



台德A12 BT Antenna Test Report

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DATE : 2025 . 12 . 09



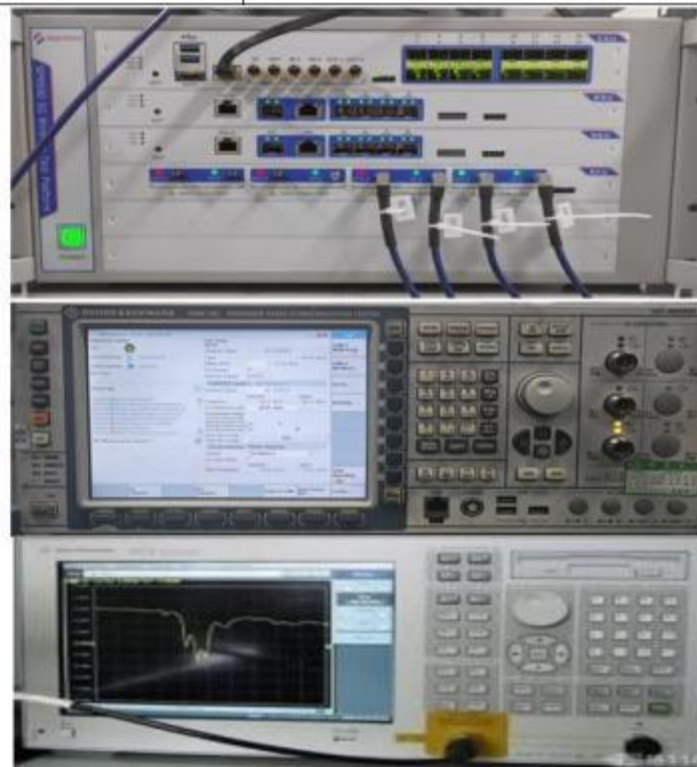
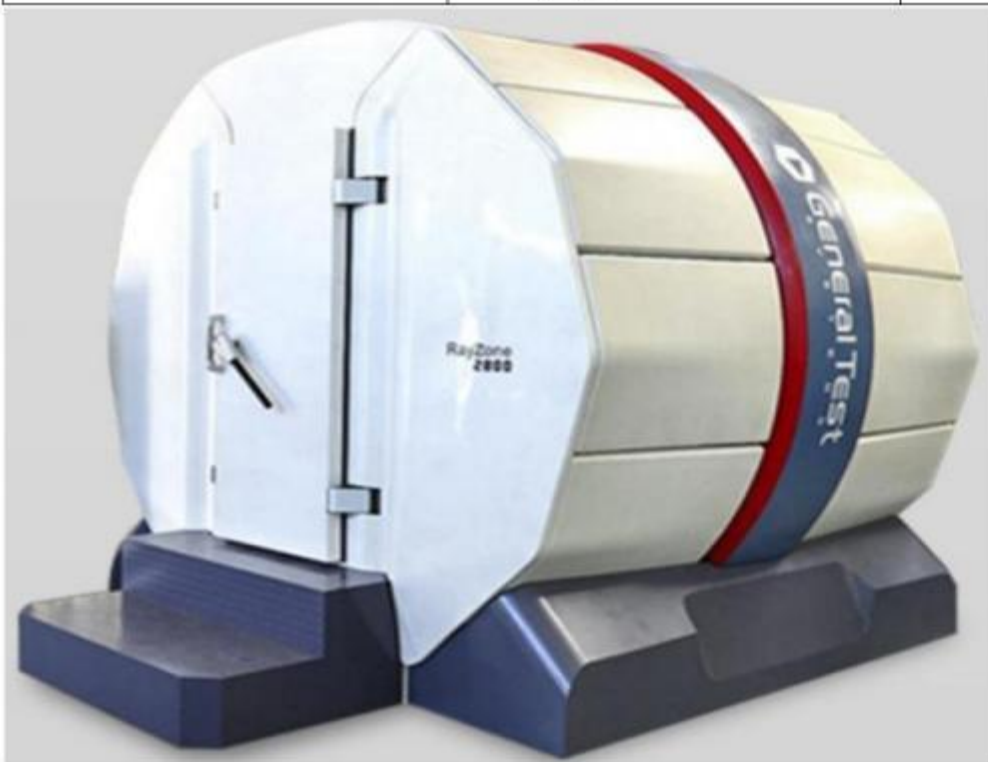
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测试设备 Testing facility

