

LTE MIMO Adhesive Mount Antenne

Key Features

Cable 1 and 2: CELLULAR / LTE

- 698-960 MHz
- 1710-2170 MHz
- 2500-2700 MHz

Cable 3 and 4: 2.4/5.0 GHz ISM

- 2410-2490 MHz
- 4920-5925 MHz

Cable 5: GPS/GLONASS/BeiDou/QZSS/Galileo

- 1561-1606 MHz

Adhesive Mount

High Performance

Ground Plane Independent

Customizable Cable and Connector

Dimensions: 61.8 x 155.6 x 17.0 mm



Description

Antenna for glass or plastic mount designed for 4G LTE MIMO, 2.4/5.0 GHz WIFI MIMO and GNSS suitable for wide range of applications within industry.

1. Antenna and electrical specifications

Cable 1

Parameters	CELLULAR / LTE Antenna		
Standards	2G,3G and 4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698-960	1710-2170	2500-2700
Return Loss (dB)	~-11.8	~-13.4	~-10.3
VSWR	~2.1:1	~1.6:1	~2.0:1
Efficiency (%)	~47.0	~46.3	~43.5
Peak Gain (dBi)	~1.9	~3.3	~2.2
Average Gain (dB)	~-3.3	~-3.3	~-3.6
Impedance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	LMR195 (Other Cables Available)		

Cable 2

Parameters	CELLULAR / LTE Antenna		
Standards	2G,3G and 4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698-960	1710-2170	2500-2700
Return Loss (dB)	~-12.4	~-12.9	~-12.1
VSWR	~2.1:1	~1.7:1	~1.8:1
Efficiency (%)	~48.0	~49.7	~49.4
Peak Gain (dBi)	~2.0	~2.7	~1.6
Average Gain (dB)	~-3.2	~-3.0	~-3.1
Impedance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	LMR195 (Other Cables Available)		

Antenna Measurement Conditions:

Mounted on Plastic Plate of 30 x 30 cm

200 cm of Cable LMR195

Measured in Certified CTIA 3D Anechoic Chamber

Cable 3

Parameters	2.4/5.0 GHz ISM Antenna	
Standards	WiFi, BT, ZigBee, ISM	
Band (MHz)	2.4 GHz	5.0 GHz
Frequency (MHz)	2410-2490	4920-5925
Return Loss (dB)	~-19.6	~-14.3
VSWR	~1.3:1	~1.6:1
Efficiency (%)	~61.7	~74.0
Peak Gain (dBi)	~3.9	~4.0
Average Gain (dB)	~-2.1	~-1.3
Impedance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	25	
Connector Type	RP-SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LMR195 Standard (Other Cables Available)	

Cable 4

Parameters	2.4/5.0 GHz ISM Antenna	
Standards	WiFi, BT, ZigBee, ISM	
Band (MHz)	2.4 GHz	5.0 GHz
Frequency (MHz)	2410-2490	4920-5925
Return Loss (dB)	~-18.7	~-14.6
VSWR	~1.3:1	~1.6:1
Efficiency (%)	~52.5	~69.6
Peak Gain (dBi)	~4.5	~3.9
Average Gain (dB)	~-2.8	~-1.6
Impedance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	25	
Connector Type	RP-SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LMR195 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on Plastic Plate of 30 x 30 cm

200 cm of Cable LMR195

Measured in Certified CTIA 3D Anechoic Chamber

Cable 5

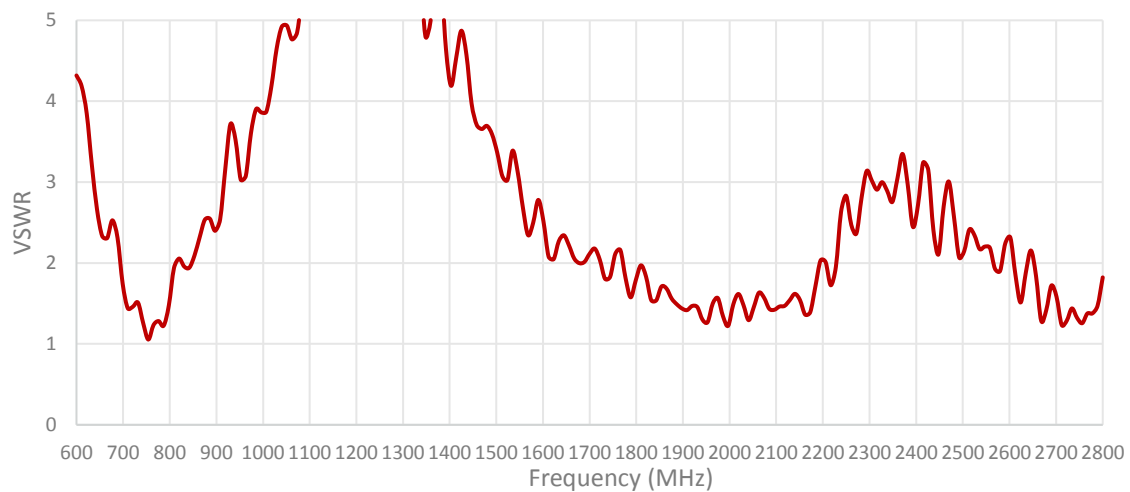
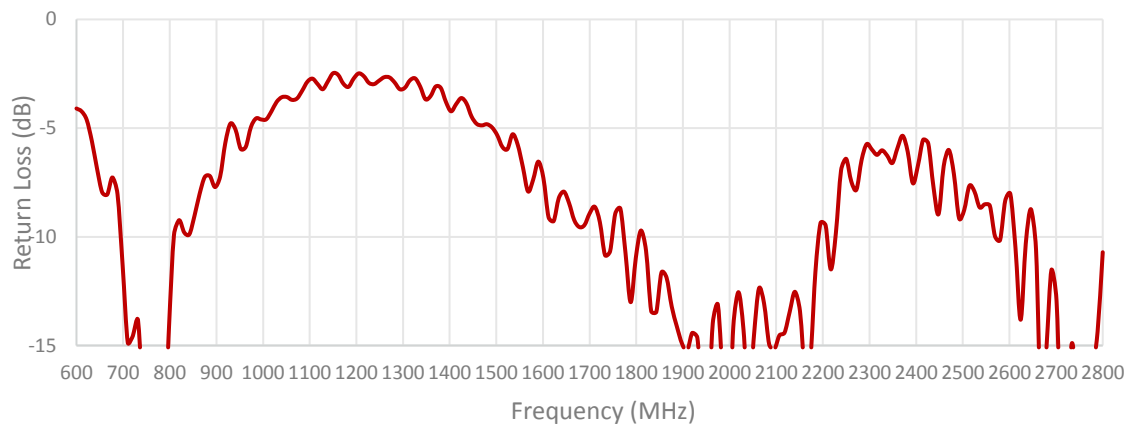
Parameters	GPS/GLONASS/BeiDou Antenna		
Standards	BeiDou	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1561	1575	1602
Frequency(MHz)	1561.098	1575.42	1598-1610
Patch Size (mm)	25 x 25 x 4		
Return Loss (dB)	<=-15.0 dB		
VSWR	<=1.4:1 dB		
Impedance	50		
Radiation Pattern	Hemispherical		
Polarization	RHCP		
Saw Filter	Pre-filter		
Active Gain (dB)	28 @ 2.7 V		
Noise Figure (dB)	1.5 Typ		
Voltage (V)	1.5 – 3.6		
Current Consumption (mA)	9 Typ		
Power Consumption (mW)	24.3 Typ		
ESD Protection (kV)	2kV		
Connector Type	SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	LMR100 Standard (Other Cables Available)		

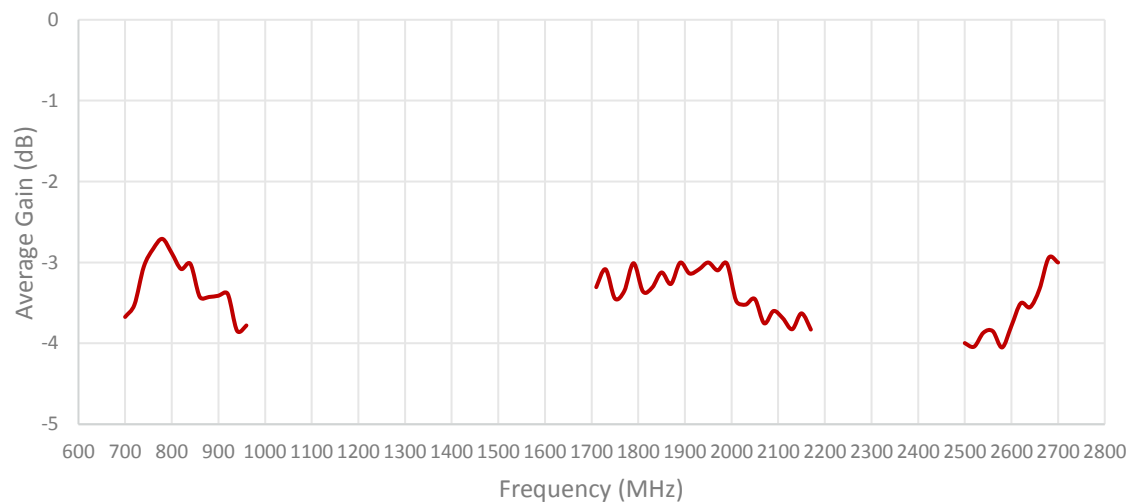
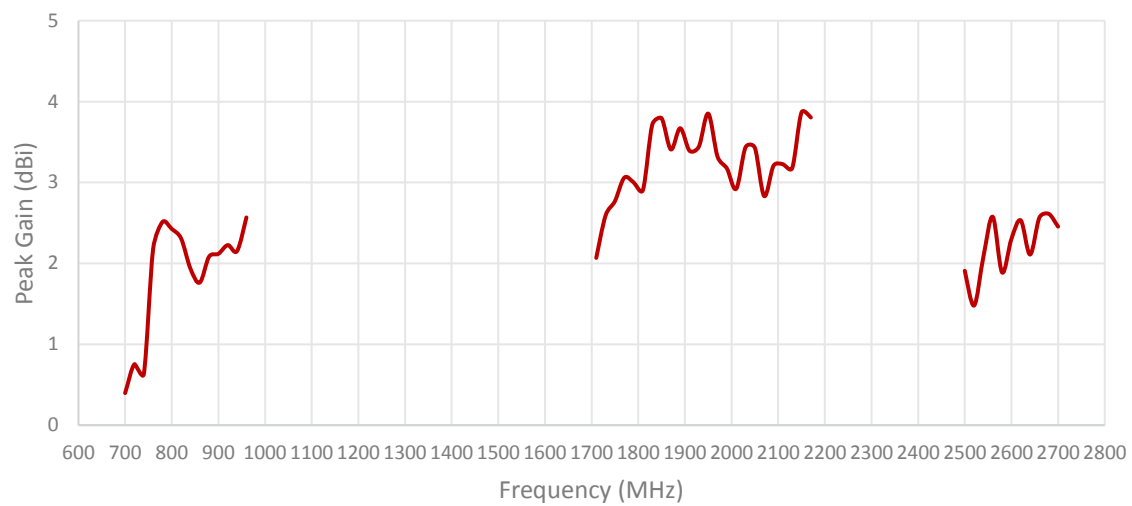
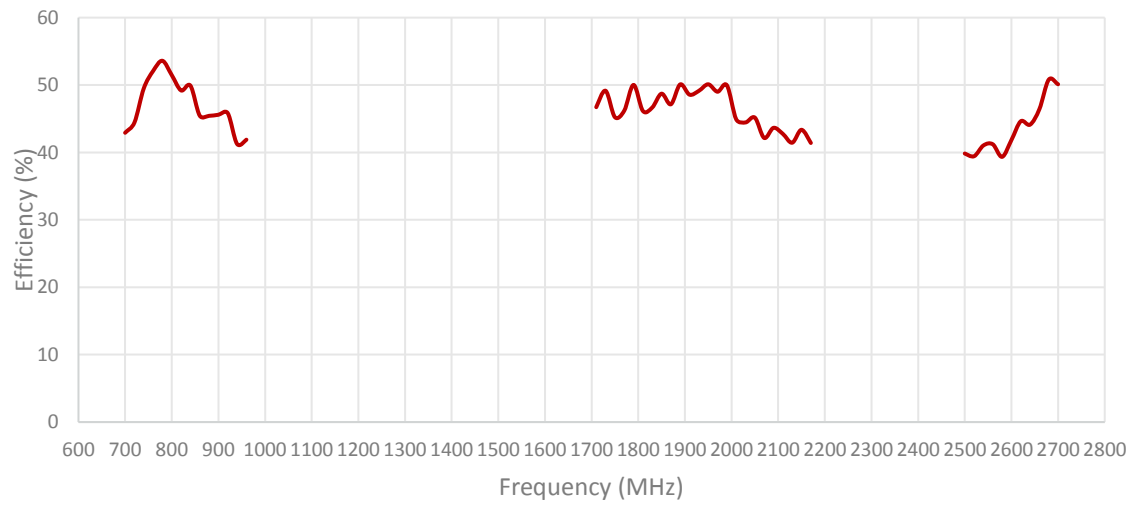
2. Mechanical and environmental specifications

