SHUN DA CHENG TECHNOLOGY CO., LTD

SPECIFICATION FOR APPROVAL

Customer Name	Dao Fai		
Customer Project Name	L1	SDC Project Name	L1
Customer P/N		SDC P/N	WG5748B-0813R-120
Band	WiFi2.4G		
Version	A0		
Designer Information			
RF Engineer	Xia cheng lei	R&D Diretor	Xia cheng lei
ME Engineer	HuangZongbao		

Approval				Customer Approval	
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	HuangZongbao	Yong-huiYang	FuXueRong		
Date	2024.08.21	2024.08.21	2024.08.21		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date

Company Address: 4th Floor, Building B5, Xinfu Industrial Park, Chongqing Road, Fuyong Town, Bao'an District, Shenzhen
TEL:0755-27211658 FAX:0755-29485750

Catalogue

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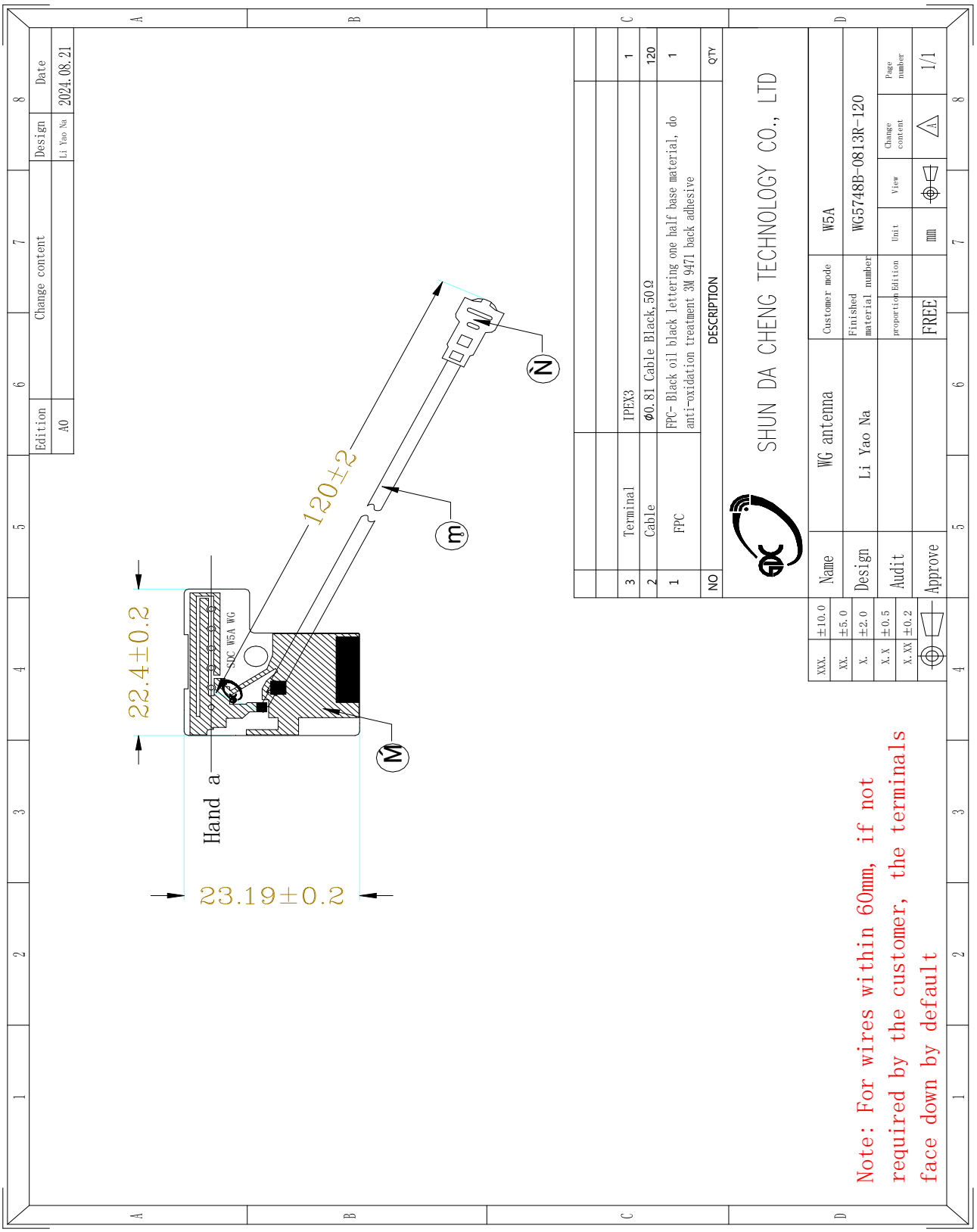
Drawing or Product Image



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Sample Dimensions Test Report

Test Date	2024.08.21	Sample Qty.	3	Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①length	22.4±0.2mm	22.4	22.5	22.4	Pass
②width	23.19±0.2mm	23.2	23.3	23.2	Pass
③thickness	0.1±0.03mm	0.1	0.1	0.1	Pass
④Line length	120±2mm	120	121	120	Pass
Conclusion					PASS
Inspector & Date	Xu Yanfang 2024.08.21		Approval &D ate		

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RF Performance Test Report

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:

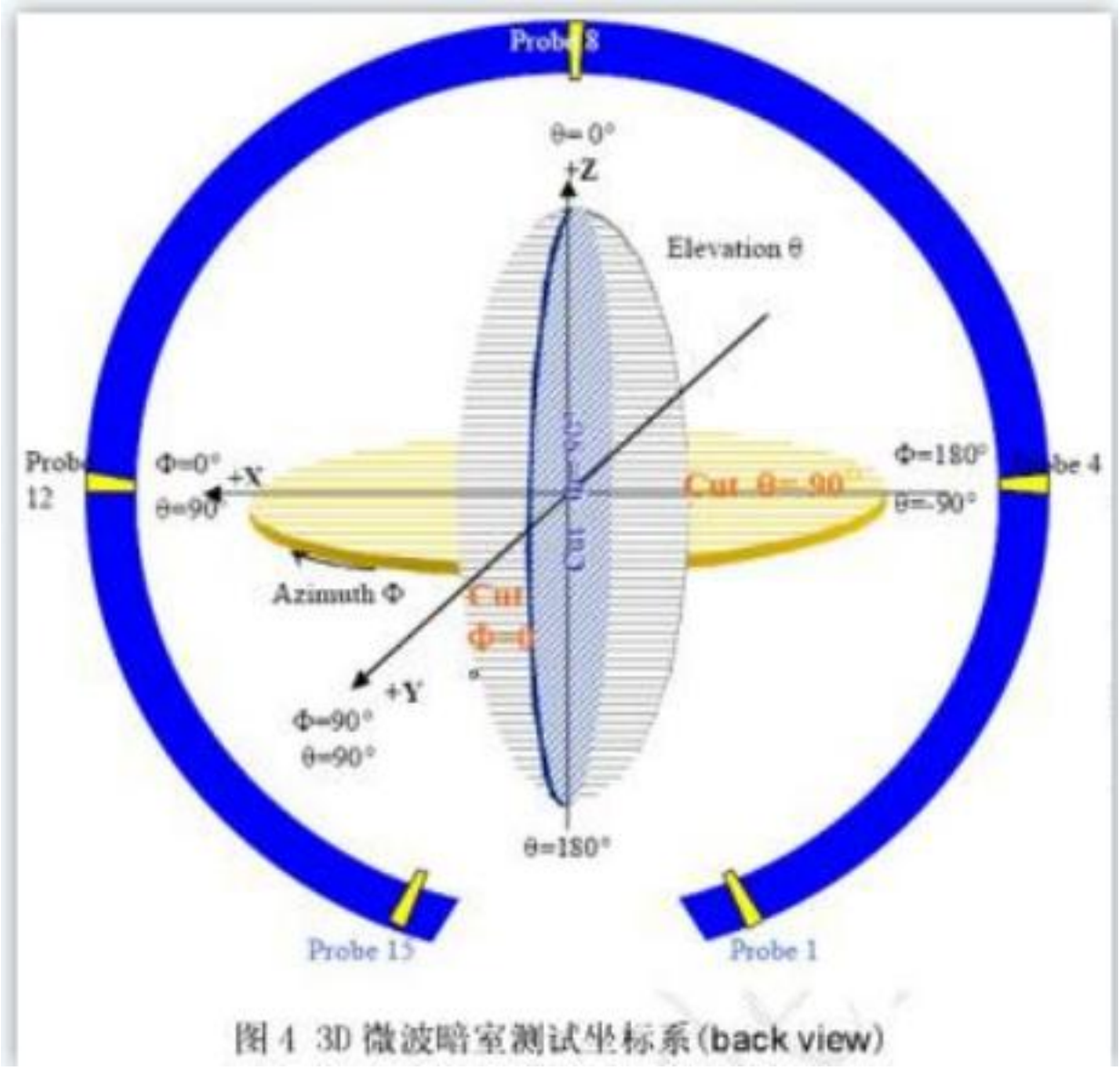


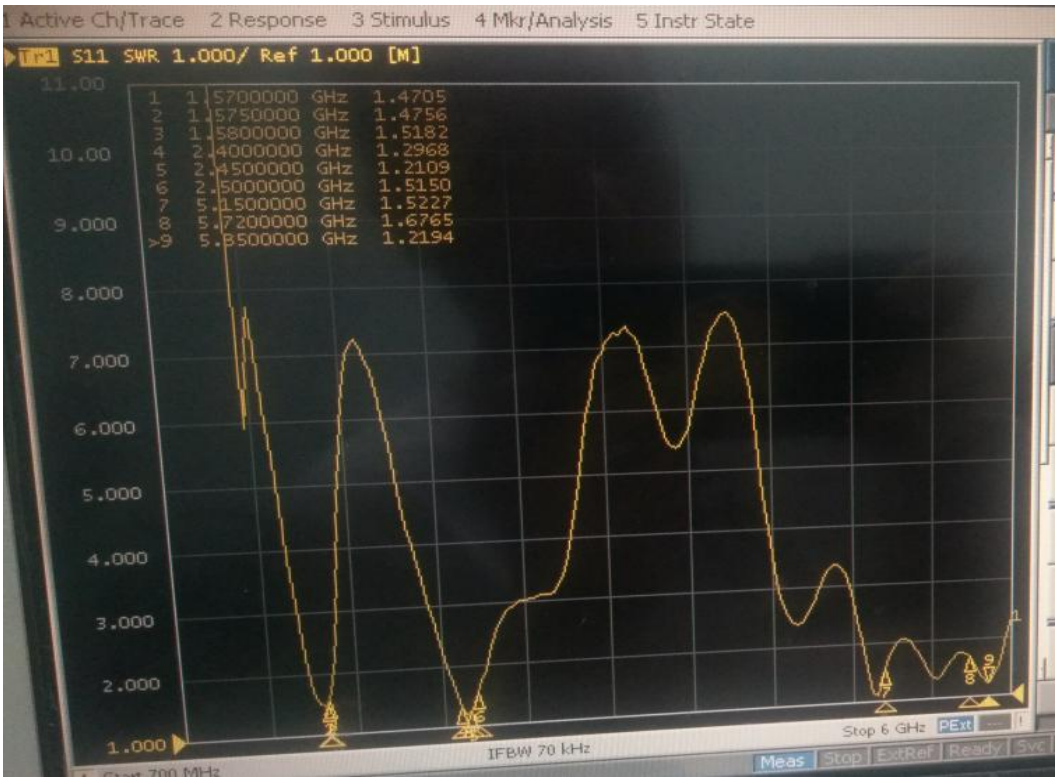
图 4 3D 微波暗室测试坐标系(back view)

1. *S11 Parameter-VSWR*

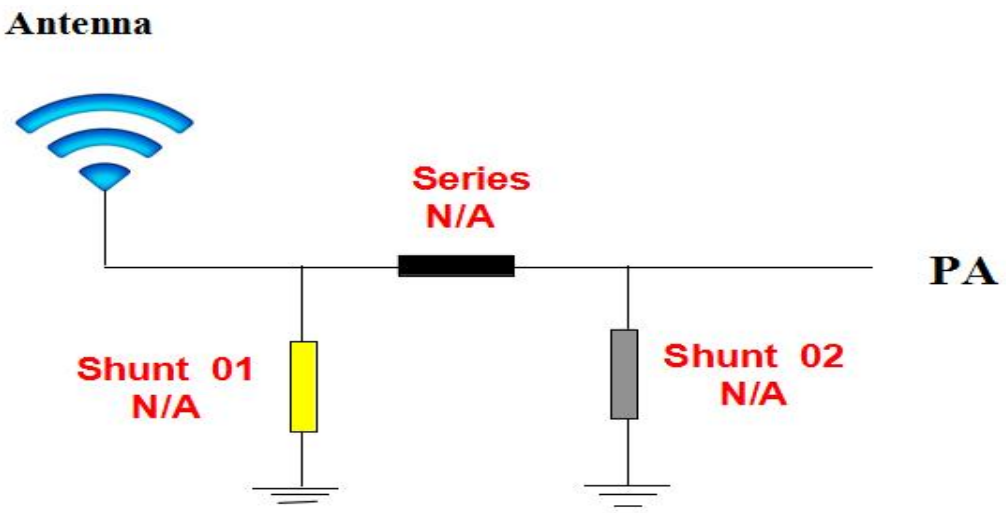
Measuring Method is a 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.

S11 Parameter-VSWR

Frequency(MHz)	1570	1575	1580	2400	2450	2500	5150	5720	5850
VSWR	1.47	1.29	1.21	1.51	1.52	1.67			



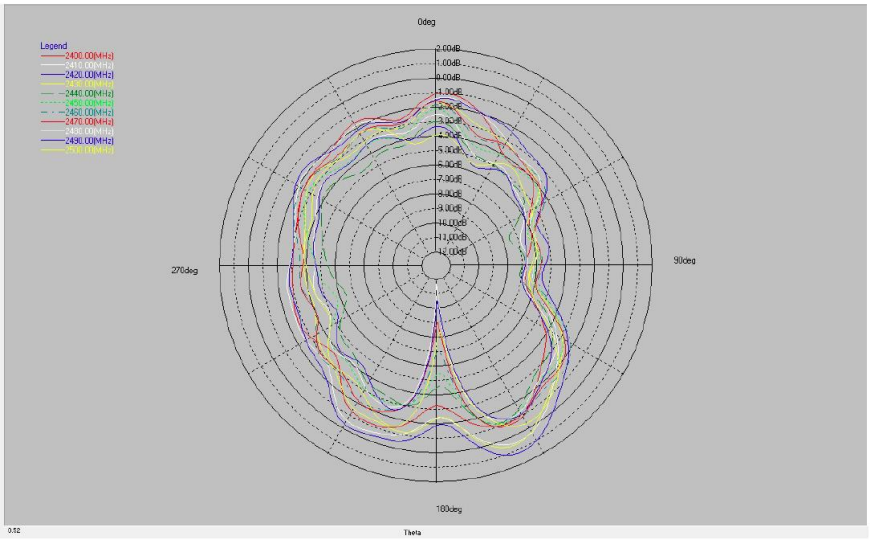
2. Antenna Matching Network

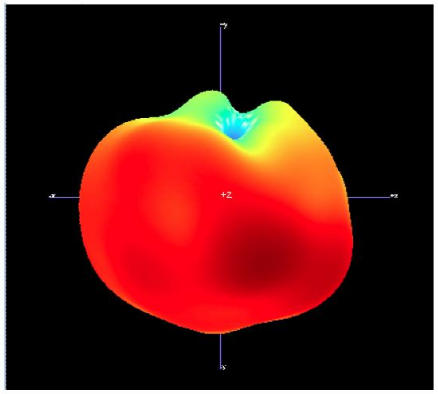


3.Gain & Efficiency

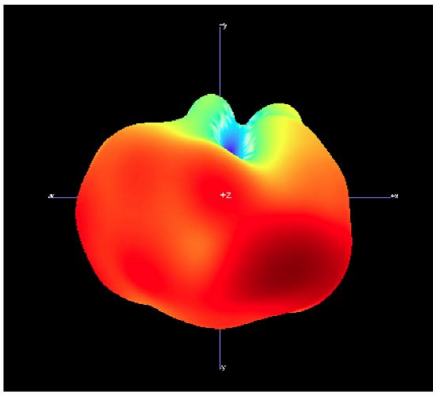
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
1575	41.67	1.22
2400	35.58	1.36
2450	40.26	1.80
2500	38.39	1.45

2D&3D radiation pattern diagram





2400MHz



2450MHz

4. WIFI OTA Data

2.4G	802.11b, (2.4G)11M		
Channel	CH1	CH6	CH12
TRP	13.85	13.28	13.51
TIS	-82.12	-82.77	-82.12

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Reliability Test Report

Test Date	2024.08.21	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 ℃ for 24 hours, recover for 2 hours, and conduct testing	Constant temperature and humidity box	OK	OK	OK	Pass
low temperature storage	Expose to -40 ° C for 24 hours, recover for 2 hours, and perform testing	Constant temperature and humidity box	OK	OK	OK	Pass
High temperature operation	Powered on for 24 hours at+60 ℃	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature operation	Powered on for 24 hours at -20 ℃	Constant temperature and humidity box	OK	OK	OK	Pass
Salt spray test	(5±0.5)%sodium chloride、pHValue is6.5～7.2, Temperature of experimental chamber(35±2)℃ ☐24H ☑48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting and pulling force	1.13Wire diameter≥ 10N 0.81Wire diameter ≥ 8N RG174 ≥60N RG178 ≥50N	Push-pull force gauge	≥10N	≥10N	≥10N	Pass
Conclusion						Pass
Inspector &	Xu Yanfang 2024.08.21		Approval &D			

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Date		ate	

Install Wizard or Other
setup script:

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

Installation process precautions:

☐Ensure that the FPC is fully attached to the housing after pasting the antenna;

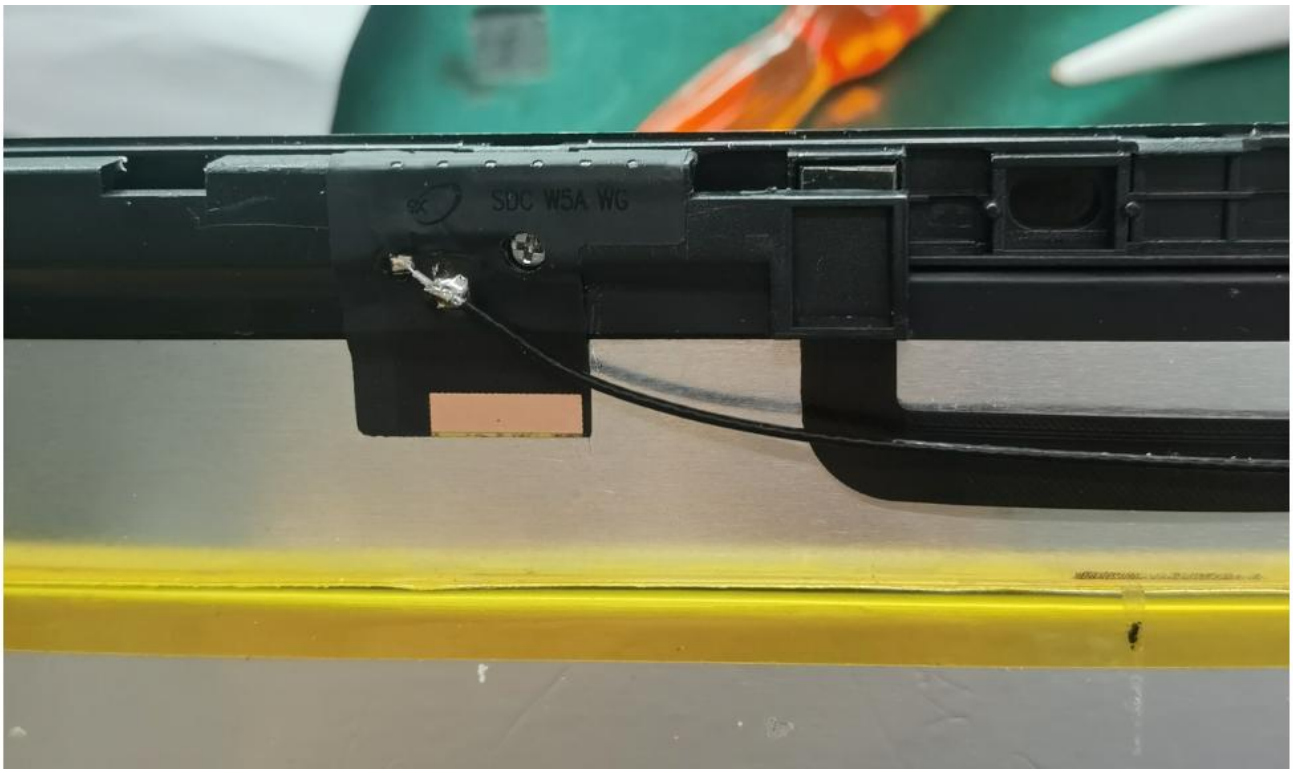
☐Align the positioning hole with the position of the casing positioning column;

☐Align FPC edge with shell edge;

☐When attaching the terminal to the PCBA end of the motherboard, please first align the terminals and then snap them vertically;

☐When disassembling antenna terminals, it is necessary to use a tool (such as a special pry bar) to vertically lift the terminals and not directly pull the wires for disassembly

Test equipment(The following equipment is calibrated every six months, inMarch/September of each year）



ROHS certificate of the product

Company Address: 4th Floor, Building B5, Xinfu Industrial Park, Chongqing Road, Fuyong Town, Bao'an District, Shenzhen
TEL:0755-27211658 FAX:0755-29485750

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

CE

Certificate of Compliance

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;

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