

## 2J4250PGF-2.4

CELLULAR/LTE, 2.4 GHz ISM and GNSS Adhesive Mount

### Key Features

#### Cable 1: CELLULAR / LTE

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

#### Cable 2: 2.4 GHz ISM

- 2410-2490 MHz

#### Cable 3: GPS/GLONASS/QZSS/Galileo

- 1575-1606 MHz

Adhesive Mount

High Performance

Compact Size

Ground Plane Independent

Customizable Cable and Connector

Dimensions: 77 × 34 × 14 mm

Certificates: IP67, IP69



## 1. 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>	~-7.6	~-13.1	~-15.4
<b>VSWR</b>	~2.5:1	~1.6:1	~1.5:1
<b>Efficiency (%)</b>	~29.6	~27.0	~18.9
<b>Peak Gain (dBi)</b>	~-2.4	~-2.2	~-2.1
<b>Average Gain (dB)</b>	~-5.5	~-5.7	~-7.2
<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 GHz ISM Antenna
<b>Standards</b>	WiFi, BT, ZigBee, ISM
<b>Band (MHz)</b>	2.4 GHz
<b>Frequency (MHz)</b>	2410-2490
<b>Return Loss (dB)</b>	~-12.5
<b>VSWR</b>	~1.8:1
<b>Efficiency (%)</b>	~21.6
<b>Peak Gain (dBi)</b>	~-2.8
<b>Average Gain (dB)</b>	~-7.6
