



HIRSCHMANN MOBILITY

WLAN/BT

Screw Antenna

MCA 2458 S

Part Number 920-315-002

Features

- Passive transmitting and reception antenna acc. standard IEEE 802.11 a, b, g, h, n, p
- Low Profile (body height app. 30 mm)
- Mounting on several surfaces (e.g. plastics, metal ...)

Technical Data

Dimensions	approx. 80 mm x 80 mm x 30 mm
Housing material	ASA-PC
Temperature range	-40°C - +80°C
Protection class	IP6k9k (acc. ISO 20653)
Cable type	RG 174 Low Loss

Technical Data

WLAN	
Frequency range	IEEE 802.11 b, g: 2400 - 2484 MHz
	IEEE 802.11 a, h: 5150 - 5725 MHz
	IEEE 802.11 n: 2400 - 2484 MHz
	5150 - 5725MHz
	IEEE 802.11 p: 5755 - 5925 MHz
	Bluetooth (BT): 2400 - 2483,5 MHz
Impedance	50 Ohm
VSWR	≤ 1.5
Gain	> 3 dBi*
Polarization	linear vertical
Load capacity	IEEE 802.11 b, g: ≤ 200 mW
	IEEE 802.11 a, h: ≤ 1000 mW
	IEEE 802.11 n: ≤ 200 mW (2.4 - 2.84 GHz)
	≤ 1000 mW (5.1 - 5.72 GHz)
	IEEE 802.11 p: ≤ 8 W EIRP (5.79 - 5.81 GHz)
	≤ 2 W EIRP (5.85 - 5.92 GHz)
Bluetooth (BT): < 100 mW	

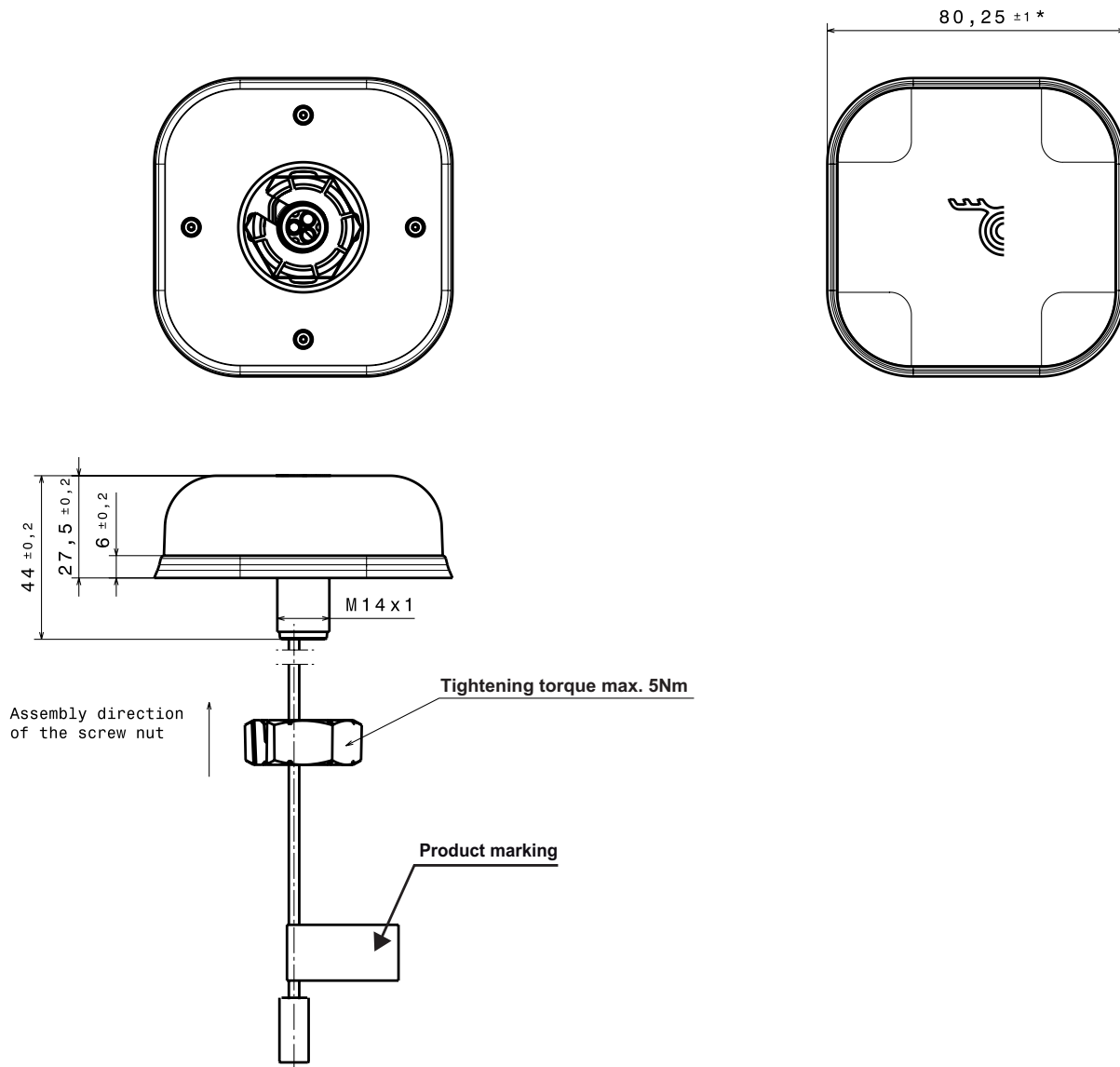
* dBi: referenced to an isotropic radiator

