



REPORT No.: SZ23010069E01

TEST REPORT

APPLICANT : Gemstar Technology(Yangzhou) Co.Ltd

PRODUCT NAME : Remote control

MODEL NAME : BV Sky LC102 2023

TRADE NAME : N/A

BRAND NAME : N/A

STANDARD(S) : IEEE Std 149-2021

RECEIPT DATE : 2023-01-09

TEST DATE : 2023-01-10

ISSUE DATE : 2023-01-12

Edited by:

Fang Jinshan(Rapporteur)

Approved by:

Chi Shide(Supervisor)

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MORLAB

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Change History		
Version	Date	Reason for change
1.0	2023-01-12	First edition



1. Technical Information

Note: Provide by Applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Gemstar Technology(Yangzhou) Co.Ltd
Applicant Address:	Room 606, Guofa building, #3110 Renmin Road, Suzhou, Jiangsu Province, China
Manufacturer:	N/A
Manufacturer Address:	N/A

1.2. Equipment Under Test (EUT) Description

Wireless Type	Bluetooth
Frequency	2402MHz-2480MHz
IMEI	N/A
Sample No.	1#&2#

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

2.2. Test Conditions

Test Environment Conditions:

Relative Humidity:	25 ... 75 %
Temperature:	+10 °C to +30 °C

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. When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% Confidence intervals.

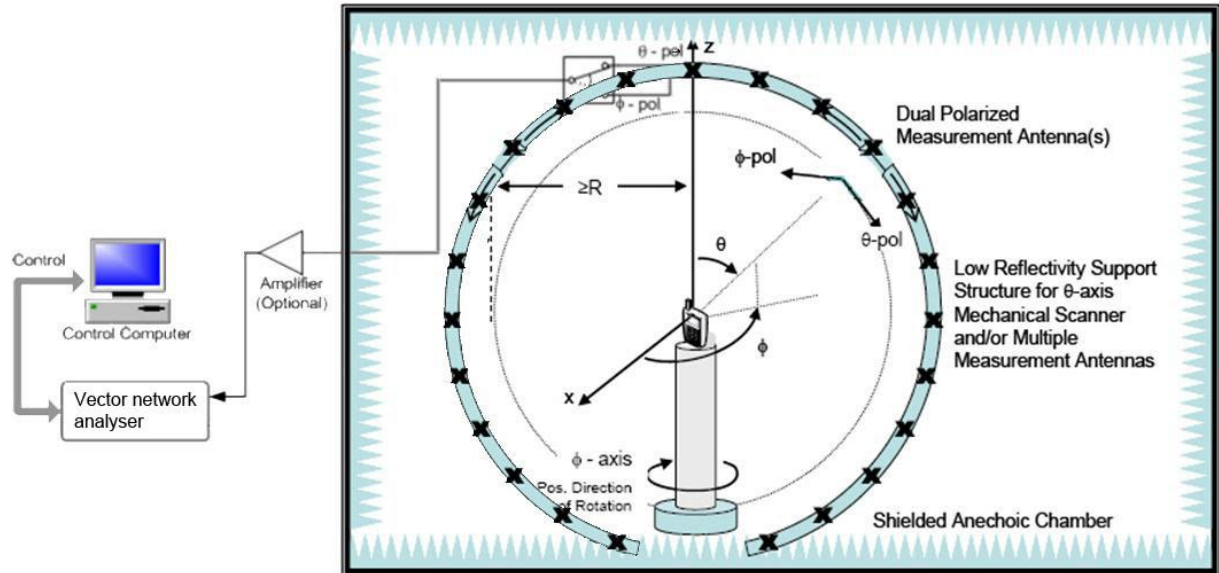
Item	Measurement Uncertainty(dB)
Gain	±0.5
VSWR	±0.2
Measurement Uncertainty(95% Confidence Interval) K=2	

2.4. Test Results lists

2.4.1. Gain and Efficiency

Frequency (MHz)	Gain(dBi)		Efficiency(%)		Efficiency(dB)	
	1#	2#	1#	2#	1#	2#
2400	0.23	0.13	38.90	37.99	-4.10	-4.20
2402	0.28	0.17	39.13	38.28	-4.08	-4.17
2410	0.24	0.13	38.46	37.66	-4.15	-4.24
2420	0.10	0.06	37.39	36.74	-4.27	-4.35
2430	-0.01	0.07	36.57	36.07	-4.37	-4.43
2440	0.07	0.13	36.74	36.26	-4.35	-4.41
2450	0.21	0.21	37.00	36.51	-4.32	-4.38
2460	0.21	0.20	36.40	35.83	-4.39	-4.46
2470	0.16	0.10	35.03	34.45	-4.56	-4.63
2480	0.08	0.03	34.00	33.42	-4.68	-4.76
2490	-0.03	0.06	32.86	32.21	-4.83	-4.92
2500	0.15	0.20	32.77	32.10	-4.85	-4.93

