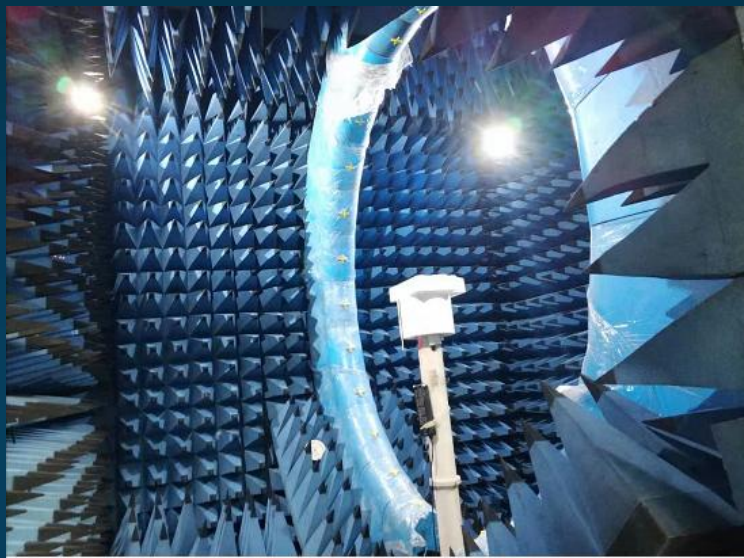


测试设备(Equipment Testing)

SG24



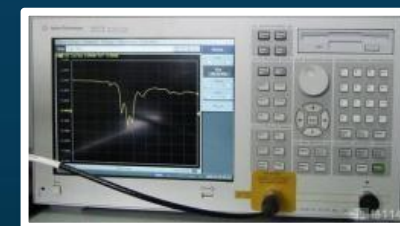
GTS



Agilent 8960



CMW 500

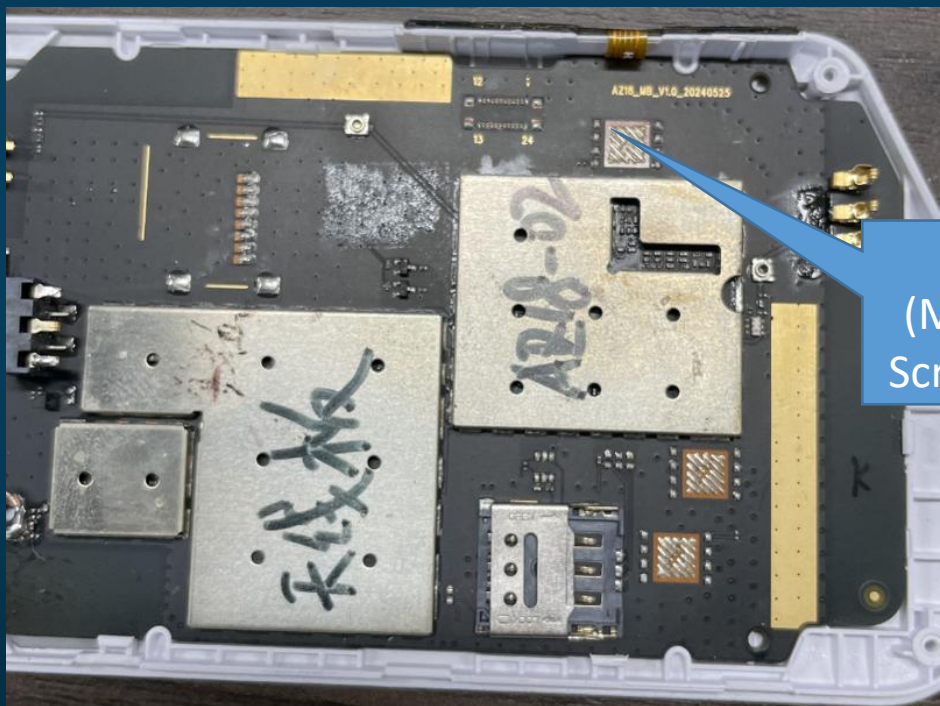


Agilent E5071B

测试系统(Test System)	测试环境(Test Environment)	有源测试(OTA Testing)	无源测试(SAR Testing)
SG24 ETS	温度(Temperature): $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 湿度(humidity): $50\% \pm 15\%$	支持(Support)2G/3G/4G 支持(Support)BT/WIFI/GPS	600MHZ——6G

调试版本记录Debug version log

(JC22)

