ANTENNA TEST REPORT

Applicant	:	Guangzhou Chuangrui Vehicle Devices Ltd.,co.
Address of Applicant	:	NO.8 Shenshan East Road Baiyun District, Guangzhou, P.R.C
Manufacturer	:	Guangzhou Chuangrui Vehicle Devices Ltd.,co.
Address of Manufacturer	:	NO.8 Shenshan East Road Baiyun District, Guangzhou, P.R.C
Equipment under Test	:	2.4G Antenna
Model No.	:	9AYV-171000-4900
Test Standard(s)	:	GB/T 9410-2008 ANSI/IEEE Std149-2021
Report No.	:	DDT-RE25102107-3E01
Issue Date	:	2025/12/31
Issued By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

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Equipment under Test	:	2.4G Antenna
Model No.	:	9AYV-171000-4900

Test Standard Used:

GB/T 9410-2008
ANSI/IEEE Std149-2021

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25102107-3E01		
Date of Receipt:	2025/10/23	**Date of Test:**	2025/10/23~2025/11/08

Created: Ella Gong	Reviewed: Zoe Peng	Approved: Damon Hu
Ella Gong	Zoe peng	GUANGDONG DONGDIAN TESTING SERVICE CO.,LTD. 广东东电检测技术有限公司 Certificate and Report Seal 检验检测专用章
2025/12/31	2025/12/31	2025/12/31

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Version	Revision Content	Issue Date	Approved
V0	Initial issue	2025/12/31	Damon Hu

1. General Test Information

1.1. Description of EUT

Product Name	:	2.4G Antenna
Model Number	:	9AYV-171000-4900
Antenna Type	:	PCB Layout Antenna
Frequency Range	:	2400-2500MHz

1.2. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

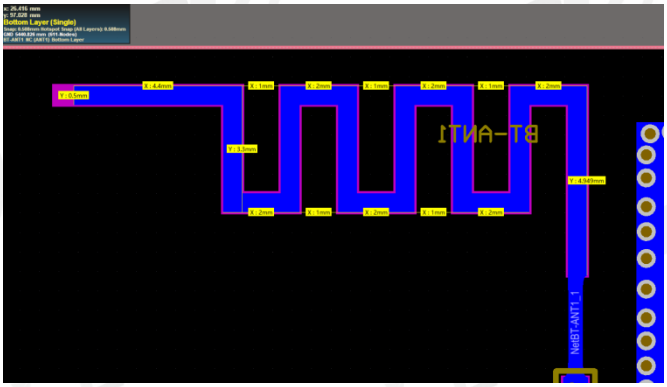
FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2. Antenna Parameter

