

## AMC-ANT-2J6024Ba

### 4G LTE MIMO screw mount antenna

#### Features

- Cellular/LTE:
  - 698 – 960MHz
  - 1710 – 2170MHz
  - 2500 – 2700MHz
- Screw mount
- Ground plane independent
- Low profile
- Optional thread depths: 8.5mm, 19mm (default), 30mm
- Dimensions: 80 x 74 x 14.7mm
- Certificates: IP67
- Customisable cable and connectors



## 1. Antenna and electrical specifications

Cable 1

Parameters	Cellular/LTE antenna		
Standards	2G/3G/4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698 - 960	1710 - 2170	2500 - 2700
Return loss (dB)	~-9.4	~-7.8	~-19.4
VSWR	~2.1:1	~2.4:1	~1.3:1
Efficiency (%)	~31.5	~30.4	~43.8
Peak gain (dBi)	~0.7	~2.7	~4.3
Average gain (dB)	~-5.0	~-5.2	~-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	LMR100 standard (other cables available)		



**Cable 2**

Parameters	Cellular/LTE antenna		
Standards	2G/3G/4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698 - 960	1710 - 2170	2500 - 2700
Return loss (dB)	~-9.9	~-8.1	~-19.5
VSWR	~2.0:1	~2.3:1	~1.3:1
Efficiency (%)	~33.0	~29.5	~43.1
Peak gain (dBi)	~1.4	~2.2	~4.4
Average gain (dB)	~-4.8	~-5.5	~-3.7
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	LMR100 standard (other cables available)		

**Measurement conditions:**

- Mounted on 30 x 30 x 0.25cm ABS plate
- 200cm LMR100 cable
- Measured in certified CTIA 3D Anechoic chamber



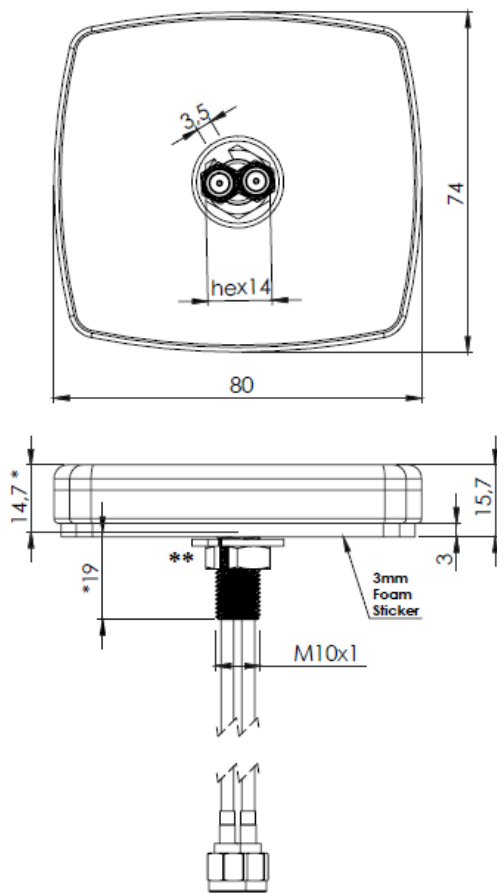
## 2. Mechanical and environmental specifications

<b>Mounting type</b>	Screw mount
<b>Dimensions (mm)</b>	80 x 74 x 14.7
<b>Max. Tighten Torque (Nm)</b>	5
<b>Radome</b>	ABS
<b>Radome Colour</b>	Black
<b>Operating temperature (°C)</b>	-40 to +85
<b>Storage temperature (°C)</b>	-40 to +85
<b>Substance compliance</b>	RoHS
<b>Certificates</b>	IP67



