



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 14XT titanium compression driver. The Sound Guard IV tweeter protection network is built in for driver protection. The low end is produced using the Peavey Scorpion Pro 1500+ 15" woofer with 2.5" (64 mm) voice coil. Connections are made using a four-pin Neutrik® Speakon® 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, white or a

natural wood finish for staining or painting. 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 three finishes: black, white or natural
- Peavey Scorpion® Pro 1500+ 15" woofer with 2.5" (64 mm) voice coil
- Peavey 14XT™ titanium diaphragm compression driver
- Sound Guard™ IV tweeter protection network
- Seven flying points (six 3/8" for suspension and one 1/4" 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)





SANCTUARY SERIES™

Maximum sound pressure level (1 meter):

Full range:
122 dB SPL continuous
128 dB SPL peak

Radiation angle measured at -6 dB point of polar response:

500 Hz to 1.6 kHz:
Horiz. $90^\circ \pm 20^\circ$
Vert. $95^\circ \pm 30^\circ$
1.6 kHz to 5 kHz:
Horiz. $70^\circ \pm 20^\circ$
Vert. $60^\circ \pm 35^\circ$
5 kHz to 16 kHz:
Horiz. $90^\circ \pm 15^\circ$
Vert. $40^\circ \pm 10^\circ$

Directivity factor, Q (Mean):

10.86 \pm 6.7

Directivity index, Di (Mean):

9.57 dB \pm 2.6 dB

Transducer complement:

Low frequency section:
Peavey Scorpion® Pro 1500+ woofer
with 2.5" (64 mm) voice coil
High frequency section:
Peavey 14XT™ titanium diaphragm
compression driver on a $90^\circ \times 40^\circ$
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) four-pin Neutrik® Speakon® 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,
white or natural finishes.

Mounting provisions:

- (6) 3/8"-16 threaded mounting
suspension points (three each top and
one each side and back). Use only
forged shoulder machinery eye bolt,
Mil Spec MIL51937-3.
(1) 1/4"-20 threaded mounting point
on back bottom for angle adjustments.
(4) 1/4"-20 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:

46 lbs. (20.9 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 5
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 46 lbs. The loudspeaker system shall
be a SSE 15 model.

3 + 2 YEAR LIMITED WARRANTY

NOTE: For details, refer to the
warranty statement. Copies of
this statement may be obtained
by contacting Peavey Electronics
Corporation, P.O. Box 2898, Meridian,
Mississippi 39301-2898.

