

TEST REPORT

Report number:

DRTTEC2603-0007

Issue Date:

2026-03-13

Applicant

- Company Name : GINT Co.,Ltd.

- Address : 17, Pangyo-ro 228beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, Republic of Korea**Equipment under test**

- Product Name : Tablet

- Model Name : ION-TA-M1

Date of Test

: 2026.03.03 ~ 2026.03.09

Laboratory

- Company Name : Dt&C Co., Ltd.

- Address : 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Korea 449-935**Test Results**

: PASS

The results in this reports are applicable only to the samples tested.

This report shall not be re-produced except in full without the written approval of
Dt&C Co., Ltd.

Tested Engineer;

HyoJae Park

Approval Person;

HyunSu Son

1. Summary of Test

1. Purpose of test

Ordinance on Technical Standards Conformity Certification of Specified Radio Equipment
2.4GHz Band wide band low power data communication System

2. Standards

Certification Ordinance Article 2 Clause 1 Item19

1) Test Methods

Ministry of Internal Affairs and Communications Notification Article 88 Appendix 43

2) Deviation from standards

None

3. List of applied test to the EUT

Article 88 Appendix 43	Classification of EUT	Condition	Result
1	Voltage fluctuation	Conducted	PASS
3	Frequency Tolerance	Conducted	PASS
4	Occupied Bandwidth	Conducted	PASS
5	Unwanted (Spurious) Emission Strength	Conducted	PASS
6	RF Output Power Tolerance	Conducted	PASS
7	Secondary Emitted Radio Wave Strength	Conducted	PASS
8	Carrier Sensing Function (1)	Conducted	NA
9	Carrier Sensing Function (2)	Conducted	NA
10	Absolute Gain of Transmission Antenna	Conducted	NA
11	Angle Width of Principal Radiation from Transmission Antenna	Conducted	NA
12	Interference Prevention Function	Conducted	PASS
13	Hopping frequency dwell time	Conducted	NA

1) Test set up

Table-Top

2) Modification to the EUT by laboratory

None

2. Test Information

1. Applicant

GINT Co.,Ltd.

17, Pangyo-ro 228beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

2. Product Name

Tablet

3. Model Name

ION-TA-M1

4. Serial number

Identical Prototype

5. Size

(W) 270.9 x (D) 46.7 x (H) 173.5 mm

6. Terminal limitation

-20°C to 70°C

7. RF Specification Frequency range

2402 - 2480 MHz

8. Number of RF Channels

40 Channels

9. Modulation method

Method of GFSK

(Frequency equal to the transmission rate of the modulation signal: 1MHz, 2MHz)

10. Data rate

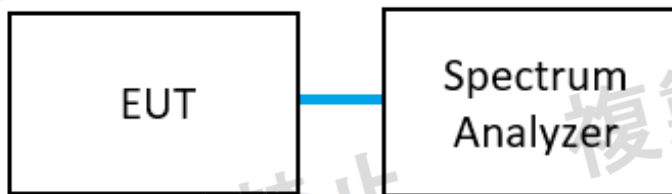
1Mbps(GFSK), 2Mbps(GFSK)

11. Variation of the family model(s)

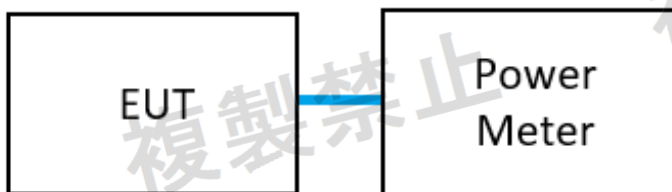
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3. Configuration of equipment

1. Frequency tolerance, Spread bandwidth, Occupied Bandwidth,
Unwanted(Spurious) emission strength, Secondary emitted radio wave strength



2. RF output power tolerance



4. List of Measuring Instruments

USE	Equipment	Manufacturer	Model No.	Serial No.	Cal. by	Cal. Method	Cal. Due	Cal. Date
X	Spectrum Analyzer	KEYSIGHT	N9020A	MY53301143	KTL	Λ(c)	Nov. 18, 2026	Nov. 18, 2025
X	DC Power Supply	Agilent Technologies	66332A	MY43000440	KTL	Λ(c)	Nov. 21, 2026	Nov. 21, 2025
X	Signal Generator	Rohde Schwarz	SMBV100A	255571	KTL	Λ(c)	Nov. 20, 2026	Nov. 20, 2025
X	Signal Generator	Rohde Schwarz	SMR20	101251	KTL	Λ(c)	Nov. 20, 2026	Nov. 20, 2025
X	Digital Multimeter	FLUKE	17B+	36390701WS	KTL	Λ(c)	Nov. 21, 2026	Nov. 21, 2025
X	Thermohygrometer	BODYCOM	BJ5478	1209	KTL	Λ(c)	Nov. 24, 2026	Nov. 24, 2025
X	Power Meter	Anritsu	ML2488B	0926003	KTL	Λ(c)	Nov. 25, 2026	Nov. 25, 2025
X	Power Sensor	Anritsu	MA2472A	030031	KTL	Λ(c)	Nov. 25, 2026	Nov. 25, 2025

Note1: "X" は使用した測定機器です。

"X" used equipment.

Note2: 較正期限は、較正を行った日の翌月から起算して1年以内です。

The validity of measurement equipment is one year from the first day of the following month of the calibration date.

Note3: 較正方法
Cal.Method

イ) : 国立研究開発法人情報通信研究機構 (NICT) (以下「機構」という。) 又は第百二条の十八第一項の指定較正機関 (TELEC, インターテックジャパン、キーサイト) が行う較正

a) : Calibration conducted by the National Institute of Information and Communications Technology ~NICT~ or a designated calibration agency under Article 102-18 paragraph (1) ~ Telecom Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc ~.

ロ) : 計量法 (平成四年法律第五十一号) 第百三十五条 又は第百四十四条の規定に基づく校正 (JCSS校正)

b) : Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) ~ Japan Calibration Service System ~

ハ) : 外国において行う較正であつて、機構又は第百二条の十八第一項の指定較正機関 (TELEC, インターテックジャパン、キーサイト) が行う較正に相当するもの

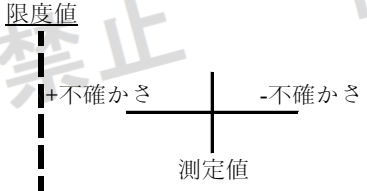
c) : Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1) ~ Telecom Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc ~.

ニ) : イからハまでのいずれかに掲げる較正等を受けたものを用いて行う較正等

d) : Calibration conducted by using other equipment that listed above from a) to c)

5. Uncertainty

Parameter	Uncertainty
Total RF power conducted	1.1 dB
Spurious emissions conducted	1.2 dB
Temperature	0.9℃
Humidity	3.0%

判定	測定データにおける不確かさの判断とその範囲	
適合	例 A 	測定結果と不確かさは与えられた 限度値内に入っています。 これを『適合』と呼びます。
	例 B 	完全には、限度値内でも限度値外 でもありません。 この場合の適合性については、確 実な結論を出すことは出来ません 。
不適合	例 C 	完全には、限度値内でも限度値外 でもありません。 この場合の適合性については、確 実な結論を出すことは出来ません 。
	例 D 	測定結果も不確かさも与えられた 限度値内に入っていません。 これは『不適合』と呼びます。

6. Configuration Photographs

Conducted Measurement Photo



7. Laboratory description

1. Location

- Name: Dt&C Co., Ltd.
- Address: 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 449-935
- Phone: +81-031-321-2664
- Fax: +81-031-321-2855

2. Accreditation and Registration

1) VLAC

Accreditation No.: N/A

2) NVLAP

LAB CODE: N/A

3) BSMI

Laboratory Code: TL652

4) KOLAS

Registration number	Facility	Expiration date
KT393	Dt&C Co., Ltd.	2029-01-21

3. Test Site

1) Conducted test

Conducted Test-room

8. Test Results

LE 1M

Environment of Test Room	Test Date	2026.03.03 ~ 2026.03.09	
	Temperature	20 ~ 23	°C
	Humidity	45 ~ 49	%

Peak Antenna Gain	3.610	dBi
Declaration Output Power	5.802	mW
Declaration Output Power	7.636	dBm
E.I.R.P.	11.246	dBm
Input Power Voltage	12.000	VDC

Tested Circuit Insertion Loss		0.000	dB
Transmission Time	ON TIME	2.132	ms
	OFF TIME	0.377	ms
	Ratio	84.974%	%
Packet Type (Mode)		Not Applicable	mode
Transmit Speed		Not Applicable	MHz

Note: The insertion loss was corrected during the test.

