TEST REPORT

Product Name	:	Antenna
Model/Type reference	:	/
Report Number	:	HTC20250723001
Date of Issue	:	July 23, 2025
Test Standards	:	GB/T 9410-2008 ANSI/IEEE Std149-1979

Compiled by: Eason Reviewed by: Aaron

Approved by: Jason Date: July 23, 2025

REPORT SEAL

Prepared by:

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Version

Version No.	Date	Description
00	July 23, 2025	Original

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1. General Information

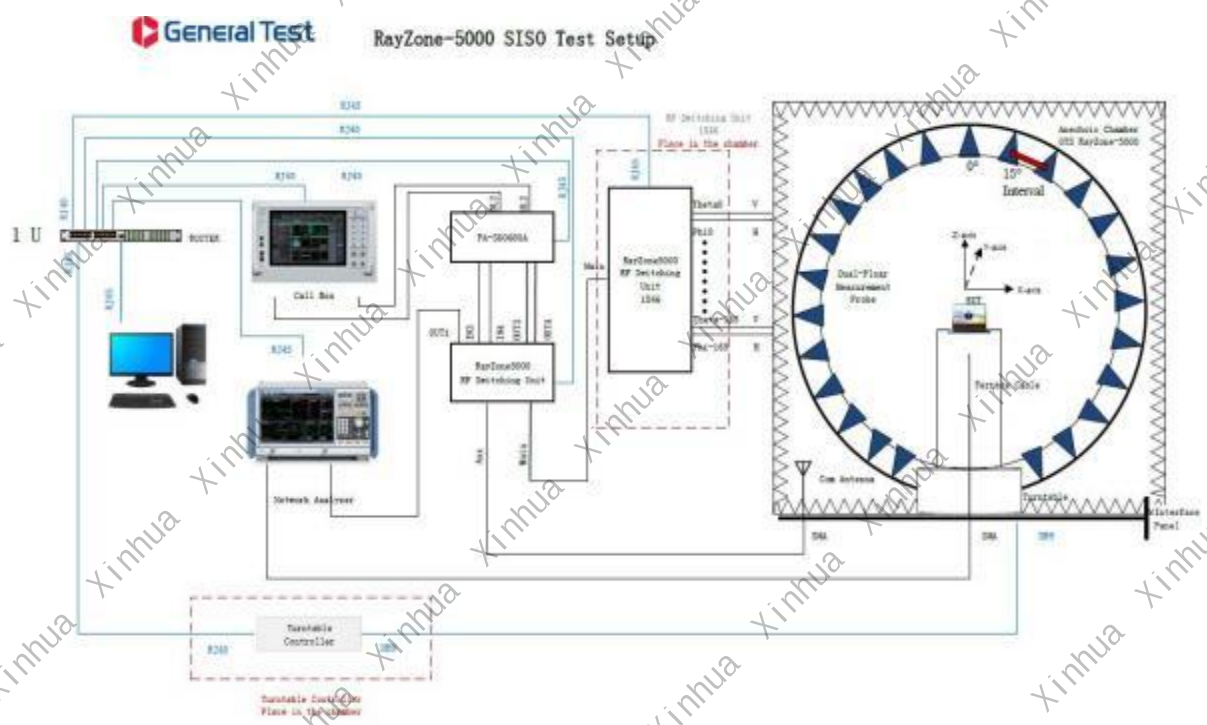
1.1 General information of testing institutions

Name	Shenzhen XinHua Technology co.,Ltd
Address	C709, Building D, Juji Industrial Park, Yabian Xueziwei, Shajing Street, Bao'an District, Shenzhen City

1.2 Applicant and Manufacturer

Applicant/Client Name	Ji 'an Rongdu Electronics Co., LTD
Applicant Address	Building 10, Phase 2, Yongxin County Industrial Park, Ji 'an City, Jiangxi Province

1.3 Testing principle



1.4 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
OTA Test System	RayZone-5000	A0011	GTS	2023.8.14	2025.8.13
Network Analyzer	E5071C	C0017	KEYSIGHT	2025.4.28	2026.4.27

1.5 Test environment

Temperature	24.8℃
Humidity	83%RH
Pressure	100.06kPa

1.6 Statement

(1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report.
(2) Only Shenzhen XinHua Technology co.,Ltd have the right to modify the report, and the modification information shall be annotated in the revision form.
(3) Any objection to this report shall be raised within 30 days after formal confirmation of the report.
(4) This report is invalid if there is any evidence that the sample information provided is falsified.
(5) The report is invalid without the signature of the auditor and approver.

