

# SPECS

PEAVEY ELECTRONICS



## HV™ 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

*part # 00332250  
eye bolts optional*

**Maximum Sound Pressure Level:**  
120 dB

**Radiation Angle Measure at -6 dB Point of Polar Response:**

500 Hz to 1.6 kHz:  
Horizontal: 99° ±34°  
Vertical: 103° ±16°

1.6 kHz to 5 kHz:  
Horizontal: 79° ±20°  
Vertical: 81° ±7°

5 kHz to 16 kHz:  
Horizontal: 50° ±2°  
Vertical: 88° ±7°

**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:**  
58 Hz

**Harmonic Distortion:**  
1/100 rated power  
2nd harmonic:  
100 Hz: 0.7%  
1 kHz: 0.8%

3rd harmonic:  
100 Hz: 0.56%  
1 kHz: 0.71%  
1/10 rated power  
2nd harmonic:  
100 Hz: 2.5%  
1 kHz: 0.9%  
3rd harmonic:  
100 Hz: 2.6%  
1 kHz: 1.4%

#### Input Connections:

Five-position terminal strip

#### Impedance:

8 ohms (nominal)  
6.7 ohms (minimum)

#### Crossover Frequency:

800 Hz

#### Enclosure Materials & Finish:

Painted finish:

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

Natural finish: (illustrated)

3/4" Birch, 9-ply, void-free plywood (ready for finish of user's choice), white grille

#### Mounting:

12 flying points (4 horizontal, 6 vertical,  
2 aiming/tilt), 1/2"-13 female thread.

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

16 -1/2" H x 23-1/8" W (front)  
11-1/2" W (rear) x 14-1/8" D

#### Net Weight:

52 lbs.

#### FEATURES

- High power handling
- Metal guard grille
- 10-gauge steel flying brackets
- 22XT™ titanium dome compression driver
- Trapezoidal design
- 800 Hz crossover point

#### DESCRIPTION

The new HV™ 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 12-inch, wide bandwidth, low-frequency driver, and an 22XT™ compression driver loaded in a constant-directivity horn supplying the mid and high frequencies. The frequency spectrum is divided by a two-way passive crossover operating at 800 Hz, allowing a smooth frequency response from 60 Hz out to 18,000 Hz. As requested by professional sound installers, the HV™ 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 HV 1280 exhibits a desirable beamwidth and directivity factor suitable for all high-level sound reinforcement applications.

If EASE or EASE Jr. is being used to design an installation, note that the horizontal and vertical polar plots have been interchanged. This is due to the horn placement on the Impulse 1280 enclosure. EASE or EASE Jr. allows asymmetry in the vertical (horizontal on the HV 1280) axis only.

**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 HV 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 music. The test signal contains large

