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Specification

客户 Customer		规格型号 Specs	G051
三好料号 Part Number	CQ-G051-01 CQ-G051-02 CQ-G051-03	频 段 Frequency Band	BT&2.5G WIFI:2400~2483.5MHZ 5G WIFI:5100~5800MHZ GSM850/900/1800/1900 WCDMA1/2/4/5/8 B1.2.3.4.5.7.8.12.17.20.26.28.66.38.39.40.41.66
颜 色 Color	black	版 本 Edition	
销 售 Salesperson		设 计 Design	
结 构 Structure		确 认 Confirm	
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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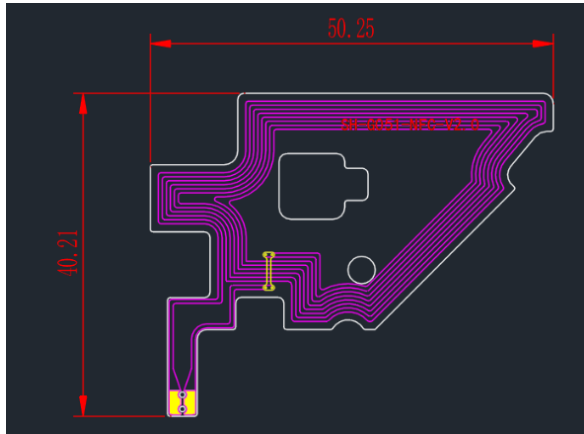
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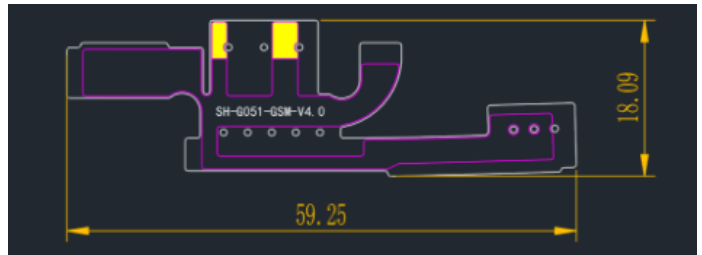
一、Product specifications