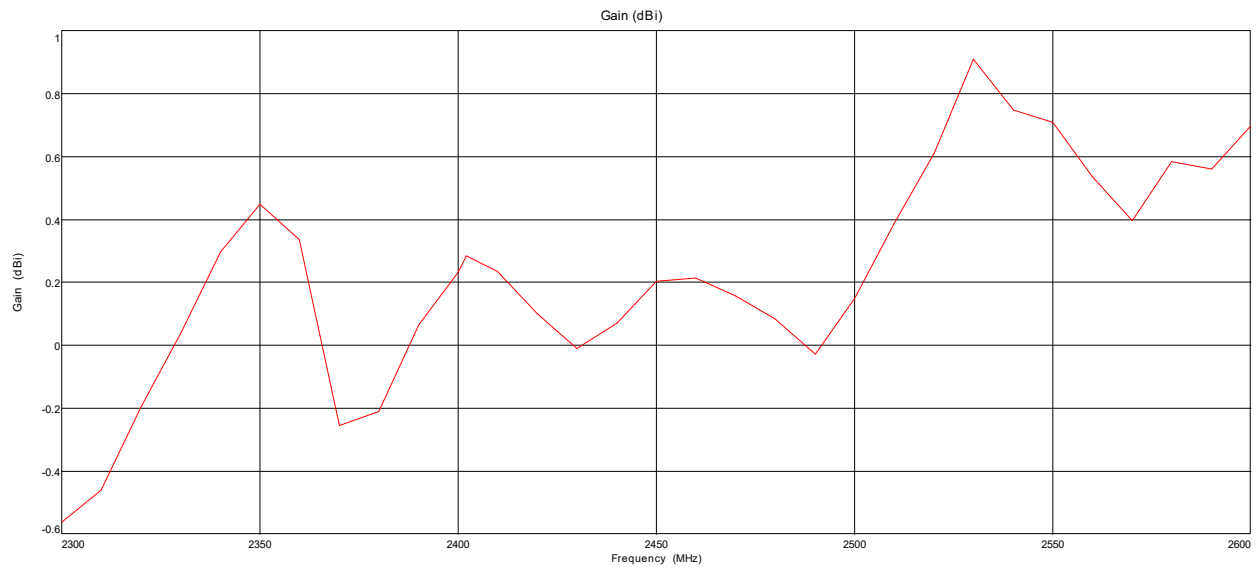
Annex A Test Setup Photos



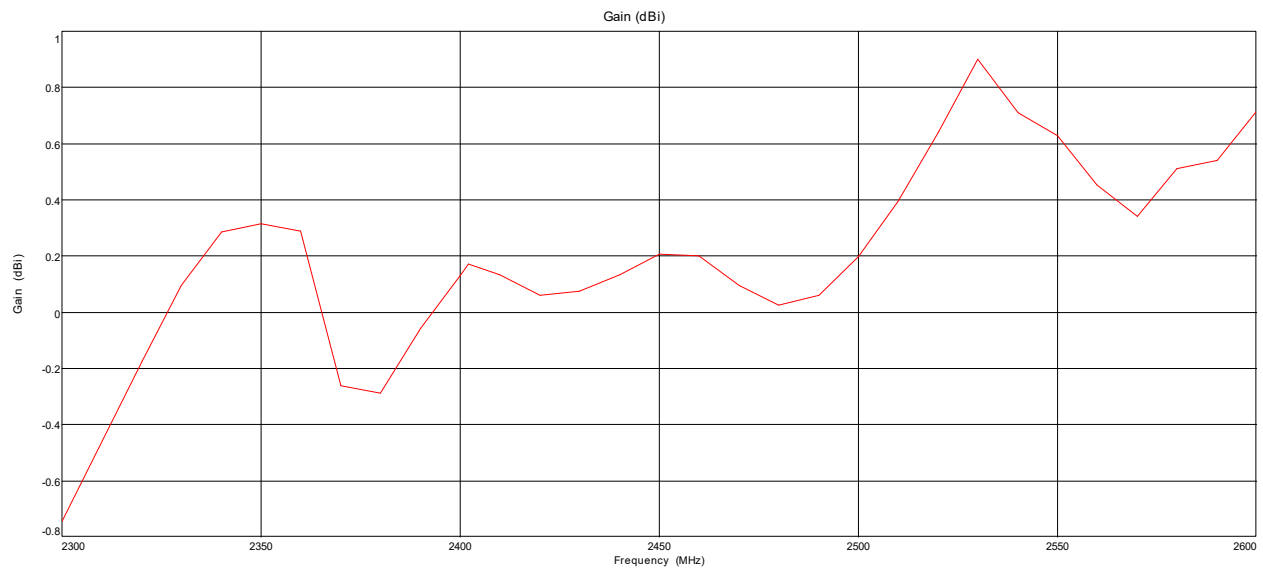
Annex B Figures

1. 2D Radiation Pattern

Gain



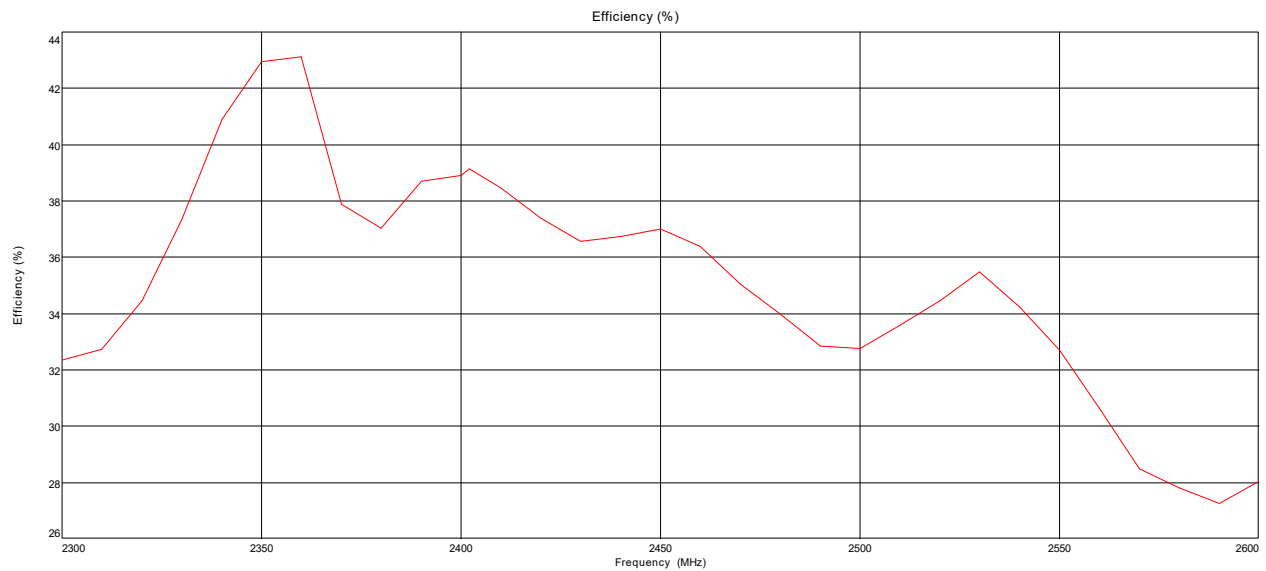
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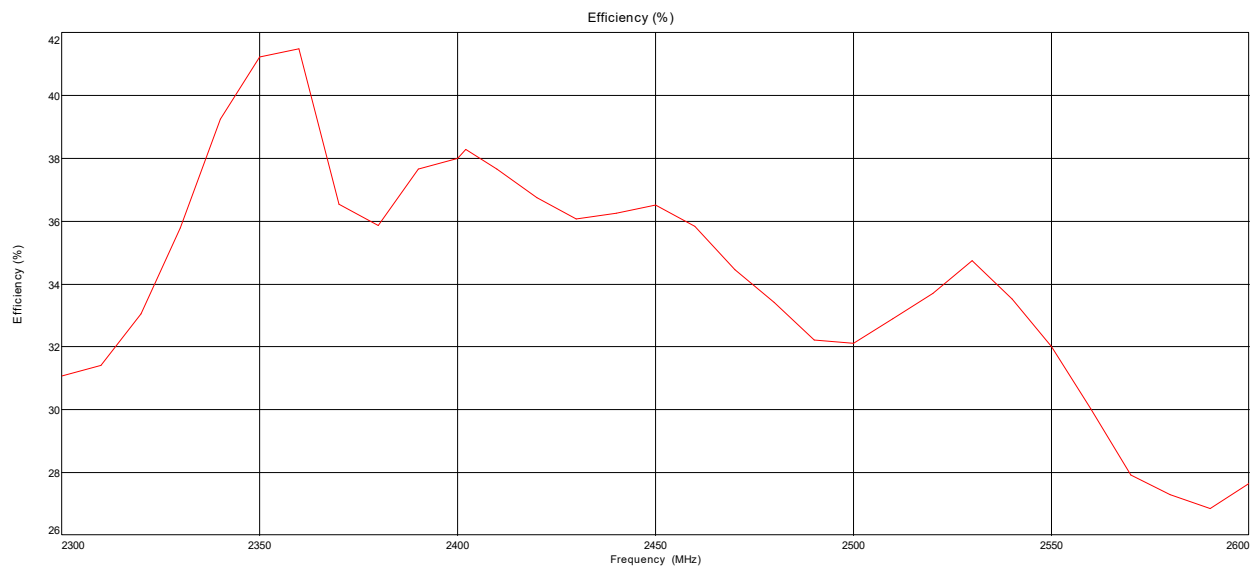
2#



Efficiency



1#

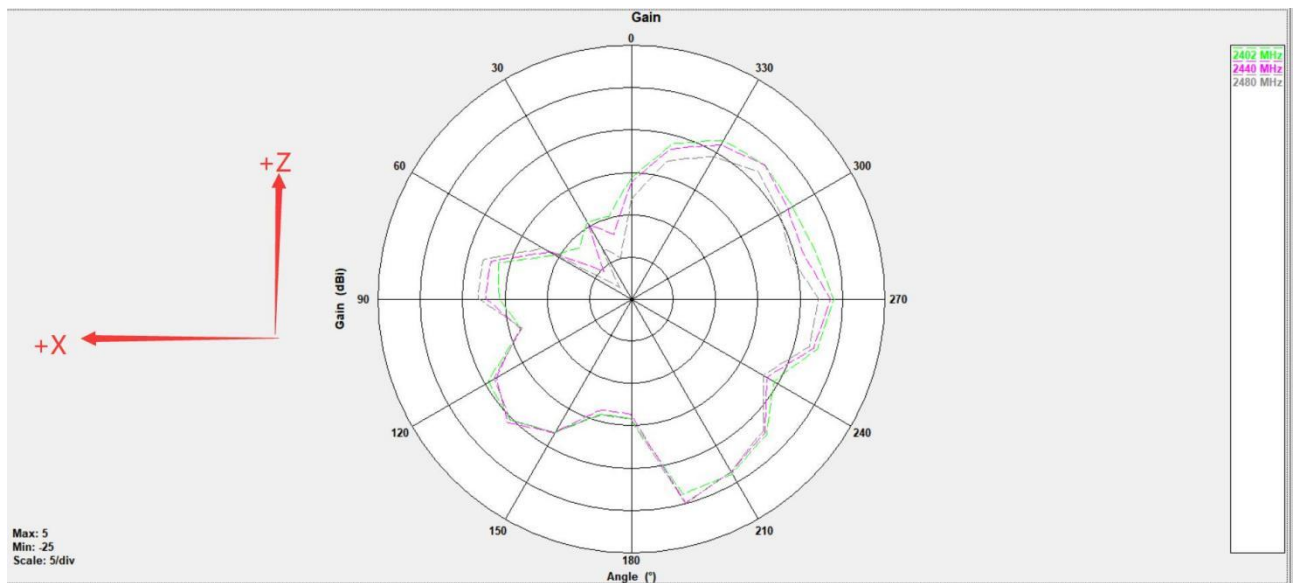
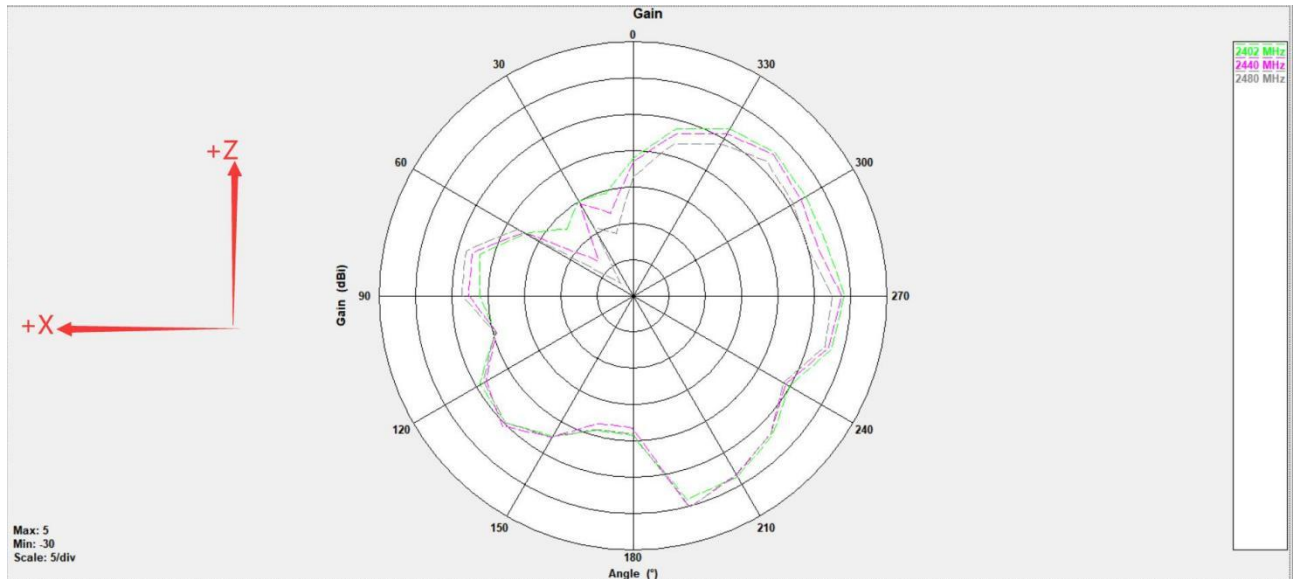


