



# Antenna Passive TEST REPORT

Applicant	:	GLOBE ELECTRIC COMPANY INC.
Address	:	Room H-I, 10th floor, International Trade Commercial Building, No. 3005 Nanhu Road, Lowu District, Shenzhen City, Guangdong, China
Equipment under Test	:	Beacon Outdoor Power Stake
Model No.	:	DR-B2097
Trade Mark	:	N/A
Manufacturer	:	GLOBE ELECTRIC COMPANY INC.
Address	:	Room H-I, 10th floor, International Trade Commercial Building, No. 3005 Nanhu Road, Lowu District, Shenzhen City, Guangdong, China
Report No.	:	DDT-B25063011-1A01
Issue Date	:	Jul. 03, 2025
Issued By	:	Tianjin Dongdian Testing Service Co., Ltd.
Address	:	Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park, Development Area, Tianjin, China. Tel: +86-022-58038033, E-mail: ddt@dgddt.com, <a href="http://www.ddttest.com">http://www.ddttest.com</a>

# REPORT

## Statement

1. The report is invalid without the inspection and testing special seal of the company.
2. This report is invalid if altered.
3. This report is responsible for the conformance testing of sample(s) received.
4. This report shall not be reproduced, without the written approval of test laboratory. The copy of the report not stamped again with the inspection and testing special seal is invalid.
5. Item with “☆” was subcontracted to other laboratories.
6. The report without CMA mark indicated that either test item(s) not accredited by CMA or test item(s) accredited by CMA but the report is only used for development or quality control which purposes within the company that has no effect on social proof.
7. Any objections must be raised to our company within 15 days on receiving the report, overdue will not be accepted.
8. The sample(s) must be collected within three months, overdue will be dealt with by our company.
9. The report is invalid without the signature of editor, reviewer, approver.

Test Institution: Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China.

Postcode: 300385

Tel: 022-58038033

Fax: 022-58038033

Website: <http://www.ddttest.com>

EUT Name	Beacon Outdoor Power Stake	Model No.	DR-B2097
Serial No.	N/A	EUT Class	N/A
Sample Quantity	1	Sample No.	Y25063011-01
Sample Batch / Batch No.	N/A	Trade Mark	N/A
Sample Receiving Method	Received from Applicant	Test Type	Commissioned Test
Date of Receipt	Jul. 01, 2025	Date of Test	Jul. 02, 2025
Test Address	2-1-805-1, Zone 1, Fubao Industrial Park, No.1, Fubao Road, Zhangjiawo, Xiqing District, Tianjin, China		
Applicant	GLOBE ELECTRIC COMPANY INC.		
Address	Room H-I, 10th floor, International Trade Commercial Building, No.3005 Nanhу Road, Lowu District, Shenzhen City, Guangdong, China		
Manufacturer	GLOBE ELECTRIC COMPANY INC.		
Address	Room H-I, 10th floor, International Trade Commercial Building, No.3005 Nanhу Road, Lowu District, Shenzhen City, Guangdong, China		
Test Item	1 Electric performance		
Reference Standard	clients' requirement		
Test Results	This test only provides test data results and does not make judgments Issue Date: Jul. 03, 2025		
Note	The "N/A" is the abbreviation of not applicable. The "--" indicate blank.		
Prepared by:	Reviewed by:	Approved By:	
Novak Wei Jul. 03, 2025	Ethan Bao Jul. 03, 2025	Aaron Zhang Jul. 03, 2025	

## COMMENT

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## Revision History

Rev.	Revisions	Issue Date	Revised By
—	Initial issue	Jul. 03, 2025	

## 1. General TEST Information

### 1.1 Description of EUT

EUT Description	:	Beacon Outdoor Power Stake
Model Number	:	DR-B2097
Frequency Band	:	2400MHz-2500MHz
Power Supply	:	N/A
Sample No	:	Y25063011-01
Note	:	N/A

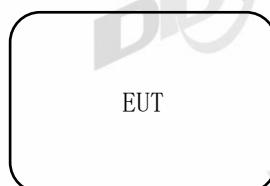
### 1.2 Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