Test Category ;	2.4GHz Band Wideband Low-Power Data Communication System Bluetooth_GFSK		
The reason why the tests are performed only at rated voltage :	When the input voltage to receiver RF circuit varies below $\pm 1\%$ as the input voltage from the external power supply to the receiver varies $\pm 10\%$ (excluding power supply).		

Measurement Frequency	MHz	2402	2440	2480	Result	Limit	Note
Channel Number	Ch.	0	19	39	---	---	
Reading Frequency	MHz	2401.984	2439.976	2479.970	---	---	
Frequency Tolerance	ppm	-6.713	-9.713	-12.127	PASS	$\pm 50 \times 10^{-6}$ (50ppm)	
Occupied Bandwidth	MHz	1.065	1.065	1.063	PASS	26MHz or below	
RF Output Power	mW	5.994	6.527	4.883	PASS	10mW	
RF Output Power Tolerance	%	3.308	12.496	-15.834	PASS	+20%	
Tx Spurious Emission Strength	30 to 2387MHz	uW/MHz	0.002	0.002	0.002	PASS	2.5uW/MHz or below
		MHz	2296.960	2033.690	2093.320	----	
	2387 to 2400MHz	uW/MHz	2.630	0.002	0.002	PASS	25uW/MHz or below
		MHz	2399.909	2398.635	2399.441	----	
	2483.5 to 2496.5MHz	uW/MHz	0.002	0.002	0.006	PASS	25uW/MHz or below
		MHz	2488.843	2488.661	2483.617	----	
	2496.5 to 12500MHz	uW/MHz	0.067	0.051	0.030	PASS	2.5uW/MHz or below
		MHz	3202.750	3253.760	3306.780	----	
Rx Spurious Emission Strength	10 to 1000MHz	nW	0.037	0.016	0.068	PASS	4nW or below
		MHz	888.031	884.913	838.284	----	
	1000 to 5000MHz	nW	0.174	0.223	0.541	PASS	20nW or below
		MHz	2458.400	2426.400	2480.400	----	
	5000 to 12500MHz	nW	0.184	0.201	0.183	PASS	20nW or below
		MHz	11844.690	12185.380	12472.810	----	
Interference Prevention Function	-----	Good	Good	Good	PASS		

8. Test Results

LE 2M

Environment of Test Room	Test Date	2026.03.03 ~ 2026.03.09	
	Temperature	20 ~ 23	°C
	Humidity	45 ~ 49	%

Peak Antenna Gain	3.610	dBi
Declaration Output Power	5.754	mW
Declaration Output Power	7.600	dBm
E.I.R.P.	11.210	dBm
Input Power Voltage	12.000	VDC

Tested Circuit Insertion Loss		0.000	dB
Transmission Time	ON TIME	1.070	ms
	OFF TIME	0.810	ms
	Ratio	56.915%	%
Packet Type (Mode)		Not Applicable	mode
Transmit Speed		Not Applicable	MHz

Note: The insertion loss was corrected during the test.

Test Category ;	2.4GHz Band Wideband Low-Power Data Communication System Bluetooth_GFSK (BLE 2M)		
The reason why the tests are performed only at rated voltage :	When the input voltage to receiver RF circuit varies below $\pm 1\%$ as the input voltage from the external power supply to the receiver varies $\pm 10\%$ (excluding power supply).		

Measurement Frequency	MHz	2402	2440	2480	Result	Limit	Note
Channel Number	Ch.	0	19	39	---	---	
Reading Frequency	MHz	2402.023	2440.016	2480.008	---	---	
Frequency Tolerance	ppm	9.367	6.393	3.085	PASS	$\pm 50 \times 10^{-6}$ (50ppm)	
Occupied Bandwidth	MHz	2.078	2.084	2.077	PASS	26MHz or below	
RF Output Power	mW	5.926	6.483	4.850	PASS	10mW	
RF Output Power Tolerance	%	2.992	12.669	-15.705	PASS	+20%	
Tx Spurious Emission Strength	30 to 2387MHz	uW/MHz	0.002	0.002	0.002	PASS	2.5uW/MHz or below
		MHz	2387.000	2264.440	-2296.730	----	
	2387 to 2400MHz	uW/MHz	1.321	0.002	0.002	PASS	25uW/MHz or below
		MHz	2399.987	2391.693	2399.246	----	RBW: 30 kHz
	2483.5 to 2496.5MHz	uW/MHz	0.002	0.002	0.014	PASS	25uW/MHz or below
		MHz	2487.699	2493.341	2483.578	----	
	2496.5 to 12500MHz	uW/MHz	0.057	0.052	0.034	PASS	2.5uW/MHz or below
		MHz	3203.000	3253.510	3306.780	----	
Rx Spurious Emission Strength	10 to 1000MHz	nW	0.015	0.018	0.022	PASS	4nW or below
		MHz	884.913	885.309	887.982	----	
	1000 to 5000MHz	nW	0.291	0.135	0.377	PASS	20nW or below
		MHz	2438.400	2467.600	2462.400	----	
	5000 to 12500MHz	nW	0.237	0.200	0.207	PASS	20nW or below
		MHz	12218.750	12428.190	12251.940	----	
Interference Prevention Function	-----	Good	Good	Good	PASS		

