

AMC-ANT-2J4A41PCFa

Combi cellular/LTE MIMO and GNSS adhesive mount antenna

Features

- **Cables 1 & 2: Cellular/LTE**
 - 698 – 960MHz
 - 1710 – 2170MHz
 - 2500 – 2700MHz
- **Cable 3: GPS/GLONASS/BeiDou/QZSS/Galileo**
 - 1561 – 1606MHz
- Adhesive mount
- High performance
- Ground plane independent
- Adhesive mount
- Certificates: IP67, IP69
- Dimensions: 61.8 x 155.6 x 17mm
- Customisable cables and connectors



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)	~-13.7	~-19.8	~-10.1
VSWR	~1.7:1	~1.3:1	~1.9:1
Efficiency (%)	~52.9	~63.2	~43.7
Peak Gain (dBi)	~2.2	~3.6	~2.9
Average Gain (dB)	~-2.9	~-2.0	~-3.6
Impedance (Ohms)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA male standard (other connectors available)		
Cable Length	300cm standard (other lengths available)		
Cable Type	LMR195 standard (other cables available)		



Cable 2

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)	~-10.1	~-14.8	~-10.0
VSWR	~2.1:1	~1.5:1	~2.0:1
Efficiency (%)	~45.3	~58.9	~41.2
Peak Gain (dBi)	~1.1	~4.4	~2.2
Average Gain (dB)	~-3.5	~-2.3	~-3.9
Impedance (Ohms)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA male standard (other connectors available)		
Cable Length	300cm standard (other lengths available)		
Cable Type	LMR195 standard (other cables available)		

Measurement conditions:

- Mounted on 30 x 30cm plastic plate
- 200cm LMR195 cable
- Measured in certified CTIA 3D anechoic chamber



Cable 3

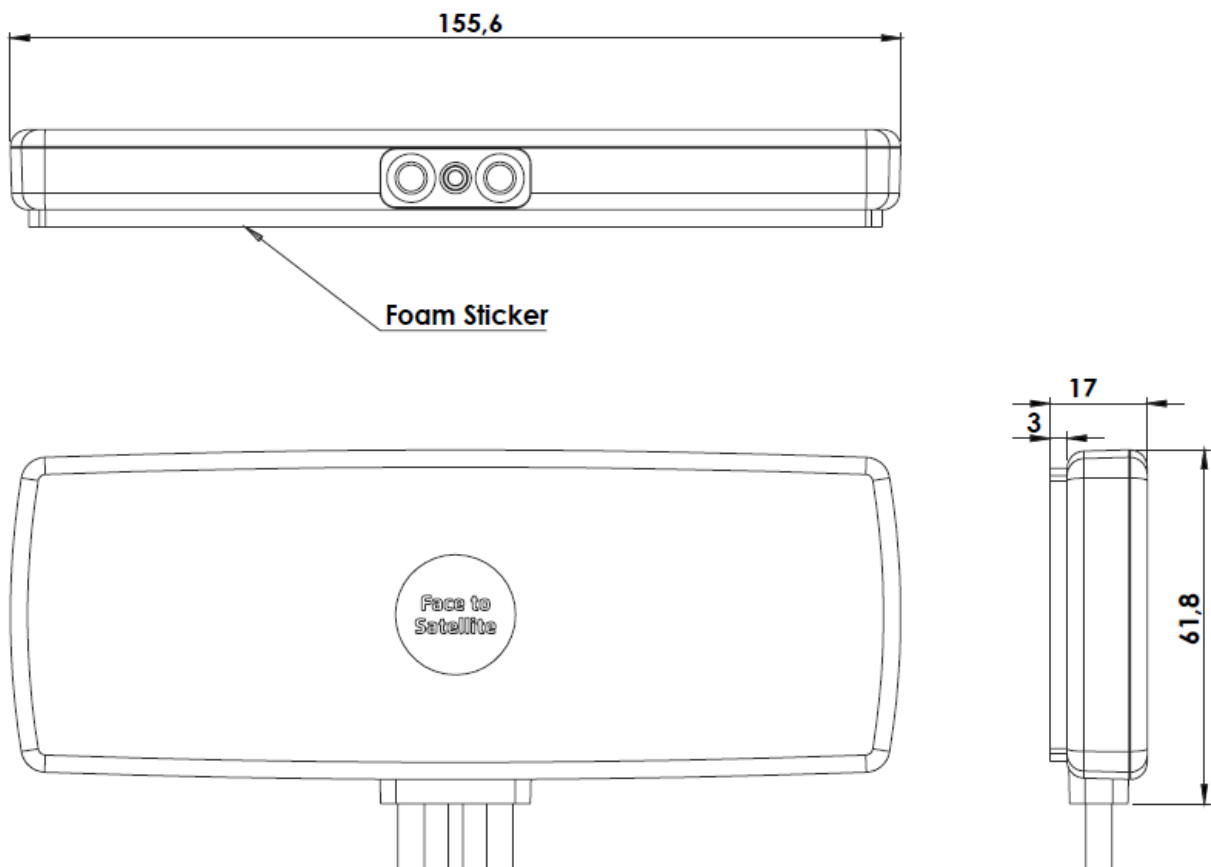
Parameters	GPS/GLONASS/BeiDou Antenna		
	BeiDou	GPS/QZSS/Galileo	GLONASS
Standards	BeiDou	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1561	1575	1602
Frequency (MHz)	1561.098	1575.42	1598 - 1610
Patch Size (mm)	25 x 25 x 4		
Return Loss (dB)	<=-15.0		
VSWR	<=1.4:1		
Impedance (Ohms)	50		
Polarisation	RHCP		
Radiation Pattern	Hemispherical		
SAW Filter	Pre-Filter		
Active Gain (dB)	28 @ 2.7V		
Noise Figure (dB)	1.5 (typ.)		
Voltage (V)	1.5 – 3.6		
Current Consumption(mA)	9 (typ.)		
Power Consumption (mW)	24.3 (typ.)		
ESD Protection (kV)	2		
Connector Type	SMA male standard (other connectors available)		
Cable Length	300cm standard (other lengths available)		
Cable Type	LMR100 standard (other cables available)		



