

## 2J6A41BGF

CELLULAR / LTE and GPS/GLONASS Screw Mount

### Key Features

#### Cable 1: CELLULAR / LTE

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

#### Cable 2: GPS/GLONASS/QZSS/Galileo

- 1575-1610 MHz

Screw Mount

Anti-Rotation Mechanism

Ground Plane Dependent

Customizable Cable and Connector

Dimensions: Ø 77.3 x 65.5 mm

Certificates: IP67, IK09, IP69K



## 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>	~-10.3	~-14.8	~-15.1
<b>VSWR</b>	~2.1:1	~1.5:1	~1.5:1
<b>Efficiency (%)</b>	~52	~62	~50
<b>Peak Gain (dBi)</b>	~-0.7	~3.4	~4.0
<b>Average Gain (dB)</b>	~-2.9	~-2.1	~-3.0
<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>	Most RF Connectors (SMA-Male Standard)		
<b>Cable Length</b>	Any Cable Length (300 cm Standard)		
<b>Cable Type</b>	Other Cables Available (DACAR 302 Standard)		

**Cable 2**

Parameters	GPS/GLONASS Antenna	
<b>Standard</b>	GPS/QZSS/Galileo	GLONASS
<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>	<= 1.5:1 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</b>	2 kV	
<b>Connector Type</b>	Most RF Connectors (SMA-Male Standard)	
<b>Cable Length</b>	Any Cable Length (300 cm Standard)	
<b>Cable Type</b>	Other Cables Available (LMR100 Standard)	

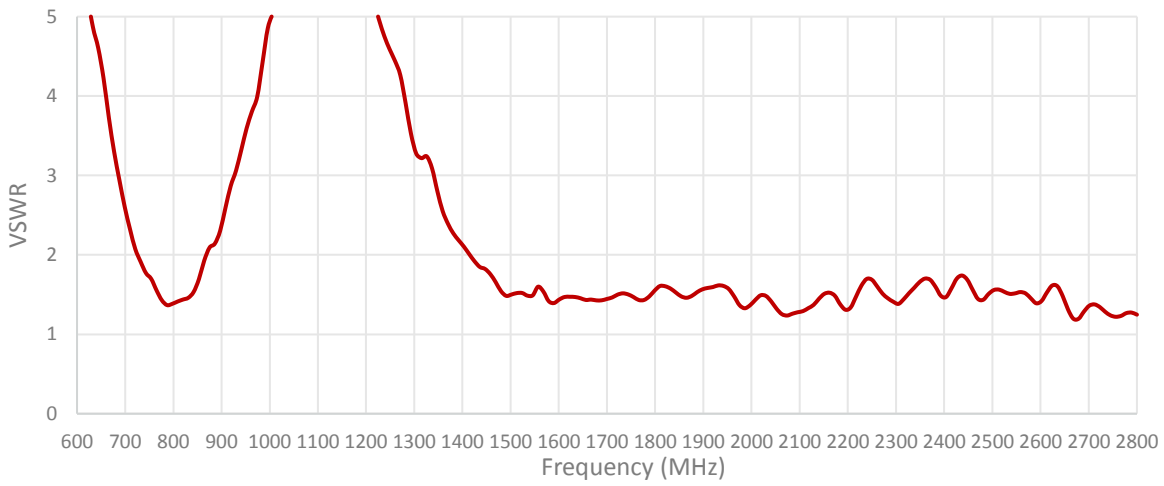
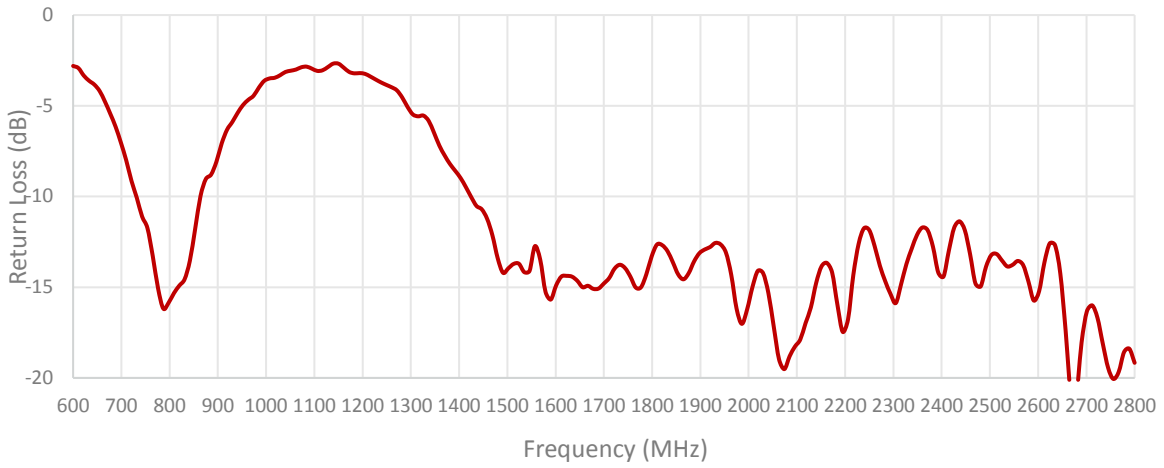
**Antenna Measurement Conditions:**

