

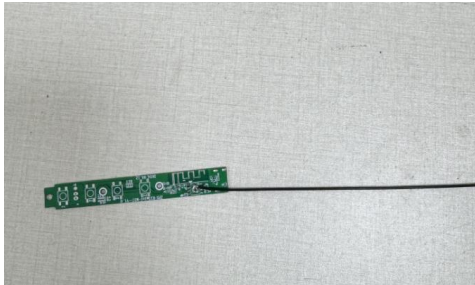
天线测试

- 1，硬件测试
- 2，软件测试
- 3，数据读取

1，硬件测试

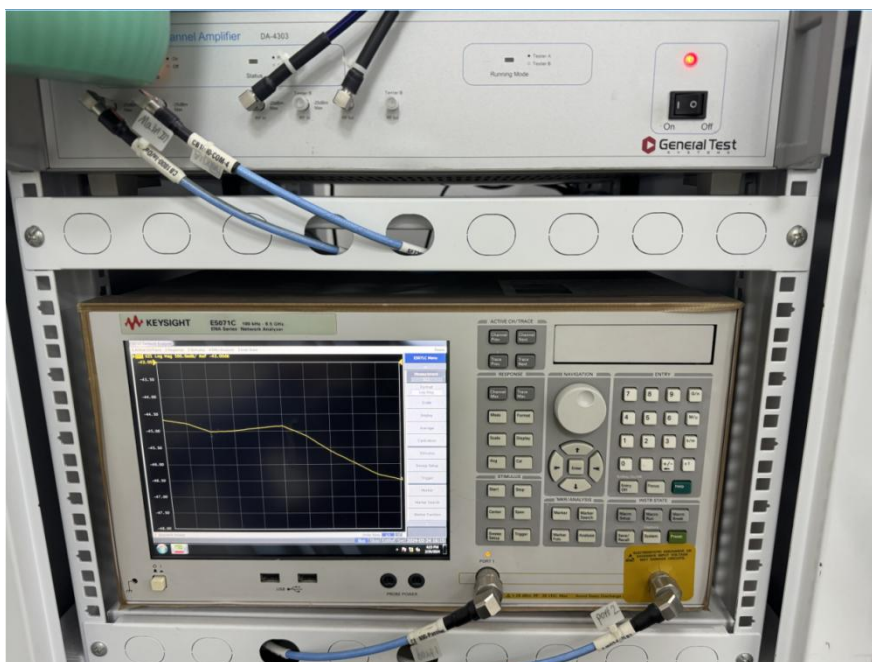
1.1，PCBA 裸板测试

