深圳市广源发电子有限公司

Shenzhen Guangyuanfa Electronic Co., Ltd.

Antenna Test Report

客户名称	凌度	项目名称	**S58**
时间	**2025/4/21**	报告版本	**A1**
调试工程师	骆业辉	联系方式	**15077703194**

History

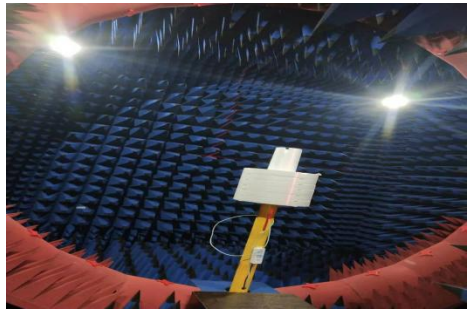
Version	Report Date	Revision Description	Prepared by
A1	2025.4.21	天线测试报告	骆业辉

目录

项目调试简介

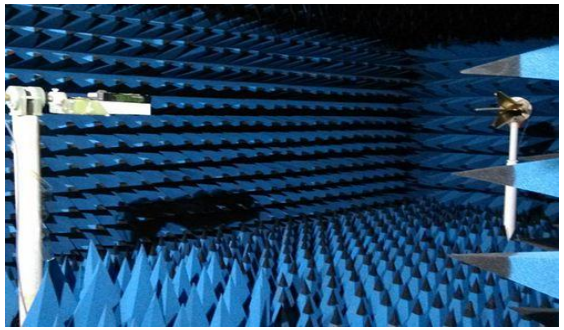
MODEL	S58			
antennan type	FPC			
Frequency band and antenna materia	Main antenna	frequency band		materia
		2G	/	FPC
		3G	/	
		LTE	B1/3/5/8/20/28/38/40/41	
	other antenna	DIV	/	/
		WIFI\BT	2.4G	FPC
performance requirement	Execute according to customer requirements			

测试设备说明



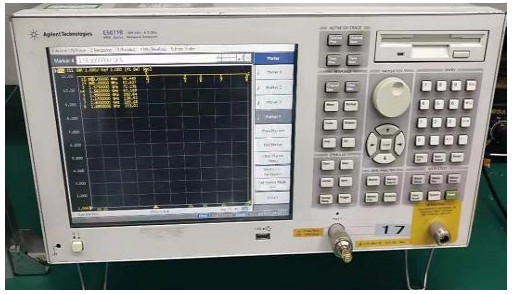
24 Probe microwave anechoic chamber

CMW500



7*4*3M ETS anechoic chamber

Agilent 8960



Agilent E5071B

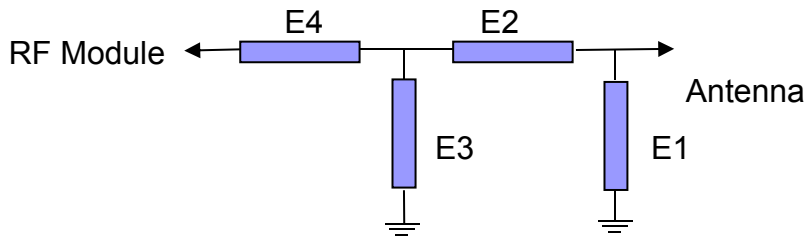
High and low temperature experiment box

MT8820C

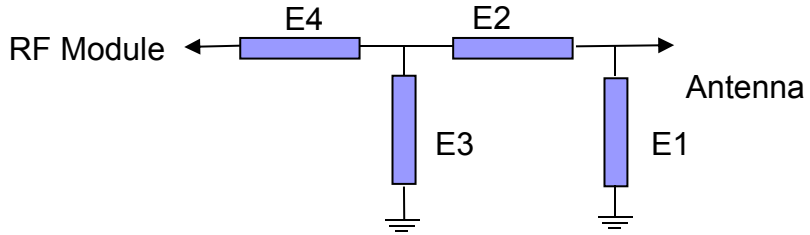
HP8753ES

Test System	Test System	Active test	Passive test
ETS anechoic chamber 24-probe OTA anechoic chamber	Temperature: 22℃±3℃ Humidity: 50%±15%	SUPPORT 2G/3G/4G SUPPORT NB-IoT/CAT-M/BT/WIFI	700MHz——6G

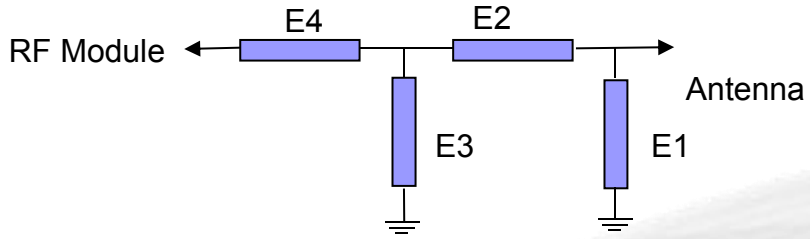
Description of matching circuit no change in antenna matching



