

Bluetooth Antenna Debugging Report

2.4Ghz Team

V1.0

2024. 7. 03

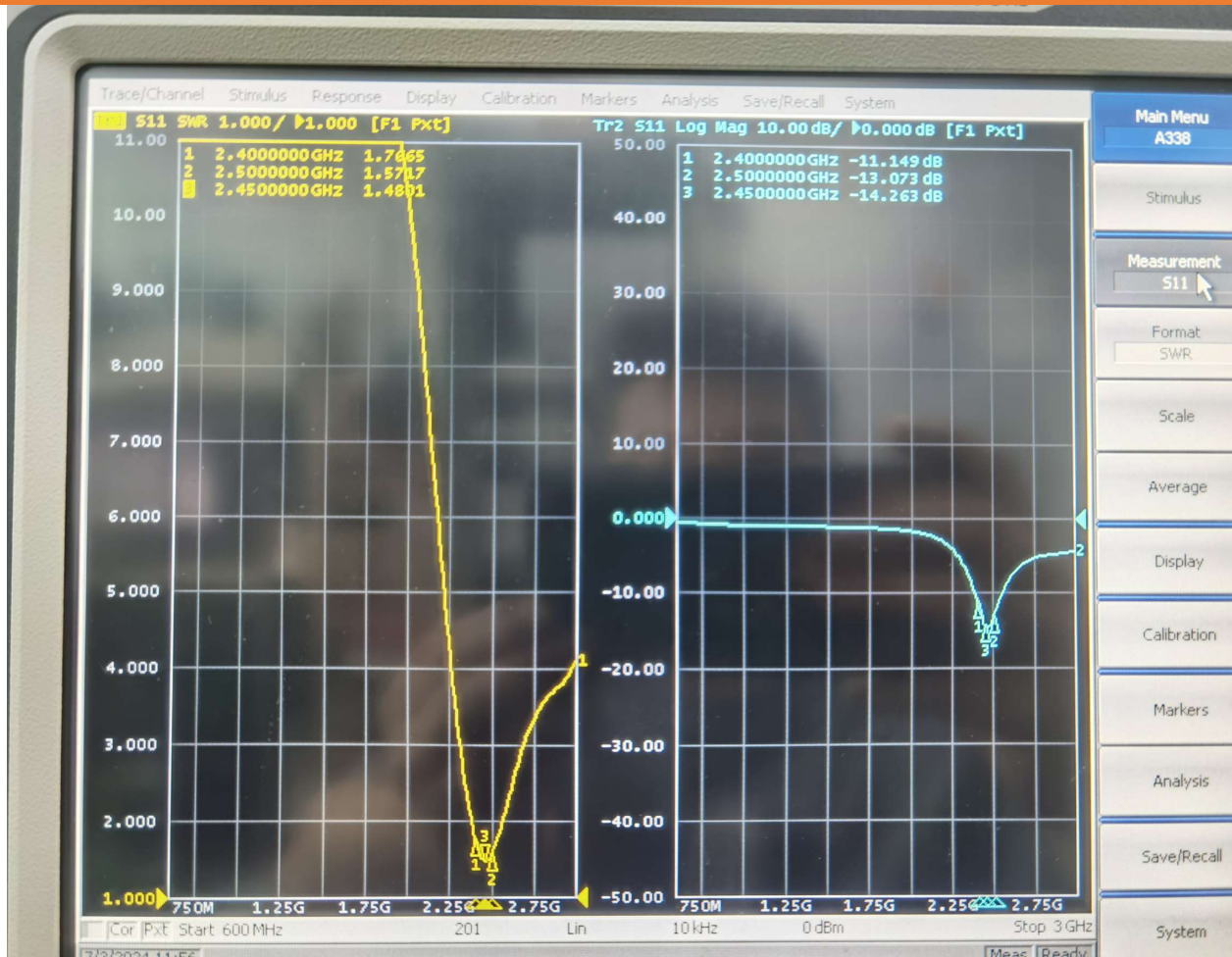
Contents

- Version Description
- Physical picture
- Passive debugging impedance
- direction diagram
- Conclusion

- Version Description

Version	date	describe
V1.0	2024.07.03	Debugging report

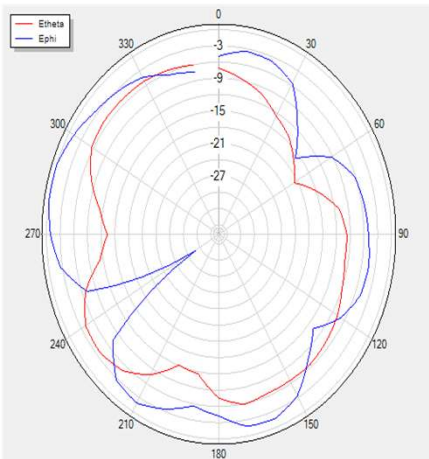
- Passive debugging impedance



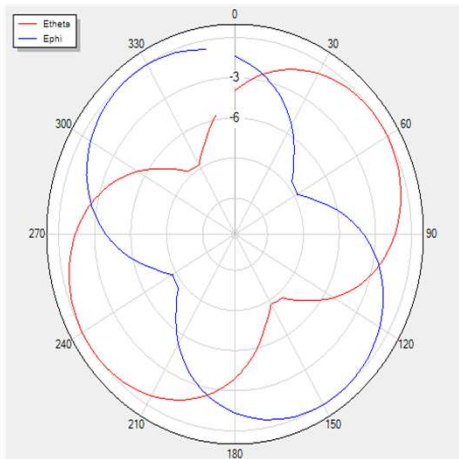
Gain&Efficiency				
frequency	gain	mingain	efficiency	efficiency
频率(MHz)	增益(dBi)	最小增益	效率(dBi)	效率(%)
2400	1.86	-23.02	-3.67	42.95
2410	1.64	-26.55	-3.62	43.47
2420	2.51	-27.17	-2.89	51.39
2430	2.09	-25.34	-3.24	47.47
2440	2.07	-20.9	-3.22	47.65
2450	2.12	-18.24	-3.25	47.33
2460	2.57	-16.65	-2.95	50.67
2470	2.4	-18.87	-3.15	48.44
2480	3	-25.5	-2.89	51.45
2490	3.15	-26.95	-2.68	53.91
2500	2.97	-20.71	-2.64	54.50
Horizontal				

