

MEA-5LGI-SM

5GNR/LTE, IRIDIUM and GNSS Screw Mount



FEATURES

Screw Mount

Ground Plane Independent

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

Cable 2: Iridium (1616-1627 MHz)

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

IP67, IP69

80 x 74 x 43 mm

Customized Cable and Connector

ANTENNA AND ELECTRICAL SPECIFICATIONS

Spectrum	5G NR Antenna			
Technologies	5G, 4G, 3G and 2G			
Standards	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
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
5G NR Bands	n5, n8, n12, 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	
4G LTE 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
3G CELL 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	
2G CELL Bands	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
CDMA CELL 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)	~-8.9	~-9.2	~-8.2	~-7.5
VSWR	~2.6:1	~2.4:1	~2.7:1	~2.5:1
Efficiency (%)	~55.0	~51.2	~25.7	~28.3
Peak Gain (dBi)	~2.3	~5.1	~2.6	~2.7
Average Gain (dB)	~-2.7	~-3.1	~-6.0	~-5.5
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	D302 Standard (Other Cables Available)			

Cable 2	Iridium Antenna
Standards	Iridium
Band (MHz)	1621
Frequency(MHz)	1616-1627
Return Loss (dB)	~-12.5
VSWR	~1.6:1
Efficiency (%)	~68.1
Peak Gain (dBi)	~5.2
Average Gain (dB)	~-1.8
Radiation Pattern	Hemispherical
Polarization	RHCP
Connector Type	SMA-Male Standard (Other Connectors Available)
Cable Length	300 cm Standard (Any Cable Length Available)
Cable Type	D302 Standard (Other Cables Available)

Antenna Measurement Conditions

Mounted on Metal Plate of 30 x 30 cm
100 cm of Cable D302

Measured in Certified CTIA 3D Anechoic Chamber

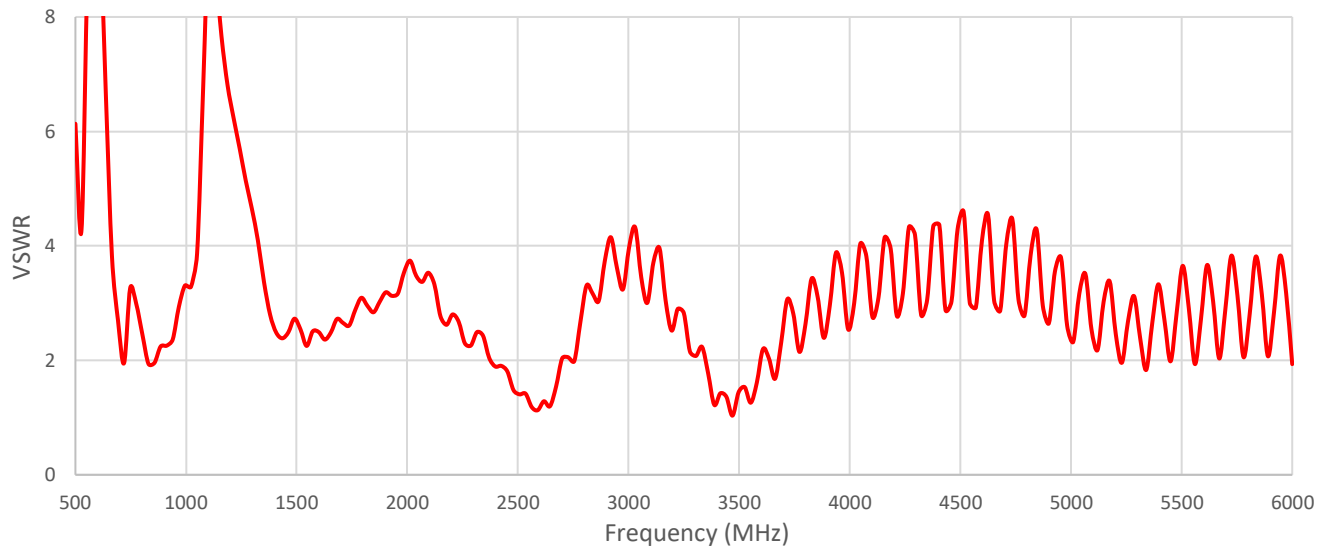
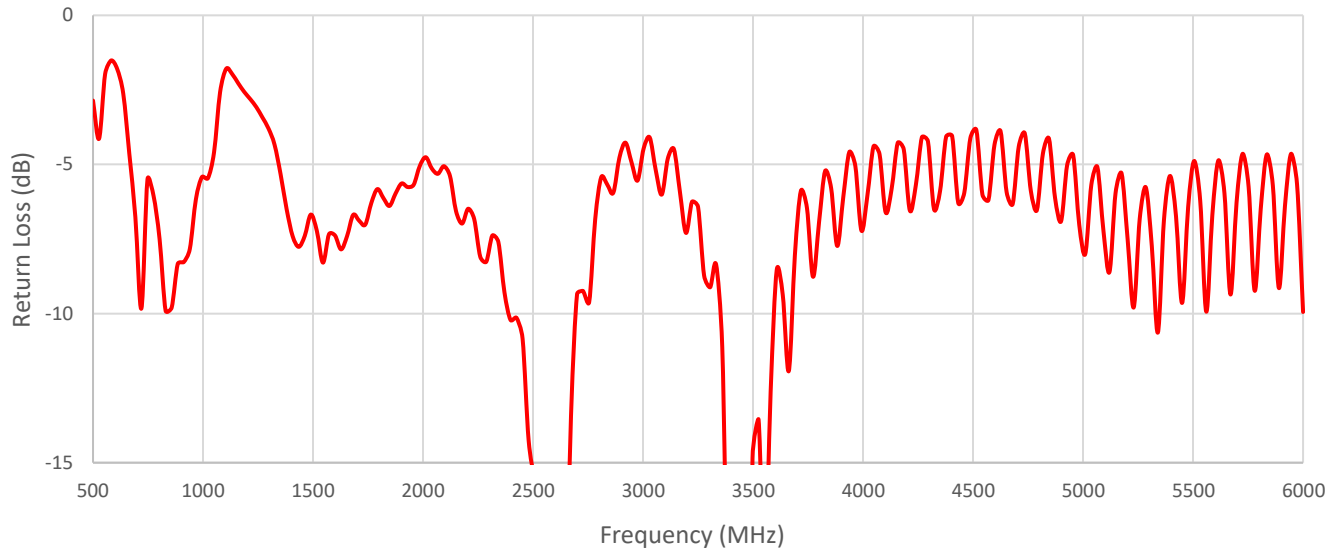
Cable 3	GPS/GLONASS Antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Bands (MHz)	1575	1602
Frequency (MHz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Return Loss (dB)	<=-15.0 dB	
VSWR	<=1.4:1 dB	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Pre-filter	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.5 Typ	
Voltage (V)	1.5 – 3.6	
Current (mA)	9 Typ	
Power Consumption (mW)	24.3 Typ	
ESD Protection	2kV	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length (m)	300 cm Standard (Any Cable Length Available)	
Cable Type	D100 Standard (Other Cables Available)	

