



Antenna Gain Test Report

Project No.: \

Client Name: Primax

Client Address: \

Product Name: 2.4GHz Dongle

Product Model: \

Manufacture: Primax

Antenna Type: Dongle: PIFA

Antenna Size: \

Project Engineer: James Qin

Test Standards: ANSI/IEEE std 149-2021

Issued Date: 2023.1.13

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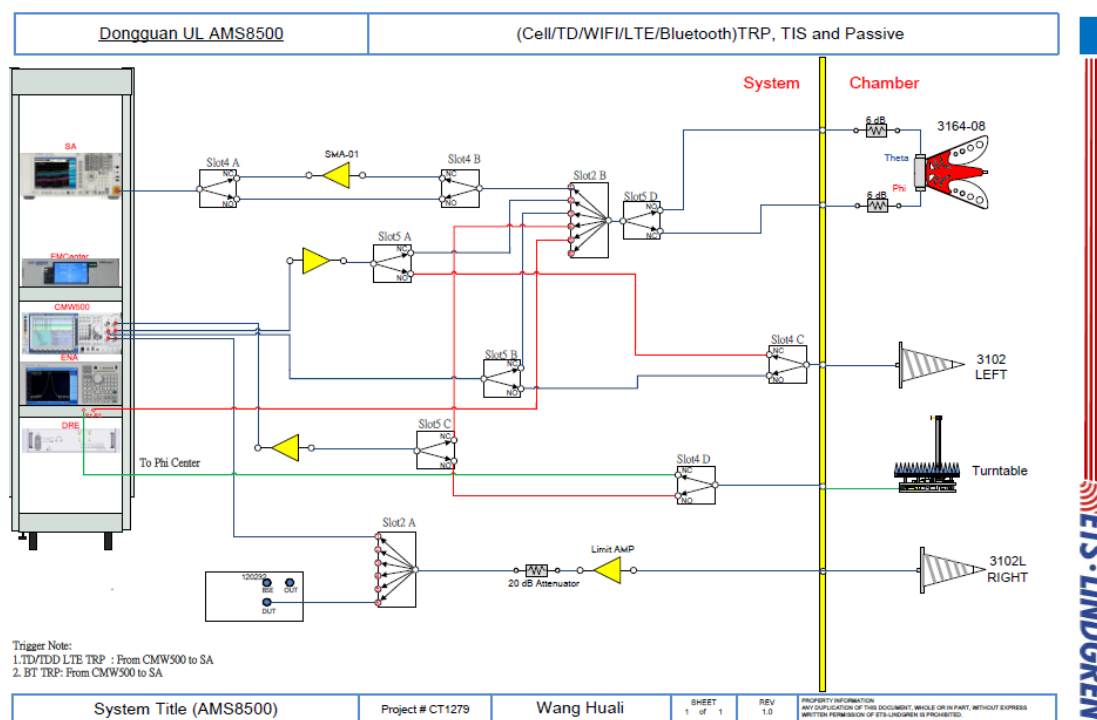
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1 Test Equipment Information

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: 23.1°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.

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Dongle 1#

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	24.09	1.14
2410	25.90	1.27
2420	28.15	1.33
2430	30.01	1.45
2440	31.62	1.57
2450	32.71	1.83
2460	33.24	1.10
2470	33.52	1.28
2480	33.92	1.42
2490	34.33	1.58
2500	34.45	1.75

Dongle 2#

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	29.77	1.78
2410	29.66	1.70
2420	29.92	1.57
2430	29.70	1.43
2440	29.20	1.24
2450	28.34	1.15
2460	27.37	1.13
2470	26.48	1.17
2480	25.92	1.30
2490	25.72	1.51
2500	25.31	1.76

