antenna conceptor

Product Datasheet

2J6024Ma

CELLULAR/LTE MIMO Magnetic Mount

Key Features

Cable 1 - 2: CELLULAR / LTE
- 698-960 MHz
- 1710-2170 MHz
- 2500-2700 MHz

Magnetic Mount
Ground Plane Independent
Customizable Cable and Connector
Dimensions 80 x 76 x 13 mm

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)	~-10.0	~-7.8	~-9.7
VSWR	~2.2:1	~2.6:1	~2.1:1
Efficiency (%)	~25.3	~20.2	~36.1
Peak Gain (dBi)	~-0.7	~1.7	~4.4
Average Gain (dB)	~-6.1	~-7.1	~-4.4
Impendance (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	DACAR302 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)	~-9.9	~-8.3	~-9.1
VSWR	~2.5:1	~2.5:1	~2.2:1
Efficiency (%)	~25.7	~22.5	~35.2
Peak Gain (dBi)	~0.8	~1.8	~4.5
Average Gain (dB)	~-6.1	~-6.6	~-4.6
Impendance (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	DACAR302 Standard (Other Cables Available)		

Antenna Measurement Conditions:

Mounted on 30 x 30 x 0.25 cm Metal Plate

200 cm of Cable DACAR302

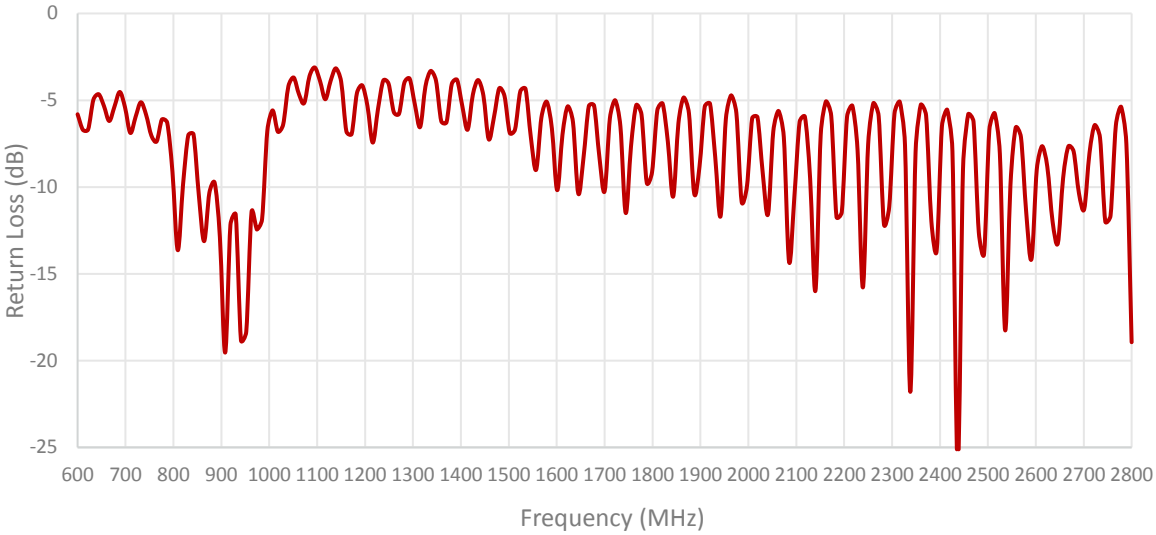
Measured in Certified CTIA 3D Anechoic Chamber

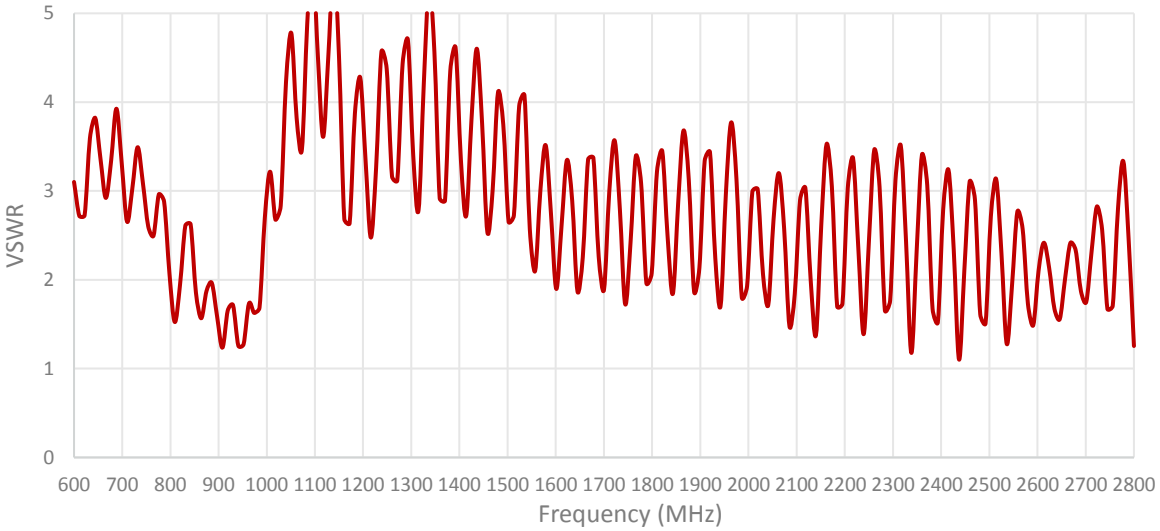
2. Mechanical and environmental specifications

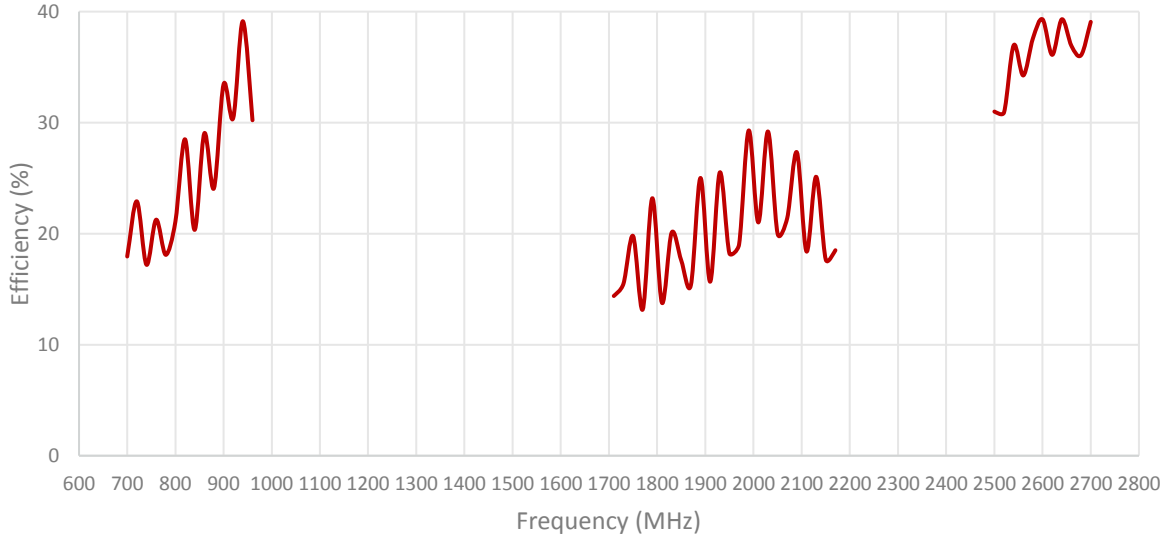
Specifications	2J6024Ma
Mounting Type	Magnetic Mount
Dimensions (mm)	80 x 76 x 13
Radome	ABS UV Stable
Radome color	Black
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