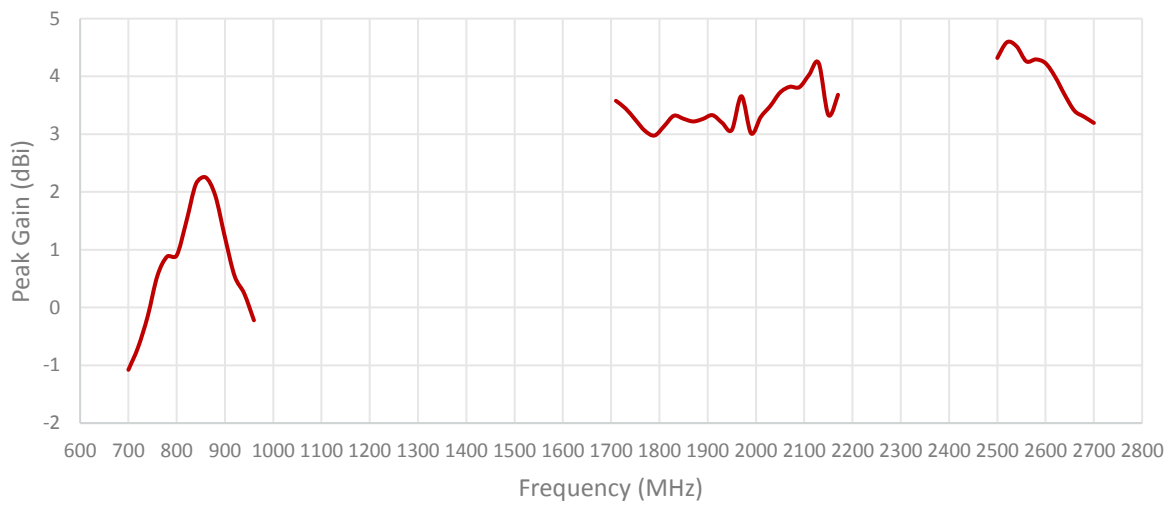
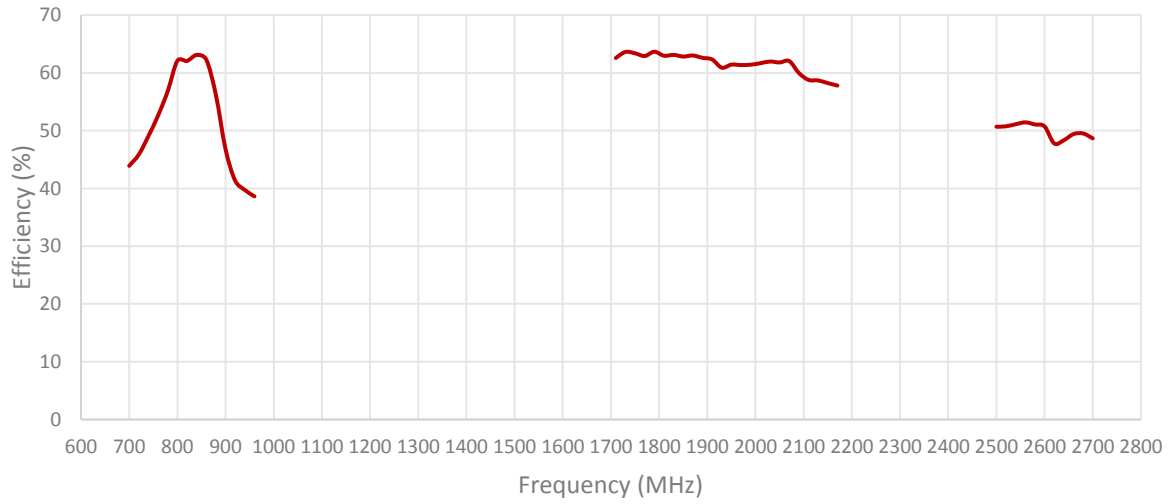
Mounted on 30 x 30 cm Ground Plane  
 DACAR302 200 cm Cable Length  
 Measured in Certified CTIA 3D Anechoic Chamber

