

MEA-LIG-SM

5GNR/LTE, Iridium and GNSS Screw Mount



FEATURES

Screw Mount

Anti-Rotation Mechanism

Ground Plane Dependent

Cable 1: 5GNR/LTE (617-960, 1427-2690, 3300-5000 and 5150-5925 MHz)

Cable 2: Iridium (1616-1626 MHz)

Cable 3: GPS/QZSS/Galileo/GLONASS (1575-1610 MHz)

IK09, IP67, IP69

146 x 146 x 31.5 mm

Customizable Cable and Connector

ANTENNA AND ELECTRICAL SPECIFICATIONS

Spectrum	5GNR Antenna			
Technologies	5G, 4G, 3G and 2G			
Standards	5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G2G			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
Band (MHz)	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
5GNR Bands	n5, n8 ,12, n20, n28, n71, n81, n82, n83,	n1, n2, n3, n7, n25, n34, n38, n39, n40, n41, n50, n51, n66, n70, n74, n75, n76, n80, n84, n86	n77, n78, n79	
4GLTE Bands	B5, B6, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B29, B44, B67, B68, B71, B85	B1, B2, B3, B4, B7, B9, B10, B11, B21, B23, B24, B25, B30, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B45, B50, B51, B65, B66, B69, B70, B74, B75, B76	B22, B42, B43, B48, B49, B52	B46, B47, B252, B255
3GCELL Bands	B5, B6, B8, B12, B13, B14, B19, B20, B26	B1, B2, B3, B4, B7, B9, B10, B11, B21, B25, B32, B33, B34, B35, B36, B37, B38, B39, B40	B22	
2GCELL Bands	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
CDMACELL Bands	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		

Cable 1	5G NR Antenna			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
Return Loss (dB)	~-7.5	~-9.7	~-11.2	~-14.2
VSWR	~3.3:1	~2.3:1	~2.1:1	~1.7:1
Efficiency (%)	~22.4	~20.0	~15.5	~16.4
Peak Gain (dBi)	~-1.5	~-1.5	~-1.3	~0.6
Average Gain (dB)	~-7.0	~-7.6	~-8.3	~-8.0
Impedance (Ohm)	50			
Polarization	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	LL100 Standard (Other Cables Available)			

Antenna Measurement Conditions

Mounted on 30 x 30 cm Metal Plate

100 cm of LL100 Cable

Measured in Certified CTIA 3D Anechoic Chamber

Cable 2	Iridium Antenna
Standard	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	LL100 Standard (Other Cables Available)

Cable 3	GNSS Antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Bands (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	LL100 Standard (Other Cables Available)	

