



Antenna Test Report

天线调试报告

Customer Name(客户名称): 海翼

Project Name (项目名称): D2426

Date (日期): 2024. 02. 18

R & D Engineer (研发): 张万泽

Directory(目录)

1.Company Introduction(公司简介)-----	3p
2.Appearance(产品外观)-----	4-5p
3.Antenna Impedance Matching(天线阻抗匹配)-----	6p
4.Antenna Passive(天线无源相关数据)-----	7-12p
5.Antenna Radiation Pattern(天线辐射方向图)-----	13-18p
6.Summary总结-----	19p

公司简介

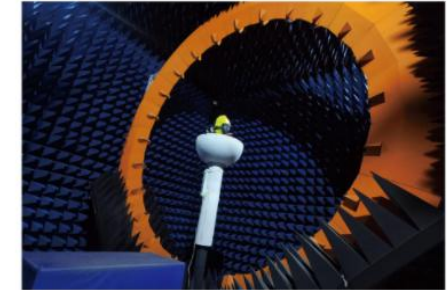
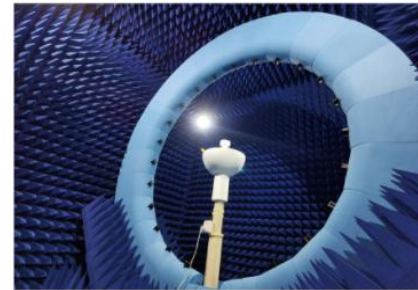
爱特恩科技（深圳）有限公司成立于2016年，公司位于深圳市，是一家专业的通讯电子产品配件的解决方案提供商和制造商。集天线研发、生产、销售于一体的高新科技企业。

公司主要从事与开发安防类、智能家居类的电子产品。目前拥有3座微波暗室、模拟人头手测试、网络分析仪等。

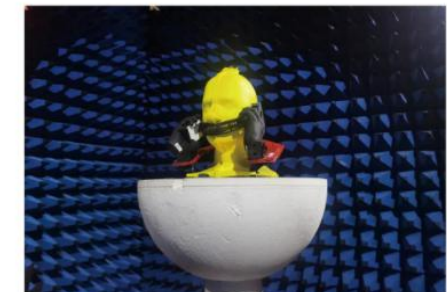
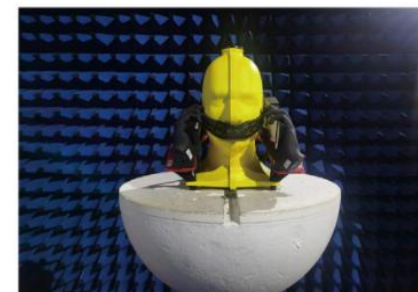
我们致力与客户建立长期稳定的商业合作关系，始终坚持“顾客至上，锐意进取”的经营理念，为我们的客户提供最具竞争力的价格，最好的质量和优质的服务。

AT&C

专注品质 | 质量第一 | 共赢未来



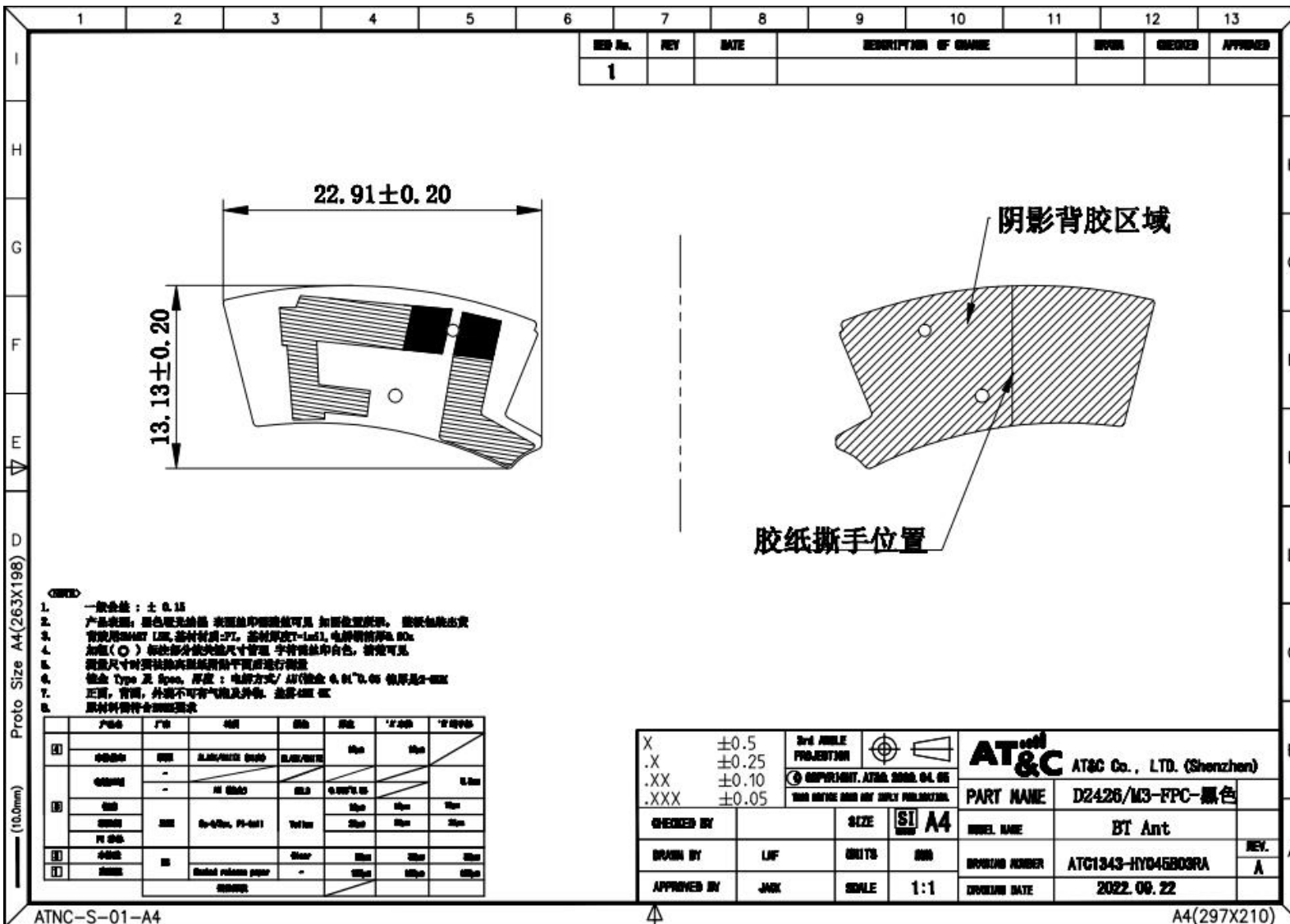
拥有SATIMO原装实验室7M*5M*5M的24探头一座
 益麦3.5MX3.5MX3.5M的24探头一座
 频率范围均为400MHZ-8.5GHZ
 2/3/4/5G、
 WIFI A/B/G/N/AC/AX
 BT
 GPS
 NB-10T等有源测试，
 拥有模拟人头手测试设备