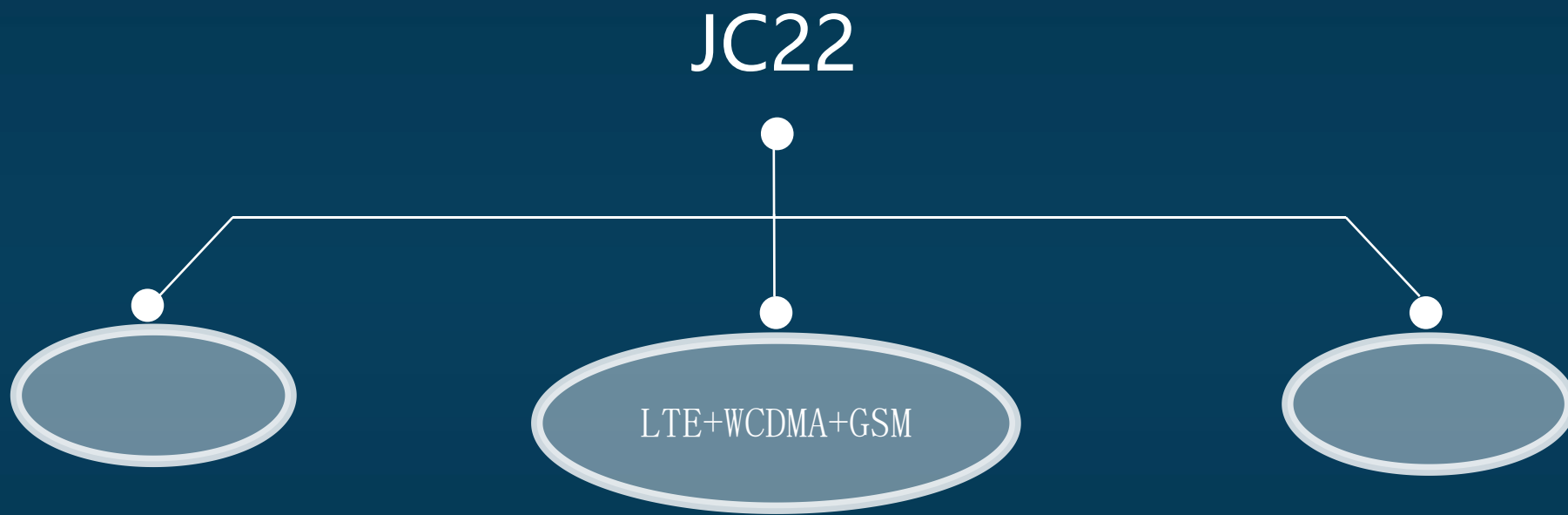


主板丝印 (MotherBoard Screen Printing)

主板版本(MotherBoard Version):
AZ18_MB_V1.0_20240525

[illegible]

项目说明(Project description)



机器类型:

天线方式: fpc

匹配改动: 未更改

Device: Mobile Phone

Antenna Type: fpc

Matching changes: No changes

匹配电路(Matching Circuit)

RF Module

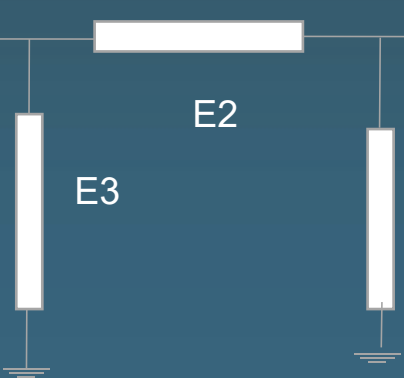
Antenna

Matching Changes

No Change

匹配是否有改动

未改动



天线(Antenna)	
Element	Value
E1 (0201)	
E2 (0201)	
E3 (0201)	

OTA测试数据(OTA Test Data):

Band	TRP	TIS	Band	TRP	TIS	Band	TRP	TIS	Band	TRP	TIS
B1	18.5		B7	19.89		B38	19.75		W1	18.37	
	18.32			19.97			19.34			18.39	
	18.19	-97.34		19.76	-92.89		18.69	-92.19		18.67	-104.38
B2	19.24		B12	16.34		B41	20.43		W2	18.46	
	18.99			16.78			20.01			18.73	
	18.32	-96.45		17.02	-92.46		19.56	-92.48		18.66	-104.25
B4	18.72		B17	16.21		B66	18.38		W4	18.71	
	18.92			16.49			18.71			18.96	
	19.06	-96.45		17.05	-92.15		19.06	-93.62		19.08	-105.07
B5	18.75		B28	16.45					W5	18.66	
	18.34			17.04						18.37	
	18.01	-92.06		17.39	-94.38					18.02	-103.78

主天线无源测试数据(Main Antenna SAR Test Data):

LTE						LTE						LTE					
BAND	Frequency (MHz)	Gain(dBi)	Gain MAX (dBi)	Efficiency (%)	Efficiency MAX	BAND	Frequency (MHz)	Gain(dBi)	Gain MAX (dBi)	Efficiency (%)	Efficiency MAX	BAND	Frequency (MHz)	Gain(dBi)	Gain MAX (dBi)	Efficiency (%)	Efficiency MAX
B28 B12 B17	700	-1.69	0.99	25.22	36.59	B5 W5	810	-0.98	-0.61	36.12	38.16	B28 B12 B17	910	-1.26	-1.26	25.22	30.87
	710	-1.12		26.3			820	-0.96		37.22			920	-1.32		26.3	
	720	-1.06		27.7			830	-0.82		38.16			930	-1.51		27.7	
	730	-0.35		28.12			840	-0.61		37.25			940	-1.64		28.12	
	740	0.21		28.1			850	-0.73		36.11			950	-1.71		28.1	
	750	0.98		30.87			860	-0.59		34.72			960	-1.88		30.87	
	760	0.99		32.12													
	770	0.68		33.43													
	780	-0.56		35.72													
	790	-0.69		36.26													
	800	-1.21		36.59			900	-1.19		27.25							

