

# Regulatory Antenna Information

English Language Required

|                                                                                                                                                                     |                           |                        |                        |                            |                        |  |                           |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|------------------------|----------------------------|------------------------|--|---------------------------|--|--|
| Platform information                                                                                                                                                |                           |                        |                        |                            |                        |  |                           |  |  |
| Brand                                                                                                                                                               |                           | ODM                    |                        | ****End product model name |                        |  |                           |  |  |
| SumUp inc                                                                                                                                                           |                           | Wistron Corp.          |                        | R0DT5NB00-CN               |                        |  |                           |  |  |
| ****Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection. |                           |                        |                        |                            |                        |  |                           |  |  |
| Antenna information                                                                                                                                                 |                           |                        |                        |                            |                        |  |                           |  |  |
| Vendor                                                                                                                                                              |                           | Type                   |                        | Antenna Part number (Main) |                        |  | Antenna Part number (Aux) |  |  |
| Molex Interconnect (Shanghai) Co., Ltd                                                                                                                              |                           | Monopole               |                        | 2181620101                 |                        |  | 2181620201                |  |  |
| Address                                                                                                                                                             |                           |                        |                        |                            |                        |  |                           |  |  |
| No.889, Yinglun Road, Waigaoqiao Free Trade Zone, Shanghai, P. R. China                                                                                             |                           |                        |                        |                            |                        |  |                           |  |  |
| Peak gain w/ cable loss (dBi)*                                                                                                                                      |                           |                        |                        |                            |                        |  |                           |  |  |
|                                                                                                                                                                     | 2.4GHz<br>2400-2483.5 MHz | 5.2GHz<br>5150-5250MHz | 5.3GHz<br>5250-5350MHz | 5.6GHz<br>5470-5725MHz     | 5.8GHz<br>5725-5850MHz |  |                           |  |  |
| Main                                                                                                                                                                | 3.15                      | 2.18                   | 2.40                   | 1.96                       | 1.51                   |  |                           |  |  |
| Aux                                                                                                                                                                 | 3.09                      | 3.55                   | 3.12                   | 1.33                       | 2.12                   |  |                           |  |  |

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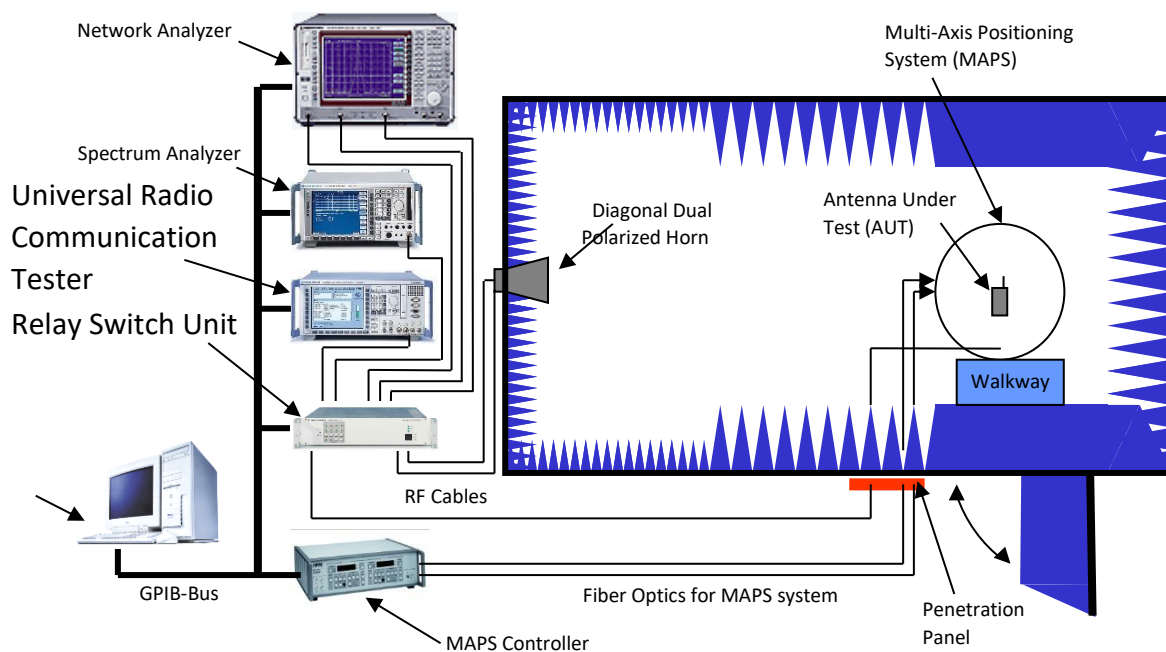
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## 1. Applicable test methods

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

## 2. Test & System Description

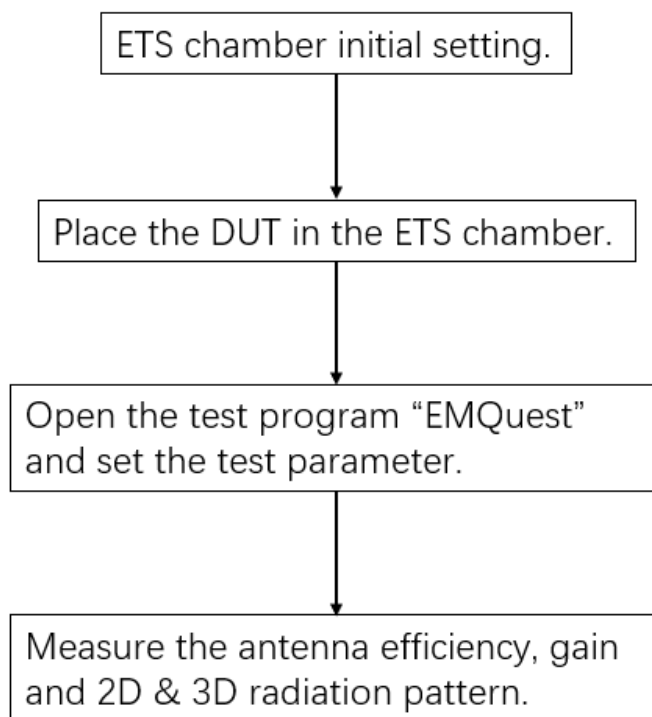
### a. Test setup



## b. Equipment list

| Equipment               | Manufacturer  | Model No.     | Serial No. | Cal. Date | Cal. Due Date |
|-------------------------|---------------|---------------|------------|-----------|---------------|
| Network Analyzer        | Agilent       | E5071C        | MY46101560 | 2022/1/30 | 2023/1/30     |
| Spectrum Analyzer       | ROHDE&SCHWARZ | FSP           | 100878     | 2022/4/7  | 2023/4/7      |
| Broad-Band Horn Antenna | ETS-LINDGREN  | Model 3102    | SN00066947 | 2022/8/25 | 2023/8/25     |
| Broad-Band Horn Antenna | ETS-LINDGREN  | Model 3164-03 | SN00064049 | 2022/8/25 | 2023/8/25     |
| Turn Table              | ETS-LINDGREN  | Model 2090    | SN00105913 | N/A       | N/A           |
| Controller              | ROHDE&SCHWARZ | TS-RSP        | 100331     | N/A       | N/A           |
| Chamber                 | ETS-Lindgren  | AMS-8500      | 4063       | 2022/8/25 | 2023/8/25     |

## c. Test setup



## d. Chamber information



- **ETS-Lindgren AMS-8500 Antenna Measurement System**
- **Frequency Range: 400MHz~6GHz**
- **Overall Dimensions(L x W x H):**  
7.5 m x 3.9 m x 3.9 m
- **Software: EMQuest**
- **Calibration Date: 2022/8/25**

e. Test information

|               |            |
|---------------|------------|
| Tester        | Liu Hai    |
| Test Date     | 2022/11/25 |
| Test Software | EMQuest    |

