

深圳旭航通讯科技有限公司

Shenzhen Xuhang Communication
Technology Co., Ltd

规格承认书

客户 CUSTOMER	
客户料号 CUSTOMER NO.	350W
供方品名 PART NAME	BT 天线
规格名称 SUPPLIER NO.	板载 BT 天线

客户确认 CUSTOMER APPROVED BY		
检验 APPROVAL	审核 CHIEF	批准 SUPERVISOR

设计 DESIGN	审核 CHECK	批准 APPROVAL
Luo	Robert	SHANG

Date:Monday, April 07, 2025

DIRECTORY

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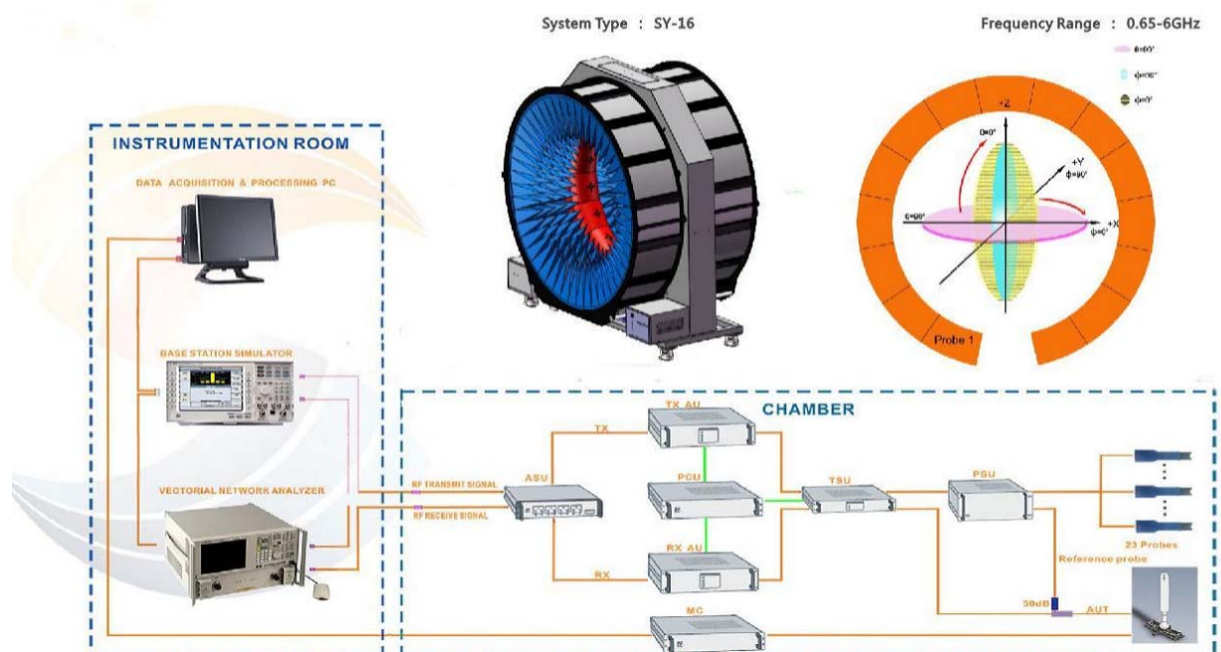
1.General Information

1.1 General information of testing institutions

Name	Shenzhen Xuhang Communication Technology Co., Ltd
Address	Room 213, 2nd Floor, Building 1, Huiyixin Maker Center, Longhua District, Shenzhen
Tel	18588291966
E-mail	970307612@qq.com
Equipment	All equipment in this report is installed in Room 213, 2nd Floor, Building 1, Huiyixin Maker Center, Longhua District, Shenzhen City

1.2 Testing principle

Xuhang Multi Probe Testing System



1.3Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
16 probe microwave chamber	5*3*3	XH-LAB-RF-001	Outhali Technology	2025.04.03	2026.04.03
Network Analyzer	PROTEK A338	XH-LAB-RF-003	Outhali Technology	2025.04.03	2026.04.03
Network Analyzer	8753D	XH-LAB-RF-004	Outhali Technology	2025.04.03	2026.04.03

1.4 Test environment

Temperature	24.4°C
Humidity	59%RH
Pressure	100.21kPa

1.5 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 Xuhang Communication 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 infonnation provided is falsified.

