

Shanghai Shangyuan Communication Technology Co., LTD

Antenna admission book

Customer name: Yunjia		Project name: V104
Working frequency band: WiFi2.4G		
Hardware version:		
Shangyuan material specifications		
specifications and models	Shang Yuan material number	Customer material number
WIFI ant	SZ24350A70	2. 1. 09. 12. 002403

Change the resume			
Preparation / change date	Change the content	Change the person	edition
2024.07.30	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	

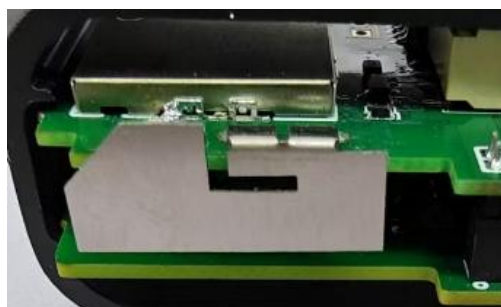
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一、 item information

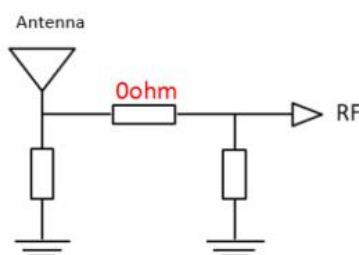
.11 Schematic diagram



.21 Antenna product diagram



二、 Antenna matching circuit



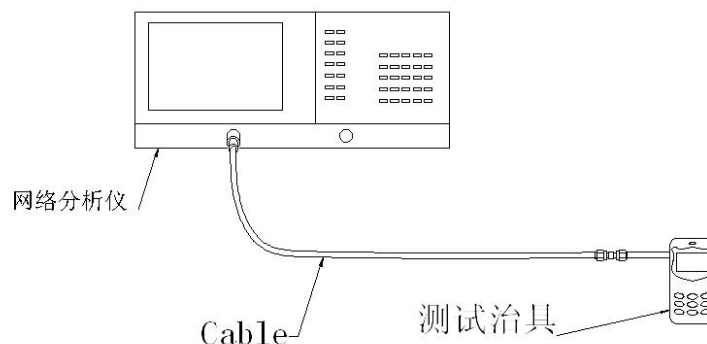
三、 Complete machine test data

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 $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$

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

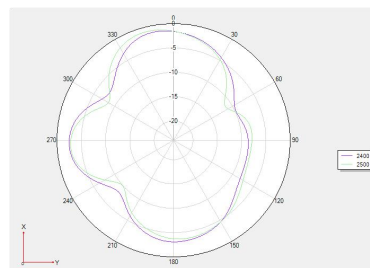
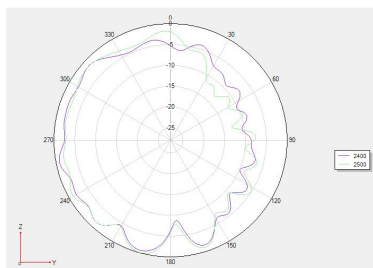
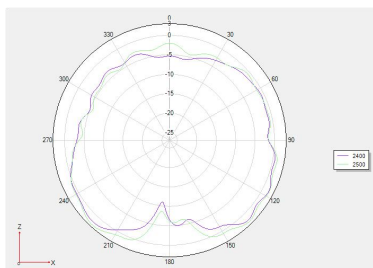
Frequency (GHZ)	2400	2500
standing-wave ratio	1.4	1.5



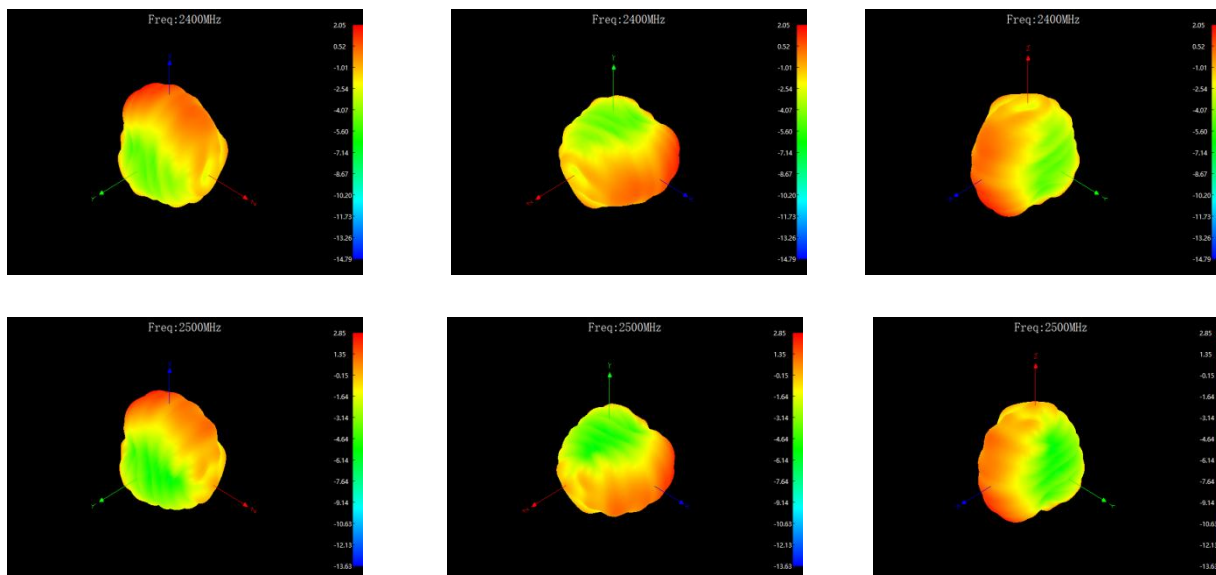
Passive efficiency

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	2.05	44.87
2410	2.14	44.53
2420	2.18	44.55
2430	2.18	44.98
2440	2.4	44.17
2450	2.62	45.88
2460	2.66	45.72
2470	2.87	44.33
2480	2.97	44.45
2490	2.88	45.7
2500	2.85	45.84

Passive direction diagram



Radiation Apple Figure 2.4G



3.4 Active test data

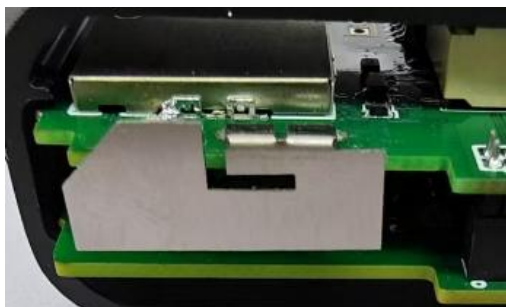
Measurement	Band	Channel	Total
TRP	WIFI_B (1M)	1	16.54
TRP	WIFI_B (1M)	6	16.26
TRP	WIFI_B (1M)	11	16.61
TIS(EIRP)	WIFI_B (11M)	1	-80.43
TIS(EIRP)	WIFI_B (11M)	6	-80.62
TIS(EIRP)	WIFI_B (11M)	11	-81.39
TRP	WIFI_G (6M)	1	14.52
TRP	WIFI_G (6M)	6	14.41
TRP	WIFI_G (6M)	11	14.56
TIS(EIRP)	WIFI_G (54M)	1	-65.9
TIS(EIRP)	WIFI_G (54M)	6	-66.47
TIS(EIRP)	WIFI_G (54M)	11	-67.5
TRP	WIFI_N_ISM (6.5M)	1	13.26
TRP	WIFI_N_ISM (6.5M)	6	13.43
TRP	WIFI_N_ISM (6.5M)	11	13.23
TIS(EIRP)	WIFI_N_ISM (65M)	1	-63.32
TIS(EIRP)	WIFI_N_ISM (65M)	6	-65.57
TIS(EIRP)	WIFI_N_ISM (65M)	11	-67.09