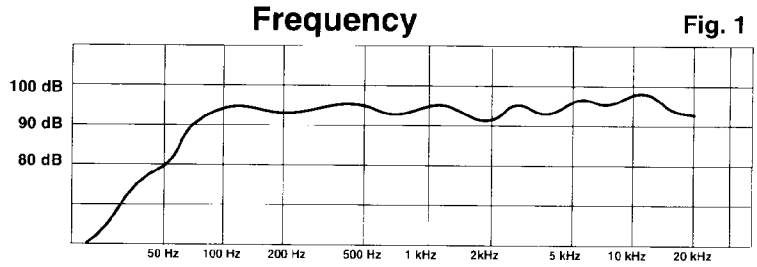


Fig. 1

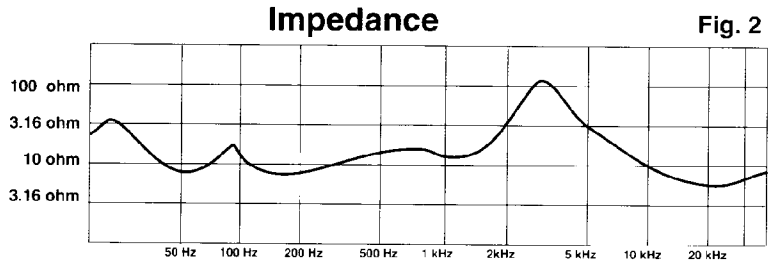


Fig. 2

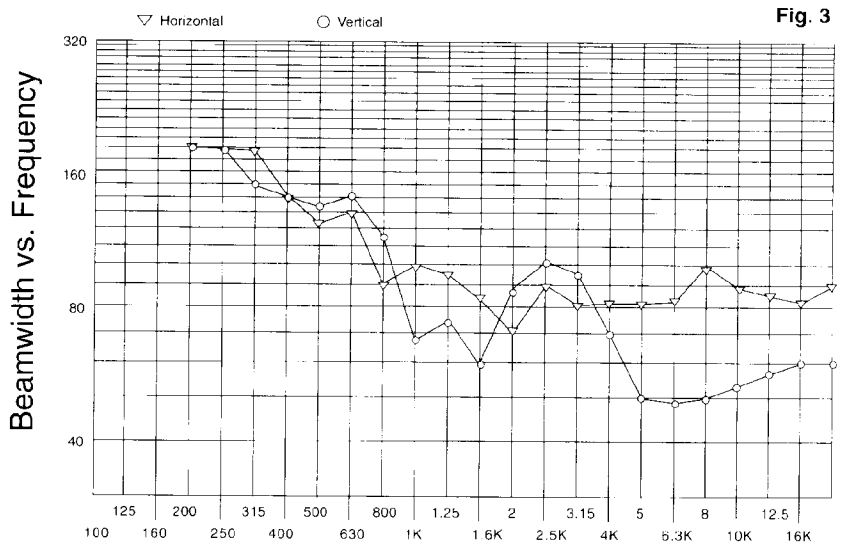


Fig. 3

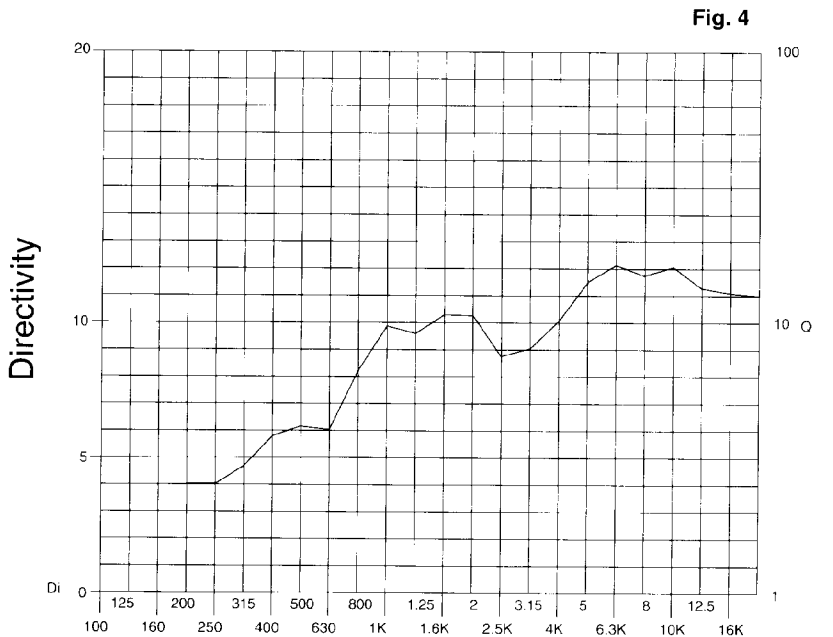


Fig. 4

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 HV 1280. However, the combined weight of additional enclosures and all cables, clamps, and other hardware must not exceed 148 pounds.

The HV 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.

