

AMC-ANT-2J7724Ba

4G LTE MIMO screw mount antenna

Features

- Cellular/LTE:
 - 698 – 960MHz
 - 1710 – 2170MHz
 - 2500 – 2700MHz
- Screw mount
- High performance
- Ground plane dependent
- Dimensions: \varnothing 60 x 69mm
- Certificates: IP67, IP69, IK09
- Customisable cable and connectors



1. Antenna and electrical specifications

Cable 1

Parameters	Cellular/LTE antenna		
Standards	2G/3G/4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698 - 960	1710 - 2170	2500 - 2700
Return loss (dB)	~-6.9	~-15.3	~-16.7
VSWR	~2.9:1	~1.4:1	~1.4:1
Efficiency (%)	~37.8	~53.3	~54.9
Peak gain (dBi)	~-0.8	~3.6	~4.1
Average gain (dB)	~-4.3	~-2.7	~-2.6
Impedance (Ohms)	50		
Polarisation	Linear		
Radiation pattern	Omni-Directional		
Max. input power (W)	25		
Connector Type	SMA male standard (other connectors available)		
Cable Length	3 metres standard (other lengths available)		
Cable Type	LMR100 standard (other cables available)		



Cable 2

Parameters	Cellular/LTE antenna		
Standards	2G/3G/4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698 - 960	1710 - 2170	2500 - 2700
Return loss (dB)	~-6.8	~-14.3	~-9.3
VSWR	~2.8:1	~1.5:1	~2.1:1
Efficiency (%)	~38.7	~52.3	~42.1
Peak gain (dBi)	~-0.6	~2.9	~3.0
Average gain (dB)	~-4.2	~-2.8	~-3.8
Impedance (Ohms)	50		
Polarisation	Linear		
Radiation pattern	Omni-Directional		
Max. input power (W)	25		
Connector Type	SMA male standard (other connectors available)		
Cable Length	3 metres standard (other lengths available)		
Cable Type	LMR100 standard (other cables available)		

Measurement conditions:

- Mounted on 30 x 30cm ground plane
- 2 metres LMR100 cable
- Measured in certified CTIA 3D Anechoic chamber

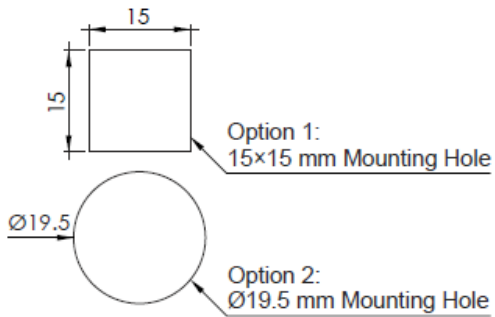
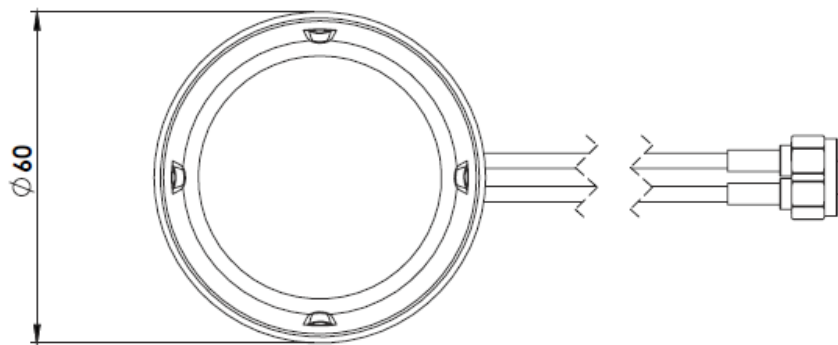
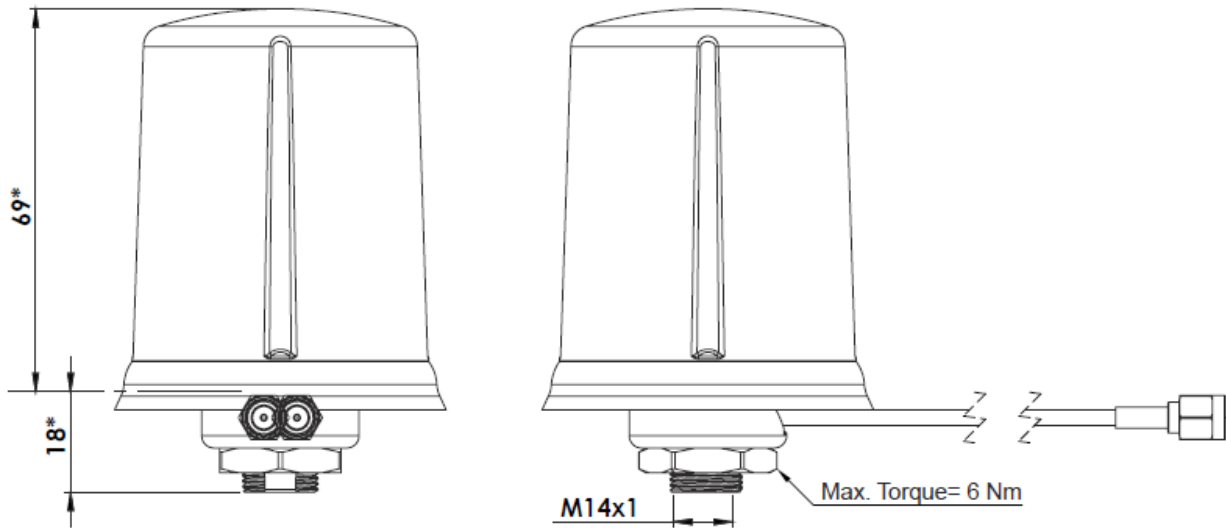


2. Mechanical and environmental specifications

Mounting type	Screw mount
Dimensions (mm)	∅ 60 x 69
Max. Tighten Torque (Nm)	6
Radome Type	PC/ABS UV Stable
Radome Colour	Black
Antenna Base	Zamak
Gasket	TPE
Operating temperature (°C)	-40 to +85
Storage temperature (°C)	-40 to +85
Substance compliance	RoHS
Certificates	IP67, IP69, IK09



