Antenna Test

1、 hardware test

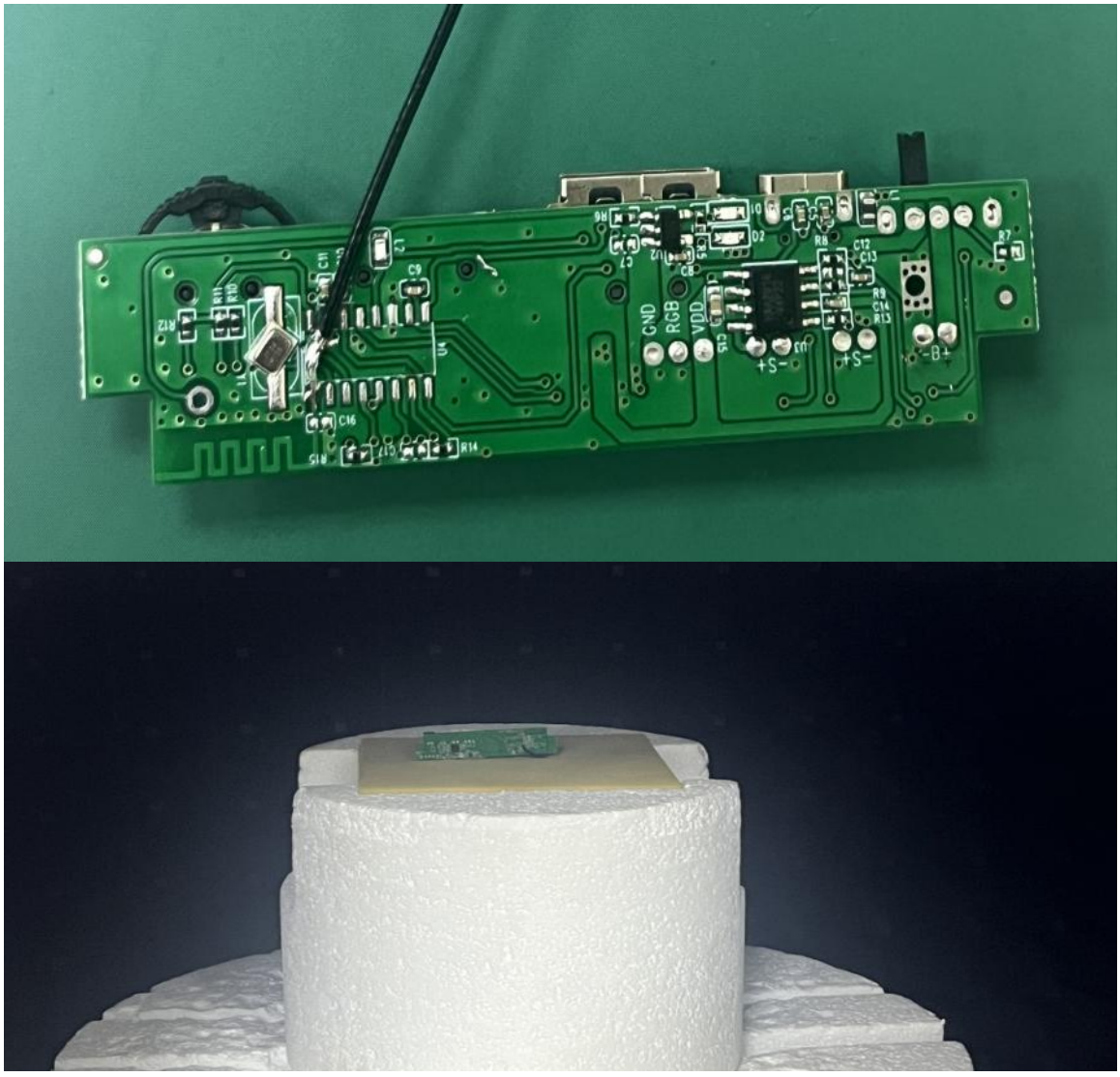
2、 software test

3、 data read

1、 hardware test

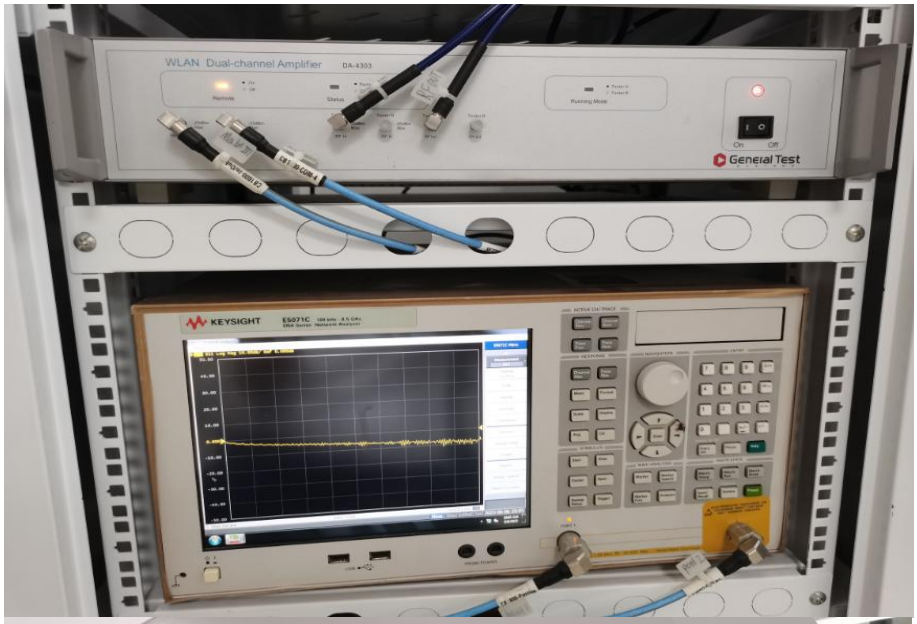
1.1. PCBA Bare Board Testing

