



深圳市睿德通讯科技有限公司

Shenzhen Etheta Communication Technology Co., LTD.

供应商名称: 深圳市睿德通讯科技有限公司

Specification for Approval

供应商地址: Area B&D, floor 3, building 1, Baisha Technology

Industrial Park, No.3011,, Shahe West Load, Nanshan District, Shenzhen (518055),

Guangdong Province, China.

客户名称

Client Name: 百富计算机技术（深圳）有限公司

品 牌

Brand Name: 睿德

物料规格

Part Description: Q58-WIFI-Antenna-V01-PCB-睿德

产品制造商:

Manufacturer: 深圳市睿德通讯科技有限公司

百富物料类别

PAX Part Name: PCB 天线

百富物料描述

PAX Description: Q58-WIFI -Antenna-V01-PCB-睿德

测试日期

Testing Date: 7/8/2023

测试工程师

Testing Engineer:

供 应 商 签 章		客 户 签 章	
结构		承 认: 确 认:	
射频			
确 认			



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Antenna Specification

Sample Photo

1. Electrical Characteristics

Frequency	2.400~2.4835GHz
Polarization	Linear
Impedance	50 Ohm

2. Material & Mechanical Characteristics

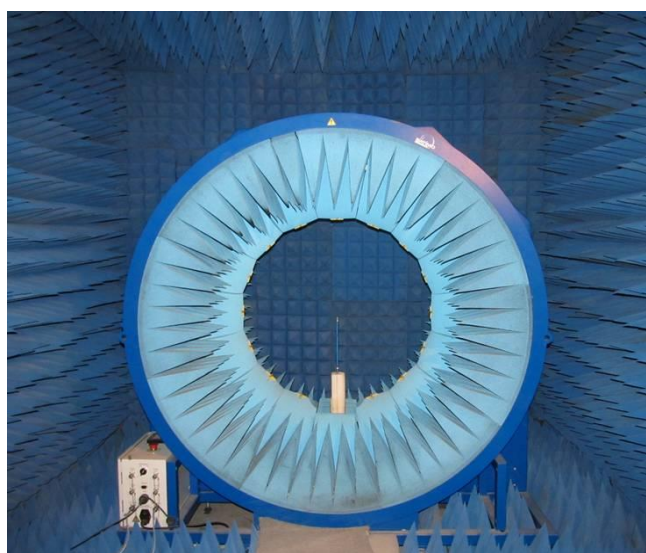
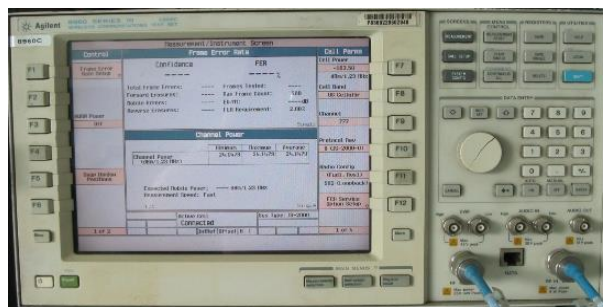
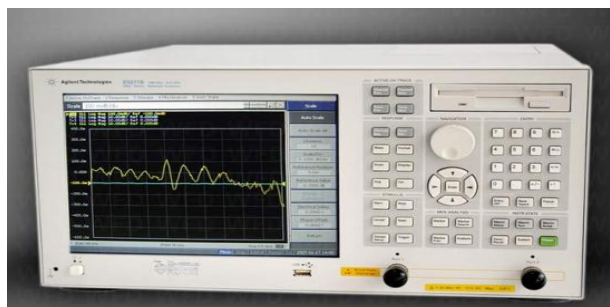
Material of antenna	PCB
Connector Type	

3. Environmental

Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

4、Test &Item Equipment

List	Test Item	Equipment	
1.S11 Parameter	VSWR, Return Loss	Agilent VNA	
2.Active Test	TRP, TIS	Agilent 8960	Satimo Starlab
3.Passive Test	Gain, Efficiency, Pattern	Agilent VNA	



