

深圳市八方达通信有限公司

Z6501E天线测试报告

工程：毛宇峥

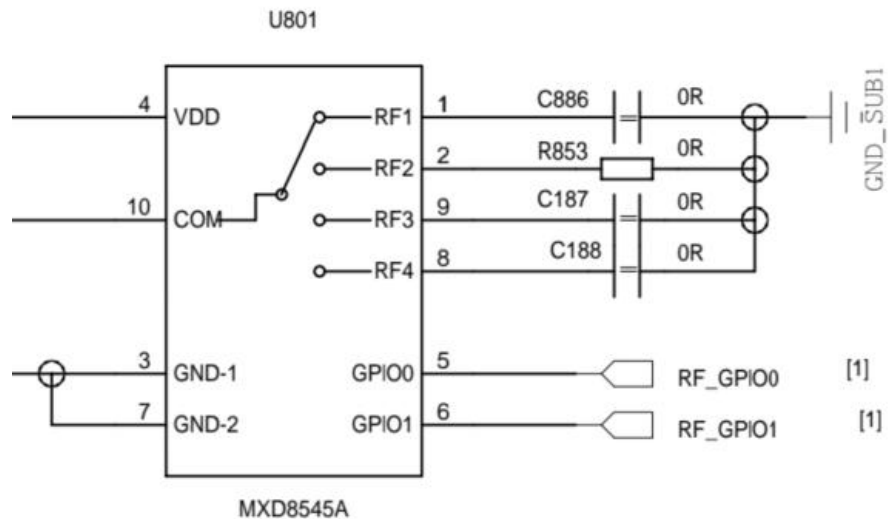
测试日期：2022-10-11

工程电话：13424326585

天线频段设计

射频	网络模式	GSM+W+BT+WIFI+GPS	
	频段要求	GSM: B2 B3 B5 B8 WCDMA: B2 B5 LTE: B2 B5 B66	
	通讯天线数量	主天线	GSM+W+LTE
		分集天线	
		三合一天线	GPS+WIFI+BT

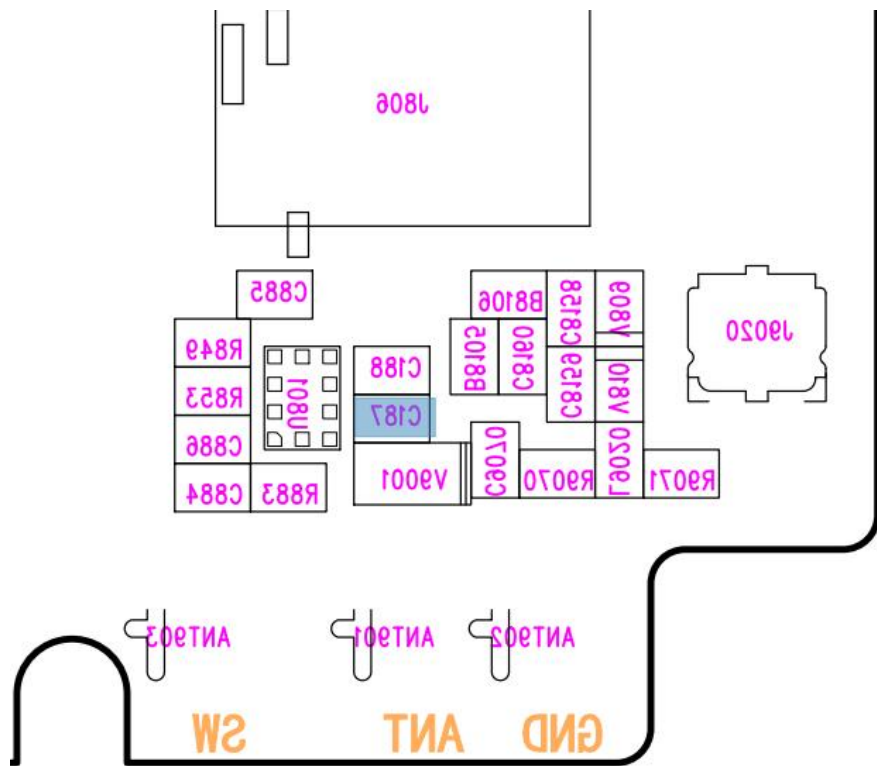
开关逻辑说明



RF1: GSM(B2/B3/B8) WCDMA(B2/B5) LTE(B2/B66)