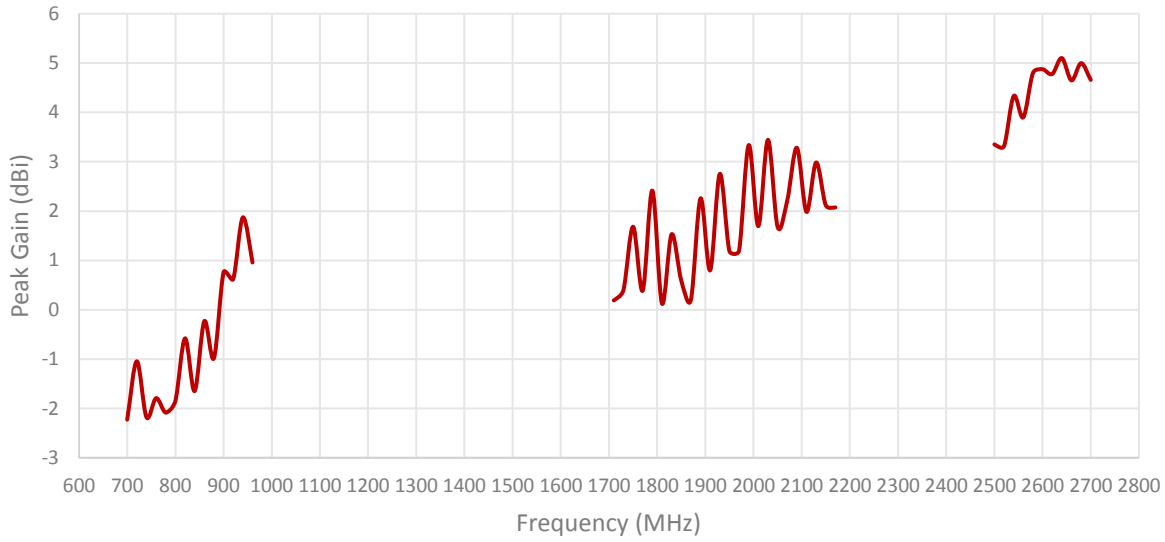
3. Antenna parameters

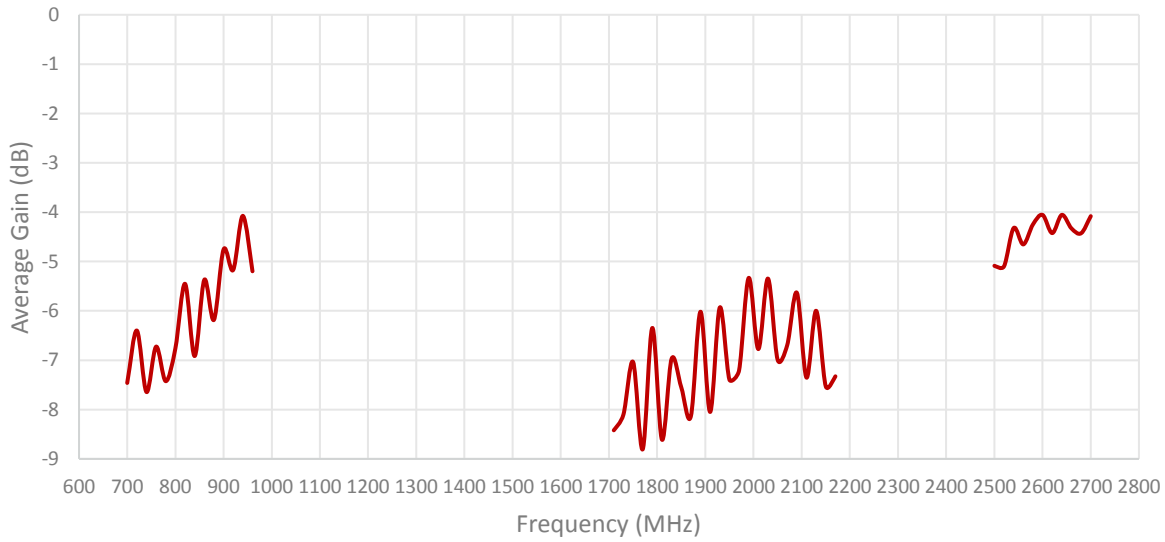
Cable 1: CELLULAR/LTE



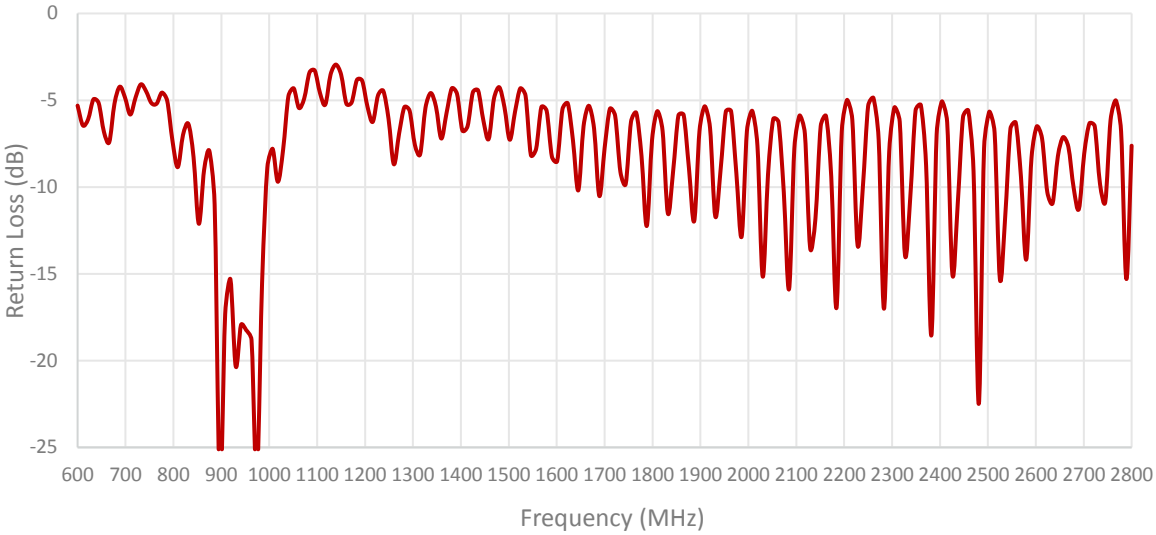


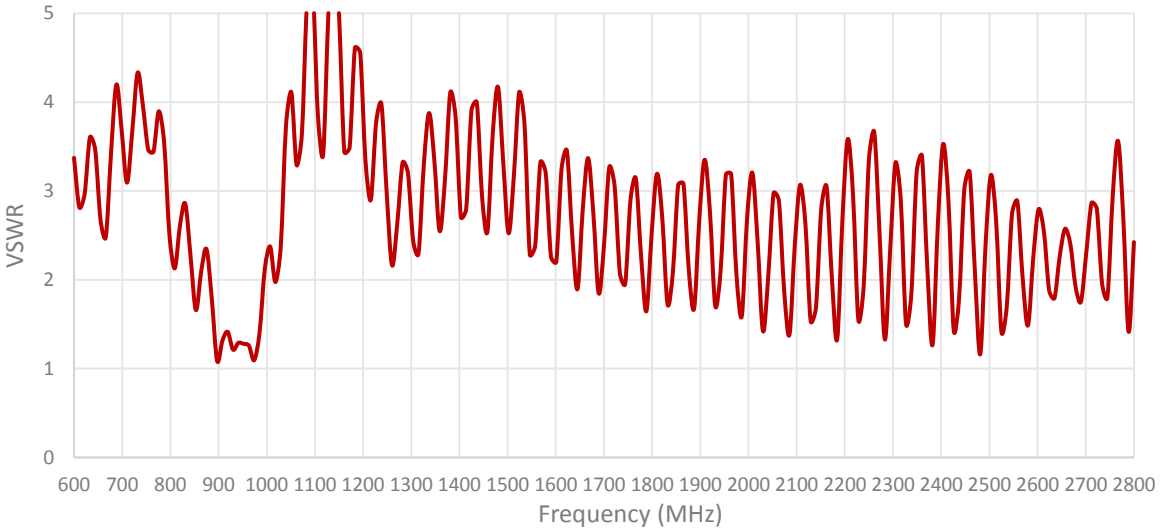