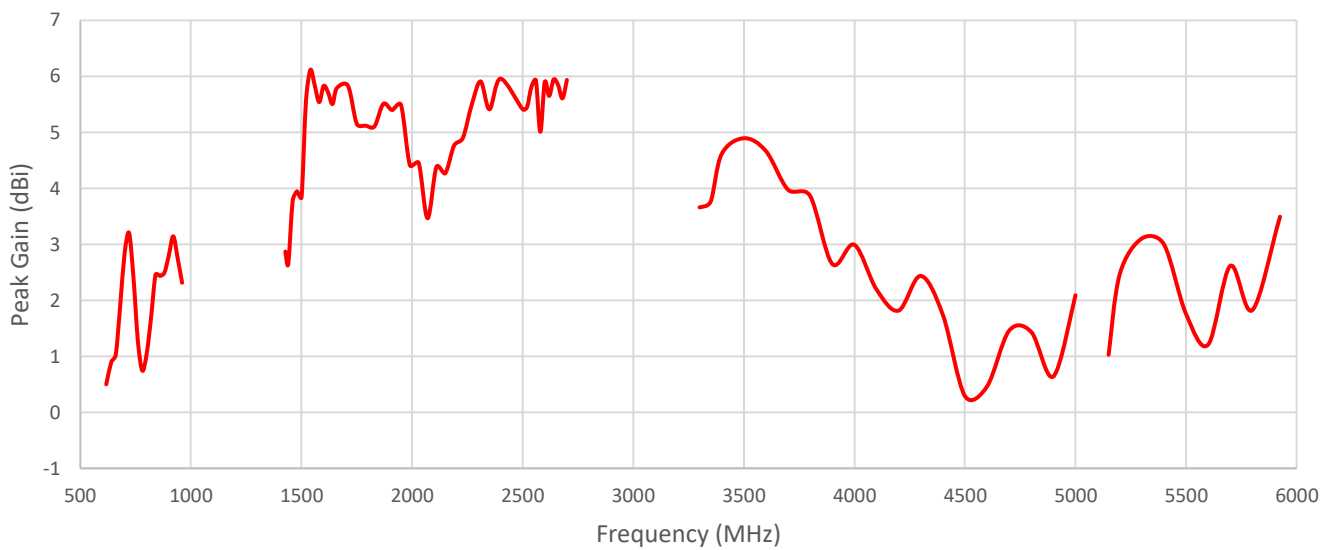
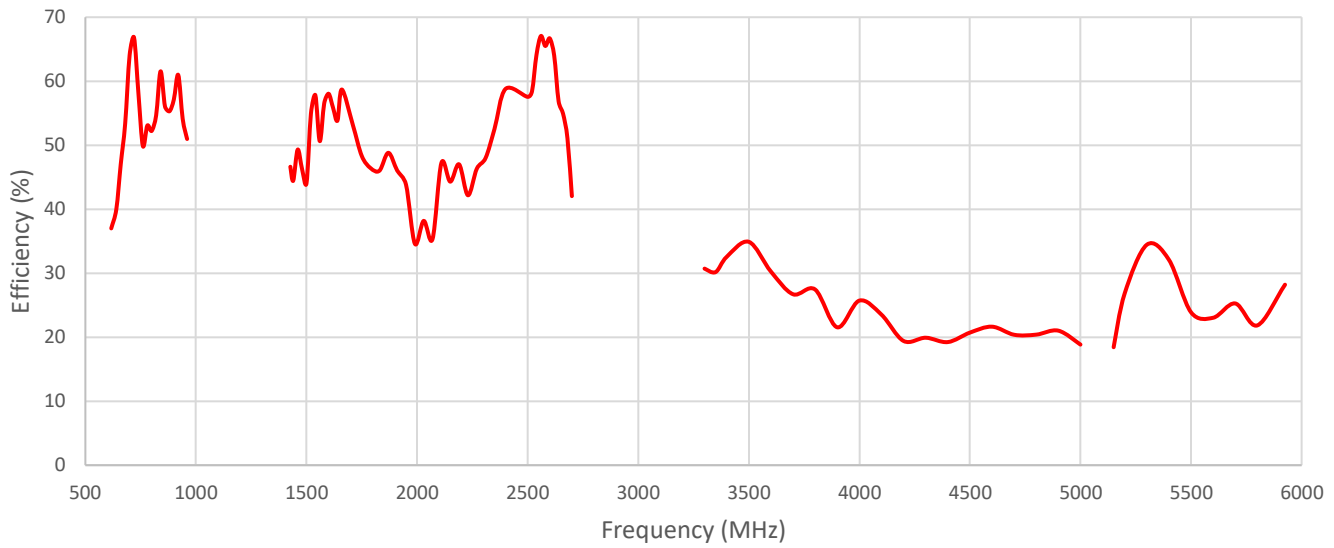
MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

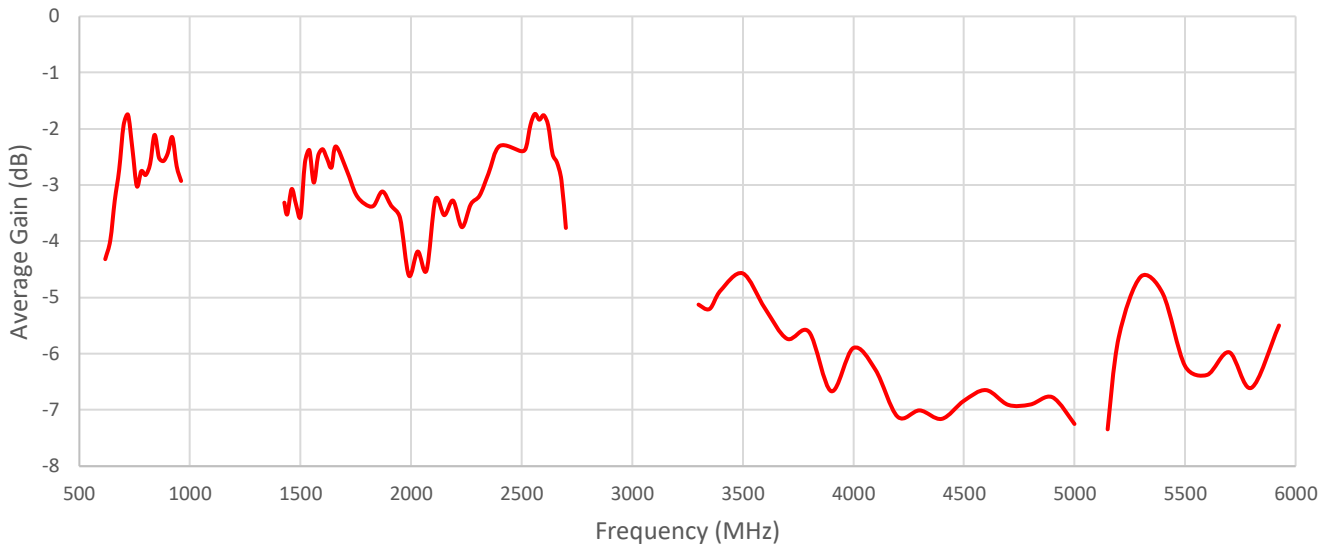
Specification	MEA-5LGI-SM
Mounting Type	Screw Mount
Dimensions (mm)	80 x 74 x 43
Radome Type	ABS UV Stable
Radome Color	Black, White
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Ingress Protection	IP67, IP69
Substance Compliance	RoHS

