

RFA-150-020: SMA ANTENNA WITH ELBOW, WIFI 6, ADDITIONAL SNAP 45°

Material and plating:

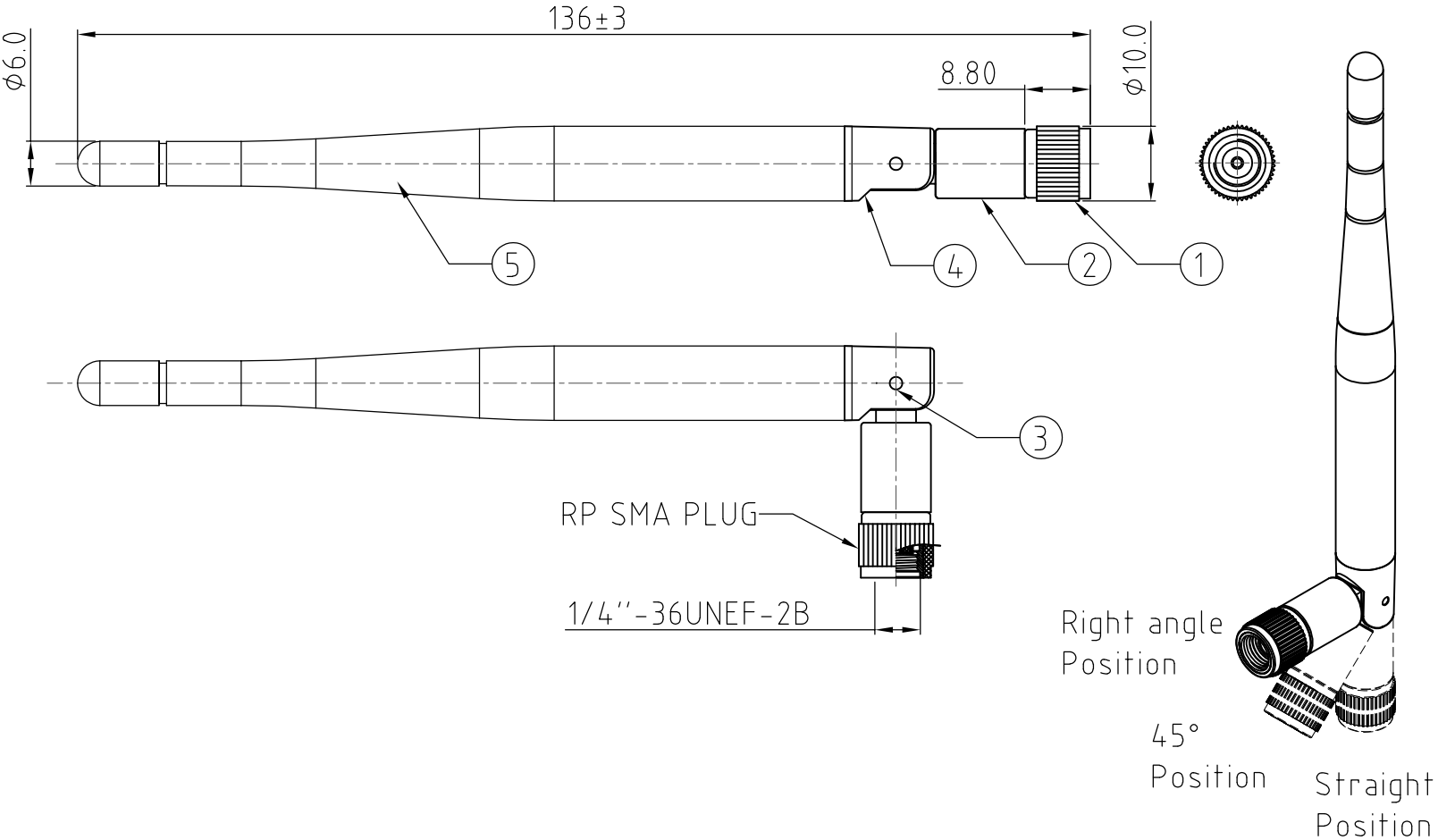
- 1. RP SMA Plug: Brass, Nickel plating
- 2. Bottom Base: PC+PBT, Black
- 3. Rivet: POM, Black
- 4. Upper Base: PC+PBT, Black
- 5. Cap: TPEE, Black