2#



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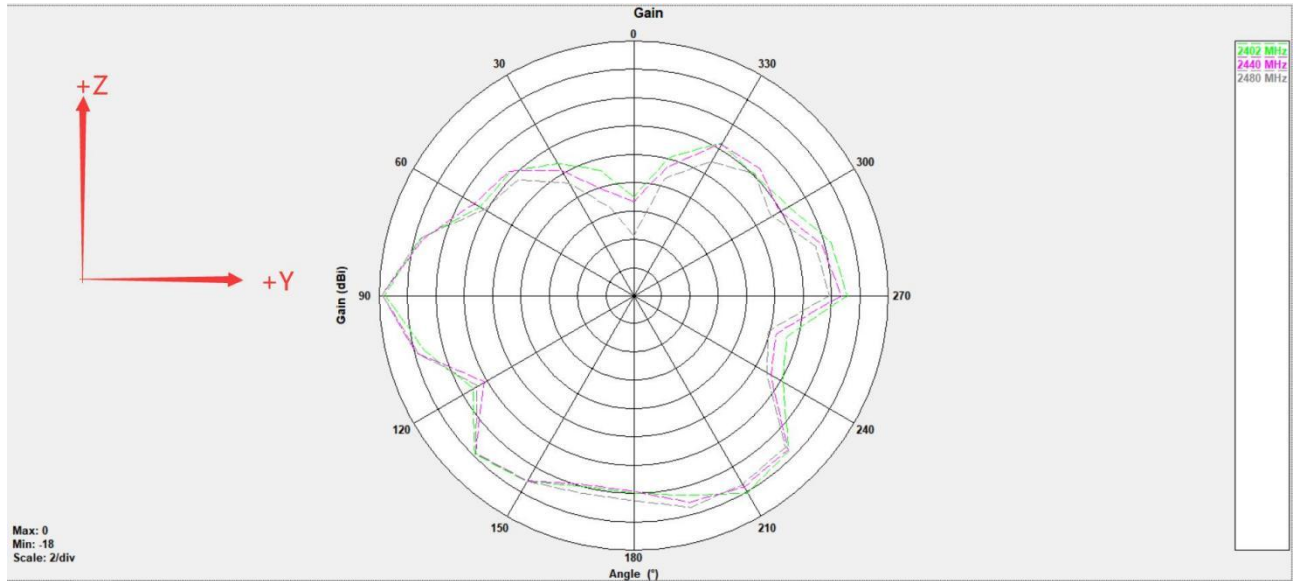
$\Phi=0^\circ$



