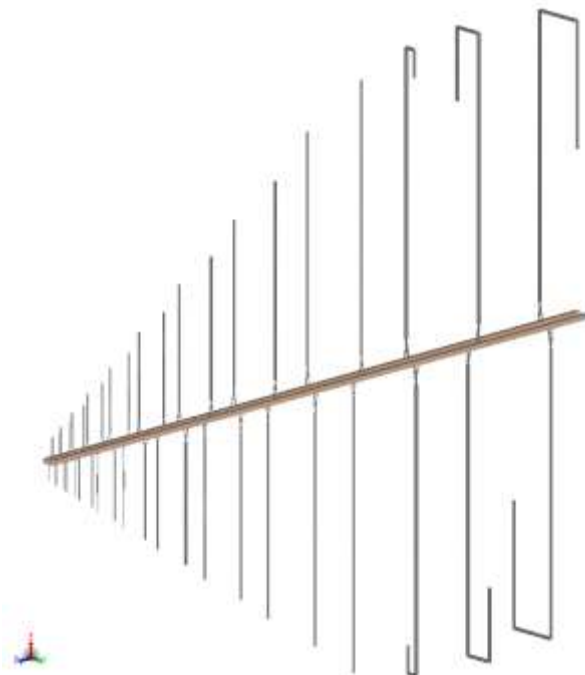


Log.-Periodic Directional Antenna

S12018/2

20 – 220 MHz



The antenna S12018/2 is a linear polarized log.-periodic antenna with foreshortened radiators used for EMC testing.

It has been designed for the frequency range 20 – 220 MHz to achieve constant gain and radiation patterns over a wide frequency range despite of its compact size. Elevation and polarization can be adjusted dependent on the mounting construction.

Technical Data

Electrical	Frequency range	20 – 220 MHz
	Gain in free space	typ. 6 dBi
	Polarization	linear
	Nominal input impedance	50 Ω
	VSWR	typ. 1.8:1 max. 2.5 : 1
	RF input power	10 kW (CW)
Mechanical	RF connector	1 5/8" EIA
	Dimensions	approx. 6 x 5 m (L x W)

Mechanical Data



Figure 1: Antenna mounted on supporting mast

Electrical Data

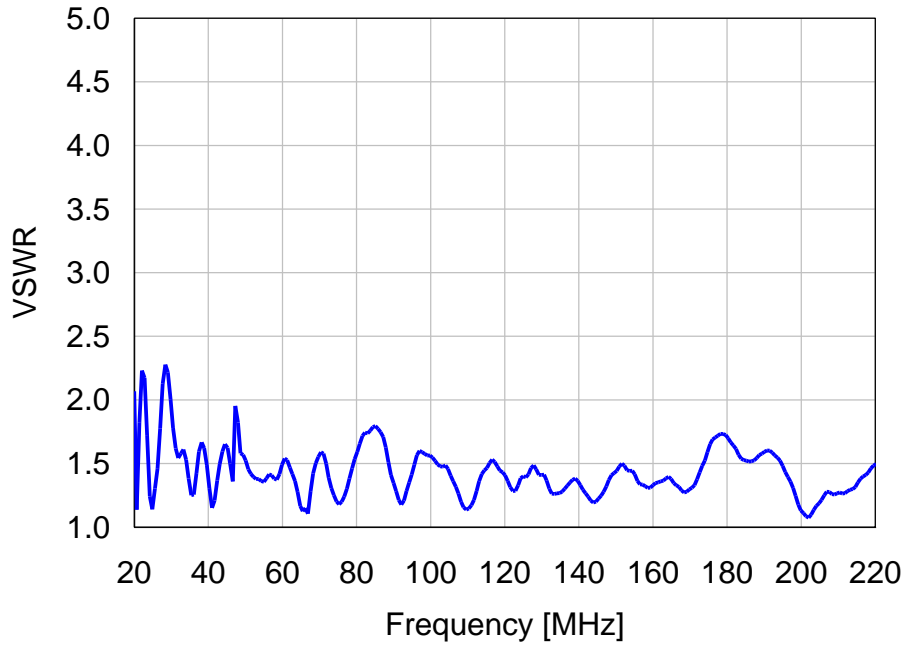


Figure 2: VSWR (measured)