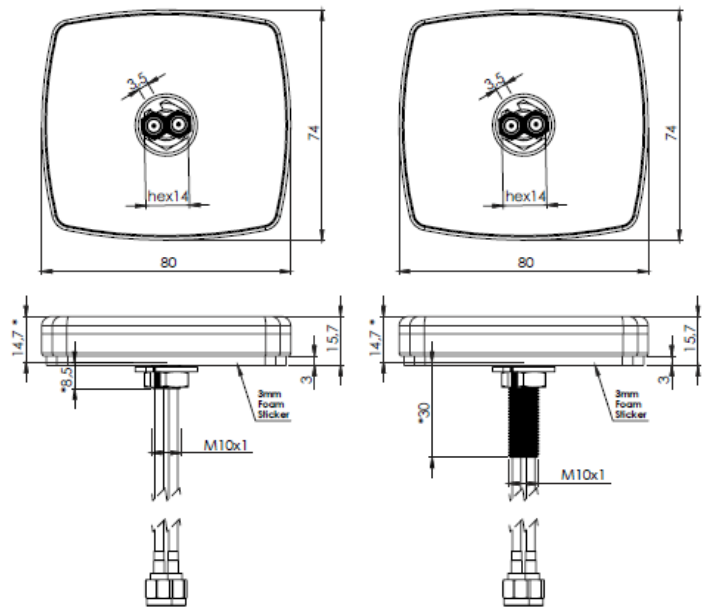
### 3. Antenna drawings

#### Default Thread Option



**2J6024Ba-TH19**  
19 mm Thread  
Default Option

#### Other Thread Options available



**2J6024Ba-TH8,5**  
8,5 mm Thread

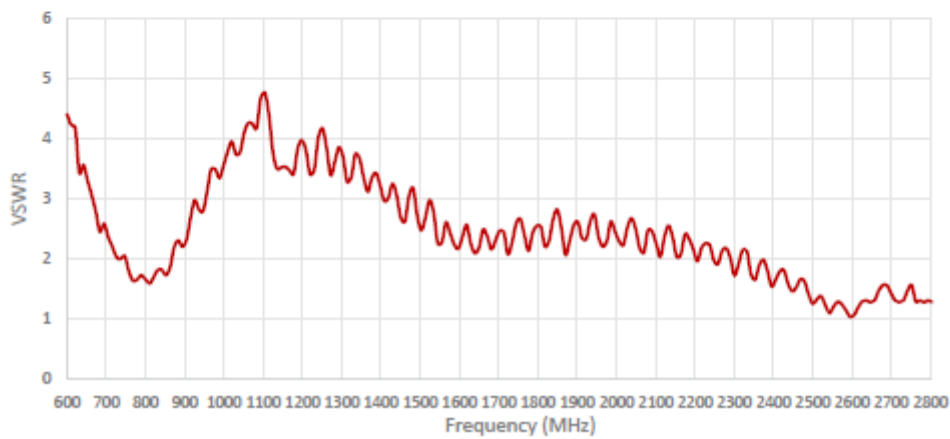
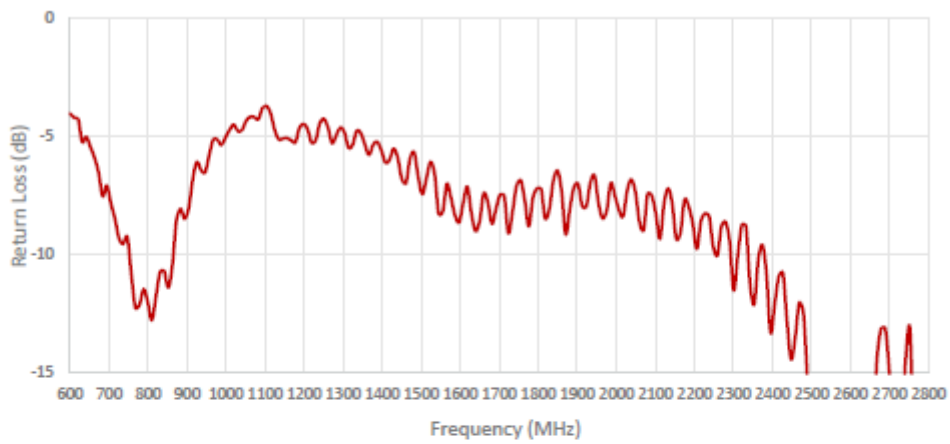
**2J6024Ba-TH30**  
30 mm Thread