拥有AGILENT5071系列网络分析仪、AGILENT8960、RS CM W500、4438C等终端测试设备，提供天线性能测试。

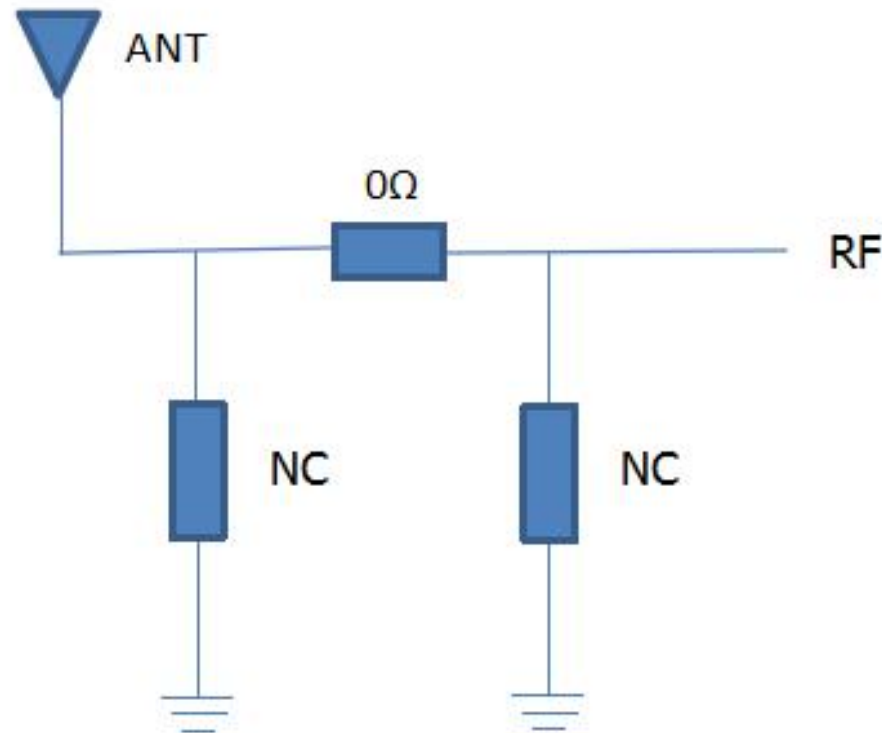
● D2426_Appearance(产品外观)

BT



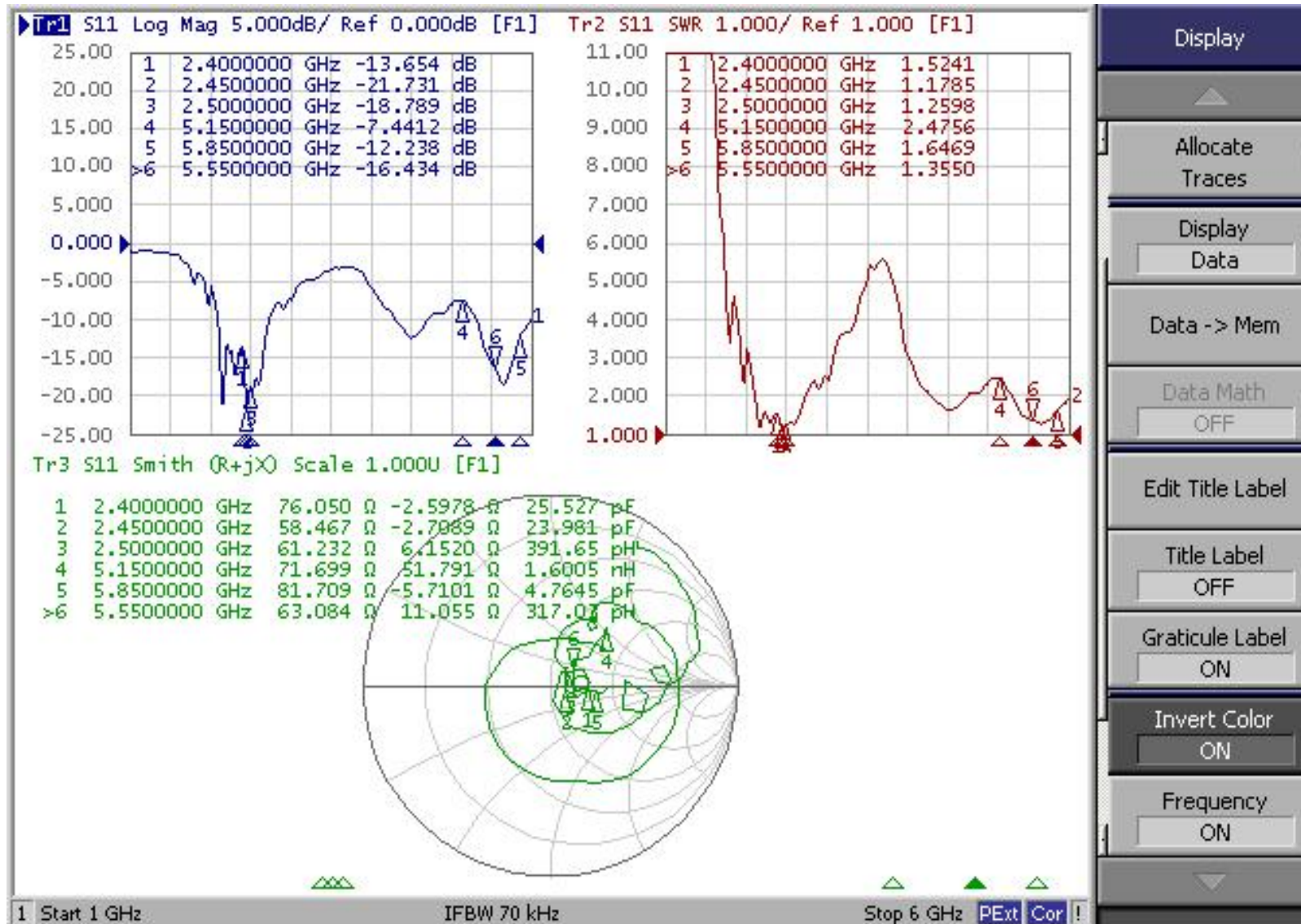
● D2426_Antenna Impedance Matching(天线阻抗匹配)

