Antenna Gain Test Report

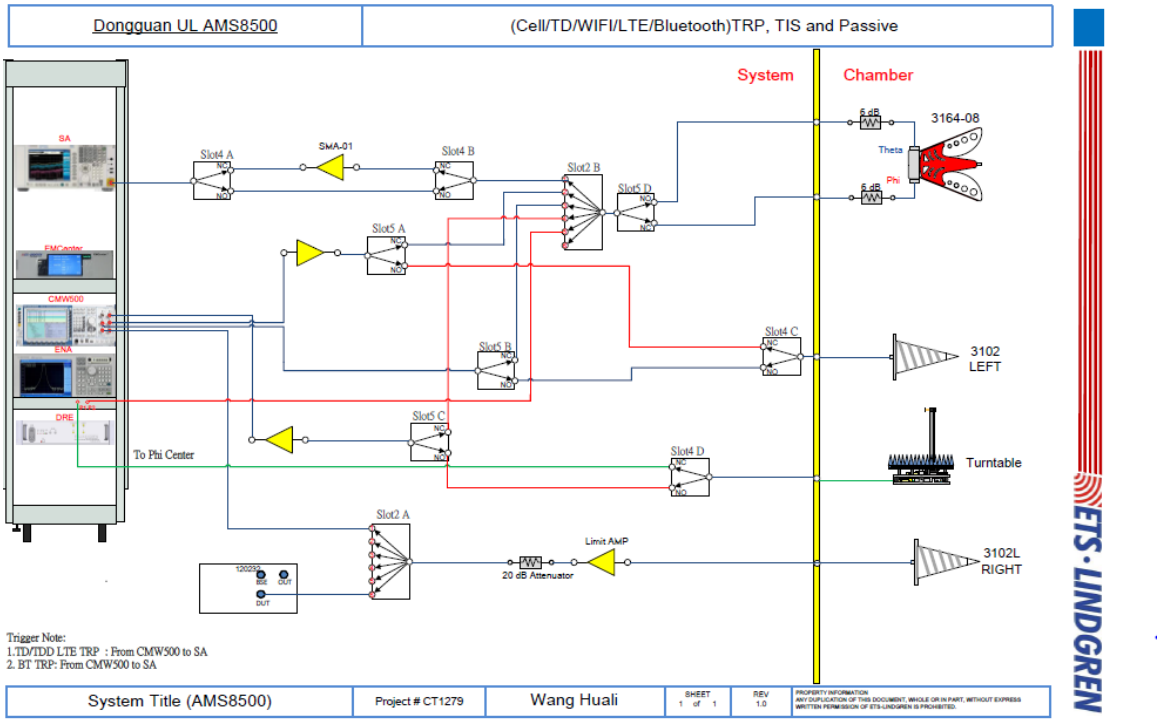
Project No.:	4790763966
Client Name:	TEN PAO PRECISION ELECTRONICS COMPANY LIMITED
Client Address:	RM 610-611 6/F KWONG SANG HONG CENTRE 151-153 HOI BUN RD KWUN TONG KL
Product Name:	Swift Bluetooth Adapter
Product Model:	SWIFT; DMTGWPWMBTCC
Model Difference:	All the same except for the model's name.
Manufacture:	TEN PAO PRECISION TECHNOLOGY (HUIZHOU) COMPANY LIMITED
Antenna Type:	PCB
Antenna Size:	14 mm * 5 mm
Test Standards:	ANSI/IEEE std 149-2021
Date of Tested:	2023.6.9
Issued Date:	2023.6.9

Prepared By:	Reviewed By:	Approved By:
Burt Hu	James Qin	Stephen Guo
Laboratory Engineer	Project Engineer	Laboratory *Manager*

