Shanghai Shangyuan Communication Technology Co., LTD

Antenna admission book

Customer name: Yunjia	Project name: v220
Working frequency band: WiFi2.4G	
Hardware version: V220_XB_V0.1_20250226	
Shangyuan material specifications	

specifications and models	Shang Yuan material number	Customer material number
WIFI-2 ant	SZ25121IA70	2.1.09.12.012301

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Preparation / change date	Change the content	Change the person	edition
2025.06.09	A new release	Xuwei	A

Shang Yuan will sign the column				
research and development	structure:	examine and verify:	Quality Engineer:	ratify:
	radio frequency:	examine and verify:		

The customer will sign the column			
electronic engineer	project manager	construction engineer	Quality engineer

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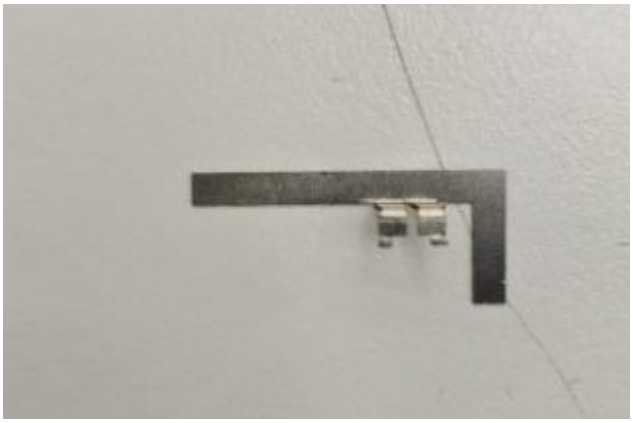
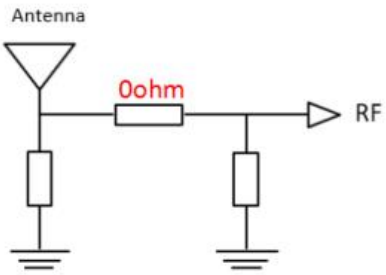
一、 Project information

1.1 .Mockup picture

1.2 Antenna product picture



二、 Antenna matching circuit



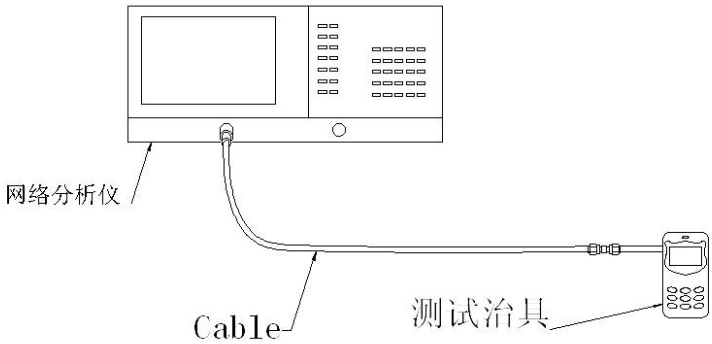
三、 Complete machine test data

3.1 S11 Description of the test method

Test Equipment: Network Analyzer (Agilent E5071C)

Test method: Export a 50 Ohm CABLE cable from the instrument test port, connect the SMA connector of the test device after the calibrator, and record the echo loss and standing wave ratio corresponding to the relevant frequency point.

The test schematic diagram is as follows:



Schematic diagram of the test

3.2 Test environment

Test System: MPS 6450 Multi-sensor OTA Measurement System (XH-IoT)

