

蓝牙 天线调试报告

Bluetooth antenna debugging report

2.4Ghz Team

V1.0

2023.04.5

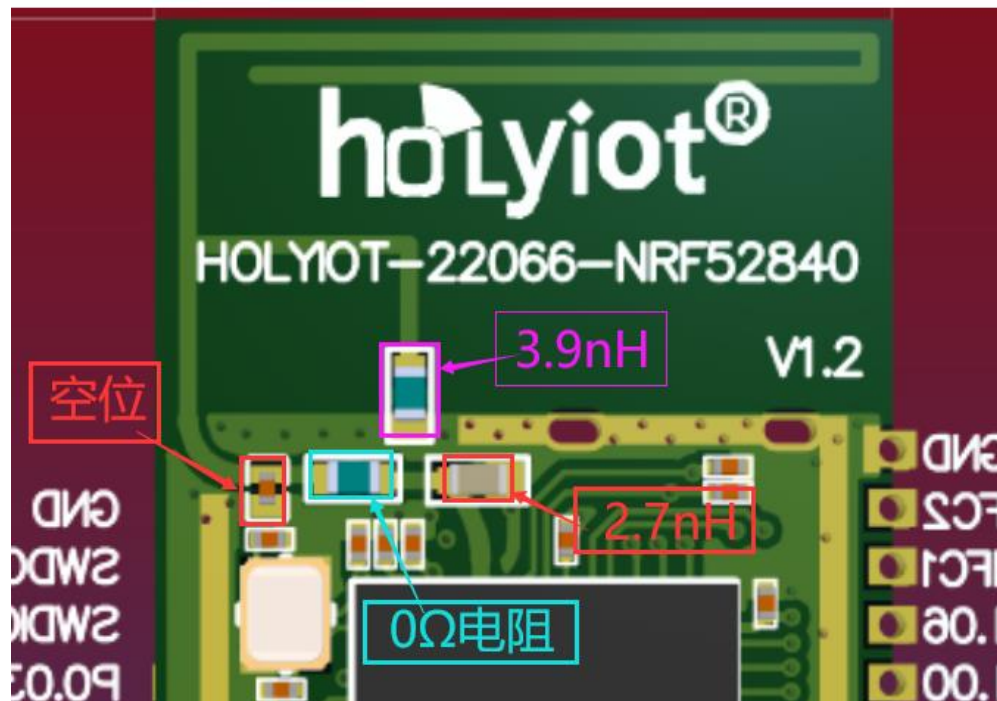
- 版本说明Version description
- 性能总结 Performance summary
- 更换匹配物料Replacement of matching material
- 无源调试阻抗Passive debugging impedance

版本说明

Version description

版本Edition	日期Date	描述Description
V1.0	2023.04.05	调试报告Debugging report

更换匹配物料 Replacement of matching material



备注：我司修改的天线参数如上图，其他匹配参数都没有改动，其他参数按照主板原有参数
Note: The antenna parameters modified by our company are shown in the figure above.
Other matching parameters are unchanged, and other parameters are based on the original parameters of the motherboard

无源调谐器：回波损耗，驻波比，效率

Passive modulation attempts: return loss, standing wave ratio, efficiency

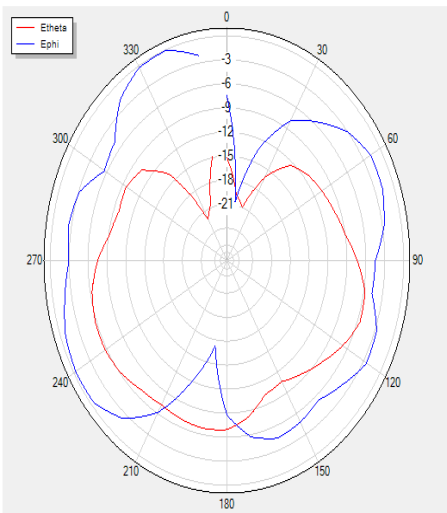


Gain&Efficiency				
frequency	gain	mingain	efficiency	efficiency
频率(MHz)	增益(dBi)	最小增益	效率(dBi)	效率(%)
2400	3.73	-23.21	-3.49	44.79
2410	3.71	-23.02	-3.35	46.19
2420	4.32	-23.07	-2.95	50.66
2430	4.16	-22.81	-2.92	51.00
2440	3.85	-21.05	-3.05	49.56
2450	4.17	-20.32	-3.06	49.45
2460	4.51	-20.82	-2.79	52.60
2470	3.83	-21.17	-3.27	47.08
2480	3.63	-20.82	-3.64	43.23
2490	4	-19.19	-3.31	46.64
2500	3.35	-17.91	-3.81	41.55

