SPCO-50W-400-EN54 & SPCO-50W-400-EN54-DC

- Column Loudspeaker
- 50W 100V
- Length 40” (1000mm)
- Swivel-bracket mounting
- Aluminium housing
- Weatherproof to IP66
- Full range sound quality
- Option with DC capacitor fitted
- Certified to EN 54-24

OVERVIEW

The SPCO-50W-400-EN54 is a 50W 100V column loudspeaker, which has eight 3” (77mm) full-range chassis providing high sound quality with speech and background music, and which is certified to EN54-24. The speaker is fitted with a 100V transformer which has four power adjustment tappings of 50W, 30W, 15W and 7.5W.

The SPCO-50W-400-EN54 has a powder coated shock resistant metal chassis and grille, with the high quality powder coated finish giving good long-term protection and resistance to corrosion. The enclosure uses PG9 cable glands and is sealed to the IP66 environmental standard. Thus the speaker is protected against the ingress of dust, and is sealed against high pressure water jets. As standard the speaker is coloured to match RAL9006 ‘White Aluminium’, however the speakers can be supplied in any four-digit RAL or NCS colour, as a special order.

The speaker is mounted using a multi-direction swivel bracket, which provides great flexibility in the orientation of the speaker relative to its mounting location. 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 compliant with the British Standard BS 5839, Part 8.

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 SPCO-50W-400-EN54-DC.

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

TECHNICAL DATA

Power Tappings	50W / 30W / 15W / / 7.5W
Impedance (100V)	200 / 333 / 667/ 1333 ohm
DC Capacitor (SPCO-50W-400-EN54-DC Version only)	TBD
Frequency Range	250 – 15,800 Hz
Frequency Response	110 – 18,000 Hz
SPL 1W/1m, peak	102,8 dB
SPL 1W/4m, peak	90,8 dB
SPL Pmax/4m, peak	107,7 dB
SPL IEC 60268-5 1W/1m	95,0 dB
SPL IEC 60268-5 Pmax/1m	112,0 dB
SPL EN 54-24 Pmax/4m	97,0 dB
Sensitivity EN 54-24, 1W / 4m	82,7 dB
Dispersion (-6dB, 500Hz) Horizontal / Vertical Plane*	360° (horizontal) / 73° (vertical)
Dispersion (-6dB, 1KHz) Horizontal / Vertical Plane*	186° (horizontal) / 33° (vertical)
Dispersion (-6dB, 2KHz) Horizontal / Vertical Plane*	173° (horizontal) / 17° (vertical)
Dispersion (-6dB, 4KHz) Horizontal / Vertical Plane*	98° (horizontal) / 6° (vertical)
Temperature Range	-25 / +70°C
Dimensions	971 x 100 x 92 mm
IP Rating	IP66
Weight (net)	5.20 kg
Colour	RAL9006
Connector	2-pin ceramic block
Mounting	Swivel bracket
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:**