direction diagram

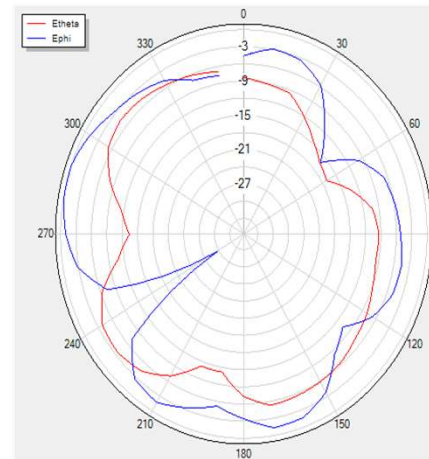
H Theta=90 freq=2400MHz



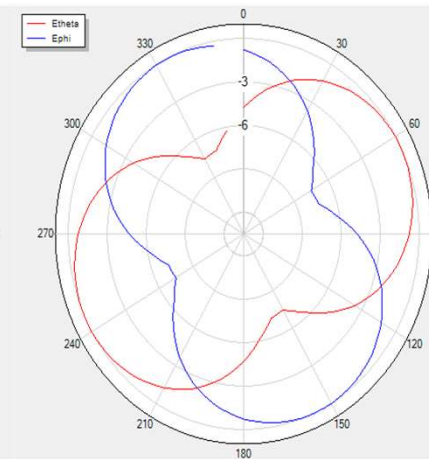
H Theta=0 freq=2400MHz



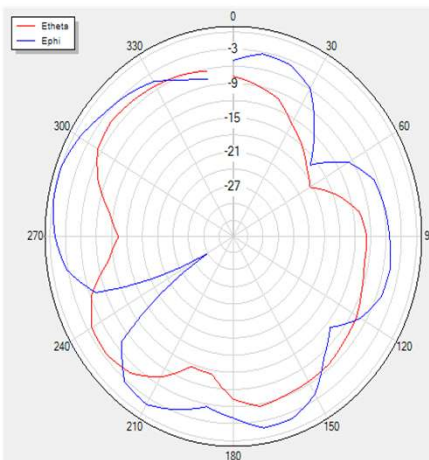
H Theta=90 freq=2420MHz



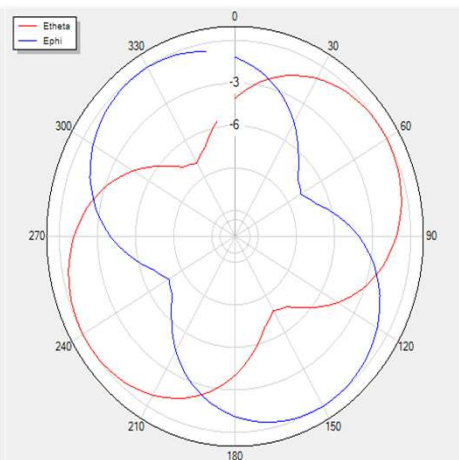
H Theta=0 freq=2420MHz



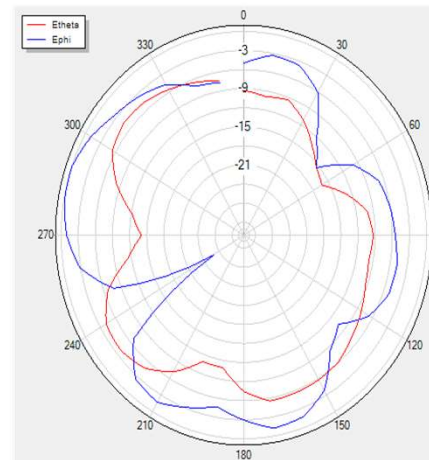
H Theta=90 freq=2410MHz



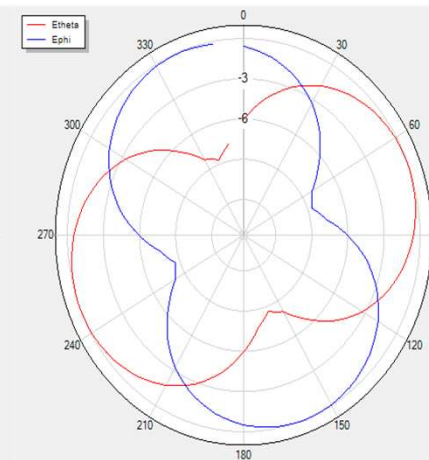
H Theta=0 freq=2410MHz



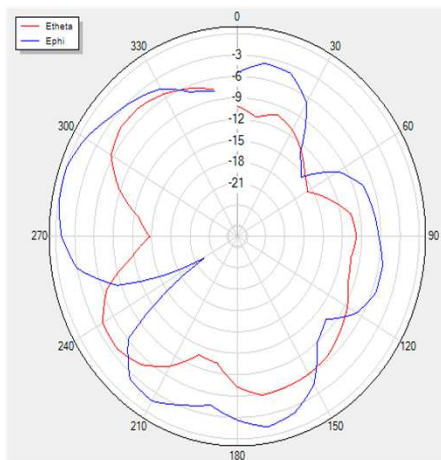
H Theta=90 freq=2430MHz



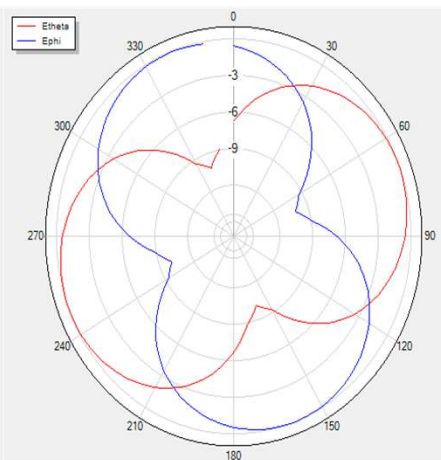
