



Antenna Gain Test Report

Project No.: 4790514043

product Name : WIFI Module

product Model: WT2JM2601B

Client Name: Hui Zhou Gaoshengda Technology Co.,LTD

Client Address: Hui Zhou Gaoshengda Technology Co.,LTD No.2,Jin-da Road,Huinan High-tech Industrial Park,Hui-ao Avenue,Huizhou City,Guangdong,China

Antenna Type: PCB

Antenna Size: 30 mm * 7.8 mm* 5.2 mm

Project Engineer: Kebo Zhang

Test Standards: ANSI/IEEE std 149-2021

Testing software: EMQuest

Issued Date: 2022.12.5

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1 Test Equipment Information

Equipment	Manufacturer	Mode No.	Serial No.	Cal date	Cal Due
Test Chamber	ETS-Lindgren	8500	/	/	/
Test Software	ETS-Lindgren	EMQuest V1.12	1496	/	/
Network Analyzer	Keysight	E5071C	MY46524531	2022.10.17	2023.10.16
EXA Singal Analyzer	Keysight	N9010A	MY55150514	2022.10.17	2023.10.16

2 Test Temperature and Humidity

Temperature: 22.3°C

Humidity: 60.1%

3 Test Requirement

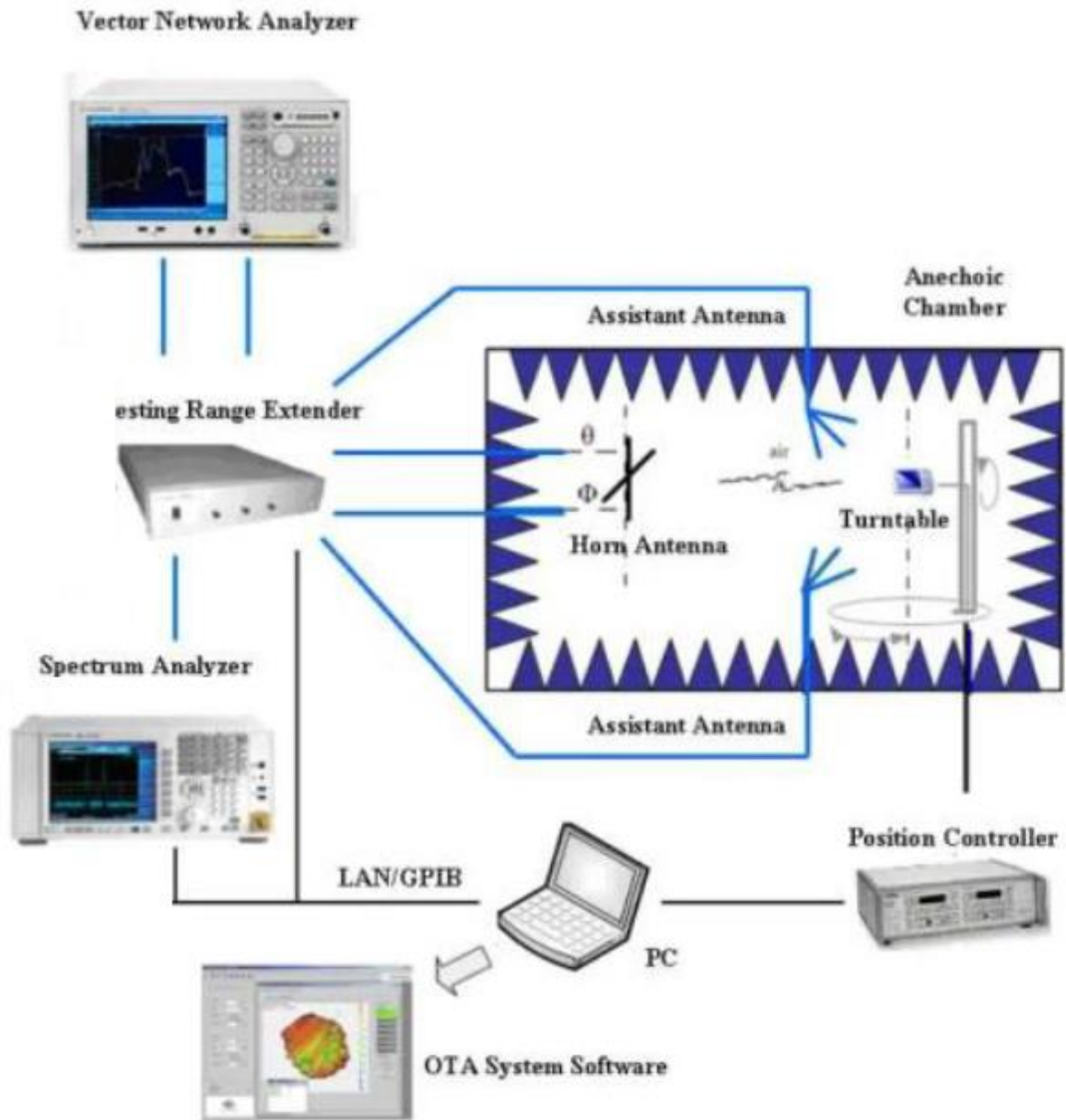
ANSI/IEEE std 149-2021: Recommended Practice for Antenna Measurements