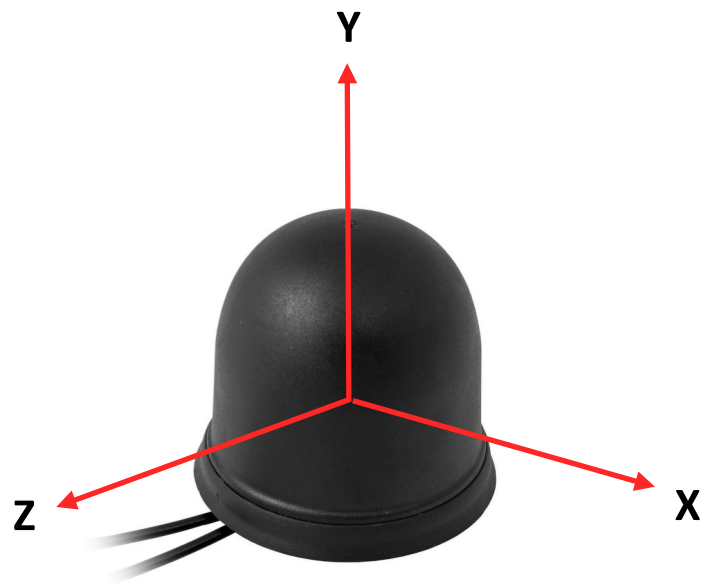
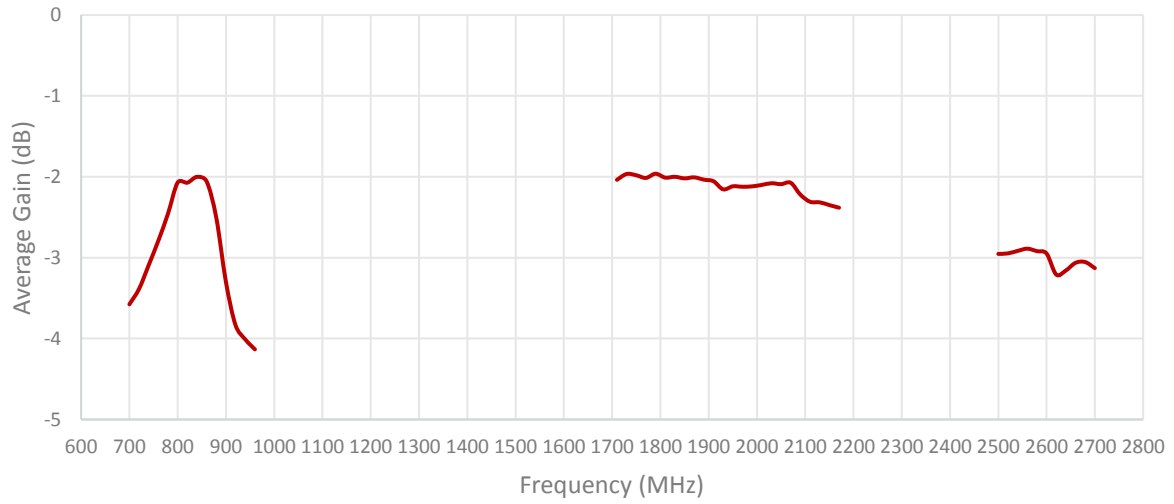
## 2. Mechanical and environmental specifications

