



PURE RESONANCE AUDIO  
SD5 TECHNICAL INFORMATION

## PRODUCT OVERVIEW

The Pure Resonance Audio SD5 SuperDispersion® omnidirectional drop tile ceiling speaker array stands alone in the market with unrivaled speech reproduction and intelligibility. Backed by more than 30 years of drop tile speaker research and development, the SD5's proprietary high-frequency driver and frequency-matched low-frequency drivers create a smooth even 360-degree coverage pattern with crisp vocal articulation. This is achieved by creating a speaker system with the ability to lower the crossover point of the unit well below traditional ceiling speakers.

The SD5 provides 50' by 50' of audio coverage with zero frequency cancellation. Strategically engineered waveguides shape the sound as it travels away from the speaker array eliminating any potential nodes. Additionally, the SD5's reinforced housing and directional vortex porting maximize audio dispersion by reducing turbulence within the speaker system.

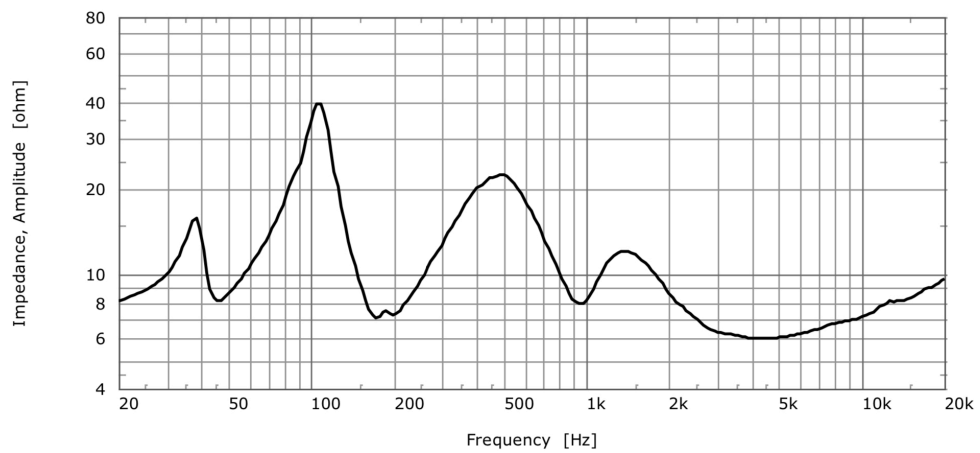
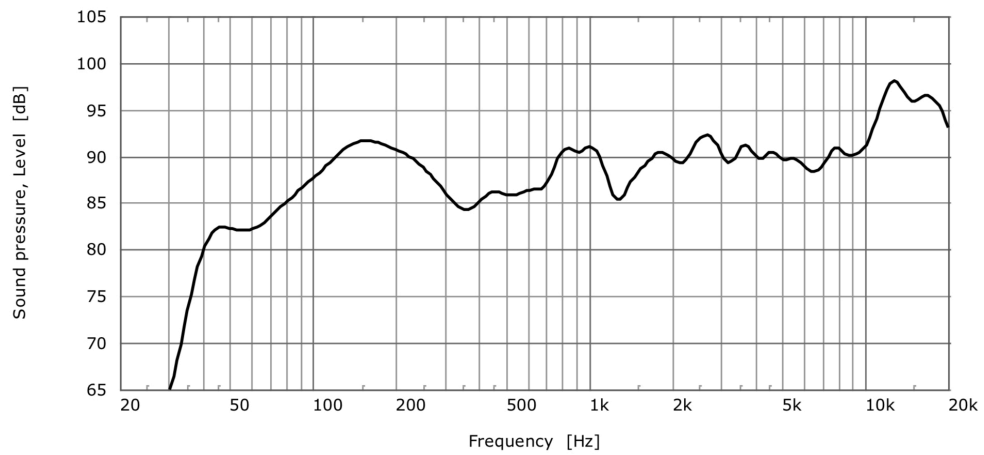
The frequency response needed from a speaker to clearly hear human speech falls into a range that can vary depending on volume, pronunciation, tone, and pitch. Unlike conventional speakers that tend to have a very narrow high-frequency dispersion pattern, the SD5, through its proprietary design, offers an unconventionally wide dispersion of high-frequency sounds allowing the speaker to have unprecedented vocal clarity. This makes the SD5 perfect for classrooms, conference rooms, training rooms, auditoriums, and meeting rooms of any kind.