	Element	Value
Main antenna	E1(0402)	N/A
	E2(0402)	0Ω
	E3(0402)	N/A
	E4(0402)	0Ω



	Element	Value
GWBantenna	E1(0402)	N/A
	E2(0402)	0Ω
	E3(0402)	N/A
	E4(0402)	0Ω



	Element	Value
DIVantenna	E1(0402)	N/A
	E2(0402)	0Ω
	E3(0402)	N/A
	E4(0402)	0Ω

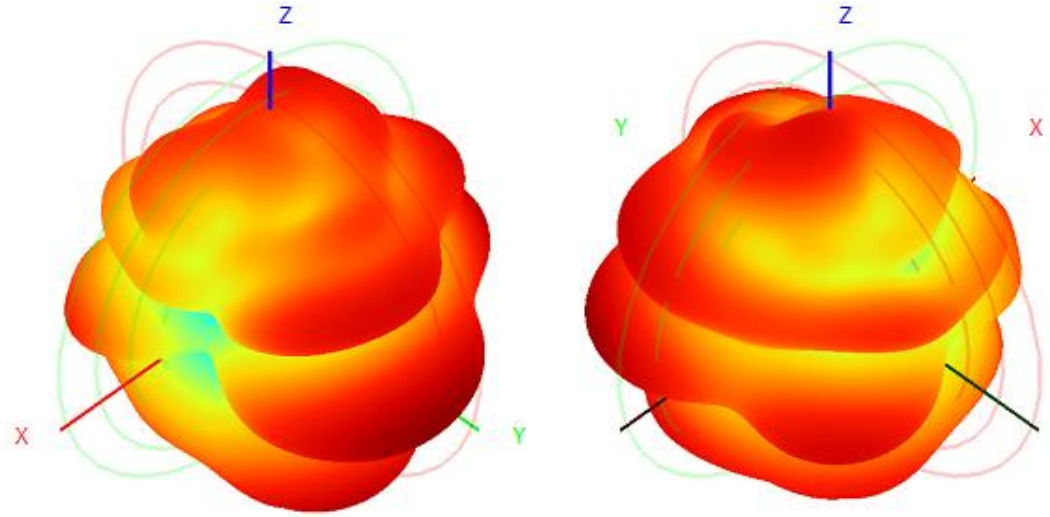
Passive data-4G

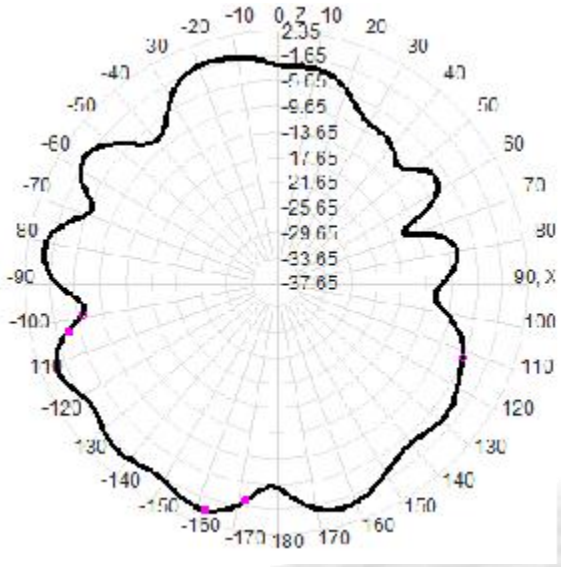
Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
700.0	-5.62	0.48	27.40	1700.0	-5.38	1.36	28.99	2300.0	-5.67	1.65	27.13
710.0	-5.98	0.38	25.26	1720.0	-4.95	1.79	32.02	2320.0	-5.23	1.38	29.99
720.0	-5.87	0.48	25.88	1740.0	-4.99	0.96	31.66	2340.0	-5.27	2.86	29.70
730.0	-6.20	0.77	23.98	1760.0	-4.93	1.35	32.12	2360.0	-5.13	1.76	30.69
740.0	-6.35	0.28	23.16	1780.0	-4.48	0.81	35.62	2380.0	-4.70	1.56	33.86
750.0	-6.20	-0.15	24.00	1800.0	-4.46	0.68	35.80	2400.0	-4.89	1.04	32.45
760.0	-6.45	-0.37	22.64	1820.0	-4.70	1.30	33.91	2420.0	-4.70	1.51	33.91
770.0	-6.62	-0.53	21.75	1840.0	-4.33	0.75	36.88	2440.0	-4.51	1.78	35.36
780.0	-6.63	-0.31	21.72	1860.0	-4.09	0.80	39.01	2460.0	-4.24	1.77	37.63
790.0	-6.69	-0.18	21.45	1880.0	-4.37	1.59	36.60	2480.0	-4.03	1.58	39.55
800.0	-6.54	0.14	22.17	1900.0	-4.31	1.57	37.08	2500.0	-3.77	2.04	42.02
810.0	-6.20	0.40	24.01	1920.0	-4.33	1.66	36.94	2520.0	-3.12	2.67	48.73
820.0	-5.97	0.39	25.29	1940.0	-4.44	1.57	35.97	2540.0	-3.30	2.50	46.78
830.0	-5.94	-0.22	25.48	1960.0	-4.25	1.11	37.62	2560.0	-3.45	1.67	45.14
840.0	-6.02	-0.80	25.02	1980.0	-4.30	1.54	37.14	2580.0	-3.43	1.64	45.42
850.0	-6.18	-0.63	24.09	2000.0	-4.59	1.10	34.75	2600.0	-3.62	2.06	43.49
860.0	-6.09	0.41	24.62	2020.0	-4.67	0.79	34.09	2620.0	-4.10	2.04	38.93
870.0	-5.88	1.09	25.82	2040.0	-4.56	0.96	35.01	2640.0	-3.87	2.27	41.01
880.0	-5.66	1.94	27.16	2060.0	-4.55	1.03	35.08	2660.0	-3.99	2.39	39.88
890.0	-5.38	2.51	28.98	2080.0	-4.50	0.99	35.48	2680.0	-4.20	2.32	38.00
900.0	-5.19	2.84	30.25	2100.0	-4.45	1.00	35.92	2700.0	-3.86	2.09	41.15
910.0	-5.14	3.13	30.58	2120.0	-4.65	0.79	34.30				
920.0	-5.21	3.08	30.10	2140.0	-4.37	1.13	36.56				
930.0	-5.59	2.55	27.58	2160.0	-4.15	1.26	38.44				
940.0	-6.31	1.64	23.39	2180.0	-4.44	1.14	35.95				
950.0	-7.17	0.76	19.18								
960.0	-8.35	-0.35	14.61								
970.0	-9.66	-1.59	10.83								
980.0	-11.01	-3.02	7.92								
990.0	-12.46	-4.16	5.68								
1000.0	-14.00	-6.48	3.98								