2.Sample Information

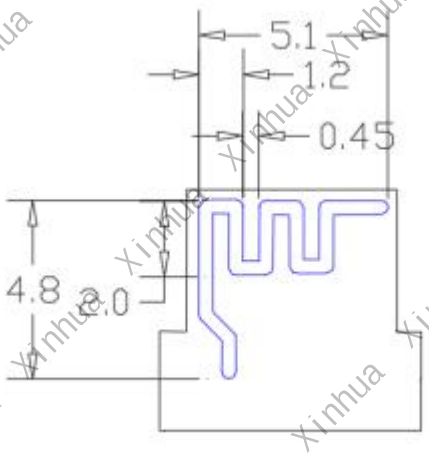
2.1 Description of EUT(S)

Test Item	VSWR;Antenna gain; Efficiency; Radiation pattern
Frequency Range	2400-2480MHz
Received Date	July 22, 2025
Test Date	July 23, 2025

2.2 EUT appearance

View Of Product-01

View Of Product-02



Antenna Dimensions

2.3 EUT setup photo of free space OTA testing

3. Test Results

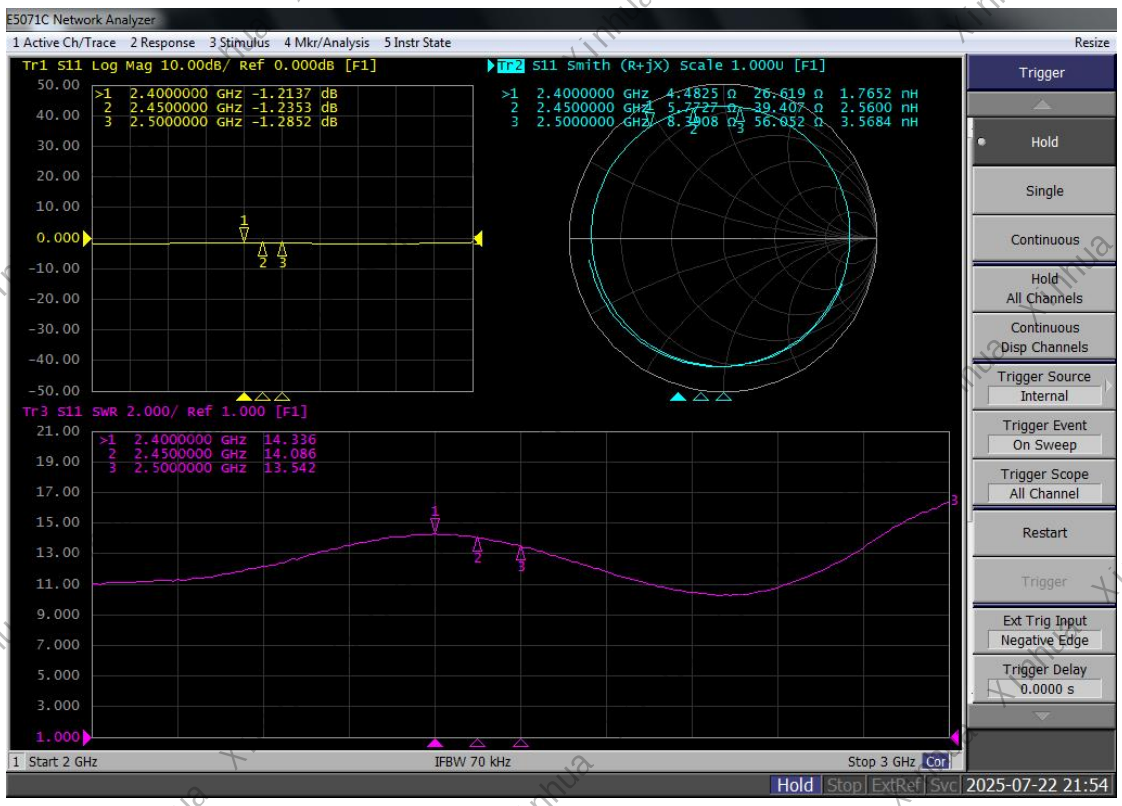
3.1 Test uncertainty

The uncertainty was calculated on the basis of the GUM published by ISO, using the inclusion factor of K=2 and the 95% confidence level to express the extendeduncertainty.

Item	Uncertainty
VSWR	±0.3
Antenna gain	±0.72dB
Radiation efficiency	±0.72dB

3.2 Test data

3.2.1 VSWR parameters



3.2.2 VSWR data

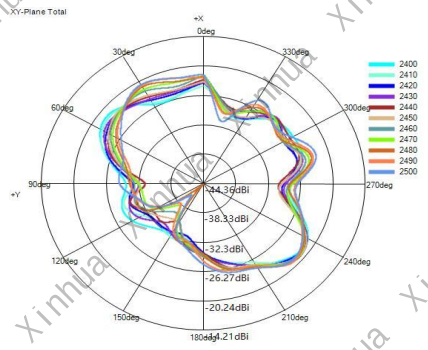
Frequency/MHz	2400	2450	2500
VSWR	14.336	14.086	13.542

