

Shenzhen Qianmu Communication Technology Co.,Ltd.

Antenna describe:

Antenna Model: H700

Antenna plate: PIFA Antenna

1.GSM passive test report

VSWR parameter values

频率 (MHZ)	794	960	1710	1880	2170	2500	2690
RL	2.7	1.71	1.8	1.8	3.1	1.7	1.3



Return loss parameter values

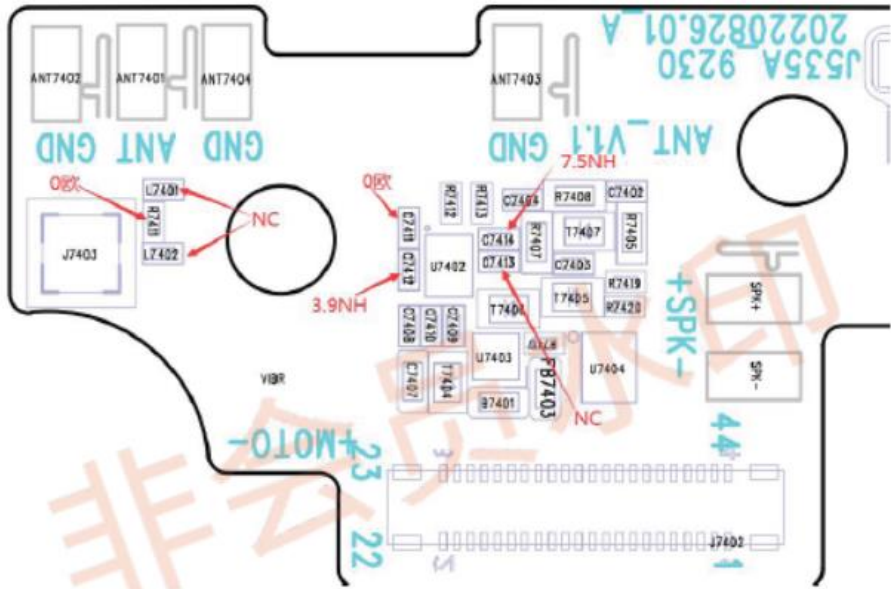
频率 (MHz)	794	960	1710	1880	2170	2500	2690
RL	-6.5	-5.5	-10.2	-10.4	-5.7	-11	-16.3



2. Matching specification

Small board switch logic and matching change instructions

RF 端口	位号	值	应用频段
RF1	C7411	0 欧	GSM900/1800/1900+W1/2/4/8+LTE B1/2/3/4/7/8/40/41
RF2	C7412	3.9NH	GSM850+W5+LTE B5/B20
RF3	C7414	7.5NH	FDD B28AB
RF4	C7413	NC	



3、测试报告 test report

	GSM 850				GSM 900		
Channel	128	190	251		1	62	124
TRP	26.88	27.63	27.35		25.27	26.13	26.66
TIS			-102.99				-103.16
	DCS 1800				PCS 1900		
Channel	512	698	885		512	661	810
TRP	23.17	24.24	24.86		24.22	24.23	24.3
TIS			-103.51				-103.42

	WCDMA 2100				WCDMA 1900		
Channel	10562	10700	10838		9662	9700	9938
TRP	17.23	17.59	17.01		17.84	17.86	18.63
TIS			-103.08				-103.27
	WCDMA 1700				WCDMA 850		
Channel	1537	1638	1738		4357	4408	4458
TRP	16.51	17.16	18.16		16.26	16.17	15.33
TIS			-102.68				-102.85
	WCDMA 900						
Channel	2937	3013	3088				
TRP	16.44	17.41	17.71				
TIS			-102.96				

	LTE-FDD B1				LTE 2		
Channel	18050	18300	18550		18650	18900	19150
TRP	18.73	17.86	17.46		18.85	18.37	18
TIS			-91.16				-91.27
	LTE-FDD B3				LTE 4		
Channel	19300	19575	19850		20000	20175	20350
TRP	17.95	18.85	18.85		17.39	17.59	17.66
TIS			-91.35				-91.62

