

TEST REPORT

For

RAWM LEVIATHAN V4 GT Wireless Gaming Mouse

Model Number: LEVIATHAN V4 GT

Prepared for : Shenzhen Renmo Electronic Technology Co., Ltd
Address : Room 404-406, Building 2, Sanhe International, Laiwushan New Village, Dalang Street, Longhua District, Shenzhen, Guangdong, China

Prepared by : Shenzhen NTT Testing Technology Co.,Ltd.
Address : 1B, Building 2, Factory Building & 103, Building 3, Factory Building, Dayang Industrial Park No.4, Industrial Avenue, Tangwei Community, Fuhai Sub-district, Bao 'an District, Shenzhen City, China

Report No. : SZNTT26027288E1-1
Date of Test : Jul. 01, 2026-Jul. 08, 2026
Date of Report : Jul. 08, 2026

Shenzhen NTT Testing Technology Co.,Ltd.

Applicant:	Shenzhen Renmo Electronic Technology Co., Ltd		
Address:	Room 404-406, Building 2, Sanhe International, Laiwushan New Village, Dalang Street, Longhua District, Shenzhen, Guangdong, China		
Manufacturer:	Shenzhen Renmo Electronic Technology Co., Ltd		
Address:	Room 404-406, Building 2, Sanhe International, Laiwushan New Village, Dalang Street, Longhua District, Shenzhen, Guangdong, China		
E.U.T:	RAWM LEVIATHAN V4 GT Wireless Gaming Mouse		
Model Number:	LEVIATHAN V4 GT		
Trade Name:	RAWM		
Date of Receipt:	Jul. 01, 2026	Date of Test:	Jul. 01, 2026-Aug. 07, 2026
Test Specification :	Article2 Paragraph 1, item 19 MIC Notice No.88 Appendix No.43		
Test Result:	The equipment under test was found to be compliance with the requirements of the standards applied.		
Issue Date: Aug. 07, 2026			
Tested by:	Reviewed by:	Approved by:	
			
Cindy Qin / Engineer	Ken Wu / Supervisor	Abel Yu / Supervisor	
Other Aspects:			
None.			
Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested			
This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen NTT Testing Technology Co.,Ltd.			

Table of Contents

Page

1. SUMMARY OF TEST RESULTS	5
1.1. TEST PROCEDURES ACCORDING TO THE TECHNICAL STANDARDS	5
1.2. TEST FACILITY	6
1.3. MEASUREMENT UNCERTAINTY	6
2. GENERAL INFORMATION	7
2.1. GENERAL DESCRIPTION OF EUT	7
2.2. DESCRIPTION OF TEST MODES	8
2.3. TEST CONDITIONS	9
2.4. TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	9
2.5. BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	10
2.6. DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	10
2.7. EQUIPMENTS LIST FOR ALL TEST ITEMS	11
3. TEST RESULT FOR BLUETOOTH	12
4.1. FREQUENCY ERROR	12
4.2. LIMIT	12
4.3. MEASURING INSTRUMENTS AND SETTING	12
4.4. TEST PROCEDURES	12
4.5. TEST SETUP LAYOUT	12
4.6. TEST RESULT	12
5. ANTENNA POWER	13
5.1. LIMIT	13
5.2. TEST PROCEDURES	13
5.3. TEST SETUP LAYOUT	13
5.4. EST DEVIATION	13
5.5. TEST RESULT	13
6. OCCUPIED BANDWITH (99%)	13
6.1. LIMIT	14
6.2. MEASURING INSTRUMENTS AND SETTING	14
6.3. TEST PROCEDURES	14
6.4. TEST SETUP LAYOUT	14
6.5. TEST DEVIATION	14

6.6. EUT OPERATION DURING TEST	14
6.7. TEST RESULT	14
7. UNWANTED EMISSION INTENSITY MEASUREMENT	15
7.1. LIMIT	15
7.2. MEASURING INSTRUMENTS AND SETTING	15
7.3. TEST PROCEDURES	15
7.4. TEST SETUP LAYOUT	16
7.5. TEST DEVIATION	16
7.6. TEST RESULT	16
8. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT	17
8.1. LIMIT	17
8.2. MEASURING INSTRUMENTS AND SETTING	17
8.3. TEST PROCEDURES	17
8.4. TEST RESULT	17
9 INTERFERENCE PREVENTION FUNCTION	18
9.1. TEST SETUP	18
9.2. RADIO INTERFERENCE PREVENTION FUNCTION	18
10 CARRIER SENSE	19
11. EUT TEST PHOTO	20
12.EUT CONSTRUCTIONAL DETAILS	21

1. SUMMARY OF TEST RESULTS

1.1. TEST PROCEDURES ACCORDING TO THE TECHNICAL STANDARDS

article 49.20			
Standard Section	Test Item	Judgment	Remark
General provisions			
5	Frequency Error	PASS	
6	Occupied Bandwidth	PASS	
7	Spurious Emissions Intensity	PASS	
Transmitting equipment			
14	Antenna Power	PASS	
Transmitting antenna			
20	Type, Configuration, etc., of Transmitting Antenna	PASS	
22	Direction Pattern of Transmitting Antenna (Provided at Individual Antenna Report)	PASS	
Receiving antenna			
24	Limitation of Collateral Emission of Receiver	PASS	
26	Refer to All Articles for Transmitting Antenna	PASS	
Operating frequency 2400~2483MHz			
49.20(1);a	RF Shielding Method	PASS	
49.20(1);a	Communication Method	PASS	
49.20(1);b	Spread-spectrum Method	PASS	
49.20(1);c	Antenna Power	PASS	
4.10	Construction Protection Confirmation	PASS	
49.20	Carrier Sensing Function(1)	N/A(See Note3)	
49.20	Carrier Sensing Function(2)	N/A(See Note4)	
49.20	Half Power Beam Angle (Radiation angle of antenna)	N/A(See Note5)	

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report
- (2) MIC Ordinance Regulating Radio Equipment Section 4.17 of Article 49.20
- (3) Application to transmitting devices which E.I.R.P. is less than [2.14dBi+antenna power limit] and the shortage of E.I.R.P. is compensated by the antenna power.
- (4) Application to transmitting devices with OFDM modulation and the occupied bandwidth greater than 26MHz.
- (5) It is unnecessary to testing, when a E.I.R.P. is less than 12.14dBm.