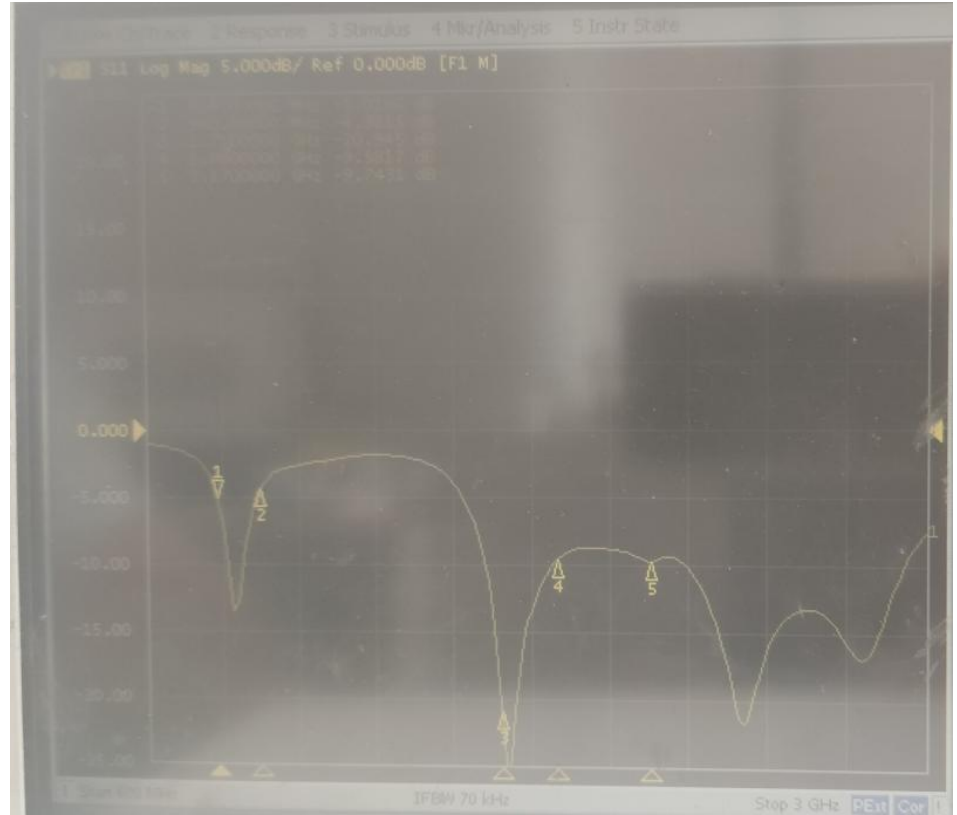
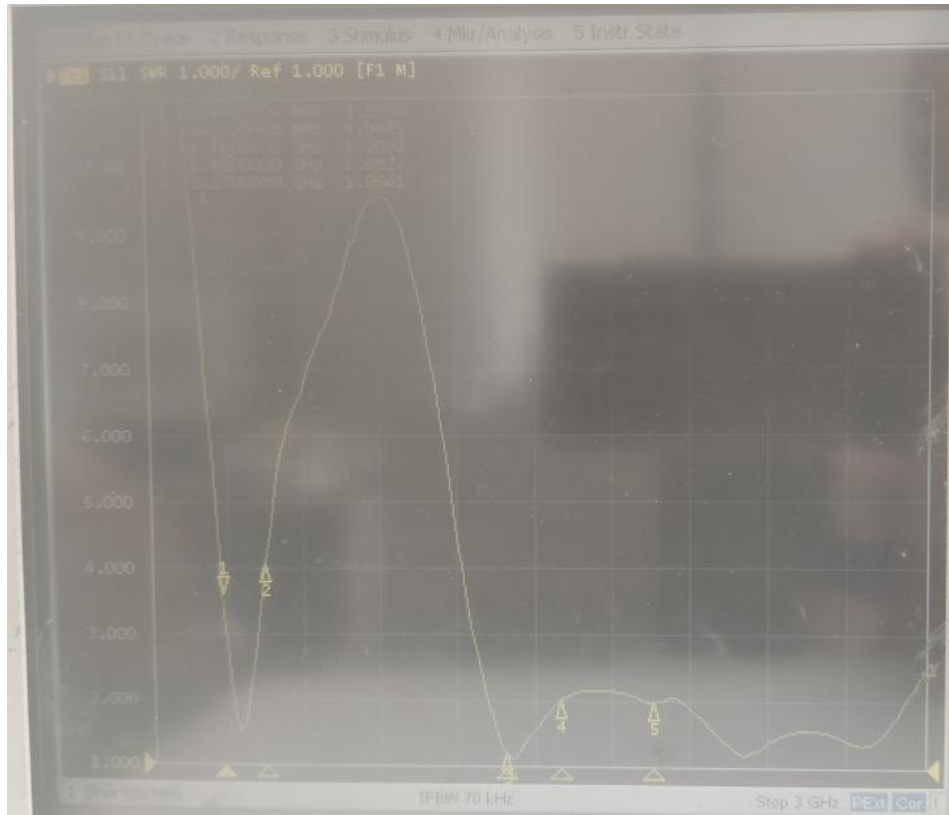
RF2: GSM-B5 WCDMA-B5 LTE-B5

天线匹配电路说明

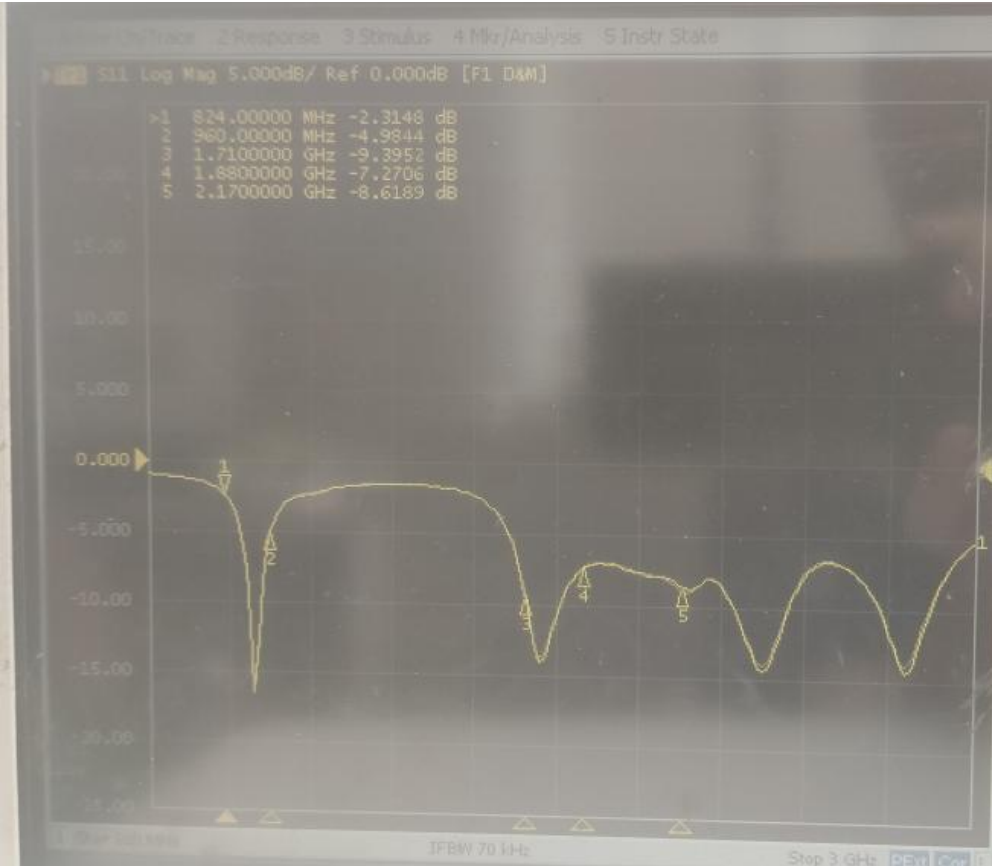
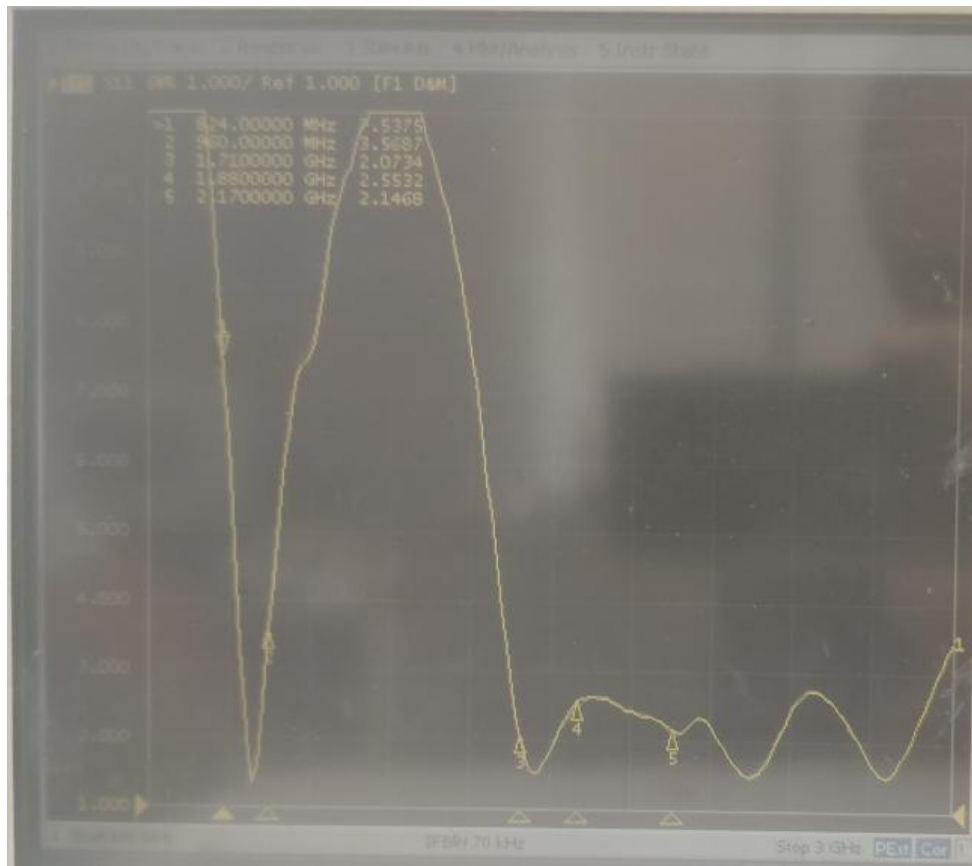