Antenna Measurement Conditions

Mounted on 70 x 70 mm Ground Plane

No cable

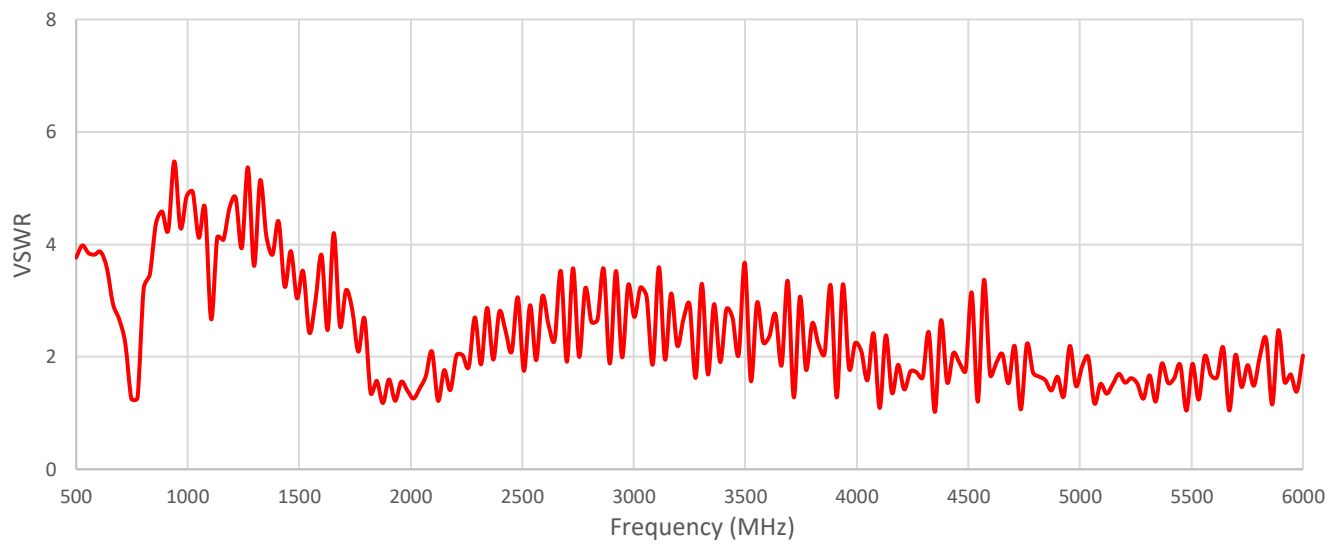
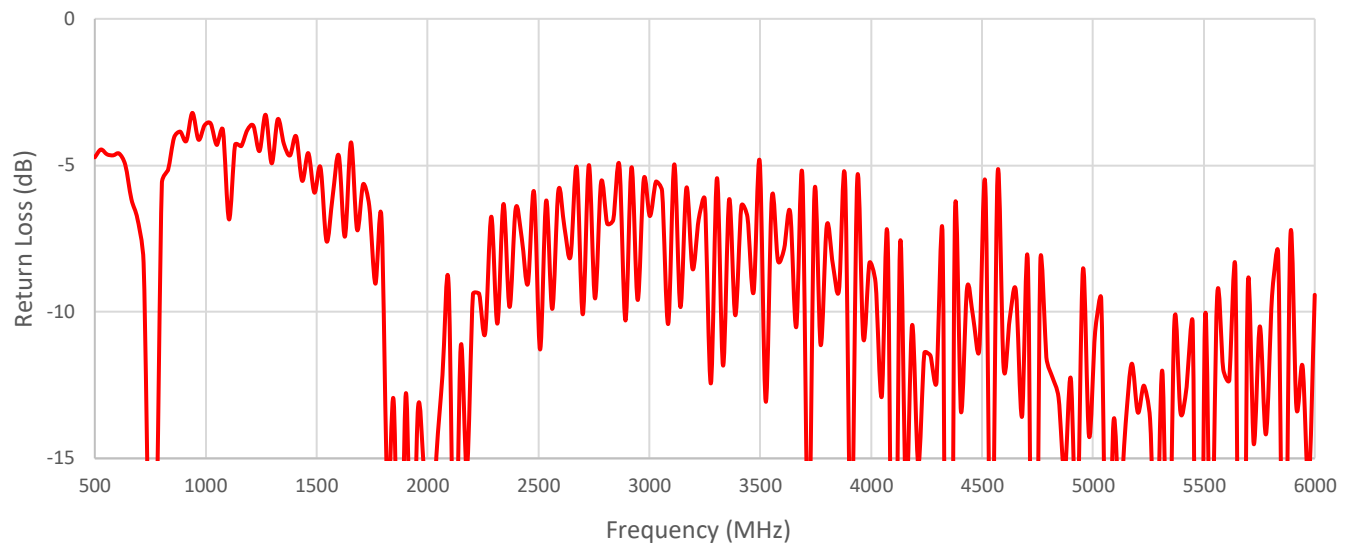
Measured in Certified CTIA 3D Anechoic Chamber