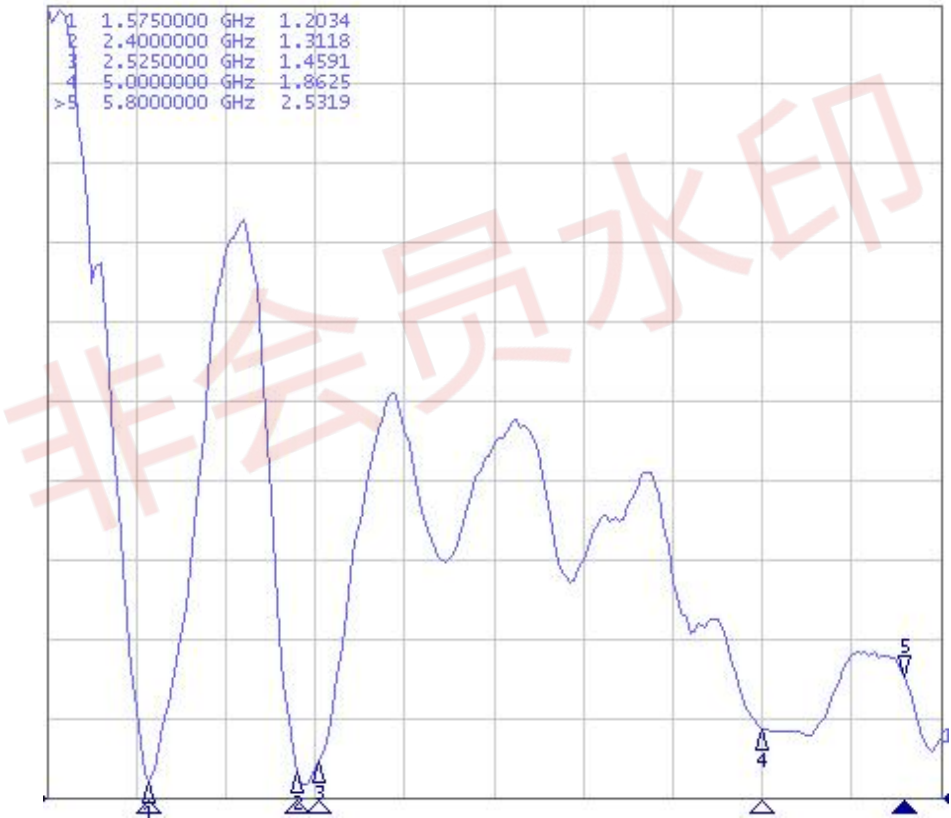
	LTE-FDD B5				LTE-FDD B7		
Channel	20450	20550	20600		20800	21100	21400
TRP	15.07	15.13	15		18.25	18.16	18.38
TIS			-88.86				-91.62
	B8				LTE B20		
Channel	21500	21625	21750		24200	24300	24400
TRP	16.58	16.37	17.33		16.1	15.38	15
TIS			-89.13				-91.94

