

# 2J6084PGFa

5GNR MIMO and GPS/GLONASS Adhesive Mount

## Key Features

### Cable 1 - 2 : 5GNR

- 617-960 MHz
- 1427-2690 MHz
- 3300-5000 MHz
- 5150-5925 MHz

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

- 1575-1606 MHz

Adhesive Mount

Ground Plane Independent

Customizable Cable and Connector

Dimensions 80 × 76 × 16 mm



## 1. Antenna and electrical specifications

Cable 1

Parameters	5G NR Antenna			
<b>Technologies</b>	5G, 4G, 3G and 2G			
<b>Standards</b>	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
<b>Frequency (MHz)</b>	617-960	1427-2690	3300-5000	5150-5925
<b>Band (MHz)</b>	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
<b>5G NR Bands</b>	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	
<b>4G LTE Bands</b>	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
<b>3G CELL Bands</b>	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	
<b>2G CELL Bands</b>	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
<b>CDMA CELL Bands</b>	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		
<b>Return Loss (dB)</b>	~-6.9	~-13.5	~-9.1	~-7.2
<b>VSWR</b>	~3.4:1	~1.7:1	~2.3:1	~2.6:1
<b>Efficiency (%)</b>	~42.6	~58.8	~37.5	~31.8
<b>Peak Gain (dBi)</b>	~2.4	~4.4	~2.0	~1.1
<b>Average Gain (dB)</b>	~-3.9	~-2.3	~-4.3	~-5.0
<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>	SMA-Male Standard (Other Connectors Available)			
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)			
<b>Cable Type</b>	D302 Standard (Other Cables Available)			

Cable 2

Parameters	5GNR Antenna			
<b>Technologies</b>	5G, 4G, 3G and 2G			
<b>Standards</b>	5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
<b>Frequency (MHz)</b>	617-960	1427-2690	3300-5000	5150-5925
<b>Band (MHz)</b>	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
<b>5GNR Bands</b>	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	
<b>4GLTE Bands</b>	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
<b>3GCELL Bands</b>	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	
<b>2GCELL Bands</b>	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
<b>CDMACELL Bands</b>	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		
<b>Return Loss (dB)</b>	~-6.1	~-15.5	~-9.2	~-8.0
<b>VSWR</b>	~3.5:1	~1.6:1	~2.3:1	~2.3:1
<b>Efficiency (%)</b>	~43.9	~63.9	~36.8	~31.1
<b>Peak Gain (dBi)</b>	~1.9	~4.7	~1.9	~1.4
<b>Average Gain (dB)</b>	~-3.7	~-2.0	~-4.4	~-5.1
<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>	SMA-Male Standard (Other Connectors Available)			
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)			
<b>Cable Type</b>	D302 Standard (Other Cables Available)			

**Antenna Measurement Conditions:**

Mounted on 30 x 30 x 0.25 cm ABS Plate

100 cm of Cable D302

Measured in Certified CTIA 3D Anechoic Chamber

Cable 3

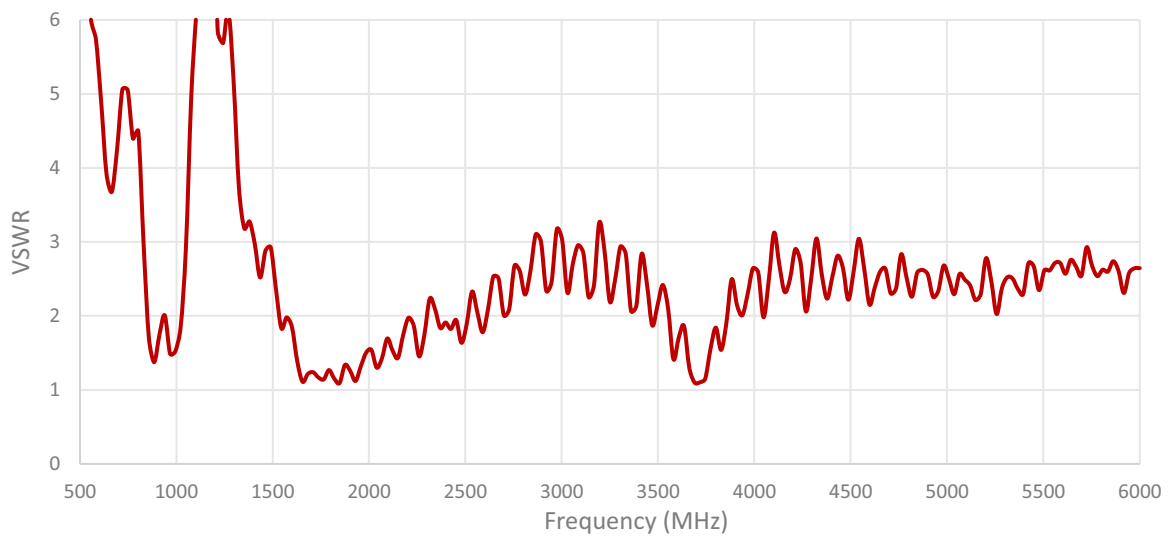
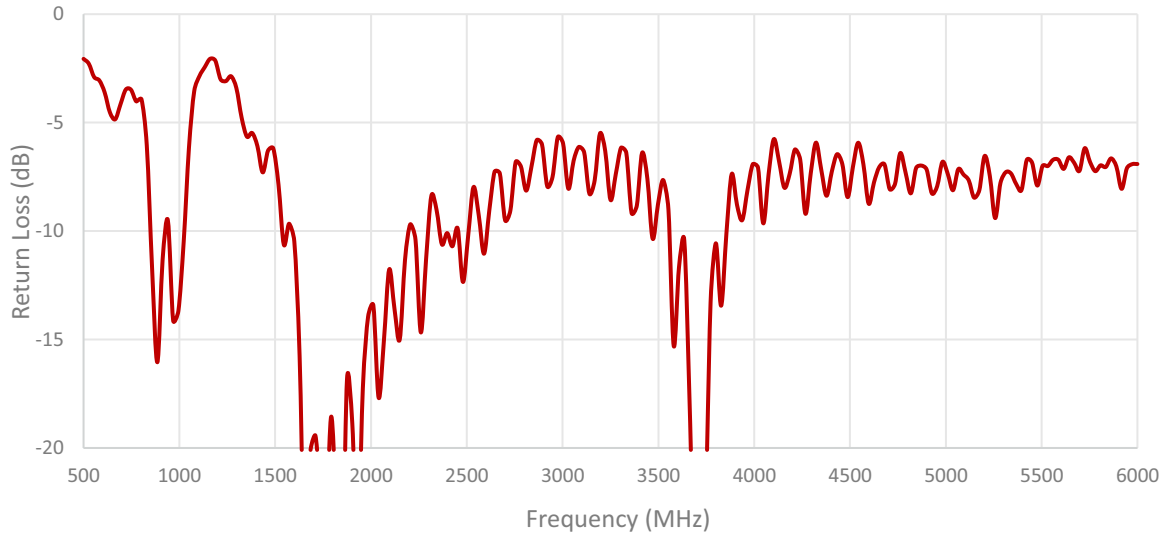
Parameters	GPS/GLONASS Antenna	
	GPS/QZSS/Galileo	GLONASS
Standard	1575	1602
Band (MHz)	1575.42	1598-1606
Frequency(MHz)	25 x 25 x 4	
Patch Size (mm)	<=-15 dB	
Return Loss (dB)	<=1.4:1 dB	
VSWR	50	
Impedance	Hemispherical	
Radiation Pattern	RHCP	
Polarization	pre-filter	
Saw Filter	28 @ 2.7 V	
Active Gain (dB)	1.5 Typ	
Noise Figure (dB)	1.5 – 3.6	
Voltage (V)	9 Typ	
Current (mA)	24.3 Typ	
Power Consumption (mW)	2kV	
ESD Protection	SMA-Male Standard (Other Connectors Available)	
Connector Type	300 cm Standard (Any Cable Length Available)	
Cable Length	LL100 Standard (Other Cables Available)	
Cable Type		

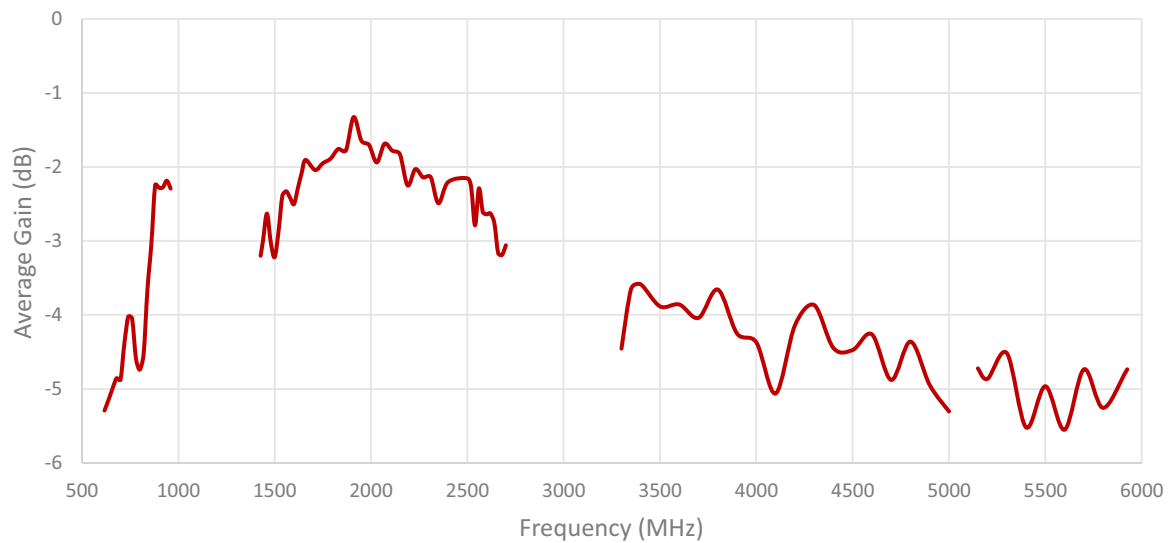
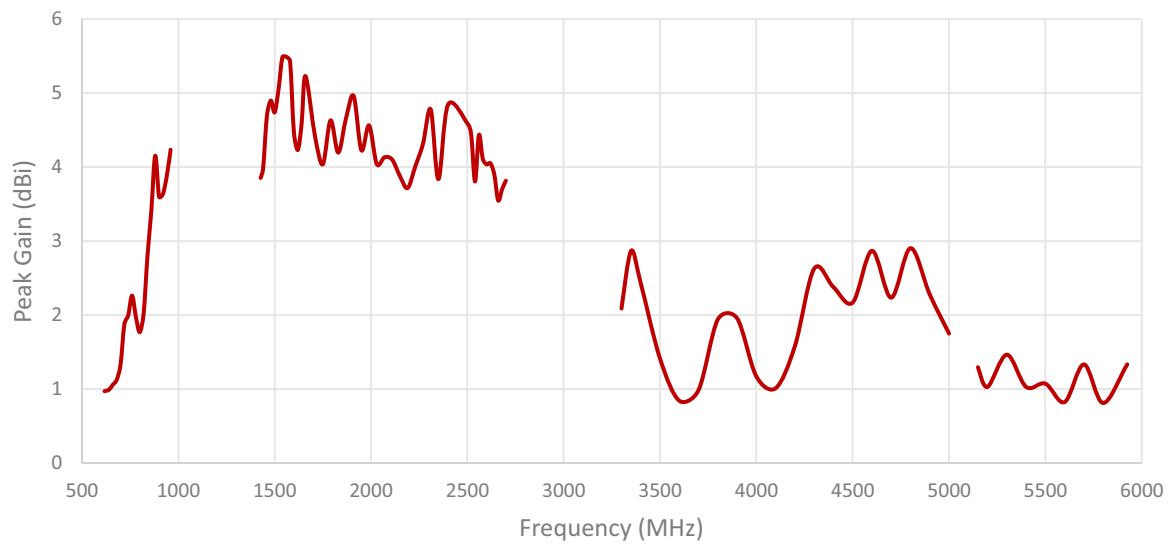
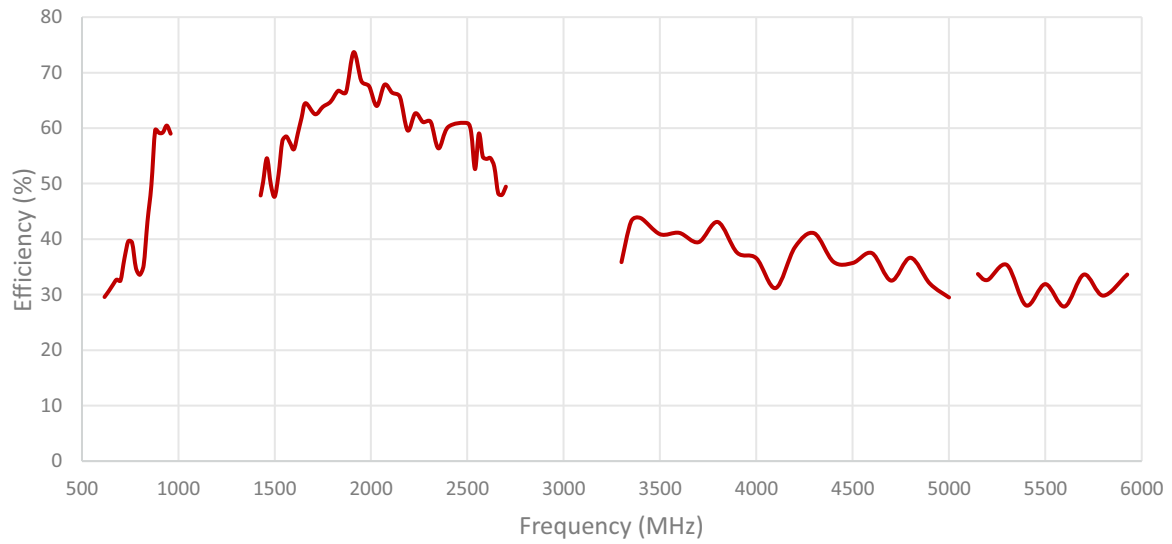
## 2. Mechanical and environmental specifications

Specifications	2J6084PGFa
Mounting Type	Adhesive Mount
Dimensions (mm)	80 × 76 × 16
Radome	ASA
Radome color	Black or White
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

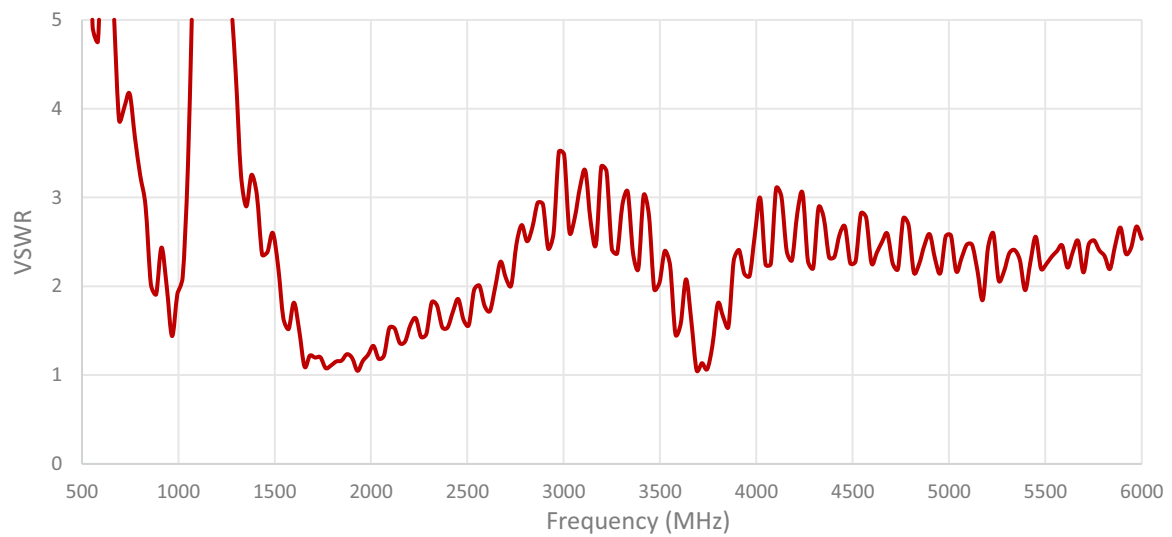
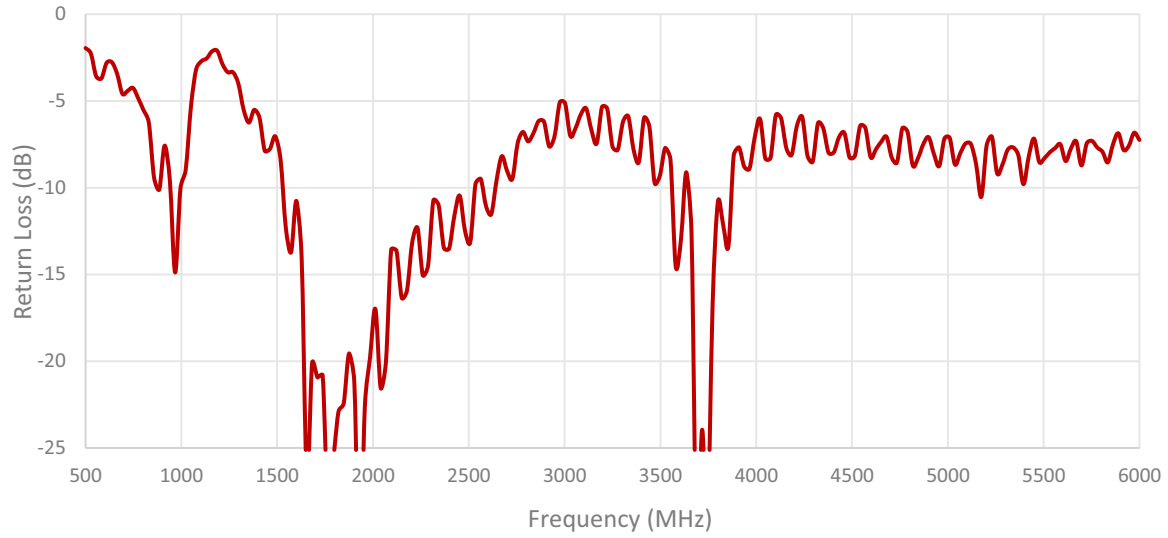
## 3. Antenna parameters

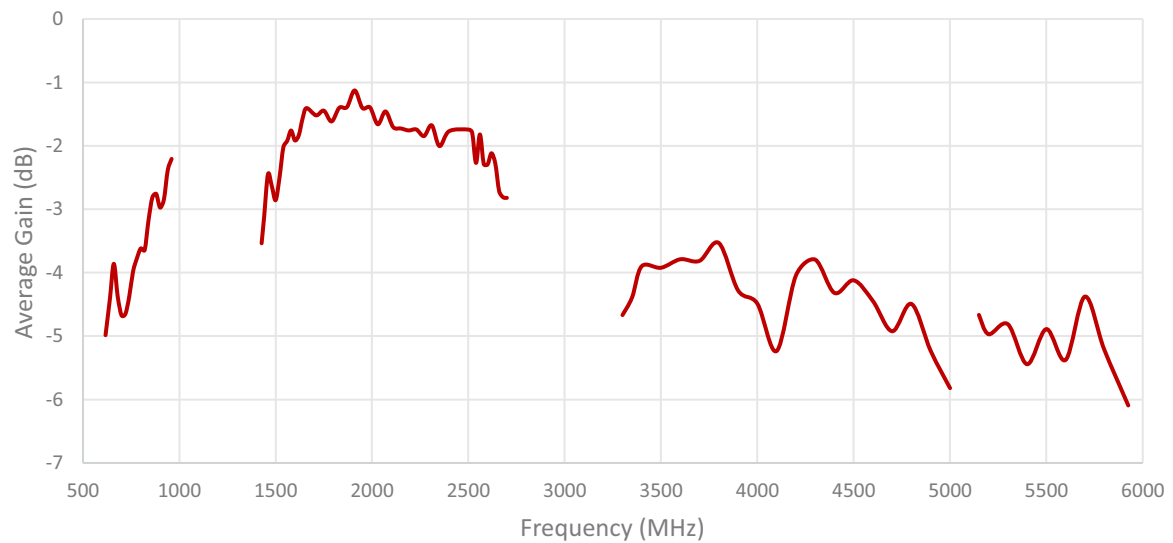
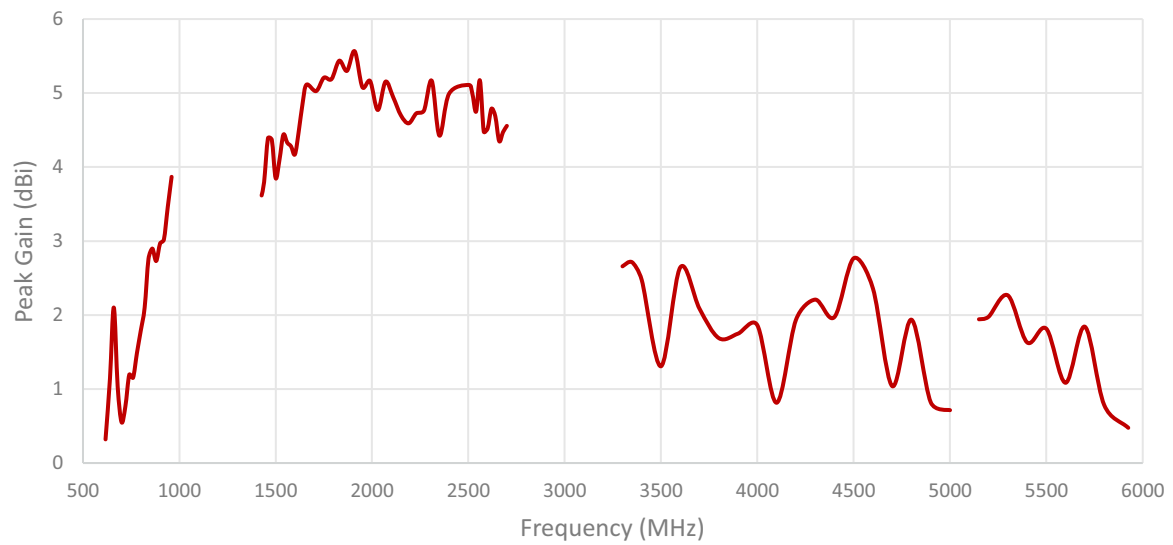
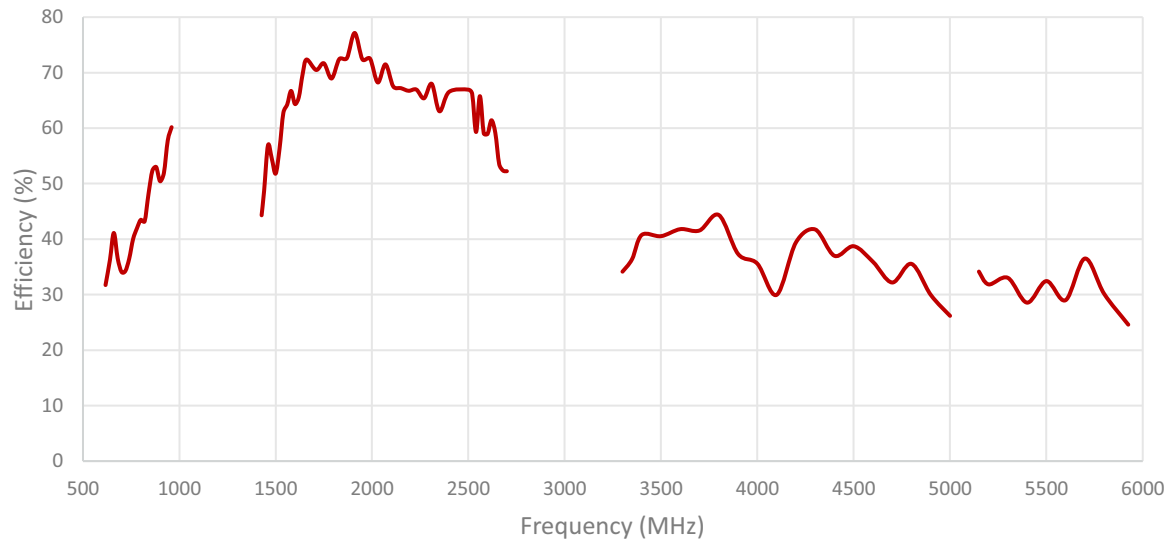
Cable 1: 5GNR



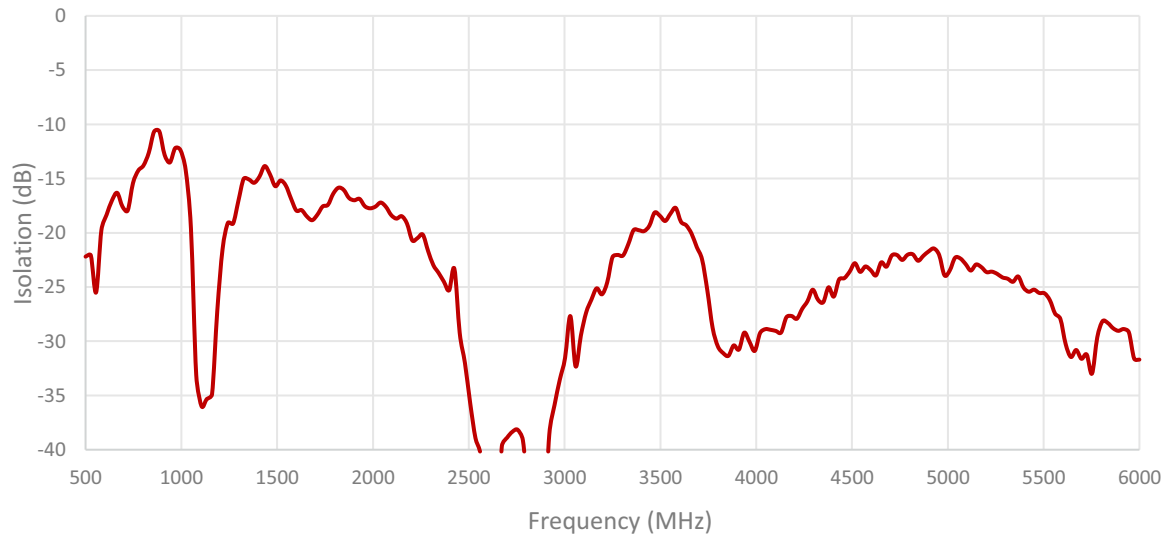


Cable 2: 5GNR

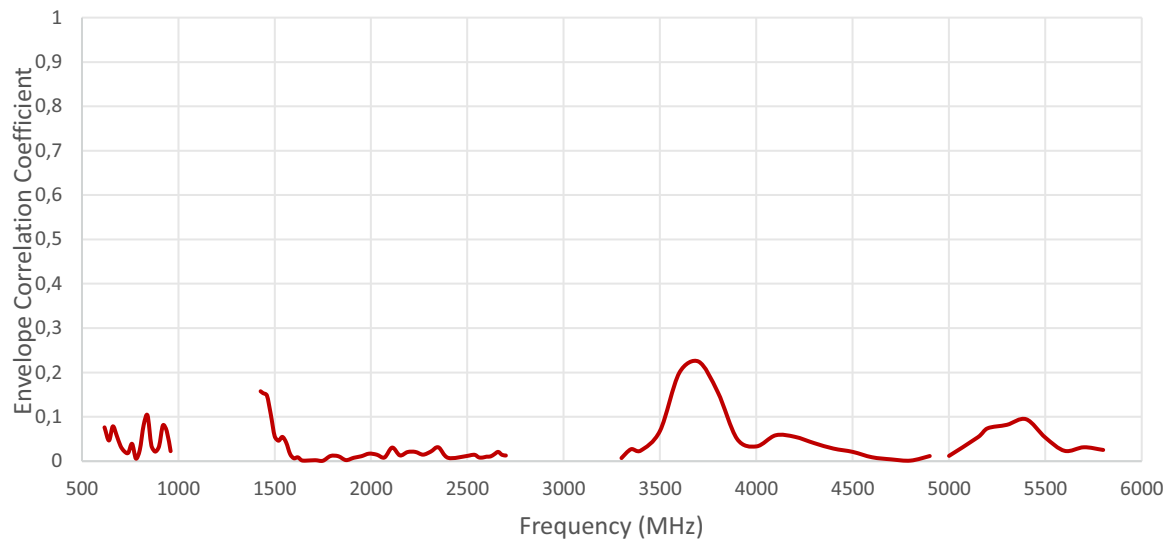


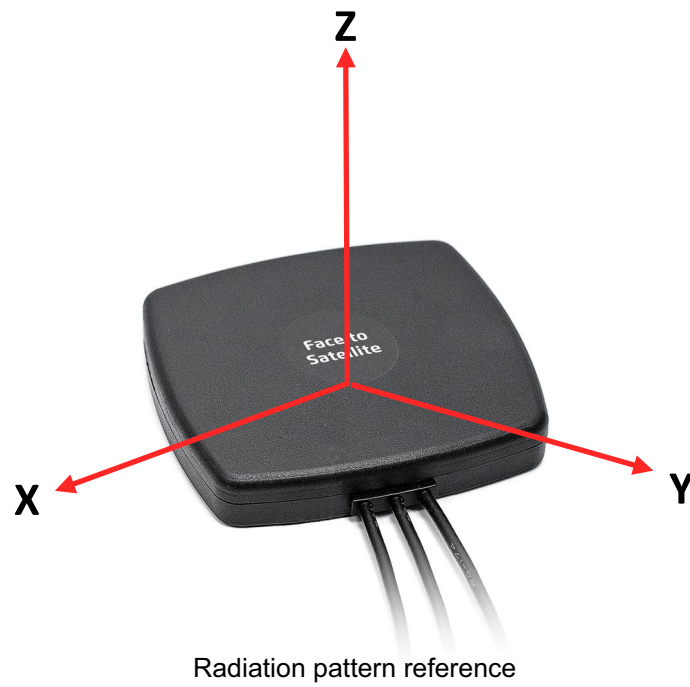


## ISOLATION FOR CABLES 1 AND 2

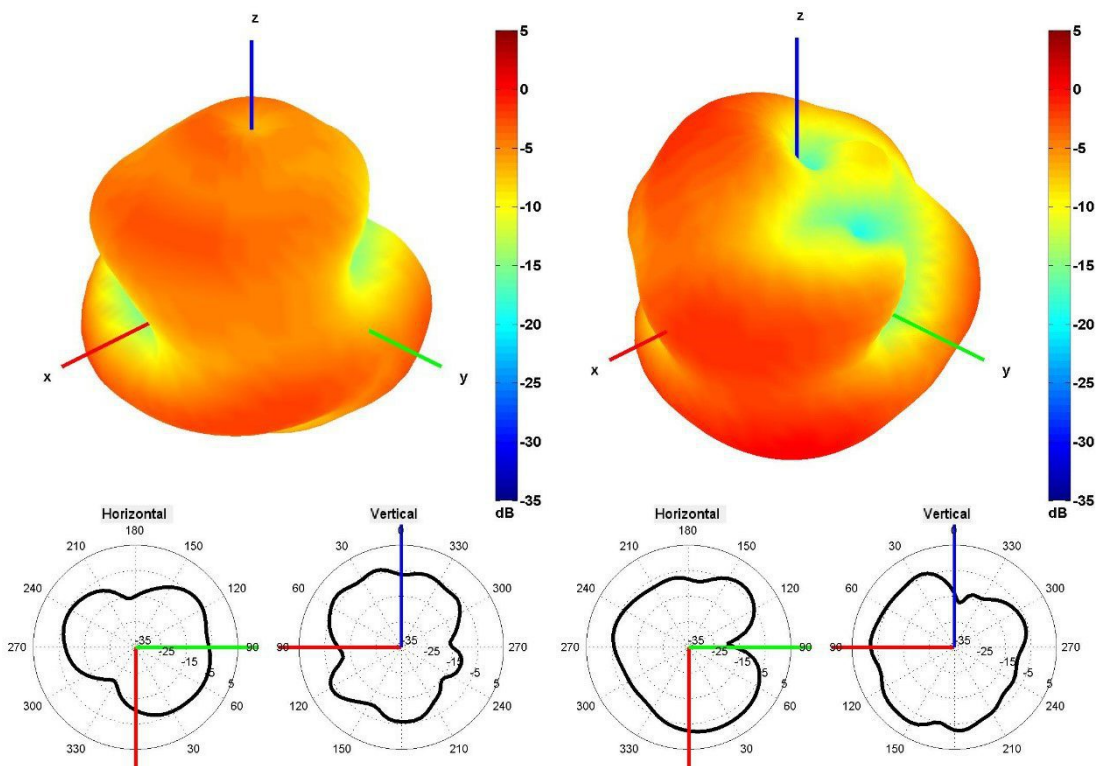


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2

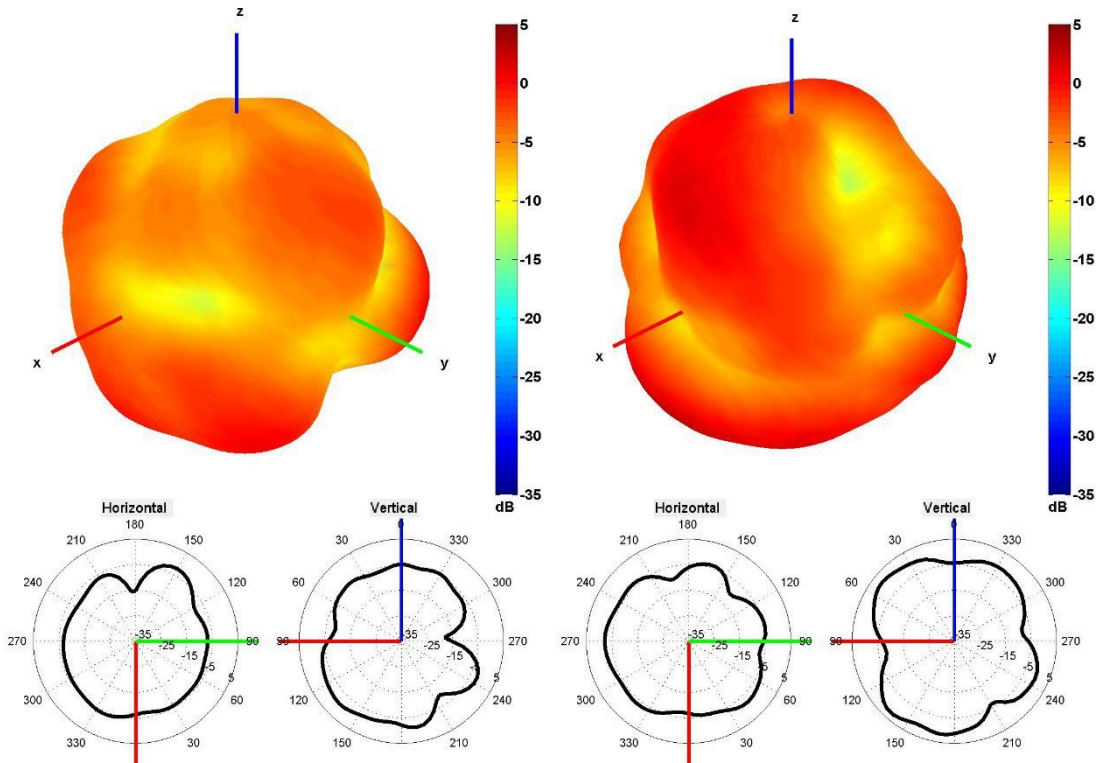




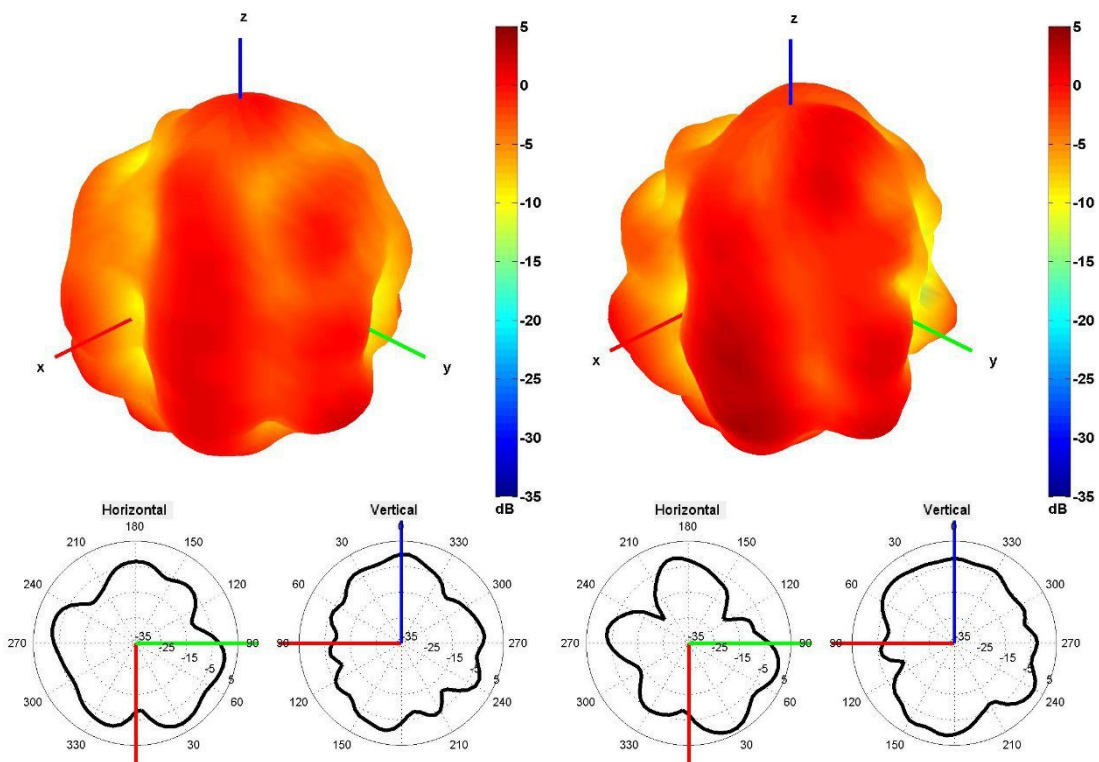
Cable 1: 5GNR



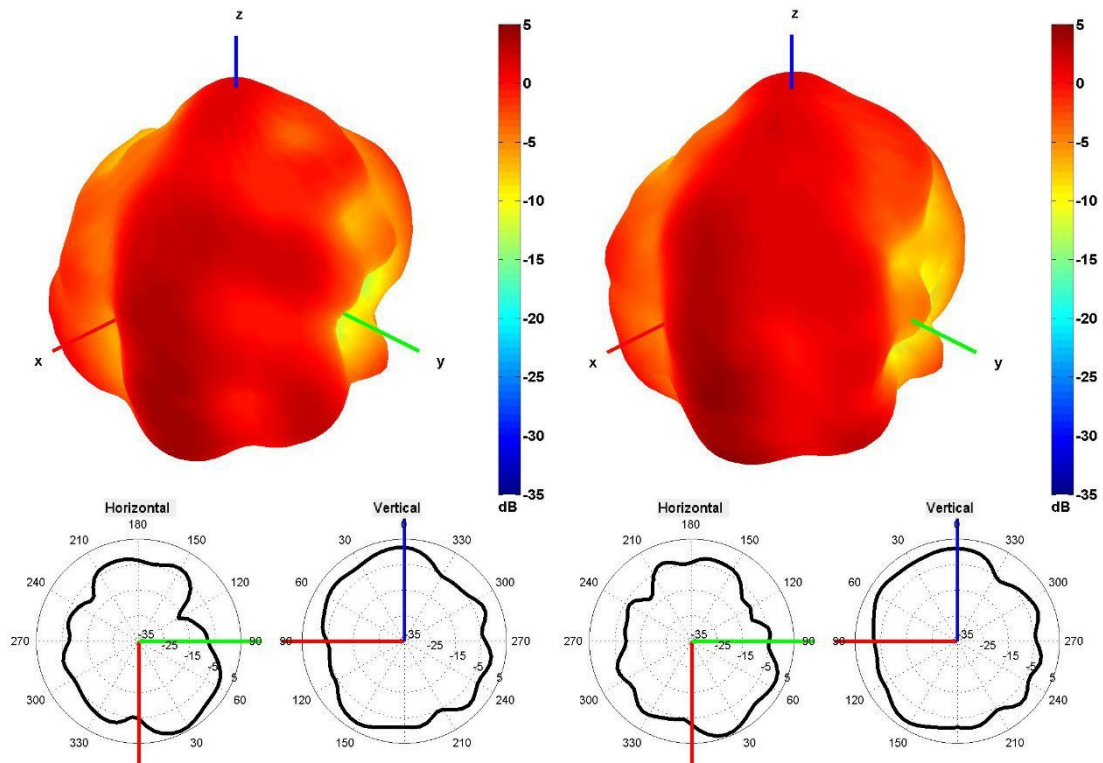
650 and 750 MHz Radiation pattern



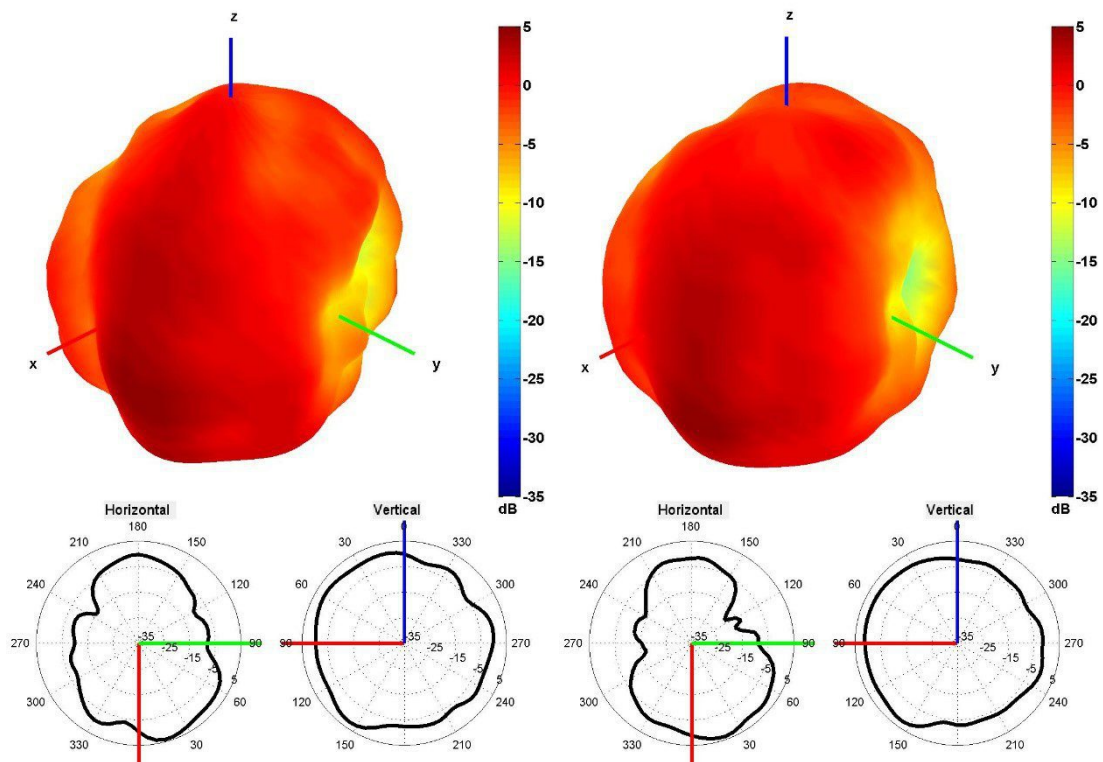
850 and 940 MHz Radiation pattern



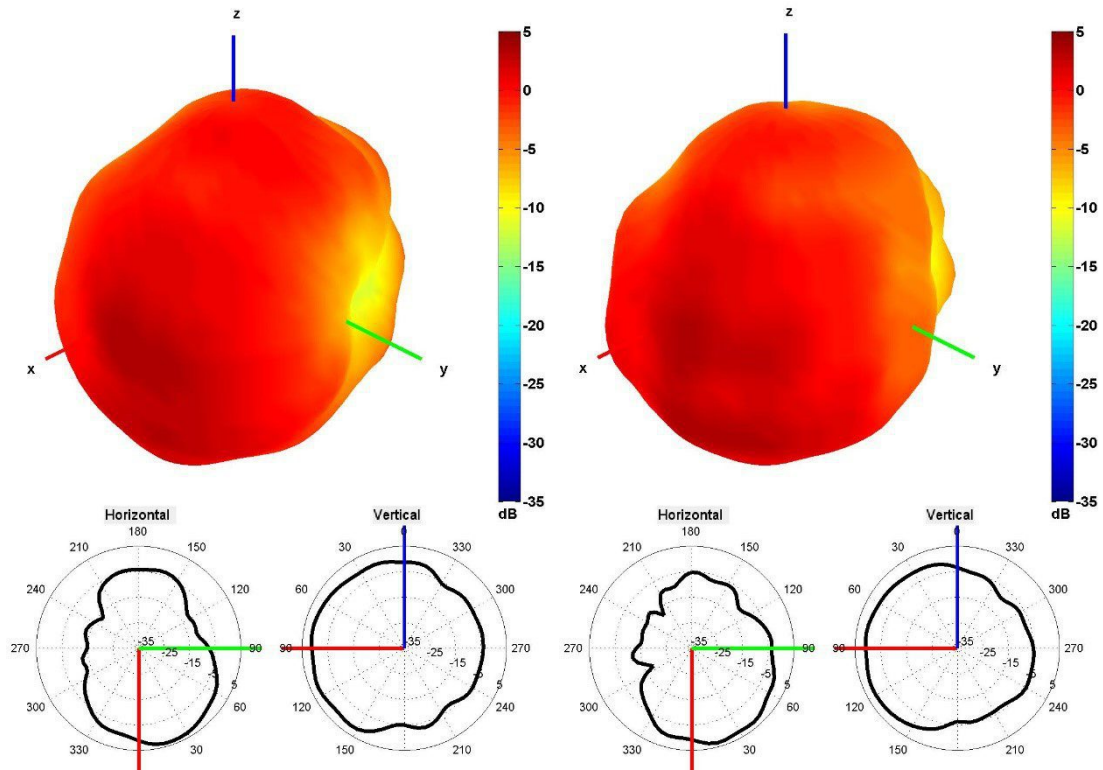
1500 and 1600 MHz Radiation pattern



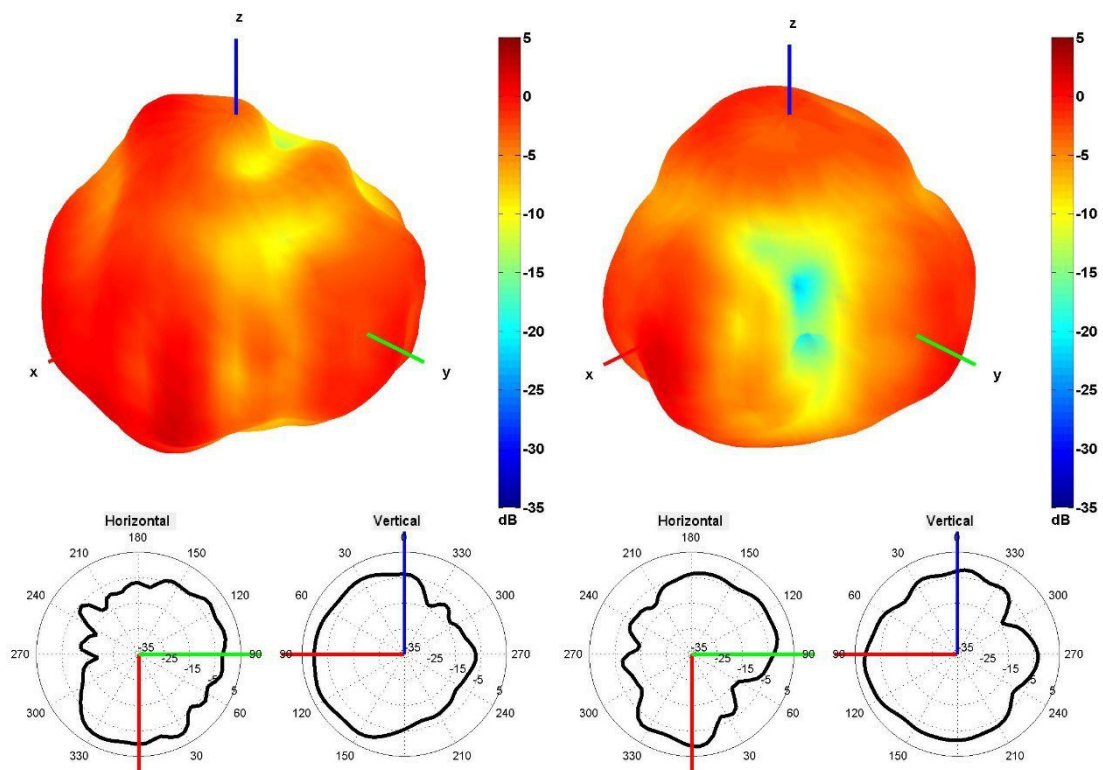
1750 and 1850 MHz Radiation pattern



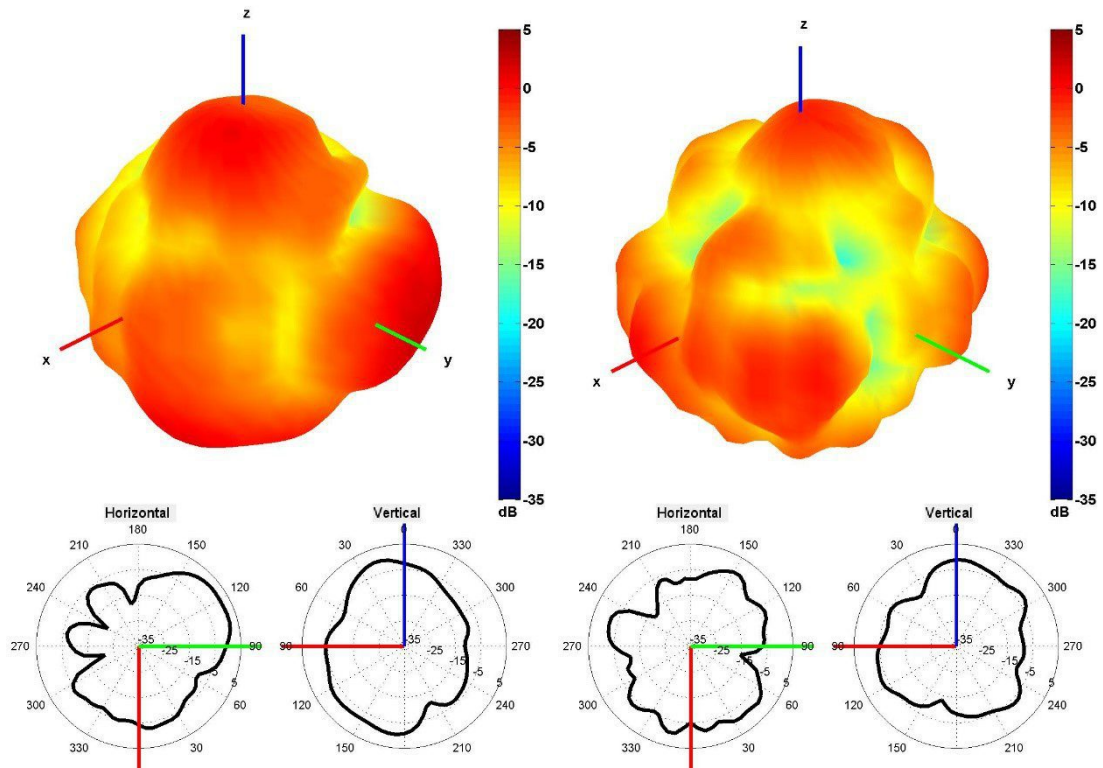
1950 and 2100 MHz Radiation pattern



2350 and 2600 MHz Radiation pattern

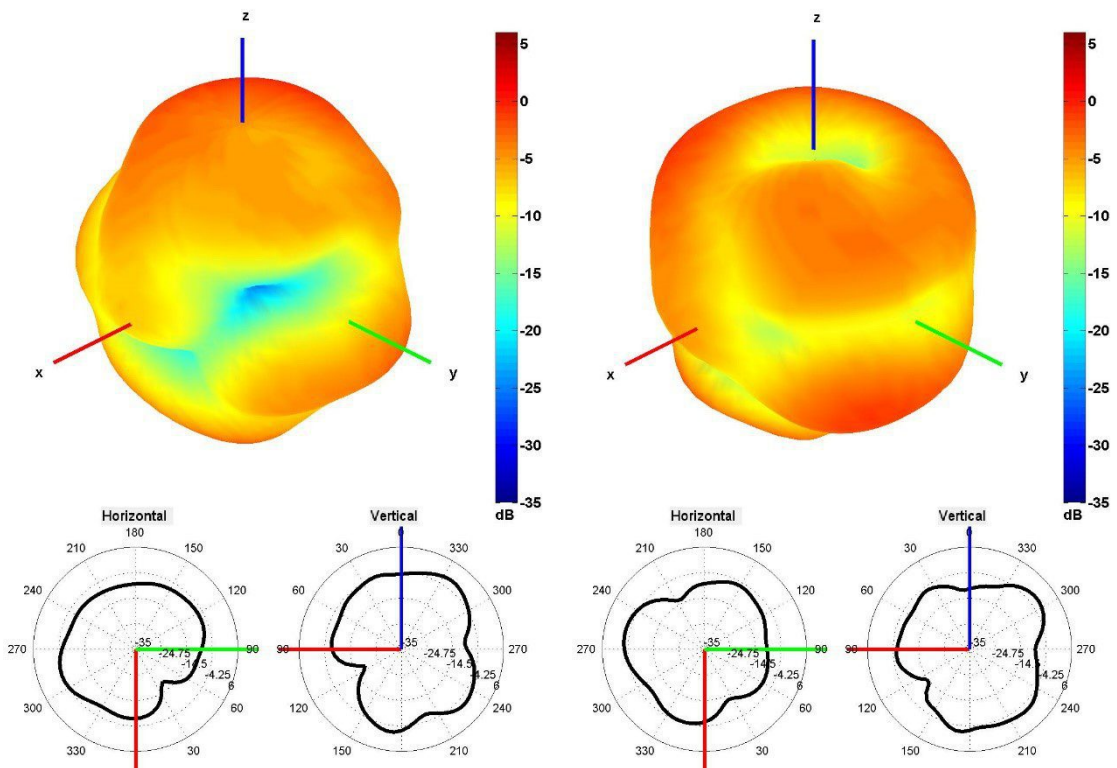


3350 and 3600 MHz Radiation pattern

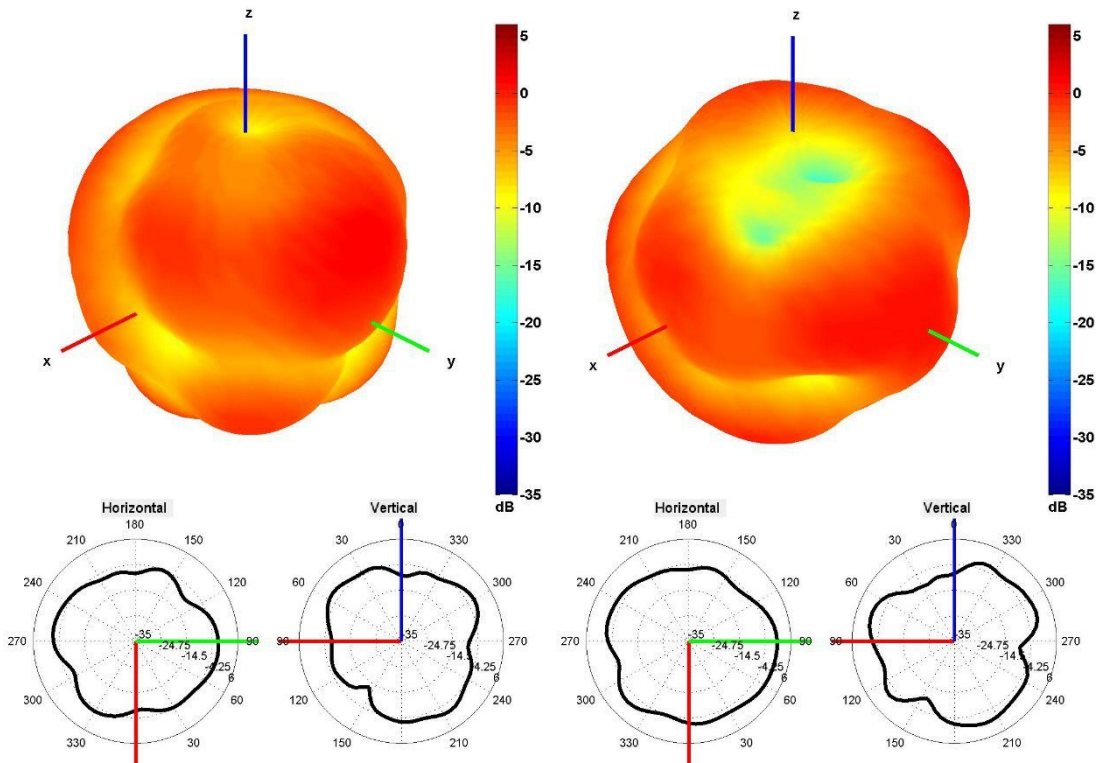


450 and 550 MHz Radiation pattern

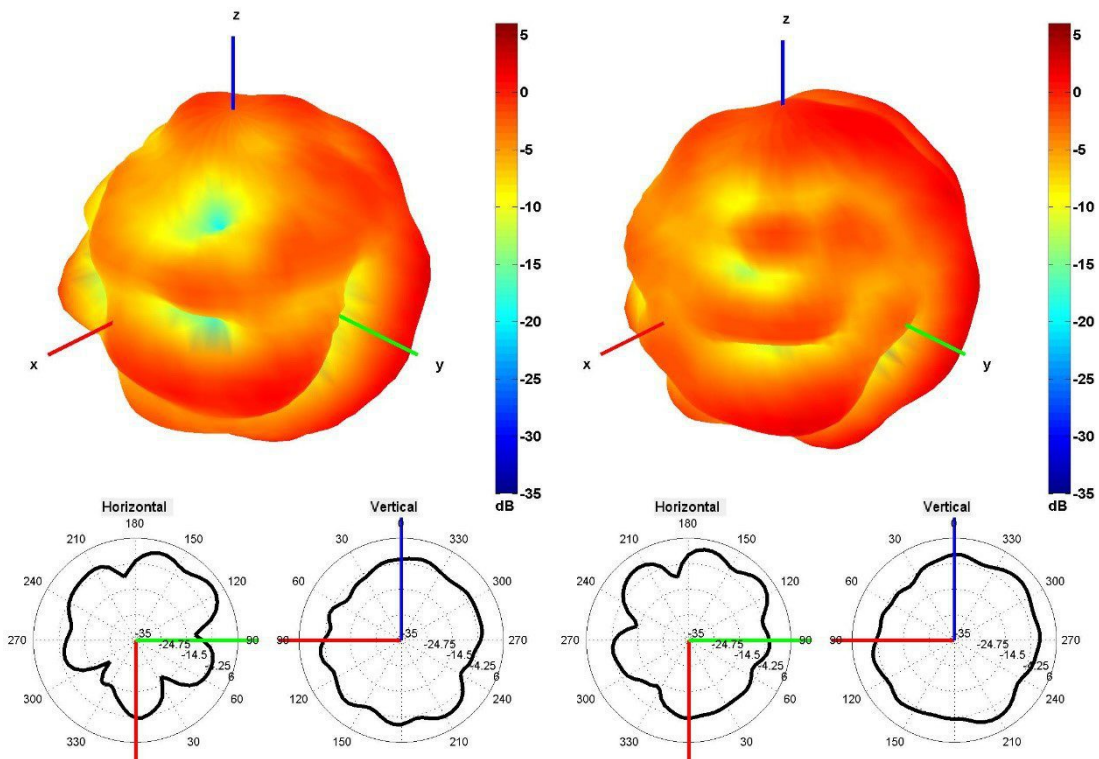
Cable 2: 5GNR



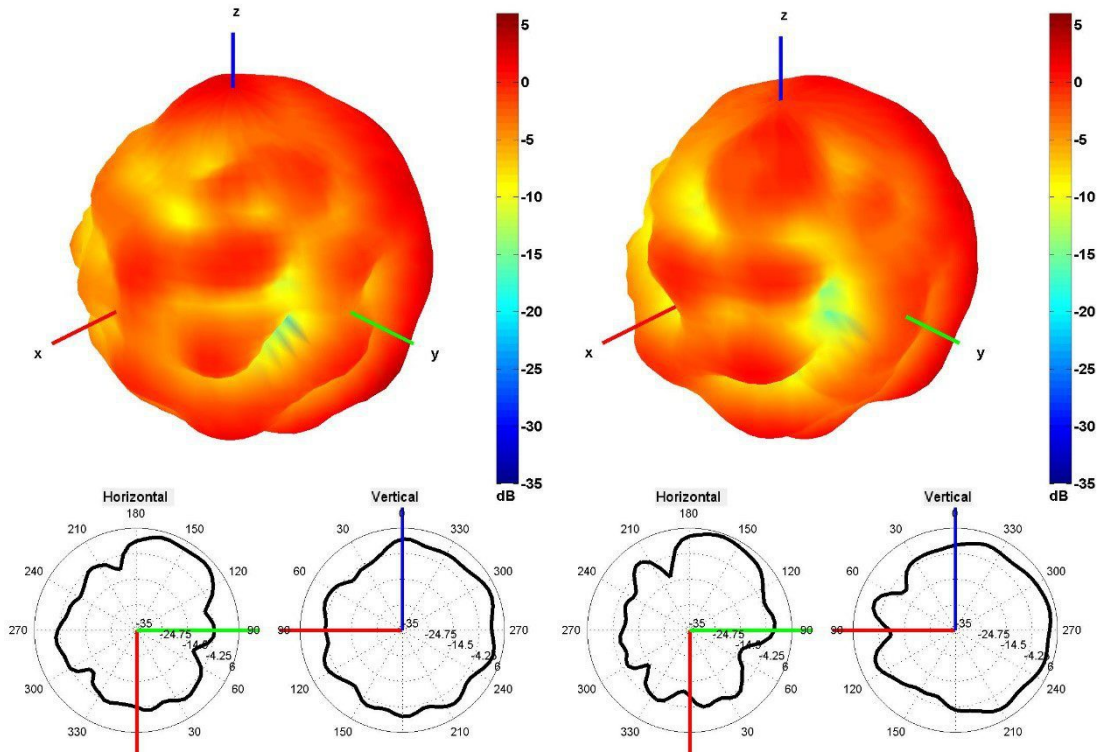
650 and 750 MHz Radiation pattern



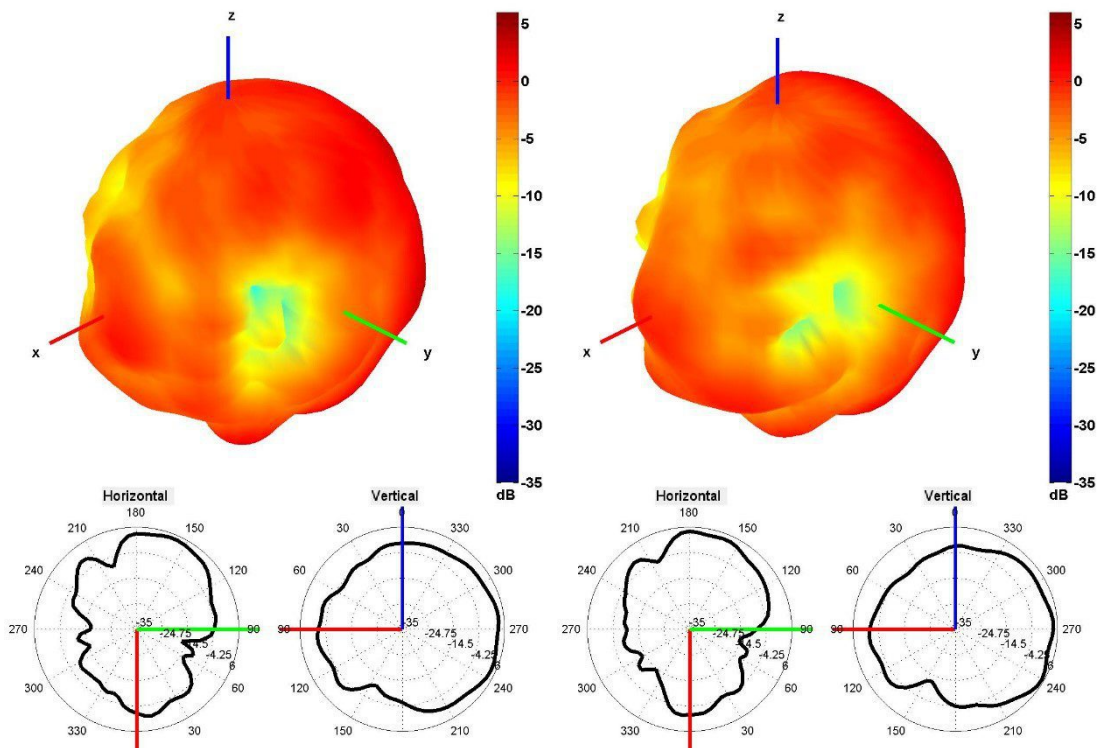
850 and 940 MHz Radiation pattern



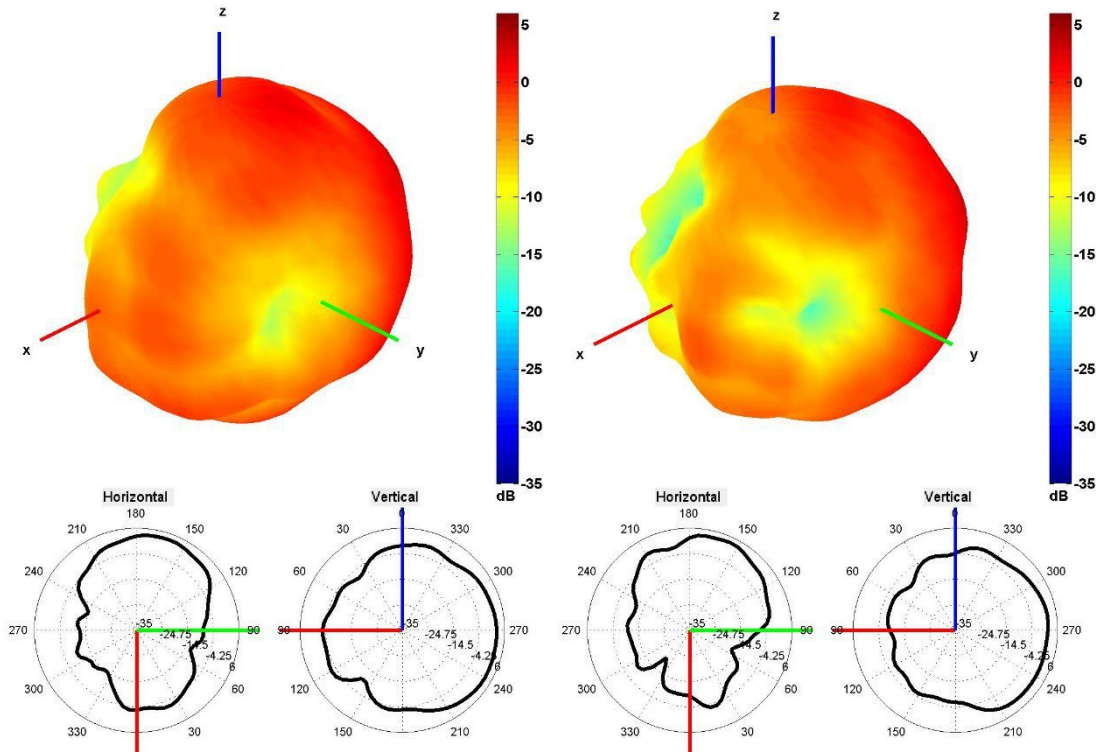
1500 and 1600 MHz Radiation pattern



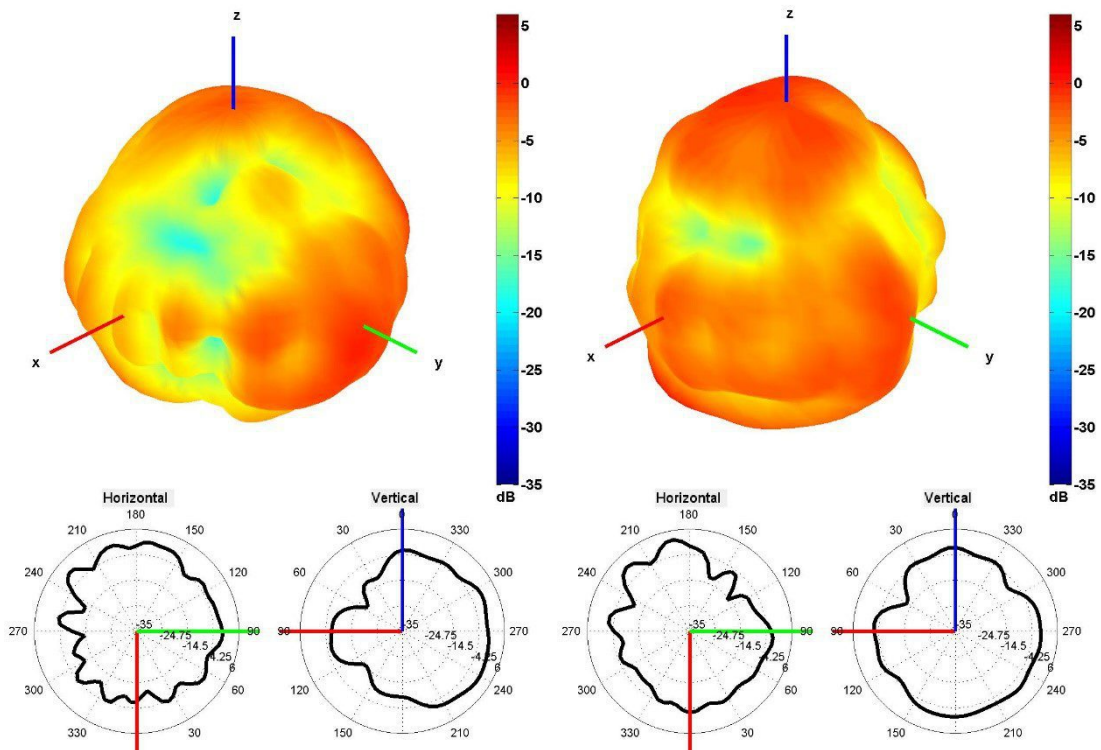
1750 and 1850 MHz Radiation pattern



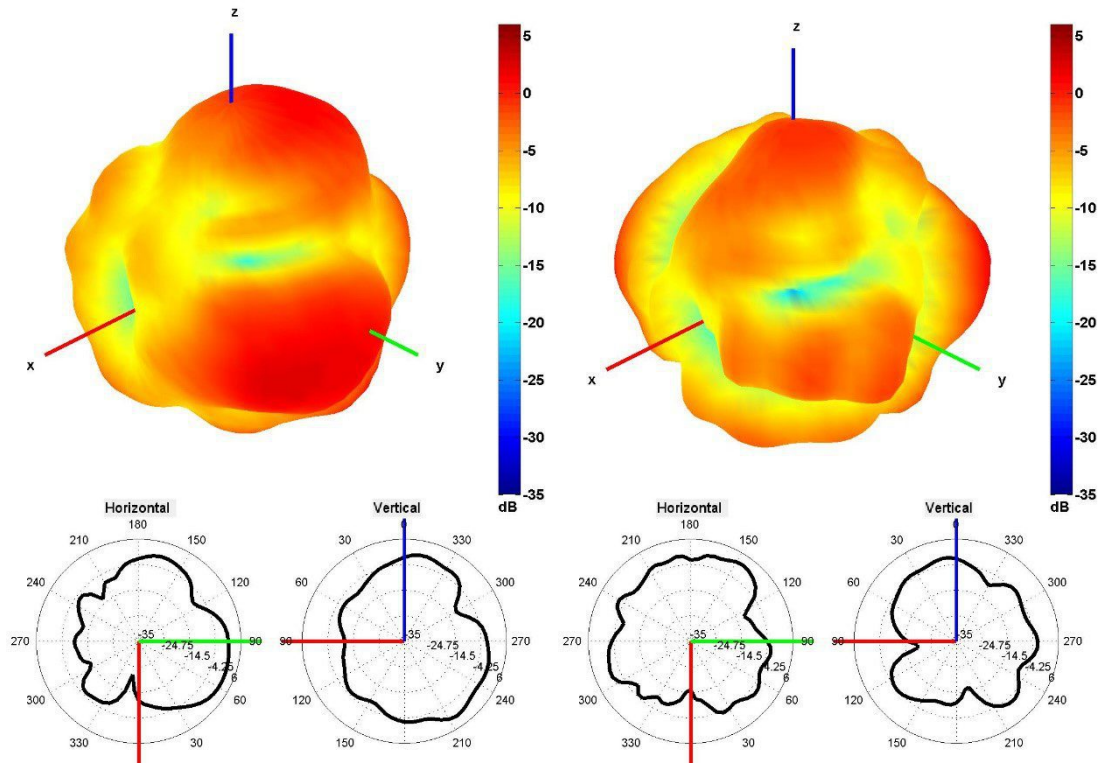
1950 and 2100 MHz Radiation pattern



2350 and 2600 MHz Radiation pattern

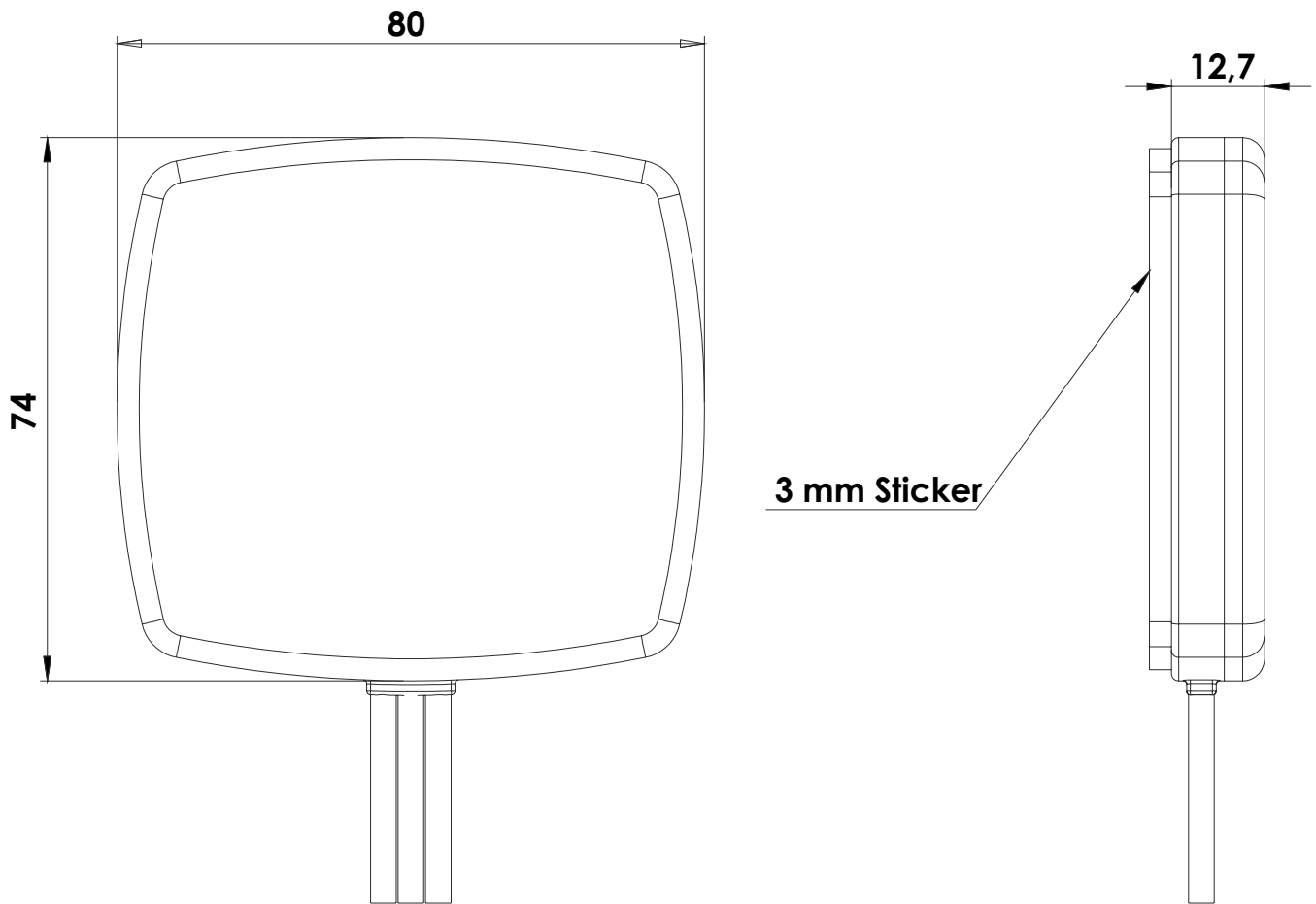


3350 and 3600 MHz Radiation pattern



4500 and 5500 MHz Radiation pattern

## 4. Antenna drawings



## 5. Antenna Images

