

## SP™ 5Ti

### 2-Way Sound Reinforcement Enclosure

#### SPECIFICATIONS

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##### Frequency Response:

80 Hz - 17 kHz

##### Low Frequency Limit (-3 dB point):

80 Hz

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

50 Hz

##### Power Handling:

250 watts continuous (44.7 volts RMS)  
500 watts program

##### Sound Pressure Level 1 Watt at 1 Meter Swept Sine Input in Anechoic Environment:

100 dB

##### Maximum Sound Pressure Level:

121 dB

##### Radiation Angle Measured at -6 dB Point of Polar Response

Horizontal Plane	Vertical Plane
<b>500 Hz - 1.6 kHz</b> 100° ±25°	<b>500 Hz - 1.6 kHz</b> 100° ±35°
<b>1.6 kHz - 5 kHz</b> 85° ±20°	<b>1.6 kHz - 5 kHz</b> 85° ±25°
<b>5 kHz - 16,000 Hz</b> 105° ±15°	<b>5 kHz - 16,000 Hz</b> 50° ±10°

##### Directivity Factor Q

##### 500 Hz-16,000 Hz Median:

5.8, +4.2, -1.8

##### Directivity index Di 500-16,000 Hz Median:

7.6 dB, +2.4 dB, -1.6 dB

##### Transducer Complement:

One 15" SP-15825 Scorpion® Plus woofer  
and one 22T™ 2" compression driver  
mounted on a CH™-3 constant directivity  
90° x 45° horn tweeter

##### Tuning Frequency (F box):

50 Hz

##### Crossover Frequency:

1200 Hz

##### Crossover Type:

Two-way passive internal

##### Electrical Crossover Slope:

12 dB/octave (2nd order) high and low  
pass, high pass section has constant  
directivity horn EQ

##### Impedance (Nominal):

8 ohms

##### Impedance (Minimum):

4.7 ohms

##### Input Connections:

Two ¼" female full-range inputs in parallel,  
one each ¼" female connectors for  
biamp use, high & low

##### Enclosure Materials and Finish:

High density ¾" wood, covered in a  
durable black carpet, reinforced with steel  
corners

##### Mounting:

SA-1 stand adaptor built-in, also 4 large  
rubber feet for floor standing use

##### Dimensions:

26" (66.0 cm) H x 19½" (49.8 cm) W x  
13⅞" (35.3 cm) D

##### Optional Accessories:

Peavey S-1 tripod speaker enclosure  
stand, Dynamic System Controller™ Series  
23, an active electronic crossover system  
with built-in high & low frequency signal  
processing or the Dynamic System  
Controller™ Series 12, a stereo version of  
the above, and the PCS™ (Processor Con-  
trolled System)

##### Net Weight:

66 lbs.

##### Additional Remarks:

Unit may be used with or without signal  
processing in biamp mode, integral  
passive crossover provides excellent full  
range use

#### DESCRIPTION

The SP™ 5Ti is a compact, 2-way sound  
reinforcement system able to be  
operated full range or biamped with  
processor capability. Suitable for use in  
public address, keyboard monitoring,  
vocals, and general sound reinforce-  
ment situations. The rich sound of the  
SP-5Ti has a variety of uses. The  
enclosure is constructed of ¾" high  
density wood, covered with a heavy-  
duty black carpet, and reinforced with  
steel corners. Recessed handles on  
each side aid in transport and set-up.  
The two-way system is comprised of a

15" SP-15825 Scorpion Plus woofer, and a 22T titanium compression driver loaded onto a CH-3 constant directivity horn tweeter. A passive crossover is built-in for full range use, giving the system a smooth frequency response from 80 Hz to 17 kHz. Biamp input jacks allow either straight biamplified use or, if preferred, the use of one of the Peavey Dynamic System Controllers for that processed low-end punch. An SA-1 stand adaptor is mounted on the bottom of the enclosure allowing stand mounting on all 1 $\frac{3}{8}$ " shafts.

## DIRECTIVITY

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots (see figure 3) which are measured in a whole space anechoic environment. These are specifications which 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 blending of the components of the SP 5Ti exhibits a desirable beamwidth and directivity factor (figure 4 and 5) 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 SP 5Ti is measured at 1 meter using a 2.82 volt swept sine input. As shown in Figure 1, the selected drivers in the SP 5Ti combine to give a smooth frequency response from 80 Hz to 17 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-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 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 synthesized tone that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