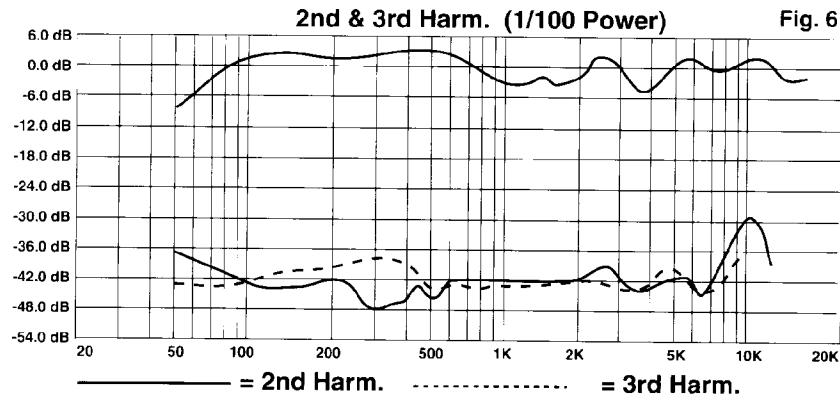
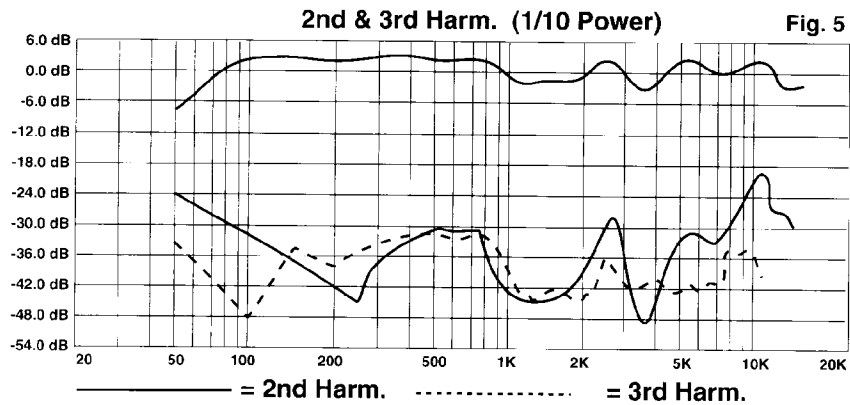
**ARCHITECTURAL & ENGINEERING SPECIFICATIONS**

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 HV™ 1280.