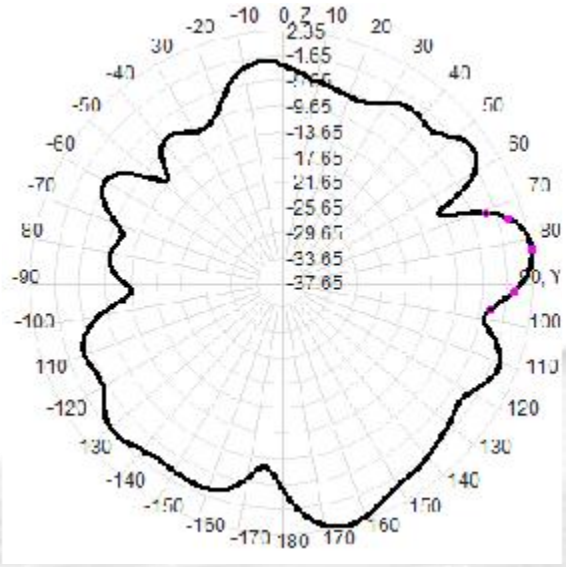
Passive data-WIFI

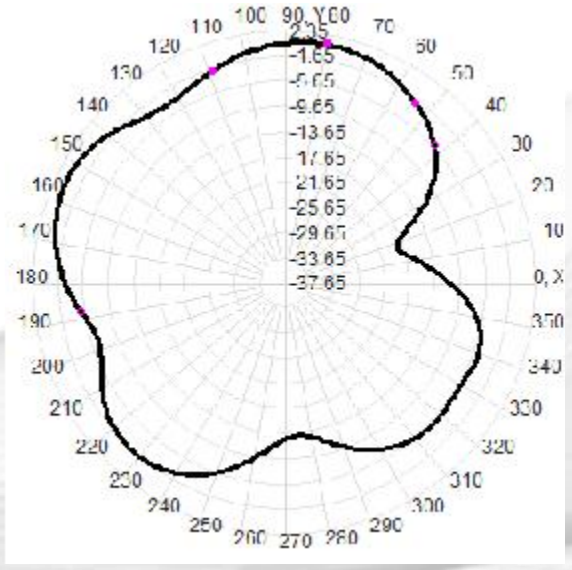
Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400.0	**-3.35**	1.26	**46.19**
2410.0	**-3.32**	1.40	**46.56**
2420.0	**-3.12**	1.83	**48.78**
2430.0	**-3.04**	1.79	**49.62**
2440.0	**-3.11**	2.37	**48.84**
2450.0	**-3.47**	1.52	**44.96**
2460.0	**-3.57**	2.02	**43.91**
2470.0	**-3.65**	2.24	**43.19**
2480.0	**-3.31**	2.04	**46.71**
2490.0	**-3.38**	1.77	**45.93**
2500.0	**-3.33**	1.70	**46.50**

