

## 2J4847P

Cellular/LTE and 2.4/5.0 GHZ ISM Adhesive Mount

### Key Features

#### Cable 1: CELLULAR/LTE

- 698-960 MHz
- 1710-2170 MHz
- 2500-2700 MHz

#### Cable 2: 2.4/5.0 GHz ISM

- 2410-2490 MHz
- 4920-5925 MHz

Adhesive Mount

Ground Plane Independent

Customizable Cable and Connector

Dimensions 83 x 35 x 13.3 mm

Certificates: IP67, IP69



**Note:** Antenna 2J4847PR equipped with 10K resistor for antenna detection is available.



## 1. Antenna and electrical specifications

**Cable 1**

| Parameters                  | CELLULAR/LTE Antenna                           |                     |           |
|-----------------------------|------------------------------------------------|---------------------|-----------|
| <b>Standards</b>            | 2G,3G and 4G                                   |                     |           |
| <b>Band (MHz)</b>           | 700/850/900                                    | 1700/1800/1900/2100 | 2600      |
| <b>Frequency (MHz)</b>      | 698-960                                        | 1710-2170           | 2500-2700 |
| <b>Return Loss (dB)</b>     | ~-13.1                                         | ~-16.7              | ~-11.6    |
| <b>VSWR</b>                 | ~1.9:1                                         | ~1.4:1              | ~1.8:1    |
| <b>Efficiency (%)</b>       | ~50                                            | ~47                 | ~27       |
| <b>Peak Gain (dBi)</b>      | ~2.0                                           | ~1.0                | ~-0.6     |
| <b>Average Gain (dB)</b>    | ~-3.0                                          | ~-3.2               | ~-5.6     |
| <b>Impedance (Ohm)</b>      | 50                                             |                     |           |
| <b>Polarisation</b>         | Linear                                         |                     |           |
| <b>Radiation Pattern</b>    | Omni-Directional                               |                     |           |
| <b>Max. Input Power (W)</b> | 25                                             |                     |           |
| <b>Connector Type</b>       | SMA-Male Standard (Other Connectors Available) |                     |           |
| <b>Cable Length</b>         | 300 cm Standard (Any Cable Length Available)   |                     |           |
| <b>Cable Type</b>           | LMR100 Standard (Other Cables Available)       |                     |           |

**Cable 2**

| Parameters                  | 2.4/5.0 GHz ISM Antenna                           |           |
|-----------------------------|---------------------------------------------------|-----------|
| <b>Standards</b>            | WiFi, BT, ZigBee, ISM                             |           |
| <b>Band (MHz)</b>           | 2.4 Ghz                                           | 5.0 Ghz   |
| <b>Frequency (MHz)</b>      | 2410-2490                                         | 4920-5925 |
| <b>Return Loss (dB)</b>     | ~-20.5                                            | ~-18.5    |
| <b>VSWR</b>                 | ~1.2:1                                            | ~1.3:1    |
| <b>Efficiency (%)</b>       | ~42                                               | ~27       |
| <b>Peak Gain (dBi)</b>      | ~2.5                                              | ~-0.5     |
| <b>Average Gain (dB)</b>    | ~-3.7                                             | ~-5.6     |
| <b>Impedance (Ohm)</b>      | 50                                                |           |
| <b>Polarisation</b>         | Linear                                            |           |
| <b>Radiation Pattern</b>    | Omni-Directional                                  |           |
| <b>Max. Input Power (W)</b> | 25                                                |           |
| <b>Connector Type</b>       | RP-SMA-Male Standard (Other Connectors Available) |           |
| <b>Cable Length</b>         | 300 cm Standard (Any Cable Length Available)      |           |
| <b>Cable Type</b>           | LMR100 Standard (Other Cables Available)          |           |

