

# 4G 65x15 L450 SMA MALE Antenna

## FEATURES & BENEFITS



- Welding RG 1.13 cable, Ipex connector, 3M sticker for easy installation.
- Mounting to: non-conductive surface
- Installation type: adhesive

## APPLICATIONS

- IoT Devices
- Smart Cities
- Smart Agriculture
- Consumer Tracking
- Smart Metering
- Smart Agriculture



## ORDER INFORMATION

|               |                                                                                  |
|---------------|----------------------------------------------------------------------------------|
| Product Name  | 4G 65x15 L450 SMA MALE Antenna                                                   |
| Part Number   | M01-0501140R0A                                                                   |
| Dimensions    | 65.0 x 15.0mm                                                                    |
| Weight        | 4.0 g                                                                            |
| Color         | Black                                                                            |
| Mounting      | adhesive                                                                         |
| Antenna Cable | Default SMA MALE RF 1.13 black coaxial cable ( Ø 1.13 x 450 mm ) , customizable. |

## REFERENCE GUIDE

|                                                                                                                                                                       |                 |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------|
| Technical Features (MHz)                                                                                                                                              | 698-960         | 1710-2690 |
| Max VSWR                                                                                                                                                              | 5.0:1           | 3.0:1     |
| Max Efficiency                                                                                                                                                        | 55.07%          |           |
| Peak Gain                                                                                                                                                             | 3.09dBi         |           |
| Radiation Pattern                                                                                                                                                     | Omnidirectional |           |
| Polarization                                                                                                                                                          | Linear          |           |
| Input Impedance                                                                                                                                                       | 50 Ω            |           |
| Operating Temperature                                                                                                                                                 | -40°C to +85°C  |           |
| Storage Temperature                                                                                                                                                   | -40°C to +85°C  |           |
| Relative Humidity                                                                                                                                                     | 10 to 70%       |           |
| Material Substance Compliance                                                                                                                                         | RoHS Compliant  |           |
| Dimensions (L x W x H)                                                                                                                                                | 65.0 x 15.0mm   |           |
| All test data were obtained from testing conducted on 1.4mm thick polycarbonate (PC) plastic material; with an 450-mm-long RF 1.13 cable.Application data might vary. |                 |           |

MyAntenna RF Technology Co., Ltd

ADD:No.RM 410, Country Garden Phoenix Wisdom Valley, No. 50 Tiezai Road, Baoan District, Shenzhen, P.R.China.