1. 2. TEST FACILITY

Site Description

EMC Lab. : Accredited by CNAS, 2026.03.30
The certificate is valid until 2032.03.29
The Laboratory has been assessed and proved to be in compliance with
CNAS-CL01 (identical to ISO/IEC 17025:2017)
The Certificate Registration Number is L25606
Designation Number: CN3446
Test Firm Registration Number: 129414
Accredited by ANAB, Dec. 19, 2025
The Certificate Registration Number is AT-3446

Name of Firm : Shenzhen NTT Testing Technology Co., Ltd.

Site Location : 1B, Building 2, Factory Building & 103, Building 3, Factory Building,
Dayang Industrial Park No.4, Industrial Avenue, Tangwei Community, Fuhai
Sub-district, Bao 'an District, Shenzhen City, China

1. 3. MEASUREMENT UNCERTAINTY

Parameter	Uncertainty
RF output power, conducted	±1.0dB
Power Spectral Density, conducted	±2.2dB
Radio Frequency	± 1 x 10 ⁻⁶
Bandwidth	± 1.5 x 10 ⁻⁶
Time	±2%
Duty Cycle	±2%
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±3%
Conducted Emissions (150kHz~30MHz)	±3.64dB
Radiated Emission(9KHz~30MHz)	±4.51dB
Radiated Emission(30MHz~1GHz)	±5.03dB
Radiated Emission(1GHz~25GHz)	±4.74dB
Remark:When making a conformity declaration based on test results for regulations/standards or specifications,the default is to use Clause 4.2.1of ILAC-G8:09/2019 and the guidelines on decision rules and conformity declaration in IEC Guide 115:2023.	

2. GENERAL INFORMATION

2.1. GENERAL DESCRIPTION OF EUT

Equipment	RAWM LEVIATHAN V4 GT Wireless Gaming Mouse	
Model Name	LEVIATHAN V4 GT	
Series Model:	N/A	
Model Different.:	N/A	
Product Description	The EUT is a RAWM LEVIATHAN V4 GT Wireless Gaming Mouse	
	Operation Frequency:	2402~2478MHz
	Bit Rate of Transmitter:	GFSK
	Number Of Channel:	39 CH
	Data Rate:	1Mbps, 2Mbps
	Antenna Type:	PCB Antenna
	Antenna Gain(Peak):	-2.52dBi
Channel List	Please refer to the Note 2.	
Power Source	DC 3.7V by Battery; Charging input: DC 5V	
Hardware Version	V1.0	
Software Version	V1.0	

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel List							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402	11	2422	21	2442	31	2462
02	2404	12	2424	22	2444	32	2464
03	2406	13	2426	23	2446	33	2466
04	2408	14	2428	24	2448	34	2468
05	2410	15	2430	25	2450	35	2470
06	2412	16	2432	26	2452	36	2472
07	2414	17	2434	27	2454	37	2474
08	2416	18	2436	28	2456	38	2476
09	2418	19	2438	29	2458	39	2478
10	2420	20	2440	30	2460	/	/

3. Table for Filed Antenna

ANT	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
1	N/A	N/A	PCB Antenna	-2.52	N/A

4. Testing environment

Temperature range: 26℃, Humidity range: 54%. Atmospheric Pressure(mbar):1015

2.2. DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode1	CH01
Mode2	CH20
Mode3	CH39
Mode4	RX

For Conducted Emission	
Final Test Mode	Description
Mode1	CH01
Mode2	CH20
Mode3	CH39
Mode4	RX

2.3. TEST CONDITIONS

The 2.4GHz module was tested while in a continuous transmitter/receiver mode. The EUT was tuned to a low, middle, and high channel for all tests. For all test case pre/scans were completed in all Modes to determine worst case levels.

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
DC Power	DC 5.0V	DC 5.50V	DC 4.50V
To RF Circuit	DC 5.0V	DC 5.0V	DC 5.0V

Note:

Voltage Variation (%)

= (Output high or Low Voltage - Output Normal Voltage) / Output Normal Voltage * 100

During the input supply voltage to the EUT from the external power source is varied by +/- 10%, if output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition test, EUT only operated in normal voltage to test all regulations.