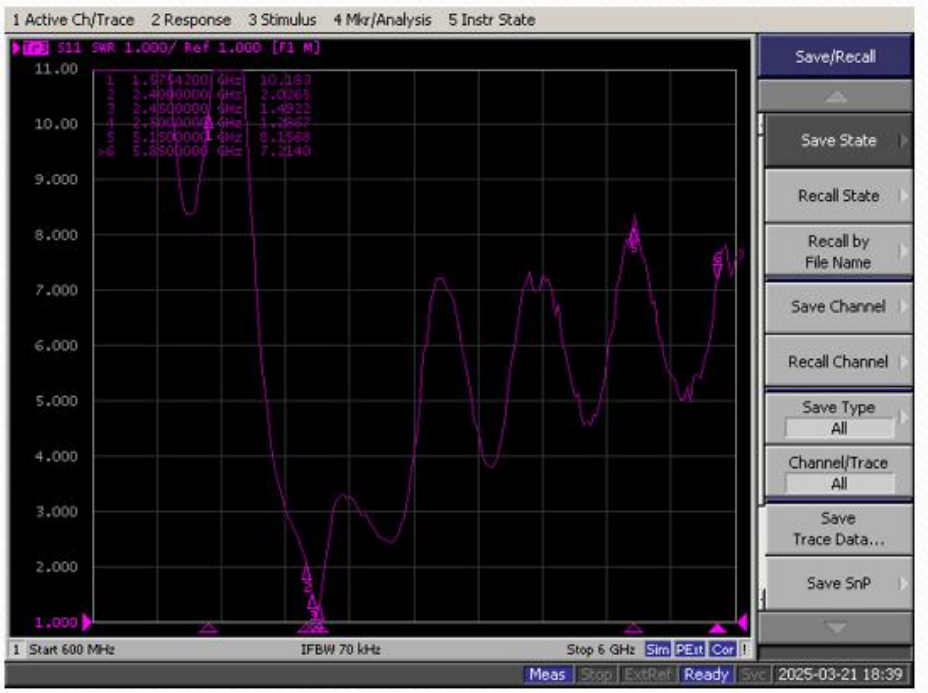
Test environment: temperature 22℃± 3℃, humidity 50% ± 15%

Test equipment: Use the network analyzer R & S ZND / Agilent E5071C when testing the passive data

When testing active data, use the comprehensive meter Agilent 8960 / CMW500 / S P9500E / SP 8315

3.3 The passive test parameters

standing-wave ratio VSWR

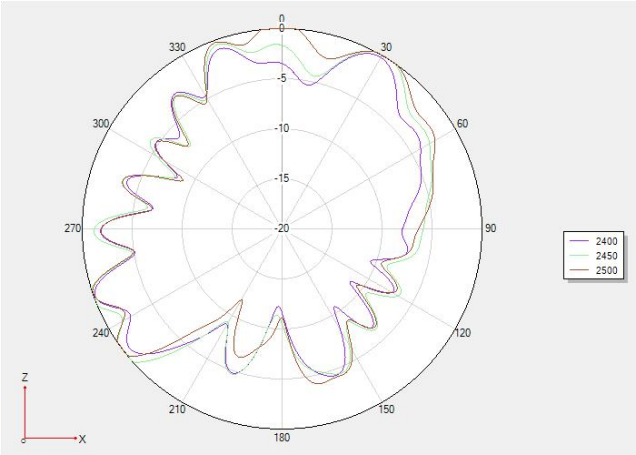


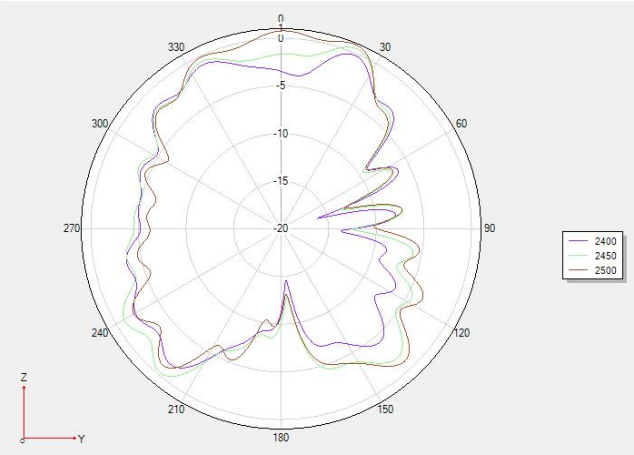
频率（MHZ）	2400	2450	2500
驻波比	2.02	1.49	1.28

