



REPORT No.: SZ26060297T01

TEST REPORT

APPLICANT : RPG BRANDS, LLC

PRODUCT NAME : PCB Antenna

MODEL NAME : ANT-01-00251

TRADE NAME : N/A

BRAND NAME : N/A

STANDARD(S) : IEEE Std 149-2021

RECEIPT DATE : 2026-06-17

TEST DATE : 2026-06-18

ISSUE DATE : 2026-08-03



Edited by:

Guo Penghua

Guo Penghua(Rapporteur)

Approved by:

Chi Shide

Chi Shide(Supervisor)

NOTE: This document is issued by Shenzhen Morlab Communications Technology Co., Ltd., the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.

MORLAB

Shenzhen Morlab Communications Technology Co., Ltd., FL.1-3, Building A,
FeiYang Science Park, No.8 LongChang Road,Block67, BaoAn District,
ShenZhen , GuangDong Province, P. R. China

Tel: 86-755-36698555

Http://www.morlab.cn

Fax: 86-755-36698525

E-mail: service@morlab.cn





DIRECTORY

1. Technical Information	3
1.1. Applicant and Manufacturer Information	3
1.2. Equipment Under Test (EUT) Description	3
2. Test Results	4
2.1. Applied Reference Documents	4
2.2. Test Conditions	4
2.3. Measurement Uncertainty	4
2.4. Test Results lists	5
Annex A Test Setup Photos	6
Annex B Figures	7
1. 2D Radiation Pattern	7
2. 3D Radiation Pattern	8
3. VSWR	10
Annex C EUT Photos	11
Annex D Testing Laboratory Information	14
1. Identification of the Responsible Testing Laboratory	14
2. Identification of the Responsible Testing Location	14
3. Test Equipment Utilized	14
3.1 Test Equipments	14
3.2 Test Software	14
Notes	15

Change History		
Version	Date	Reason for change
1.0	2026-08-03	First edition

Note: the latest revision of the report supersedes all previous version.

1. Technical Information

Note: Provide by Applicant.

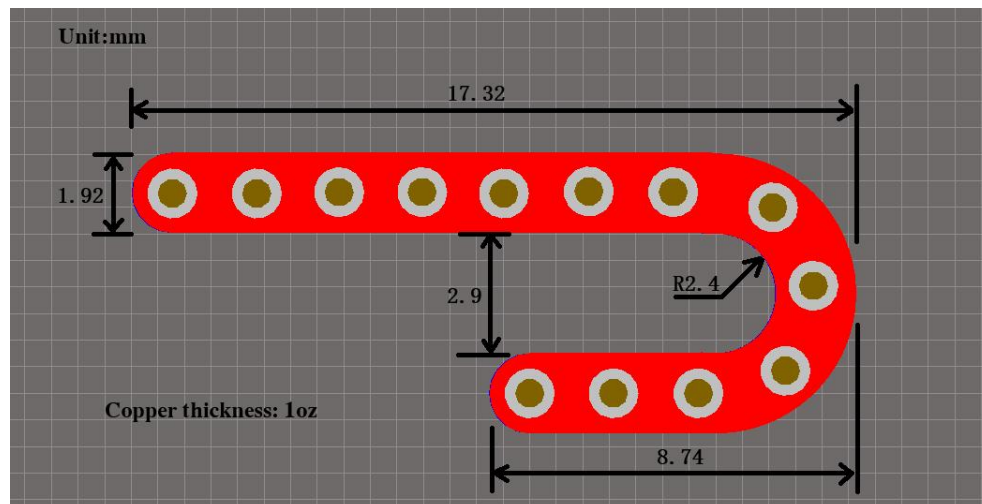
1.1. Applicant and Manufacturer Information

Applicant:	RPG BRANDS, LLC
Applicant Address:	3515 East Atlanta Avenue, Phoenix, Arizona 85040 United States of America Phoenix Arizona United States
Manufacturer:	Dongguan Golden Flame Appliances CO.,LTD
Manufacturer Address:	Room 1101, Building8, No.63, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan City, Guangdong Province, 523000, PRC

1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A
Antenna Type	N/A
Frequency	2400MHz-2500MHz
Serial Number	N/A
Sample No.	1#

Dimension:





2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	IEEE Std 149-2021	IEEE Recommended Practice for Antenna Measurements

Notes: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".

2.2. Test Conditions

Test Environment Conditions:

Relative Humidity(%):	25 – 75
Temperature(°C):	10 – 30

2.3. Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.



