

## Regulatory WLAN Antenna Information

| Peak Gain (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 |
| <b>Main<br/>(Ant 6)</b> | 1.64                      | 4.64                   | 4.87                   | 5.36                   | 5.15                   |
| <b>Aux<br/>(Ant 7)</b>  | 2.83                      | 4.69                   | 4.69                   | 5.57                   | 5.65                   |

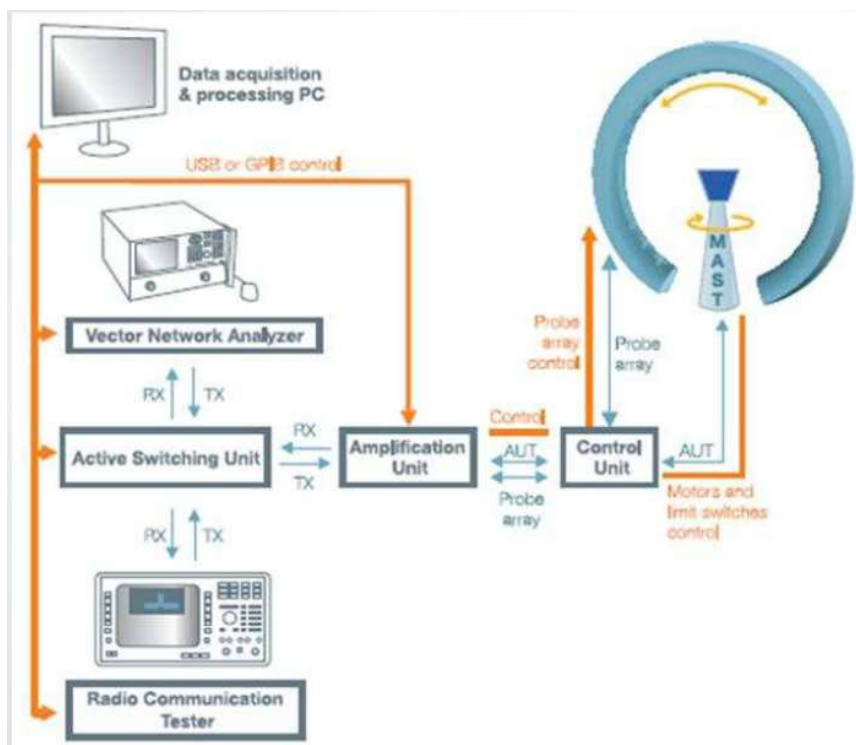
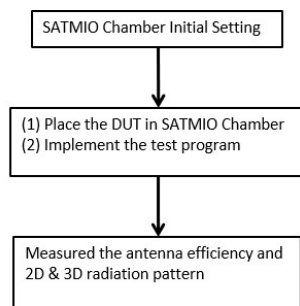
## 1. Applicable test methods

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

## 2. Test & System Description

### a. Test setup

Diagram



### Equipment for Antenna Passive Test Coverage

- Satimo Chamber SG24
- Agilent VNA E5071C
- Antenna Passive Measurement up to 6GHz

b. Equipment list

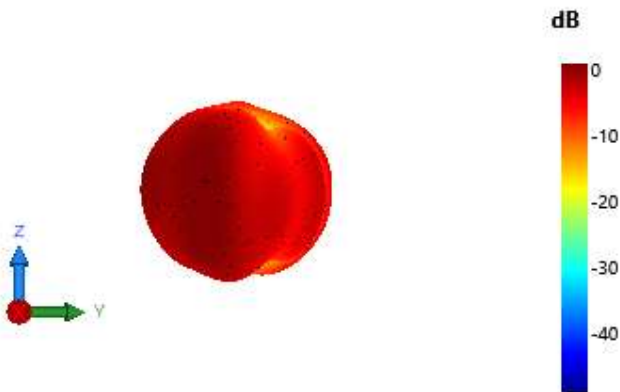
|   | Equipment        |              |         |       |
|---|------------------|--------------|---------|-------|
|   | Description      | Manufacturer | Model # | Notes |
| 1 | SATMIO Chamber   |              | SG24    |       |
| 2 | Network Analyzer | Agilent      | E5071C  |       |

Radiation characteristics of antenna loaded in Host Platform

**Main Antenna (Antenna 6)**

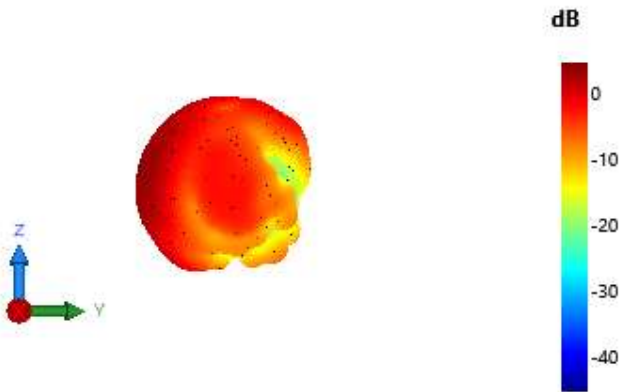
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 2400-2483.5     | 1.64                          |