3. Antenna drawings

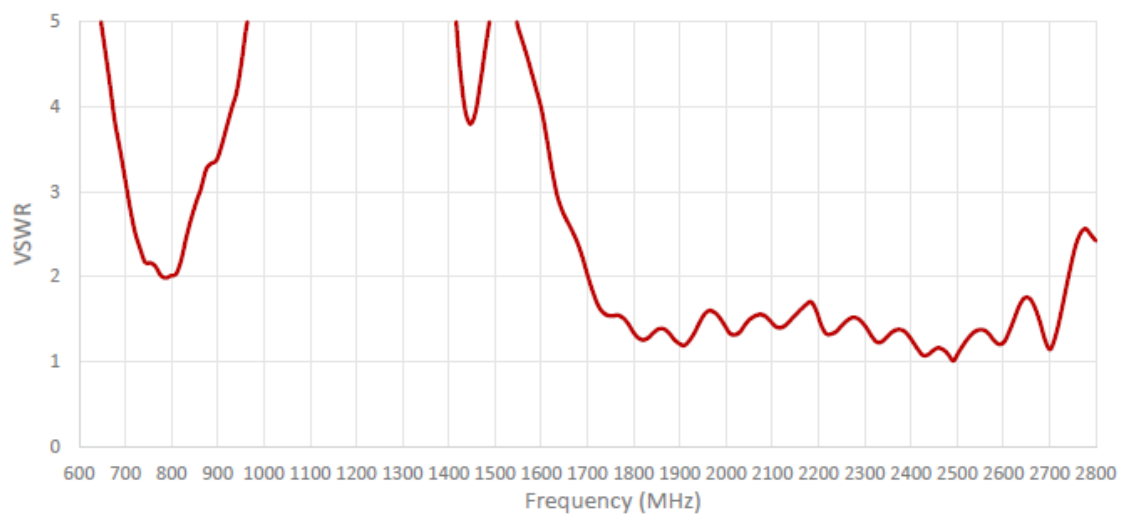
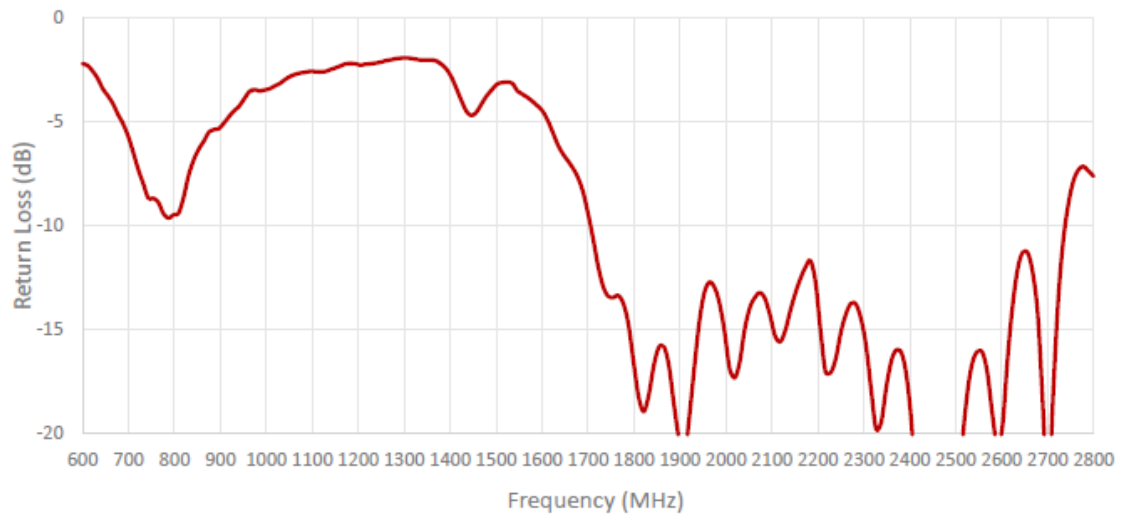


