

# WXT2N Antenna Test Report

Antenna Type: PCB

Manufacture: Hui Zhou Gaoshengda Technology Co.,LTD

Trade: GSD

Address: No.2,Jin-da Road,Huinan High-tech Industrial Park,Hui-ao Avenue,Huizhou City,Guangdong

ZHONG TIAN XUN TECHNOLOGY CO., LTD				
MANAGER CHECKED	MANAGER CHECKED	ME TESTED	RF TESTED	LISTER
		邹一麟	刘蒋军	



深圳市中天迅通信技术有限公司

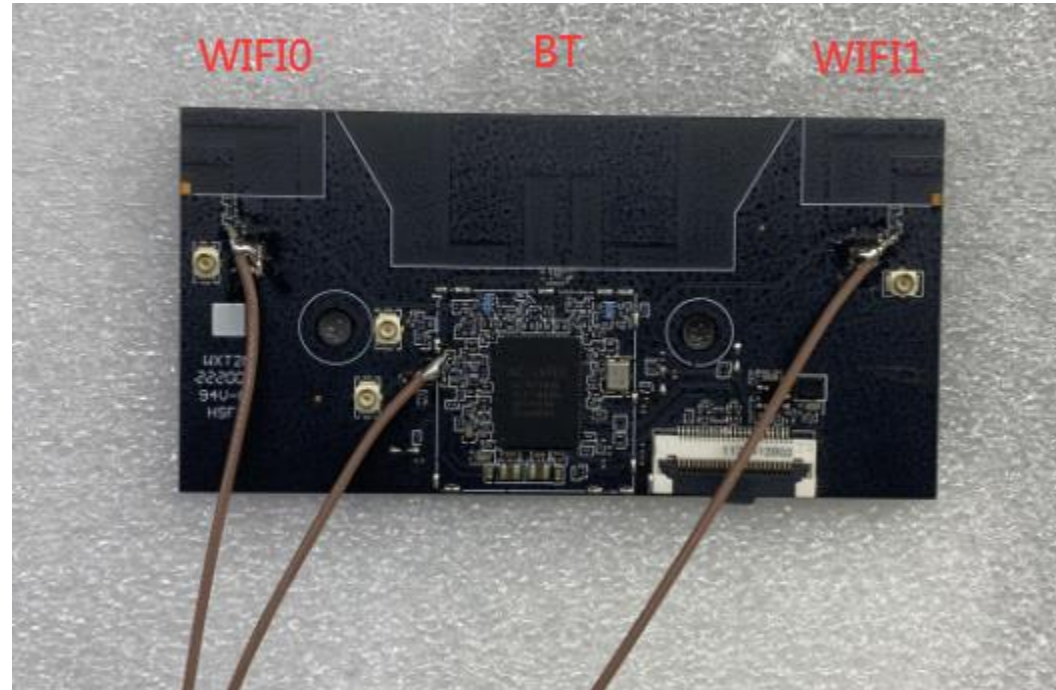
SHENZHEN ZHONGTIAN XUN Communication Technology Co., Ltd.

地址：深圳市宝安区石岩镇石龙大道 34 号(腾达工业园) 邮编：518000

电话：0755-27588320 传真：0755-27588045 <http://www.chinaztx.com>

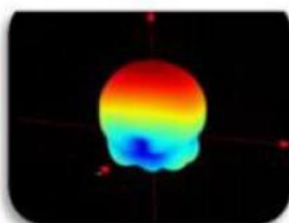
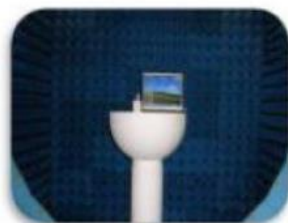
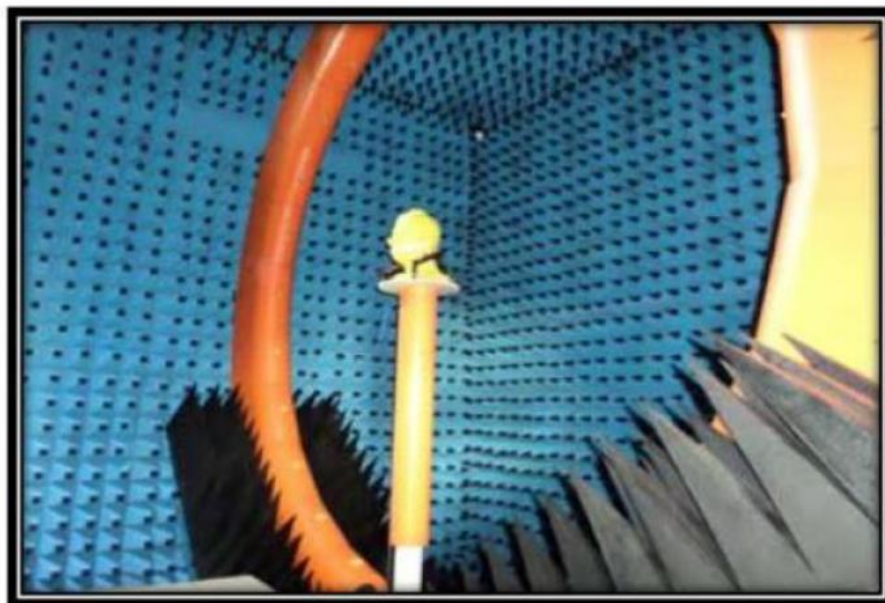
Address: Tenada Industrial Park. Shilong Avenue. Shivan Town. Baoan District. Shenzhen

# Test photo





# Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CTIA standards.

Testing range:

Support active, passive testing of GSM/CDMA/WCDMA/TD-SCDMA/LTE/WIFI/WLAN/WiMax/BT/GPS/MIMO/UWB within 0.4-6G.

# Test equipment

Equipment	Manufacturer	Model No.	Series	Last cal.	Dul date
Network analyzer	Keysight	E5071C	MY47002902	2023. 04. 20	2024. 04. 19
Network analyzer	Agilent	E5071C	MY46521960	2023. 04. 20	2024. 04. 19
SG24 Antenna test system	SATIMO	SG24		2023. 04. 20	2024. 04. 19

Test software	Satimo.Spm
Test standard	GB/T 9410-2008

# Test procedure

## Test Step Flow

1. Maintain the test ambient temperature of 23±2 C, the instrument is powered on and preheated for more than 30 minutes
2. Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard
3. Outline sets the test content objectives and conducts calibration tests
4. Run the EMQuest OTA software, the test is complete, export the corresponding test diagram and test data, and save to the corresponding directory

## Test Principle

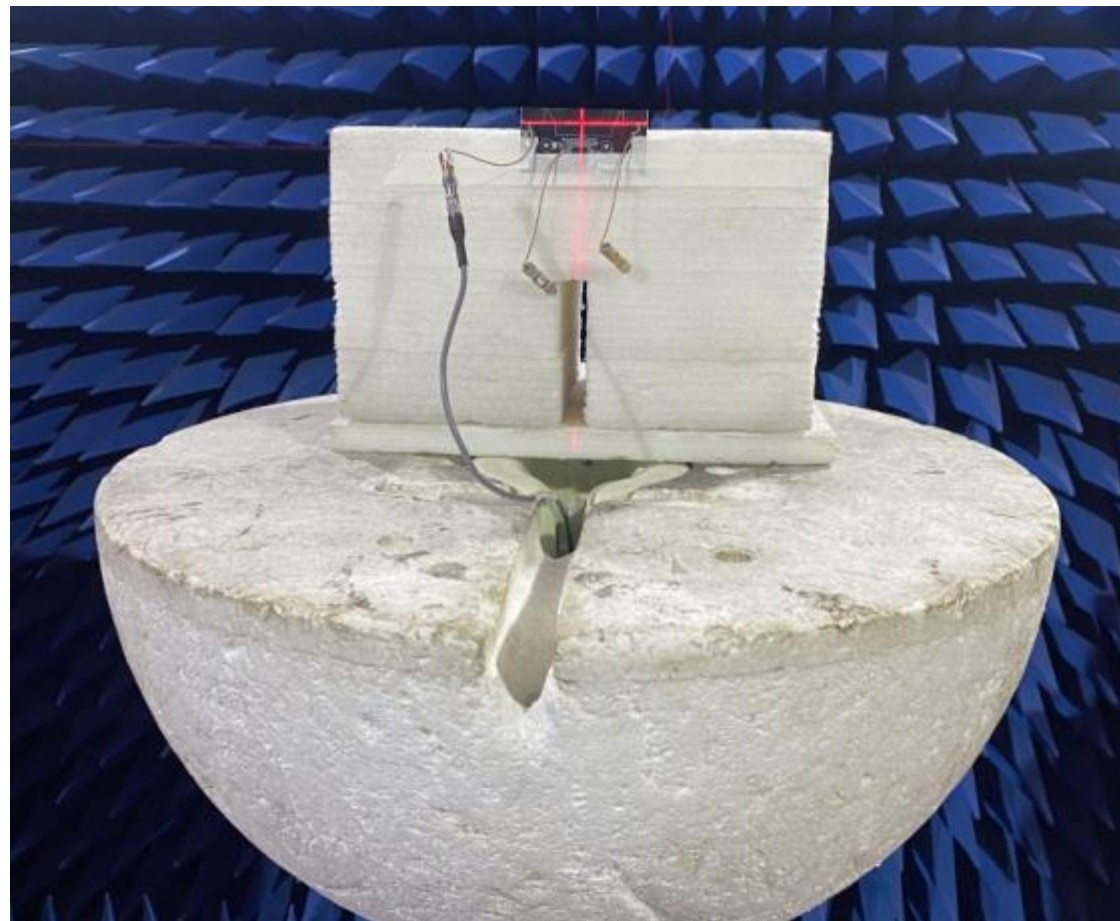
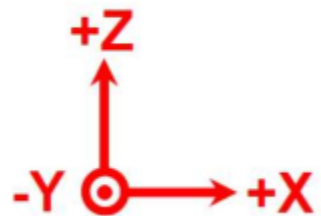
The test principle can be seen in accordance with the standard ANSI/IEEE std 149-2021