Specifications	
Mounting Type	Adhesive Mount
Dimensions (mm)	61.8 x 155.6 x 17.0
Radome Type	ABS UV Stable
Radome color	Black
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

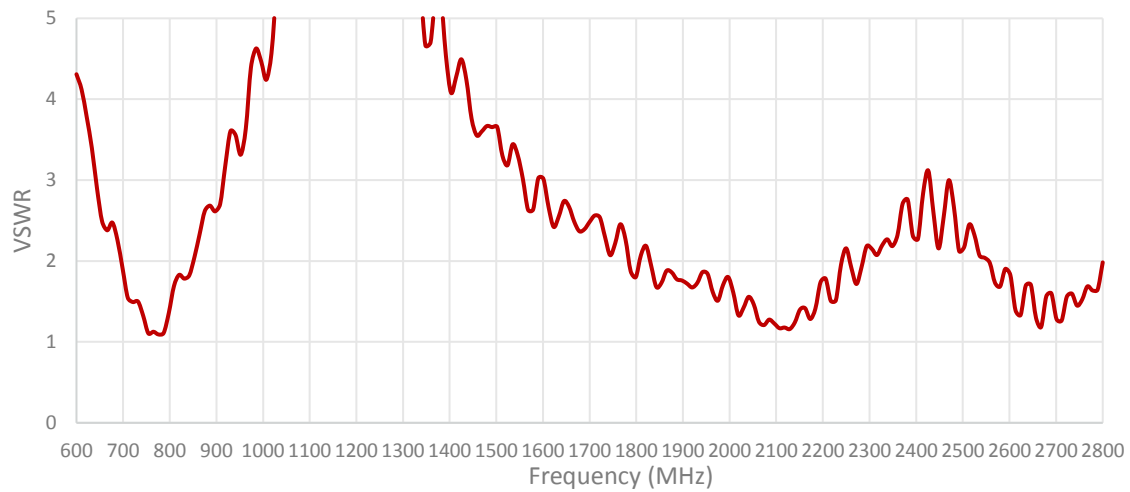
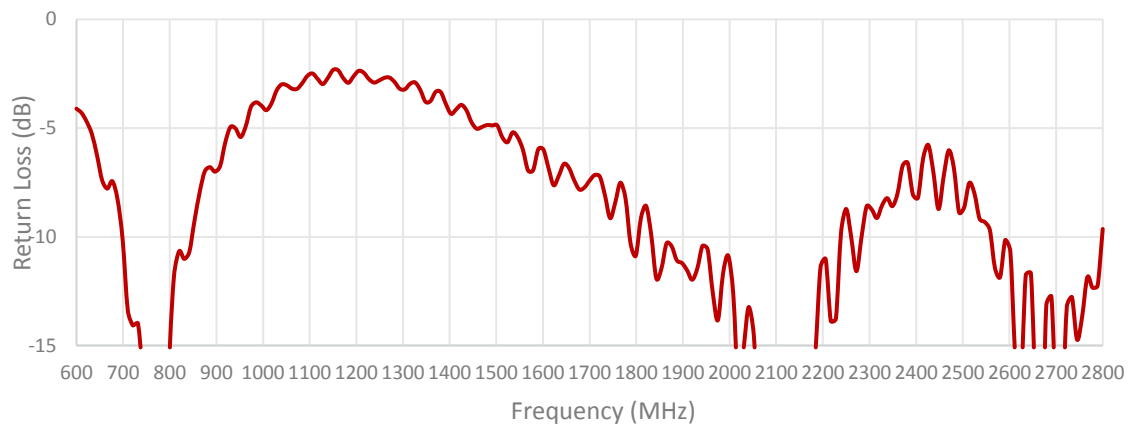
3. Antenna parameters

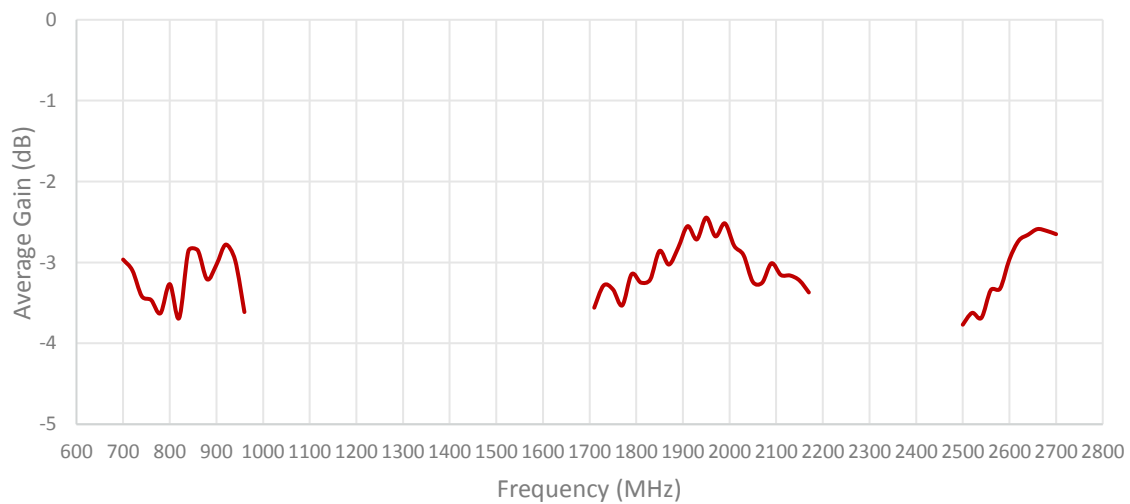
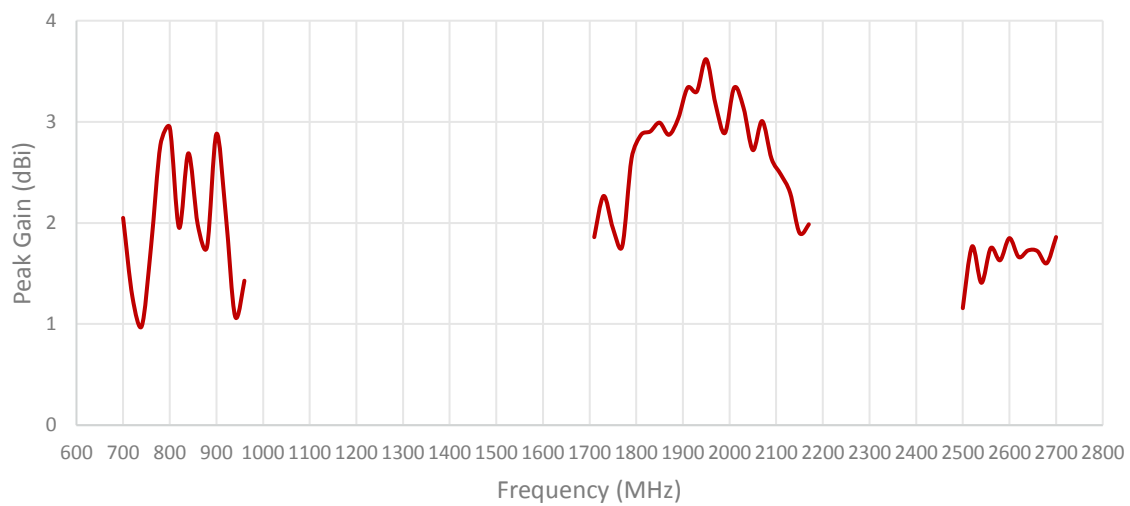
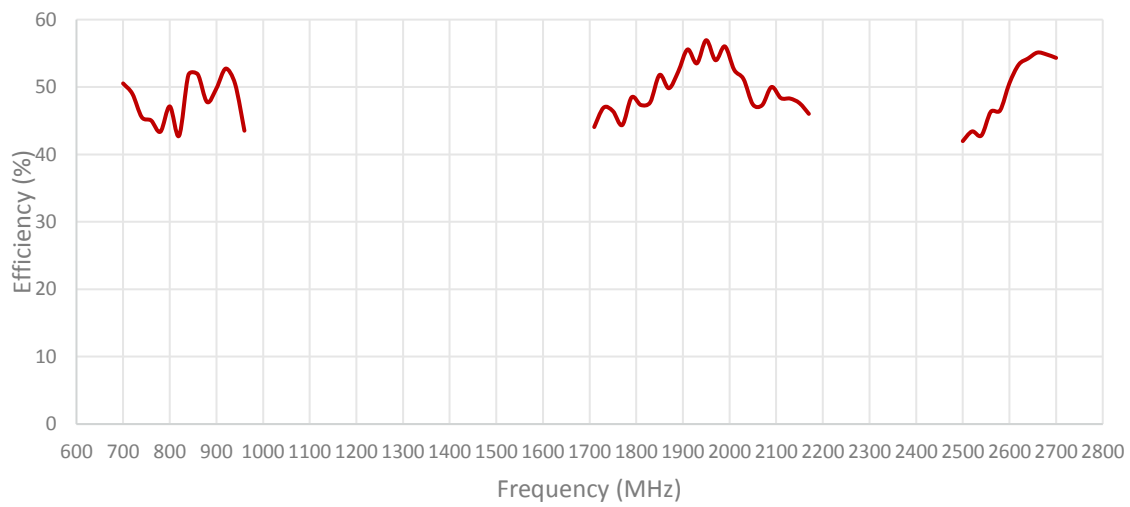
Cable 1: CELLULAR/LTE



