

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



Note: This product is compatible with Bluetooth® technology but does not incorporate Bluetooth® technology



1. Antenna and electrical specifications

Cable 1

Parameters	CELLULAR / LTE Antenna		
Standards	2G,3G and 4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698-960	1710-2170	2500-2700
Return Loss (dB)	~-9.3	~-6.8	~-19.9
VSWR	~2.1:1	~2.7:1	~1.3:1
Efficiency (%)	~45.9	~50.3	~64.1
Peak Gain (dBi)	~-2.7	~-5.1	~-5.3
Average Gain (dB)	~-3.8	~-3.2	~-1.9
Impedance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	DACAR302 Standard (Other Cables Available)		

Cable 2

Parameters	2.4/5.0 GHz ISM Antenna	
Standards	WiFi, Bluetooth®, ZigBee, ISM	
Band (MHz)	2.4 GHz	5.0 GHz
Frequency (MHz)	2410-2490	4920-5925
Return Loss (dB)	~-13.5	~-12.8
VSWR	~1.6:1	~1.8:1
Efficiency (%)	~35.4	~26.4
Peak Gain (dBi)	~-3.4	~-3.2
Average Gain (dB)	~-4.5	~-5.8
Impedance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	25	
Connector Type	RP-SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	DACAR302 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Ground Plane

200 cm of Cable DACAR302

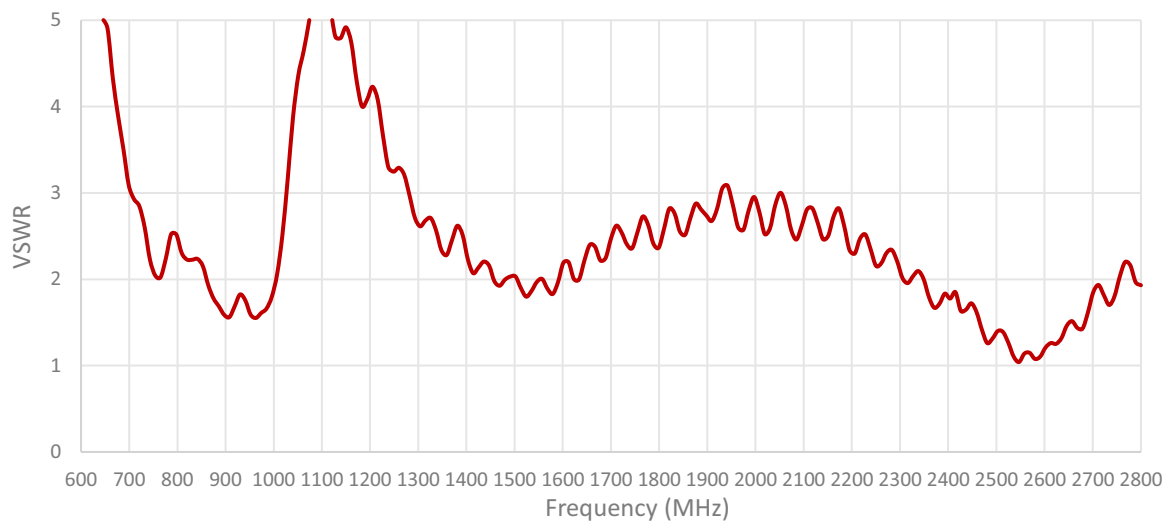
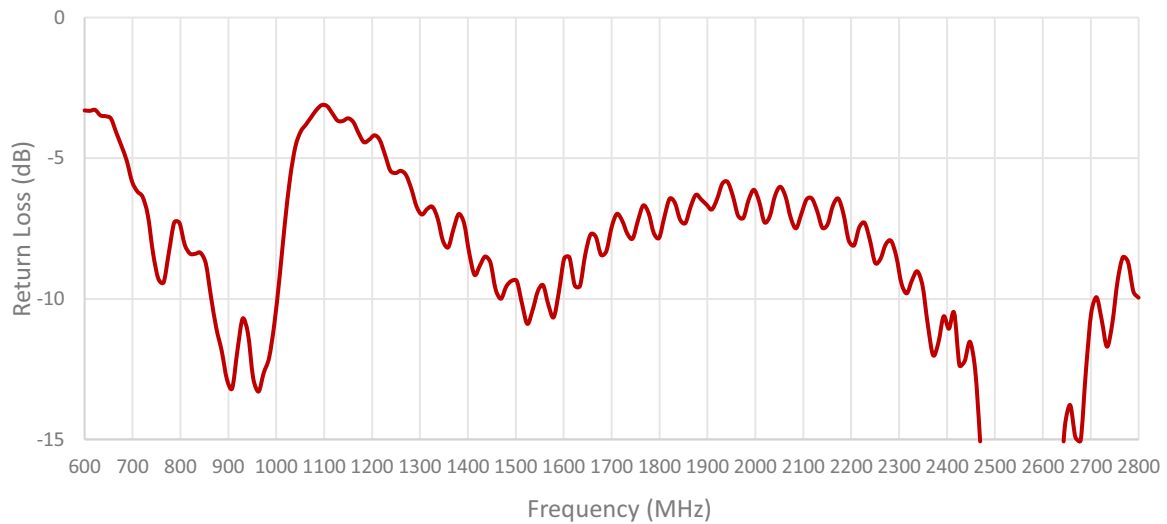
Measured in Certified CTIA 3D Anechoic Chamber