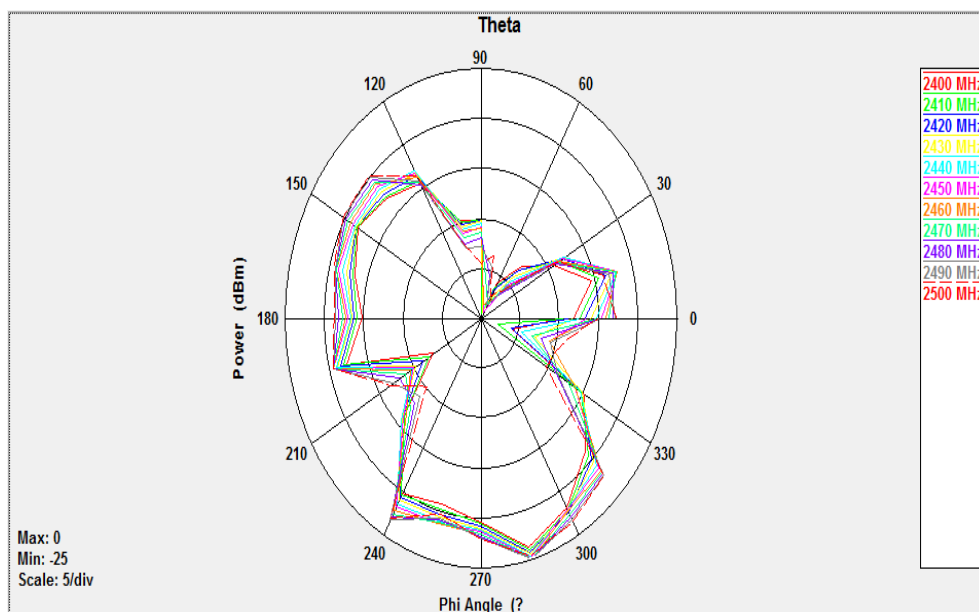
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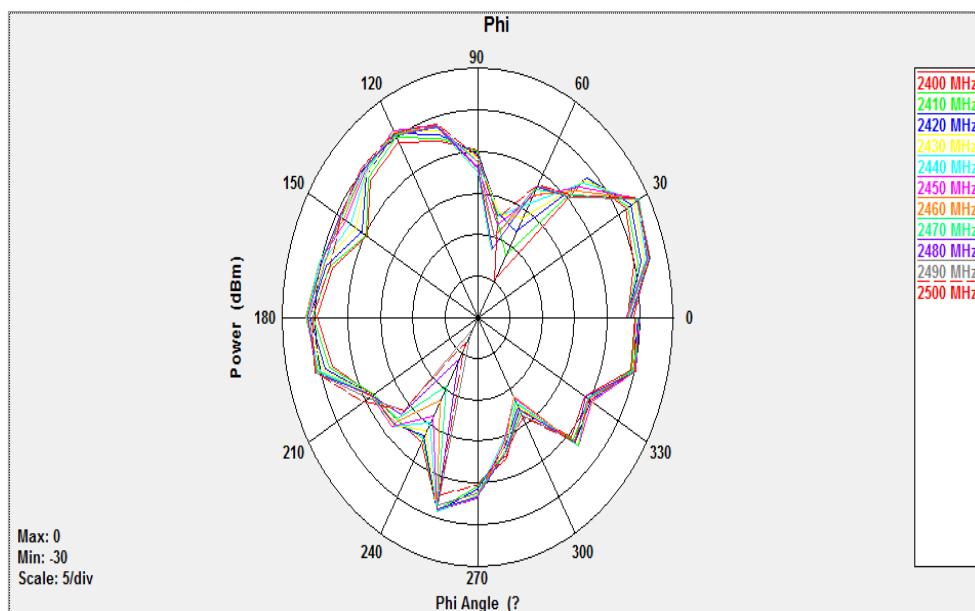


Dongle 1#

Theta Polarization(Theta Angle=90°)



Phi Polarization(Theta Angle=90°)

