

Log. Periodic Directional Antenna

S24080/20/100-2

200 – 1000 MHz



The antenna type S24080/20/100-2 is a group of two linear polarized antennas, which are connected at the feed point in parallel. It covers the frequency range 200 MHz to 1000 MHz with a maximum input power of 1 kW.

The antenna system is especially designed for indoor EMC susceptibility testing. The design is optimised to generate maximum field strength at the DUT.

The antenna can be installed on a dolly with rollers for easy positioning or on customer's own mast and dolly.

If ordered with mast and dolly the options manual adjustment of height, polarisation and tilt are available. In combination with an optional remote control unit S42056/01 these functions can be adjusted automatically via a fibre optic link.

Technical Data

Electrical	Frequency range	200 – 1000 MHz
	Gain	Typ. 10 dBi
	Polarization	Linear
	Nominal input impedance	50 Ω
	VSWR	Typ. 1.8 : 1 Max. 2.5 : 1
	RF input power	1 kW cw
Mechanical	RF connector	13-30 socket or tbd
	Dimensions (antenna only)	1.1 m x 0.9 m x 1.1 m (L x W x H)
	Weight (antenna only)	Approx. 10 kg
Options	Remote control unit S42056/01 Mechanical interface according customer's requirements (e.g. length of boom, connector...)	

Mechanical Data

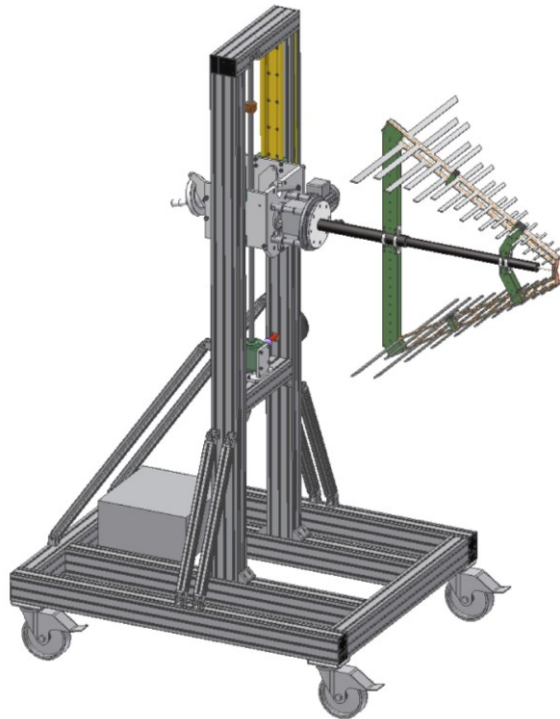


Figure 1: S24080/20/100-2 with optionally dolly including automatic polarisation control