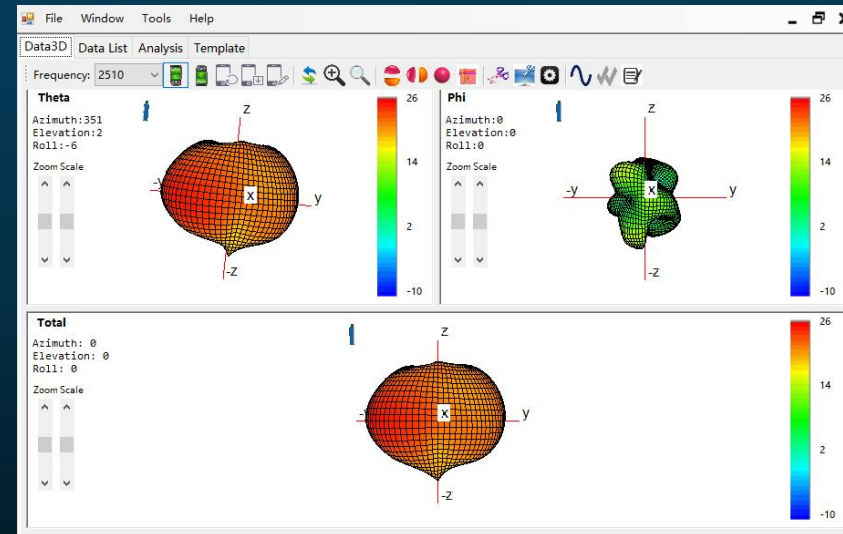
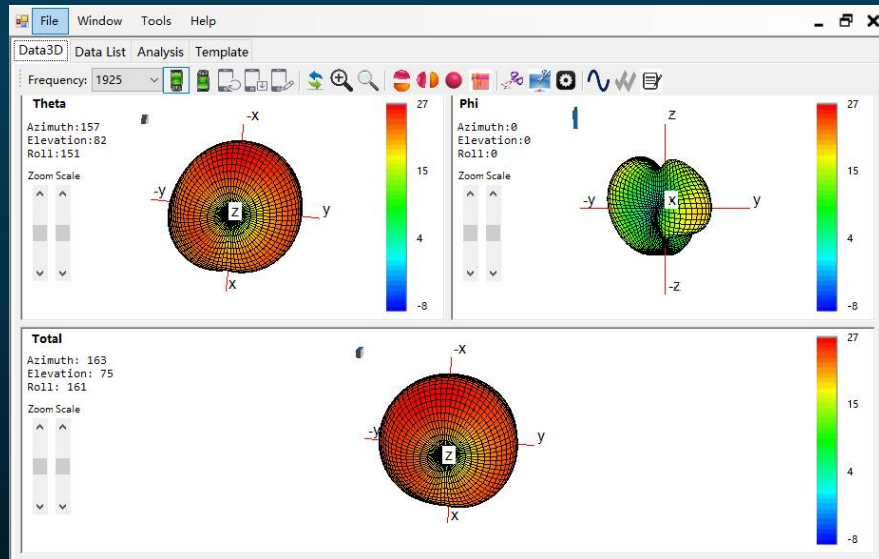
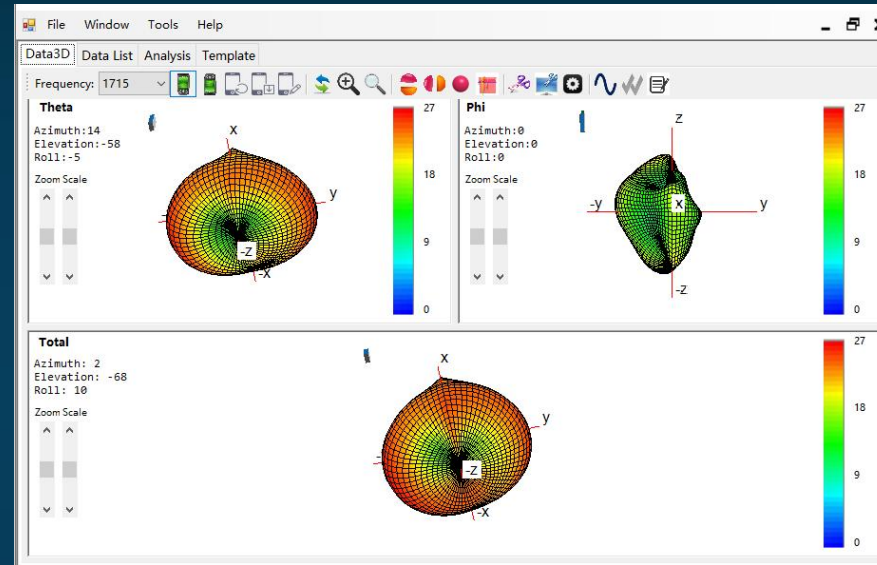
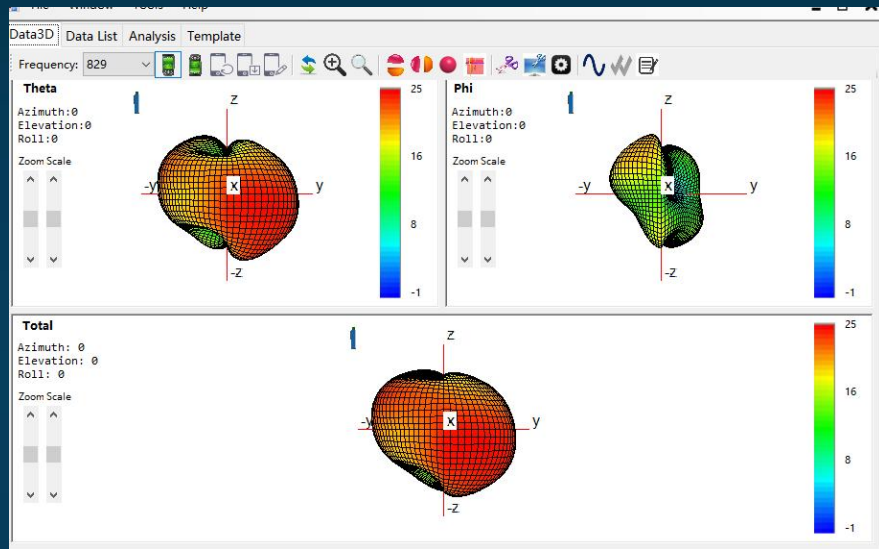
主天线无源测试数据(Main Antenna SAR Test Data):																	
LTE						LTE						LTE					
						BAND	Freque ncy (MHz)	Gain(dB i)	Gain MAX(d Bi)	Efficie ncy(%)	Effici ency MAX						
BAND	Freque ncy (MHz)	Gain(d Bi)	Gain MAX(dB i)	Efficie ncy(%)	Effici ency MAX	BAND	Freque ncy (MHz)	Gain(dB i)	Gain MAX(d Bi)	Efficie ncy(%)	Effici ency MAX	BAND	Freque ncy (MHz)	Gain(dB i)	Gain MAX(d Bi)	Efficie ncy(%)	Effic ency MAX
B1 B2 B4 B66 W1 W2 W4	1700	1.26	1.98	35.24	37.04	B1 B4 B66 W1 W4	2030	1.77	2.72	37.68	39.92	B7 B38 B41	2520	2.25	2.96	35.08	36.0
	1730	1.59		36.86			2060	1.89		38.47			2540	2.96		35.07	
	1760	1.62		36.18			2090	1.95		39.92			2560	2.54		36.01	
	1790	1.71		37.04			2120	2.05		38.69			2580	2.33		34.45	
	1820	1.76		36.58			2150	2.17		38.41			2600	2.21		33.89	
	1850	1.79		36.95			2170	2.68		37.27			2620	2.02		33.39	
	1880	1.89		35.35			2300	1.72		34.69			2640	1.89		32.54	
	1910	1.95		34.27			2320	1.95		36.39			2660	1.67		31.97	
	1940	1.05		33.69			2340	1.72		37.37			2680	1.59		31.27	
	1970	1.64		33.29			2360	1.59		36.58			2700	1.46		30.33	
	2000	1.98		34.27			2380	2.72		37.29							
							2400	2.64		38.25							