无源及有源测试—5G微波暗室

◆ 测试系统	◆ 测试环境	◆ 有源测试	◆ 无源测试
GTS2800	温度：22°C±3°C 湿度：50%±15%	支持5G/4G/3G/2G 支持BT/WIFI/GPS	600MHZ——6G



>>> 版本记录 Colophon



版本 Version	日期 Date	内容概述 Content Overview
V1.0	2025/11/27	初版无源调试+实测 Passive Debugging and Real Test in the First Edition
V2.0	2025/12/09	更改结构后重新调试 Re-debug after modifying the structure

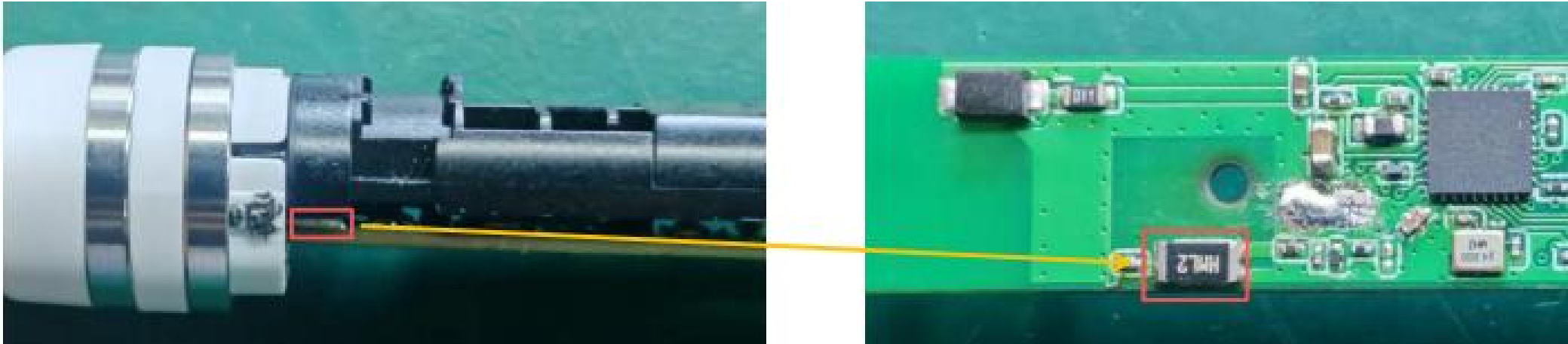
>>> 项目说明 Entry specification



整机及天线分布图 Whole machine and antenna distribution diagram		
	天线种类及材质 Antenna Type and Material	BT:贴片陶瓷天线 patch ceramic antenna
	调试频段 debugging band	BT: 2400~2483MHz
	天线形式 antenna form	BT:双极 twin pole