## Test Conditions

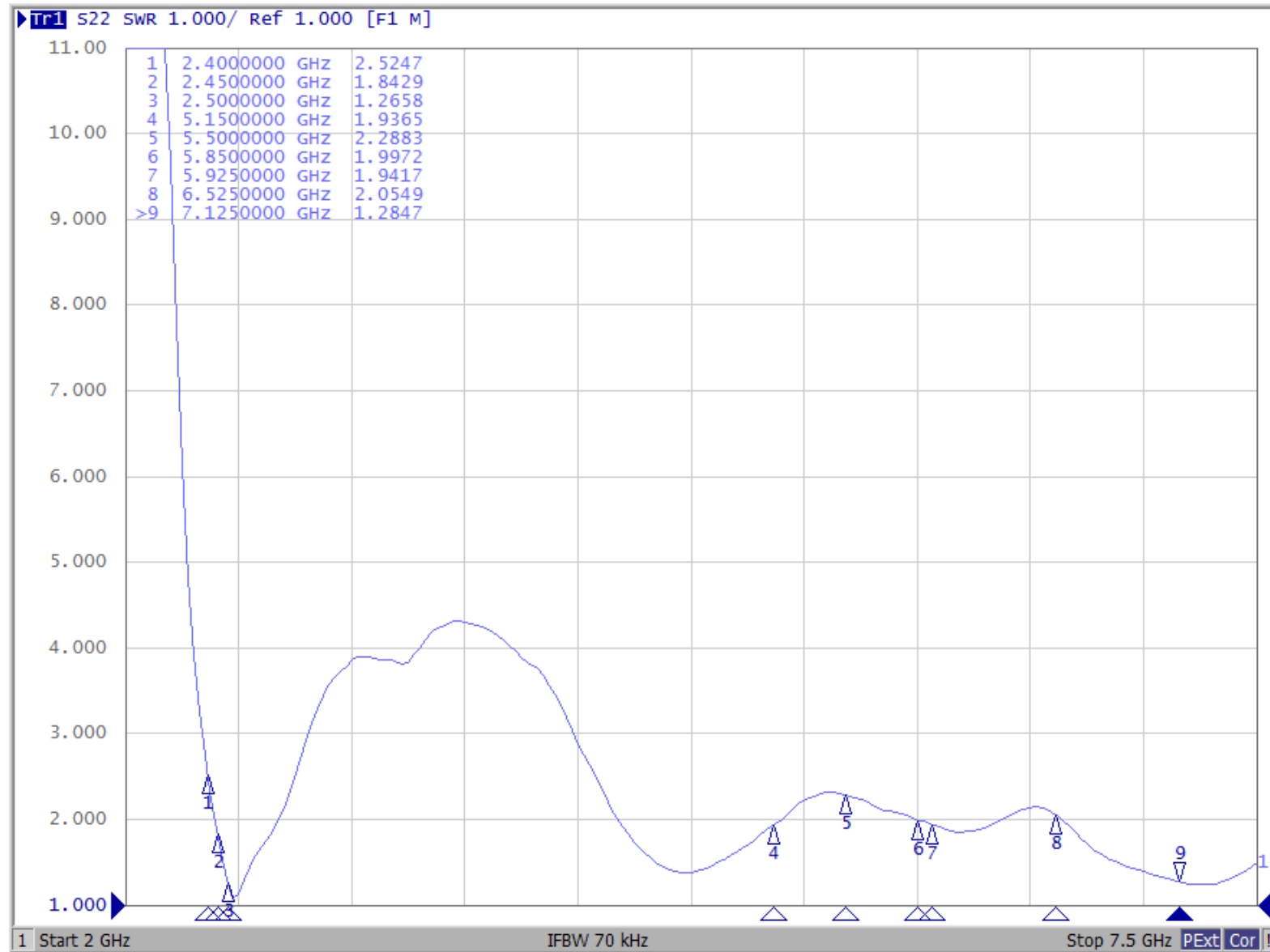
1. The analyte, the network analyzer for testing, the test equipment and the test cable connector should have good reliability, stability, dynamic range and measurement accuracy to ensure the correctness of the measurement accuracy
2. The measuring instrument should have a certificate of conformity and be within the effective calibration period
3. The analyte should be complete and undamaged, and the test environment should be kept clean



# Test environment

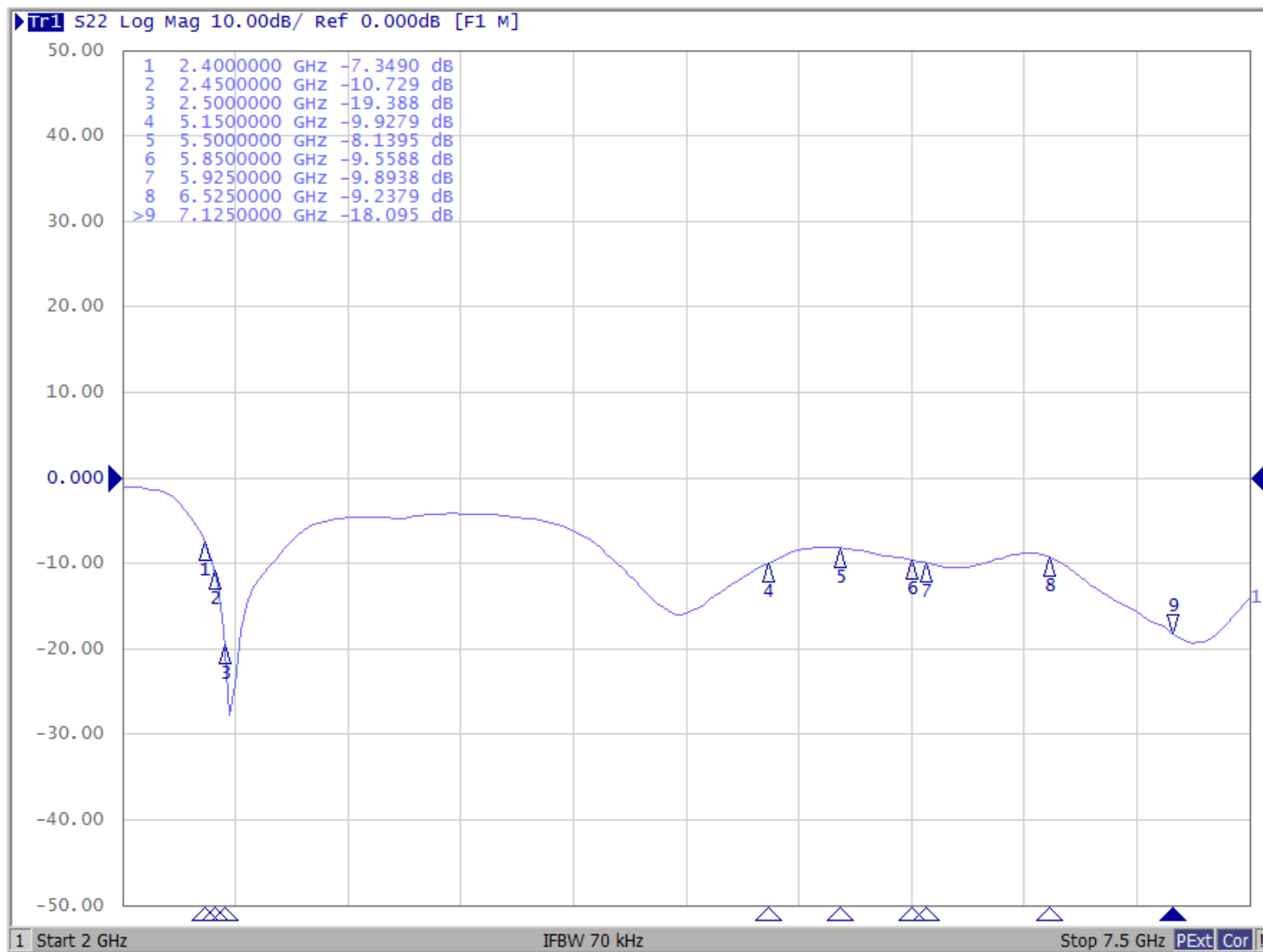


# Test data (WIFI0- VSWR )





# Test data (WiFi0- return loss )

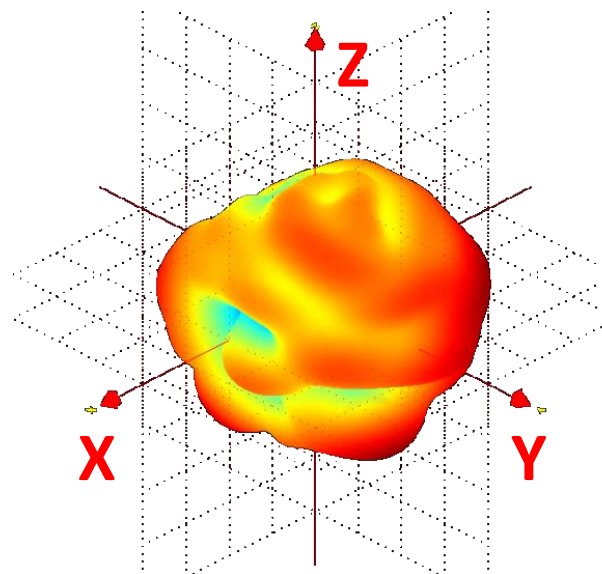
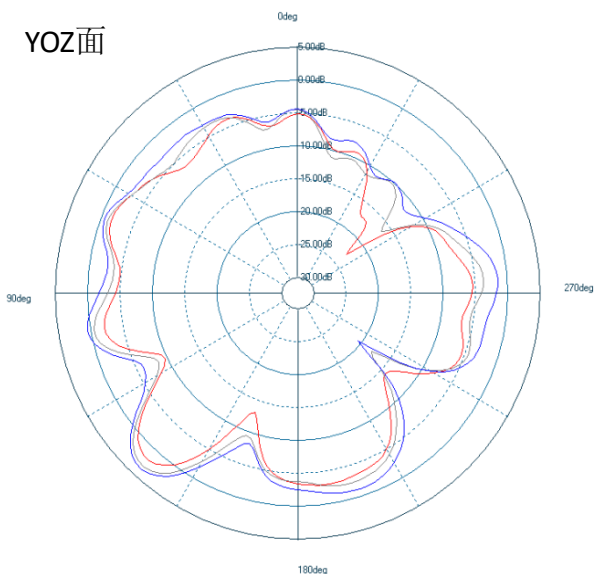
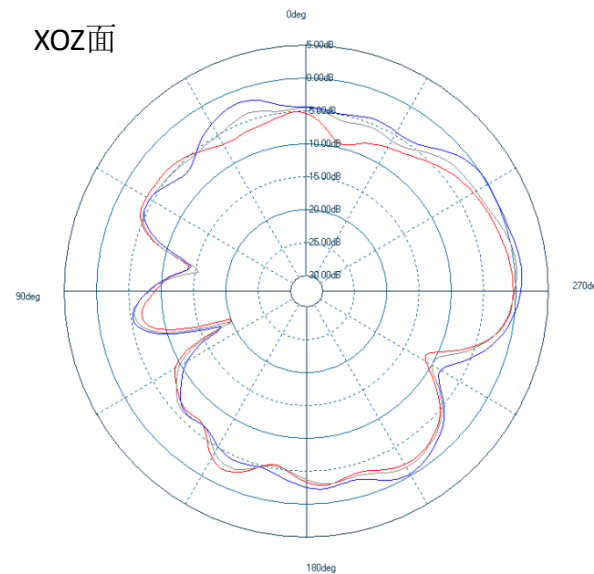
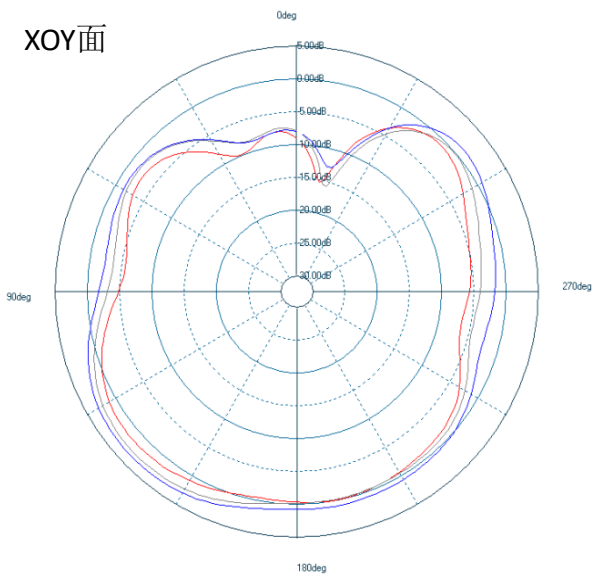


# Test data (WIFI0- Efficiency/Gain )

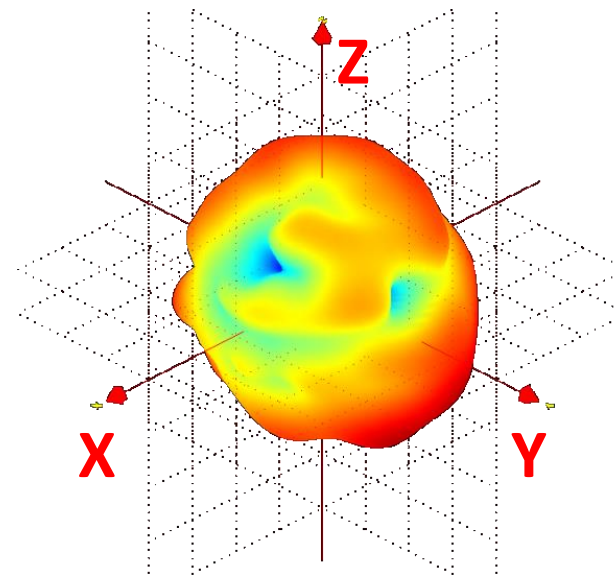
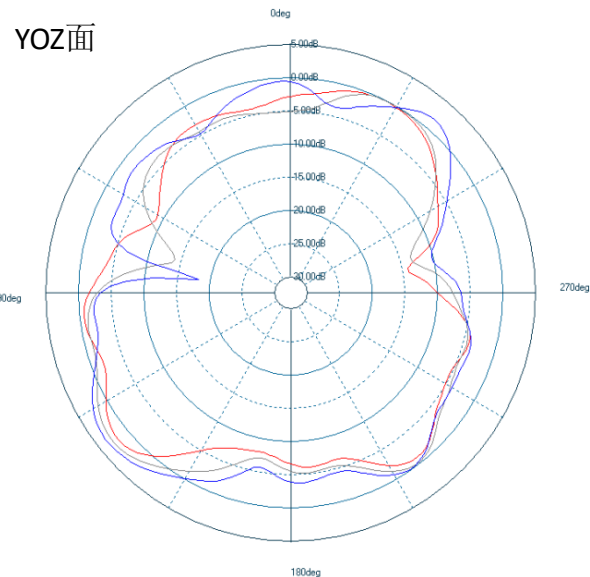
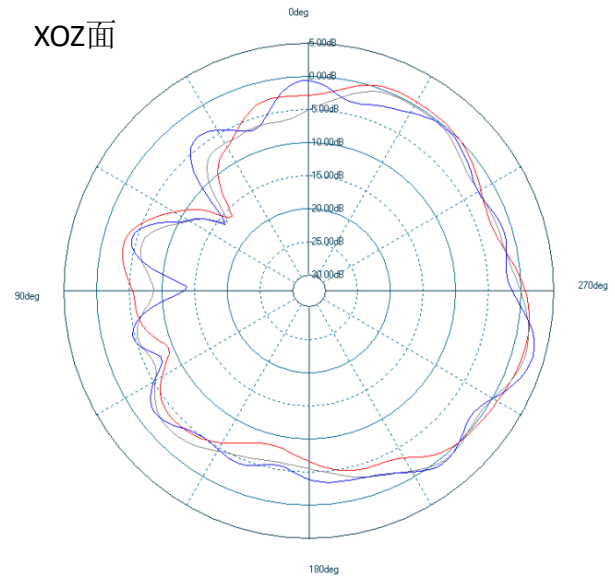
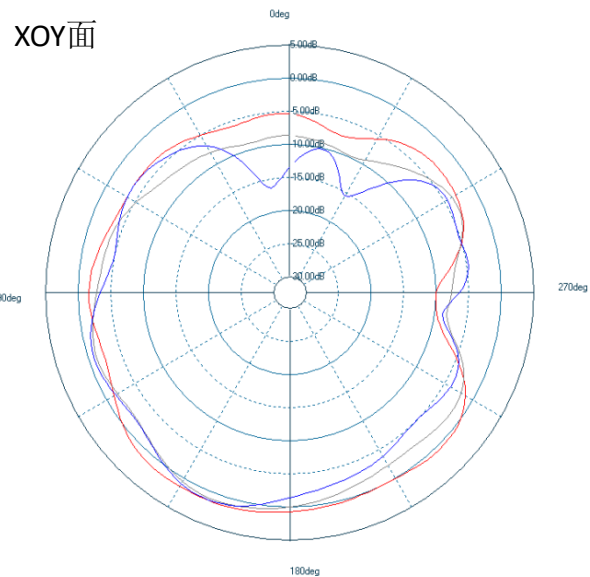
Frequency Mhz	Peak Gain dB	Efficiency	
		%	dB
2400	2.22	41.75	-3.79
2410	2.06	42.77	-3.69
2420	2.40	43.80	-3.59
2430	2.37	45.34	-3.44
2440	2.46	46.50	-3.33
2450	2.73	47.16	-3.26
2460	2.70	49.73	-3.03
2470	3.42	55.28	-2.57
2480	3.43	57.40	-2.41
2490	3.25	58.89	-2.30
2500	3.32	59.61	-2.25
5150	4.13	58.86	-2.30
5250	4.27	56.62	-2.47
5350	4.09	55.11	-2.59
5450	4.29	60.26	-2.20
5550	4.22	56.85	-2.45
5650	4.06	59.15	-2.28
5750	4.19	55.58	-2.55
5850	4.43	55.83	-2.53