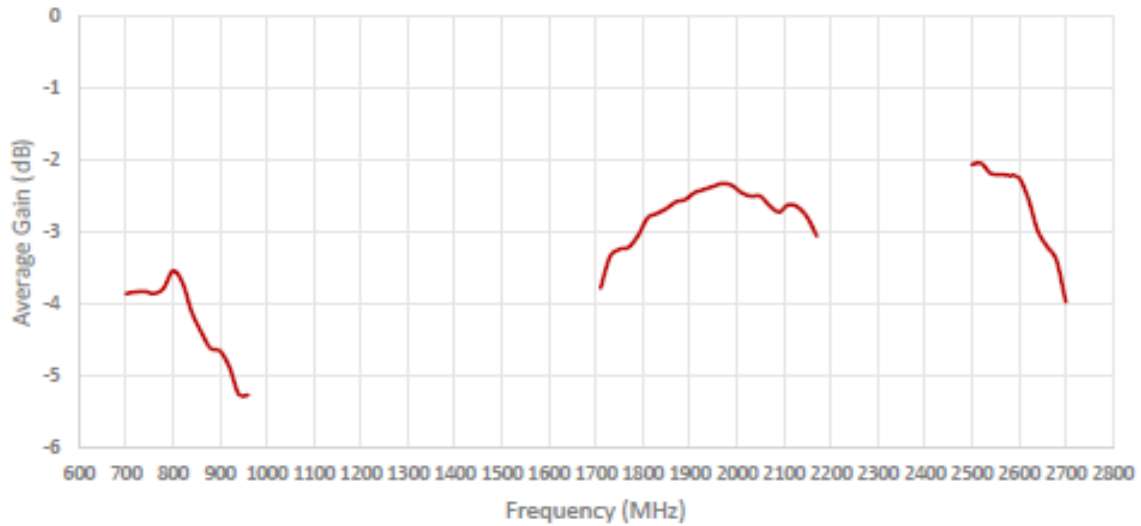
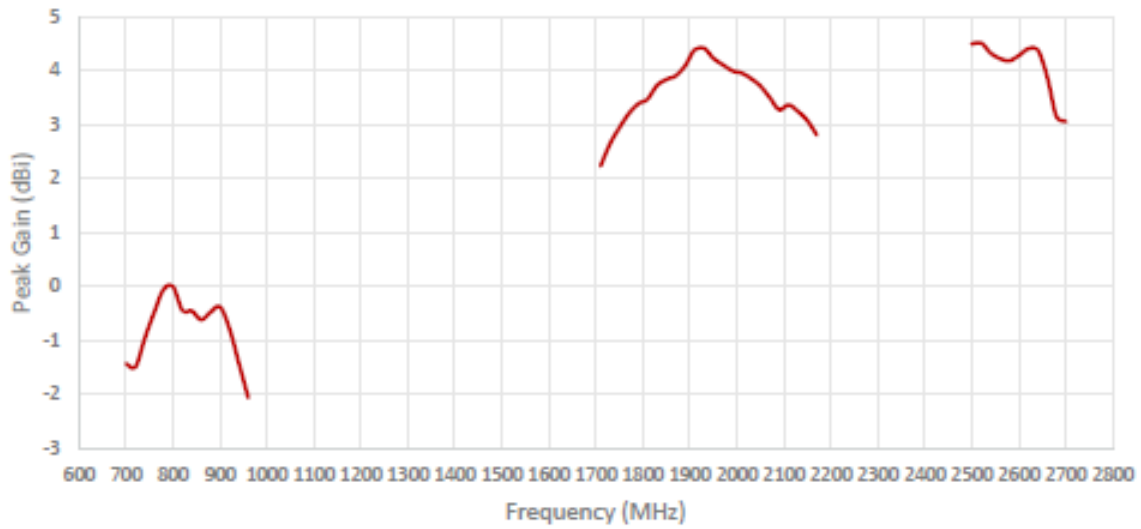
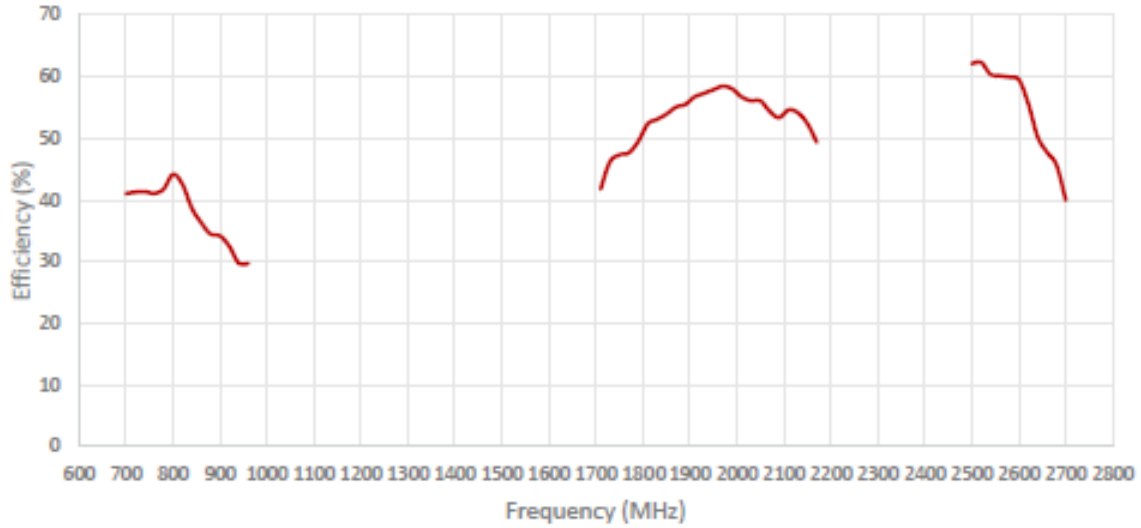
Note: Dimensions are in millimeters
*Dimensions are after mounting
**Max. Torque= 6 Nm



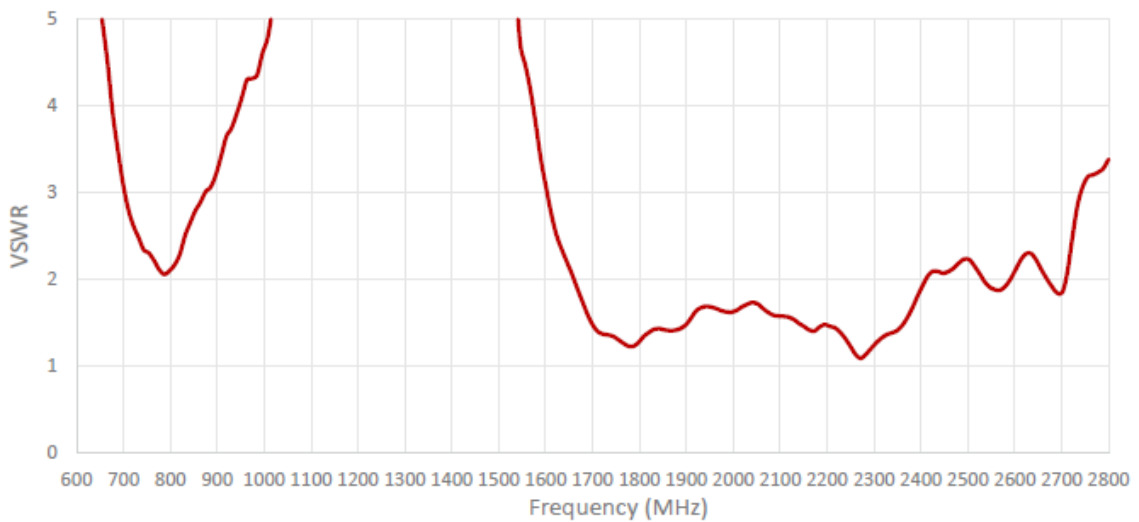
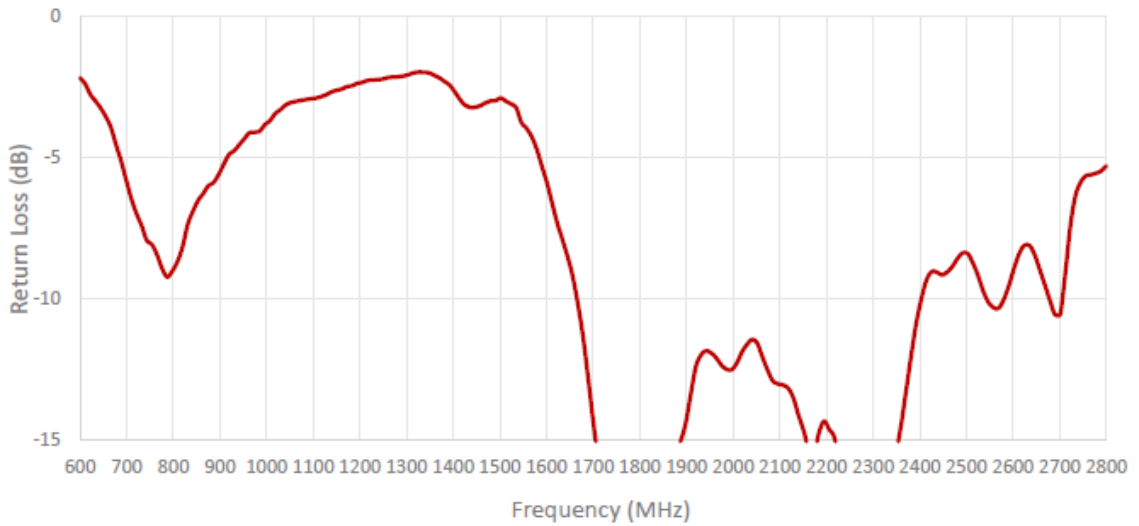
4. Antenna Parameters