## SPECIFICATIONS

Sensitivity (ref. to 1 m, 2.83 V)	89 dB
Frequency Response (-10 dB)	40 Hz - 20 kHz
Impedance	8 ohm
Beamwidth (average 800 Hz - 5 kHz)	Horizontal: 120° Vertical: 135°
Maximum SPL (measured, ref. to 1 m half space)	106 dB
Maximum Input Voltage	22.4 V
Power Handling	63 W

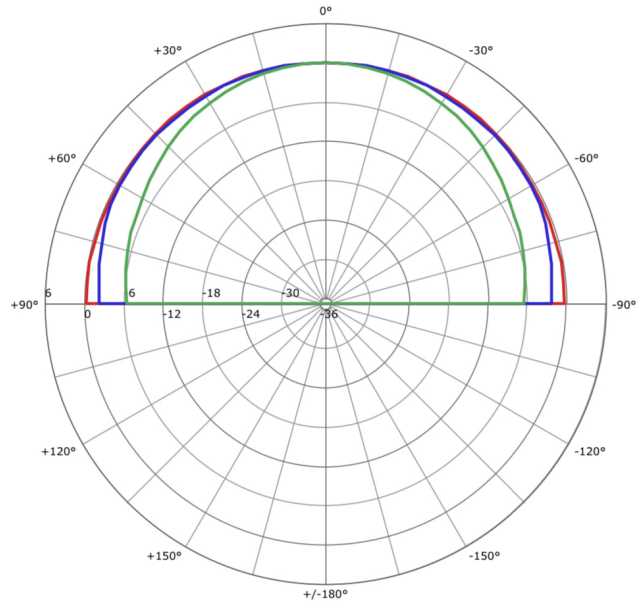