四、 The prototype environment processing mode

No change in environmental treatment

五、 Antenna loading position

The antenna is assembled in the following figure



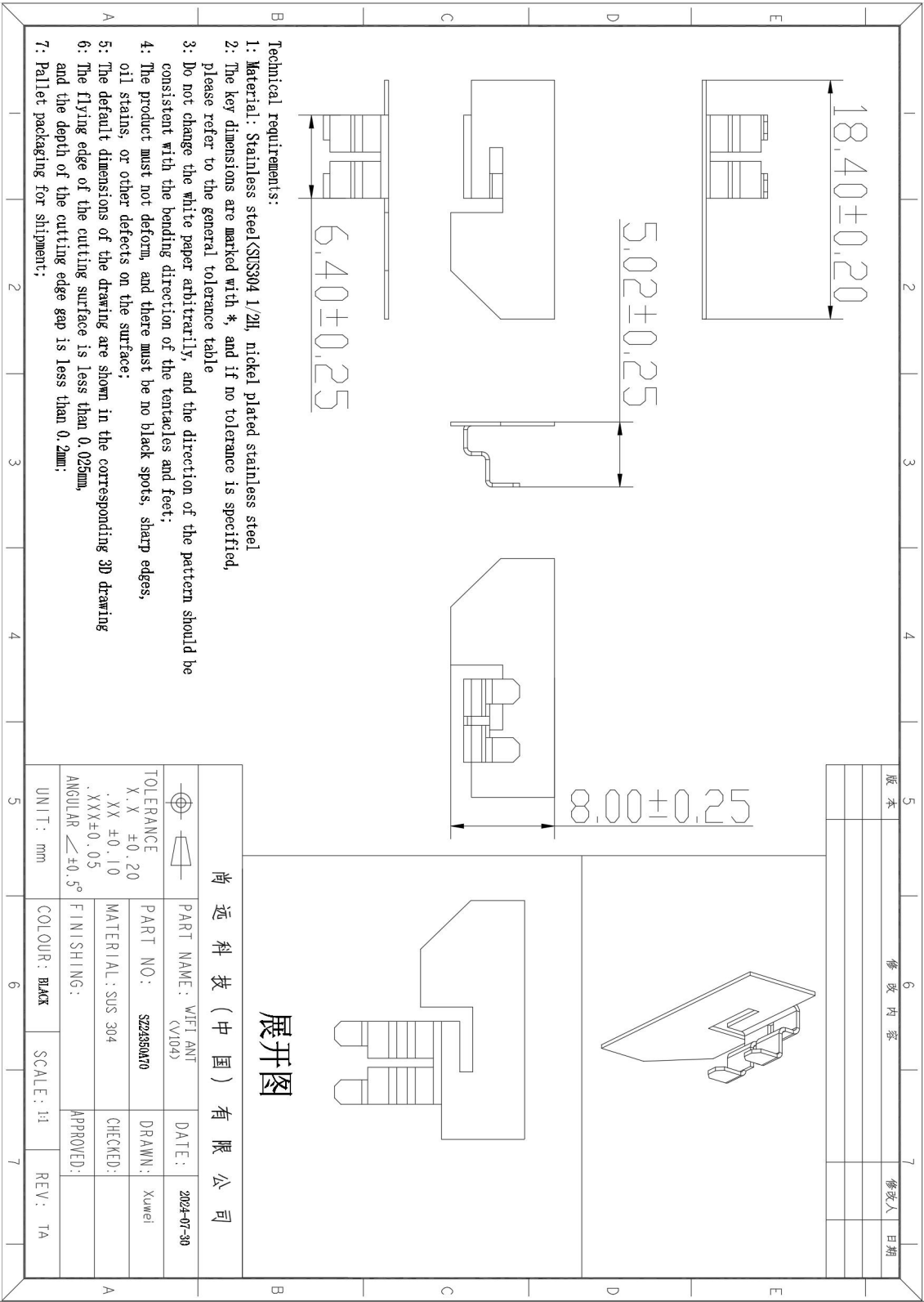
六、 Mass production antenna index

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
2400-2500MHz	VSWR (mass production performance) <VSWR (recognized performance) + 0.5

七、 schedule drawing



八、 ROHS restricted substance composition questionnaire

RoHS List of RoHS restricted substances

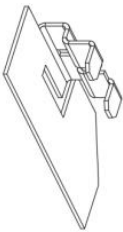
SUBPART																
零件料号/Part number		零件名称/型号/Part name / model		供应商料号/Supplier item number		制造商名称/Name of manufacturer										
		V104		SZ24350A70		深圳市尚远科技有限公司										
序号 Serial number	名称/name	料号 Item No	单件产品 使用量/Usage of single product(g)	供应商/supplier	检测 报告 /Test report	限用物质含量PPM/Content of restricted substances ppm				控制方法 /Control method	SGS Report			备注 Remarks		
1	单体 /Monomer	成分 /component			有/无 Yes / no	铅 /Pb	镉 Cd	汞/Hg	六价 铬 /Cr6+	PBB	PBDE	审核SGS报告 /Review SGS report	编号/number	生效日期 /effective date	查询网址/Query website	
1	SUS304	基材/base material		CHUWEI	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告 /Review SGS report	CANEC24002510203	2024/2/2	www.sgs.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: 2024/7/10

九、 manner of packing

Parts packing instructions report			
customer name	Yunjia	manufacturer	SUNNYWAY
entry name	SZ24350A70	product name	WIFI antenna
Bale quantity	500 PCS * 1 ☐ bundle ☐ PE bag ☒ disc ☐ layer ☐ other_____		
Moisture-proof & slow walking	☐ desiccant ☐ Vacuum bag ☐ Bubble pack ☐ foam ☐ Paper wood ☒ other_____		
内包装方式及标签	 客户名称: 云伽 产品名称: 五金 WIFI 天线 订单号码: 厂商编码: SZ24350A70 客户编码: 数 量: 检验员 : 发货日期: ____年__月__日 注意事项: 防潮, 防震, 防压, 小心轻放..... 500pcs / disc Carton label		
外包装方式示意图及标签	客户名称: 云伽 产品名称: 五金 WIFI 天线 订单号码: 厂商编码: SZ24350A70 客户编码: 数 量: 检验员 : 发货日期: ____年__月__日 注意事项: 防潮, 防震, 防压, 小心轻放.....  Check packaging, paste product Carton label		
		manufacturer	
		XUWEI	
* The packaging picture is a schematic, does not mean that the picture is the actual product.			