



SHUN DA CHENG TECHNOLOGY CO., LTD

SPECIFICATION FOR APPROVAL

Customer Name	DE BEN		
Customer Project Name	DB73	SDC Project Name	DB73
Customer P/N		SDC P/N	WF688B-0814R-75
Band	WIFI2. 4G/BT		
Version	A0		
Designer Information			
RF Engineer	Yong-hui Yang	R&D Diretor	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. 12. 06	2024. 12. 06	2024. 12. 06		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date



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Catalogue

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A		B	C	D	E	F	G
Observed ○ = All through holes						REV	DATE
						A0	2024.12.06
							New Issue
1							
2							
3							
4							
5							
6							

Technical drawing of a cable assembly. The drawing shows a cross-section of a cable with a central conductor and an outer shield. The dimensions are: 21.91±0.2 (width of the central conductor), 10±0.2 (width of the outer shield), 75±2 (length of the central conductor), and 75±2 (length of the outer shield). A label 'Tear position' points to a specific location on the central conductor. A note 'Observed ○ = All through holes' is present.

3	端子	IPEX4	1
2	Cable	∅0.81 Cable Black,50Ω	75
1	FPC	FPC- Black oil black and white one half base material, do anti-oxidation treatment 3M 9471 back adhesive	1
NO	DESCRIPTION		QTY
REMARK			

CUSTOMER:		De Ben
PART NAME:		WIFI antenna 0073 FPC (silk screen SDC HD-61 WP) ∅0.81 Black cable +IPEX L=75mm
SDC P/NO :		WF688B-0814R-75
REV	UNIT	FILE
A0	m/m	SHEET : 1/1

XX

±5

APPROVED

X

±3.0

Fu Xuerong

X

±1.0

CHECKED

.XX

±0.5

Li Yona

.XXX

±0.1

DRAWING

⊙

Li Yona

Shenzhen City

shun reach

Technology Co.,

LTD.

Note: Terminal head up

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Company Address: 4th Floor, Building B5, Xinfu Industrial Park, Chongqing Road, Fuyong Town, Baoan District,
Shenzhen Telephone :0755-27211658 Fax :0755-29485750



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Sample Dimensions Test Report

Test Date	2024. 12. 06	Sample Qty.	3	Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①length	21. 91±0. 2mm	21. 95	22	21. 95	Pass
②width	10±0. 2mm	10	10. 1	10	Pass
③thickness	0. 1±0. 03mm	0. 1	0. 1	0. 1	Pass
④Line length	75±2mm	75	76	75	Pass
Conclusion					PASS
Inspector & Date	Xu Yanfang 2024. 12. 06		Approval & Date		

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Shenzhen Telephone :0755-27211658 Fax :0755-29485750