# Antenna Information

## Section 1. Antenna Assembly Specifications

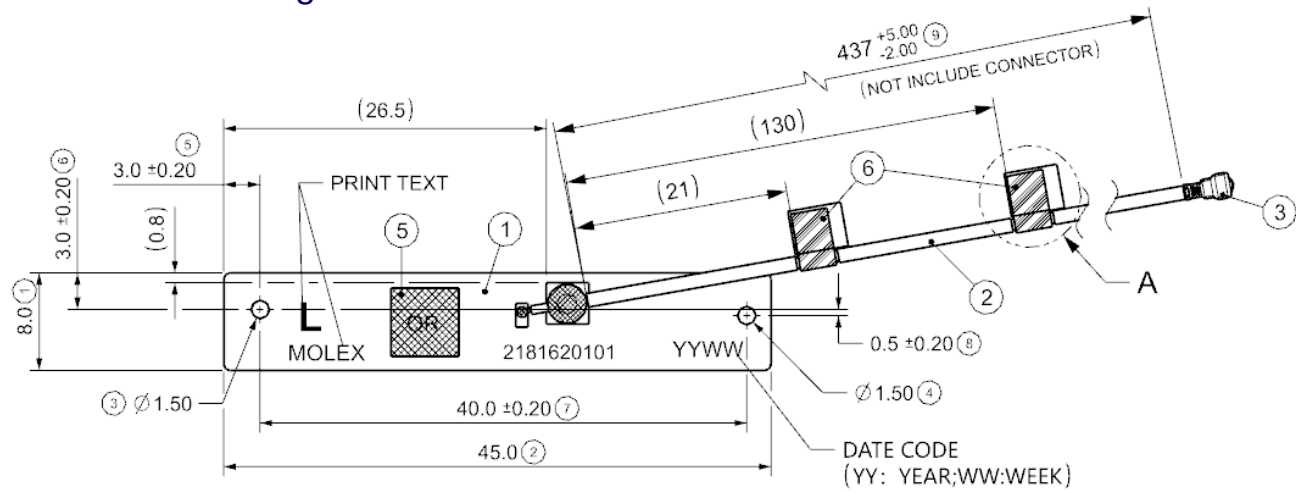
| 1A                             | 1B                                     | 1C           | 1D                                         |                | 1E                              | 1F                             | 1G       | 1H              |
|--------------------------------|----------------------------------------|--------------|--------------------------------------------|----------------|---------------------------------|--------------------------------|----------|-----------------|
| Antenna Part Number            | Manufacturer                           | Antenna Type | Cable Assembly Part Number and Information | Freq Range MHz | * Peak Gain W/ Cable loss (dBi) | Peak Gain w/o Cable Loss (dBi) | Max VSWR | Cable Loss (dB) |
| (P/N: 2181620101) Main Antenna | Molex Interconnect (Shanghai) Co., Ltd | Monopole     | NA                                         | 2400-2483.5    | 3.15                            | 4.33                           | 2.1      | 1.18            |
|                                |                                        |              |                                            | 5150-5250      | 2.18                            | 3.97                           | 2.2      | 1.79            |
|                                |                                        |              |                                            | 5250-5350      | 2.4                             | 4.23                           | 1.62     | 1.83            |
|                                |                                        |              |                                            | 5470-5725      | 1.96                            | 3.85                           | 1.65     | 1.89            |
|                                |                                        |              |                                            | 5725-5850      | 1.51                            | 3.43                           | 1.97     | 1.92            |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
| (P/N: 2181620201) Aux Antenna  | Molex Interconnect (Shanghai) Co., Ltd | Monopole     | NA                                         | 2400-2483.5    | 3.09                            | 4.2                            | 1.74     | 1.11            |
|                                |                                        |              |                                            | 5150-5250      | 3.55                            | 5.24                           | 1.81     | 1.69            |
|                                |                                        |              |                                            | 5250-5350      | 3.12                            | 4.85                           | 1.88     | 1.73            |
|                                |                                        |              |                                            | 5470-5725      | 1.33                            | 3.1                            | 2.39     | 1.77            |
|                                |                                        |              |                                            | 5725-5850      | 2.12                            | 3.93                           | 2.31     | 1.81            |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |
|                                |                                        |              |                                            |                |                                 |                                |          |                 |

- 3D Antenna Peak Gain required being test in system basis.

Section 2. Dimensioned Photos and Drawings of Antennas

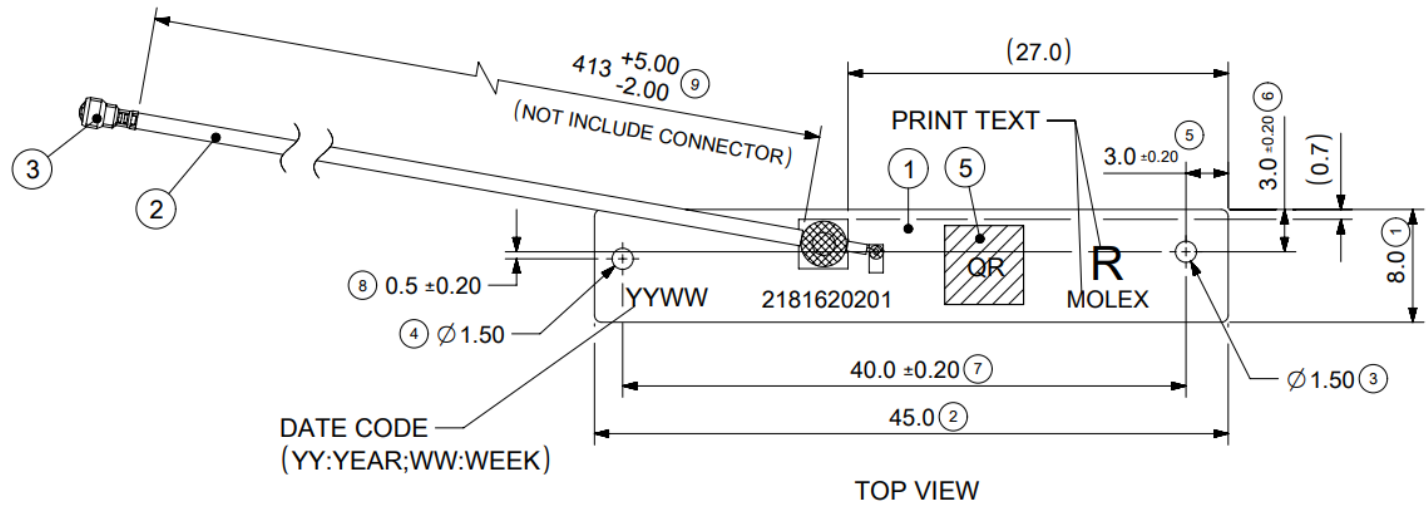
Include the dimensioned photo and drawing of Main antenna here.

