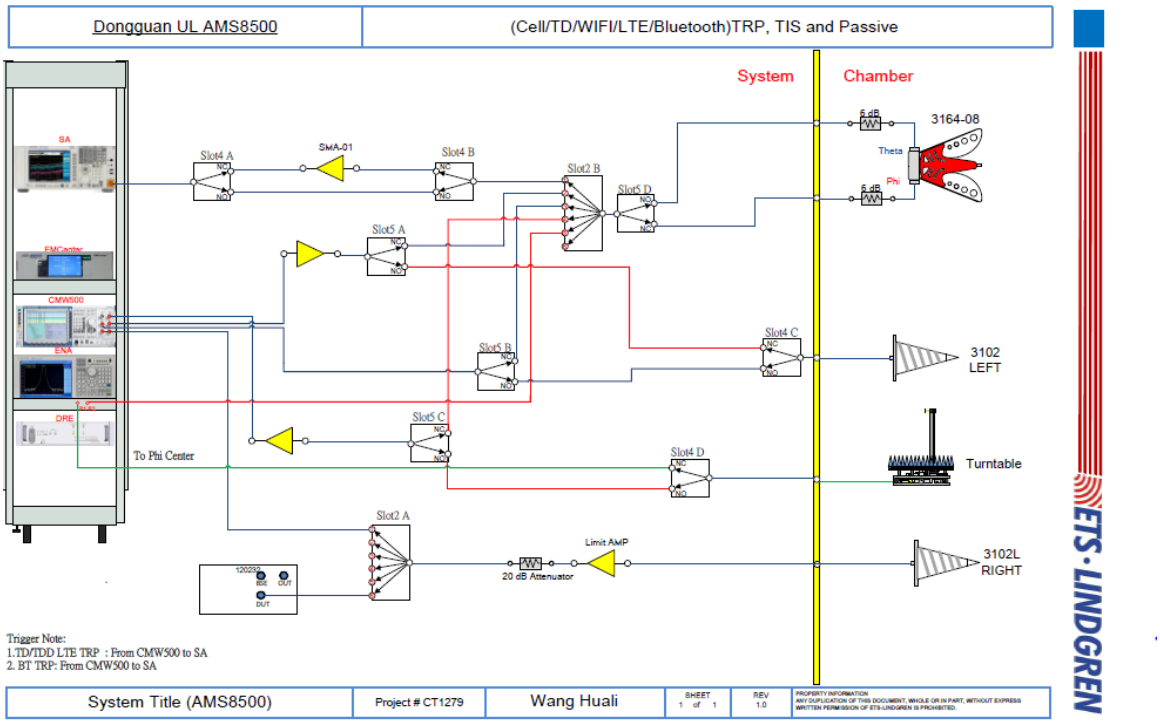
Antenna Gain Test Report

Project No.:	4790752179
Client Name：	SHANGHAI ISHIDA ELECTRONIC SCALES CO.,LTD.
Client Address:	Building 2, No.86，Minxue Rd, Pudong，Shanghai
Product Name：	FPC Antenna
Product Model：	SI-T1
Manufacture：	SHANGHAI ISHIDA ELECTRONIC SCALES CO.,LTD.
Antenna Type：	FPC
Antenna Size:	48 mm * 14 mm* 1.8 mm
Project Engineer：	James Qin
Test Engineer：	Burt Hu
Test Standards：	ANSI/IEEE std 149-2021
Date of Tested：	2023.3.27
Issued Date：	2023.3.27