1. No changes were made to the matching of the three antennas(三个天线匹配均无更改)。



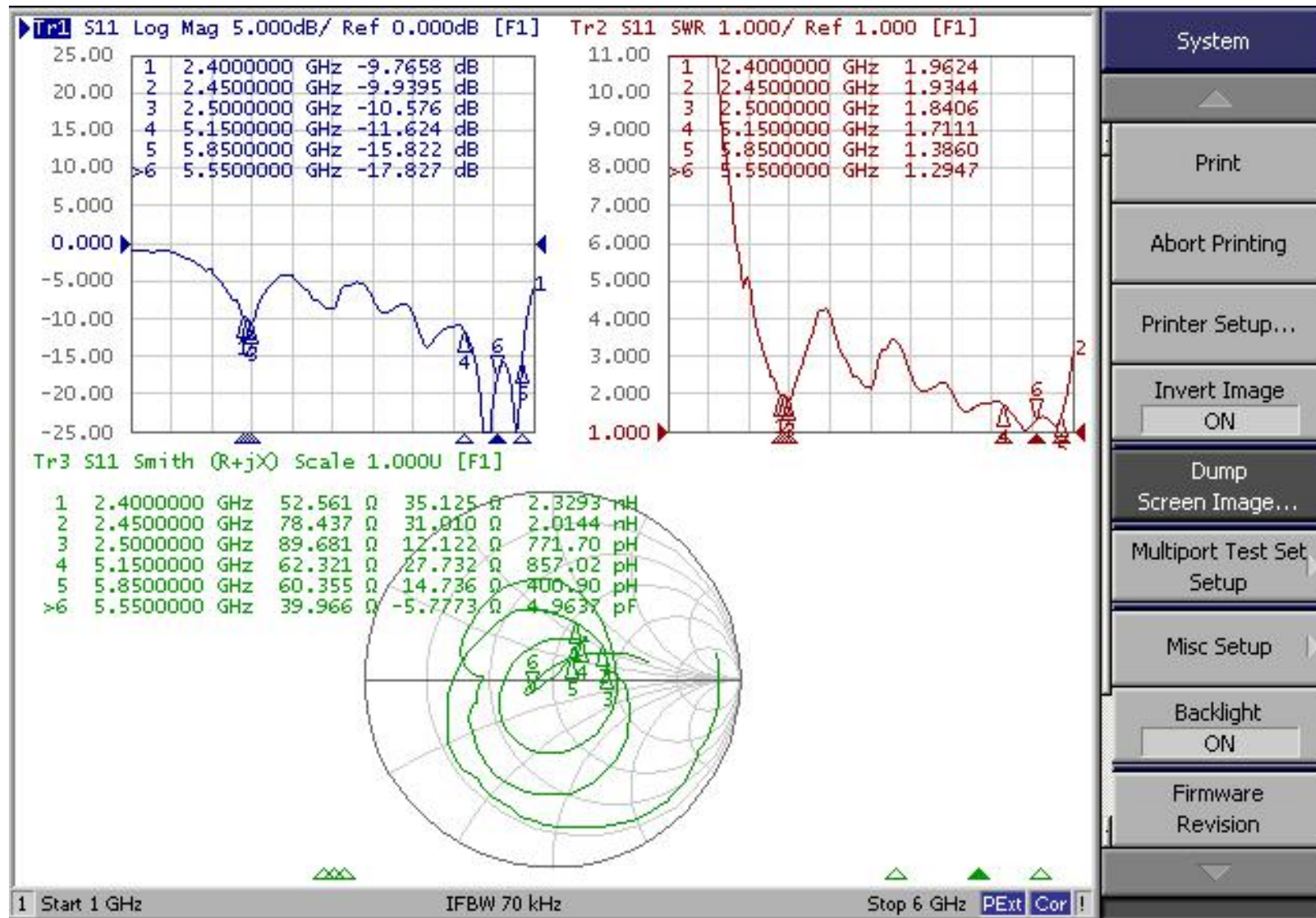
● D2426_WIFI 1_S11/VSWR (无源驻波比)

WIFI 1 antenna_VSWR(WIFI 1天线_VSWR)



D2426_WIFI 2_S11/VSWR (无源驻波比)

WIFI 2 antenna_ VSWR(WIFI 2天线_VSWR)



System

Print

Abort Printing

Printer Setup...

