Shenzhen Aihui Technology Co. , Ltd.

Antenna specification

Antenna Sample Confirmation From

Name of supplier	ShenZhen Aihui Technology Co., Ltd				
Customer name	You cheng				
Sample name	W30-YK-WGB-AH				
model	Tablet computer				
Sample size					
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					

Address: 402TEL: 0755-23203435fax: 0755-23203435, Block C, Juxin Science and Technology Industrial Park, Nanchang community, xixiang, Baoan District, Shenzhen

Customer feedback	
Customer signature/seal	date:

Antenna Test Report

Test Unit: Shenzhen Aihui Technology Co. , Ltd.			
Materials	Coaxial line+Copper pipes		
Antenna form	**FPC**	Polarization mode	**Linear**
Application	**Wifi**		

scenario			
Working band	2400Mhz-2500Mhz	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.

Shenzhen Aihui Technology Co. , Ltd.

---

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

Address: 402TEL: 0755-23203435fax: 0755-23203435, Block C, Juxin Science and Technology Industrial Park, Nanchang community, xixiang, Baoan District, Shenzhen

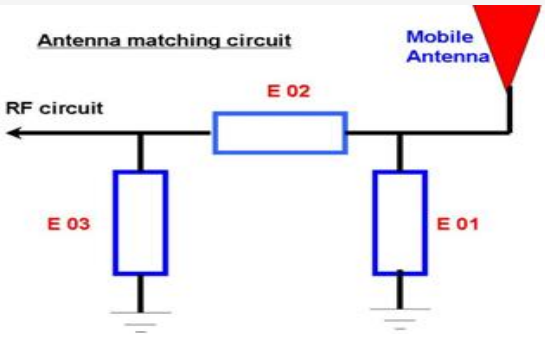
1.Project Image

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



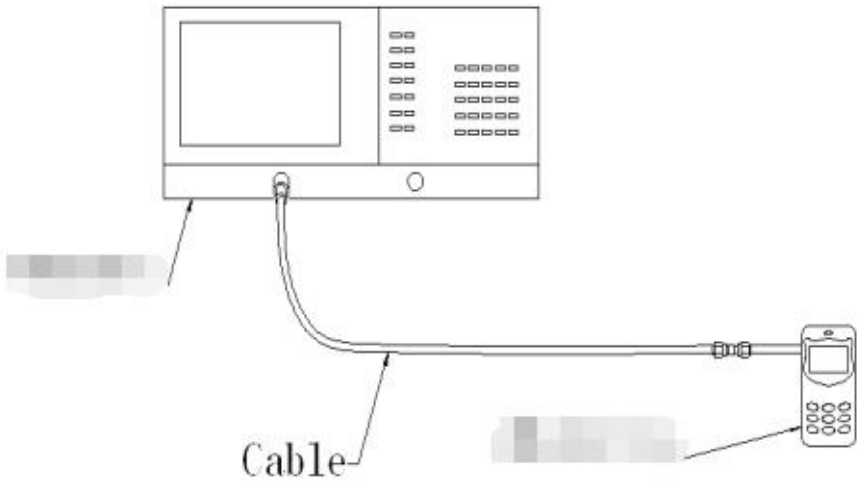
Modify

E01	E02	E03
No	No	No

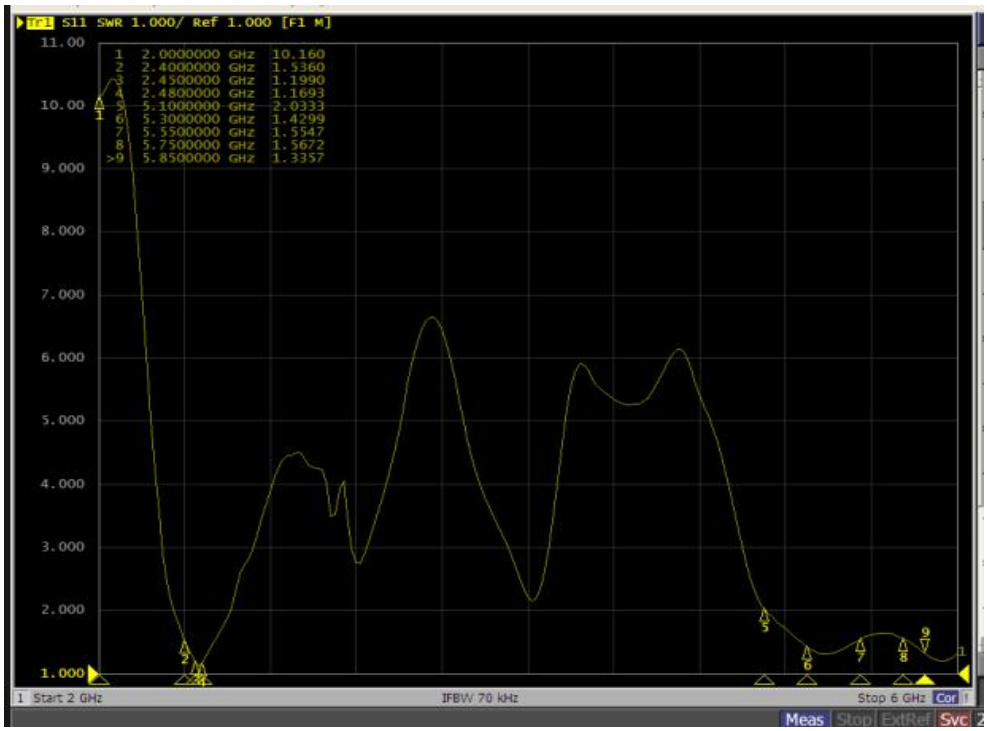
Note: The match is unmodified.