A darkroom test parameters
 The test system: SATIMO-SG24
 Test environment: temperature 20 °C + 2 °C, humidity of 50% plus or minus 15%
 Agilent 8960 Active test equipment, test data, from using measuring Agilent 8960

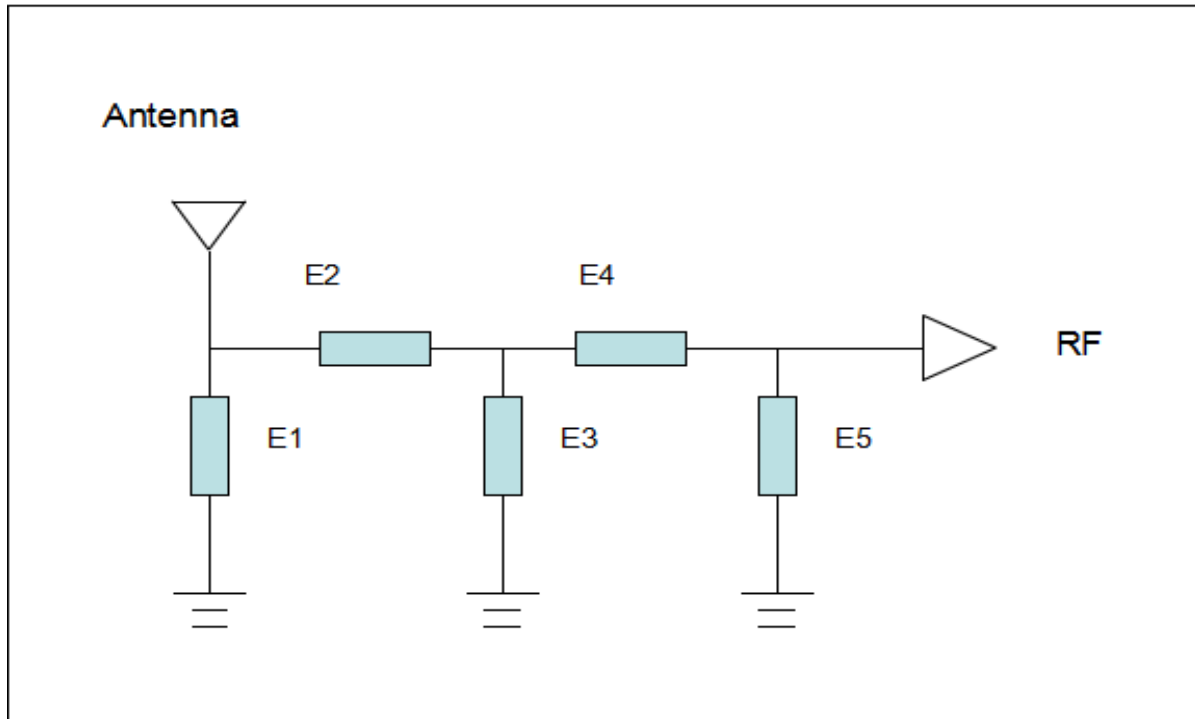
设备清单

Equipment	Manufactuer	Model NO.	Serial No.	Last Cal.	Due Date
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Network	Agilent	E5071C		2022.12.29	2023.12.28
Analyzer					

