

Shanghai Shangyuan Communication Technology Co., LTD

Antenna admission book

Customer name: Yunjia		Project name: P830 non-integrated machine
Working frequency band: WiFi2.4G		
Hardware version: PA_WIFI_V1.0_20230818		
Hardware version: PD_VCI_V0.2-20231027		
Shangyuan material specifications		
specifications and models	Shang Yuan material number	Customer material number
WIFI-2 ant	SZ24703IB77-2	2.1.09.12.012301

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Preparation / change date		Change the content		Change the person	edition
2025.02.24		A new release		Yaodaheng	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

catalogue

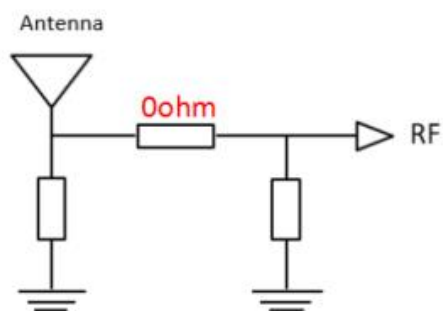
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一、 item information

.11 Schematic diagram



二、 Antenna matching circuit



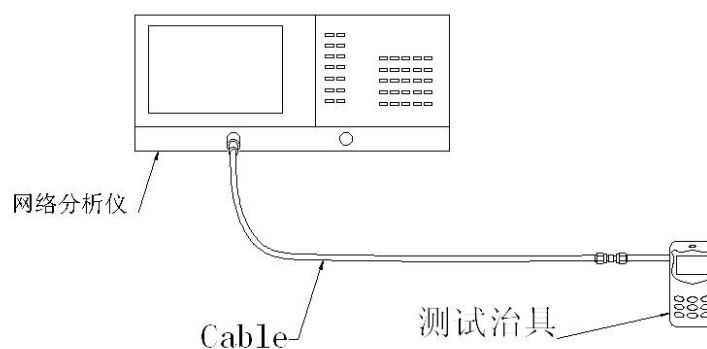
三、 Complete machine test data

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 $50\% \pm 15\%$

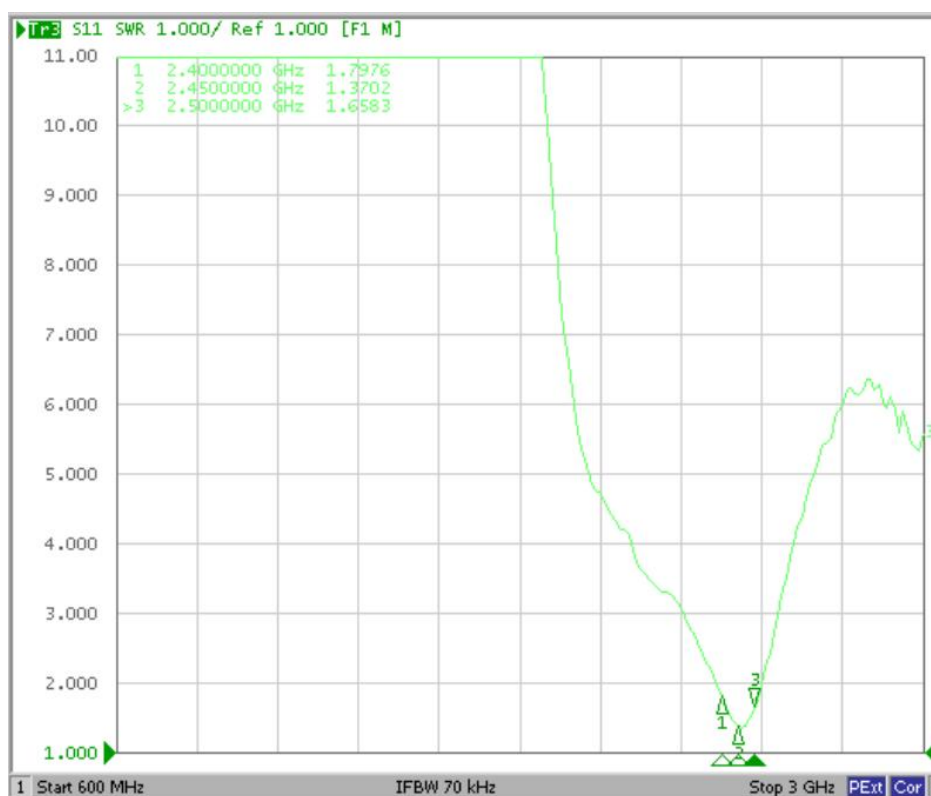
Test equipment: Use the network analyzer R & S ZND / Agilent E5071C when testing the passive data