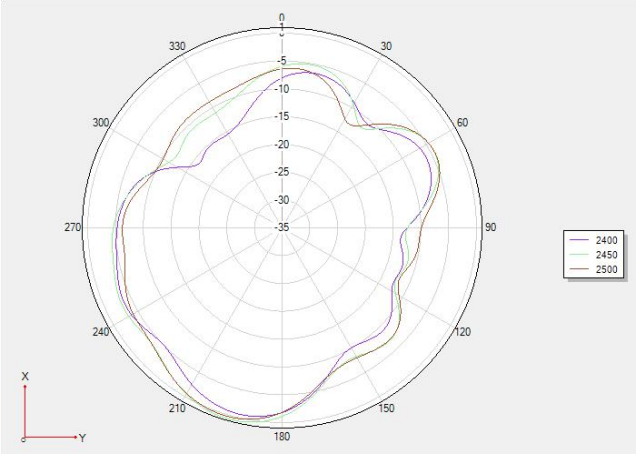
Passive efficiency

Freq (MHz)	Effi (%)	Gain (dB)
2400	43. 25	0. 88
2410	48. 64	1. 66
2420	39. 17	0. 54
2430	39. 26	0. 92
2440	41. 69	1. 29
2450	48. 64	2. 34
2460	45. 08	2. 04
2470	43. 45	1. 94
2480	45. 08	2. 15
2490	47. 64	2. 59
2500	45. 19	2. 52