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



3 Test Temperature and Humidity

Temperature: 22.3°C
Humidity: 62%

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

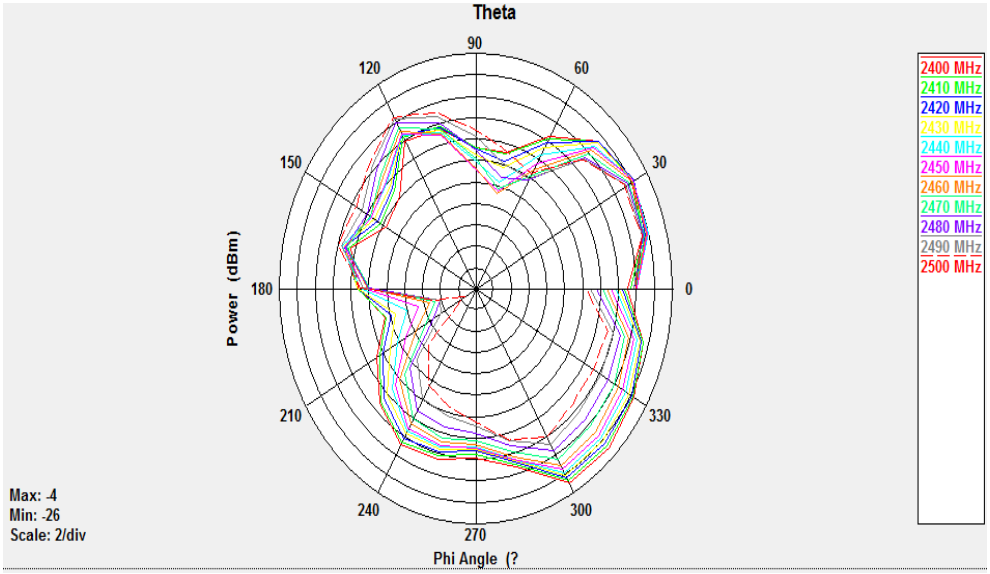
2.4GHz

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	62.31	5.61
2410	62.18	5.79
2420	62.86	6.03
2430	62.99	6.19
2440	62.83	6.32
2450	61.88	6.40
2460	60.60	6.48
2470	59.16	6.51
2480	58.71	6.58
2490	58.97	6.64
2500	59.45	6.69

