

Shenzhen 3good Wireless Technology Co., Ltd

# Specification

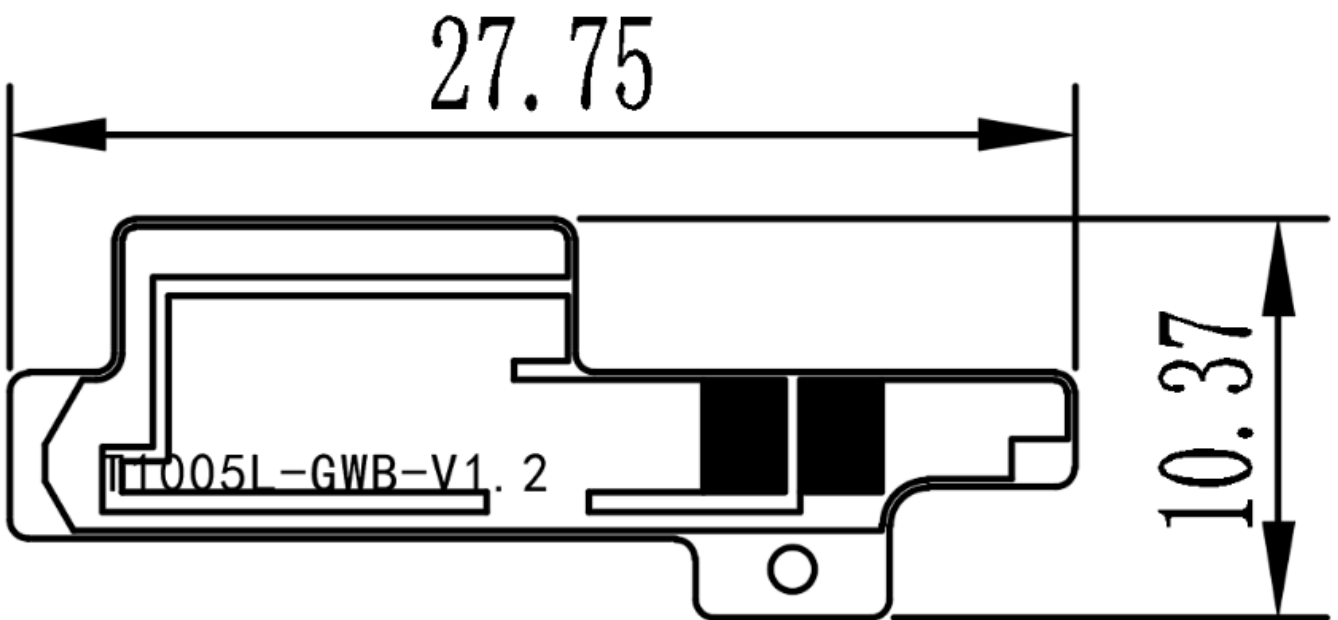
客户 Customer	Cloud base	规格型号 Specs	T1005L
三好料号 Part Number	<b>T1005L-01</b> <b>T1005L-02</b> <b>T1005L-03</b>	频段 Frequency Band	BT&2.4G WIFI:2.4G/5.8G GSM850/900/1800/1900 WCDMA1/2/5 B2.4.5.12.66.71.41
颜色 Color	black	版本 Edition	REV:A1
销售 Salesperson		设计 Design	叶金强
结构 Structure	李富伦	确认 Confirm	周武
日期 Date		签字日期 Signing Date	
客户确认 Customer confirmation:			
Join hands to create the future			

