

Antenna TEST REPORT

Test Report No.....: RF230827001-03-001

Product(s) Name.....: Wall mounted antenna

Model(s).....: PF-D-I-8027-BG-X-001

Applicant.....: Shenzhen Giesonwell Technology Co.,Ltd

Address.....: Room 209-11,1970 Technology Park,Minzhi Street,Long Hua District,Shenzhen
City,Guangdong Province

Receipt Date.....: Nov. 17.2023

Test Date.....:Nov. 17.2023~ Nov. 21.2023

Issued Date.....: Nov. 22.2023

Standards.....: Customer requirement(Refer to Chapters 2.2 Test Method)

Testing Laboratory.....: Shenzhen Haiyun Testing Co., Ltd.

Prepared by	Reviewed by	Approved by	
Krain Wu	Vic Cai	Eric Yu	
Krain Wu	Vic Cai	Eric Yu	

TABLE OF CONTENTS

1.Purose & Environment	3
1.1 Purpose	3
1.2 Environment	3
2.Test Configuration and Test Method	4
2.1 Test Configuration.....	4
2.2 Test Method.....	4
3.Test photos、 Test Condition and DUT Antenna	5
3.1 Test photos	5
3.2 Test Condition	5
3.3 DUT Antenna	6
4.Radiation pattern	7
4.1 2D Radiation pattern test results.....	7
4.2 3D Radiation pattern test results.....	10
5.Peak Gain	14
5.1 Test results.....	14

1.Purose & Environment

1.1 Purpose

- Meet the electrical performance index;
- Confirm the antenna scheme to meet the design requirements;

1.2 Environment

- Test Condition: the network analyzer(E5071C) and SATIMO microwave anechoic chamber
- Passive measurement results are presented