Invert Image

ON

Dump
Screen Image...Multiport Test Set
Setup

Misc Setup

Backlight

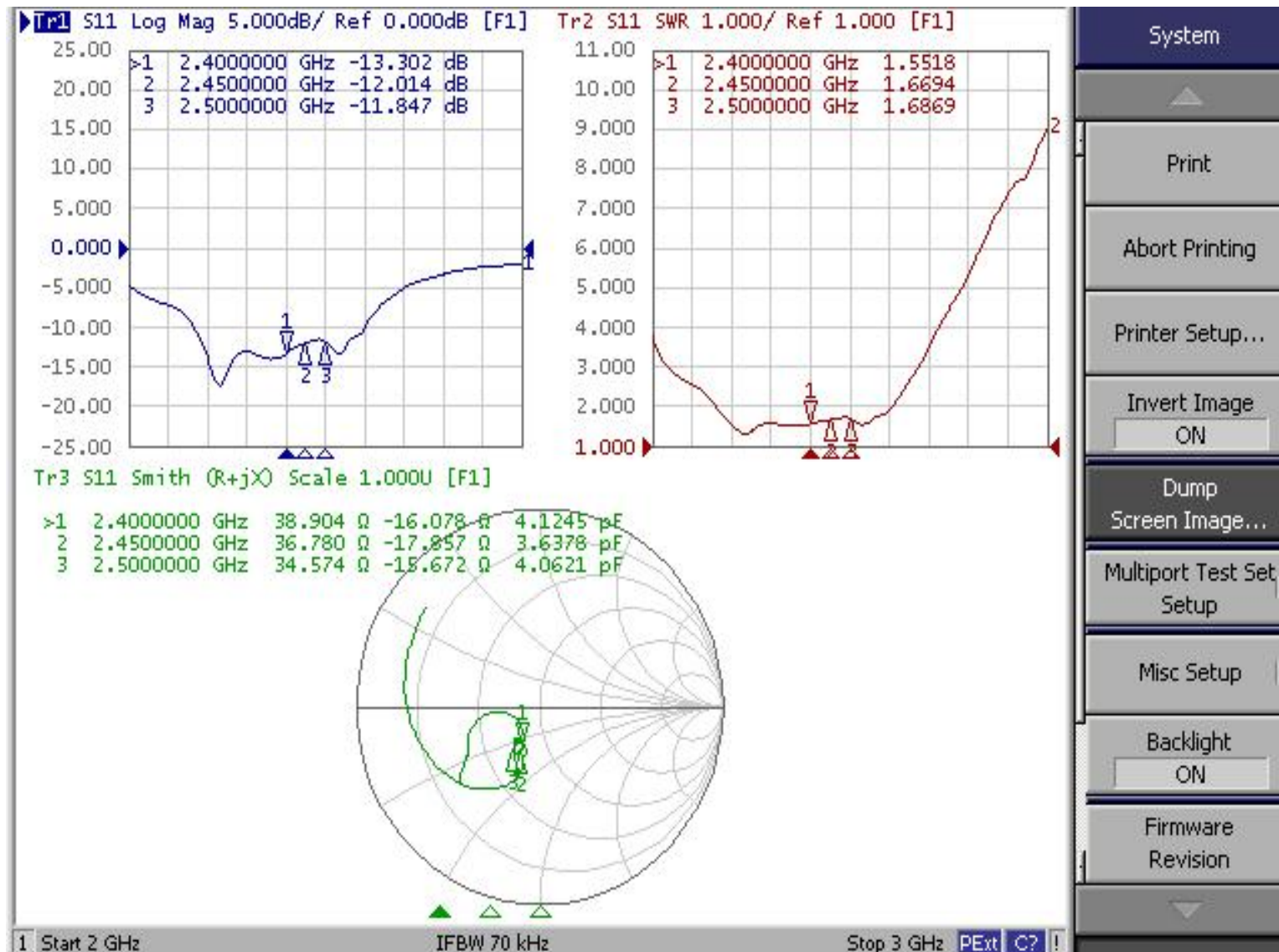
ON

Firmware
Revision

▼

● D2426_BT_S11/VSWR (无源驻波比)

BT antenna_VSWR(BT天线_VSWR)



● D2426 _WIFI 1_Efficiency & Gain（无源效率和增益）

2.4G

5G

(2.4G)Passive Test Results(无源测试结果)				(5G)Passive Test Results(无源测试结果)			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)	Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)
2400	51.66%	-2.87	1.24	5150	50.58%	-2.96	3.95
2420	50.27%	-2.99	1.13	5200	50%	-3.01	3.77
2440	49.99%	-3.01	0.89	5250	50.93%	-2.93	3.99
2460	49.81%	-3.03	0.99	5300	50.70%	-2.95	3.95
2480	49.81%	-3.03	1.32	5350	52.97%	-2.76	4.45
2500	48.45%	-3.15	2.12	5400	53.33%	-2.73	4.48
AVG:	50.00%	-3.01	1.28	5450	56.49%	-2.48	4.7
				5500	56.10%	-2.51	4.97
				5550	53.83%	-2.69	4.35
				5600	52%	-2.84	4.73
				5650	52%	-2.84	4.88
				5700	53.33%	-2.73	4.89
				5750	53.46%	-2.72	4.6
				5800	50.93%	-2.93	3.95
				5850	53.58%	-2.71	4.22
				5900	53%	-2.79	4.39
				AVG:	50.58%	-2.96	3.95