2.4. TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of 2.4GHz

Test software Version	PhyPlusKit		
Frequency	2402MHz	2440 MHz	2478 MHz
Parameters	DEF	DEF	DEF

2.5. BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Mode :



2.6. DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Serial	Equipment	Brand	Model/Type No.	Series No.	Note
1	LEVIATHAN V4 GT Optical-Magnetic Switch Wireless Gaming Mouse	RAWM	LEVIATHAN V4 GT	/	EUT
2	Adapter	/	HW-059200C00	/	Auxiliary
3	PC	ASUS	U1	/	Auxiliary

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

2.7. EQUIPMENTS LIST FOR ALL TEST ITEMS

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Cal. Date	Calibration Lab	Calibration Method
MXG Signal Analyzer	N9020A	MY50510202	Agilent	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c
MXG Vector Signal Generator	N5182A	MY50140020	Agilent	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c
Attenuation	PCL-10dB	221126	HTEC	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c
MXG Analog Signal Generator	N5181A	MY47420919	Agilent	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c
Power Sensor	TR1029-2	512364	Techoy	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c
RF Swith	TR1029-1	512364	Techoy	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c
Power Meter	ML2495A	10084	Anritu	2025/9/08	2026/9/07	Guangzhou LiSai Metrology & Test Co., Ltd.	c

Test Equipment

Note: Calibration Method

- a): Calibration conducted by the National Institute of Information and Communications Technology(NICT) or a designated calibration agency under Article 102-18 paragraph (1) of the Radio Law.
- b): Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
- 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).
- d): Calibration conducted by using other equipment that listed above from a) to c).

3. TEST RESULT FOR BLUETOOTH

4. 1. FREQUENCY ERROR

4. 2. LIMIT

Item	Limits
Frequency Error	$\pm 50\text{ppm}$

4. 3. MEASURING INSTRUMENTS AND SETTING

The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	10KHz/10KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4. 4. TEST PROCEDURES

- (1) In the case of unmodulated signal (continuous or continuous burst), measure the frequency directly by a frequency meter.
- (2) In the case of burst waves, the measurement shall be done for enough time in order to obtain the enough measuring accuracy, and the average of the measured values becomes the final value.
- (3) In the case of a test mode with a specific frequency spectrum, measure the frequency of the specific spectrum by a spectrum analyzer.
- (4) In the cases above, if the frequency equivalent to the test frequency is not directly measured in principle, it shall be obtained by necessary calculation.

In the case of modulated signal, if there is no specific spectrum measurable by a spectrum analyzer but a specific dip is observed, it is allowed to measure the frequency with the signal generator (synthesized). That is, observe a signal of the signal generator concurrently (or alternately) with the tested signal using the spectrum analyzer while setting the frequency of the signal generator to the position of the dip on the screen of the spectrum analyzer, and determine the frequency of the signal generator at the time as a measured value.

4. 5. TEST SETUP LAYOUT



4. 6. TEST RESULT

Please see the attachment for data.

5. ANTENNA POWER

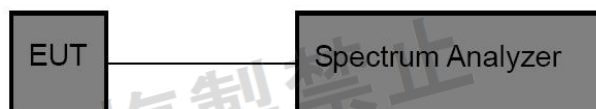
5.1. LIMIT

Item	Limits
Antenna Power Density	$\leq 3\text{mW/MHz}$ (FH form 2402 - 2480 MHz) $\leq 10\text{mW/MHz}$ (OFDM,DS from 2400~2483.5MHz) $\leq 10\text{mW}$ (Other from 2400~2483.5MHz)
Antenna Power Error	$\leq 20\%$

5.2. TEST PROCEDURES

1. The EUT was directly connected to the power meter.
2. The EUT was set to frequency hopping mode.

5.3. TEST SETUP LAYOUT



5.4. EST DEVIATION

There is no deviation with the original standard.

5.5. TEST RESULT

Please see the attachment for data.

6. OCCUPIED BANDWITH (99%)

6.1. LIMIT

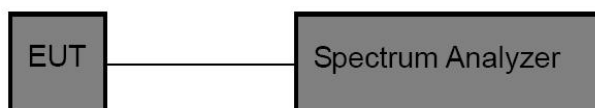
Item	Limits
Occupied Band Width:	FH 83.5MHz; OFDM,DS $\leq$ 26MHz; Others $\leq$ 26MHz
Spreading Bandwidth:	Only test(No Limits)

6.2. MEASURING INSTRUMENTS AND SETTING

6.3. TEST PROCEDURES

- Setting of SA is following as: RB: 300KHz / VB:300KHz / SPAN: 3MHz / AT: 30dB Ref: 21.96dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
- EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device) or continuous maximum power of hopping mode(For FHSS Device). SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than 26MHz(For DSSS or OFDM Device) or 83.5MHz(For FHSS Device).
- SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth and must greater than 500kHz.
- Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.
- Spread Spectrum Factor limit is greater than 5

6.4. TEST SETUP LAYOUT



6.5. TEST DEVIATION

There is no deviation with the original standard.

6.6. EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

6.7. TEST RESULT

Please see the attachment for data.

7. UNWANTED EMISSION INTENSITY MEASUREMENT

7.1. LIMIT

Item	Limits
TX Spurious Emission	$\leq 2.5 \mu\text{W/MHz}$ ($30\text{MHz} \leq f \leq 1000\text{MHz}$)
	$\leq 2.5 \mu\text{W/MHz}$ ($1000\text{MHz} < f \leq 2387\text{MHz}$)
	$\leq 25 \mu\text{W/MHz}$ ($2387\text{MHz} < f \leq 2400\text{MHz}$)
	$\leq 25 \mu\text{W/MHz}$ ($2483.5\text{MHz} \leq f < 2496.5\text{MHz}$)
	$\leq 2.5 \mu\text{W/MHz}$ ($2496.5\text{MHz} \leq f < 12500\text{MHz}$)

7.2. MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Below 1G	Above 1G
	Setting	Setting
Attenuation	Auto	Auto
RB / VB	100kHz	1MHz
Detector	Peak	Peak
Trace	Max Hold	Max Hold
Sweep Time	Auto	Auto

7.3. TEST PROCEDURES

- EUT have transmitted the maximum modulation signal and fixed channelize.
- Setting of SA is following as: Below 1GHz RB:100KHz / VB:100KHz
Above 1GHz RB:1MHz / VB:1MHz / AT: 30dB Ref: 20dBm / Sweep time: Auto
Sweep Mode: Continuous sweep / Detect mode: Positive peak
Trace mode: Max hold
- Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 2.5 μW .
- Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5 μW .
- SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μW .
- SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25 μW
- SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 μW
- If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as Result_Value.