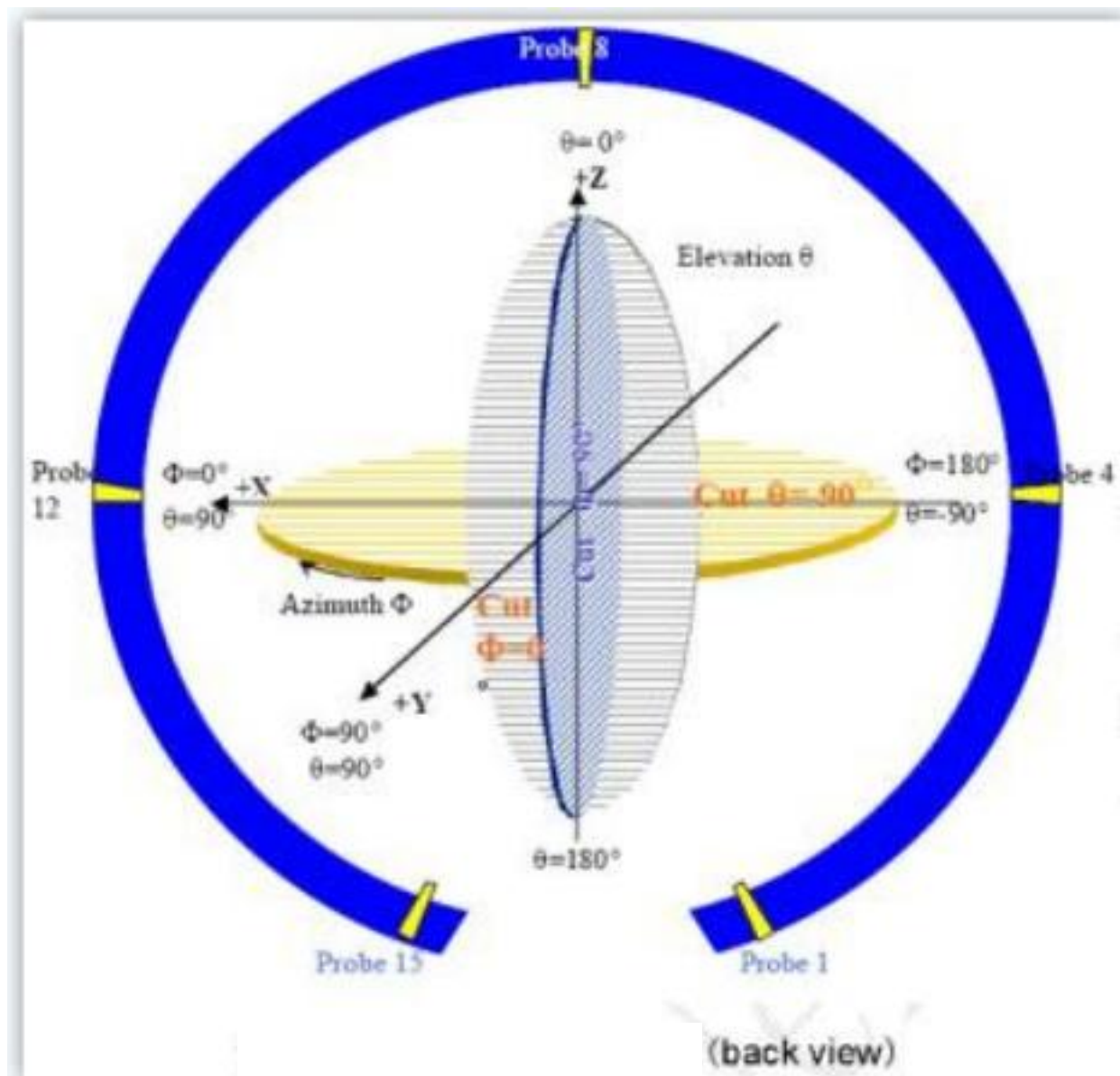


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RF Performance Test Report

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:



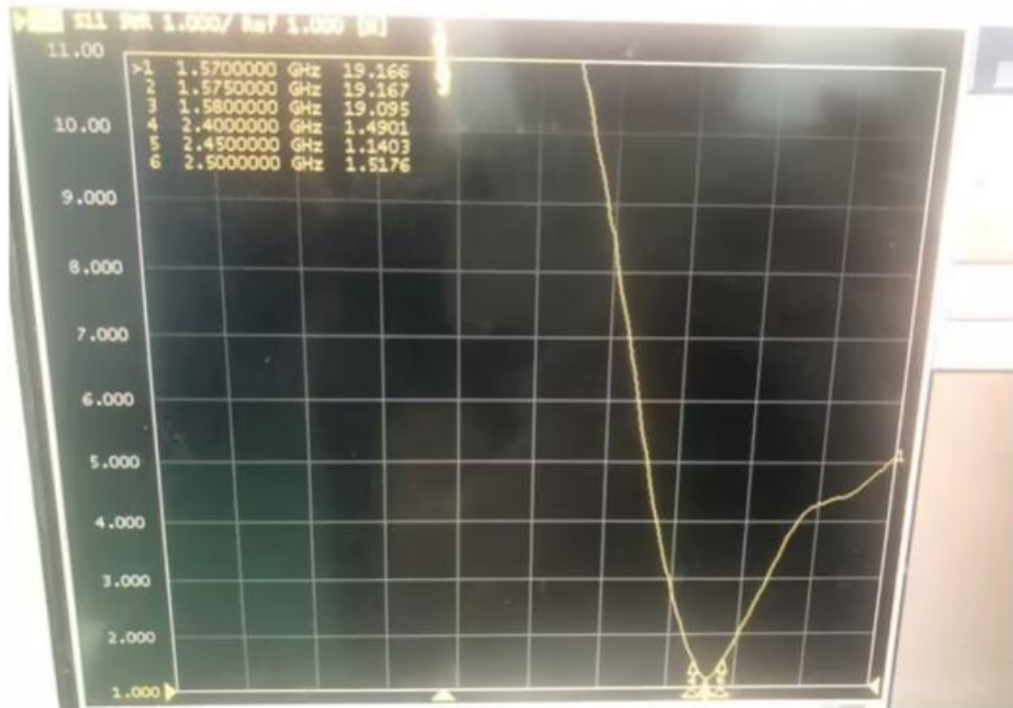
1. S11 Parameter-VSWR

Measuring Method is a 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.



