

Shenzhen 3good Wireless Technology Co., Ltd

# Specification

客户 Customer		规格型号 Specs	F071
三好料号 Part Number	<b>CQ-F071-01</b> <b>CQ-F071-02</b> <b>CQ-F071-03</b>	频 段 Frequency Band	BT&2.5G WIFI:2400~2483.5MHZ 5G WIFI:5100~5800MHZ
颜色 Color	black	版 本 Edition	
销售 Salesperson		设 计 Design	官炳坤
结构 Structure	李富伦	确 认 Confirm	周武
日期 Date		签字日期 Signing Date	
客户确认 Customer confirmation:			
Join hands to create the future			

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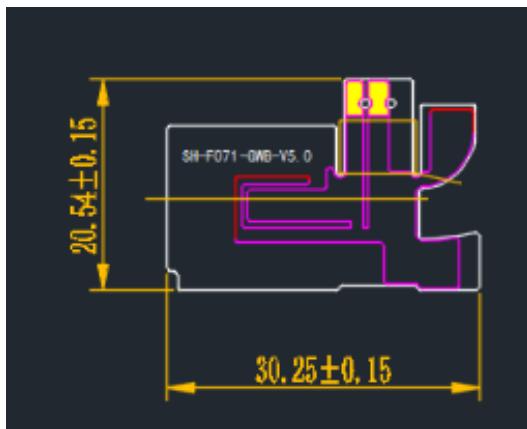
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## 一、 Product specifications

The report mainly provides parameter tests of S105 antenna performance. S105 antenna is 4G antenna. (As shown in the figure below)