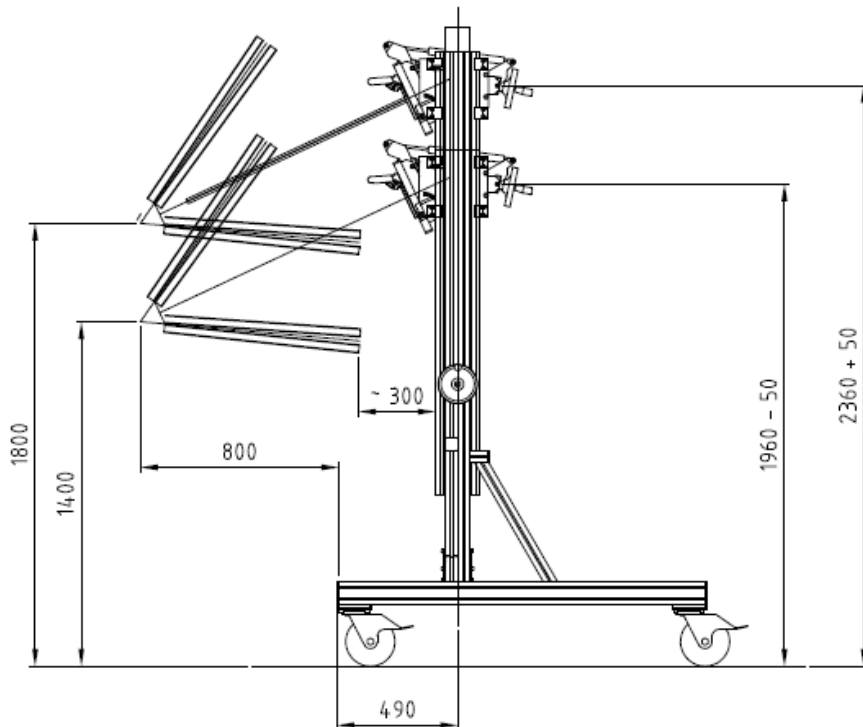


Figure 2: Main dimensions of the antenna dolly

Electrical Data

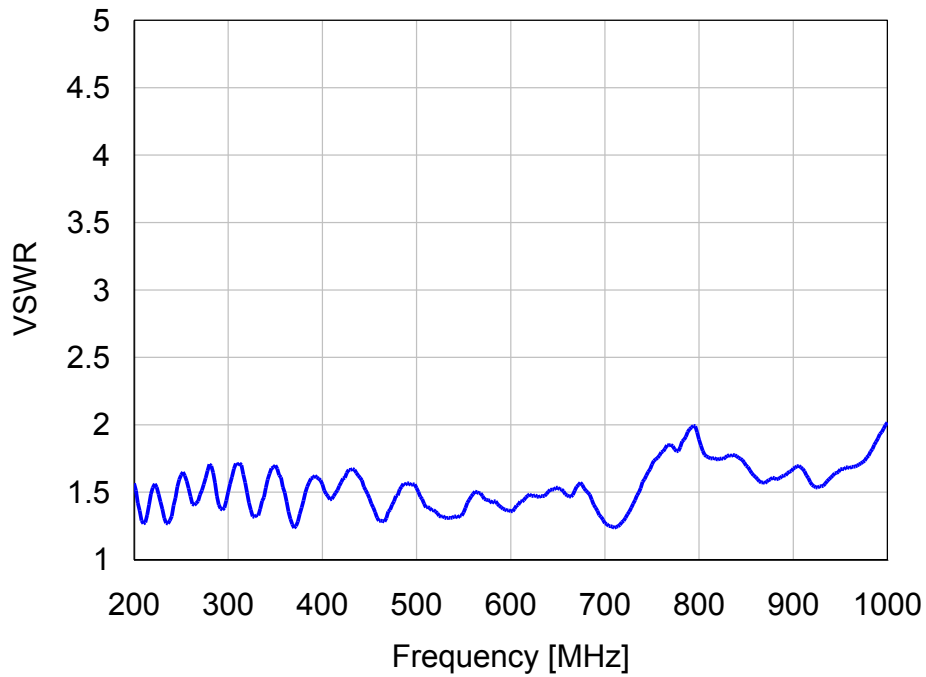


Figure 3: Measured VSWR

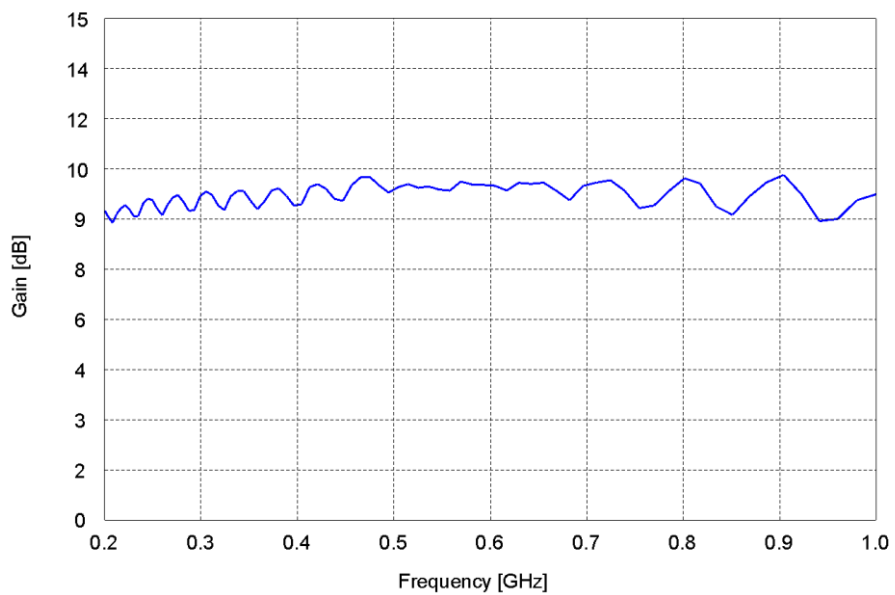


Figure 4: Gain

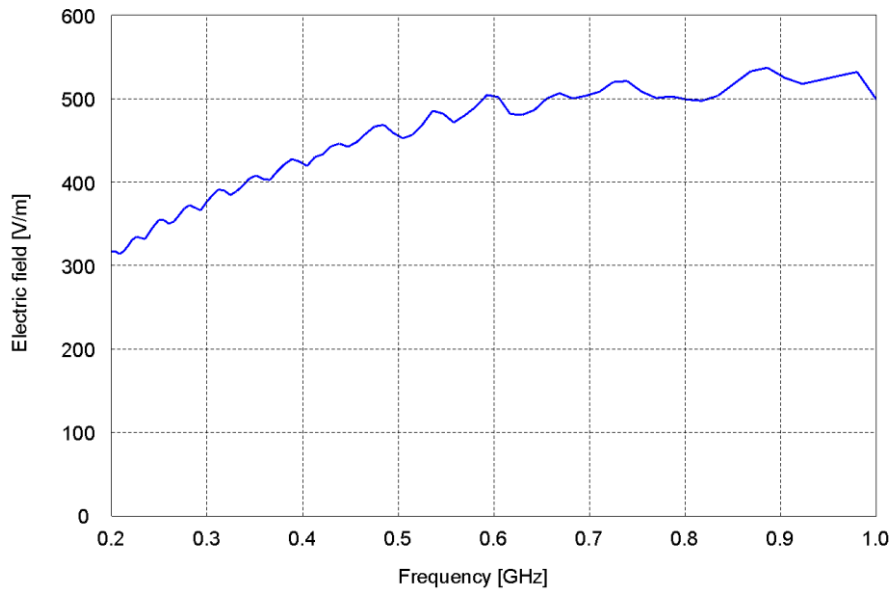
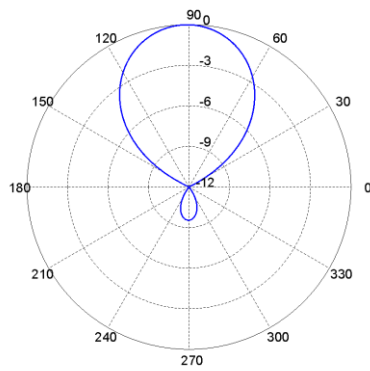
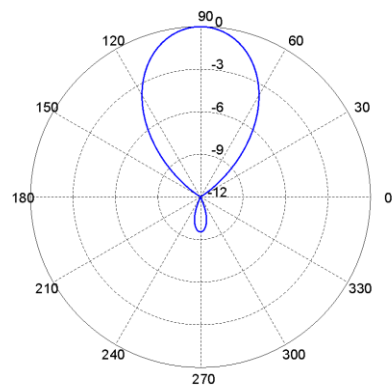