9. Trace Data

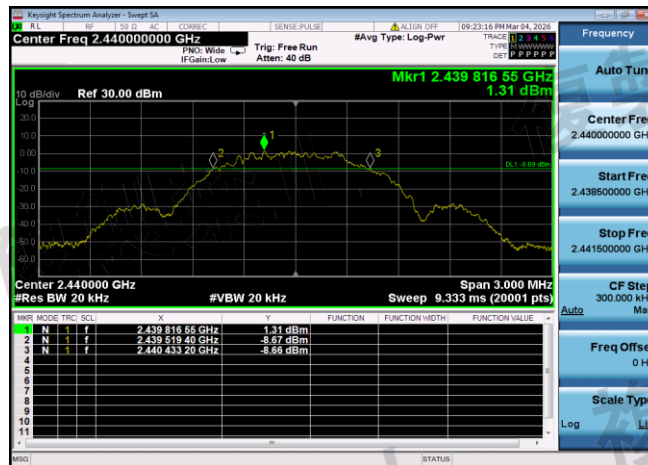
9.1 Frequency Tolerance

LE 1M

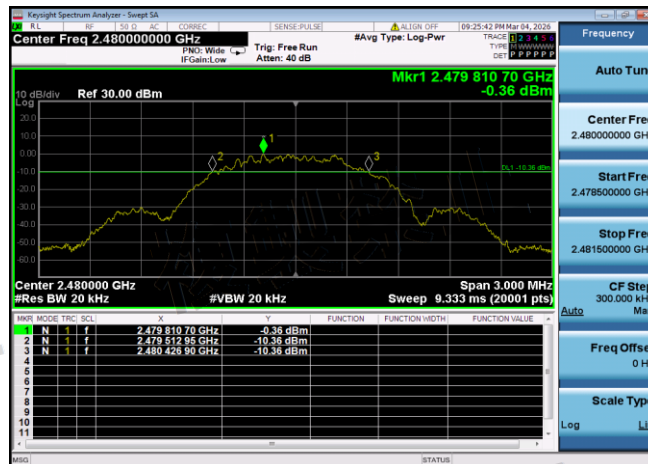
Ch.0: 2402 MHz



Ch.19: 2440 MHz



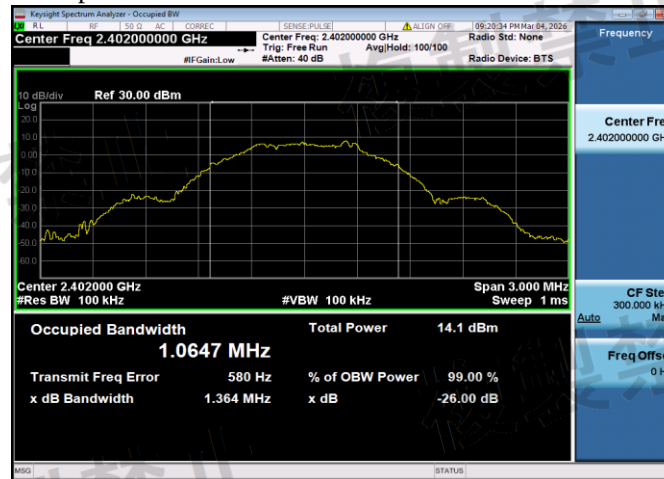
Ch.39: 2480 MHz



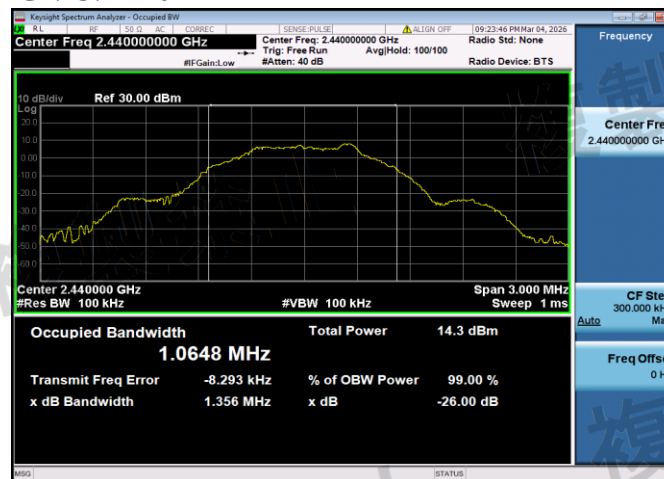
9.2 Occupied and Spread Bandwidth

Ch.0: 2402 MHz

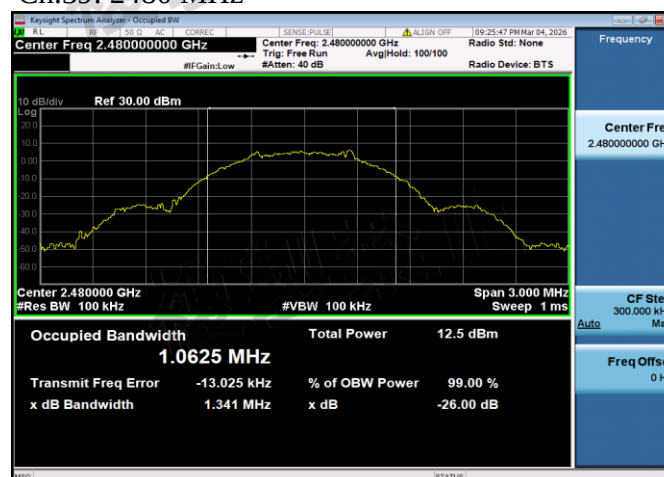
Occupied Bandwidth



Ch.19: 2440 MHz



Ch.39: 2480 MHz



9.3 Tx Spurious Emission Strength

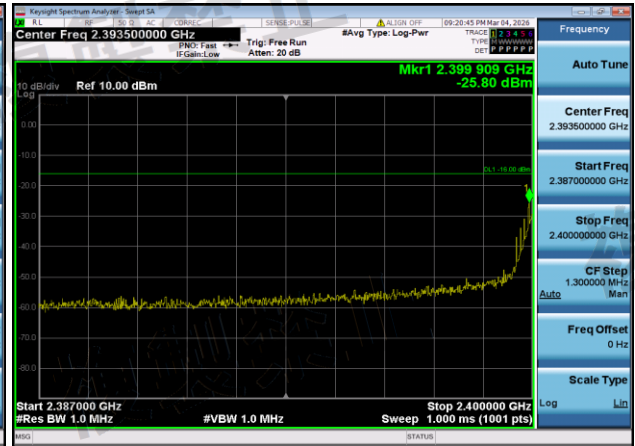
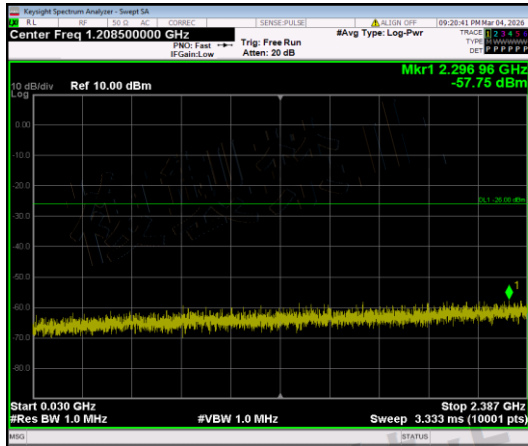
Ch.0: 2402 MHz

30.0 MHz ~ 2387.0 MHz

1.0 MHz

2387.0 MHz ~ 2400.0 MHz

1.0 MHz

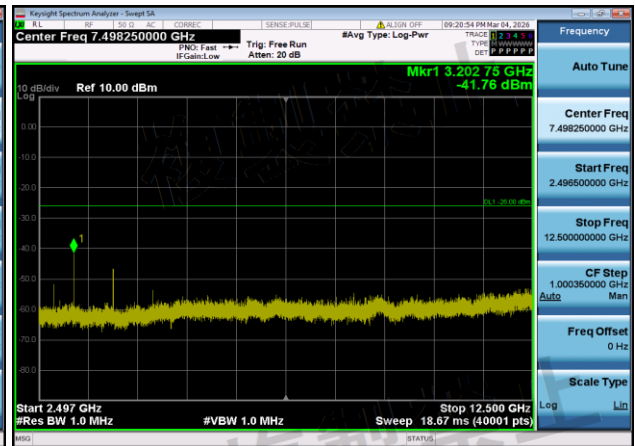
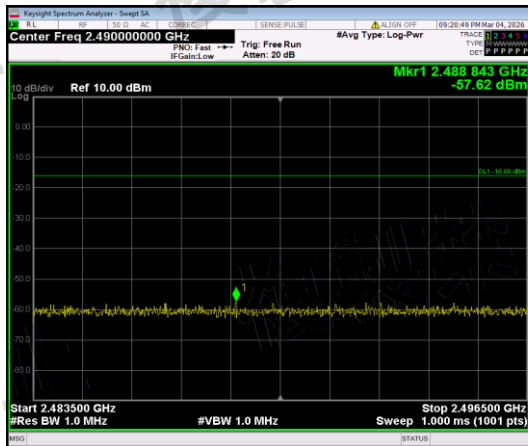