### Antenna Measurement Conditions:

Mounted on 30 x 30 x 0.25 cm ABS Plate

200 cm of Cable LMR100

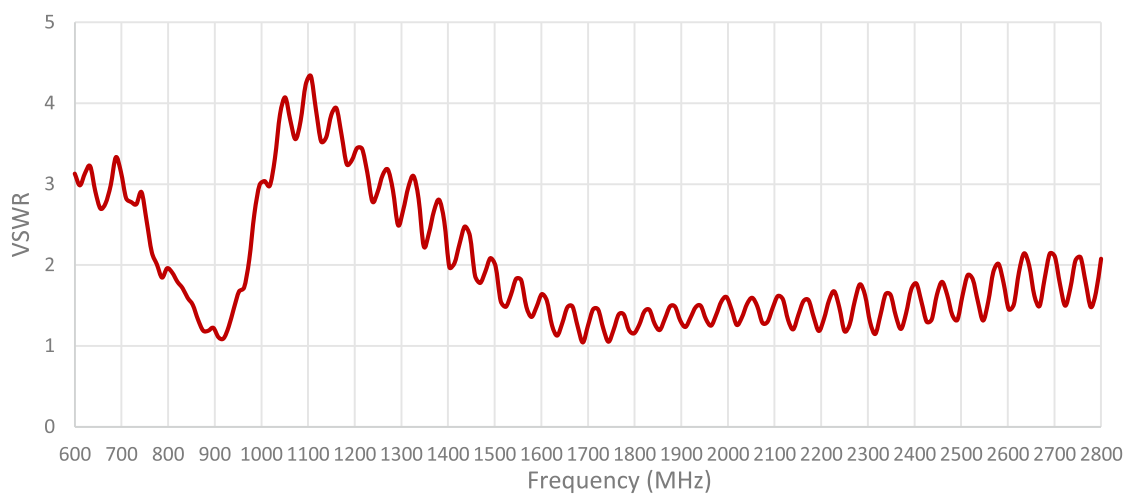
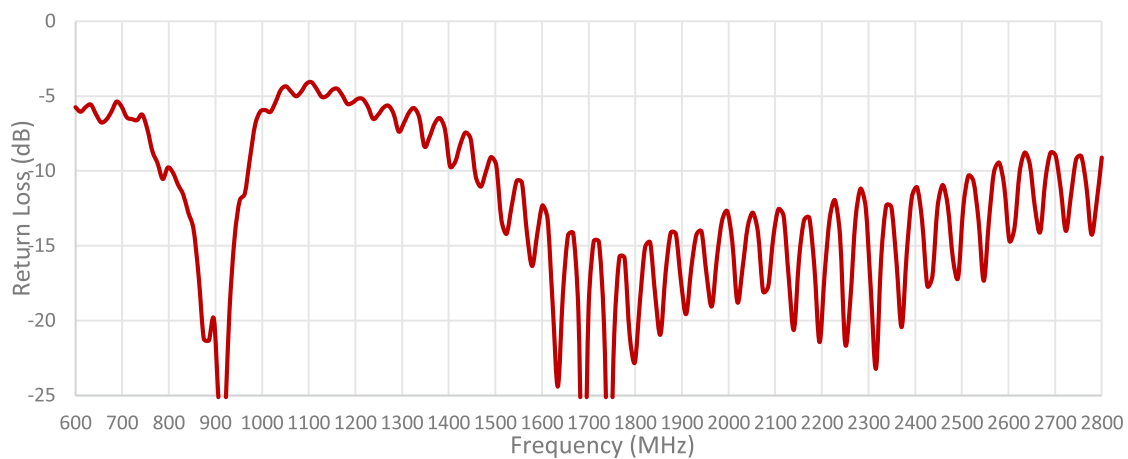
Measured in Certified CTIA 3D Anechoic Chamber

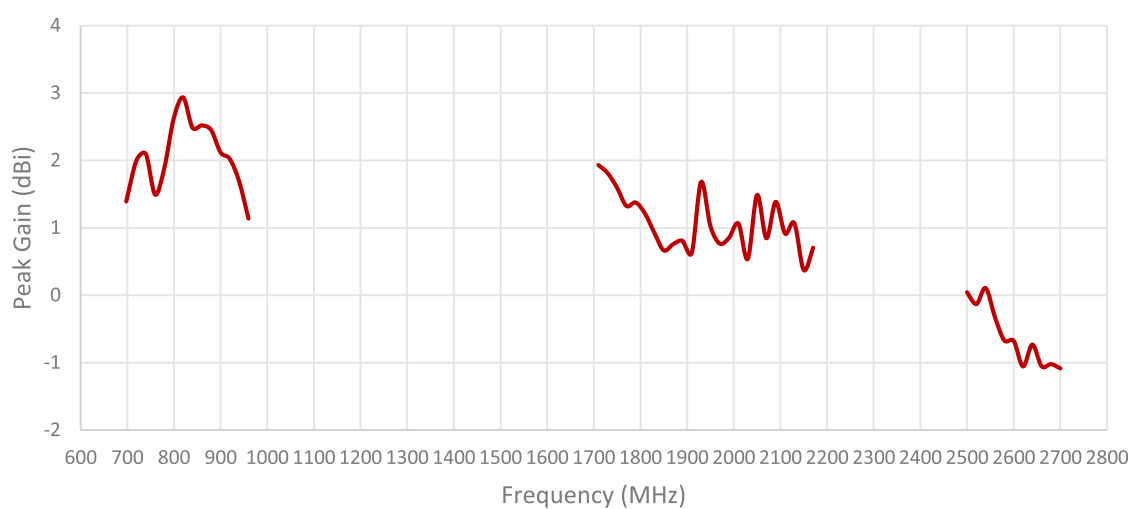
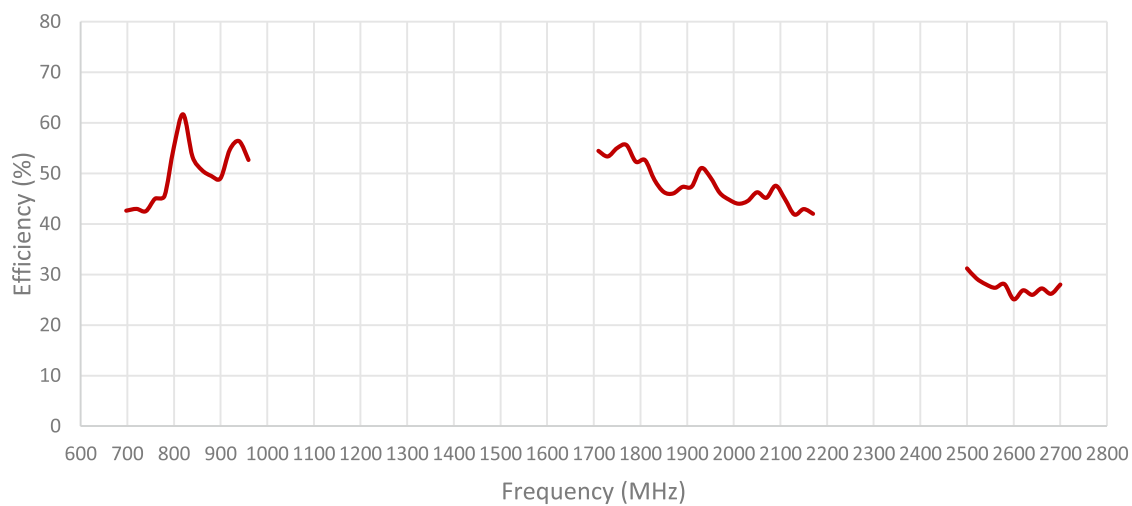
## 2. Mechanical and environmental specifications