2. Mechanical and environmental specifications

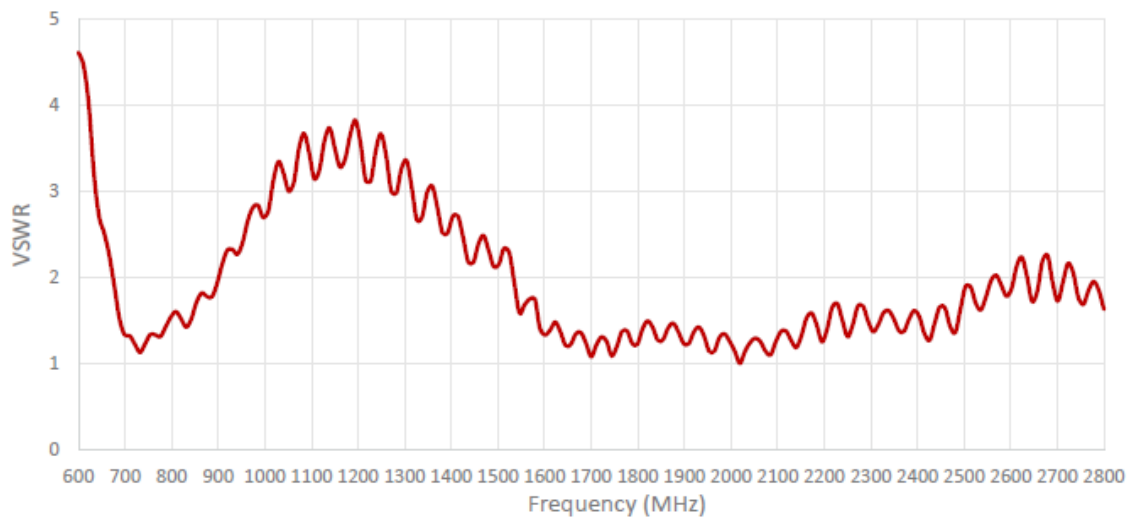
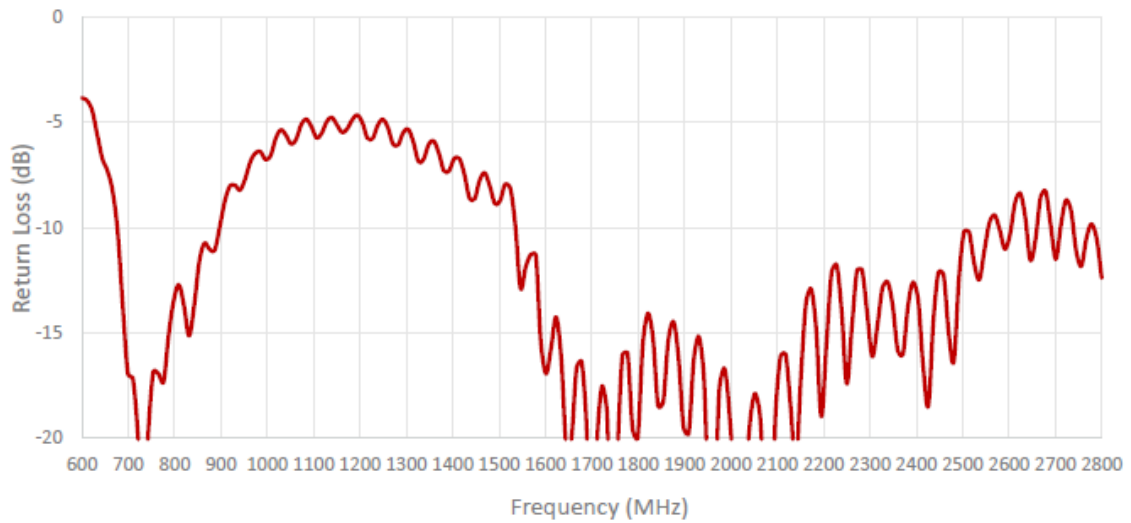
Mounting Type	Adhesive mount
Dimensions (mm)	61.8 x 155.6 x 17.0
Radome	ABS UV stable
Radome Colour	Black
Operating Temperature (°C)	-40 to +85
Storage Temperature (°C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69