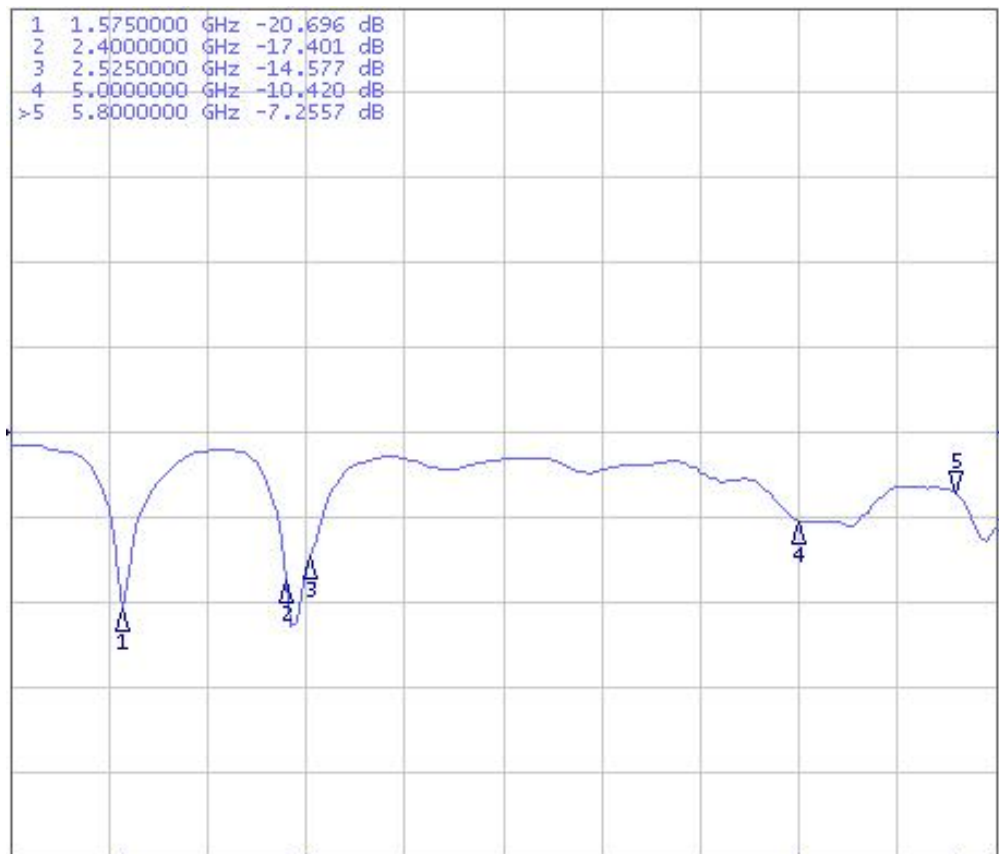
	B28AB				
Channel	27260	27433	27435	27510	27610
TRP	16.46	15.41	15.15	15.4	15
TIS			-87.19		-89.23

	B40				B41		
Channel	38750	39150	39550		40340	40740	41140
TRP	17.43	17.12	16.24		18.25	17.58	17.23
TIS			-90.52				-90.55

4、GPS/WIFI S11 Passive parameter

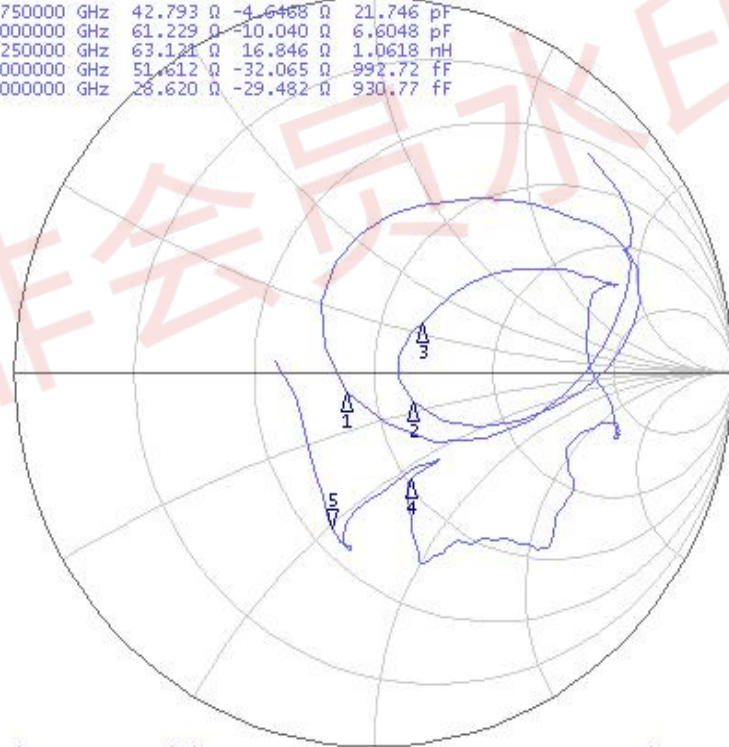
Band (MHz)	GPS&WIFI&BT				
	1575	2400	2500	5000	5800
R. L (dB)	-20.6	-17.4	-14.5	-10.4	-7.25
VSWR	1.2	1.3	1.4	1.8	2.5





