

# Acknowledgment Letter

## SPECIFICATION FOR APPROVAL

Customer Name	Weihide		
Customer Project Name	CX310	Project Name	CX310
Customer P/N		RF P/N	WF5034B-1131L-180
Band	WIFI2. 4G/5. 8G/BT		
Version	A0		
Designer Information			
RF Engineer	Fu Xuerong	R&D Diretor	Xia Chenglei
ME Engineer	Huang Zongbao		

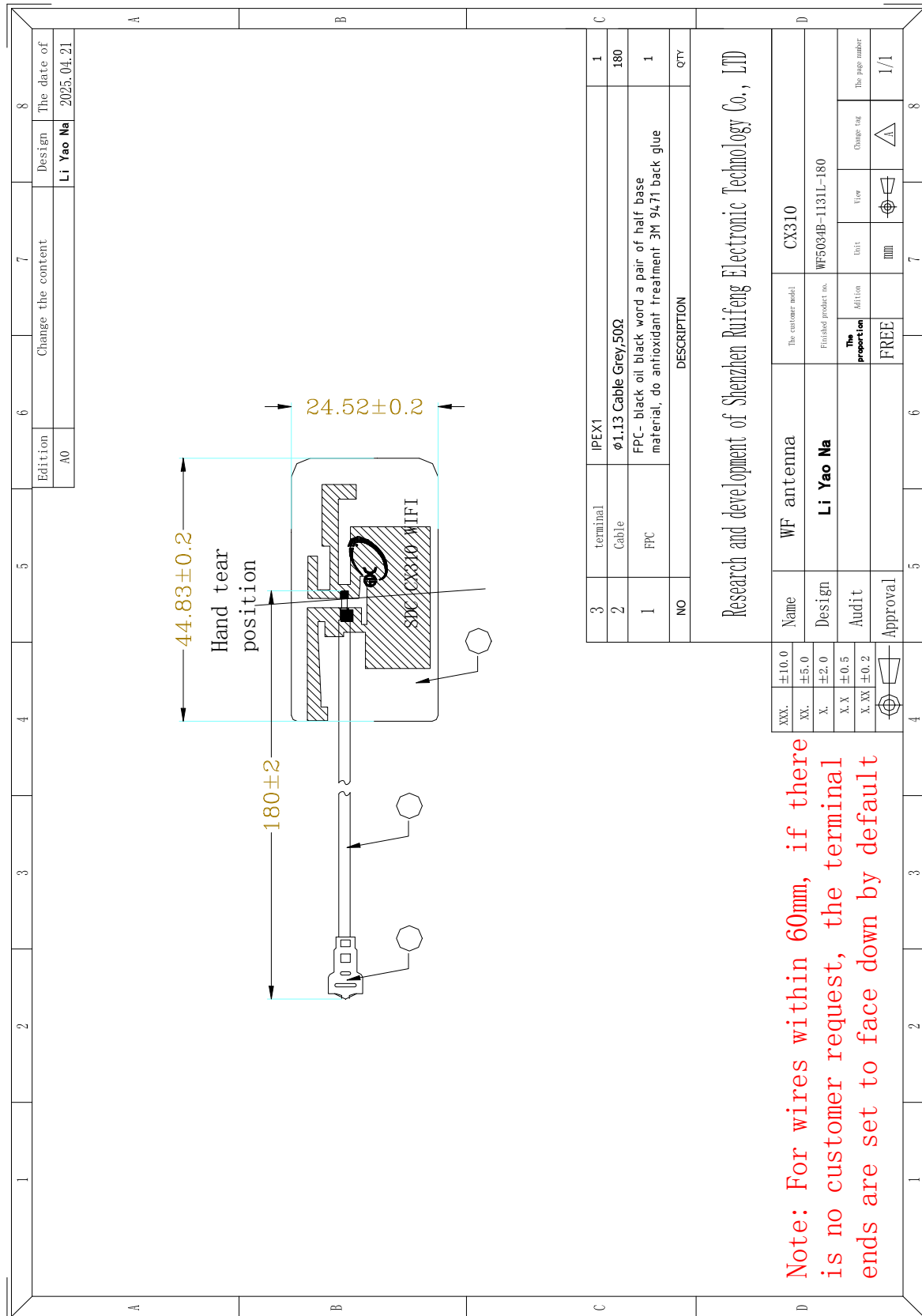
Approval				Customer Approval	
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	Huang Zongbao	Fu Xuerong	Xia Chenglei		
Date	2025. 4. 21	2025. 4. 21	2025. 4. 21		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date