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

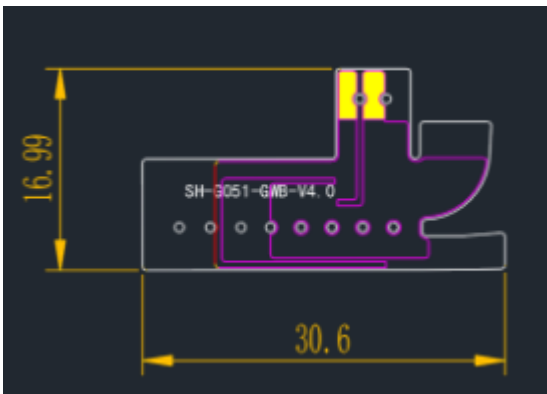
NF Antenna



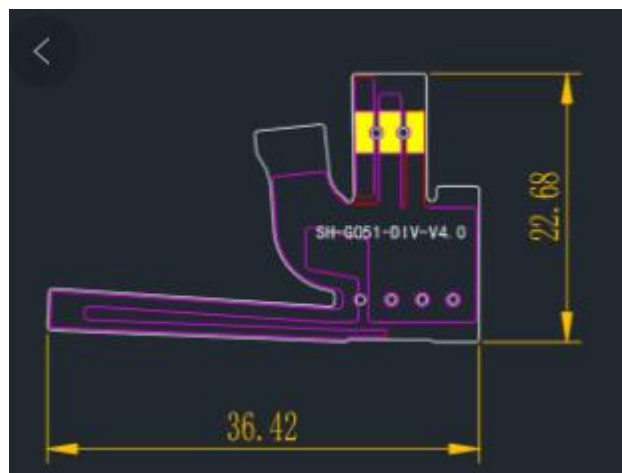
Main set antenna



Three in one antenna



Diversity antenna

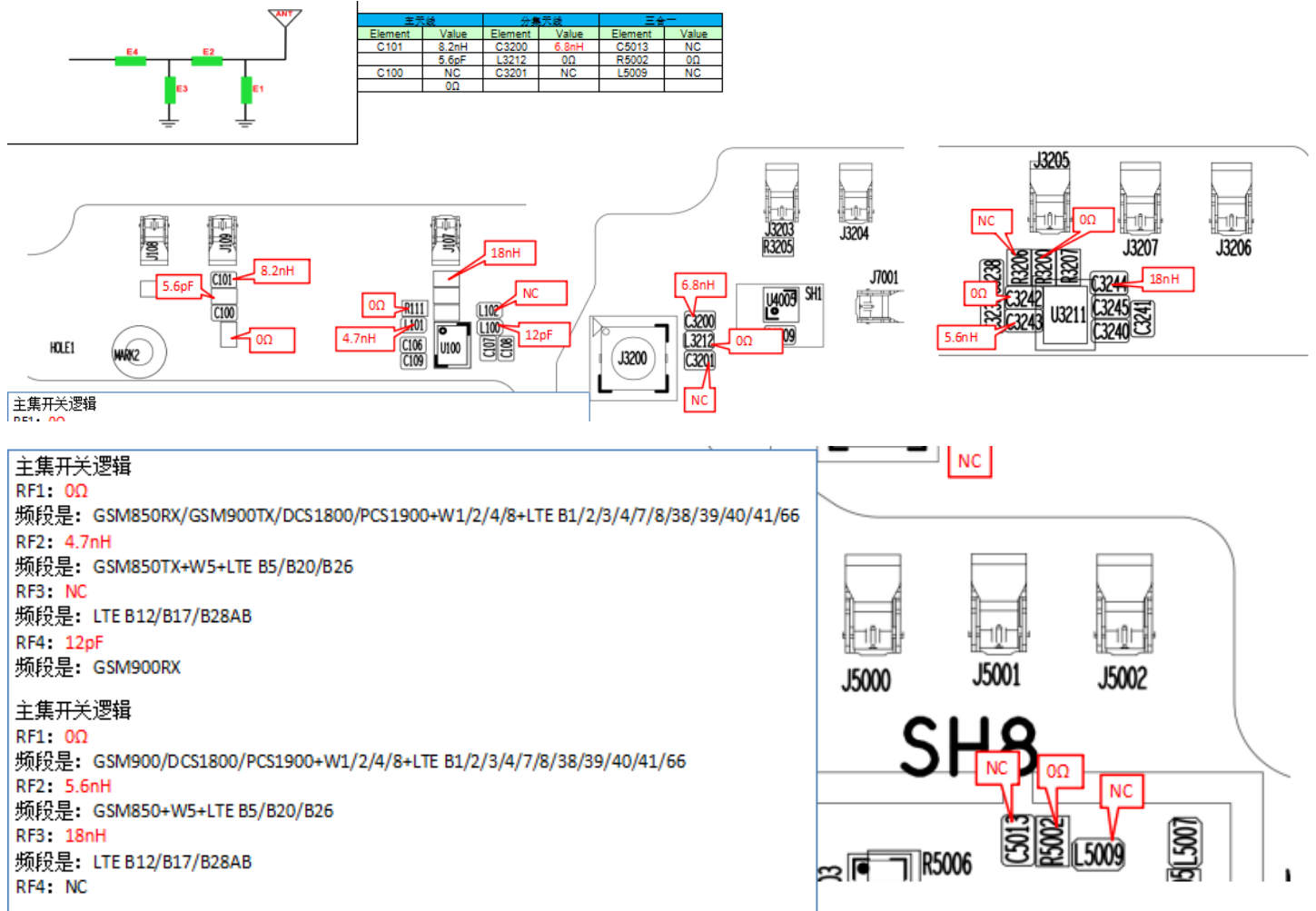


二、Electrical performance

1.Specifications

The operating frequency band of G051 antenna is 699~960MHZ and 1710~2700MHZ, in which resonance occurs.

2.Matching circuit of antenna



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.