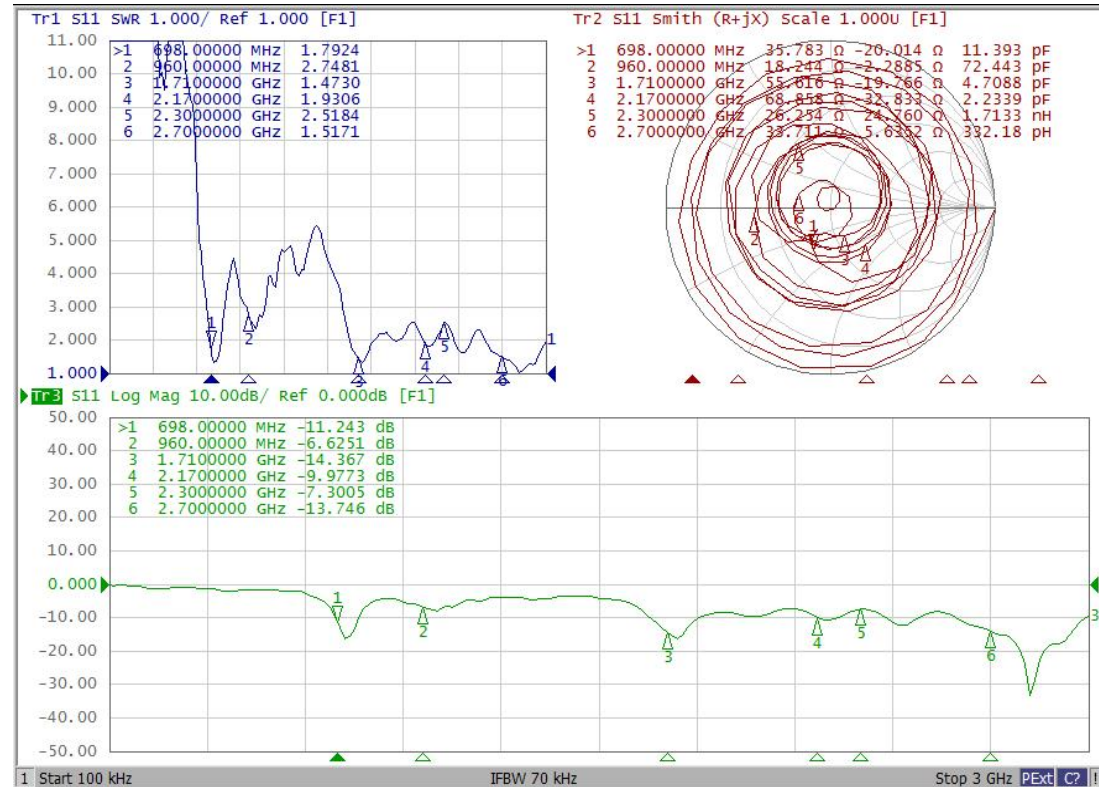
TEL: +86-0755-86503881 FAX: +86-0755-27801677 E-mail: [nfc@myantenna.com](mailto:nfc@myantenna.com)

## ELECTRICAL PERFORMANCE

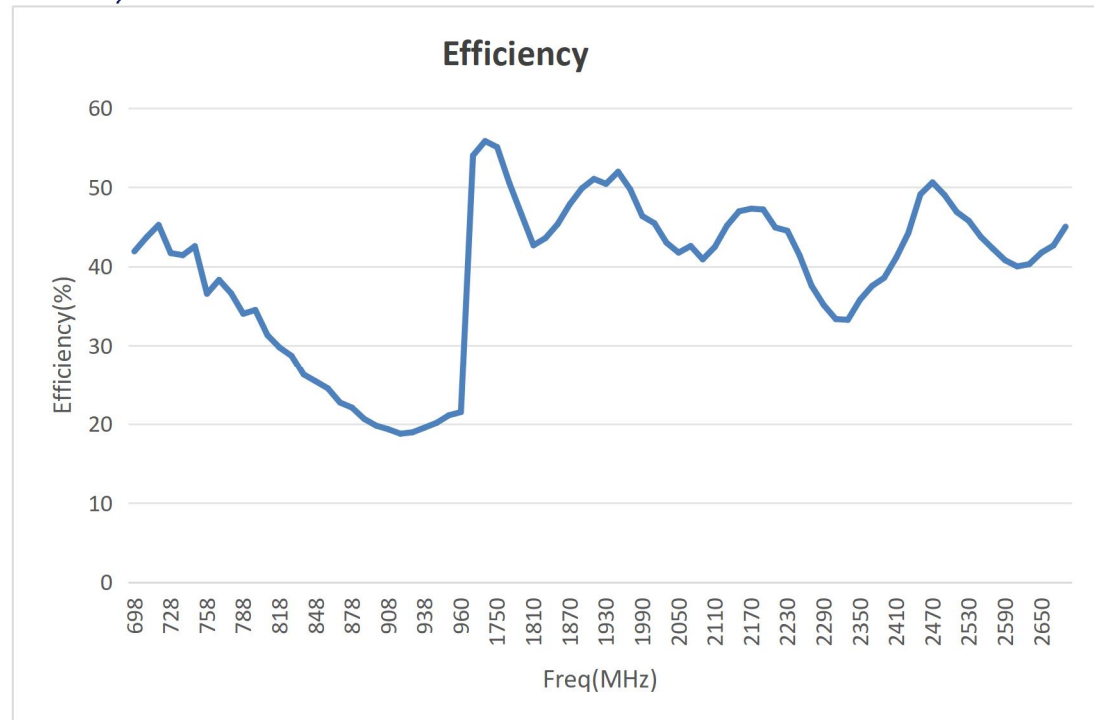
### Note

All data displayed in the "ELECTRICAL PERFORMANCE" section were measured using a 450mm-long RF 1.13 cable mounted on 1.4mm thick polycarbonate (PC) plastic material.

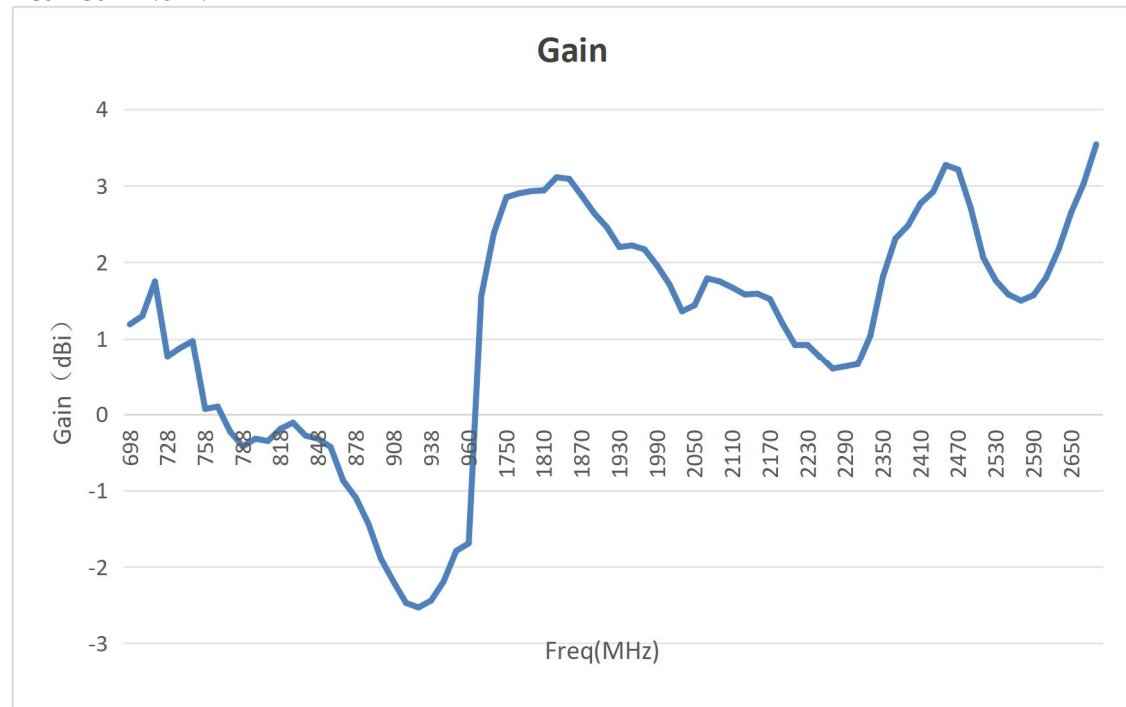
### Return Loss



### Efficiency (%)



## Peak Gain (dBi)

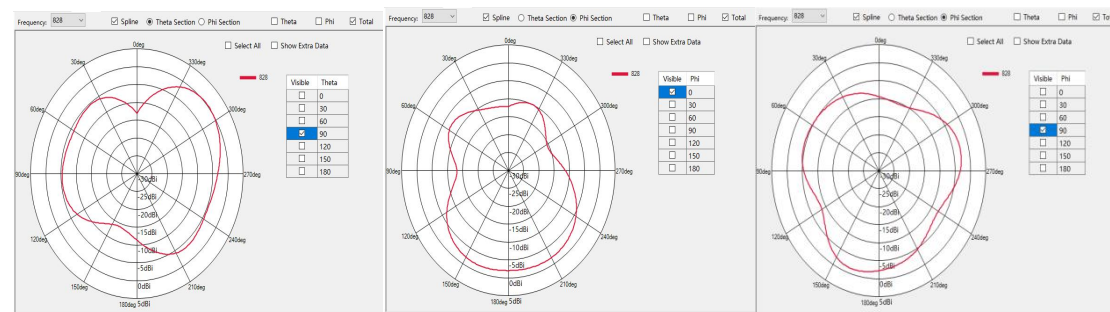


| Freq(MHz) | Gain (dBi) | Efficiency(%) | Freq(MHz) | Gain (dBi) | Efficiency(%) | Freq(MHz) | Gain (dBi) | Efficiency(%) |
|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|
| 698       | 1.19       | 41.92         | 958       | -1.79      | 21.09         | 2190      | 1.20       | 47.20         |
| 708       | 1.30       | 43.69         | 960       | -1.69      | 21.50         | 2210      | 0.92       | 44.93         |
| 718       | 1.75       | 45.25         | 1710      | 1.56       | 54.02         | 2230      | 0.92       | 44.51         |
| 728       | 0.77       | 41.70         | 1730      | 2.38       | 55.84         | 2250      | 0.76       | 41.43         |
| 738       | 0.88       | 41.44         | 1750      | 2.85       | 55.07         | 2270      | 0.60       | 37.57         |
| 748       | 0.97       | 42.57         | 1770      | 2.90       | 50.56         | 2290      | 0.63       | 35.15         |
| 758       | 0.07       | 36.57         | 1790      | 2.93       | 46.61         | 2310      | 0.66       | 33.37         |
| 768       | 0.10       | 38.32         | 1810      | 2.94       | 42.68         | 2330      | 1.04       | 33.28         |
| 778       | -0.23      | 36.62         | 1830      | 3.11       | 43.60         | 2350      | 1.81       | 35.80         |
| 788       | -0.42      | 34.04         | 1850      | 3.09       | 45.36         | 2370      | 2.31       | 37.55         |
| 798       | -0.32      | 34.52         | 1870      | 2.87       | 47.86         | 2390      | 2.48       | 38.58         |
| 808       | -0.35      | 31.34         | 1890      | 2.64       | 49.87         | 2410      | 2.77       | 41.14         |
| 818       | -0.19      | 29.78         | 1910      | 2.46       | 51.06         | 2430      | 2.92       | 44.23         |
| 828       | -0.11      | 28.71         | 1930      | 2.20       | 50.44         | 2450      | 3.27       | 49.12         |
| 838       | -0.28      | 26.26         | 1950      | 2.22       | 51.96         | 2470      | 3.21       | 50.62         |
| 848       | -0.32      | 25.39         | 1970      | 2.17       | 49.75         | 2490      | 2.71       | 49.02         |
| 858       | -0.43      | 24.50         | 1990      | 1.96       | 46.37         | 2510      | 2.06       | 46.89         |
| 868       | -0.87      | 22.71         | 2010      | 1.71       | 45.47         | 2530      | 1.76       | 45.77         |
| 878       | -1.09      | 22.06         | 2030      | 1.36       | 43.01         | 2550      | 1.58       | 43.74         |
| 888       | -1.43      | 20.64         | 2050      | 1.44       | 41.76         | 2570      | 1.50       | 42.24         |

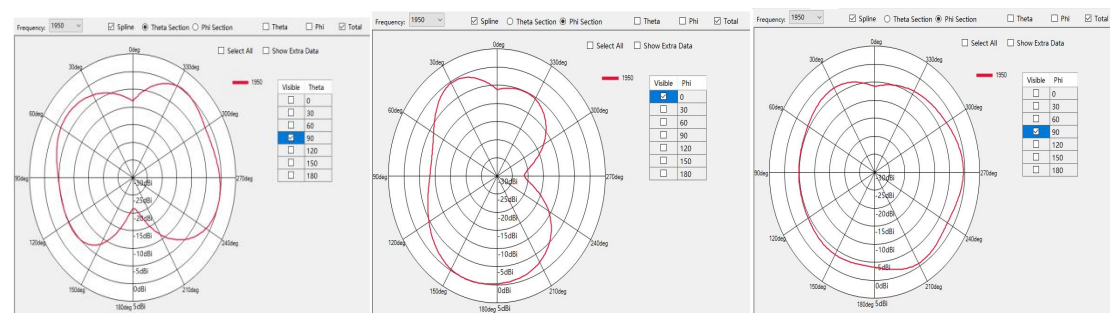
|     |       |       |      |      |       |      |      |       |
|-----|-------|-------|------|------|-------|------|------|-------|
| 898 | -1.89 | 19.78 | 2070 | 1.79 | 42.59 | 2590 | 1.57 | 40.80 |
| 908 | -2.19 | 19.33 | 2090 | 1.75 | 40.91 | 2610 | 1.80 | 40.02 |
| 918 | -2.47 | 18.77 | 2110 | 1.67 | 42.48 | 2630 | 2.17 | 40.30 |
| 928 | -2.53 | 18.95 | 2130 | 1.58 | 45.16 | 2650 | 2.65 | 41.75 |
| 938 | -2.44 | 19.54 | 2150 | 1.59 | 46.97 | 2670 | 3.03 | 42.66 |
| 948 | -2.19 | 20.15 | 2170 | 1.52 | 47.31 | 2690 | 3.54 | 45.03 |

**RADIATION PATTERNS**(The data were obtained through testing conducted using a 450-mm-long RF 1.13 cable mounted on a 1.4mm thick polycarbonate (PC) plastic substrate.)