- TEST ENVIRONMENT CONDITIONS

Temperature	24.5°C	Relative Humidity	58.0 %
Atmosphere Pressure	101 kPa	\	\

2. Test Configuration and Test Method

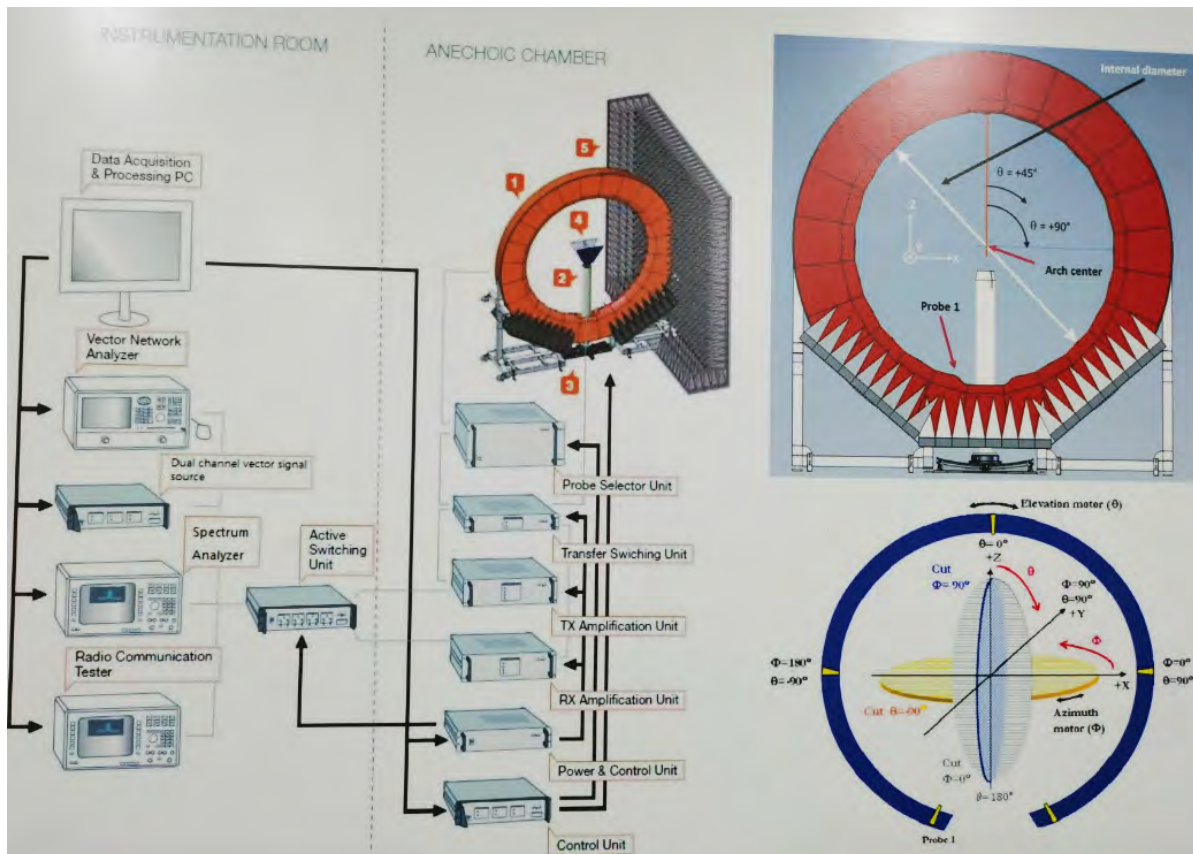
2.1 Test Configuration

Test configuration: Reference to CTIA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Turntable: Phi angle; Multiple antenna loop: Theta angle

Test system configuration diagram

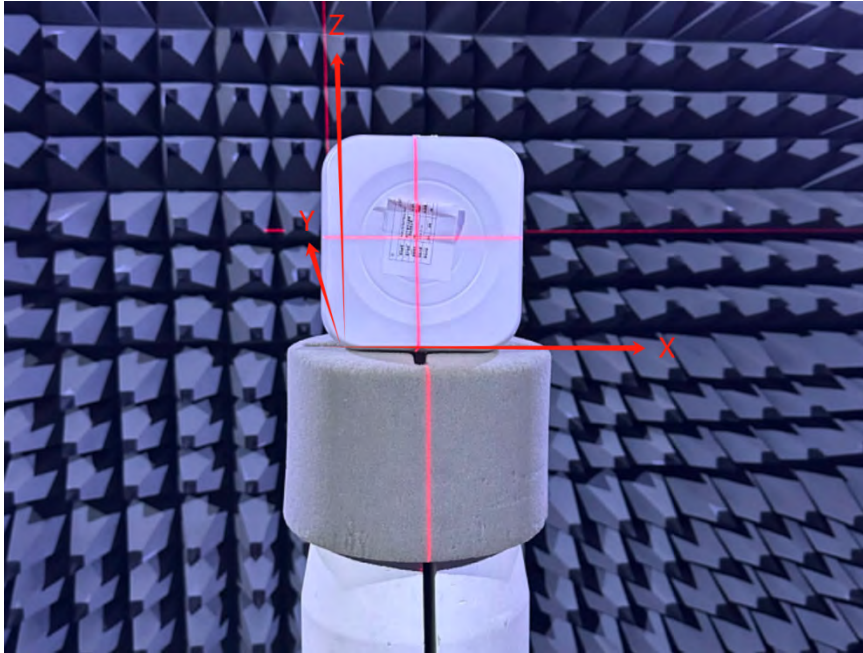


2.2 Test Method

Port 1 of Network analyzer connect to antenna of EUT. Record S21 value every 15 degree from 0 to 345 degree on Theta angle and 0 to 180 on Phi angle . Repeat process to each antenna of EUT.