H Theta=0 freq=2430MHz



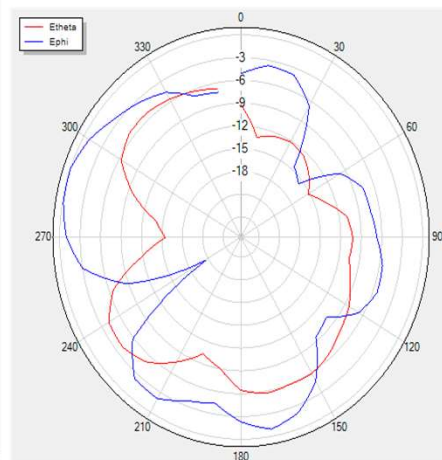
H Theta=90 freq=2440MHz



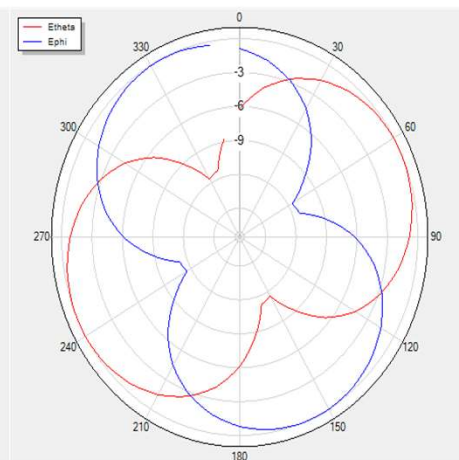
H Theta=0 freq=2440MHz



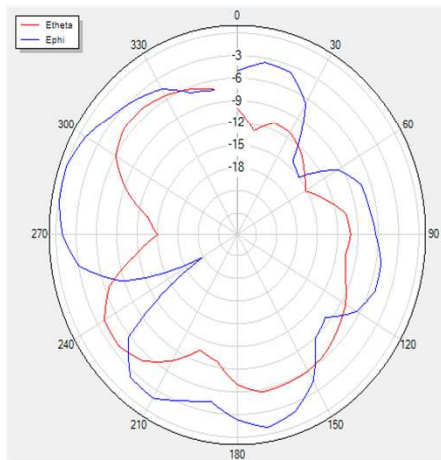
H Theta=90 freq=2460MHz



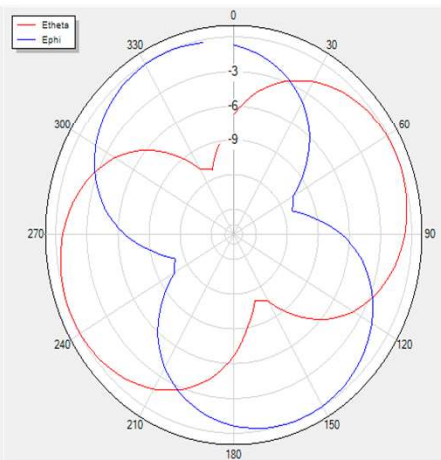
H Theta=0 freq=2460MHz



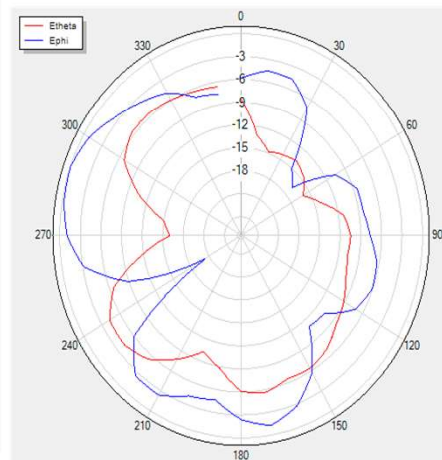
H Theta=90 freq=2450MHz



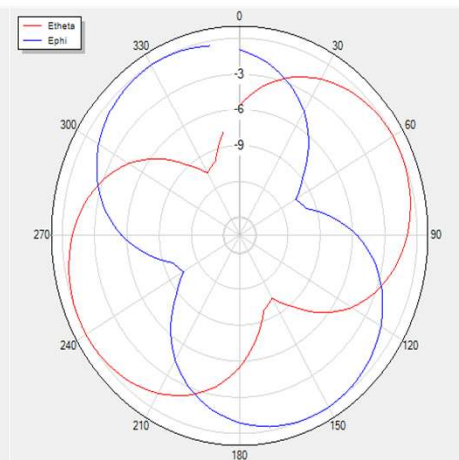
H Theta=0 freq=2450MHz



H Theta=90 freq=2470MHz

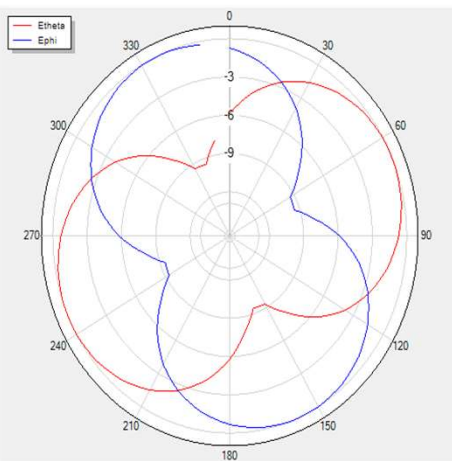
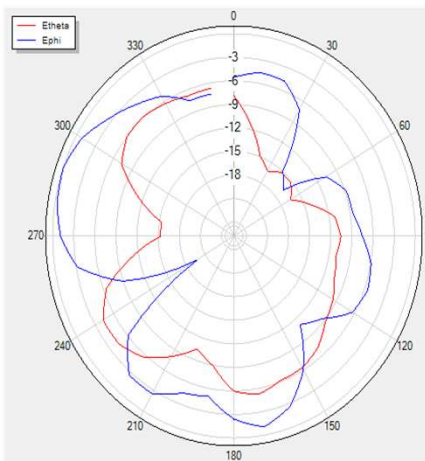