Frequency Mhz	Peak Gain dB	Efficiency	
		%	dB
5925	4.69	60.09	-2.21
6025	4.51	57.70	-2.39
6125	4.63	59.10	-2.28
6225	4.77	60.19	-2.20
6325	4.80	62.30	-2.06
6425	4.80	63.18	-1.99
6525	4.88	65.27	-1.85
6625	4.82	62.57	-2.04
6725	4.74	65.17	-1.86
6825	4.89	66.31	-1.78
6925	4.92	65.53	-1.84
7025	4.59	61.54	-2.11
7125	4.50	62.14	-2.07

# Test data (WIFI0-2.4G Antenna pattern)

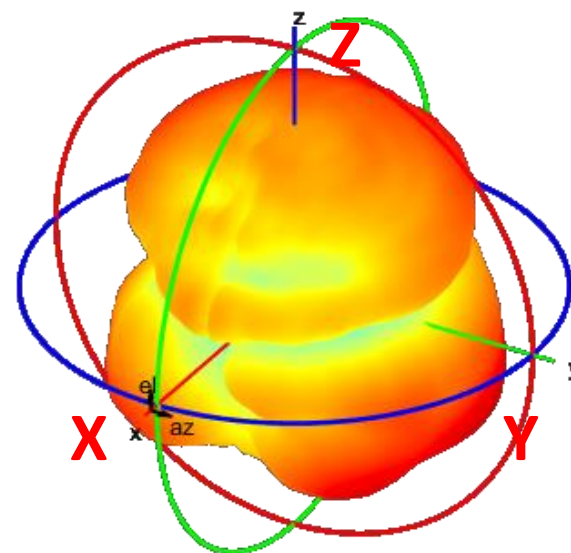
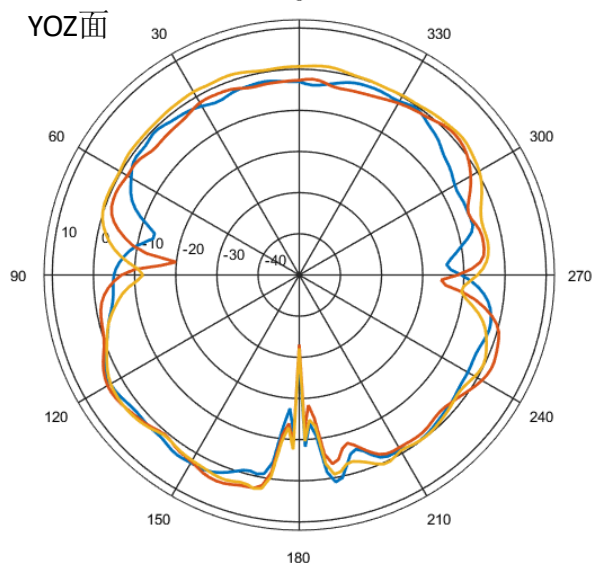
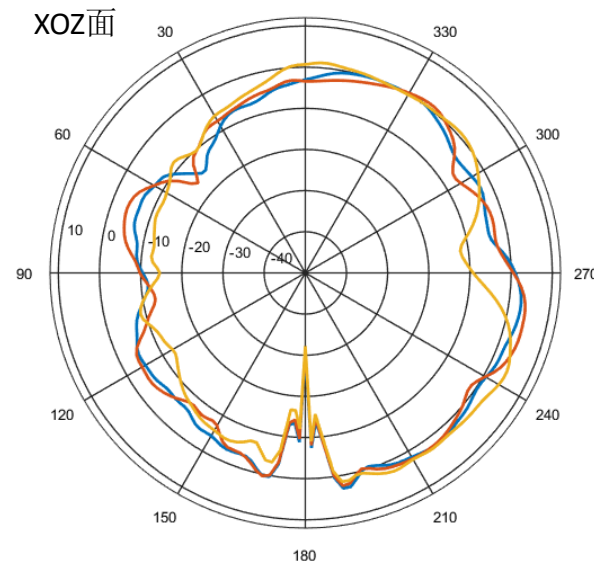
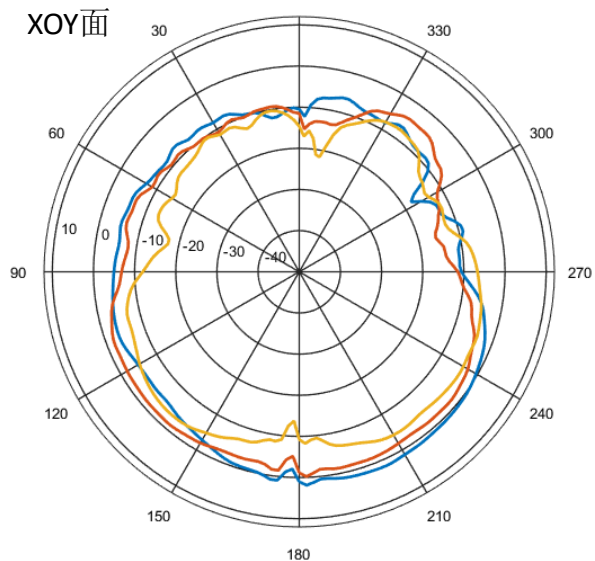