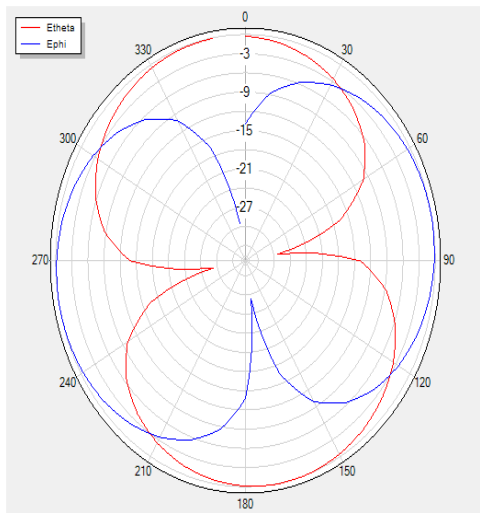
方向图

Directional diagram

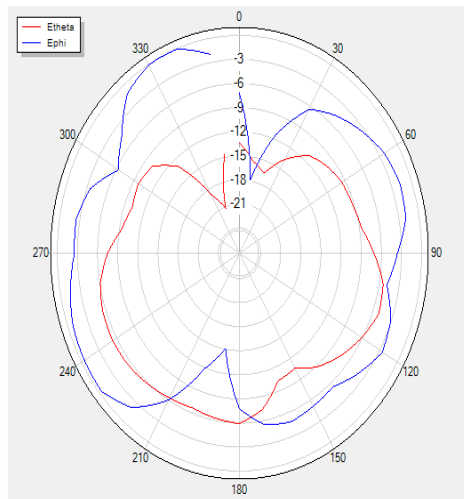
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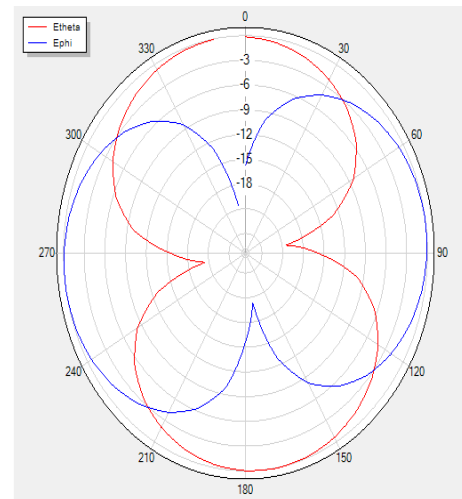
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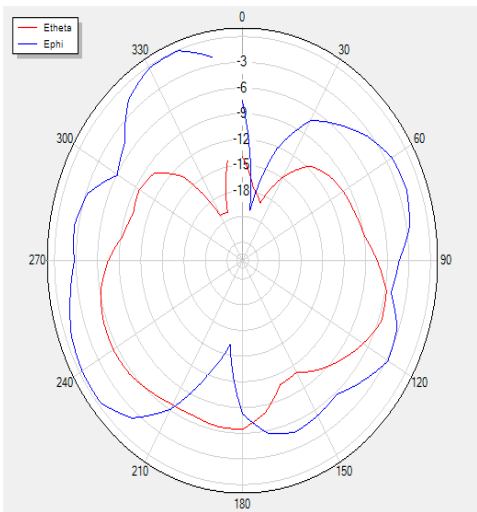
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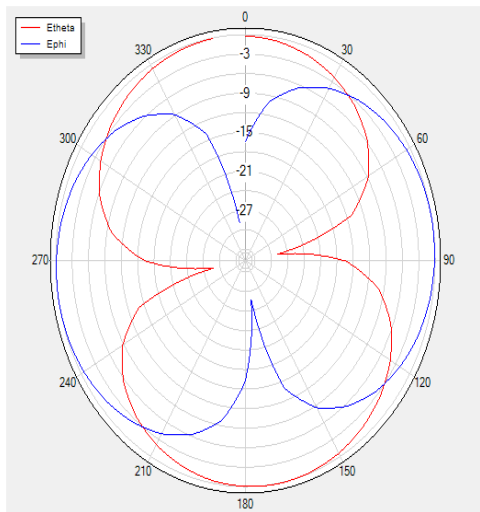
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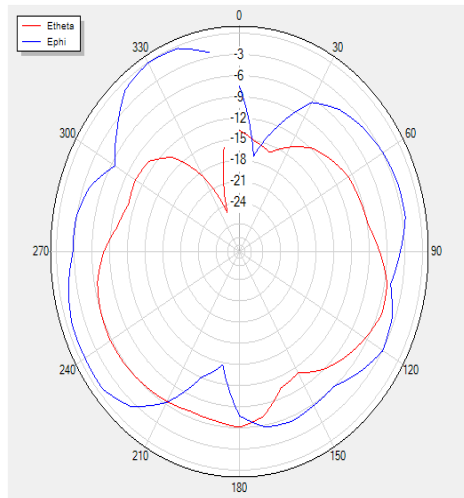
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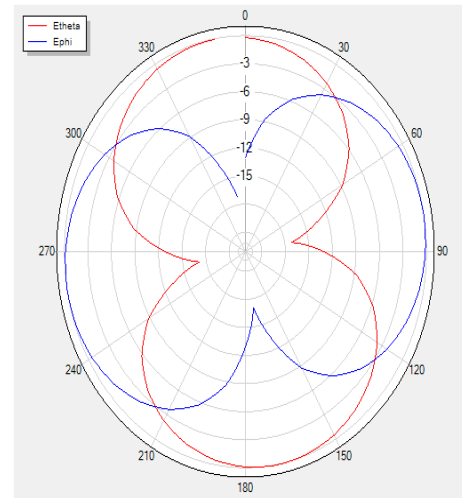
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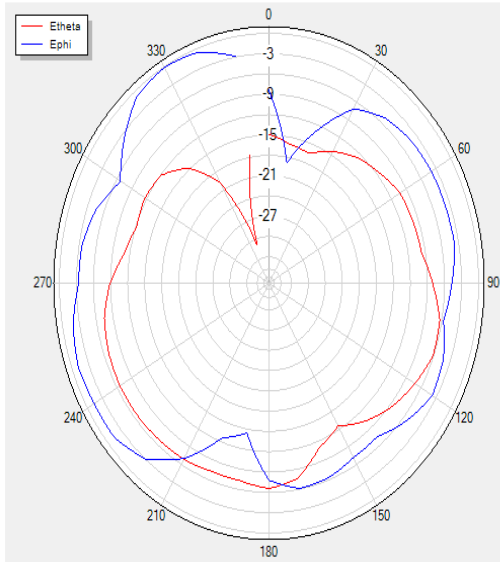