L9020	10nH
C886	3.6nH
R853	8.2nH

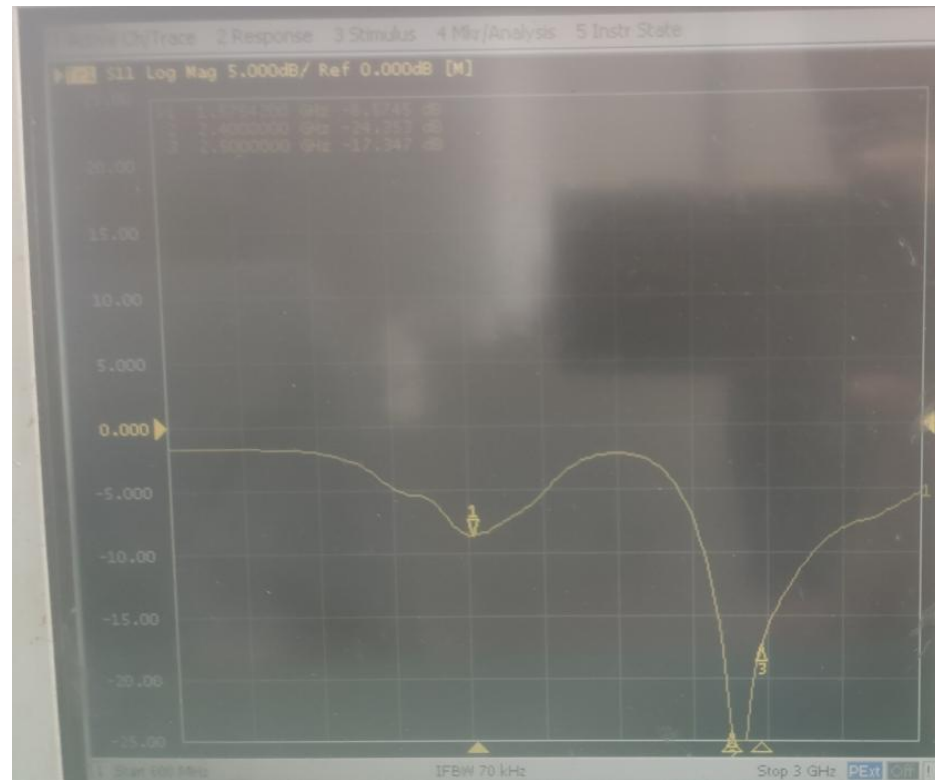
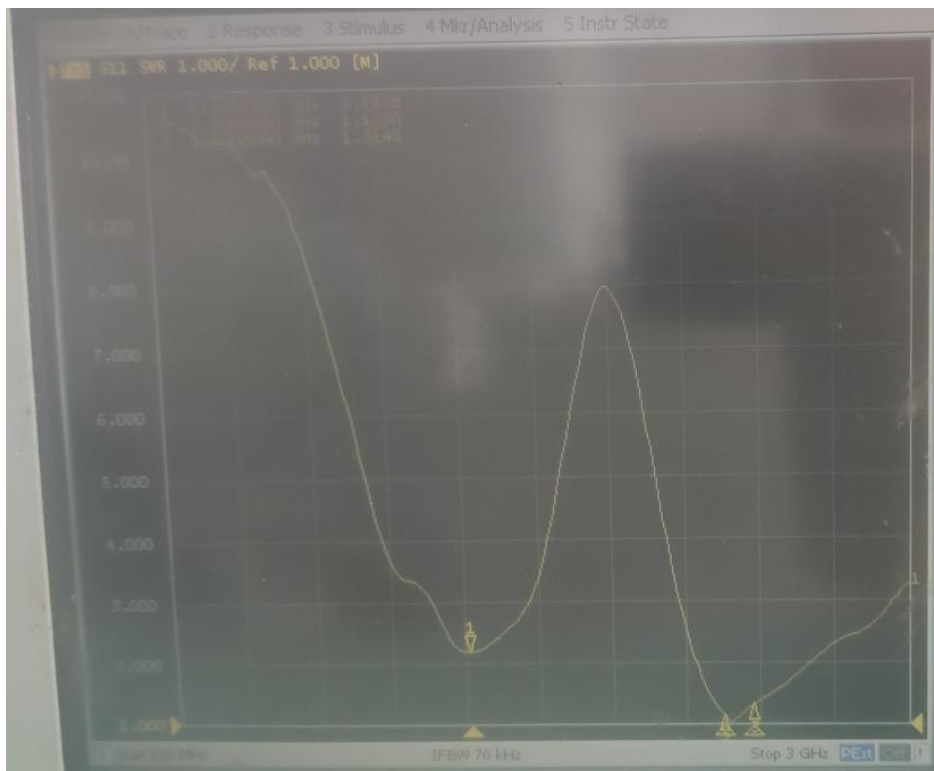
主天线无源数据