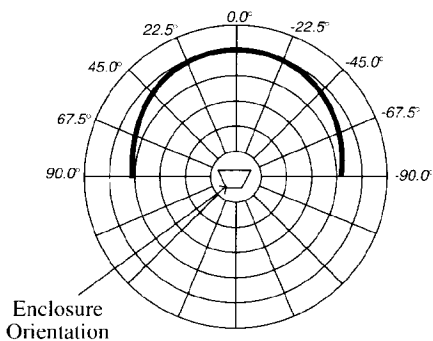
**ONE YEAR LIMITED WARRANTY**

**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.

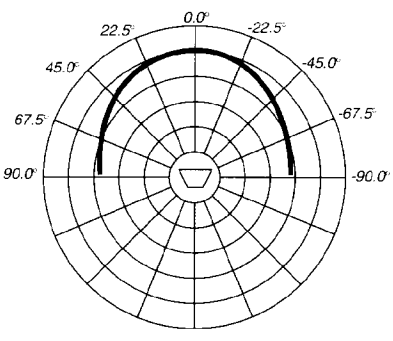


# HORIZONTAL POLAR PATTERNS

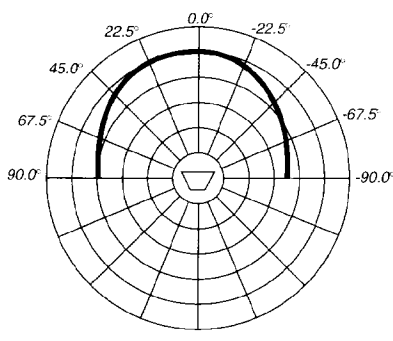
6 dB per division



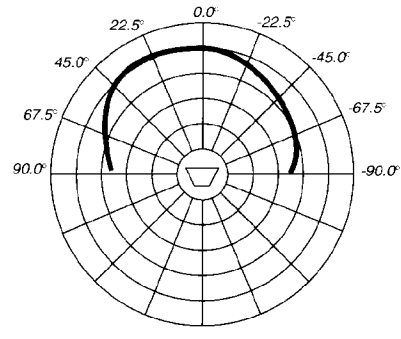
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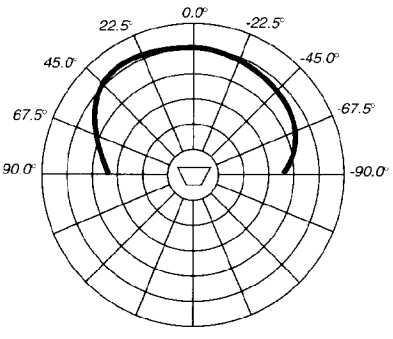
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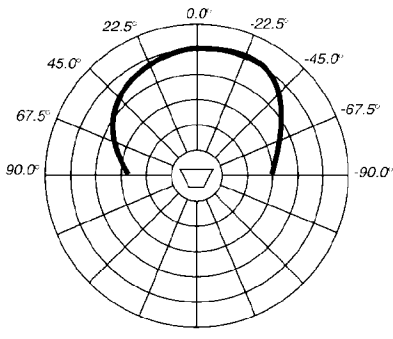
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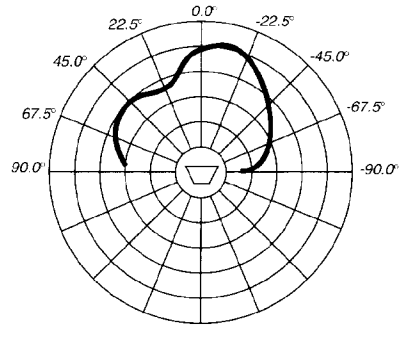
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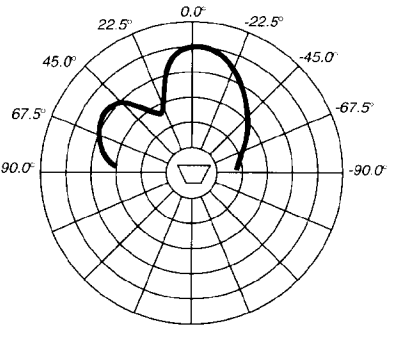
630 Hz



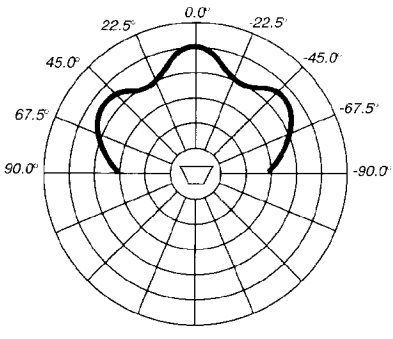
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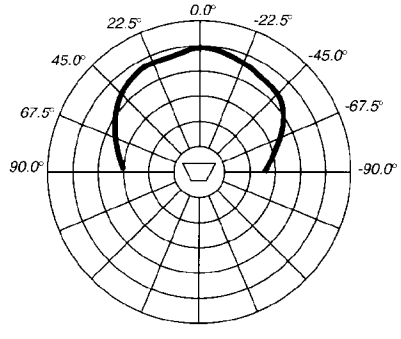
1 kHz



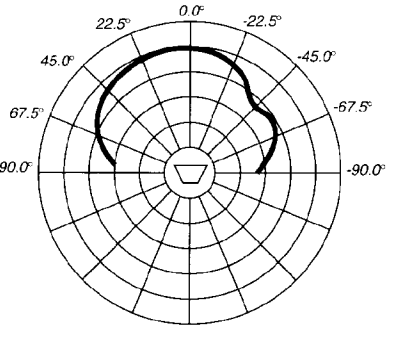
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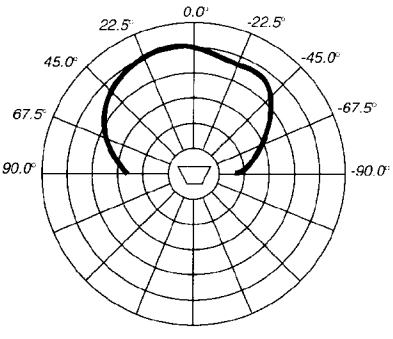
1.6 kHz



2 kHz



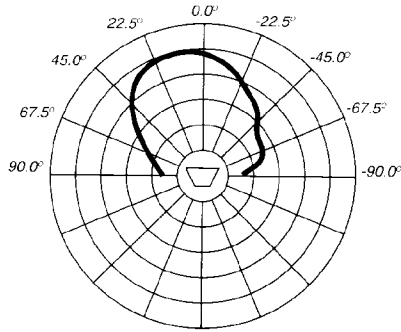
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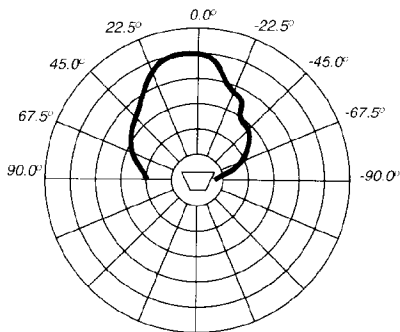
3.15 kHz