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

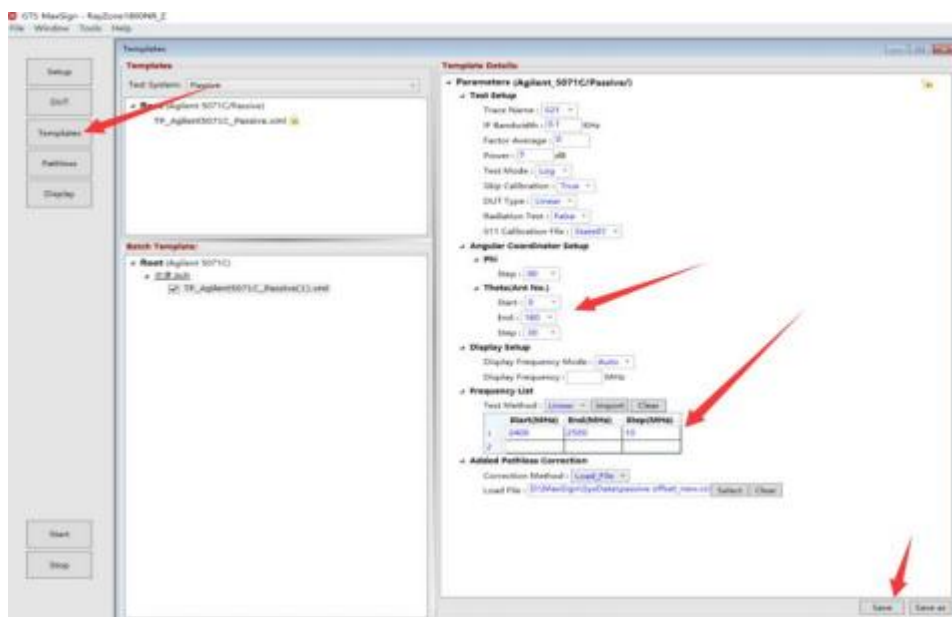
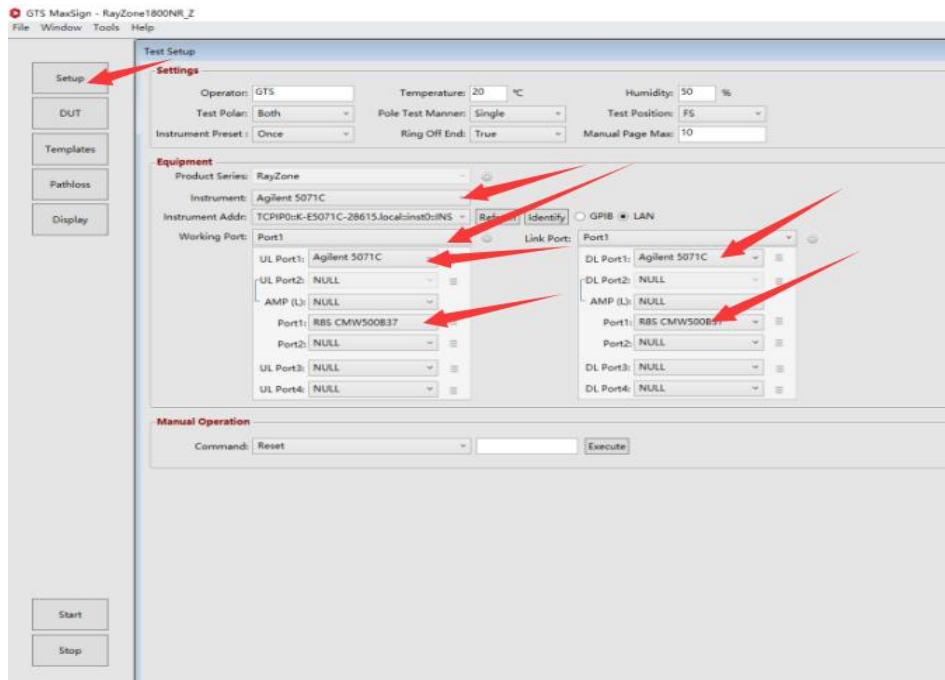