天线位置 Antenna position

BT Antenna



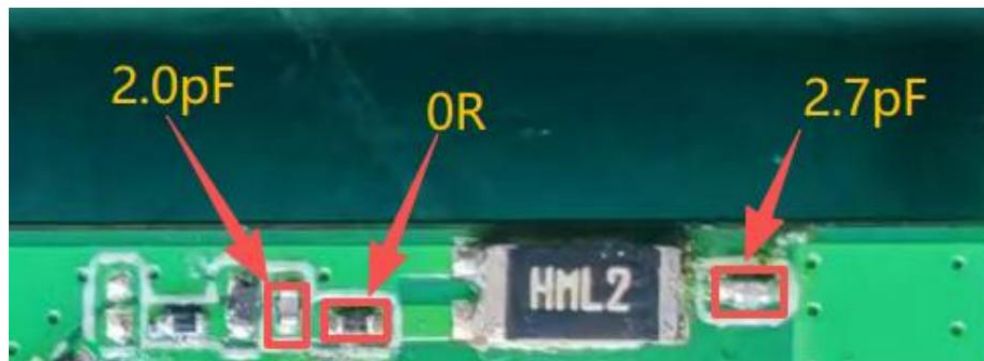
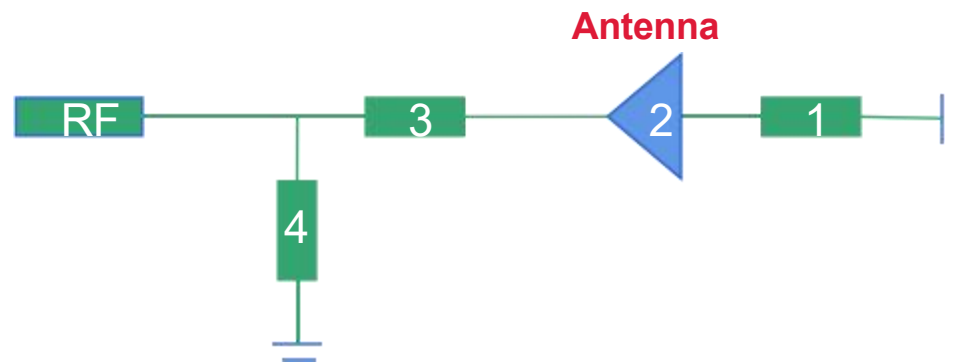
>>> 天线匹配 Antenna matching-BT