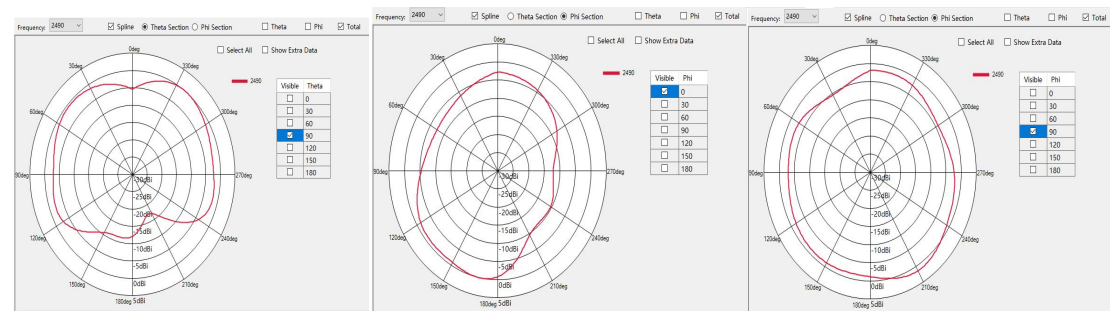
### 2D Radiation Pattern at 828MHz



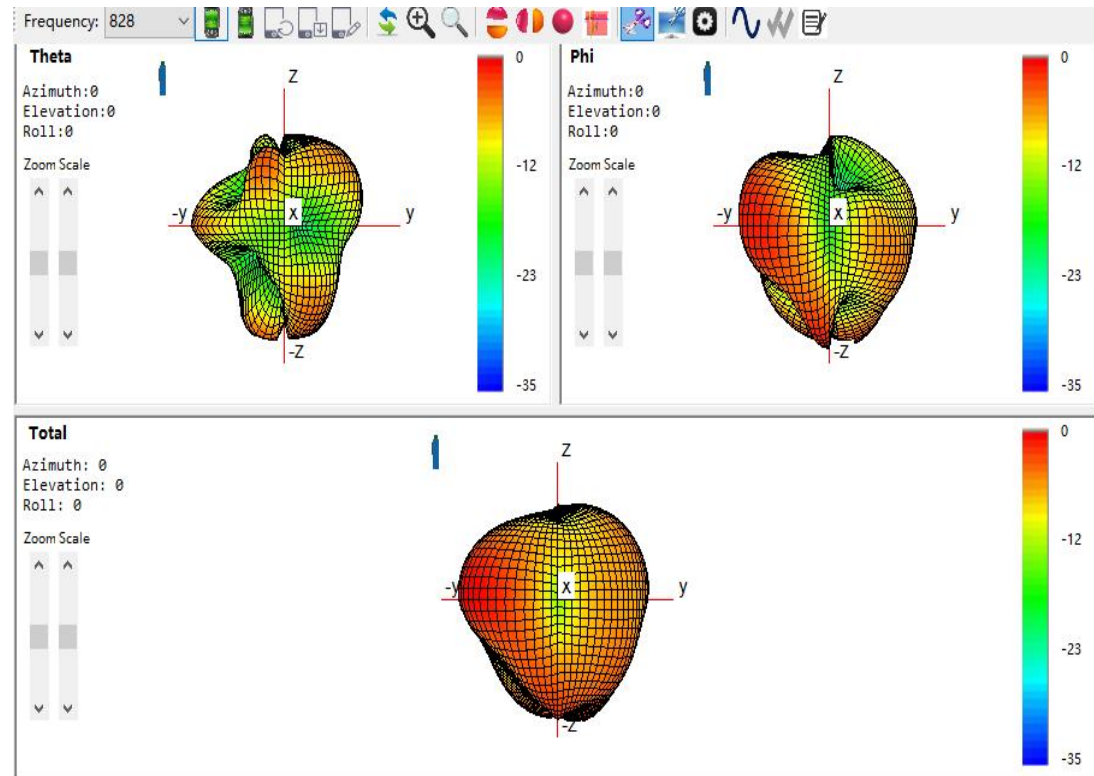
### 2D Radiation Pattern at 1950MHz



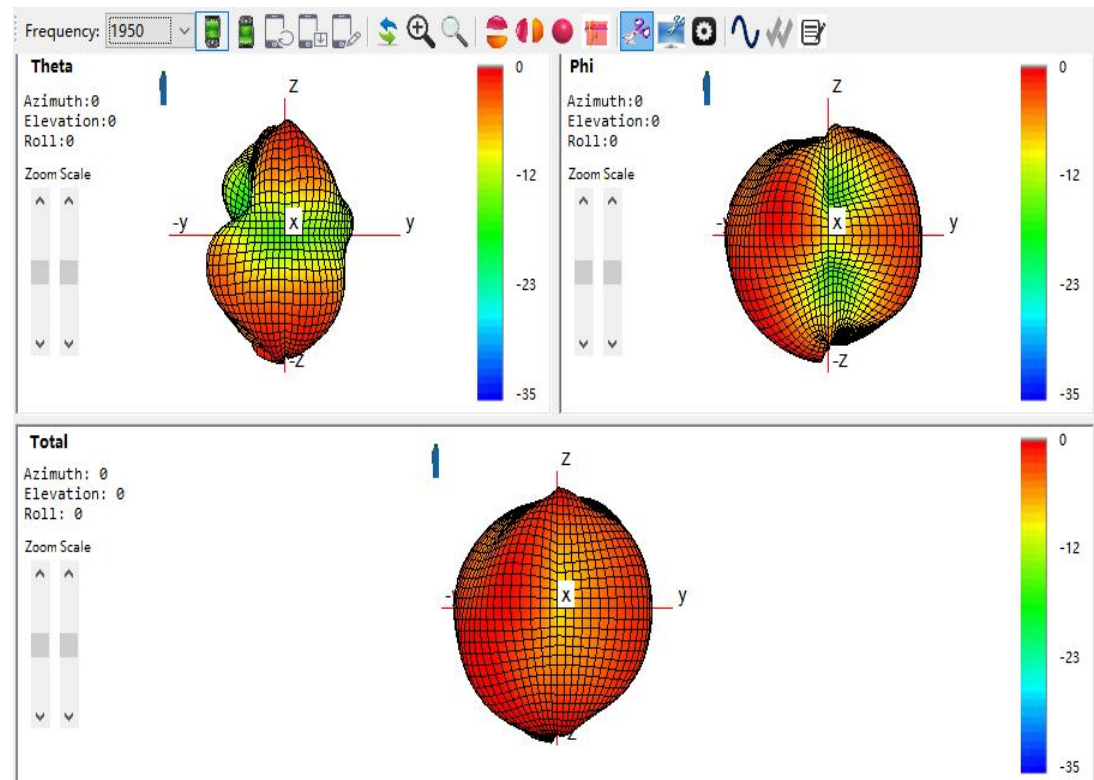