2483.5 MHz ~ 2496.5 MHz

1.0 MHz

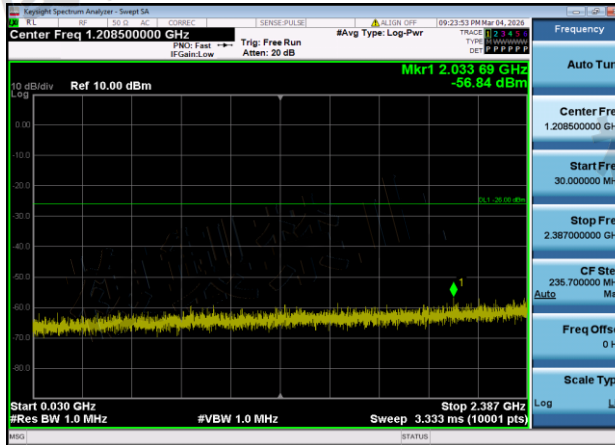
2496.5 MHz ~ 12500.0 MHz

1.0 MHz



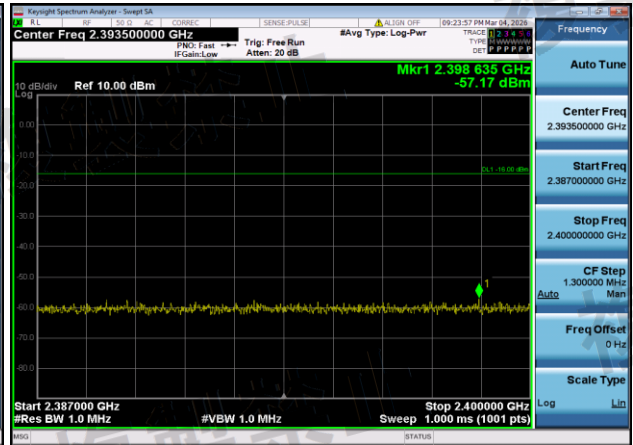
Ch.19: 2440 MHz
30.0 MHz ~ 2387.0 MHz

1.0 MHz



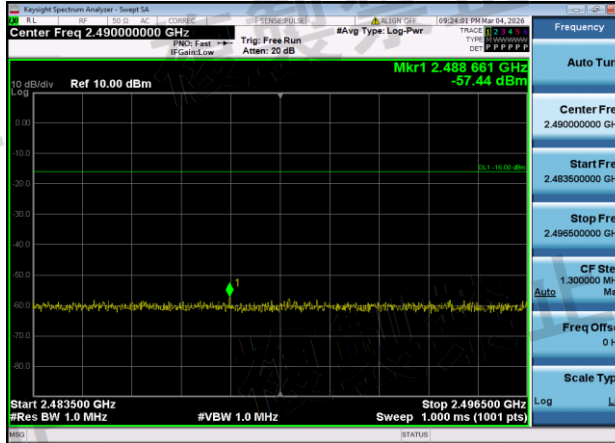
2387.0 MHz ~ 2400.0 MHz

1.0 MHz



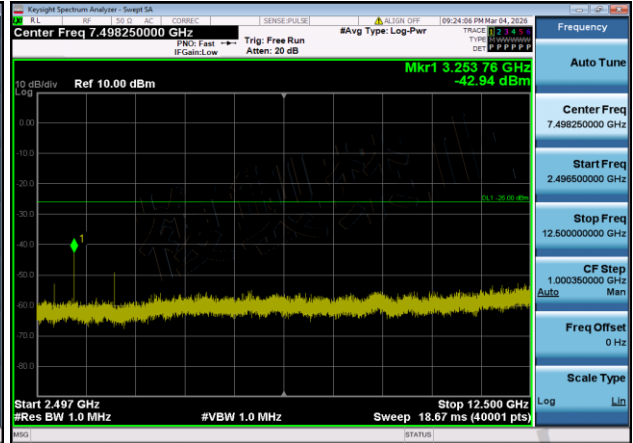
2483.5 MHz ~ 2496.5 MHz

1.0 MHz



2496.5 MHz ~ 12500.0 MHz

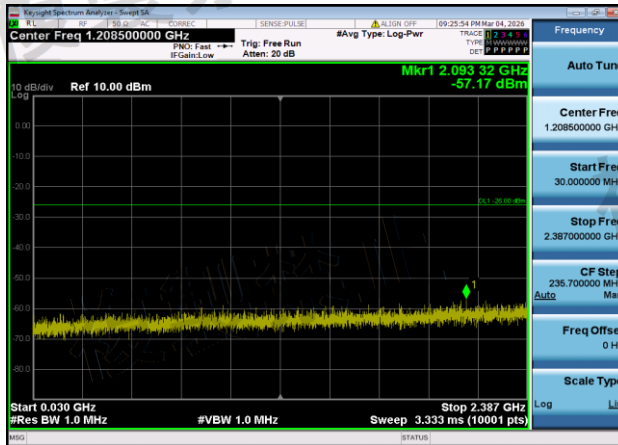
1.0 MHz



Ch.39: 2480 MHz

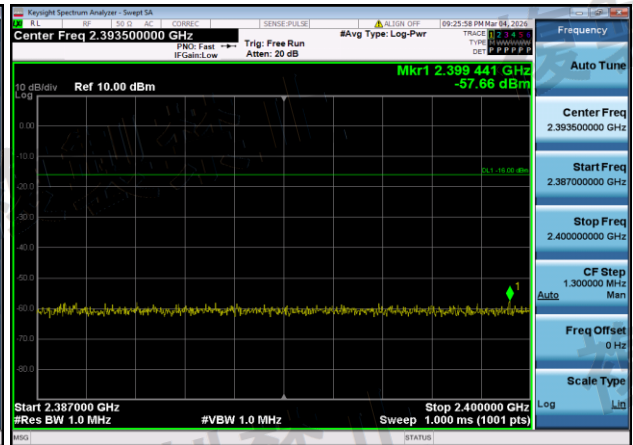
30.0 MHz ~ 2387.0 MHz

1.0 MHz



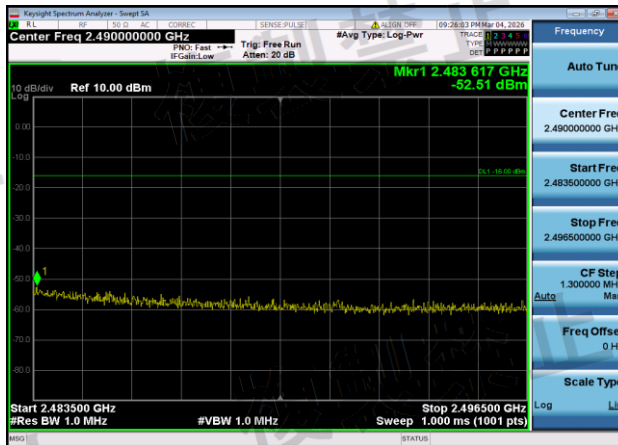
2387.0 MHz ~ 2400.0 MHz

1.0 MHz



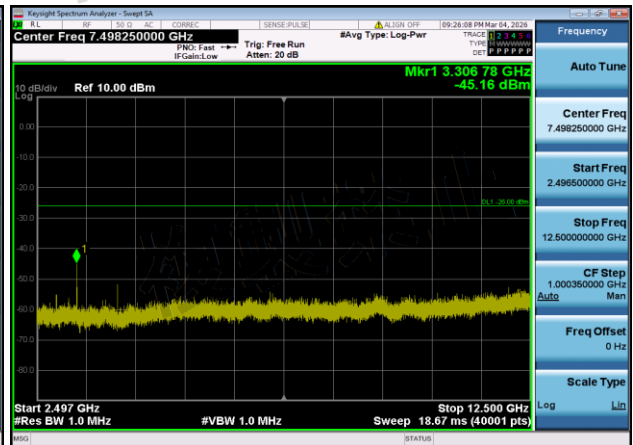
2483.5 MHz ~ 2496.5 MHz

1.0 MHz



2496.5 MHz ~ 12500.0 MHz

1.0 MHz

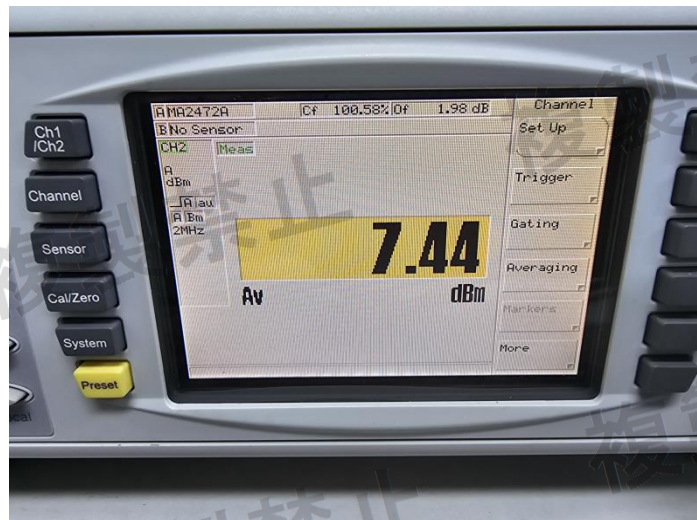