D2426 _WIFI 2_Efficiency & Gain（无源效率和增益）

2.4G

5G

(2.4G)Passive Test Results(无源测试结果)				(5G)Passive TestR esults(无源测试结果)			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)	Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)
2400	57.28%	-2.42	2.07	5150	67.14	-1.73	3.8
2420	54.95%	-2.6	1.21	5200	66.83	-1.75	3.4
2440	51.64%	-2.87	1.4	5250	67.3	-1.72	3.57
2460	53.77%	-3.03	1.41	5300	66.99	-1.74	3.55
2480	50.70%	-2.95	1.34	5350	67.45	-1.71	3.71
2500	51.64%	-2.87	0.89	5400	64.27	-1.92	3.84
AVG:	53.33%	-2.79	1.39	5450	64.71	-1.89	3.52
				5500	63.83	-1.95	3.82
				5550	63.39	-1.98	2.9
				5600	62.66	-2.03	2.78
				5650	60.53	-2.18	2.68
				5700	58.88	-2.3	2.35
				5750	54.7	-2.62	1.96
				5800	55.81	-2.39	0.78
				5850	50.46	-2.93	0.61
				5900	67.14	-1.73	3.8
				AVG:	66.83	-1.75	3.4

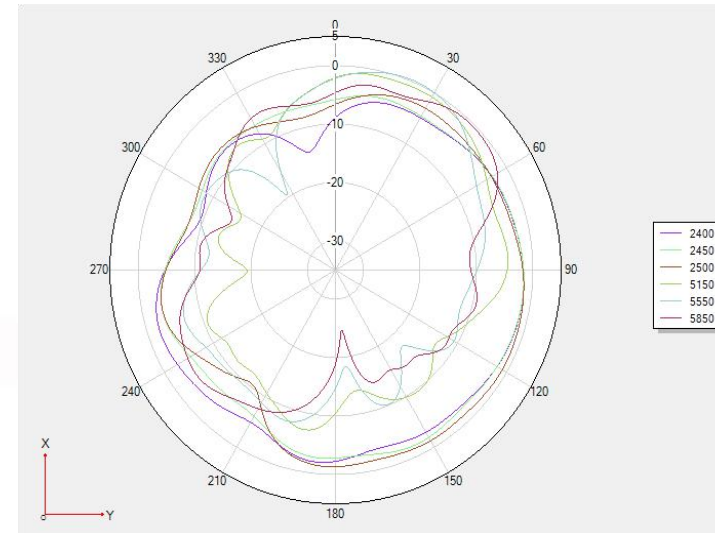
● D2426 _BT_Efficiency & Gain (无源效率和增益)

(2.4G)Passive Test Results(无源测试结果)			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)
2400	48.98%	-3.1	1.54
2420	49.42%	-3.06	1.19
2440	50.60%	-2.96	0.96
2460	52.32%	-2.81	1.23
2480	56.43%	-2.48	1.46
2500	57.34%	-2.42	2.1
AVG:	52.52%	-2.81	1.41

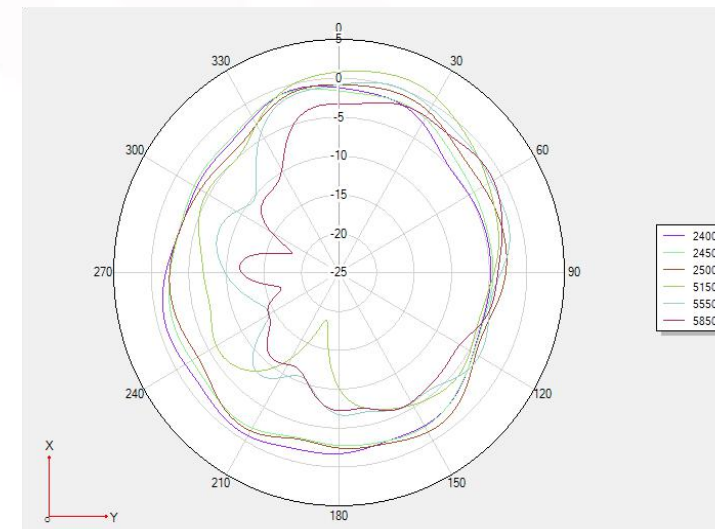
● D2426_2.4G&5.8G_2D Antenna Radiation Pattern(2D 天线辐射方向图)