ANTENNA PARAMETERS

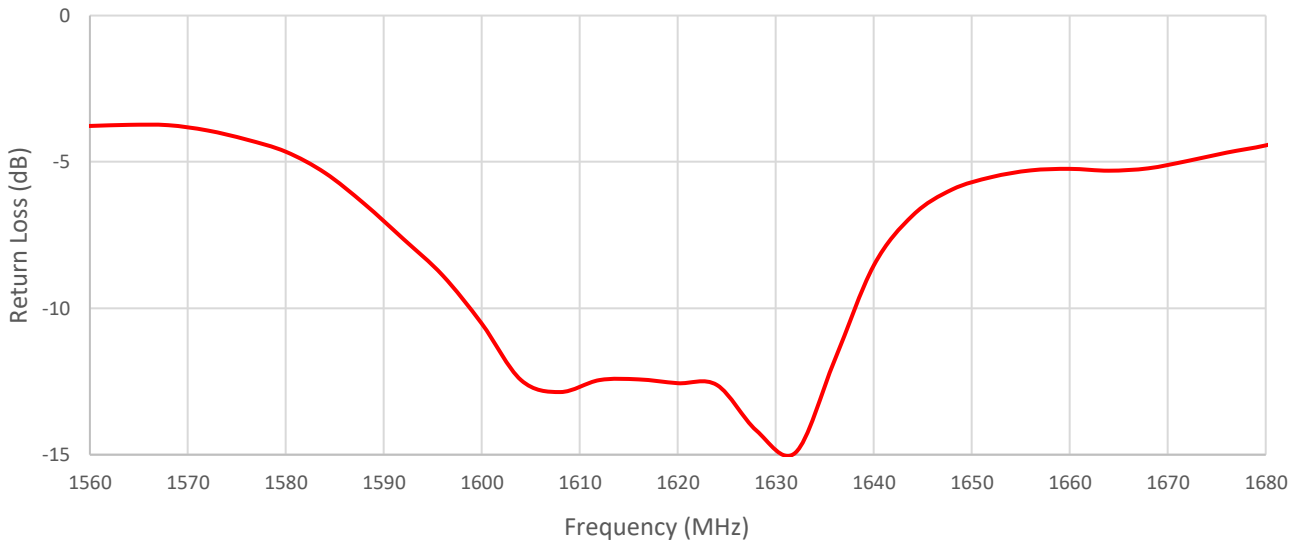
CABLE 1: Cellular/LTE

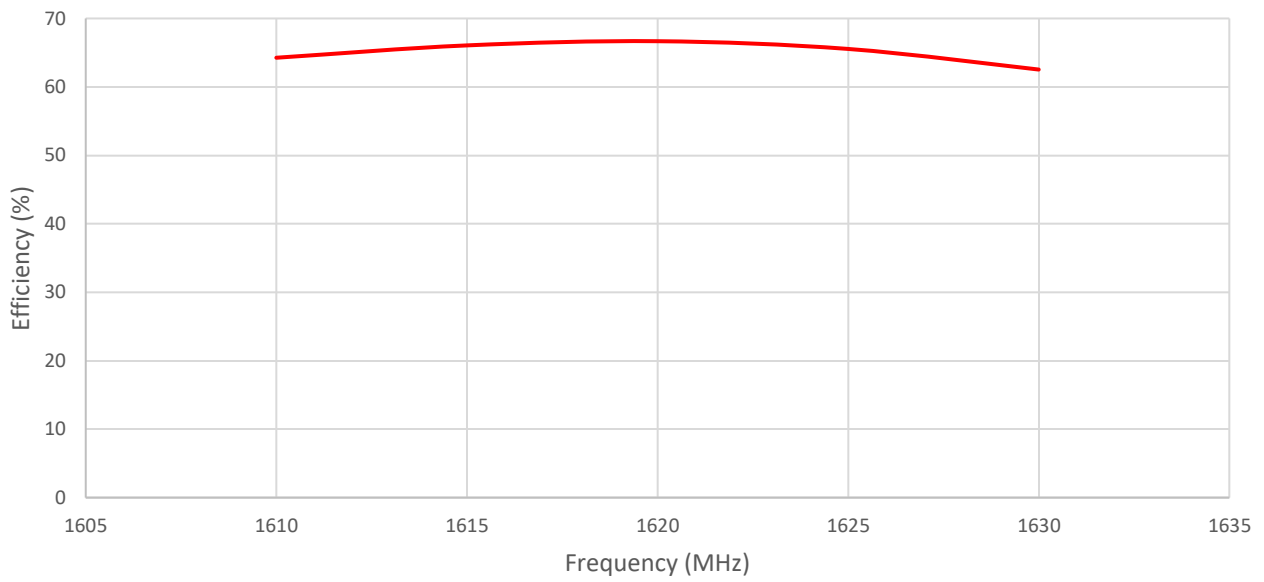
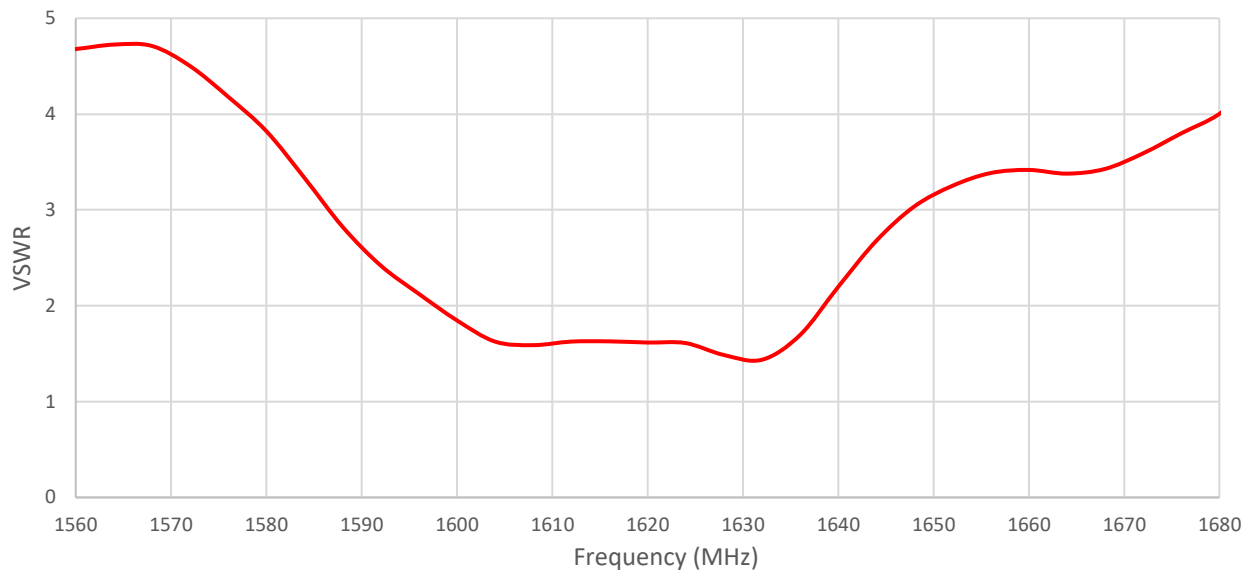


