

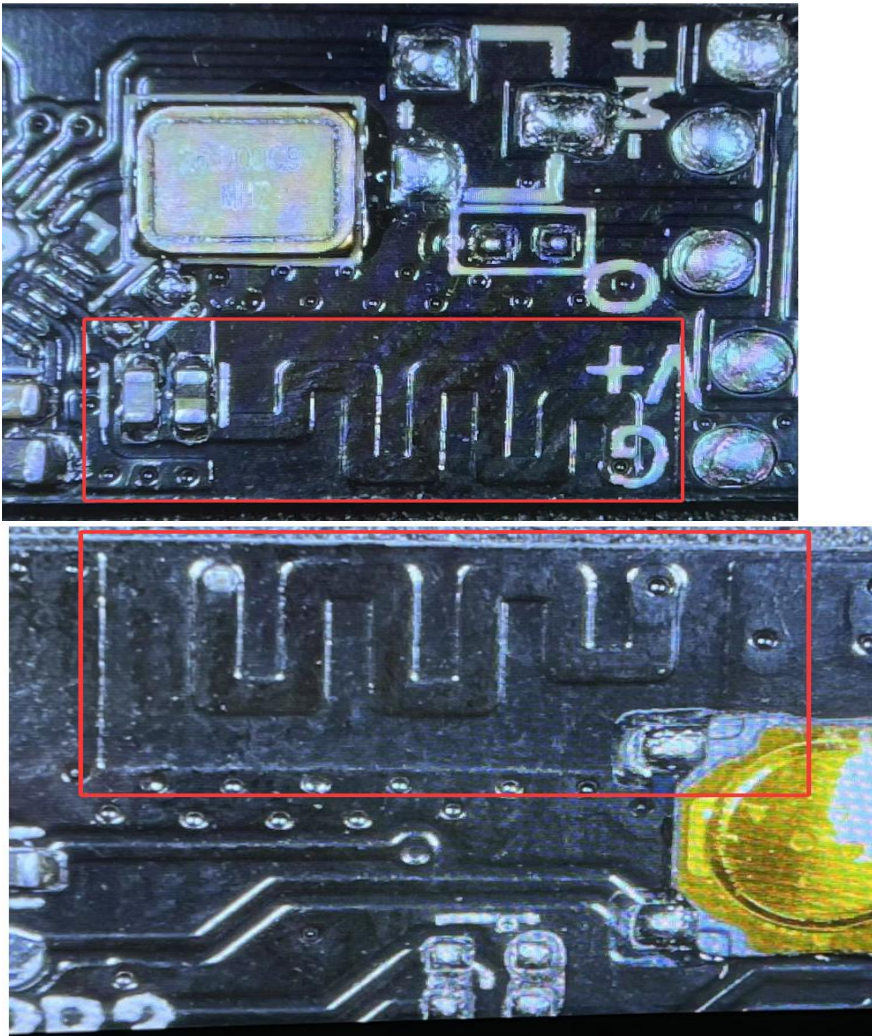
天线测试

- 1、硬件测试
- 2、软件测试
- 3、数据读取

1、硬件测试