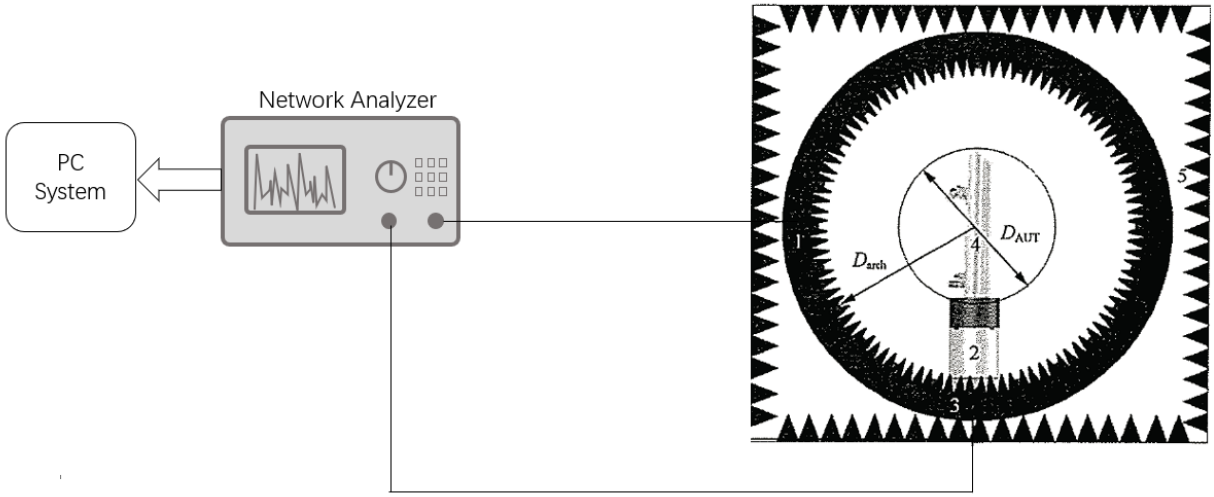


3. Antenna Gain Measurement

3.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
ENA Network Analyzer	Agilent	E5071C	MY46900684	2026/03/28
Software	SHENZHEN XINGHANG	XH.PassiveTest	V2.7.6	N/A
Software	SHENZHEN XINGHANG	XHDP	V2.8.0	N/A

3.2. Block Diagram of Test Setup



3.3. Test procedure

(1) Set up the antenna to be measured. Set up the antenna and mark the cross reference line at the center of the antenna port surface to be measured.

(2) Connect the cable connector and adjust the downdip Angle (electrically tuned antenna).

(3) Open the test software, create the test project, and configure the test port.

(4) Use test software for automatic testing and save test data of electromagnetic field distribution.

(5) Change the port, downdip Angle, or test frequency (if necessary), and repeat steps (3) to (4) until all status data to be measured is collected.

(6) After near and far field exchange, the three-position spherical pattern of the antenna to be tested is obtained, and the Theta and Phi angles of the position where the maximum level of the three-position spherical pattern is located are found. The horizontal plane pattern curve of the antenna to be tested is obtained by cutting according to equal Theta Angle, and the vertical plane pattern of the antenna to be tested is cancelled by cutting according to equal Phi Angle. Then the radiation parameters of the horizontal plane and vertical plane pattern of the antenna to be measured are obtained by using the processing method similar to that of the far field.