WIFI antenna 2470MHz 2D/3D

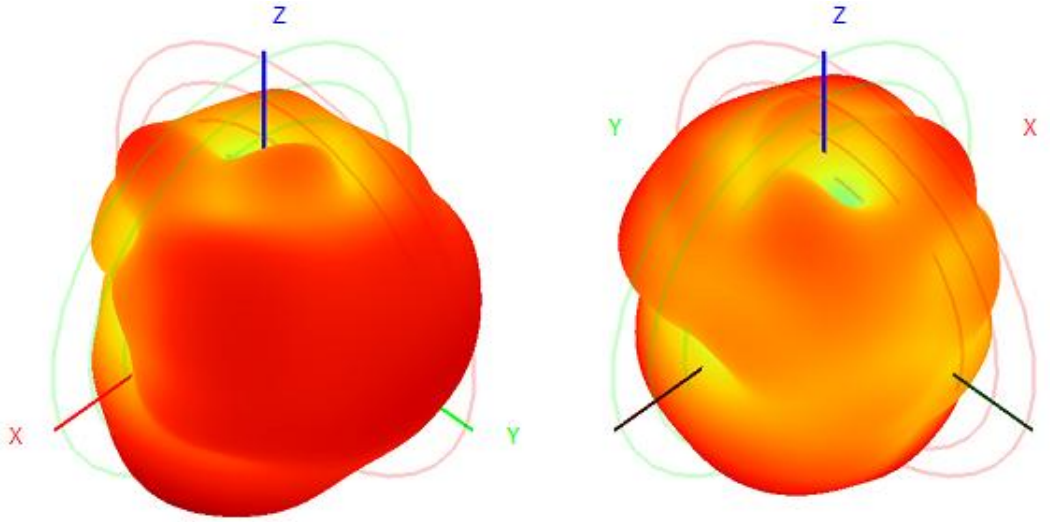


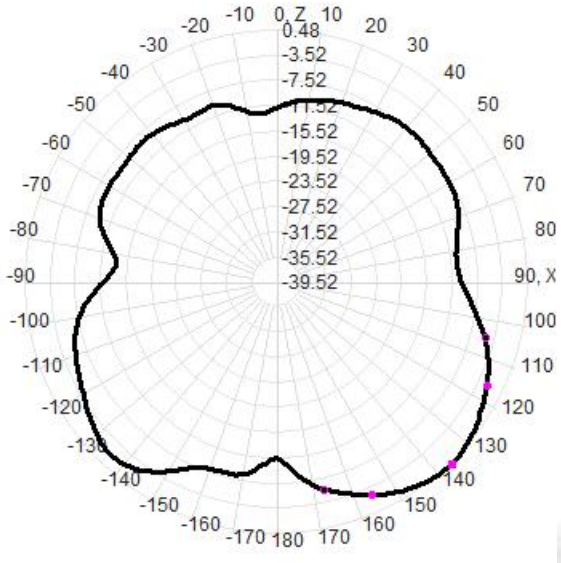


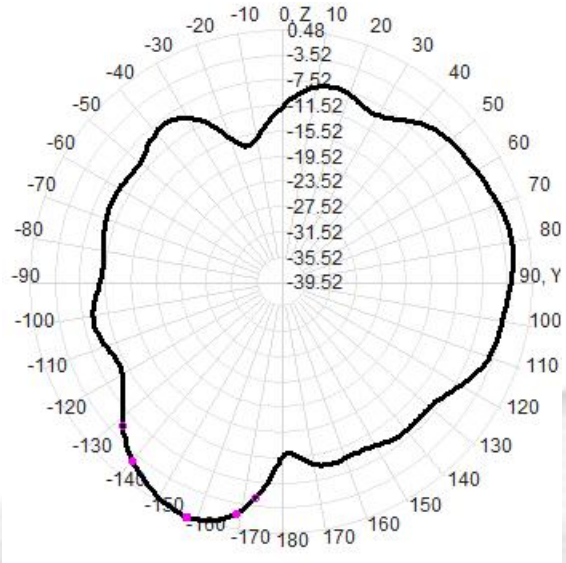


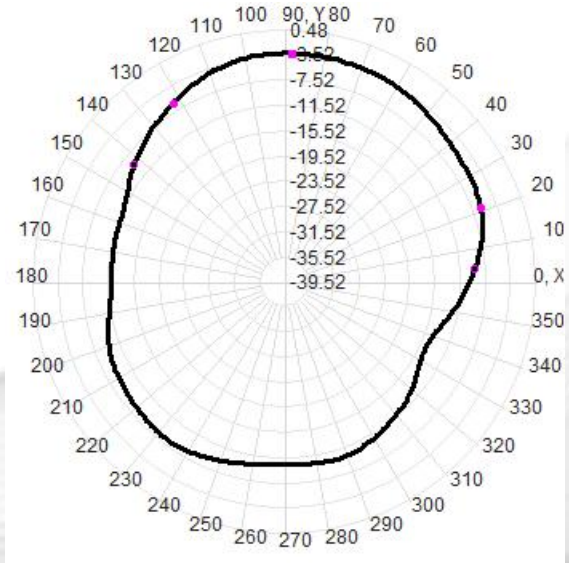


4g antenna 700MHz 2D/3D

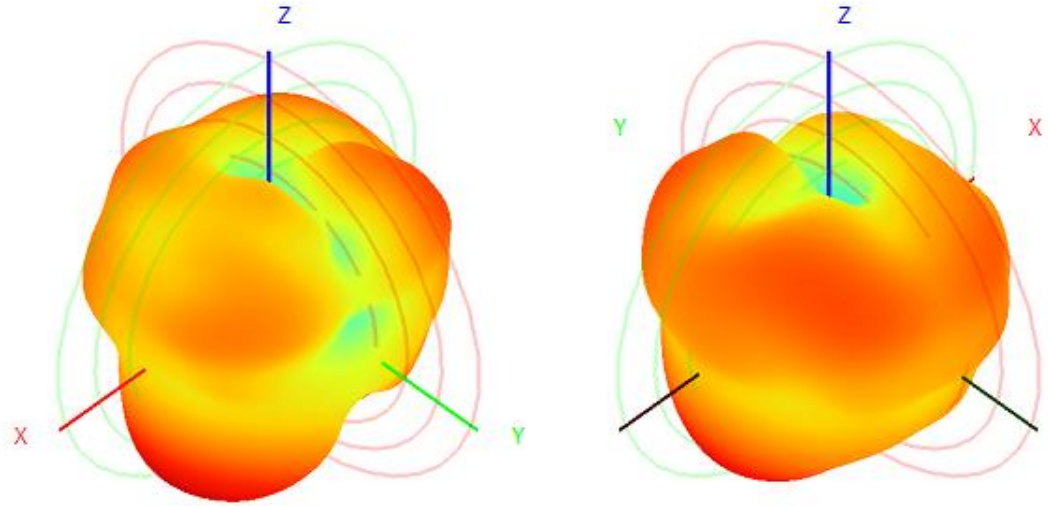


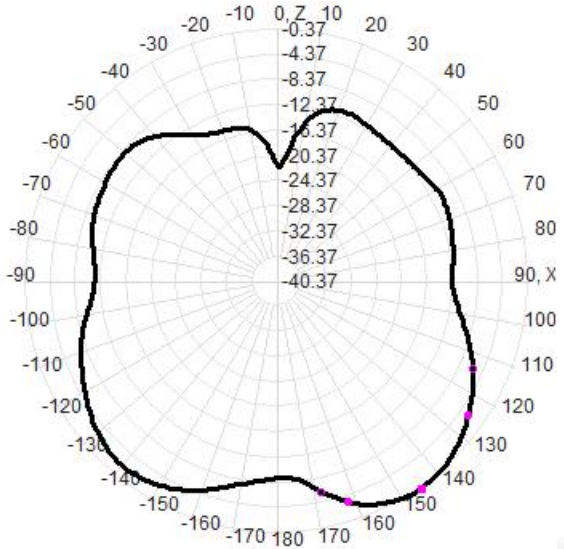


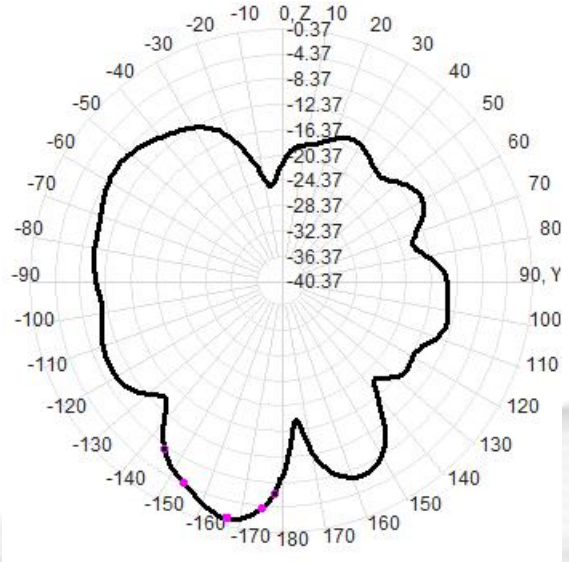


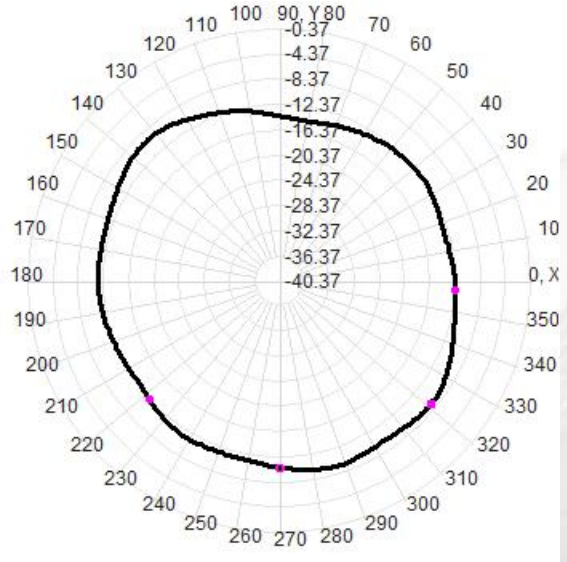


4g antanna 960MHz 2D/3D

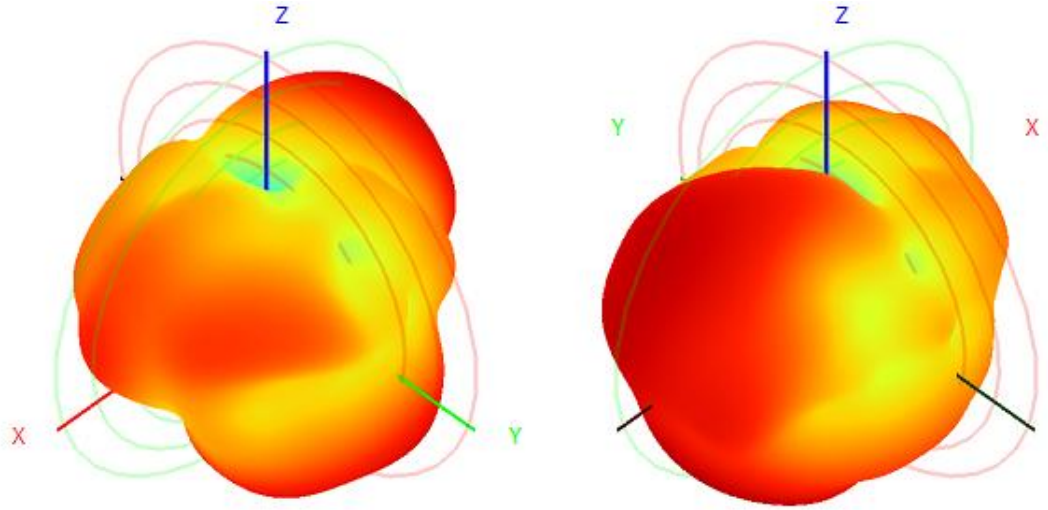


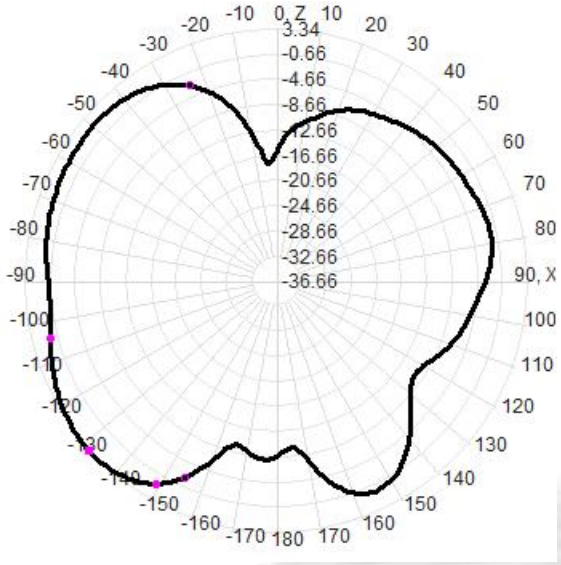


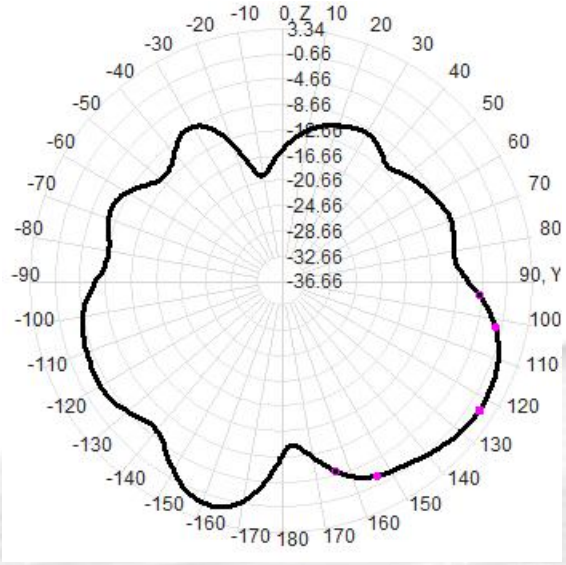


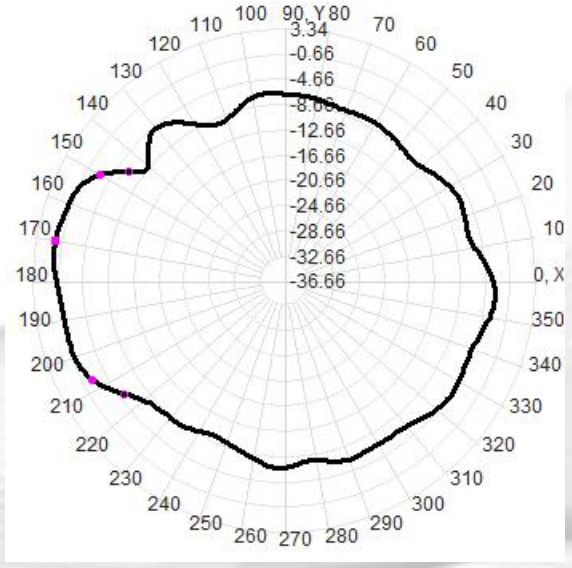