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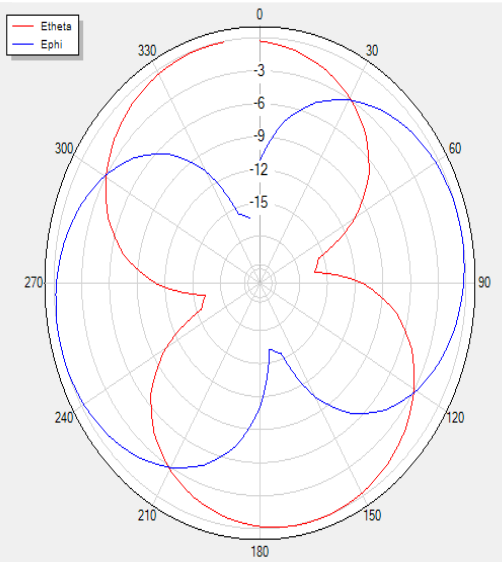
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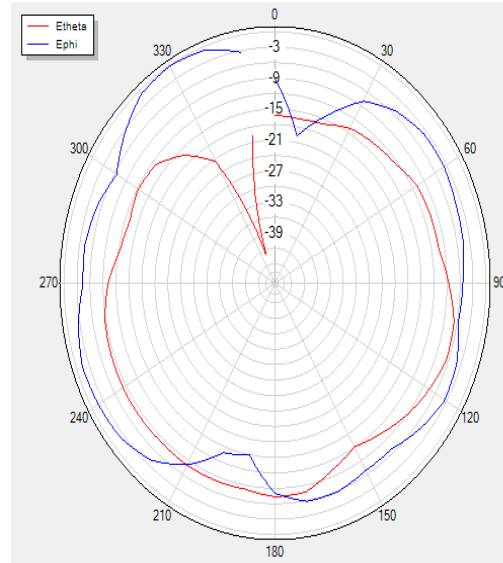
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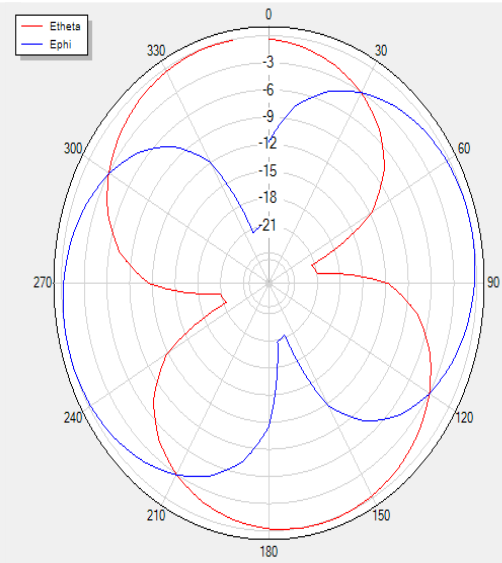
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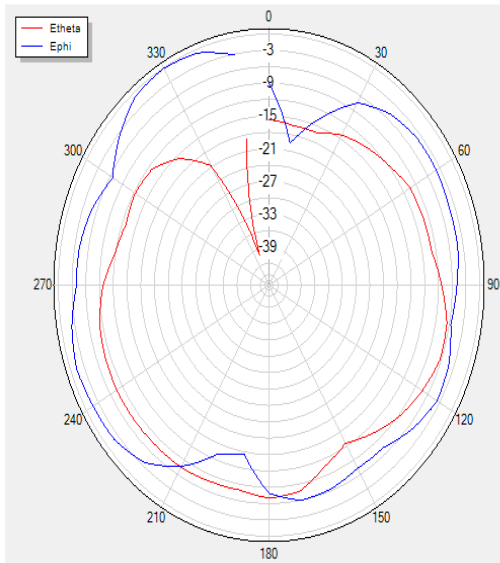
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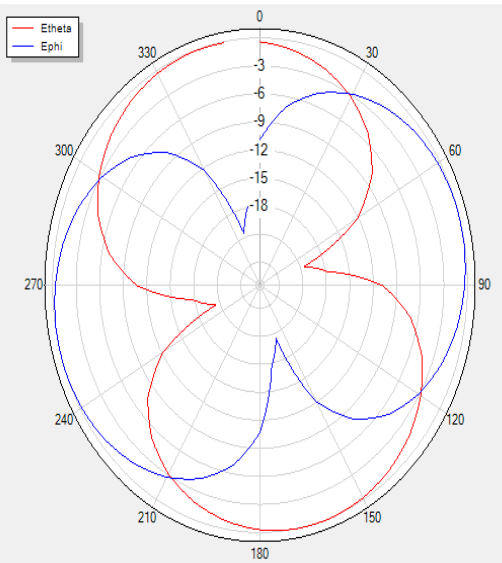
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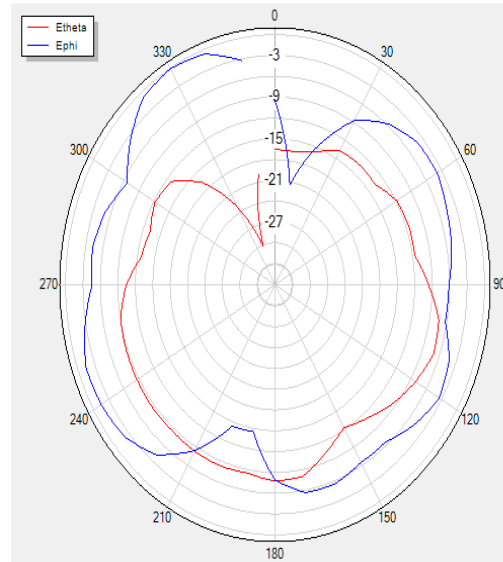
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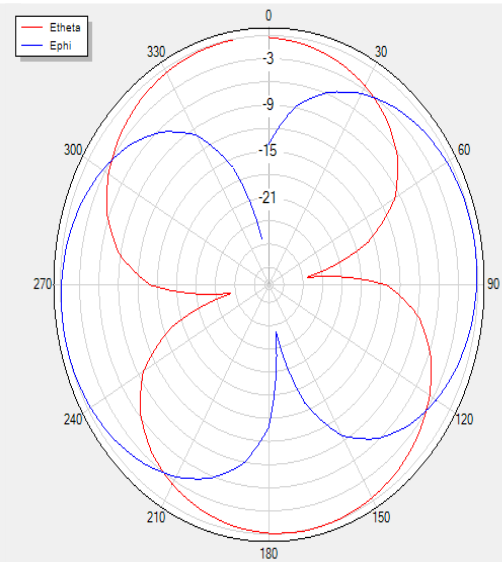
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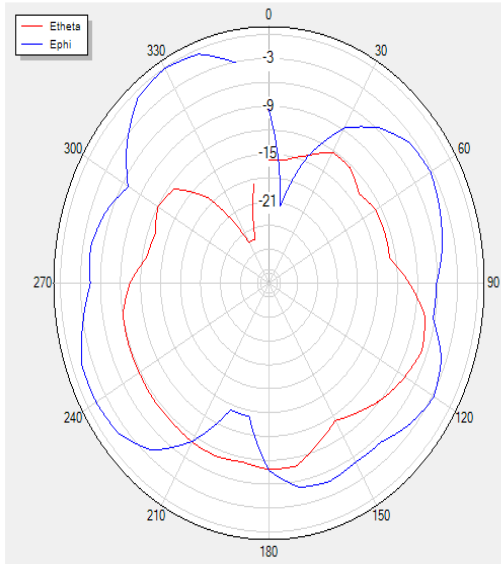