### 1.3 Assistant equipment used for test

Description of Accessories	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

### 1.4 Block diagram of EUT configuration for test

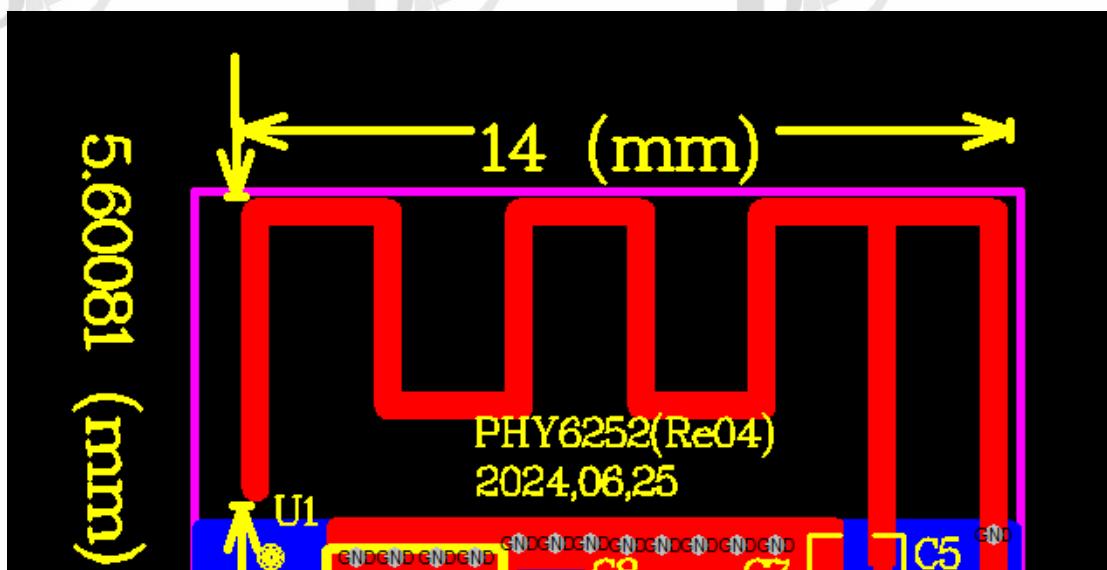


### 1.5 Measurement uncertainty

Test Item	uncertainty
Near-field gain measurement	0.44 dB
Near-field pattern measurement	0.44 dB

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

### 1.6 Antenna Parameter



### 1.7 Test laboratory

Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China., 300385

Tel: +86-22-58038033, <http://www.ddttest.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com)

NVLAP (National Voluntary Laboratory Accreditation Program) CODE: 500036-0

CNAS (China National Accreditation Service for Conformity Assessment) CODE: L13402

FCC Designation Number: CN5004; FCC Test Firm Registration Number: 368676

ISED (Innovation, Science and Economic Development Canada) Company Number: 27768

Conformity Assessment Body Identifier: CN0125

VCCI Facility Registration Number: C-20089, T-20093, R-20125, G-20122

## 2. Electric performance measurement

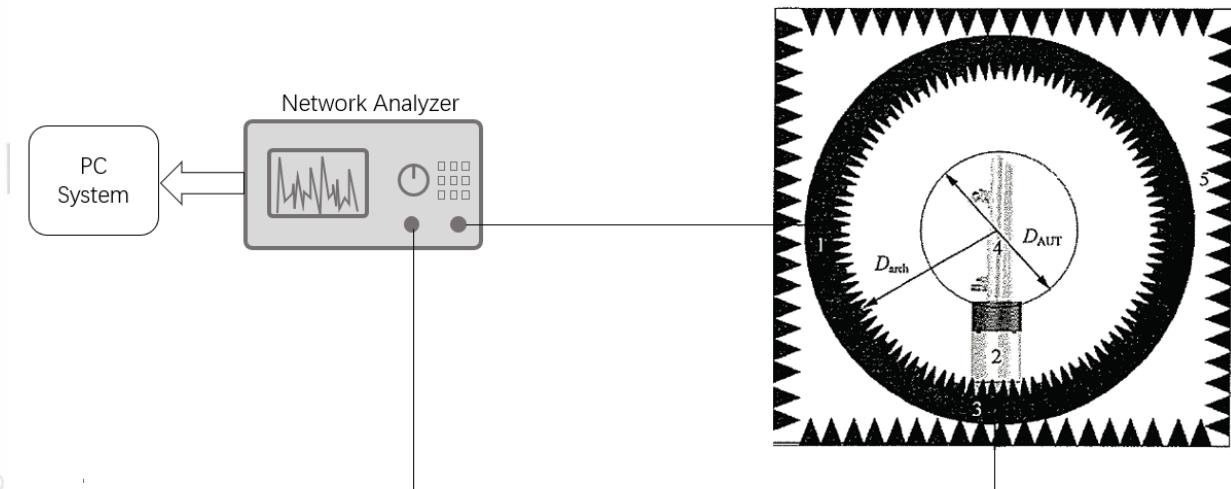
### 2.1 General Information

Test Date	2025-07-02		
Test Condition	Temperature: 22.1°C	Humidity: 33%	Pressure: 100.4kPa
Test Place	OTA Room	Test Engineer	Novak Wei

### 2.2 Test Equipment

Equipment	Manufacturer	Mode No	Serial No	Last Cal.	Cal. Interval
ENA network analyzer	Keysight	E5071C	MY46900684	2025-06-04	1 year
Software	FEITU	ANTESTPRO	N/A	N/A	N/A