分集天线无源数据



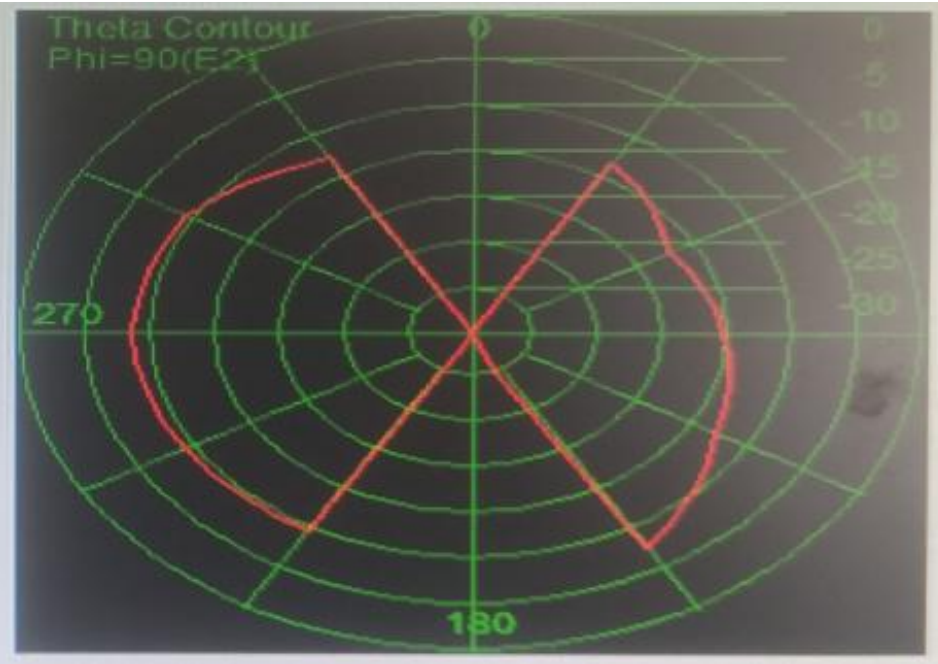
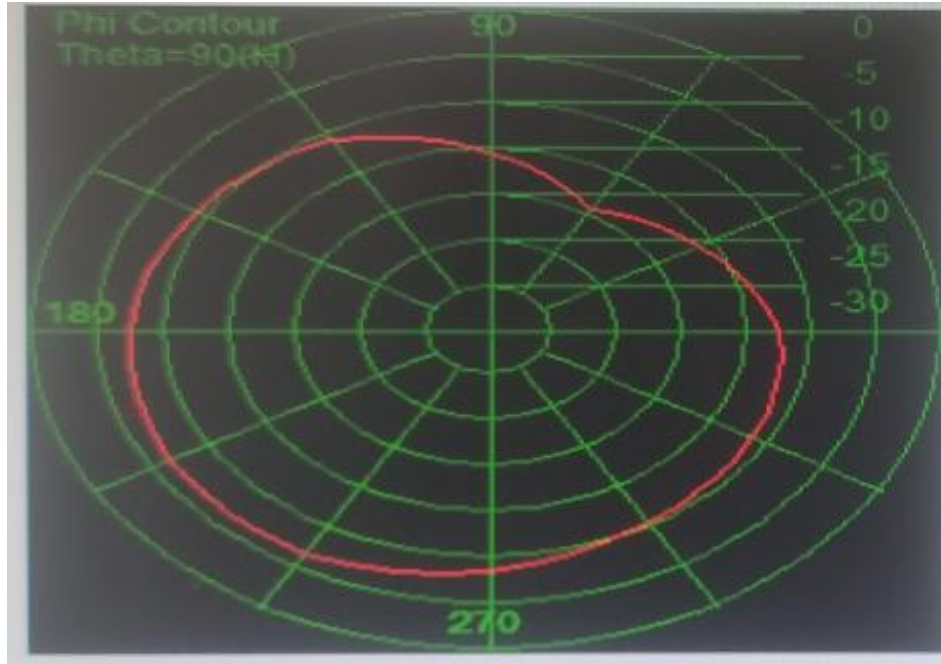
三合一天线无源数据



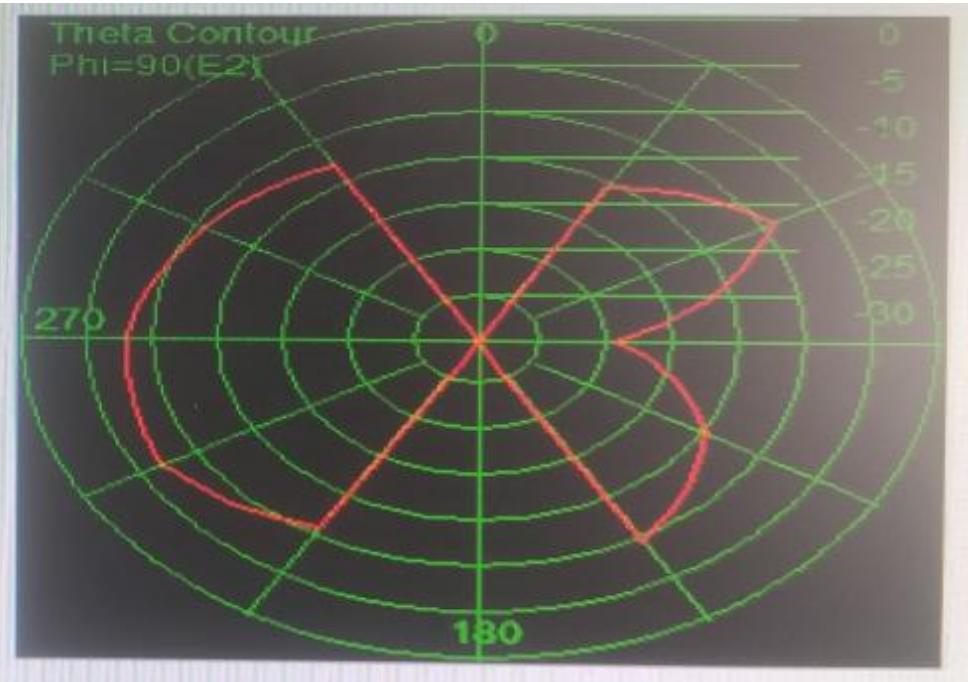
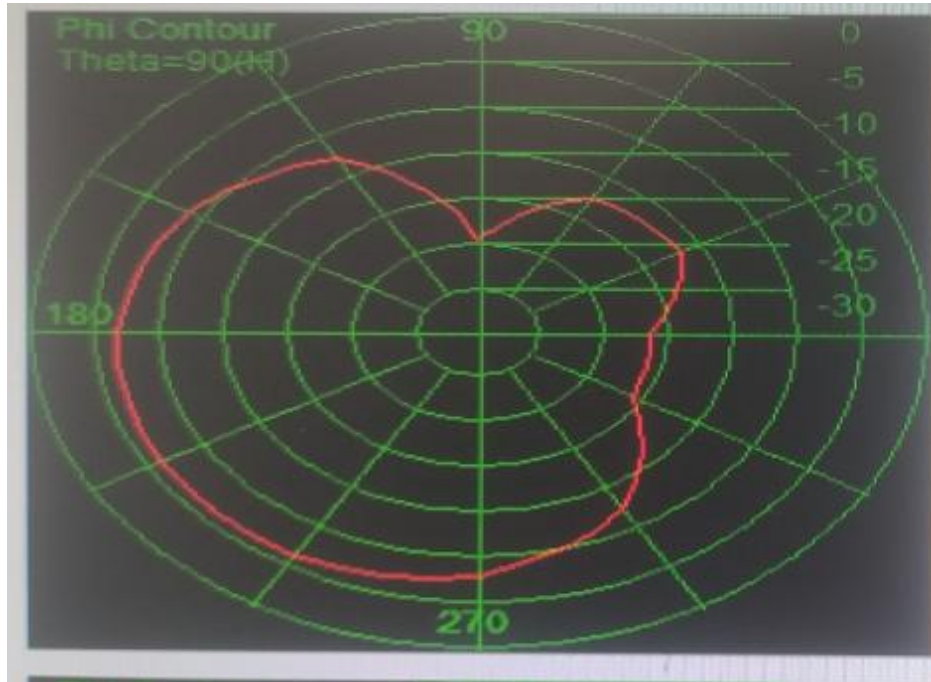
天线增益