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: 57.6%

4 Test Step Flow

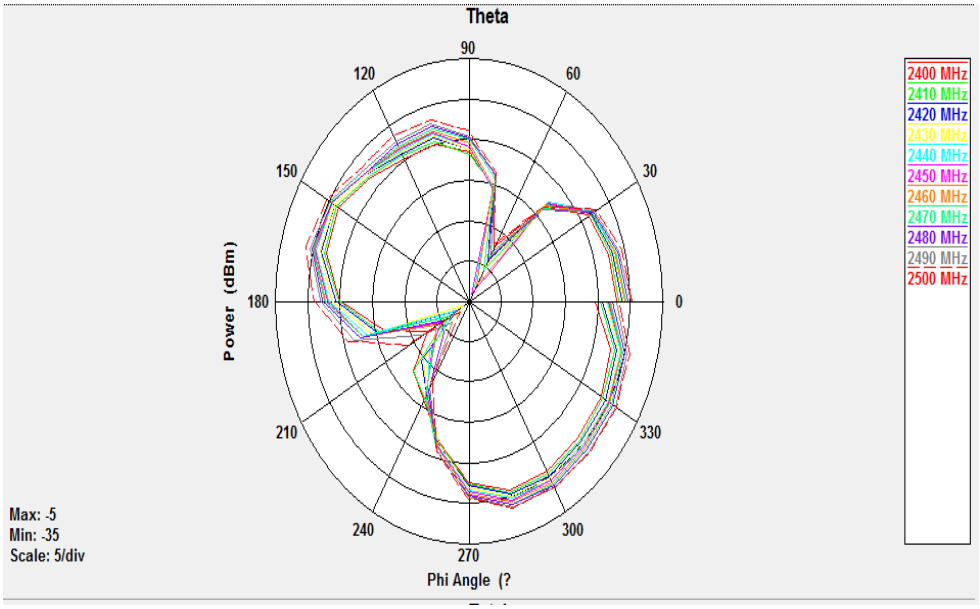
1) Maintain the test ambient temperature of 23±2 C, the instrument is powered on and preheated for more than 30 minutes;
2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
3) Outline sets the test content objectives and conducts calibration 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

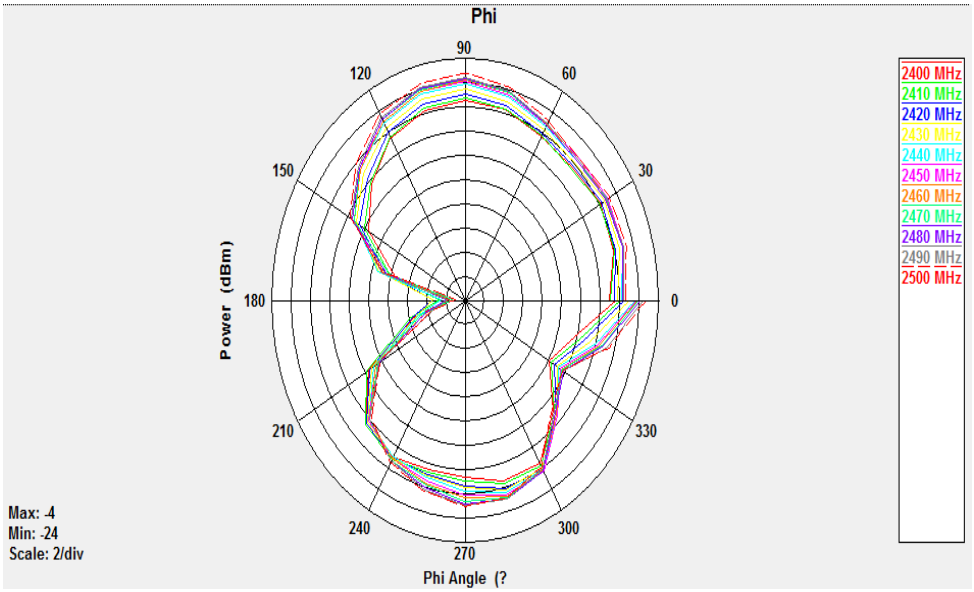
Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	20.09	1.32
2410	20.67	1.48
2420	21.52	1.68
2430	22.26	1.88
2440	22.89	1.95
2450	22.95	1.99
2460	22.79	1.98
2470	22.77	1.96
2480	22.73	1.95
2490	22.95	2.02
2500	23.55	2.05