## FREQUENCY RESPONSE & IMPEDANCE

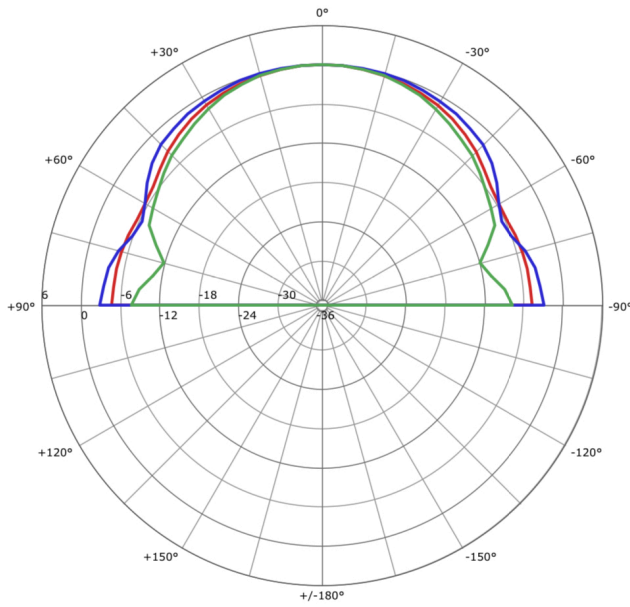


# POLAR PATTERNS

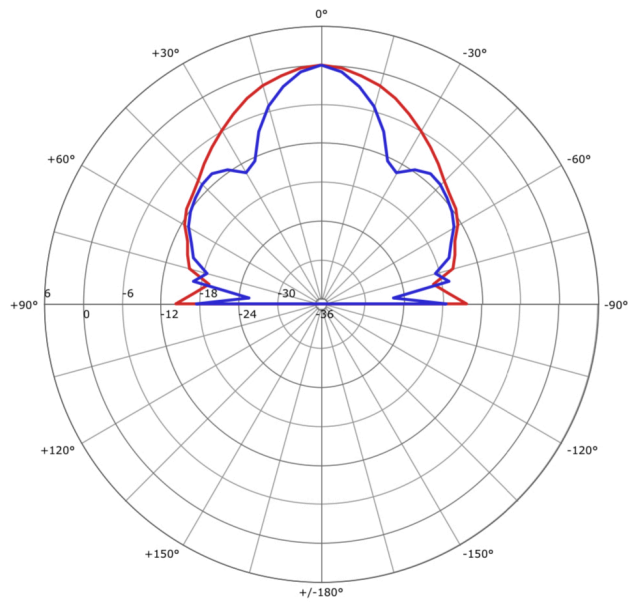
## HORIZONTAL POLAR PATTERNS



— 125 Hz      — 500 Hz  
— 250 Hz



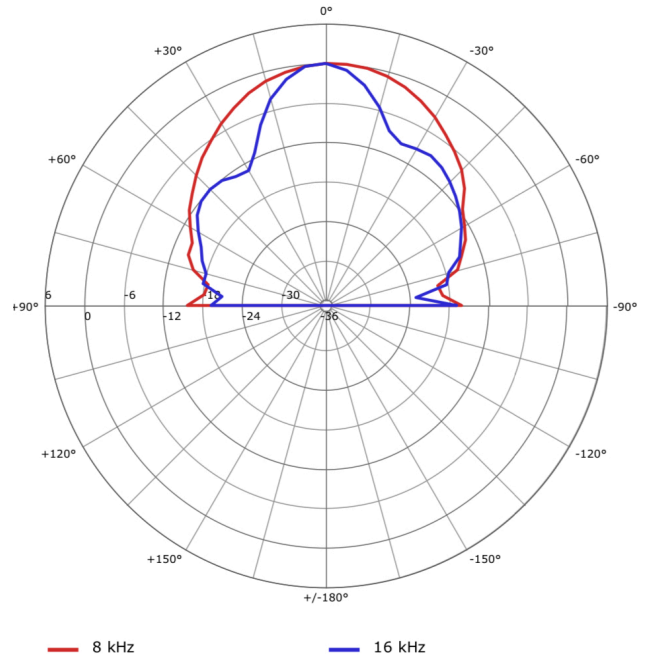
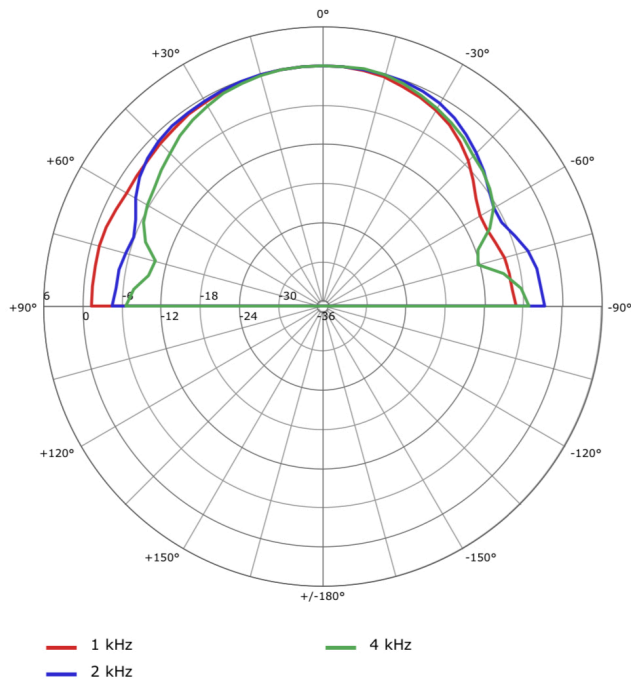
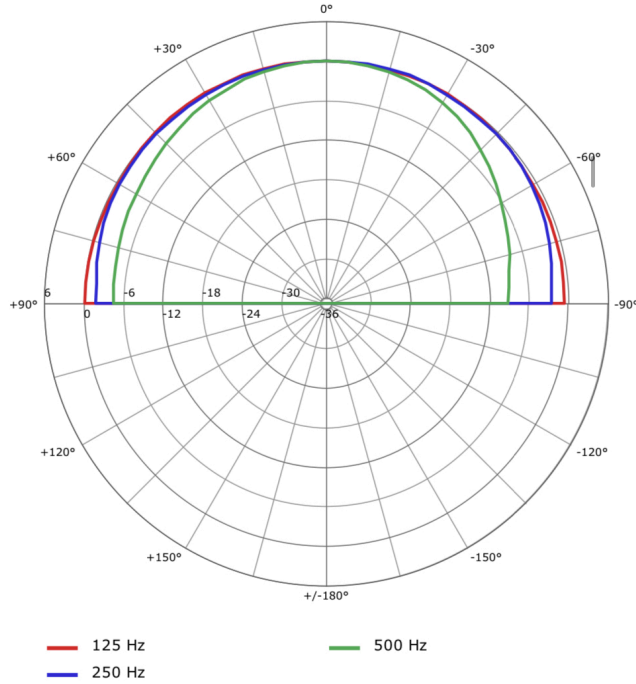
— 1 kHz      — 4 kHz  
— 2 kHz