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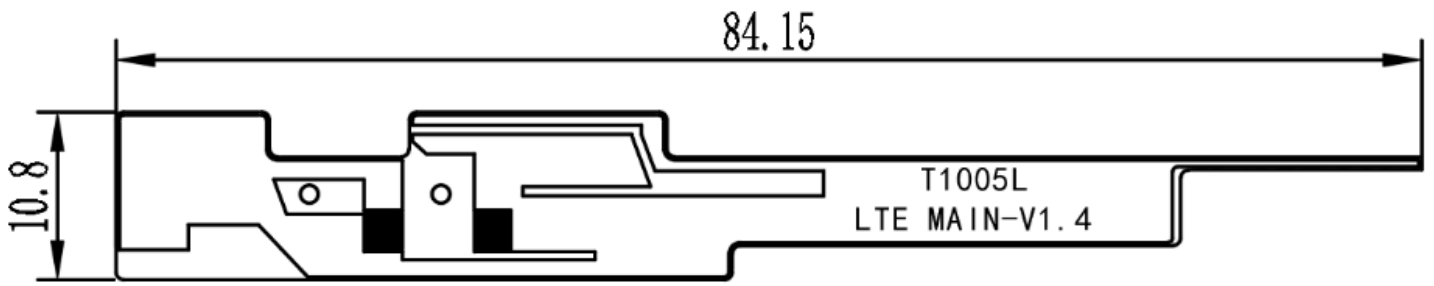
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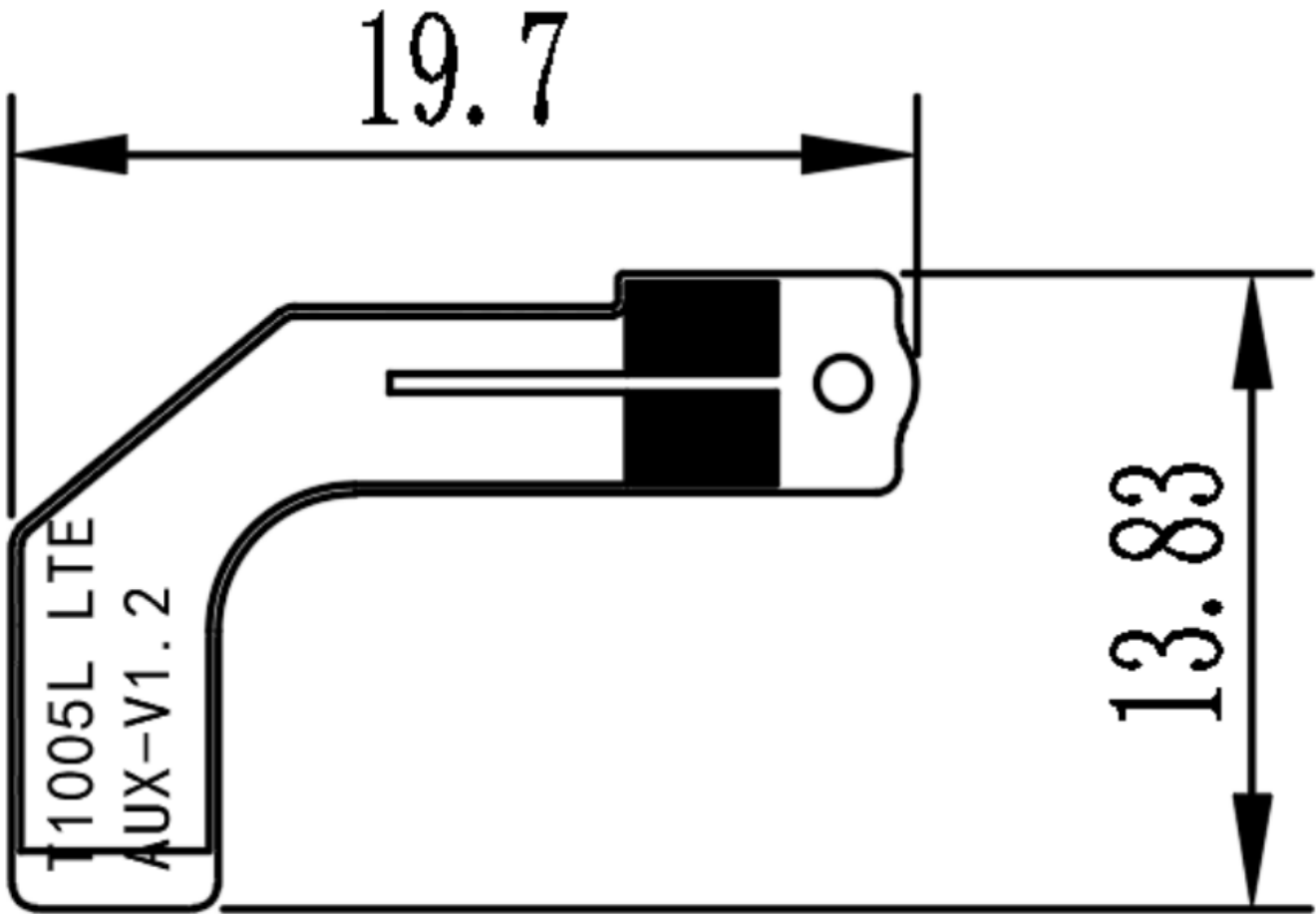
Three in one antenna