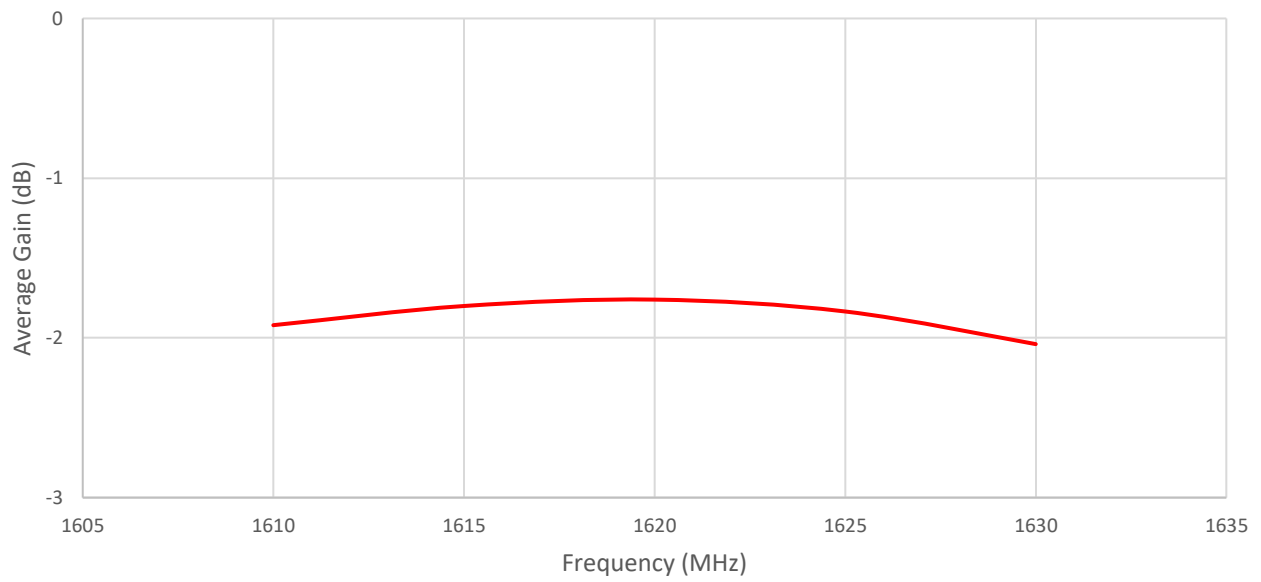
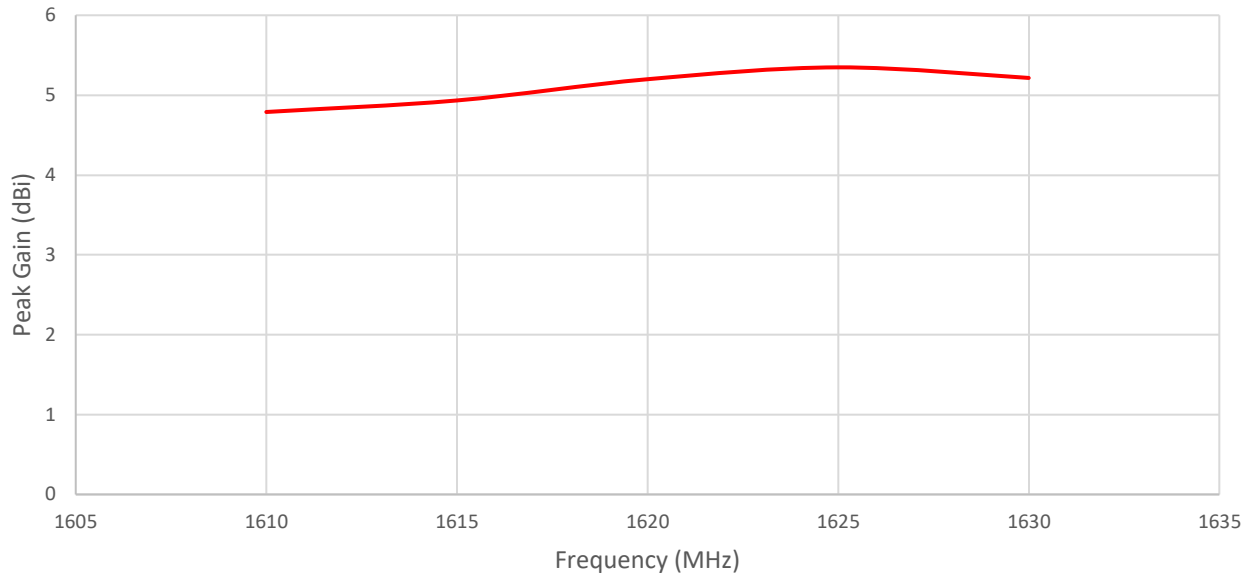