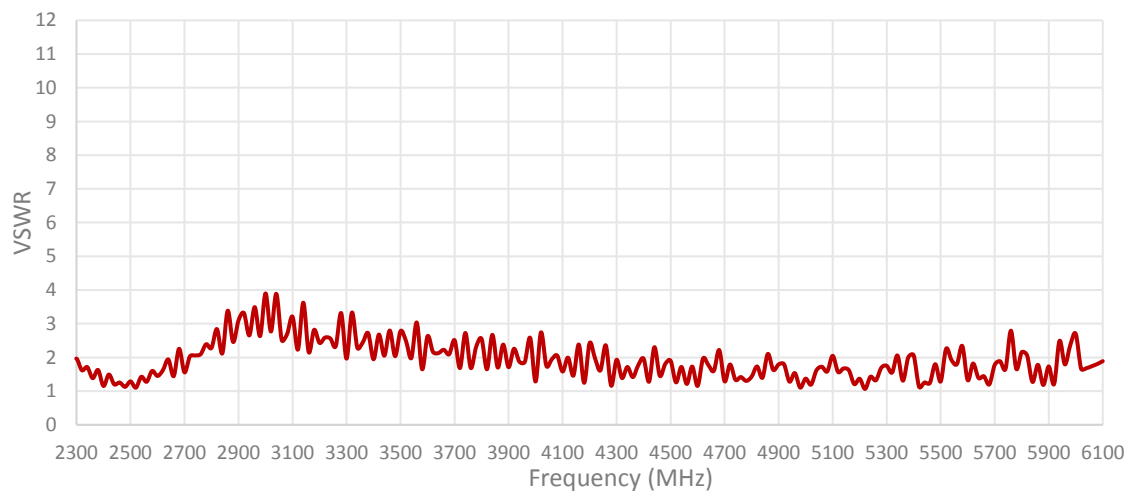
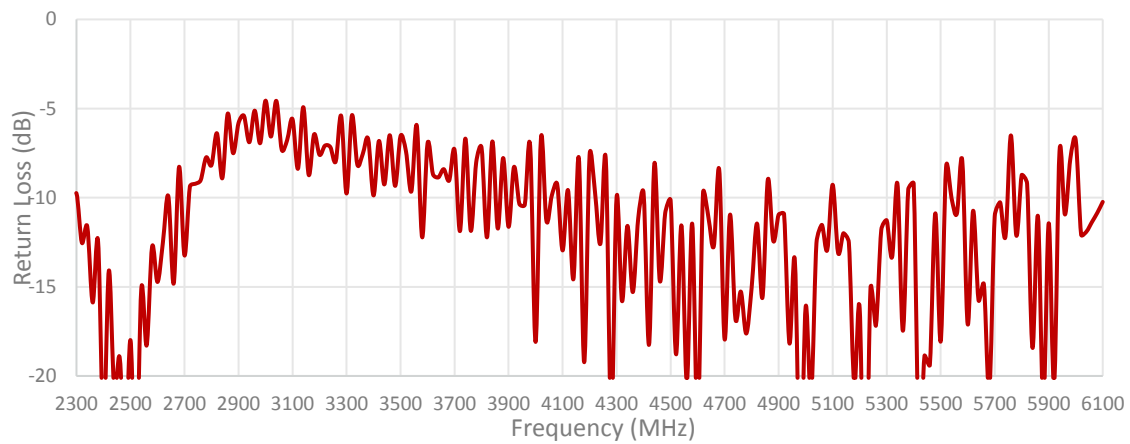


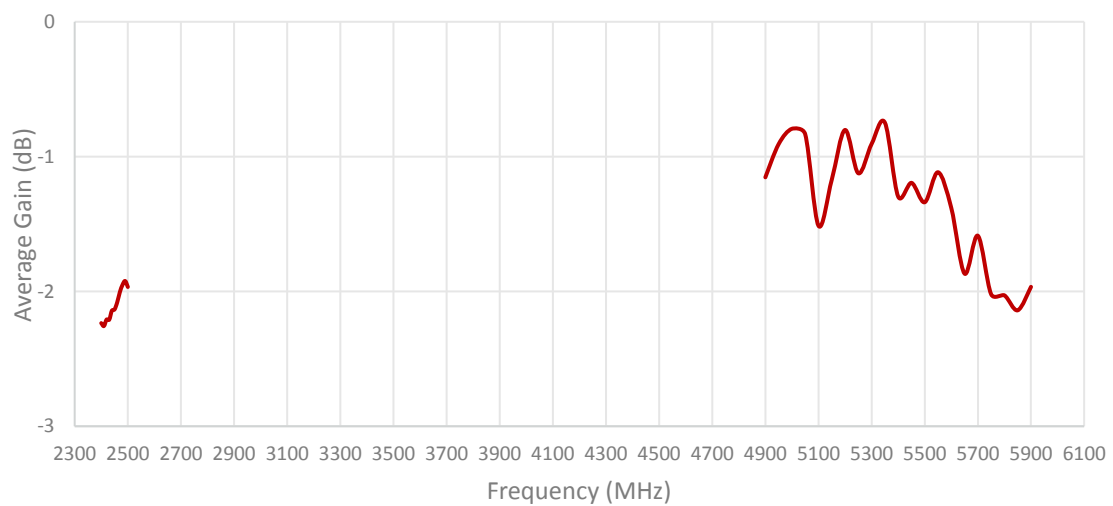
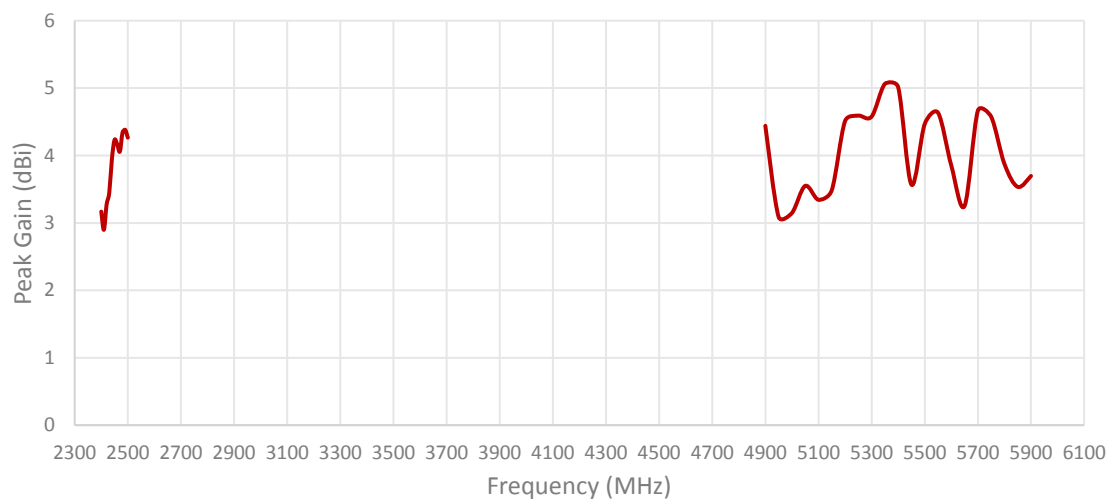
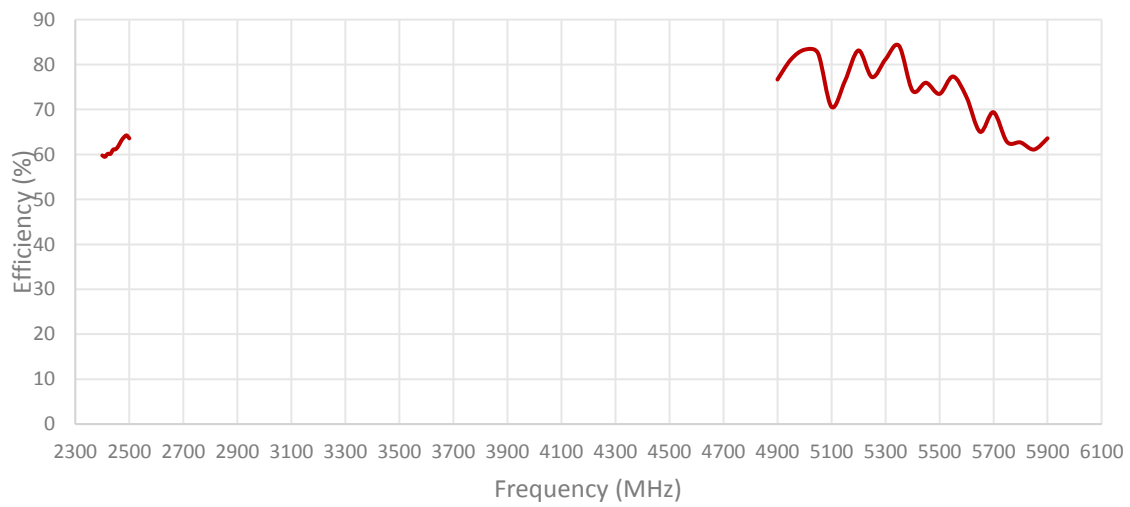
Cable 2: CELLULAR/LTE