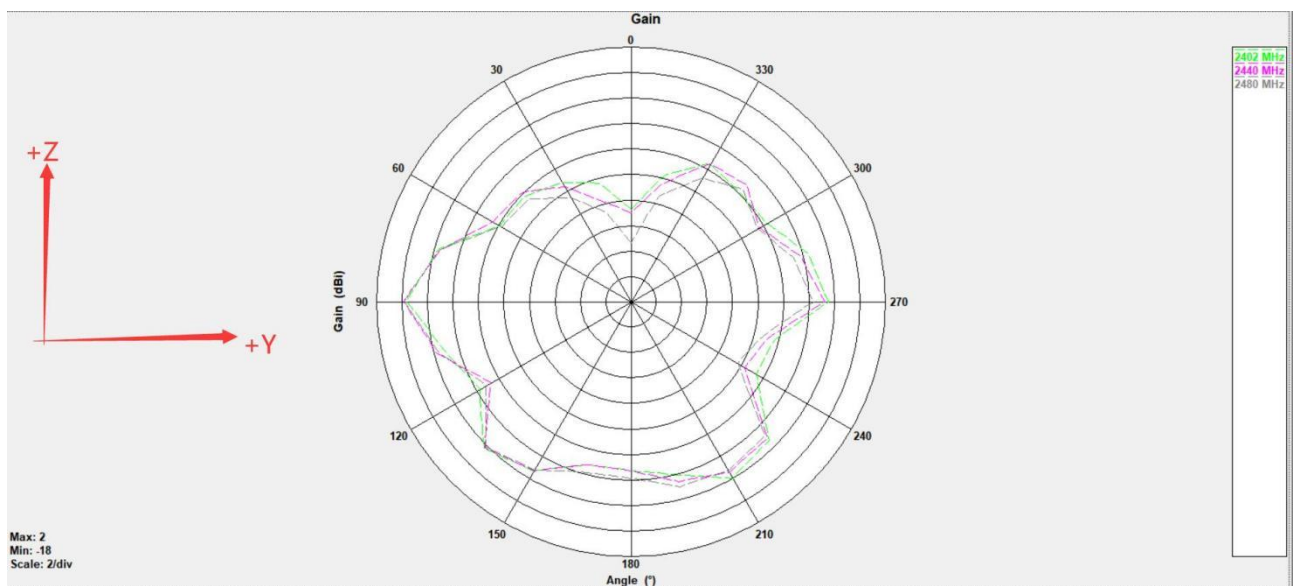


REPORT No.: SZ23010069E01

Phi=90°



1#

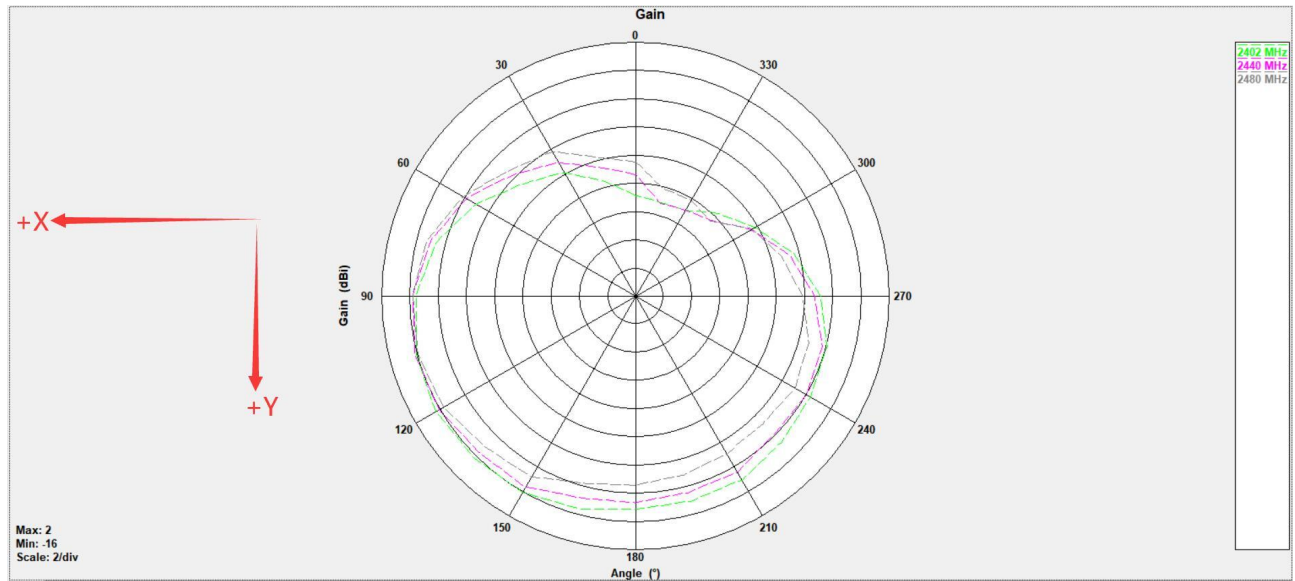


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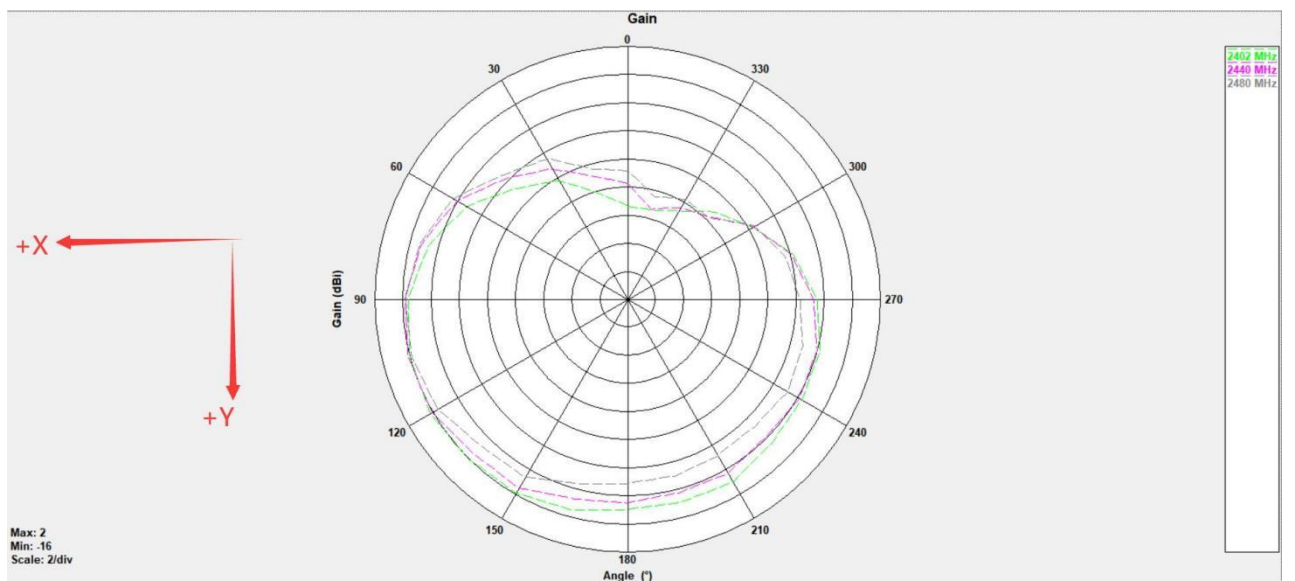


REPORT No.: SZ23010069E01

Theta=90°

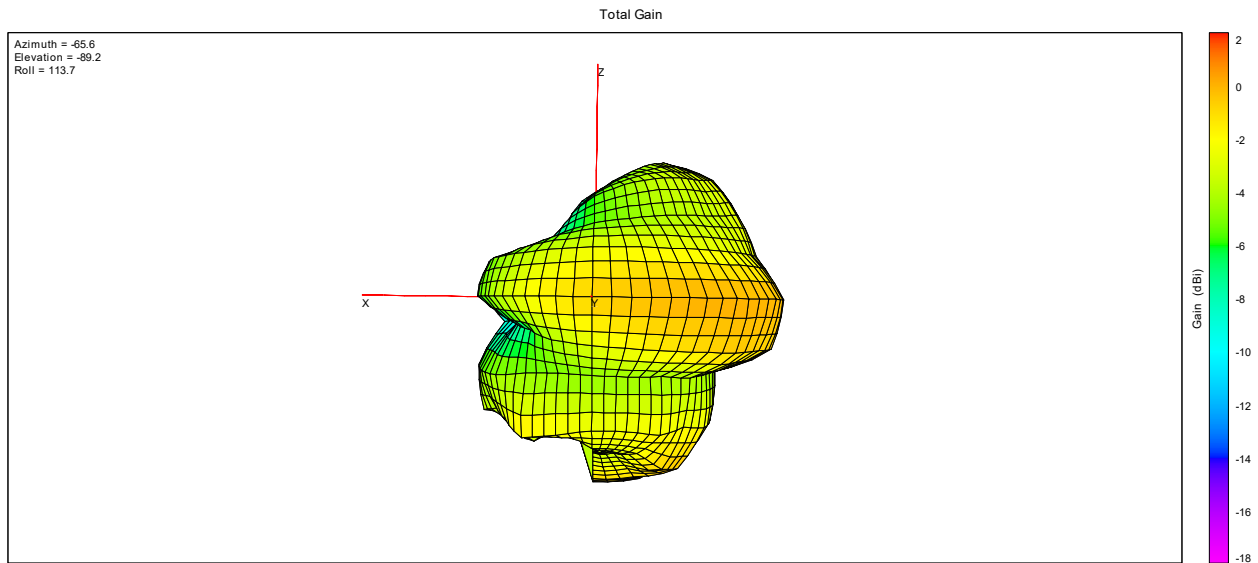


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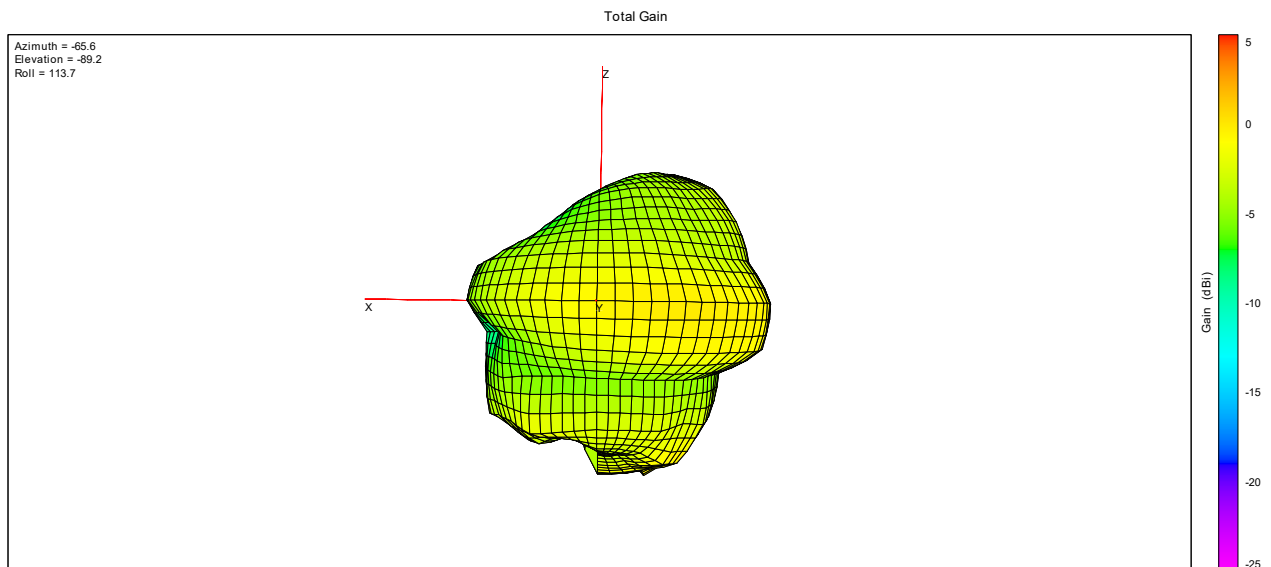