### Three in one antenna



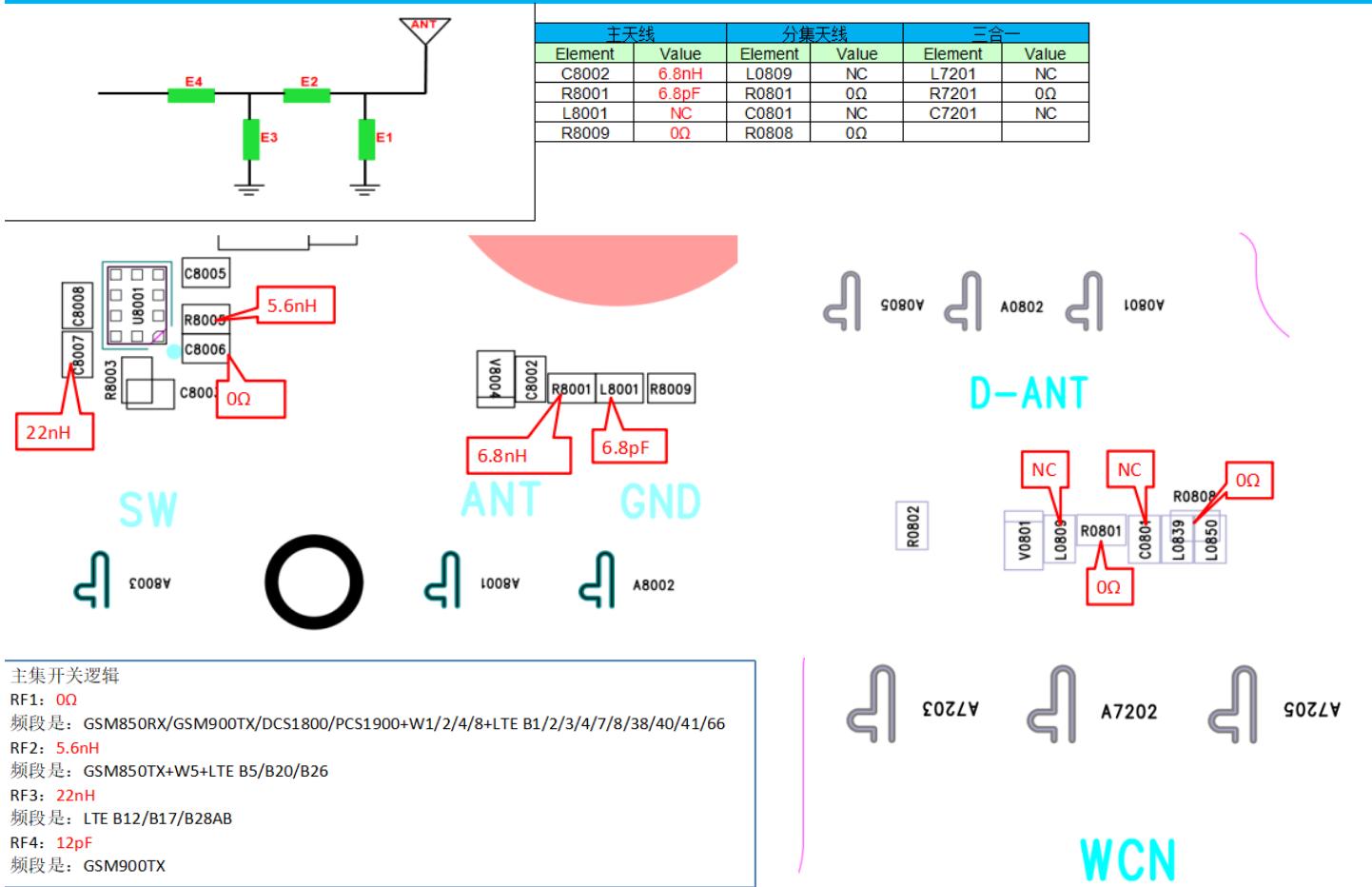
## 二、 Electrical performance

### 1.Specifications

The operating frequency band of F071 antenna is 2400-2500MHZ, in which resonance occurs.

### 2. Matching circuit of antenna

## Matching circuits (匹配电路)



Structure of antenna: FPC

### 三、Test of parameters

#### 1. Test settings

The connection of VSWR test device is:

E5071B network analyzer → 50 Ohmic coaxial Cable → 110mm Long copper tube → Test fixture

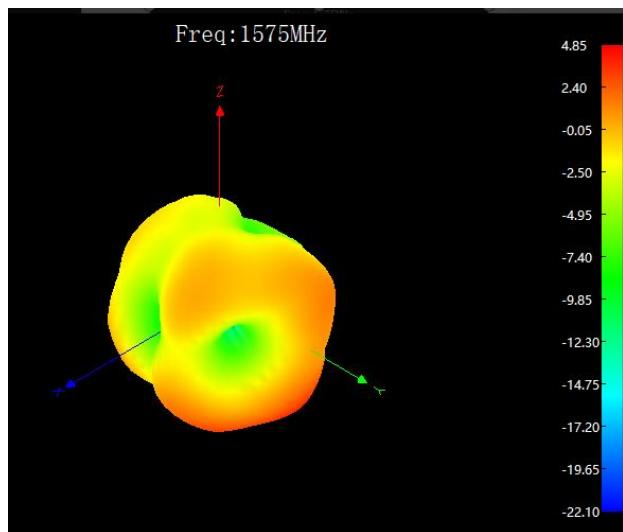
Treatment of test fixture: Use a hard cable to lead out the SMA-J connector from the 50 ohm test point of the antenna on the mobile phone PCB, connect it to the copper tube with a choke, and then connect other devices in turn.

