

# QYX\_Pro 左右旋天线规格书

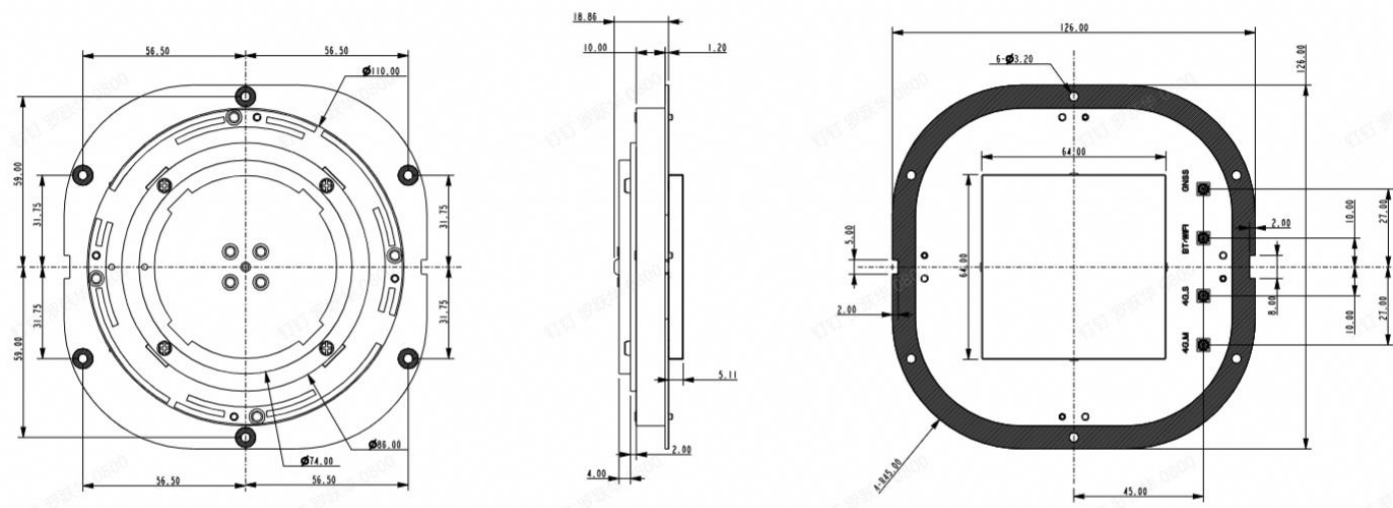
## ■ 技术特点

- 1. 天线具备四系统 GNSS 全频点、左旋 Lband、双 4G、BT-WiFi 信号接收能力，一体化设计；
- 2. 天线无源部分采用多馈点设计方案，保证相位中心与几何中心的重合，有效提高天线相位中心稳定性, 要求优异的低轴比特性满足多径场景下星基定位的稳定性；
- 3. 天线单元增益高，方向图波束宽，确保各种户外场景的信号接收效果，在一些遮挡较严重的场景下仍能正常搜星；

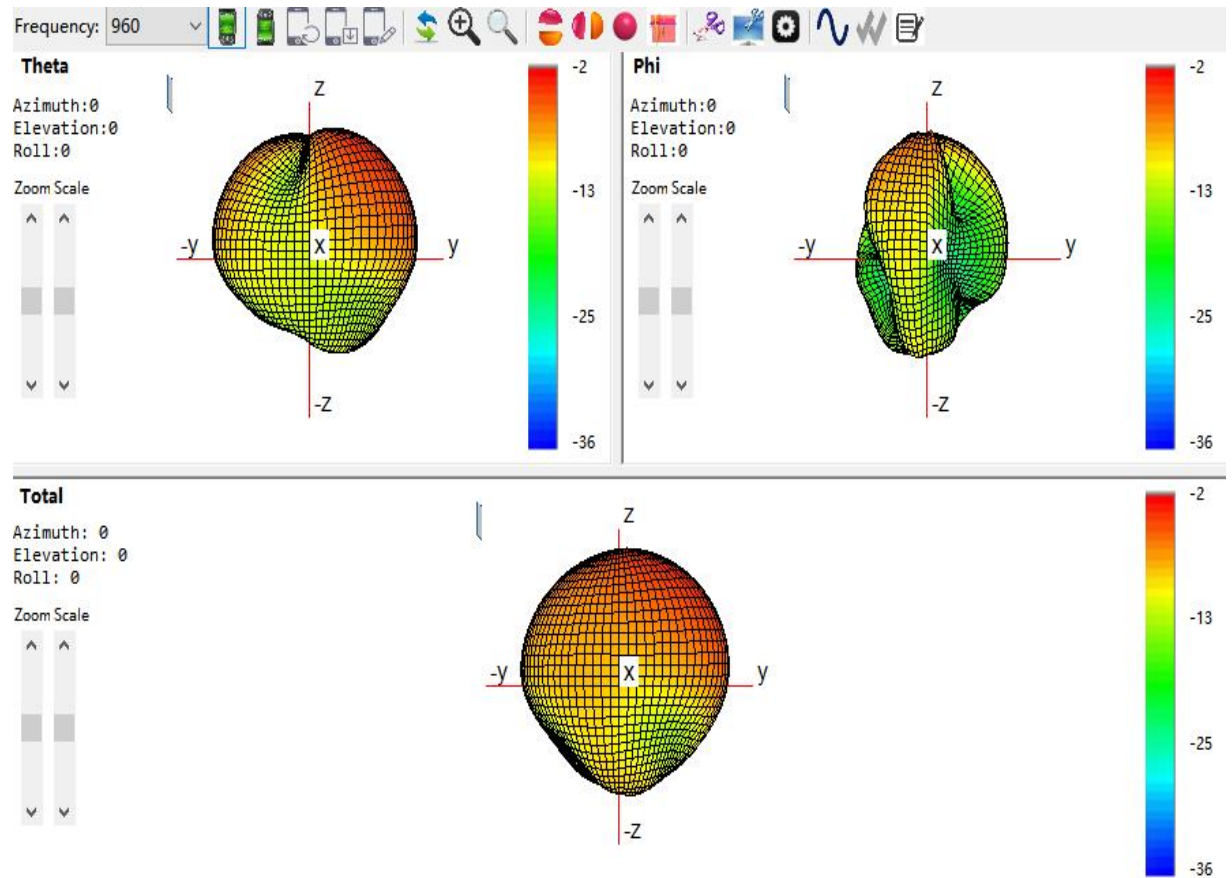
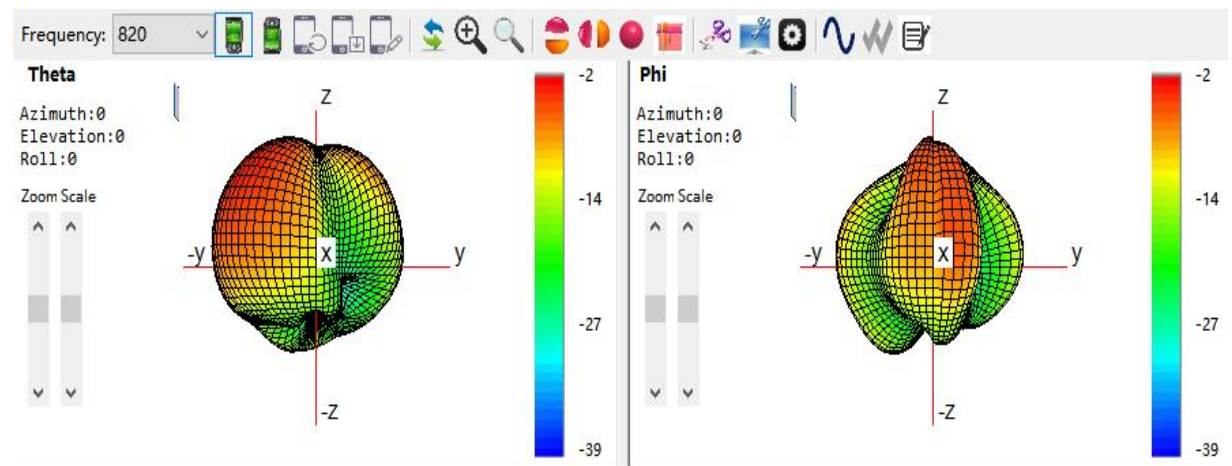
## ■ 技术指标