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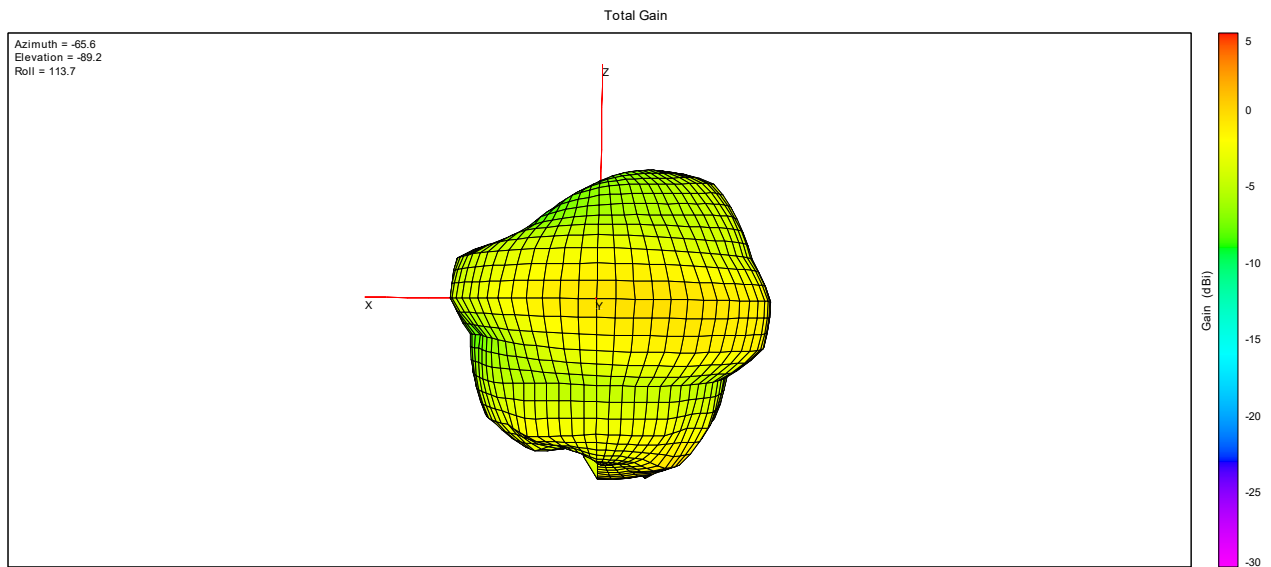
2. 3D Radiation Pattern



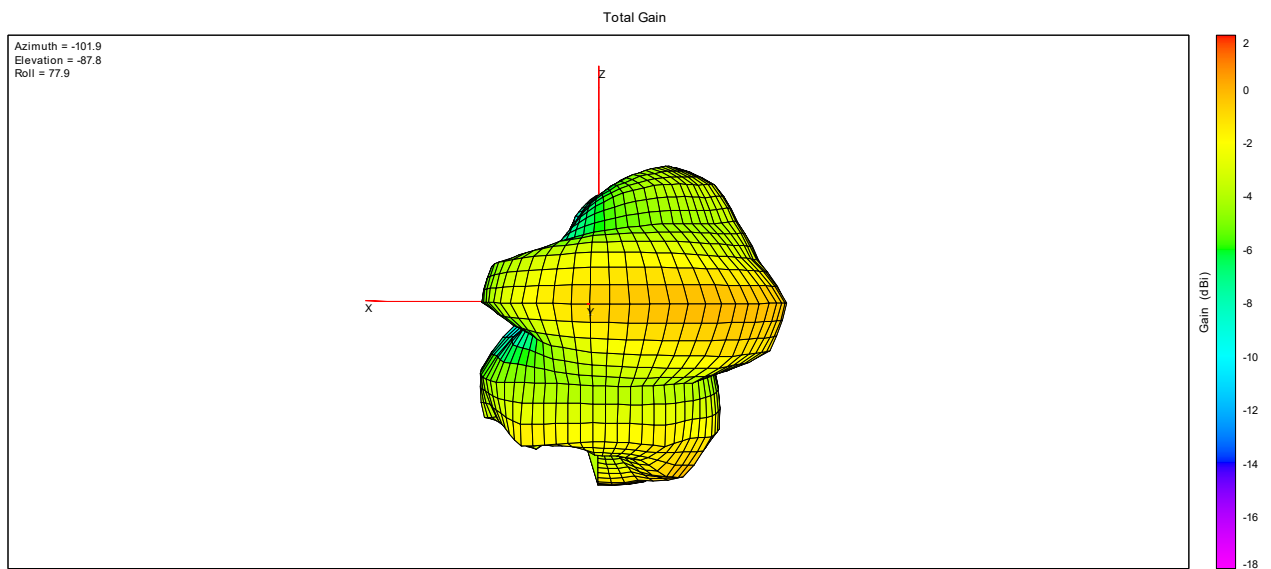
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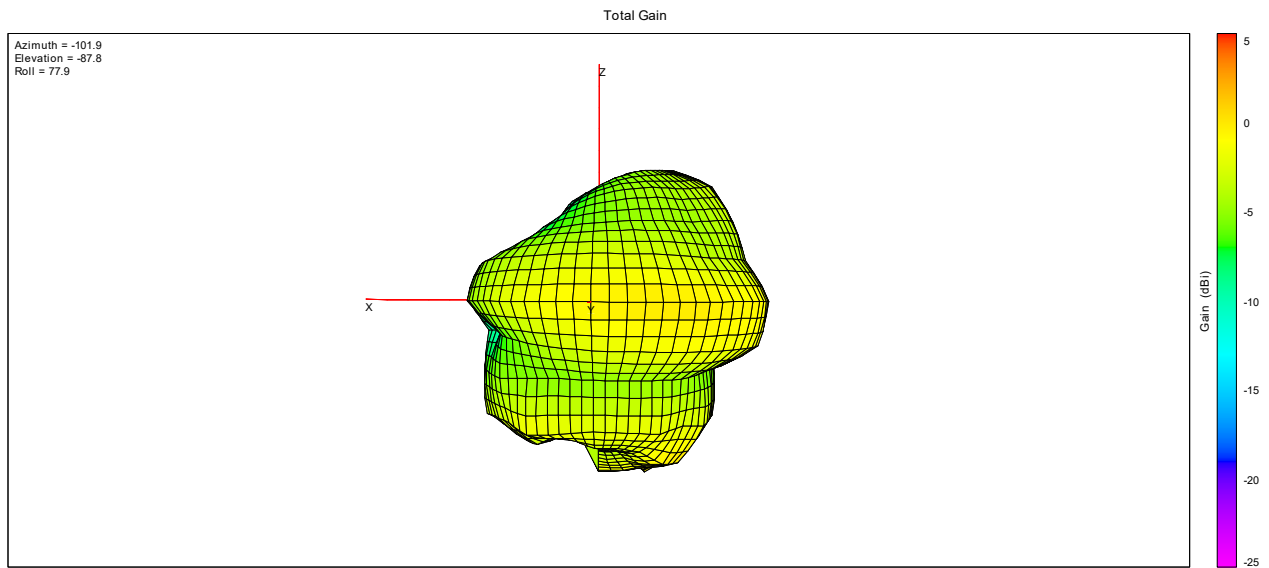
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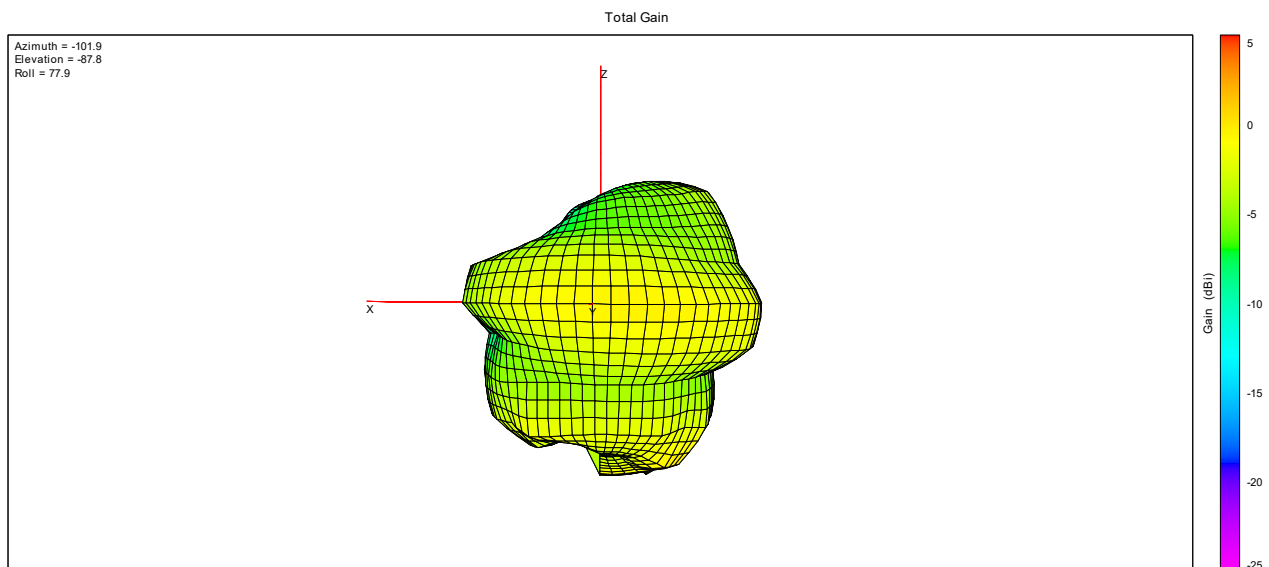
2480MHz_1#