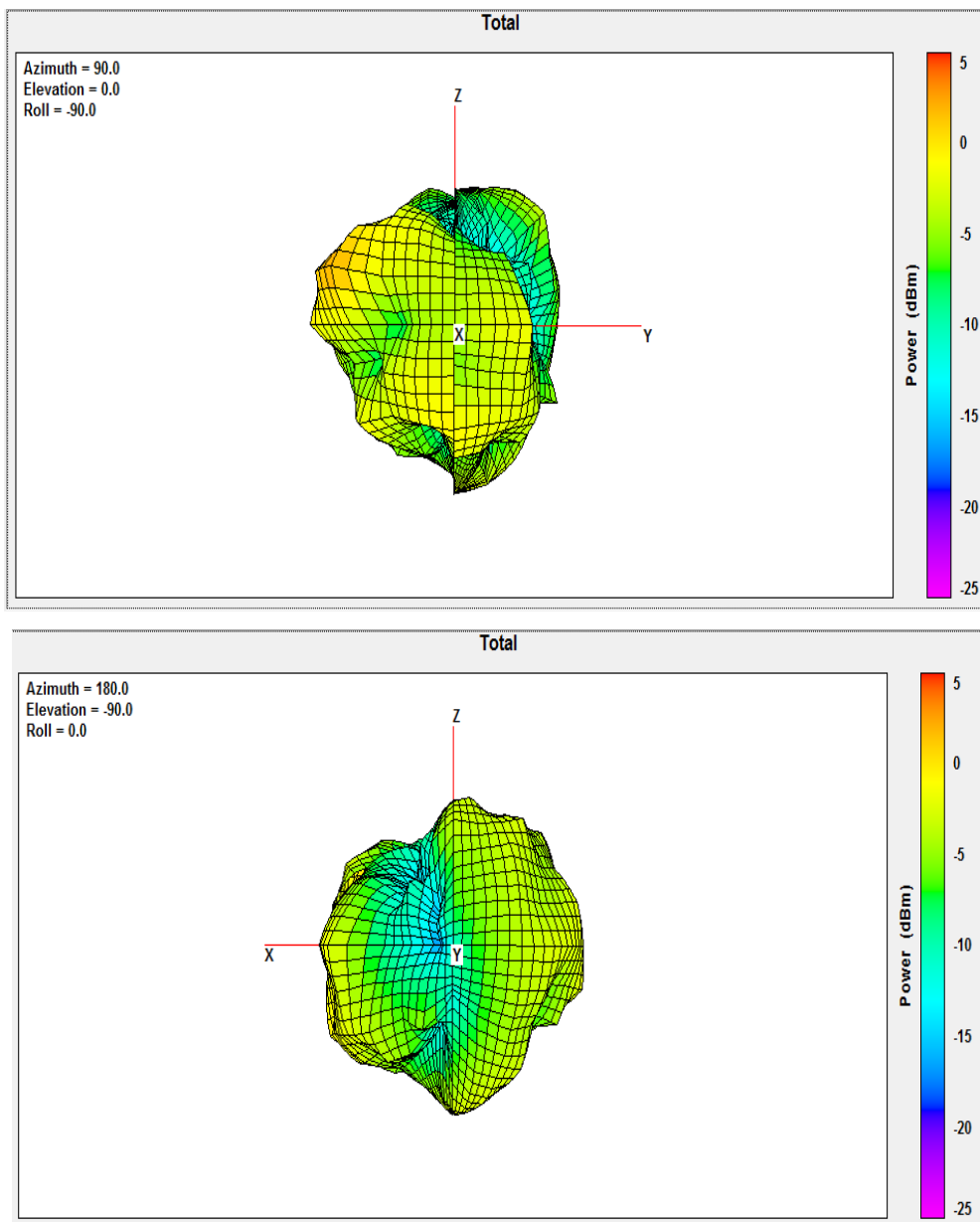


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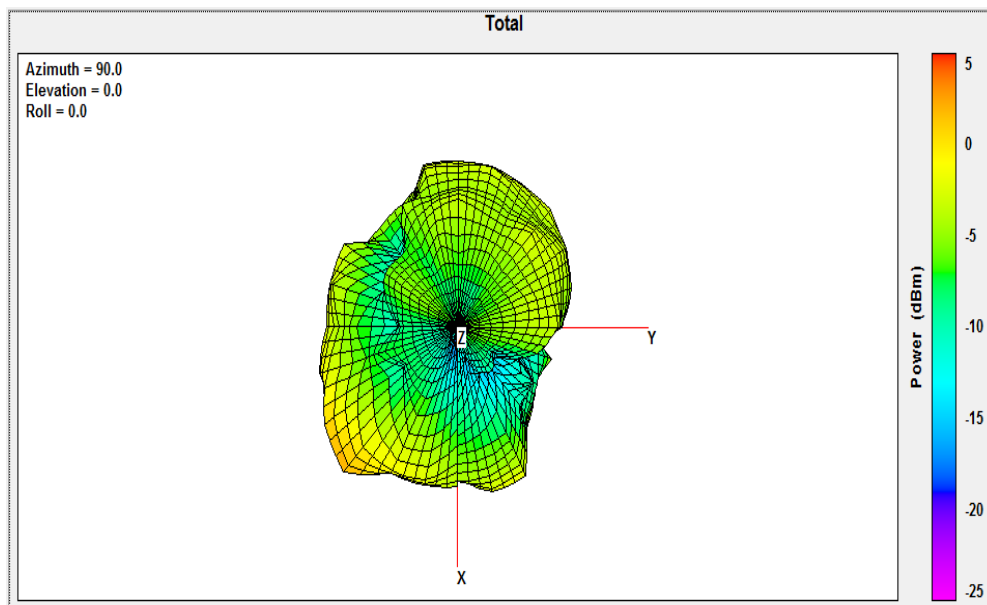