Frequency (MHZ)	Average Gain (dB)	Peak Gain (dBi)
GSM850	0.31	0.74
GSM900	0.35	0.79
DCS1800	0.42	0.73
PCS1900	0.51	0.83
WCDMA850	0.33	0.75
WCDMA1900	0.54	0.86
LTE B2	0.52	0.83
LTE B5	0.35	0.77
LTE B66	0.55	0.85
GPS	0.21	0.67
WIFI/BT	0.25	0.34

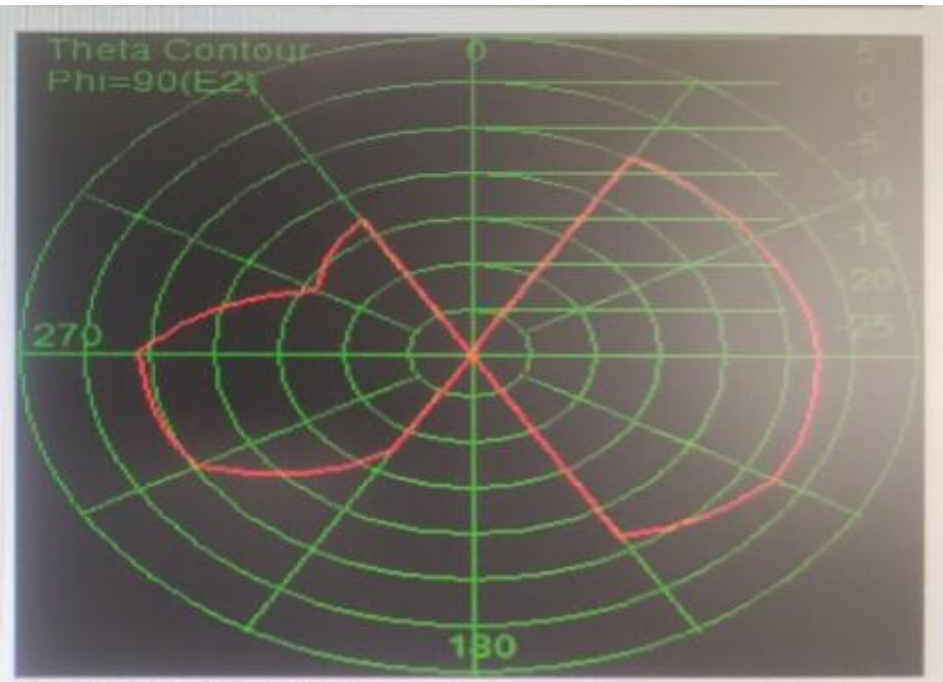
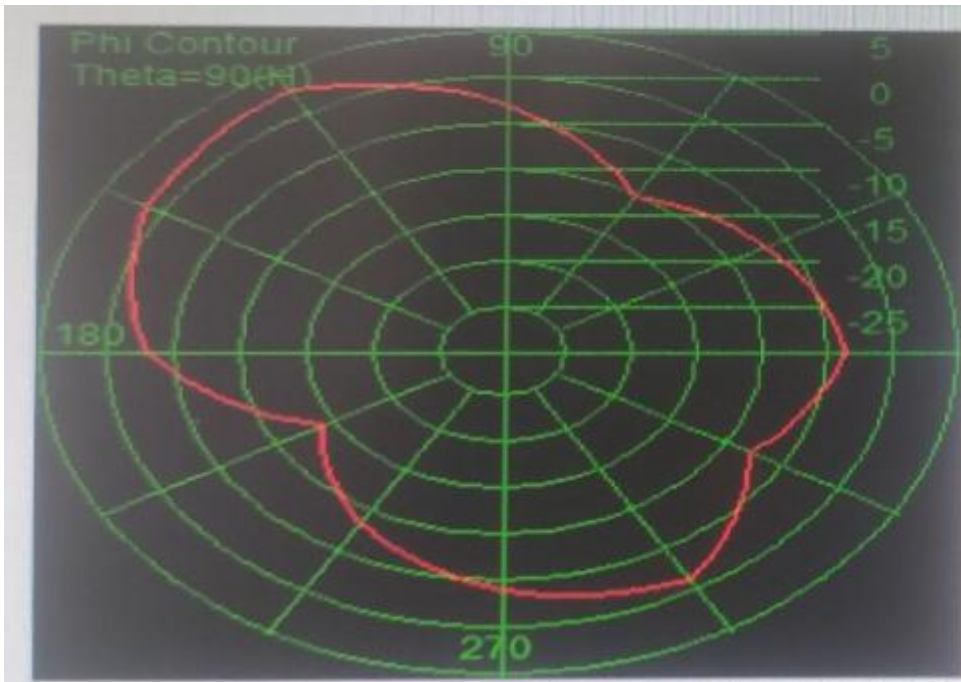
850MHZ增益波形图



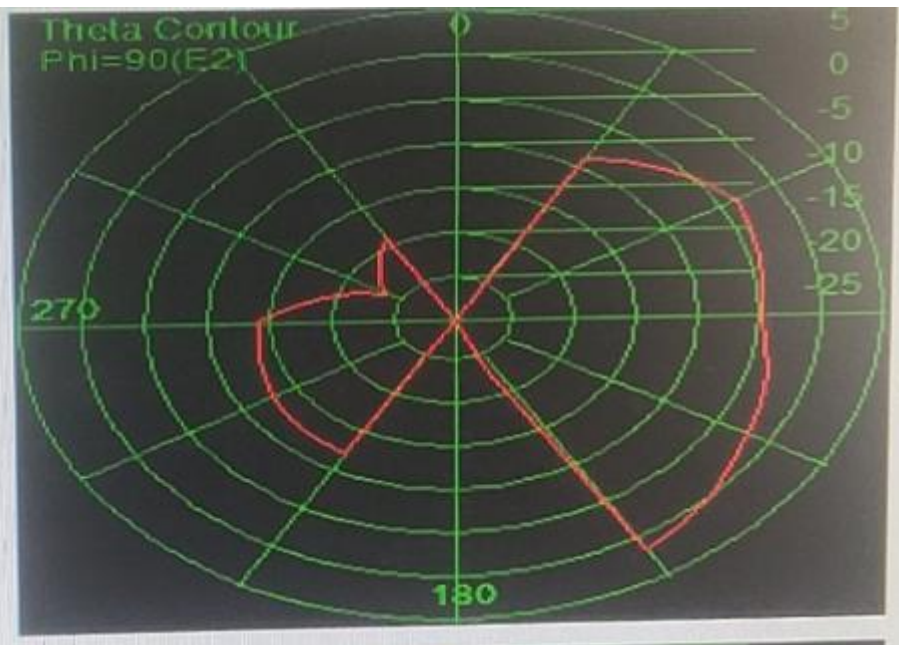
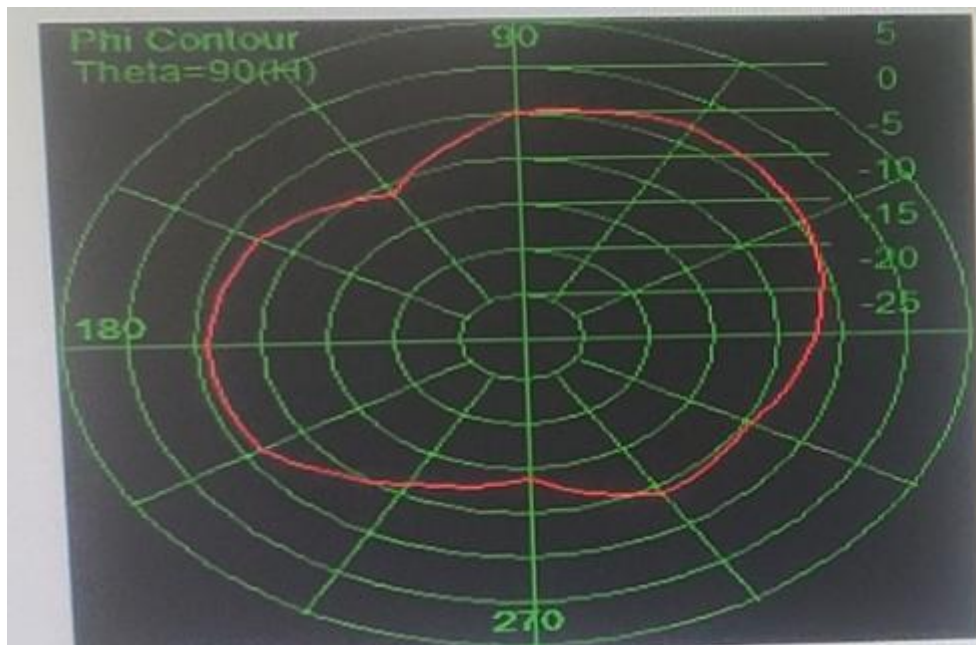
900MHZ增益波形图



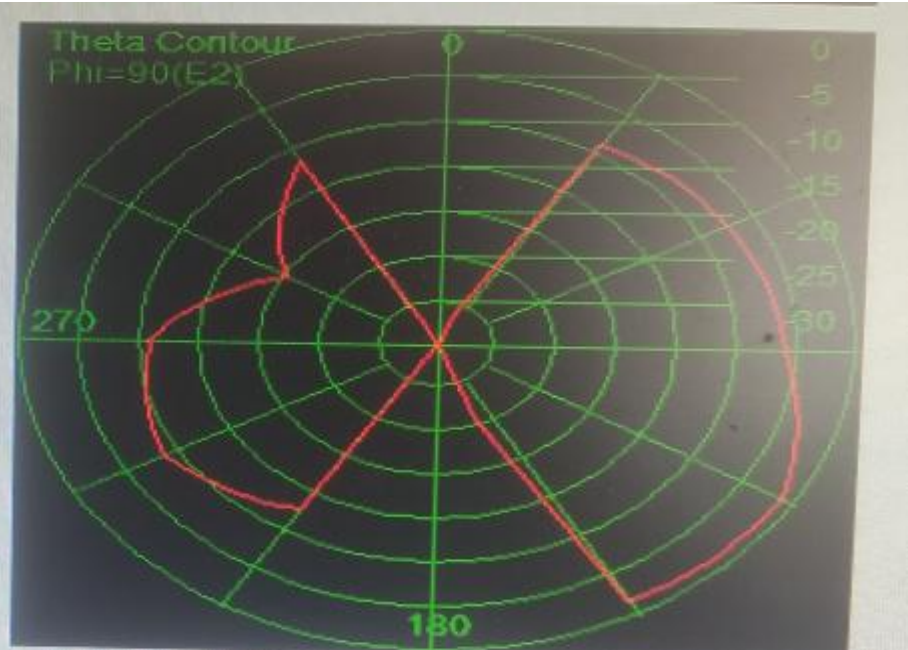
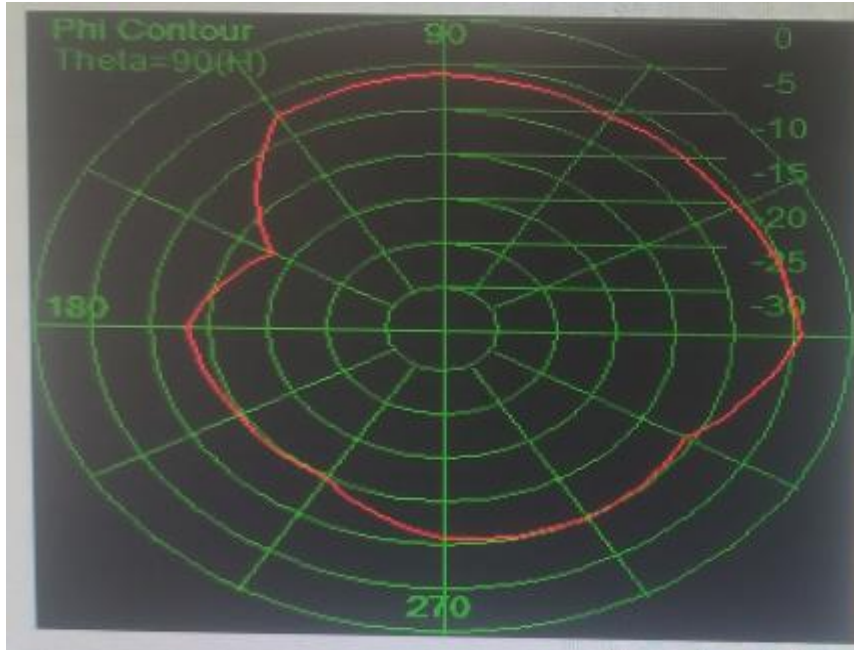
1800MHZ增益波形图



