Antenna Gain Test Report

Project No.:	4790785577
Client Name:	AnX Robotica Corp
Client Address:	6010 W. Spring Creek Pkwy, Plano, TX 75024, USA
Test Lab Name:	UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Test Lab Address:	Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China
Product Name:	BioXam Capsule
Product Model:	AKEM-31SW
Manufacture:	AnX Robotica Corp
Antenna Type:	FPC Antenna
Antenna Size:	/
Project Engineer:	James Qin
Test Engineer:	Burt Hu
Test Standards:	ANSI/IEEE std 149-2021
Test Date:	2023.12.26
Issued Date:	2023.12.26

Revision History

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

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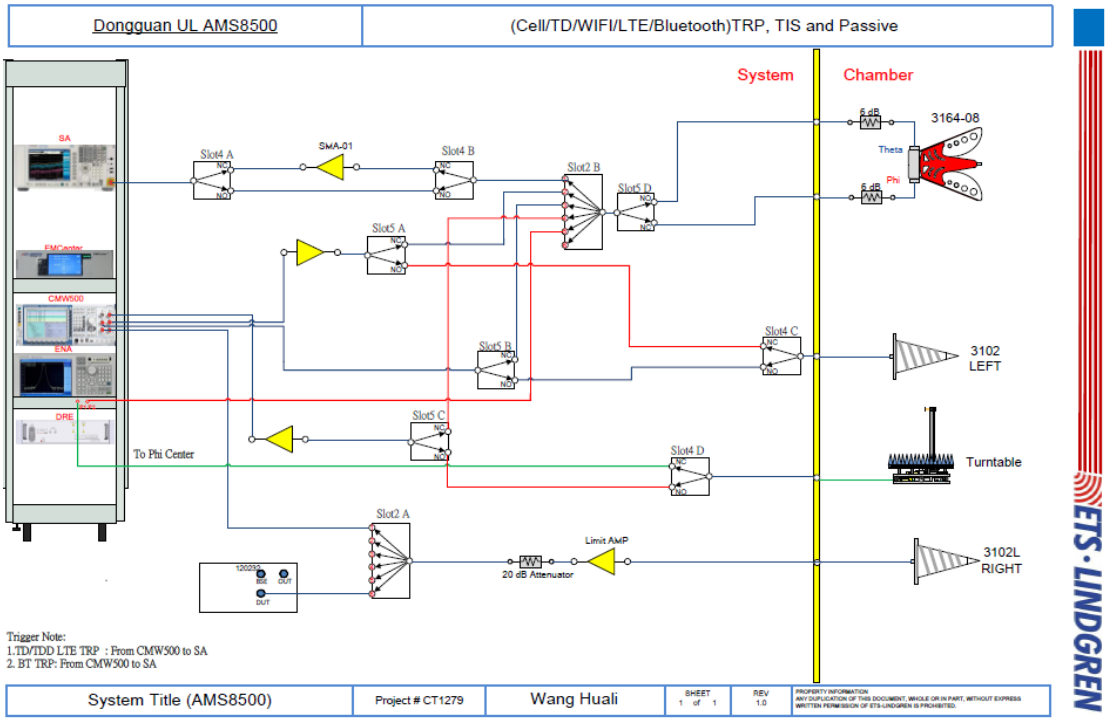
1 Test Equipment Information

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



Note：

1) This test report is prepared by testing in a dark room that is completely silenced and shielded from external signals.