Efficiency (%)
40
30
20
10
0
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

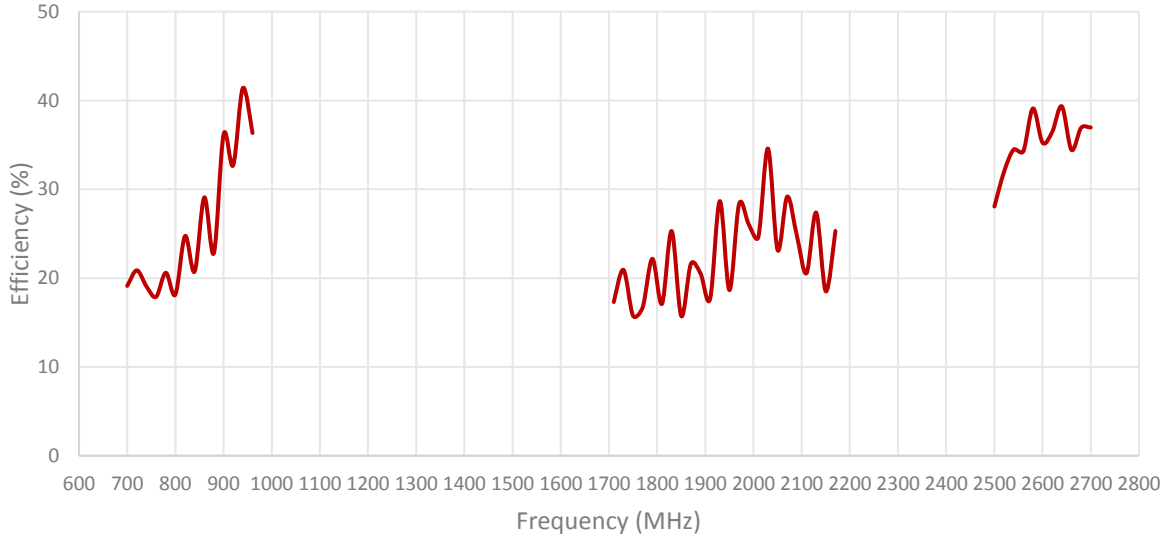

Peak Gain (dBi)
6
5
4
3
2
1
0
-1
-2
-3
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

