

# SPECS

PEAVEY ELECTRONICS



## IMPULSE™ 1280

### Full-Range, Two-Way Enclosure

#### SPECIFICATIONS

**Frequency Response, 1 Meter, On-Axis, Swept Sine in Anechoic Environment:**

60 Hz to 18 kHz

**Low-Frequency Cut-Off (-3 dB point):**

60 Hz

**Useable Low-Frequency Limit (-10 dB point):**

48 Hz

**Power Handling:**

150 W continuous (34.6 V RMS)  
300 W program

**Sound Pressure Level, 2.83 V (1 watt), 1 Meter in Anechoic Environment:**

98 dB

**Maximum Sound Pressure Level:**

119 dB

**Radiation Angle Measure at -6 dB**

**Point of Polar Response:**

500 Hz to 1.6 kHz:

Horizontal:  $103^{\circ} \pm 16^{\circ}$

Vertical:  $90^{\circ} \pm 27^{\circ}$

1.6 kHz to 5 kHz:

Horizontal:  $81^{\circ} \pm 7^{\circ}$

Vertical:  $76^{\circ} \pm 22^{\circ}$

5 kHz to 16 kHz:

Horizontal:  $88^{\circ} \pm 7^{\circ}$

Vertical:  $50^{\circ} \pm 3^{\circ}$

**Directivity Factor, Q (Mean):**

5.92

**Directivity Index, D<sub>i</sub> (Mean)**

7.72 dB

**Transducer Complement:**

One 12" heavy-duty woofer  
One 22XT™ driver coupled to a CH-3 constant-directivity horn

**Box Tuning Frequency:**

48 Hz

**Harmonic Distortion:**

1/100 rated power

2nd harmonic:

100 Hz: 0.6%

1 kHz: 1%

3rd harmonic:

100 Hz: 0.7%

1 kHz: 1%

1/10 rated power

2nd harmonic:

100 Hz: 2%

1 kHz: 1%

3rd harmonic:

100 Hz: 3.2%

1 kHz: 1.6%

**Input Connections:**

Five-position terminal strip

**Impedance:**

8 ohms (nominal)

6.4 ohms (minimum)

**Crossover Frequency:**

800 Hz

**Enclosure Materials & Finish:**

Painted finish: (illustrated)

3/4" high-density, poplar-faced,  
7-ply, void-free plywood, gray polyurethane, black grille

Natural finish:

18 mm 13-ply Baltic Birch, void-free plywood, (ready for finish of user's choice), white grille

**Mounting:**

8 flying points (4 horizontal, 8 vertical, aiming/tilt), 1/2"-13 female thread.

**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. Other enclosures may be suspension below one Impulse 1280.

However, the combined weight of additional enclosures and all cables, clamps, and other hardware must not exceed 147 lbs.

The Impulse 1280 weighs 54 pounds and the maximum combined weight suspended from the uppermost mounting bracket

assemblies must not exceed 200 pounds.

Maximum enclosure angle 45°. Use only 1/2" forged shoulder machinery eyebolt, mil spec. MS51937-5; all associated rigging is the responsibility of others.

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

23" H x 16 1/2" W x 13 1/8" /D

**Net Weight:**

54 lbs.



## FEATURES

- High power handling
- Metal guard grille
- Integral flying brackets
- 22XT™ titanium dome compression driver
- 800 Hz crossover point

## DESCRIPTION

The new Impulse™ 1280 is a full-range, two-way enclosure designed specifically for permanent installation. The cabinet is constructed of 3/4" plywood and reinforced with 10-gauge steel bracing. The grille is permanently attached to the baffle to provide component protection and cosmetic appeal.

The two-way system is comprised of a high-power, 12-inch, low-frequency loudspeaker and an 22XT™ compression driver coupled to a constant-directivity horn supplying the mid and high frequencies. As requested by professional sound installers, the Impulse 1280 incorporates a terminal strip to facilitate secure lead connection.

## DIRECTIVITY

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots, which are measured in a whole-space anechoic environment. These are specifications that provide a reference to the coverage characteristics of the enclosure. These parameters provide insight for proper enclosure placement and installation in the chosen environment. The Impulse 1280 exhibits a desirable beamwidth and directivity factor suitable for all high-level sound reinforcement applications.

