

Antenna Gain Test Report

Test Lab	CVTE Test Lab
Client Address:	2No. 6, Yunpu 4th Road, Huangpu District, Guangzhou City
Product Name :	M2DU
Manufacture :	Hefei Shiyan Electronic Technology Co., Ltd.No.6621, Xiygy Road, Economic and Technological DevelopmentZone, Hefei, Anhui, PR.China
Antenna Type :	PCB Antenna
Project Engineer:	LinYiXiong
Test Standard :	ANSI/IEEE std 149-2021
Test Date :	2026.02.12

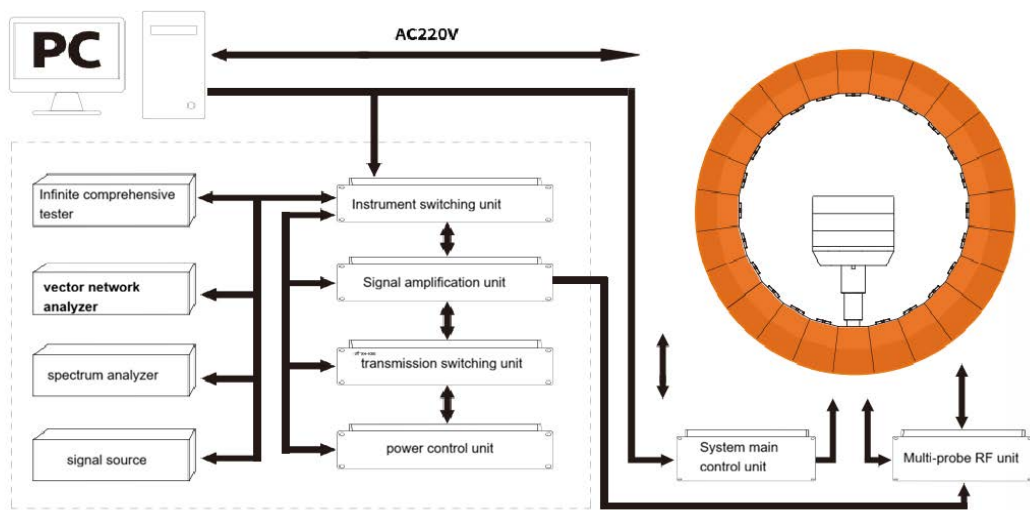
CONTENTS

1	Test Equipment Information	3
2	Setup block diagram	4
3	Test environment	5
4	Test Step Flow and test standard	6
5	Test Result	7
6	Antenna Dimension	16
7	Photo	17

1 Test Equipment Information

Equipment	Manufacturer	Mode No.	Serial No.	Cal date	Cal Due
Chamber	XH-IOE	ATS260	XH240406	2025.09.08	2026.09.08
Antenna	SUNYIELD	Standard antenna	SH800-005	2025.09.08	2026.09.08
Test Software	XH-IOE	XH-ACTIVE V3.9.0	-	2025.09.08	2026.09.08
Network Analyzer	Agilent	E5071B	MY46105450	2025.09.08	2026.09.08

2 Setup block diagram



3 Test environment

Temperature: 25.5°C

Humidity: 56.1%

4 Test Step Flow and test standard

- 1) Maintain the test ambient temperature of 25 ± 2 °C
- 2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
- 3) Outline sets the test content objectives and conducts calibration tests;
- 4) Run the software, when the test is completed, export the corresponding test diagram and test data, and save to the corresponding directory.
- 5) The following are the test standards.

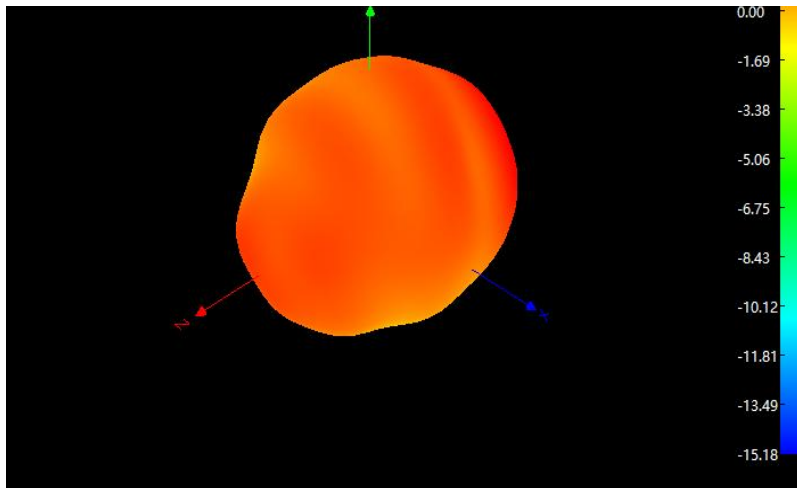
Name	Parameter	Method	Standard no.
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149- 2021