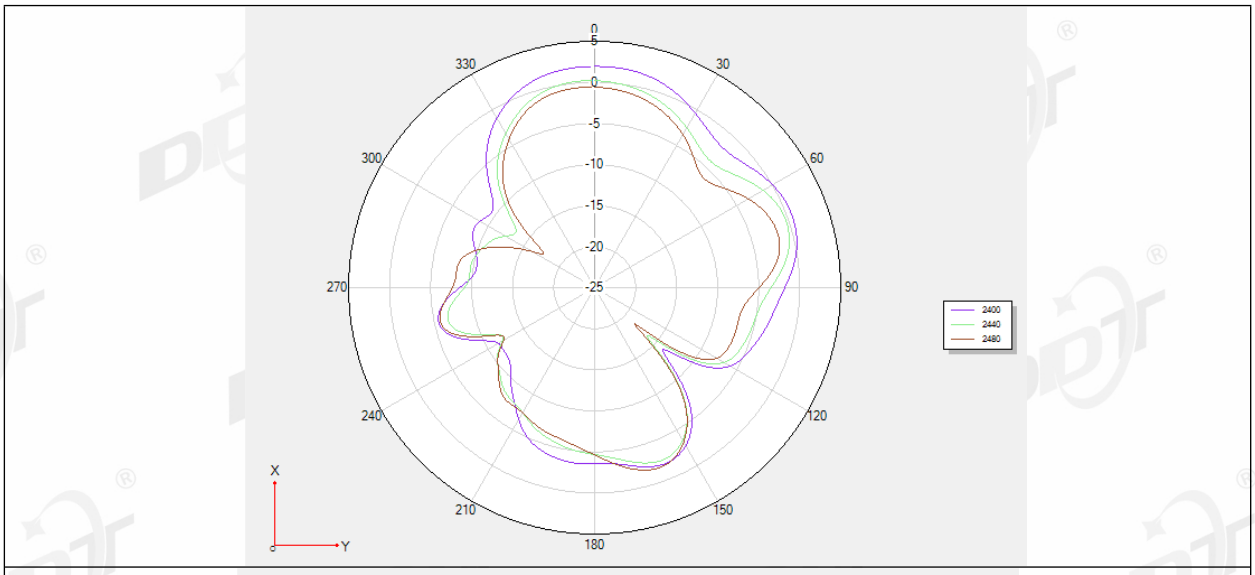
3.4. Test Data

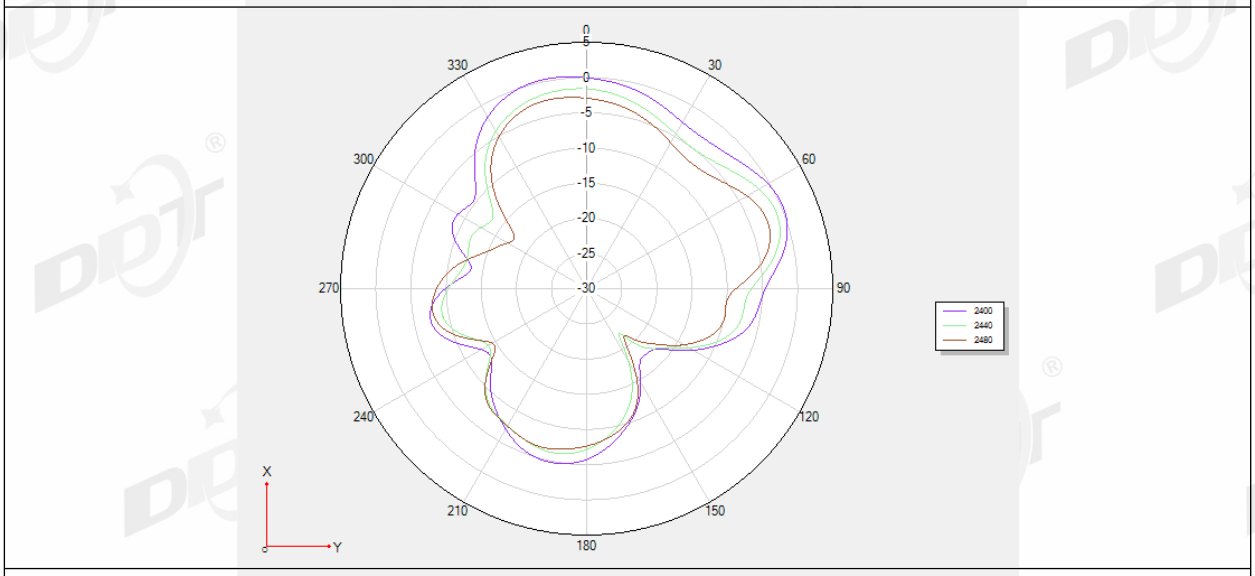
Test Engineer:	Jason Cao	Test Site:	OTA chamber
Ambient Condition:	23.5 ℃, 55%RH	Test Date:	2025/10/28 - 2025/10/28
Sample Number:	S25102107-002		

