



Test Report

ZTX			
RF engineer	Zhao Feng 178 7542 6686	ME	Zou Yilin 152 2014 8960
Audit	Han Zhenyu 158 1473 5757	Sales	Ni Jieyou 186 8245 1445
Company address	34 Shilong Avenue, Shiyan, Bao'an, Shenzhen		
Project information			
Project name	WC1XR2511	Type version	
Antenna type		Scheme company	ShenzhenBaoXinXinWangElectronicsCo., LTD
Antenna system	2.4G/5G	Date	2022.01.21
Remarks:			

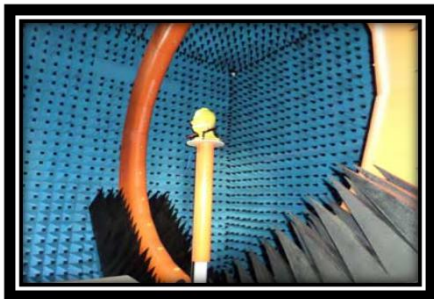
Add: 34 Shilong Avenue, Shiyan, Bao'an, Shenzhen
TEL:0755-27588360 /27572127 FAX:0755-27588320
Website:www.chinaztx.com



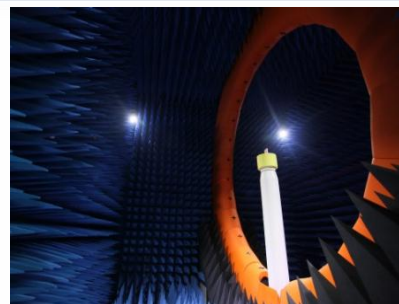
- ◇ R & D equipment
- ◇ Glossary
- ◇ Test environment
- ◇ Antenna size
- ◇ Match description
- ◇ Antenna passive test data



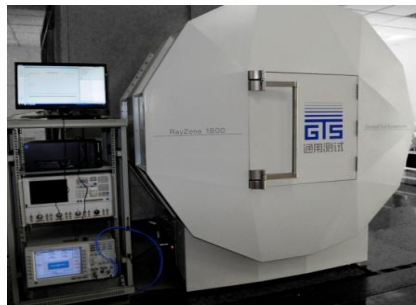
R & D equipment



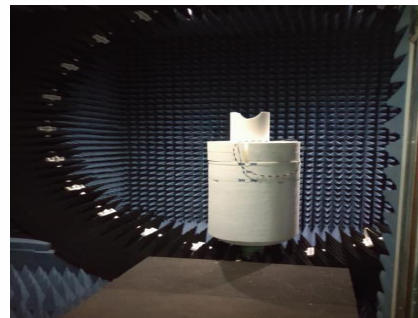
Shenzhen Shiyan R & D base has more than 30 R & D engineers, two Satimo SG24 darkrooms and two ETS darkrooms. Support 2 / 3 / 4G / WiFi OTA test. One Sara test equipment. Self developed WiFi throughput, GPS OTA, ECC test system .



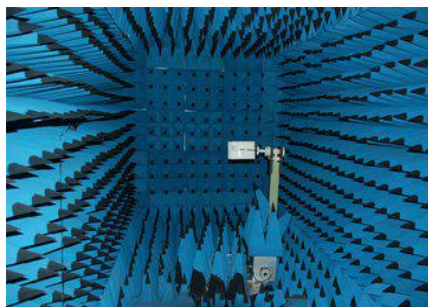
Shanghai R & D center has more than 10 R & D engineers, two darkrooms, two Satimo SG24. Support 2 / 3 / 4G / WiFi / NB-iot / EMTC OTA test.



Fuzhou R & D center has more than 10 R & D engineers and two Satimo SG24. Support 2 / 3 / 4G / WiFi OTA test



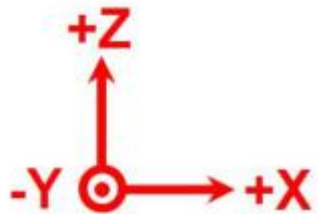
Shenzhen Nanshan R & D center has more than 10 R & D engineers and two ETS AMS 8923 darkroom test systems. Support 2 / 3 / 4G / WiFi OTA test.