Passive parameters of main antenna:

工作频段(Working frequency band): 699~960MHZ, 1710~2700MHZ

GSM850/900/1800/1900

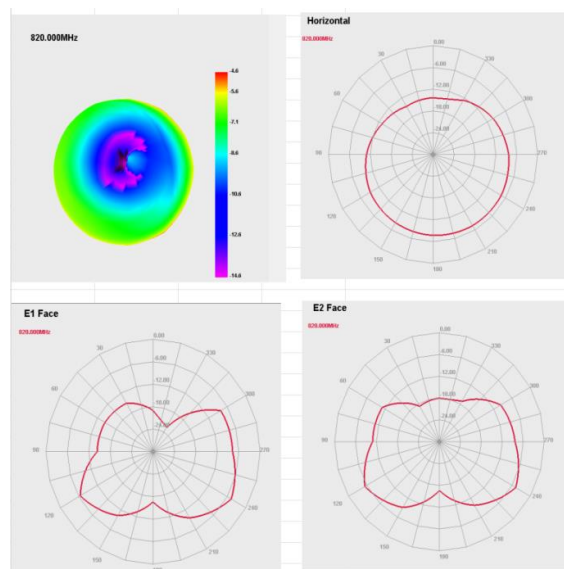
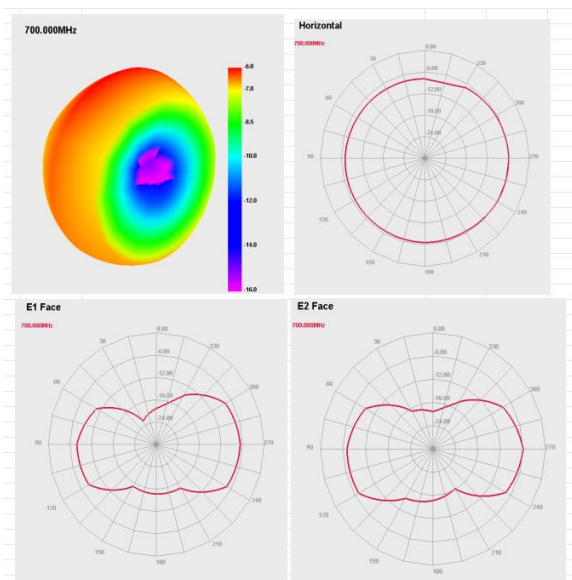
WCDMA1/2/4/5/8

LTE B1.2.3.4.5.7.8.12.17.20.26.28.66.38.39.40.41

Gain			
频段 Band	gain 增益 (dBi)	频段 Band	gain 增益(dBi)
GSM850,WCDMA-B5,LTE-B5/B20/B26	-2.54	LTE-B7/B38/B41	-1.04
GSM900,WCDMA-B8,LTE-B8	-3.94	LTE-B12/B13/B17/B28	-4.42
DCS1800,WCDMA-B4,LTE-B3/B4/B66	0.41	LTE-B40	2.39
PCS1900,WCDMA-B1/B2,LTE-B1/B2	0.92		