### 2.3 Block Diagram of Test Setup



### 2.4 Test Procedure

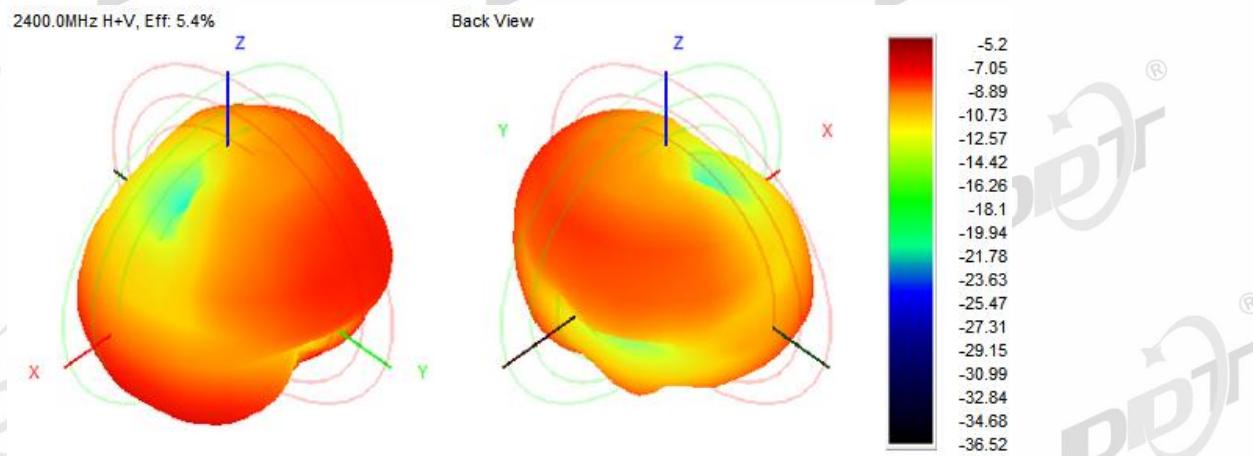
- (1) Set up the antenna to be measured. Set up the antenna and mark the cross reference line at the center of the antenna port surface to be measured.
- (2) Connect the cable connector and adjust the downdip Angle (electrically tuned antenna).
- (3) Open the test software, create the test project, and configure the test port.
- (4) Use test software for automatic testing and save test data of electromagnetic field distribution.

(5) Change the port, downdip Angle, or test frequency (if necessary), and repeat steps (3) to (4) until all status data to be measured is collected.

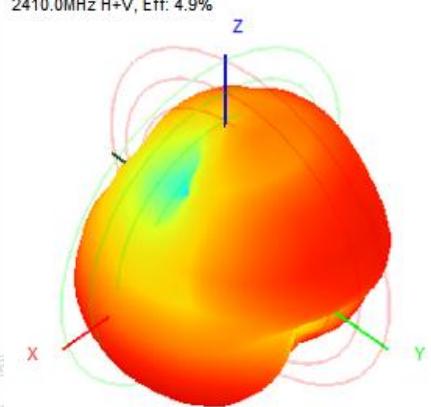
(6) After near and far field exchange, the three-position spherical pattern of the antenna to be tested is obtained, and the Theta and Phi angles of the position where the maximum level of the three-position spherical pattern is located are found. The horizontal plane pattern curve of the antenna to be tested is obtained by cutting according to equal Theta Angle, and the vertical plane pattern of the antenna to be tested is cancelled by cutting according to equal Phi Angle. Then the radiation parameters of the horizontal plane and vertical plane pattern of the antenna to be measured are obtained by using the processing method similar to that of the far field.