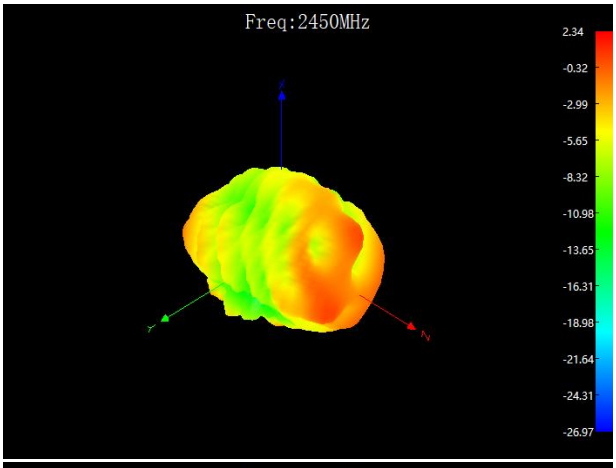
Passive direction diagram

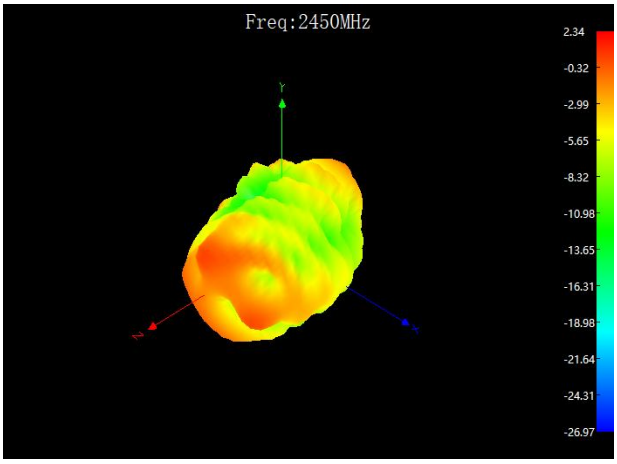


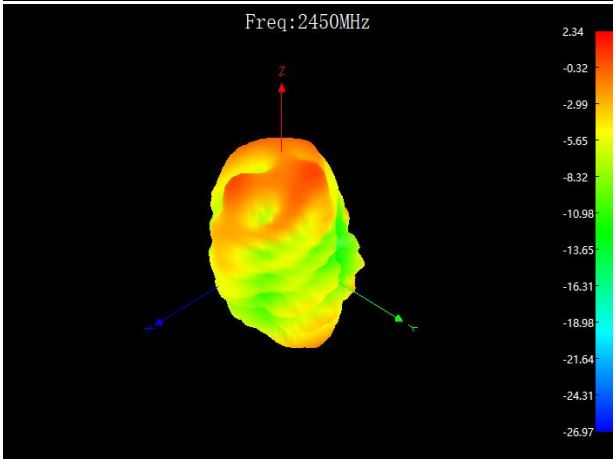




Radiation Apple Figure 2.4G







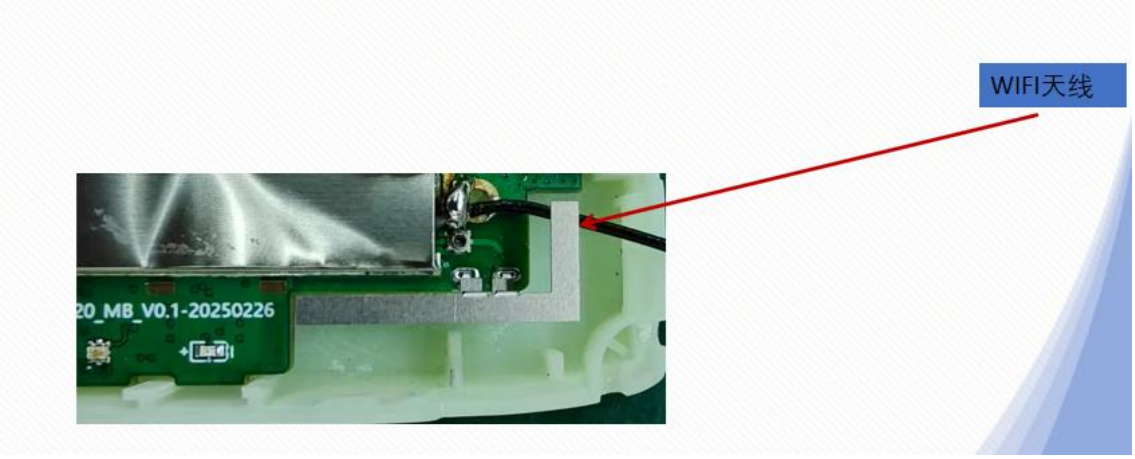
3.4 Active test data

2. 4G	信道	TRP	TIS
802. 11b 11mbps	1	17.77	-84.09
	6	17.88	-86.55
	11	18.94	-88.17
802. 11g 54mbps	1	17.9	-71.05
	6	18.11	-70.9
	11	18.06	-72.15
802. 11n MCS7	1	17.61	-68.31
	6	18.23	-67.13
	11	18.95	-69.62

