OTA TEST REPORT

Applicant	Band Industries, Inc.
Product	Roadie 4
Model	RD400
Report No.	EFTA25090252-IE-08-T1
Issue Date	October 21,2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **ANSI/IEEE Std 149-2021.** The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Wei Fangying *Approved by: Xu Kai*

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複製禁止

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1. Test Laboratory

1.1. Notes of the Test Report

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1.2. Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
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Website: https://www.eurofins.com/electrical-and-electronics
E-mail: Kain.Xu@cpt.eurofinscn.com

1.3. Laboratory Environment

Temperature	15°C ~ 35°C	
Relative humidity	20% ~ 80%	
Shield effect	0.7-6GHz	> 100dB
Ground resistance	<0.5Ω	

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2. General Description of Equipment Under Test

2.1. Applicant and Manufacturer Information

Applicant Name	Band Industries, Inc.
Applicant address	191 Saddletree Dr., Port Townsend, WA 98368 USA
Manufacturer Name	Band Industries, Inc.
Manufacturer address	191 Saddletree Dr., Port Townsend, WA 98368 USA

2.2. General Information

EUT Description	
Product Name:	Roadie 4
Model	RD400
HW Version:	Ver05
SW Version:	Ver09
Antenna Type:	Internal Antenna
Antenna Manufacturer:	Band Industries, Inc.
Test Frequency:	2402MHz ~ 2483.5MHz
Note: The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.	

2.3. Test Date

The test is performed on September 26, 2025.

2.4. Received Date

The sample was received on September 19, 2025.

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2.5. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test Method: **ANSI/IEEE Std 149-2021**

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3. Test Conditions

3.1. Test Configuration

Great-Circle-Cut method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test (EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 5m.

3.2. Test Measurement

Spherical coordinate system

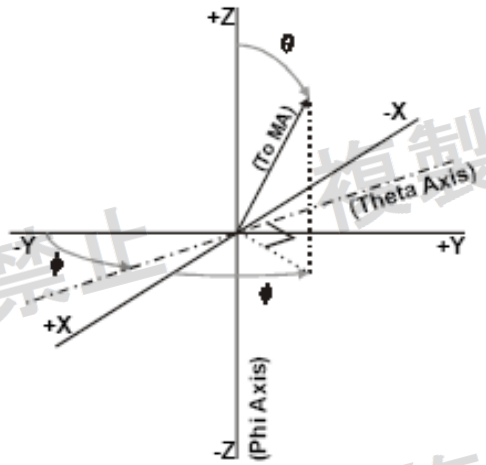
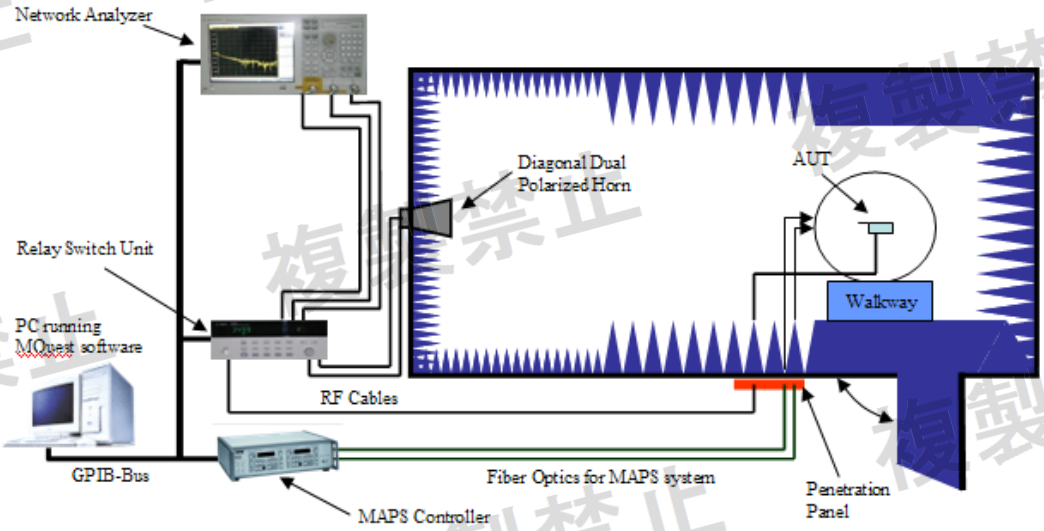


Figure 1 Test coordinate system

Note: Theta is from 0~180 degree. Phi is from 0~360. Rotate the EUT and record the Data, the step of rotation is 15 degree.