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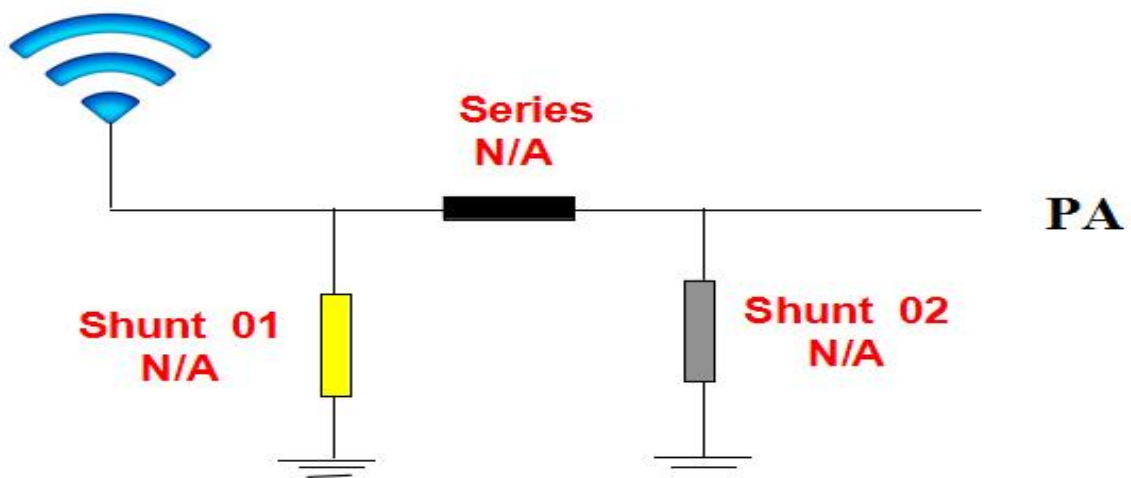
S11 Parameter-VSWR