Versions

PN	Description	WLAN
920-315-002	MCA 2458 S	1000+10 mm SMAM straight

Other cable lengths and connectors on request

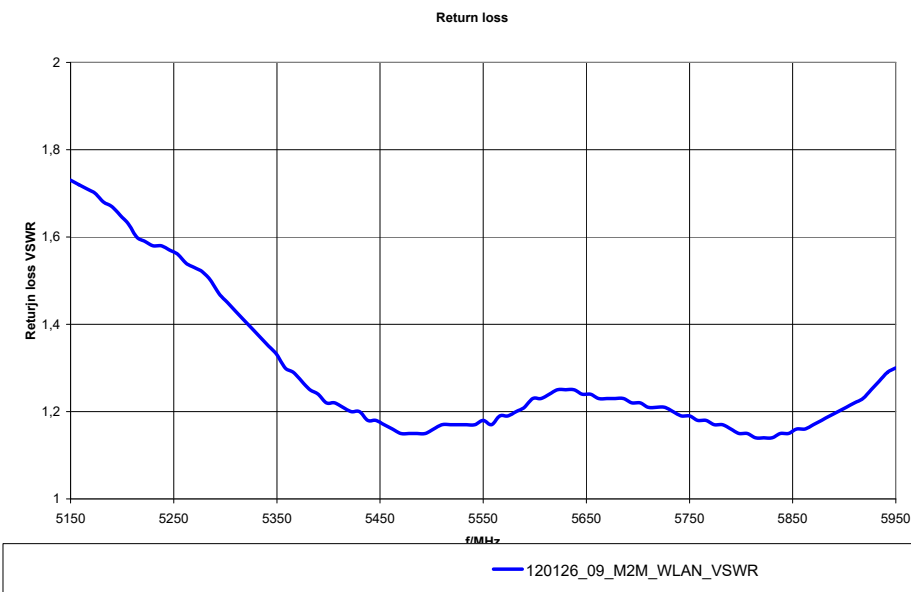
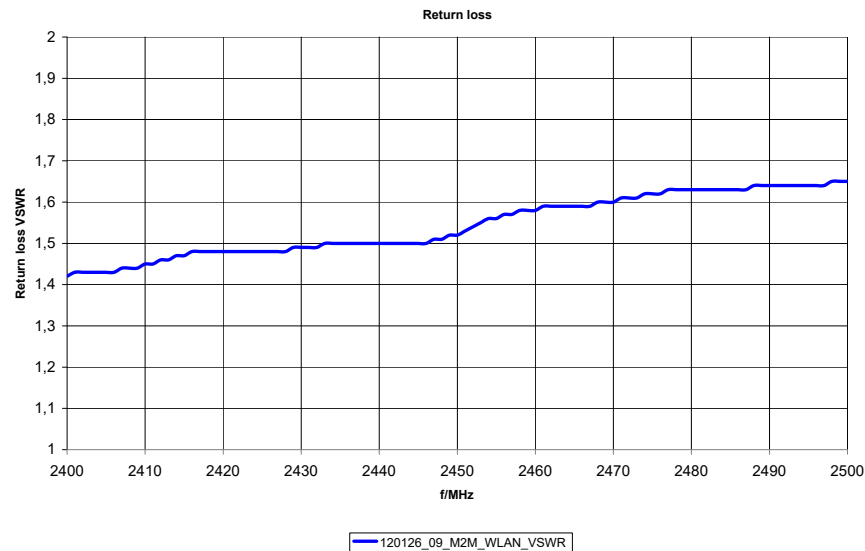
Technical Drawing