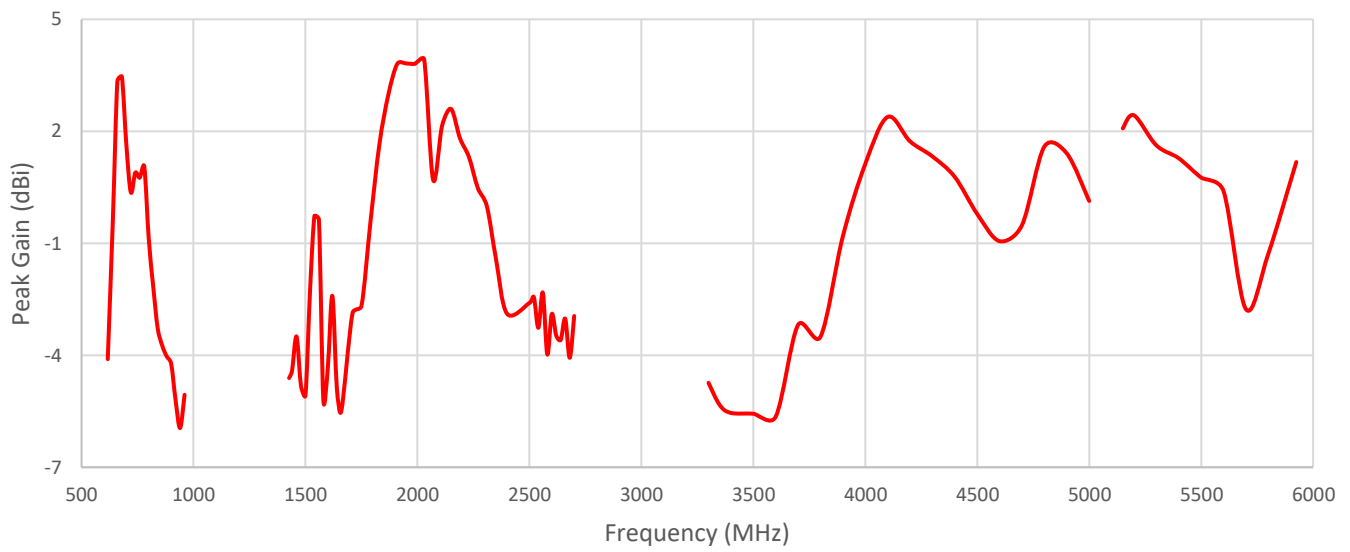
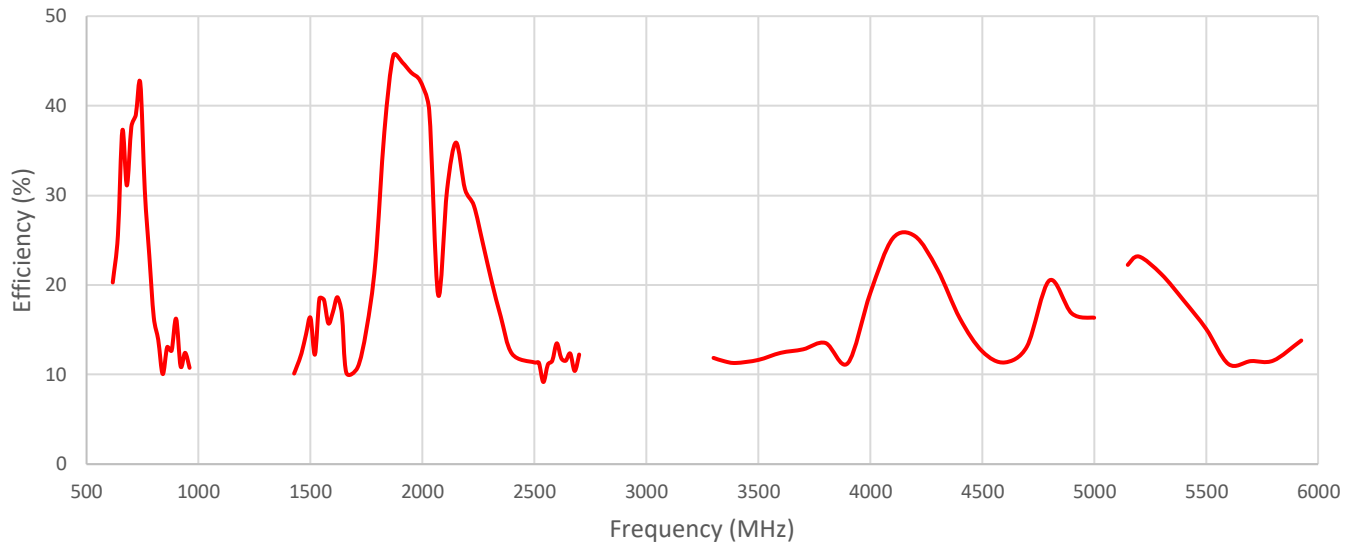
MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

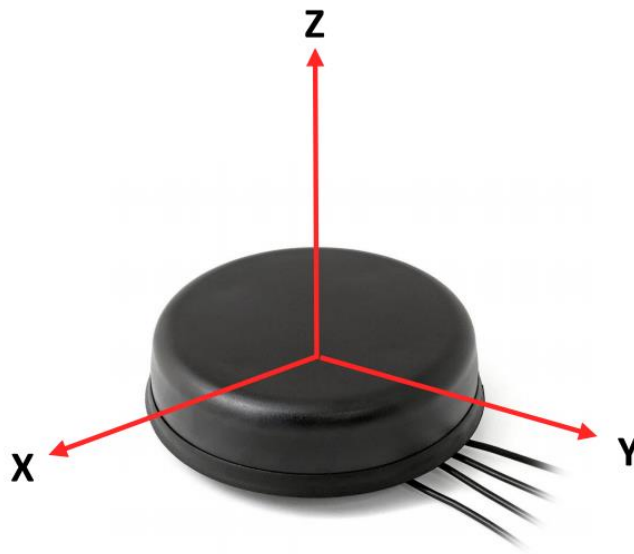
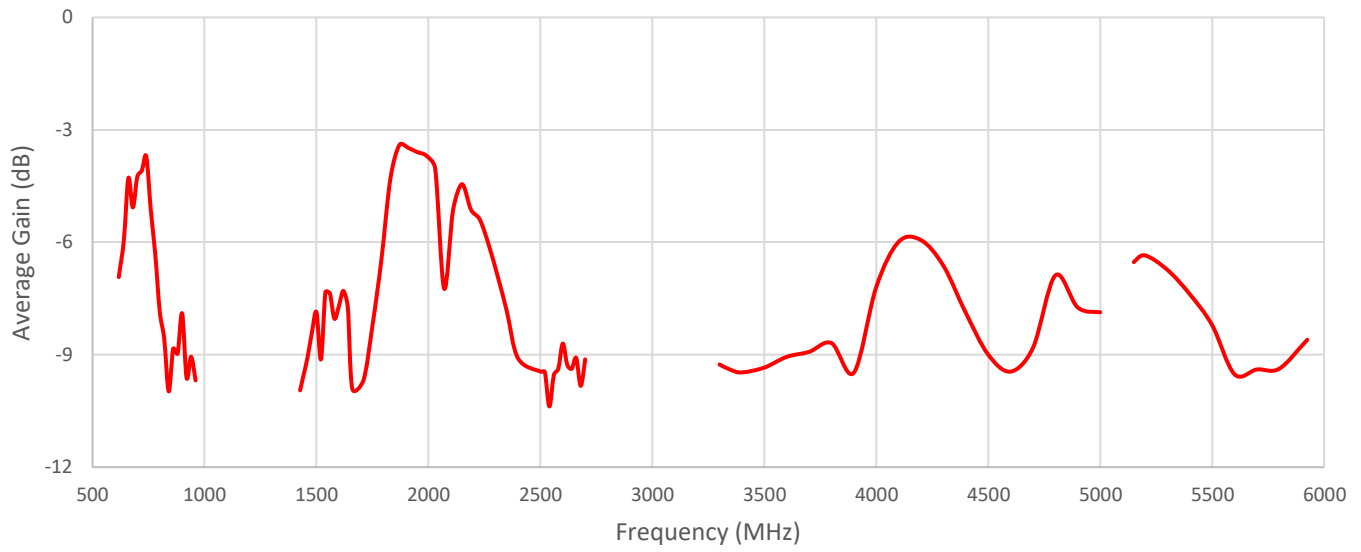
Specification	MEA-LIG-SM
Mounting Type	Screw Mount
Dimensions (mm)	146 x 146 x 31.5
Radome Type	PC+ASA UV Stable
Radome Color	Black
Antenna Base	Zamak
Gasket	TPE
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Certificates	IK09, IP67, IP69
Substance Compliance	RoHS

