



REPORT No.: SZ25050327E01

TEST REPORT

APPLICANT : Guangzhou Universal Electronics Service Co.,Ltd.

PRODUCT NAME : JPN Daikin 5th Gen Wi-Fi module

MODEL NAME : i

TRADE NAME : N/A

BRAND NAME : N/A

STANDARD(S) : IEEE Std 149-2021

RECEIPT DATE : 2025-06-03

TEST DATE : 2025-06-03

ISSUE DATE : 2025-06-12



Edited by:

MaoRuJie

Mao Rujie(Rapporteur)

Approved by:

Chi Shide

Chi Shide(Supervisor)

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MORLAB

Shenzhen Morlab Communications Technology Co., Ltd., FL.1-3, Building A,
FeiYang Science Park, No.8 LongChang Road,Block67, BaoAn District,
ShenZhen , GuangDong Province, P. R. China

Tel: 86-755-36698555

Http://www.morlab.cn

Fax: 86-755-36698525

E-mail: service@morlab.cn





DIRECTORY

1. Technical Information	3
1.1. Applicant and Manufacturer Information	3
1.2. Equipment Under Test (EUT) Description	3
2. Test Results	4
2.1. Applied Reference Documents	4
2.2. Test Conditions	4
2.3. Measurement Uncertainty	4
2.4. Test Results lists	5
Annex A Test Setup Photos	7
Annex B Figures	8
1. Gain and Efficiency	8
2. 2D Radiation Pattern	11
3. 3D Radiation Pattern	15
Annex C EUT Photos	20
Annex D General Information	28
1.1 Identification of the Responsible Testing Laboratory	28
1.2 Identification of the Responsible Testing Location	28
1.3 Test Equipments Utilized	28
1.4 Test Software Utilized	28

Change History		
Version	Date	Reason for change
1.0	2025-06-12	First edition



1. Technical Information

Note: Provide by Applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Guangzhou Universal Electronics Service Co.,Ltd.
Applicant Address:	18th Floor, Building No.1 of Tower 4, Hailunbao Creative Park, Yushan Road, Shatou Street, Panyu District, Guangzhou
Manufacturer:	N/A
Manufacturer Address:	N/A

1.2. Equipment Under Test (EUT) Description

Wireless Type	WiFi and Bluetooth
Antenna Type	PCB trace antenna
Frequency	2400MHz-2500MHz
Brand name	N/A
Hardware Version	N/A
Software Version	N/A
IMEI	N/A
Sample No.	1#&2#&3#

2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	IEEE Std 149-2021	IEEE Recommended Practice for Antenna Measurements

Notes: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".

2.2. Test Conditions

Test Environment Conditions:

Relative Humidity(%):	25 – 75
Temperature(°C):	10 – 30

2.3. Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.



2.4. Test Results lists

2.4.1. Test Method

Gain measurement and antenna radiation pattern were tested in a fully anechoic chamber. Calibrate the anechoic chamber using standard dipole antennas. The radiation pattern is measured by two methods: horizontal polarization and vertical polarization. The EUT under test is placed on the test turntable in the anechoic chamber and connected to the network analyzer. The EUT under test rotates 0-180° around the Phi axis, and the measuring antenna moves from 0-360° along the Theta axis. The probe is automatically selected for sampling and the measured values are read at a measurement step of 15°.

2.4.2. Gain and Efficiency

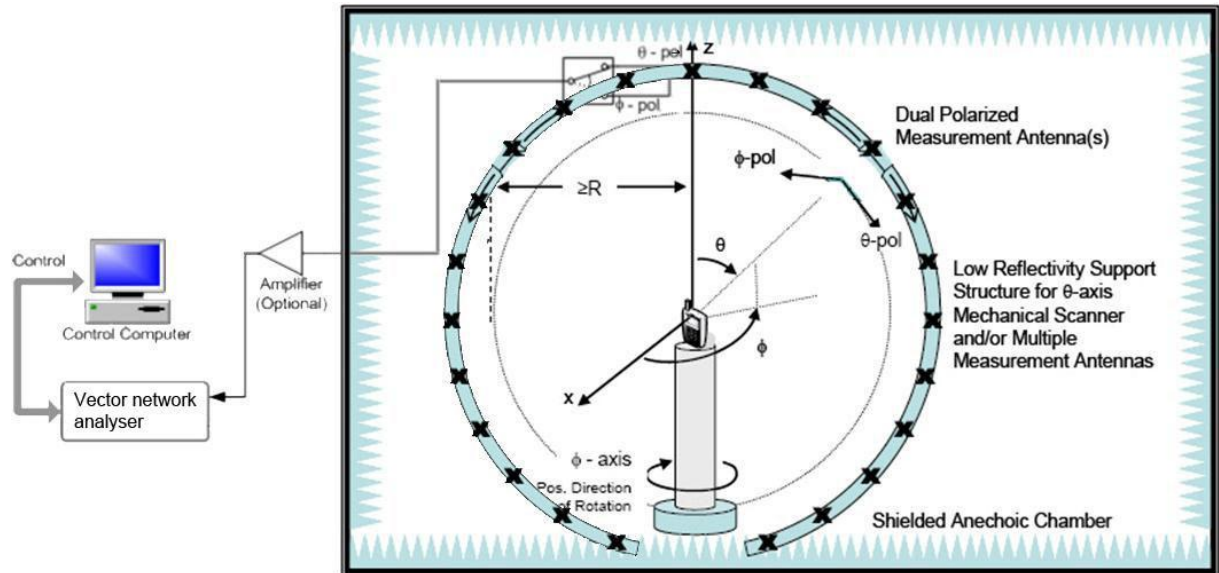
Frequency (MHz)	Gain(dBi)			Efficiency(%)			Efficiency(dB)		
	1#	2#	3#	1#	2#	3#	1#	2#	3#
2400	3.34	2.98	3.32	78.90	74.96	77.56	-1.03	-1.25	-1.10
2405	3.13	2.75	3.10	79.19	75.35	77.88	-1.01	-1.23	-1.09
2410	3.33	2.99	3.30	77.90	74.12	76.57	-1.08	-1.30	-1.16
2412	3.15	2.86	3.14	75.58	71.95	74.28	-1.22	-1.43	-1.29
2415	2.83	2.49	2.79	73.53	70.03	72.24	-1.34	-1.55	-1.41
2417	2.79	2.44	2.76	73.87	70.36	72.58	-1.32	-1.53	-1.39
2420	2.95	2.60	2.93	73.89	70.41	72.60	-1.31	-1.52	-1.39
2422	3.00	2.66	2.97	72.96	69.55	71.67	-1.37	-1.58	-1.45
2425	2.94	2.60	2.91	72.47	69.12	71.20	-1.40	-1.60	-1.48
2427	2.76	2.42	2.75	71.47	68.10	70.19	-1.46	-1.67	-1.54
2430	2.69	2.32	2.65	71.81	68.39	70.53	-1.44	-1.65	-1.52
2432	2.74	2.40	2.73	71.78	68.39	70.50	-1.44	-1.65	-1.52
2435	2.82	2.48	2.80	70.89	67.57	69.63	-1.49	-1.70	-1.57
2437	2.83	2.51	2.79	71.66	68.31	70.37	-1.45	-1.66	-1.53
2440	2.72	2.38	2.70	72.42	68.99	71.19	-1.40	-1.61	-1.48
2442	2.67	2.31	2.62	72.28	68.86	71.02	-1.41	-1.62	-1.49
2445	2.81	2.46	2.80	72.62	69.22	71.35	-1.39	-1.60	-1.47
2447	2.84	2.52	2.83	71.59	68.22	70.33	-1.45	-1.66	-1.53
2450	2.83	2.41	2.70	71.53	68.18	70.25	-1.46	-1.66	-1.53
2452	2.99	2.55	2.69	73.11	69.69	71.82	-1.36	-1.57	-1.44