Antenna Diagrams

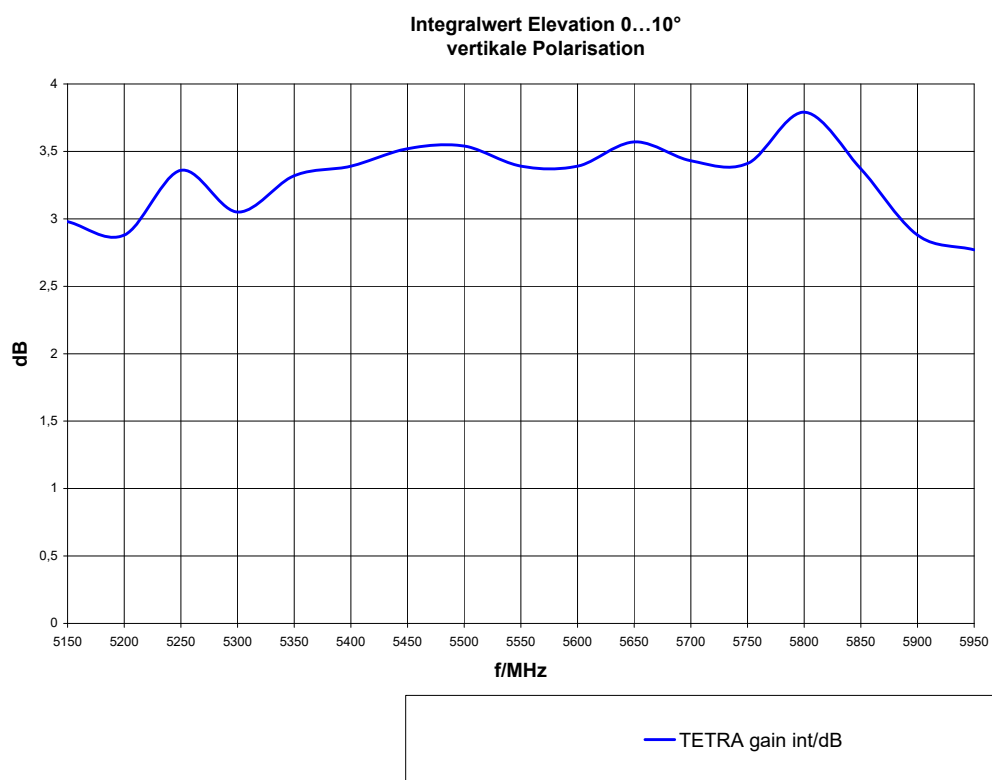
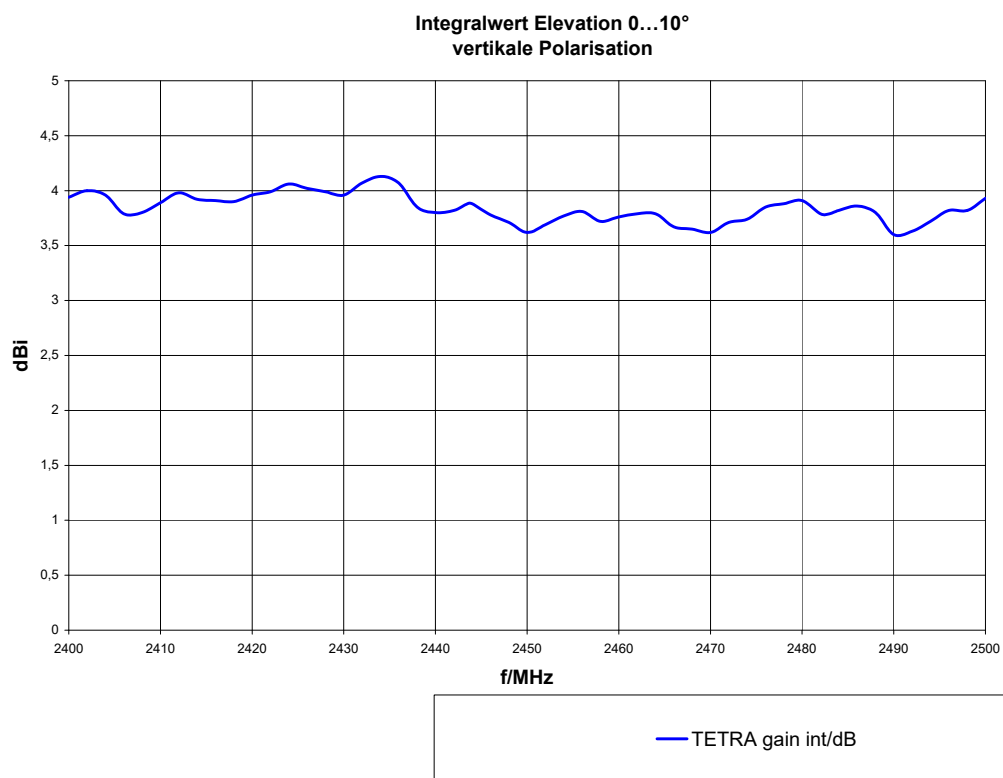
typ. VSWR

