

Shanghai Shangyuan Communication Technology Co., LTD

Antenna admission book

Customer name：Yunjia		Project name：P140
Working frequency band: 2400-2500MHZ		
Hardware version: PD_WIFI_V1.020230818		
Shangyuan material specifications		
specifications and models	Shang Yuan material number	Customer material number
WIFI-1 ant	SZ25365IB74-1	2.1.09.12.014501

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Preparation / change date		Change the content		Change the person	edition
2025.08.06		A new release		Xiaokunxiong	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	

Sunnyway Technology(CHINA)

Add: 1F, Building 4, No.215-99, GaoGuang Road, QingPu District, Shanghai, China

Tel: +86-021-6083 5368 Fax: +86-021-6484 2328

Email: sales@sunnyway-iot.com Web: www.sunnyway-iot.com

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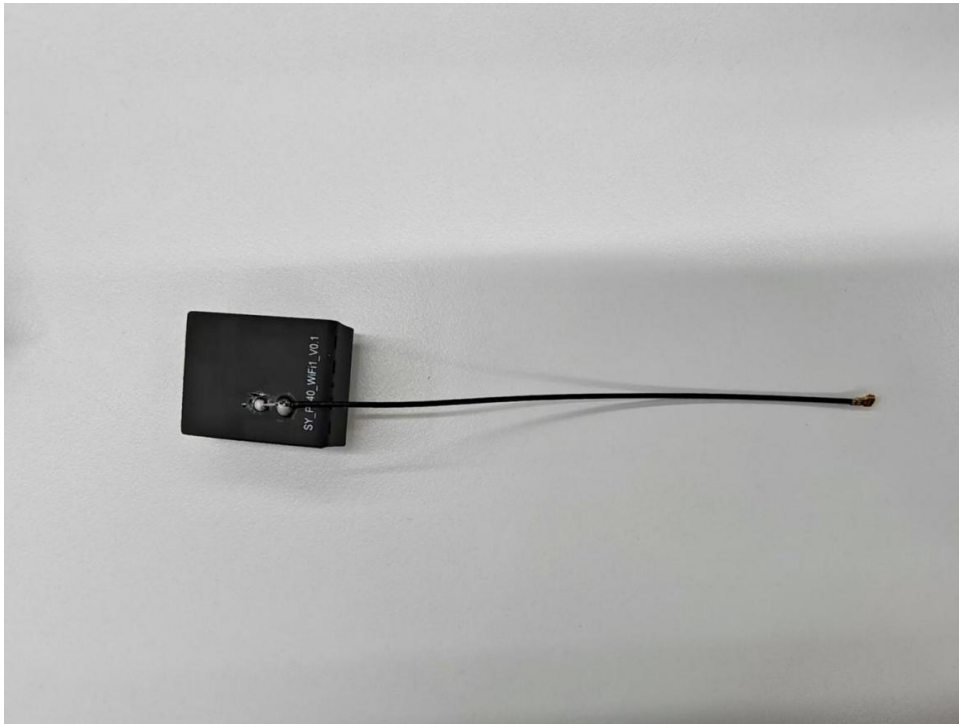
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一、 item information