Test Setup



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4. Test Results

4.1. Gain and Efficiency

Test Item	Test State	Frequency (MHz)	Efficiency(%)	Gain(dBi)	Note
Gain	FS	2402	23.13	0.29	/
		2407	23.46	0.99	
		2412	23.79	0.63	
		2417	23.44	0.90	
		2422	23.64	1.02	
		2427	24.27	0.68	
		2432	24.07	0.72	
		2437	23.54	0.73	
		2442	22.99	0.52	
		2447	22.68	0.77	
		2452	22.84	0.73	
		2457	22.61	0.50	
		2462	21.35	0.26	
		2467	20.78	0.33	
		2472	20.90	0.36	
		2477	21.59	0.37	
		2482	21.61	0.81	
		2485	21.27	0.52	

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5. Equipment List

• Type of Equipment	Manufacturer	Model	SN	Version	Calibration Date	Expiration Time
Anechoic Chamber	ETS	AMS-8500	CT-001157-1219	/	2025-05-07	2030-05-06
Test Software	ETS	EMQuest™	1464	REV 1.17	/	/
EMCenter_Switch Control System	ETS	7006/7001	00059957/MY42001152	/	/	/
Diagonal Dual Polarized Horn	ETS	ETS 3164-04	00062743	/	2024-03-09	2029-03-08
Network Analyzer	Keysight	E5071B	MY42404014	REV.A.06.50	2025-01-06	2026-01-05

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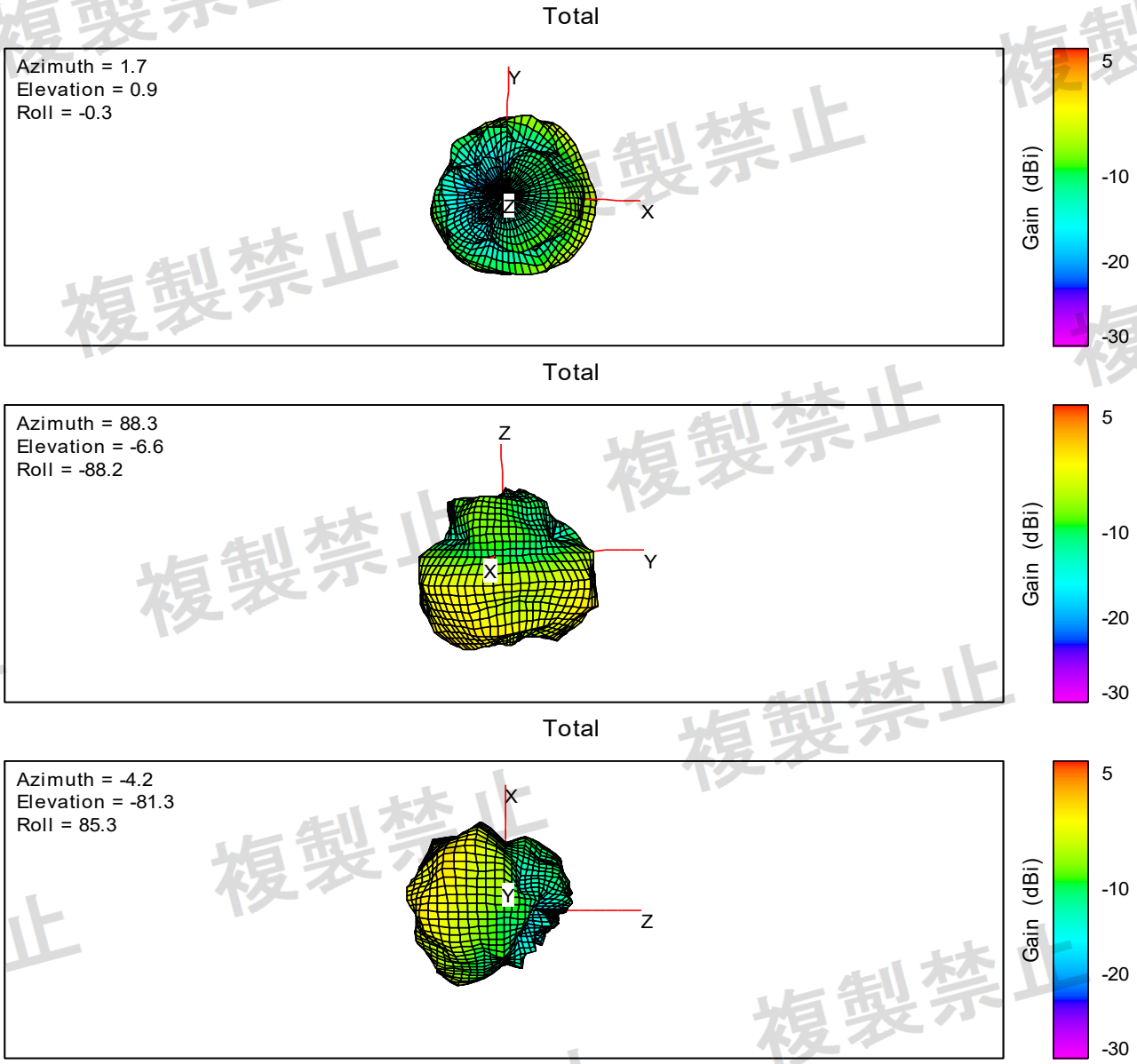
ANNEX A: 3-D Pattern Plots



