

Antenna testing

1, hardware test

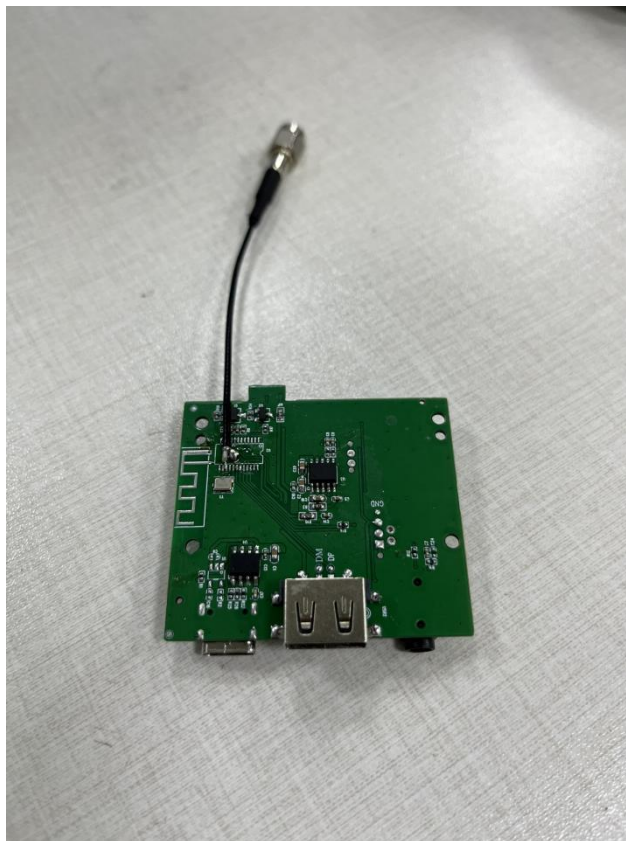
2, Software Test

3, Data Reading

1, Hardware Test

1.1 PCBA bare plate test

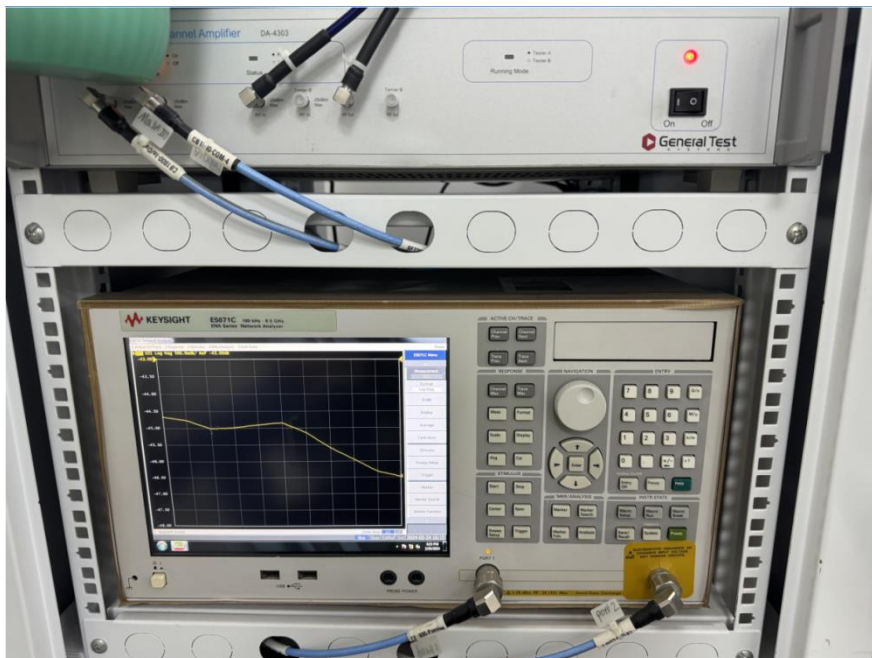
Solder the RF connecting wire to the bare board, then connect the assembly to the OTA device. The connection diagram of the RF connecting wire and the bare board is shown in the figure below.