2.4. Test Results lists

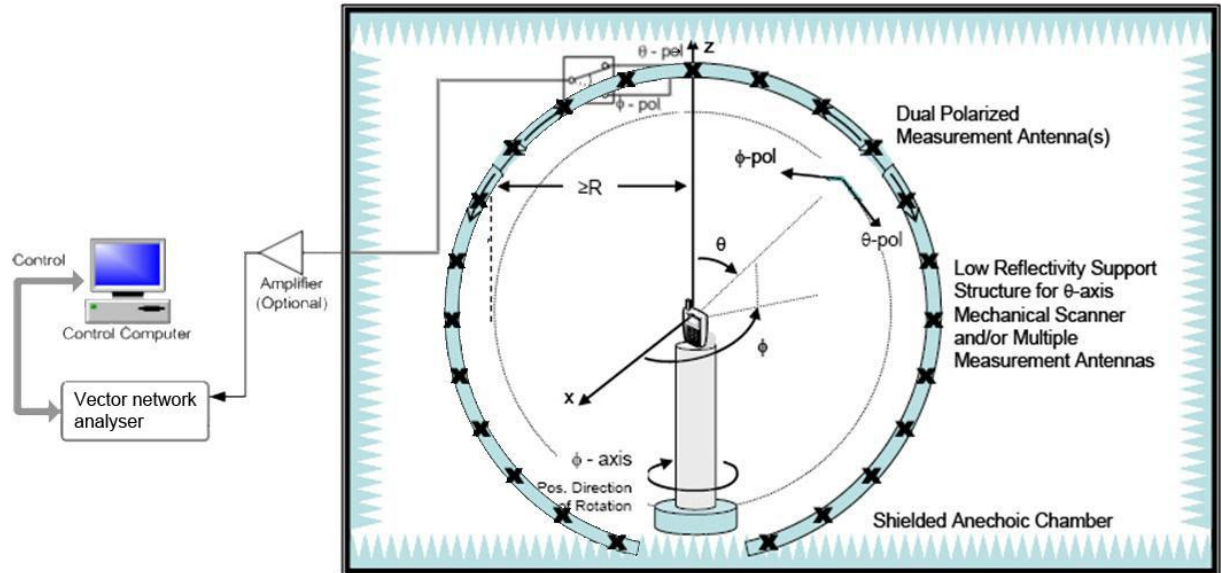
2.4.1. Gain

Frequency (MHz)	Gain(dBi)
2400	-3.91
2419	-3.91
2450	-4.16
2500	-4.32