| 天线特性    |                                                                            |                                                               |                                                                            |                          |
|---------|----------------------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------|
| 工作频段    | BDS B1/B2/B3、<br>GPS L1/L2/L5、<br>GLONASS G1/G2、<br>GALILEO E1/E2/E5a/E5b、 | Lband:<br>1525~1550MHz,<br>Fc=1544MHz                         | 2G/3G/4G:<br>824~960MHz、<br>1710~2170MHz、<br>2300~2400MHz、<br>2550~2655MHz | BT-WIFI:<br>2402~2482MHz |
| 极化方式    | 右旋圆极化(RHCP)                                                                | 左旋圆极化(LHCP)                                                   | /                                                                          | /                        |
| 增益/效率   | 仰角 90°增益均值：≥5dBi;<br>仰角 30°增益均值：≥-2dBi;                                    | 仰角 90°增益均值：≥5dBi;<br>仰角 30°增益均值：≥-2dBi;                       | Typ: 20~50%                                                                | ≥50%                     |
| 输出阻抗    | 50Ω                                                                        | 50Ω                                                           | 50Ω                                                                        | 50Ω                      |
| VSWR    | typ≤2, max<3                                                               | ≤2                                                            | typ≤4                                                                      | ≤2                       |
| 圆极化轴比   | 仰角 90°轴比均值：≤1.5dB;<br>仰角 30°轴比均值：≤2.5dB;<br>仰角 0°轴比均值：≤5.0dB;              | 仰角 90°轴比均值：≤1.5dB;<br>仰角 30°轴比均值：≤2.5dB;<br>仰角 0°轴比均值：≤5.0dB; | /                                                                          | /                        |
| 水平面覆盖范围 | 360°                                                                       | 360°                                                          | 360°                                                                       | 360°                     |
| 相位中心稳定度 | ≤±2mm                                                                      | /                                                             | /                                                                          | /                        |
| 电路特性    |                                                                            |                                                               |                                                                            |                          |
| 增益      | 30±2dB                                                                     | 30±2dB                                                        | /                                                                          | /                        |
| 带内平坦度   | ≤±1dB                                                                      | ≤±1dB                                                         | /                                                                          | /                        |
| 带外抑制度   | 30dB@边频±100MHz<br>15dB@1544MHz                                             | 30dB@边频±50MHz<br>15dB@1559MHz                                 | /                                                                          | /                        |
| 天线增益    | 2.0dB                                                                      | 2.0dB                                                         | 2.0dB                                                                      | 2.0dB                    |
| 工作电压    | 3.3~12V                                                                    |                                                               | /                                                                          | /                        |
| 工作电流压   | ≤50mA                                                                      |                                                               | /                                                                          | /                        |
| 结构特性    |                                                                            |                                                               |                                                                            |                          |
| 天线尺寸    | 见 CAD 和三维图纸                                                                |                                                               |                                                                            |                          |
| 接口      | 电路合路共用一个 MMCX-K                                                            |                                                               | MMCX-K                                                                     | MMCX-K                   |
| 整机工作环境  |                                                                            |                                                               |                                                                            |                          |
| 工作温度    | -40°~ +85°C                                                                |                                                               |                                                                            |                          |
| 存储温度    | -55°~ +85°C                                                                |                                                               |                                                                            |                          |
| 湿 度     | 95%不冷凝                                                                     |                                                               |                                                                            |                          |

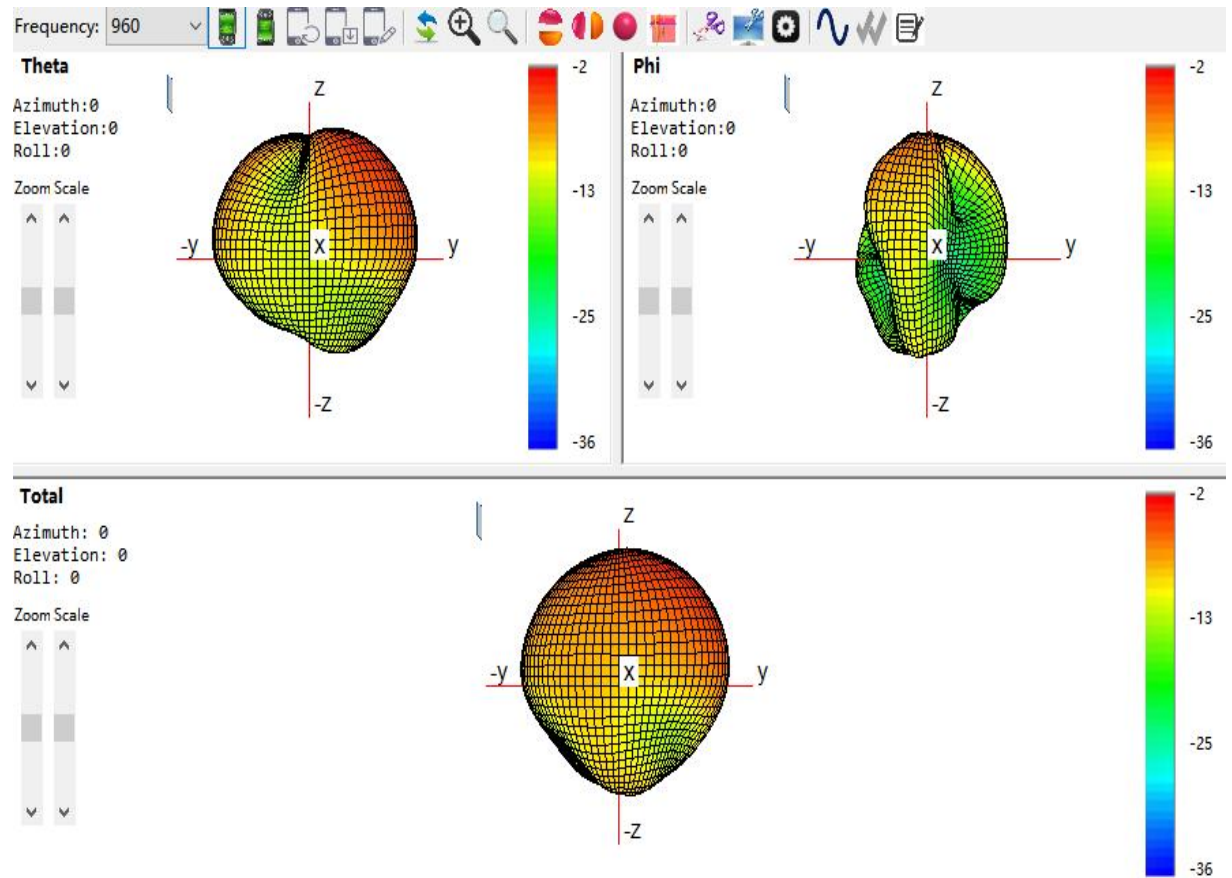
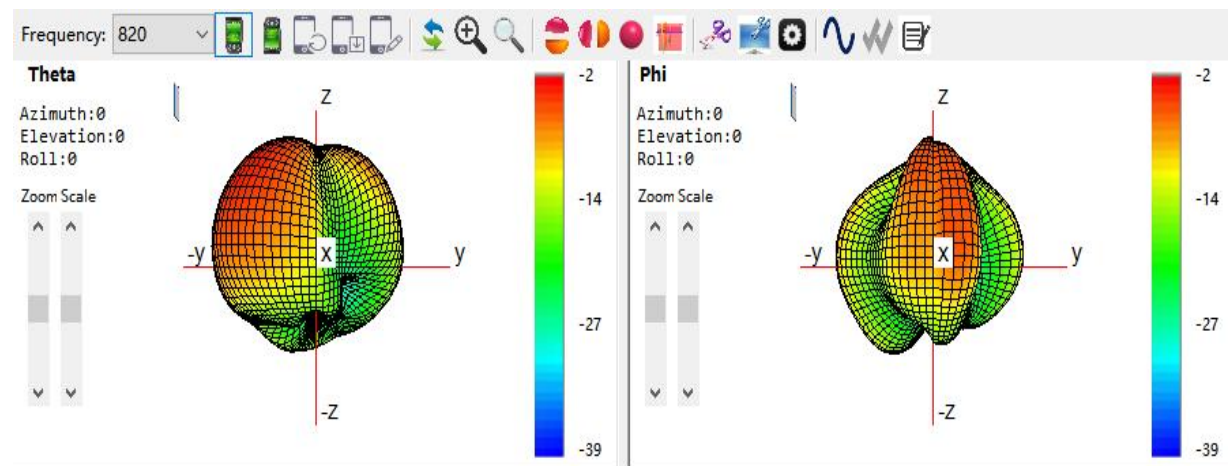
■ 结构图纸(仅参考板框和外形尺寸)

