

Antenna Gain Test Report

Project No.: 4791107448

Client Name: L&S Lighting Equipment (Shanghai) Co., Ltd.

Client Address: Building No.1, Lane 255 Longpan Road, Malu Town, Jiading District, Shanghai, China

Product Name: Wireless Controller
LED-CONTROL-MODULE-EASYLUX-12V-1

Product Model:

Manufacture Name: L&S Lighting Equipment (Shanghai) Co., Ltd.

Manufacture Address: Building No.1, Lane 255 Longpan Road, Malu Town, Jiading District, Shanghai, China

Antenna Type: PCB

Antenna Size: 8.5mm*10.7mm

Project Engineer: James Qin

Test Standards: ANSI/IEEE std 149-2021

Test Date: 2023.12.26

Issued Date: 2023.12.26

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	2023.12.26	Initial Issue	\

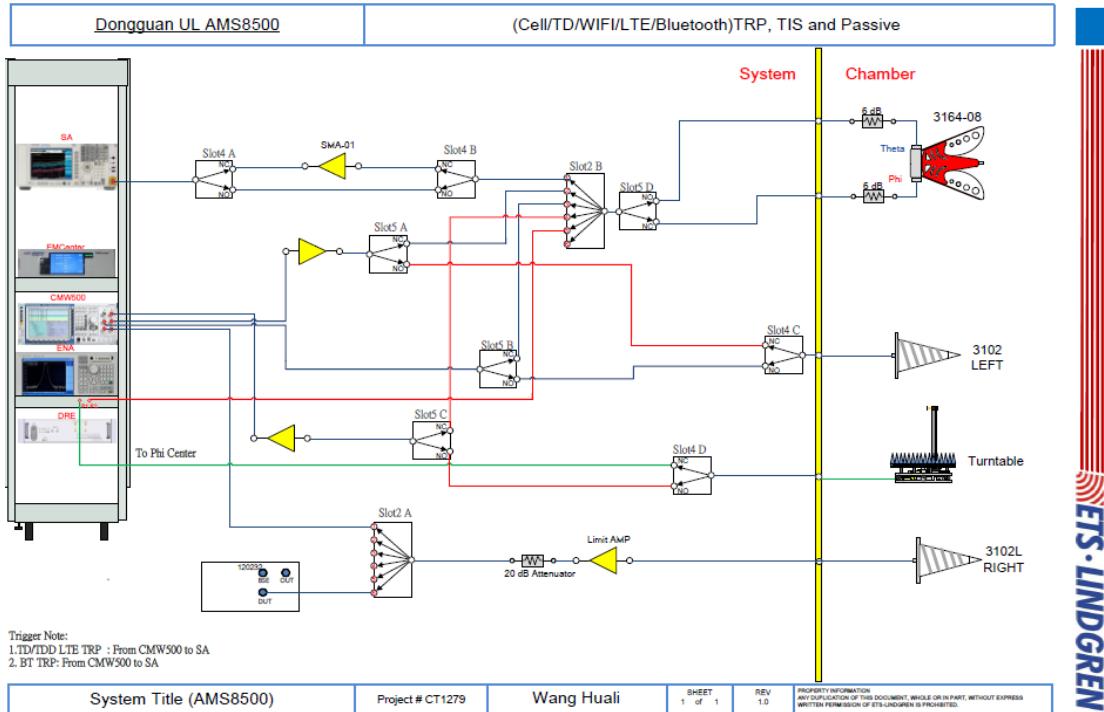
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1 Test Equipment Information

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	2023.10.12	2024.10.11
EXA Singal Analyzer	Keysight	N9010A	MY55150514	2023.10.12	2024.10.11

2 Setup block diagram



3 Test Temperature and Humidity

Temperature: 21.5°C

Humidity: 53.6%

4 Test Step Flow

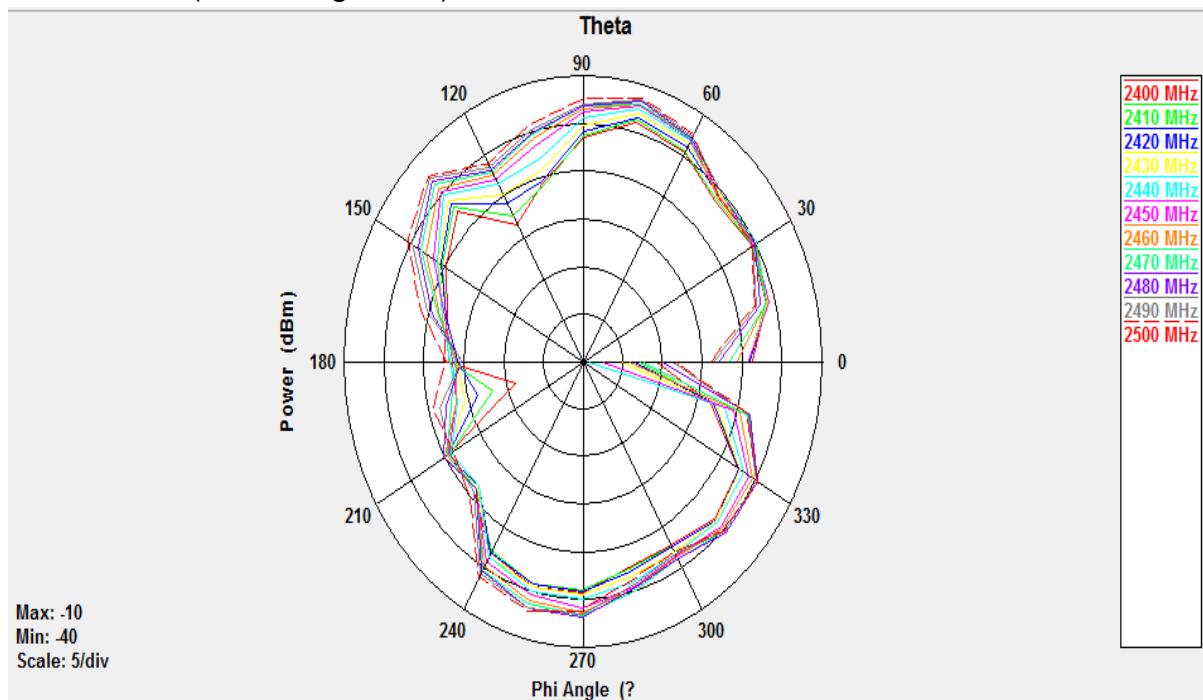
- 1) Maintain the test ambient temperature of 23 ± 2 C, the instrument is powered on and preheated for more than 30 minutes;
- 2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
- 3) Outline sets the test content objectives and conducts calibration 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	10.64	-2.50
2410	10.57	-2.53
2420	10.81	-2.41
2430	11.31	-2.21
2440	11.50	-2.09
2450	11.77	-2.01
2460	11.84	-2.00
2470	12.06	-2.04
2480	12.26	-2.09
2490	11.87	-2.35
2500	11.81	-2.59

Polarization Pattern Photos

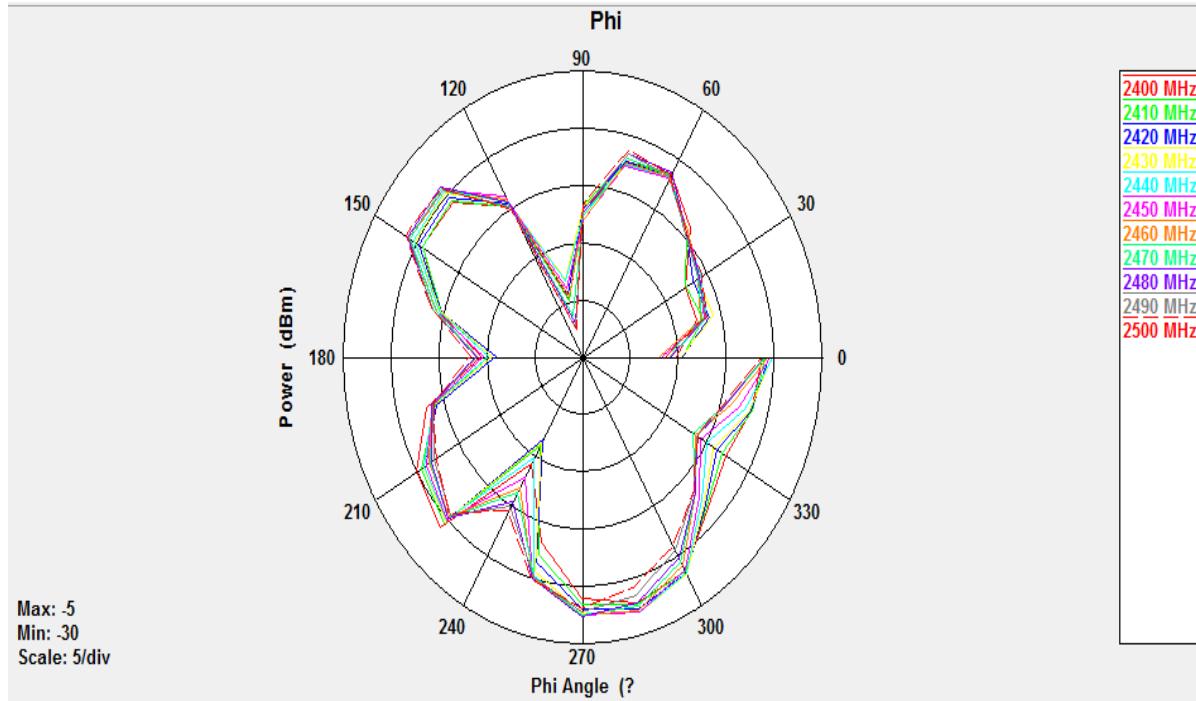
Theta Polarization(Theta Angle=90°)