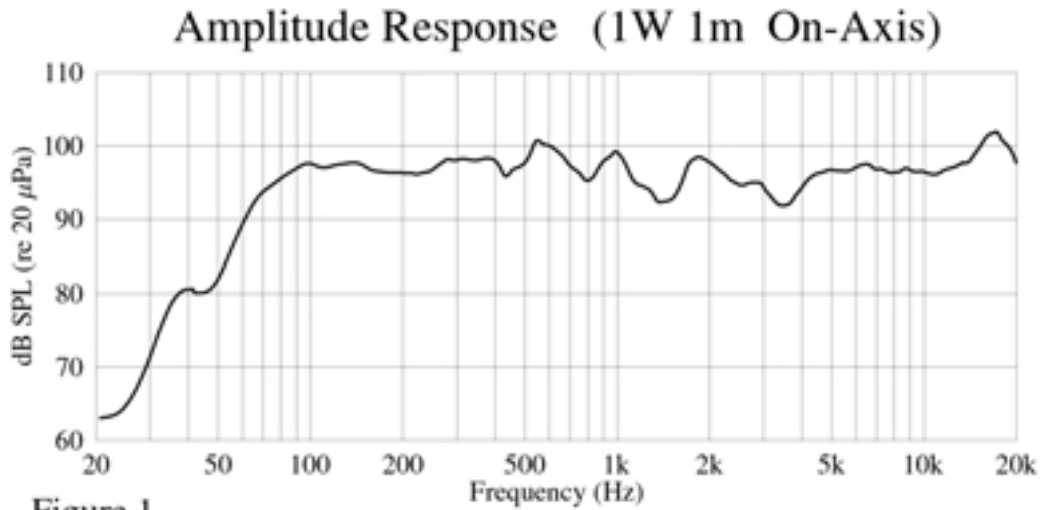


Figure 1

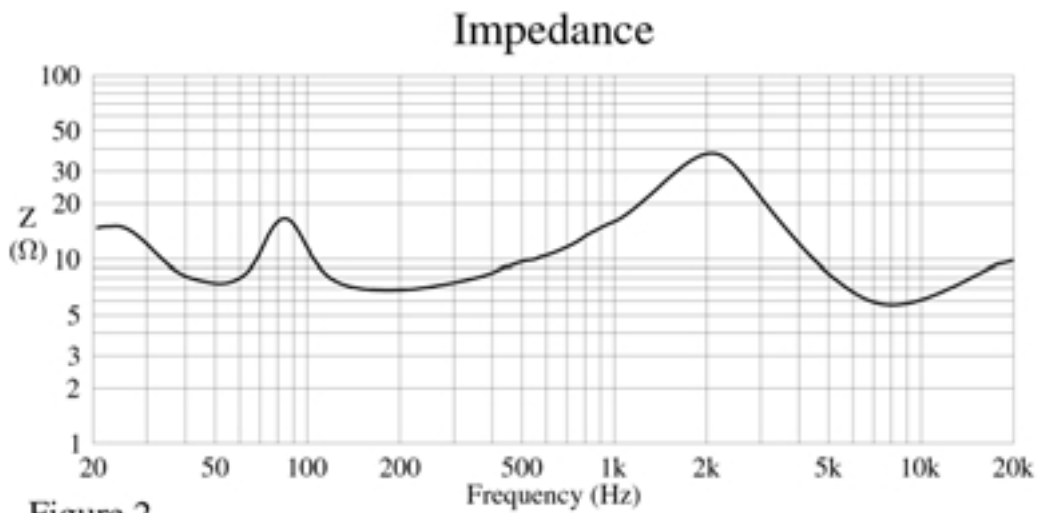


Figure 2

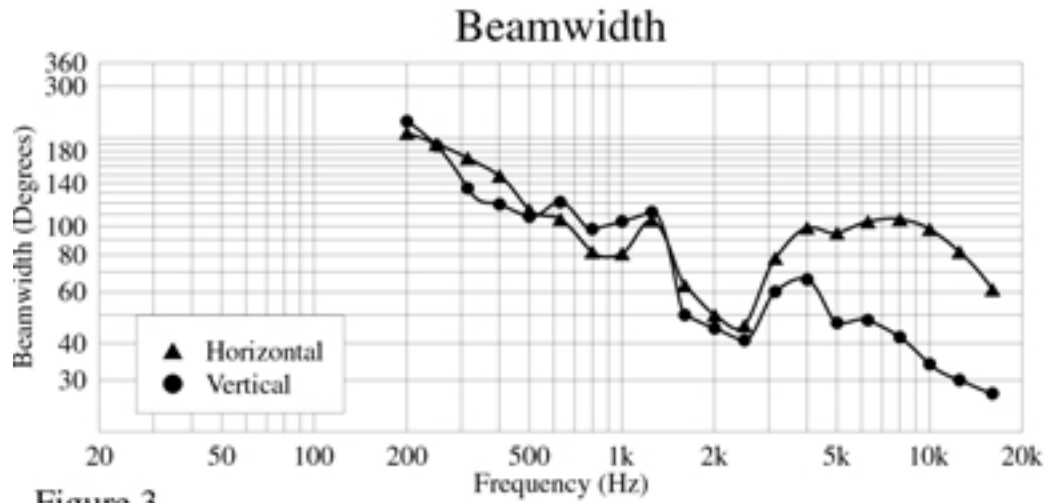


Figure 3