Frequency(MHz)	2400	2450	2500
VSWR	1. 49	1. 14	1. 51

2. Antenna Matching Network

Antenna

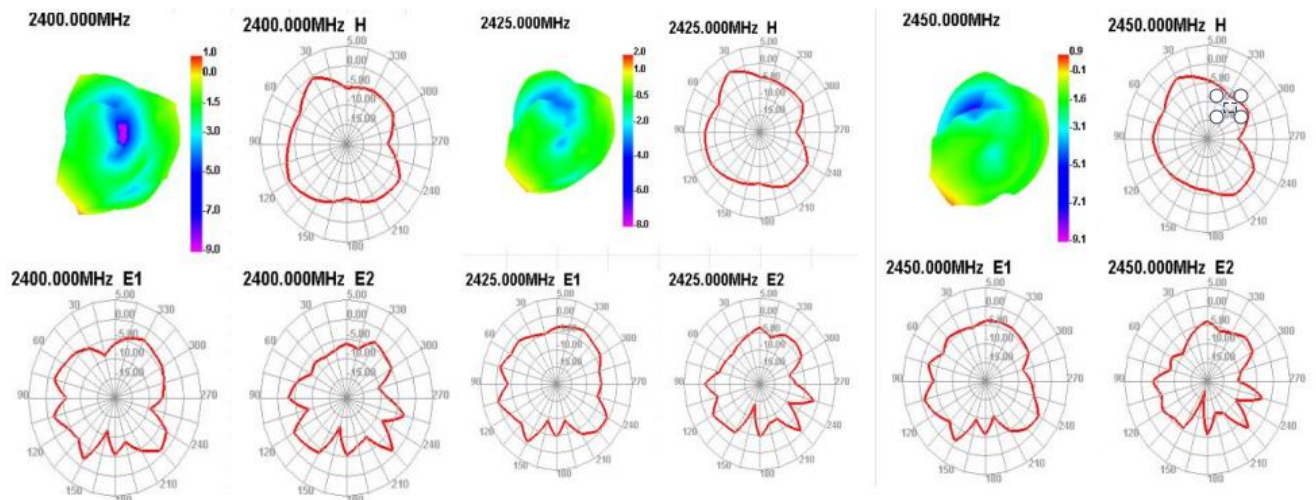




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3.Gain & Efficiency

Passive Test For 2.4G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	43.54	-3.61	1.03	-1.12	20.581	22.962	1.03	-15.9	4.64	15	48.93	49.09
2425	45.48	-2.97	1.96	-0.19	23.926	26.555	1.96	-16.48	4.93	15	49.09	49.22
2450	36.53	-4.37	0.87	-1.28	17.136	19.397	0.87	-19.74	5.24	15	49.25	49.27
2475	35.97	-4.44	0.52	-1.63	17.205	18.763	0.52	-23.22	4.96	75	49.98	49.91
2500	36.94	-4.32	0.32	-1.83	17.676	19.267	0.32	-18.36	4.64	75	49.71	49.62





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Reliability Test Report

Test Date	2024. 12. 06	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℃ 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℃ and 2H recovery	Constant temperature and humidity box	OK	OK	OK	Pass
High temperature work	At +60℃ for 24H	Constant temperature and humidity box	OK	OK	OK	Pass
Work in low temperature	At -20℃ 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)℃ ☐ 24H ☒ 48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting and drawing force	1.13Wire diameter ≥ 10N 0.81Wire diameter ≥ 8N RG174 ≥60N RG178 ≥50N	Push pull meter	≥10N	≥10N	≥10N	Pass
Conclusion						Pass
Inspector & Date	Xu Yanfang 2024. 12. 06		Approval & Date			

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Packing rules

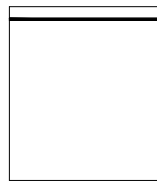
Project name: DB73

Product name: FPC antenna

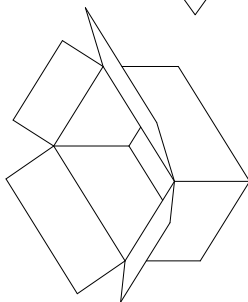
FPC antenna (one)



(two) Each PE bag contains 100pcs of products (subject to actual packaging)



(three) Then put the small antenna bag neatly into (Figure 3) and fill 10 small bags (the actual packaging shall prevail).



(four) The packaged antenna can be put into a carton, which can hold 5 large bags, each box can hold 5000PCS (Figure 4). (Subject to actual packaging)



supplier	
purchase order number	
material code	
specifications and models	
quantity	
date	

(five) After the packaging is completed, the shipping label should be affixed (Figure 5).



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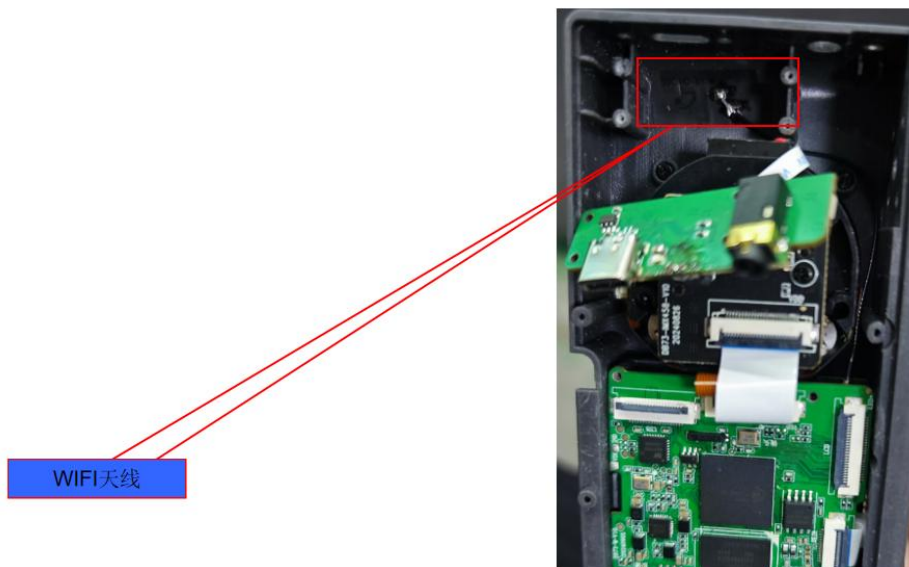
Install Wizard or Other

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





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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



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

Company Address: 4th Floor, Building B5, Xinfu Industrial Park, Chongqing Road, Fuyong Town, Baoan District,
Shenzhen Telephone :0755-27211658 Fax :0755-29485750