(5) The report is invalid without the signature of the auditor and approver.

2.Sample Information

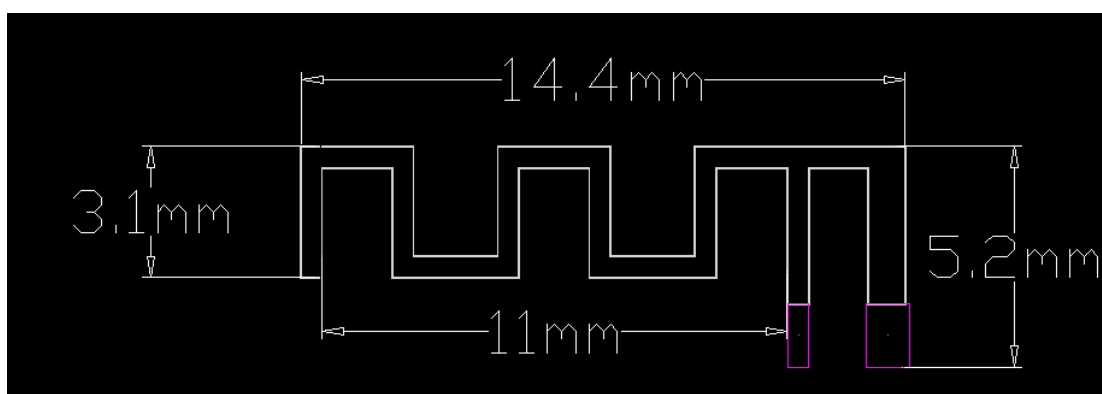
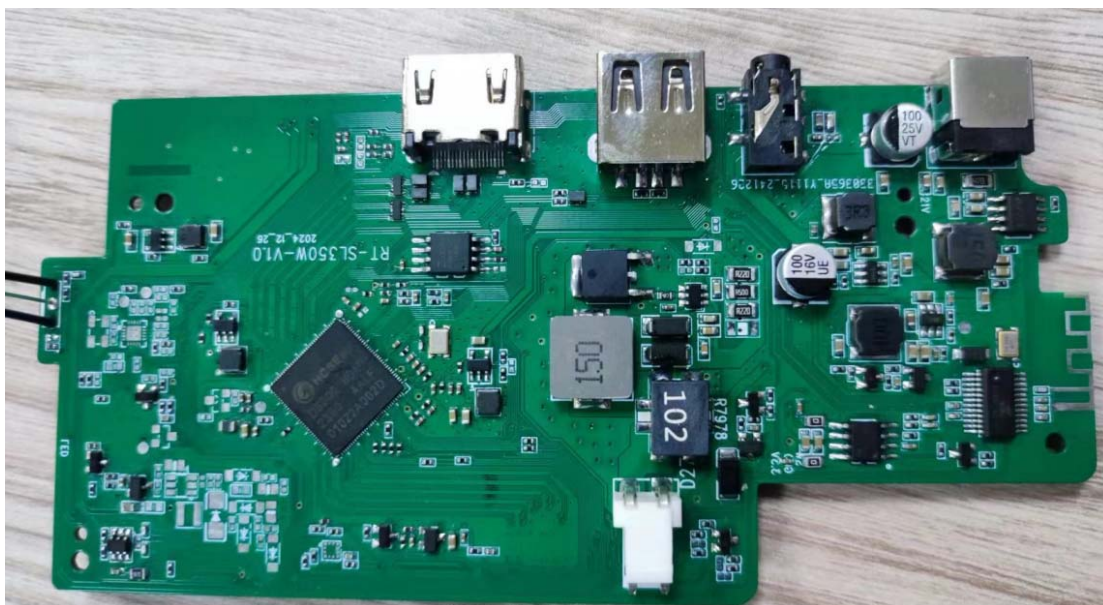
2.1 Client information