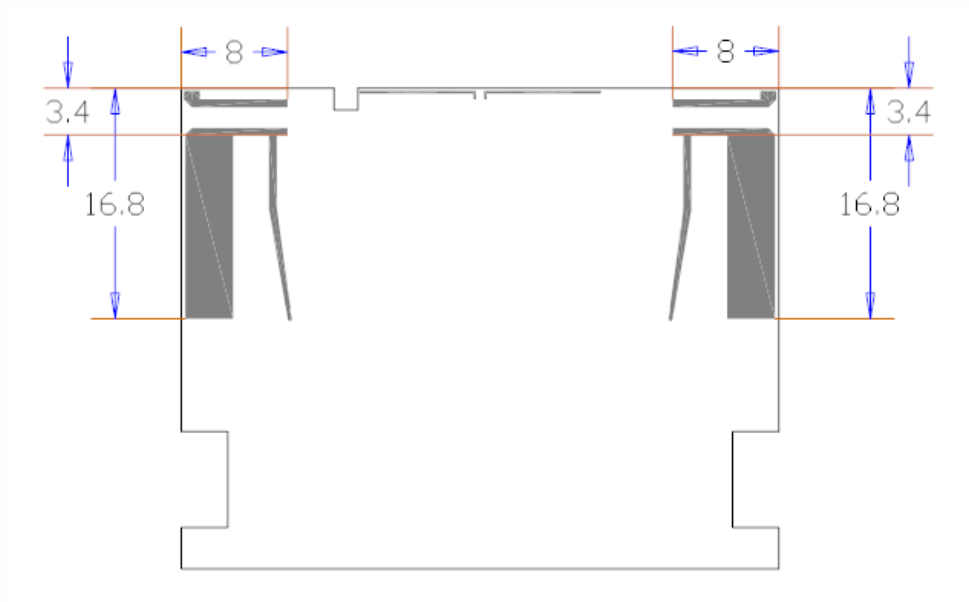
Taiwan R & D center has more than 6 R & D engineers and an ETS 8500 darkroom. Support 2 / 3 / 4G / WiFi OTA test.

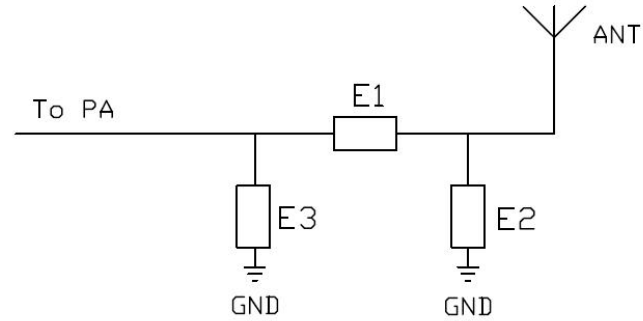
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dB _i	Decibel relative isotropic antenna
T _x	Transmit frequency
R _x	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
PCS	Personal Communication System
PHS	Personal Handly-phone System
SAR	Specific Absorption Rate
PCB	Printed Circuit Board
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access
LTE	Long Term Evolution