# Catalogue

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Drawing or Product Image



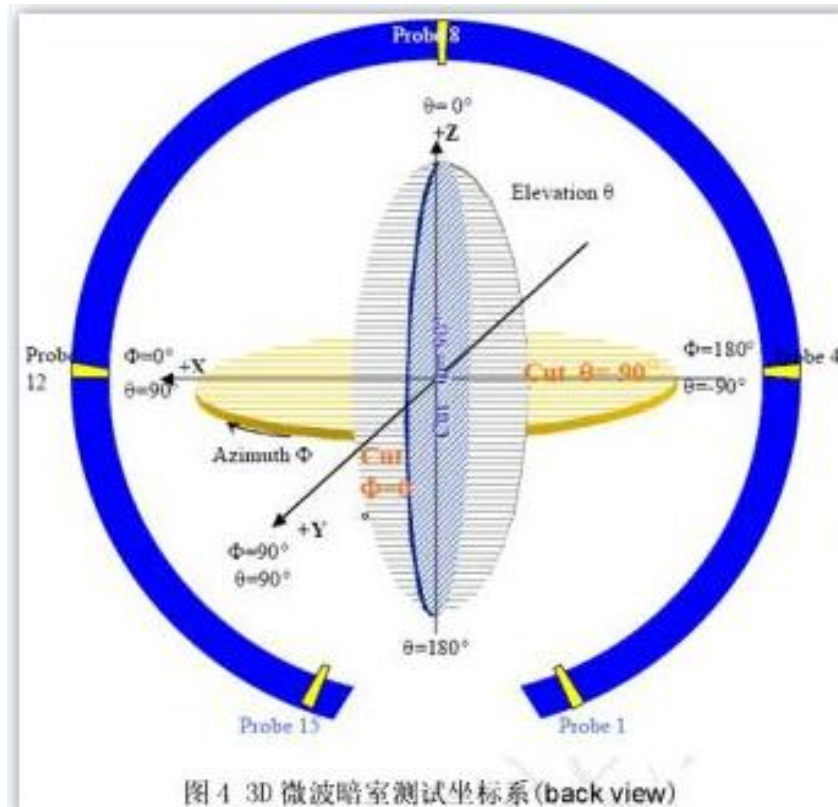
## Sample Dimensions Test Report

Test Date	2025. 4. 21	Sample Qty.	3	Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①length	44. 83±0. 2mm	44. 83	44. 93	44. 83	Pass
②breadth	24. 52±0. 2mm	24. 52	24. 62	24. 52	Pass
③thickness	0. 1±0. 03mm	0. 1	0. 1	0. 1	Pass
④Line length	180±2mm	180	181	180	Pass
Conclusion					PASS
Inspector & Date	Xu Yanfang 2025. 4. 21		Approval & Date		

## RF Performance Test Report

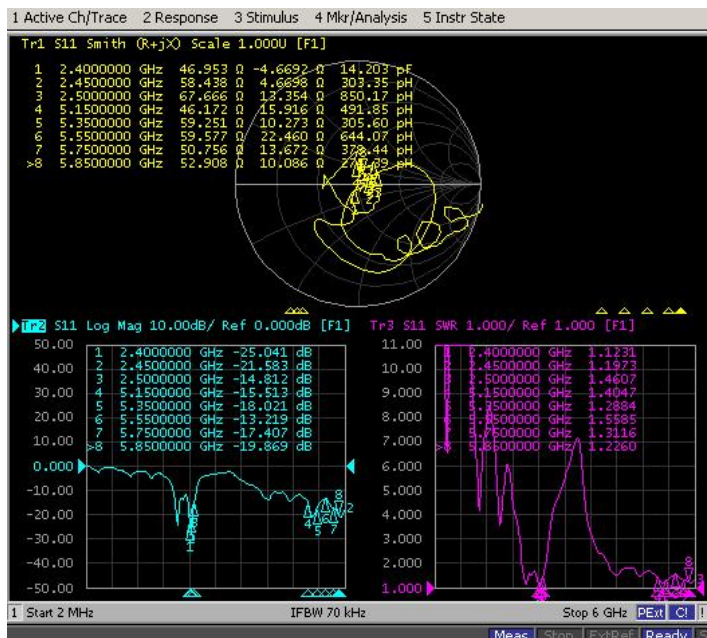
## Antenna Test Equipment Introduction

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:

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.

## S11 Parameter-VSWR



frequency (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
SWR	1.12	1.19	1.46	1.4	1.28	1.55	1.31	1.22
Smith	46.9 Ω	58.4 Ω	67.6 Ω	46.1 Ω	59.2 Ω	59.5 Ω	50.7 Ω	52.9 Ω
Log Mag	-25	-21.5	-14.8	-15.5	-18	-13.2	-17.4	-19.8

## 2. Antenna Matching Network

Antenna



Series  
N/A

PA

Shunt 01  
N/A

Shunt 02  
N/A

### 3. Gain & Efficiency

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	41.27	1.15
2450	43.65	1.37
2500	42.37	1.29
5150	41.62	1.13
5350	40.53	0.87
5500	41.70	1.4
5750	40.88	0.6
5850	42.61	1.60

### 4. WIFI OTA Data

2.4G WIFI	TRP			TIS		
Channel	CH1	CH6	CH12	CH1	CH6	CH12
802.11 <b>b</b> , 11M	13.17	13.73	12.49	-78.72	-77.69	-77.14
802.11 <b>g</b> , 54M	12.53	12.98	11.92	-66.34	-66.25	-66.07
802.11 <b>n</b> , MCS7 (65M)	11.85	11.76	11.43	-64.29	-64.11	-64.36
5.8G WIFI	TRP			TIS		
Channel	CH36	CH60	CH165	CH36	CH161	CH165
802.11 <b>A</b> , 54M	12.52	11.16	11.47	-70.77	-69.36	-68.76

## Reliability Test Report

Test Date	2025. 4. 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 °C 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 °C	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature operation	Powered on for 24 hours at -20 °C	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) °C <input type="checkbox"/> 24H <input checked="" type="checkbox"/> 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 & Date	Xu Yanfang 2025. 4. 21		Approval & Date			



Product ROHS Composition Declaration Form

product name	Uniform material	Harmful substance content( PPM )					HS test report number	Date of HS test report
		Pb	Cd	Hg	Cr	Br		
WIFI&BT antenna	FPC	ND	ND	ND	ND	ND	UNIB21042707HR-01	2025. 4. 21
		ND	ND	ND	ND	ND		
		ND	ND	ND	ND	ND		
		ND	ND	ND	ND	ND		
		ND	ND	ND	ND	ND		
	wire rod	ND	ND	ND	ND	ND		
		ND	ND	ND	ND	ND		
		ND	ND	ND	ND	ND		
	terminal	ND	ND	ND	ND	ND		

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

