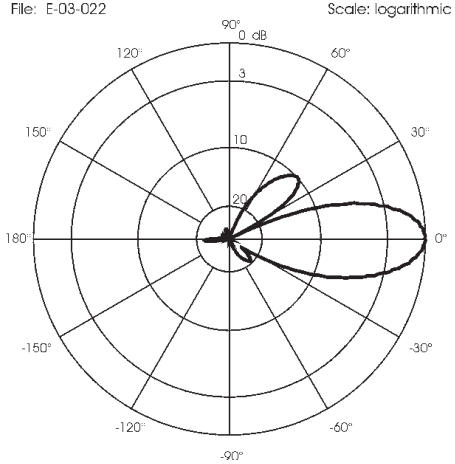
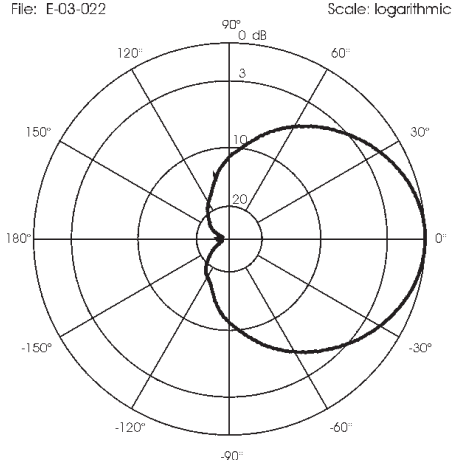
TYPICAL RADIATION PATTERN in E-plane at 2442.5 MHz

File: E-03-022 Scale: logarithmic

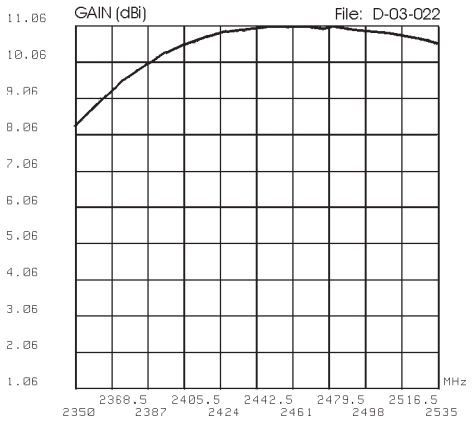


TYPICAL RADIATION PATTERN in H-plane at 2442.5 MHz

File: E-03-022 Scale: logarithmic



TYPICAL GAIN DIAGRAM vs FREQUENCY



SMS - 2.4 x 4 - 11

WLAN Base Station Antenna 2400-2485 MHz

Installation Manual

DESCRIPTION

Base station antenna conceived for W-LAN system. The radiant element is a Teflon® PCB to guarantee high power and low losses and it is protected by ASA radome. It's supplied with an aluminium bracket for an easy installation on the mast. The antenna is made of 4 separate sectors covering 90° each. When both sectors work in the same time they can cover 360° horizontal.

SPECIFICATIONS

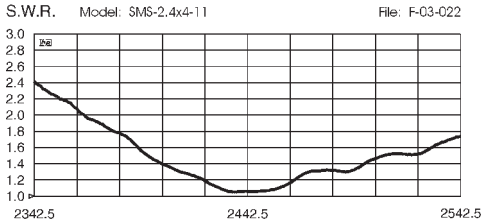
Electrical Data

Type	:	Multi Sector Dipole Array
Frequency Range	:	2400-2485 MHz for W-LAN system
Impedance	:	50 Ω Unbalanced
3 dB Beamwidth Horizontal	:	H-plane 84° at 2442.5 MHz
3 dB Beamwidth Vertical	:	E-plane 25° at 2442.5 MHz
Radiation Angle	:	0°
Front to Back Ratio	:	≥ 20 dB
Isolation	:	≥ 30 dB (between any two port)
Polarization	:	Linear Vertical
Gain	:	8.9 dBd - 11 dBi
V.S.W.R. in Bandwidth	:	≤ 1.5:1
Max Power	:	20 Watts (CW) at 50° C
Feed System / Position	:	direct DC-ground / Base
Connector type	:	4 x N-female

Mechanical Data

Housing Materials	:	Aluminium, Stainless Steel, PCB
Radome Material	:	Thermoplastic UV stabilized
Wind Load / Resistance	:	94 N at 150 Km/h / 180 Km/h
Wind Surface	:	0.08 m^2
Height (approx.)	:	600 mm
Radome diameter	:	Ø 216 mm
Weight (approx.)	:	2300 gr
Operating Temperature	:	-40° C to 80° C
Mounting Mast	:	Ø 35-52 mm

TYPICAL S.W.R. RESPONSE



MOUNTING INSTRUCTIONS