ELECTRICAL WLAN		
Standard	IEEE 802.11 b,g,n	IEEE 802.11 a,h,n,p
Band (MHz)	2450	5400
Frequency (MHz)	2400-2484	5150-5925
Return Loss (dB)		
Cable length (m)	0,2	1,2
Efficiency (%)		
Cable length (m)	0,2	71,50%
Gain (dBi)		
Cable length (m)	0,2	3,6
	3,4	



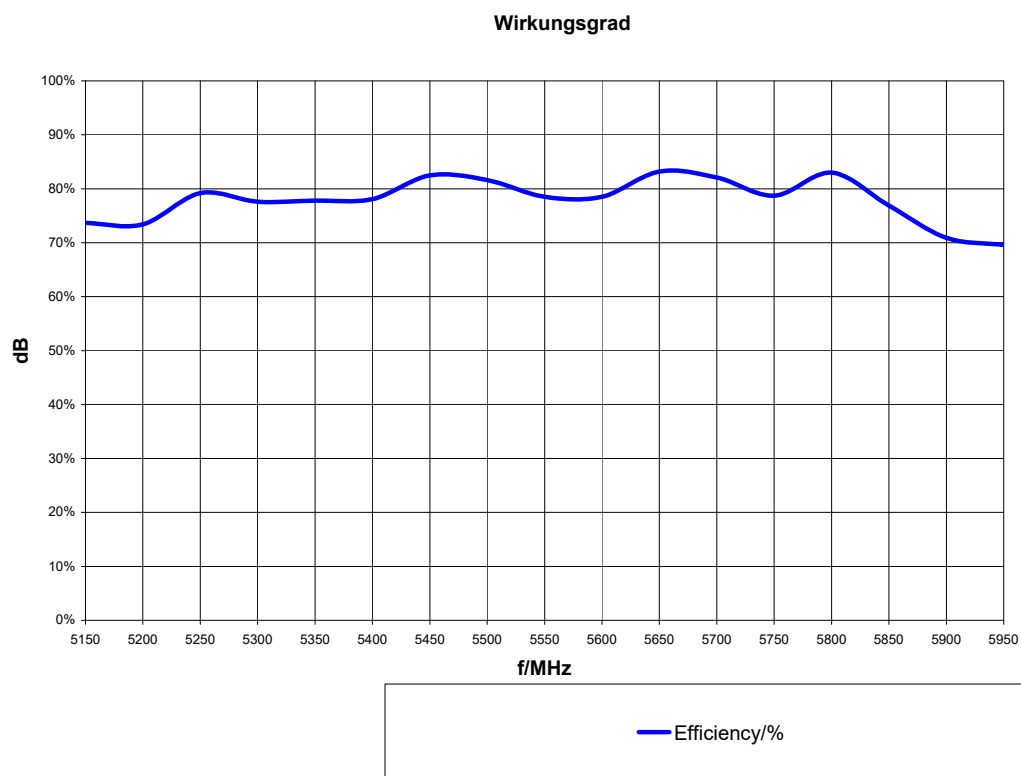
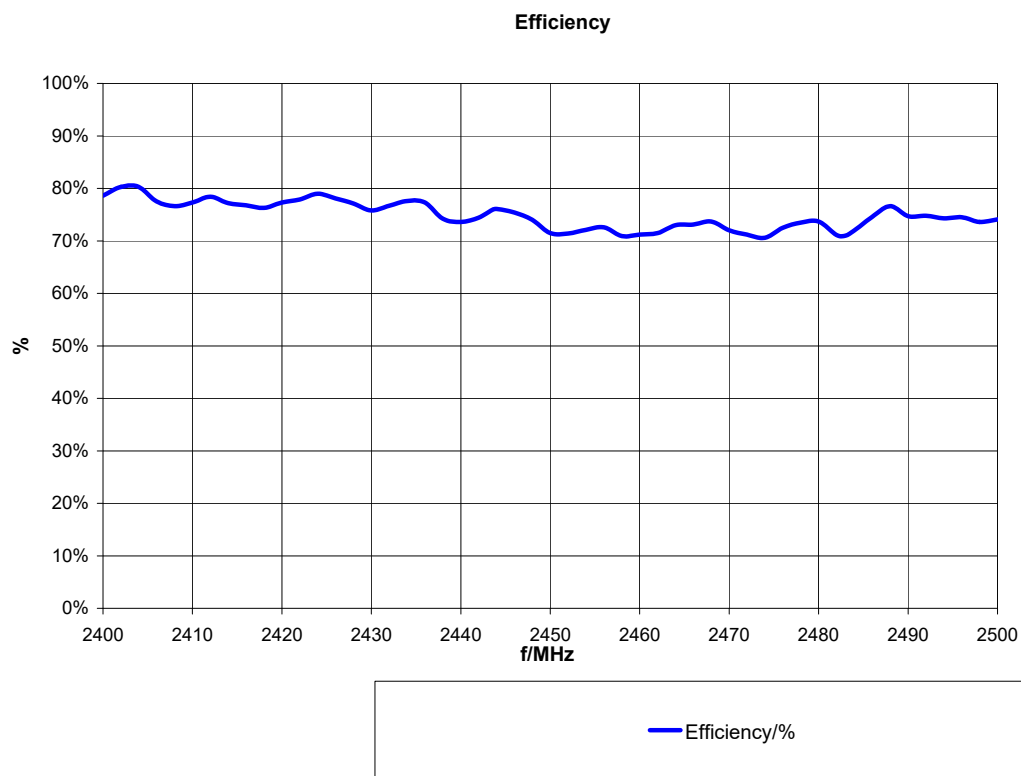
Antenna Diagrams