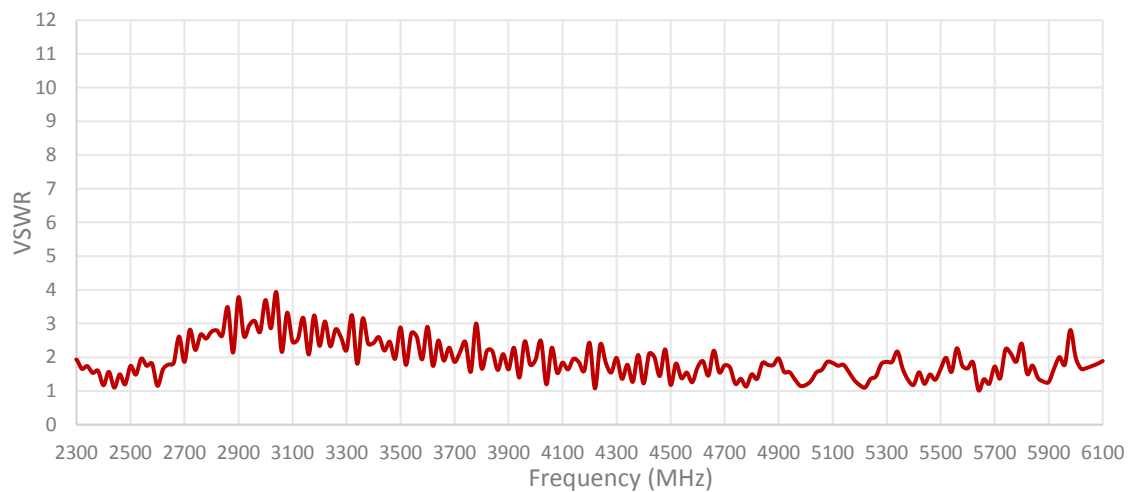
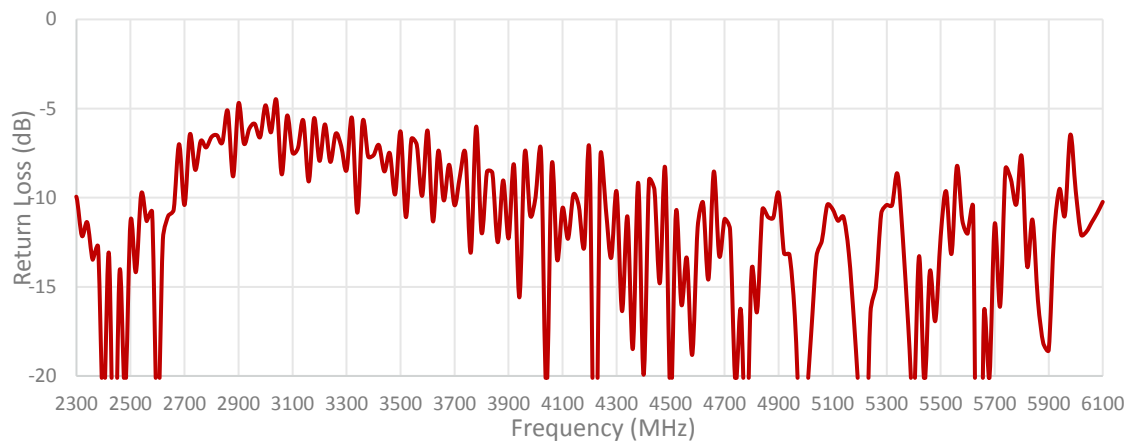


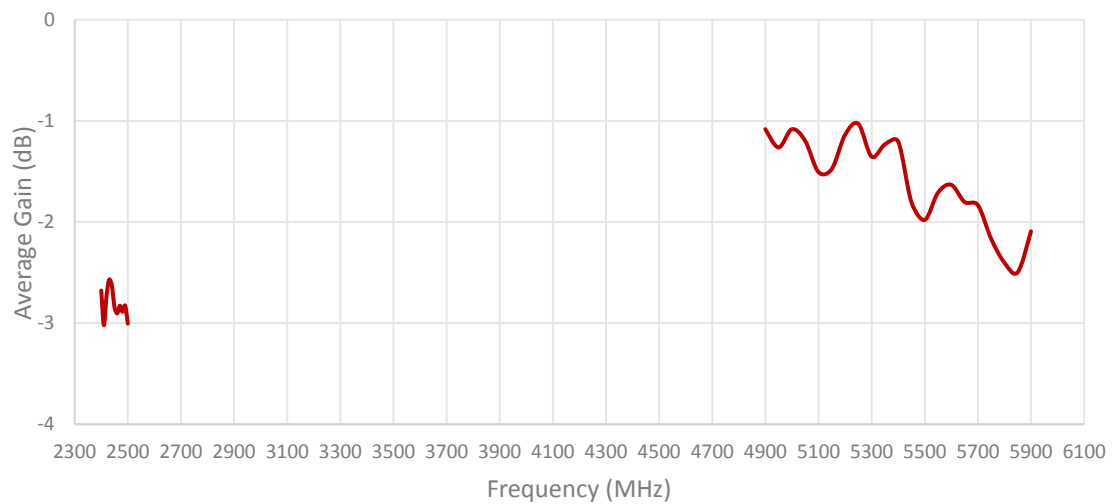
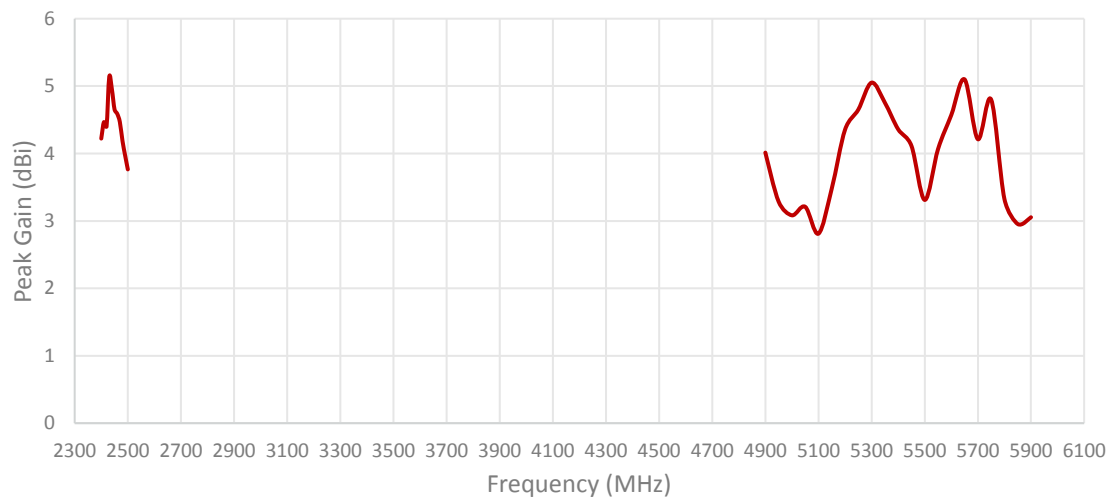
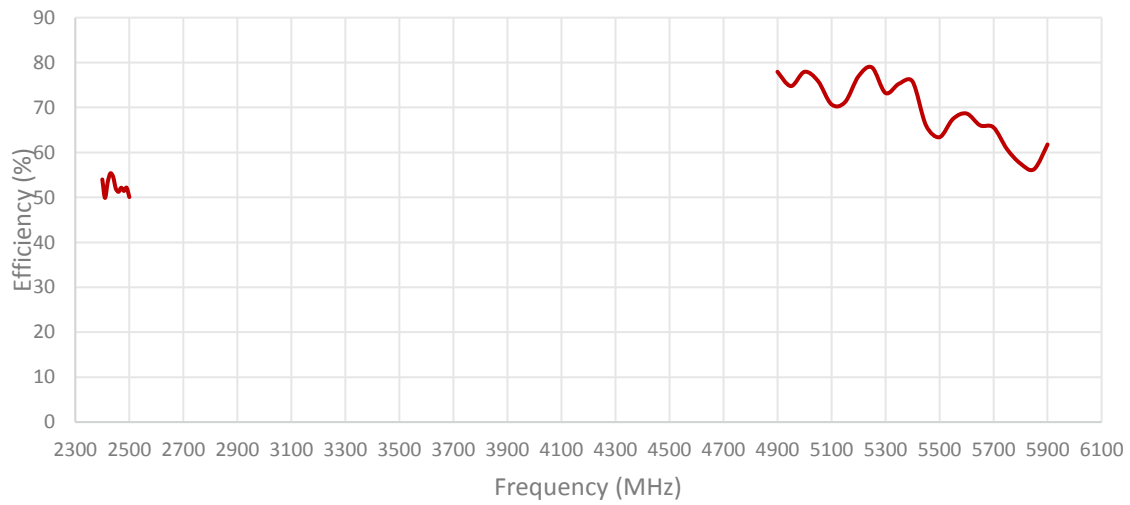
Cable 3: 2.4/5.0 GHz ISM