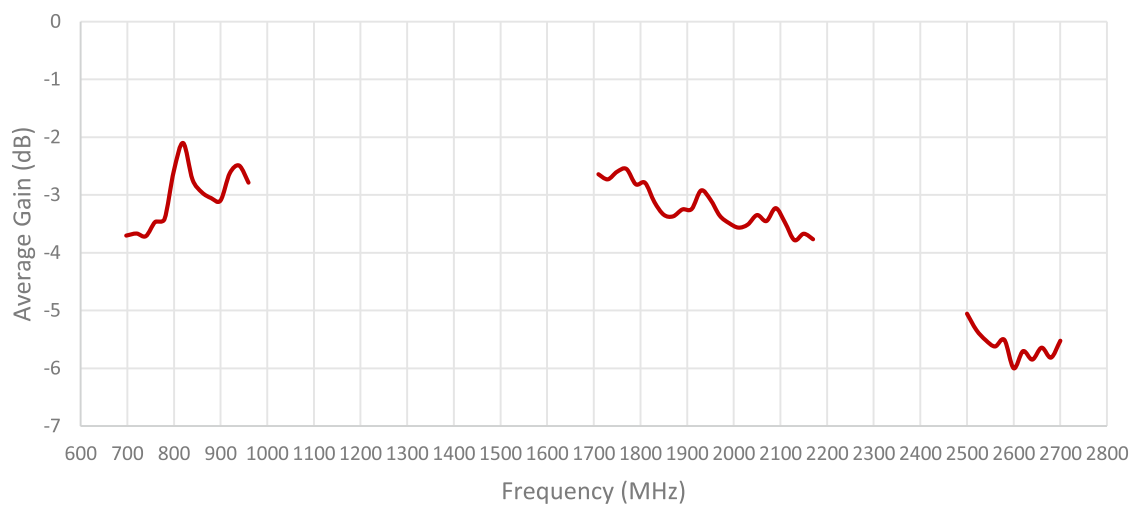
| Specifications            | 2J4847P        |
|---------------------------|----------------|
| Mounting Type             | Adhesive Mount |
| Dimensions (mm)           | 83 x 35 x 13.3 |
| Radome                    | ABS UV Stable  |
| Radome color              | Black          |
| Operating Temperature (C) | -40 to +85     |
| Storage Temperature (C)   | -40 to +85     |
| Substance Compliance      | RoHS           |
| Certificates              | IP67, IP69     |