Electrical

Frequency Range:
2.4GHz~2.48Ghz,
5.15GHz~5.825Ghz,
5.935GHz~7.125Ghz.
Impedence: 50Ω
VSWR: 2.5 max.
Radiation: Omni
Gain: 3.83dBi +/-0.5
Polarization: Vertical
Maximum Power: 1W

Mechanical & Environment

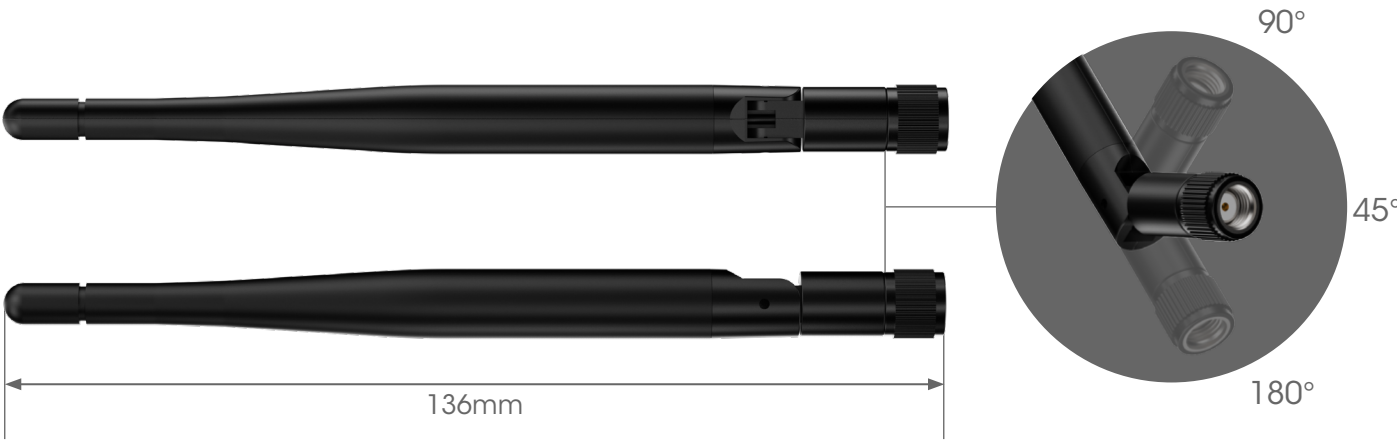
Operating Temperature: -20°C to +65°C
Weight: 10.4g
Lead free ROHS



REV. DATE & DRN 1.0 04/08/23 - CC RELEASE 1.1 13/05/25 - NYW ADD GCT LOGO.	Scale: NTS			THIRD ANGLE	Unstated Tolerances: .X ± 0.30 .XX ± 0.20 .XXX ± 0.10 ANGLES	Material SEE NOTE	  www.gct.co www.gradconn.com	Type: RFA-150-020			
	Drawn: CC							RFA-150-020			
	App'd: PH			Title SMA Antenna	NOT TO SCALE	Drawing Number:					
	Date: 13 MAY '25			Revision: 1.1		Unit: mm		Sheet 1 of 1			
Date: 13 MAY '25						Revision: 1.1	Unit: mm	© THIS DRAWING IS CONFIDENTIAL AND MUST NOT BE COPIED OR DISCLOSED WITHOUT WRITTEN CONSENT		Drawing ©	E and O E

RFA-150-020 Antenna

RF Antenna Stick | Tri Band | SMA Plug interface



Electrical Specifications

Description	Specification
Frequency Range/s	2400-2480MHz, 5150-5825MHz, 5935-7125MHz
Antenna Type	Stick Antenna
Number of Bands	5
Radiation Pattern	Omnidirectional
Polarization	Linear
Max. Input Power	1 Watt
Impedance	50Ω

Frequency	Return Loss	Peak Gain	Average Efficiency
2400-2480MHz	< -24.0 dB	4.0 dBi	67%
5150-5825MHz	< -9.5 dB	5.2 dBi	43%
5935-7125MHz	< -9.5 dB	7.0 dBi	51%

Mechanical Specifications

Description	Specification
Lengh	136 ± 3mm
Swivel Elbow	180°, 90°, 45°
Weight	12g
Termination	RP-SMA
Radome Material	PC+PBT
Operating Temprature	-20°C to 65°C
Compliance	RoHS

Applications

Wireless Communication: Wi-Fi 4/5/6/6E/7 (2.4/5/6GHz)
Short-range Protocols: Bluetooth, Zigbee, Thread
Consumer Electronics: Smart TVs, streaming devices, mesh routers
IoT & Smart Devices: Gateways, sensors, smart home products.

