



# SHUN DA CHENG TECHNOLOGY CO., LTD

## SPECIFICATION FOR APPROVAL

Customer Name	Xi Yang		
Customer Project Name	874	070	874
Customer P/N	3. 03. 99. 99. 0002	SDC P/N	WF874-1131M-110
Band	WIFI2. 4G/5. 8G/BT		
Version	A0		
Designer Information			
RF Engineer	Yong-hui Yang	R&D Director	FuXueRong
ME Engineer	Huang Zongbao		

Approval			Customer Approval		
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	Huang Zongbao	Yong-hui Yang	FuXueRong		
Date	2024. 03. 21	2024. 03. 21	2024. 03. 21		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date



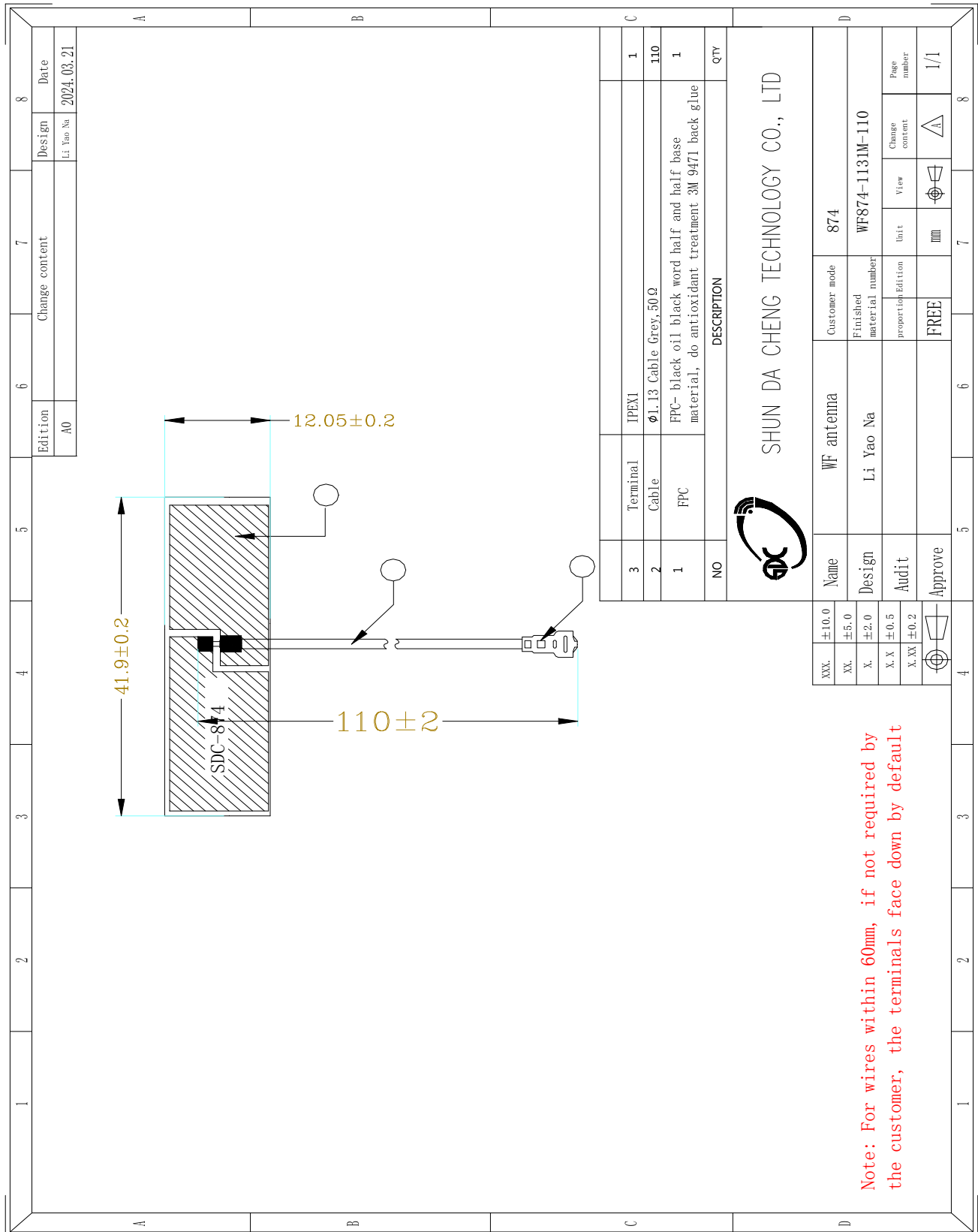
# Catalogue

No.	Item	Page No.
1	Drawing or Product Image	3
2	Dimensions Test Report	4
3	RF Performance Test Report	5-7
4	Reliability Test Report1	8
5	Package Document	9
6	RoHS Control list for Sample	10
7	Install Wizard or Other	10



