规格承认书
Approval Sheet

客户名称 微星

(Customer Name）

产品名称 WIFI antenna

(Specification)

客户料号

(Customer P/N)

产品料号

(O/I)

送样日期 2024-01-15

（Date）

频段	WIFI		
版本	A		
射频	陈彦博	确认	
结构	杨学忠		
客户确认			
日期			

Null

1.Project picture

2.test fixture

3.building-out circuit

4. Test electrical performance

4.1 Test method specification standard

4.2 Parametric picture

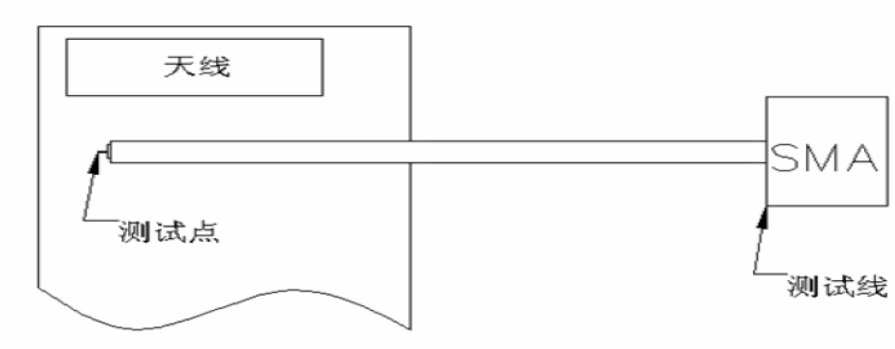
5.structural drawings

WIFI antenna

1. Passive testing

Objective: To test the passive parameters of antenna as accurately as possible.

Method: This fixture is a 50 ohm coaxial cable, one end of which is connected to the test point at the back end of the matching circuit of the mobile phone motherboard (the front section of the RF test hole), and the other section is connected to the SMA connector. The details are as follows:

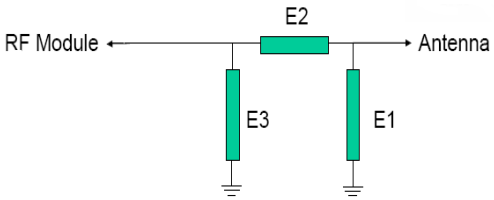


The following table is a test of the performance of the S7-WIFI production antenna：

WIFI antenna				
	frequency(MHz)	VSWR	frequency (MHz)	VSWR
frequency	transmitting terminal		receiving end	
2.4G WIFI	2400-2550	≤3.0	2400-2550	≤3.0

2.building-out circuit

Antenna (match unchanged)



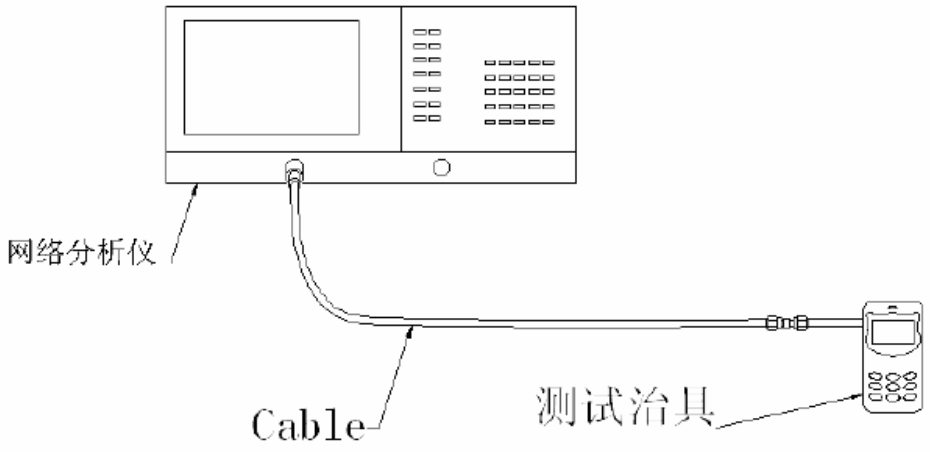
Element	Matched value
E1(0402)	
E2(0402)	0 Ohm
E3(0402)	

3. Test

3.1 Test method specification standard

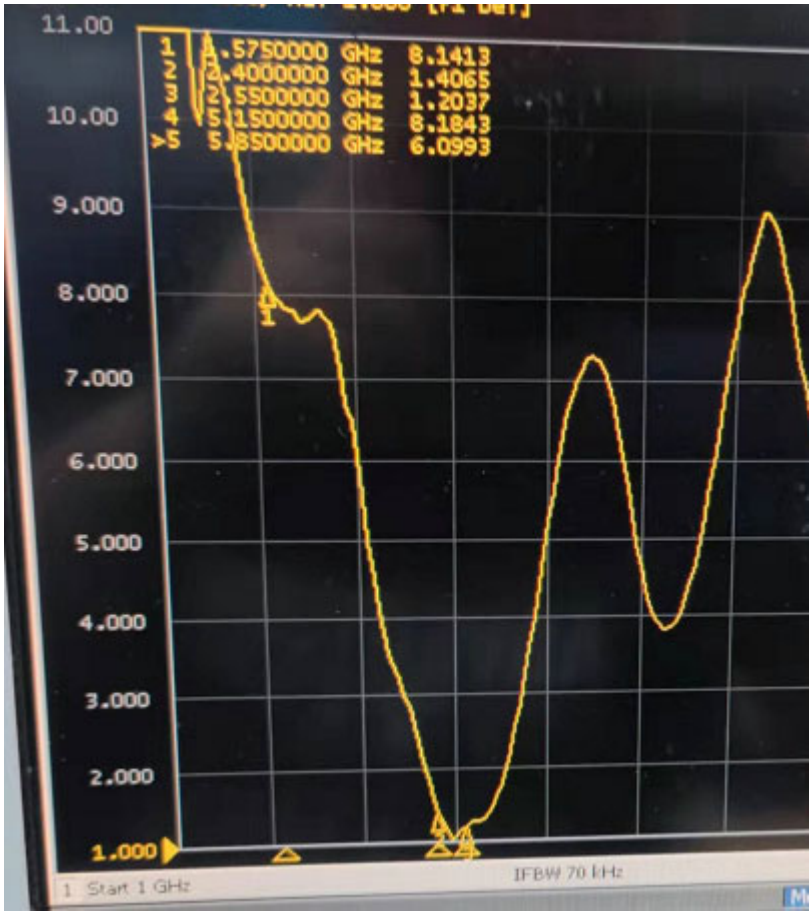
VSWR The test devices are successively connected as：E5071 Bnetwork analyzer→50 ohm coaxialCable→120mmLong copper pipe→test fixture。

Test fixture processing: From the antenna 50 ohm test point on the PCB of the mobile phone with a hard cable to lead out the SMA-J connector, connected with the copper tube with a choke, and then connected to other devices in turn。



Test diagram

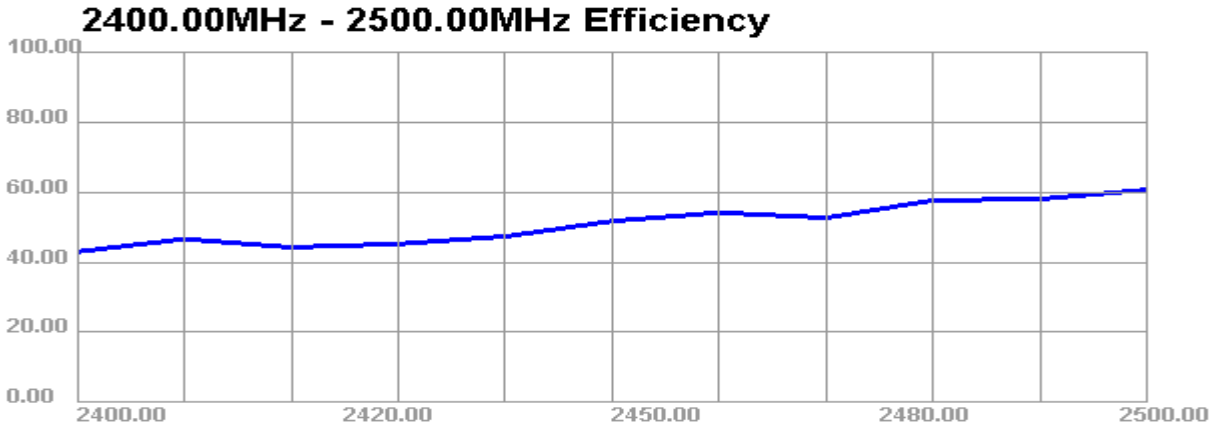
Passive standing wave pattern



2.4 Efficiency/gain

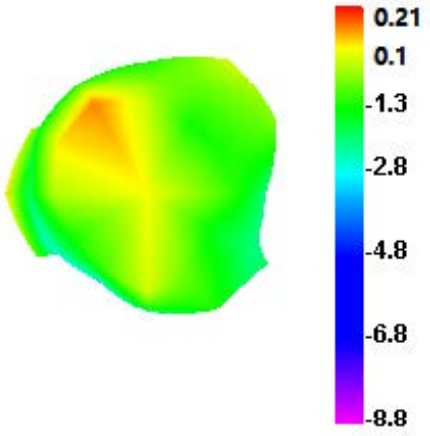
2.4G-WiFi		
Freq	Effi	Gain
(MHz)	(%)	(DBi)
2400	20.03	0.21
2420	22.26	0.31
2460	22.81	0.36
2480	24.38	0.42
2500	25.14	0.5

2.4 antenna effeciency：

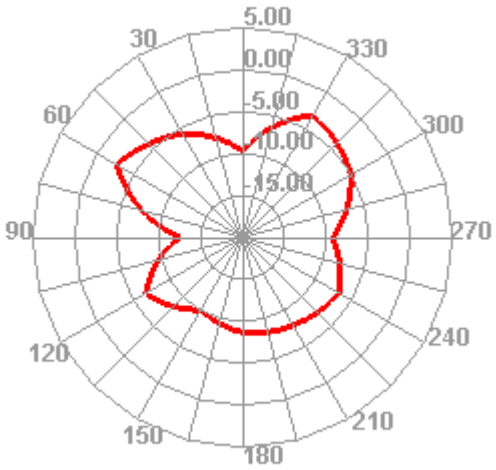


2.4 antenna pattern：

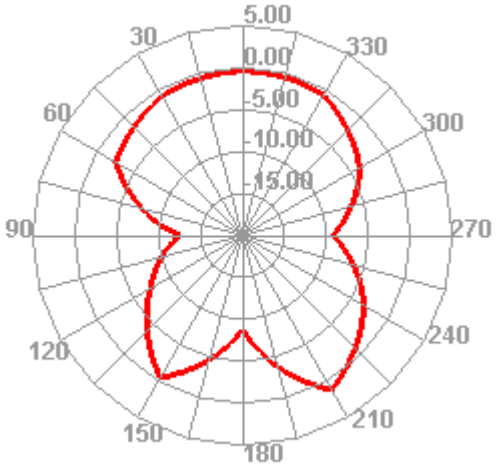
2400.000MHz



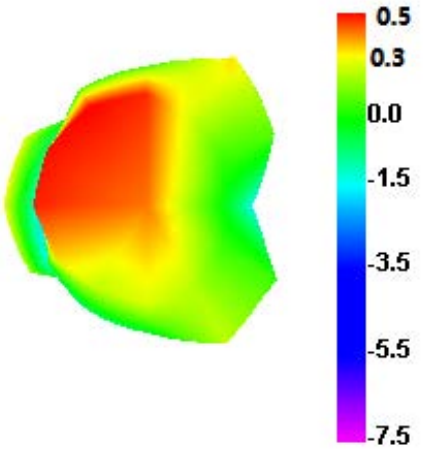
2400.000MHz H



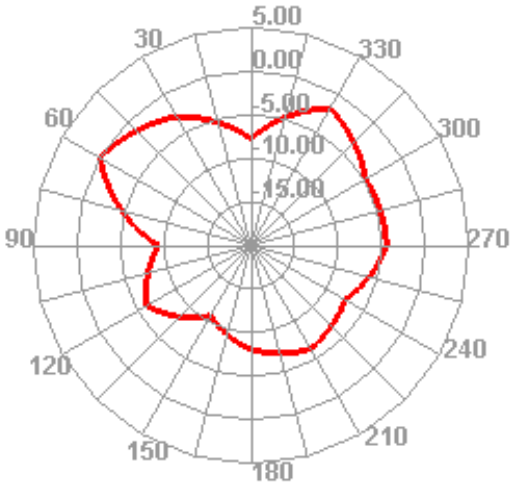
2400.000MHz E2

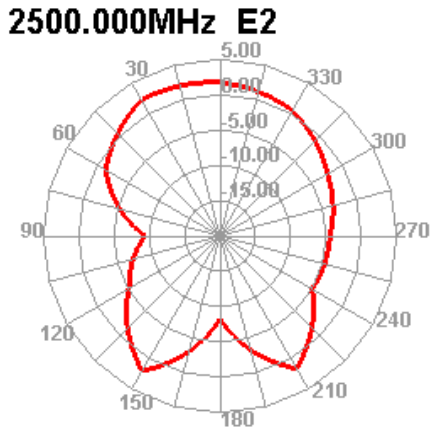


2500.000MHz



2500.000MHz H





The above tests meet the design requirements and the data is superior。

5：structural drawings