REPORT No.: SZ25050327E01

2455	2.95	2.54	2.77	73.95	70.50	72.64	-1.31	-1.52	-1.39
2457	3.01	2.59	2.90	73.97	70.54	72.69	-1.31	-1.52	-1.39
2460	3.04	2.67	2.97	73.14	69.73	71.89	-1.36	-1.57	-1.43
2462	3.00	2.61	2.79	71.15	67.90	69.97	-1.48	-1.68	-1.55
2465	3.15	2.76	2.87	71.35	68.05	70.08	-1.47	-1.67	-1.54
2467	3.17	2.79	2.89	72.45	69.10	71.16	-1.40	-1.61	-1.48
2470	2.92	2.55	2.85	71.18	67.89	69.92	-1.48	-1.68	-1.55
2472	2.96	2.65	2.93	71.62	68.32	70.34	-1.45	-1.65	-1.53
2475	2.92	2.62	2.89	71.98	68.72	70.73	-1.43	-1.63	-1.50
2477	2.79	2.48	2.77	71.19	67.89	69.91	-1.48	-1.68	-1.55
2480	2.83	2.50	2.82	71.25	67.94	69.97	-1.47	-1.68	-1.55
2482	2.85	2.54	2.84	70.04	66.74	68.75	-1.55	-1.76	-1.63
2484	2.84	2.51	2.80	68.77	65.57	67.49	-1.63	-1.83	-1.71
2485	2.80	2.46	2.78	68.43	65.28	67.17	-1.65	-1.85	-1.73
2490	2.73	2.41	2.71	69.71	66.47	68.47	-1.57	-1.77	-1.65
2495	2.88	2.56	2.87	69.49	66.22	68.22	-1.58	-1.79	-1.66
2500	2.71	2.39	2.68	69.48	66.22	68.07	-1.58	-1.79	-1.67

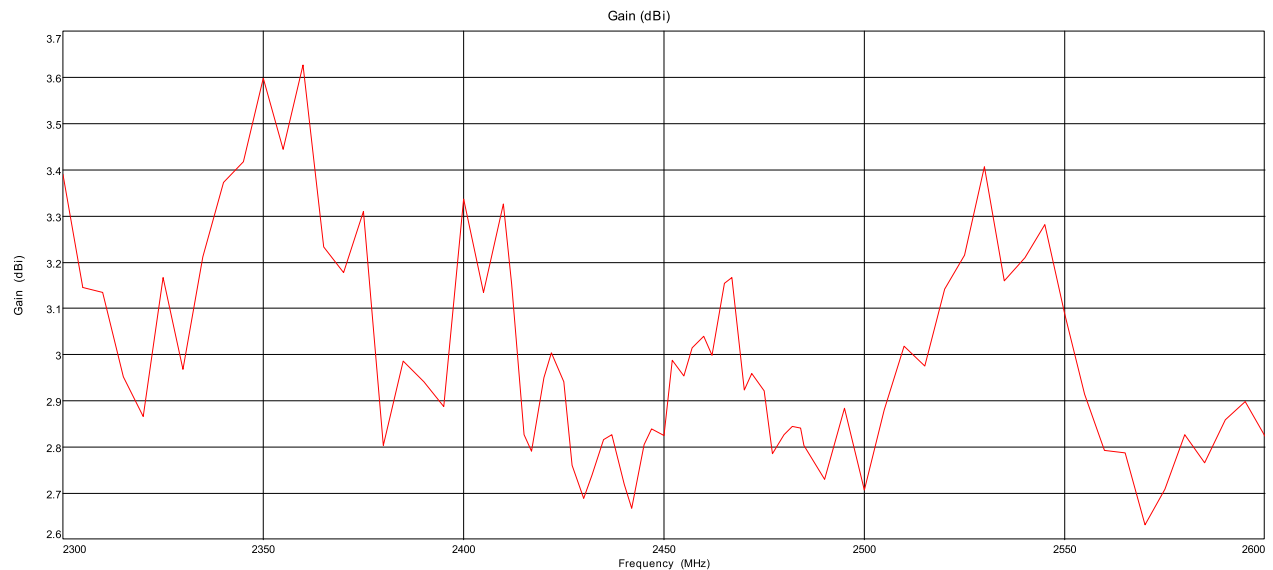
Annex A Test Setup Photos



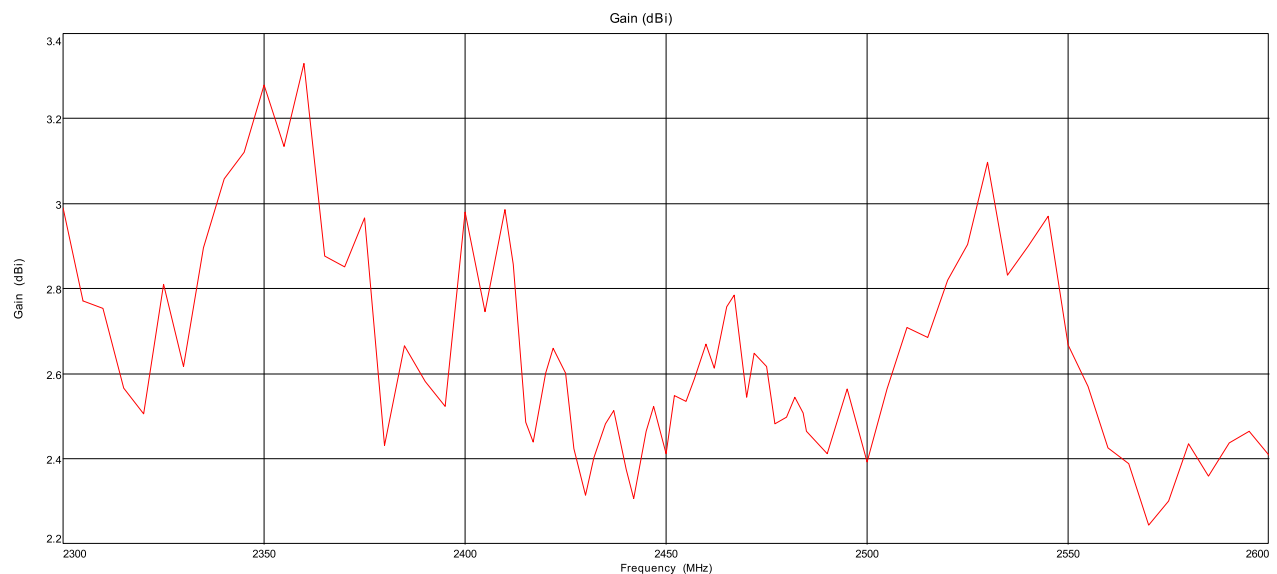
Annex B Figures

1. Gain and Efficiency

Gain



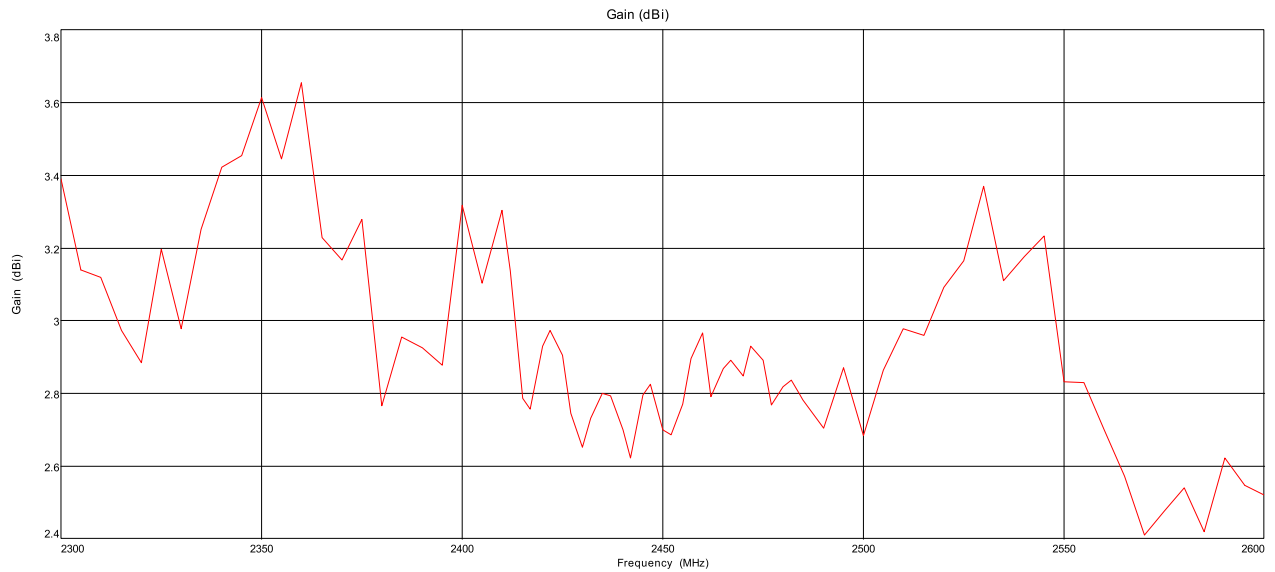
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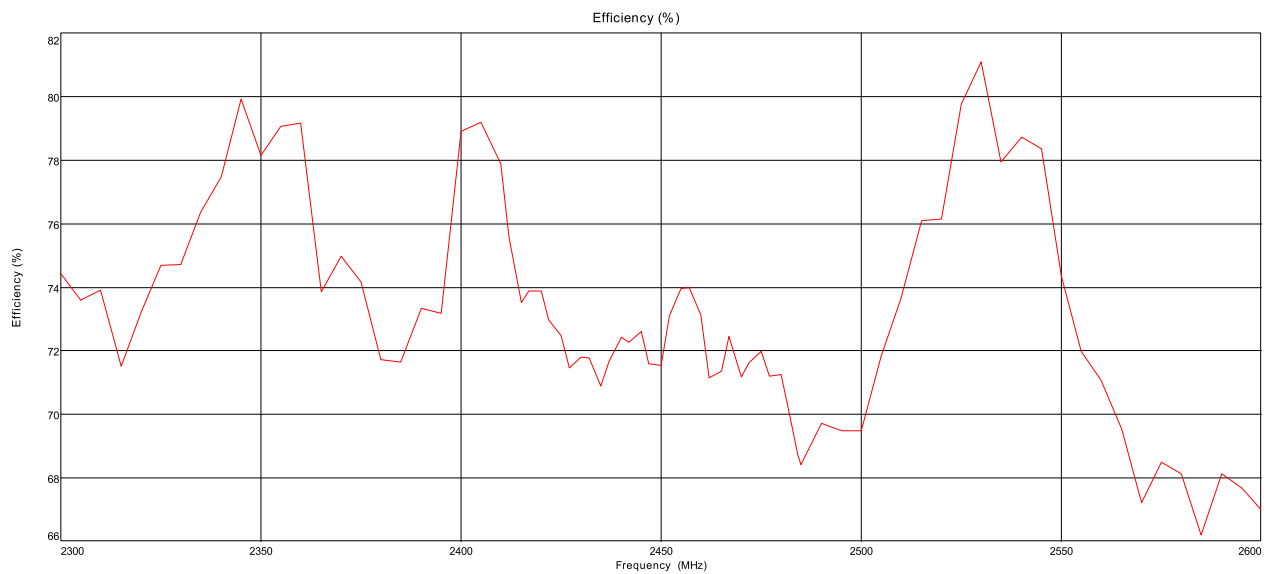