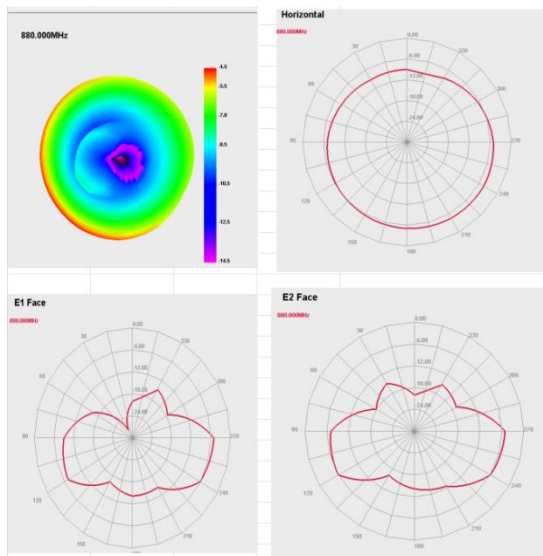
700

800

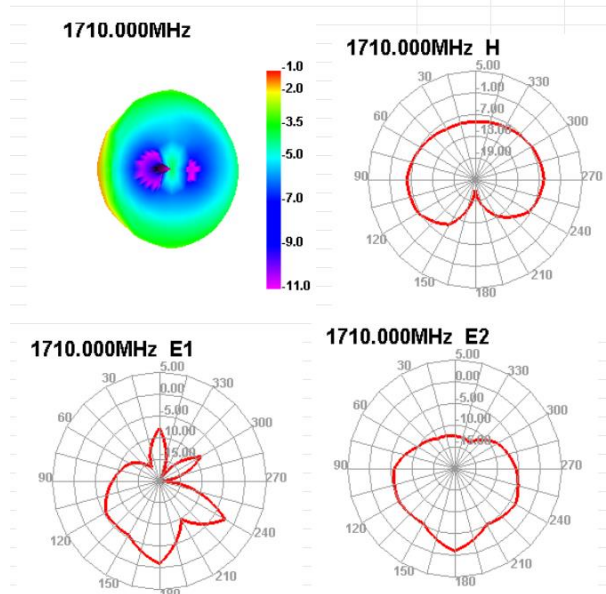


900

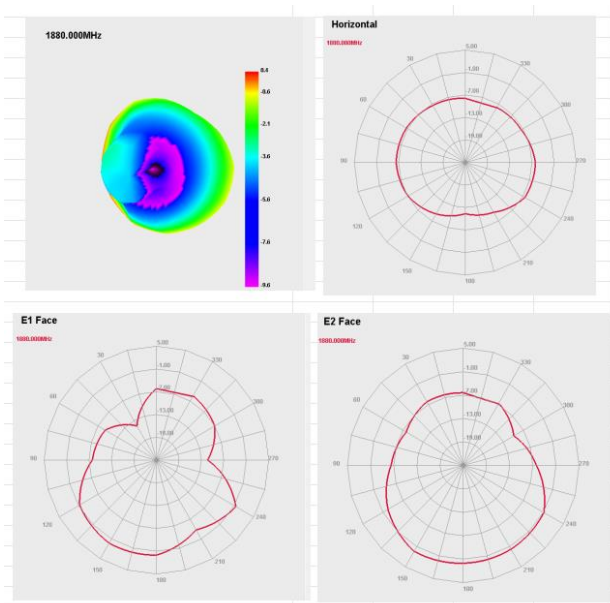
1700



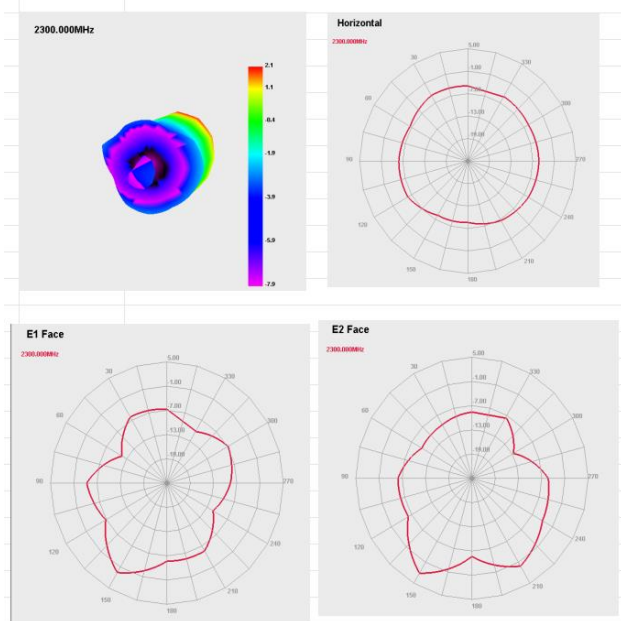
1900

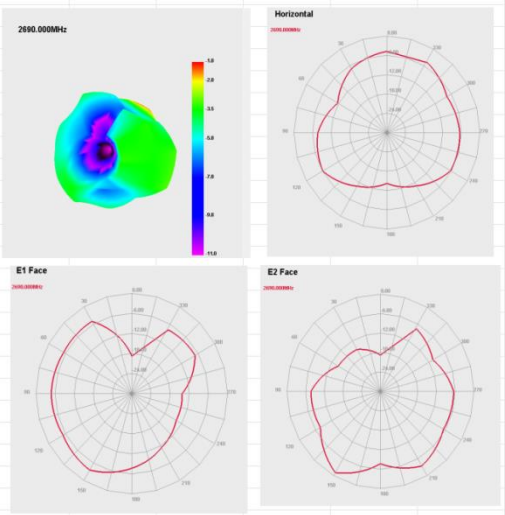


2300



2700





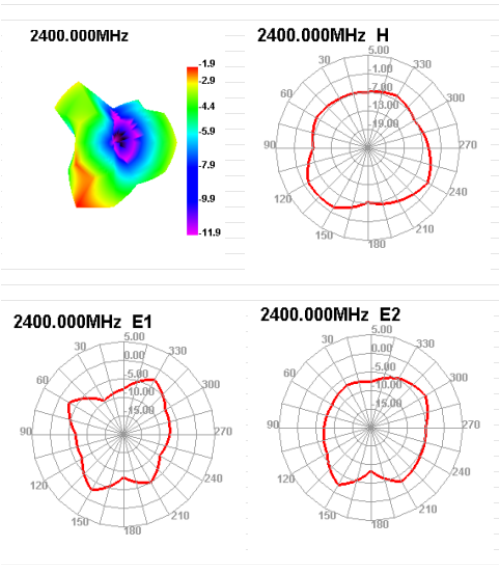
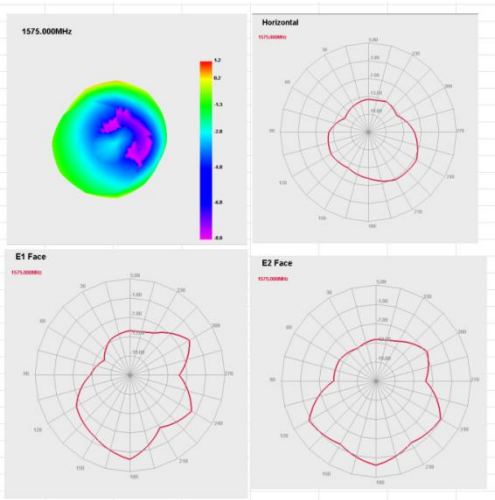