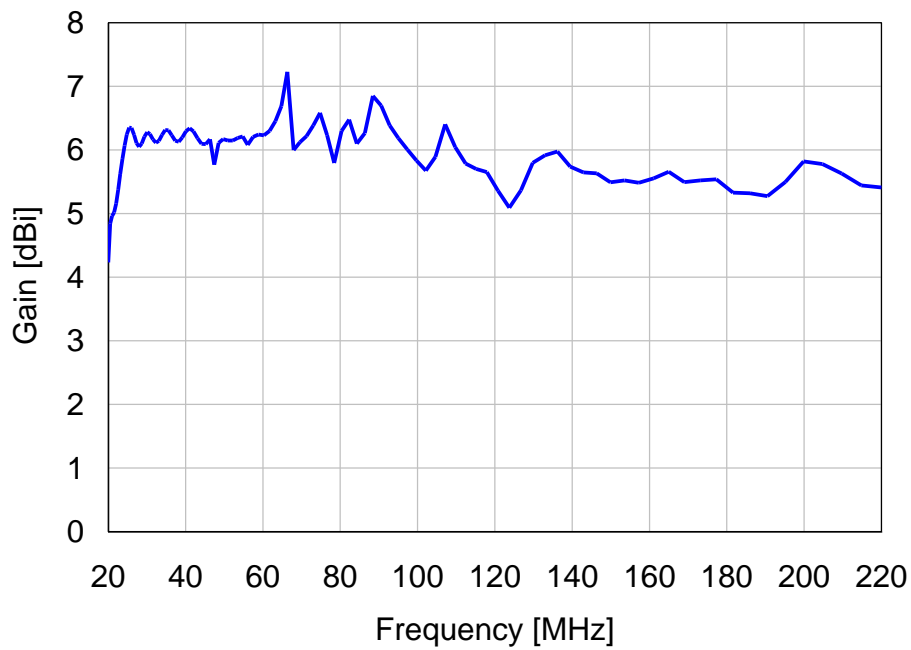
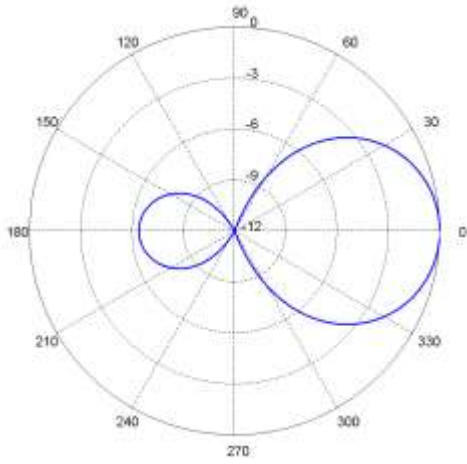
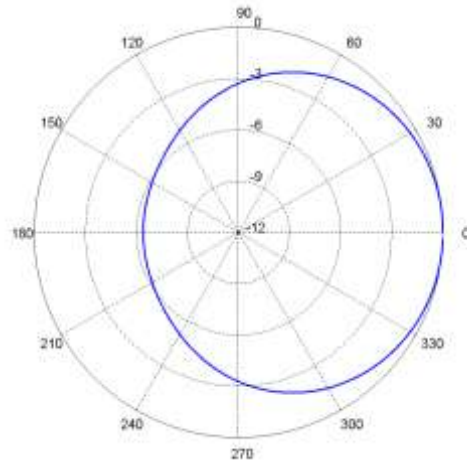


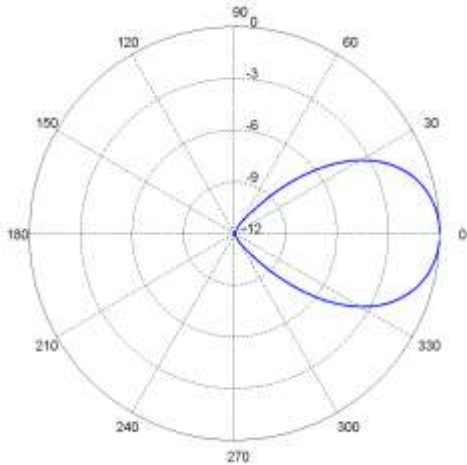
Figure 3: Gain (based on simulation)



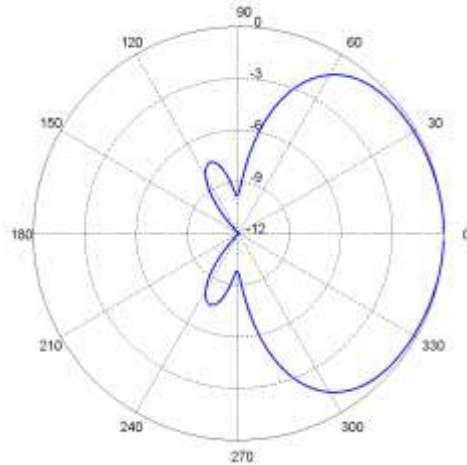
E-plane radiation pattern at 20 MHz



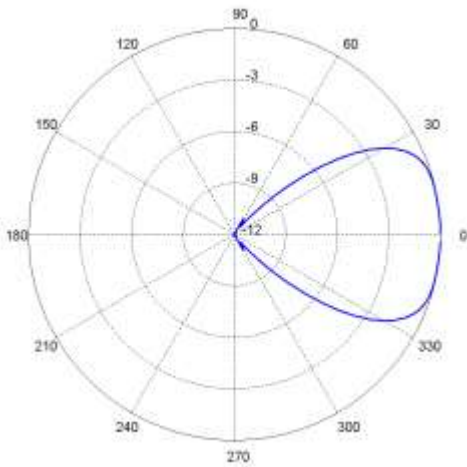
H-plane radiation pattern at 20 MHz



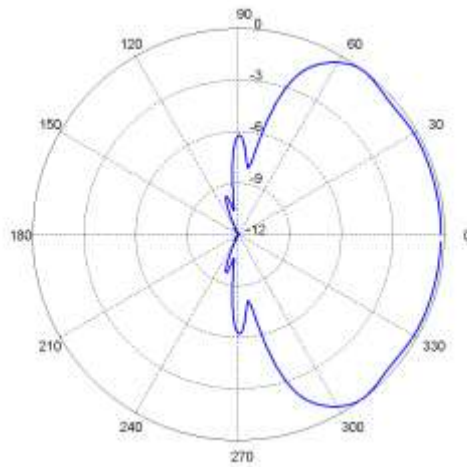
E-plane radiation pattern at 75 MHz



H-plane radiation pattern at 75 MHz



E-plane radiation pattern at 200 MHz



H-plane radiation pattern at 200 MHz

Figure 4a-f: E- and H-plane radiation patterns (based on simulation)