REPORT No.: SZ25050327E01



3#

Efficiency



1#



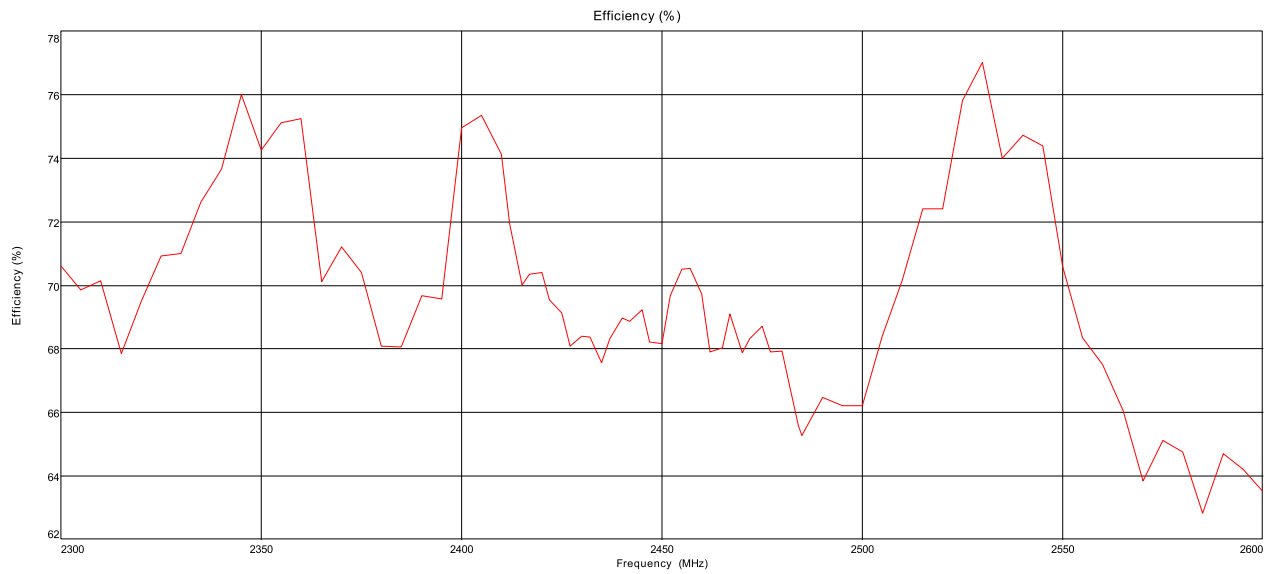
Shenzhen Morlab Communications Technology Co., Ltd. FL.1-3, Building A,
FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District,
ShenZhen, GuangDong Province, P. R. China

Tel: 86-755-36698555

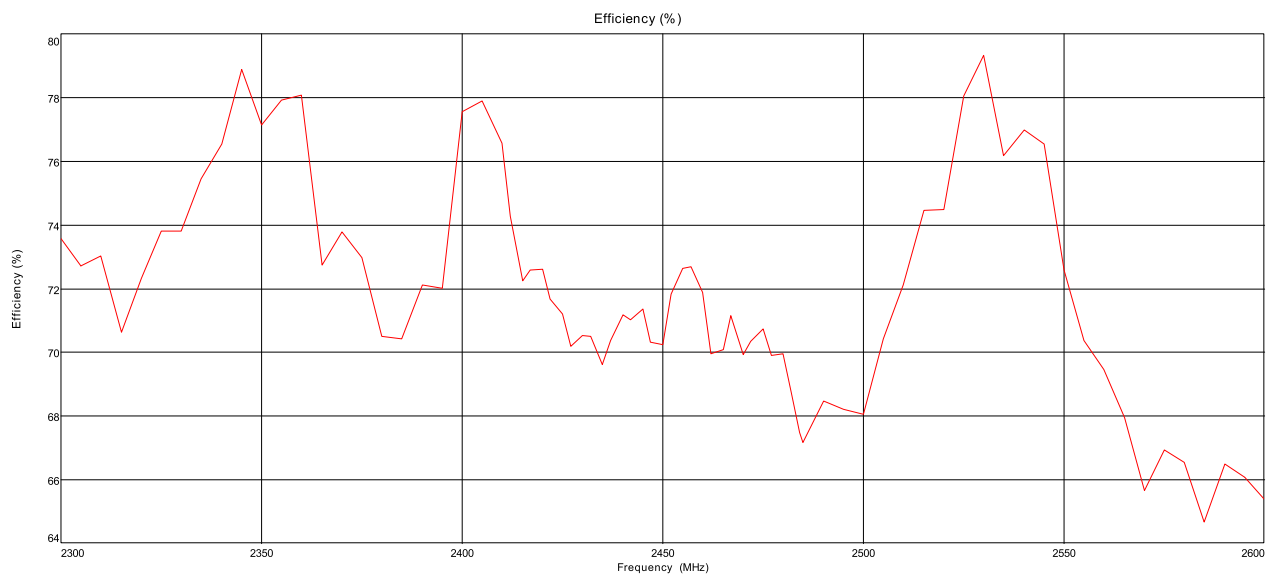
[Http://www.morlab.cn](http://www.morlab.cn)