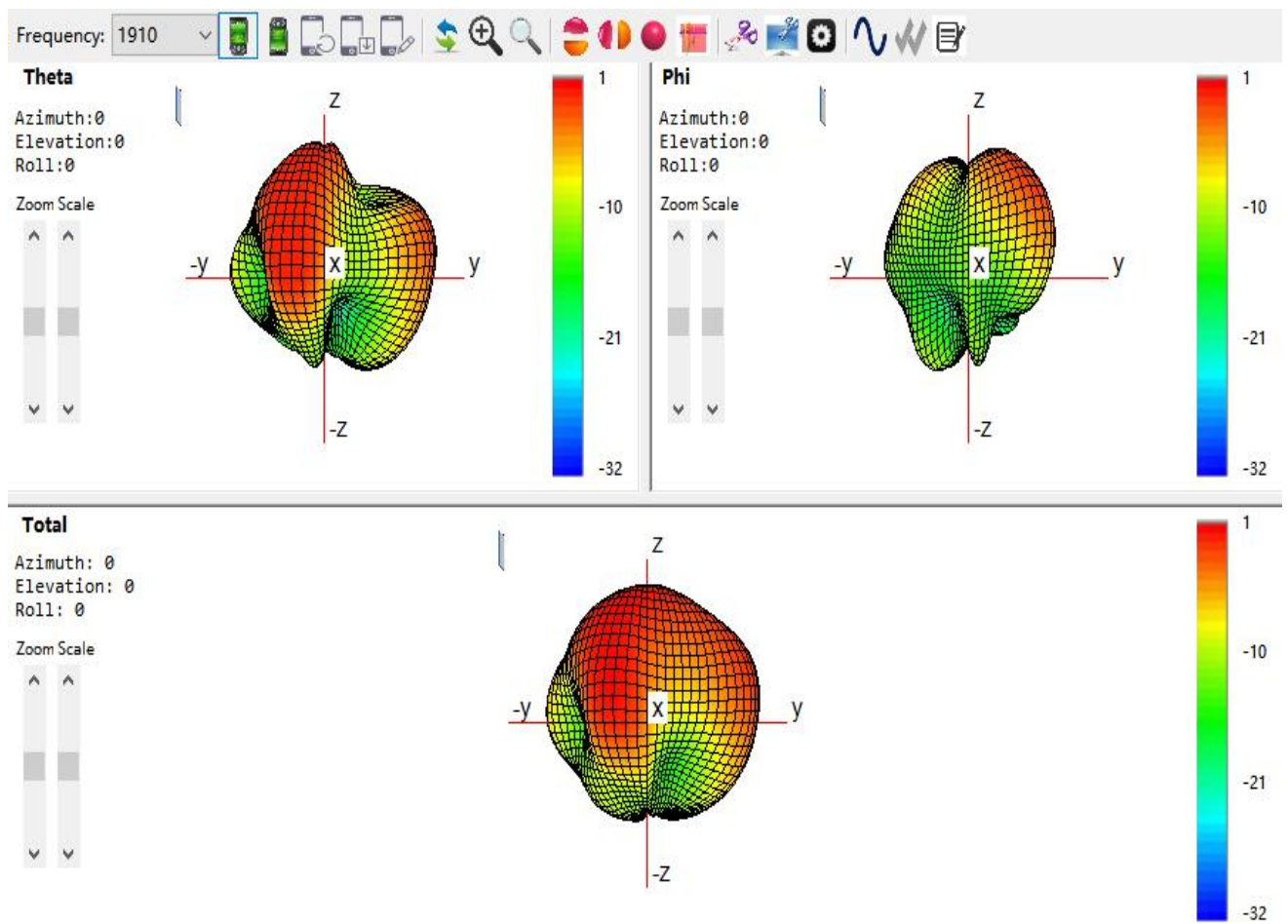
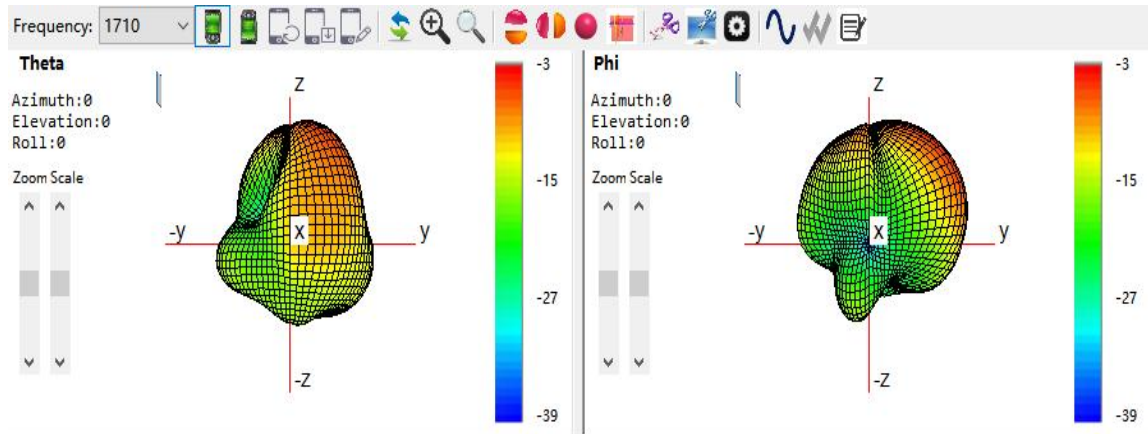


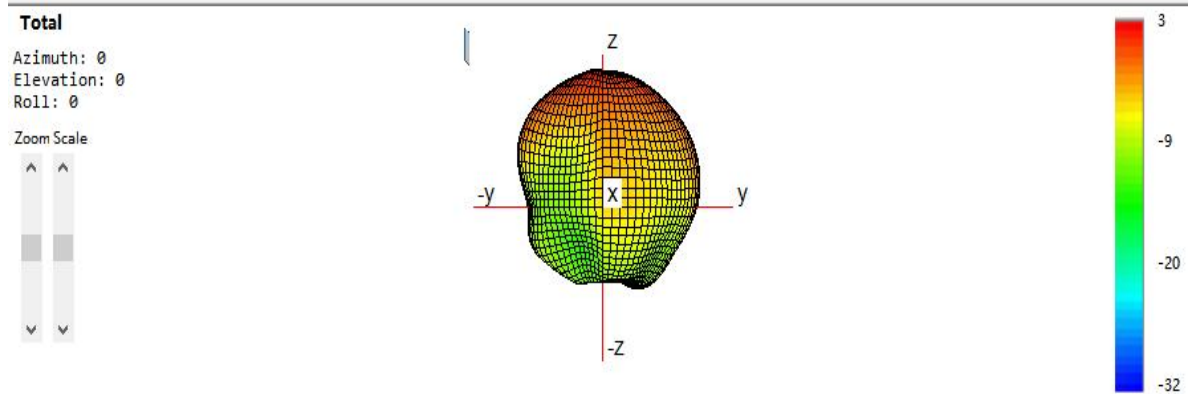
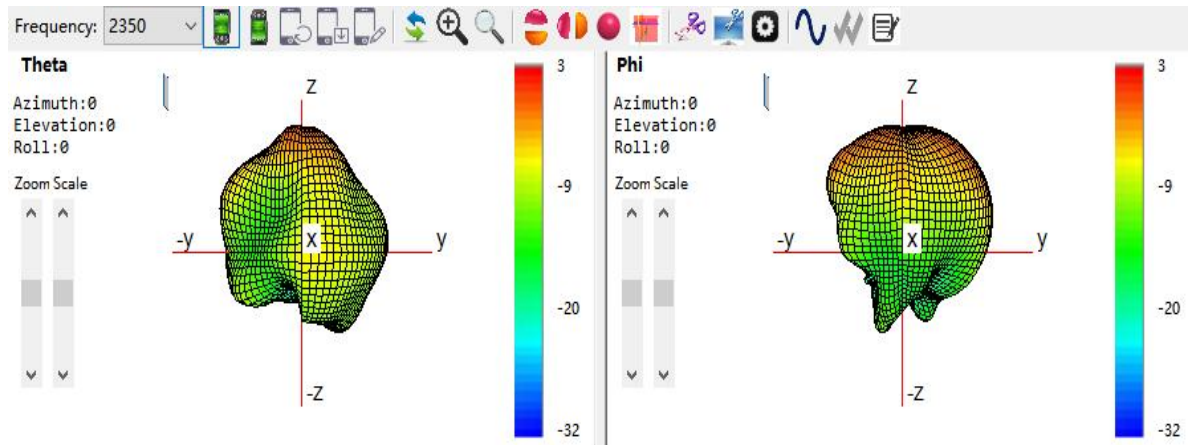
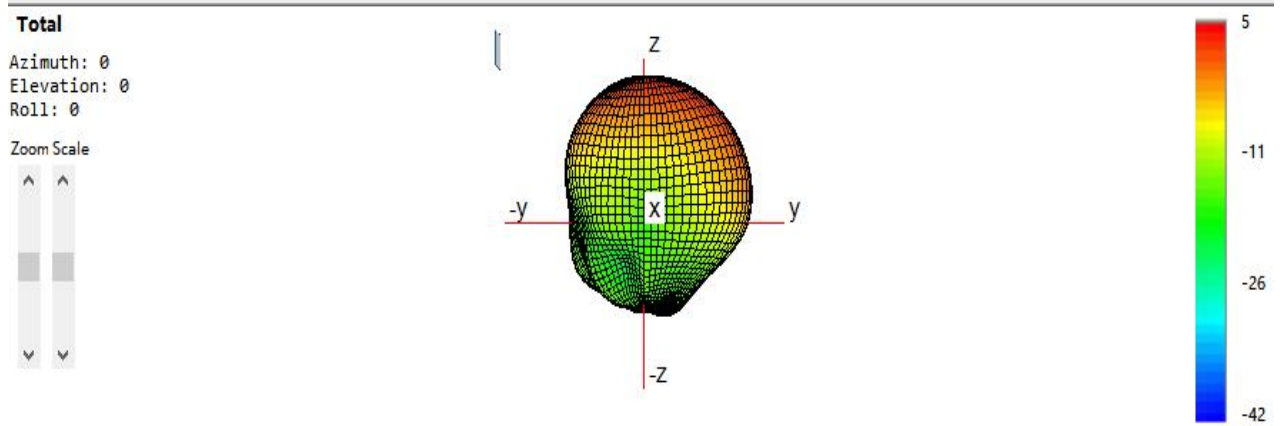
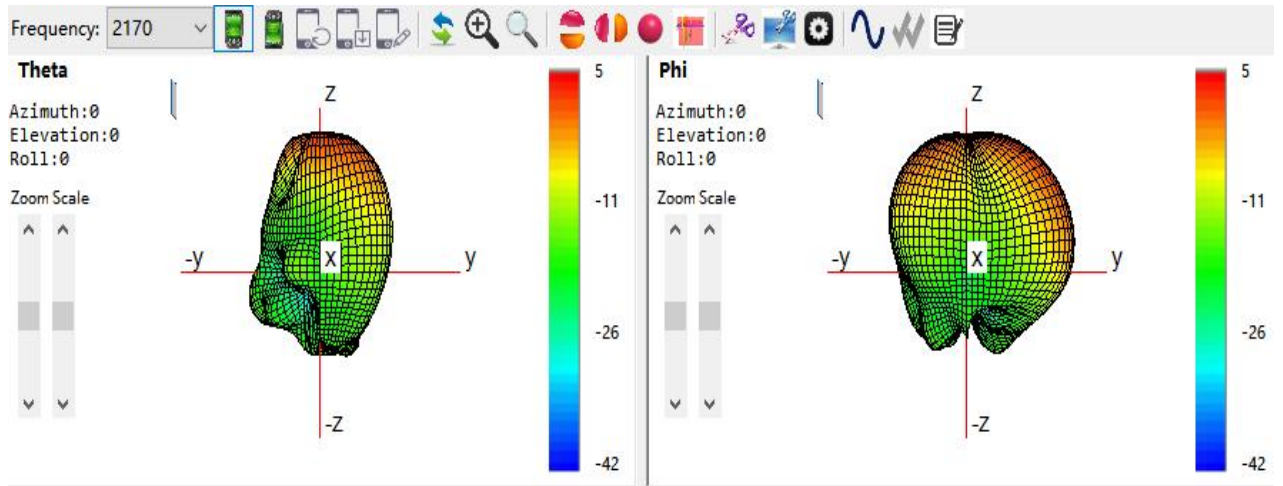
4G:

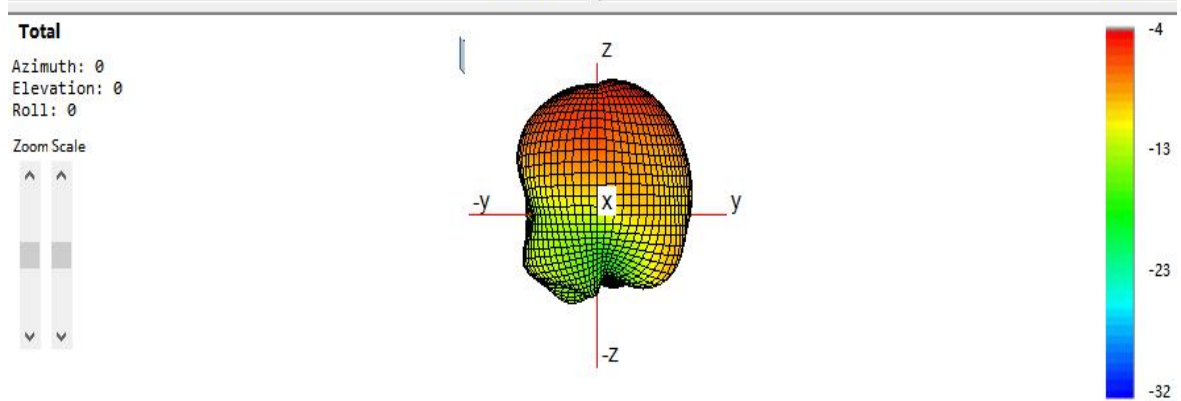
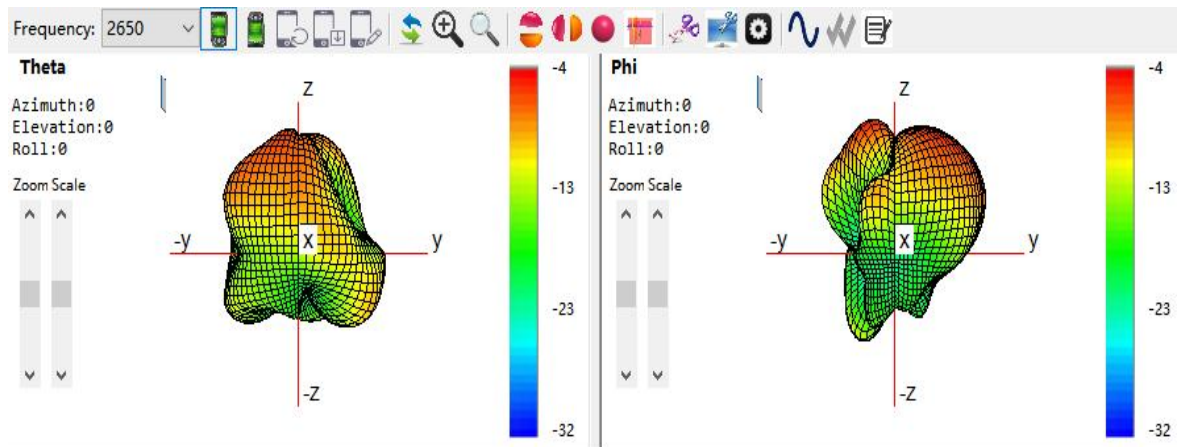
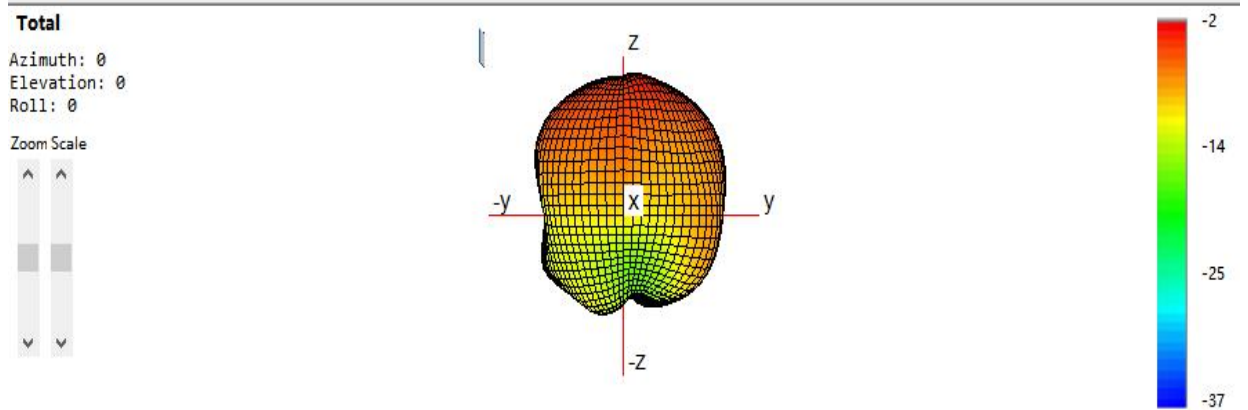
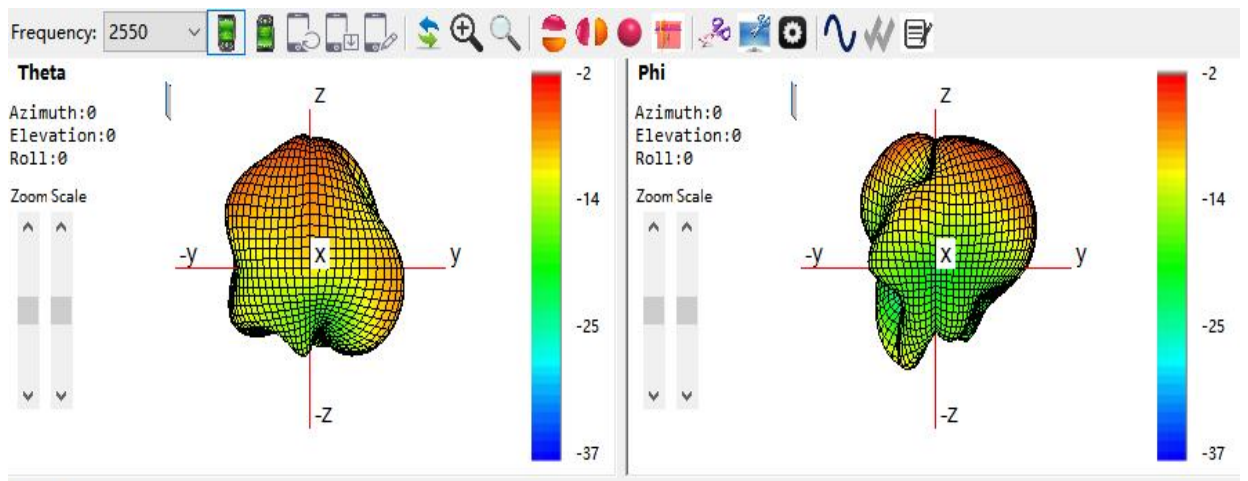


