

# Regulatory WWAN Antenna Information

(English Language Required for Intel Regulatory Review / Approval)

**(OEM/ODM or antenna vendor is required to complete this document with platform antenna information. Remove Intel references and make this your own document)**

|                    |   |
|--------------------|---|
| <b>Platform</b>    |   |
| Platform Owner     | DELL                                      |
| Brand Name         | DELL                                      |
| Model Name         | Arches13                                  |
| ODM                | Wistron Corporation                       |
| Target Launch Date |   |
|                    |   |
| <b>Antenna</b>     |   |
| Manufacturer       | Wistron Corp                              |
| Part Number        | ■ Tx1/Rx1 <u>Antenna</u> WWAN Main: 77C82 |
|                    | ■ Rx2 Antenna WWAN Aux: 77C82             |
|                    |   |
| <b>Module</b>      |   |
| With WWAN Module   |   |
| (Check Box)        |   |
|                    |   |
|                    |   |
|                    |   |
|                    |   |
|                    |   |

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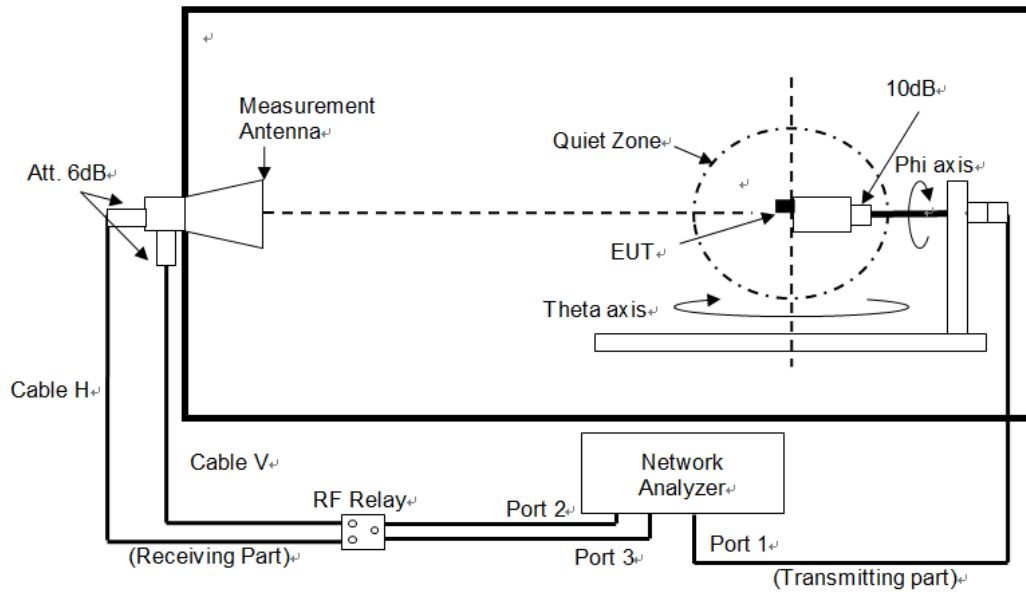
1. **Applicable test methods**

This test report is prepared for host antenna testing under a Full Anechoic Chamber.

2. **Test & System Description**

c. Test setup

<insert test diagram here for test site utilized>



b. Equipment list

<insert test diagram here for test site utilized>

| Huaya-Sporton OTA03   |                       |            |               |             |           |
|---|-----------------------|------------|---------------|-------------|-----------|
| Name  | Manufacturer          | Type/Model | Serial Number | Calibration |           |
|   |                       |            |               | Last Cal.   | Due Date  |
| ENA Series Network Analyzer                                 | Keysight              | E5080B     | MY59101211    | 2022/5/23   | 2023/5/22 |
| RF Switch   | Keysight              | 3499A      | MY42000955    | NCR         | NCR       |
| Multi-Axis Positioner Controller                            | ETS-Lindgren          | 2090       | N/A           | NCR         | NCR       |
| Medium-Duty Positioner                                      | ETS-Lindgren          | 2015       | N/A           | NCR         | NCR       |
| Measurement Horn Antenna                                    | EMCO                  | 3164-08    | 00086722      | NCR         | NCR       |
| Anechoic chamber  | ETS-Lindgren          | AMS-8500   | N/A           | 2022/1/6    | 2023/1/5  |
| 12GHz SMA(M)-SMA(M)+20core for 60cm RG316DS Cable Assembly  | Woken Technology Inc. | RG316DS    | N/A           | N/A         | N/A       |
| 12GHz SMA(M)-SMA(M)+30core for 300cm RG316DS Cable Assembly | Woken Technology Inc. | RG316DS    | N/A           | N/A         | N/A       |
| Note: Chamber calibration included full set of implement.   |                       |            |               |             |           |

# Antenna Information

## Section 1. Antenna Assembly Specifications

NB Mode

| 1A<br>Antenna Part Number    | 1B<br>Manufacture | 1C<br>Antenna Type | 1D<br>Cable Assembly Part Number and Information               | 1E<br>*Peak Gain W/<br>Cable loss (dBi) | 1F<br>Peak Gain w/o Cable Loss (dBi) | 1G<br>VSWR    | 1H<br>Cable Loss (dBi) |
|------------------------------|-------------------|--------------------|--|---|--------------------------------------|---------------|------------------------|
| Tx1/Rx1 Antenna<br>P/N:77C82 | Wistron Corp      | Monopole coupling  | 50 ohm Coaxial length: 285mm diameter: 1.13mm Connector : IPEX | 617-698MHz                              | 617-698MHz                           | 617-698MHz    | 617-698MHz             |
|                              |                   |                    |  | -1.99 dBi (peak)                        | -1.67 dBi (peak)                     | 4.5 max       | 0.32 dBi (peak)        |
|                              |                   |                    |  | 698-821MHz                              | 698-821MHz                           | 698-821MHz    | 698-821MHz             |
|                              |                   |                    |  | 0.02 dBi (peak)                         | 0.4 dBi (peak)                       | 4.5 max       | 0.38 dBi (peak)        |
|                              |                   |                    |  | 824-960MHz                              | 824-960MHz                           | 824-960MHz    | 824-960MHz             |
|                              |                   |                    |  | -0.98 dBi (peak)                        | -0.54 dBi (peak)                     | 4.5 max       | 0.44 dBi (peak)        |
|                              |                   |                    |  | 1452-1515MHz                            | 1452-1515MHz                         | 1452-1515MHz  | 1452-1515MHz           |
|                              |                   |                    |  | -2.04 dBi (peak)                        | -1.57 dBi (peak)                     | 3 max         | 0.47 dBi (peak)        |
|                              |                   |                    |  | 1710-2200MHz                            | 1710-2200MHz                         | 1710-2200MHz  | 1710-2200MHz           |
| 1.23 dBi (peak)              | 1.86 dBi (peak)   | 3 max              | 0.63 dBi (peak)  |   |                                      |               |                        |
| 2300-2690MHz                 | 2300-2690MHz      | 2300-2690MHz       | 2300-2690MHz   |   |                                      |               |                        |
| 2.42 dBi (peak)              | 3.1 dBi (peak)    | 3 max              | 0.68 dBi (peak)  |   |                                      |               |                        |
| 3300-3800MHz                 | 3300-3800MHz      | 3300-3800MHz       | 3300-3800MHz   |   |                                      |               |                        |
| -0.04 dBi (peak)             | 0.83 dBi (peak)   | 3 max              | 0.87 dBi (peak)  |   |                                      |               |                        |
| 4200-5000MHz                 | 4200-5000MHz      | 4200-5000MHz       | 4200-5000MHz   |   |                                      |               |                        |
| -2.09 dBi (peak)             | -1.12 dBi (peak)  | 3 max              | 0.97 dBi (peak)  |   |                                      |               |                        |
| 5150-5925MHz                 | 5150-5925MHz      | 5150-5925MHz       | 5150-5925MHz   |   |                                      |               |                        |
| -2.64 dBi (peak)             | -1.51 dBi (peak)  | 3 max              | 1.13 dBi (peak)  |   |                                      |               |                        |
| Rx2 Antenna<br>P/N: 77C82    | Wistron Corp      | Monopole coupling  | 50 ohm Coaxial length: 485mm diameter: 1.13mm Connector : IPEX | 617-698MHz                              | 617-698MHz                           | 617-698MHz    | 617-698MHz             |
|                              |                   |                    |  | -4.31 dBi (peak)                        | -3.76 dBi (peak)                     | 5 max         | 0.55 dBi (peak)        |
|                              |                   |                    |  | 698-821MHz                              | 698-821MHz                           | 698-821MHz    | 698-821MHz             |
|                              |                   |                    |  | -1.98 dBi (peak)                        | -1.33 dBi (peak)                     | 5 max         | 0.65 dBi (peak)        |
|                              |                   |                    |  | 716-821MHz                              | 716-821MHz                           | 716-821MHz    | 716-821MHz             |
|                              |                   |                    |  | -1.98 dBi (peak)                        | -1.33 dBi (peak)                     | 5 max         | 0.65 dBi (peak)        |
|                              |                   |                    |  | 824-960MHz                              | 824-960MHz                           | 824-960MHz    | 824-960MHz             |
|                              |                   |                    |  | -0.62 dBi (peak)                        | 0.13 dBi (peak)                      | 4.5 max       | 0.75 dBi (peak)        |
|                              |                   |                    |  | 1452-1515MHz                            | 1452-1515MHz                         | 1452-1515MHz  | 1452-1515MHz           |
|                              |                   |                    |  | -2.86 dBi (peak)                        | -2.05 dBi (peak)                     | 3 max         | 0.81 dBi (peak)        |
|                              |                   |                    |  | 1557-1610 MHz                           | 1557-1610 MHz                        | 1557-1610 MHz | 1557-1610 MHz          |
|                              |                   |                    |  | -0.71 dBi (peak)                        | 0.15 dBi (peak)                      | 3 max         | 0.86 dBi (peak)        |
| 1805-2200MHz                 | 1805-2200MHz      | 1805-2200MHz       | 1805-2200MHz   |   |                                      |               |                        |
| -1.31 dBi (peak)             | -0.25 dBi (peak)  | 3 max              | 1.06 dBi (peak)  |   |                                      |               |                        |
| 2300-2690MHzzz               | 2300-2690MHzzz    | 2300-2690MHzzz     | 2300-2690MHzzz   |   |                                      |               |                        |
| 0.08 dBi (peak)              | 1.23 dBi (peak)   | 3 max              | 1.15 dBi (peak)  |   |                                      |               |                        |
| 3300-3800MHz                 | 3300-3800MHz      | 3300-3800MHz       | 3300-3800MHz   |   |                                      |               |                        |
| -0.11 dBi (peak)             | 1.36 dBi (peak)   | 3 max              | 1.47 dBi (peak)  |   |                                      |               |                        |
| 4200-5000MHz                 | 4200-5000MHz      | 4200-5000MHz       | 4200-5000MHz   |   |                                      |               |                        |
| -0.81 dBi (peak)             | 0.84 dBi (peak)   | 3 max              | 1.65 dBi (peak)  |   |                                      |               |                        |
| 5150-5925MHz                 | 5150-5925MHz      | 5150-5925MHz       | 5150-5925MHz   |   |                                      |               |                        |
| -4.51 dBi (peak)             | -2.58 dBi (peak)  | 3 max              | 1.93 dBi (peak)  |   |                                      |               |                        |

- **Antenna Peak Gain required being test in system basis.**
- **1E frame contend absolutely peak antenna gain include H/V**

**Antenna Peak Gain Table(I):  
Low and middle band**

| Frequency<br>(MHz) | Tx1/Rx1 antenna |          | Rx2 antenna |          |
|--------------------|-----------------|----------|-------------|----------|
|                    | Horizontal      | Vertical | Horizontal  | Vertical |
|                    | (dBi)           | (dBi)    | (dBi)       | (dBi)    |
| 617                | -3.11           | -3.50    | -4.51       | -4.31    |
| 634.5              | -2.58           | -3.53    | -4.48       | -4.80    |
| 652                | -3.17           | -3.14    | -4.98       | -4.66    |
| 663                | -3.26           | -3.24    |             |          |
| 680.5              | -2.62           | -3.42    |             |          |
| 698                | -1.99           | -2.91    |             |          |
| 703                | -1.70           | -1.93    |             |          |
| 707.5              | -1.47           | -1.62    |             |          |
| 716                | -1.23           | -1.29    |             |          |
| 717                | -1.25           | -0.96    | -3.27       | -2.21    |
| 722.5              | -1.09           | -0.66    | -3.43       | -2.14    |
| 725.5              | -0.97           | -1.18    |             |          |
| 728                | -1.38           | -0.61    | -3.35       | -2.19    |
| 729                | -1.45           | -0.59    | -3.33       | -2.17    |
| 737.5              | -1.08           | -0.33    | -2.71       | -2.08    |
| 746                | -1.23           | -0.04    | -2.86       | -1.98    |
| 748                | -0.61           | -0.99    |             |          |
| 751                | -0.78           | -0.03    | -2.59       | -2.15    |
| 756                | -0.75           | -0.05    | -2.60       | -2.33    |
| 758                | -0.80           | -0.11    | -2.71       | -2.40    |
| 763                | -0.58           | -0.10    | -2.60       | -2.43    |
| 768                | -0.60           | 0.02     | -2.74       | -2.50    |
| 777                | -0.74           | -0.90    |             |          |
| 780.5              | -0.09           | -0.15    | -2.29       | -2.59    |
| 782                | -0.76           | -1.06    |             |          |
| 787                | -0.93           | -1.22    |             |          |
| 788                | -0.98           | -1.24    |             |          |
| 791                | -0.23           | -0.16    | -2.36       | -2.66    |
| 793                | -1.19           | -1.37    |             |          |
| 798                | -1.37           | -1.54    |             |          |
| 803                | -0.10           | -0.76    | -2.27       | -2.89    |
| 806                | -0.01           | -0.89    | -2.15       | -3.16    |
| 814                | -1.98           | -2.41    |             |          |
| 815                | -2.04           | -2.45    |             |          |
| 821                | -0.22           | -2.08    | -2.10       | -3.23    |
| 823                | -2.53           | -2.74    |             |          |
| 824                | -2.59           | -2.77    |             |          |
| 830                | -2.81           | -2.76    |             |          |
| 831.5              | -2.84           | -2.73    |             |          |
| 832                | -2.85           | -2.73    |             |          |
| 835                | -2.87           | -2.65    |             |          |
| 836.5              | -2.87           | -2.63    |             |          |

|        |       |       |       |       |
|--------|-------|-------|-------|-------|
| 838    | -2.86 | -2.60 |       |       |
| 840    | -2.81 | -2.56 |       |       |
| 845    | -2.72 | -2.48 |       |       |
| 847    | -2.67 | -2.44 |       |       |
| 849    | -2.62 | -2.41 |       |       |
| 859    | -2.11 | -2.11 | -1.25 | -2.61 |
| 860    | -2.20 | -2.16 | -1.28 | -2.65 |
| 862    | -2.29 | -2.12 |       |       |
| 868    | -2.42 | -2.28 | -1.14 | -2.51 |
| 869    | -2.46 | -2.25 | -1.15 | -2.44 |
| 875    | -2.40 | -2.10 | -0.84 | -2.19 |
| 876.5  | -2.40 | -2.12 | -0.77 | -2.14 |
| 880    | -3.00 | -2.29 | -0.66 | -2.11 |
| 881.5  | -2.42 | -2.19 | -0.63 | -2.15 |
| 883    | -2.41 | -2.24 | -0.62 | -2.21 |
| 885    | -2.47 | -2.26 | -0.67 | -2.30 |
| 890    | -2.83 | -2.31 | -0.96 | -2.30 |
| 894    | -0.98 | -2.30 | -0.96 | -2.23 |
| 897.5  | -3.37 | -2.19 |       |       |
| 915    | -3.82 | -2.08 |       |       |
| 925    | -2.27 | -3.17 | -1.43 | -2.54 |
| 942.5  | -2.18 | -3.11 | -1.50 | -2.96 |
| 960    | -2.13 | -2.98 | -1.75 | -3.44 |
| 1427.9 |       |       |       |       |
| 1447.9 |       |       |       |       |
| 1452   | -2.04 | -3.26 | -5.09 | -4.34 |
| 1455.4 |       |       |       |       |
| 1462.9 |       |       |       |       |
| 1474   | -3.45 | -4.98 | -4.19 | -3.49 |
| 1496   | -3.04 | -5.02 | -3.05 | -2.86 |
| 1510.9 |       |       |       |       |
| 1557   |       |       | -2.00 | -2.03 |
| 1561   |       |       | -2.00 | -2.01 |
| 1565   |       |       | -1.88 | -1.89 |
| 1573   |       |       | -1.84 | -1.76 |
| 1575   |       |       | -1.81 | -1.76 |
| 1577   |       |       | -1.83 | -1.79 |
| 1594   |       |       | -1.51 | -2.03 |
| 1602   |       |       | -0.87 | -1.74 |
| 1610   |       |       | -0.71 | -1.83 |



## High band

| Frequency (MHz) | Tx1/Rx1 antenna  |                | Rx2 antenna      |                |
|-----------------|------------------|----------------|------------------|----------------|
|                 | Horizontal (dBi) | Vertical (dBi) | Horizontal (dBi) | Vertical (dBi) |
| 1710            | -1.33            | -2.92          |                  |                |
| 1732.5          | -0.85            | -2.80          |                  |                |
| 1745            | -0.92            | -2.79          |                  |                |
| 1747.5          | -0.93            | -2.74          |                  |                |
| 1749.9          | -0.98            | -2.71          |                  |                |
| 1755            | -1.09            | -2.67          |                  |                |
| 1767.4          | -1.38            | -2.69          |                  |                |
| 1780            | -1.39            | -2.97          |                  |                |
| 1784.9          | -1.44            | -3.07          |                  |                |
| 1805            | -2.52            | -1.02          | -2.53            | -3.09          |
| 1842.5          | -1.12            | -0.07          | -2.00            | -2.48          |
| 1844.9          | -1.11            | -0.08          | -2.10            | -2.51          |
| 1850            | -1.17            | -3.33          |                  |                |
| 1862.4          | -0.81            | -3.08          | -2.00            | -2.37          |
| 1880            | -0.85            | -2.92          | -1.89            | -2.14          |
| 1882.5          | -0.83            | -2.88          |                  |                |
| 1900            | -0.46            | -2.24          | -1.92            | -1.94          |
| 1910            | -0.25            | -1.92          |                  |                |
| 1915            | -0.19            | -1.79          |                  |                |
| 1920            | -0.12            | -1.57          | -1.91            | -1.85          |
| 1930            | -0.84            | -0.38          | -1.79            | -1.68          |
| 1950            | 0.47             | -0.79          |                  |                |
| 1960            | -0.87            | -0.09          | -1.68            | -2.16          |
| 1962.5          | -0.92            | -0.17          | -1.75            | -2.23          |
| 1980            | 0.95             | -0.42          |                  |                |
| 1990            | -0.31            | -0.11          | -2.06            | -2.02          |
| 1995            | -0.19            | -0.06          | -2.15            | -2.15          |
| 2010            | 0.24             | 0.38           | -1.92            | -1.73          |
| 2018            | 1.15             | -0.75          | -1.82            | -1.74          |
| 2025            | 1.18             | -0.83          | -1.84            | -1.64          |
| 2110            | 0.57             | 0.69           | -1.85            | -1.58          |
| 2132.5          | 1.23             | -0.87          | -1.68            | -1.46          |
| 2140            | 0.08             | 0.29           | -1.37            | -1.31          |
| 2155            | -0.28            | 0.50           | -1.35            | -1.52          |
| 2170            | -0.14            | 0.50           | -1.45            | -1.53          |
| 2200            | 0.13             | 0.47           | -1.49            | -1.72          |
| 2300            | 0.52             | 0.40           | -1.48            | -1.78          |
| 2305            | 0.64             | 0.41           |                  |                |
| 2310            | 2.42             | 0.02           |                  |                |
| 2315            | 0.97             | 0.11           |                  |                |
| 2350            | 0.94             | 0.17           | -1.19            | -1.90          |
| 2355            | 0.99             | 0.18           | -1.14            | -1.99          |
| 2360            | 1.72             | -0.57          | -0.65            | -2.35          |

|        |        |        |       |       |
|--------|--------|--------|-------|-------|
| 2400   | 1.46   | -0.54  | -0.83 | -2.40 |
| 2496   | 1.25   | -0.62  | -0.84 | -2.50 |
| 2500   | 0.96   | -0.75  |       |       |
| 2535   | 1.85   | -0.17  |       |       |
| 2570   | 1.73   | -0.31  | 0.08  | -1.62 |
| 2593   | 1.38   | -1.15  | 0.03  | -1.04 |
| 2595   | 0.98   | -0.75  | -0.07 | -0.59 |
| 2620   | 0.64   | -0.74  | -0.28 | -0.62 |
| 2655   | 0.57   | -0.72  | -0.42 | -0.60 |
| 2690   | -0.11  | -0.57  | -1.38 | -1.26 |
| 3300   | -0.07  | -0.51  | -2.29 | -2.56 |
| 3400   | -0.79  | -0.46  | -3.34 | -2.68 |
| 3500   | -0.04  | -1.30  | -0.84 | -0.58 |
| 3550   | -0.09  | -1.31  | -1.19 | -1.03 |
| 3600   | -0.30  | -2.39  | -0.11 | -1.51 |
| 3625   | -0.86  | -3.10  | -1.30 | -2.60 |
| 3700   | -1.57  | -3.77  | -0.95 | -3.26 |
| 3750   | -1.88  | -3.59  | -0.46 | -2.48 |
| 3800   | -2.05  | -2.60  | -0.18 | -1.90 |
| 4200   | -2.09  | -2.77  | -0.81 | -1.33 |
| 4400   | -3.44  | -3.65  | -1.02 | -1.19 |
| 4700   | -10.96 | -10.76 | -2.59 | -3.29 |
| 5000   | -4.14  | -4.57  | -7.22 | -7.85 |
| 5150   | -4.33  | -4.46  | -5.52 | -5.83 |
| 5537.5 | -2.64  | -3.54  | -4.54 | -4.51 |
| 5925   | -3.03  | -3.98  | -5.47 | -5.64 |

| 1A<br>Antenna Part Number    | 1B<br>Manufacture | 1C<br>Antenna Type | 1D<br>Cable Assembly Part Number and Information               | 1E<br>*Peak Gain W/ Cable loss (dBi) | 1F<br>Peak Gain w/o Cable Loss (dBi) | 1G<br>VSWR             | 1H<br>Cable Loss (dBi)           |
|------------------------------|-------------------|--------------------|--|--------------------------------------|--------------------------------------|------------------------|----------------------------------|
| Tx1/Rx1 Antenna<br>P/N:77C82 | Wistron Corp      | Monopole coupling  | 50 ohm Coaxial length: 285mm diameter: 1.13mm Connector : IPEX | 617-698MHz<br>-0.32 dBi (peak)       | 617-698MHz<br>0 dBi (peak)           | 617-698MHz<br>4.5 max  | 617-698MHz<br>0.32 dBi (peak)    |
|                              |                   |                    |  | 698-821MHz<br>-0.07 dBi (peak)       | 698-821MHz<br>0.31 dBi (peak)        | 698-821MHz<br>4.5 max  | 698-821MHz<br>0.38 dBi (peak)    |
|                              |                   |                    |  | 824-960MHz<br>-1.4 dBi (peak)        | 824-960MHz<br>-0.96 dBi (peak)       | 824-960MHz<br>4.5 max  | 824-960MHz<br>0.44 dBi (peak)    |
|                              |                   |                    |  | 1452-1515MHz<br>-1.13 dBi (peak)     | 1452-1515MHz<br>-0.66 dBi (peak)     | 1452-1515MHz<br>3 max  | 1452-1515MHz<br>0.47 dBi (peak)  |
|                              |                   |                    |  | 1710-2200MHz<br>-1 dBi (peak)        | 1710-2200MHz<br>-0.37 dBi (peak)     | 1710-2200MHz<br>3 max  | 1710-2200MHz<br>0.63 dBi (peak)  |
|                              |                   |                    |  | 2300-2690MHz<br>0.88 dBi (peak)      | 2300-2690MHz<br>1.56 dBi (peak)      | 2300-2690MHz<br>3 max  | 2300-2690MHz<br>0.68 dBi (peak)  |
|                              |                   |                    |  | 3300-3800MHz<br>-0.2 dBi (peak)      | 3300-3800MHz<br>0.67 dBi (peak)      | 3300-3800MHz<br>3 max  | 3300-3800MHz<br>0.87 dBi (peak)  |
|                              |                   |                    |  | 4200-5000MHz<br>-3.31 dBi (peak)     | 4200-5000MHz<br>-2.34 dBi (peak)     | 4200-5000MHz<br>3 max  | 4200-5000MHz<br>0.97 dBi (peak)  |
|                              |                   |                    |  | 5150-5925MHz<br>-3.23 dBi (peak)     | 5150-5925MHz<br>-2.1 dBi (peak)      | 5150-5925MHz<br>3 max  | 5150-5925MHz<br>1.13 dBi (peak)  |
| Rx2 Antenna<br>P/N:77C82     | Wistron Corp      | Monopole coupling  | 50 ohm Coaxial length: 485mm diameter: 1.13mm Connector : IPEX | 617-698MHz<br>-3.65 dBi (peak)       | 617-698MHz<br>-3.1 dBi (peak)        | 617-698MHz<br>5 max    | 617-698MHz<br>0.55 dBi (peak)    |
|                              |                   |                    |  | 698-821MHz<br>-2.80 dBi (peak)       | 698-821MHz<br>-2.15 dBi (peak)       | 698-821MHz<br>5 max    | 698-821MHz<br>0.65 dBi (peak)    |
|                              |                   |                    |  | 716-821MHz<br>-2.80 dBi (peak)       | 716-821MHz<br>-2.15 dBi (peak)       | 716-821MHz<br>5 max    | 716-821MHz<br>0.65 dBi (peak)    |
|                              |                   |                    |  | 824-960MHz<br>-2.56 dBi (peak)       | 824-960MHz<br>-1.81 dBi (peak)       | 824-960MHz<br>4.5 max  | 824-960MHz<br>0.75 dBi (peak)    |
|                              |                   |                    |  | 1452-1515MHz<br>-3.59 dBi (peak)     | 1452-1515MHz<br>-2.78 dBi (peak)     | 1452-1515MHz<br>3 max  | 1452-1515MHz<br>0.81 dBi (peak)  |
|                              |                   |                    |  | 1557-1610 MHz<br>0.23 dBi (peak)     | 1557-1610 MHz<br>1.09 dBi (peak)     | 1557-1610 MHz<br>3 max | 1557-1610 MHz<br>0.86 dBi (peak) |
|                              |                   |                    |  | 1805-2200MHz<br>-2.2 dBi (peak)      | 1805-2200MHz<br>-1.14 dBi (peak)     | 1805-2200MHz<br>3 max  | 1805-2200MHz<br>1.06 dBi (peak)  |
|                              |                   |                    |  | 2300-2690MHz<br>0.56 dBi (peak)      | 2300-2690MHz<br>1.71 dBi (peak)      | 2300-2690MHz<br>3 max  | 2300-2690MHz<br>1.15 dBi (peak)  |
|                              |                   |                    |  | 3300-3800MHz<br>0.34 dBi (peak)      | 3300-3800MHz<br>1.81 dBi (peak)      | 3300-3800MHz<br>3 max  | 3300-3800MHz<br>1.47 dBi (peak)  |
|                              |                   |                    |  | 4200-5000MHz<br>-0.74 dBi (peak)     | 4200-5000MHz<br>0.91 dBi (peak)      | 4200-5000MHz<br>3 max  | 4200-5000MHz<br>1.65 dBi (peak)  |
|                              |                   |                    |  | 5150-5925MHz<br>-2.9 dBi (peak)      | 5150-5925MHz<br>-0.97 dBi (peak)     | 5150-5925MHz<br>3 max  | 5150-5925MHz<br>1.93 dBi (peak)  |

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V

**Antenna Peak Gain Table(I):  
Low and middle band**

| Frequency<br>(MHz) | Tx1/Rx1 antenna |          | Rx2 antenna |          |
|--------------------|-----------------|----------|-------------|----------|
|                    | Horizontal      | Vertical | Horizontal  | Vertical |
|                    | (dBi)           | (dBi)    | (dBi)       | (dBi)    |
| 617                | -4.00           | -6.86    | -4.22       | -7.15    |
| 634.5              | -2.63           | -5.35    | -4.03       | -6.55    |
| 652                | -1.62           | -3.90    | -3.65       | -4.86    |
| 663                | -1.11           | -3.16    |             |          |
| 680.5              | -0.81           | -2.37    |             |          |
| 698                | -0.32           | -1.87    |             |          |
| 703                | -0.07           | -1.64    |             |          |
| 707.5              | -0.07           | -1.75    |             |          |
| 716                | -0.36           | -2.02    |             |          |
| 717                | -0.37           | -2.03    | -3.20       | -2.80    |
| 722.5              | -0.54           | -2.27    | -3.36       | -3.03    |
| 725.5              | -0.72           | -2.44    |             |          |
| 728                | -0.96           | -2.64    | -3.58       | -3.27    |
| 729                | -1.04           | -2.75    | -3.60       | -3.31    |
| 737.5              | -1.65           | -2.78    | -3.94       | -3.34    |
| 746                | -1.91           | -2.72    | -4.07       | -3.40    |
| 748                | -1.89           | -2.70    |             |          |
| 751                | -1.90           | -2.64    | -3.78       | -3.48    |
| 756                | -1.82           | -2.57    | -3.78       | -3.57    |
| 758                | -1.82           | -2.57    | -3.83       | -3.61    |
| 763                | -1.54           | -2.36    | -3.73       | -3.57    |
| 768                | -1.56           | -2.22    | -3.90       | -3.48    |
| 777                | -1.29           | -2.31    |             |          |
| 780.5              | -1.24           | -2.29    | -3.66       | -3.37    |
| 782                | -1.32           | -2.29    |             |          |
| 787                | -1.50           | -2.32    |             |          |
| 788                | -1.45           | -2.30    |             |          |
| 791                | -1.40           | -2.31    | -3.87       | -3.31    |
| 793                | -1.39           | -2.31    |             |          |
| 798                | -1.40           | -2.27    |             |          |
| 803                | -1.41           | -2.44    | -4.05       | -3.50    |
| 806                | -1.27           | -2.50    | -3.94       | -3.56    |
| 814                | -1.52           | -2.63    |             |          |
| 815                | -1.49           | -2.64    |             |          |
| 821                | -1.57           | -2.80    | -4.03       | -3.77    |
| 823                | -1.58           | -2.89    |             |          |
| 824                | -1.54           | -2.91    |             |          |
| 830                | -1.40           | -2.98    |             |          |
| 831.5              | -1.44           | -3.00    |             |          |
| 832                | -1.44           | -3.07    |             |          |
| 835                | -1.61           | -3.11    |             |          |
| 836.5              | -1.70           | -3.17    |             |          |

|        |       |       |       |       |
|--------|-------|-------|-------|-------|
| 838    | -1.73 | -3.21 |       |       |
| 840    | -1.73 | -3.21 |       |       |
| 845    | -1.67 | -3.18 |       |       |
| 847    | -1.60 | -3.19 |       |       |
| 849    | -1.57 | -3.23 |       |       |
| 859    | -1.40 | -3.47 | -3.12 | -3.69 |
| 860    | -1.49 | -3.49 | -3.16 | -3.71 |
| 862    | -1.55 | -3.48 |       |       |
| 868    | -1.75 | -3.56 | -3.07 | -3.34 |
| 869    | -1.81 | -3.60 | -3.06 | -3.34 |
| 875    | -1.73 | -3.69 | -2.81 | -3.23 |
| 876.5  | -1.74 | -3.75 | -2.72 | -3.19 |
| 880    | -1.75 | -3.80 | -2.63 | -3.16 |
| 881.5  | -1.78 | -3.82 | -2.58 | -3.14 |
| 883    | -1.82 | -3.85 | -2.56 | -3.10 |
| 885    | -1.89 | -3.84 | -2.61 | -3.06 |
| 890    | -2.31 | -3.90 | -2.96 | -3.03 |
| 894    | -2.49 | -3.97 | -2.98 | -3.01 |
| 897.5  | -2.68 | -4.05 |       |       |
| 915    | -3.40 | -4.51 |       |       |
| 925    | -3.84 | -4.81 | -3.20 | -3.35 |
| 942.5  | -3.96 | -5.14 | -3.37 | -3.90 |
| 960    | -4.09 | -5.52 | -4.01 | -4.46 |
| 1427.9 |       |       |       |       |
| 1447.9 |       |       |       |       |
| 1452   | -1.76 | -5.93 | -6.57 | -6.74 |
| 1455.4 |       |       |       |       |
| 1462.9 |       |       |       |       |
| 1474   | -1.13 | -6.38 | -5.24 | -5.25 |
| 1496   | -2.03 | -5.67 | -3.59 | -4.83 |
| 1510.9 |       |       |       |       |
| 1557   |       |       | -0.92 | -3.60 |
| 1561   |       |       | -0.84 | -3.70 |
| 1565   |       |       | -0.72 | -3.56 |
| 1573   |       |       | -0.66 | -3.31 |
| 1575   |       |       | -0.67 | -3.26 |
| 1577   |       |       | -0.71 | -3.30 |
| 1594   |       |       | -0.56 | -3.26 |
| 1602   |       |       | 0.06  | -2.96 |
| 1610   |       |       | 0.23  | -2.90 |

## High band

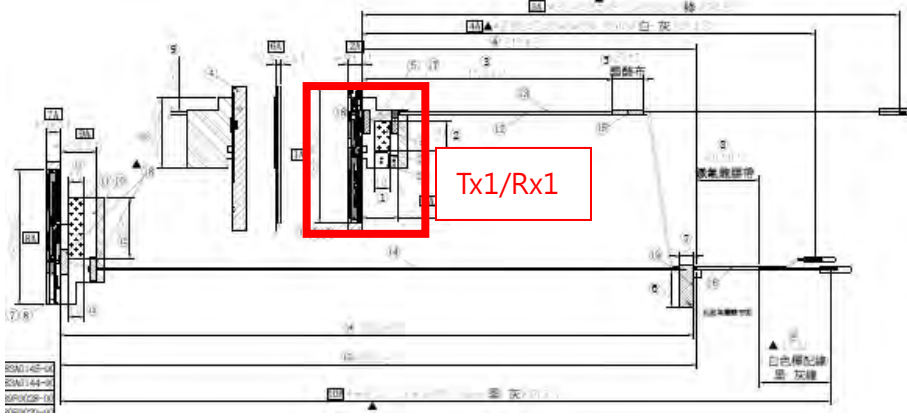
| Frequency (MHz) | Tx1/Rx1 antenna  |                | Rx2 antenna      |                |
|-----------------|------------------|----------------|------------------|----------------|
|                 | Horizontal (dBi) | Vertical (dBi) | Horizontal (dBi) | Vertical (dBi) |
| 1710            | -1.00            | -3.22          |                  |                |
| 1732.5          | -1.30            | -3.07          |                  |                |
| 1745            | -1.52            | -3.00          |                  |                |
| 1747.5          | -1.55            | -2.97          |                  |                |
| 1749.9          | -1.55            | -2.99          |                  |                |
| 1755            | -1.82            | -2.94          |                  |                |
| 1767.4          | -1.86            | -3.05          |                  |                |
| 1780            | -2.03            | -3.00          |                  |                |
| 1784.9          | -2.07            | -3.00          |                  |                |
| 1805            | -2.26            | -2.91          | -2.92            | -3.36          |
| 1842.5          | -2.35            | -2.41          | -2.33            | -2.75          |
| 1844.9          | -2.34            | -2.51          | -2.28            | -2.83          |
| 1850            | -2.30            | -2.55          |                  |                |
| 1862.4          | -2.10            | -2.48          | -2.20            | -2.80          |
| 1880            | -1.96            | -2.37          | -2.28            | -2.89          |
| 1882.5          | -1.94            | -2.36          |                  |                |
| 1900            | -1.80            | -2.27          | -2.57            | -2.65          |
| 1910            | -1.64            | -2.30          |                  |                |
| 1915            | -1.63            | -2.41          |                  |                |
| 1920            | -1.70            | -2.51          | -2.64            | -2.68          |
| 1930            | -1.49            | -2.39          | -2.58            | -2.57          |
| 1950            | -1.59            | -2.58          |                  |                |
| 1960            | -1.62            | -2.60          | -2.99            | -3.12          |
| 1962.5          | -1.72            | -2.61          | -3.04            | -3.02          |
| 1980            | -1.87            | -2.22          |                  |                |
| 1990            | -2.02            | -2.03          | -3.69            | -2.98          |
| 1995            | -1.99            | -1.94          | -3.69            | -3.01          |
| 2010            | -1.81            | -1.58          | -3.61            | -2.68          |
| 2018            | -1.77            | -1.51          | -3.58            | -2.67          |
| 2025            | -1.66            | -1.59          | -3.58            | -2.69          |
| 2110            | -1.65            | -1.47          | -3.62            | -2.70          |
| 2132.5          | -1.51            | -1.47          | -3.52            | -2.65          |
| 2140            | -1.24            | -2.90          | -3.11            | -2.75          |
| 2155            | -1.03            | -3.07          | -3.20            | -3.16          |
| 2170            | -1.01            | -3.17          | -3.09            | -3.16          |
| 2200            | -1.09            | -3.27          | -3.07            | -3.28          |
| 2300            | -1.45            | -3.18          | -3.31            | -3.23          |
| 2305            | -1.47            | -3.23          |                  |                |
| 2310            | -0.77            | -4.15          |                  |                |
| 2315            | -0.64            | -4.18          |                  |                |
| 2350            | -0.51            | -3.98          | -1.89            | -2.34          |
| 2355            | -0.53            | -4.06          | -1.79            | -2.38          |
| 2360            | -0.36            | -3.91          | -0.71            | -2.47          |

|        |       |       |       |       |
|--------|-------|-------|-------|-------|
| 2400   | -0.46 | -3.79 | -0.79 | -2.71 |
| 2496   | -0.54 | -3.83 | -0.79 | -2.62 |
| 2500   | -0.85 | -3.58 |       |       |
| 2535   | 0.00  | -4.58 |       |       |
| 2570   | 0.08  | -4.56 | 0.49  | -2.30 |
| 2593   | 0.26  | -4.12 | 0.52  | -1.95 |
| 2595   | 0.86  | -2.94 | 0.56  | -1.83 |
| 2620   | 0.88  | -2.50 | 0.21  | -2.18 |
| 2655   | 0.76  | -2.48 | 0.13  | -2.27 |
| 2690   | 0.69  | -2.23 | -0.81 | -3.40 |
| 3300   | -0.20 | -2.55 | -2.33 | -5.50 |
| 3400   | -1.34 | -3.11 | -2.87 | -7.07 |
| 3500   | -3.16 | -4.38 | -0.48 | -4.91 |
| 3550   | -1.41 | -3.20 | -0.78 | -5.62 |
| 3600   | -1.60 | -2.88 | 0.34  | -5.26 |
| 3625   | -2.33 | -2.72 | -0.57 | -5.46 |
| 3700   | -3.95 | -3.31 | -0.35 | -4.66 |
| 3750   | -5.22 | -4.11 | -0.89 | -4.54 |
| 3800   | -6.12 | -5.40 | -0.75 | -4.48 |
| 4200   | -3.95 | -3.31 | -0.92 | -4.44 |
| 4400   | -7.28 | -5.51 | -0.74 | -4.28 |
| 4700   | -9.78 | -5.51 | -3.51 | -3.17 |
| 5000   | -5.27 | -6.50 | -7.23 | -8.31 |
| 5150   | -6.18 | -6.21 | -5.52 | -5.97 |
| 5537.5 | -4.77 | -3.98 | -3.86 | -6.16 |
| 5925   | -4.31 | -3.23 | -2.90 | -7.24 |

## Section 2. Dimensioned Photos or Drawings of Antennas

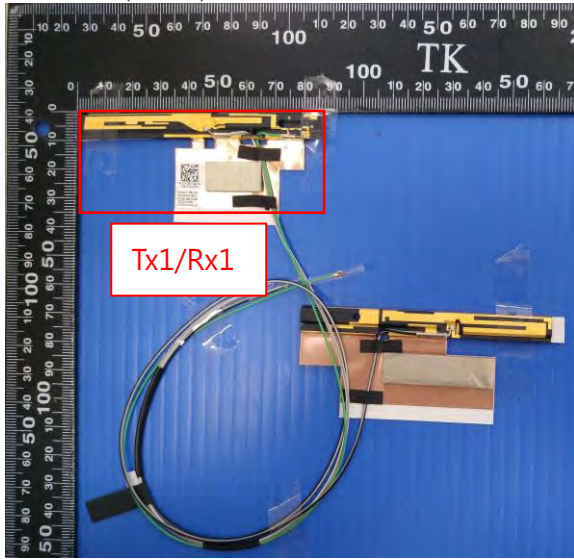
Include a dimensioned photo and dimensioned drawing of Tx1/Rx1 antenna here.

Tx1/Rx1 Antenna Dimensioned Drawing:

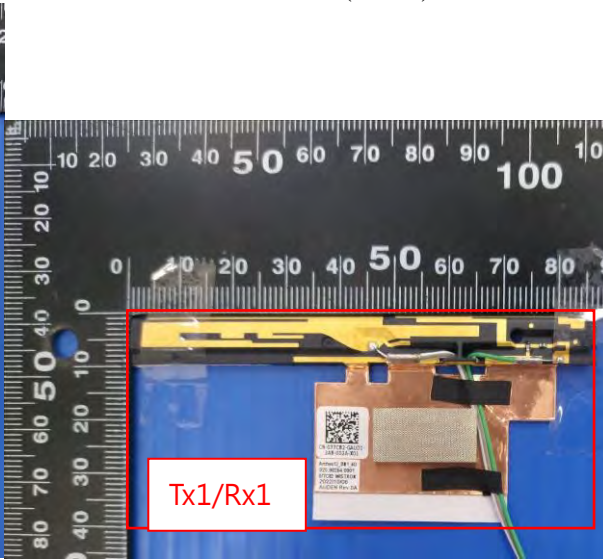


Tx1/Rx1 Antenna Photo:

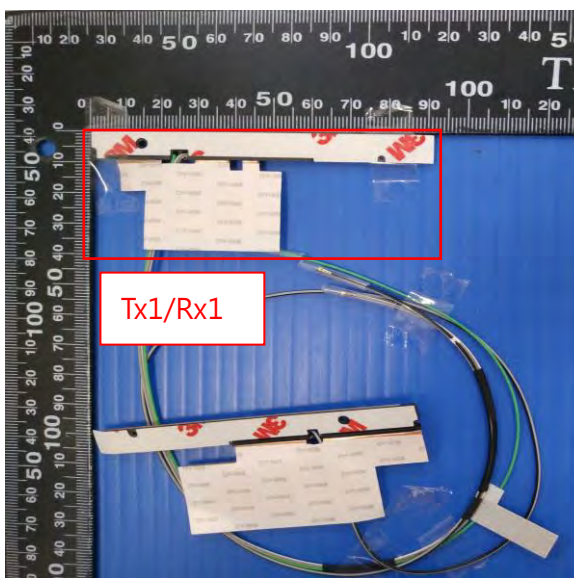
Tx1/Rx1 (Front)-Far



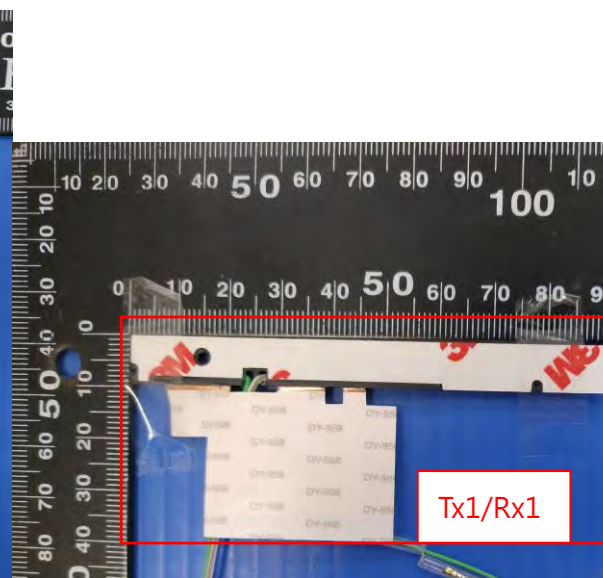
Tx1/Rx1 (Front)-Near



Tx1/Rx1 (Back)-Far



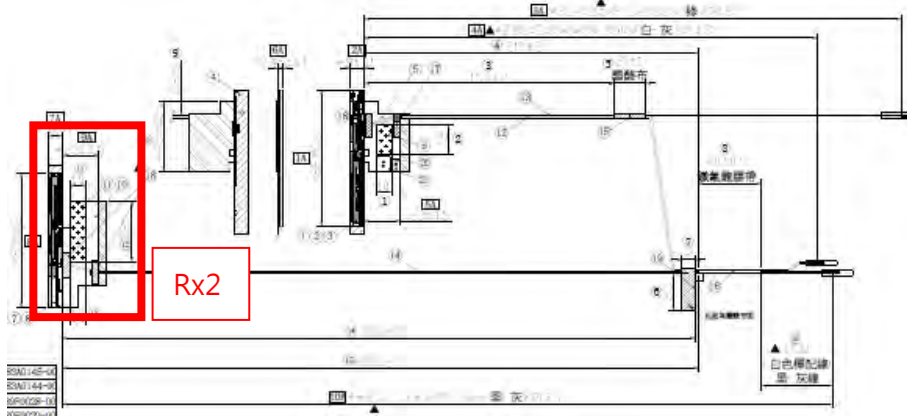
Tx1/Rx1 (Back)-Near





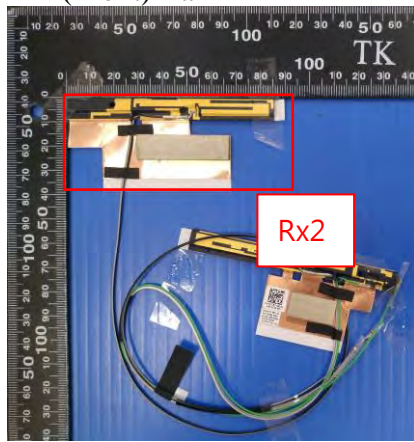
Include a dimensioned photo and dimensioned drawing of Rx2 antenna here.

**Rx2 Antenna Dimensioned Drawing:**

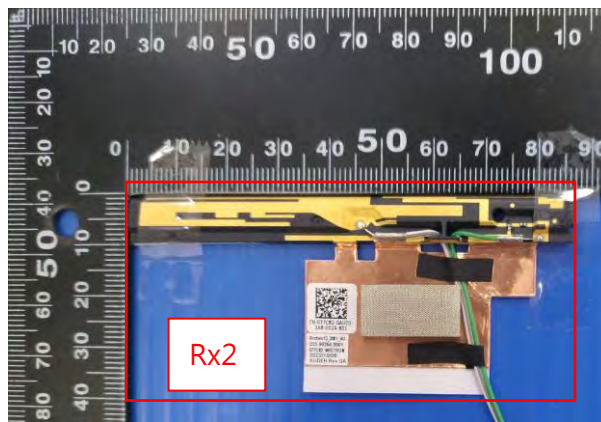


**Rx2 Antenna Photo:**

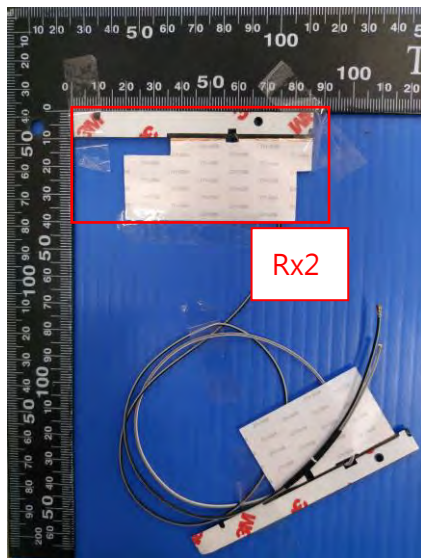
Rx2(Front)-Far



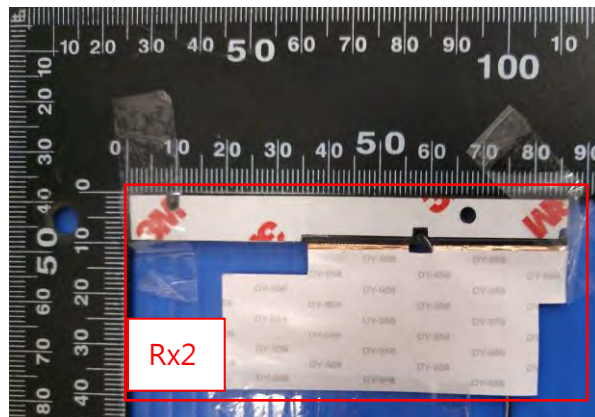
Rx2 (Front)-Near



Rx2 (Back)-Far



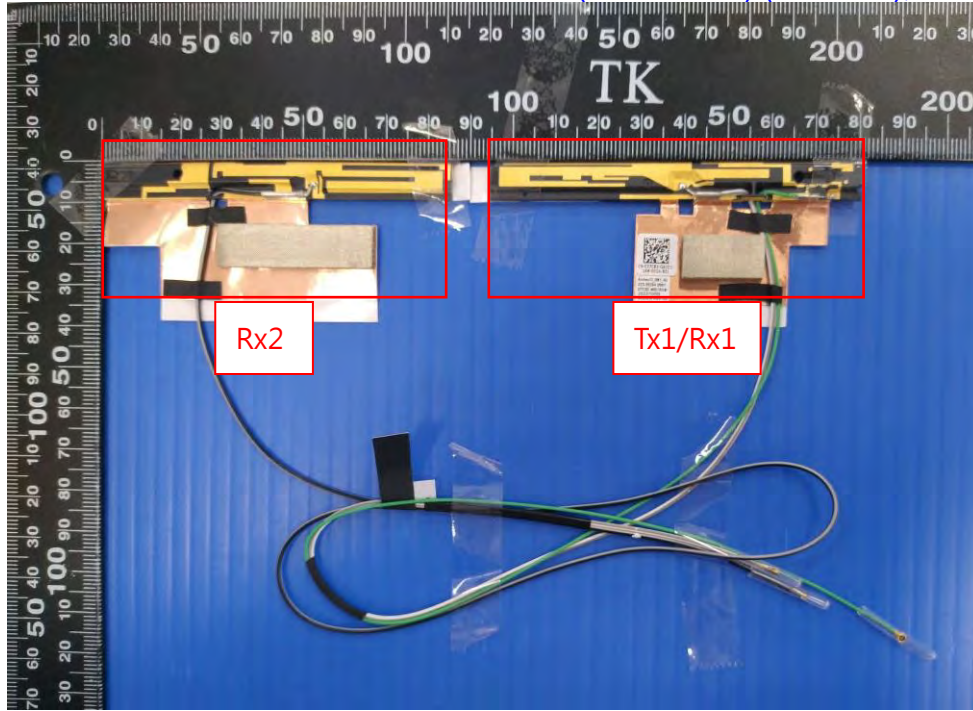
Rx2 (Front)-Near



Include front view photo of all 2 antennas here.

Antenna Manufacturer: Auden Techno Corp.

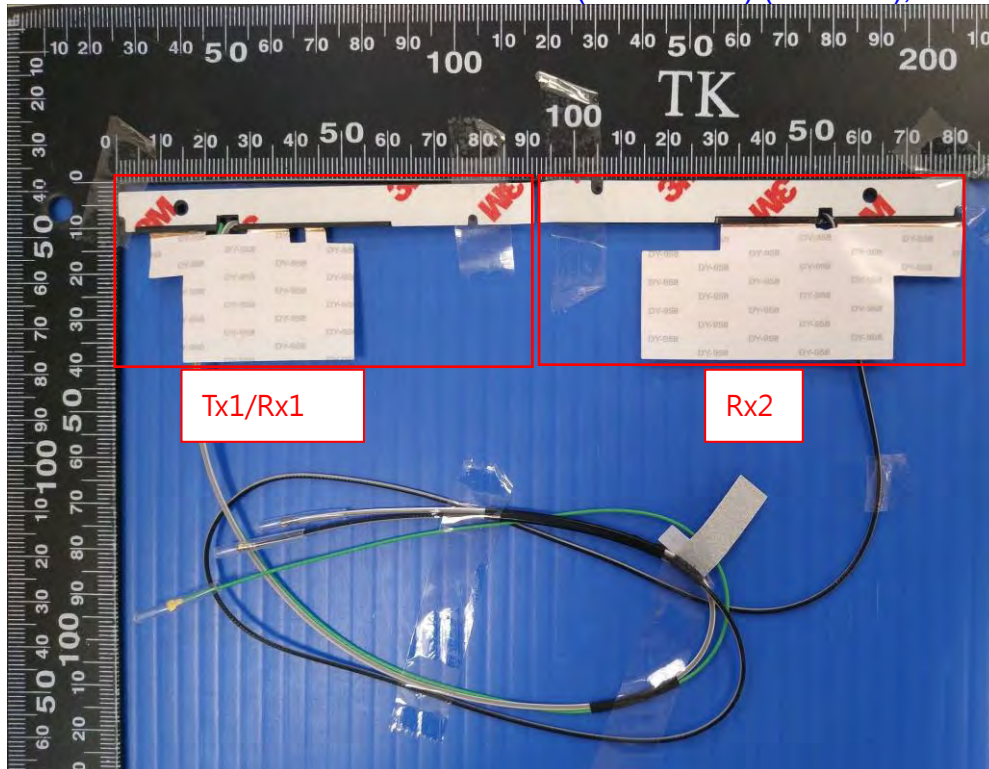
Antenna Part Number: 025.90264.0001 (A22650-00) (Tx1/Rx1), 025.90264.0001 (A22650-00) (Rx2)



Include back view photo of all 2 antennas here.

Antenna Manufacturer: Auden Techno Corp.

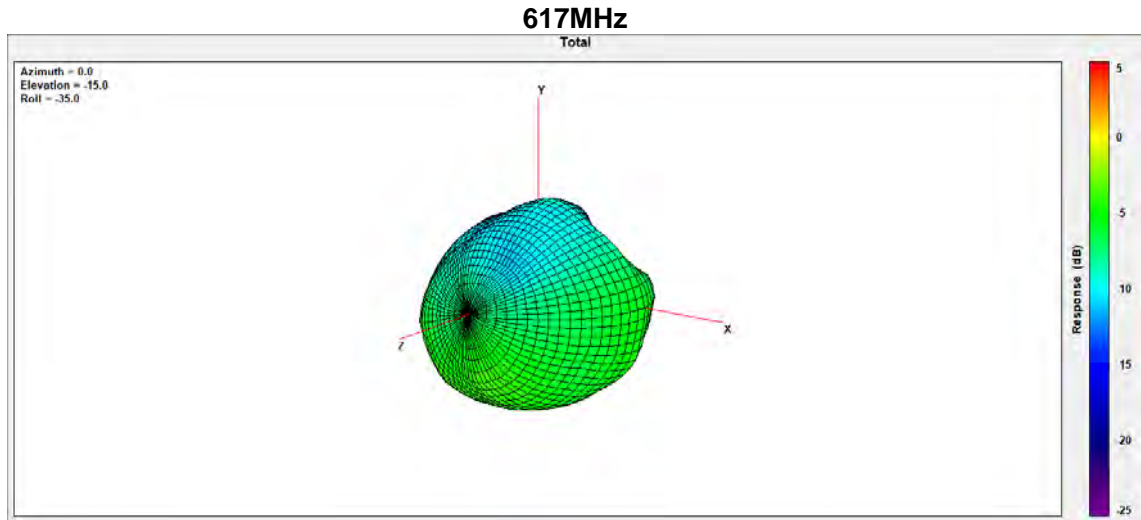
Antenna Part Number: 025.90264.0001 (A22650-00) (Tx1/Rx1), 025.90264.0001 (A22650-00) (Rx2)



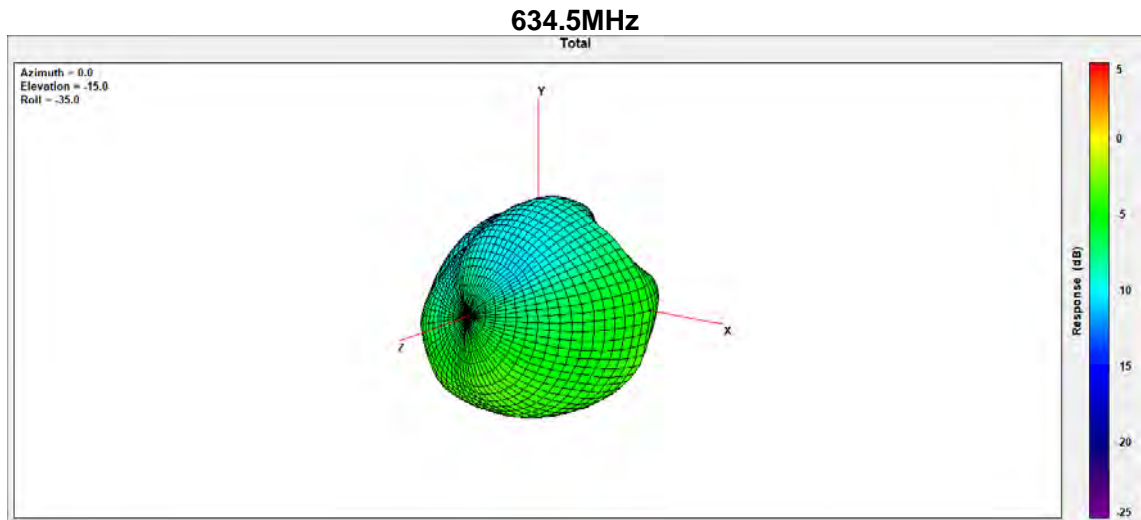
# Section 3. Radiation characteristics of antennae Loaded in Host Platform

NB mode

WWAN Main Antenna (Tx1/Rx1)

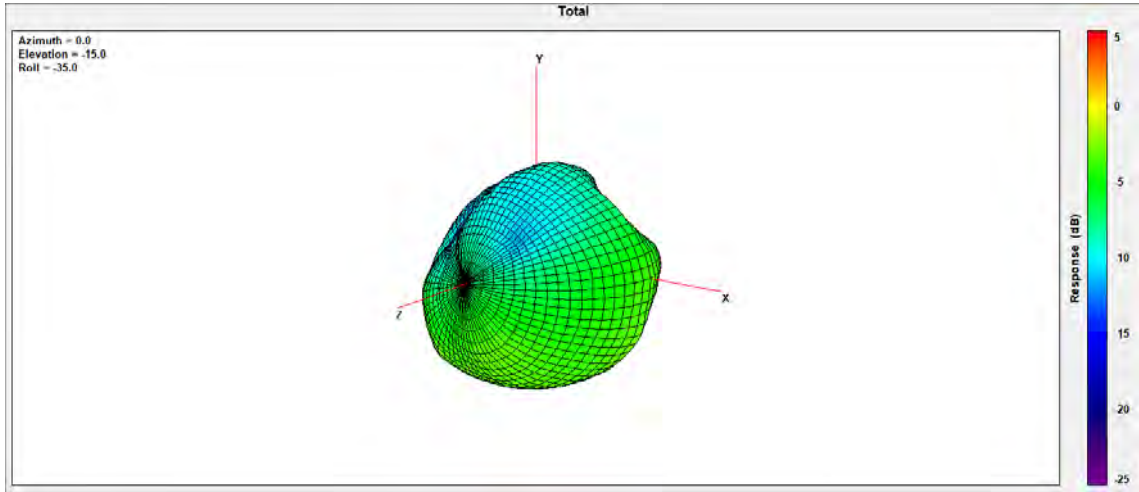


| 617MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.11    | -3.50    |



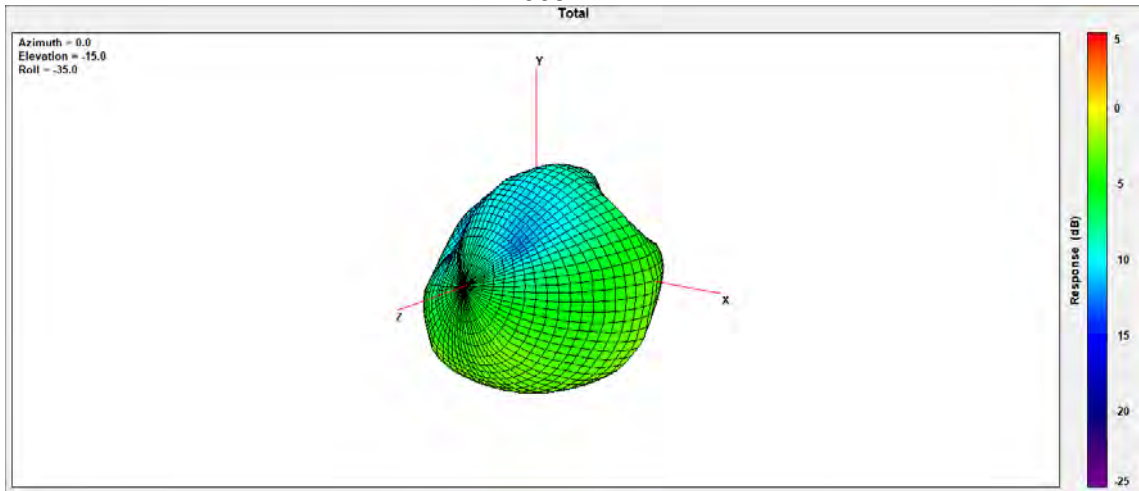
| 634.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.58    | -3.53    |

### 652MHz



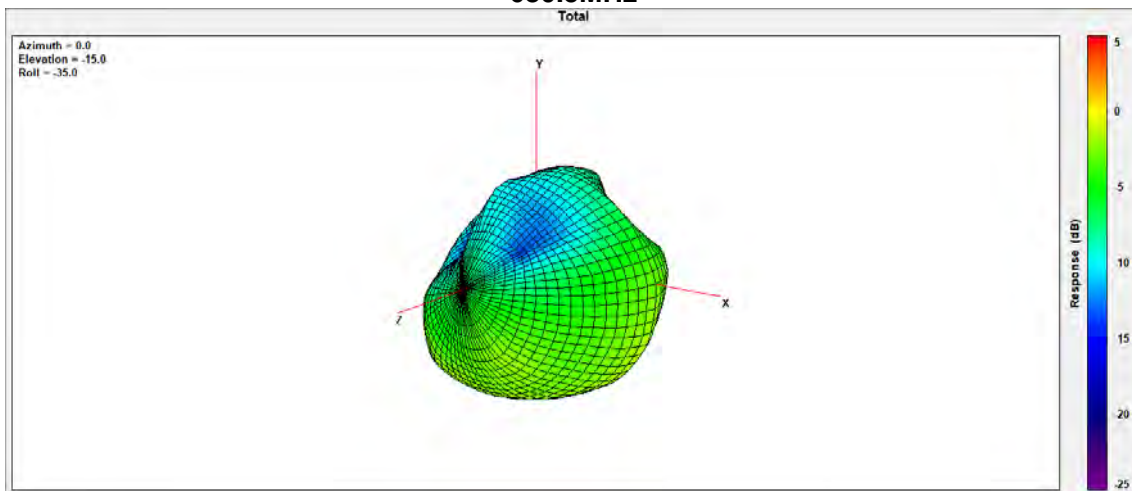
| 652MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.17    | -3.14    |

### 663MHz



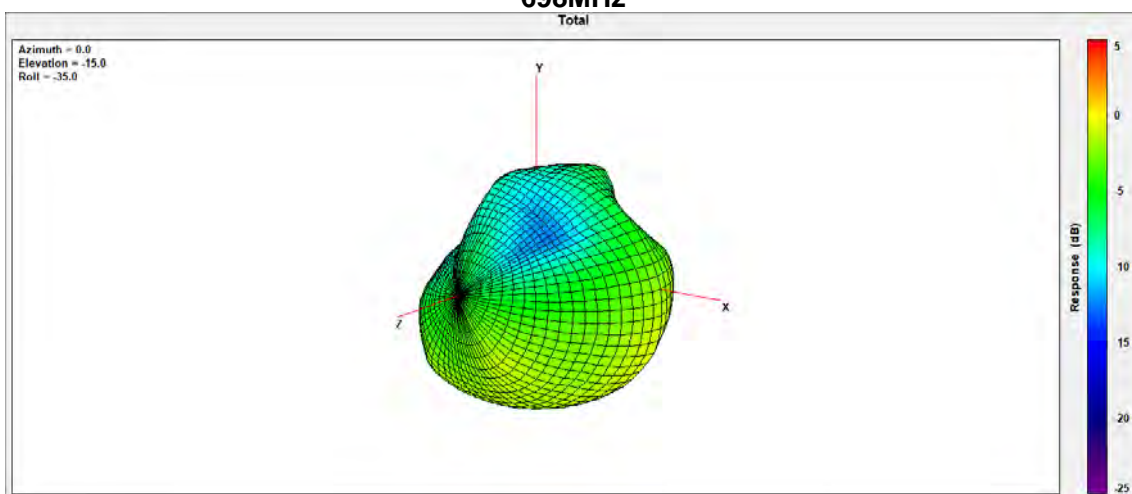
| 663MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.26    | -3.24    |