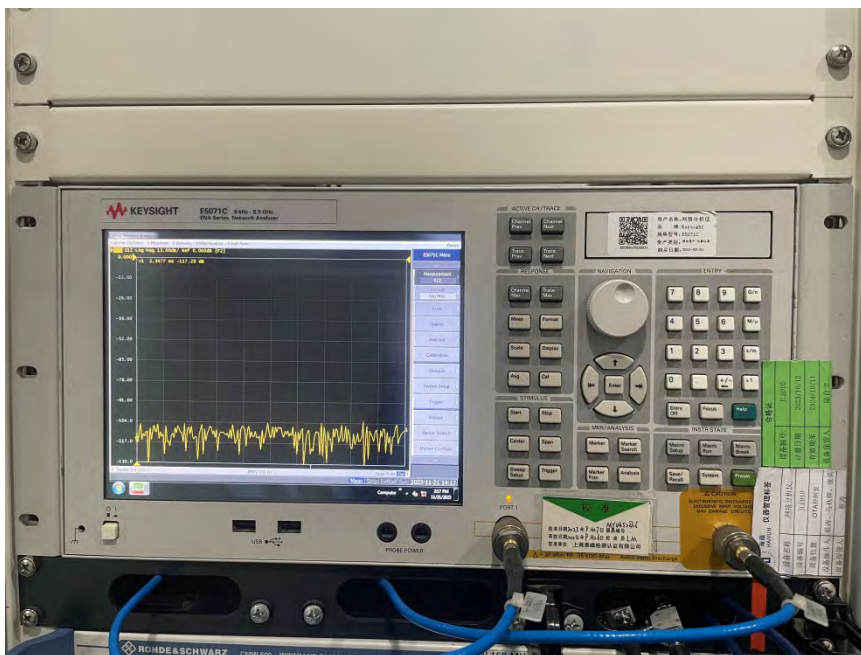
3.Test photos、 Test Condition and DUT Antenna

3.1 Test photos



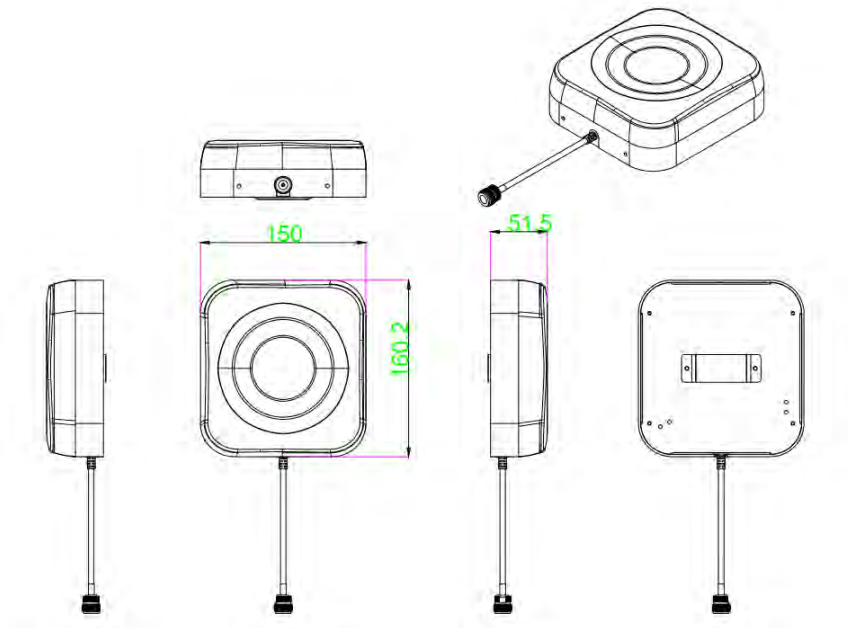
Microwave anechoic chamber

3.2 Test Condition



The network Analyzer