Fax: 86-755-36698525

E-mail: service@morlab.cn



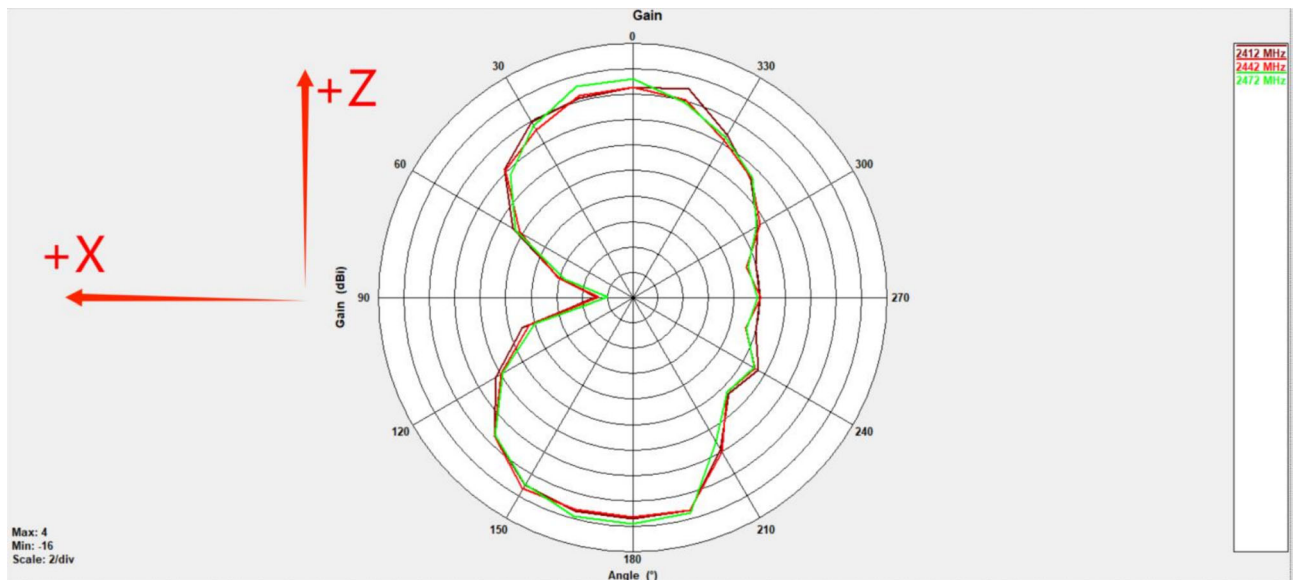
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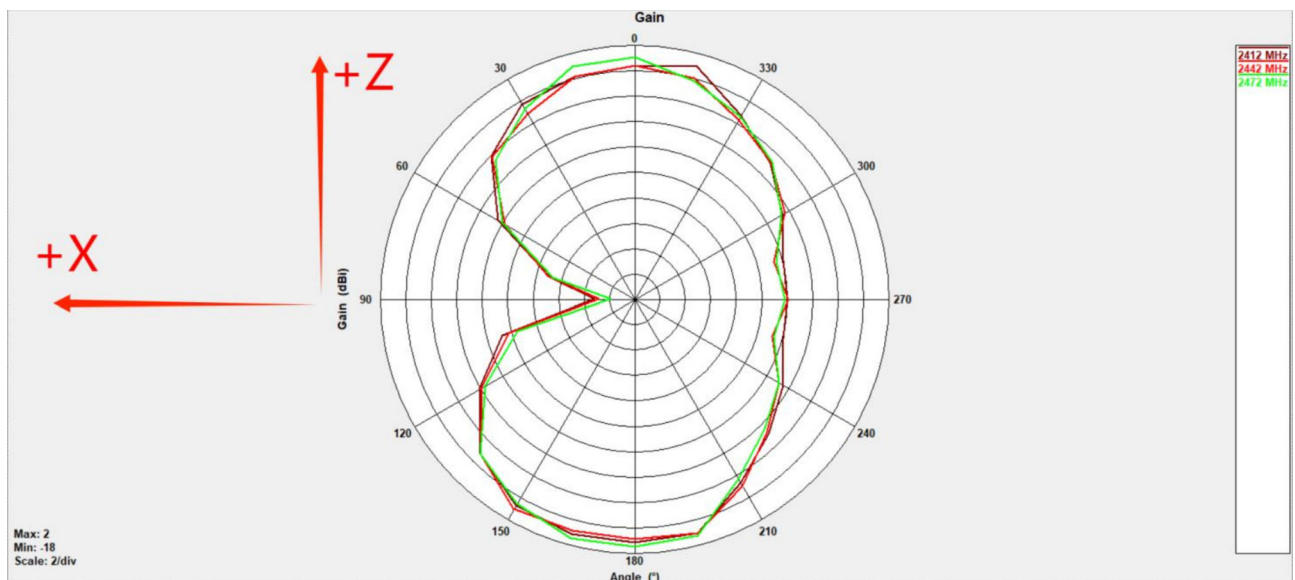
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2. 2D Radiation Pattern

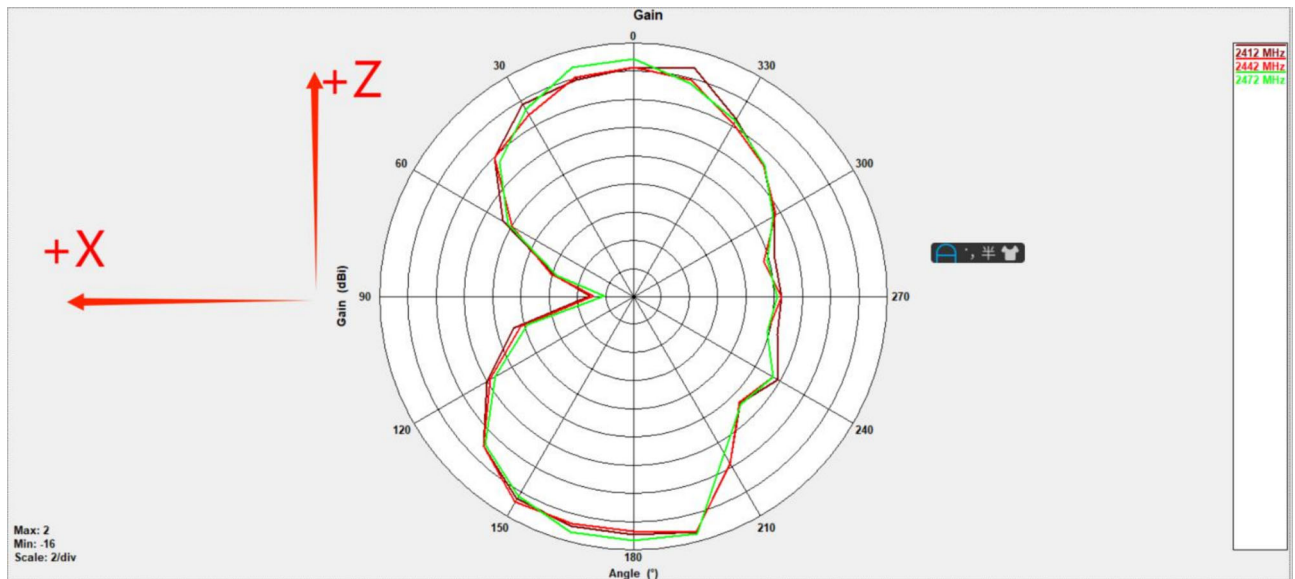
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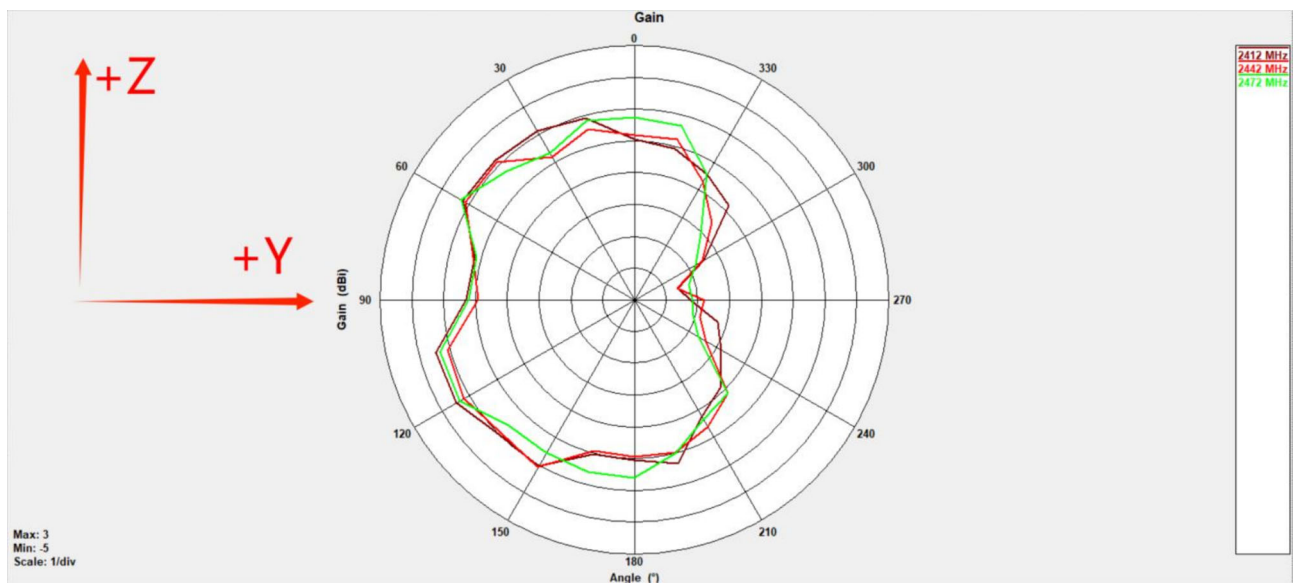