\*Dimensions after mounting  
\*\*Max. Torque= 5 Nm



## 4. Antenna parameters

Table 1: CELLULAR/LTE



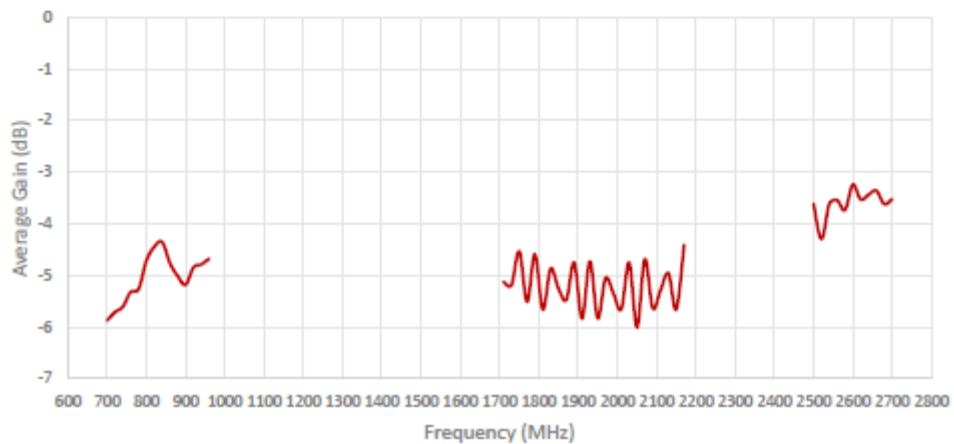
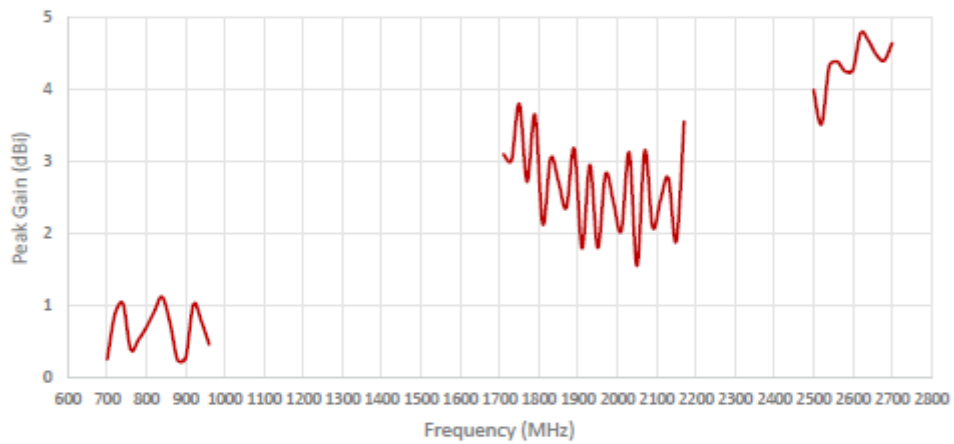
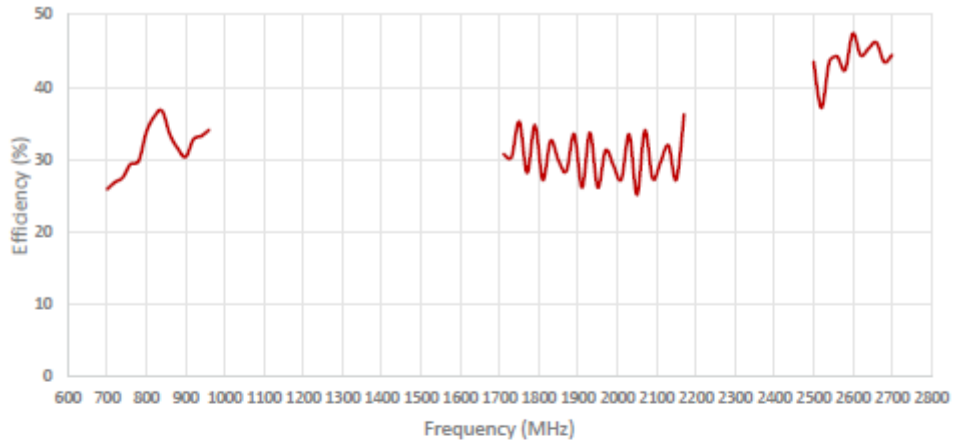