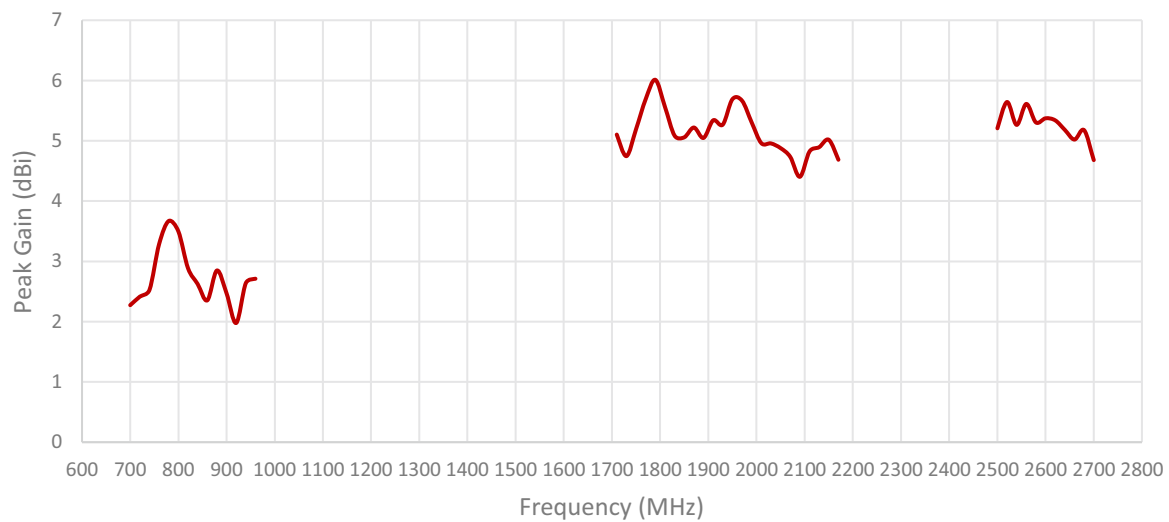
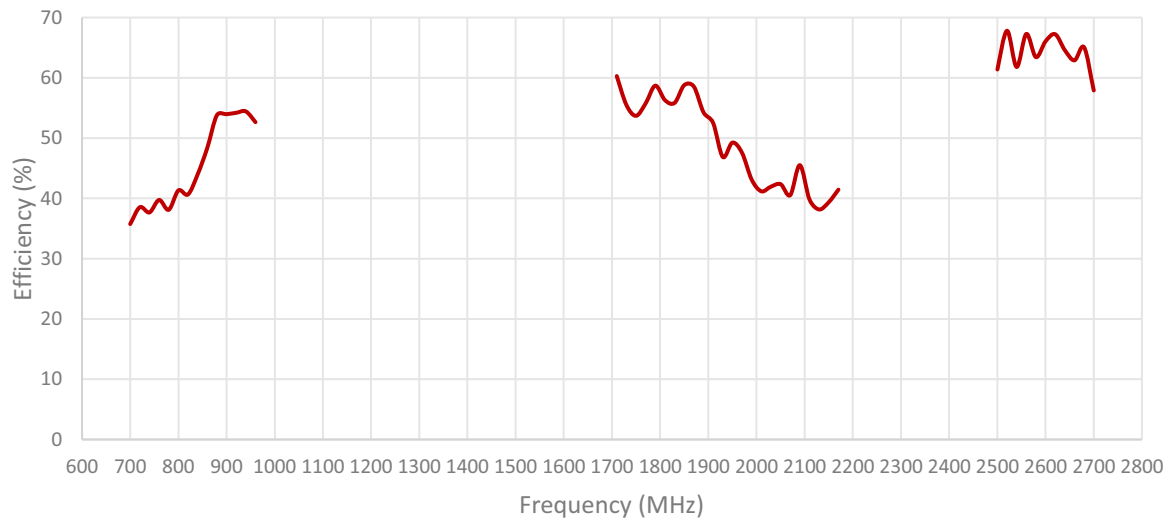
2. Mechanical and environmental specifications

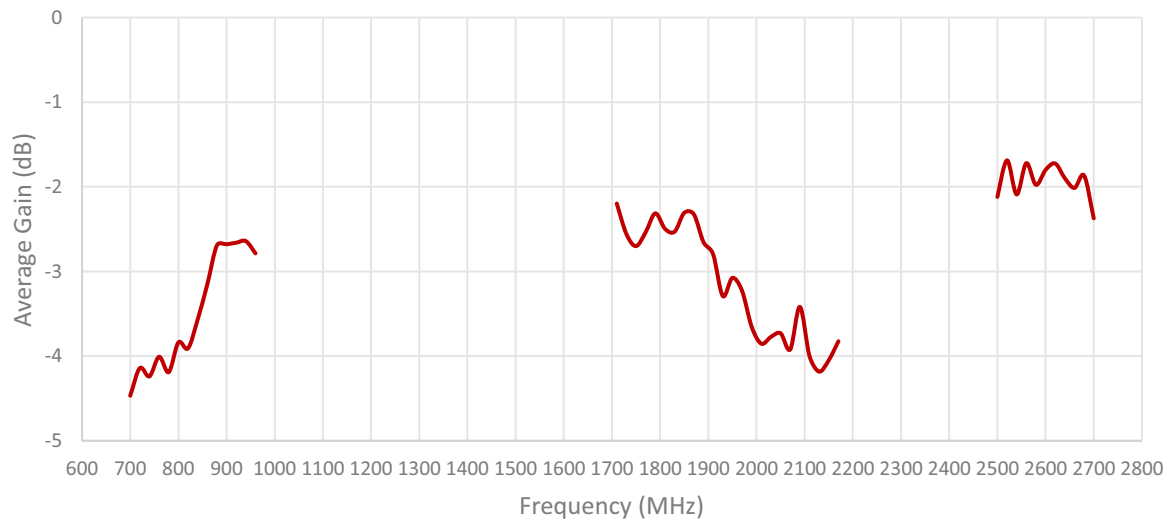
Specifications	2J6947B
Mounting Type	Screw Mount
Dimensions (mm)	80 × 74 × 25.6
Max. Tighten Torque (Nm)	5 Nm
Radome Type	PC+ASA
Radome Color	Black, White
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69