H Theta=0 freq=2470MHz



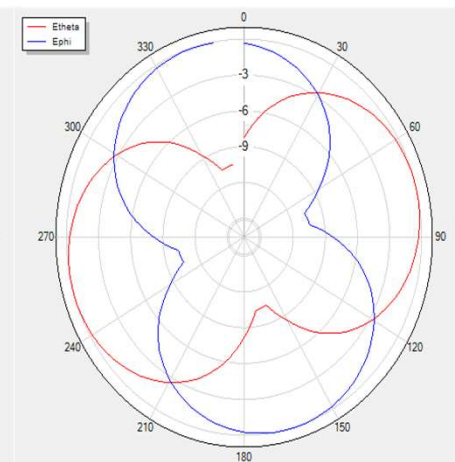
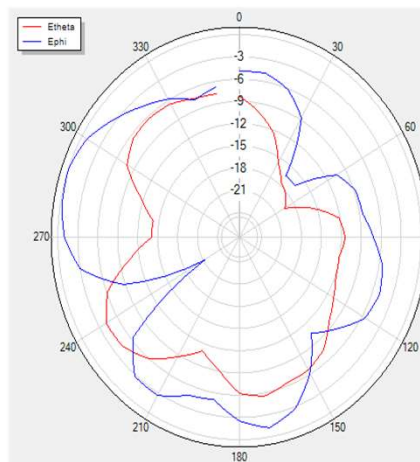
H Theta=90 freq=2480MHz

H Theta=0 freq=2480MHz



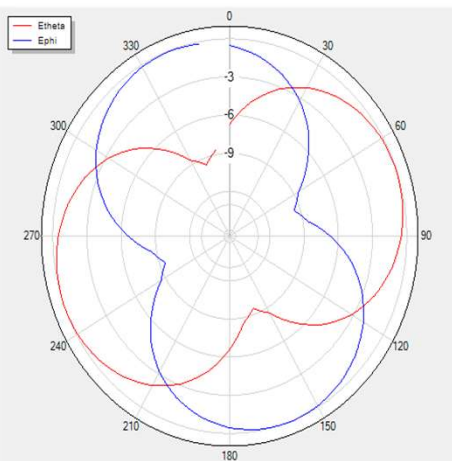
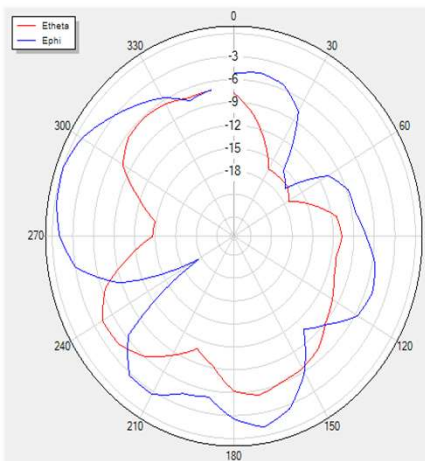
H Theta=90 freq=2500MHz

H Theta=0 freq=2500MHz



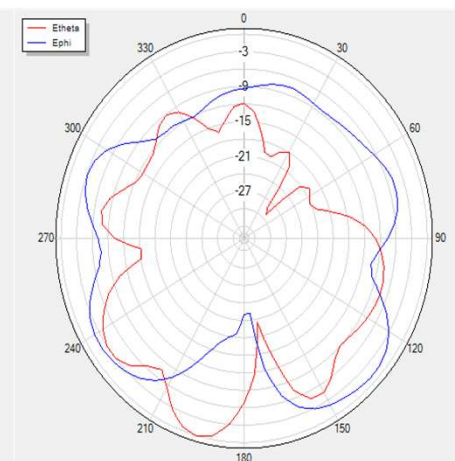
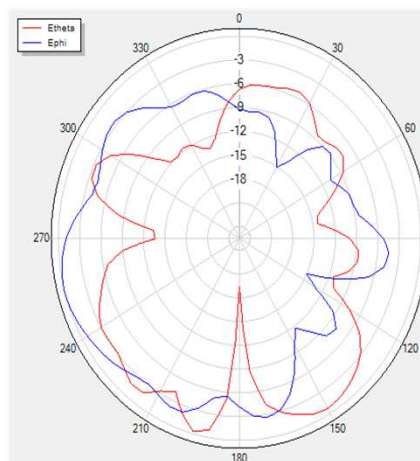
H Theta=90 freq=2490MHz