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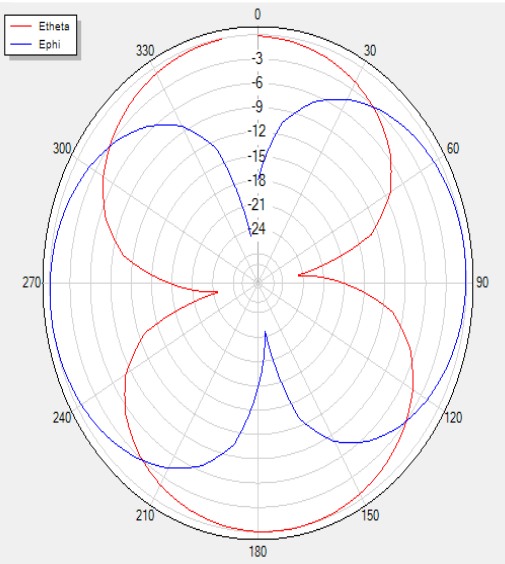
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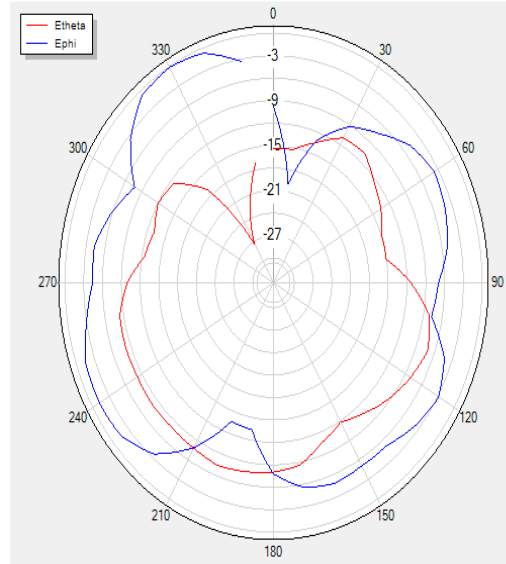
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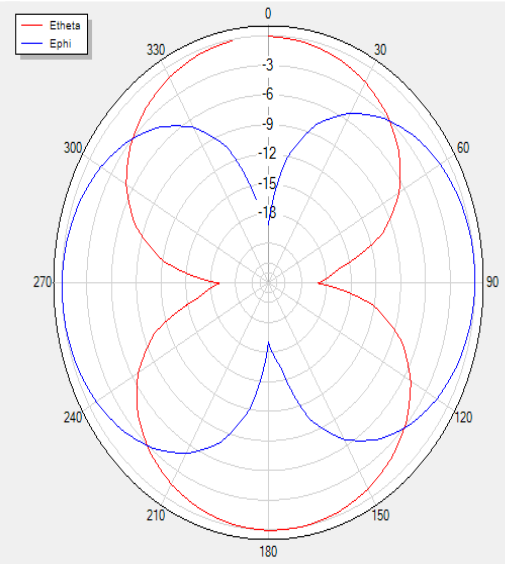
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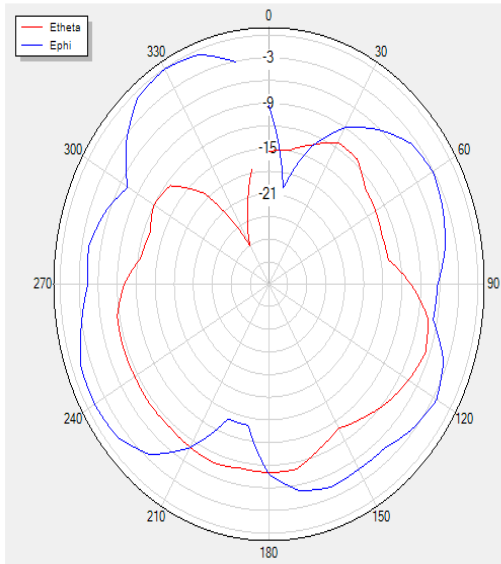
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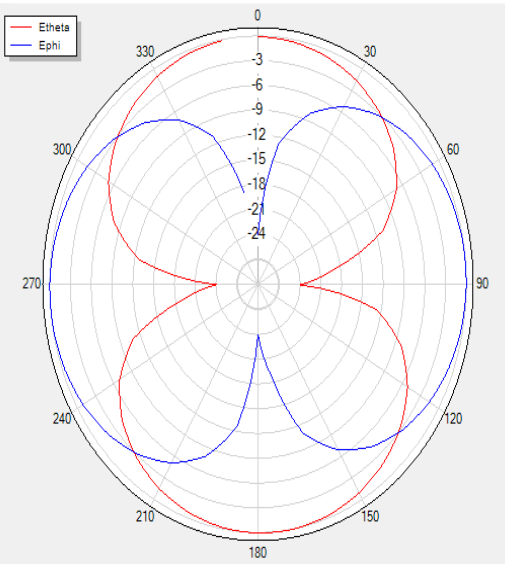
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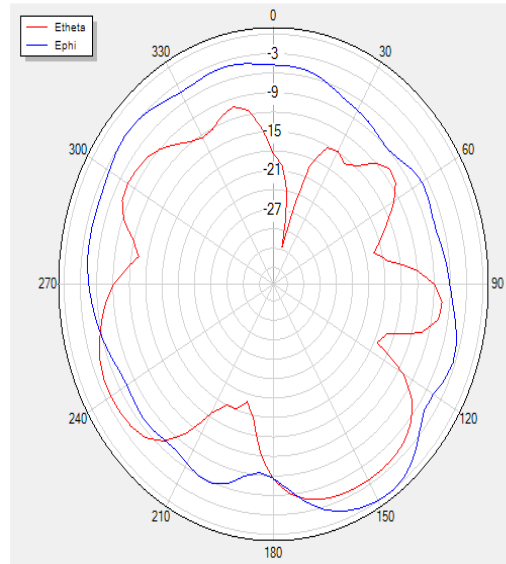
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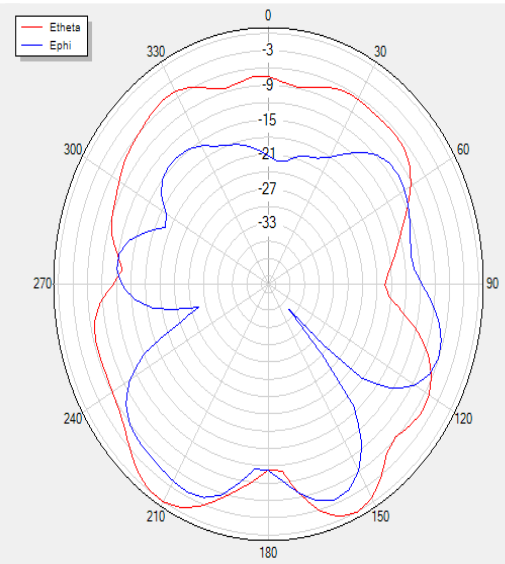