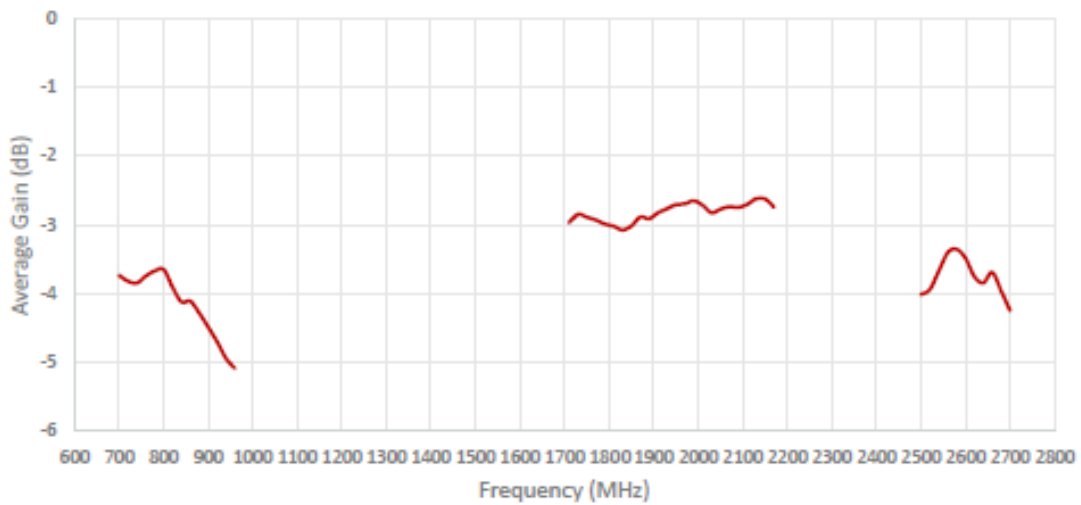
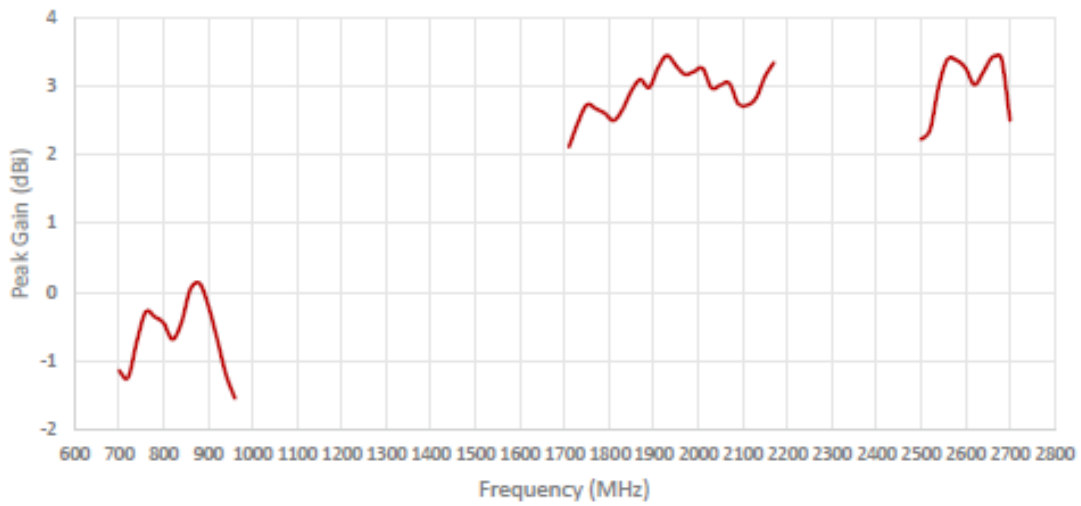
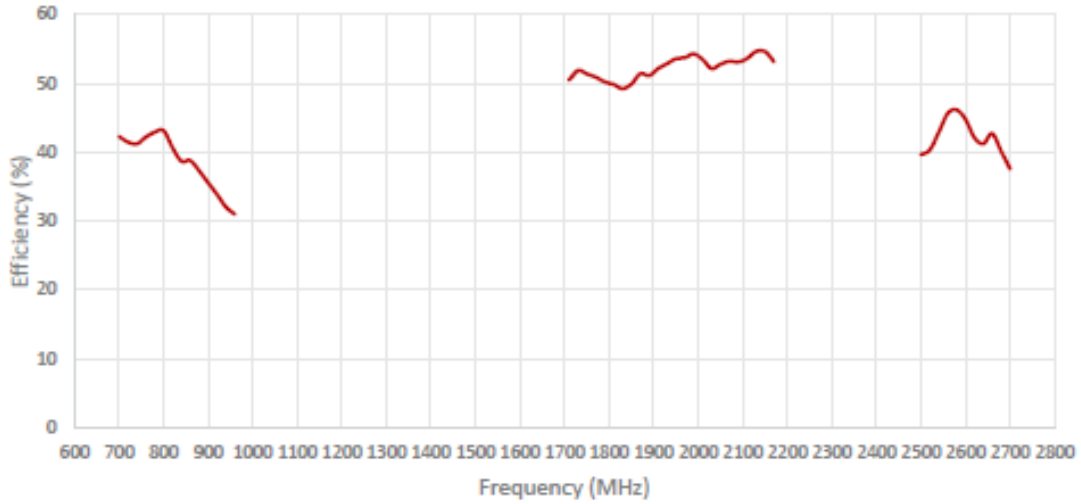
Cable 1: CELLULAR/LTE