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



3.3 The passive test parameters

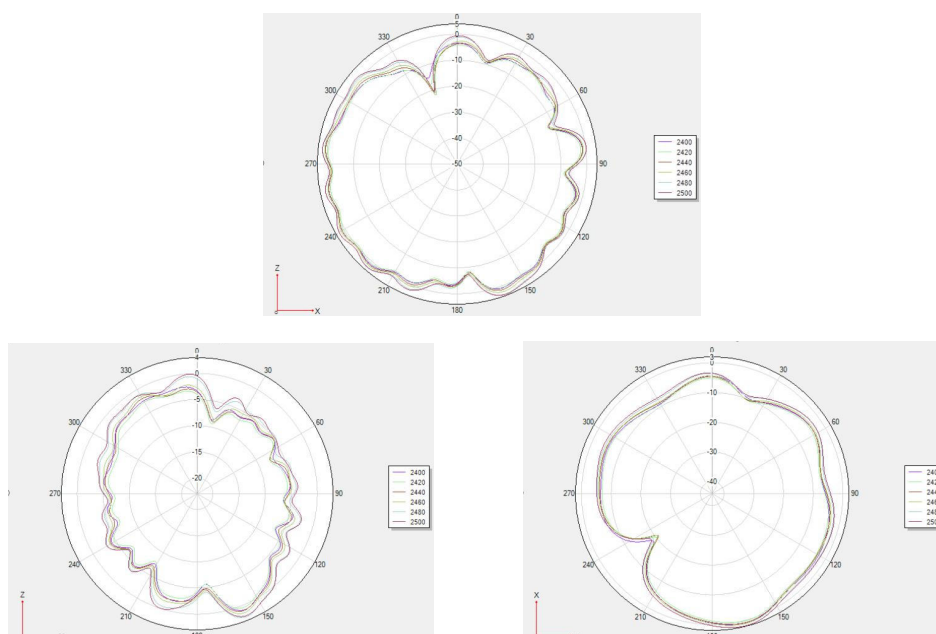
standing-wave ratio VSWR

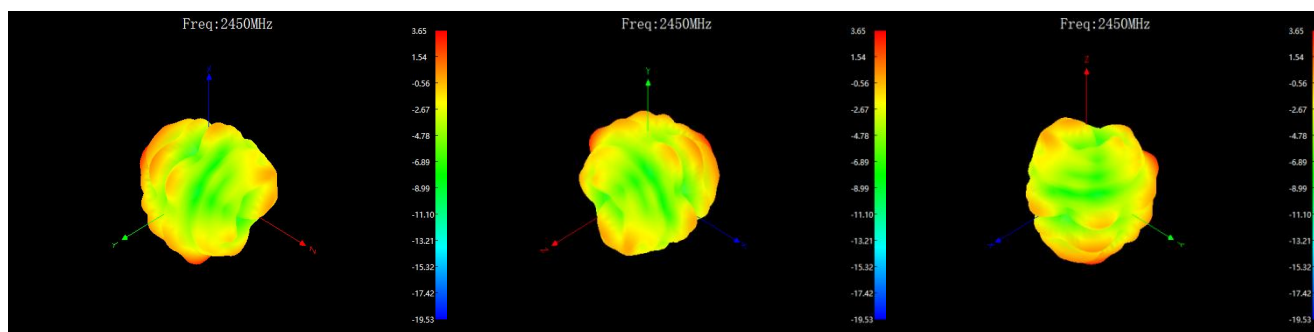


Passive efficiency

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	2.53	39.85
2410	2.5	42.81
2420	2.76	42.51
2430	2.73	44.36
2440	3.55	48.37
2450	3.36	49.81
2460	4.23	52.07
2470	3.79	50.64
2480	4.54	52.56
2490	4.09	51.98
2500	4.86	53.55