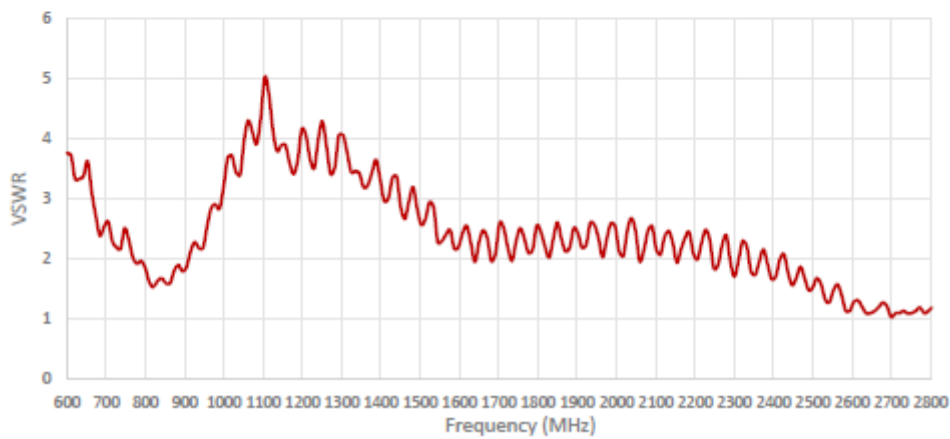
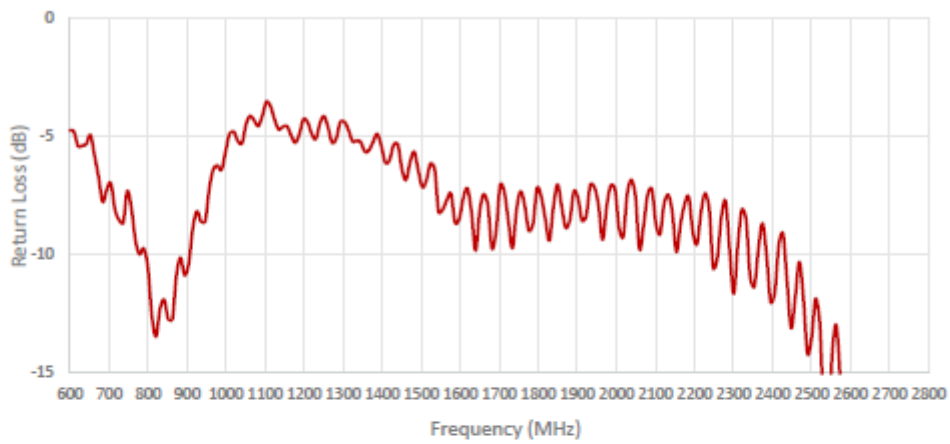
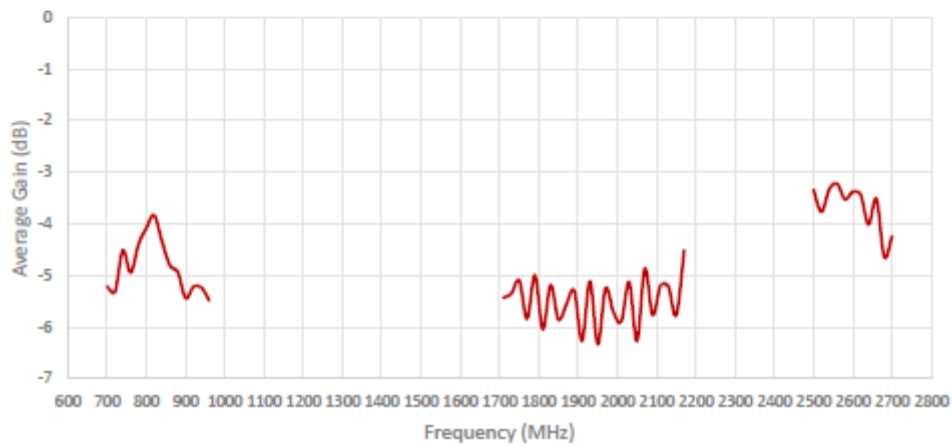
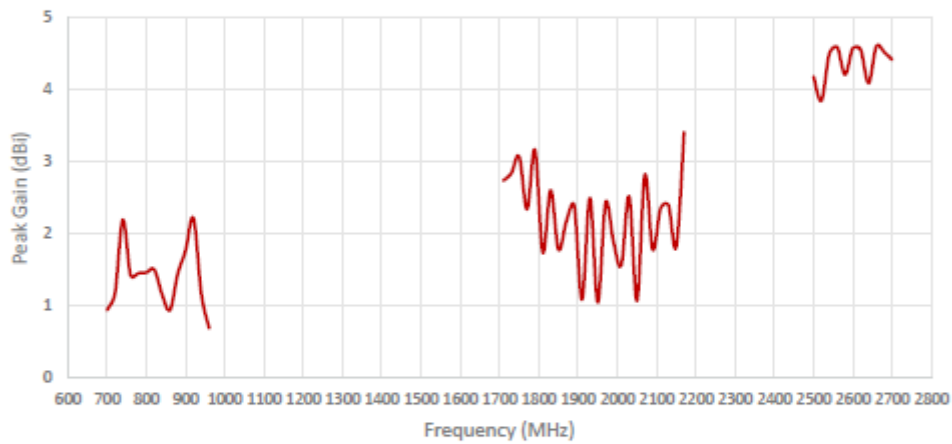
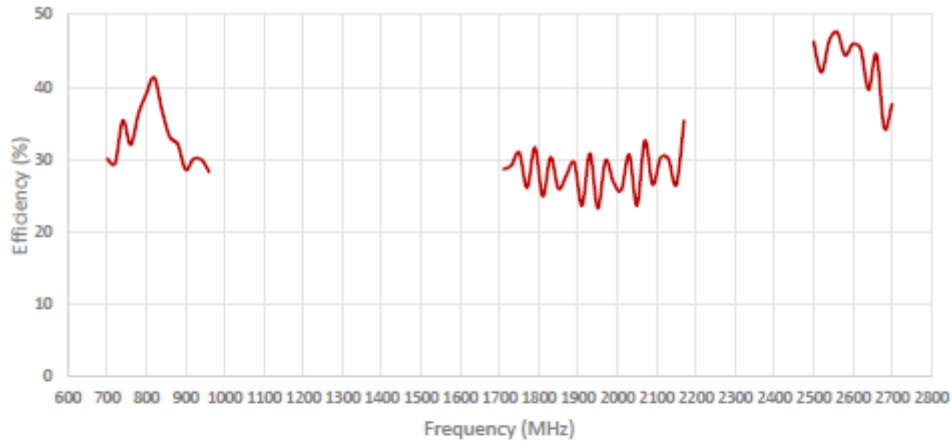