2.4.2. VSWR

Frequency (MHz)	VSWR
2400	8.02
2419	8.39
2450	8.74
2500	8.64

Annex A Test Setup Photos

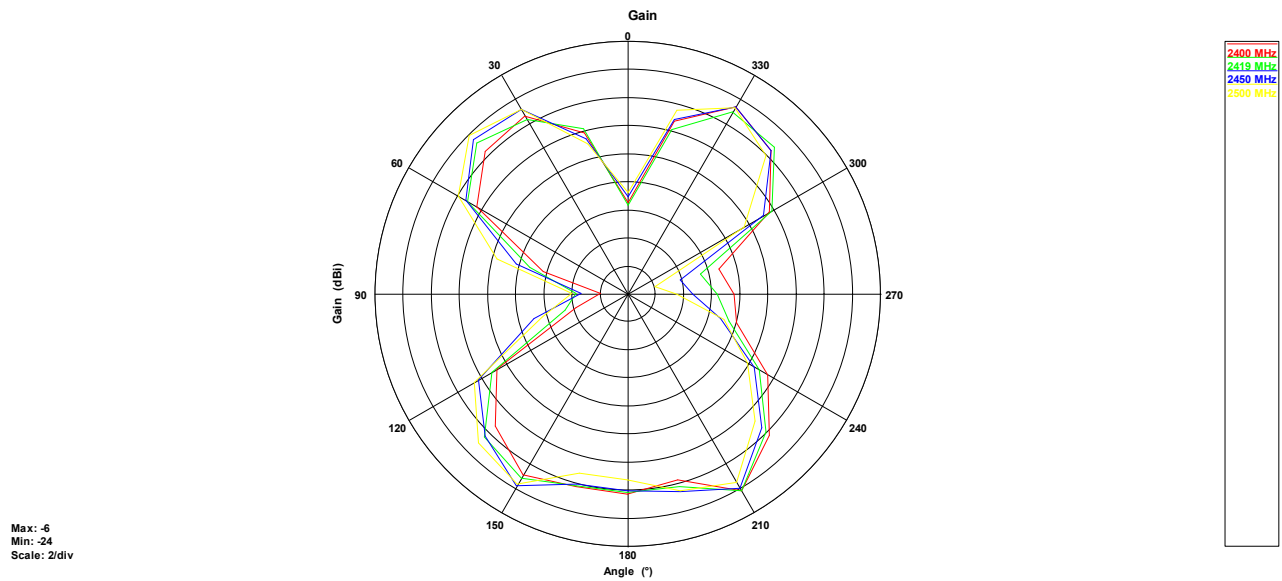




