Antenna test

1、Hardware test
2、Software testing
3、Data read

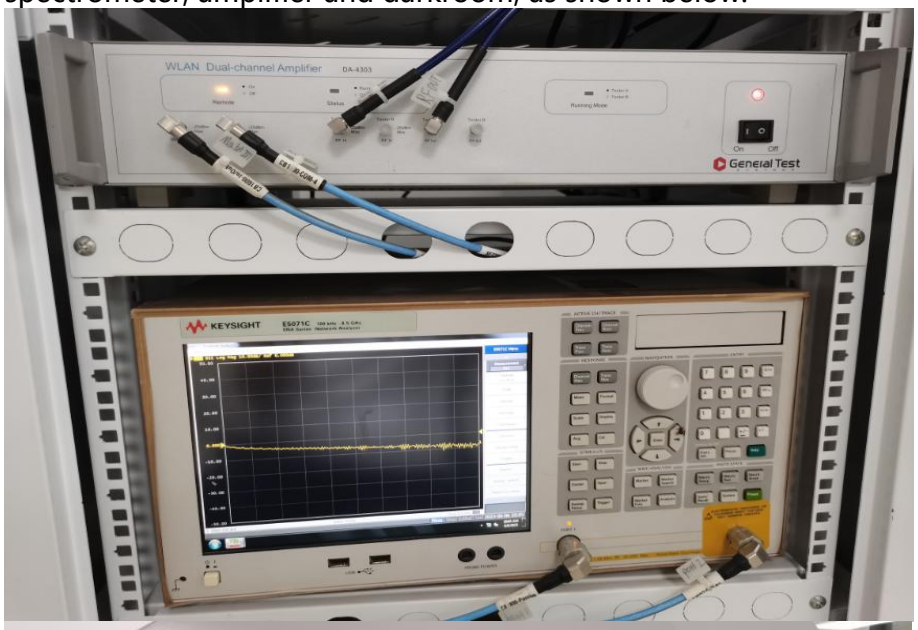
1、Hardware test

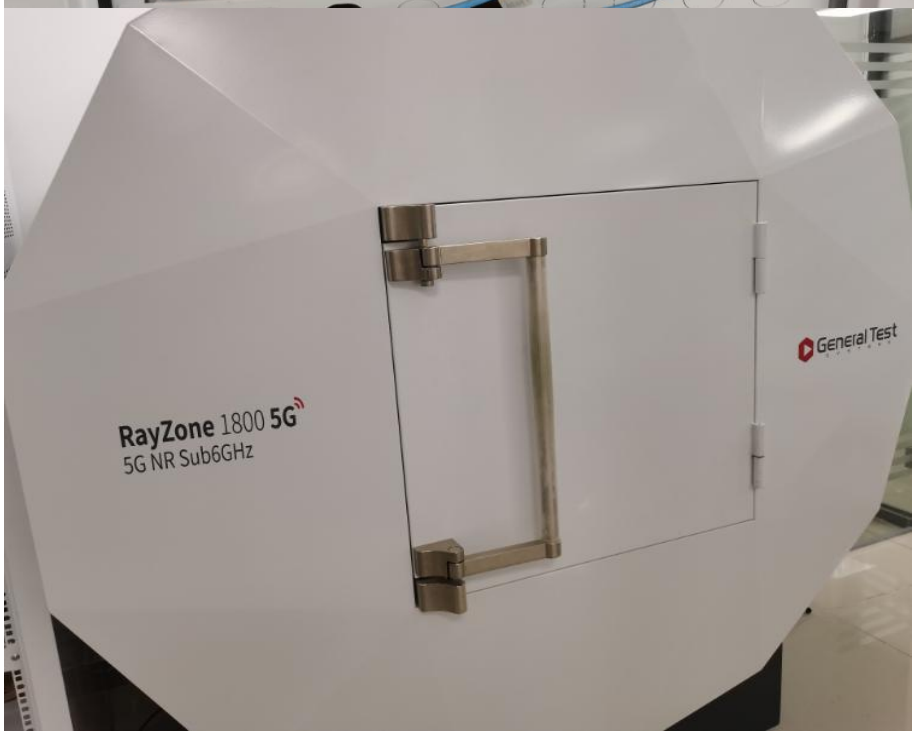
1.1 、PCBA bare board test

Solder the RF cable to the bare board and connect it to the OTA device.

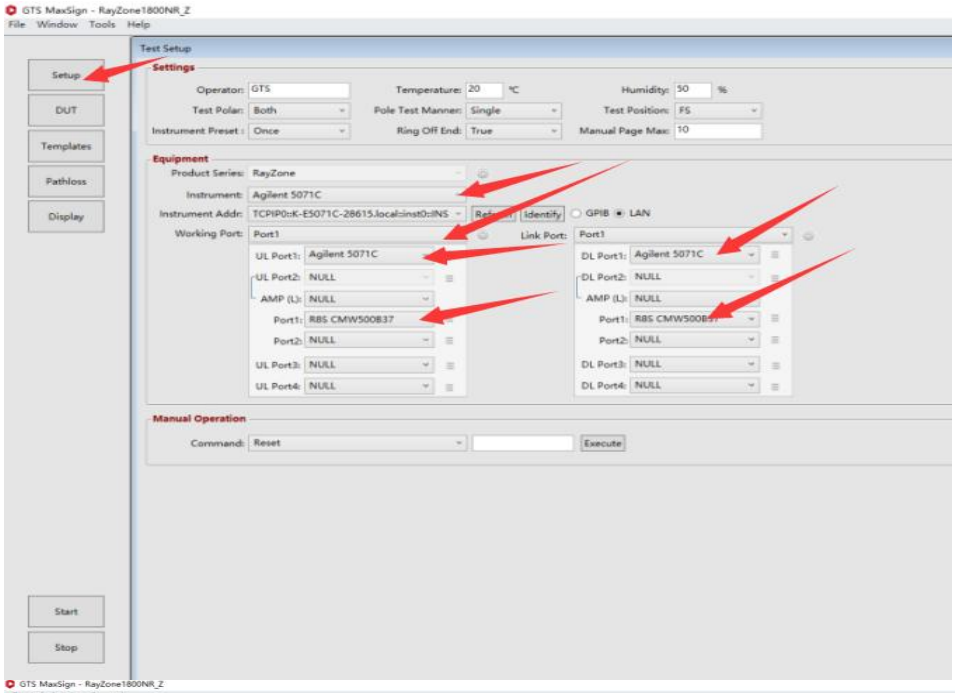
1.2 、Equipment environment

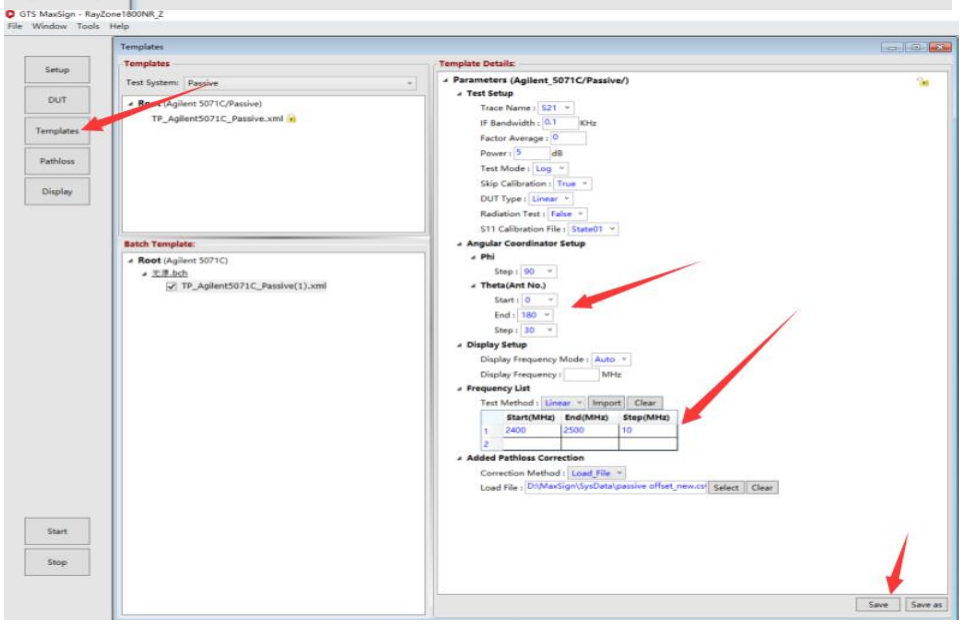
The equipment required for this test includes computer, spectrometer, amplifier and darkroom, as shown below:





2、Software testing

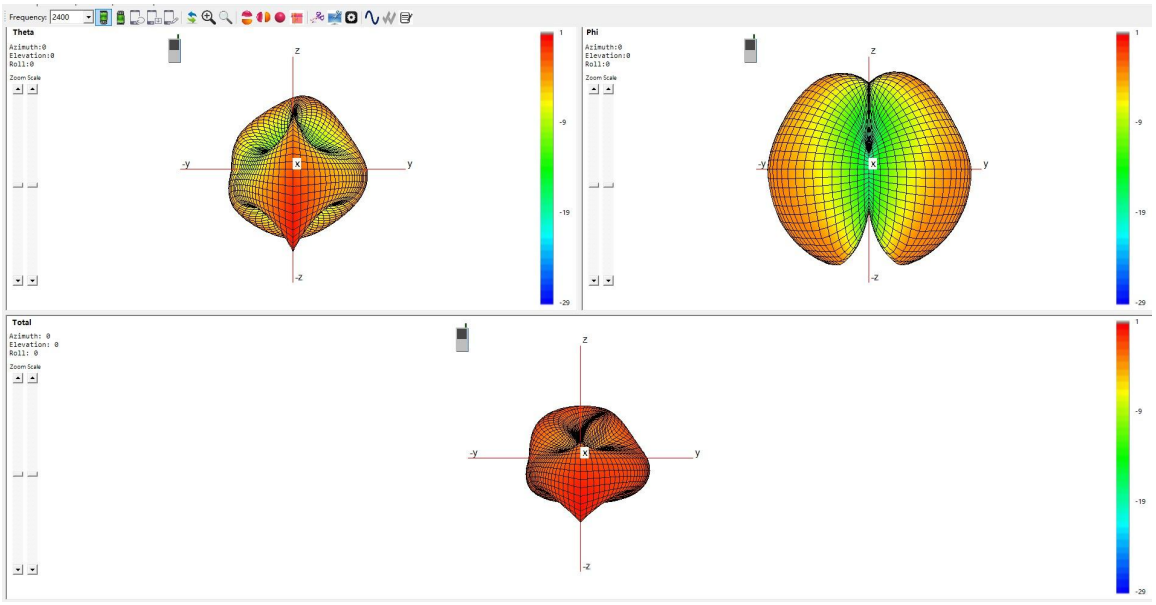




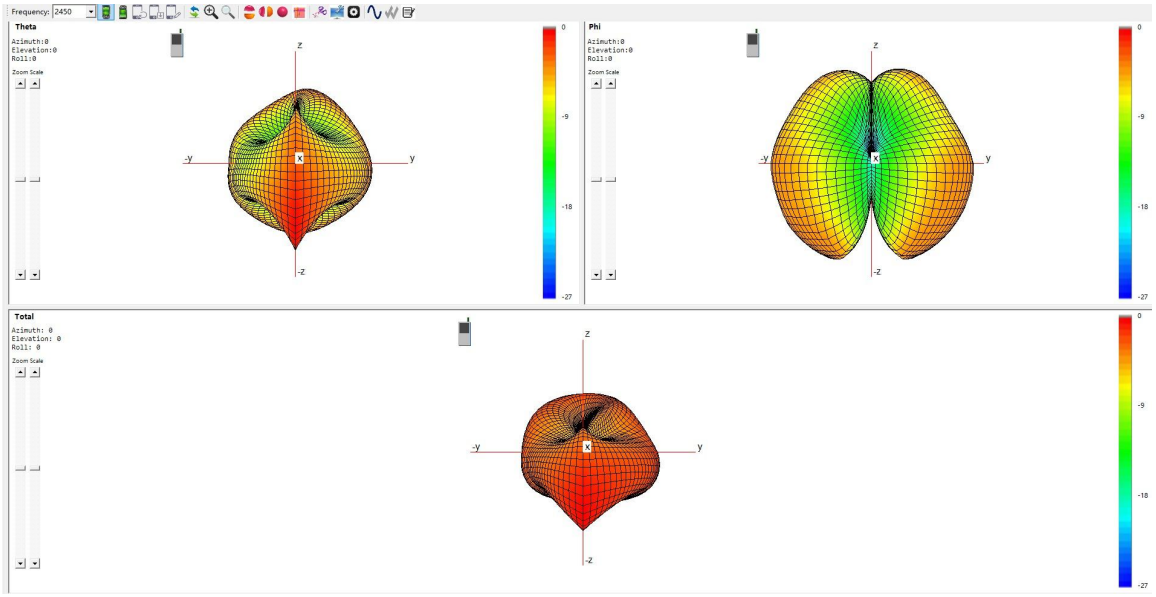
3、Data read

3.1、Scan the antenna for 3D radiation

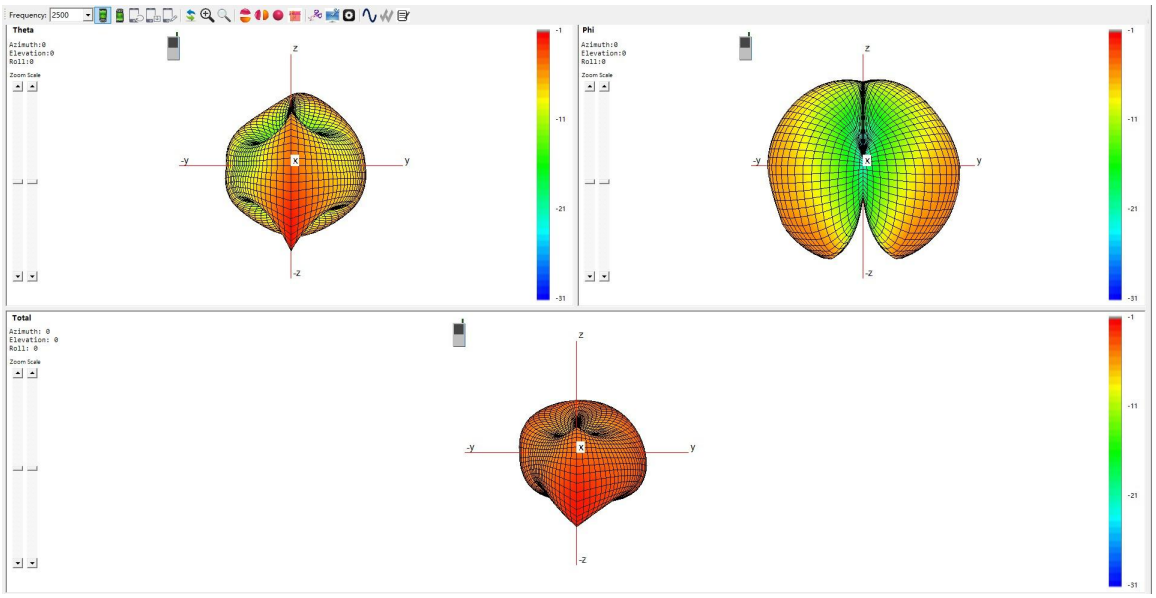
2400MHz：



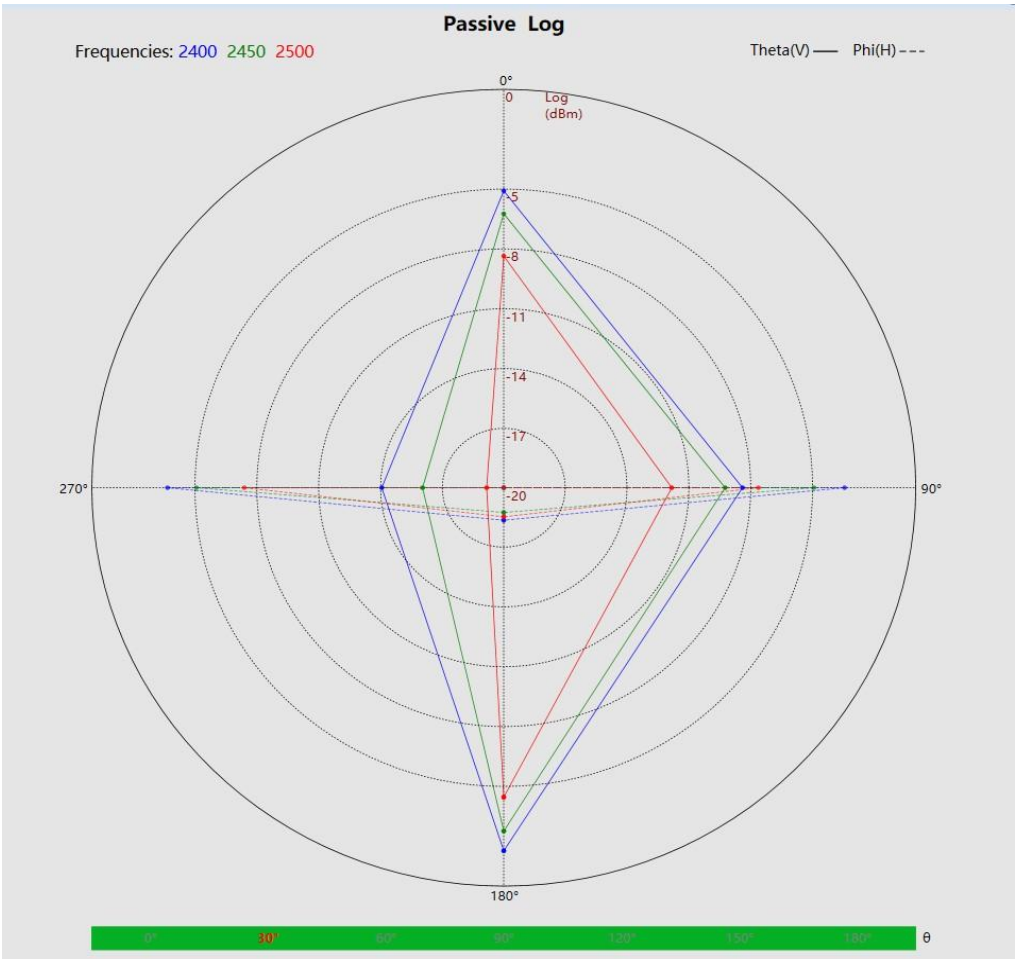
2450MHz：



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	0.669282488	-1.475507465	71.19496052
2410	0.828769362	-1.356724983	73.16906438
2420	0.78444832	-1.459679278	71.45490928
2430	0.090215032	-2.162885459	60.77310897
2440	-0.05590836	-2.32666539	58.52392715
2450	-0.03097585	-2.346307698	58.2598323
2460	-0.638251369	-2.943165613	50.77891753
2470	-1.057121671	-3.377168361	45.94975117
2480	-1.47726649	-3.790830412	41.77504811
2490	-1.796725361	-4.090947936	38.98568832
2500	-1.508369805	-3.818845701	41.50643467

Summary

ITEM	ANT SPEC		
Model Name	2.4G ANT		
Antenna plate	PCB antenna		
Center Frequency	2400MHz	2450MHz	2500MHz
	0.67dBi	-0.03dBi	-1.51dBi
MAX. Gain	0.83dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture			

AntennaPhoto&Length(mm)