7.4. TEST SETUP LAYOUT



7.5. TEST DEVIATION

There is no deviation with the original standard.

7.6. TEST RESULT

Please see the attachment for data.

8. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

8.1. LIMIT

Item	Limits
RX Spurious Emission:	$\leq 4\text{nW}$ ($f < 1\text{GHz}$)
	$\leq 20\text{nW}$ ($1\text{GHz} \leq f$)

8.2. MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB	100kHz($f < 1\text{GHz}$); 1 MHz ($1\text{GHz} \leq f$)
VB	100KHz($f < 1\text{GHz}$); 1 MHz ($1\text{GHz} \leq f$)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

8.3. TEST PROCEDURES

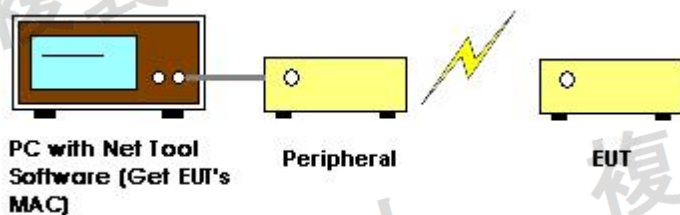
- EUT have the continuous reception mode and fixed only one channelize.
- Setting of SA is following as:
AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
- SA set RB: 100kHz and VB: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW
- SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 13000MHz. Search to mark peak reading value + cable loss shall be less than 20nW
- If power level of lower emissions are more than 1/10 of limit (.0.4nW for $f < 1\text{GHz}$, 2nW for $f \geq 1\text{GHz}$), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated.

8.4. TEST RESULT

Please see the attachment for data.

9 INTERFERENCE PREVENTION FUNCTION

9.1. TEST SETUP



9.2. RADIO INTERFERENCE PREVENTION FUNCTION

	Normal voltage	High voltage	Low voltage
Result	OK	OK	OK

Result: Pass

MAC:42:41:06:11:19:21

10 CARRIER SENSE

10.1 STANDARD APPLICABLE

Item	Limits
Carrier Sense	Good – EUT stop RF transmission signal after carrier inject to EUT. (On $22.79 + Gr - 20 \cdot \log(f)$ [dBm] (Gr: dBi; f: MHz) or 100mV/m)

10.2 INSTRUMENTS SETTING

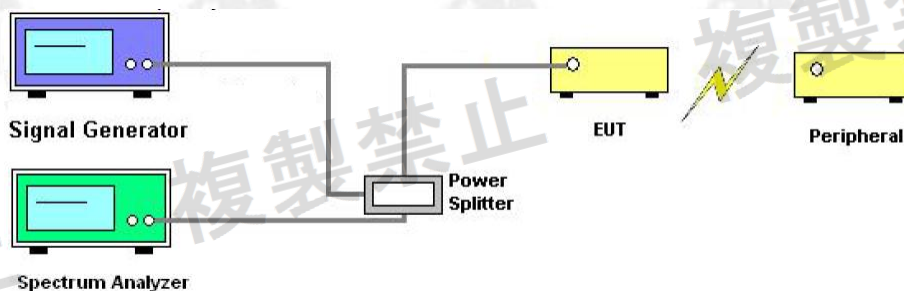
The following table is the setting of spectrum analyzer and receiver

Spectrum Parameter	Setting
Attenuation	Auto
RB/VB	1mHz
Span	0mHz
Sweep	Continuous
Detector	Peak
Trigger mode	Video

10.3 TEST PROCEDURES

- SSG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SSG and power level is (On $22.79 + Gr - 20 \cdot \log(f)$ [dBm] (Gr: dBi; f: MHz). Then turn off the RF signal of SSG.
- EUT have transmitted the maximum modulation signal and fixed channelize.
- Setting of SA is following as: RB: 1MHz / VB: 1MHz / SPAN: 50MHz / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak.
- SSG RF Signal On.
- EUT shall be stop the transmitted any signal and SSG RF Signal Off. Then EUT will be continuous transmitted signal.