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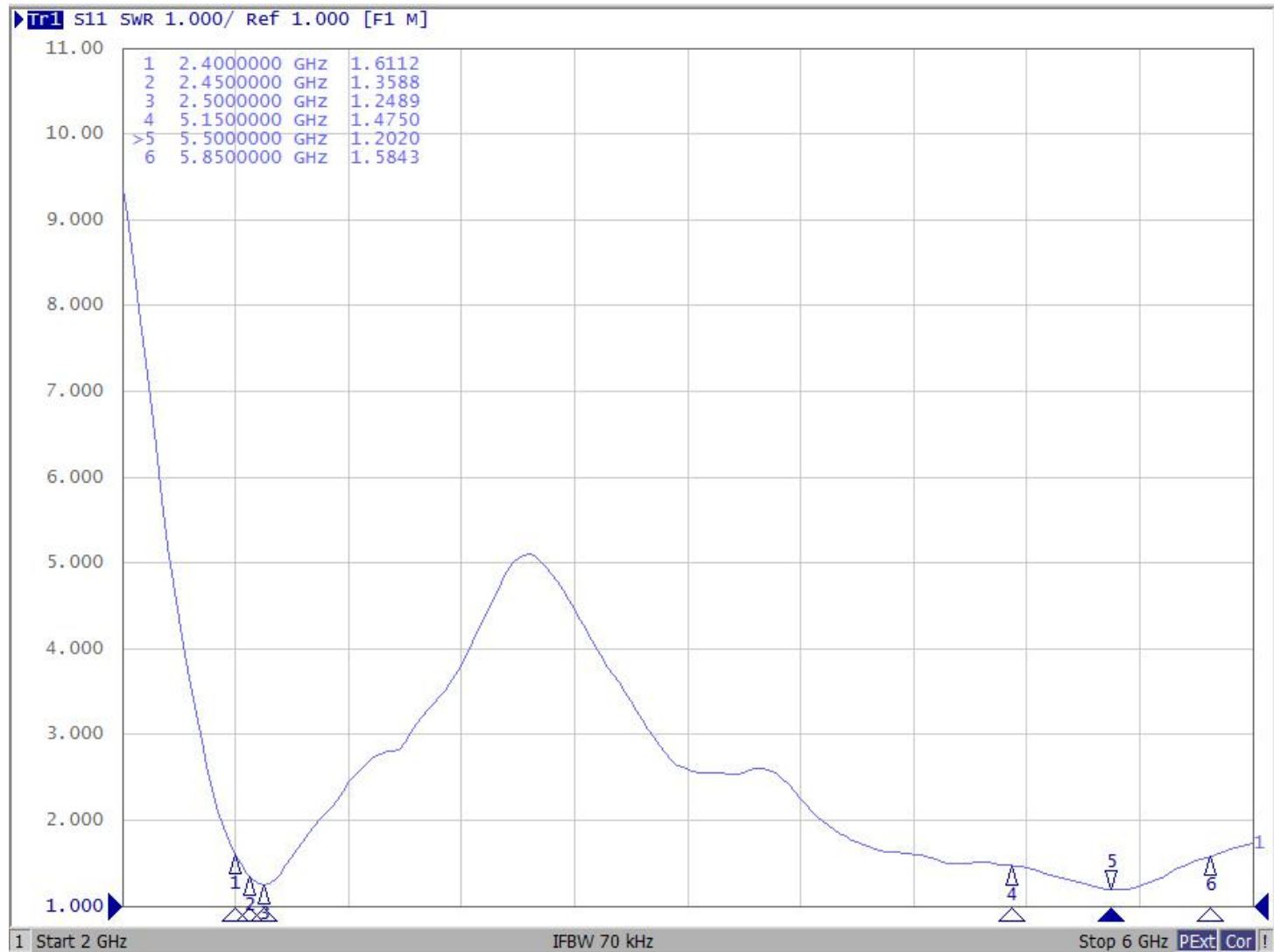




Matching	WIFI-1
E1	0Ω
E2	NC
E3	NC

Matching	WIFI-2
E1	0Ω
E2	NC
E3	NC

Voltage Standing Wave Ratio



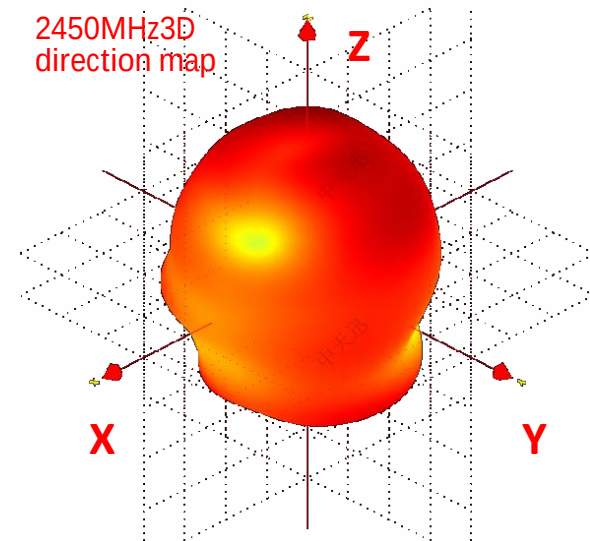
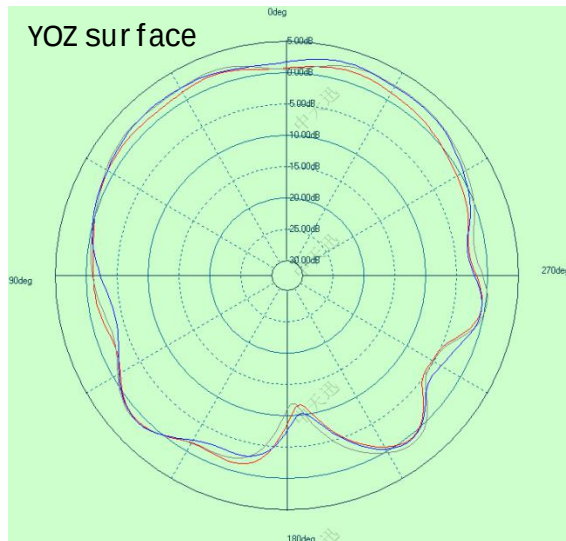
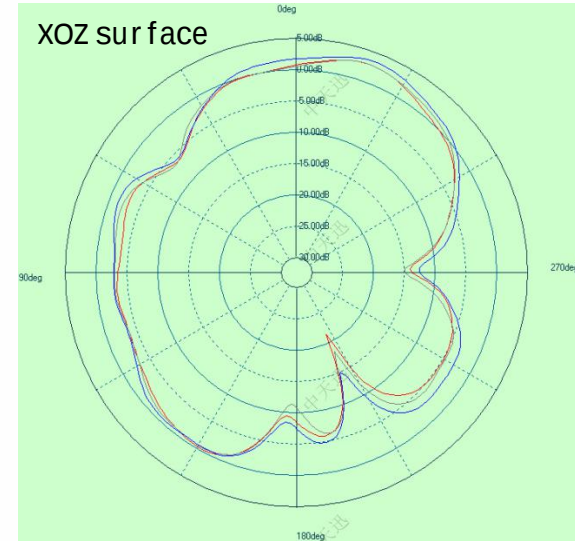
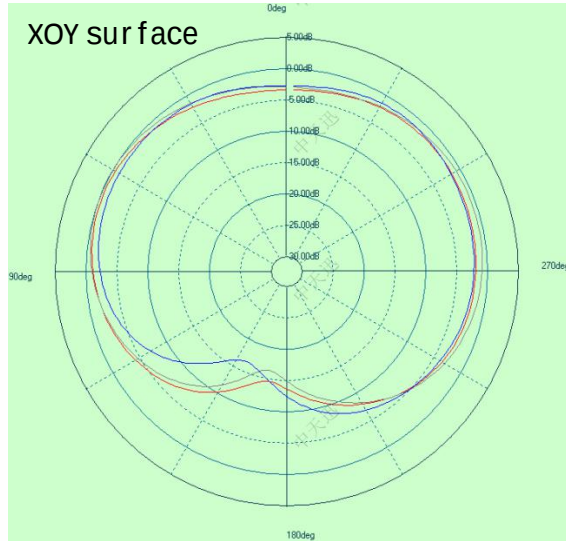
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Efficiency and Gain

Frequency	Efficiency		Peak Gain
Mhz	%	dB	dB
2400	60.86	-2.16	3.01
2410	64.22	-1.92	3.51
2420	68.71	-1.63	3.83
2430	69.53	-1.58	3.86
2440	69.07	-1.61	3.84
2450	68.99	-1.61	3.79
2460	67.27	-1.72	3.38
2470	67.37	-1.72	3.61
2480	69.94	-1.55	3.80
2490	69.47	-1.58	3.85
2500	70.17	-1.54	3.87

