Overview

Dante PoE powered ceiling speaker as a part of ADECIA Solution

Features

- Simple installation and seamless connectivity with any Dante output device
- Creates enhanced flexibility for the ADECIA Solution - Optimised performance when used in conference rooms
- A single PoE+ network cable connection avoids complex wiring and enables audio control via Dante
- Full-range, bass-reflex, powered speaker
- 160° horizontal directivity angle for a large coverage area
- 1.8 kg, Φ225 x D133mm

Specifications 1/2

General Specifications

Description		VXC2P Speaker System
System Type		Full-range bass-reflex powered speaker
Dimensions (Φ x D)		Φ225 mm × D133 mm (including grille)
Weight		1.8 kg (including grille)
Power Requirements		PoE+ (IEEE 802.3at), PoE (IEEE 802.3af)
Maximum Power Consumption		25.5W (PoE+ (IEEE 802.3at)), 12.95W (PoE (IEEE 802.3af))
Idle Power Consumption		4.0W
1/8 Power Consumption		6.2W (PoE+ (IEEE 802.3at)), 4.9W (PoE (IEEE 802.3af))
In Operation	Temperature	0°C – 40°C
	Humidity	30% – 90% (No condensation)
Storage	Temperature	-20°C – 60°C
	Humidity	20% – 90% (No condensation)
Cooling Method		Natural convection
Accessories		Grille, Cutout template, Safety wire, Owner's Manual, Safety Guide, Installation/dimensional diagram
Color		White
Protection Circuit		[Product] Over temperature protection, Over power output protection, Over voltage protection, Under voltage lockout [Amplifier] Over temperature protection, Over current shutdown, DC detect protection, Over voltage protection, Under voltage lockout, Clock detection protection [Power supply] Over load protection, Thermal shutdown
Component Configuration		2.5" (6.4 cm) full range unit
Enclosure Specifications	Cabinet Material	Steel 1.0 mm Black
	Baffle Material	PP (HB) 5 mm Black
Grille Specifications	Material	Metal grille: Powder coated perforated steel 0.6mm Aperture rate: 51% Trim ring: ABS (V-0)
	Finish	White painting (approximate value: Munsell 9.3)
Input/Output Terminal		RJ-45 (PoE / Dante) x 1
Operator		DIP switch 8P x 1
Indicator		Power (Front), SYNC (RJ-45), LINK/ACT (RJ-45)
Installation Method		Ceiling mount Cutout size: Φ186 mm Required celling board thickness: 5 mm – 24 mm Conduit Tube: Terminal Cover Knockout diameter: Φ27.6mm
Maximum Device Number with RM-CR		16
Dust And Water Resistance		No
Magnetically Shielded		No
Eco Products		No
Frequency Range (-10dB) [*1]		80Hz – 20kHz
Coverage Angle (-6dB 1-4kHz Average)		160° conical
Maximum SPL (Peak) [*1, *2]		97dB SPL
Certification		VCCI

*1 Half-space (2π)
*2 Measured at 2m; value converted to 1m is shown (frequency range: 100 Hz – 10 kHz)

Specifications 2/2

Electrical Specifications

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Amplifier Type	Class-D
Power Rating (Dynamic)	15W (PoE+ (IEEE 802.3at)), 6W (PoE (IEEE 802.3af))
Power Rating (Continuous)	15W (PoE+ (IEEE 802.3at)), 6W (PoE (IEEE 802.3af))
Sampling Rate	48kHz
Signal Processing	EQ/Enhancer, Volume, PEQ, Ducker (Noise gate), MIXER, Delay, Speaker EQ (6band)

Network Specifications

Ethernet	Dante audio/Dante control, Remote control, WebUI, PoE
Cable requirements	CAT5e or higher (STP)

Shipping Packing Specifications

Number of Packages	Packaged in 1pc

Dimensions

Unit: mm (inch)

φ 180 (7.1)

φ 180 (7.1)

φ 27.6 (1.09)

121 (4.8)

133 (5.3)