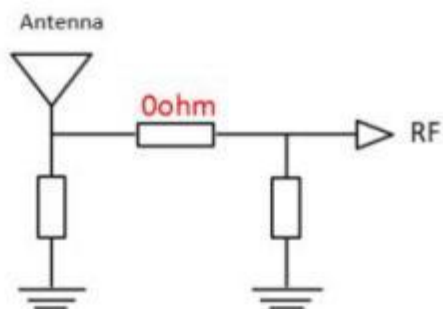
.11 Schematic diagram



.22Antenna product diagram



二、 Antenna matching circuit



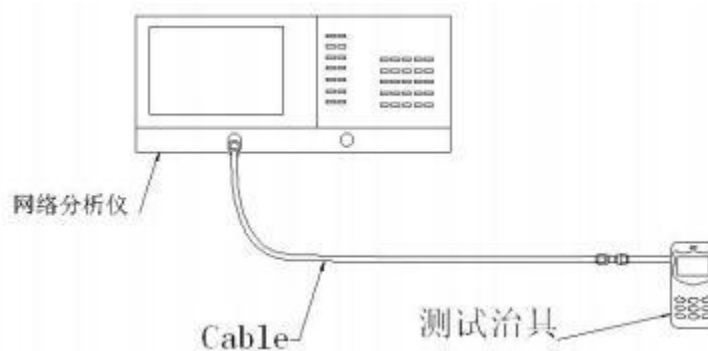
三、Complete machine test data

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)

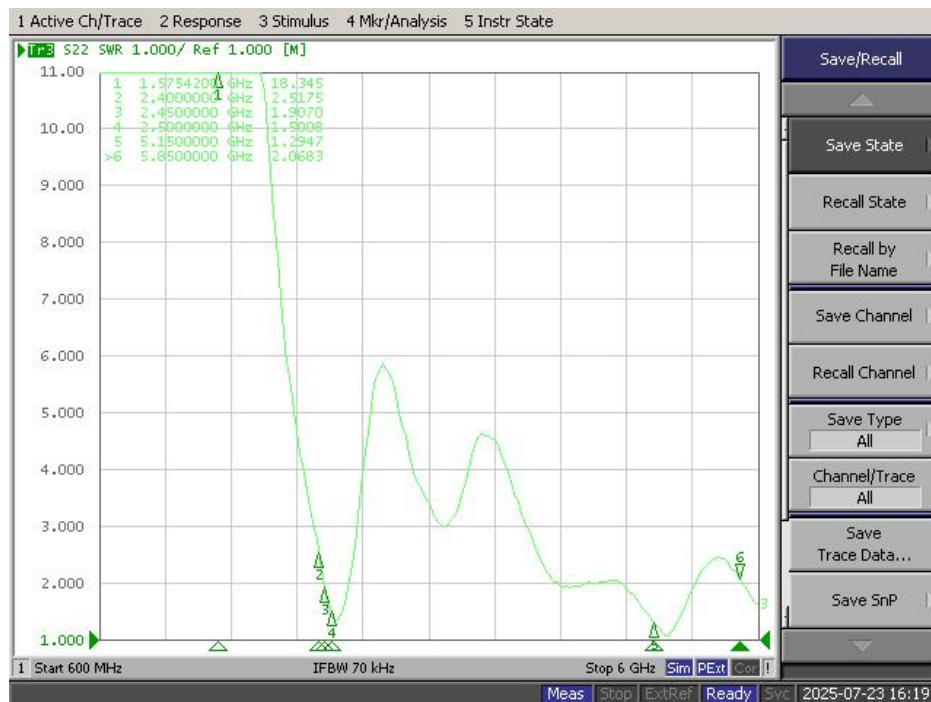
Test environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$