### Main set antenna



### Diversity antenna

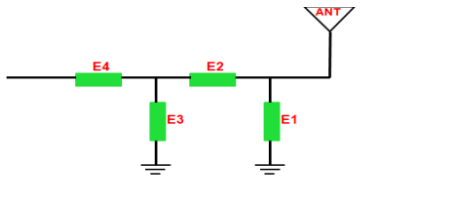


## 二、Electrical performance

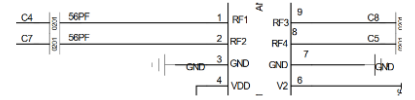
### 1.Specifications

The operating frequency band of K55B1 antenna is 699~960MHZ and 1710~2700MHZ, in which resonance occurs.

### 2.Matching circuit of antenna

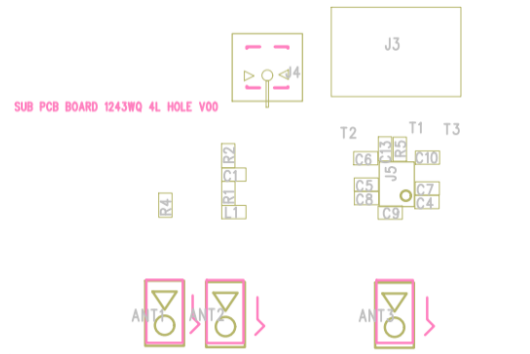


主路匹配		开关匹配	
Element	Value	Element	Value
L1	10NH	RF1	0Ω
R1	3.3PF	RF2	12NH
C1	NC	RF3	10PF
R2	0Ω	RF4	18NH



主天线主路匹配改动如右图标记。

开关配置如下：  
 RF1路， 0Ω: GSM850/1800/1900+W1/2/5+FDD2/4/5/66/41  
 RF2路， 12NH: FDD12  
 RF3路， 10PF: GSM900  
 RF4路， 18NH: FDD-71

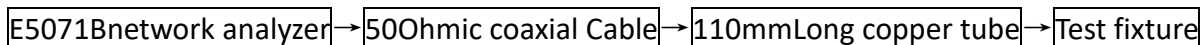


Structure of antenna: FPC

### 三、Test of parameters

#### 1.Test settings

The connection of VSWR test device is:



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.

### Passive parameters of main antenna:

工作频段(Working frequency band): 600~960MHZ, 1710~2700MHZ

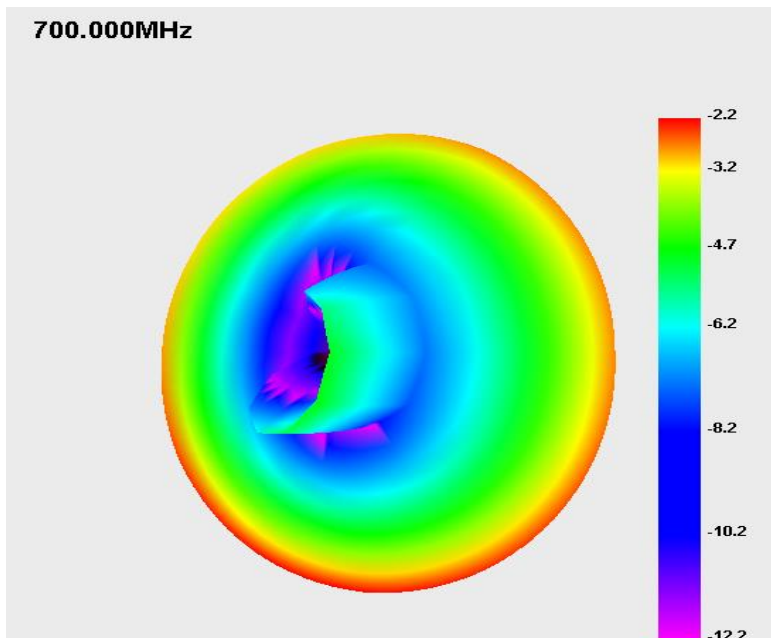
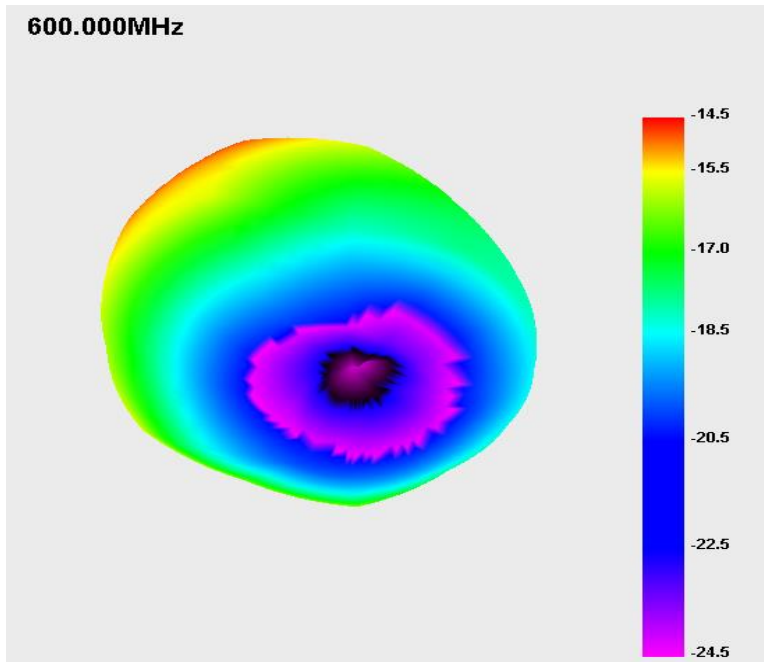
GSM850/900/1800/1900