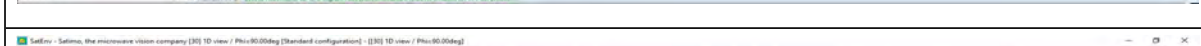
3.3 DUT Antenna



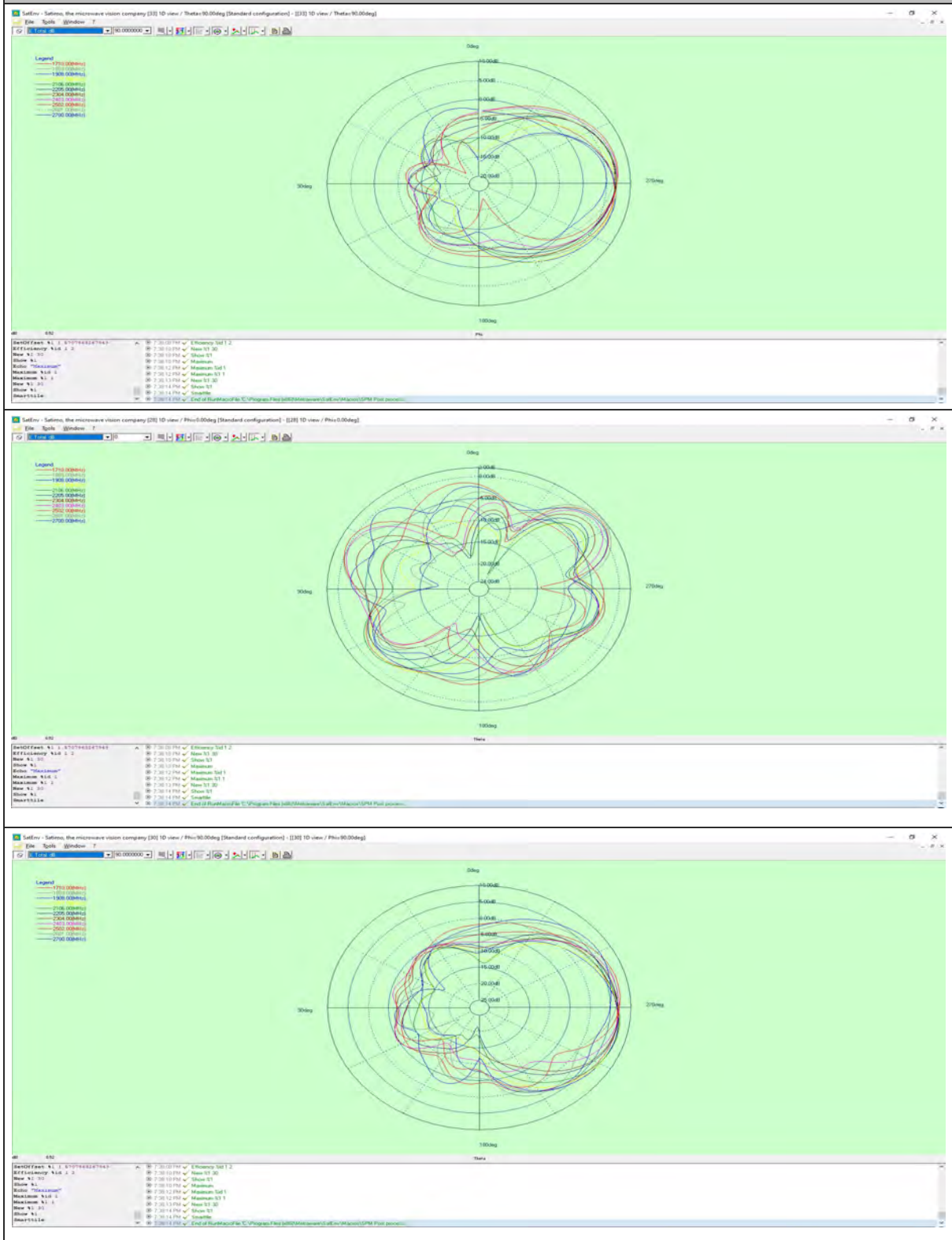
4.1 2D Radiation pattern test results