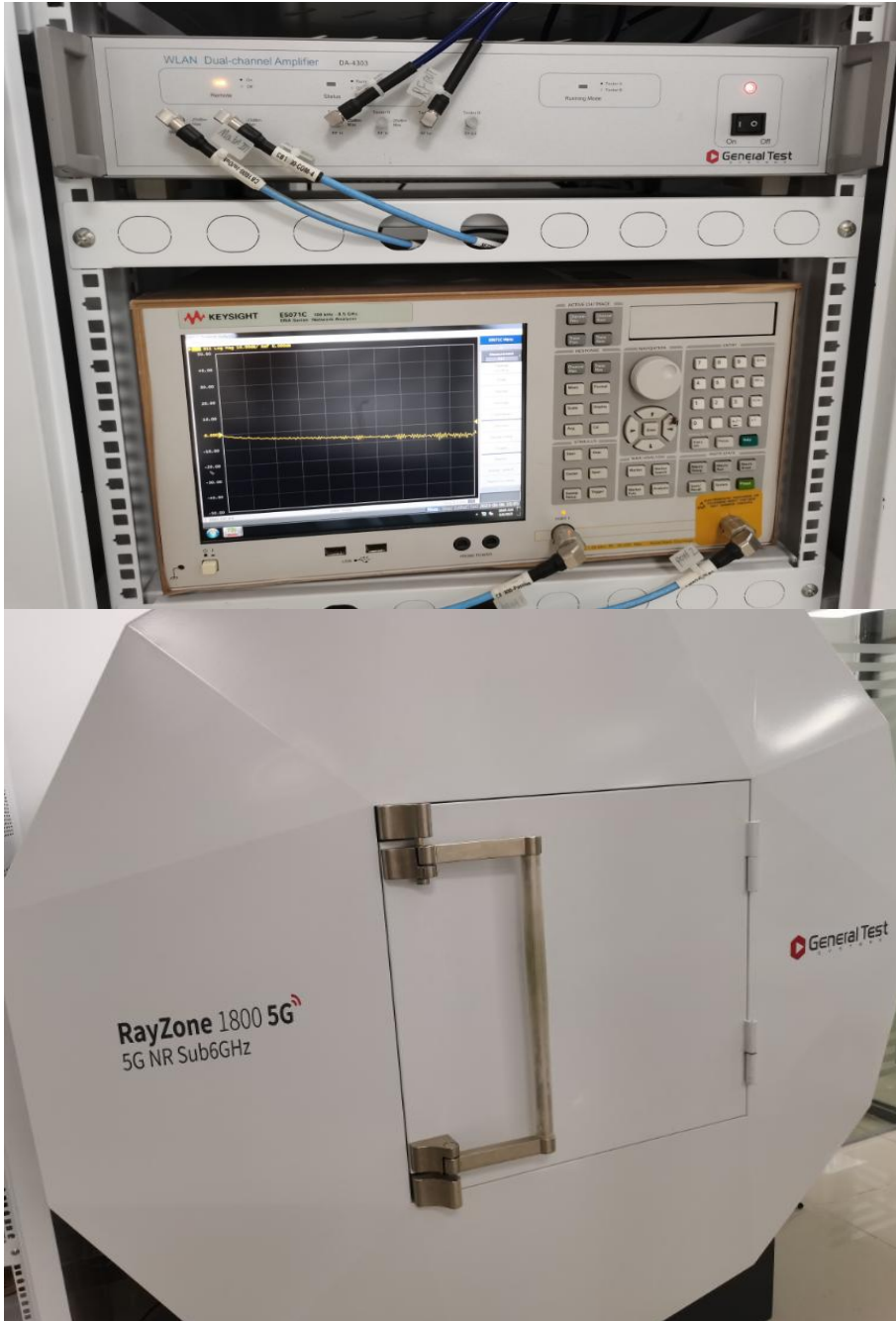
1.1 、PCBA 裸板测试

将射频连接线与裸板焊接好，再将其与 OTA 设备连接。射频连接线与裸板连接图，如下图示：