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4 Test system diagram



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5 Test Procedure

Test Step Flow

1. Maintain the test ambient temperature of 23±2 C, the instrument is powered on and preheated for more than 30 minutes
2. Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard
3. Outline sets the test content objectives and conducts calibration tests
4. Run the EMQuest OTA software, the test is complete, export the corresponding test diagram and test data, and save to the corresponding directory

Test Principle

The test principle can be seen in accordance with the standard ANSI/IEEE std 149-2021

Test Conditions

1. The analyte, the network analyzer for testing, the test equipment and the test cable connector should have good reliability, stability, dynamic range and measurement accuracy to ensure the correctness of the measurement accuracy
2. The measuring instrument should have a certificate of conformity and be within the effective calibration period
3. The analyte should be complete and undamaged, and the test environment should be kept clean

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Test Result

Frequency (MHz)	Gain (dBi)
2400	0.91
2410	0.94
2420	0.98
2430	1.01
2440	1.13
2450	1.26
2460	1.22
2470	1.16
2480	1.18
2490	1.17
2500	1.12

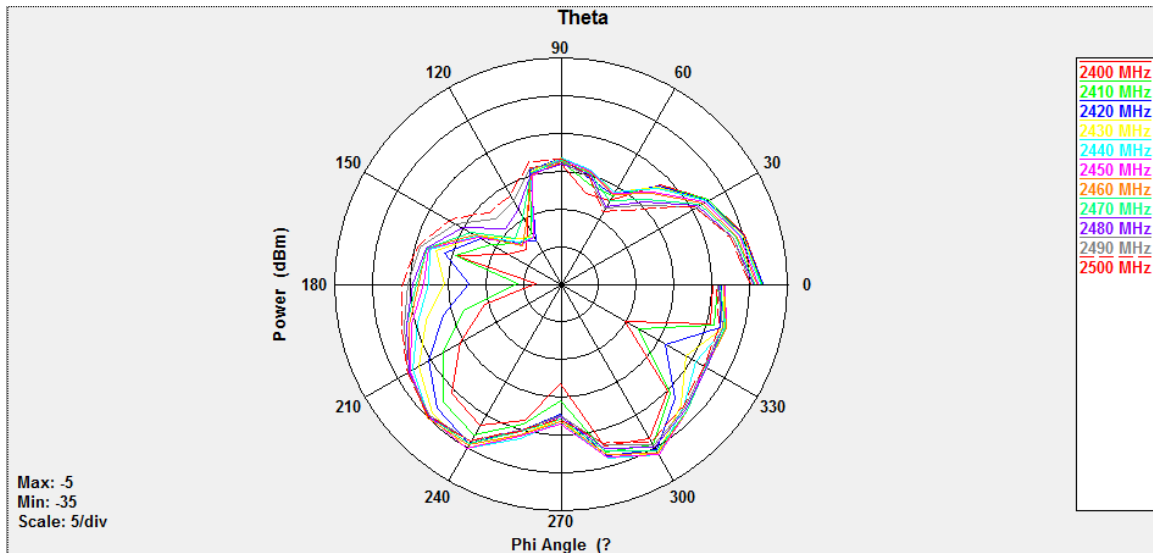
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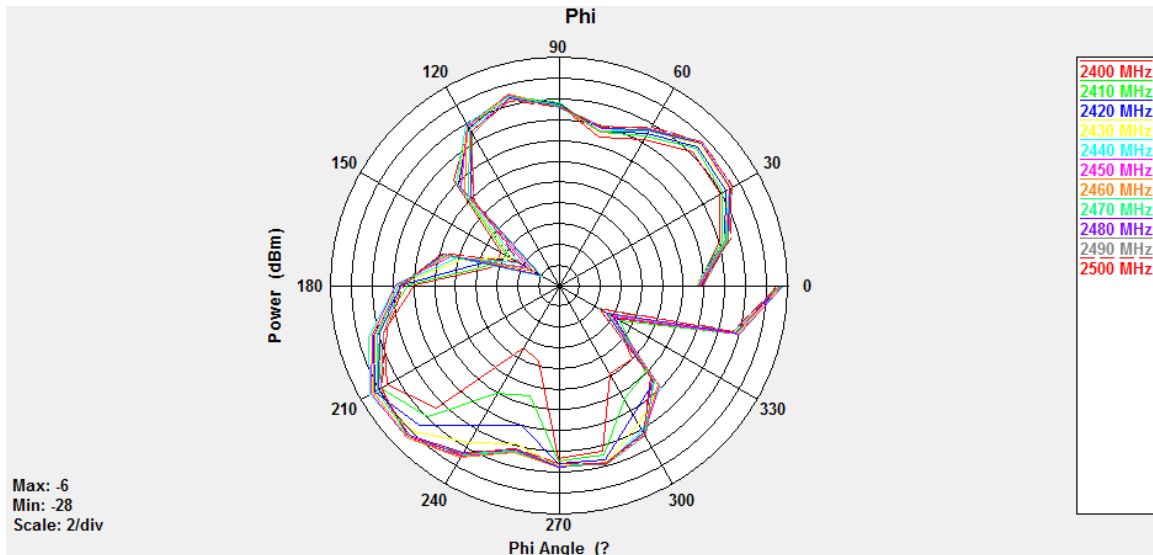