WCDMA1/2/5

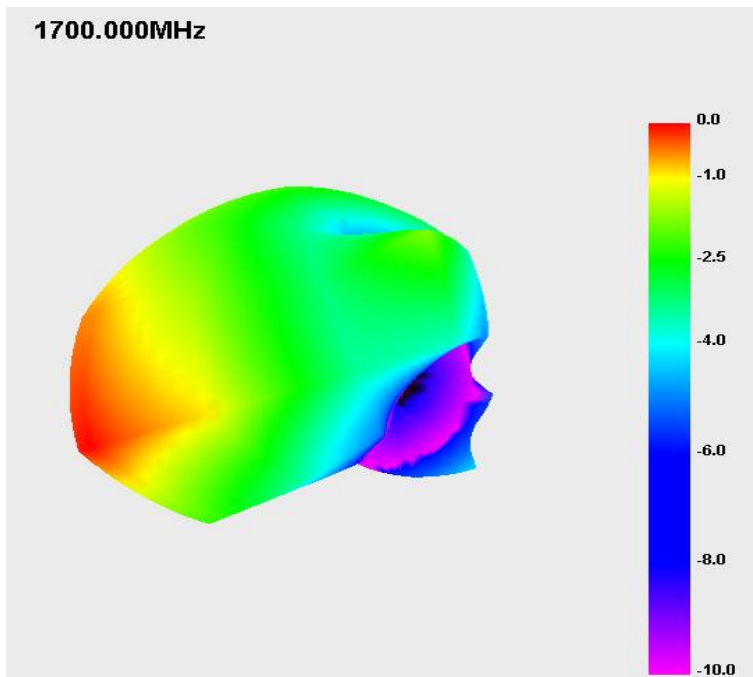
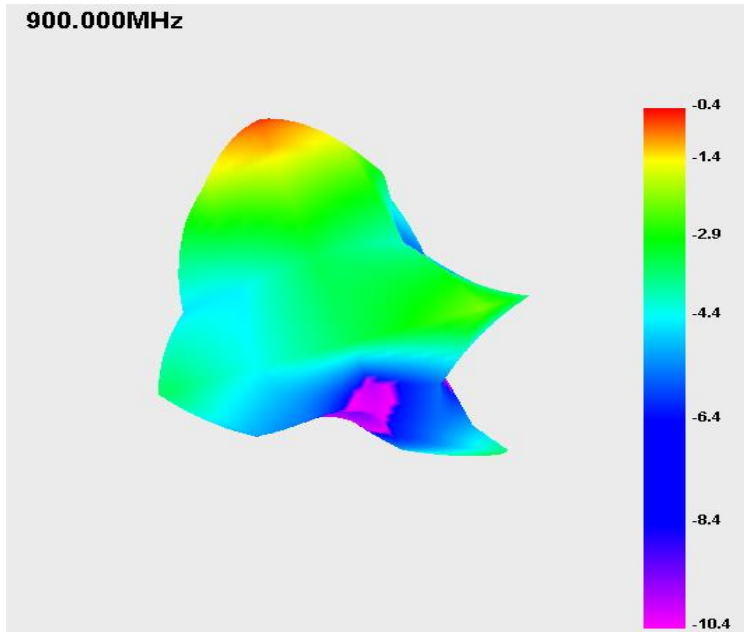
B2.4.5.12.66.71.41

