

AUT Report

Product Model: TL-WR1502X

Manufacturer: BIG FIELD GLOBAL PTE. LTD

Test Date: 2023.07.07

Tested By: Chen Xuemeng 

BIG FIELD GLOBAL PTE. LTD.
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Index

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|--|-----------|
| 1. Antenna Distribution | 错误!未定义书签。 |
| 2. Electrical Characteristics | 3 |
| 3. Gain and Radiation Pattern | 4 |
| 3.1 Measurement Procedure | 4 |
| 3.2 Test Setup | 错误!未定义书签。 |
| 3.3 S Parameter Test Data | 5 |
| 3.4 Antenna Peak Gain | 6 |
| 3.5 Antenna Radiation Pattern..... | 6 |

1. Electrical Characteristics

| Ant1 | |
|--------------------------|--|
| Frequency | 2400~2500 & 5150~5850MHz |
| Impedance | 50Ohm |
| Antenna Type | PIFA |
| Antenna Gain | 2.00dBi @2400~2500MHz 3.00dBi @5150~5850MHz |
| Radiation pattern | Omni-Directional |
| P/N | 2051501402 |

| Ant2 | |
|--------------------------|--|
| Frequency | 2400~2500 & 5150~5850MHz |
| Impedance | 50Ohm |
| Antenna Type | PIFA |
| Antenna Gain | 2.00dBi @2400~2500MHz 3.00dBi @5150~5850MHz |
| Radiation pattern | Omni-Directional |
| P/N | 6035500127 |

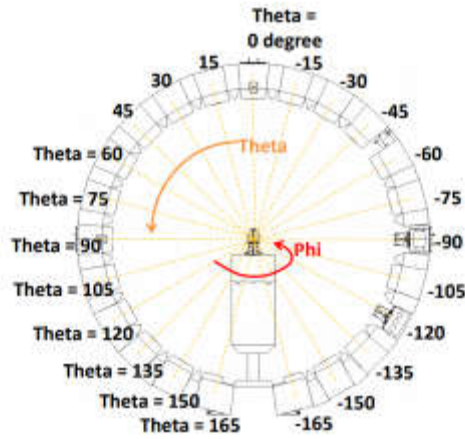


Figure 2-2

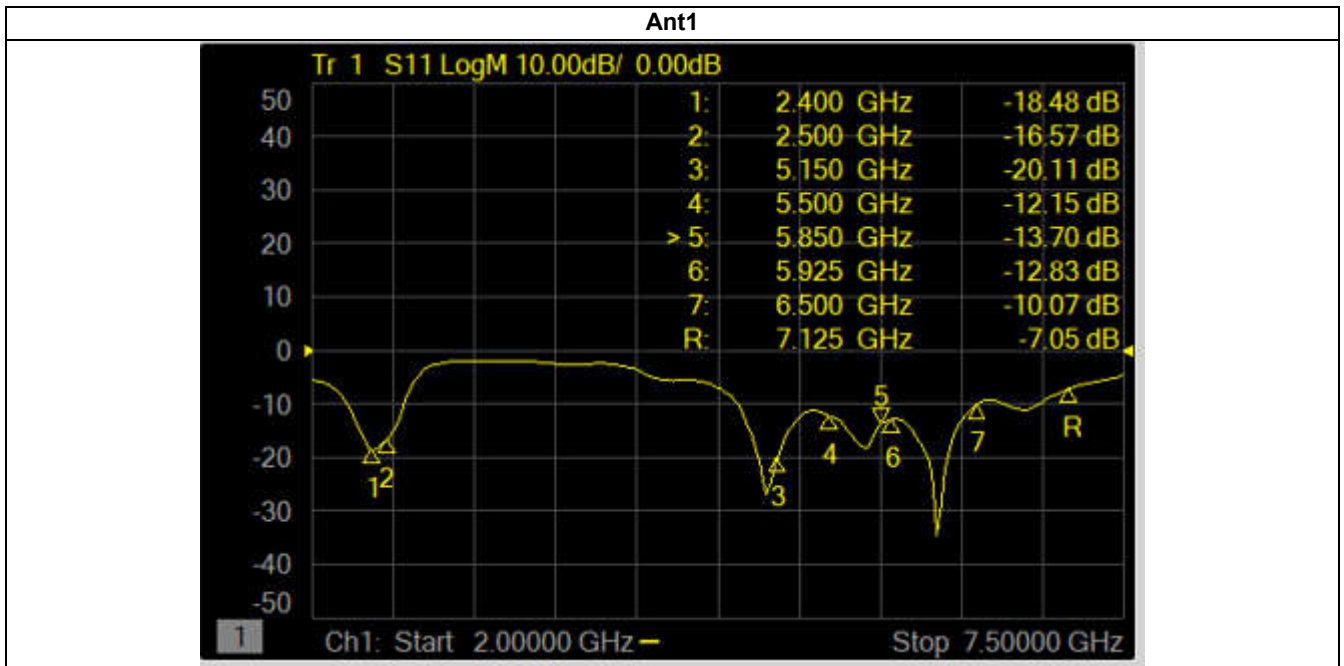
Before the measurement, calibrated the vector network analyzer, and then connected the input end of each antenna to the output end of the vector network analyzer, and evenly the antennas to be measured.