10.4 TEST SETUP LAYOUT



10.5 EUT OPERATION DURING TEST

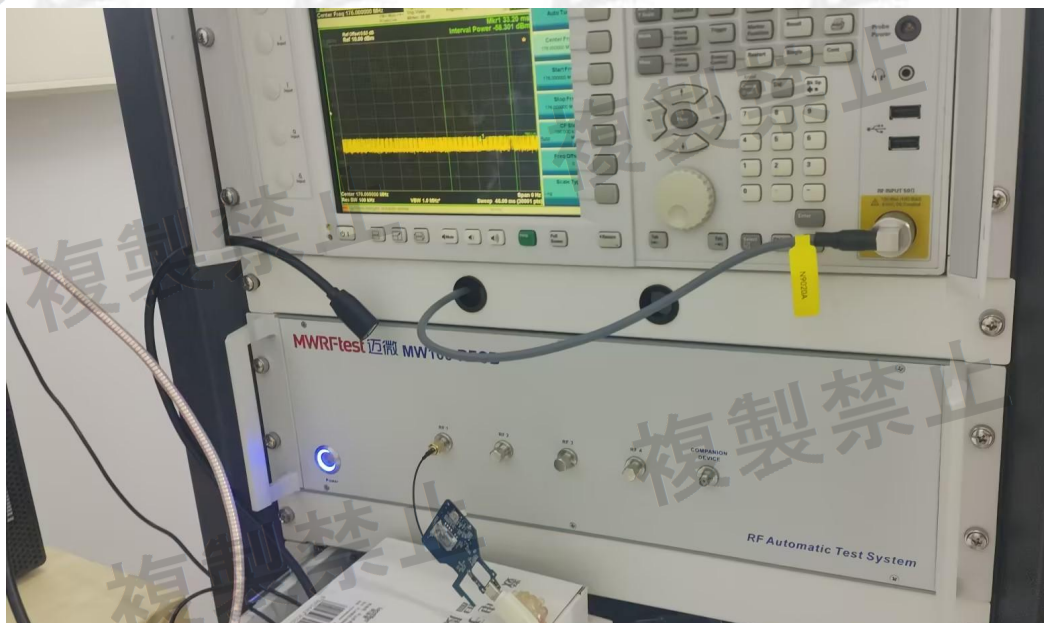
The EUT was programmed to be in normal transmitting mode.

10.6 TEST RESULT

N/A

11. EUT TEST PHOTO

Measurement Photos



12.EUT CONSTRUCTIONAL DETAILS

Please see the EUT photo for details.

the end of report



RF Test Data

Frequency Error	2
Antenna Power	6
EIRP Power	10
Occupied Channel Bandwidth	11
Spreading Bandwidth	15
Tx Spurious Emission	19
Rx Spurious Emission	37