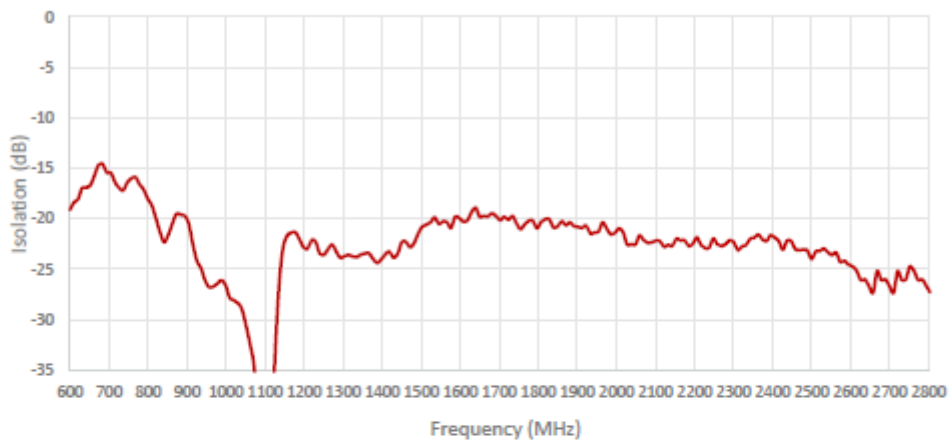
Table 2: CELLULAR/LTE



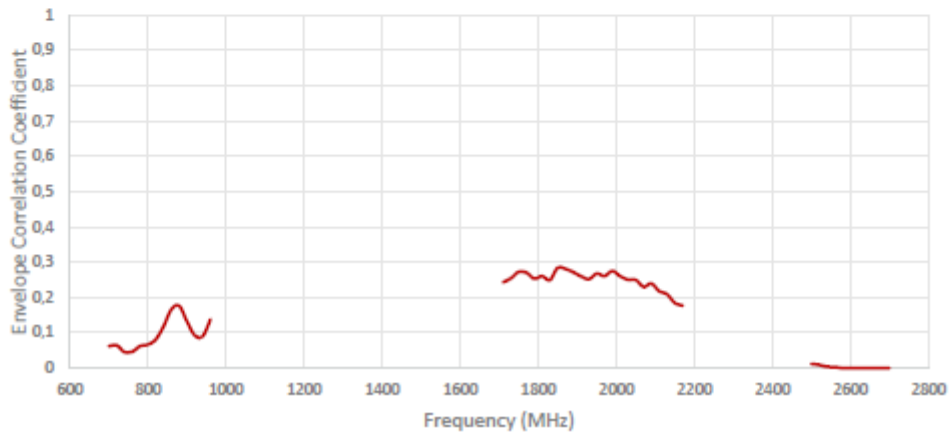


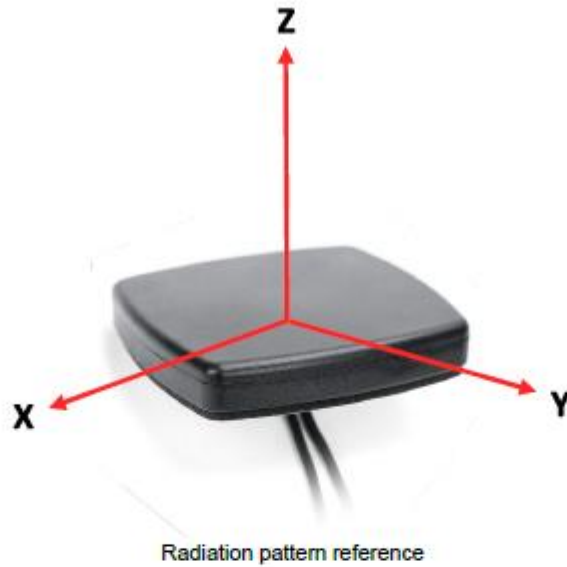


**ISOLATION FOR CABLES 1 AND 2**

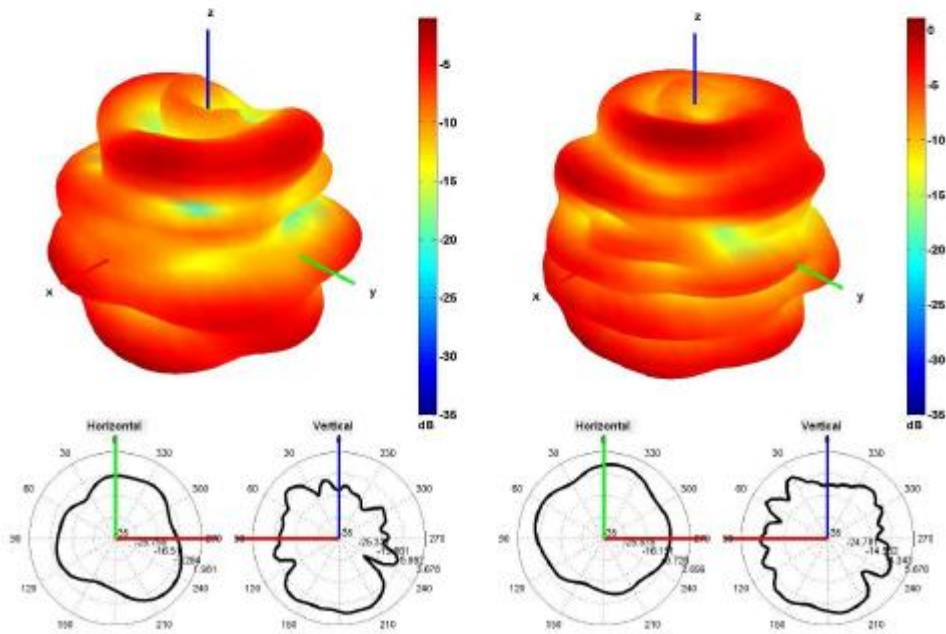


**ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2**



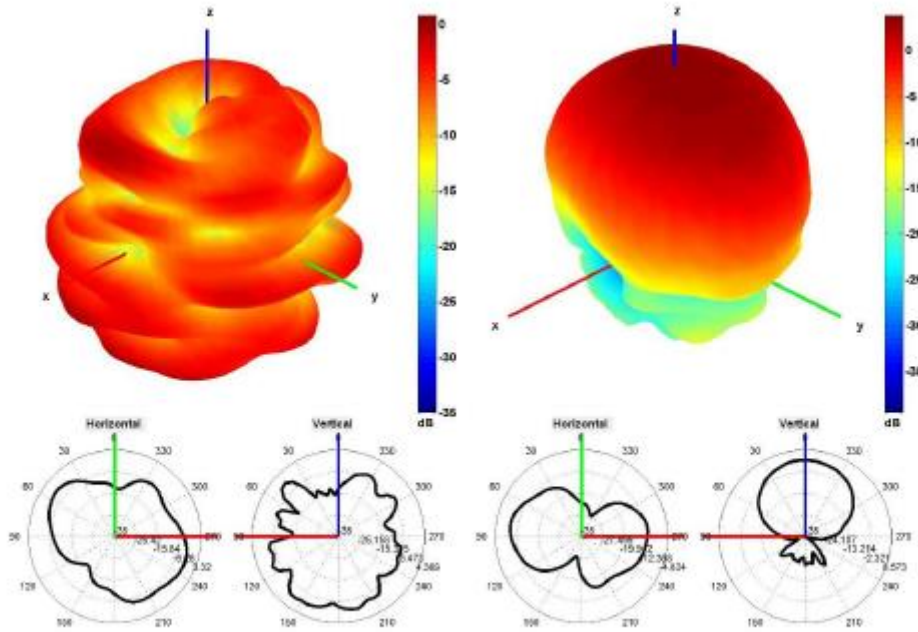


Cable 1: CELLULAR/LTE

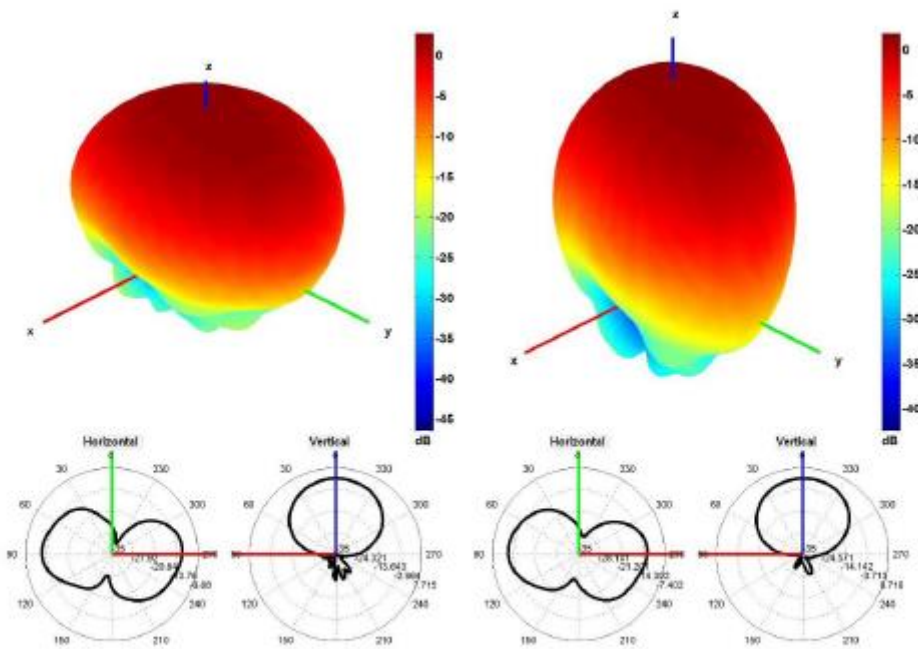


750 and 850 MHz Radiation pattern



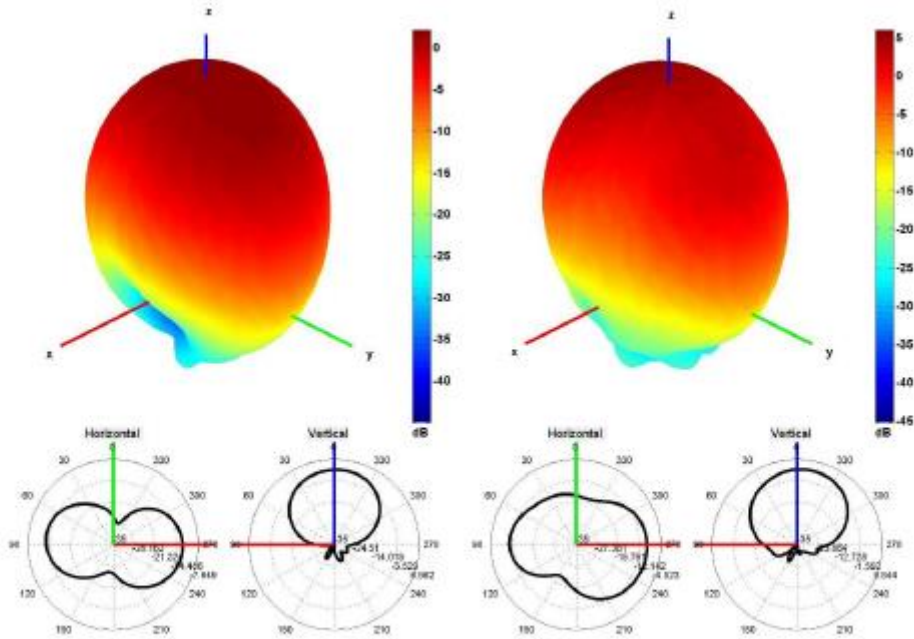


