



Antenna Gain Test Report

Project No.: 4790818116

Client Name: Huizhou Oresmart technology Co., Ltd

Client Address: No. B3-01, 02, 03, Floor 3, Building AB, Science and Technology Entrepreneurs Center, No. 2 Huatai South Road, Huinan High-tech Industrial Park, Huiao Avenue, Huizhou City

Product Name: PCB Antenna

Product Model: Nakamichi Dragon11.4.6 Home Surround Sound System

Manufacture: DALIAN GOLDEN HUALU DIGITAL TECHNOLOGY CO LTD

Antenna Type: PCB

Antenna Size: 18.8 mm * 7.8 mm

Project Engineer: James Qin

Test Standards: ANSI/IEEE std 149-2021

Issued Date: 2023.5.10

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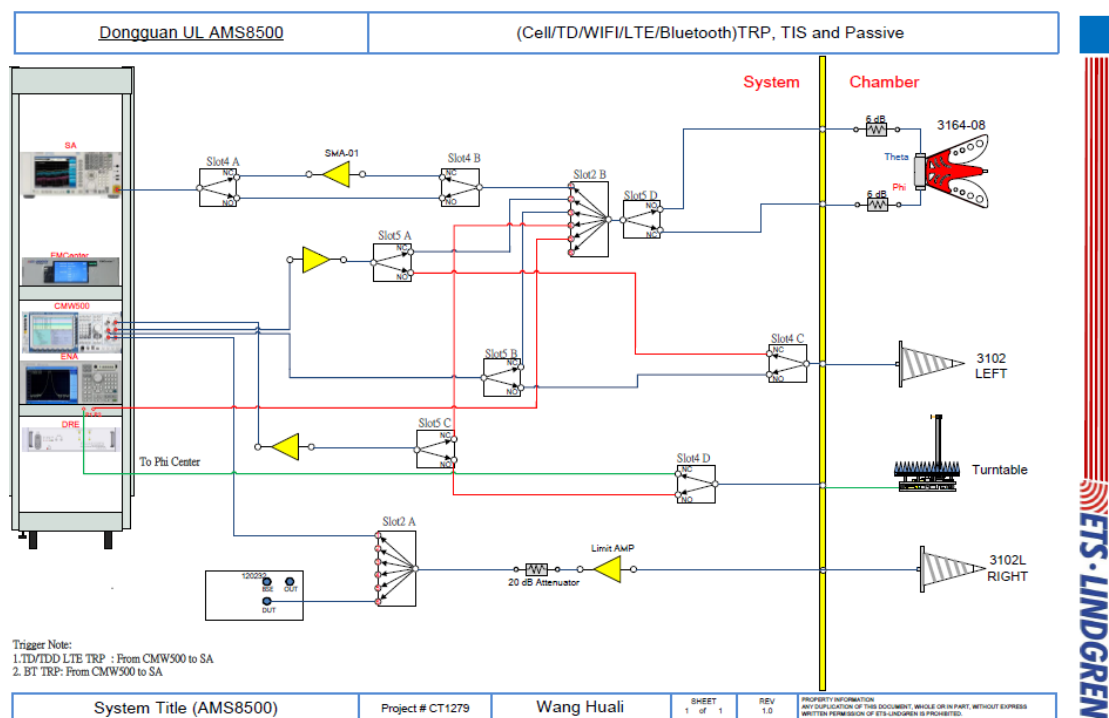
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1 Test Equipment Information

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 Setup block diagram



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3 Test Temperature and Humidity

Temperature: 23.4°C

Humidity: 63.2%

4 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 software, when the test is completed, export the corresponding test diagram and test data, and save to the corresponding directory.