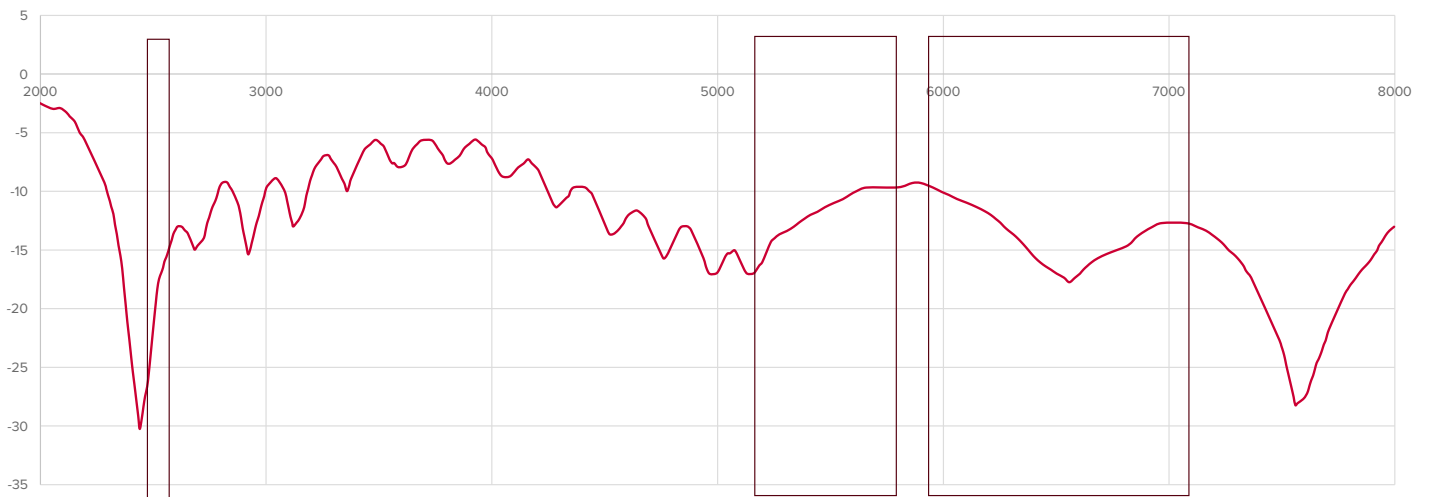
Disclaimer: The image shown is for illustration purposes only and may not be an exact representation of the product.