ANTENNA PARAMETERS

5GNR

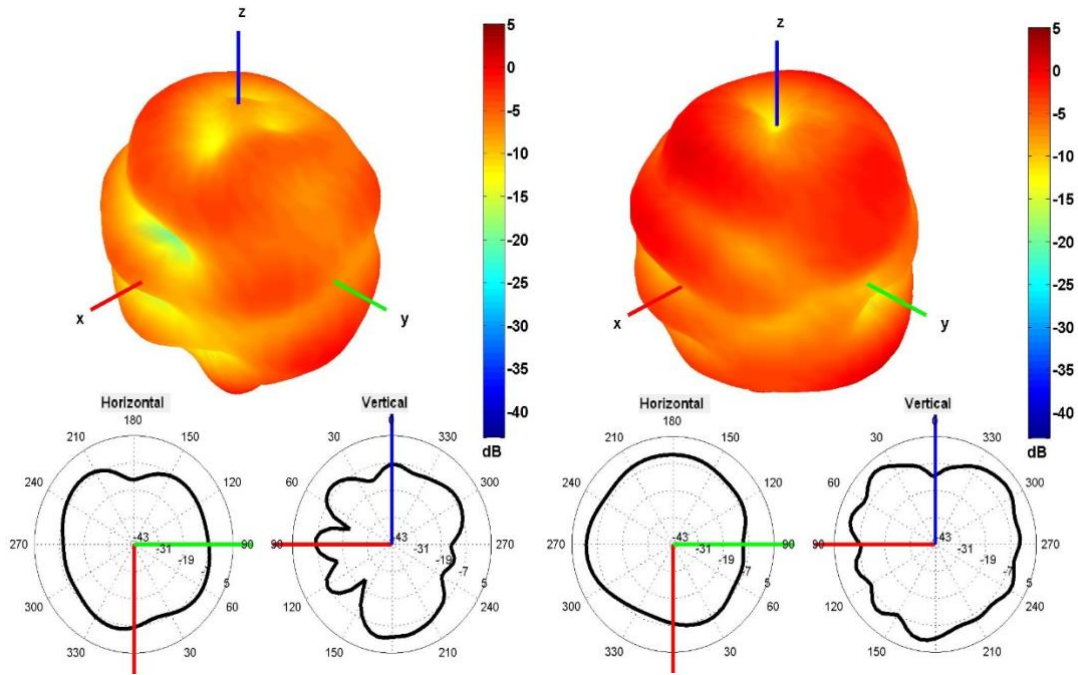




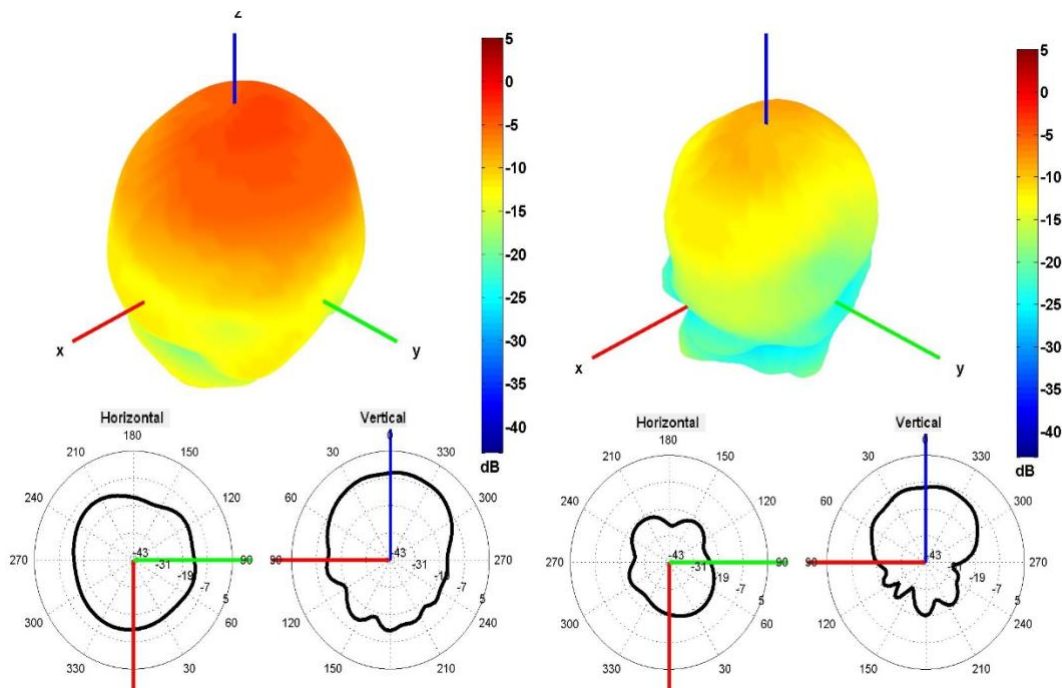


RADIATION PATTERN REFERENCE

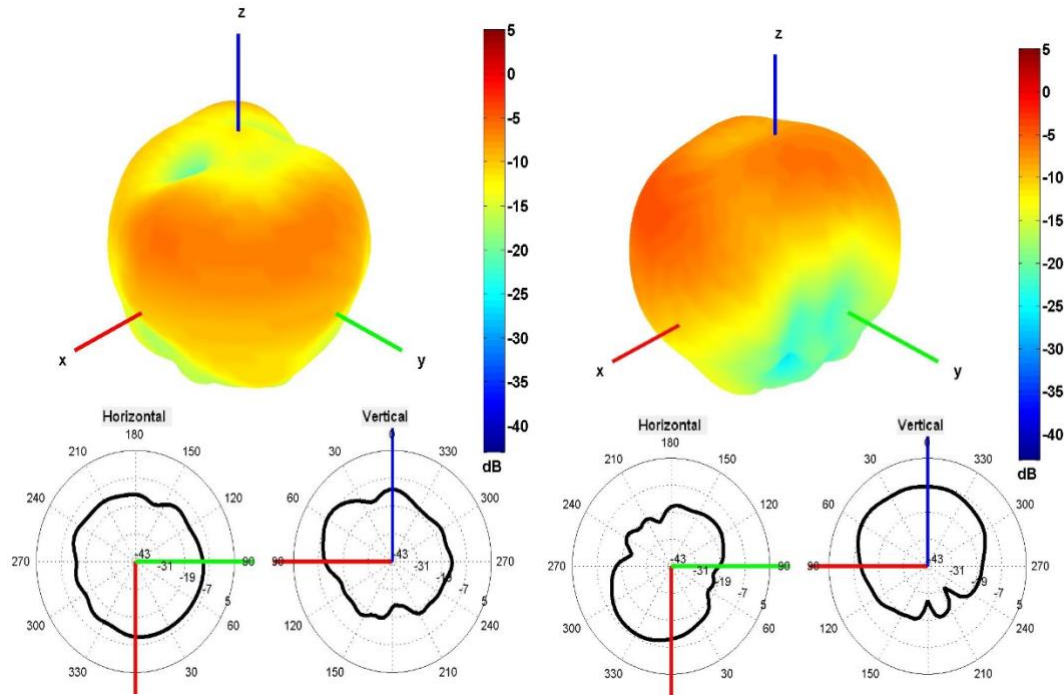
5GNR



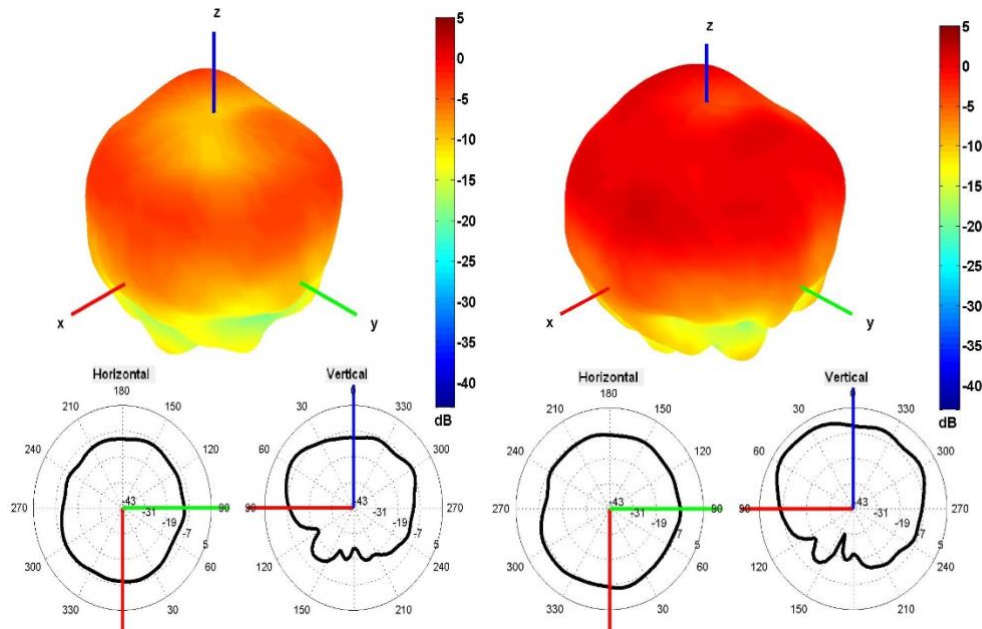