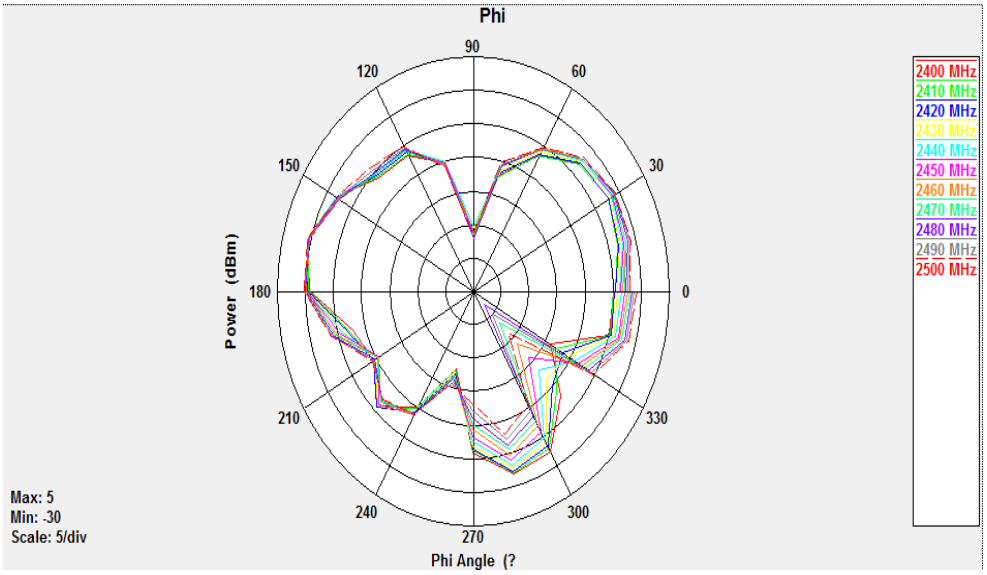
Polarization Pattern Photos

2.4GHz

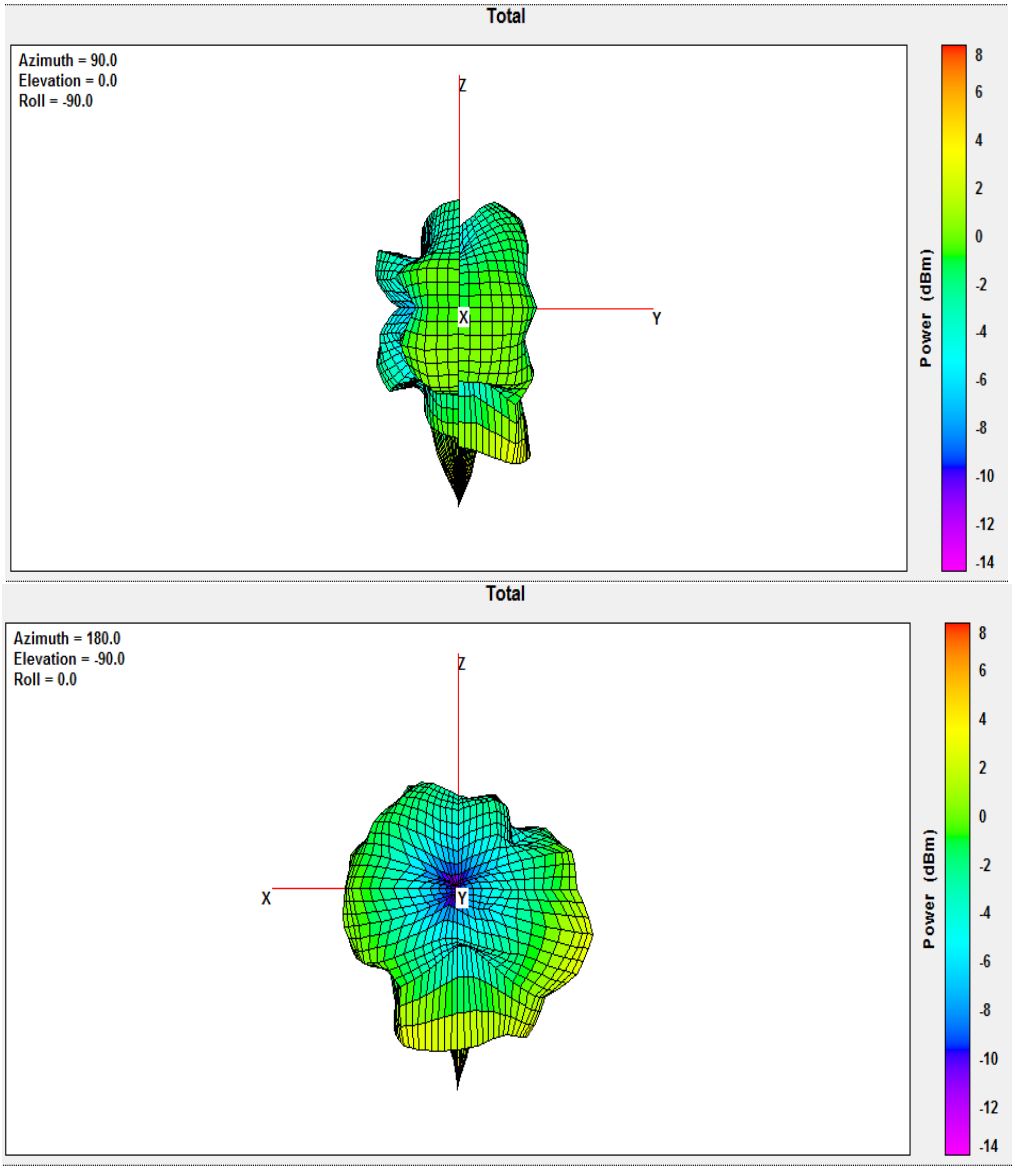
Theta Polarization(Theta Angle=90°)