Main Antenna Drawing:



Include the dimensioned photo and drawing of Aux antenna here.

Aux Antenna Drawing:

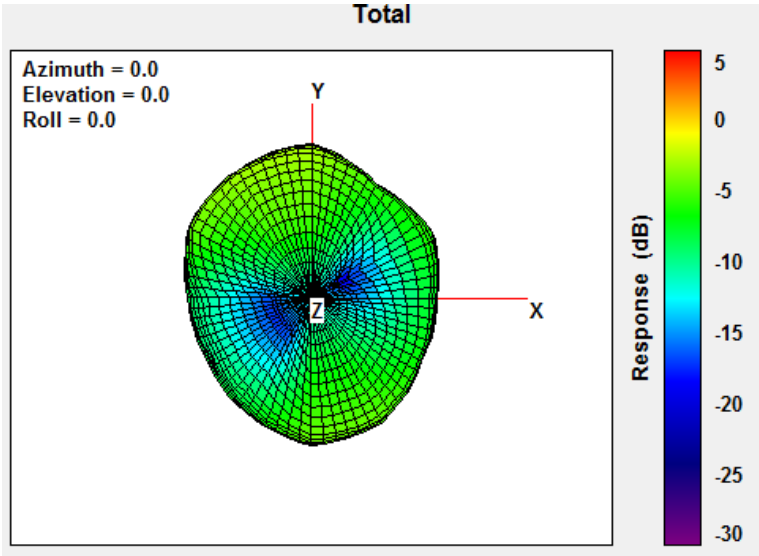


Section 3. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

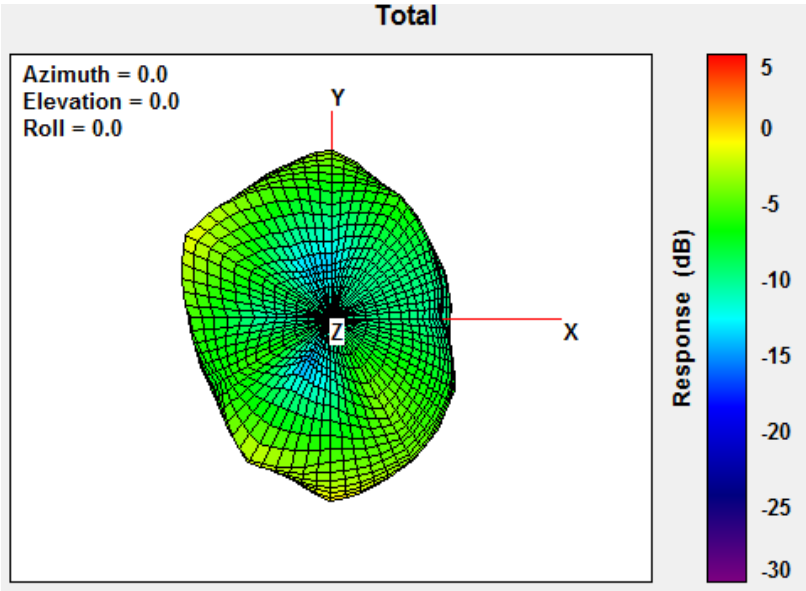
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 2400-2483.5     | 3.15                          |



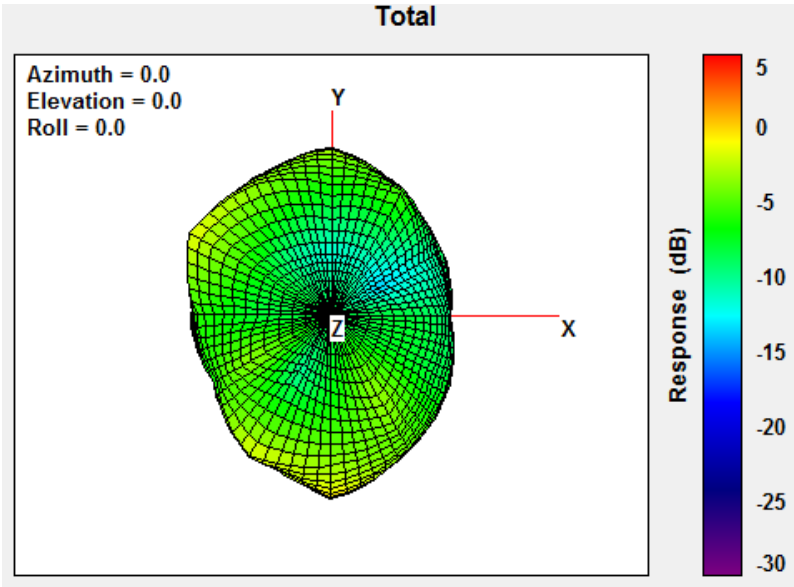
Max Antenna 3D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5150-5250       | 2.18                          |