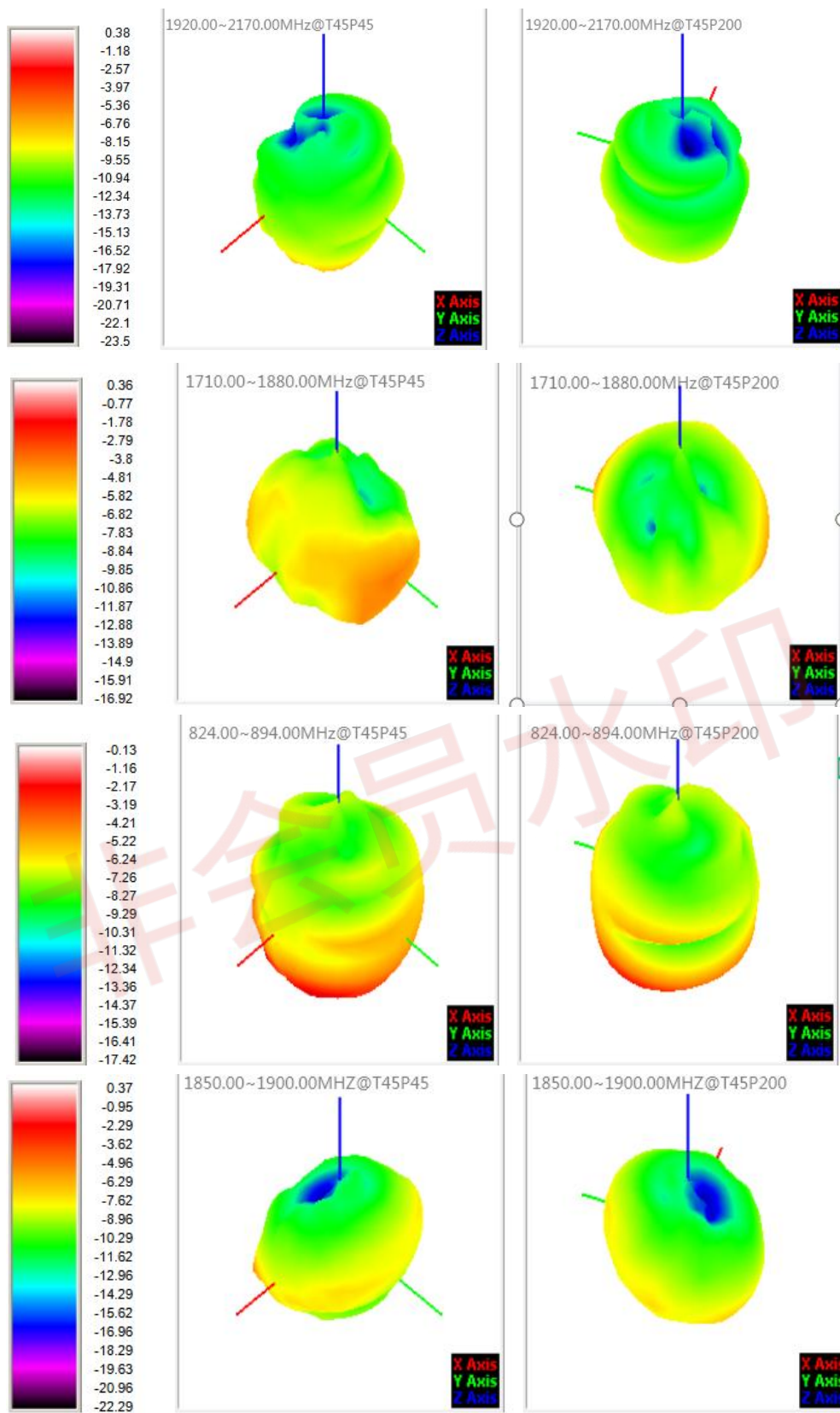
▶ S11 Smith (R+jX) Scale 1.000U [F1 M]

