

AMC-ANT-2J8606BGF

Cellular, 2.4GHz ISM and GNSS screw mount antenna

Features

- **Cable 1: Cellular**
 - 824 – 960MHz
 - 1710 – 2170MHz
- **Cable 2: 2.4GHz ISM**
 - 2410 – 2490MHz
- **Cable3: GPS/Galileo/QZSS/GLONASS**
 - 1575 – 1610MHz
- Screw mount
- Anti-rotation mechanism
- Ground plane dependent
- Certificates: IP67, IP69
- Dimensions: 98 x 60 46mm
- Customisable cable and connector



1. Antenna and electrical specifications

Cable 1

| Parameters | Cellular Antenna | |
|----------------------|--|---------------------|
| Standards | 2G and 3G | |
| Band (MHz) | 850/900 | 1700/1800/1900/2100 |
| Frequency (MHz) | 824 - 960 | 1710 - 2170 |
| Return Loss (dB) | ~-7.4 | ~-10.7 |
| VSWR | ~3.0:1 | ~1.9:1 |
| Efficiency (%) | ~11.3 | ~20.4 |
| Peak Gain (dBi) | ~5.1 | ~0.1 |
| Average Gain (dB) | ~-11.2 | ~-7.3 |
| Impedance (Ohms) | 50 | |
| Polarisation | Linear | |
| Radiation Pattern | Omni-directional | |
| Max. Input Power (W) | 100 | |
| Connector Type | SMA male standard (other connectors available) | |
| Cable Length | 300cm standard (other lengths available) | |
| Cable Type | RG174 standard (other cables available) | |



Cable 2

| | |
|-----------------------------|---|
| Parameters | 2.4GHz ISM Antenna |
| Standards | Wi-Fi, Bluetooth, ZigBee, ISM |
| Band (GHz) | 2.4 |
| Frequency (MHz) | 2410 - 2490 |
| Return Loss (dB) | ~-14.2 |
| VSWR | ~1.5:1 |
| Efficiency (%) | ~27.4 |
| Peak Gain (dBi) | ~0.4 |
| Average Gain (dB) | ~-5.6 |
| Impedance (Ohms) | 50 |
| Polarisation | Linear |
| Radiation Pattern | Omni-directional |
| Max. Input Power (W) | 25 |
| Connector Type | RP-SMA male standard (other connectors available) |
| Cable Length | 300cm standard (other lengths available) |
| Cable Type | RG174 standard (other cables available) |

Antenna measurement conditions:

Mounted on 30 x 30cm metal plate

200cm of RG174 cable

Measured in certified CTIA 3D anechoic chamber



Cable 3

| Parameters | GPS/GLONASS Antenna | |
|------------------------|--|-------------|
| Standards | GPS/GLONASS | |
| Band (MHz) | 1575 | 1602 |
| Frequency (MHz) | 1575.42 | 1598 - 1610 |
| Return Loss (dB) | <-14 | |
| VSWR | <1.2:1 | |
| Impedance (Ohms) | 50 | |
| Polarisation | RHCP | |
| Radiation Pattern | Hemispherical | |
| SAW Filter | Pre-filter | |
| Active Gain (dB) | 26 @ 3V / 27 @ 5V | |
| Noise Figure (dB) | 1.2 | |
| Voltage (V) | 2.7 – 5.5 | |
| Current (mA) | 15 - 25 | |
| Power Consumption (mW) | 40 - 137 | |
| Connector Type | SMA male standard (other connectors available) | |
| Cable Length | 300cm standard (other lengths available) | |
| Cable Type | RG174 standard (other cables available) | |

