

Report No.: XGL-B-260424-001-001G1
Report version: Rev0.2
Release date: 2026-07-06

Test Report

Applicant	:	Omni Power Technology, Inc.
Address	:	5055 Wilshire Blvd. Ste 835 Los Angeles, CA 90036 US USA
Product Name	:	10E Antenna
Model No.	:	10E
Series No.	:	N/A
Trademark	:	N/A
Manufacturer	:	Omni Power Technology, Inc.
Address	:	5055 Wilshire Blvd. Ste 835 Los Angeles, CA 90036 US USA
Test Category	:	Commissioned Test

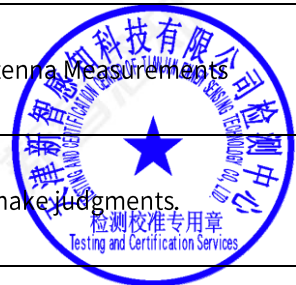
Testing and Certification Center of Tianjin ENNEW Sensing Technology Co., Ltd.



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2. This report is invalid without the signature of the authorized signatory for inspection, review, and approval.
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8. The sample(s) must be collected within three months, overdue will be dealt with by our company.

Product Name		10E Antenna	
Model No.		10E	
Series No.		N/A	
Model differences		N/A	
Applicant	Name	Omni Power Technology, Inc.	
	Address	5055 Wilshire Blvd. Ste 835 Los Angeles, CA 90036 US USA	
Manufacturer	Name	Omni Power Technology, Inc.	
	Address	5055 Wilshire Blvd. Ste 835 Los Angeles, CA 90036 US USA	
Test Category		Commissioned Test	Date Received 2026-04-24
Start Date		2026-04-27	End Date 2026-04-27
Sampling/Sending		Sending	Samples Qty. 1
Sample No.		XGL-Y-260424-001-001	
Test Standard		IEEE Std 149-2021 IEEE Recommended Practice for Antenna Measurements	
Test Results		This test only provides test data results and does not make judgments.	
Prepared by: <i>Mexyu Lv</i> 2026-07-06		Reviewed by: <i>Jim wan shi</i> 2026-07-06	Approved by: <i>Leon Li</i> 2026-07-06



Version History

Report No.	Rev.	Revisions	Release Date	Revised by	Notes
XGL-B-260424-001-O01	Rev0.1	Original Issue	2026-06-04	-	Obsolete
XGL-B-260424-001-O01G1	Rev0.2	Move the direction graph to the result section of Chapter 4. Add a 3D pattern corresponding to the angle of the maximum gain point, and update the clear 2D pattern. Delete all appendices	2026-07-06	Meiyu Lv	Valid

Note: This report XGL-B-260424-001-O01G1 replaces the original report XGL-B-260424-001-O01, and the original report is obsolete.

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1. Summary of Test

No.	Test Item	Test Standards	Test Method	Result
1	Antenna Gain	IEEE Std 149-2021	IEEE Std 149-2021 Clause 8.4	Refer to date
2	Antenna Efficiency	IEEE Std 149-2021	IEEE Std 149-2021 Clause 10.4	Refer to date
3	Antenna Directivity	IEEE Std 149-2021	IEEE Std 149-2021 Clause 8.6	Refer to date

2. Information

2.1 Base Information of Device

DUT* Name	10E Antenna
Model No.	10E
Series No.	N/A
Model differences	N/A

Note*: DUT is the abbreviation of device under test.

2.2 Technical Information of Device

Antenna Type*	PCB antenna
Operation Frequency*	2400MHz~2500MHz

Note: The information marked with * is provided by the customer.

2.3 Sample Accessories

Name	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

2.4 Sample auxiliary equipment

Name	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

2.5 Test auxiliary equipment

Name	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

2.6 Test Conditions

Condition	Normal Condition	Extreme Condition
Pressure range	86kPa ~ 106kPa	N/A
Relative Humidity	30% ~ 60%	N/A
Temperature	20°C~ 25°C	N/A
Note: During testing, the environmental conditions complied the above requirements.		

3. Test Laboratory Information

Name: Testing and Certification Center of Tianjin ENNEW Sensing Technology Co., Ltd.

Address: Building 5, No.50, ENNEW Sensing Technology Industrial Park, Haitai Chuangxin Avenue, Huayuan Industrial Zone (Outside the Ring), Binhai New District, Tianjin, China

Postal Code: 300384

Phone: +86-022-58388688

Fax: +86-022-58388688

Email: TESTING@ENN.CN

Website: <http://www.ngsense-tech.com/>

4. Antenna Gain

4.1 Test Environment

Test Date	2026.04.27		
sample number	XGL-Y-260424-001-001		
Environmental Condition	Temperature	Humidity	Atmospheric Pressure
	22.8°C	33.6%	101.2kPa
Test Site	OTA Chamber	Tester	Meiyu Lv

4.2 Test Equipments

Device Name	Manufacturer	Model	Serial Number	Calibration Date	Calibration Validity Date
Fully anechoic room	MVG	SG24	N/A	2023-12-19	2028-12-18
SG24-L testing system	MVG	SG24-L	1103570-0004	2023-12-10	2028-12-09
Vector Network Analyzer	Rohde&Schwarz	ZNB 8	101432	2025-11-18	2026-11-17
WaveStudio Testing Software	MVG	WaveStudio	N/A	N/A	N/A

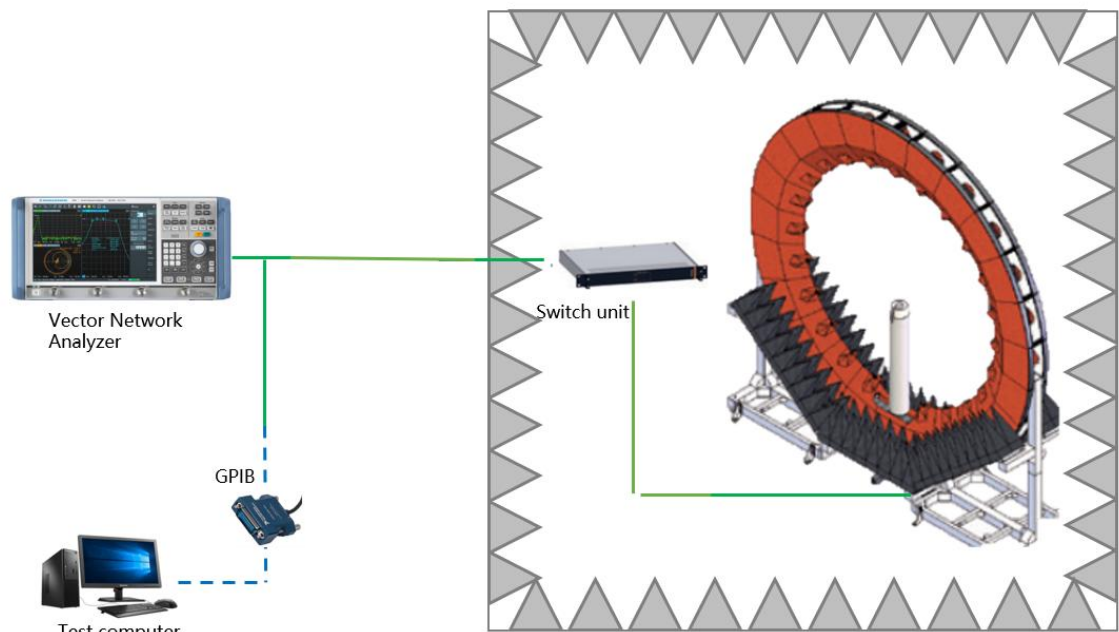
4.3 Reference Standards

IEEE Std 149-2021

4.4 Sample configuration block diagram



4.5 Test layout



4.6 Limits

N/A

4.7 Test Procedures

Refer to IEEE Std 149-2021 Clause 8.4.

4.8 Measurement Result Uncertainty

Test item	Uncertainty
Antenna Gain	0.98dB

Note: This uncertainty indicates that the extended uncertainty confidence interval is about 95% and the corresponding inclusion factor $k=2$ is obtained.

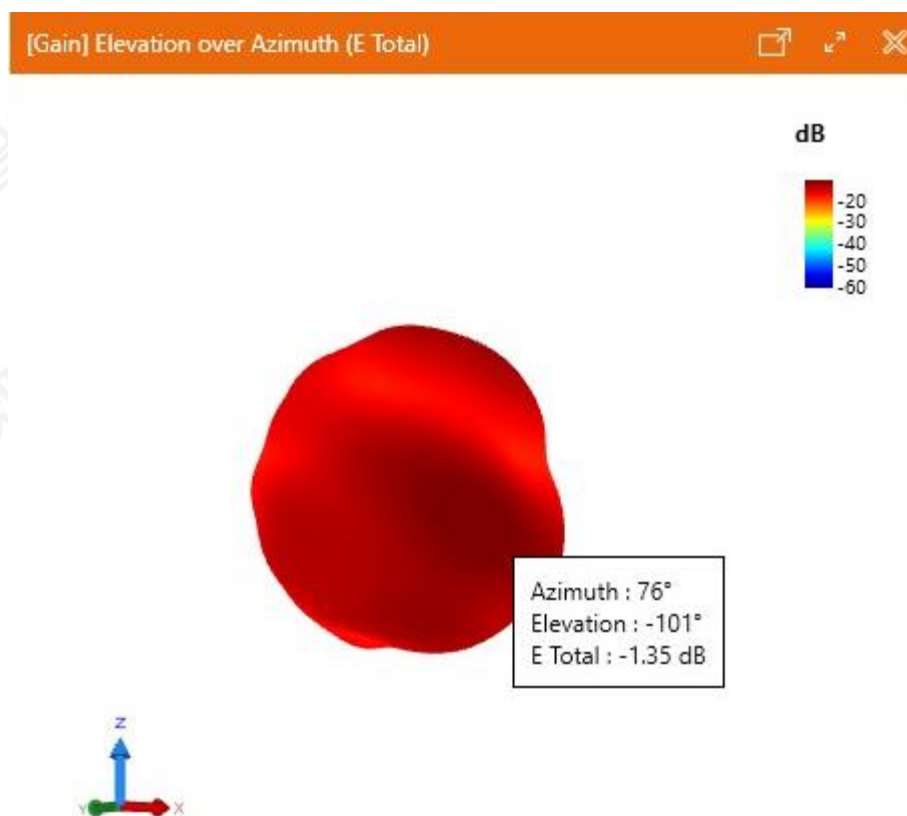
4.9 Test Result

The detailed test data is as follows

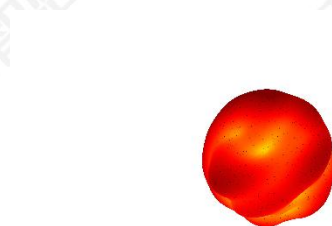
Frequency (MHz)	Gain (dBi)
2400	-3.26
2410	-3.25

2420	-2.87
2430	-2.36
2440	-2.16
2450	-1.84
2460	-1.54
2470	-1.35
2480	-1.54
2490	-1.81
2500	-1.79

3D pattern



2400MHz



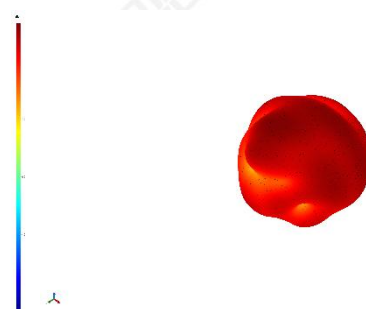
2440MHz



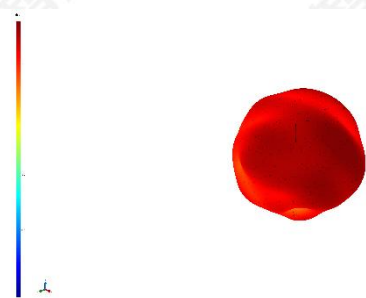
2480MHz



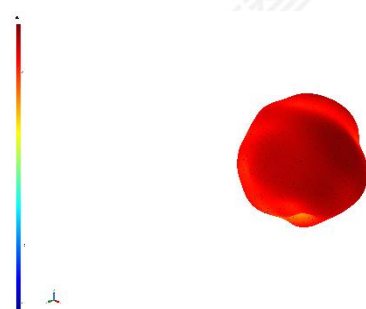
Back View



Back View



Back View

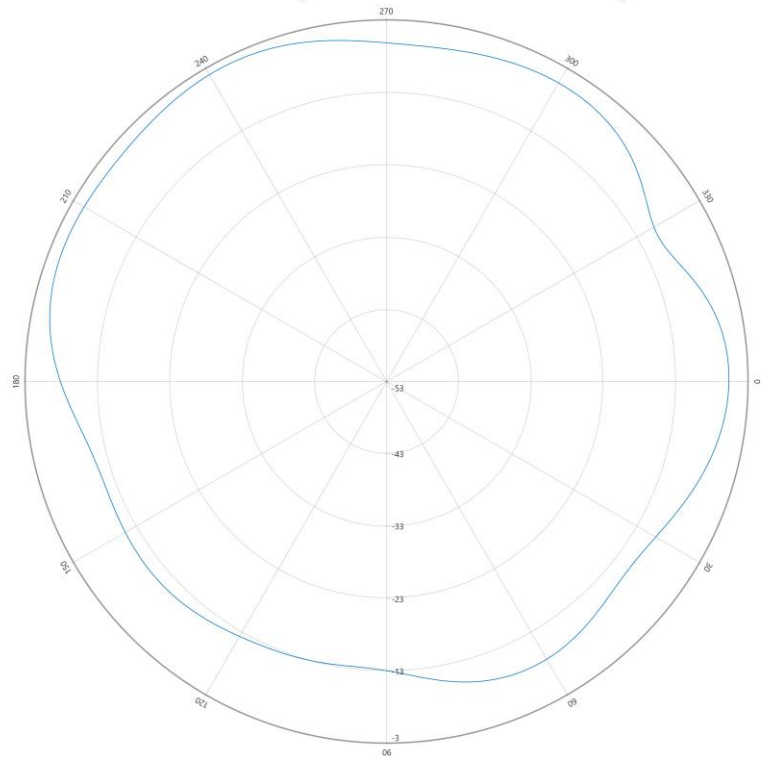


2D pattern

2400MHz

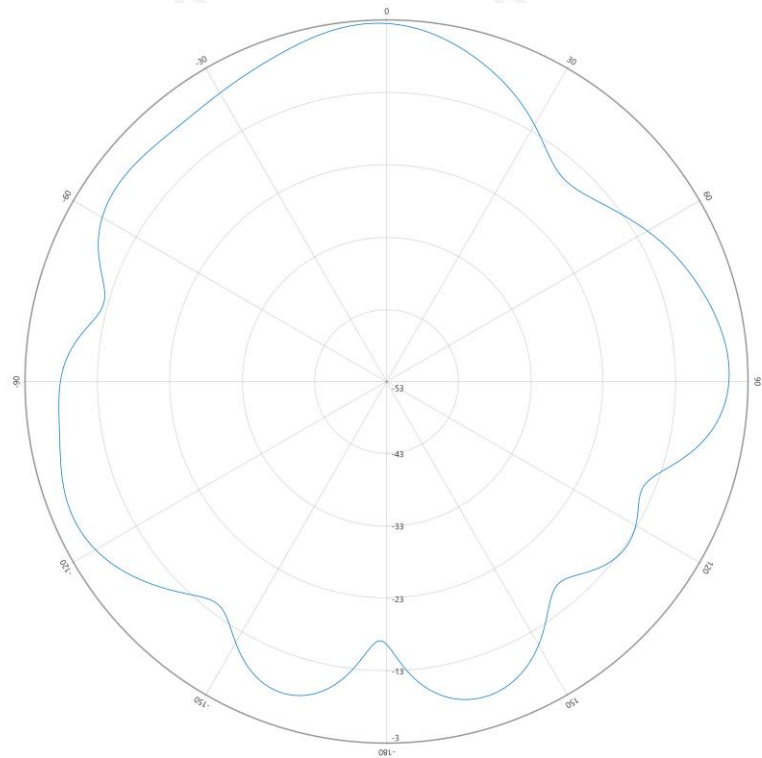
X-Y

✓ 90° 2400.00 MHz E Total



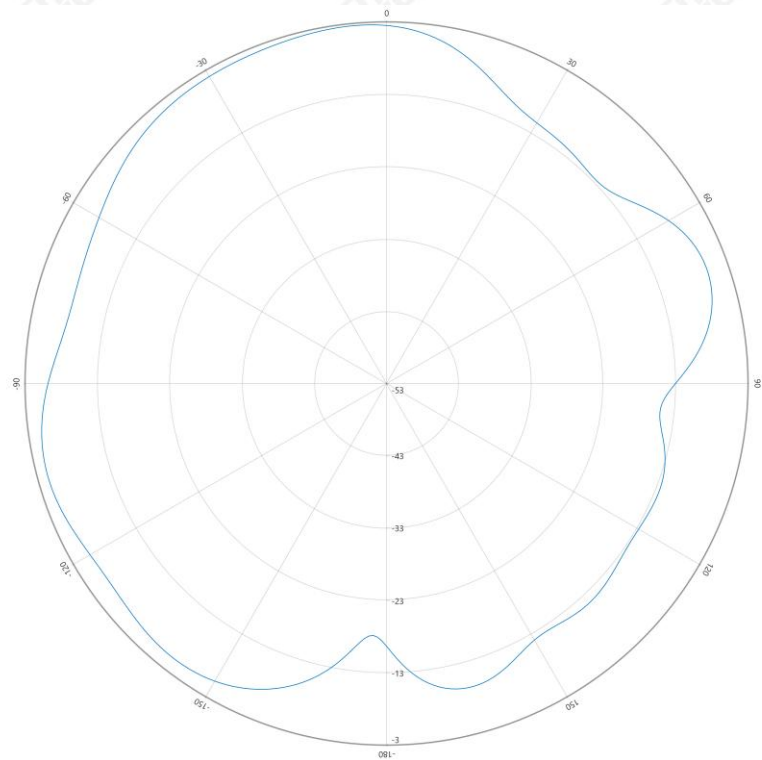
X-Z

✓ 0° 2400.00 MHz E Total



Y-Z

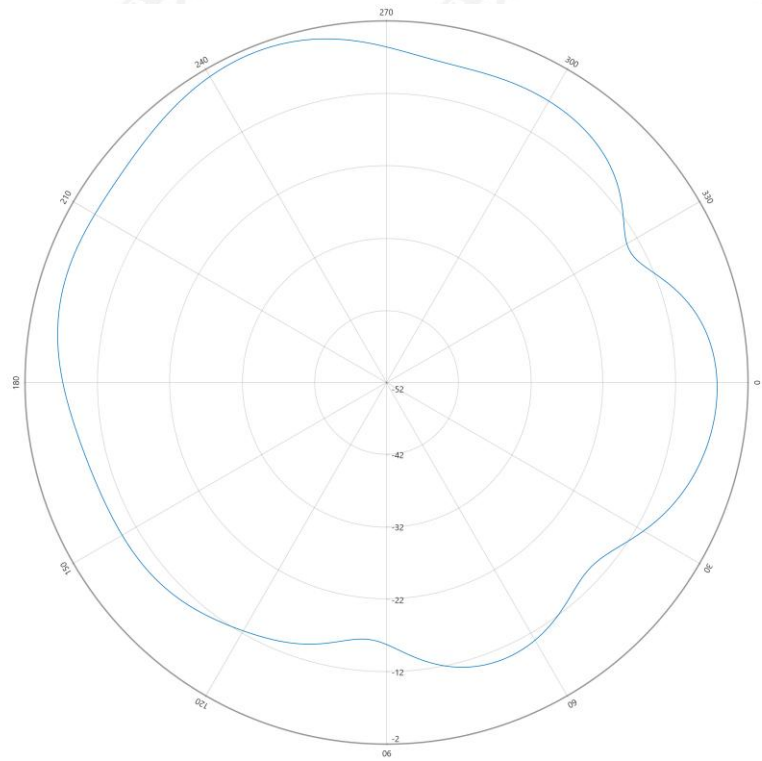
✓ 90° 2400.00 MHz E Total



2440MHz

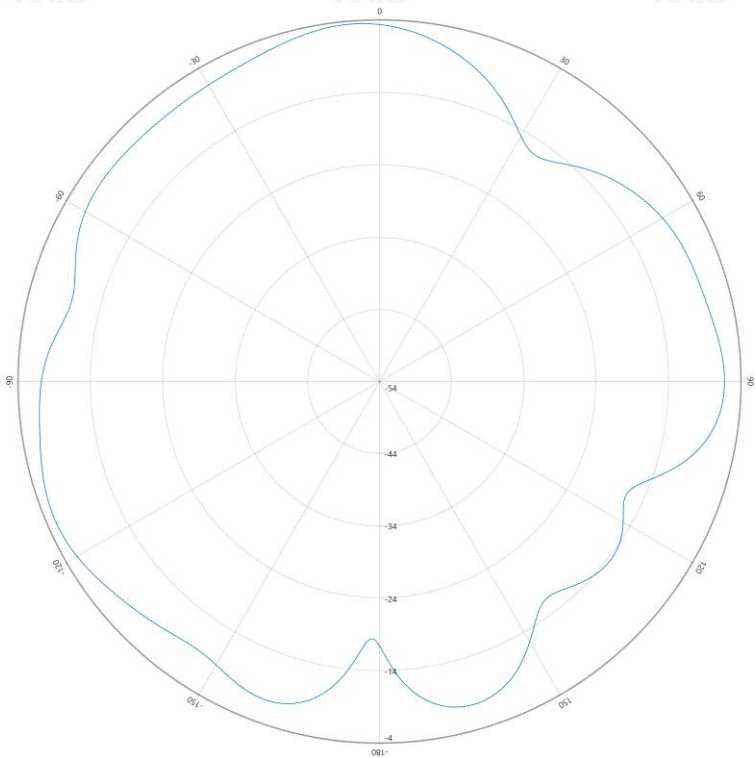
X-Y

✓ 90° 2440.00 MHz E Total



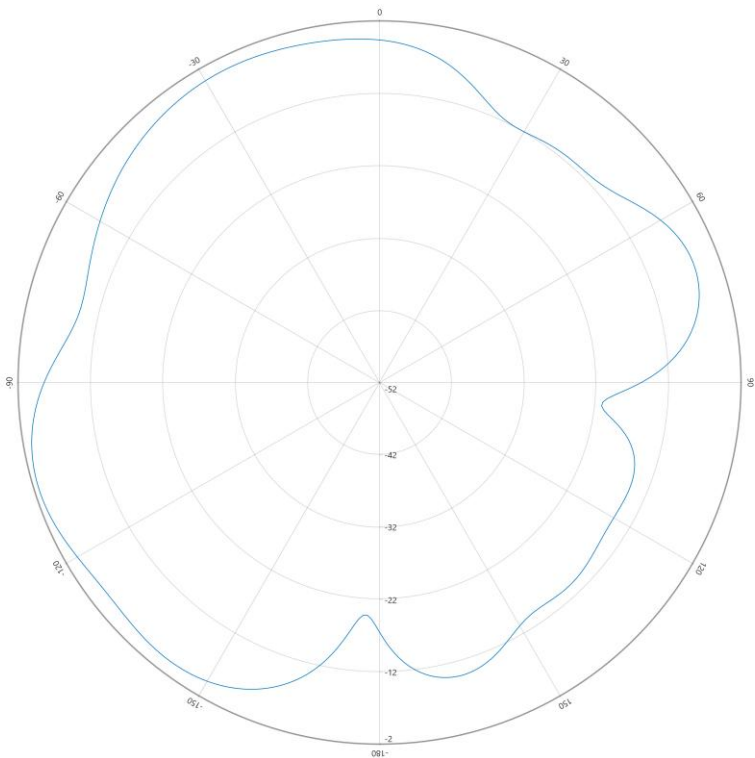
X-Z

✓ 0° 2440.00 MHz E Total



Y-Z

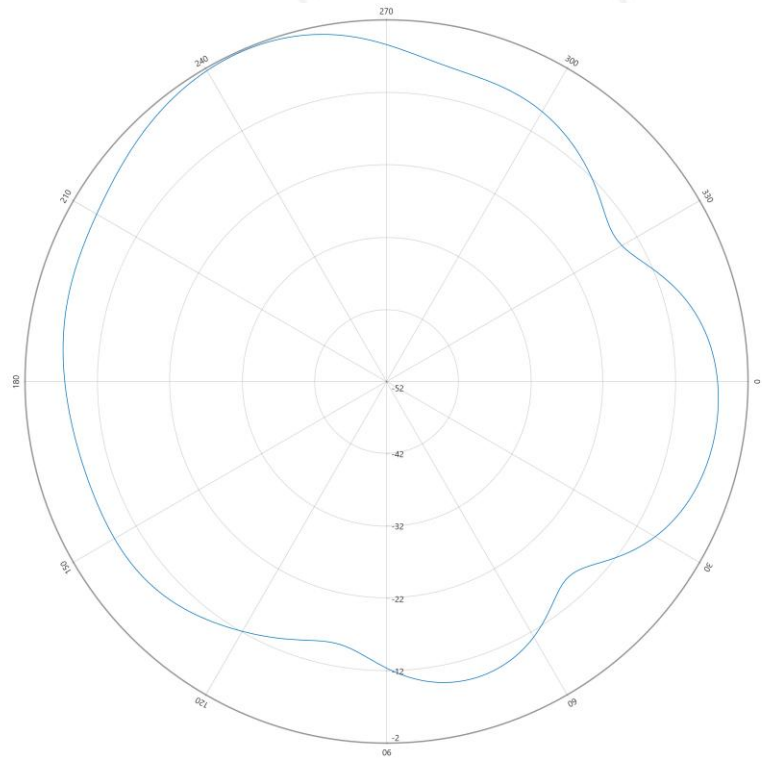
✓ 90° 2440.00 MHz E Total



2480MHz

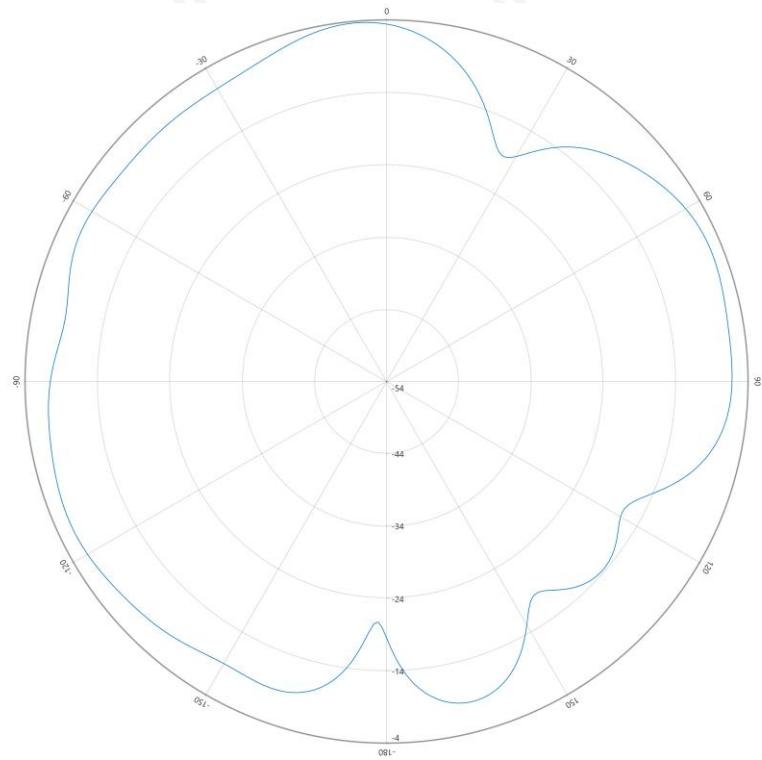
X-Y

✓ 90° 2480.00 MHz E Total



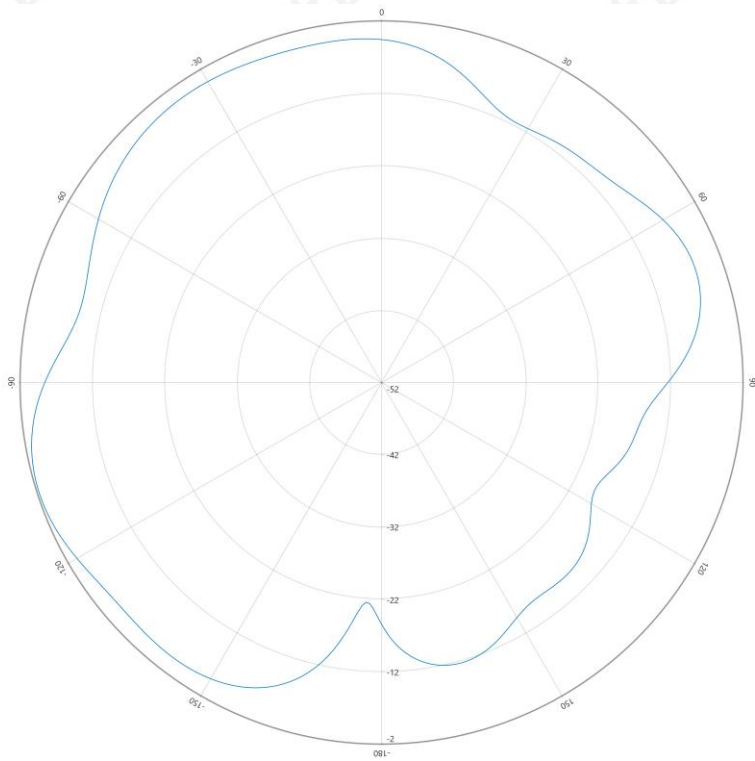
X-Z

✓ 0° 2480.00 MHz E Total



Y-Z

✓ 90° 2480.00 MHz E Total



5. Antenna Efficiency

5.1 Test Environment

Test Date	2026.04.27		
sample number	XGL-Y-260424-001-001		
Environmental Condition	Temperature	Humidity	Atmospheric Pressure
	22.8°C	33.6%	101.2kPa
Test Site	OTA Chamber	Tester	Meiyu Lv

5.2 Test Equipments

Device Name	Manufacturer	Model	Serial Number	Calibration Date	Calibration Validity Date
Fully anechoic room	MVG	SG24	N/A	2023-12-19	2028-12-18
SG24-L testing system	MVG	SG24-L	1103570-0004	2023-12-10	2028-12-09
Vector Network Analyzer	Rohde&Schwarz	ZNB 8	101432	2025-11-18	2026-11-17
WaveStudio Testing Software	MVG	WaveStudio	N/A	N/A	N/A

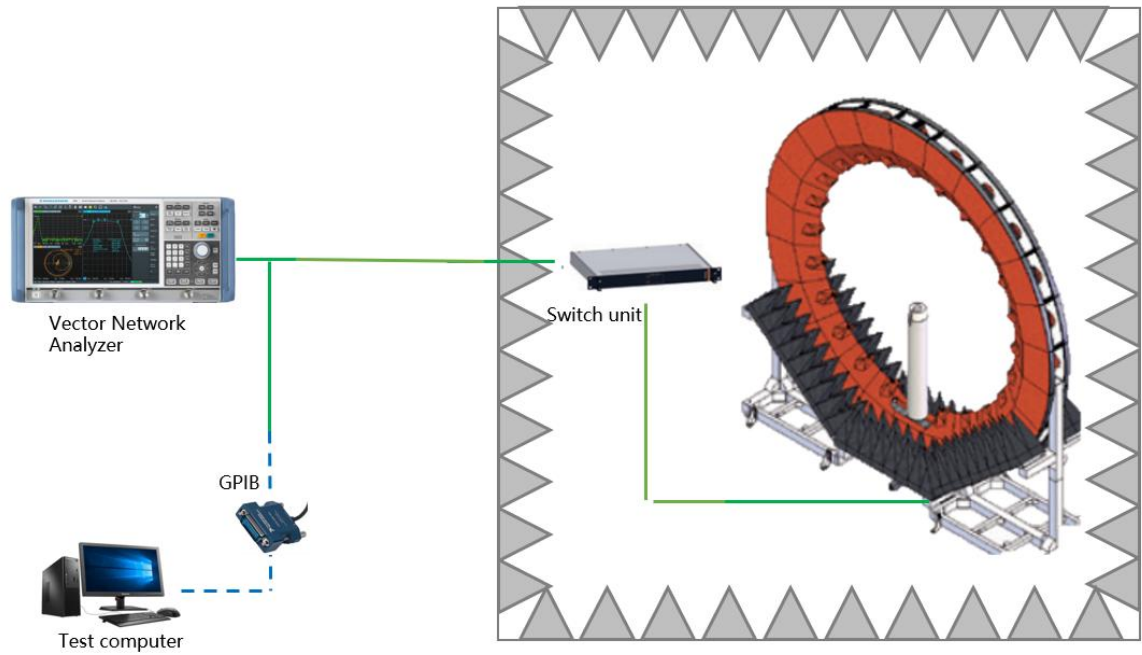
5.3 Reference Standards

IEEE Std 149-2021

5.4 Sample configuration block diagram



5.5 Test layout



5.6 Limits

N/A

5.7 Test Procedures

Refer to IEEE Std 149-2021 Clause 10.4

5.8 Measurement Result Uncertainty

Test item	Uncertainty
Antenna Efficiency	0.98dB
Note: This uncertainty indicates that the extended uncertainty confidence interval is about 95% and the corresponding inclusion factor $k=2$ is obtained.	

5.9 Test Result

The detailed test data is as follows

Frequency (MHz)	Eff. (dB)	Eff. (%)
2400	-7.98	16%

2410	-7.83	16%
2420	-7.80	17%
2430	-7.55	18%
2440	-7.73	17%
2450	-7.80	17%
2460	-7.63	17%
2470	-7.44	18%
2480	-7.59	17%
2490	-7.93	16%
2500	-7.91	16%

6. Antenna Directivity

6.1 Test Environment

Test Date	2026.04.27		
sample number	XGL-Y-260424-001-001		
Environmental Condition	Temperature	Humidity	Atmospheric Pressure
	22.8°C	33.6%	101.2kPa
Test Site	OTA Chamber	Tester	Meiyu Lv

6.2 Test Equipments

Device Name	Manufacturer	Model	Serial Number	Calibration Date	Calibration Validity Date
Fully anechoic room	MVG	SG24	N/A	2023-12-19	2028-12-18
SG24-L testing system	MVG	SG24-L	1103570-0004	2023-12-10	2028-12-09
Vector Network Analyzer	Rohde&Schwarz	ZNB 8	101432	2025-11-18	2026-11-17
WaveStudio Testing Software	MVG	WaveStudio	N/A	N/A	N/A

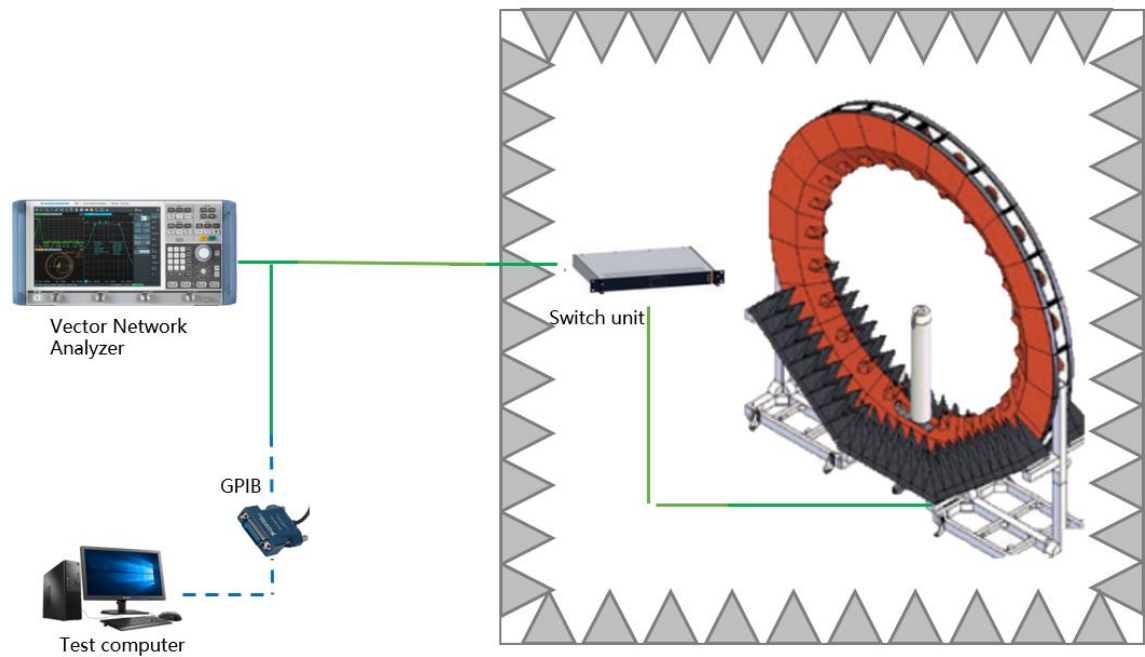
6.3 Reference Standards

IEEE Std 149-2021

6.4 Sample configuration block diagram



6.5 Test layout



6.6 Limits

N/A

6.7 Test Procedures

Refer to IEEE Std 149-2021 Clause 8.6

6.8 Measurement Result Uncertainty

Test item	Uncertainty
Antenna Directivity	0.98dB
Note: This uncertainty indicates that the extended uncertainty confidence interval is about 95% and the corresponding inclusion factor $k=2$ is obtained.	

6.9 Test Result

The detailed test data is as follows

Frequency (MHz)	Directivity (dB)
2400	4.71
2410	4.58
2420	4.93

2430	5.19
2440	5.58
2450	5.95
2460	6.08
2470	6.09
2480	6.05
2490	6.12
2500	6.12

----- End of report -----

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