SPCF-06W-50-EN54 & SPCF-06W-50-EN54-DC

- Ceiling Loudspeaker
- 6W 100V
- Size 5” (130mm)
- Quick mount
- Shock-resistant housing
- High efficiency
- Full range sound quality
- Option with DC capacitor fitted
- Certified to EN 54-24

OVERVIEW

The SPCF-06W-50-EN54 is a 6W 100V flush mount ceiling loudspeaker, which has a 5” (130mm) full-range chassis providing excellent sound quality with speech and background music, and which is certified to EN 54-24. The speaker is fitted with a 100V transformer which has three power adjustment tappings of 6W, 3W, and 1.5W.

The SPCF-06W-50-EN54 has a powder coated metal chassis and grille, with the high quality finish giving good long-term protection and resistance to corrosion. The speaker is supplied with a rear fire dome, and its enclosure is ingress protection rated against water jets to IP55C. As standard the speaker is coloured to match RAL9010 ‘Pure White’, however the speakers can be supplied in any four-digit RAL or NCS colour, as a special order.

Quick and easy ceiling mounting is provided through the use of spring clamps, with a possible ceiling thickness of between 2mm and 45mm, and an inner ring attachment prevents the grille from falling. The 100V loudspeaker line cabling is connected by means of a two-pin ceramic block. For additional reliability, the speaker chassis features vibration-damping construction. This speaker is also compliant with the British Standard BS 5839, Part 8.

Please note that although very thin ceilings can be used as a mounting surface, it should be ensured that the ceiling thickness and strength are appropriate to the weight of the speaker, and to the thickness and weight of the 100V line cables.

The loudspeaker is optionally available with a DC blocking capacitor fitted, in order to provide compatibility with DC loudspeaker line monitoring systems. The part number for this DC monitoring compatible version is SPCF-06W-50-EN54-DC.

Enhanced Acoustic Simulator for Engineers (EASE) data for this loudspeaker is available on request.

TECHNICAL DATA

Power Tappings	6W / 3W / 1.5W
Impedance (100V)	1667 / 3333 / 6667 Ohms
DC Capacitor (SPCF-06W-50-EN54-DC Version only)	0.68 µF 250 VDC
Frequency Range	350 – 13,800 Hz
Frequency Response	84 – 16,300 Hz
SPL 1W / 1m, peak	98,4 dB
SPL 1W / 4m, peak	86,4 dB
SPL Pmax / 4m, peak	94,1 dB
SPL IEC 60268-5 1W / 1m	92,0 dB
SPL IEC 60268-5 Pmax/1m	99,8 dB
SPL EN 54-24, Pmax/4m	88,0 dB
Sensitivity EN 54-24, 1W / 4m	80,0 dB
Dispersion (-6dB, 500Hz) Horizontal / Vertical Plane*	180° (horizontal) / 180° (vertical)
Dispersion (-6dB, 1KHz) Horizontal / Vertical Plane*	180° (horizontal) / 180° (vertical)
Dispersion (-6dB, 2KHz) Horizontal / Vertical Plane*	120° (horizontal) / 120° (vertical)
Dispersion (-6dB, 4KHz) Horizontal / Vertical Plane*	65° (horizontal) / 65° (vertical)
Temperature Range	-10 / +55 °C
Dimensions	180 x 104 mm
IP Rating	IP55
Weight (net)	1.17 kg
Colour	RAL 9010
Connector	2-pin ceramic block
Mounting	Quick-fit mounting
Ceiling Cut-out	167 mm
Maximum Cable Passage	8mm²
Compliance	EN 54-24 / BS 5839, Part 8