### 3. Antenna parameters

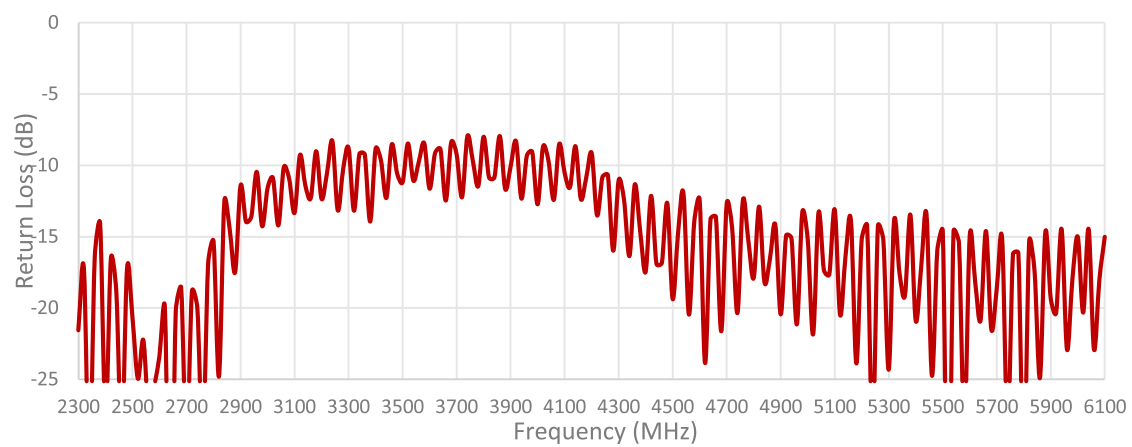
Cable 1: CELLULAR/LTE

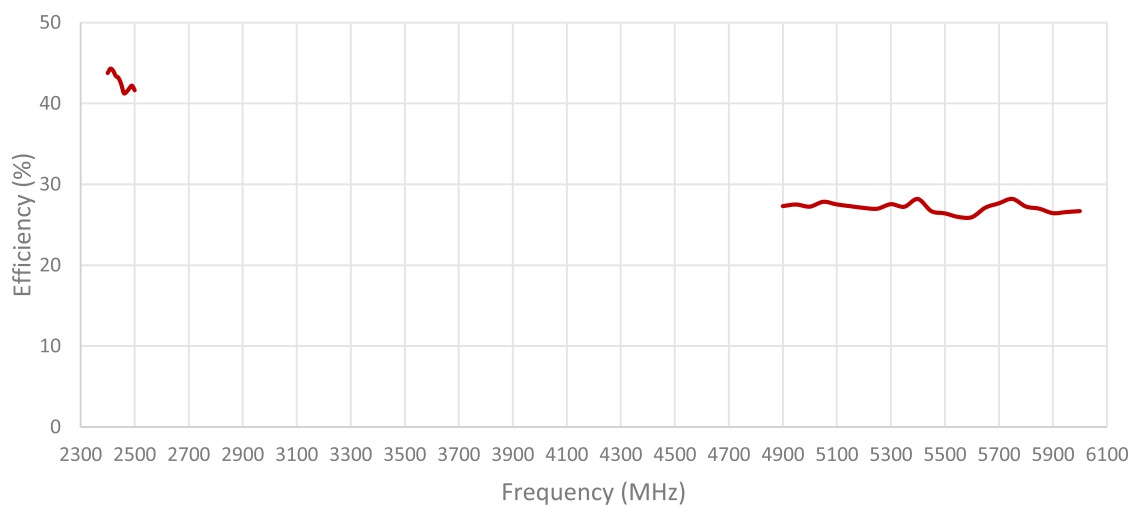
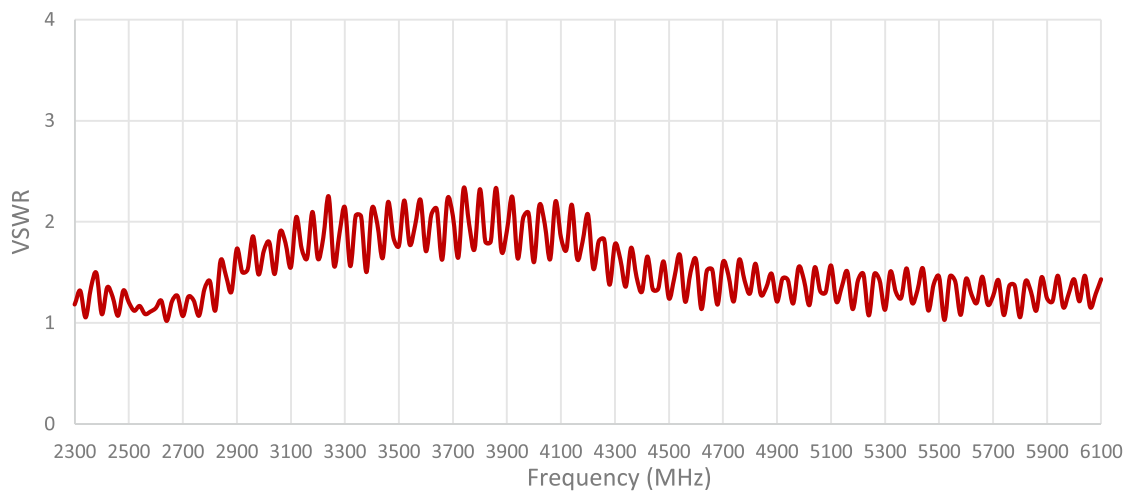