650 AND 750 MHz Radiation Patterns



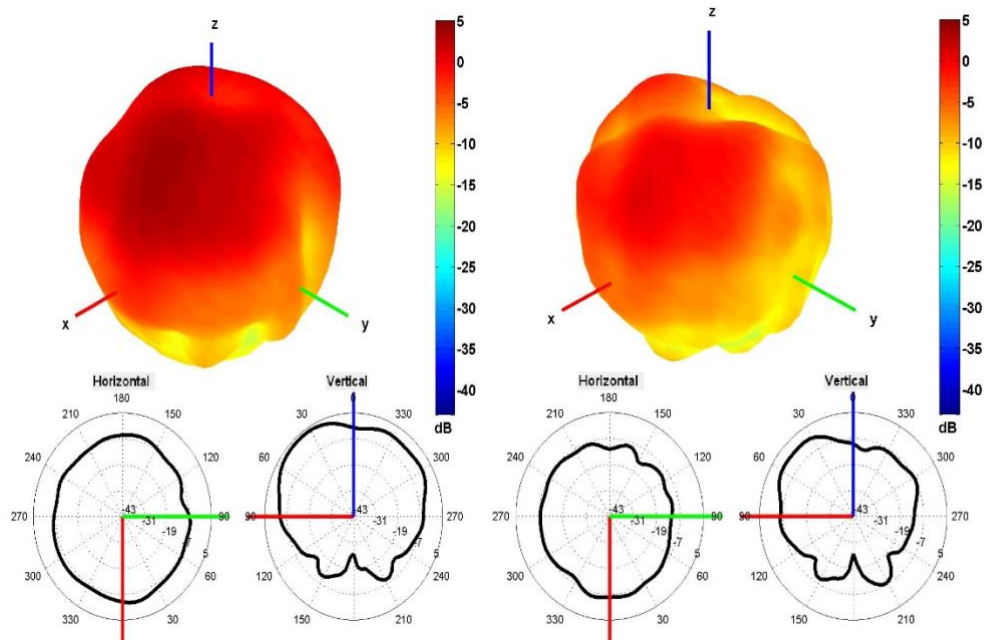
850 AND 950 MHz Radiation Patterns



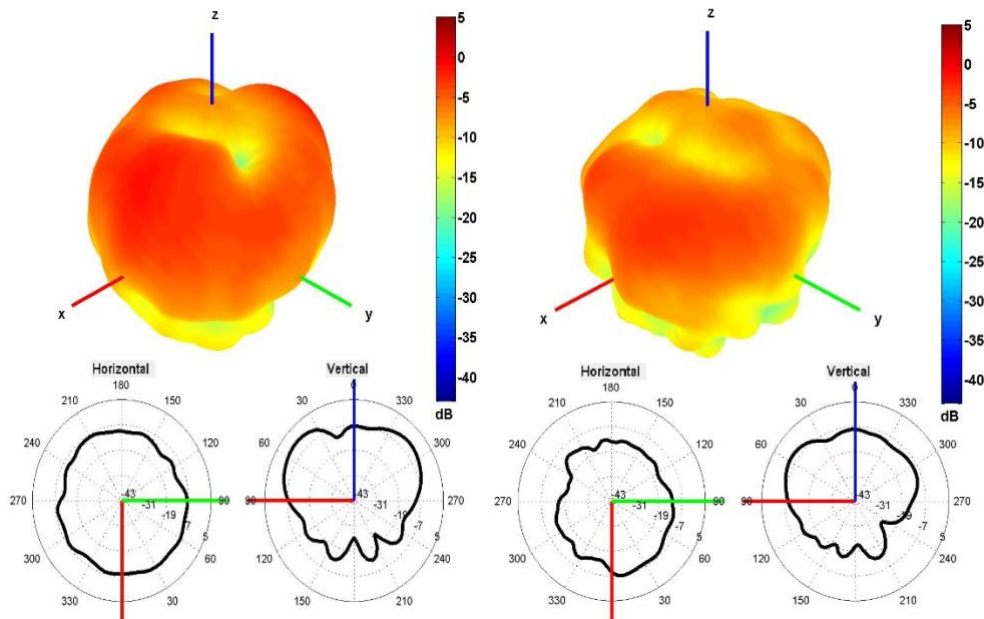
1500 AND 1600 MHz Radiation Patterns



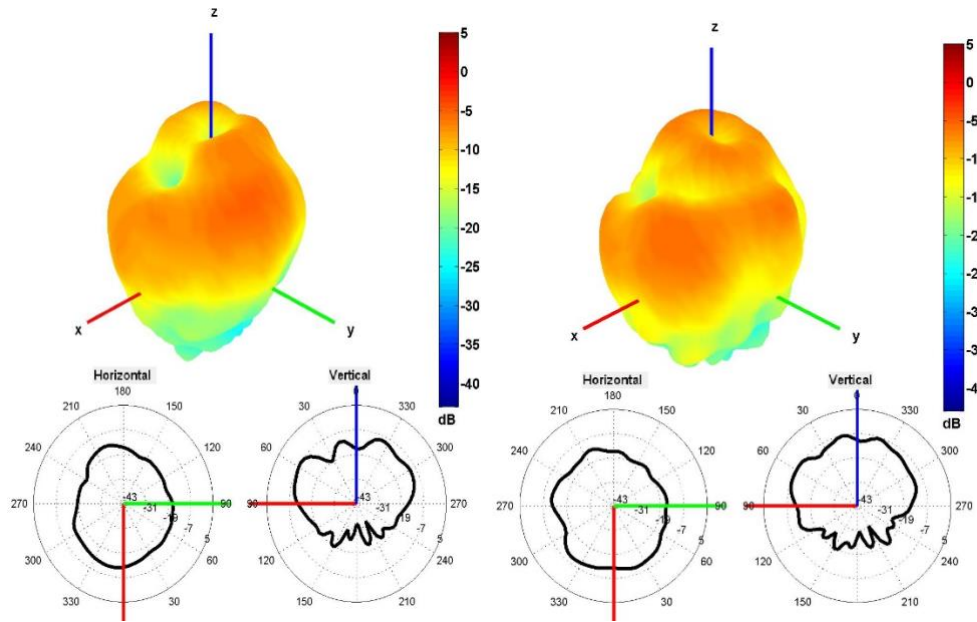