## 2.5 Result

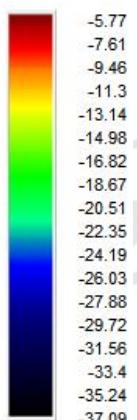
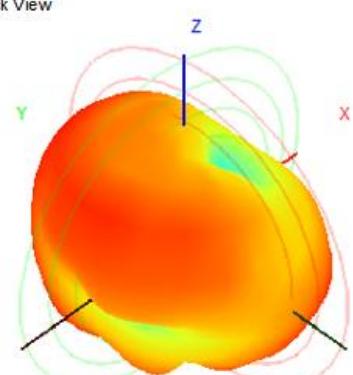
Fre. (MHz)	Eff. (dBi)	Gain (dBi)	Eff. (%)	Directivity (dB)	Peak Gain Position (Theta)	Peak Gain Position (Phi)	Eff. ThetaPol (%)	Eff. PhiPol (%)	Upper Hem. Eff. (%)	Lower Hem. Eff. (%)
2400.00	-12.65	-5.20	5.43	7.45	165.00	90.00	3.40	2.03	1.82	3.60
2410.00	-13.09	-5.77	4.91	7.32	165.00	90.00	3.11	1.80	1.67	3.24
2420.00	-13.34	-5.92	4.64	7.41	165.00	90.00	2.94	1.70	1.62	3.02
2430.00	-13.63	-6.09	4.34	7.53	165.00	90.00	2.77	1.57	1.55	2.79
2440.00	-13.62	-6.23	4.34	7.39	165.00	90.00	2.78	1.57	1.61	2.74
2450.00	-13.52	-6.42	4.44	7.10	165.00	90.00	2.85	1.59	1.67	2.77
2460.00	-13.56	-6.85	4.41	6.71	165.00	90.00	2.86	1.55	1.68	2.72
2470.00	-13.51	-7.03	4.45	6.48	165.00	90.00	2.92	1.54	1.70	2.75
2480.00	-13.29	-6.99	4.68	6.31	165.00	90.00	3.08	1.60	1.79	2.90
2490.00	-13.57	-7.47	4.40	6.09	165.00	90.00	2.91	1.49	1.65	2.75
2500.00	-13.59	-7.34	4.37	6.25	165.00	90.00	2.90	1.47	1.60	2.77



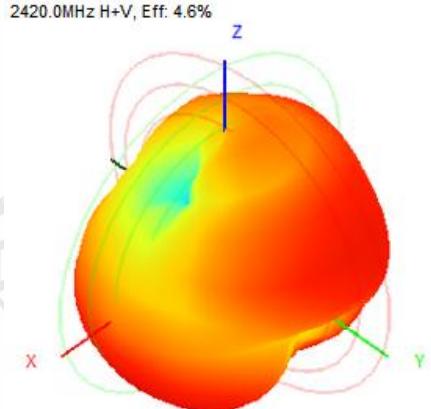
2410.0MHz H+V, Eff: 4.9%



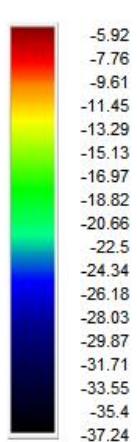
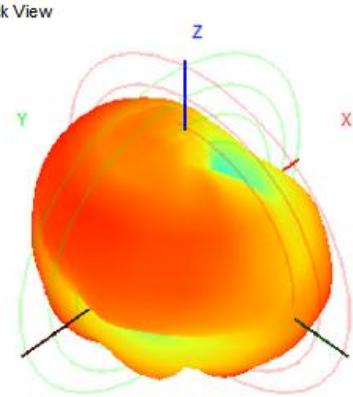
Back View



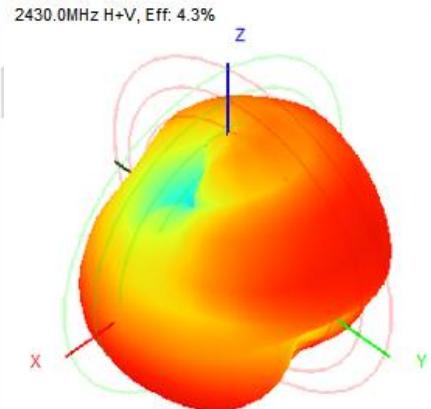
2420.0MHz H+V, Eff: 4.6%



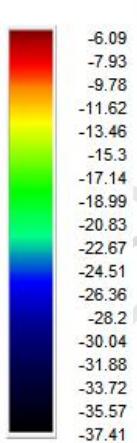
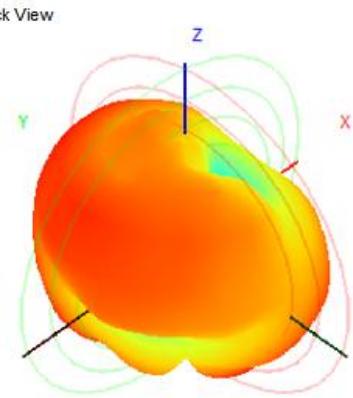
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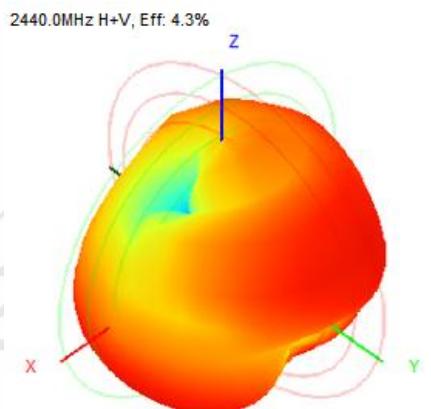
2430.0MHz H+V, Eff: 4.3%