*** EN 54-24 Definitions for Speaker Reference Axis, Point, Plane + Horizontal & Vertical Planes:**

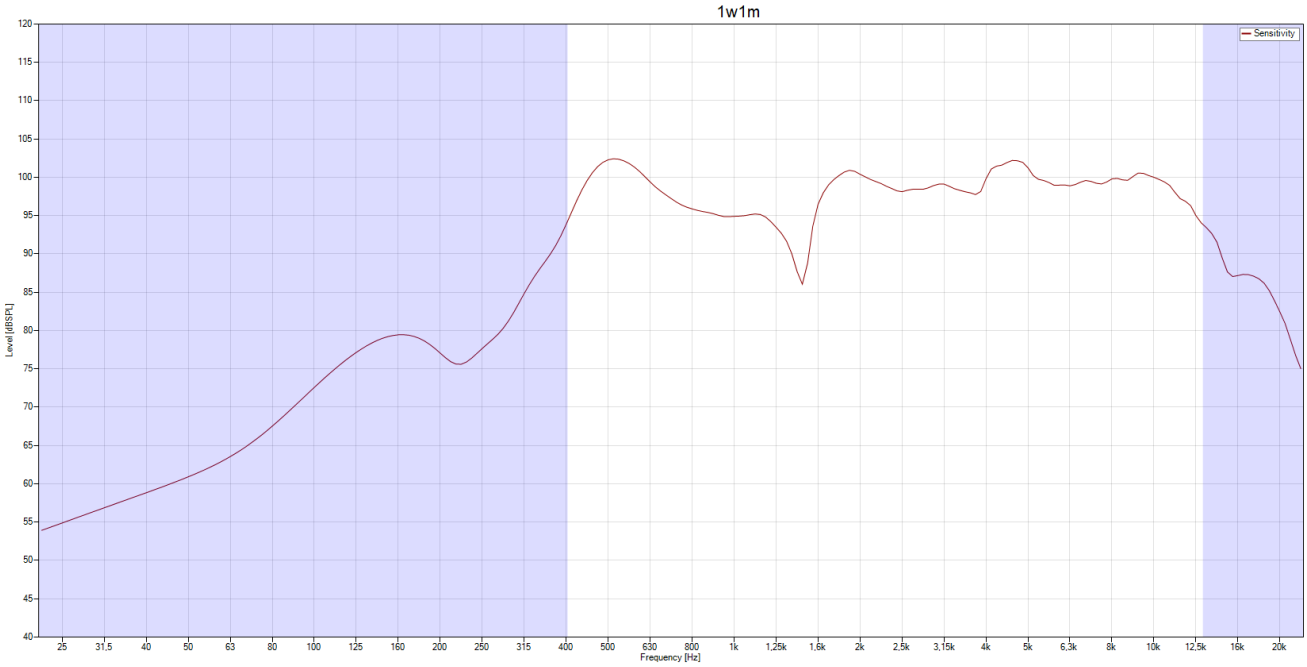
- Reference Axis: Axis is through the centre of the speaker grille surface and is perpendicular to the grille surface.
- Reference Plane: Plane is across the front of the speaker grille surface and is perpendicular to the reference axis.
- Horizontal Plane: Plane contains the reference axis and is perpendicular to the reference plane.
- Vertical Plane: Plane contains the reference axis and is perpendicular to the reference plane.
- Reference Point: Point is at the centre of the front of the speaker grille surface where all the above intersect.

All measurements in the table above relate to the Reference Axis unless otherwise stated