### 680.5MHz



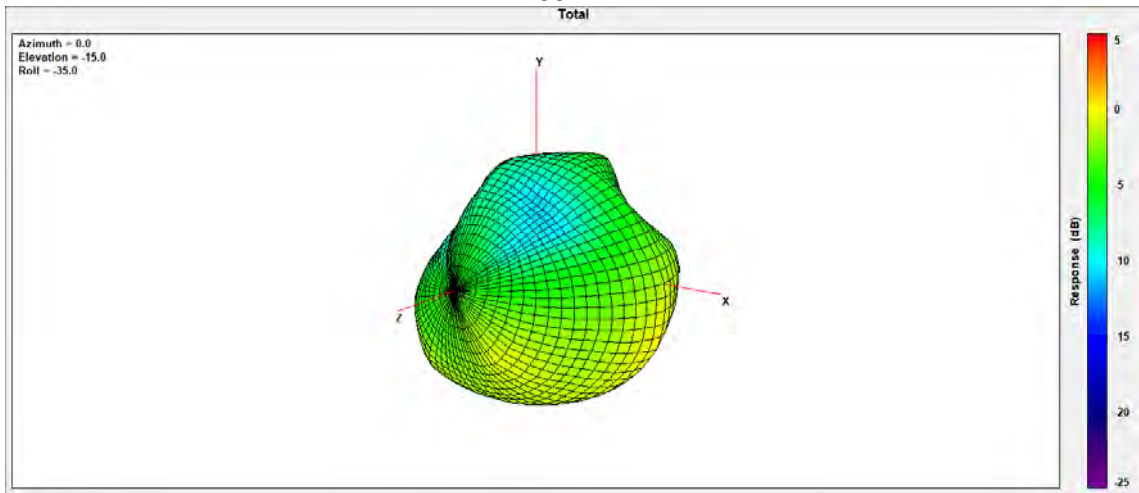
| 680.5Hz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.62    | -3.42    |

### 698MHz



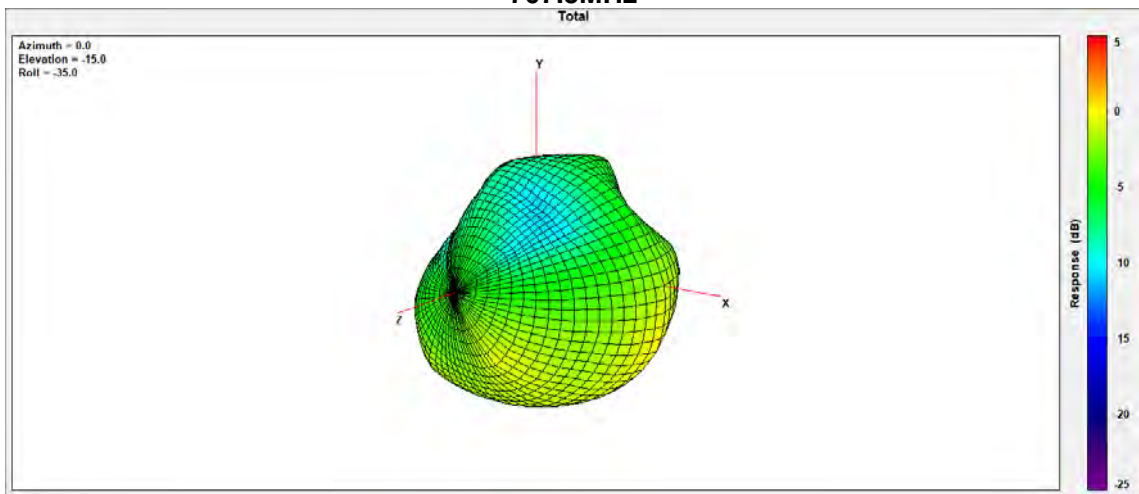
| 698MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.99    | -2.91    |

### 703MHz



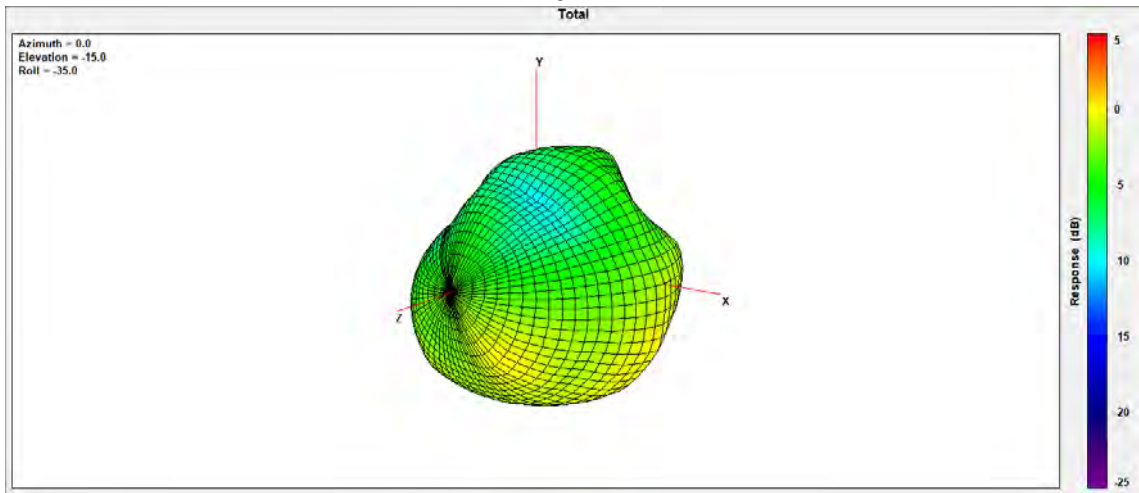
| 703MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.70    | -1.93    |

### 707.5MHz



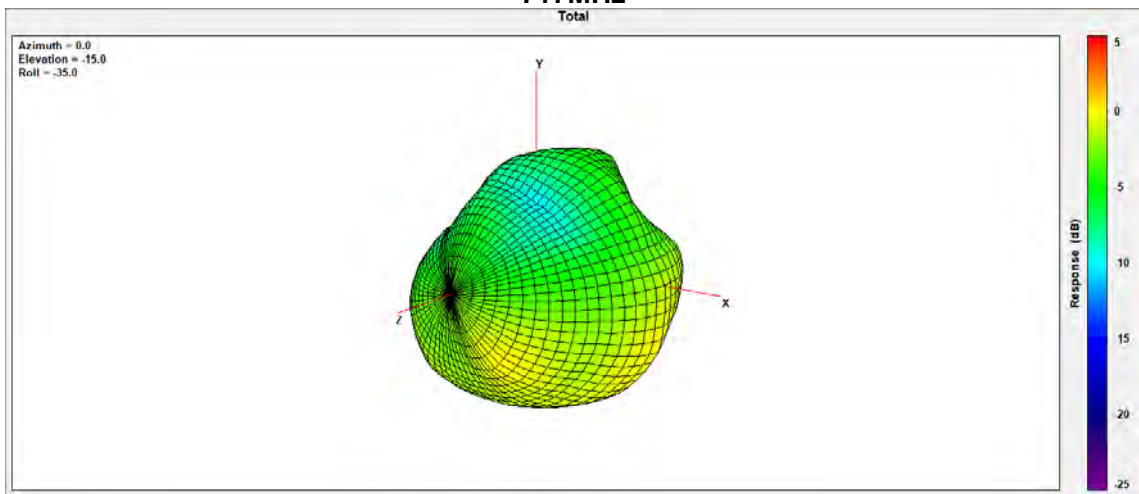
| 707.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -1.47    | -1.62    |

### 716MHz



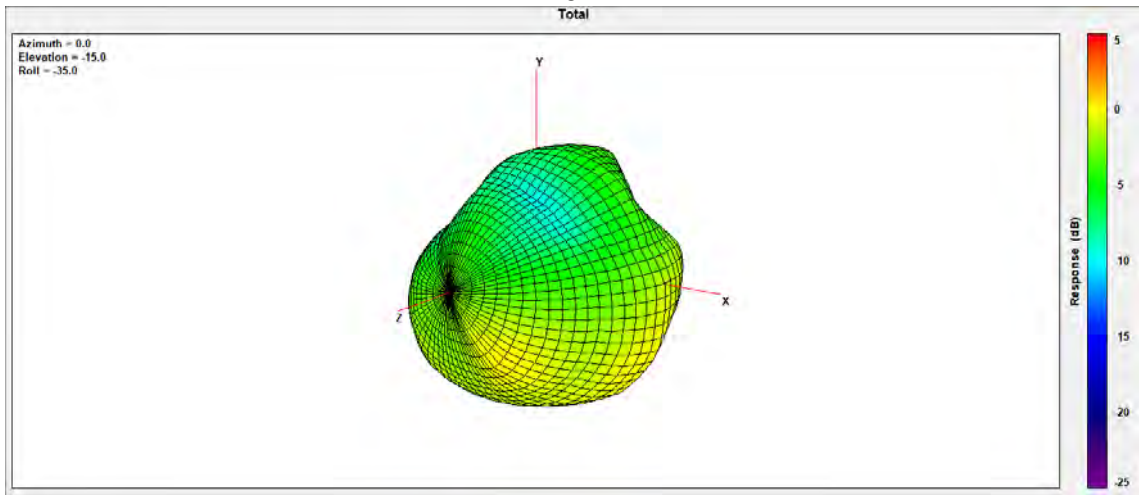
| 716MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.23    | -1.29    |

### 717MHz



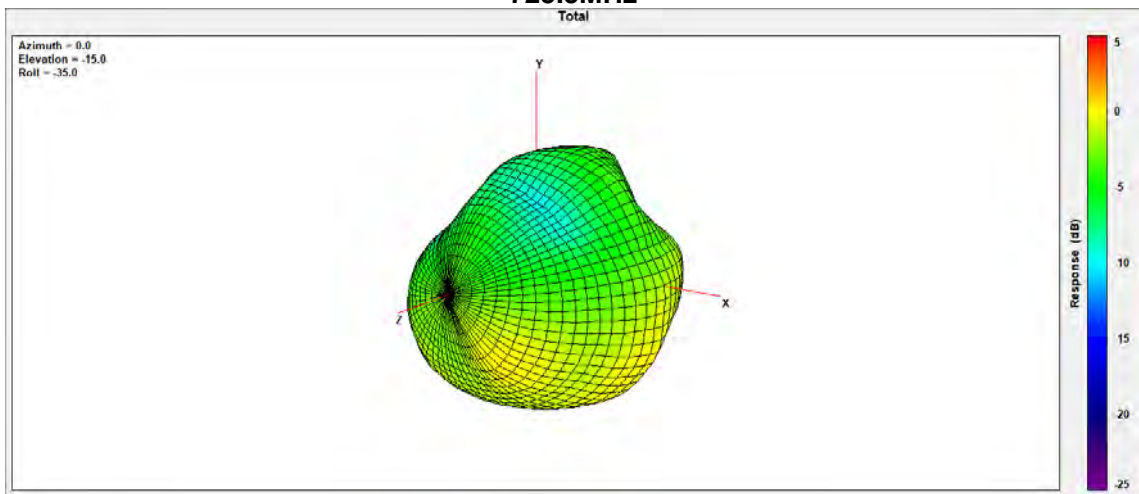
| 717MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.25    | -0.96    |

### 722.5MHz



| 722.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -1.09    | -0.66    |

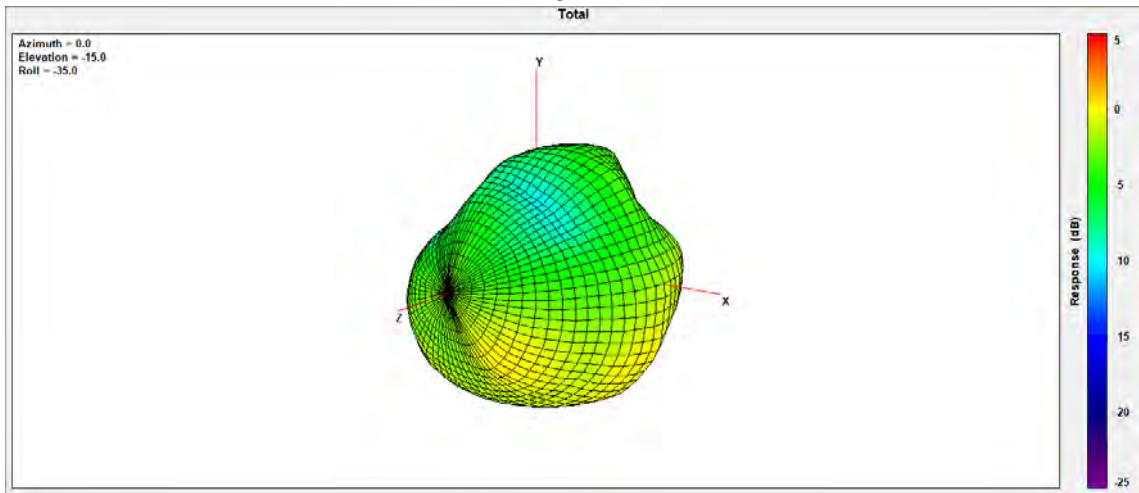
### 725.5MHz



| 725.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.97    | -1.18    |

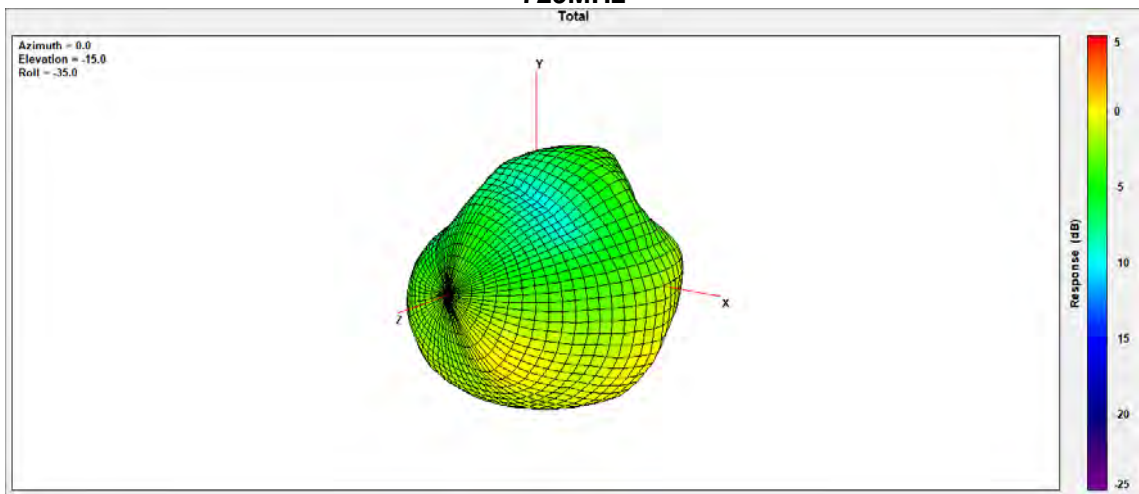


### 728MHz



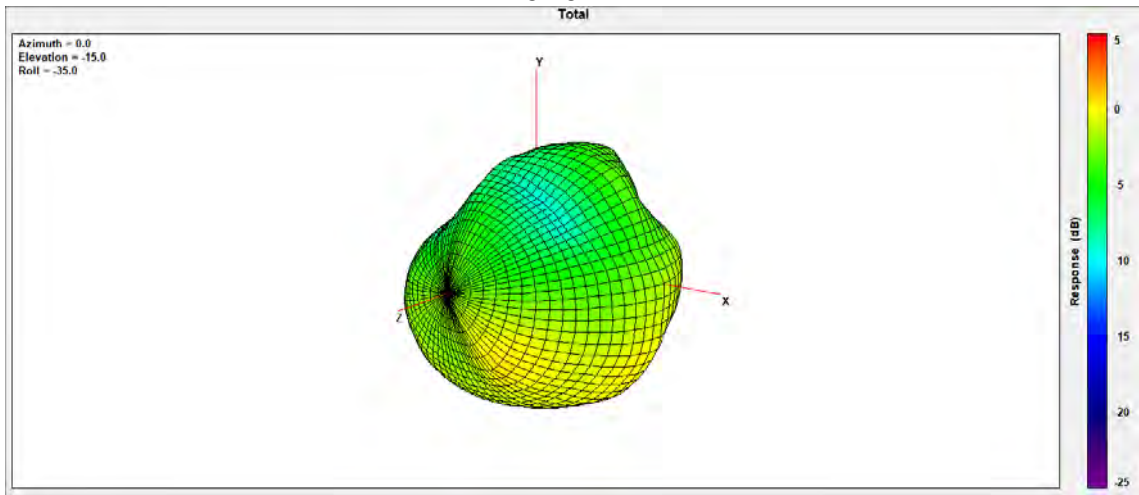
| 728MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.38    | -0.61    |

### 729MHz



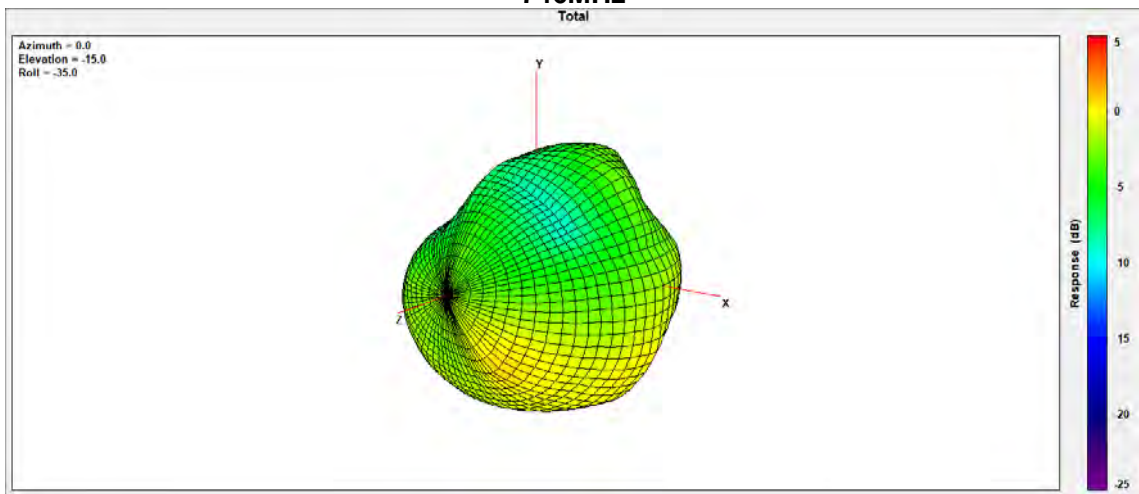
| 729MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.45    | -0.59    |

### 737.5MHz



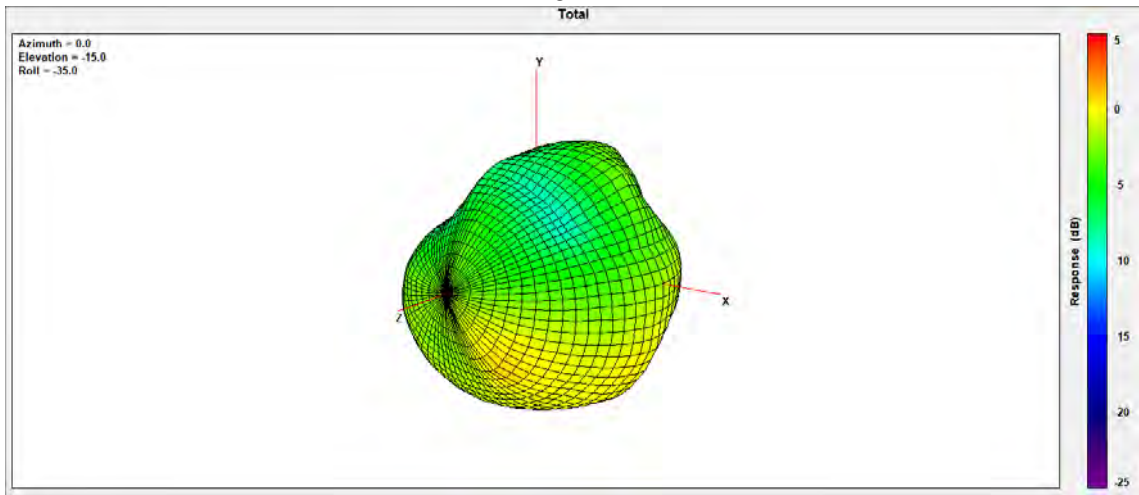
| 737.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -1.08    | -0.33    |

### 746MHz



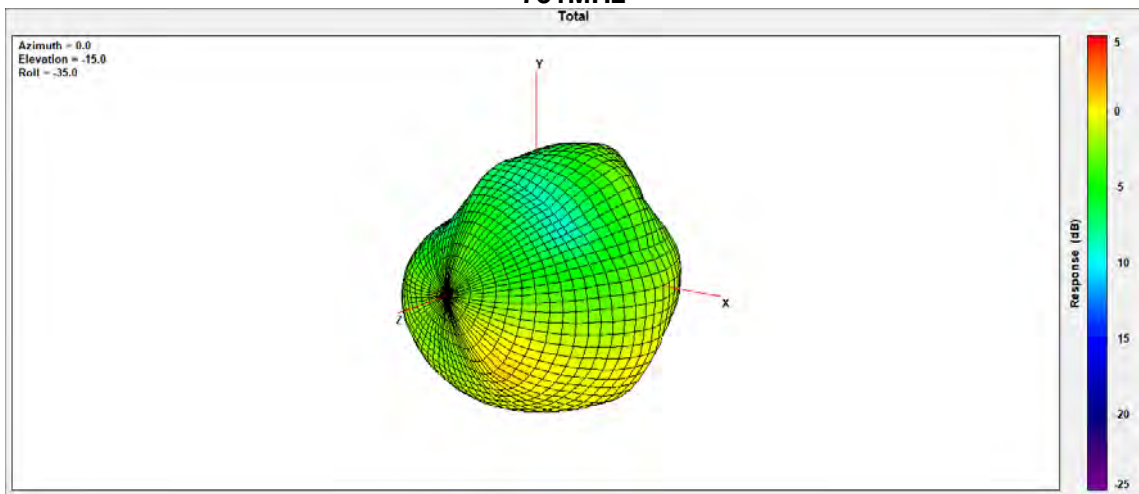
| 746MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.23    | -0.04    |

### 748MHz



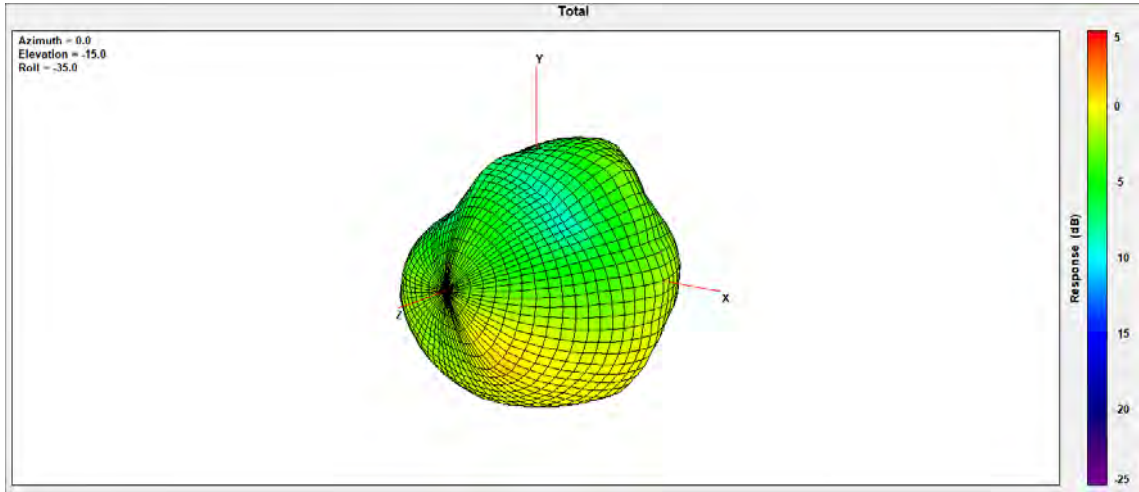
| 748MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.61    | -0.99    |

### 751MHz



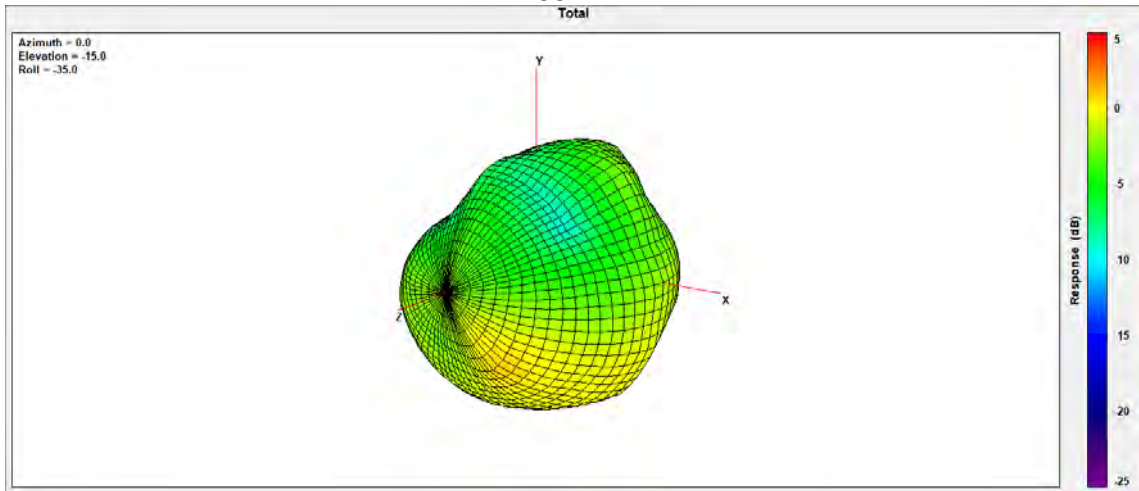
| 751MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.78    | -0.03    |

### 756MHz



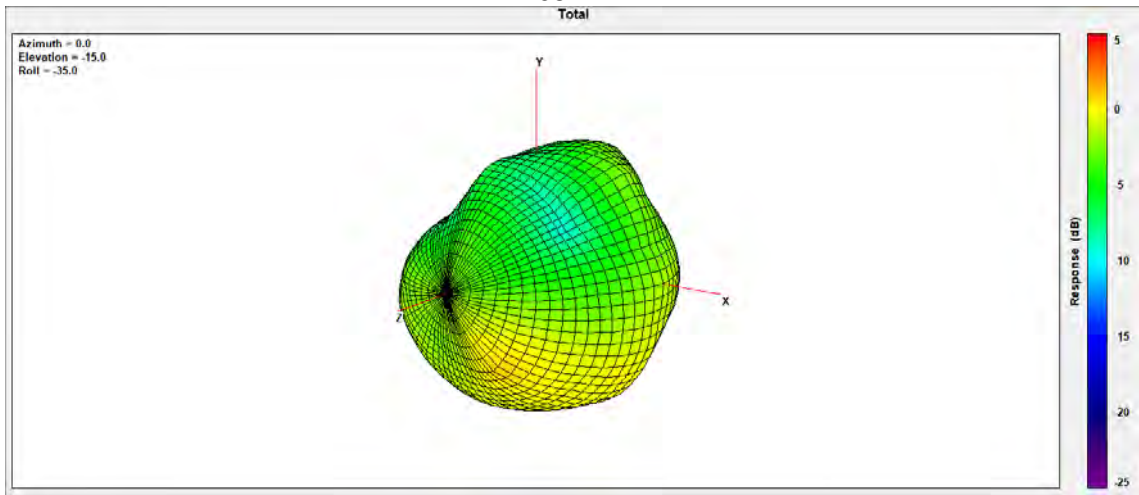
| 756MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.75    | -0.05    |

### 758MHz



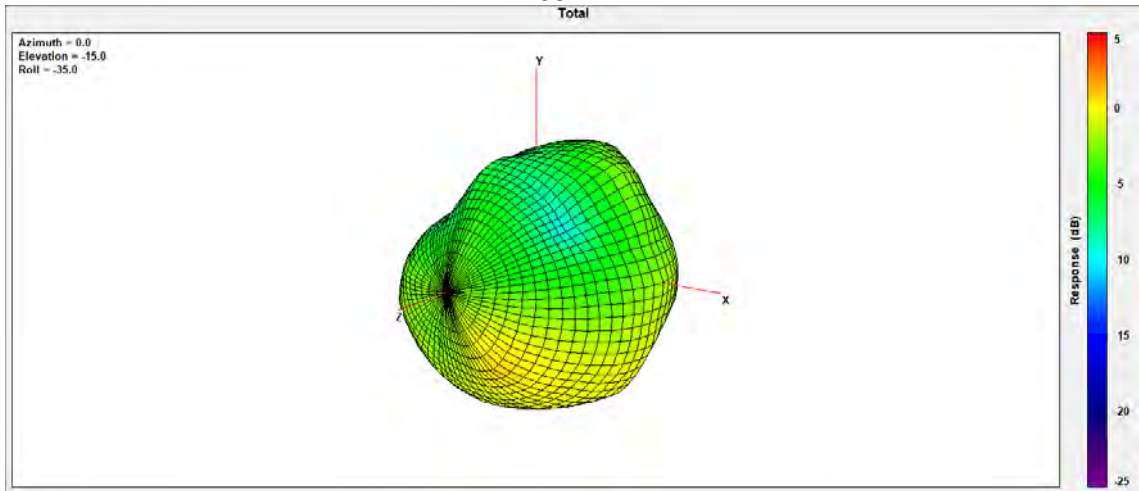
| 758MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.80    | -0.11    |

### 763MHz



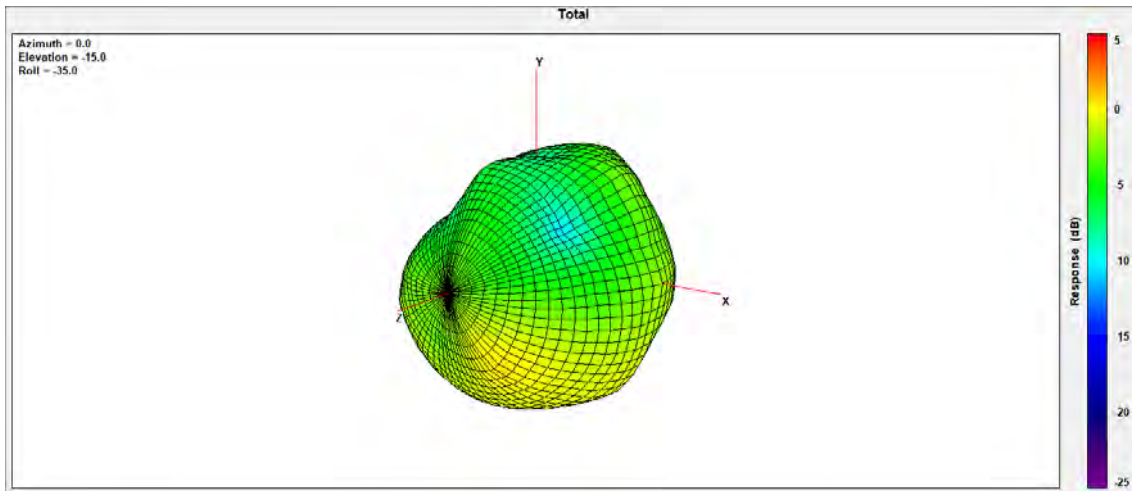
| 763MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.58    | -0.10    |

### 768MHz



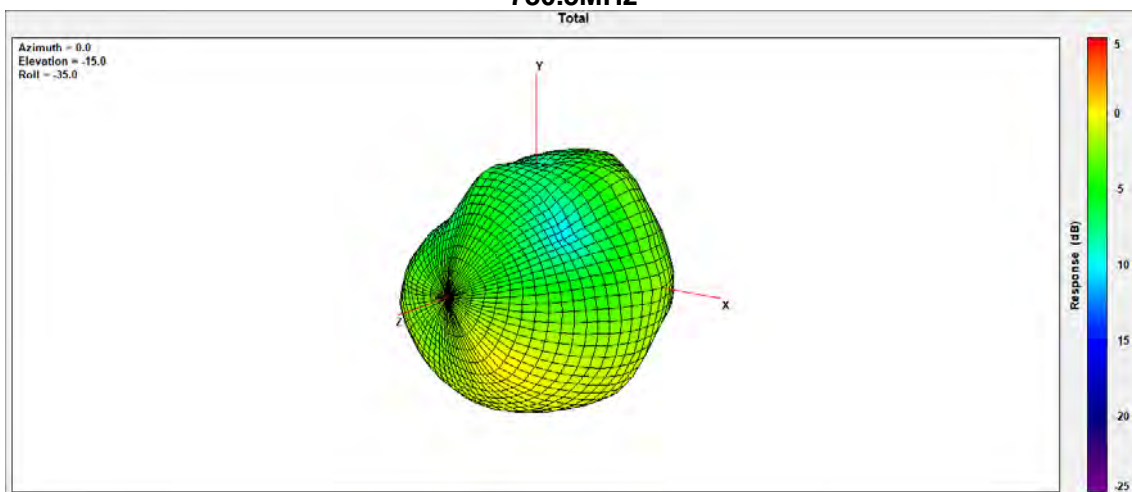
| 768MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.60    | 0.02     |

### 777MHz



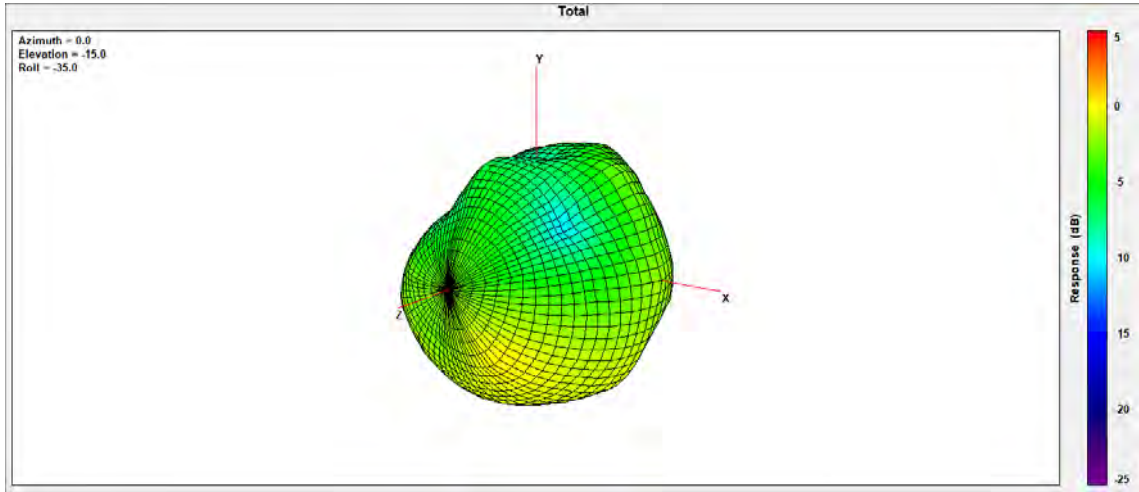
| 777MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.74    | -0.90    |

### 780.5MHz



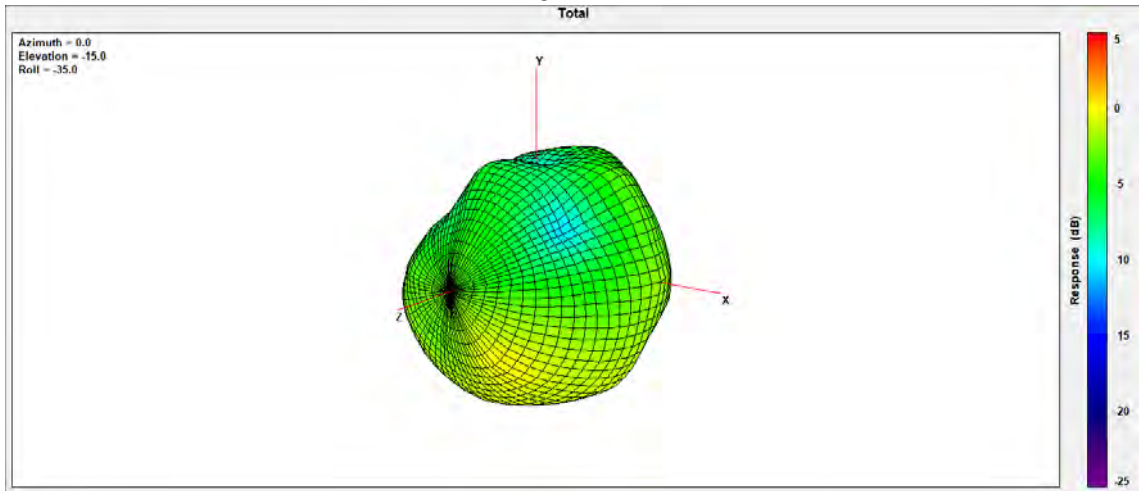
| 780.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.09    | -0.15    |

### 782MHz



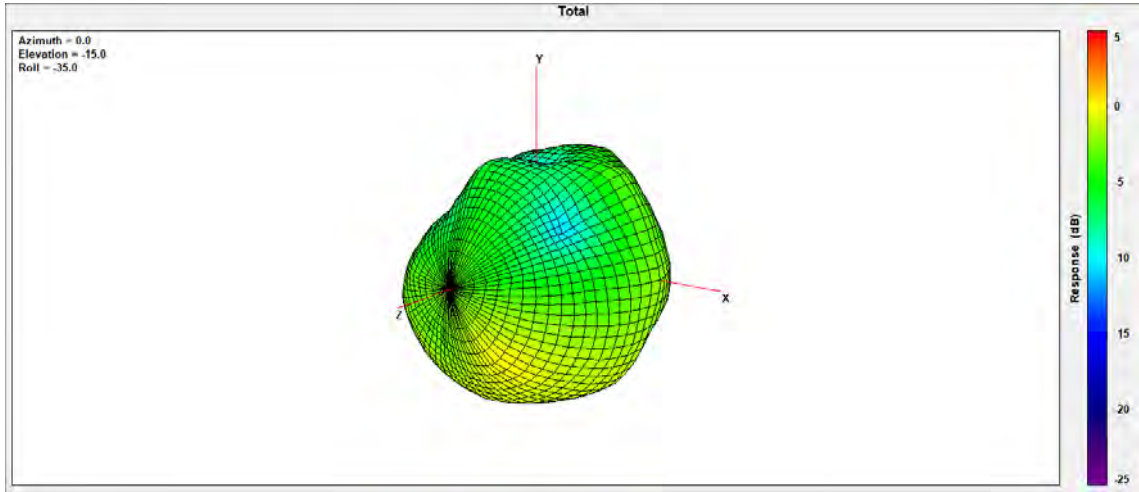
| 782MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.76    | -1.06    |

### 787MHz



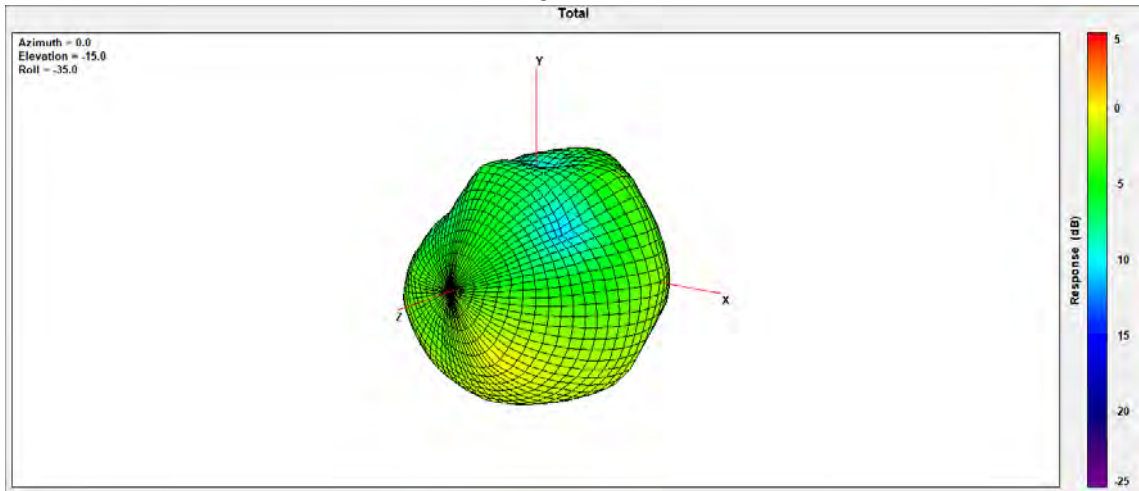
| 787MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.93    | -1.22    |

### 788MHz



| 788MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.98    | -1.24    |

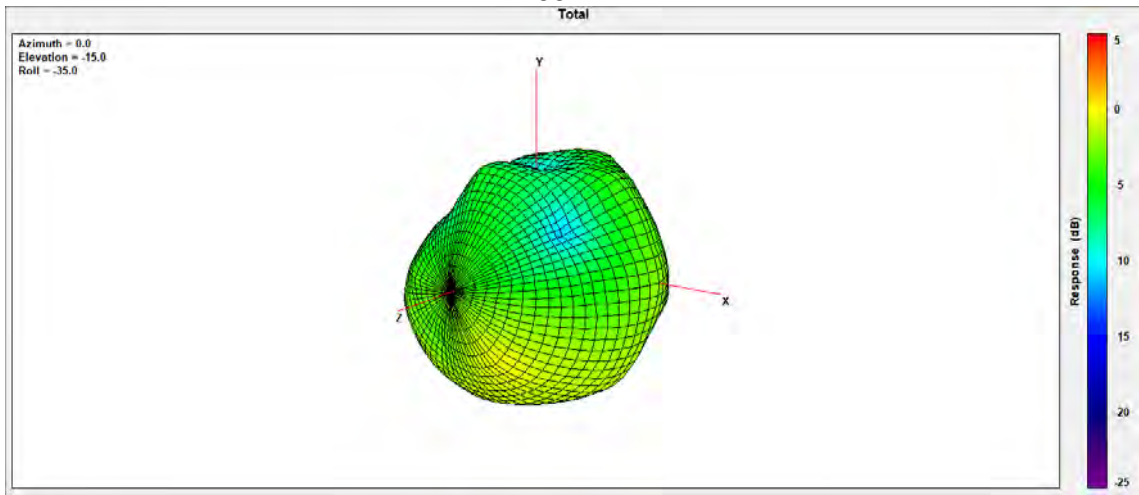
### 791MHz



| 791MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.23    | -0.16    |

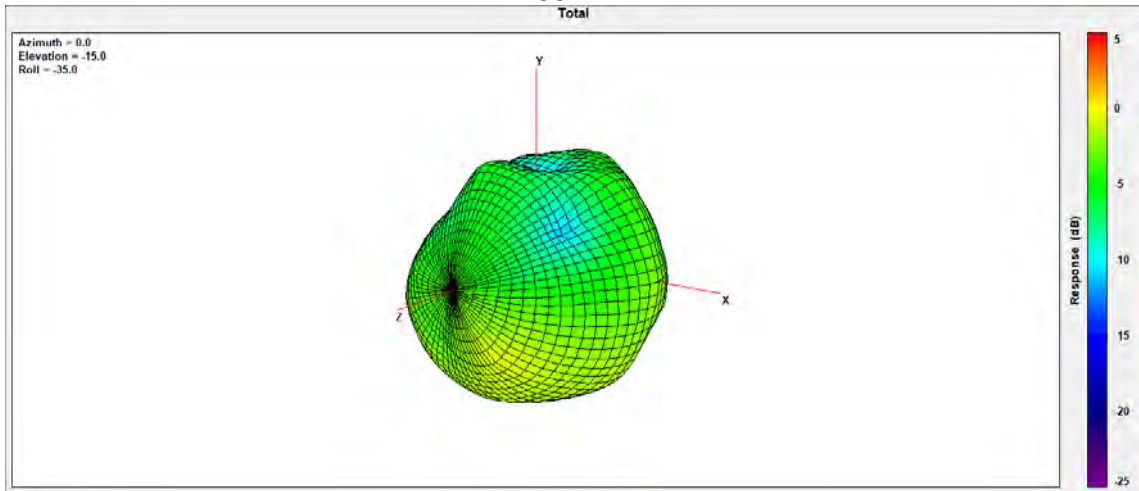


### 793MHz



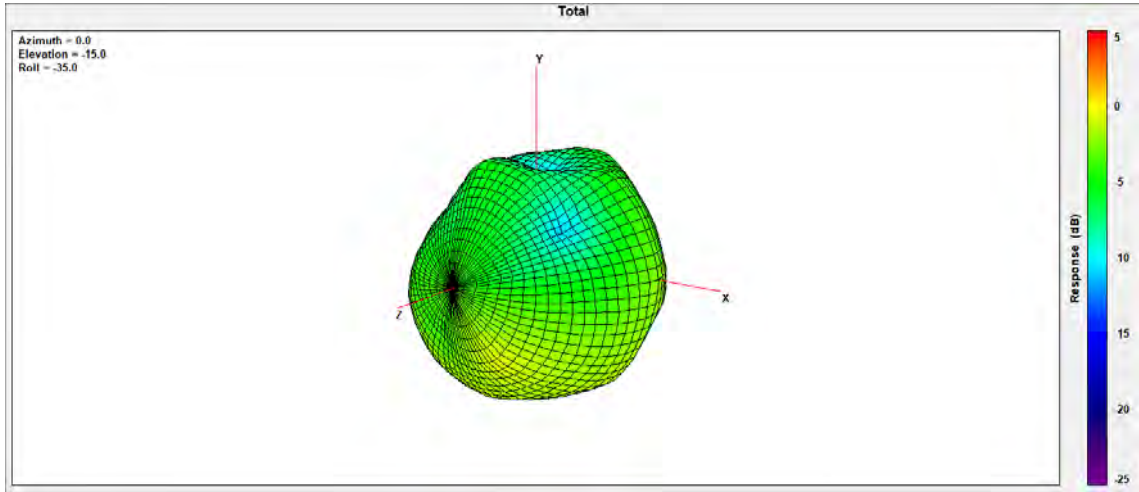
| 793MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.19    | -1.37    |

### 798MHz



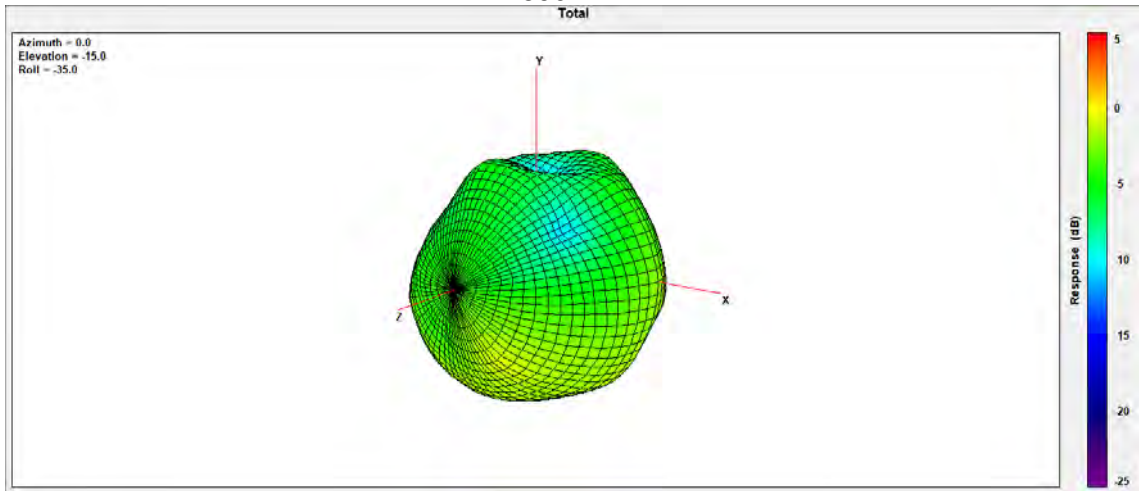
| 798MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.37    | -1.54    |

### 803MHz



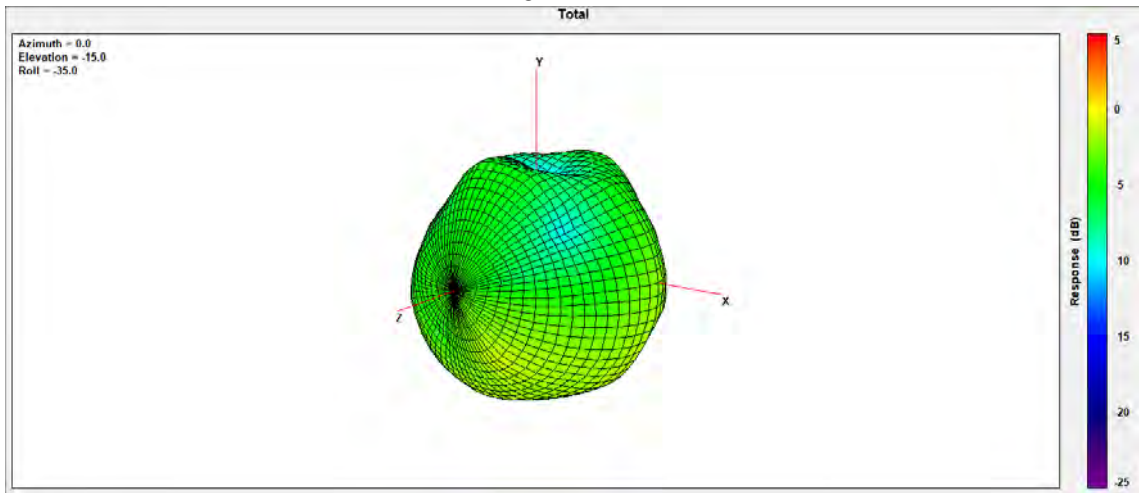
| 803MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.10    | -0.76    |

### 806MHz



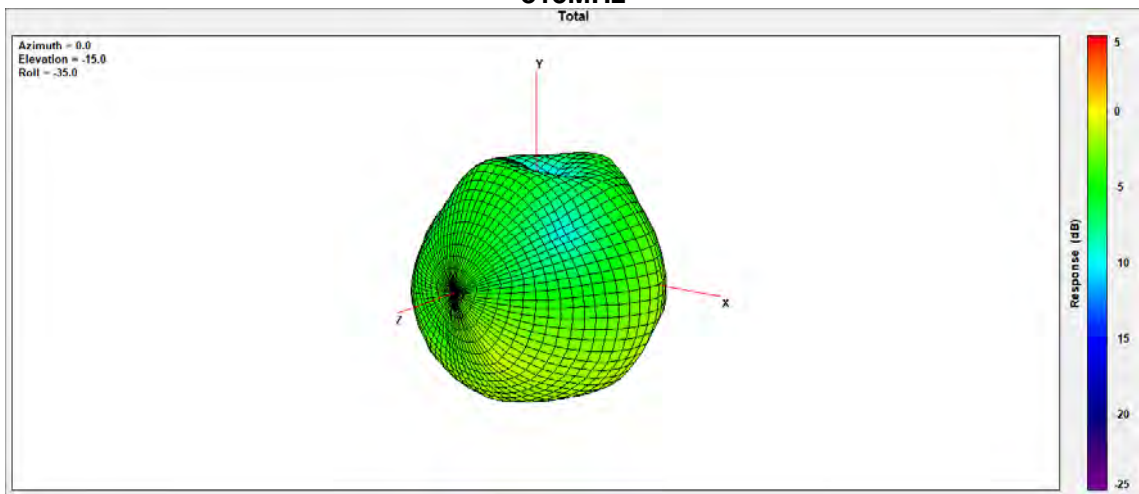
| 806MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.01    | -0.89    |

### 814MHz



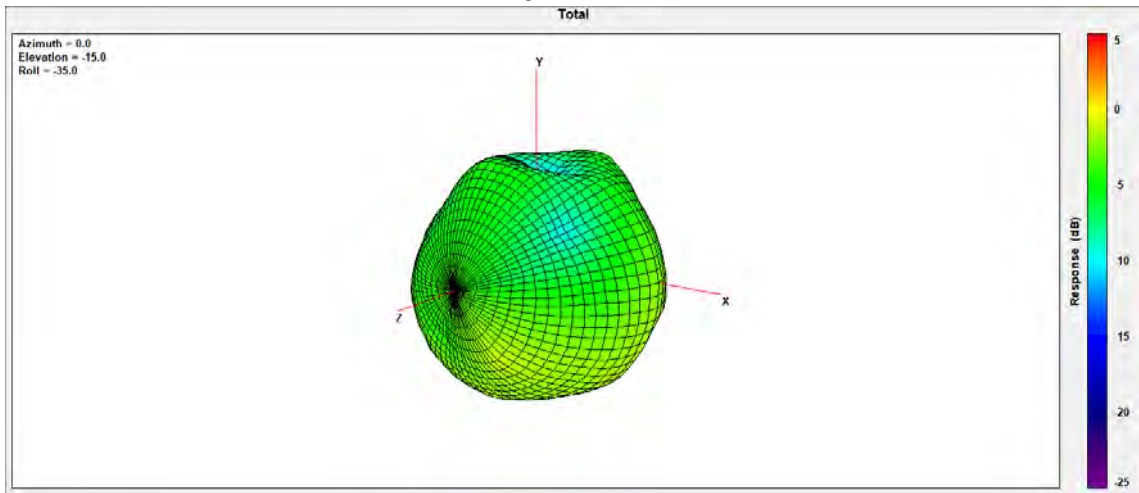
| 814MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.98    | -2.41    |

### 815MHz



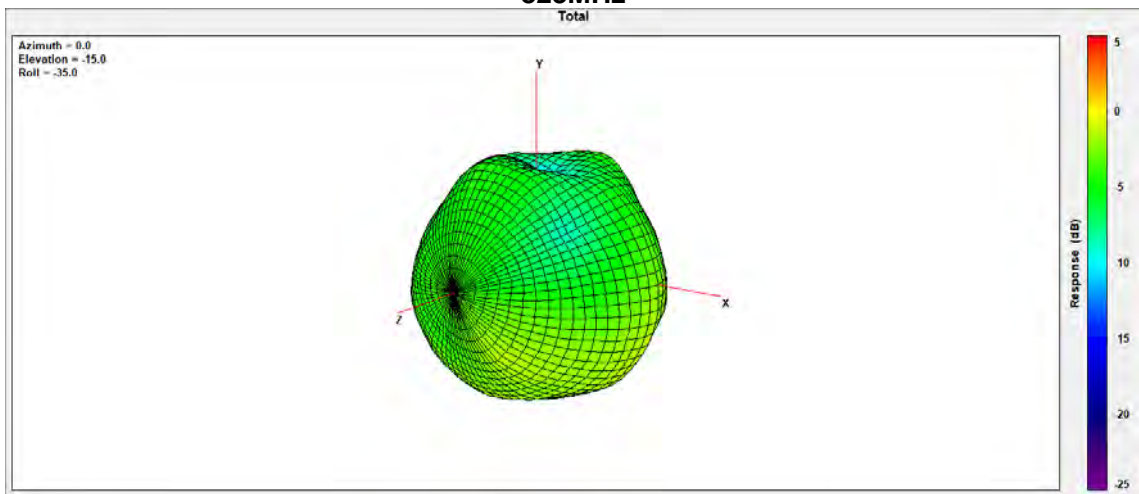
| 815MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.04    | -2.45    |

### 821MHz



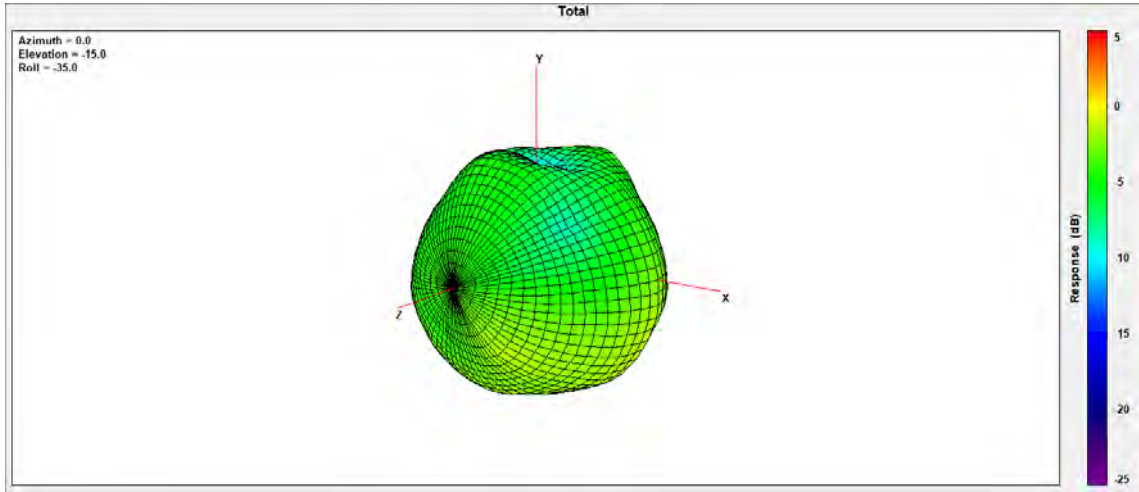
| 821MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.22    | -2.08    |

### 823MHz



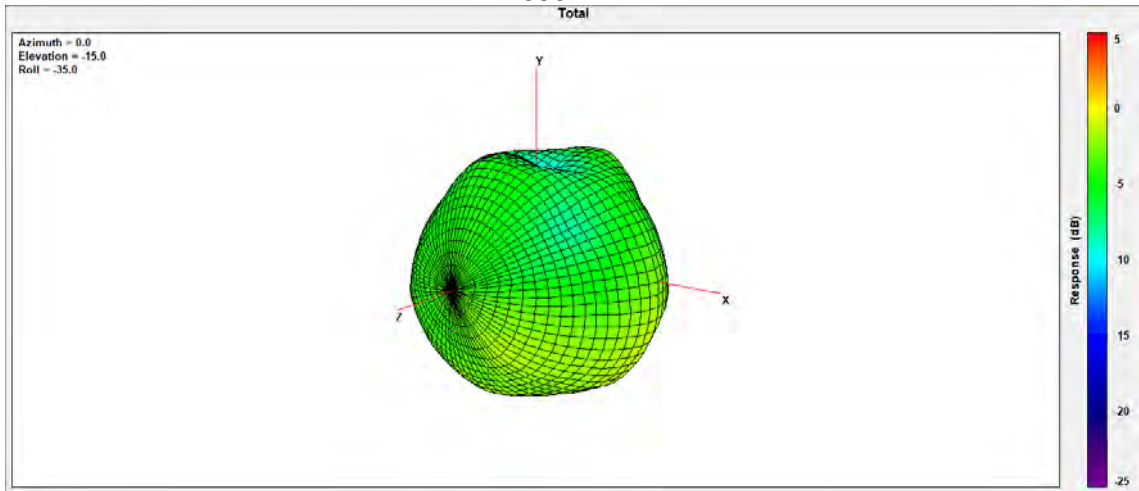
| 823MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.53    | -2.74    |

### 824MHz



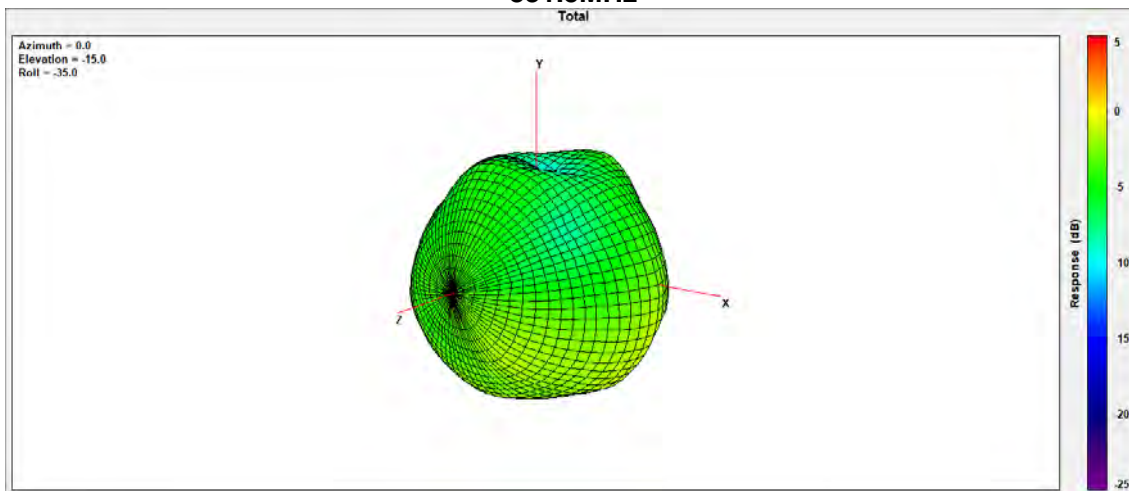
| 824MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.59    | -2.77    |

### 830MHz



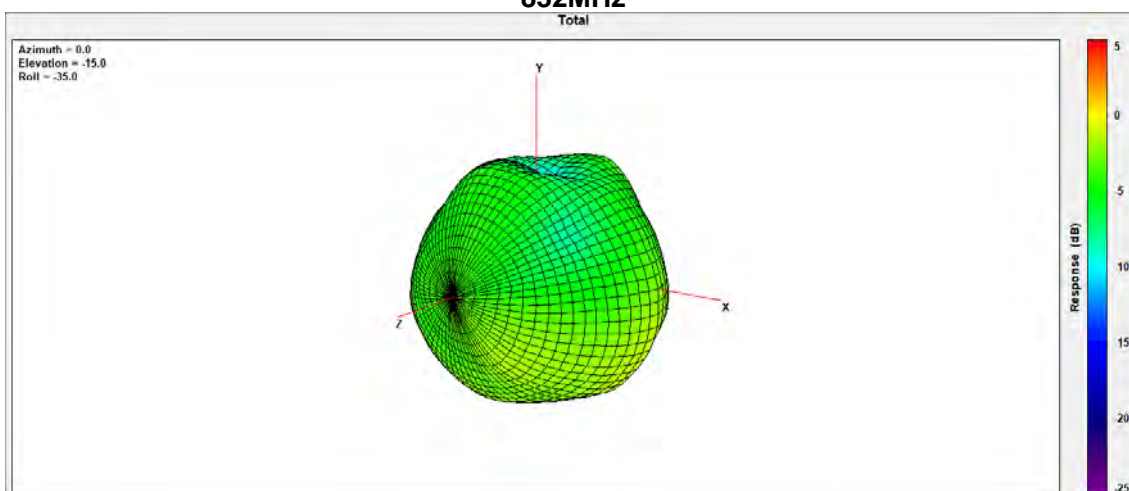
| 830MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.81    | -2.76    |

### 831.5MHz



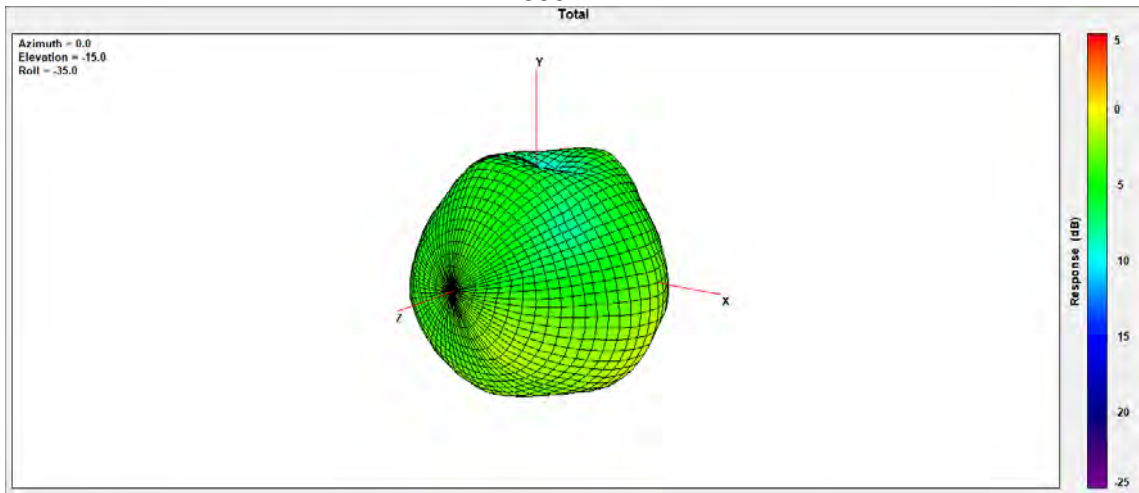
| 831.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.84    | -2.73    |

