

Antenna Test Report

Date: Dec.23.2024
rev.1

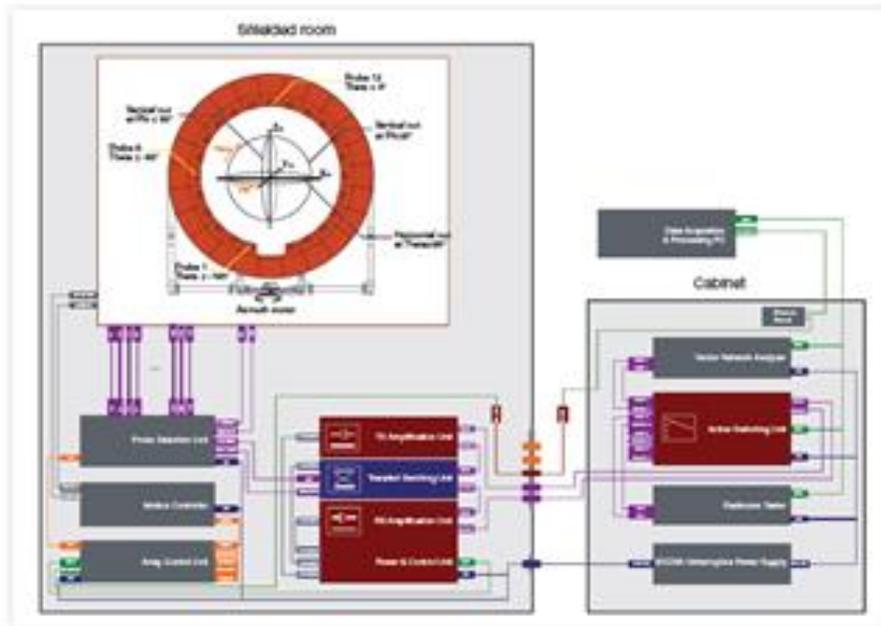
Address: 20 Park Avenue II (or Yuanchiu 2nd Rd.), Hsinchu Science Park, Hsinchu 300, Taiwan

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Chamber Info.

- Antenna Vendor : WNC
- Test Date : 20241220
- Test Engineer : Dennis
- Measurement System : SATIMO SG24
- Software Name : Wave Studio
- Software Version : 22.5.6