Performance

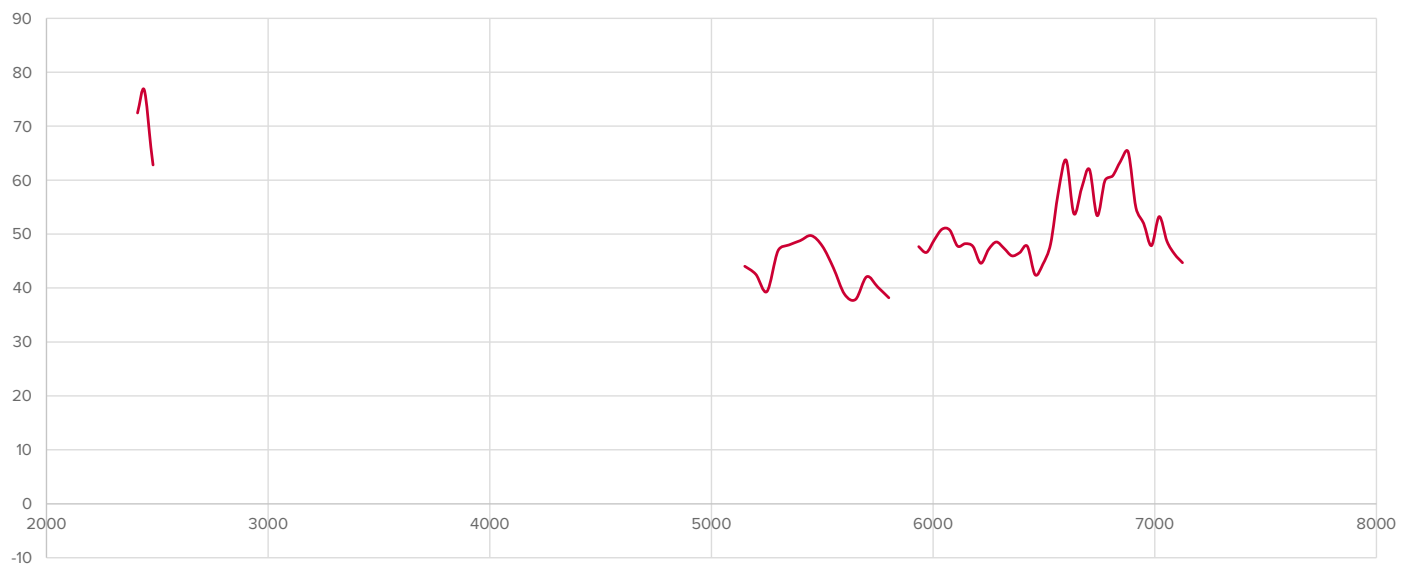
The test setup and measurements were conducted in a 3D anechoic chamber



Return Loss (dB) Chart



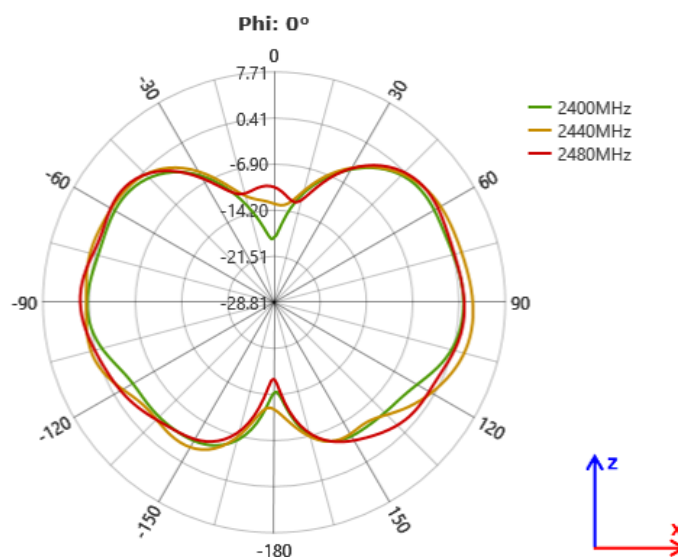
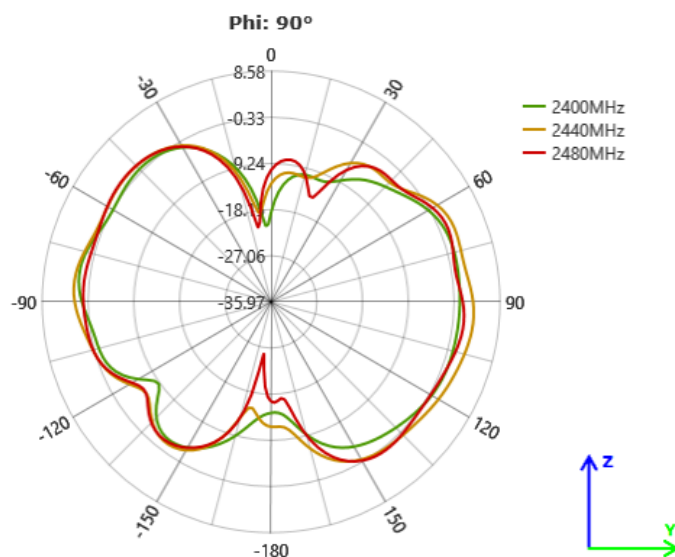
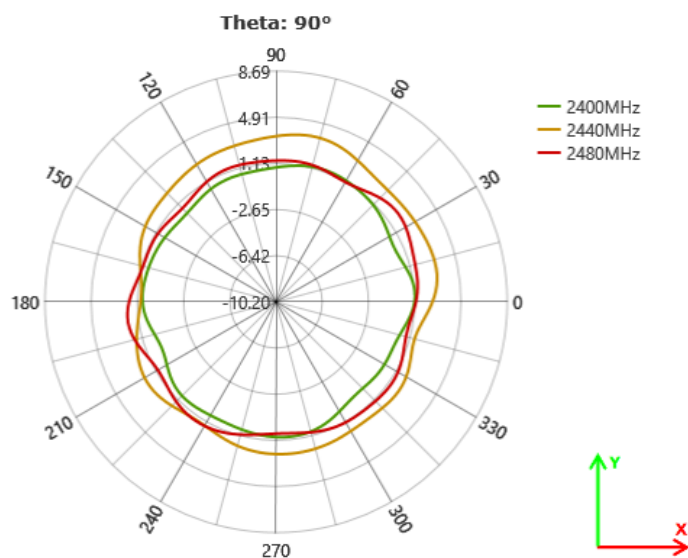
Efficiency



