antenna test
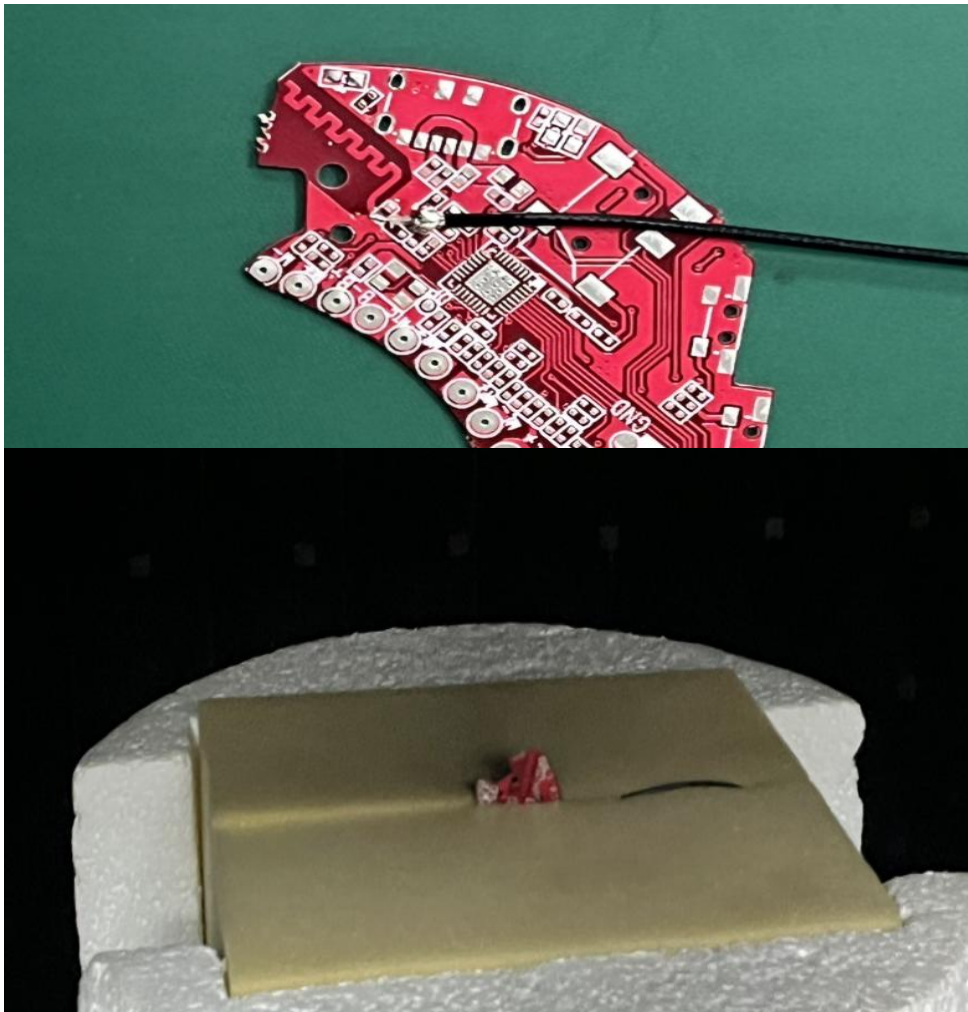
1,hardware test
2,software test
3,data reading