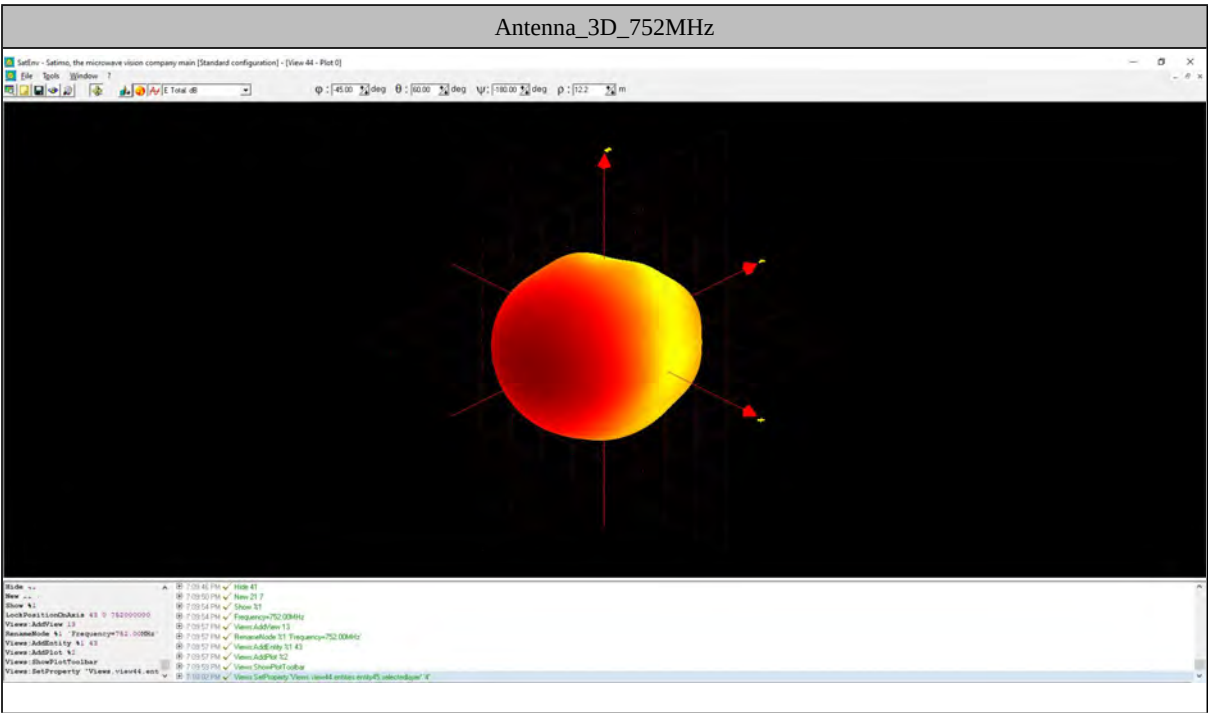
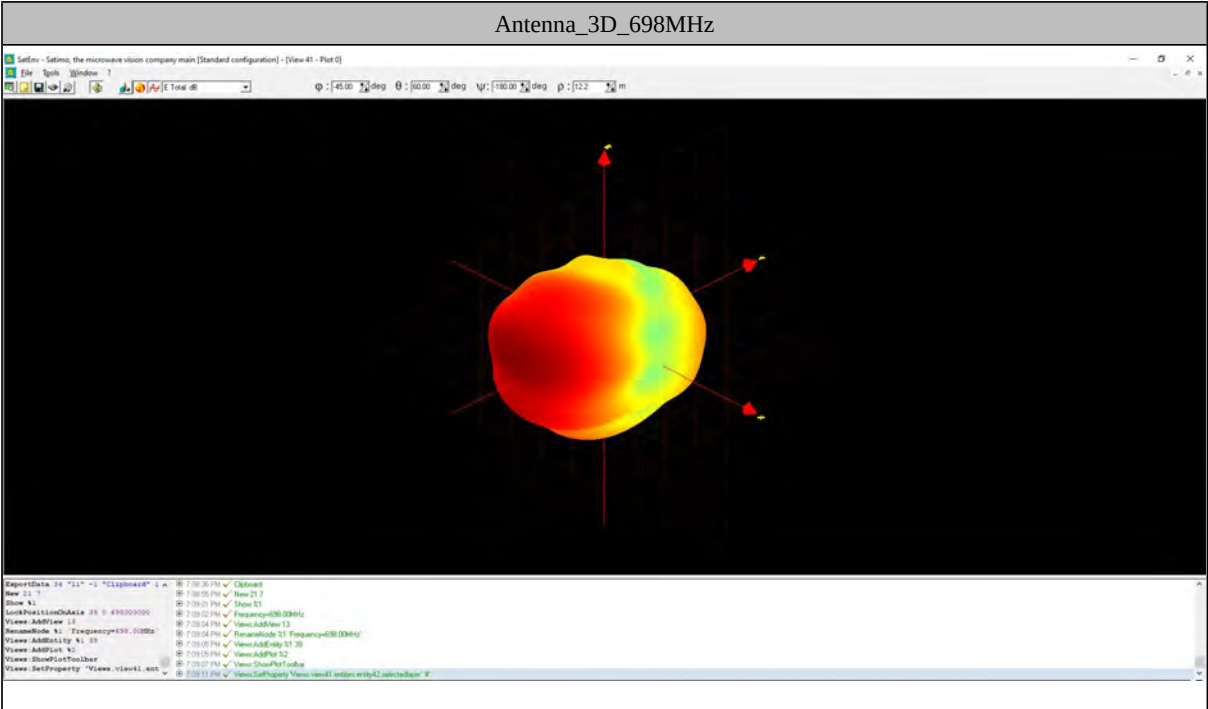
Antenna_2D(806MHz-960MHz)