φ 225 (8.9)
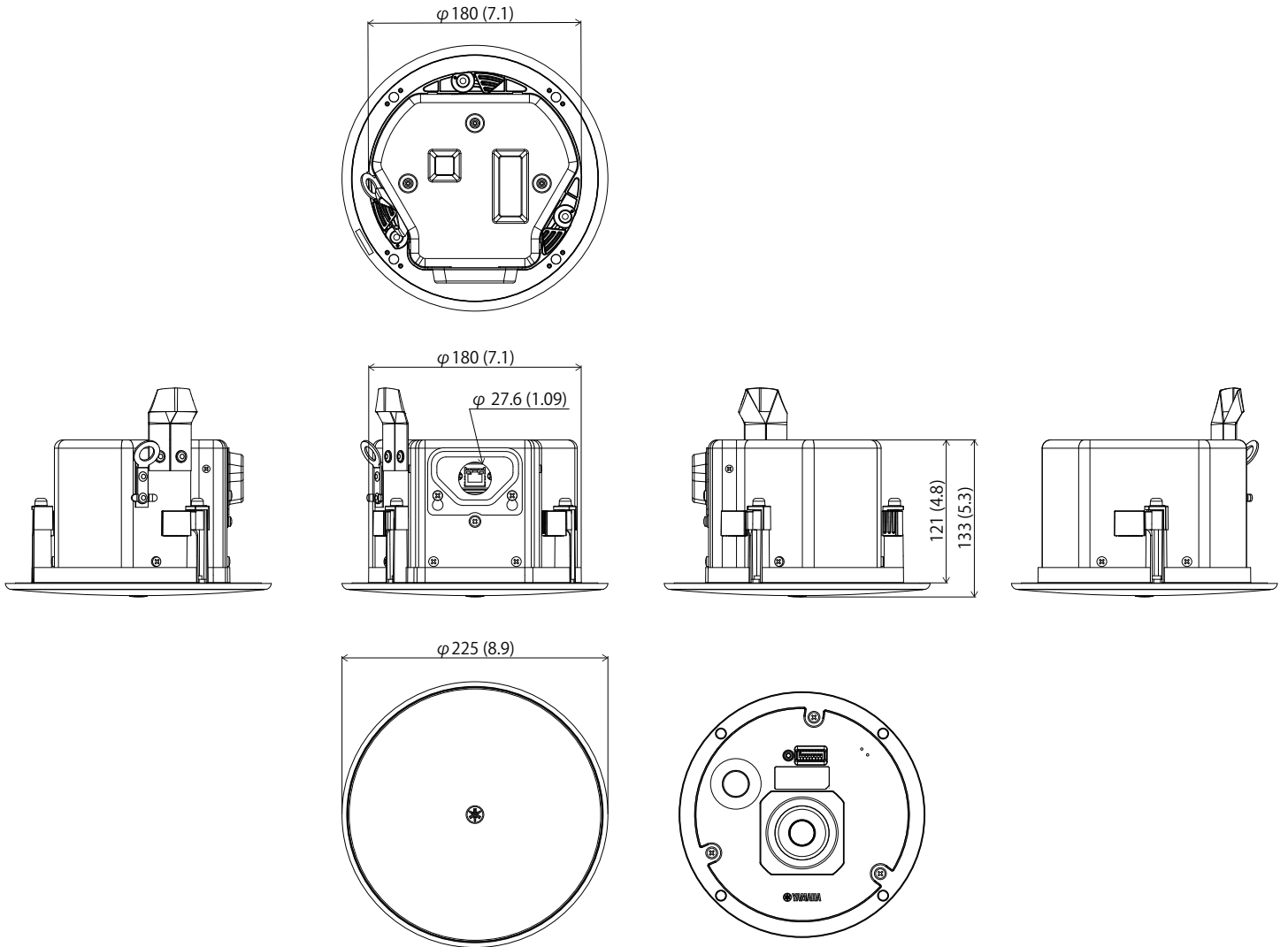
Options

• Reinforcing Bracket Kit   AB-C2

Architectural and Engineering Specifications

The Yamaha VXC2P shall be loudspeakers for use in conference rooms and similar environments. The loudspeaker shall be a full-range, bass-reflex, powered type employing a single 6.4cm (2.5") cone. The continuous power rating shall be 15 Watts when using PoE+ (IEEE 802.3 at) power, or 6 Watts when using PoE (IEEE 802.3 af) power.

The loudspeaker shall be capable of meeting the following performance criteria: reproduction frequency range shall be 80 Hz to 20 kHz (-10 dB), and maximum output SPL shall be 97 dB (peak, IEC noise @ 1m, when using PoE+ (IEEE 802.3 at) power). Coverage angles (-6 dB) shall be 160° horizontal, when mounted as per installation instructions.