Total 3D Plot(Fre.2480MHz)



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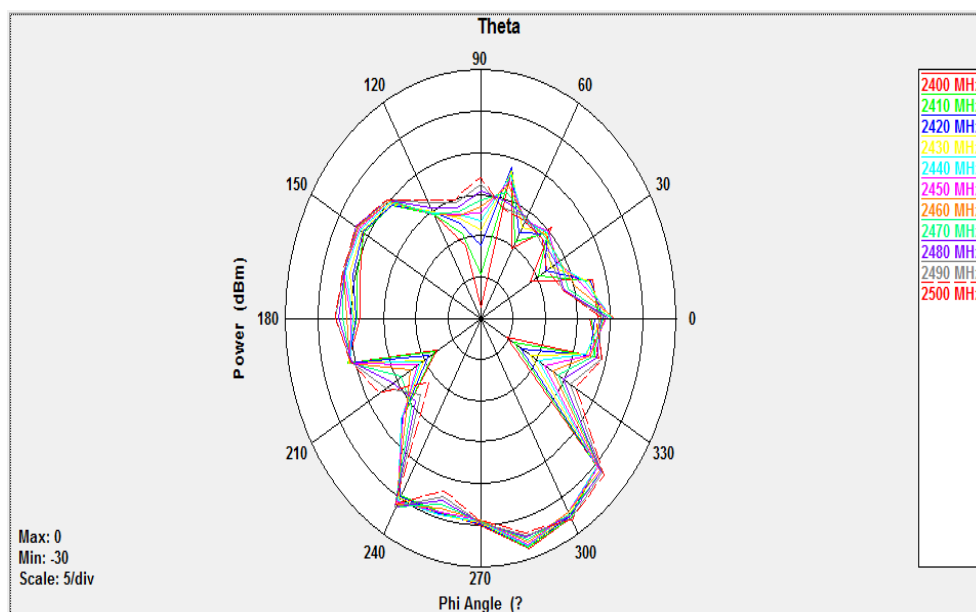
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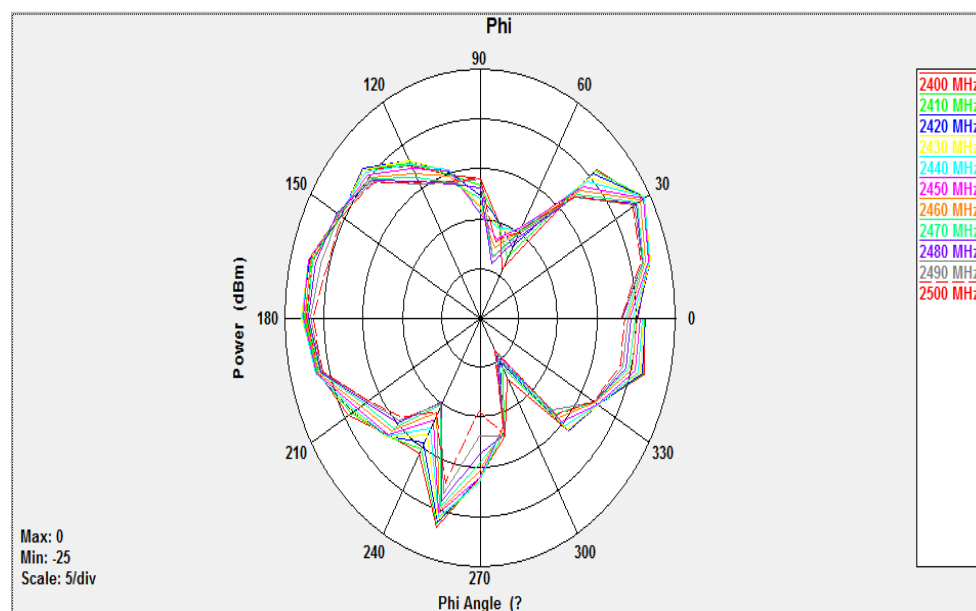