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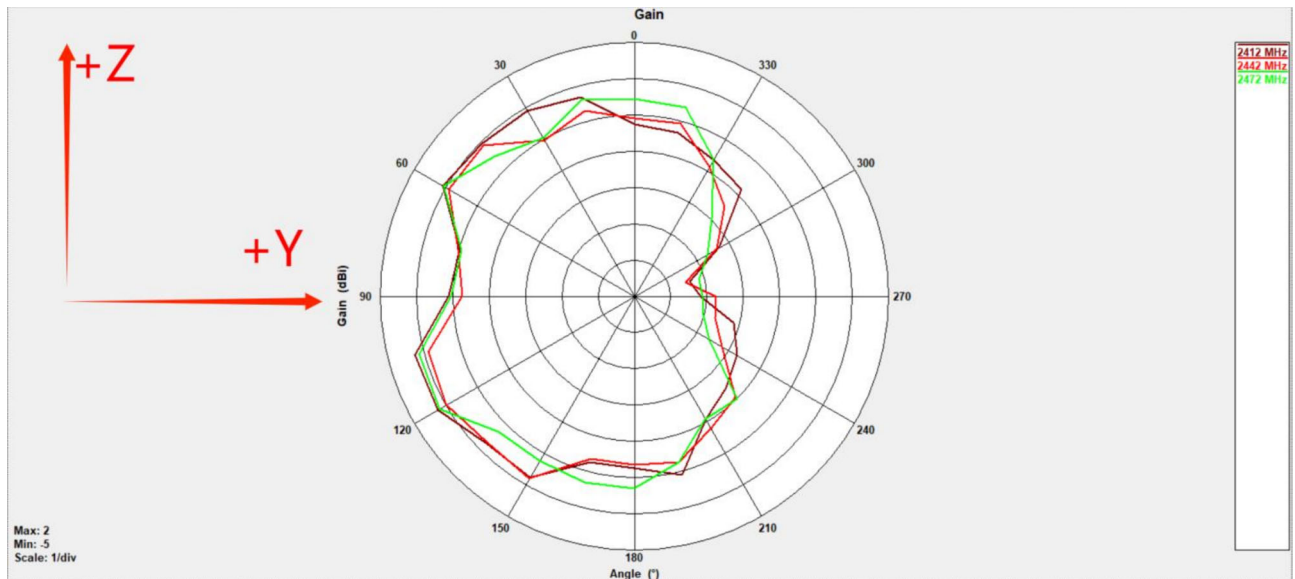


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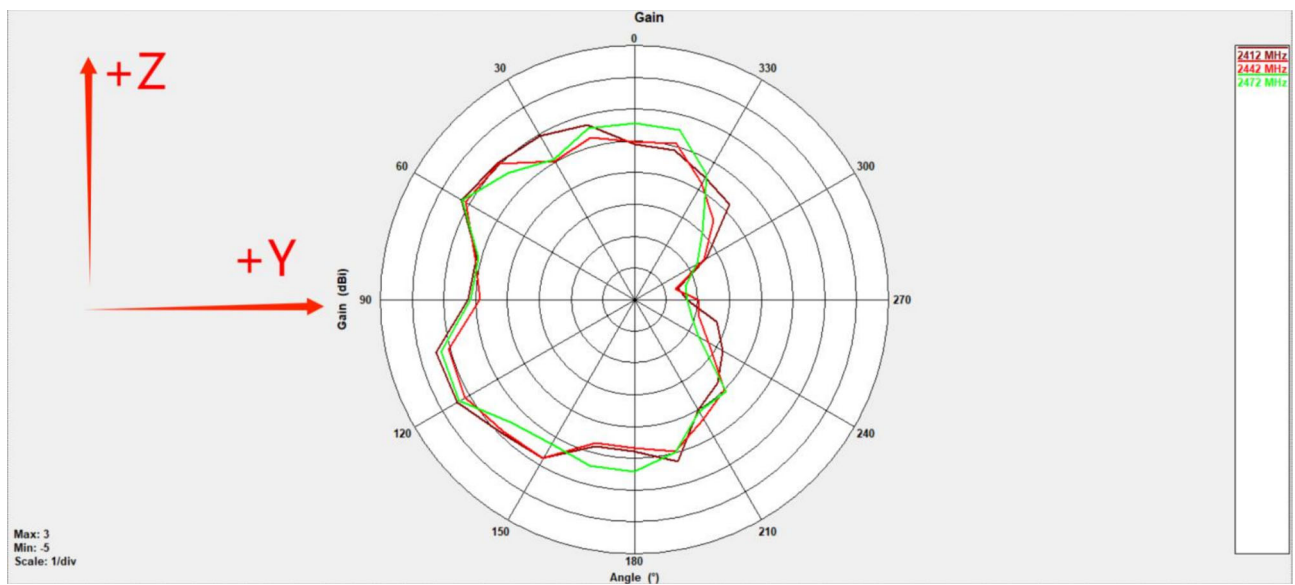
Phi=90°



1#

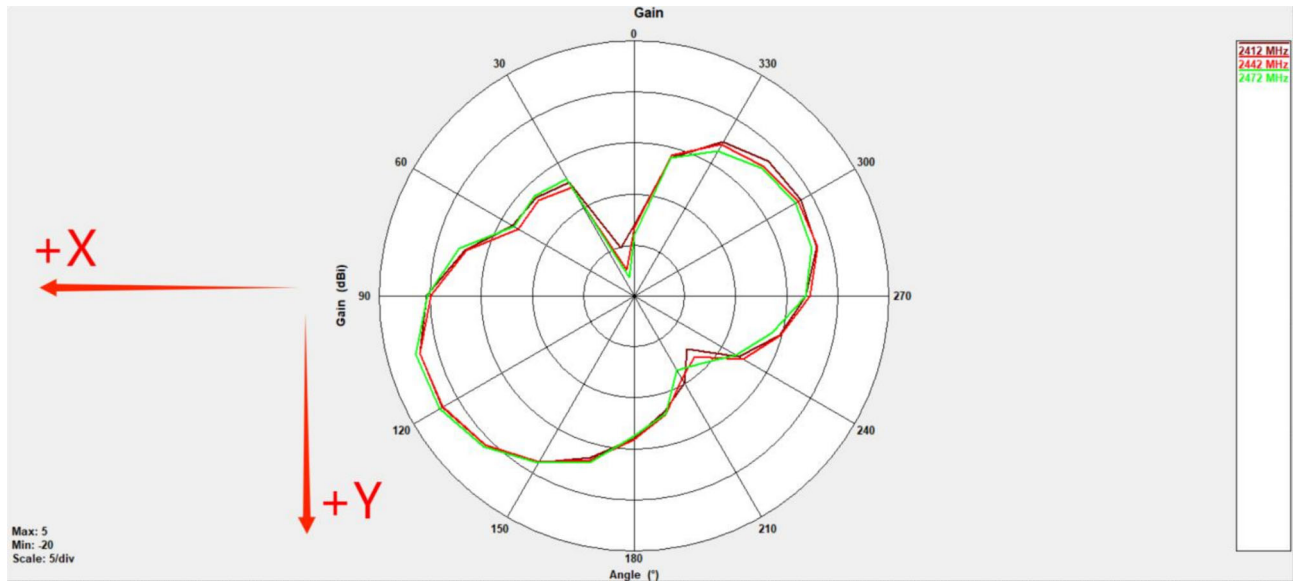


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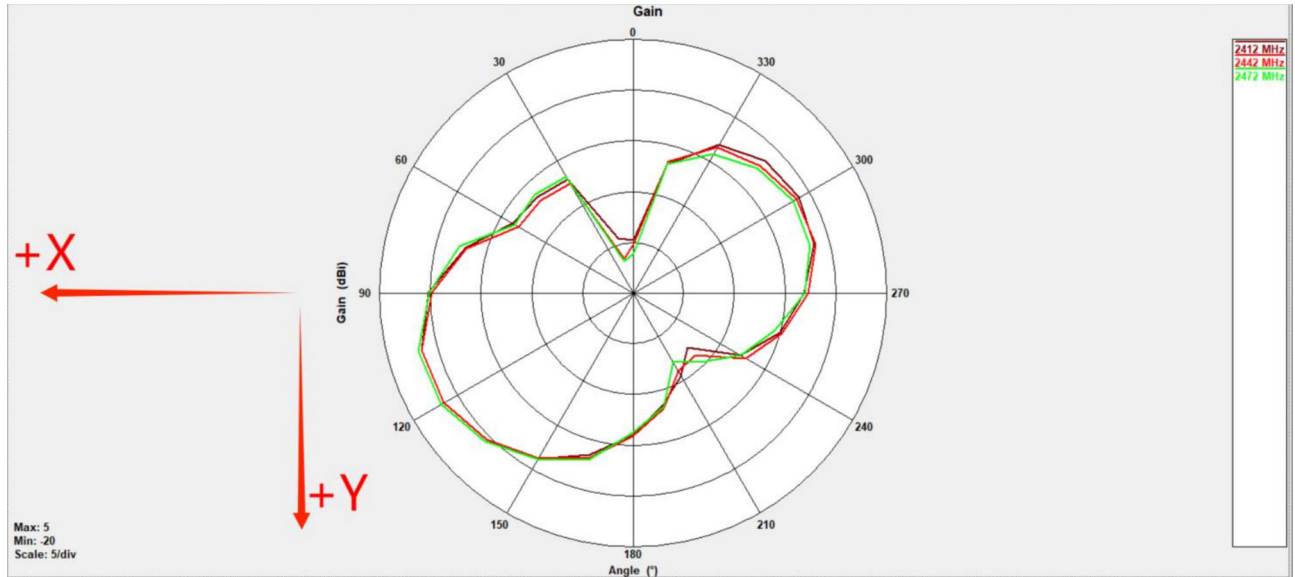