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:



5.Darkroom test equipment and data

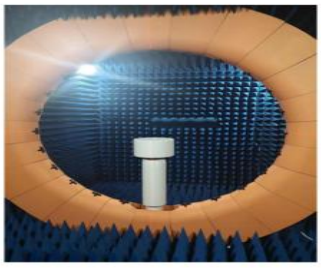


6.Test Equipment

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



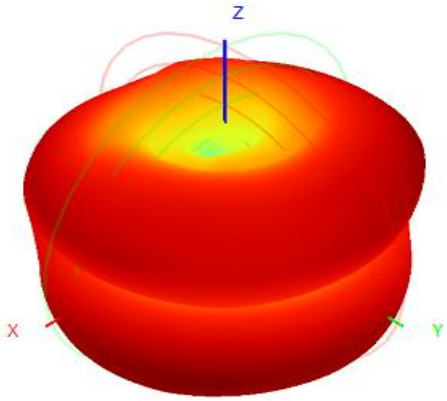
nce and

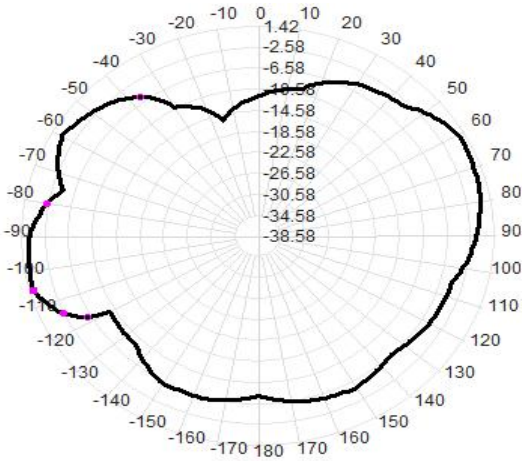
Shenzhen

7.Active antenna test data

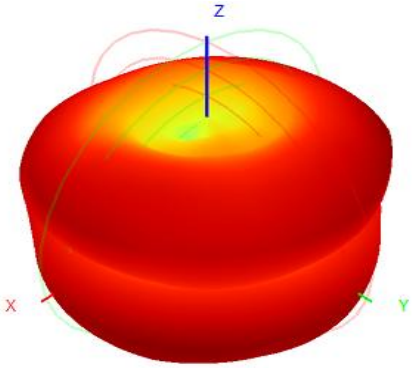
WIFITestData:		
WIFI: 2. 4G		
Frequency（MHZ）	Efficiency（%）	Gain（dbi）
2400	53.44	1.42
2410	52.52	1.44
2420	59.41	1.61
2430	57.66	1.48
2440	58.16	1.58
2450	52.30	1.65
2460	54.71	1.25
2470	58.41	1.14
2480	52.65	1.28
2490	57.41	1.41
2500	58.41	1.44

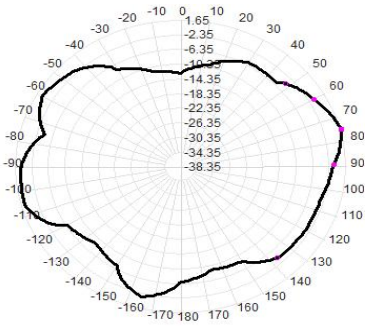
2.4 G


Z
X
Y

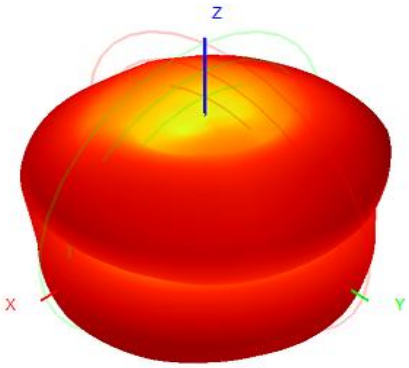

1.42
-2.58
-6.58
-10.58
-14.58
-18.58
-22.58
-26.58
-30.58
-34.58
-38.58

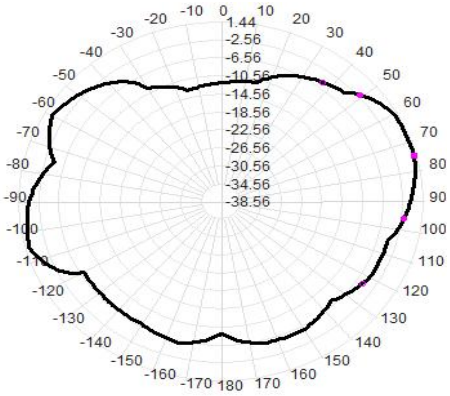
2.45 G


Z
X
Y


1.65
-2.35
-6.35
-10.35
-14.35
-18.35
-22.35
-26.35
-30.35
-34.35
-38.35

2.5G


Z
X
Y


1.44
-2.56
-6.56
-10.56
-14.56
-18.56
-22.56
-26.56
-30.56
-34.56
-38.56

8.Antenna source data

Frequency Band	2.4GWIFI-B模			2.4GWIFI-G模		
channel	L	M	H	L	M	H
TRP	17.54	16.55	16.45	16.55	15.41	15.33
TIS			-83.26			-72.31
Frequency Band	2.4GWIFI-N模					
channel	L	M	H	L	M	H
TRP	15.66	15.41	15.20	13.22	13.33	12.41
TIS			-69.52			-72.39

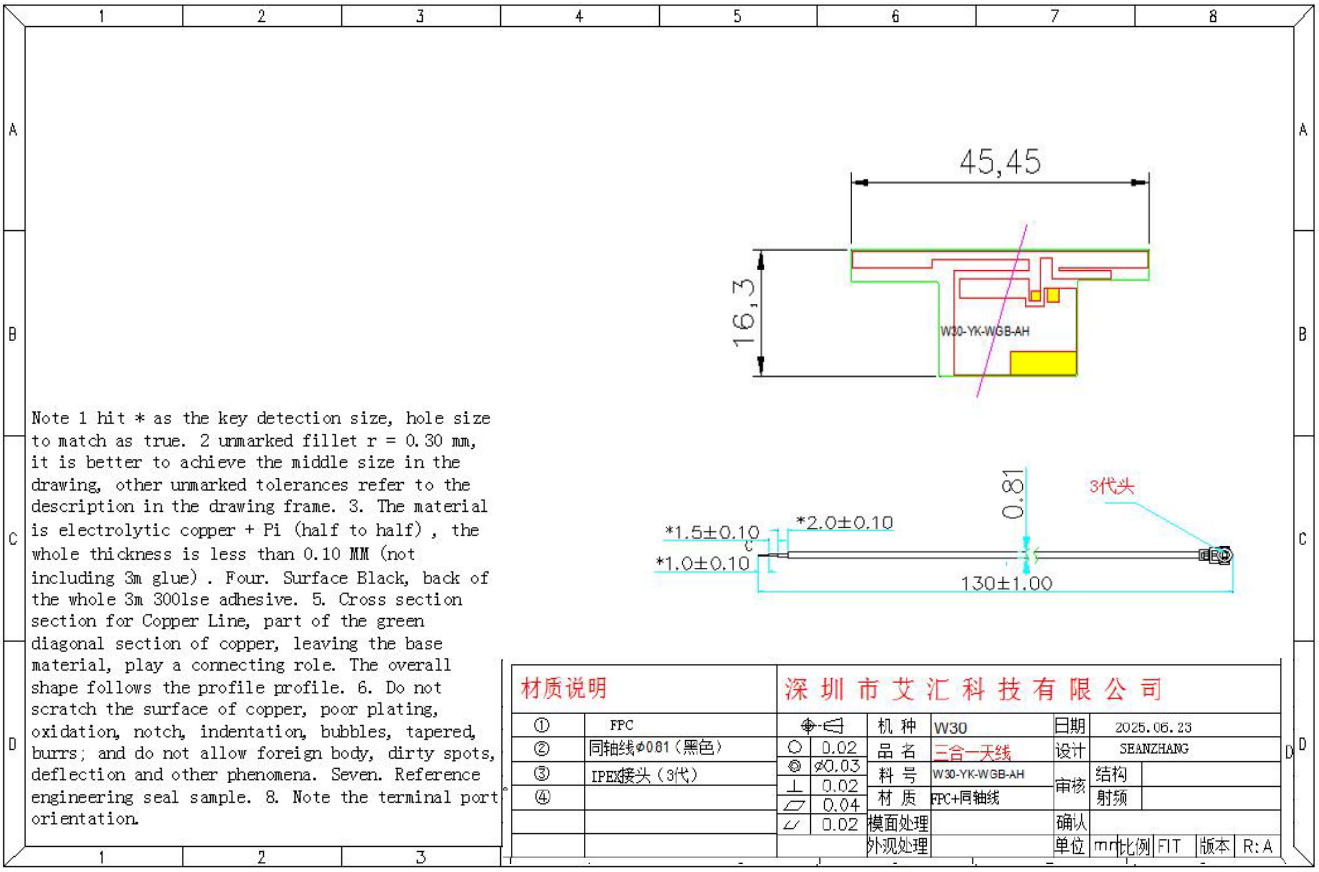
9.Antenna environment handling

Address: 402TEL: 0755-23203435fax: 0755-23203435, Block C, Juxin Science and Technology Industrial Park, Nanchang community, xixiang, Baoan District, Shenzhen

The original environment, we do not do processing

10.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

11.Structural drawings