9.4 RF Output Power

Ch.0: 2402 MHz



Ch.19: 2440 MHz



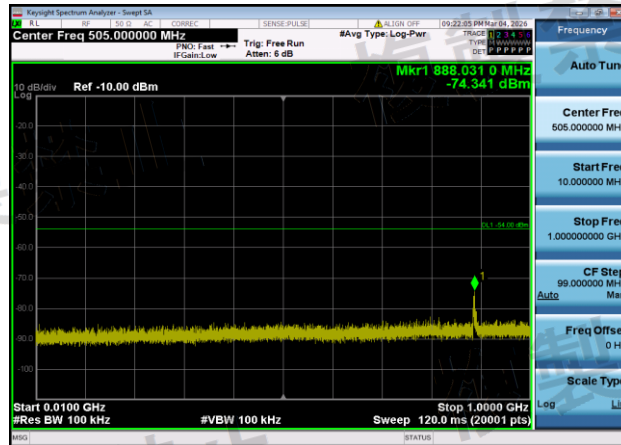
Ch.39: 2480 MHz



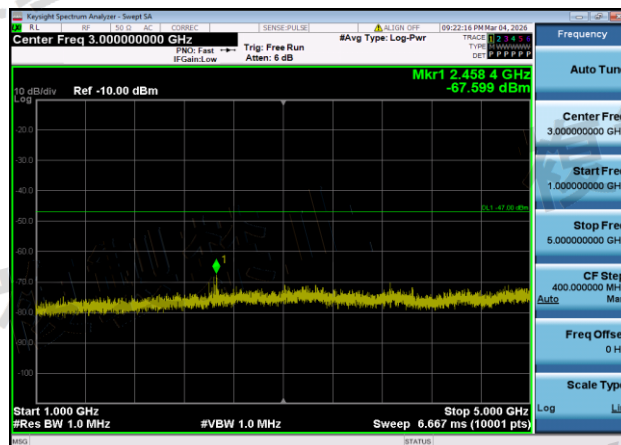
9.5 Rx Spurious Emission Strength

Ch.0: 2402 MHz

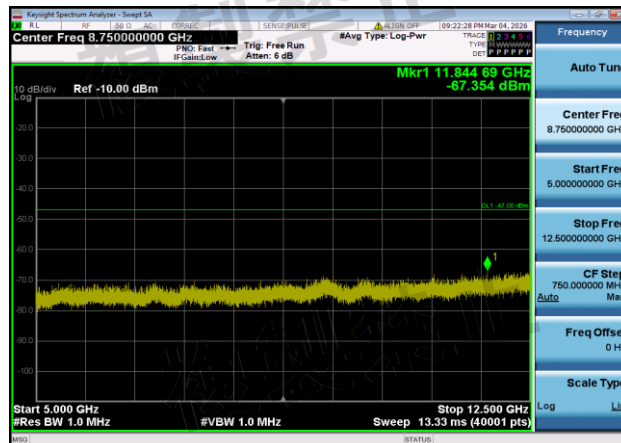
10 to 1000MHz



1000 to 5000MHz

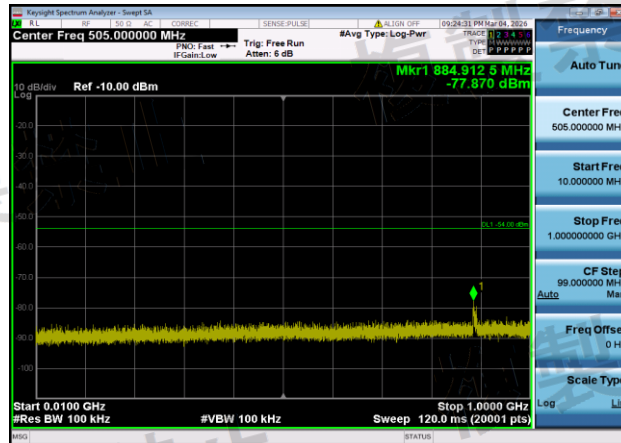


5000 to 12500MHz

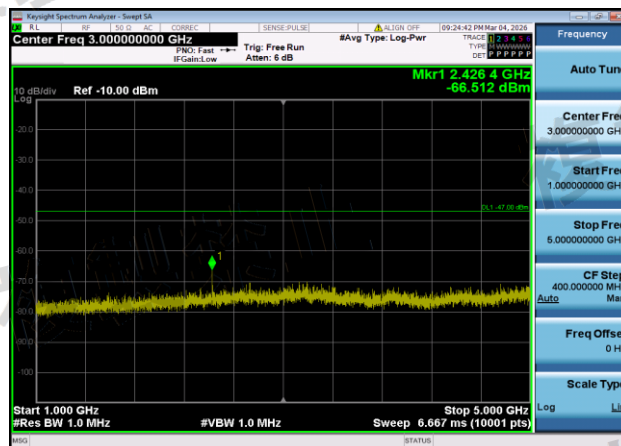


Ch.19: 2440 MHz

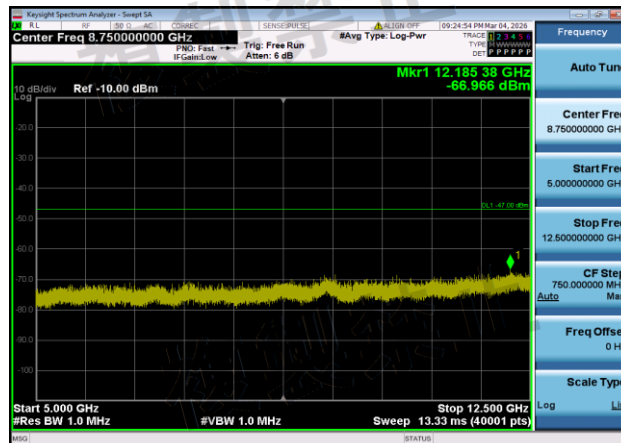
10 to 1000MHz



1000 to 5000MHz

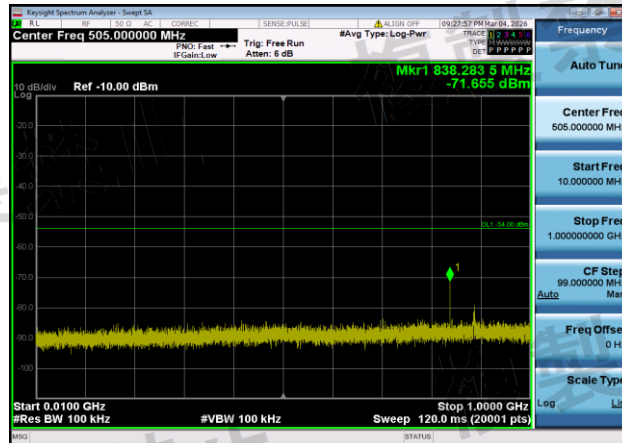


5000 to 12500MHz

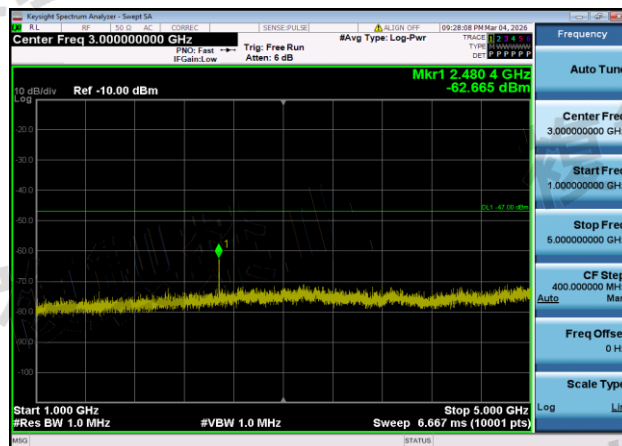


Ch.39: 2480 MHz

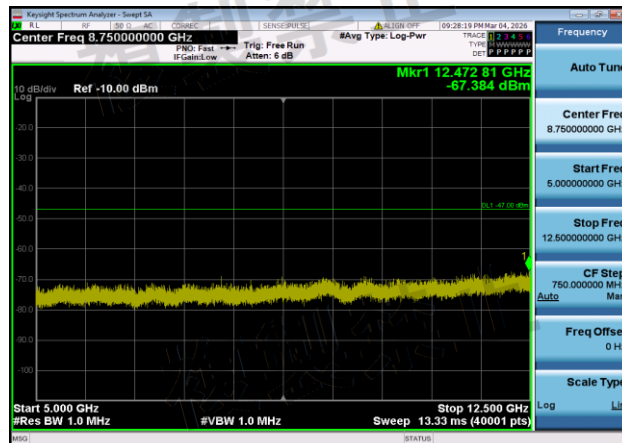
10 to 1000MHz



1000 to 5000MHz



5000 to 12500MHz



9.6 Dwell Time

ON/OFF