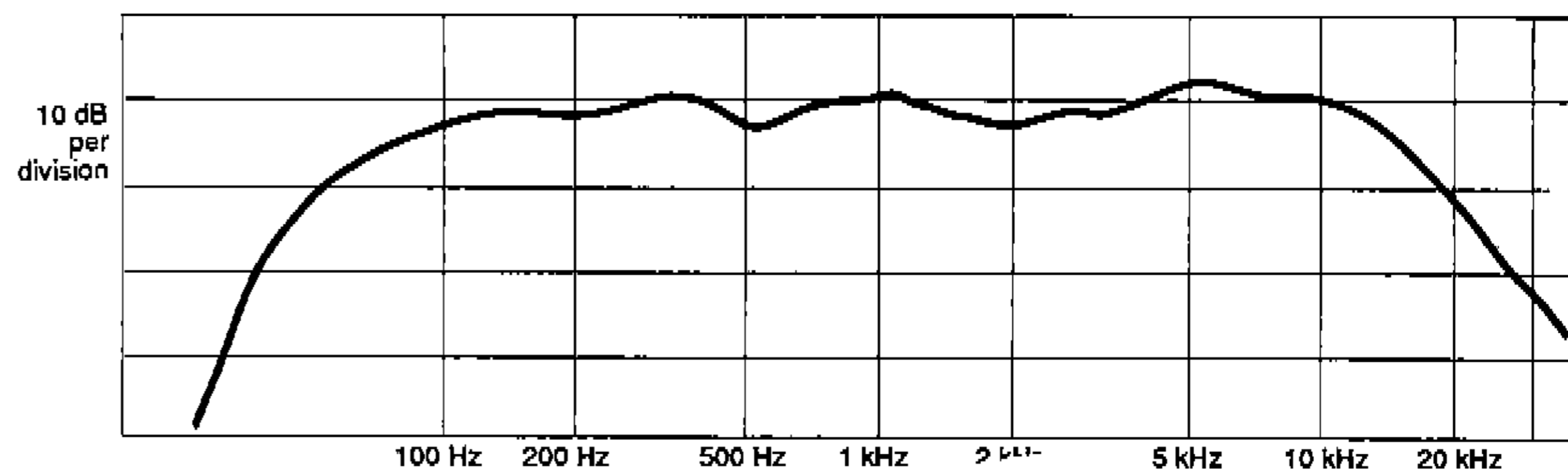


Figure 1. FREQUENCY RESPONSE