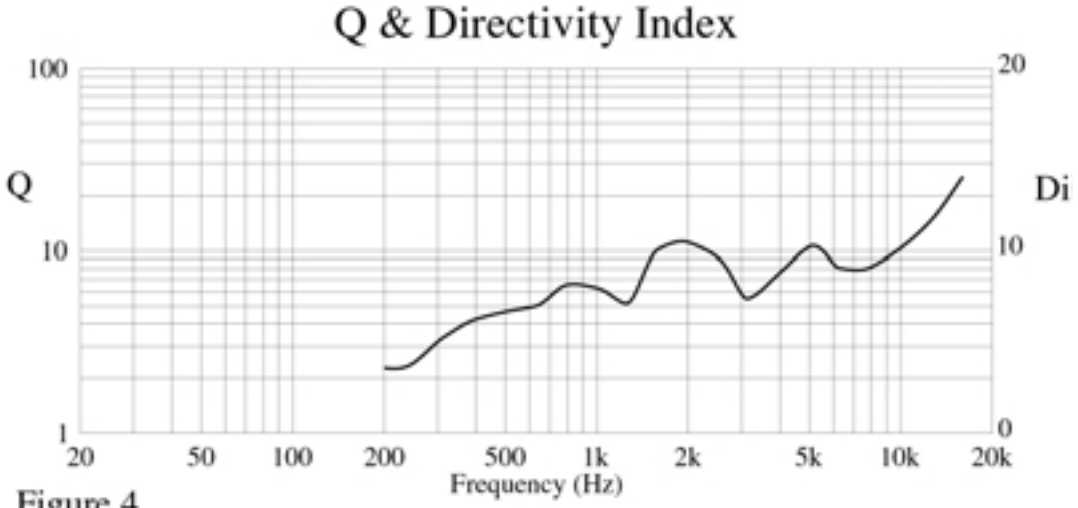


Figure 4

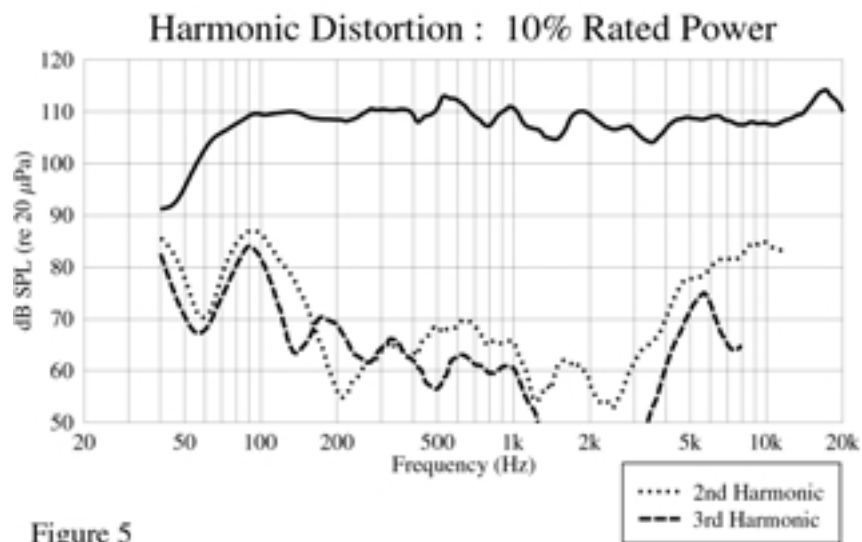


Figure 5

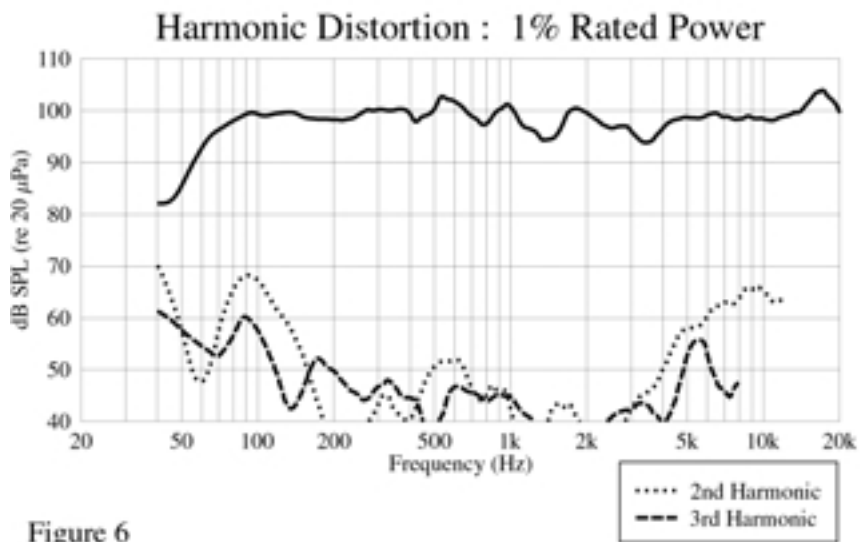
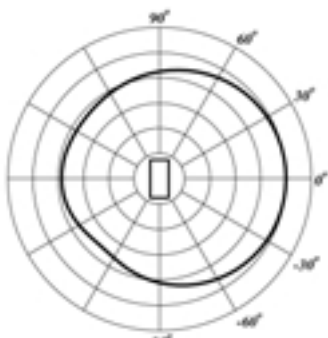


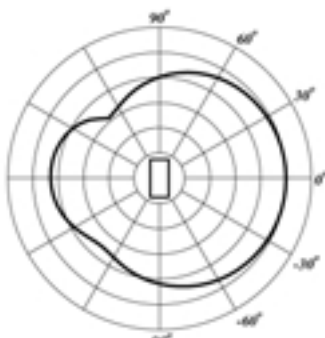
Figure 6



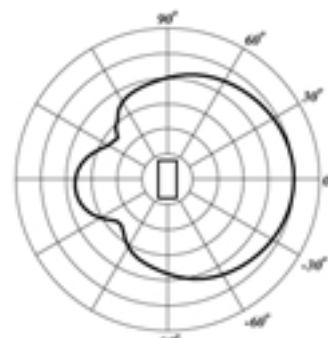
Vertical Polar Patterns 6 dB per Division