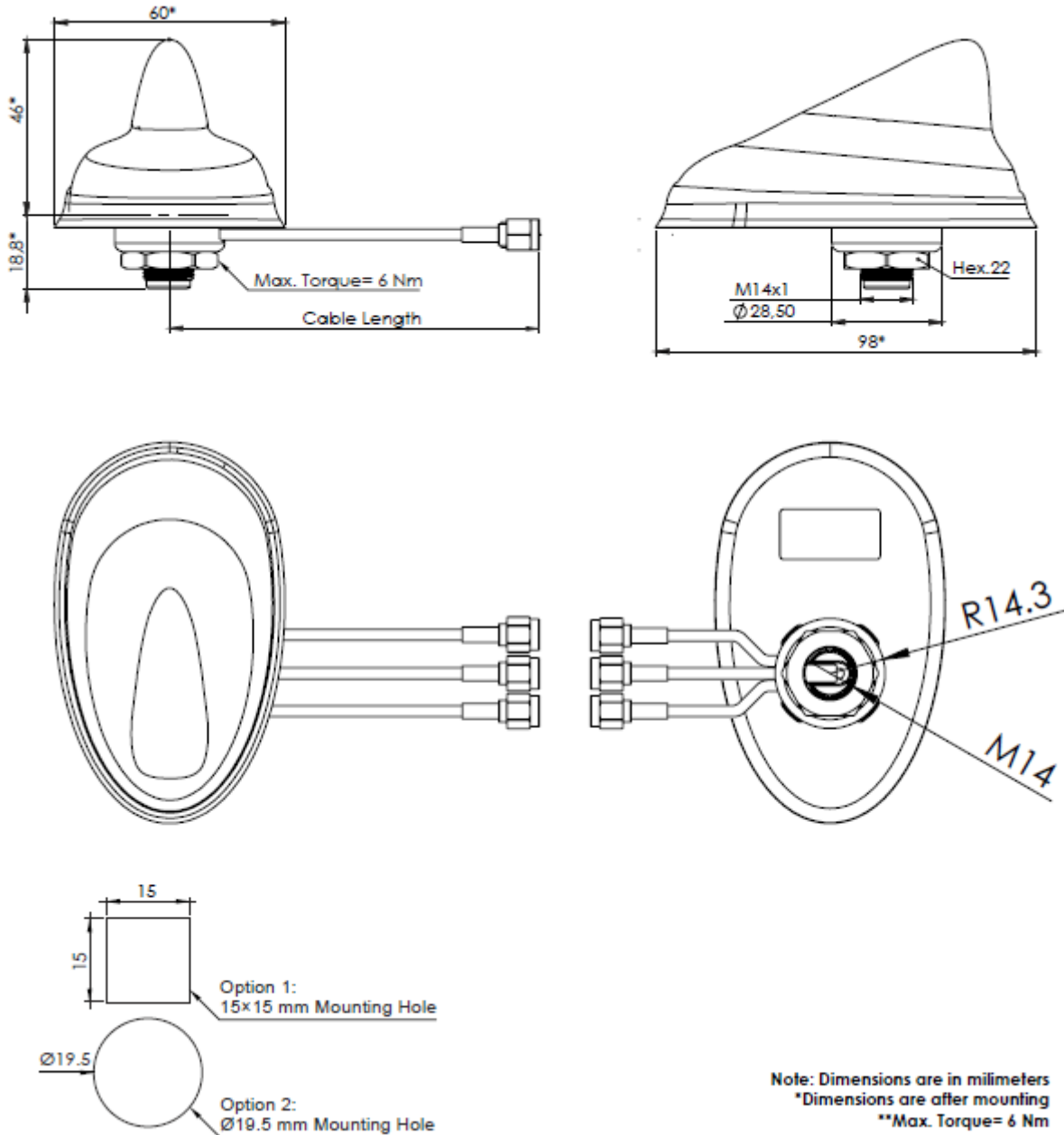


2. Mechanical and environmental specifications

| | |
|-----------------------------------|--------------|
| Mounting Type | Screw mount |
| Dimensions (mm) | 98 x 60 x 46 |
| Max. Tighten Torque (Nm) | 6 |
| Radome | ASA |
| Radome Colour | Black |
| Antenna Base | Zamak |
| Gasket | TPE |
| Operating Temperature (°C) | -40 to +85 |
| Storage Temperature (°C) | -40 to +85 |
| Substance Compliance | RoHS |
| Certificates | IP67, IP69 |

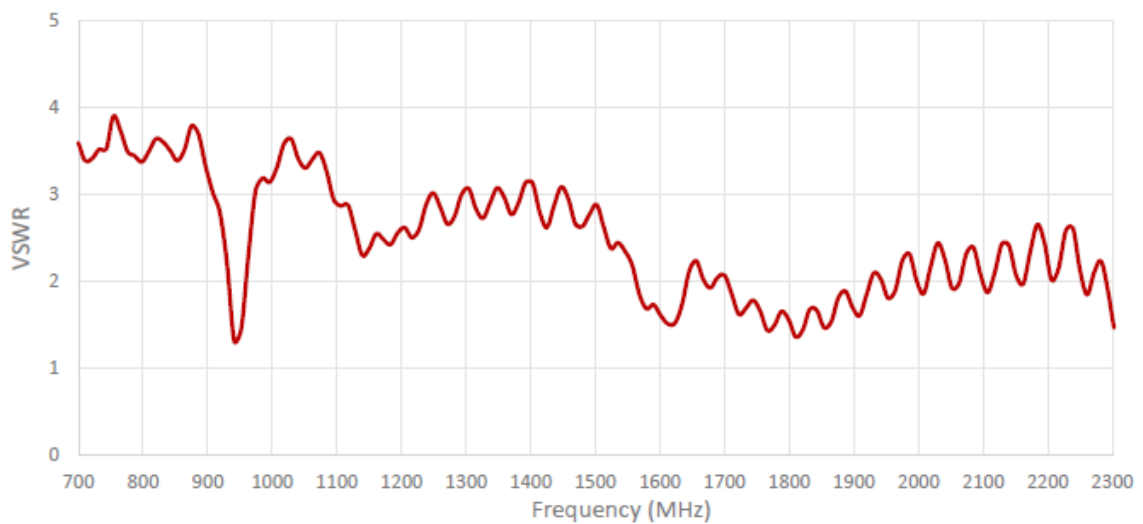
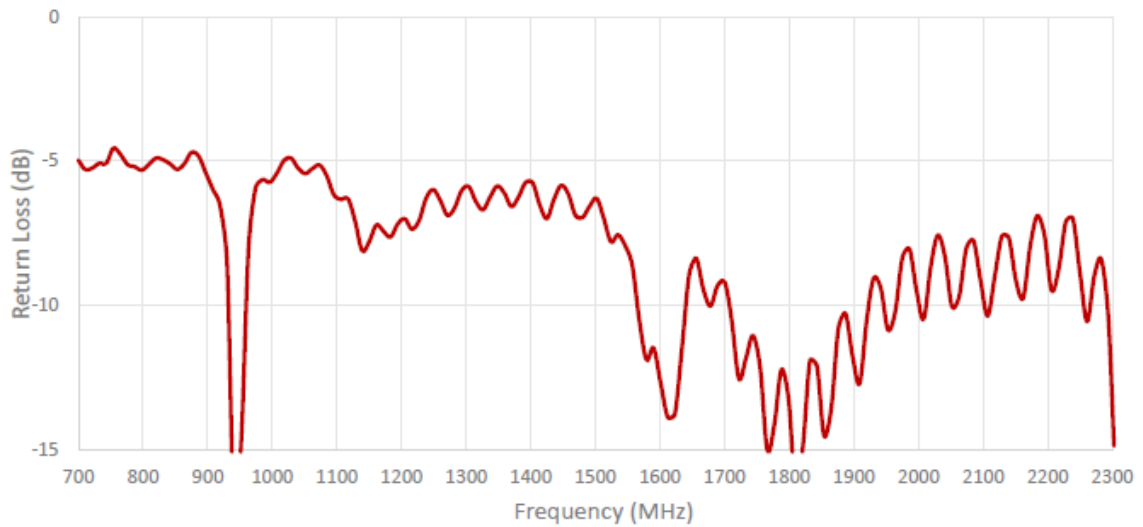


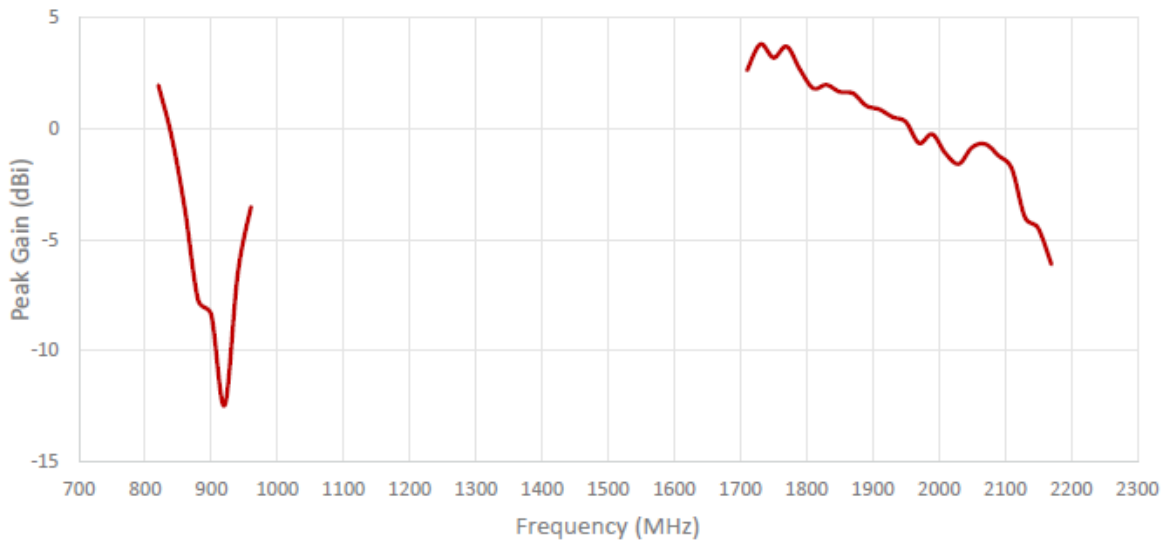
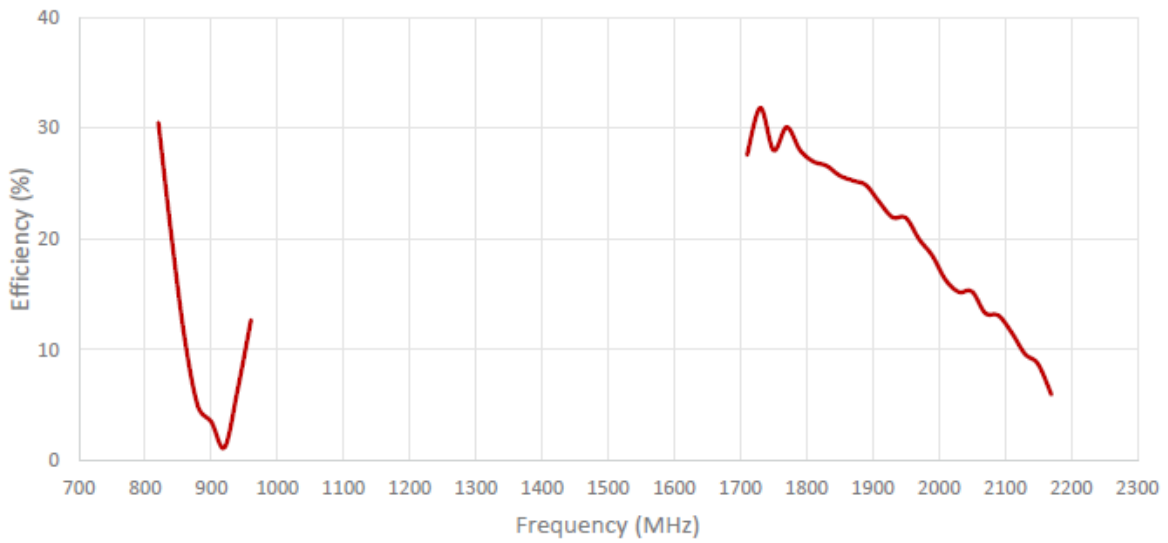
3. Antenna drawings



4. Antenna parameters

Cable 1: Cellular





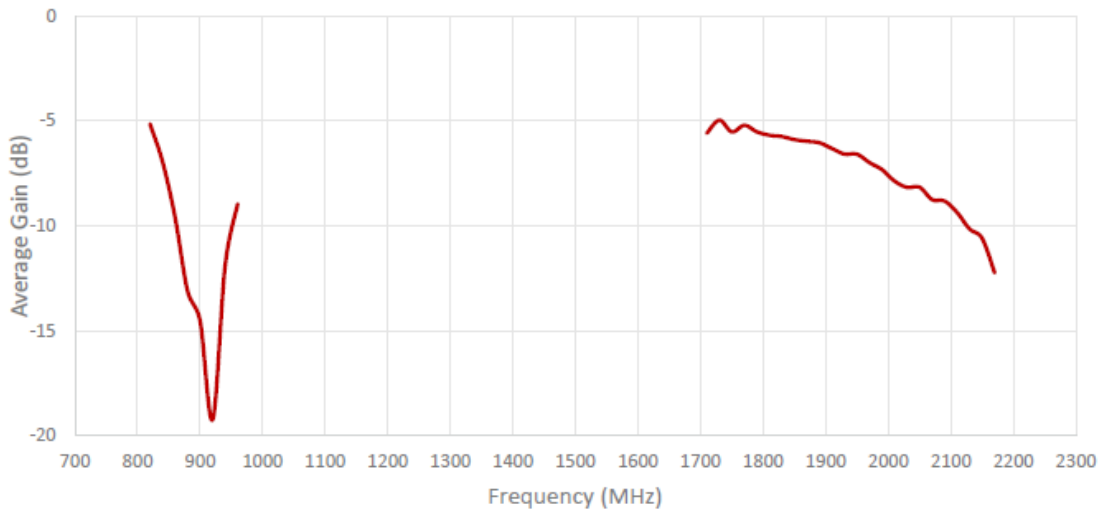
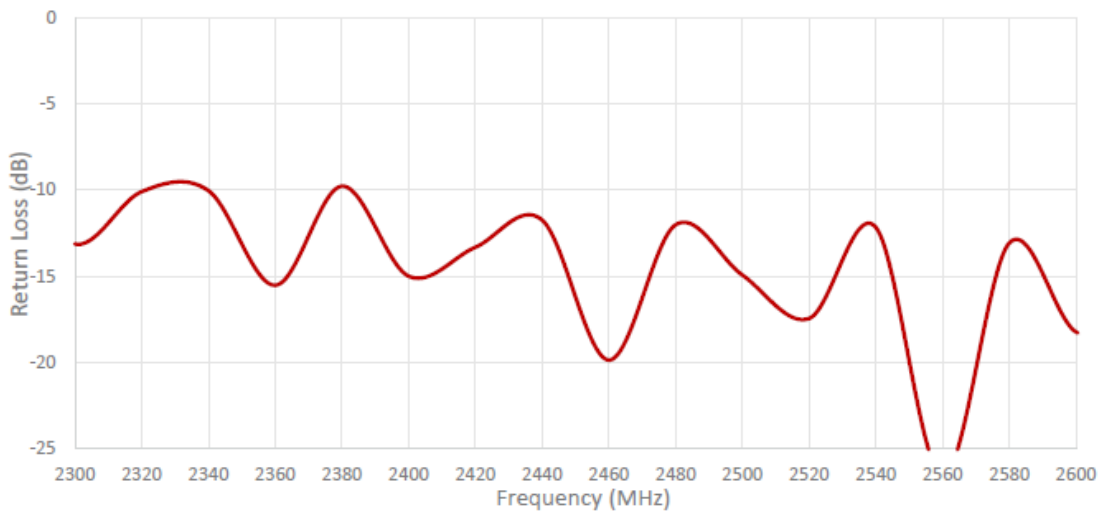
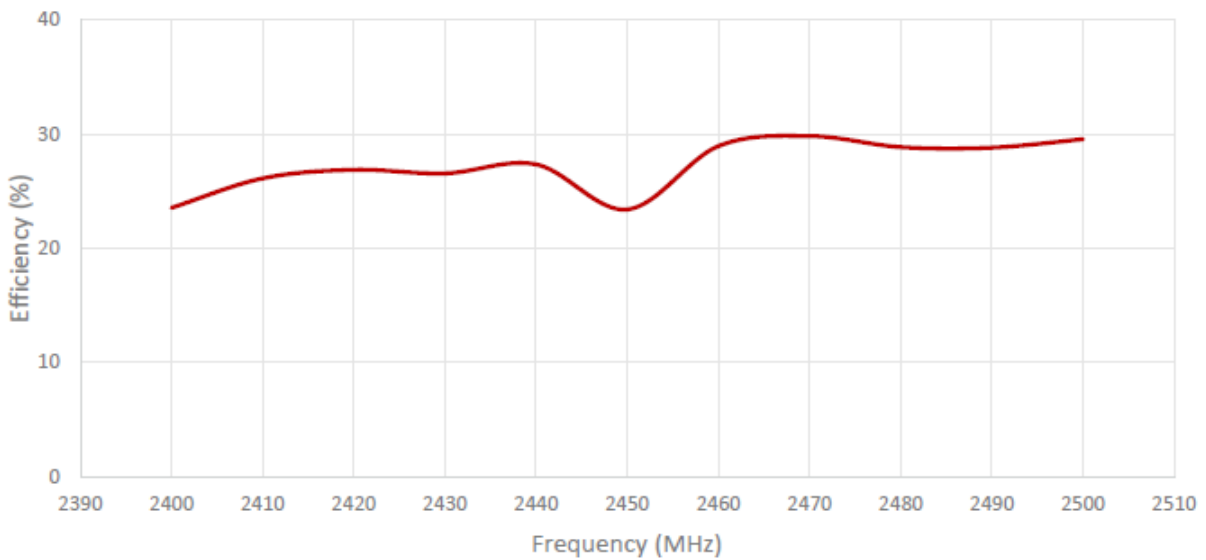
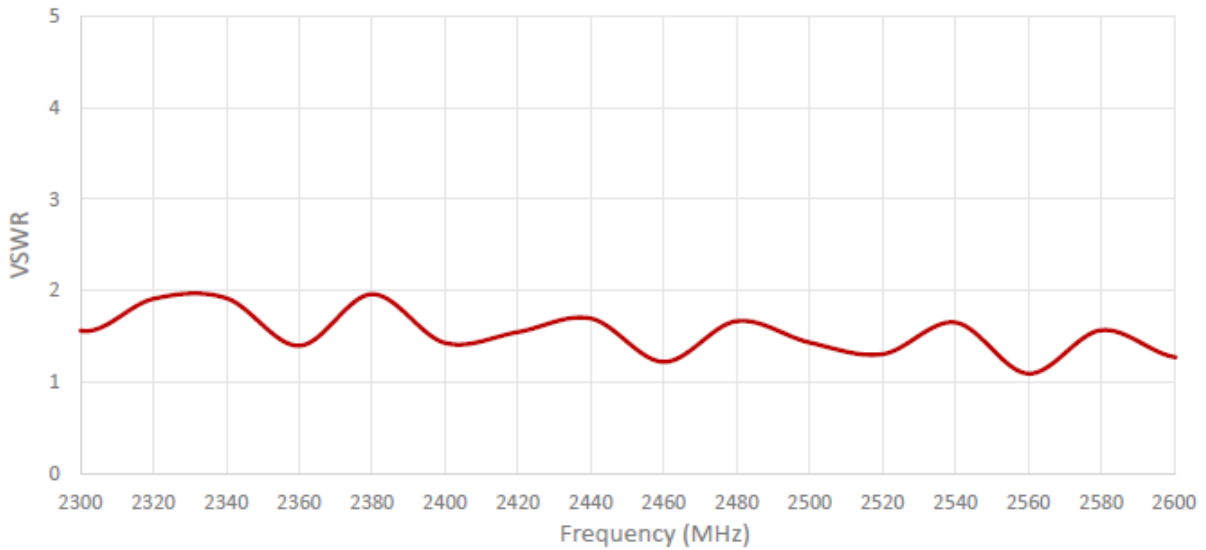
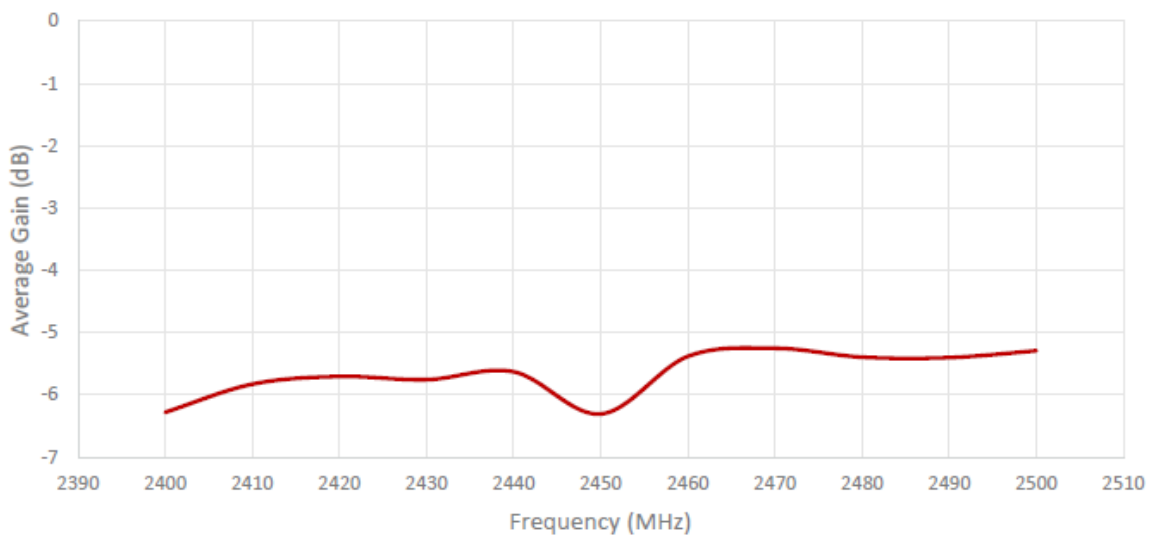
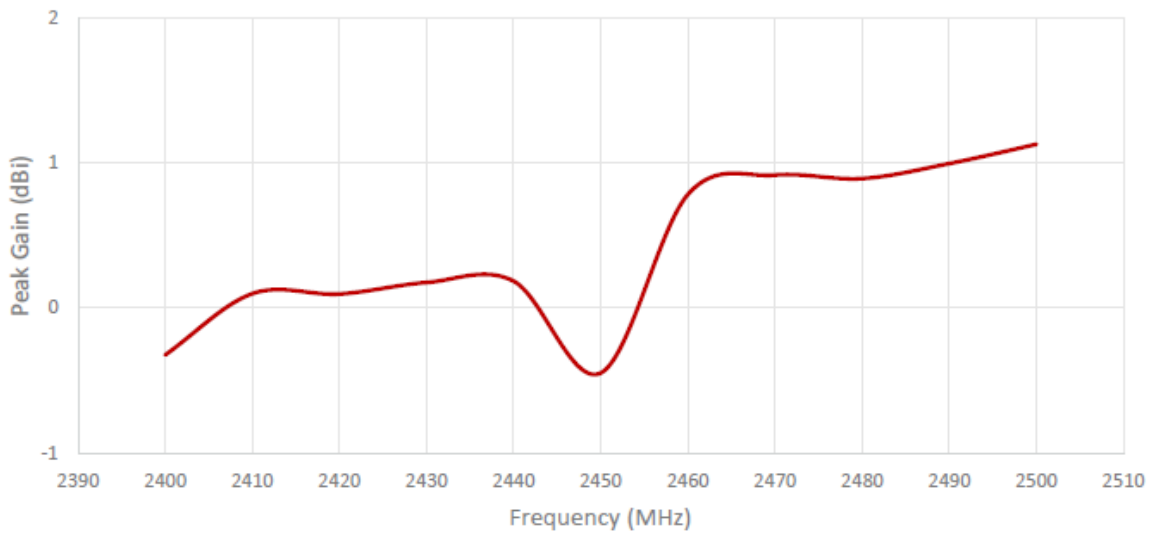
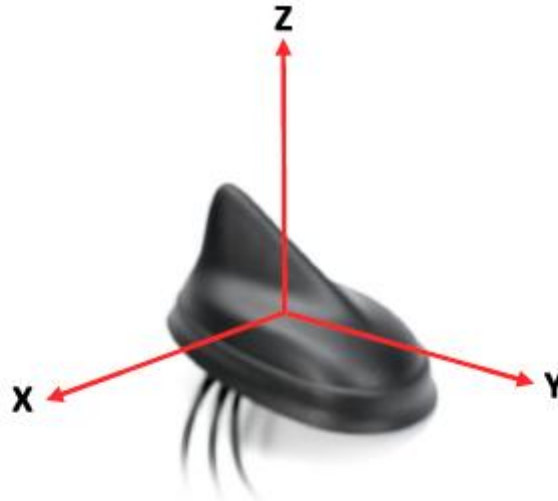


Table 2: 2.4 GHz ISM



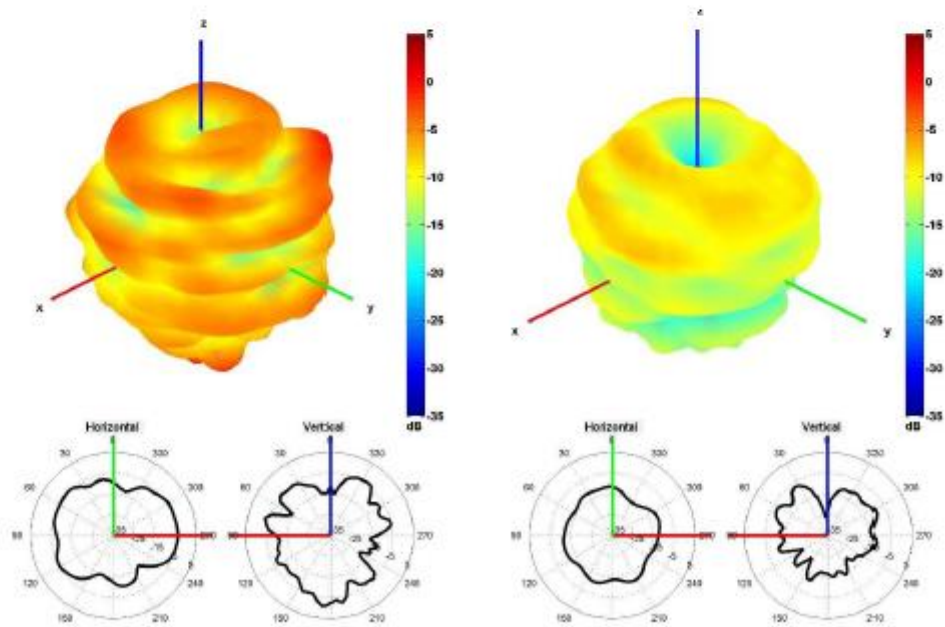






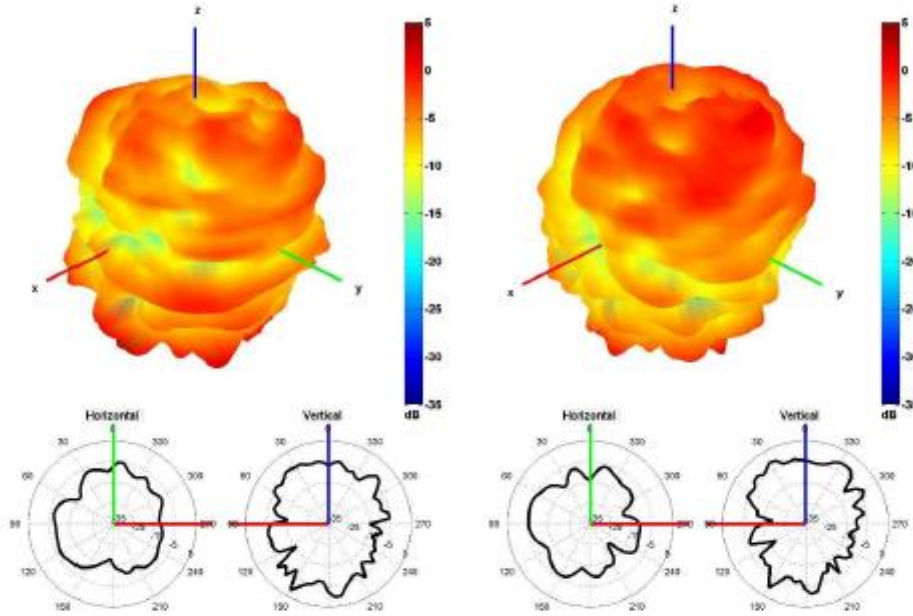
Radiation pattern reference

Table 1: CELLULAR

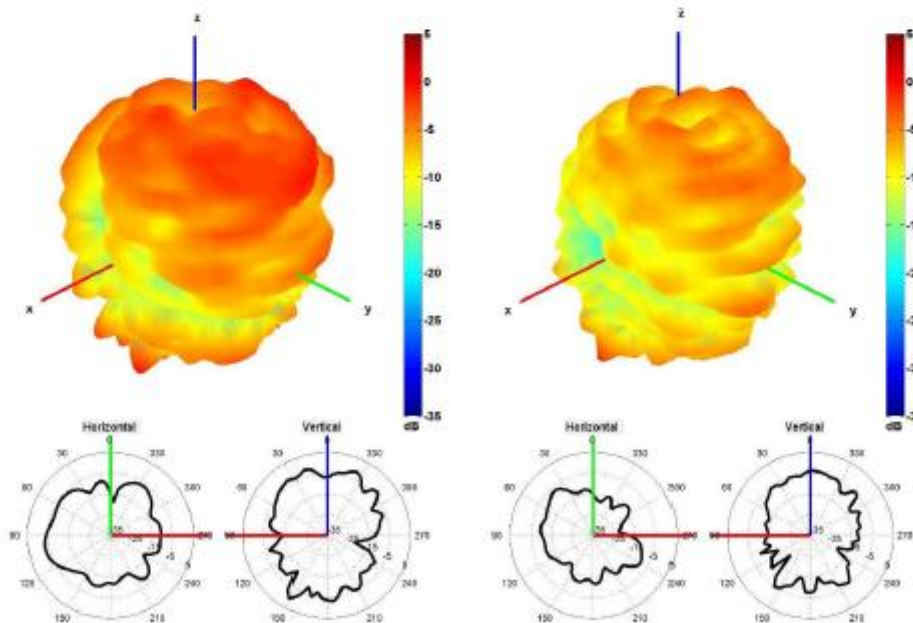


850 and 940 MHz Radiation pattern





1750 and 1850 MHz Radiation pattern



1950 and 2100 MHz Radiation pattern



Cable 2: 2.4 GHz ISM