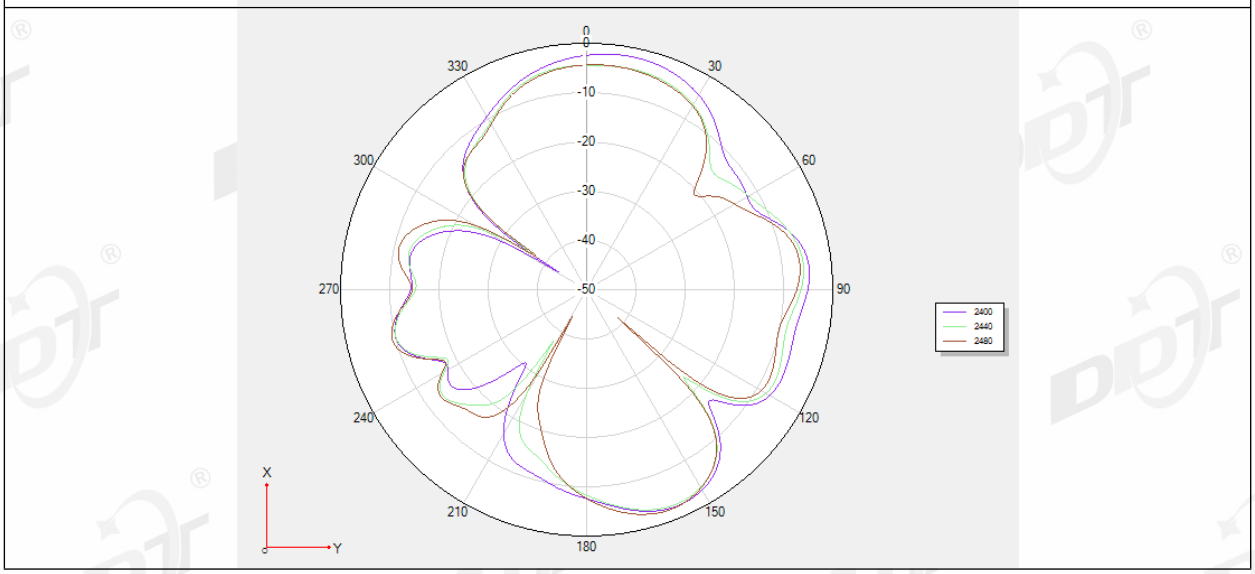
Frequency [MHz]	Max Gain [dBi]	Avg Gain [dBi]
2400	2.4	-4.48
2410	**2.51**	-4.46
2420	1.9	-4.94
2430	1.04	-5.51
2440	0.47	-5.74
2450	-0.62	-6.53
2460	-0.25	-5.98
2470	-0.53	-6.49
2480	0.53	-5.49
2490	-0.49	-6.81
2500	0.55	-5.93