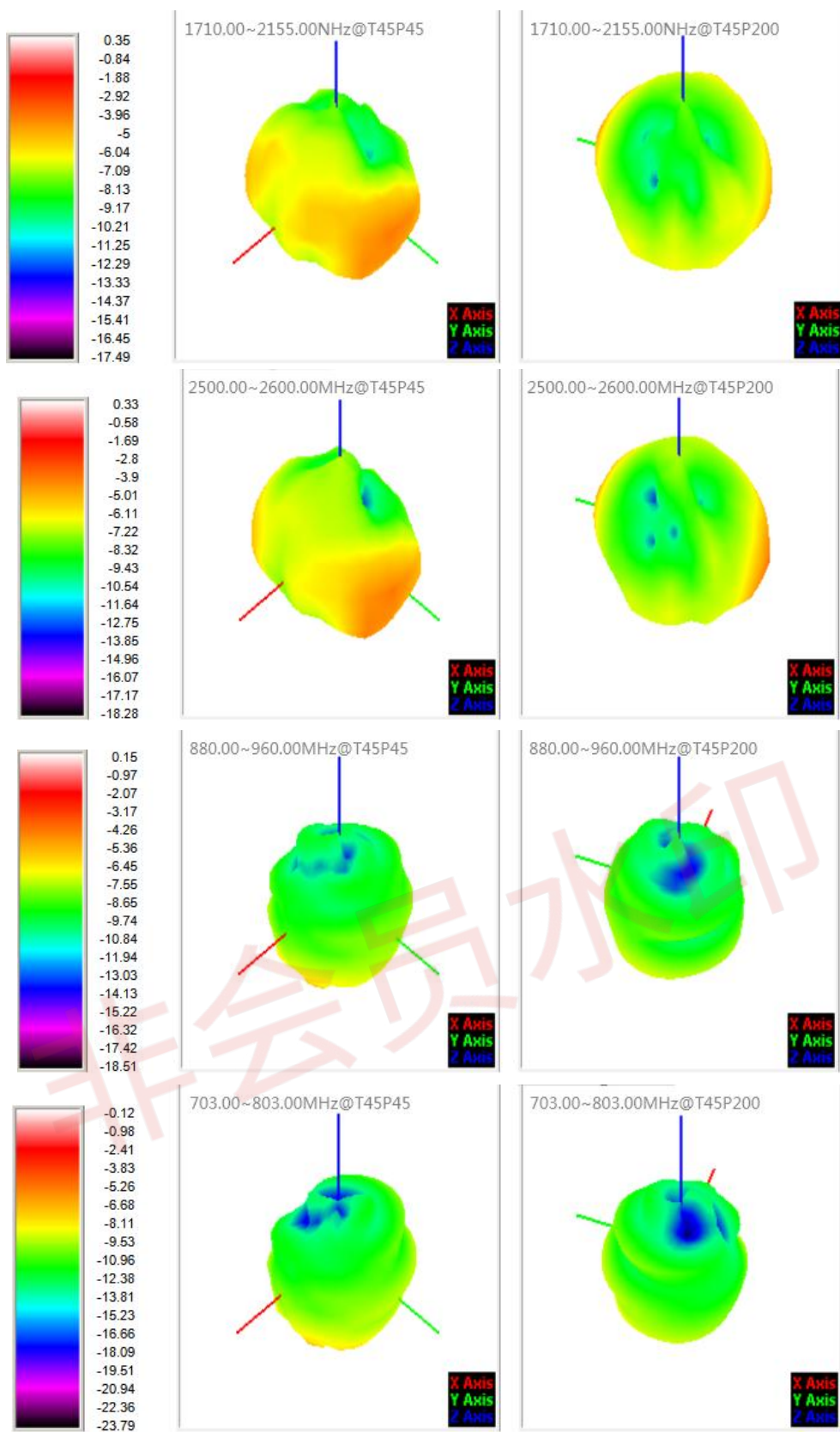
1	1.5750000	GHz	42.793	Ω	-4.6488	Ω	21.746	pF
2	2.4000000	GHz	61.229	Ω	-10.040	Ω	6.6048	pF
3	2.5250000	GHz	63.121	Ω	16.846	Ω	1.0618	nH
4	5.0000000	GHz	51.612	Ω	-32.065	Ω	992.72	fF
>5	5.8000000	GHz	28.620	Ω	-29.482	Ω	930.77	fF