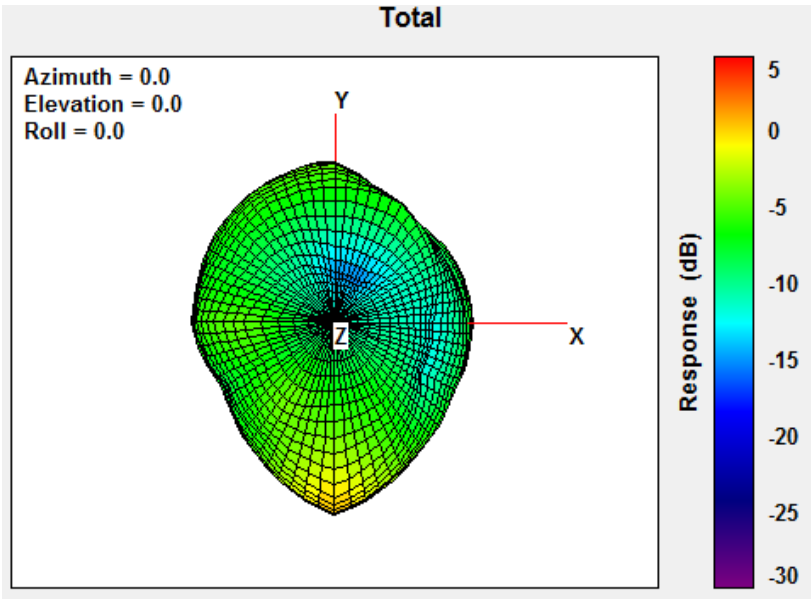
Max Antenna 3D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5250-5350       | 2.40                          |



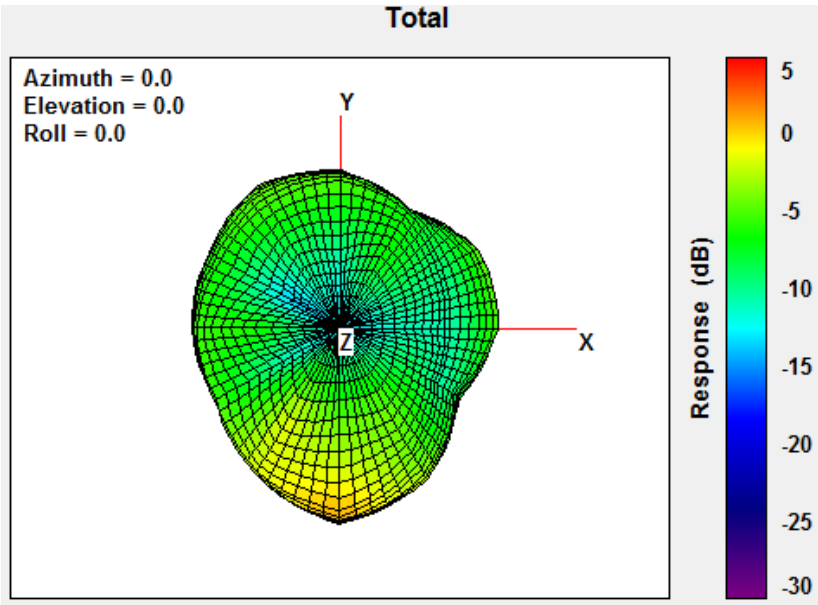
Max Antenna 3D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5470-5725       | 1.96                          |



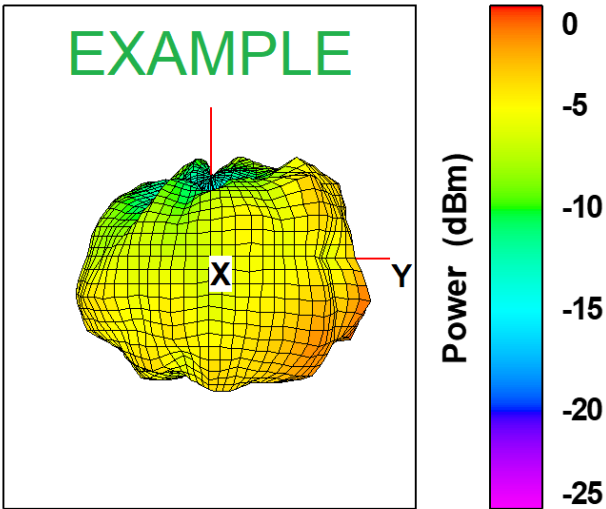
Max Antenna 3D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5725-5850       | 1.51                          |



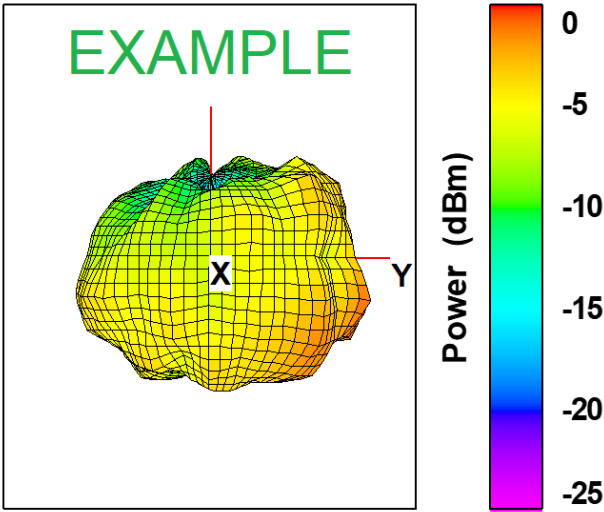
Max Antenna 3D Radiation Pattern 5925-6425 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5925-6425       | X.XX                          |



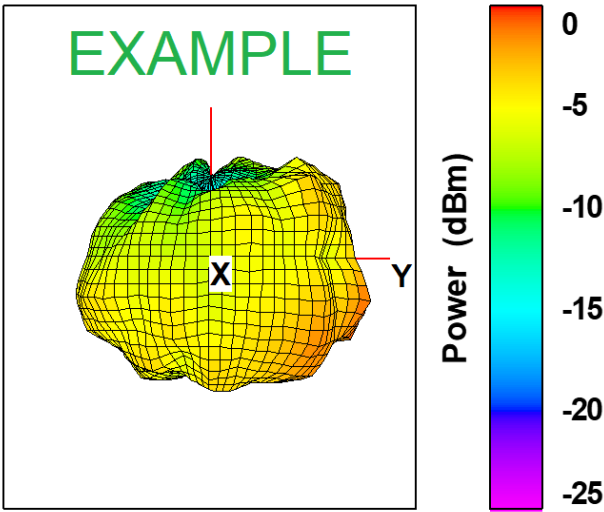
Max Antenna 3D Radiation Pattern 6425-6525 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6425-6525       | X.XX                          |



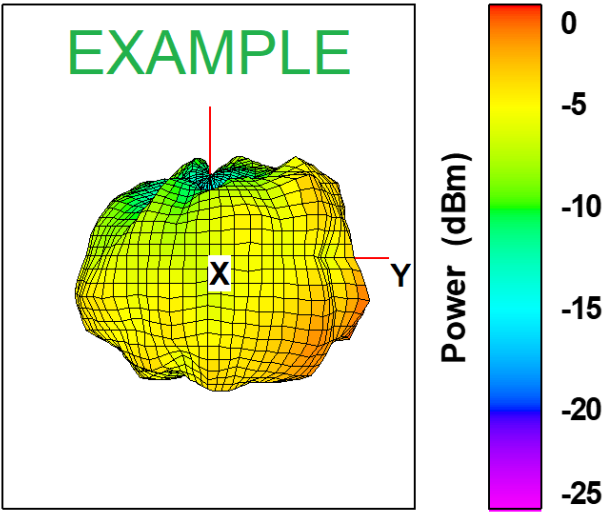
Max Antenna 3D Radiation Pattern 6525-6875 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6525-6875       | X.XX                          |



Max Antenna 3D Radiation Pattern 6875-7125 MHz

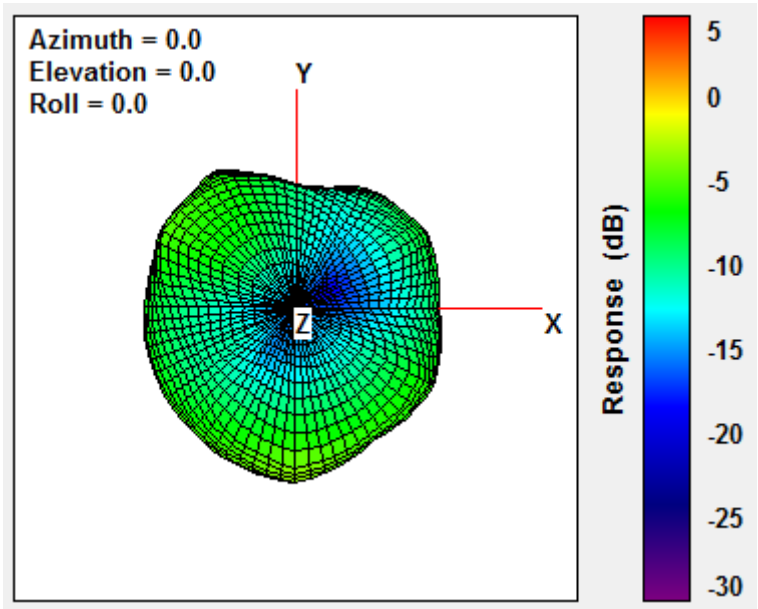
| Frequency<br>(MHz) | Peak Gain w/ Cable Loss<br>(dBi) |
|--------------------|----------------------------------|
| 6875-7125          | X.XX                             |