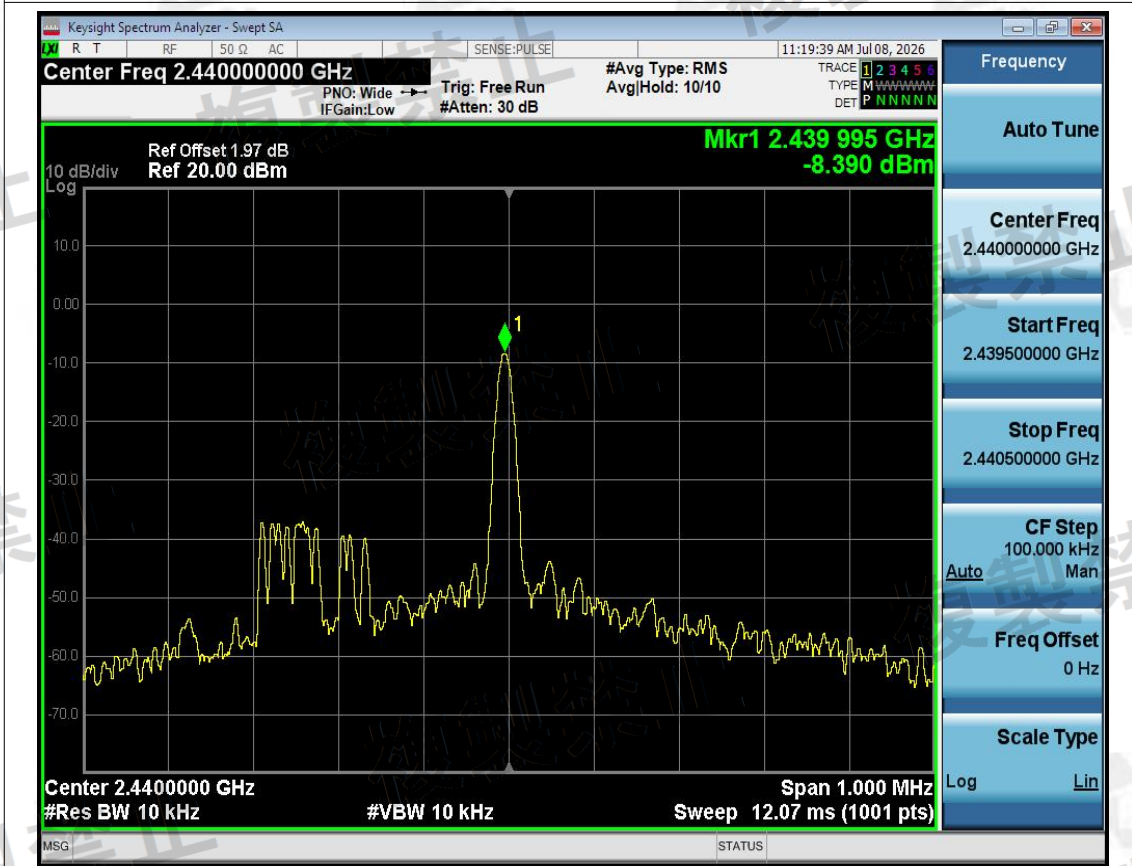


Frequency Error

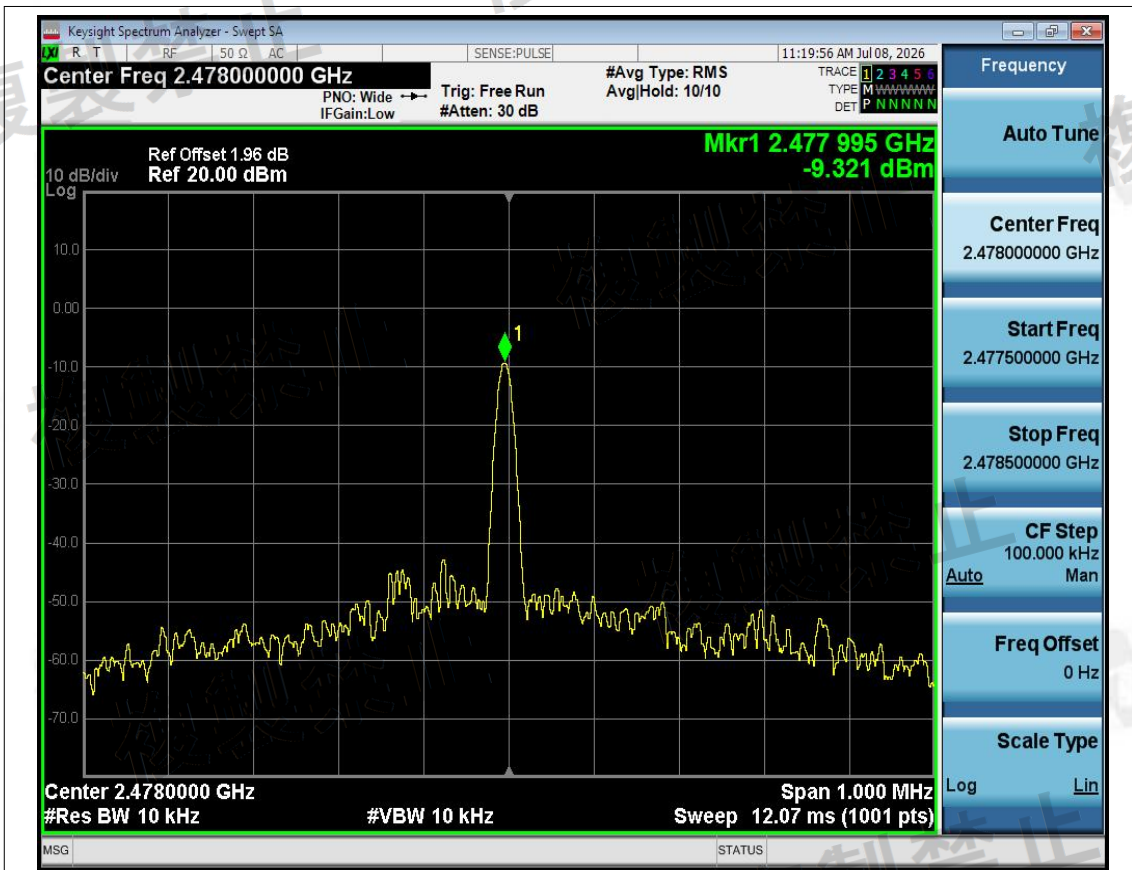
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	2.4GHz 1M	2402	Ant1	2401.995	-5000	-2.08	50	Pass
NVNT	2.4GHz 1M	2440	Ant1	2439.995	-5000	-2.05	50	Pass
NVNT	2.4GHz 1M	2478	Ant1	2477.995	-5000	-2.02	50	Pass
NVNT	2.4GHz 2M	2402	Ant1	2401.995	-5000	-2.08	50	Pass
NVNT	2.4GHz 2M	2440	Ant1	2439.995	-5000	-2.05	50	Pass
NVNT	2.4GHz 2M	2478	Ant1	2477.995	-5000	-2.02	50	Pass