H Theta=0 freq=2490MHz

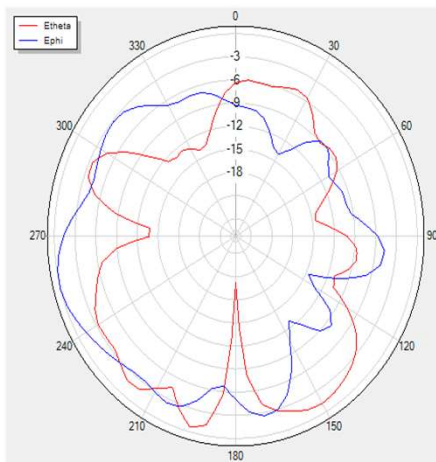


V Phi=90 freq=2400MHz

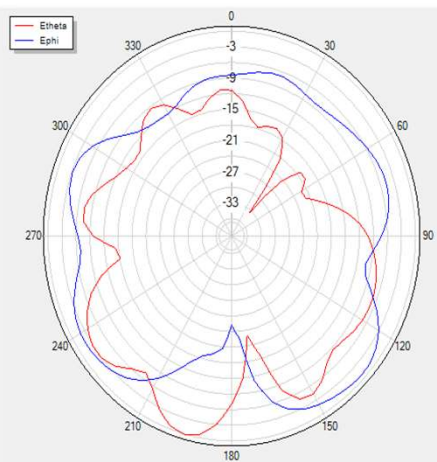
V Phi=0 freq=2400MHz



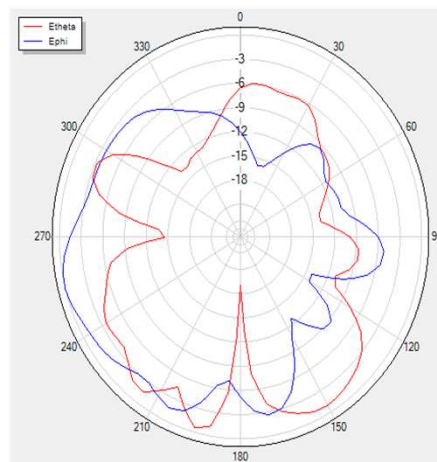
V Phi=90 freq=2410MHz



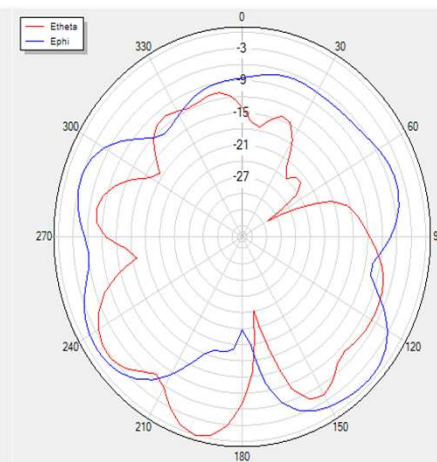
V Phi=0 freq=2410MHz



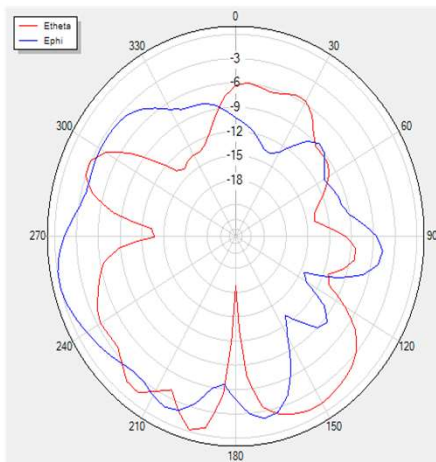
V Phi=90 freq=2430MHz



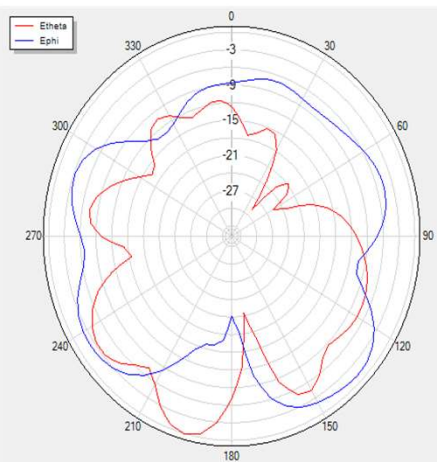
V Phi=0 freq=2430MHz



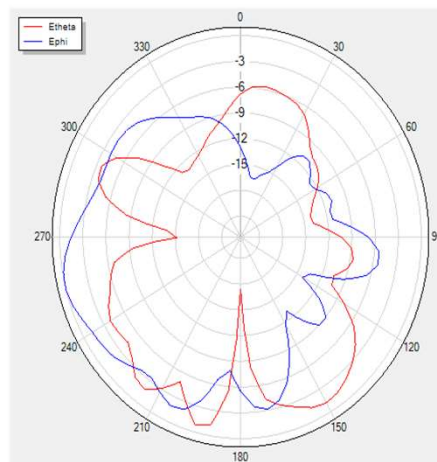
V Phi=90 freq=2420MHz



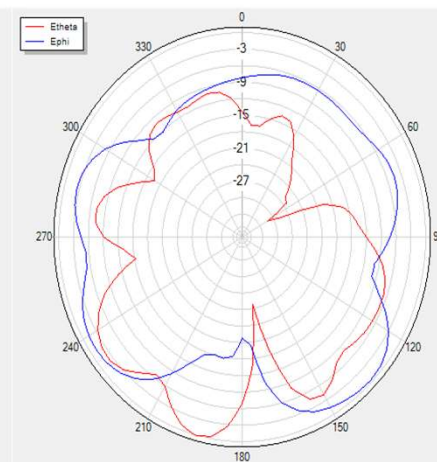
V Phi=0 freq=2420MHz



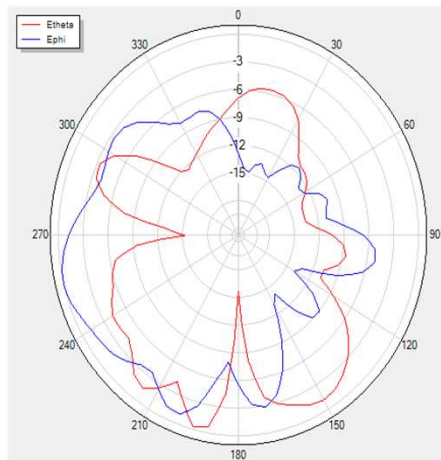
