

2J6551BGF

Cellular, GNSS, 2.4 GHz ISM and Iridium Screw Mount

Key Features

Cable 1: Cellular

- 824-960 MHz
- 1710-2170 MHz

Cable 2: 2.4 GHz ISM

- 2410-2490 MHz

Cable 3: GPS/GLONASS/QZSS/Galileo

- 1575-1610 MHz

Cable 4: Iridium

- 1616-1626 MHz

Screw Mount

Anti-Rotation Mechanism

Ground Plane Dependent

Customizable Cable and Connector

Dimensions Ø 146 x 31.5 mm

Certificates: IK09, IP67, IP69K



1. Antenna and electrical specifications

Cable 1

Parameters	Cellular Antenna	
Standards	2G and 3G	
Band (MHz)	850/900	1700/1800/1900/2100
Frequency (MHz)	824-960	1710-2170
Return Loss (dB)	~-9.3	~-12.5
VSWR	~2.1:1	~1.7:1
Efficiency (%)	~43	~37
Peak Gain (dBi)	~1.8	~2.3
Average Gain (dB)	~-3.7	~-4.3
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	LMR100 Standard (Other Cables Available)	

Cable 2

Parameters	2.4 GHz ISM Antenna	
Standards	WiFi, BT, ZigBee, ISM	
Band (MHz)	2.4 GHz	
Frequency (MHz)	2410-2490	
Return Loss (dB)	~-15.5	
VSWR	~1.4:1	
Efficiency (%)	~38	
Peak Gain (dBi)	~2.5	
Average Gain (dB)	~-4.1	
Impedance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	10	
Connector Type	RP-SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LMR100 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Metal Plate

200 cm of LMR100 Cable

Measured in Certified CTIA 3D Anechoic Chamber

Cable 3

Parameters	GNSS Ceramic Active Antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency (Mhz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Passive Gain (dBi)	~3.6	
Impedance (Ohms)	50	
Radiation Pattern	Hemispherical	
Voltage Range (V)	1.5 – 3.6	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.8 @ 2.7 V	
Current Consumption (mA)	9 @ 2.7 V	
Power Consumption (mW)	24.3 @ 2.7V	
Saw Filter Type	Pre-Filter	
Out of Band Rejection (dBc)	~43	
ESD Protection (kV)	6	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LMR100 Standard (Other Cables Available)	

Cable 4

Parameters	Iridium Antenna
Standards	Iridium
Band (MHz)	1621
Frequency (MHz)	1616-1627
Patch Size (mm)	36 x 36 x 4
Return Loss (dB)	~-18.8
VSWR	~1.2:1
Efficiency (%)	~76
Peak Gain (dBic)	~4.5
Average Gain (dB)	~-1.1
Impedance	50
Axial Ratio (dB)	3 max
Radiation Pattern	Hemispherical
Polarization	RHCP
Connector Type	SMA-Male Standard (Other Connectors Available)
Cable Length	300 cm Standard (Any Cable Length Available)
Cable Type	LMR100 Standard (Other Cables Available)

Antenna Measurement Conditions:

Mounted on 70 x 70 mm Ground Plane

No cable

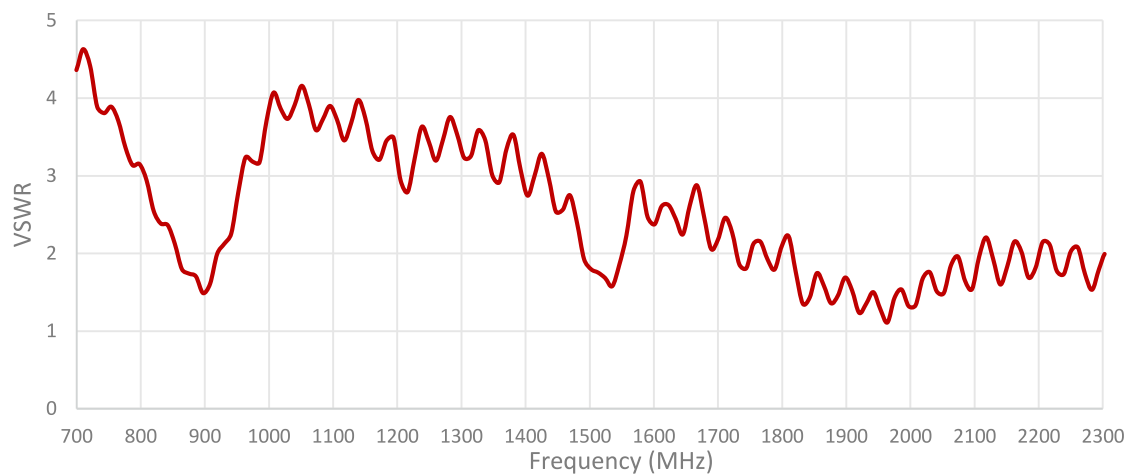
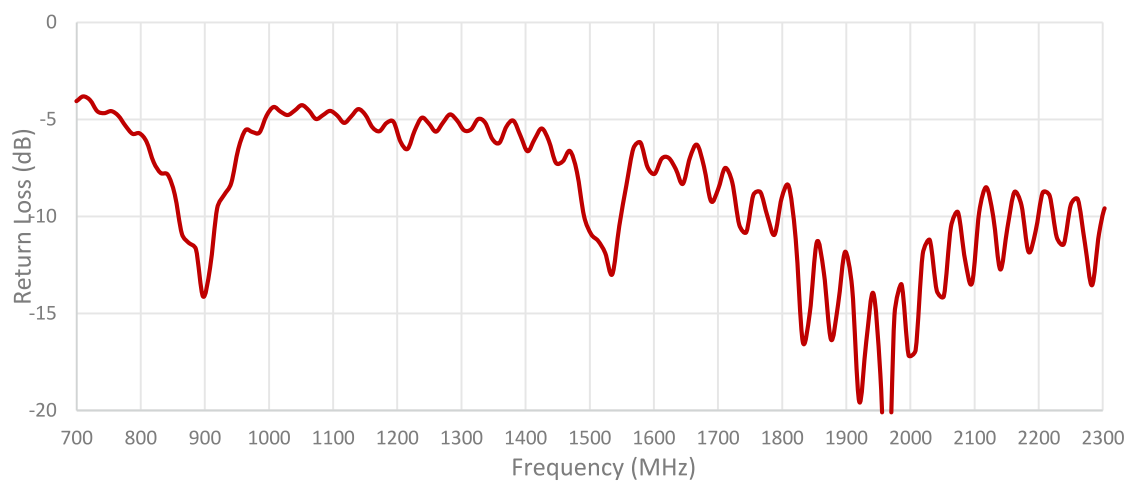
Measured in Certified CTIA 3D Anechoic Chamber

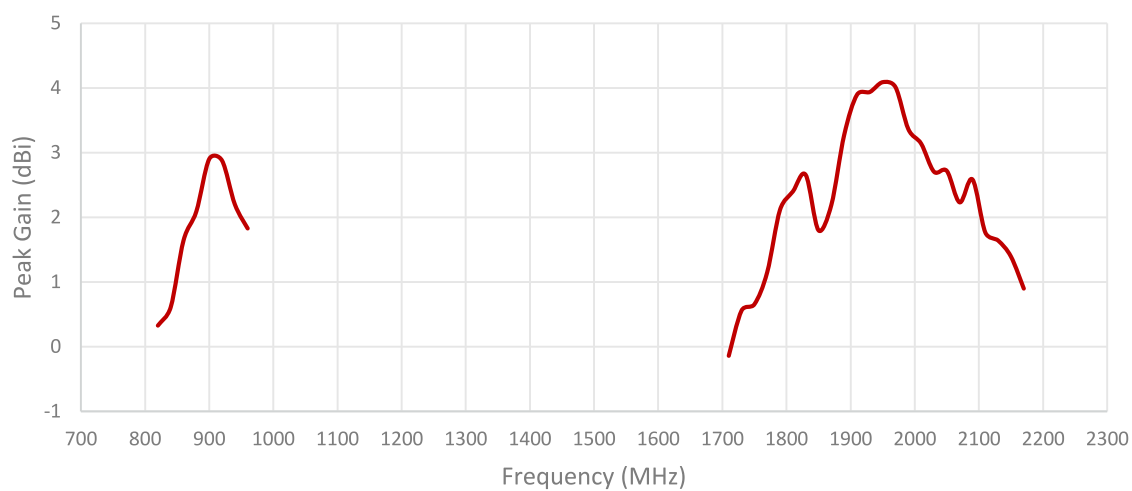
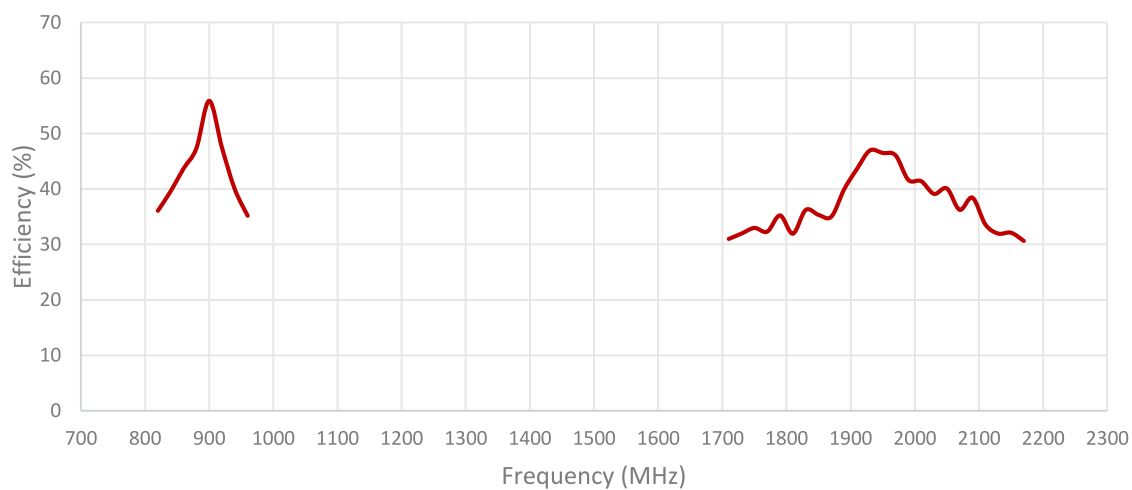
2. Mechanical and environmental specifications