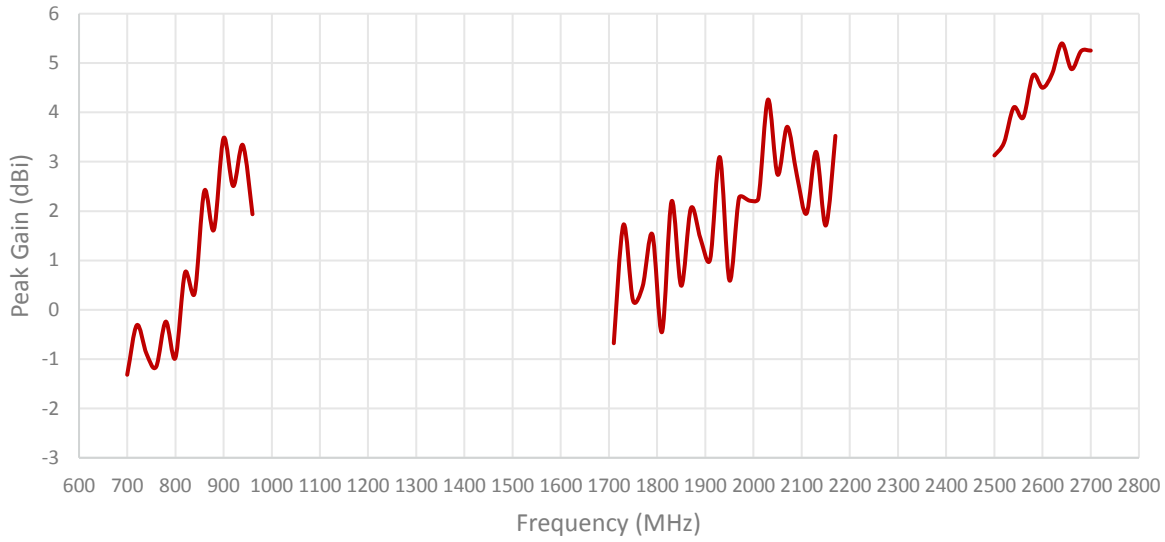

Average Gain (dB)
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

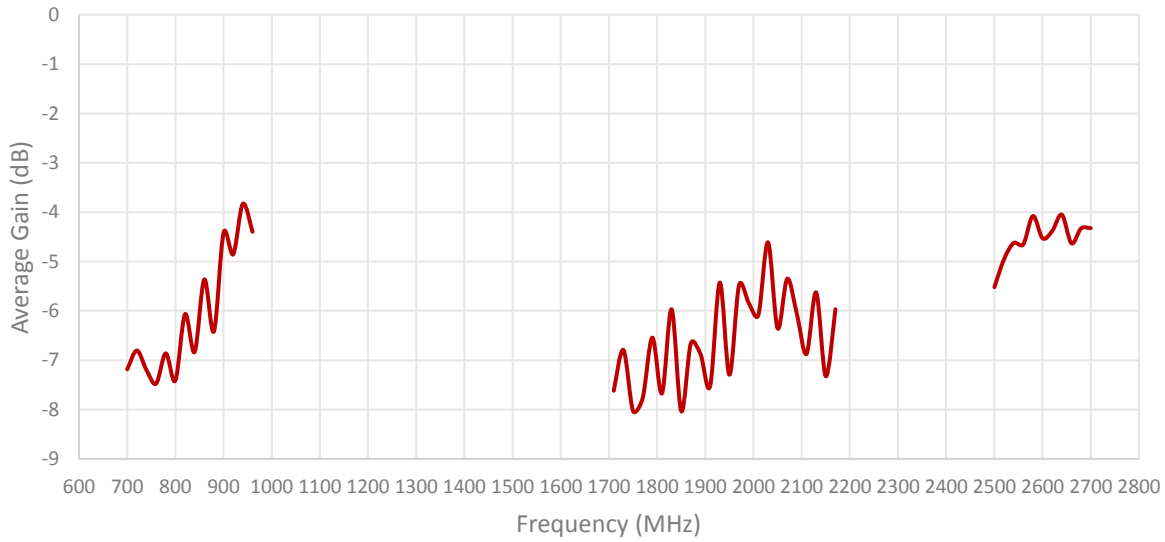
Cable 2: CELLULAR/LTE



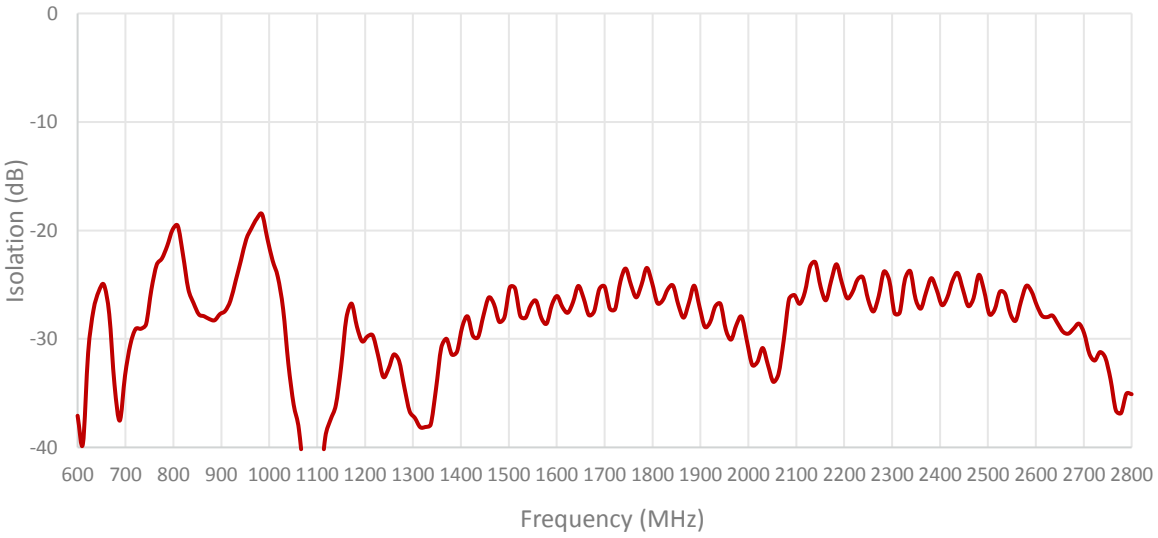



Efficiency (%)
50
40
30
20
10
0
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

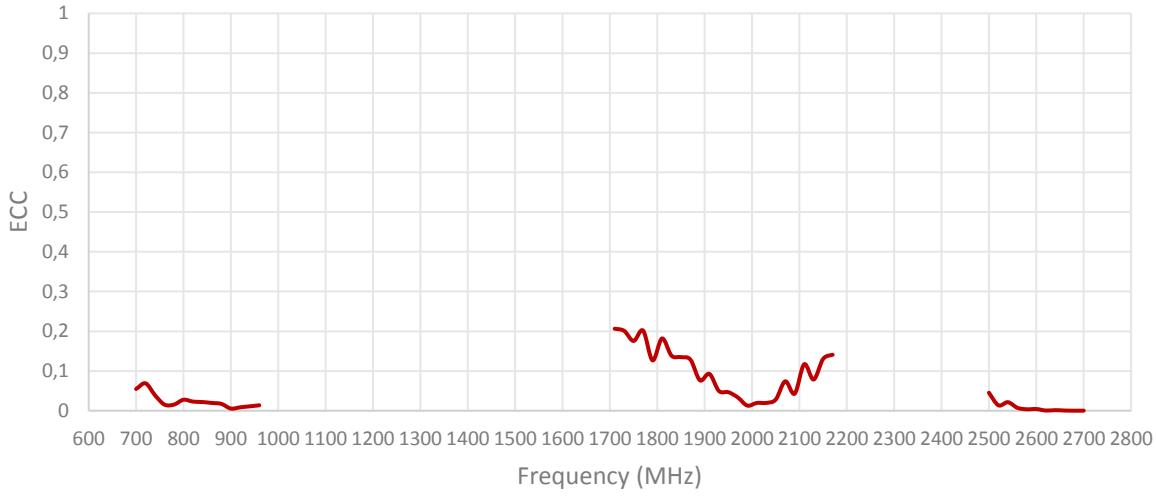

Peak Gain (dBi)
6
5
4
3
2
1
0
-1
-2
-3
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