Auxiliary Antenna

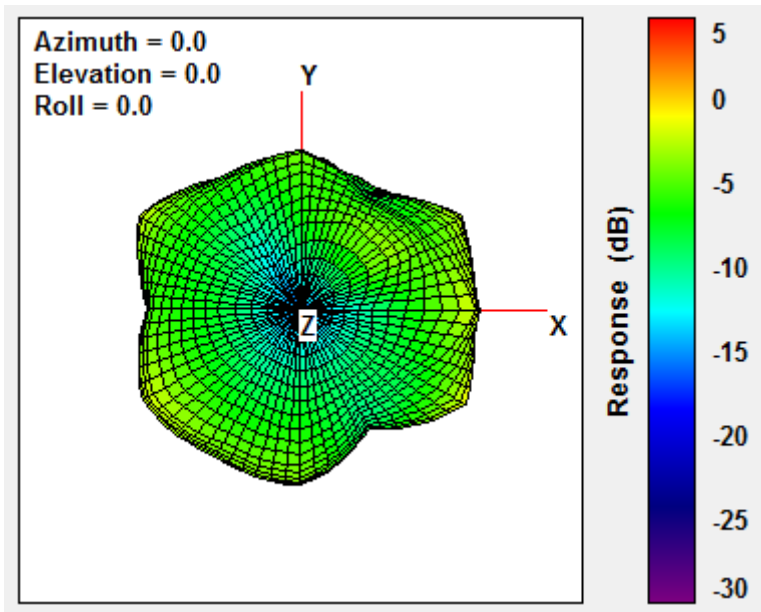
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 2400-2483.5     | 3.09                          |



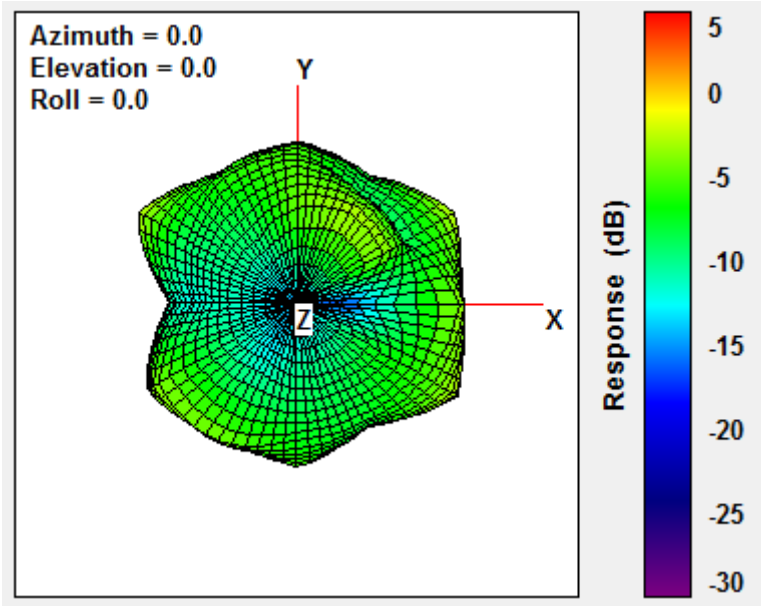
Max Antenna 3D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5150-5250       | 3.55                          |



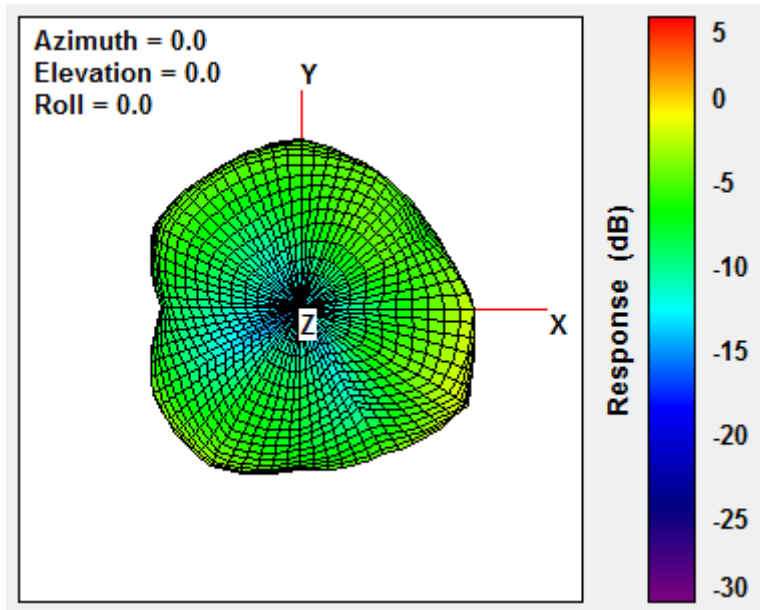
Max Antenna 3D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5250-5350       | 3.12                          |