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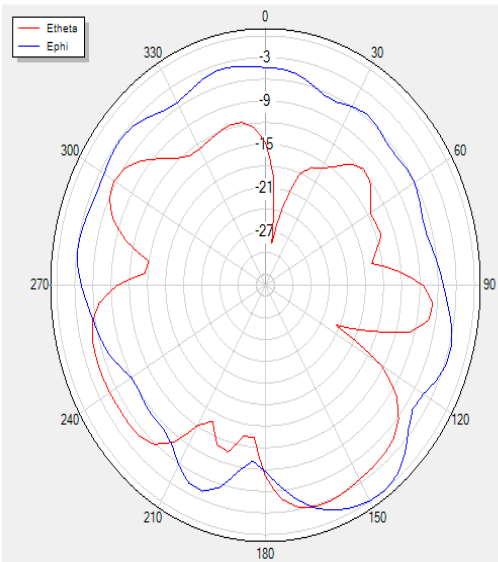
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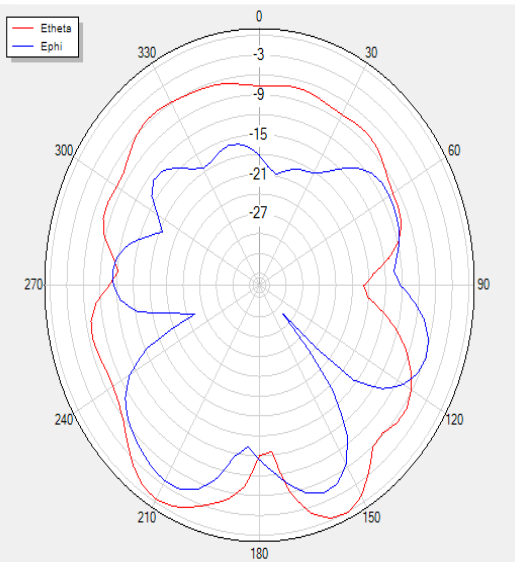
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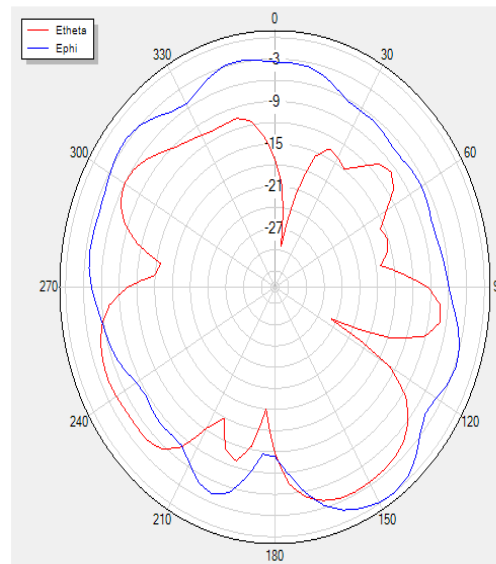
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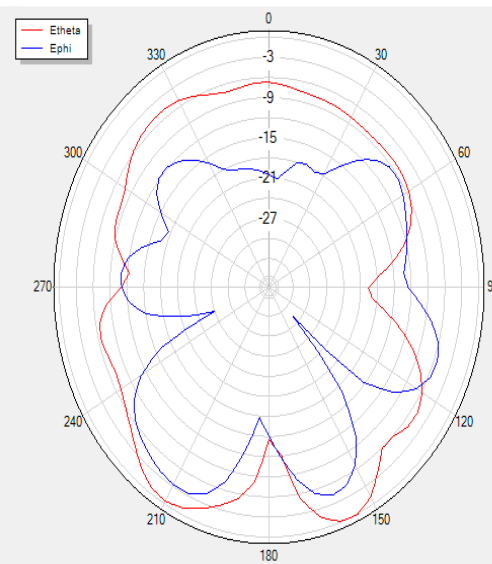
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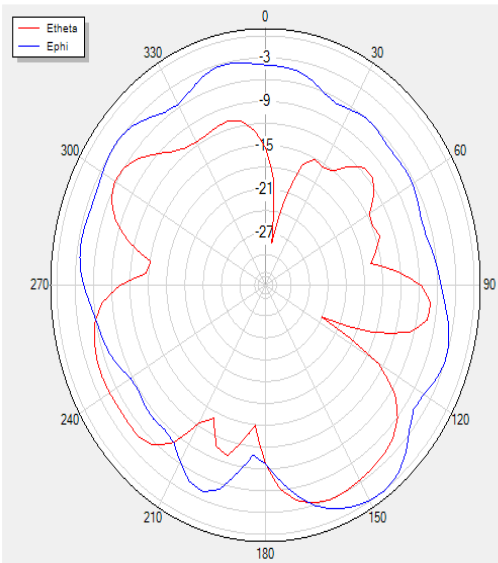
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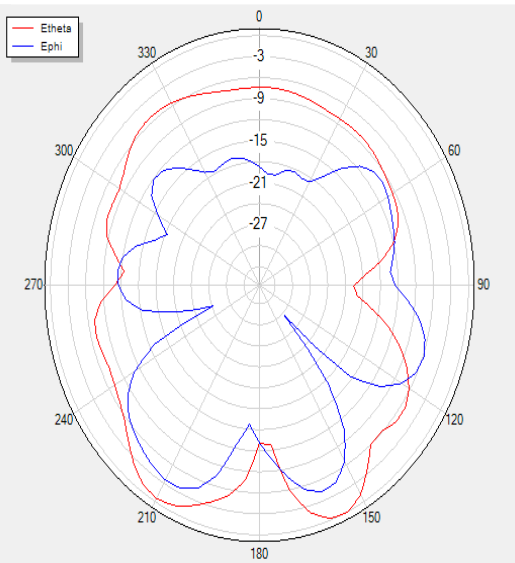
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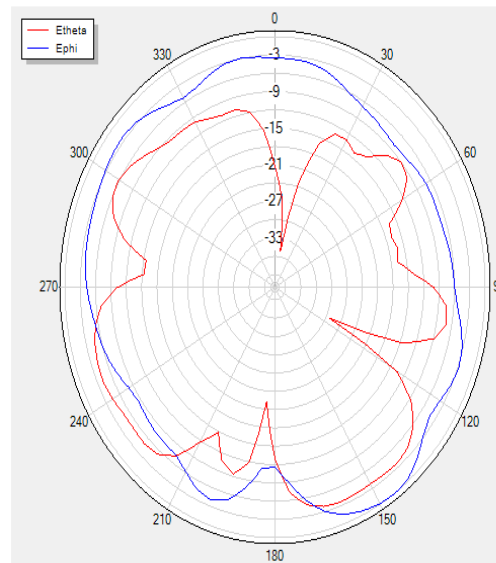
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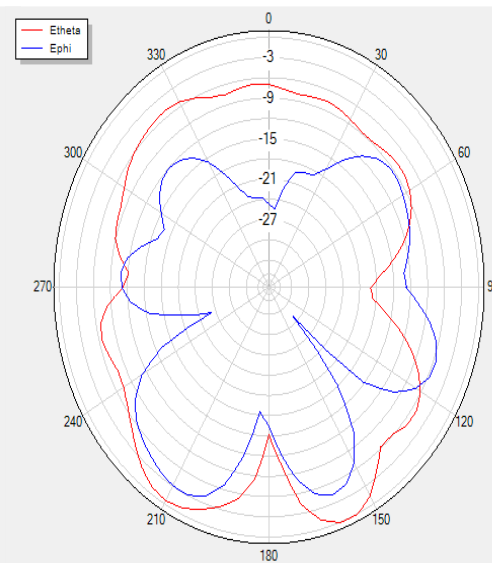
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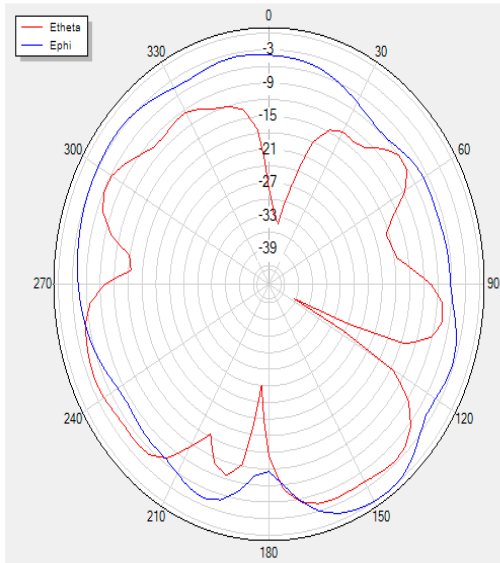
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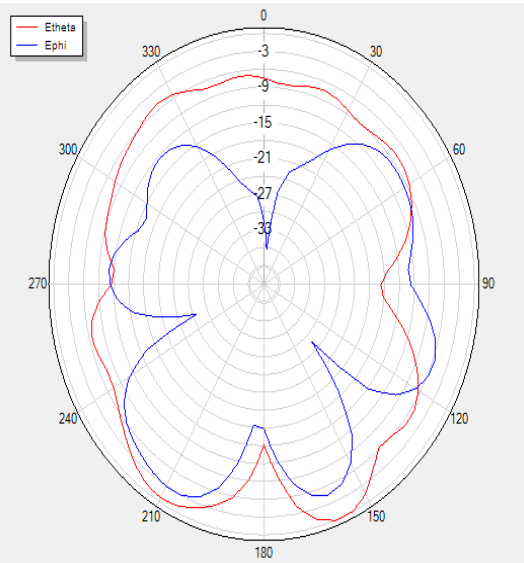
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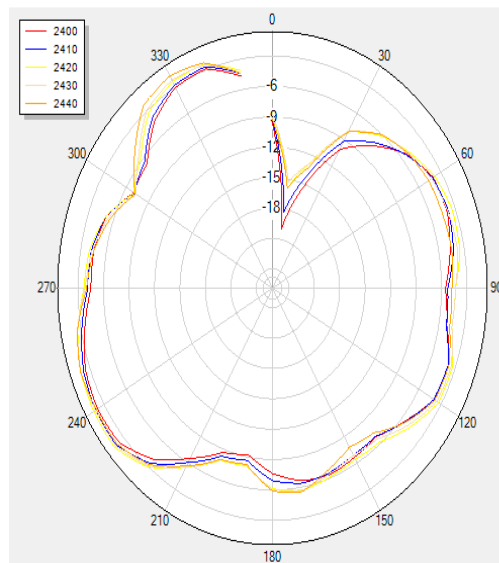
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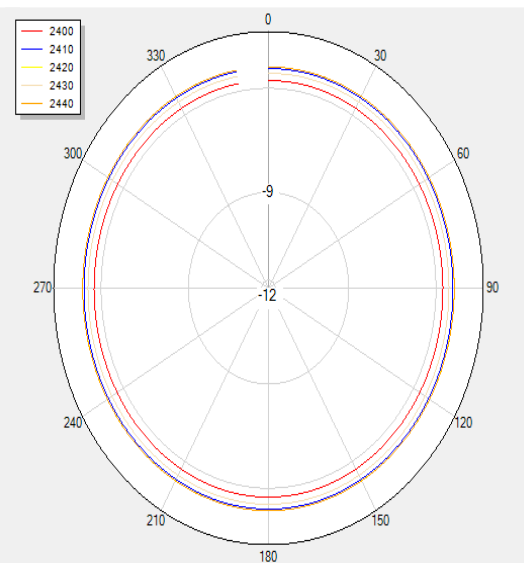
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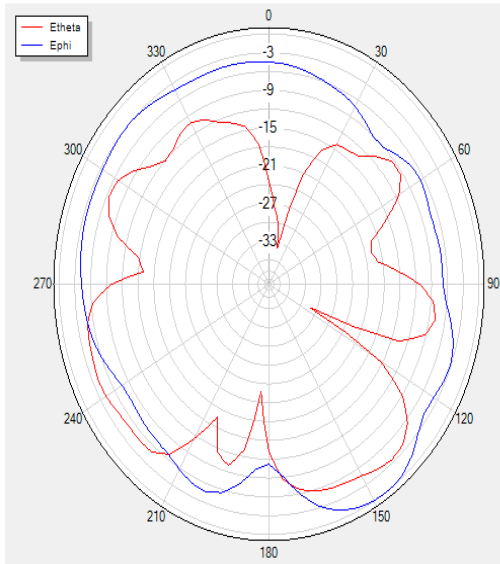
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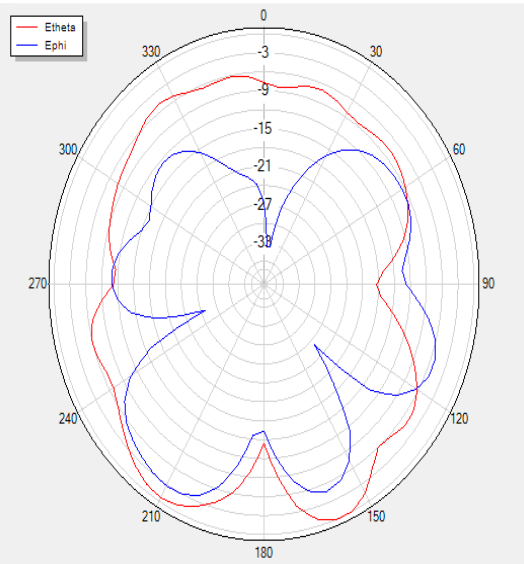
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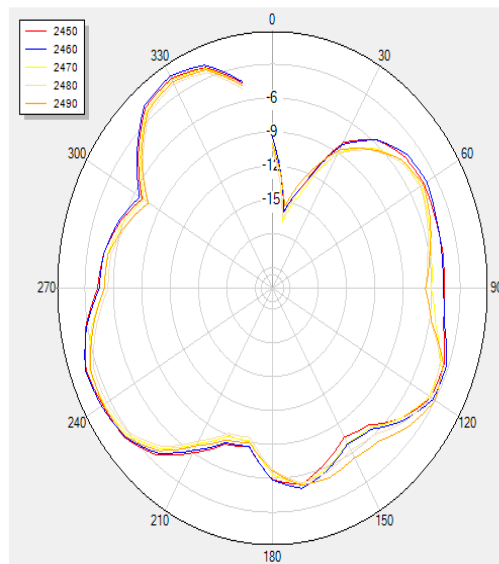
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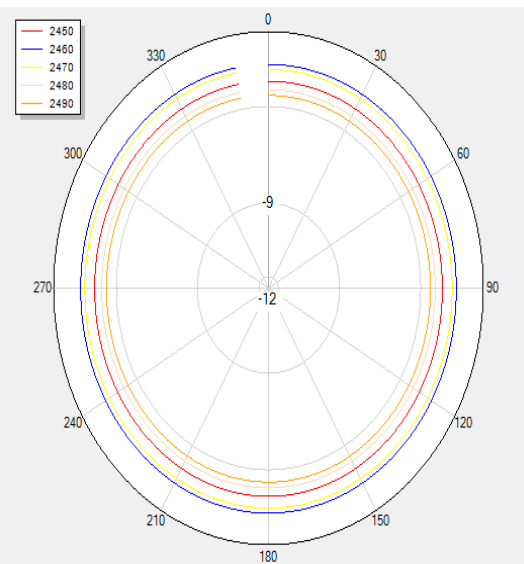
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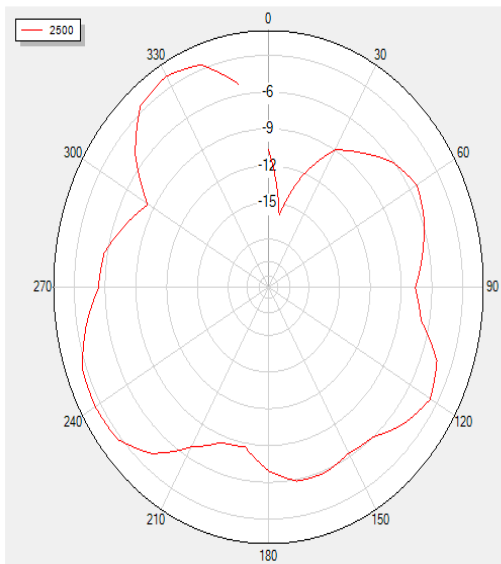
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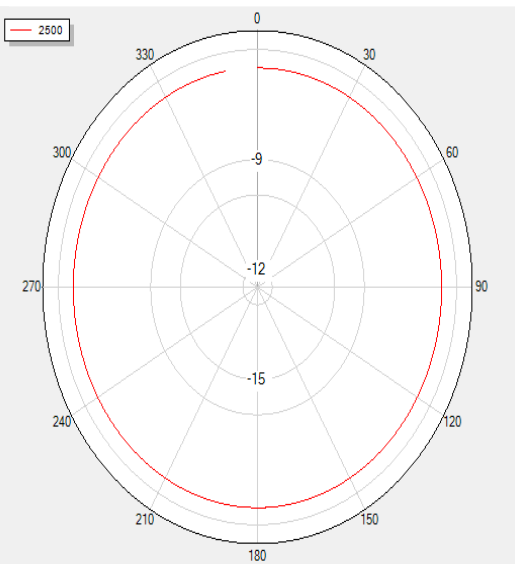
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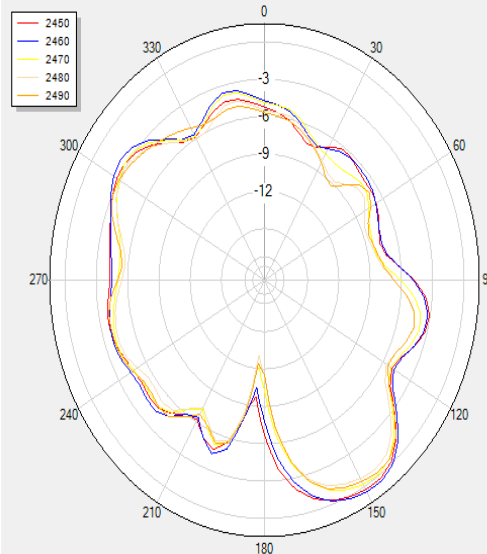
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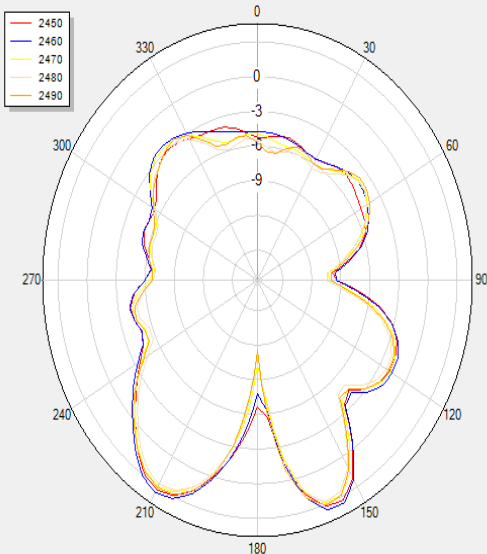
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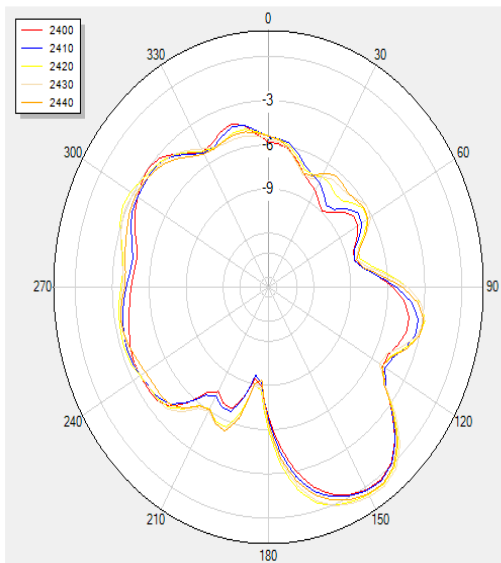
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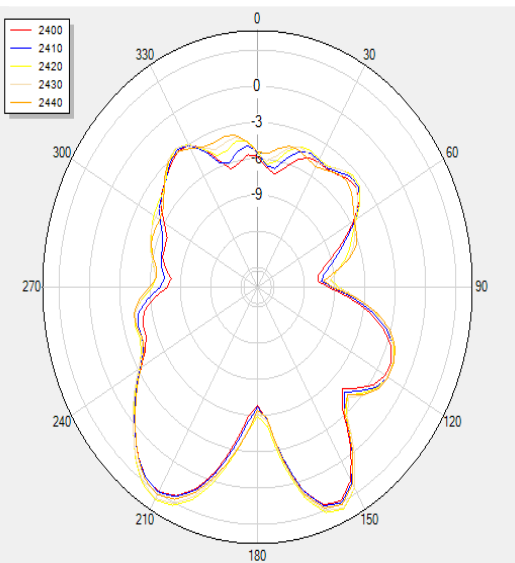