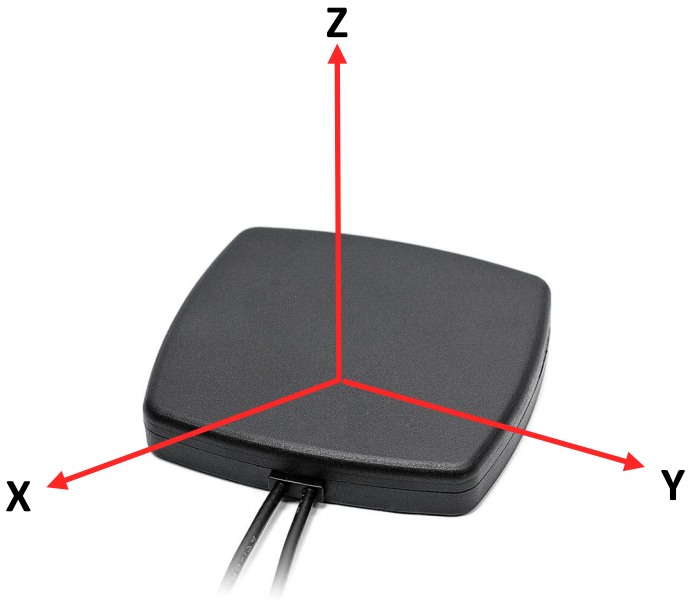

Average Gain (dB)
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

ISOLATION FOR CABLES 1 AND 2



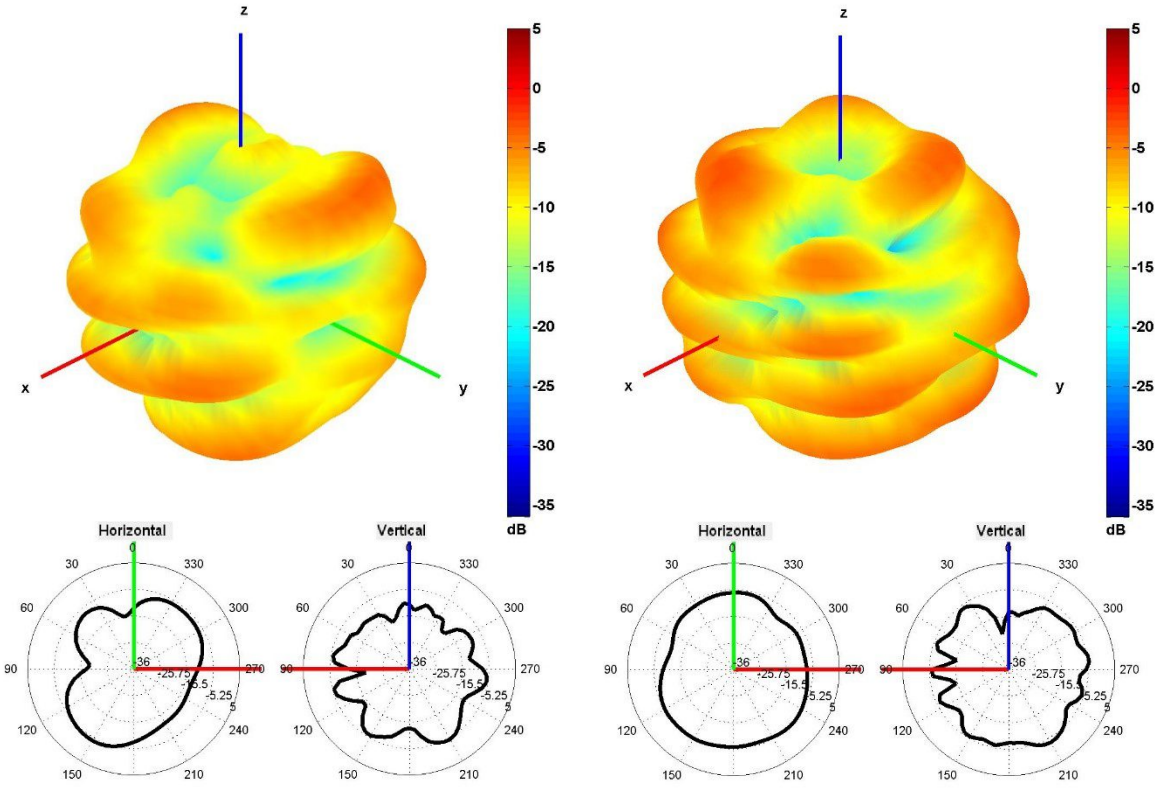
ENVELOPE CORRELATION COEFICIENT FOR CABLES 1 AND 2



