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WIFI 天线测试报告

WIFI Antenna Test Report

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修改记录

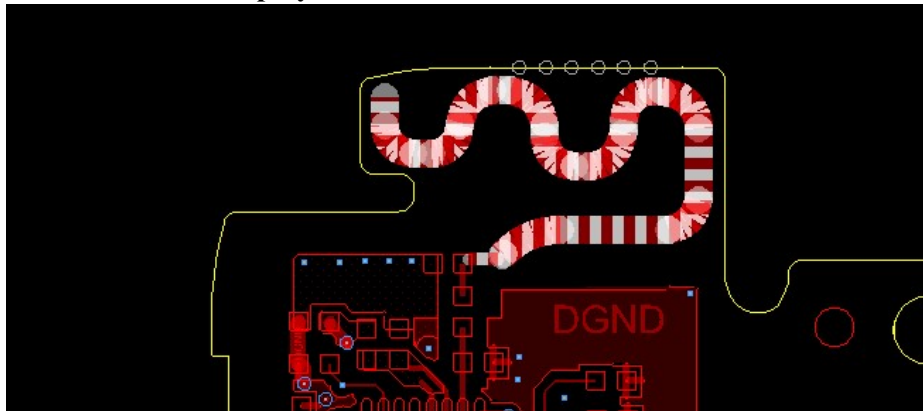
版本号	作者	修改说明	日期
1.0	晏海涛	1. 编写WIFI 天线测试报告 1. Preparation of WIFI antenna test reports	2024-07-13

1. 测试简述 Brief description of the test

鼎合远传针对 A30产品的 WIFI 天线开展测试工作，本测试包含了频段、性能、无源效率、增益、2D 和 3D 增益进行了全方面的测试工作。

Dspread's WIFI antenna for the A30 product was tested for band, performance, passive efficiency, gain, 2D and 3D gain.

2. BT 天线展示 BT antenna display



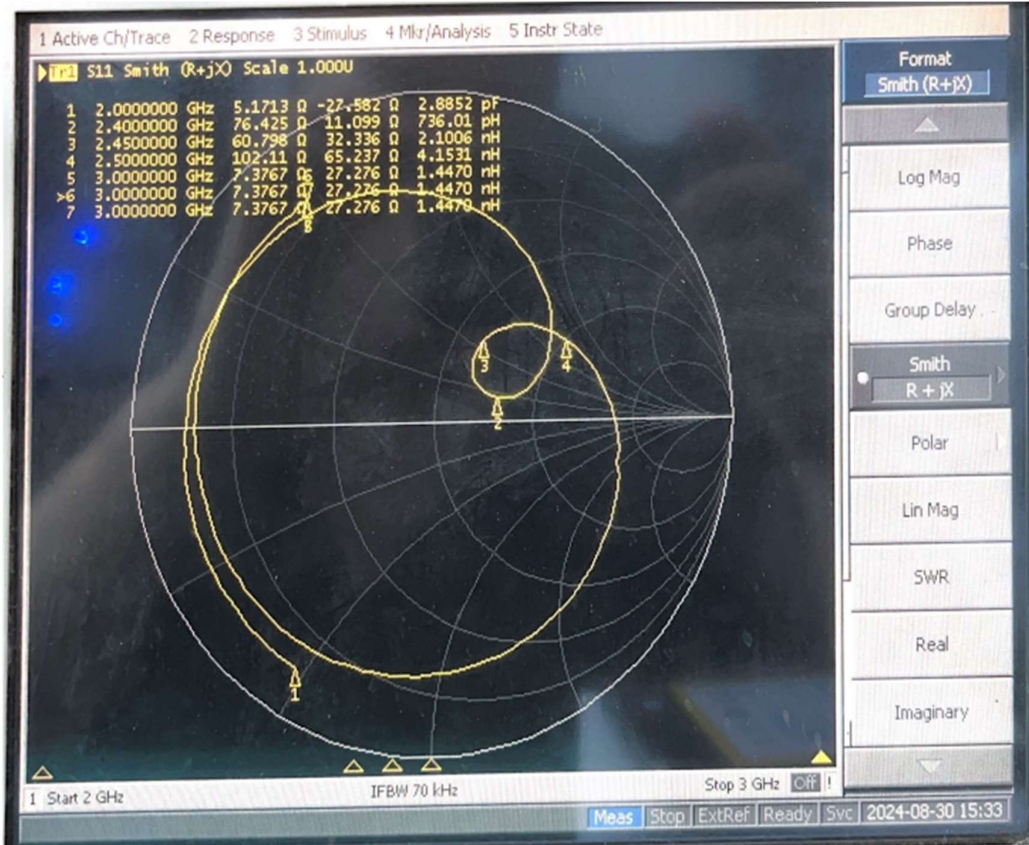
3. 测试结论 Test conclusions

3.1 频段 Frequency Band

TX: 2400MHz~2480MHz

RX: 2400MHz~2480MHz

3.2 S11 天线性能如下，工作频段覆盖整个 ISM 2.4G 频段 S11 antenna performance is as follows, the operating band covering the entire ISM 2.4G band;



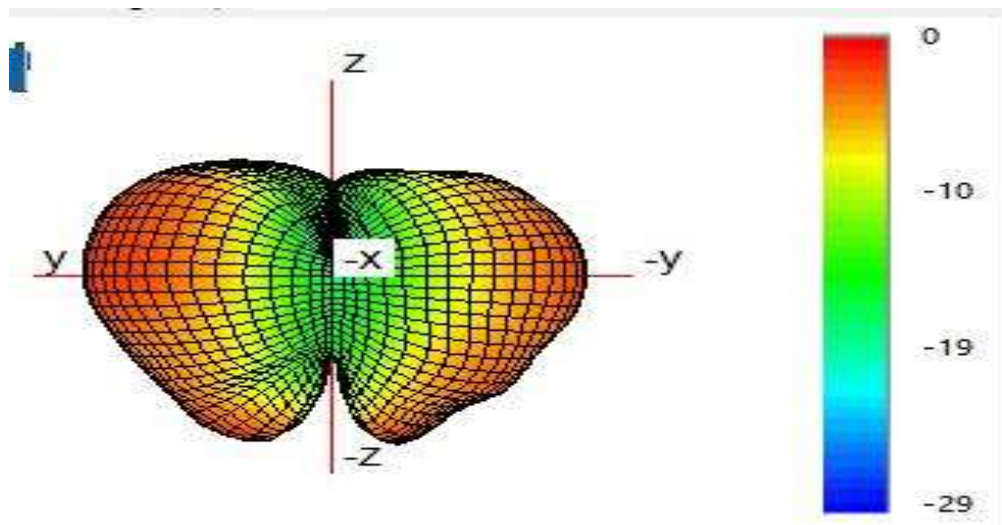
3.3 天线的无源效率和增益 The antenna passive efficiency and gain

Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	-0.63	-4.61	34.63
2410	-0.55	-4.51	35.42
2420	-0.63	-4.43	36.04
2430	-0.74	-4.53	35.20
2440	-0.77	-4.56	35.02
2450	-0.79	-4.65	34.25
2460	-0.90	-4.86	32.64
2470	-1.14	-5.15	30.52
2480	-1.28	-5.44	28.58
2490	-1.41	-5.68	27.04
2500	-1.60	-5.94	25.44