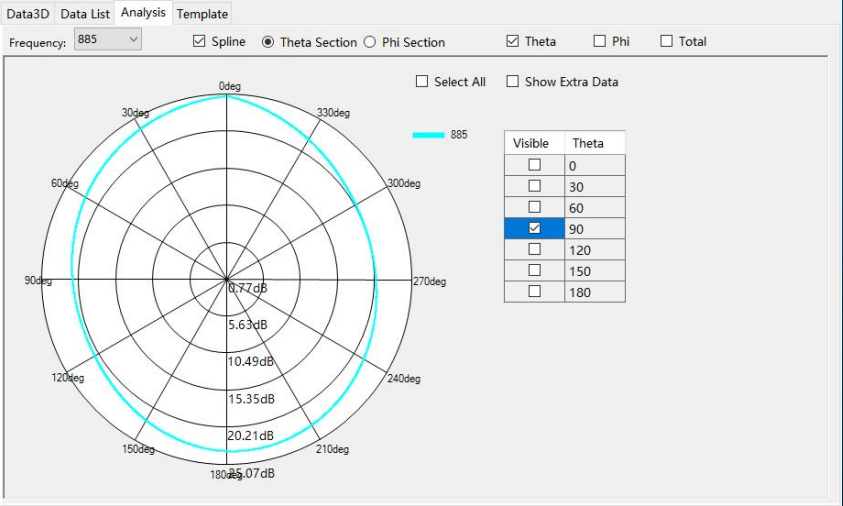
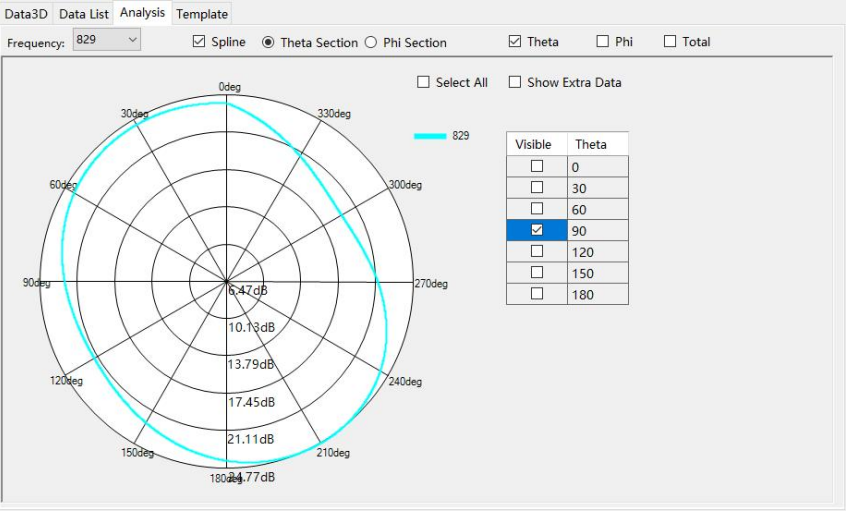
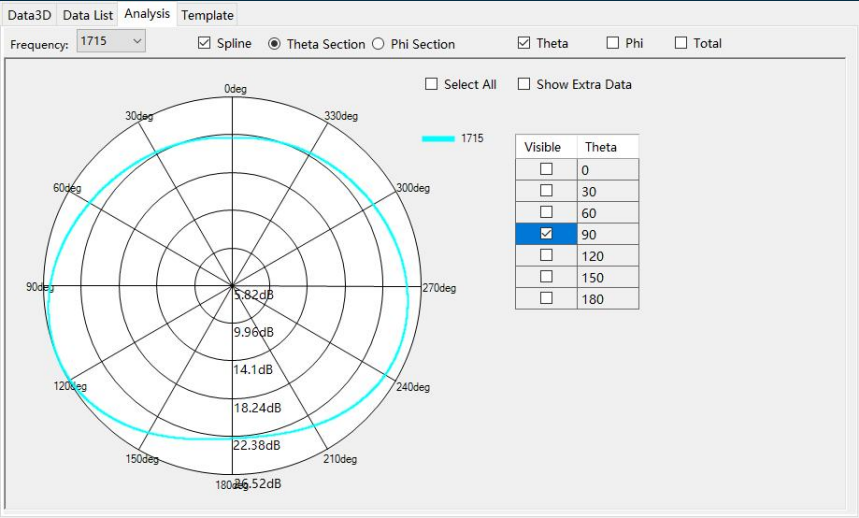
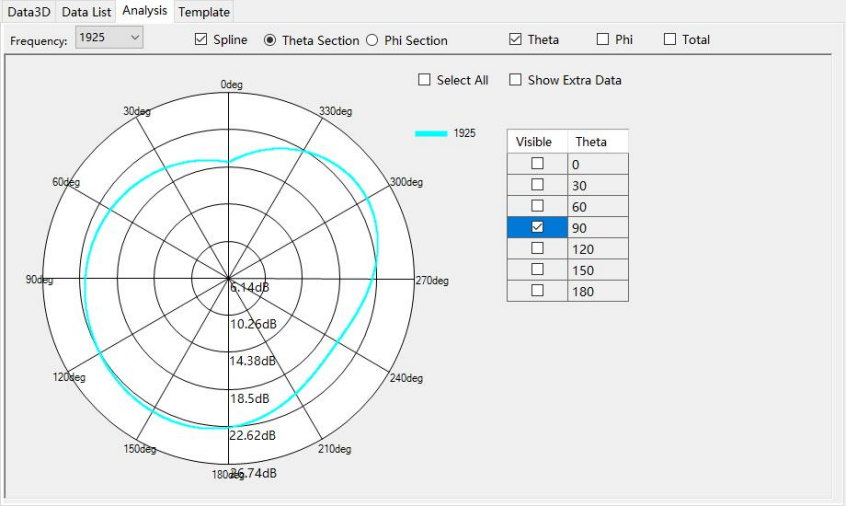
分集天线无源测试数据(Secondary Antenna SAR Test Data):																	
LTE						LTE						LTE					
BAND	Frequency (MHz)	Gain(dBi)	Gain MAX(dBi)	Efficiency (%)	Efficiency MAX	BAND	Frequency (MHz)	Gain(dBi)	Gain MAX(dBi)	Efficiency (%)	Efficiency MAX	BAND	Frequency (MHz)	Gain(dBi)	Gain MAX(dBi)	Efficiency (%)	Efficiency MAX
B1 B2 B4 B66 W1 W2 W4	1700	0.7	2.84	25.16	36.97	B1 B4 B66 W1 W4	2030	2.73	2.79	39.7	40.58	B7 B38 B41	2360	2.05	3.88	38.51	38.51
	1730	0.96		27.4			2060	2.79		40.58			2390	2.87		37.14	
	1760	1.12		29.31			2090	2.12		39.74			2420	2.53		35.7	
	1790	1.27		31.04			2120	2.37		38.47			2450	2.48		34.64	
	1820	1.68		34.5			2150	2.66		38.39			2480	3.17		33.44	
	1850	1.73		36.97			2180	2.56		38.56			2510	3.18		32.88	
	1880	2.05		35.91			2210	2.39		37.75			2540	3.86		34.31	
	1910	2.59		35.02			2240	2.39		36.17			2570	3.88		34.22	
	1940	2.84		34.16			2270	2.33		34.8			2600	2.67		35.94	
	1970	2.18		35.93			2300	2.06		35.1			2630	2.62		36.37	
	2000	2.22		35.67			2330	2.2		35.7			2660	2.75		36.59	
													2690	2.22		37.61	
														2700	2.17		36.51

