

## 2J7747M

### CELLULAR/LTE and 2.4/5.0 GHz ISM Magnetic Mount

#### Key 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

Magnetic Mount

Ground Plane Dependent

Customizable Cable and Connector

Dimensions: Ø 54 x 68.2 mm

Certificates: IP67, IP69, IK09



## 2. Antenna and electrical specifications

Cable 1

Parameters	CELLULAR / LTE Antenna		
<b>Standards</b>	2G,3G and 4G		
<b>Band (MHz)</b>	700/850/900	1700/1800/1900/2100	2600
<b>Frequency (MHz)</b>	698-960	1710-2170	2500-2700
<b>Return Loss (dB)</b>	~-9.7	~-15.2	~-9.5
<b>VSWR</b>	~2.1:1	~1.4:1	~2.1:1
<b>Efficiency (%)</b>	~61.4	~61.9	~42.4
<b>Peak Gain (dBi)</b>	~-2.2	~-3.7	~-3.2
<b>Average Gain (dB)</b>	~-2.2	~-2.1	~-3.8
<b>Impedance (Ohm)</b>	50		
<b>Polarisation</b>	Linear		
<b>Radiation Pattern</b>	Omni-Directional		
<b>Max. Input Power (W)</b>	25		
<b>Connector Type</b>	SMA-Male Standard (Other Connectors Available)		
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)		
<b>Cable Type</b>	LL100 Standard (Other Cables Available)		

Cable 2

Parameters	2.4/5.0 GHz ISM Antenna	
<b>Standards</b>	WiFi, BT, ZigBee, ISM	
<b>Band (MHz)</b>	2.4 GHz	5.0 GHz
<b>Frequency (MHz)</b>	2410-2490	4920-5925
<b>Return Loss (dB)</b>	~-11.4	~-11.3
<b>VSWR</b>	~1.7:1	~1.8:1
<b>Efficiency (%)</b>	~57.4	~43.6
<b>Peak Gain (dBi)</b>	~-4.5	~-4.8
<b>Average Gain (dB)</b>	~-2.4	~-3.6
<b>Impedance (Ohm)</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>	300 cm Standard (Any Cable Length Available)	
<b>Cable Type</b>	LL100 Standard (Other Cables Available)	

**Antenna Measurement Conditions:**

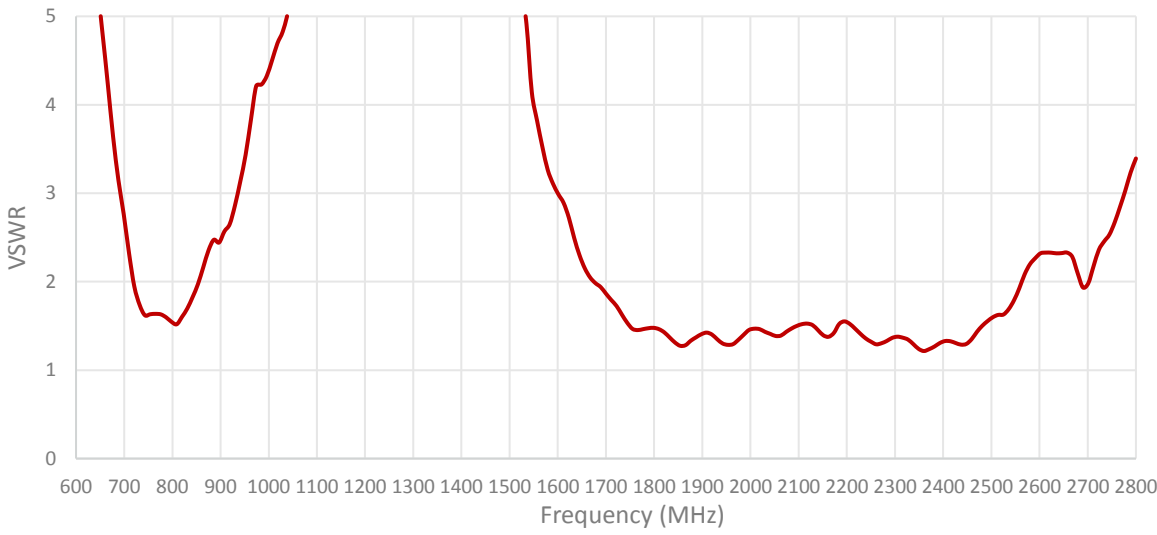
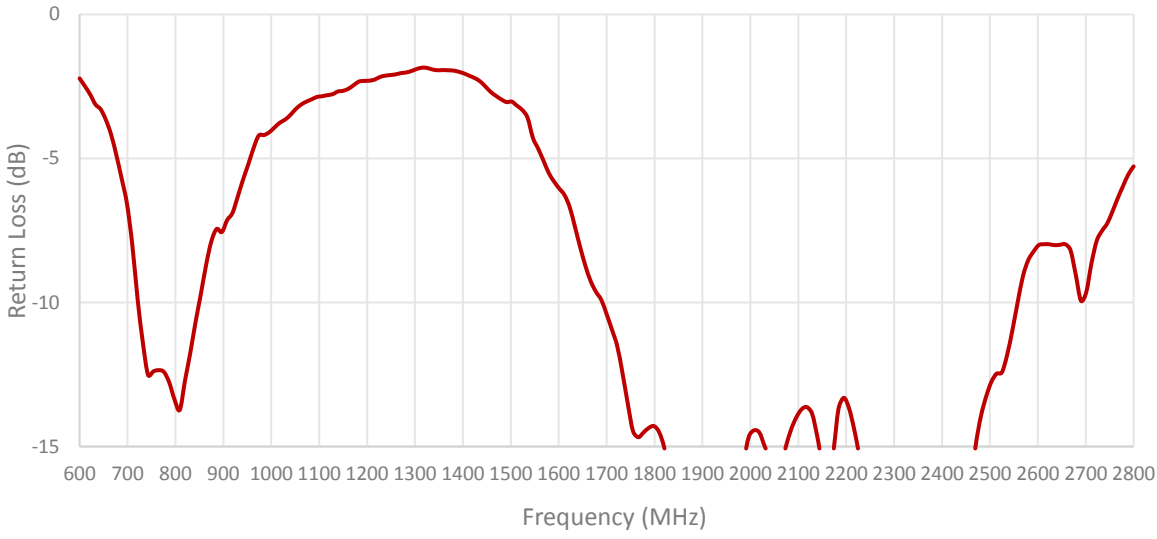
Mounted on 30 x 30 cm Ground Plane  
 200 cm of Cable LL100  
 Measured in Certified CTIA 3D Anechoic Chamber

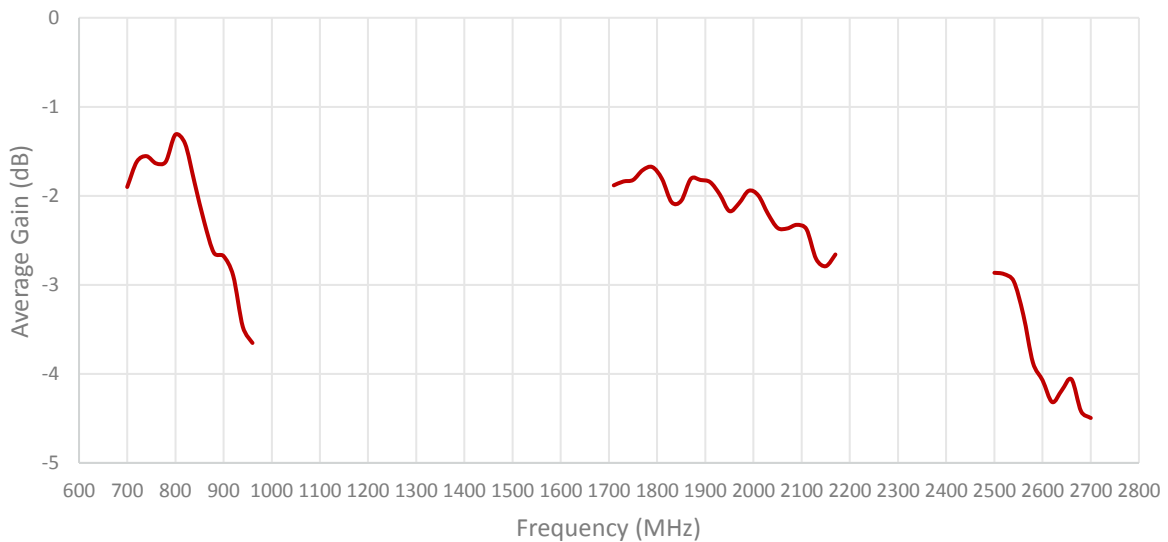
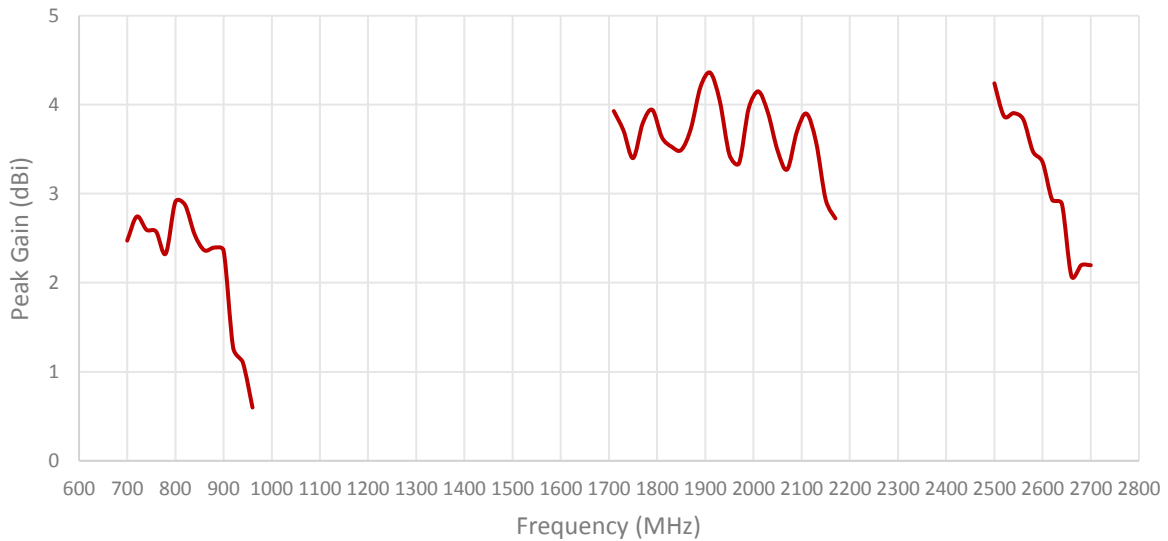
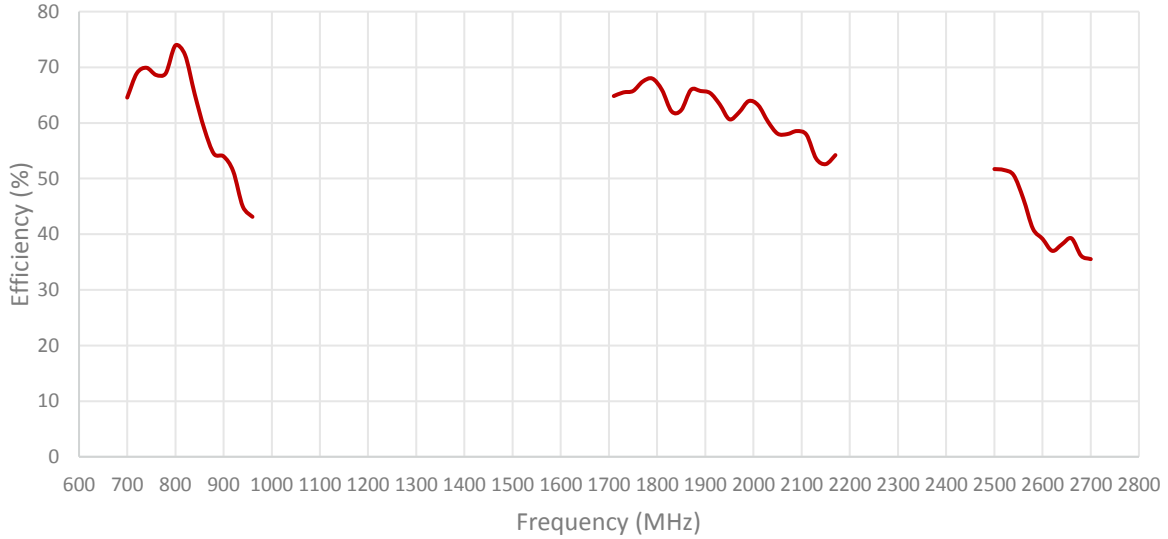
### 3. Mechanical and environmental specifications

Specifications	2J7747M
<b>Mounting Type</b>	Magnetic Mount
<b>Dimensions (mm)</b>	Ø 54 x 68.2
<b>Radome Type</b>	ASA
<b>Radome Color</b>	Black
<b>Antenna Base</b>	Zamak
<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

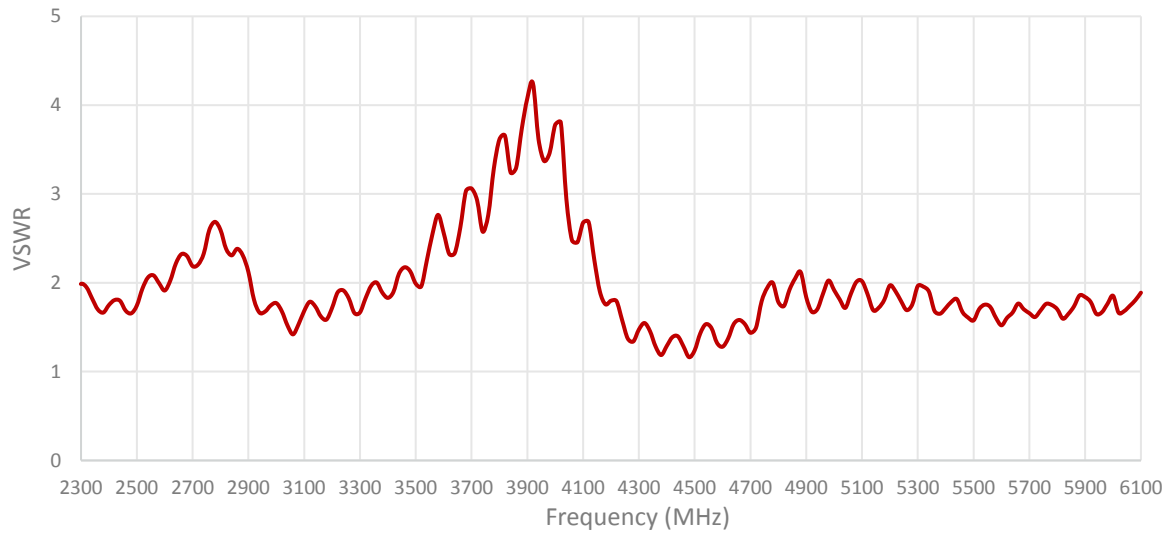
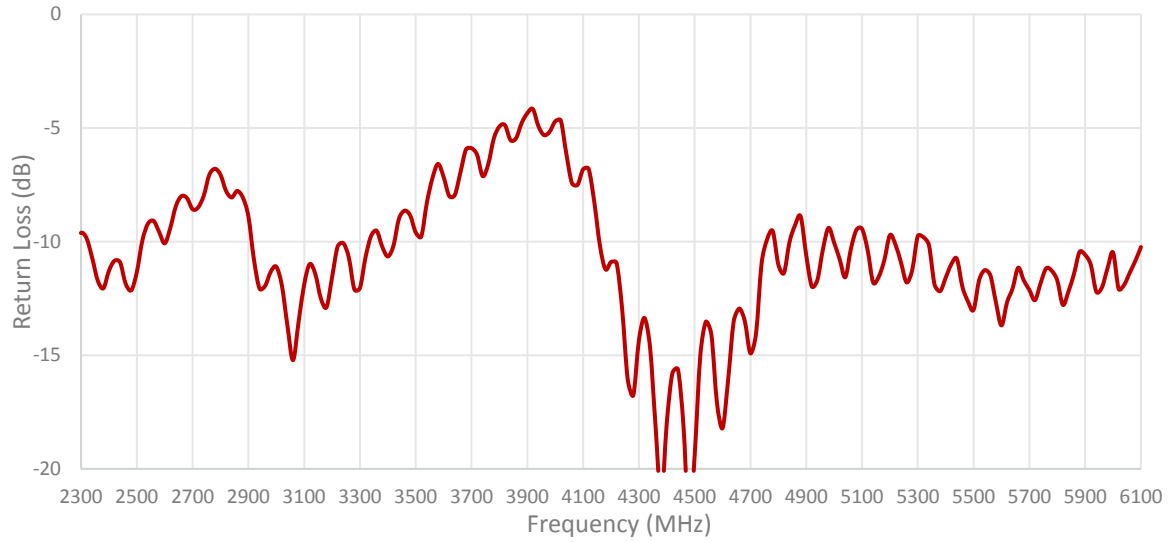
## 4. Antenna parameters

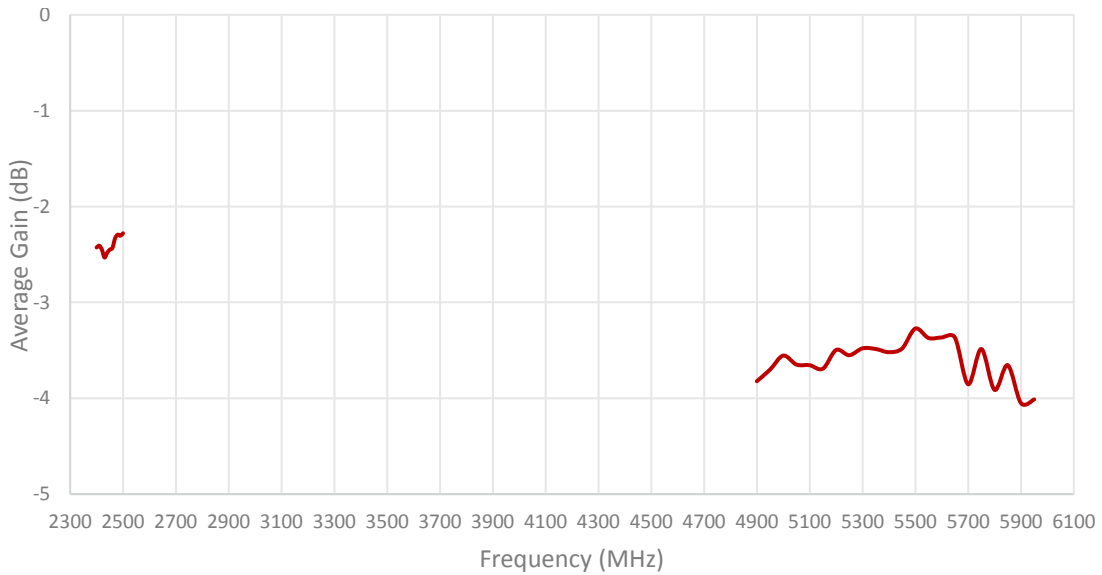
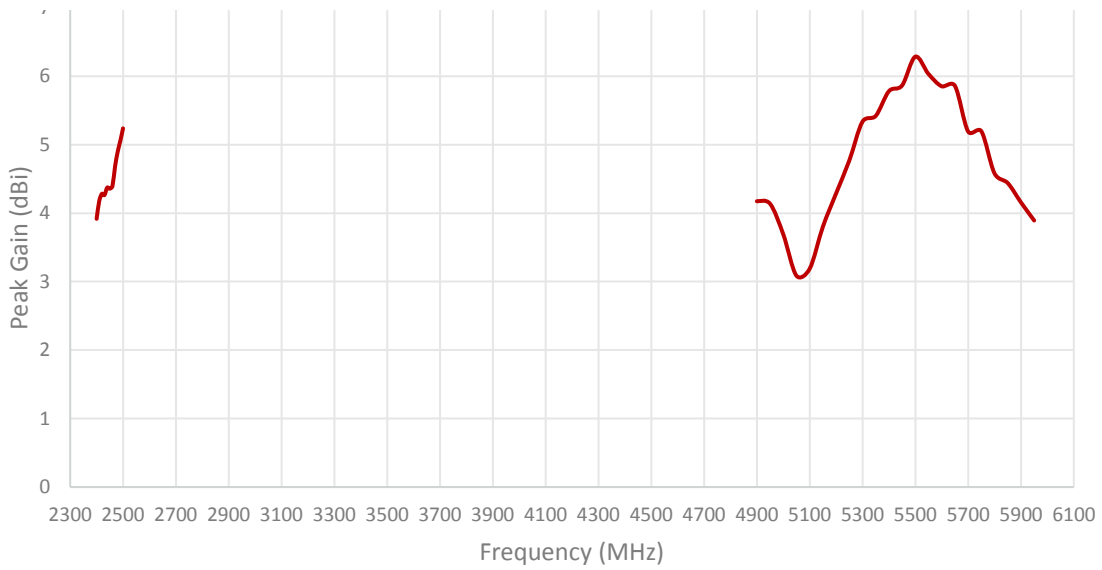
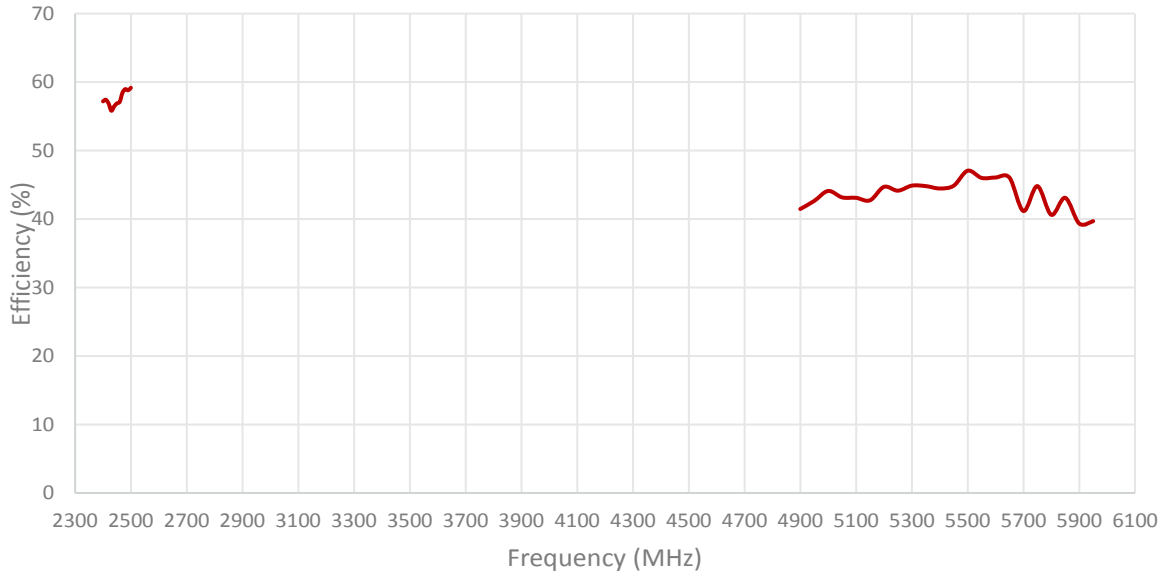
Cable 1: CELLULAR/LTE

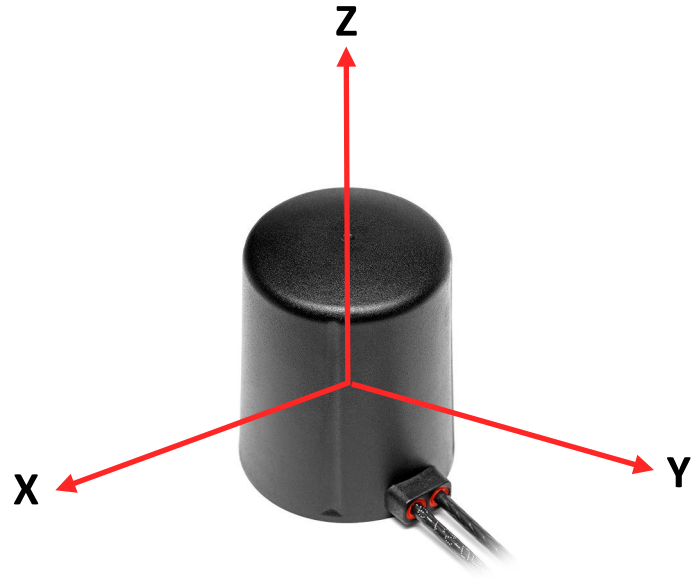




**Cable 2: 2.4/5.0 GHz ISM**

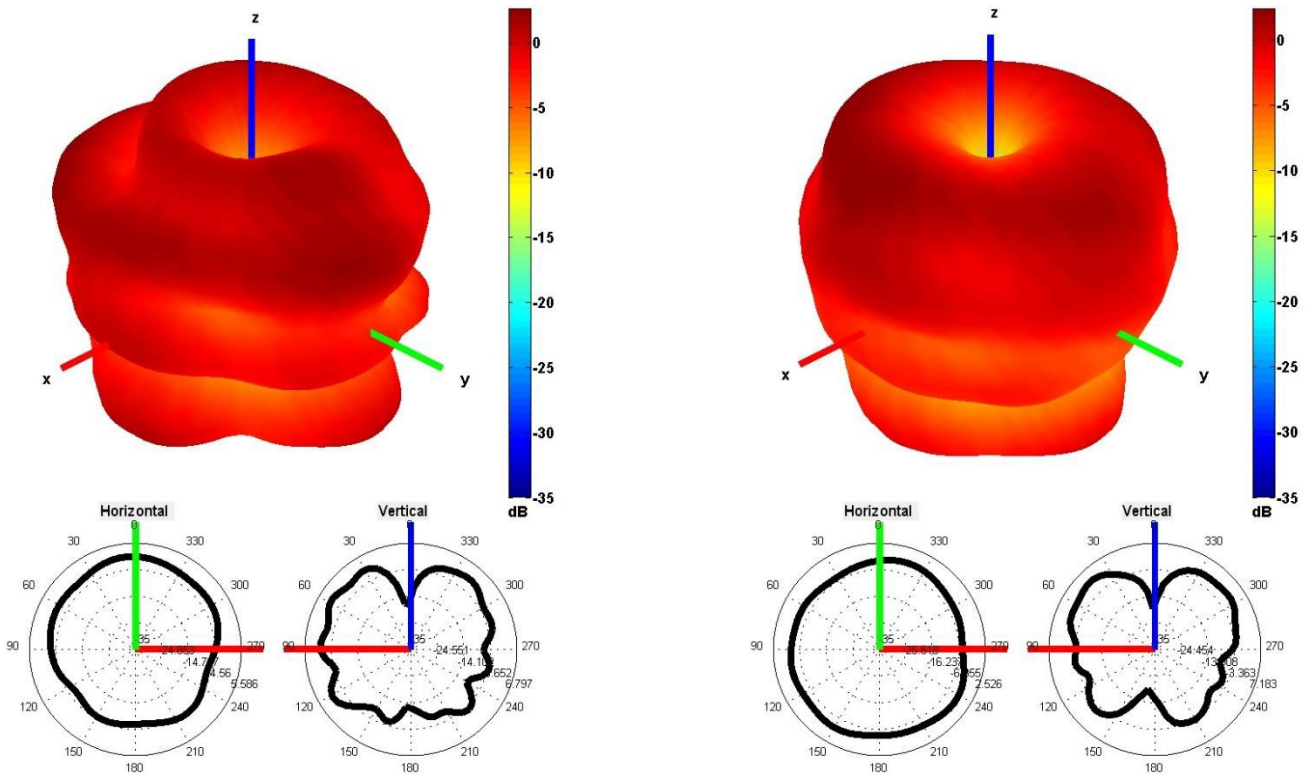






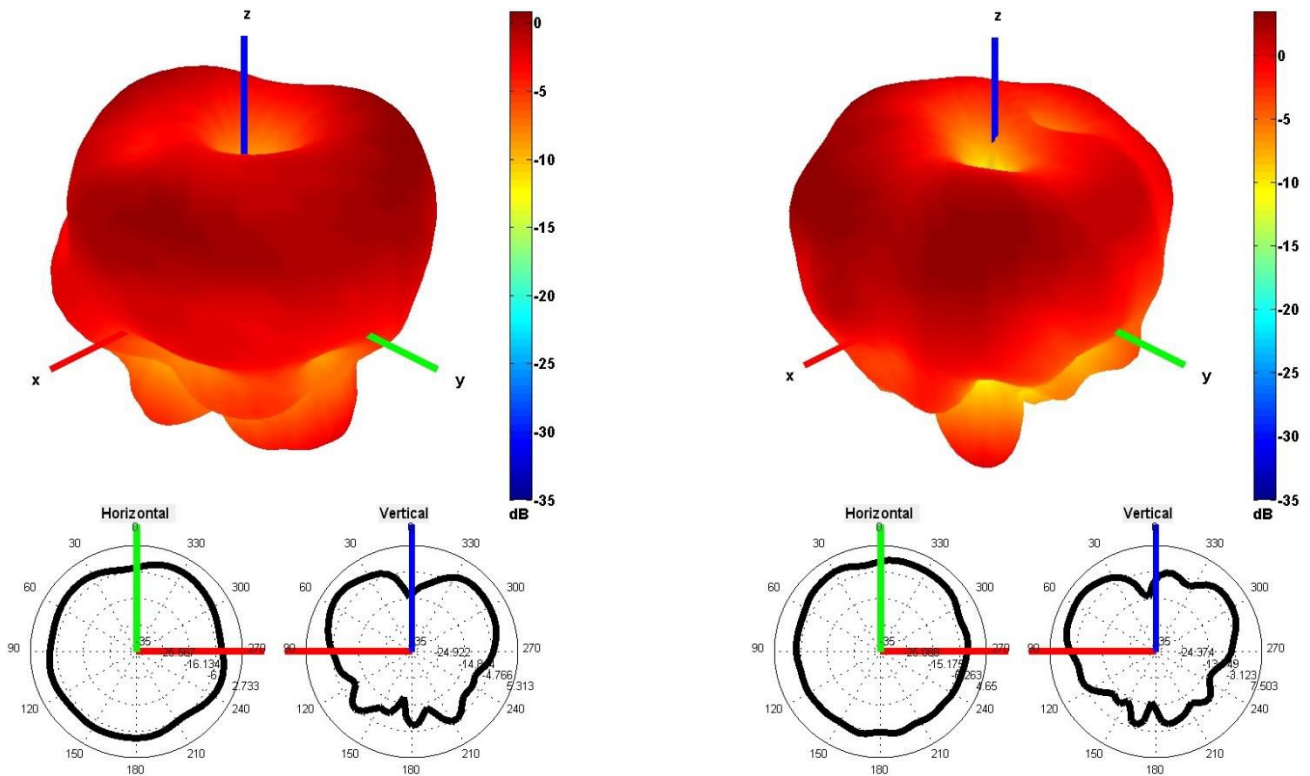
Radiation pattern reference

Cable 1: CELLULAR/LTE

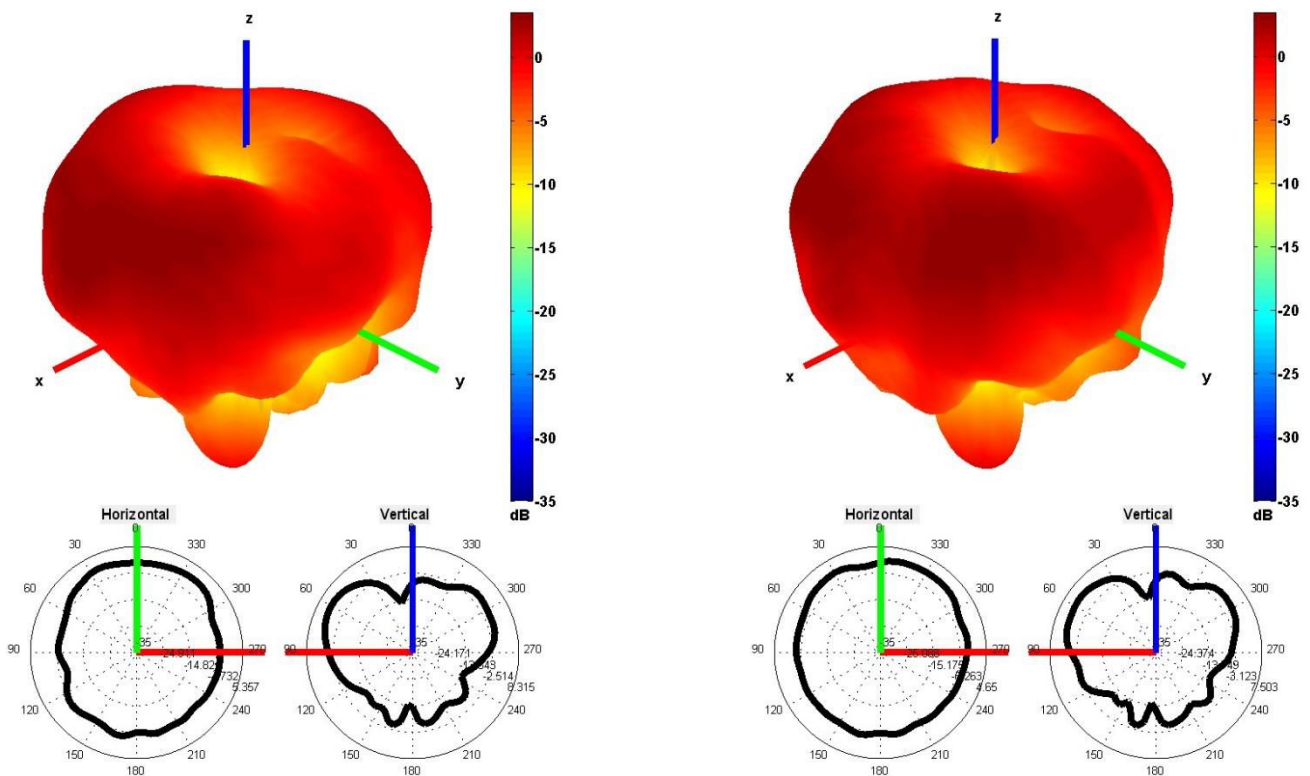


750 and 850 MHz Radiation pattern

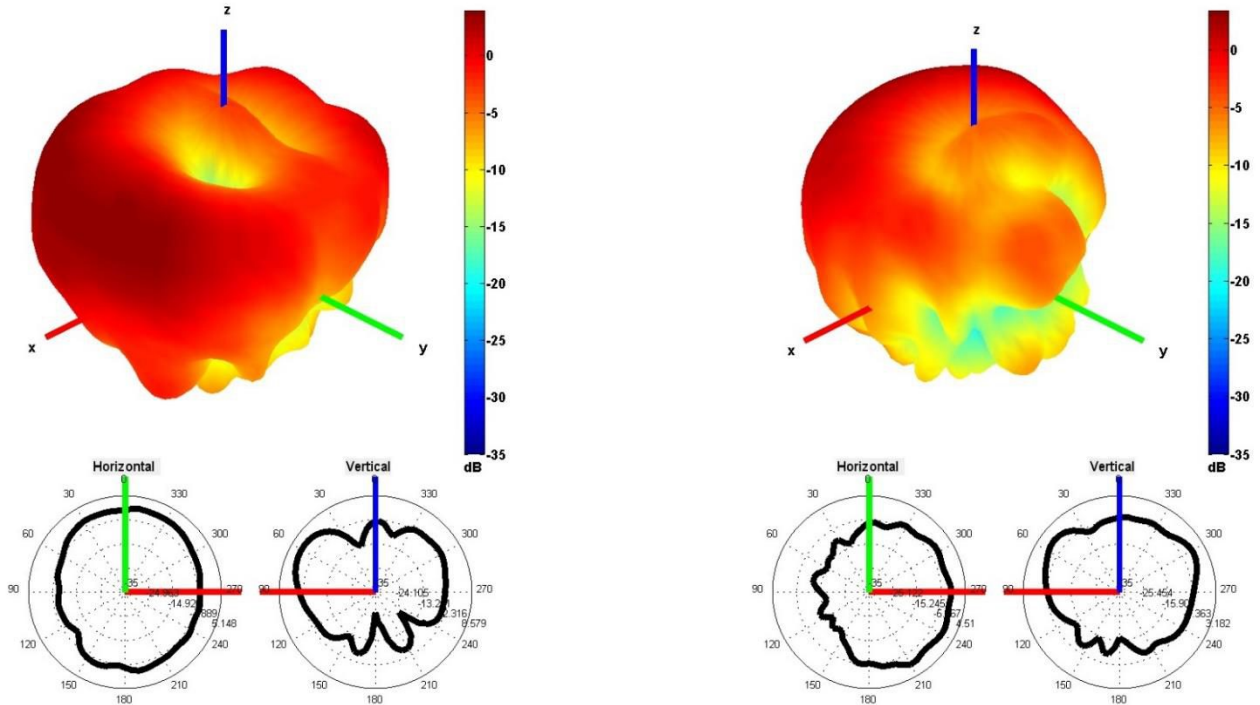




940 and 1750 MHz Radiation pattern

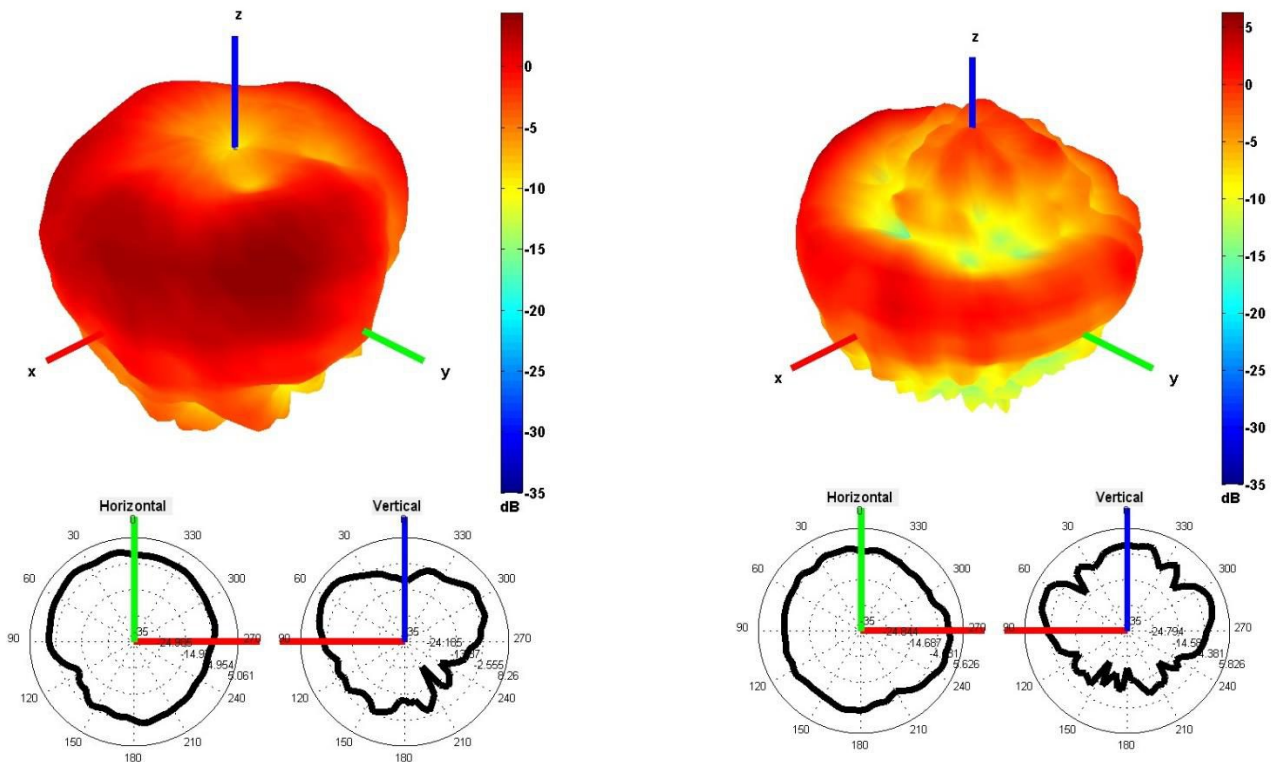


1850 and 1950 MHz Radiation pattern



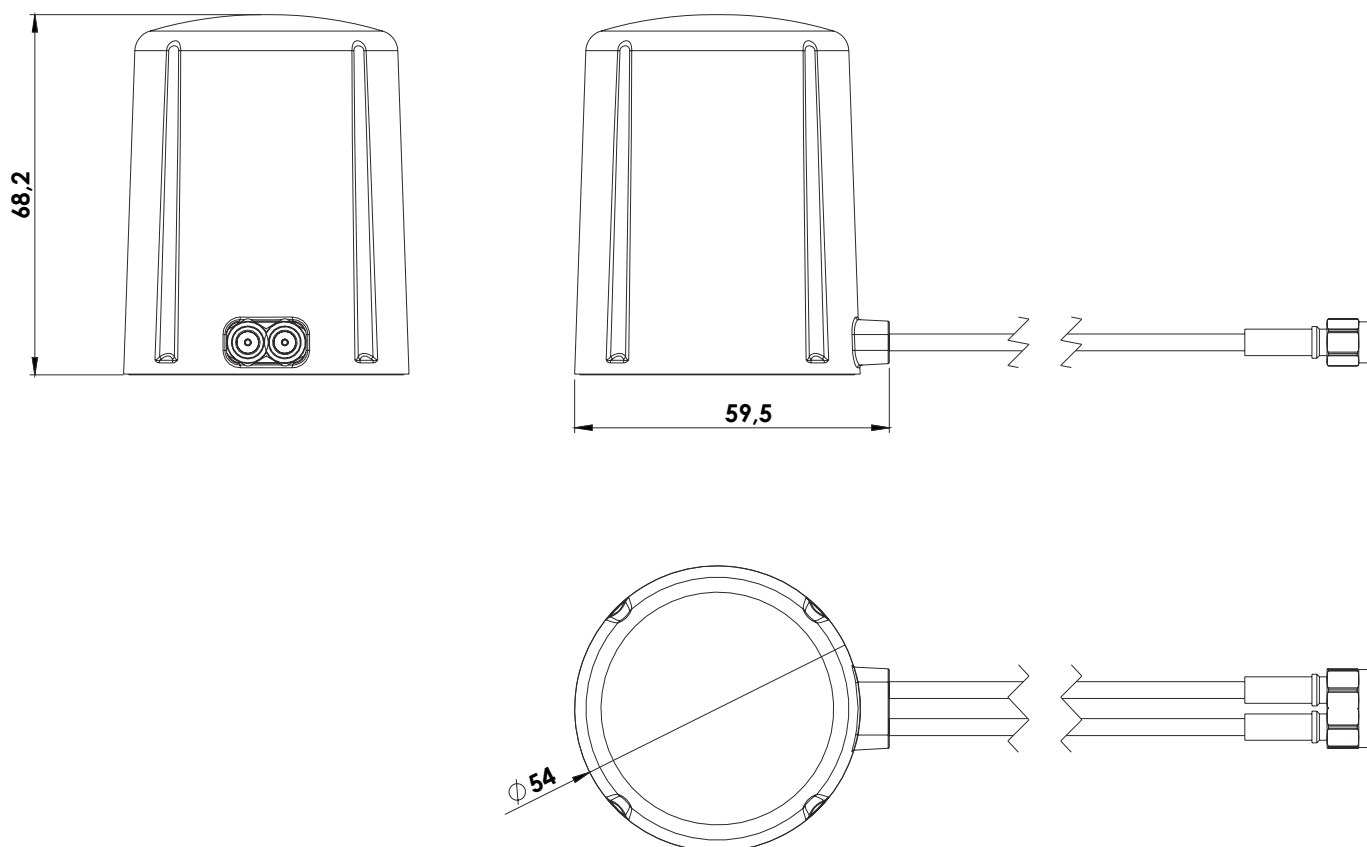
2100 and 2600 MHz Radiation pattern

Table 2: 2.4/5.0 GHz ISM



2450 and 5500 MHz Radiation pattern

## 4. Antenna drawings



## 5. Antenna Images