4g antenna 1720MHz 2D/3D

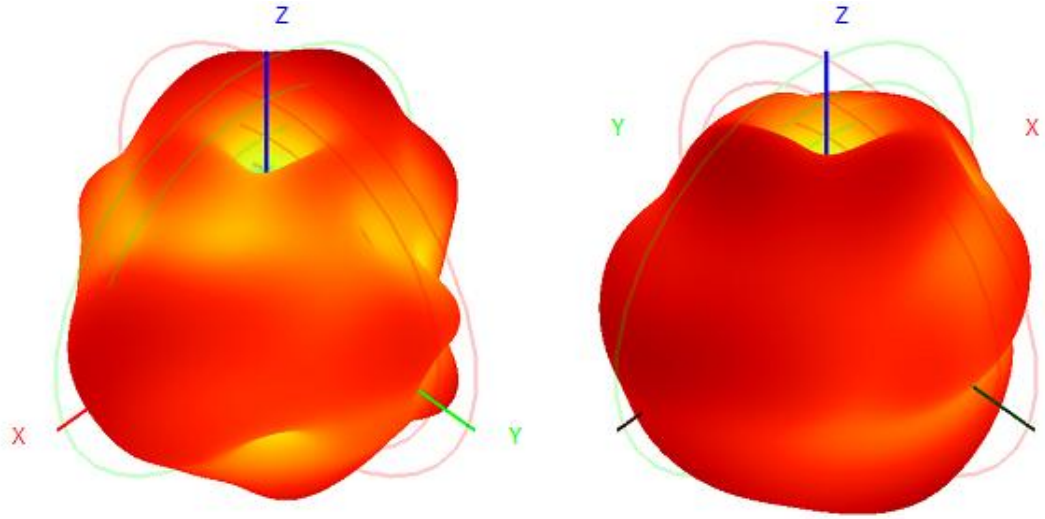


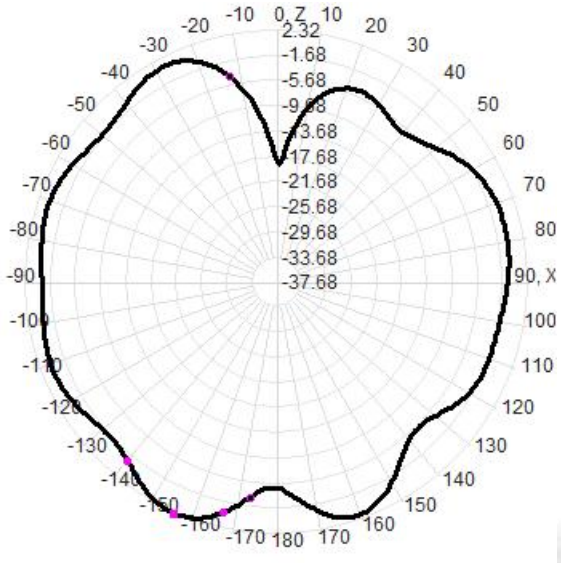


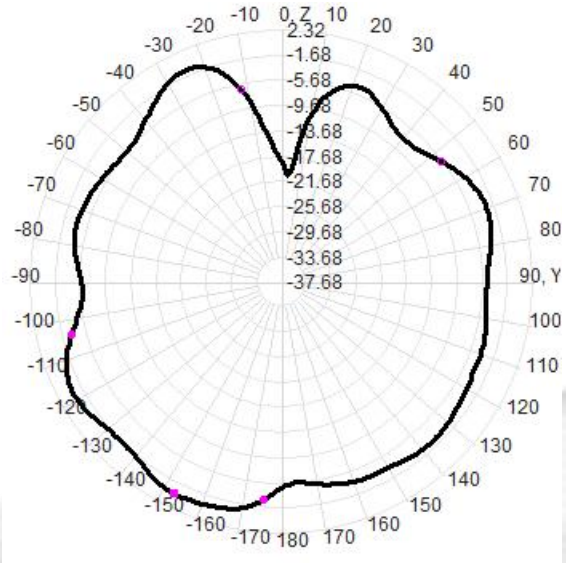


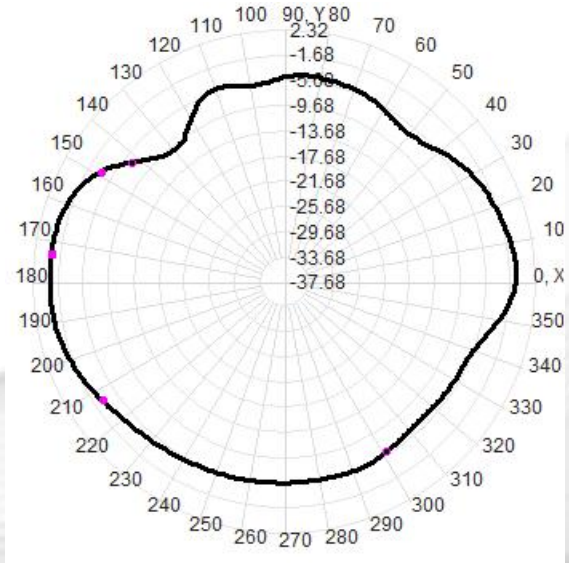


4g antenna 2680MHz 2D/3D









Antenna assembly/environmental treatment

欧美版					
Band	TRP	TIS	Band	TRP	TIS
B1	18.85		B20	15.16	
	18.69			15.6	
	17.77	-91.5		15.87	-83.54
B3	17.95		B28	15.89	
	17.26			14.59	
	17.44	-89.46		14.89	-84.21
B5	16.26		B38	17.19	
	15.37			17.62	
	16.12	-82.64		17.59	-89.1
B8	15.56		B40	16.15	
	16.37			16.4	
	15.44	-85.78		16.5	-89.12
			B41	17.23	
				17.69	
				17.19	-89.9