2402MHz_2#



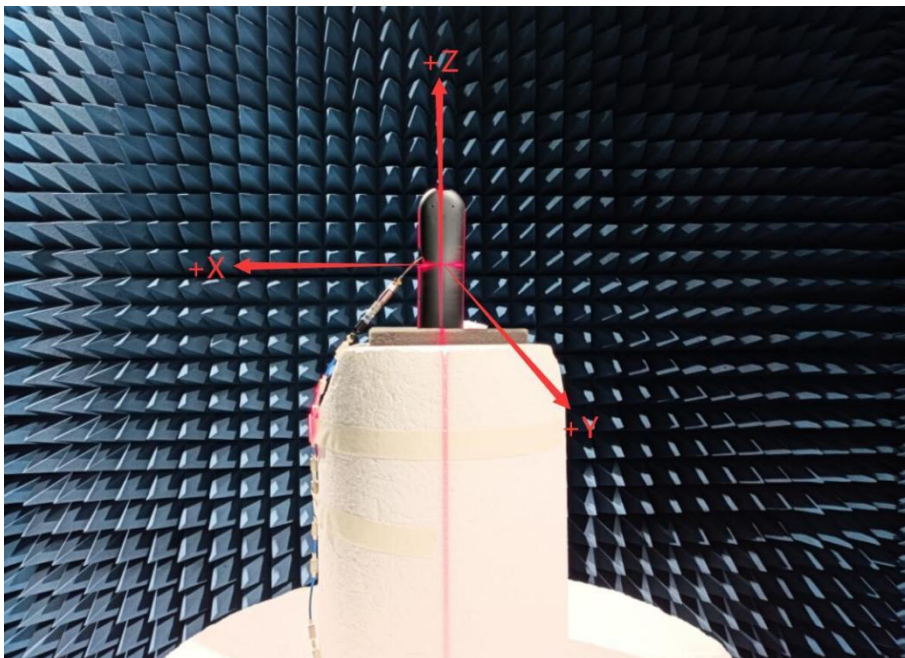
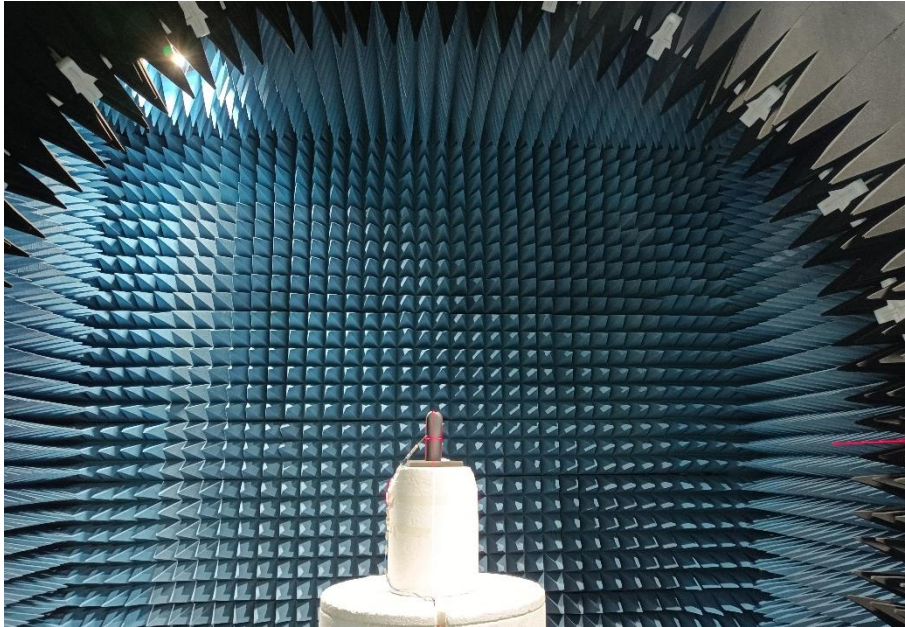
2440MHz_2#



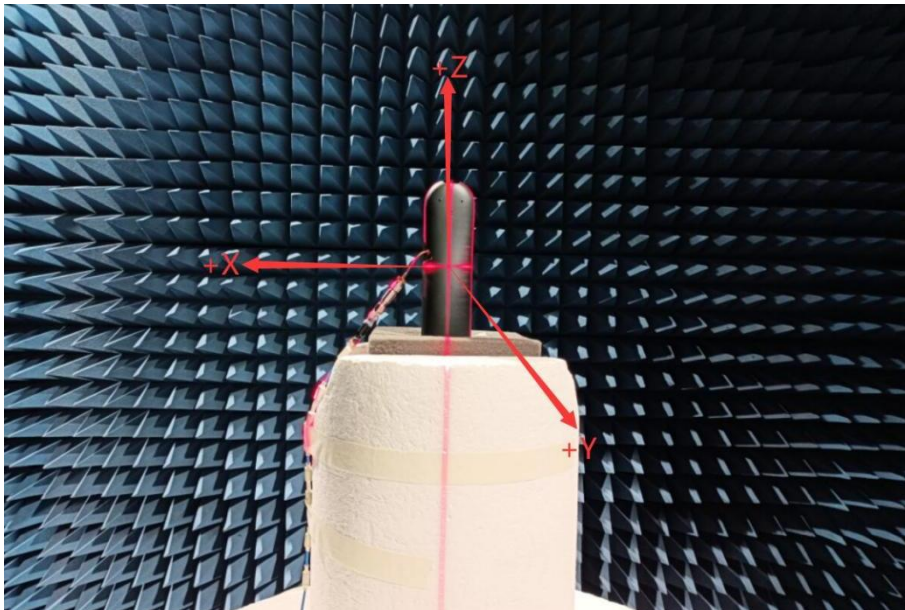
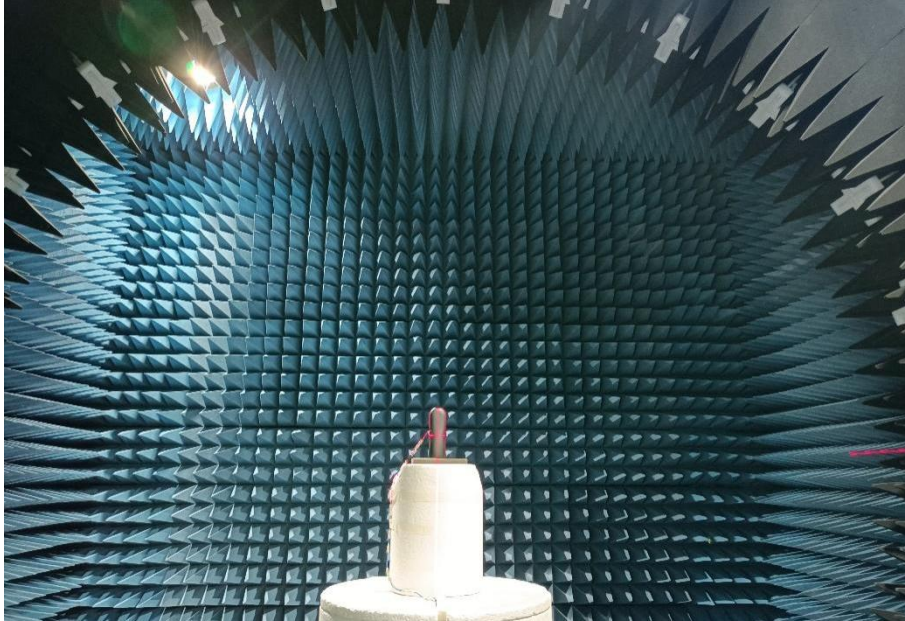
2480MHz_2#

