Shenzhen Aihui Technology Co. , Ltd.

Antenna specification

Antenna Sample Confirmation From

Name of supplier	ShenZhen Aihui Technology Co., Ltd				
Customer name	Wan mo si				
Sample name	Cable-01				
model					
Sample size	WIFI length: 70mm 4-generation terminal				
Inspection item	**Performance test**	**Visual inspection**	**Structure**	**In the news**	**Test results**
Notes					
Quality Audit		Project Audit		Business confirmation	
The following is to be completed by the client					

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Customer feedback	
Customer signature/seal	date:

Antenna Test Report

Test Unit: Shenzhen Aihui Technology Co. , Ltd.			
Materials	**FPC**		
Antenna form	**PIFA**	Polarization mode	**Linear**
Application	**Wifi /BT**		

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scenario			
Working band	**GSM/WCDMA/LTE/ WIFI/GPS/BT**	**VSWR**	**≤2**
Power	**Max：2W**	**Impedance**	**50Ω**
dBi	**≥**		
Test Equipment	**HPE5071C、Shielding Room、3D automatic turntable**		

Antenna Description:：

1. Grounding processing and picture description: no

2. Need to change the motherboard to match: no

- Test voltage: 3.6V, check the antenna contact is good before testing.
- The RF cable of the integrated tester is kept in a natural state and can not be curled.

Specification:test the specified power level, all indicators must conform to the specifications.

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1.Project Image

2.Test Fixture

3.Antenna matching circuit

4.S11 test

5.Antenna passive efficiency and gain

6.Darkroom test equipment and data

7.Schematic diagram of antenna assembly

8.Antenna environment handling

9.Antenna mass production index

10.Structural drawing

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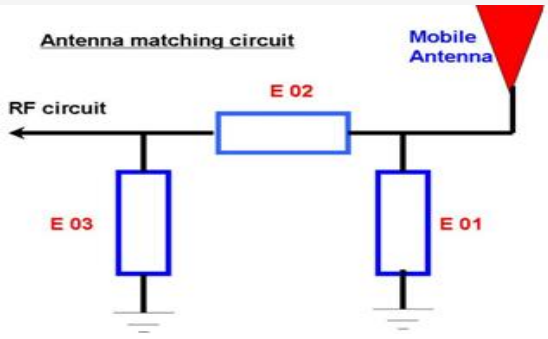
1.Project Image

The final verification antenna performance prototype in our company for at least one year, easy to analyze and solve the problem of antenna mass production, to ensure the quality of antenna shipment

2.Test Fixture

Objective: to test the passive parameters of antenna as accurately as possible. Making Method: the handset is made of a 50 ohm coaxial cable, one end of which is connected to the test point of the back end of the matching circuit of the handset motherboard (front end of the RF test hole) , and the other end is connected to the SMA joint. The diagram is as follows:

3、Antenna matching circuit



Modify

E01	E02	E03
No	No	No

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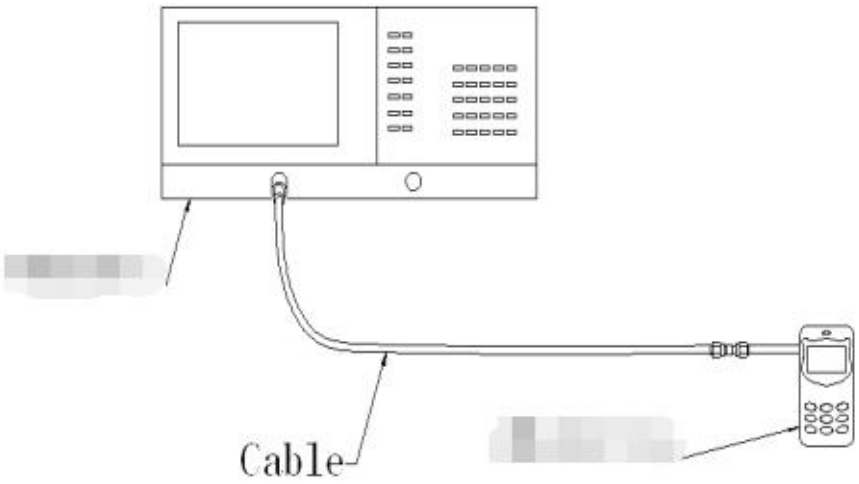
Note: The match is unmodified.