# SHUN DA CHENG TECHNOLOGY CO., LTD

产品图纸或实物图片  
Drawing or Product Image



Note: For wires within 60mm, if not required by the customer, the terminals face down by default



# SHUN DA CHENG TECHNOLOGY CO., LTD

## Sample Dimensions Test Report

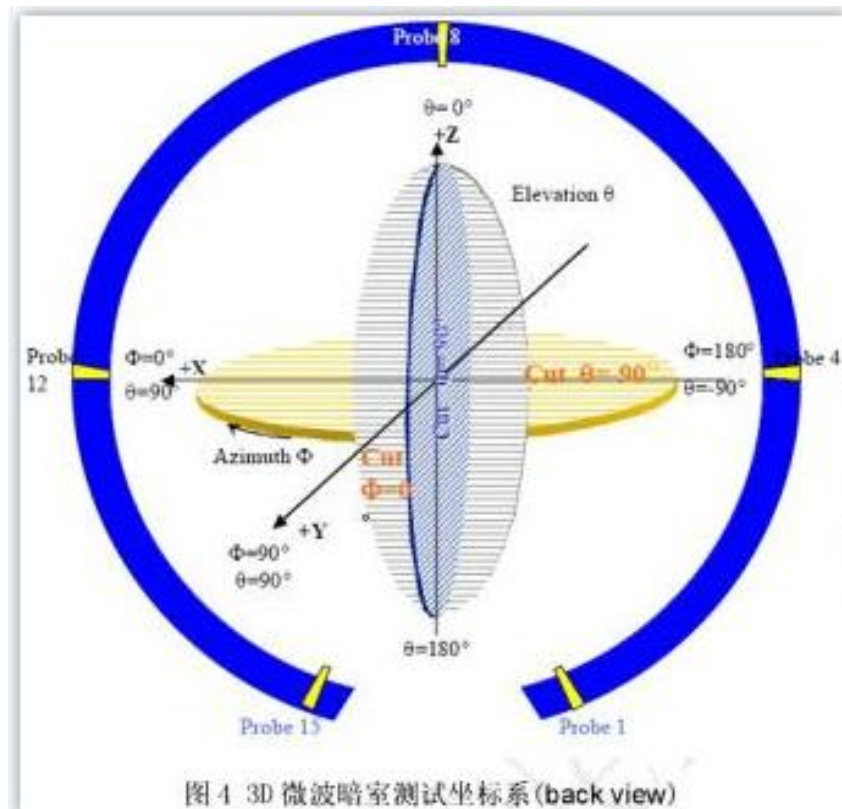
Test Date	2024. 03. 21	Sample Qty.	3	Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①length	41. 9±0. 2mm	41. 9	42	41. 9	Pass
②width	12. 05±0. 2mm	12. 05	12. 15	12. 05	Pass
③thickness	0. 1±0. 03mm	0. 1	0. 1	0. 1	Pass
④Line length	110±2mm	110	111	110	Pass
Conclusion					PASS
Inspector & Date	Xu Yanfang2024. 03. 21		Approval &D ate		



## 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:



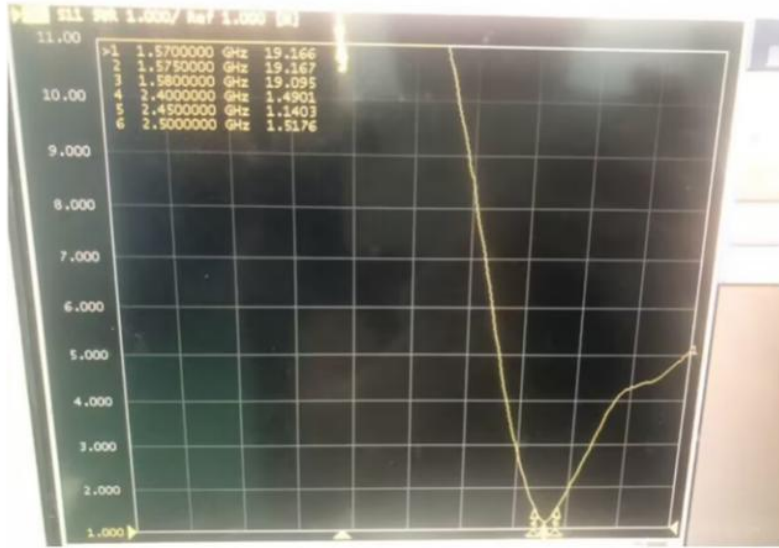
### 1. S11 Parameter-VSWR

Measuring Method is a  $50\Omega$  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.