## FREQUENCY RESPONSE

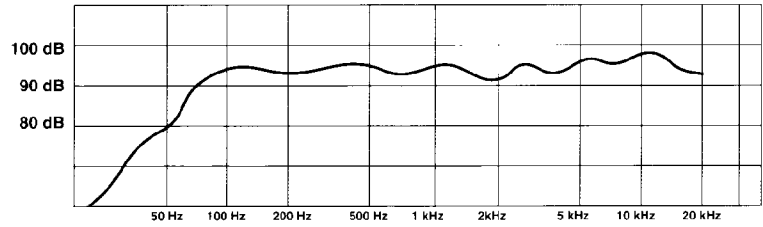
This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the Impulse 1280 is measured at 1 meter using a 2.83 volt swept sine input. As shown in Figure 1, the selected drivers in the Impulse 1280 combine to give a smooth frequency response from 60 Hz to 18 kHz.

## POWER HANDLING

There are many different approaches to power-handling ratings. Peavey rates this speaker system's power handling using a modified form of the AES Standard 2-1984. Utilizing audio band (20 Hz to 20 kHz) pink noise with peaks over four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high-technology

Frequency

Fig. 1



Impedance

Fig. 2

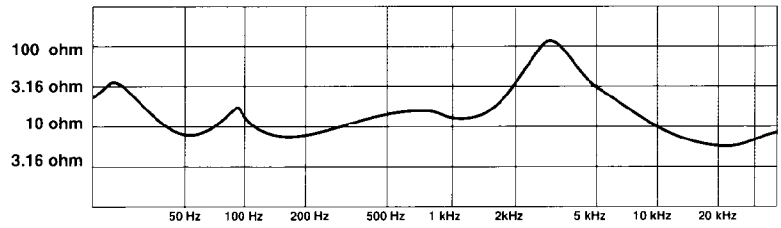


Fig. 3

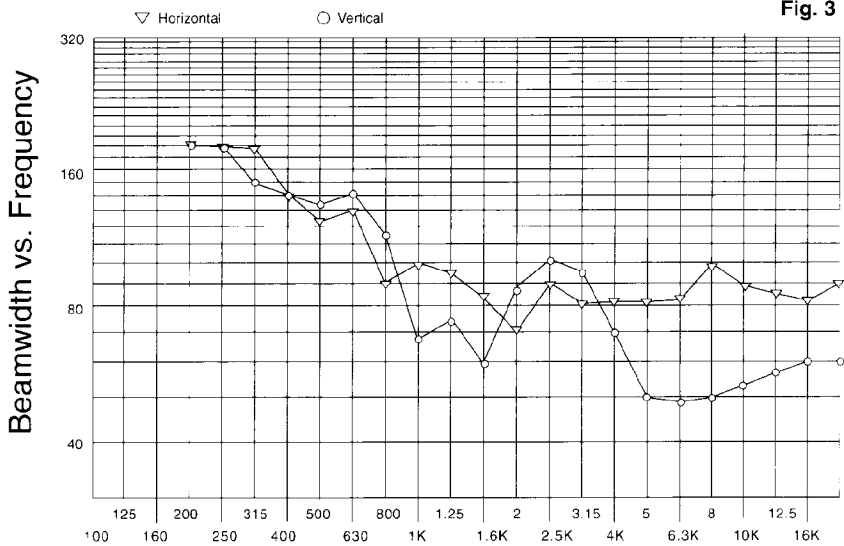
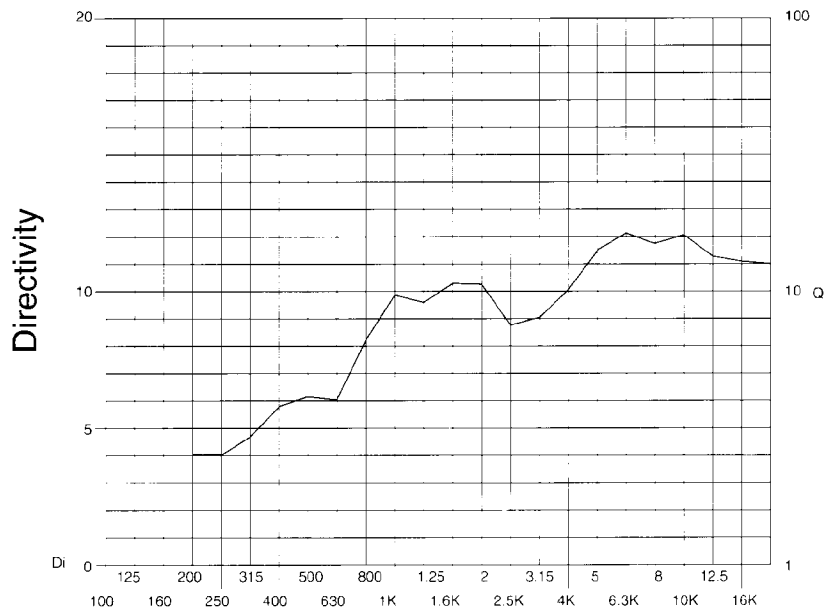


