



深圳市秋雨电子科技有限公司

Certificate of Conformity

Supplier Name Customer	Shunchengda	Date Date	29 May 2025
Supplier Part Number P/N	WF6182B-0813R-150	Customer Model Models	New K71/New K73
Product Name Product	K72 Wi-Fi Antenna	Customer Part Number Customer P/N	
Specification Description Specifications	WiFi antenna, 0.81 mm cable with 3-pin connector / cable length 150 mm FPC Antenna Silkscreen SDC K72 WF + 46(L)*5.7(W)*4.75(T) single-sided EVA foam with adhesive backing (WF6182B-0813R-150)		

Supplier Approval Signature Vendor Approved By		Customer Approved By Customer Approved By	
Supplier Engineer: Fu Xuerong SE: 29 May 2025		Project: PM:	Quality: QD:
Reviewed by: Yang Yonghui Check: 29 May 2025	Approved by: Chen Huaming Approved: 29 May 2025	Reviewed by: Check:	Approved by: Approval:

Document Revision History

Version Version	Revision Details Revise the content	Reviser Revised	Approved Approval	Revision Date Date	Remarks Note



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Accepted Confirmation Letter

SPECIFICATION FOR APPROVAL

Customer Name Customer Name	Autumn Rain		
Customer Project Name	New K71/New K73	Shunchengda Project Name SDC Project Name	K72
Customer Part Number		SDC Part Number	WF6182B-0813R-150
Frequency band Band	WIFI 2.4G/BT		
Version Version	A0		
Designer Information			
RF Engineer RF Engineer	Wu Wenzhai	Head of R&D R&D Director	Xia Chenglei
Structural Engineer ME Engineer	Huang Zongbao		

Approval				Customer Approval	
	Prepared By Prepared By	Reviewed Checked By	Approved Approved by	Reviewed Checked by	Approved Approved by
Signature Signature	Huang Zongbao	Xia Chenglei	Chen Huaming		
Date Date	29 May 2025	29 May 2025	29 May 2025		

Change Log				
Version Version	Revision Details Change Description	Person in Charge Person in Charge	Approved Approved By	Date Date



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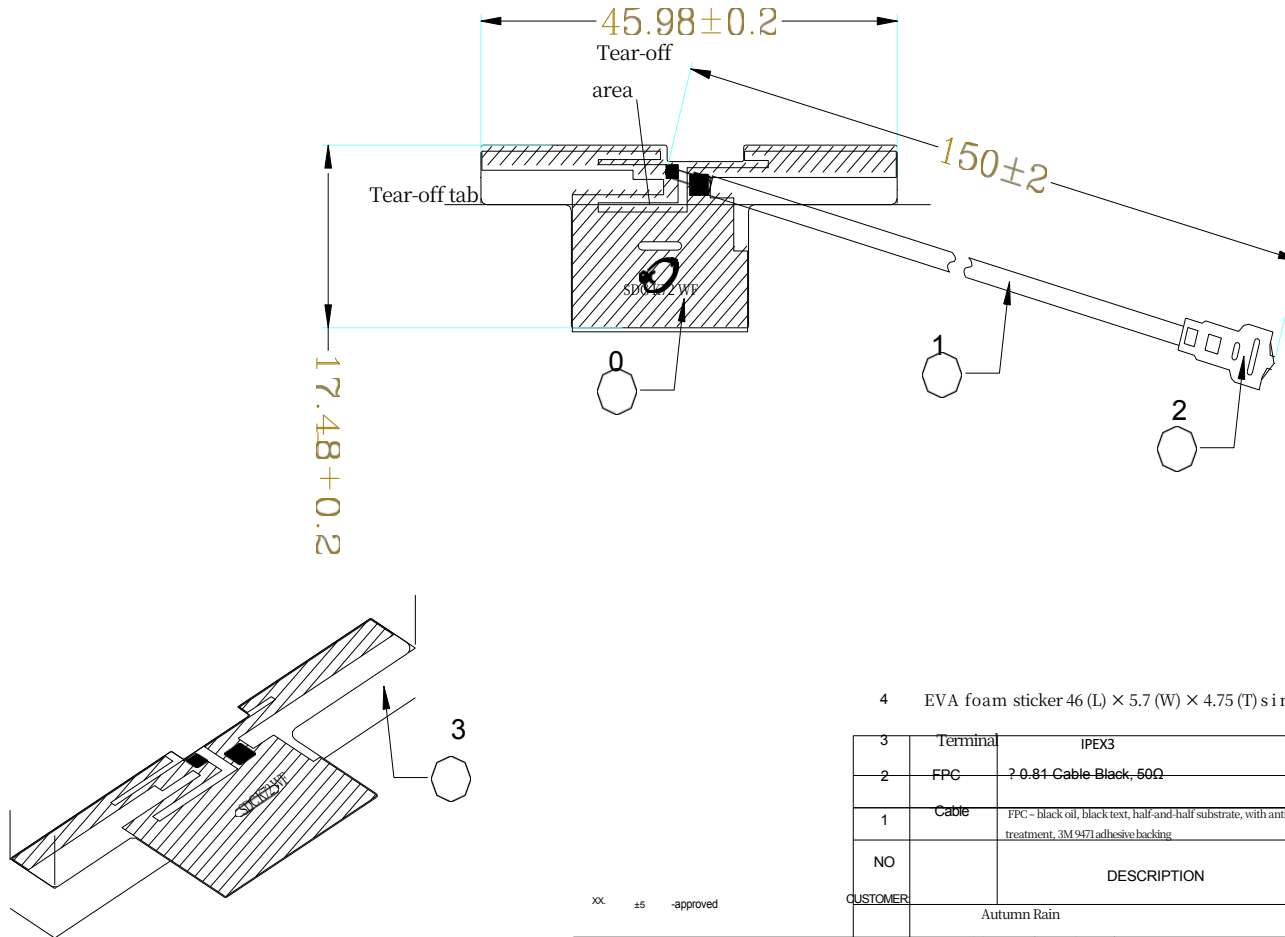
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F		DATE	G	
REV			DESCRIPTION	
A0		29 May 2025	New Issue	