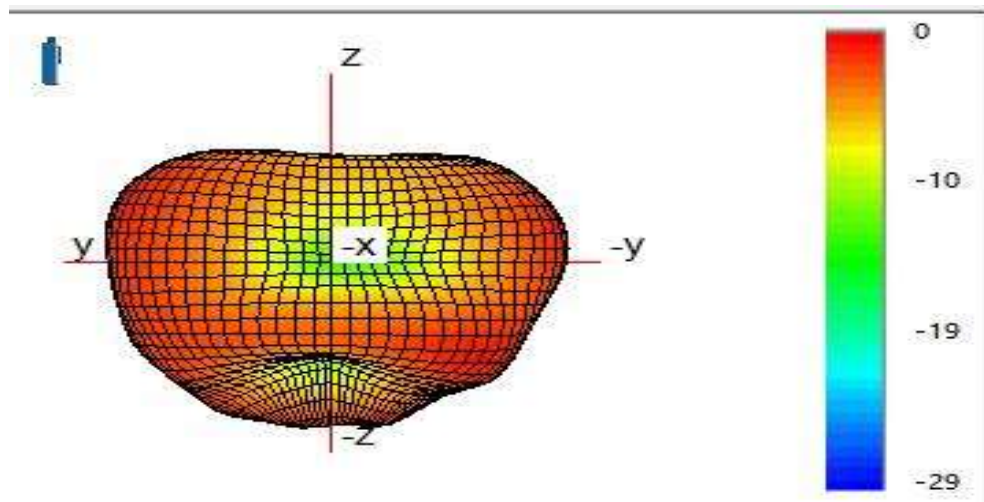
3.4 3D 和 2D方向图 3D and 2D Patterns

•3D

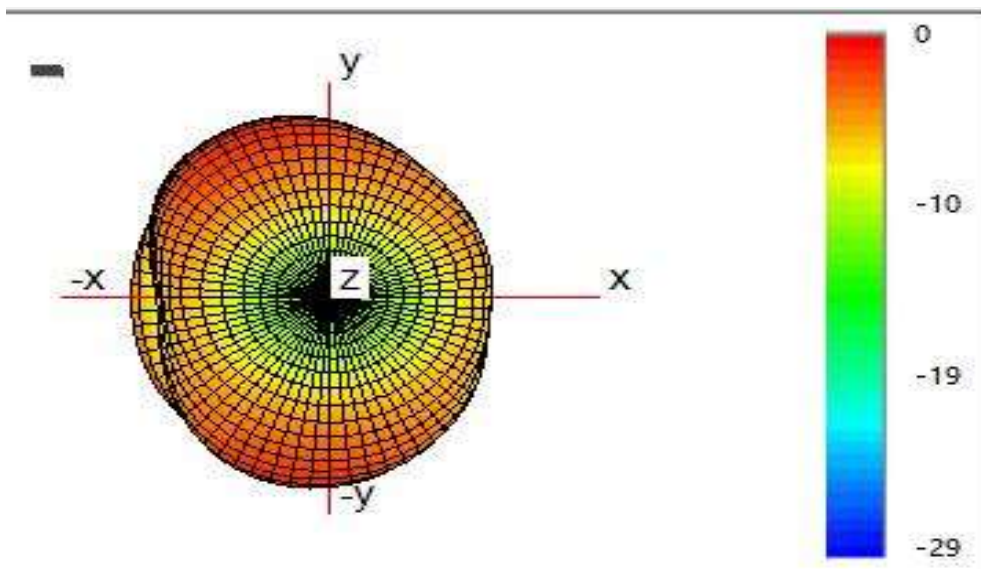
2400-0



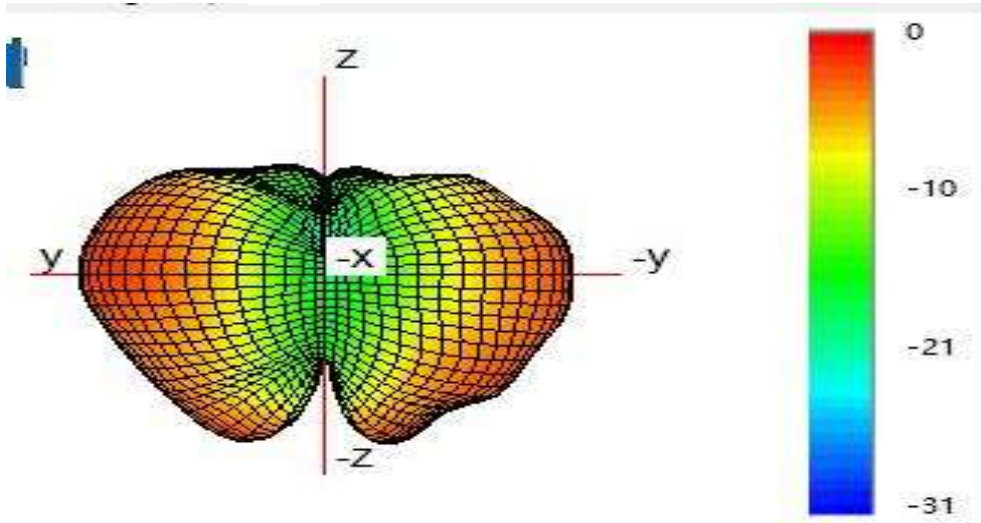