Specifications	2J6A41BGF
<b>Mounting Type</b>	Screw Mount
<b>Dimensions (mm)</b>	Ø 77.3 x 65.5
<b>Max. Tighten Torque (Nm)</b>	6 Nm
<b>Radome</b>	ASA
<b>Radome color</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, IK09, IP69K

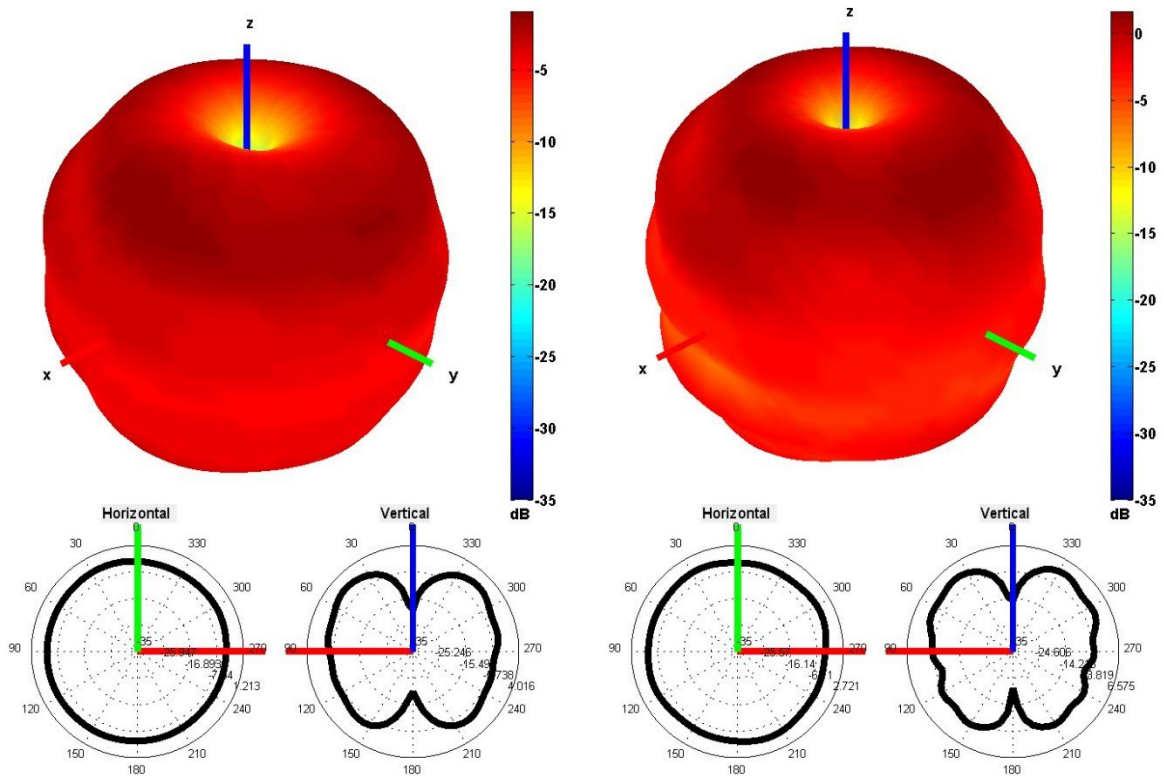
### 3. Antenna parameters



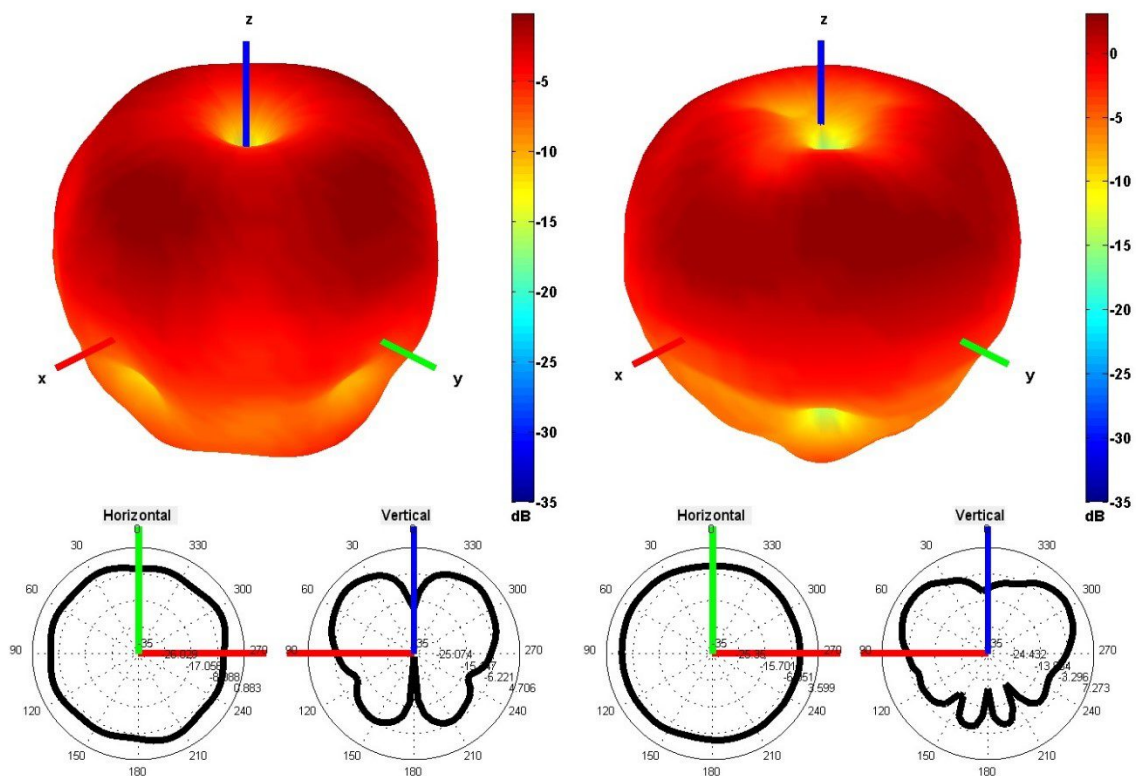