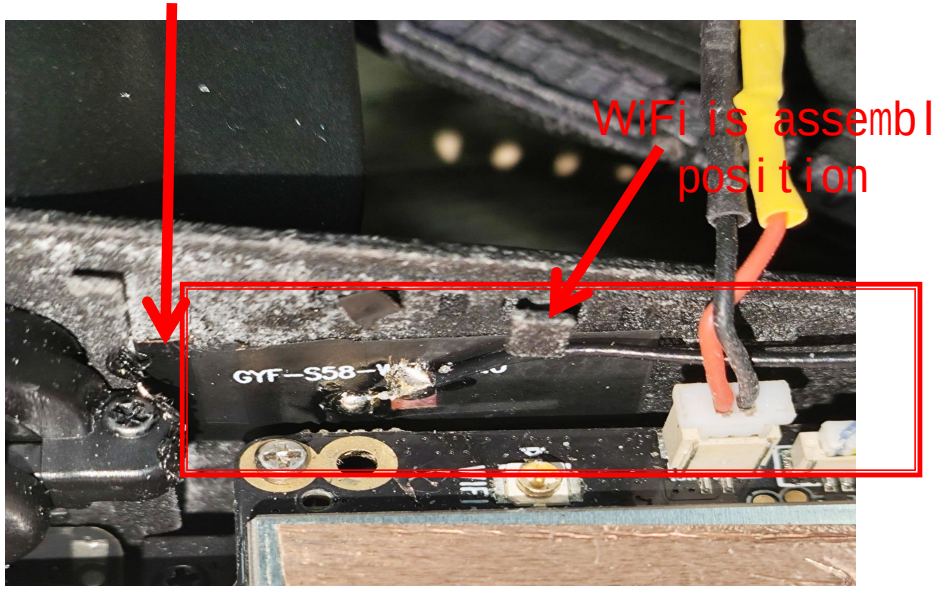
北美版		
B2	18.8	
	18.7	
	17.72	-91.77
B4	17.17	
	17.22	
	17.49	-91.78
B5	16.81	
	16.44	
	15.72	-79.33
12	14.89	
	14.87	
	14.86	-75.4
B13		
	15.95	-75.81
B14		
	16.59	-76.05
B66	17.92	
	18.48	
	18.61	-90.94
B71	13.03	
	13.78	
	13.93	-70.34

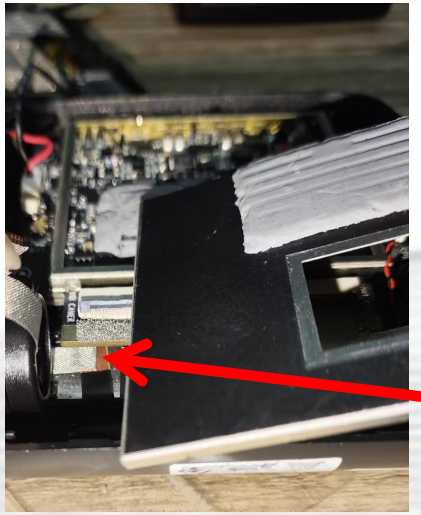
Test phone :oppofindx3
Office measurement: 10M
no lag delay video size: 200M
Download time: 59s
Average :3.4M/s
Video playback: no noise

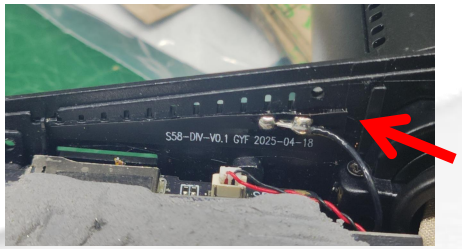
Antenna assembly/environmental treatment

4g Antenna

The antenna is attached to the edge







Diversity assembly location

The copper exposed area of the main antenna was covered with conductive cloth

Notes

1. Please confirm whether the matching and environmental treatment methods in the report are acceptable; This will directly affect the antenna performance, if you have different opinions, please timely
To contact the Department;
2. If you change materials, components, update software, change environmental treatment, etc., please provide the latest state machine to our company to verify the performance; 3. If your machine needs to be sent to a third party for performance verification, it is better to provide the test machine to our company for testing and verification. (because the motherboard, environmental processing, antenna assembly and other consistency will affect the antenna performance deviation).

Address: 10 / F, Building D2, Songhu Zhichi Innovation Center, Liaopu Town, Dongguan
Tel :0755-26702159
Fax :0755-26702585
Website :http://www.gyfgpsbd.com

Thanks.