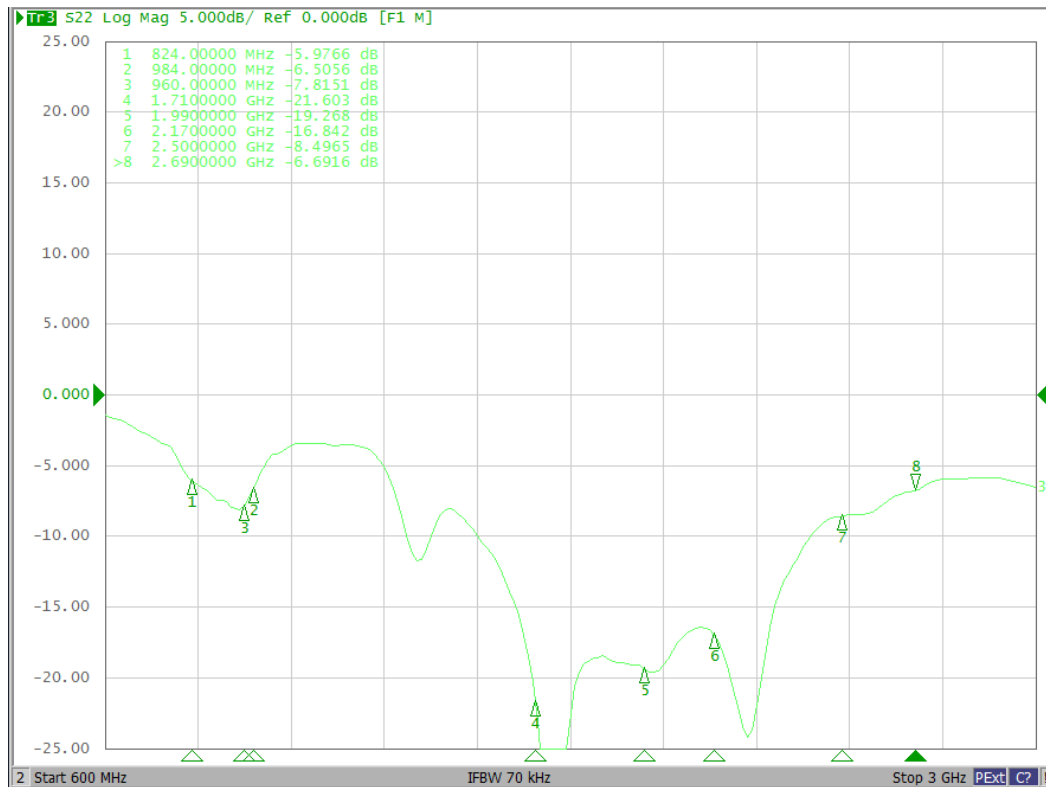
5、Matching Circuit



Element	Value
E1(0201)	N/A
E2(0201)	0Ω
E3(0201)	N/A
E4(0201)	0Ω
E5(0201)	N/A

We have changed the original matching circuit.

6、S11 Parameter Test



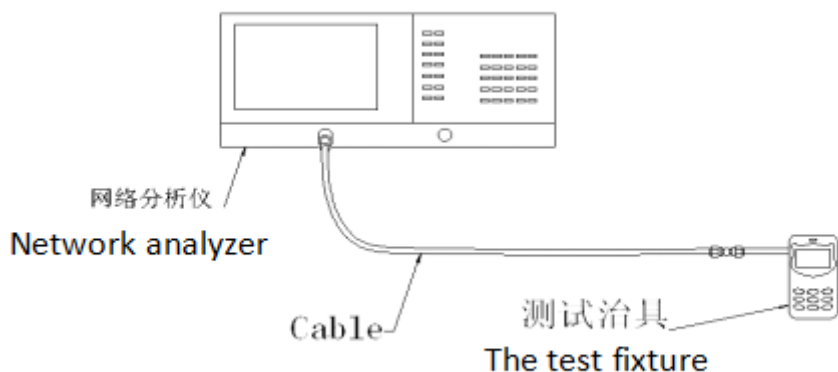
6.1、Test methods and specifications:

Testing equipment: network analyzer (HP 8753 E)

Test method: with a 50 ohm CABLE CABLE from the instrument test port export, calibration using a calibration after connection

Rf fixture of the SMA connector, records related to the frequency points corresponding return loss and standing wave ratio.