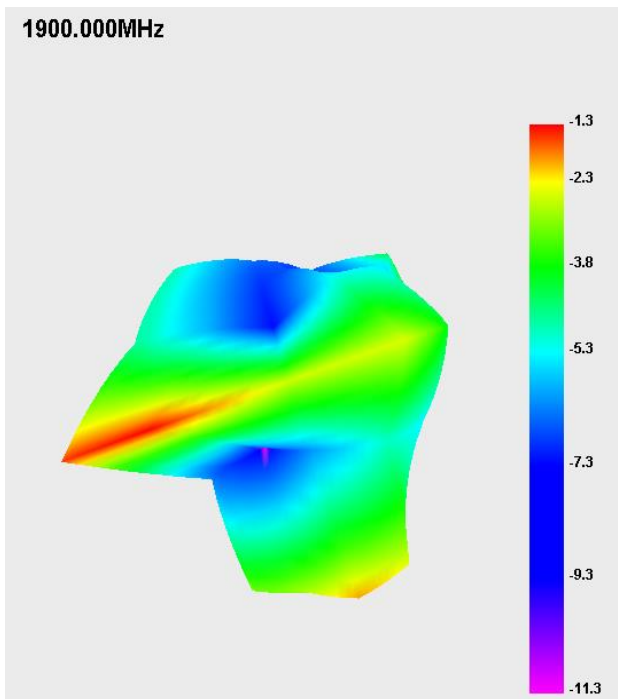
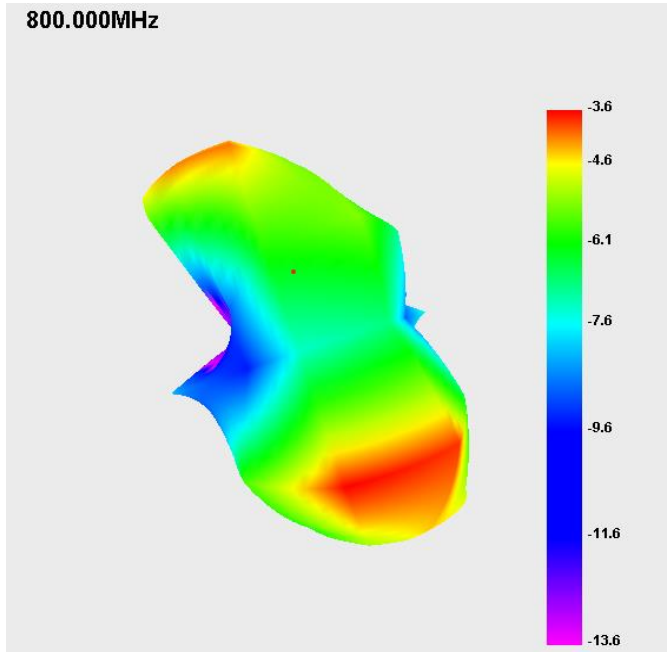
Gain	
频段 Band	gain 增益 (dBi)
LTE-B12	-3.58
GSM850,WCDMA-B5,LTE-B5	-1.82
GSM900	-2.06
DCS1800	-0.53
LTE-B4,66	-0.32
PCS1900,WCDMA-B2,LTE-B2	0.23
WCDMA-B1	0.69
LTE-B41	0.39
LTE-B71	-5.23