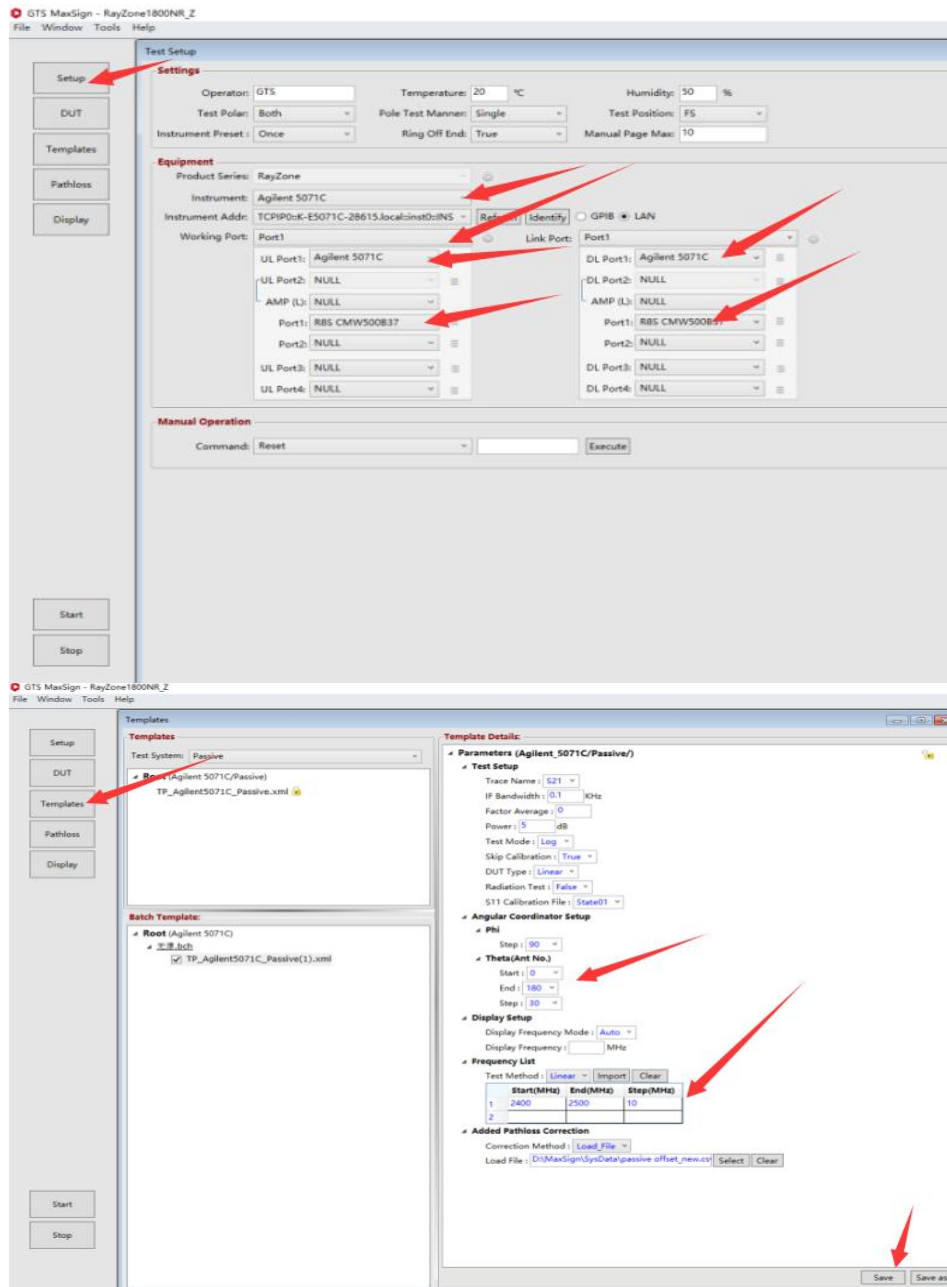


1.2 、设备环境

本次测试需用到的设备有电脑、频谱仪、放大器和暗室，如下图示：