5 Test Result

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	44.74	2.07
2410	43.93	2.01
2420	43.58	2.01
2430	43.02	1.94
2440	42.64	1.84
2450	41.62	1.66
2460	40.13	1.43
2470	38.68	1.36
2480	38.22	1.34
2490	38.41	1.32
2500	38.75	1.34

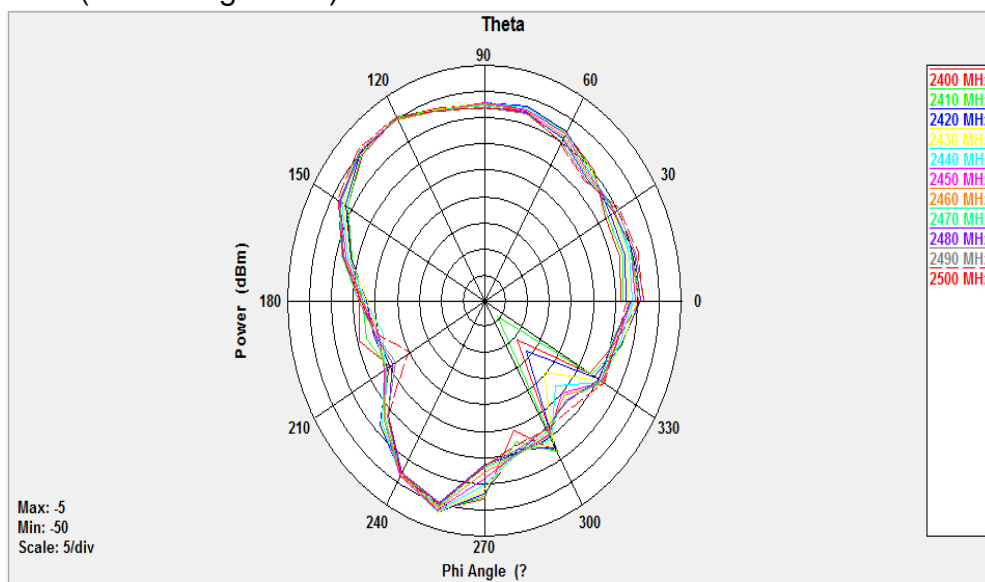
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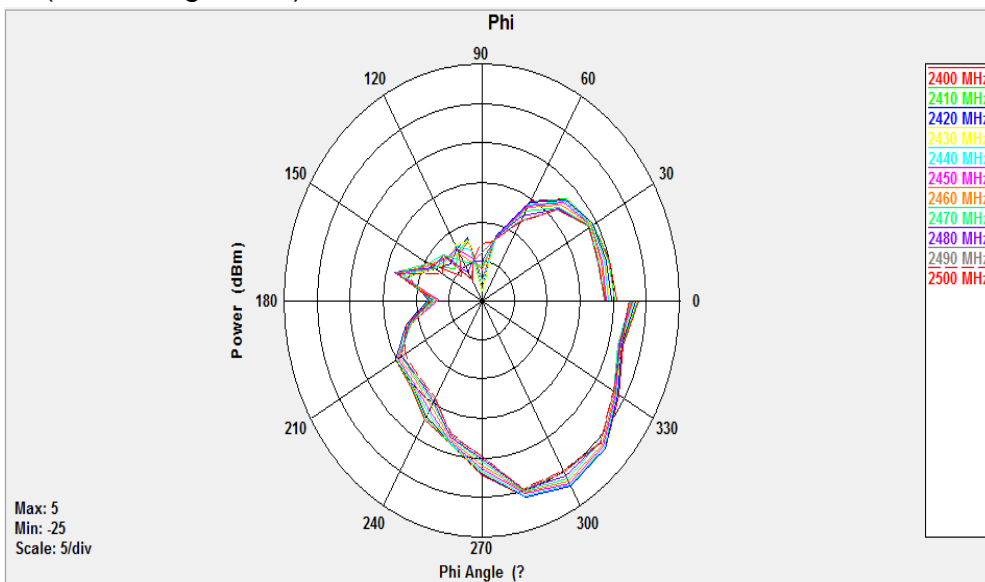


Polarization Pattern Photos

Theta Polarization(Theta Angle=90°)



Phi Polarization(Theta Angle=90°)