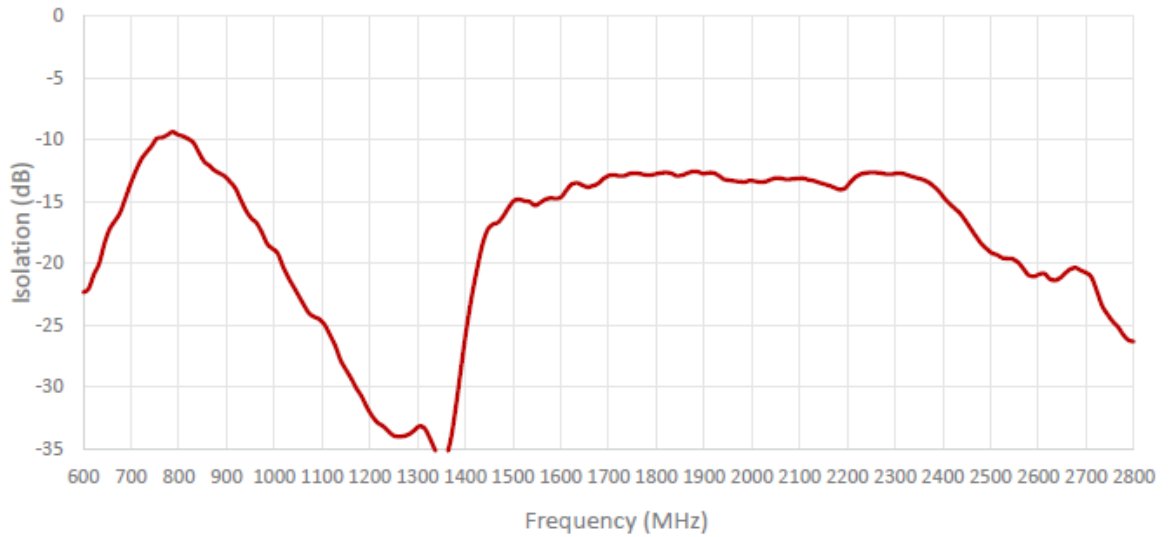


Cable 2: CELLULAR/LTE

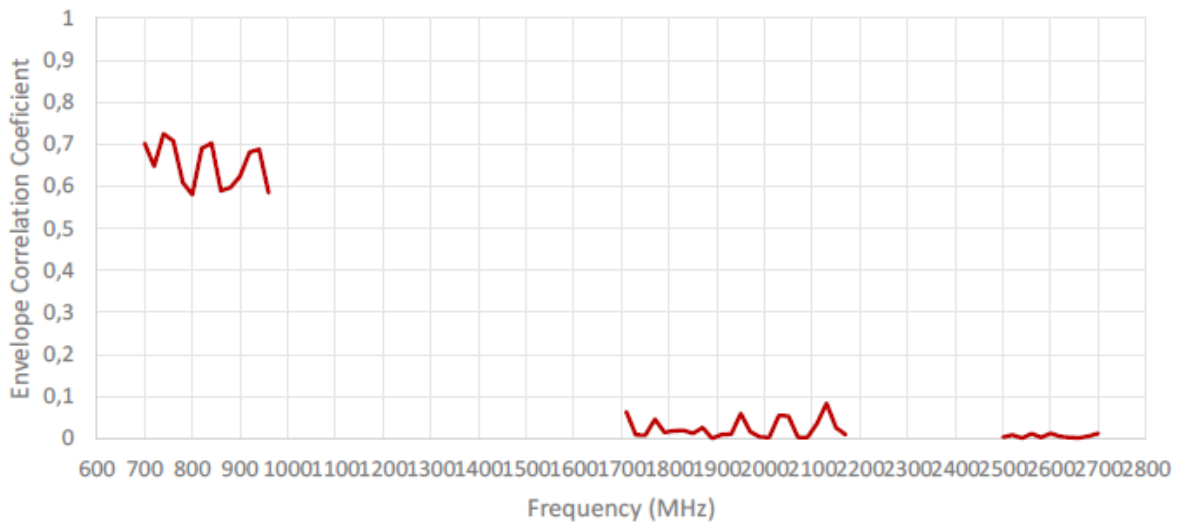


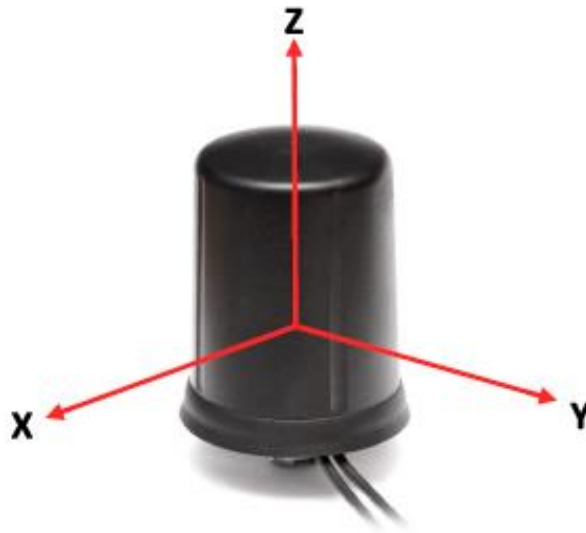


ISOLATION FOR CABLES 1 AND 2



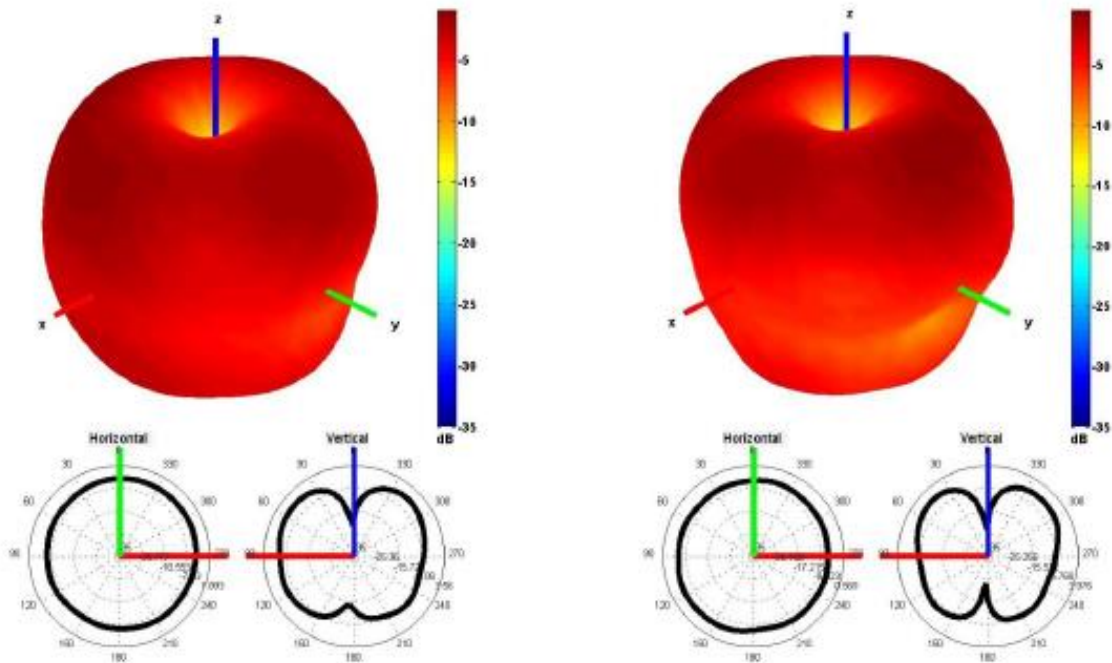
ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2





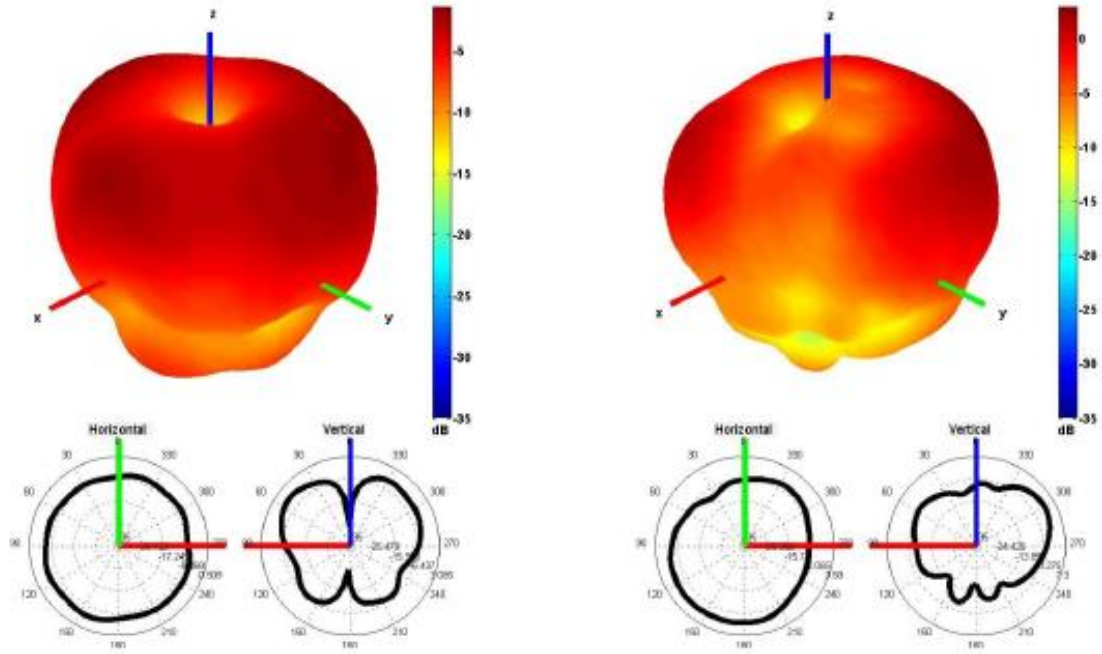
Radiation pattern reference

Table 1: CELLULAR/LTE

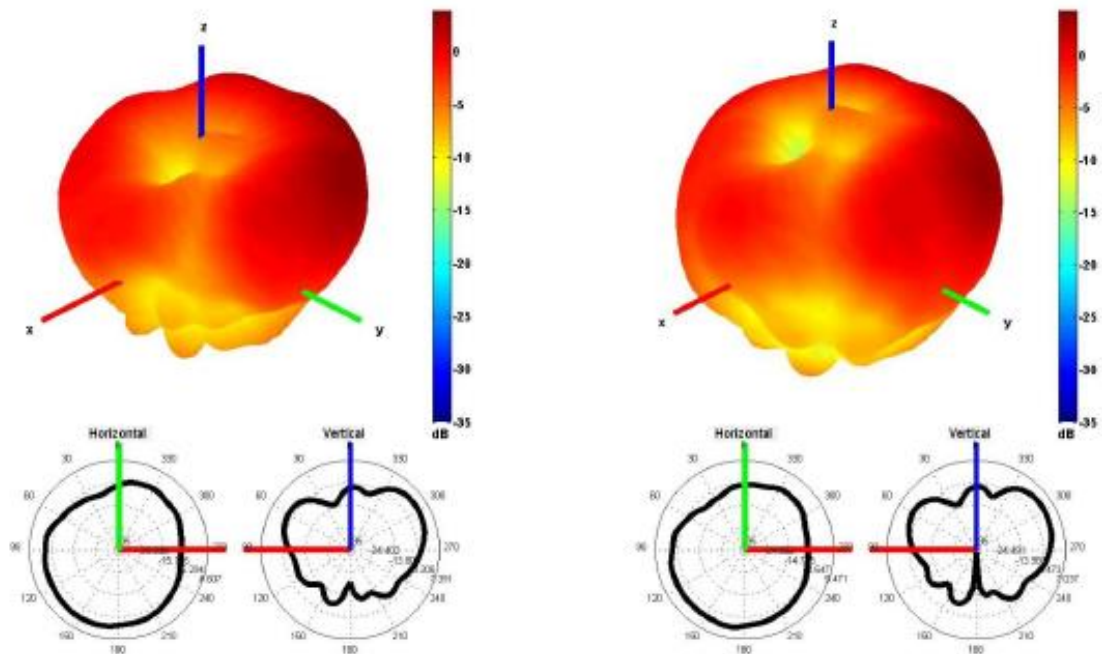


750 and 850 MHz Radiation pattern



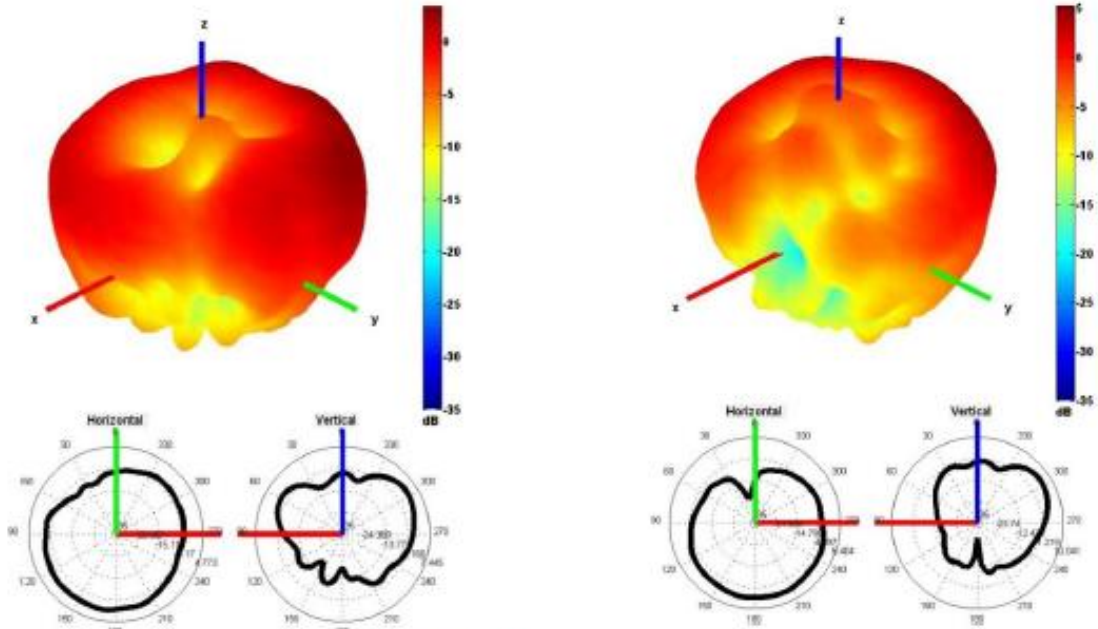


940 and 1750 MHz Radiation pattern



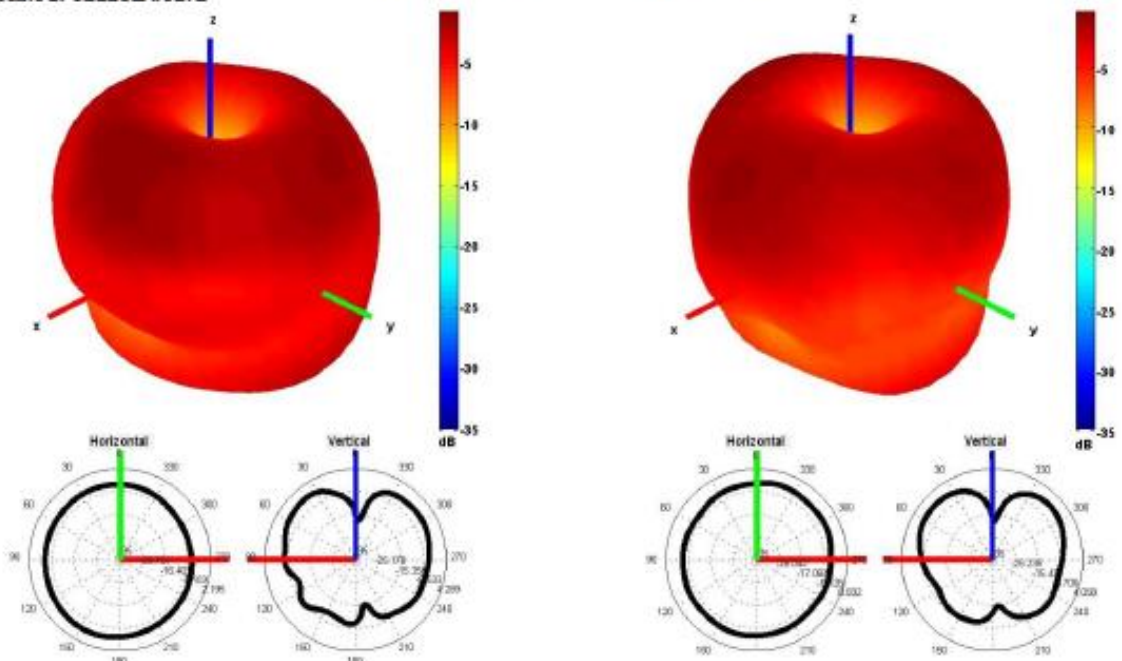
1850 and 1950 MHz Radiation pattern





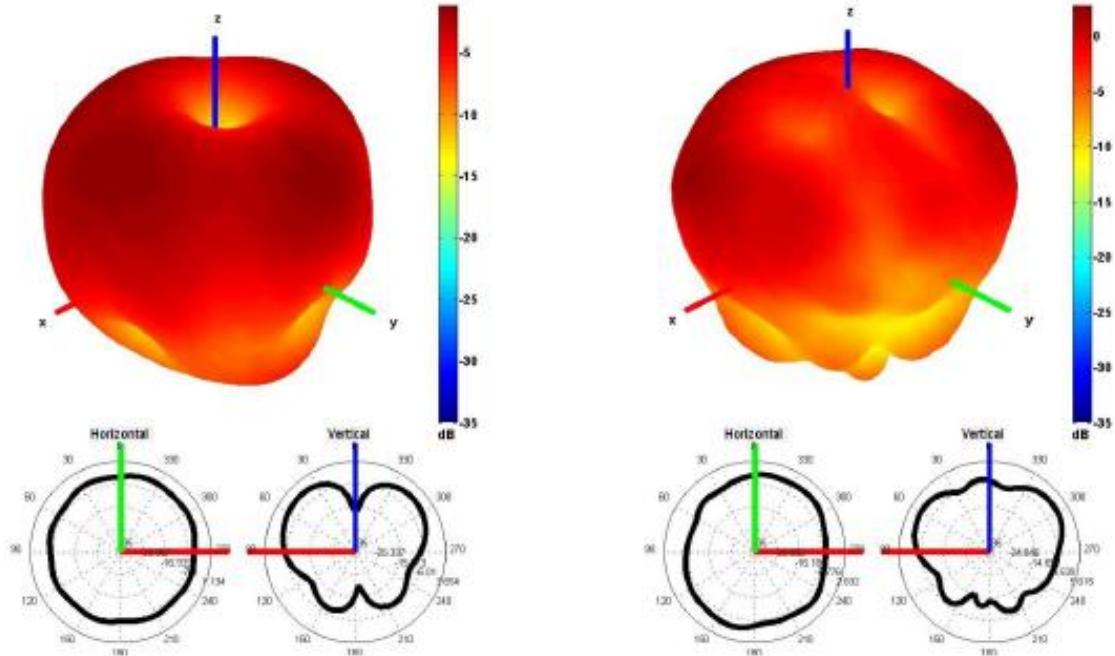
2100 and 2600 MHz Radiation pattern

Cable 2: CELLULAR/LTE

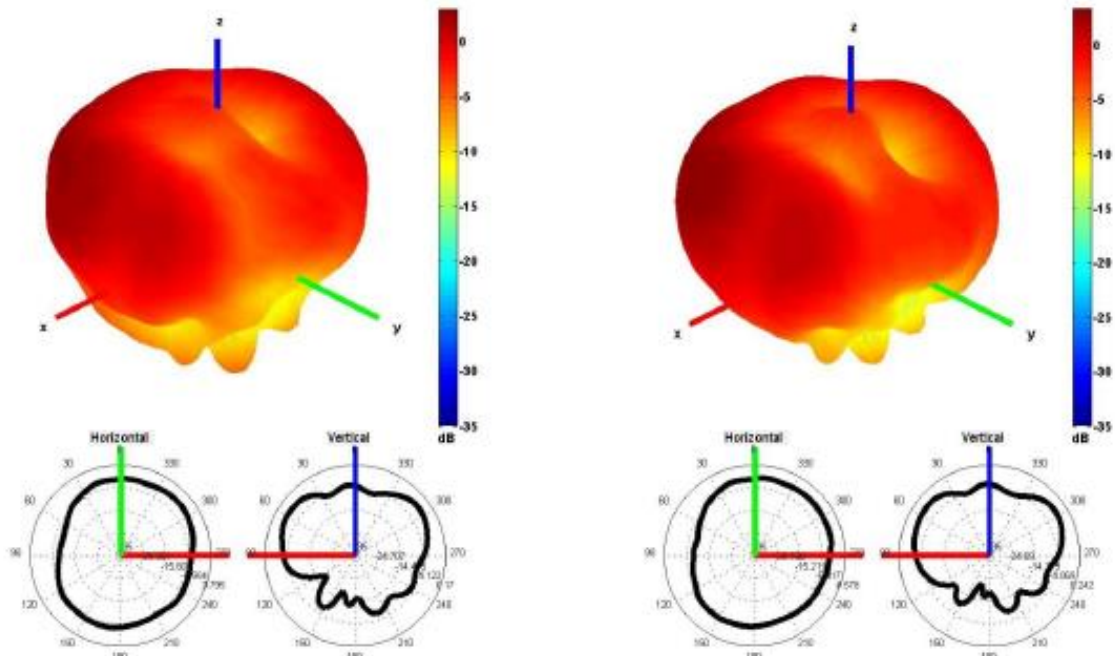


750 and 850 MHz Radiation pattern



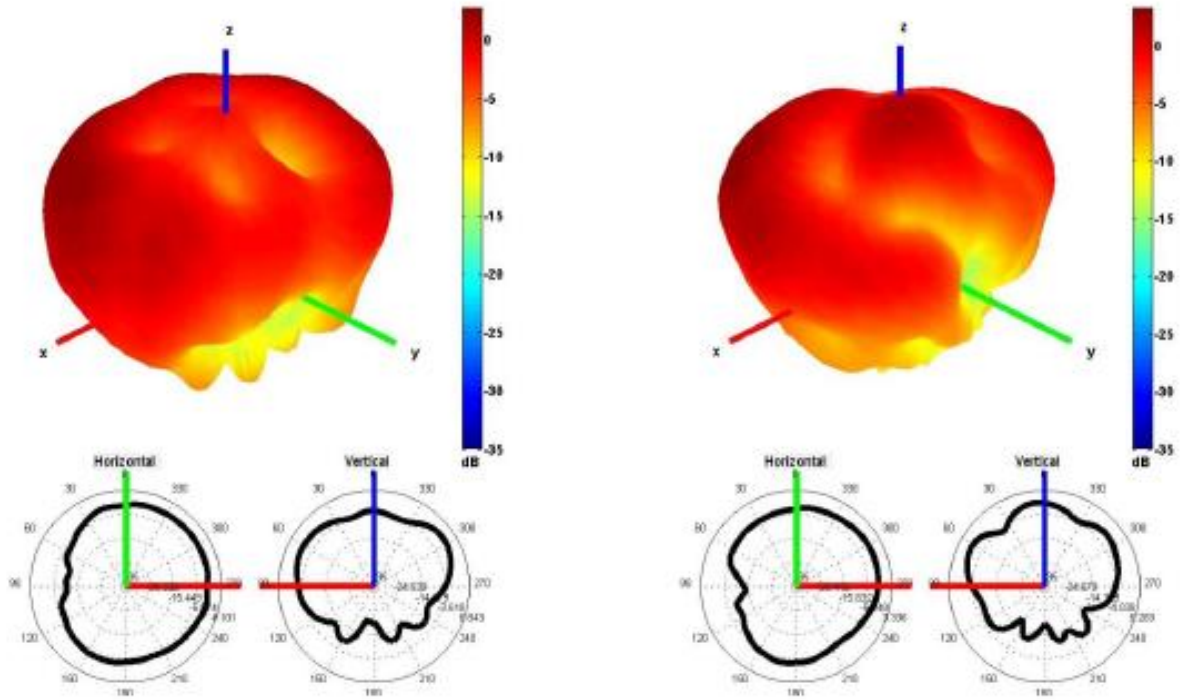


940 and 1750 MHz Radiation pattern



1850 and 1950 MHz Radiation pattern





2100 and 2600 MHz Radiation pattern