3 Test Temperature and Humidity

Temperature: 21.2°C
Humidity: 53.3%

4 Test Step Flow

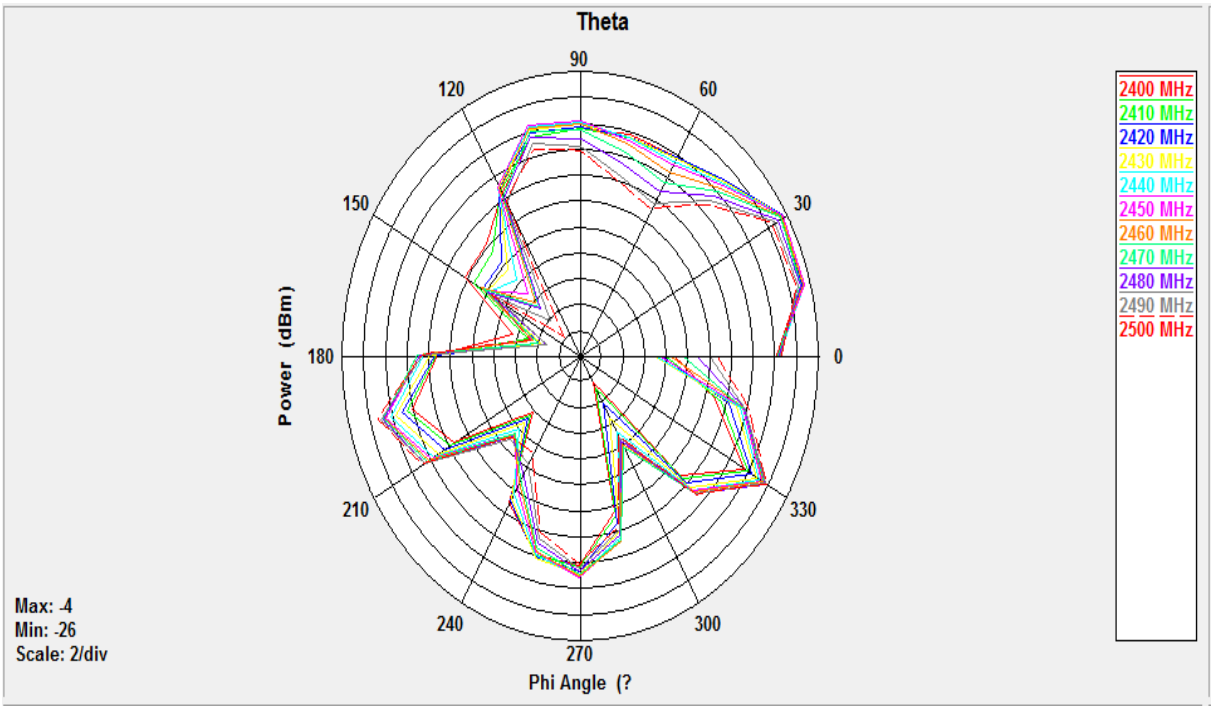
1) Maintain the test ambient temperature of 23±2 C, the instrument is powered on and preheated for more than 30 minutes;
2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
3) Outline sets the test content objectives and conducts calibration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

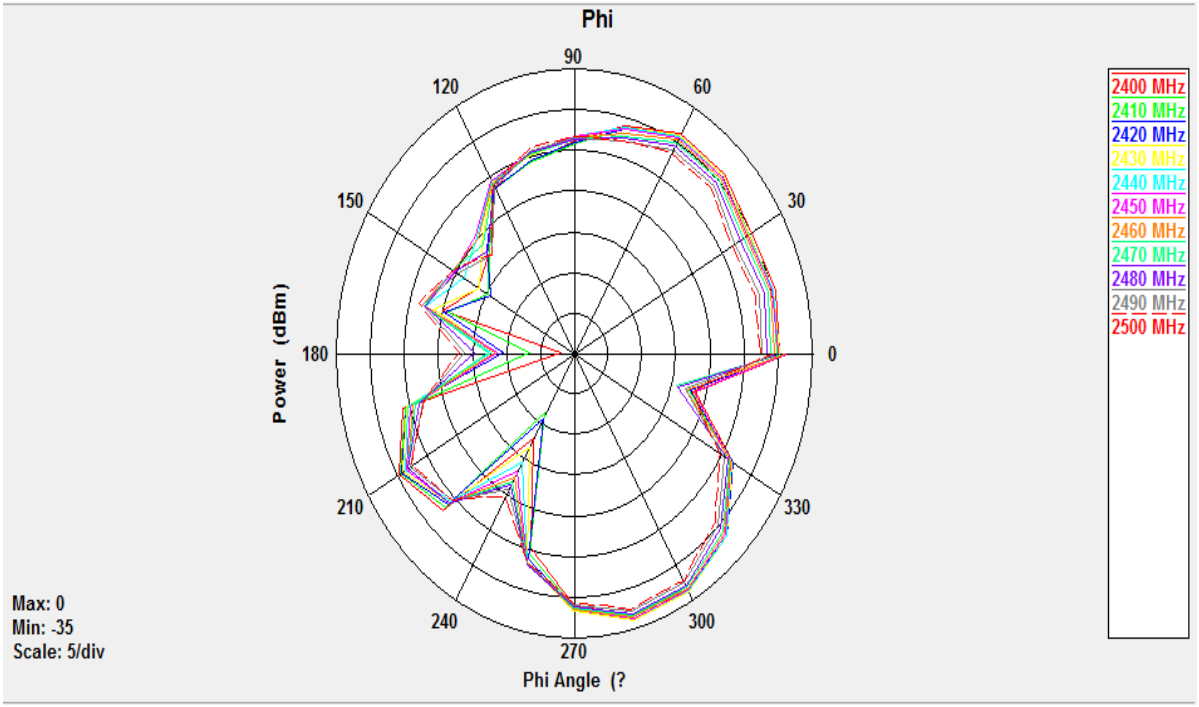
Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	43.37	2.39
2410	43.04	2.39
2420	43.66	2.44
2430	44.71	2.63
2440	44.21	2.57
2450	43.74	2.46
2460	42.55	2.26
2470	41.17	2.14
2480	39.55	2.00
2490	36.75	1.65
2500	34.74	1.39

