

## 2J6947B

CELLULAR/LTE and 2.4/5.0 GHz ISM Screw 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

Screw Mount

Anti-Rotation Mounting

Low Profile

Ground Plane Independent

Customizable Cable and Connector

Dimensions 80 × 74 × 25.6 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>	~-9.3	~-6.8	~-19.9
<b>VSWR</b>	~2.1:1	~2.7:1	~1.3:1
<b>Efficiency (%)</b>	~45.9	~50.3	~64.1
<b>Peak Gain (dBi)</b>	~-2.7	~-5.1	~-5.3
<b>Average Gain (dB)</b>	~-3.8	~-3.2	~-1.9
<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>	DACAR302 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>	~-13.5	~-12.8
<b>VSWR</b>	~1.6:1	~1.8:1
<b>Efficiency (%)</b>	~35.4	~26.4
<b>Peak Gain (dBi)</b>	~-3.4	~-3.2
<b>Average Gain (dB)</b>	~-4.5	~-5.8
<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>	RP-SMA-Male Standard (Other Connectors Available)	
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)	
<b>Cable Type</b>	DACAR302 Standard (Other Cables Available)	

**Antenna Measurement Conditions:**

Mounted on 30 x 30 cm Ground Plane

200 cm of Cable DACAR302

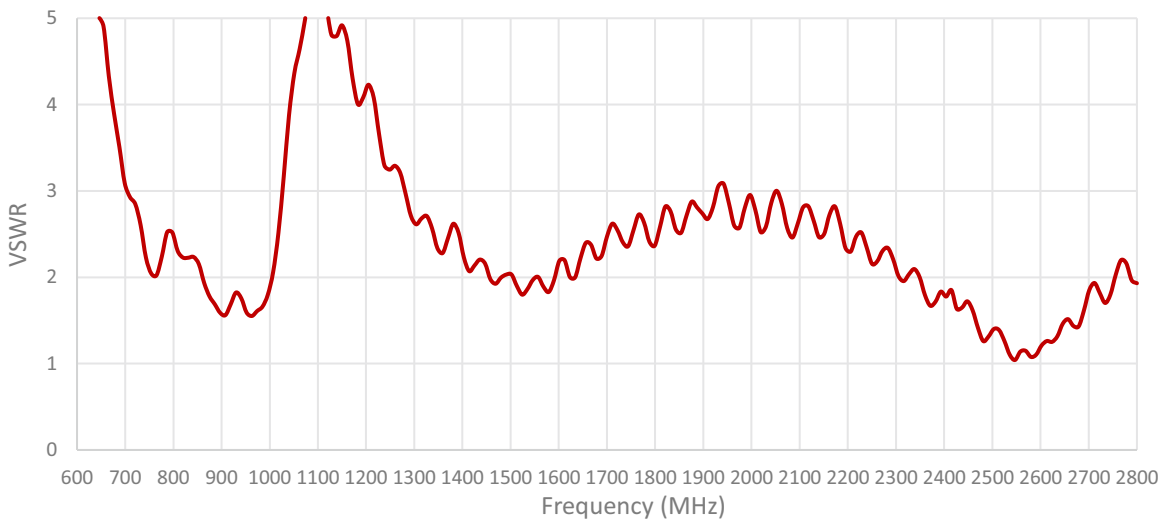
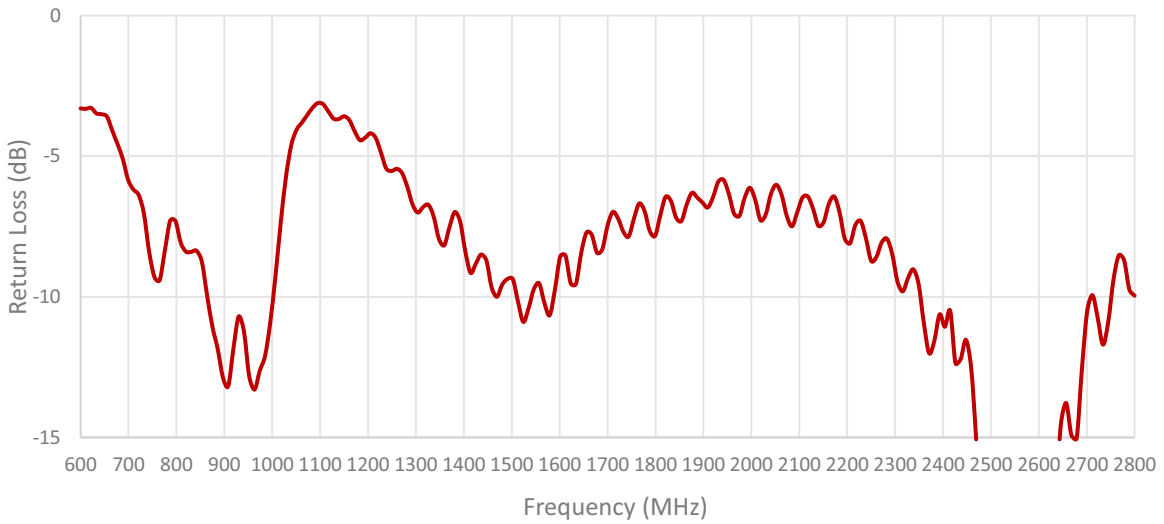
Measured in Certified CTIA 3D Anechoic Chamber

