

## AMC-ANT-2J7747B

Cellular/LTE and 2.4/5.0GHz screw mount antenna

### Features:

- **Cable 1: Cellular / LTE**
  - 698-960 MHz
  - 1710-2170 MHz
  - 2500-2700 MHz
- **Cable 2: 2.4/5.0 GHz ISM**
  - 2410-2490 MHz
  - 4920-5925 MHz
- Screw mount
- High performance
- Ground plane dependent
- Dimensions: Ø 60 x 69mm
- Certificates: IP67, IP69, IK09
- Customisable cable and connector



## 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)	~-9.4	~-16.0	~-13.1
VSWR	~2.2:1	~1.4:1	~1.6:1
Efficiency (%)	~67.0	~65.5	~50.0
Peak Gain (dBi)	~2.0	~4.5	~3.7
Average Gain (dB)	~-1.8	~-1.9	~-3.1
Impedance (Ohms)	50		
Polarisation	Linear		
Radiation Pattern	Omni-directional		
Max. Input Power (W)	25		
Connector Type	SMA male standard (other connectors available)		
Cable Length	300cm standard (other lengths available)		
Cable Type	LMR100 standard (other cables available)		



**Cable 2**

<b>Parameters</b>	2.4/5.0GHz ISM Antenna	
<b>Standards</b>	Wi-Fi, Bluetooth, ZigBee, ISM	
<b>Band (GHz)</b>	2.4	5.0
<b>Frequency (MHz)</b>	2410 - 2490	4920 - 5925
<b>Return Loss (dB)</b>	~-13.3	~-7.4
<b>VSWR</b>	~1.5:1	~2.5:1
<b>Efficiency (%)</b>	~60.1	~31.4
<b>Peak Gain (dBi)</b>	~4.5	~2.5
<b>Average Gain (dB)</b>	~-2.2	~-5.0
<b>Impedance (Ohms)</b>	50	
<b>Polarisation</b>	Linear	
<b>Radiation Pattern</b>	Omni-directional	
<b>Max. Input Power (W)</b>	25	
<b>Connector Type</b>	RP-SMA male standard (other connectors available)	
<b>Cable Length</b>	300cm standard (other lengths available)	
<b>Cable Type</b>	LMR 100 standard (other cables available)	

**Antenna measurement conditions:**

- Mounted on 30 x 30cm ground plane
- 200cm of LMR100 cable
- Measured in certified CTIA 3D anechoic chamber

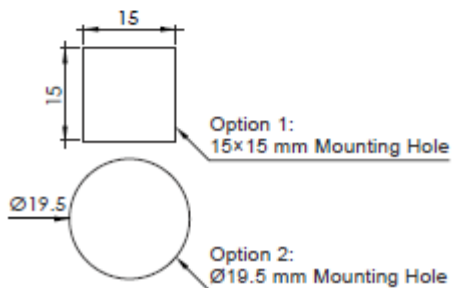
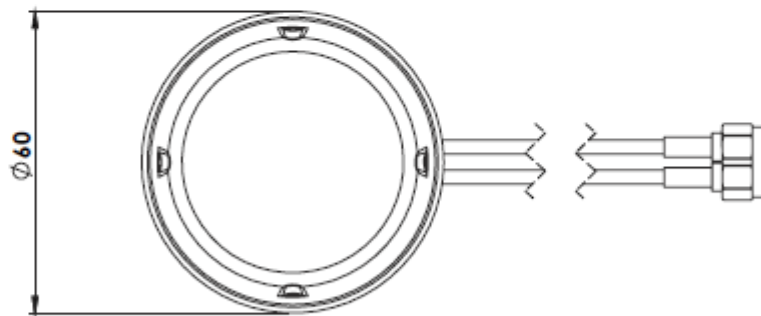
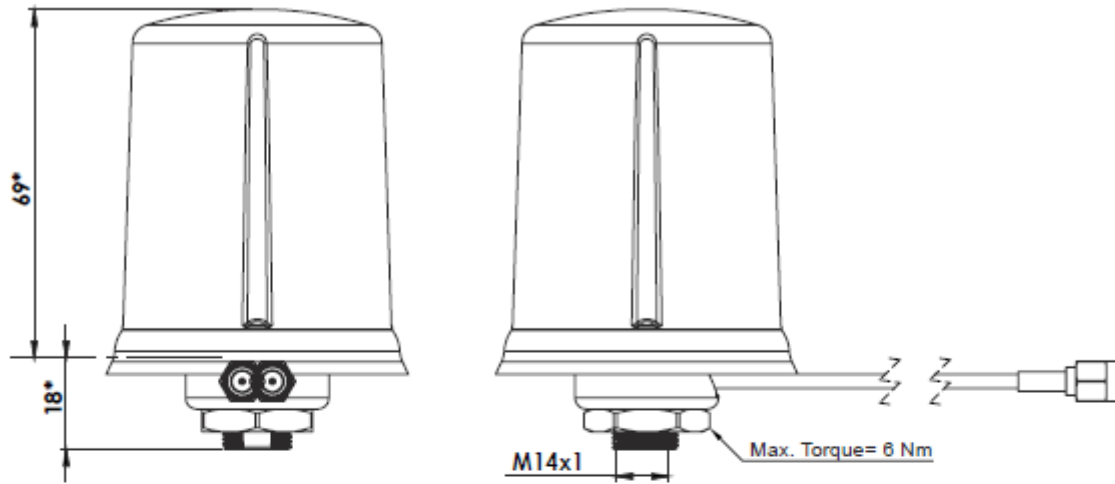


## 2. Mechanical and environmental specifications

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



### 3. Antenna drawings

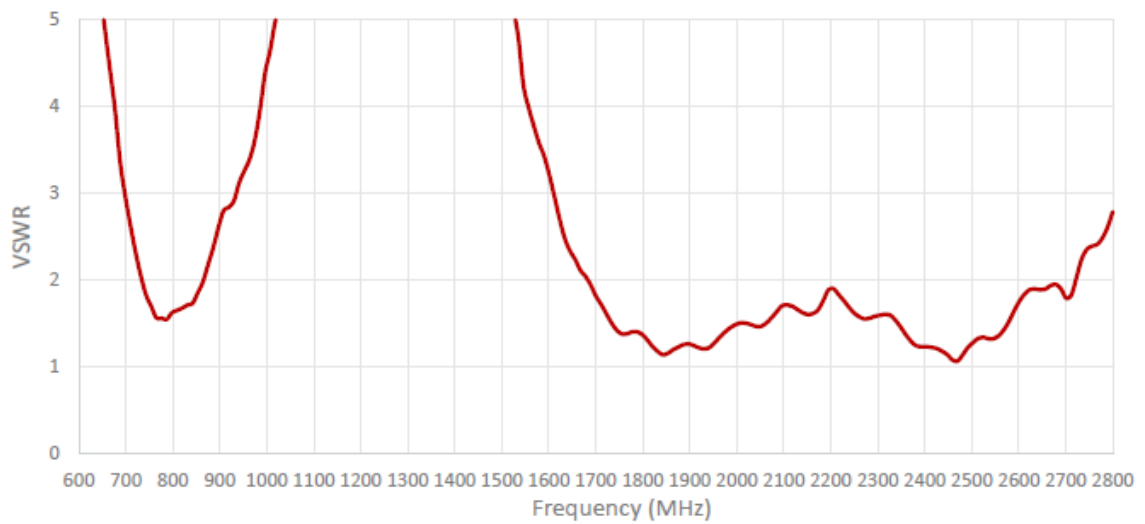
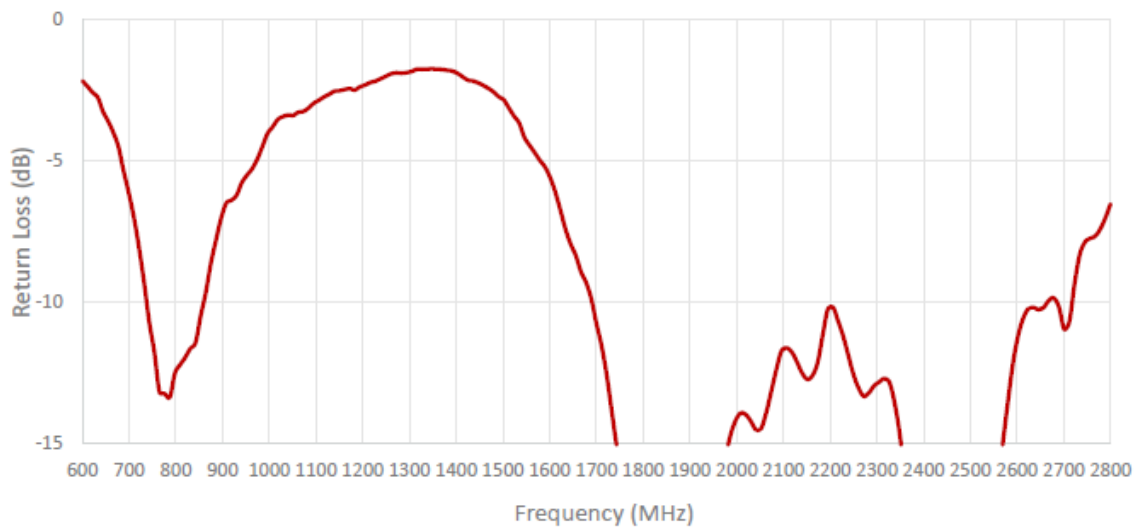


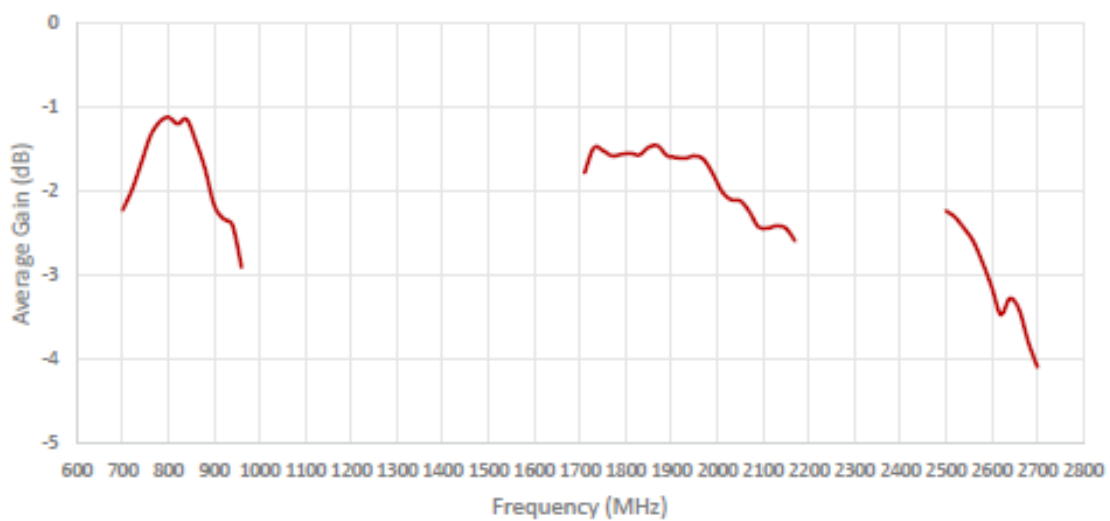
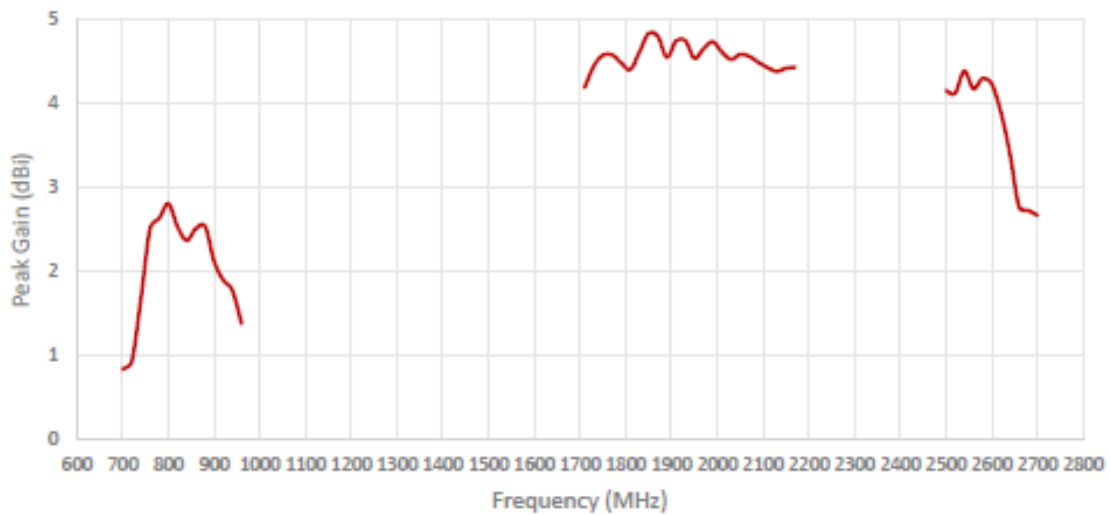
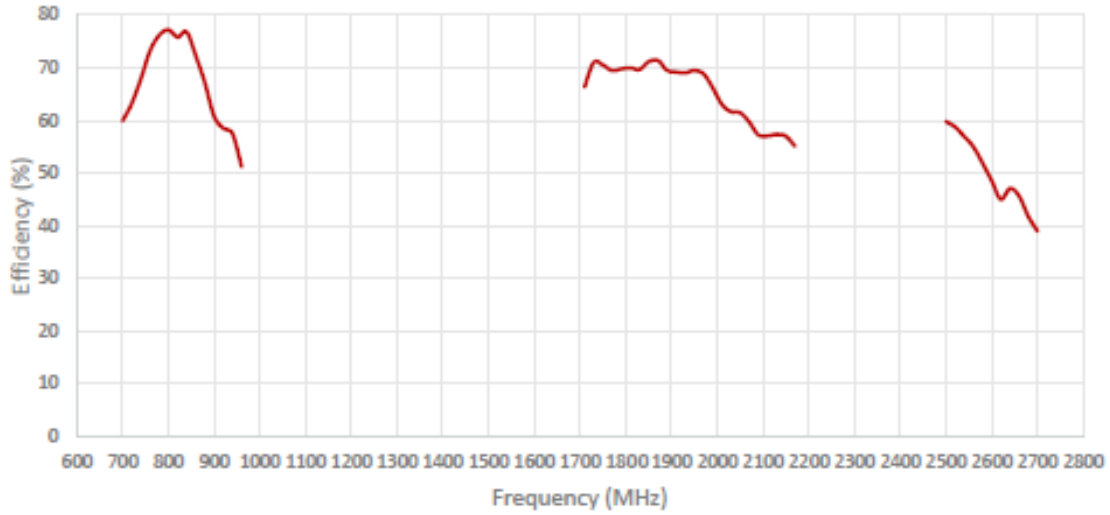
Note: Dimensions are in millimeters  
\*Dimensions are after mounting  
\*\*Max. Torque= 6 Nm



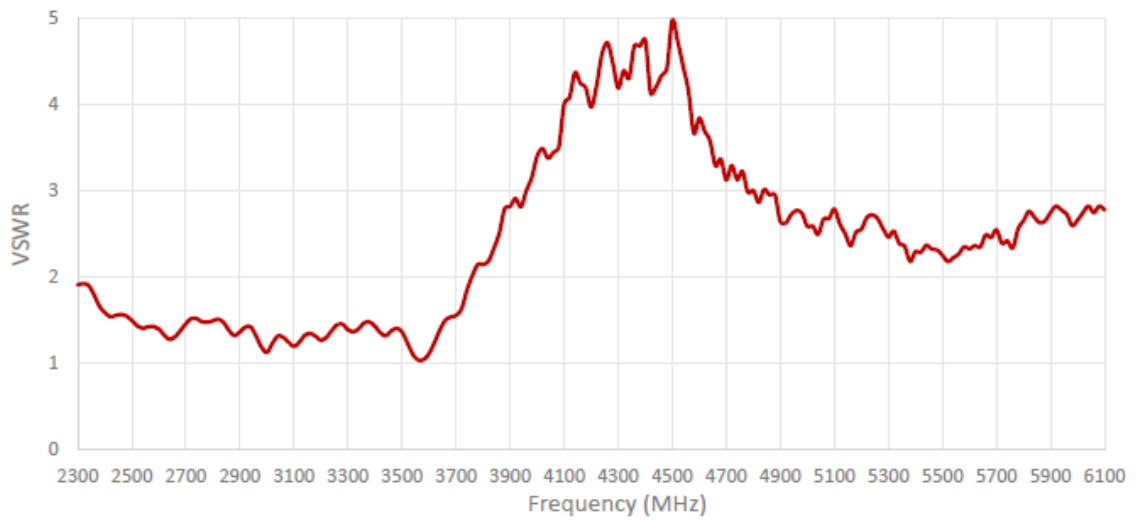
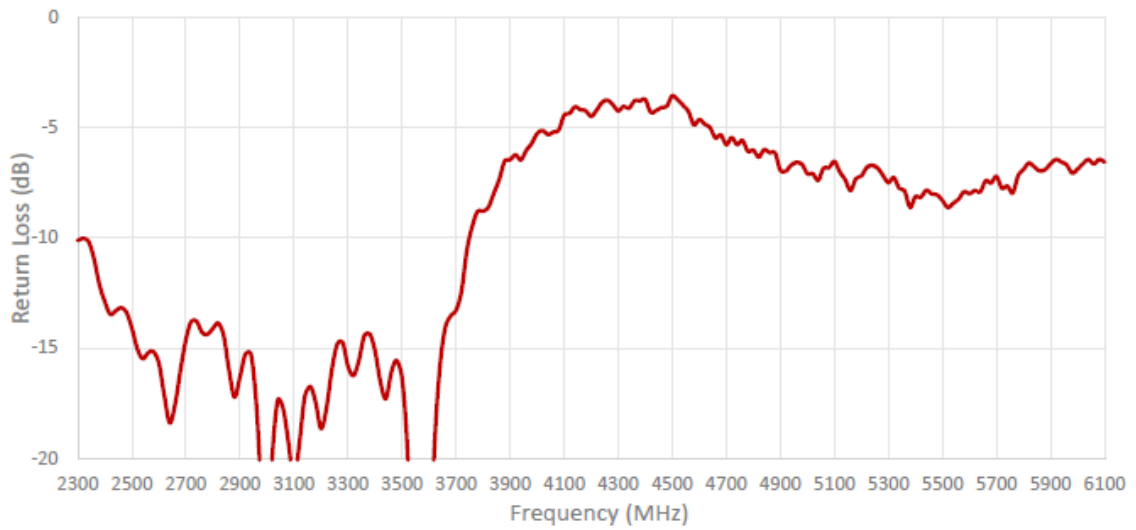
### 4. Antenna parameters