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

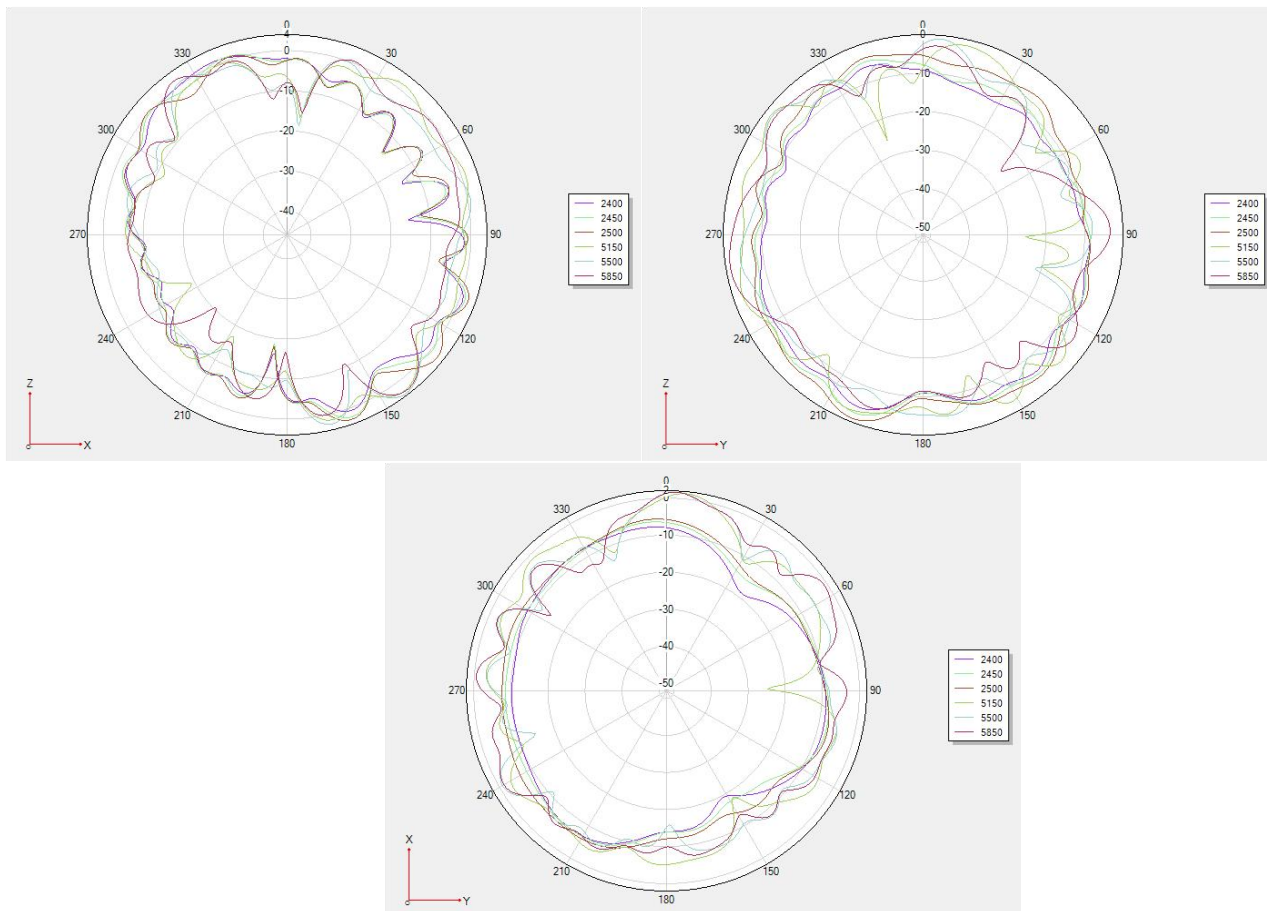
standing-wave ratio VSWR



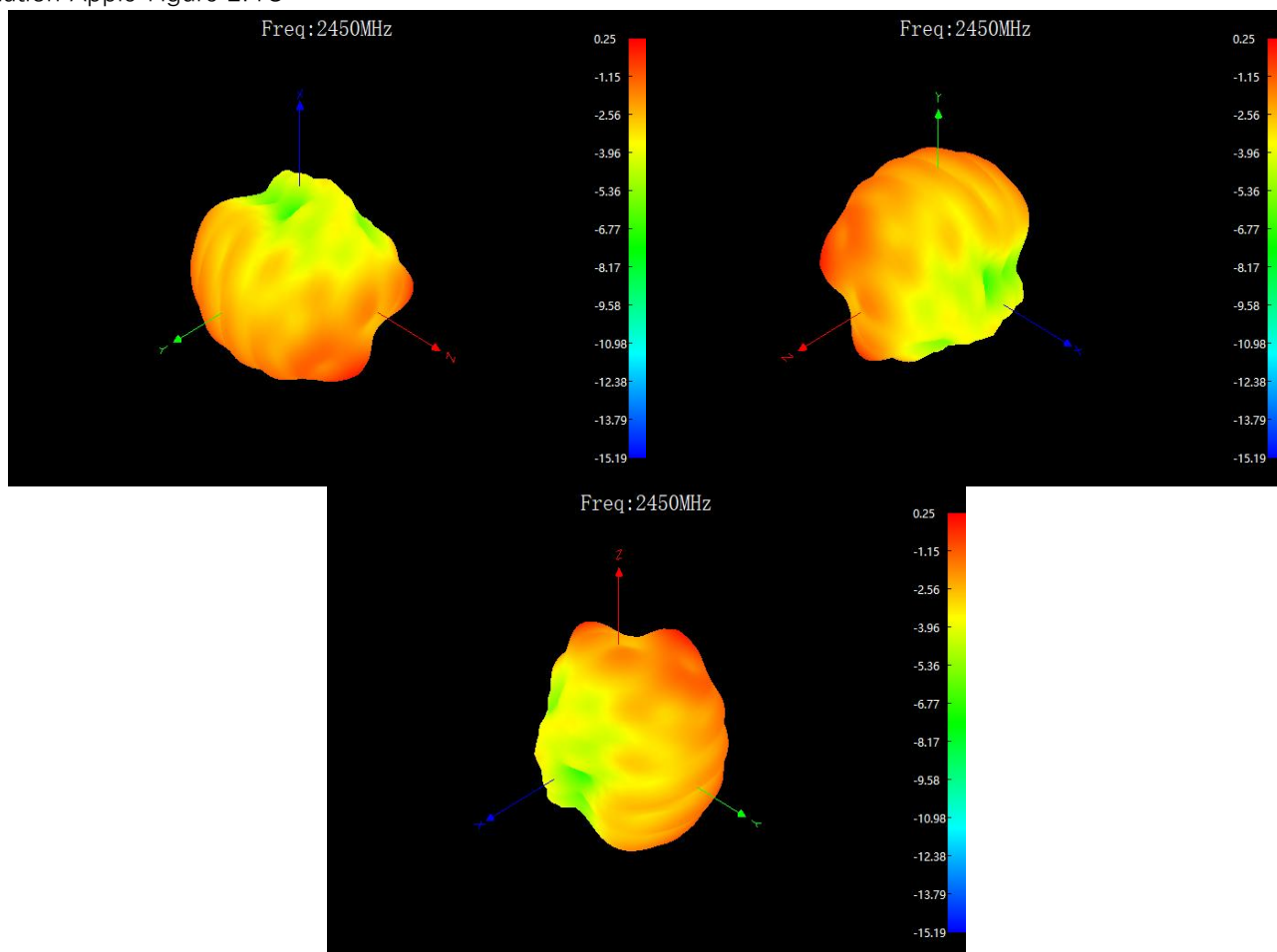
Passive efficiency

Freq (MHz)	Effi (%)	Gain (dB)
2400	46.25	0.42
2410	45.97	0.1
2420	46.41	-0.85
2430	45.93	-0.66
2440	47.26	-0.33
2450	48.71	-1.57
2460	46.78	-1.05
2470	46.02	-0.12
2480	45.46	0.51
2490	48.29	1.23
2500	46.59	1.46

Passive direction diagram



Radiation Apple Figure 2.4G



3.4 Active test data

2.4G	信道	TRP	TIS
802.11b 11mbps	1	15.83	-80.16
	6	15.94	-80.35
	11	15.75	-80.57
802.11g 54mbps	1	14.52	-68.32
	6	14.61	-68.75
	11	14.49	-68.64
802.11n MCS7	1	13.96	-65.72
	6	14.31	-65.25
	11	14.54	-66.54