1.2 Test Equipment and Environment

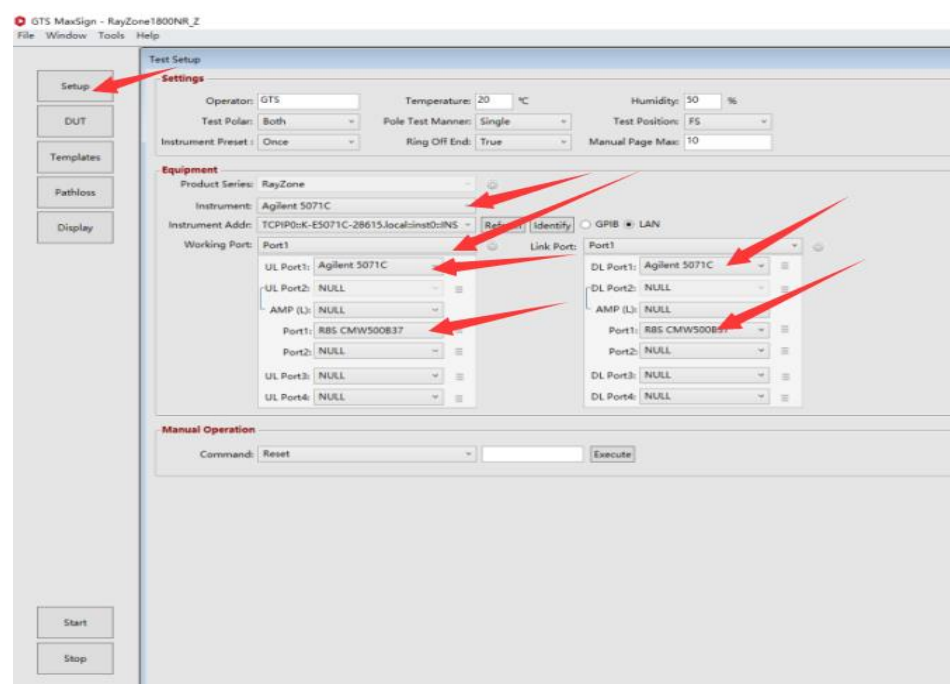
The equipment required for this test includes a computer, a spectrum analyzer, an amplifier and an anechoic chamber, as shown in the figures below.