Name	
Address	
Contacts	
Tel	
E-mail	

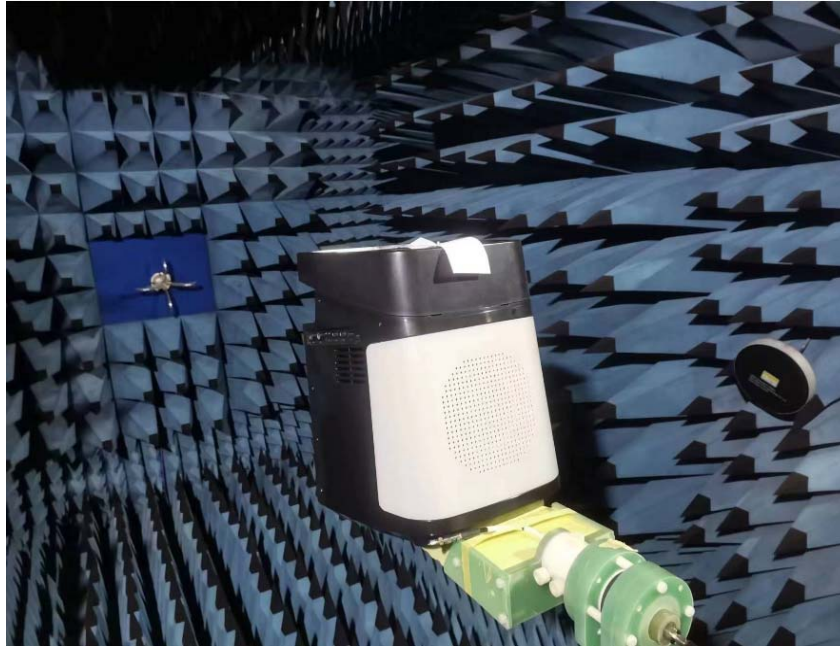
2.2 Description of EUT(S)

Product Name	projector
Sample Model	350W
Size	Bluetooth
Serial No.	/
Test Item	Antenna gain; Efficiency; Radiation pattern
Frequency Range	2402MHz-2480MHz
Received Date	2025.4.3
Test Date	2025.4.3
Remark	Location of onboard antenna

2.3 EUT appearance



2.4 DUT setup photo of free space OTA testing



3. Test Results

3.1 Test standard

Name	Parameter	Method	Standard no.
Mobile communication antenna	Antenna gain	Generic specification for antennas used in the mobile communications	GB/T 9410-2008
	Radiation pattern		
Antenna	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979
	Gain and directivity		

3.2 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 extended uncertainty.

Item	Uncertainty
Antenna gain	$-4\text{DB} \pm 1\text{DB}$
Radiation efficiency	$20\% \pm 10\%$

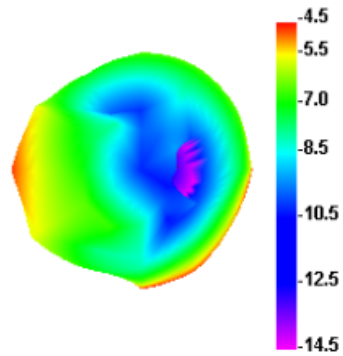
3.3 Test data

3.3.1 Typical free space efficiency and gain

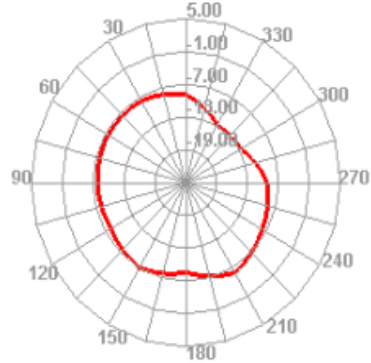
Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain/dBi	-4.54	-4.98	-4.59	-4.07	-3.4	-3.46	-2.37	-2.34	-3.68	-3.54	-4.77
Efficiency/%	14.56	12.7	12.38	12.37	14.63	17.55	21.65	21.41	15.78	15.89	11.94