四、 The prototype environment processing mode

NONE

五、 Antenna loading position



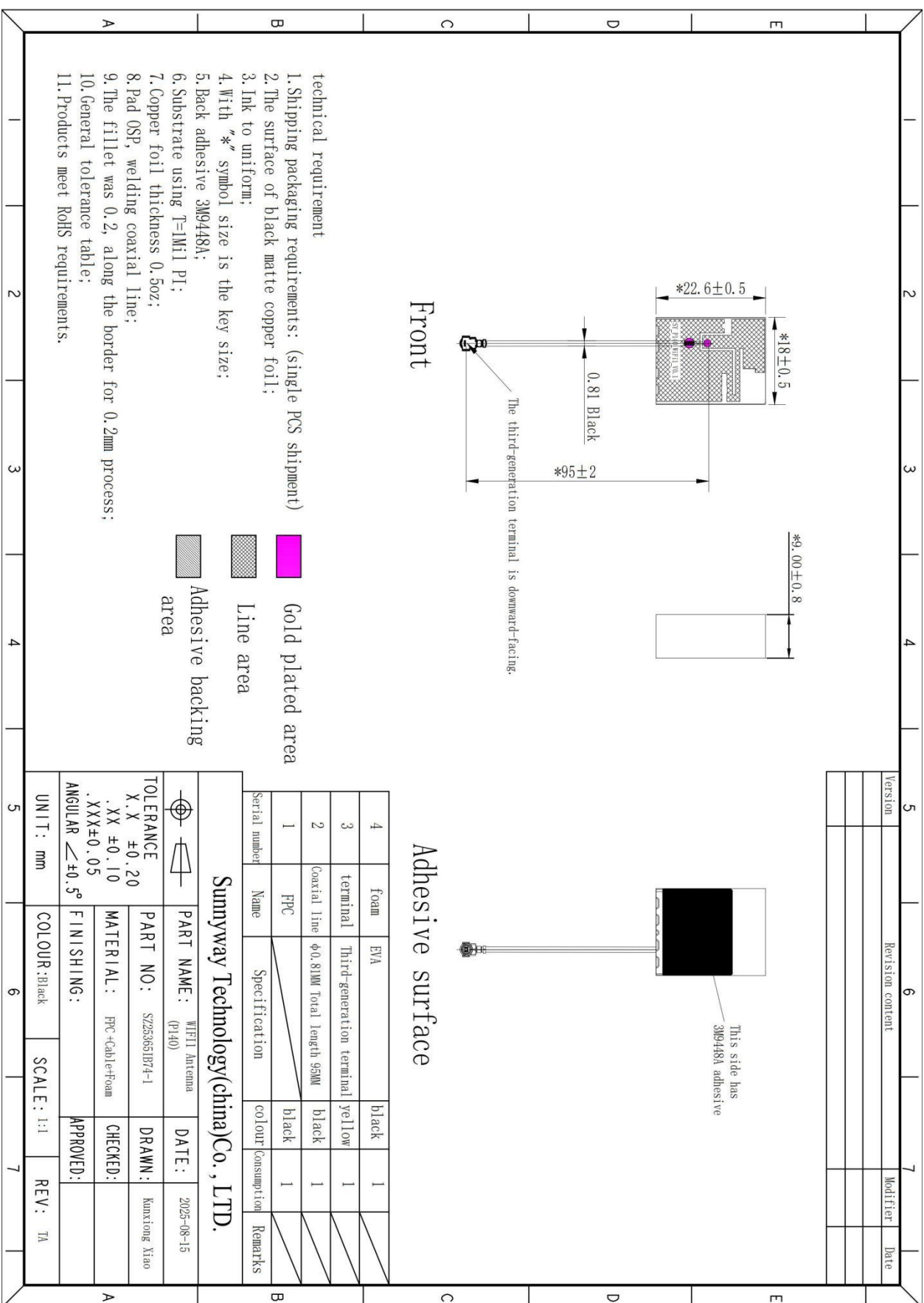
六、 Mass production antenna index

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

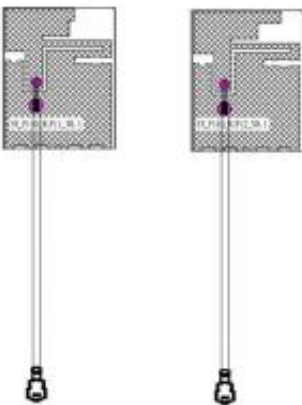
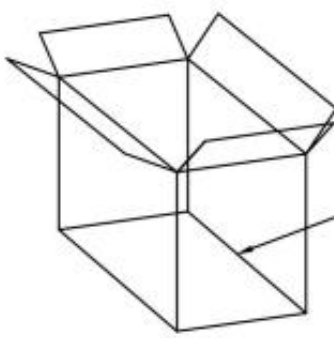


八、 ROHS restricted substance composition questionnaire

RoHS 限用物质成分表List of RoHS restricted substances

SALABLE 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										
			P140			SZ25365IB74-112		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	限制物质含量PPMContent 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	FPC	基材			蔡伦裕蒂	有	ND	ND	ND	ND	ND	ND	审核SGS报告及定期抽样送检	SHAEC24028809006	2024.12.20	www.sgsgroup.com.cn	/	
2	FPC	油墨			优立	有	ND	ND	ND	ND	ND	ND	审核SGS报告及定期抽样送检	ETR25501383	2025.5.20	www.sgsgroup.com.cn	/	
3	FPC	背胶			3M	有	ND	ND	ND	ND	ND	ND	审核SGS报告及定期抽样送检	SHAEC25000170802	2025.1.9	www.sgsgroup.com.cn	/	
4	FPC	OSP			金炜晟达	有	ND	ND	ND	ND	ND	ND	审核SGS报告及定期抽样送检	CANEC25002887302	2025.2.25	www.sgsgroup.com.cn	/	
5	Terminal	外壳CS210			紫金铜业	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	CANEC24029407215	2024.12.26	www.sgsgroup.com.cn	/	
6	Terminal	塑胶PBT			新光合成	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	A2250134628103007E	2025.3.8	www.sgsgroup.com.cn	/	
7	Terminal	镀AU			翊腾电子	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	A2250437743101001E	2025.6.27	www.sgsgroup.com.cn	/	
8	Terminal	镀NI			翊腾电子	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	A2250437743101002E	2025.6.27	www.sgsgroup.com.cn	/	