# HORIZONTAL POLAR PATTERNS

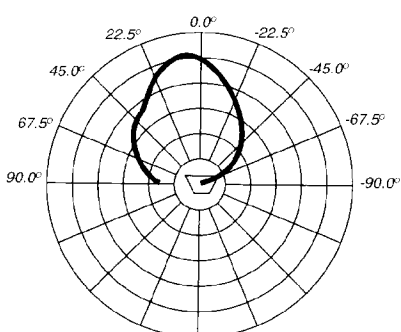
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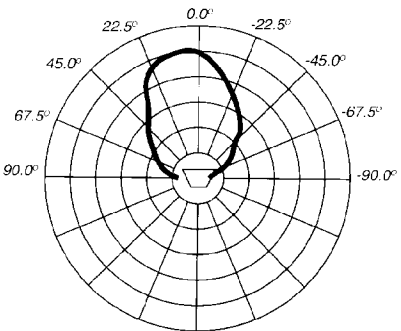
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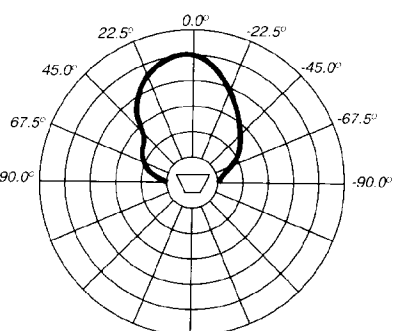
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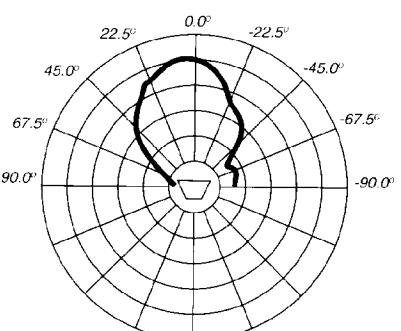
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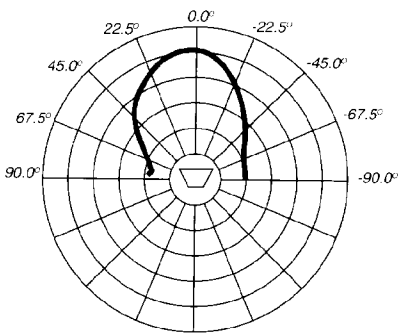
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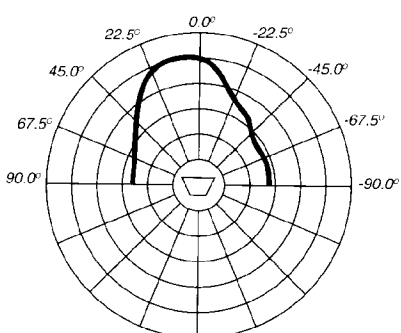
10 kHz



12.5 kHz



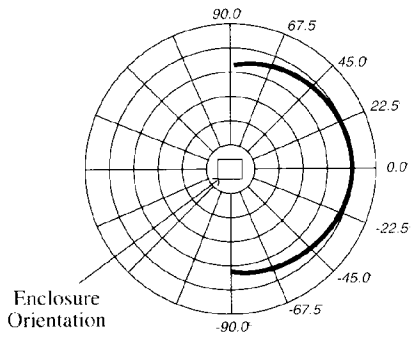
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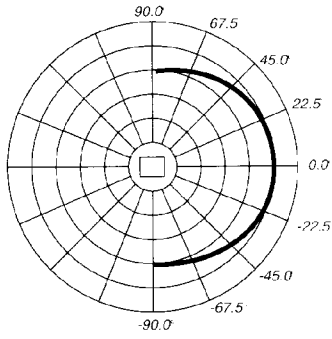
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# VERTICAL POLAR PATTERNS