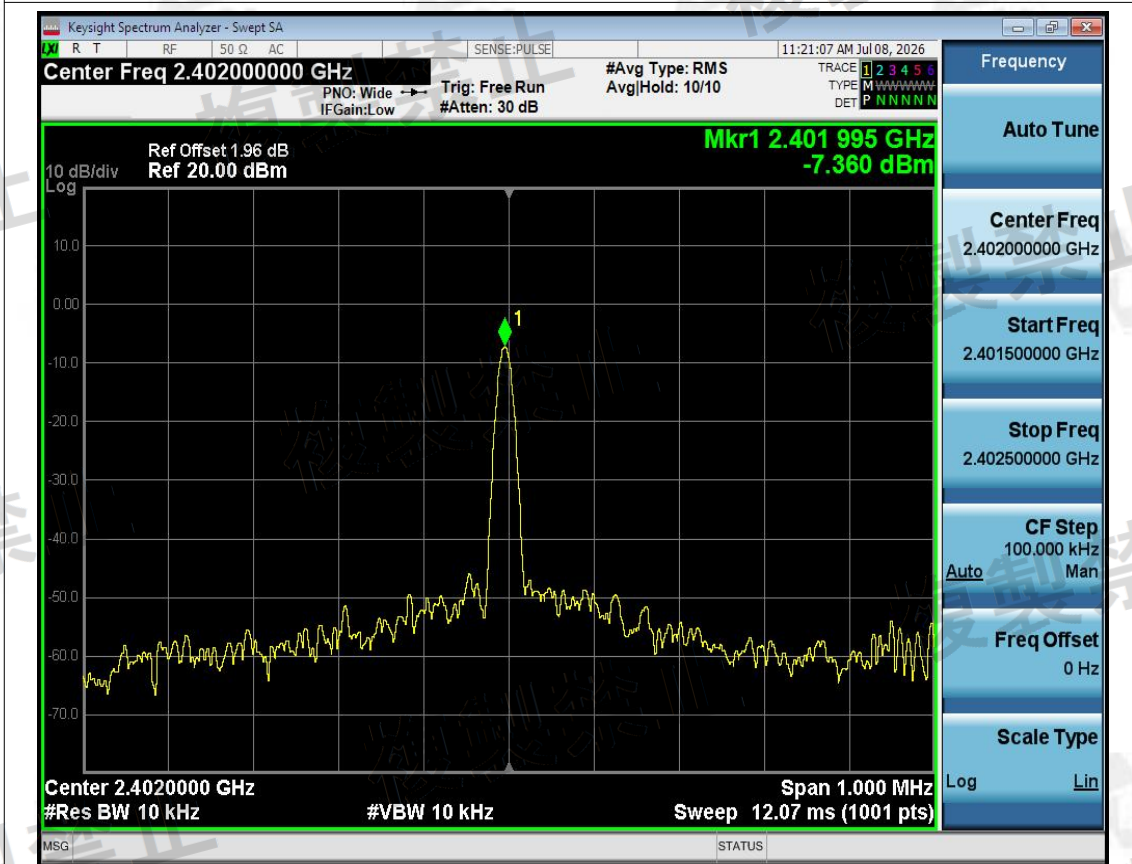
Freq. Error NVNT 2.4GHz 1M 2402MHz Ant1



Freq. Error NVNT 2.4GHz 1M 2440MHz Ant1



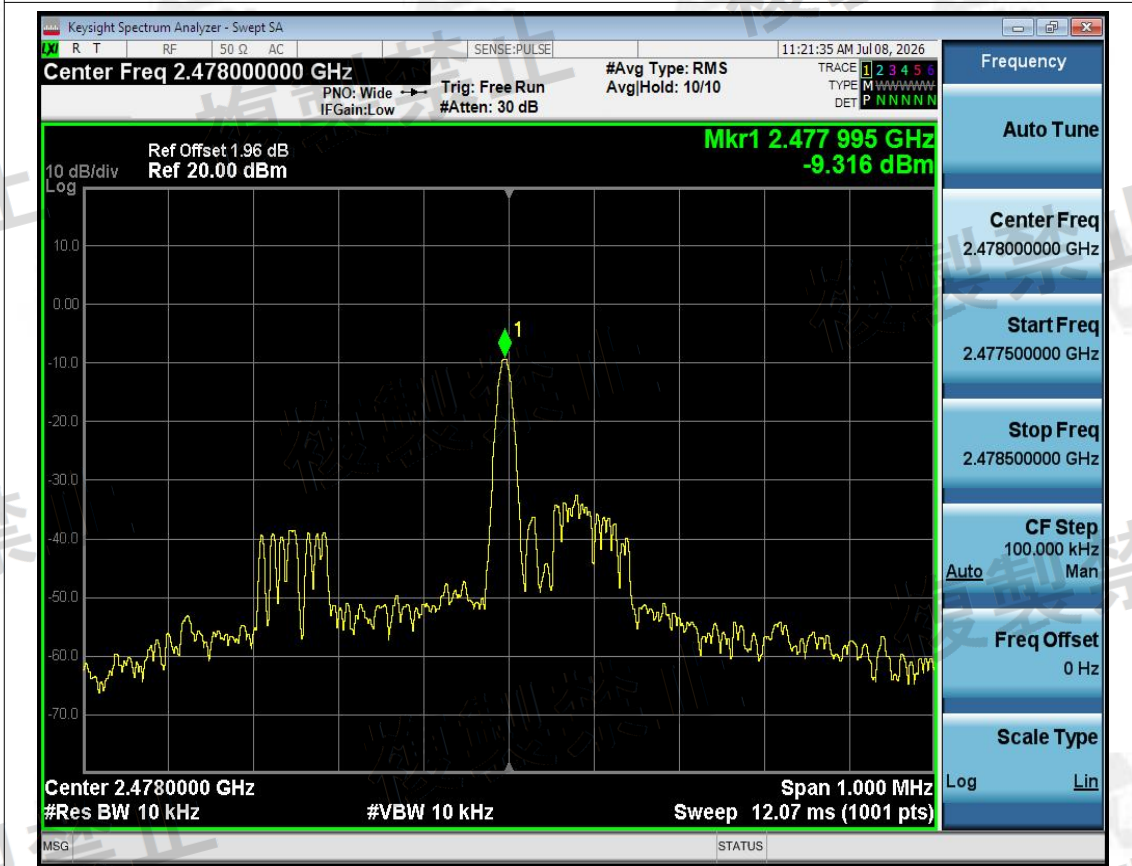
Freq. Error NVNT 2.4GHz 1M 2478MHz Ant1