# Test data (WIFI0-5G Antenna pattern )

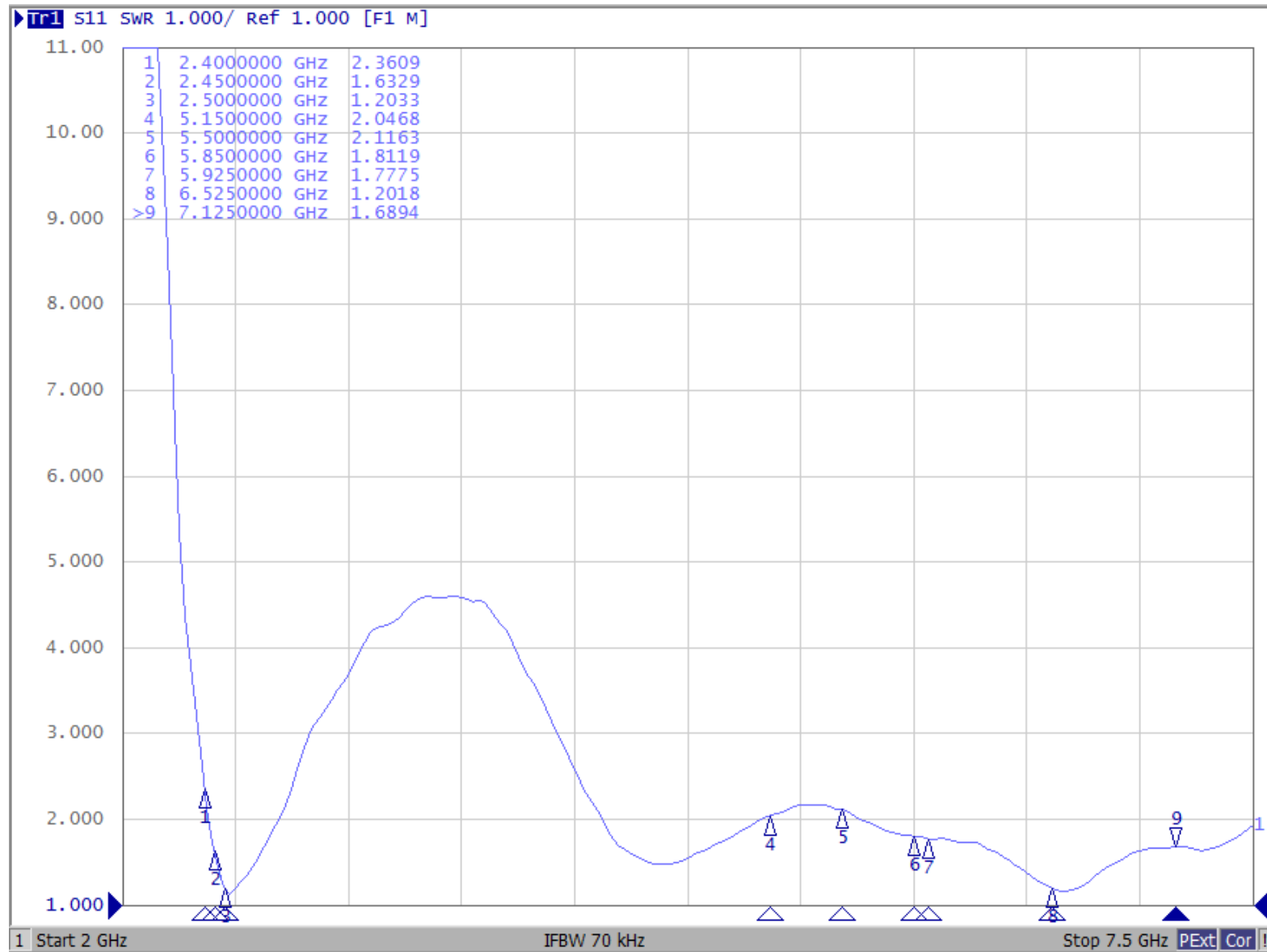




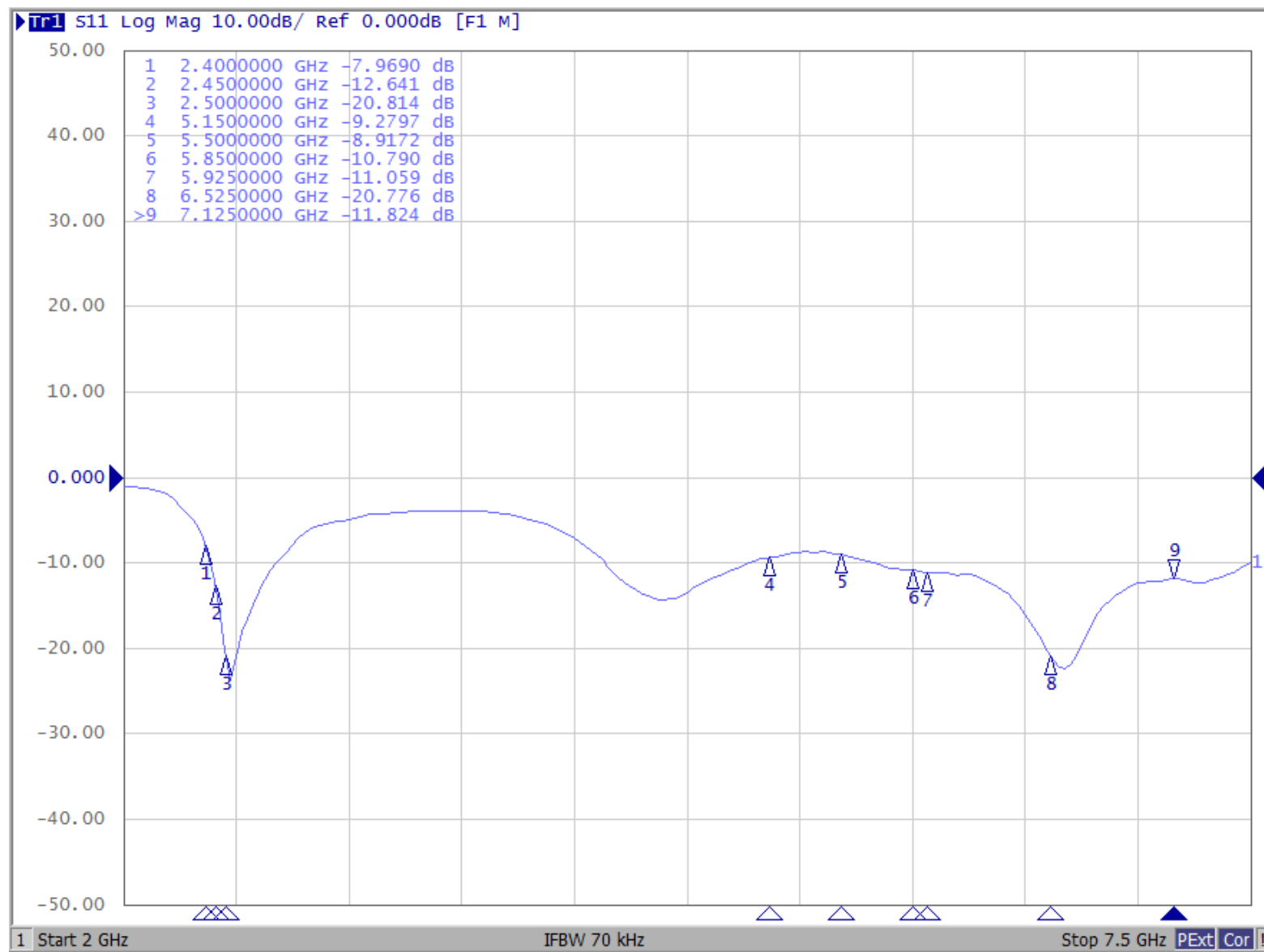
# Test data (WIFI0-6G Antenna pattern )



