

			File number:
<i>Sample acknowledgement</i>			
<i>Specification For Approval</i>			
Customer:	Shenzhen Youwei Information Technology Development Co. LTD		
Customer:	SHENZHEN GUANGYUANFA ELECTRONIC CO., LTD		
Customer part number:		Supplier material number:	Y50-GYF-E710A-WIFI-V1.0
产品描述:	FPC one pair half Material 9471 Back glue +1.13 black coaxial 65mm 1 generation terminals	Accessory model:	
Supplier acknowledgement (seal):		Customer acknowledgement (seal):	
Produced by: Shaosen Guo	structure: Shaosen Guo		
audit: Junhua Jiu	date: 2022.06.07		

directory

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WIFI antenna

1.Specifications

1.1 Electrical Specifications

This report mainly provides the test status of various electrical and structural performance parameters of WIFI antenna.

Specification and model	Wide source material number
WIFI antenna	Y50-GYF-E710A-WIFI-V1.0

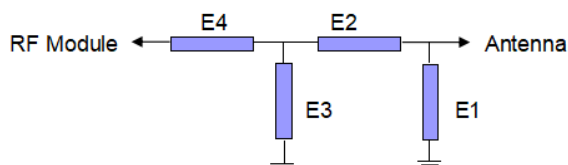
1.2Antenna frequency range

The following table is indicative of the electrical performance of wide-source antennas designed and mass-produced.

Introduction to project debugging

Machine type	sweeper			
Antenna type	FPC			
Frequency band and antenna material	Main antenna	Frequency band		material
		2G	/	FPC
		3G	/	
		LTE	/	
	Other antennas	Secondary antenna	/	FPC
		WIFI+GPS+BT	WIFI	FPC
Performance requirement	Execute according to customer requirements			

2.Match the circuit diagram



GPS WIFI BT antenna	Element	Value
	E1 (0402)	N/A
	E2 (0402)	0 ohm
	E3 (0402)	N/A
	E4 (0402)	0 ohm

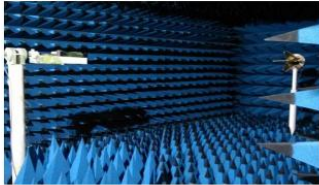
3. Structure and form

3.1 Antenna composition

The antenna is mainly composed of flexible line printing plate + coaxial line.

4. Test the equipment

Description of test equipment

			
24 Probe microwave darkroom	CMW500	7*4*3M ETS microwave darkroom	Agilent 8960
			
Agilent E5071B	High and low temperature test chamber	MT8820C	HP8753ES
Test system	Test environment	Active test	Passive test
ETS darkroom 24 probe OTA darkroom	Temperature: 22°C±3°C Humidity: 50%±15%	Supports 2G, 3G, and 4G Support for NB-IoT/CAT-M/BT/WIFI	400MHz—6G

5 . VSWR tests the connection

5.1 Test connection: The VSWR test device is connected successively as follows: R&S ZVL network analyzer → test line → test fixture.