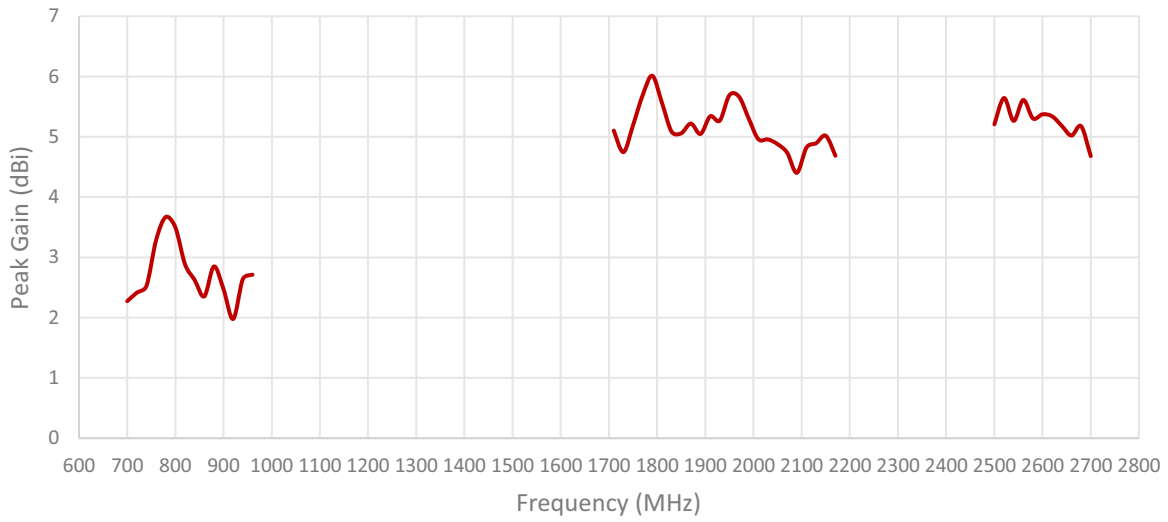
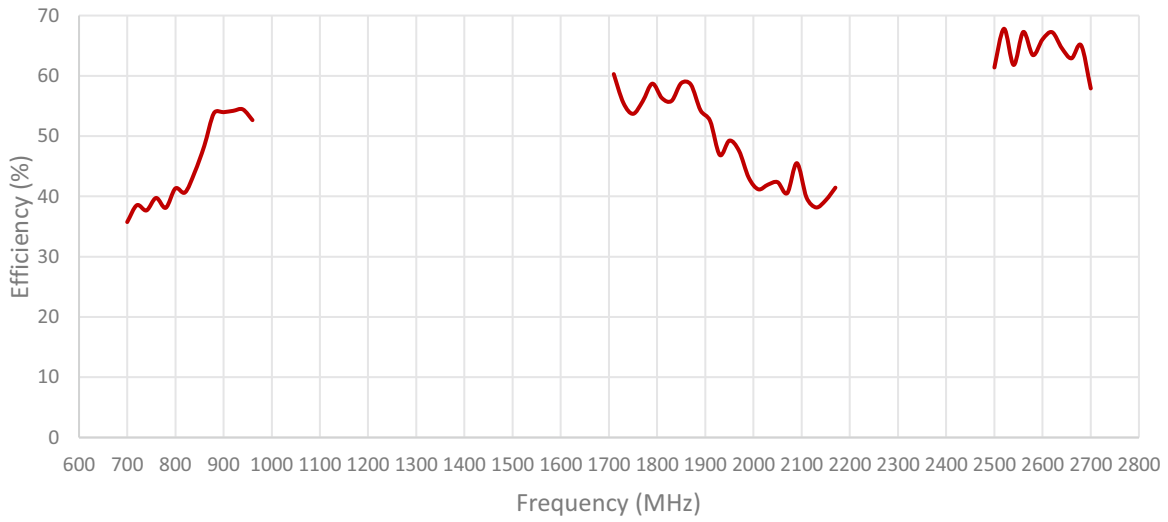
## 2. Mechanical and environmental specifications

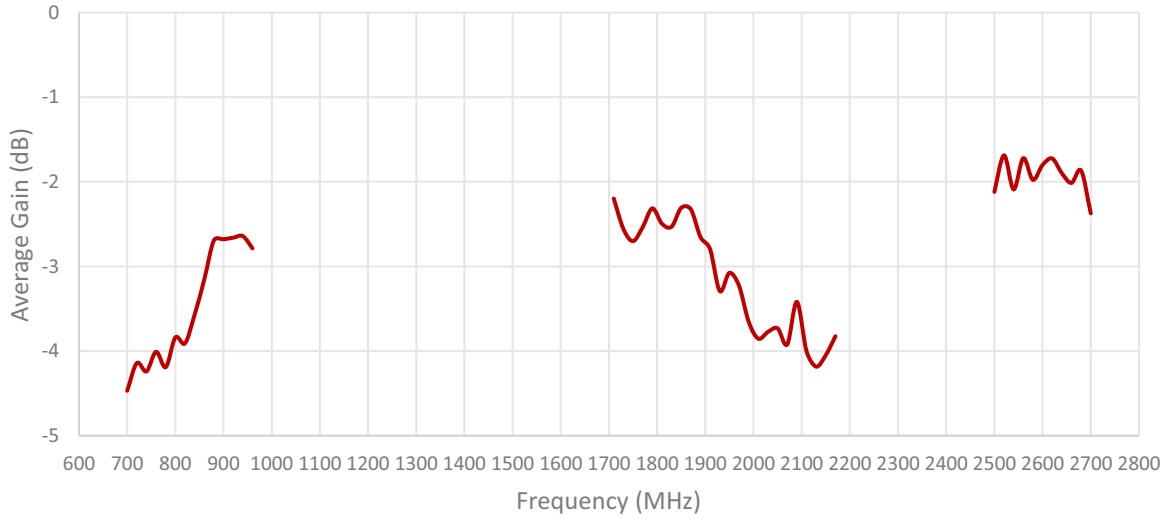
Specifications	2J6947B
<b>Mounting Type</b>	Screw Mount
<b>Dimensions (mm)</b>	80 × 74 × 25.6
<b>Max. Tighten Torque (Nm)</b>	5 Nm
<b>Radome Type</b>	PC+ASA
<b>Radome Color</b>	Black, White
<b>Operating Temperature (C)</b>	-40 to +85
<b>Storage Temperature (C)</b>	-40 to +85
<b>Substance Compliance</b>	RoHS
<b>Certificates</b>	IP67, IP69