# Test data (WIFI1- VSWR )



# Test data (WIFI1- return loss )



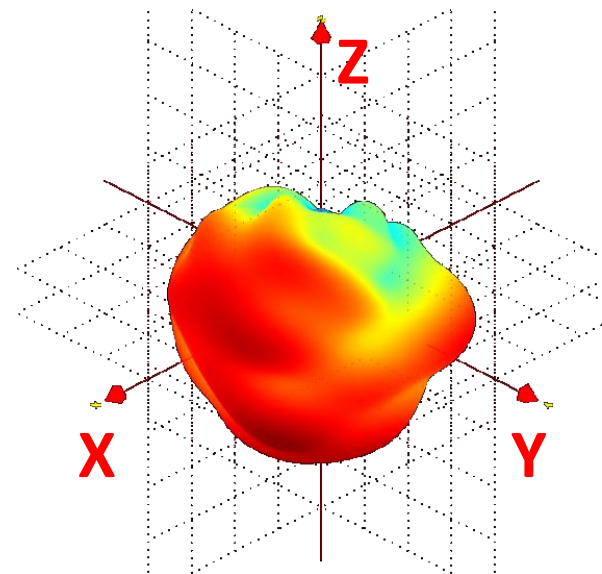
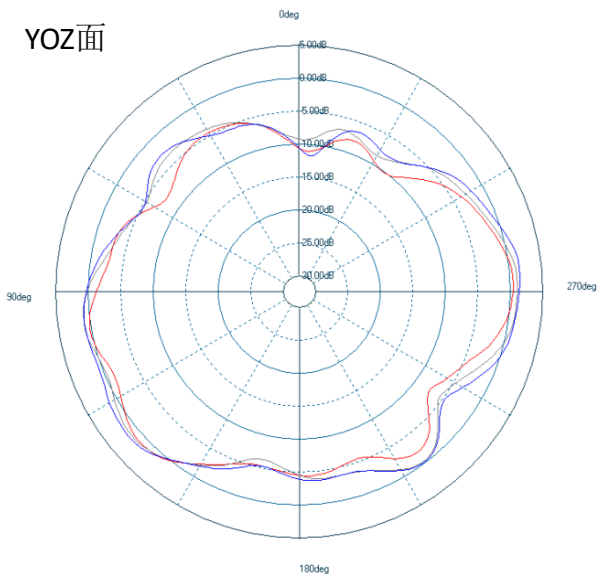
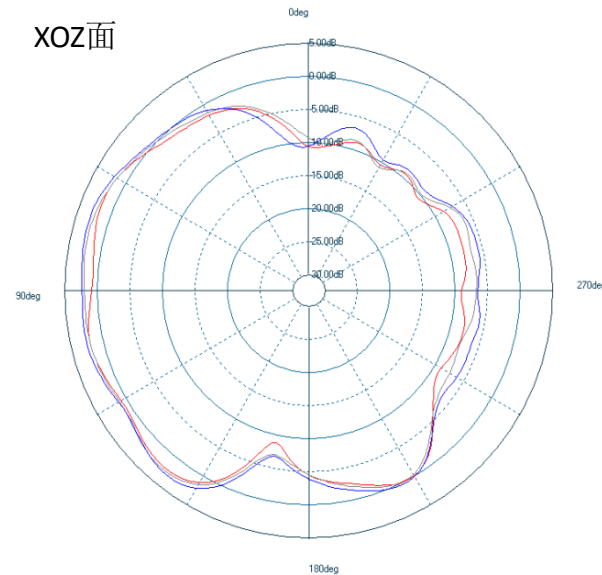
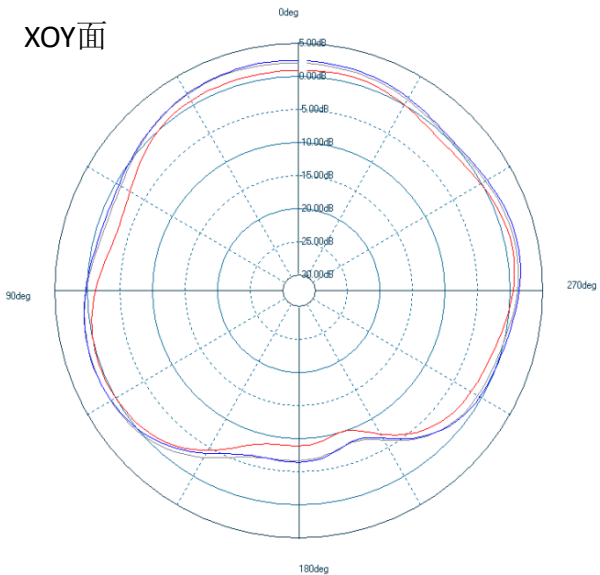
# Test data (WIFI1- Efficiency/Gain )

Frequency Mhz	Peak Gain dB	Efficiency	
		%	dB
2400	2.89	53.99	-2.68
2410	3.06	53.92	-2.68
2420	3.17	54.43	-2.64
2430	3.40	56.87	-2.45
2440	3.20	56.13	-2.51
2450	3.22	58.34	-2.34
2460	2.99	55.63	-2.55
2470	3.24	58.21	-2.35
2480	3.15	59.75	-2.24
2490	2.97	57.79	-2.38
2500	3.19	60.93	-2.15
5150	3.32	60.31	-2.20
5250	3.53	56.15	-2.51
5350	3.57	54.26	-2.66
5450	3.89	59.30	-2.27
5550	3.87	57.96	-2.37
5650	4.09	60.69	-2.17
5750	3.99	59.70	-2.24
5850	4.37	61.58	-2.11

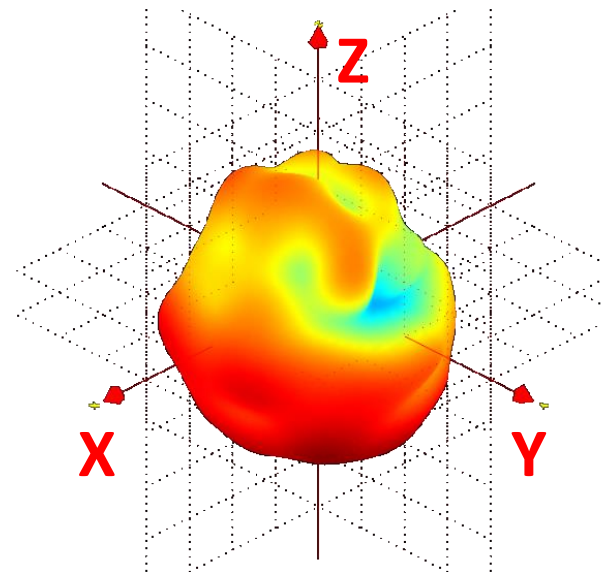
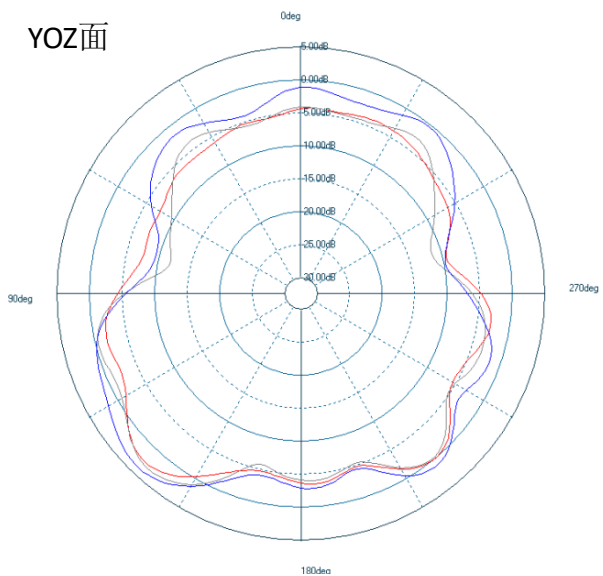
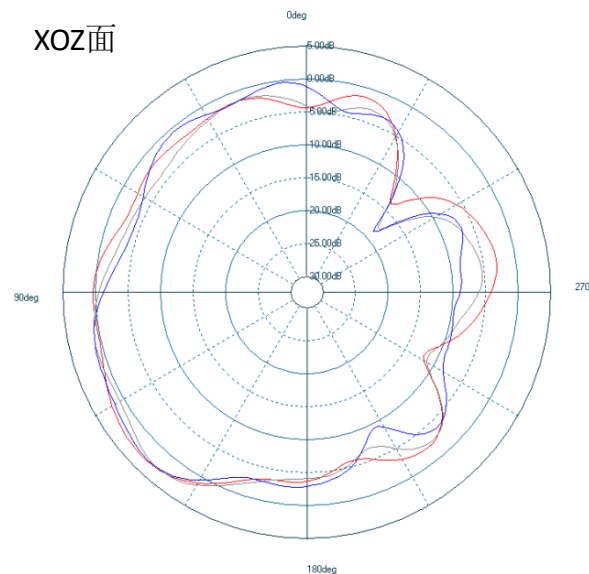
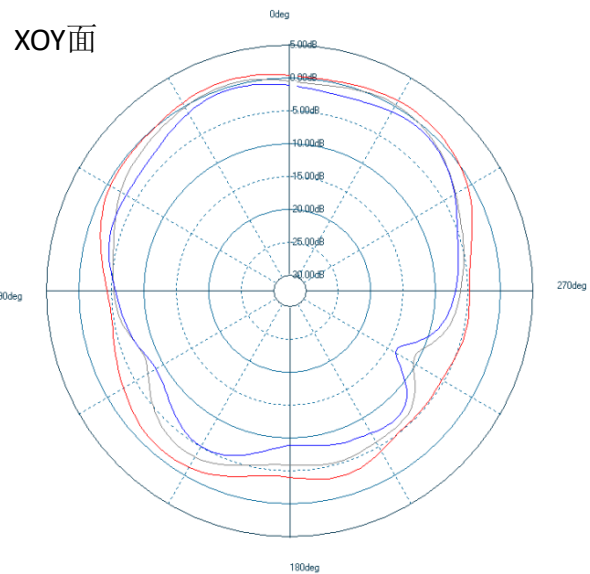
Frequency Mhz	Peak Gain dB	Efficiency	
		%	dB
5925	4.61	61.71	-2.10
6025	4.54	59.64	-2.24
6125	4.61	62.55	-2.04
6225	4.77	63.82	-1.95
6325	4.69	62.53	-2.04
6425	4.84	64.43	-1.91
6525	4.94	64.88	-1.88
6625	4.81	64.79	-1.89
6725	4.77	66.77	-1.75
6825	4.83	65.50	-1.84
6925	4.92	65.37	-1.85
7025	4.74	60.29	-2.20
7125	4.89	59.75	-2.24