1. The horizontal direction is the X-Y plane of the legend
(水平方向为图例X-Y面)。

WIFI 1

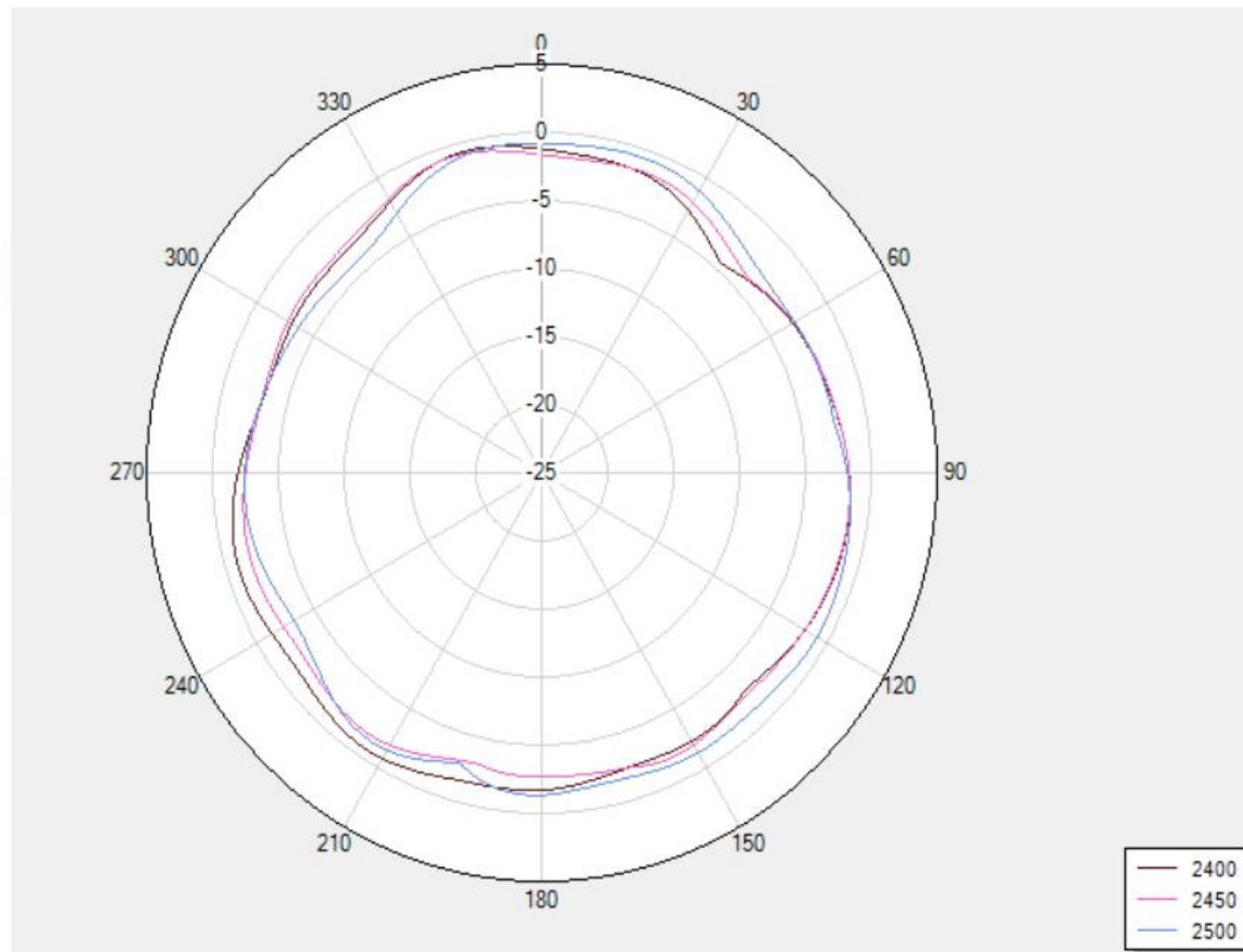


WIFI 2



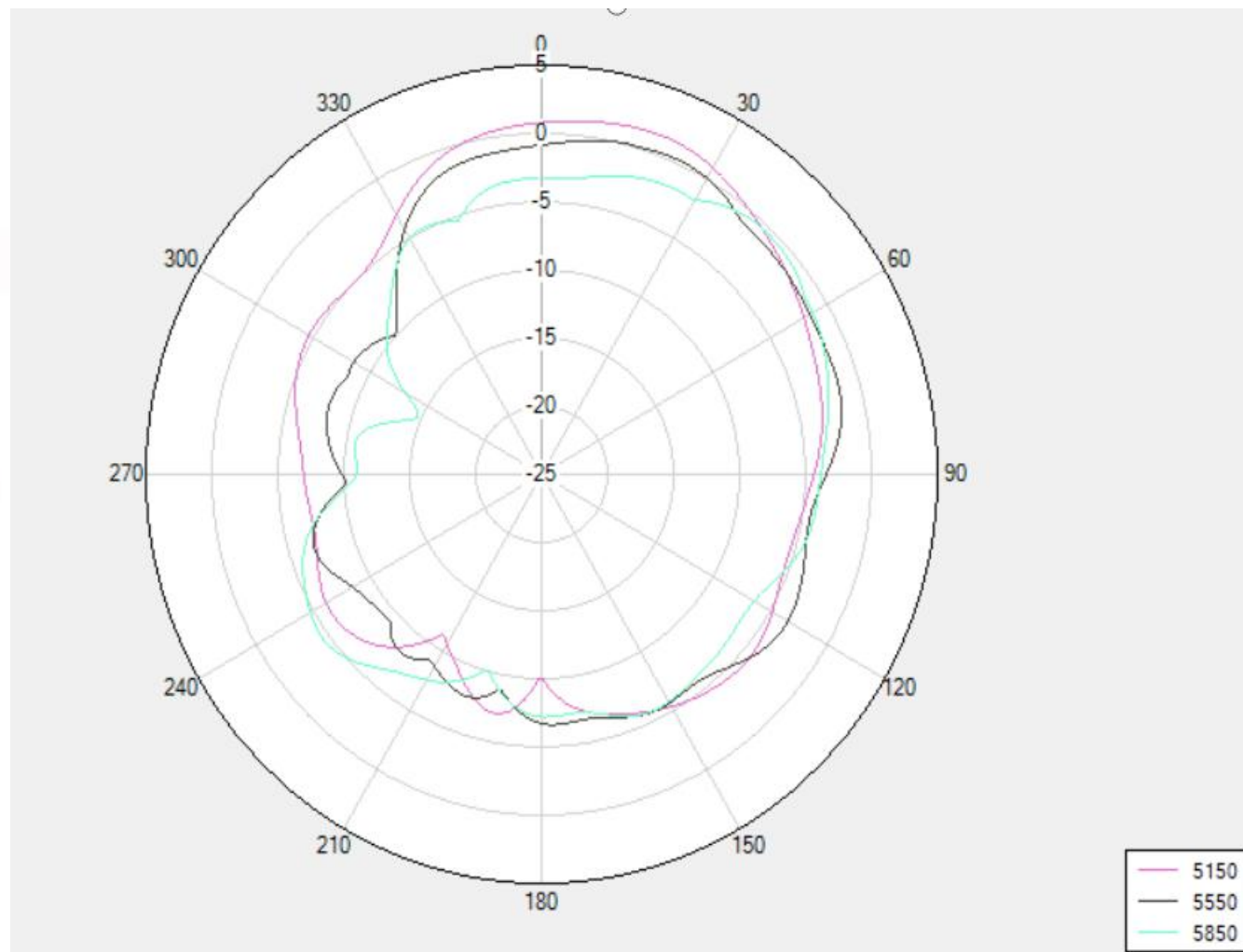
● D2426_2.4G_2D Synthetic Direction Map(2D 合成方向图)