GPS/WIFI/BTPassive parameters of antenna:

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

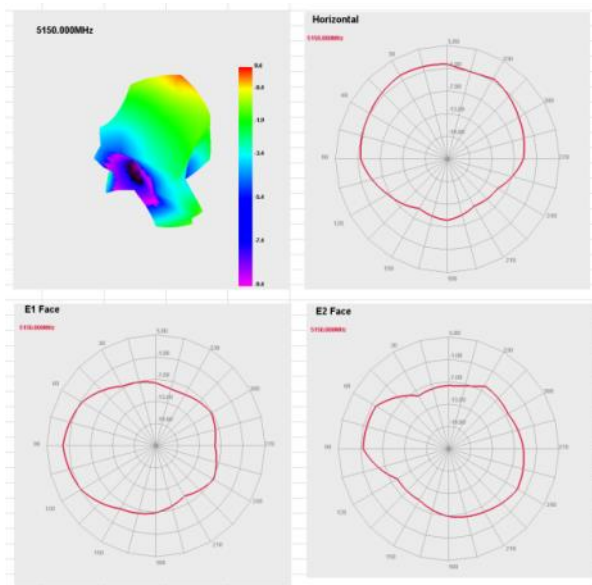
Gain			
频段 Band	gain 增益 (dBi)	频段 Band	gain 增益(dBi)
GPS	-0.19	2.4G WIFI/BT	0.06
5G WIFI	0.32		

GPS

2.4G WIFI/BT



5G WIFI

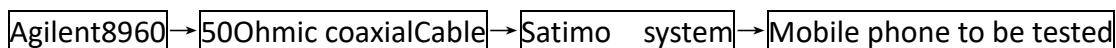


2.test result

business as usual.