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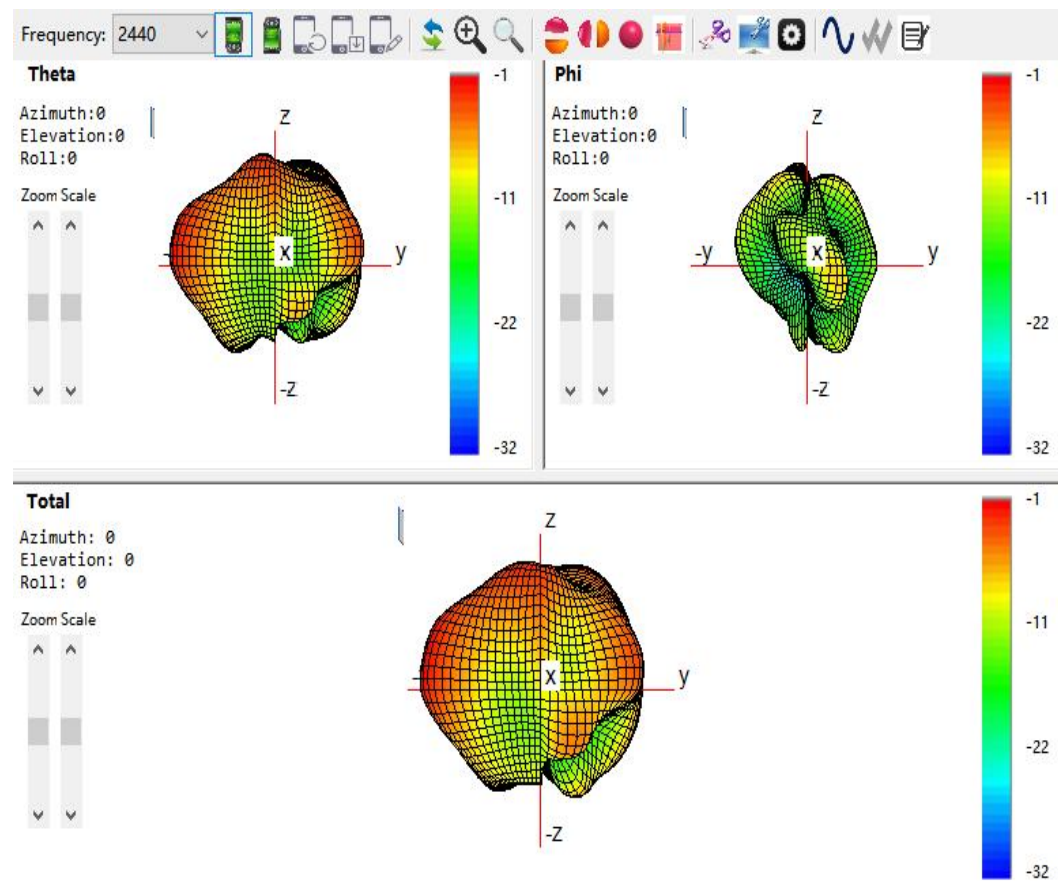
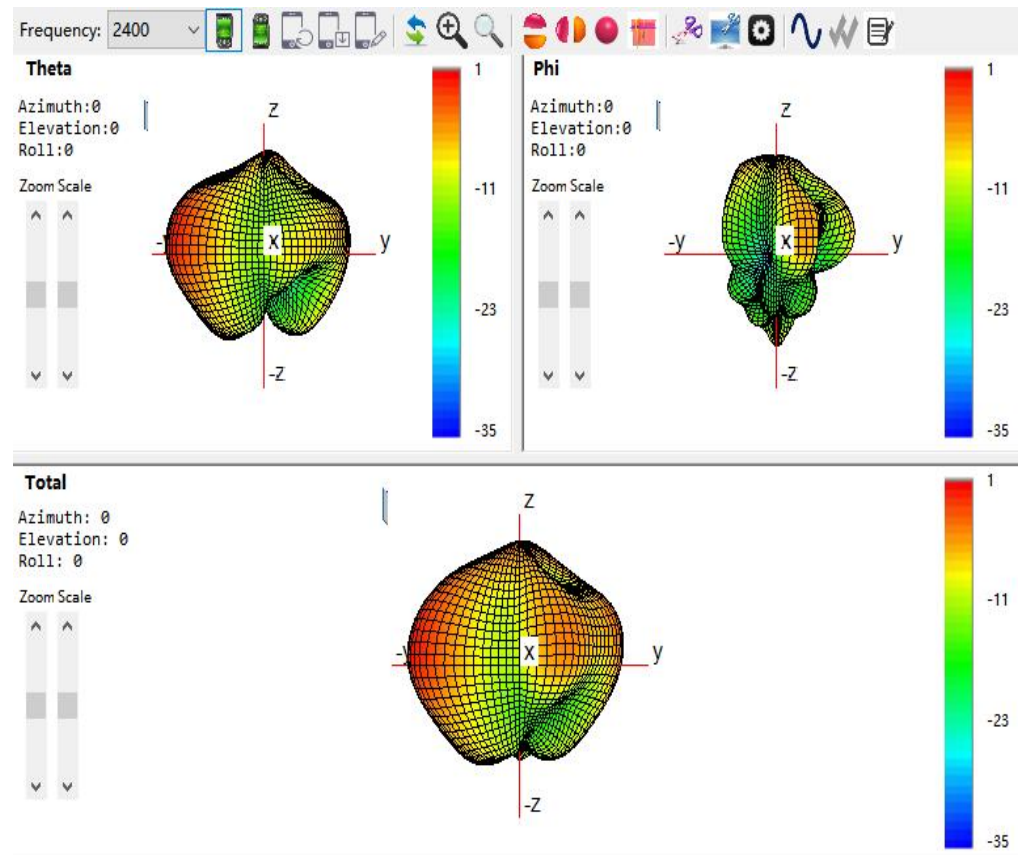


