

Antenna test

1. Hardware testing
2. Software testing
3. Data reading

1、Hardware testing

1.1 、PCBA Bare board test

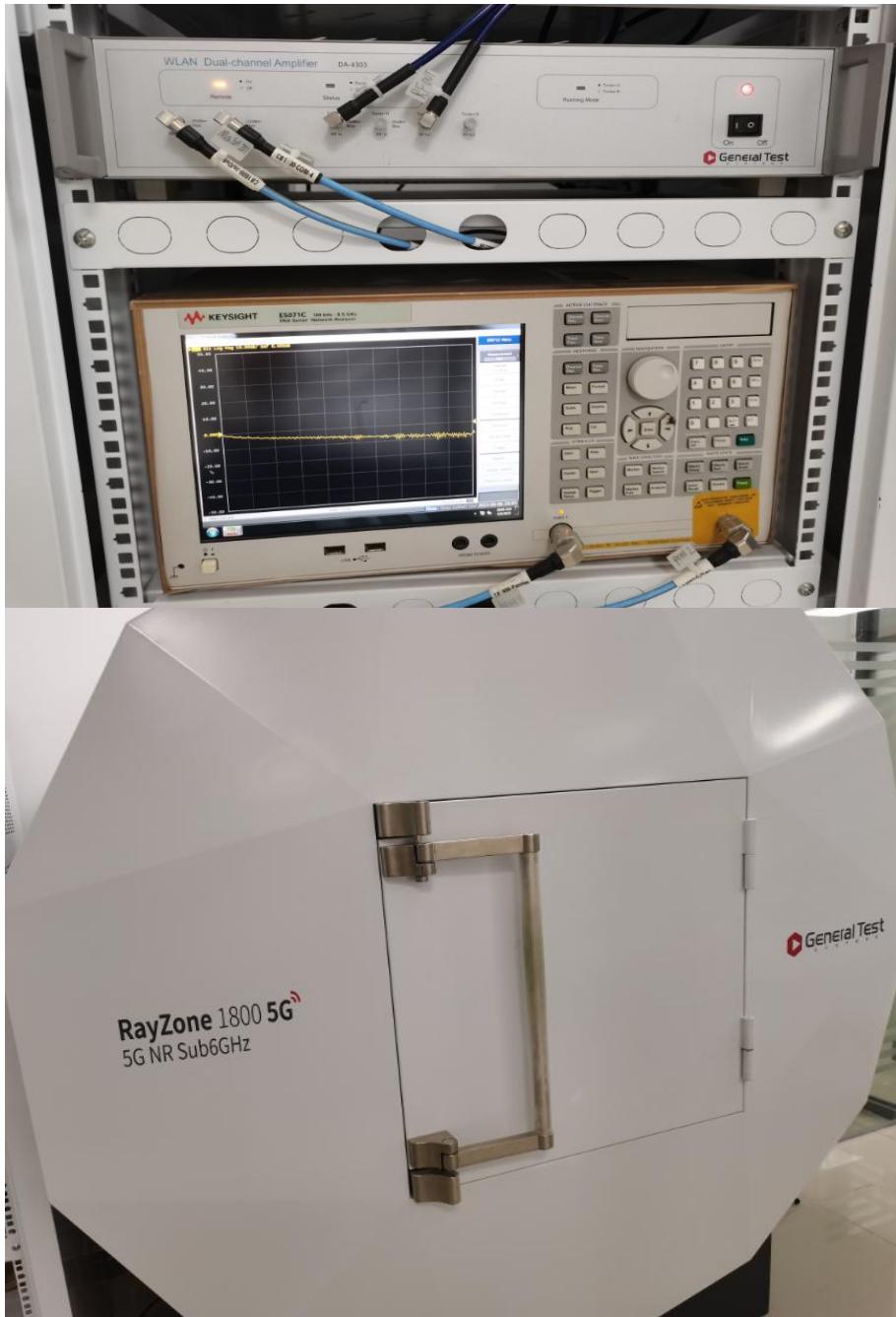
Solder the RF connection cable to the bare board, and then connect it to the OTA device.

The connection diagram of the RF connection line and the bare board is as shown in the following figure

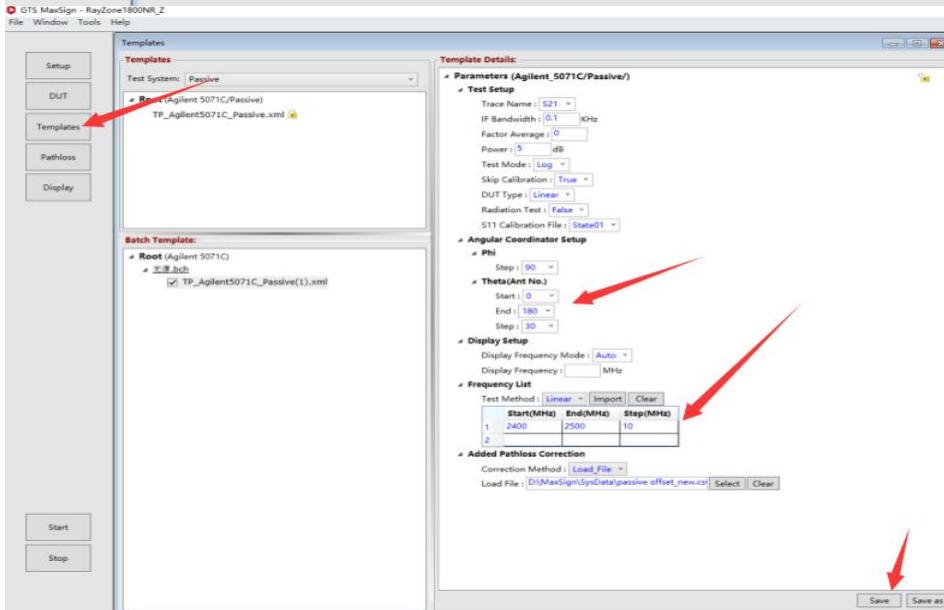
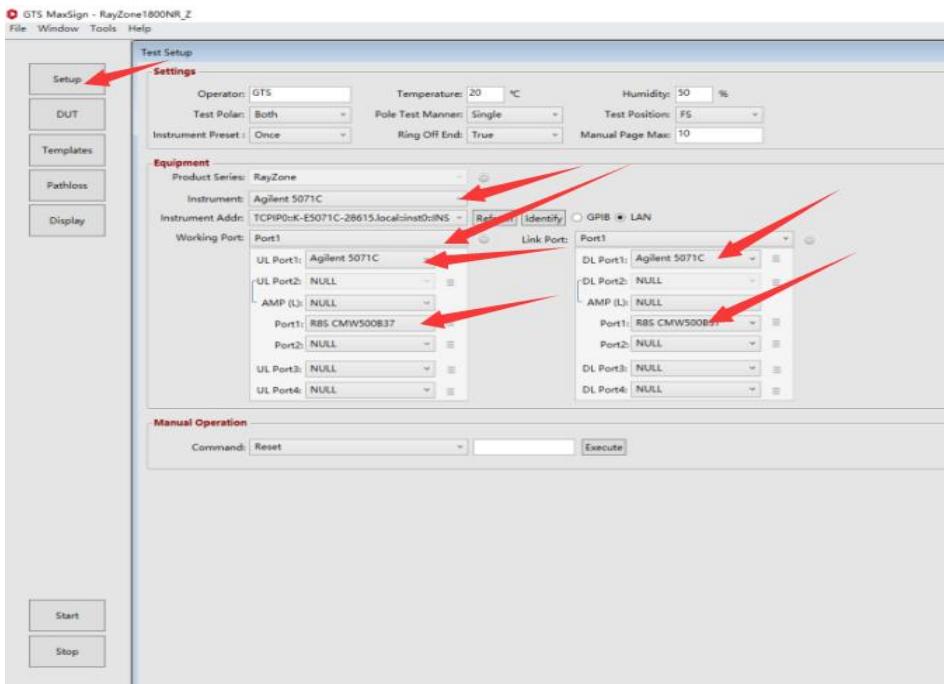


1.2 、 Equipment environment

The equipment required for this test includes a computer, a spectrum analyzer, an amplifier and a darkroom, as shown in the following figure:



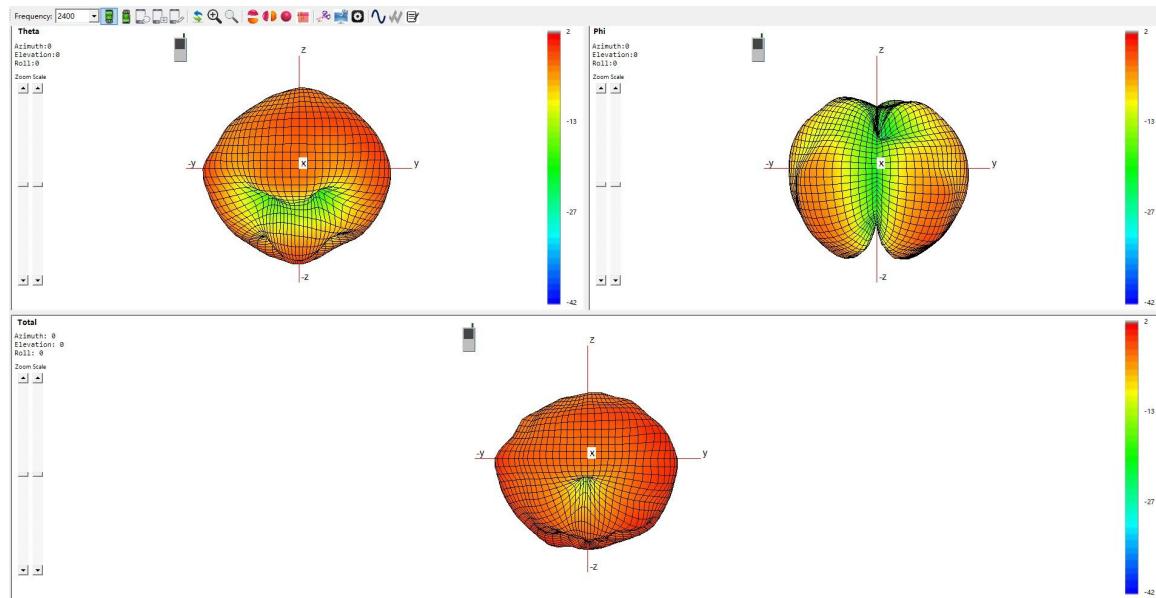
2、Software testing



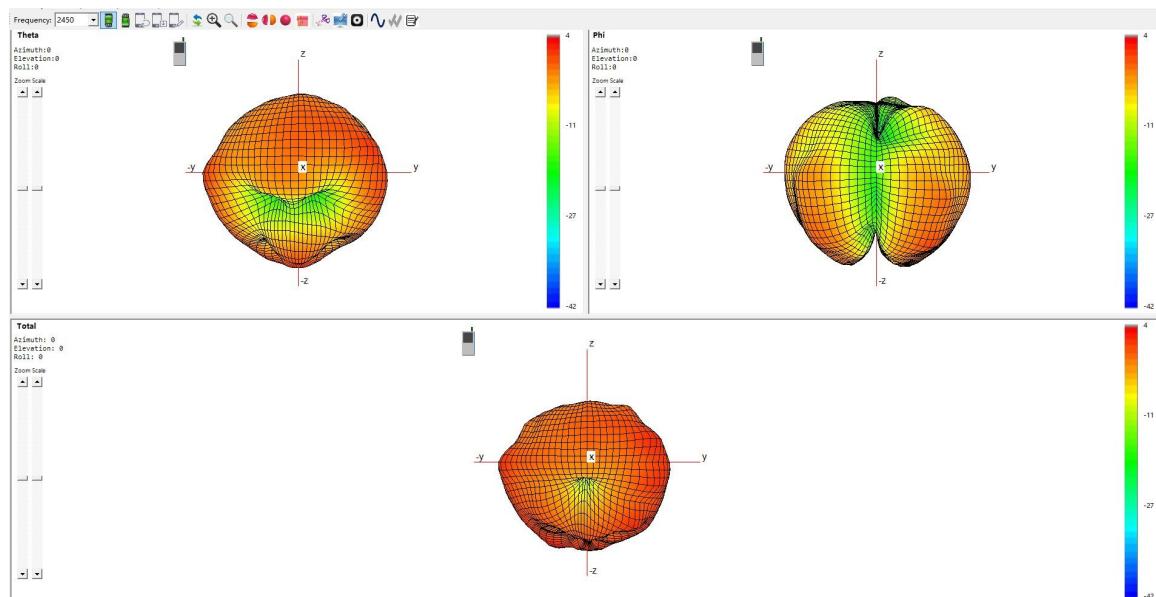
3、Data reading

3.1、Scan the 3D radiation map of the antenna

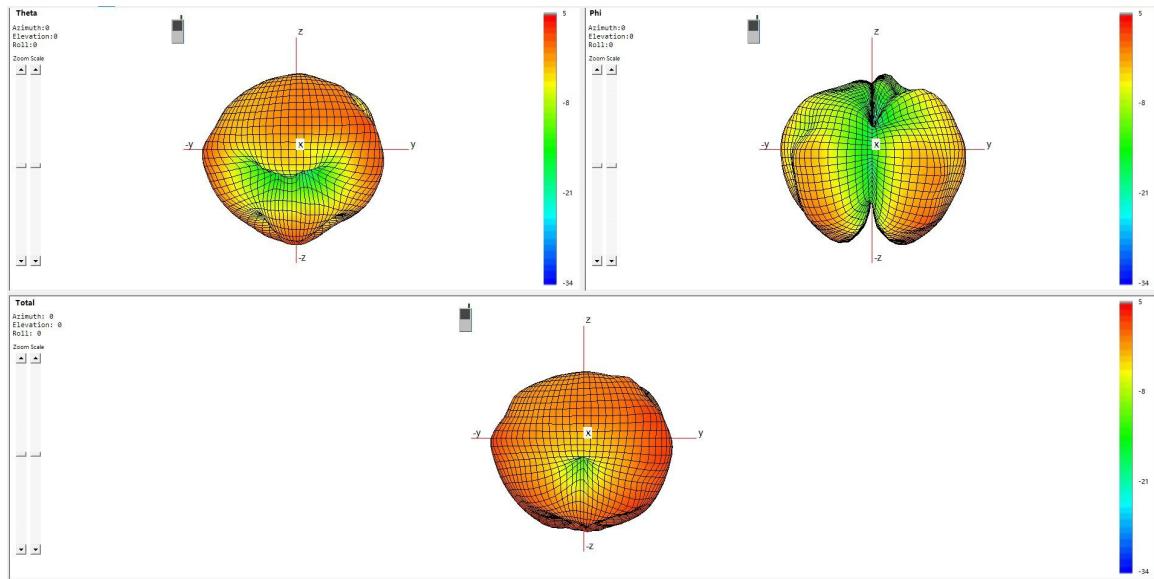
2400MHz:



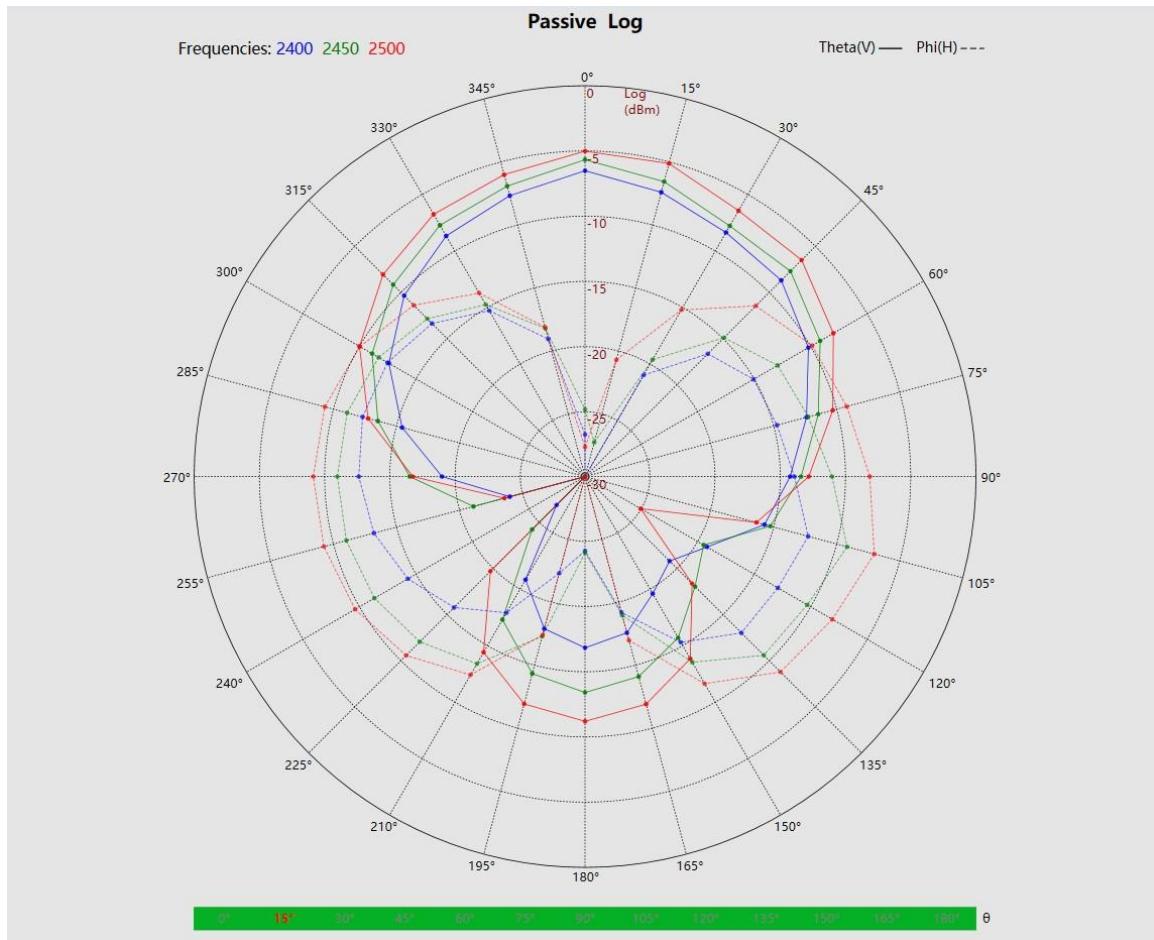
2450MHz:



2500MHz



3.2、Scan the 2D radiation pattern of the antenna



3.3、Detailed scanning output data results

Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	1. 79	-2. 27	59. 34
2410	2. 25	-1. 97	63. 60
2420	2. 65	-1. 66	68. 18
2430	3. 29	-1. 10	77. 65
2440	3. 57	-0. 86	82. 12
2450	3. 82	-0. 62	86. 76
2460	4. 26	-0. 16	96. 30
2470	4. 38	-0. 03	99. 41
2480	4. 60	0. 19	104. 53
2490	4. 73	0. 38	109. 18
2500	4. 68	0. 27	106. 50

Summary

ITEM	ANT SPEC		
Model Name	2.4G ANT		
Antenna plate	PCB antenna		
Center Frequency	2400MHz	2450MHz	2500MHz
	1.79dBi	3.82dBi	4.68dBi
MAX. Gain	4.73dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture			

AntennaPhoto&Length(mm)