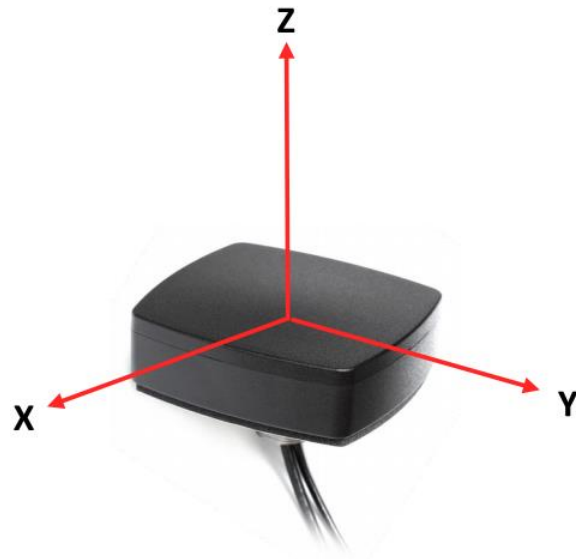
CABLE 2: Iridium





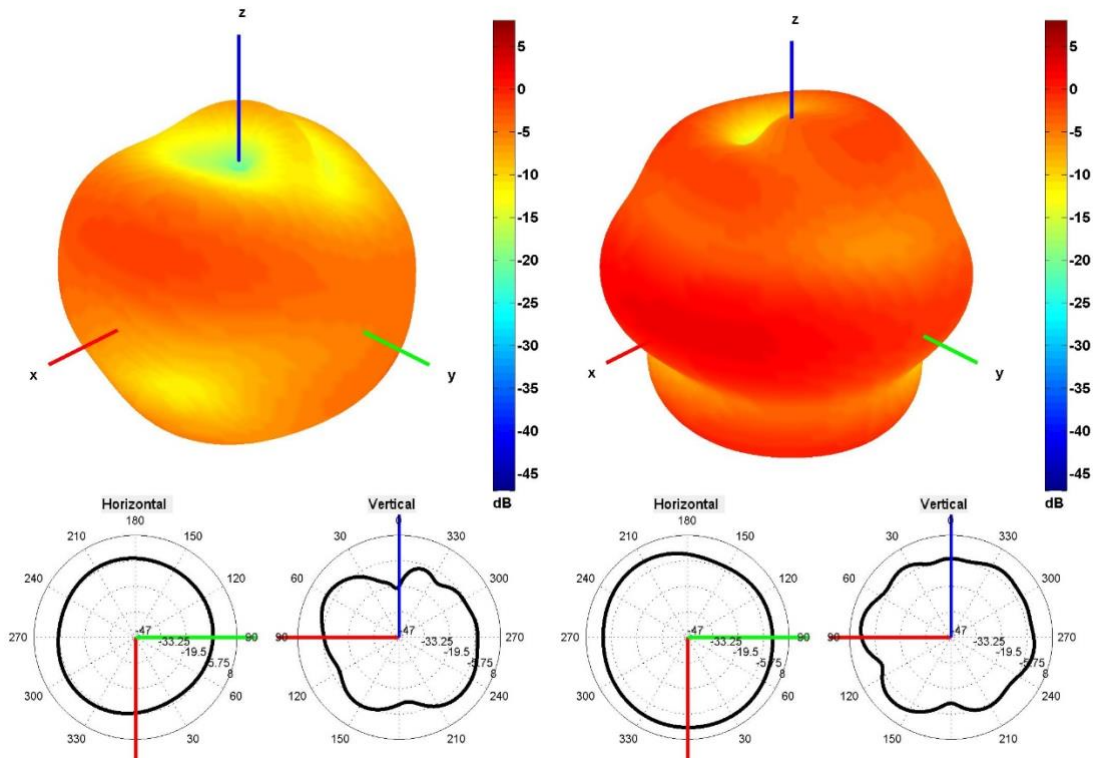


RADIATION PATTERNS

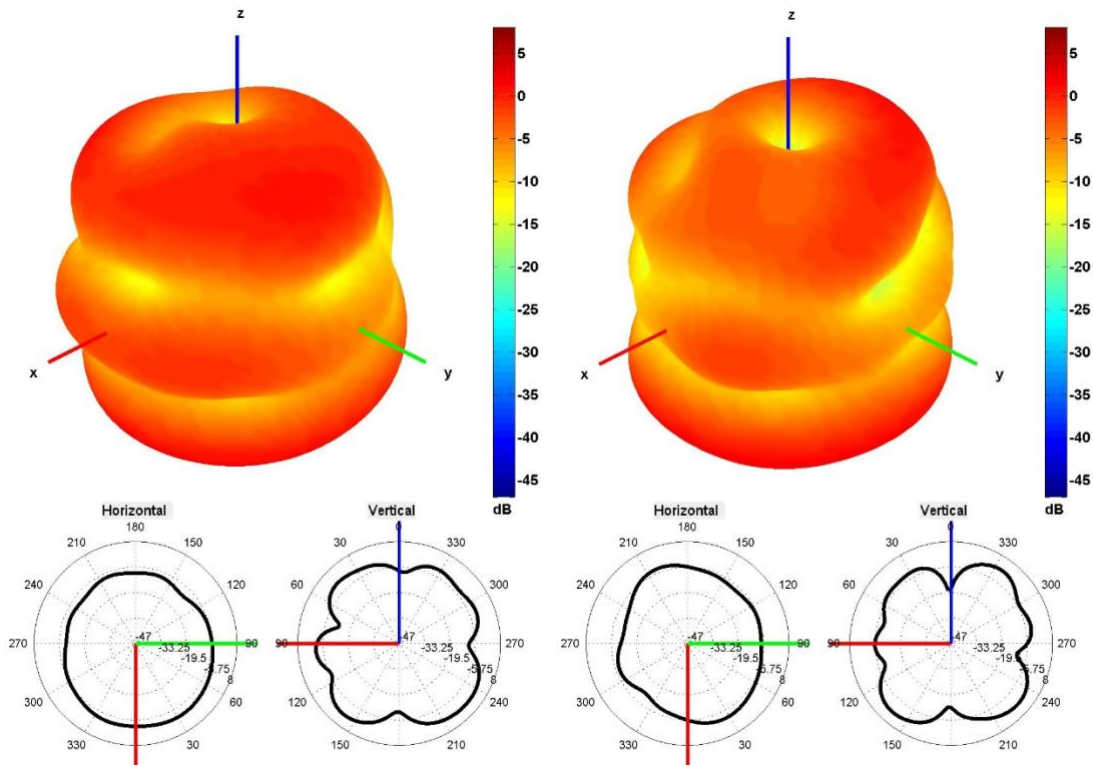


RADIATION PATTERN REFERENCE

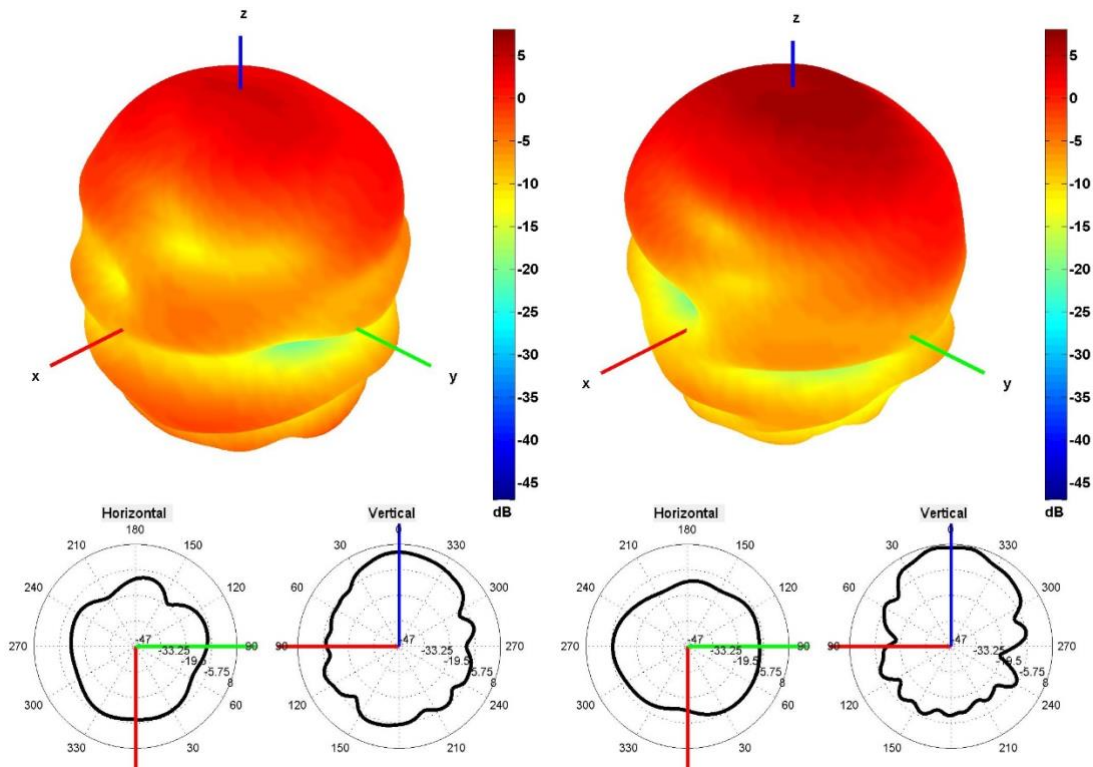
CABLE 1: 5GNR



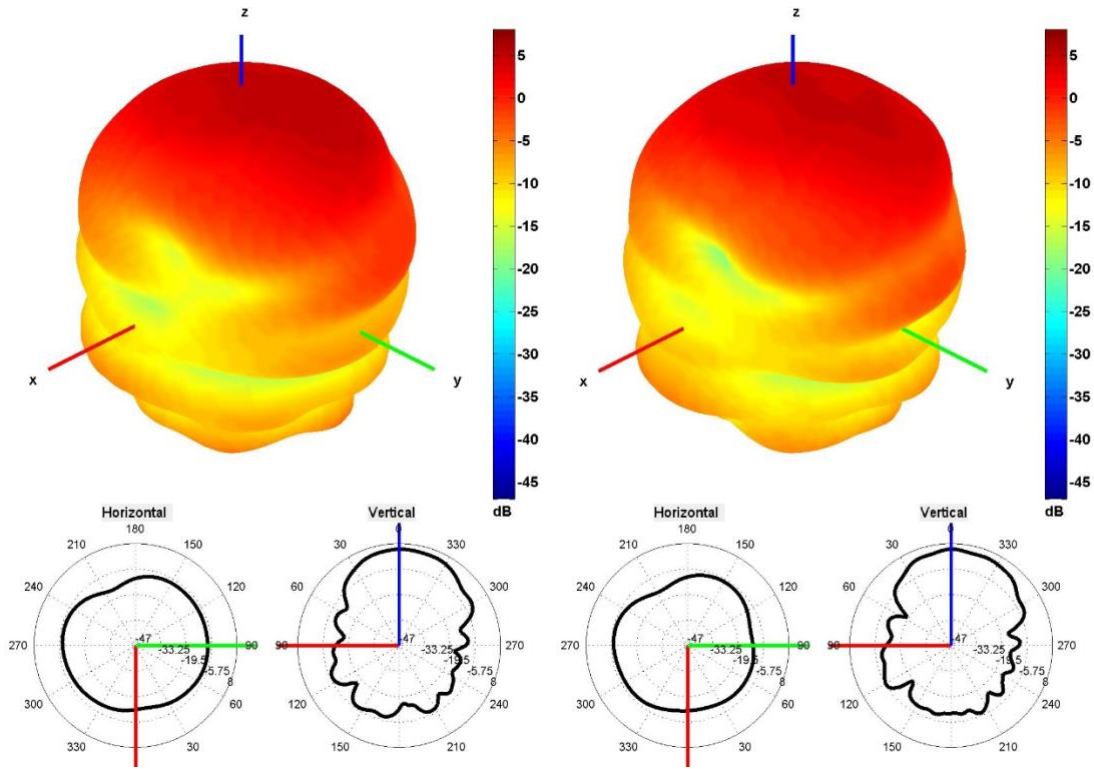