### 3. Antenna parameters

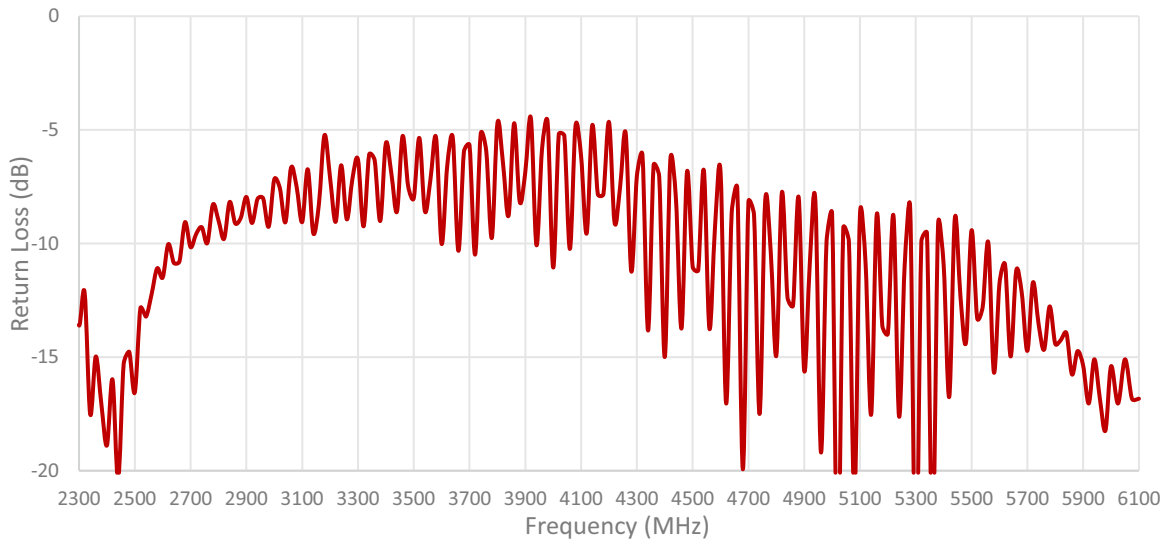
**Cable 1: CELLULAR / LTE**

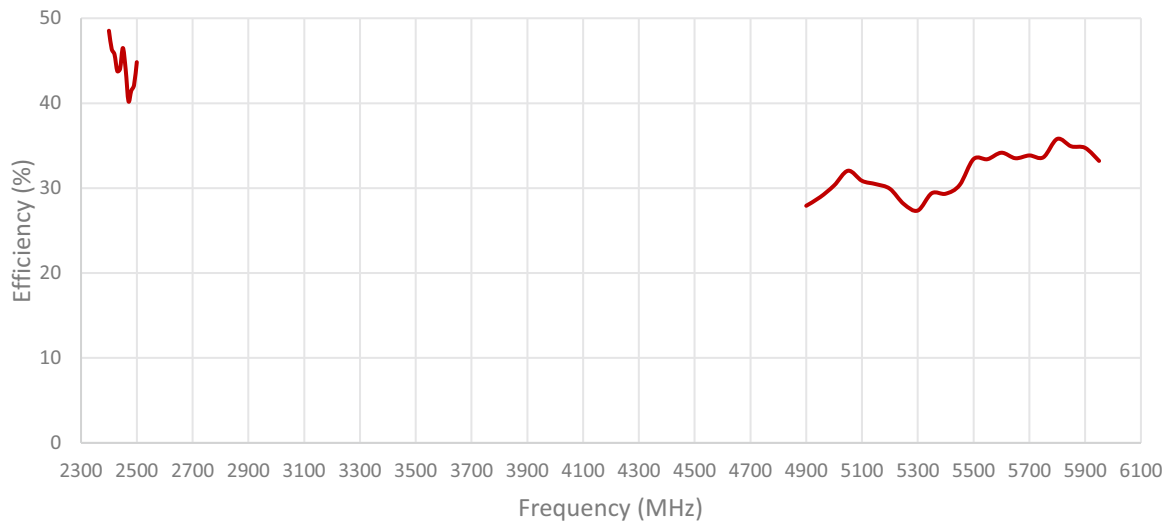
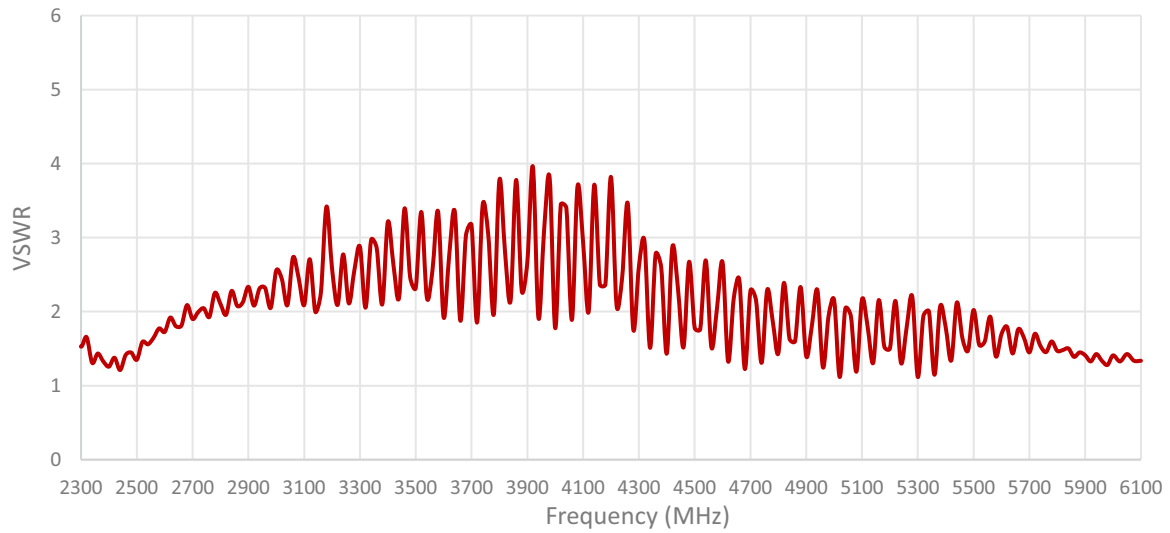