6 Polarization Pattern Photos

Theta Polarization(Theta Angle=90°)



Phi Polarization(Theta Angle=90°)

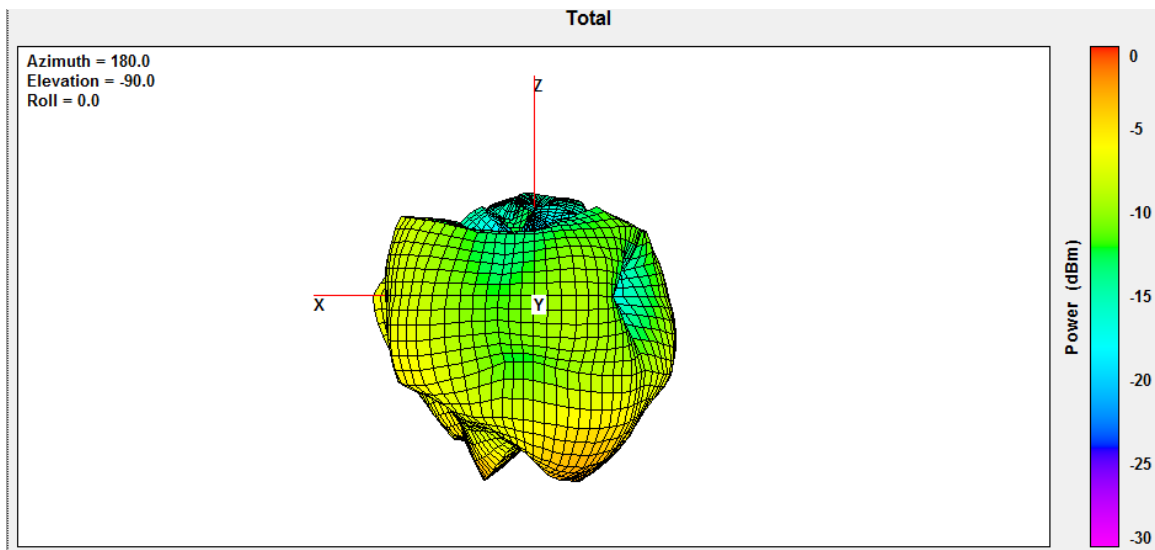
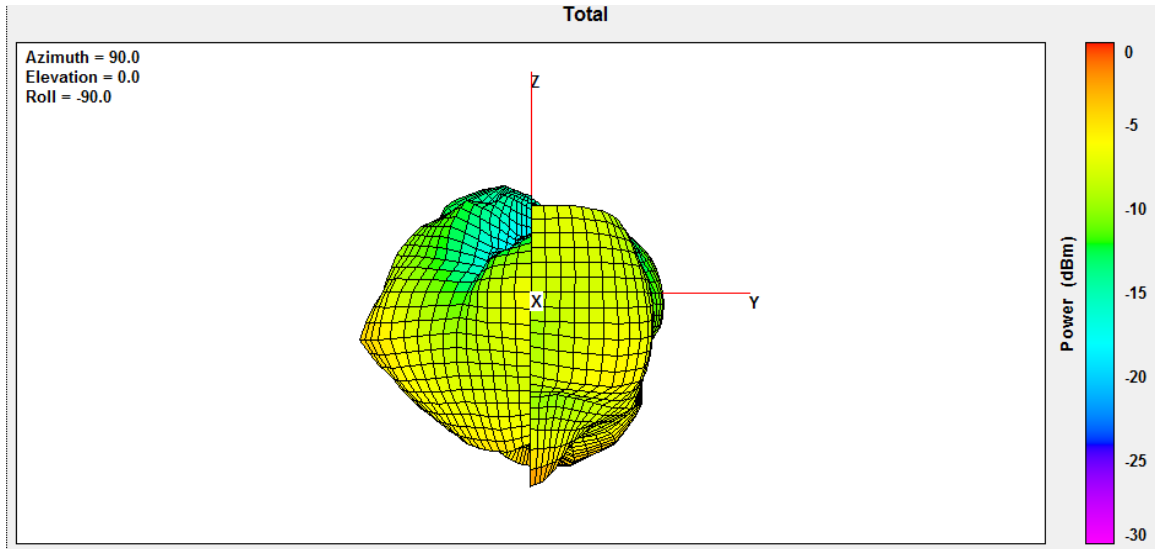