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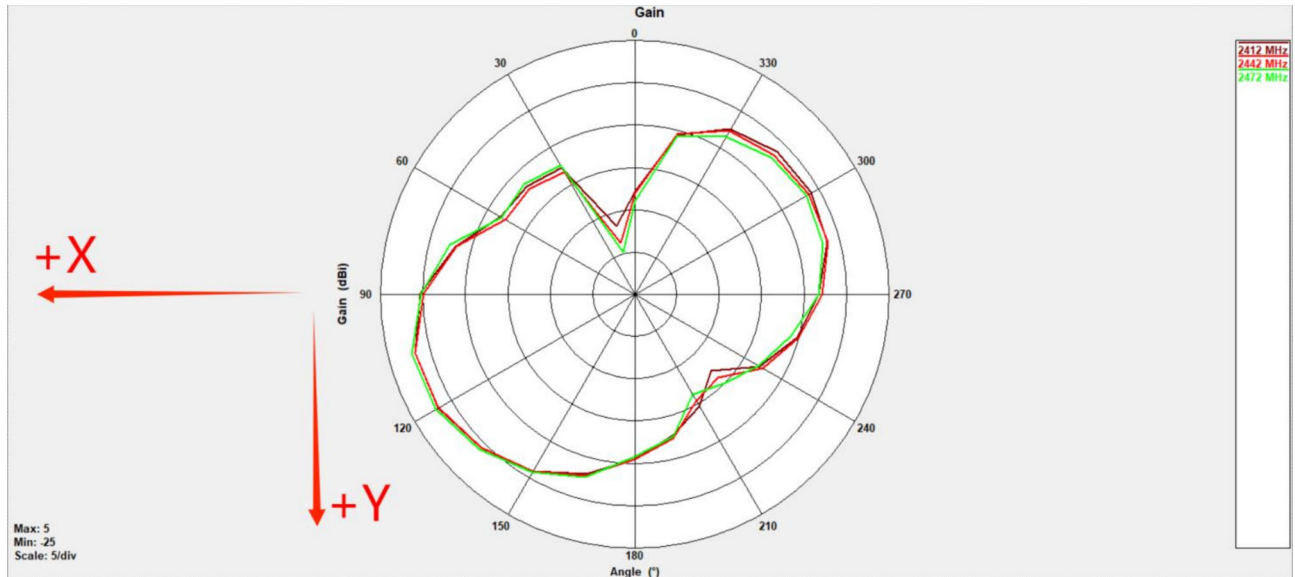
Theta=90°



1#

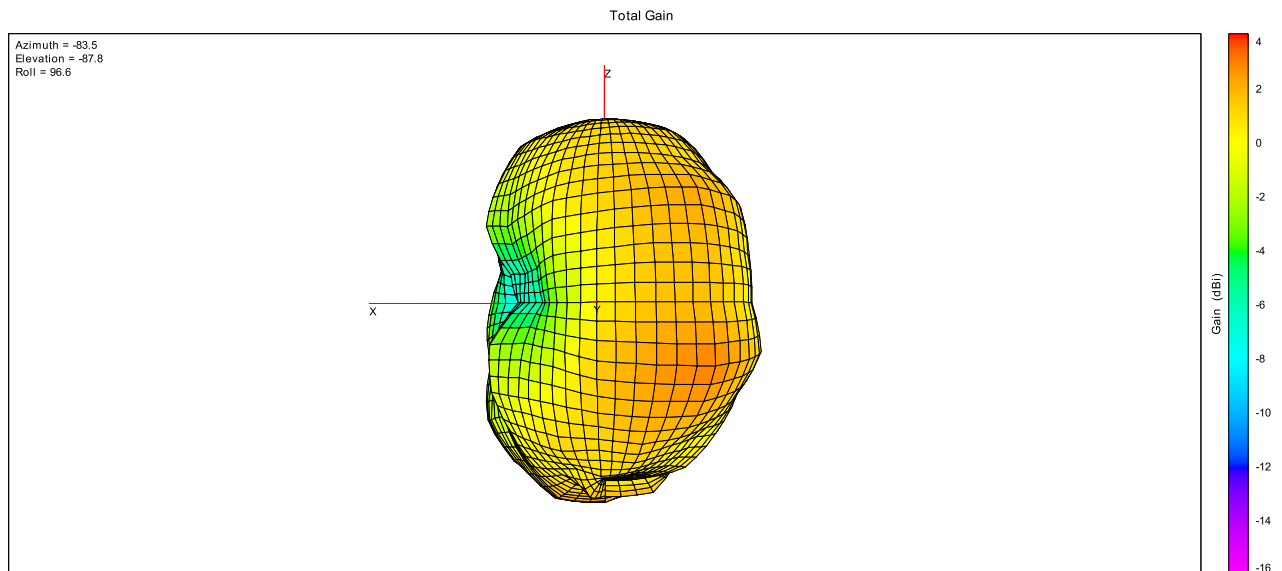


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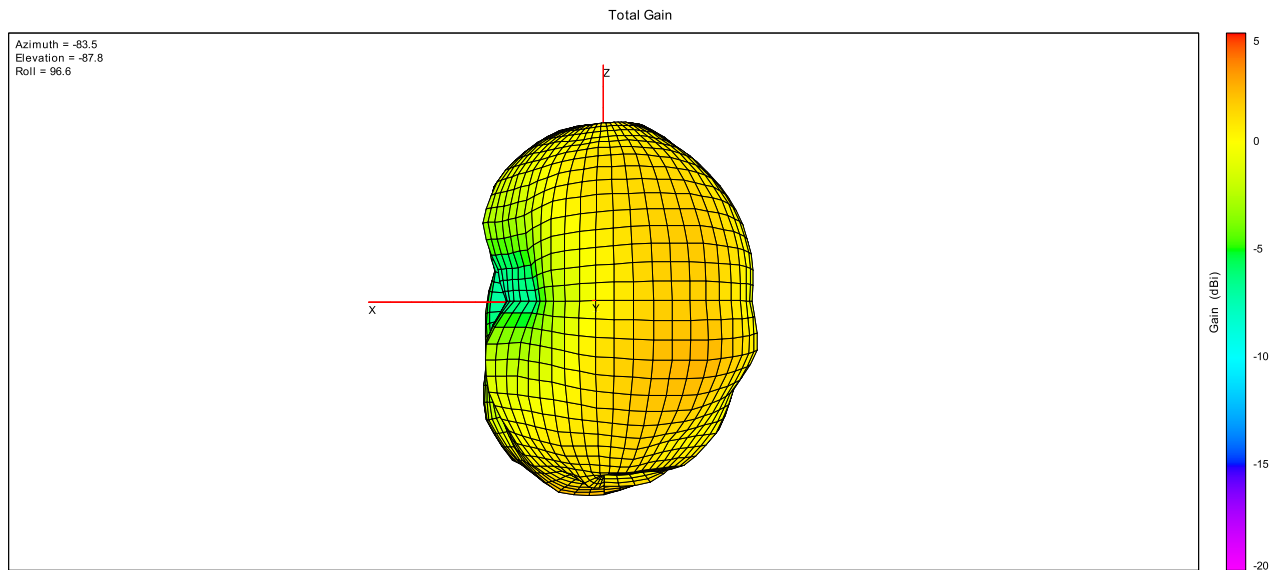