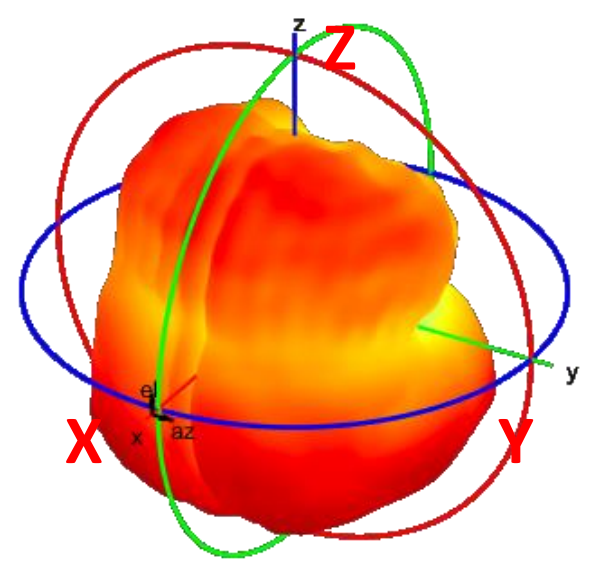
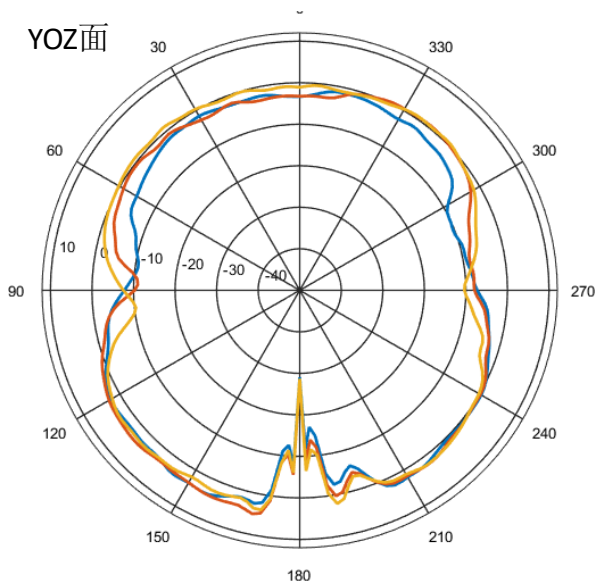
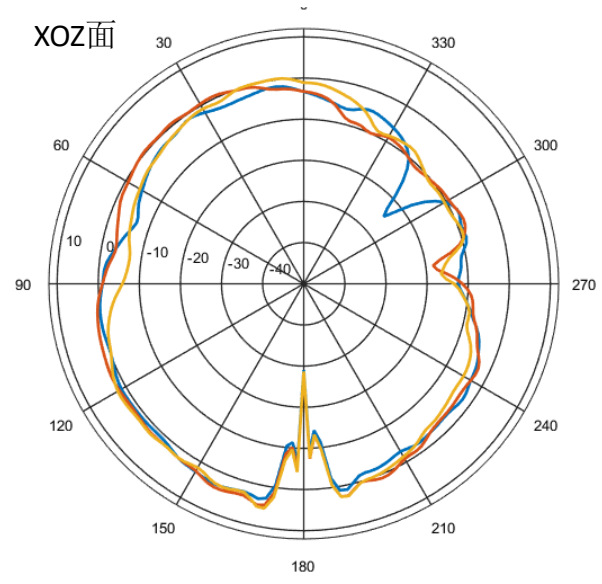
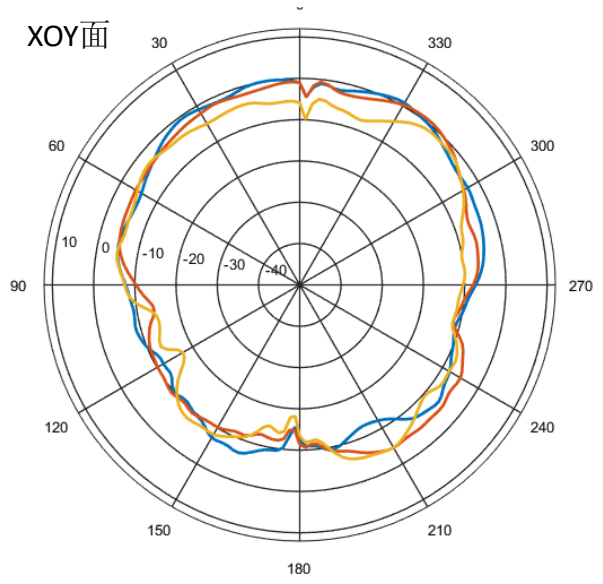
# Test data (WIFI1-2.4G Antenna pattern)



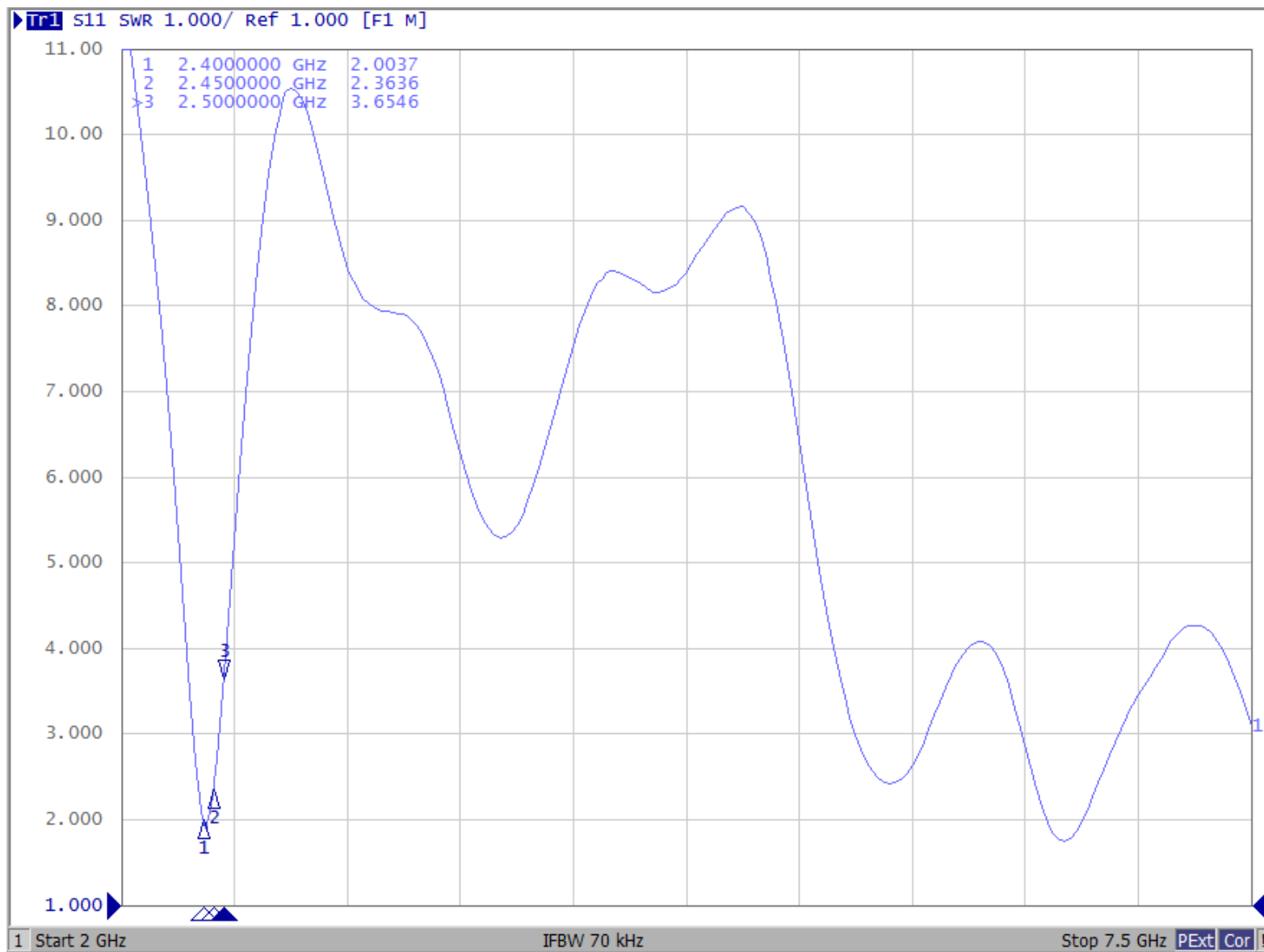
# Test data (WIFI1-5G Antenna pattern)



# Test data (WIFI1-6G Antenna pattern )

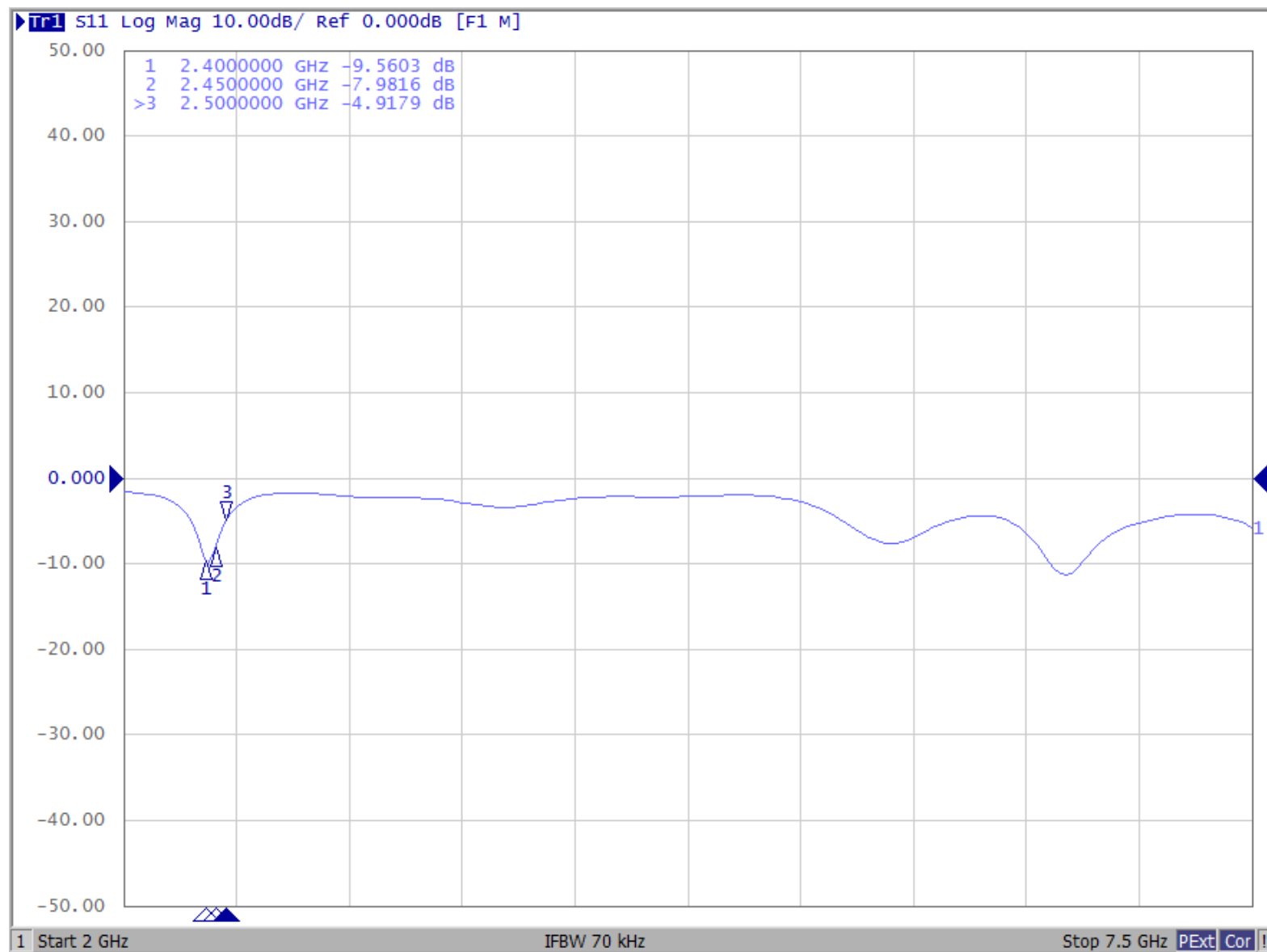


# Test data (BT- VSWR )





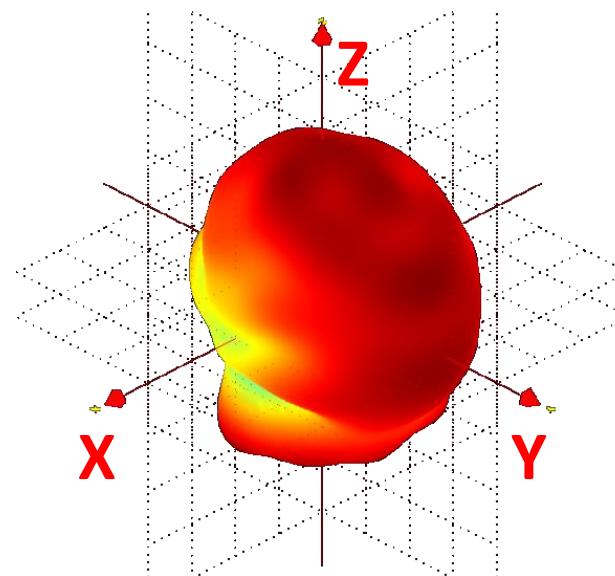
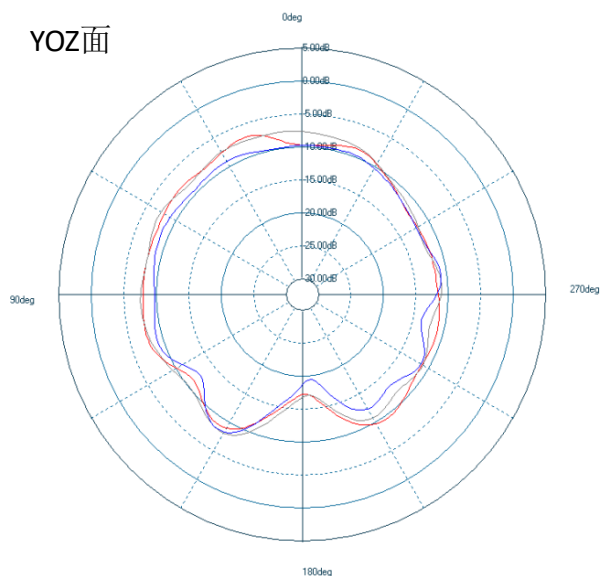
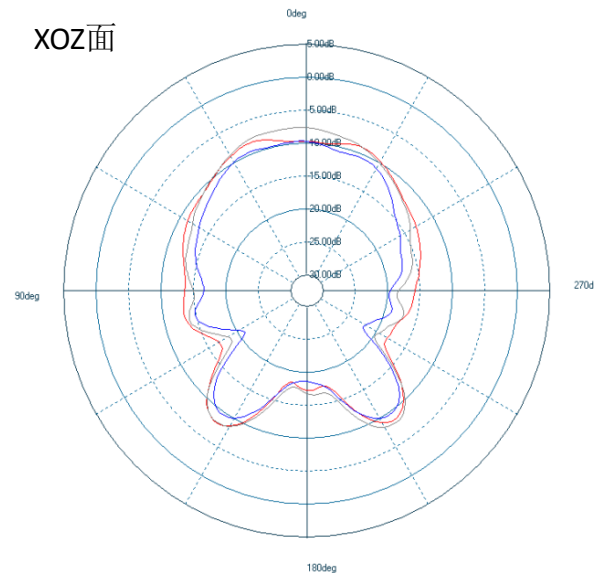
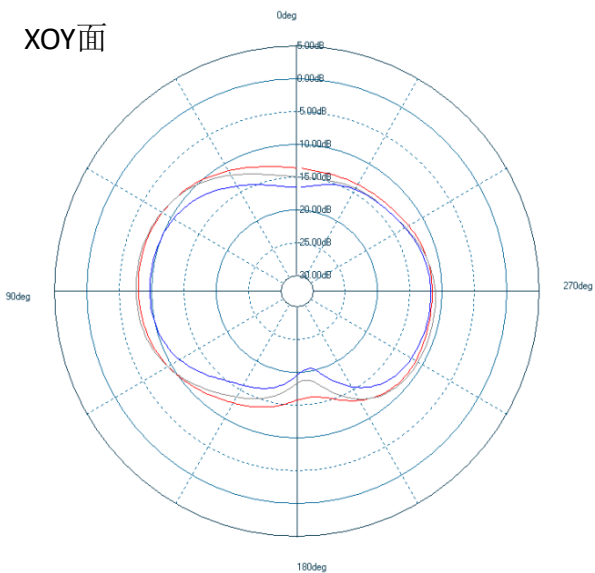
# Test data (BT- return loss )



# Test data (BT- Efficiency/Gain )

Frequency	Peak Gain	Efficiency	
Mhz	dB	%	dB
2400	-6.04	11.30	-9.47
2410	-5.94	11.69	-9.32
2420	-6.03	11.59	-9.36
2430	-5.90	12.01	-9.21
2440	-6.04	11.53	-9.38
2450	-6.35	11.11	-9.54
2460	-6.68	10.11	-9.95
2470	-6.64	10.01	-10.00
2480	-7.01	9.96	-10.02
2490	-7.38	9.28	-10.32
2500	-7.19	9.00	-10.46

# Test data (BT-2.4G Antenna pattern )



# Thank You