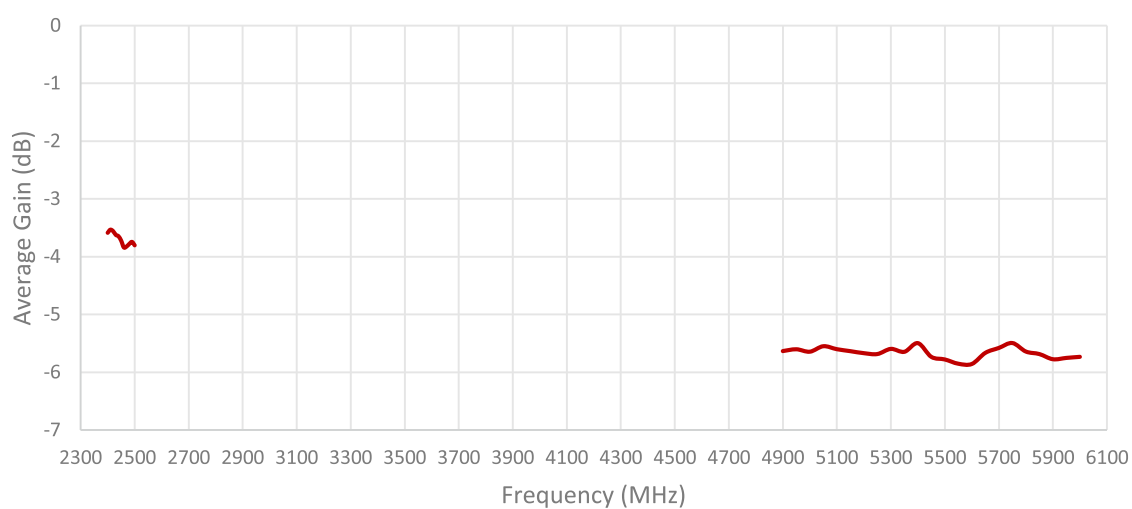
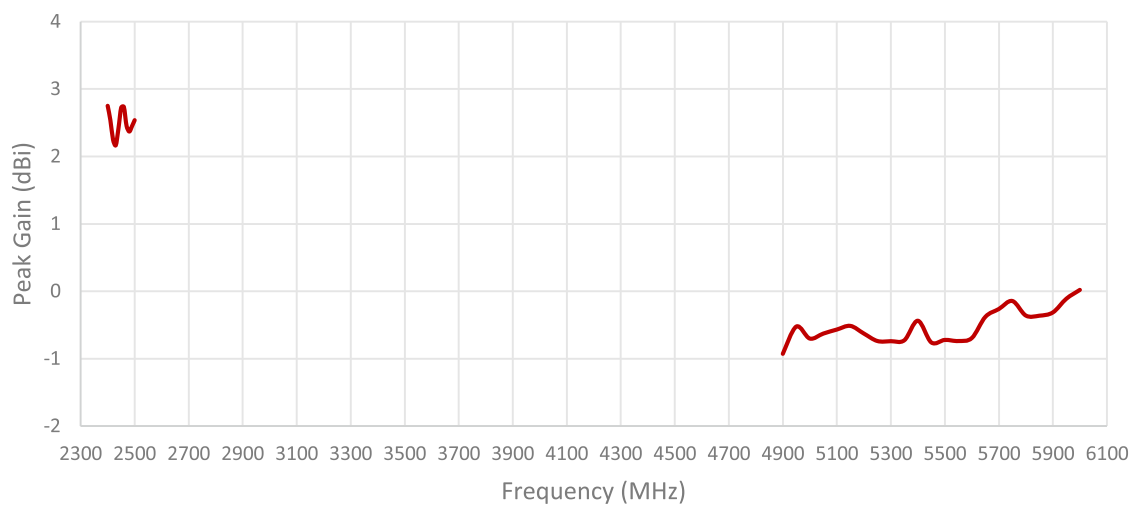