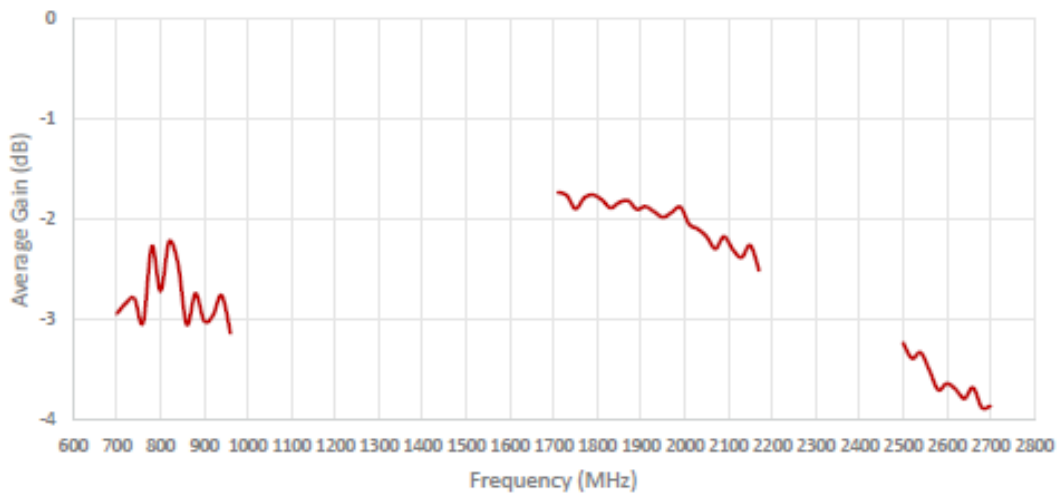
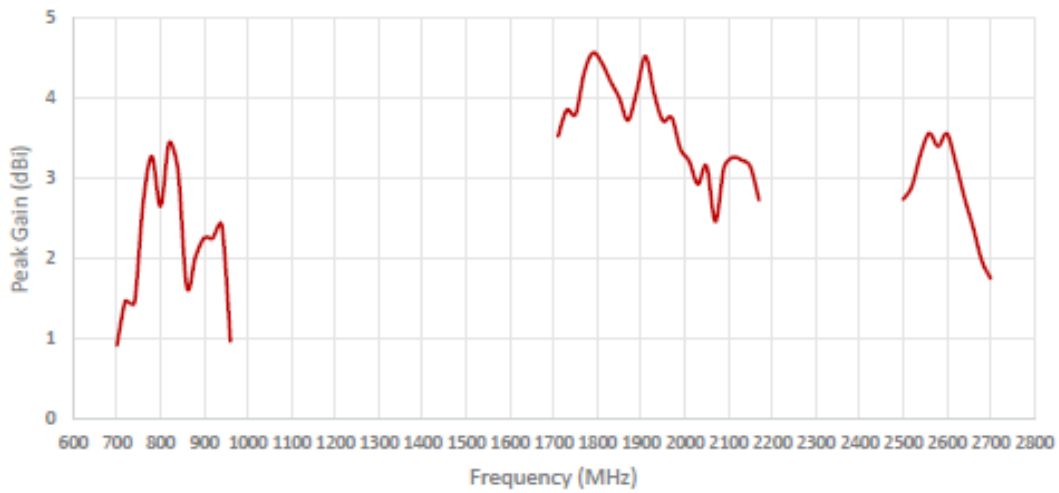
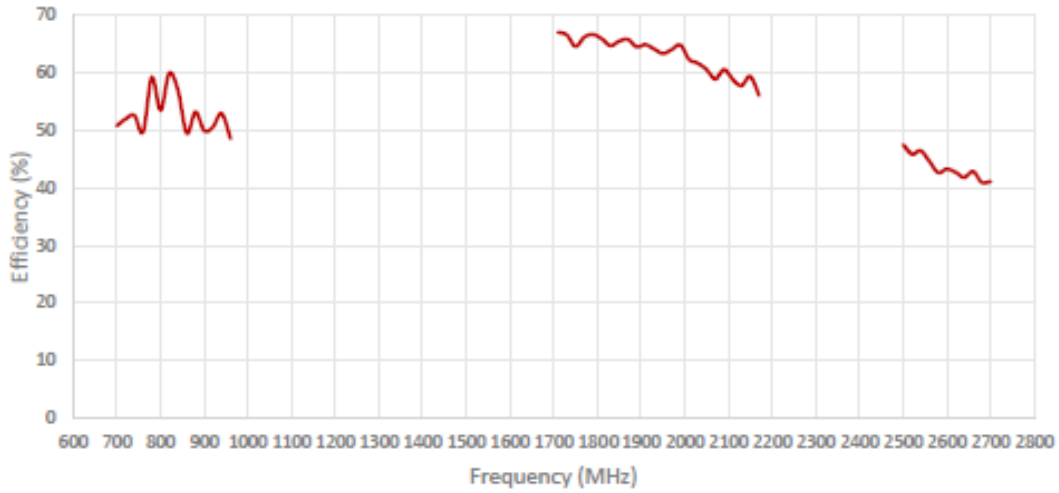
3. Antenna drawings