**GPS/WIFI/BTPassive parameters of antenna:**

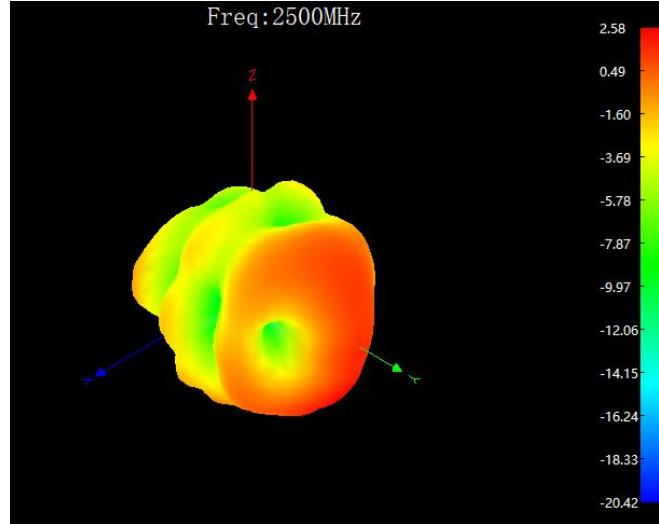
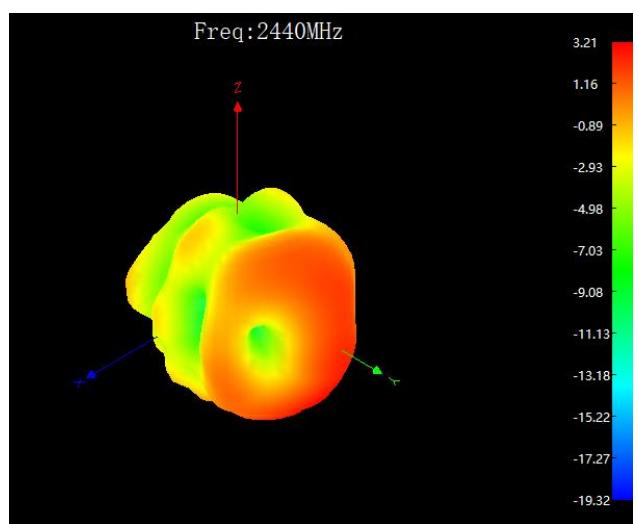
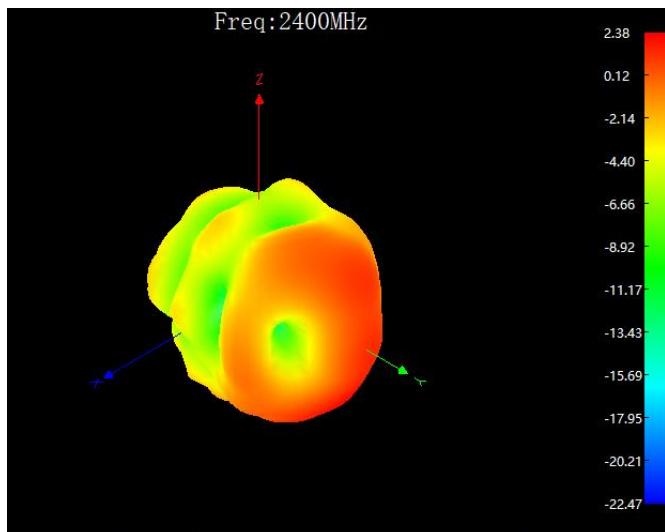
工作频段(Working frequency band): 1560~1580MHz, 2400~2500MHz, 5180~8525MHz

Gain			
频段 Band	gain 增益 (dBi)	频段 Band	gain 增益(dBi)
		2400MHz WIFI/BT	0.88
2440MHz WIFI/BT	0.77	2500MHz WIFI/BT	0.56
5150MHz WIFI	-0.68	5230MHz WIFI	-0.57
5850MHz WIFI	-0.75		