Built-in protection shall be included for speaker processing, amplifier, and power supply.

The loudspeakers shall receive both audio and power input via a single Ethernet network connection: audio via a Dante digital audio network, and power via a PoE injector or PoE network switch connected between the loudspeaker and Dante device(s). DIP switches on the front panel shall allow convenient network UNIT ID, IP address, and startup mode selection. A power indicator LED on the front panel shall light to indicate that power is ON when the device is connected to a power source, this light will then turn off approximately 30 seconds after startup. Additionally, network SYNC and LINK/ACT indicator LEDs shall be provided adjacent to a Dante/NETWORK port on the rear panel.
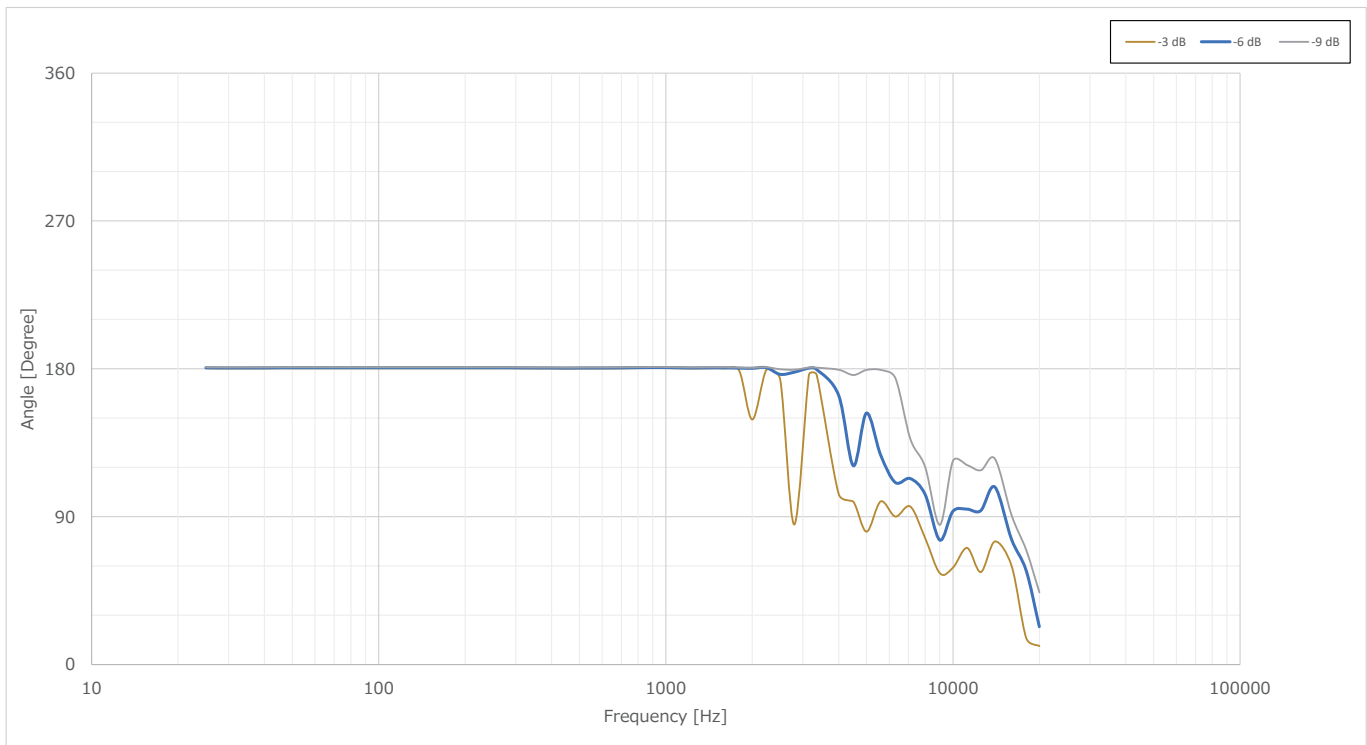
The loudspeaker enclosure shall be constructed of pressed steel with a Polypropylene baffle. The grille shall be perforated, powder-coated steel with an ABS trim ring. The loudspeaker grille shall be available in a white base colour, and can be painted if required. The loudspeaker shall be powered by Power over Ethernet: either PoE+ (IEEE 802.3 at) or PoE (IEEE 802.3 af). The loudspeaker shall be designed for ceiling-mounting, and come supplied with the necessary basic mounting hardware (integral retaining clips, safety wire x 1, template x 1).