3.2.3 Typical free space efficiency and gain

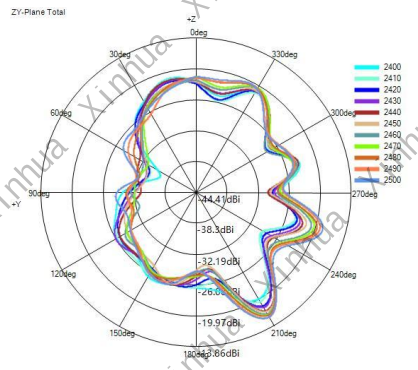
Freq No.	Freq(MHz)	Gain(dBi)	Efficiency(%)
1	2400	-18.02	0.40
2	2410	-18.11	0.39
3	2420	-18.17	0.38
4	2430	-17.36	0.40
5	2440	-16.80	0.40
6	2450	-16.38	0.40
7	2460	-15.58	0.42
8	2470	-15.06	0.45
9	2480	-14.73	0.46
10	2490	-14.61	0.48
11	2500	-14.32	0.51

3.2.4 Radiation pattern

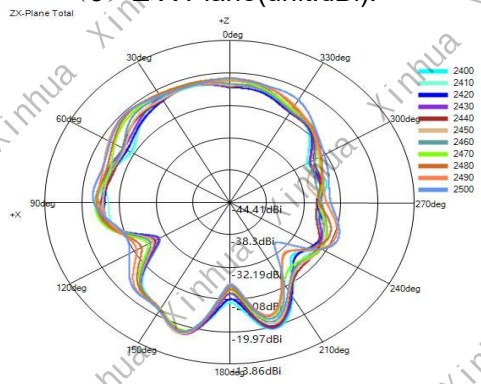
(1) X-Y Plane(unit:dBi):



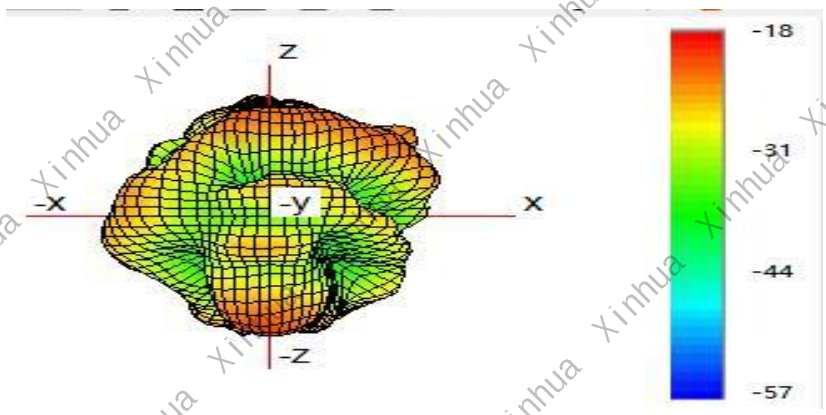
（2）Z-Y Plane(unit:dBi):



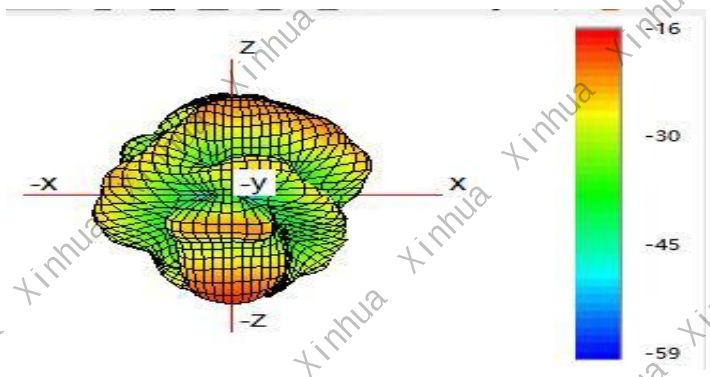
（3）Z-X Plane(unit:dBi):



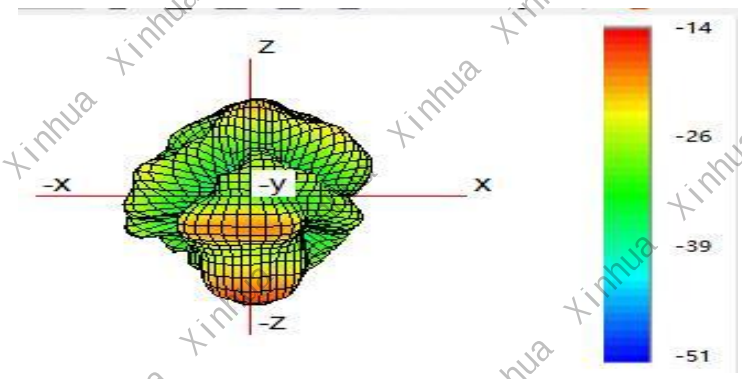
（4）Typicall Free Space 3D Radiation Pattern at 2400MHz(unit:dBi)



（5）Typicall Free Space 3D Radiation Pattern at 2450MHz(unit:dBi)



（6）Typicall Free Space 3D Radiation Pattern at 2500MHz(unit:dBi)



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