Annex C EUT Photos

1. Test environment

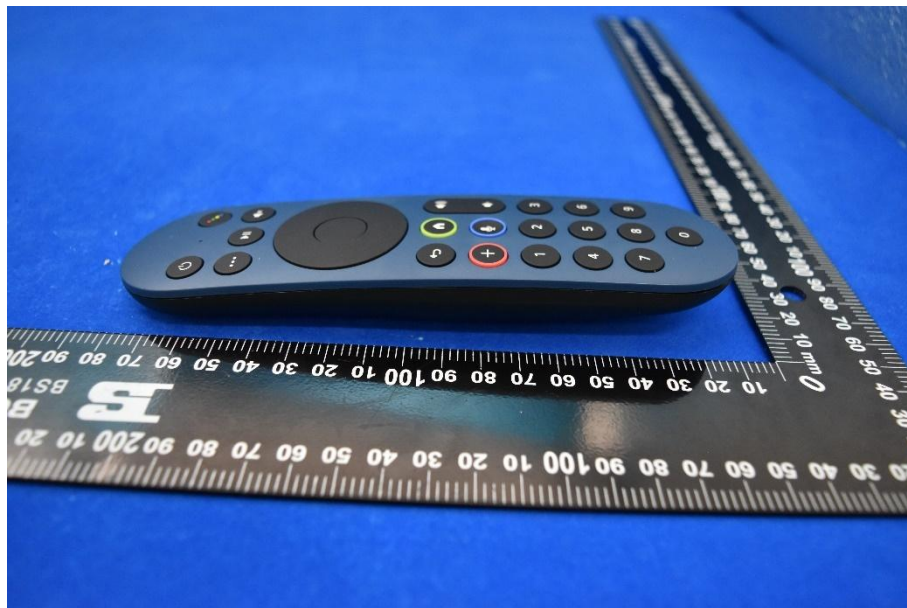


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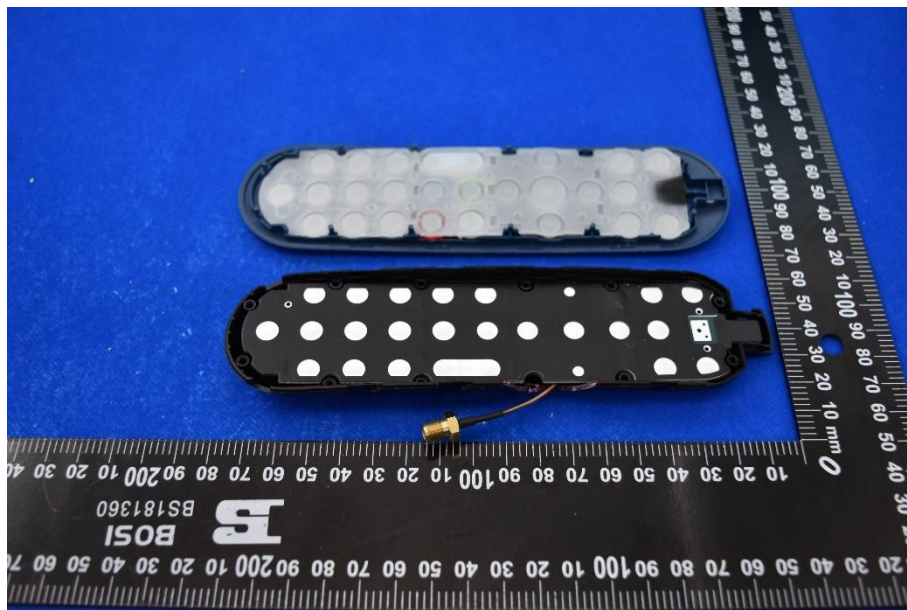
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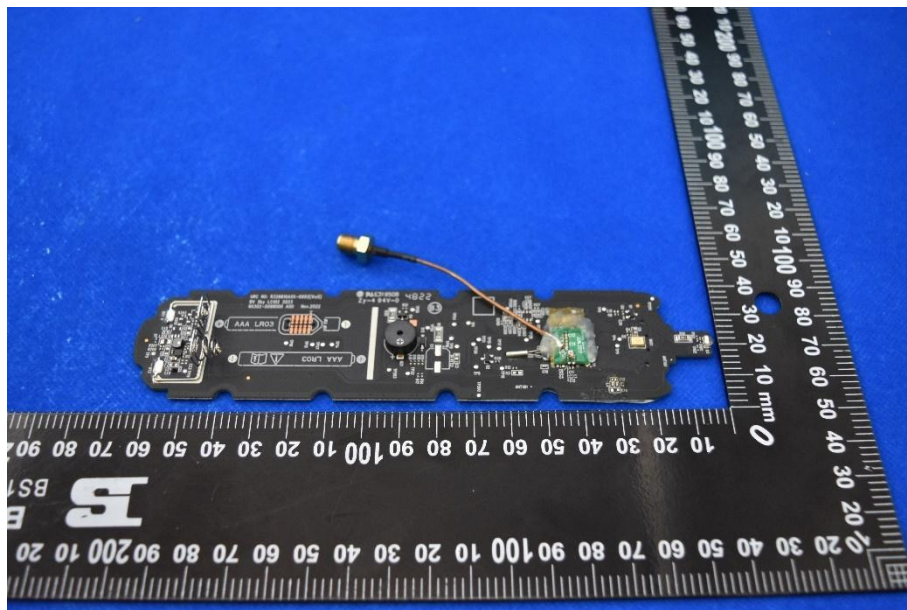
2. EUT