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Radiation Patterns

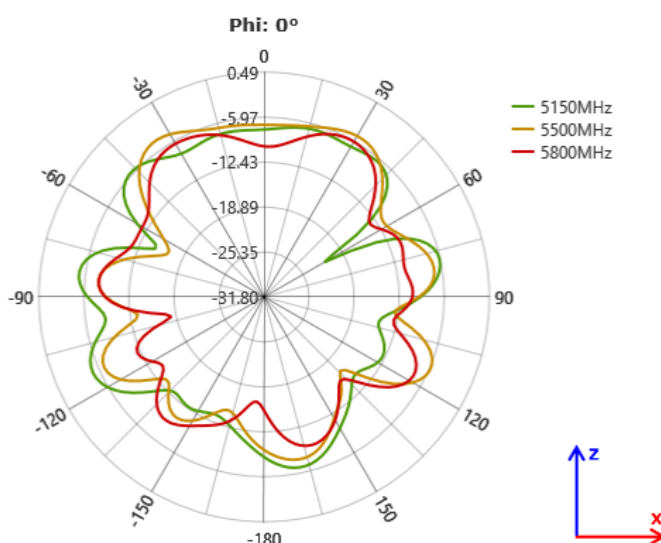
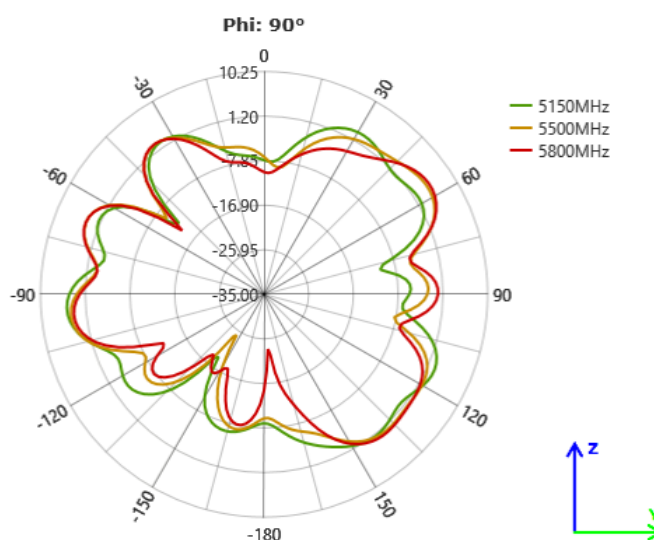
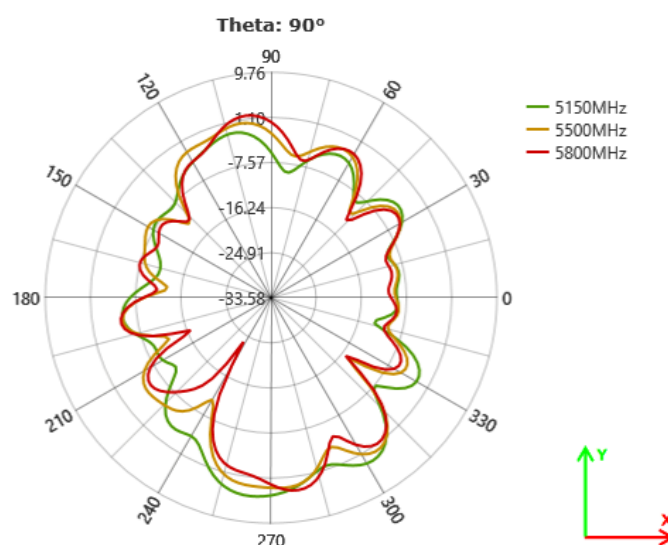
2400-2480MHz