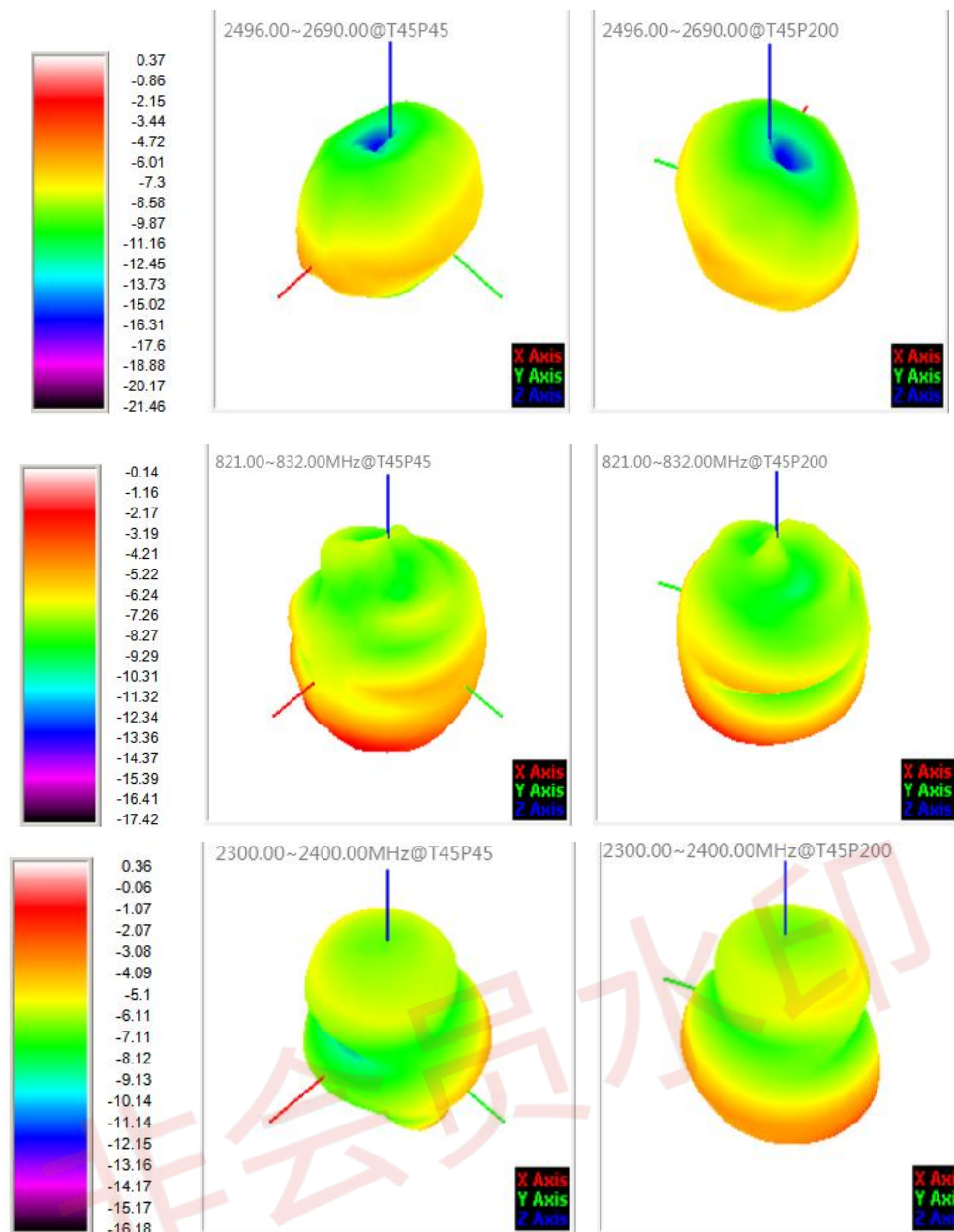


5、Directional diagram

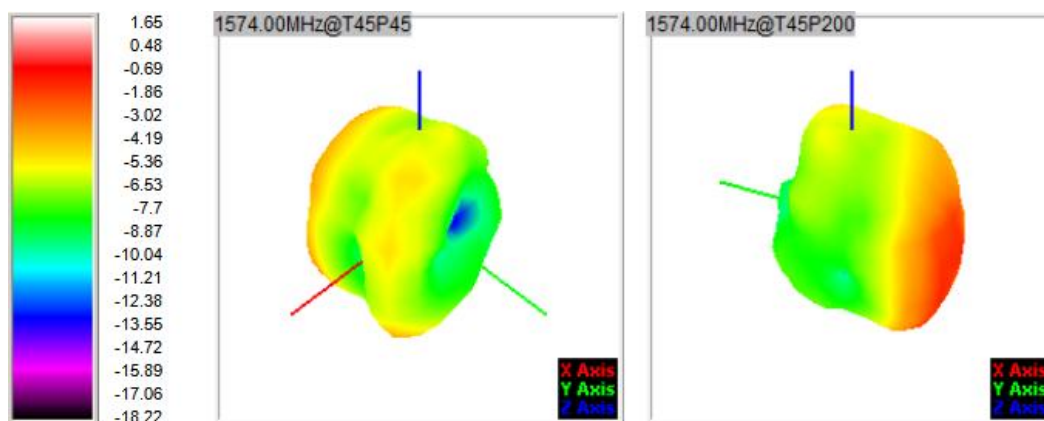
Main antenna direction

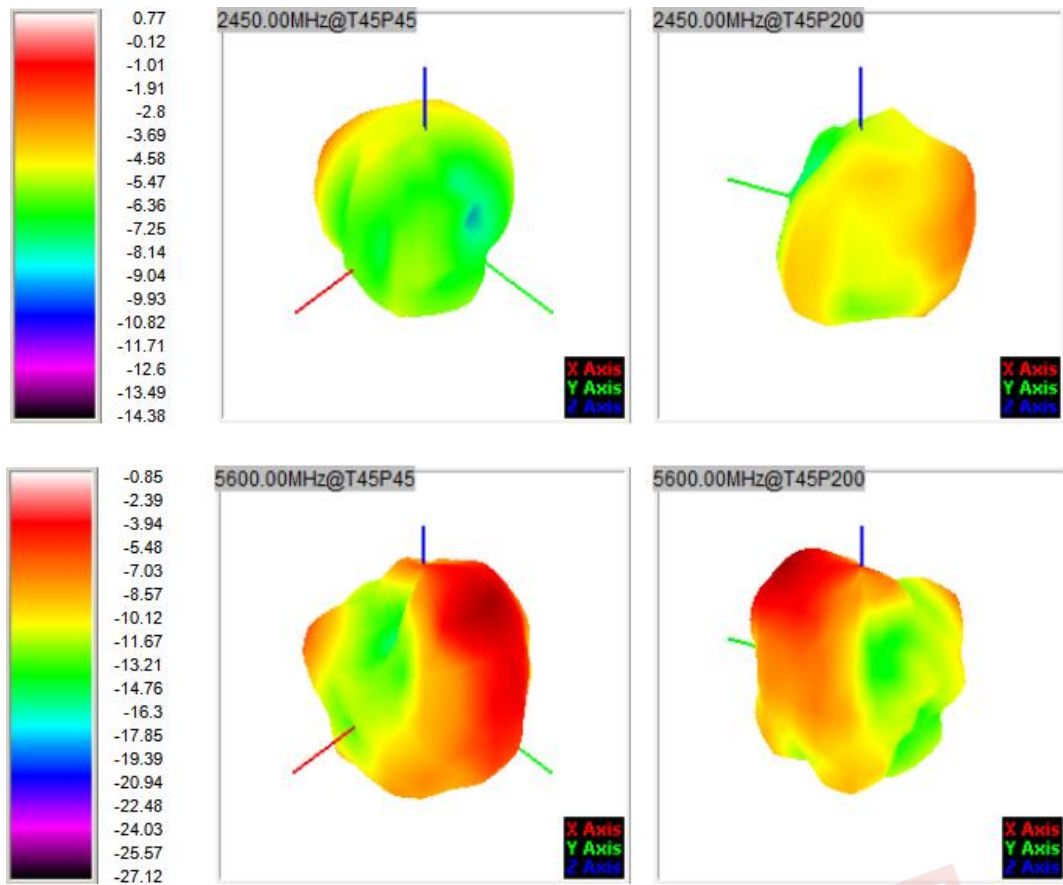






GPS/WIFI direction



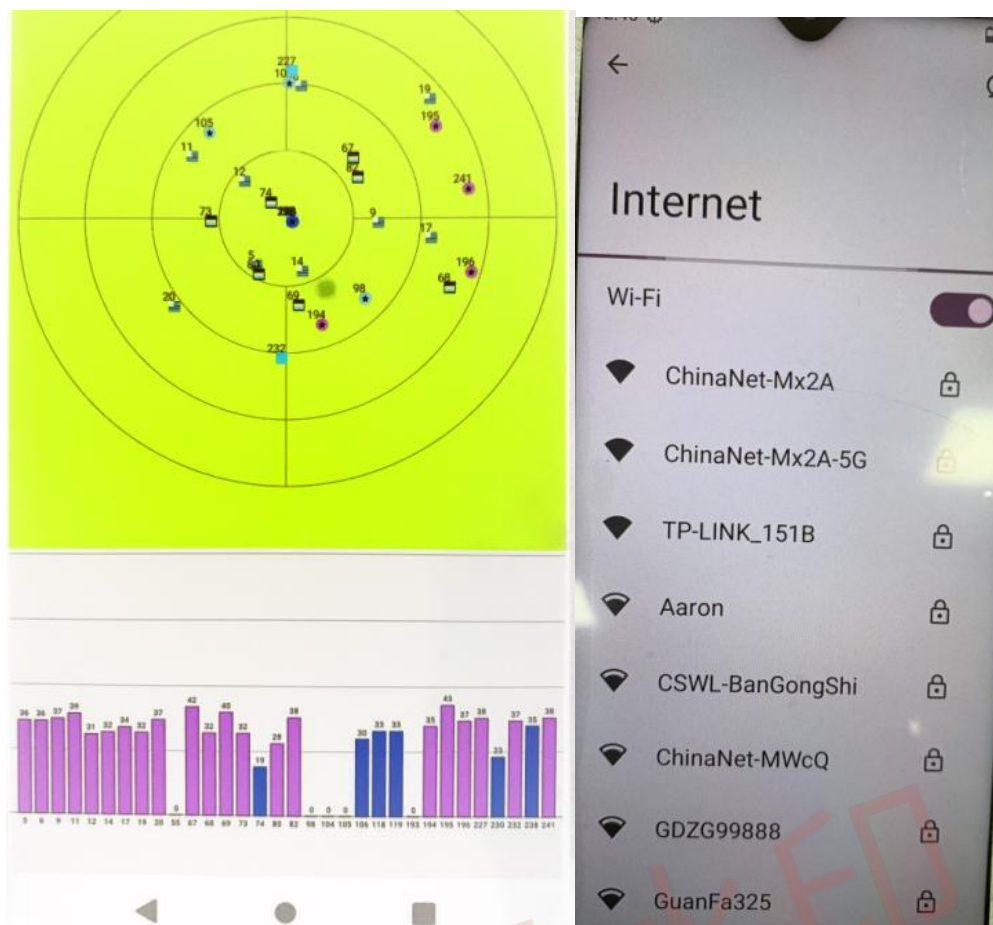


6、Antenna Gain

B1	1920~2170MHZ	0.38
B2	1850-1900MHZ	0.37
B3	1710-1880MHZ	0.36
B4	1710-2155	0.35
B5	824-894MHZ	-0.13
B7	2500-2600MHZ	0.33
B8	880-960MHZ	-0.15
B20	821~832MHz	-0.14
B28AB	703-803MHZ	-0.12
B40	2300-2400MHZ	0.36
B41	2496-2690MHZ	0.37

wifi/BT	2400-2500MHZ	-0.85
wifi	5000~5800MHZ	0.77
GPS	1575.42MHZ	1.65

7、GPS/WIFI practical test



GPS practical test: cold start within one minute positioning, ten CN values above 34