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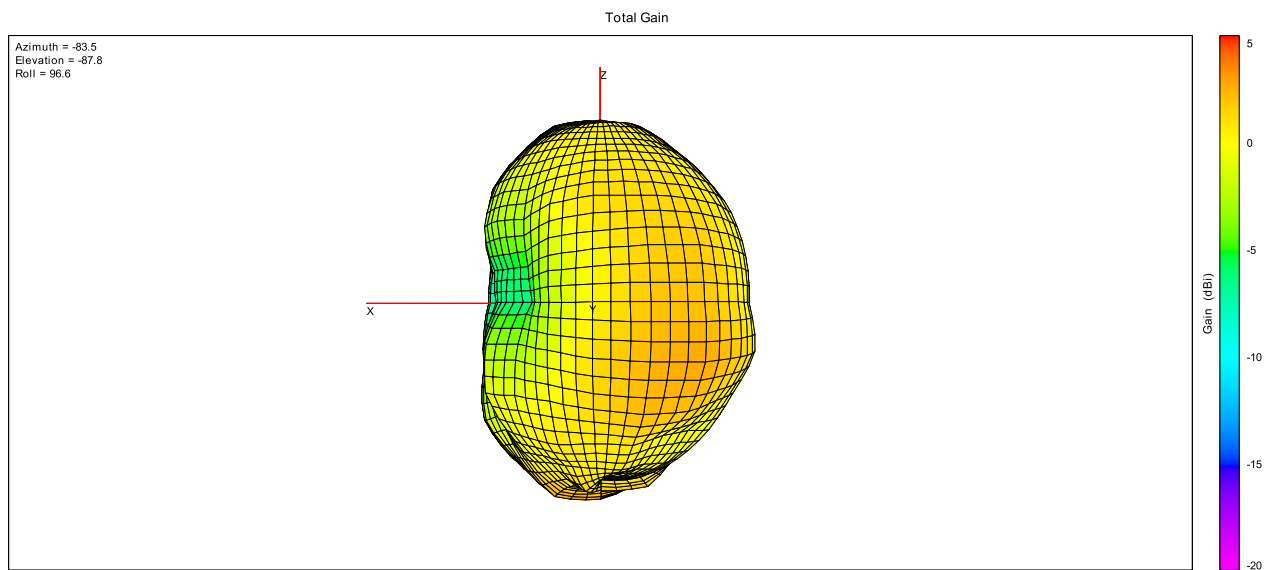
3. 3D Radiation Pattern



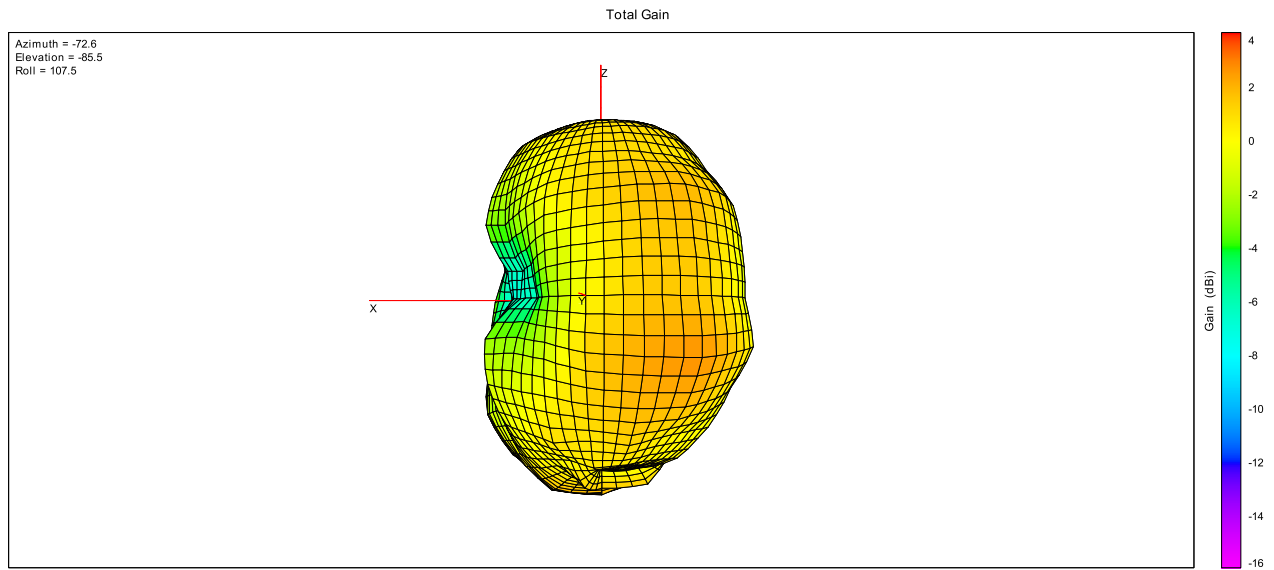
2412MHz_1#



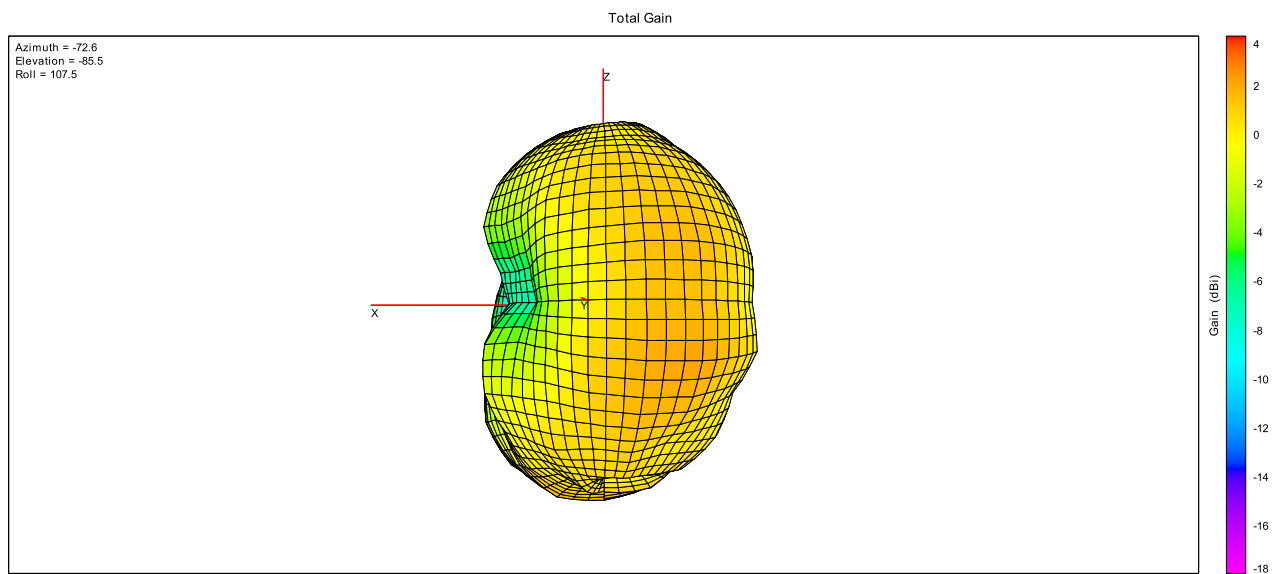
2442MHz_1#



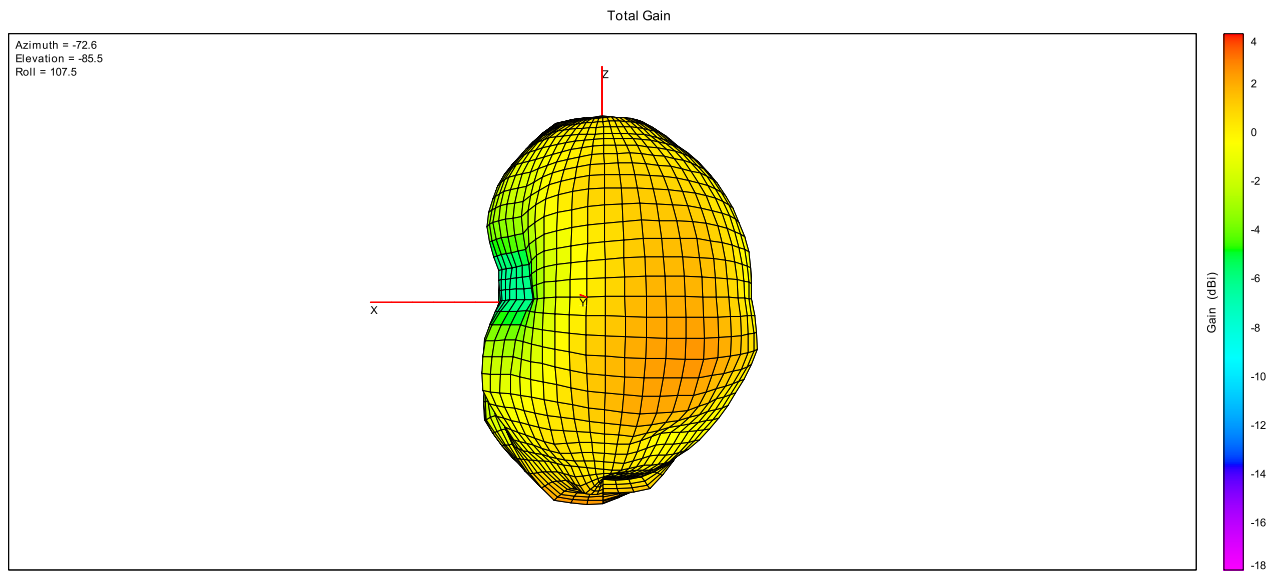
2472MHz_1#



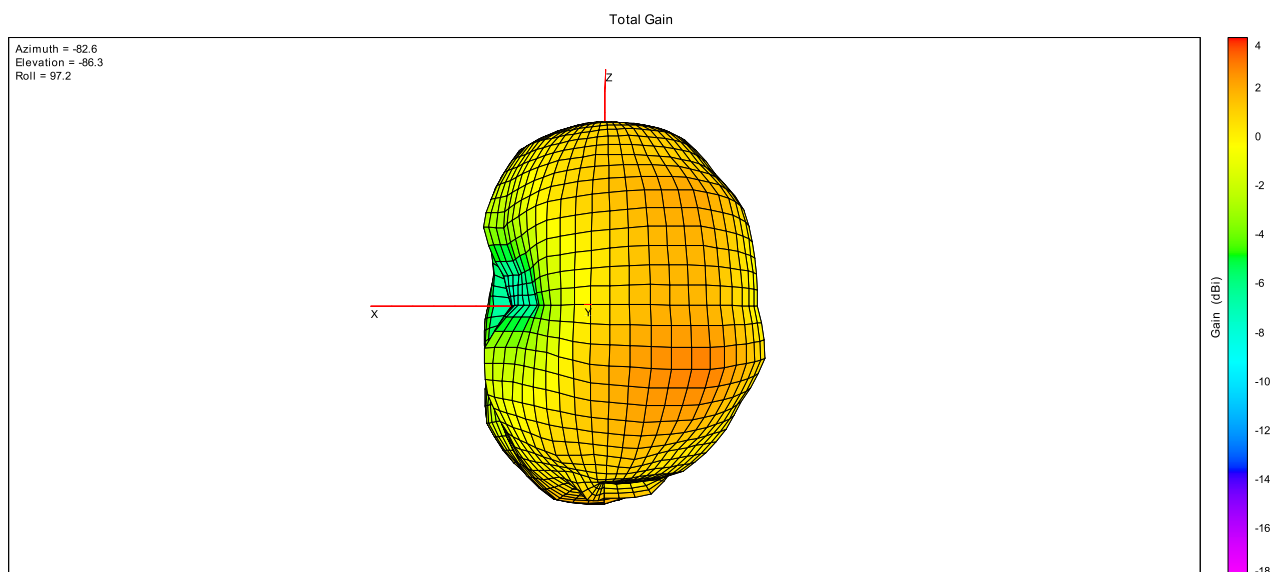
2412MHz_2#



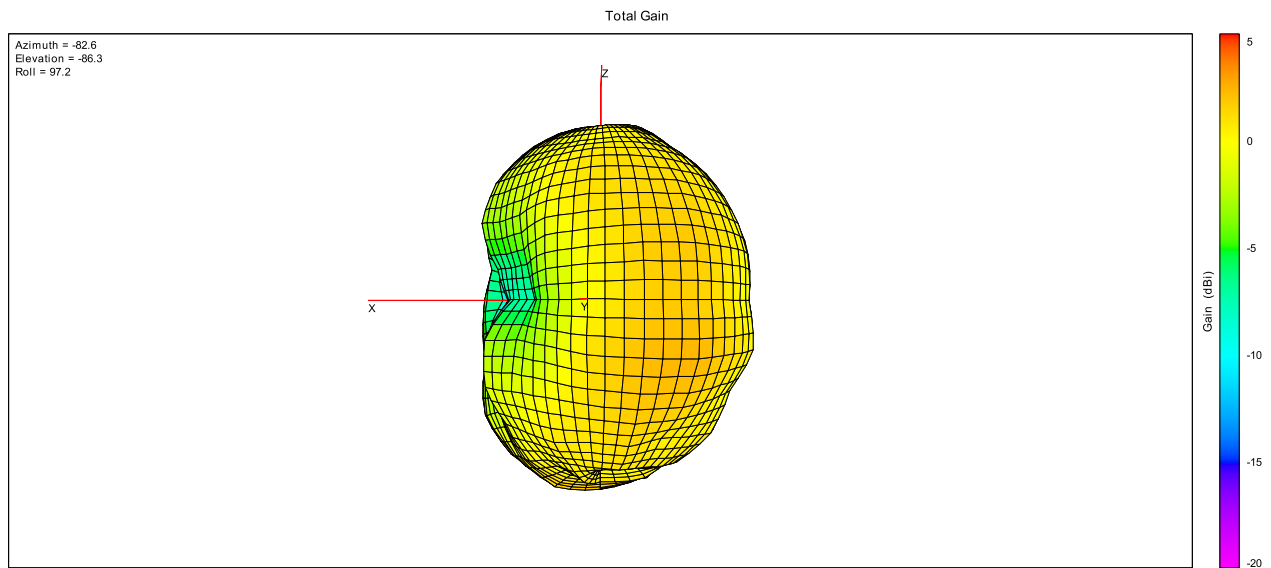
2442MHz_2#



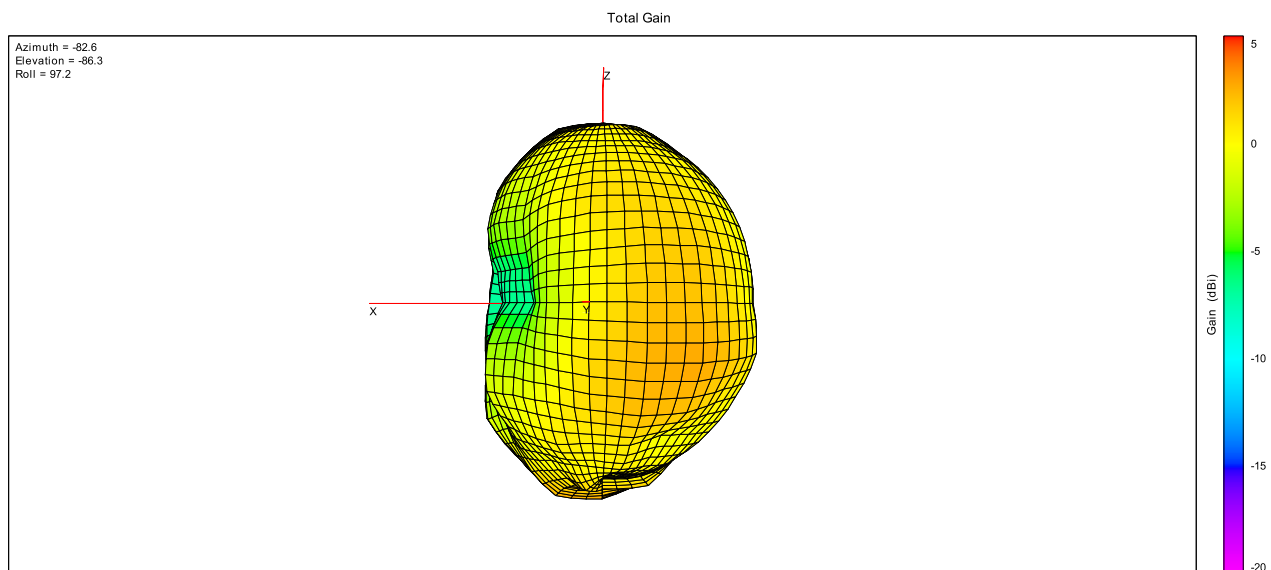
2472MHz_2#



2412MHz_3#



2442MHz_3#



2472MHz_3#



Annex D General Information

1.1 Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road,Block 67, BaoAn District, ShenZhen, Guangdong Province, P. R.China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

1.2 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road,Block 67, BaoAn District, ShenZhen, Guangdong Province, P. R.China

1.3 Test Equipments Utilized

No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Network Analyzer	MY46110140	E5071C	Agilent	2025.05.13	2026.05.12
2	OTA Chamber	TJ2235-Q1793	AMS-892 3-150	ETS	2022.11.30	2025.11.29

1.4 Test Software Utilized

No.	Software Name	Serial No.	Version	Manufacturer
1	Antenna Measurement System	1685	EMQuest EMQ-100 V 1.13 Build 21267	ETS

————— END OF REPORT —————