650 AND 750 MHz RADIATION PATTERN



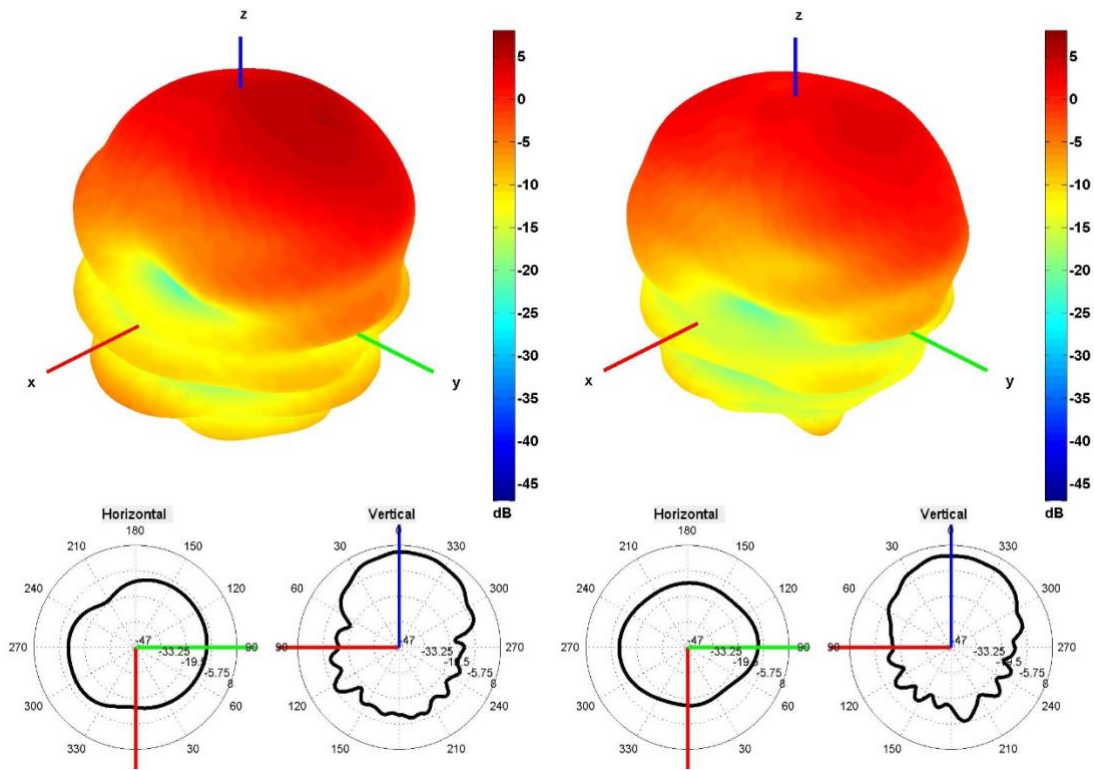
850 AND 940 MHz RADIATION PATTERN



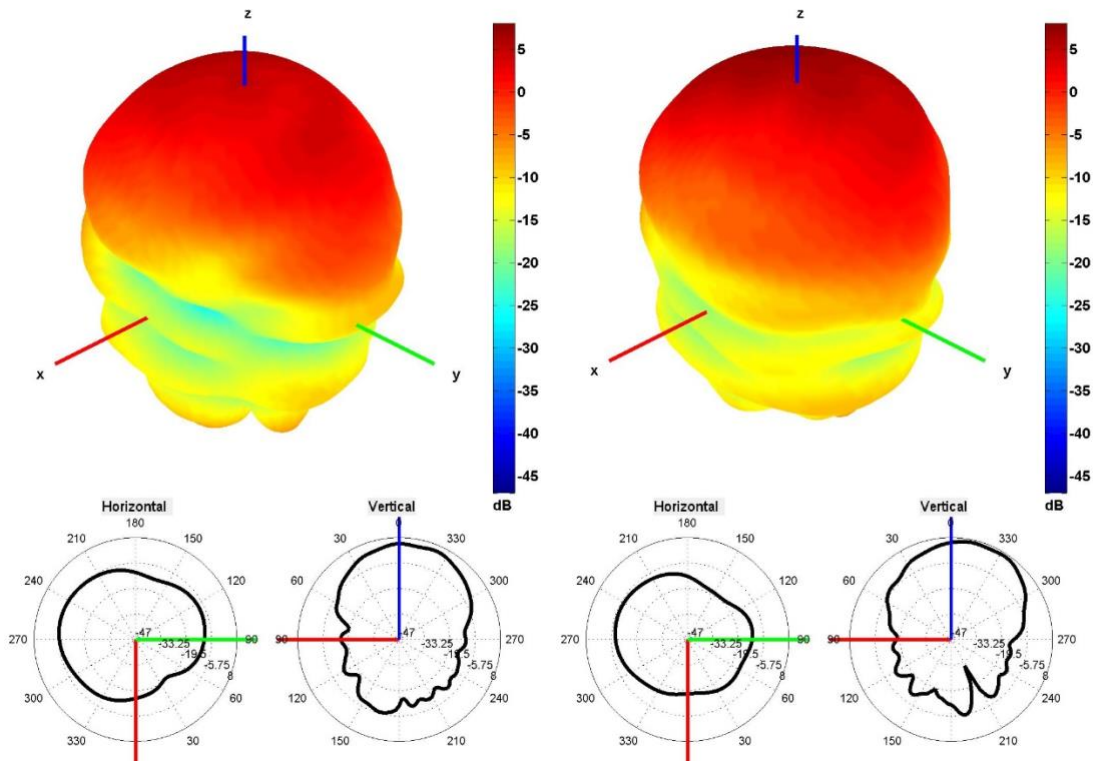
1500 AND 1600 MHz RADIATION PATTERN



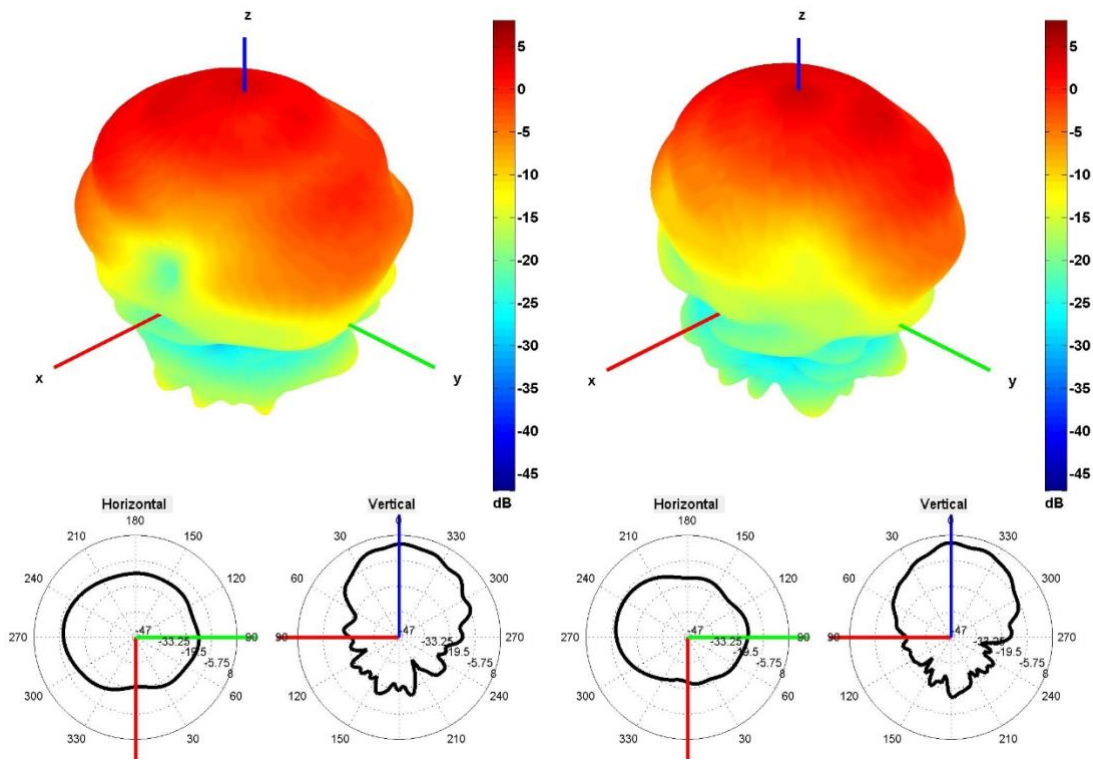
1750 AND 1850 MHz RADIATION PATTERN