### 832MHz



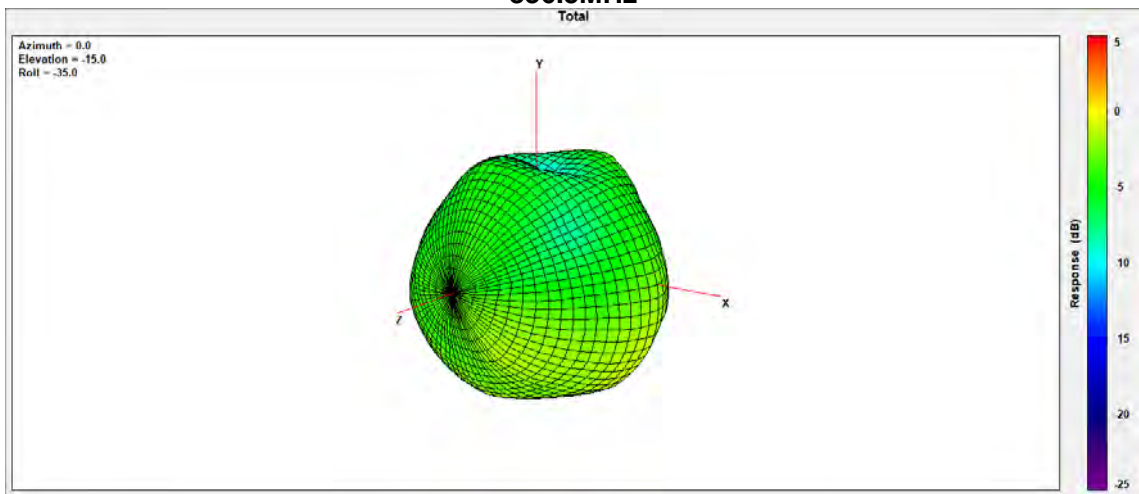
| 832MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.85    | -2.73    |

### 835MHz



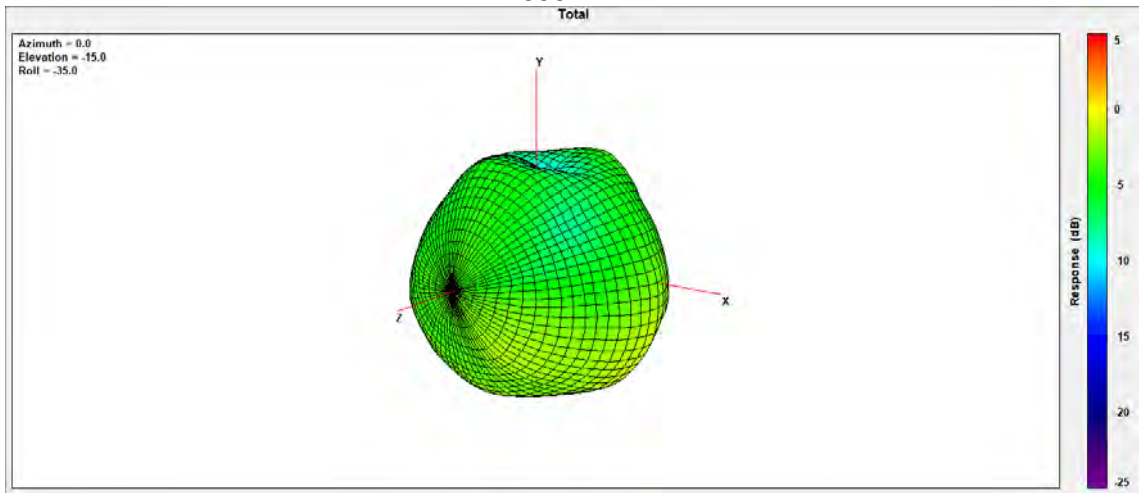
| 835MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.87    | -2.65    |

### 836.5MHz



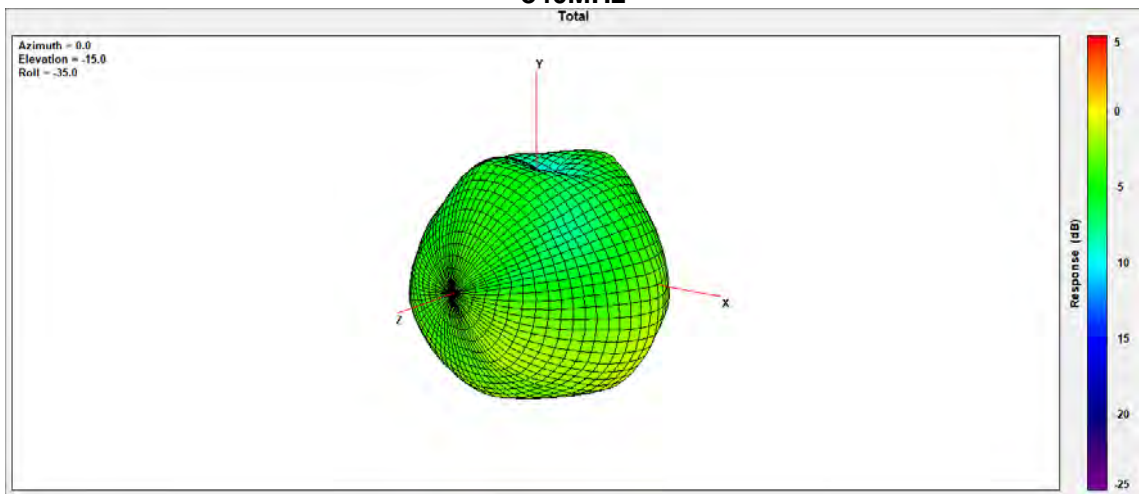
| 836.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.87    | -2.63    |

### 838MHz



| 838MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.86    | -2.60    |

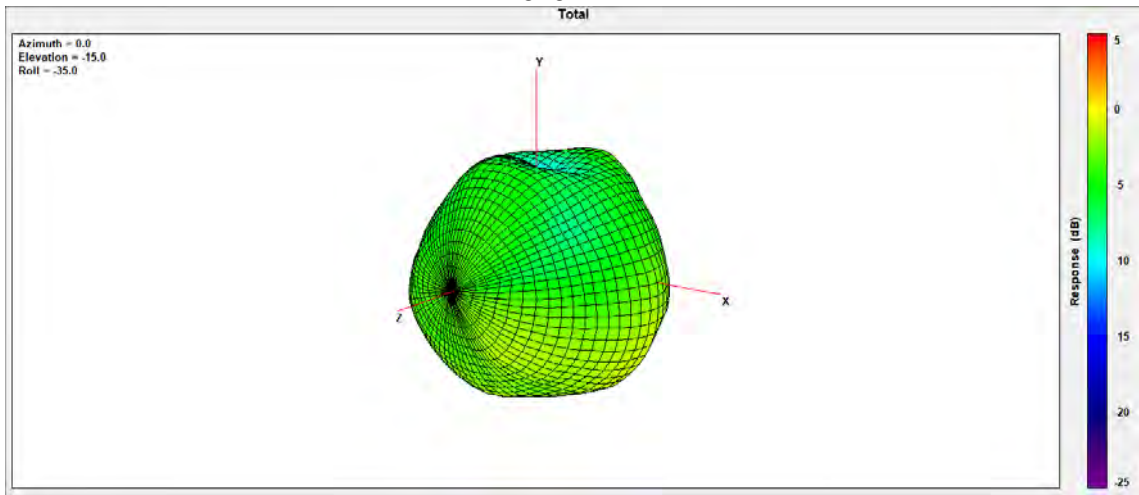
### 840MHz



| 840MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.81    | -2.56    |

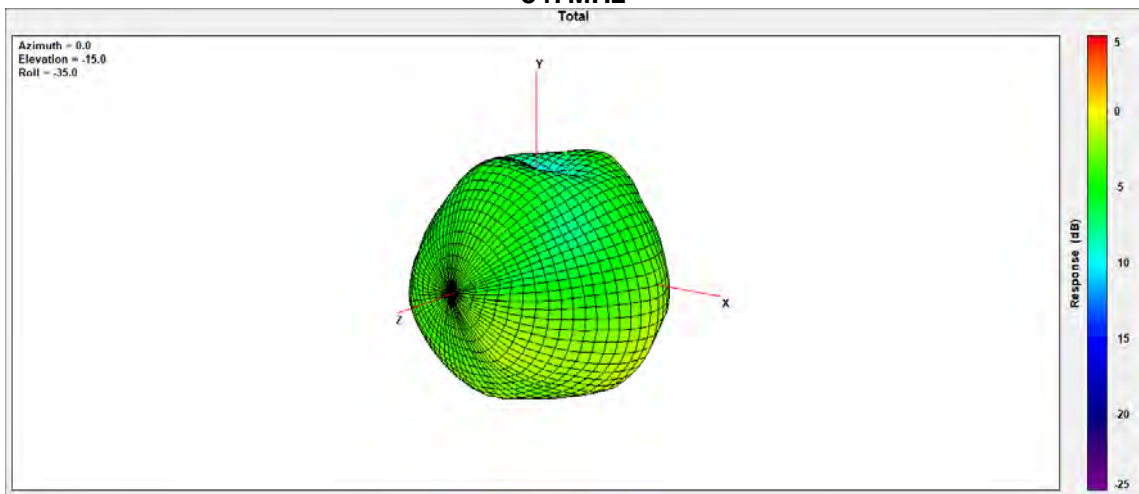


### 845MHz



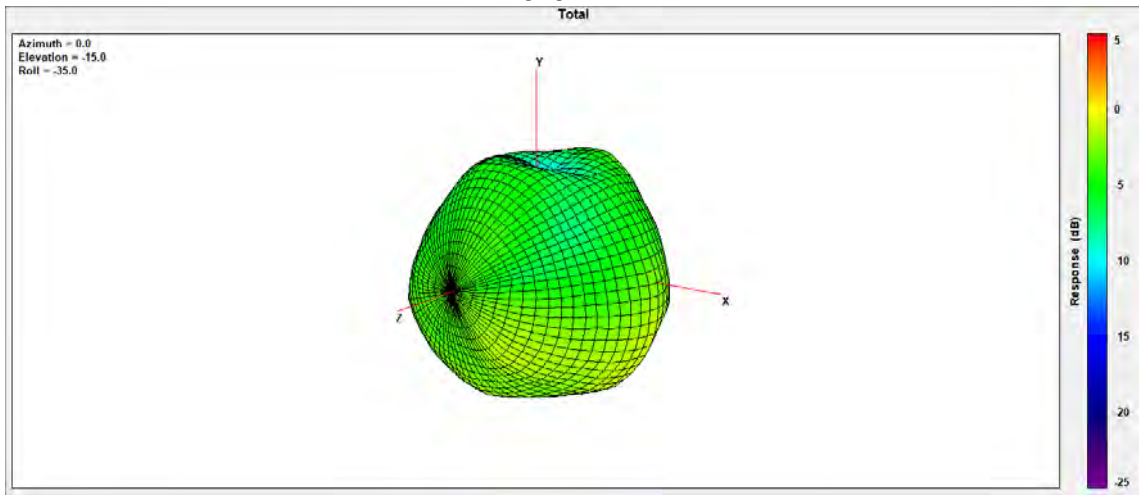
| 845MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.72    | -2.48    |

### 847MHz



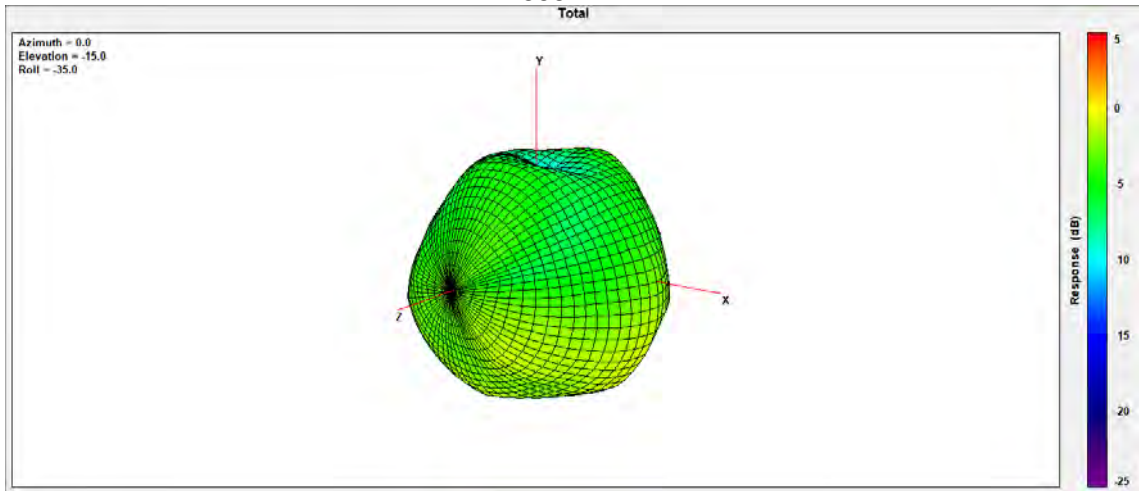
| 847MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.67    | -2.44    |

### 849MHz



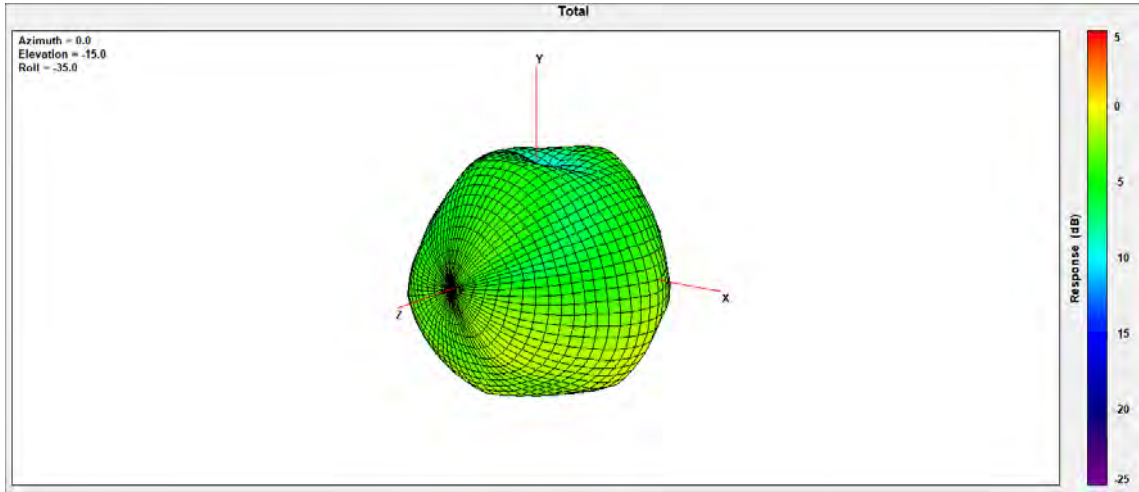
| 849MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.62    | -2.41    |

### 859MHz



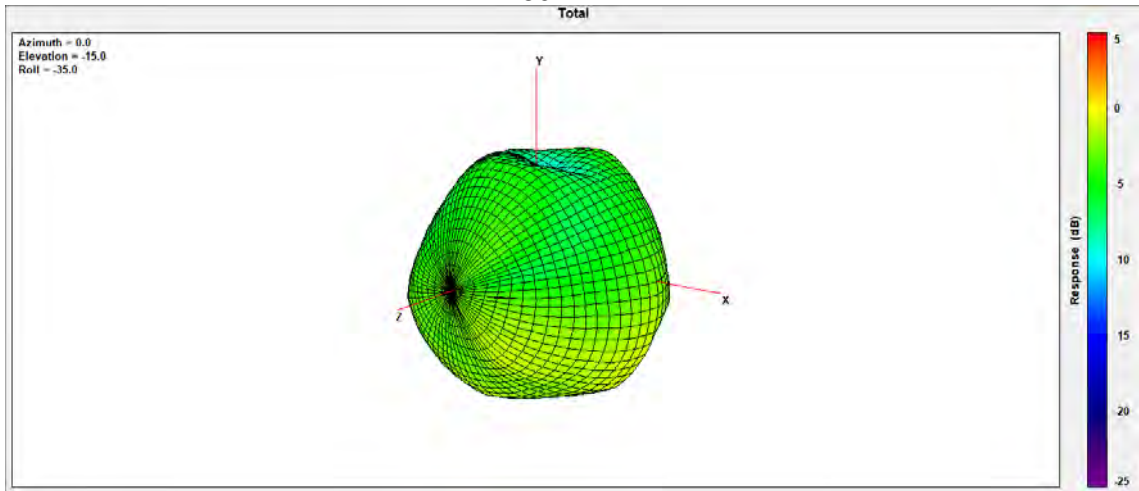
| 859MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.11    | -2.11    |

### 860MHz



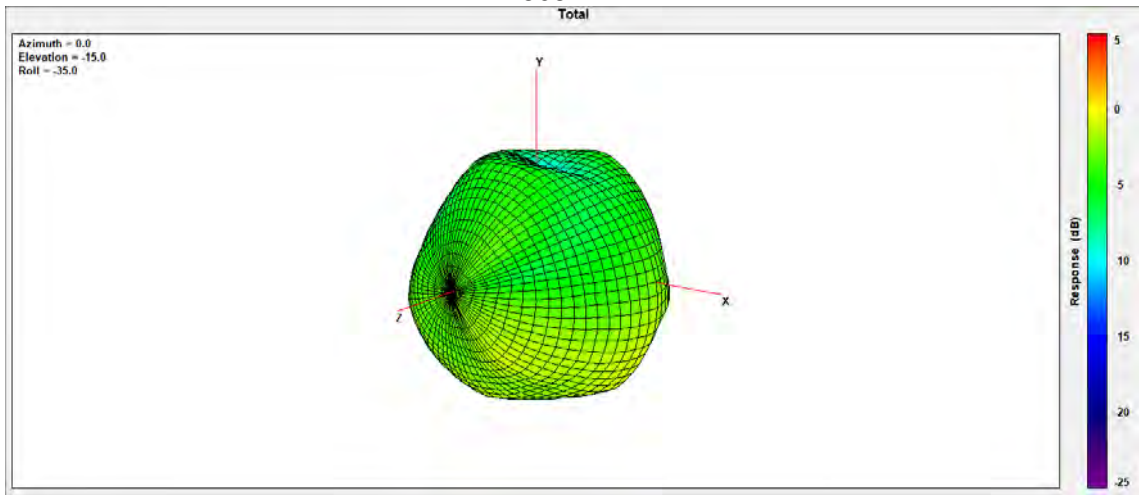
| 860MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.20    | -2.16    |

### 862MHz



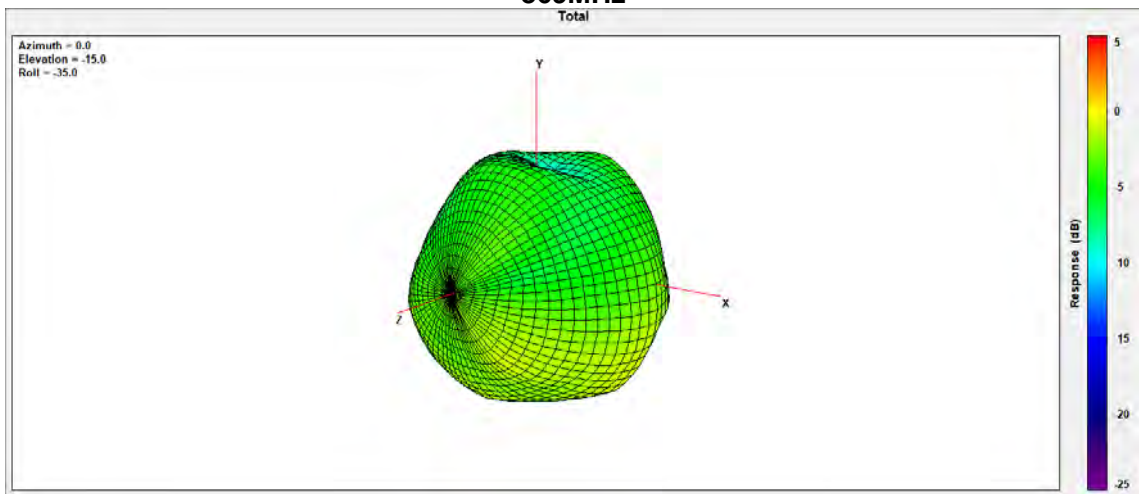
| 862MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.29    | -2.12    |

### 868MHz



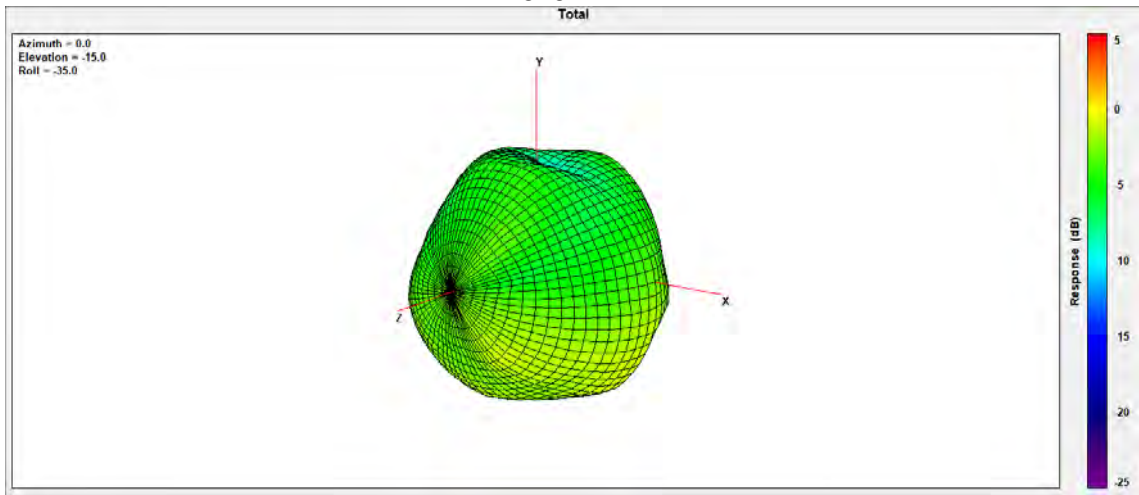
| 868MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.42    | -2.28    |

### 869MHz



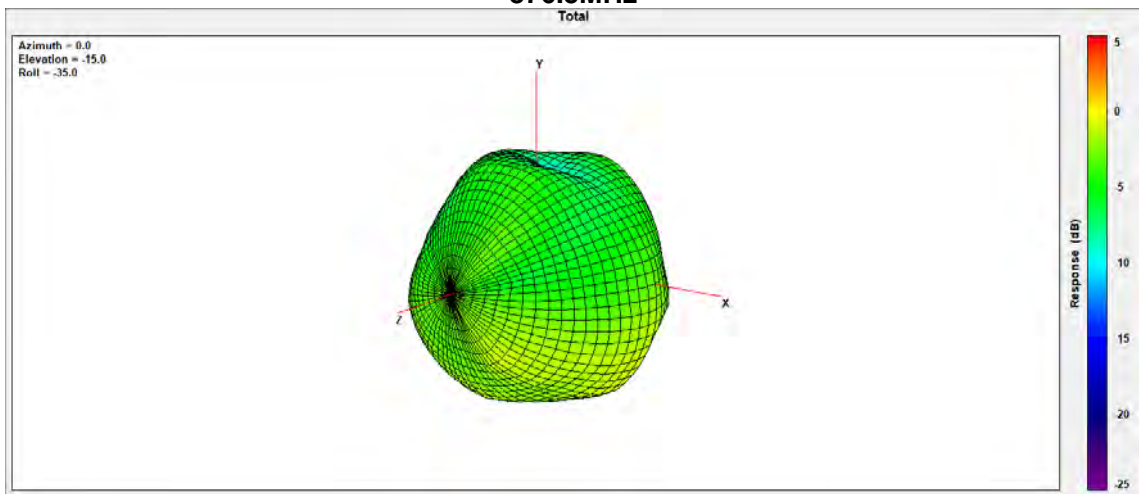
| 869MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.46    | -2.25    |

### 875MHz



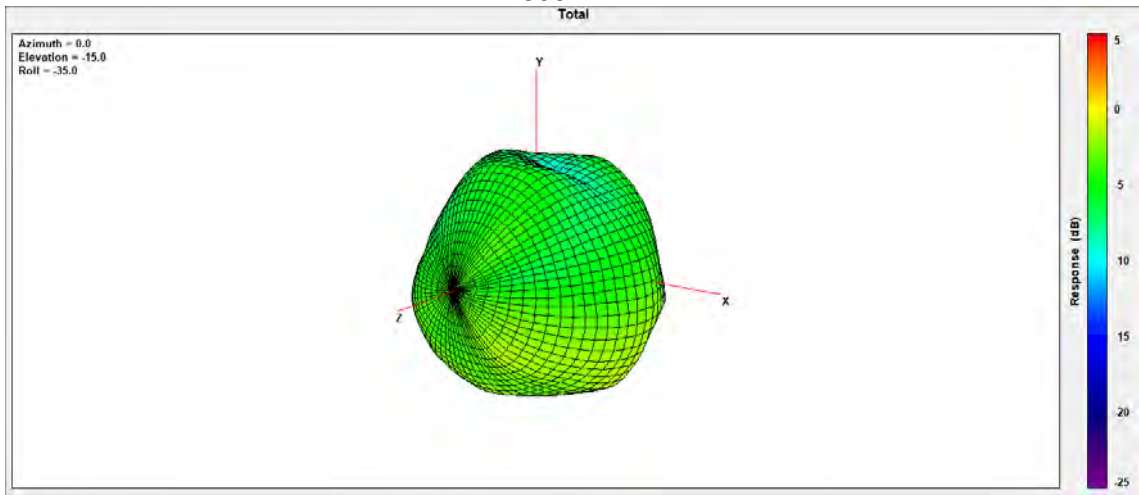
| 875MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.40    | -2.10    |

### 876.5MHz



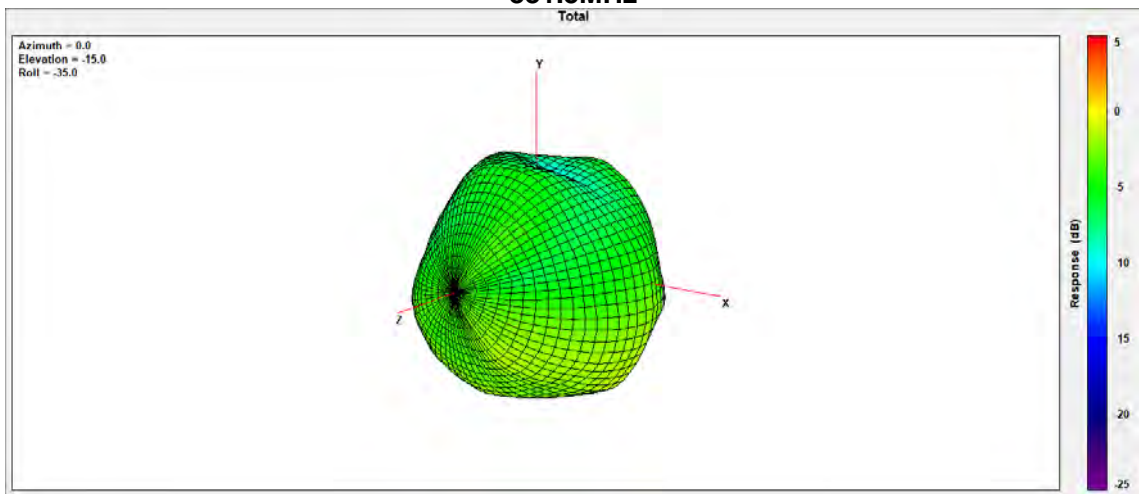
| 876.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.40    | -2.12    |

### 880MHz



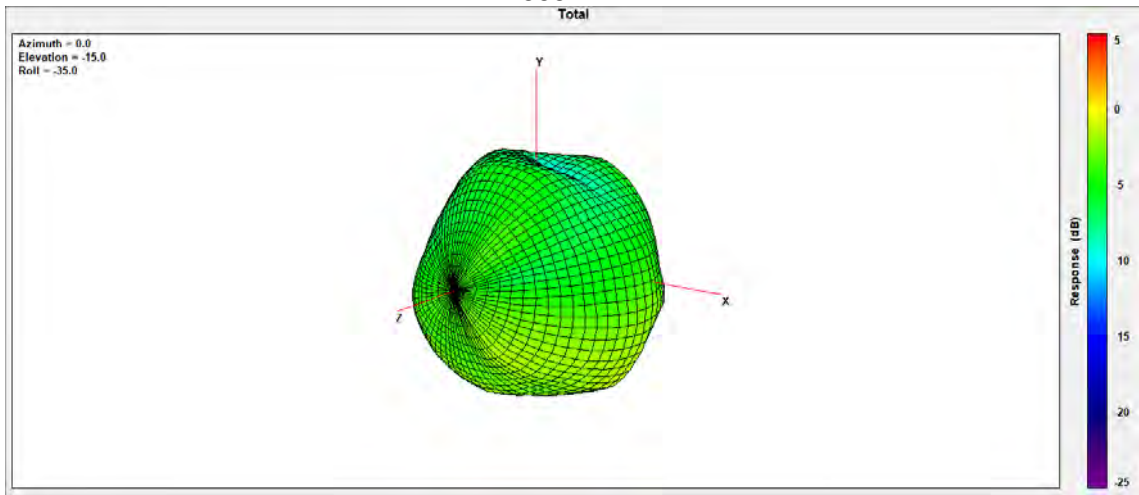
| 880MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.00    | -2.29    |

### 881.5MHz



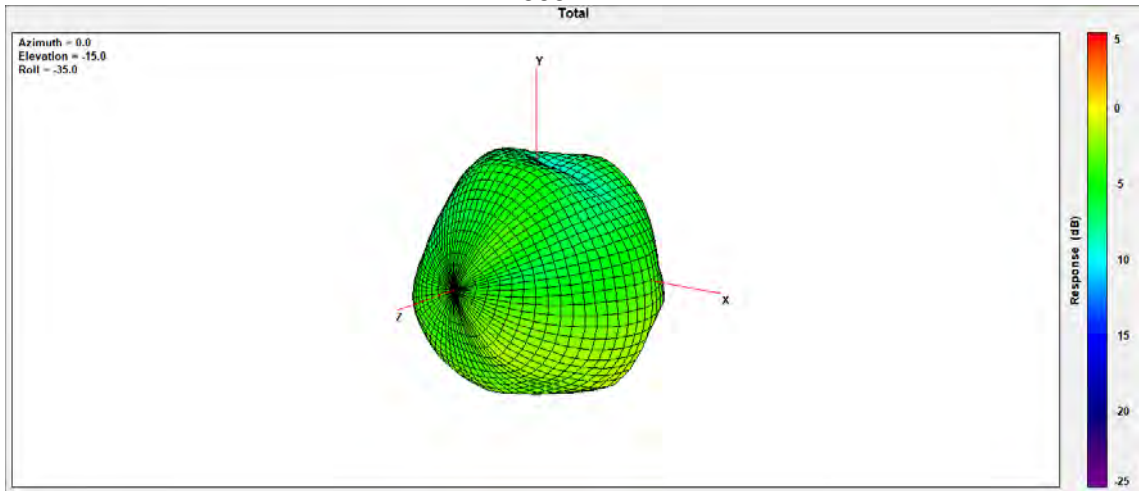
| 881.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.42    | -2.19    |

### 883MHz



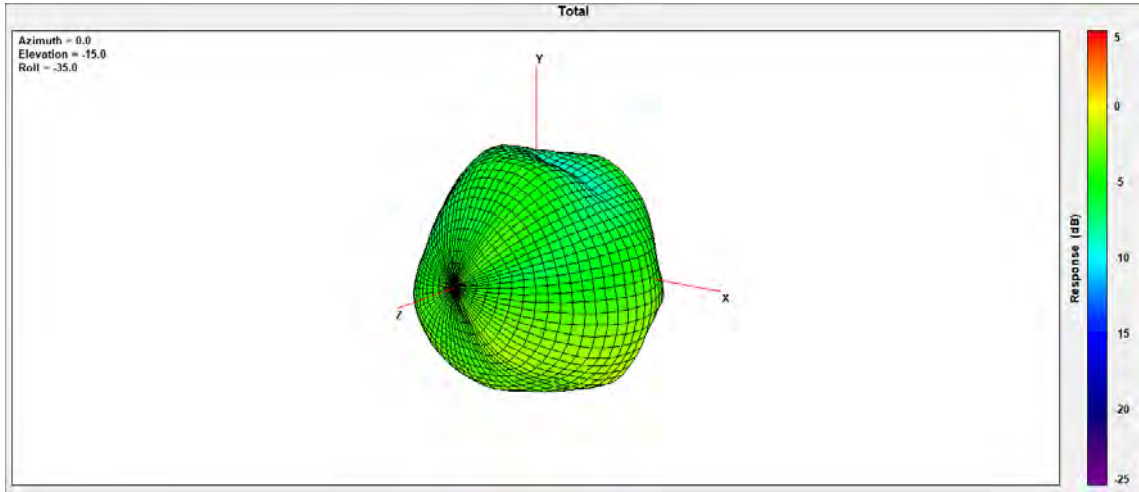
| 883MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.41    | -2.24    |

### 885MHz



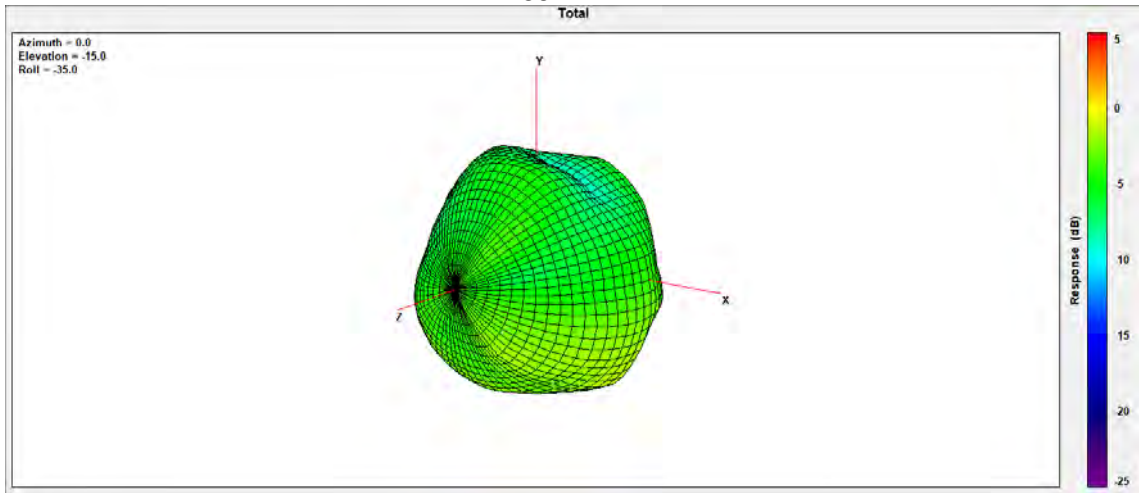
| 885MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.47    | -2.26    |

### 890MHz



| 890MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.83    | -2.31    |

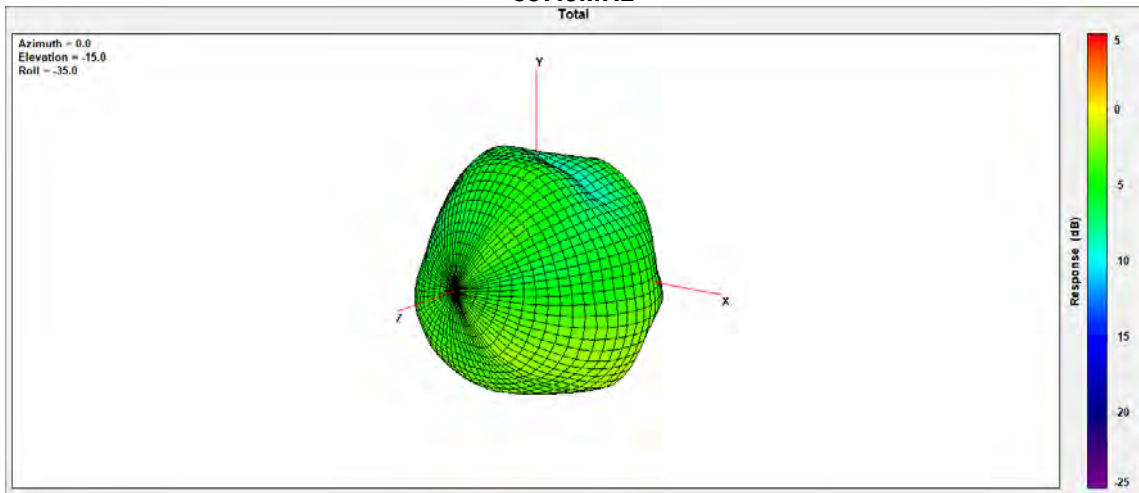
### 894MHz



| 894MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.98    | -2.30    |

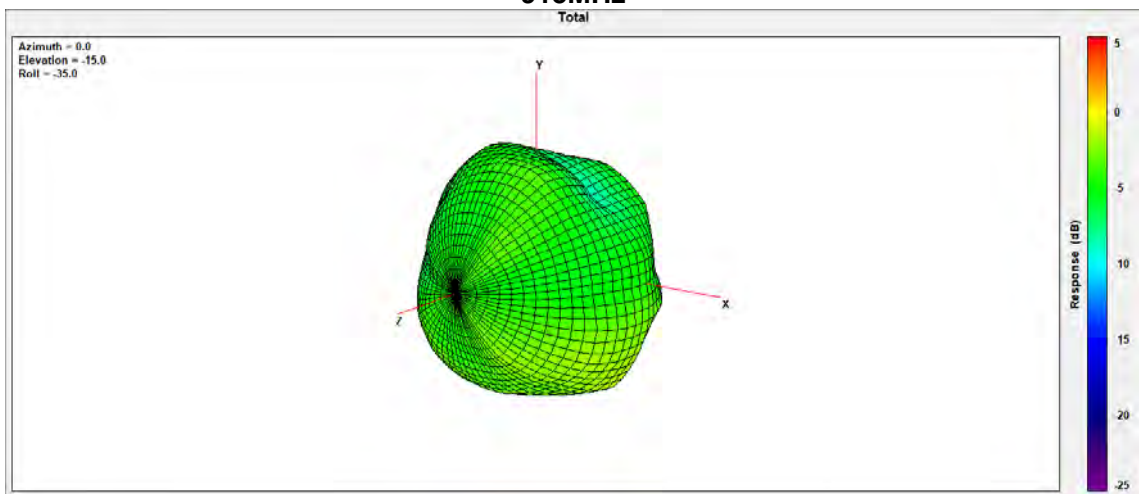


### 897.5MHz



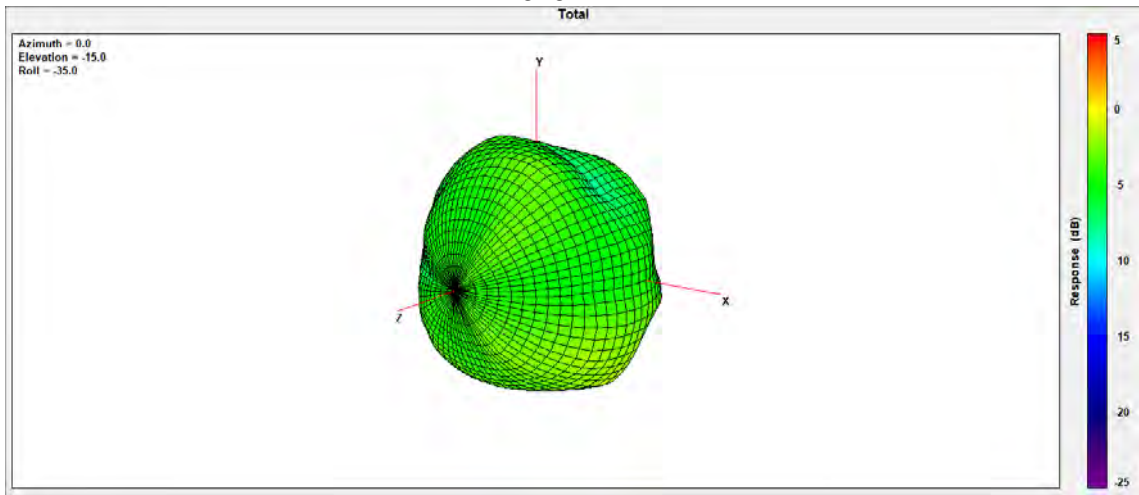
| 897.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -3.37    | -2.19    |

### 915MHz



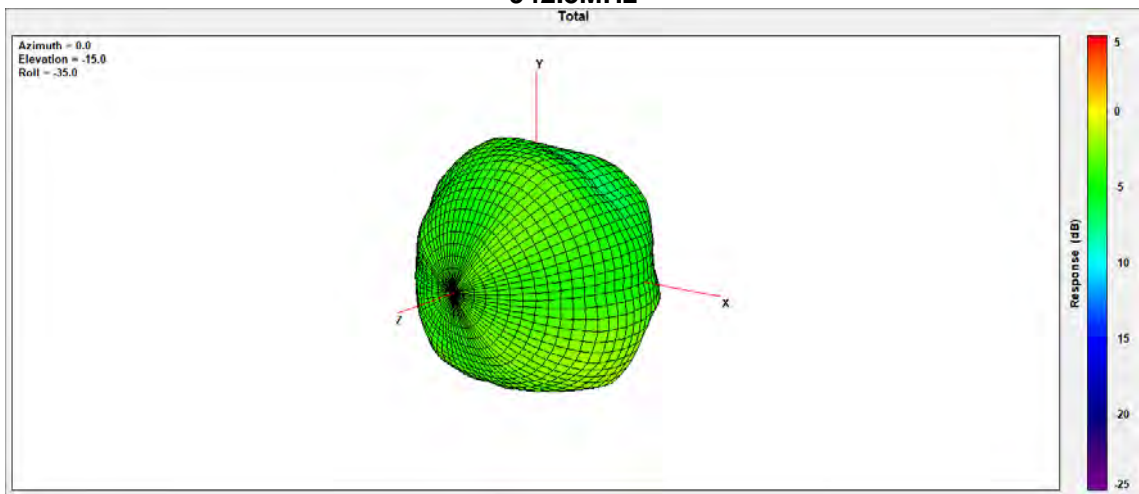
| 915MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.82    | -2.08    |

### 925MHz



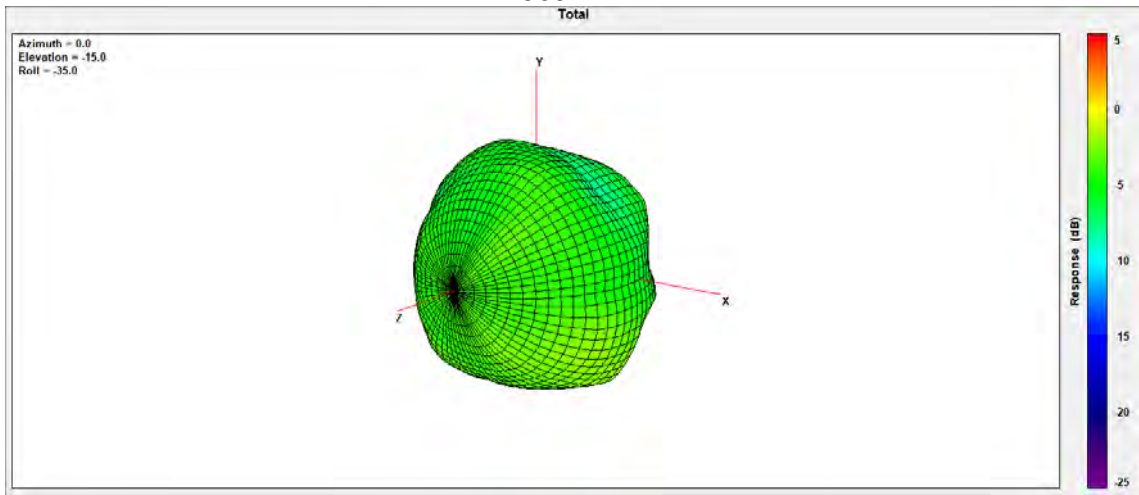
| 925MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.27    | -3.17    |

### 942.5MHz



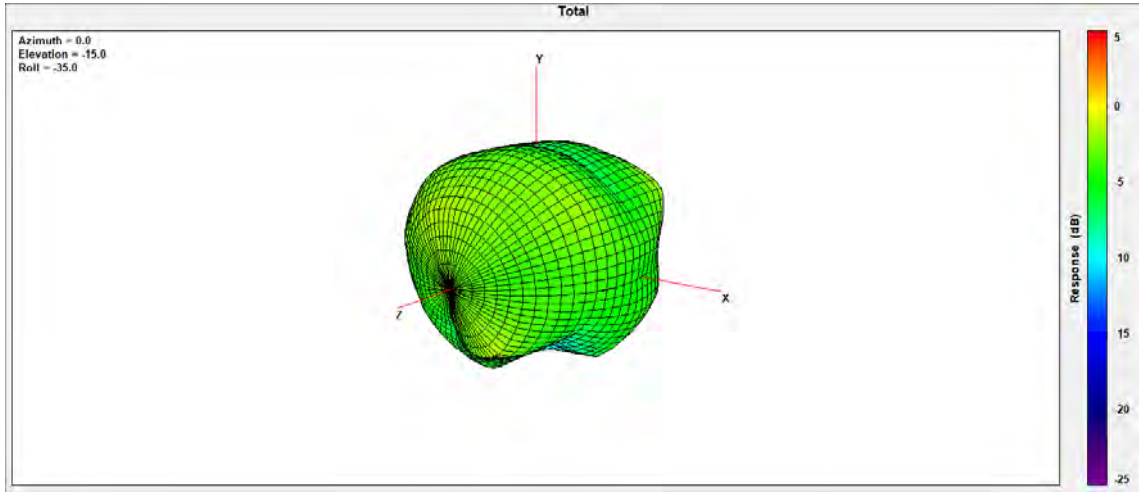
| 942.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.18    | -3.11    |

# 960MHz



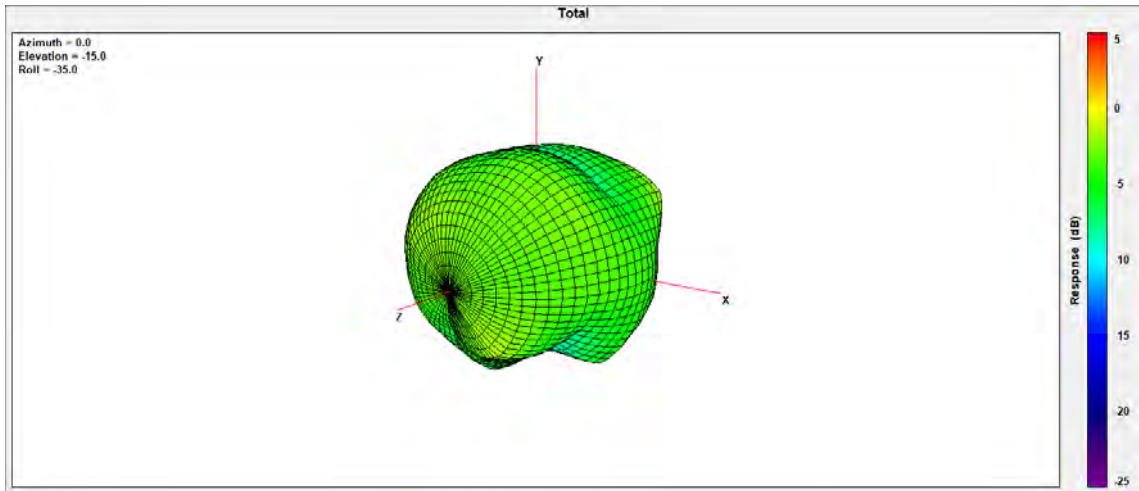
| 960MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.13    | -2.98    |

### 1452MHz



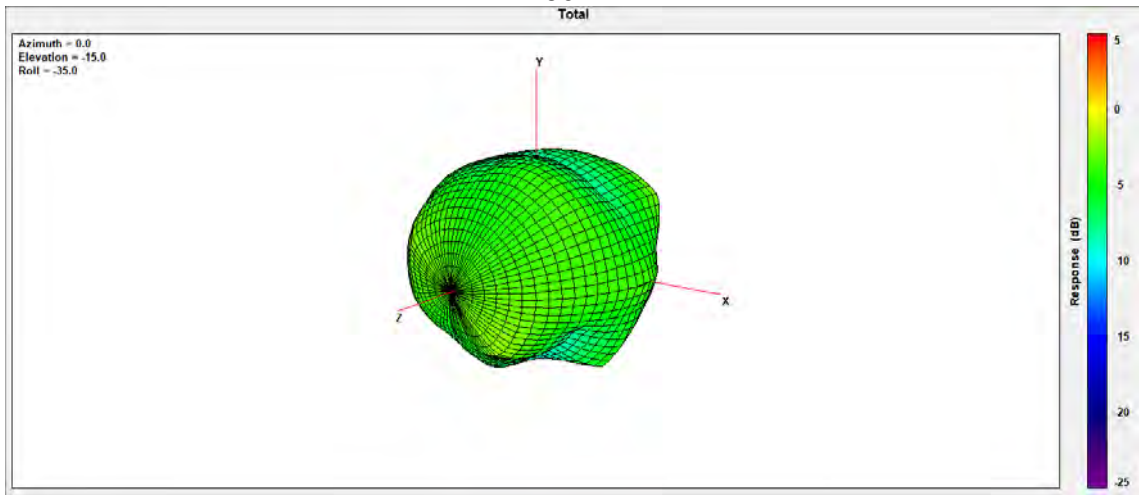
| 1452MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.04    | -3.26    |

### 1474MHz



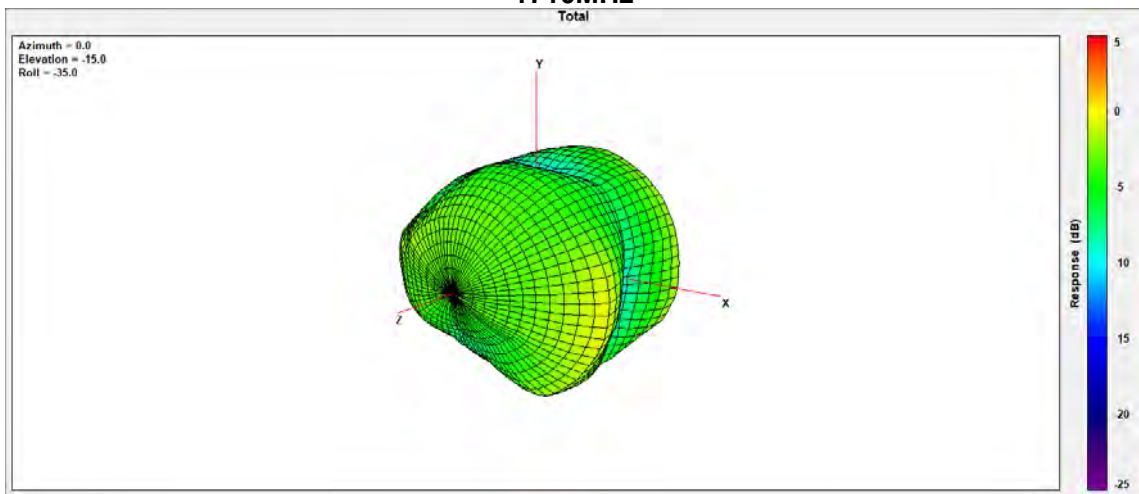
| 1474MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -3.45    | -4.98    |

### 1496MHz



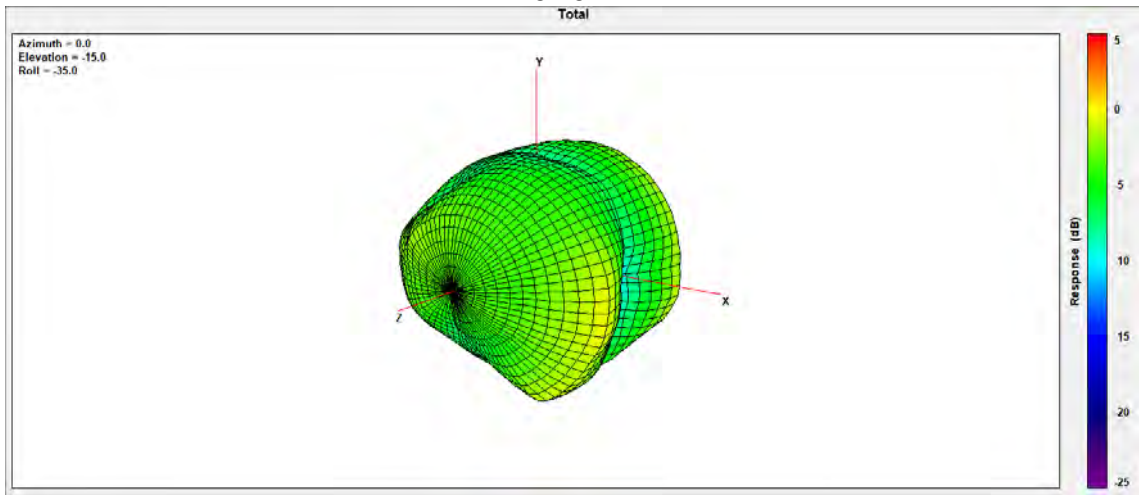
| 1496MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -3.04    | -5.02    |

### 1710MHz



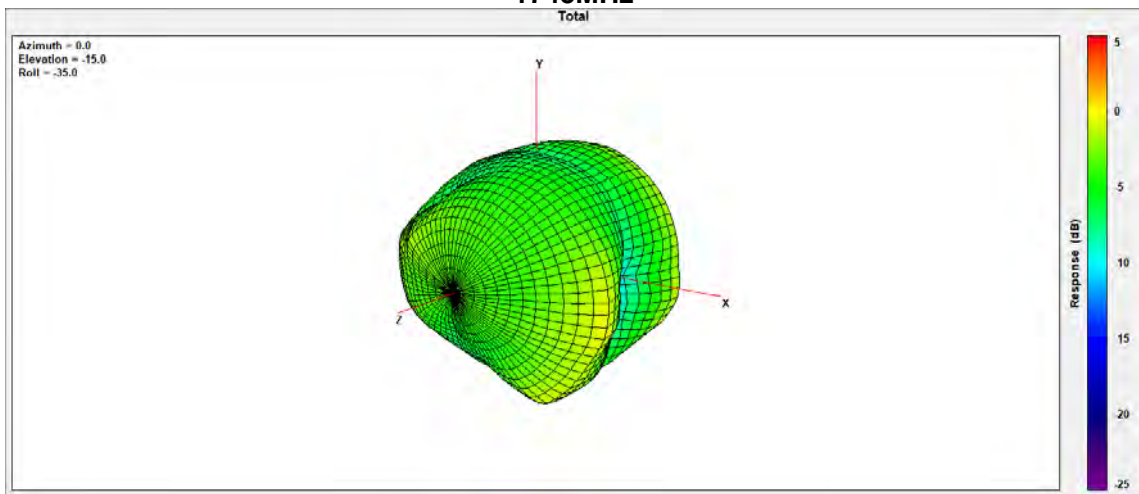
| 1710MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.33    | -2.92    |

### 1732.5MHz



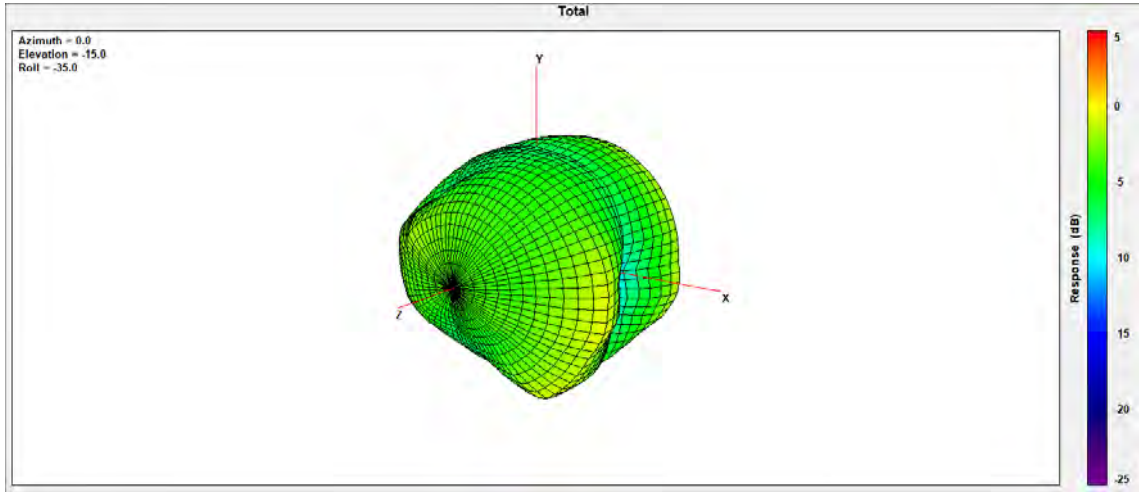
| 1732.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -0.85    | -2.80    |

### 1745MHz



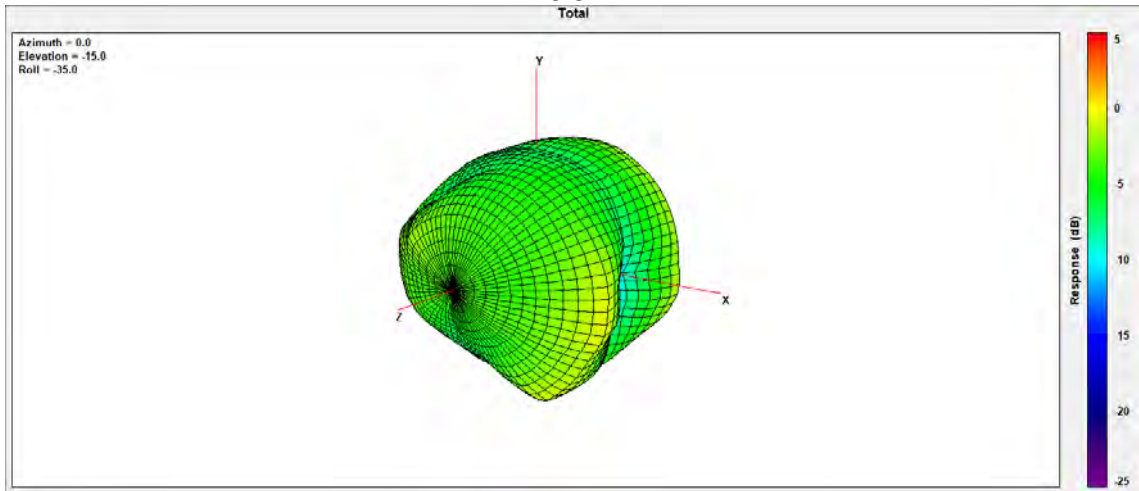
| 1745MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.92    | -2.79    |

### 1747.5MHz



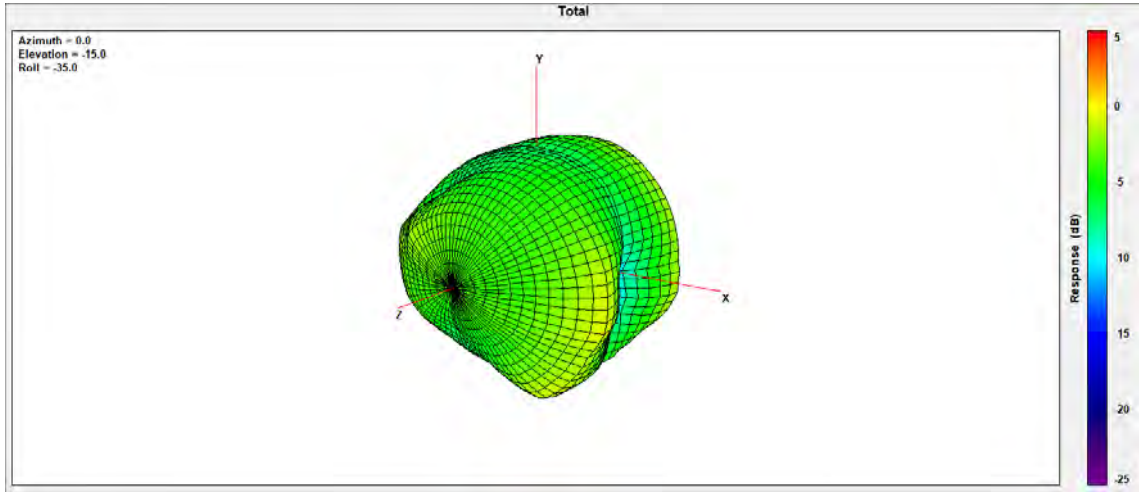
| 1747.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -0.93    | -2.74    |

### 1749.9MHz



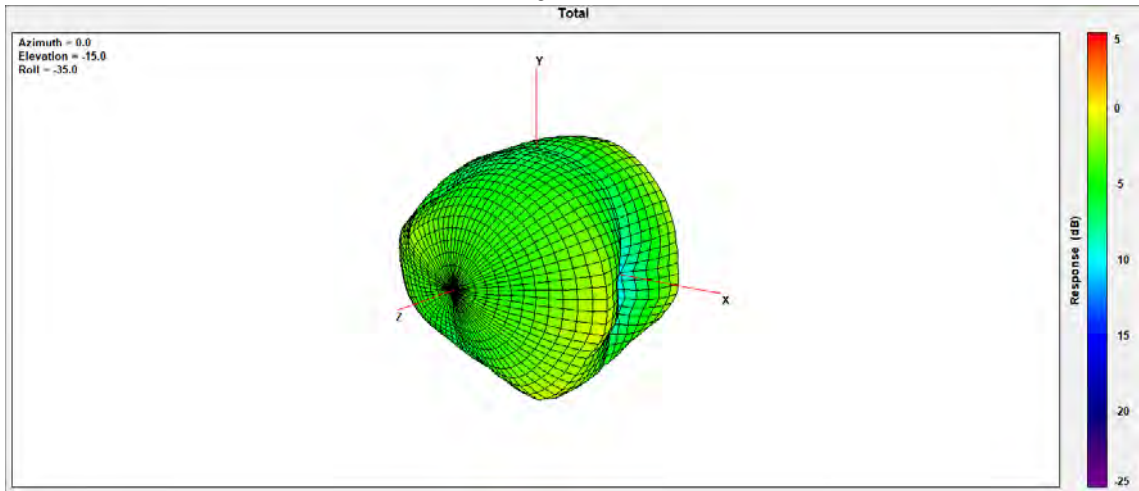
| 1749.9MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -0.98    | -2.71    |

### 1755MHz



| 1755MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.09    | -2.67    |

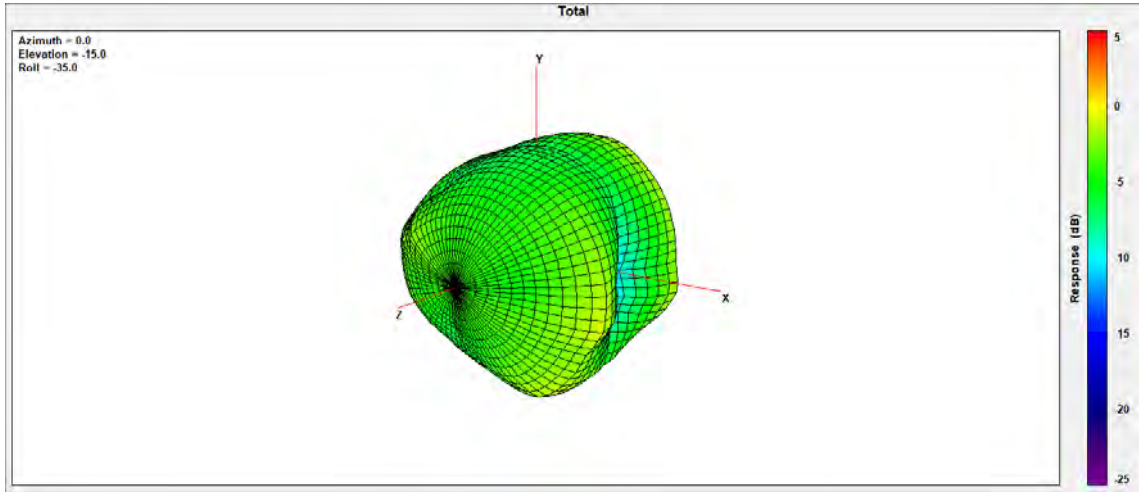
### 1767.4MHz



| 1767.4MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -1.38    | -2.69    |