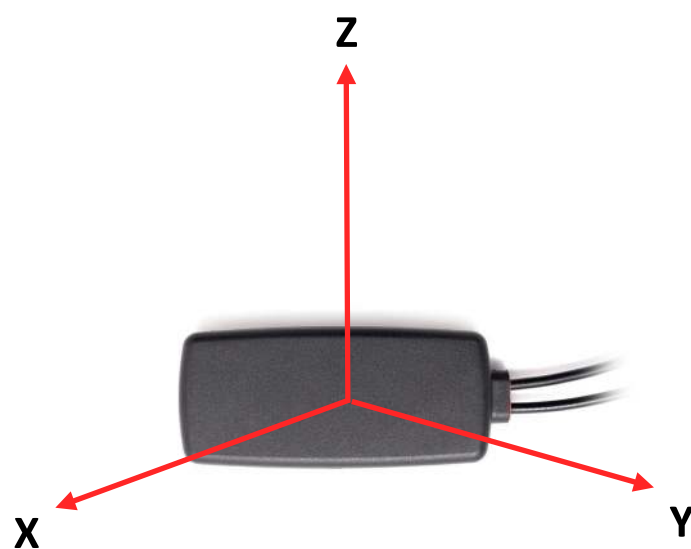
Cable 2: 2.4/5.0 GHz ISM



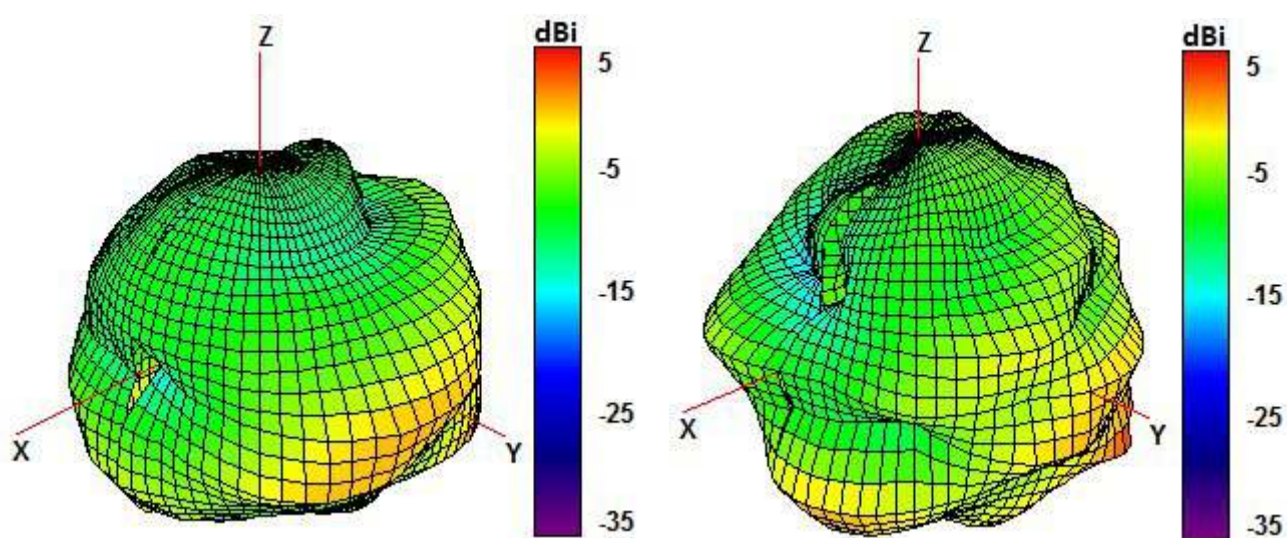




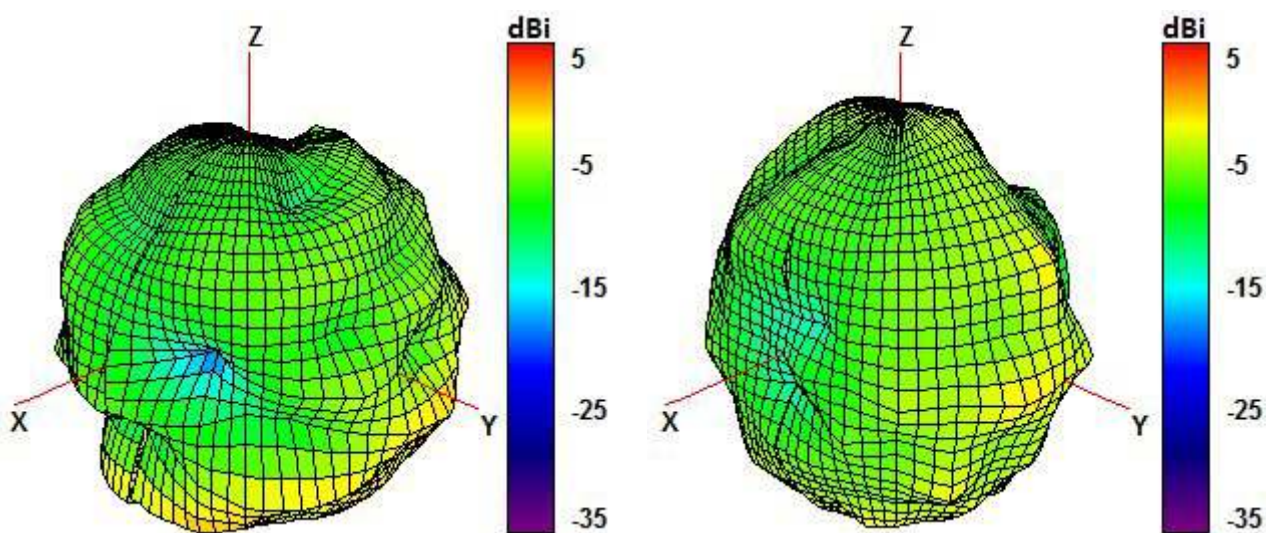




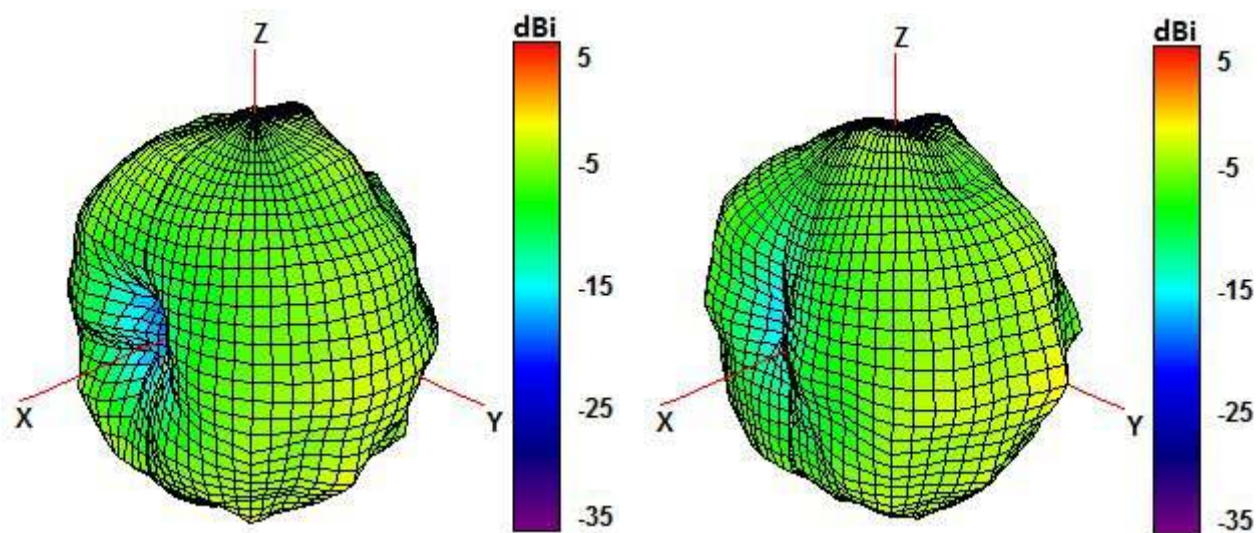