Fig. 4



music. The test signal contains large amounts of very low-frequency energy, effectively simulating the frequency content of live music situations. The full measure of high frequencies in the test signal allow for exposure of the speaker system to synthesize tones that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

**MOUNTING**

**CAUTION:** Before attempting to suspend this speaker, consult a certified structural engineer. A speaker can fall from improper suspension, resulting in serious injury and property damage. Other enclosures may be suspended below one Impulse 1280. However, the combined weight of additional enclosures and all cables, clamps, and other

hardware must not exceed 148 pounds. The Impulse 1280 weighs 52 pounds, and the maximum combined weight suspended from the uppermost mounting bracket assemblies must not exceed 200 pounds. Maximum enclosure angle 45°. Use only 1/2" forged shoulder machinery eyebolt, mil spec. MS 51937-5. All associated rigging is the responsibility of others.

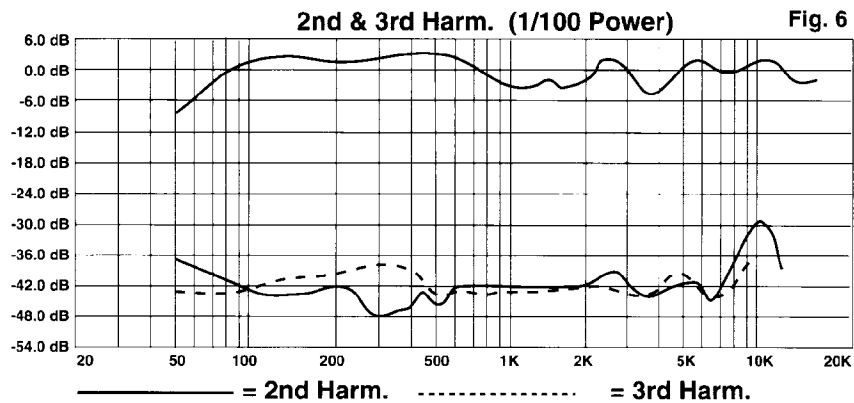
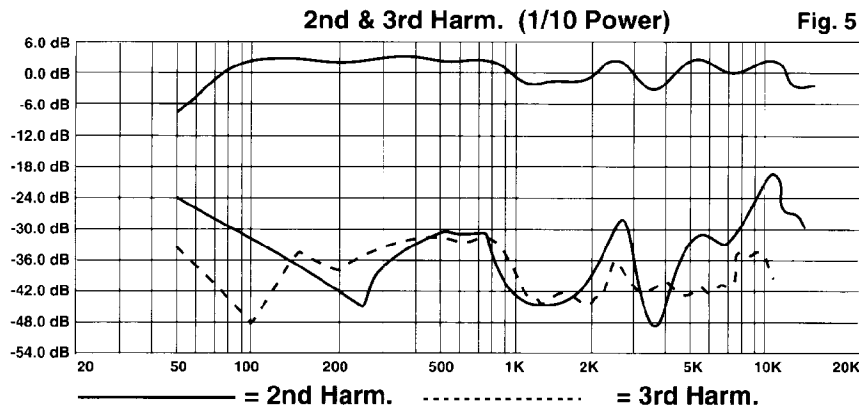
**ARCHITECTURAL & ENGINEERING SPECIFICATIONS**