3.3.2 Typical free space radiation pattern

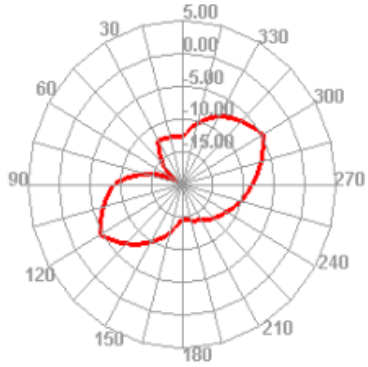
2400.000MHz



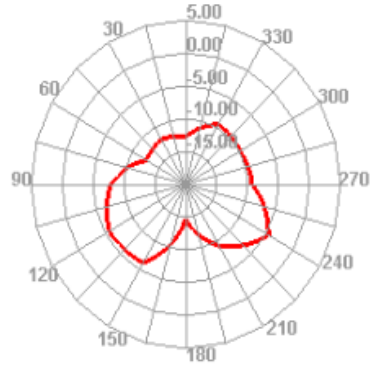
2400.000MHz H



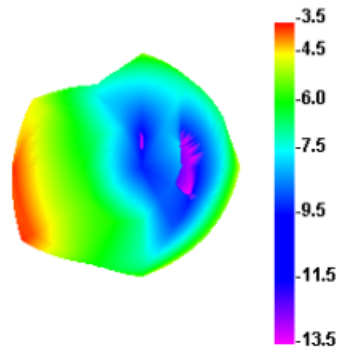
2400.000MHz E1



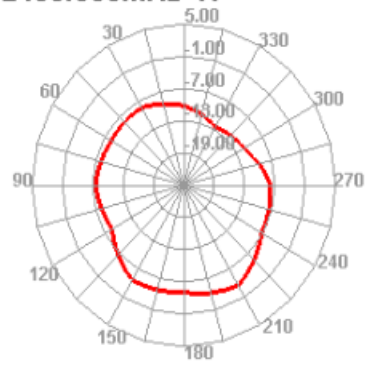
2400.000MHz E2



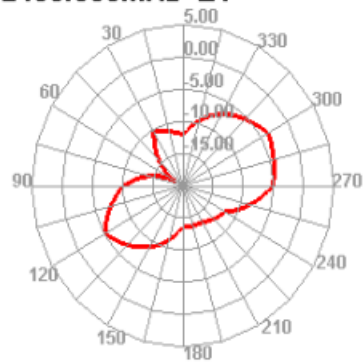
2450.000MHz



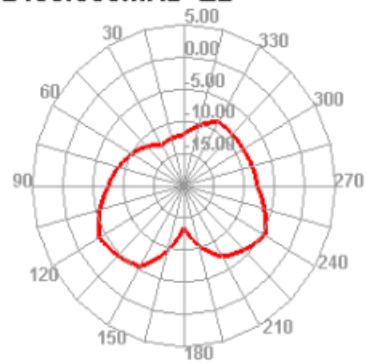
2450.000MHz H



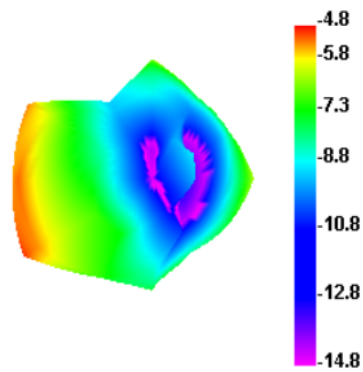
2450.000MHz E1



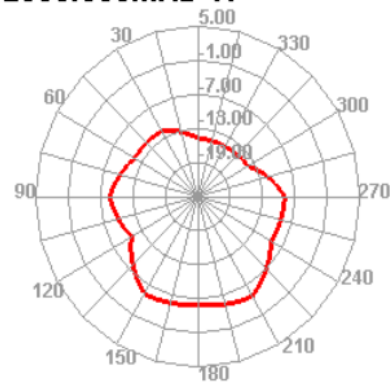
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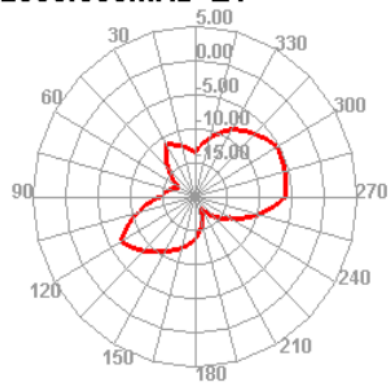
2500.000MHz



2500.000MHz H



2500.000MHz E1



2500.000MHz E2