3. Antenna parameters

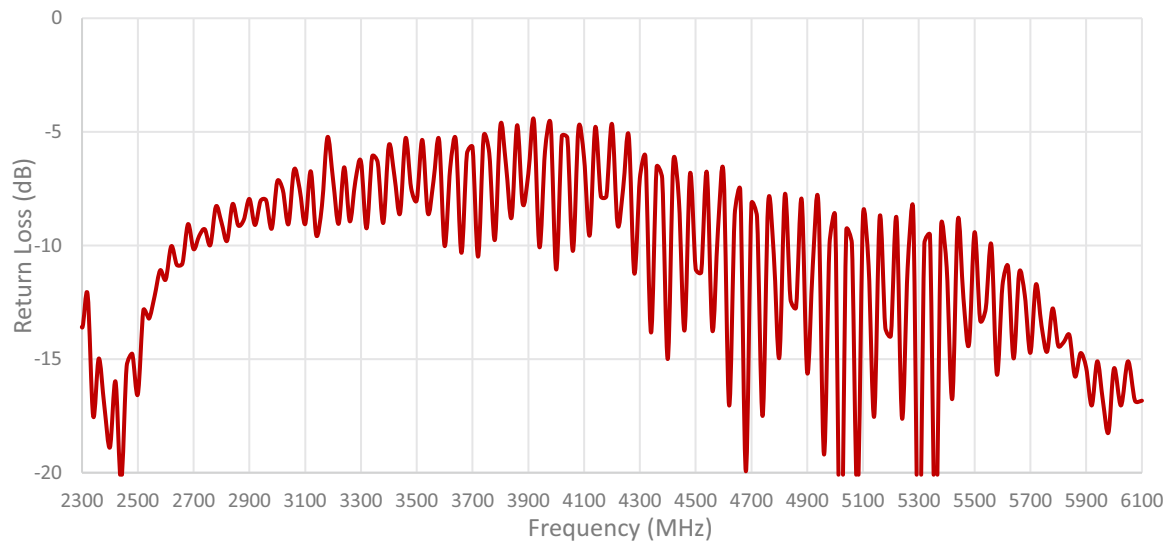
Cable 1: CELLULAR / LTE

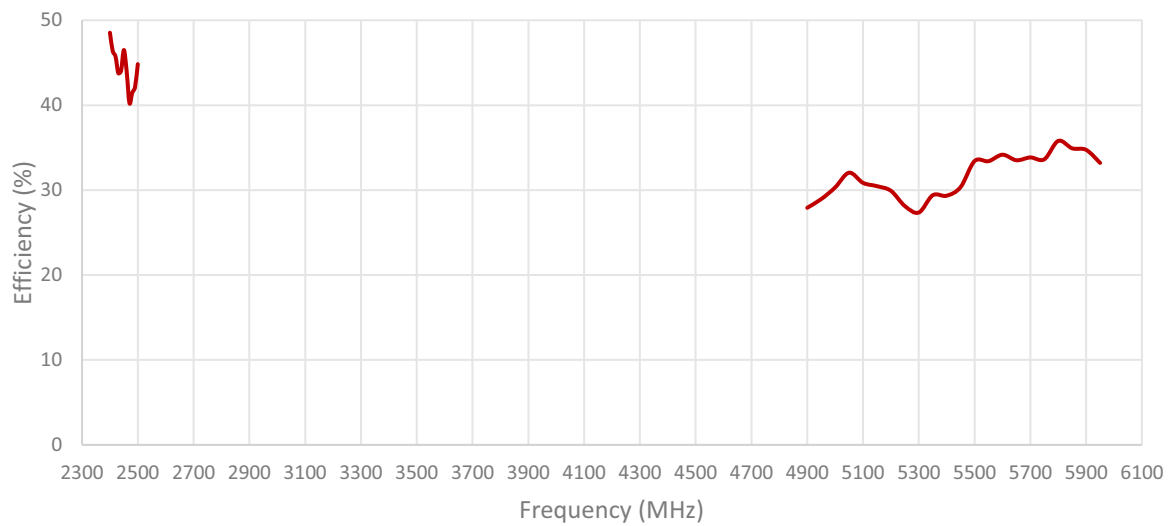
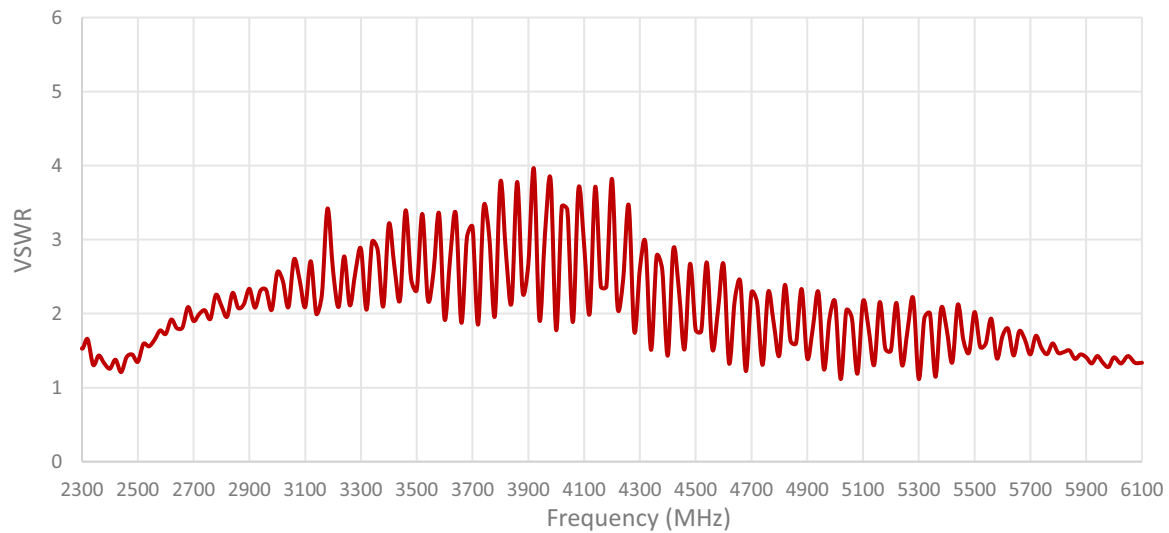