1,hardware test
1.1, PCBA bare-board testing
Solder the RF cable to the bare board and connect it to the OTA
device. The following figure shows the connection between the RF
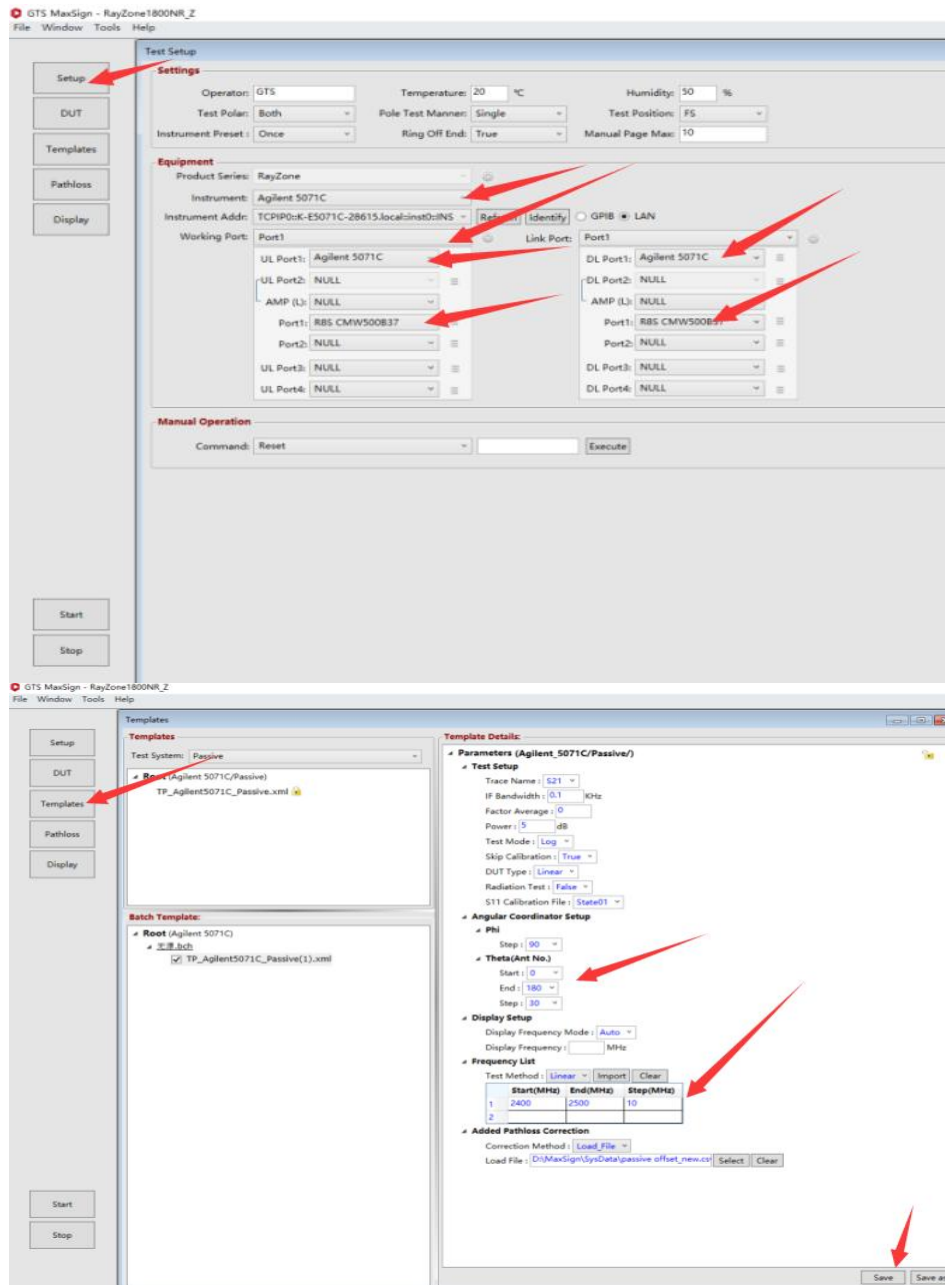cable and the bare board:

1.2 、facility environment

The equipment required for this test includes computer, spectrometer, amplifier and darkroom, as shown below:
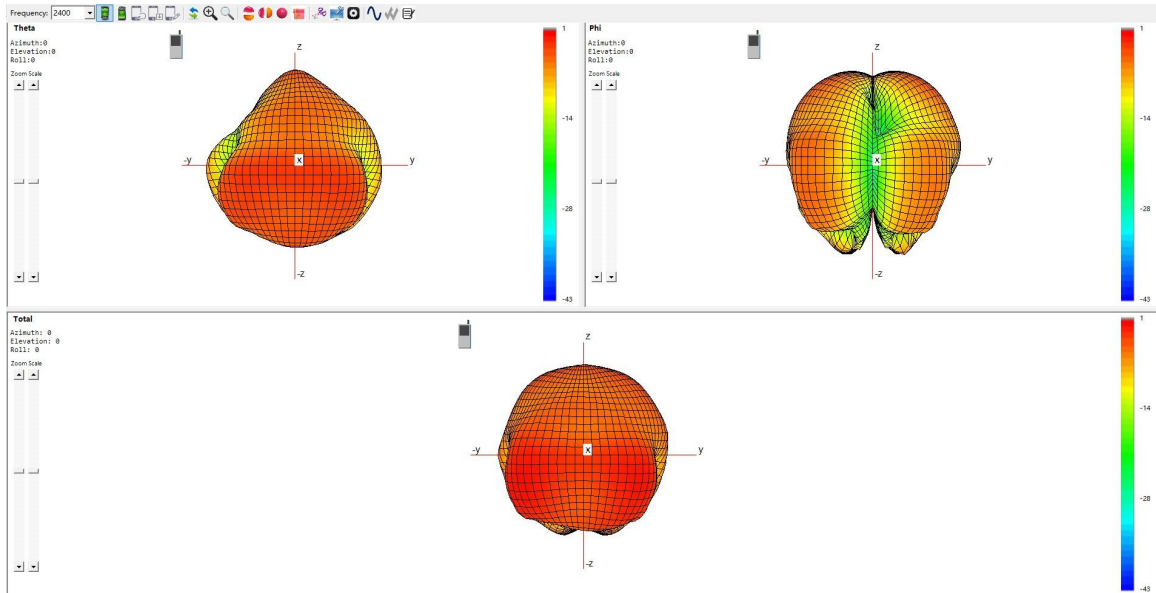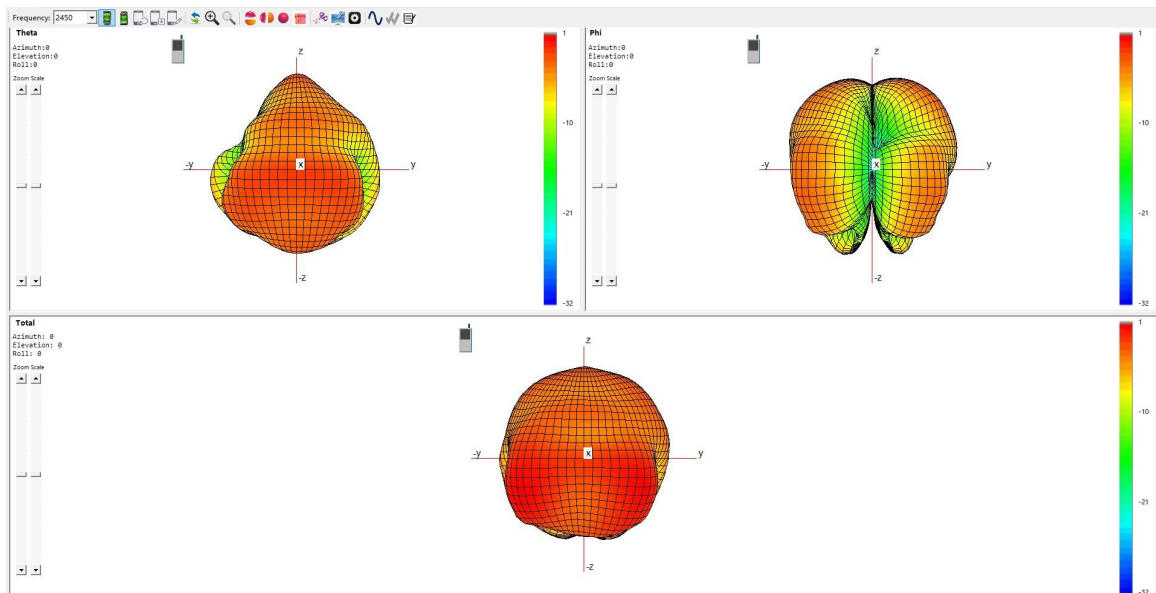
2、software testing