The loudspeaker system shall have an operating bandwidth of 60 Hz to 18 kHz. The 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 continuous power handling shall be

150 watts, with maximum program power of 300 watts and minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 45° in the horizontal plane and 90° in the vertical plane. The outside dimensions shall be 23-1/8 inches wide by 16-1/2 inches high by 14-1/8 inches deep. The weight shall be 52 lbs. The loudspeaker system shall be a Peavey model Impulse™ 1280.

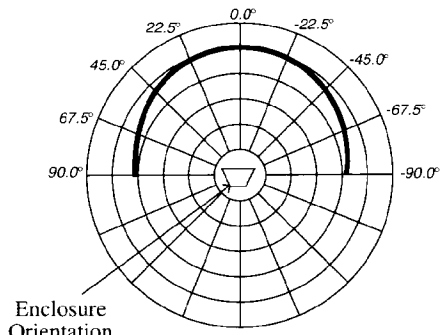
**ONE YEAR LIMITED WARRANTY**

**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 30302-2898.

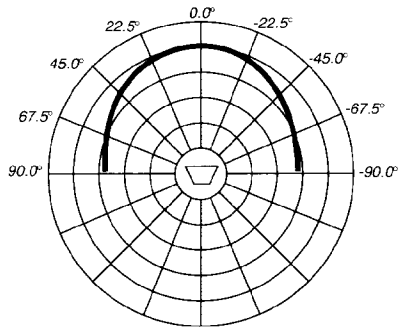