Test schematic diagram is as follows:

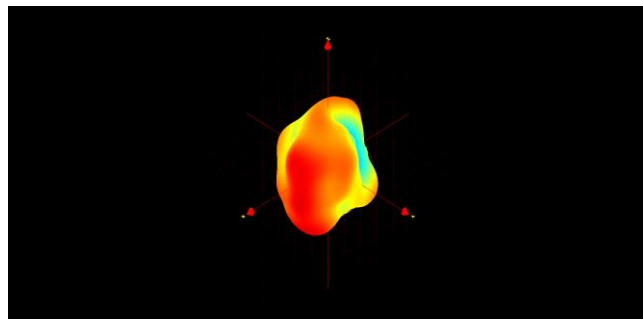
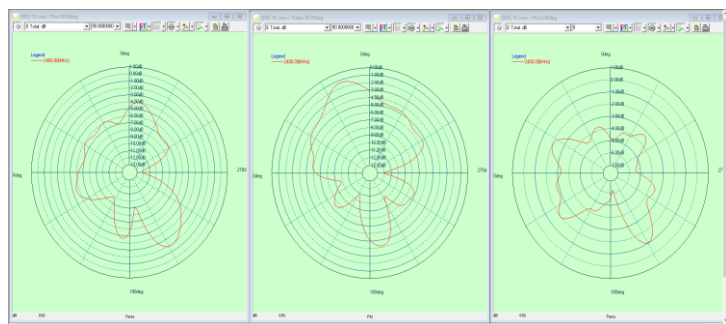


7、Passive Test

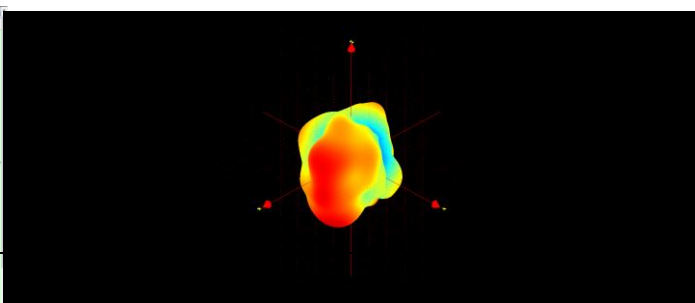
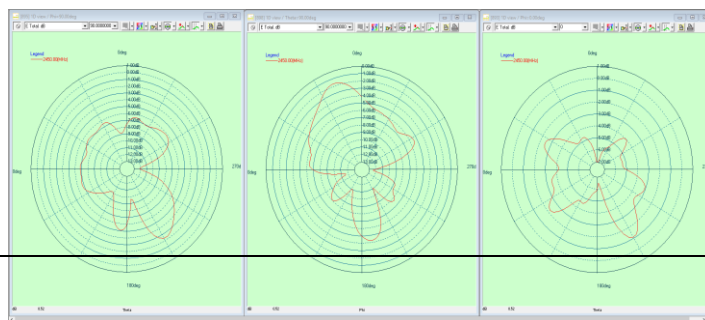
WiFi 天线

f(MHz)	效率	效率	最大增益	平均增益
2400	39%	-4.05	1.12	-4.27
2410	38%	-4.22	1.05	-4.49
2420	37%	-4.32	1.08	-4.62
2430	37%	-4.35	1.14	-4.69
2440	36%	-4.49	1.07	-4.88
2450	35%	-4.55	1.04	-4.97
2460	35%	-4.58	1.04	-5.02
2470	34%	-4.68	0.97	-5.13
2480	34%	-4.71	0.92	-5.16
2490	33%	-4.84	0.75	-5.29
2500	32%	-4.91	0.62	-5.34