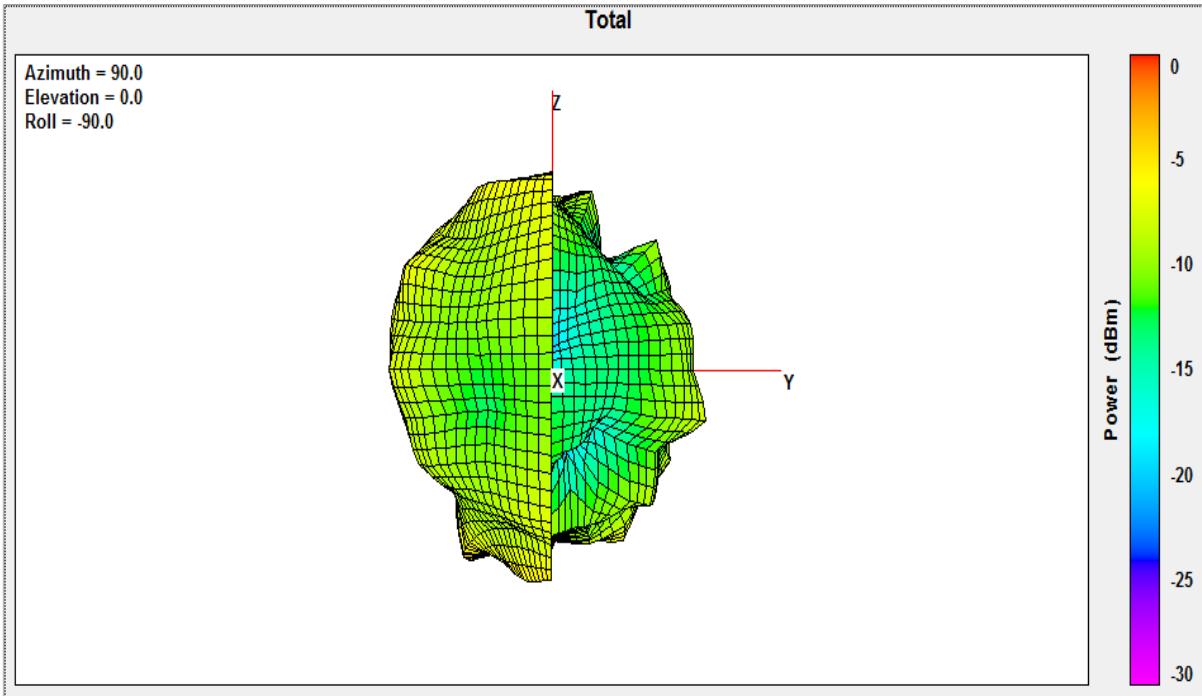
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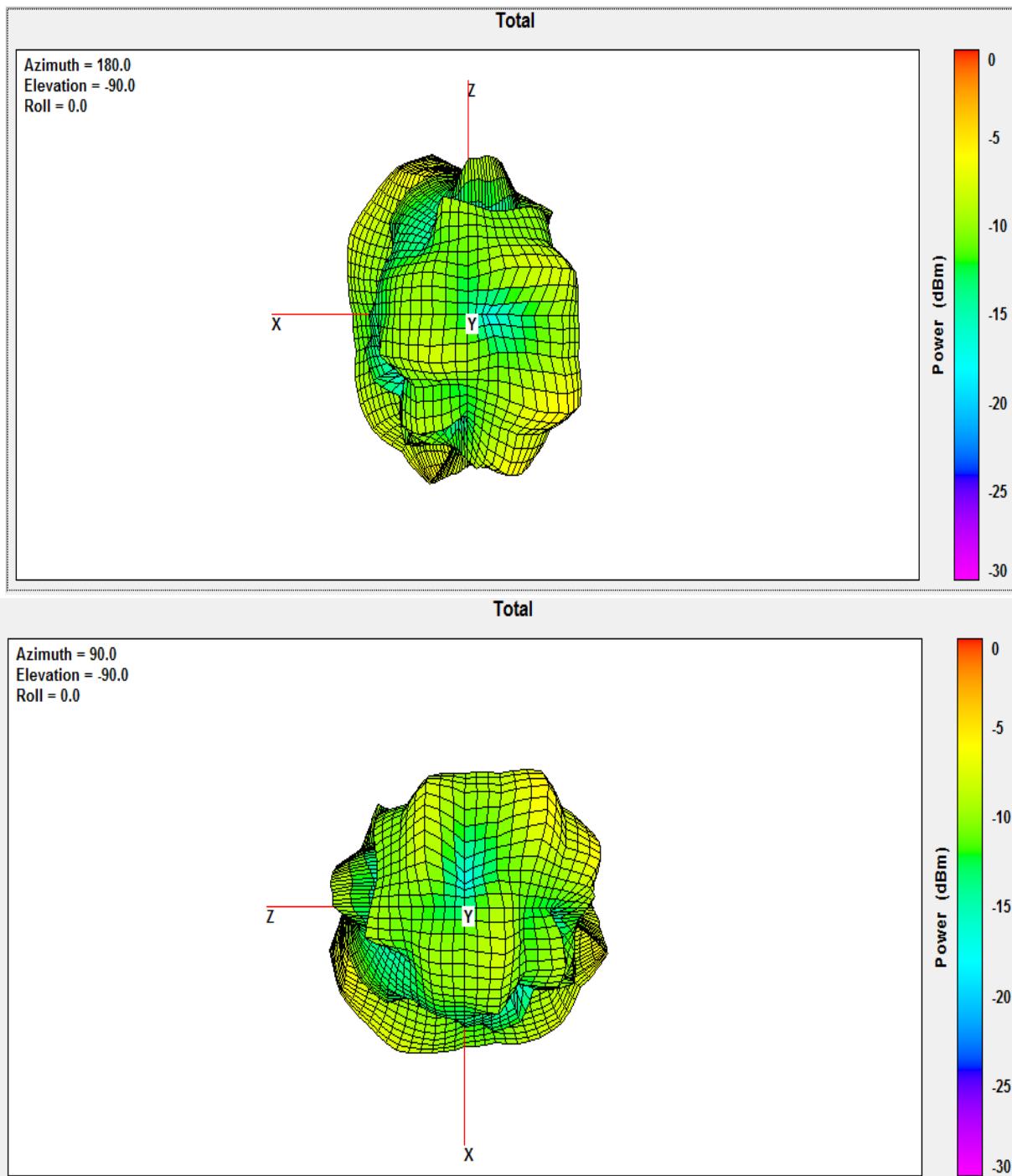
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Phi Polarization(Theta Angle=90°)