V Phi=90 freq=2440MHz



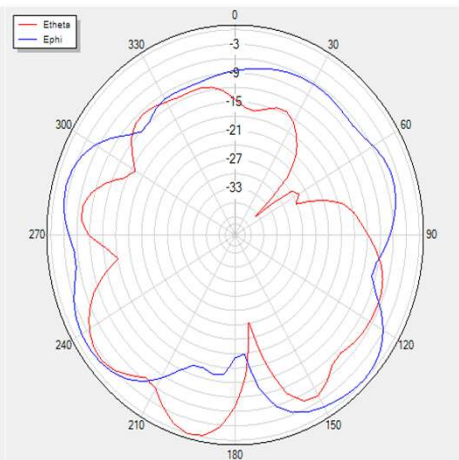
V Phi=0 freq=2440MHz



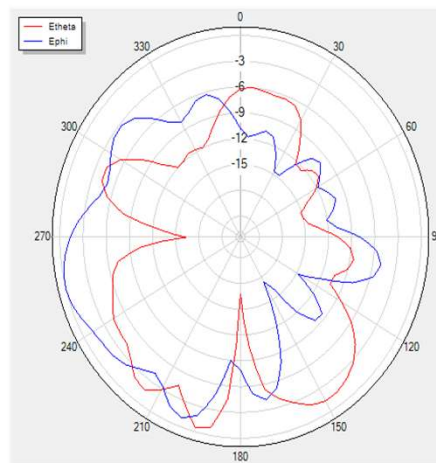
V Phi=90 freq=2450MHz



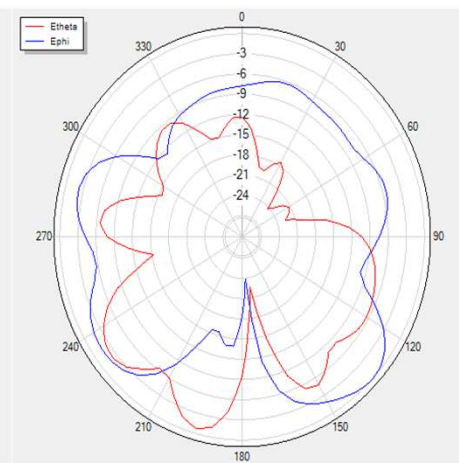
V Phi=0 freq=2450MHz



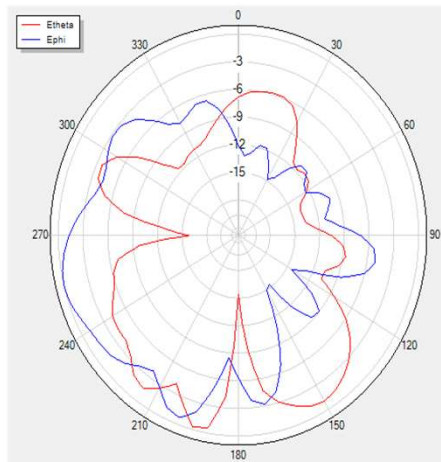
V Phi=90 freq=2470MHz



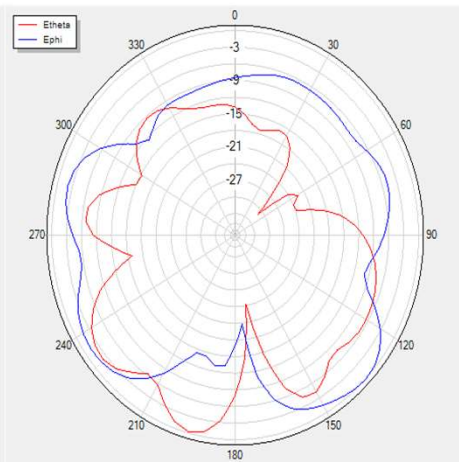
V Phi=0 freq=2470MHz



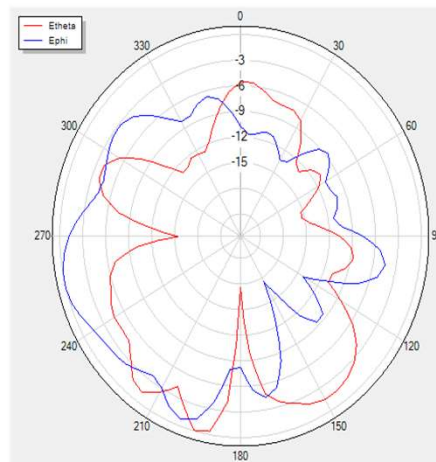
V Phi=90 freq=2460MHz



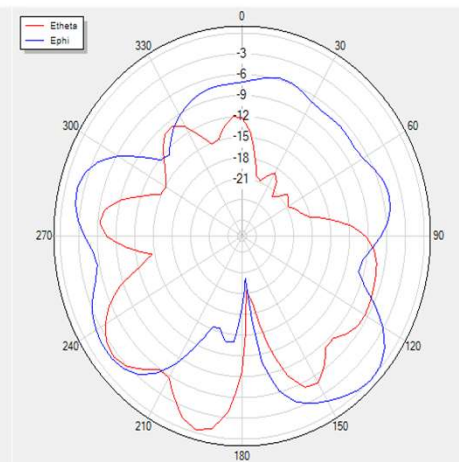
V Phi=0 freq=2460MHz



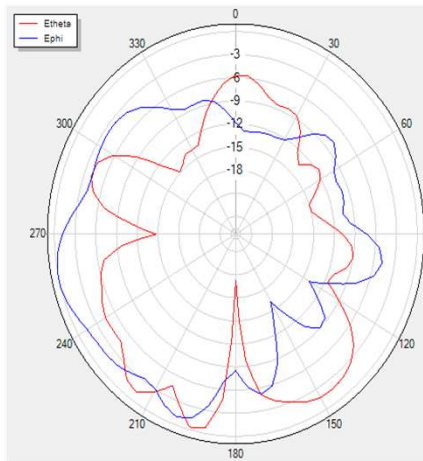
V Phi=90 freq=2480MHz



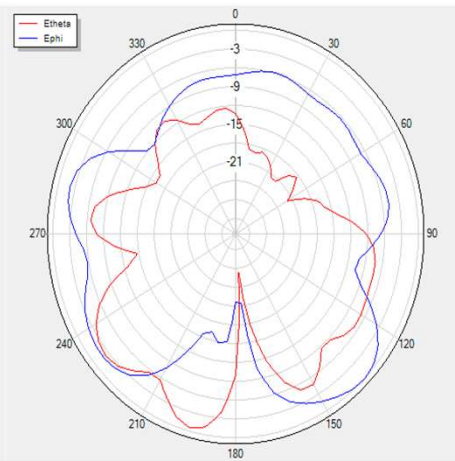
V Phi=0 freq=2480MHz



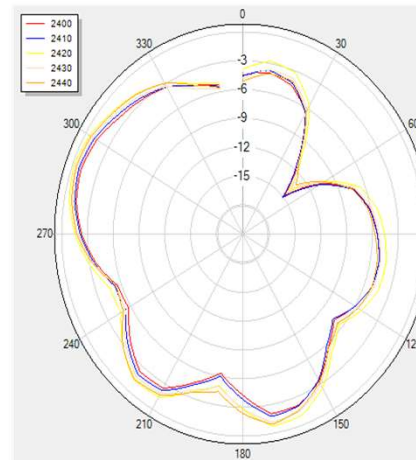
V $\Phi=90$ freq=2490MHz



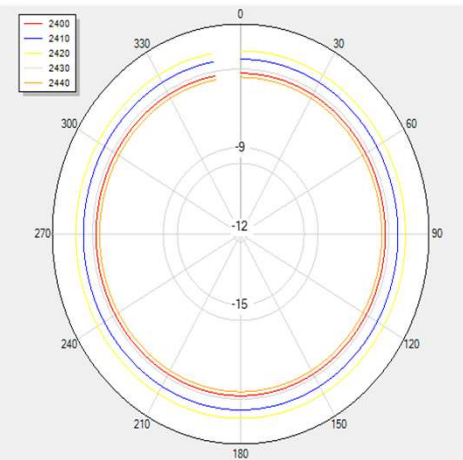
V $\Phi=0$ freq=2490MHz



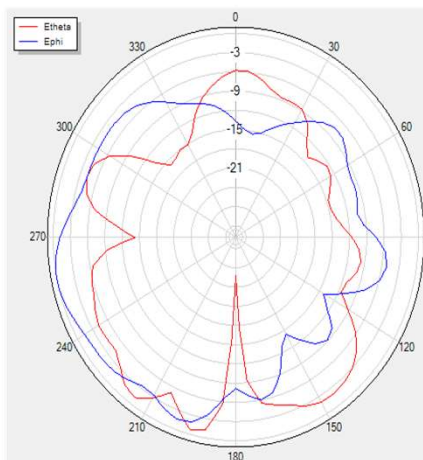
H $\Theta=90$



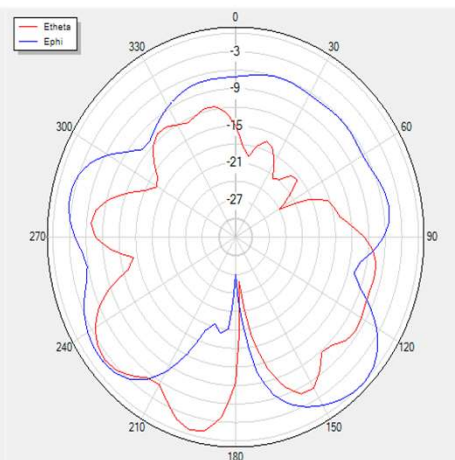
H $\Theta=0$



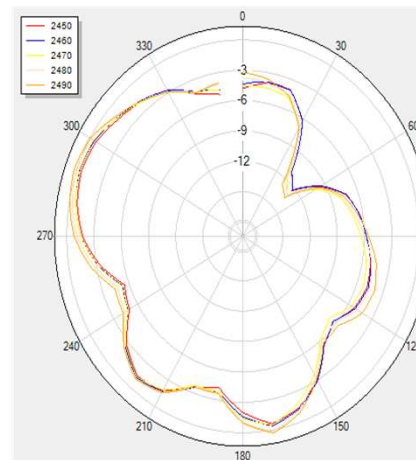
V $\Phi=90$ freq=2500MHz



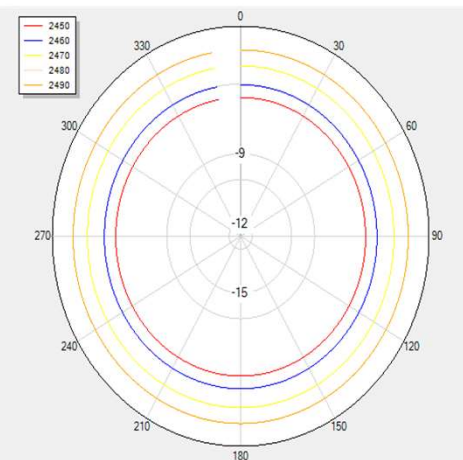
V $\Phi=0$ freq=2500MHz



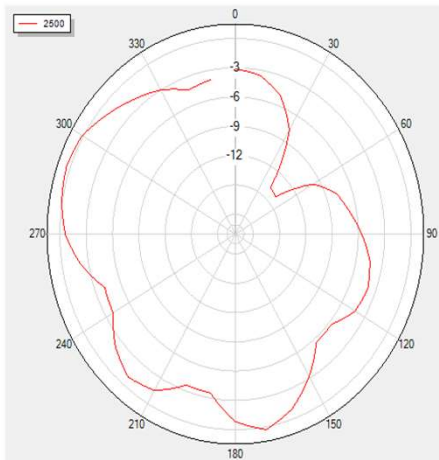
H $\Theta=90$



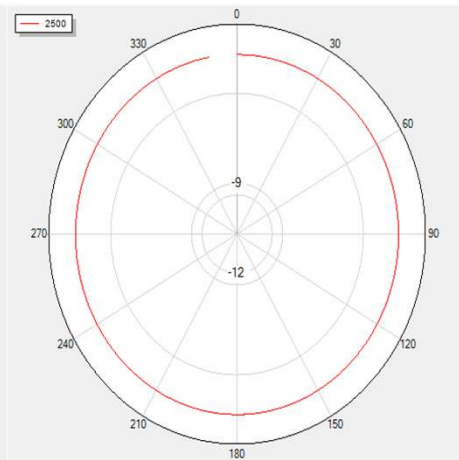
H $\Theta=0$



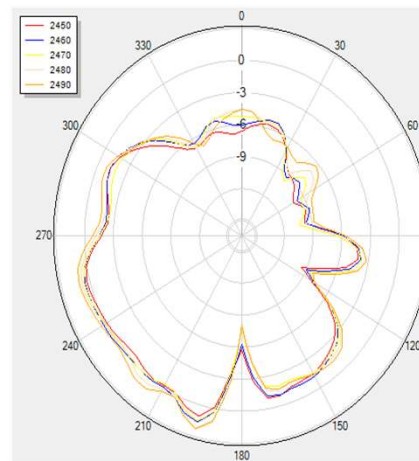
H Theta=90



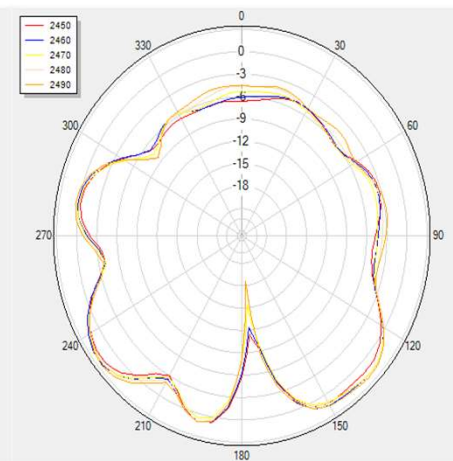
H Theta=0



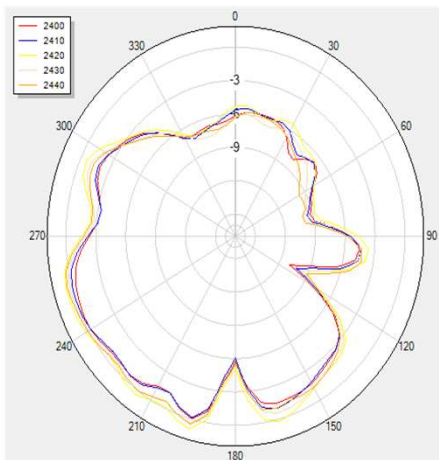
V Phi=90



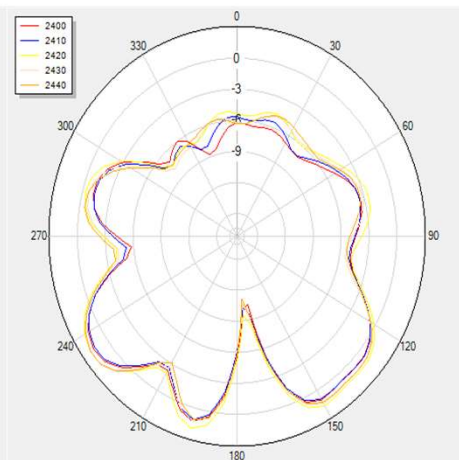
V Phi=0



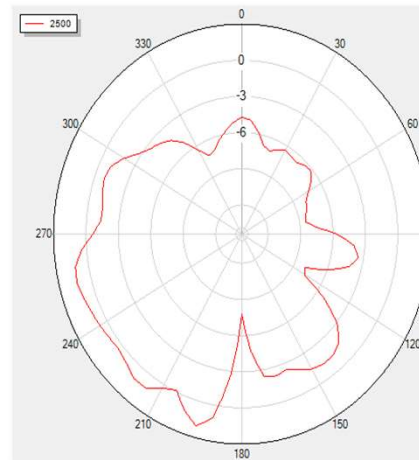
V Phi=90



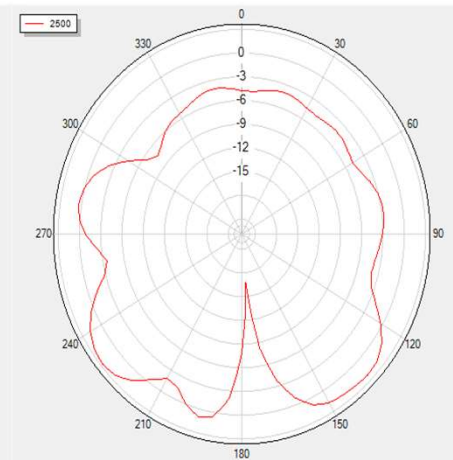
V Phi=0



V Phi=90



V Phi=0



Conclusion

1. According to the latest matching RF performance, all requirements are met and stable OK
2. Please ensure that the software and hardware are completely consistent before importing the basis for subsequent production to ensure consistency.