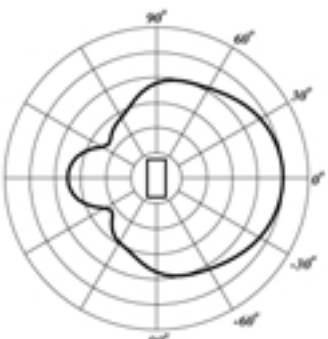
200 Hz



250 Hz



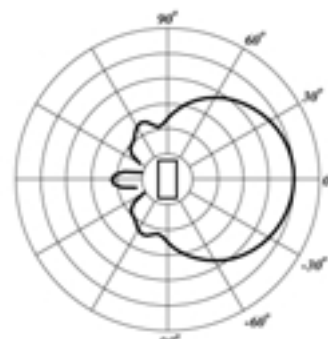
315 Hz



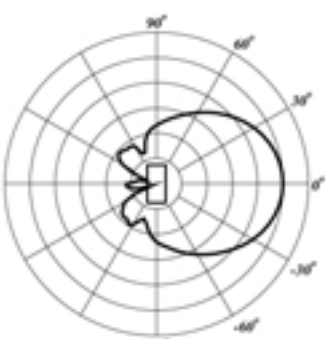
400 Hz



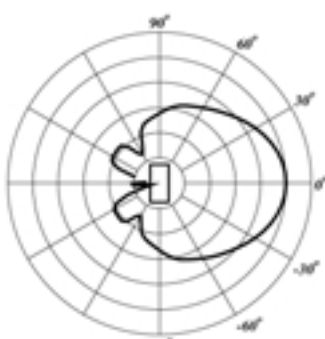
500 Hz



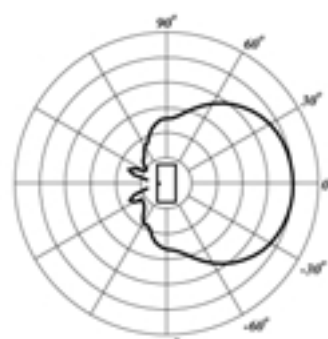
630 Hz



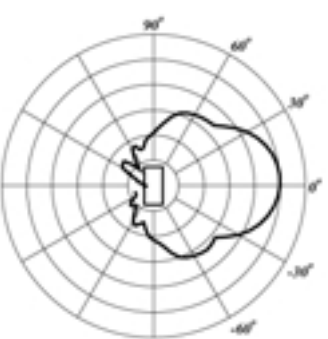
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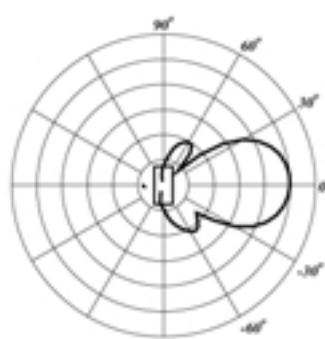
1 kHz



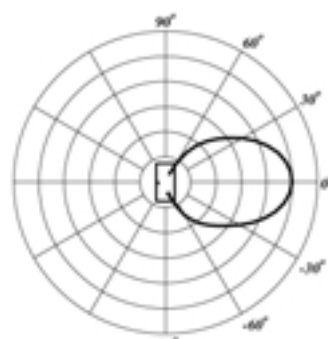
1.25 kHz



1.6 kHz

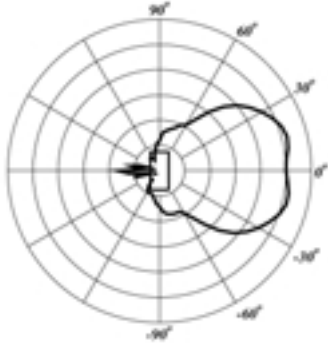


2 kHz

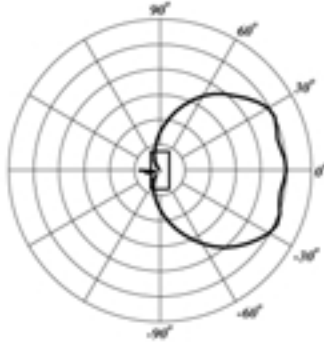


2.5 kHz

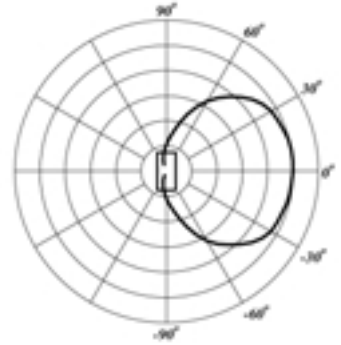
Vertical Polar Patterns 6 dB per Division