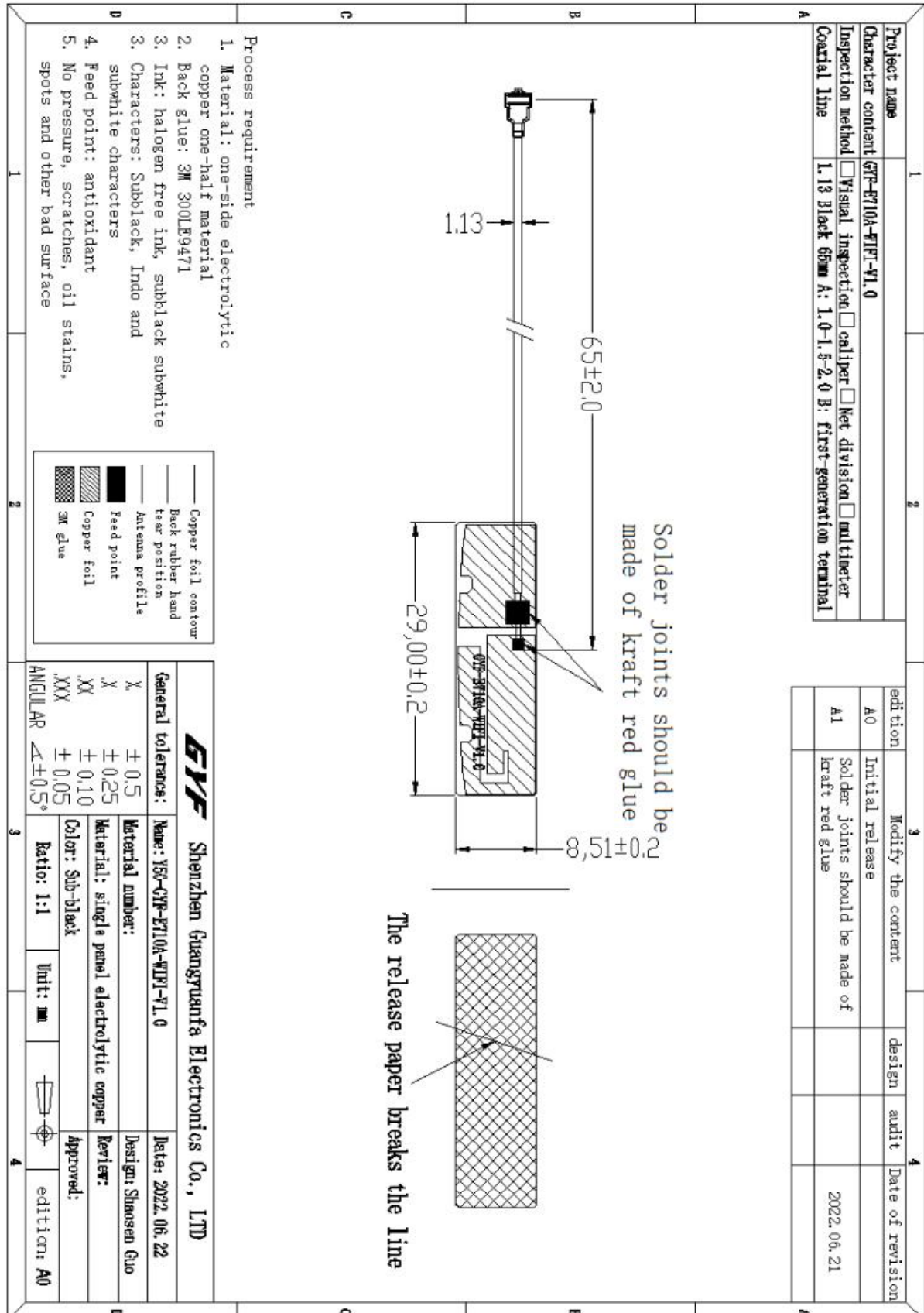
6. Test

6.1 Test site: Guangyuan microwave darkroom. The test frequency range is 400MHz -- 6GHz, the static range is 50cm circle, and the reflectance is less than -50 dB.

6.2 Instruments tested: Agilent5071B, CMW500, Agilent8960 E5515C, standard horn antenna, 24 probe OTA microwave darkroom test system, printer, etc