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Radiation Patterns

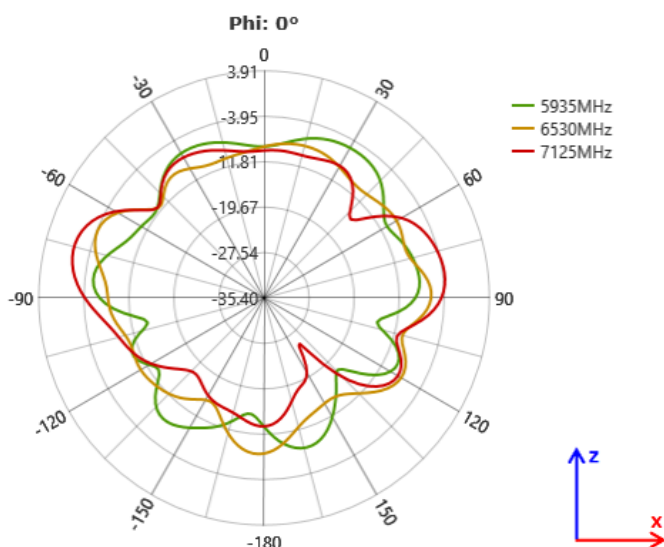
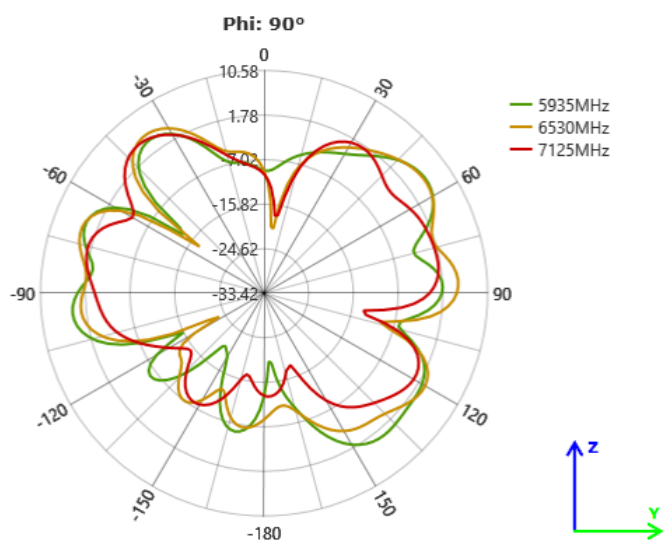
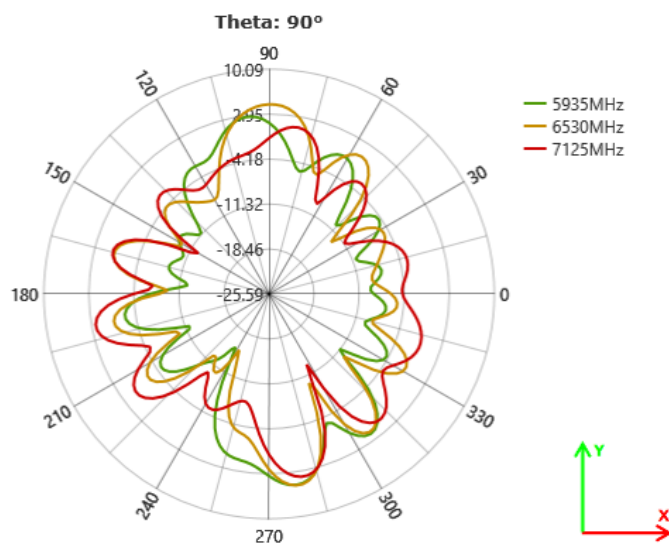
5150-5800MHz



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Radiation Patterns

5935-7125MHz



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