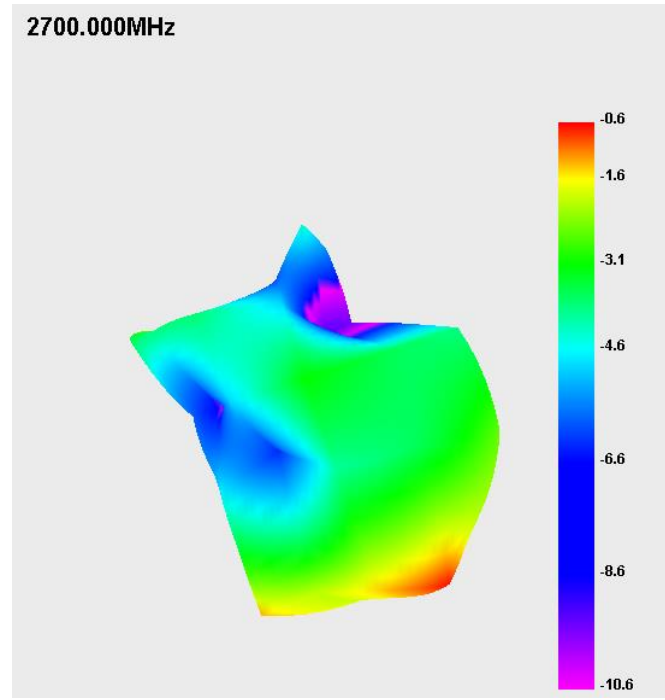
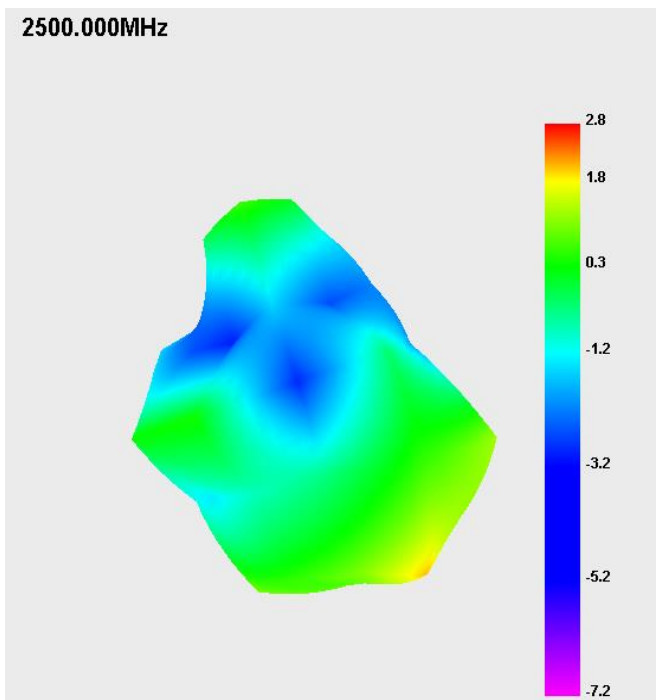
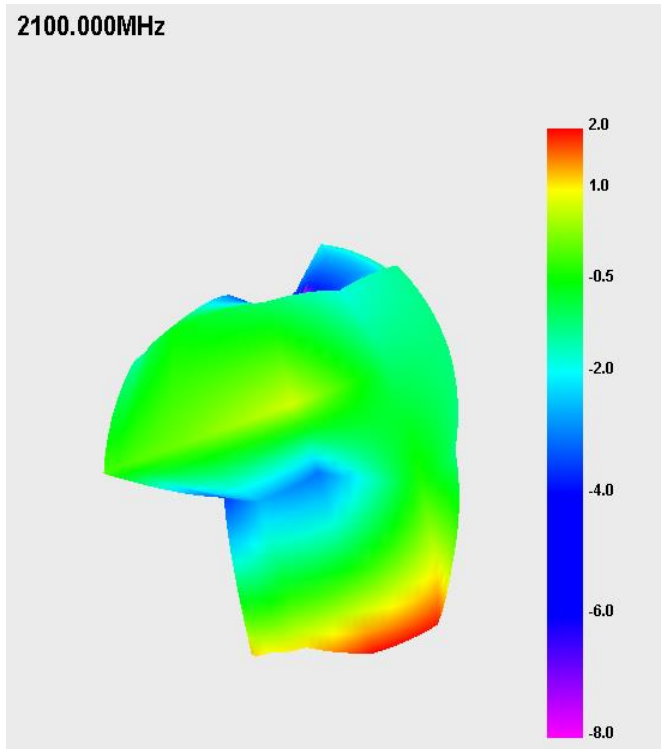
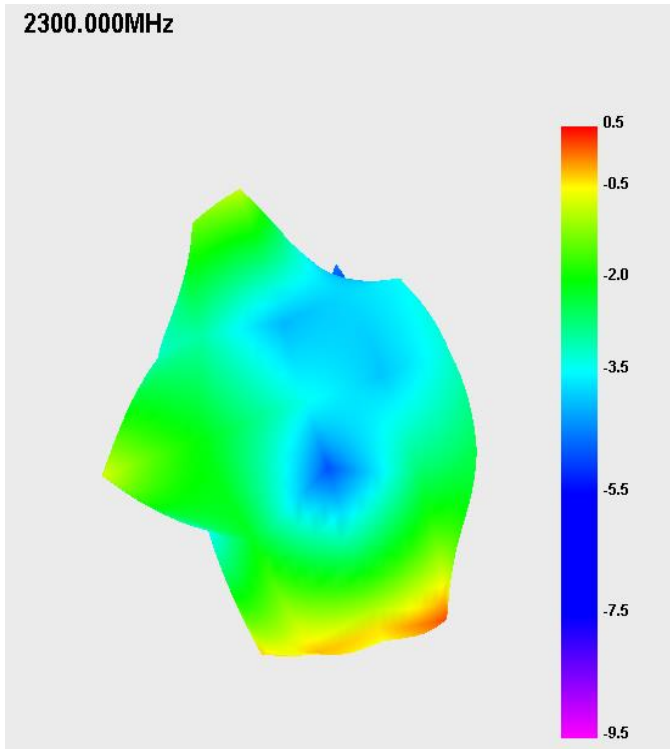
GPS	0.16
2.4G WIFI/BT	1.64
5.2G WIFI	0.29
5.8G WIFI	0.63