Cable 1: CELLULAR/LTE

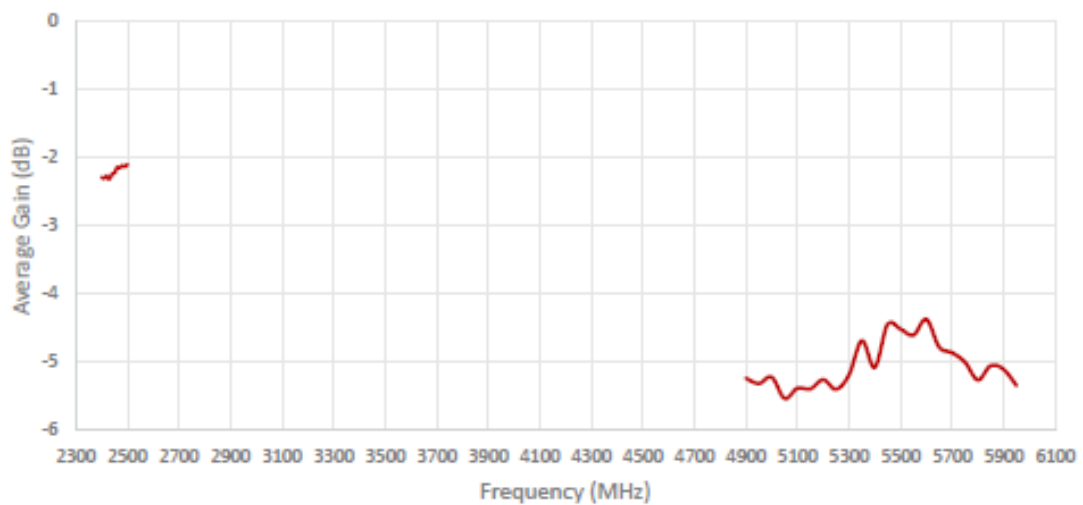
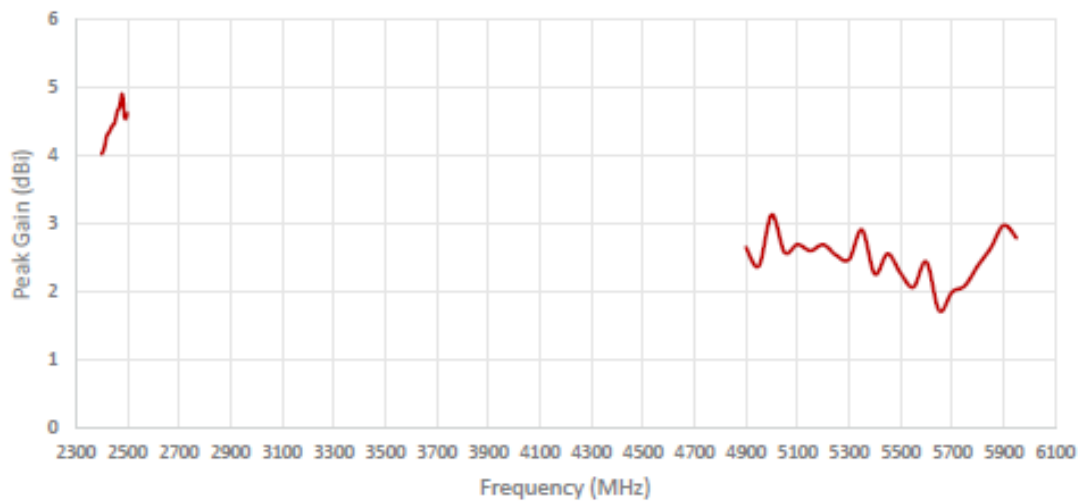
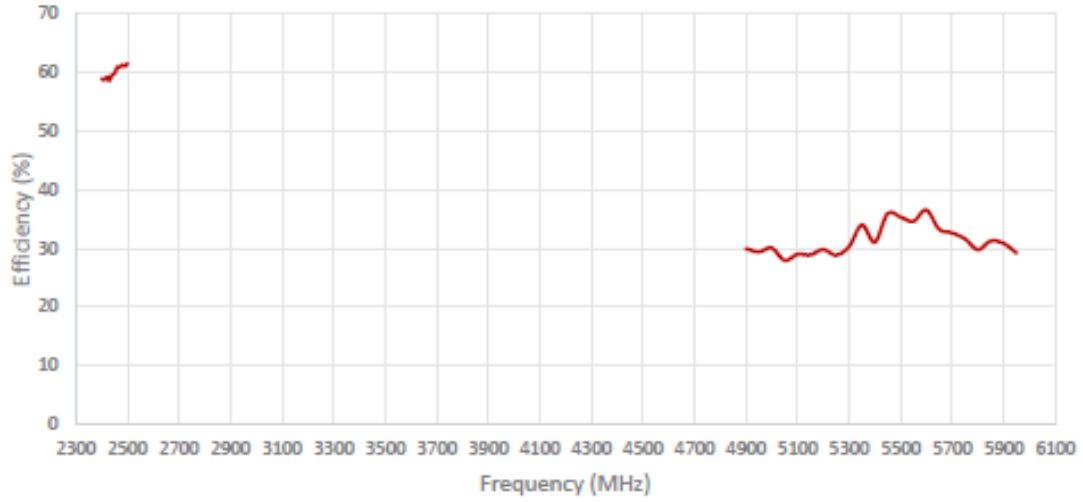


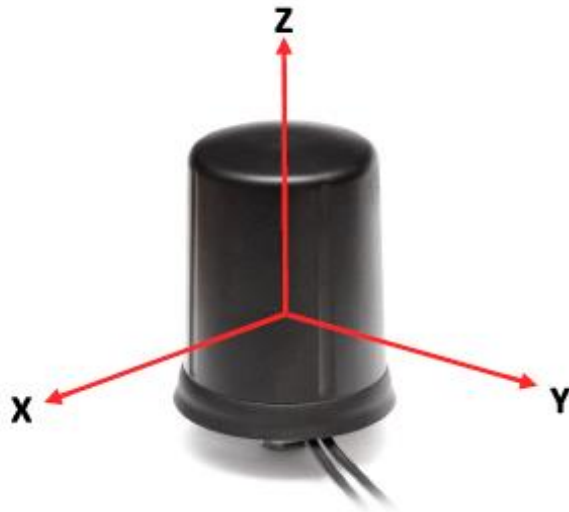


**Cable 2: 2.4/5.0 GHz ISM**



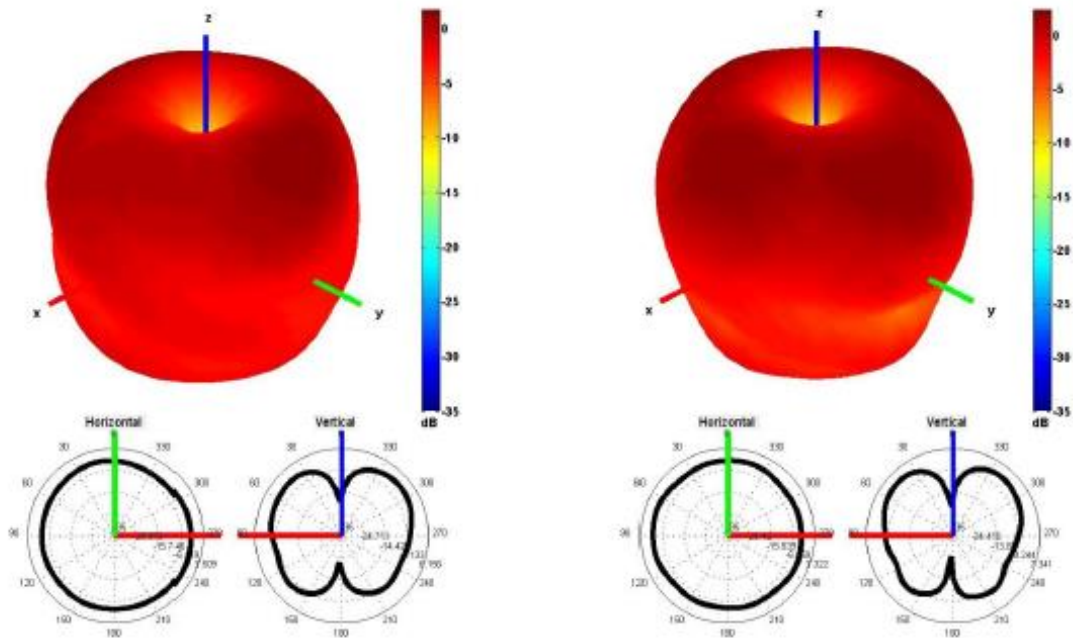






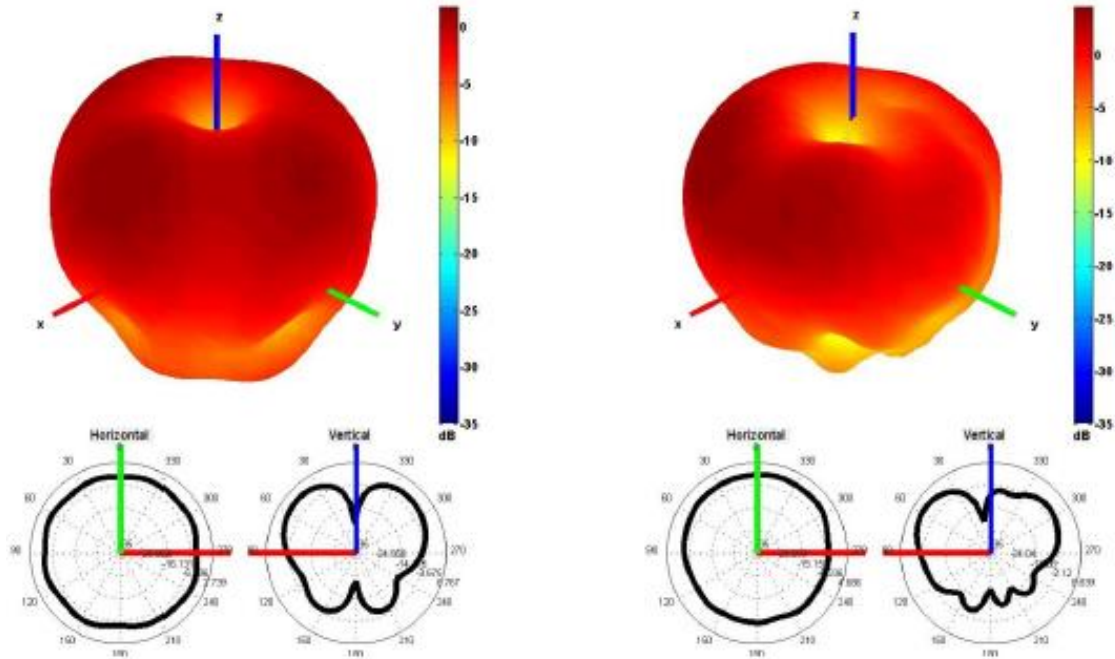
Radiation pattern reference

Cable 1: CELLULAR/LTE

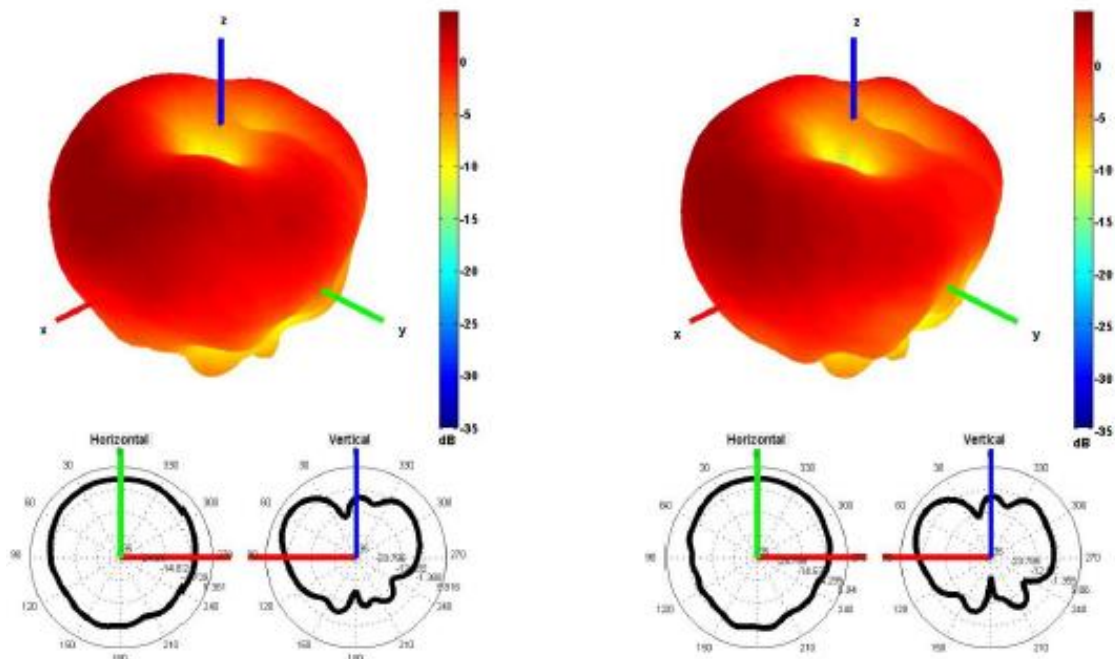


750 and 850 MHz Radiation pattern



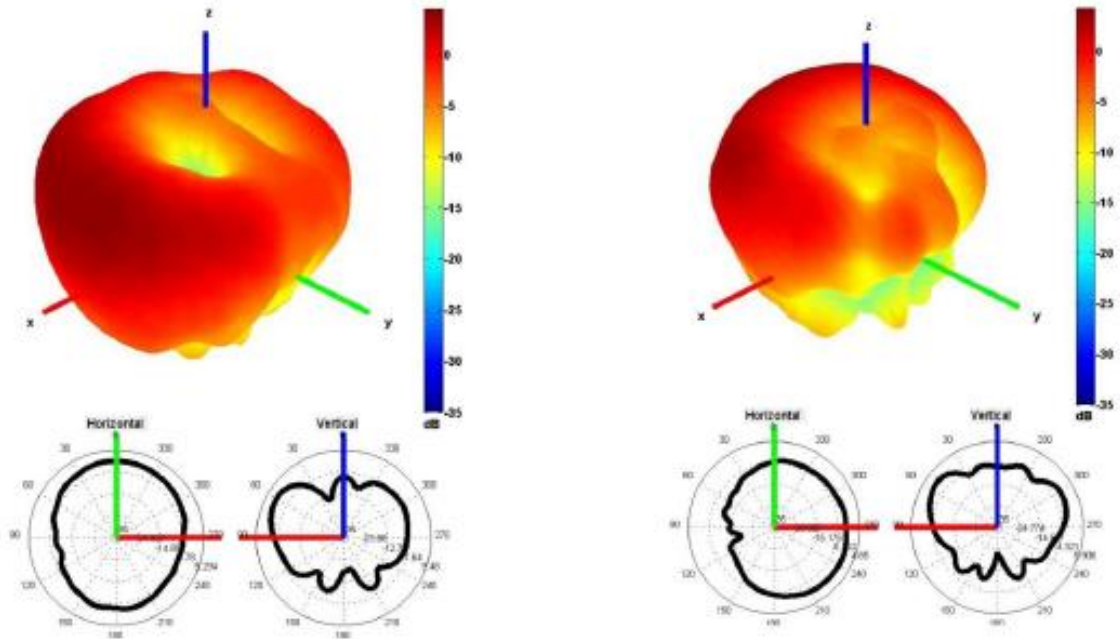


940 and 1750 MHz Radiation pattern



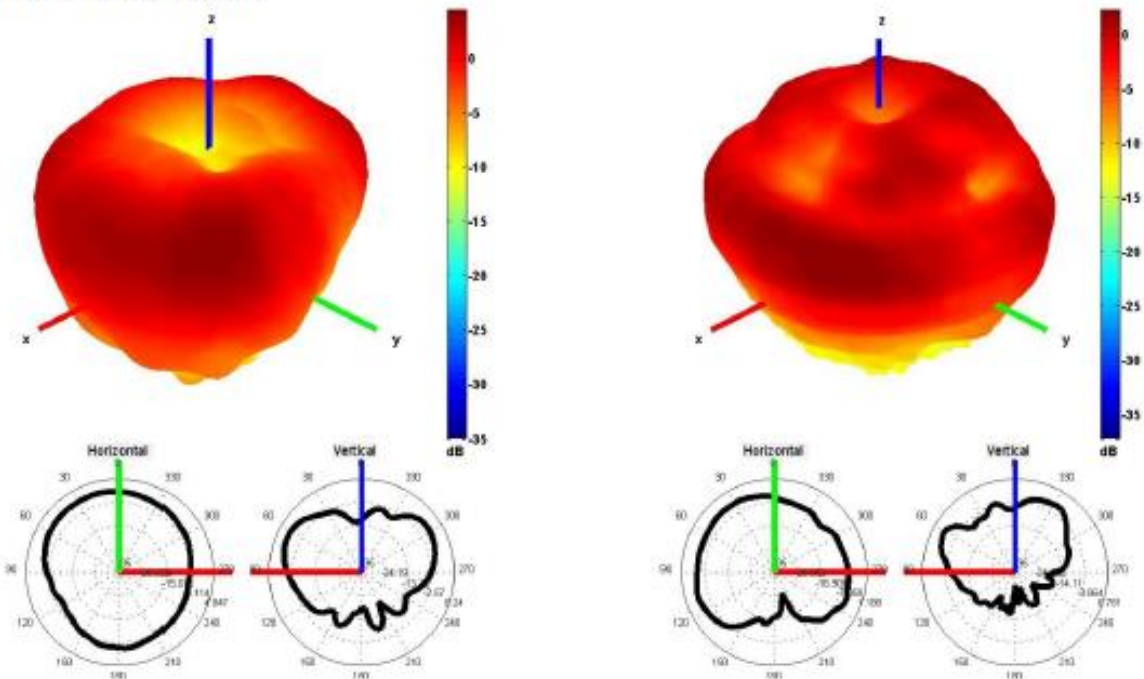
1850 and 1950 MHz Radiation pattern





2100 and 2600 MHz Radiation pattern

Cable 2: 2.4/5.0 GHz ISM



2450 and 5500 MHz Radiation pattern