1. The horizontal direction is the X-Y plane of the legend(水平方向为图例X-Y面)。
2. The minimum value is --4.58(最小值为-4.58)。



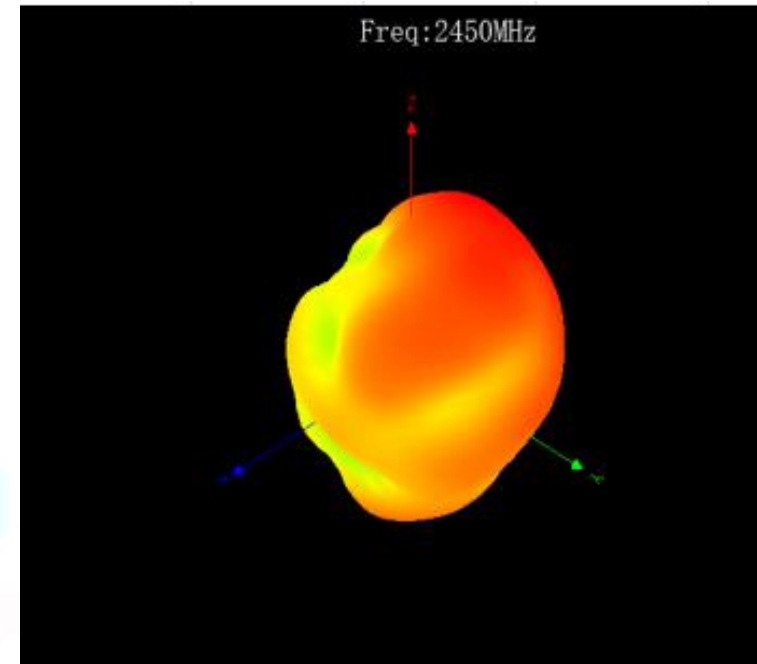
● D2426_5G_2D Synthetic Direction Map(2D 合成方向图)

1. The horizontal direction is the X-Y plane of the legend(水平方向为图例X-Y面)。
2. The minimum value is -14.81(最小值为-14.81)。

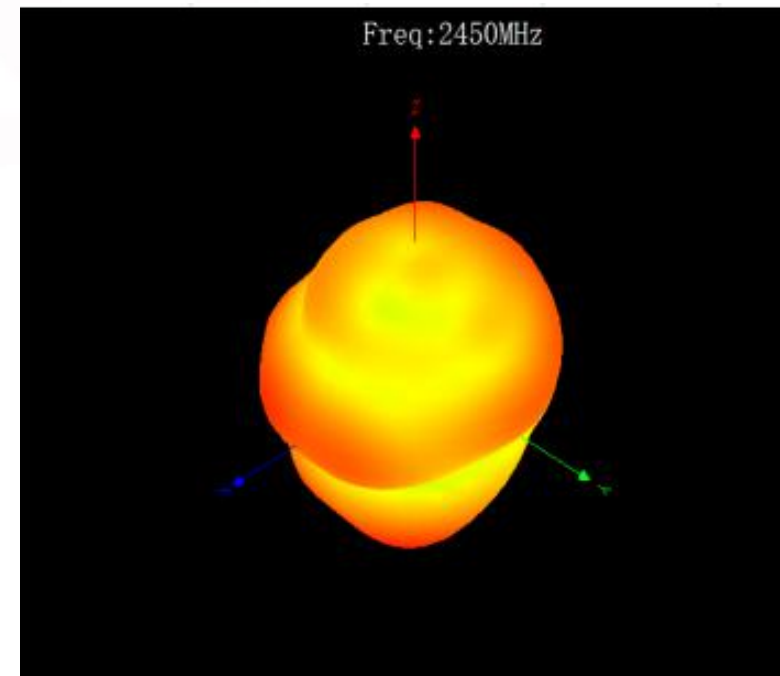


● D2426 _2.4G_ 3D Antenna Radiation Pattern(3D 天线辐射方向图)