Polarization Pattern Photos

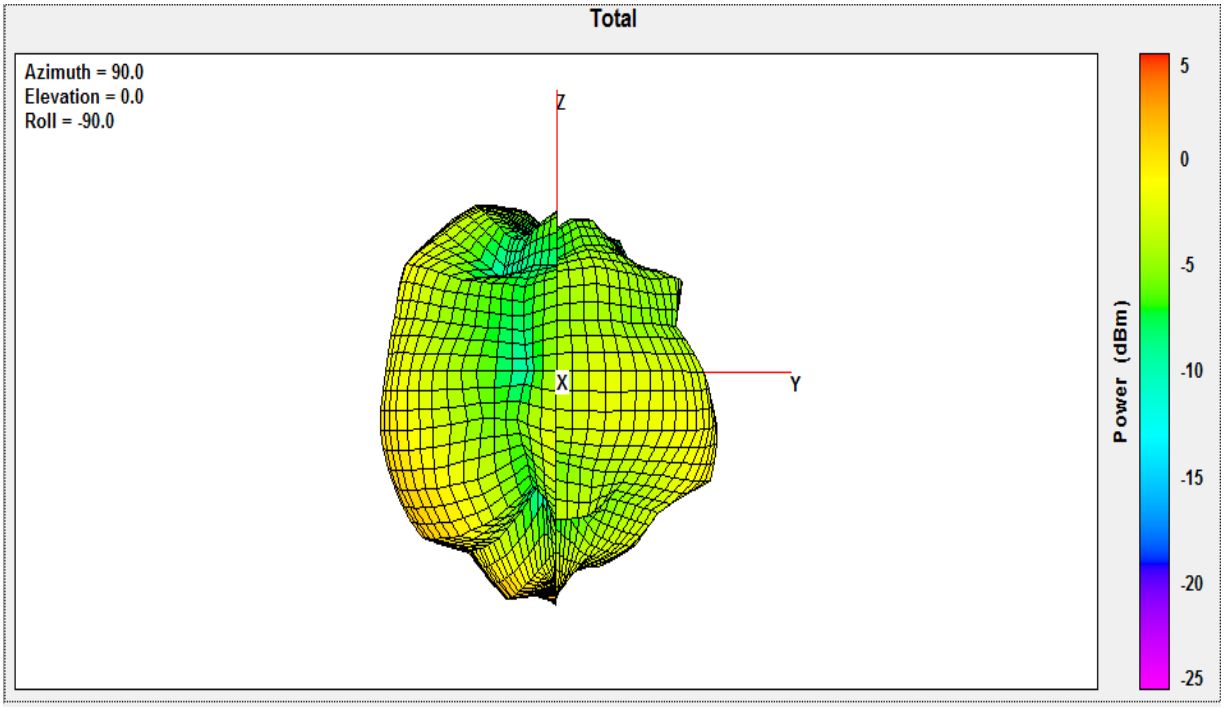
Theta Polarization(Theta Angle=90°)

