

## AMC-ANTELT245DS01

**Type** Combination Cellular/LTE and 2.4/5GHz Screw Mount Dome 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



**Certifications:**



Alpha Micro UK: Tel: +44 1256 851770 | email: [sales@alphamicro.net](mailto:sales@alphamicro.net)  
[www.alphamicro.net](http://www.alphamicro.net)



## 1. Antenna and Electrical Specifications

**Cable 1 – Cellular/LTE**

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)	~-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	3 metres standard (other lengths available)		
Cable Type	LMR100 standard (other cables available)		

**Cable 2 – Wi-Fi/Bluetooth**

Standards	Wi-Fi, Bluetooth, ZigBee, ISM	
Band (GHz)	2.4	5.0
Frequency (MHz)	2410 - 2490	4920 - 5925
Return Loss (dB)	~-13.3	~-7.4
VSWR	~1.5:1	~2.5:1
Efficiency (%)	~60.1	~31.4
Peak Gain (dBi)	~4.5	~2.5
Average Gain (dB)	~-2.2	~-5.0
Impedance (Ohms)	50	
Polarisation	Linear	
Radiation Pattern	Omni-directional	
Max. Input Power (W)	25	
Connector Type	RP-SMA male standard (other connectors available)	
Cable Length	3 metres standard (other lengths available)	
Cable Type	LMR 100 standard (other cables available)	

**Antenna measurement conditions:**

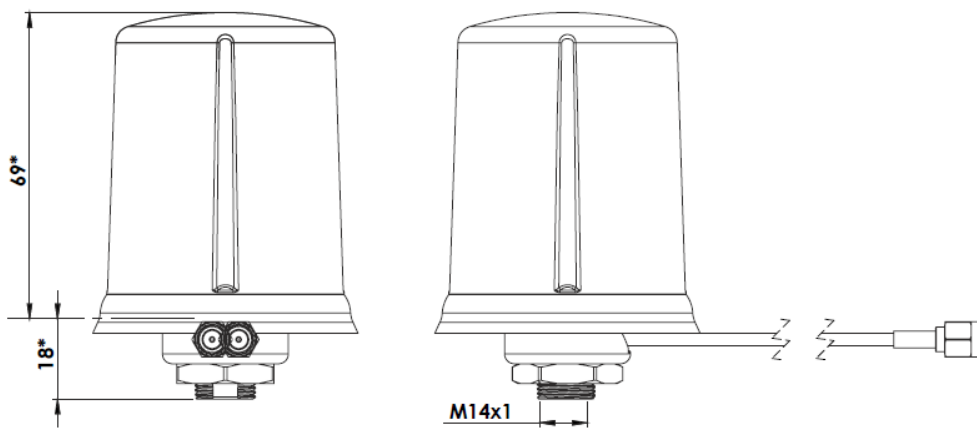
Mounted on 30 x 30cm ground plane

2 metres of LMR100 cable

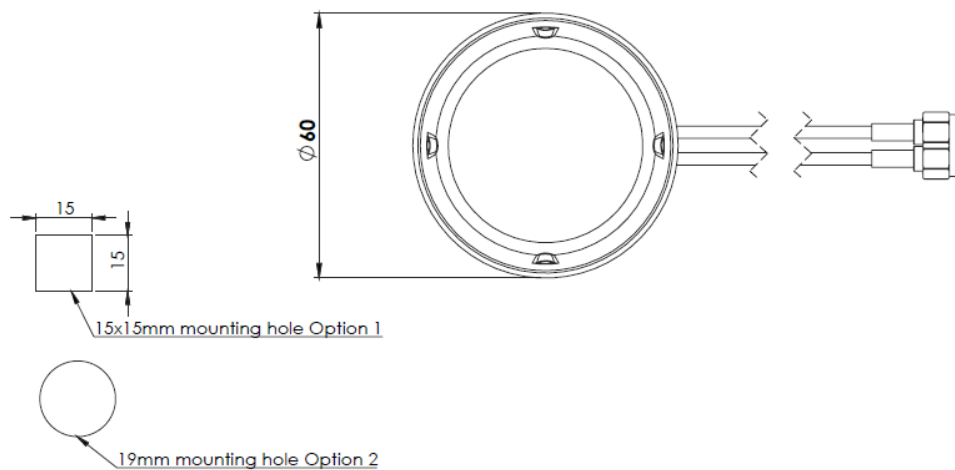
Measured in certified CTIA 3D anechoic chamber

## 2. Mechanical and Environmental Specifications

<b>Mounting Type</b>	Screw mount
<b>Dimensions (mm)</b>	∅ 60 x 69
<b>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



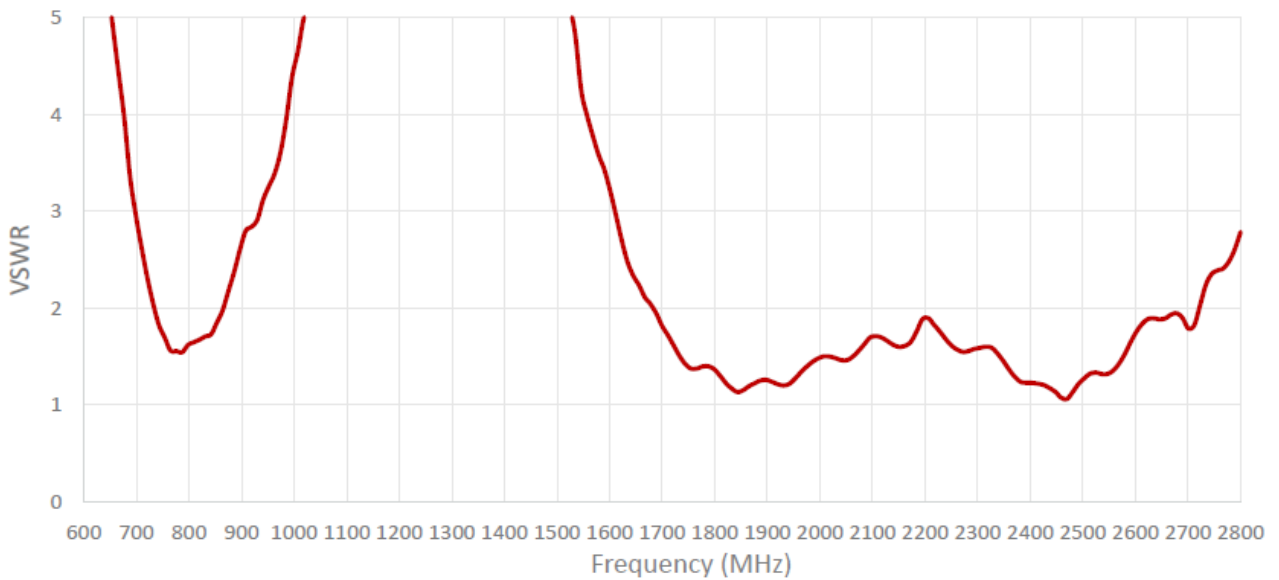
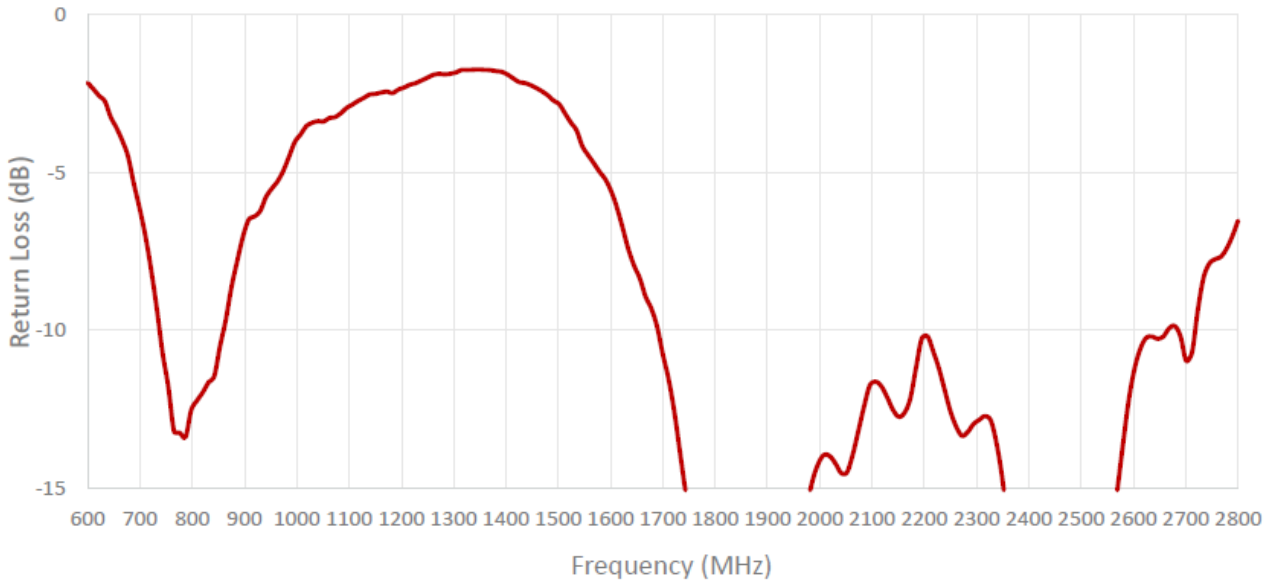
\* Dimensions after mounting

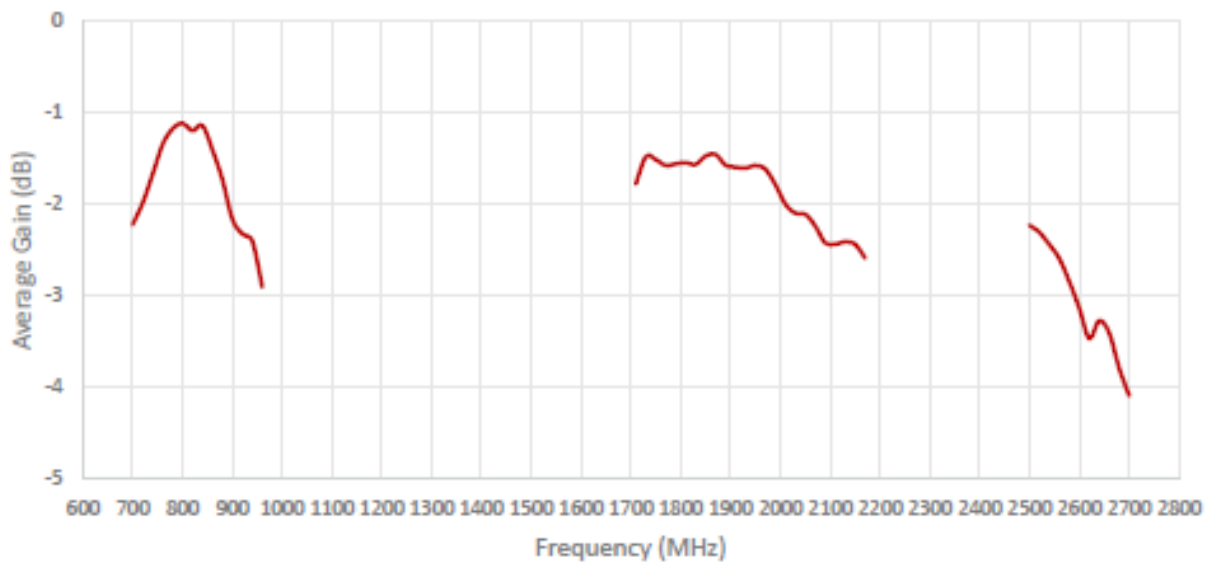
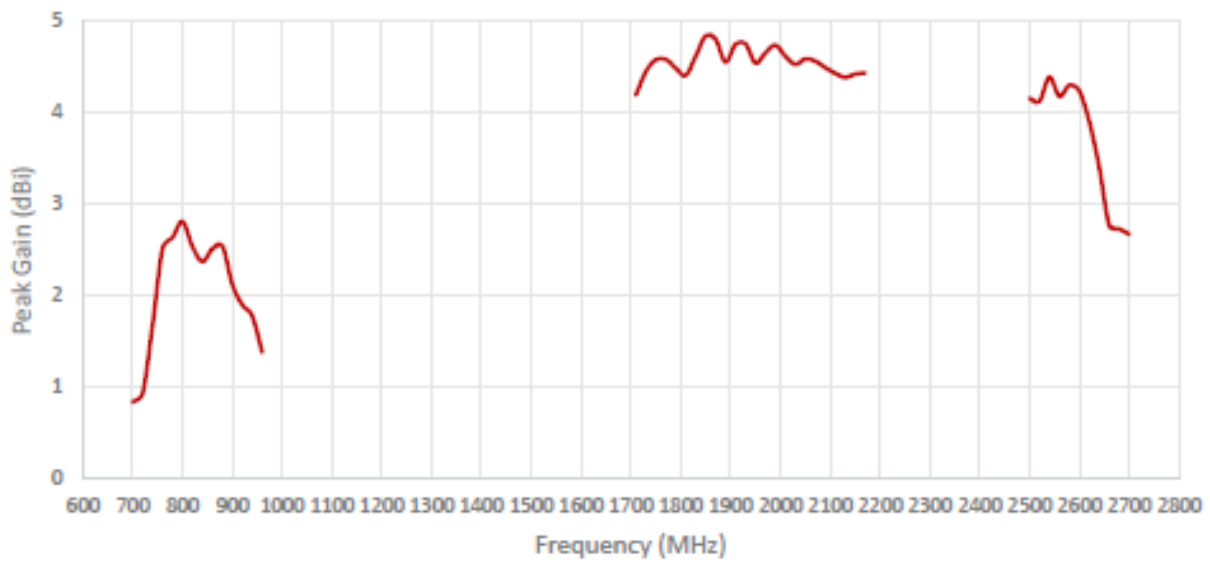
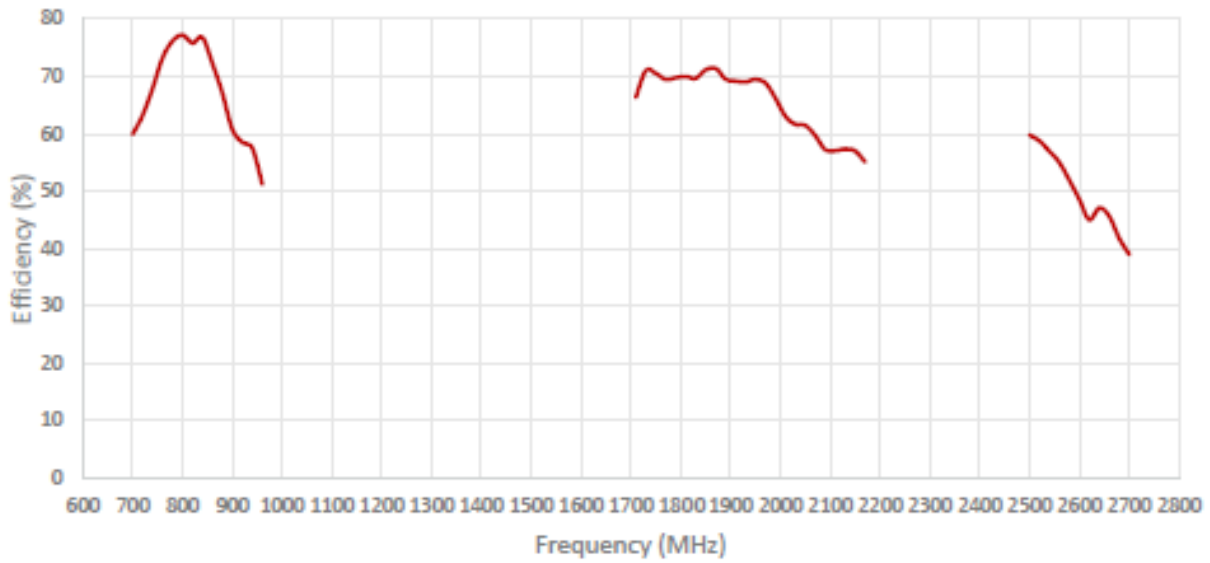




### 3. Antenna Parameters

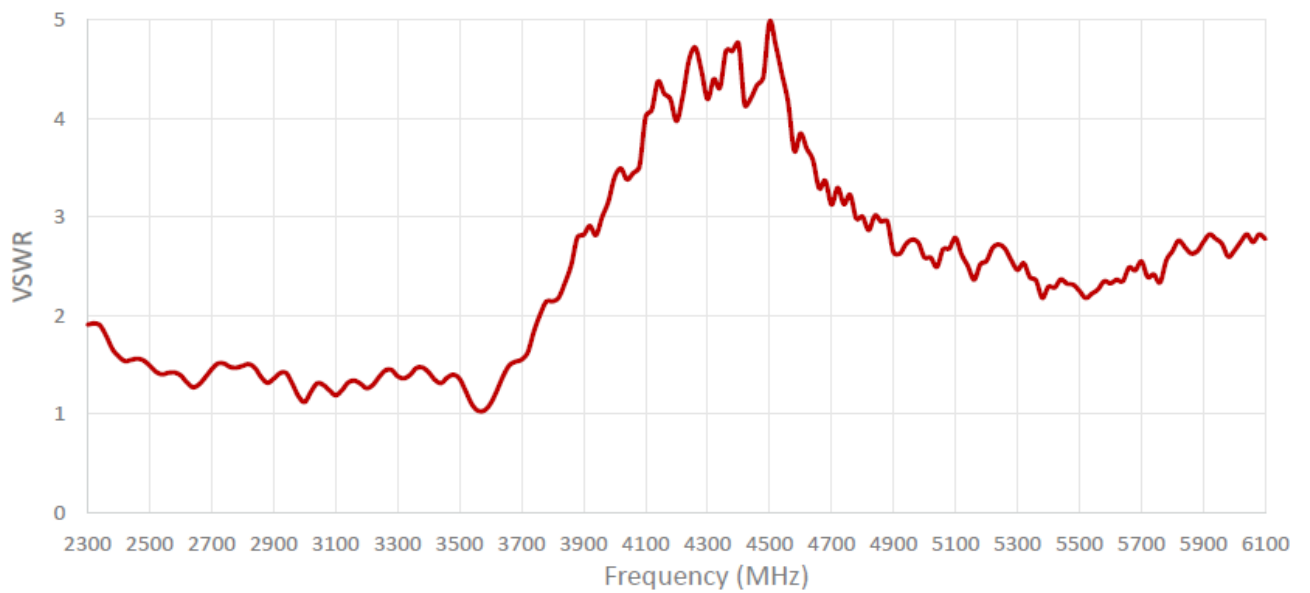
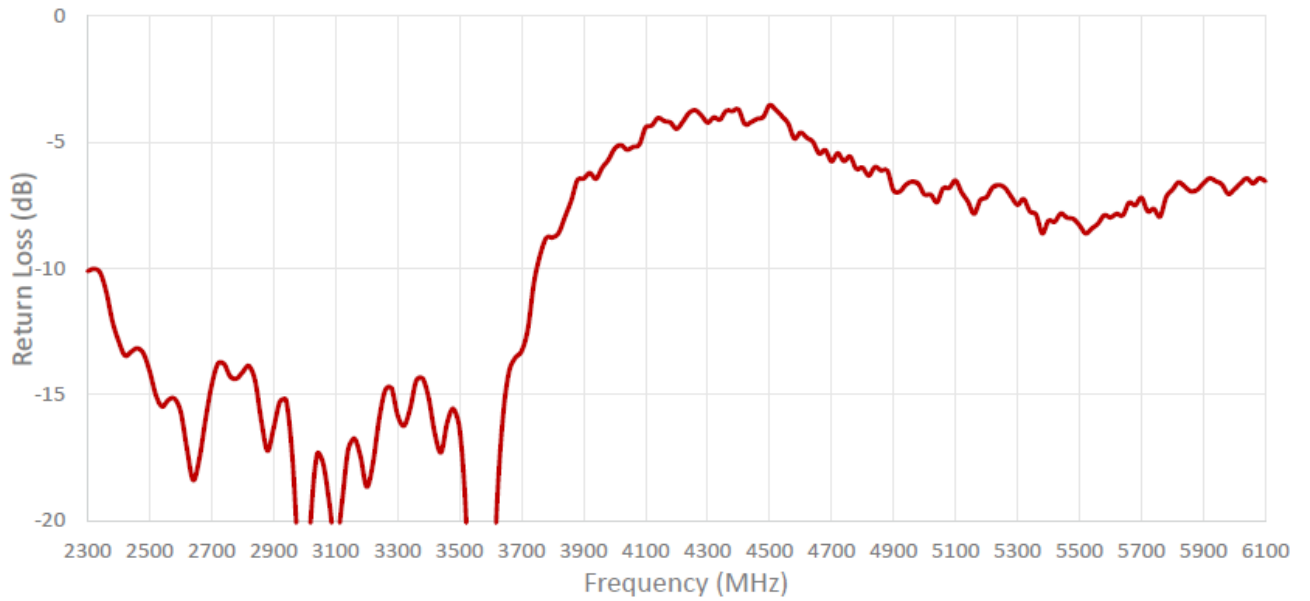
Cable 1: Cellular/LTE

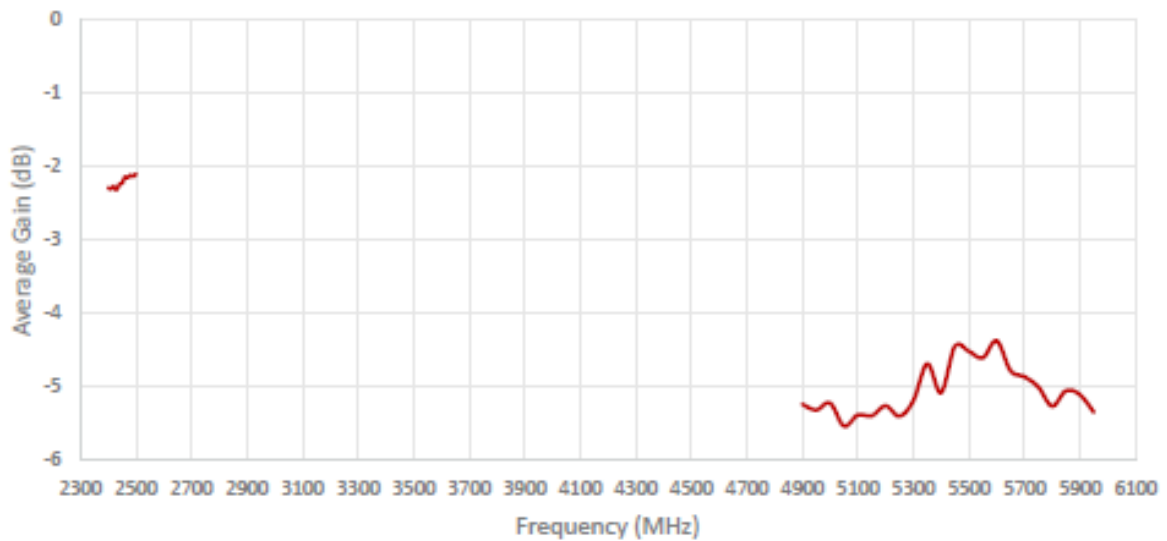
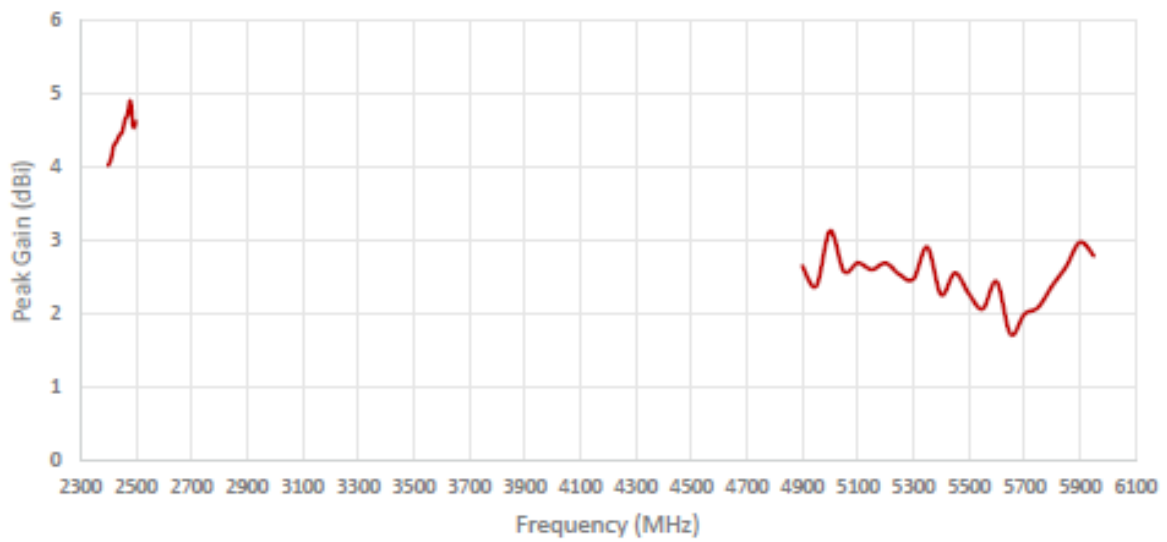
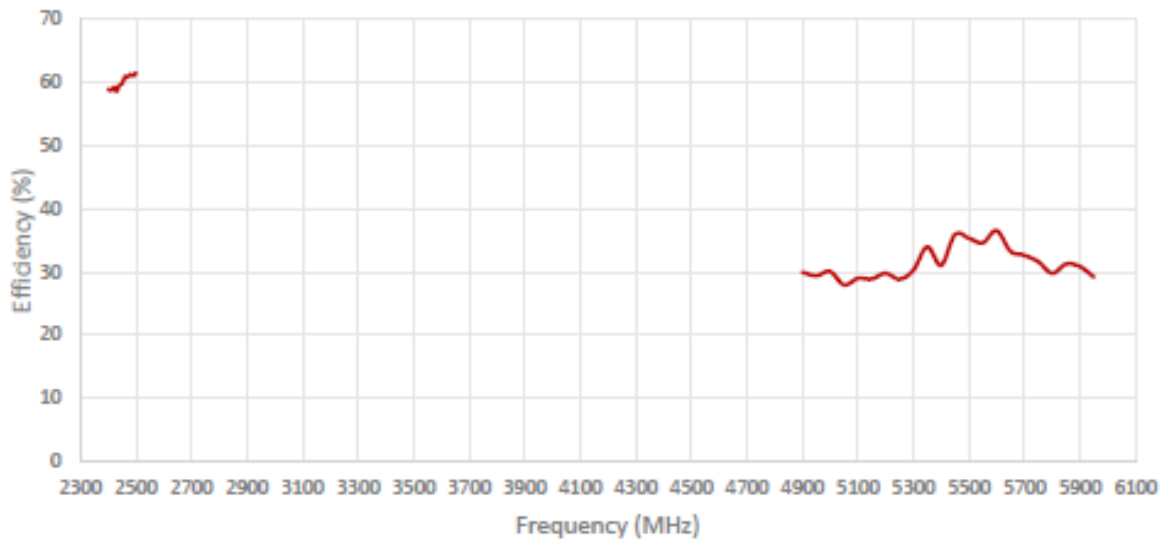




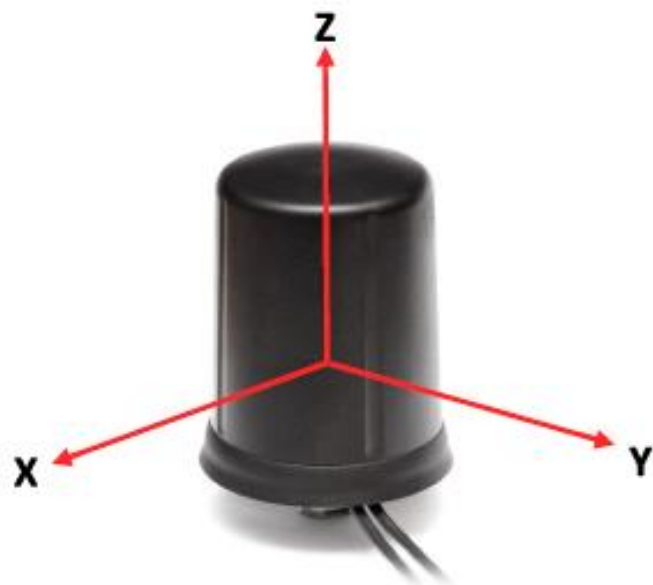


**Cable 2: 2.4/5.0GHz ISM**



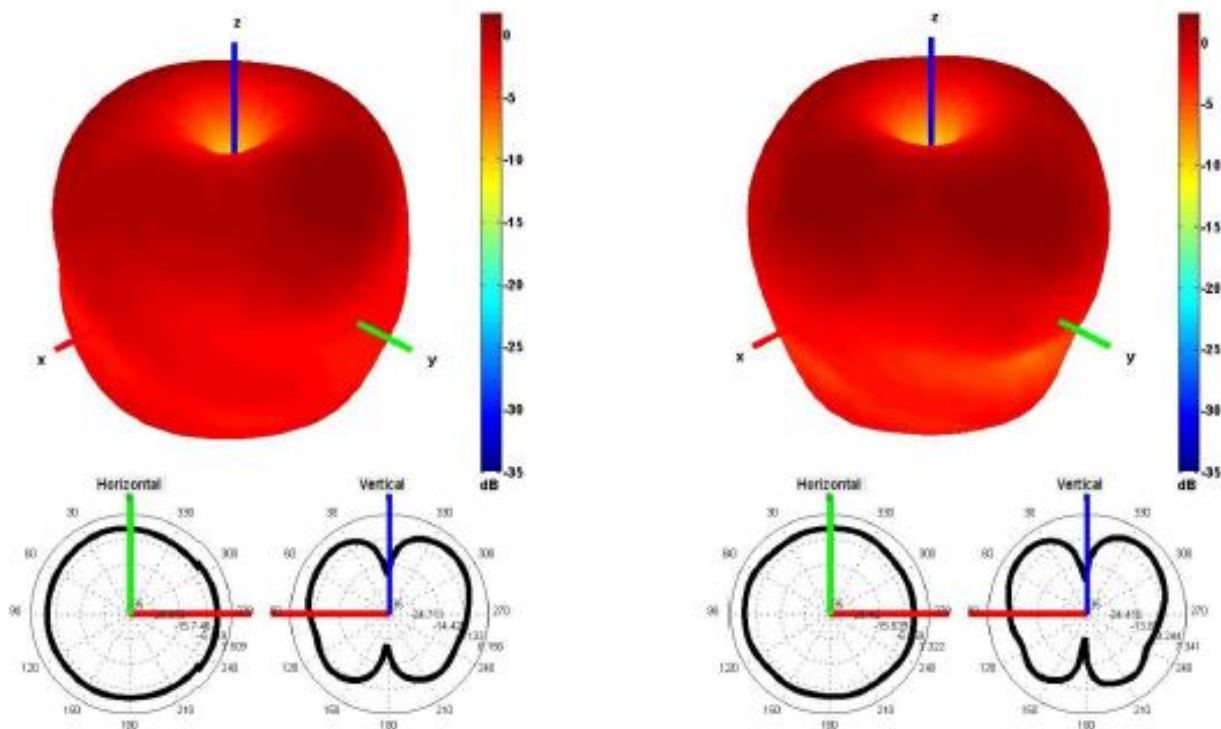




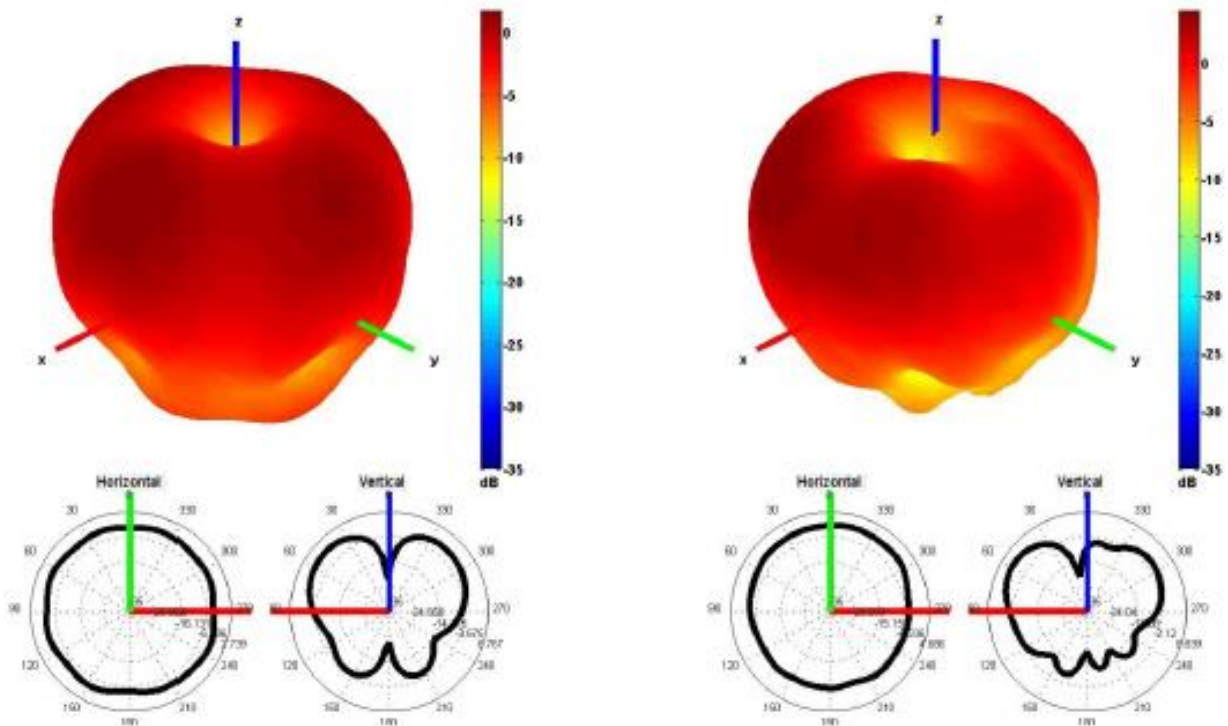


Radiation pattern reference

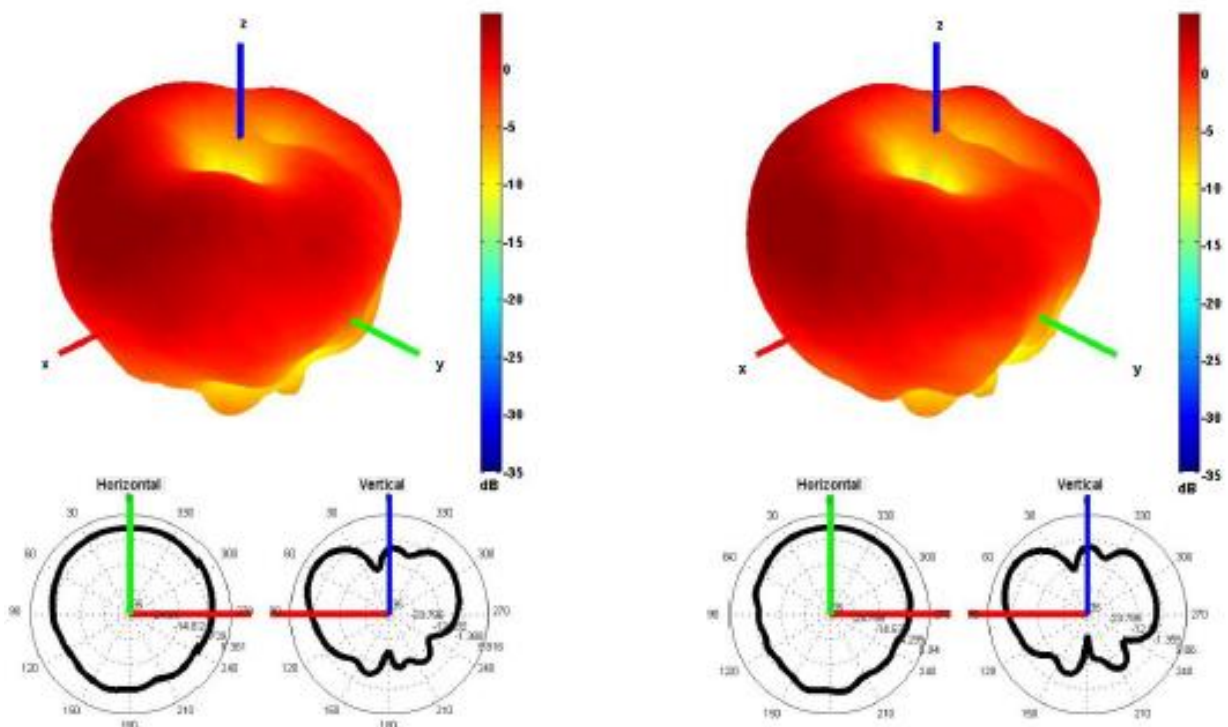
Cable 1: CELLULAR/LTE



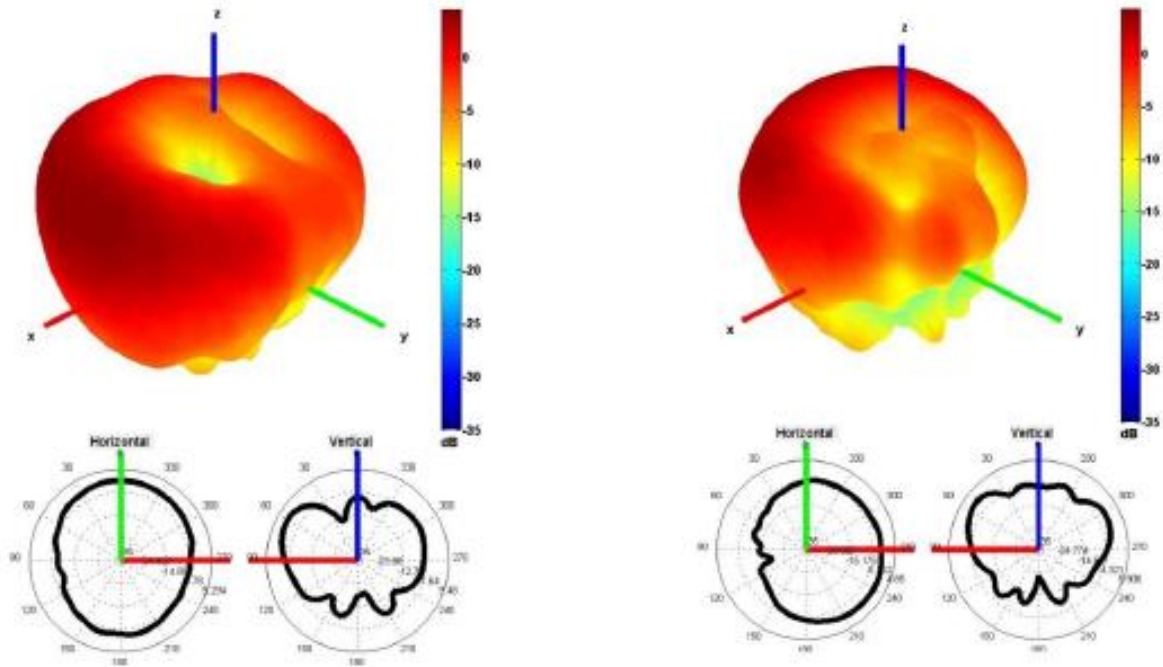
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

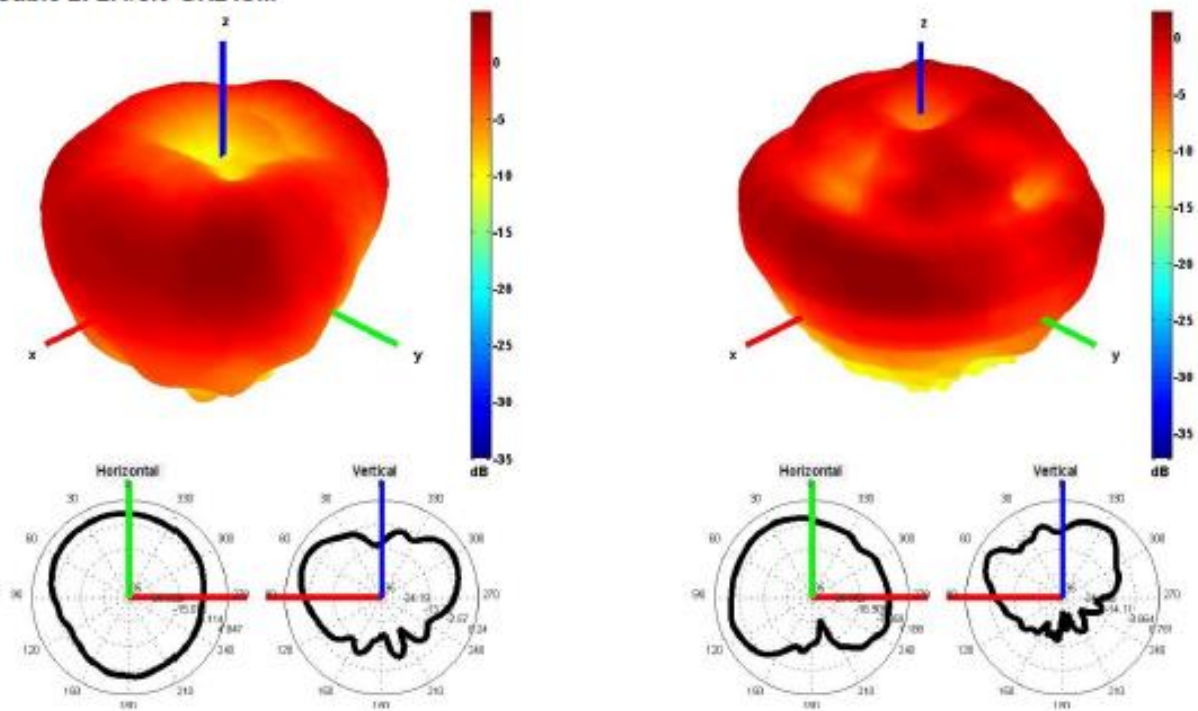


1850 and 1950 MHz Radiation pattern



2100 and 2600 MHz Radiation pattern

Cable 2: 2.4/5.0 GHz ISM



2450 and 5500 MHz Radiation pattern