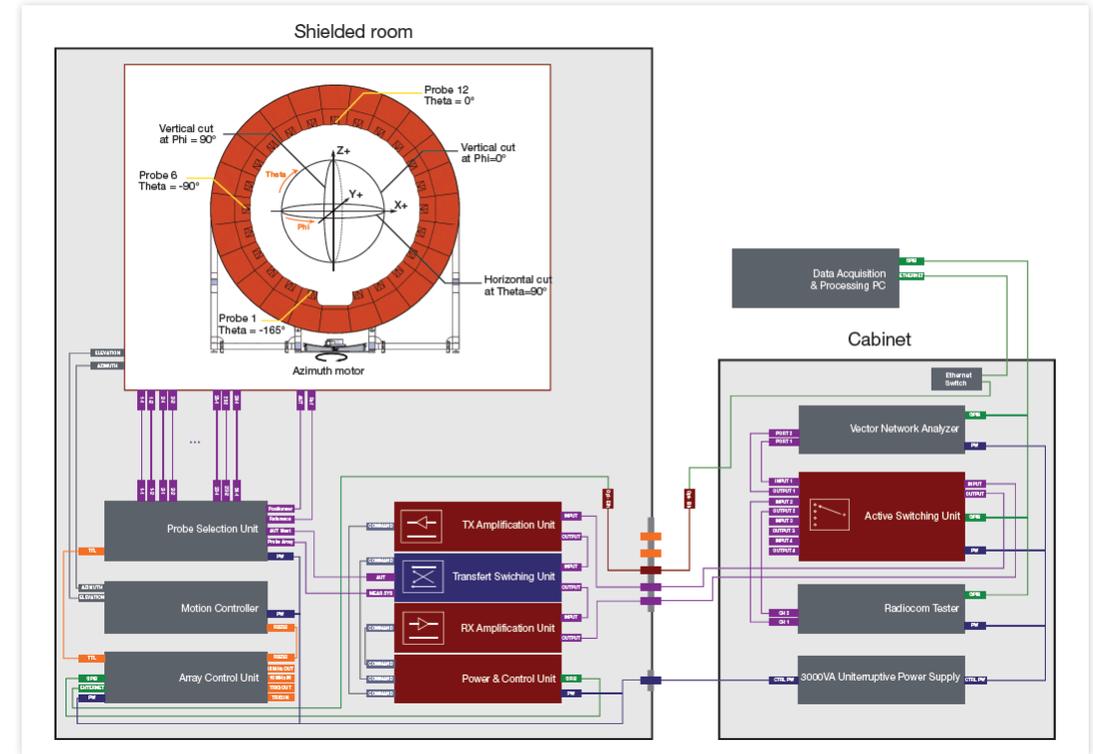


Chamber Info.

- Measurement System: SATIMO SG24 Chamber

Measurement setup:

- pattern & gain measurement
 - 1.satimo chamber (SG24)
 - 2.satimo program (wave studio)
 - 3.system overview :
- test item
 - 1.antenna passive test 400MHz~9GHz

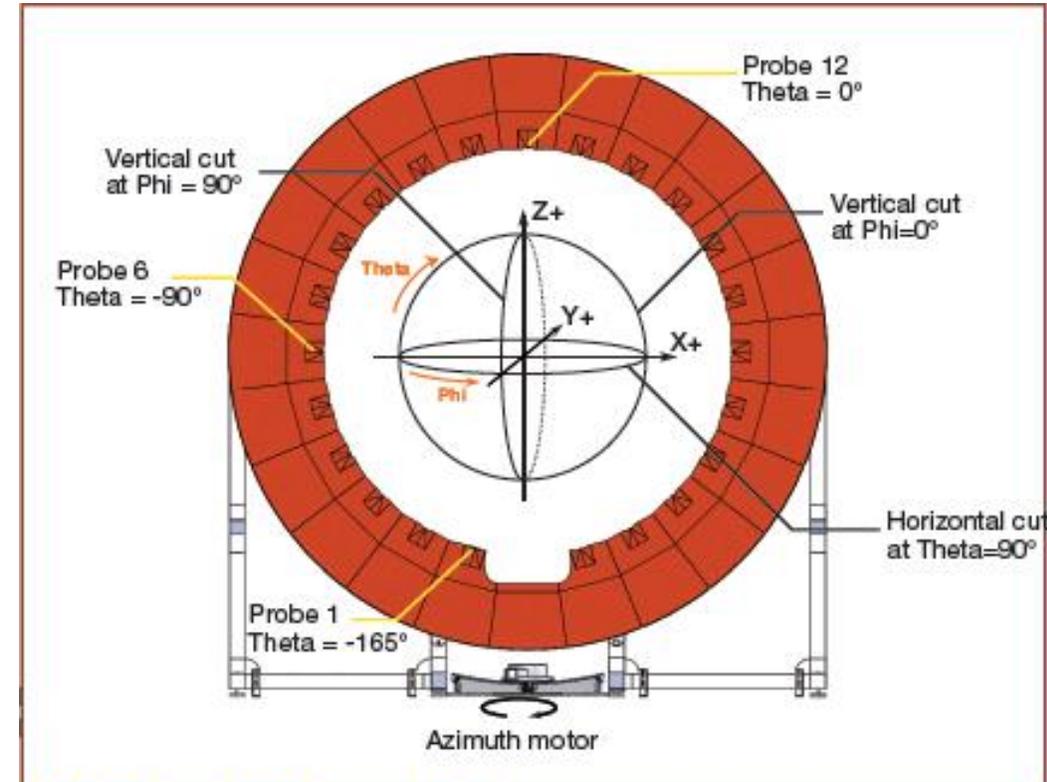


- Calibration Information

| Device | Type / Model | Serial # | Manufacture | Cal. Date | Cal. Until |
|----------------------------|-----------------|------------|-------------|------------|------------|
| Antenna Measurement System | SG24-L | HKG1669S | MVG-SATIMO | 2024-08-02 | 2025-08-01 |
| Network Analyzer | Keysight E5080B | MY59203136 | Keysight | 2024-12-04 | 2025-12-03 |

Chamber Info.