Integral level



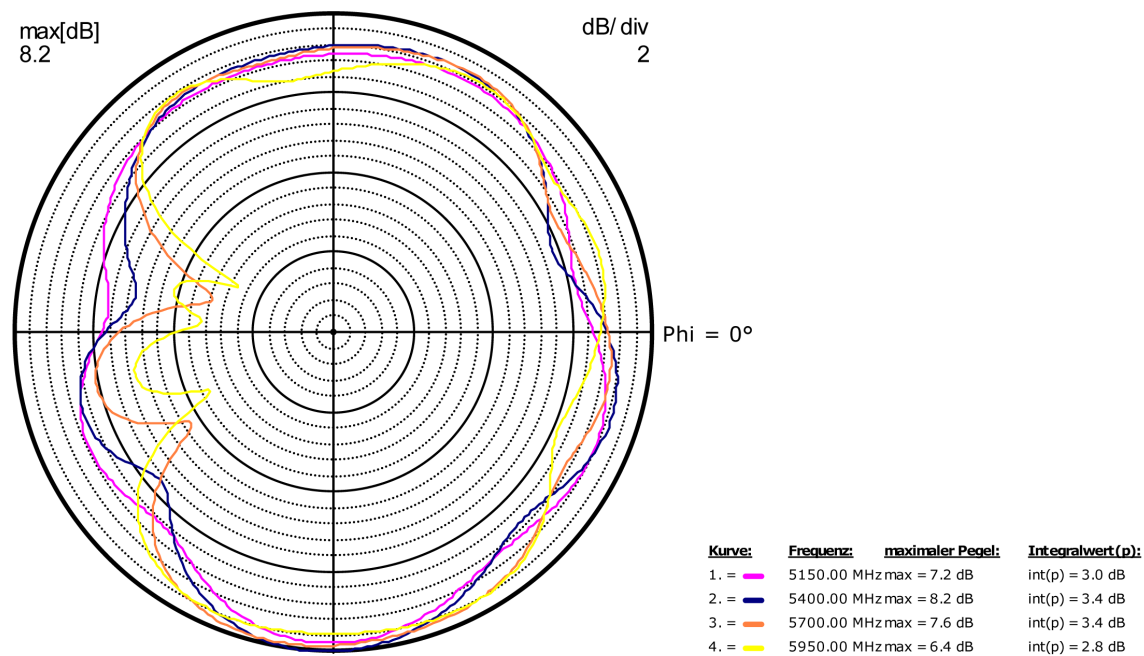
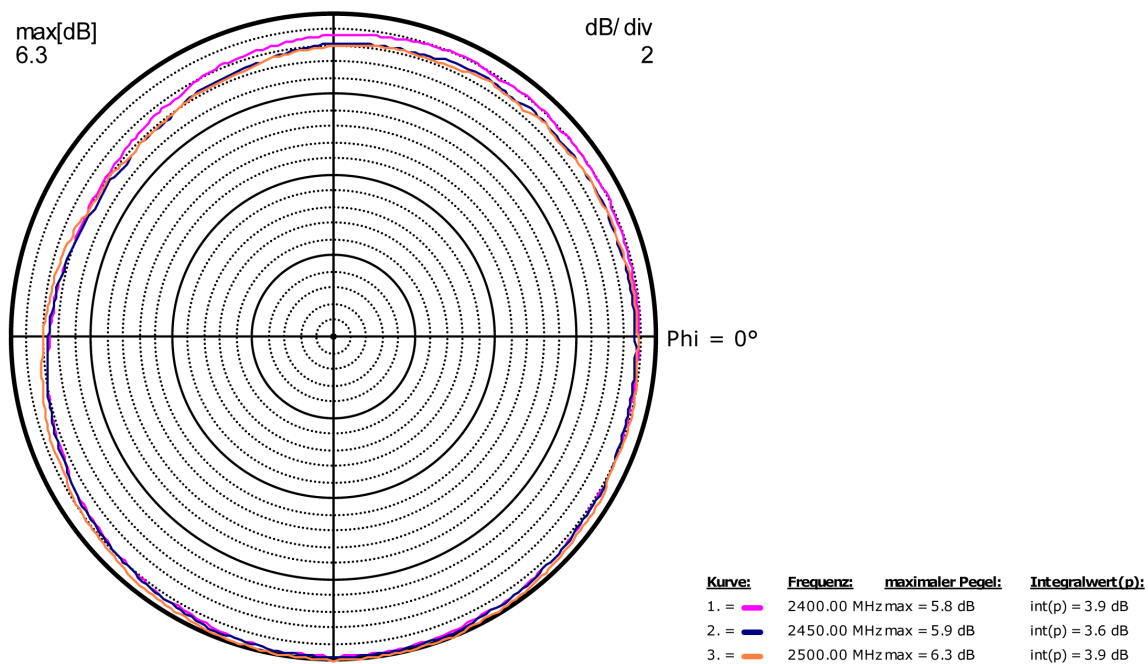
Antenna Diagrams