<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 Plastic Plate

LL100 200 cm Cable Length

Measured in Certified CTIA 3D Anechoic Chamber

Cable 3

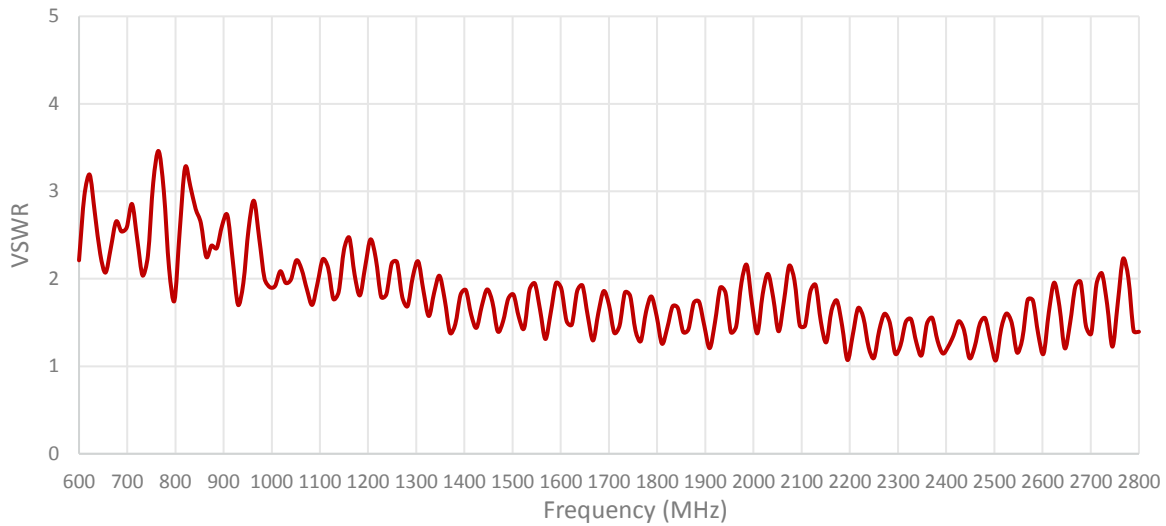
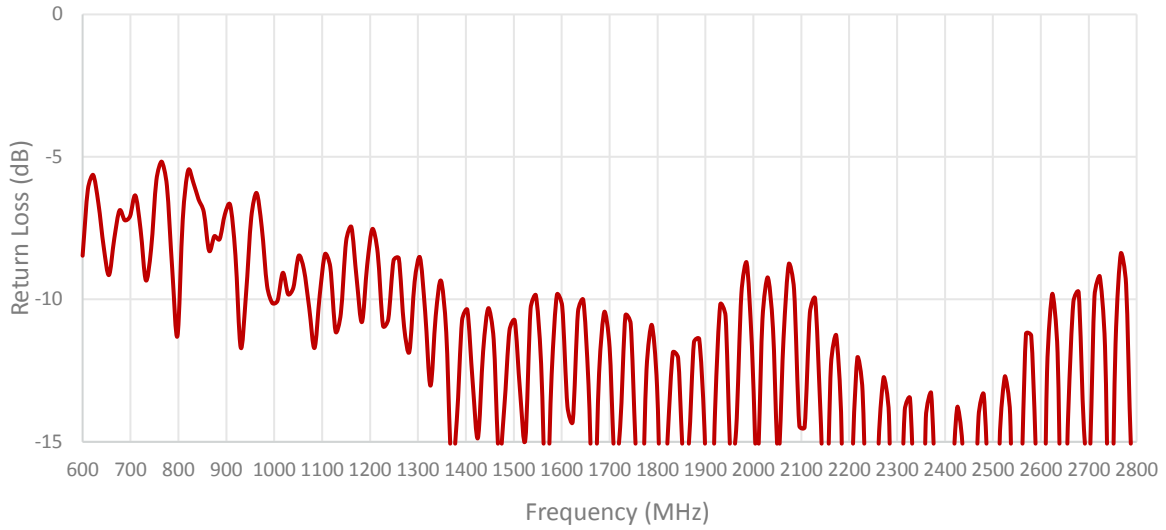
Parameters	GPS/GLONASS Antenna	
	GPS/QZSS/Galileo	GLONASS
<b>Standard</b>		
<b>Band (MHz)</b>	1575	1602
<b>Frequency(MHz)</b>	1575.42	1598-1606
<b>Patch Size (mm)</b>	25 x 25 x 4	
<b>Return Loss (dB)</b>	<=-15.0 dB	
<b>VSWR</b>	<=1.4:1 dB	
<b>Impedance</b>	50	
<b>Radiation Pattern</b>	Hemispherical	
<b>Polarization</b>	RHCP	
<b>Saw Filter</b>	Pre-filter	
<b>Active Gain (dB)</b>	28 @ 2.7 V	
<b>Noise Figure (dB)</b>	1.5 Typ	
<b>Voltage (V)</b>	1.5 - 3.6	
<b>Current (mA)</b>	9 Typ	
<b>Power Consumption (mW)</b>	24.3 Typ	
<b>ESD Protection (kV)</b>	2kV	
<b>Connector Type</b>	SMA-Male Standard (Other Connectors Available)	
<b>Cable Length</b>	200 cm Standard (Any Cable Length Available)	
<b>Cable Type</b>	LL100 Standard (Other Cables Available)	