1. Place the device to be tested on the fixture and align it with the center of the chamber.
2. Connect the antenna cable to the RF connector of the chamber.
3. Use the SW to configure parameters (antenna name, frequency points, measurement angles, antenna dimension), and then run the test SW (wave studio).
4. By phi from 0° to 360° and theta from 0° to 180° with a step size of 2 degrees, get the 3D data, including efficiency, peak gain, 2D and 3D radiation patterns.
5. This is far field test for antenna verification.
6. This is passive measurement, which means the device is off and not in any operating mode.



Name and address of the antenna manufacture



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- *Land Lot CN01, Dong Van III Industrial Zone, Dong Van Ward, Duy Tien Town, Ha Nam Province, Vietnam*
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Antenna Specification

| 90VYAA15.G02 - ANT1(white cable) | |
|---|--|
| Frequency | 2400~2500MHz, 5150~7125MHz |
| Antenna type | Dipole |
| Connector type | IPEX |
| Antenna Gain | 1.52dBi@2400~2500MHz 3.50dBi@5150~5895MHz 5.46dBi@5925~7125MHz |

| 90VYAA15.G02 - ANT2(black cable) | |
|---|--|
| Frequency | 2400~2500MHz, 5150~7125MHz |
| Antenna type | Dipole |
| Connector type | IPEX |
| Antenna Gain | 2.36dBi@2400~2500MHz 4.65dBi@5150~5895MHz 4.75dBi@5925~7125MHz |