WiFi天线无源测试数据(WiFi Antenna SAR Test Data):

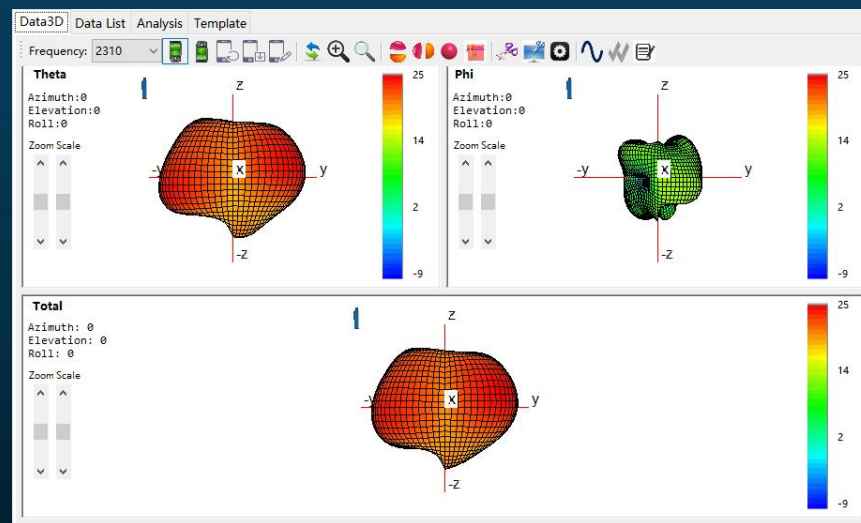
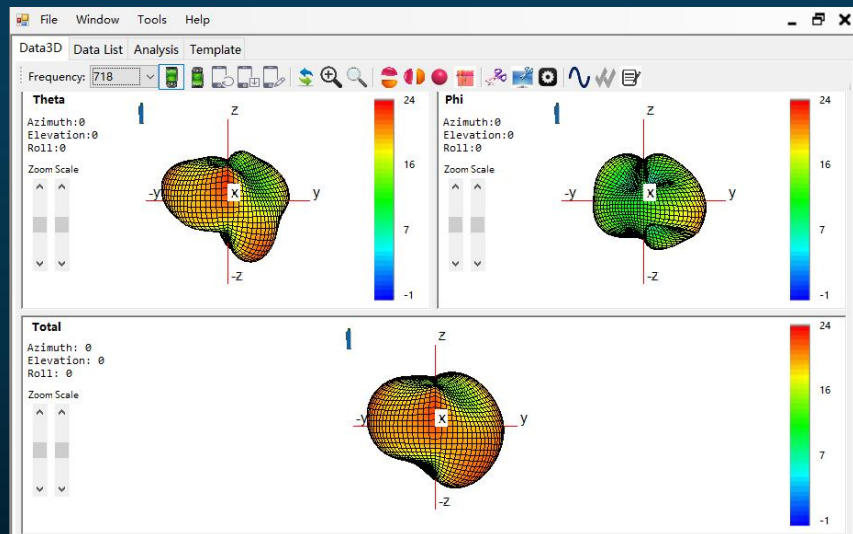
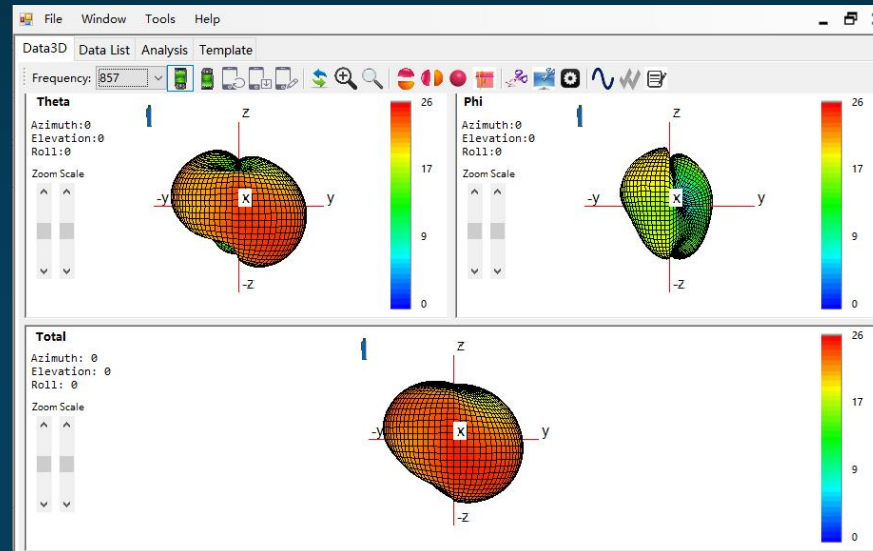
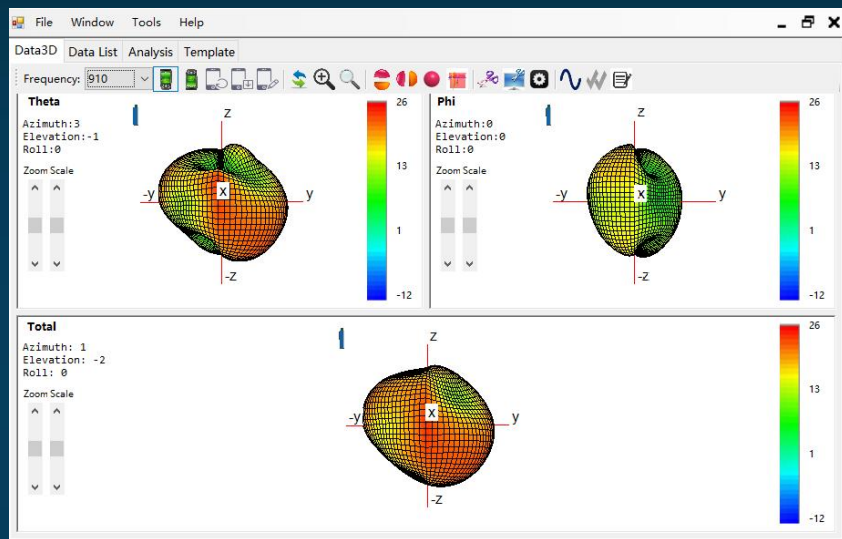
2.4WiFi				
Frequency (MHz)	Gain (dBi)	Gain MAX (dBi)	Efficiency (%)	Efficiency MAX
2400	2.15	2.51	40.12	43.17
2410	2.21		40.26	
2420	2.23		40.29	
2430	2.45		41.15	
2440	2.49		41.59	
2450	2.51		42.28	
2460	2.26		42.84	
2470	2.21		43.17	
2480	2.04		41.35	
2490	2.01		40.08	
2500	1.99		39.77	