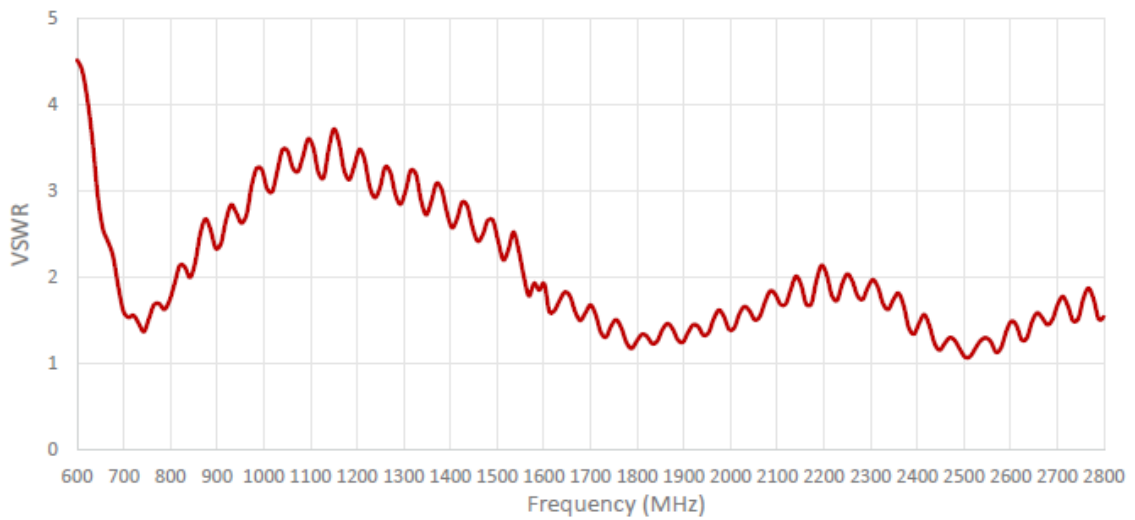
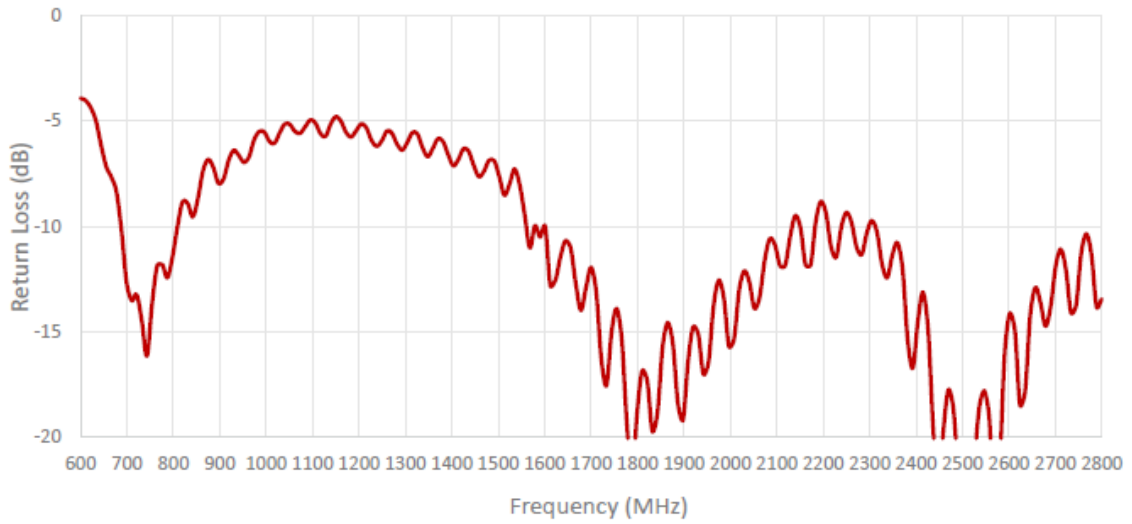
4. Antenna parameters

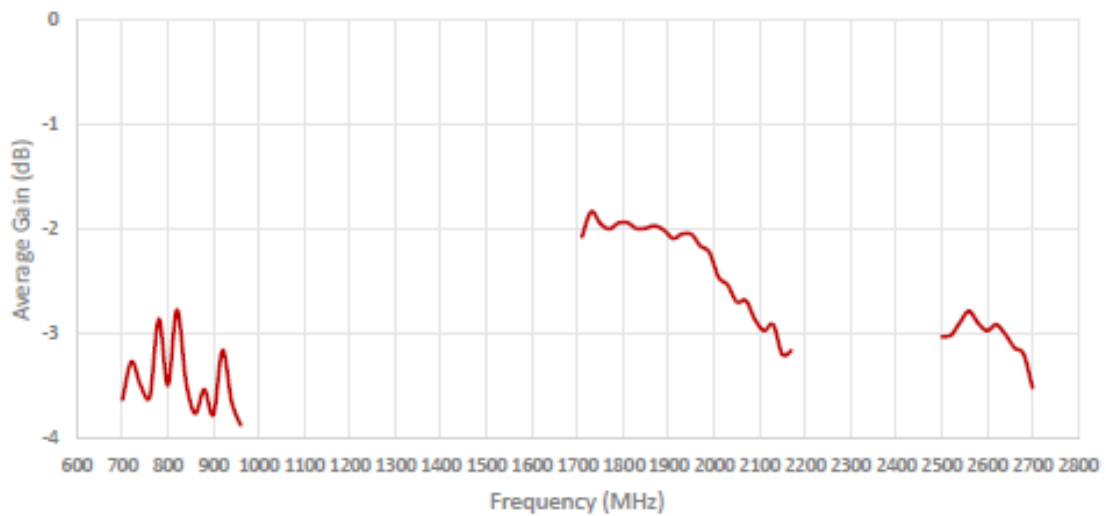