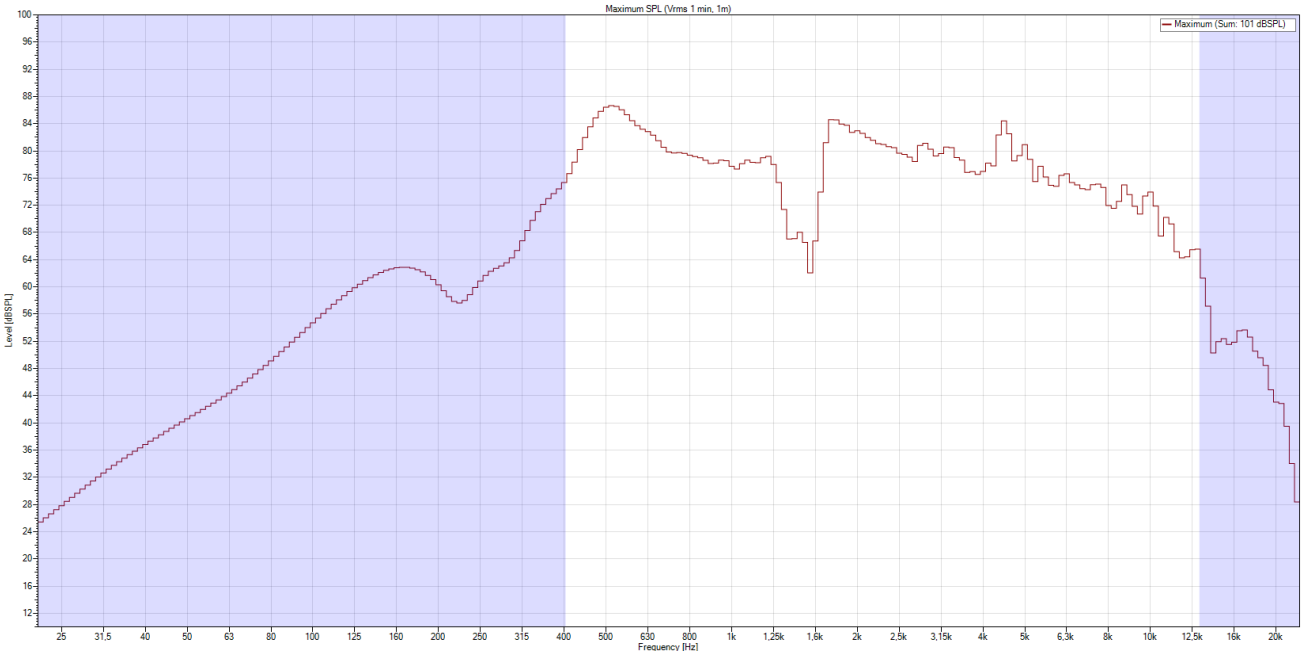
EN 54-24 Annex A, Measurement Environments:

Flush-mounted loudspeakers e.g. ceiling loudspeakers, shall be measured under half-space free field conditions.
All other speakers shall be measured under free-field conditions or in a ground plane arrangement that simulates a free-field condition.

FREQUENCY RESPONSE DIAGRAM—SENSITIVITY 1W / 1m

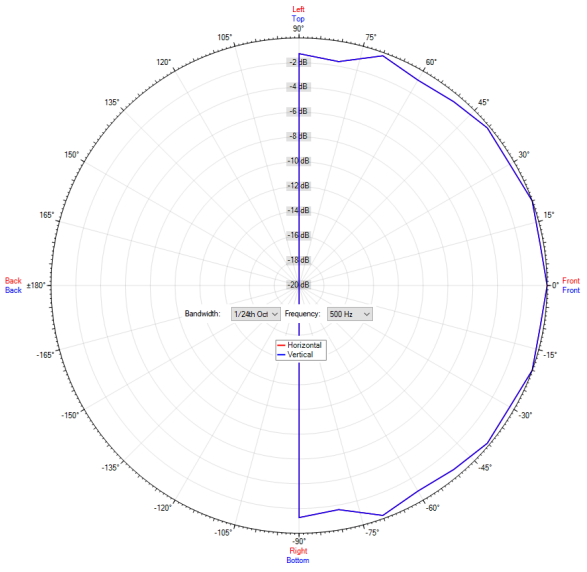


FREQUENCY RESPONSE DIAGRAM—MAXIMUM SPL (Vrms 1 min, 1m)