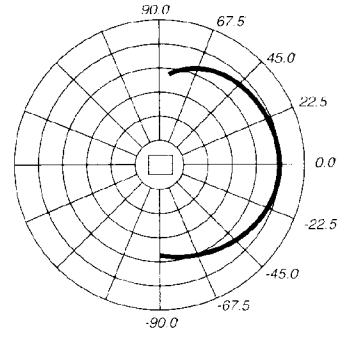
6 dB per division



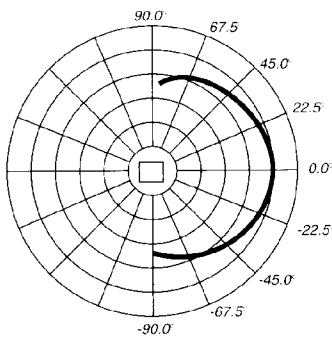
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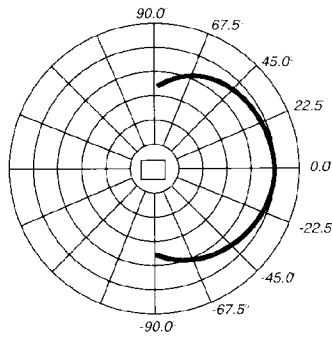
315 Hz



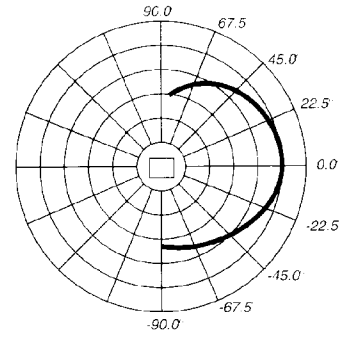
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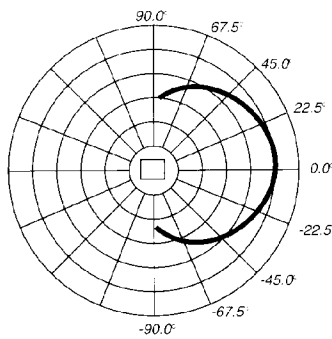
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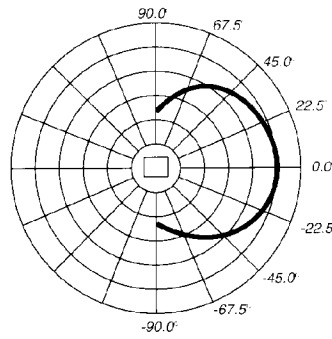
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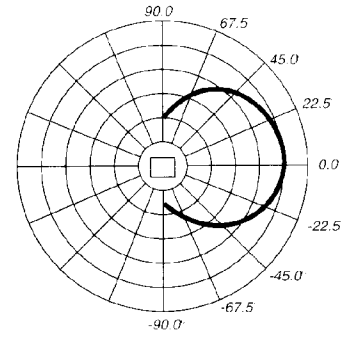
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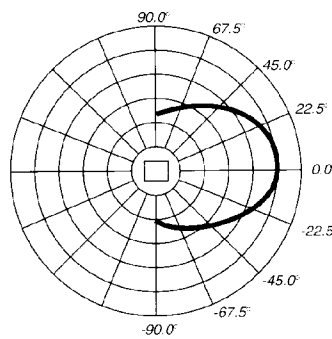
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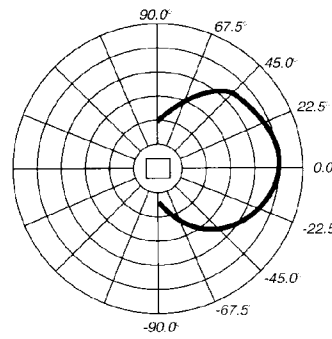
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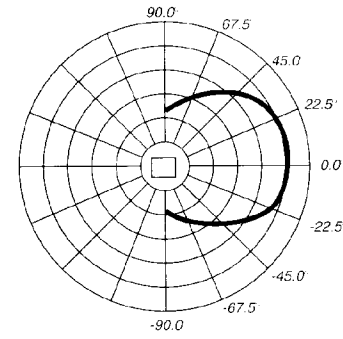
1.6 kHz