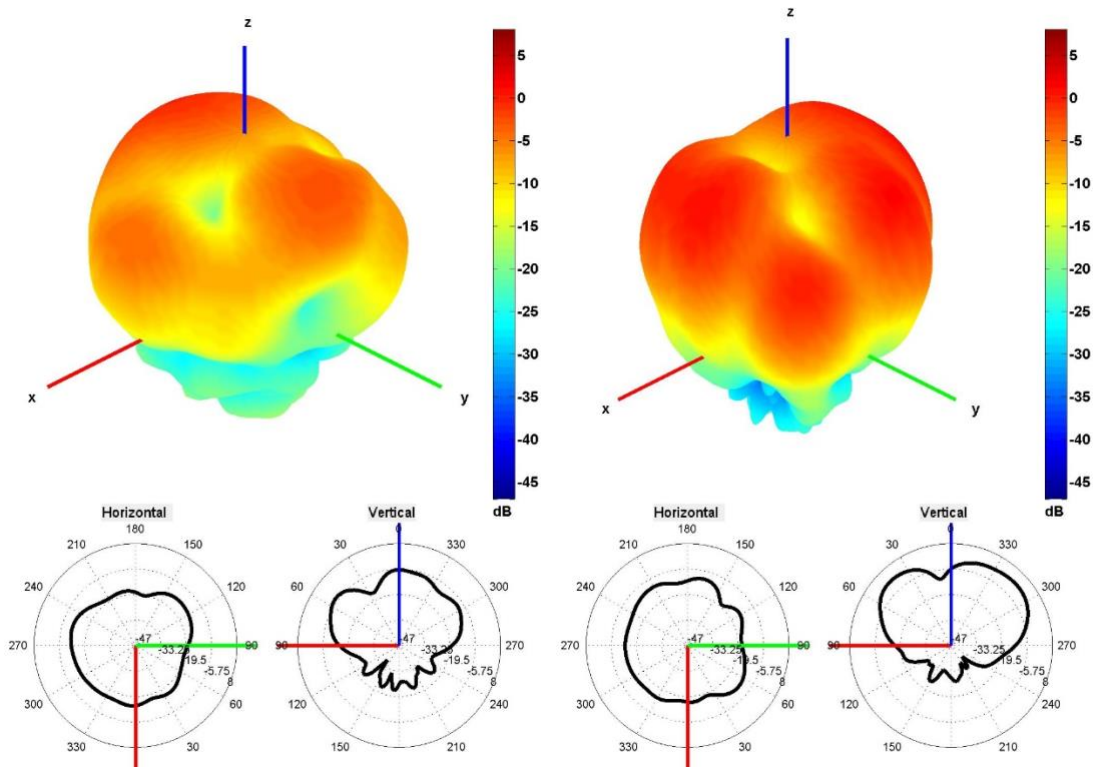
1950 AND 2100 MHz RADIATION PATTERN



2350 AND 2600 MHz RADIATION PATTERN

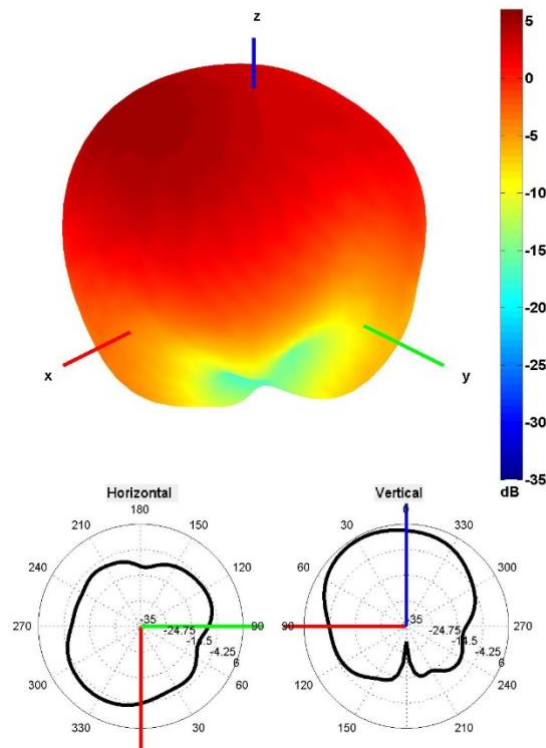


3350 AND 3600 MHz RADIATION PATTERN



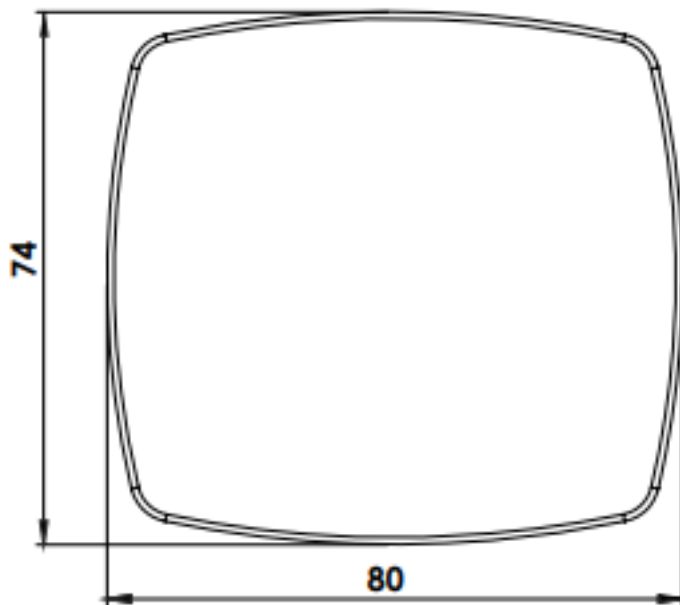
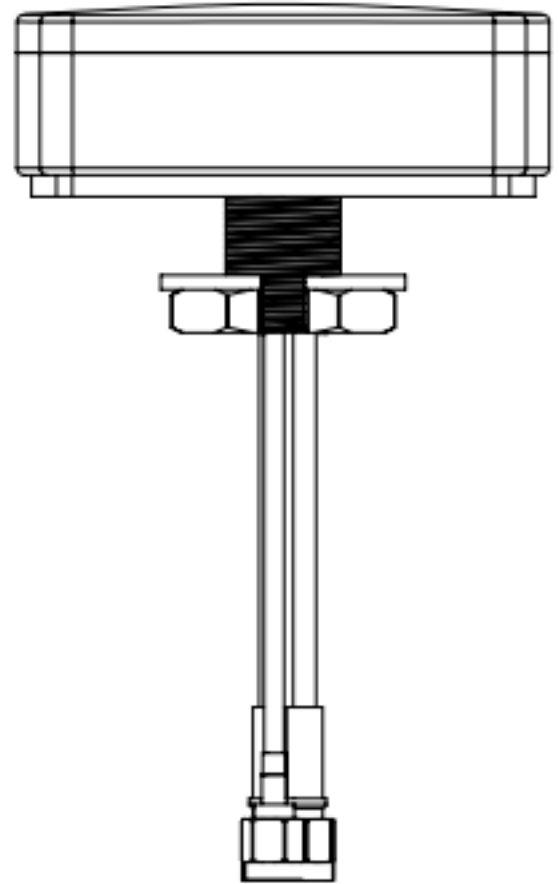