Polarization Pattern Photos

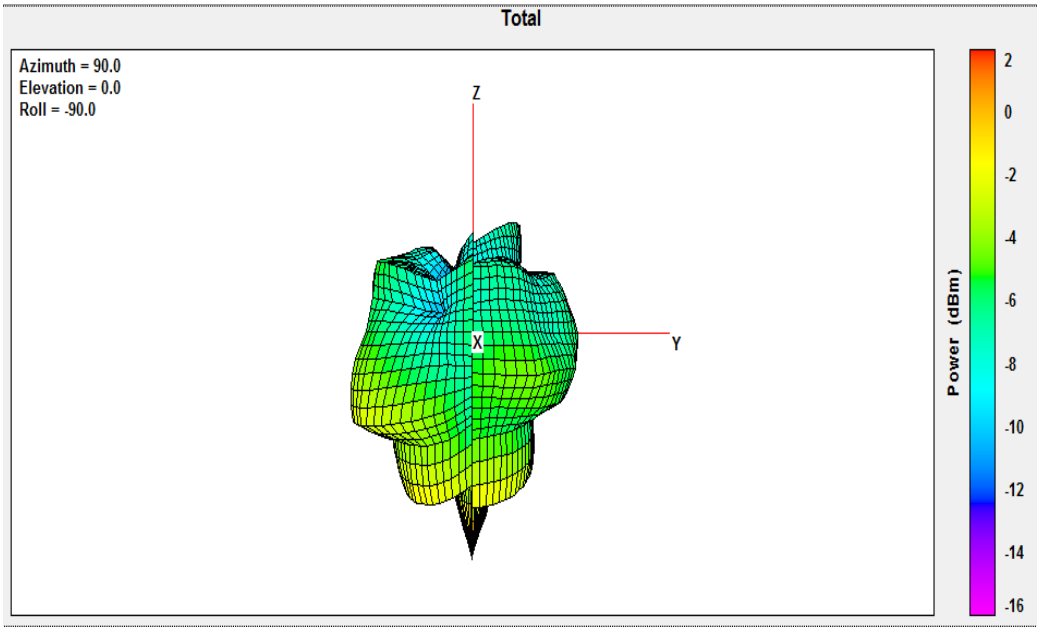
Theta Polarization(Theta Angle=90°)

