



A better self, a bigger world



Robot T200 Ant test report

Client:	Zhongshan Youwang
Project name:	Report T200
Frequency:	2.4G
Date:	2025-10-14
Tester:	Xue
Environment:	24-probe microwave anechoic chamber



Information

www.i-ioe.com

Tester	Xue	Date	2025-10-14
Client	Zhongshan Youwang		
Test Date	2025-10-14 10:30 am		
Sample	T200		
Test content	2400-2500MHz		
Testing equipment	Agilent VNA E5071B 8.5GHz		
Test Environment	24-probe microwave anechoic chamber		
Notices			
Company	Shen Zhen IOE Communication Technology Co., Ltd.		
Addrress	3rd Floor, Building 3, 5th Industrial Zone, Tianliao Community, Yutang Street, Guangming District, Shenzhen		

1. Test standard: ANSI/IEEE Std 149-2021

Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-2021
---------------------	----------------------	--	------------------------

2. Equipment list:

Equipment	Manufacturer	Model No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071B 8.5GHz	2024-11-13	2025-11-12
Wireless Device Air Interface Comprehensive Tester	Rohde & Schwarz	CMW500	2024-11-13	2025-11-12

3. Test software being used: XH OTA test Soft
Software Version: TAsuite 3.9.0

4. Test Procedure

4.1 Test Step Flow

Maintain the test ambient temperature at 24°C and humidity at 60% RH, power on the instrument and preheat for more than 30 minutes.
Turn on the darkroom power supply, connect the test cables, and set up the sample according to the standard.
Define the test objectives and perform calibration tests.
Run the XH OTA TAsuite V3.9.0 software, complete the test, export the corresponding test charts and data, and save them to the specified directory.

4.2 Test Principle

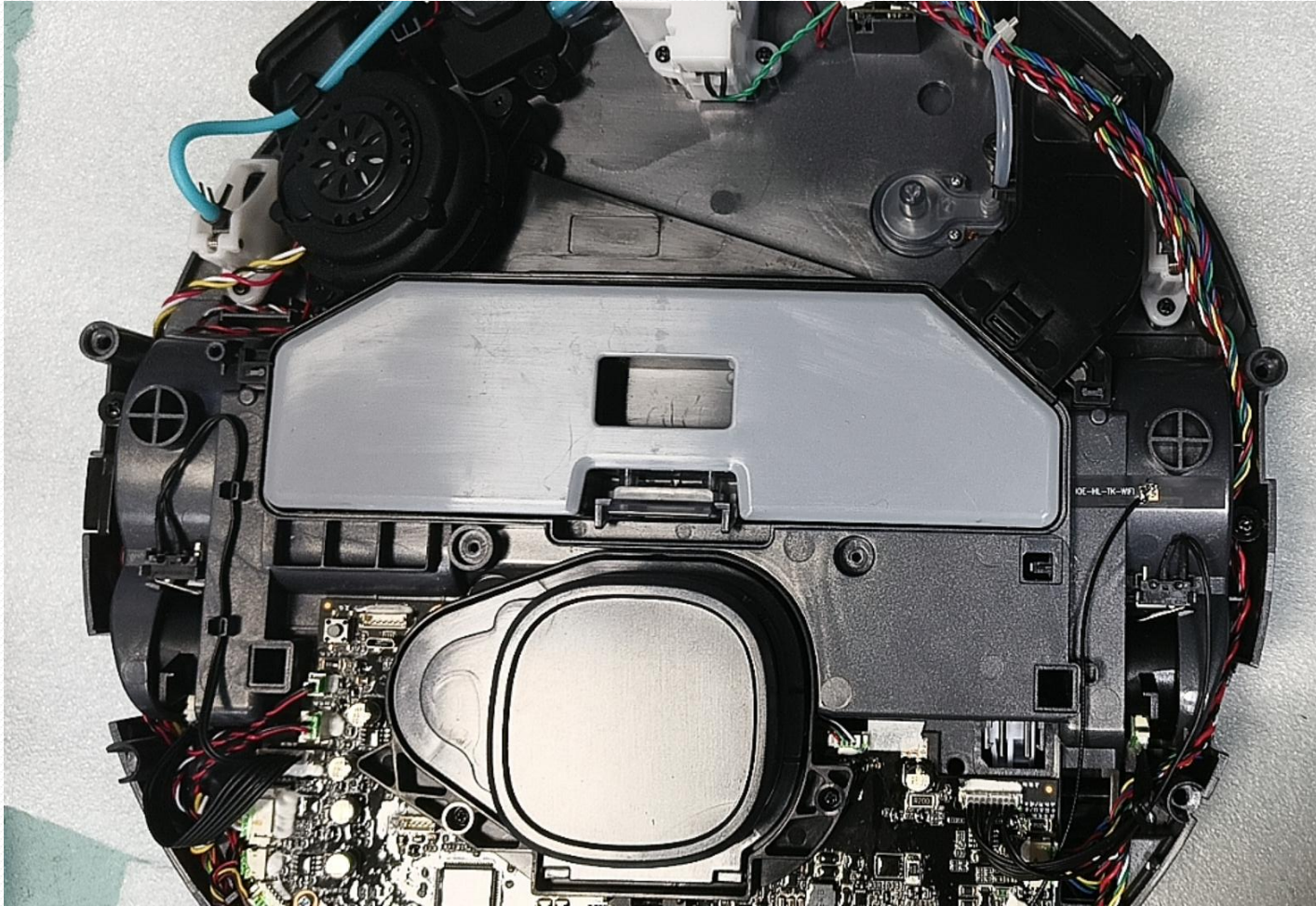
The test principle can be referenced in accordance with the standard ANSI/IEEE std 149-2021.