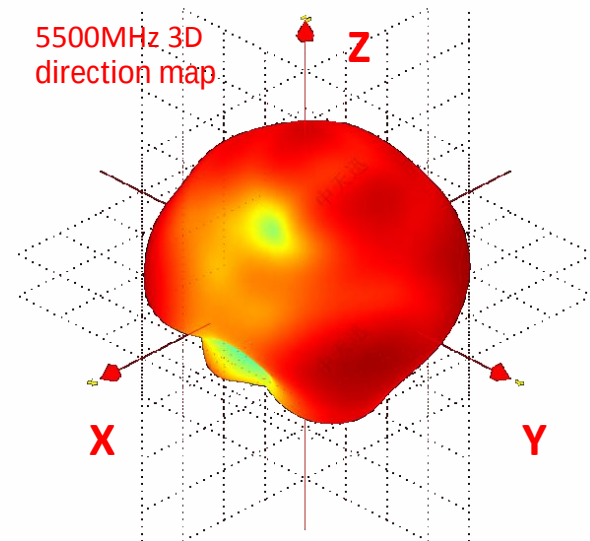
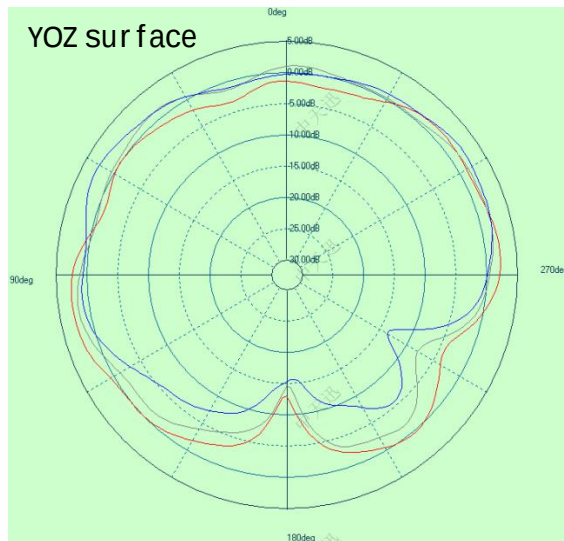
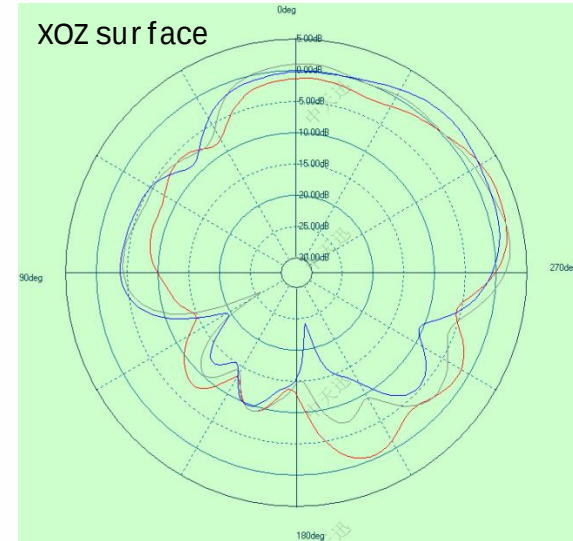
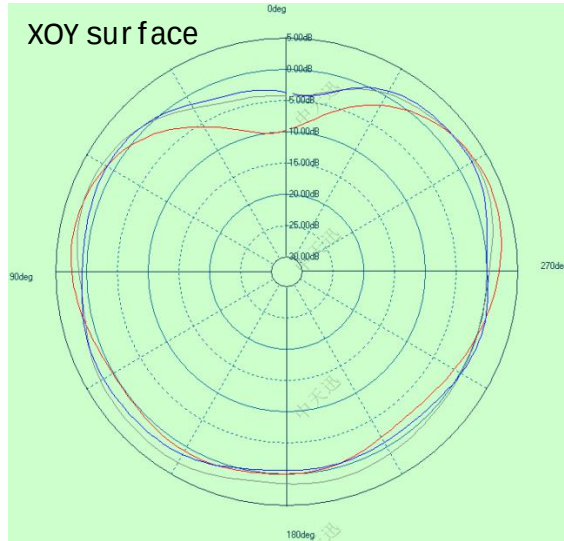
Frequency	Efficiency		Peak Gain
Mhz	%	dB	dB
5150	71.75	-1.44	3.90
5200	71.02	-1.49	3.54
5250	68.47	-1.64	3.27
5300	68.90	-1.62	3.36
5350	71.51	-1.46	3.51
5400	67.77	-1.69	3.21
5450	72.07	-1.42	3.48
5500	72.10	-1.42	3.49
5550	74.51	-1.28	3.42
5600	74.46	-1.28	3.26
5650	74.28	-1.29	3.22
5700	71.00	-1.49	2.98
5750	72.71	-1.38	3.32
5800	70.63	-1.51	3.26
5850	71.54	-1.45	3.22