940 and 1750 MHz Radiation pattern



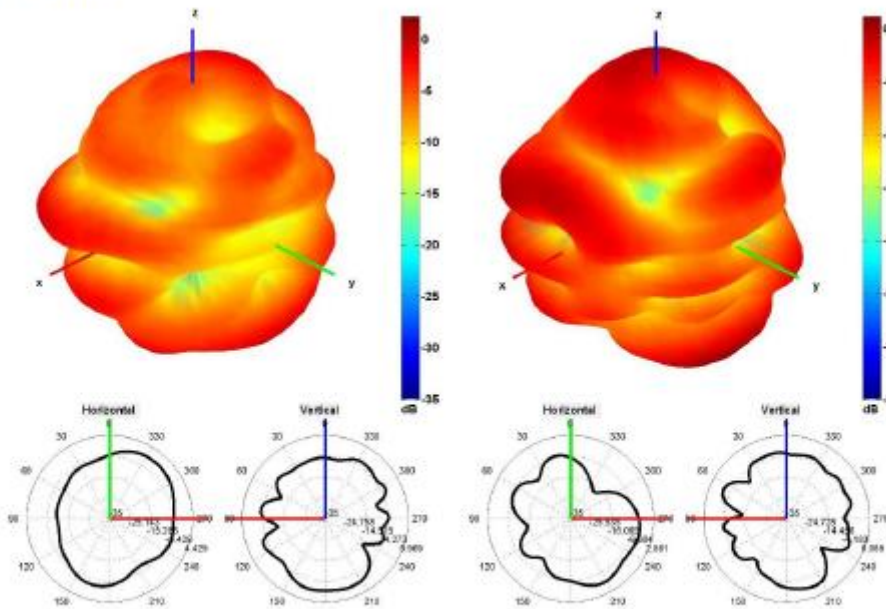
1850 and 1950 MHz Radiation pattern





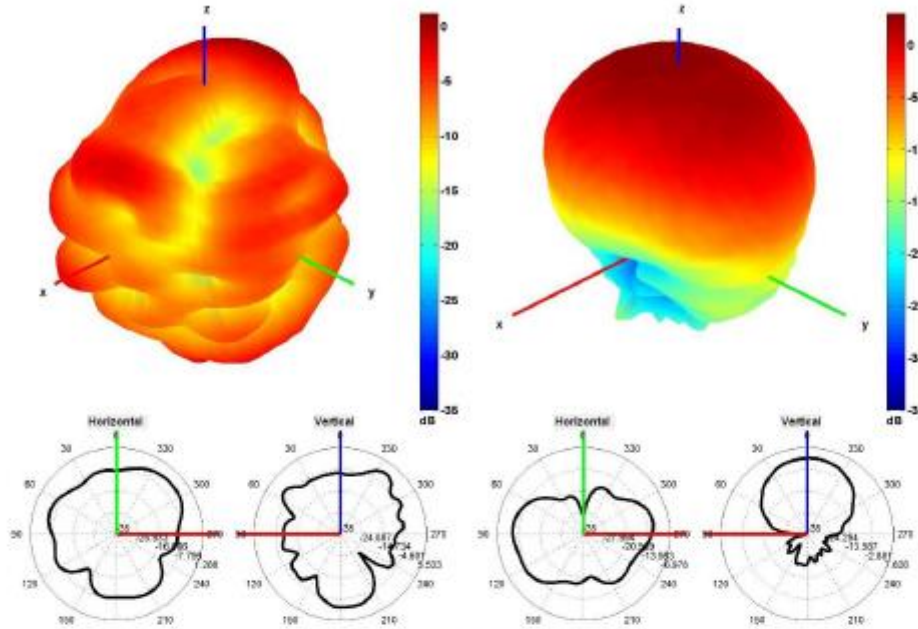
2100 and 2600 MHz Radiation pattern

Table 2: CELLULAR/LTE