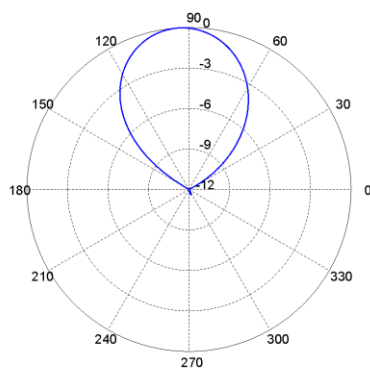
Figure 5: Electric Fieldstrength in one meter distance with 1 kW input power



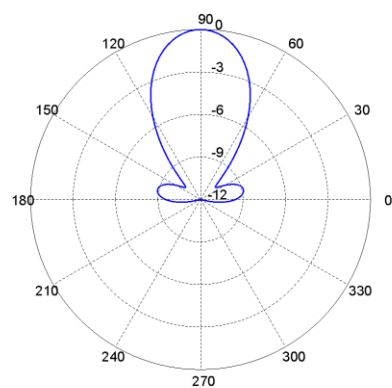
E-plane 200 MHz



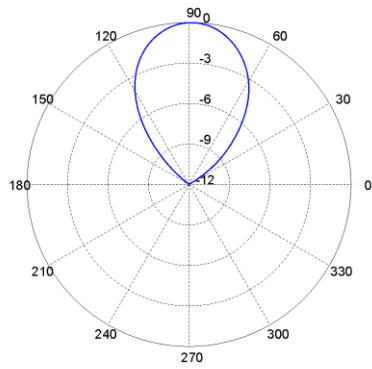
H-plane 200 MHz



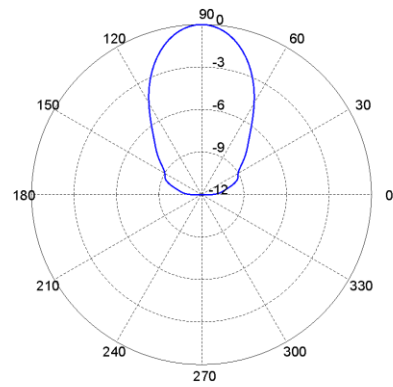
E-plane 400 MHz



H-plane 400 MHz



E-plane 1000 MHz



H-plane 1000 MHz

Figure 6 a-f: Normalized radiation patterns