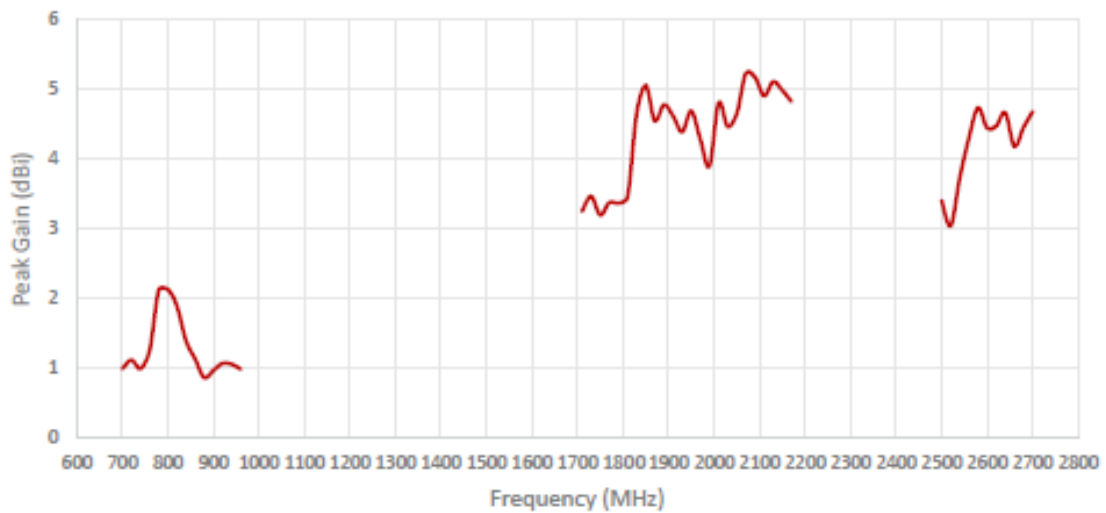
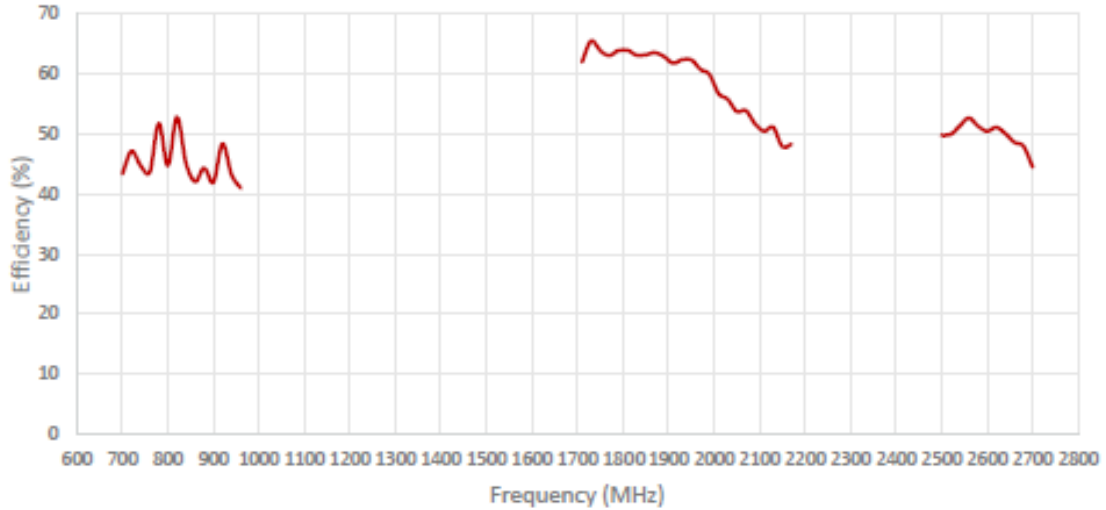
Cable 1: CELLULAR/LTE



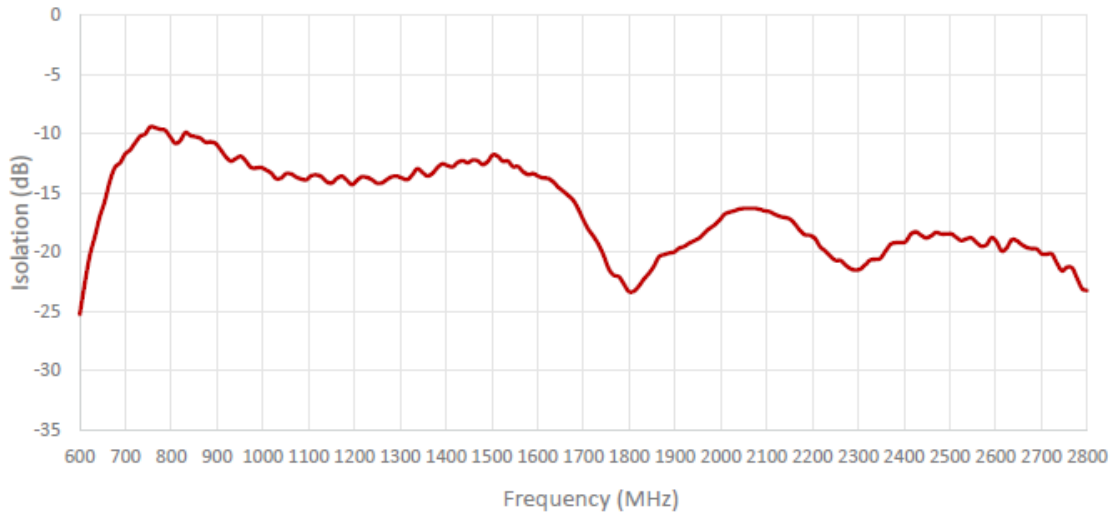


Cable 2: CELLULAR/LTE

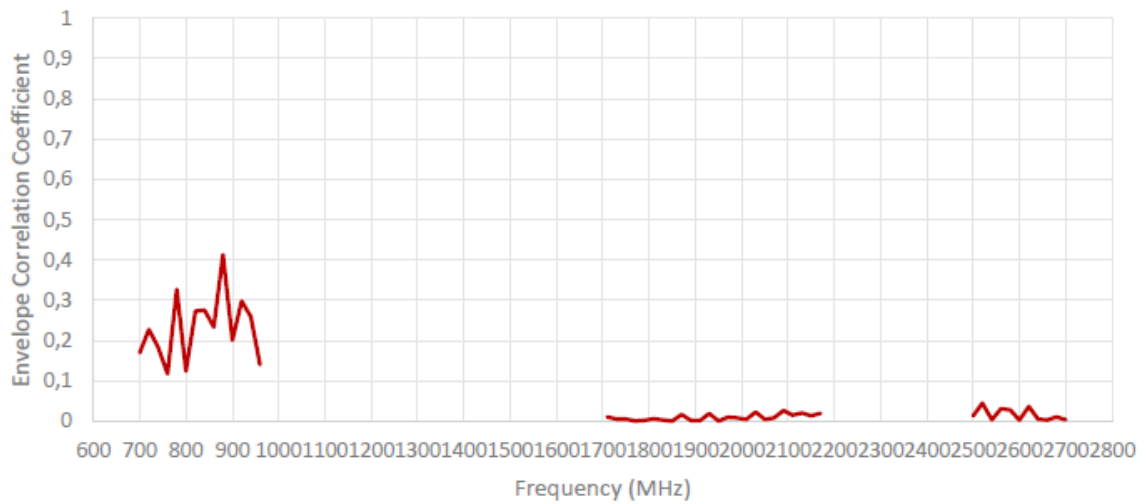


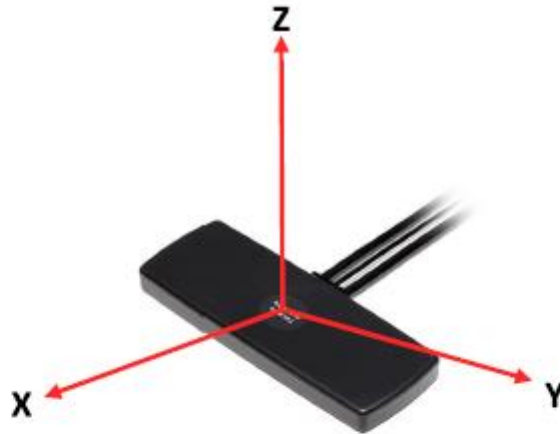


ISOLATION FOR CABLES 1 AND 2



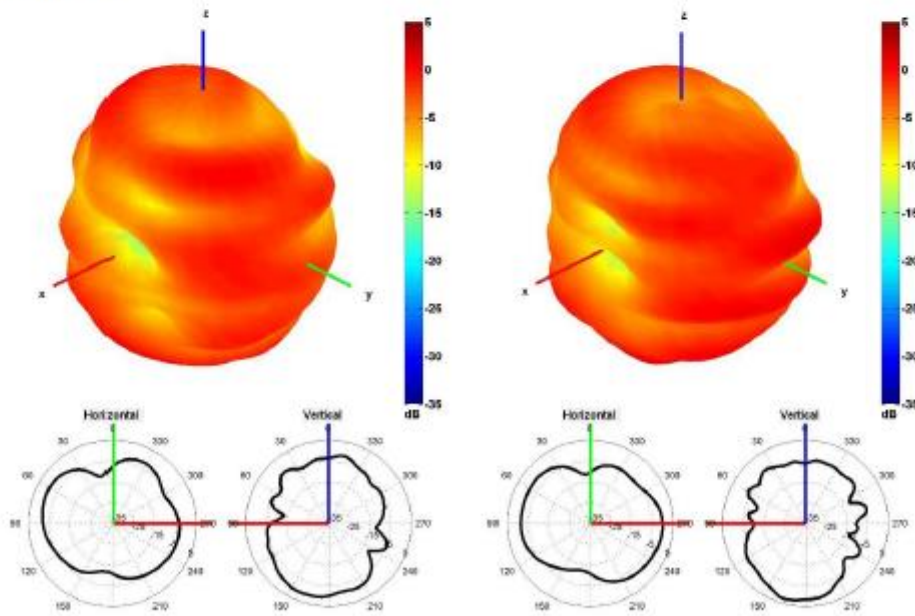
ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2





