

### SPECIFICATION FOR APPROVAL

Customer Name	DE BEN						
Customer Project Name	DB73	SDC Project Name	DB73				
Customer P/N		WF688B-0814R-75					
Band	WIF12. 4G/BT						
Version	A0						
	Designer Inf	ormation	-				
RF Engineer	Yong-hui Yang	R&D Diretor	FuXueRong				
ME Engineer	Huang Zongbao						

	Appr	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			

	Cł	nange Log		
Version	Change Description	Person in Charge	Approval By	Date

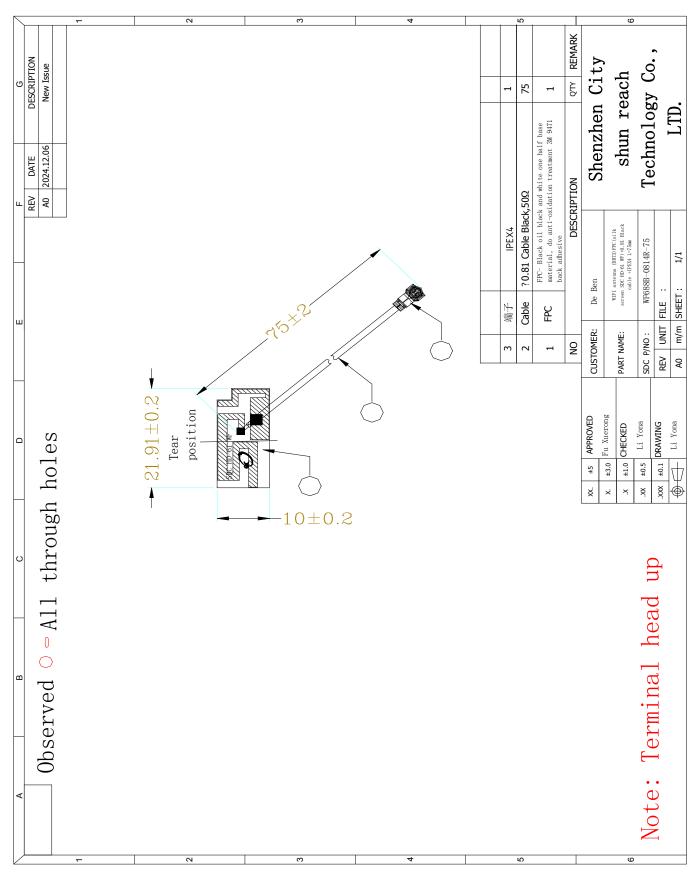


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Drawing or Product Image



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



#### Sample Dimensions Test Report

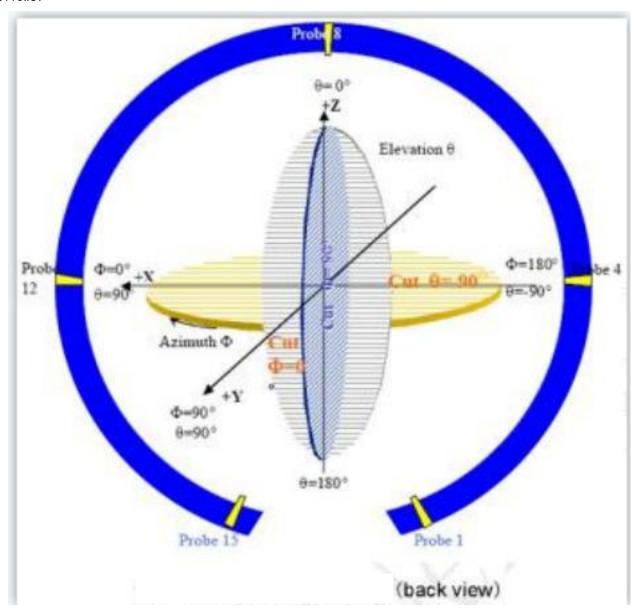
Test Date	2024. 12. 06	Sample Qty.	3	Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①length	21.91±0.2mm	21. 95	22	21. 95	Pass
②width	10±0.2mm	10	10. 1	10	Pass
③thickness	0.1±0.03mm	0. 1	0.1	0. 1	Pass
<b>4</b> Line length	75±2mm	75	76	75	Pass
	1	Conclusion	1		PASS
Inspector & Date	Xu Yanfang 20	24. 12. 06	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.



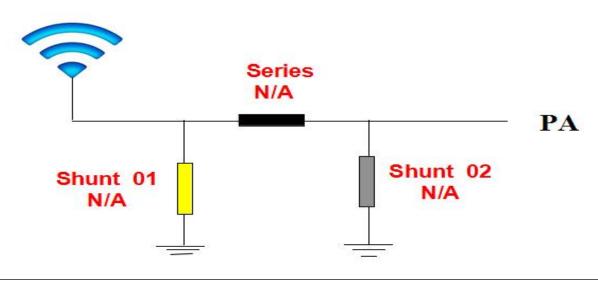
#### S11 Parameter-VSWR



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

### 2. Antenna Matching Network

#### Antenna

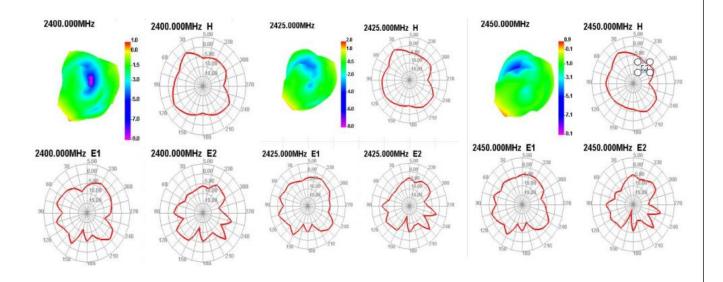


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### 3. Gain & Efficiency

					Passive	e Test For	2.4G					
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (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





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 temperatur e storage	The test was carried out after 24H exposure at +85°C and 2H recovery	Constant temperature and humidity box	ОК	ОК	ОК	Pass
Low temperatur e storage	The test was carried out after 24H exposure at -40°C and 2H recovery	Constant temperature and humidity box	ОК	OK	ОК	Pass
High temperatur e work	At +60°C for 24H	Constant temperature and humidity box	ок	ОК	ок	Pass
Work in low temperatur e	At -20°C under the condition of power work for 24H	Constant temperature and humidity box	ОК	ОК	ОК	Pass
Salt spray test	The pH value was $6.5 \sim 7.2$ , and the temperature of the experimental chamber was $(35\pm2)^{\circ}$ C	Salt spray testing machine	ОК	ОК	ок	Pass
Connector riveting and drawing force	1.13Wire diameter ≥ 10N 0.81Wire diameter ≥ 8N RG174 ≥60N RG178 ≥50N		≥10N	≥10N	≥10N	Pass
Conclusion						Pass
Inspector & Xu Yanfang 2024.12.06			Approval &D			



## Packing rules

Project name: DB73 Product name: FPC antenna FPC antenna (one) (two) Each PE bag contains 100pcs of products (subject to actual packaging)  $\sqrt{}$ (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) (five) After the packaging is completed, the shipping label should be affixed (Figure 5).

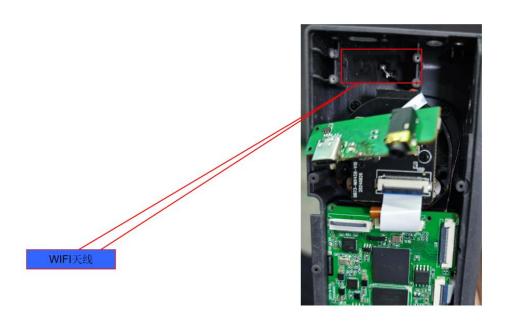


Install Wizard or Other Installation process:

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:

positions are shown in the righte below.
Precautions for installation:
☐After attaching the antenna, ensure that the FPC is fully attached to the shell;
$\Box$ 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 firs
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





### ROHS certificate of the product



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

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#### Shenzhen United Testing Technology

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Certificate of Compliance