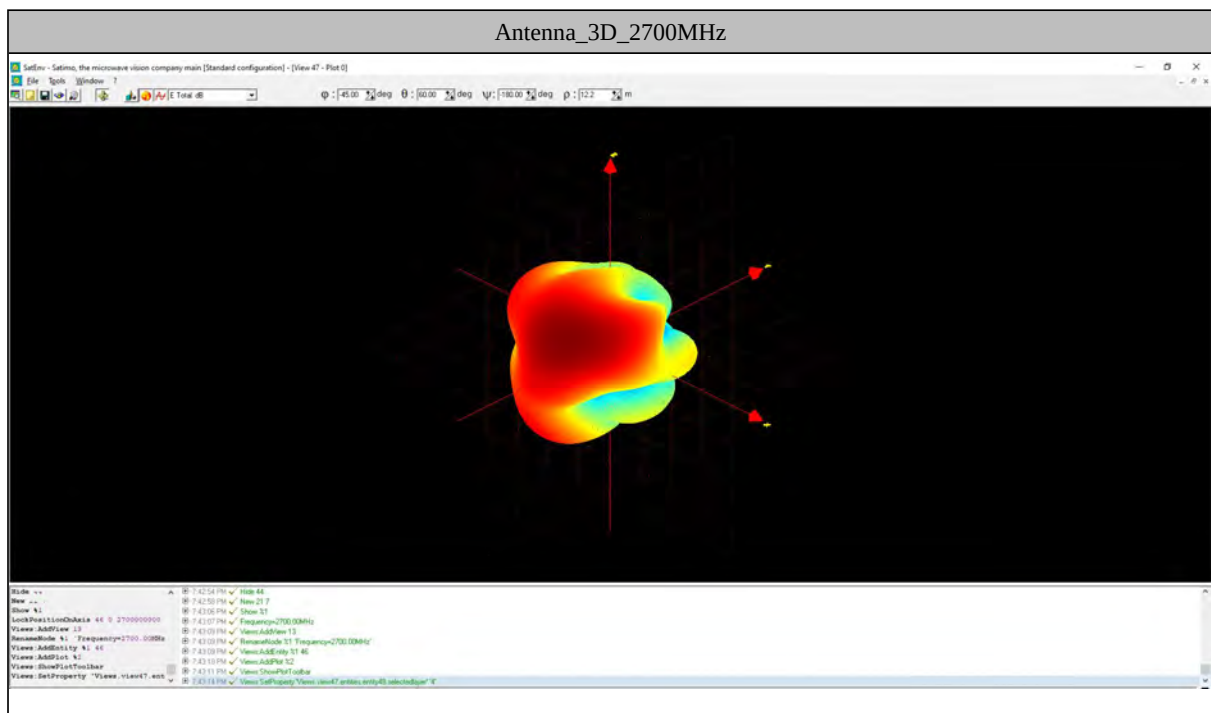
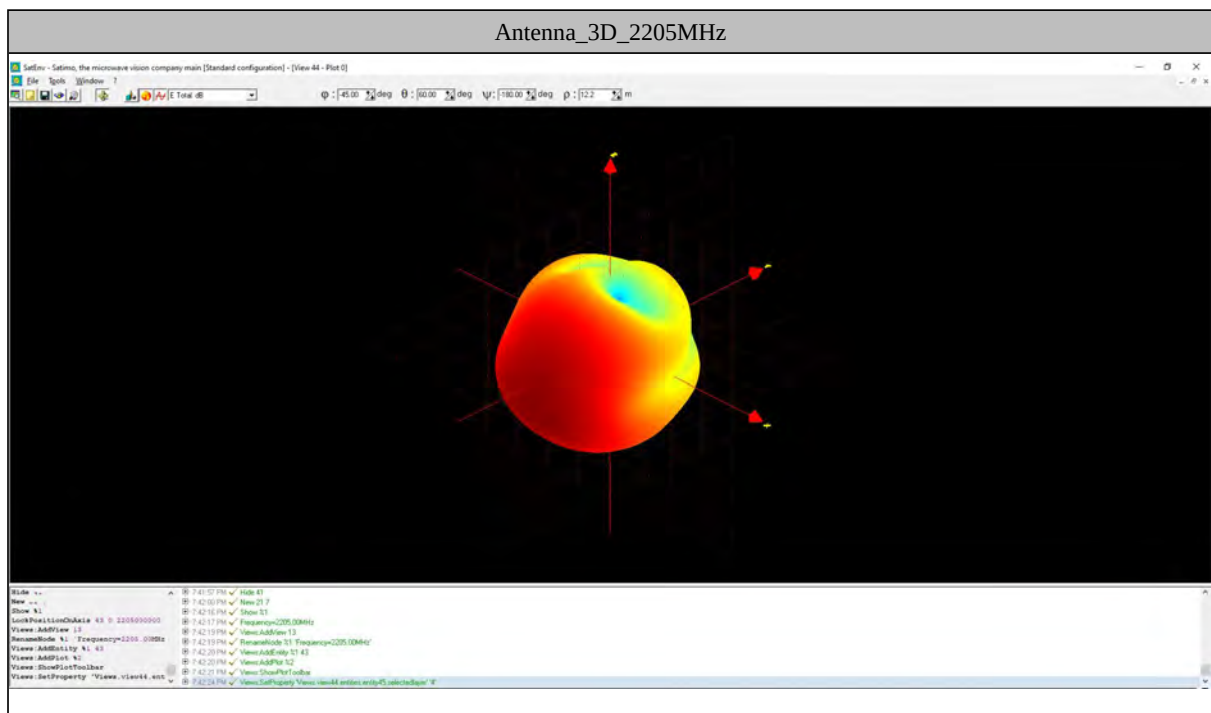


Antenna_2D(1710MHz-2700MHz)



4.2 3D Radiation pattern test results





5. Peak Gain

5.1 Test results

Antenna_Peak Gain	
Frequency (MHz)	Peak_Gain . dBi
698	3.08
752	4.51
806	5.79
883	6.20
960	6.02
1710	7.02
1809	7.68
1908	7.82
2007	7.77
2106	7.79
2205	7.18
2304	7.05
2403	7.34
2502	8.08
2601	8.37
2700	7.87

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Testing Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Testing Co., Ltd.

Address: Room 201, #3 factory, Gongjin Electronics, Shatian, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Tel: 0755-26024411

Zip Code: 518118

E-mail: service@hy-lab.cn

**** End of report ****