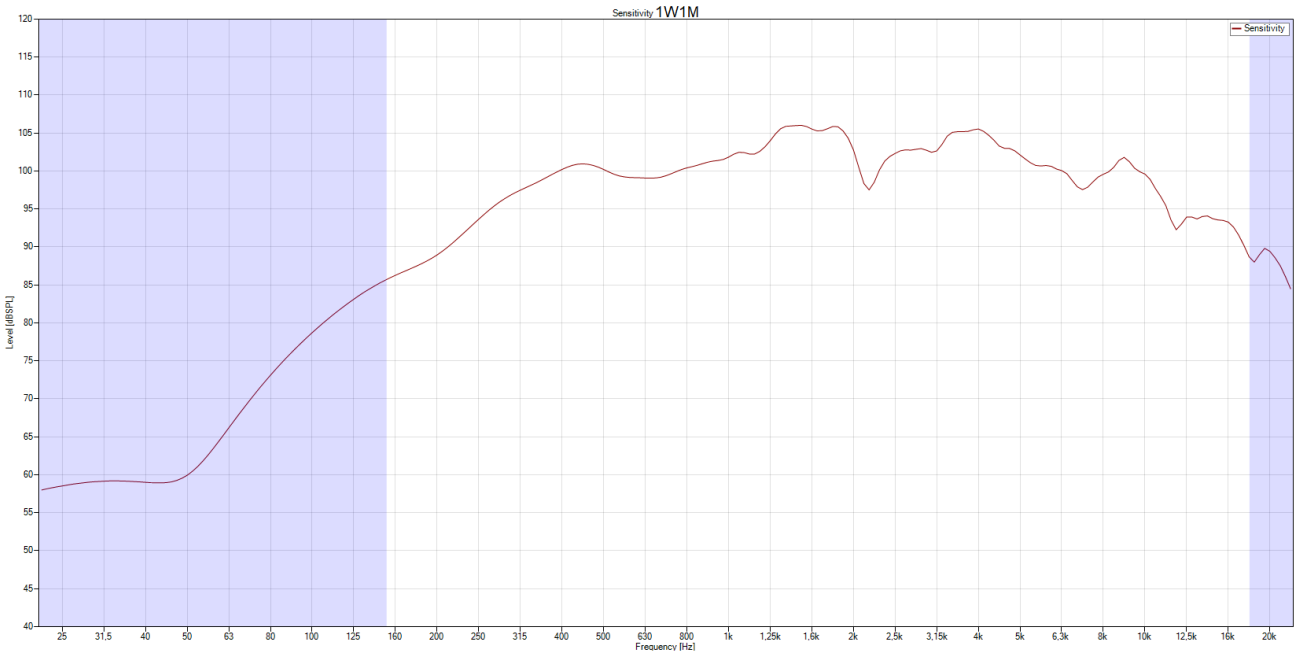
- Reference Axis: Axis is through the centre of the speaker grille surface and is perpendicular to the grille surface.
- Reference Plane: Plane is across the front of the speaker grille surface and is perpendicular to the reference axis.
- Horizontal Plane: Plane contains the reference axis and is perpendicular 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

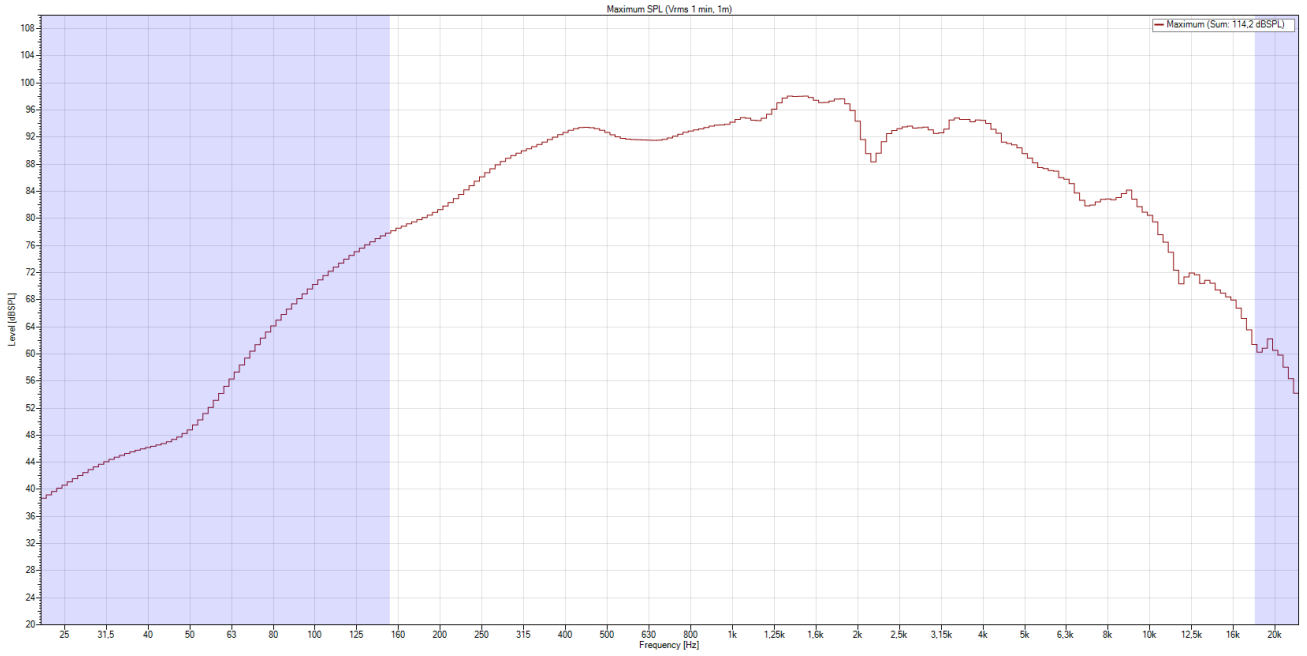
EN 54-24 Annex A, Measurement Environments:

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

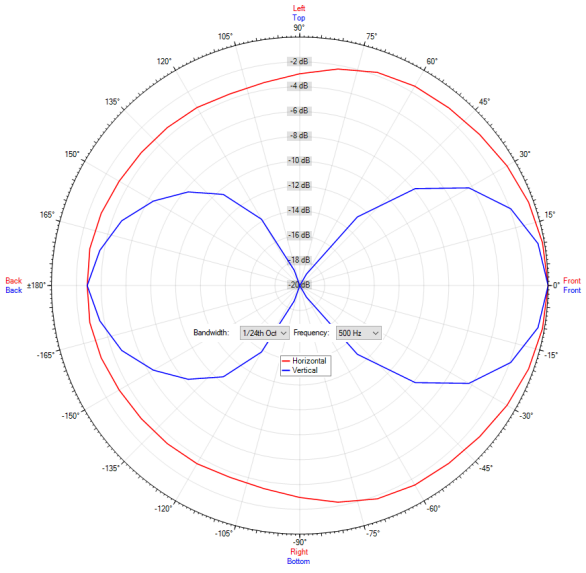


FREQUENCY RESPONSE DIAGRAM—MAXIMUM SPL (Vrms 1 min, 1m)

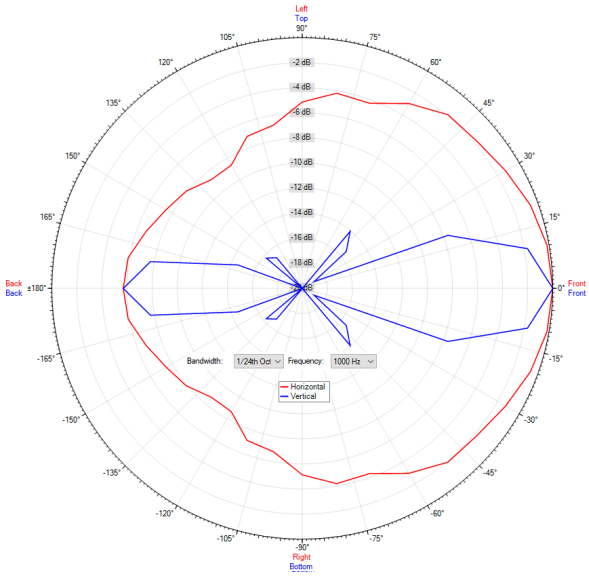


POLAR DIAGRAM

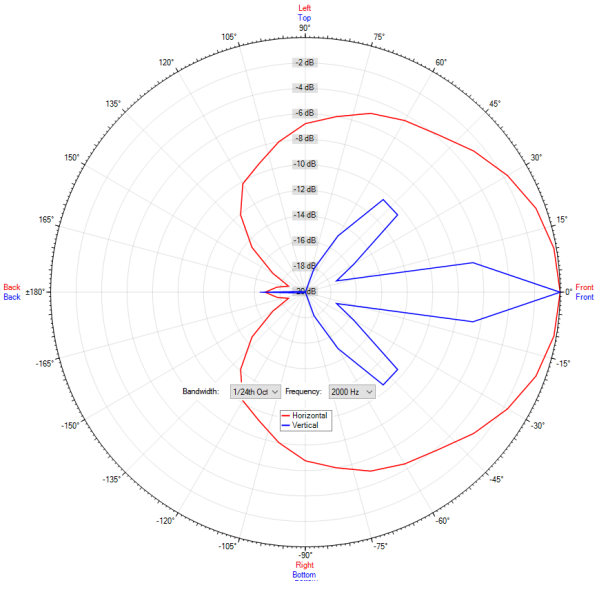
500 Hz



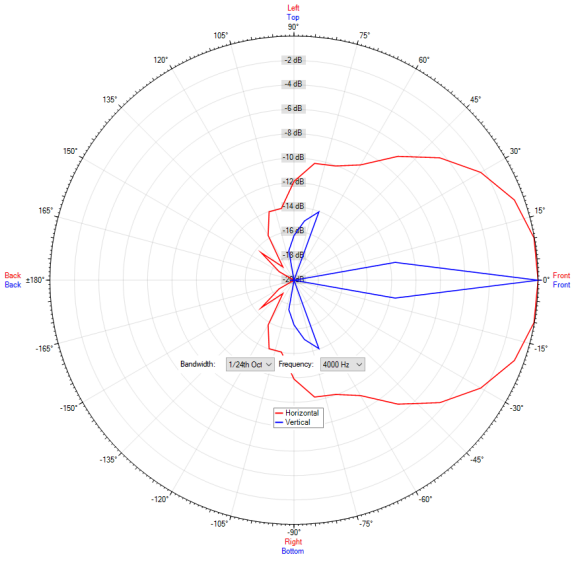
1,000 Hz



2,000 Hz

