



SPECIFICATION FOR APPROVAL

Customer Name	PIXSTAR		
Customer Project Name	M08PRO-2178A	SDC Project Name	M08PRO-2178A
Machine information		SDC P/N	WF140B-0813R-80
Band	WIFI2. 4G/BT		
Version	A0		
Designer Information			
RF Engineer	Fu xuerong	R&D Director	Xia chenglei
ME Engineer	Huang zongbao		

Approval				Customer Approval	
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	Huang zongbao	Xia chenglei	Chen minghua		
Date	2023.9.12	2023.9.12	2023.9.12		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date



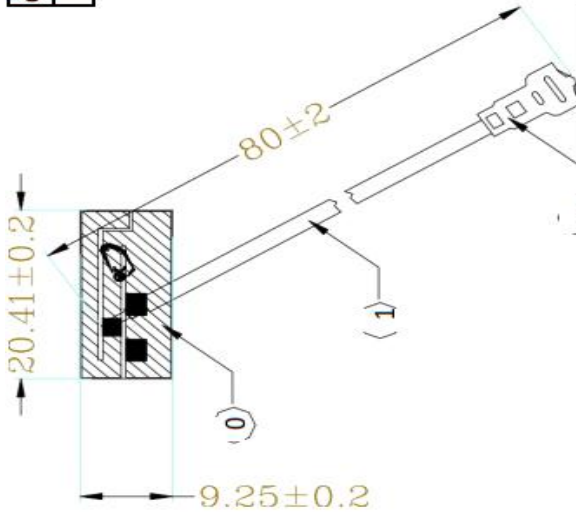
Catalogue

No.	Item	Page No.
1	Drawing or Product Image	3/5
2	Dimensions Test Report	4/6
3	RF Performance Test Report	7-10
4	Reliability Test Report1	11
5	Install Wizard or Other	12



Drawing or Product Image

Order of the edition	Designer	Date
A0	Li yaona	2023.9.12



NO.	DESCRIPTION	QTY
1	Terminal IPEX3	1
2	Cable Φ0.8 Cable Black, 30.0	80
3	FPC FPC - Black oil black lettering half to half substrate, treated with antioxidant, 3M with adhesive backing.	1
SHUN DA CHENG TECHNOLOGY CO., LTD		
Name		CUSTOMER PART
Design		WIF antenna
Examine		Liyaona
Ratio		Finished product PWF 140B-0813R-80
Proportion		Order of the edition
Free		Unit
		mm
		View
		Change mark

Note: For wires within 60mm, if there are no customer requirements, the default terminal head is facing.



Sample Dimensions Test Report

Test Date	2023.9.12	Sample Qty.	3	Inspector	Xu yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①Length	20.41±0.2mm	20.41	20.51	20.41	Pass
②Width	9.25±0.2mm	9.25	9.35	9.25	Pass
③Thickness	0.1±0.03mm	0.1	0.1	0.1	Pass
④Line length	80±2mm	80	81	80	Pass
⑤					
⑥					
⑦					
Conclusion					PASS
Inspector & Date	Xu yanfang 2023.9.12		Approval & Date		



RF Performance Test Report

Antenna Test Equipment Introduction

Test of antenna input characteristics using **Agilent E5071C and Agilent 5062A** vector network analyzer; The radiation pattern of the antenna are tested using the guangping 3D near field Anechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

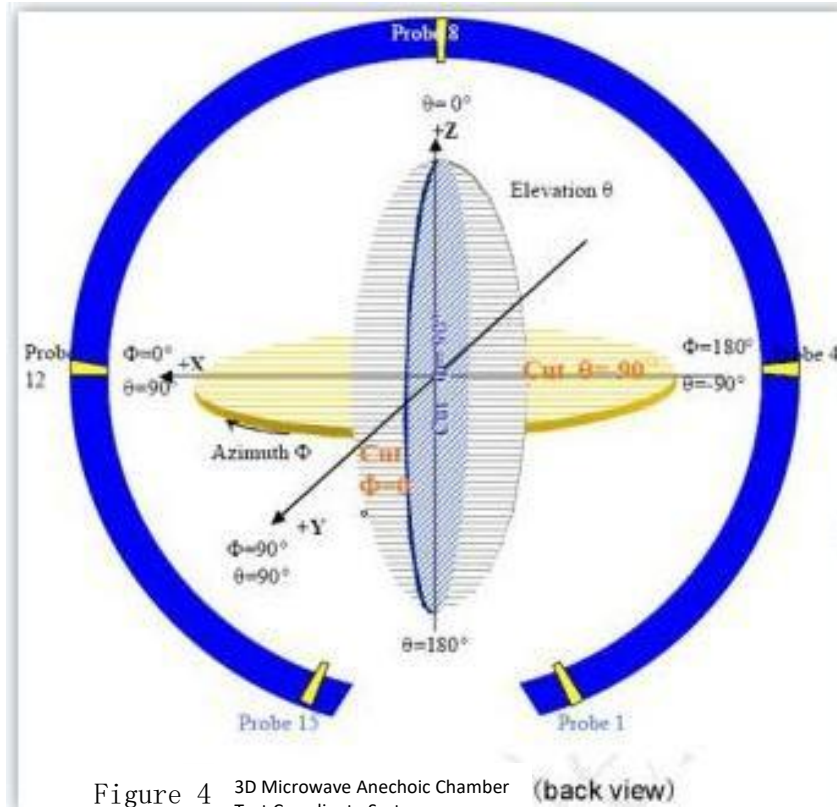


Figure 4 3D Microwave Anechoic Chamber Test Coordinate System (back view)

1. S11 **S11 Parameter-VSWR**

Measuring Method is a 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.



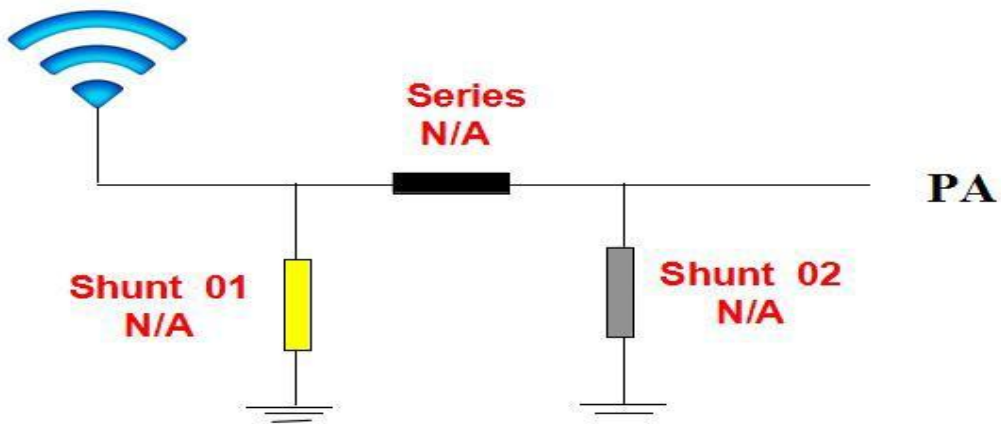
S11 Parameter-VSWR

(MHZ)	2400	2450	2500
SWR	1.45	1.15	1.61



2. Antenna Matching Network

Antenna





3.Gain & Efficiency

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	42. 61	1. 22
2450	42. 75	1. 16
2500	41. 39	1. 31



SHUN DA CHENG TECHNOLOGY CO., LTD

Reliability Test Report

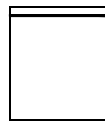
Test Date	2023.9.12	Sample Qty.	3	Inspector	Xu yanfang	
Test Item	Requirement	Testing equipment	Sample 1	Sample 2	Sample 3	PASS/NG
high temperature storage	Expose to+85 °C for 24 hours and test after 2 hours of recovery	Constant temperature and humidity box	OK	OK	OK	Pass
low temperature storage	Expose to -40 °C for 24 hours, then test after 2 hours of recovery	Constant temperature and humidity box	OK	OK	OK	Pass
High temperature operation	Powered on for 24 hours at+60 °C	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature operation	Power on for 24 hours under - 20 °C conditions	Constant temperature and humidity box	OK	OK	OK	Pass
Salt spray test	(5 ± 0.5)% sodium chloride, pH value 6.5-7.2, experimental chamber temperature (35 ± 2) °C <input type="checkbox"/> 24H <input checked="" type="checkbox"/> 48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting and pulling force	1.13 Wire diameter ≥10N 0.81 Wire diameter ≥8N RG174 ≥60N RG178 ≥50N	Push-pull force gauge	≥8N	≥8N	≥8N	Pass
Conclusion						Pass
Inspector & Date	Xu yanfang 2023.9.12		Approval &Date			



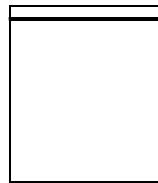
Packaging specifications

item name	M08PRO-2178A	Product Name	FPC antenna
-----------	--------------	--------------	-------------

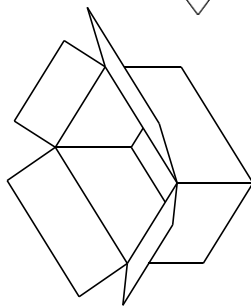
FPC Finished antenna (一)



(2) 100pcs of products per PE bag (subject to actual packaging)



(3) Put the neatly packed antenna small packaging bag into 10 small bags (as shown in Figure 3) (based on the actual packaging)



(4) The packaged antenna can be placed in a cardboard box and can hold 5 large bags. Each box can hold 5000PCS (Figure 4). (Based on actual packaging)



供应商	
采购单位	
物料编码	
规格型号	
数量	
日期	

(5) After packaging is completed, a shipping label needs to be attached (Figure 5)



Install Wizard or Other

Take 1 piece of product, tear off the release paper on the back of the FPC by hand, then align the FPC positioning hole position with the shell positioning hole position (positioning rib or positioning line), and attach it flat to the shell. The specific position is shown in the following figure:

Installation process precautions:

- Ensure that the FPC is fully attached to the shell after pasting the antenna;
- Align the positioning hole with the position of the housing positioning column;
- Align the FPC edge with the outer shell edge;
- When attaching the terminal to the PCBA end of the motherboard, please first align the terminals and then attach them vertically;
- When disassembling antenna terminals, tools (such as specialized pry bars) should be used to vertically lift the terminals, and the wires should not be directly pulled for disassembly.



WiFi antenna





产品 ROHS 证书

Certificate

Certificate Number: UNIB23083106HC-01



Product: 5G/4G/WIFI/GPS/BT antenna

Applicant: ShenZhen ShunDaCheng Technology Co., Ltd.
4th Floor, Building B5, Xinfu Industrial Zone, Fuyong Chongqing Road, Baoan District, Shenzhen

Manufacturer: N/A

Model No.: N/A

Trade Name: N/A

Test Methods: IEC 62321-2:2021, IEC 62321-3-1:2013, IEC 62321-4:2013 +A1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017

The laboratory tested the product provided by the applicant according to the above test methods. According to the test results, the product conforms to RoHS Directive [(2011/65/EU and Amendment (EU) 2015/863)] issued by the European Commission. It is possible to use CE marking to demonstrate the compliance with RoHS Directive.

The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production. It is only valid in connection with the test report number: UNIB23083106HR-01.

Note: According to the requirements of the applicant for testing, details are shown in the test report.

RoHS

Sep. 06, 2023
Issue Date

Hoffer Lau

Hoffer Lau

CE

Shenzhen United Testing Technology Co., Ltd.

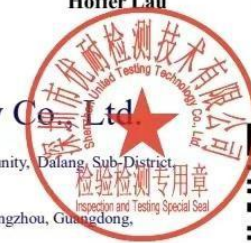
Shenzhen: D101&D401, No. 107, Kaicheng High-Tech Park, Taoyuan Community, Dalang, Sub-District, Longhua District, Shenzhen, Guangdong, China/518109

Guangzhou: No.47-3, Industrial Road, Zhushan, Dalong Street, Panyu District, Guangzhou, Guangdong, China/511450;

101/F, Building 2, Tongxin Industrial Park, Xinqiao Village, Dalong Street, Panyu District, Guangzhou, Guangdong, China/511450

Tel: +86-755-86180996/+86-020-39277769 Fax: +86-0755-86180156

Web Site: www.uni-lab.hk/ E-mail: hofferlau@uni-lab.hk



Certificate of Compliance