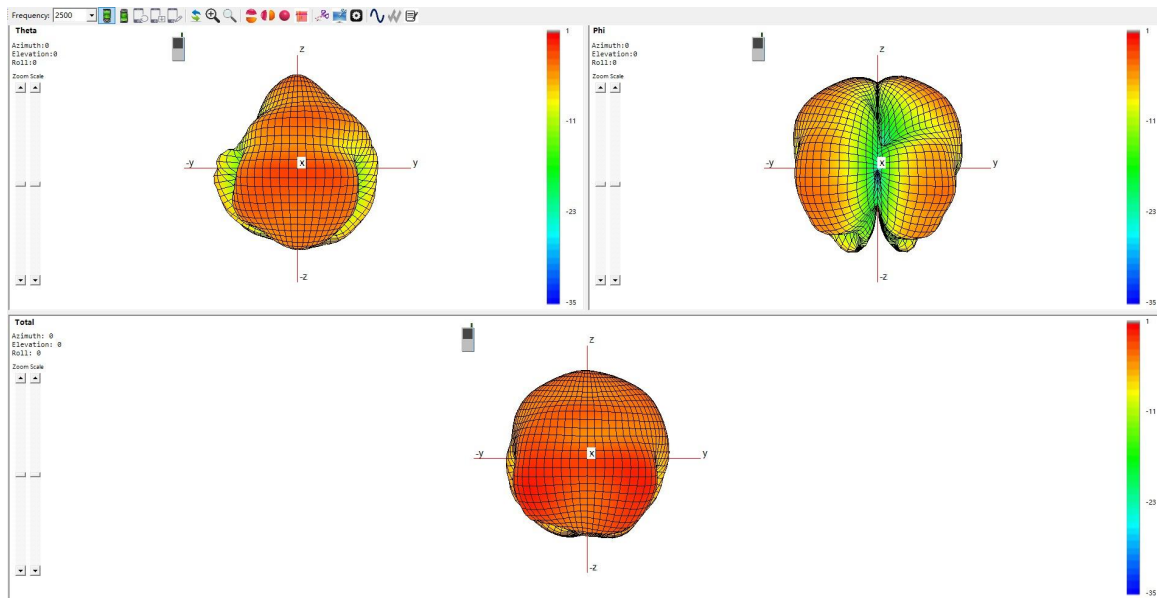# 3、data reading

3.1、Scan the antenna for 3D radiation
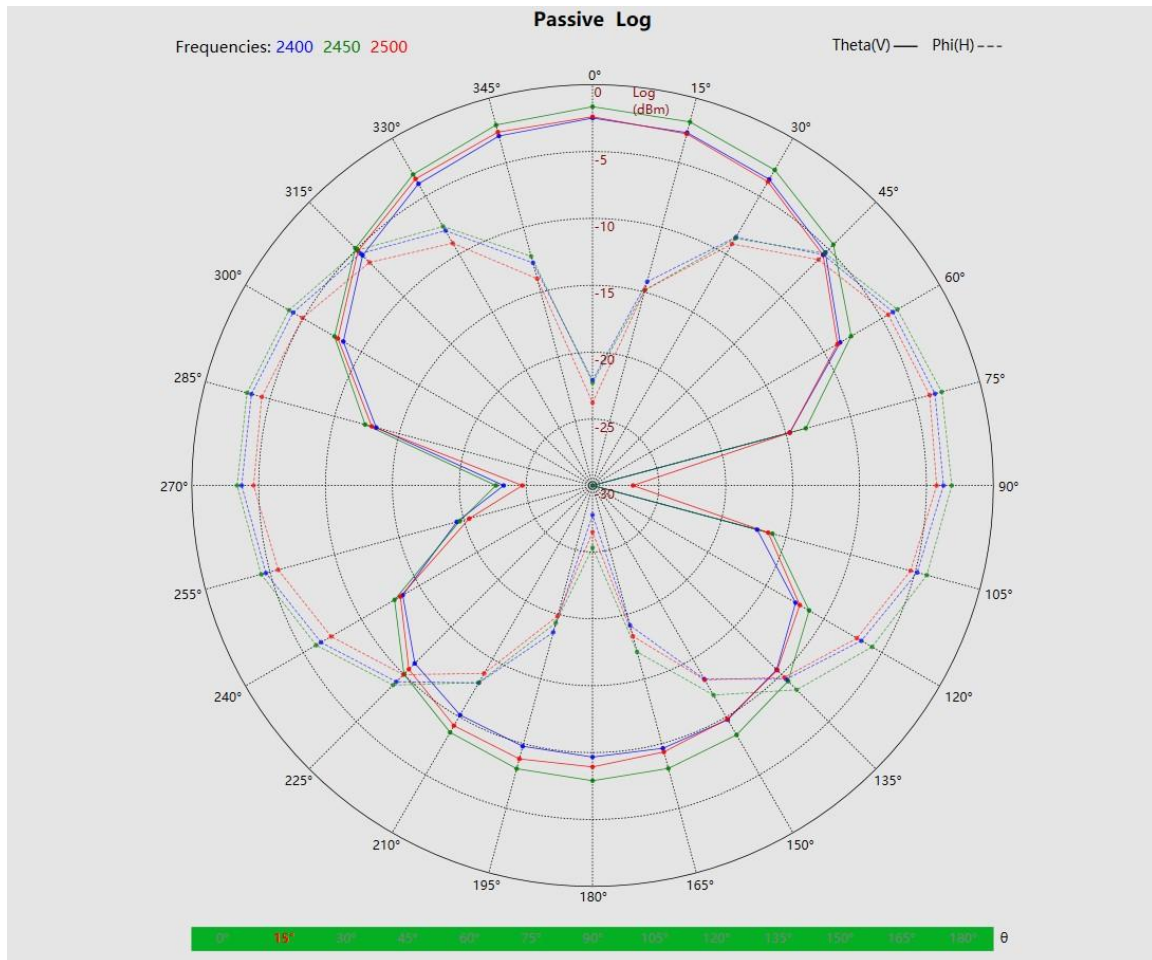
2400MHz：

2450MHz：

2500MHz

3.2、 Scan the 2D radiation pattern of the antenna

3.3、 Detailed scan output data results

Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	0.239	-5.084	31.017
2410	0.513	-4.703	33.861
2420	0.786	-4.347	36.755
2430	0.629	-4.476	35.676
2440	0.446	-4.630	34.435
2450	0.754	-4.290	37.242
2460	0.640	-4.383	36.447
2470	0.396	-4.665	34.159
2480	0.248	-4.783	33.242
2490	-0.067	-5.086	31.001
2500	0.055	-4.928	32.150

Summary

ITEM	ANT SPEC		
Model Name	2.4G ANT		
Antenna plate	PCB antenna		
Center Frequency	2400MHz	2450MHz	2500MHz
	0.24dBi	0.75dBi	0.06dBi
MAX. Gain	0.75dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture			