

2J7024Ba

CELLULAR/LTE MIMO

Key Features

Cable 1 - 2: CELLULAR / LTE

Screw Mount

Heavy Duty antenna

High Performance

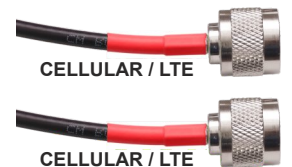
Ground Plane Independent

Anti-Rotation Mounting

Customizable Cable and Connector

Dimensions: Ø 96 x H 90 mm

Certificates: IP67, IP69, IK09



Description

Compact heavy duty antenna designed for 4G LTE suitable for wide range of applications within industry. Antenna is made with specific anti-rotation mounting system. Housing of the antenna is certified for standards of IP67 for water resistance, IK09 for high impact resistance and IP69 standard for high pressure and hot water ingress.



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) | ~-10.6 | ~-15.6 | ~-11.7 |
| VSWR | ~1.9:1 | ~1.6:1 | ~1.7:1 |
| Efficiency (%) | ~57 | ~57 | ~47 |
| Peak Gain (dBi) | ~-2.1 | ~-4.2 | ~-3.1 |
| Average Gain (dB) | ~-2.4 | ~-2.5 | ~-3.3 |
| Impedance (Ohm) | 50 | | |
| Polarisation | Linear | | |
| Radiation Pattern | Omni-Directional | | |
| Max. Input Power (W) | 25 | | |
| Connector Type | Most RF Connectors (SMA-Male Standard) | | |
| Cable Length | Any Cable Length (300 cm Standard) | | |
| Cable Type | Other Cables Available (LMR195 Standard) | | |

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) | ~-11.0 | ~-14.3 | ~-16.5 |
| VSWR | ~1.9:1 | ~1.6:1 | ~1.4:1 |
| Efficiency (%) | ~63 | ~54 | ~57 |
| Peak Gain (dBi) | ~-3.0 | ~-3.2 | ~-4.0 |
| Average Gain (dB) | ~-2.0 | ~-2.6 | ~-2.4 |
| Impedance (Ohm) | 50 | | |
| Polarisation | Linear | | |
| Radiation Pattern | Omni-Directional | | |
| Max. Input Power (W) | 25 | | |
| Connector Type | Most RF Connectors (SMA-Male Standard) | | |
| Cable Length | Any Cable Length (300 cm Standard) | | |
| Cable Type | Other Cables Available (LMR195 Standard) | | |

Antenna Measurement Conditions:

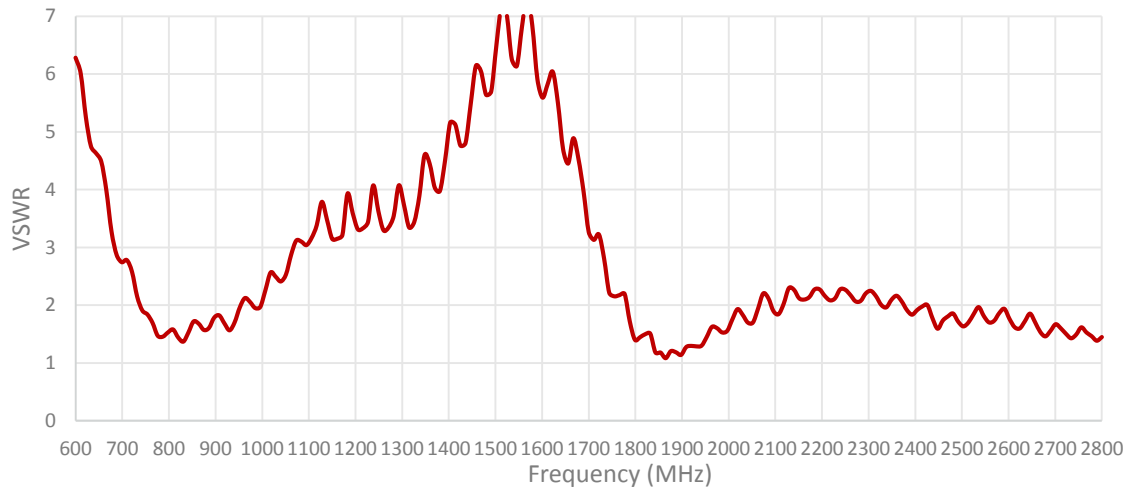
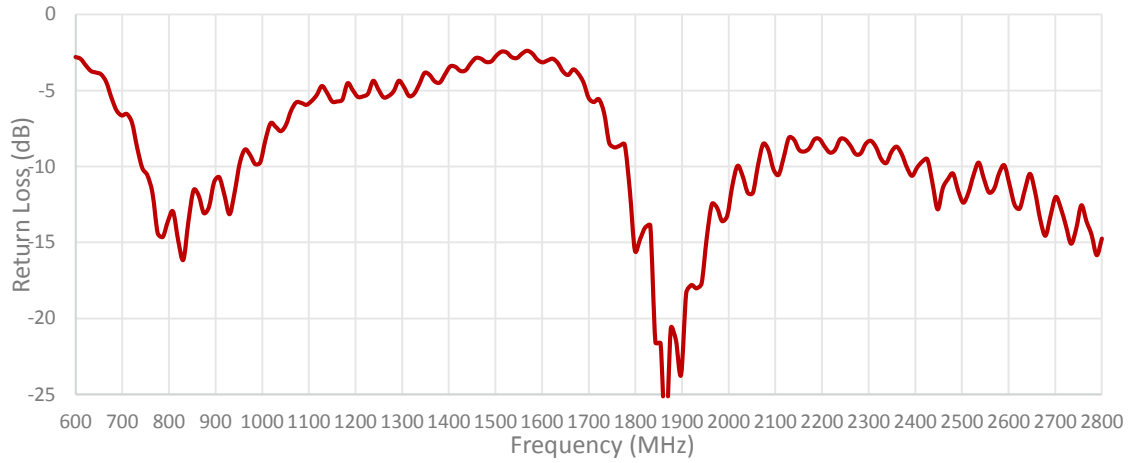
Mounted on Metal Plate of 30 x 30 cm
 200 cm of LMR195 Cable
 Measured in Certified CTIA 3D Anechoic Chamber

2. Mechanical and environmental specifications

| Specifications | 2J7024Ba |
|----------------------------------|------------------|
| Mounting Type | Screw Mount |
| Dimensions (mm) | Ø 96 x H 90 |
| Max. Tighten Torque (Nm) | 15 Nm |
| Radome | ASA UV Stable |
| Radome color | White, Black |
| Antenna Base | Alluminium alloy |
| Operating Temperature (C) | -40 to +85 |
| Storage Temperature (C) | -40 to +85 |
| Substance Compliance | RoHS |
| Certificates | IP67, IP69, IK09 |

3. Antenna parameters

Cable 1: CELLULAR/LTE



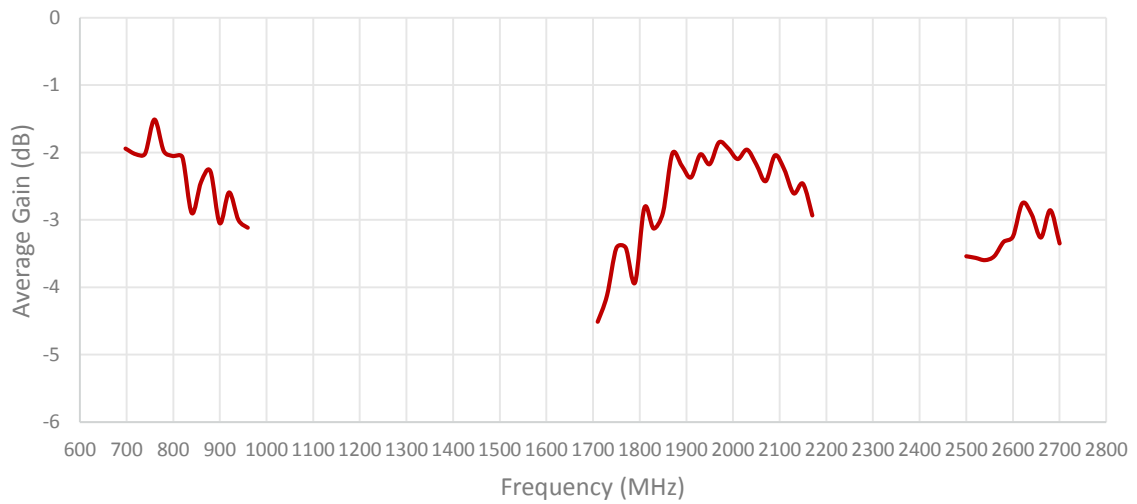
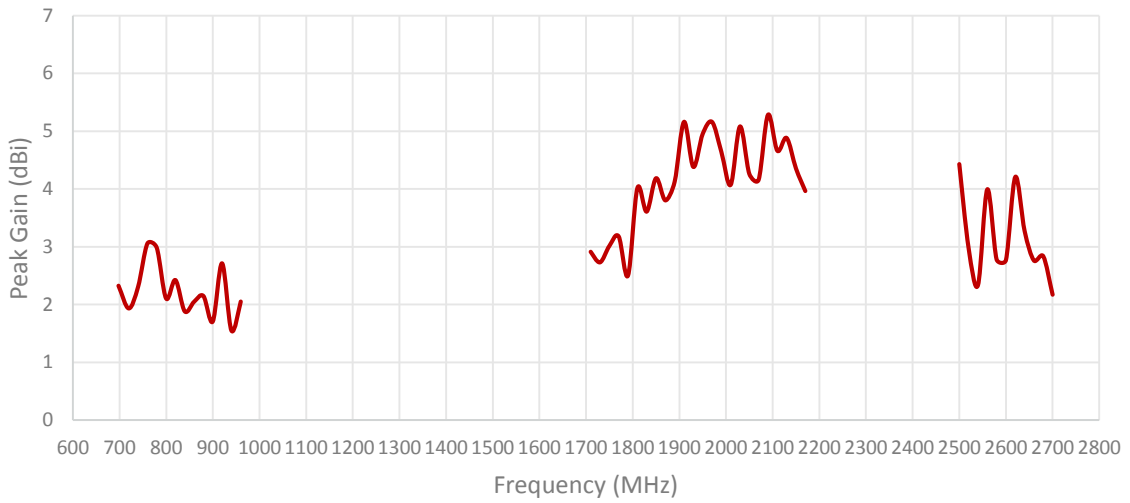
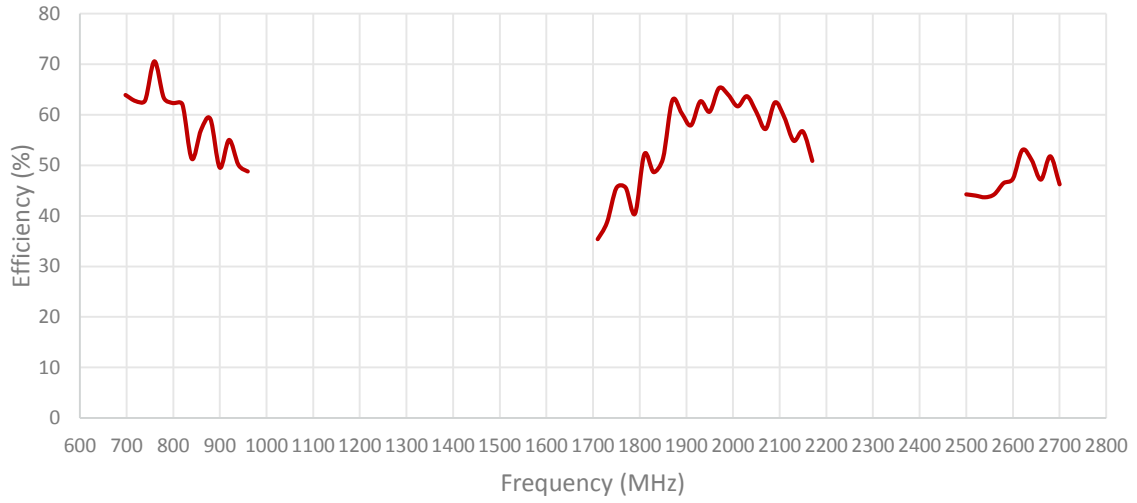
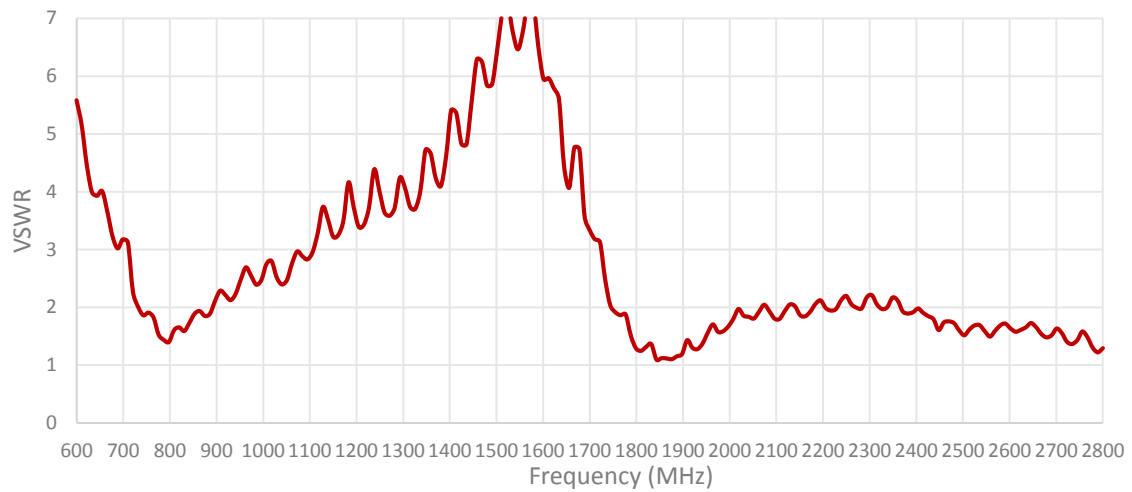
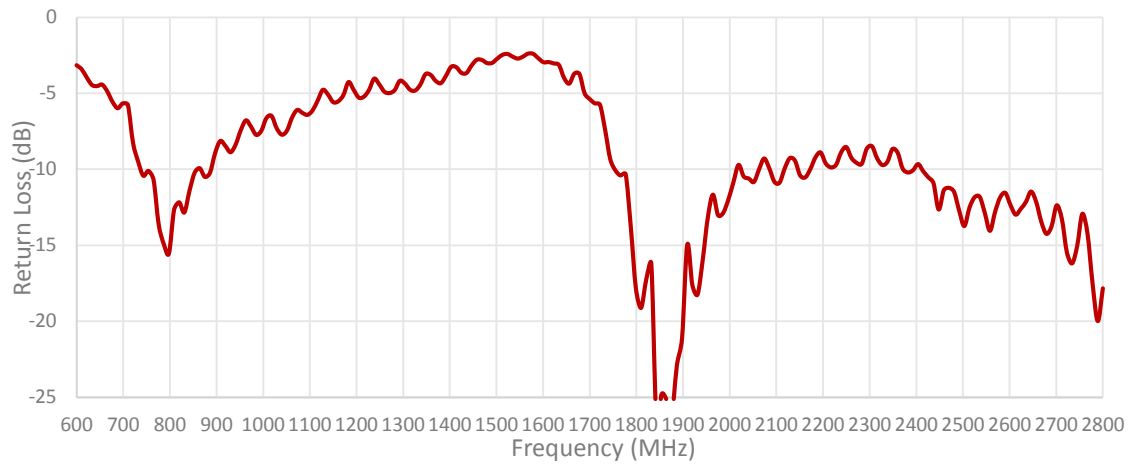
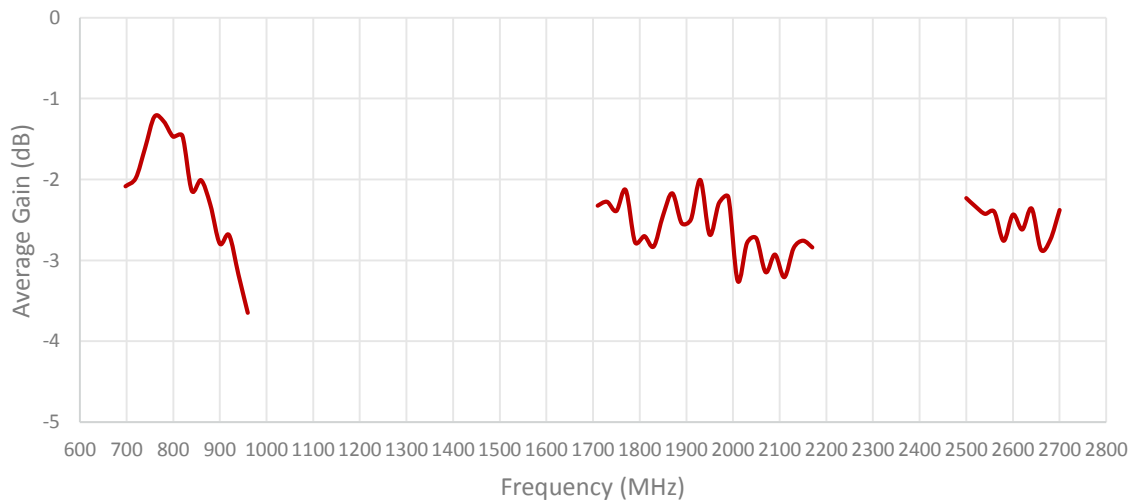
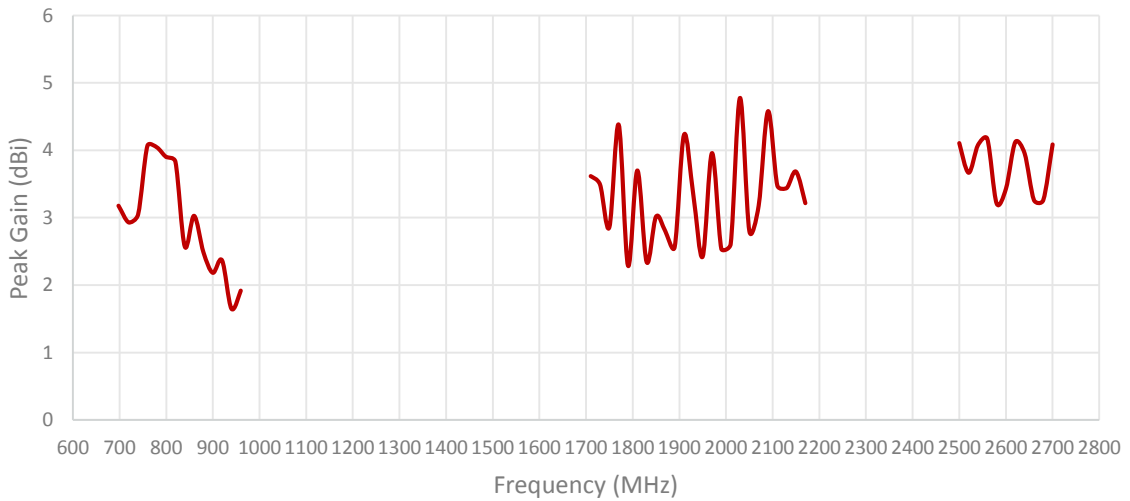
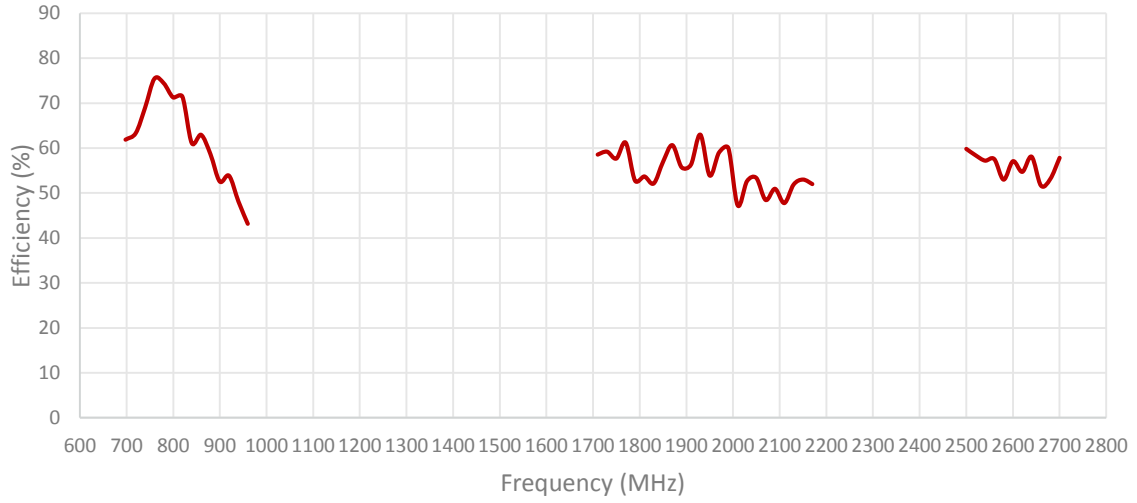
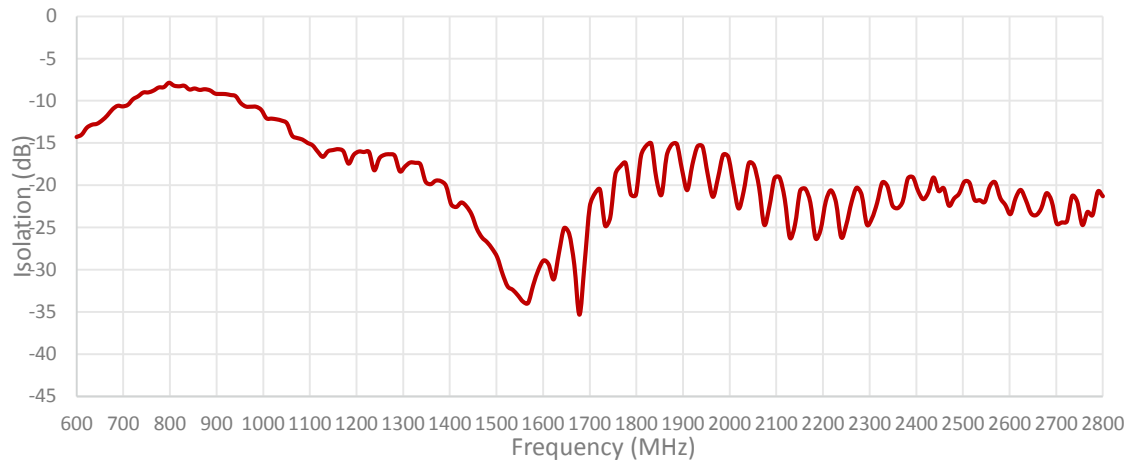


Table 2: CELLULAR/LTE

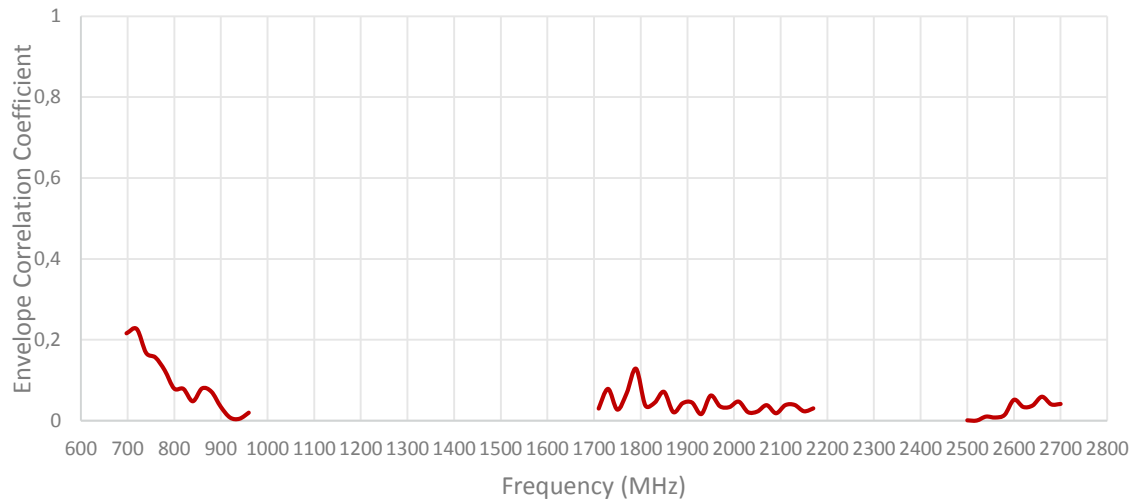


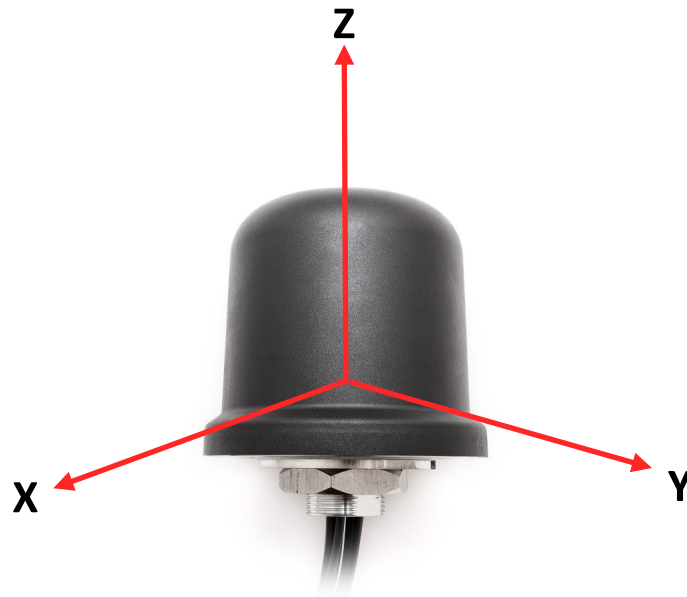


ISOLATION FOR CABLES 1 AND 2



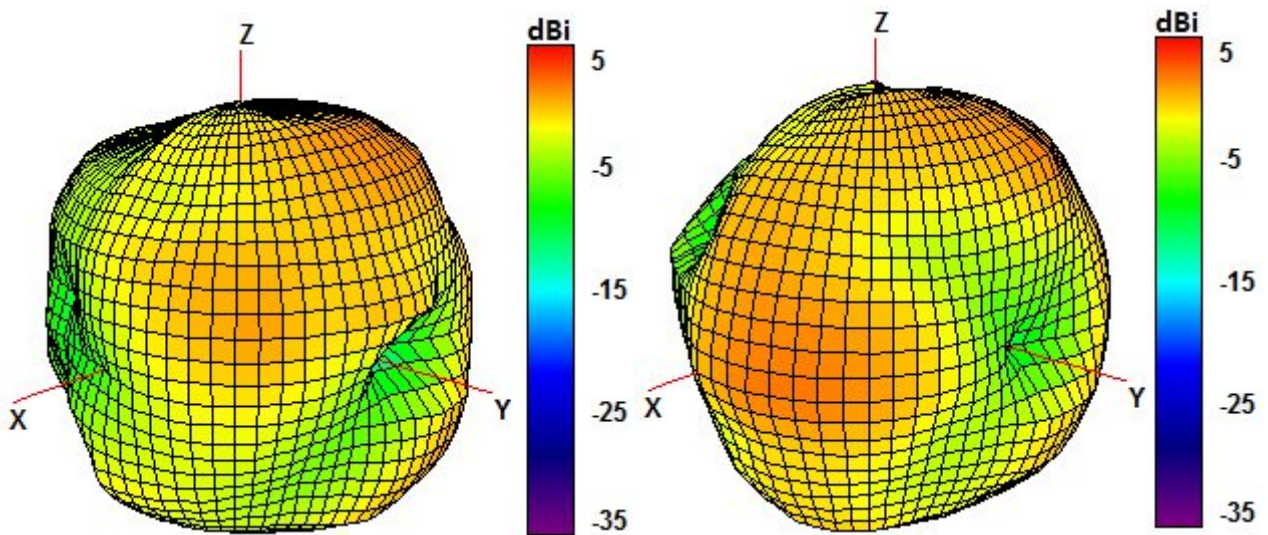
ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2



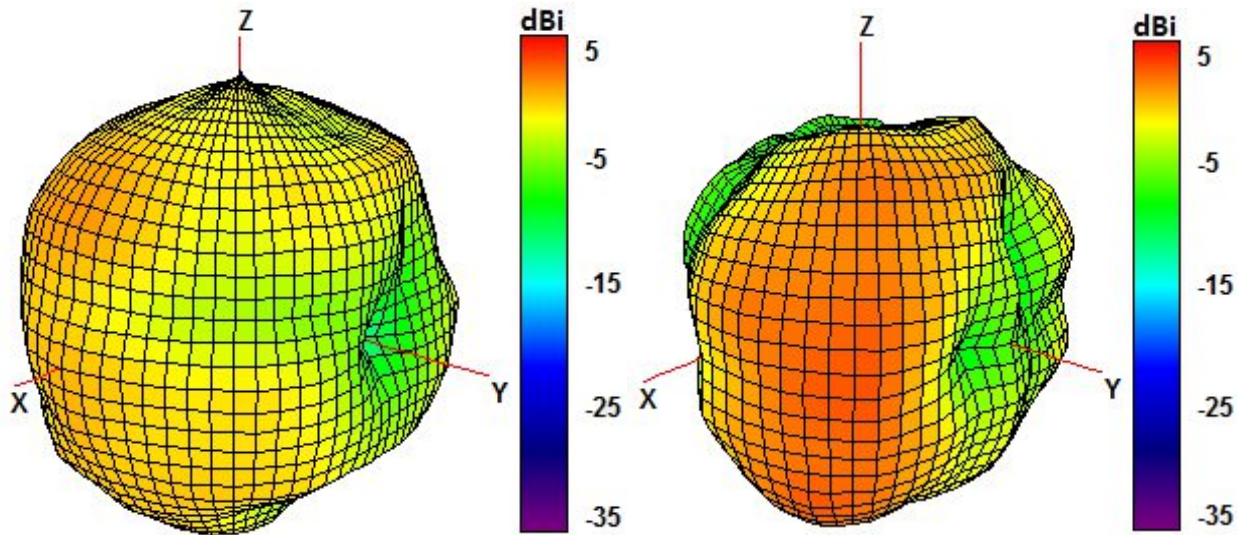


Radiation pattern reference

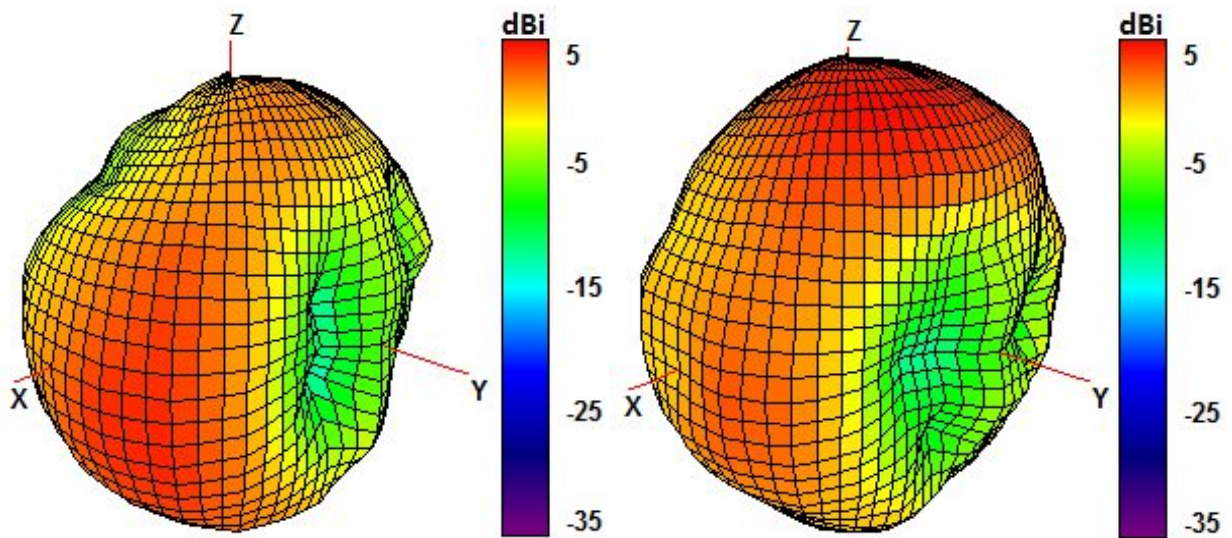
Cable 1: CELLULAR/LTE



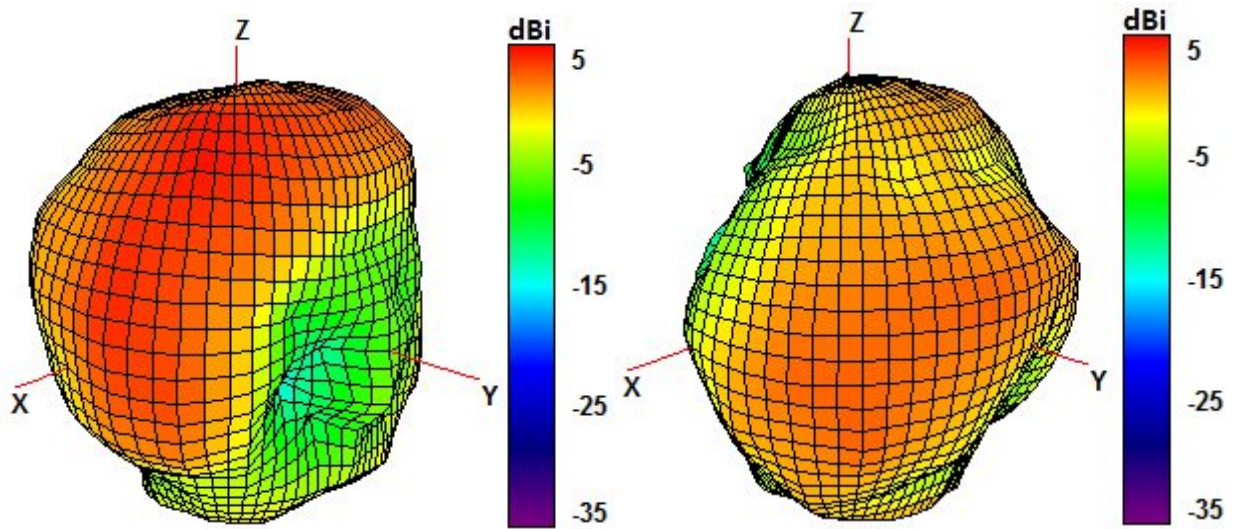
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

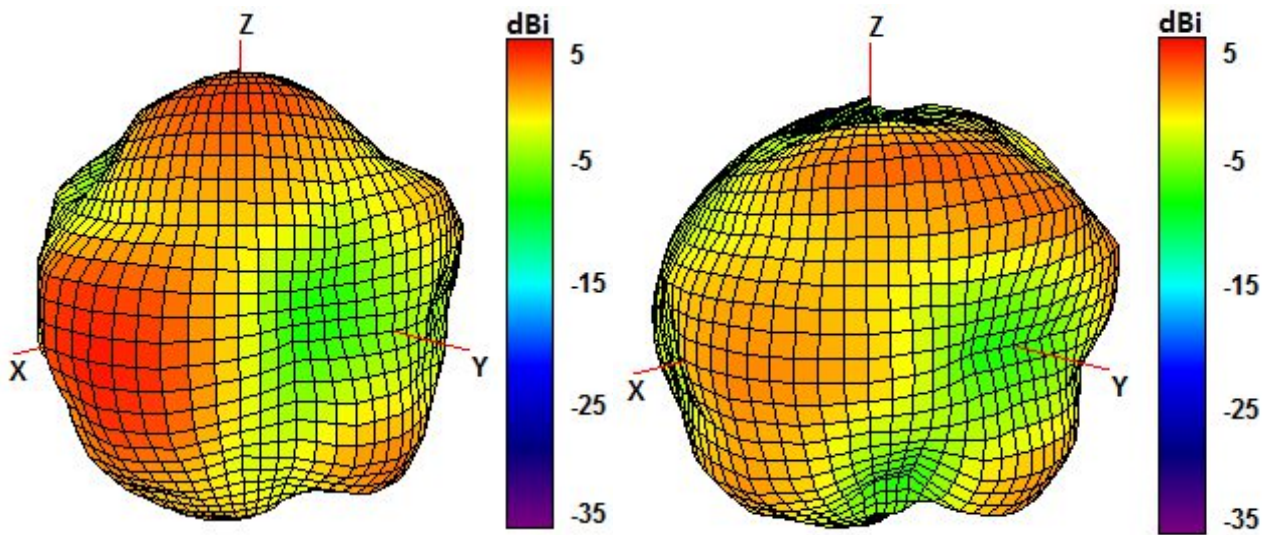


1850 and 1950 MHz Radiation pattern

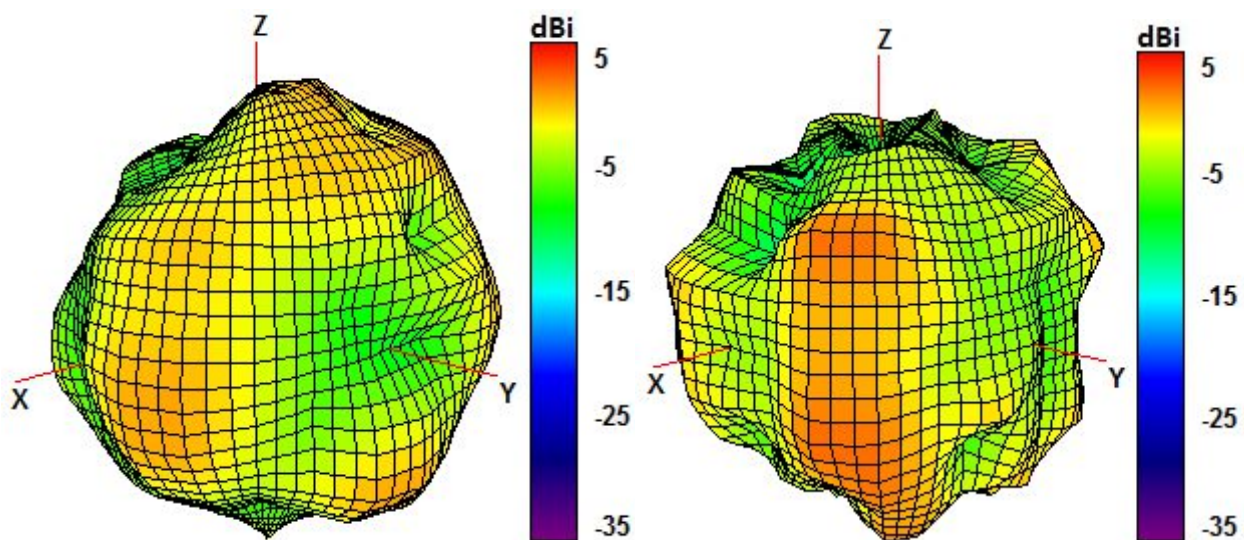


2100 and 2600 MHz Radiation pattern

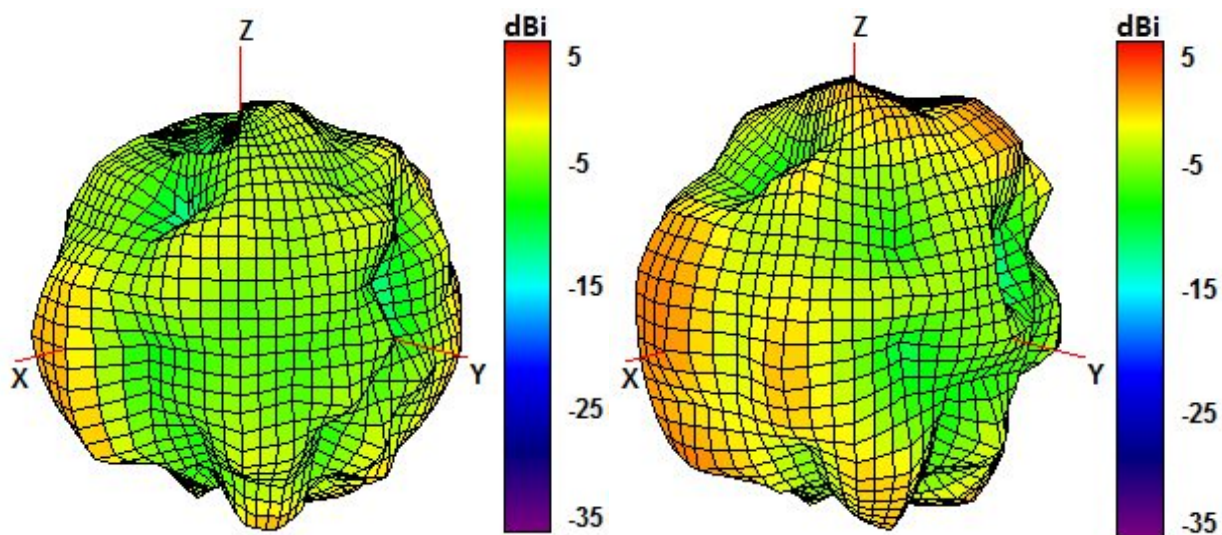
Cable 2: CELLULAR/LTE



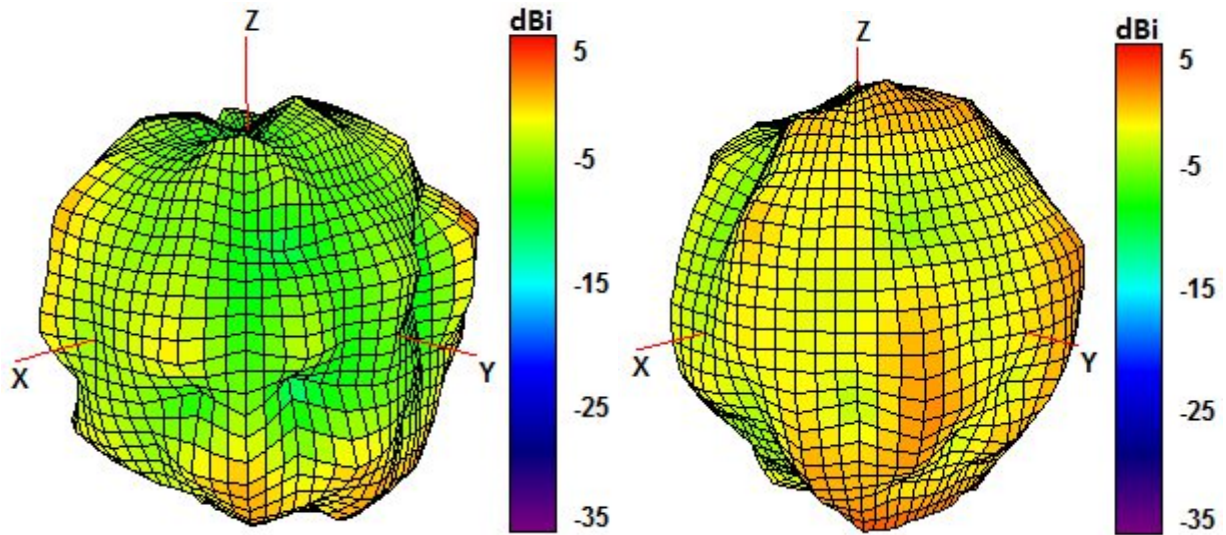
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

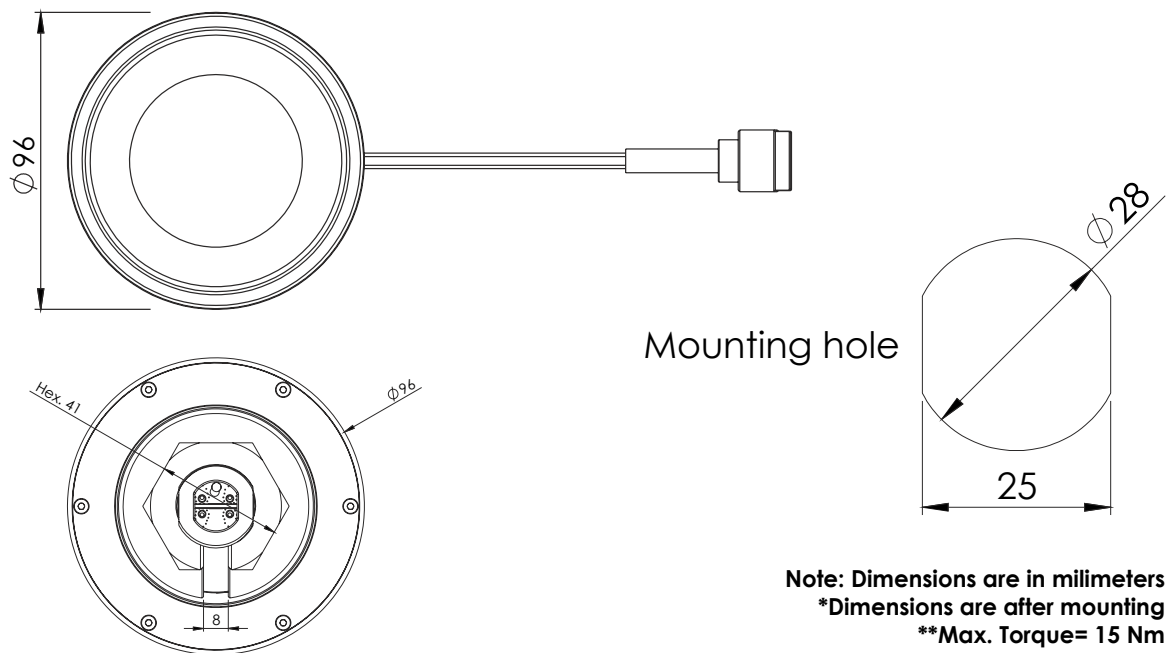
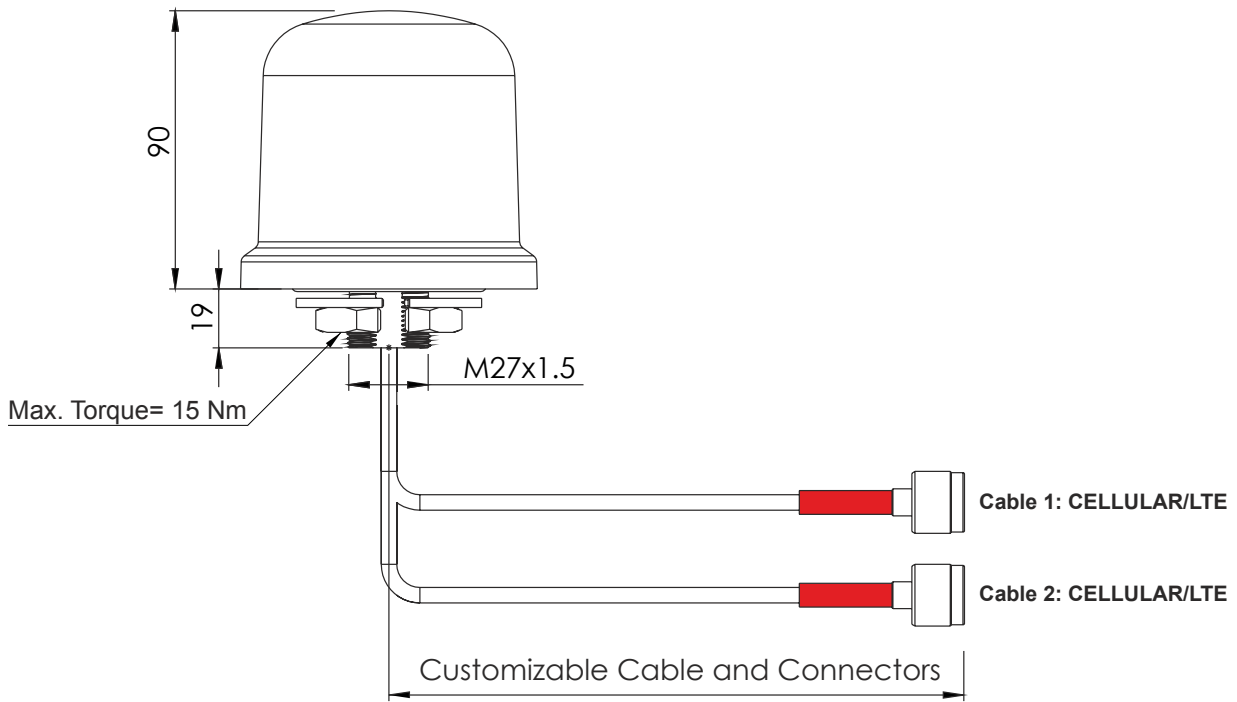


1850 and 1950 MHz Radiation pattern

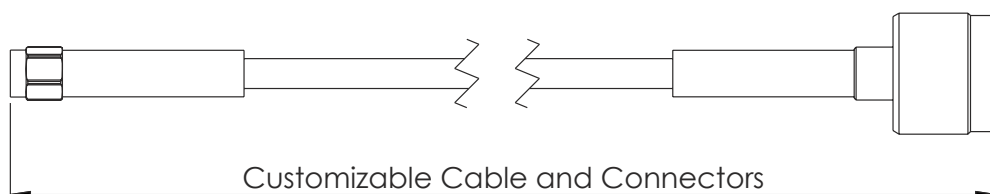


2100 and 2600 MHz Radiation pattern

4. Antenna drawings

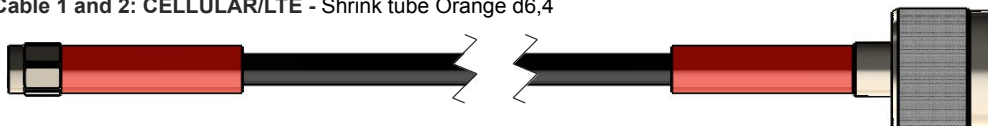


5. Jumper cables drawings - Optional



C318N-LMR195-C91N OST - 2x

Cable 1 and 2: CELLULAR/LTE - Shrink tube Orange d6,4



5. Antenna Images