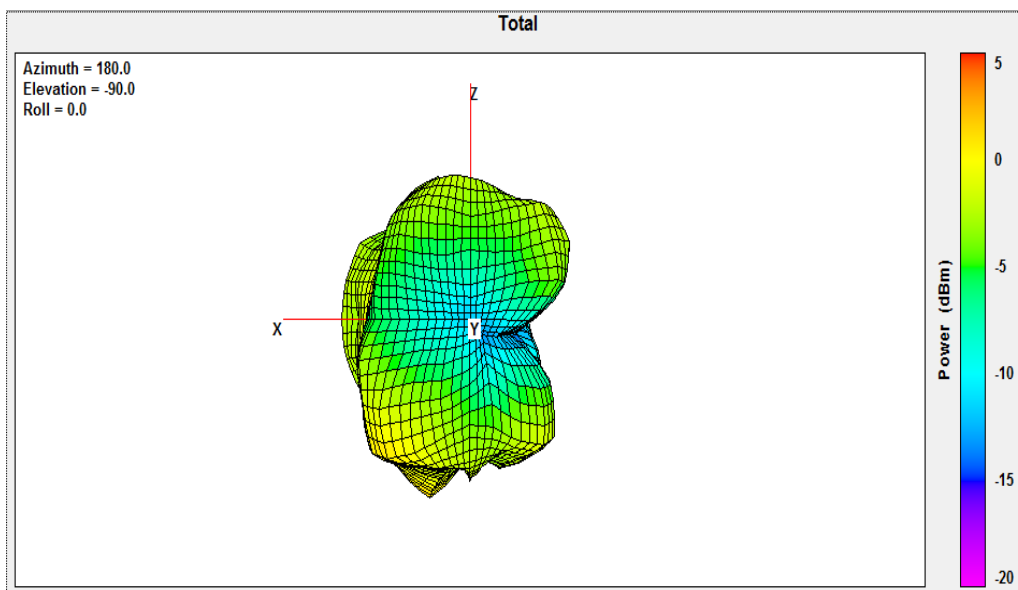
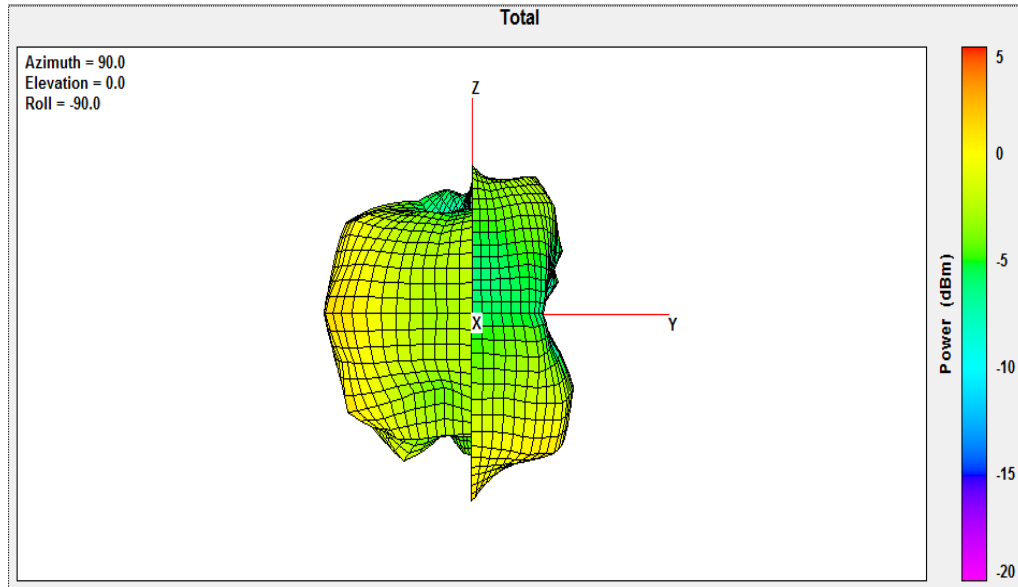