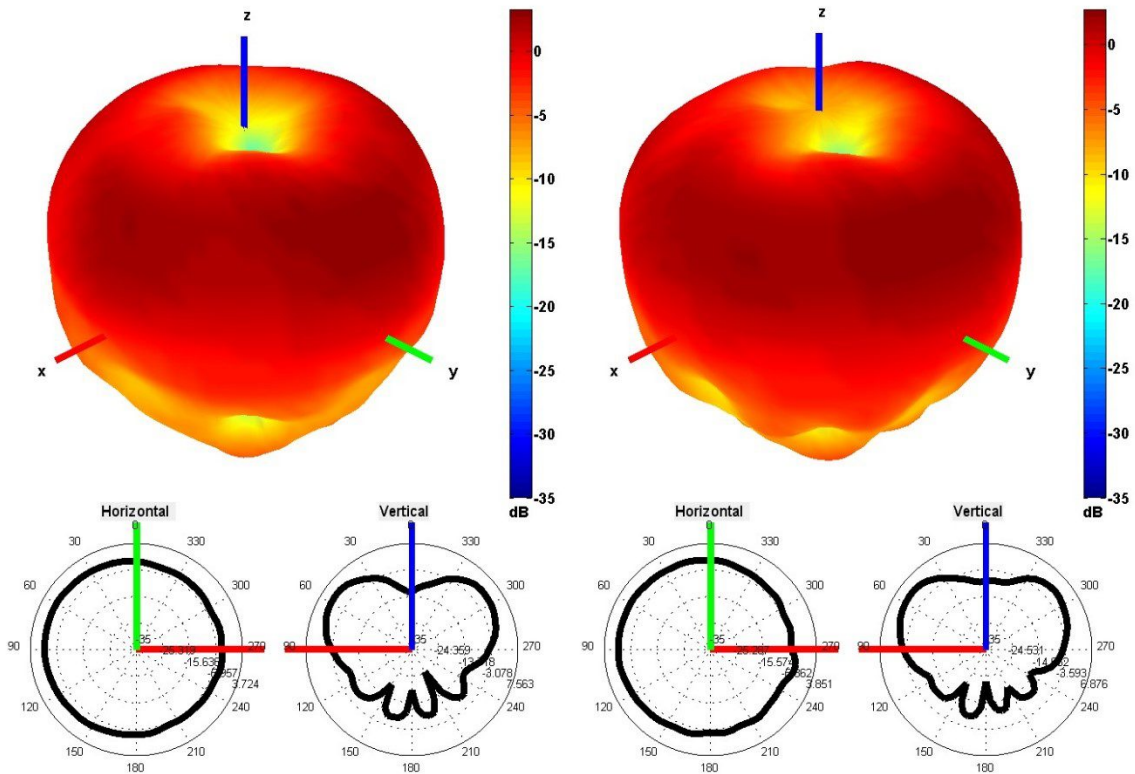
Radiation pattern reference



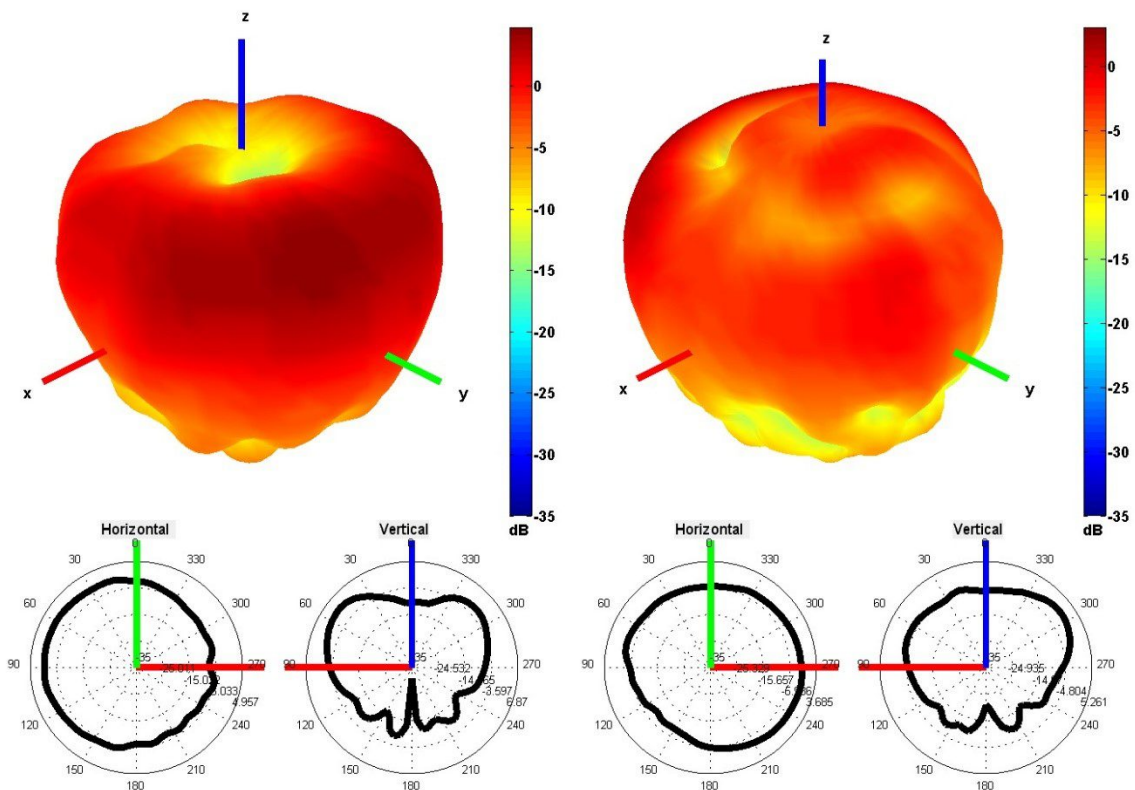
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern



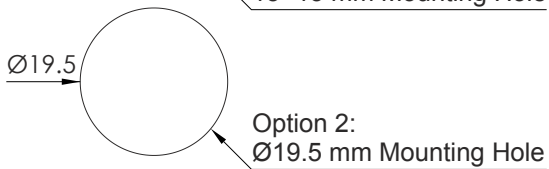
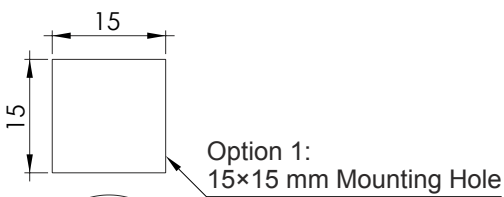
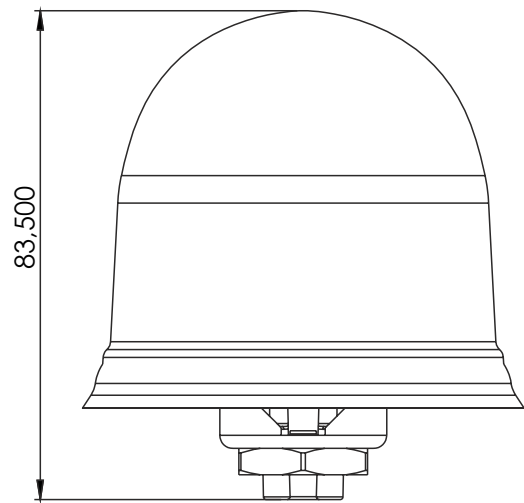
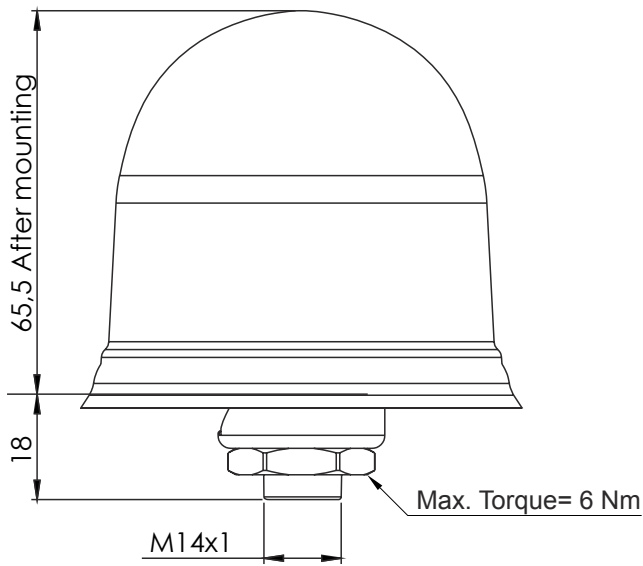
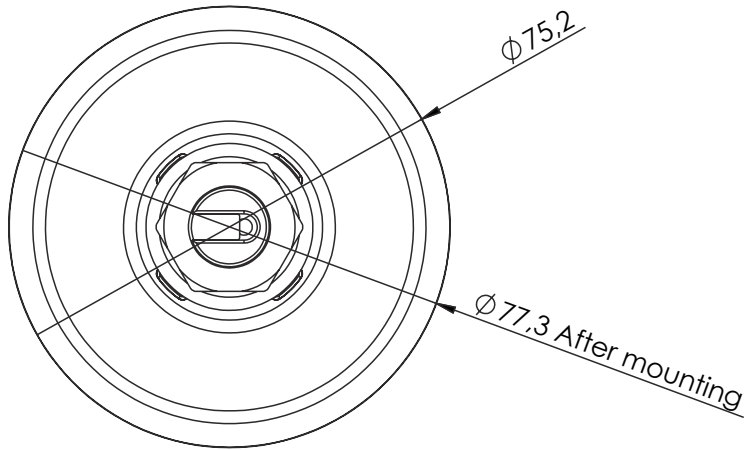
1850 and 1950 MHz Radiation pattern



2100 and 2600 MHz Radiation pattern



## 4. Antenna drawings



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

## 5. Antenna Images