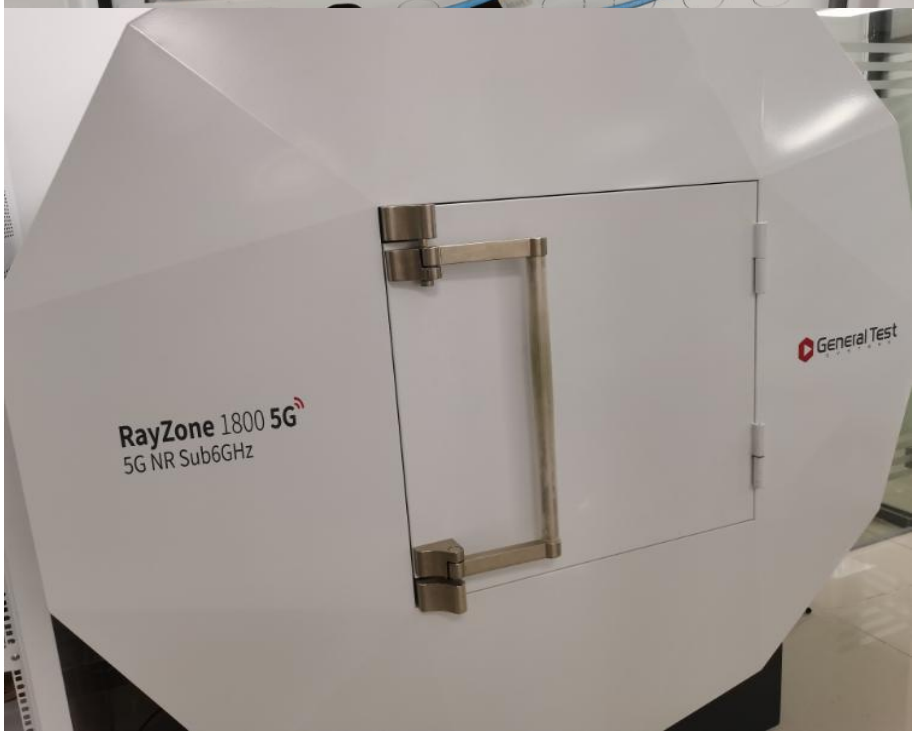
First, weld the RF cable to the bare board, then connect it to the OTA device. The connection diagram between the RF cable and the bare board is shown below:



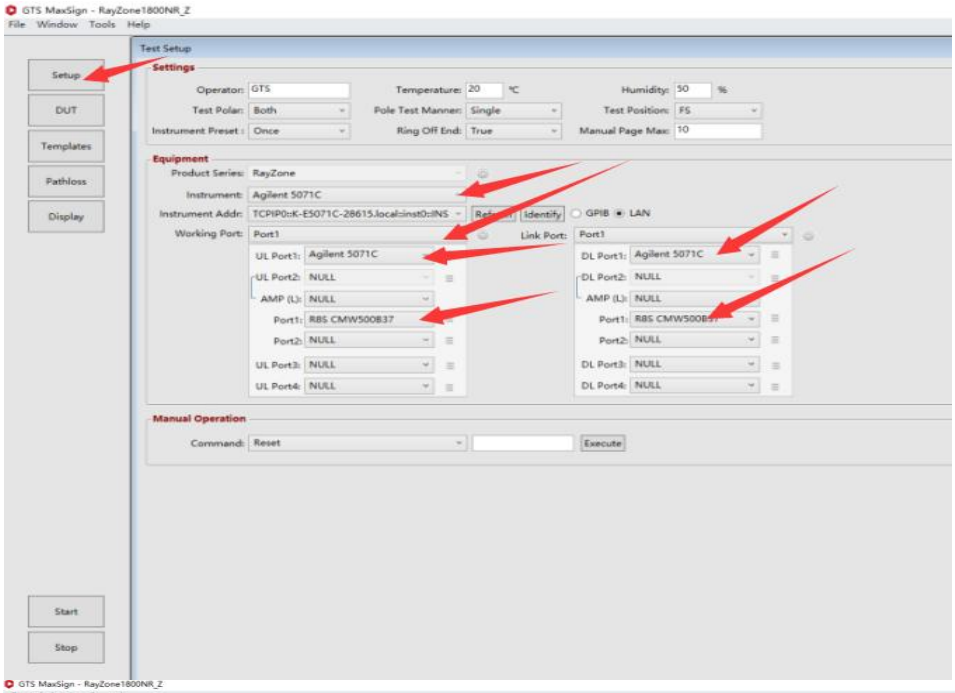
1.2 、 Facility Environment

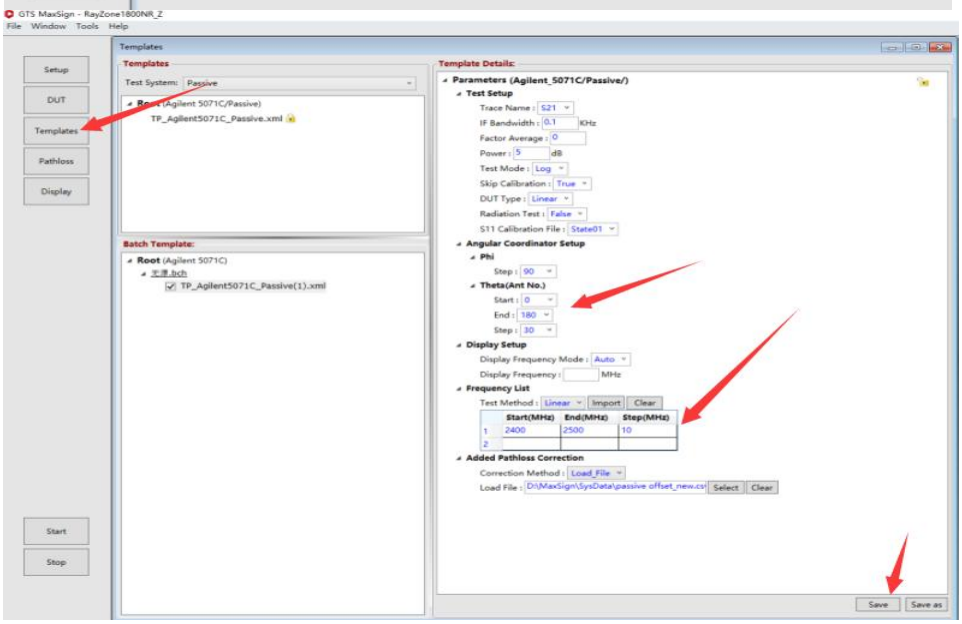
The equipment required for this test includes a computer, spectrum analyzer, amplifier, and darkroom, as shown in the figure below:





2、 Software Test

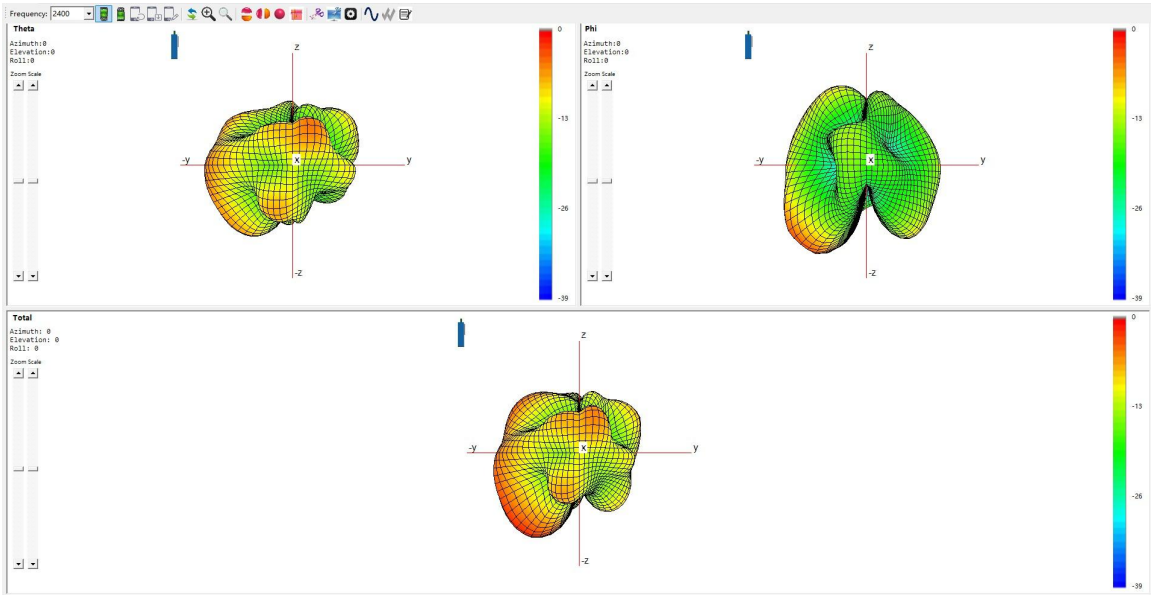




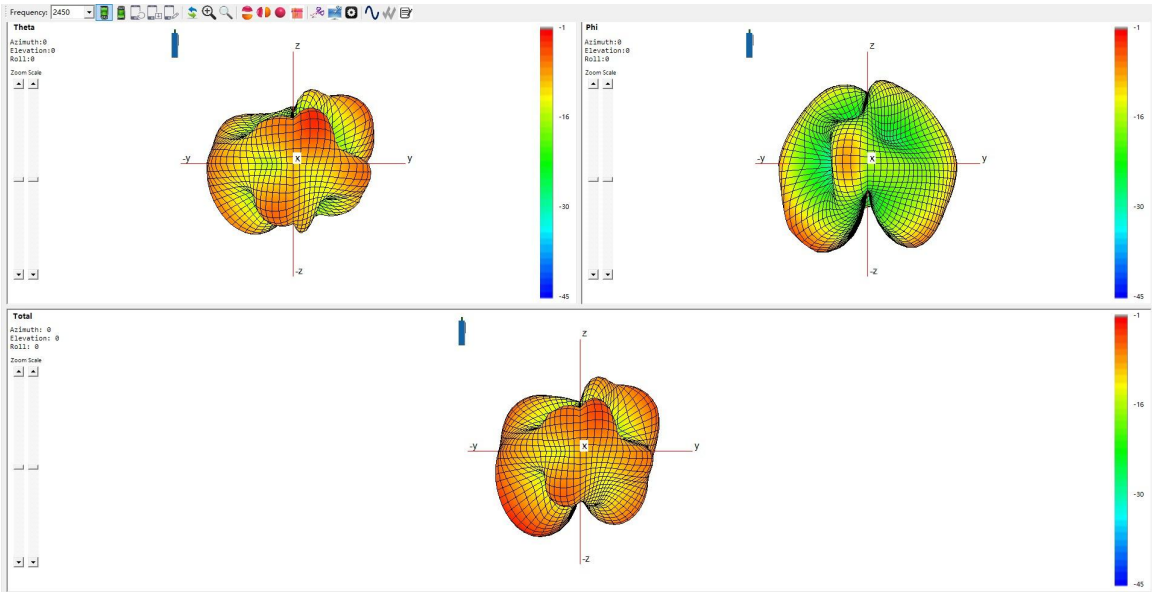
3、 Data Read

3.1. 3D radiation pattern of the

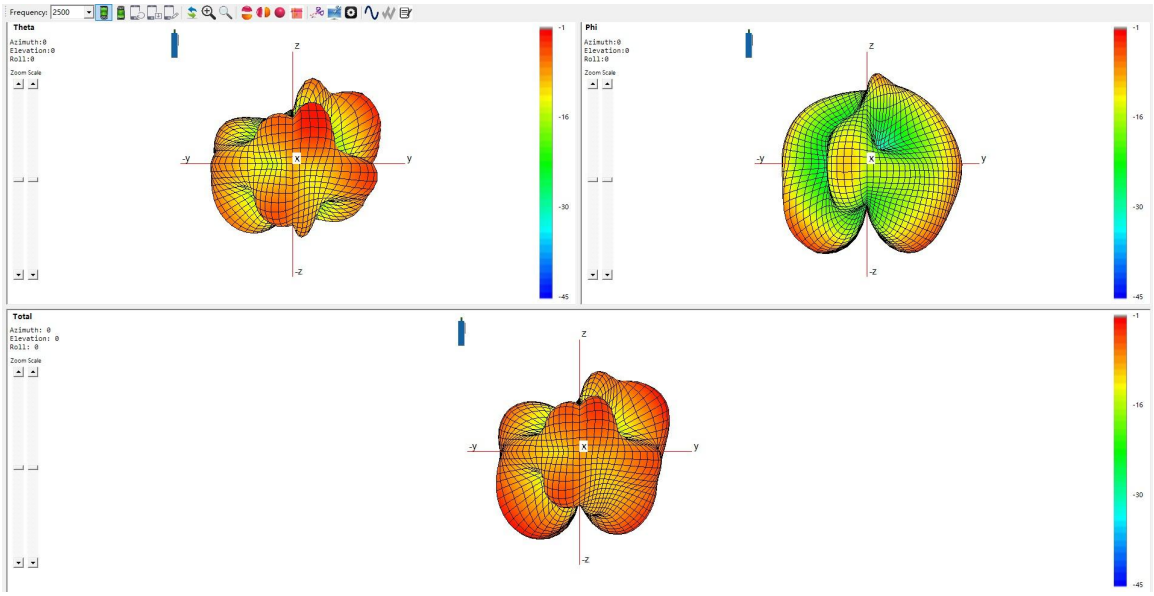
scanning antenna **2400MHz:**



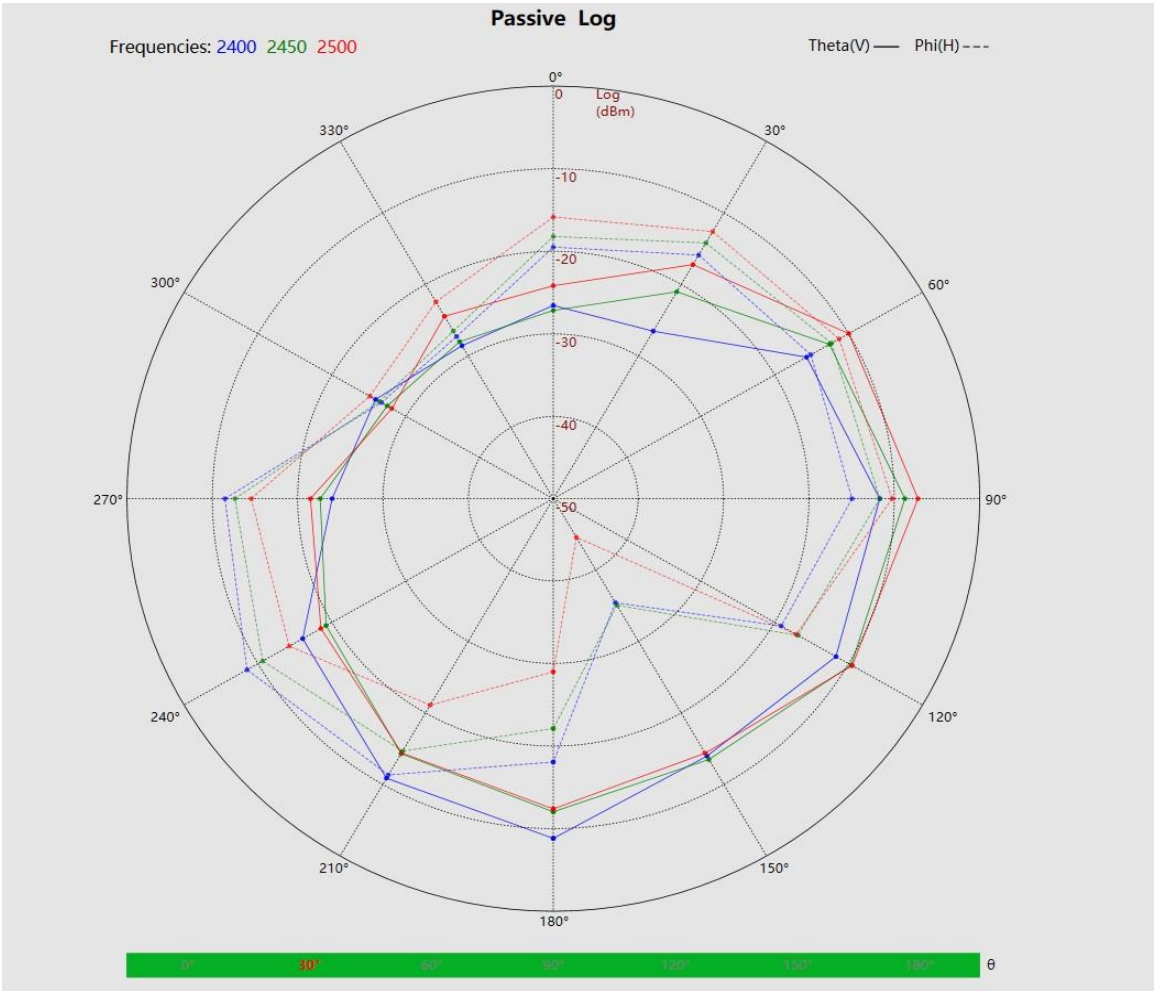
2450MHz：



2500MHz



3.2, 2D Radiation Pattern of Scanning Antenna



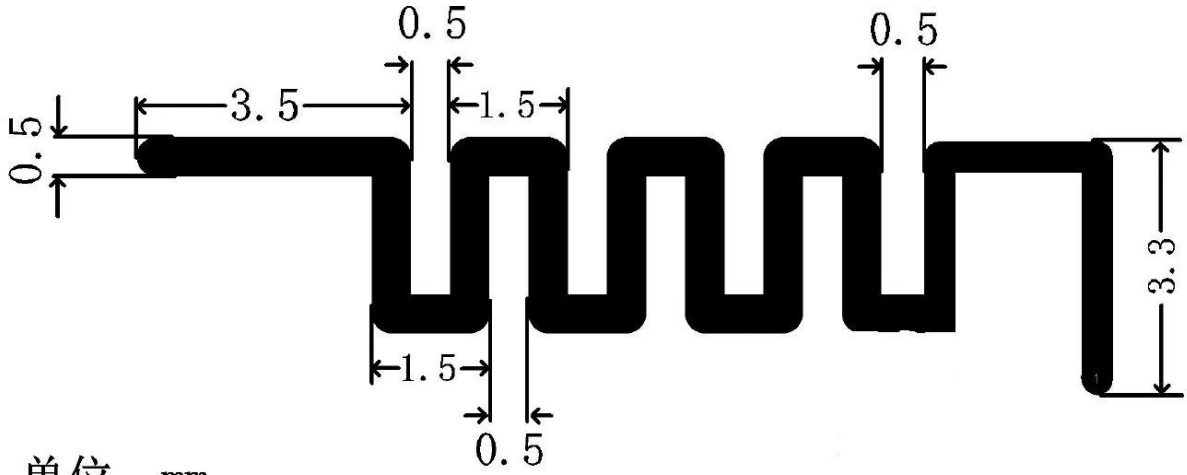
3.3, Detailed Scan Output Data Results

Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	-0.67	-7.55	17.58
2410	-0.84	-7.58	17.48
2420	-1.27	-7.73	16.87
2430	-1.71	-7.85	16.39
2440	-1.41	-7.56	17.52
2450	-1.40	-7.34	18.45
2460	-1.70	-7.23	18.93
2470	-1.79	-7.13	19.37
2480	-1.98	-6.98	20.06
2490	-1.79	-6.68	21.47
2500	-1.26	-6.26	23.65

Summary

ITEM	ANT SPEC		
Model Name	2.4G ANT		
Antenna plate	PCB antenna		
Center Frequency	2400MHz	2450MHz	2500MHz
	-0.67dBi	-1.4dBi	-1.26dBi
MAX. Gain	-0.67dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture	Shenzhen Bluetrum Technology Co., Ltd.		
Address:	13th Floor, Unit 1, Building A, Wisdom Plaza, No. 4068, Qiaoxiang Road, Gaofa Community, Shahe Sub-district, Nanshan District, Shenzhen City		

ANT size:



单位：mm