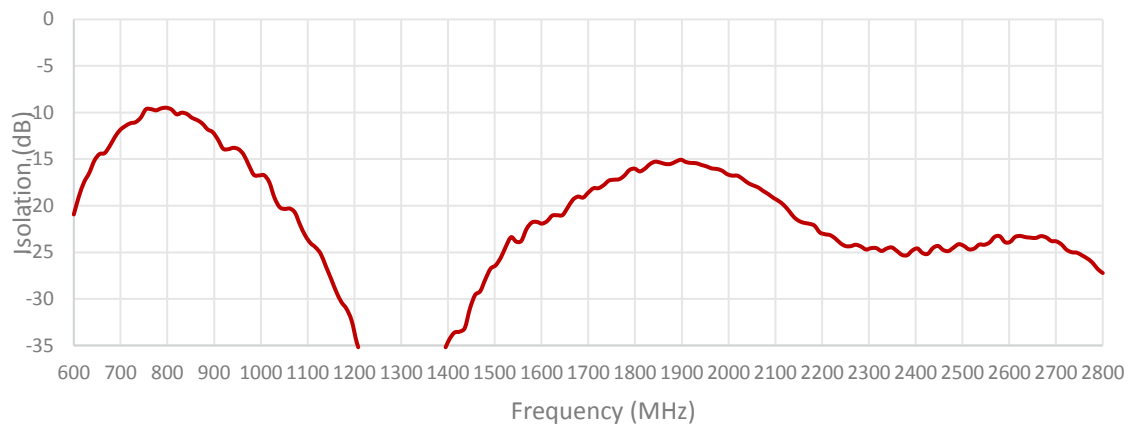


Cable 4: 2.4/5.0 GHz ISM

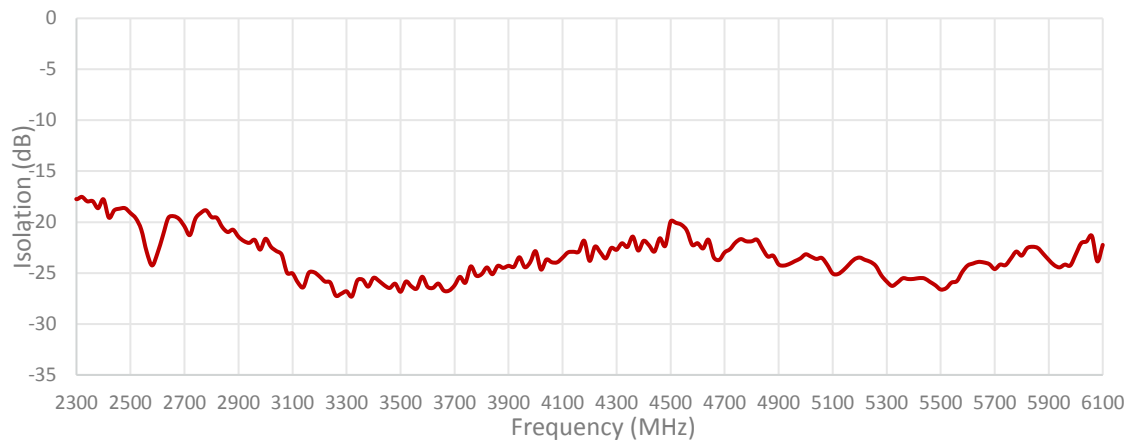




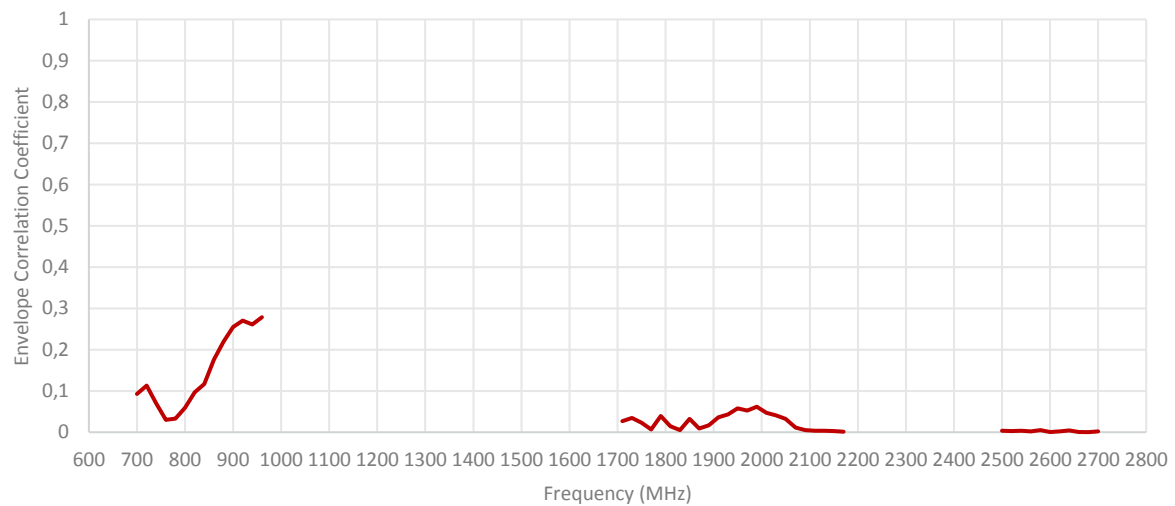
ISOLATION FOR CABLES 1 AND 2 (CELLULAR/LTE)



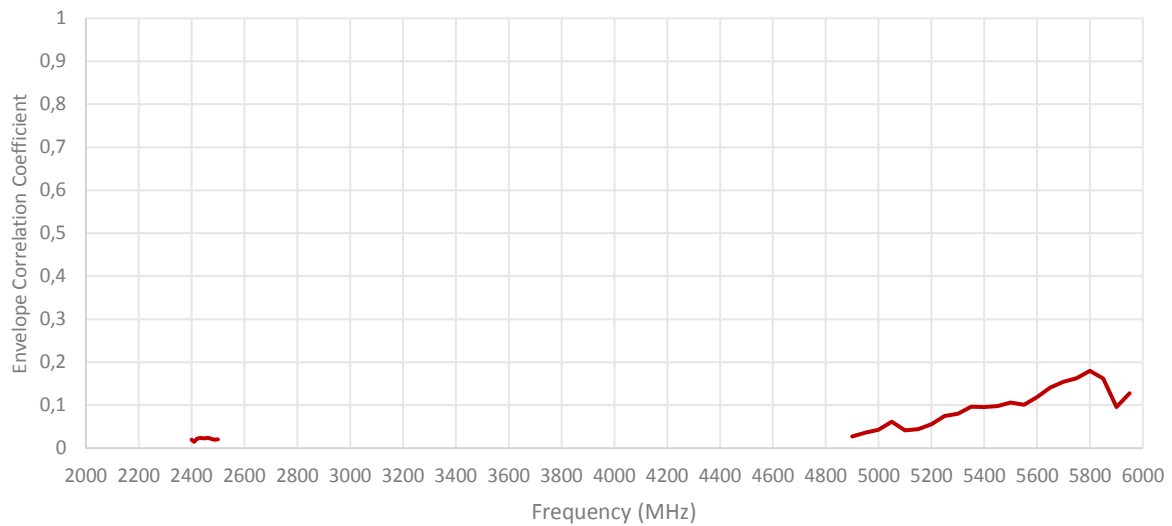
ISOLATION FOR CABLES 3 AND 4 (2.4/5.0 GHz ISM)

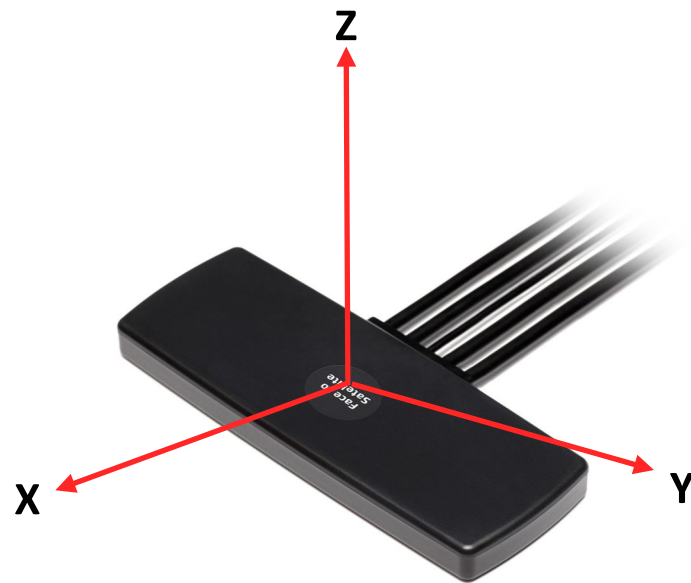


ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2 (CELLULAR/LTE)



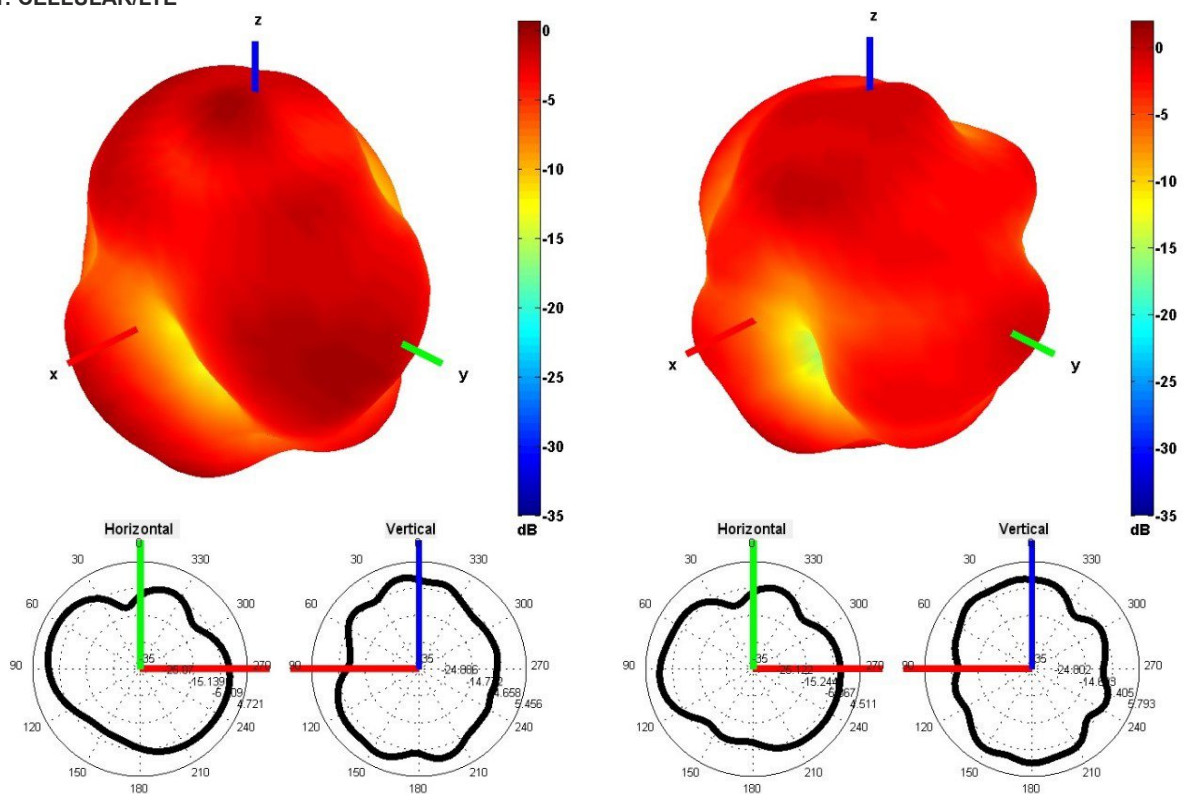
ENVELOPE CORRELATION COEFFICIENT FOR CABLES 3 AND 4 (2.4/5.0 GHz ISM)