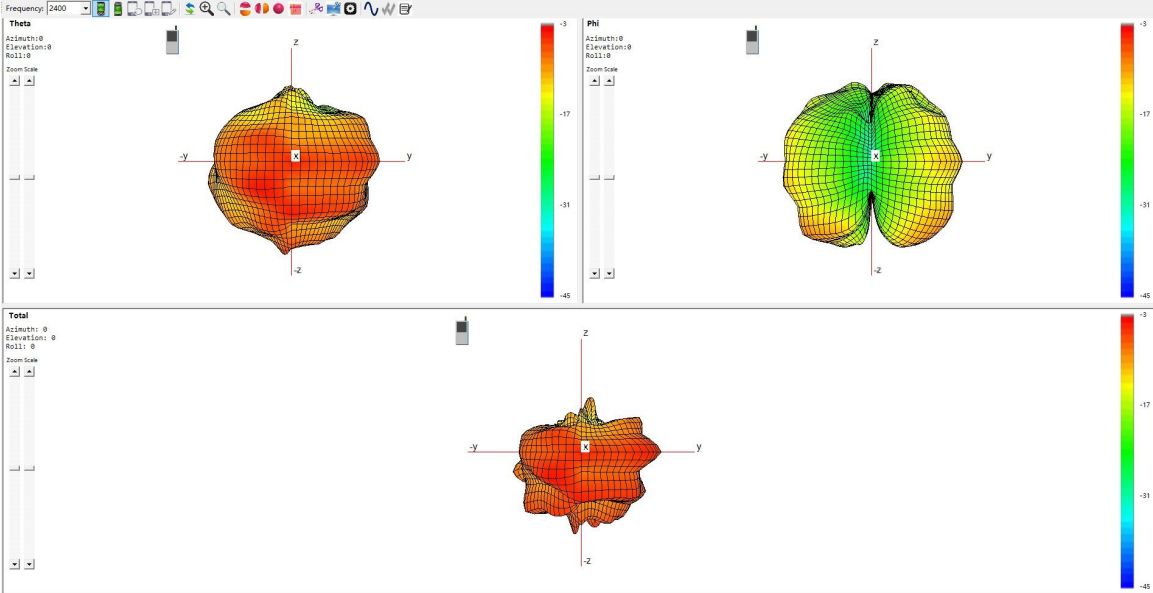
2、软件测试



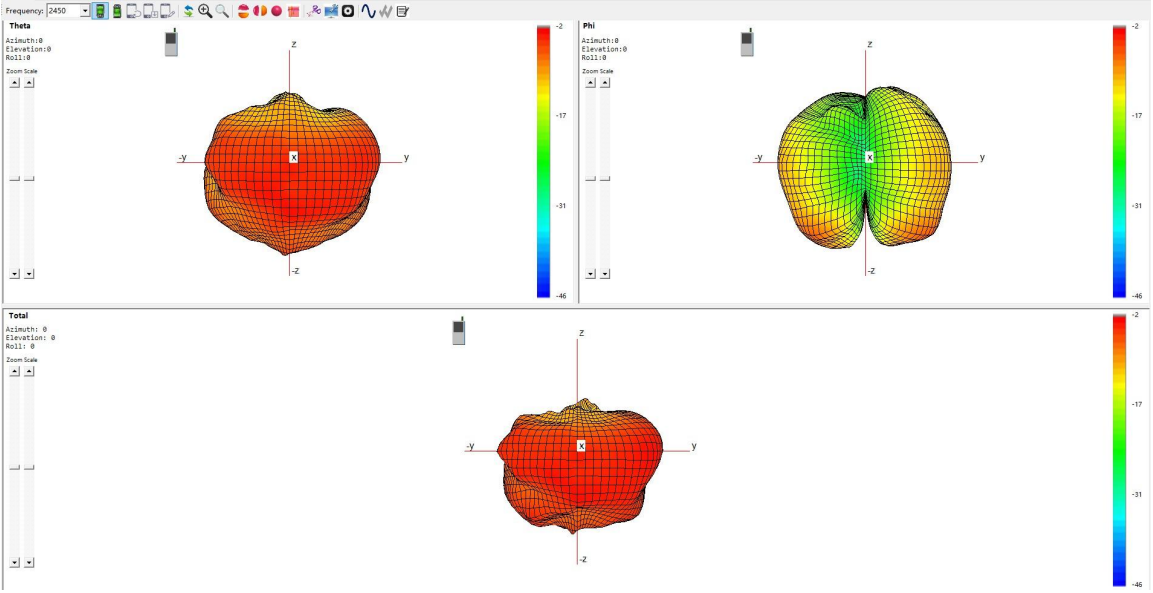