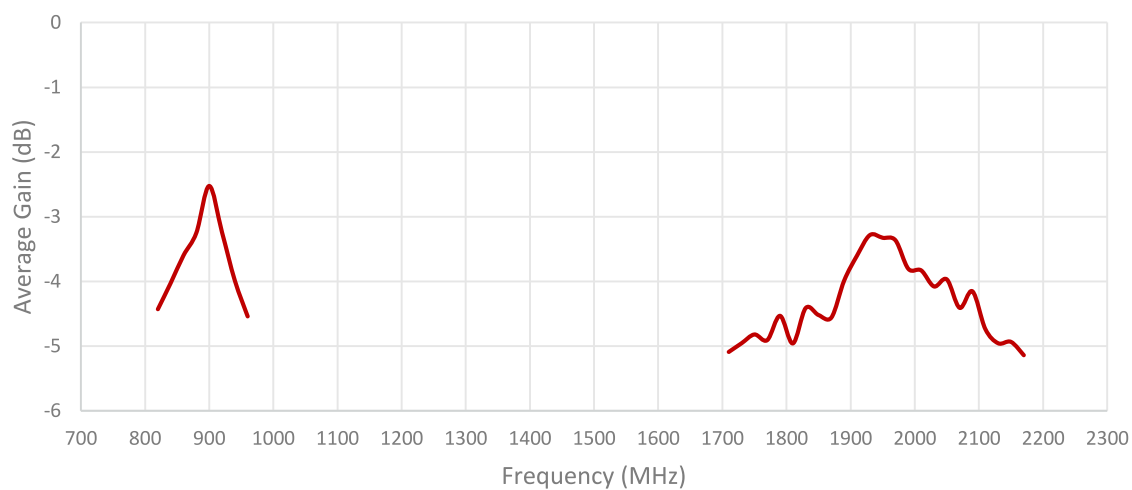
Specifications	2J6551BGF
Mounting Type	Screw Mount
Dimensions (mm)	Ø 146 x 31.5
Radome	ABS
Radome color	Black
Antenna Base	Zamak
Gasket	TPE
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IK09, IP67, IP69K