2400-90



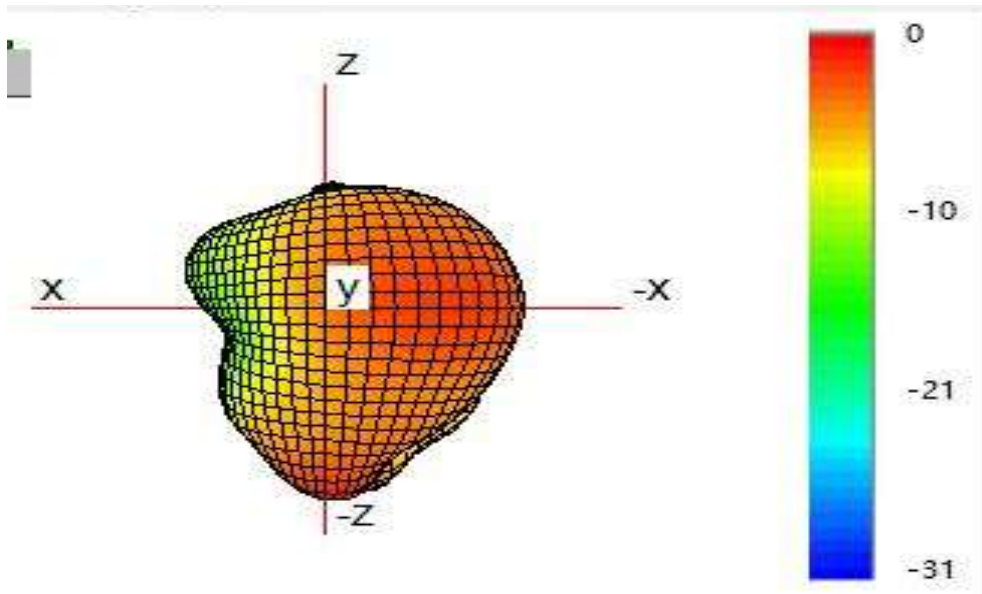
2400-45



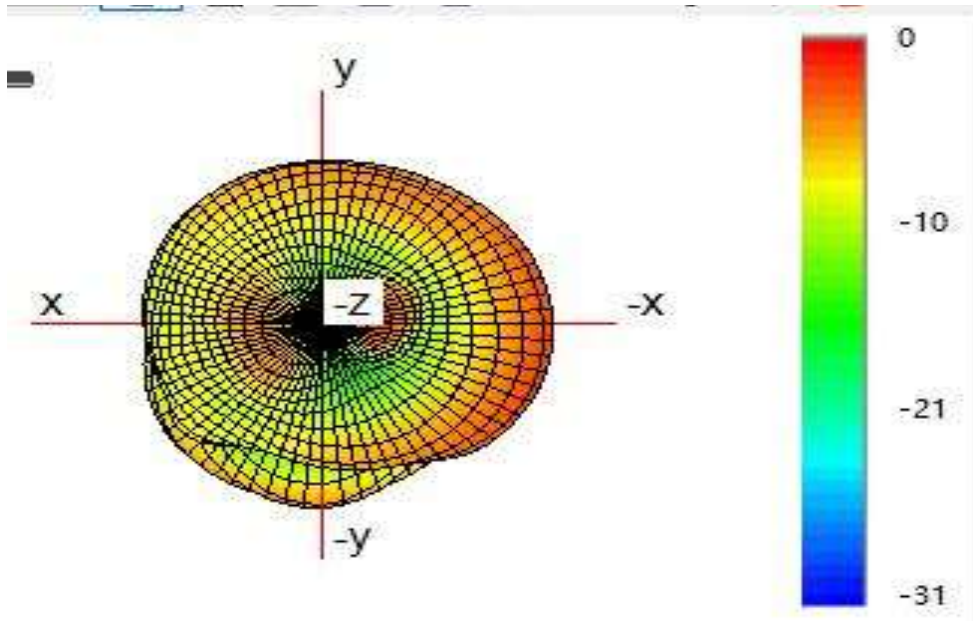
2450-0



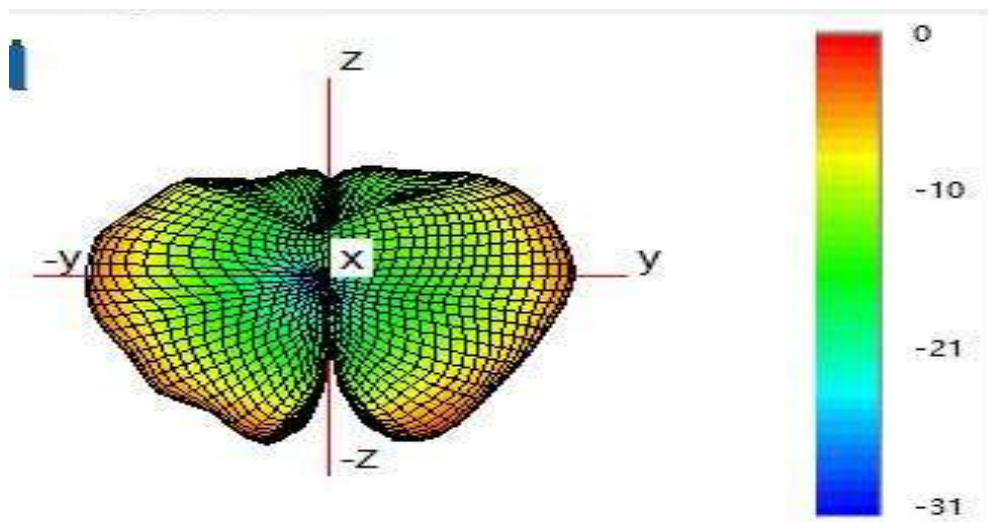
2450-90



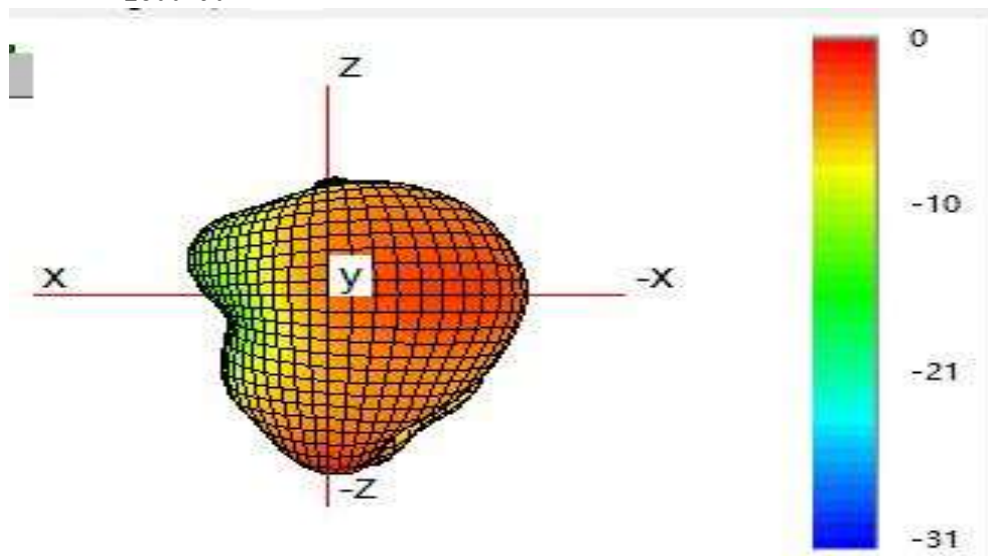
2450-45



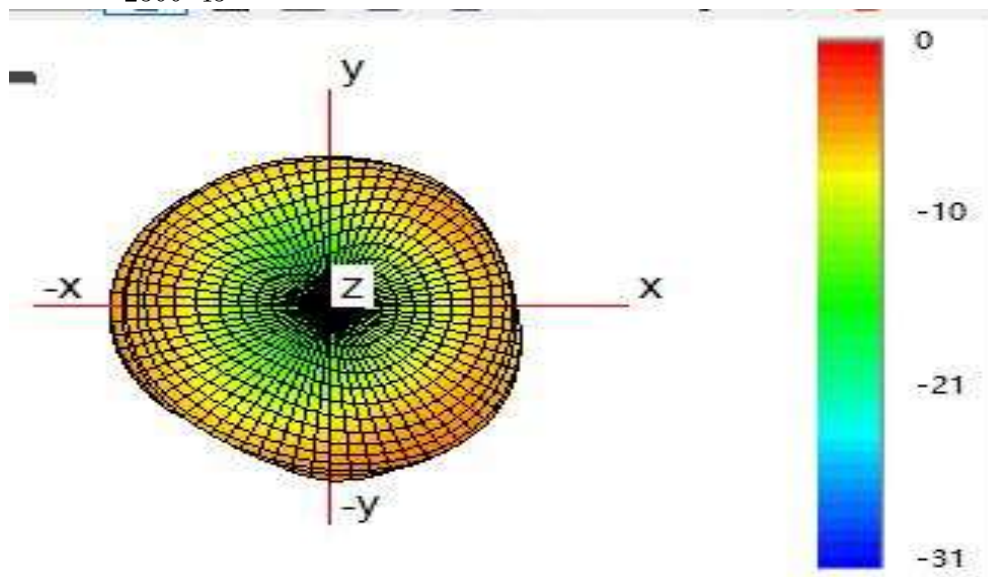
2500-0



2500-90

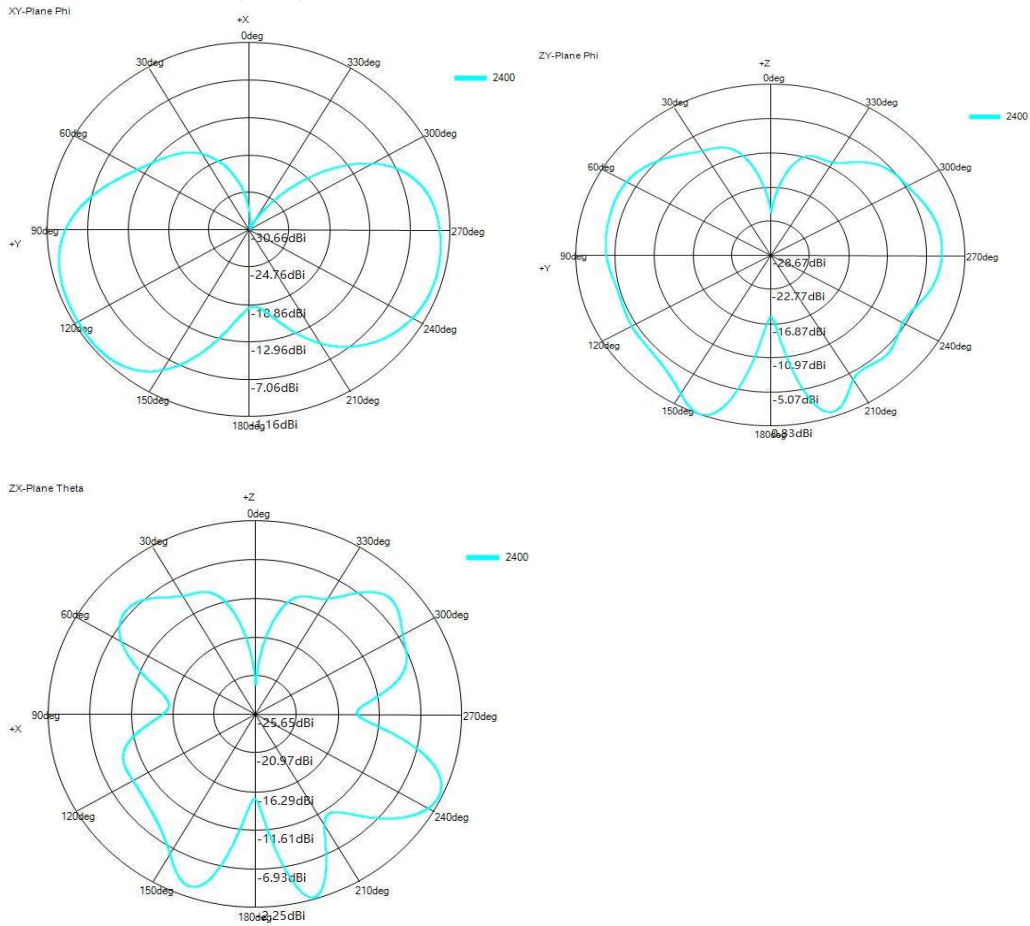