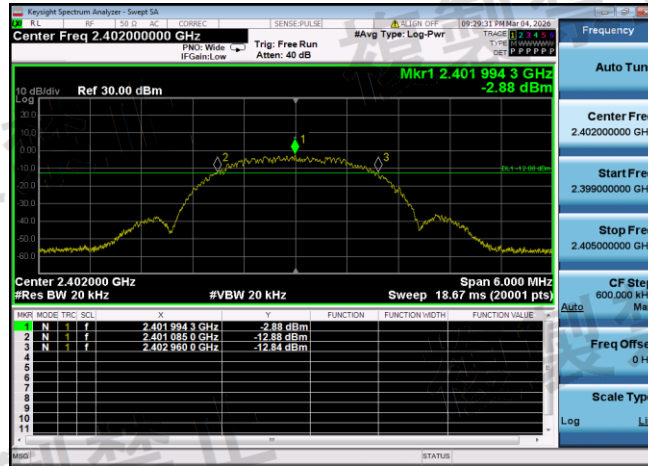


9. Trace Data

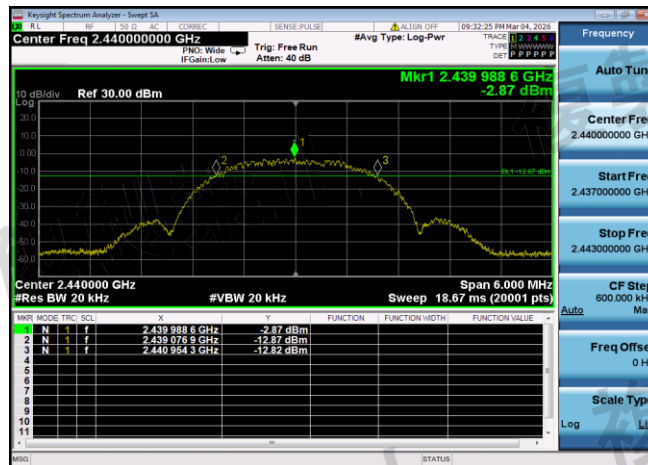
9.1 Frequency Tolerance

LE 2M

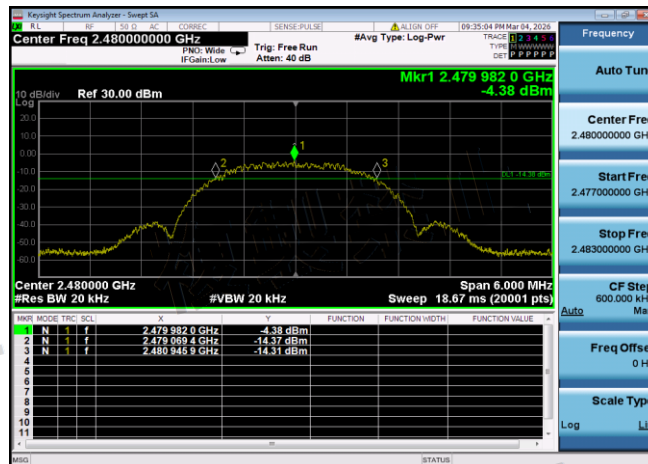
Ch.0: 2402 MHz



Ch.19: 2440 MHz



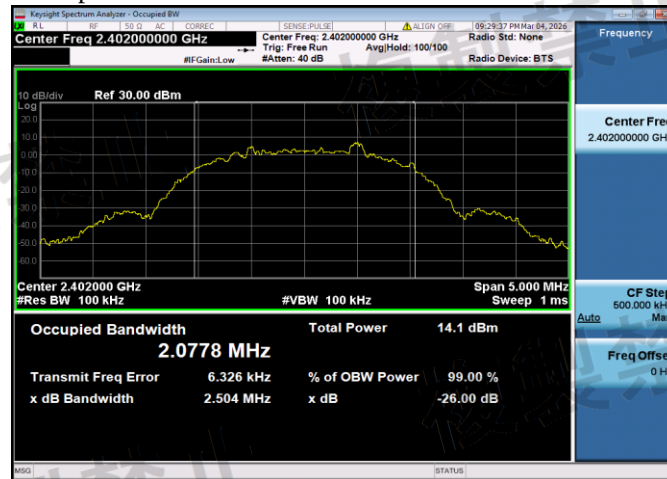
Ch.39: 2480 MHz



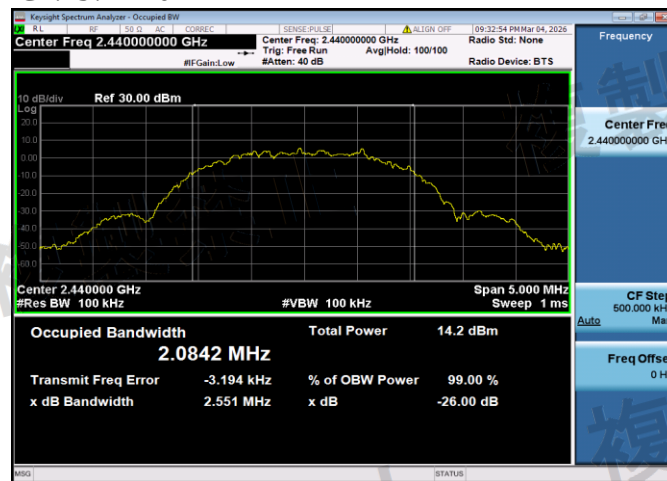
9.2 Occupied and Spread Bandwidth

Ch.0: 2402 MHz

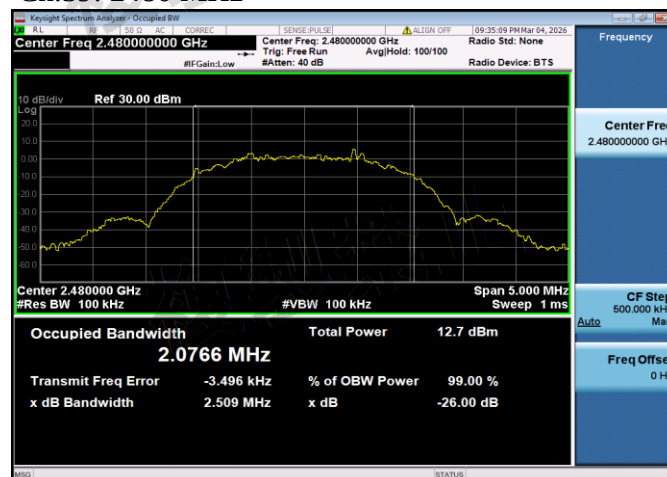
Occupied Bandwidth



Ch.19: 2440 MHz



Ch.39: 2480 MHz



9.3 Tx Spurious Emission Strength

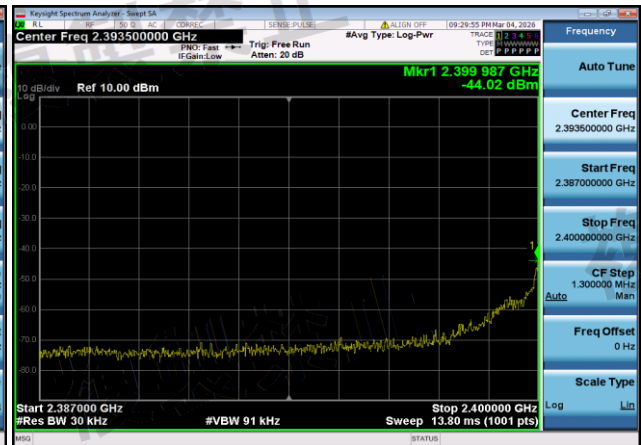
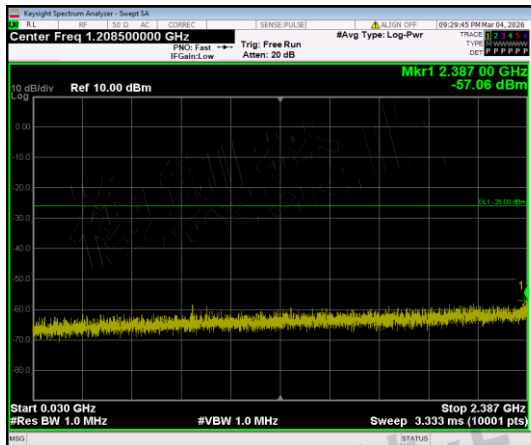
Ch.0: 2402 MHz

30.0 MHz ~ 2387.0 MHz

1.0 MHz

2387.0 MHz ~ 2400.0 MHz

30 kHz

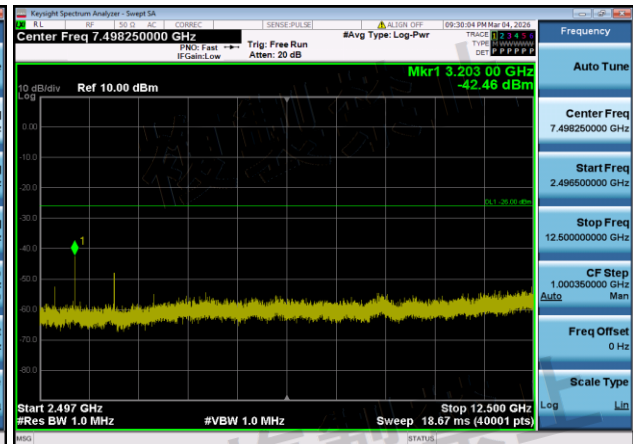
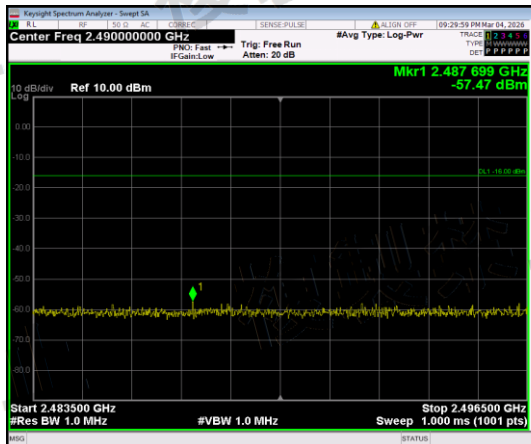