Efficiency



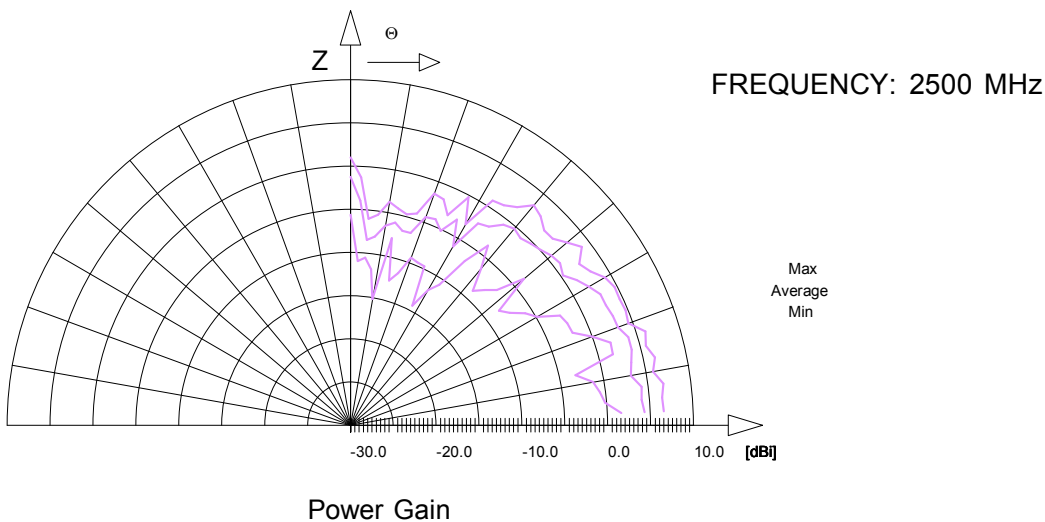
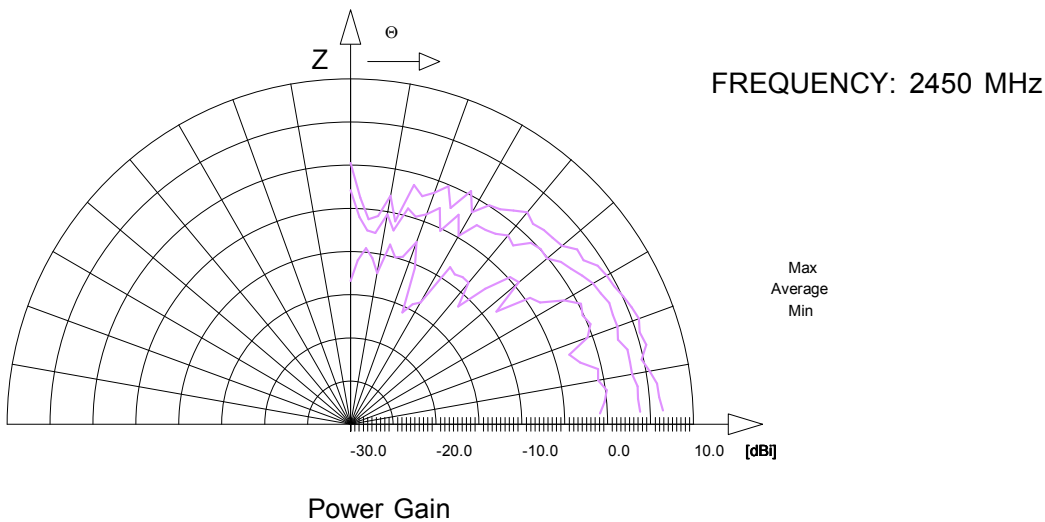
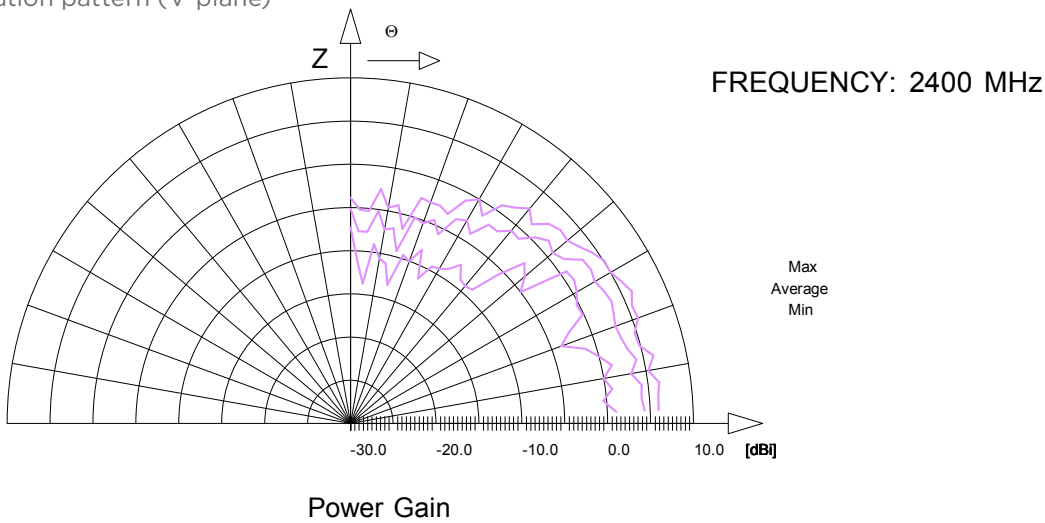
Antenna Diagrams