四、 The prototype environment processing mode

NONE

五、 Antenna loading position



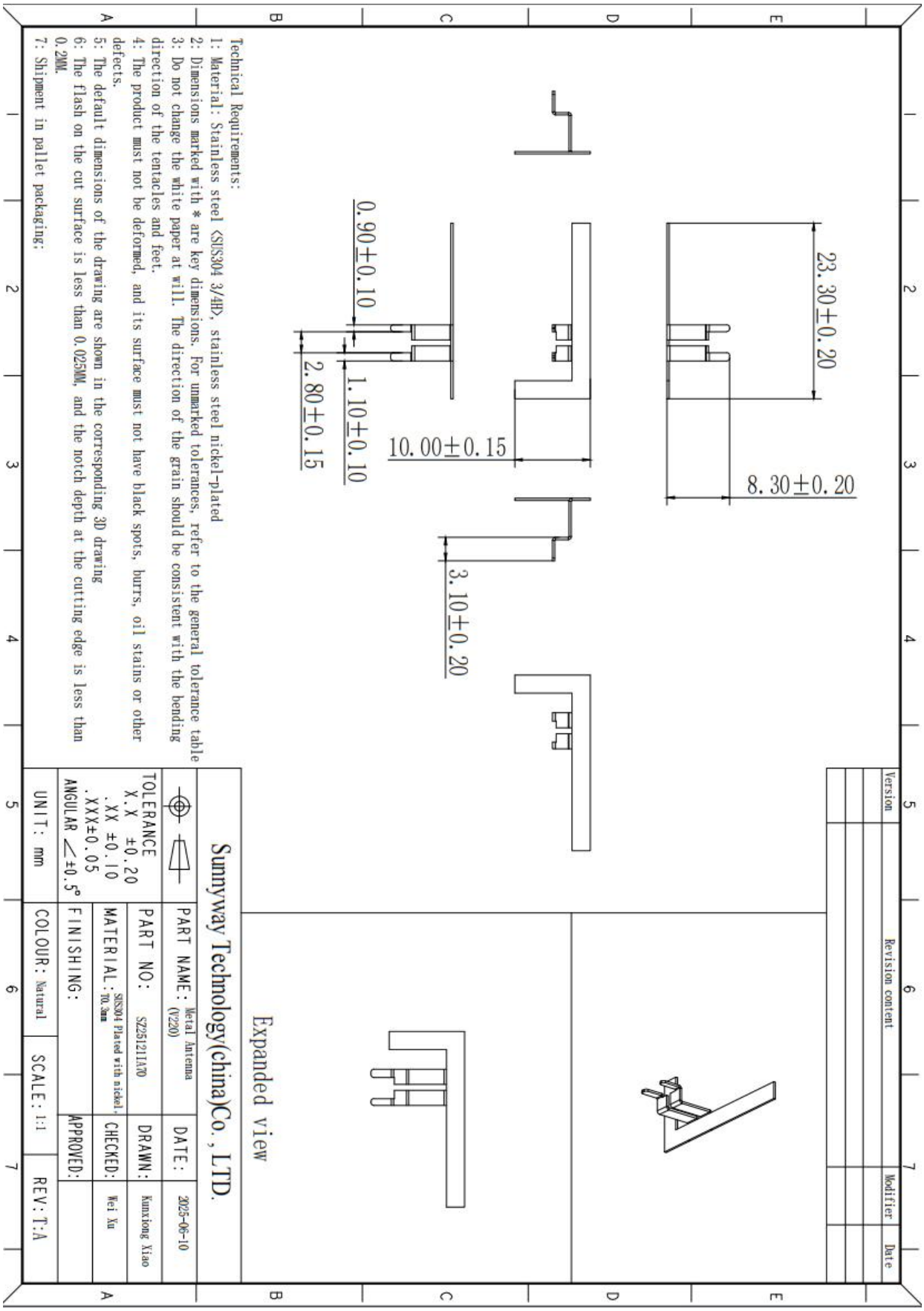
六、 Mass production antenna index

When the antenna is in mass production, the standing wave ratio is used as the test standard for mass production.

Based on the differences of the project itself, the following criteria are given:

Frequency (MHz)	Mass production standards
2400-2450MHz	VSWR (mass production performance) <VSWR (recognized performance) ± 0.5

七、 Schedule drawing



八、 ROHS restricted substance composition questionnaire

RoHS List of RoHS restricted substances

SALEABLE PART

零件料号/Part number	零件名称/型号/Part name / model	供应商料号 /Supplier item	制造商名称/Name of manufacturer
	V220	SZ25121IA70	深圳市尚远科技有限公司

SUB-PART

序号 Serial number	名称/name		料号 /Item No	单件产品使用量 /Usage of single product(g)	供应商/supplier	检测报告 /Test report	限用物质含量PPM/Content of restricted substances ppm						控制方法 /Control method	SGS Report			备注 /remarks
	单体 /Monomer	成分 /component				有/无 Yes / no	铅 /Pb	镉/Cd	汞/Hg	六价铬 /Cr6+	PBB	PBDE		编号/number	生效日期 /effective date	查询网址/Query website	
1	Metal Antenna	SUS304			深圳金信通金属 /Shenzhen Jinxintong	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告 /Review SGS report	SZXPC25000311804	2025.02.20	www.sgsgroup.com.cn	/
2	Metal Antenna	Nickel			深圳金信通金属 /Shenzhen Jinxintong	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告 /Review SGS report	SZXPC25000311808	2025.02.20	www.sgsgroup.com.cn	/
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制表/Tabulation：陈小平　　制表者部门/Tabulator Department:: 品质部/品保工程师 Quality Department　　日期/date: 2025/6/10

九、 Manner of packing

Sunnyway Technology (China) Co. Ltd.

Product packaging operation specifications

Customer: Yunjia	Packaging product name: V220	Packaging Number :SYC-HZ-001	Packaging version:TEST:A

	Serial number	Product name	Specification	Dosage
package Material details	GYSTP	Pallet		
	SYC-HZ-01	Carton		

package finding production product figure in

Work steps

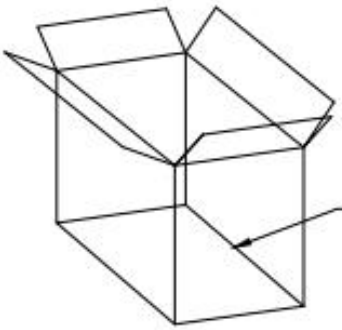
1. Prepare the required packaging materials and place them in a favorable position for work.
2. According to the packaging specification of SYC-HZ01, it is packed in cartons and Pallet
3. Keep filling each box until it is full. Seal the box with transparent tape

Shipping label

Precautions

1. Operators must wear gloves when operating.
2. Pay attention to the quantity of packing. Do not overpack or underpack. The last number of boxes must be indicated
3. Cartons should not be stacked too high to prevent glue overflow due to heavy pre

Illustration
illustration



Note: The quantity is subject to the actual packaging.
This is the reference quantity.

Approval	Review	Production	Date
		Xiaoping Chen	2025.06.10

Number: ED-QR-09-20 Version/Edition: A/0 Page 1, total 1 page

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