3、数据读取

3.1、扫描天线的 3D 辐射图

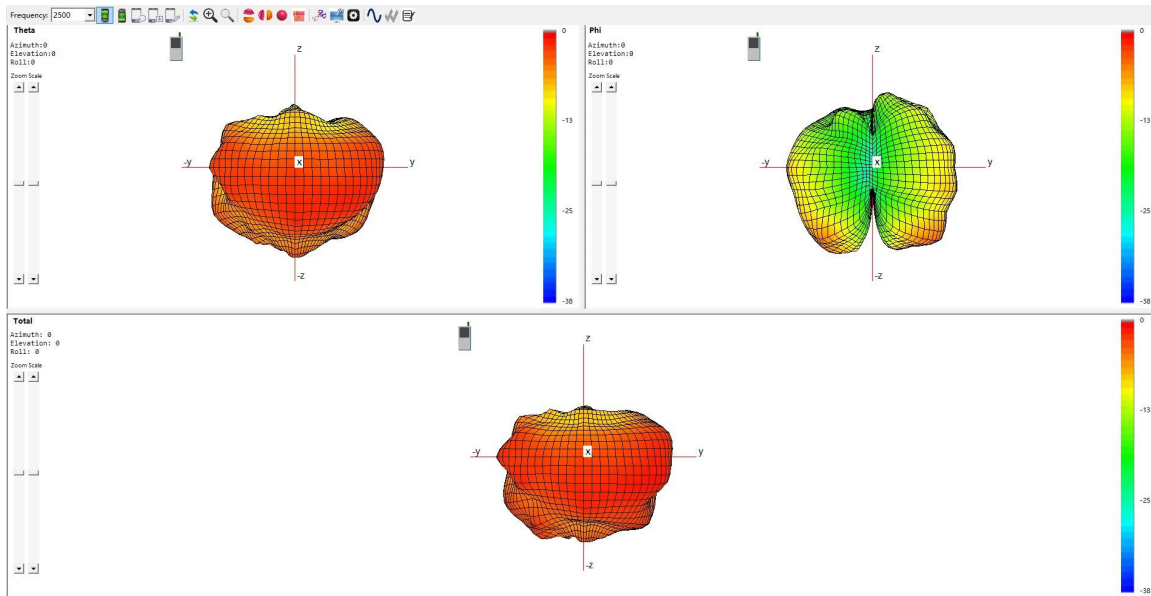
2400MHz:



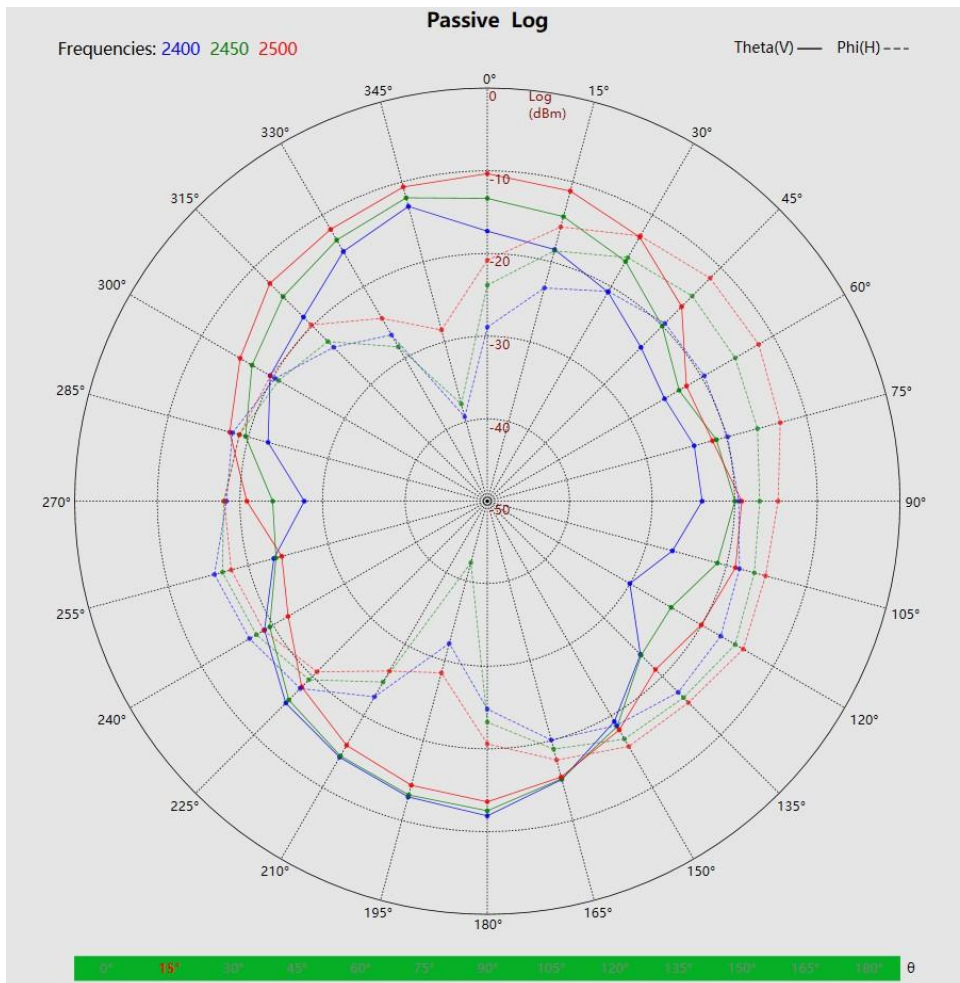
2450MHz:



2500MHz



3.2、扫描天线的 2D 辐射图



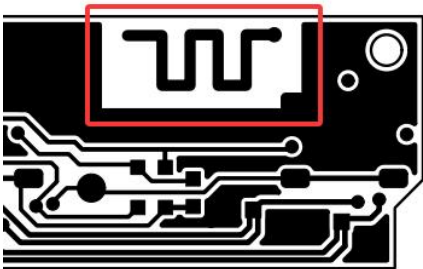
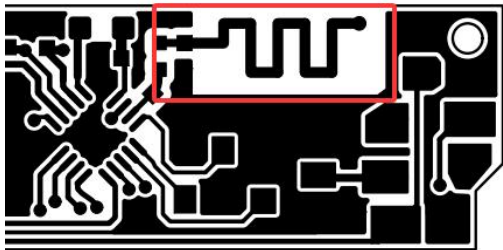
3.3、详细的扫描输出数据结果

Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	-3.70	-9.21	12.01
2410	-3.31	-8.63	13.71
2420	-3.03	-8.08	15.57
2430	-3.12	-7.64	17.22
2440	-2.81	-7.32	18.54
2450	-2.44	-6.72	21.28
2460	-2.15	-6.23	23.85
2470	-1.72	-5.98	25.22
2480	-1.10	-5.60	27.54
2490	-0.81	-5.35	29.14
2500	-0.63	-5.01	31.57

Summary

ITEM	ANT SPEC		
Model Name	2.4G ANT		
Antenna plate	PCB antenna		
Center Frequency	2400MHz	2450MHz	2500MHz
	-3.70dBi	-2.44dBi	-0.63dBi
MAX. Gain	-0.63dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture			

AntennaPhoto&Length(mm)



Frequency (MHz)	Gain(dBi)	
	Horizontal	Vertical

	MAX	MIN	MAX	MIN
2400	-8.79	-44.56	-3.71	-43.45
2450	-5.96	-45.86	-2.46	-35.98
2500	-3.91	-37.31	-1.23	-32.32