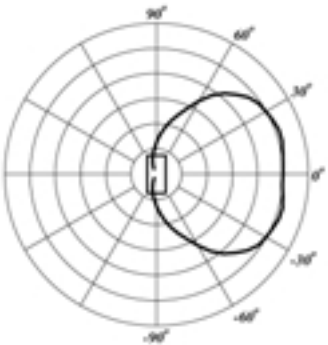
3.15 kHz



4 kHz



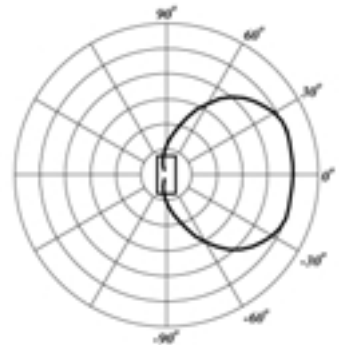
5 kHz



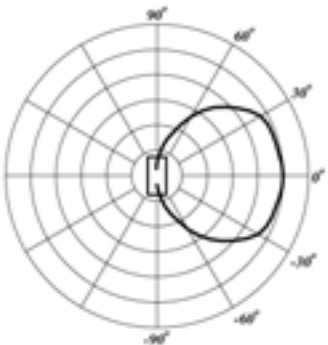
6.3 kHz



8 kHz



10 kHz



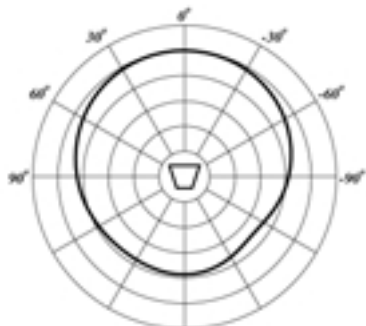
12.5 kHz



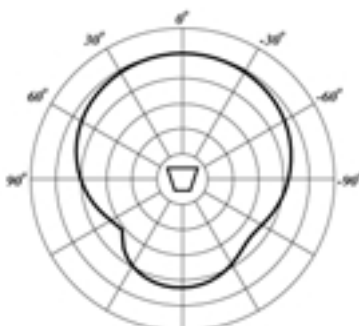
16 kHz



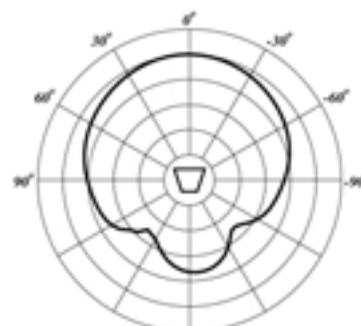
Horizontal Polar Patterns 6 dB per Division



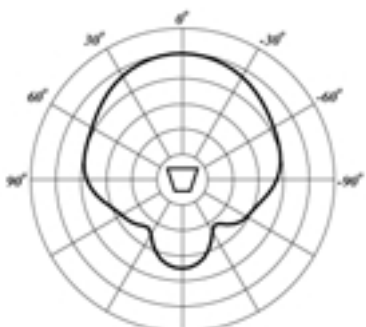
200 Hz



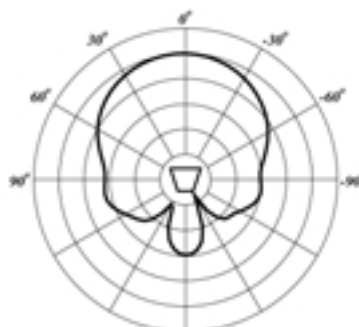
250 Hz



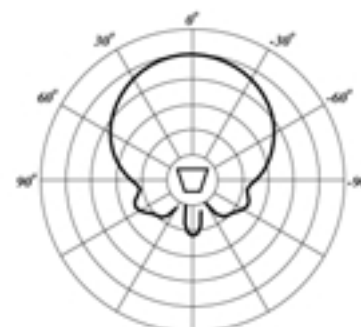
315 Hz



400 Hz



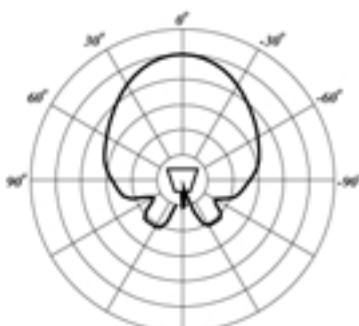
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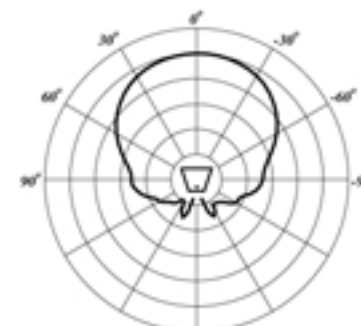
630 Hz



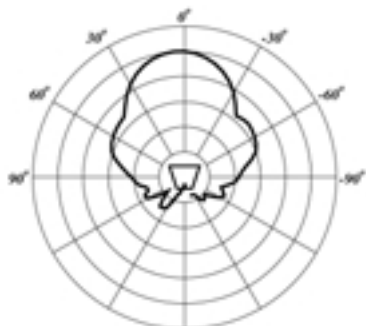
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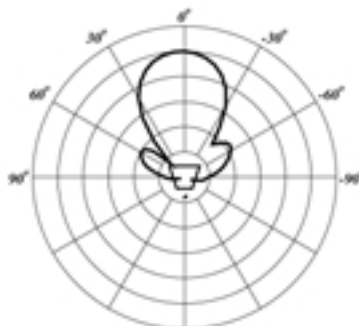
1 kHz