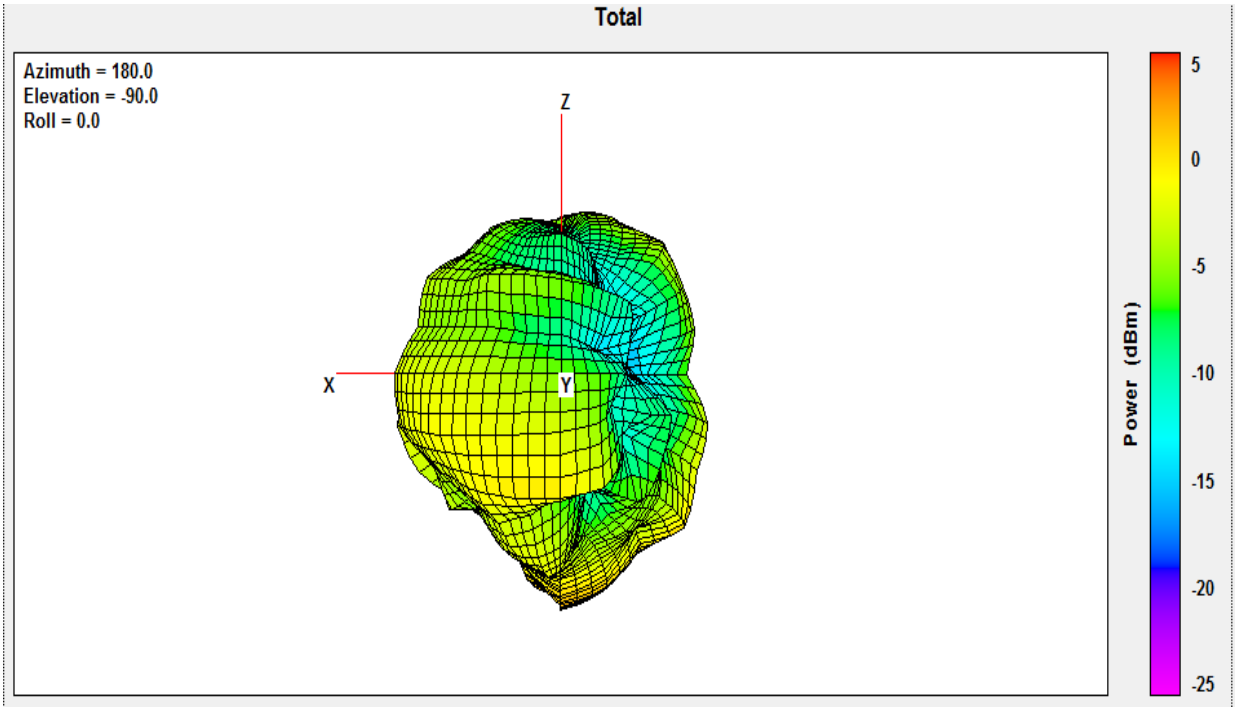


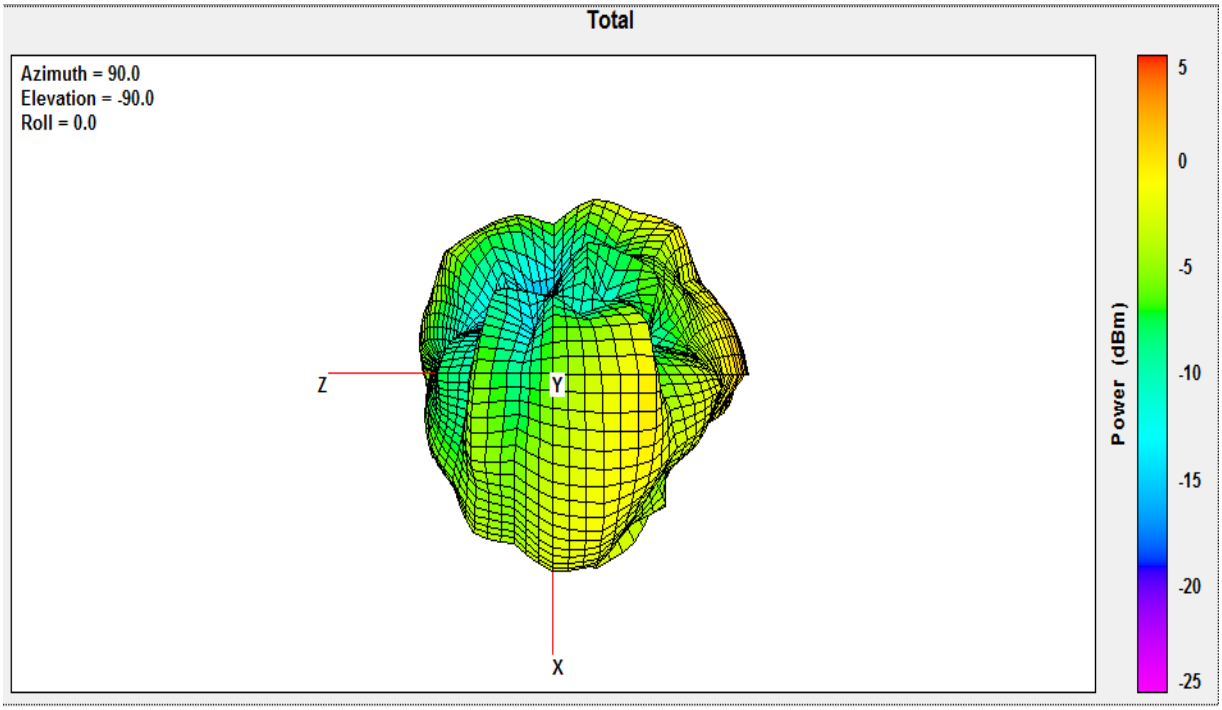
Phi Polarization(Theta Angle=90°)



