

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

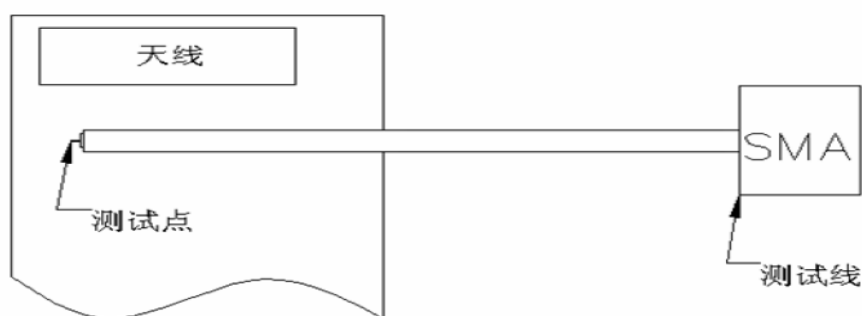
5.structural drawings

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:

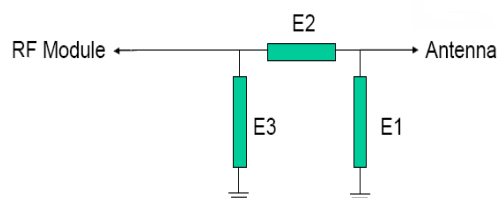


The following table is a test of the performance of the S7-WIFI production antenna:

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)



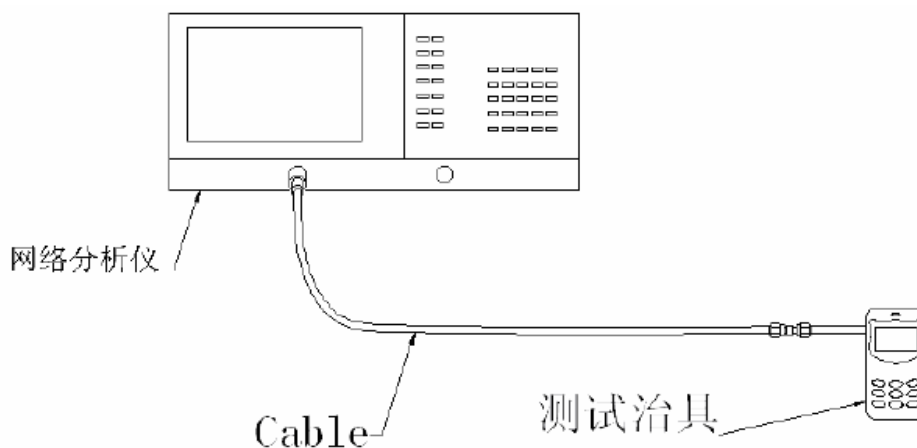
Element	Matched value
E1(0402)	
E2(0402)	0 Ohm
E3(0402)	

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

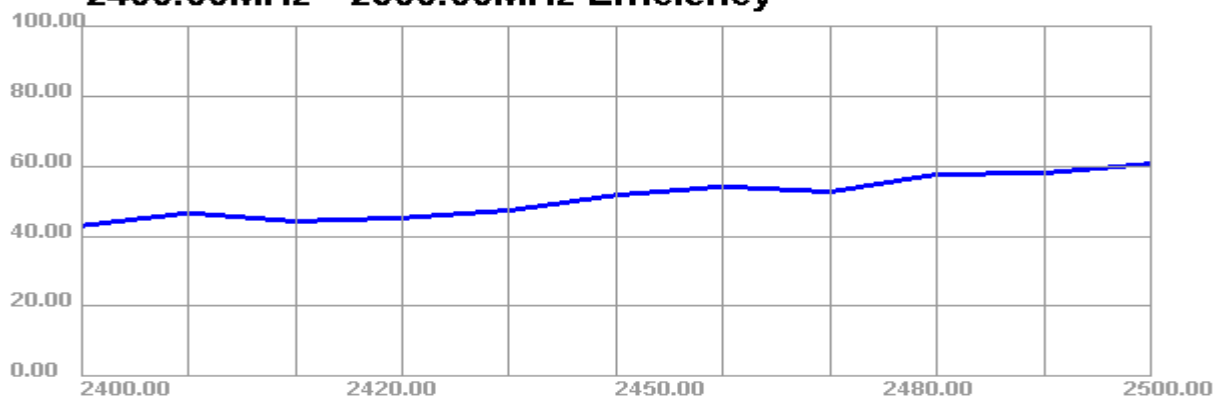


2.4 Efficiency/gain

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

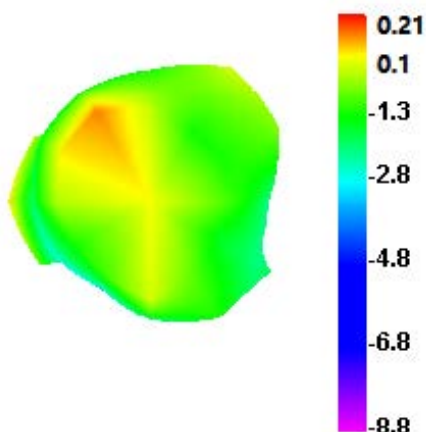
2.4 antenna efficiency:

2400.00MHz - 2500.00MHz Efficiency

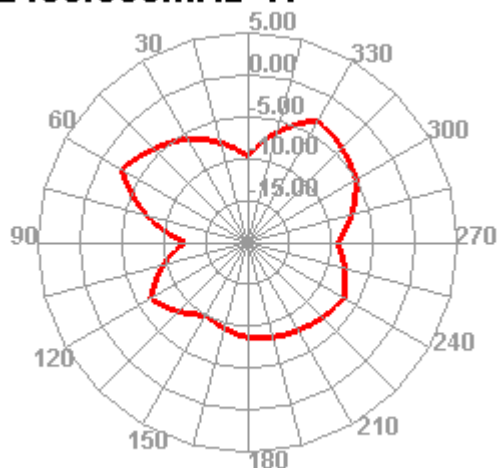


2.4 antenna pattern:

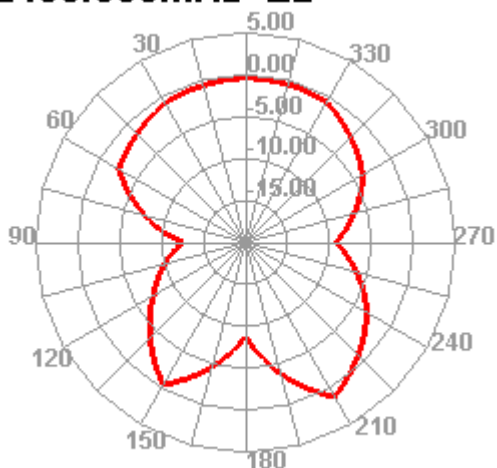
2400.000MHz



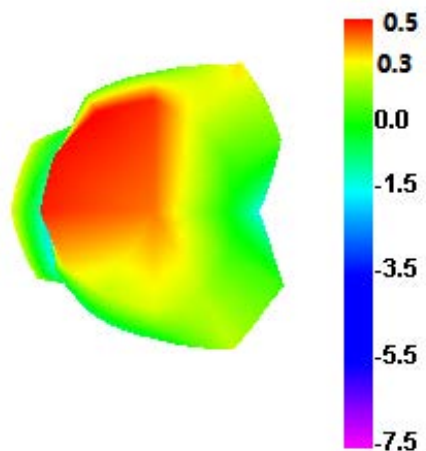
2400.000MHz H



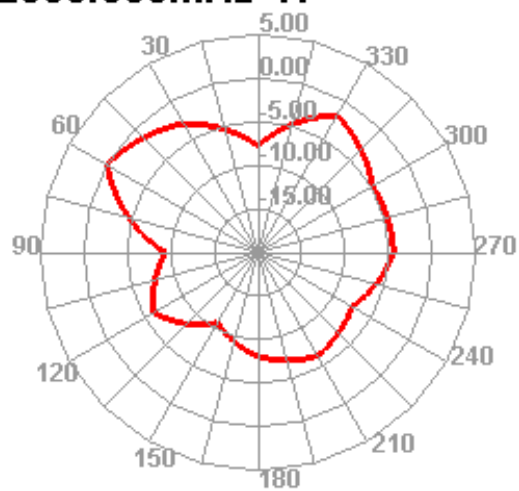
2400.000MHz E2



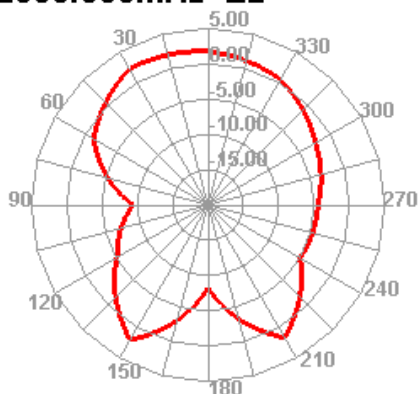
2500.000MHz



2500.000MHz H



2500.000MHz E2



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

5: structural drawings

1	2	3	4	5	6	7	8																																																		
料号	颜色	色号	供应商色号																																																						
<p>A 单位 (Unit):mm</p> <div style="text-align: center;"> </div> <p>B</p> <p>C</p> <p>注:</p> <ol style="list-style-type: none"> 1. "*"为重点尺寸,孔位以适配为准; 2. FPC材料:电解铜,一对半; 3. 反面背胶(背胶3M300-9471LSE); 4. 未标公差尺寸,模具冲出尺寸公差为±0.2, 铜箔线条尺寸公差为±0.05, 标重点的孔公差为±0.08; 5. 实心部分为镀金区,画斜线的为铜箔区,画交叉线的为背胶区; 6. 表面印油黑色亚光磨砂; 7. Pb、Hg、Cr+6、PBBs、PBDEs各项小于500PPM, Cd小于50PPM. <p>D</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td colspan="6" style="text-align: center;">深圳市德仕勤科技有限公司</td> </tr> <tr> <td style="width: 20%;">料号</td> <td style="width: 20%;">WJ-37</td> <td style="width: 20%;">日期</td> <td style="width: 20%;">20240116</td> <td style="width: 10%;">页码</td> <td style="width: 10%;">1 / 1</td> </tr> <tr> <td>项目编号</td> <td></td> <td>结构</td> <td>设计</td> <td></td> <td></td> </tr> <tr> <td>零件名称</td> <td>WIFI FPC(天线)</td> <td>结构</td> <td>设计</td> <td></td> <td></td> </tr> <tr> <td>零件料号</td> <td></td> <td>审</td> <td>核</td> <td></td> <td></td> </tr> <tr> <td>材</td> <td>质</td> <td>确</td> <td>认</td> <td></td> <td></td> </tr> <tr> <td>外</td> <td>表</td> <td>处</td> <td>理</td> <td></td> <td></td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 15%;">日期</th> <th style="width: 35%;">修改内容</th> <th style="width: 15%;">版本</th> <th style="width: 35%;">备注</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>								深圳市德仕勤科技有限公司						料号	WJ-37	日期	20240116	页码	1 / 1	项目编号		结构	设计			零件名称	WIFI FPC(天线)	结构	设计			零件料号		审	核			材	质	确	认			外	表	处	理			日期	修改内容	版本	备注				
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