Radiation pattern reference



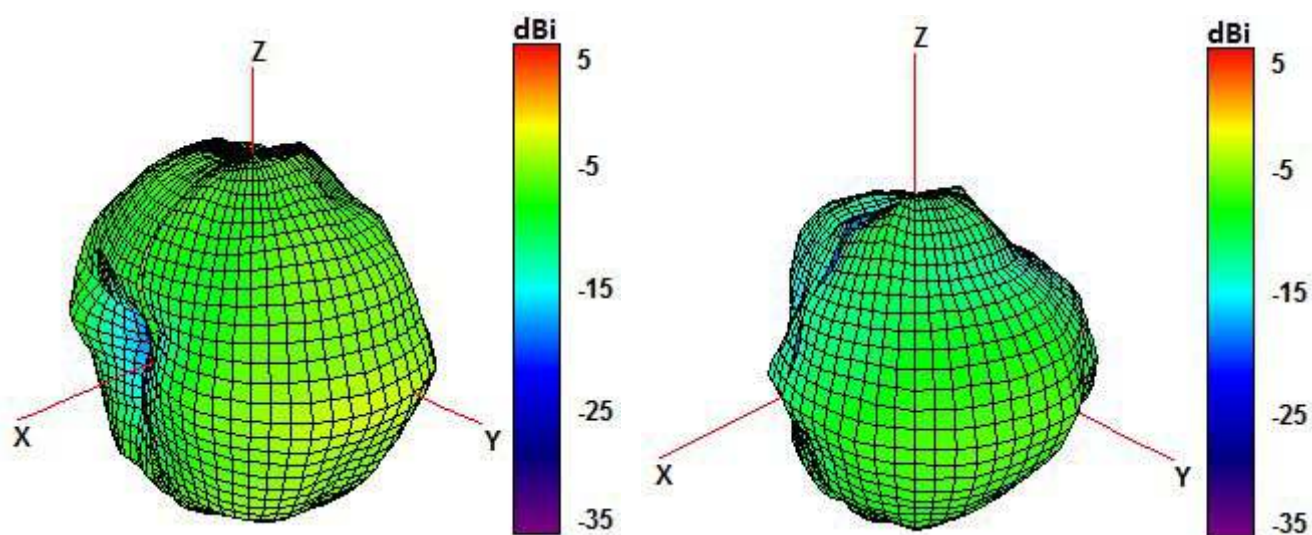
750 and 850 MHz Radiation pattern



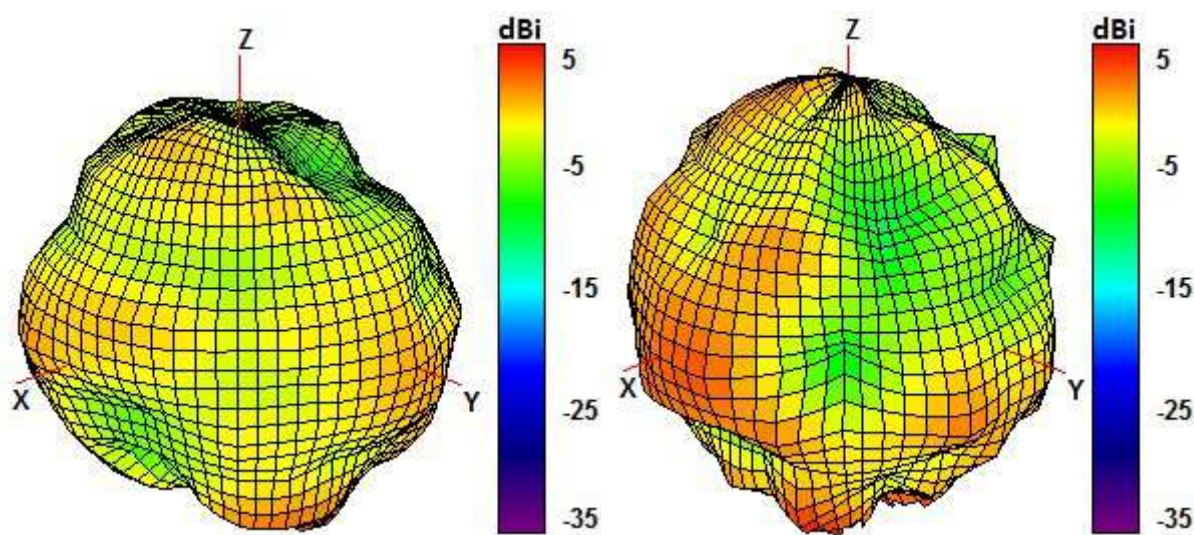
940 and 1750 MHz Radiation pattern