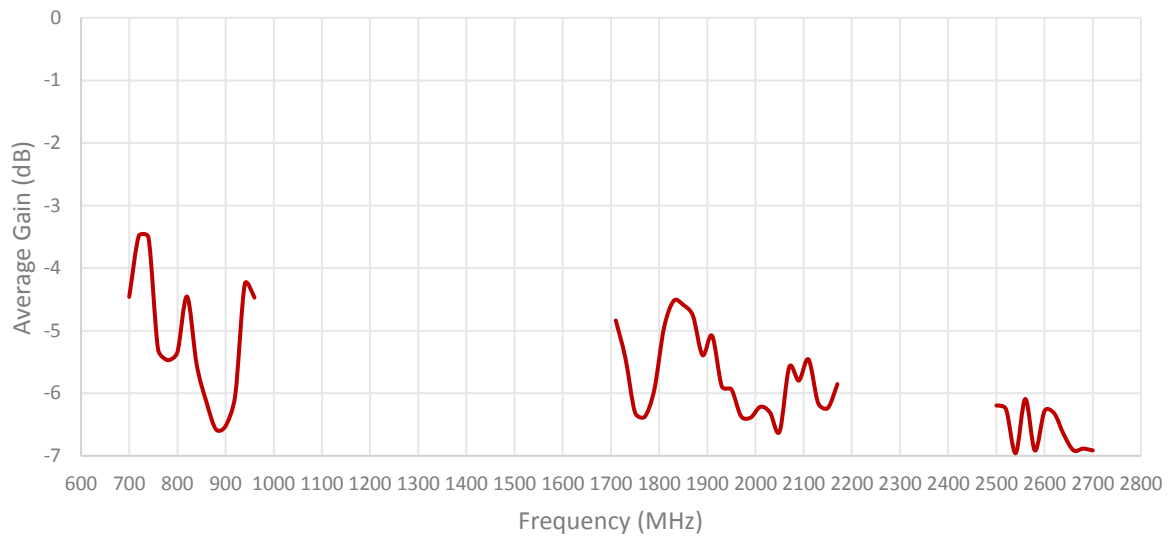
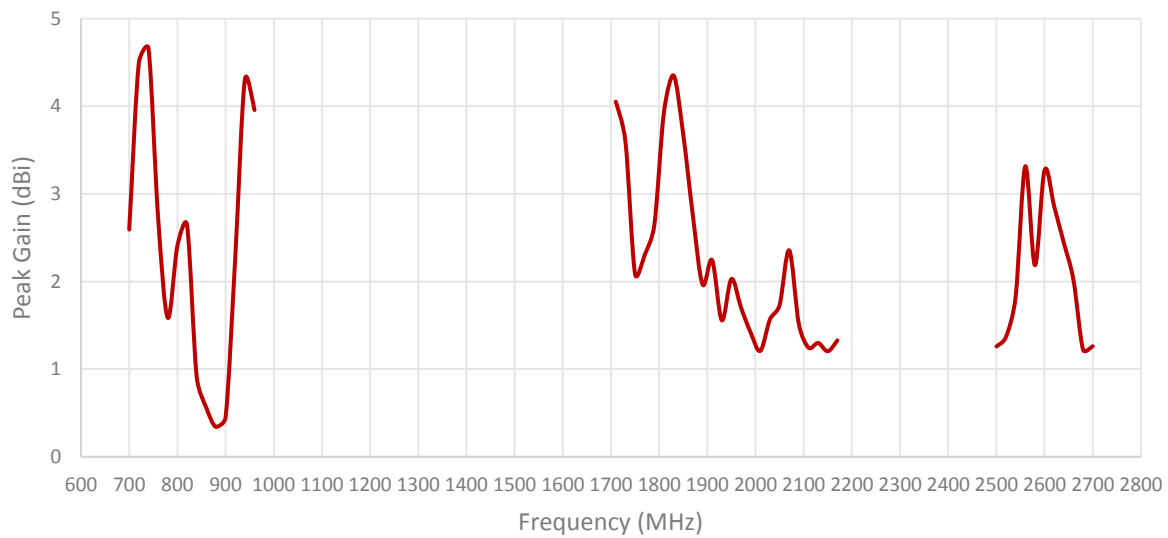
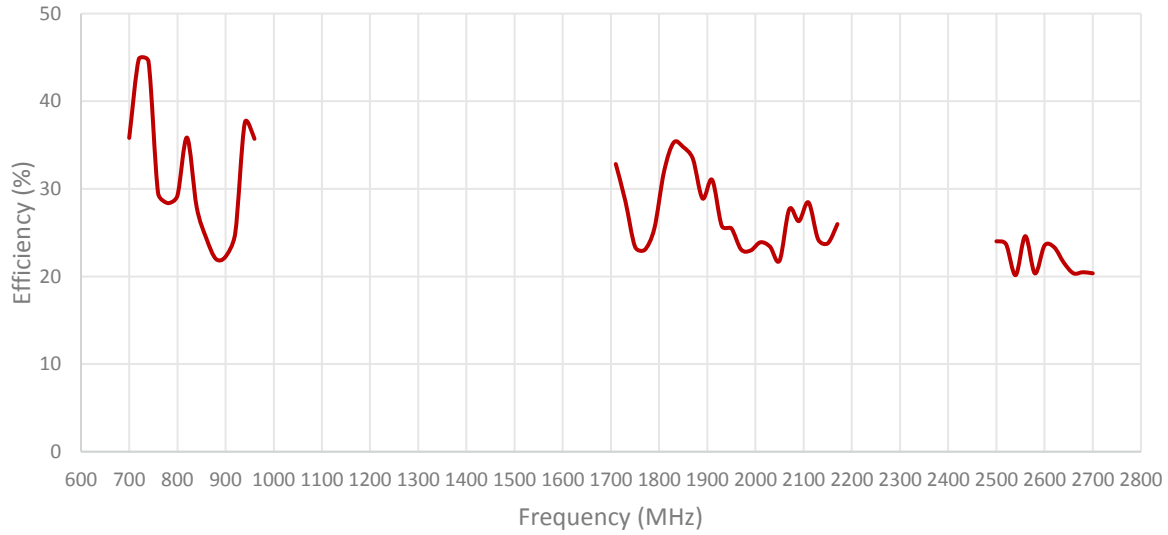
## 2. Mechanical and environmental specifications

Specifications	2J4250PGF-2.4
<b>Mounting Type</b>	Adhesive Mount
<b>Dimensions (mm)</b>	77 x 34 x 14
<b>Radome Type</b>	ASA UV Stable
<b>Radome Color</b>	Black
<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

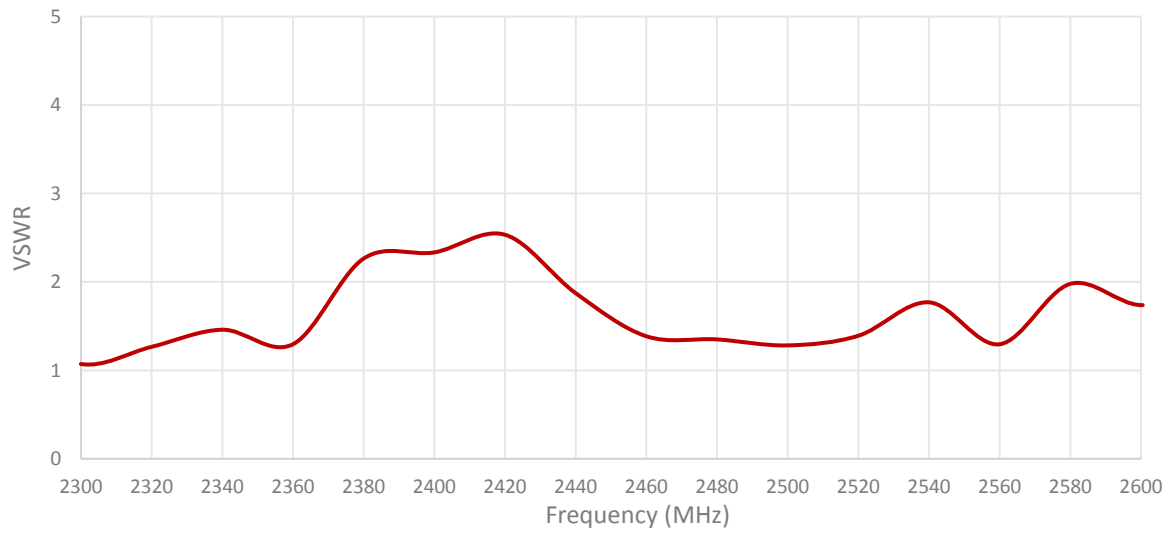
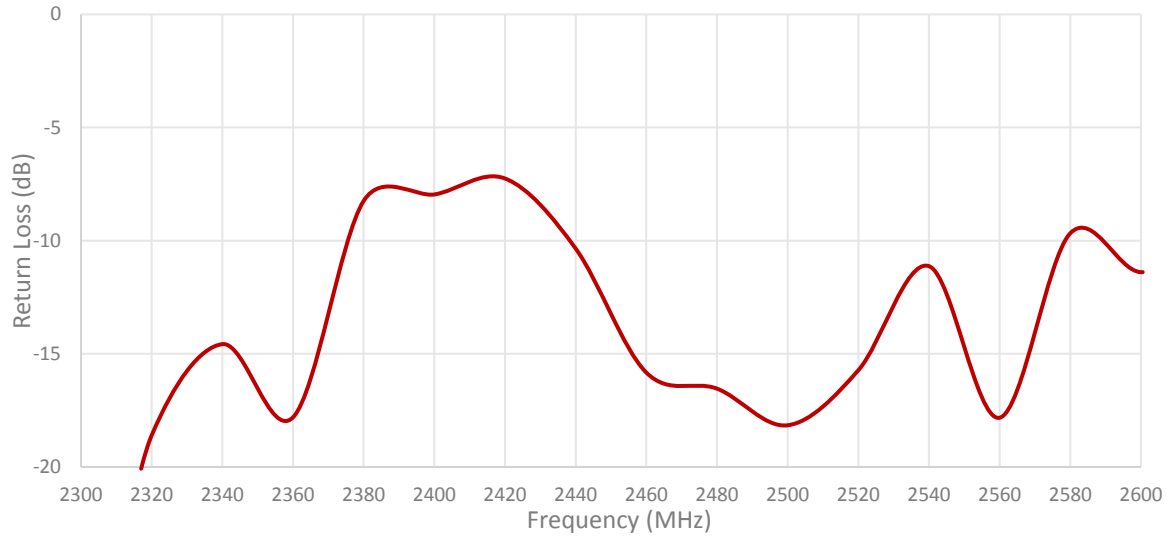
### 3. Antenna parameters

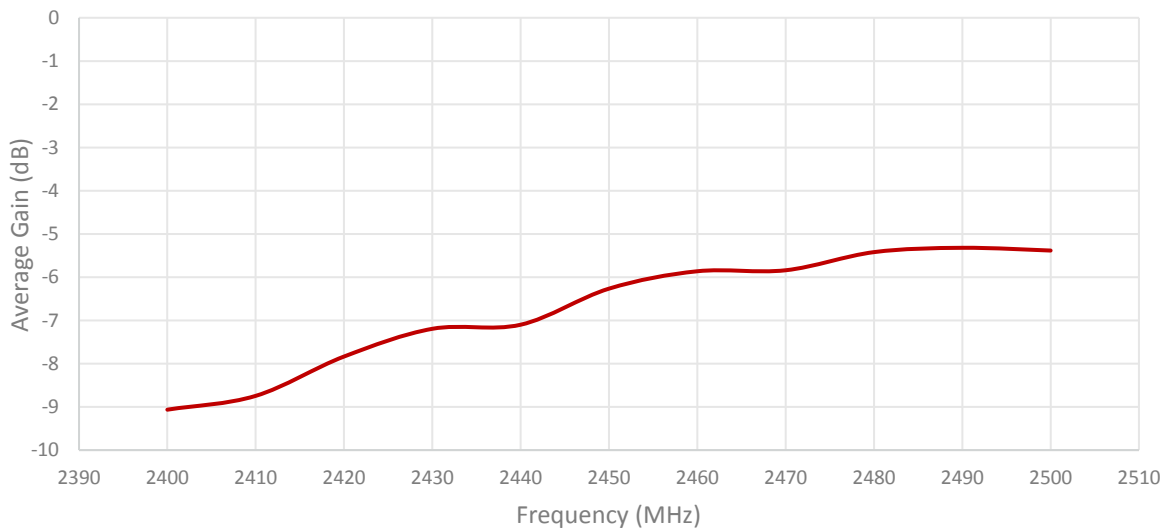
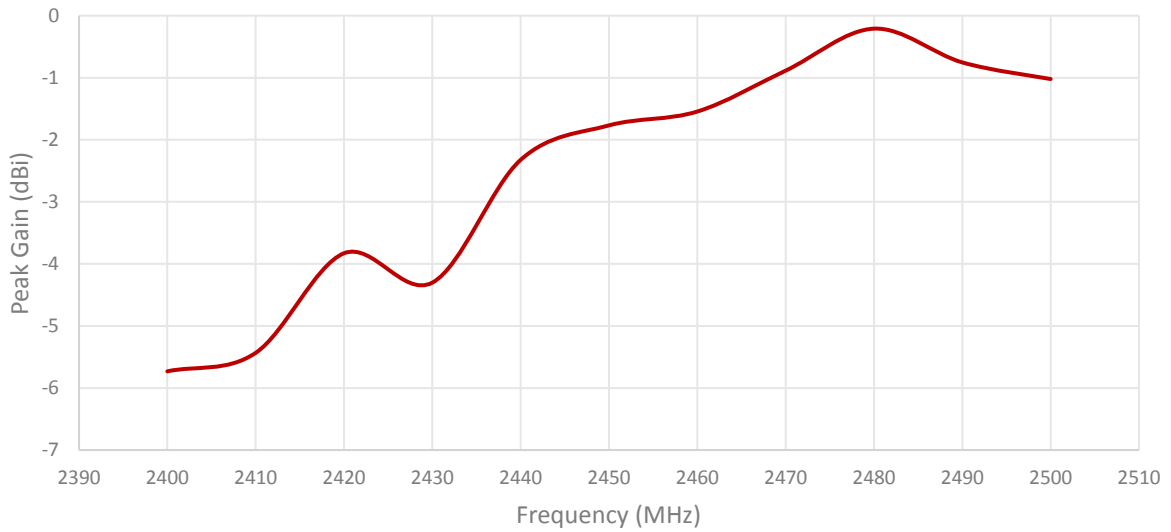
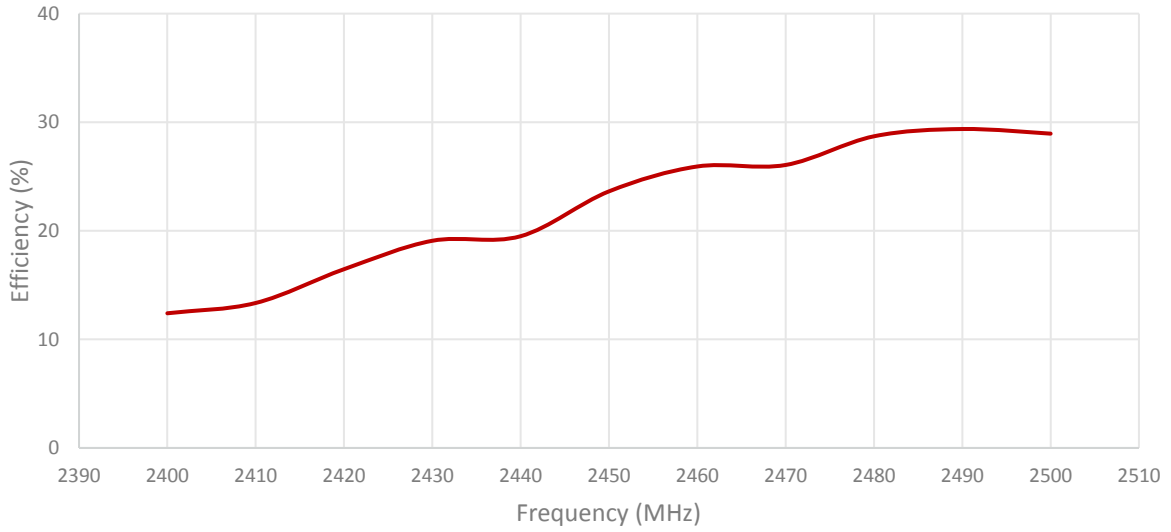
**Table 1: CELLULAR/LTE**