3.5. Radiation pattern

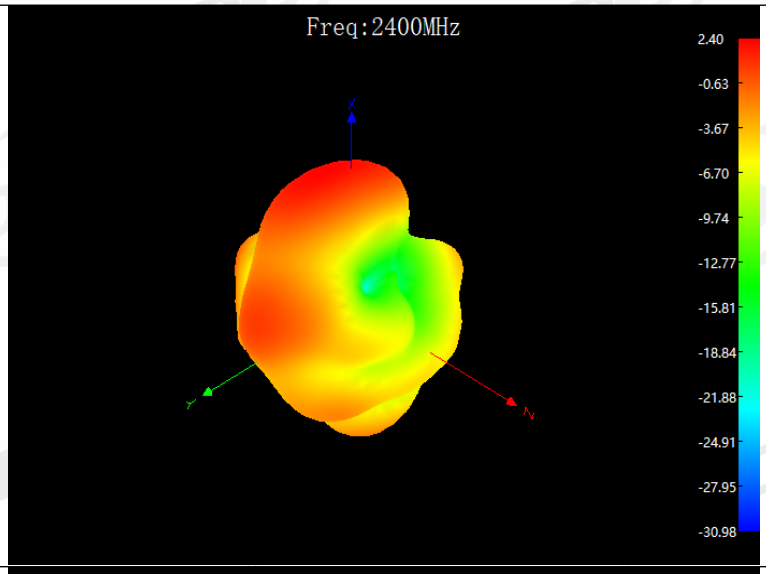
2-D Pattern Plots

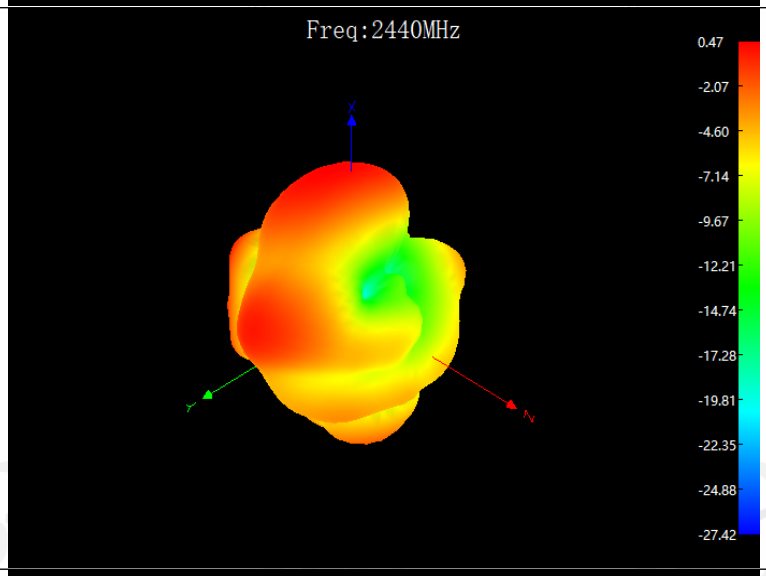


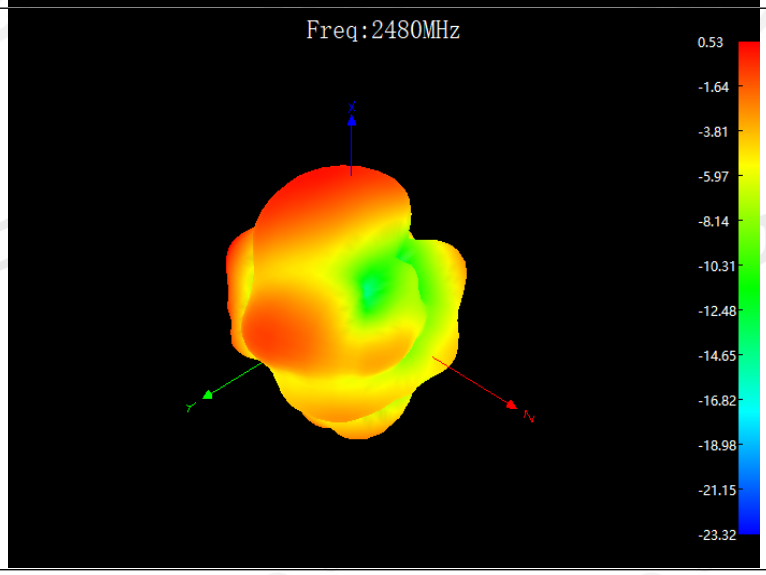




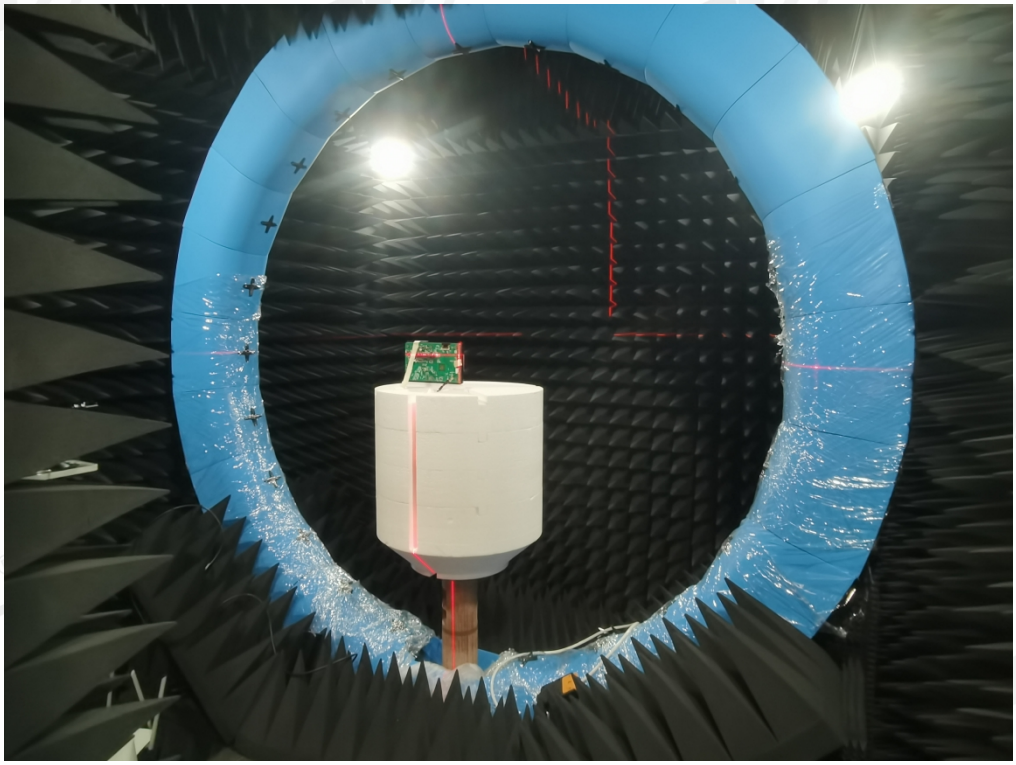
3-D Pattern Plots







4. Test Setup Photograph



----------End Report----------