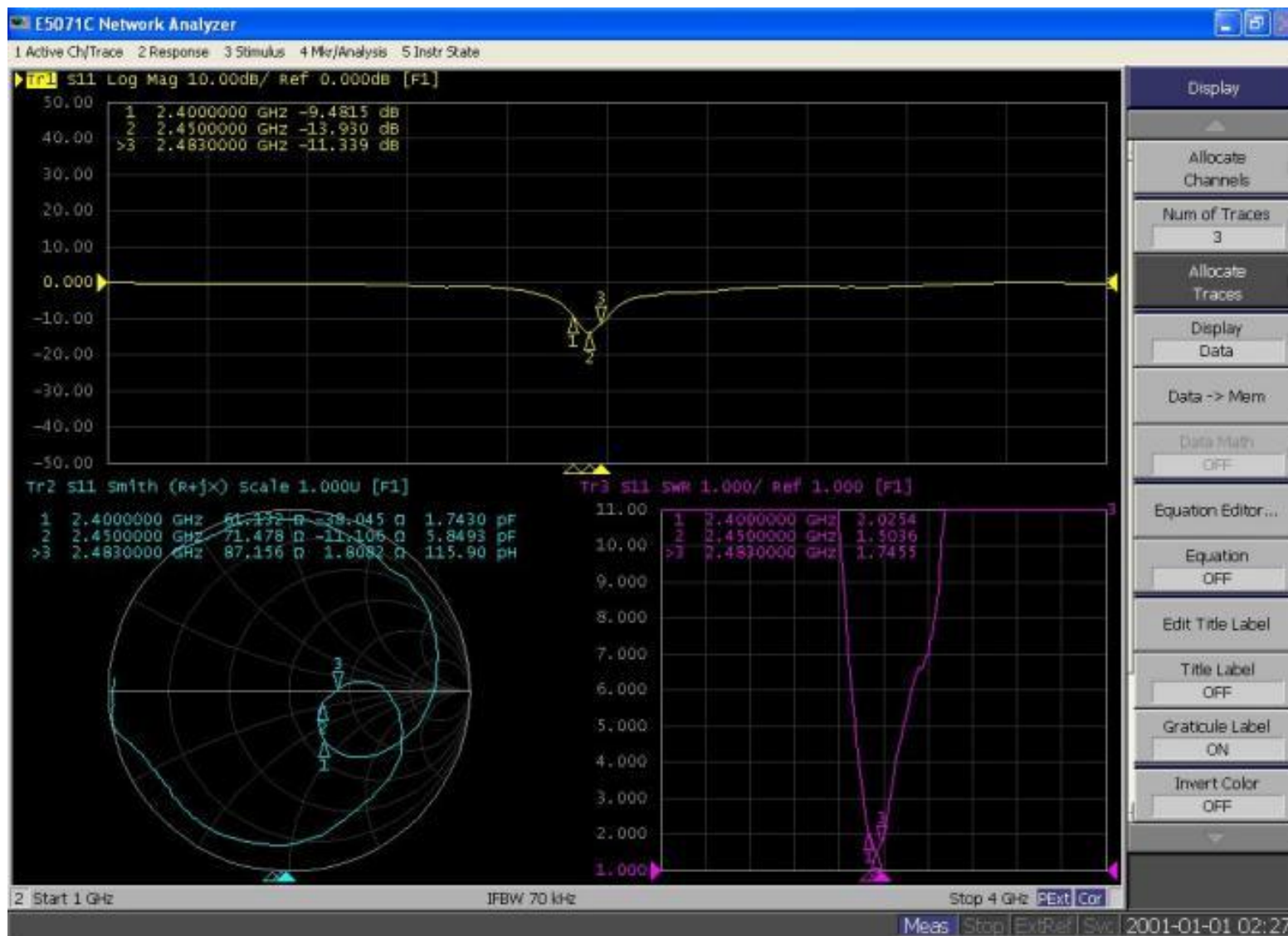
- 天线匹配
Antenna matching

No.	R/L/C
1	2.7 pF
2	ANT (HML2)
3	0R
4	2.0pF

- 匹配电路示意图
schematic diagram of the matching circuit



>>> 无源测试 Passive test-BT