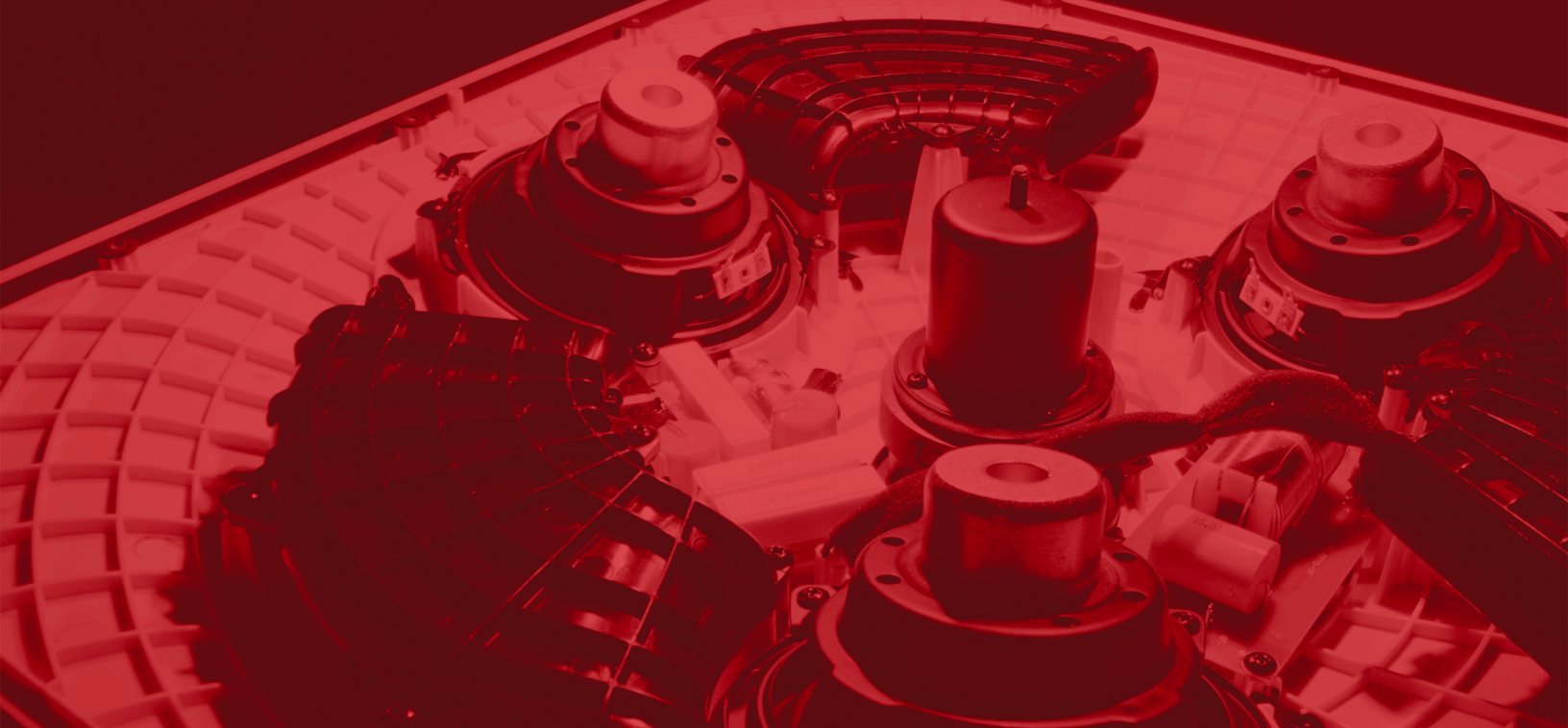


— 8 kHz      — 16 kHz

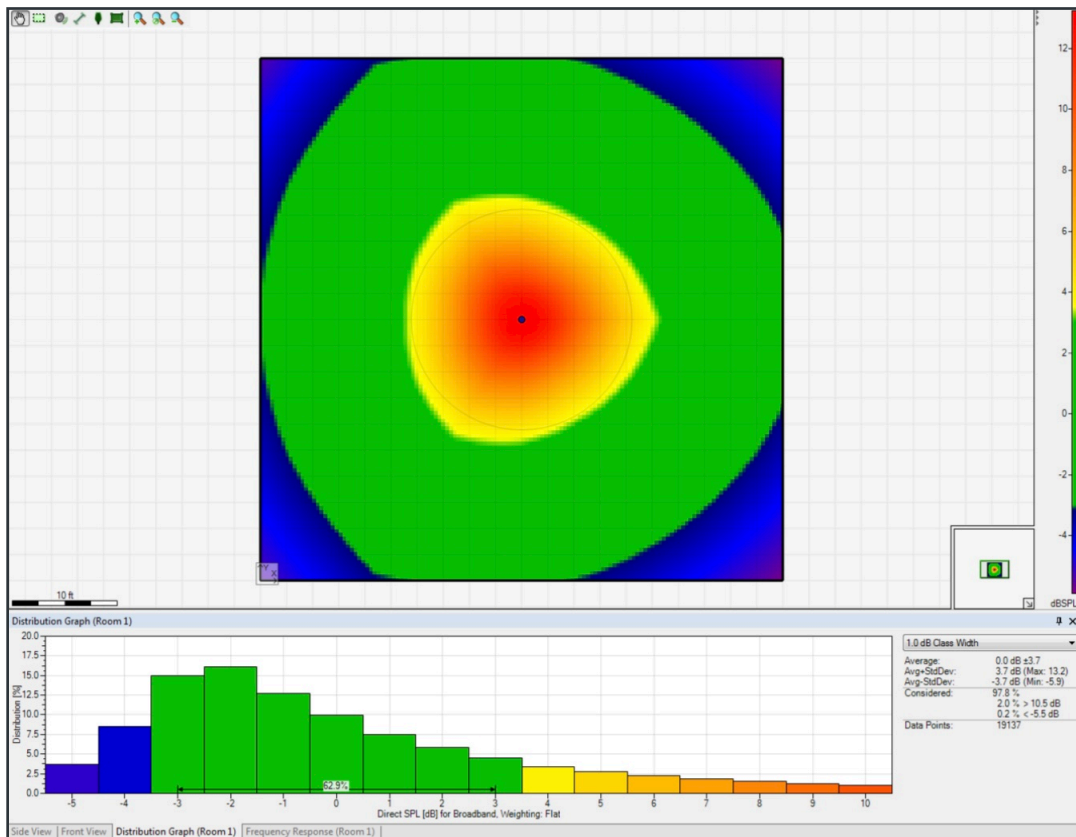
# POLAR PATTERNS

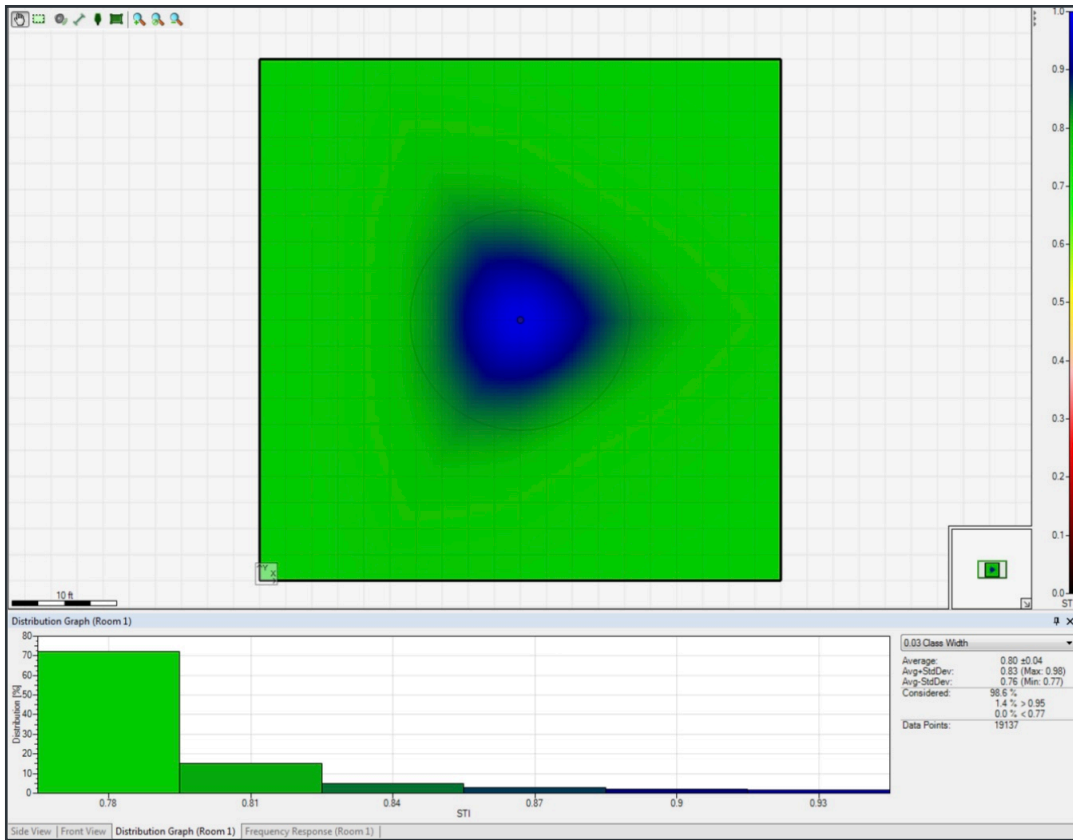