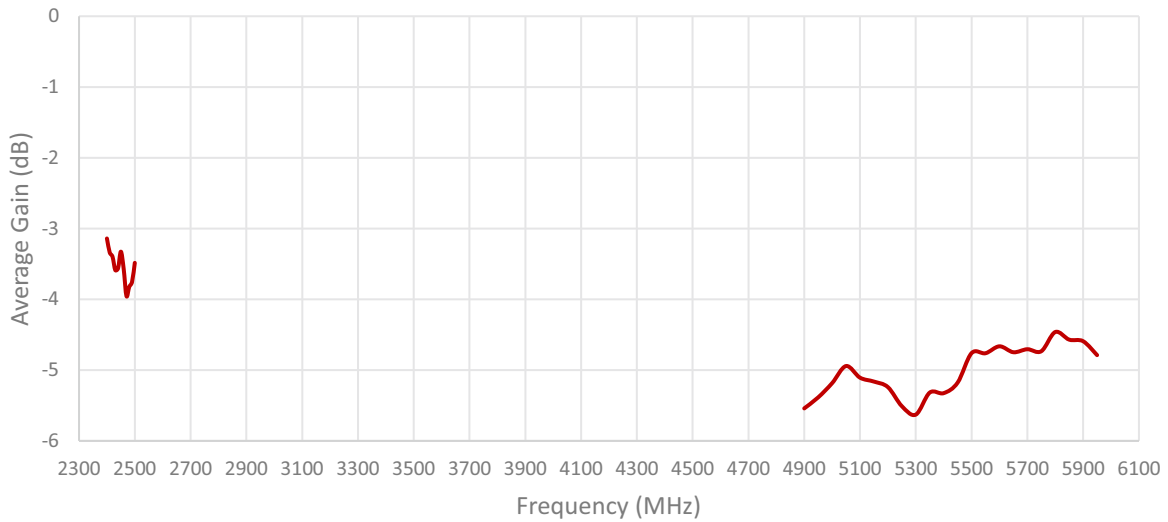
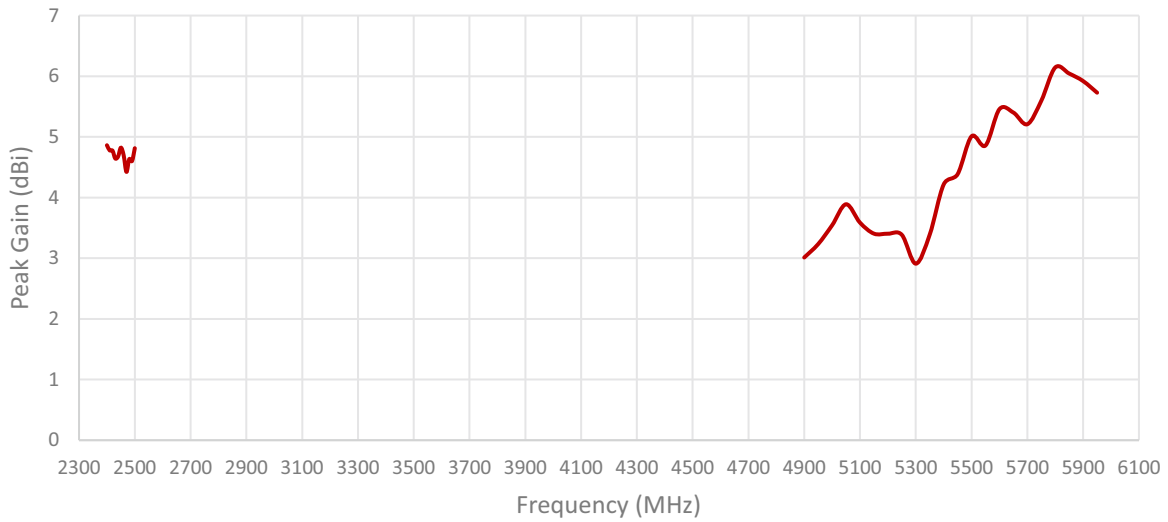