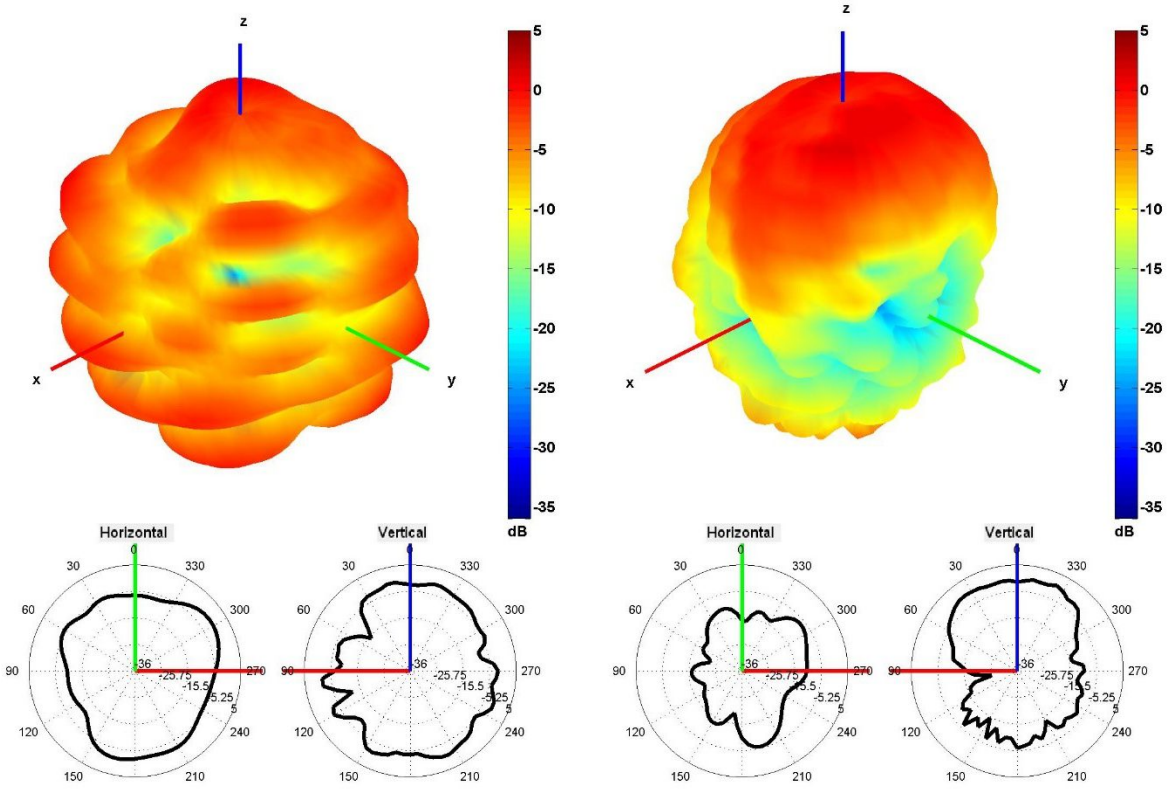


Radiation pattern reference

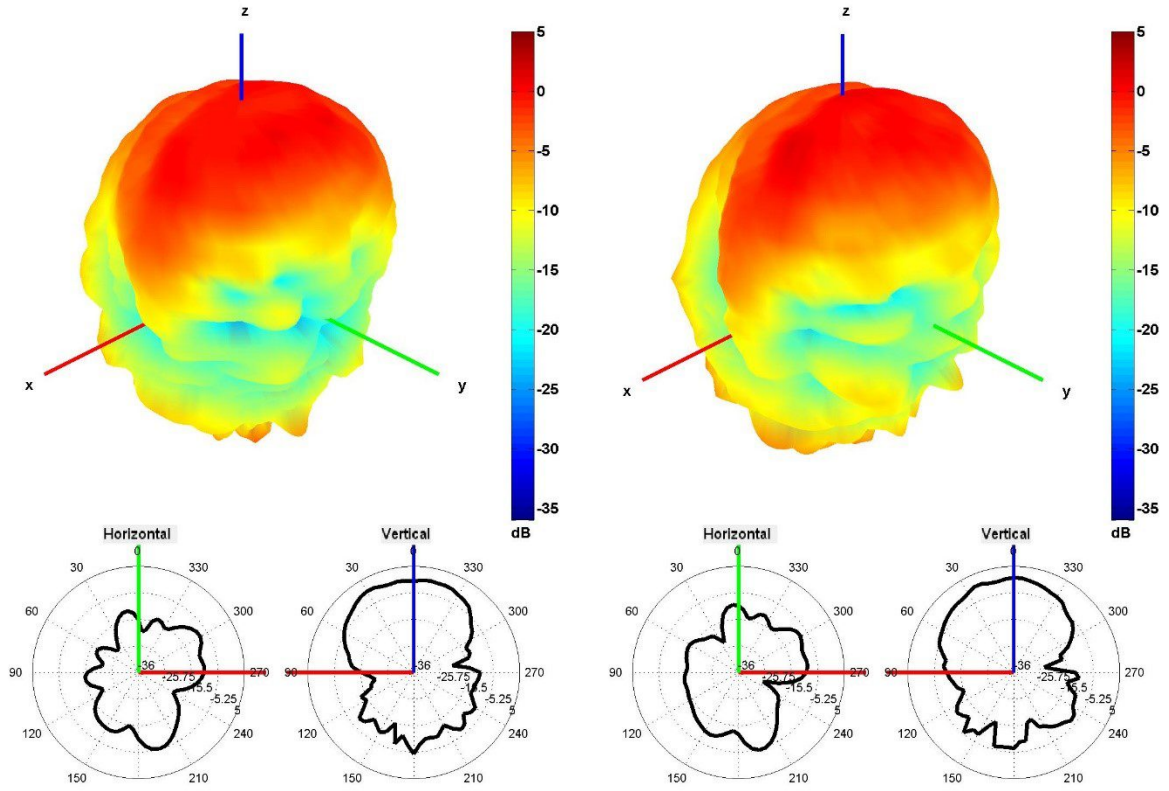
Cable 1: CELLULAR/LTE



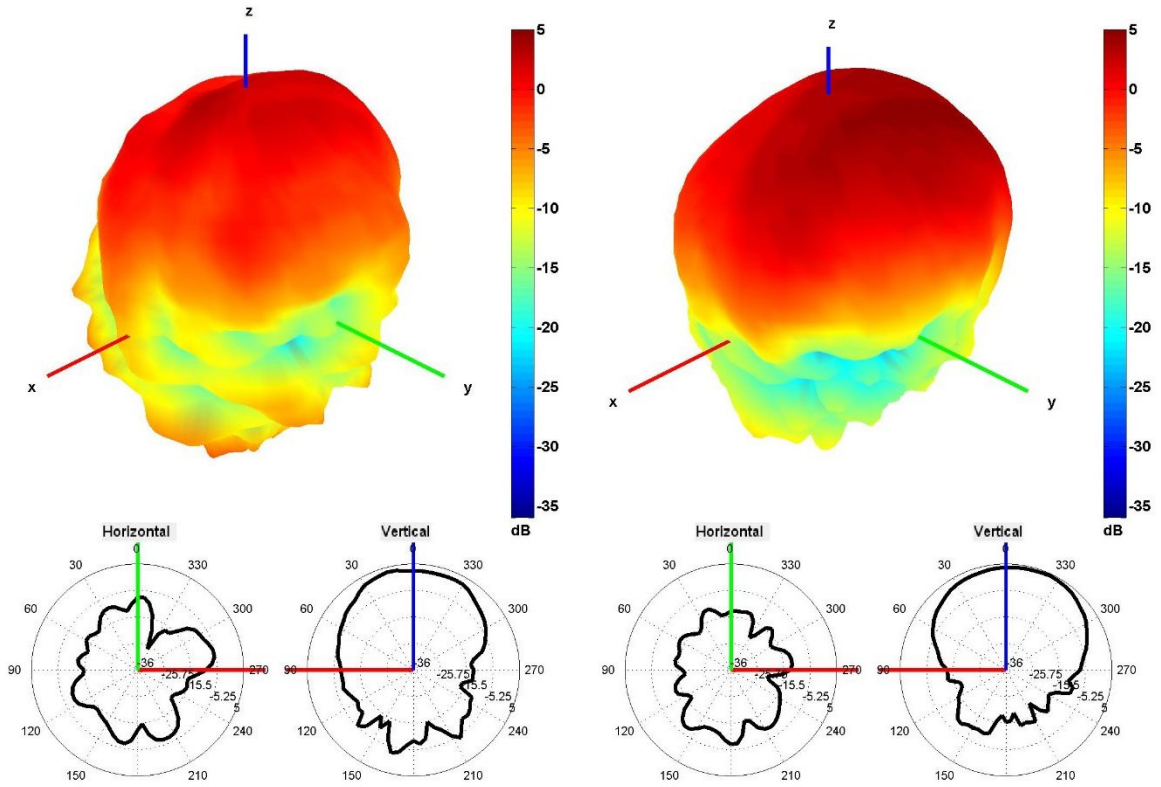
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