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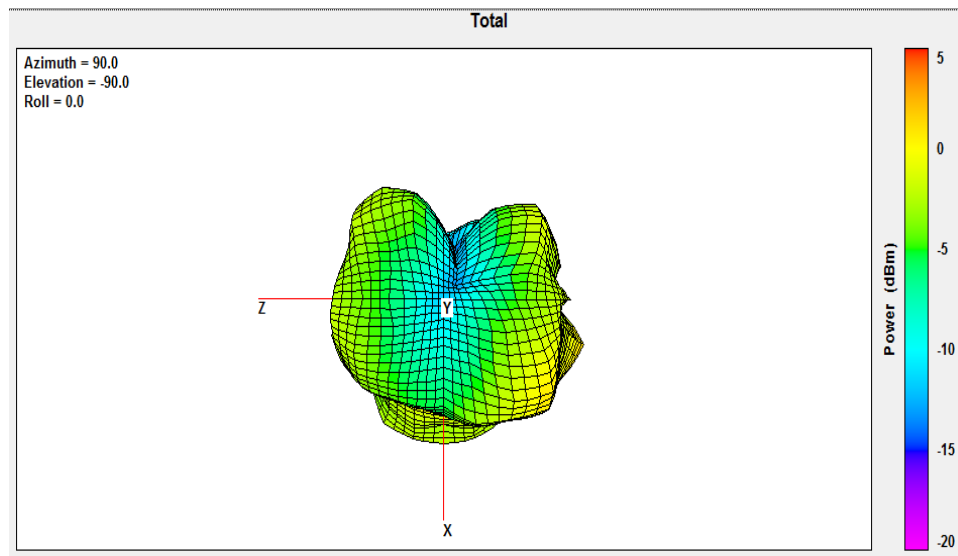


Total 3D Plot(Fre.2400MHz)



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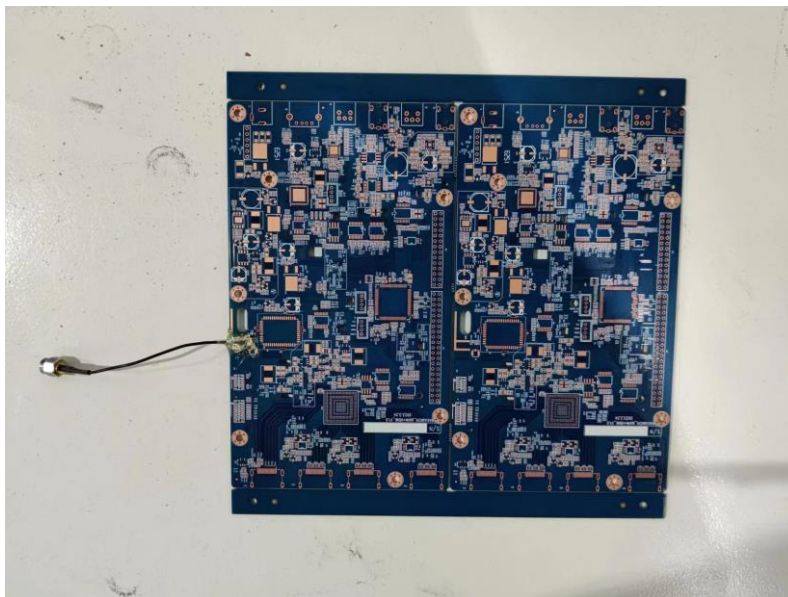
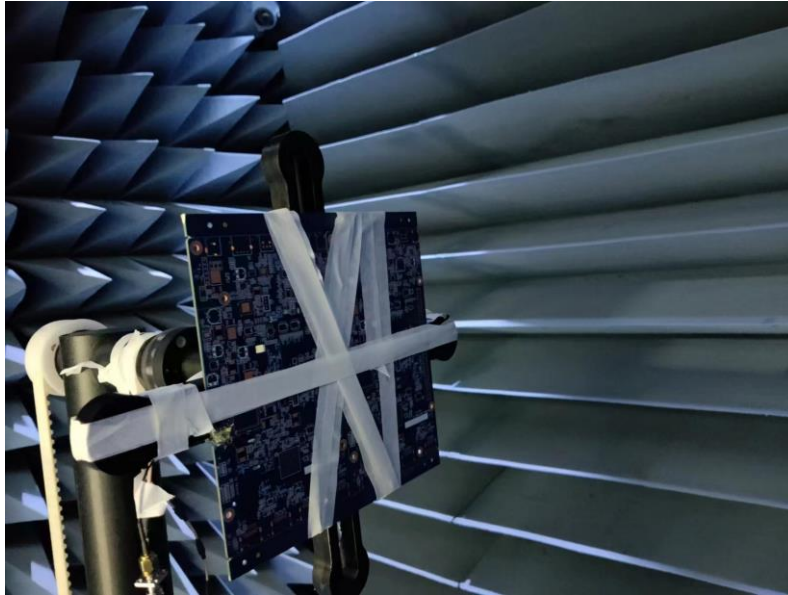


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6 Photo



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