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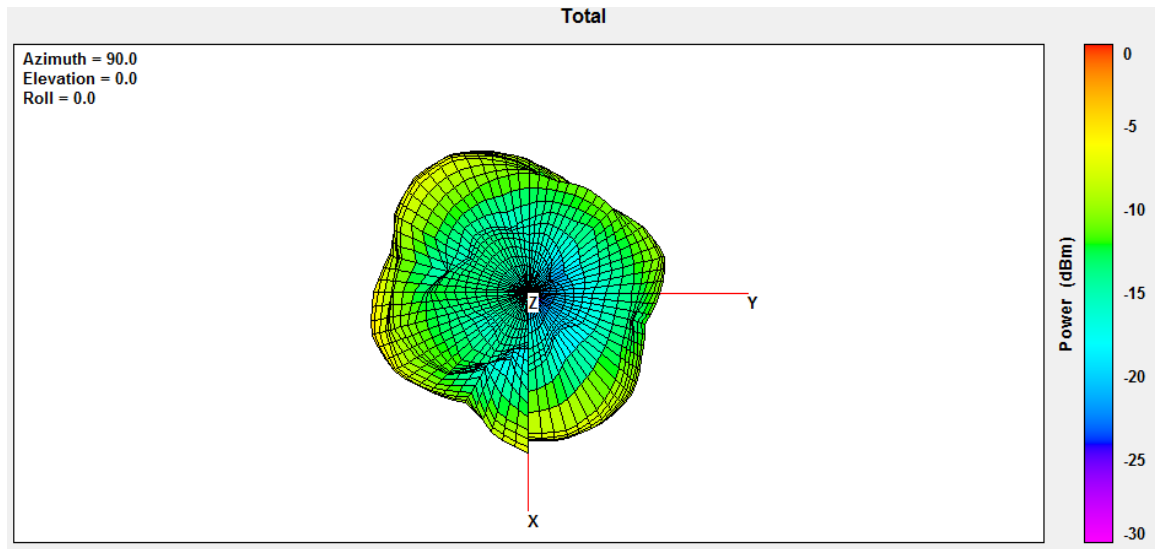


Total 3D Plot(Fre.2450MHz)