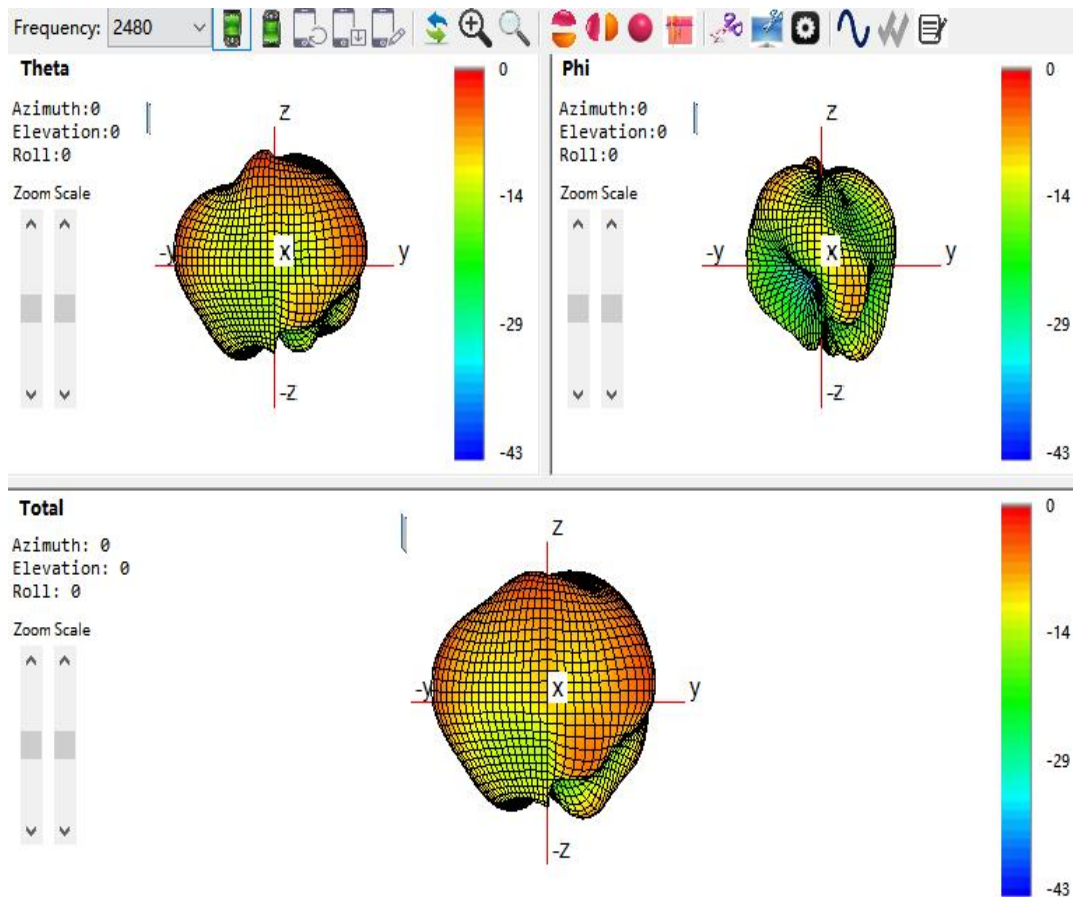




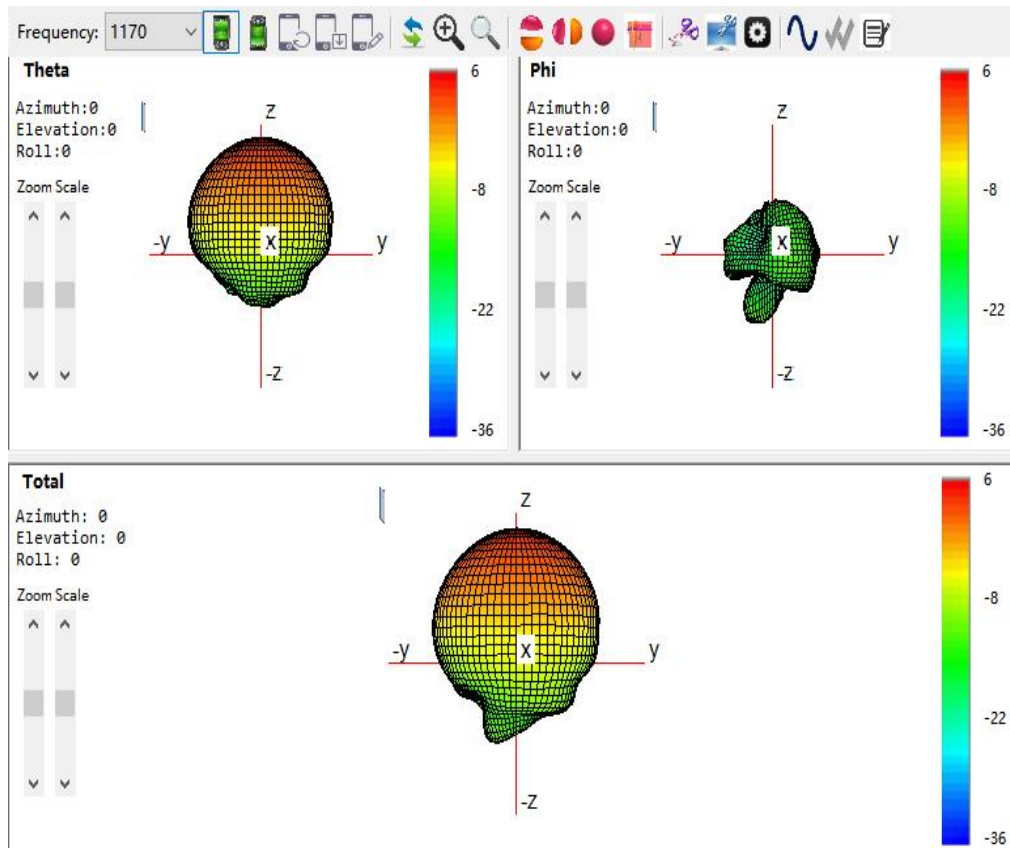


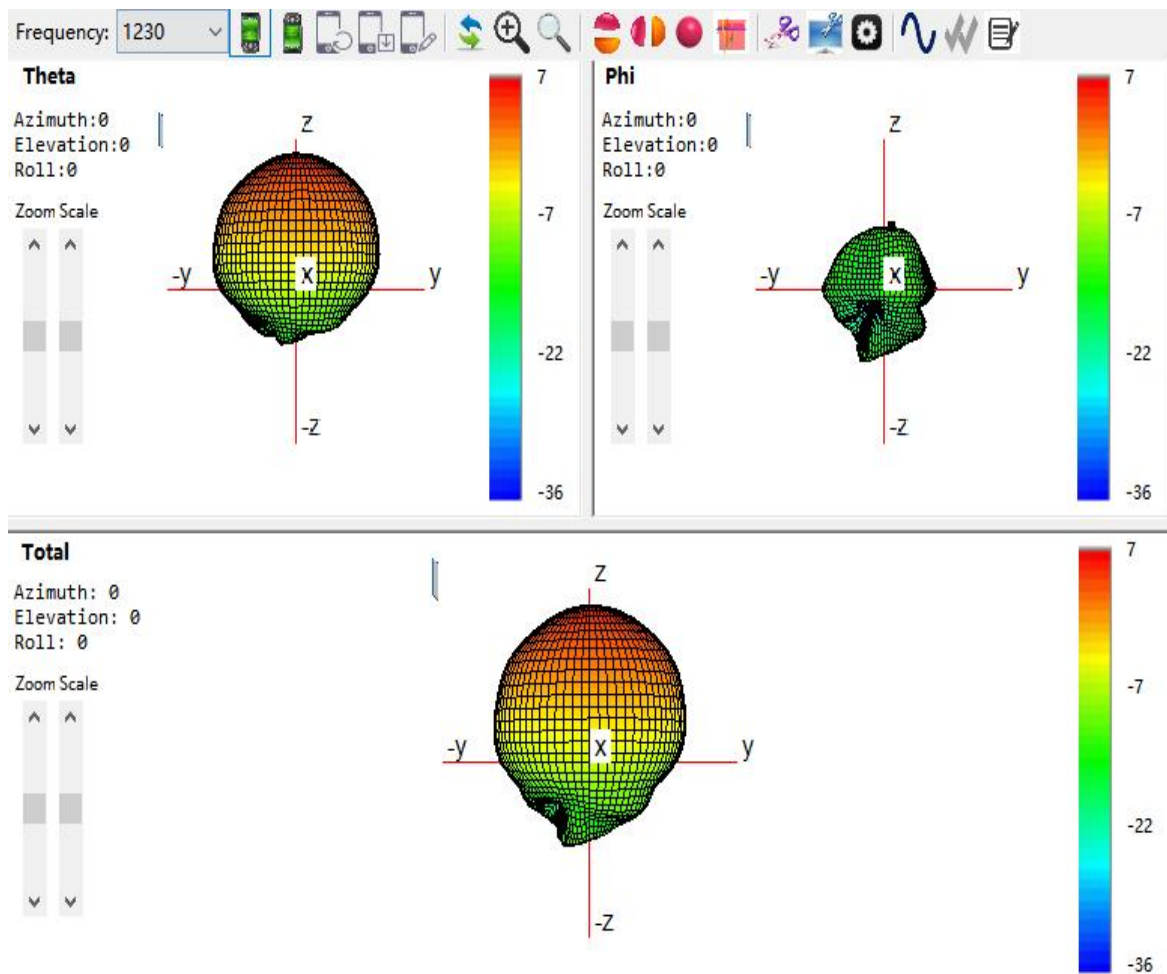
BT WIFI:

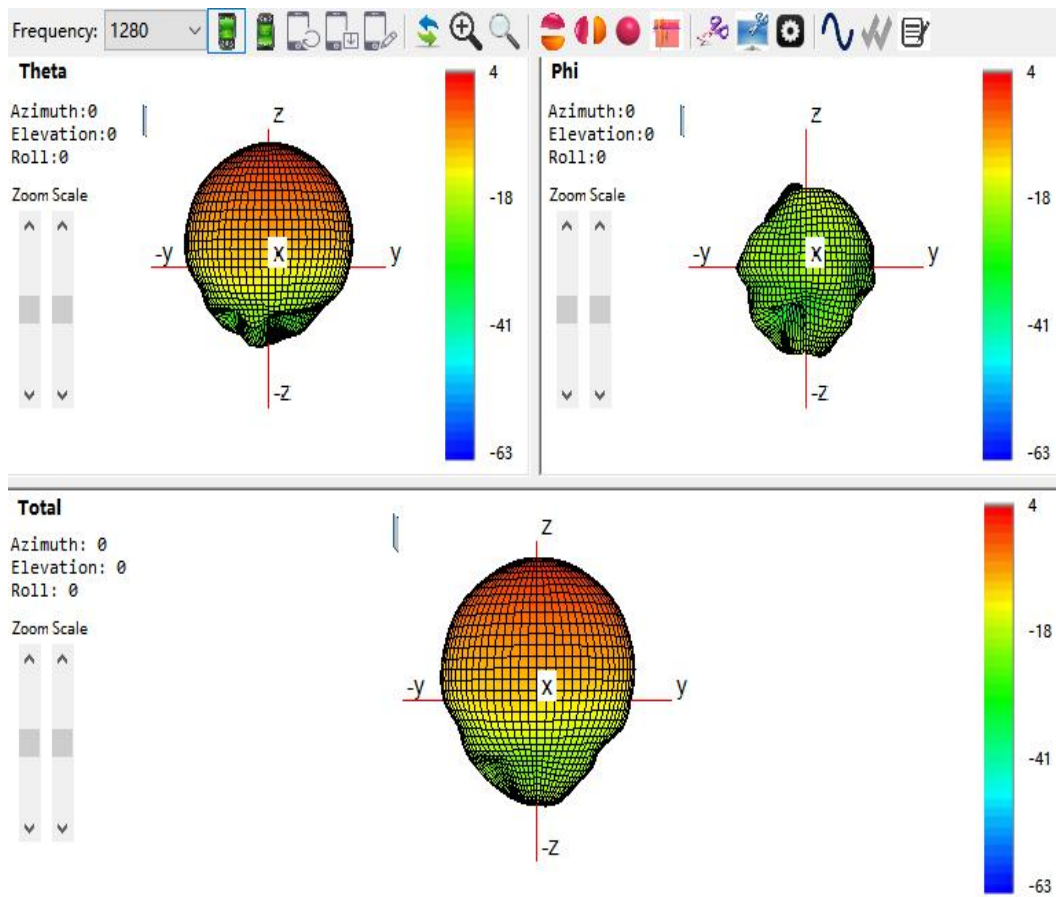


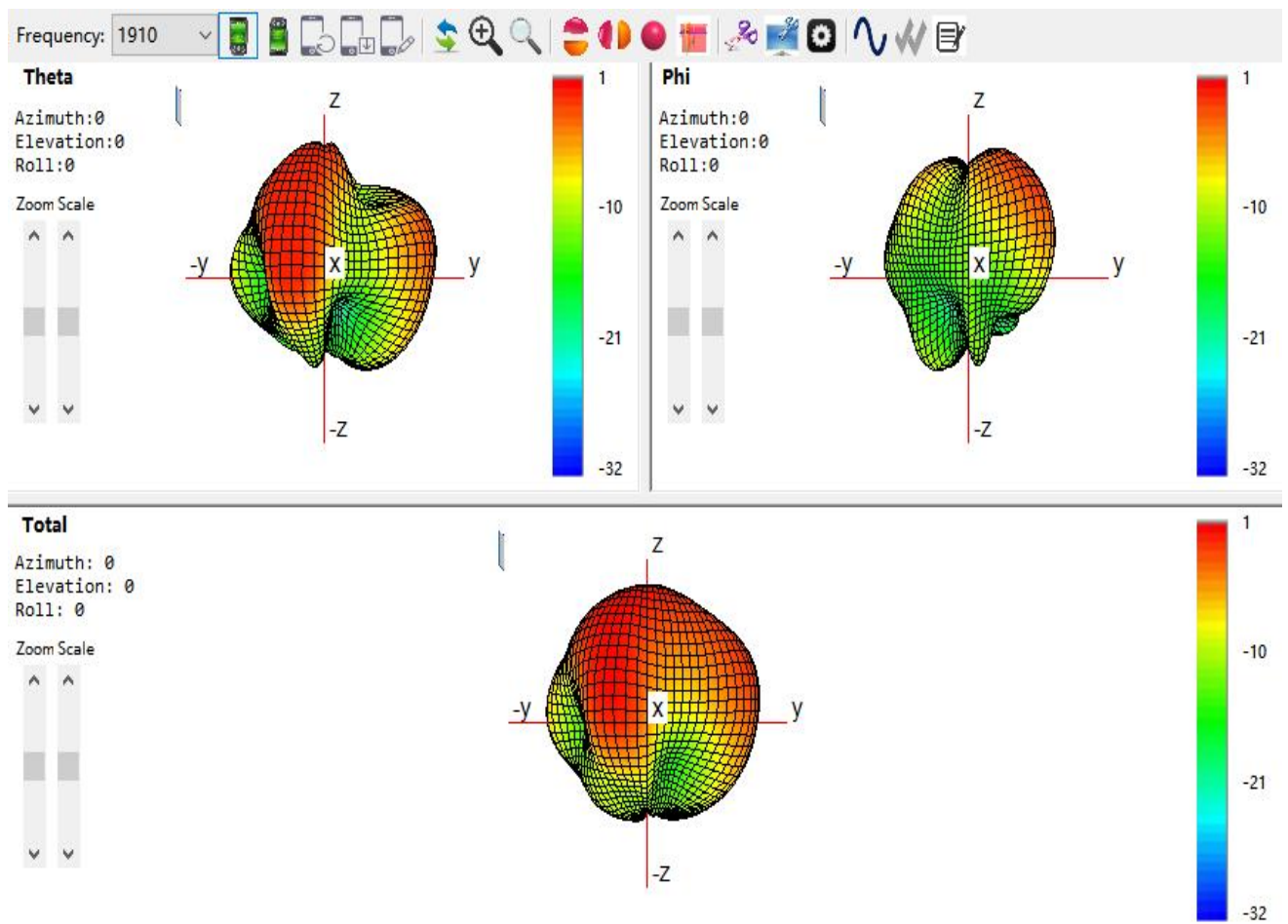
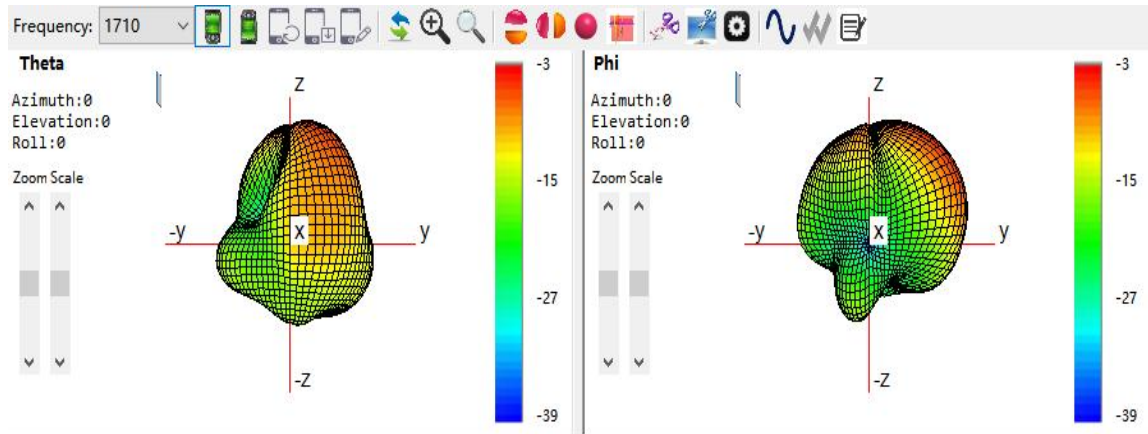


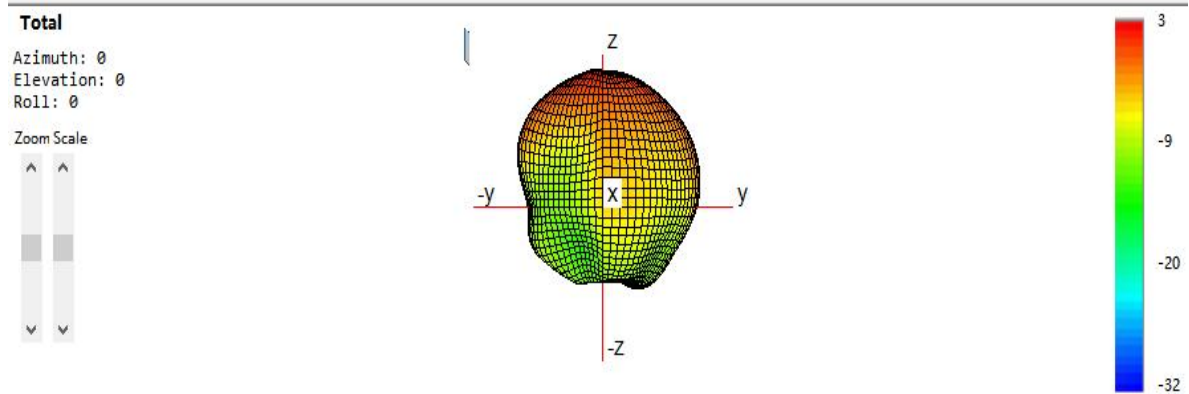
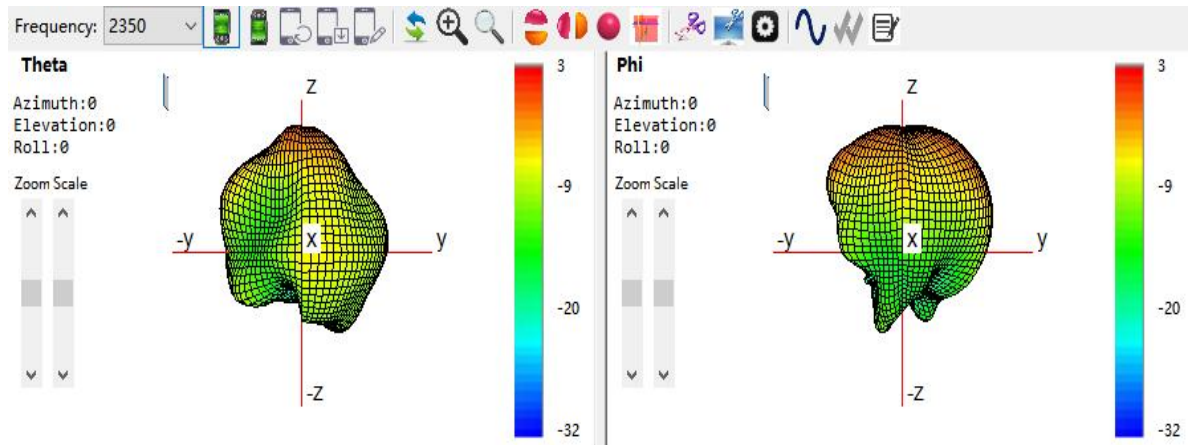
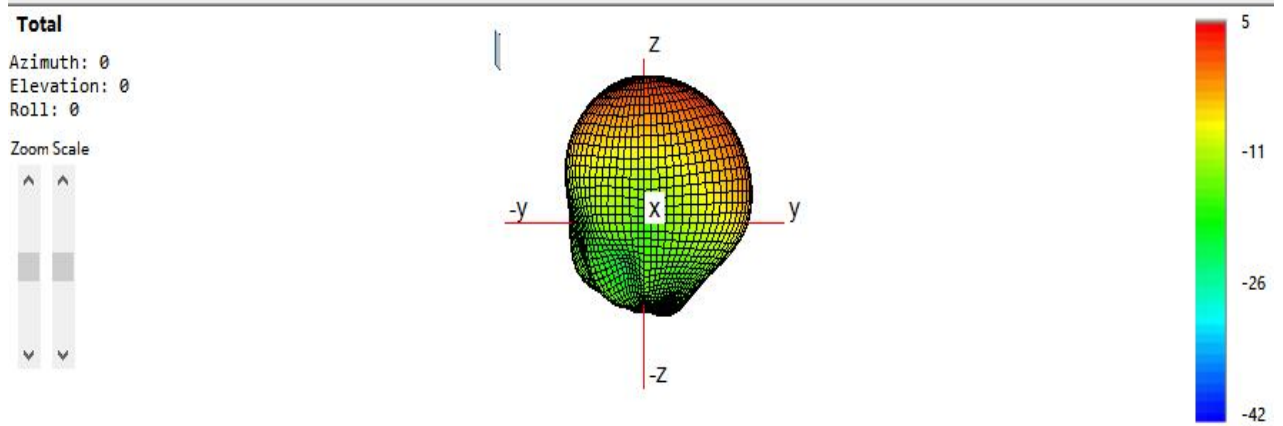
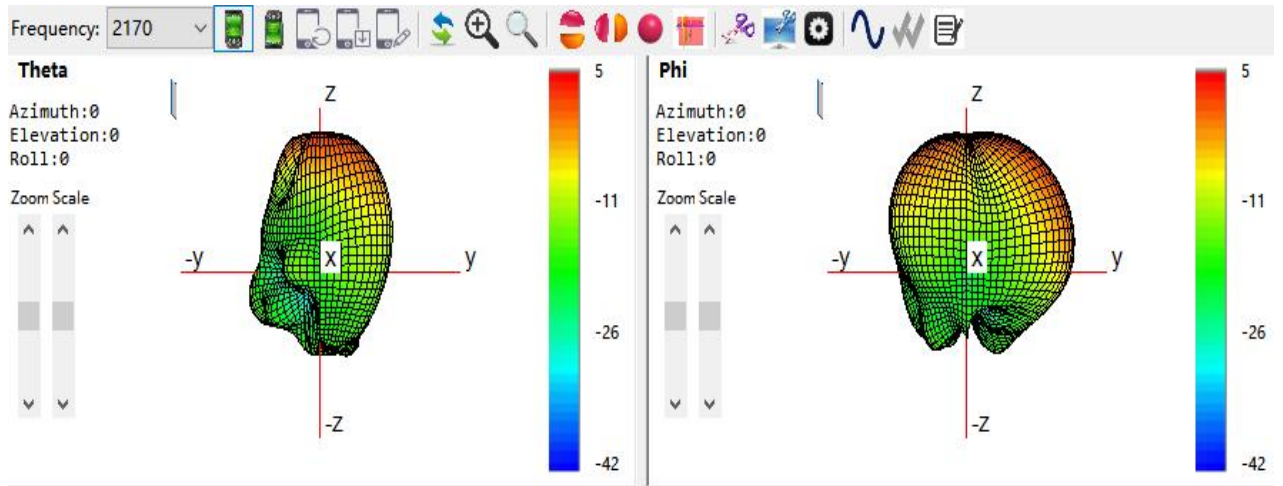
GNSS:

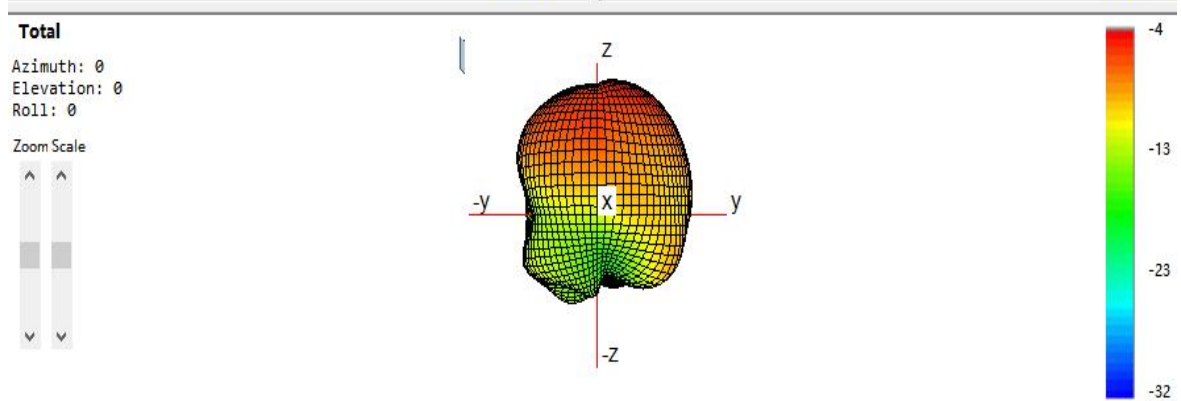
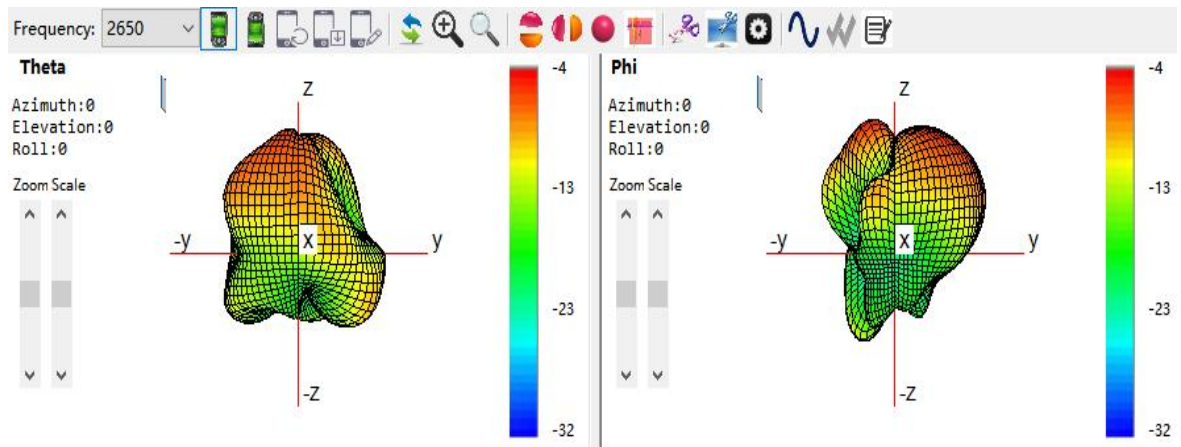
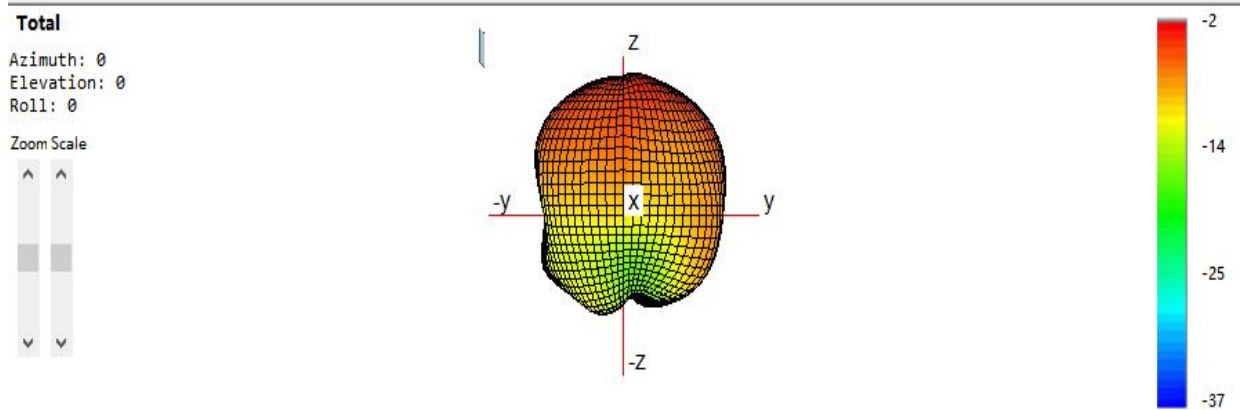
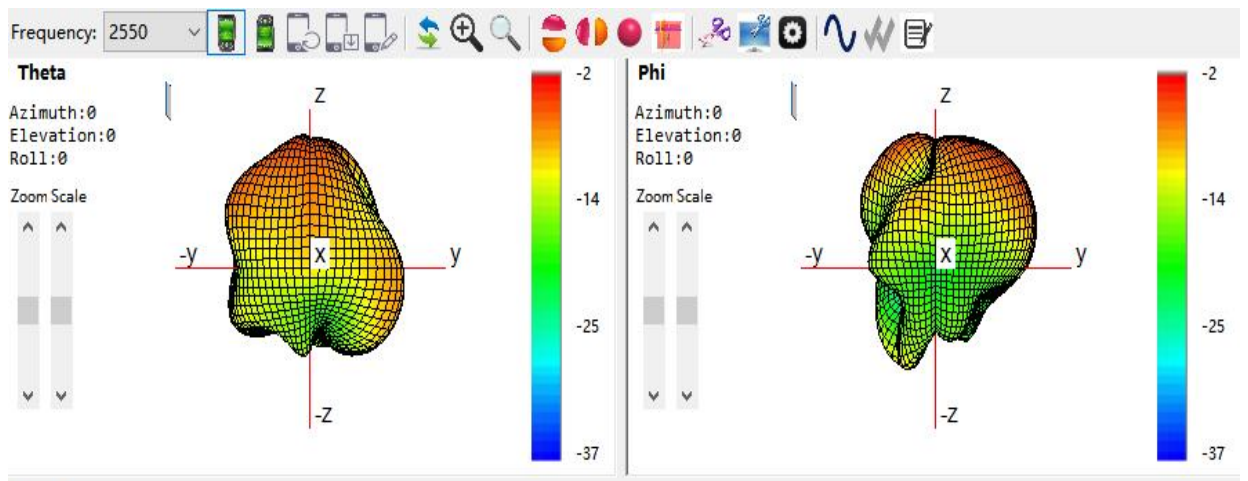












BT WIFI:

