

**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

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## 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

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### 3 Test Temperature and Humidity

Temperature: 21.2°C

Humidity: 53.3%

## 4 Test Step Flow

- 1) Maintain the test ambient temperature of  $23\pm 2$  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

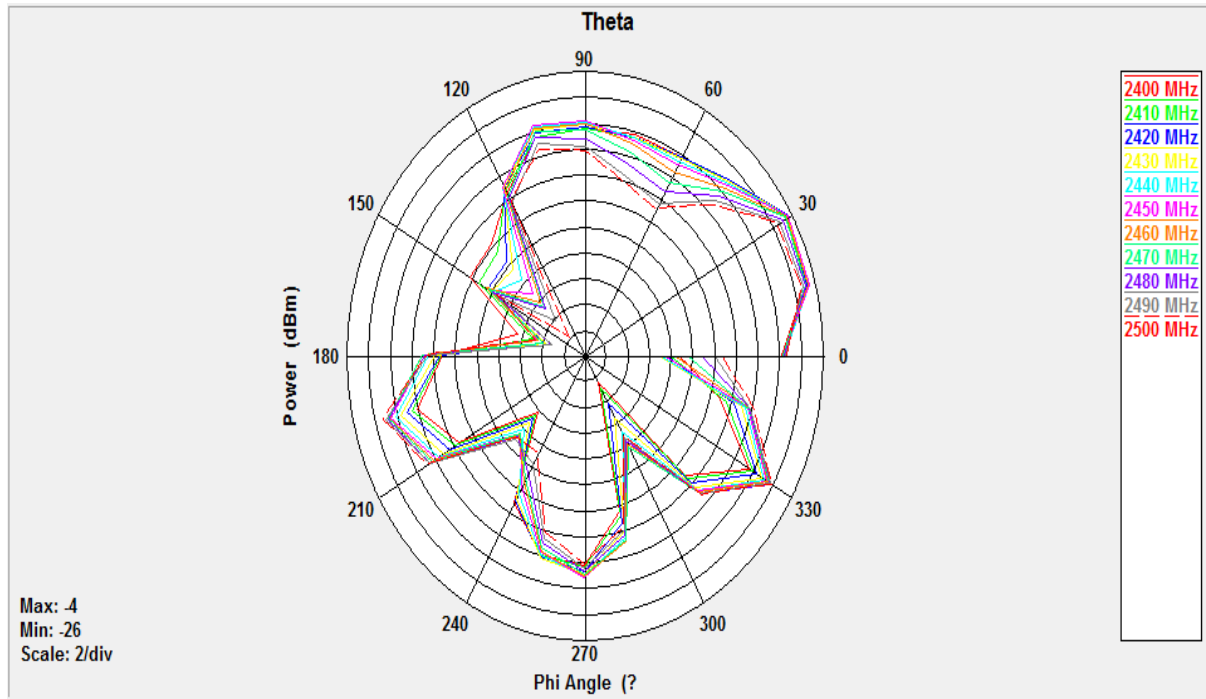
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## Polarization Pattern Photos

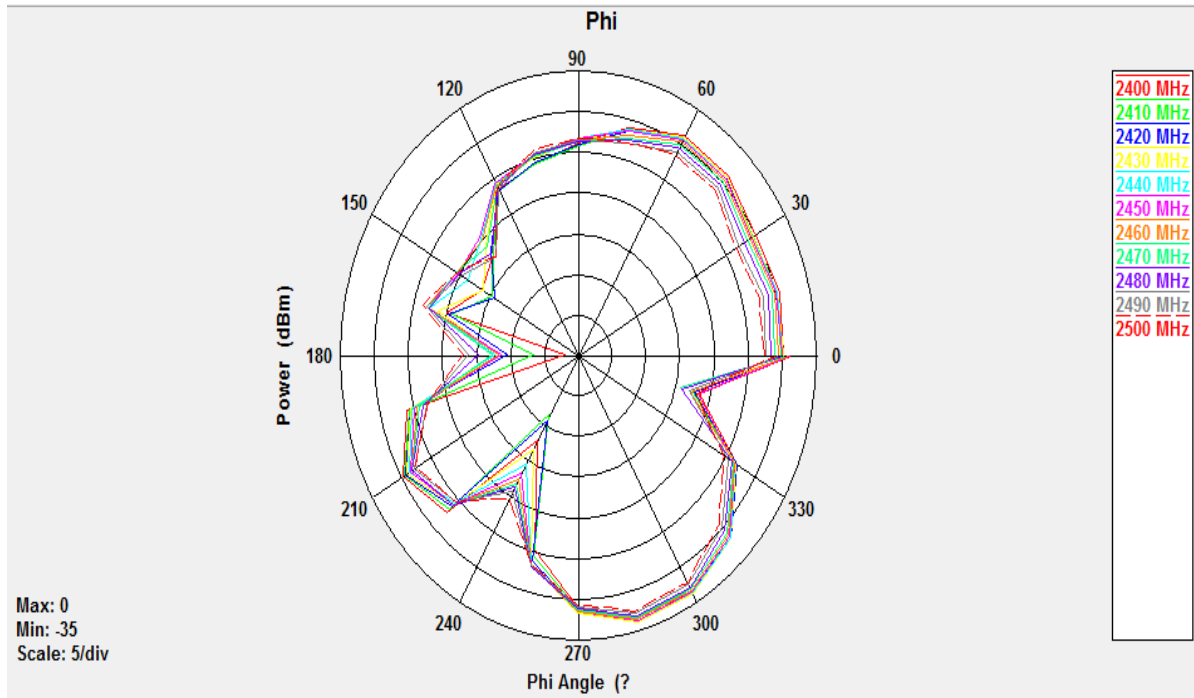
Theta Polarization(Theta Angle=90°)



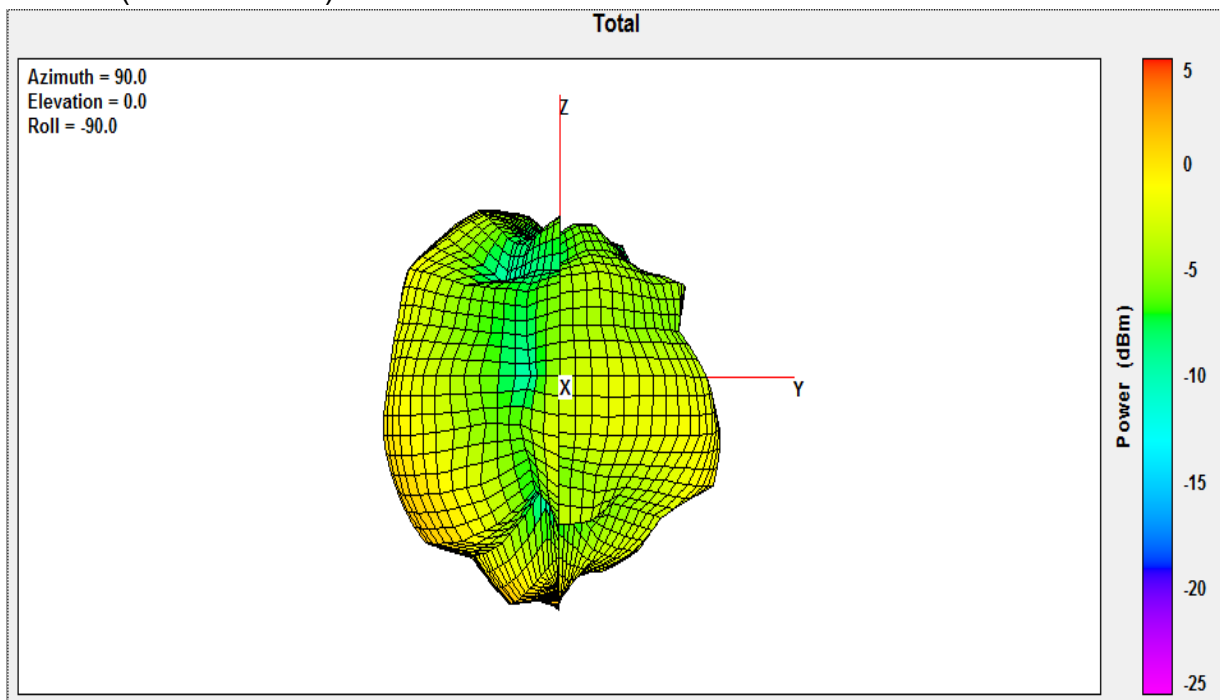
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### Phi Polarization(Theta Angle=90°)

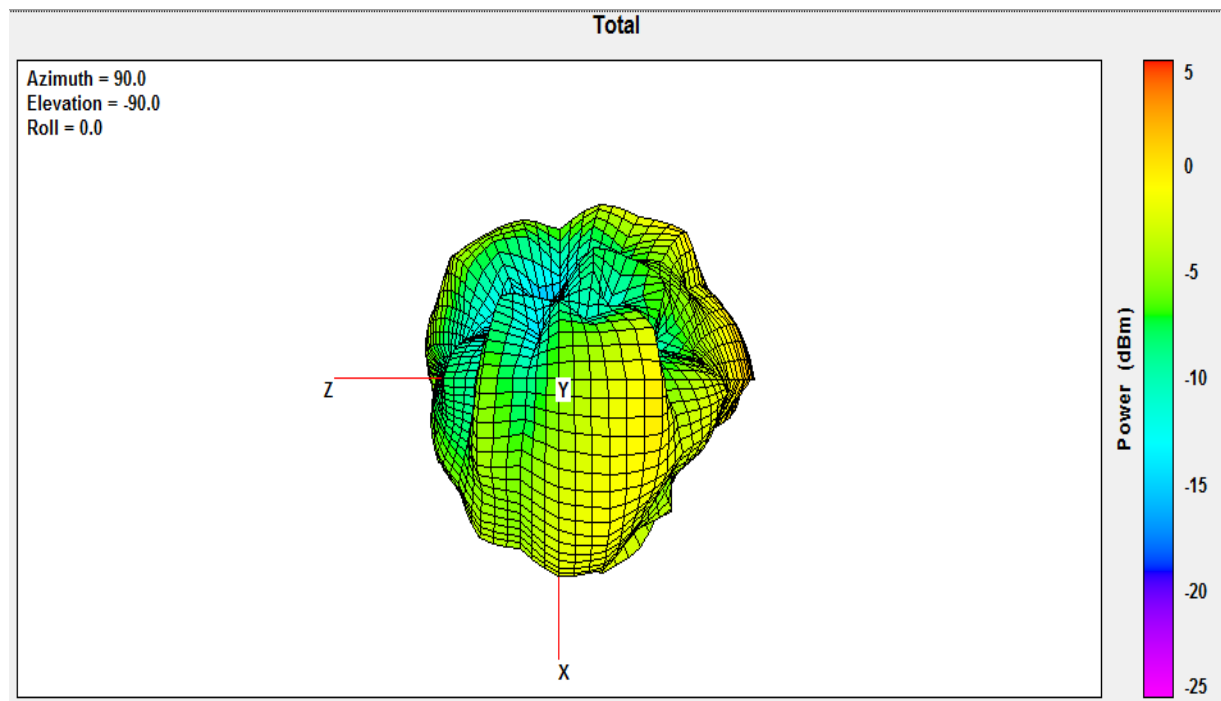
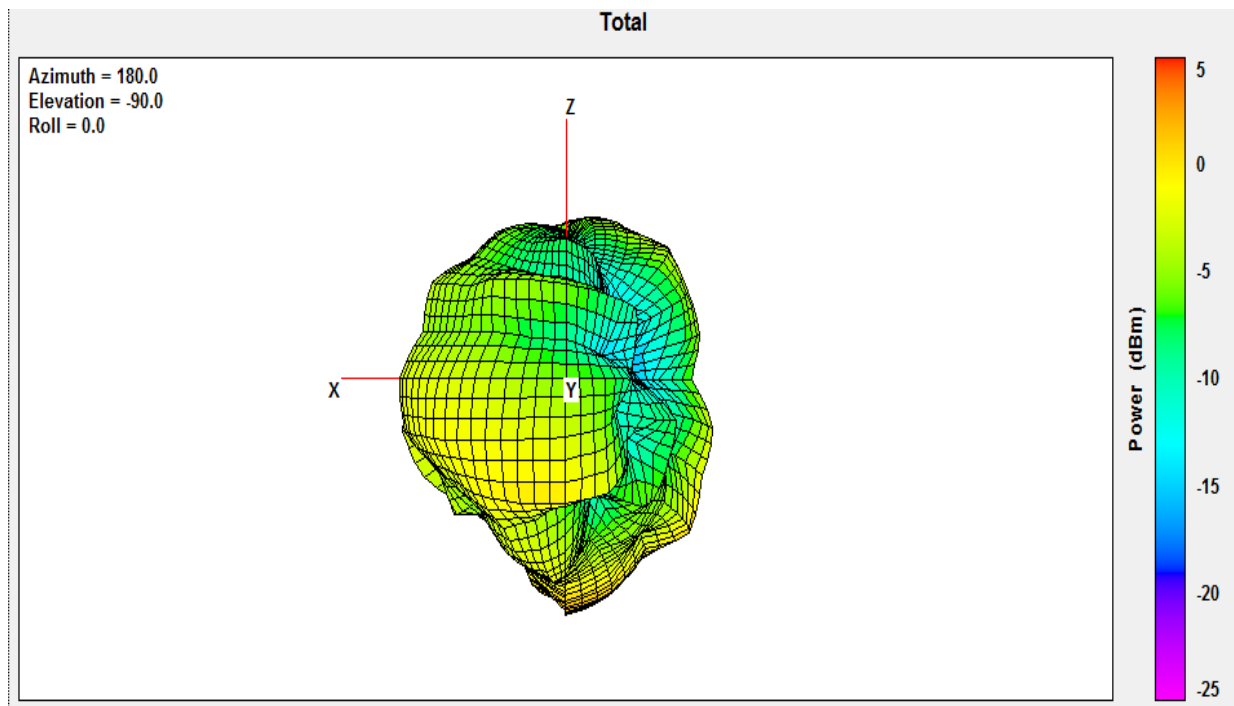


### Total 3D Plot(Fre.2430MHz)



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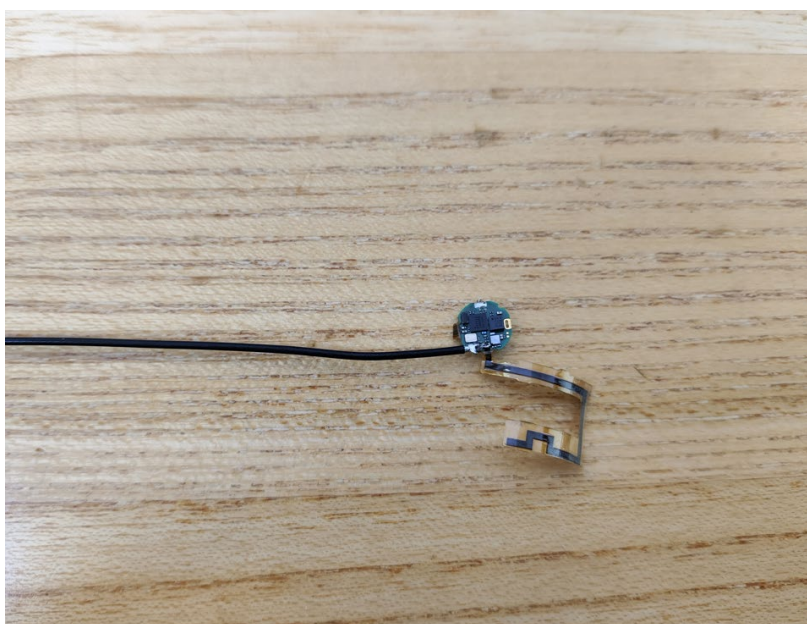
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## 6 Photo



**END OF REPORT**

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