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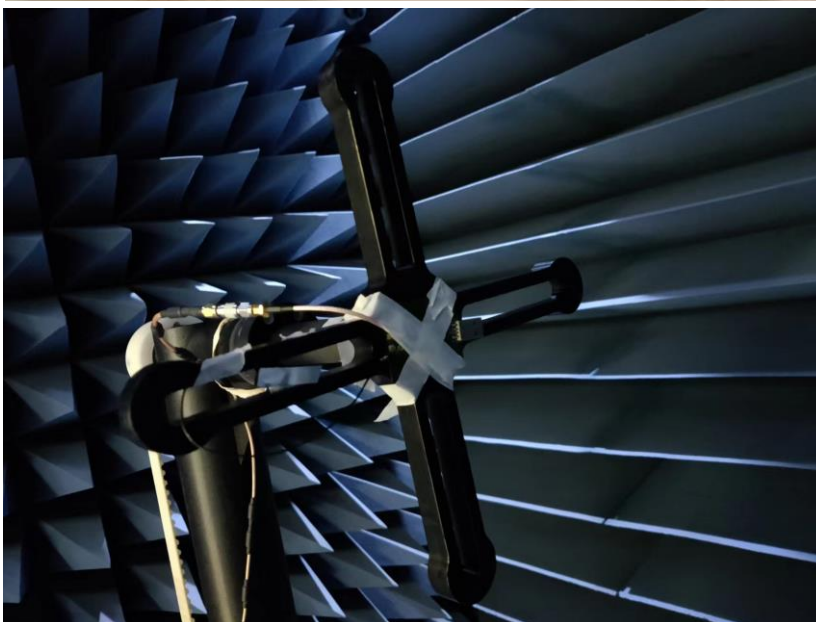
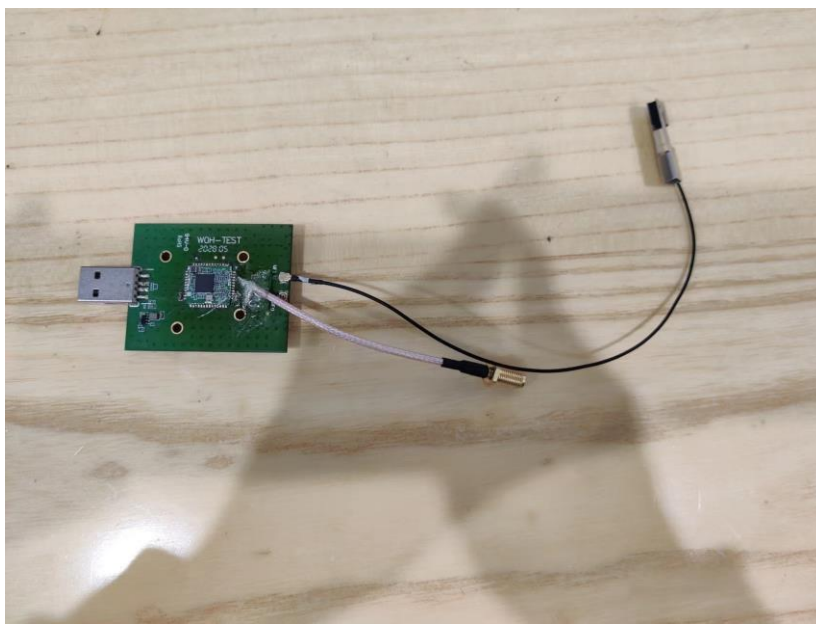


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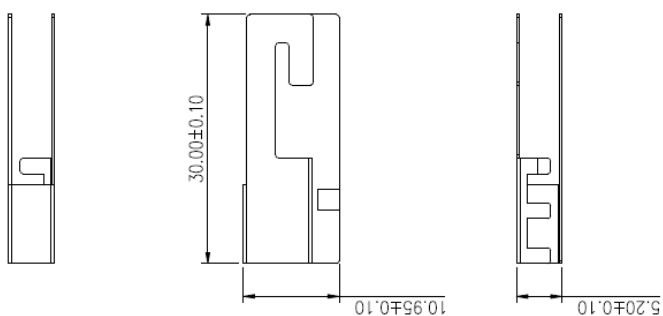
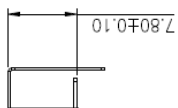


7 Photo



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END OF REPORT

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