Dongle 2#

Theta Polarization(Theta Angle=90°)



Phi Polarization(Theta Angle=90°)

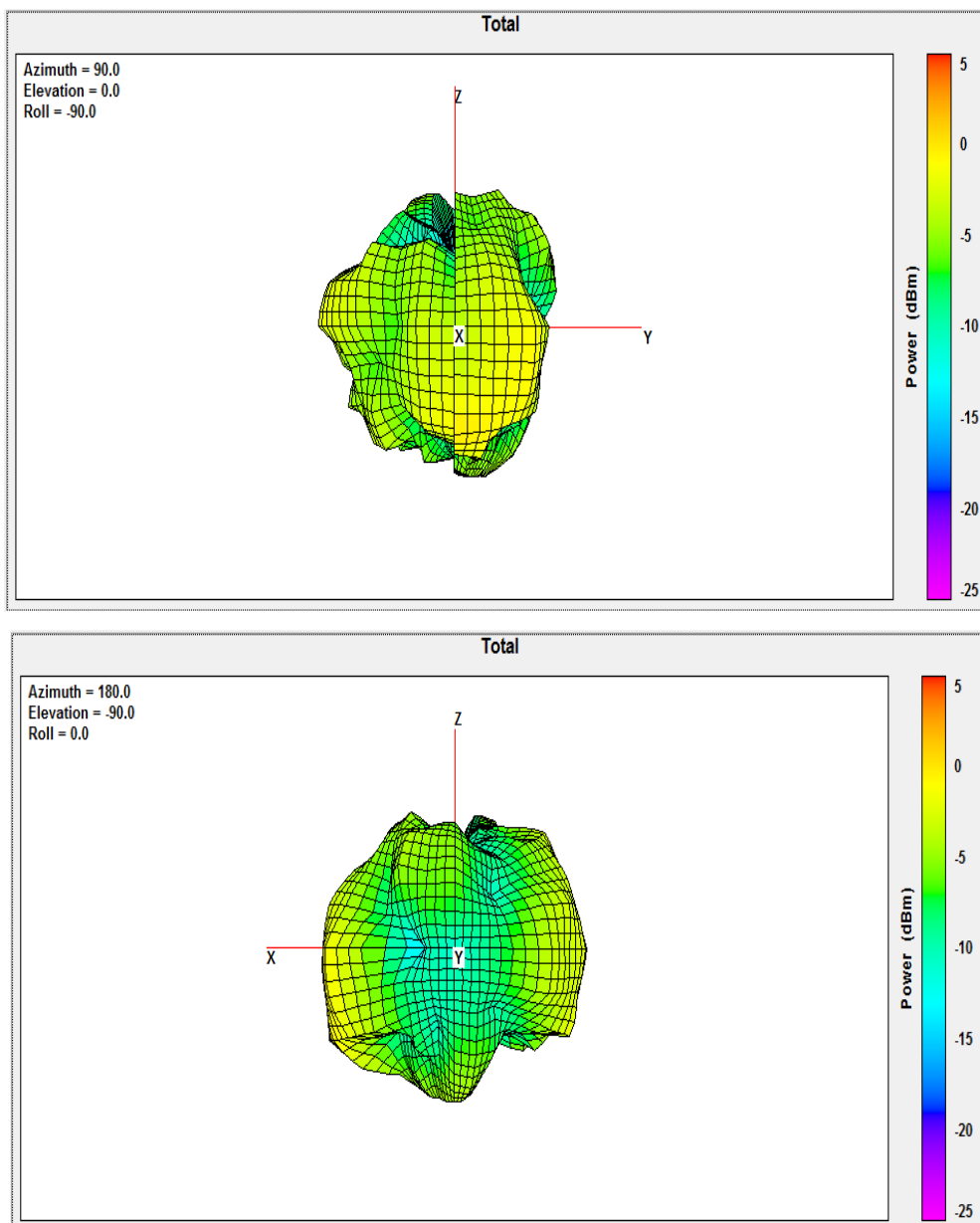


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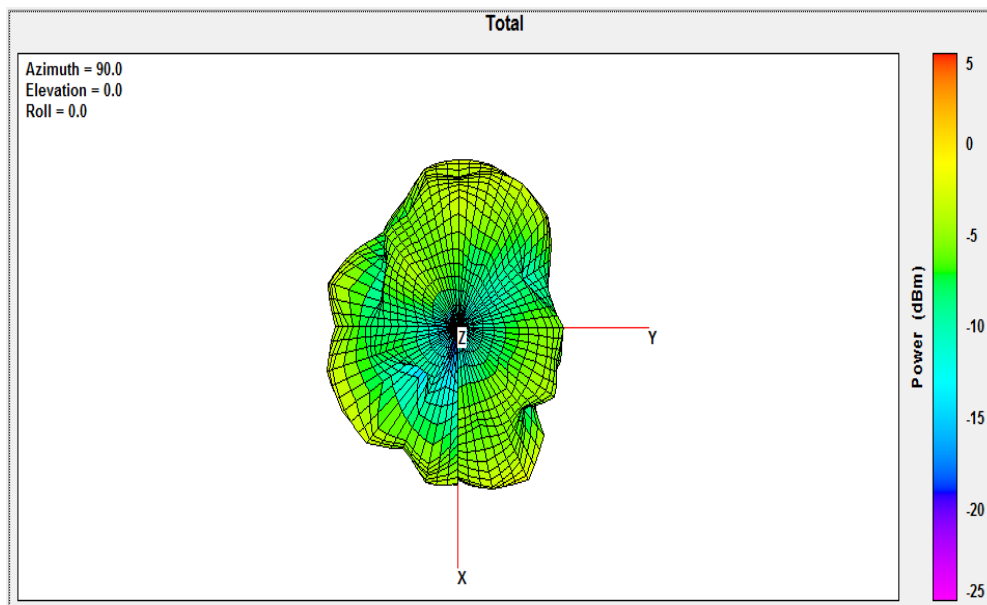


Total 3D Plot(Fre.2410MHz)