7.Drawing specification

7.1Drawing



7.2 Sample size detection

Project name	WIFI		Finished material number	Y50-GYF-E710A-WIFI-V1.0		date	2022.06.07	
item	specification	Measured data					decision	remarks
		1	2	3	4	5		
1	29.00	29.06	29.11	29.09	29.12	29.09	OK	
2	8.51	8.52	8.59	8.54	8.68	8.53	OK	
3	1.13	1.11	1.10	1.12	1.13	1.11	OK	
4	65.00	65.69	65.52	65.76	65.14	65.93	OK	
5								
6								
7								
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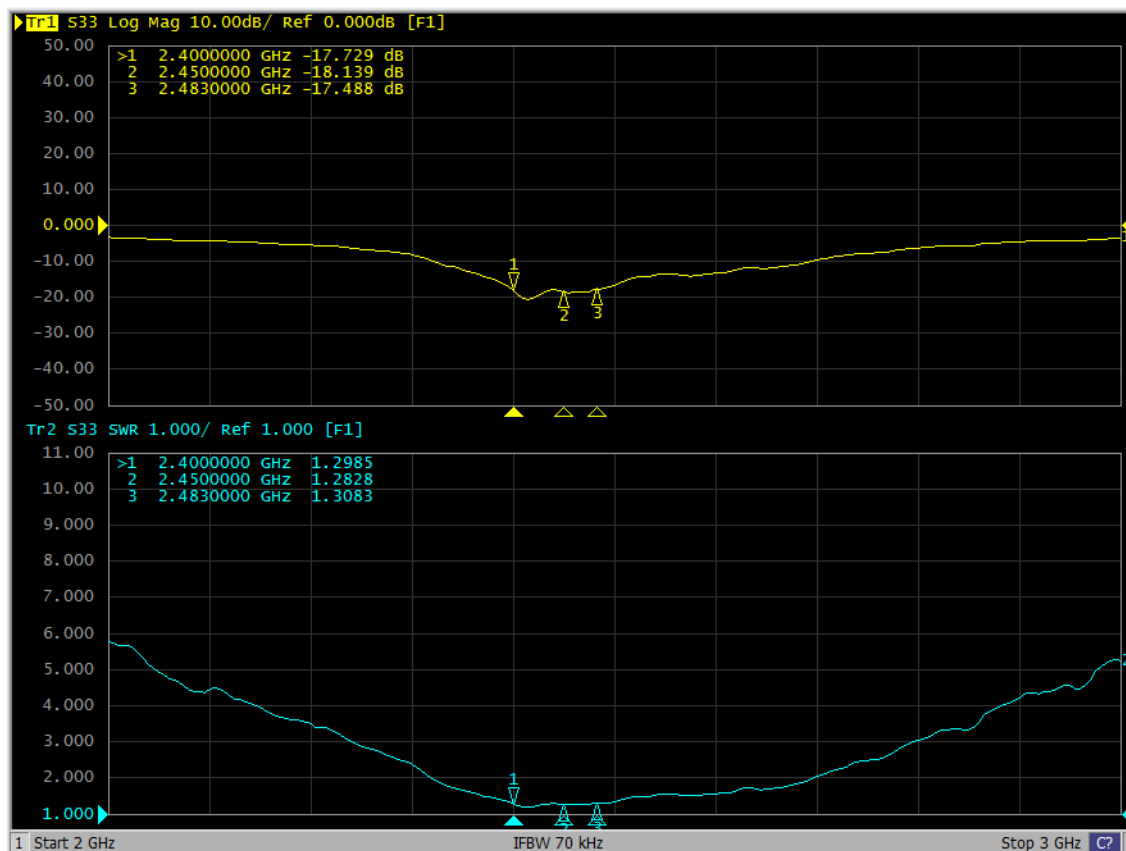
7.3 Bill of materials

Bill of materials

Project name	WIFI	Finished material number	Y50-GYF-E710A-WIFI-V1.0	date	2022.06.07
Bill of materials	category	material	specification	dosage	
1	fpcantenna	Half and half	29.00*8.51mm	1	
3	Coaxial line	copper	1.13*65mm First generation terminal	1	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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16					
17					
18					
19					
20					

8. Test report

Network analyzer test report

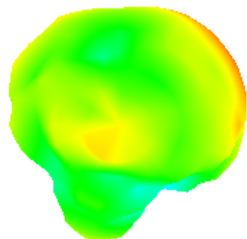


Antenna gain and efficiency

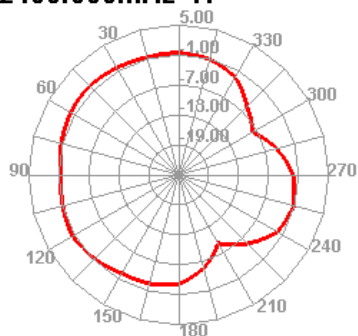
Frequency (MHZ)	Peak gain (dBi)	Efficiency (%)
2400	2.65	56.61
2450	3.00	61.27
2500	2.85	58.38