Test Equipment listed below:

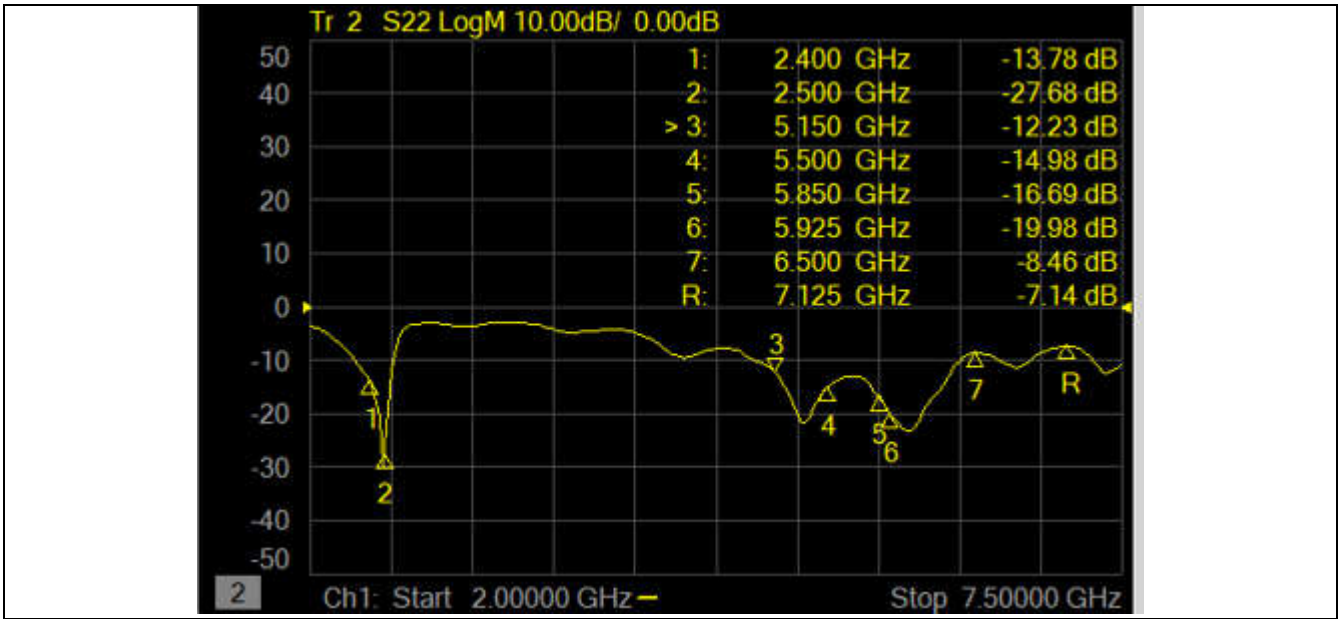
| Equipments | Model | Manufacturer | S/N | Cali. Interval | Cali. Due Date |
|-------------------------|-------------|--------------------------|----------------|----------------|----------------|
| Chamber | Rayzone2800 | GTS(General Test System) | MY5347043 5 | 12months | 2024/01/15 |
| Vector Network Analyzer | E5071C | Keysight | MY46315238 | 24months | 2024/03/13 |
| GTS MaxSign100 Software | V2.1 | GTS(General Test System) | / | / | / |

Figure 2-3

2.2 S Parameter Test Data



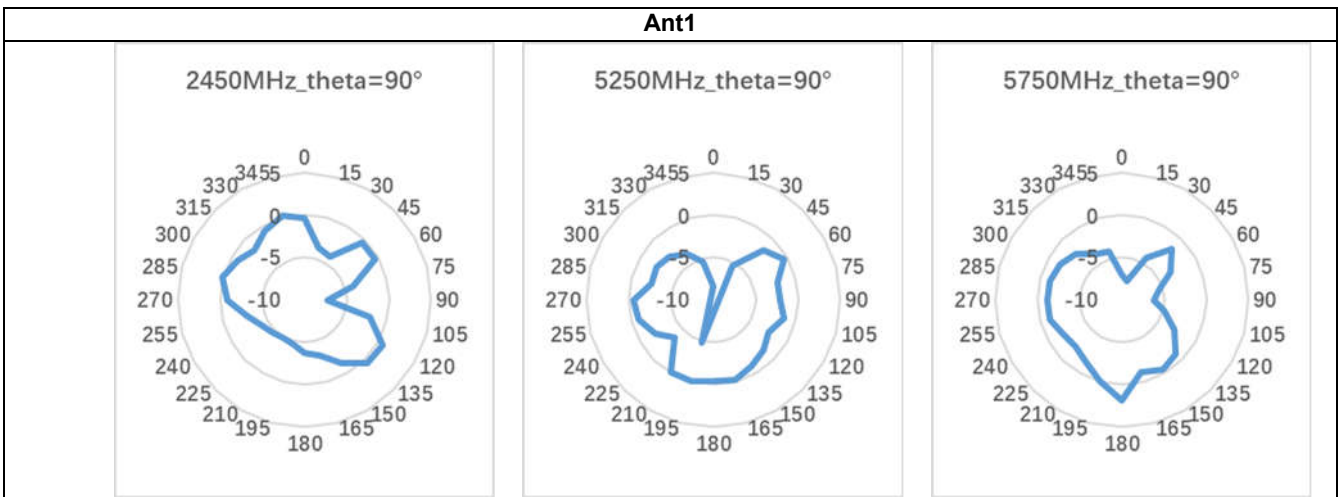
Ant2



2.3 Antenna Peak Gain

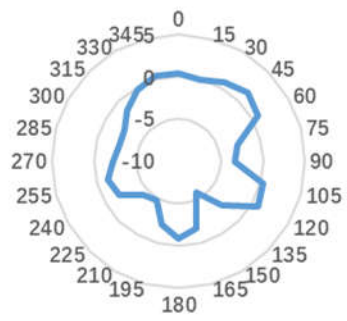
| Frequency(G Hz) | 2.40 | 2.45 | 5.15 | 5.25 | 5.45 | 5.50 | 5.75 |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Ant1 MaxGain(dBi) | 2.00 | 1.55 | 2.31 | 2.54 | 3.00 | 2.82 | 2.51 |
| Ant2 MaxGain(dBi) | 2.00 | 1.60 | 3.00 | 2.78 | 2.45 | 2.61 | 2.71 |
| Ant1 Polarization/ Φ (°) / θ (°) | Theta/120/ 90 | Theta/135/ 90 | Theta/180/ 90 | Theta/195/ 90 | Theta/165/ 90 | Theta/195/ 90 | Theta/180/ 90 |
| Ant2 Polarization/ Φ (°) / θ (°) | Theta/45/9 0 | Theta/60/9 0 | Theta/285/ 90 | Theta/270/ 90 | Theta/330/ 90 | Theta/60/9 0 | Theta/315/ 90 |
| Max Gain(dBi) | 2.00 | 1.60 | 3.00 | 2.78 | 3.00 | 2.82 | 2.71 |

2.4 Antenna Radiation Pattern

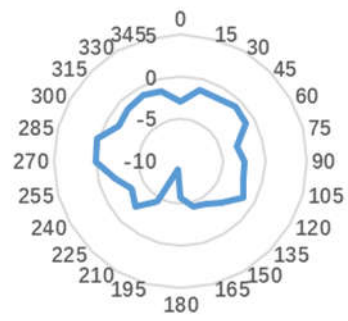


Ant2

2450MHz_theta=90°



5250MHz_theta=90°



5750MHz_theta=90°