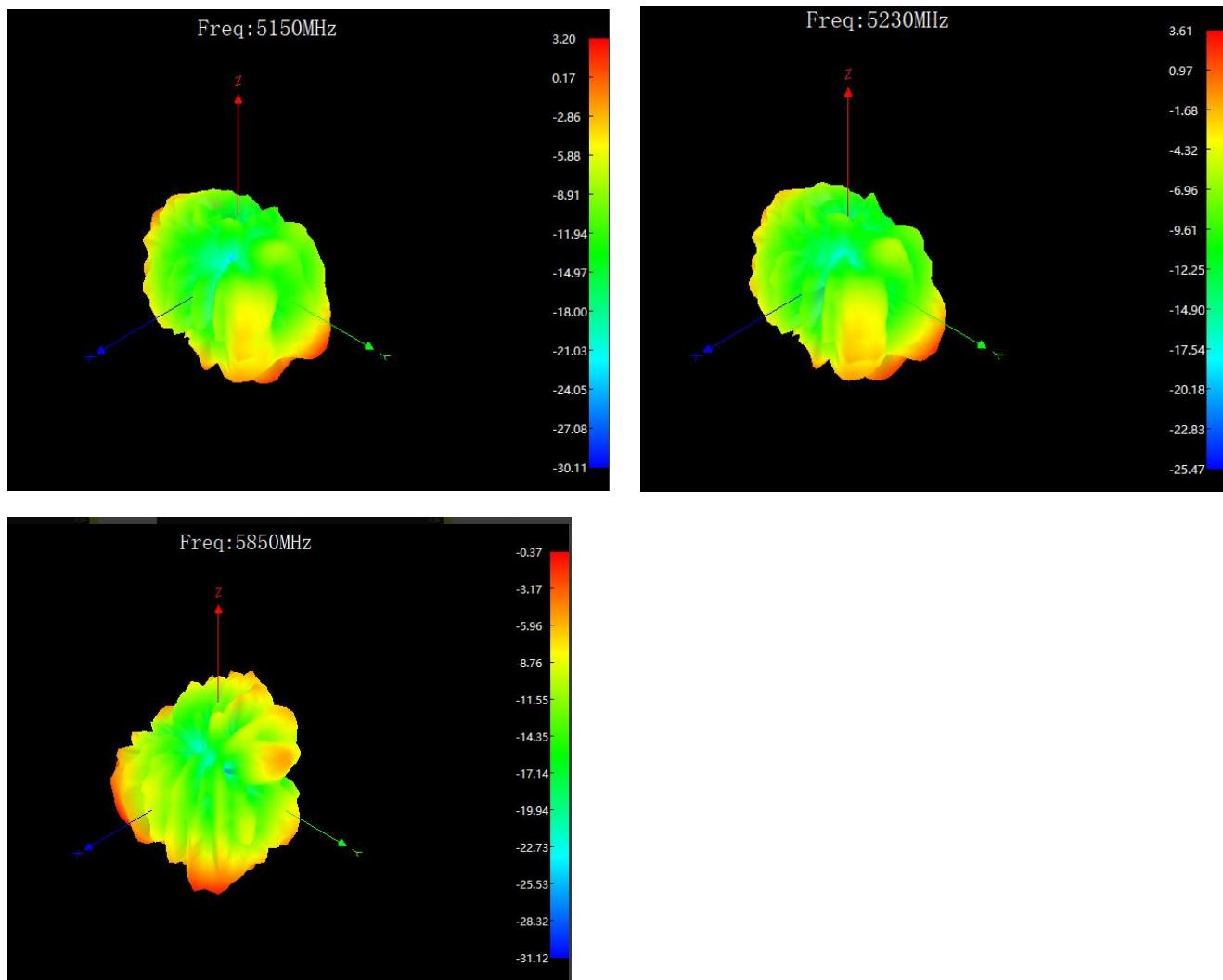
GPS



2.4G WIFI/BT



## 5G WIFI



## 2. test result

**business as usual.**

#### 四、 Active test setup

The active test devices are sequentially connected as follows:

Agilent8960 → 50Ohmic coaxialCable → Satimo system → Mobile phone to be tested

#### 1. Test site

**microwave anechoic chamber: the test frequency range is 400MHz - 6GHz, the quiet zone range is 40cm circumference, and the reflectivity is less than - 90 dB.**

## **2.test result**

**The maximum radiation power and maximum receiving sensitivity reflect the maximum power radiation value and the optimal receiving performance of the antenna in the entire radiation space. TRP and TIS reflect the average radiation power and average receiving sensitivity of the antenna, that is, the overall receiving performance of the antenna.**

**The following is the active test result of F071 mobile phone main antenna:**

### **2-1.Three in one test results**

灭屏			
	CH	TRP	TIS
WIFI-B	1	14.24	-82.33
	7	14.22	-82.36
	13	14.82	-82.5
WIFI-A	36	12.22	-72.65
	149	11.72	-72.23
	165	10.74	-70.88



10 meters online listening to music, making calls smoothly without interruption

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