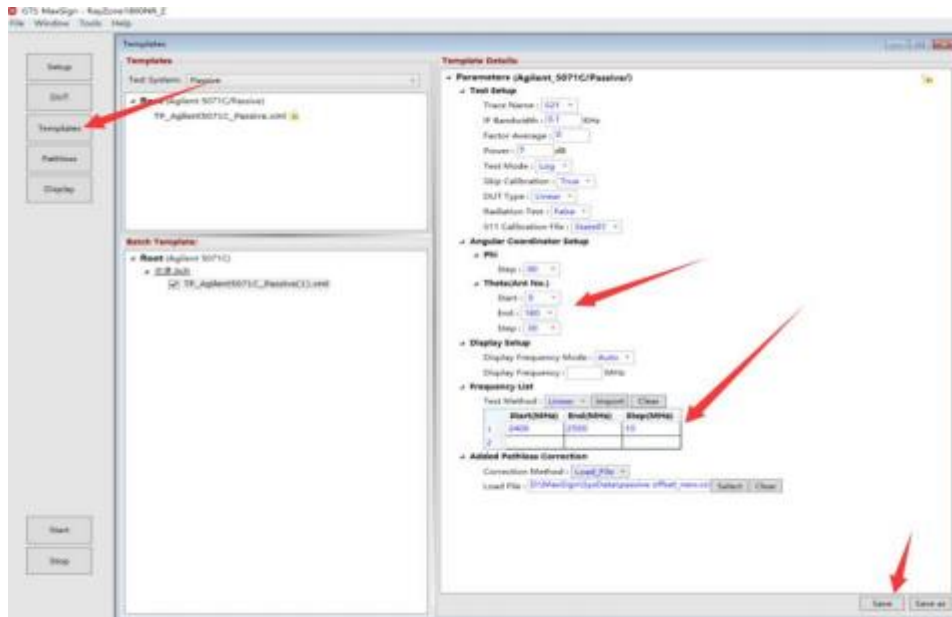




4, Software Test

1,

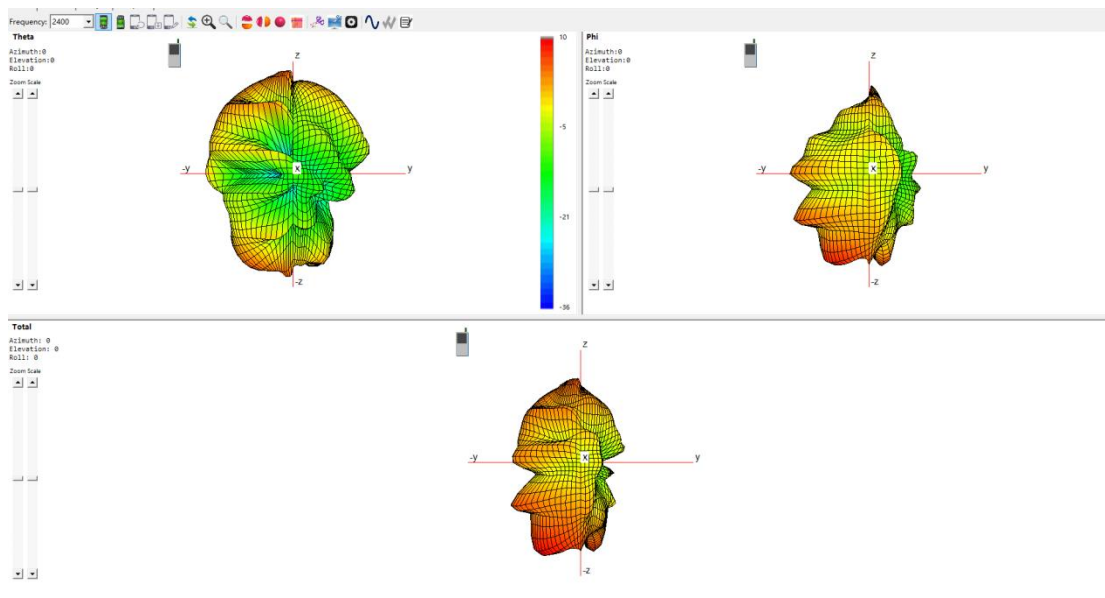




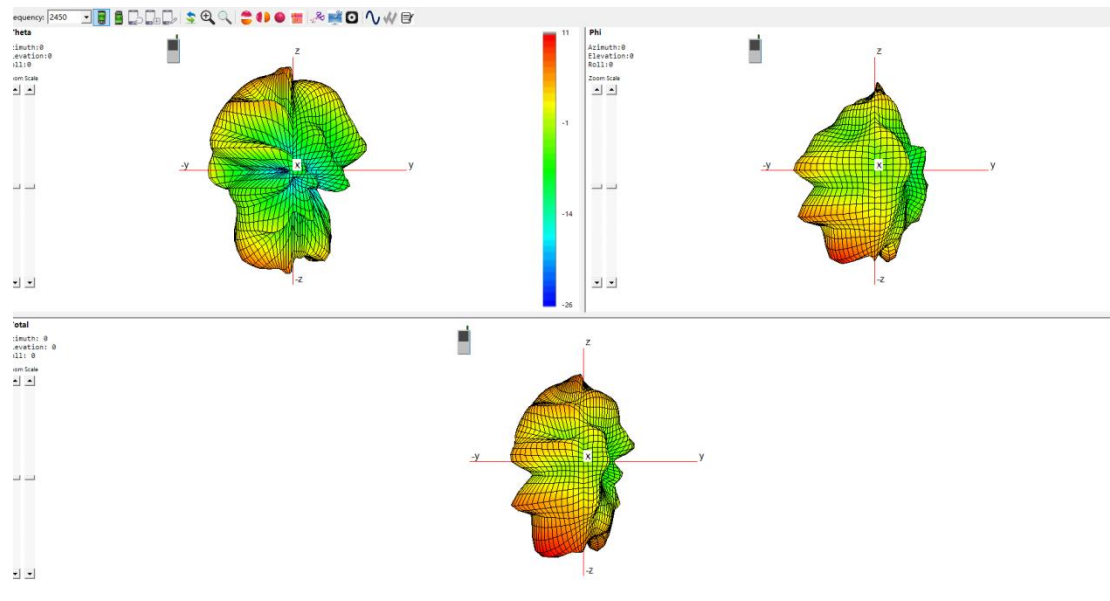