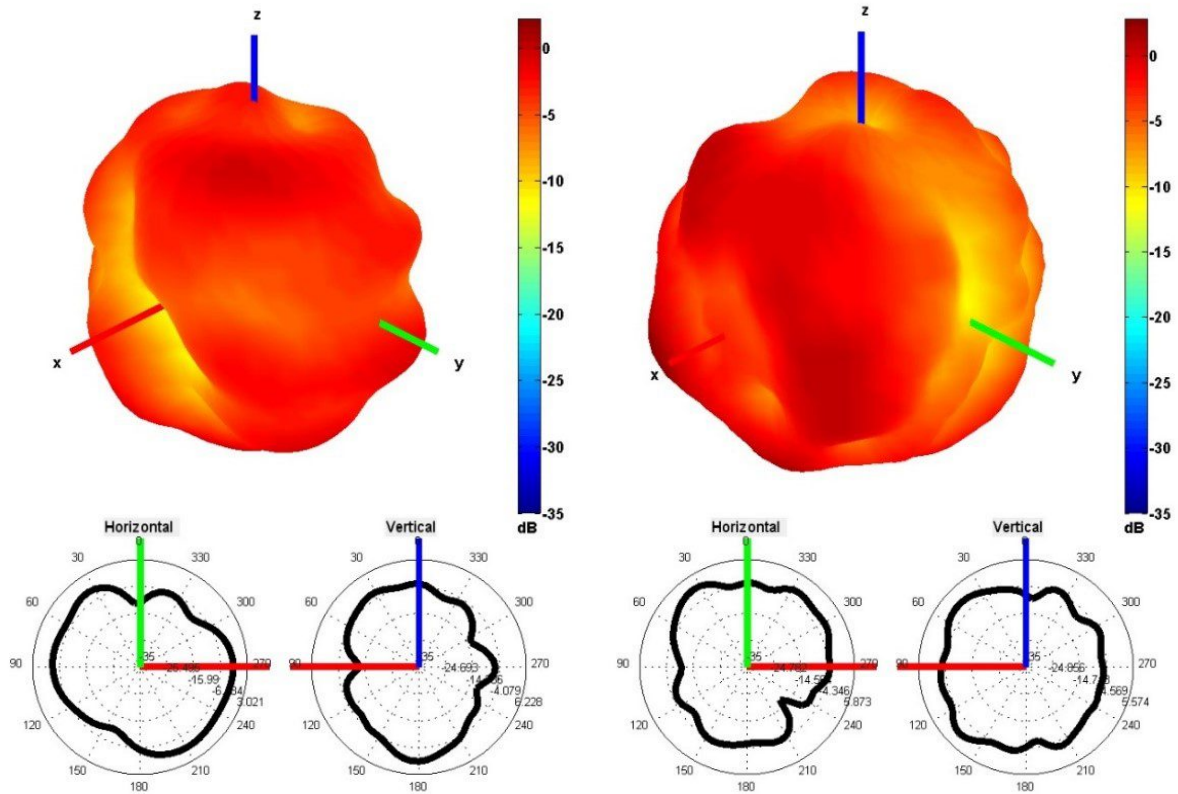


Radiation pattern reference

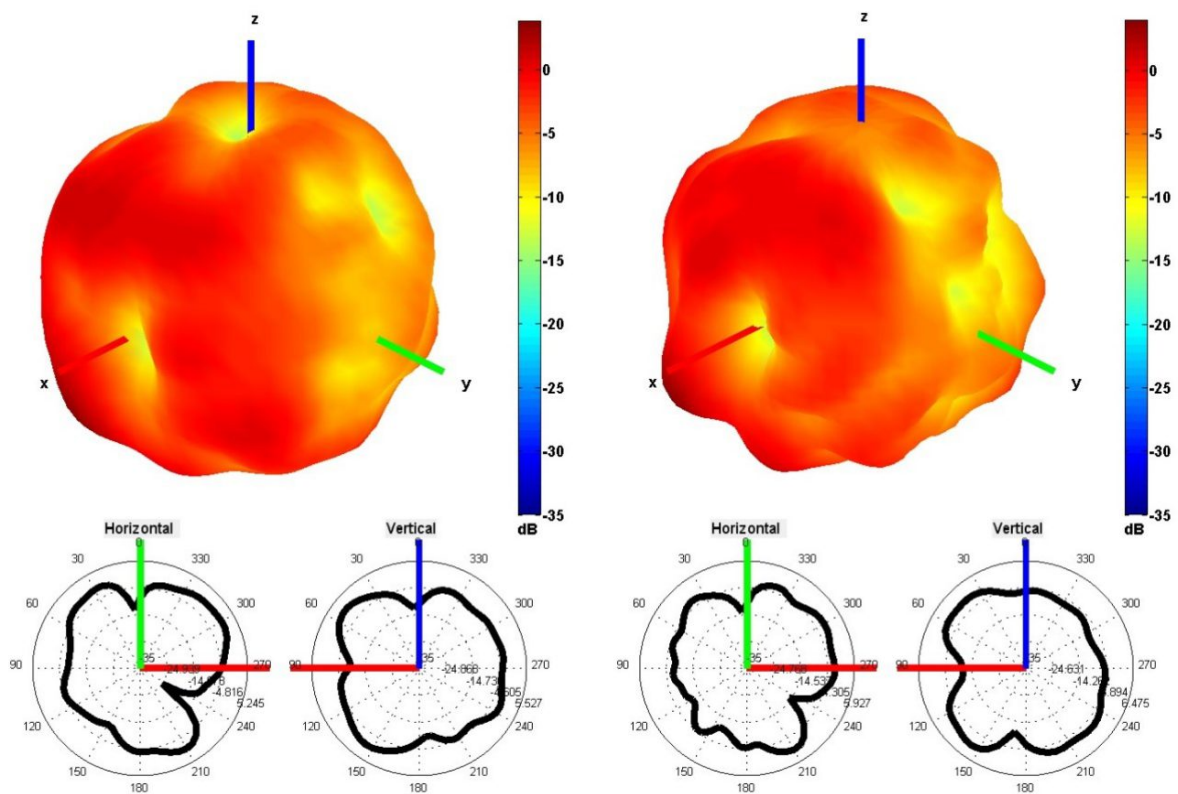
Cable 1: CELLULAR/LTE



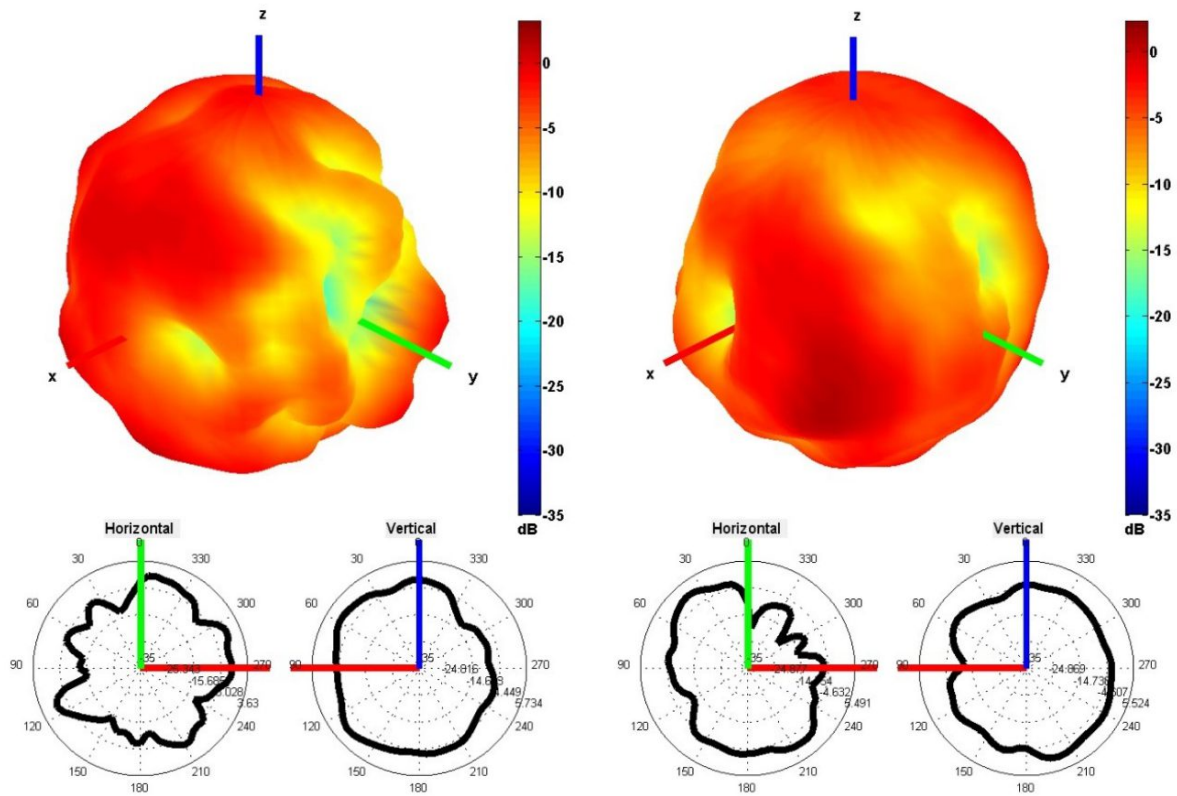
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