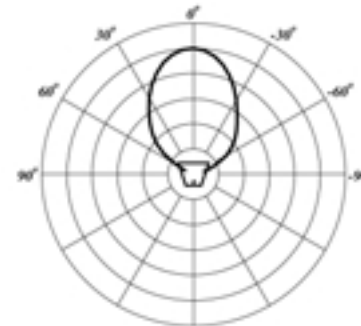
1.25 kHz



1.6 kHz

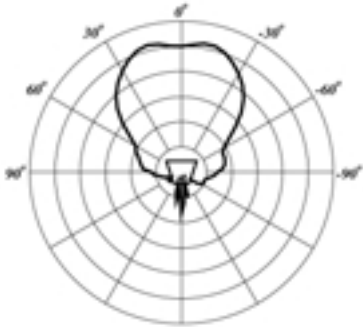


2 kHz

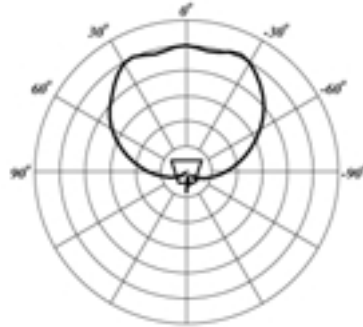


2.5 kHz

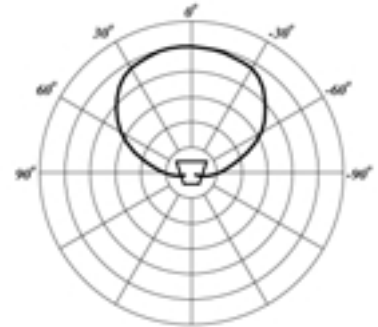
Horizontal Polar Patterns 6 dB per Division



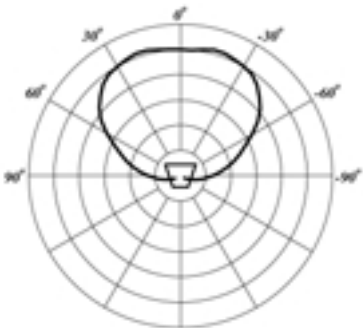
3.15 kHz



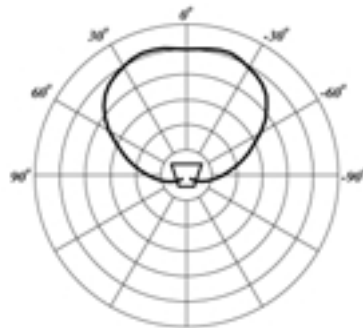
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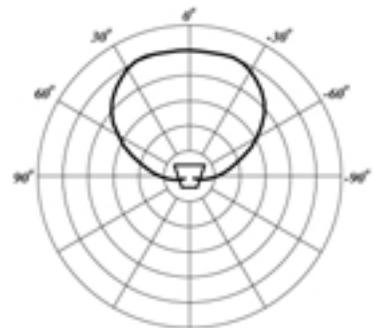
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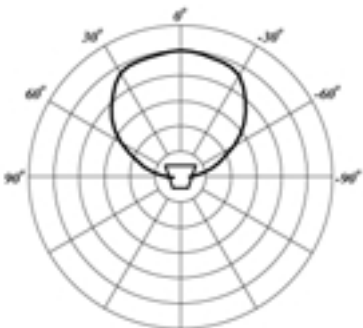
6.3 kHz



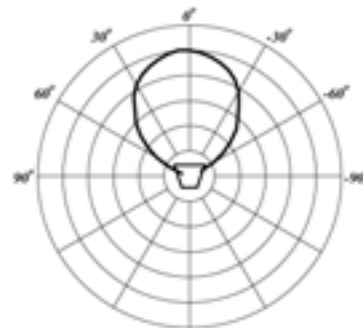
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10 kHz