2483.5 MHz ~ 2496.5 MHz

1.0 MHz

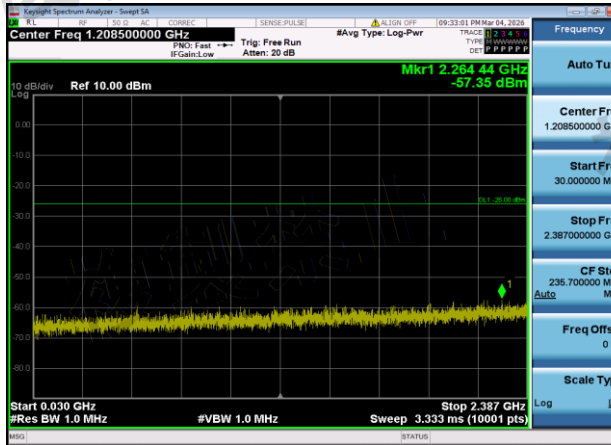
2496.5 MHz ~ 12500.0 MHz

1.0 MHz



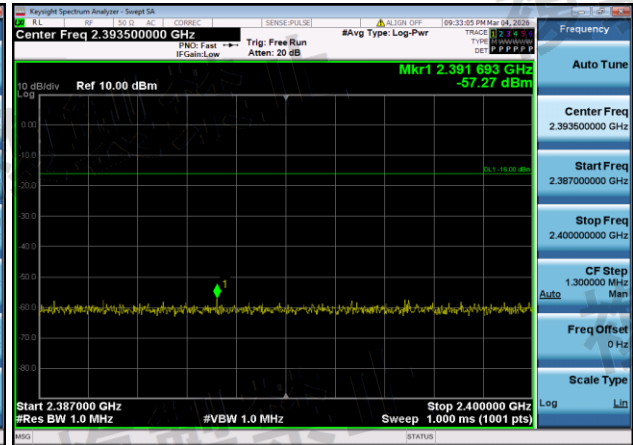
Ch.19: 2440 MHz
30.0 MHz ~ 2387.0 MHz

1.0 MHz



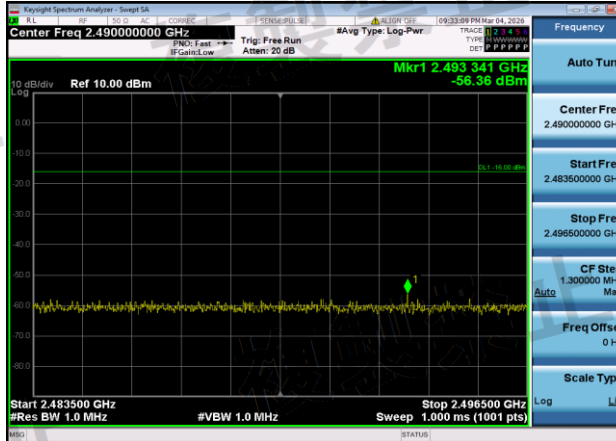
2387.0 MHz ~ 2400.0 MHz

1.0 MHz



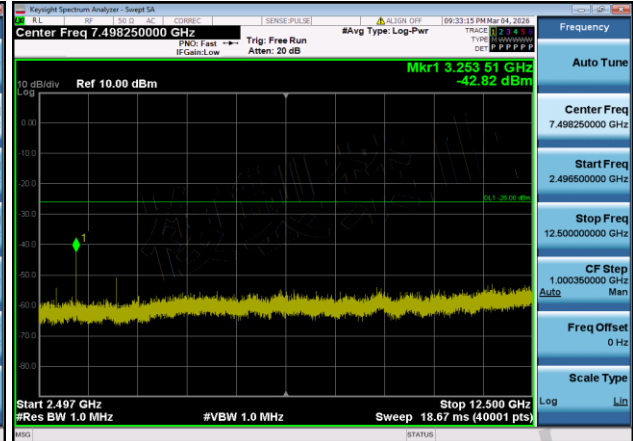
2483.5 MHz ~ 2496.5 MHz

1.0 MHz



2496.5 MHz ~ 12500.0 MHz

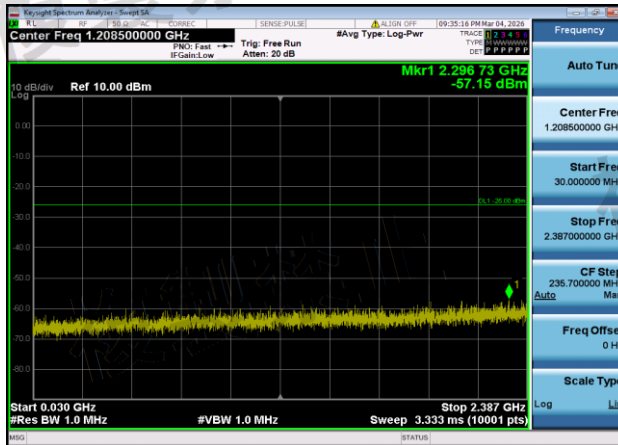
1.0 MHz



Ch.39: 2480 MHz

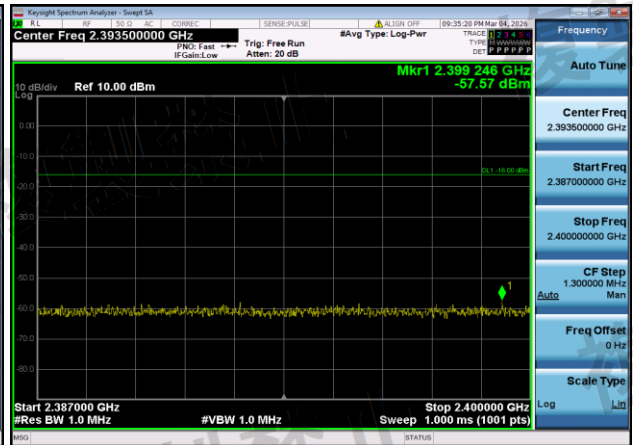
30.0 MHz ~ 2387.0 MHz

1.0 MHz



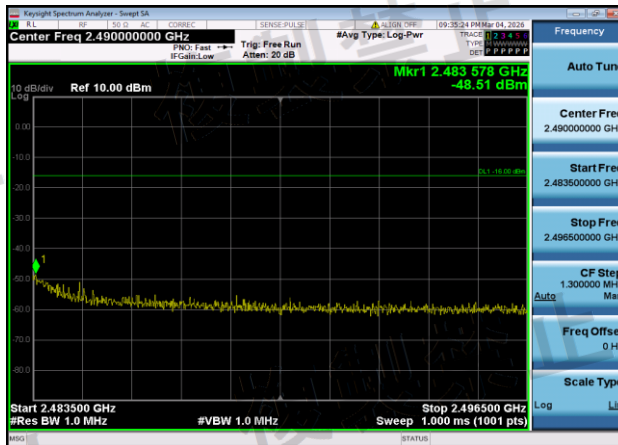
2387.0 MHz ~ 2400.0 MHz

1.0 MHz



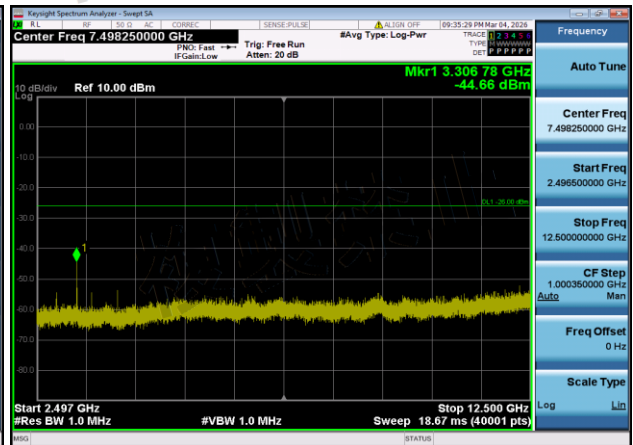
2483.5 MHz ~ 2496.5 MHz

1.0 MHz



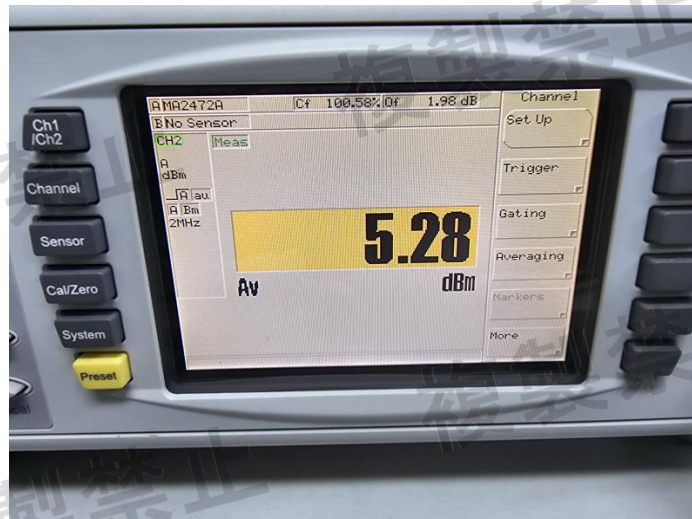
2496.5 MHz ~ 12500.0 MHz