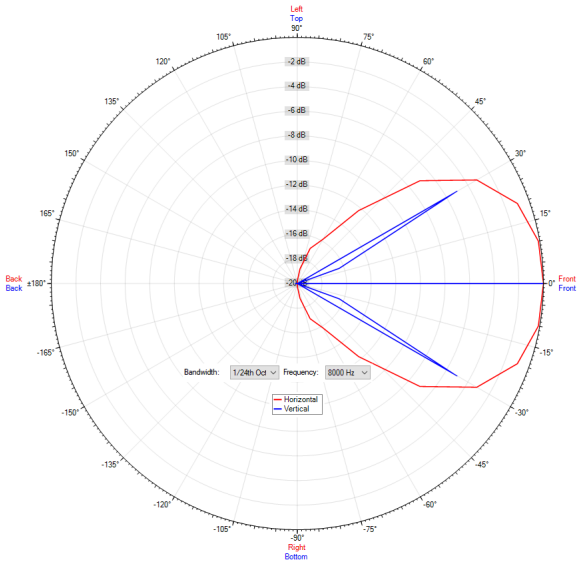


4,000 Hz

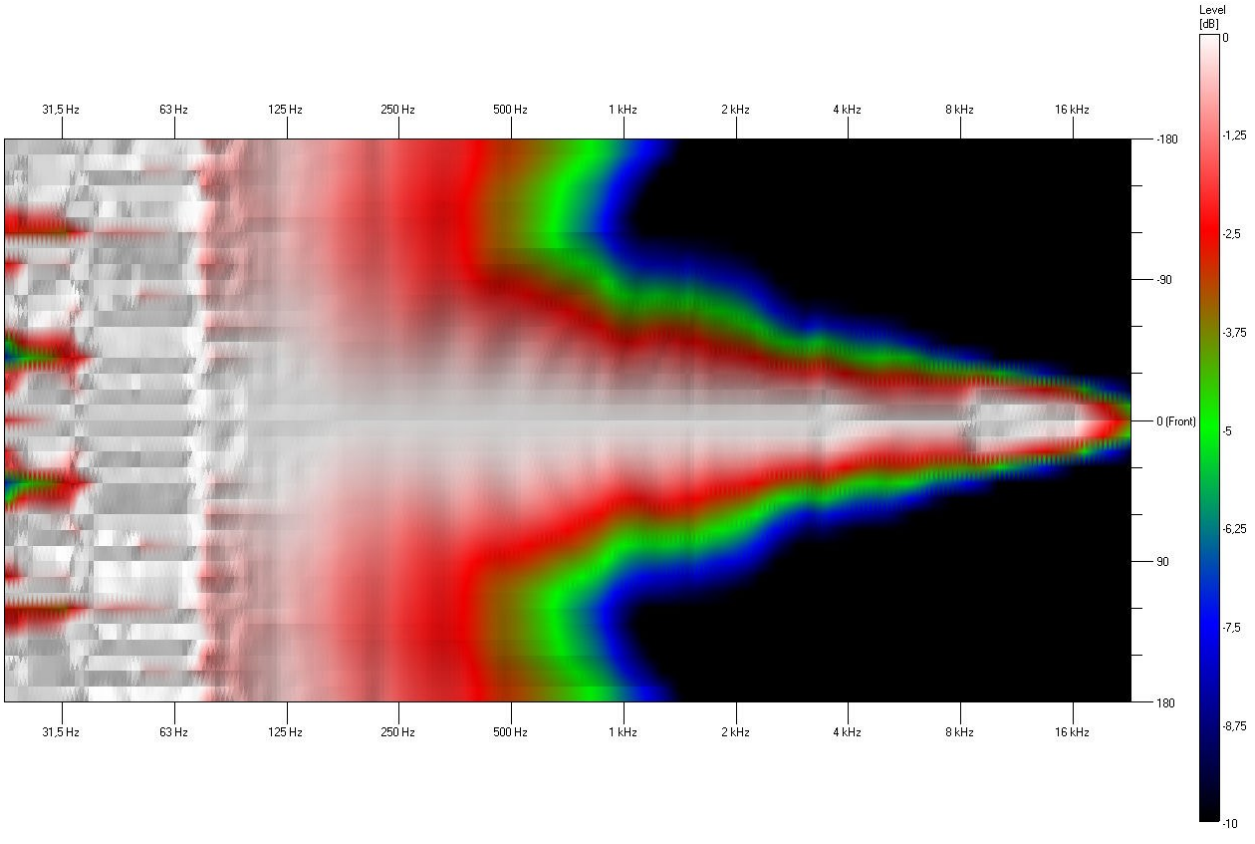


POLAR DIAGRAMS

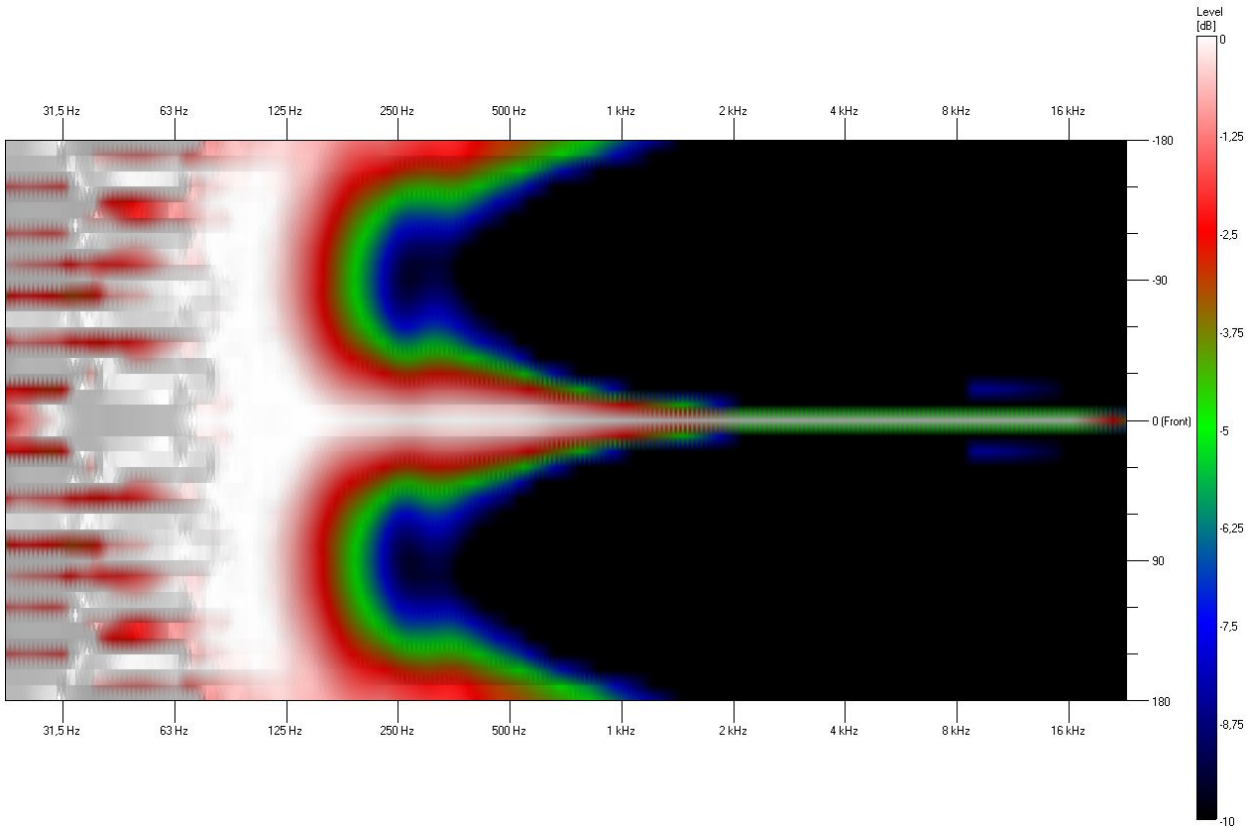
8,000 Hz