2.4G Direction



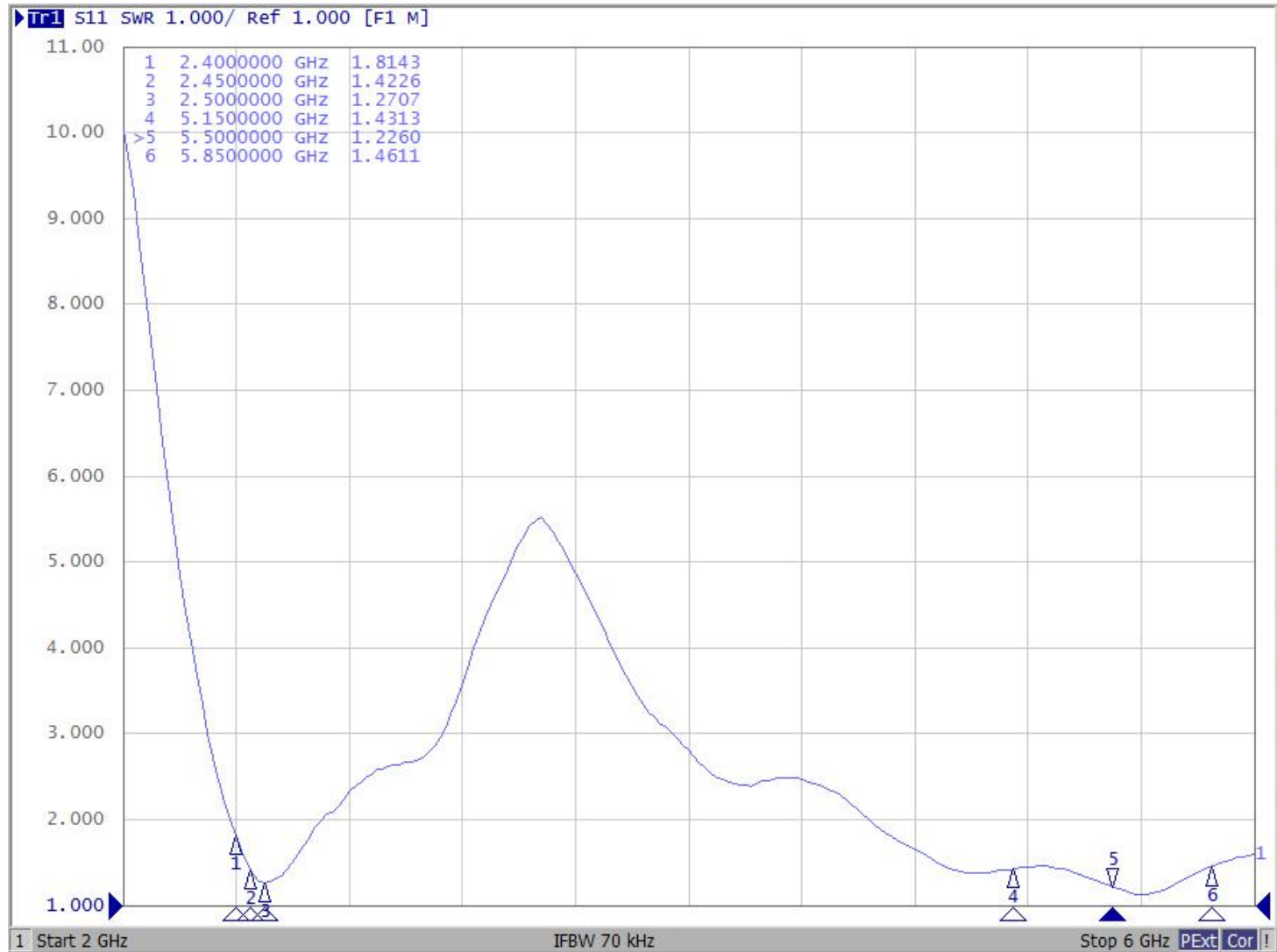
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5G Direction