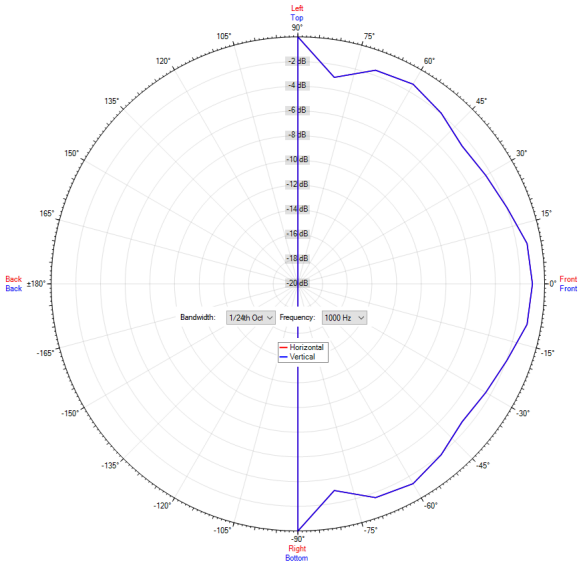


POLAR DIAGRAM

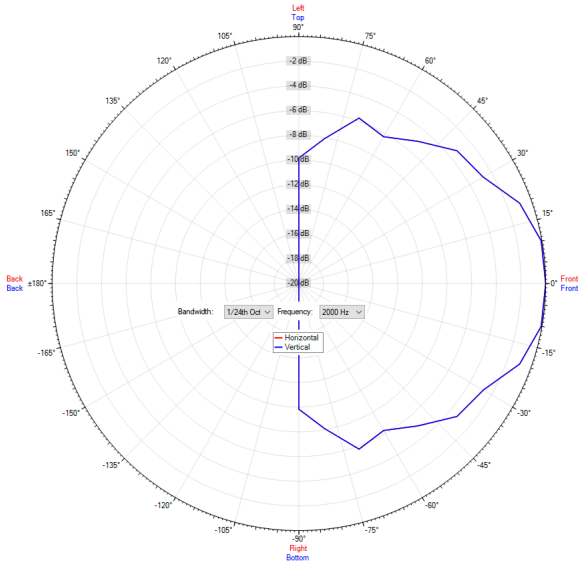
500 Hz



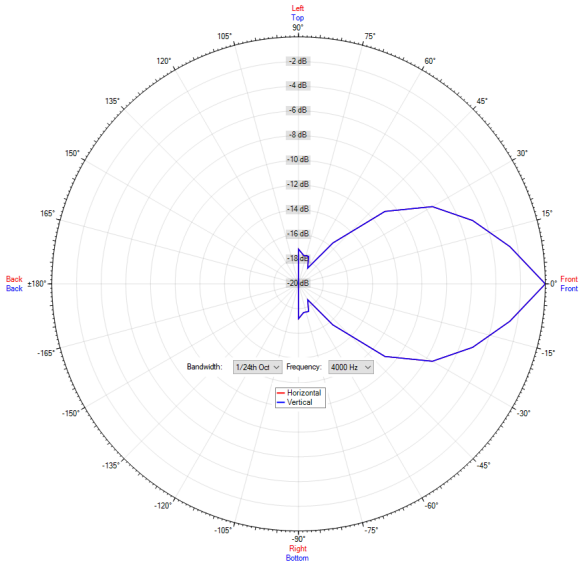
1,000 Hz



2,000 Hz

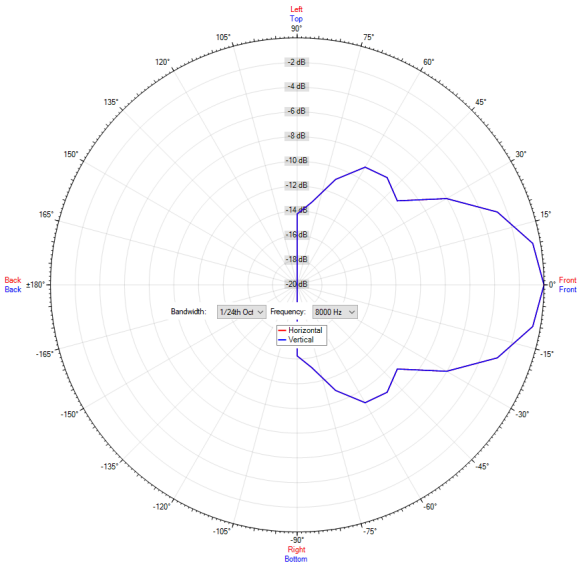


4,000 Hz