# HORIZONTAL POLAR PATTERNS

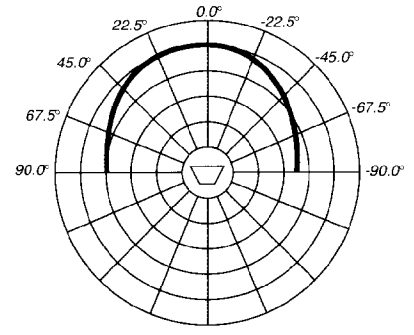
6 dB per division



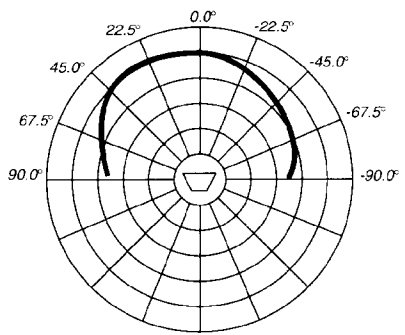
250 Hz



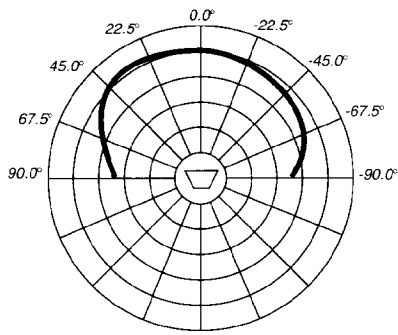
315 Hz



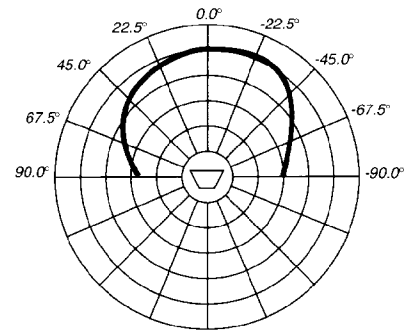
400 Hz



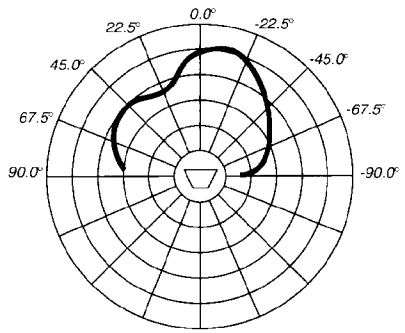
500 Hz



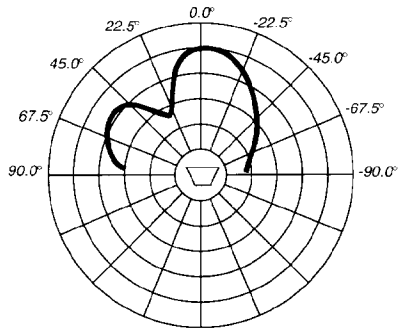
630 Hz



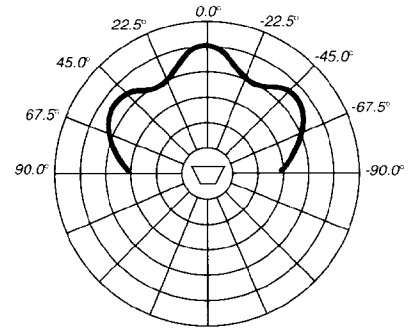
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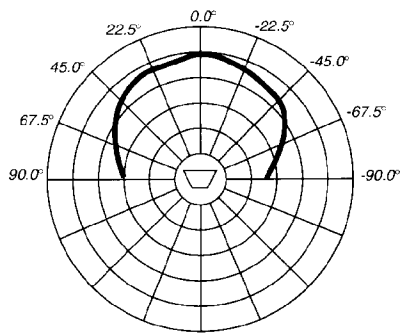
1 kHz



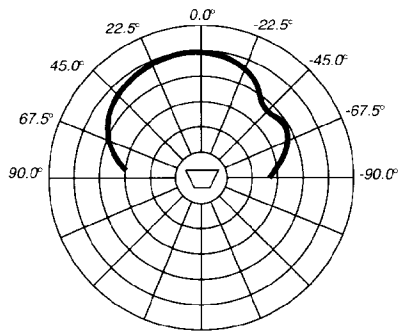
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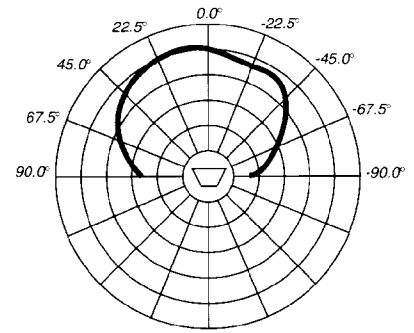
1.6 kHz