Passive direction diagram





3.4 Active test data

Item	Measurement	Band	Channel	Total
1	TRP	WIFI_B (1M)	1	15.97
2	TRP	WIFI_B (1M)	6	15.84
3	TRP	WIFI_B (1M)	11	15.09
4	TIS(EIRP)	WIFI_B (11M)	11	-82.78
5	TRP	WIFI_G (6M)	1	14.16
6	TRP	WIFI_G (6M)	6	14.42
7	TRP	WIFI_G (6M)	11	14.37
8	TIS(EIRP)	WIFI_G (54M)	11	-70.3
9	TRP	WIFI_N_ISM (6.5M)	1	13.01
10	TRP	WIFI_N_ISM (6.5M)	6	13.73
11	TRP	WIFI_N_ISM (6.5M)	11	13.01
12	TIS(EIRP)	WIFI_N_ISM (65M)	11	-68.39

四、 The prototype environment processing mode

NONE

五、 Antenna loading position

The antenna is assembled in the following figure

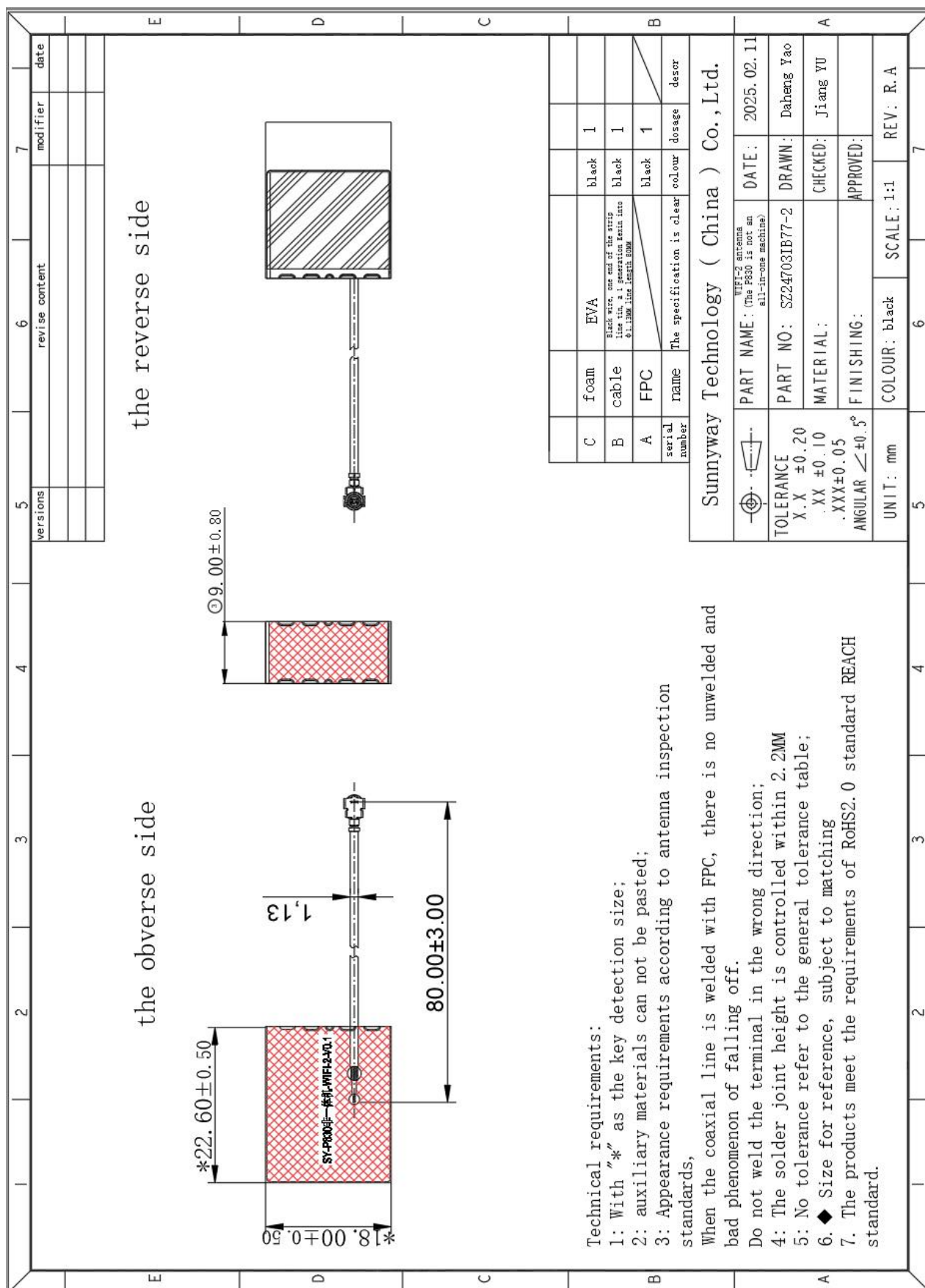
六、 Mass production antenna index

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

七、 schedule drawing



八、 ROHS restricted substance composition questionnaire

SALEABLE PART																	
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											
		P830非一体机 WiFi-1 天线组件 WiFi-2 天线组件		SZ247031877-1 SZ247031877-2		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 有/无 Yes / no	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					铅 /Pb	镉 /Cd	汞/Hg /Cr6	六价 铬	PBB	PBDE		编号/number	生效日期 /effective date	查询网址/Query website	
1	FPC	基材/base material			蔡伦格带 /Cherengetti	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	SHAEC24028809006	2024/12/20	www.sgsgroup.com.cn	/
2	FPC	油墨 /printing ink			优立/You li	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	ETR24600712	2024/6/14	www.sgsgroup.com.cn	/
3	FPC	背胶/Gum back			3M	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	SHAEC24027480901	2024/12/6	www.sgsgroup.com.cn	/
4	FPC	OSP/FT-HT1060			泰达富	有/yes	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	A2240092421101001E	2024/2/28	www.sgsgroup.com.cn	/