3. Antenna parameters

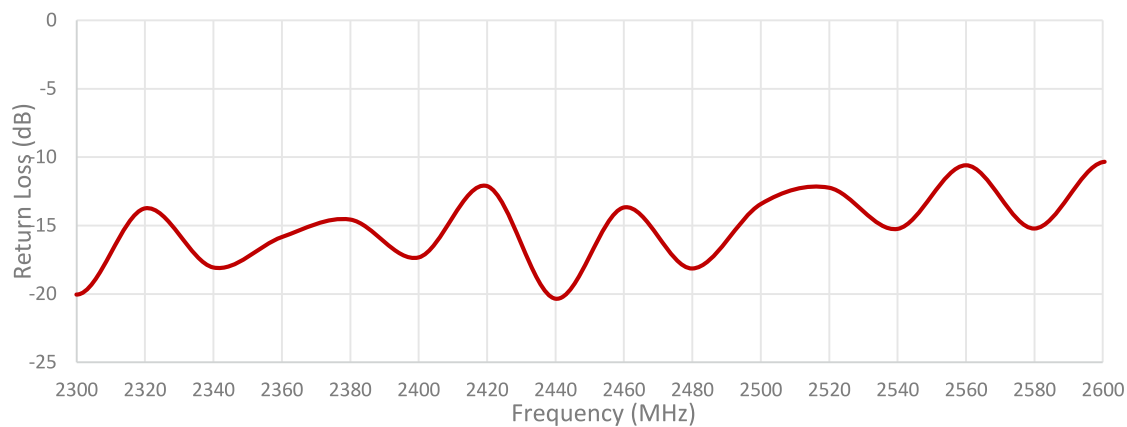
Cable 1: Cellular

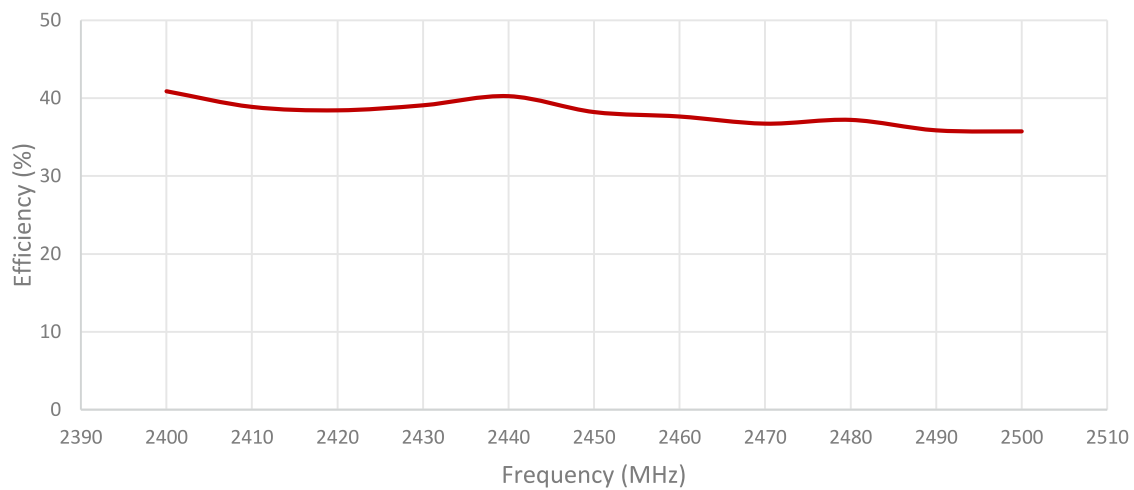
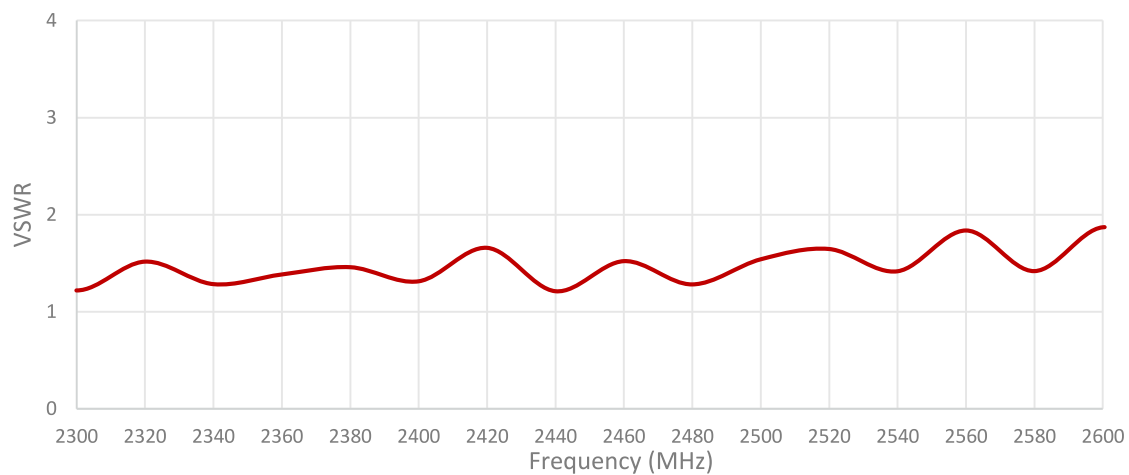