# SHUN DA CHENG TECHNOLOGY CO., LTD

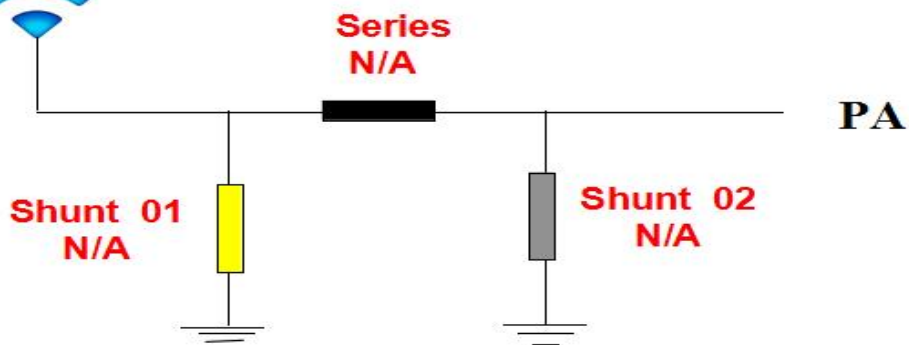
## S11 Parameter-VSWR



Frequency(MHz)	2400	2450	2500
VSWR	1.49	1.14	1.51

## 2. Antenna Matching Network

Antenna





## SHUN DA CHENG TECHNOLOGY CO., LTD

### 3.Gain & Efficiency

Passive Test For 2.4G			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	45.29	-2.5	1.73
2425	46.6	-2.63	2.76
2450	43.1	-2.75	2.45
2475	45.95	-2.52	1.86
2500	46.39	-1.78	2.34

Passive Test For 5.8G			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	36.93	-4.82	1.85
5250	38.25	-4.41	1.7
5350	43.01	-3.66	1.79
5450	41.39	-3.83	1.99
5550	41.23	-3.85	2.36
5650	38.59	-4.14	1.33
5750	41.23	-3.85	1.87
5850	37.76	-4.23	1.91



# SHUN DA CHENG TECHNOLOGY CO., LTD

## Reliability Test Report

Test Date	2024. 03. 21	Sample Qty.	3	Inspector	Xu Yanfang	
Test Item	Requirement	testing equipment	Sample 1	Sample 2	Sample 3	PASS/NG
High temperature storage	The test was carried out after 24H exposure at +85°C and 2H recovery	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature storage	The test was carried out after 24H exposure at -40°C and 2H recovery	Constant temperature and humidity box	OK	OK	OK	Pass
High temperature work	At +60°C for 24H	Constant temperature and humidity box	OK	OK	OK	Pass
Work in low temperature	At -20°C under the condition of power work for 24H	Constant temperature and humidity box	OK	OK	OK	Pass
Salt spray test	The pH value was 6.5 ~ 7.2, and the temperature of the experimental chamber was (35±2)°C <input type="checkbox"/> 24H <input checked="" type="checkbox"/> 48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting and drawing force	1. 13 线径 ≥10N 0. 81 线径 ≥8N RG174 ≥60N RG178 ≥50N	Push pull meter	≥10N	≥10N	≥10N	Pass
<b>Conclusion</b>						Pass
Inspector & Date	Xu Yanfang 2024. 03. 21		Approval & Date			





## SHUN DA CHENG TECHNOLOGY CO., LTD

---

Install Wizard or Other

Installation process:

Take 1PCS of products and tear off the release paper on the back of the FPC by hand. Then align the positioning holes of the FPC with the positioning holes of the shell (positioning bars or positioning wires) and attach them to the shell smoothly. The specific positions are shown in the figure below:

Precautions for installation:

- After attaching the antenna, ensure that the FPC is fully attached to the shell;
- The positioning hole is aligned with the position of the housing positioning column;
- FPC edges are aligned with housing edges;
- When connecting the antenna with terminal to the PCBA end of the motherboard, align the terminal first and then close it vertically.
- When removing the antenna terminal, use a tool (such as a dedicated crowbar) to lift the terminal vertically. Do not pull the cable to remove the terminal directly



# SHUN DA CHENG TECHNOLOGY CO., LTD

## ROHS certificate of the product

# 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



### 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