4.S11 test

4.0 4.0s11 test method description of test equipment: Network Analyzer (E5071C) test method: a 50 ohm CABLE is used to export from the instrument test port. The SMA connector for connecting the handset is calibrated using a calibration piece, record the echo loss and standing wave ratio corresponding to the relevant frequency points. The test schematic is as follows:



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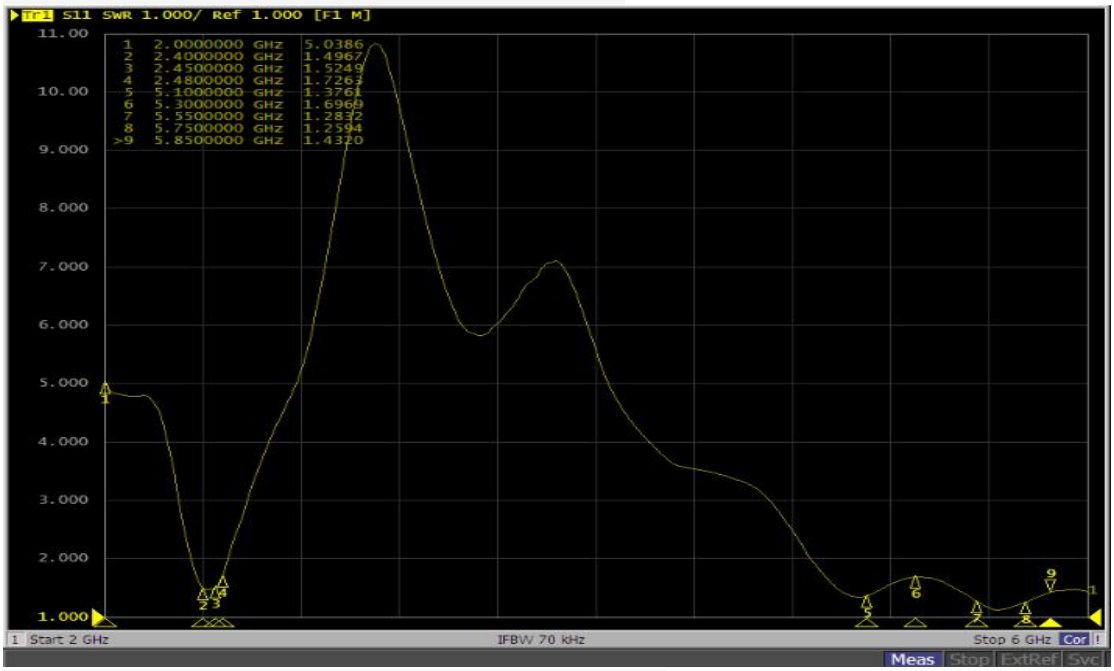
5.Passive VSWR of antenna



5.2 Passive antenna test data

Test data：		
WIFI 2. 4G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
2400	54.25	1.61
2410	55.86	1.92
2420	57.96	1.99
2430	57.16	2.10
2440	58.11	1.89
2450	59.30	1.71

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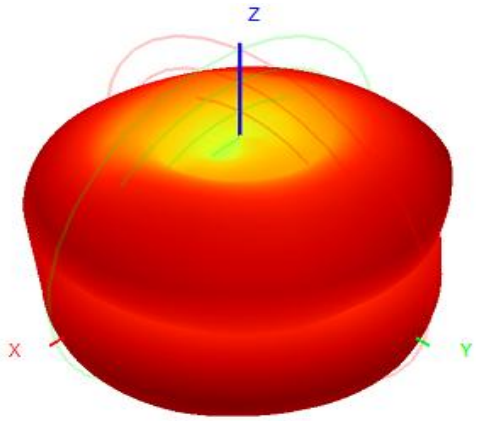
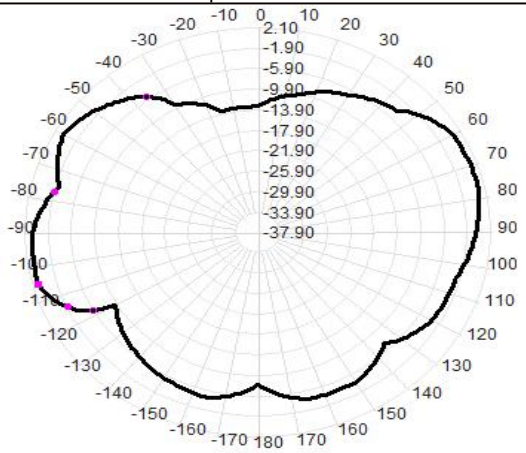
2460	54.55	1.63
2470	52.31	1.45
2480	54.36	1.88





Test data：		
WIFI 5. 8G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
5000	59.65	1.30
5100	57.15	1.11
5200	58.22	1.93
5300	56.93	1.25
5400	57.16	1.71
5500	58.66	1.60
5600	52.63	1.49