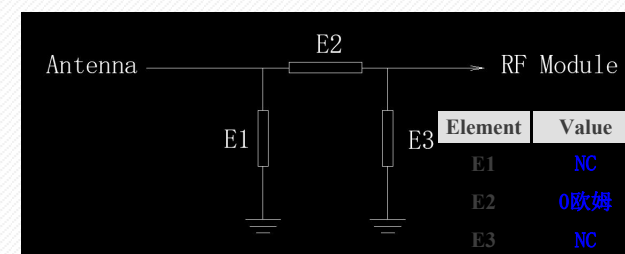
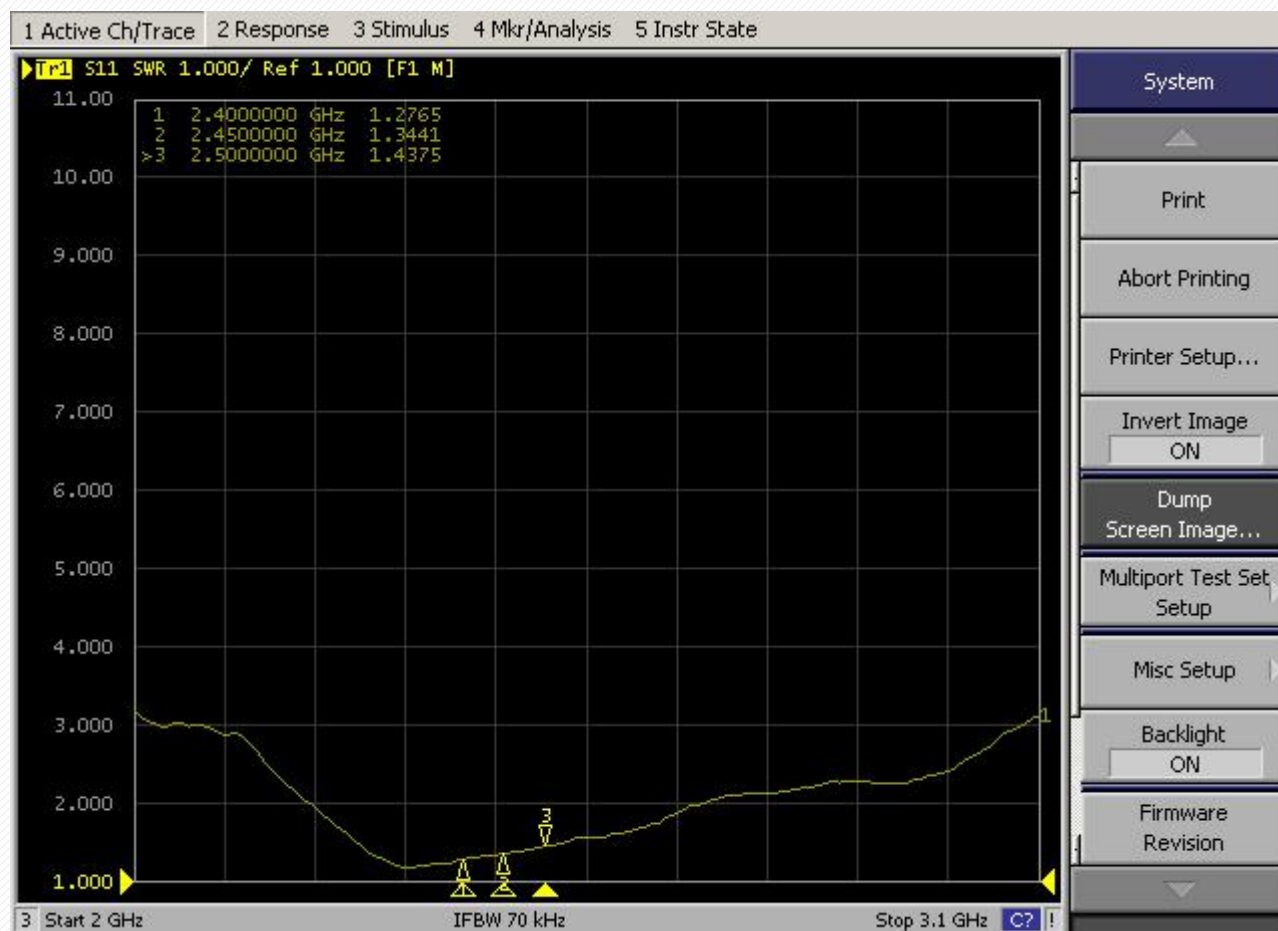
4.3 Test Conditions