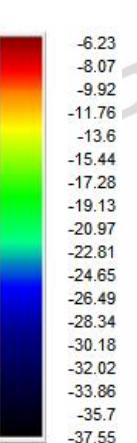
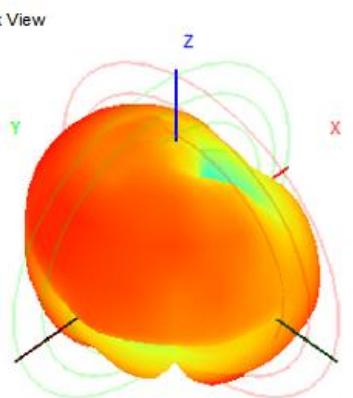
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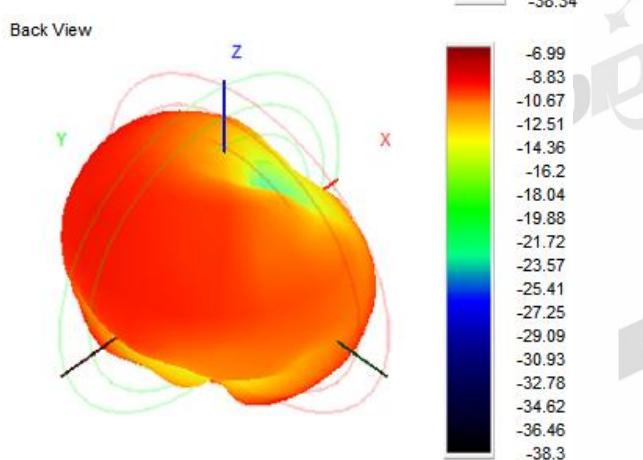
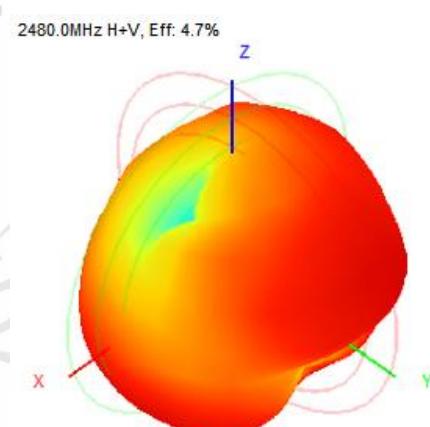
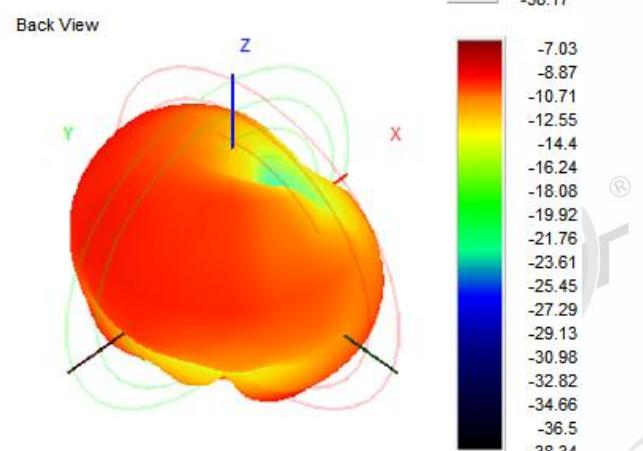
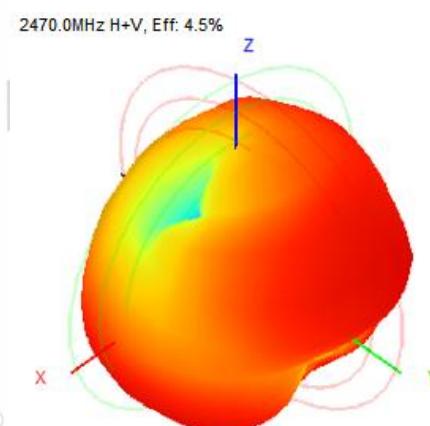
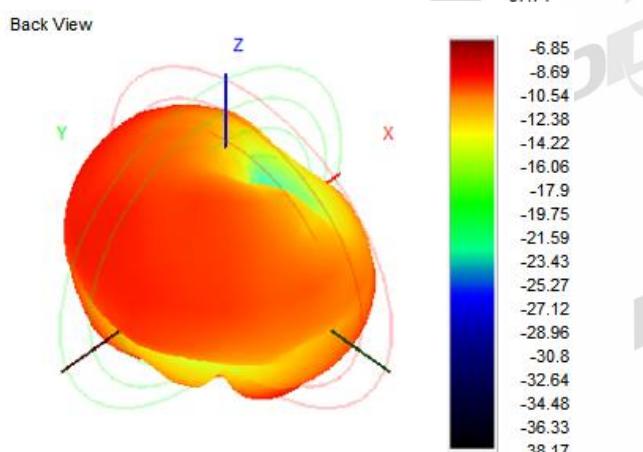
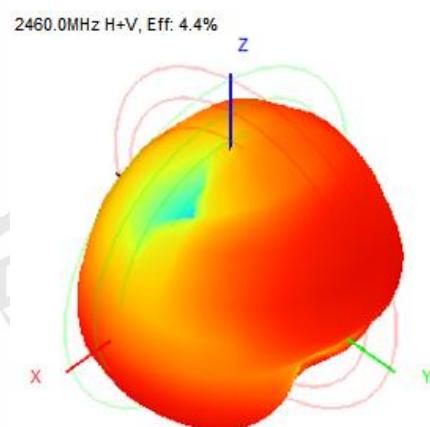
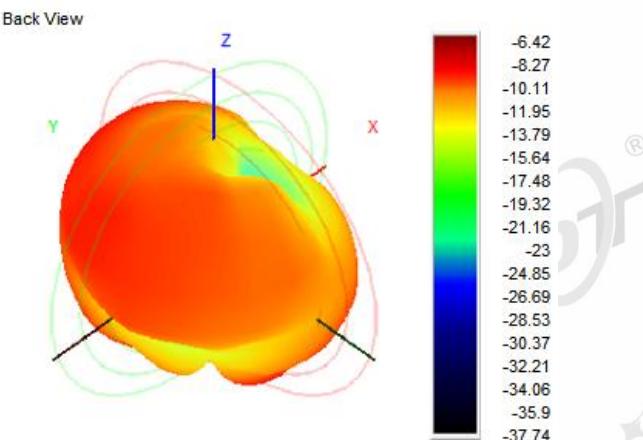
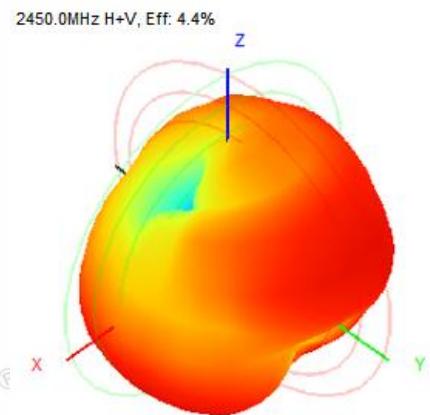