2402MHz 3D Gain

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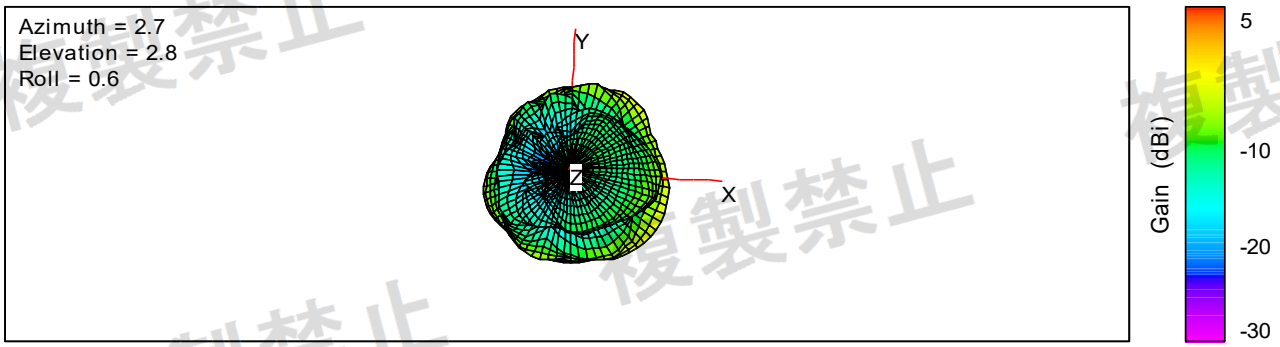
Total



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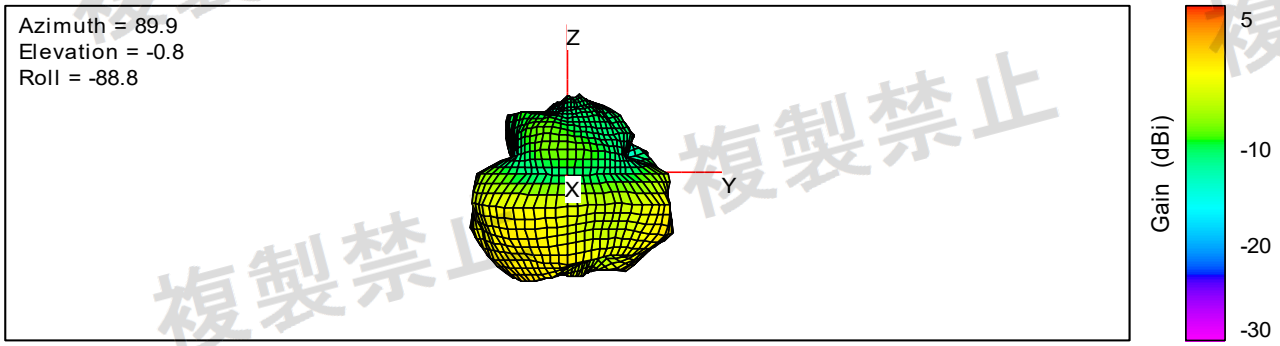

