

Antenna Efficiency

1、 hardware test

2、 software test

3、 Data Reading

1、 hardware test

1.1 PCBA Bare Board Testing

Weld the RF connection cable to the bare board, then connect it to the OTA device. The connection diagram between the RF cable and the bare board is shown in Figure 1:

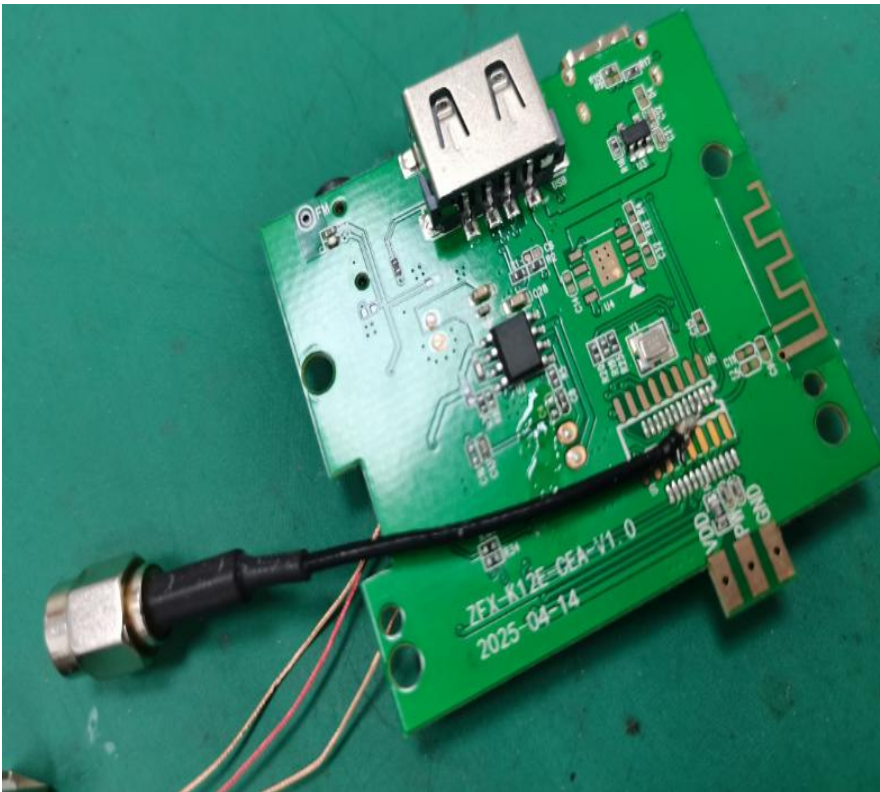
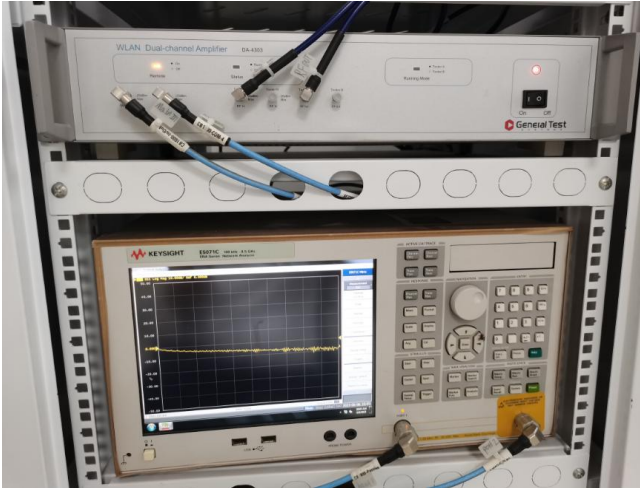


图 1

1.2 、 Facility Environment

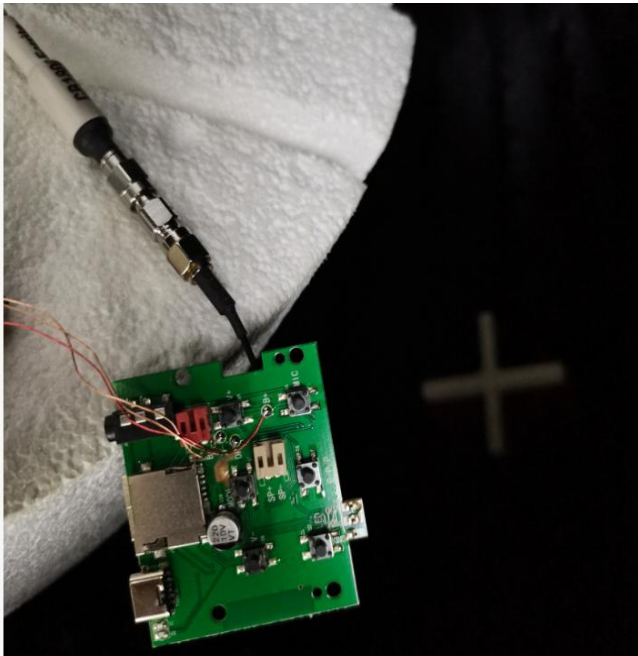
The equipment required for this test includes a computer, spectrum analyzer, amplifier, and darkroom. Connect them as shown in Figures 2, 3, and 4 below:



graph 2

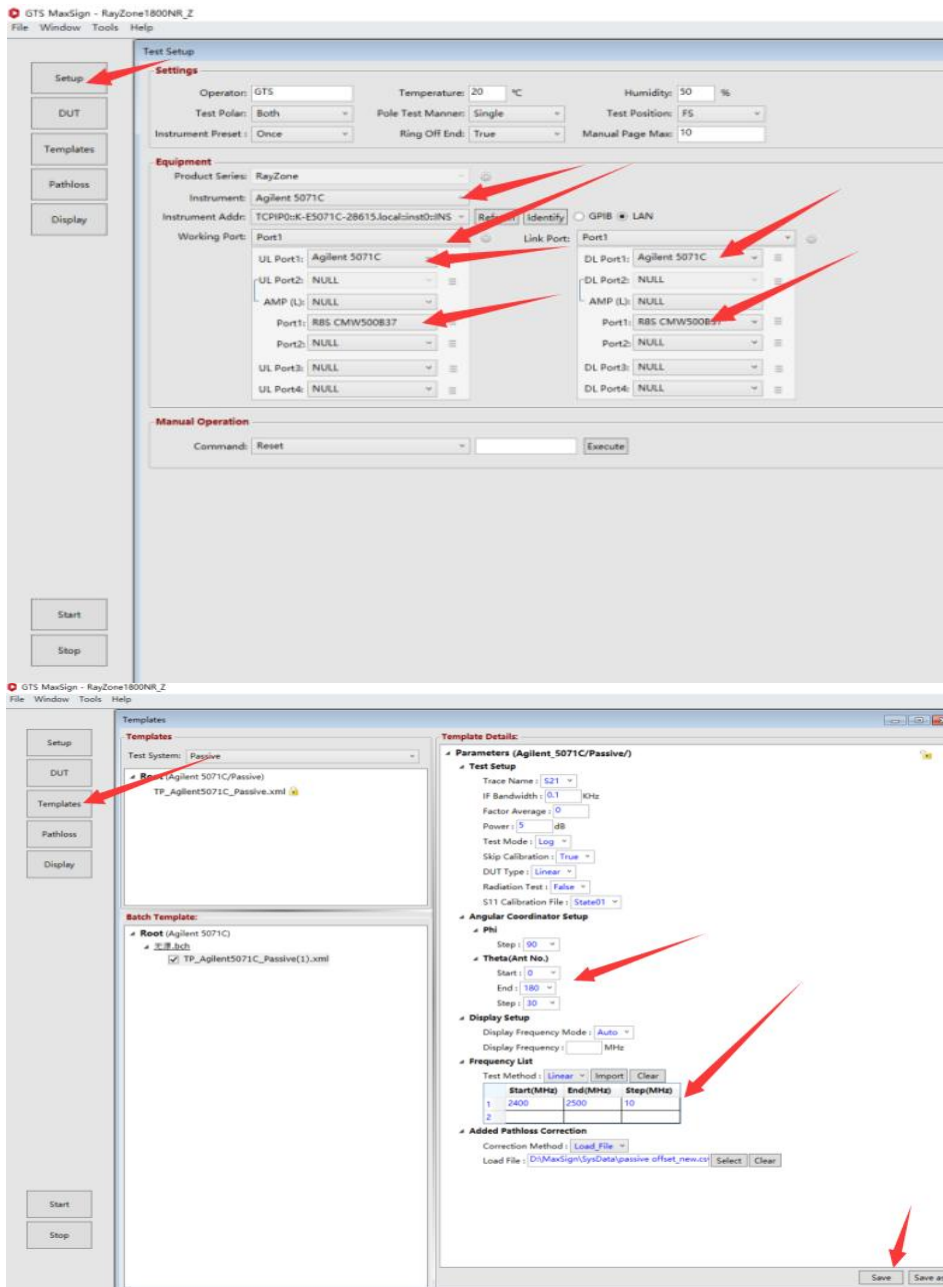


graph 3



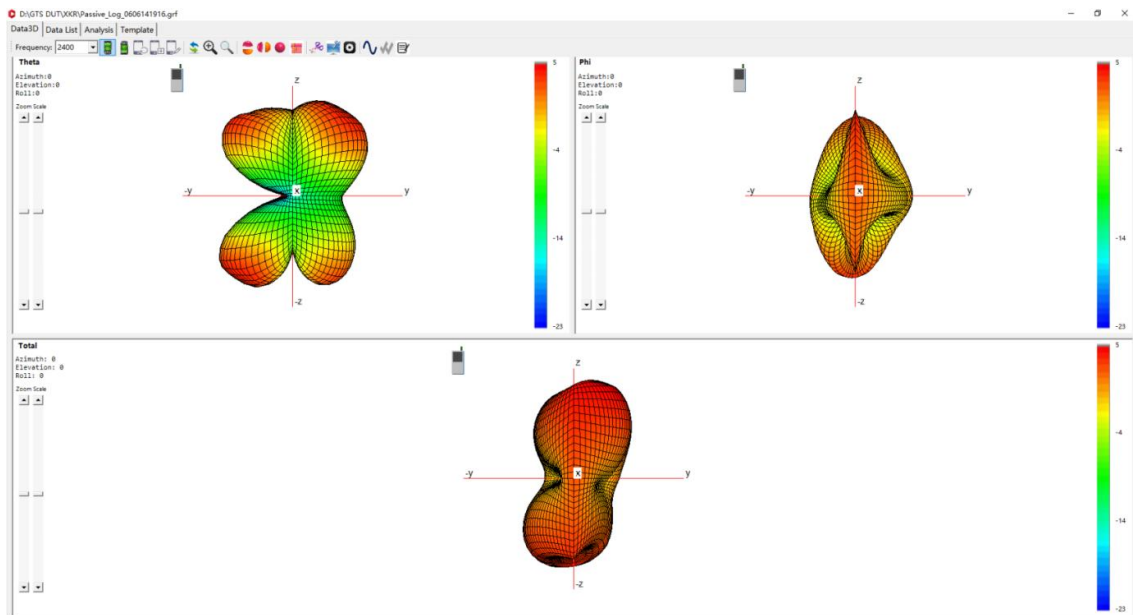
graph 4

2、 Software Test

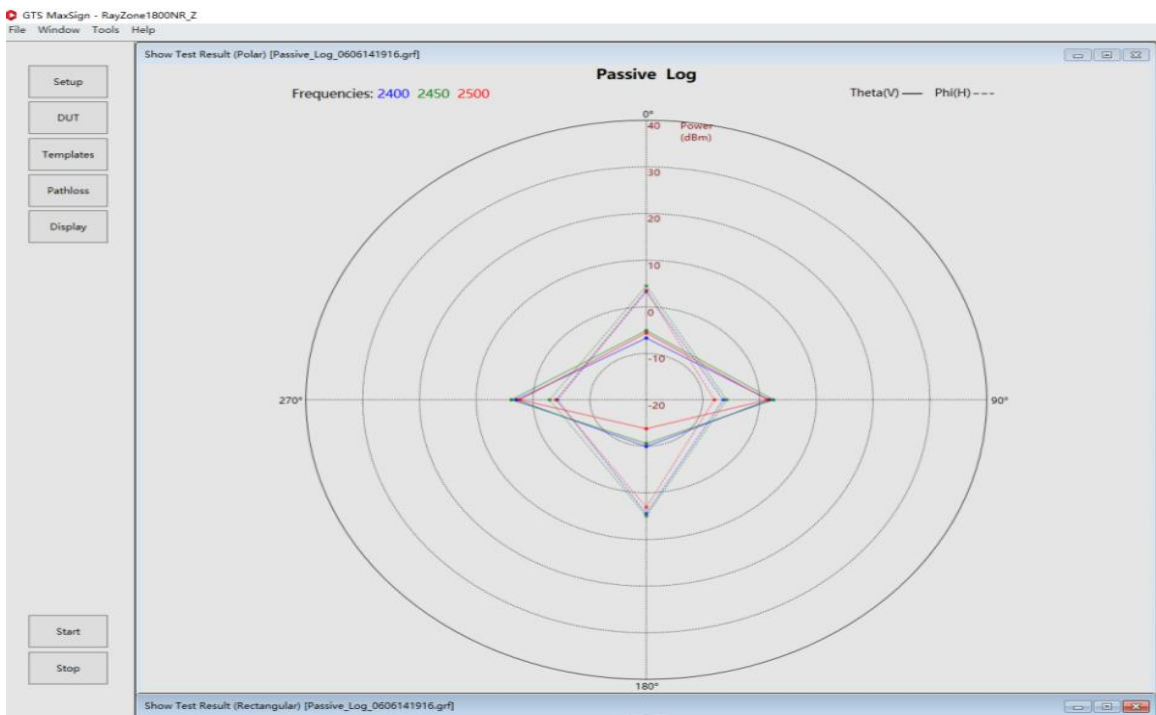


3、 Data Reading

3.1.3D Radiation Pattern of the Scanning Antenna



3.2.2D radiation pattern of the scanning antenna



3.3.Detailed Scan Output Data Results

Frequency (MHz)	Gain(dBi)			
	Horizontal		Vertical	
	MAX	MIN	MAX	MIN
2400	3.7	-22.5	4.4	-6.4
2450	5.0	-19.7	5.3	-5.8
2500	3.7	-19.2	3.7	-8.0