

#### Antenna Gain Test Report

Project No.: 4790218908

Client Name: YADEA TECHNOLOGY GROUP CO., LTD.

Client Address: Dongsheng Road, Dacheng Industrial Zone,

Anzhen, Xishan District, Wuxi, Jiangsu, China

Product Name: center box

Product Model: H60A

Manufacture: Wuhan Hekang Power Technology CO., LTD

Antenna Type: PCB

Antenna Size: 11.1 mm \* 5.6 mm

Project Engineer: Burt Hu

Test Standards: ANSI/IEEE std 149-2021

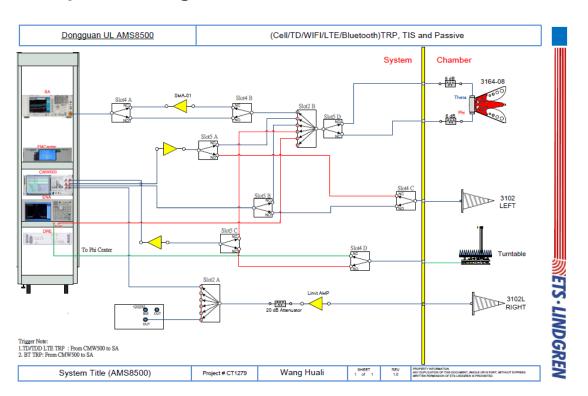
Issued Date: 2023.2.1



# 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	1	/
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





### 3 Test Temperature and Humidity

Temperature: 21.6°C

Humidity: 63%

### 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.

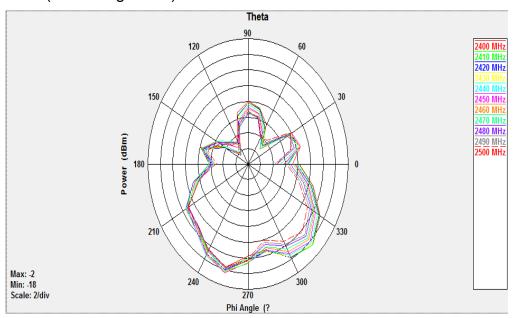
#### 5 Test Result

Frequency (MHz)	Efficiency (%)	Gain (dBi)	
2400	38.12	2.47	
2410	37.93	2.46	
2420	38.26	2.49	
2430	37.94	2.43	
2440	37.12	2.24	
2450	35.48	1.95	
2460	33.66	1.63	
2470	31.79	1.22	
2480	30.11	0.88	
2490	29.25	0.69	
2500	28.53	0.51	

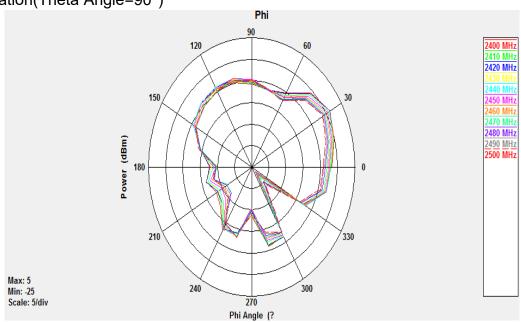


### **Polarization Pattern Photos**

Theta Polarization(Theta Angle=90°)



Phi Polarization(Theta Angle=90°)



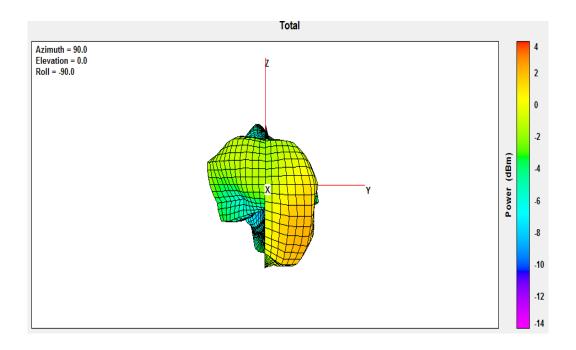
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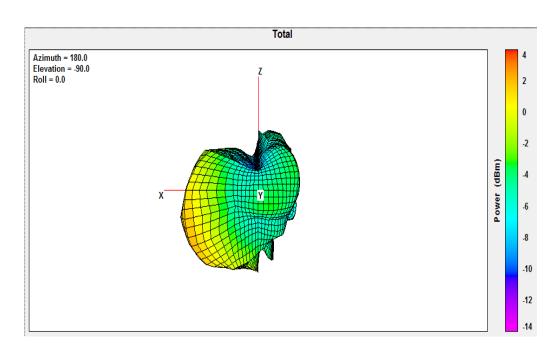
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### Total 3D Plot(Fre.2420MHz)

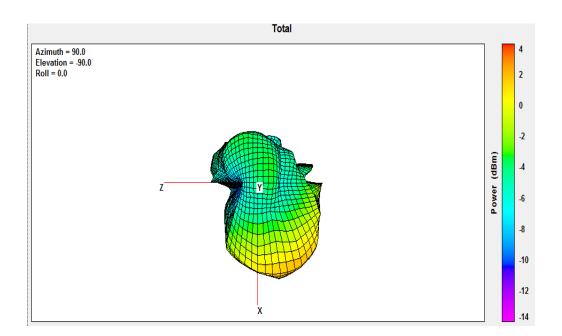




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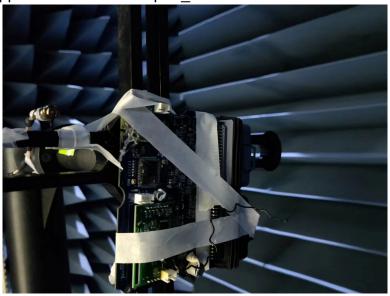






### **Photo**

Please refer to the appendix of antenna report\_2.4GHz





**END OF REPORT**