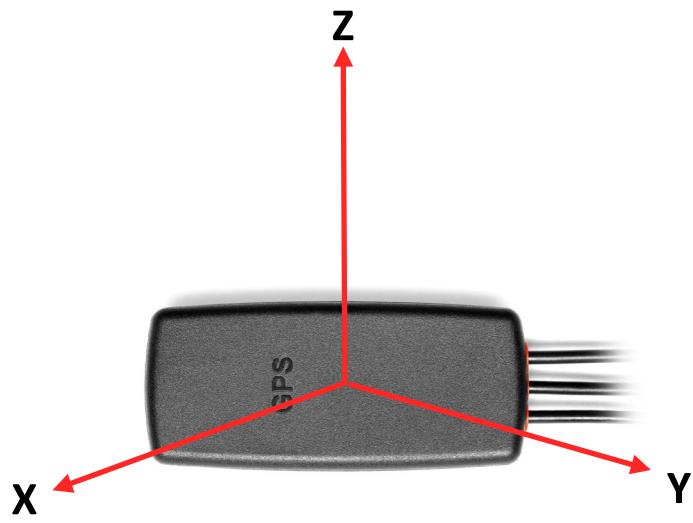




**Table 2: 2.4 GHz ISM**

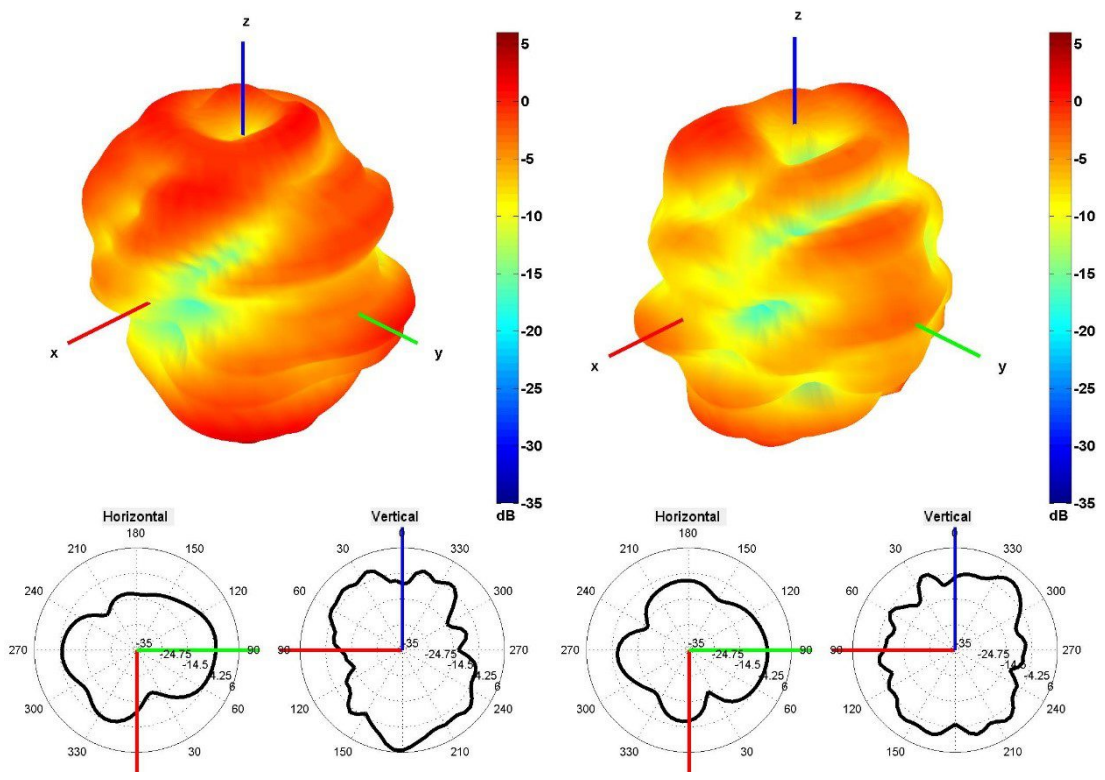






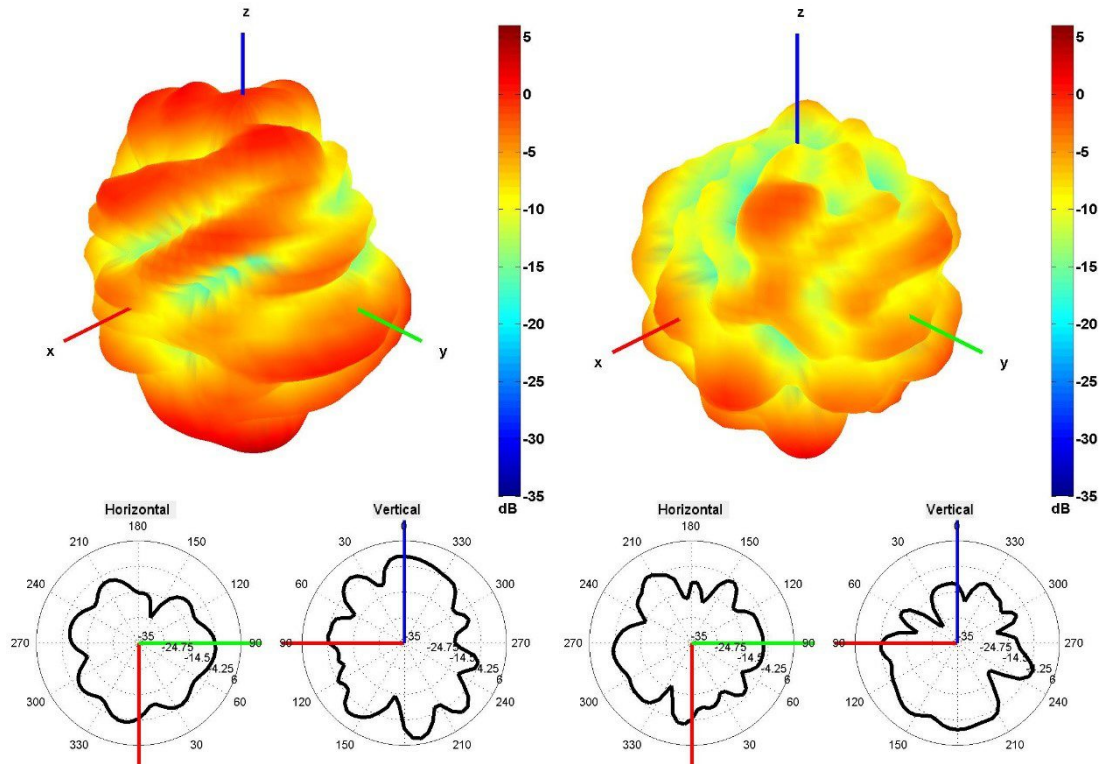
Radiation pattern reference

Table 1: CELLULAR/LTE