2500-45

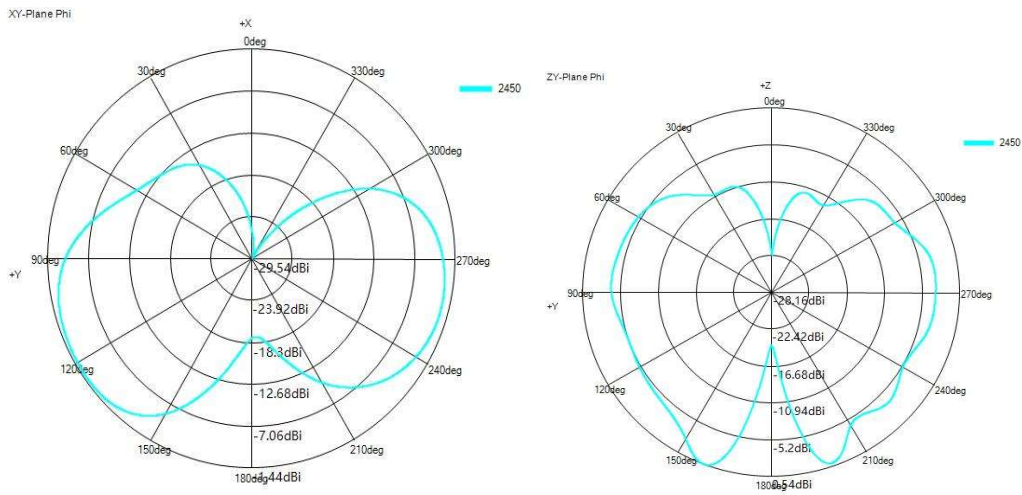


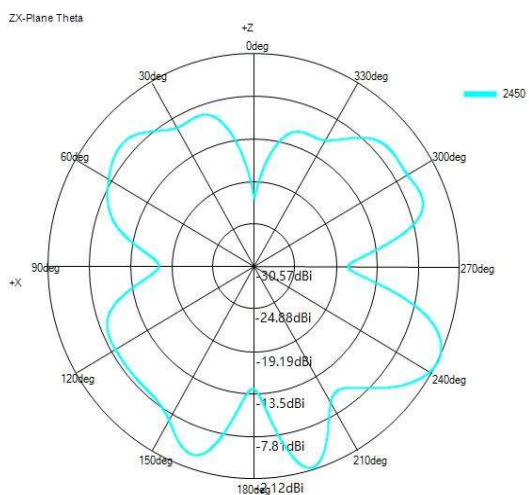
•2D

2400 T90/P90/P0

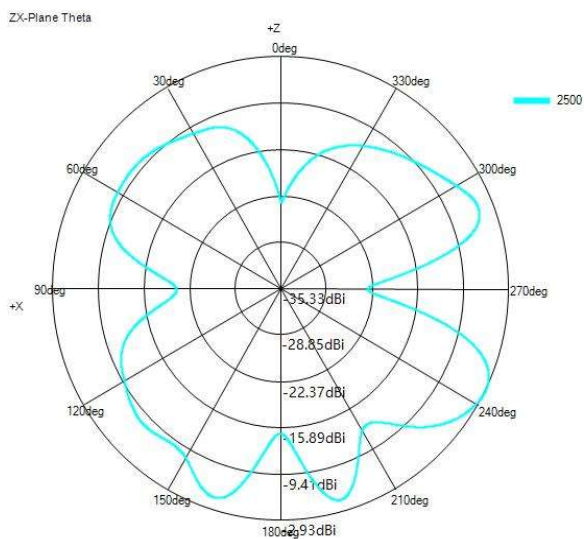