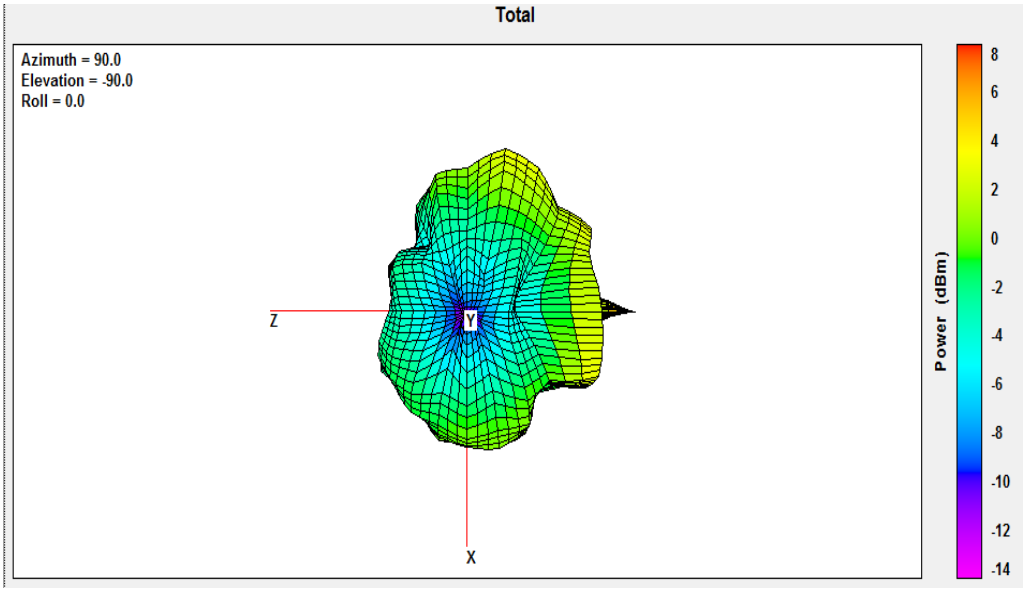


Phi Polarization(Theta Angle=90°)



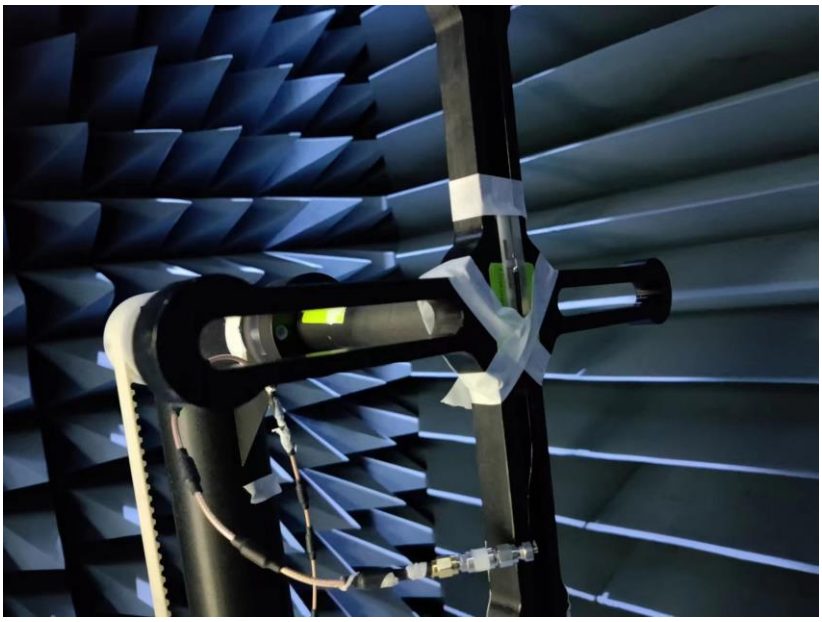
Total 3D Plot(Fre.2500MHz)

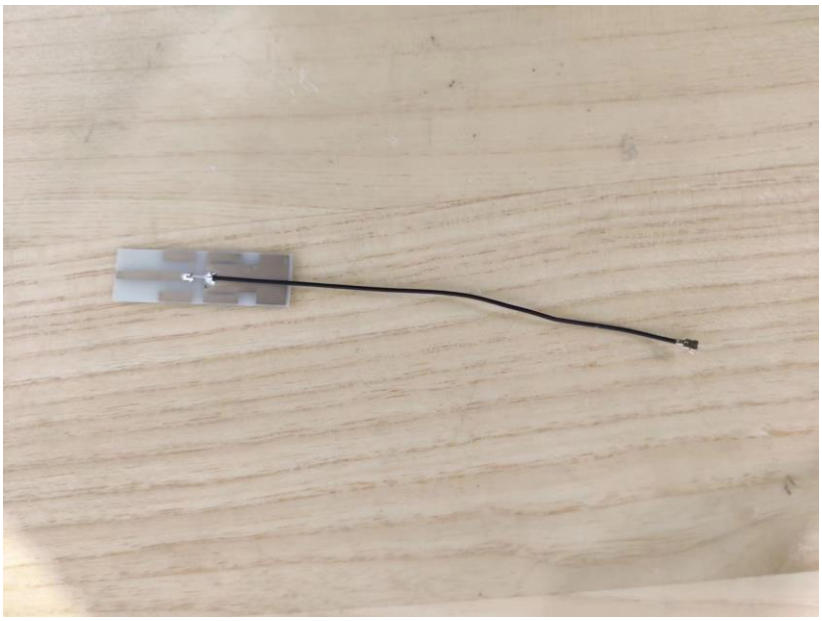




6 Photo

Please refer to the appendix of antenna report_2.4GHz





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