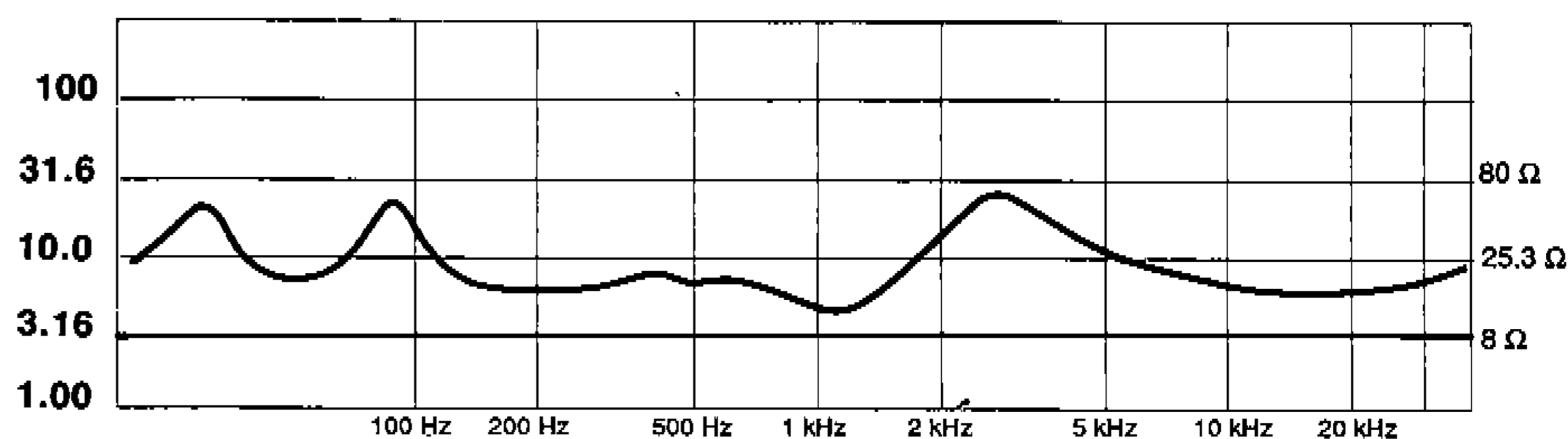


Figure 2. IMPEDANCE

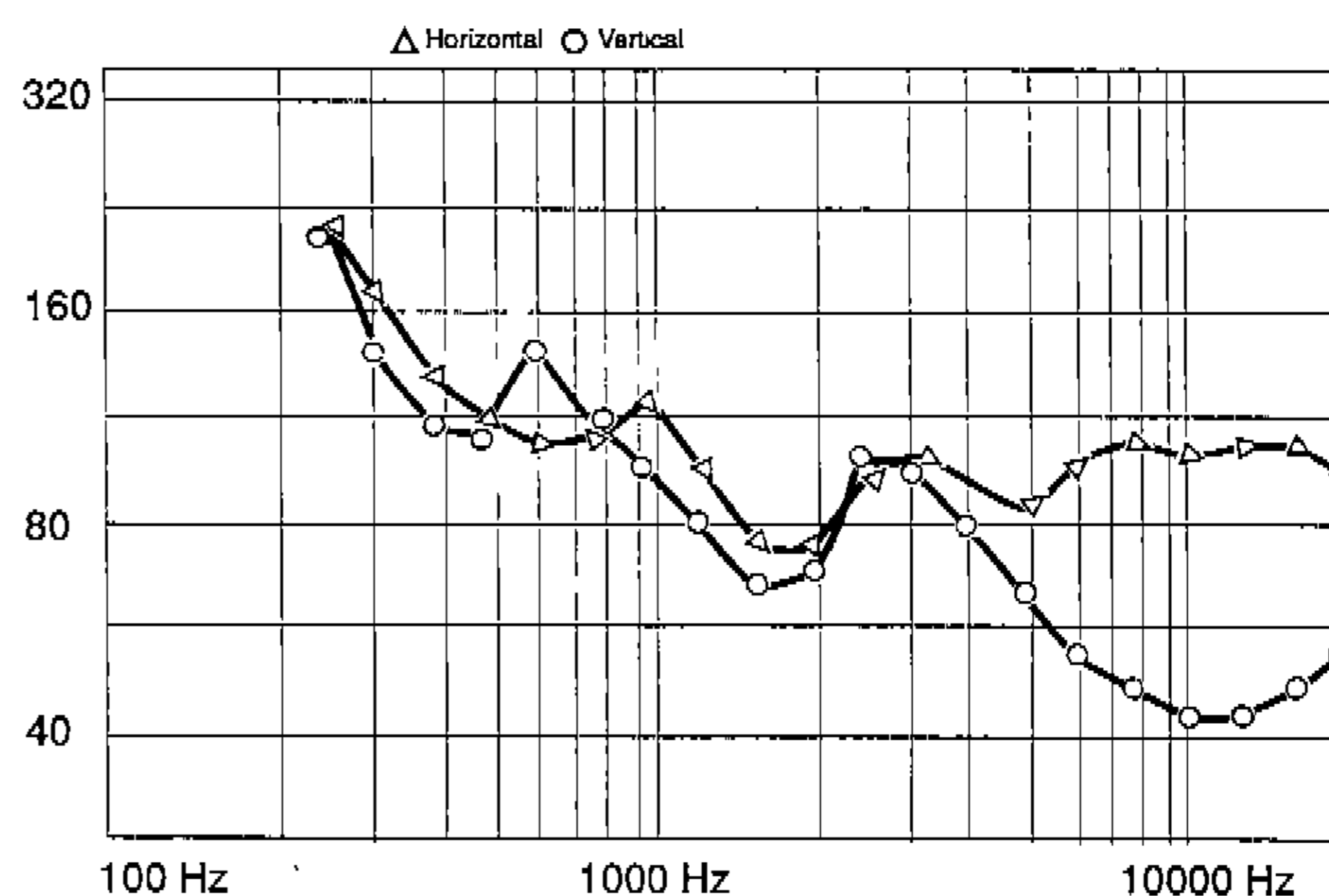


Figure 3. BEAMWIDTH VS. FREQUENCY

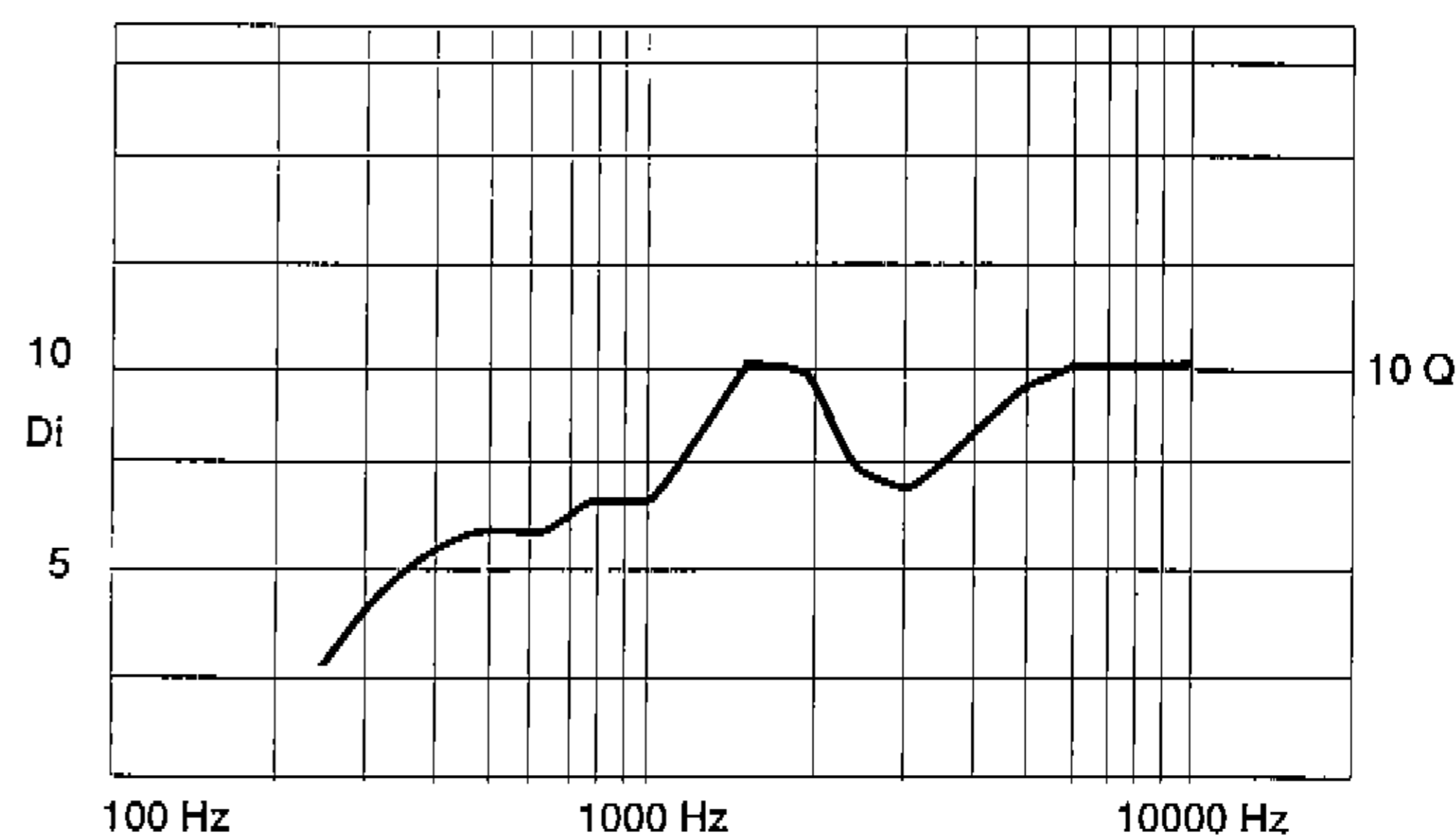
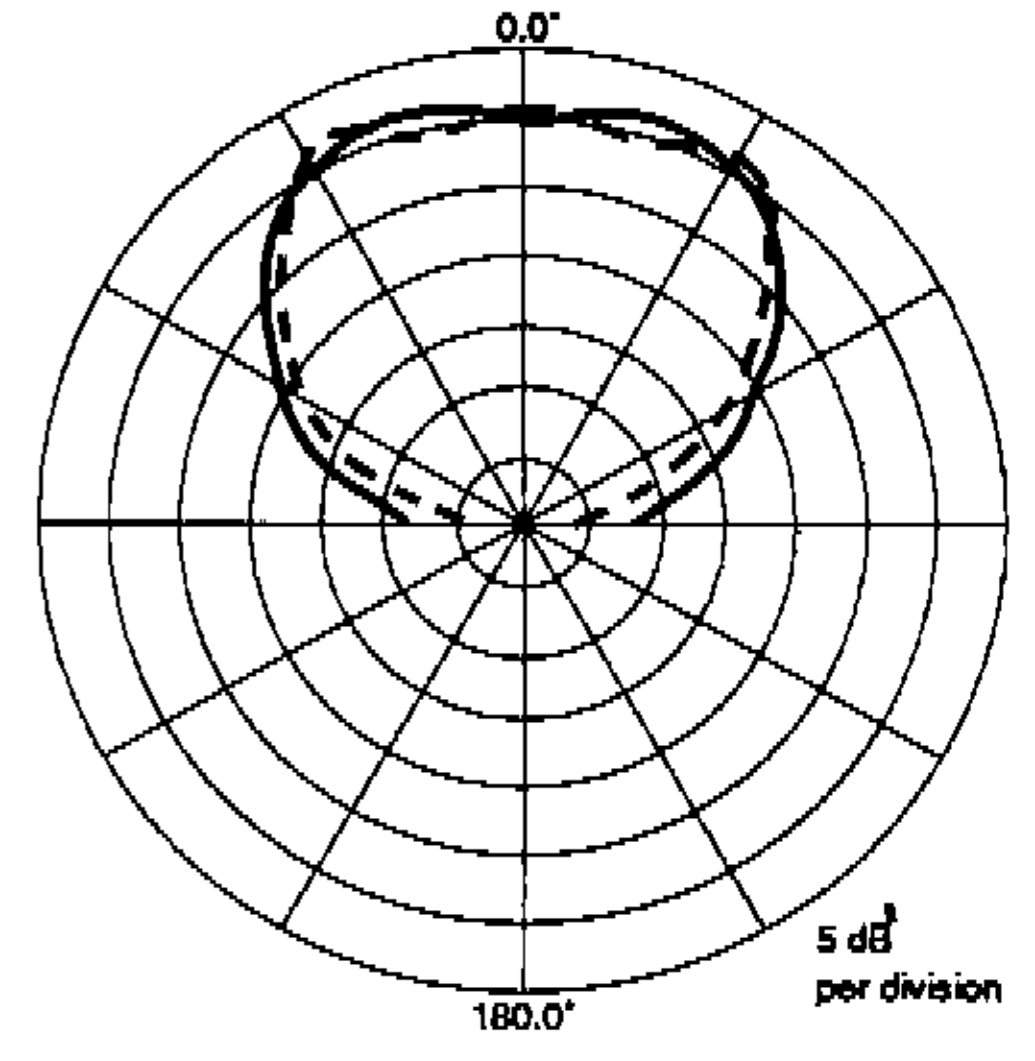
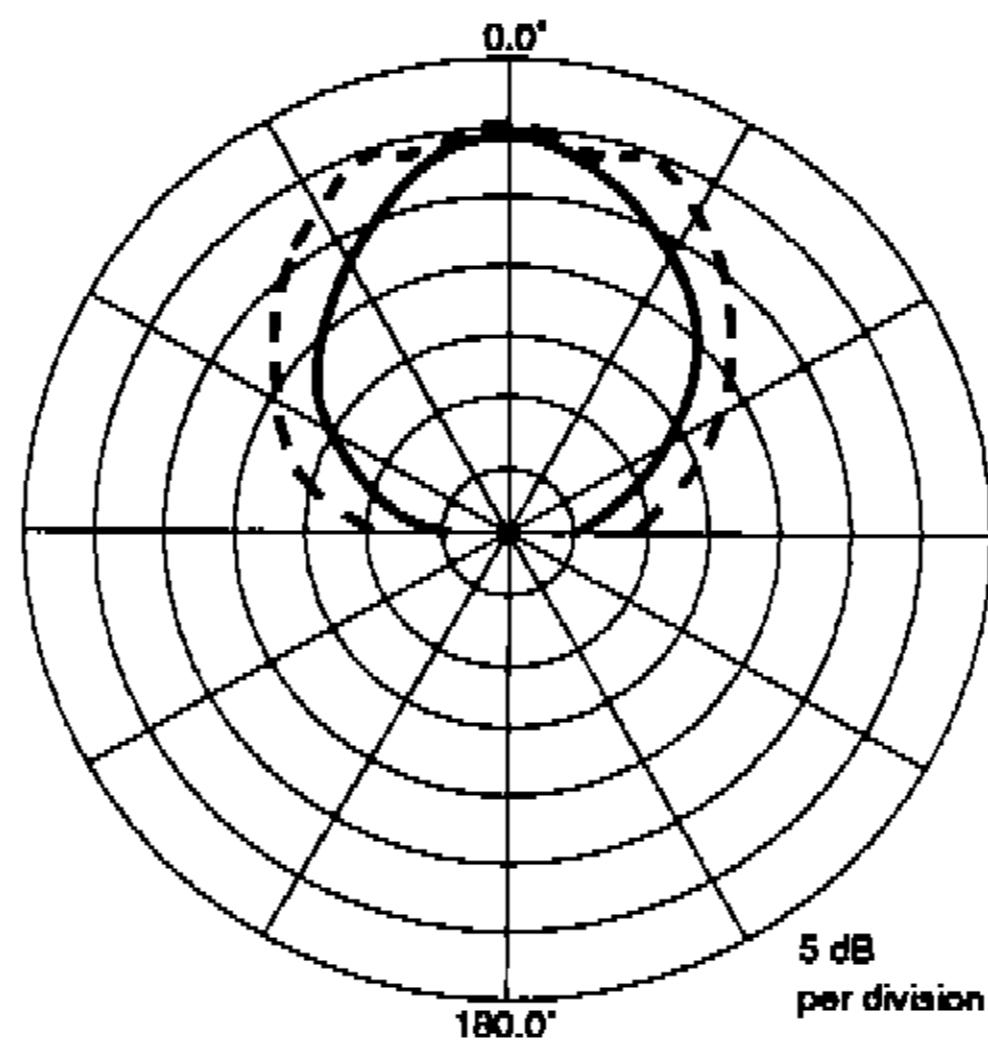
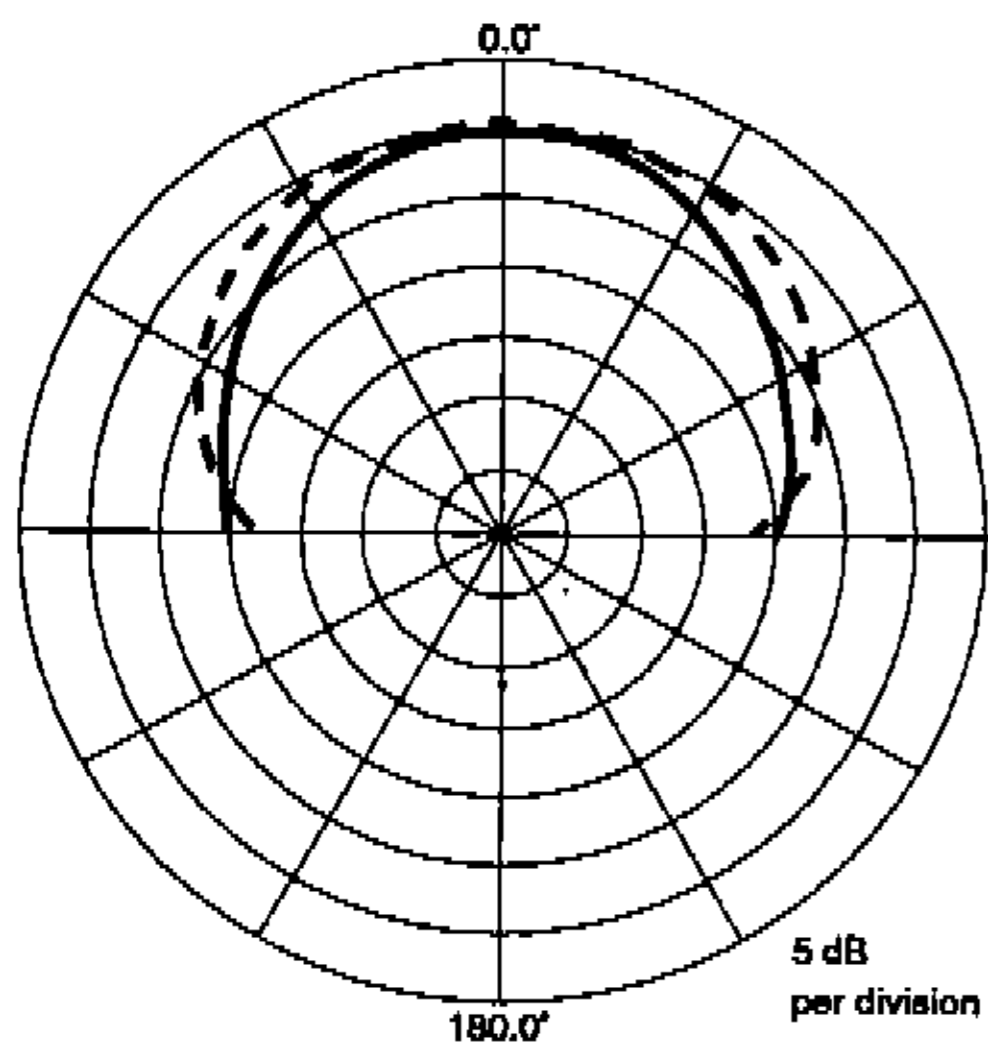