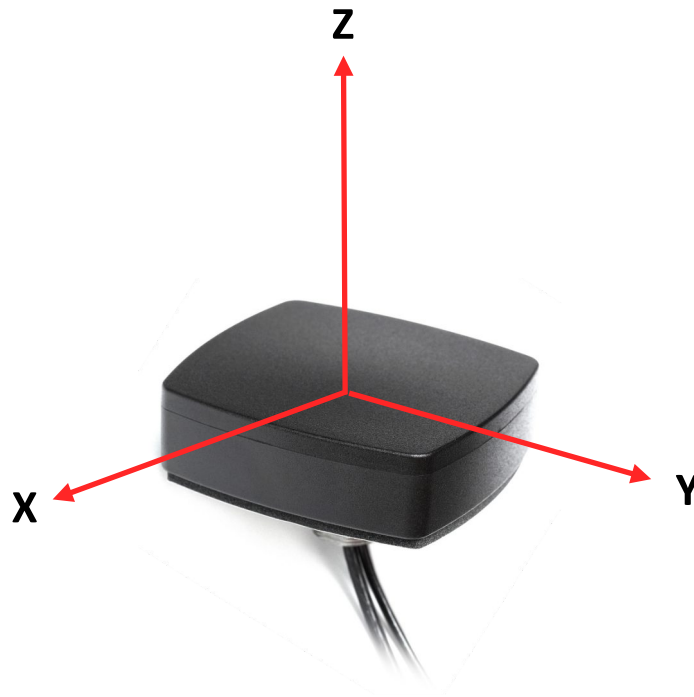
**Cable 2: 2.4/5.0 GHz ISM**





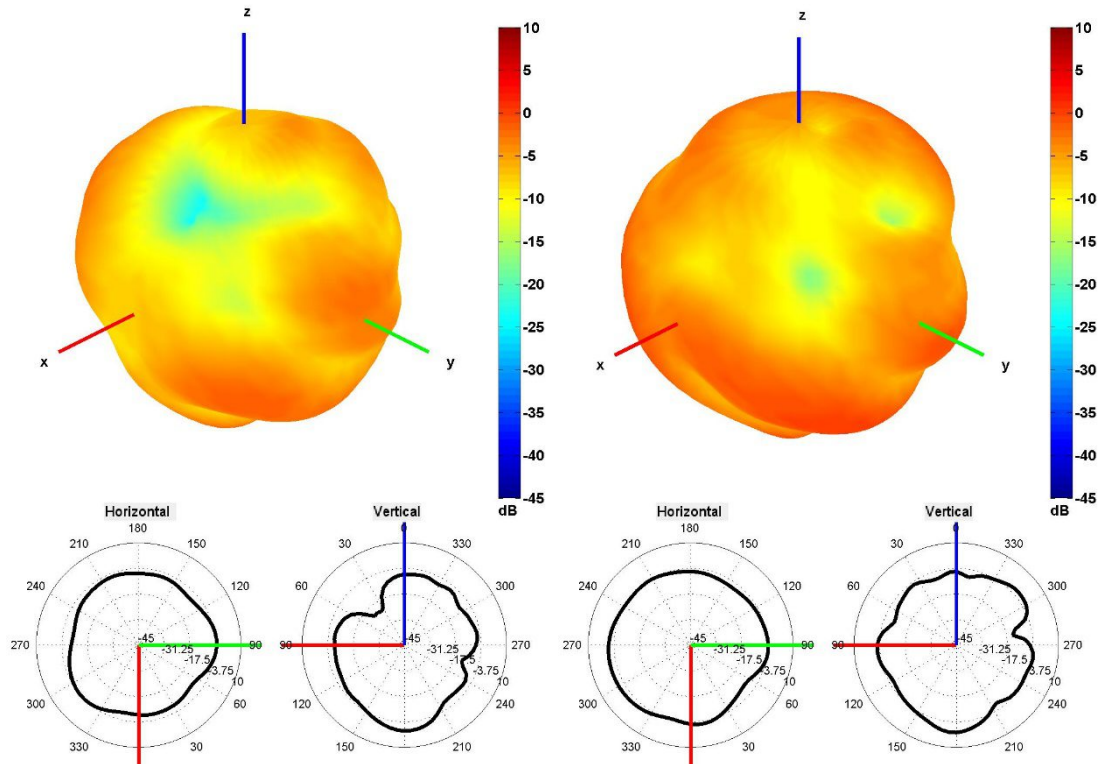




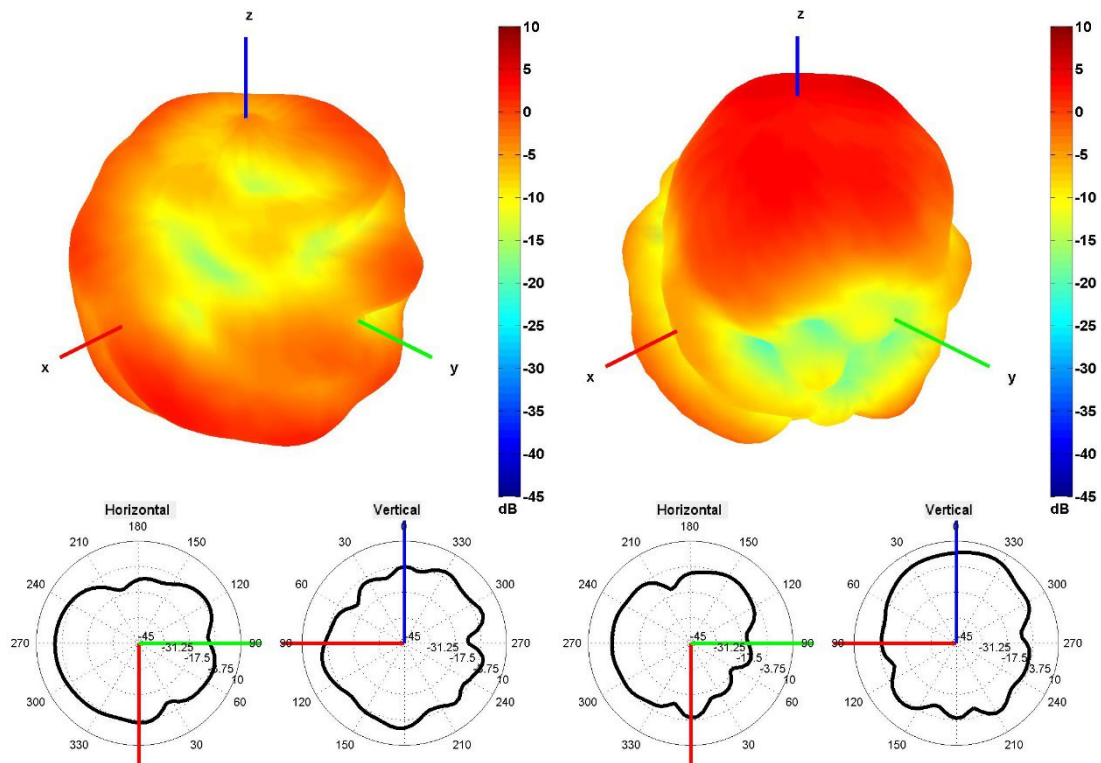