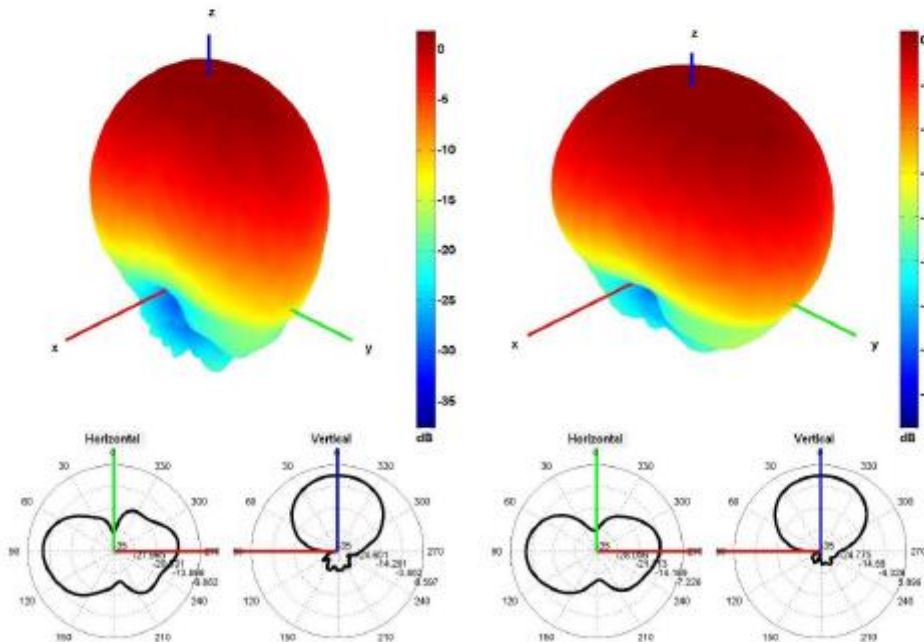


750 and 850 MHz Radiation pattern



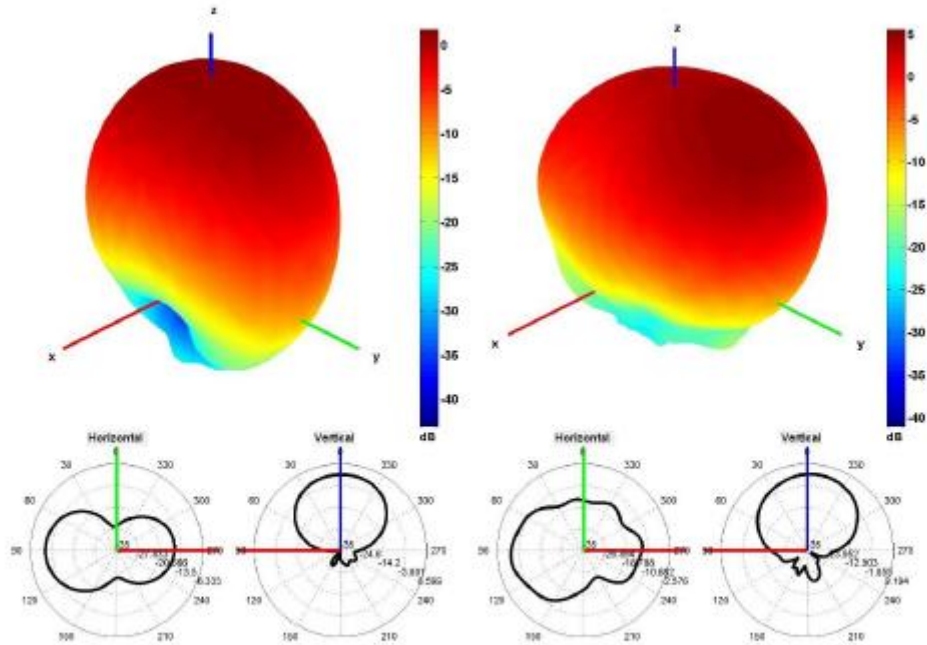


940 and 1750 MHz Radiation pattern



1850 and 1950 MHz Radiation pattern





2100 and 2600 MHz Radiation pattern