1.2，设备环境

本次测试需要用到设备有电脑，频谱仪，放大器和暗室，如下图示：



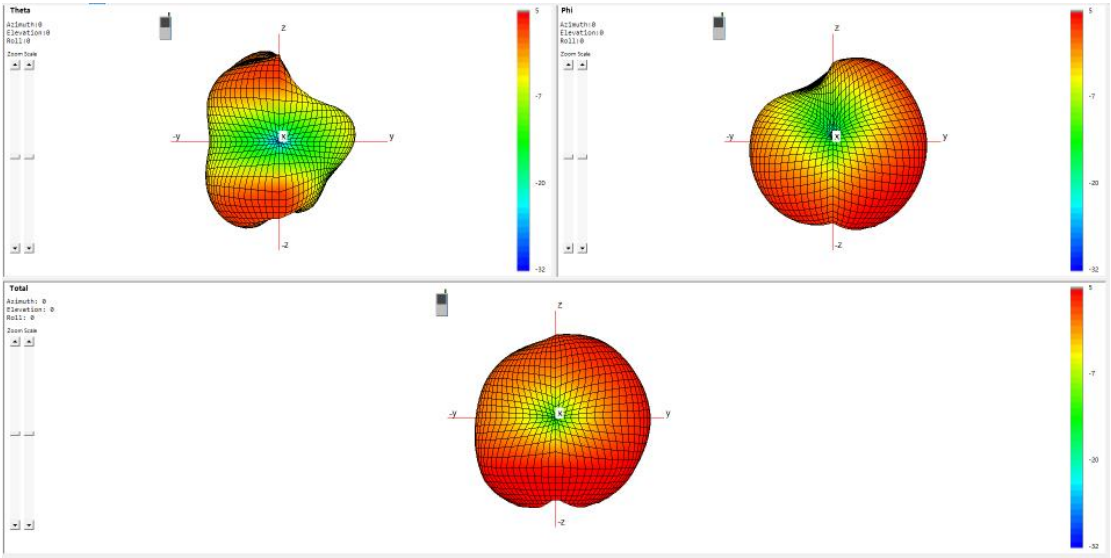
2, 软件测试



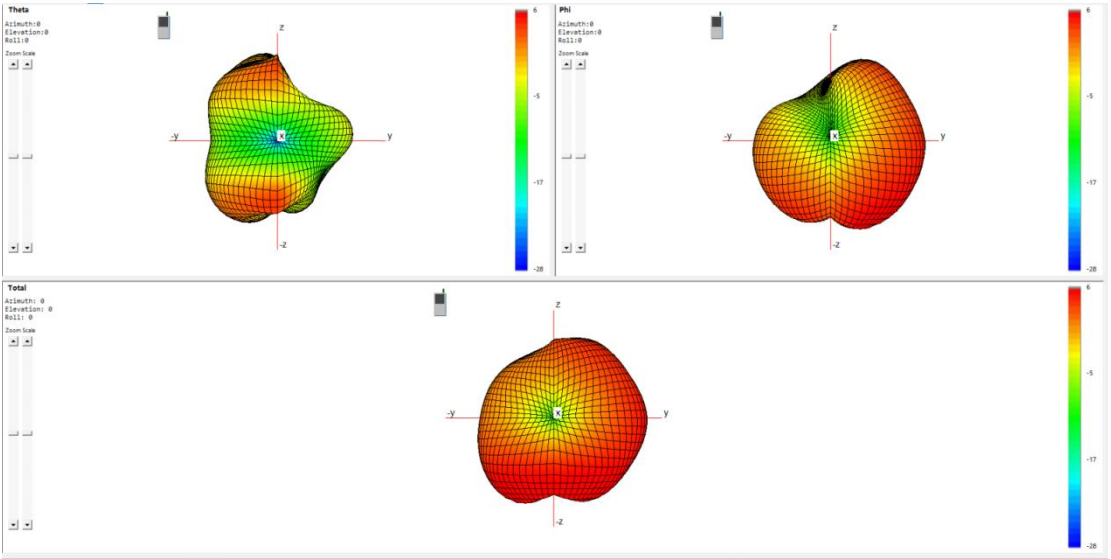
3, 数据读取

3.1，扫描天线的 3D 图辐射图

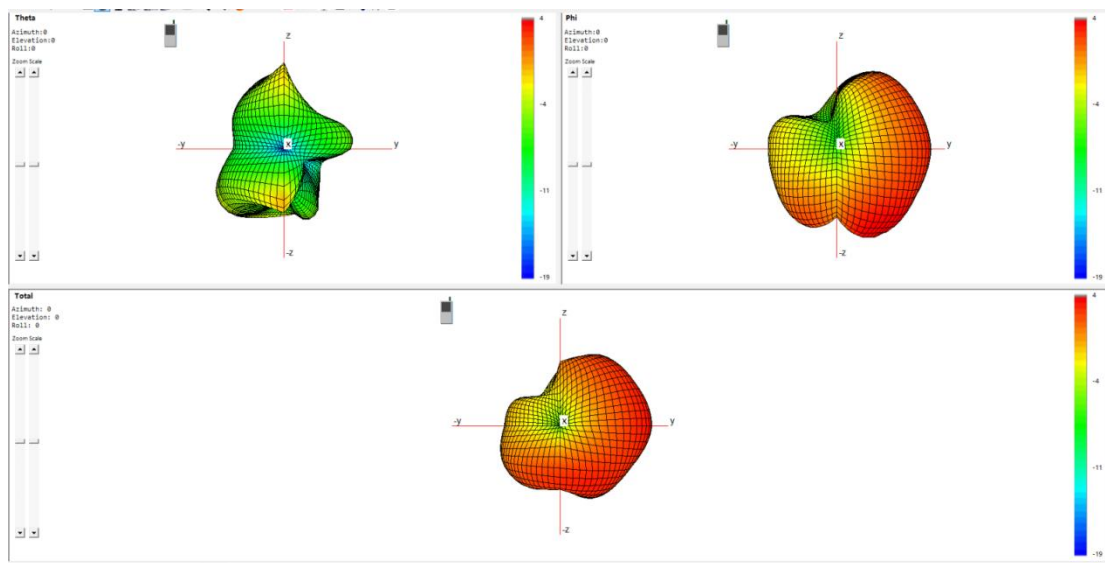
2400MHz:



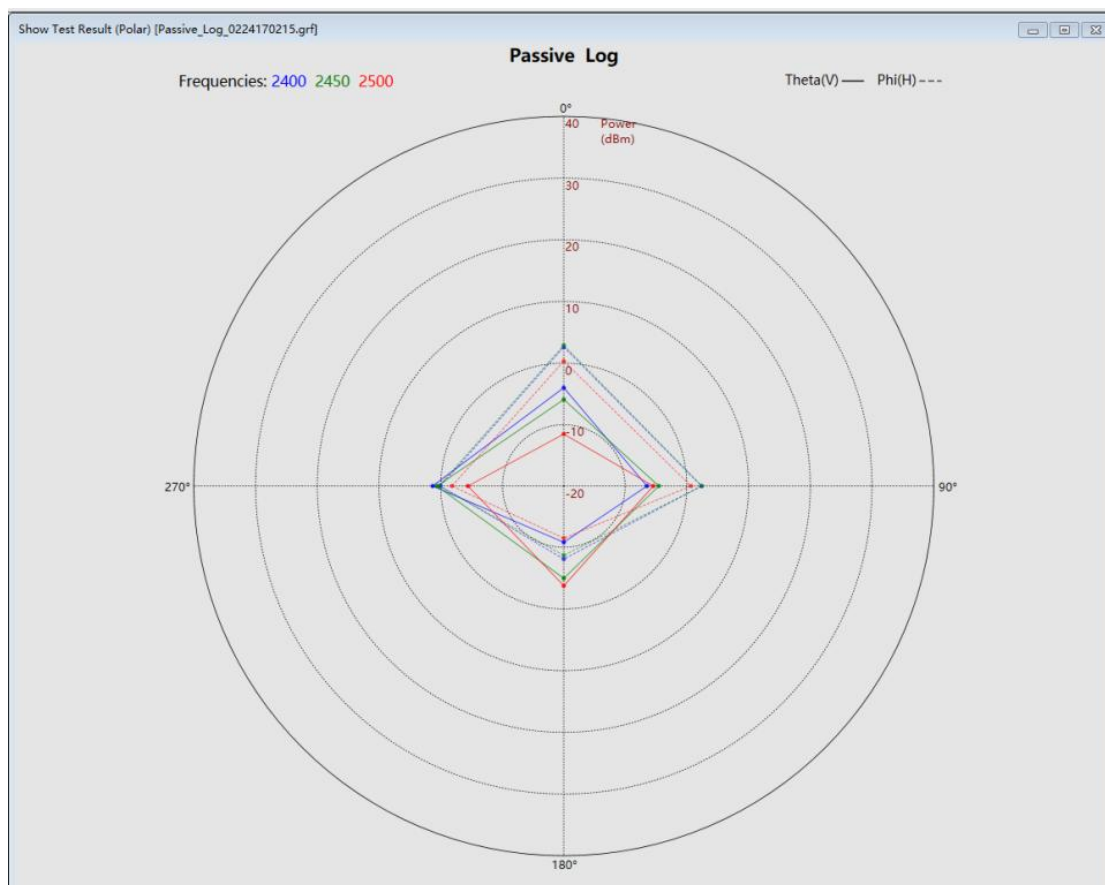
2450MHz:



2500MHz:



3.2, 扫描天线 2D 辐射图

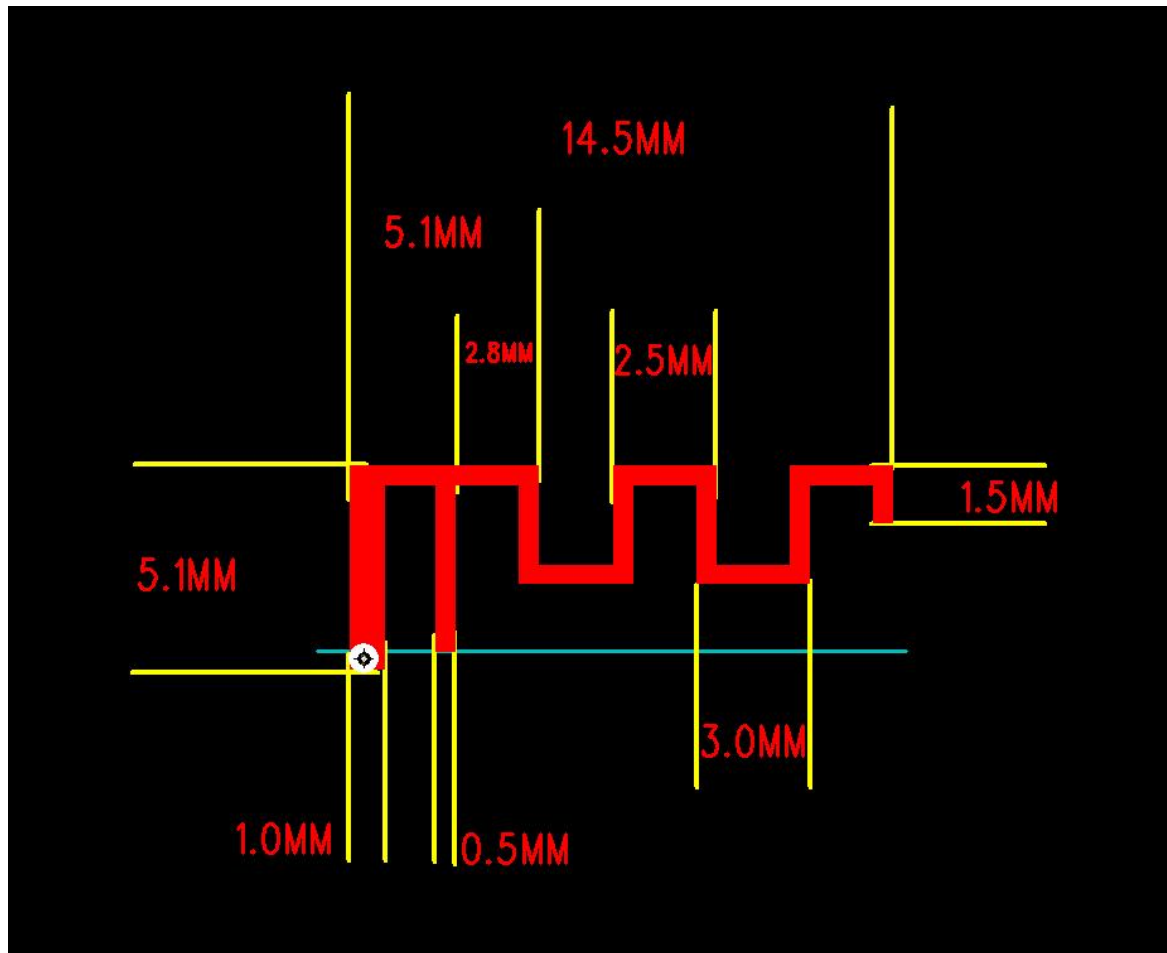


3.3, 详细的扫描输出数据结果

Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	4.73342591	1.773815678	150.4463195
2410	4.961265122	1.895608836	154.7251398
2420	5.067302169	1.962652587	157.1322245
2430	5.368003414	2.188791154	165.5309149
2440	5.600528892	2.350140377	171.7963916
2450	5.655040851	2.390523367	173.4012951
2460	5.521399269	2.267430619	168.5555519
2470	5.001927509	1.794395308	151.1609215
2480	4.563397682	1.323160534	135.6175997
2490	4.023180436	0.746943067	118.7665953
2500	3.691213759	0.453532901	111.0077475

ITEM	ANT SPEC		
Model Name	2.4G ANT		
Antenna plate	PCB antenna		
Center Frequency	2400MHz	2450MHz	2500MHz
	4.73dBi	5.65dBi	3.69dBi
MAX.Gain	5.65dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture			

AntennaPhouo&Length(mm)



Frequency (MHz)	Gain (dBi)			
	Horizontal		Vertical	
	MAX	MIN	MAX	MIN
2400	2.89	-31.04	4.16	-24.07
2450	2.95	-25.14	5.08	-13.43
2500	-0.07	-18.60	3.18	-11.53