Radiation pattern reference

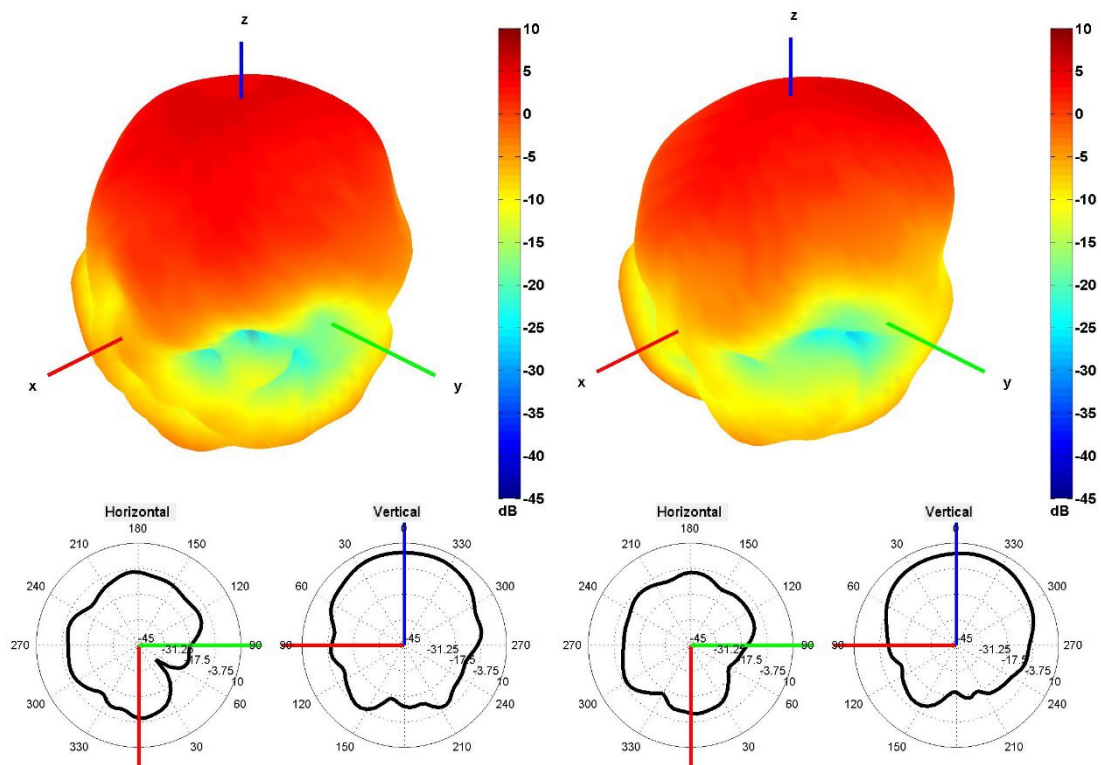
Cable 1: CELLULAR/LTE



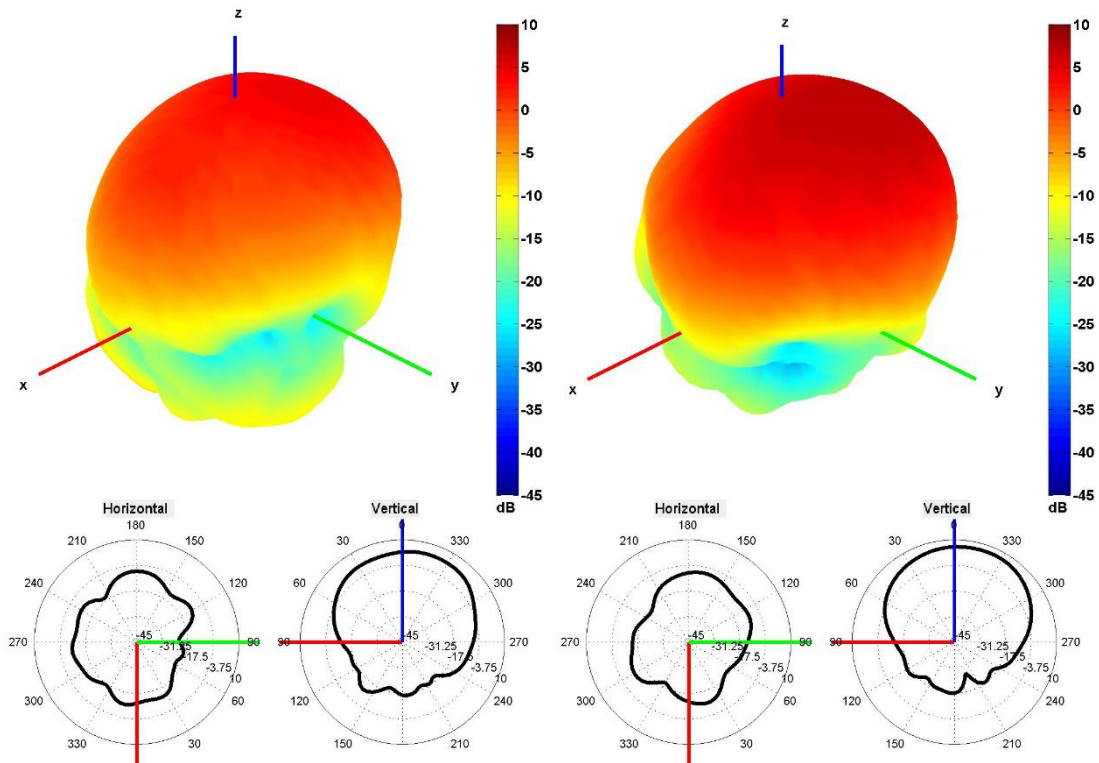
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