5 Test Result

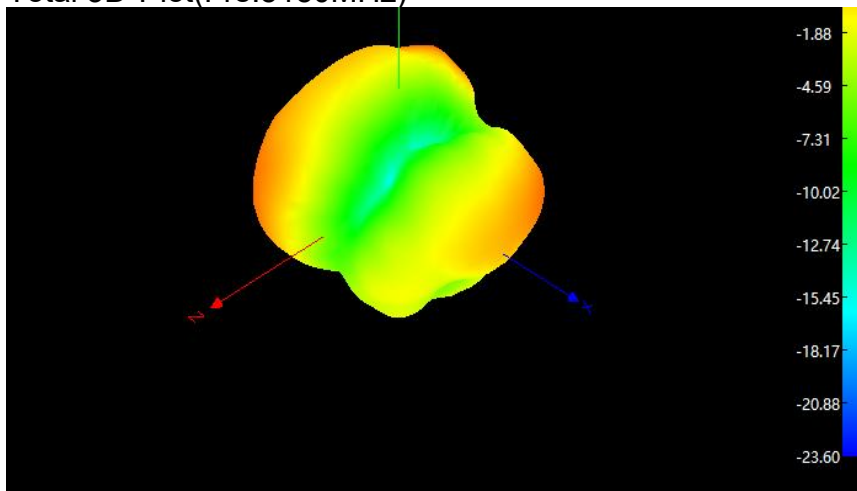
Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	75.91	2.09
2410	75.72	2.05
2420	76.66	2.39
2430	72.98	2.16
2440	75.41	2.37
2450	76.41	2.38
2460	73.62	2.21
2470	70.56	1.98
2480	76.99	2.27
2490	70.8	2.15
2500	70.7	2.2
5000	73.54	3.93
5050	67.95	4.07
5100	74.5	4.24
5150	73.31	4.27
5200	72.56	4.49
5250	70.95	4.67
5300	72.22	4.69
5350	69.85	4.7

5400	68.72	4.73
5450	64.62	4.85
5500	69.8	5.11
5550	64.16	5.21
5600	65.74	5.18
5650	62.86	4.88
5700	64.64	4.72
5750	61.51	4.95
5800	61.51	4.78
5850	61.3	4.72
5900	64.38	4.76

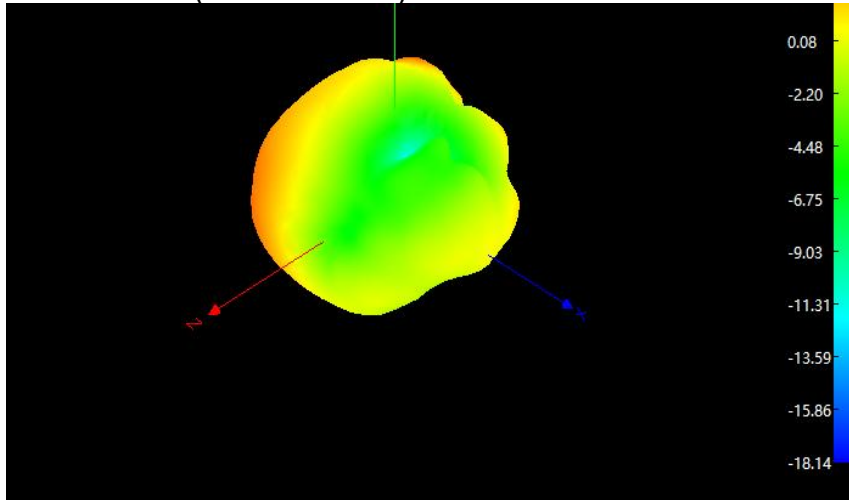
Total 3D Plot(Fre.2440MHz)



Total 3D Plot(Fre.5150MHz)



Total 3D Plot(Fre.5550MHz)



Total 3D Plot(Fre.5850MHz)