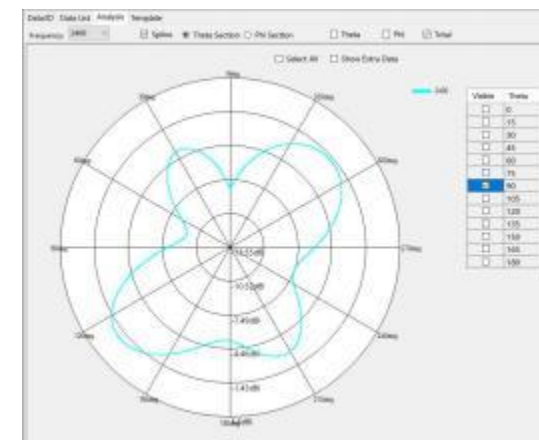
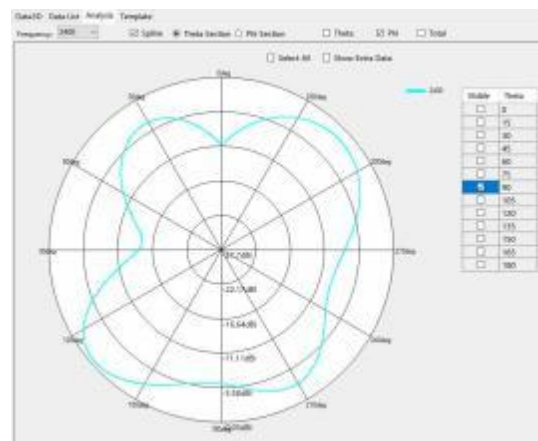
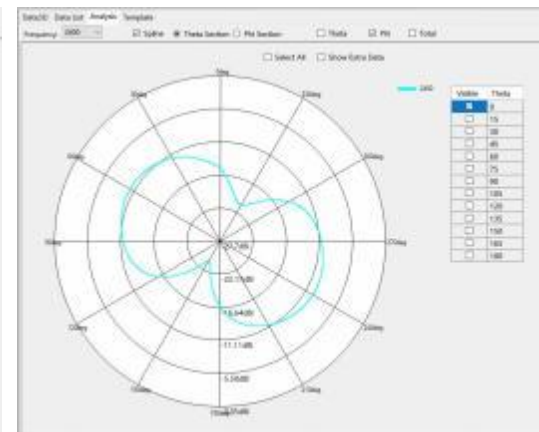
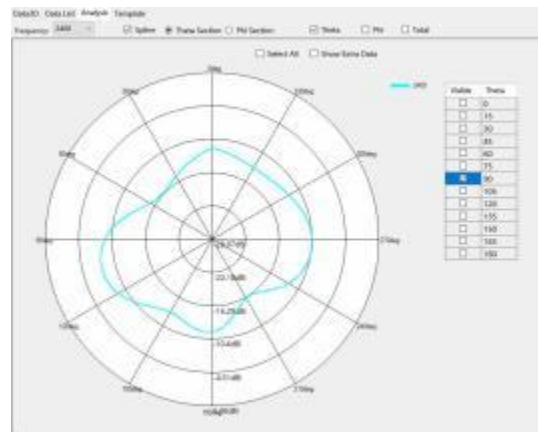
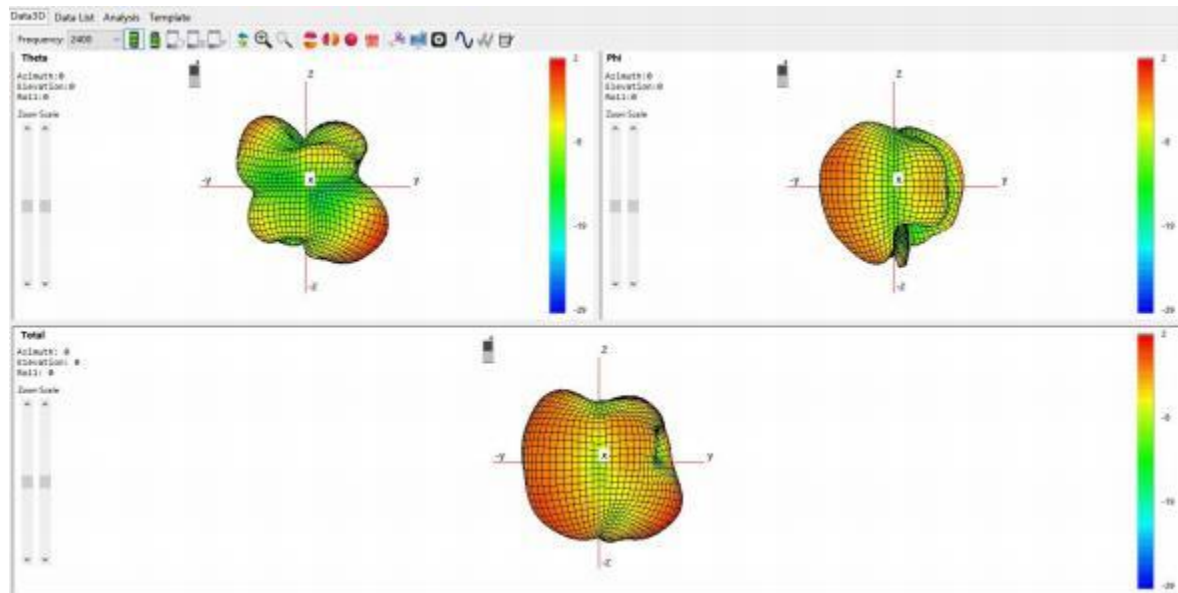
>>> 无源测试 Passive test-BT



Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	1.48	-3.69	42.79
2410	1.61	-3.65	43.11
2420	1.77	-3.61	43.57
2430	1.78	-3.64	43.28
2440	1.65	-3.61	43.51
2450	1.66	-3.56	44.05
2460	1.61	-3.6	43.65
2470	1.59	-3.55	44.15
2480	1.61	-3.61	43.58
2490	1.59	-3.72	42.43

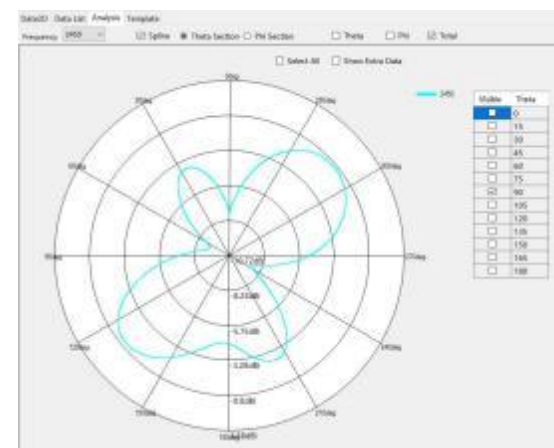
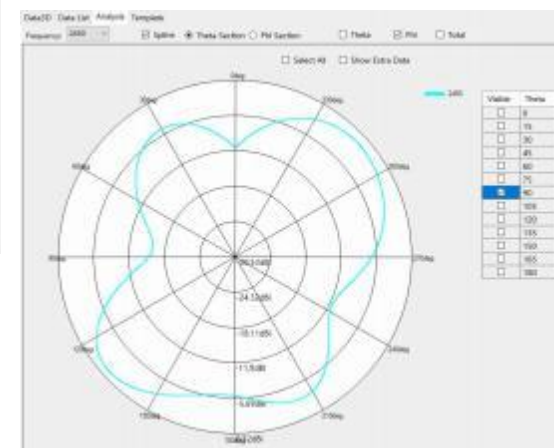
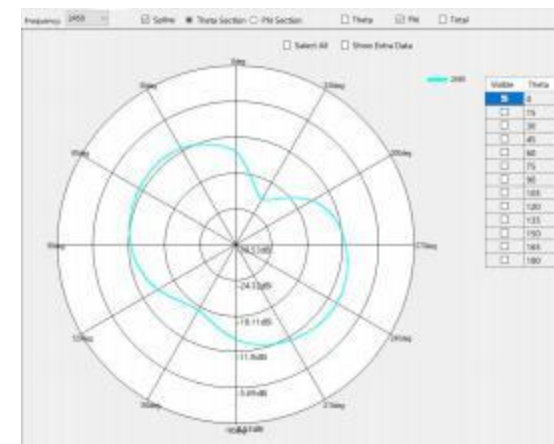
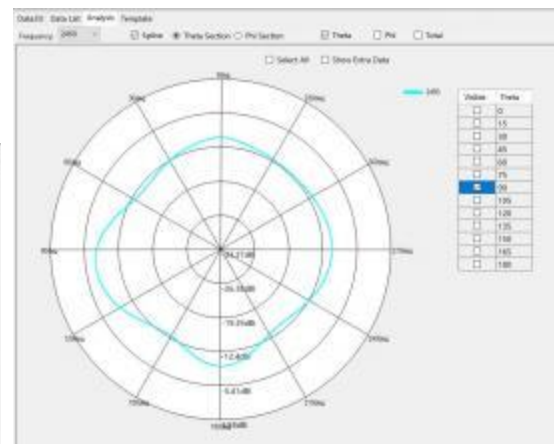
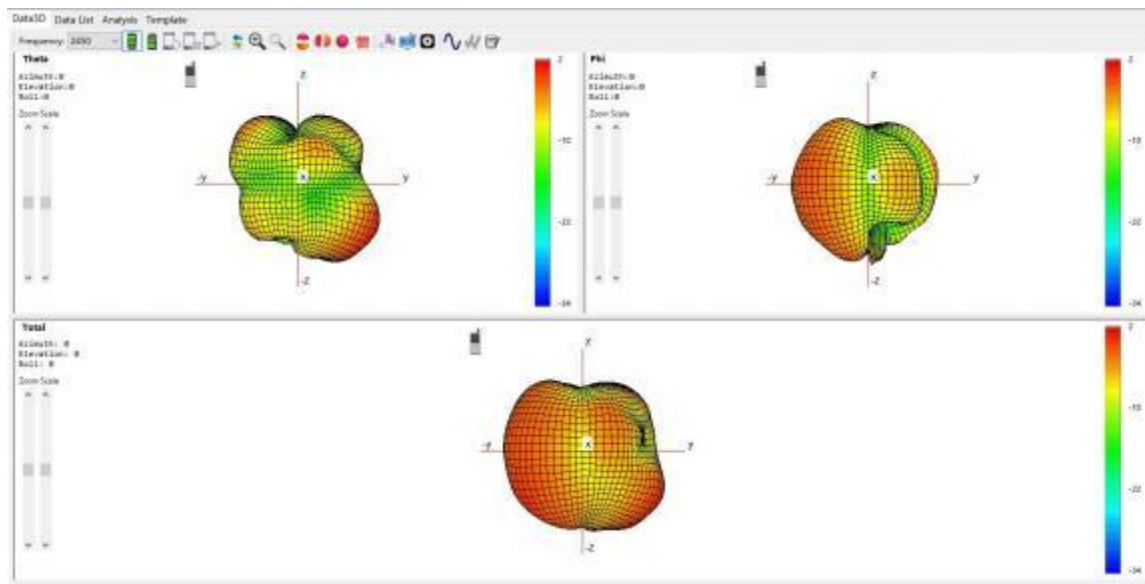
>>> 无源测试 Passive test-BT (pattern)