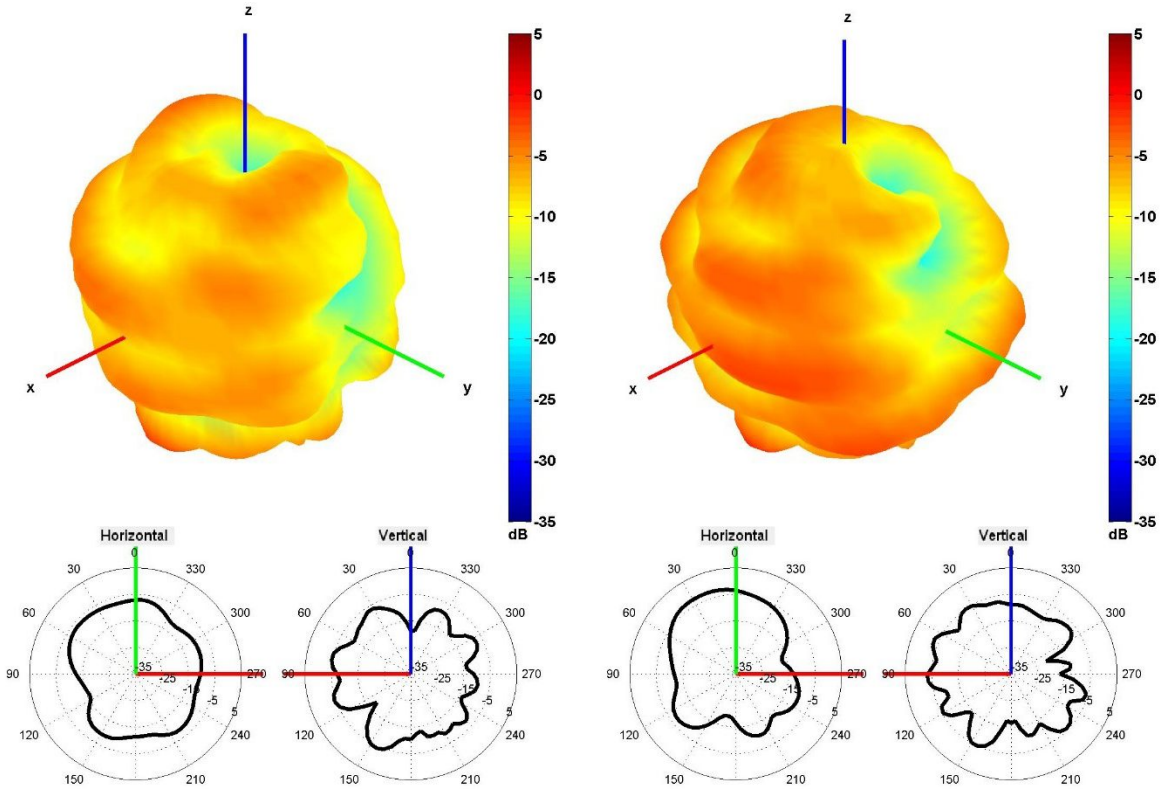


1850 and 1950 MHz Radiation pattern

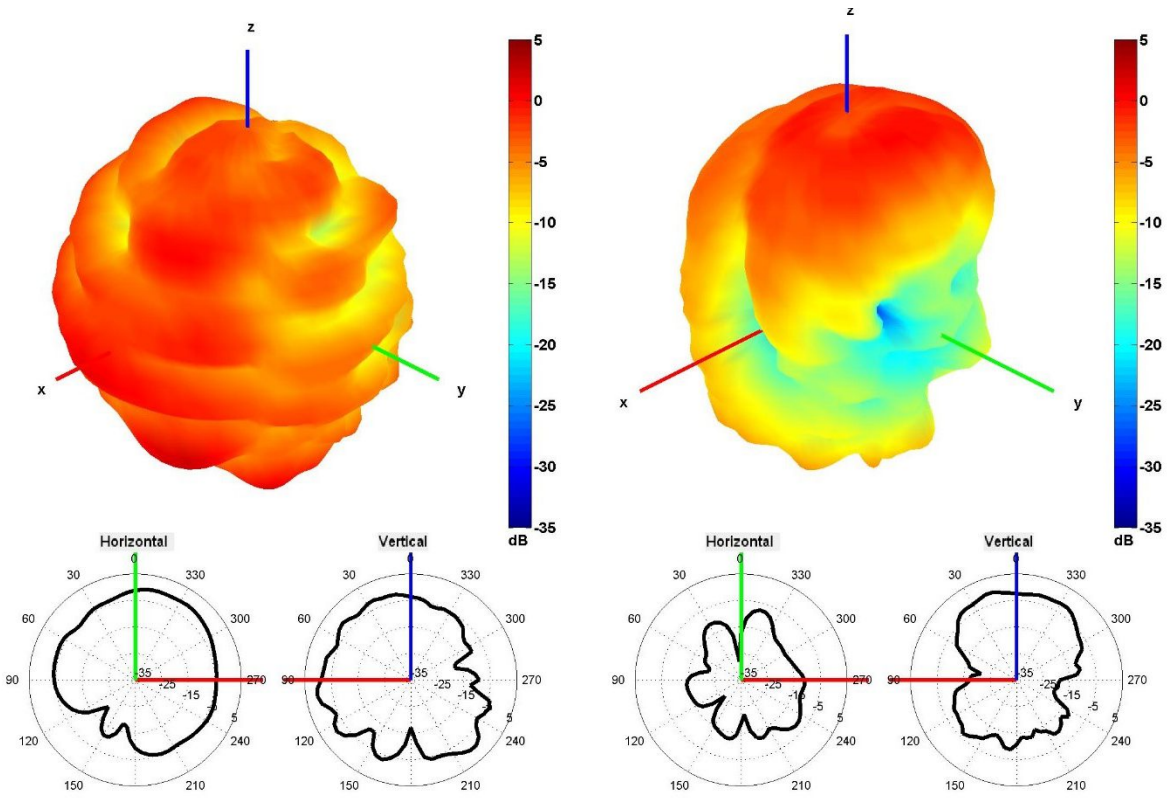


2100 and 2600 MHz Radiation pattern

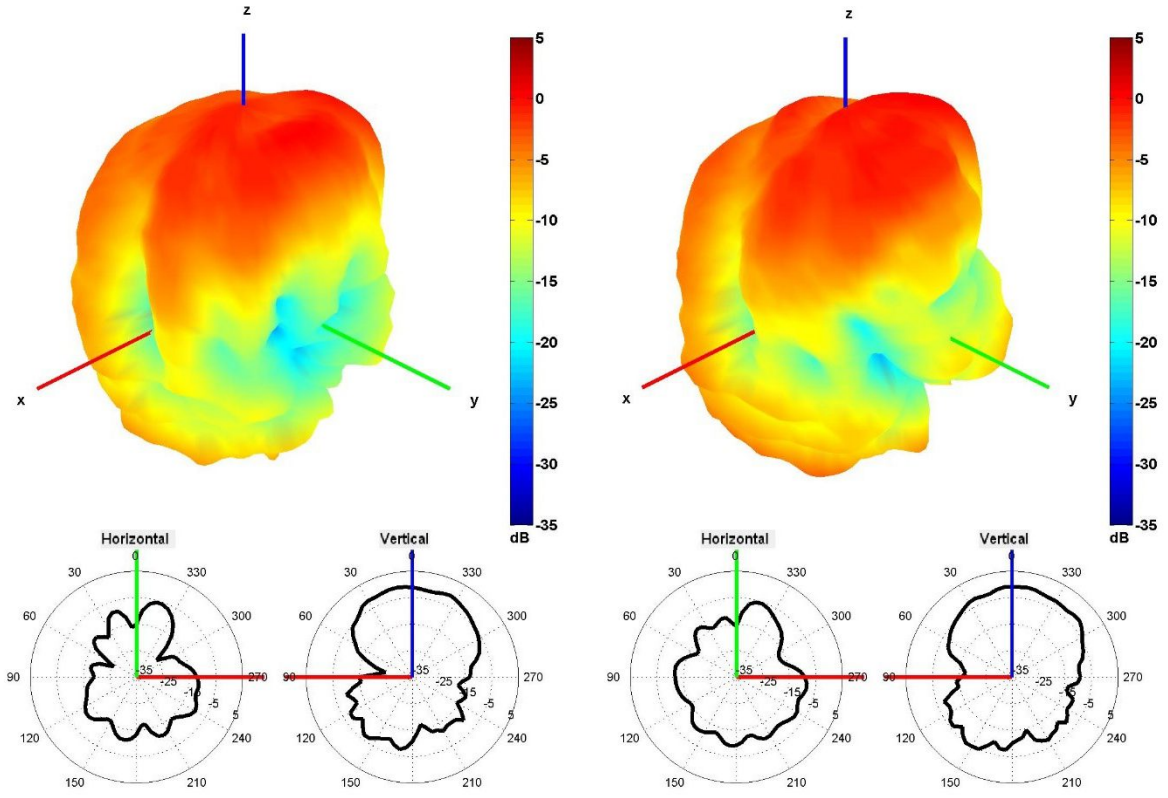
Cable 2: CELLULAR/LTE



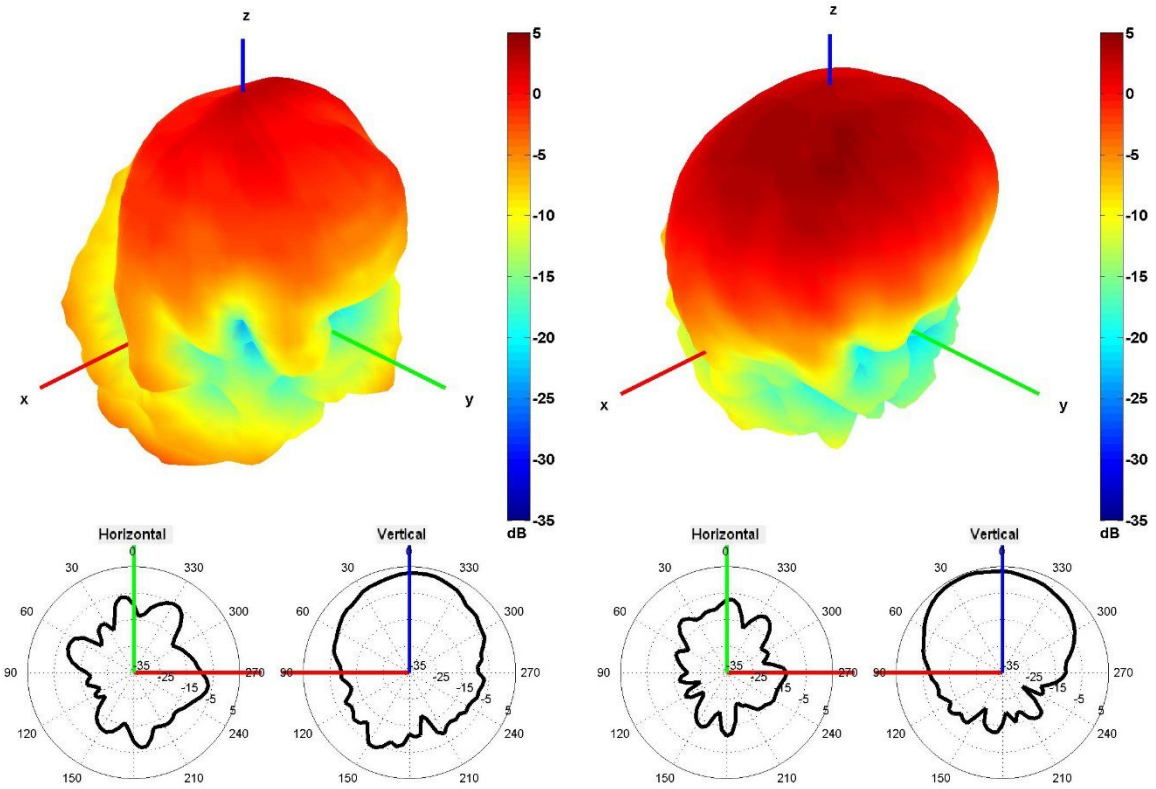
