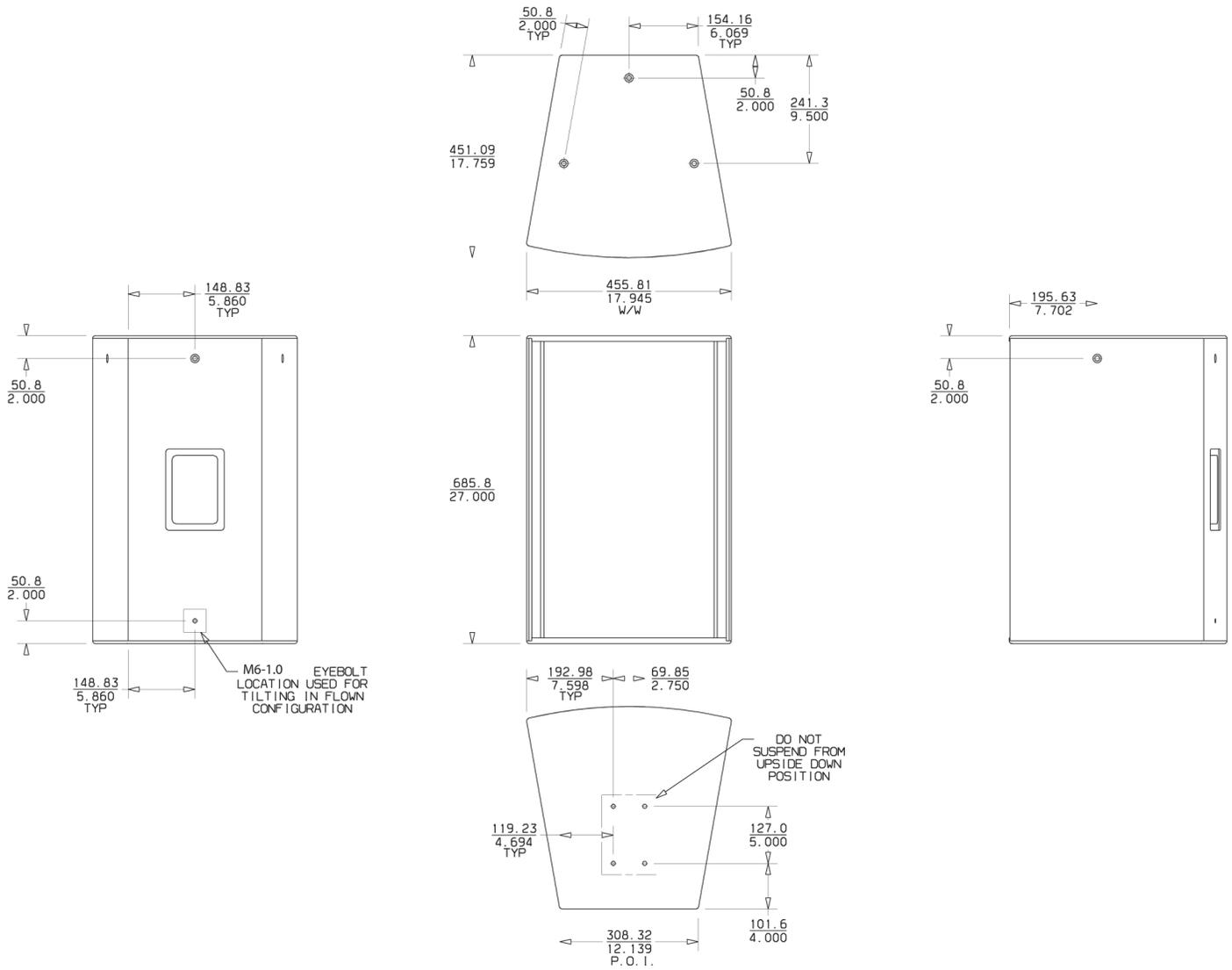
12.5 kHz



16 kHz



# SANCTUARY SERIES™



Input Plate

**PEAVEY**

**SANCTUARY SERIES™**  
sanctuary-series.com

**SSE 15**  
MADE IN CHINA

IMPEDANCE:  
**8 OHMS**

WEIGHT:  
**46 lbs./21 kg**

MAX POWER:  
**500W PROGRAM**

**PIN 1 + (+) POS.**  
**PIN 1 - (-) NEG.**

**HF DRIVER PROTECTED BY SOUNDGUARD™ IV**  
A PRODUCT OF PEAVEY ELECTRONICS

**8Ω** **+** **-** **CE**

**+** **-**  
**FULL RANGE INPUTS**

**DANGER:** BEFORE ATTEMPTING TO SUSPEND THIS SPEAKER CONSULT A CERTIFIED STRUCTURAL ENGINEER. SPEAKER CAN FALL FROM IMPROPER SUSPENSION, RESULTING IN SERIOUS INJURY AND PROPERTY DAMAGE. DO NOT SUSPEND OR MOUNT ANY OTHER PRODUCT OR DEVICE FROM THIS ENCLOSURE! USE ONLY GRADE 5 HARDWARE OR BETTER.

**WARNING:** THIS SPEAKER SYSTEM CAN PERMANENTLY DAMAGE HEARING! USE EXTREME CARE SETTING MAXIMUM LOUDNESS.

## Flying/Rigging Information

Caution: Before attempting to suspend this speaker, consult a certified structural engineer. Speaker can fall from improper suspension, resulting in serious injury and property damage. Do not suspend or mount any other product or device from this enclosure! Maximum enclosure angle 30°. Use only the correct mating hardware. All associated rigging is the responsibility of others. DO NOT OVER TORQUE HARDWARE. ALWAYS USE SAFETY CHAIN. INSPECT RIGGING ANNUALLY.

## Hardware for Flying/Rigging

Bracket bolts should be metric thread grade 8.8 or better. Eyebolts and bracket bolts must conform to certain minimum strength criteria for safety reasons. Unspecified eyebolts found at local hardware stores are not strong enough to maintain safety for overhead flying or rigging. Use only forged steel shoulder machinery eyebolts designed for rigging use. Eyebolts should comply to one of the following standards: DIN 580, ASTM A489, or the German BGV-C1 specification. This Peavey loudspeaker should be suspended overhead only in accordance with the procedures and limitations specified in this User's Manual and possible manual update notices. This system should be suspended with certified rigging hardware by an authorized rigging professional and in compliance with local, state and federal suspension ordinances.



[www.peavey.com](http://www.peavey.com)

Warranty registration and information for U.S. customers available online at  
[www.peavey.com/warranty](http://www.peavey.com/warranty)  
or use the QR tag below



Features and specifications subject to change without notice.

Peavey Electronics Corporation 5022 Hartley Peavey Drive Meridian, MS 39305 (601) 483-5365 FAX (601) 486-1278



Logo referenced in Directive 2002/96/EC Annex IV  
(OJ(L)37/36,13.02.03 and defined in EN 50419: 2005  
The bar is the symbol for marking of new waste and  
is applied only to equipment manufactured after  
13 August 2005