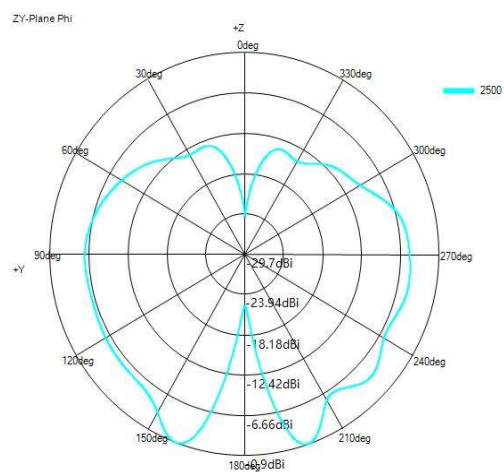
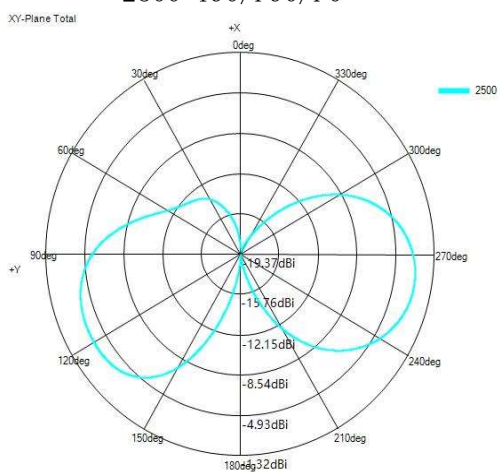


2450 T90/P90/P0





2500 T90/P90/P0



3.5 的增益如下

The gain of 2D and 3D is as follows