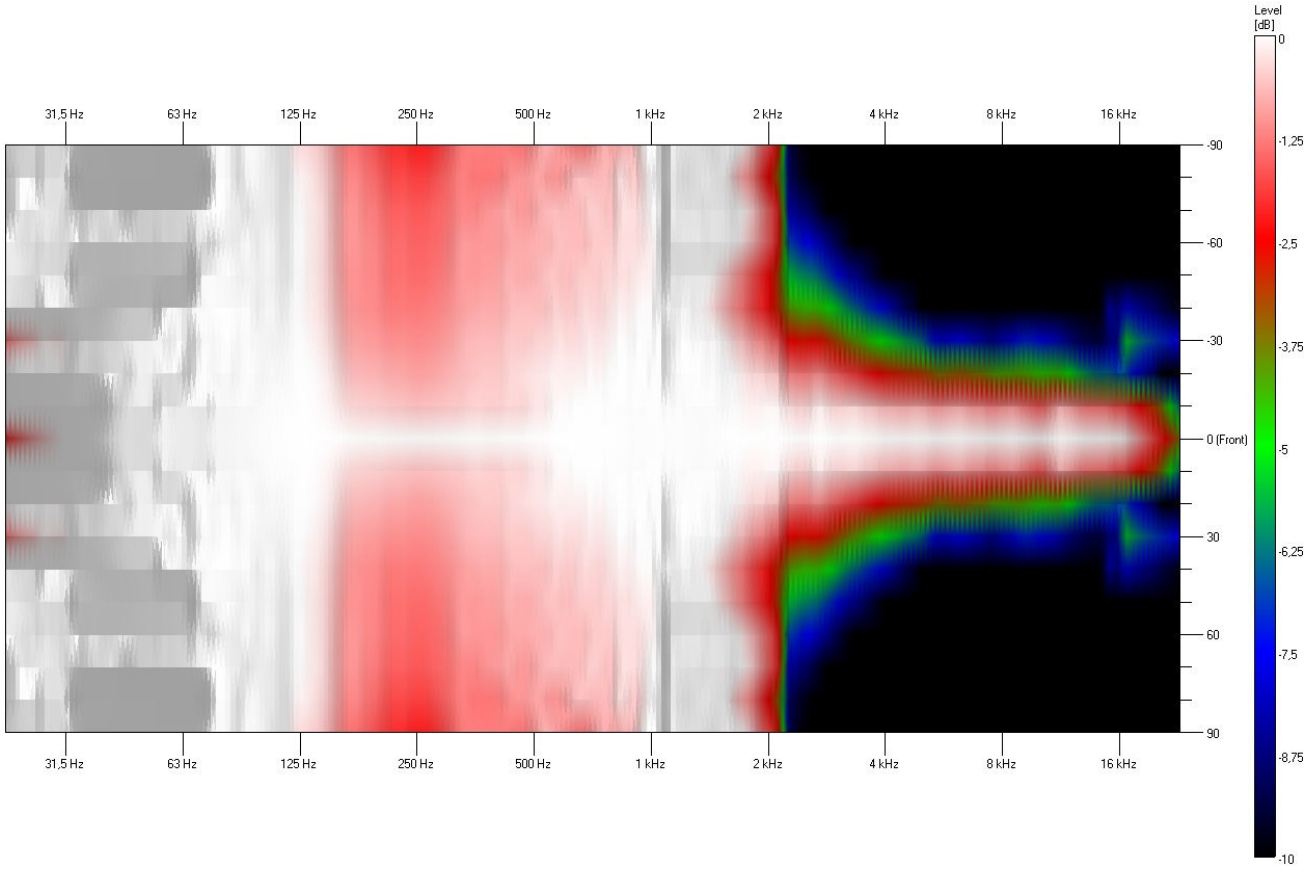


POLAR DIAGRAM

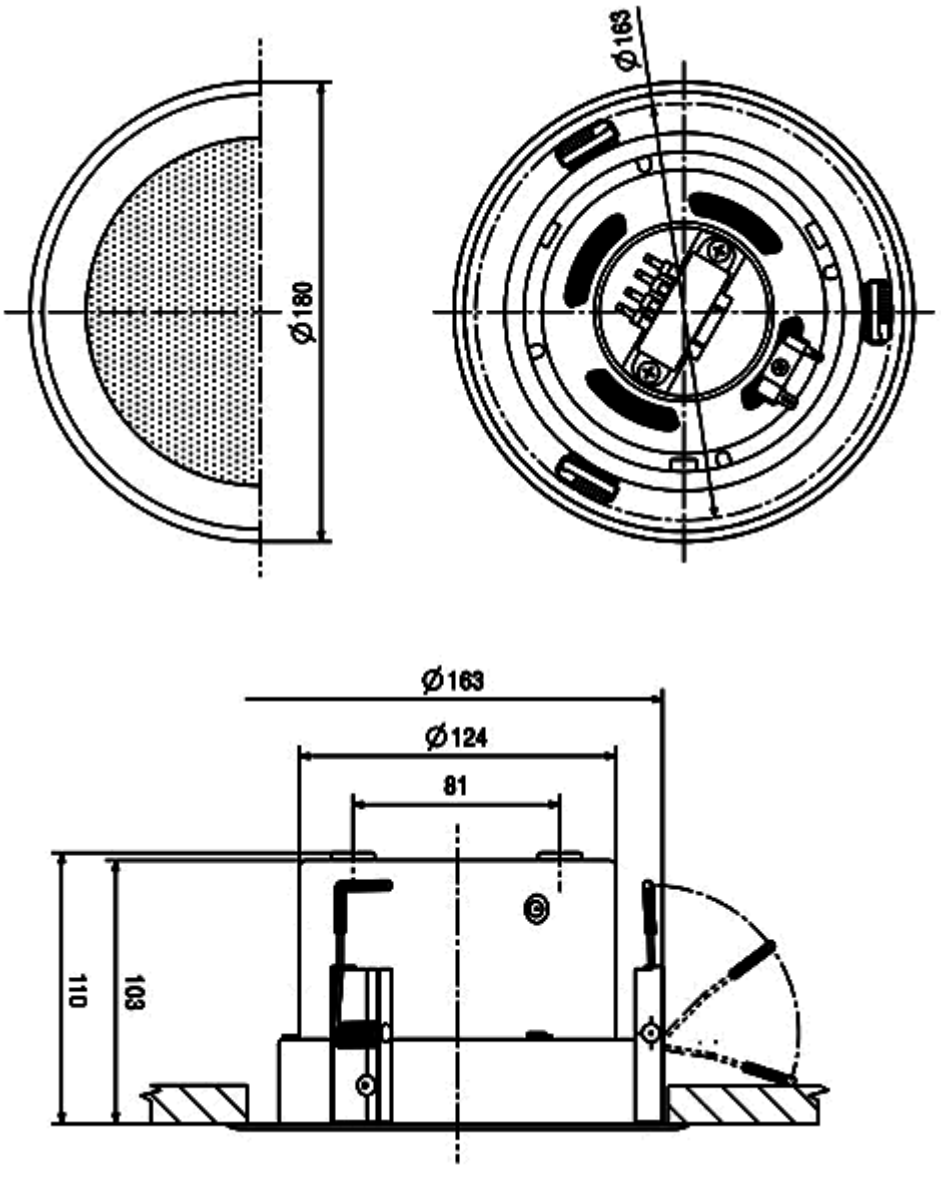
8,000 Hz



ISOBAR



DIMENSIONAL DIAGRAM



This equipment is designed and manufactured to conform to the following EU Directives:

CE

Low Voltage: 2014/35/EU
Restriction of Hazardous Substances (RoHS): 2011/65/EU & 2015/863/EU

Made for:

Zenitel GB Limited

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www.zenitel.com

Version 7 ASL_Datasheet_SPCF-06W-50-EN54