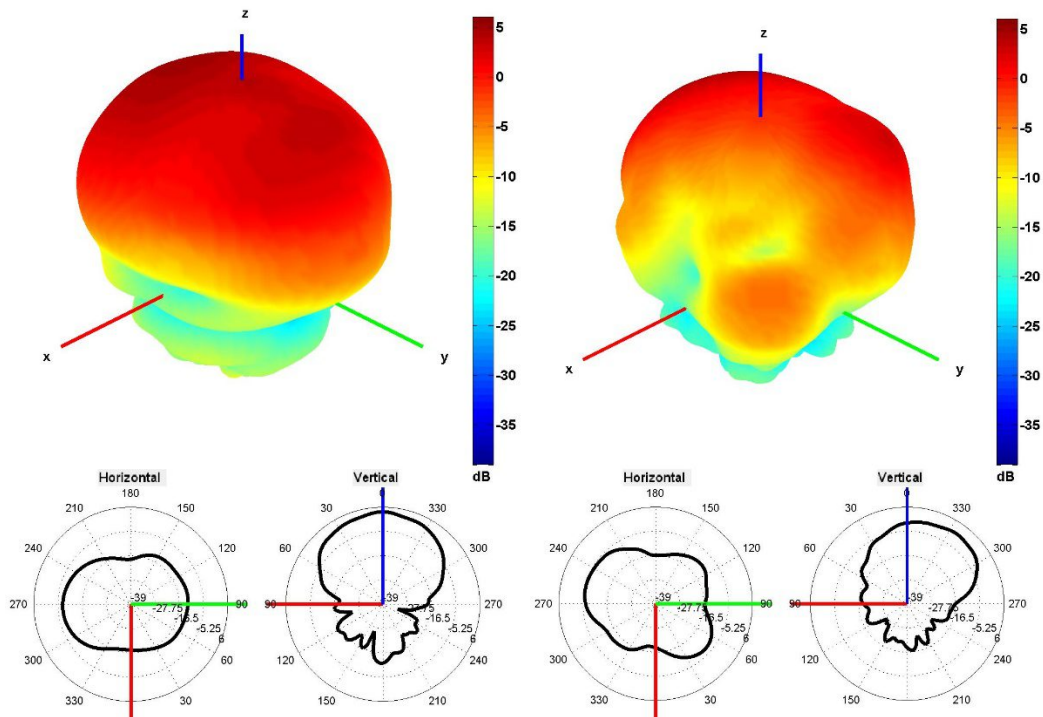


1850 and 1950 MHz Radiation pattern



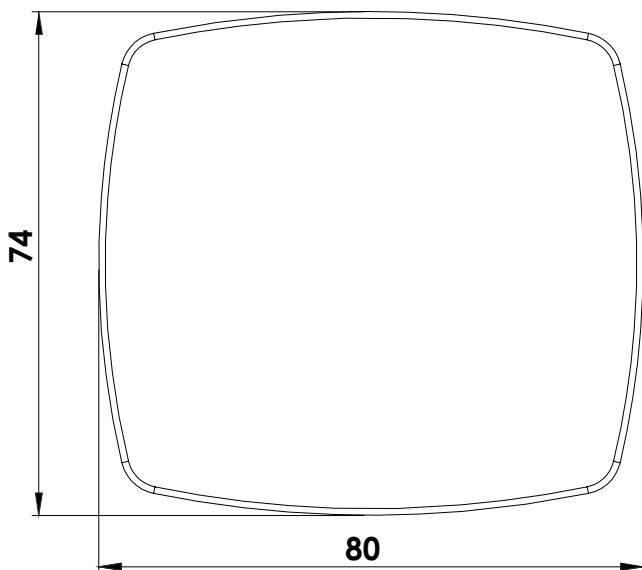
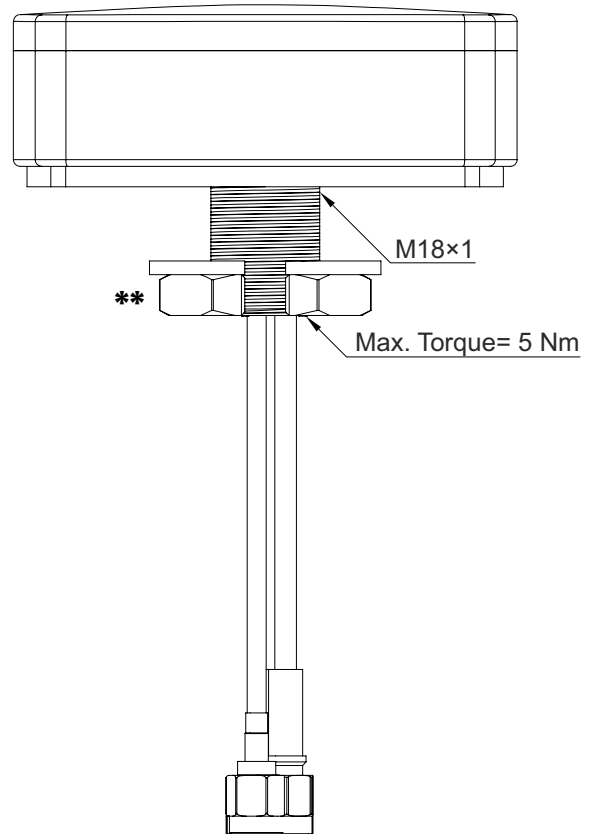
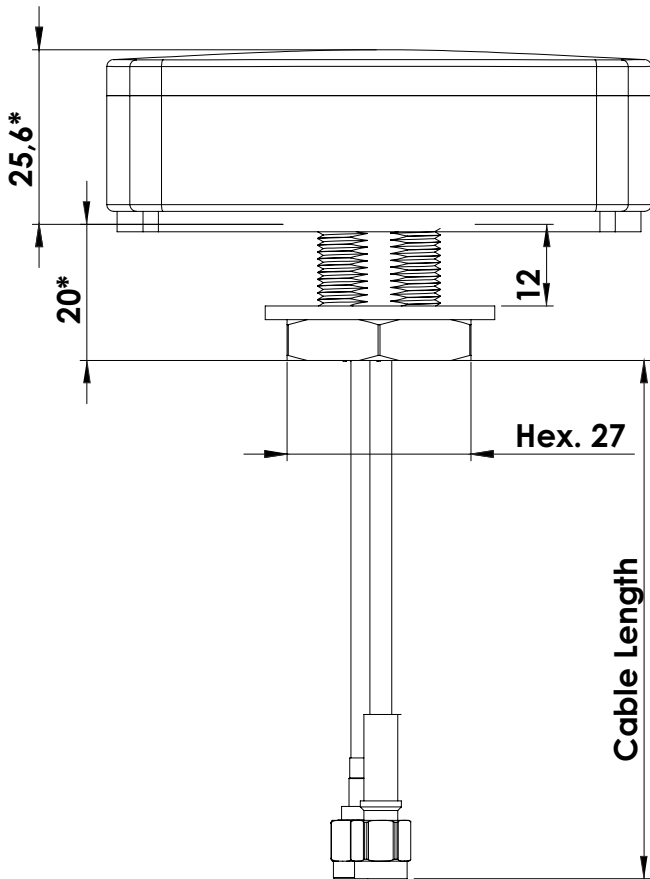
2100 and 2600 MHz Radiation pattern

Cable 2: 2.4/5.0 GHz ISM

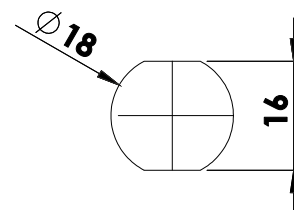


2450 and 5500 MHz Radiation pattern

## 4. Antenna drawings



### Mounting hole



Max. mounting thickness 12mm  
 Note: Dimensions are in millimeters  
 \*Dimensions are after mounting  
 \*\*Max. Torque= 5 Nm

## 5. Antenna Images