Typical radiation pattern (H-plane)



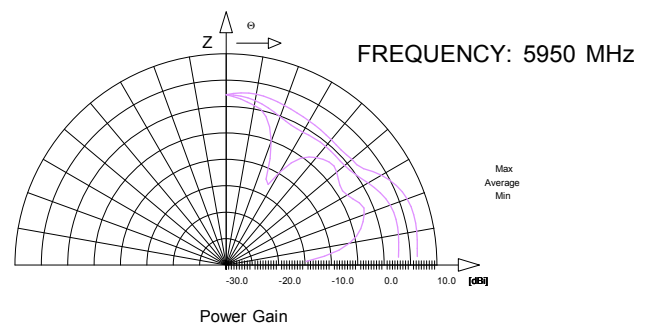
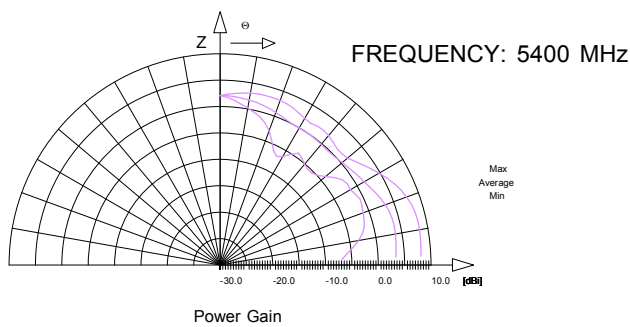
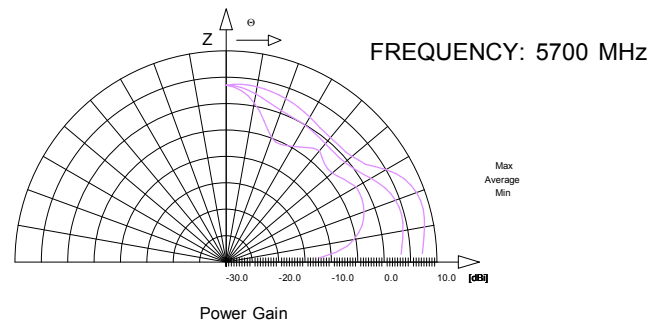
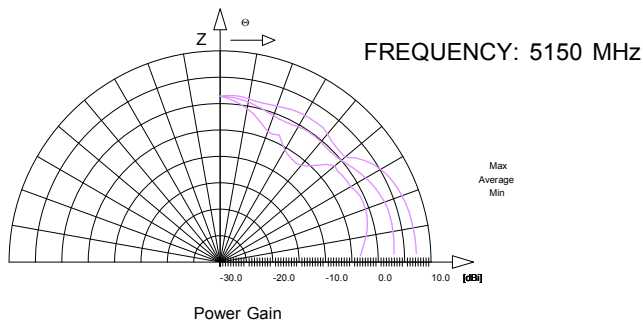
Antenna Diagrams

Typical radiation pattern (V-plane)



Antenna Diagrams

Typical radiation pattern (V-plane)



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