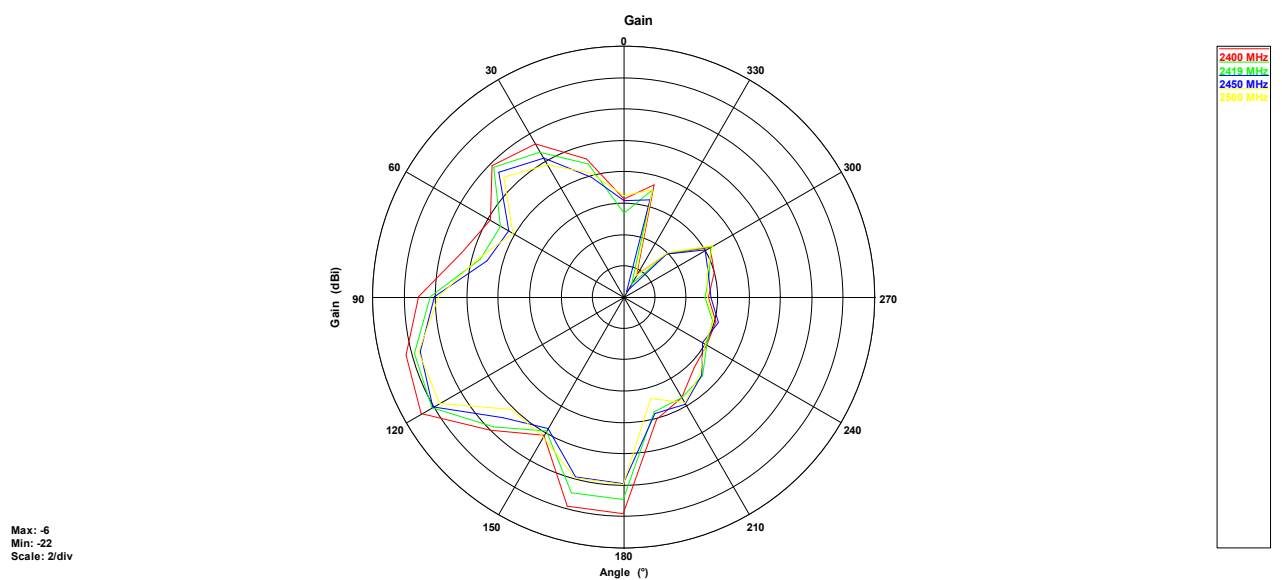
Annex B Figures

1. 2D Radiation Pattern

Phi=0°



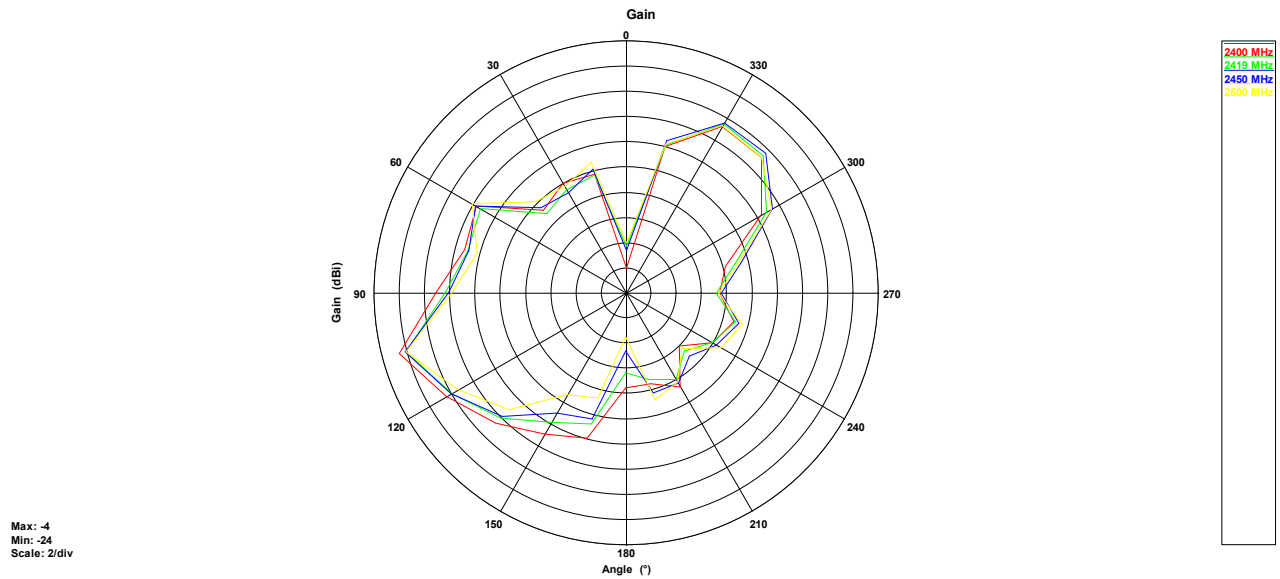
Phi=90°