2440.0MHz H+V, Eff: 4.3%

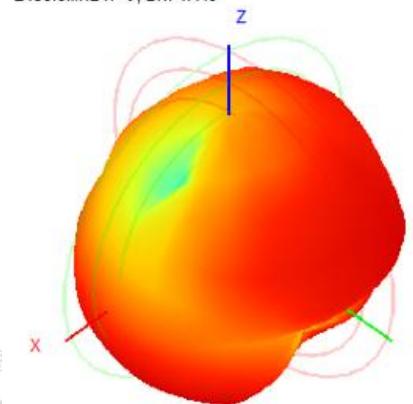


Back View

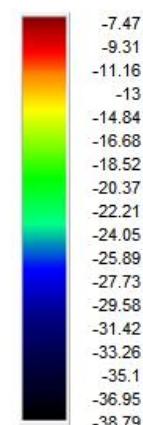
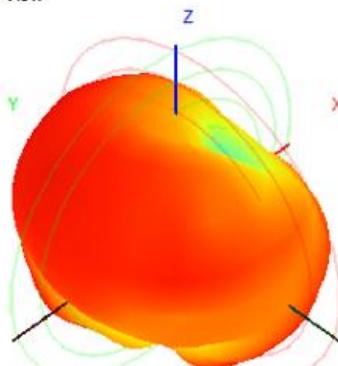




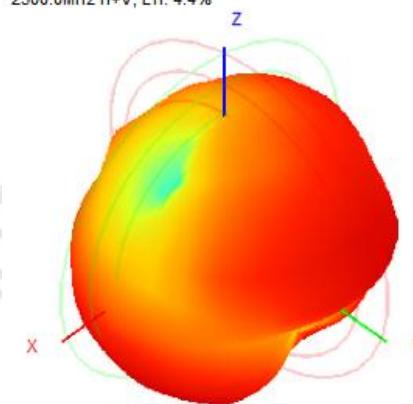
2490.0MHz H+V, Eff: 4.4%



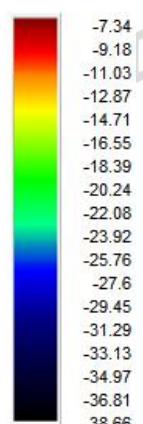
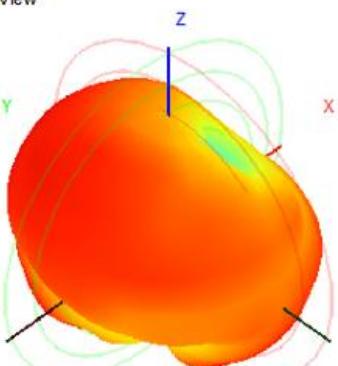
Back View



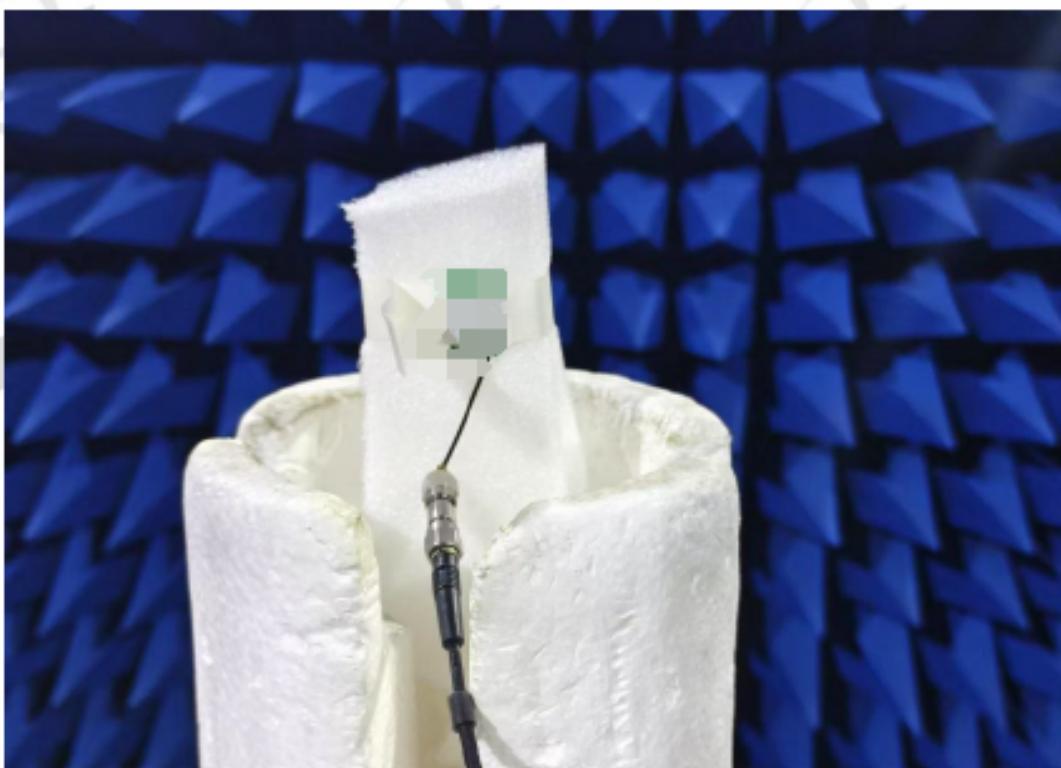
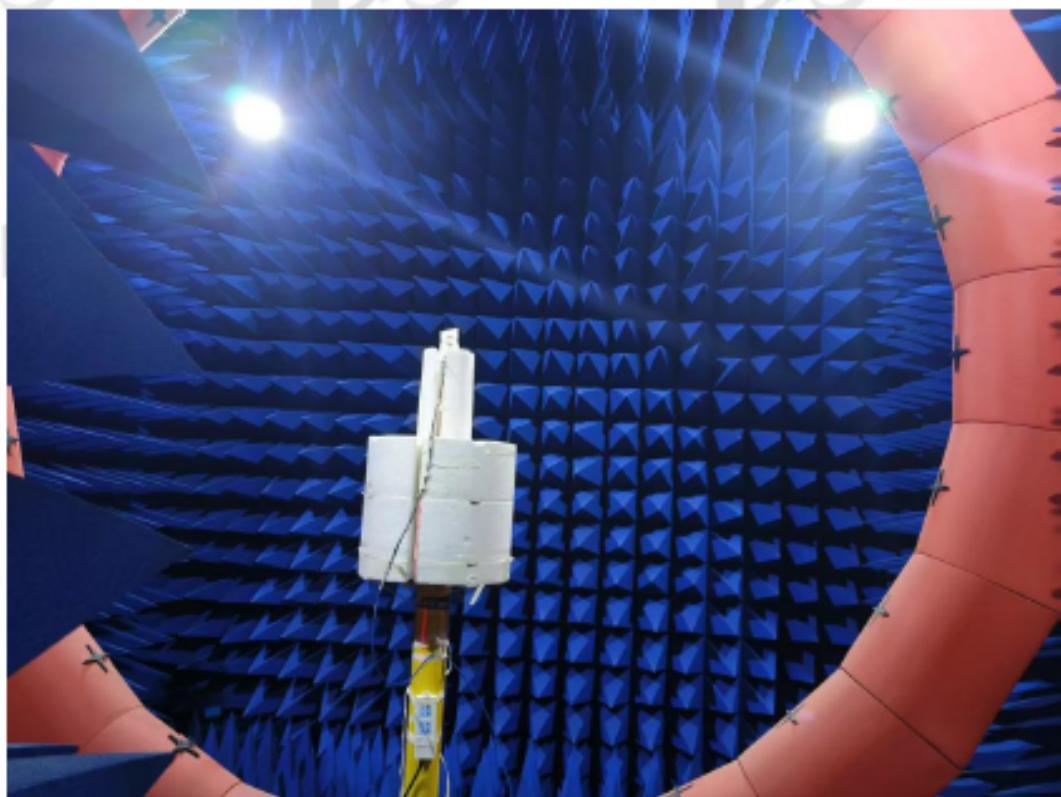
2500.0MHz H+V, Eff: 4.4%



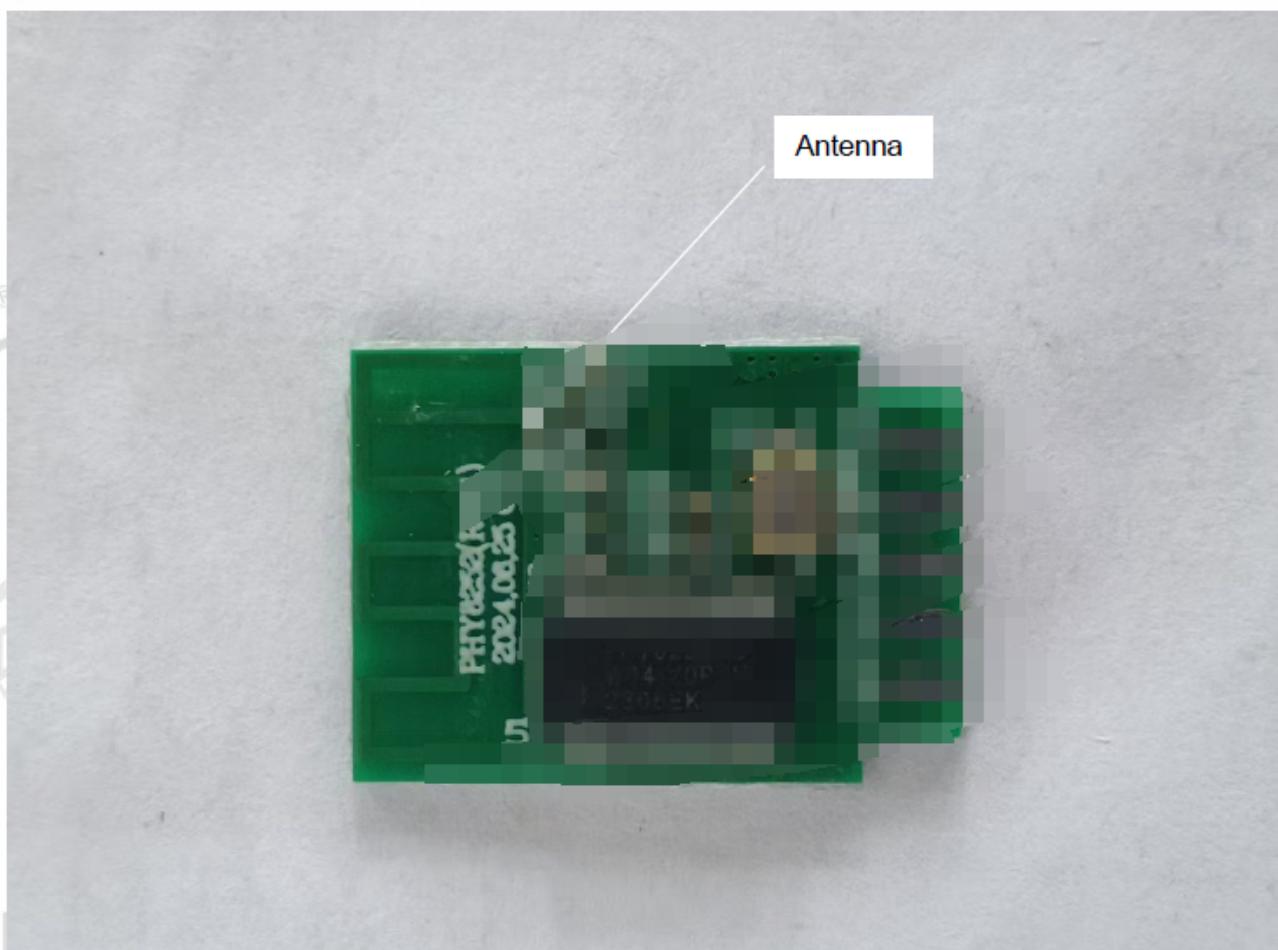
Back View



Annex A Test Setup Photo



Annex B EUT Photo



END