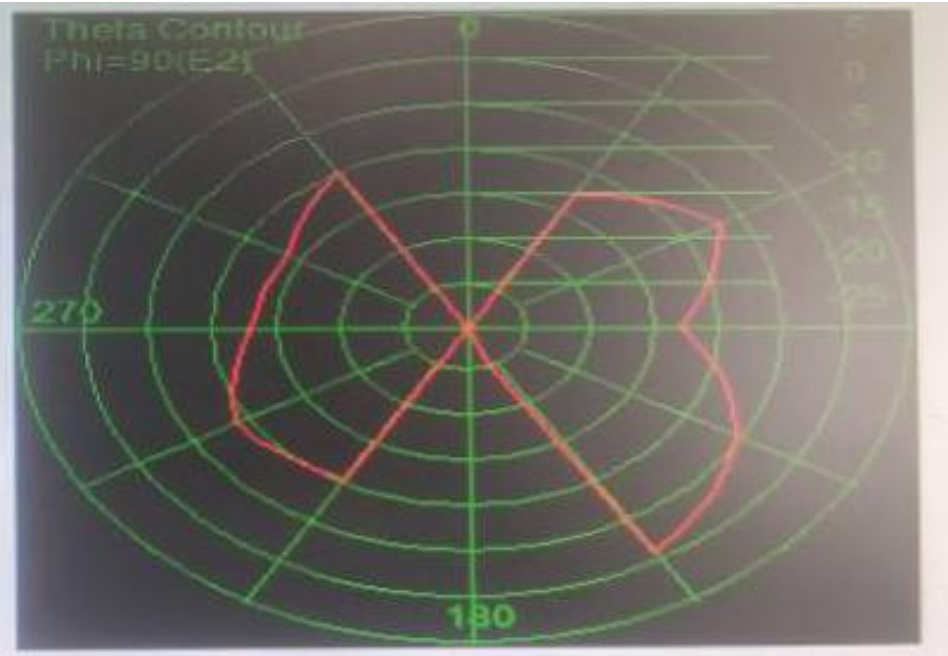
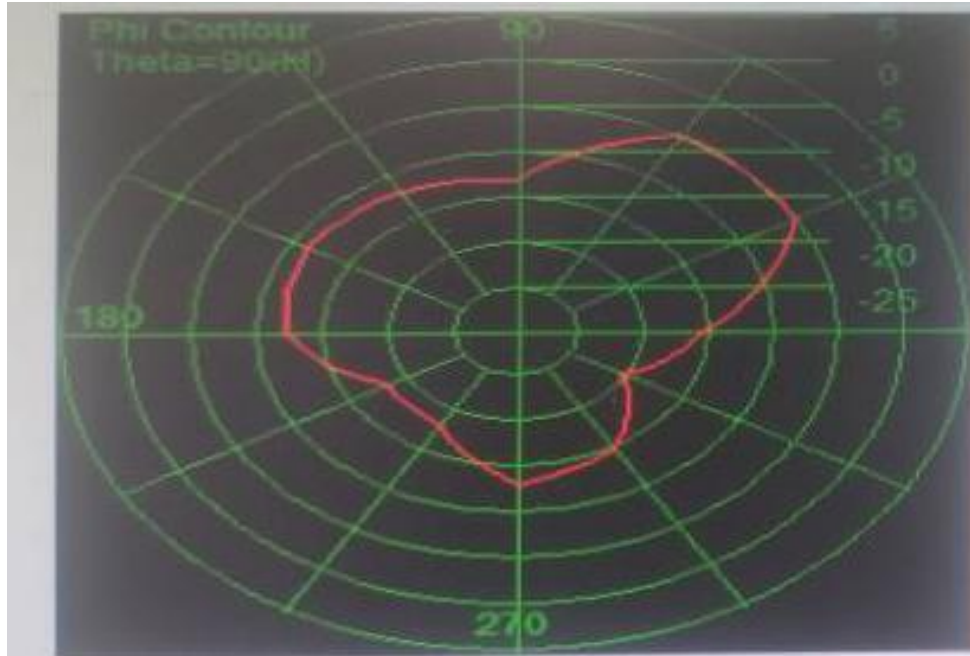
1900MHZ增益波形图



2100MHZ增益波形图



WiFi增益波形图

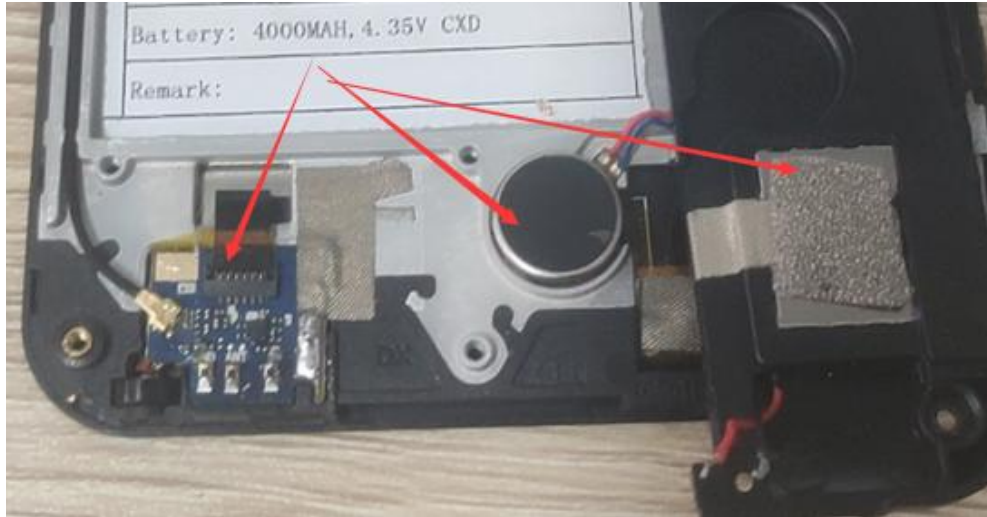


天线数据

Modulation	GSM 850			GSM 900			DCS 1800			PCS 1900		
Channel	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
TRP	25.03	25.06	25.13	25.43	25.41	26.08	23.71	24.74	25.26	24.21	25.02	25.34
TIS	-100.09	-100.23	-101.04	-101.53	-102.25	-101.19	-104.63	-104.9	-104.32	-104.95	-105.65	-105.74
Modulation	WCDMA B2			WCDMAB5								
Channel	Low	Medium	High	Low	Medium	High						
TRP	17.99	17.14	17.05	15.42	16.35	15.63						
TIS	-104.59	-104.36	-104.17	-103.06	-102.84	-102.70						