5, Data Reading

1.1, Scan the 3D radiation pattern of the antenna

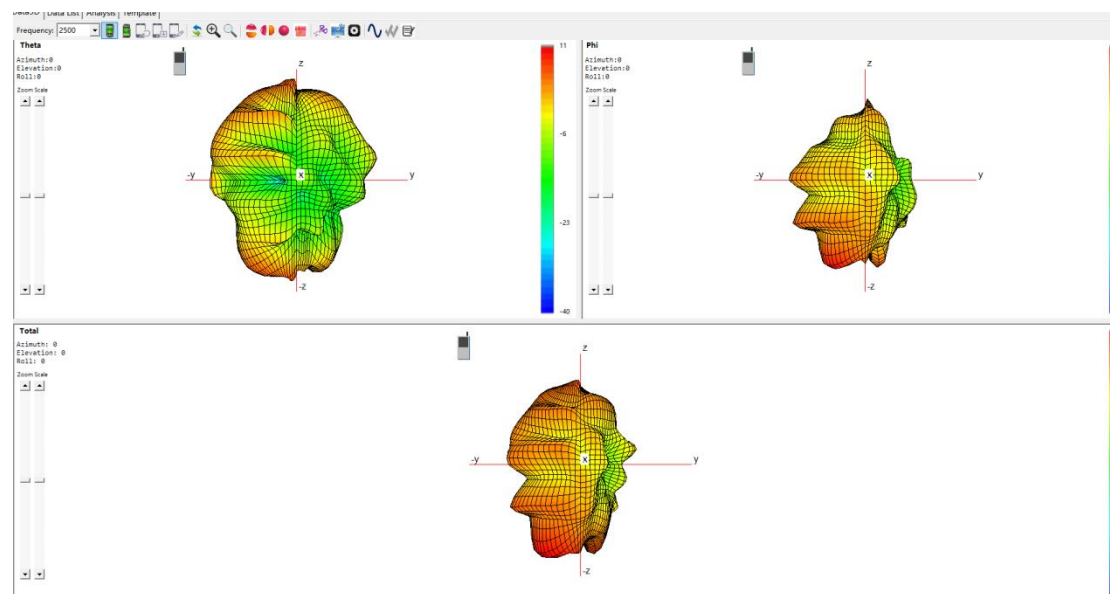
2400MHz:



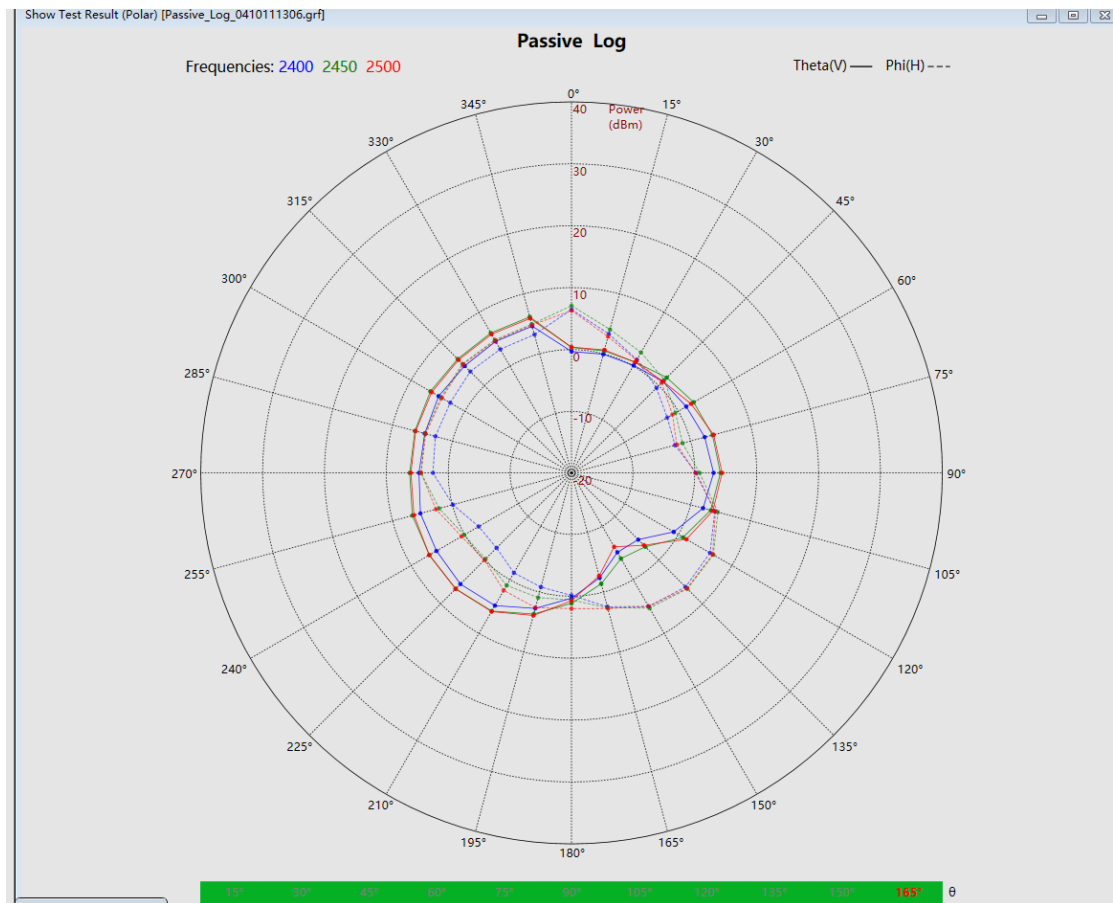
2450MHz:



2500MHz:



1.2, Scan the 2D radiation pattern of the antenna



1.3, Detailed Scanning Output Data Results

Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	1.68780662520884	0.794033387146613	120.061382165417
2410	2.0118389516155	1.18096359730949	131.249107761556
2420	2.4009849329741	1.57132406265487	143.592714734613
2430	2.5361105550862	1.68319878312963	147.339732930495
2440	2.5989948761988	1.68593708885818	147.43266260681
2450	2.9331328784454	1.99049316297015	158.142760803987
2460	2.9336854281553	2.00757643303747	158.766051228755
2470	2.7996135229011	1.82038045769657	152.068074103843
2480	2.804228454566	1.79181986007354	151.071306813431
2490	2.6239796482235	1.64115325655912	145.920169566323
2500	2.6986900197952	1.75439124848679	149.77492984879

ITEM	ANT SPEC
Model Name	2.4G ANT
Antenna plate	PCB antenna

Center Frequency	2400MHz	2450MHz	2500MHz
	1.68dBi	2.93dBi	2.69dBi
MAX.Gain	2.93dBi		
Polarization	Horizontal and Vertical		
Impedance	50Ohm		
Manufacture	Hua Sheng Jie		
address, location, localization, site	718, Block A, Huafeng Internet Creative Park, No.107 Gonghe Industrial Road, Gongle Community, Xixiang Street, Bao'an District, Shenzhen City, Guangdong Province		

AntennaPhouo&Length(mm)