四、 Active test setup

The active test devices are sequentially connected as follows:



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 G051 mobile phone main antenna:

	CH	TRP	TIS (次)	TIS (表)	1#	CH	TRP	TIS (次)	TIS (表)		CH	TRP	TIS (次)	TIS (表)
GSM850	128	25.25			B1	18050	18.61			B20	24200	15.26		
	190	25.03				18300	19.08				24300	15.24		
	251	24.18	-102.09	-99.01		18550	17.96	-92.94	-92.06		24400	14.92	-89.3	-87.22
EGSM900	1	25.35			B2	18650	17.65			B26	26715	16.34		
	62	25.21				18900	18.19				26865	16.35		
	124	24.26	-99.08	-97.18		19150	19.56	-93.35	-92.47		27015	15.11	-93.64	-91.56
DCS1800	512	24.29			B3	19250	18.27			B28	27260	15.31		
	698	25.56				19575	18.9				27435	15.12		
	885	24.26	-102.86	-101.79		19900	17.22	-93.82	-92.94		27610	14.94	-91.31	-89.23
PCS1900	512	24.27			B4	20000	16.11			B38	37850	18.57		
	661	25.62				20175	18.92				38000	17.98		
	810	26.68	-101.59	-100.52		20300	18.31	-91.9	-91.02		38150	17.99	-95.67	-94.79
W1	10562	18.51			B5	20450	15.44			B39	38350	17.04		
	10700	19.07				20625	15.28				38450	17.22		
	10838	18.16	-103.9	-102.83		20600	15.02	-91.84	-89.76		38550	18	-91.11	-90.23
W2	9626	16.73			B7	20800	17.55			B40	38750	19.88		
	9400	17.41				21100	18.73				39150	19.63		
	9538	18.41	-104.69	-103.52		21400	17.87	-92.86	-91.98		39550	19.4	-89.11	-88.23
W4	1312	17.89			B8	21500	15.98			B41	40340	18.79		
	1412	17.97				21625	15.22				40620	18.7		
	1512	17.61	-103.22	-102.15		21750	14.89	-90.84	-88.76		41140	18.67	-93.68	-92.8
W5	4132	15.54			B12	23035	14.98			B66	132022	16.09		
	4183	15.06				23095	15.46				132322	19.55		
	4233	14.07	-103.06	-99.98		23155	15.43	-92.9	-90.82		132622	17.89	-93.4	-92.52
W8	2937	15.46			B17	23780	15.51							
	3013	15.08				23790	15.47							
	3088	14.13	-100.02	-98.12		23800	15.31	-91.23	-89.15					

2-1.Three in one test results

GPS/WIFI Field test (GPS/WIFI场测)

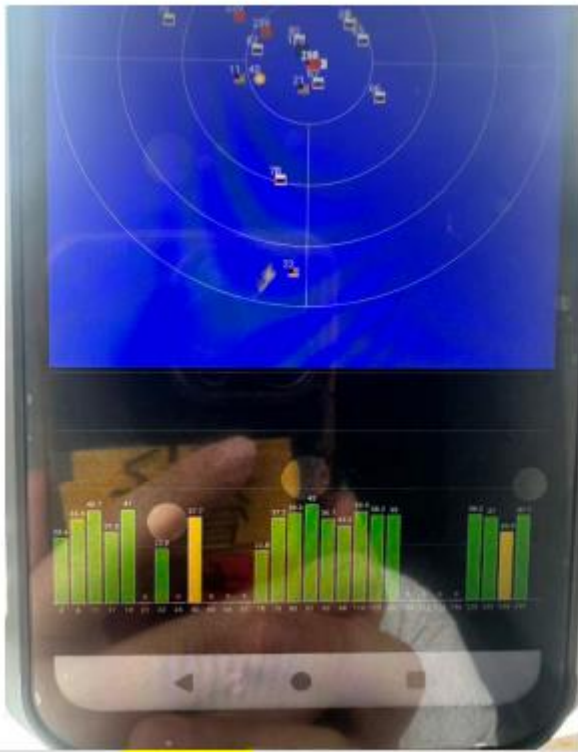


表 1			
	CH	TRP	TIS
WIFI-B	1	11.19	-80.44
	7	12.22	-80.11
	13	12.18	-80.17
WIFI-A	36	10.22	-70.33
	149	10.16	-70.24
	165	10.01	-70.15

2-2. 蓝牙测试 (Bluetooth Test) :

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

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