Modulation	LTE B2			LTE B5			LTEB66		
Channel	Low	Medium	High	Low	Medium	High	Low	Medium	High
TRP	18.89	17.84	17.99	15.49	15.86	15.92	17.04	17.44	17.13
TIS	-93.58	-93.35	-93.09	-92.21	-92.15	-92.04	-92.42	-92.45	-92.29

环境处理及说明



文字说明

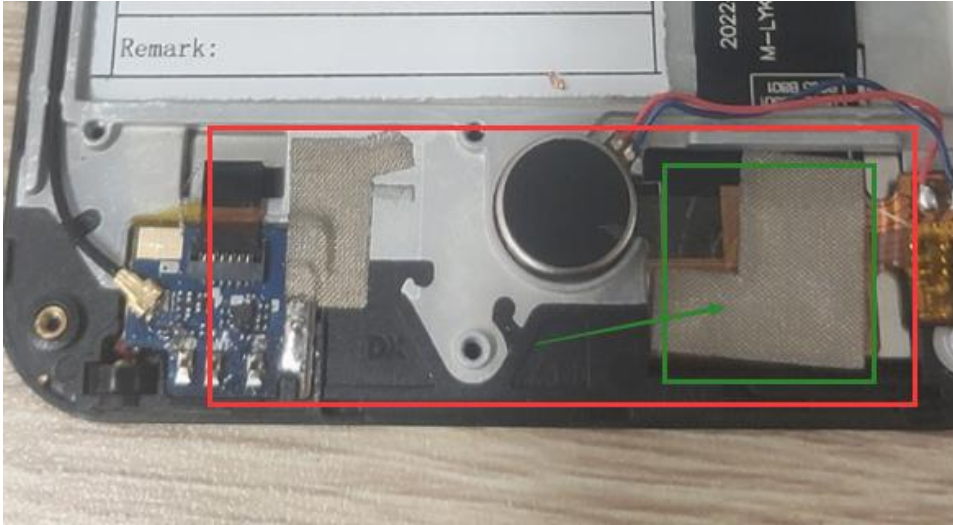
如图所示:

小板背面露铜区充分接地，正面露铜区贴导电布。

喇叭磁缸，马达做好接地。

环境处理及说明

文字说明



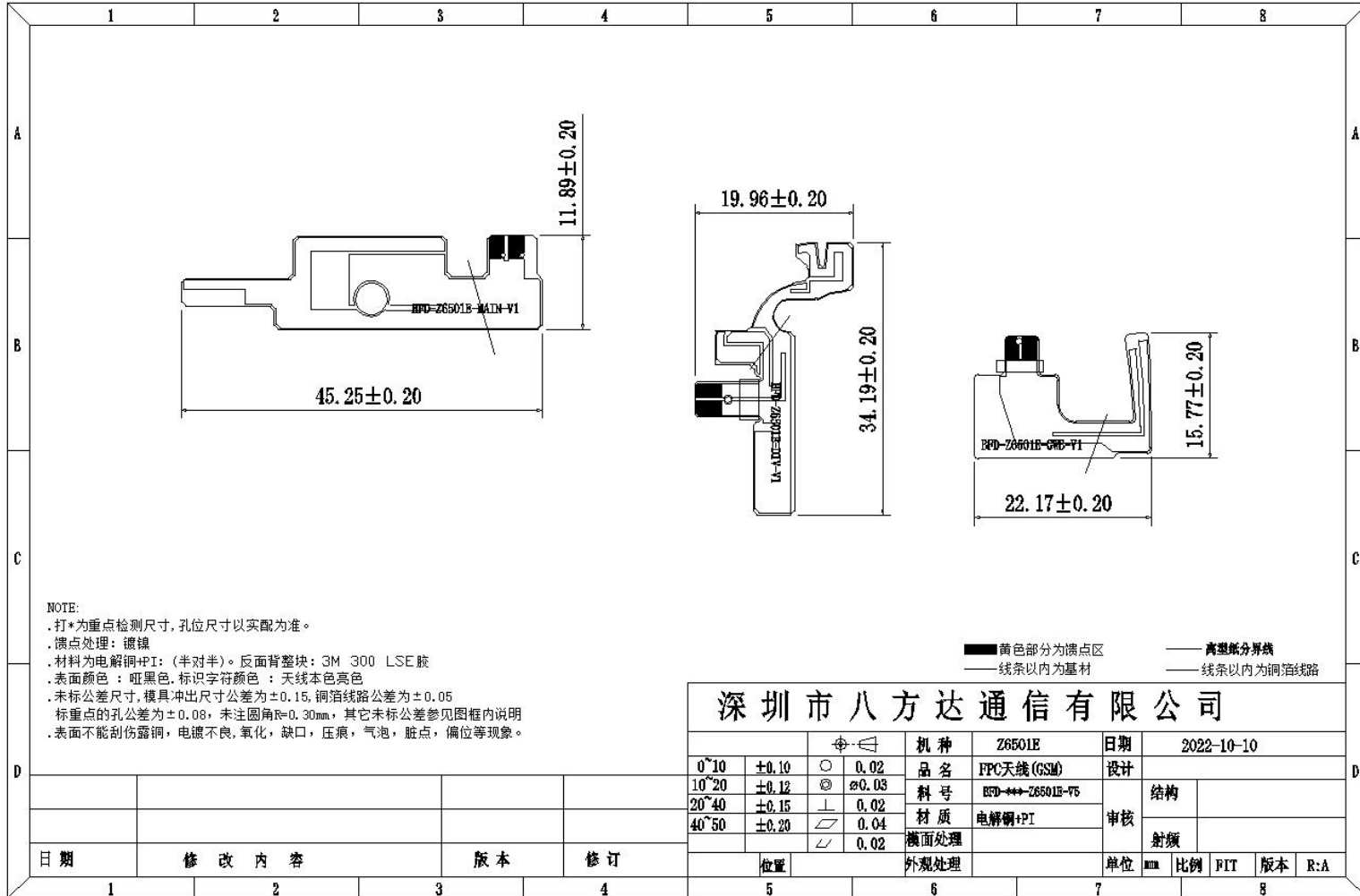
如图所示:

红框内屏排线需要全部用导电布屏蔽，目前只屏蔽了绿框区域，作用不大。

GPS/WIFI/BT有源测试报告

GPS	最大信号强度	搜星数量	平均定位时间	天气状况
	40	9	120S	晴
WIFI	距WIFI路由器6m处接收信号强度		无障碍正常上网距离	
	-55dB		20m	
BT	背向无障碍清晰通话距离			
	7m			

Antenna Dimensions (unit: mm)



深圳市八方达通信有限公司

SHENZHEN BFD COMMUNICATION EQUIPMENT CO.,LTD

公司地址：深圳市福田区车公庙泰然工贸园212栋311

公司电话：0755-82737516 传真：0755-82737505

公司邮箱：best-just@163.com <http://www.best-just.com>