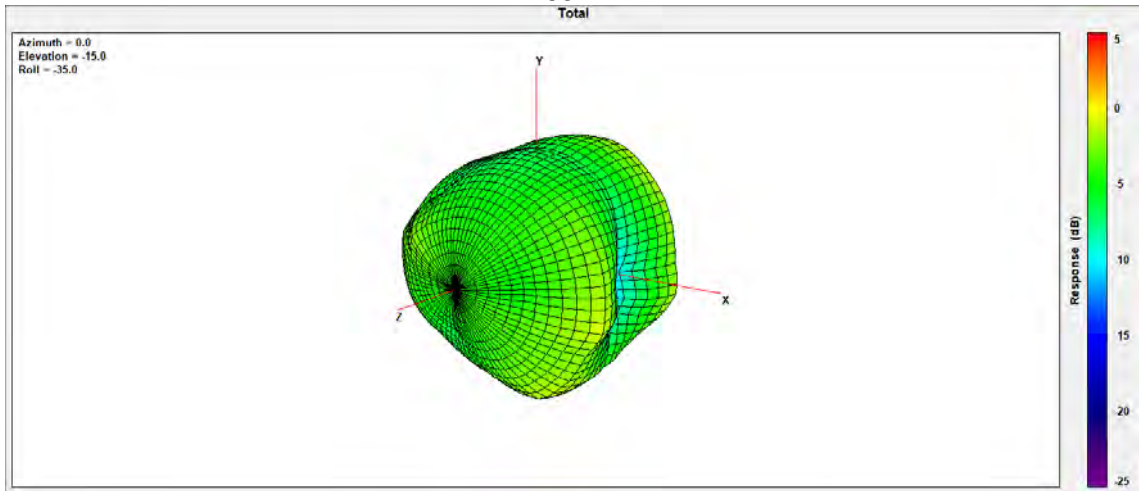


### 1780MHz



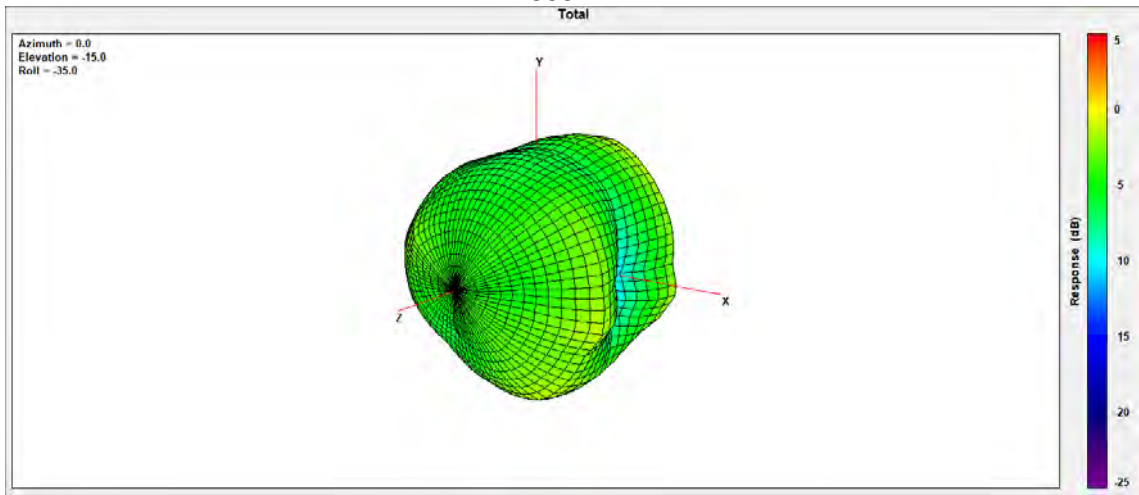
| 1780MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.39    | -2.97    |

### 1785MHz



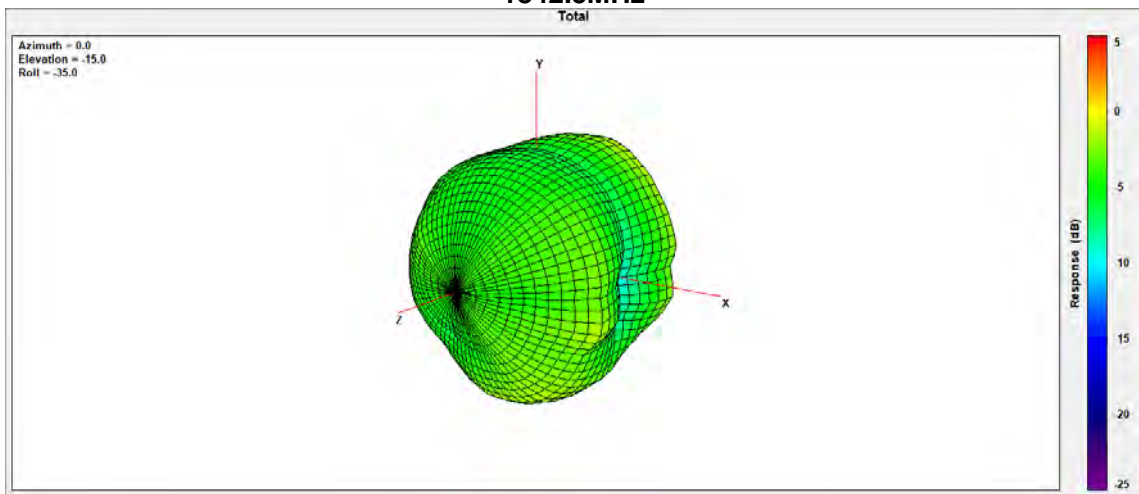
| 1785MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.44    | -3.07    |

### 1805MHz



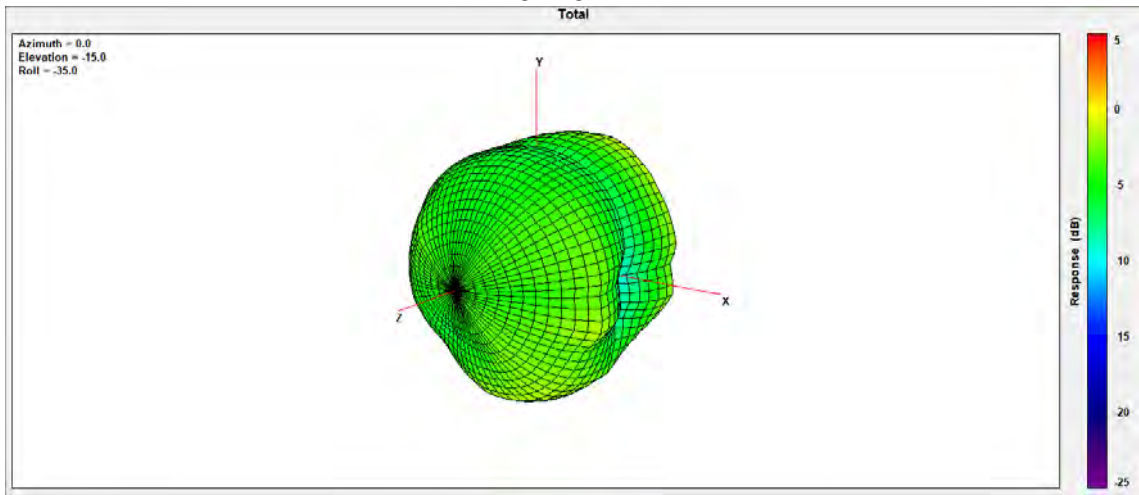
| 1805MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.52    | -1.02    |

### 1842.5MHz



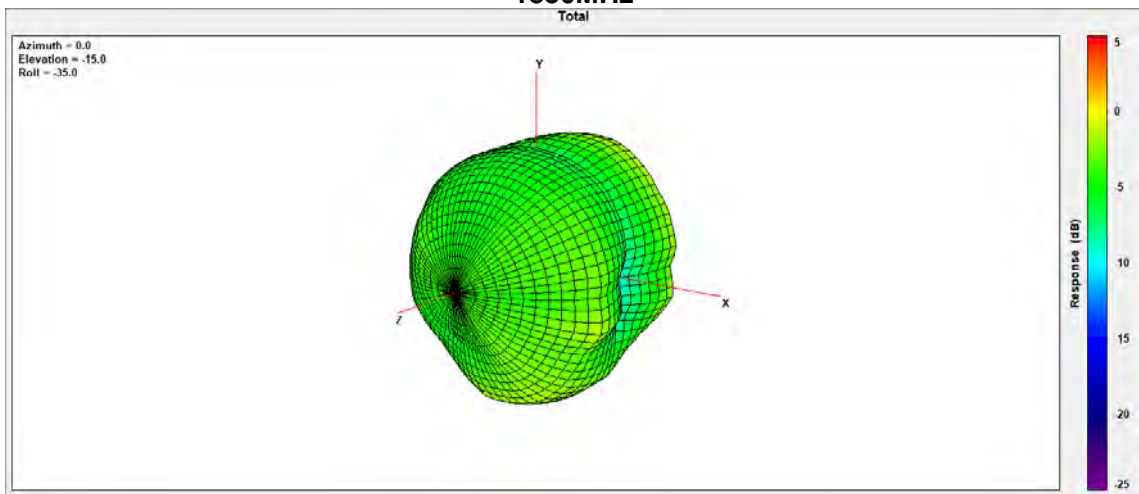
| 1842.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -1.12    | -0.07    |

### 1844.9MHz



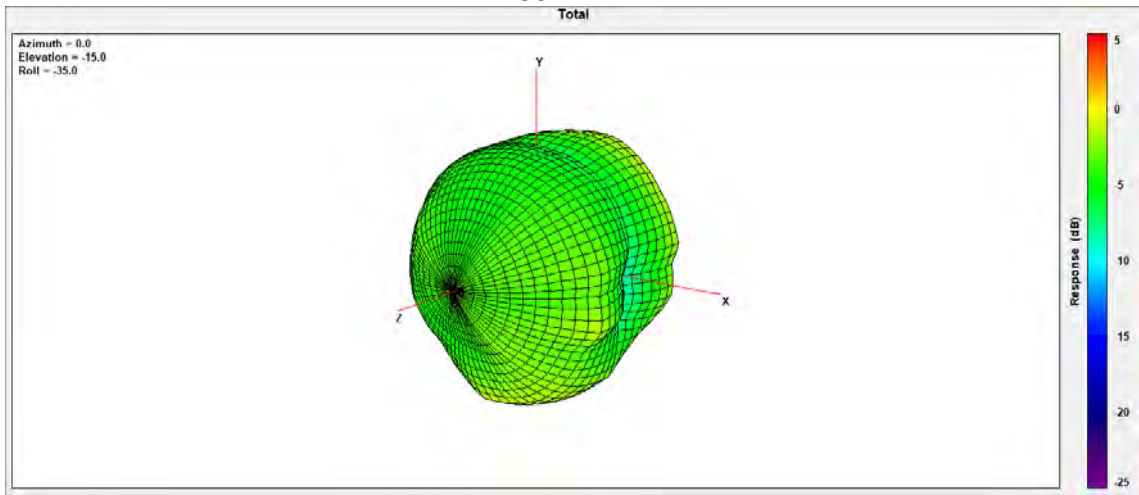
| 1844.9MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -1.11    | -0.08    |

### 1850MHz



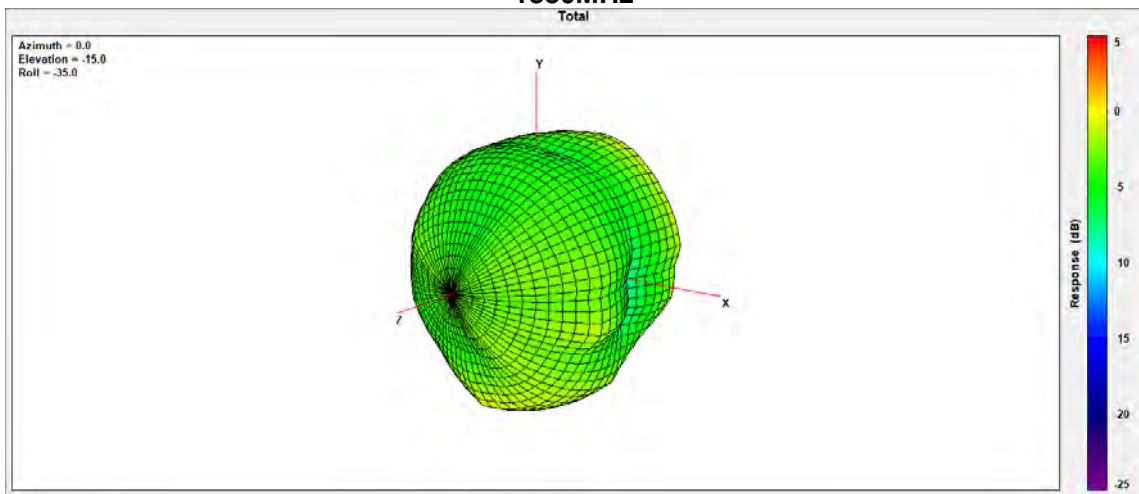
| 1850MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.17    | -3.33    |

### 1862.4MHz



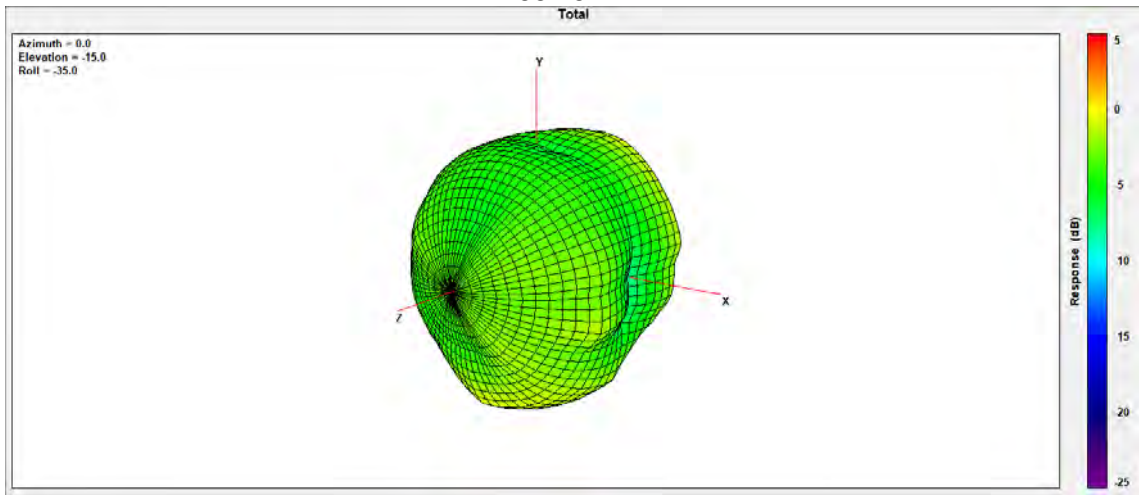
| 1862.4MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -0.81    | -3.08    |

### 1880MHz



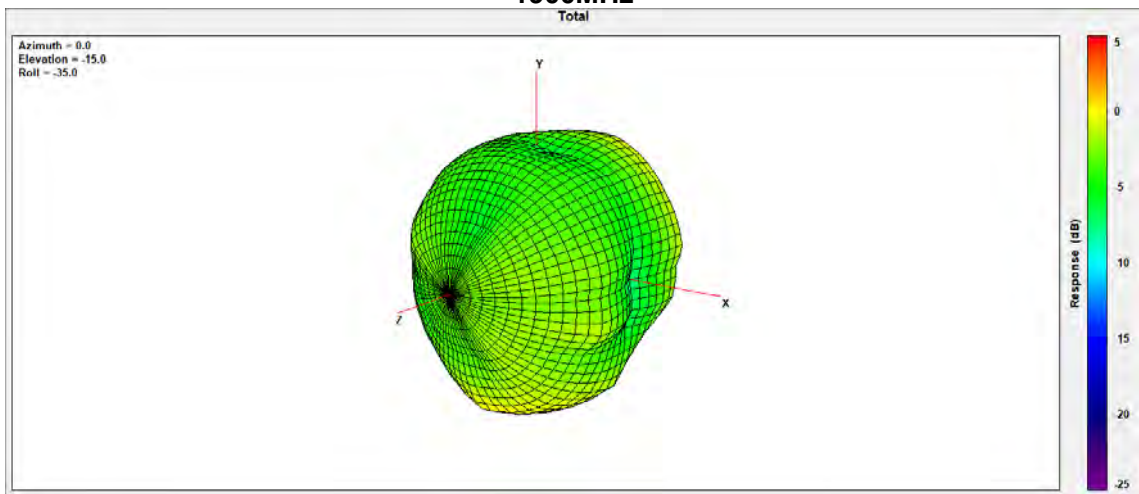
| 1880MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.85    | -2.92    |

### 1882.5MHz



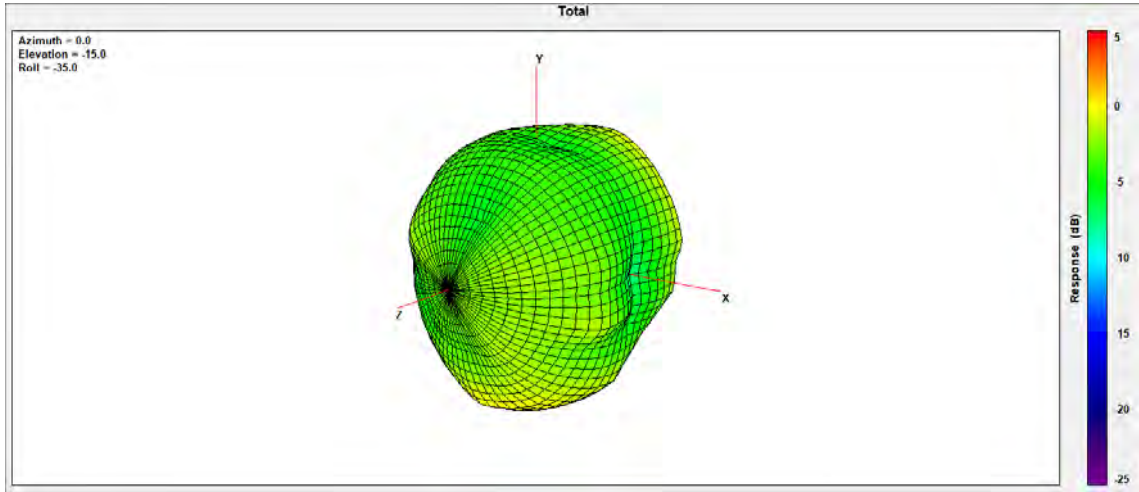
| 1882.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -0.83    | -2.88    |

### 1900MHz



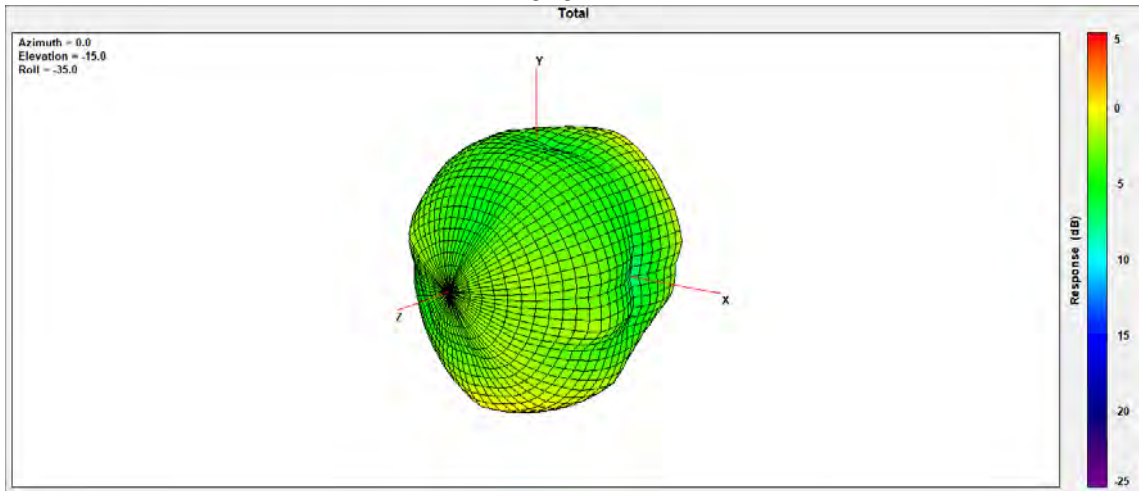
| 1900MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.46    | -2.24    |

### 1910MHz



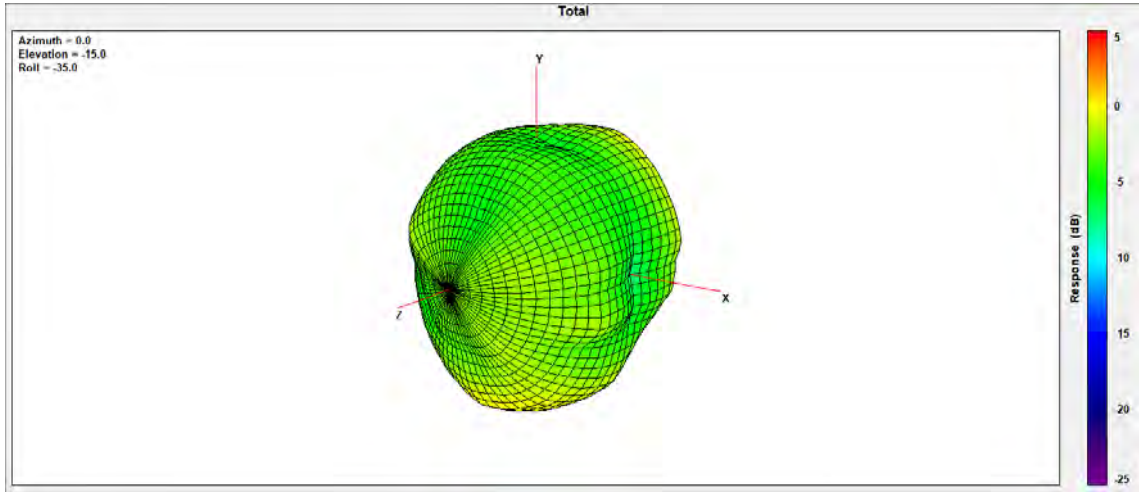
| 1910MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.25    | -1.92    |

### 1915MHz



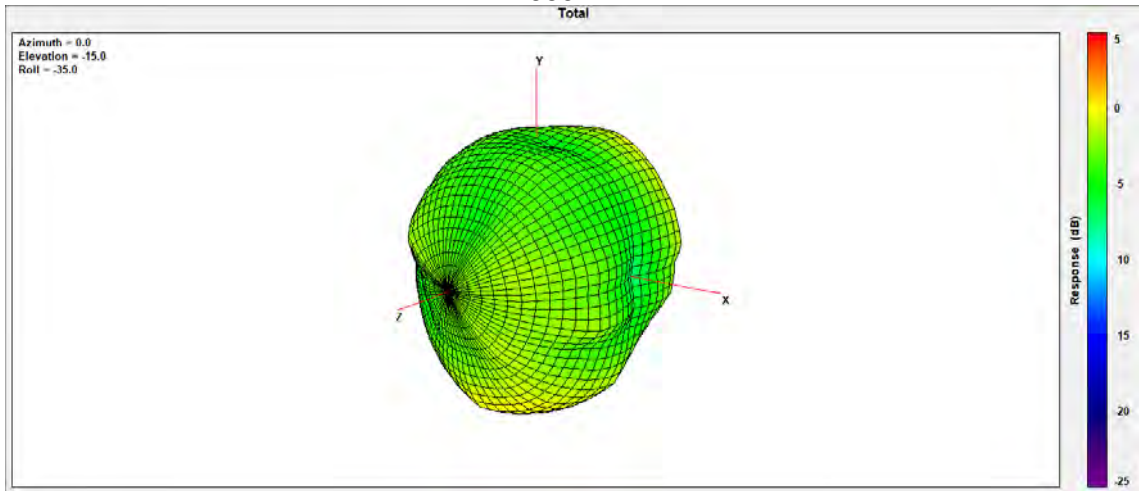
| 1915MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.19    | -1.79    |

### 1920MHz



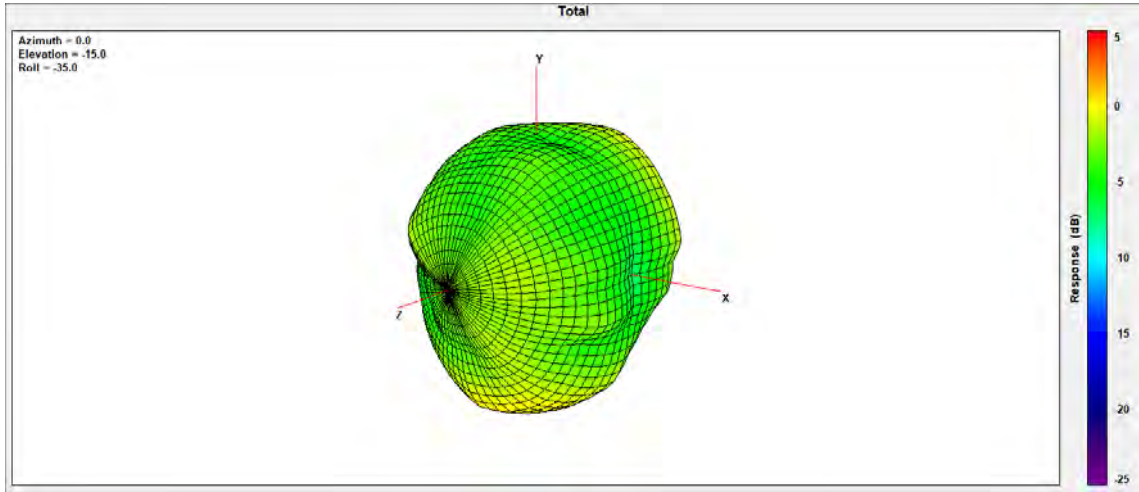
| 1920MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.12    | -1.57    |

### 1930MHz



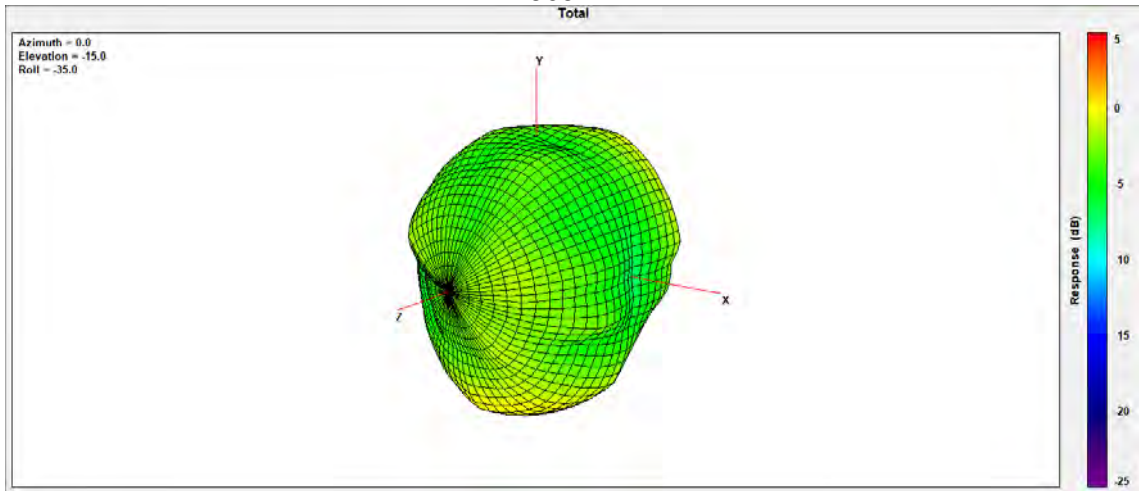
| 1930MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.84    | -0.38    |

### 1950MHz



| 1950MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.47     | -0.79    |

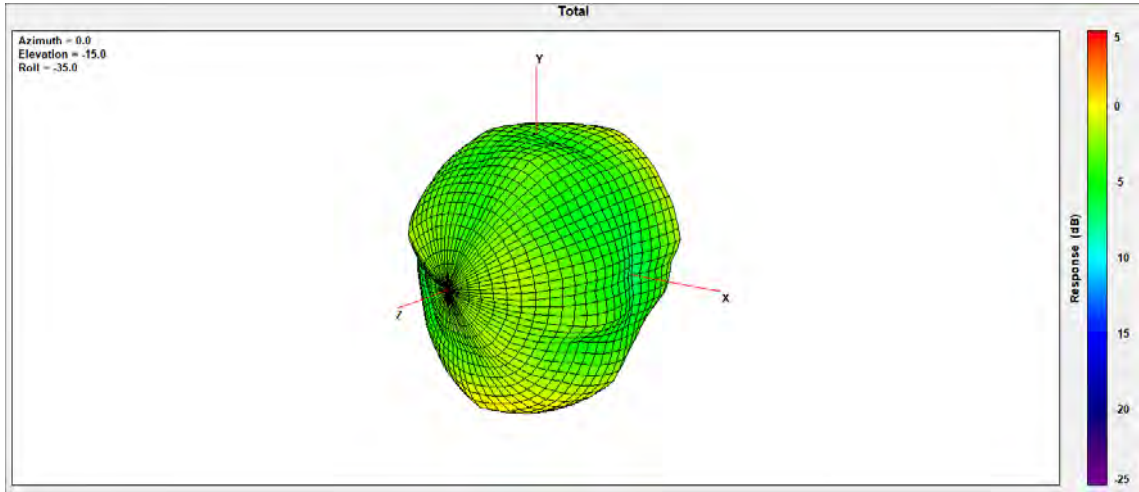
### 1960MHz



| 1960MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.87    | -0.09    |

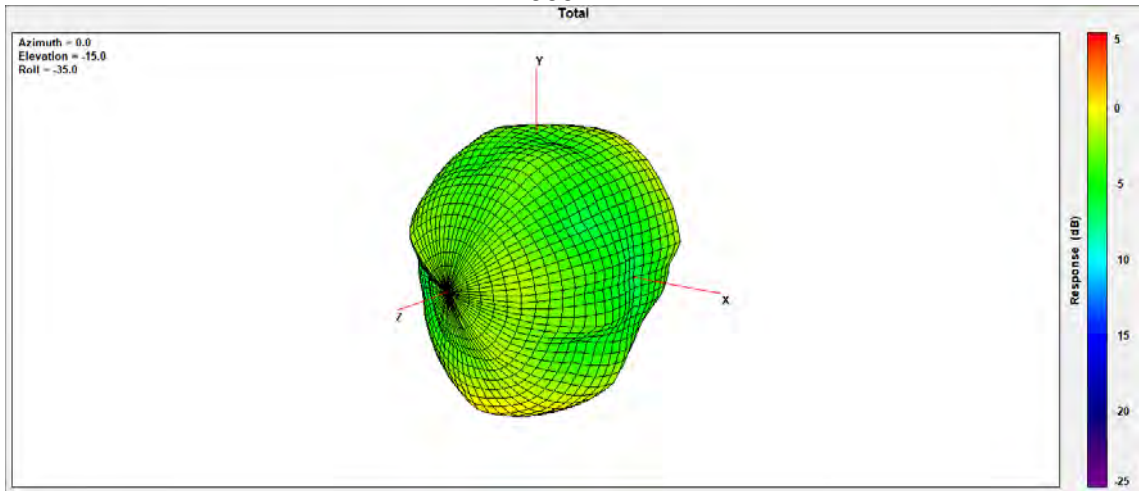


### 1962.5MHz



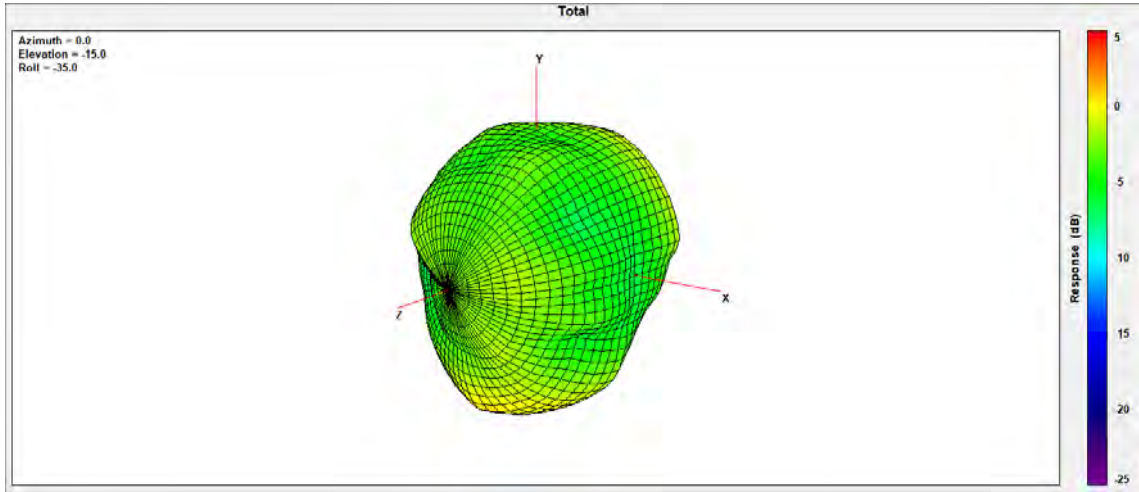
| 1962.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -0.92    | -0.17    |

### 1980MHz



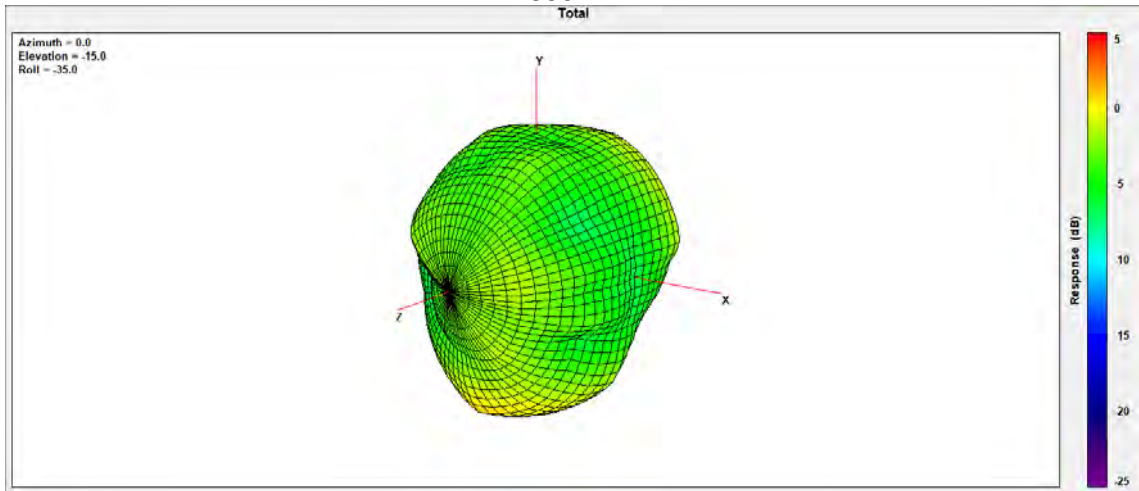
| 1980MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.95     | -0.42    |

### 1990MHz



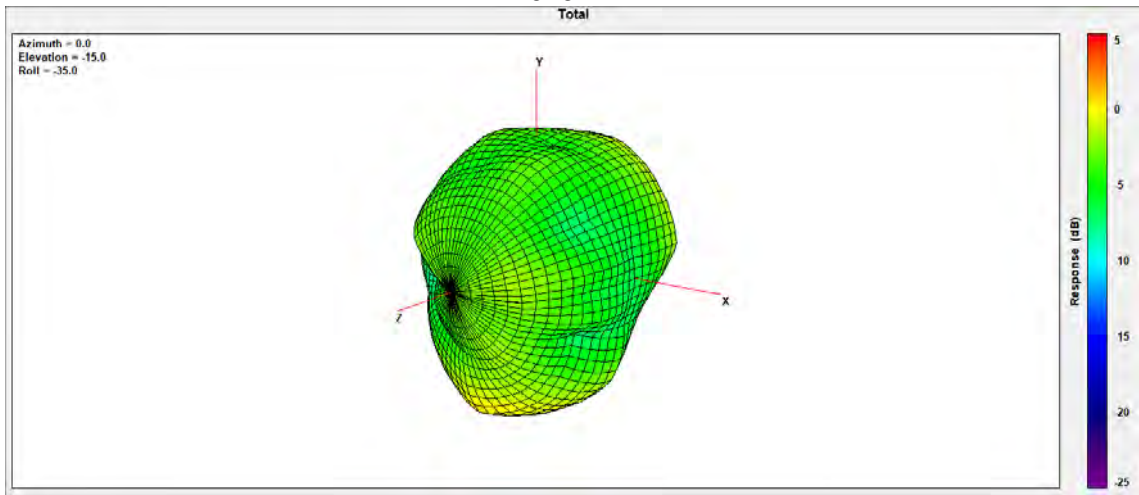
| 1990MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.31    | -0.11    |

### 1995MHz



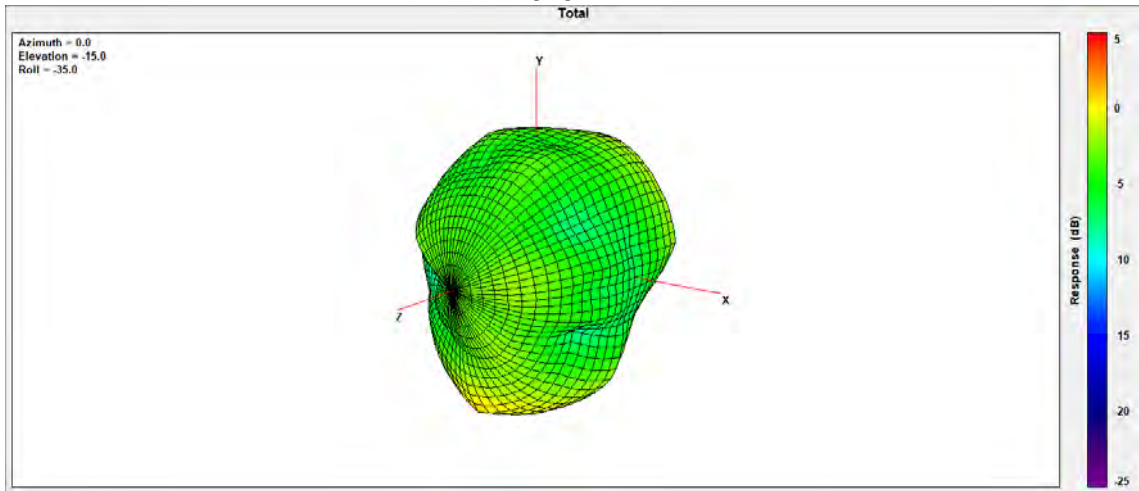
| 1995MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.19    | -0.06    |

### 2010MHz



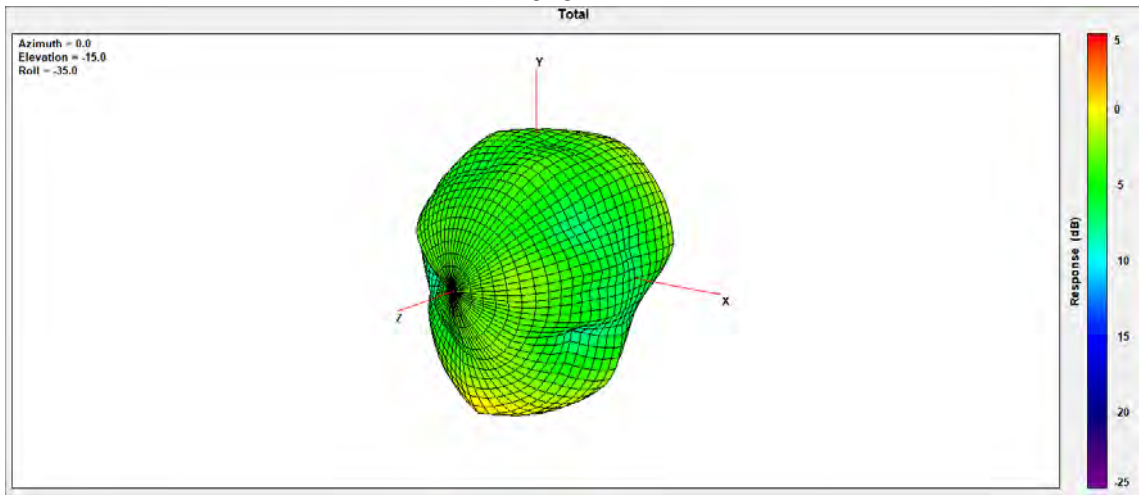
| 2010MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.24     | 0.38     |

### 2018MHz



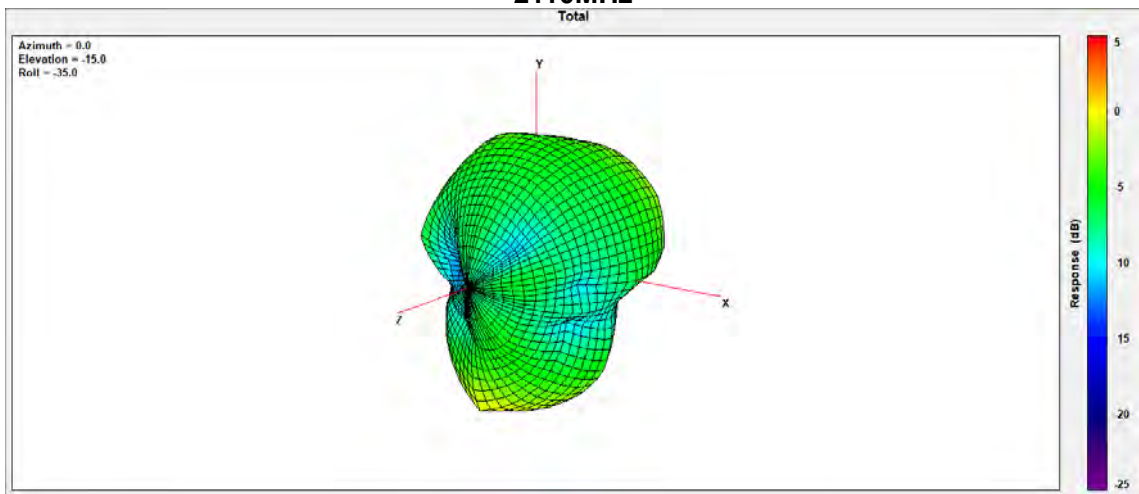
| 2018MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.15     | -0.75    |

### 2025MHz



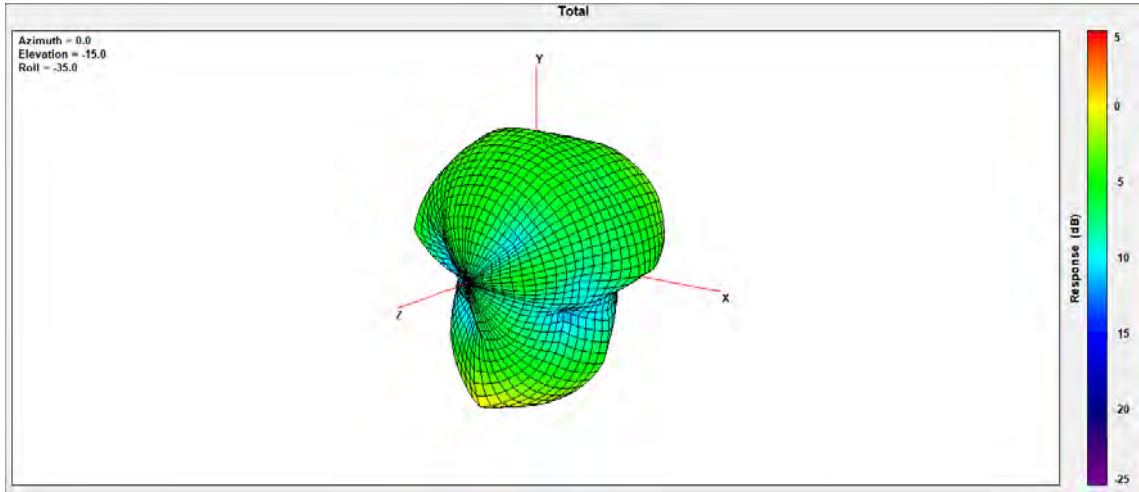
| 2025MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.18     | -0.83    |

### 2110MHz



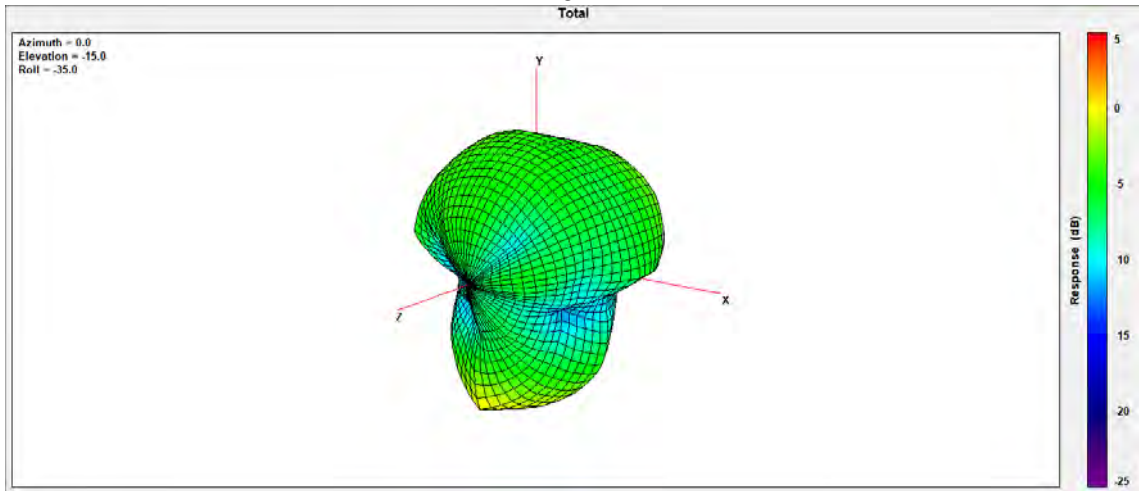
| 2110MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.57     | 0.69     |

### 2132.5MHz



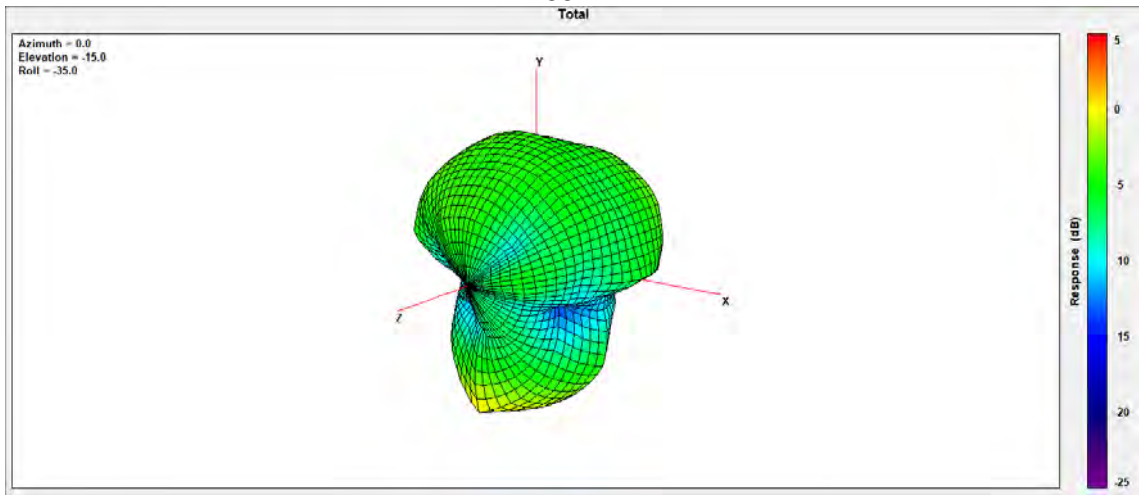
| 2132.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | 1.23     | -0.87    |

### 2140MHz



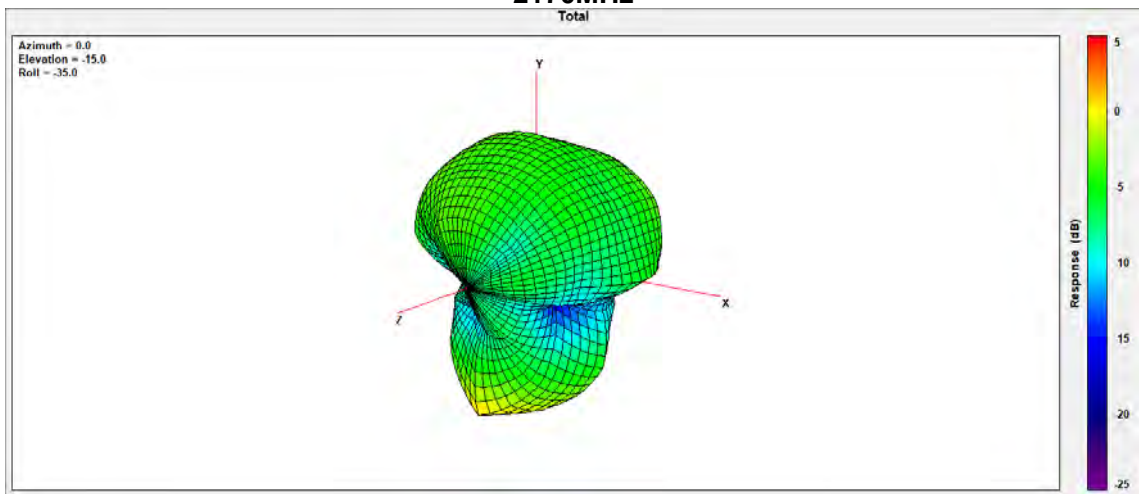
| 2140MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.08     | 0.29     |

### 2155MHz



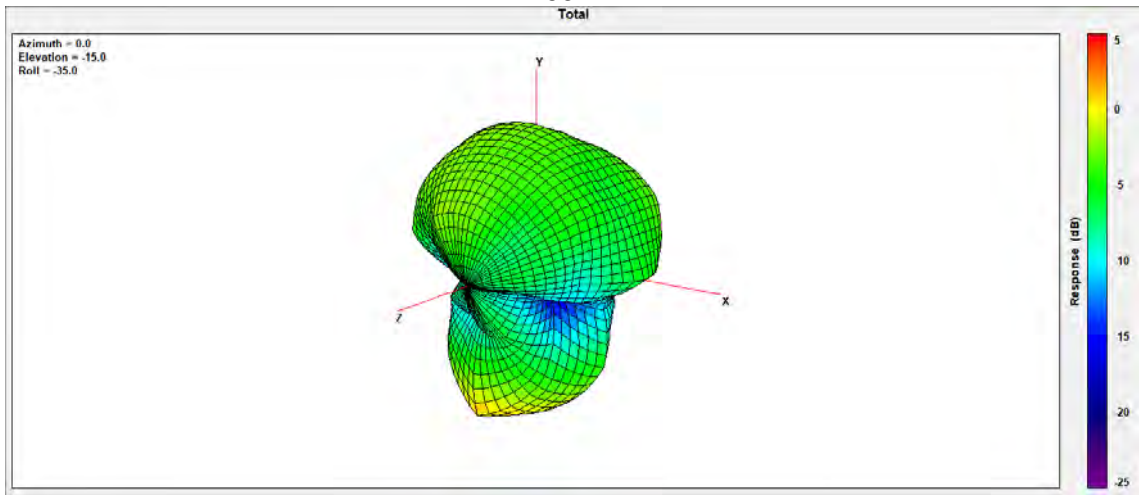
| 2155MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.28    | 0.50     |

### 2170MHz



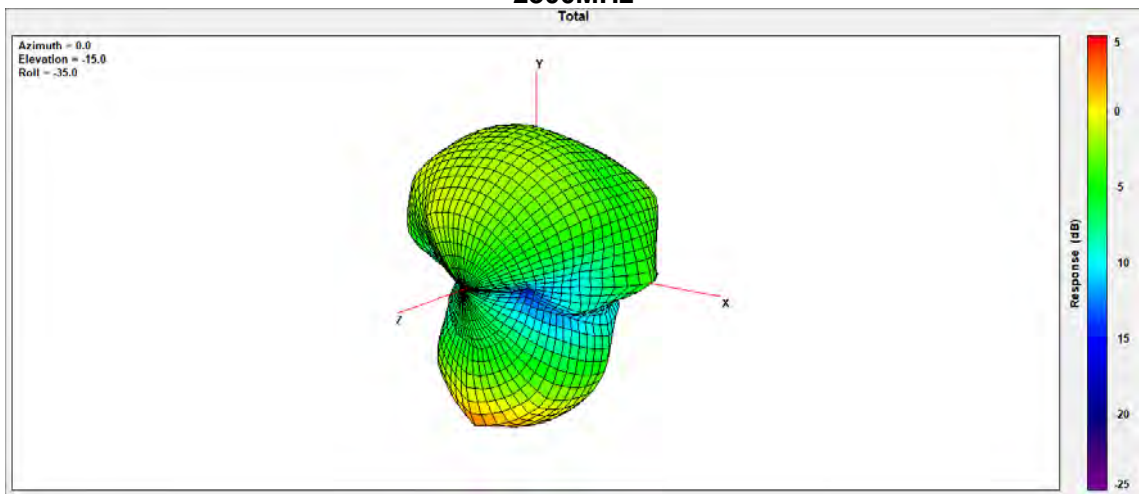
| 2170MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.14    | 0.50     |

### 2200MHz



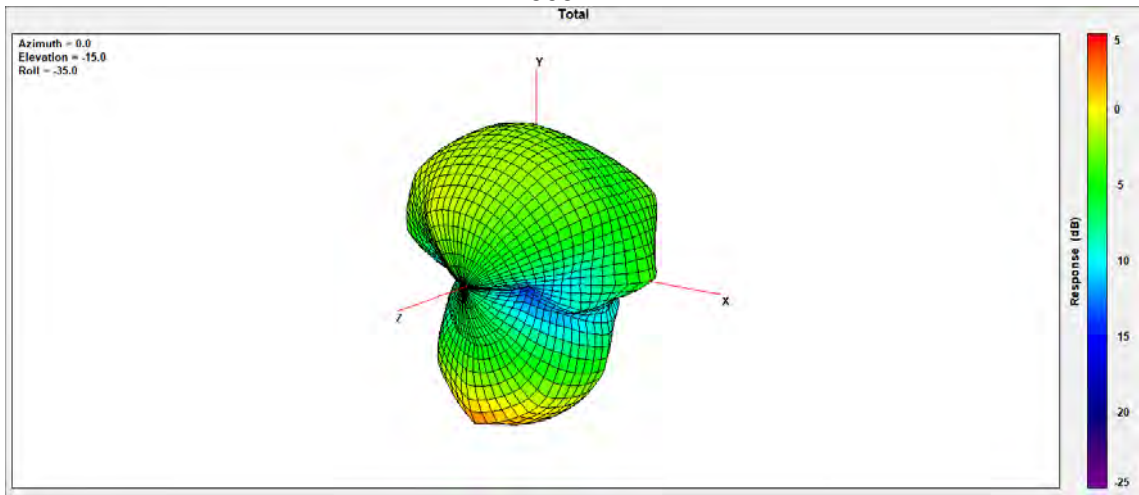
| 2200MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.13     | 0.47     |

### 2300MHz



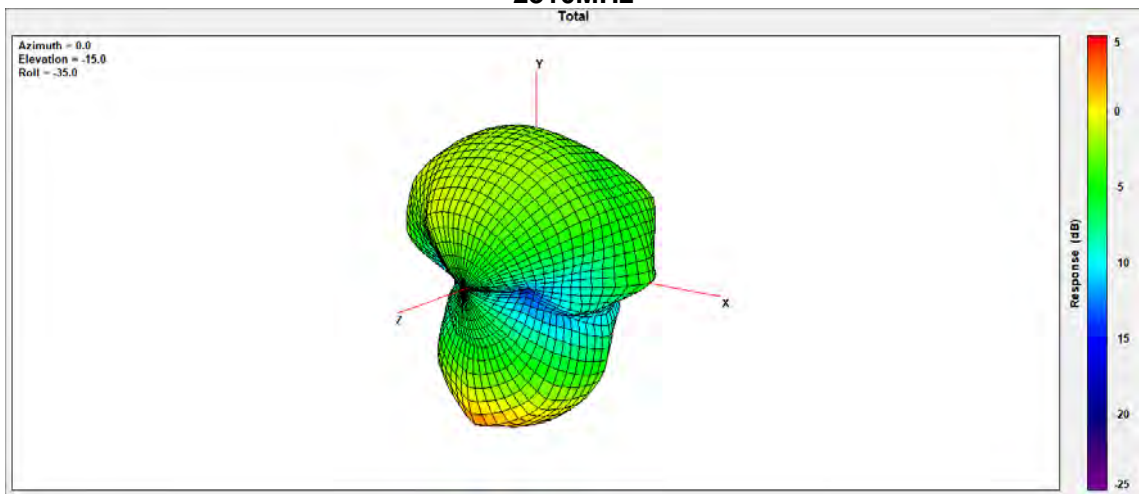
| 2300MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.52     | 0.40     |

### 2305MHz



| 2305MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.64     | 0.41     |

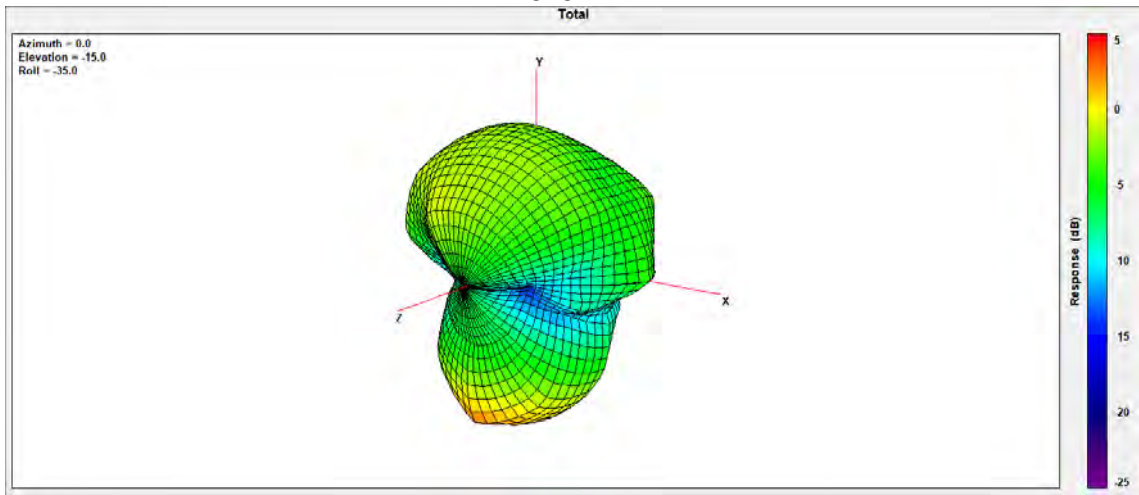
### 2310MHz



| 2310MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 2.42     | 0.02     |

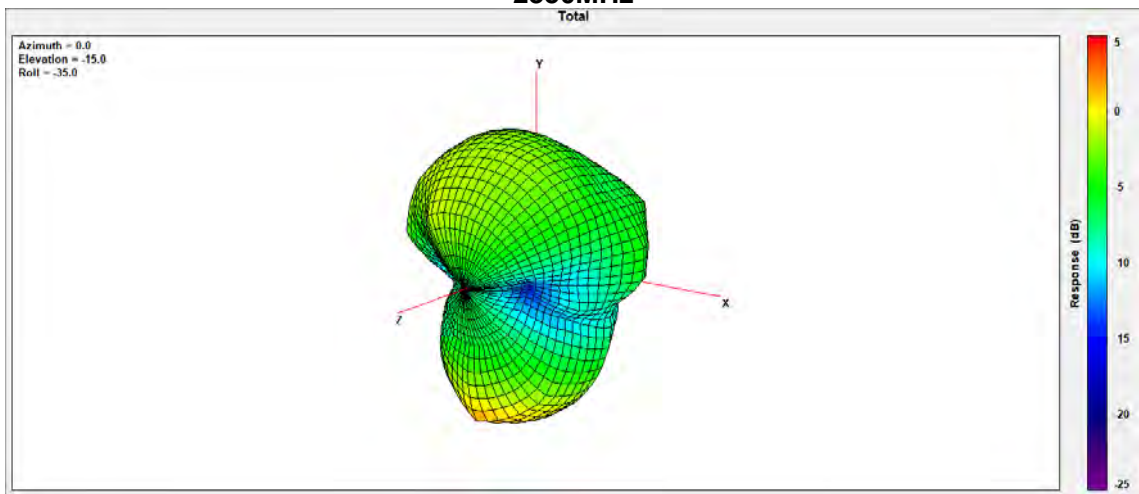


### 2315MHz



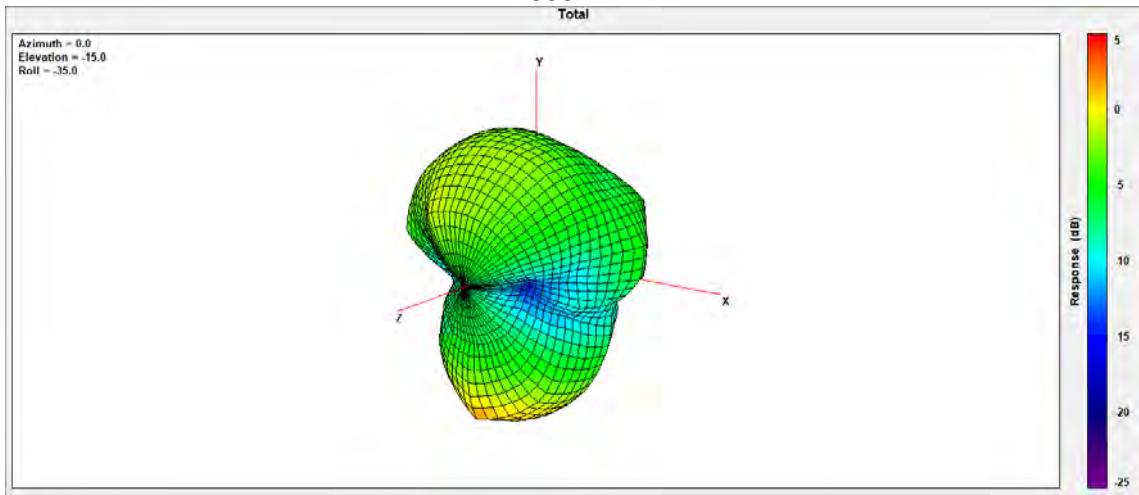
| 2315MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.97     | 0.11     |

### 2350MHz



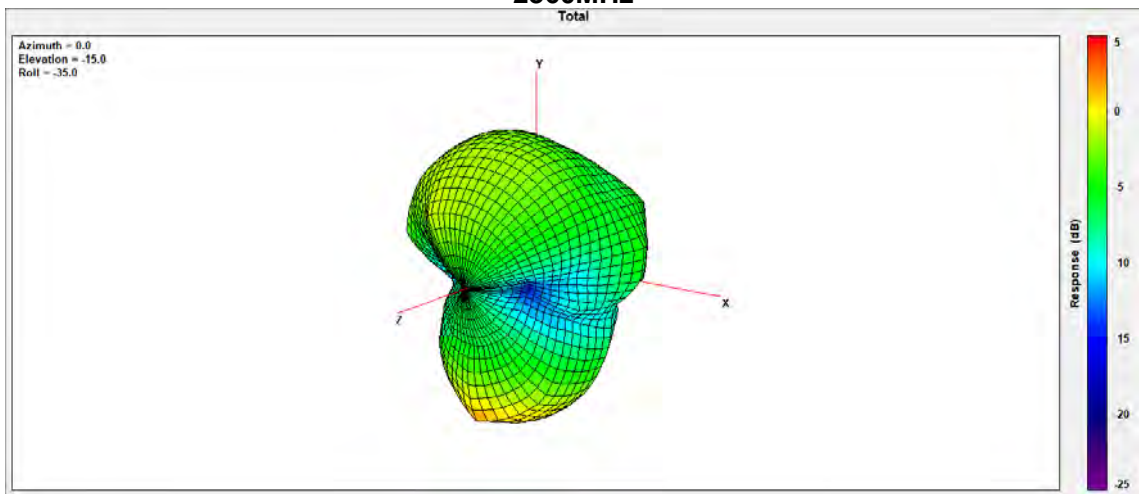
| 2350MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.94     | 0.17     |

### 2355MHz



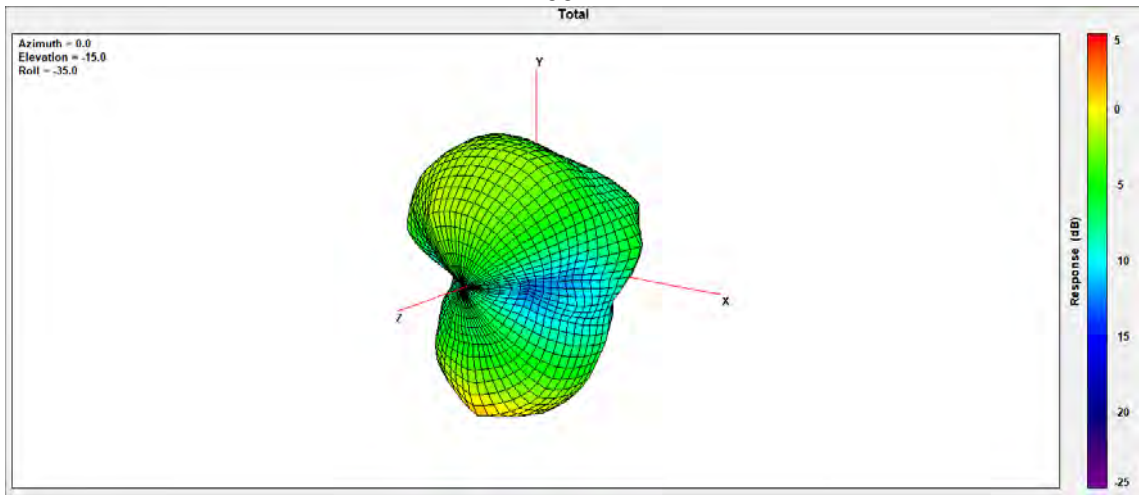
| 2355MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.99     | 0.18     |