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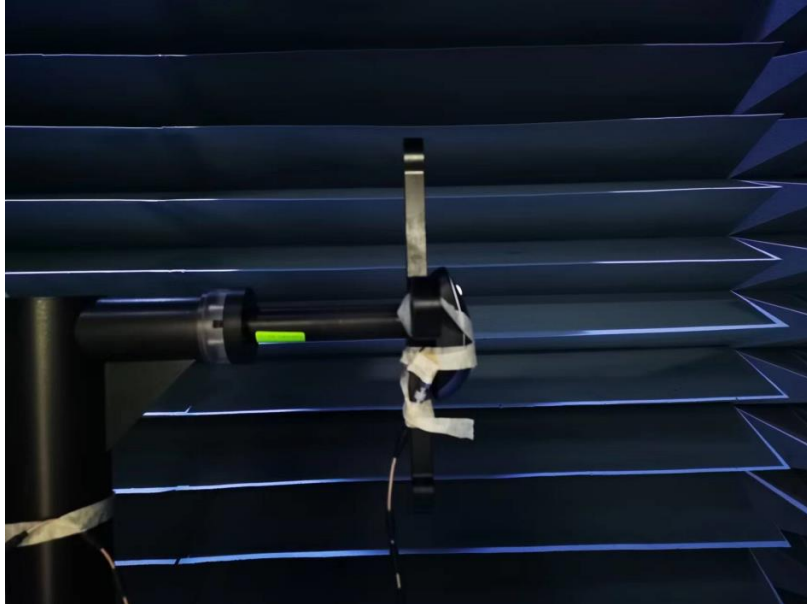


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7 Photo



END OF REPORT

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