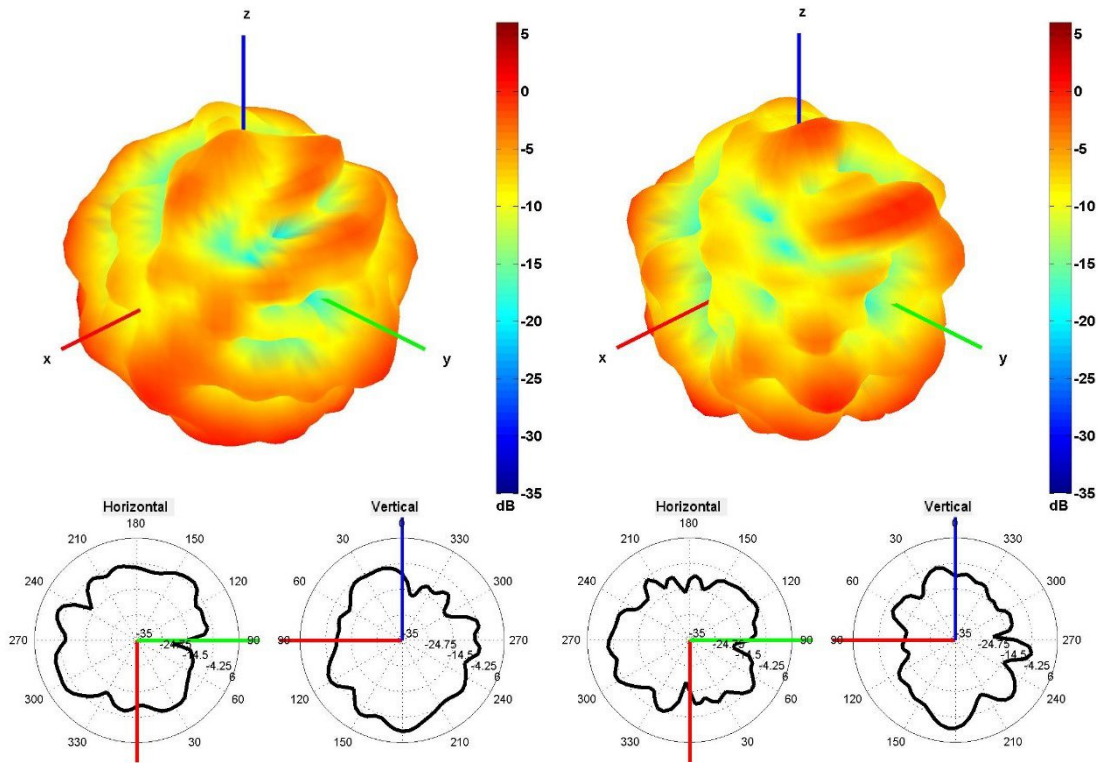


750 and 850 MHz Radiation pattern

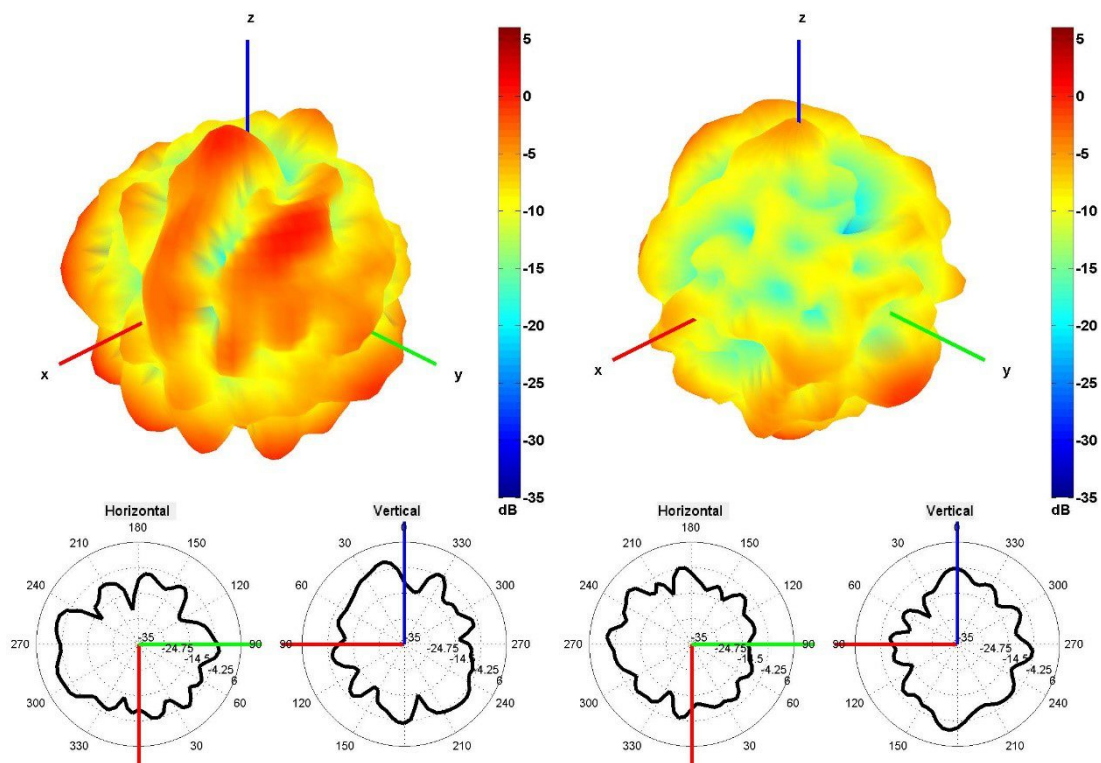




940 and 1750 MHz Radiation pattern

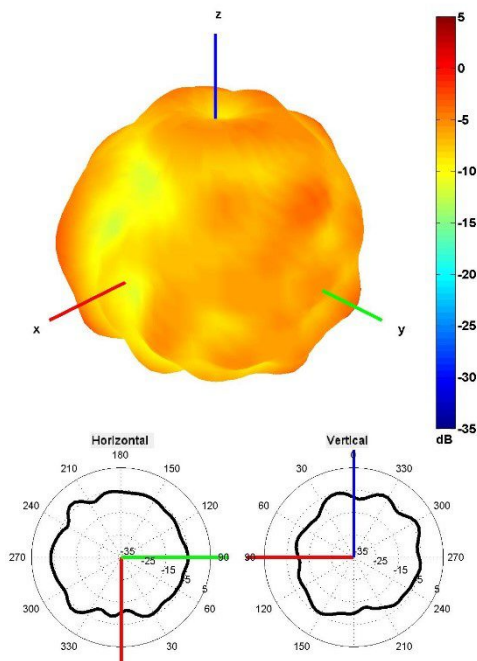


1850 and 1950 MHz Radiation pattern