### 2D Radiation Pattern at 2490MHz



### 3D Radiation Pattern at 828MHz

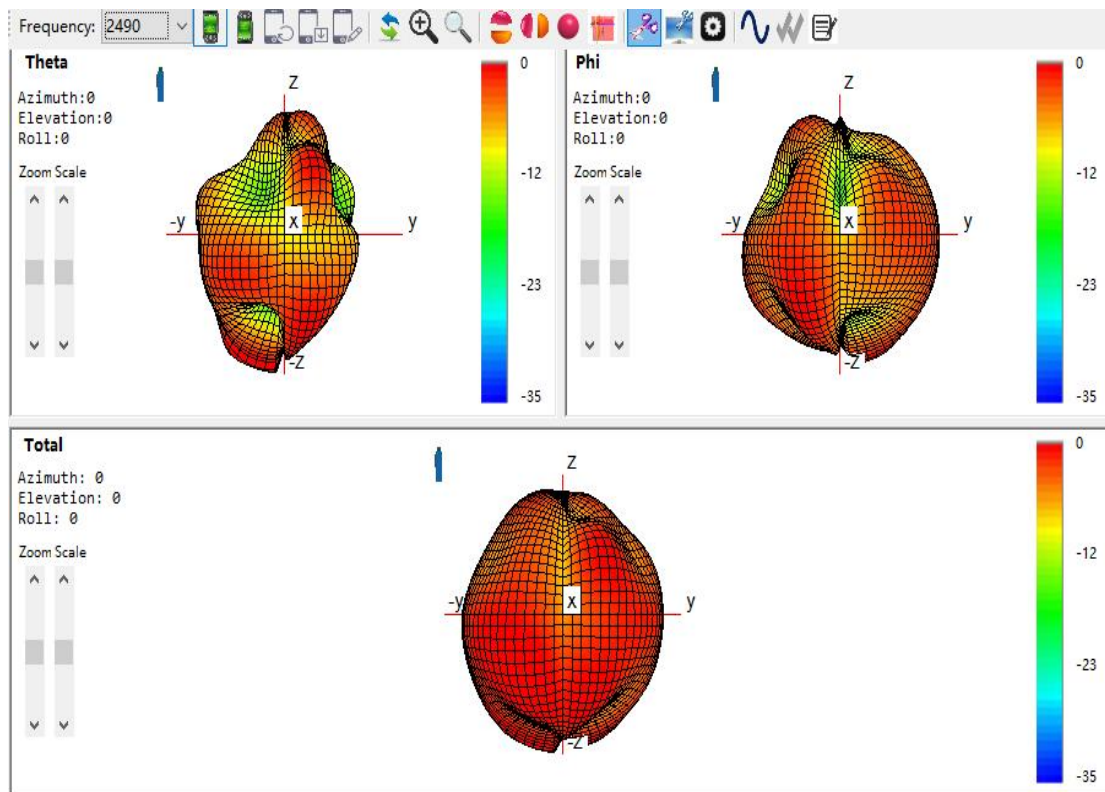


### 3D Radiation Pattern at 1950MHz





### 3D Radiation Pattern at 2490MHz



## HOUSING CONFIGURATIONS