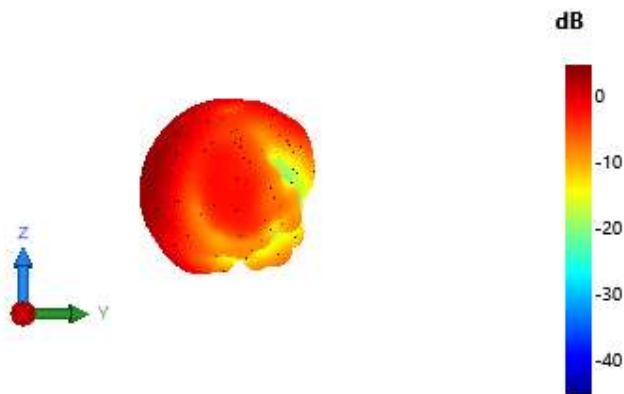
Max Antenna 3D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5150-5250       | 4.64                          |



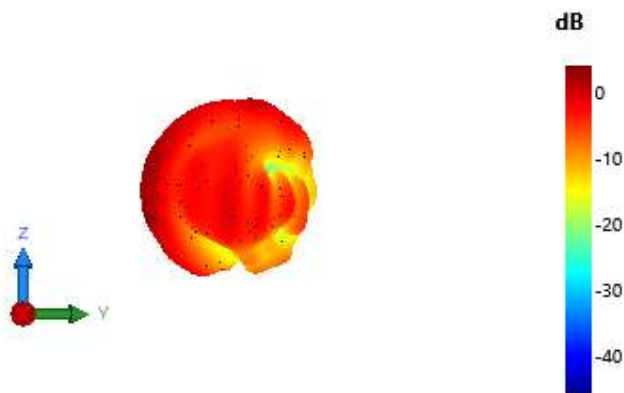
Max Antenna 3D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5250-5350       | 4.87                          |



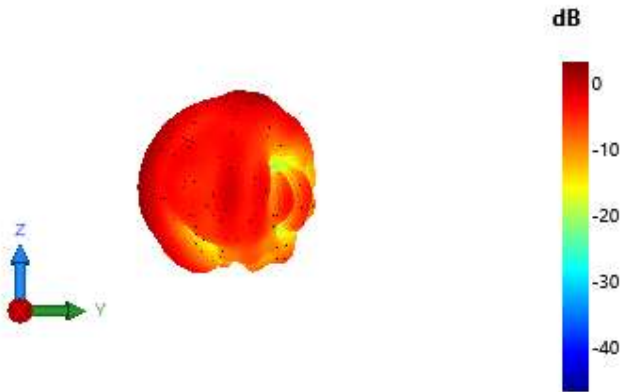
Max Antenna 3D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5470-5725       | 5.36                          |



Max Antenna 3D Radiation Pattern 5725-5850 MHz

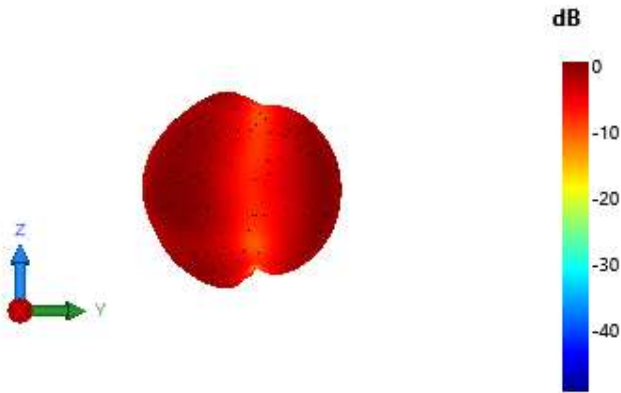
| Frequency<br>(MHz) | Peak Gain w/ Cable Loss<br>(dBi) |
|--------------------|----------------------------------|
| 5725-5850          | 5.15                             |



Auxiliary Antenna (Antenna 7)

Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

| Frequency<br>(MHz) | Peak Gain w/ Cable Loss<br>(dBi) |
|--------------------|----------------------------------|
| 2400-2483.5        | 2.83                             |



Max Antenna 3D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5150-5250       | 4.69                          |



Max Antenna 3D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5250-5350       | 4.69                          |



Max Antenna 3D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5470-5725       | 5.57                          |



Max Antenna 3D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5725-5850       | 5.65                          |