5	CABLE	镀锌铜线			展维铝业	N.D	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	A2240555311102001C	2024/9/12	www.sgsgroup.com.cn	/
6	CABLE	FEP			见龙	N.D	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	A2240269286101001C	2024/5/21	www.sgsgroup.com.cn	/
10	CABLE	胶芯			新港	N.D	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	SHAHL24019391801	2024/8/29	www.sgsgroup.com.cn	
11	CABLE	镀金			翔腾电子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	A2240410234101001E	2024/7/16	www.sgsgroup.com.cn	
12	CABLE	镀锡			翔腾电子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	审核SGS报告/Review SGS report	A2240410234101002E	2024/7/16	www.sgsgroup.com.cn	
13																	

日期/date: 2025/02/18

制表者/Tabulator Department: 品质部/品质工程师 Quality Department

制表/Tabulation: 陈小华

九、 manner of packing

Parts packing instructions report			
customer name	yunjia	manufacturer	SUNNYWAY
entry name	SZ24703IB77-1/2	product name	WIFI antenna
Bale quantity	100 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	 Customer Name: yunjia Product name: WIFI antenna Order Number: Manufacturer code: SZ24703IB77-1 Customer Code: Quantity: Inspector: Delivery Date: Precautions: Moisture-proof, shock-proof, pressure-proof, handle with care. 100pcs / disc Carton label		
外包装方式示意图及标签	Customer Name: yunjia Product name: WIFI antenna Order Number: Manufacturer code: SZ24703IB77-1 Customer Code: Quantity: Inspector: Delivery Date: Precautions: Moisture-proof, shock-proof, pressure-proof, handle with care.  Check packaging, paste product		
		manufacturer	
		Daheng Yao	
* The packaging picture is a schematic, does not mean that the picture is the actual product.			