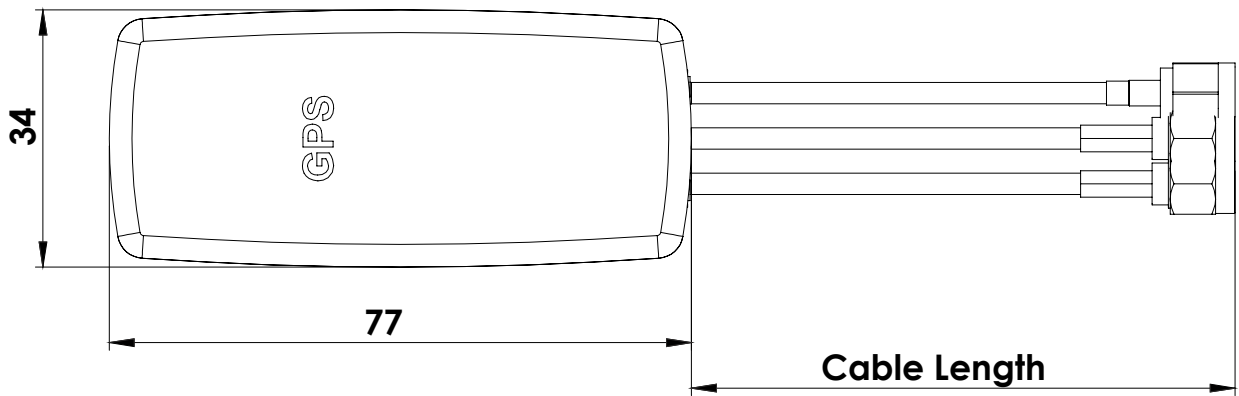
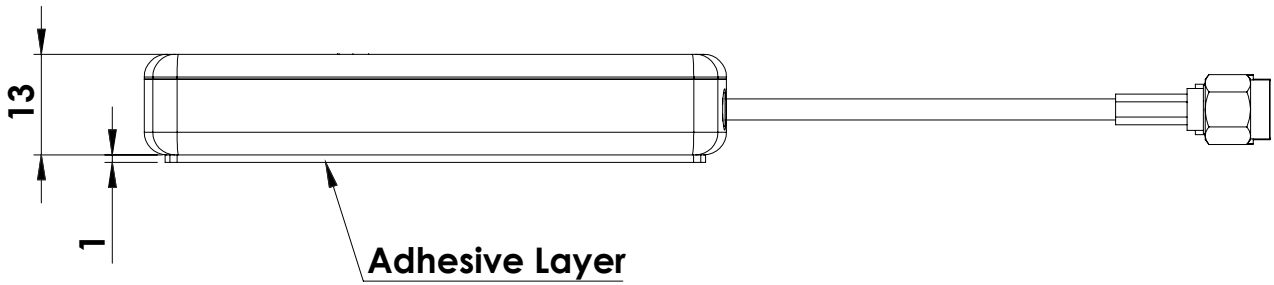
2100 and 2600 MHz Radiation pattern

Cable 2: 2.4 GHz ISM



2450 MHz Radiation pattern

#### 4. Antenna drawings



5. Antenna Images