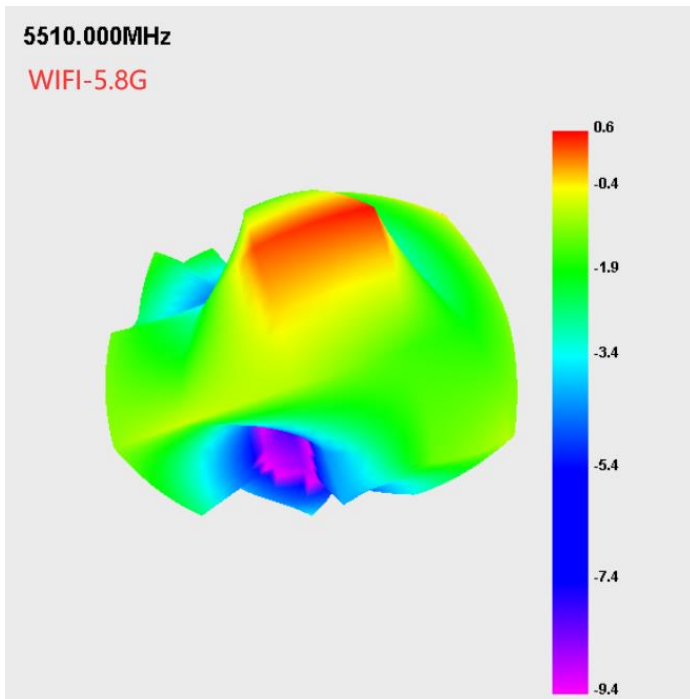
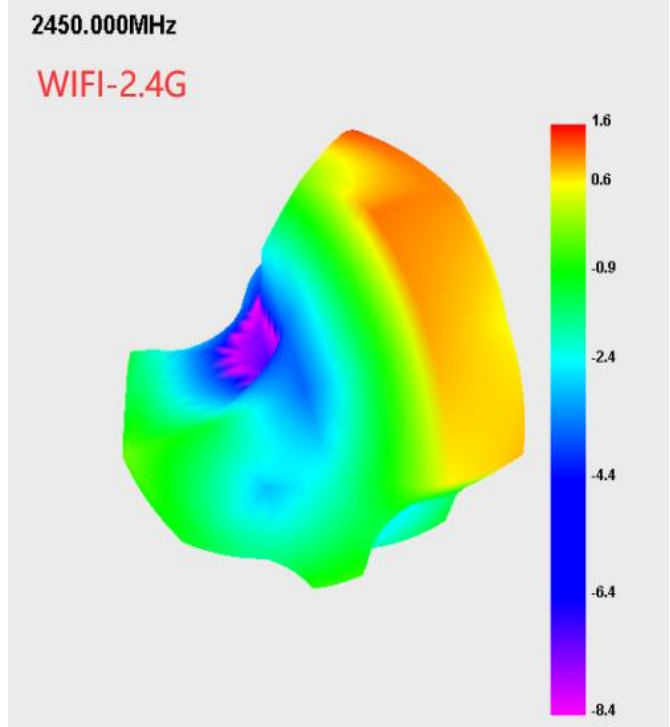
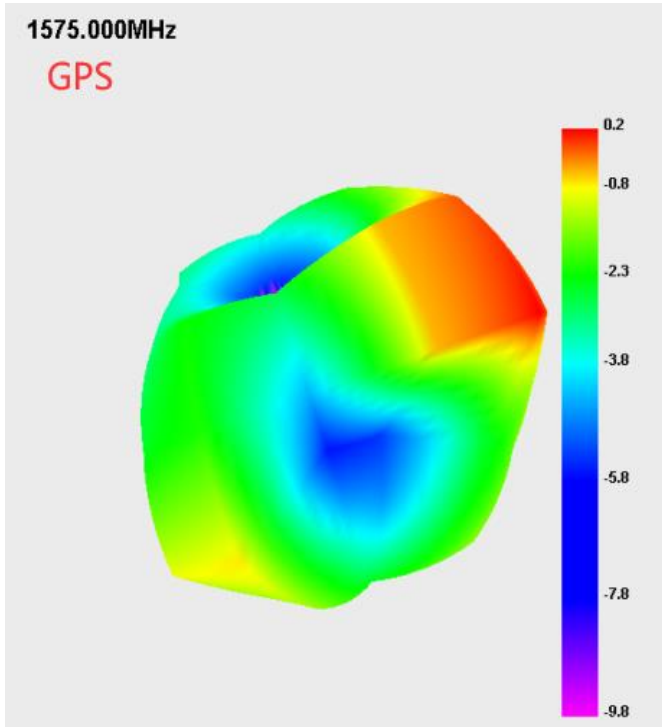