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

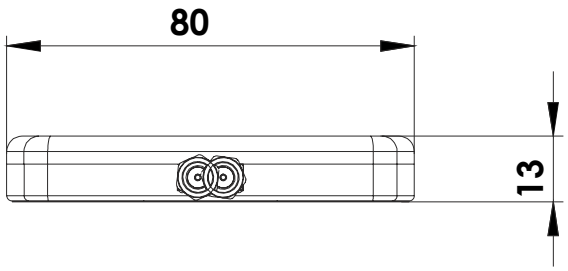


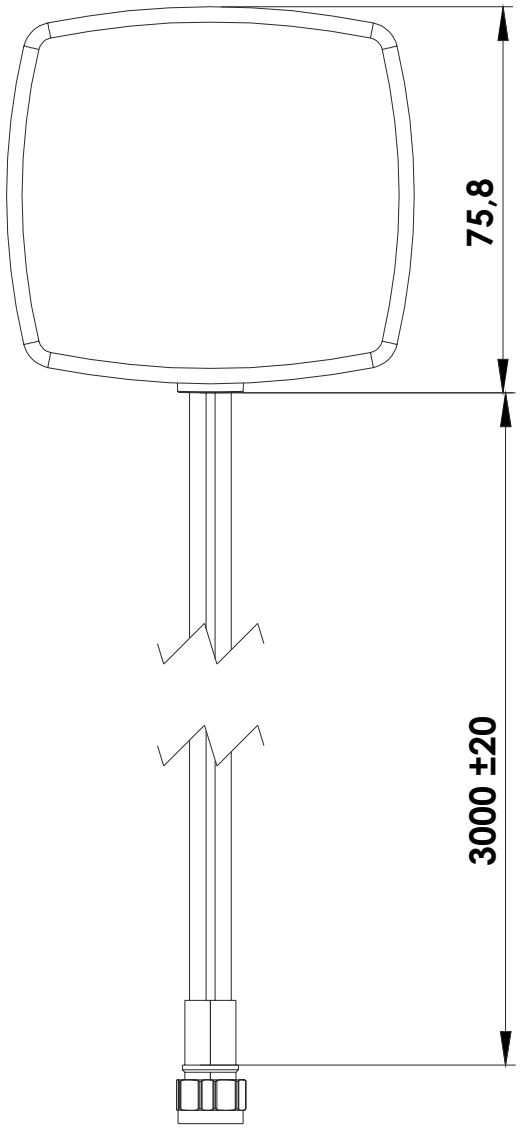
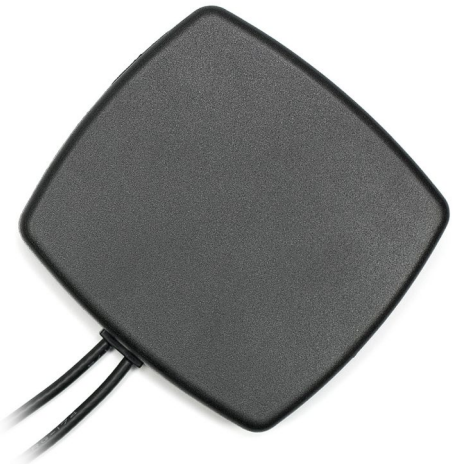
1850 and 1950 MHz Radiation pattern



2100 and 2600 MHz Radiation pattern

4. Antenna drawings





5. Antenna Images