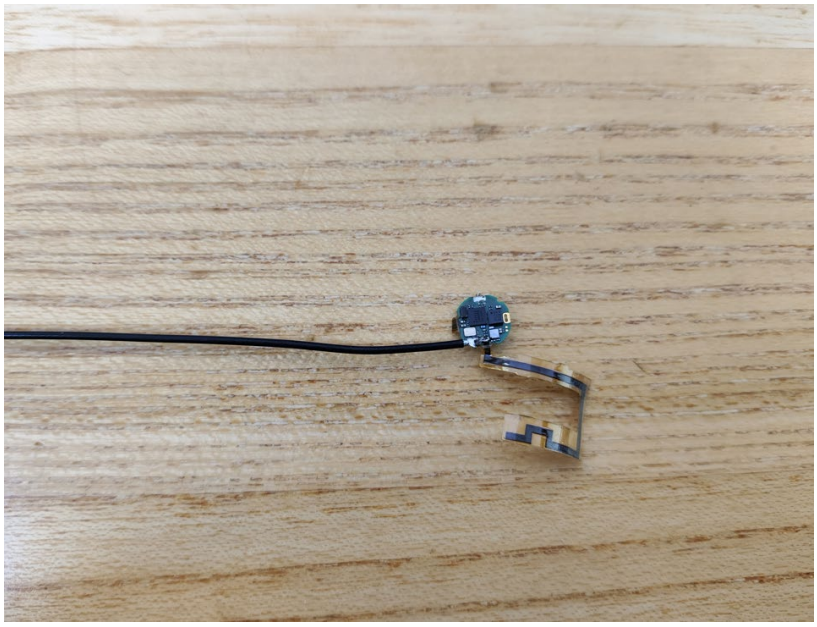
Total 3D Plot(Fre.2430MHz)







6 Photo



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