2 kHz



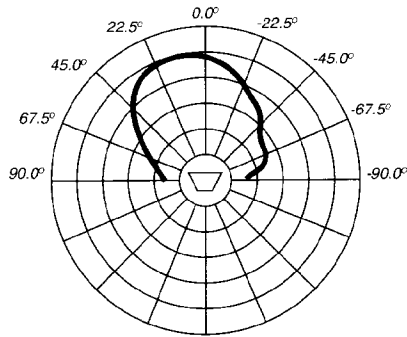
2.5 kHz



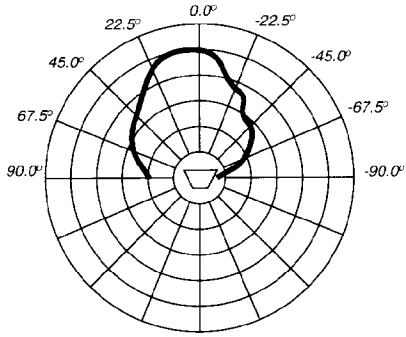
3.15 kHz

# HORIZONTAL POLAR PATTERNS

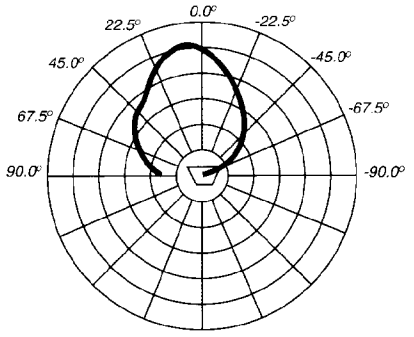
6 dB per division



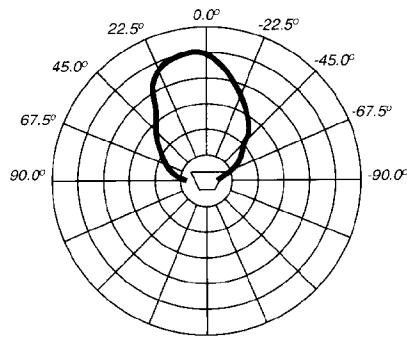
4 kHz



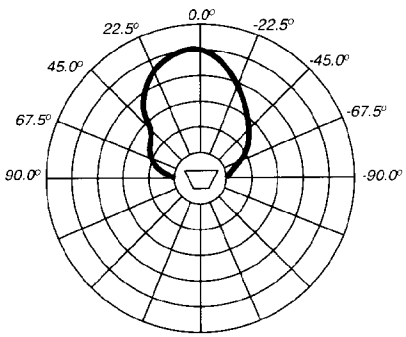
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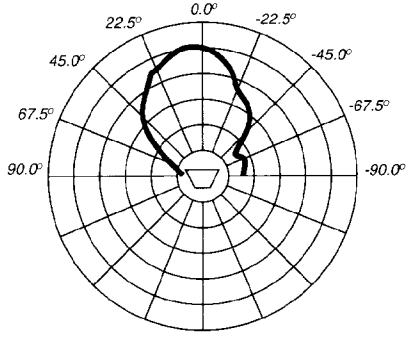
6.3 kHz



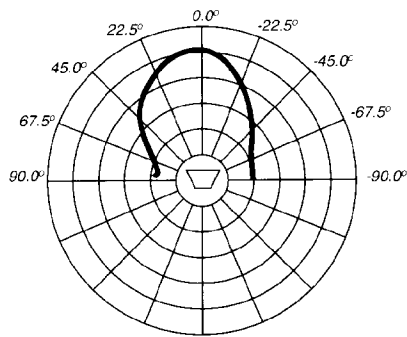
8 kHz



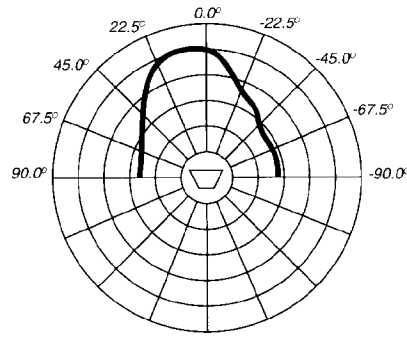
10 kHz



12.5 kHz



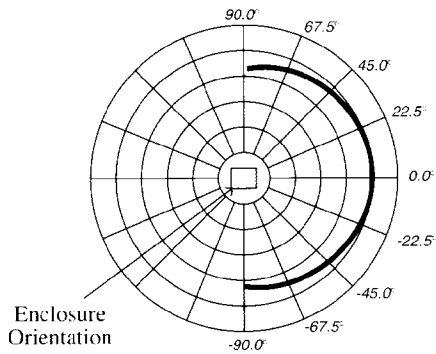
16 kHz



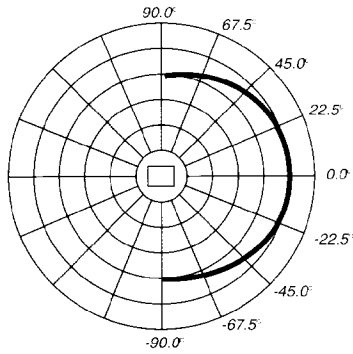
20 kHz

# VERTICAL POLAR PATTERNS

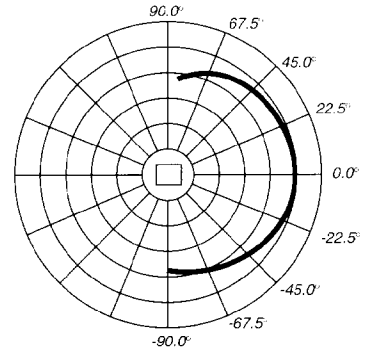
6 dB per division



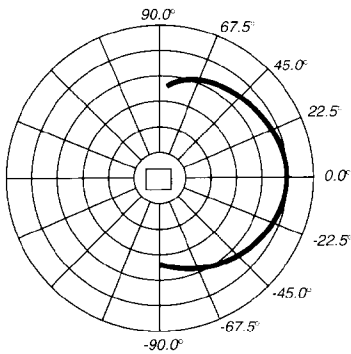
250 Hz



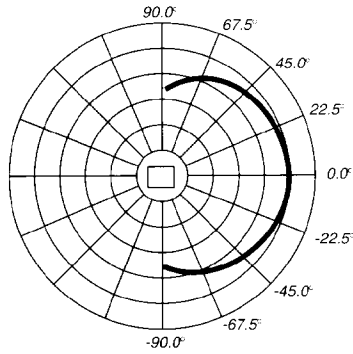
315 Hz



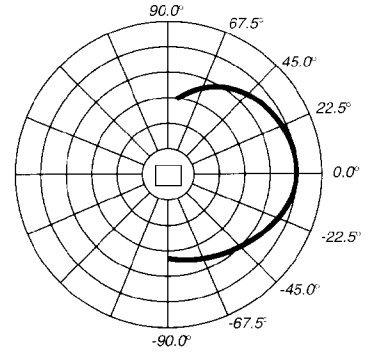
400 Hz



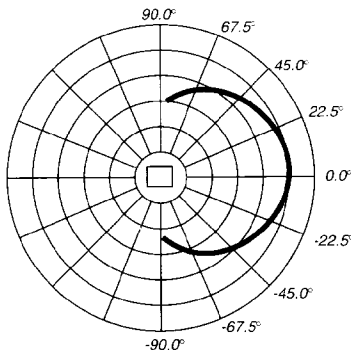
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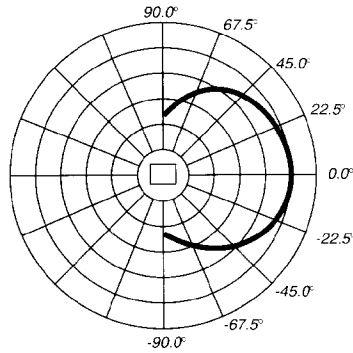
630 Hz



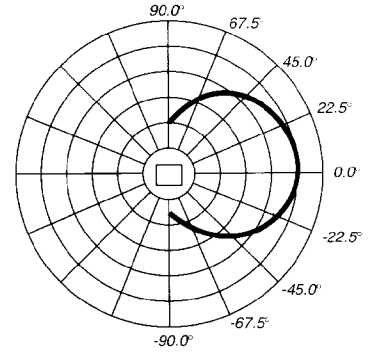
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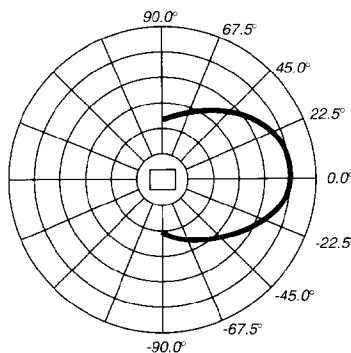
1 kHz



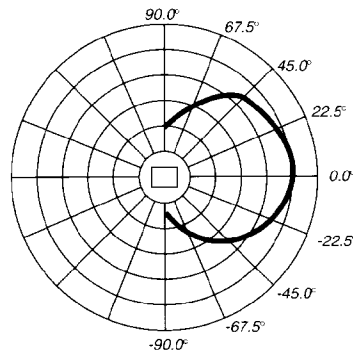
1.25 kHz



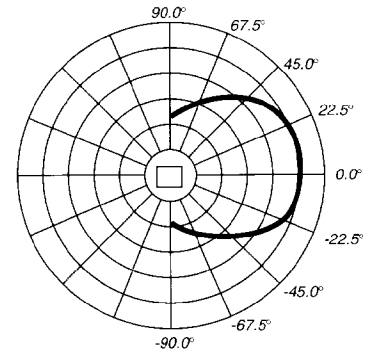
1.6 kHz



2 kHz



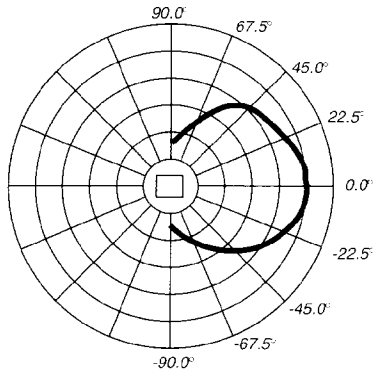
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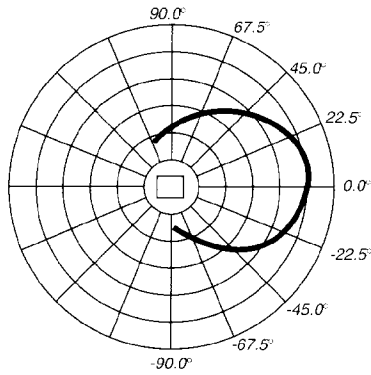
3.15 kHz

# VERTICAL POLAR PATTERNS

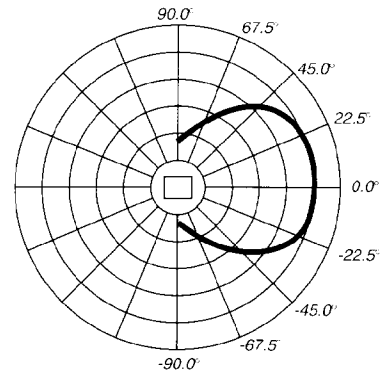
6 dB per division



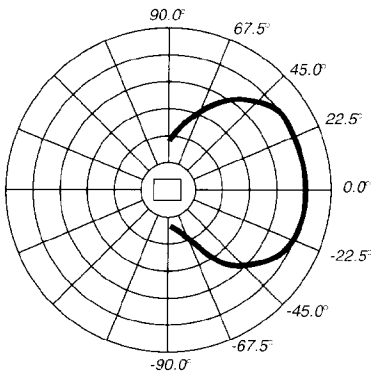
4 kHz \_\_\_\_\_



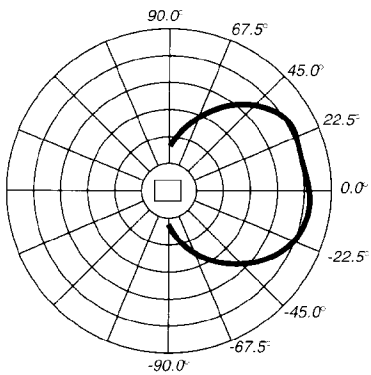
5 kHz \_\_\_\_\_



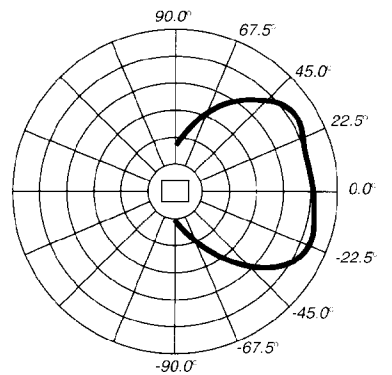
6.3 kHz \_\_\_\_\_



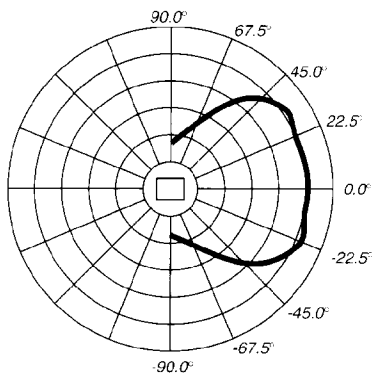
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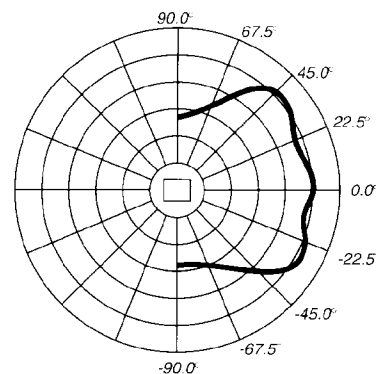
10 kHz \_\_\_\_\_



12.5 kHz \_\_\_\_\_



16 kHz \_\_\_\_\_



20 kHz \_\_\_\_\_

**PEAVEY**<sup>®</sup>



Features and specifications subject to change without notice.

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