WIFI 1 -2450MHz

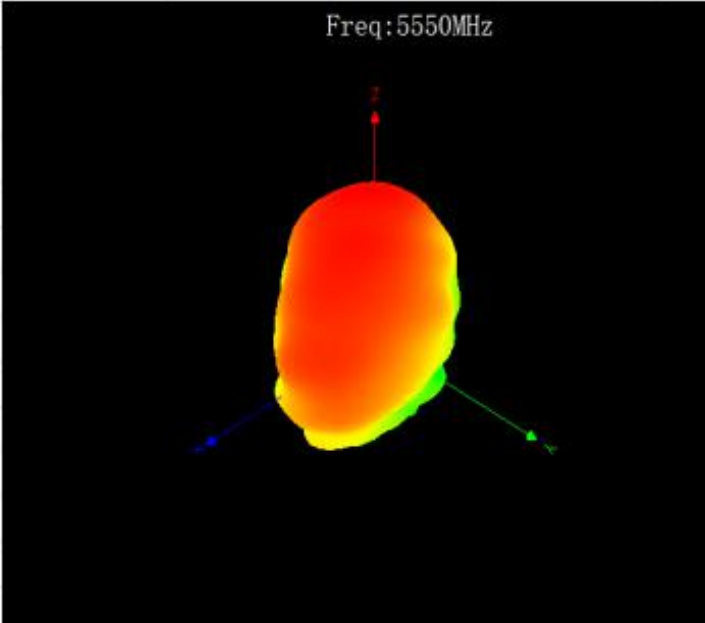


WIFI 2 -2450MHz

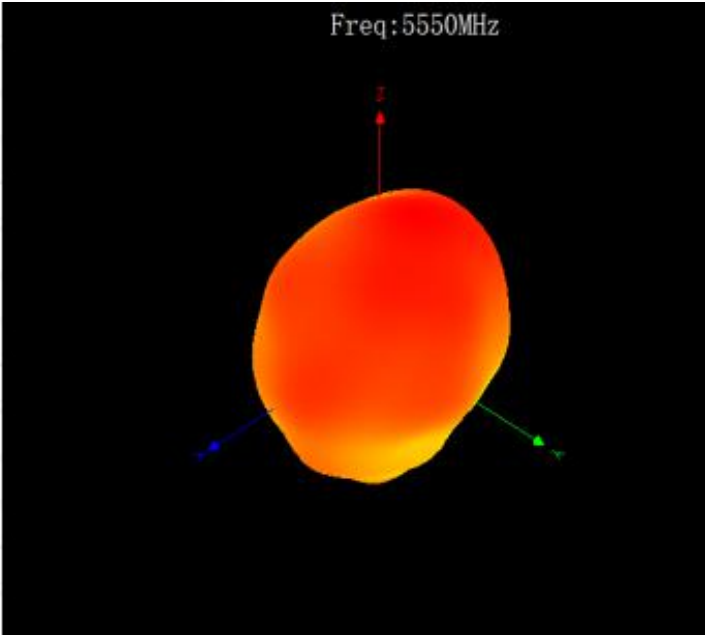


● D2426 _5G_ 3D Antenna Radiation Pattern(3D 天线辐射方向图)

WIFI 1 -5500MHz



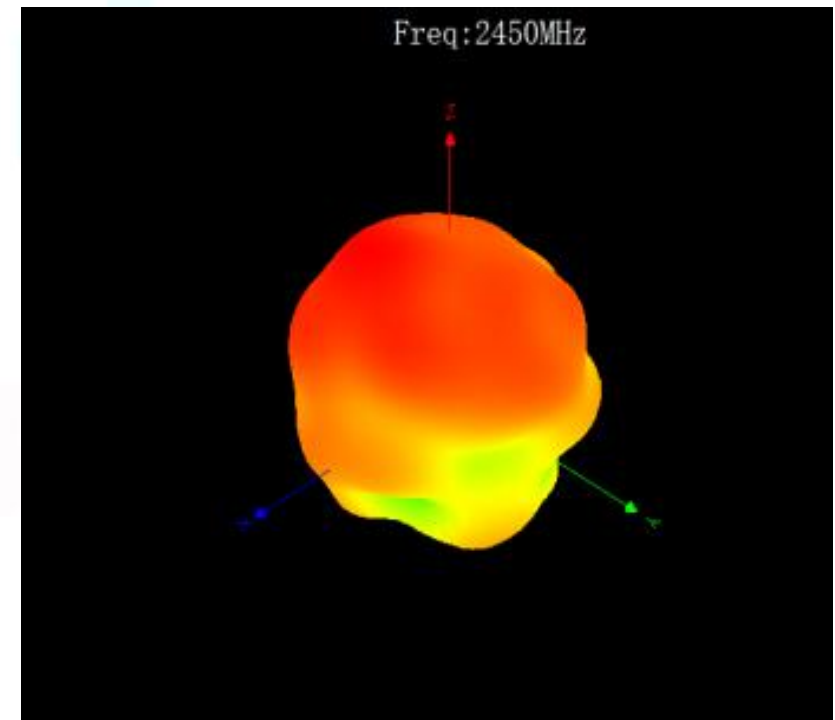
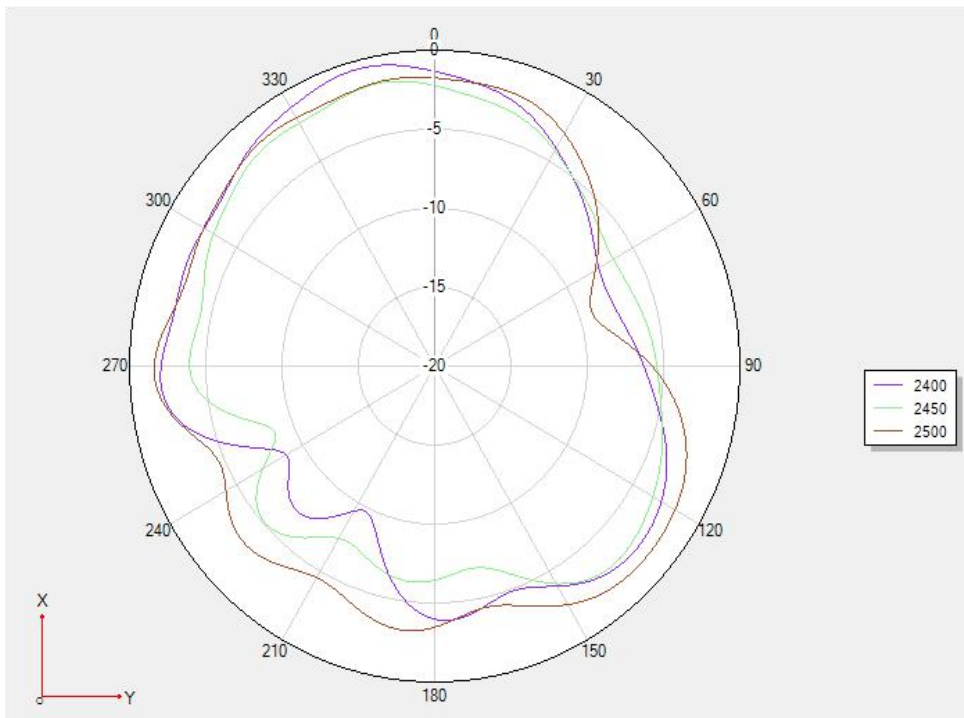
WIFI 2 -5500MHz



● D2426_BT Antenna Radiation Pattern(天线辐射方向图)

1. The horizontal direction is the X-Y plane of the legend(水平方向为图例X-Y面)。
2. The minimum value is -9.62(最小值为-9.62)。

BT-2450MHz



● D2426 _Summary(总结)

- 1.The antenna matching has not changed, and the antenna performance is basically up to standard(天线匹配无更改，天线性能基本达标)。
2. During assembly, pay attention to the position of the FPC sticker and follow the instructions(组装时注意FPC贴的位置按标示进行作业)。

*** (If there are any changes to the machine, please notify our company; if there are any problems, please communicate promptly) ***

*** (如果机器有变化，请通知我司；如果有任何问题，请及时沟通) ***

Thank You!!