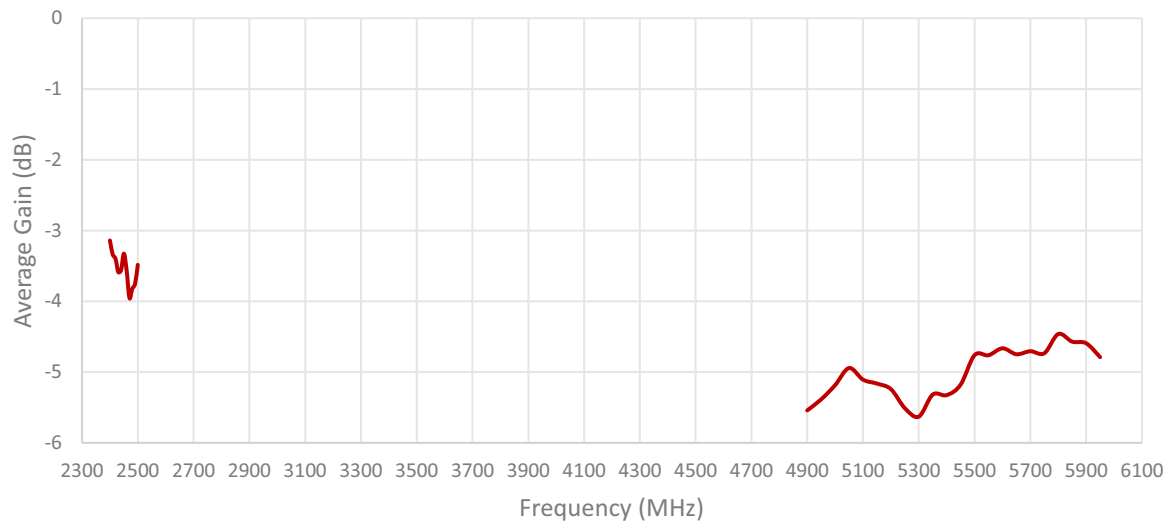
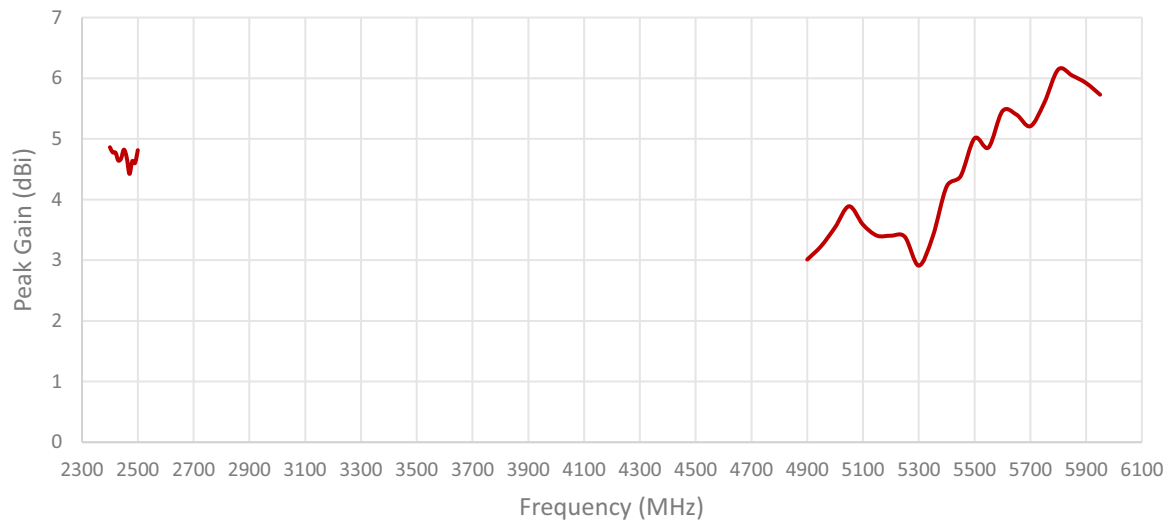


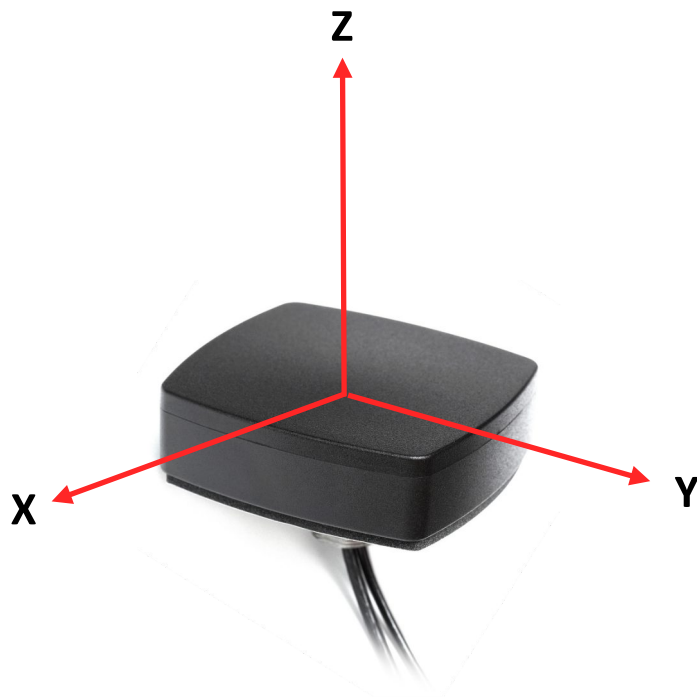


Cable 2: 2.4/5.0 GHz ISM



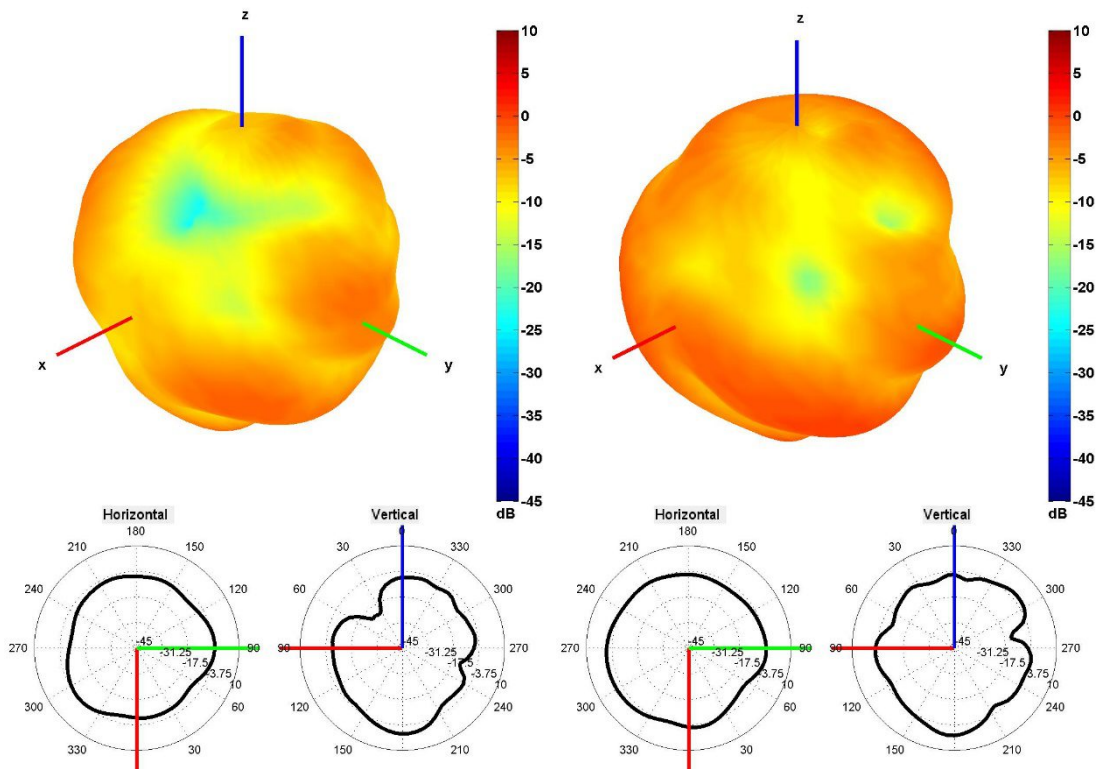




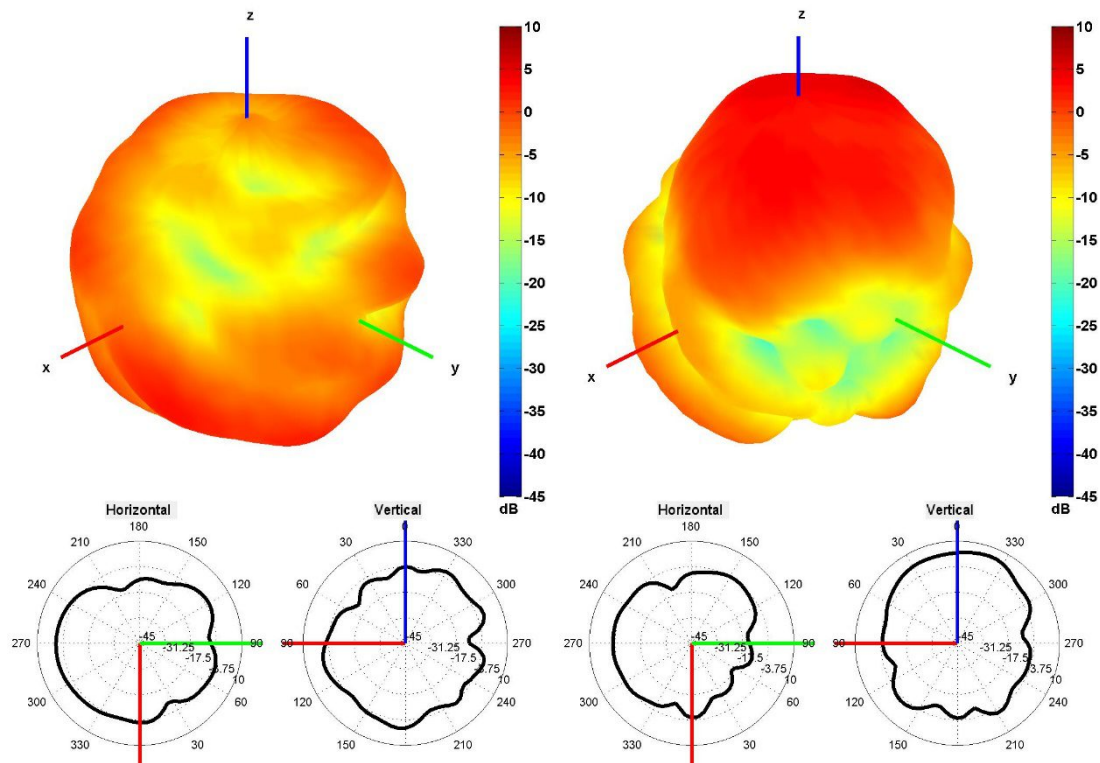


Radiation pattern reference