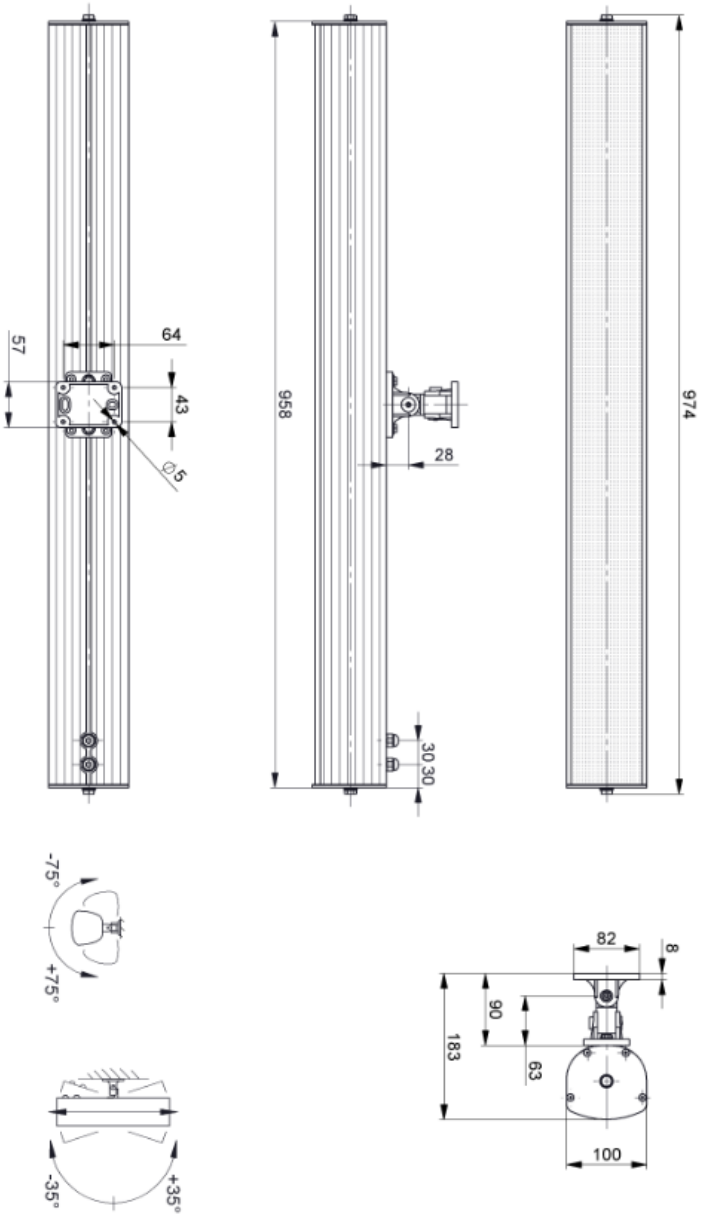
ISOBAR - HORIZONTAL



ISOBAR - VERTICAL



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 3 ASL_Datasheet_SPCO-50W-400-EN54