

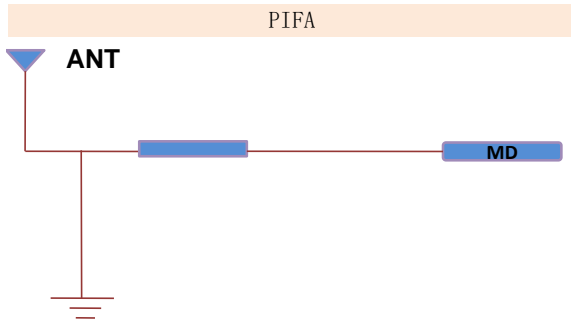


MR014G Antenna Test Report V4

Description:

- * Carry out test of customer provided antenna sample
- * This report shows test data
- * This report do not provide conclusions

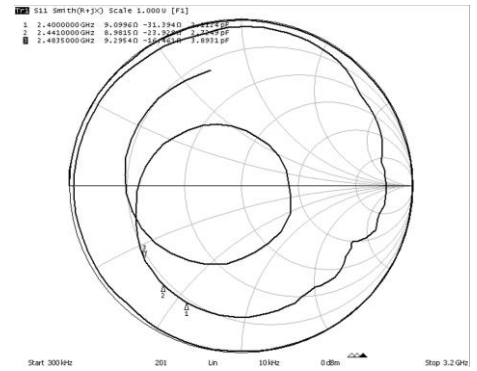
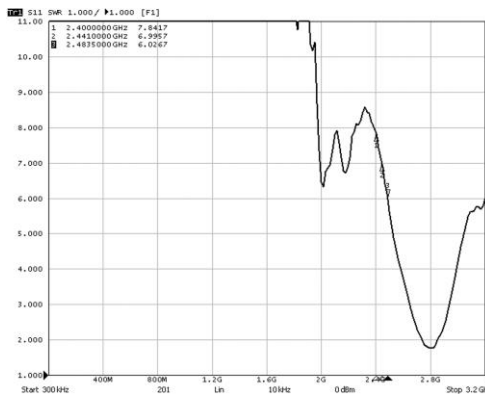
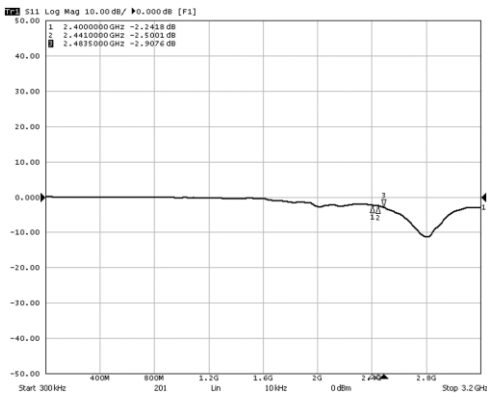
Antenna matching wiring



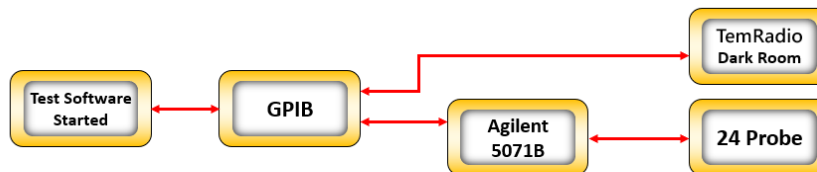
PIFA	
Antenna matching circuit	
E1-(0402)	None
E2-(0402)	None
E3-(0402)	None

Antenna Passsive test data (Free space) Return Loss

Antenna sample :MR-014G



Test Procedure:

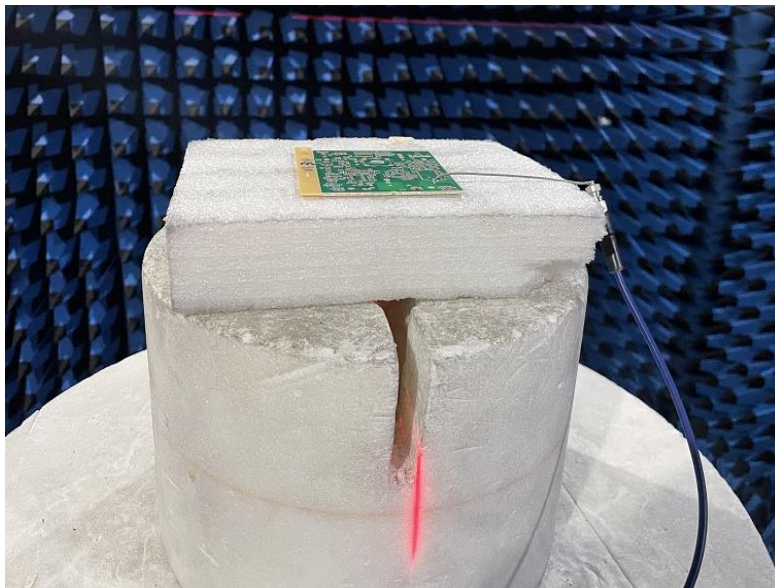


1. TemRadio turn on the Test Software, Name: XH-IOE Active Suite, Version No.: V 3.5.05;
2. XH-IOE Active Suite via GPIB (General Purpose Interface Bus) to control the shielding room (darkroom)'s TemRadio;
3. Meanwhile, GPIB control the Agilent 5071B to read the Antenna data by 24 Probe;
4. Agilent 5071B will analysis the data and generate the result;
5. Agilent 5071B will feedback to XH-IOE Active Suite to generate the test report.

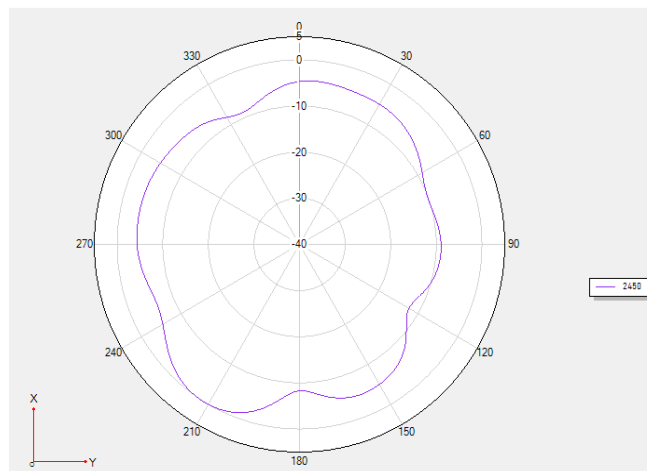
Antenna Efficiency Test

BT			
Frequency / MHz	Efficiency / dB	Efficiency / %	Gain / dBi
2400	-5.02	29.41	0.15
2410	-5.19	28.42	0.17
2430	-5.23	28.01	0.23
2450	-5.11	27.98	0.36
2460	-5.06	28.46	0.32
2470	-5.08	28.13	0.25
2480	-5.21	28.56	0.32
2490	-5.25	28.47	0.29

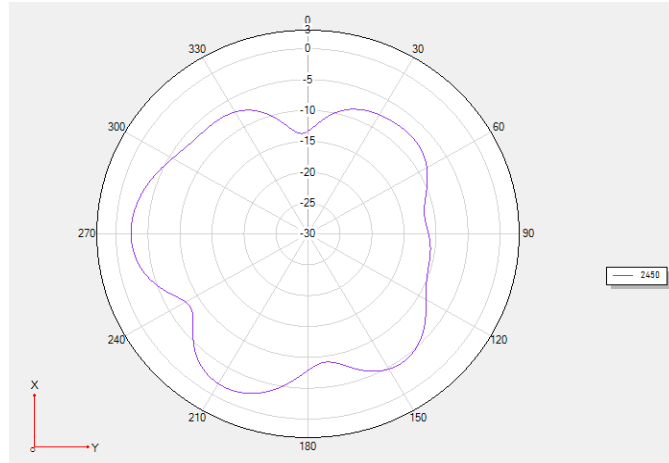
Reference test environment



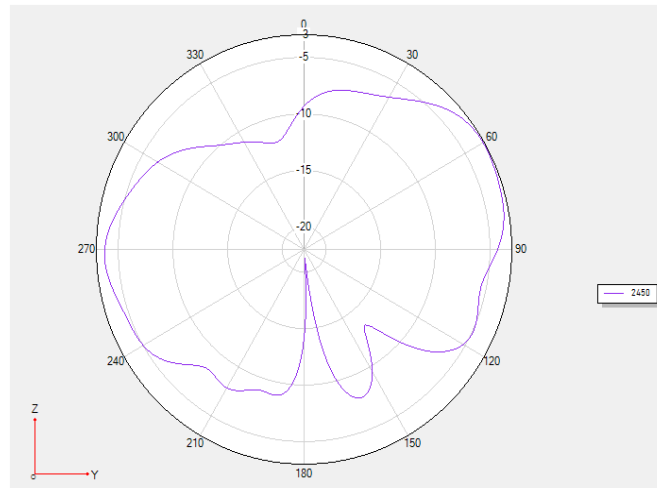
2D direction diagram



Phi 0 2D diagram



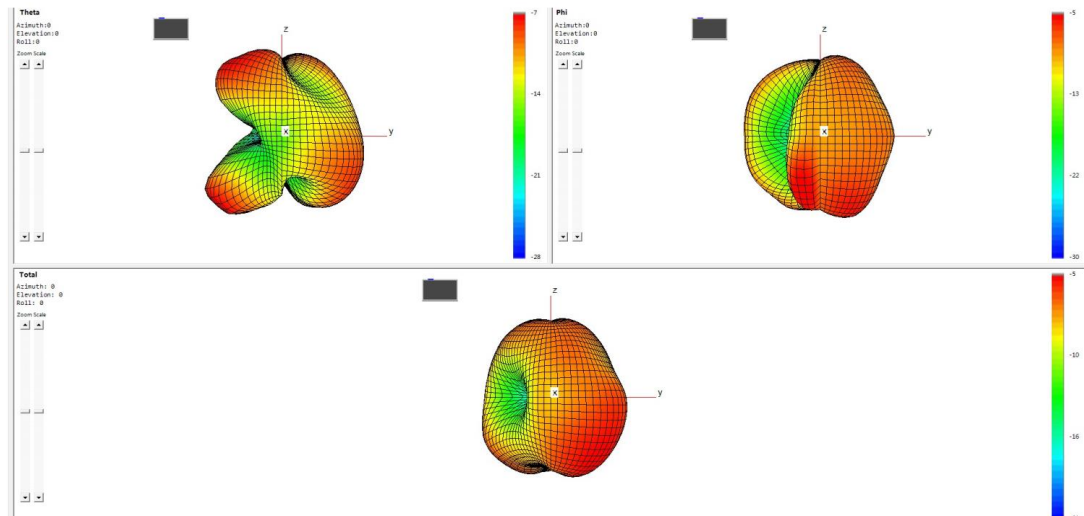
Phi 90 2D diagram



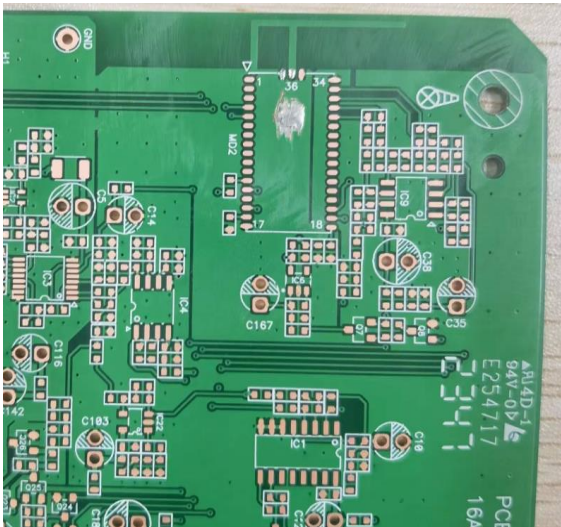
Theta 90 2D diagram

3D direction diagram

2450MHz



Antenna Photo



Testing Equipment List

	Test items	Equipments	Calibration Date
S Parameters	Return loss	RF Network Analyzer: Agilent E5071B	1 Apr 2023
	SWR		
Coupled Power Test	Tx Power	Wireless communicaion Test: Agilent 8960 E5515C	1 Apr 2023
	Rx Sensitivity	LTE/WIFI/BT tester : R&S CMW500	1 Apr 2023
Radiation Pattern and Gain	radiation pattern	Dark Room: 8x4x4 m (3D)	1 Apr 2023
	Antenna Gain	RF Network Analyzer: Agilent E5071B	1 Apr 2023

Test Date: 27 Dec 2023

Test Personnel: Mr. Yang Xiang

Antenna Brand: Sangan

Antenna Model: MR014G