The analyte, network analyzer, test equipment, and test cable connectors should have good reliability, stability, dynamic range, and measurement accuracy to ensure measurement accuracy.

The measuring instruments should have a certificate of conformity and be within the valid calibration period.

The analyte should be intact and undamaged, and the test environment should be kept clean.





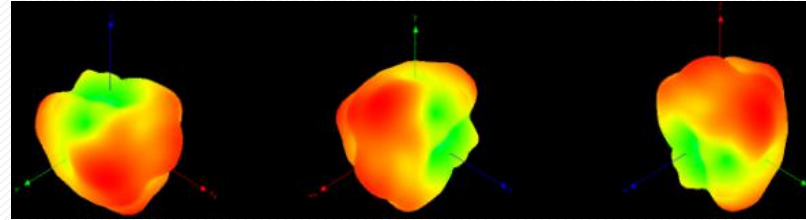
WIFI Ant

2.4G Ant

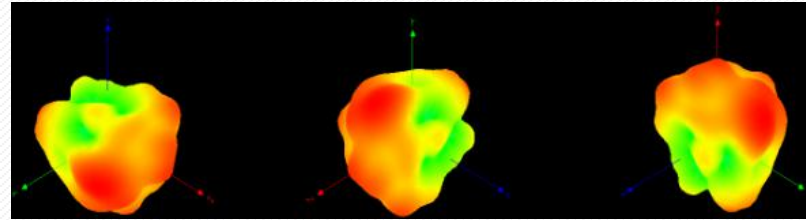
Freq (MHz)	Efficiency / %	MaxGain/dBi
2400	57.15	3.02
2410	55.84	2.69
2420	54.58	2.86
2430	53.58	2.93
2440	53.33	3.01
2450	54.58	3.16
2460	54.05	2.50
2470	53.83	2.84
2480	52.72	2.76
2490	53.09	3.10
2500	52.12	3.12
AVG	54.08	2.91