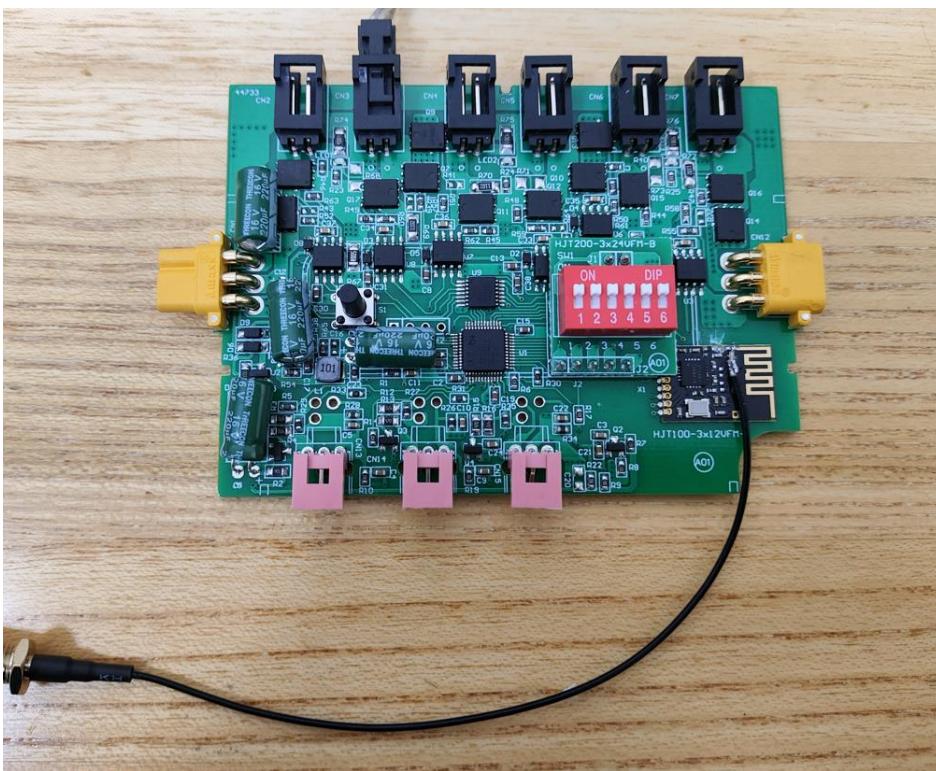


Total 3D Plot(Fre.2440MHz)





6 Photo



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END OF REPORT

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