As seen  = All through-holes



4 EVA foam sticker 46 (L) $\times$ 5.7 (W) $\times$ 4.75 (T) single-sided self-adhesive EVA foam

NO	DESCRIPTION	QTY	REMARK
3	Terminal IPEX3	1	
2	FPC 7.0-81 Cable Black, 50 Ω	150	
1	Cable FPC - black oil, black text, half-and-half substrate, with anti-oxidation treatment, 3M 9471 adhesive backing	1	
CUSTOMER Autumn Rain			

XX ± 5 -approved

X	± 3.0	Fu
X	± 1.0	Xuerong
XX	± 0.5	CHECKED
		Li Yaona
XXX	± 0.1	DRAWING
		Li Yaona

PART NAME: SDC		WF6182P61813R-150
P/NO :		
REV	UNIT	FILE :
A0	mm	SHEET : 1/1

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Note: For wire up to 60mm in length,
unless otherwise specified by the customer
By default, the terminal
block faces downwards



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Sample Dimensions Measurement Report

Sample Dimensions Test Report

Test Date Test Date	29 May 2025	Sample Quantity Sample Qty.	3	Tester Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1 Sample 1	Sample 2 Sample 2	Sample 3 Sample 3	Pass/Fail
① Length	45.98±0.2 mm	46	46.1	46	Pass
② Width	17.48±0.2 mm	17.5	17.6	17.5	Pass
③ Thickness	0.1±0.03 mm	0.1	0.1	0.1	Pass
④ Wire length	150±2 mm	150	151	150	Pass
Final Conclusion					PASS
Tester & Date Inspector & Date	Xu Yanfang 29 May 2025		Approval & Date Approval & Date		



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RF Performance Test Report

RF Performance Test Report

Introduction to Antenna Test Equipment

Introduction to Antenna Test Equipment

The input characteristics of the test antenna were measured using **Agilent E5071C and Agilent 5062A** vector network analysers; the radiation characteristics were tested in a wide-screen 3D near-field anechoic chamber and analysed using Agilent 8960 E5515 and Agilent E4438C respectively. The test coordinates for the anechoic chamber are as follows:

Test of antenna input characteristics using the **Agilent E5071C and Agilent 5062A** vector network analyser; The radiation pattern of the antenna is tested using the Guangping 3D near-field anechoic chamber, and the instruments used are the Agilent 8960, E5515 and Agilent E4438C. The test coordinates of the anechoic chamber are as follows:

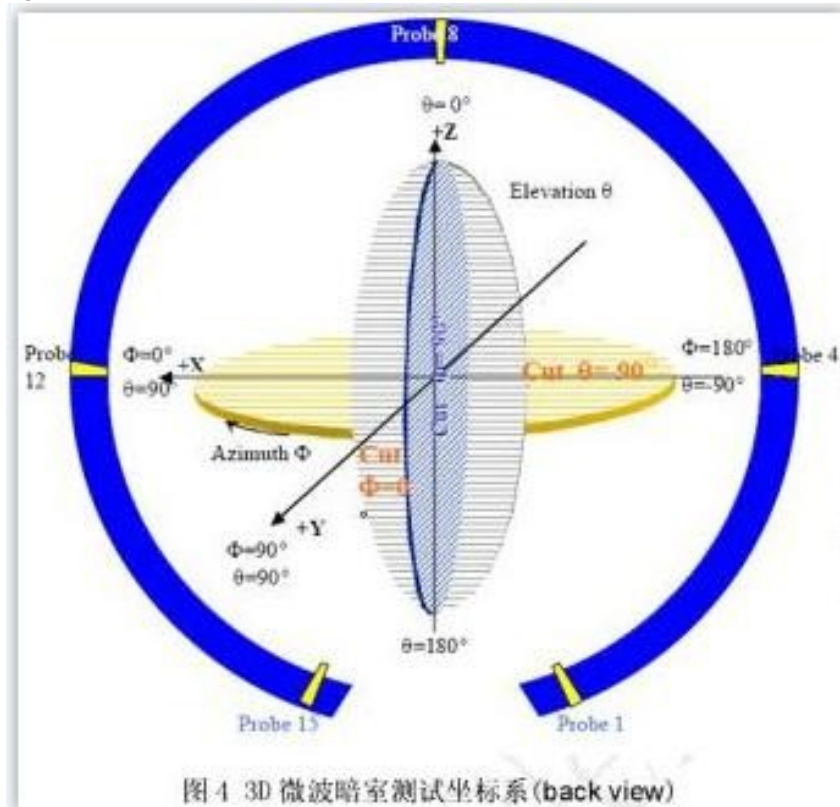


图4 3D 微波暗室测试坐标系 (back view)

1. S11 Parameter Measurement / **S11 Parameter - VSWR**

A 50 Ω coaxial cable is connected to the antenna, which is then connected to the network analyser to measure the S11 parameter; the test specimen must be positioned 20 cm away from any metal.

Measuring Method A 50 Ω coaxial cable is connected to the antenna. This cable is then connected to a network analyser to measure the S11 parameter, ensuring the fixture is kept at least 20 cm away from any metal.



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S11 Parameter - VSWR



Frequency (MHz)	2400	2450	2500
Standar VSWR	1.5	1.1	1.7
Impedance	73.5 Ω	43.8 Ω	31.2 Ω
Return loss	-13.2	-23	-11.1

2. Antenna Matching Network

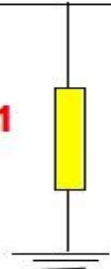
Antenna



Series
N/A

PA

Shunt 01
N/A



Shunt 02
N/A



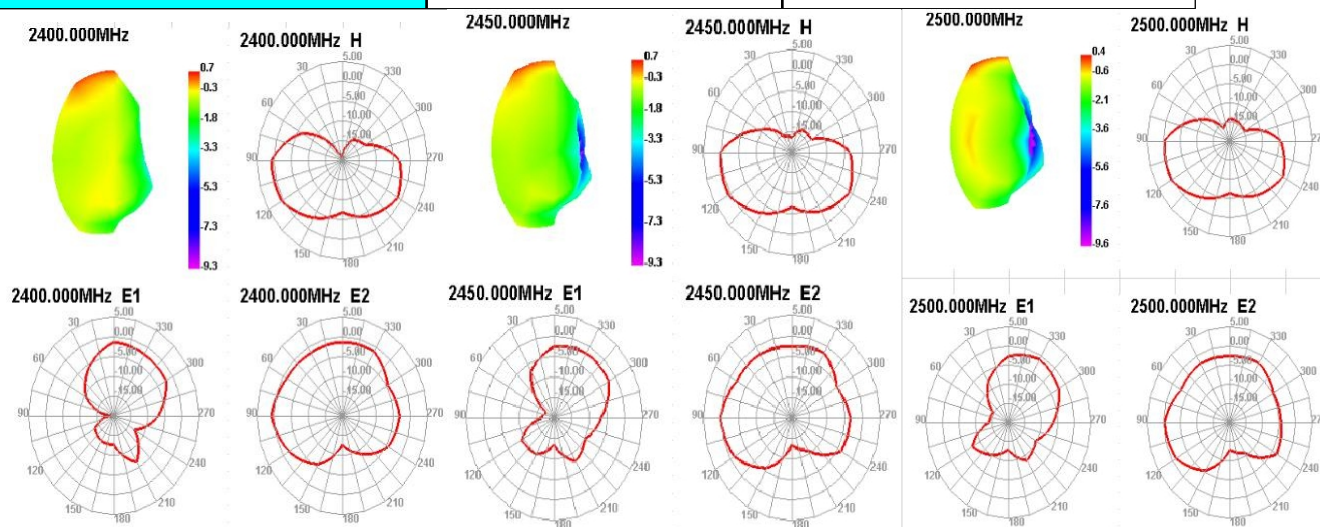
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3. Gain & Efficiency - Wi-Fi Main