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Voltage Standing Wave Ratio



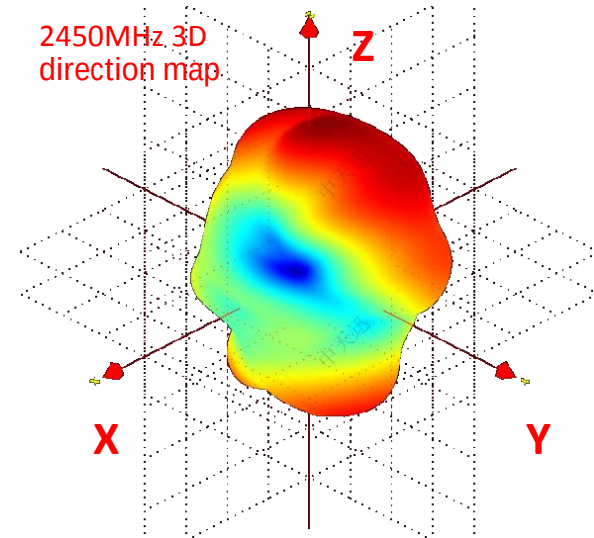
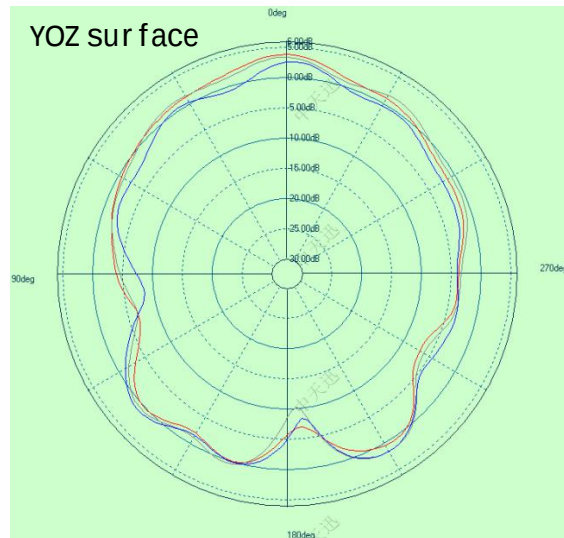
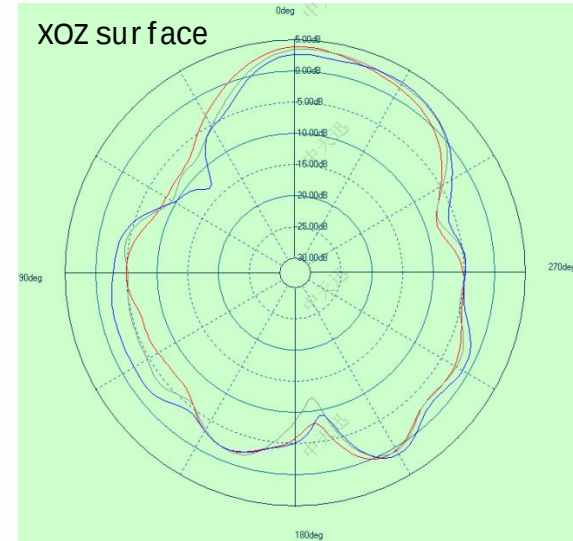
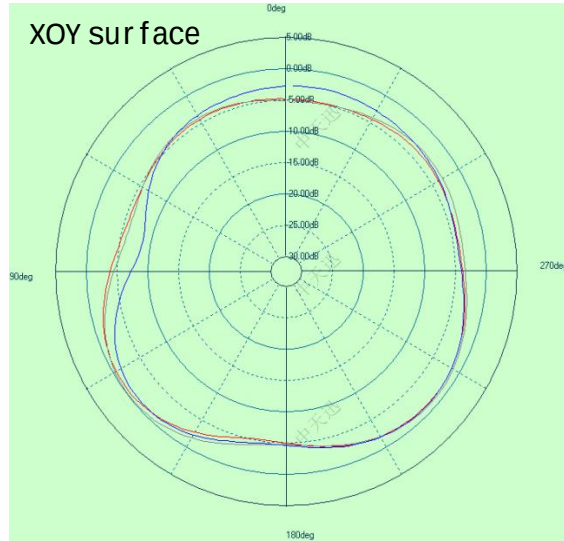
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Efficiency and Gain

Frequency	Efficiency		Peak Gain
Mhz	%	dB	dB
2400	55.11	-2.59	3.77
2410	56.21	-2.50	3.87
2420	60.56	-2.18	3.81
2430	60.81	-2.16	3.78
2440	61.37	-2.12	3.45
2450	60.34	-2.19	3.42
2460	61.39	-2.12	3.54
2470	58.50	-2.33	3.33
2480	60.35	-2.19	3.35
2490	60.92	-2.15	3.16
2500	59.23	-2.27	2.81