The dimensions of the loudspeaker (excluding mounting hardware) shall be 225mm (8.86") diameter x 133mm (5.24") depth. The weight shall be 1.8kg (4.0lbs) including grille.
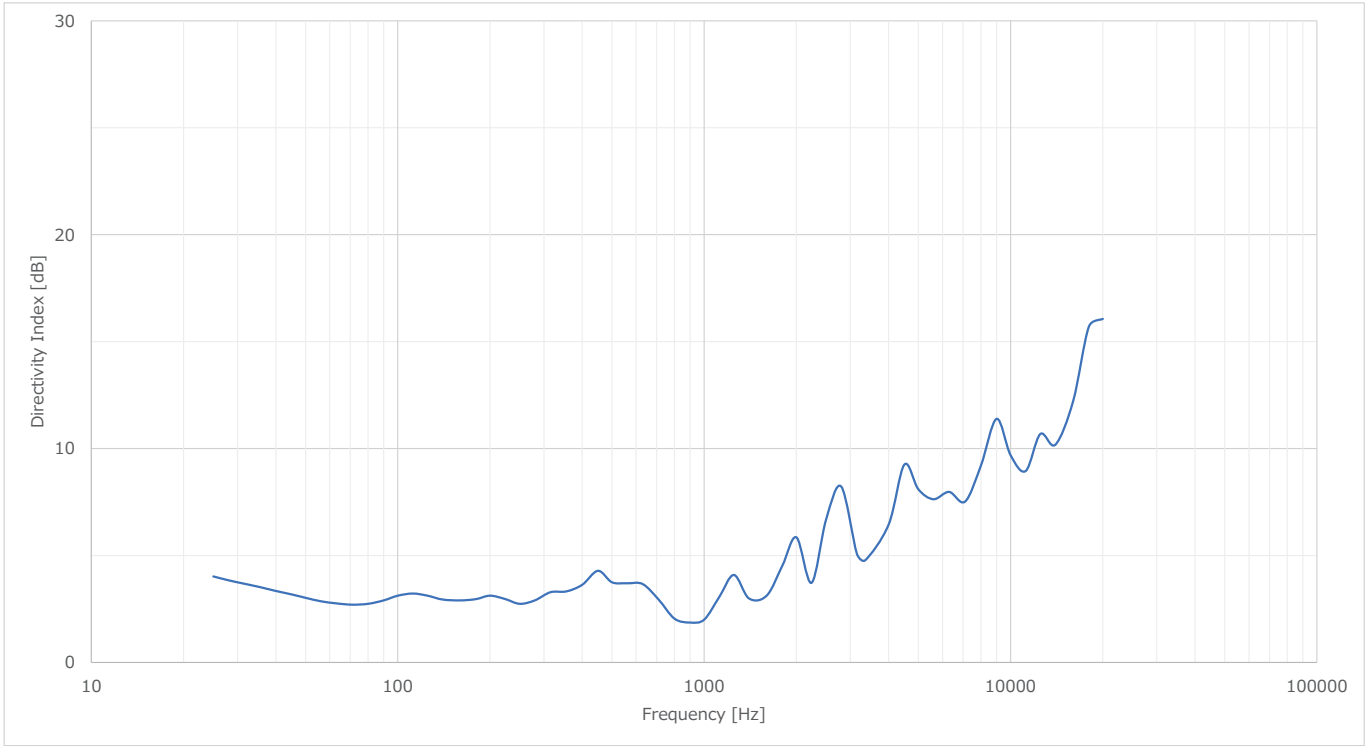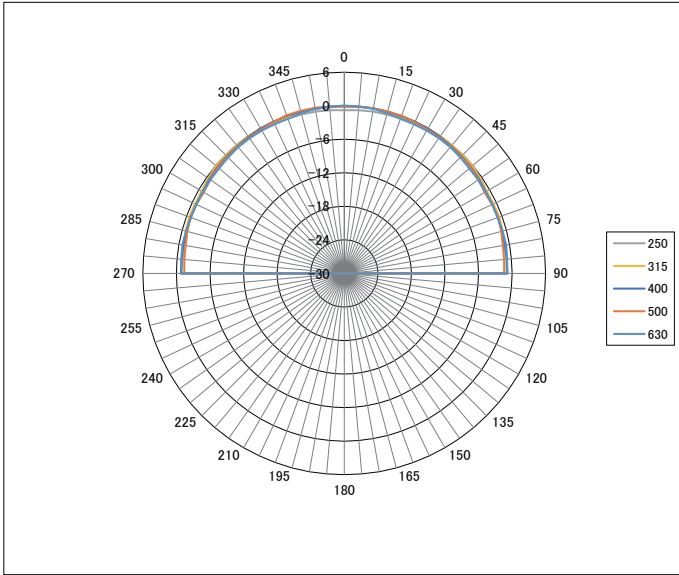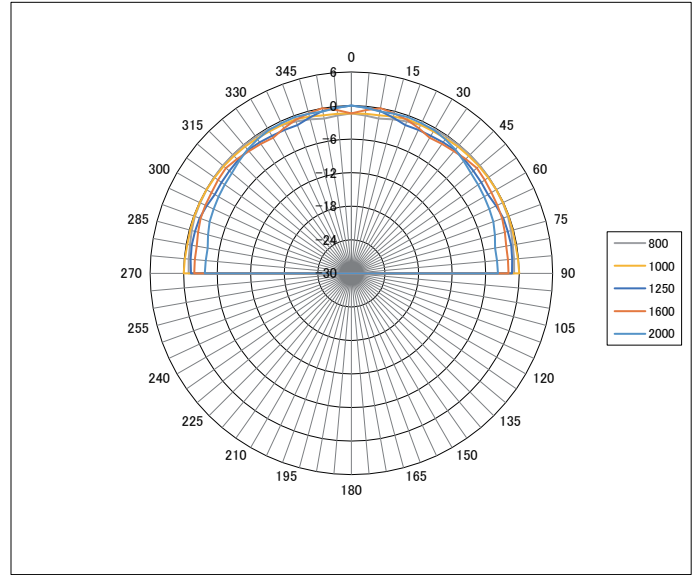
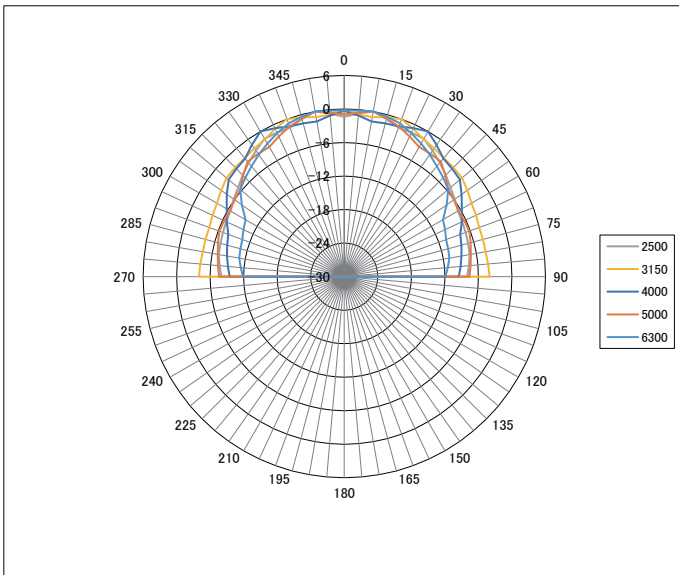# Frequency Response
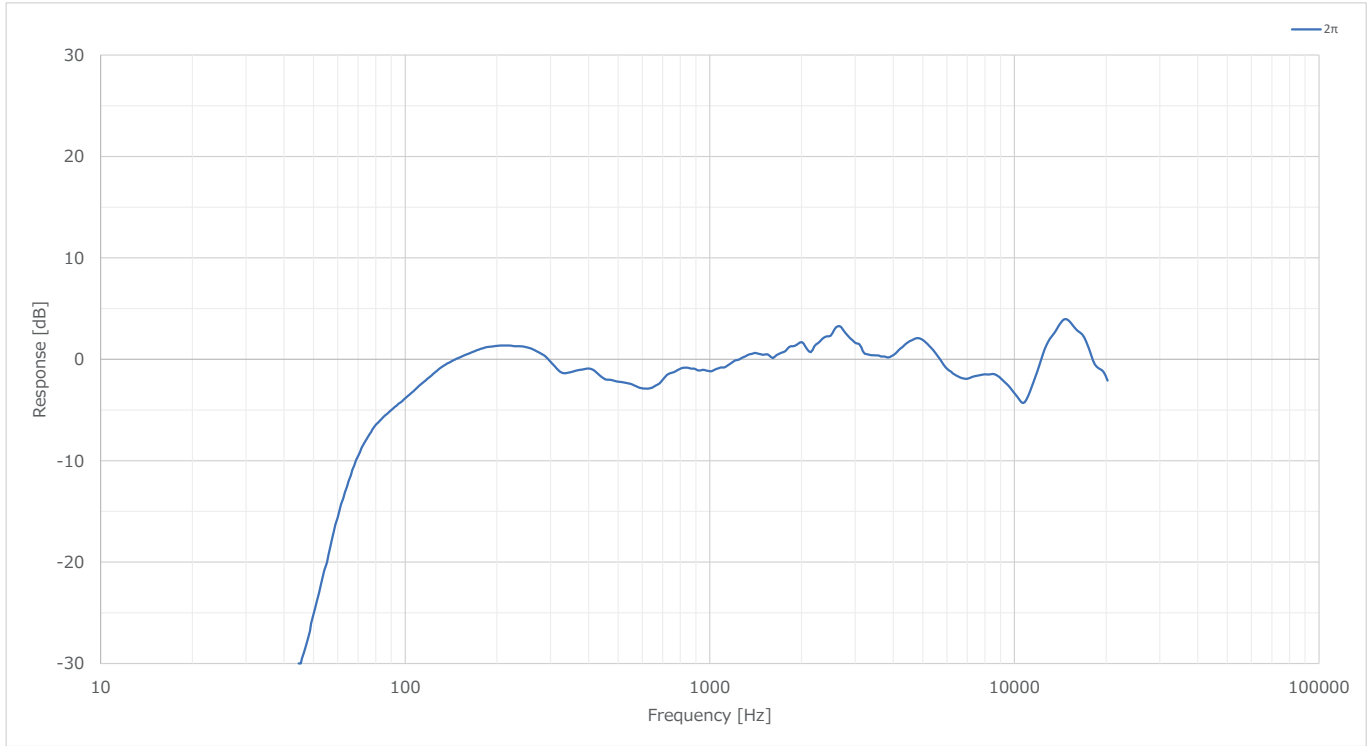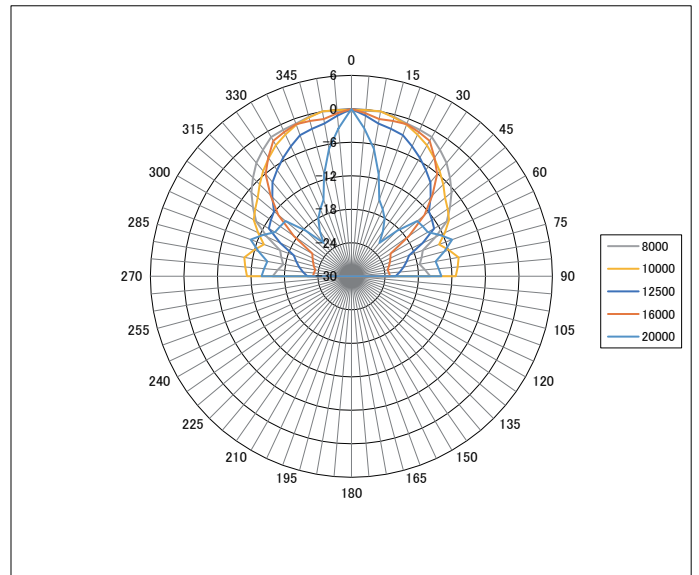

Beamwidth

Directivity Index

Polar Plots

400Hz Octave Band

	250
	315
	400
	500
	630

1250Hz Octave Band

	800
	1000
	1250
	1600
	2000

4000Hz Octave Band

	2500
	3150
	4000
	5000
	6300

12500Hz Octave Band

	8000
	10000
	12500
	16000
	20000