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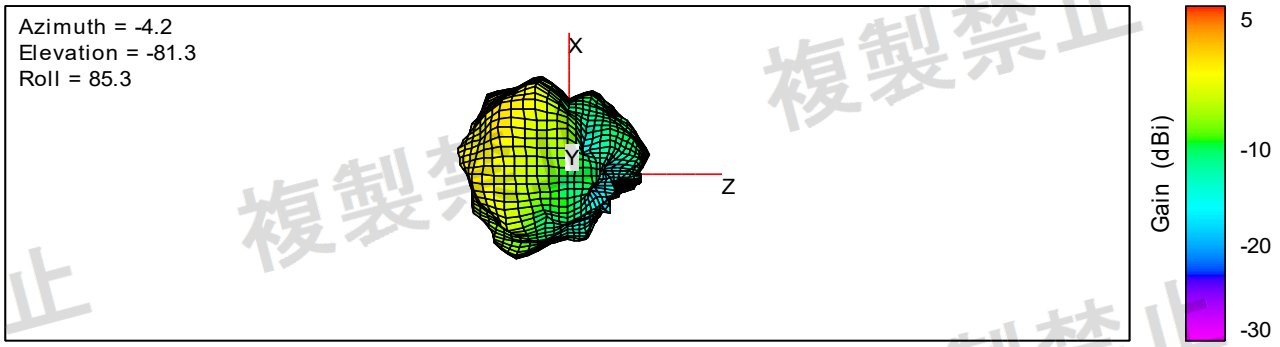

2442MHz 3D Gain

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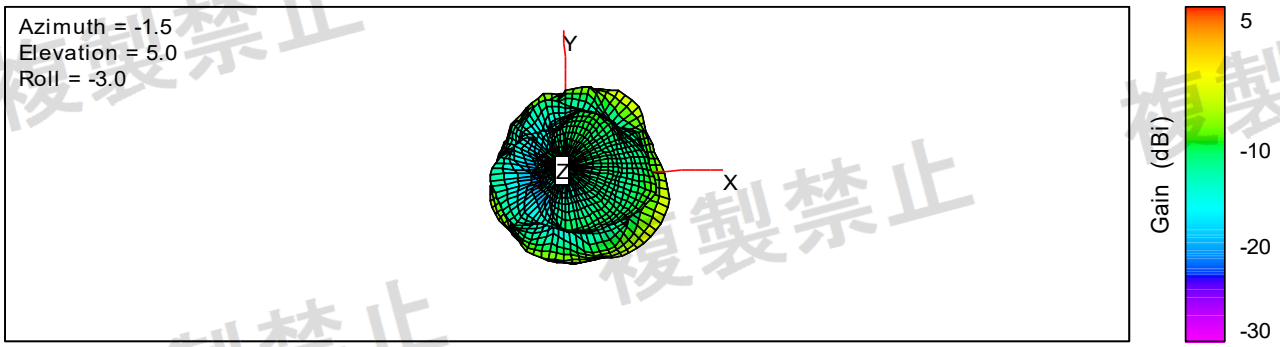
Total



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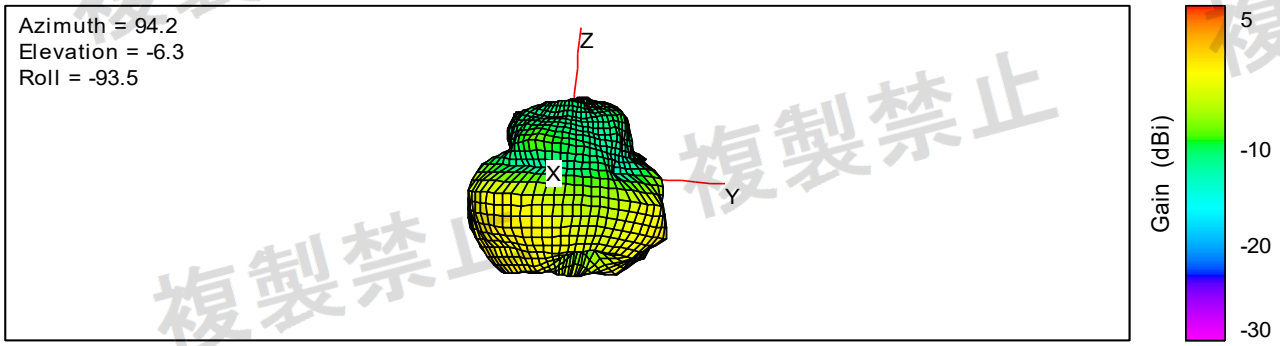