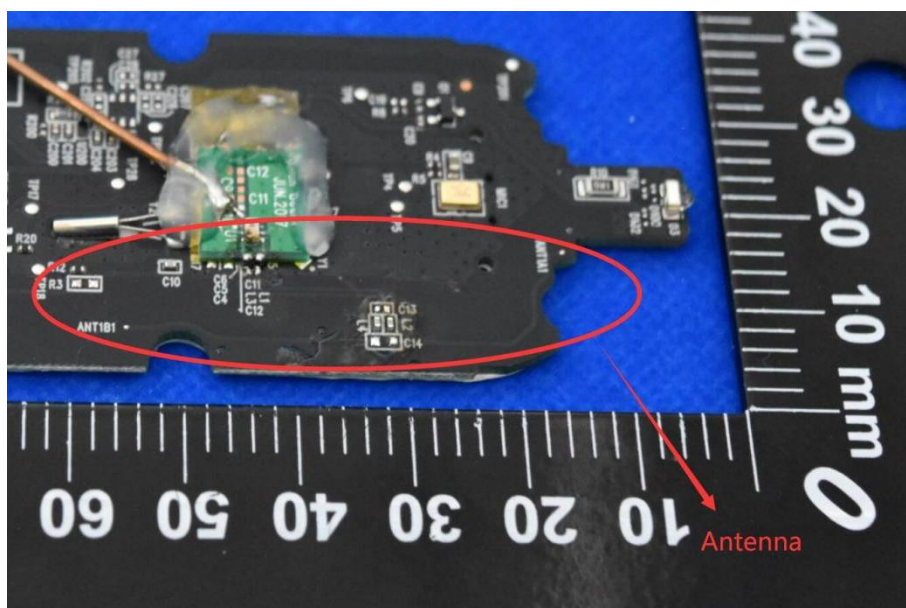




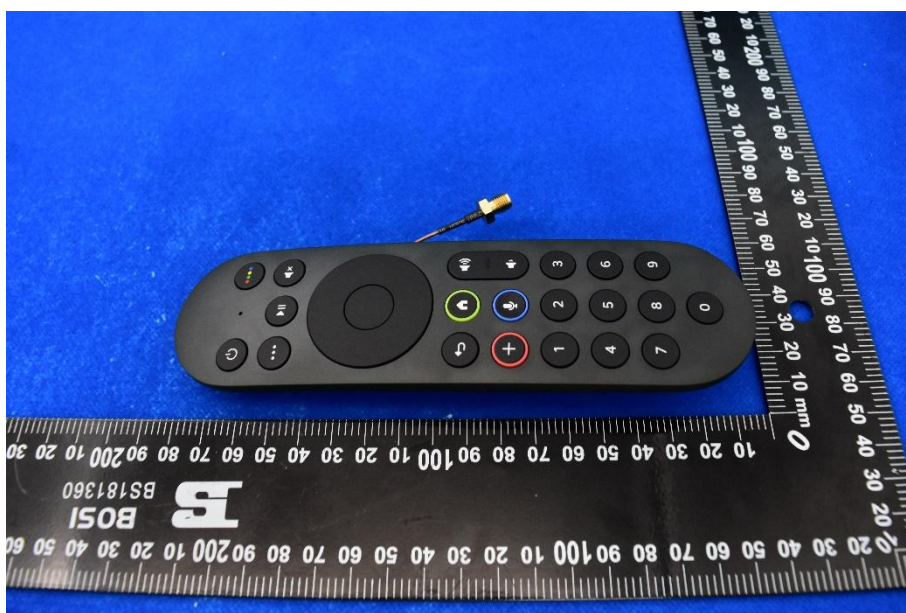








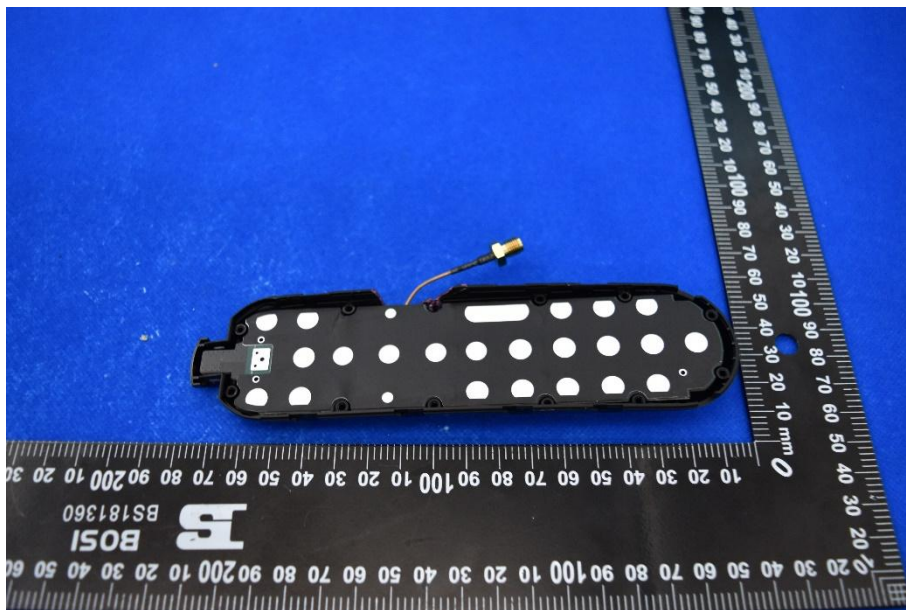
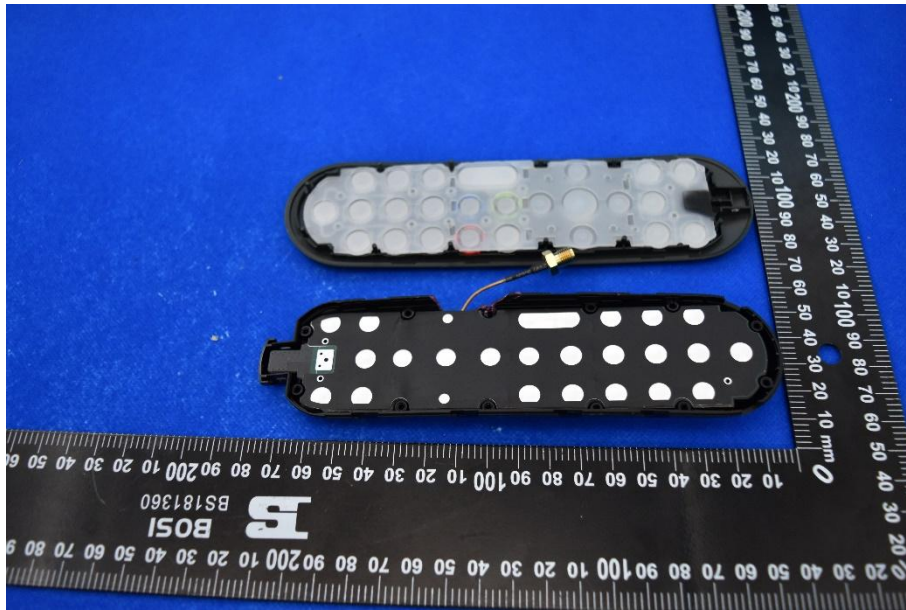
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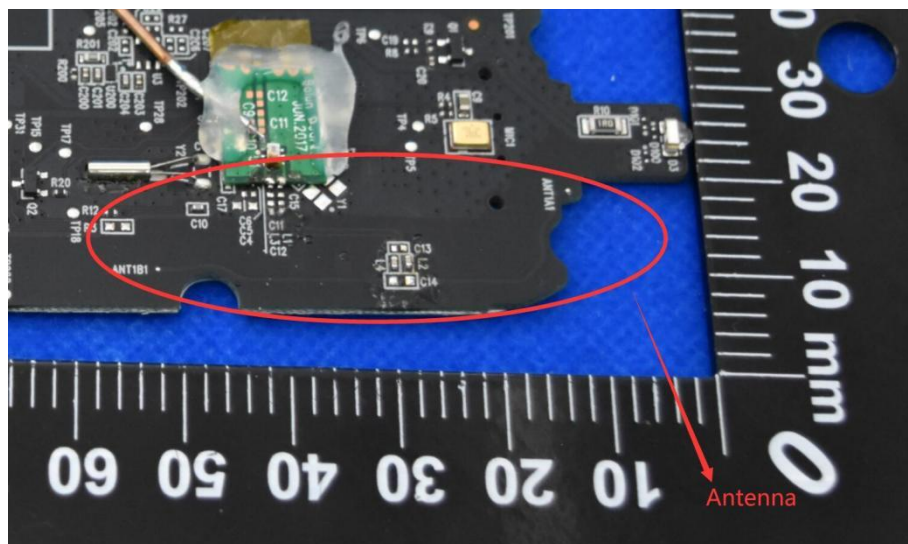
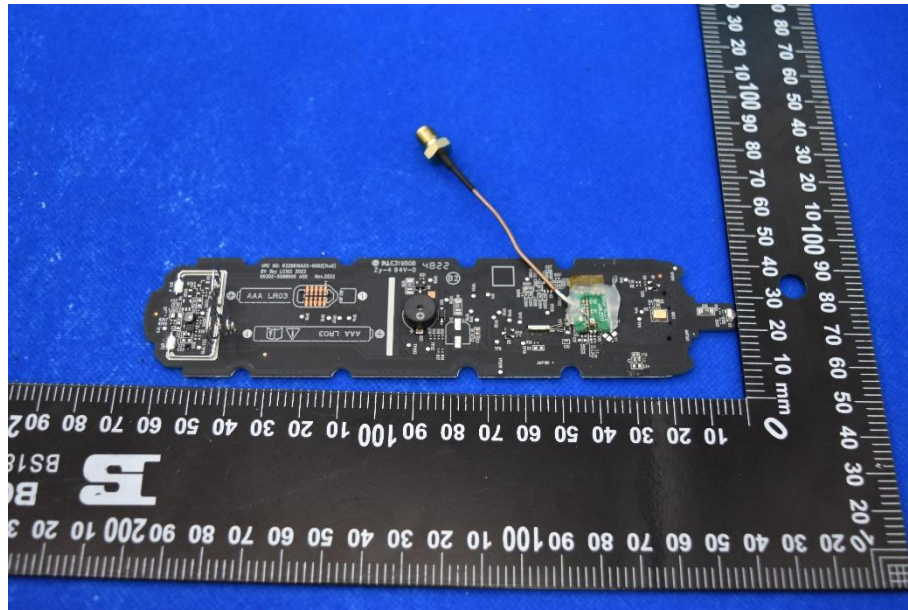












2#



Annex D General Information

1.1 Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, 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:	FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

1.3 Test Equipments Utilized

No.	Equipement Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Network Analyzer	MY46110140	E5071C	Agilent	2022.07.04	2023.07.03
2	OTA Chamber	TJ2235-Q1793	AMS-892 3-150	ETS	2022.11.30	2025.11.29
3	Antenna Measurement System	1685	EMQuest EMQ-100 V 1.13 Build 21267	ETS	N/A	N/A

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