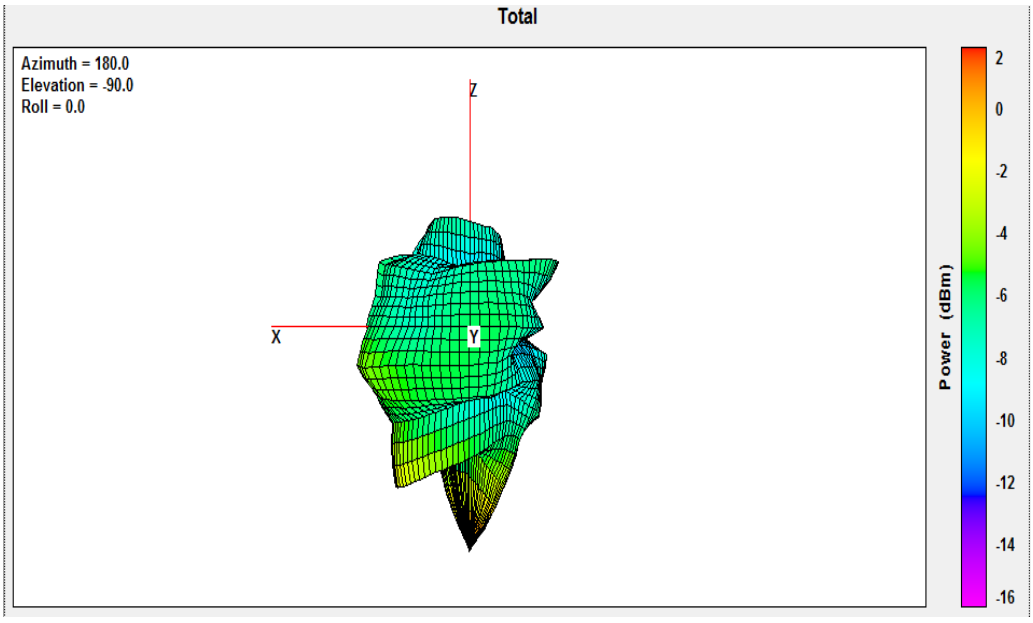


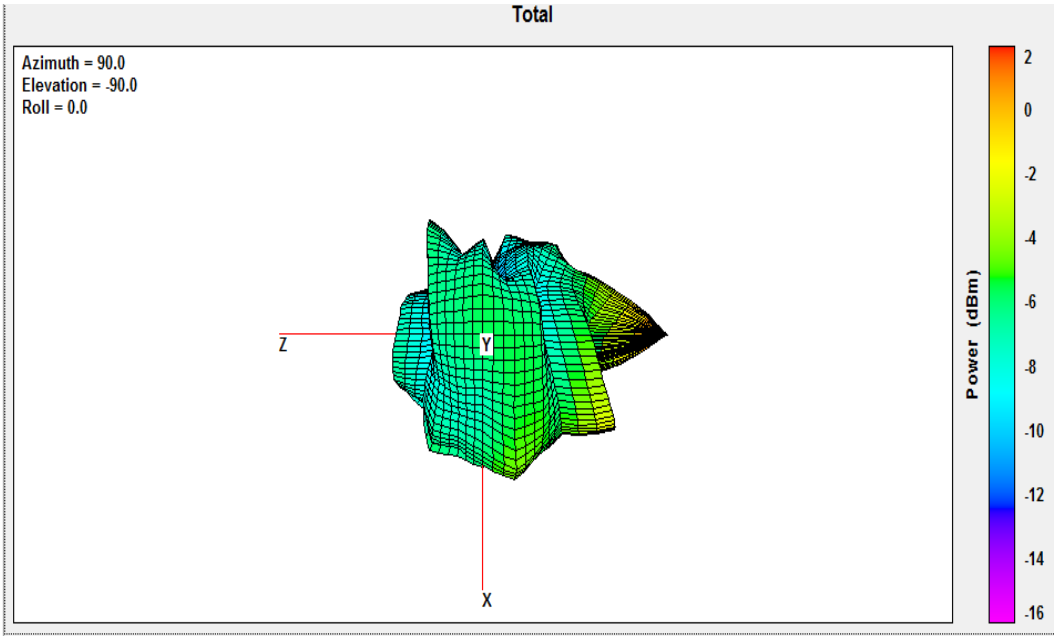
Phi Polarization(Theta Angle=90°)



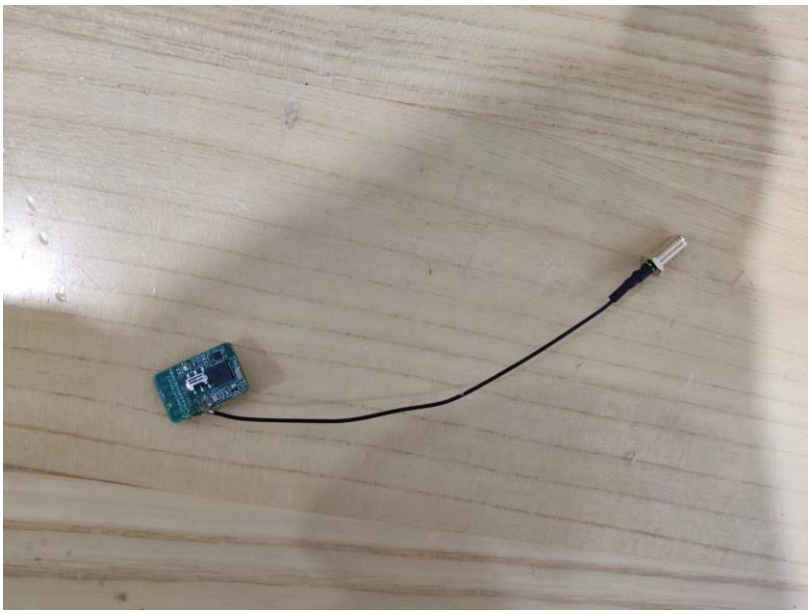
Total 3D Plot(Fre.2500MHz)







6 Photo



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