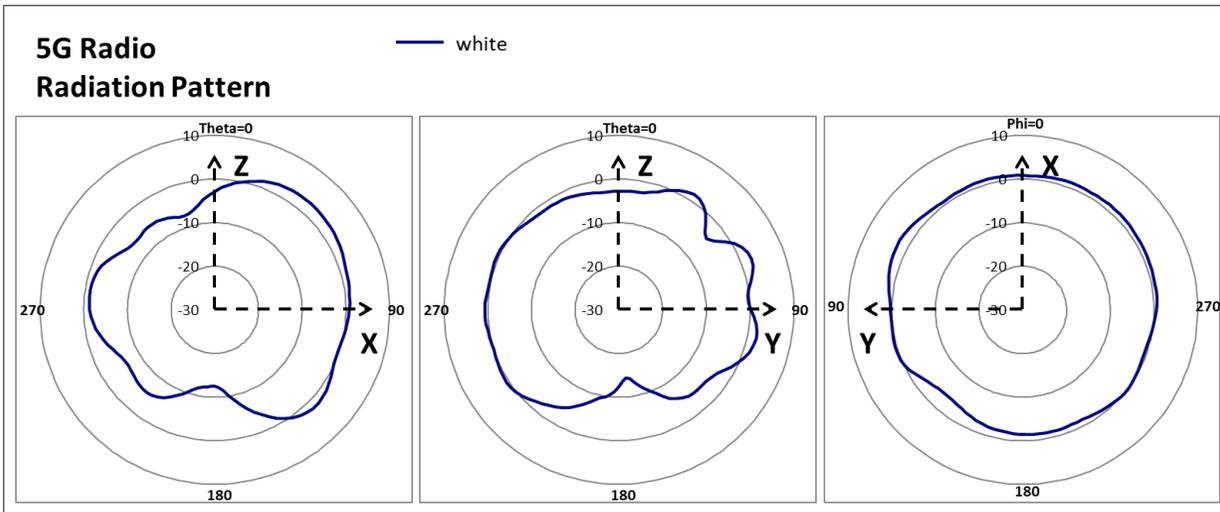
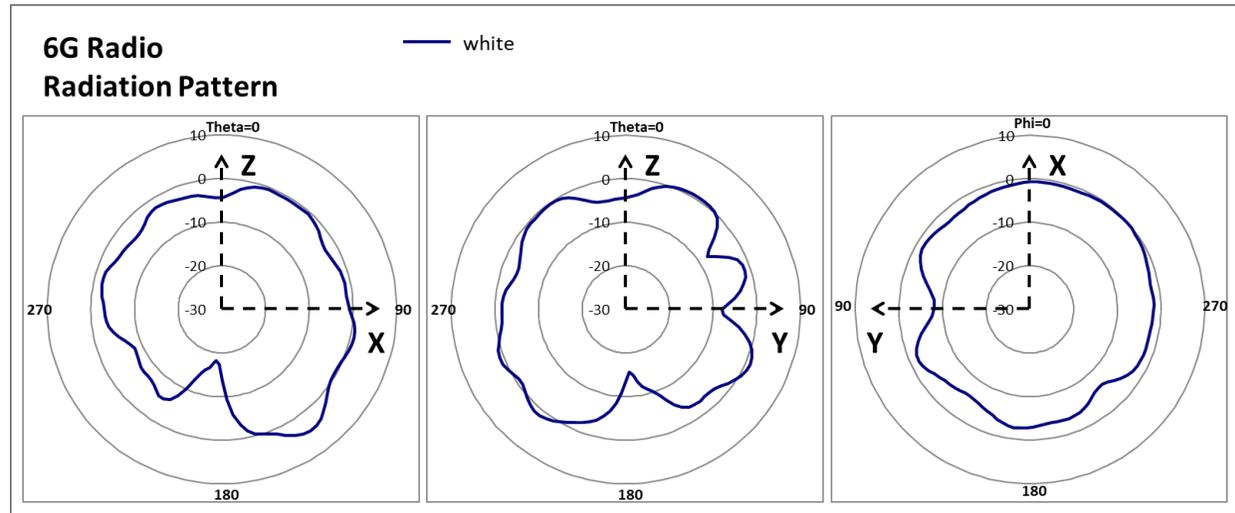
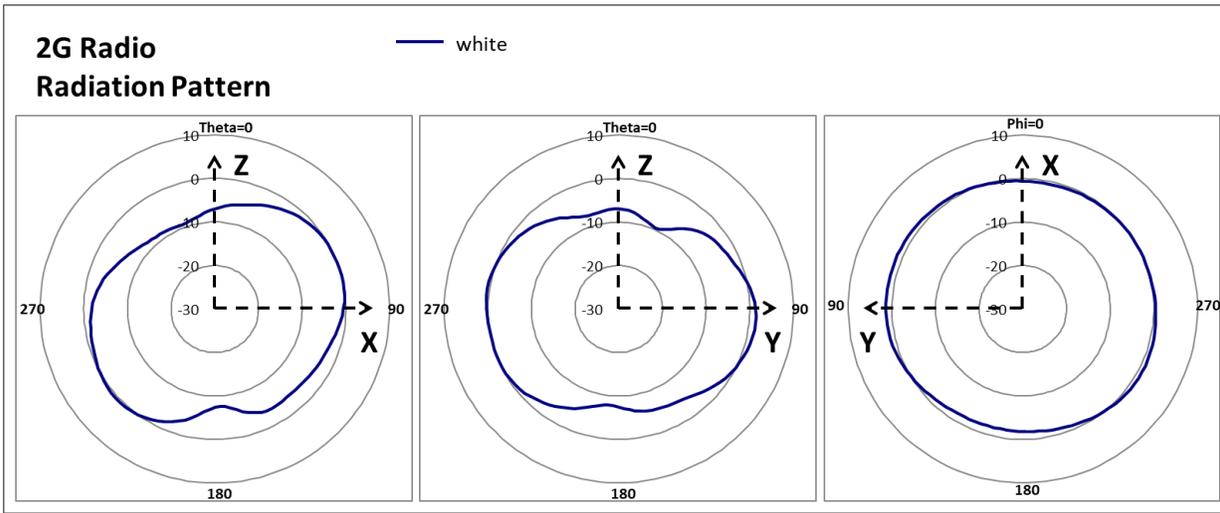
Peak Gain