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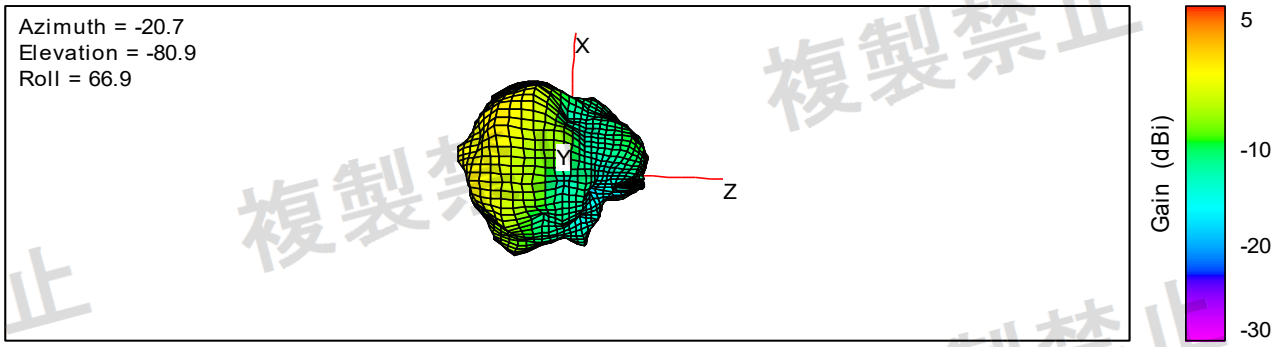

2485MHz 3D Gain

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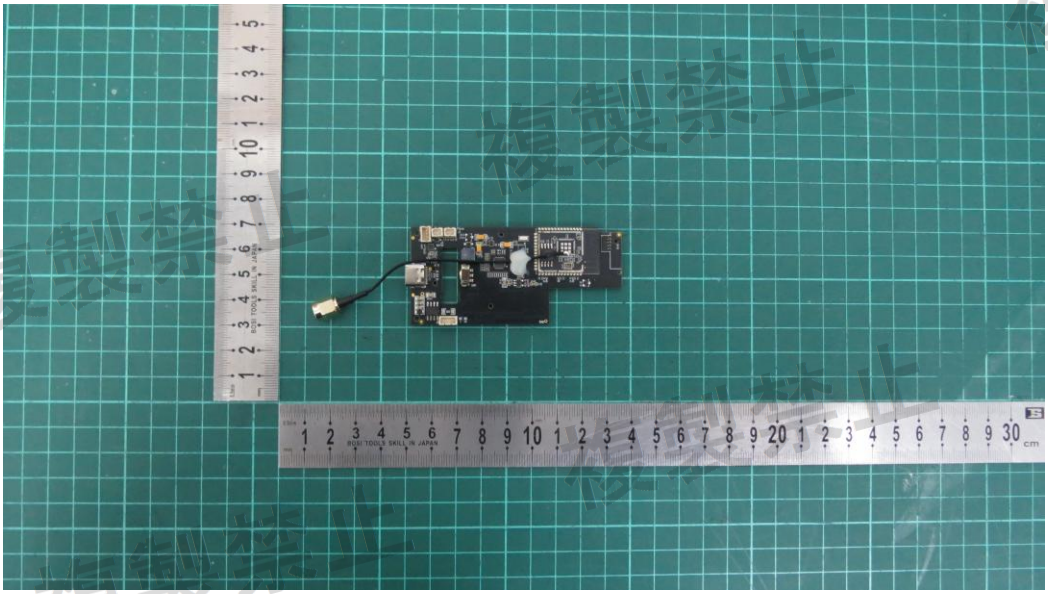
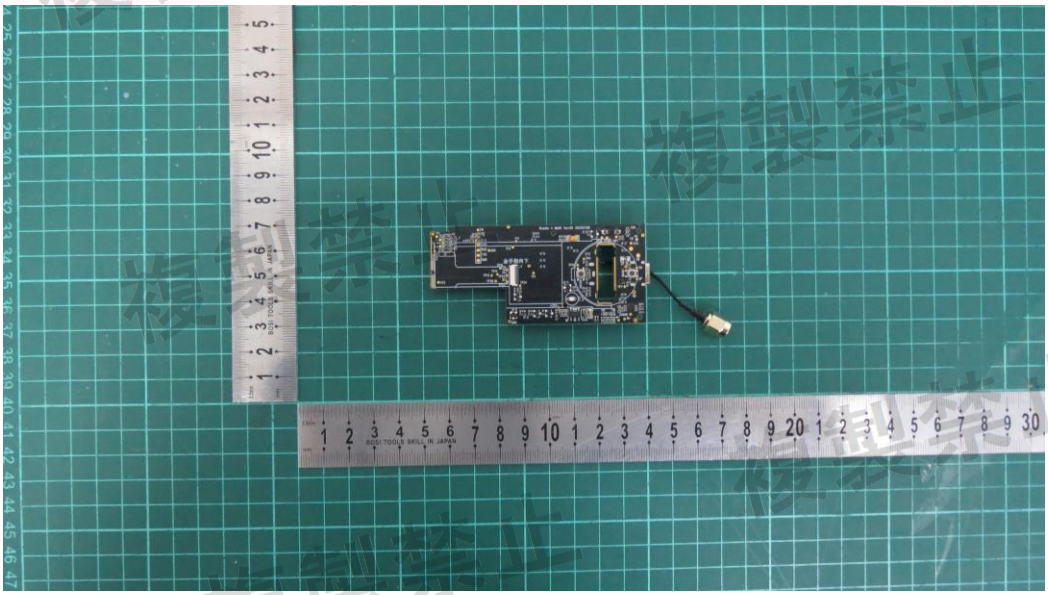
ANNEX B: The EUT Appearance and Test Configuration

B.1 EUT Appearance





Picture 1 Constituents of EUT

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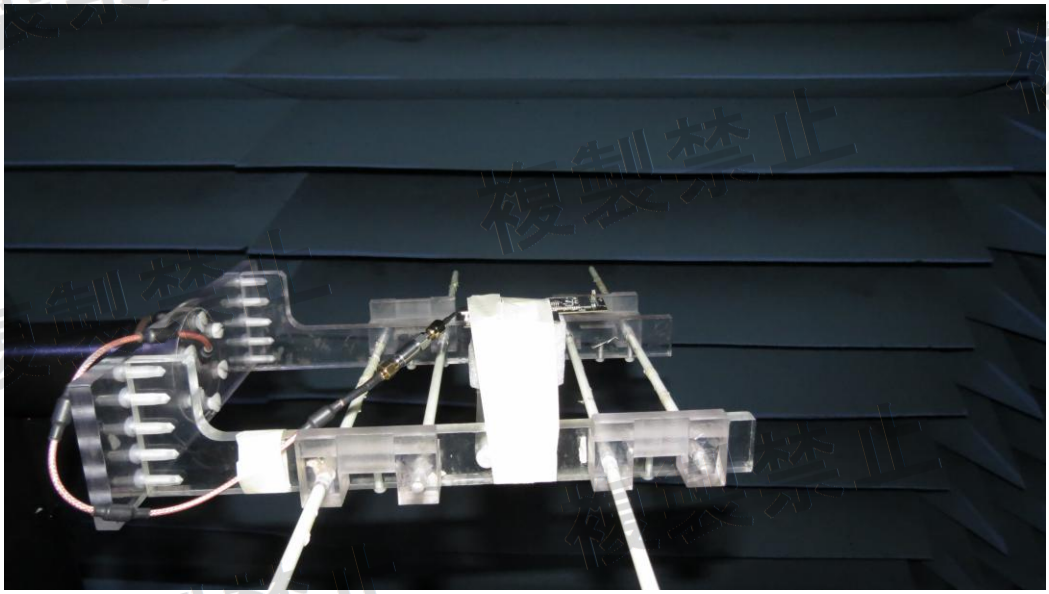
B.2 Test Configuration



Picture 2 Test Setup

********END OF REPORT ********

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