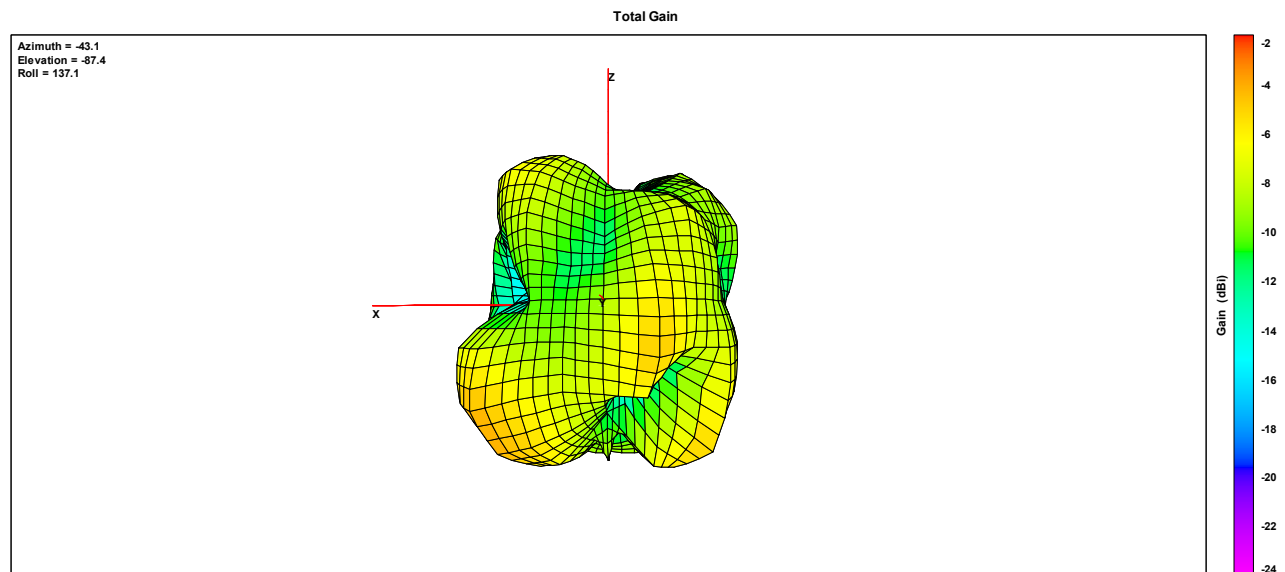


REPORT No.: SZ26060297T01

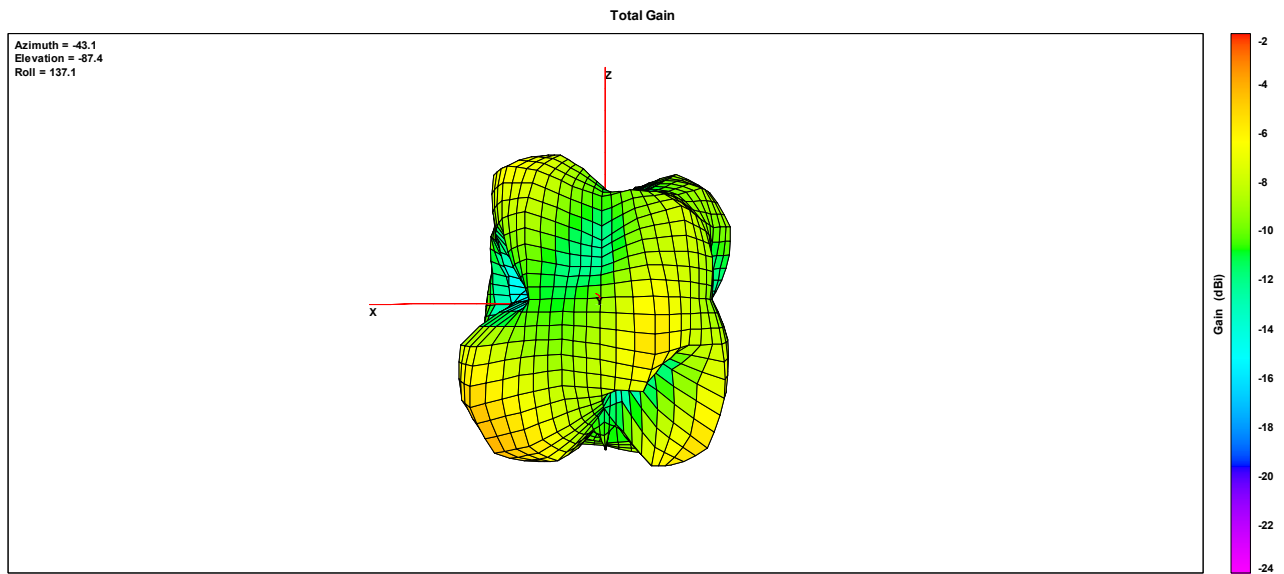
Theta=90°



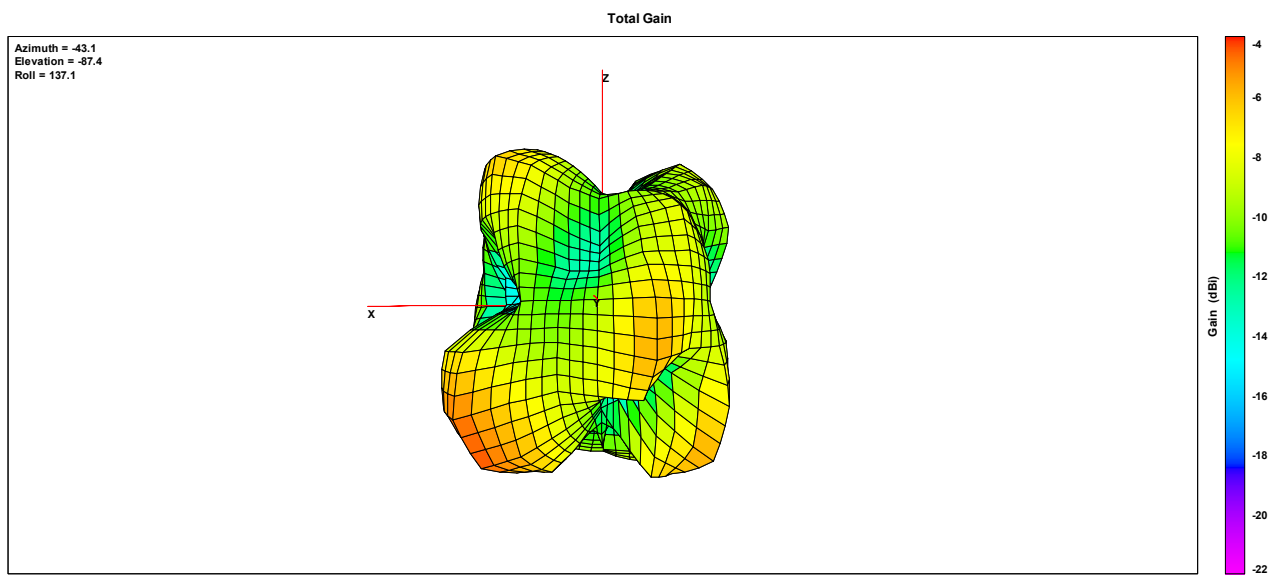