9	Cable	镀锡铜线			震雄	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	A2240555311102001C	2024.9.9	www.sgsgroup.com.cn	/	
10	Cable	绝缘FEP			巨圣	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	NGBPC24007471212	2024.12.17	www.sgsgroup.com.cn	/	
11	Cable	护套			见龙	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	A2250269592101001E	2025.4.24	www.sgsgroup.com.cn	/	
12	Foms	EVA			繁中宝橡塑	有/yes	ND	ND	ND	ND	ND	ND	审核SGS报告	CANEC24028865442	2025.1.3	www.sgsgroup.com.cn	/	
附表/Tabulation: 陈小平																		
制表者制/Tabulator Department:: 品质部/ 品质工程师 Quality Department 日期/date: 2025/7/29																		

九、 manner of packing

Sunnyway Technology (China) Co. Ltd.					
Product packaging operation specifications					
Customer: Yunjia		Packaging product name: #140		Packaging Number :SYC-BZ-001	
				Packaging version:TEST:A	
package Material details	Serial number	Product name	Specification	Dosage	package loading protection product flow is
	PE	Ziplock bag			
	SYC-BZ-01	Carton			
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-BZ01, it is packed in cartons and ziplock bag 3.Keep filling each box until it is full. Seal the box with transparent tape				
Shipping Label					
					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  Note: The quantity is subject to the actual packaging. This is the reference quantity.					
Approval		Review		Production	
				Xiaoping Chen	
				Date	
				2025.08.05	

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

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