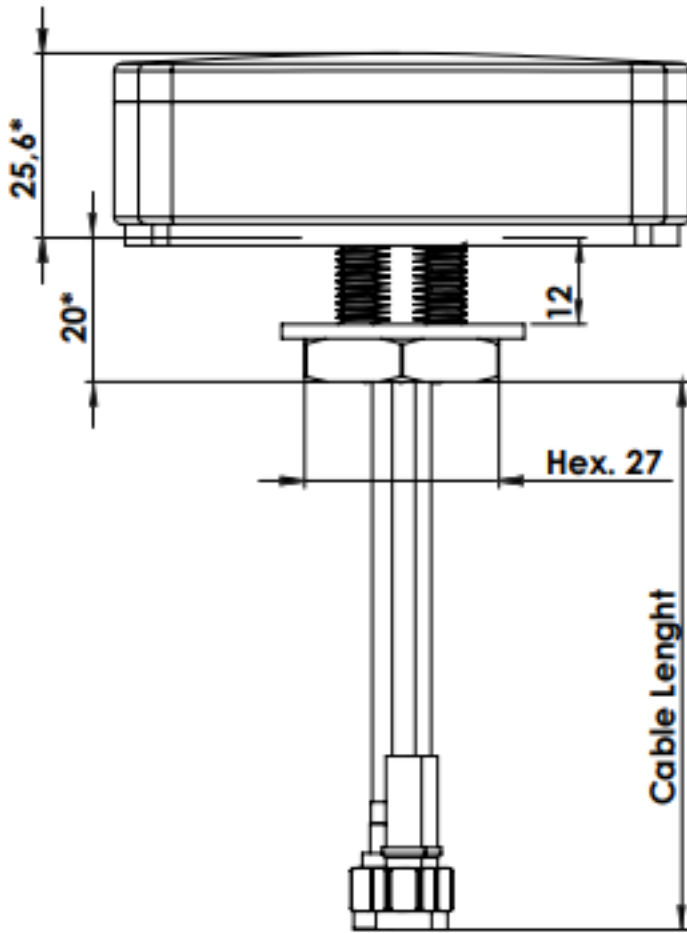
450 AND 550 MHz RADIATION PATTERN

CABLE 2: Iridium

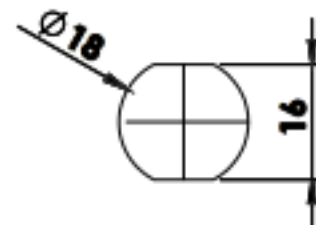


1621 MHz RADIATION PATTERN

ANTENNA DRAWINGS



Mounting hole



Max. mounting thickness 12mm

*** Dimensions after mounting**

ANTENNA IMAGES