2. 3D Radiation Pattern



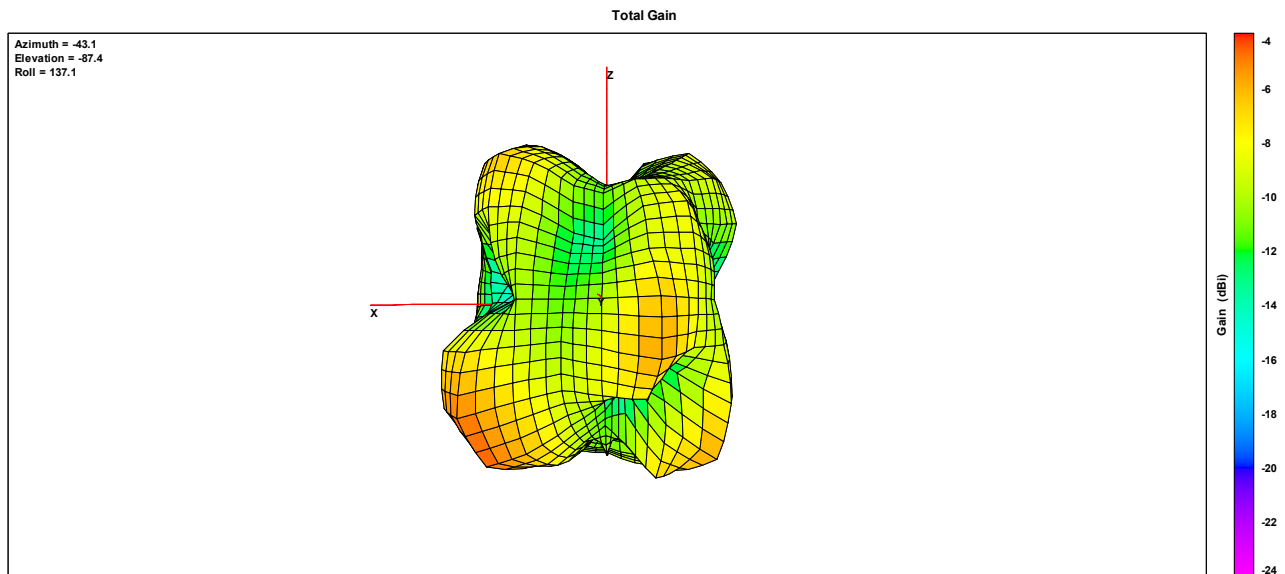
2400MHz



2419MHz

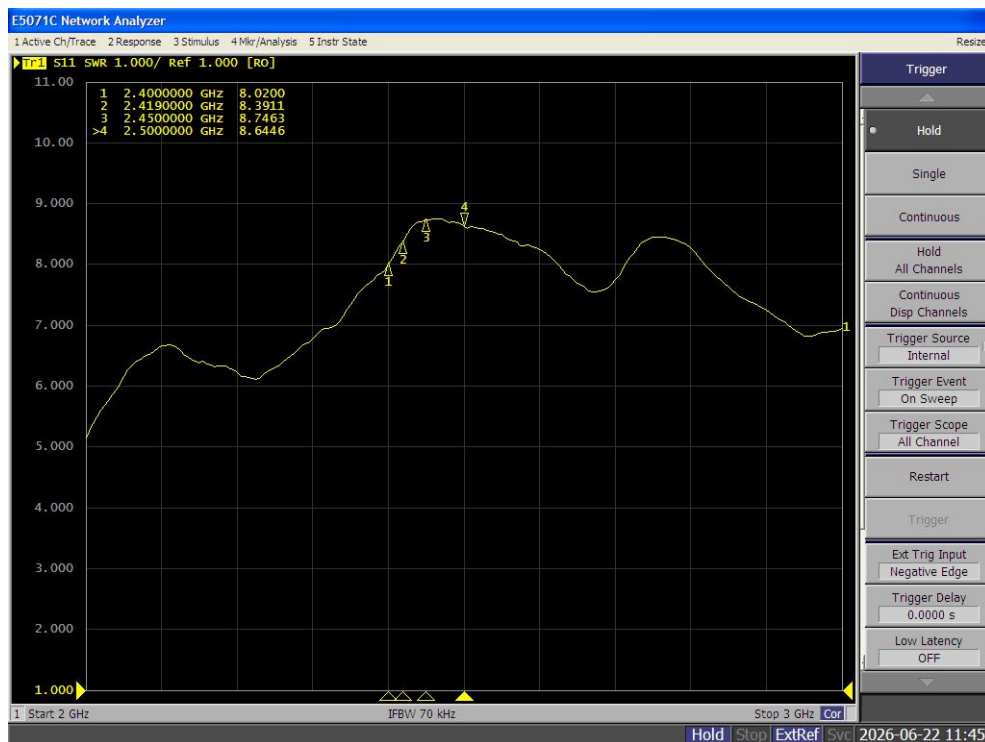


2450MHz



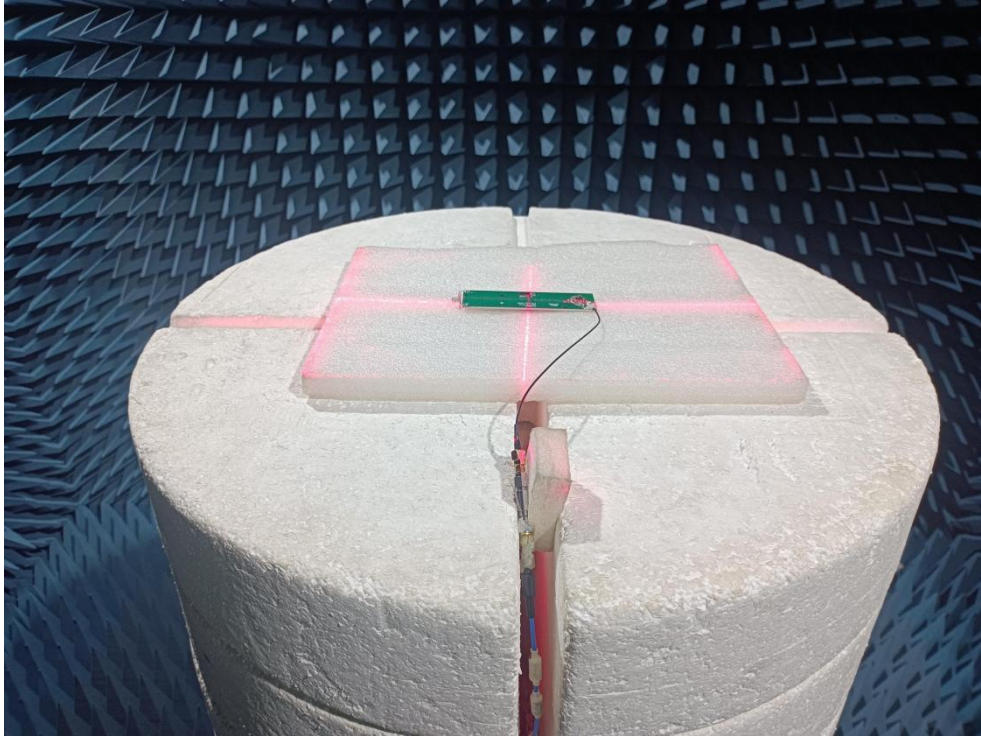
2500MHz

3. VSWR

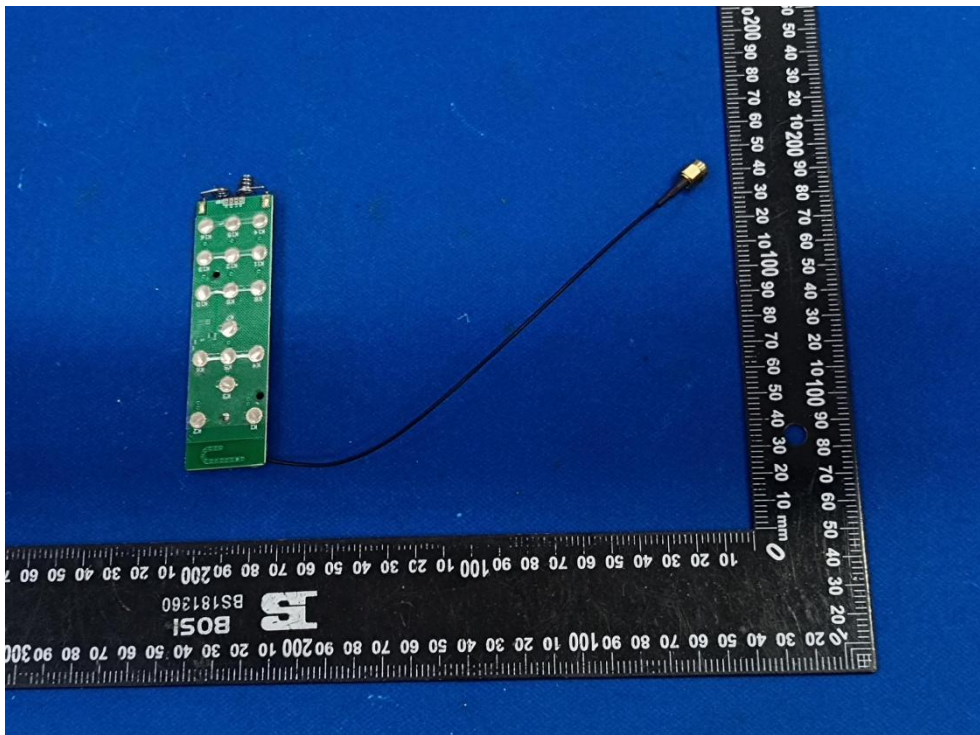
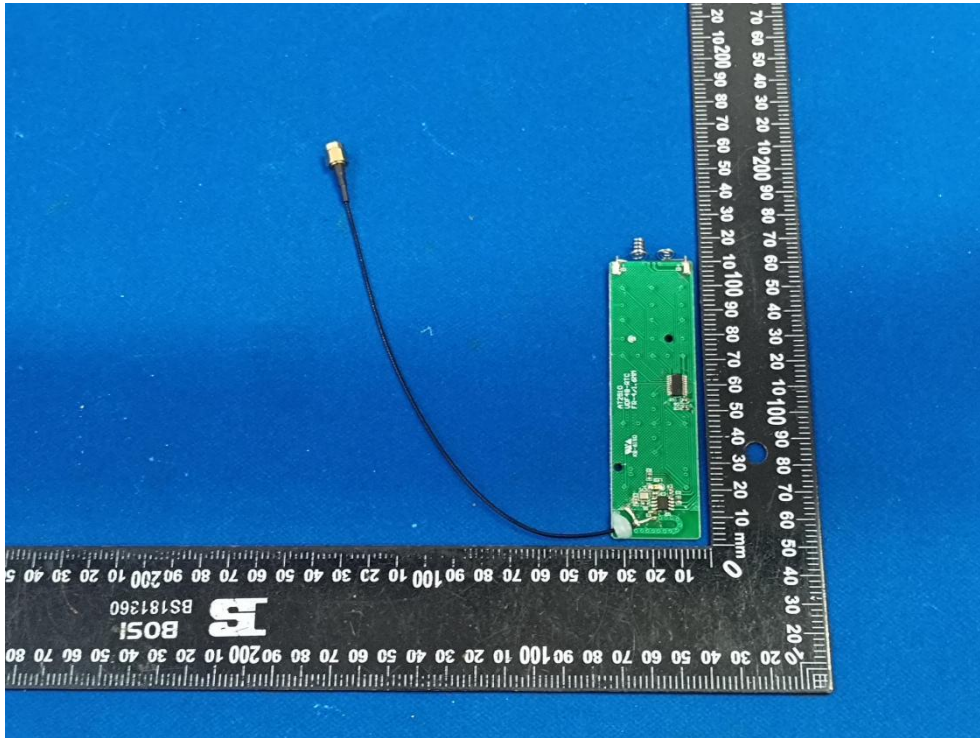