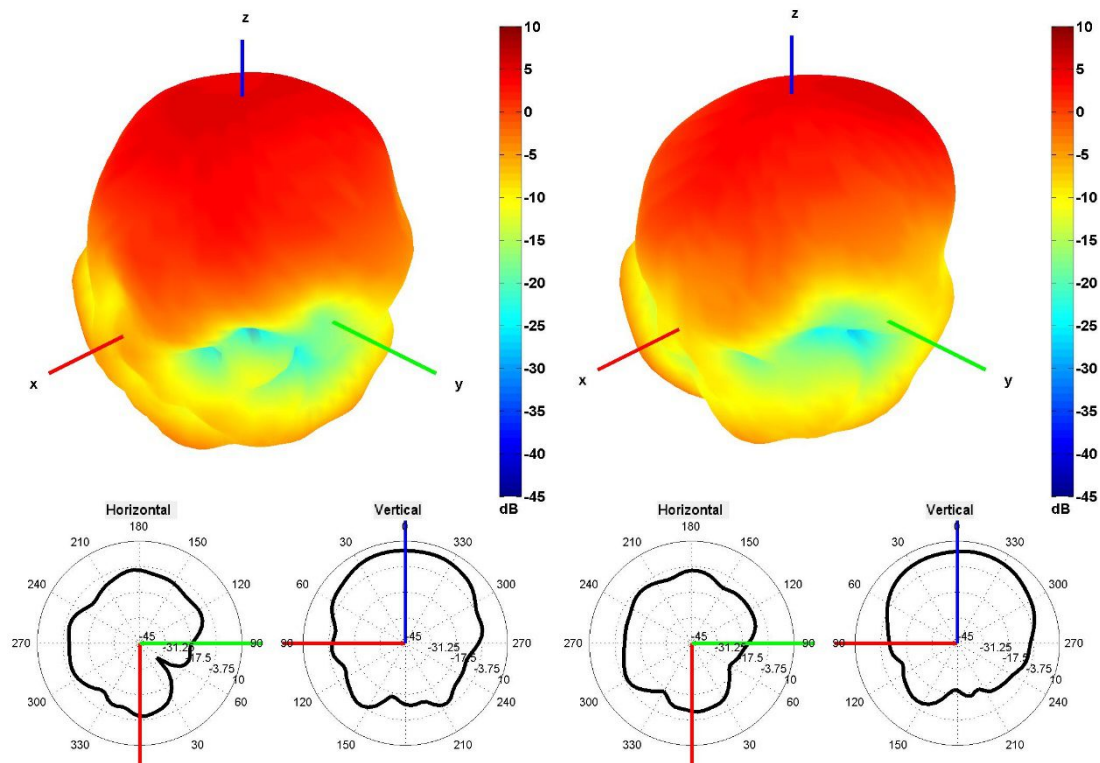
Cable 1: CELLULAR/LTE



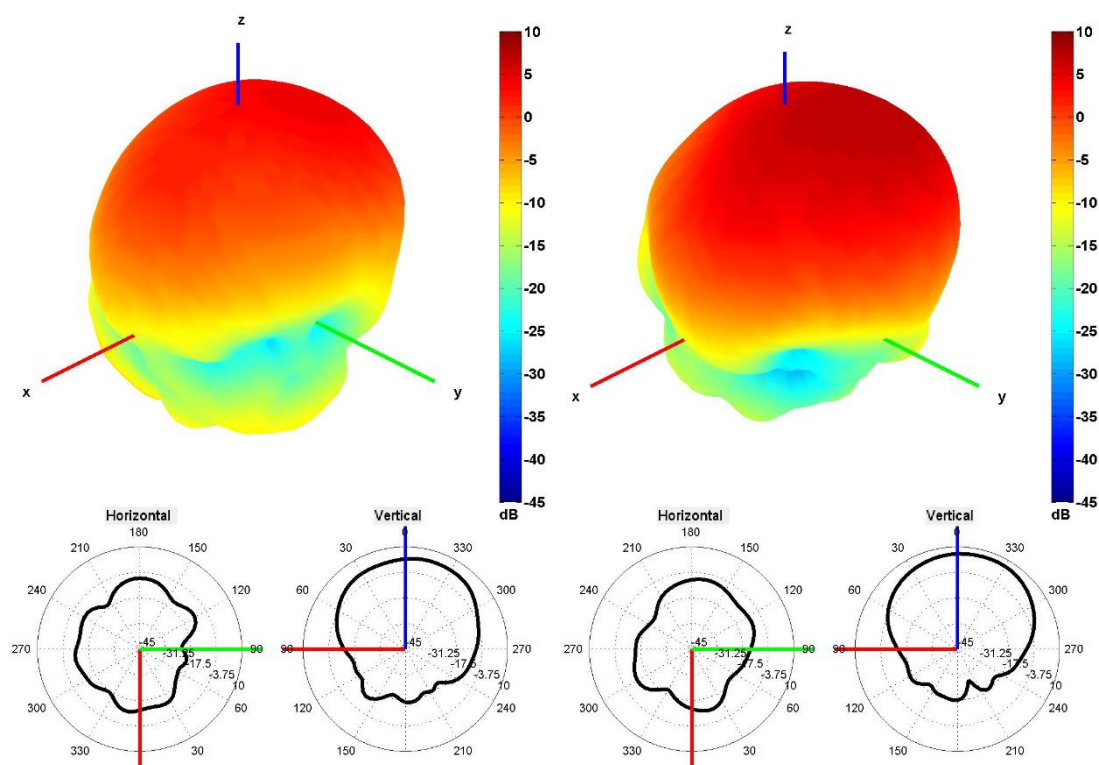
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

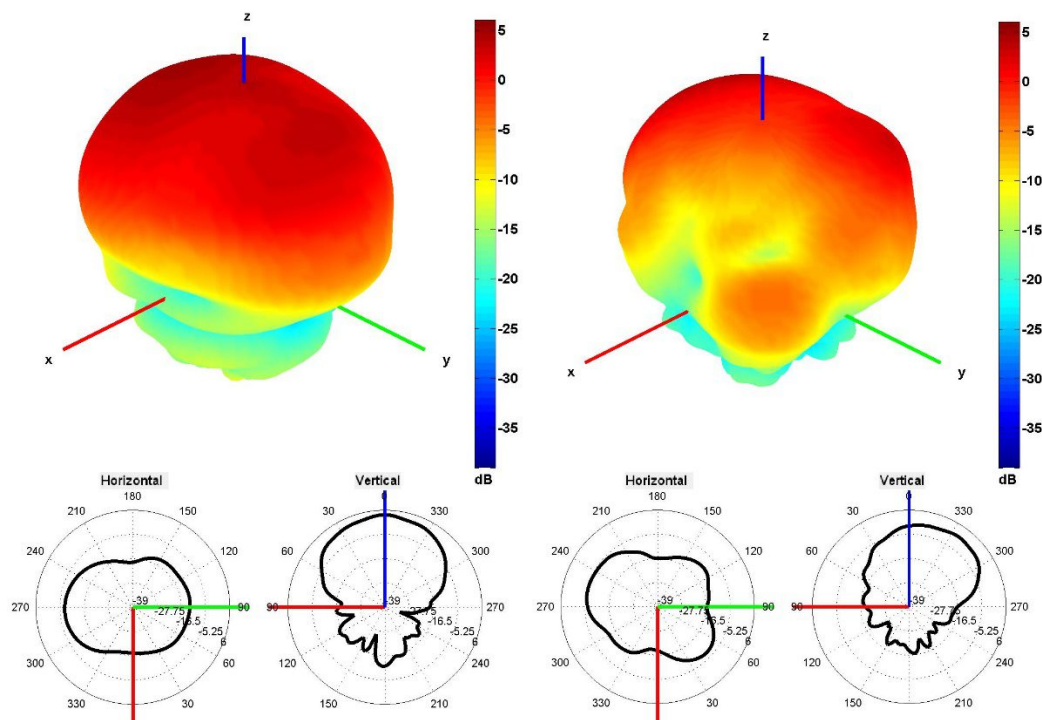


1850 and 1950 MHz Radiation pattern



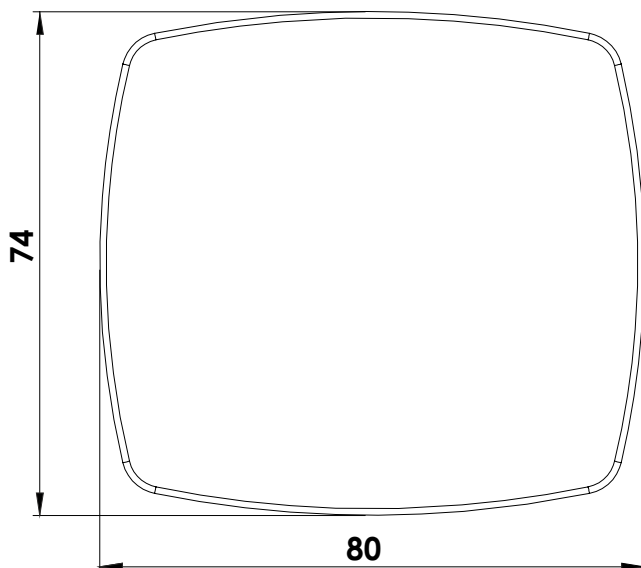
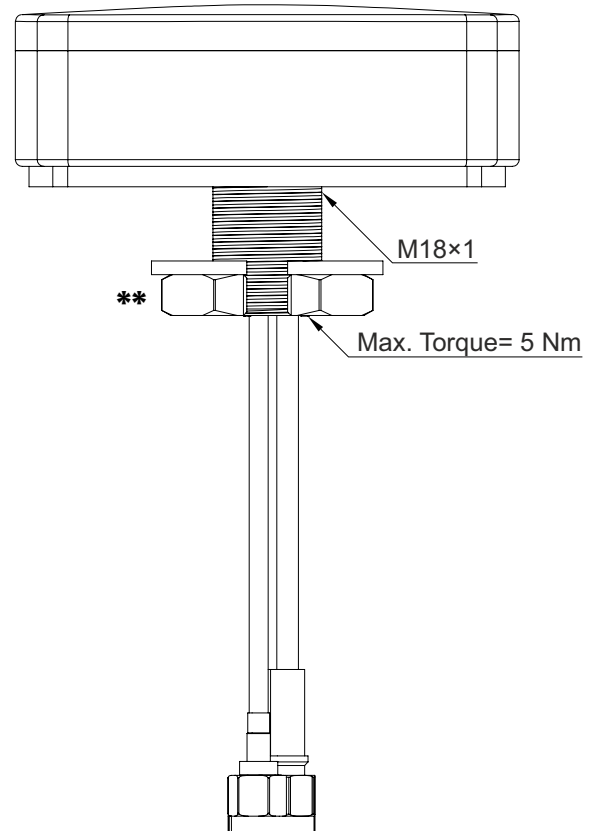
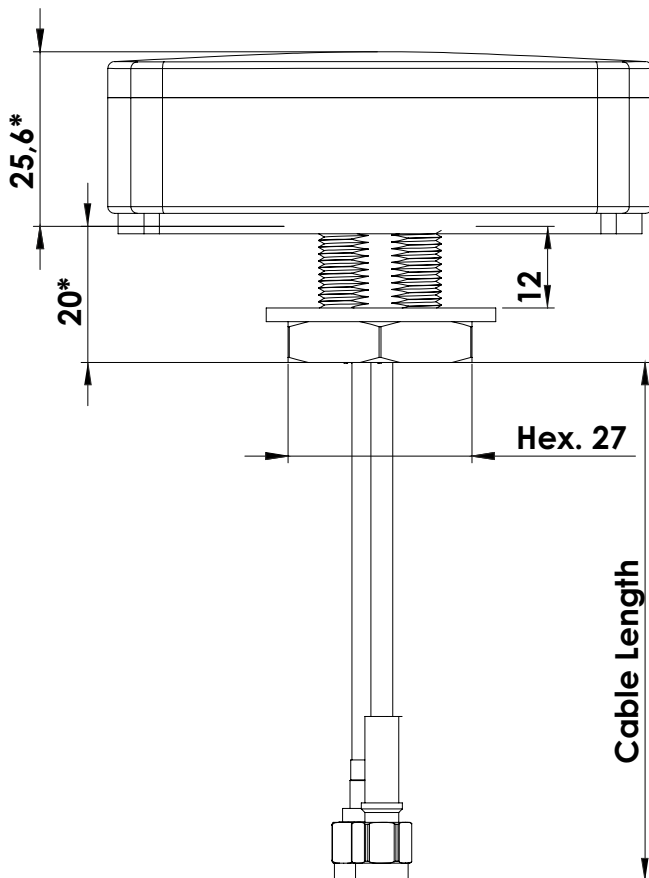
2100 and 2600 MHz Radiation pattern

Cable 2: 2.4/5.0 GHz ISM

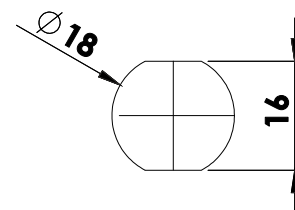


2450 and 5500 MHz Radiation pattern

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