1750 AND 1850 MHz Radiation Patterns



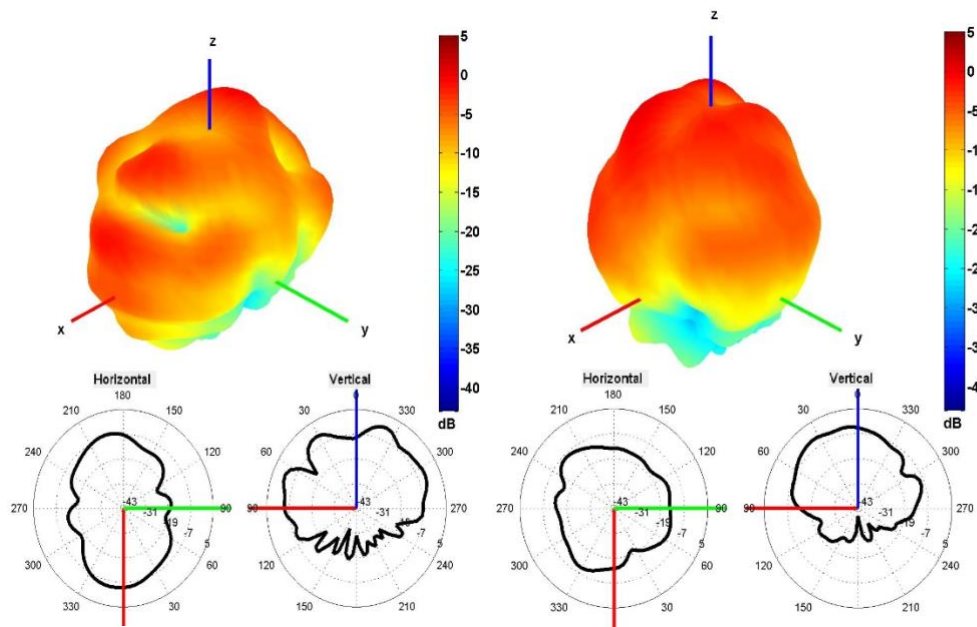
1950 AND 2100 MHz Radiation Patterns



2350 AND 2600 MHz Radiation Patterns

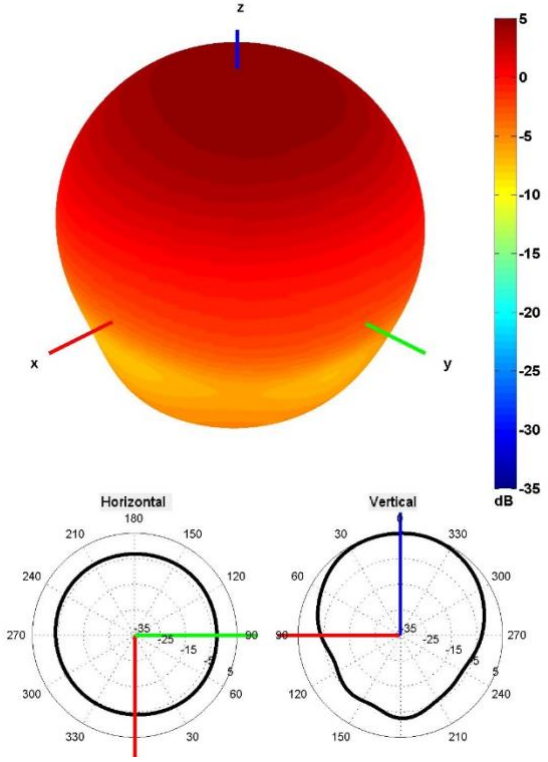


3350 AND 3600 MHz Radiation Patterns