Dark room 2D、3DRaditation Pattern

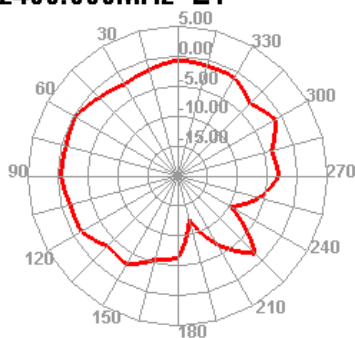
2400.000MHz



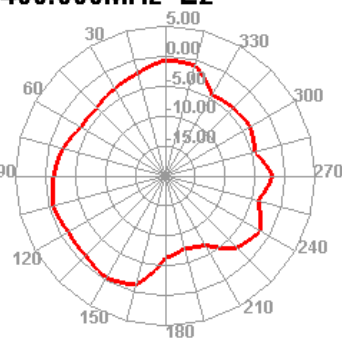
2400.000MHz H



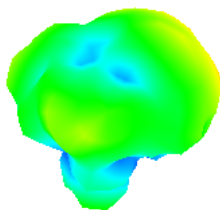
2400.000MHz E1



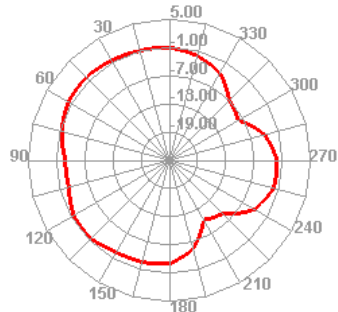
2400.000MHz E2



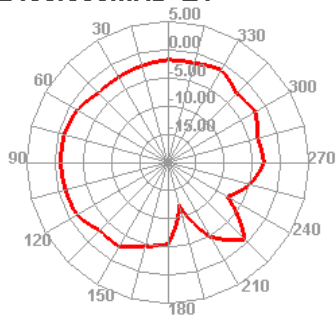
2450.000MHz



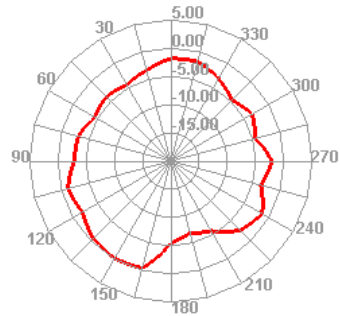
2450.000MHz H



2450.000MHz E1

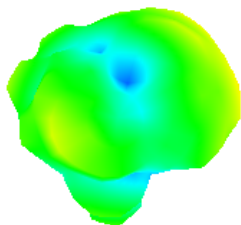


2450.000MHz E2

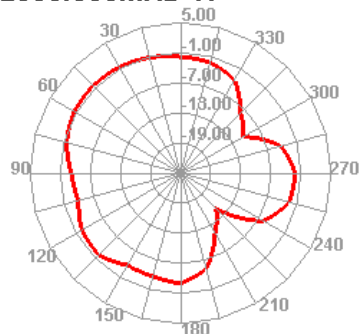


Dark room 2D、3DRaditation Pattern

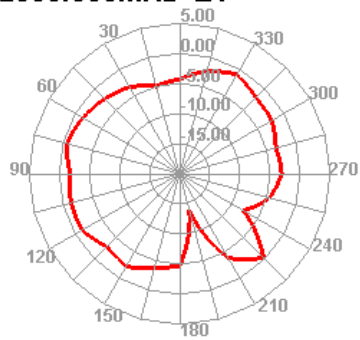
2500.000MHz



2500.000MHz H



2500.000MHz E1



2500.000MHz E2