1850 and 1950 MHz Radiation pattern

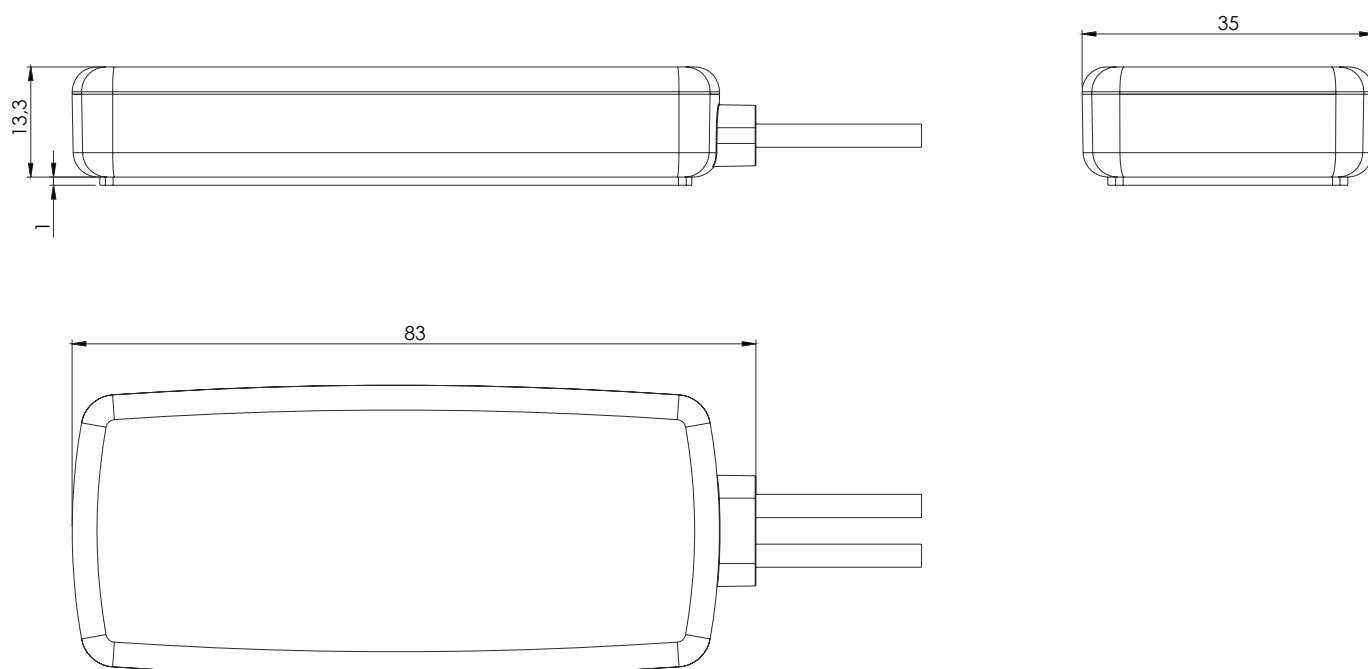


2100 and 2600 MHz Radiation pattern



2450 and 5500 MHz Radiation pattern

## 4. Antenna drawings





## 5. Antenna Images