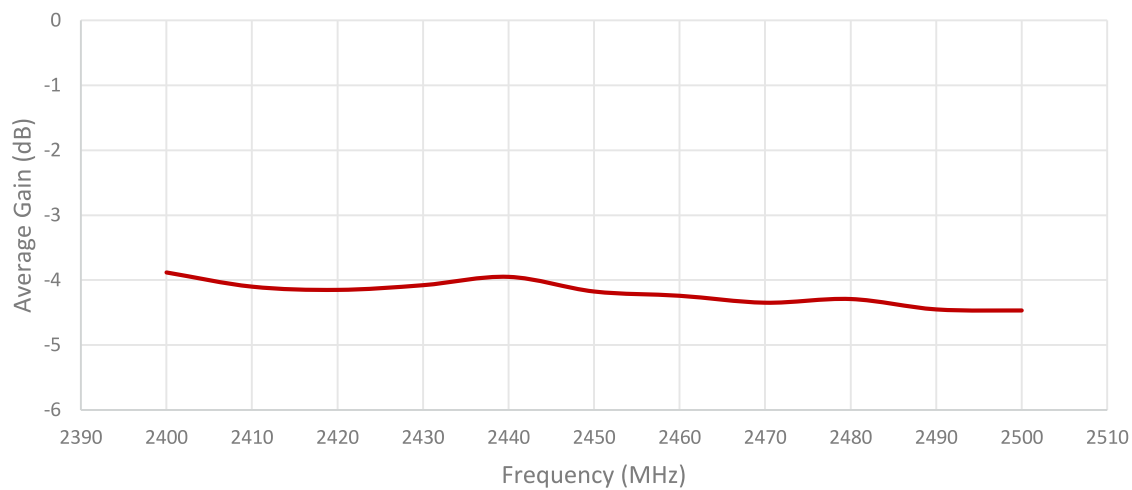
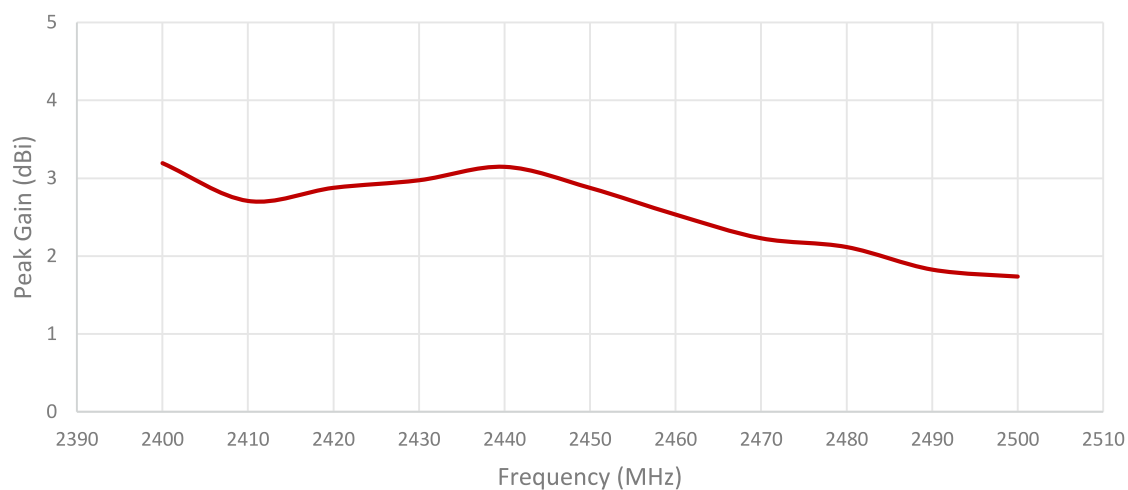


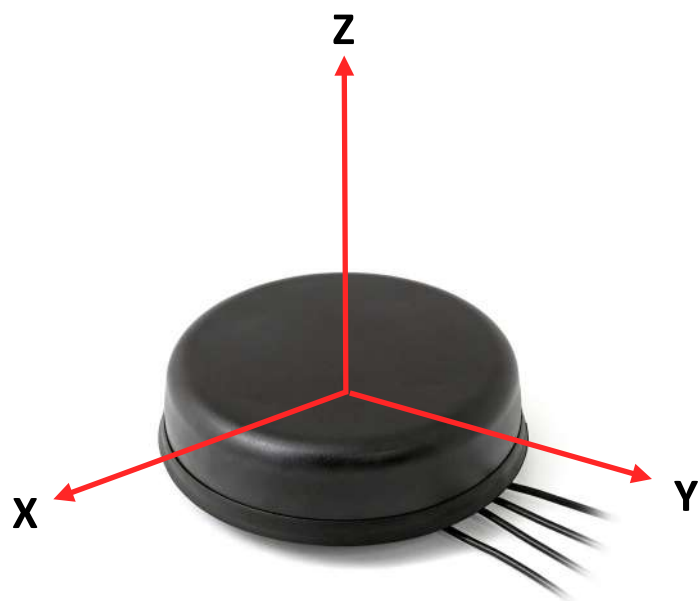


Cable 2: 2.4 GHz ISM



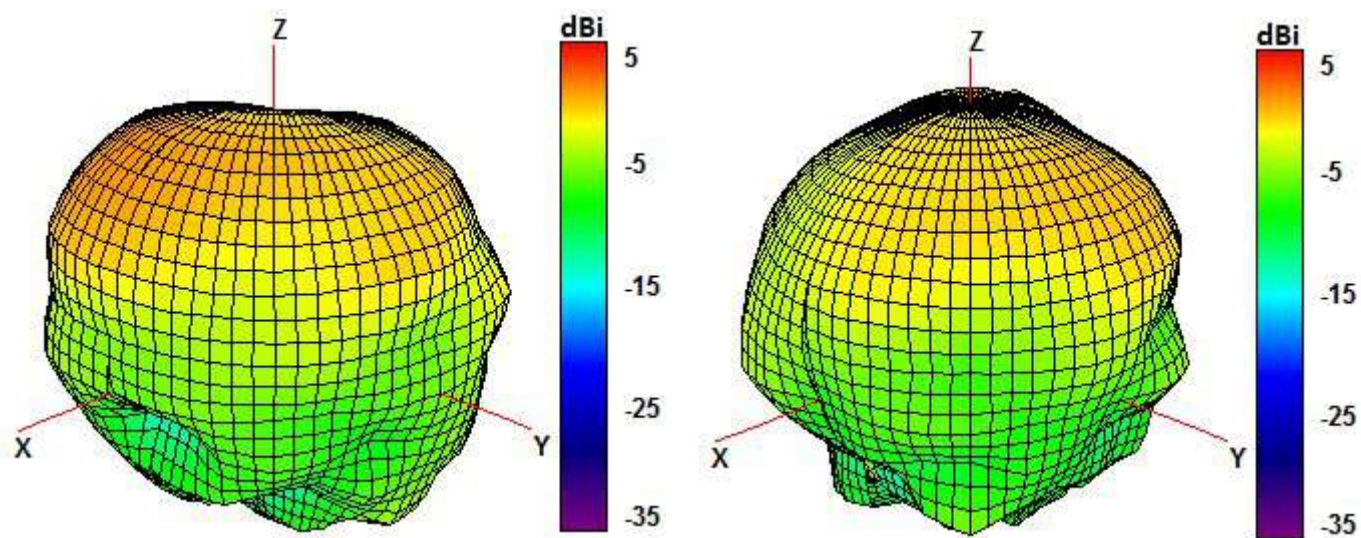




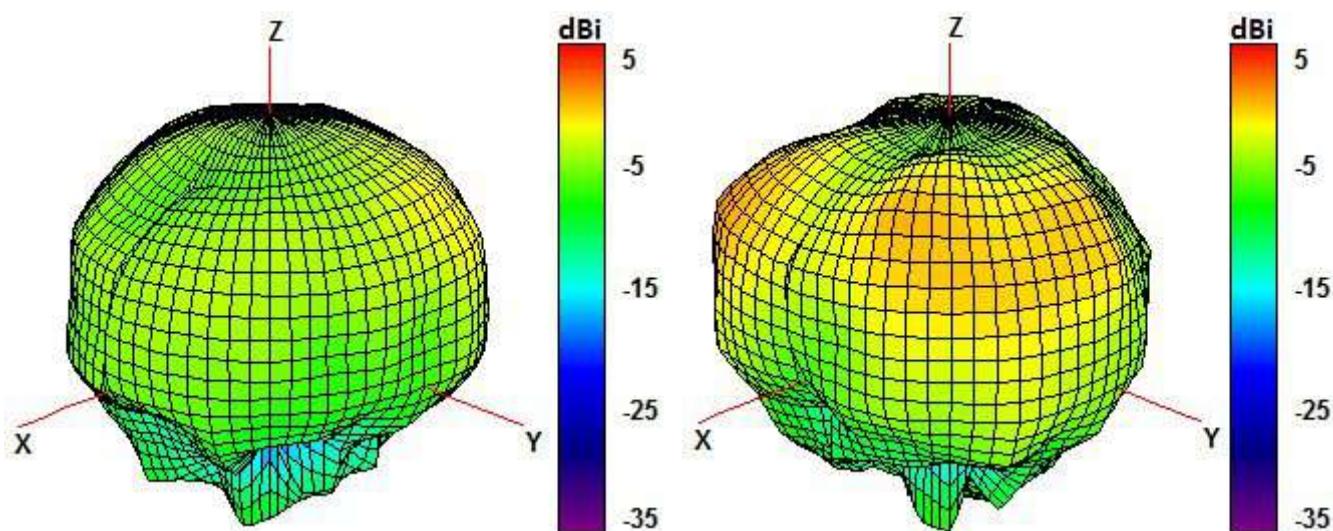


Radiation pattern reference

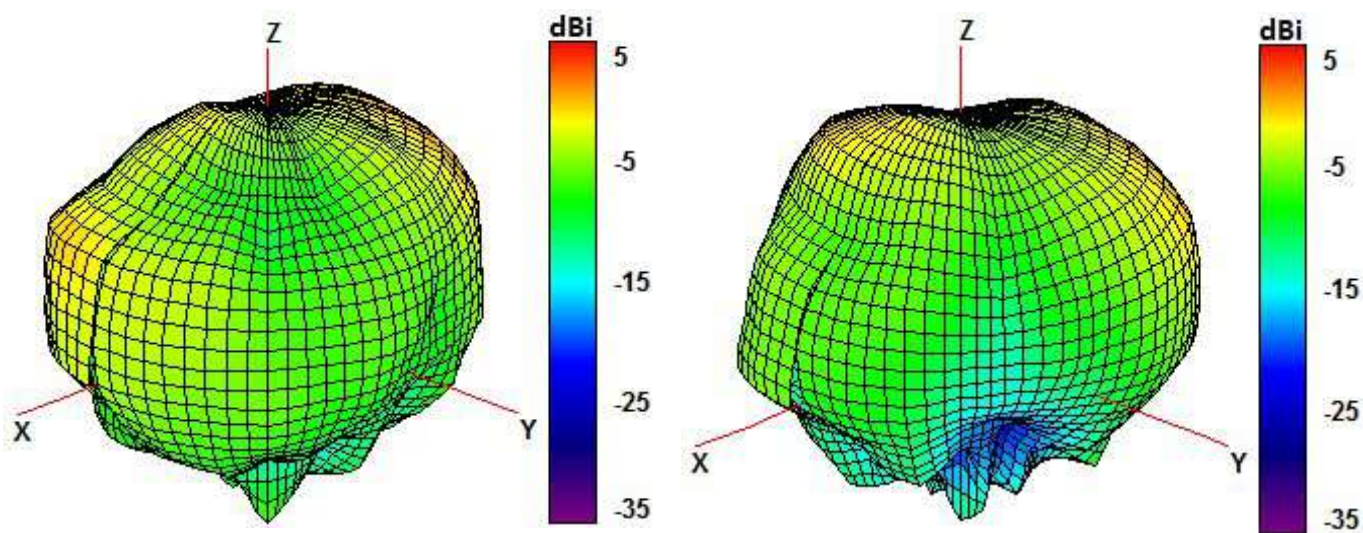
Cable 1: Cellular



850 and 940 MHz Radiation pattern

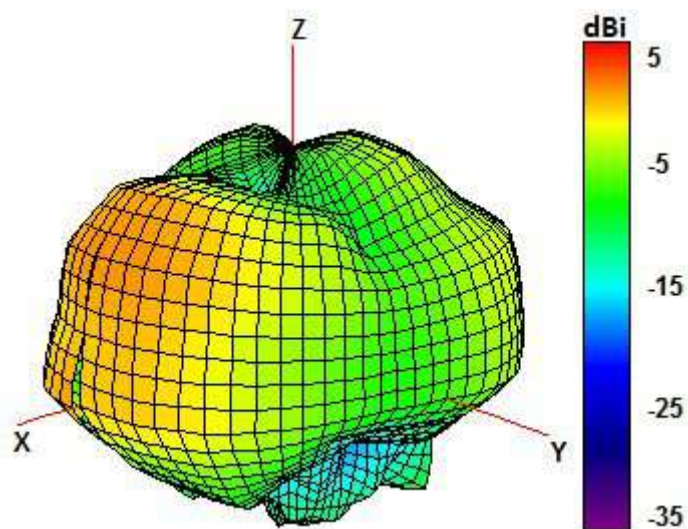


1750 and 1850 MHz Radiation pattern



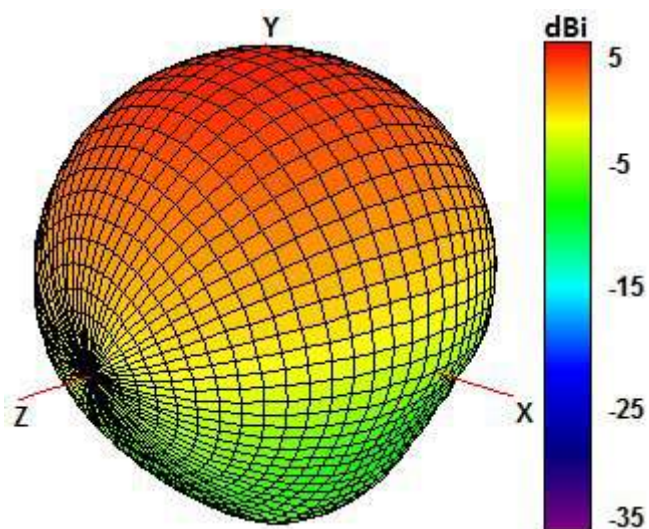
1950 and 2100 MHz Radiation pattern

Cable 2: 2.4 GHz ISM



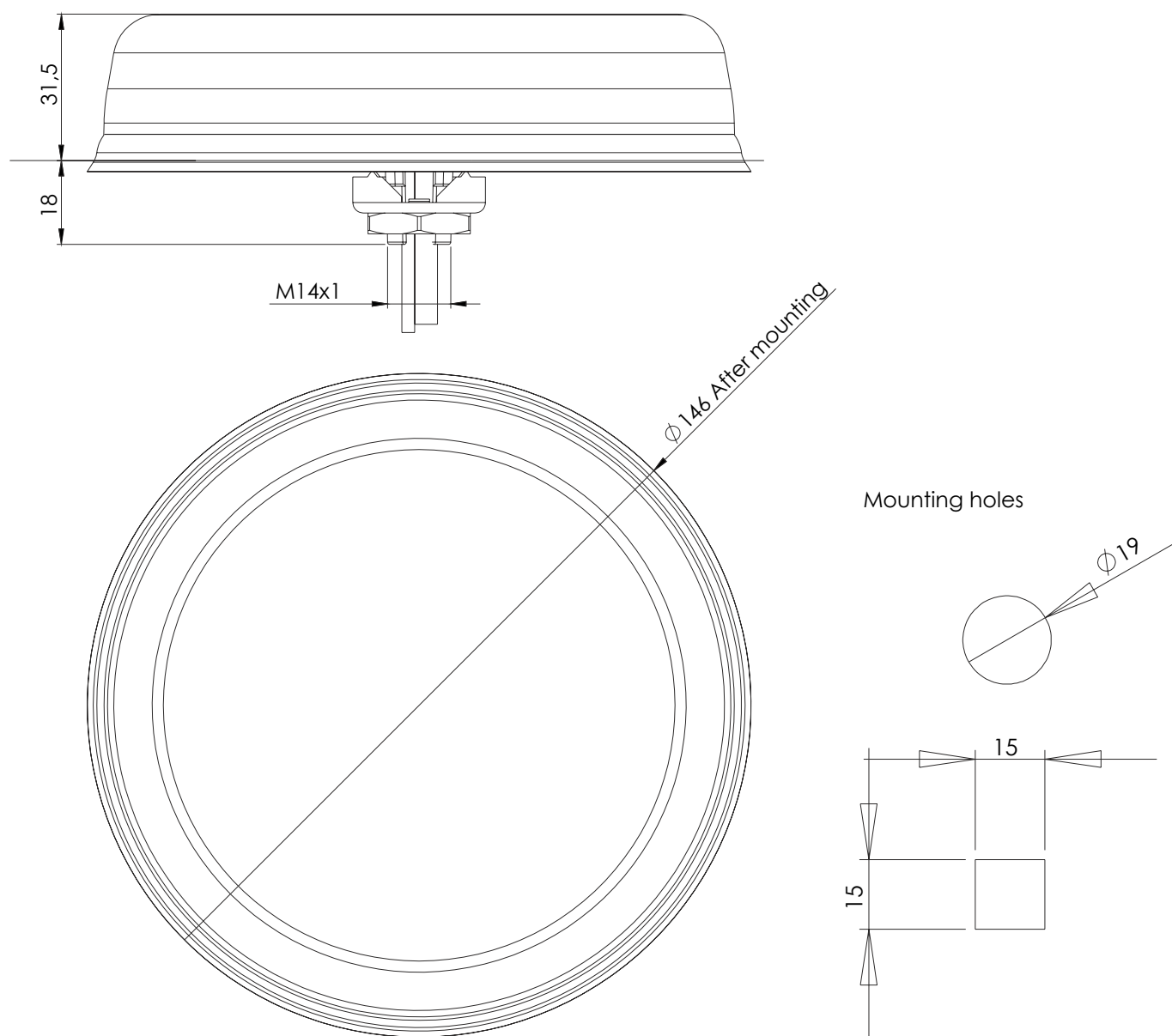
2450 MHz Radiation pattern

Cable 4: Iridium



1621 MHz Radiation pattern

4. Antenna drawings



5. Antenna Images