2 kHz



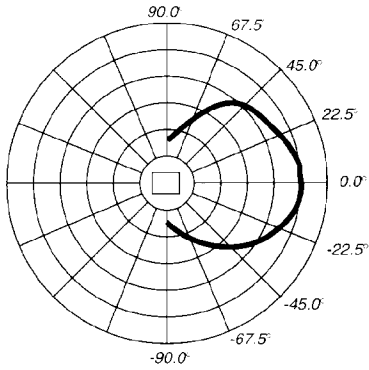
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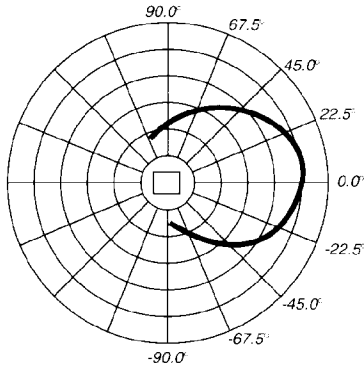
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# VERTICAL POLAR PATTERNS

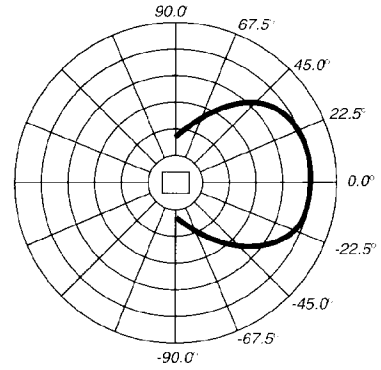
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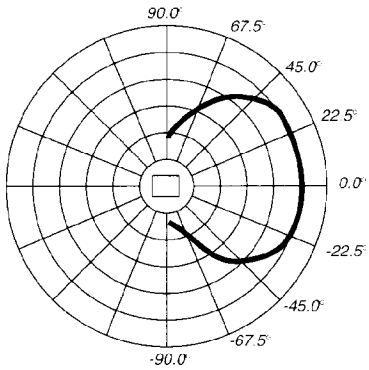
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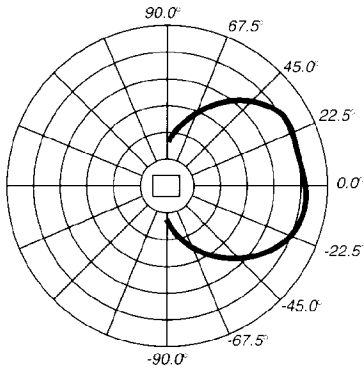
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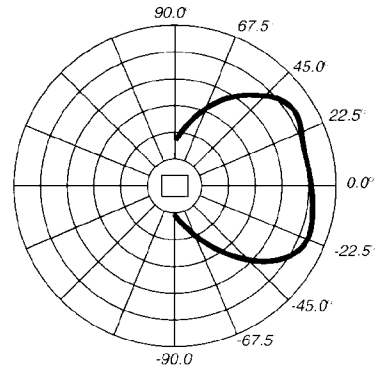
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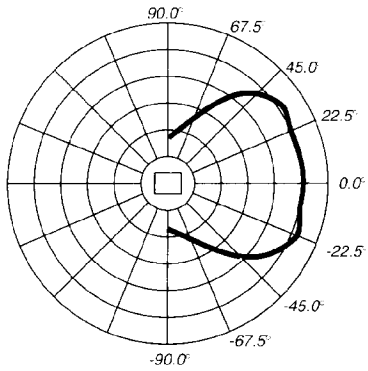
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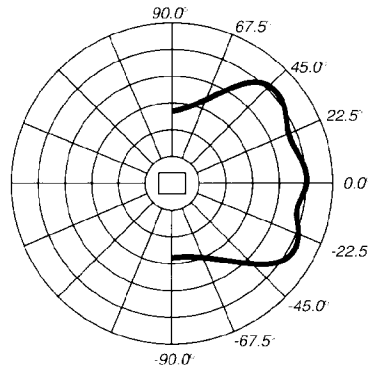
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12.5 kHz



16 kHz



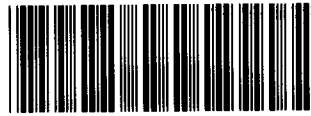
20 kHz

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