| 2.4GHz | Freq. (MHz) | 2450 |
|-------------------|----------------|------|
| ANT1(white cable) | Peak Gain(dBi) | 1.52 |
| ANT2(black cable) | Peak Gain(dBi) | 2.36 |

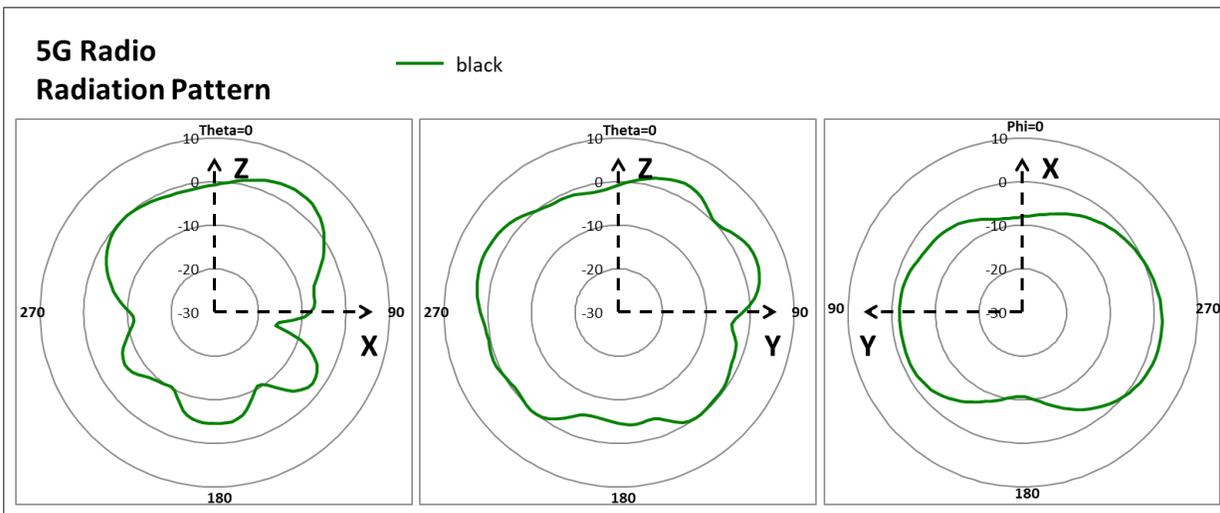
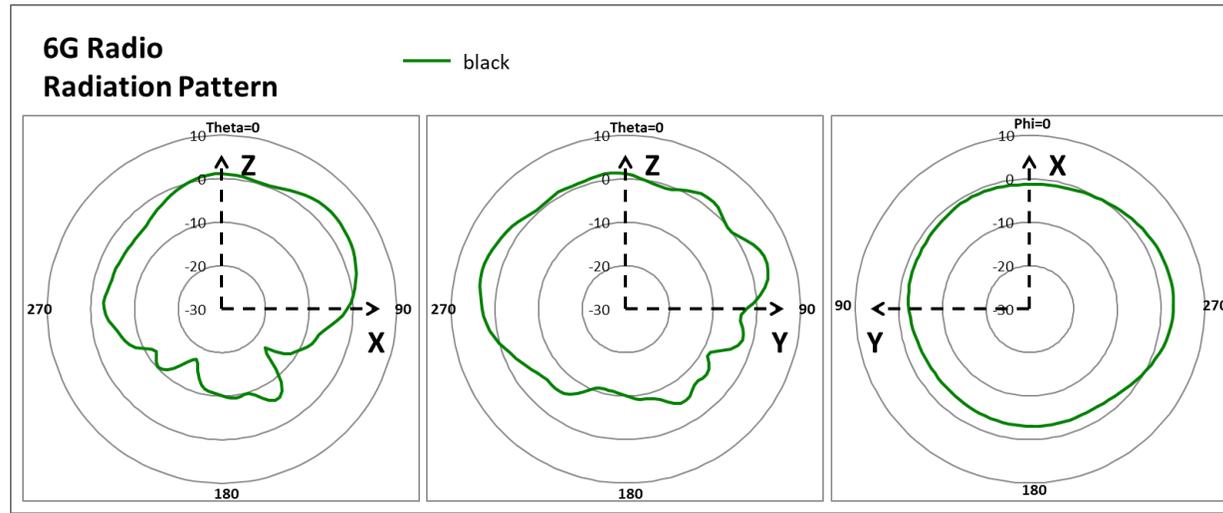
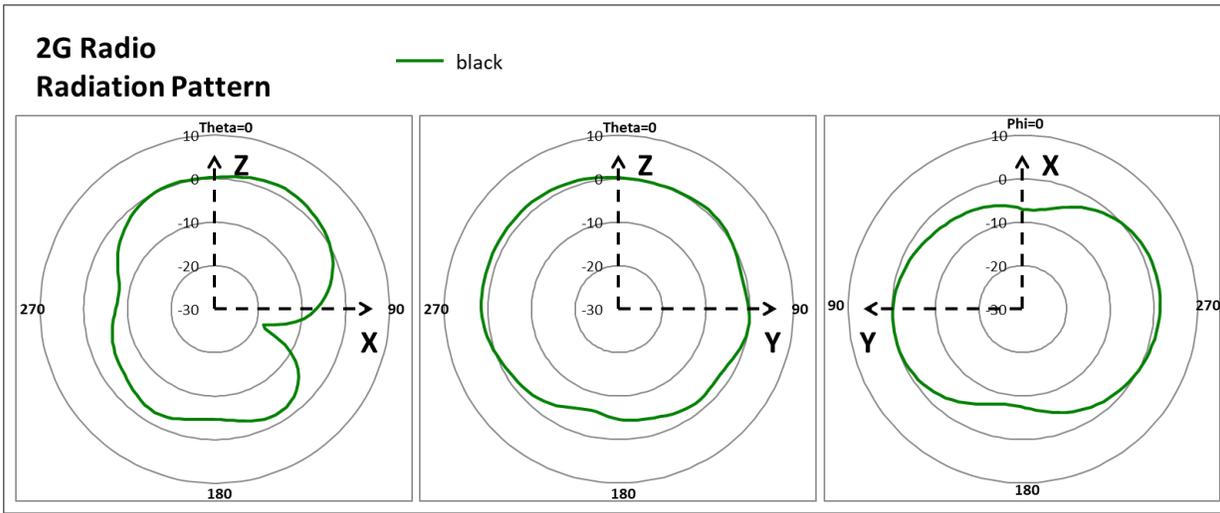
| 5GHz | Freq. (MHz) | 5200 | 5300 | 5600 | 5785 | 5885 |
|-------------------|----------------|------|------|------|------|------|
| ANT1(white cable) | Peak Gain(dBi) | 3.44 | 3.50 | 3.30 | 2.77 | 2.57 |
| ANT2(black cable) | Peak Gain(dBi) | 2.86 | 2.60 | 4.65 | 4.62 | 4.64 |

| 6GHz | Freq. (MHz) | 6200 | 6470 | 6700 | 7000 |
|-------------------|----------------|------|------|------|------|
| ANT1(white cable) | Peak Gain(dBi) | 3.22 | 4.45 | 5.25 | 5.46 |
| ANT2(black cable) | Peak Gain(dBi) | 4.66 | 4.69 | 4.75 | 4.66 |

Radiation Pattern - ANT1(white cable)



Radiation Pattern - ANT2(black cable)



WNC

Wistron NeWeb Corp.