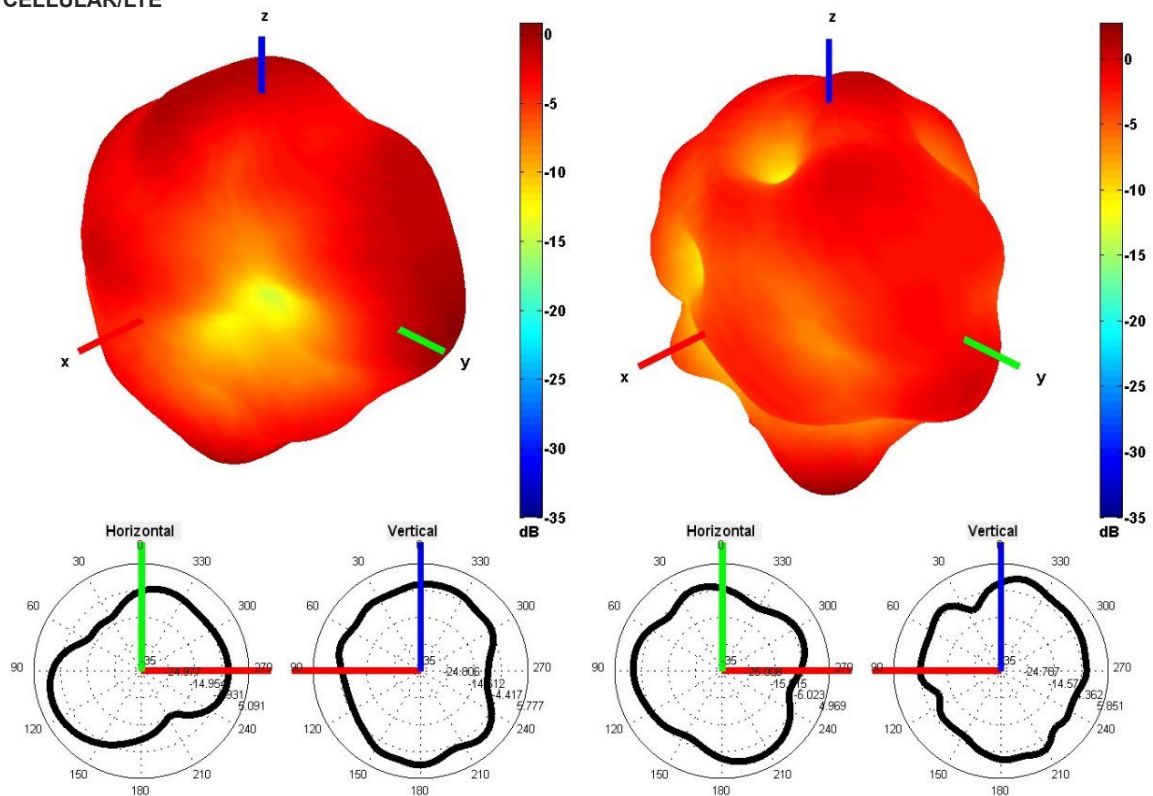


1850 and 1950 MHz Radiation pattern

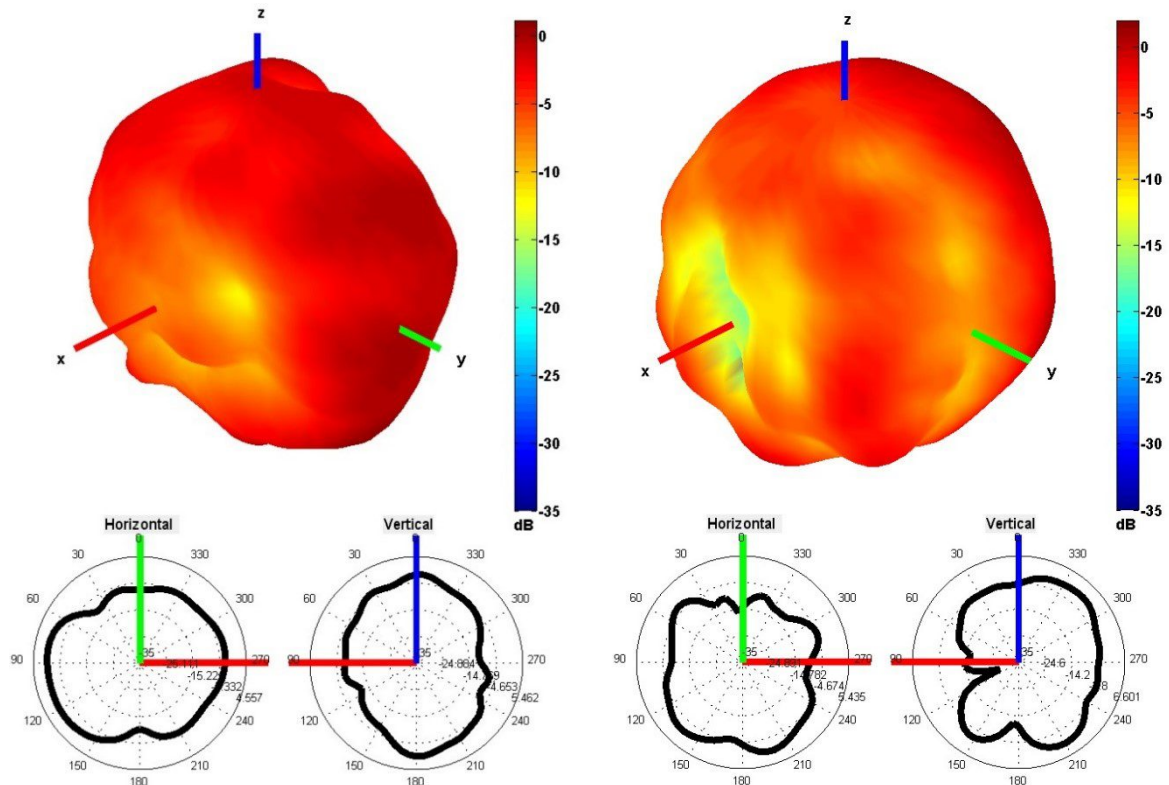


2100 and 2600 MHz Radiation pattern

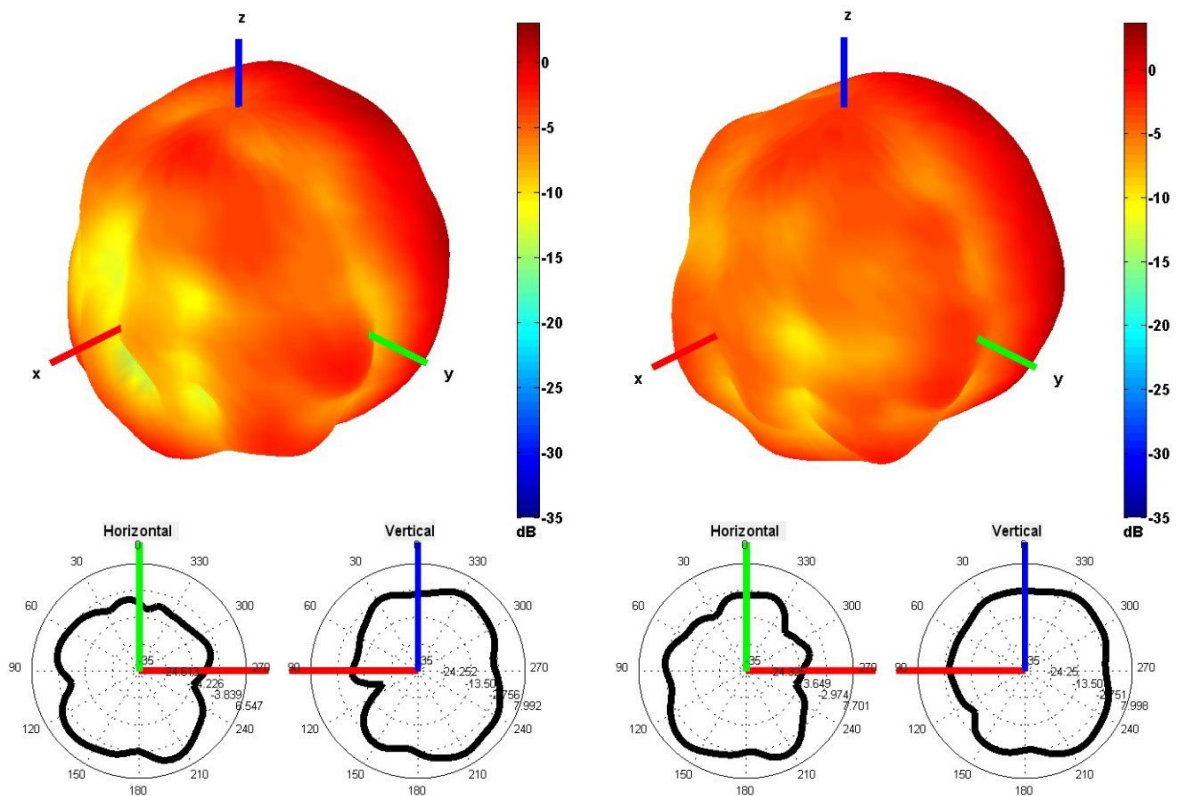
Cable 2: CELLULAR/LTE



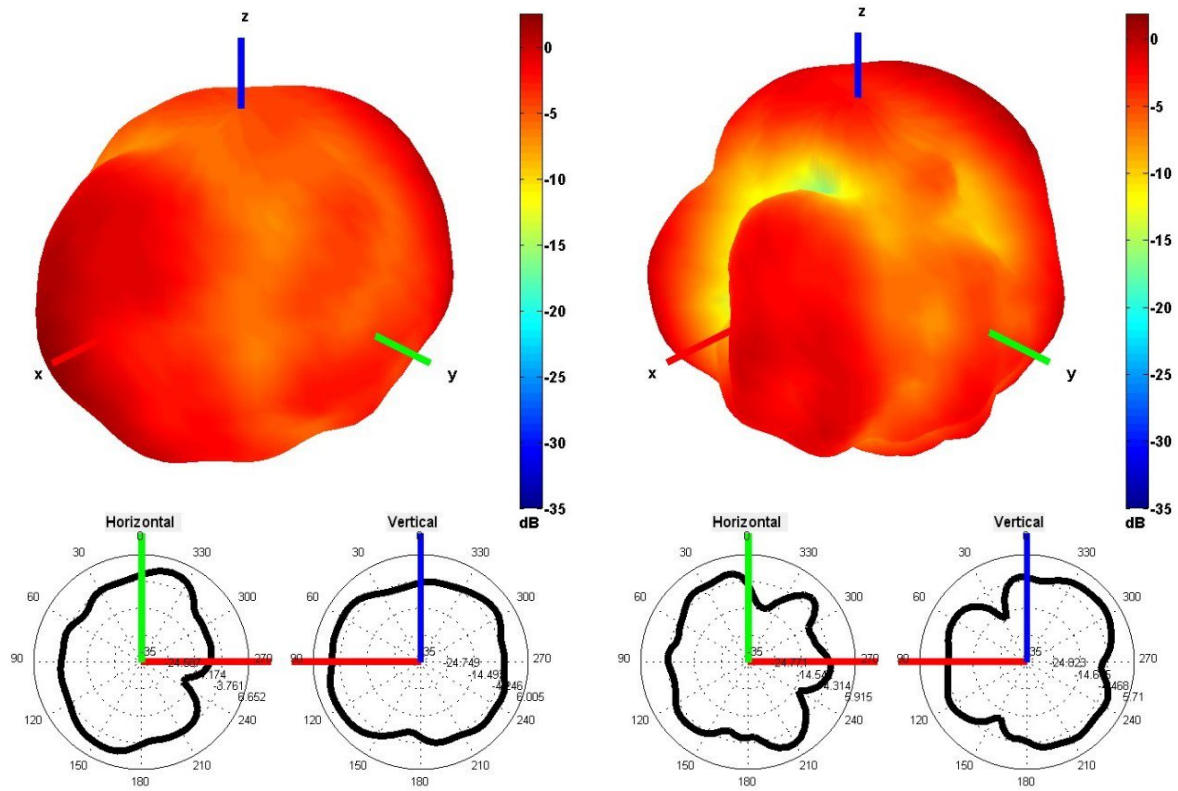
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