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Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	36.71	0.73
2425	36.02	0.58
2450	36.29	0.65
2475	37.16	0.68
2500	34.85	0.36



4. WIFI OTA Data

2.4 GHz	802.11b, (2.4 GHz) 11 Mbps		
Channel	CH1	CH6	CH11
TRP	10.38	11.99	10.66
TIS	-65.93	-78.24	-76.29



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Reliability Test Report

Reliability Test Report

Test Date Test Date	29 May 2025	Sample Quantity Sample Qty.	3	Tester Inspector	Xu Yanfang	
Test Item	Requirement	Testing equipment equipment	Sample 1 Sample 1	Sample 2 Sample 2	Sample 3 Sample 3	PASS/NG determination
High-temperature storage	Exposed to +85°C for 24 hours; test conducted after 2 hours of recovery	Constant temperature and humidity chamber	OK	OK	OK	Pass
Low-temperature storage	Exposed to -40°C for 24 hours; testing carried out after a 2-hour recovery period	Constant temperature and humidity chamber	OK	OK	OK	Pass
High-temperature operation	Operates for 24 hours under power at +60°C	Constant Temperature and Humidity Chamber	OK	OK	OK	Pass
Low-temperature operation	Operates for 24 hours when powered at -20°C	Constant Temperature and Humidity Chamber	OK	OK	OK	Pass
Salt spray test	(5 ± 0.5)% sodium chloride, pH 6.5-7.2, test chamber temperature (35 ± 2)°C ☐ 24 hours ☒ 48 hours	Salt spray test chamber	OK	OK	OK	Pass
Connector crimp pull-out force	1.13 Wire diameter ≥10N 0.81 x wire diameter ≥ 8 N RG174 ≥ 60 N RG178 ≥ 50 N	Push-pull gauge	≥10 N	≥10 N	≥10N	Pass
Final Conclusion						Pass
Tester & Date Inspector & Date	Xu Yanfang 29 May 2025		Approval & Date			



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Cocoon

Item Name: K72

Product Name: FPC Assembly

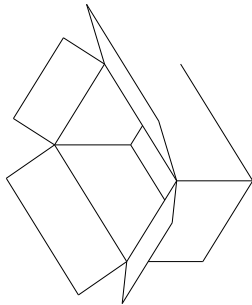
FPC Finished Product (1)



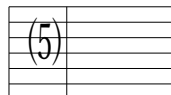
(2) Each PE bag contains m units of the product (subject to actual packaging capacity)



(3) Then, place the small bags containing the finished products into a (Ring) box (subject to actual packaging requirements)



(4) Place the packaged FPCs into a carton; each box can hold 5 large bags, with 5,000 pieces per box (see Figure 4). (Subject to actual packaging specifications)



(5) Once packaging is complete, affix the dispatch label (Fig. 5)



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Installation or Other

Installation Wizard or Other

Installation
procedure:

Take 1 piece of the product, peel off the release paper from the back of the FPC by hand, then align the positioning holes on the FPC with those on the housing (positioning ribs or lines), and affix it smoothly to the housing. The specific position is shown in the figure below:

Points to note during installation:

- ☐ Ensure the FPC is fully adhered to the housing after attaching the antenna;
- ☐ Ensure the alignment holes are aligned with the housing's locating pins;
- ☐ Ensure the edges of the FPC align with the edges of the housing;
- ☐ For antennas with terminals, when connecting the terminals to the mainboard PCBA, first align the terminals and then snap them into place vertically;
- ☐ When removing the antenna terminals, use a tool (such as a specialised pry bar) to lift the terminals vertically; do not pull the wires directly to remove them.



WiFi天线





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SHUN DA CHENG
Product RoHS Certificate

Certificate

Certificate Number: UNIB24083009HC-01



Product: 5G/4G/WIFI/GPS/BT antenna/M808 antenna
Applicant: ShenZhen ShunDaCheng Technology Co., Ltd.
4th Floor, Building B5, Xinfu Industrial Zone, Fuyong Chongqing Road,
Baoan District, Shenzhen
Manufacturer: ShenZhen ShunDaCheng Technology Co., Ltd.
4th Floor, Building B5, Xinfu Industrial Zone, Fuyong Chongqing Road,
Baoan District, Shenzhen
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: UNIB24083009HR-01.

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

RoHS

Sep. 06, 2024
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
Web Site: www.uni-lab.hk/ E-mail: hofferlau@uni-lab.hk



Certificate of Compliance