## VERTICAL POLAR PATTERNS





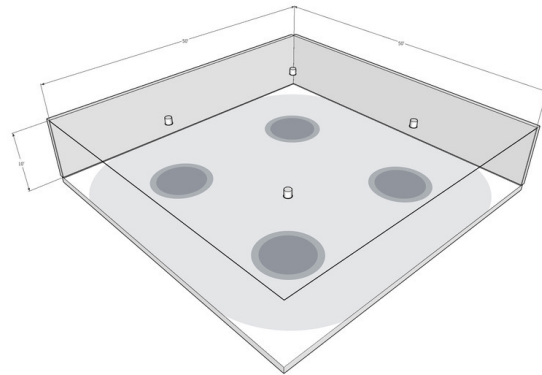
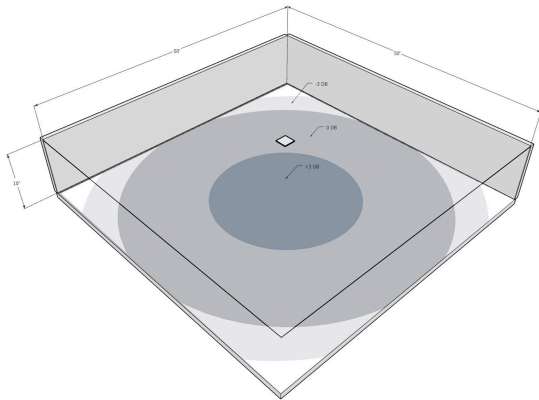
## COVERAGE DATA & STI





# ROOM LAYOUTS

## SD5 PLACEMENT VS TRADITIONAL CEILING SPEAKER PLACEMENT



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