### 2360MHz



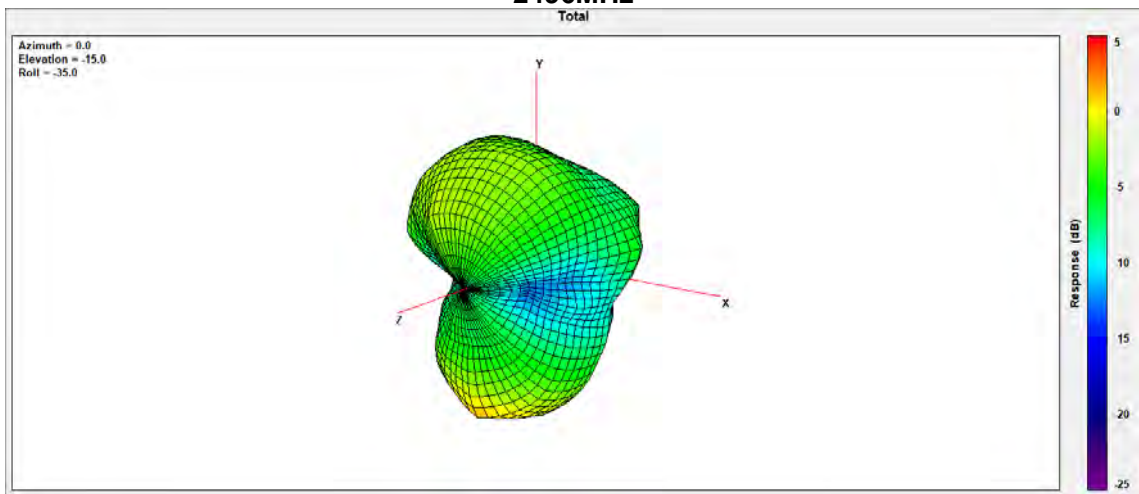
| 2360MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.72     | -0.57    |

### 2400MHz



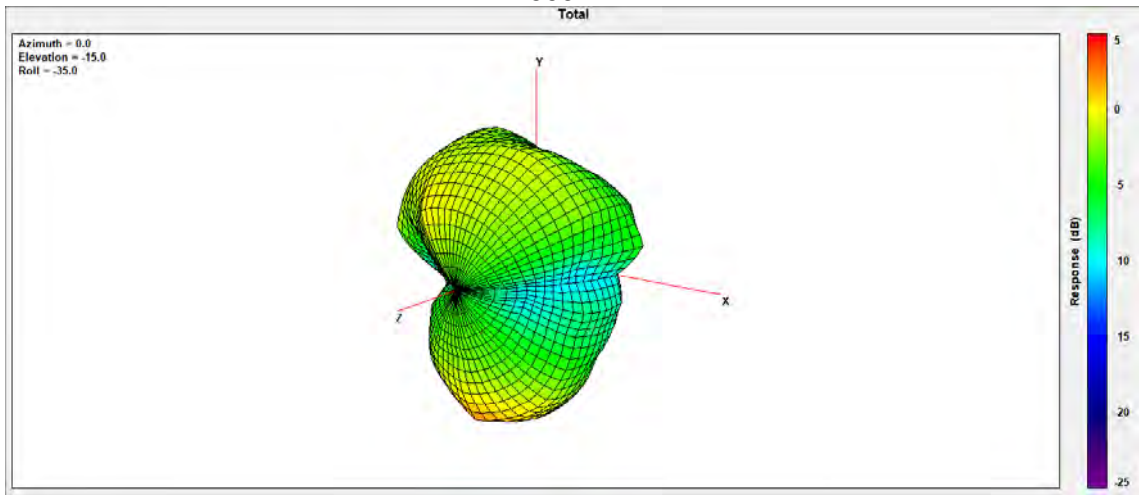
| 2400MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.46     | -0.54    |

### 2496MHz



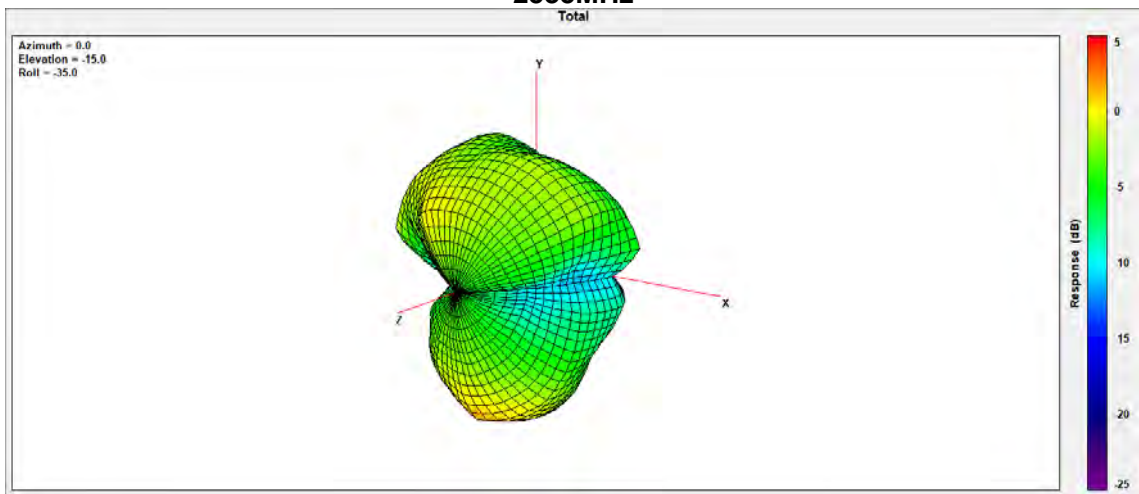
| 2496MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.25     | -0.62    |

### 2500MHz



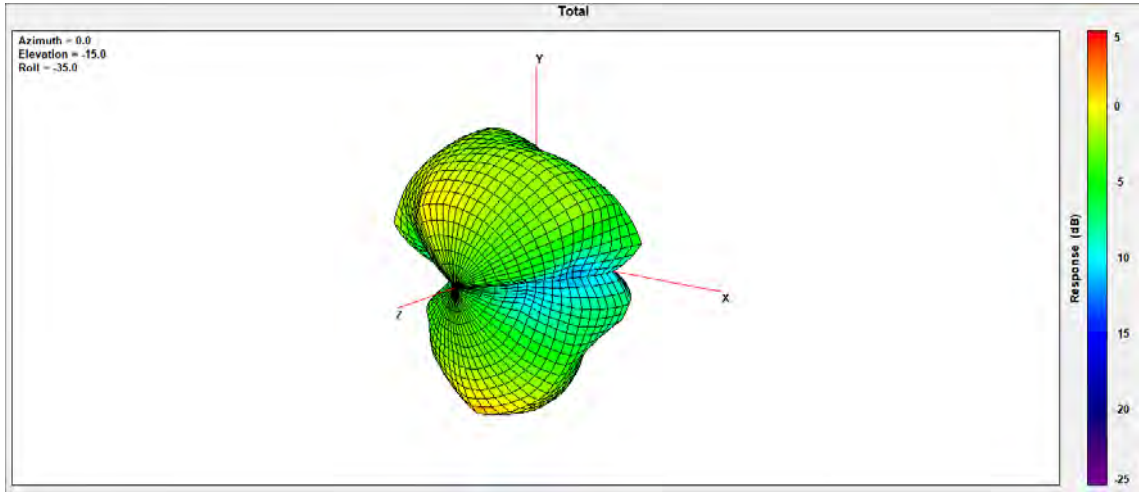
| 2500MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.96     | -0.75    |

### 2535MHz



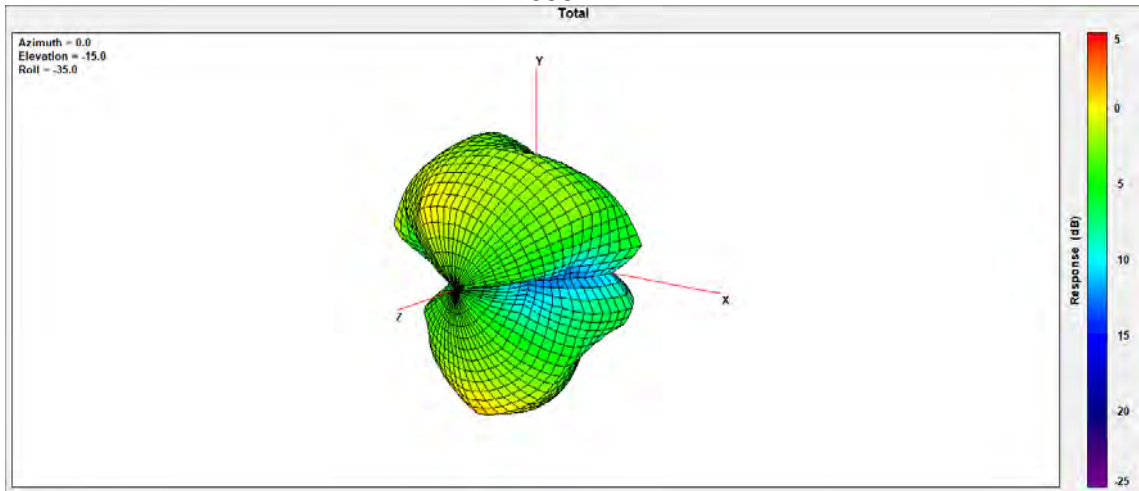
| 2535MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.85     | -0.17    |

### 2570MHz



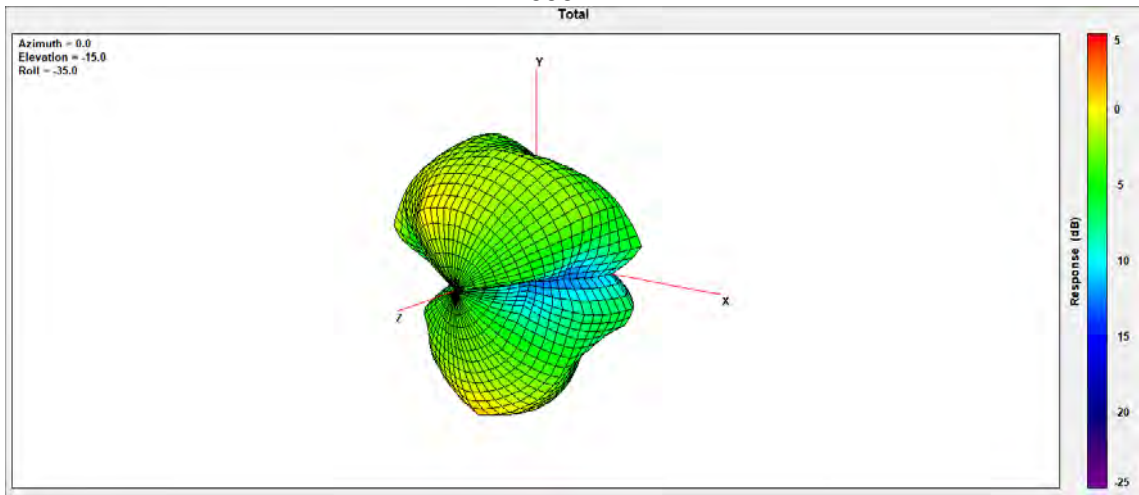
| 2570MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.73     | -0.31    |

### 2593MHz



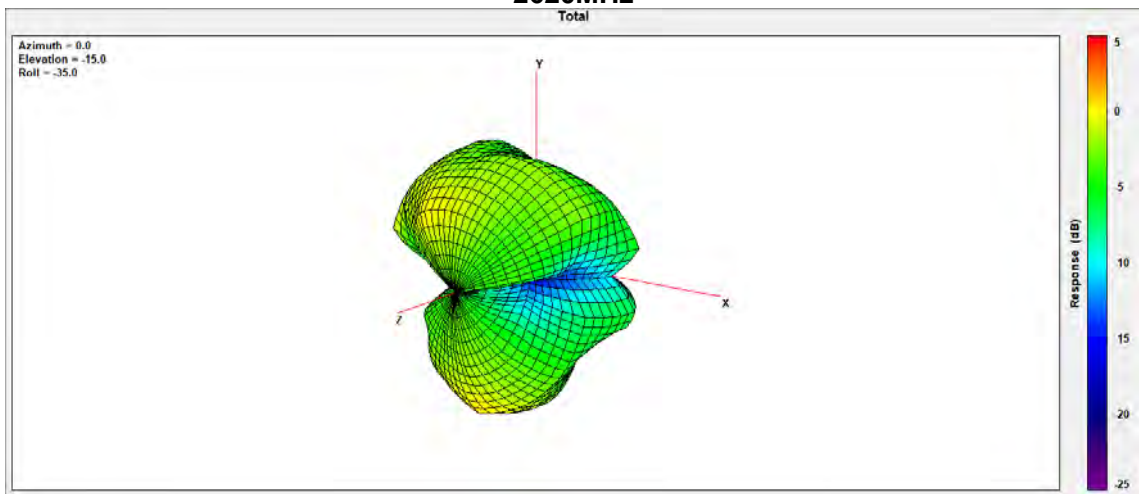
| 2593MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 1.38     | -1.15    |

### 2595MHz



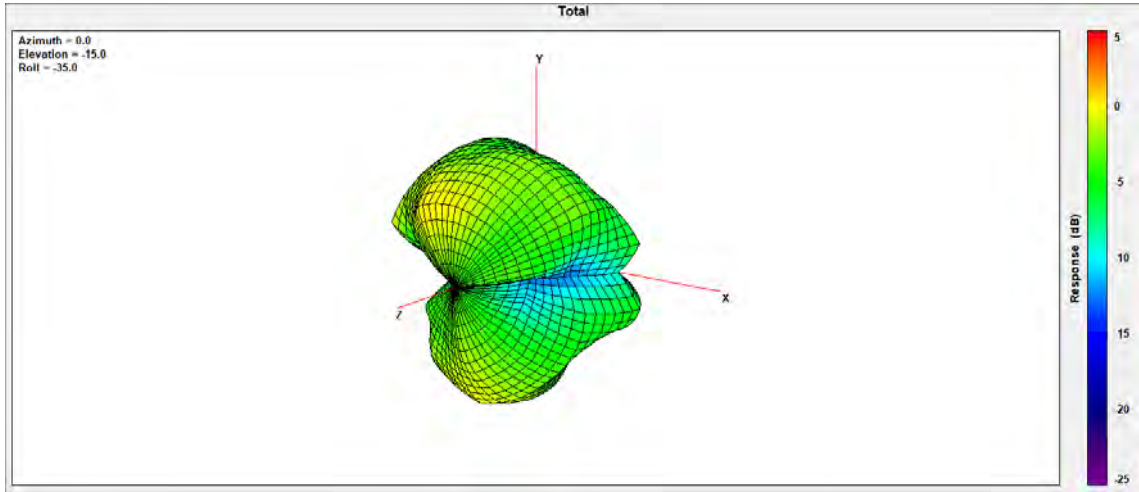
| 2595MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.98     | -0.75    |

### 2620MHz



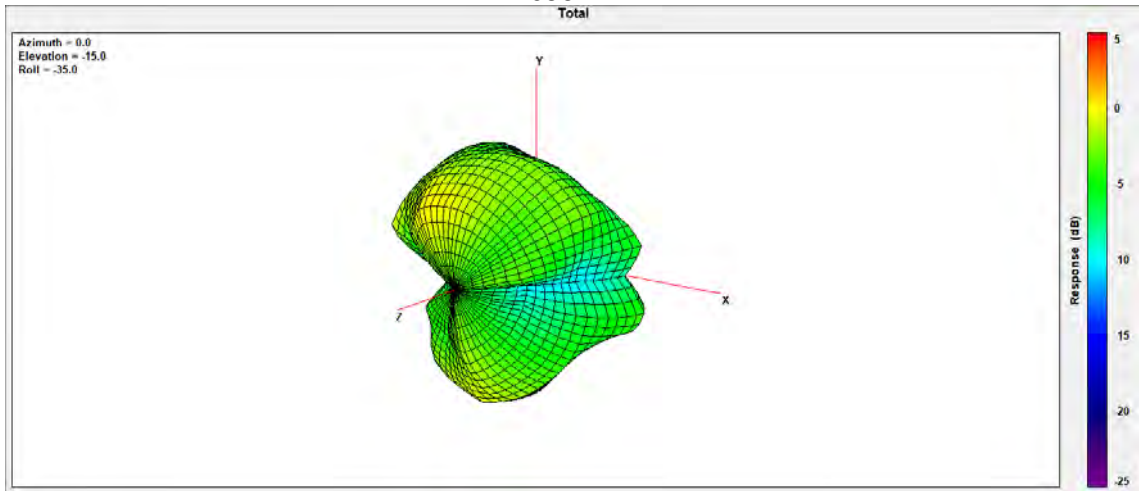
| 2620MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.64     | -0.74    |

### 2655MHz



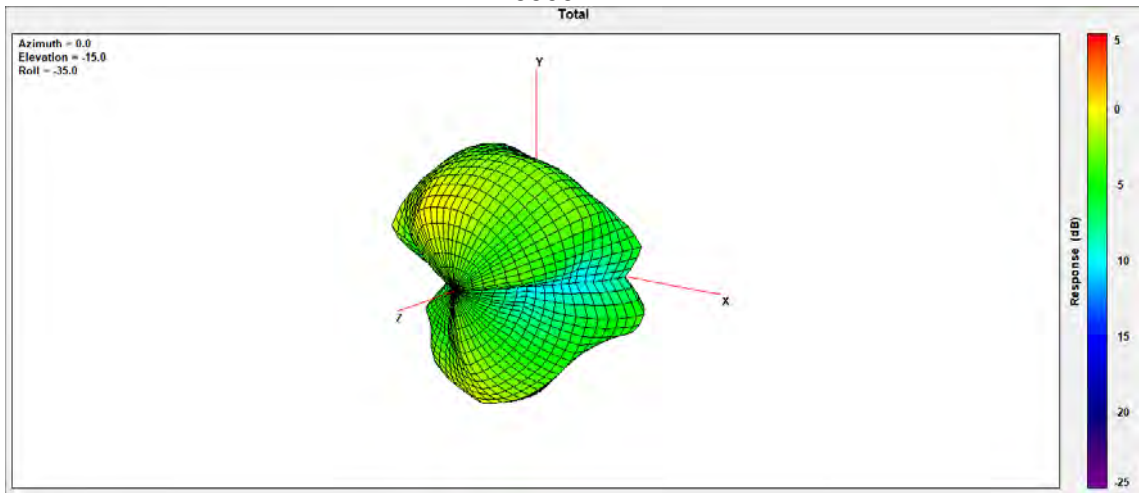
| 2655MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.57     | -0.72    |

### 2690MHz



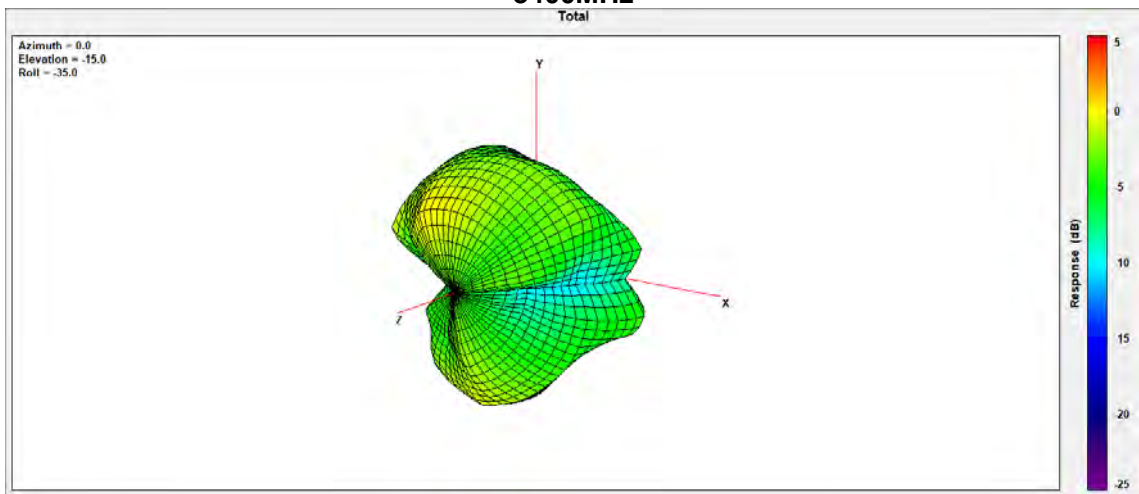
| 2690MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.11    | -0.57    |

### 3300MHz



| 3300MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.07    | -0.51    |

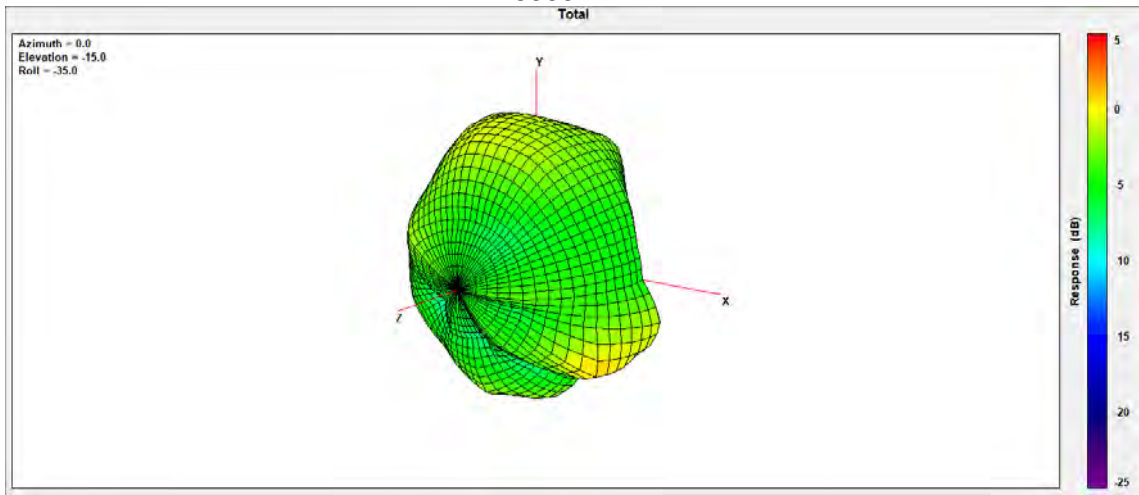
### 3400MHz



| 3400MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.79    | -0.46    |

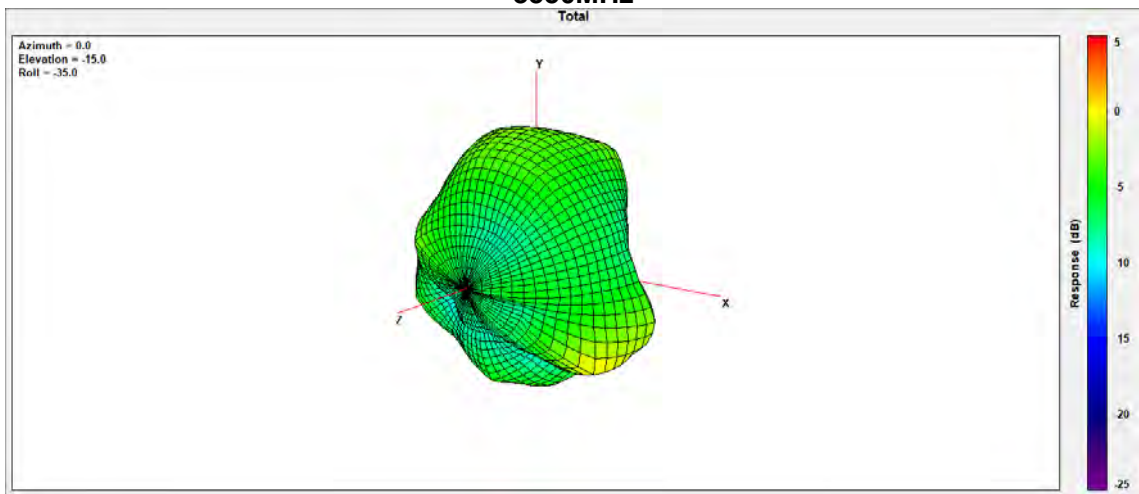


### 3500MHz



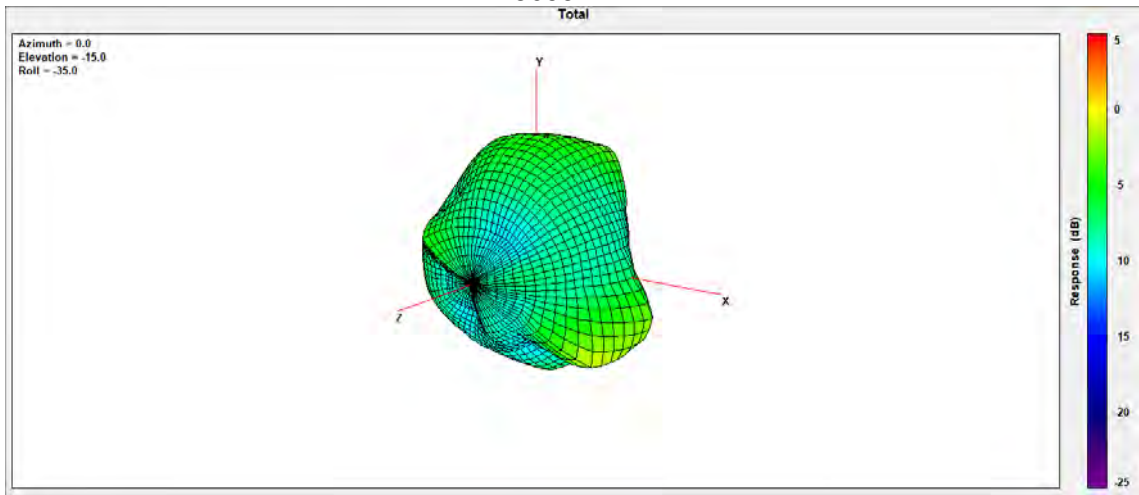
| 3500MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.04    | -1.30    |

### 3550MHz



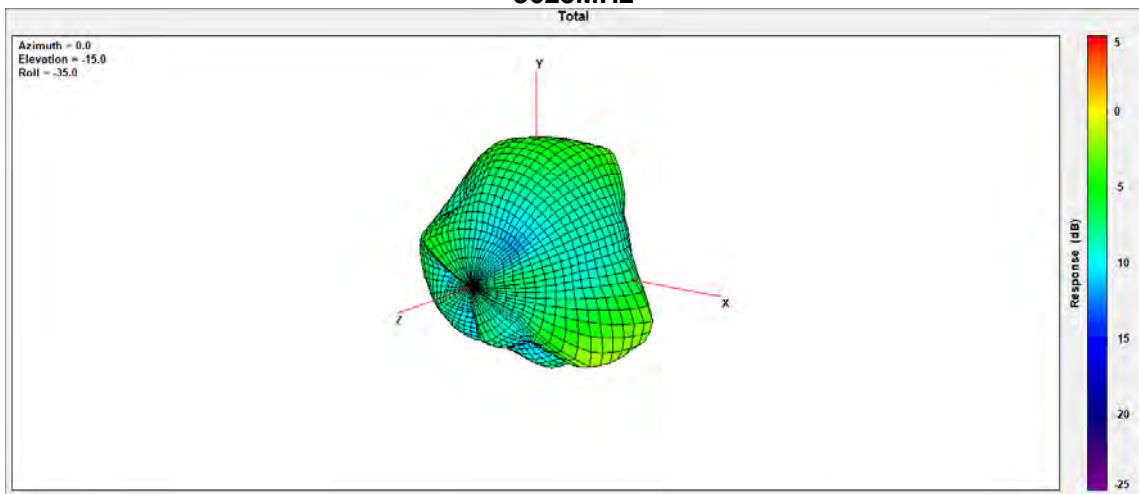
| 3550MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.09    | -1.31    |

### 3600MHz



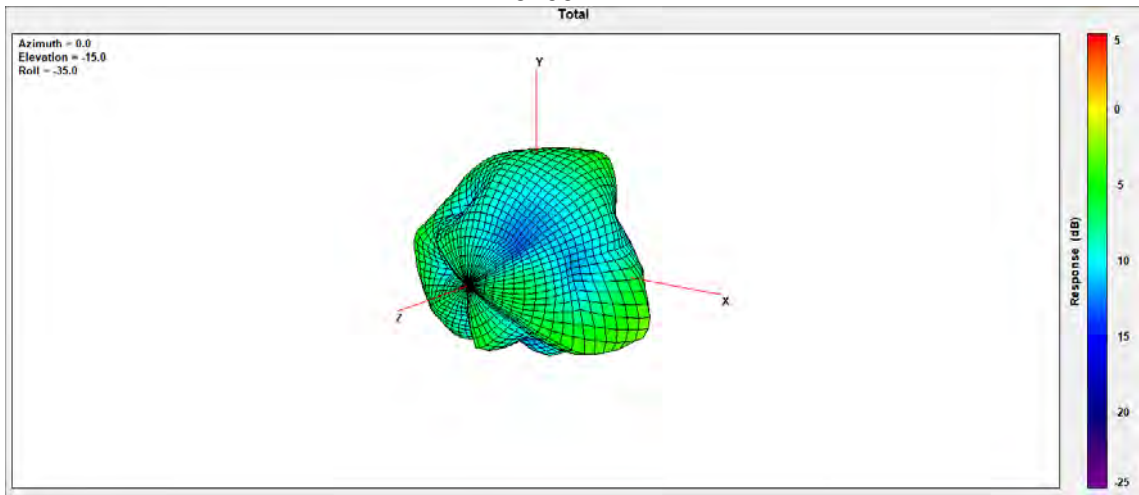
| 3600MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.30    | -2.39    |

### 3625MHz



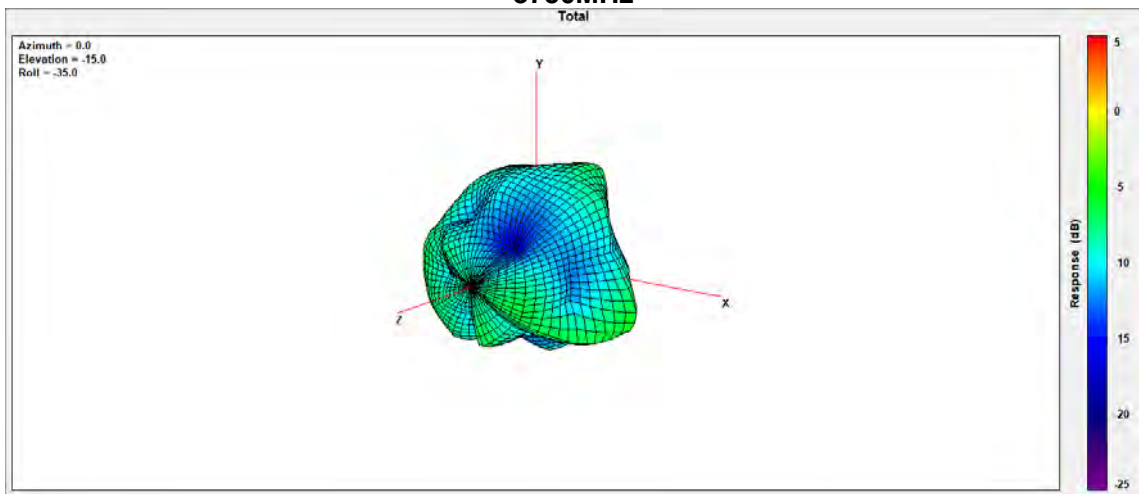
| 3625MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.86    | -3.10    |

### 3700MHz



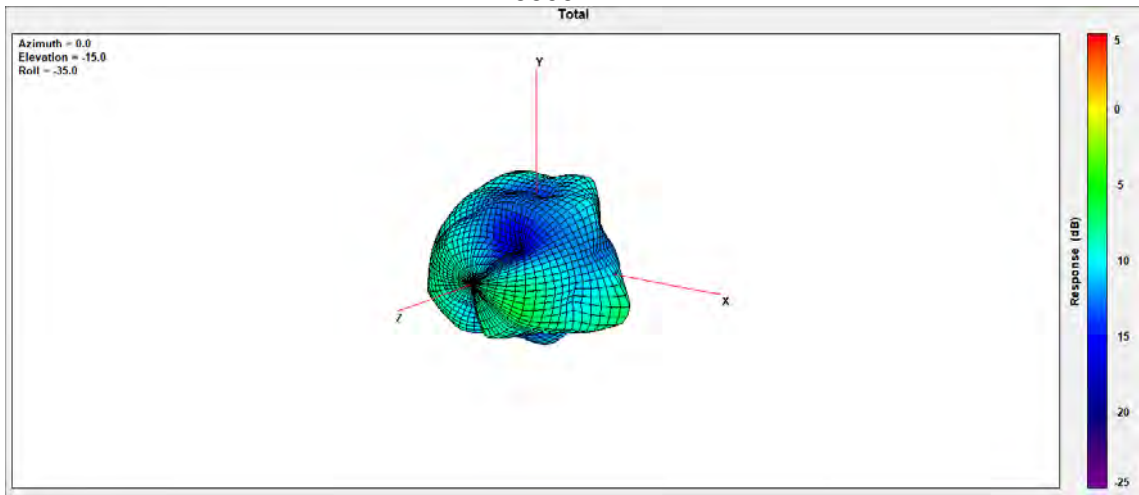
| 3700MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.57    | -3.77    |

### 3750MHz



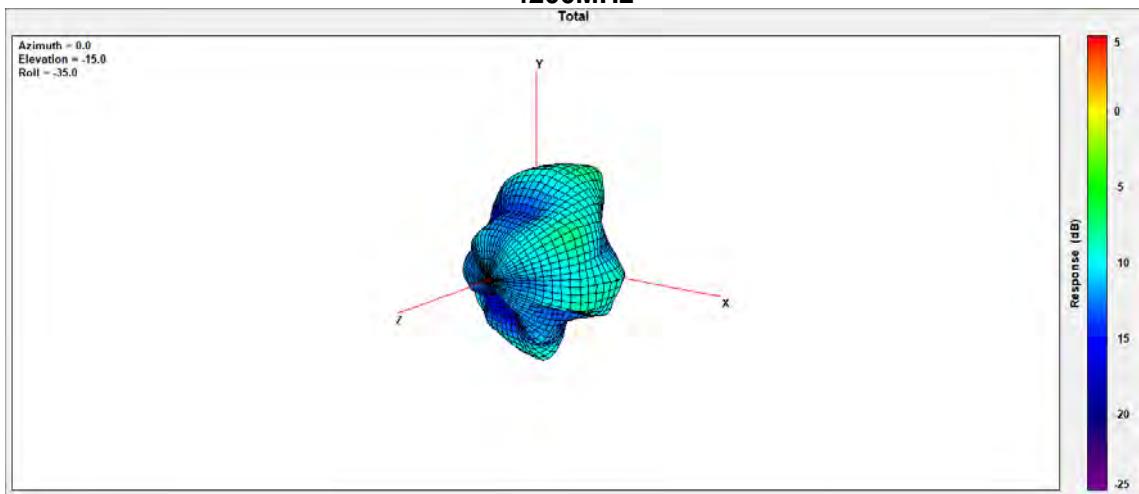
| 3750MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.88    | -3.59    |

### 3800MHz



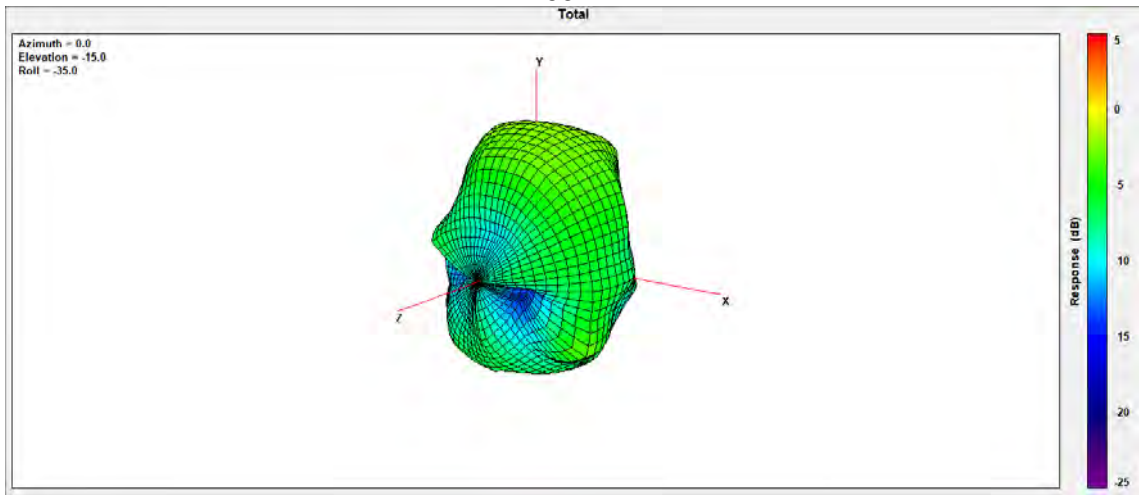
| 3800MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.05    | -2.60    |

### 4200MHz



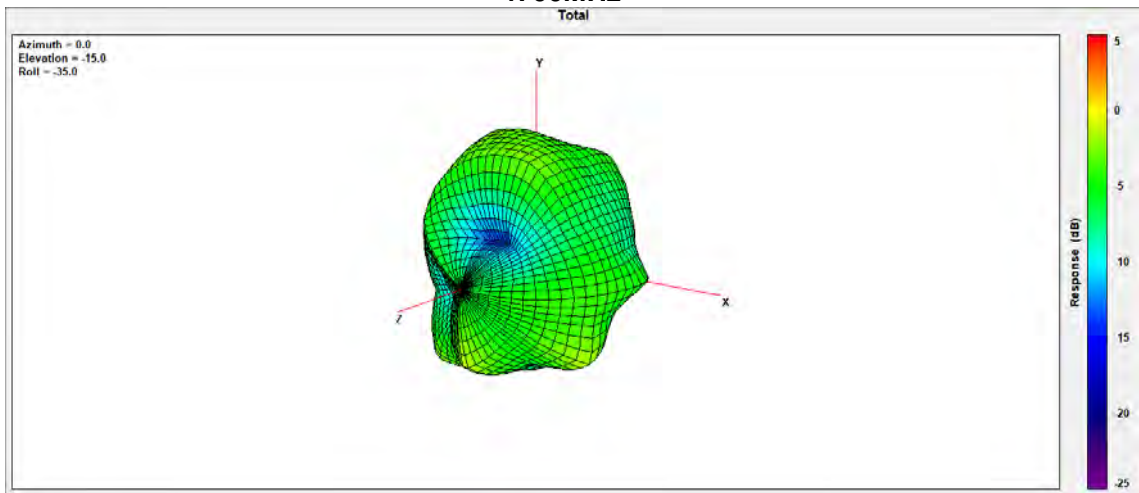
| 4200MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.09    | -2.77    |

### 4400MHz



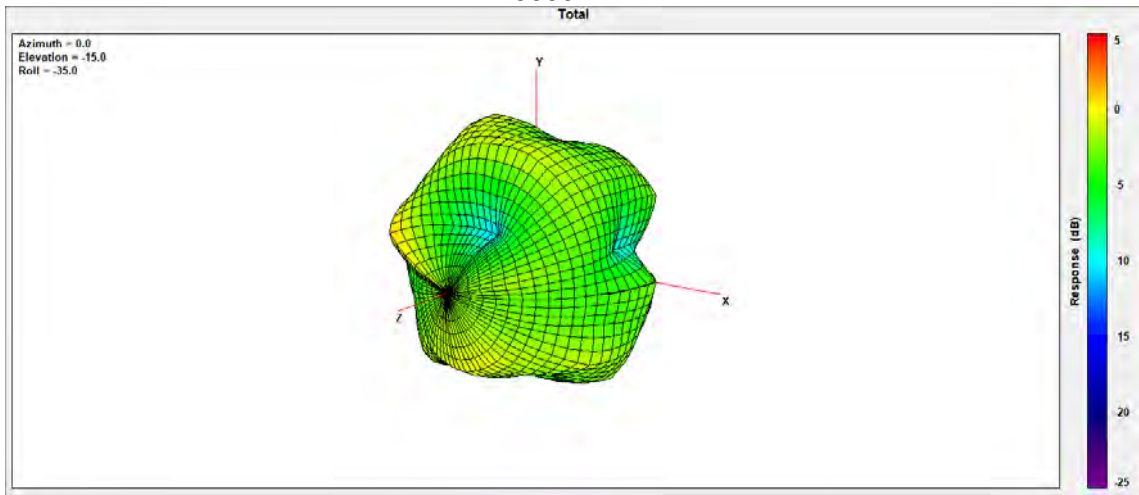
| 4400MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -3.44    | -3.65    |

### 4700MHz



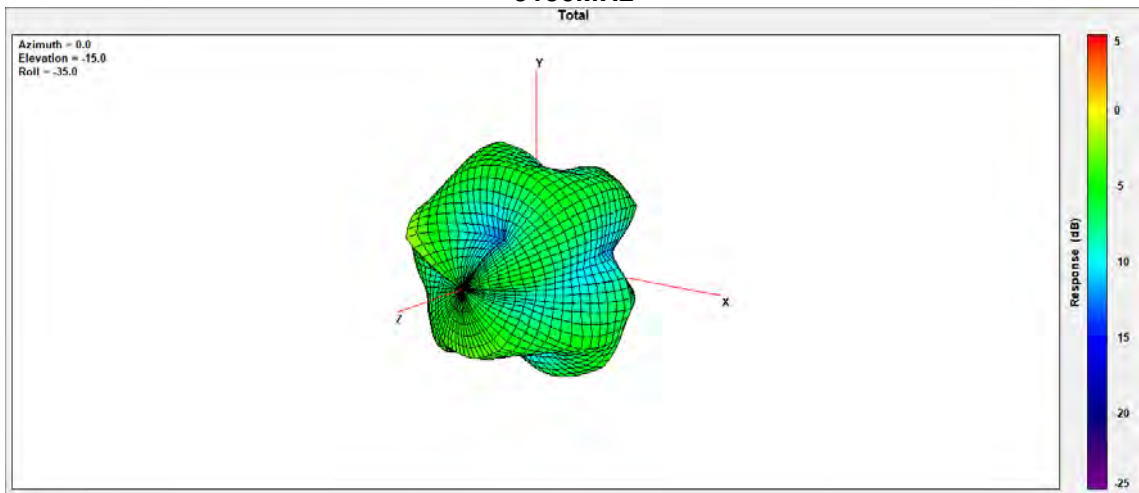
| 4700MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -10.96   | -10.76   |

### 5000MHz



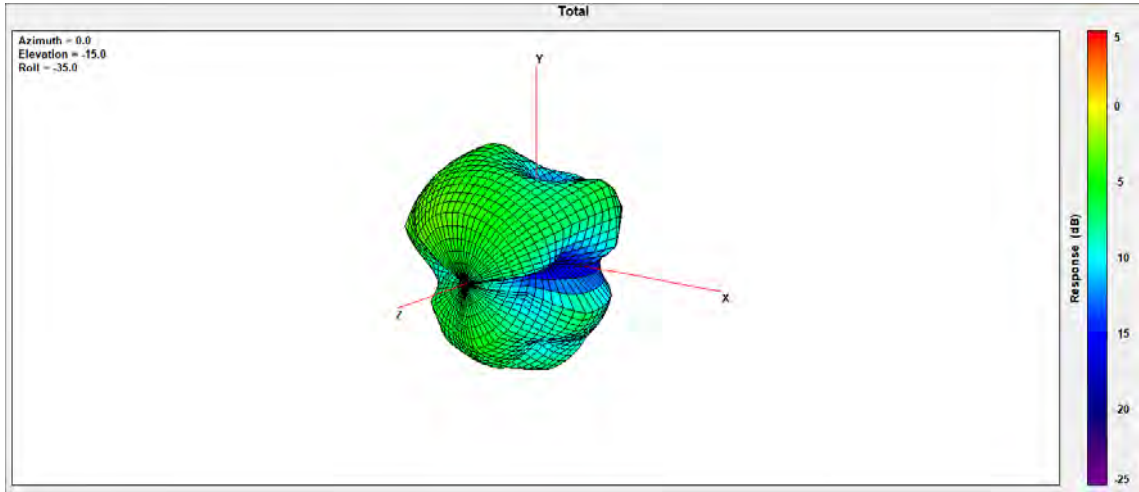
| 5000MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -4.14    | -4.57    |

### 5150MHz



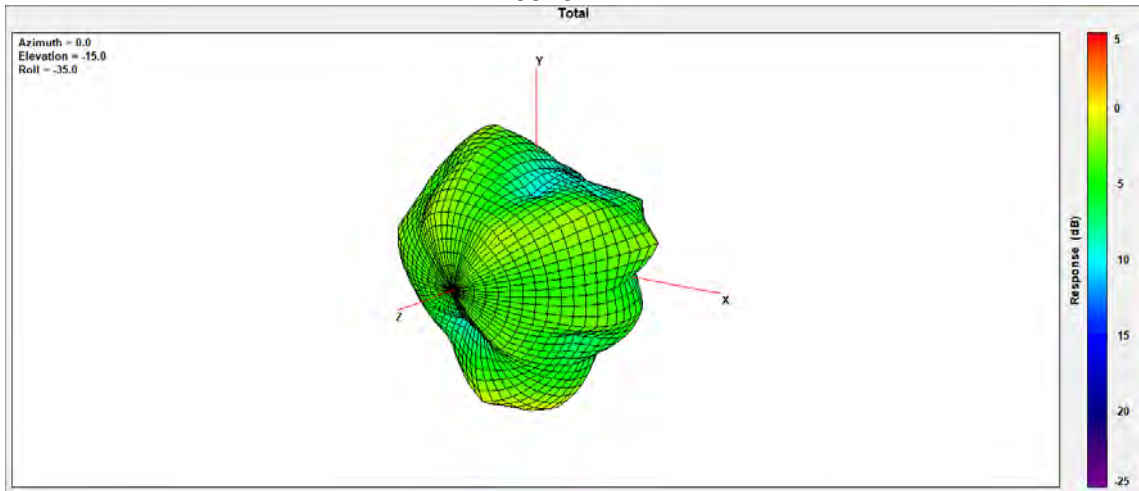
| 5150MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -4.33    | -4.46    |

### 5537.5MHz



| 5537.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -2.64    | -3.54    |

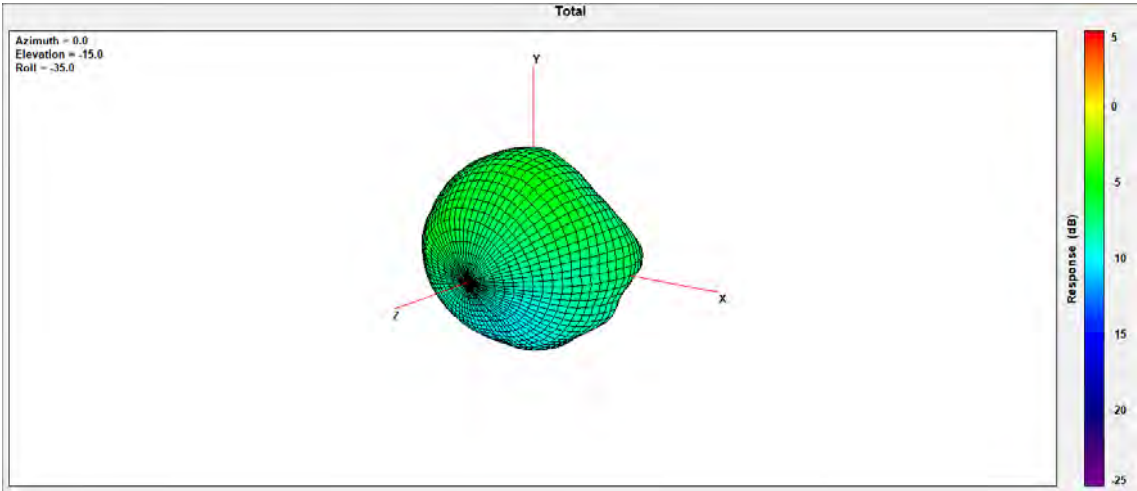
### 5925MHz



| 5925MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -3.03    | -3.98    |

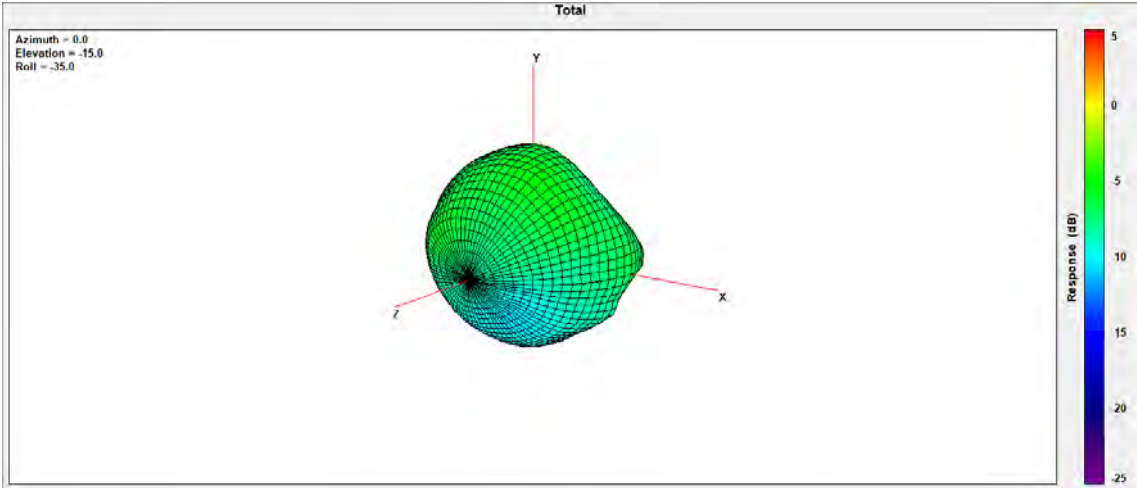
# WWAN Aux1 Antenna (Rx2)

617MHz



| 617MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -4.51    | -4.31    |

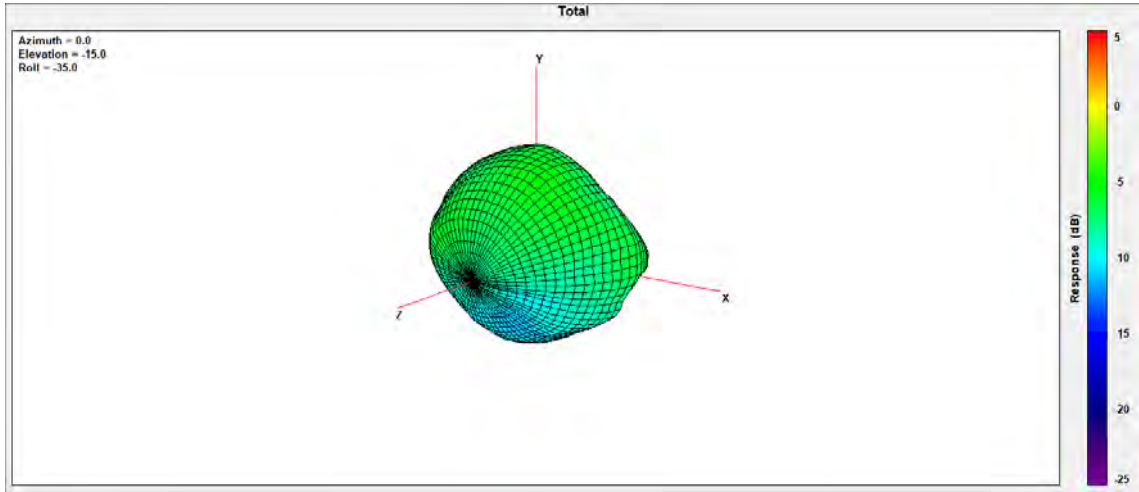
634.5MHz



| 634.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -4.48    | -4.80    |

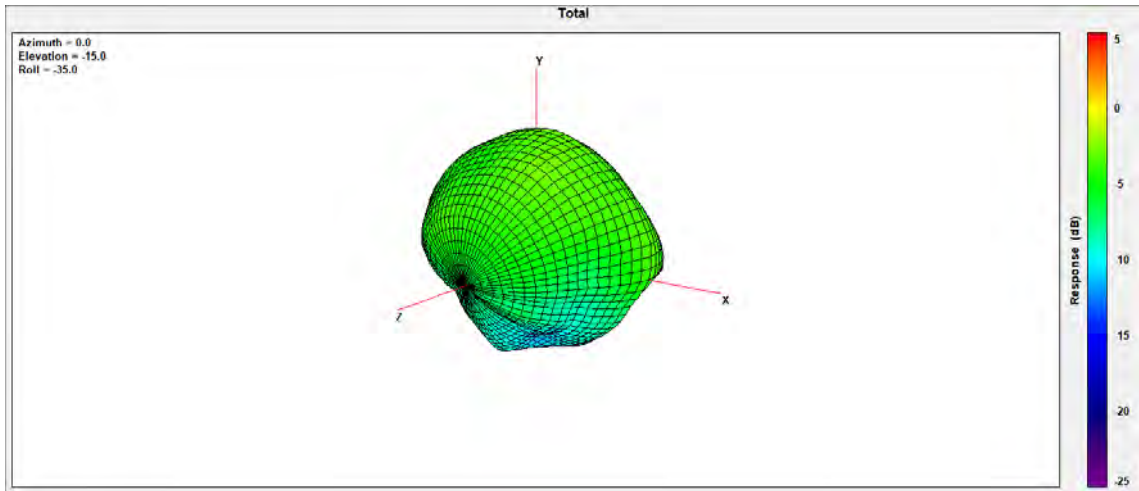


### 652MHz



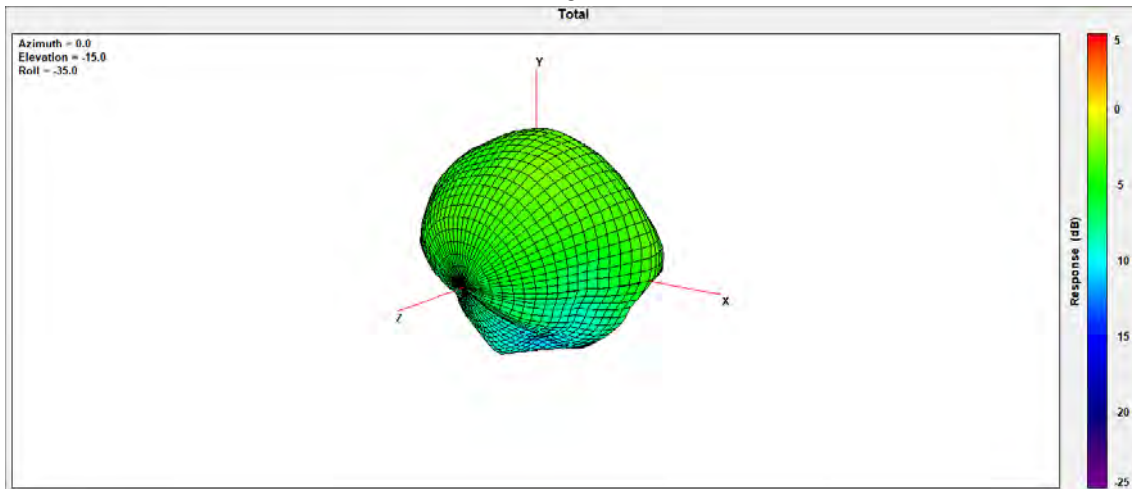
| 652MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -4.98    | -4.66    |

### 717MHz



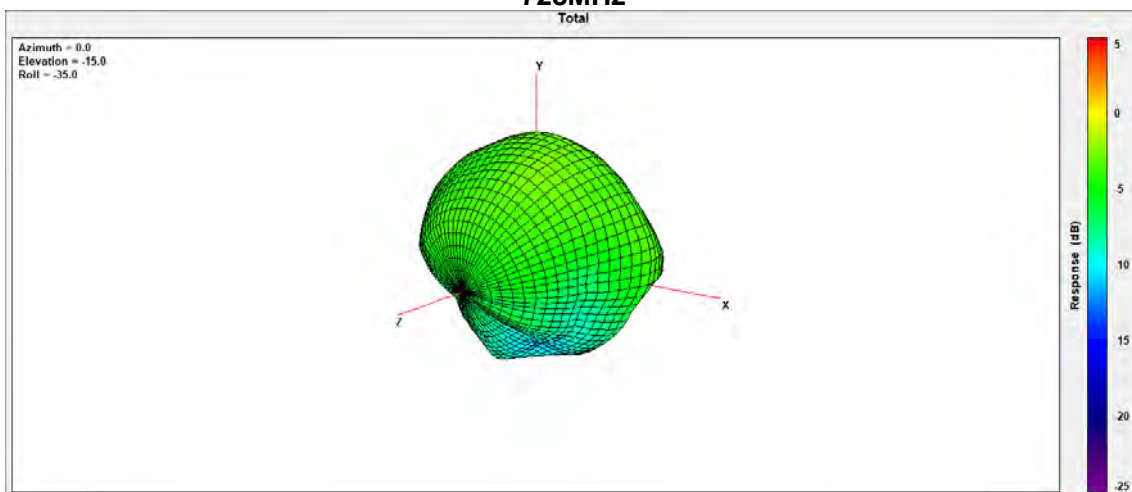
| 717MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.27    | -2.21    |

### 722.5MHz



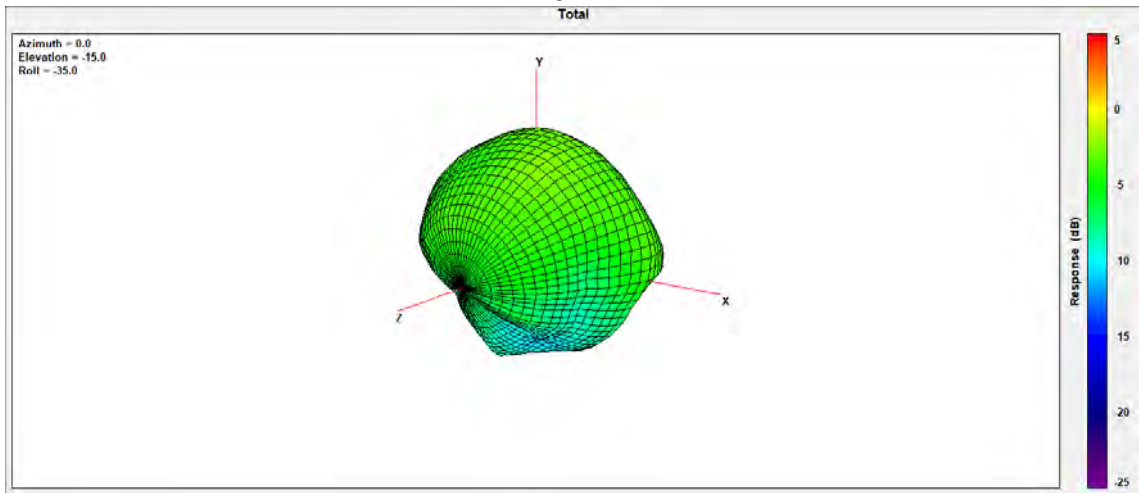
| 722.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -3.43    | -2.14    |

### 728MHz



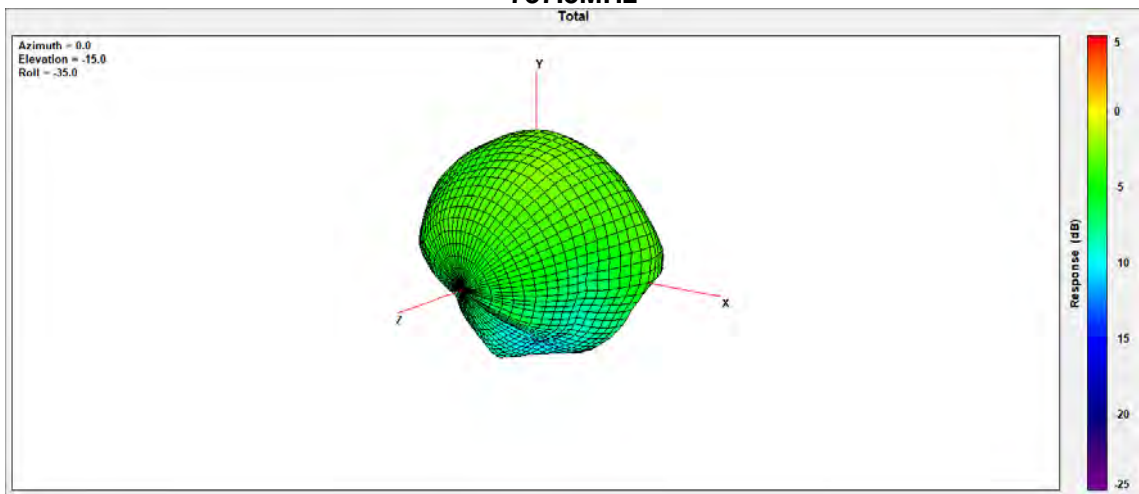
| 728MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.35    | -2.19    |

### 729MHz



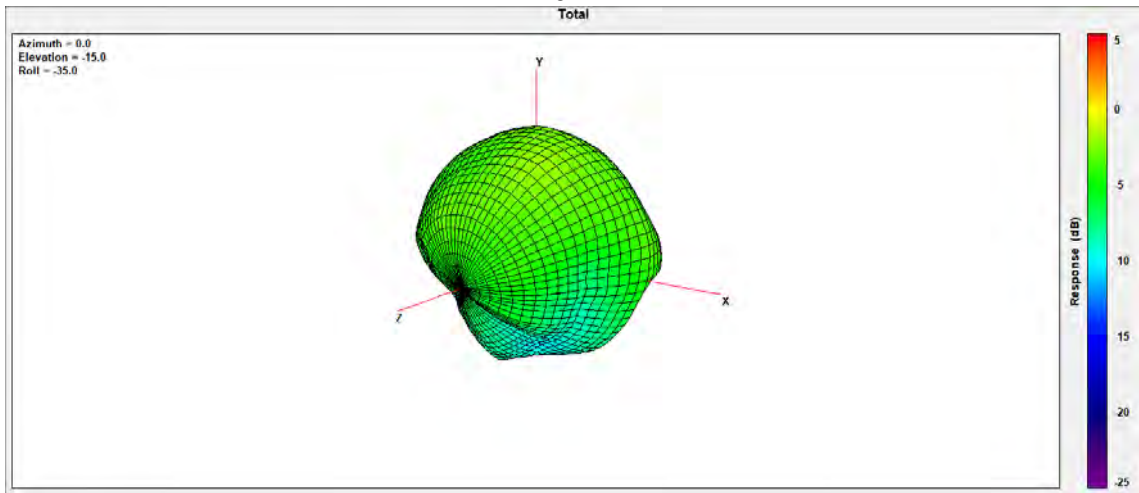
| 729MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -3.33    | -2.17    |

### 737.5MHz



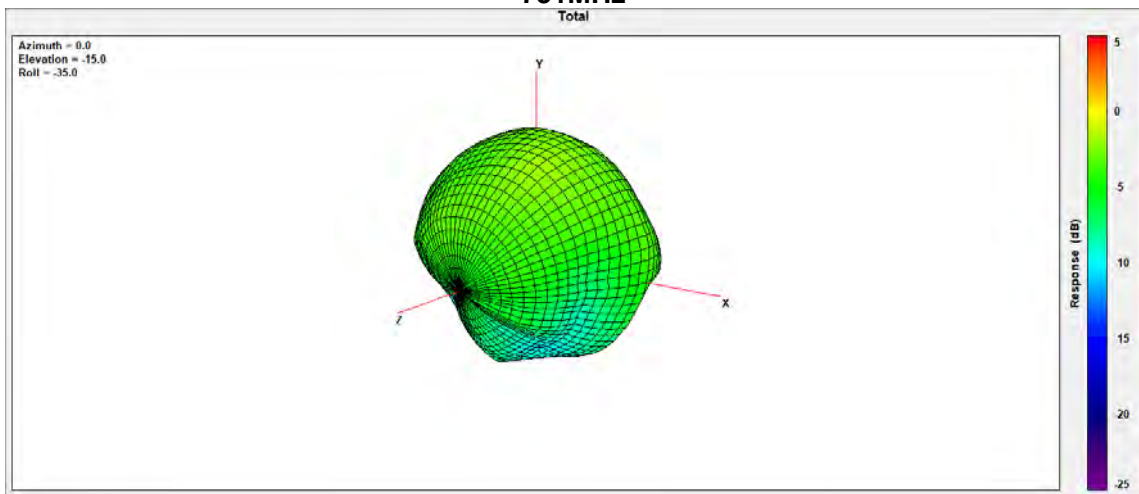
| 737.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.71    | -2.08    |

### 746MHz



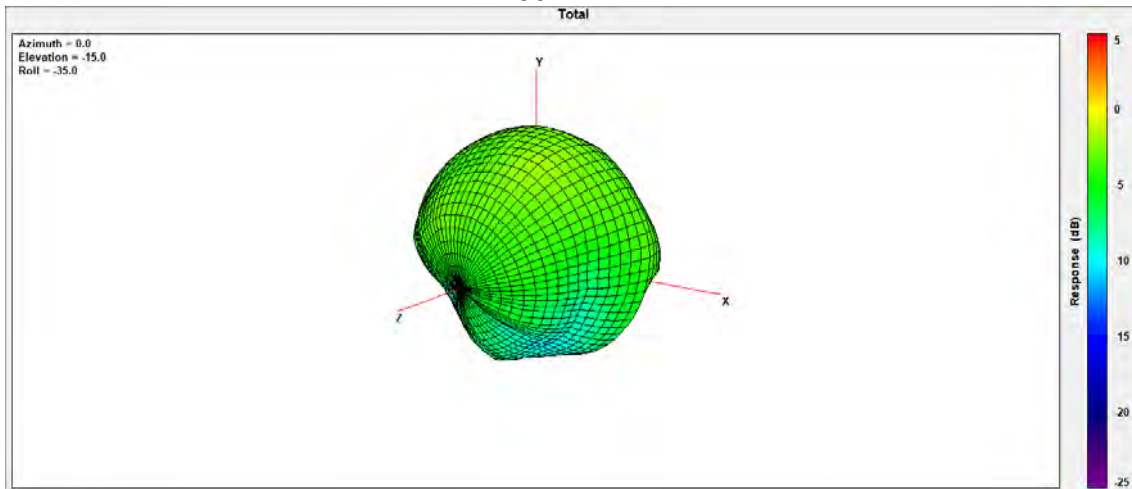
| 746MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.86    | -1.98    |

### 751MHz



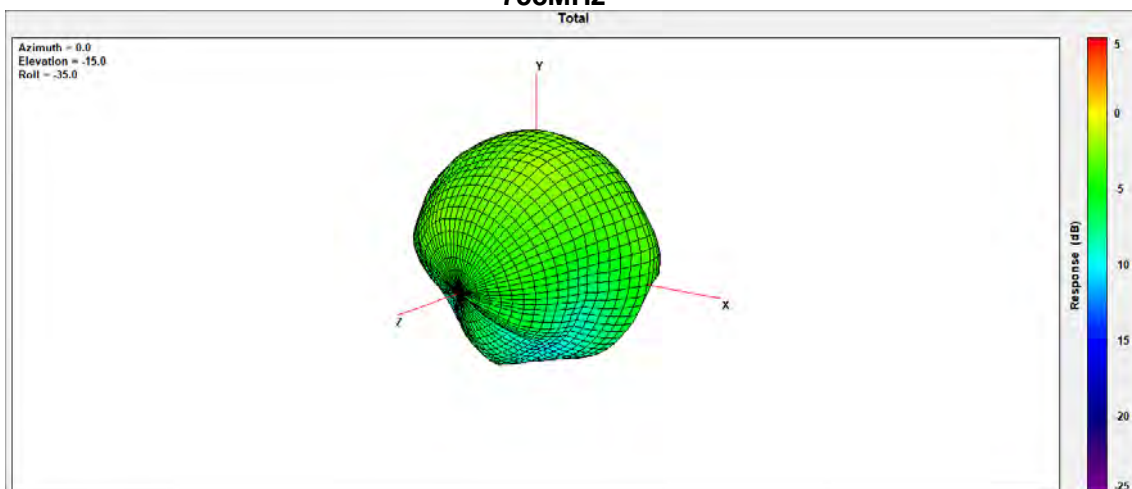
| 751MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.59    | -2.15    |

### 756MHz



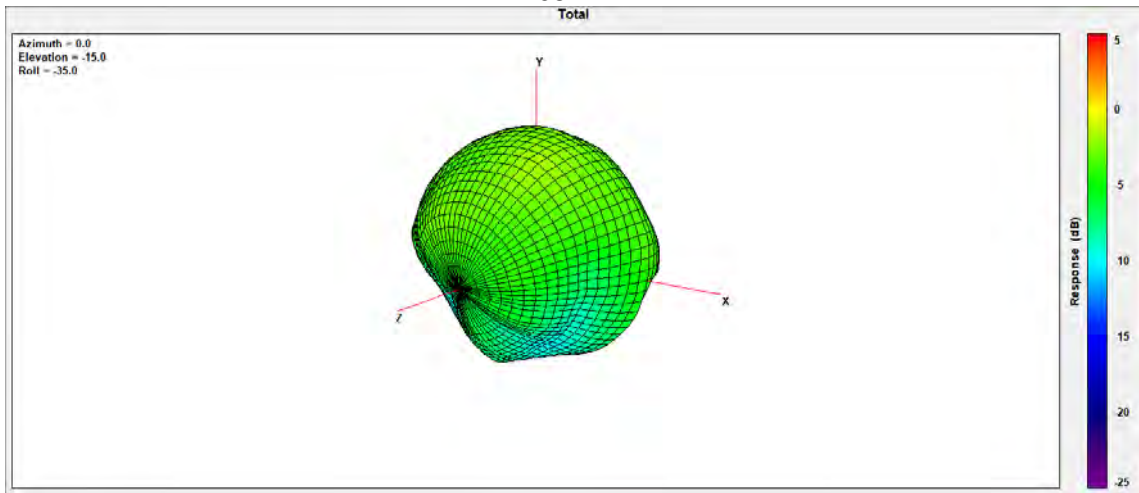
| 756MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.60    | -2.33    |

### 758MHz



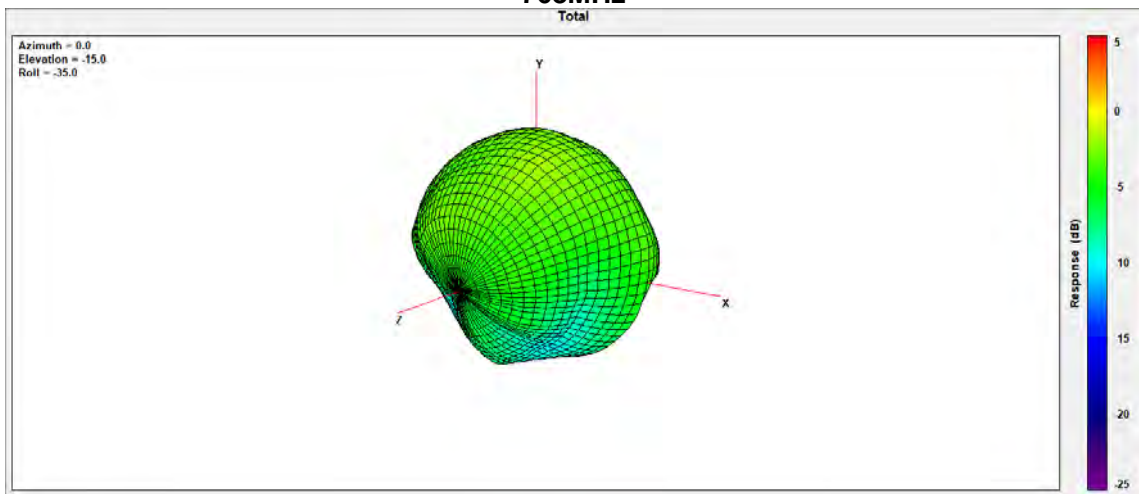
| 758MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.71    | -2.40    |

### 763MHz



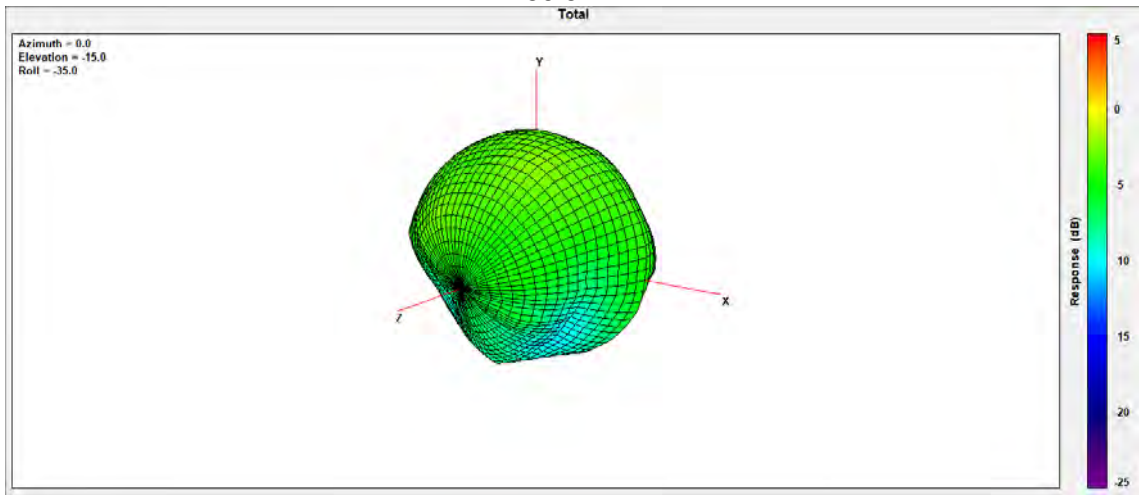
| 763MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.60    | -2.43    |

### 768MHz



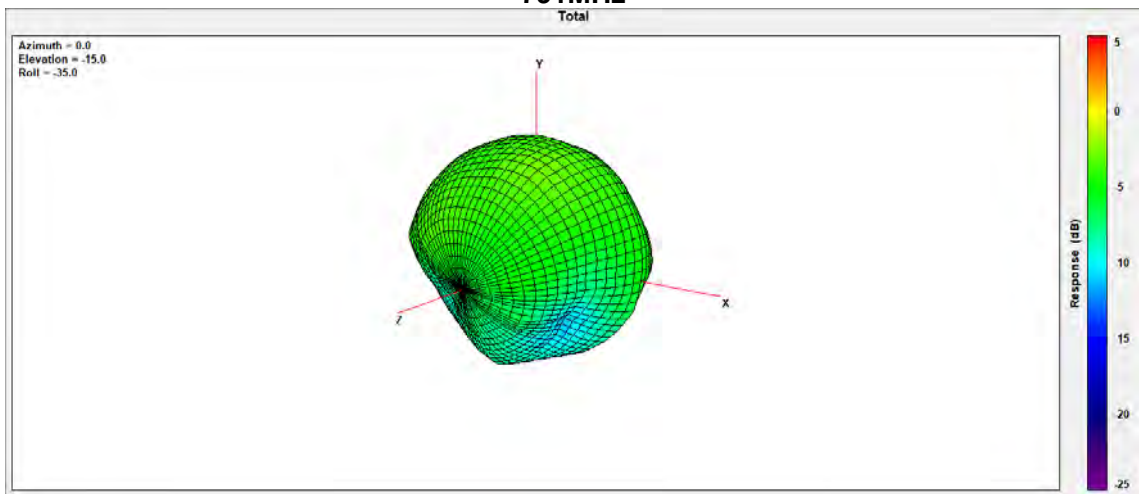
| 768MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.74    | -2.50    |

### 780.5MHz



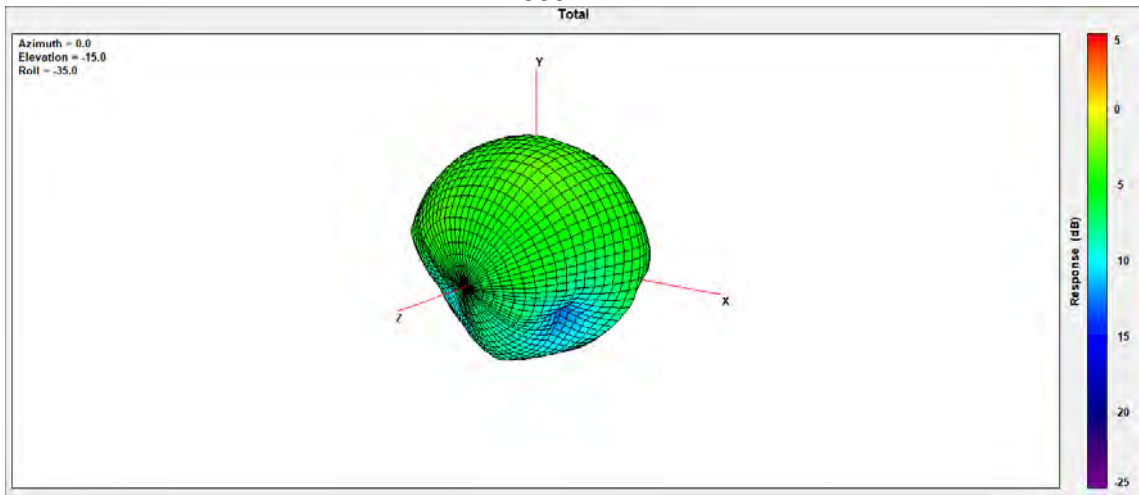
| 780.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.29    | -2.59    |

### 791MHz



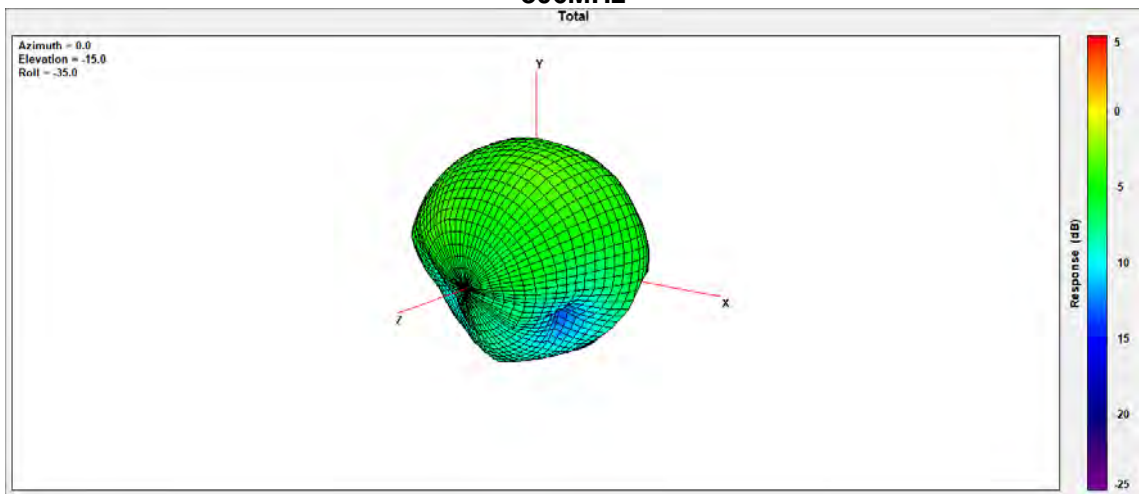
| 791MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.36    | -2.66    |

### 803MHz



| 803MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.27    | -2.89    |

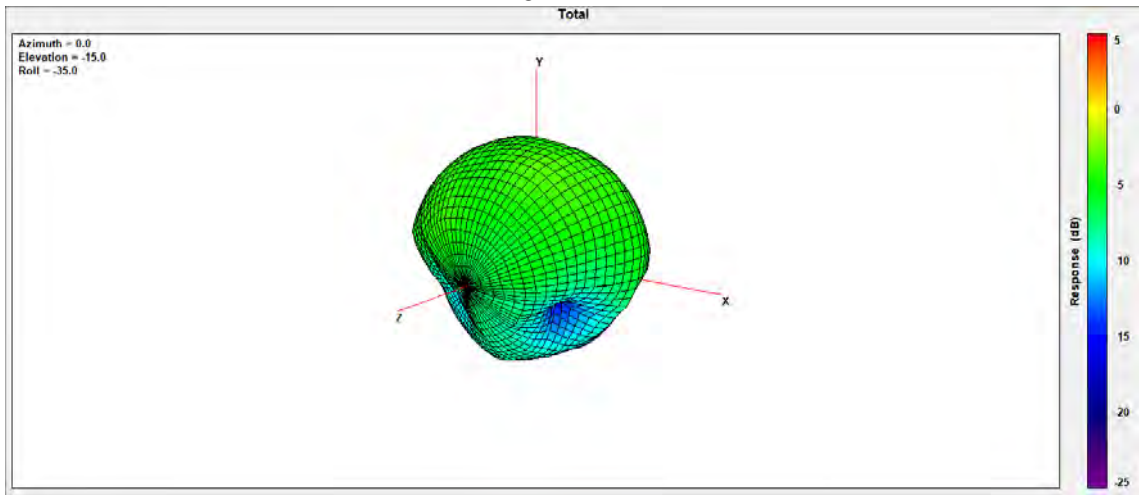
### 806MHz



| 806MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.15    | -3.16    |

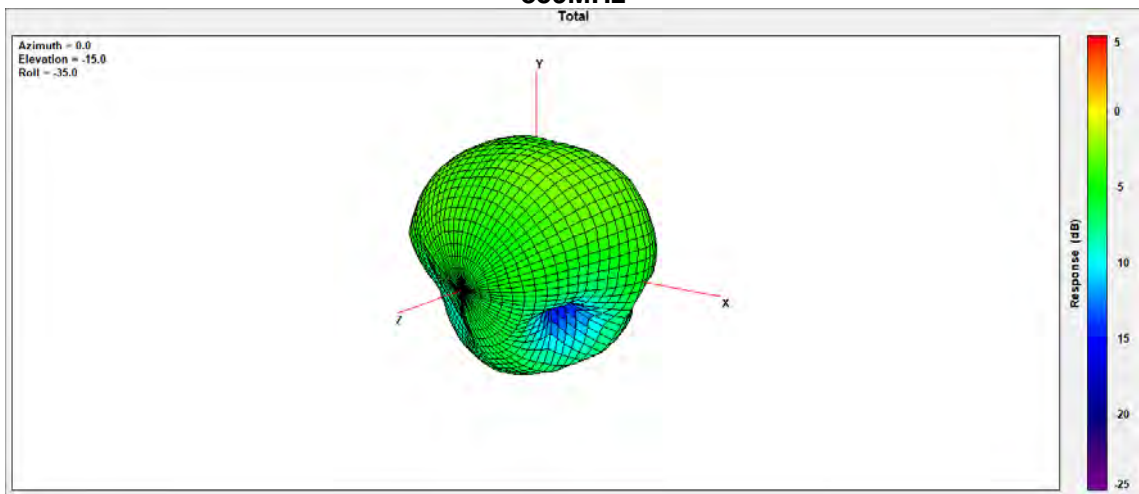


### 821MHz



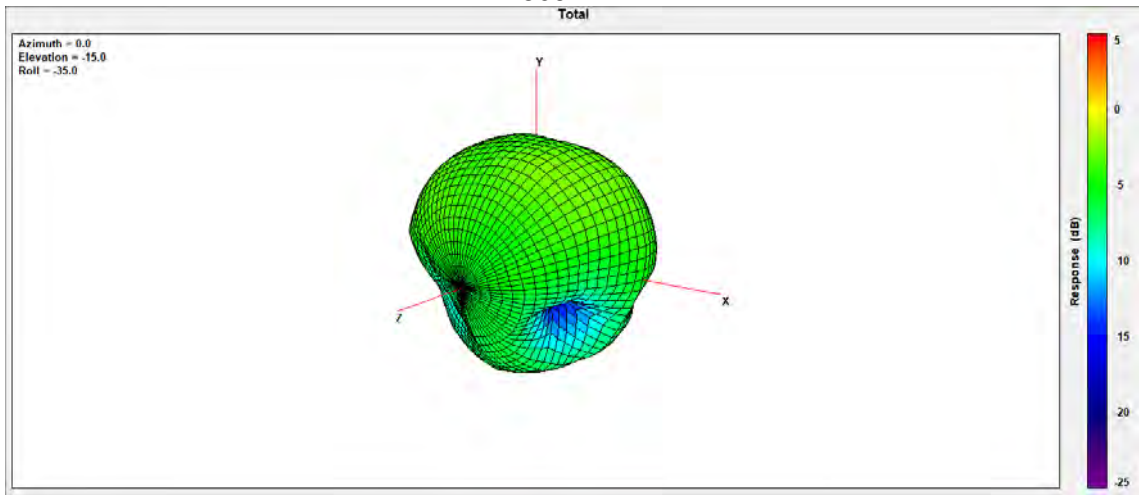
| 821MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -2.10    | -3.23    |

### 859MHz



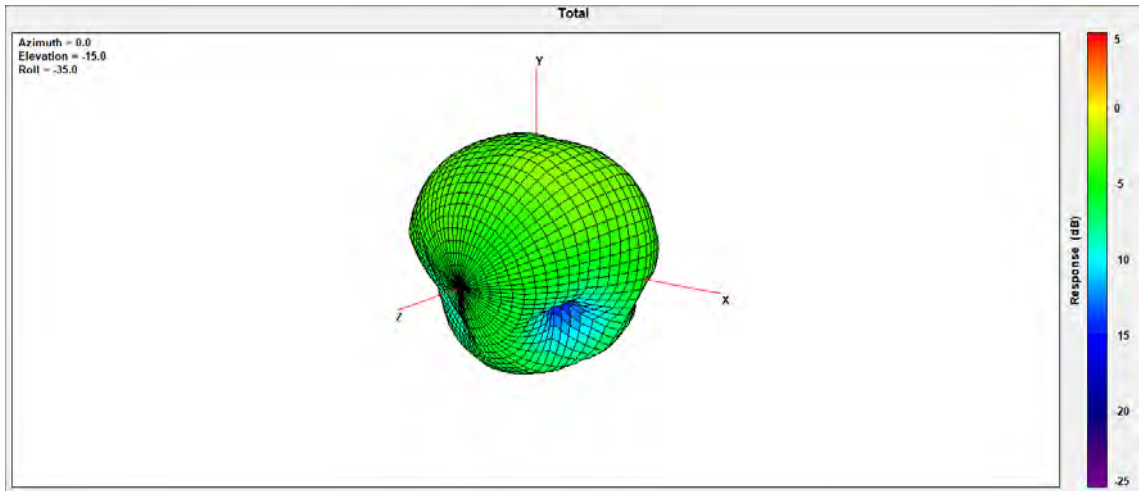
| 859MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.25    | -2.61    |

### 860MHz



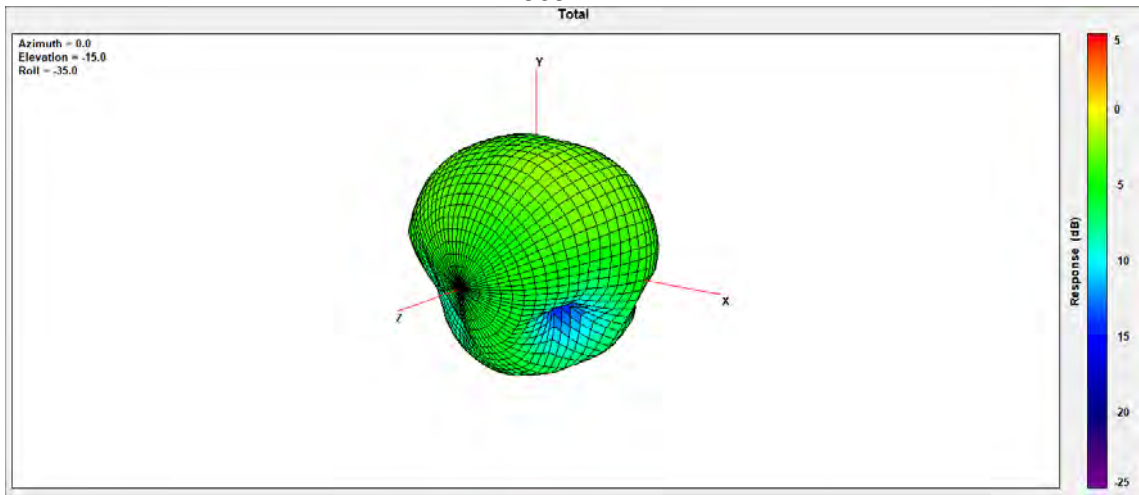
| 860MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.28    | -2.65    |

### 868MHz



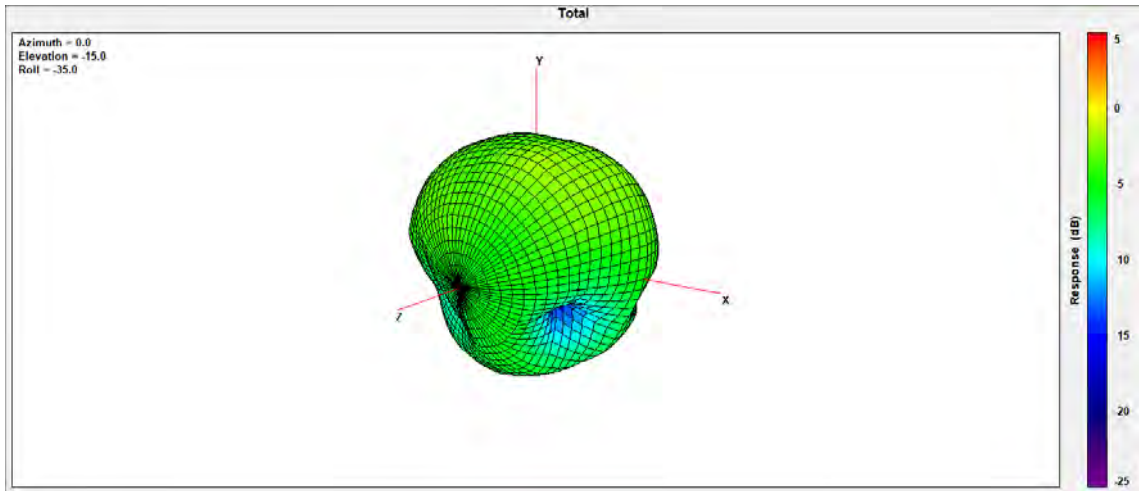
| 868MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.14    | -2.51    |

### 869MHz



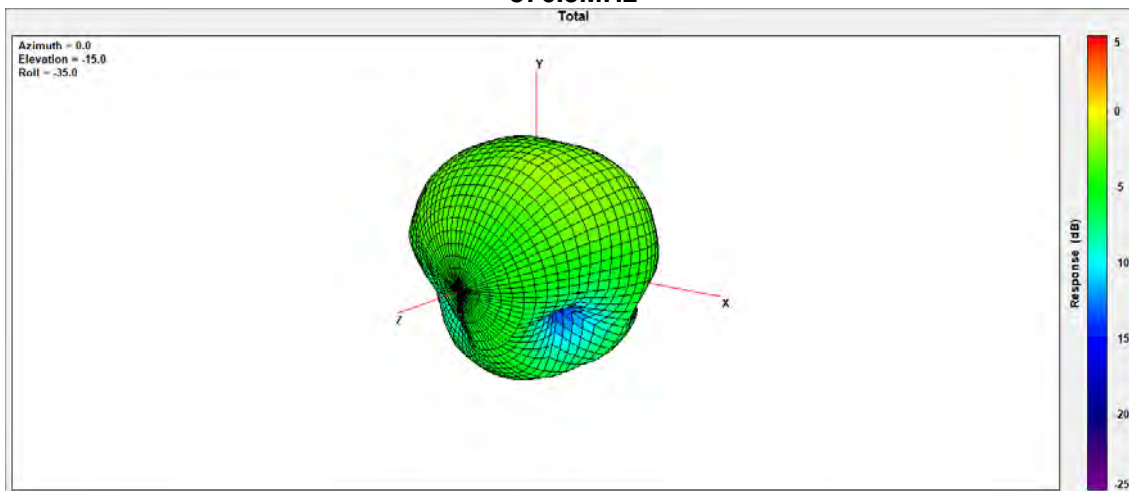
| 869MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.15    | -2.44    |

### 875MHz



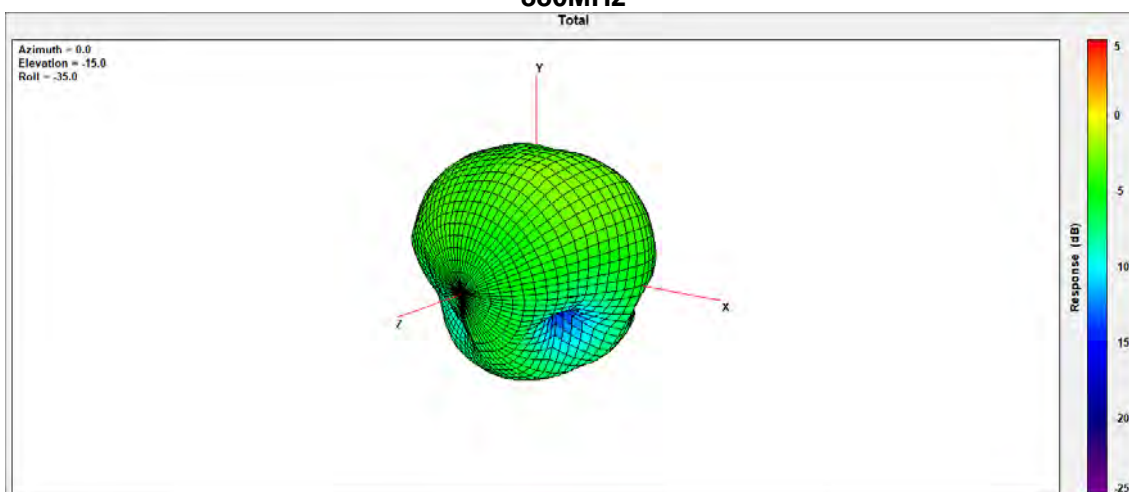
| 875MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.84    | -2.19    |

### 876.5MHz



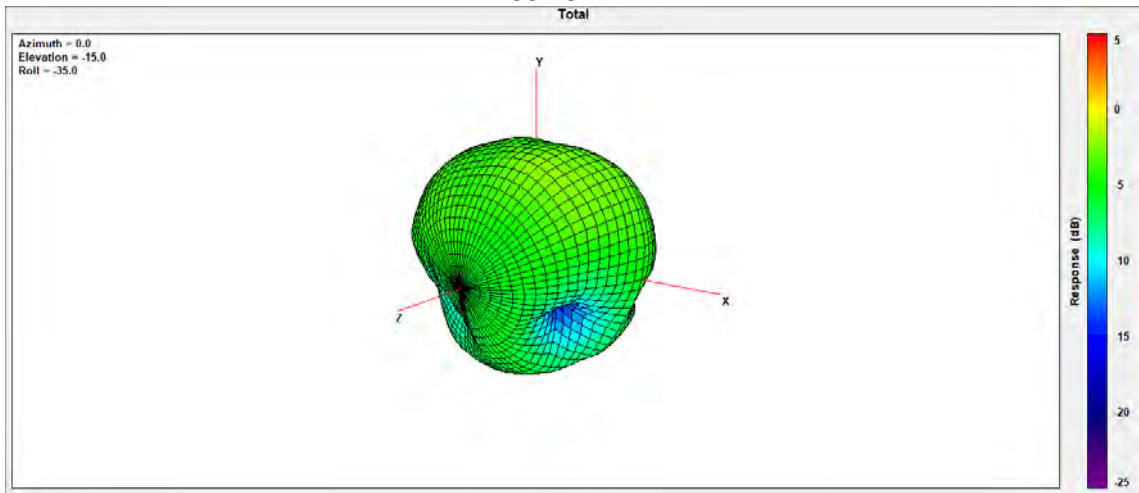
| 876.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.77    | -2.14    |

### 880MHz



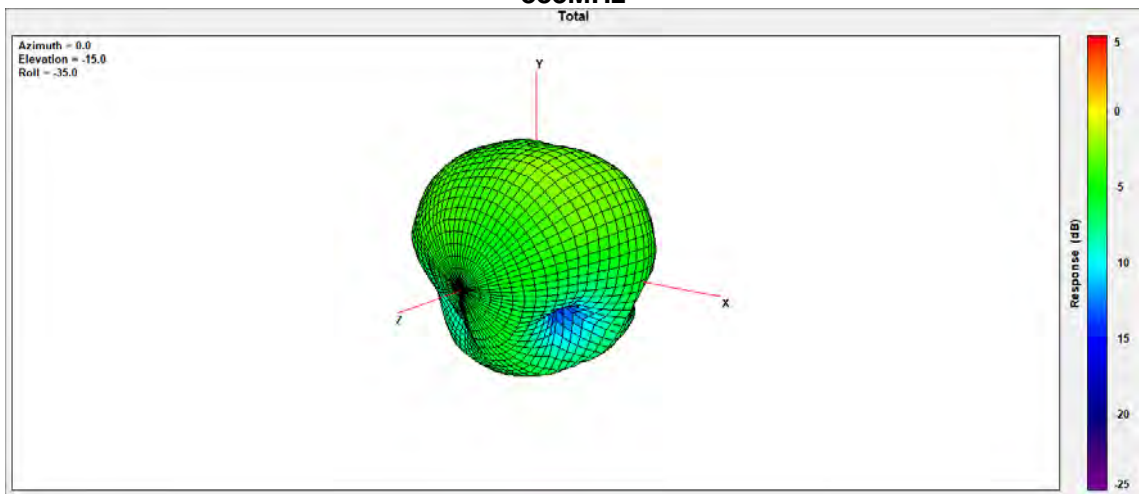
| 880MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.66    | -2.11    |

### 881.5MHz



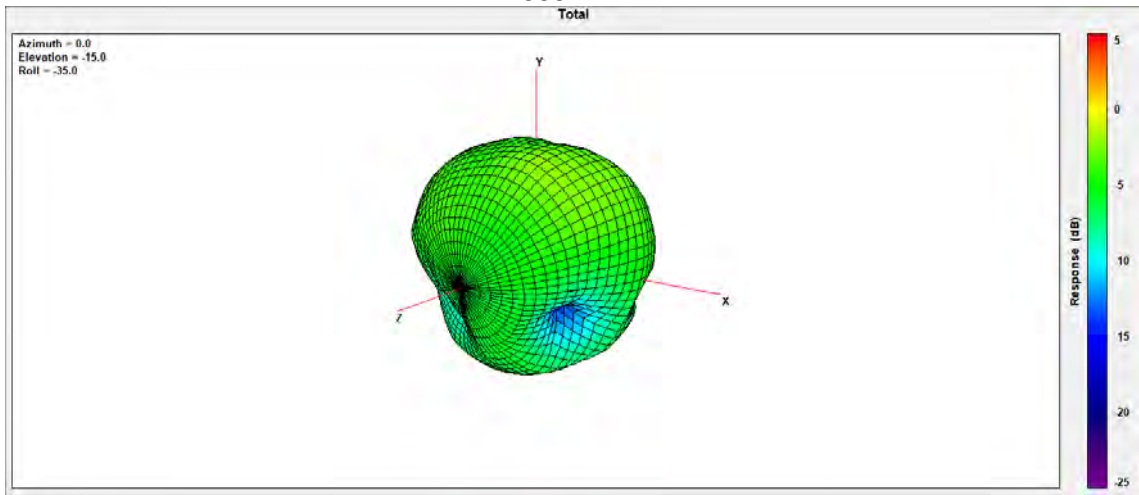
| 881.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.63    | -2.15    |

### 883MHz



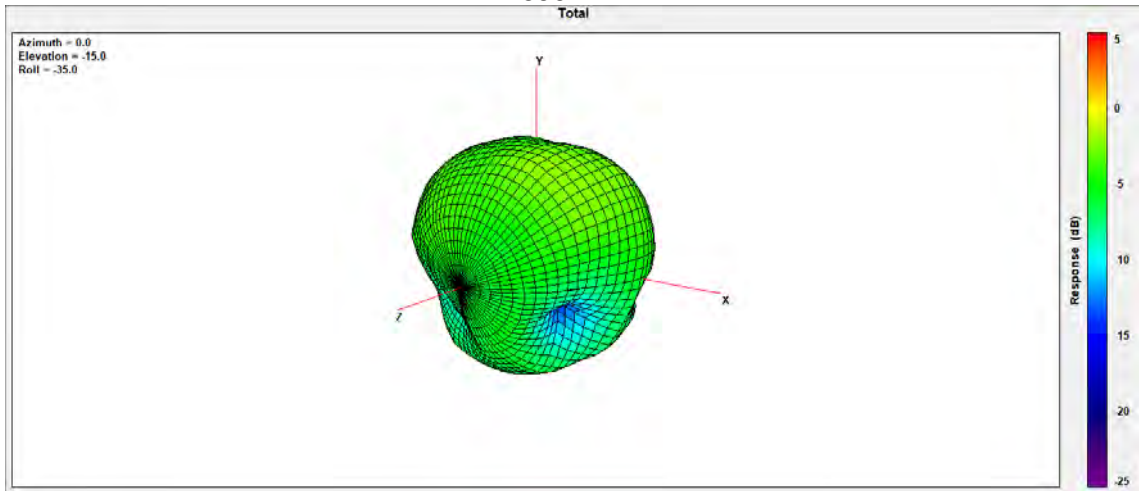
| 883MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.62    | -2.21    |

### 885MHz



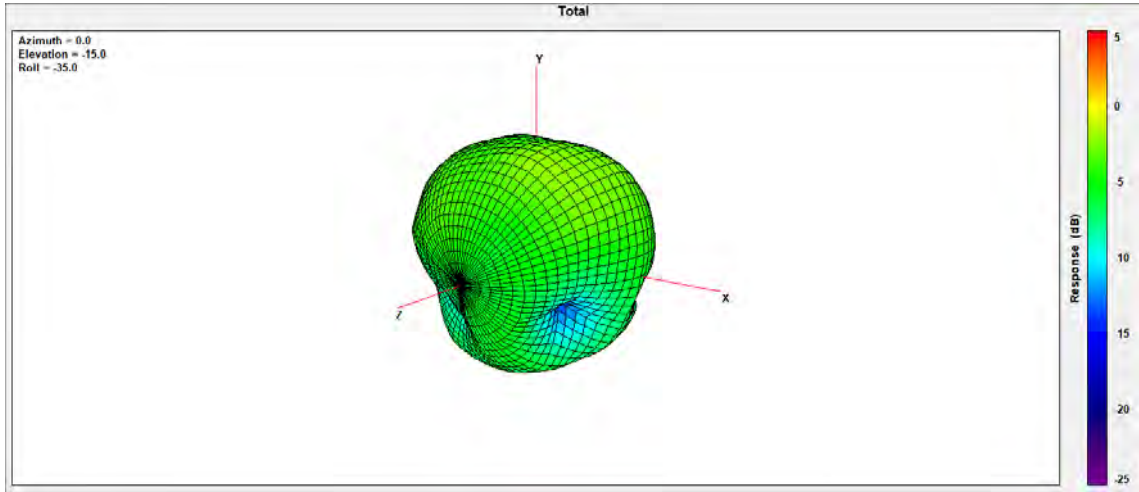
| 885MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.67    | -2.30    |

### 890MHz



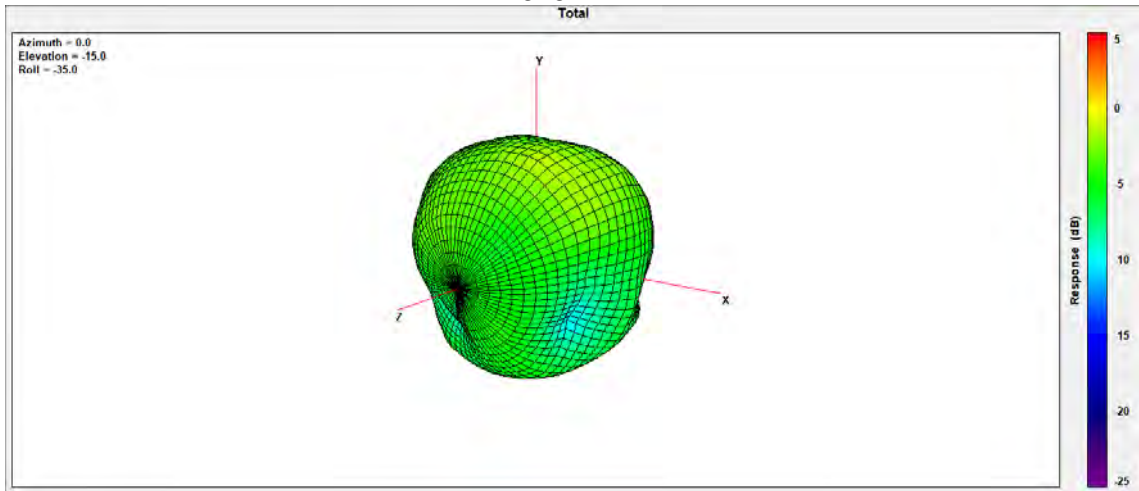
| 890MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.96    | -2.30    |

### 894MHz



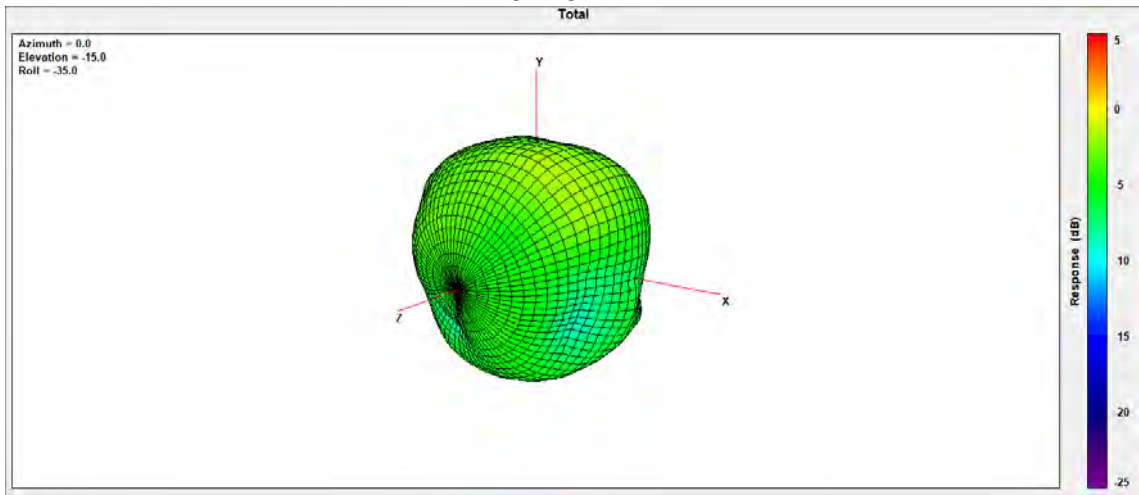
| 894MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.96    | -2.23    |

### 925MHz



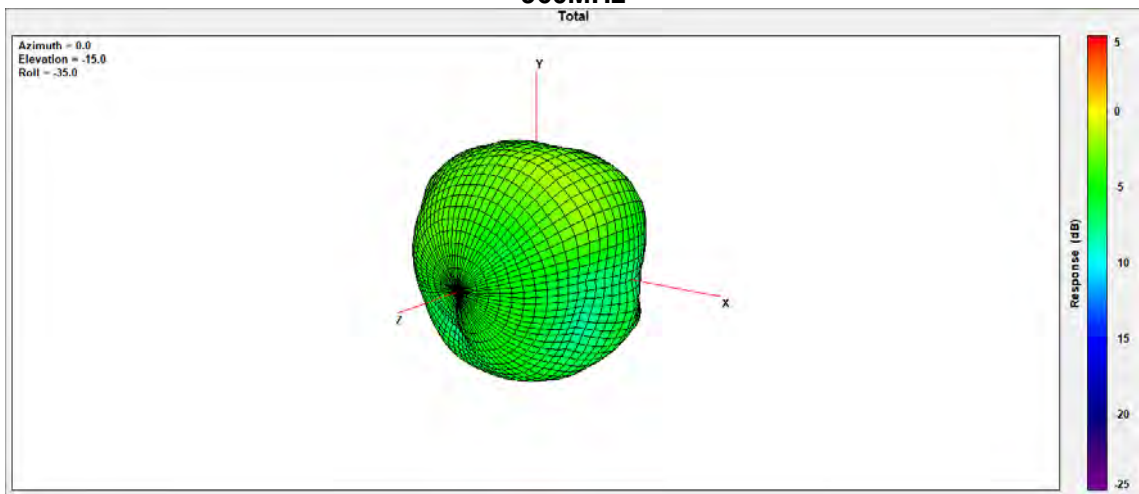
| 925MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.43    | -2.54    |

### 942.5MHz



| 942.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -1.50    | -2.96    |

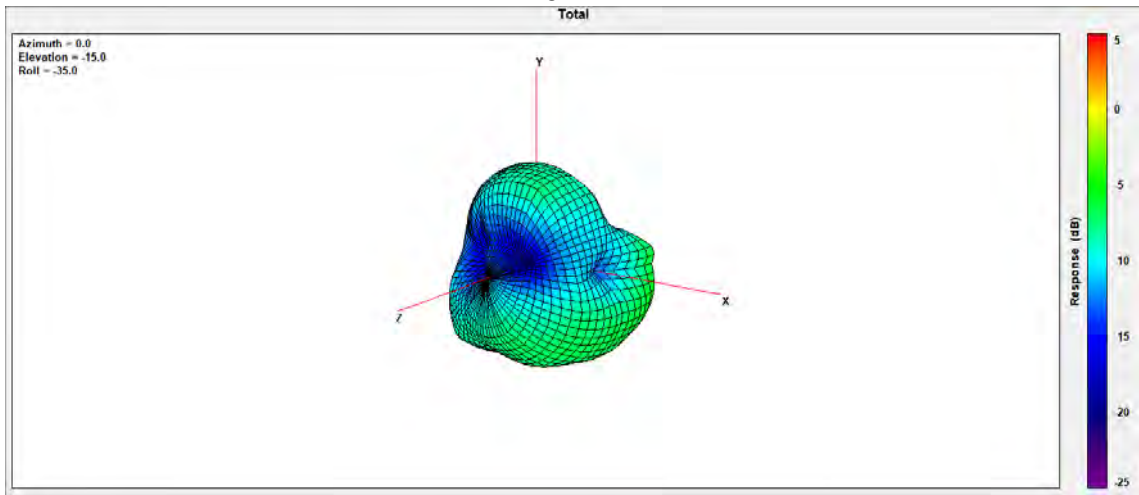
### 960MHz



| 960MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.75    | -3.44    |

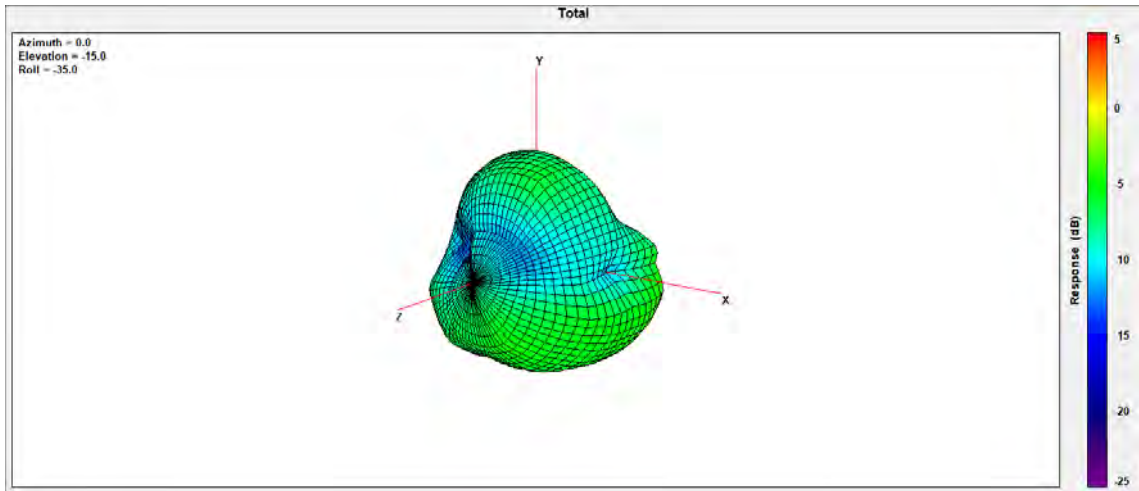


### 1452MHz



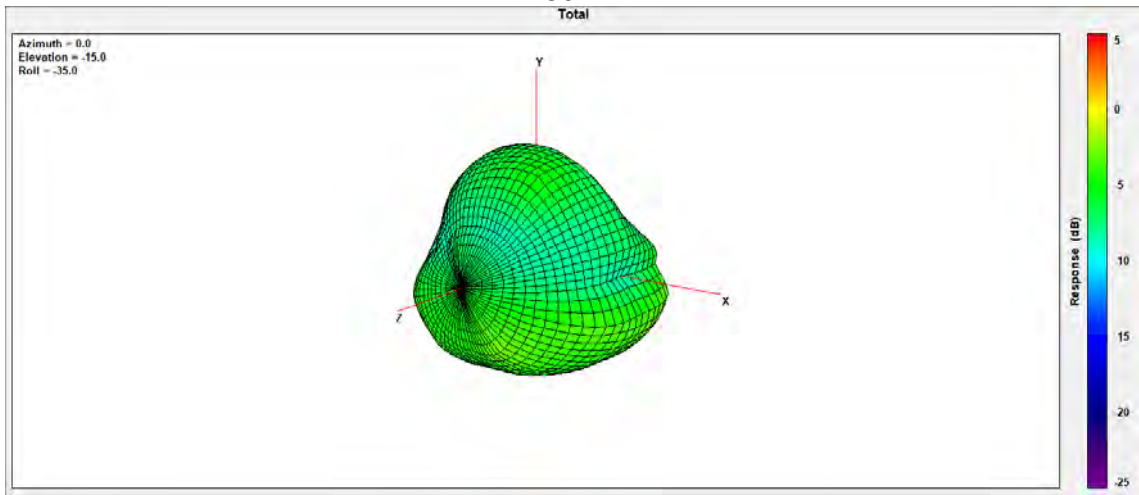
| 1452MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -5.09    | -4.34    |

### 1474MHz



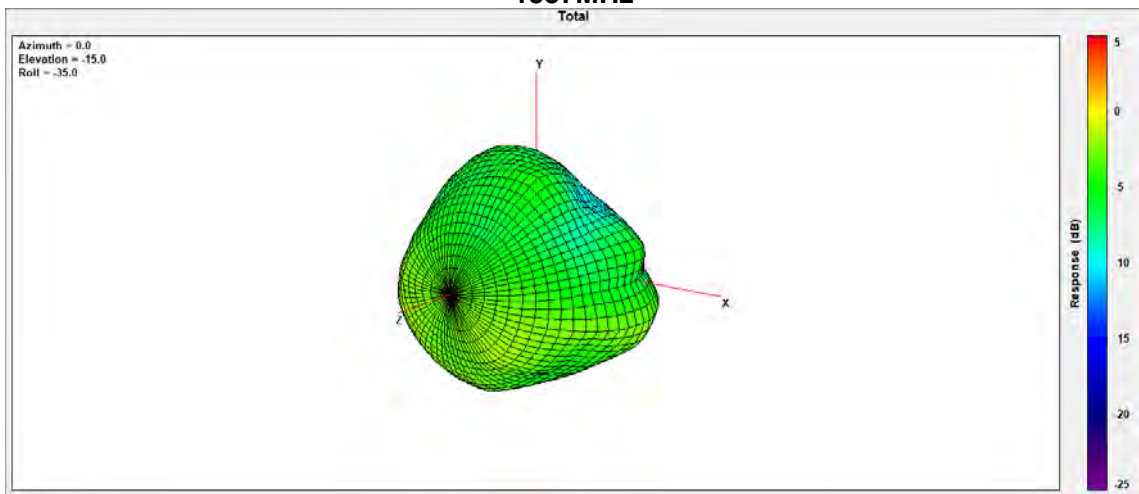
| 1474MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -4.19    | -3.49    |

### 1496MHz



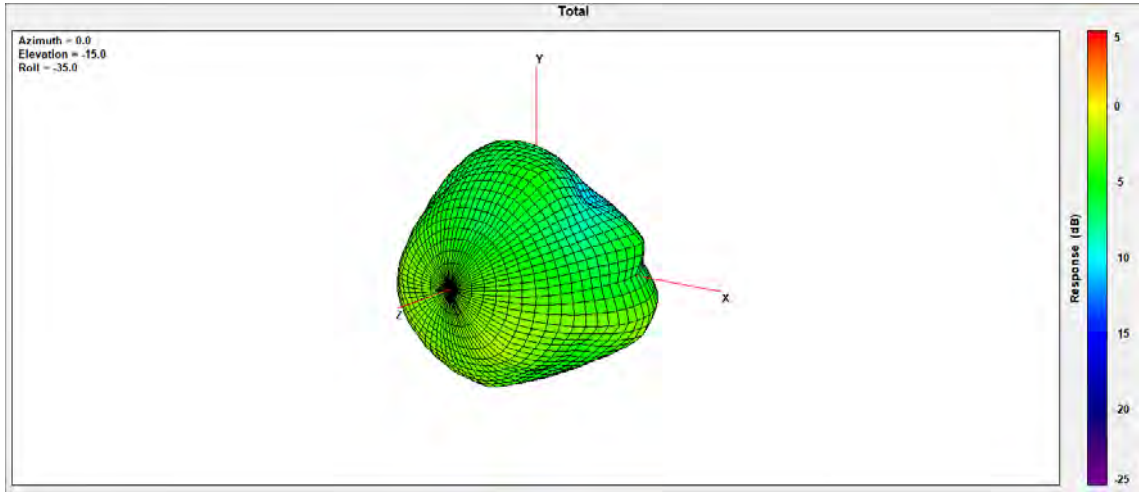
| 1496MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -3.05    | -2.86    |

### 1557MHz



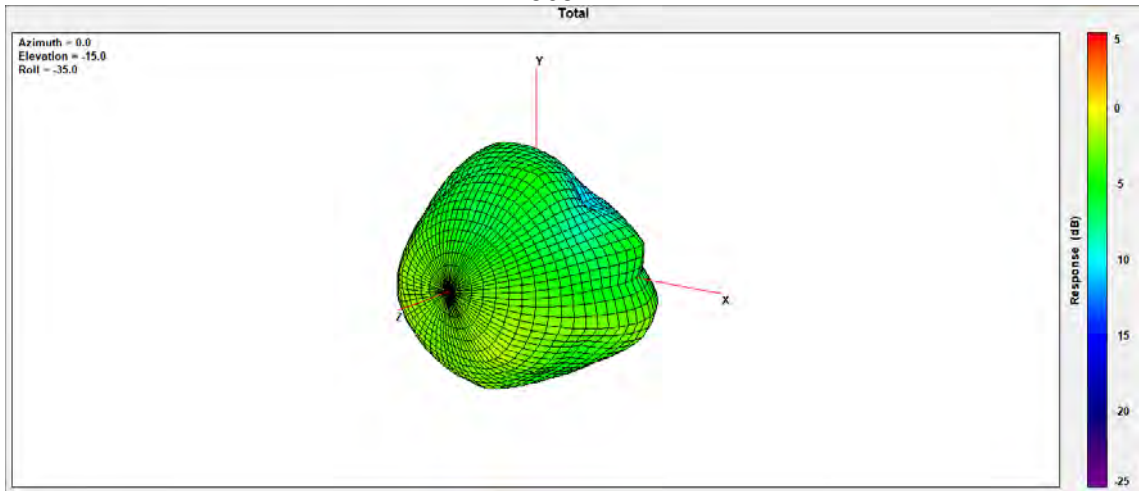
| 1557MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.00    | -2.03    |

### 1561MHz



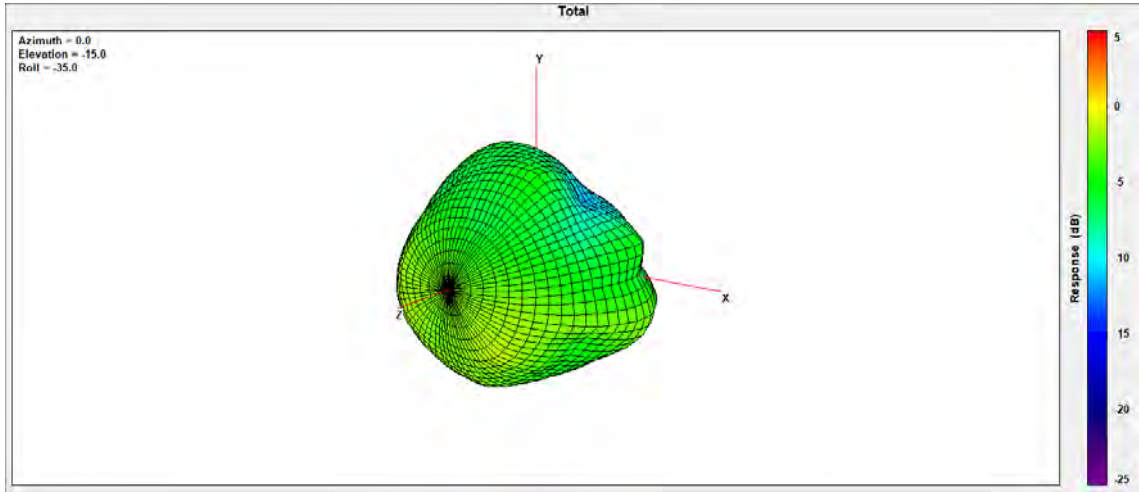
| 1561MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.00    | -2.01    |

### 1565MHz



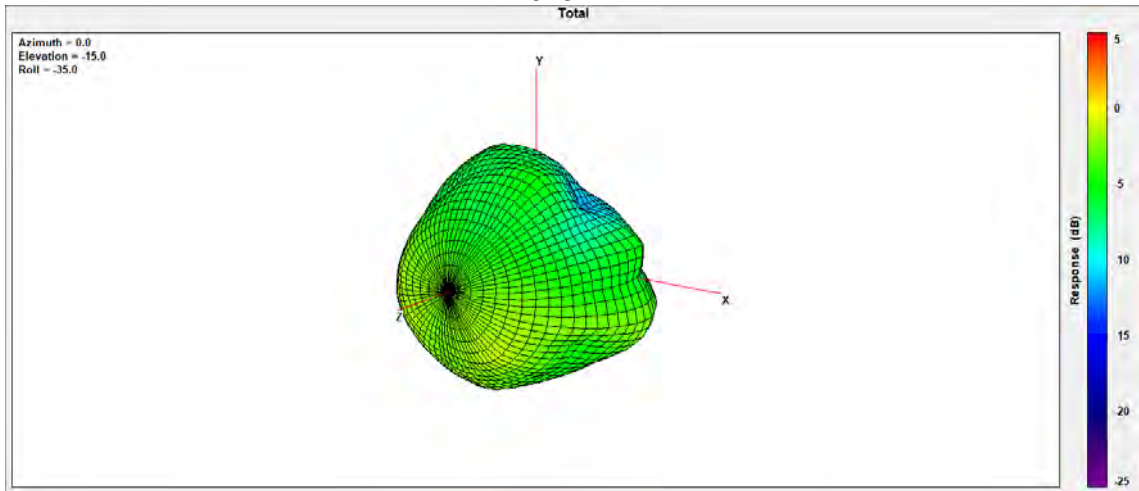
| 1565MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.88    | -1.89    |

### 1573MHz



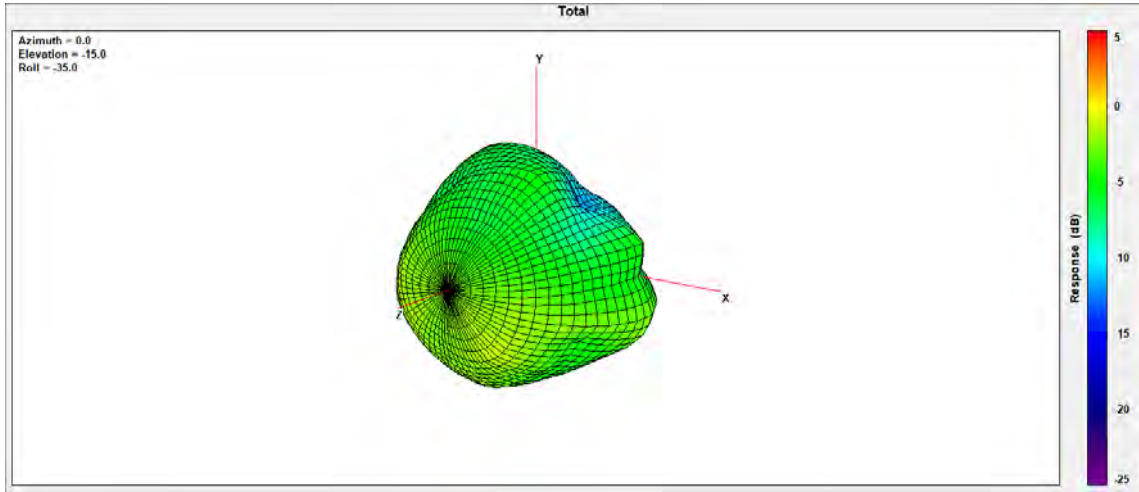
| 1573MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.84    | -1.76    |

### 1575MHz



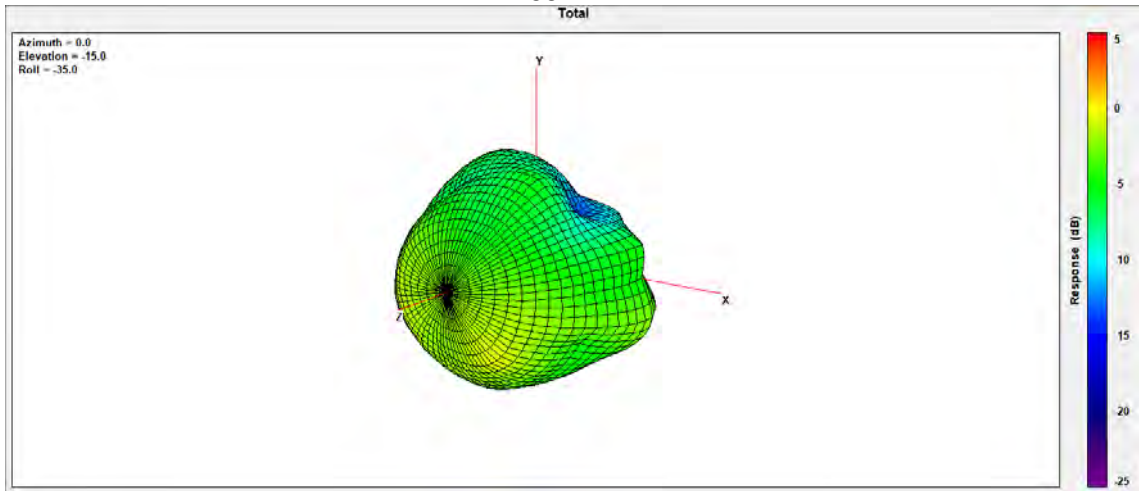
| 1575MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.81    | -1.76    |

### 1577MHz



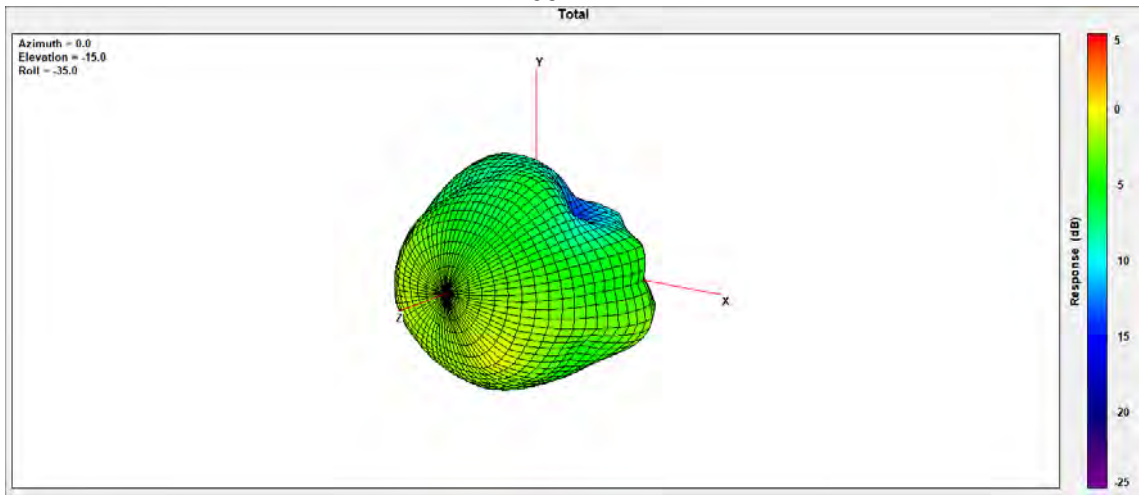
| 1577MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.83    | -1.79    |

### 1594MHz



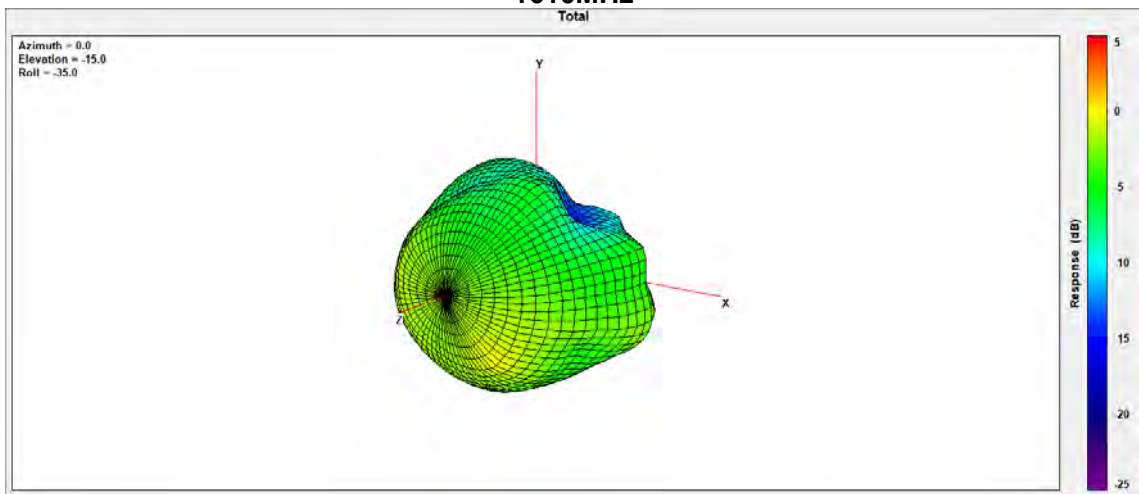
| 1594MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.51    | -2.03    |

### 1602MHz



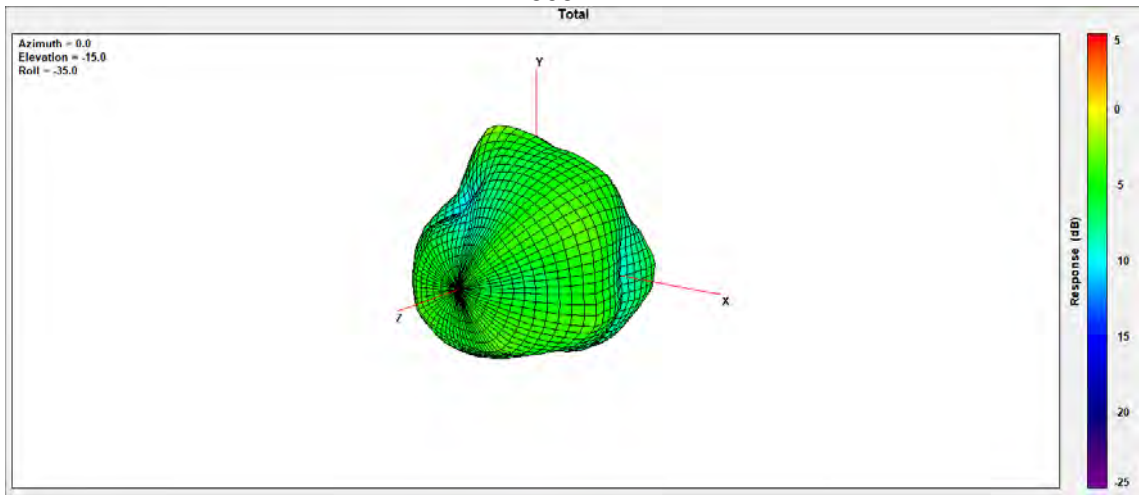
| 1602MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.87    | -1.74    |

### 1610MHz



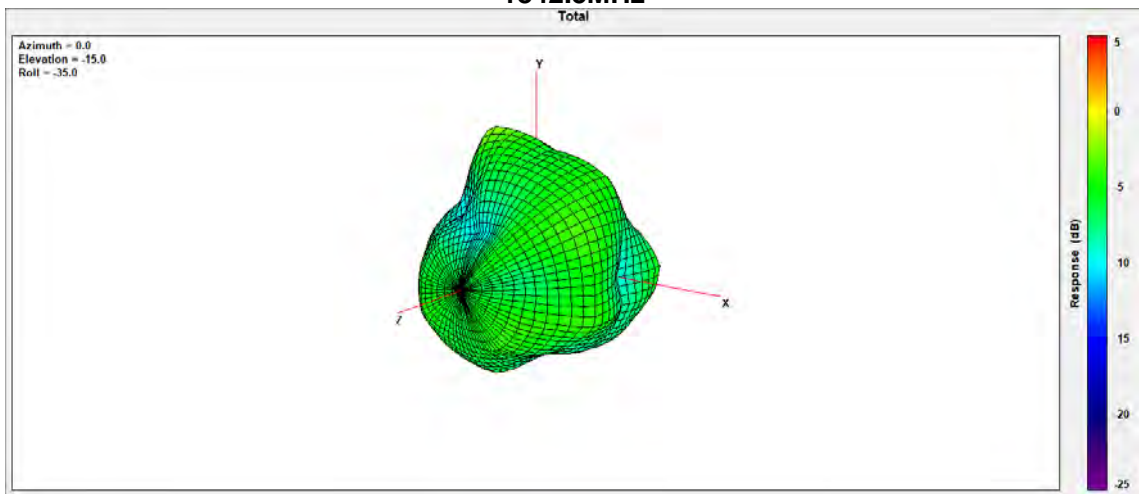
| 1610MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.71    | -1.83    |

### 1805MHz



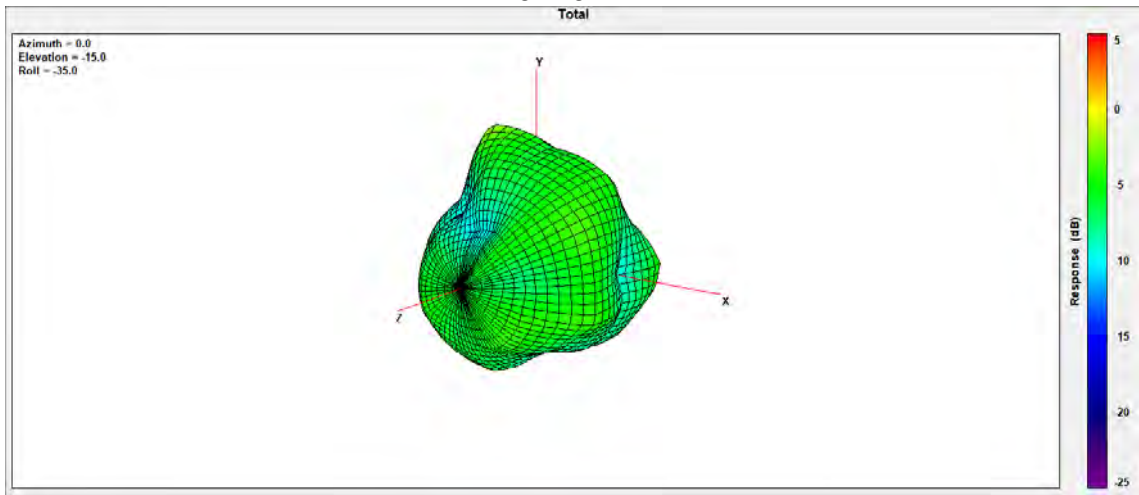
| 1805MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.53    | -3.09    |

### 1842.5MHz



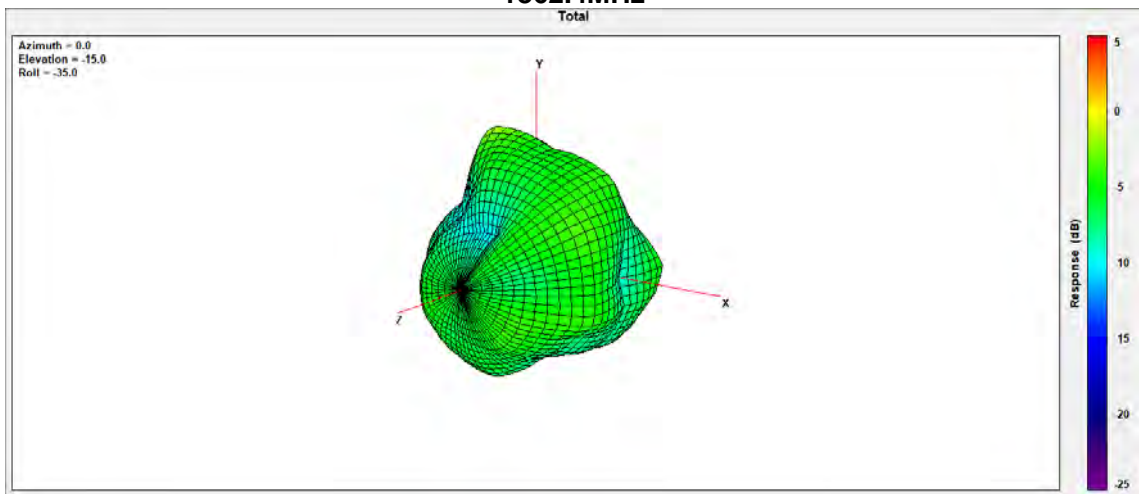
| 1842.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -2.00    | -2.48    |

### 1844.9MHz



| 1844.9MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -2.10    | -2.51    |

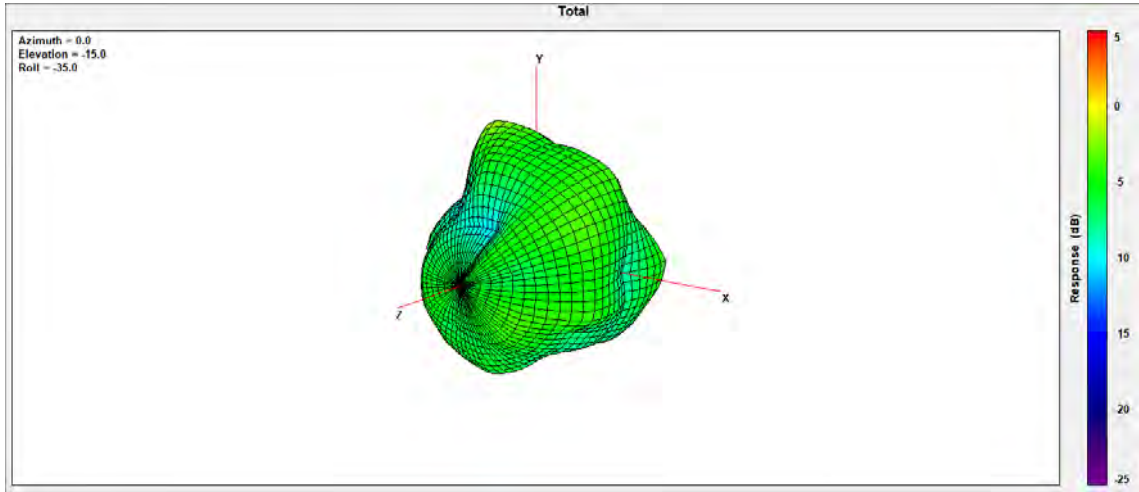
### 1862.4MHz



| 1862.4MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -2.00    | -2.37    |

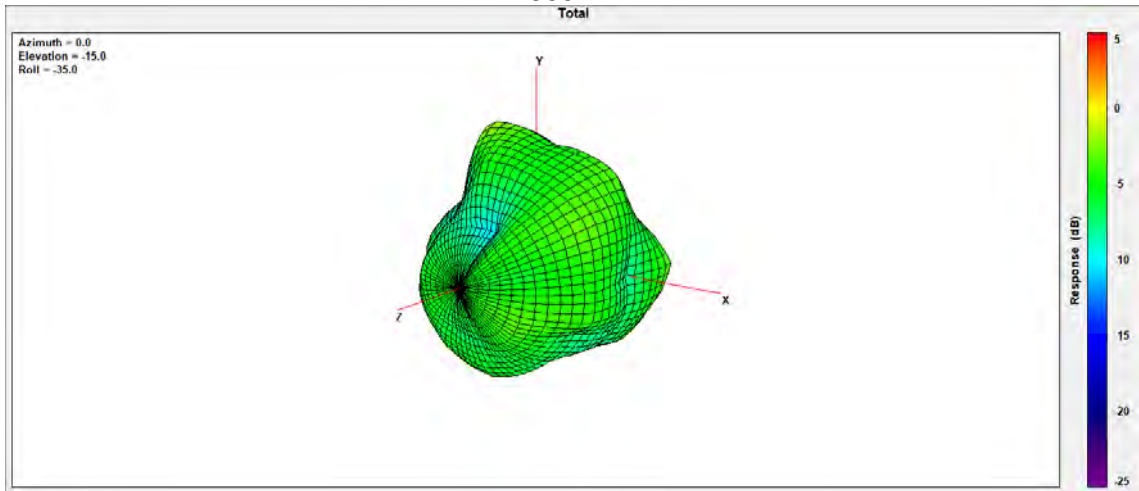


### 1880MHz



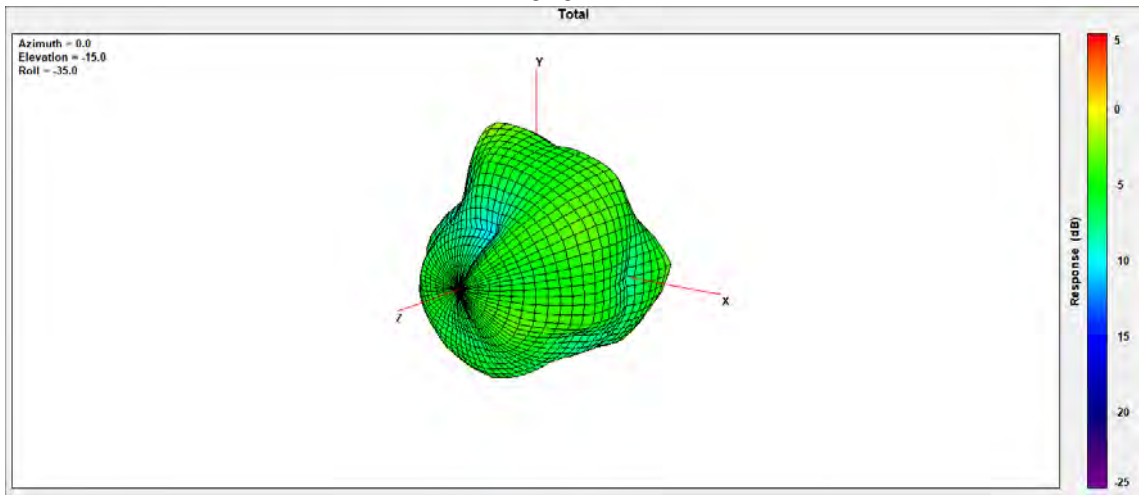
| 1880MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.89    | -2.14    |

### 1900MHz



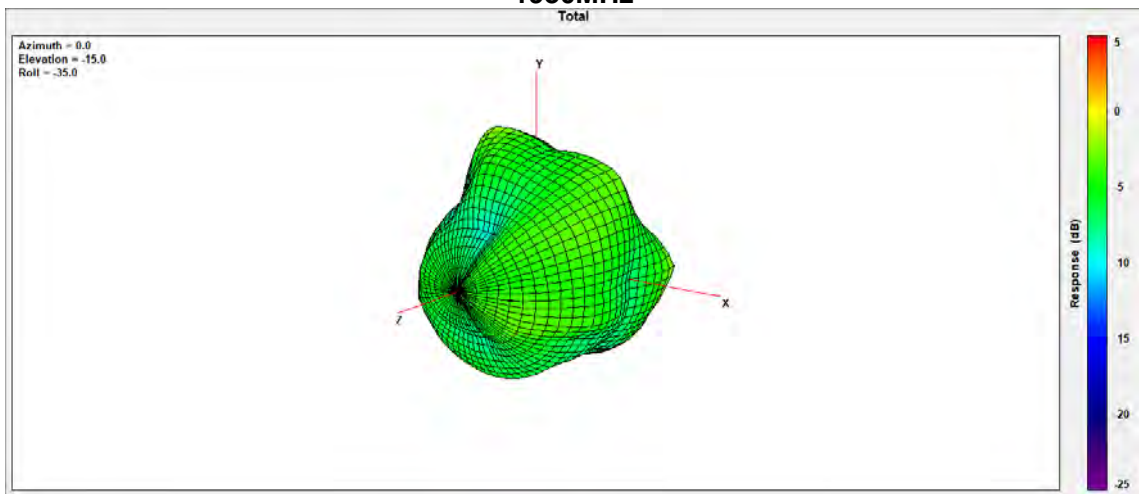
| 1900MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.92    | -1.94    |

### 1920MHz



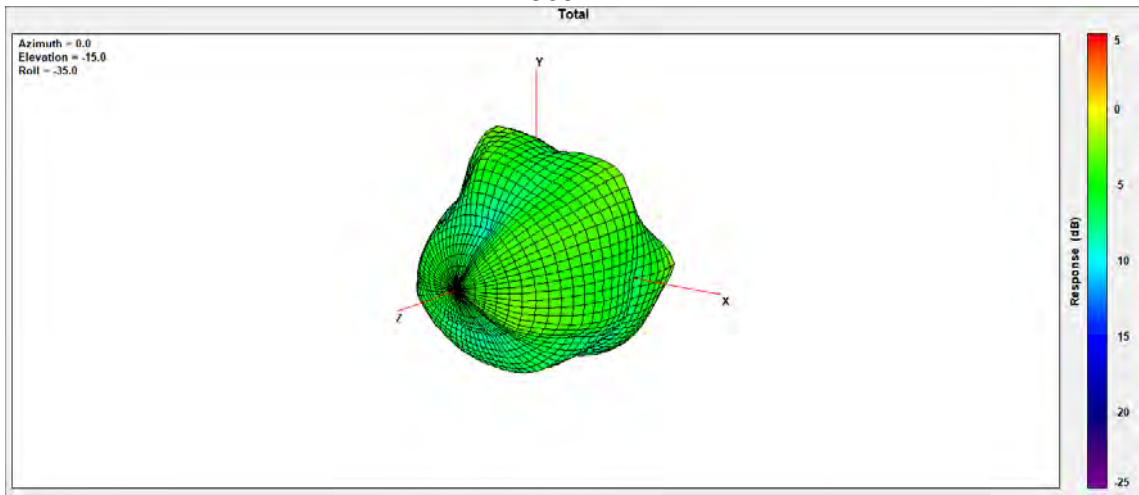
| 1920MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.91    | -1.85    |

### 1930MHz



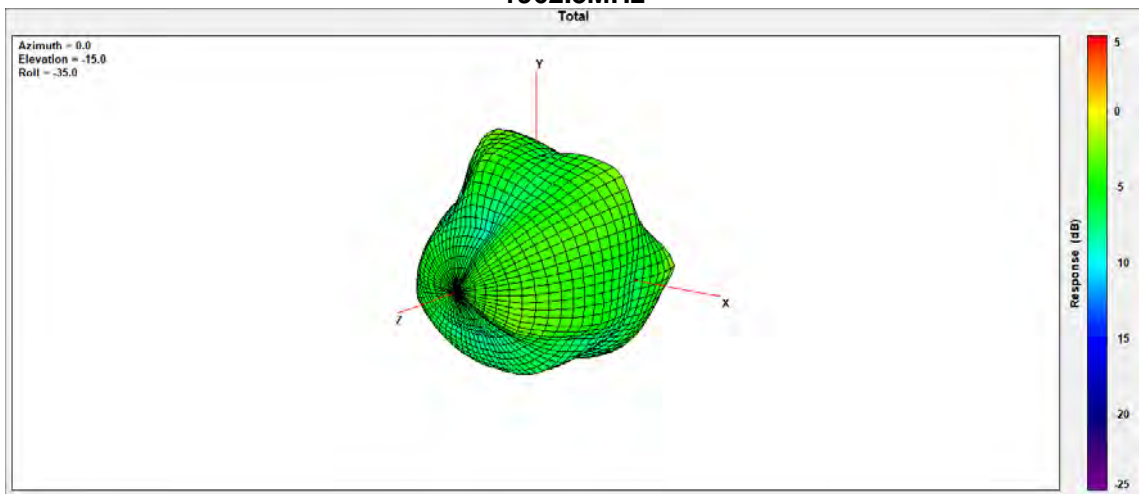
| 1930MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.79    | -1.68    |

### 1960MHz



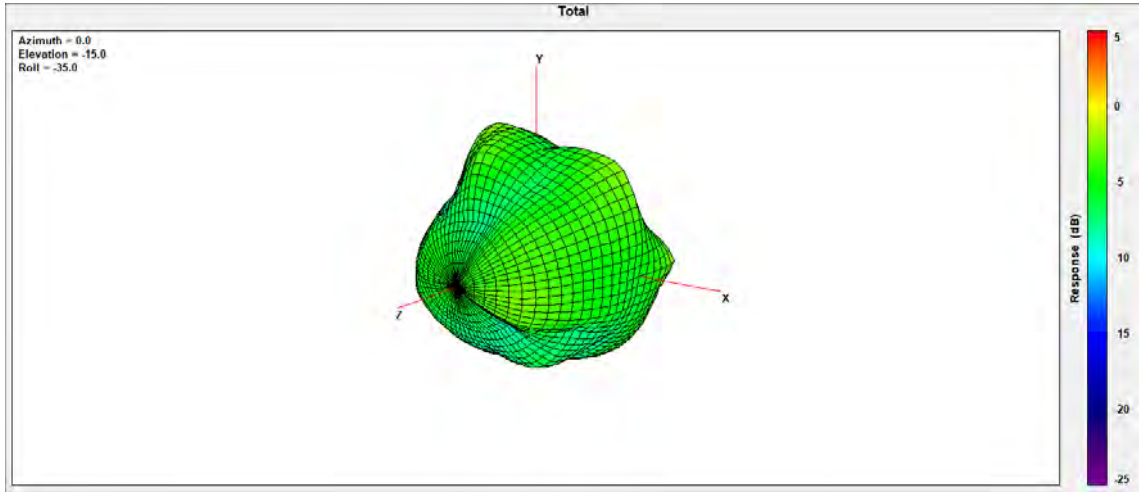
| 1960MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.68    | -2.16    |

### 1962.5MHz



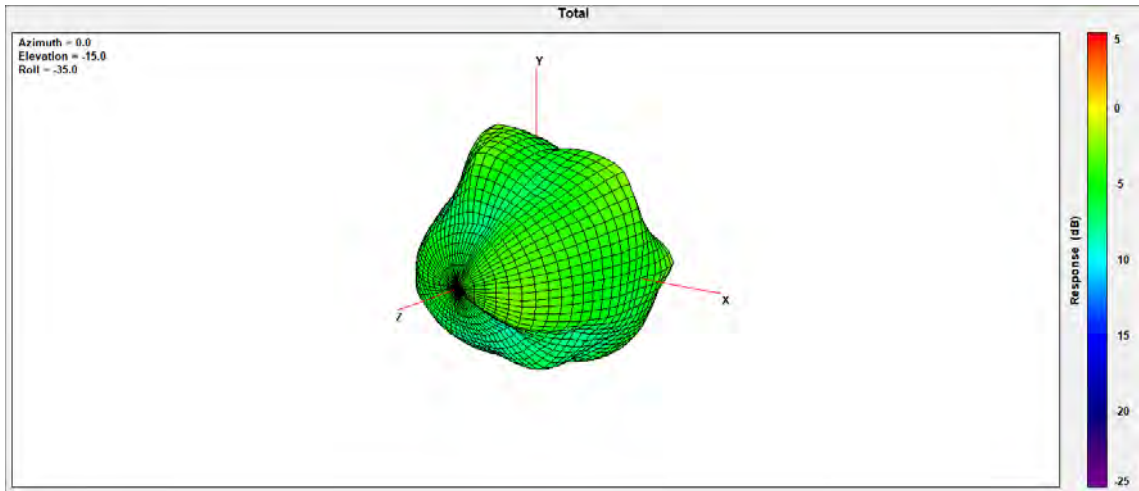
| 1962.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -1.75    | -2.23    |

### 1990MHz



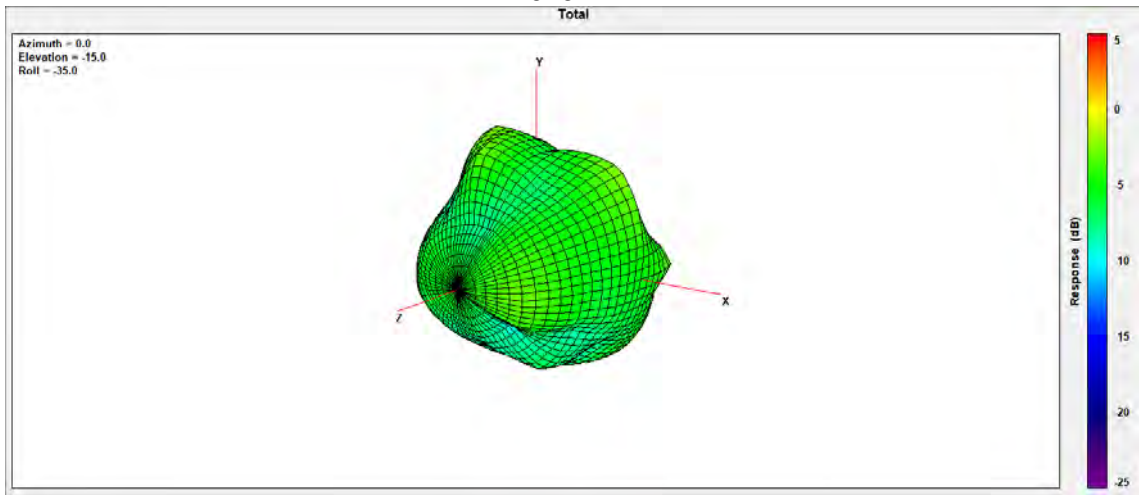
| 1990MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.06    | -2.02    |

### 1995MHz



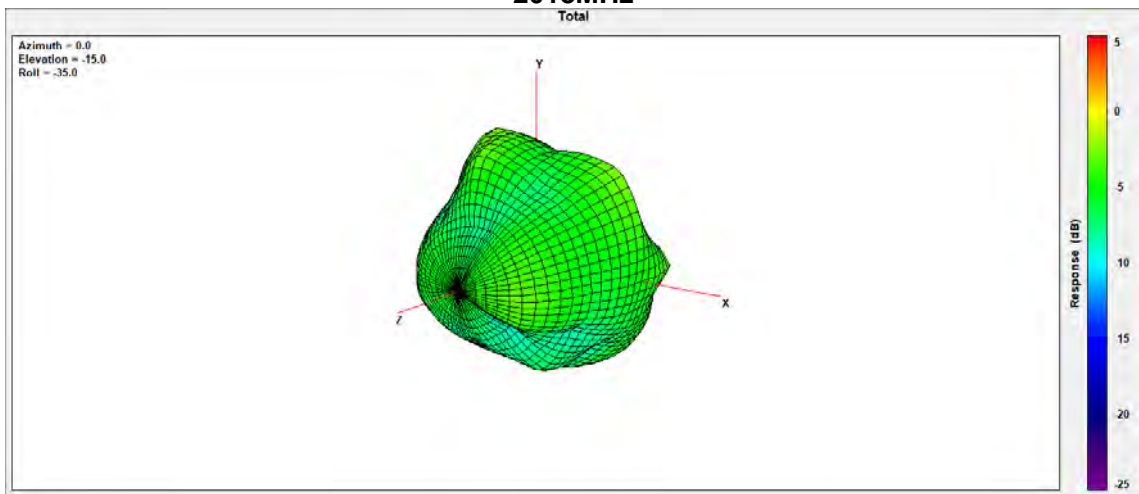
| 1995MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.15    | -2.15    |

### 2010MHz



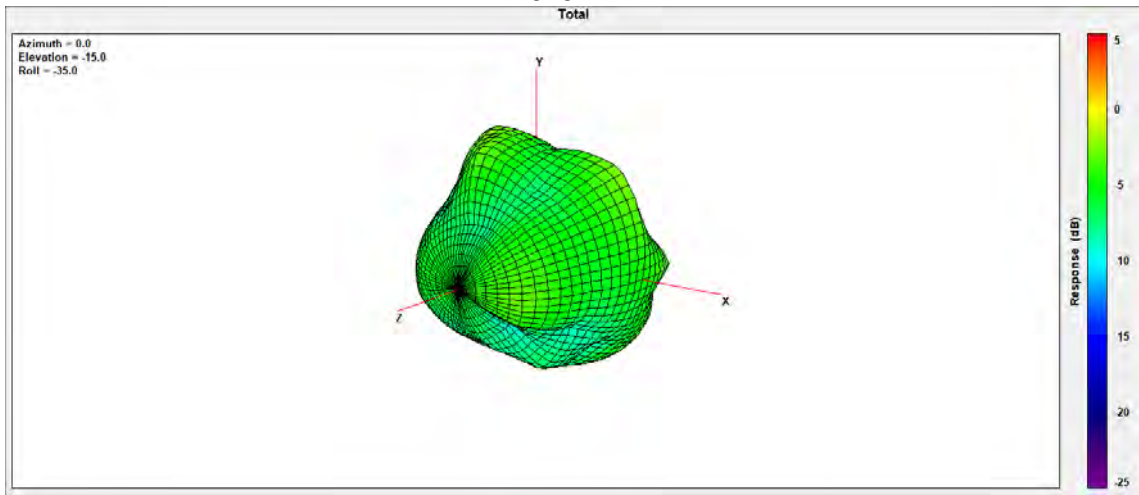
| 2010MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.92    | -1.73    |

### 2018MHz



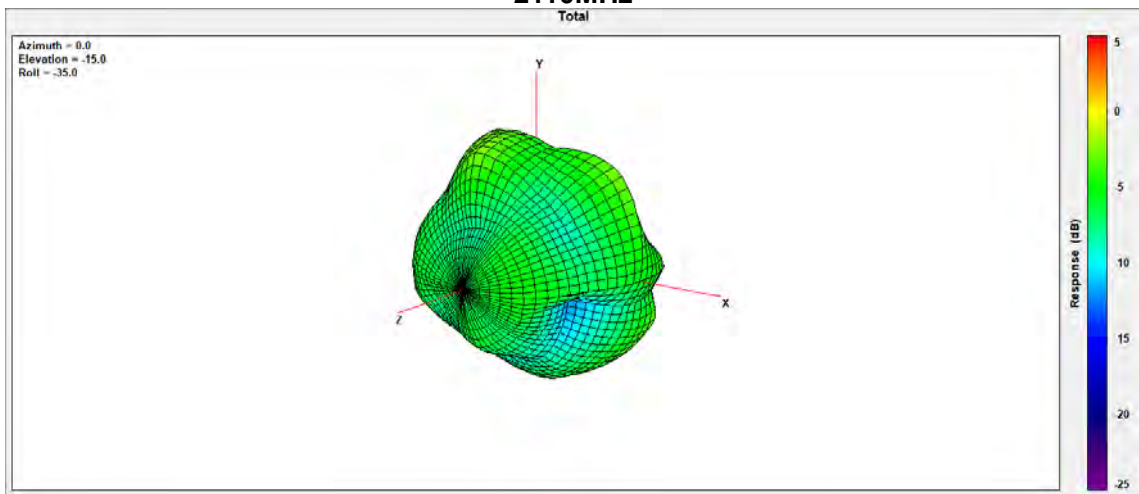
| 2018MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.82    | -1.74    |

### 2025MHz



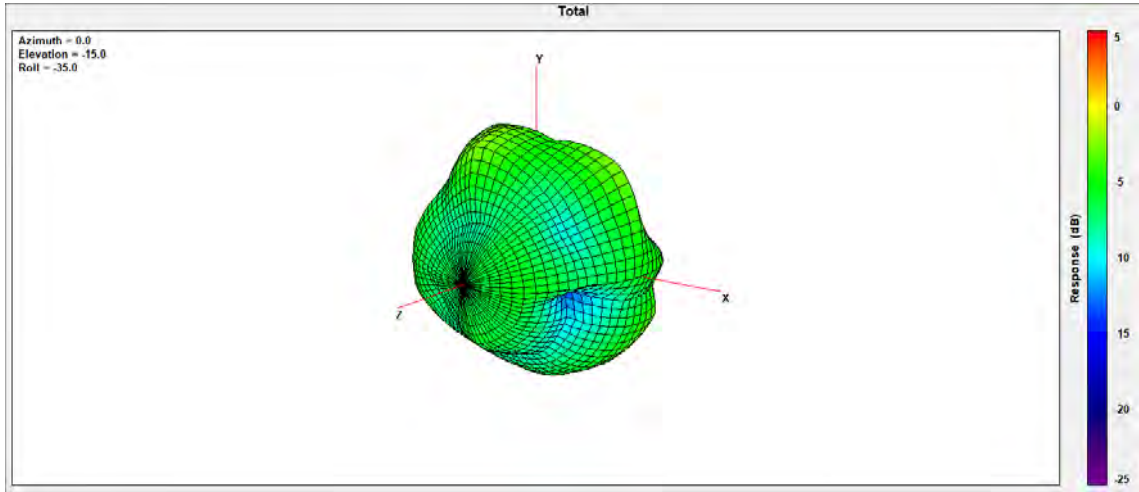
| 2025MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.84    | -1.64    |

### 2110MHz



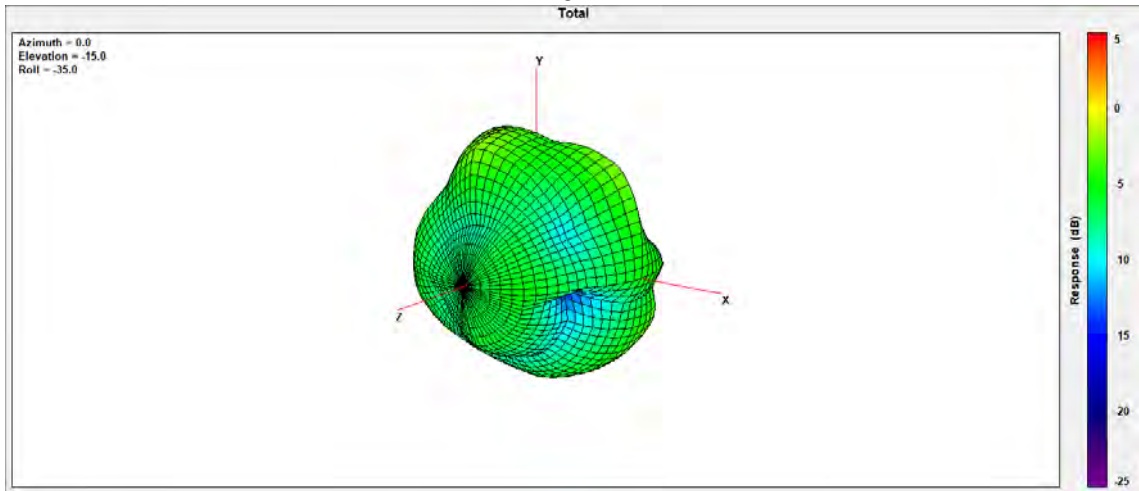
| 2110MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.85    | -1.58    |

### 2132.5MHz



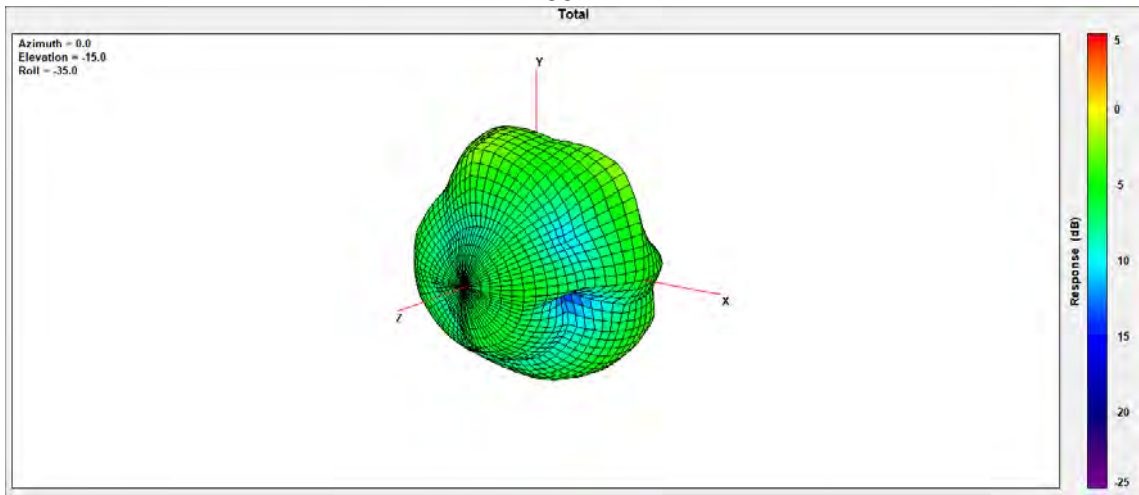
| 2132.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -1.68    | -1.46    |

### 2140MHz



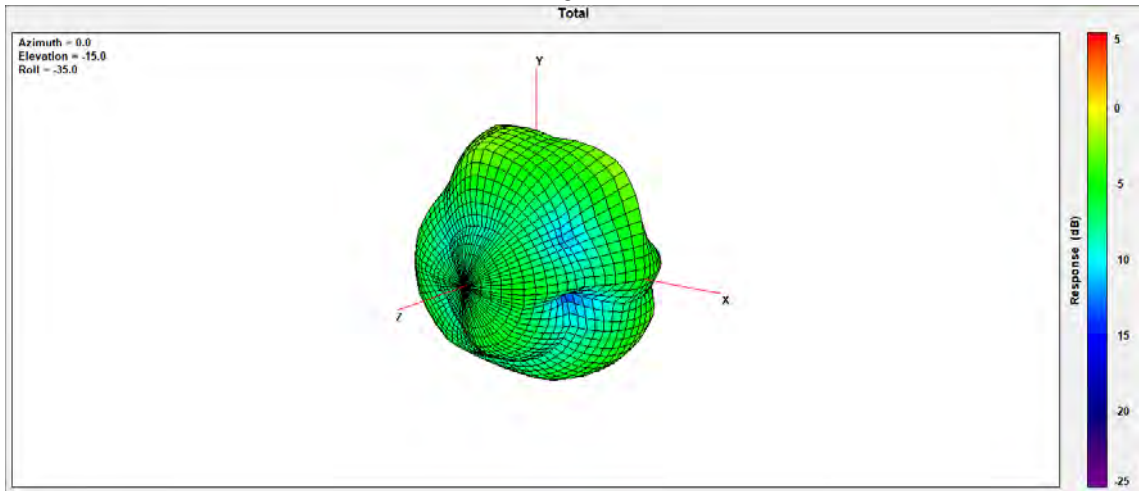
| 2140MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.37    | -1.31    |

### 2155MHz



| 2155MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.35    | -1.52    |

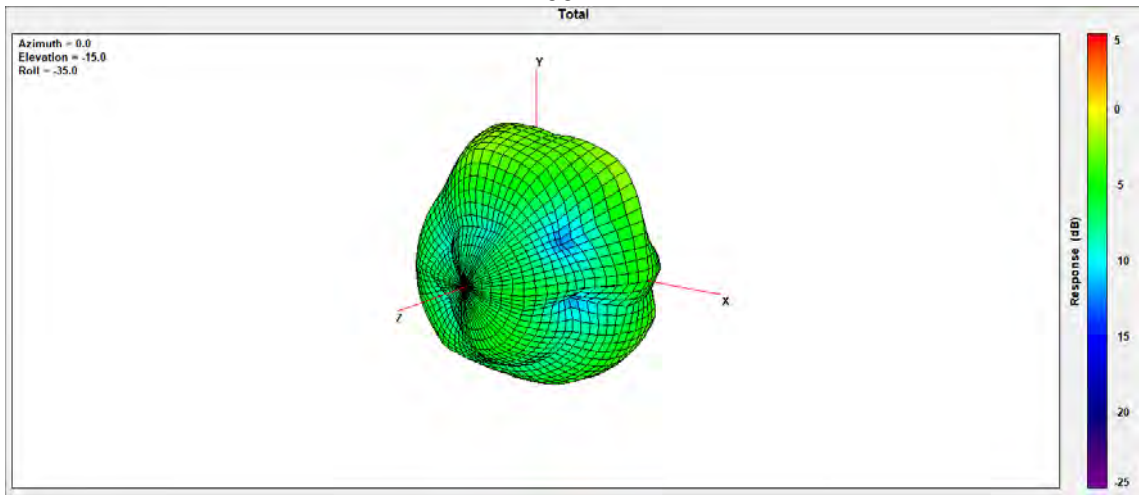
### 2170MHz



| 2170MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.45    | -1.53    |

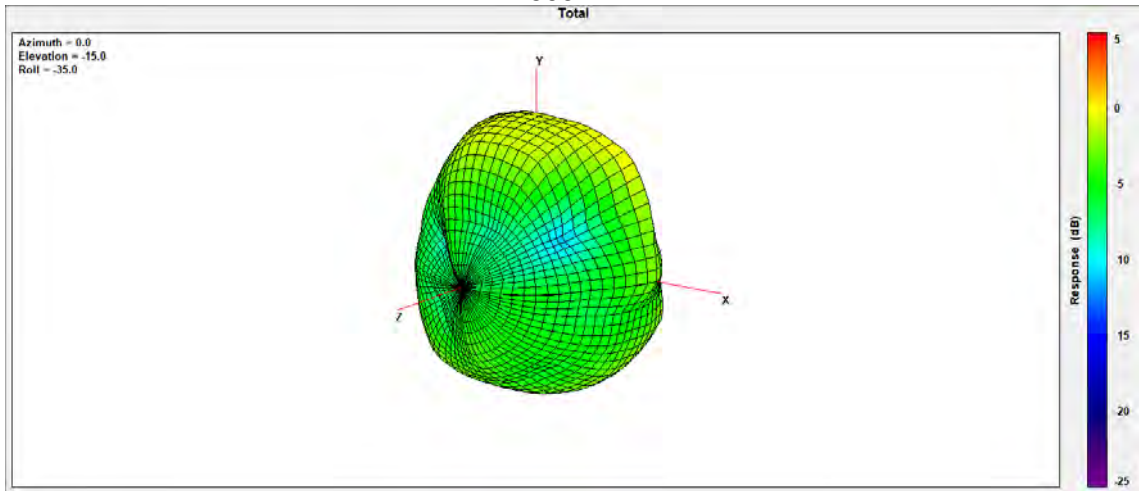


### 2200MHz



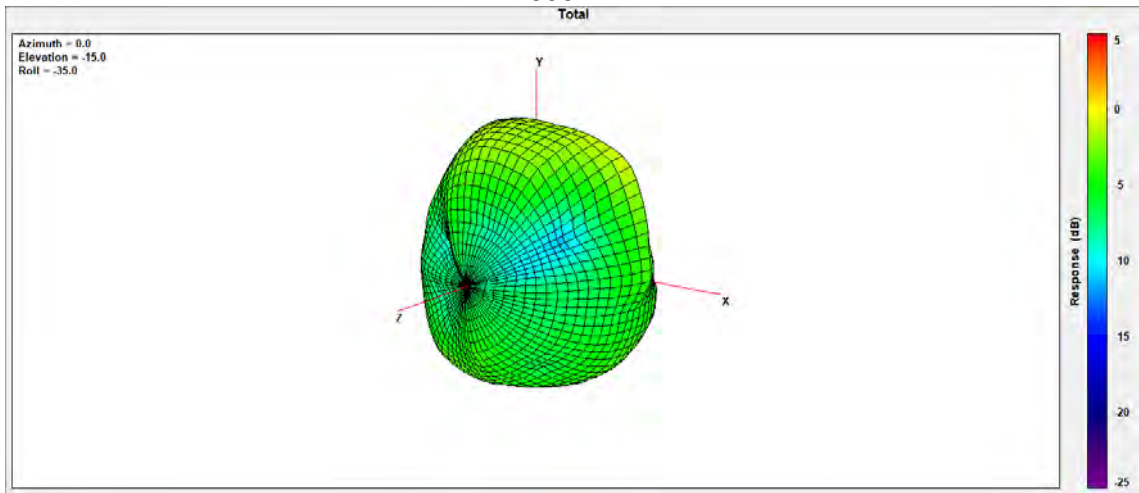
| 2200MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.49    | -1.72    |

### 2300MHz



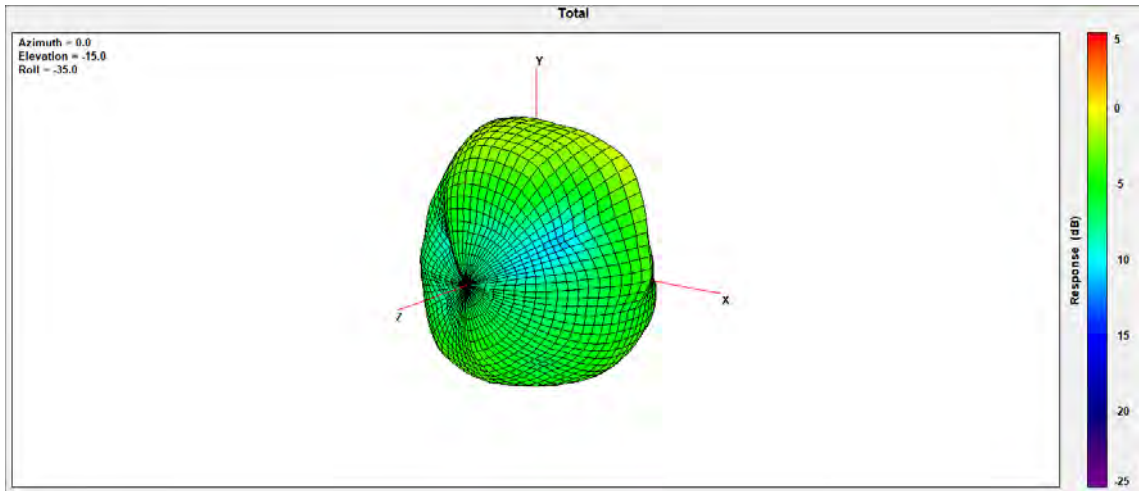
| 2300MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.48    | -1.78    |

### 2350MHz



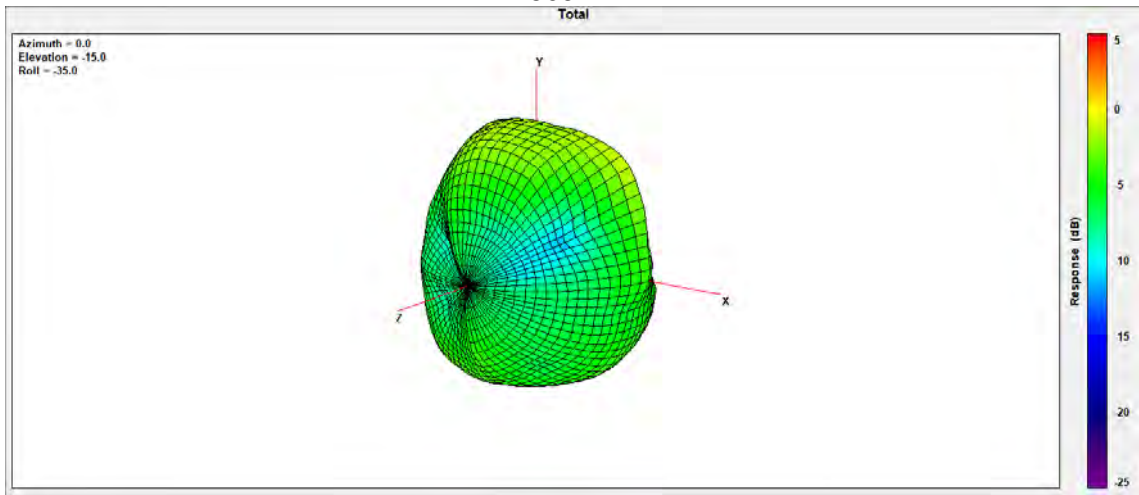
| 2350MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.19    | -1.90    |

### 2355MHz



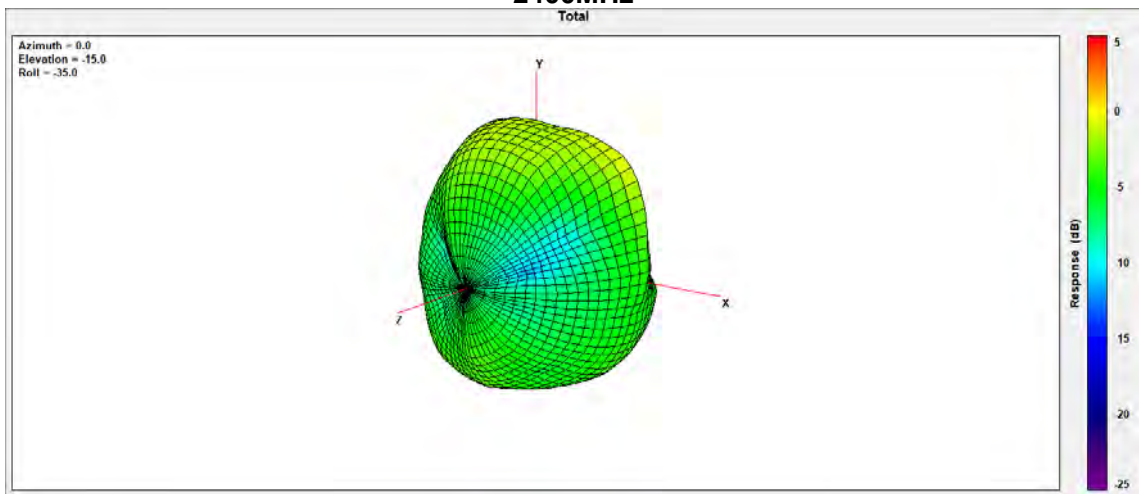
| 2355MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.14    | -1.99    |

### 2360MHz



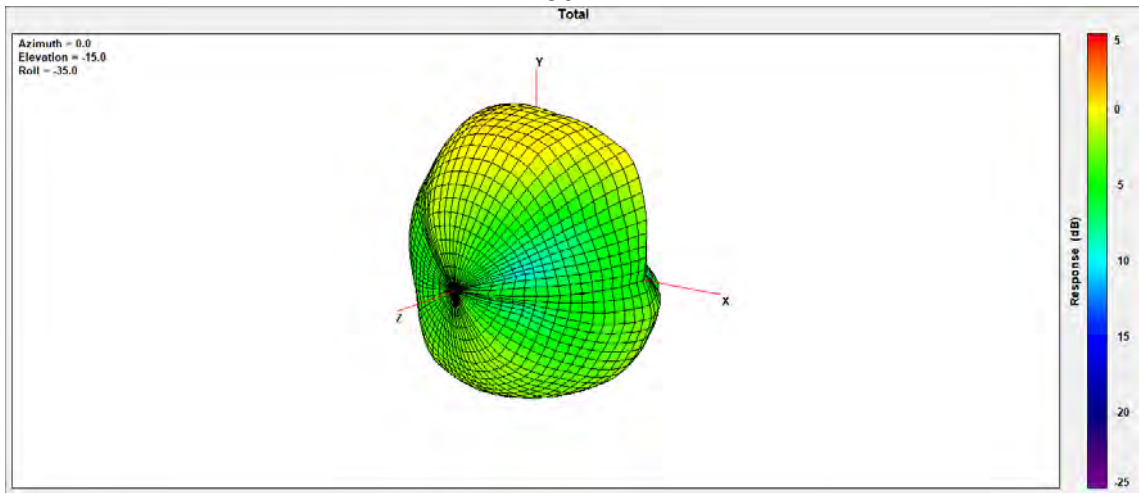
| 2360MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.65    | -2.35    |

### 2400MHz



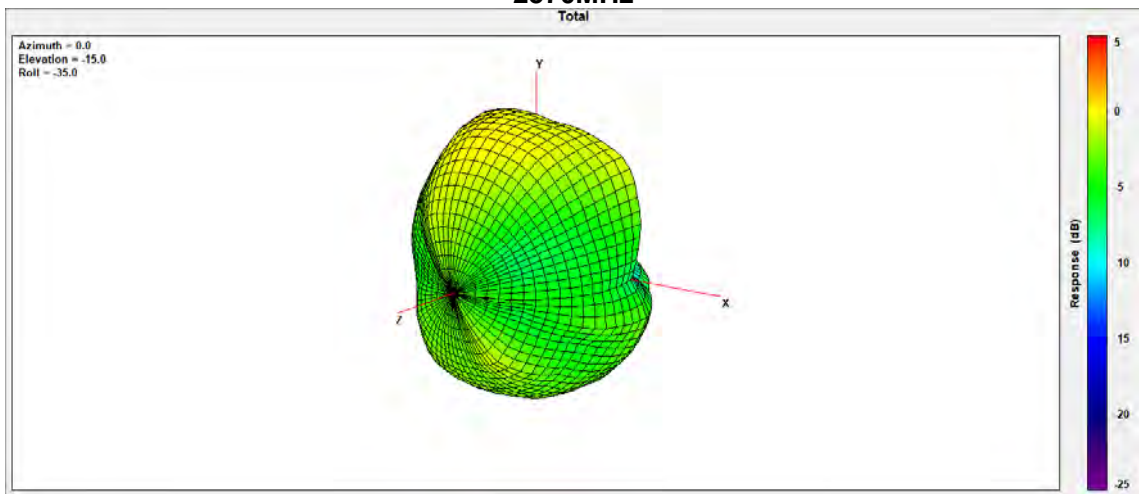
| 2400MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.83    | -2.40    |

### 2496MHz



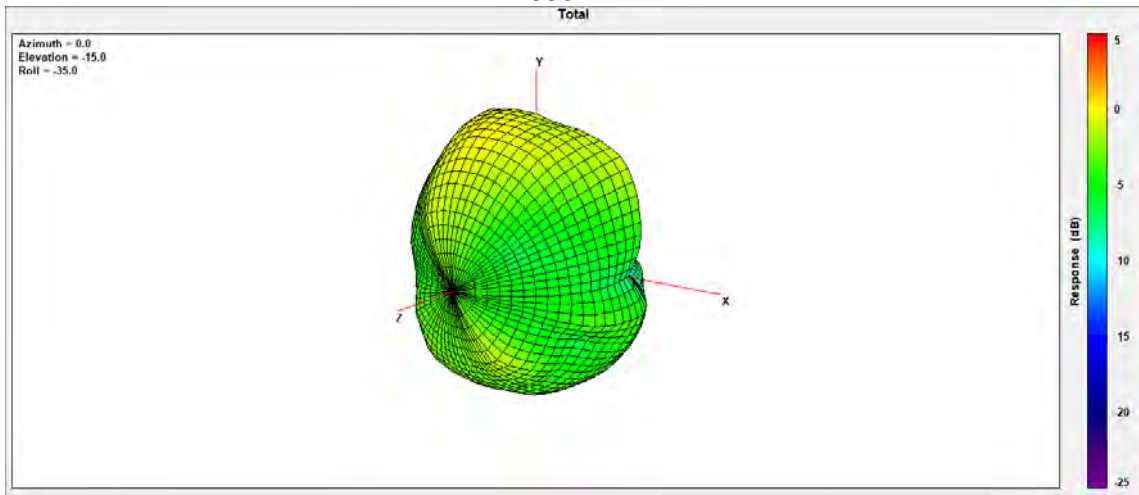
| 2496MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.84    | -2.50    |

### 2570MHz



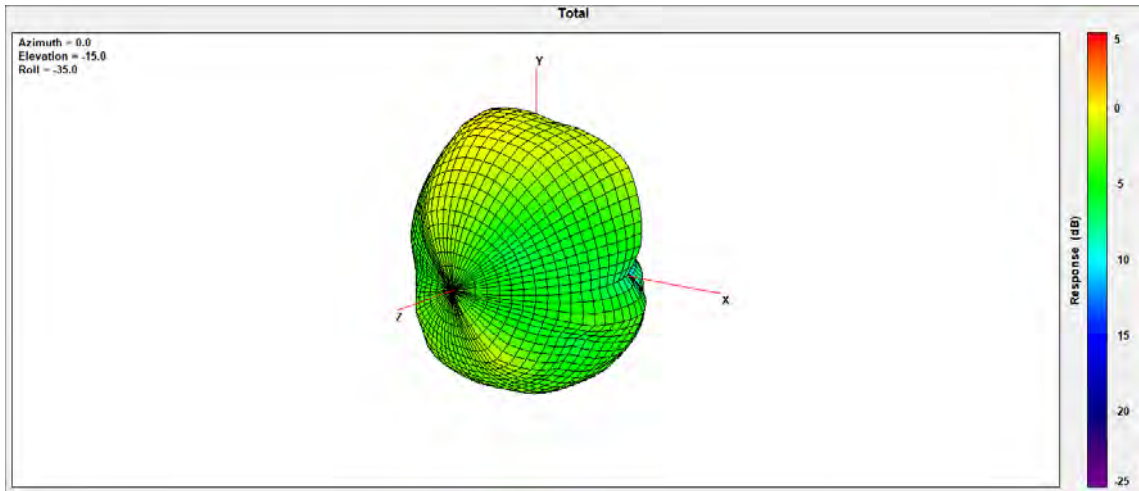
| 2570MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.08     | -1.62    |

### 2593MHz



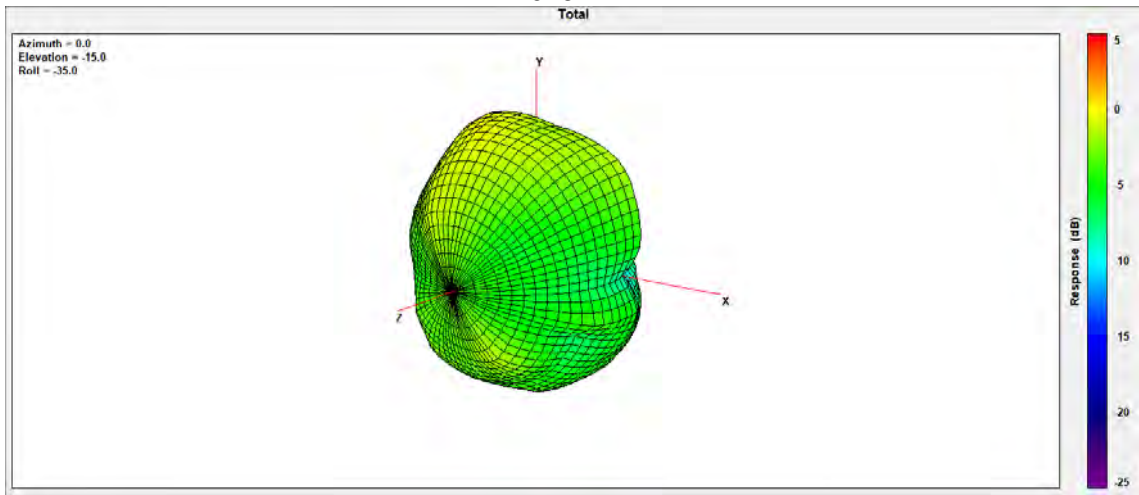
| 2593MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | 0.03     | -1.04    |

### 2595MHz



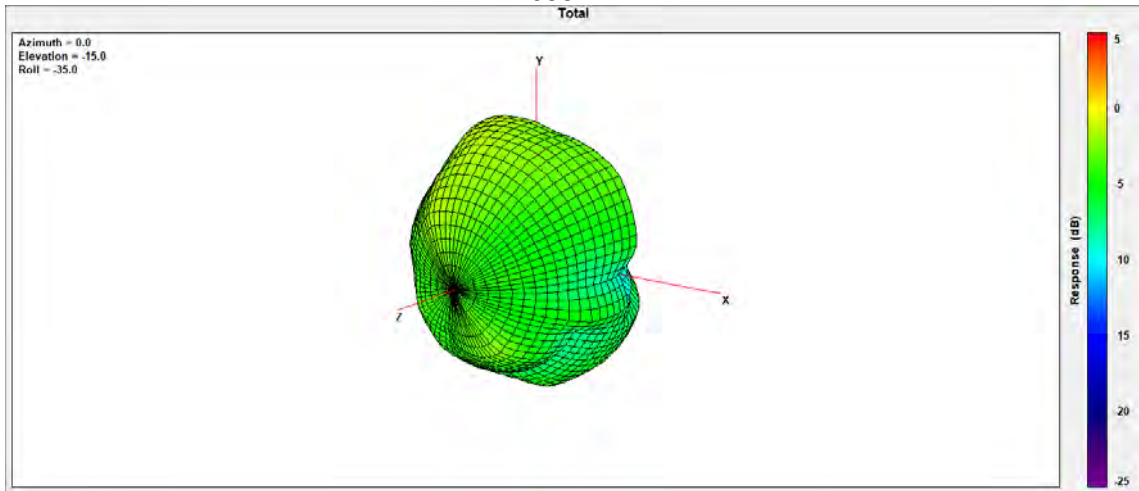
| 2595MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.07    | -0.59    |

### 2620MHz



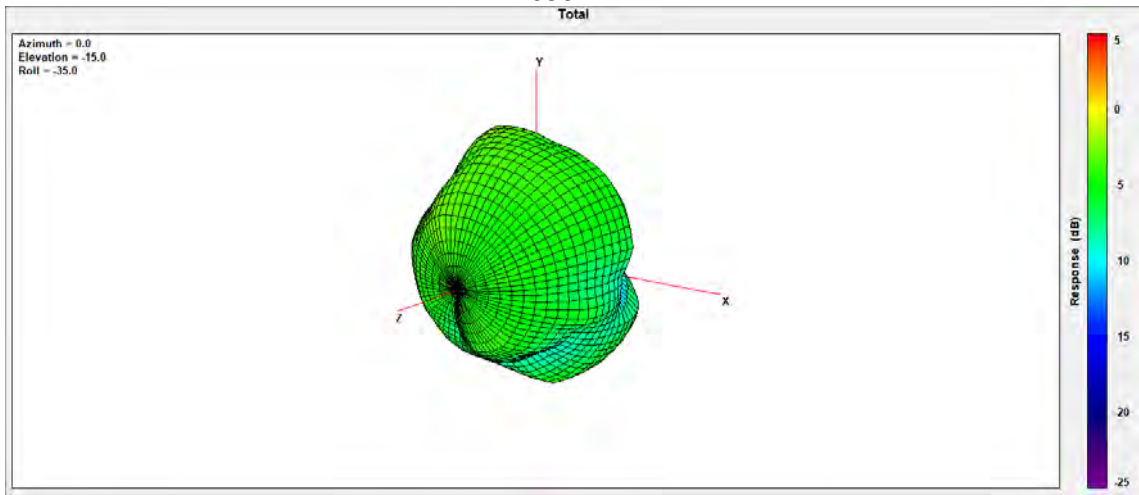
| 2620MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.28    | -0.62    |

### 2655MHz



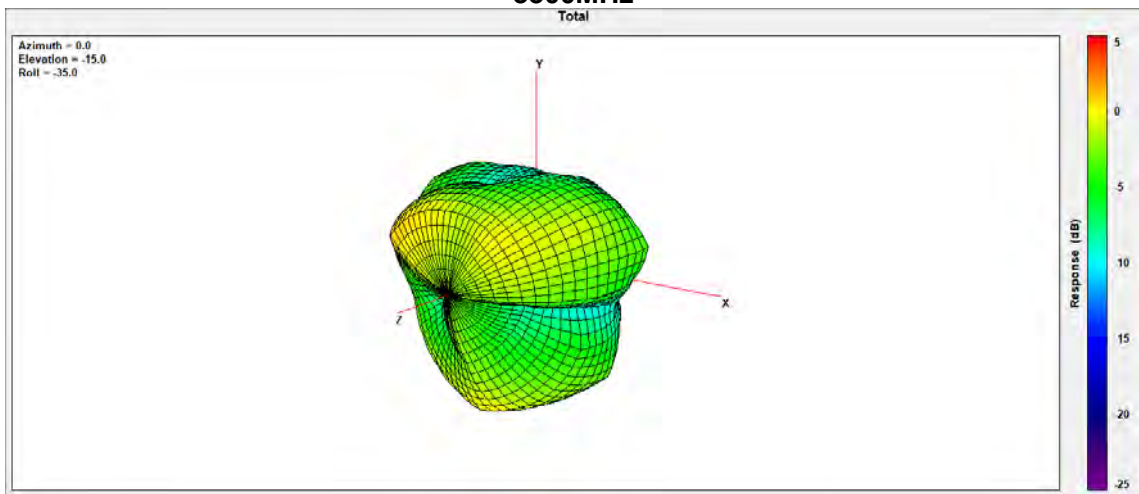
| 2655MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.42    | -0.6     |

### 2690MHz



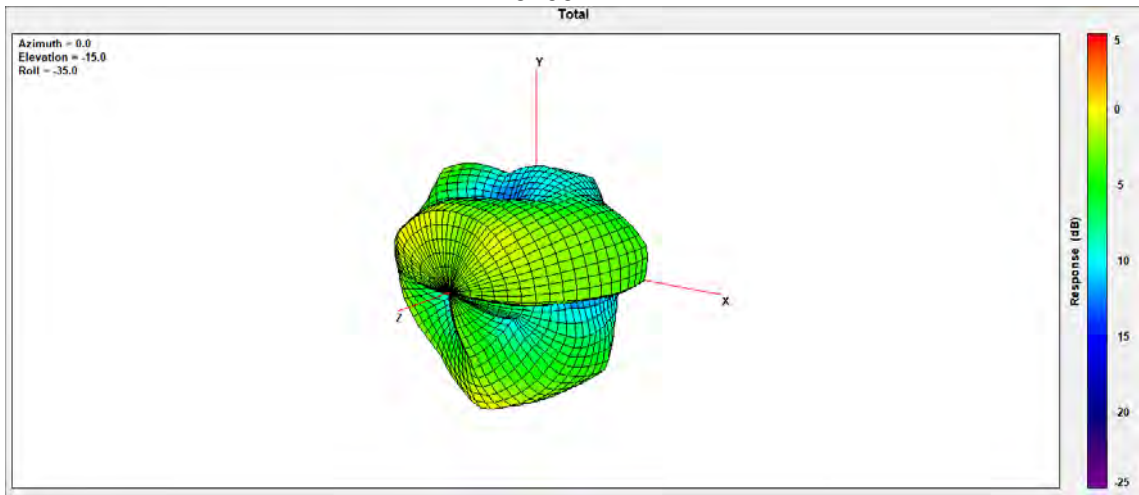
| 2690MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.38    | -1.26    |

### 3300MHz



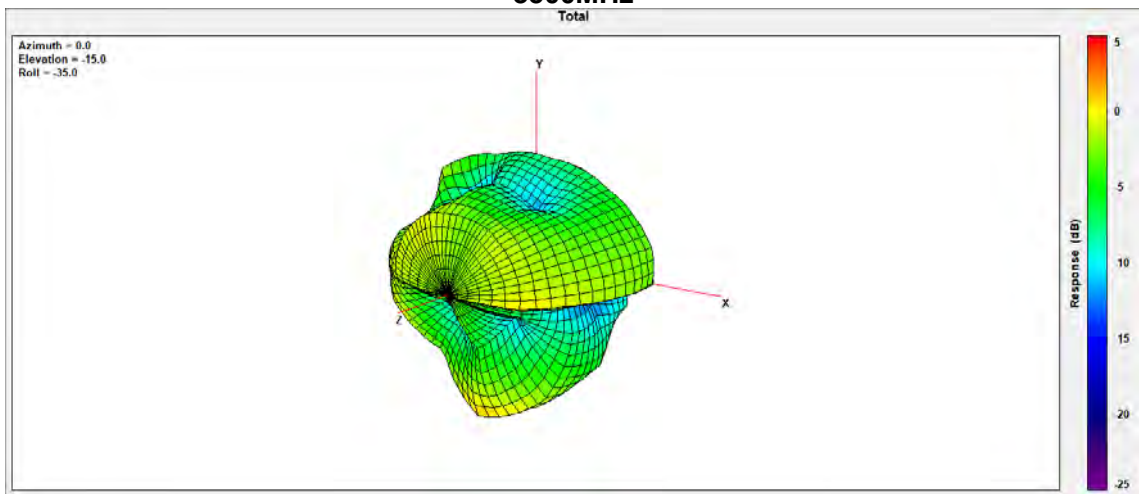
| 3300MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.29    | -2.56    |

### 3400MHz



| 3400MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -3.34    | -2.68    |

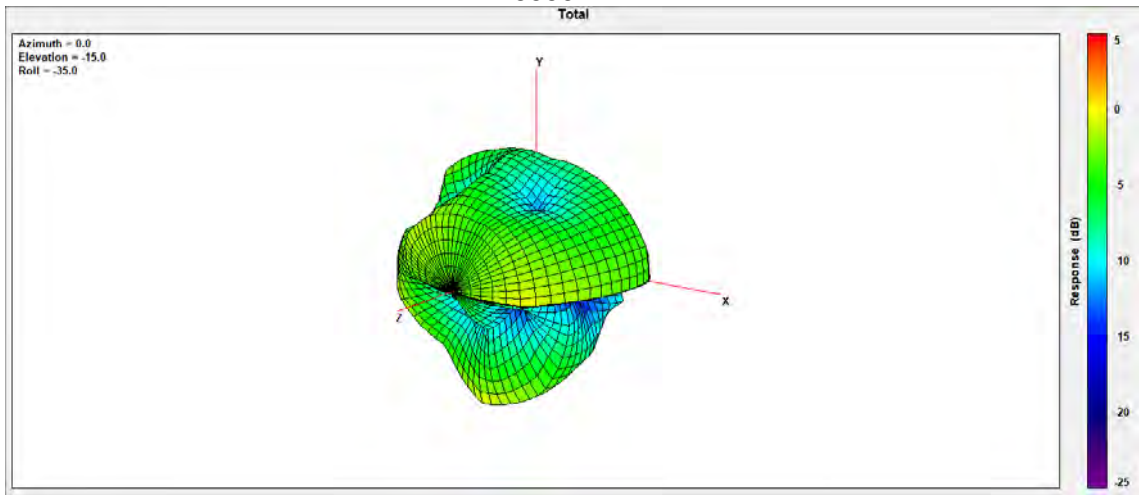
### 3500MHz



| 3500MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.84    | -0.58    |

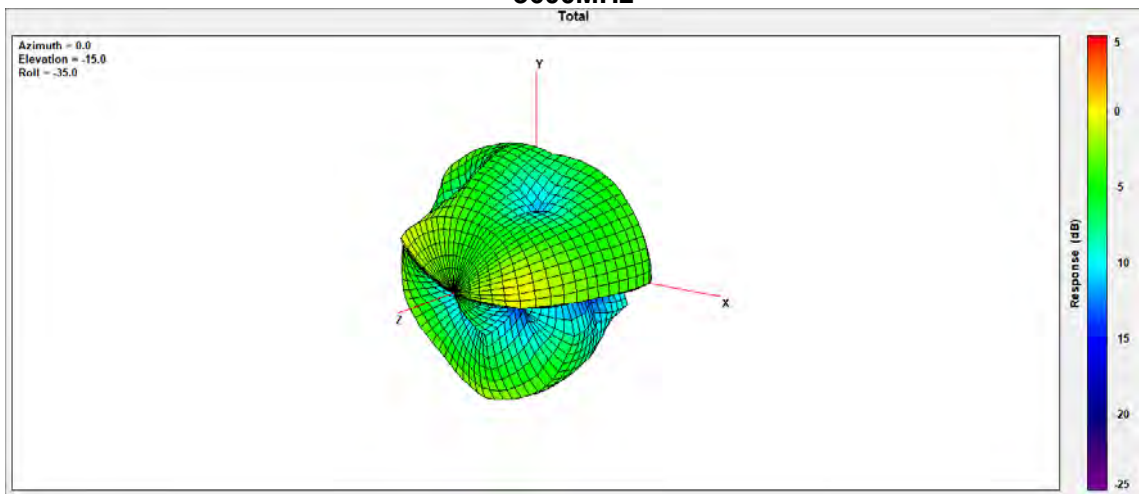


### 3550MHz



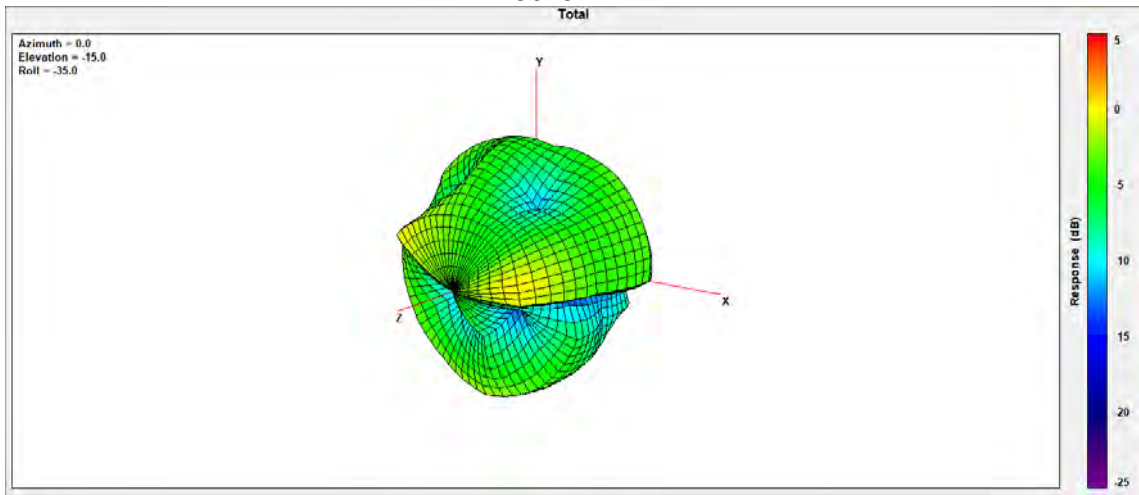
| 3550MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.19    | -1.03    |

### 3600MHz



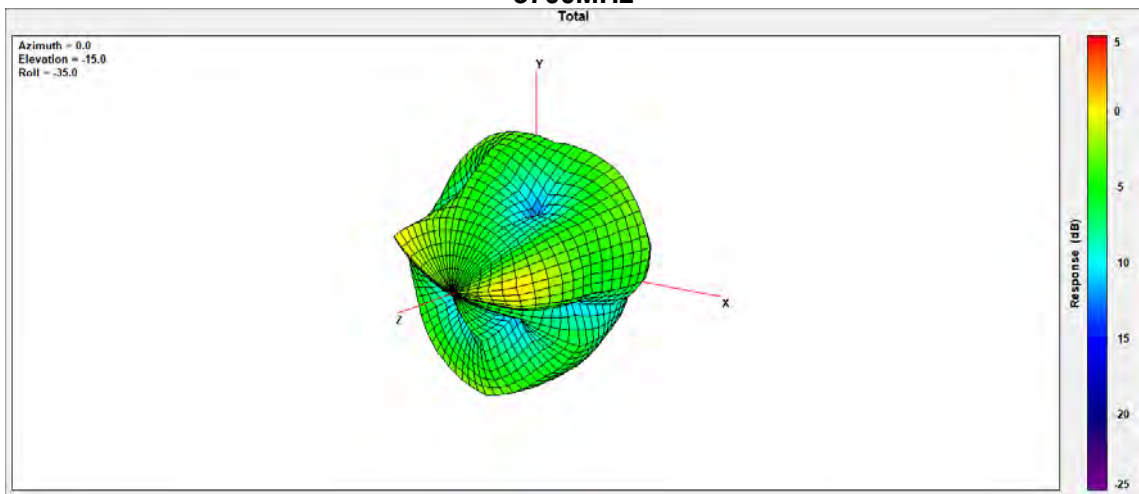
| 3600MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.11    | -1.51    |

### 3625MHz



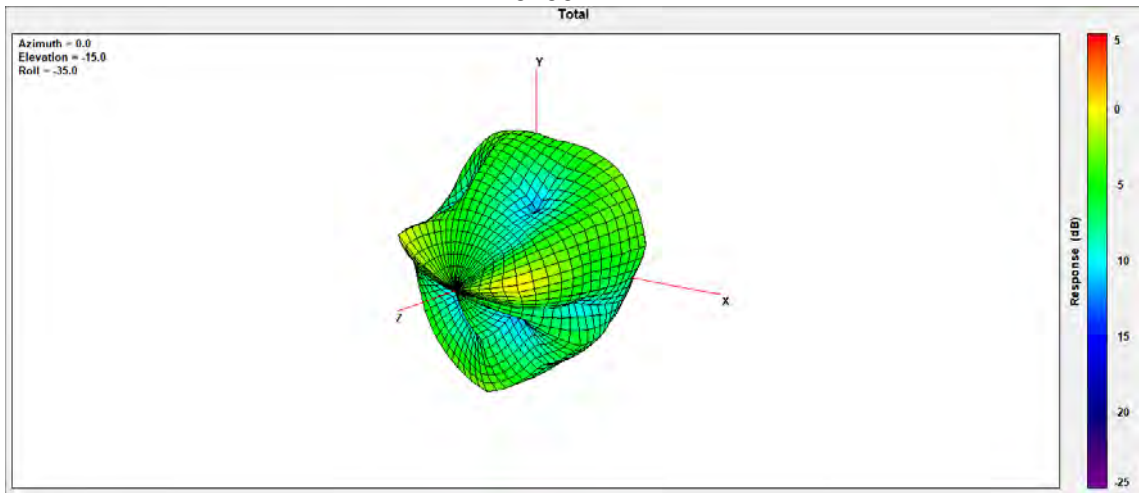
| 3625MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.3     | -2.6     |

### 3700MHz



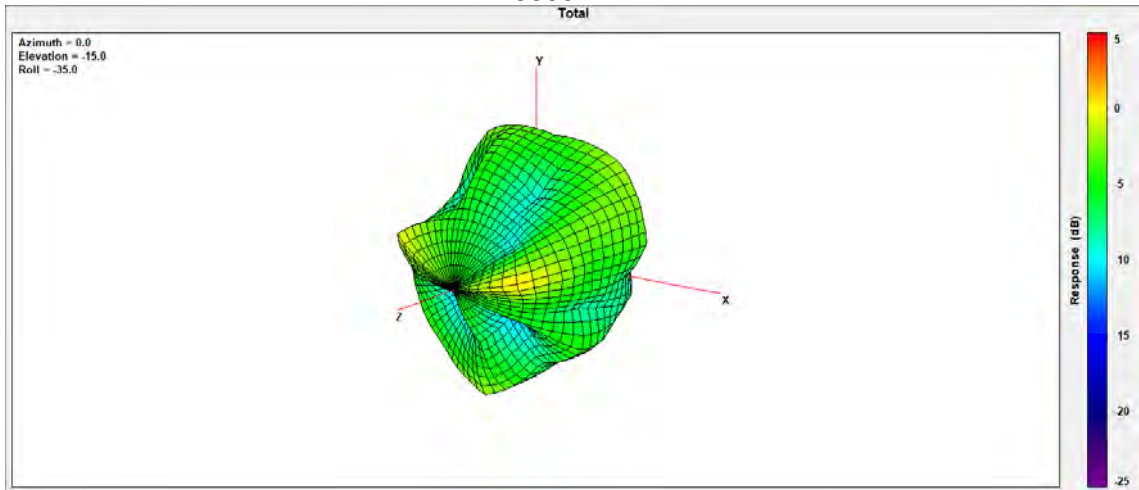
| 3700MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.95    | -3.26    |

### 3750MHz



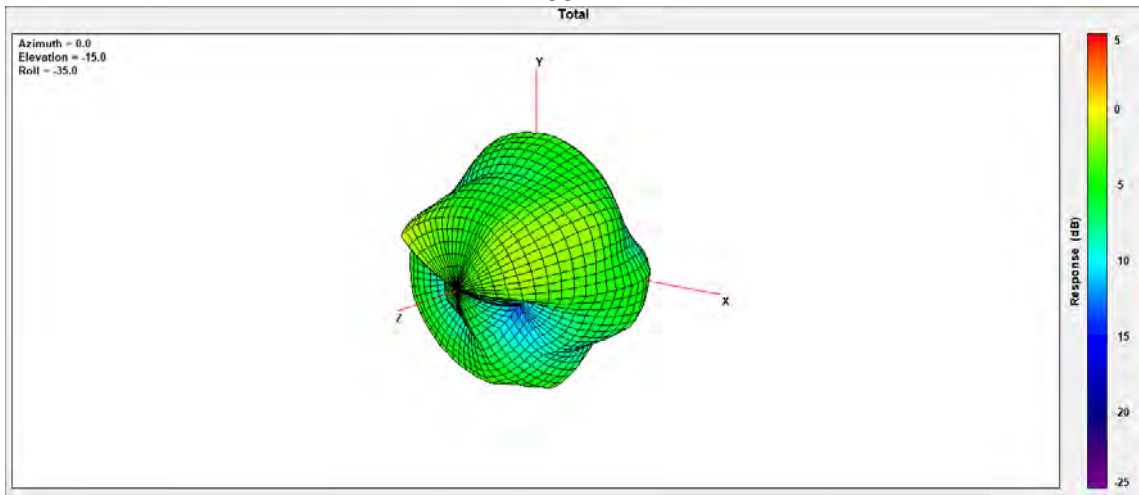
| 3750MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.46    | -2.48    |

### 3800MHz



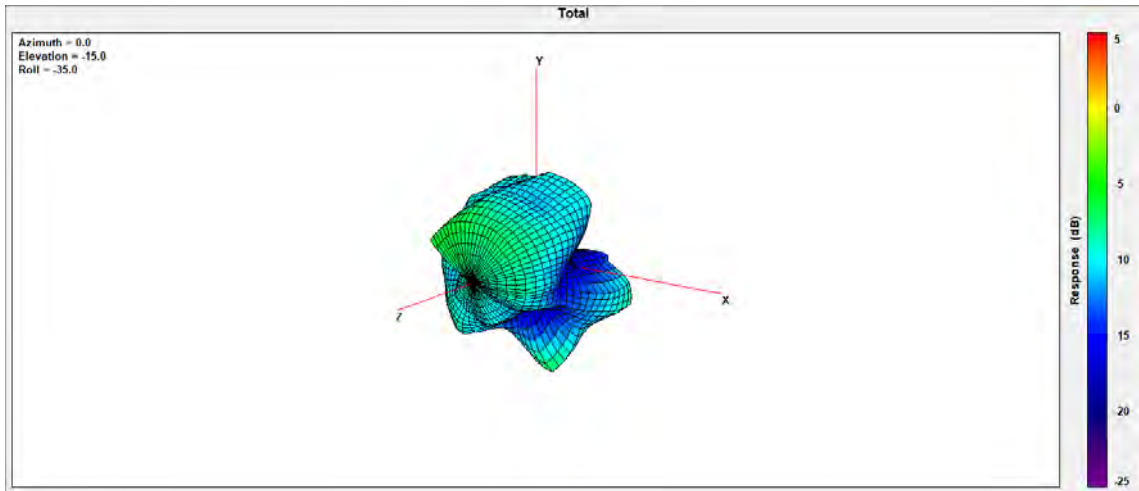
| 3800MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.18    | -1.9     |

### 4200MHz



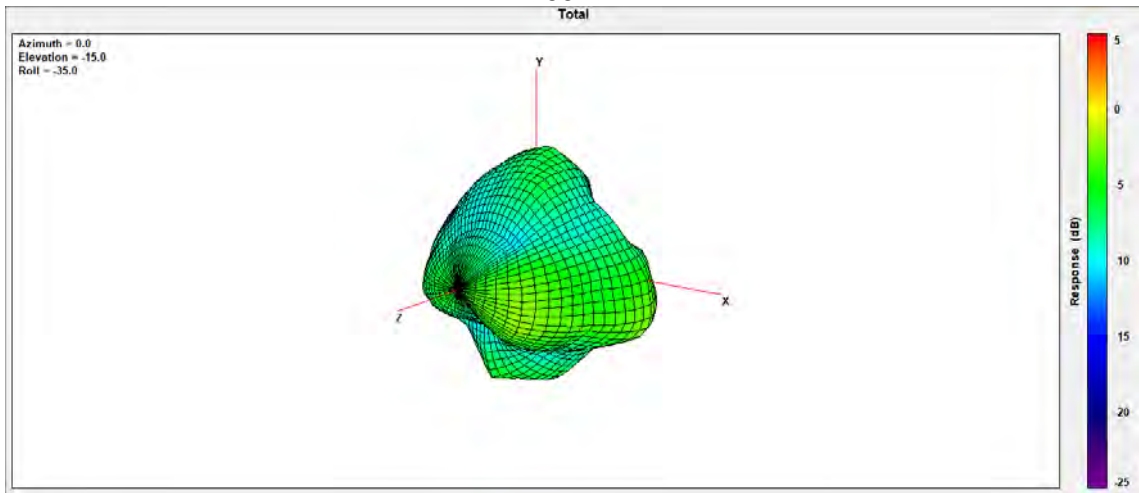
| 4200MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.81    | -1.33    |

### 4400MHz



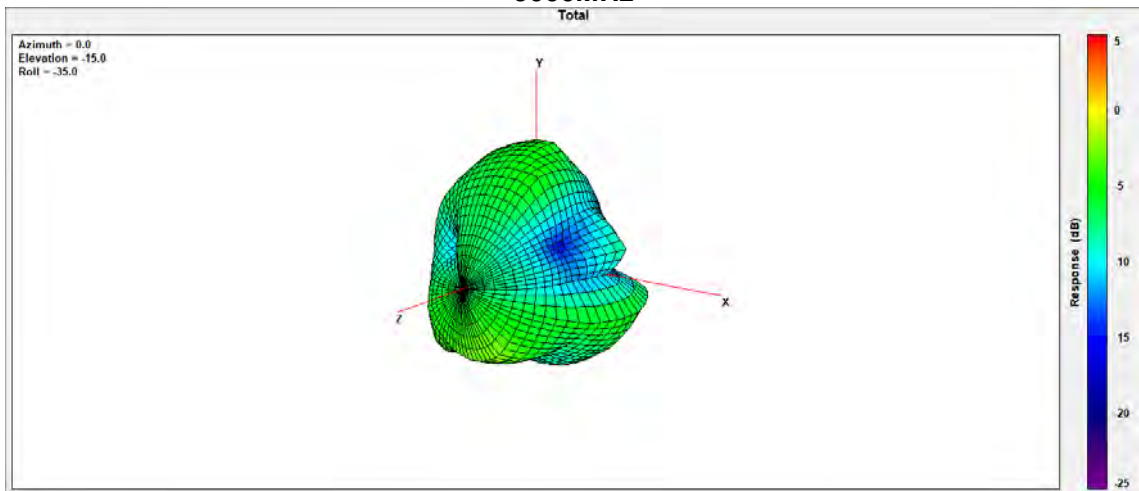
| 4400MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -1.02    | -1.19    |

### 4700MHz



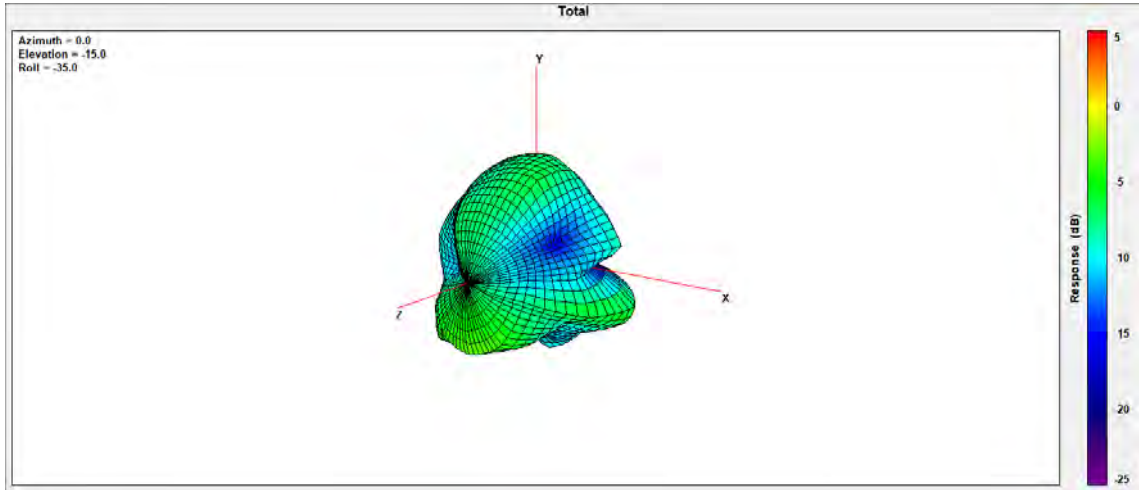
| 4700MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -2.59    | -3.29    |

### 5000MHz



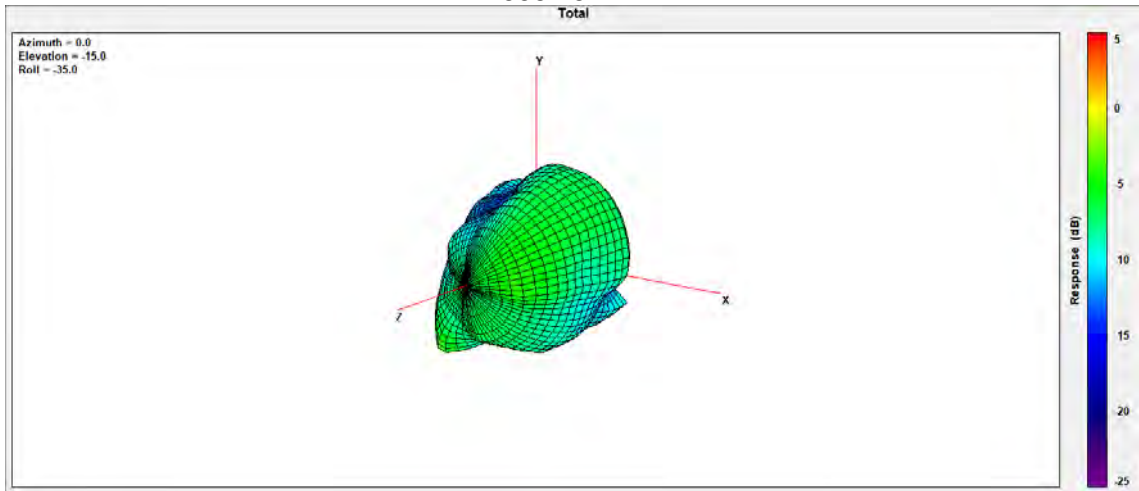
| 5000MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -7.22    | -7.85    |

### 5150MHz



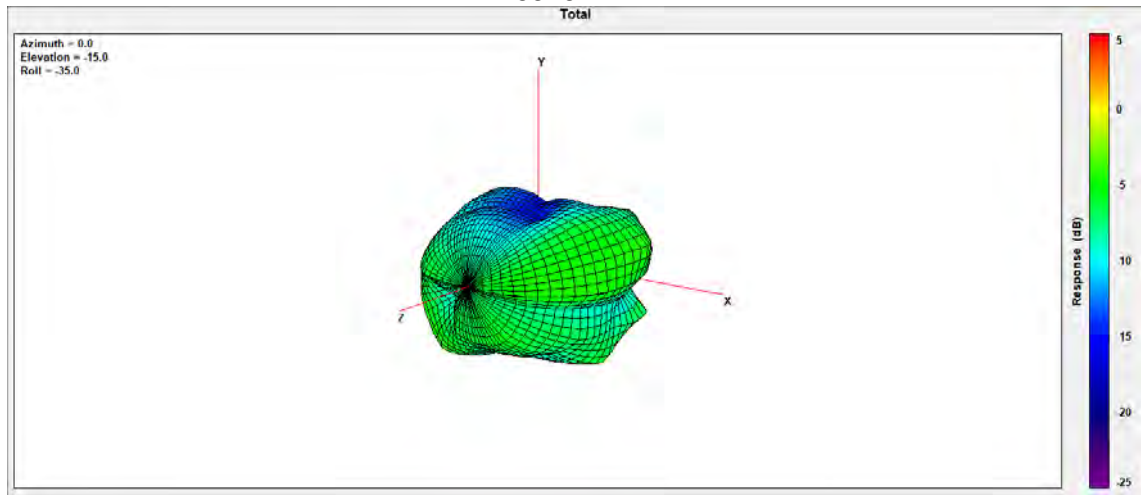
| 5150MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -5.52    | -5.83    |

### 5537.5MHz



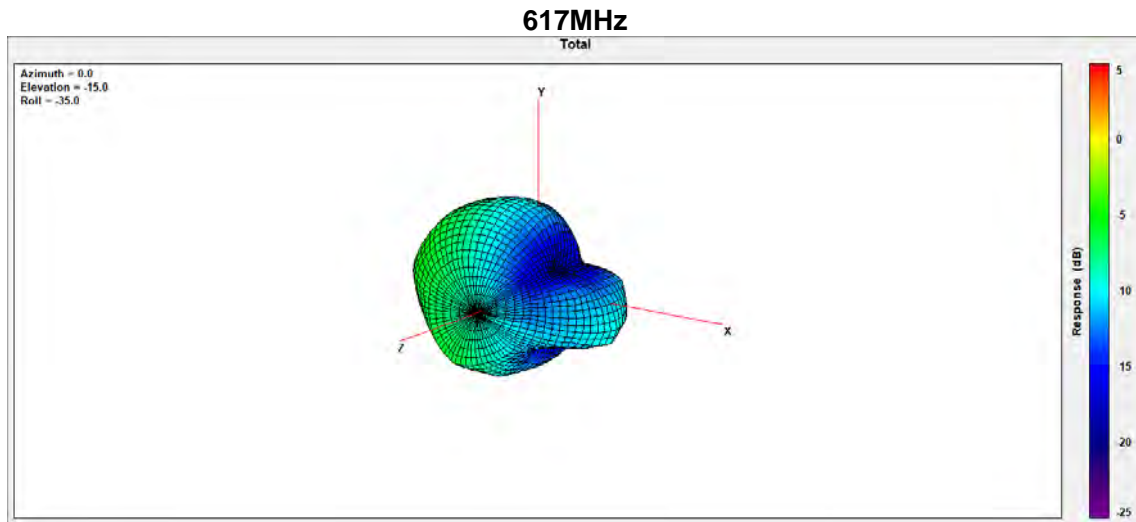
| 5537.5MHz | H (Peak) | V (Peak) |
|-----------|----------|----------|
|           | -4.54    | -4.51    |

# 5925MHz

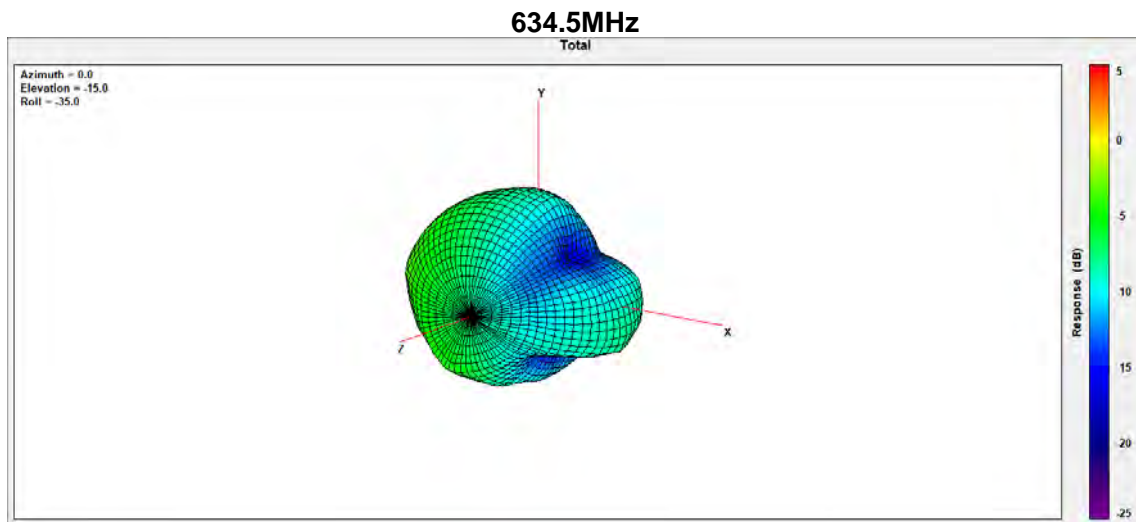


| 5925MHz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -5.47    | -5.64    |

**Tablet mode**  
**WWAN Main Antenna (Tx1/Rx1)**



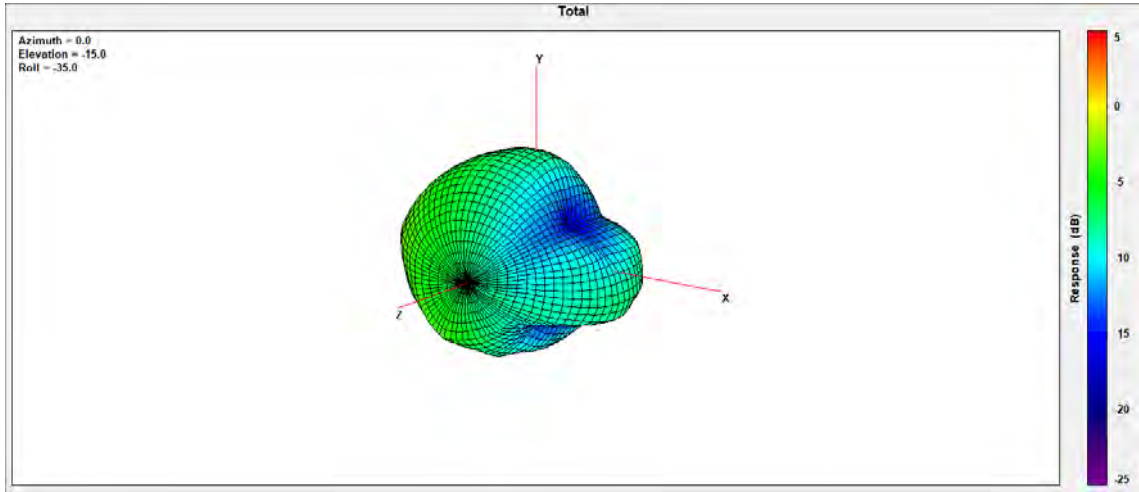
| 617MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -4.00    | -6.86    |



| 634.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -2.63    | -5.35    |

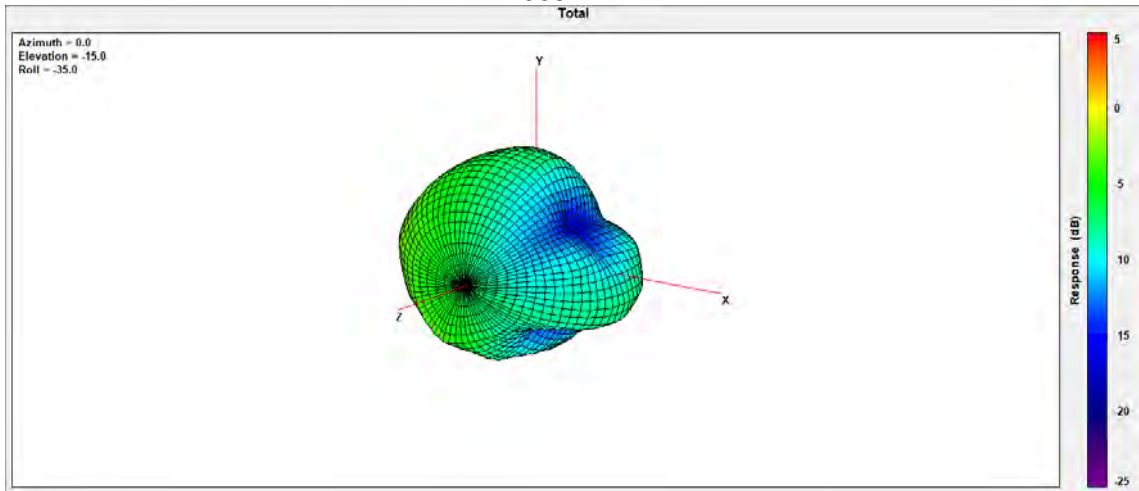


### 652MHz



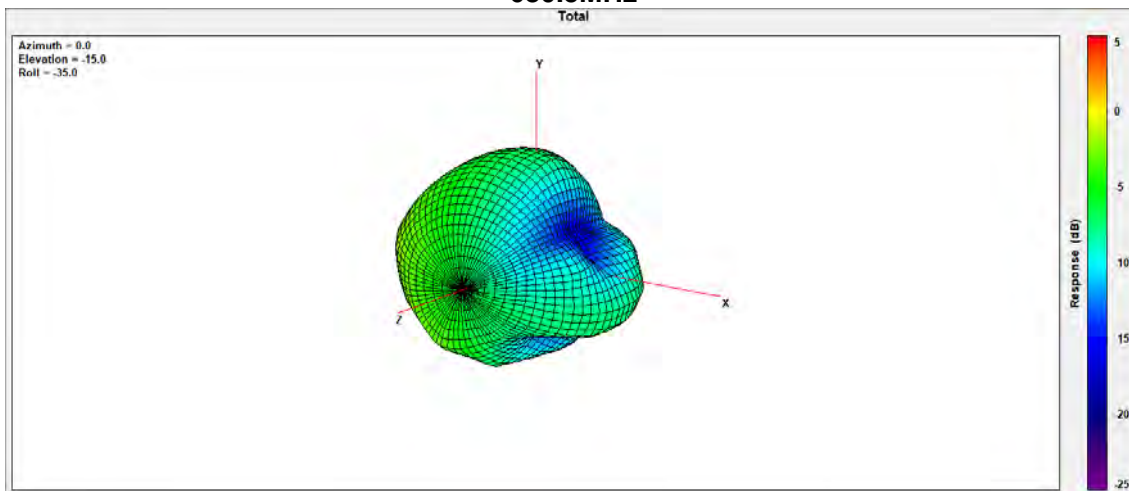
| 652MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.62    | -3.90    |

### 663MHz



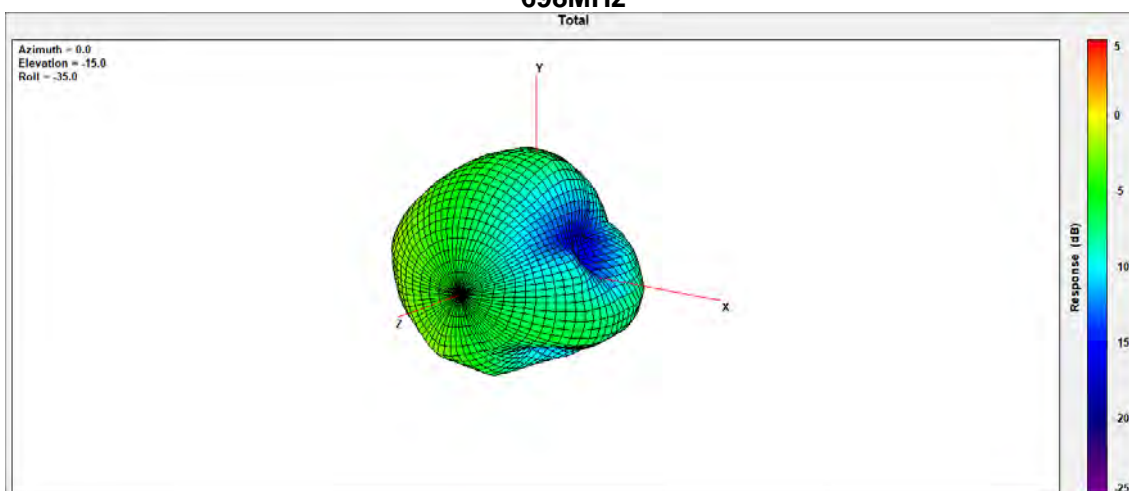
| 663MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.11    | -3.16    |

### 680.5MHz



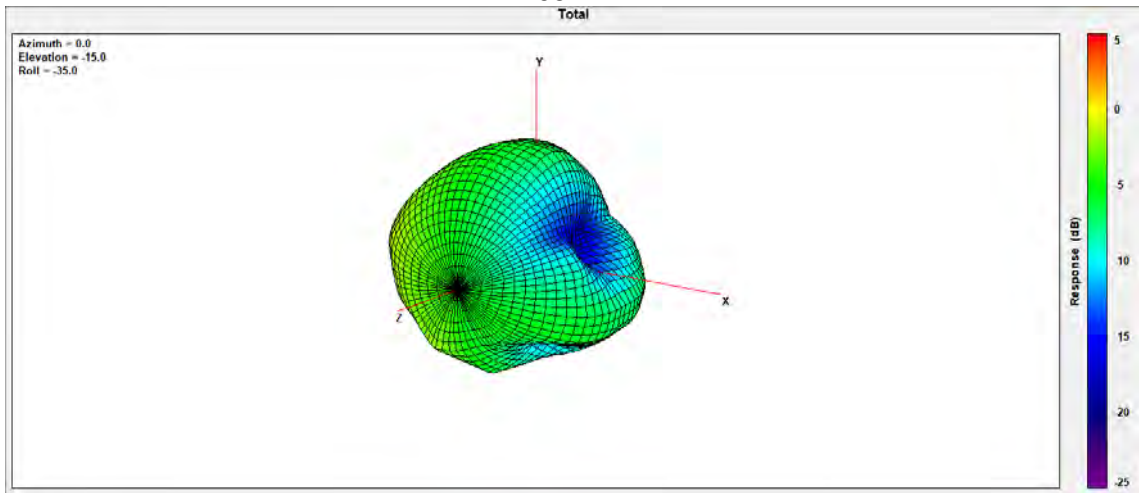
| 680.5Hz | H (Peak) | V (Peak) |
|---------|----------|----------|
|         | -0.81    | -2.37    |

### 698MHz



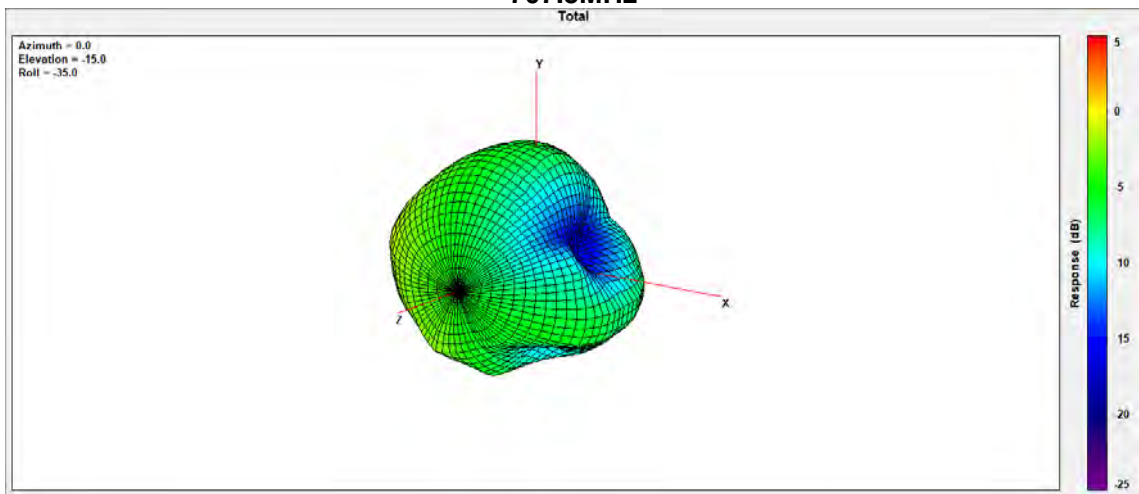
| 698MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.32    | -1.87    |

### 703MHz



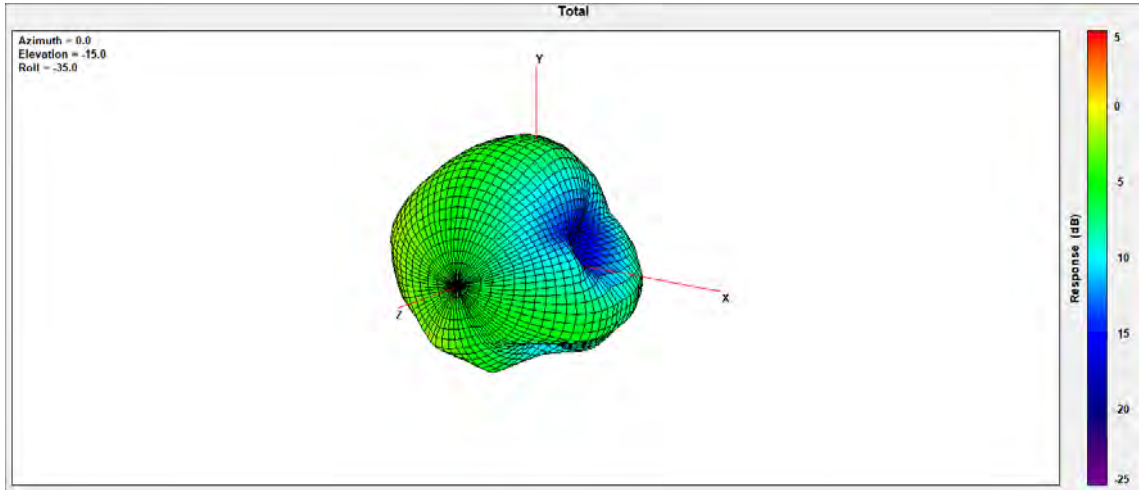
| 703MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.07    | -1.64    |

### 707.5MHz



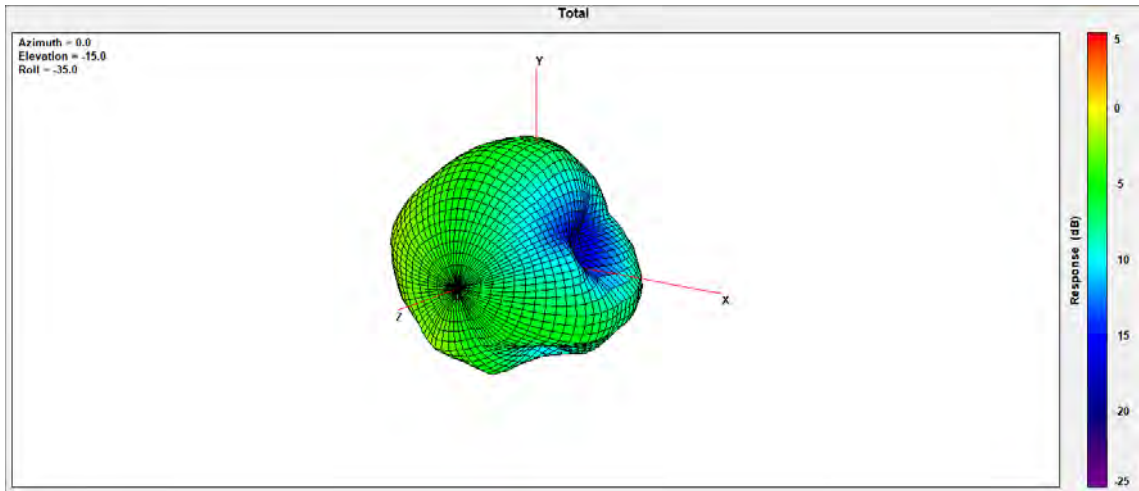
| 707.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.07    | -1.75    |

### 716MHz



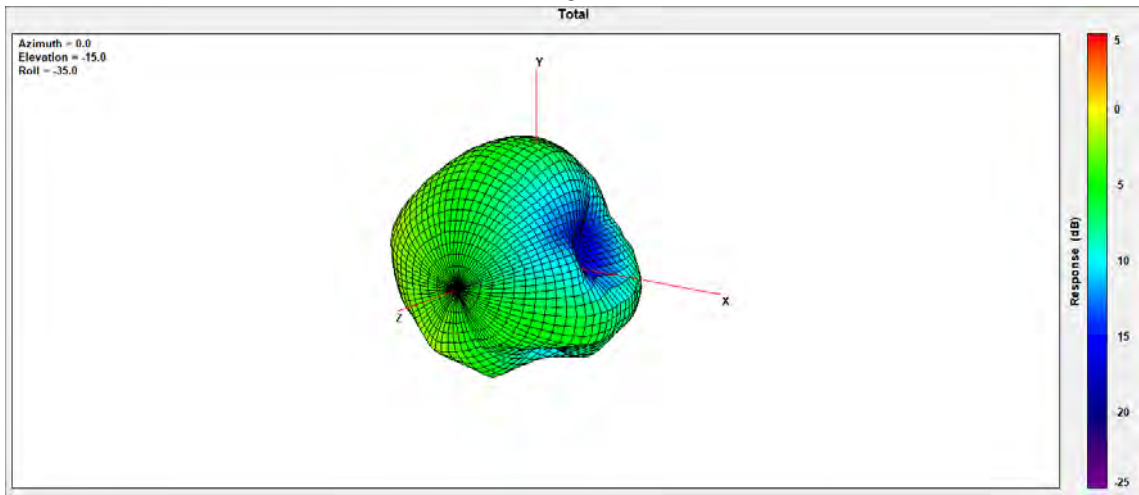
| 716MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.36    | -2.02    |

### 717MHz



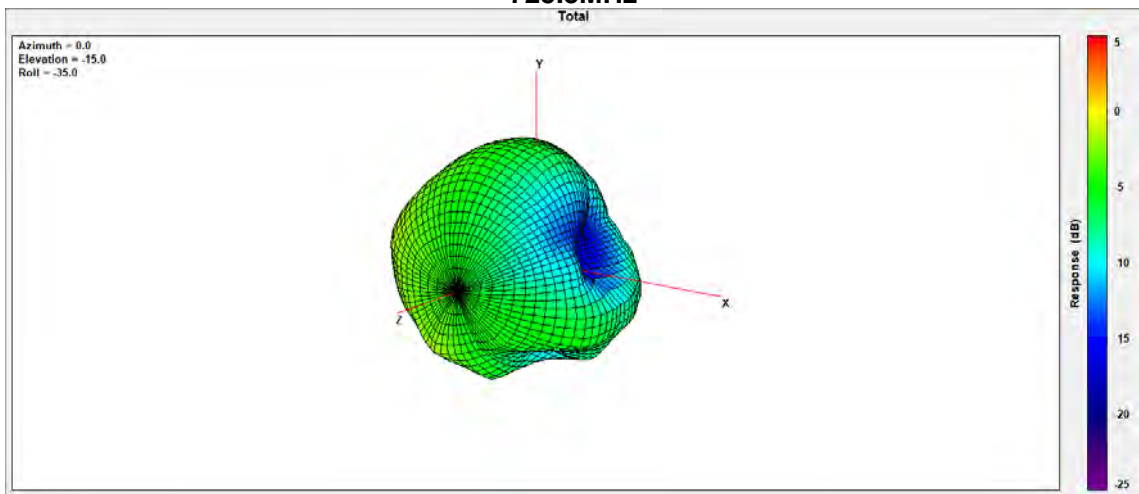
| 717MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.37    | -2.03    |

### 722.5MHz



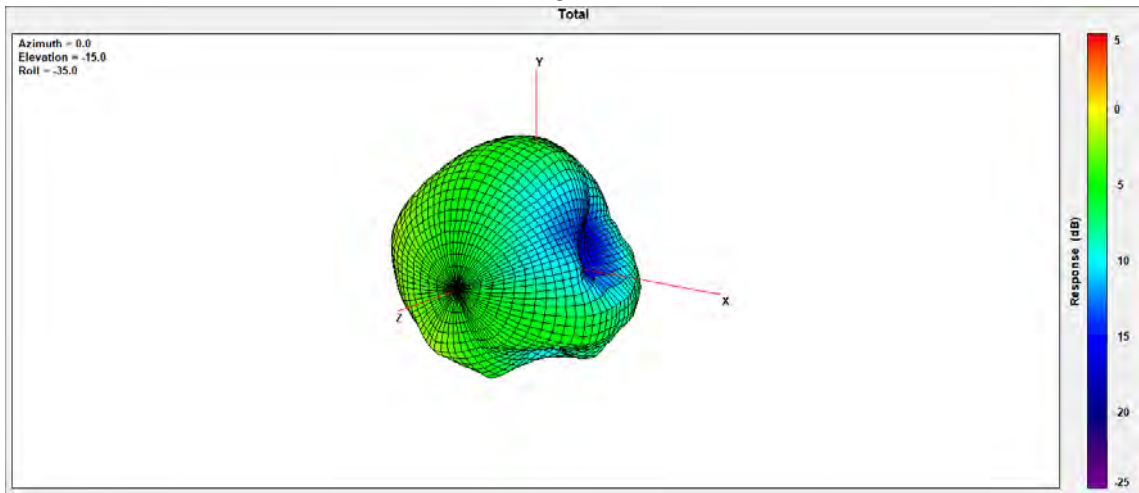
| 722.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.54    | -2.27    |

### 725.5MHz



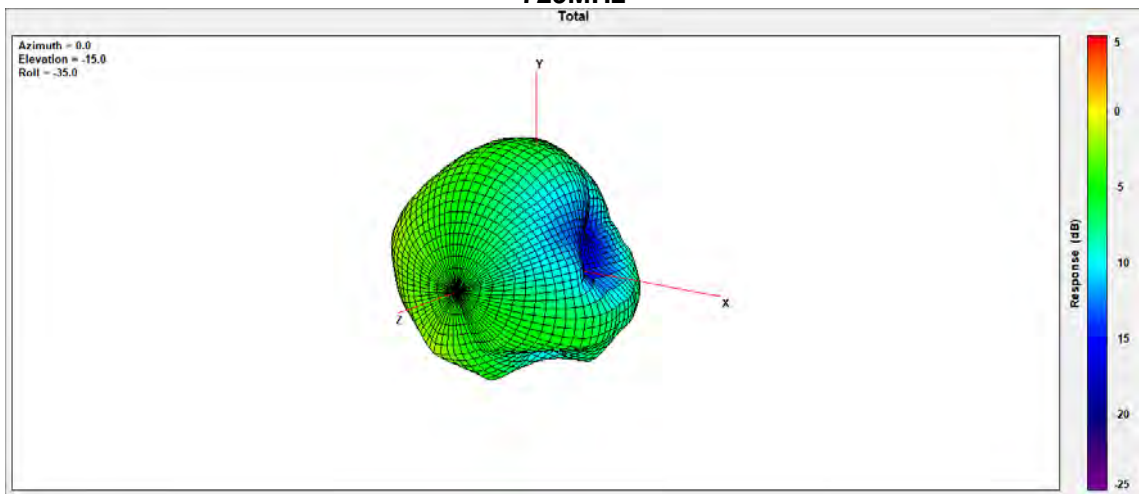
| 725.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -0.72    | -2.44    |

### 728MHz



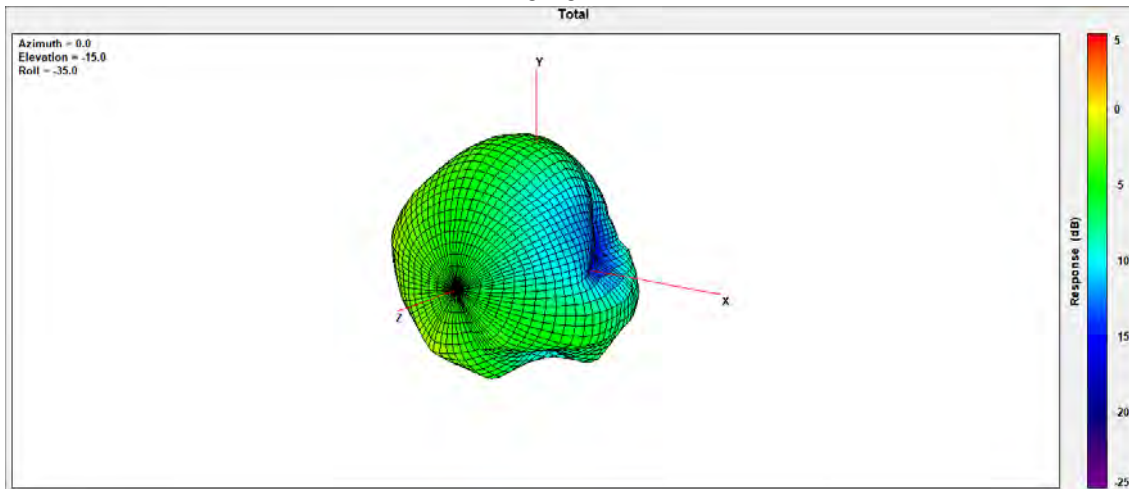
| 728MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -0.96    | -2.64    |

### 729MHz



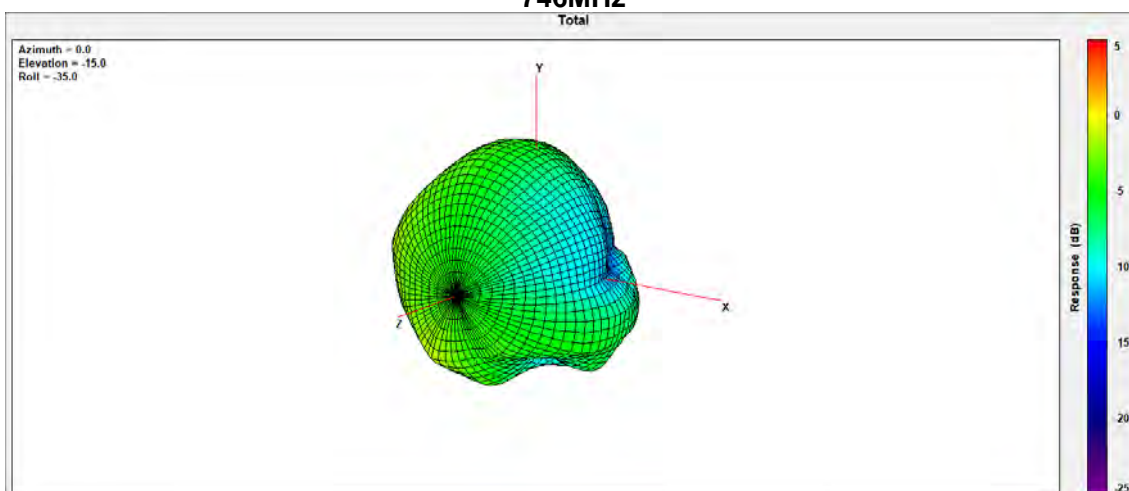
| 729MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.04    | -2.75    |

### 737.5MHz



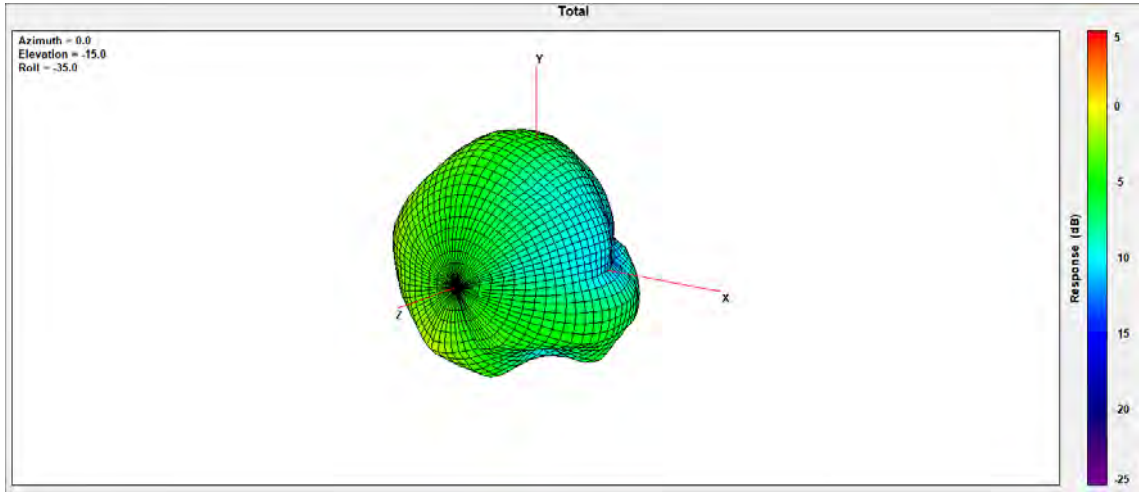
| 737.5MHz | H (Peak) | V (Peak) |
|----------|----------|----------|
|          | -1.65    | -2.78    |

### 746MHz



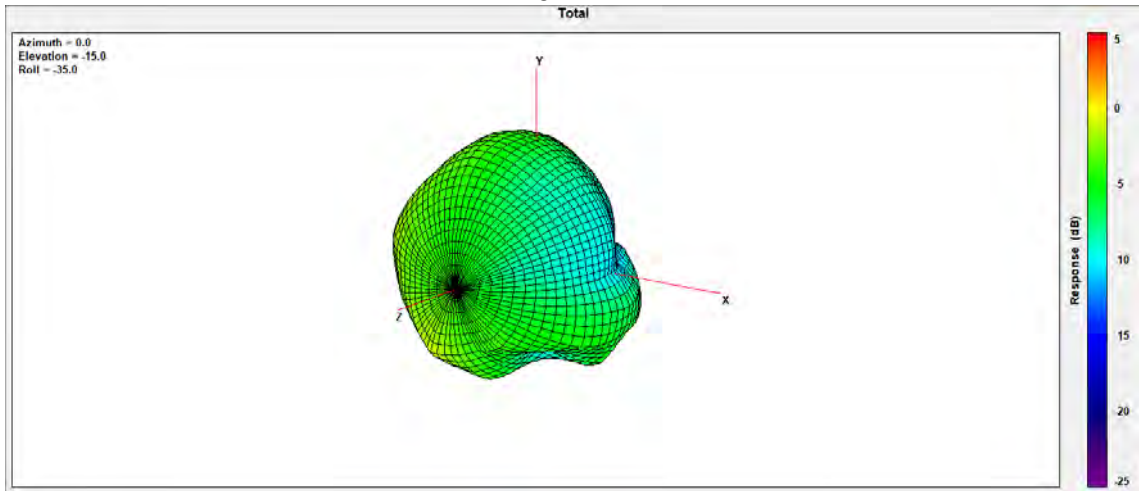
| 746MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.91    | -2.72    |

### 748MHz



| 748MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.89    | -2.70    |

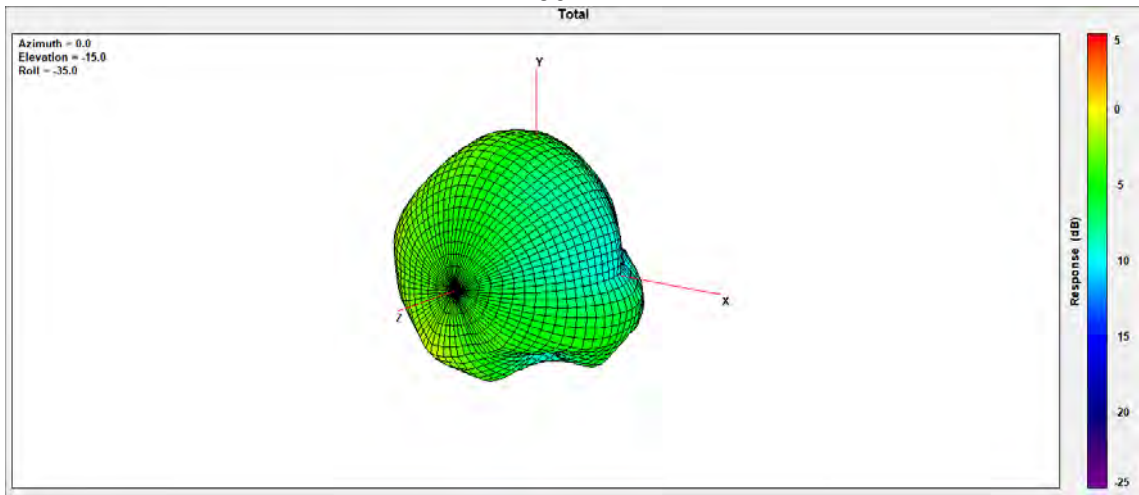
### 751MHz



| 751MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.90    | -2.64    |

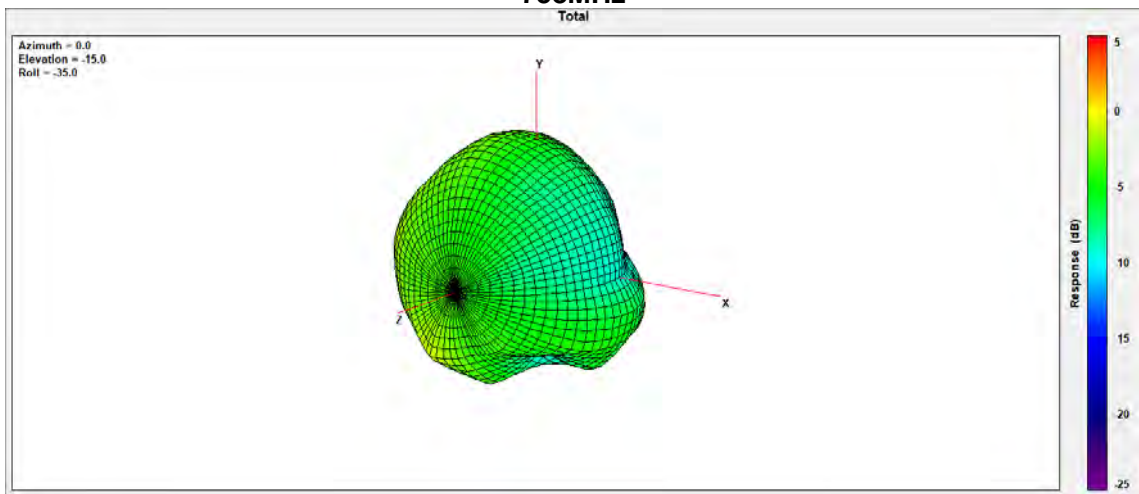


### 756MHz



| 756MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.82    | -2.57    |

### 758MHz



| 758MHz | H (Peak) | V (Peak) |
|--------|----------|----------|
|        | -1.82    | -2.57    |