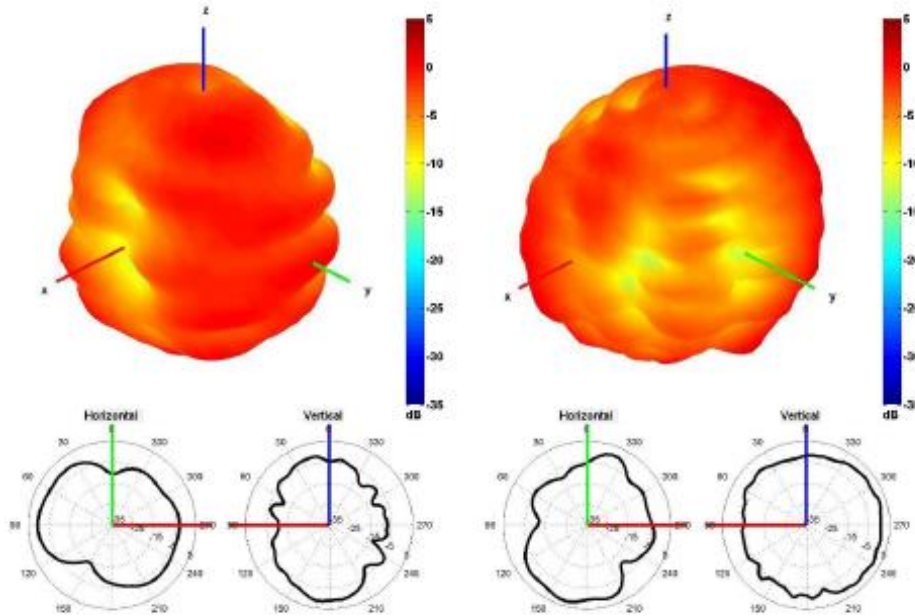
Radiation pattern reference

Table 1: CELLULAR/LTE

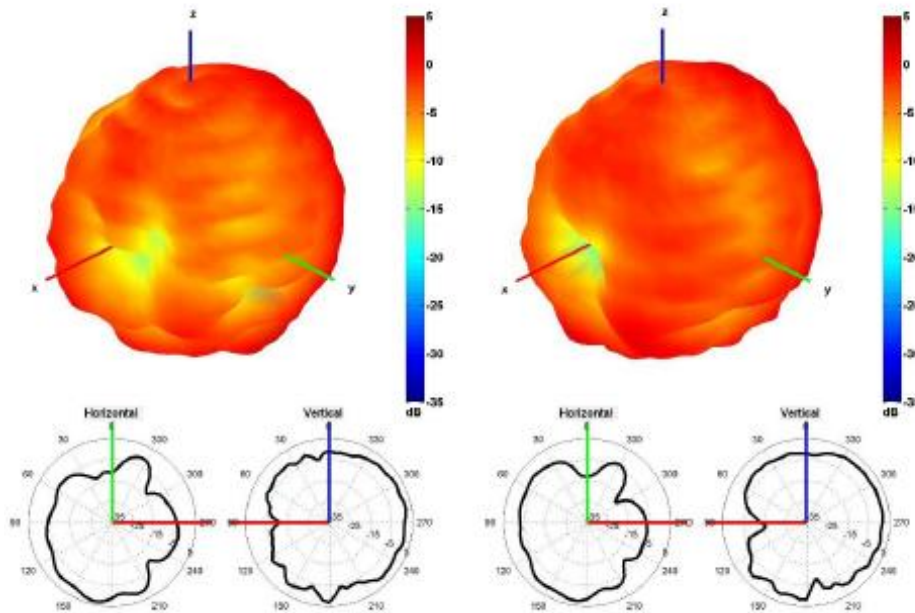


750 and 850 MHz Radiation pattern



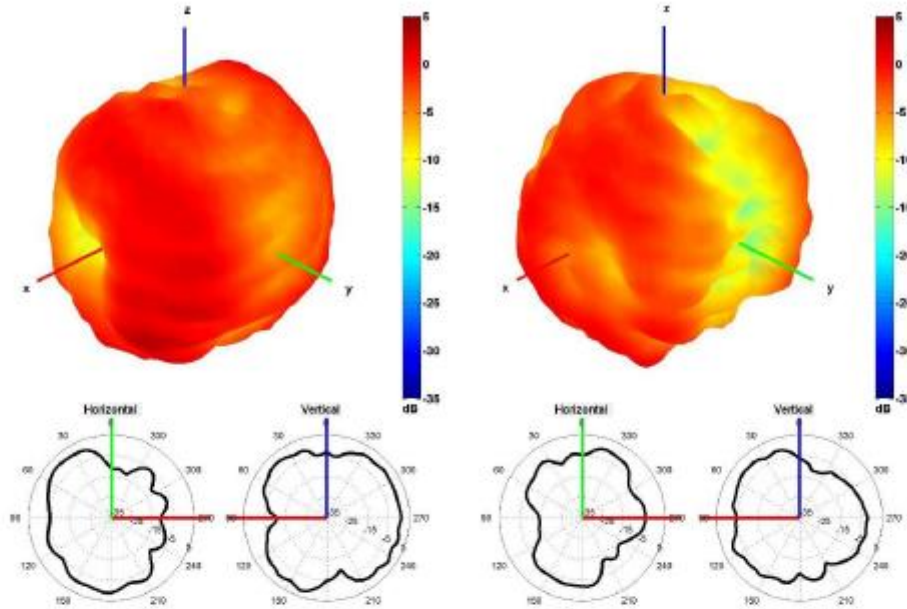


940 and 1750 MHz Radiation pattern



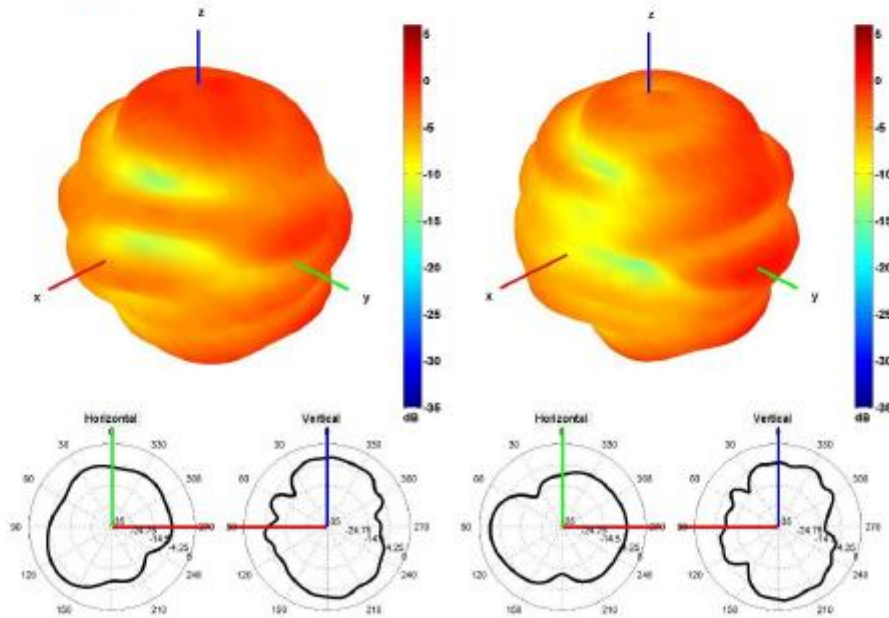
1850 and 1950 MHz Radiation pattern





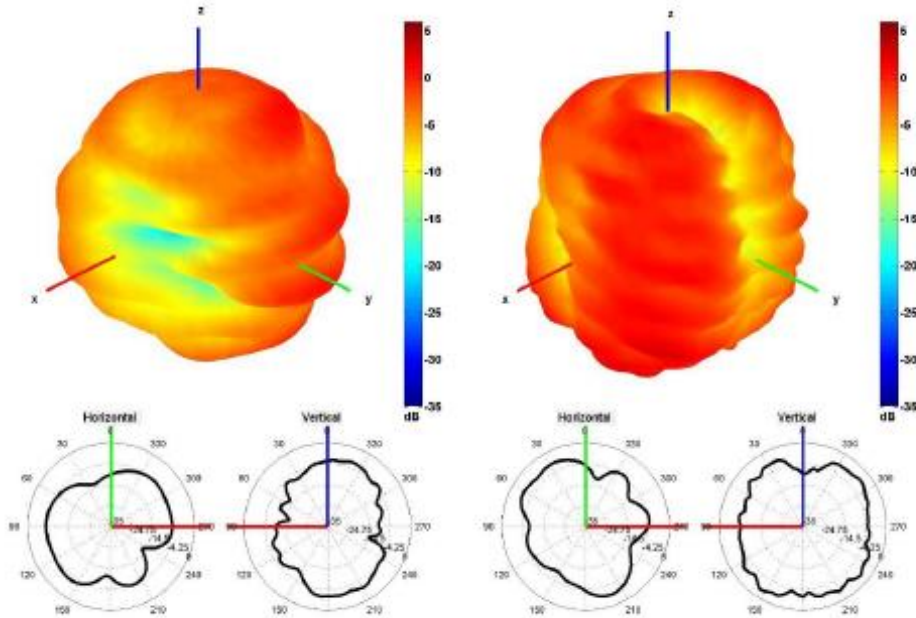
2100 and 2600 MHz Radiation pattern

Table 2: CELLULAR/LTE

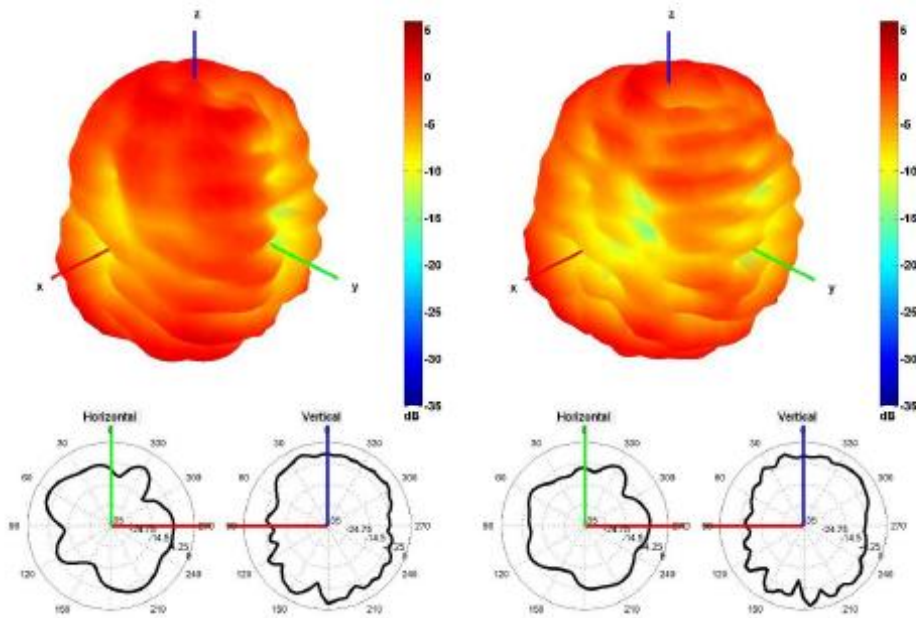


750 and 850 MHz Radiation pattern



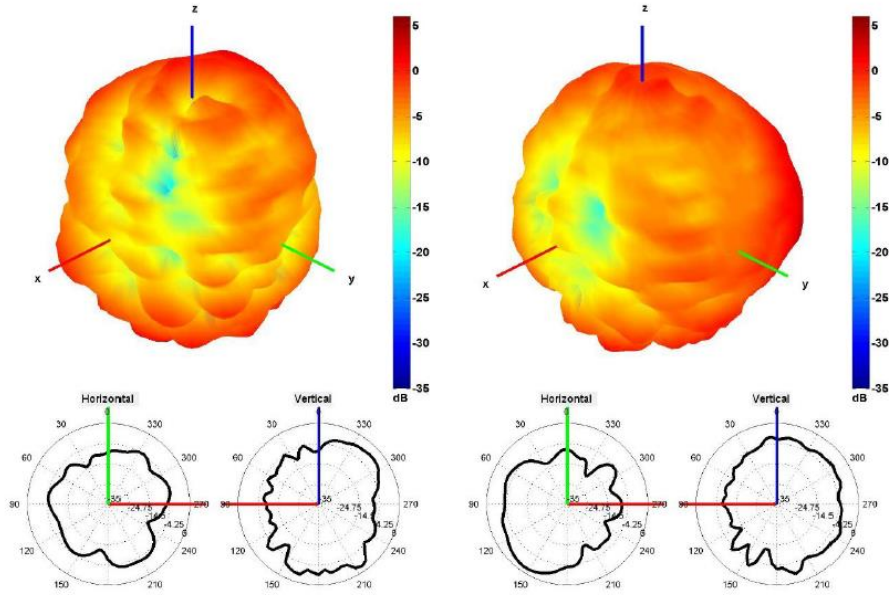


940 and 1750 MHz Radiation pattern



1850 and 1950 MHz Radiation pattern





2100 and 2600 MHz Radiation pattern