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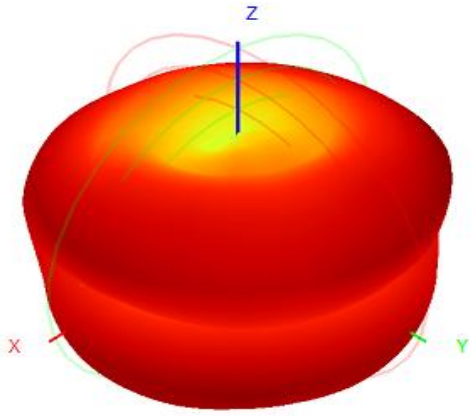
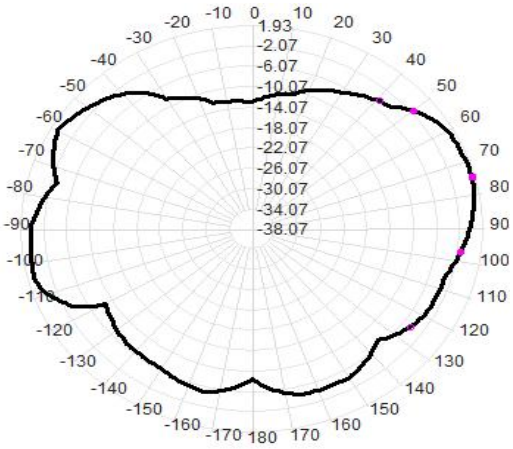
5700	54.82	1.62
5800	54.63	1.71
5850	55.16	1.93



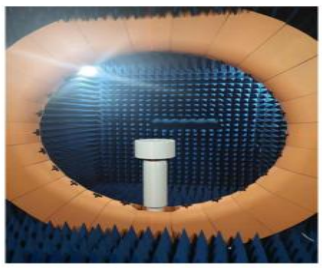


6.Test Equipment

Test system: shielded darkroom

The temperature was 22 ° C ± 3 ° C and the humidity was 50% ± 15%

Test equipment: when testing passive data, use the Network analyzer AGILENTE5071C to test active data, use the omnibus CMW500



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7.Antenna environment handling

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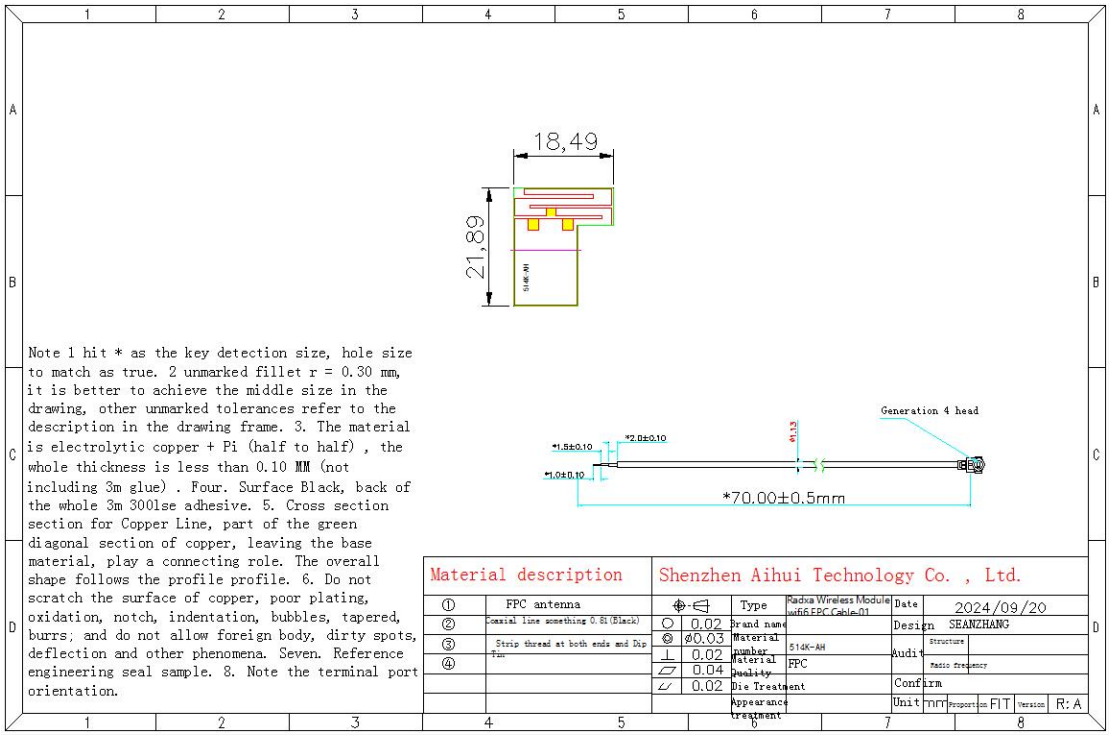
8.Antenna mass production index

When the antenna is mass-produced, the standing wave ratio is taken as the mass-produced test standard.
Based on the differences of the project itself, the following criteria are given:

Frequency	Standard for volume production
2400 MHZ -2500MHZ	VSWR (Mass Production performance) & LT; VSWR(recognition performance) 0.5
5100 MHZ -5800MHZ	VSWR (Mass Production performance) & LT; VSWR(recognition performance) 0.5

9.Structural drawings



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