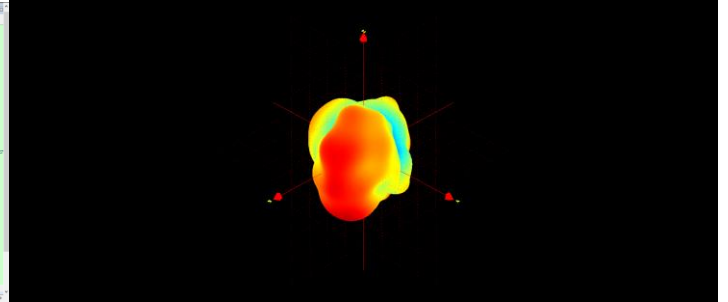
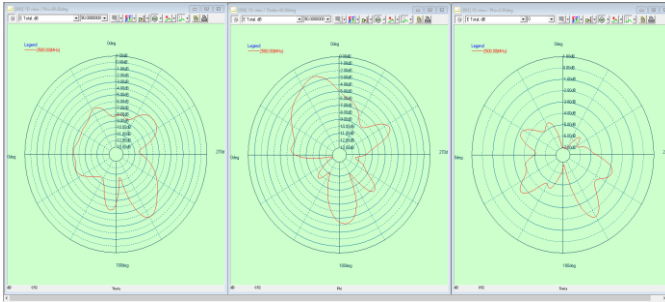
2400MHZ



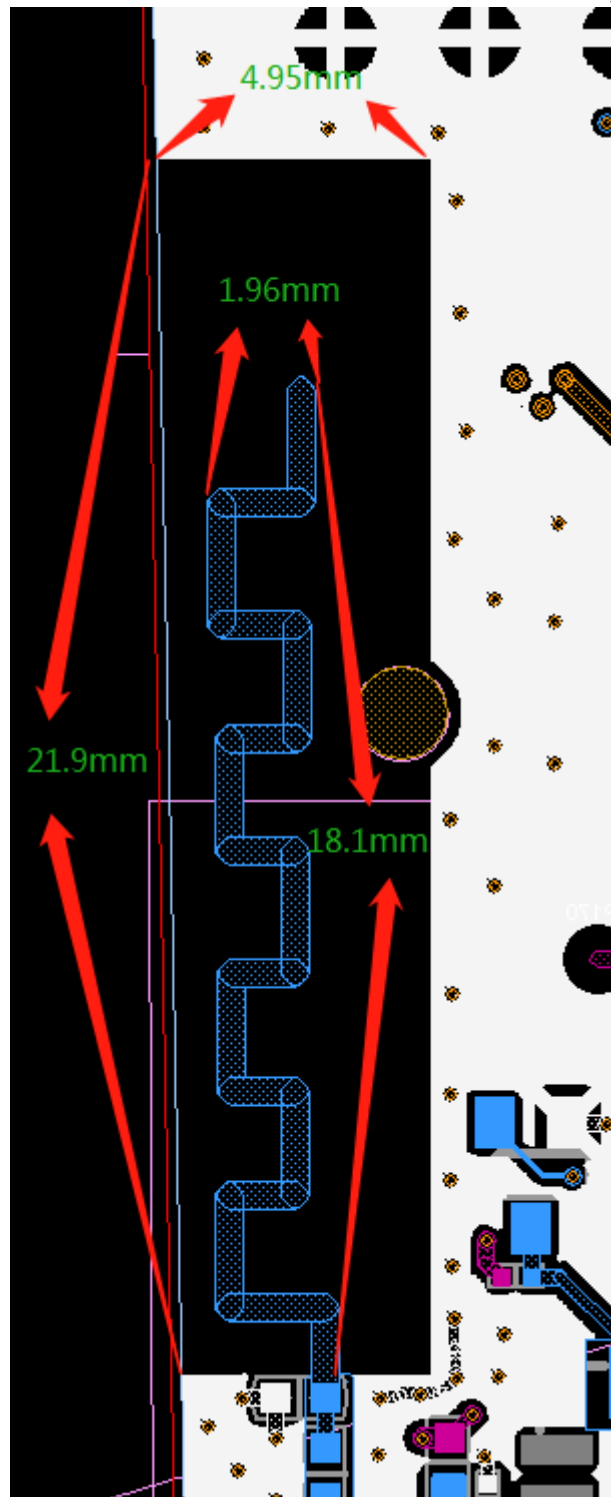
2450MHZ



2500MHZ



8、Drawings





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