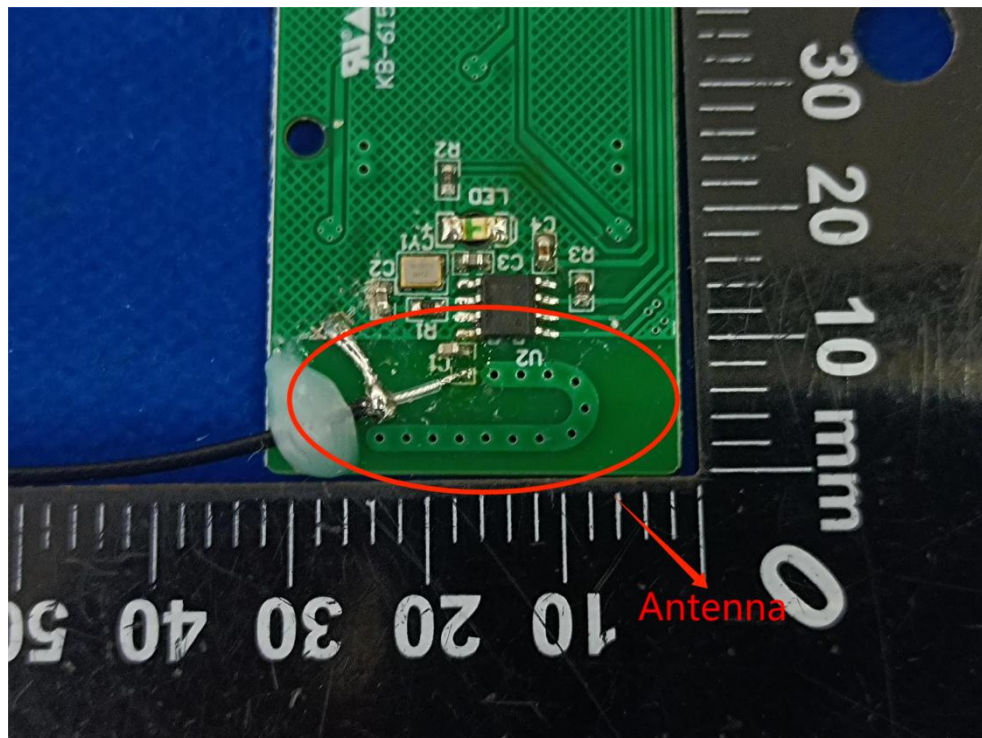
Annex C EUT Photos

1. Test environment



2. EUT







Annex D Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

3. Test Equipment Utilized

3.1 Test Equipments

No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Network Analyzer	MY46110140	E5071C	Agilent	2026.05.19	2027.05.18
2	OTA Chamber	TJ2235-Q1793	AMS-8923 -150	ETS	2025.11.15	2028.11.14

3.2 Test Software

No.	Software Name	Serial No.	Version	Manufacturer
1	Antenna Measurement System	1685	EMQuest EMQ-100 V 1.13 Build 21267	ETS



Notes

1. The report shall have report stamp or our company stamp.
2. The report shall be invalid without all the signatures of the editor and approver.
3. The report shall not be changed.
4. Any objections must be raised to Morlab within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.
5. Conformity declaration:
 - ☒ Morlab issues a statement of conformity based on the corresponding standards (default)
 - ☐ Morlab issues a statement of conformity based on the applicant requirement
6. Use of uncertainty of measurement for decisions on conformity (decision rule):

No decision rule is specified by the testing standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule).

————— END OF REPORT —————