- 2.4GHz



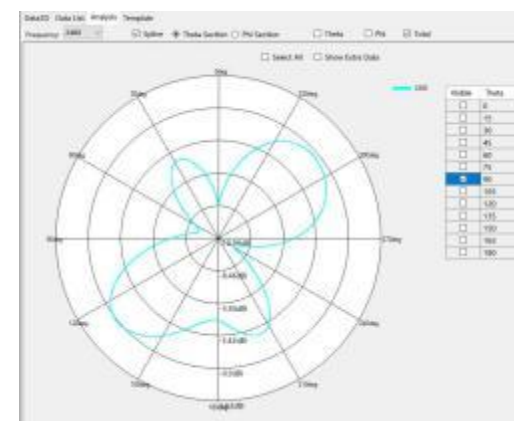
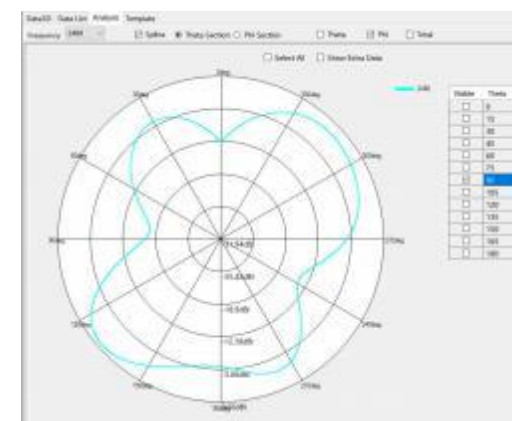
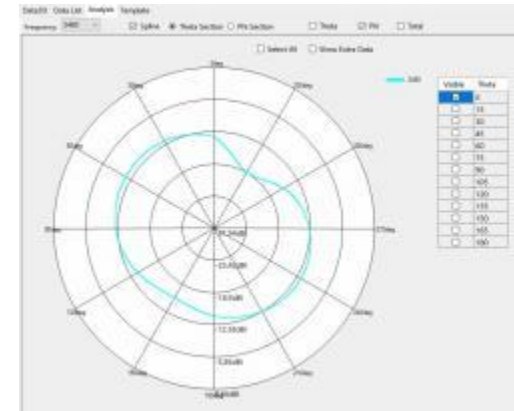
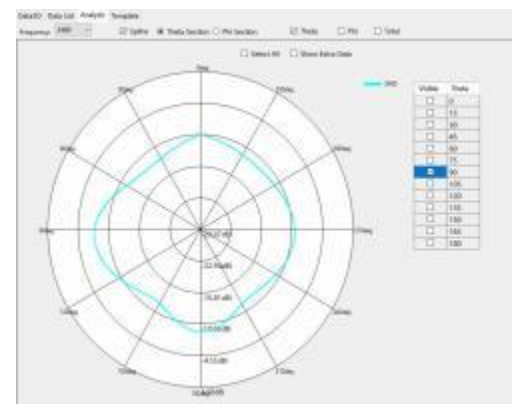
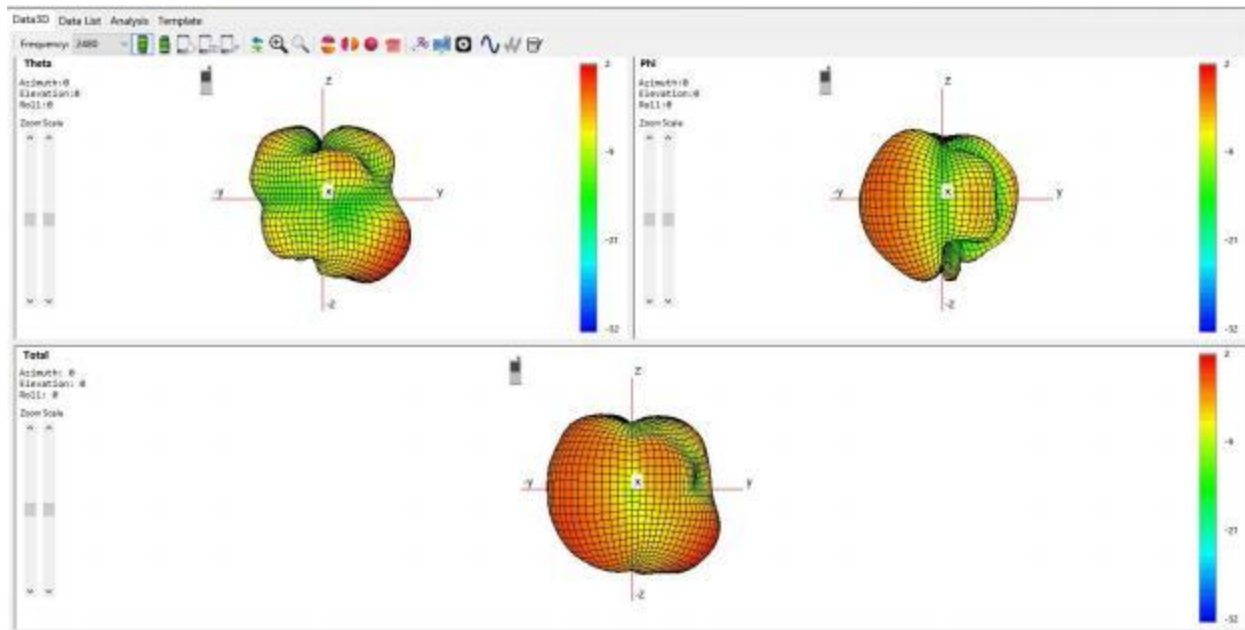
>>> 无源测试 Passive test-BT (pattern)

- 2.45GHz



>>> 无源测试Passive test-BT (pattern)

- 2.48GHz



结论 Conclusion

- 天线性能结论
Conclusions of antenna performance

BT无源效率40%以上, 满足性能要求;

Passive BT efficiency is above 40%, which satisfies the performance specifications.



谢谢观看

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