Figure 4. DIRECTIVITY

**HORIZONTAL**

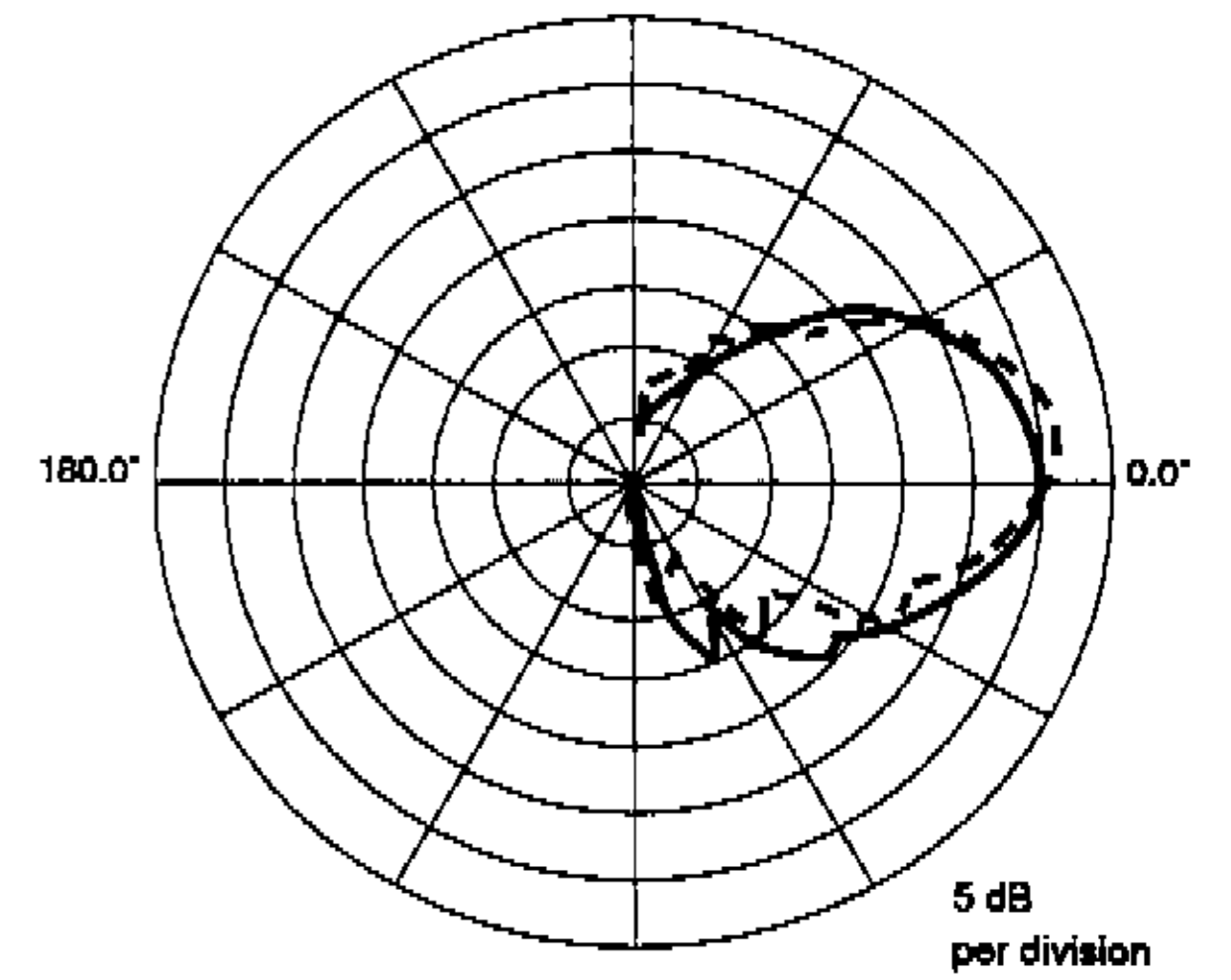
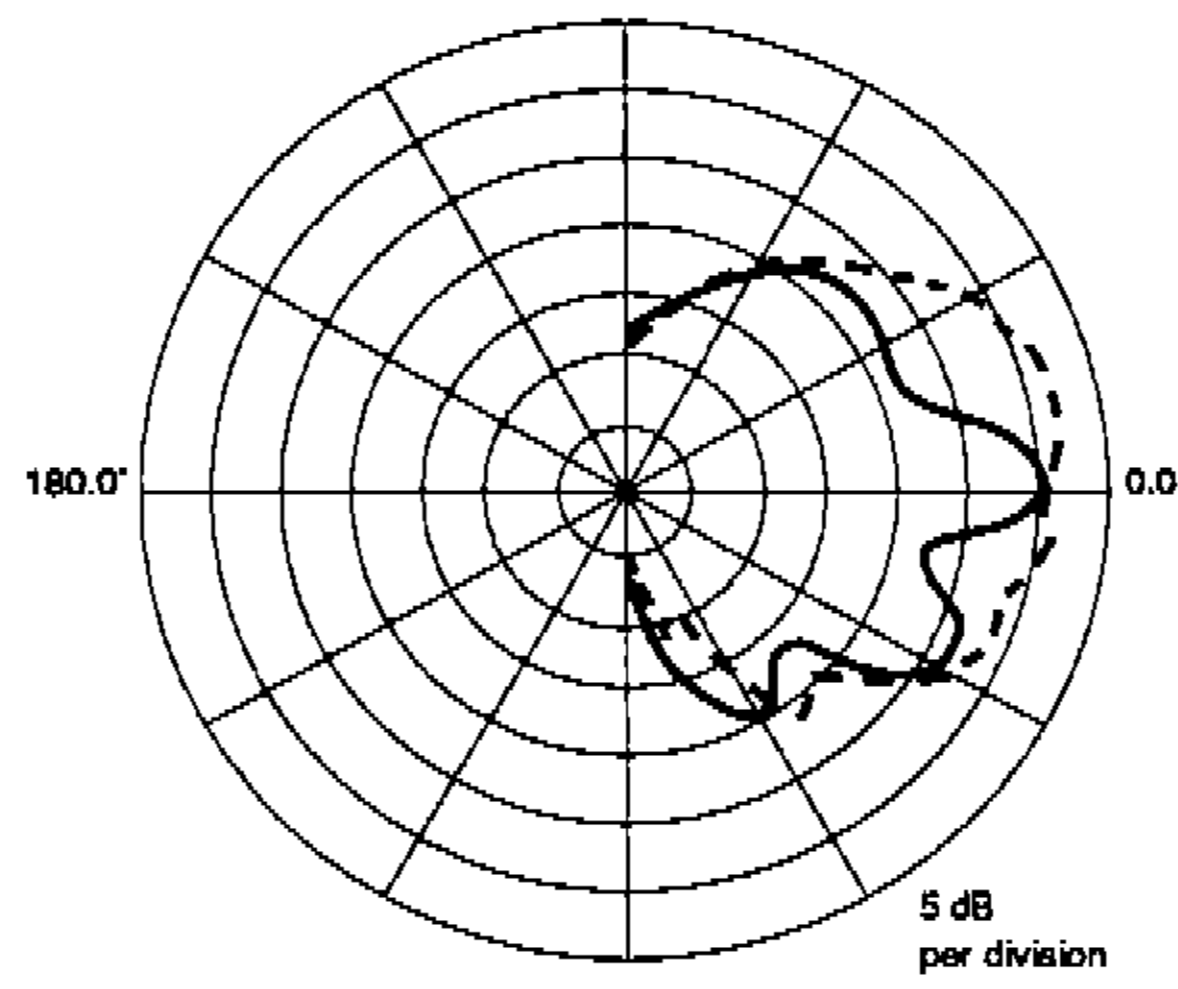
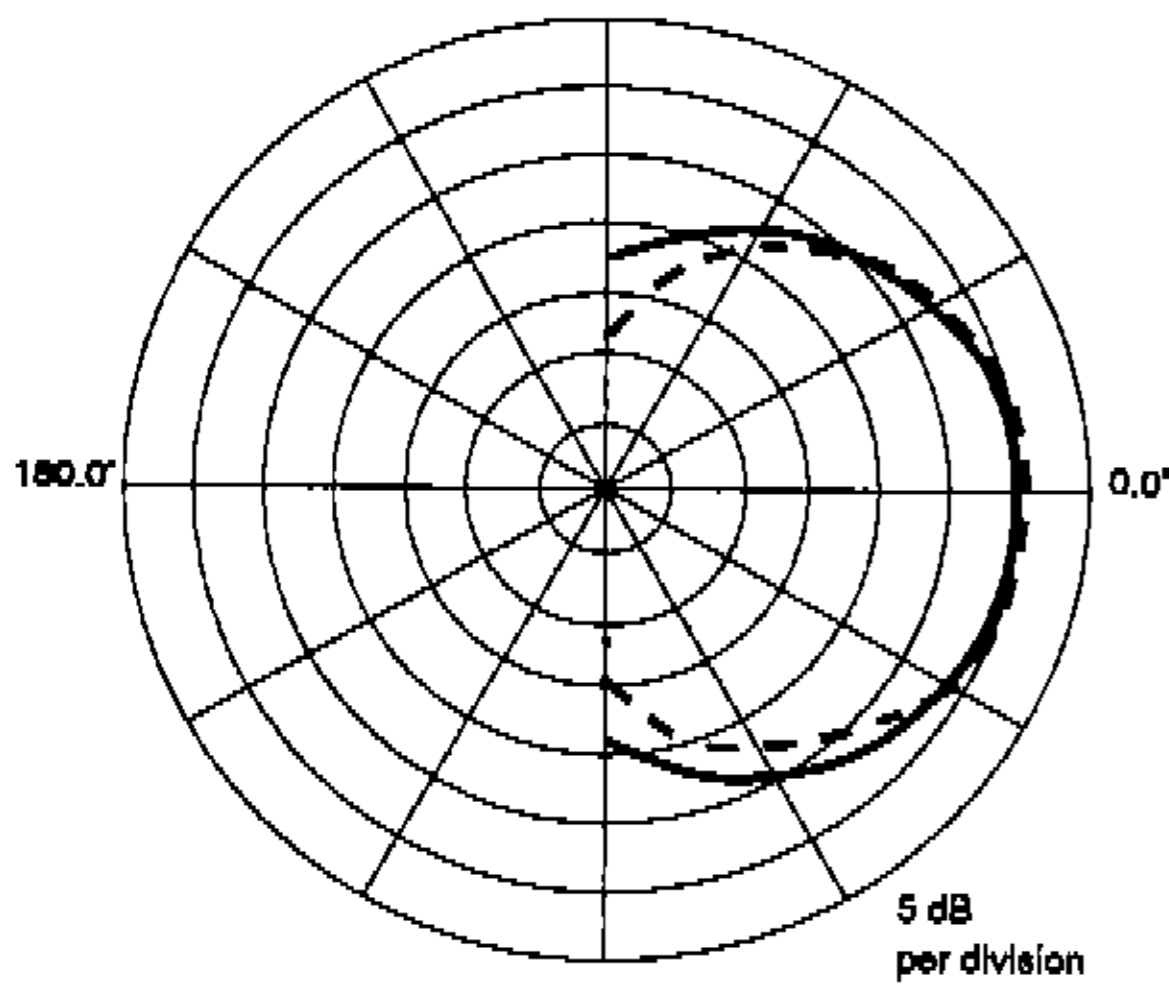


— 500 Hz  
 ..... 1 kHz

— 2 kHz  
 ..... 4 kHz

— 8 kHz  
 ..... 16 kHz

**VERTICAL**



**SP-5Ti**

**Sound Reinforcement System**

A PRODUCT OF PEAVEY ELECTRONICS CORP.  
 MERIDIAN, MS MADE IN U.S.A.

**MAX POWER: 500W RMS (PROGRAM)  
 250W RMS (44.7V RMS)**

**IMPEDANCE: 8 OHMS**

**CROSSOVER: 1200 Hz**

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

**NORMAL**

**BI-AMP**



**FULL RANGE**

**HI**

**LOW**

## **ARCHITECTURAL & ENGINEERING SPECIFICATIONS**

The loudspeaker system shall have an operating bandwidth of 80 Hz to 17 kHz. The output level shall be 100 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 250 watts, maximum program power of 500 watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90° in the horizontal plane and 45° in the vertical plane. The outside dimensions shall be 19<sup>5</sup>/<sub>8</sub>" wide by 26" high by 13<sup>7</sup>/<sub>8</sub>" deep. The weight shall be 66 pounds. The loudspeaker system shall be a Peavey model SP 5Ti.

## **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 39302-2898.



Features and specifications subject to change without notice.

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