**GPS/WIFI/BTPassive parameters of antenna:**

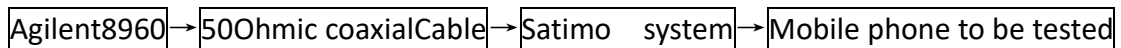
工作频段(Working frequency band): 1560~1580MHZ, 2400~2500MHZ

**2.test result**

**business as usual.**

#### **四、 Active test setup**

The active test devices are sequentially connected as follows:



##### **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 K55B1mobile phone main antenna:**

2G	CH	TRP	TIS
<b>GSM850</b>	128	28.6	
	190	29.07	
	251	29.25	-103.35
<b>EGSM900</b>	1	27.89	
	62	28.05	
	124	27.58	-101.56
<b>DCS1800</b>	512	24.53	
	698	24.68	
	885	25.39	-105.21
<b>PCS1900</b>	512	25.88	
	661	26.19	
	810	26.97	-105.2

3G	CH	TRP	TIS
<b>WCDMA1</b>	10562	17.97	
	10700	18.12	
	10838	18.96	-105.76
<b>WCDMA2</b>	9662	18.67	
	9800	18.74	
	9938	18.65	-105.23
<b>WCDMA5</b>	4357	17.07	
	4408	18.32	
	4458	18.26	-102.79

4G	CH	TRP	TIS
<b>FDD-B2</b>	18650	19.58	
	18900	19.7	
	19150	18.92	-95.07
<b>FDD-B4</b>	20000	19.43	
	20175	19.34	
	20350	18.69	-93.93
<b>FDD-B5</b>	20450	18.06	
	20525	18.5	
	20600	18.72	-92.45
<b>FDD-B12</b>	23060	18.64	
	23095	18.65	
	23130	17.7	-90.73
<b>FDD-B66</b>	132022	18.71	
	132322	19.19	
	132622	18.2	-92.4
<b>FDD-B71</b>	133172	18.32	
	133297	17.6	
	133422	16.49	-89.42
<b>TDD-B41</b>	40340	18.7	
	40620	18.92	
	41140	19.23	-90.15

## 2-1.Three in one test results



序号	测试地点	测试项目	样机编号	
			1#	
1	公司旁边足球场	开机首次定位时间	69	
2		冷启动定位时间	63	
3		热启动定位时间	25	
4		有效定位后卫星总数	7	
5		>40的星数	2	
6		卫星SNR最大值	43.3	
			TRP	亮TIS
wifi-B			1	12.93
			7	12.17
			13	12.39
			TRP	亮TIS
wifi-A			36	11.17
			149	10.69
			165	10.43
			TRP	亮TIS
wifi-G			1	12.7
			7	12.88
			13	12.69
			TRP	亮TIS
wifi-GN			1	12.63
			7	12.85
			13	12.39
			TRP	亮TIS
wifi-AN			36	11.95
			149	11.75
			165	11.16
三合一			捕获灵敏度	
GPS			-137	CN
				39

## 2-2. 蓝牙测试 (Bluetooth Test) :

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