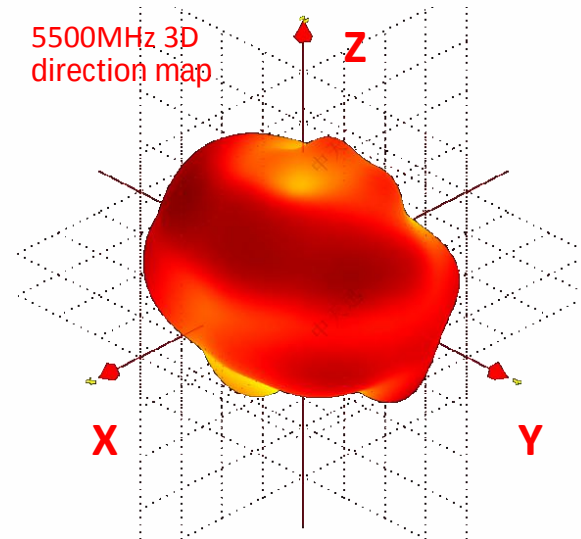
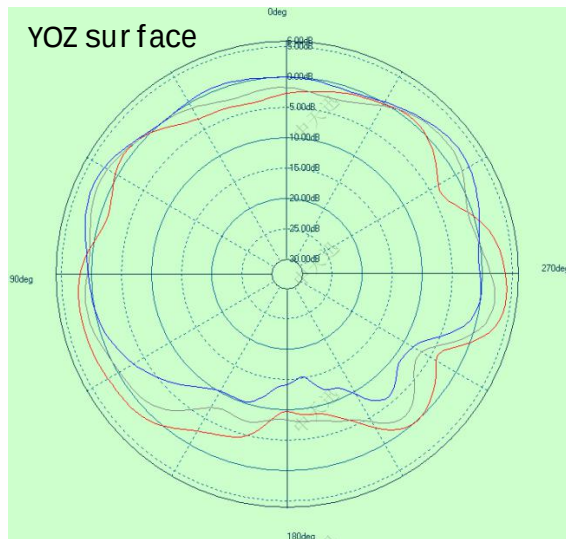
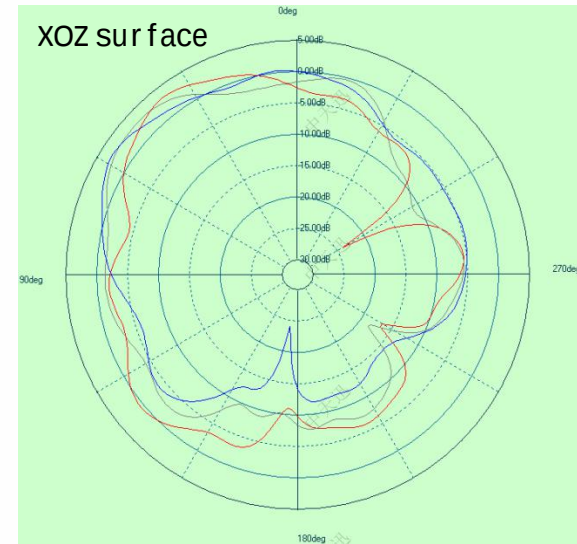
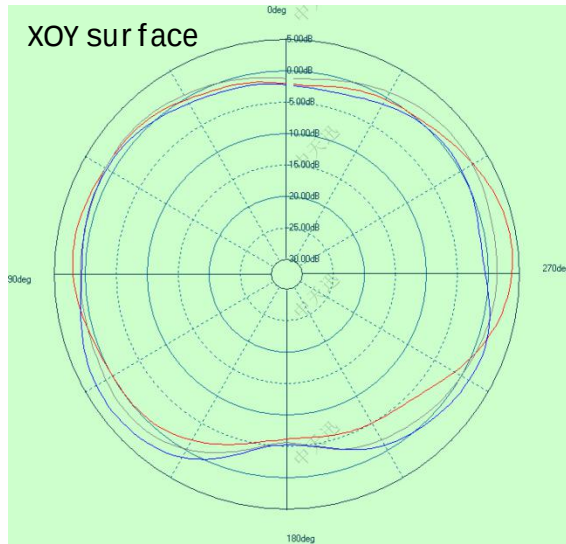
Frequency	Efficiency		Peak Gain
Mhz	%	dB	dB
5150	67.72	-1.63	3.89
5200	67.61	-1.70	3.86
5250	66.22	-1.79	3.90
5300	67.49	-1.71	3.84
5350	70.34	-1.53	3.83
5400	67.43	-1.71	3.25
5450	71.18	-1.48	3.35
5500	71.28	-1.47	3.55
5550	73.84	-1.32	3.51
5600	73.88	-1.31	3.31
5650	74.72	-1.27	3.50
5700	71.60	-1.45	3.26
5750	73.35	-1.35	3.73
5800	72.01	-1.43	3.44
5850	73.25	-1.35	3.57

2.4G Direction



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5G Direction



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