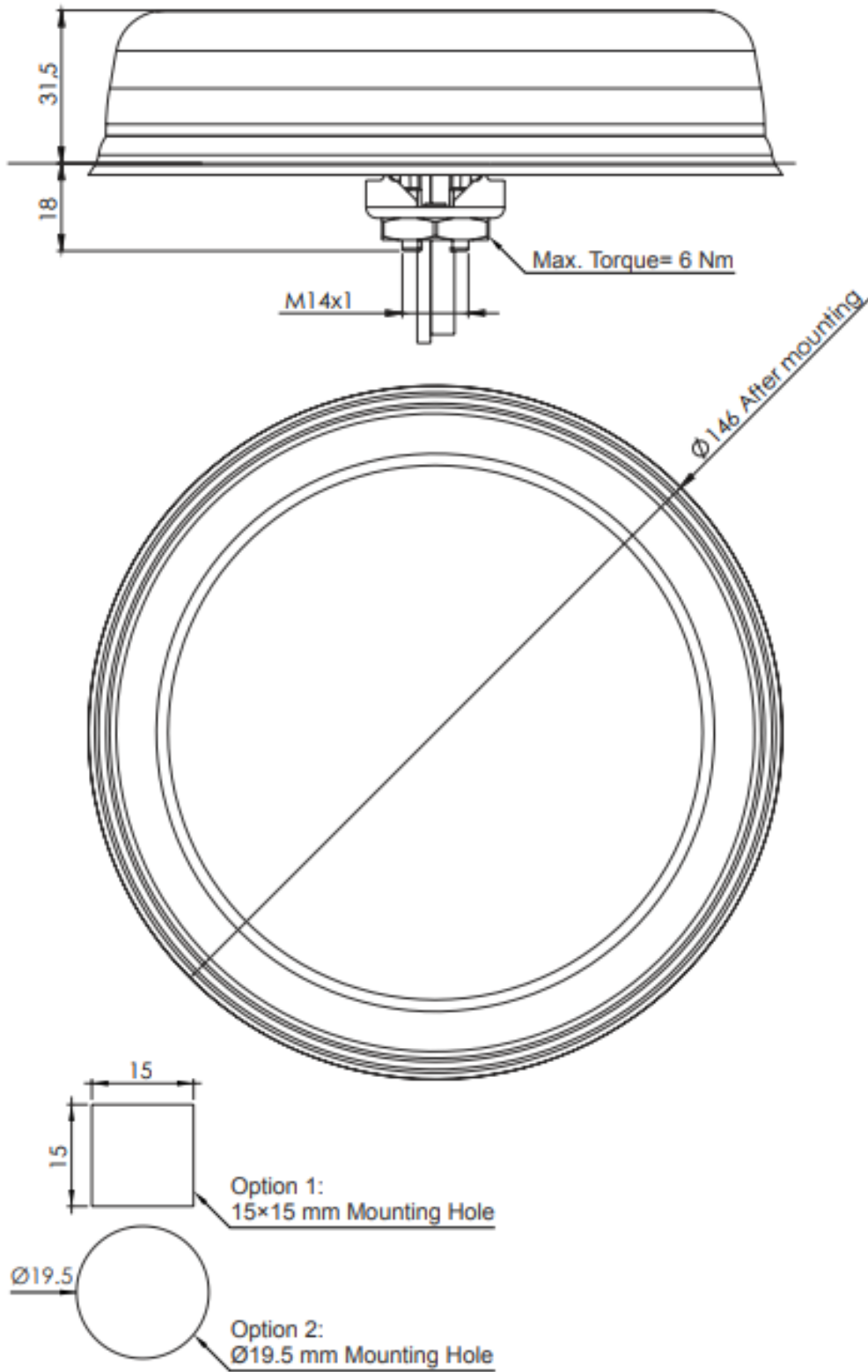
4500 AND 5500 MHz Radiation Patterns

IRIDIUM



1621 MHz Radiation Pattern

ANTENNA DRAWINGS



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

ANTENNA IMAGES



 **iridium**[®]
Certified