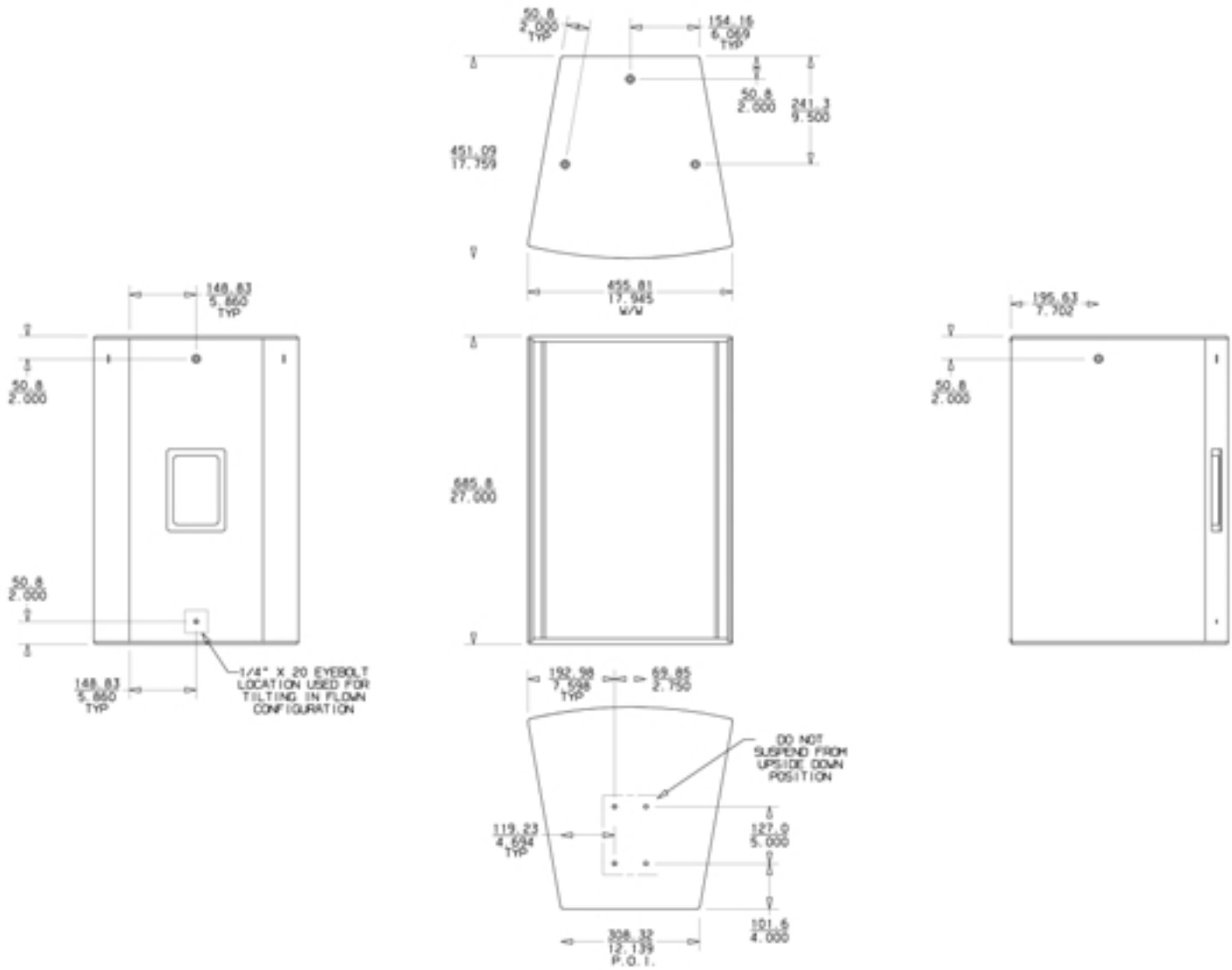
12.5 kHz



16 kHz



SANCTUARY SERIES™



Input Plate

SANCTUARY SERIES™
sanctuary-series.com

SSE 15
DESIGNED AND
MADE IN USA

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.



www.sanctuary-series.com

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Features and specifications subject to change without notice.