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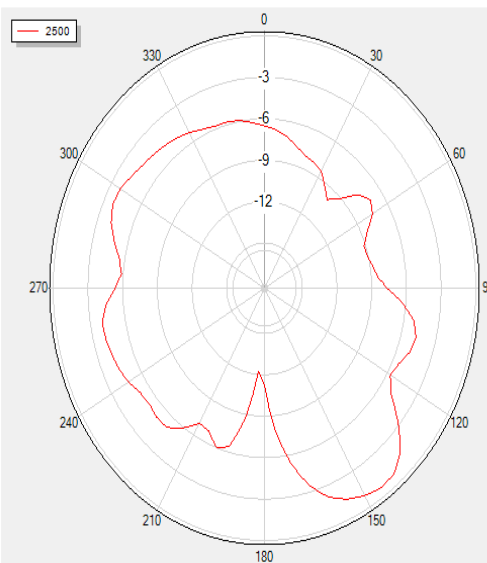
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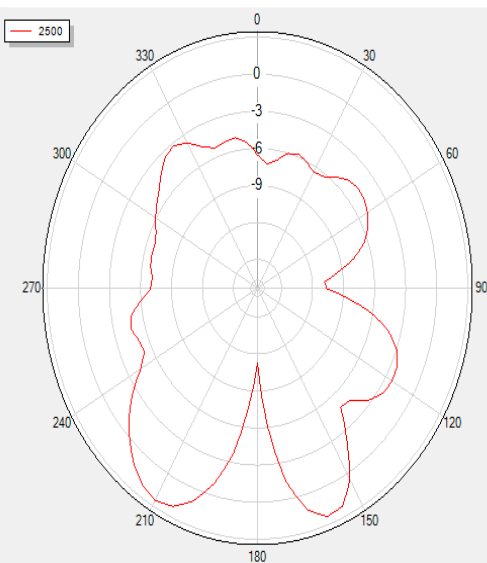
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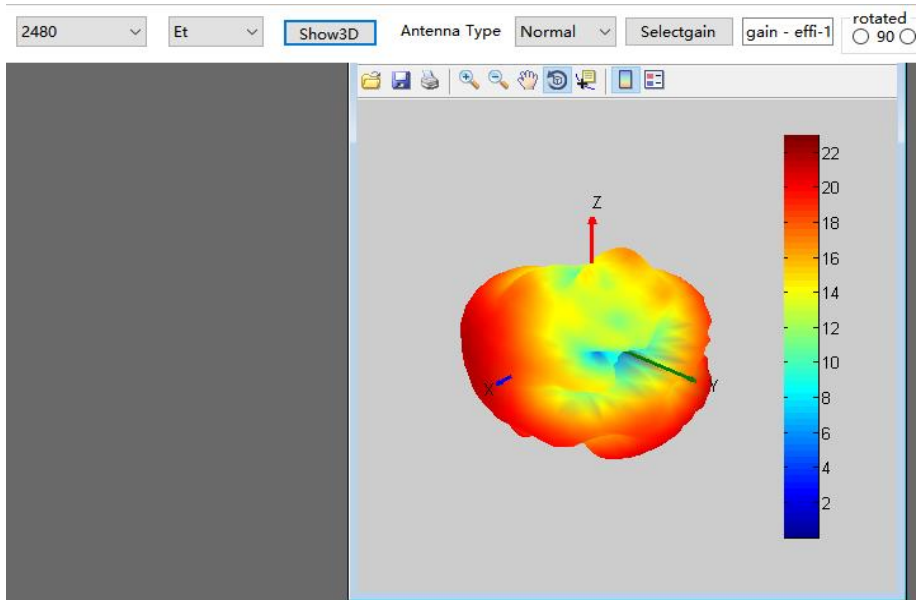
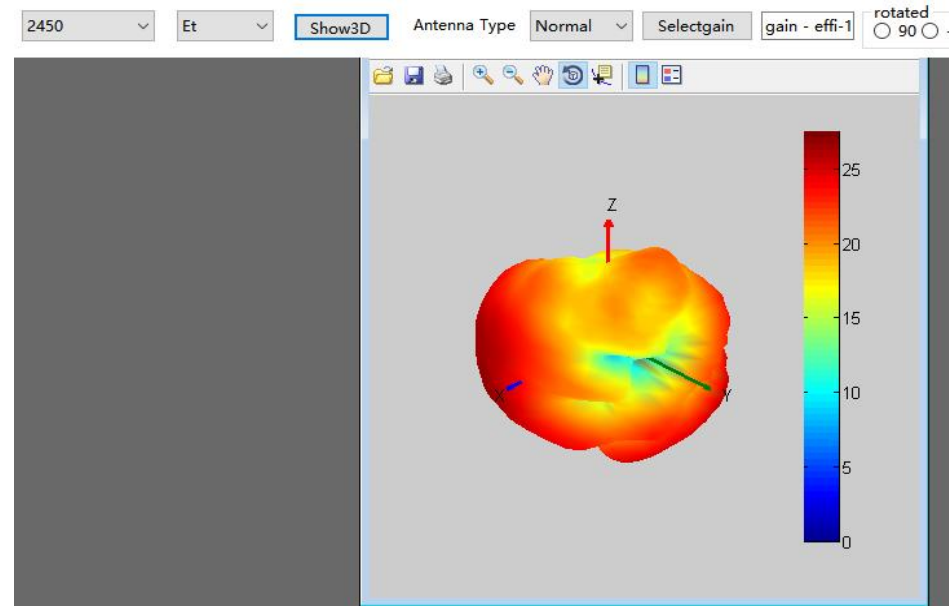
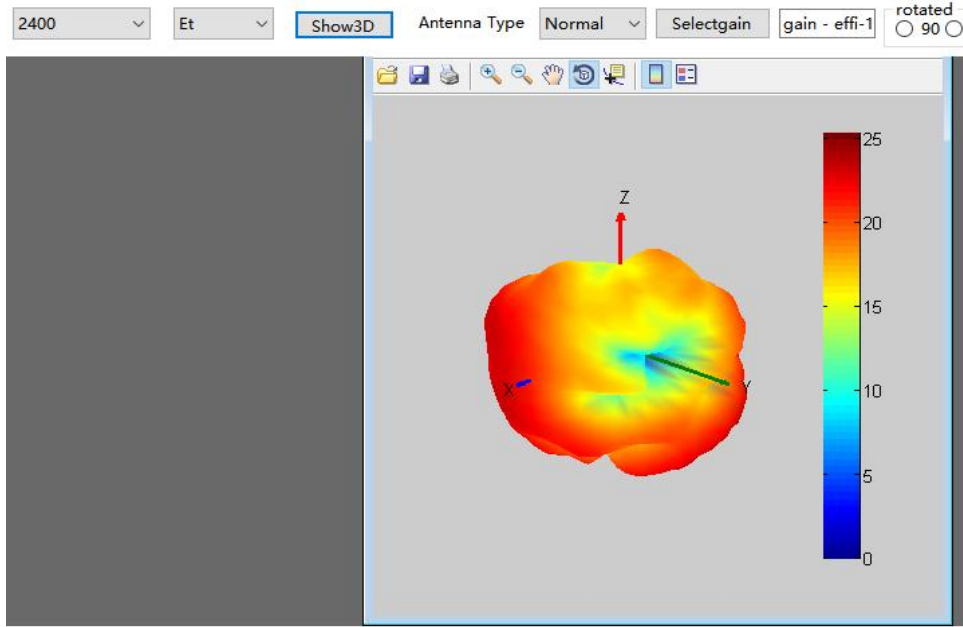
V Phi=90



V Phi=0



方向图 Directional diagram (3D)



Conclusion

1. 按照最新的匹配RF Performance 均满足要求且稳定 OK.
1. According to the latest matching RF Performance meets the requirements and is stable.
2. 后续用于生产的依据, 请确保软硬件完全一致后导入, 保证一致性。
2. For production purposes, ensure that the software and hardware are consistent before import to ensure consistency.