

Antenna specification

Antenna Sample Confirmation From

Name of supplier	ShenZhen Aihui Technology Co. , Ltd				
Customername	Hai fu an				
Sample name	YHK-A523-1089				
model					
Sample size	ANT1:BT line length: 140mm 4 generation Gray ANT2:Wifi length: 80mm 4 generation black				
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					

Shenzhen Aihui Technology Co. , Ltd.

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 scenario	Wifi /BT		
Working band		VSWR	≤ 2
Power	Max : 2W	Impedance	50 Ω
dBi	\geq		
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.

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. Antenna environment handling

8. Antenna mass production index

9. Structural drawing

1. Project Image

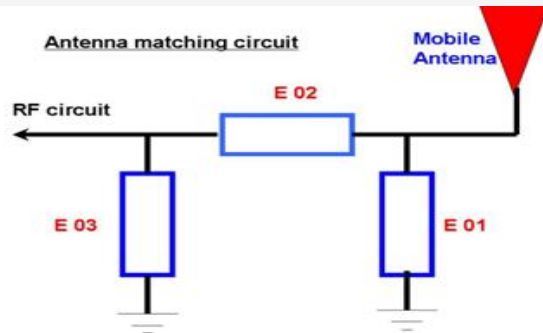
The final verification antenna performance prototype in our company for at least one year, easy to analyze and solve the problem of antenna mass production, to ensure the quality of antenna shipment

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



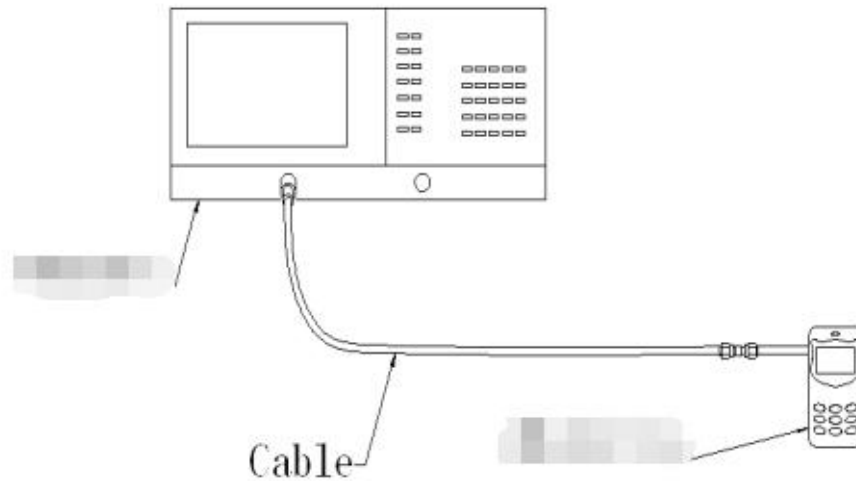
Modify

E01	E02	E03
No	No	No

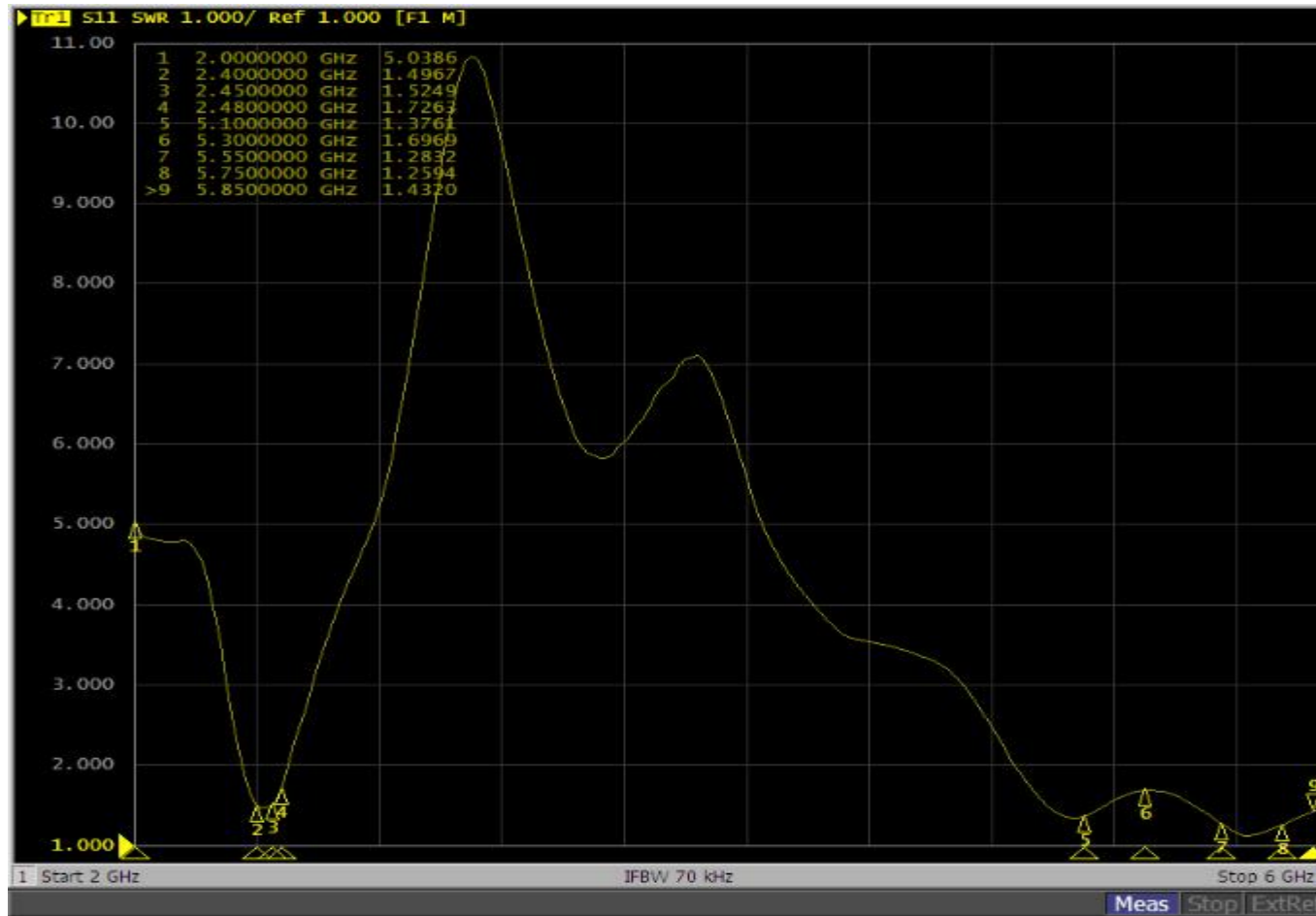
Note: The match is unmodified.

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.Passive VSWR of antenna



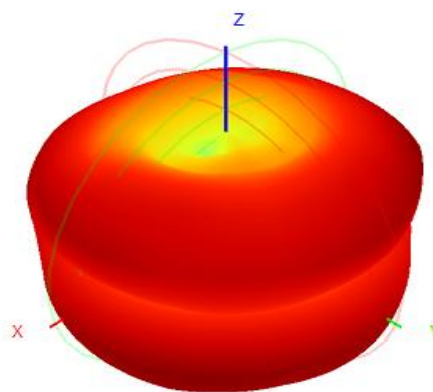
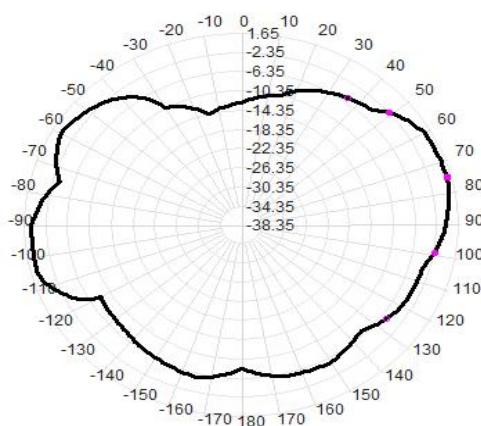
Frequency Band	2.4GWIFI-B模		
channel	L	M	H
TRP	13.25	13.22	13.41
TIS			-80.25
Frequency Band	2.4WIFI-N模		
channel	L	M	H
TRP	11.25	11.14	11.30
TIS			-67.24

5.1 Passive antenna test data

Test data :

WIFI 2.4G/BT

Freq(MHz)	Efficiency (%)	Gain (dBi)
2400	55.25	1.25
2410	55.41	1.47
2420	57.65	1.35
2430	59.65	1.44
2440	61.41	1.54
2450	60.54	1.52
2460	62.63	1.44
2470	64.15	1.65
2480	59.64	1.23

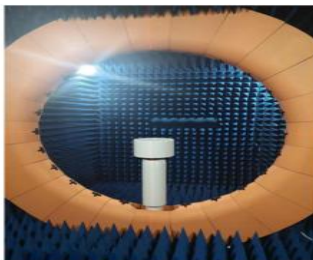


6.Test Equipment

Test system: shielded darkroom

The temperature was $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and the humidity was $50\% \pm 15\%$

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



7. Antenna mass production index

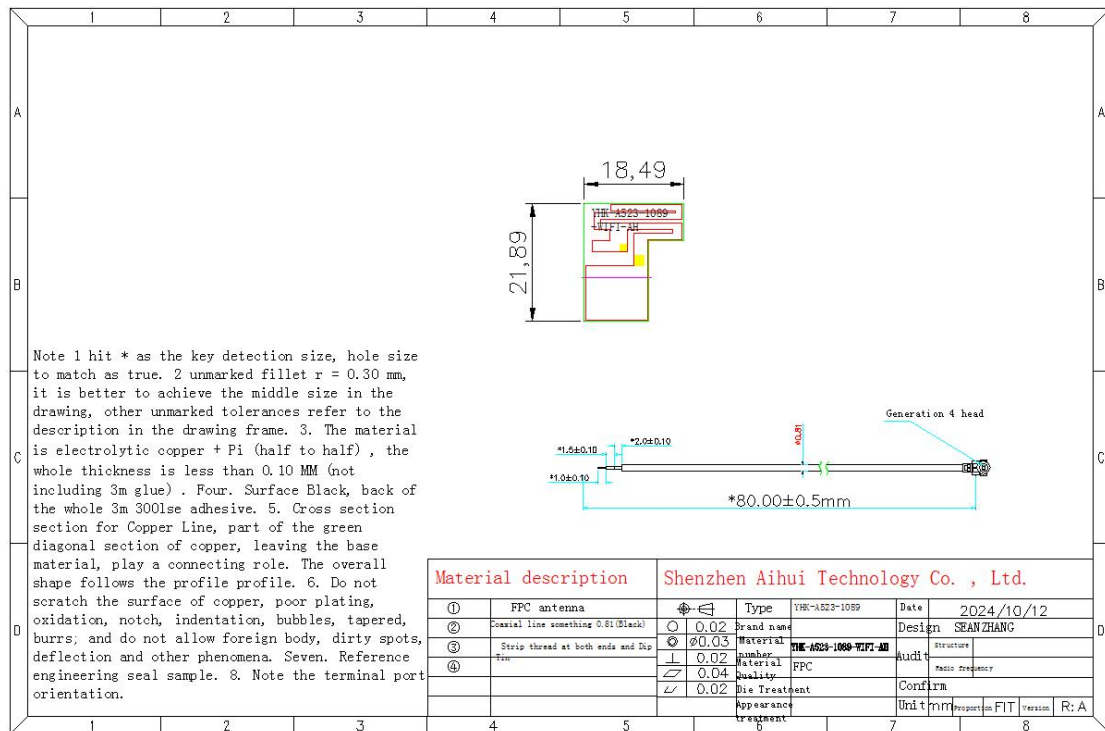
When the antenna is mass-produced, the standing wave ratio is taken as the mass-produced test standard.

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

8.Structural drawings

2.4GWIFI ANT



BT ANT