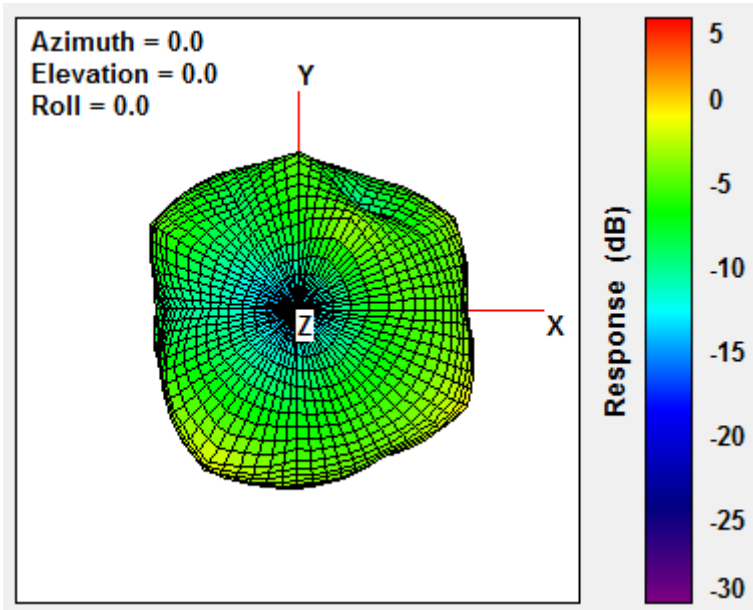
Max Antenna 3D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5470-5725       | 1.33                          |



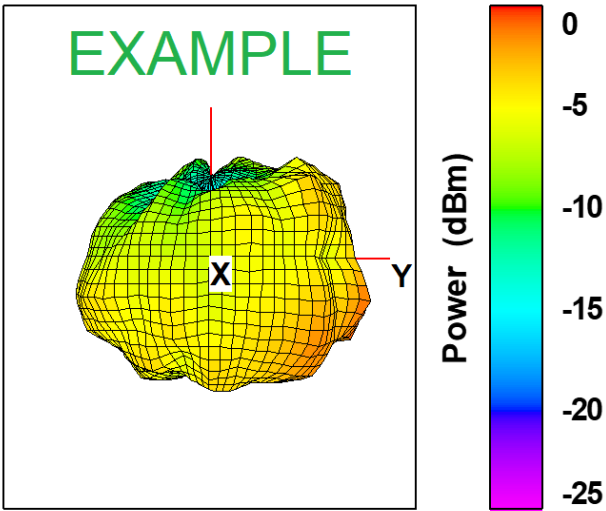
Max Antenna 3D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5725-5850       | 2.12                          |



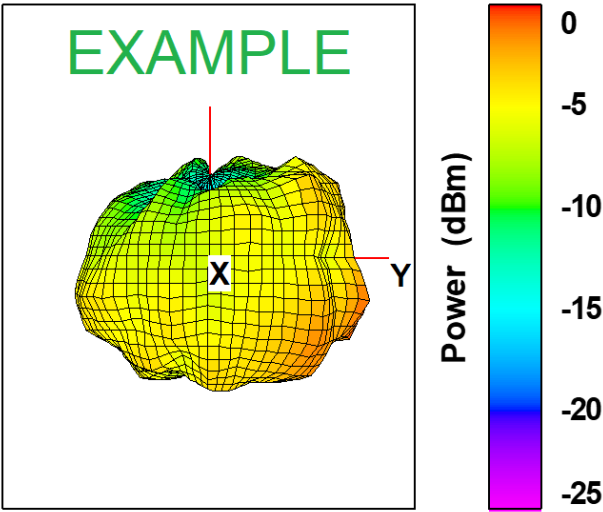
Max Antenna 3D Radiation Pattern 5925-6425 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5925-6425       | X.XX                          |



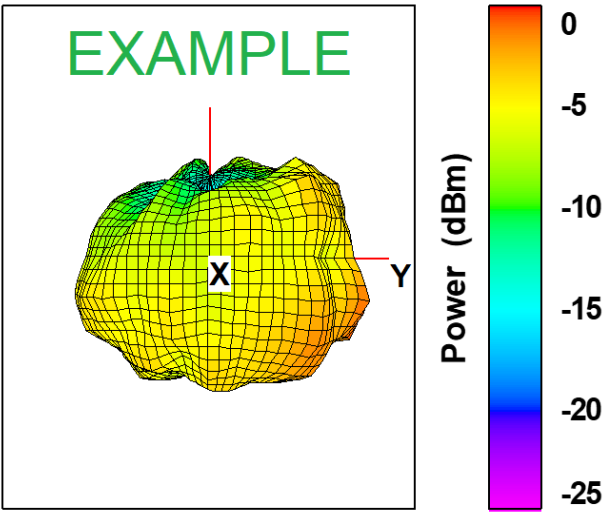
Max Antenna 3D Radiation Pattern 6425-6525 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6425-6525       | X.XX                          |



Max Antenna 3D Radiation Pattern 6525-6875 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6525-6875       | X.XX                          |



Max Antenna 3D Radiation Pattern 6875-7125 MHz

| Frequency<br>(MHz) | Peak Gain w/ Cable Loss<br>(dBi) |
|--------------------|----------------------------------|
| 6875-7125          | X.XX                             |

