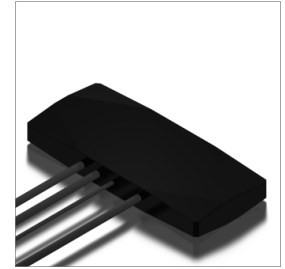
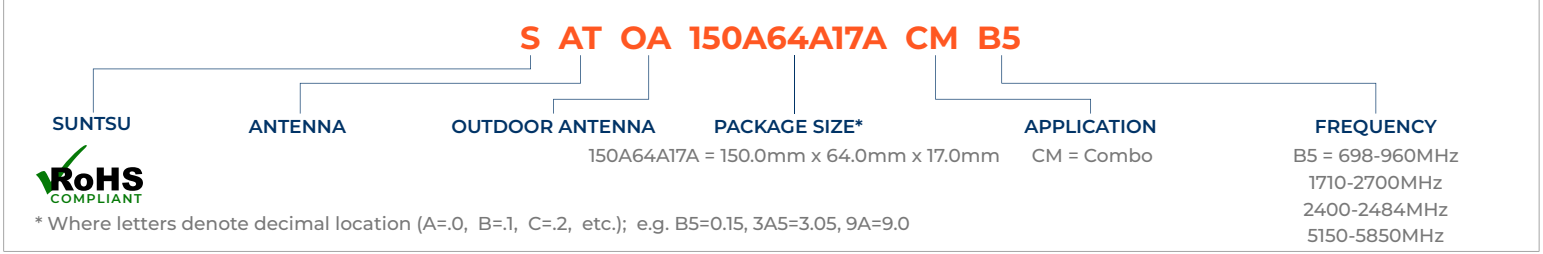


Features
<ul style="list-style-type: none"> 2 x 4G LTE MIMO, WiFi Dual Band, GNSS RHCP Outdoor Antenna Stable And Reliable Performance Omni-Directional IP67

Applications
<ul style="list-style-type: none"> Vehicle Tracking Asset Tracking GPS Navigation Machine To Machine Communication



Part Numbering Guide



Cellular/4G LTE Antenna 1

Frequency Band (MHz)	Cable Length	698 - 960	1710 - 2170	2300 - 2400	2490 - 2690
Efficiency (%)	1 M	55.8	49.6	50.7	48.8
	2 M	54.1	47.5	48.3	46.3
	3 M	52.6	45.6	46.1	44.1
Average Gain (dB)	1 M	-2.6	-3.1	-3.0	-3.1
	2 M	-2.7	-3.2	-3.2	-3.3
	3 M	-2.8	-3.4	-3.4	-3.6
Peak Gain (dBi)	1 M	2.4	3.1	2.2	1.6
	2 M	2.2	2.9	2.0	1.3
	3 M	2.1	2.7	1.8	1.1
V.S.W.R.		<5		<3	
Impedance (Ω)		50			
Polarization		Linear			
Cable		LMR 200 Low Loss Cable			
Connector		SMA (M) ST			

Cellular/4G LTE Antenna 2

Frequency Band (MHz)	Cable Length	698 - 960	1710 - 2170	2300 - 2400	2490 - 2690
Efficiency (%)	1 M	56.6	60.5	53.7	44.0
	2 M	55.0	58.0	51.2	41.8
	3 M	53.4	55.5	48.8	39.7
Average Gain (dB)	1 M	-2.6	-2.2	-2.7	-3.6
	2 M	-2.7	-2.6	-3.1	-4.0
	3 M	-2.8	-2.7	-3.3	-4.2
Peak Gain (dBi)	1 M	2.6	2.6	1.9	2.1
	2 M	2.5	2.5	1.7	1.9
	3 M	2.4	2.3	1.5	1.7
V.S.W.R.		<5		<3	
Impedance (Ω)		50			
Polarization		Linear			
Cable		LMR 200 Low Loss Cable			
Connector		SMA (M) ST			

WiFi Dual Band / WiFi Antenna 1			
Frequency Band (MHz)	Cable Length	2400 - 2484	5150 - 5850
Efficiency (%)	1 M	59.3	65.8
	2 M	56.5	60.6
	3 M	53.9	55.9
Average Gain (dB)	1 M	-2.3	-1.8
	2 M	-2.5	-2.2
	3 M	-2.7	-2.5
Peak Gain (dBi)	1 M	2.7	1.9
	2 M	2.5	1.5
	3 M	2.2	1.2
V.S.W.R.	<3.5		
Impedance (Ω)	50		
Polarization	Linear		
Cable	LMR 200 Low Loss Cable		
Connector	SMA (M) ST		

GNSS Navigation Antenna			
Navigation	BeiDou	GPS / QZSS / GALILEO	GLONASS
Center Frequency (MHz)	1561.00	1575.42	1602.00
Gain (dBiC)	0.5 Typ.		
V.S.W.R.	<2.0		
Impedance (Ω)	50		
Polarization	RHCP		
Cable	1M RG174		
Connector	SMA (M) ST		

LNA Electrical Properties	
Gain (dB)	30 Typ,
Noise Figure (dB)	1.8 Typ.
Output V.S.W.R.	<2.0
DC Input Voltage (V)	3 - 24
Current Consumption	9 mA Typ. @ 3V

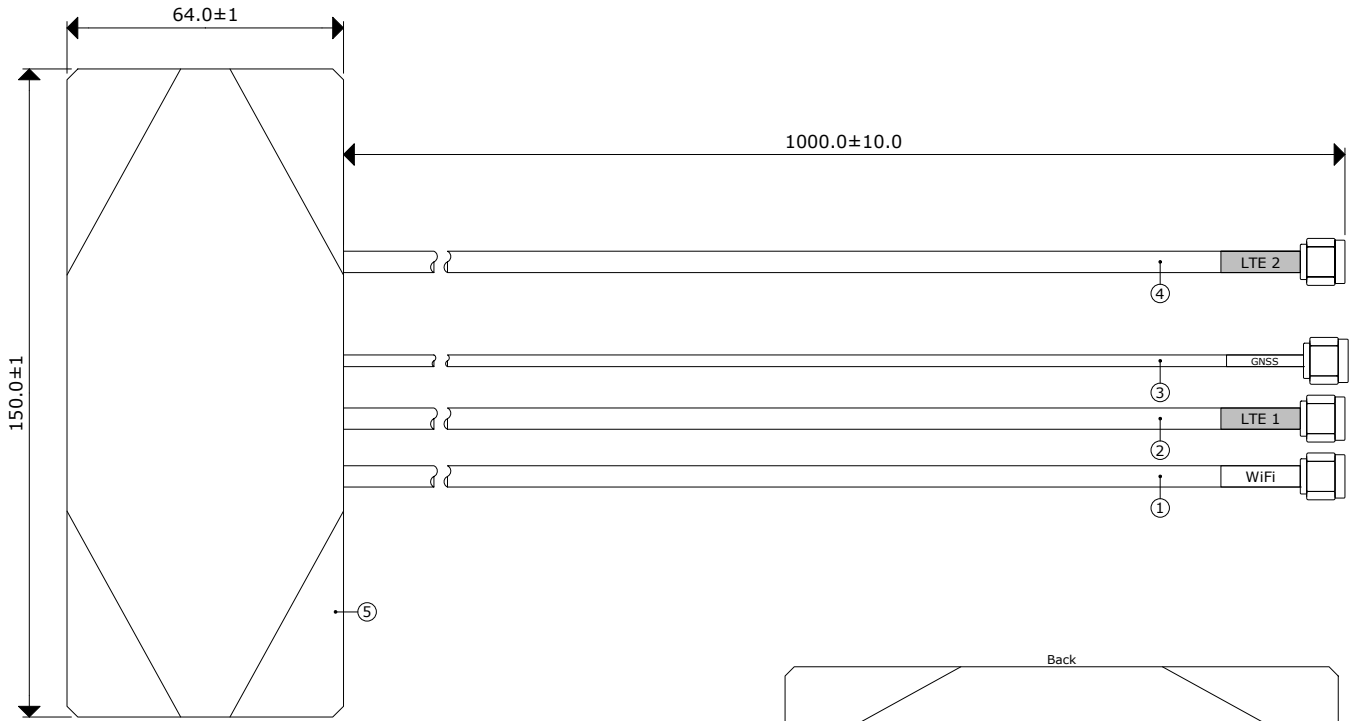
Mechanical	
Dimensions	150.0mm x 64.0mm x 17.0mm
Cable Type †	LMR 200
Cable Length †	1 M
Connector †	SMA (M) ST
Mounting Type	Adhesive Mount

Enviromental	
Operating Temperature	-40 to +85 °C
Storage Temperature	-40 to +85 °C

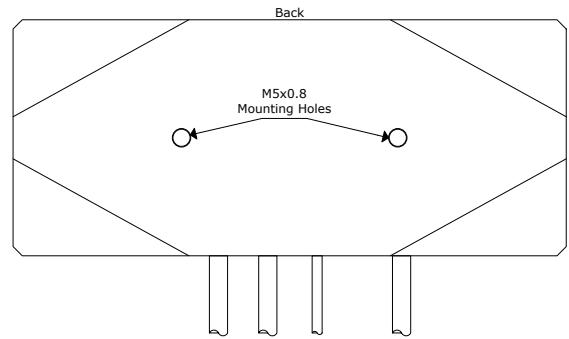
†- The Connector, Cable Length and Cable Type can be tailored to your needs.

Outline Drawing

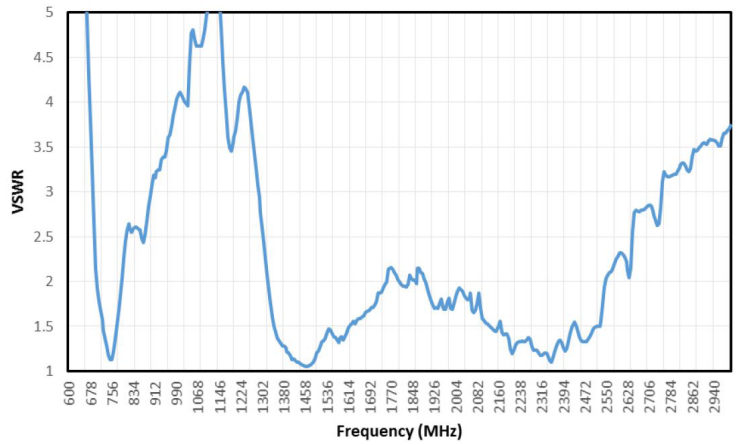
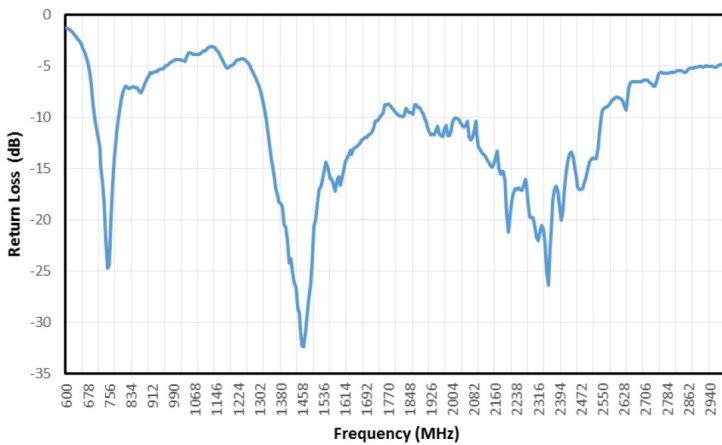
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



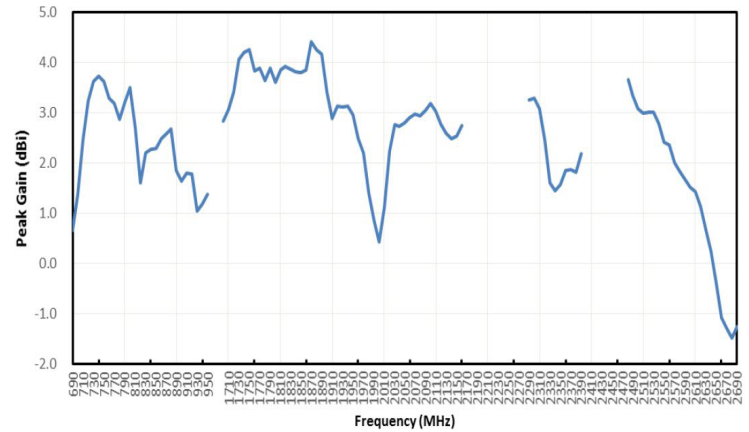
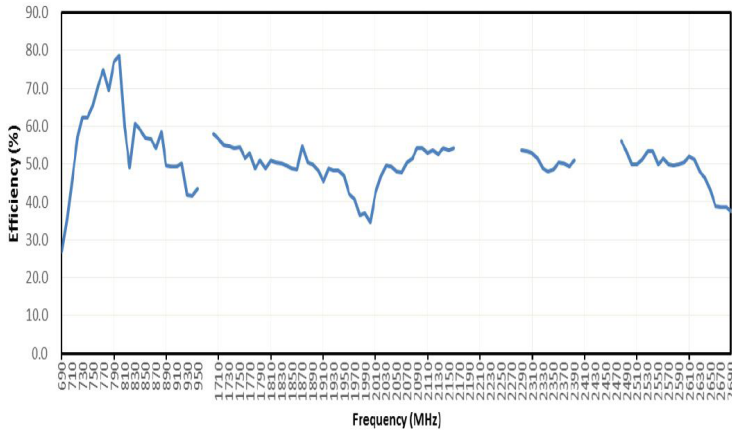
Item	Name	Material	Color	Qty
1	Connector Cable Ø 5mm	PVC	Black	1
2	Connector Cable Ø 5mm	PVC	Black	1
3	Connector Cable Ø 2.7mm	PVC	Black	1
4	Connector Cable Ø 5mm	PVC	Black	1
5	Plastic Cover	PC/ABS	Black	1



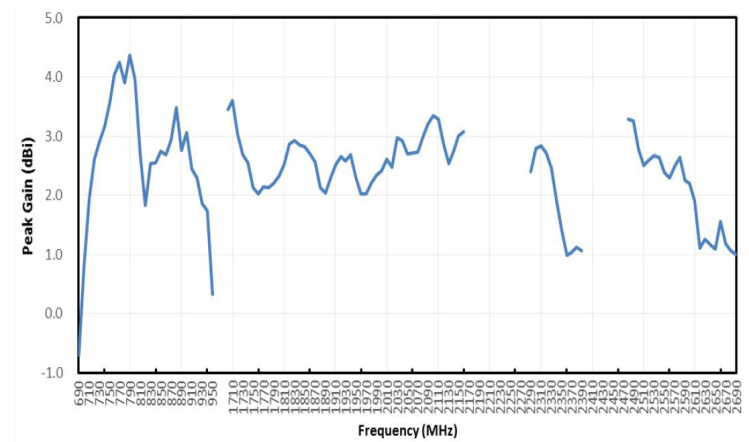
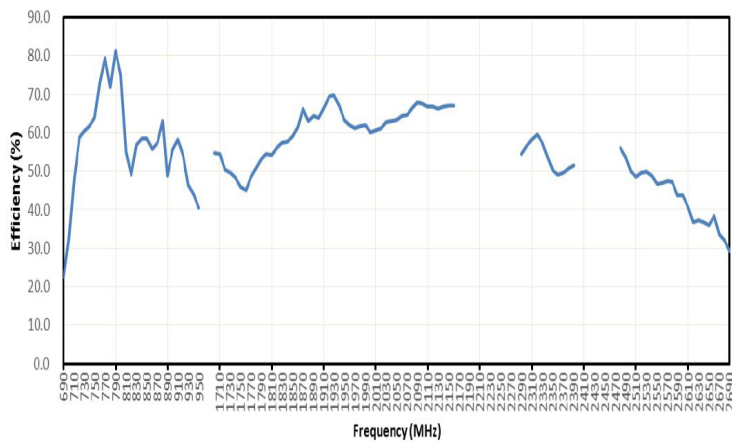
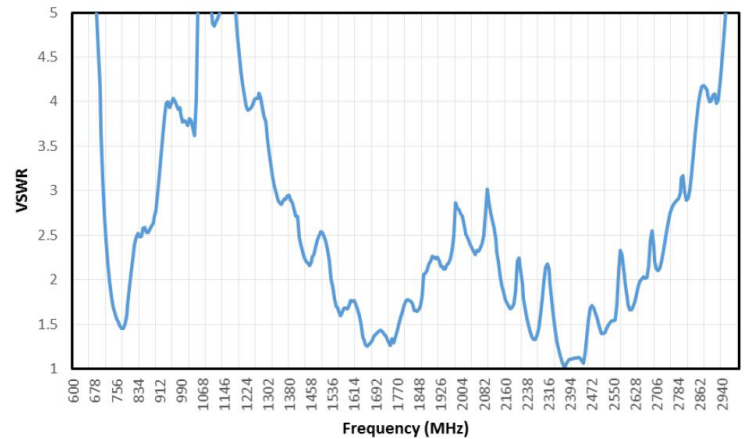
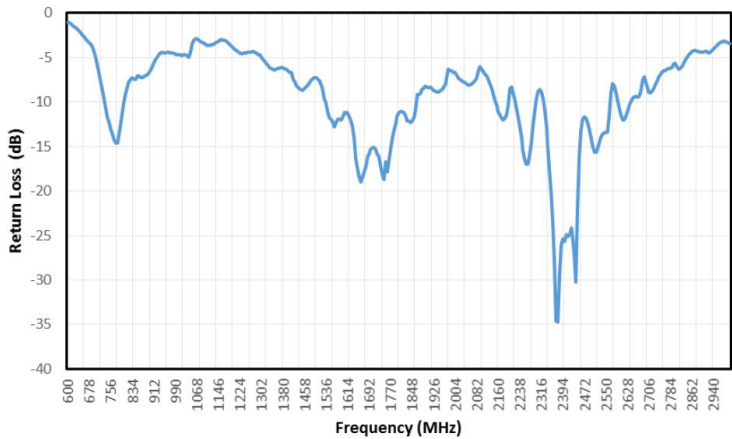
Cellular/LTE Antenna 1



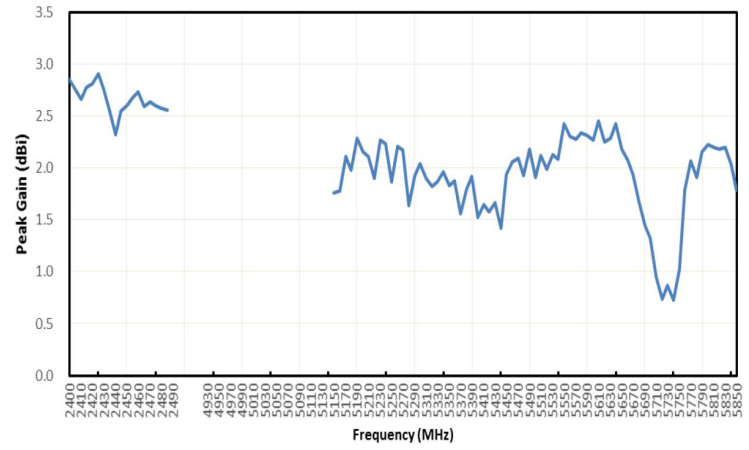
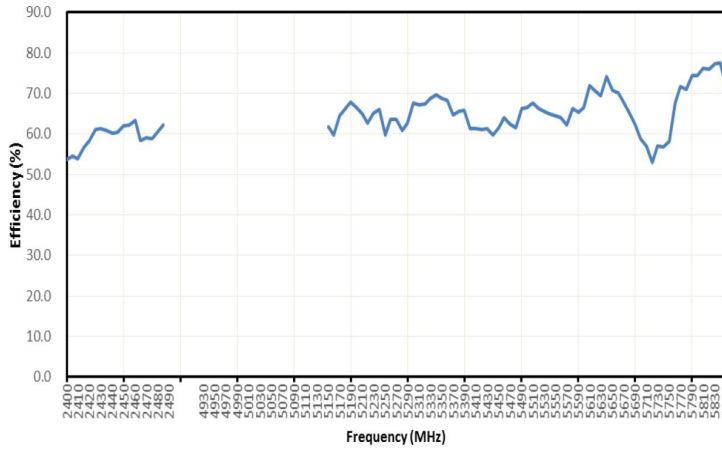
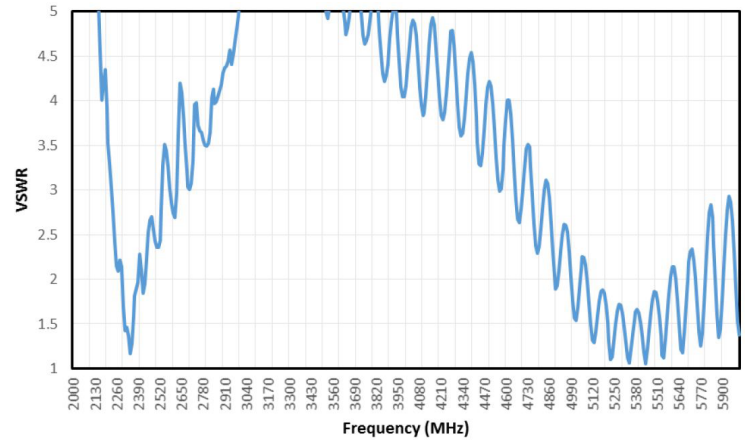
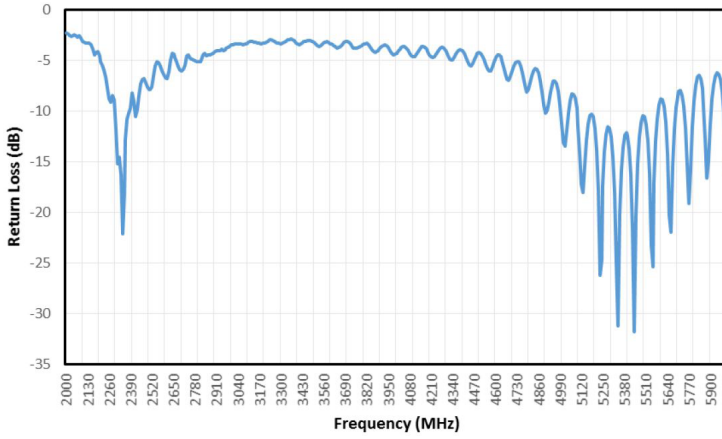
Cellular/LTE Antenna 1 (Cont.)



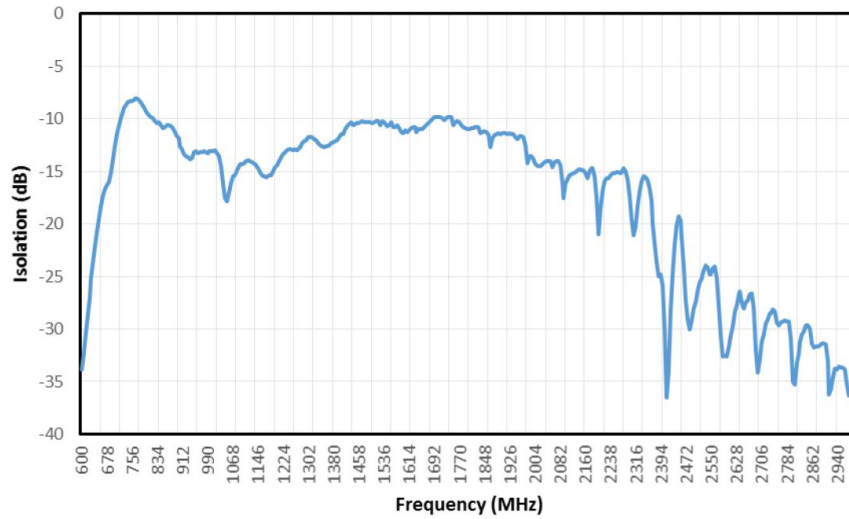
Cellular/LTE Antenna 2



WiFi Dual Band / WiFi Antenna 1

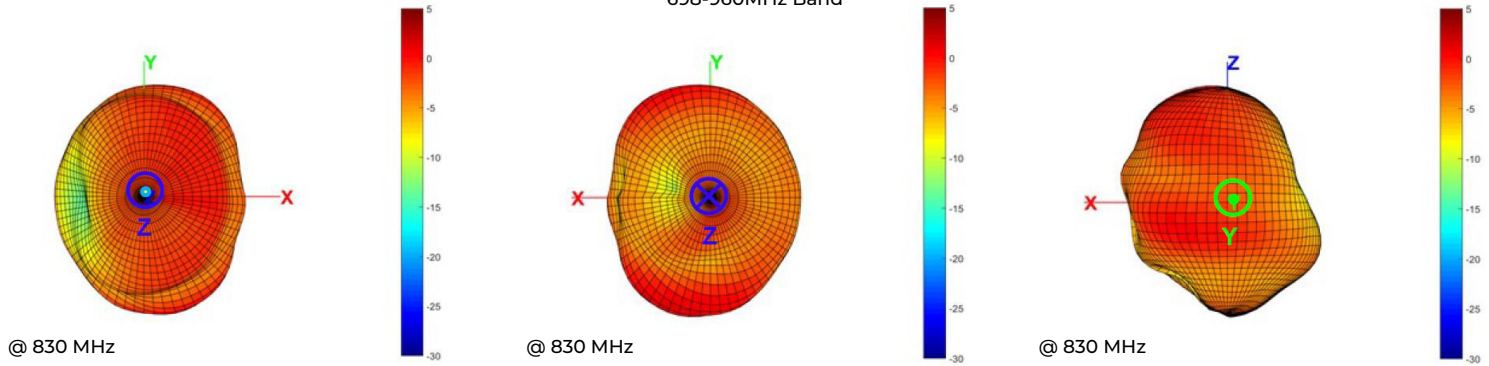


Isolation

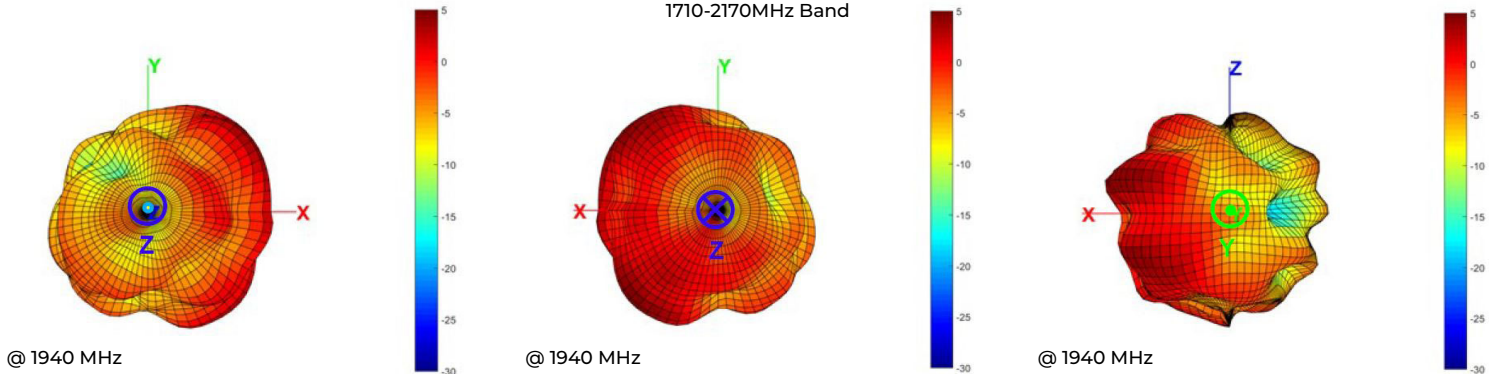


3D Radiation Gain Pattern Of LTE Antenna 1

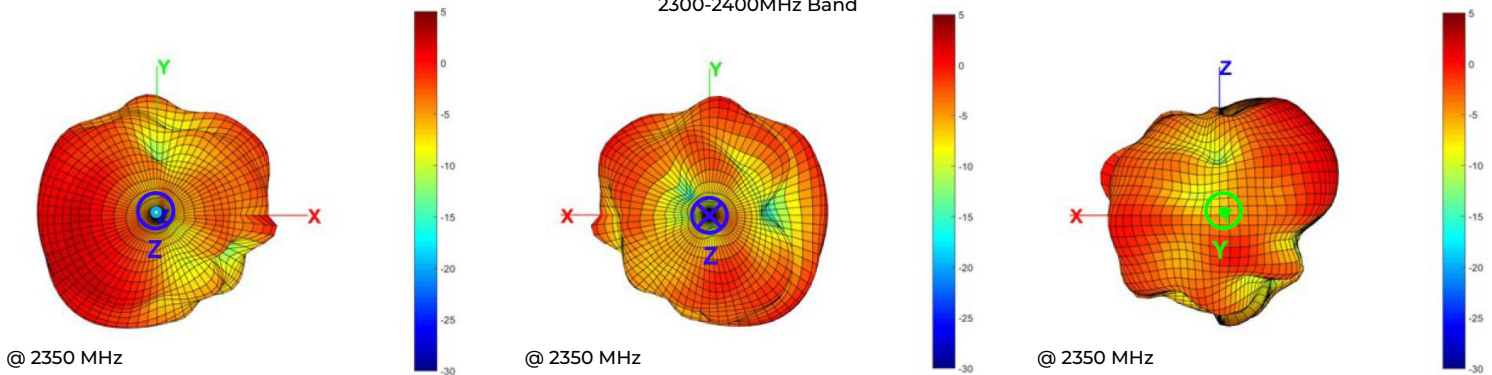
698-960MHz Band



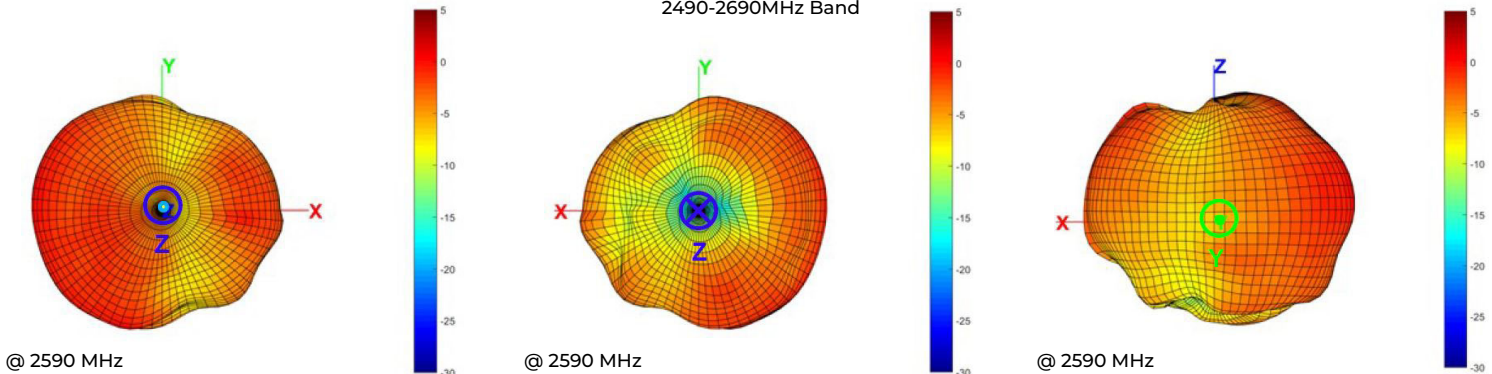
1710-2170MHz Band



2300-2400MHz Band

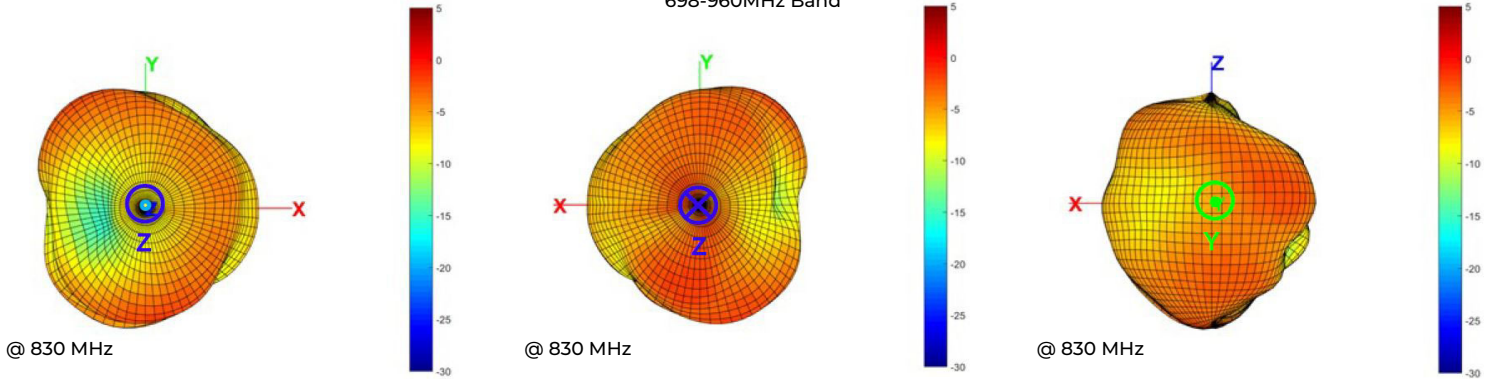


2490-2690MHz Band

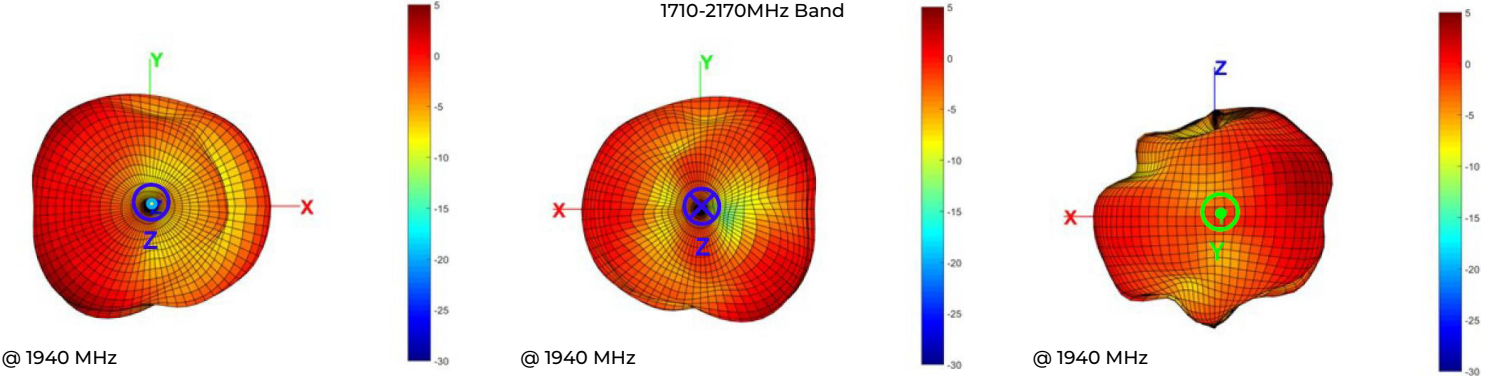


3D Radiation Gain Pattern Of LTE Antenna 2

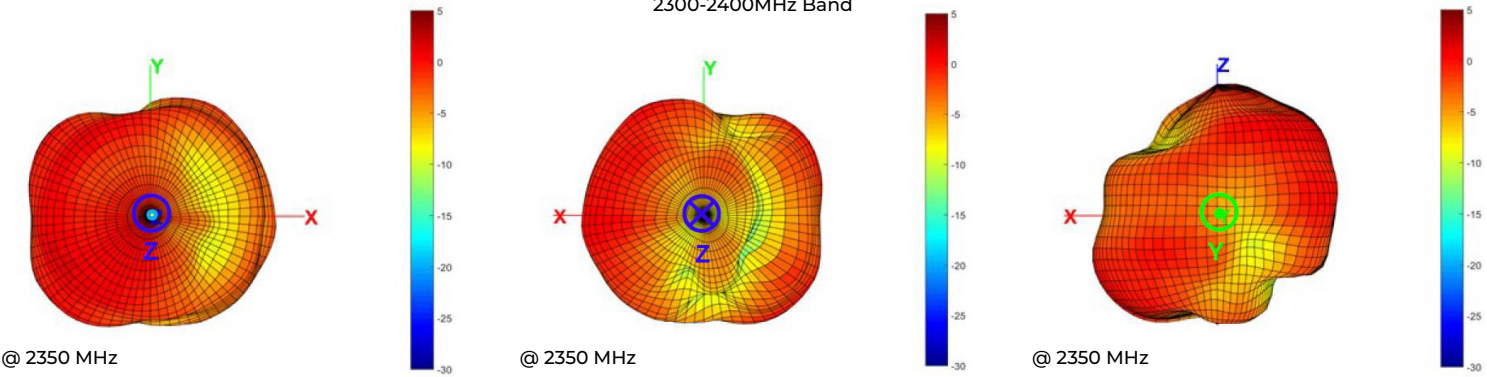
698-960MHz Band



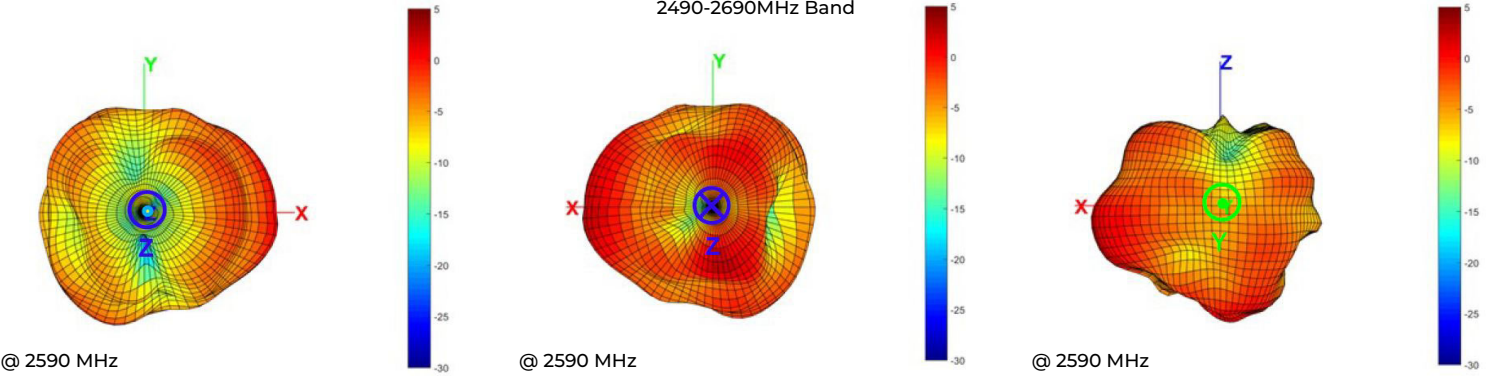
1710-2170MHz Band



2300-2400MHz Band

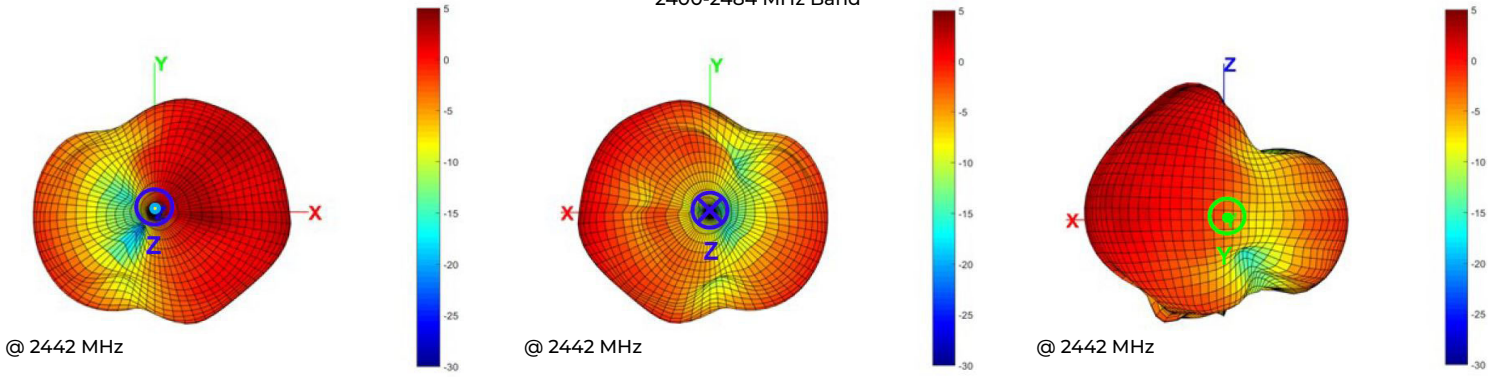


2490-2690MHz Band



3D Radiation Gain Pattern Of WiFi Antenna 1

2400-2484 MHz Band



5150-5850 MHz Band