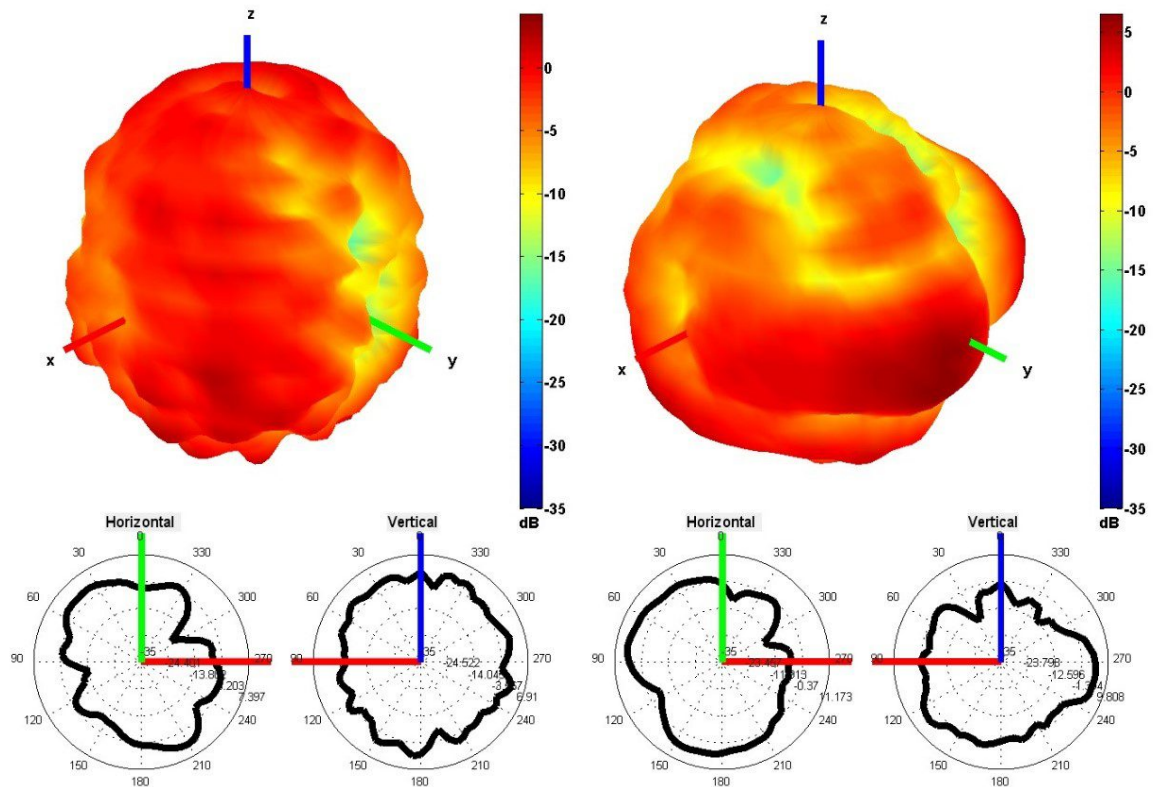


1850 and 1950 MHz Radiation pattern



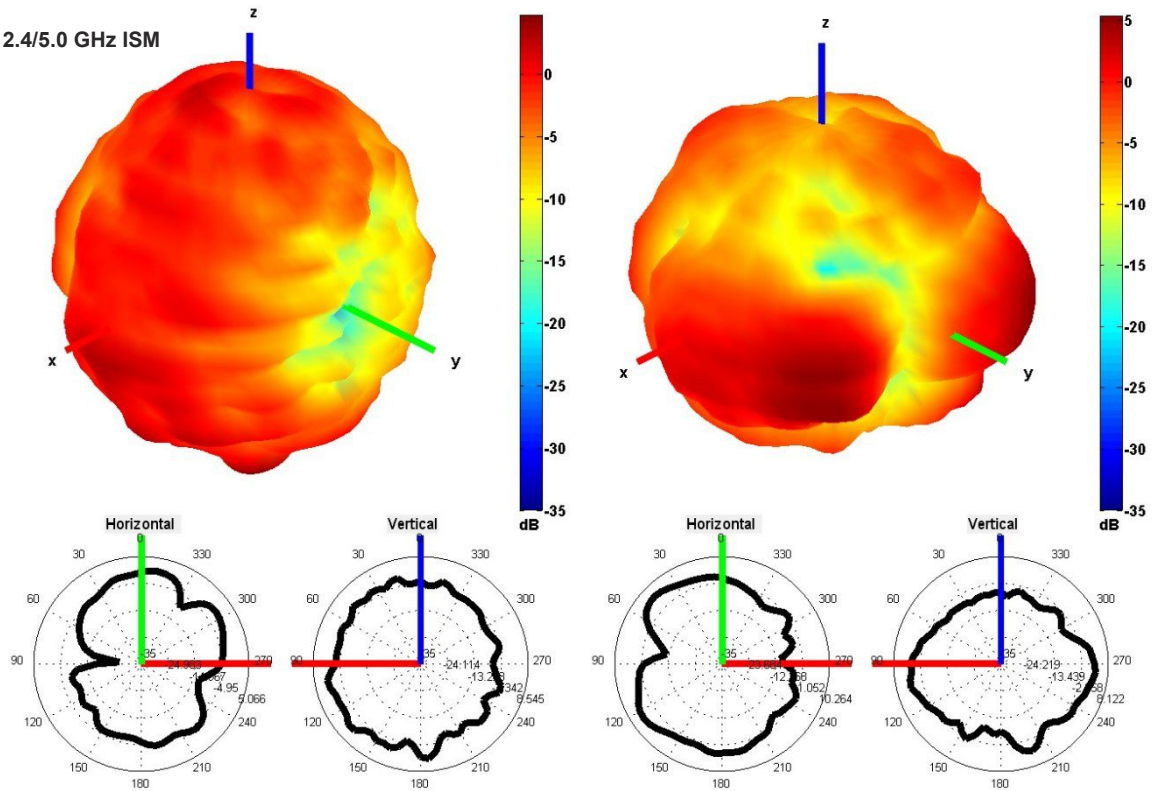
2100 and 2600 MHz Radiation pattern

Cable 3: 2.4/5.0 GHz ISM



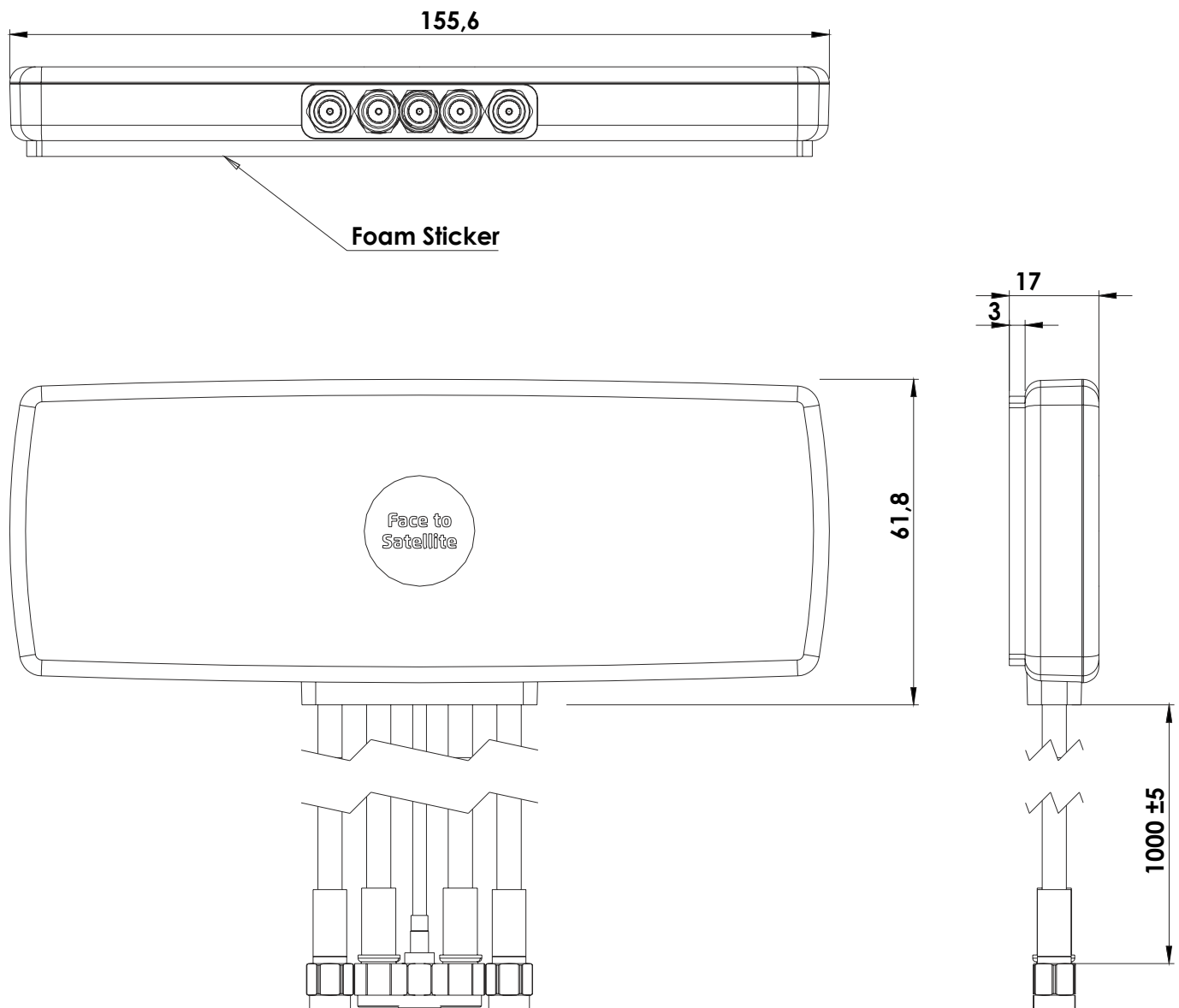
2450 and 5500 MHz Radiation pattern

Cable 4: 2.4/5.0 GHz ISM



2450 and 5500 MHz Radiation pattern

4. Antenna drawings



5. Antenna Images