2.4G Ant

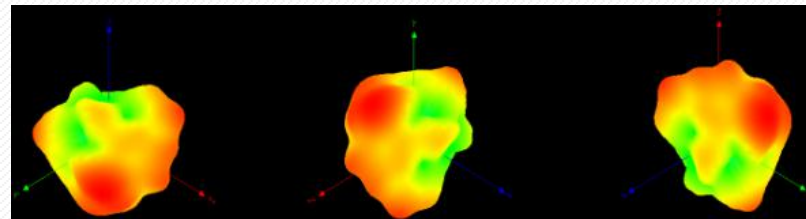
2400MHz

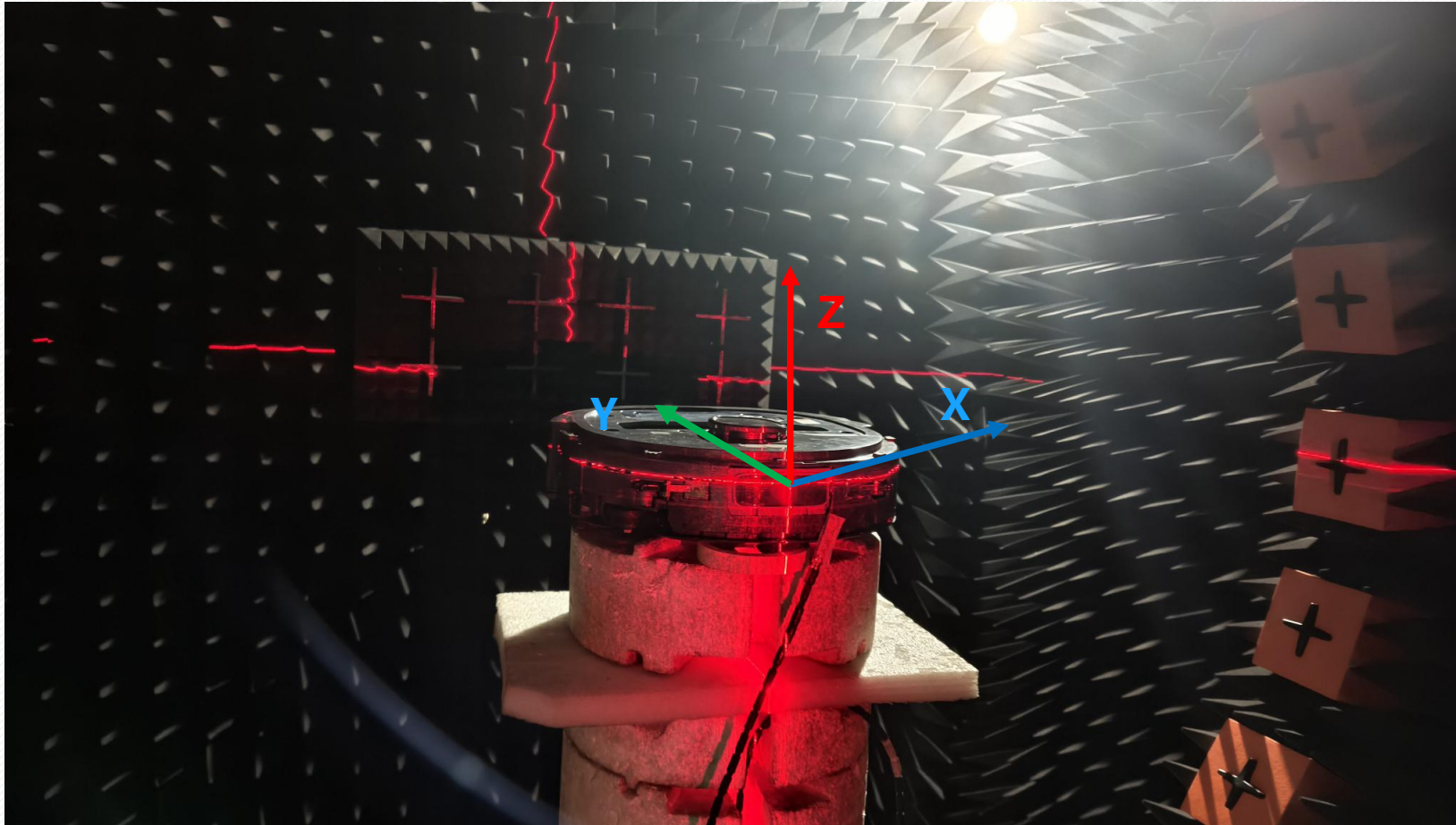


2450MHz



2500MHz





The above is the 3D coordinate distribution of the darkroom environment, and the corresponding color coordinates in the following structure are consistent with those in the figure.



THANKS

感 / 谢 / 您 / 的 / 关 / 注

IOE