1.0 MHz



9.4 RF Output Power

Ch.0: 2402 MHz



Ch.19: 2440 MHz



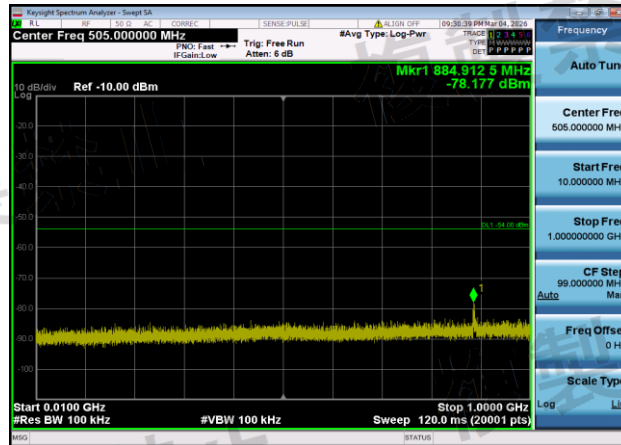
Ch.39: 2480 MHz



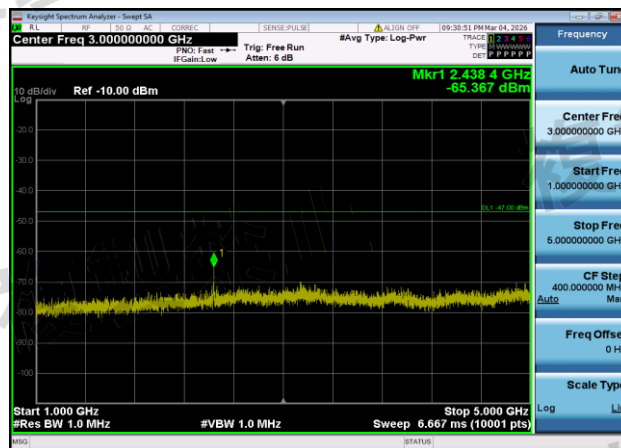
9.5 Rx Spurious Emission Strength

Ch.0: 2402 MHz

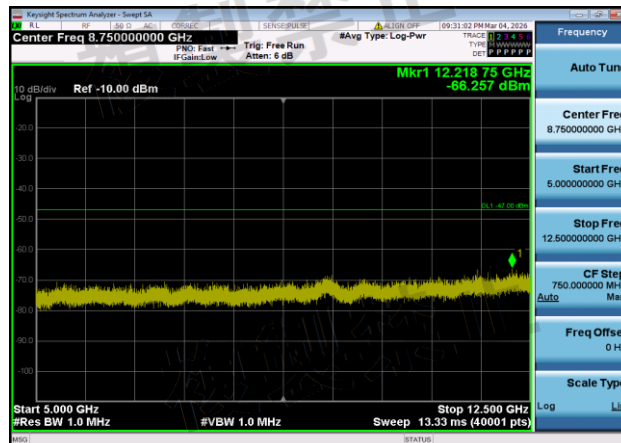
10 to 1000MHz



1000 to 5000MHz

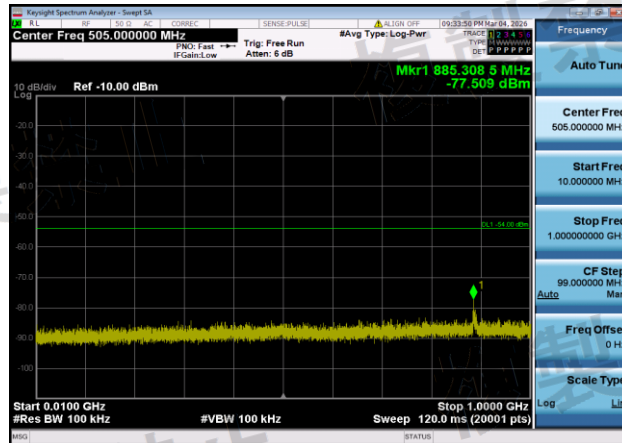


5000 to 12500MHz

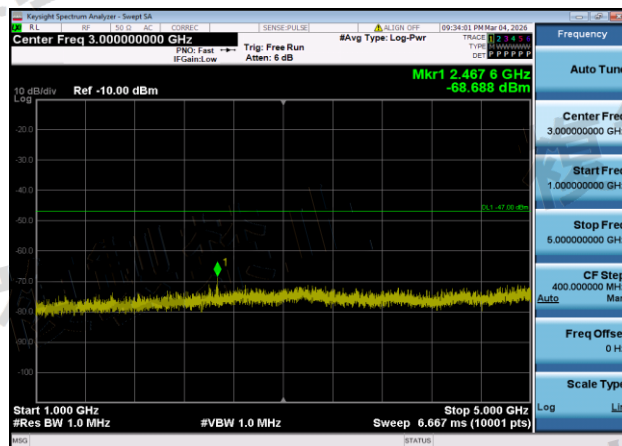


Ch.19: 2440 MHz

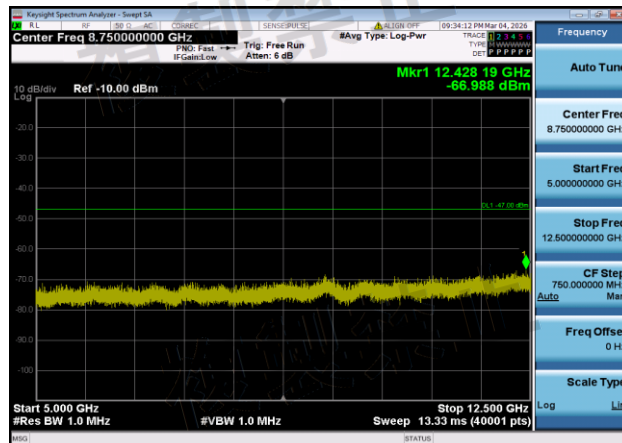
10 to 1000MHz



1000 to 5000MHz

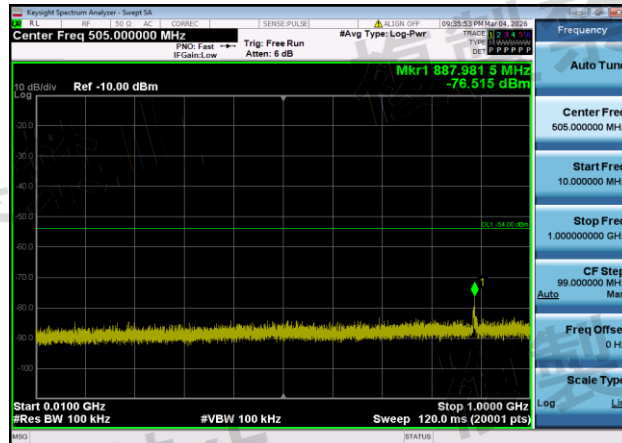


5000 to 12500MHz

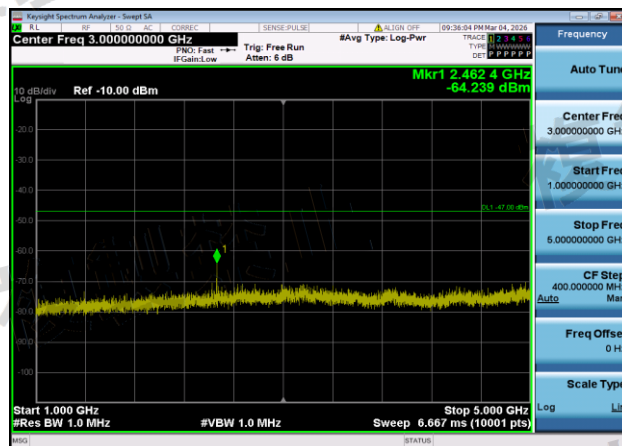


Ch.39: 2480 MHz

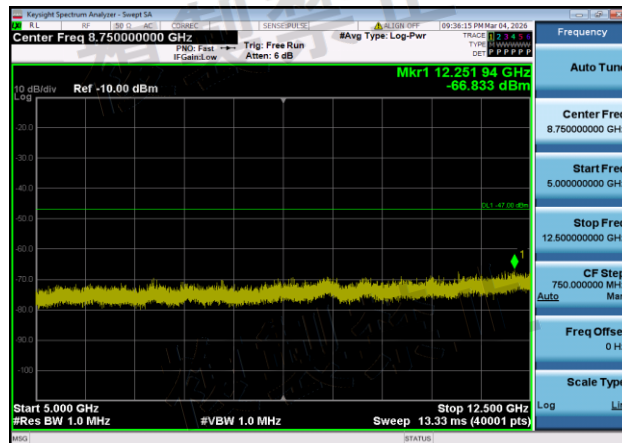
10 to 1000MHz



1000 to 5000MHz



5000 to 12500MHz



9.6 Dwell Time

ON/OFF