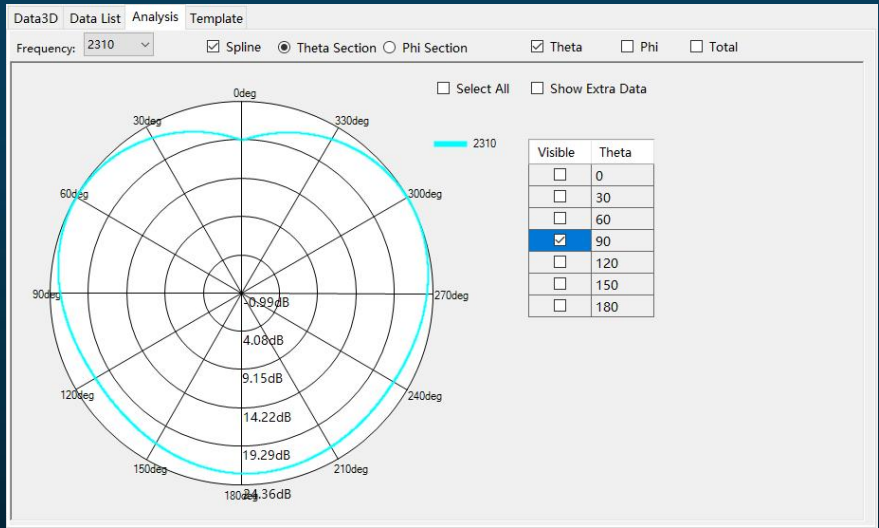
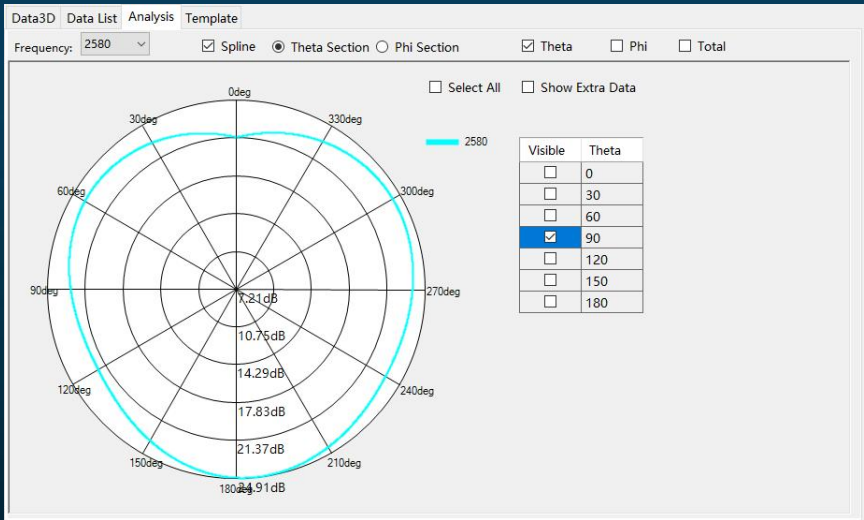
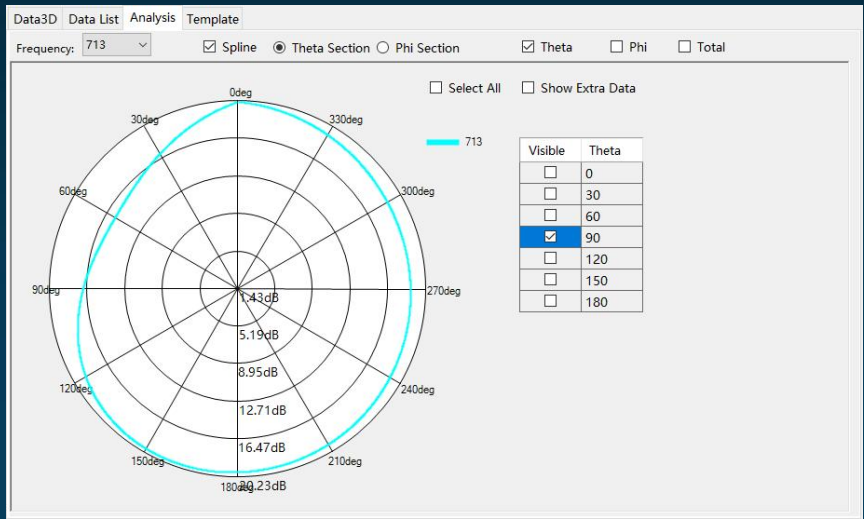
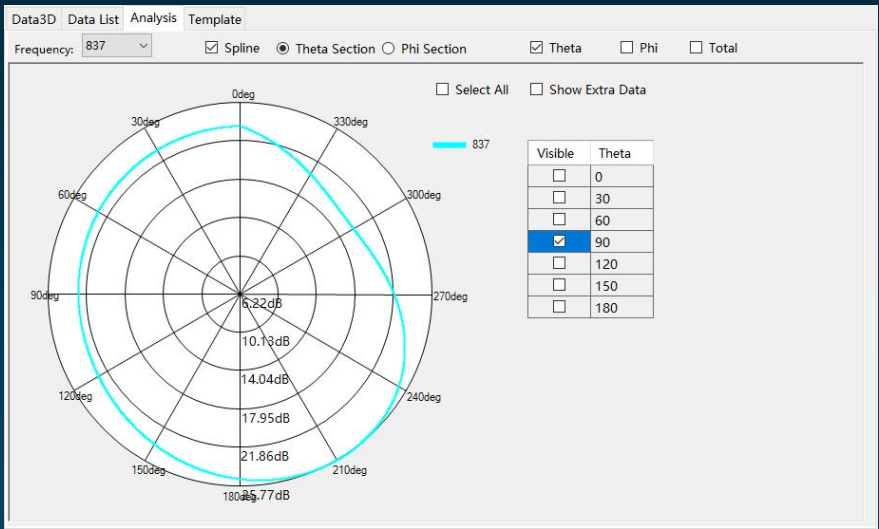
3D图（主天线） [3D Views/Pictures(Main Antenna)]:



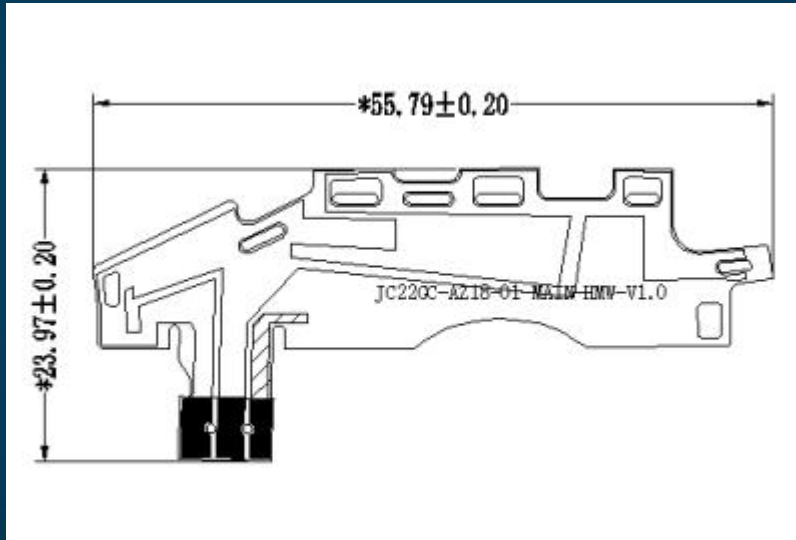


3D图（分集天线） [3D Views/Pictures(Secondary Antenna)]：

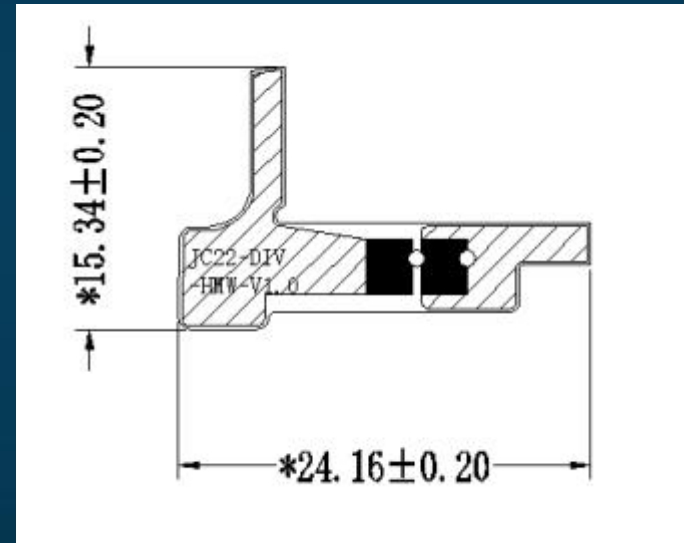




天线尺寸(Antenna Dimension):

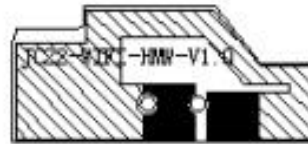


主天线 Main Antenna



分集天线 Secondary Antenna

天线尺寸(Antenna Dimension):



WiFi天线 WiFi Antenna

环境处理(environmental treatment(manipulation?))

未做环境处理

重要说明 (Important Notes)



1

请贵司注意报告中的匹配是否更改、环境处理是否可行；这直接会影响天线性能，若有异议请及时与本司联系；(In this report, please pay attention to whether the matching is changed and whether the environmental treatment is feasible because this will directly affect the antenna performance, if there is any objection, please contact us in time.)

2

若贵司机器有更换物料、更新软件、环处理变更等，须及时提供最新状态机器来我司验证；(If the machine has replaced materials, updated software, ring processing changes, etc., please provide the latest state of the machine to our company in a timely manner to verify.)

3

若贵公司机器需送第三方验证或送检，请最好提供送测机器来我司测试验证OK后方可送测（因为主板、环境处理、天线组装等一致性会影响天线性偏差）

(If this machine needs to be sent to a third party for verification or inspection, it is best to provide the test machine to our company for testing and verification before sending the test (because the consistency of the motherboard, environmental processing, antenna assembly, etc. will affect the antenna deviation)



深圳市和鸣微科技有限公司

Shenzhen HamyWe Technology Co., Ltd.

Add: 深圳市宝安71区留仙二路敬航工业园B栋1楼