Freq. Error NVNT 2.4GHz 2M 2402MHz Ant1



Freq. Error NVNT 2.4GHz 2M 2440MHz Ant1

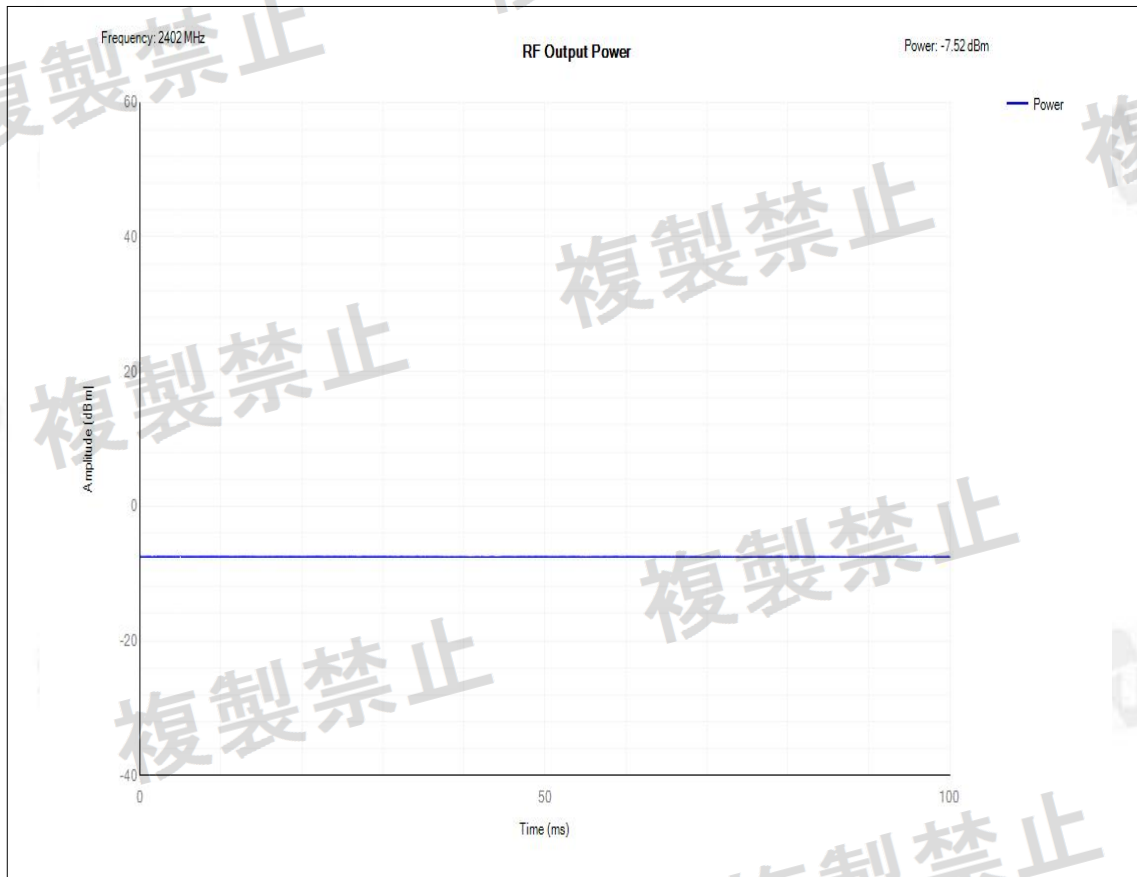


Freq. Error NVNT 2.4GHz 2M 2478MHz Ant1

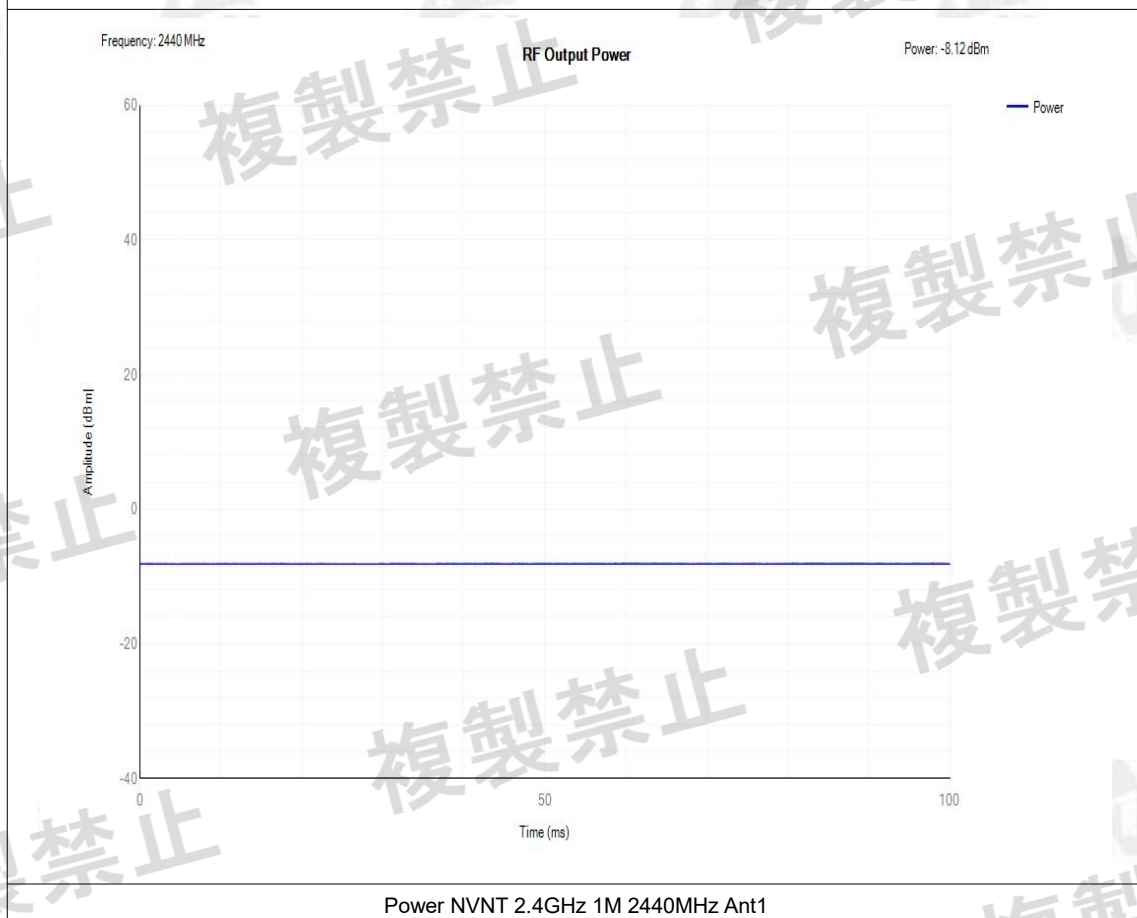


Antenna Power

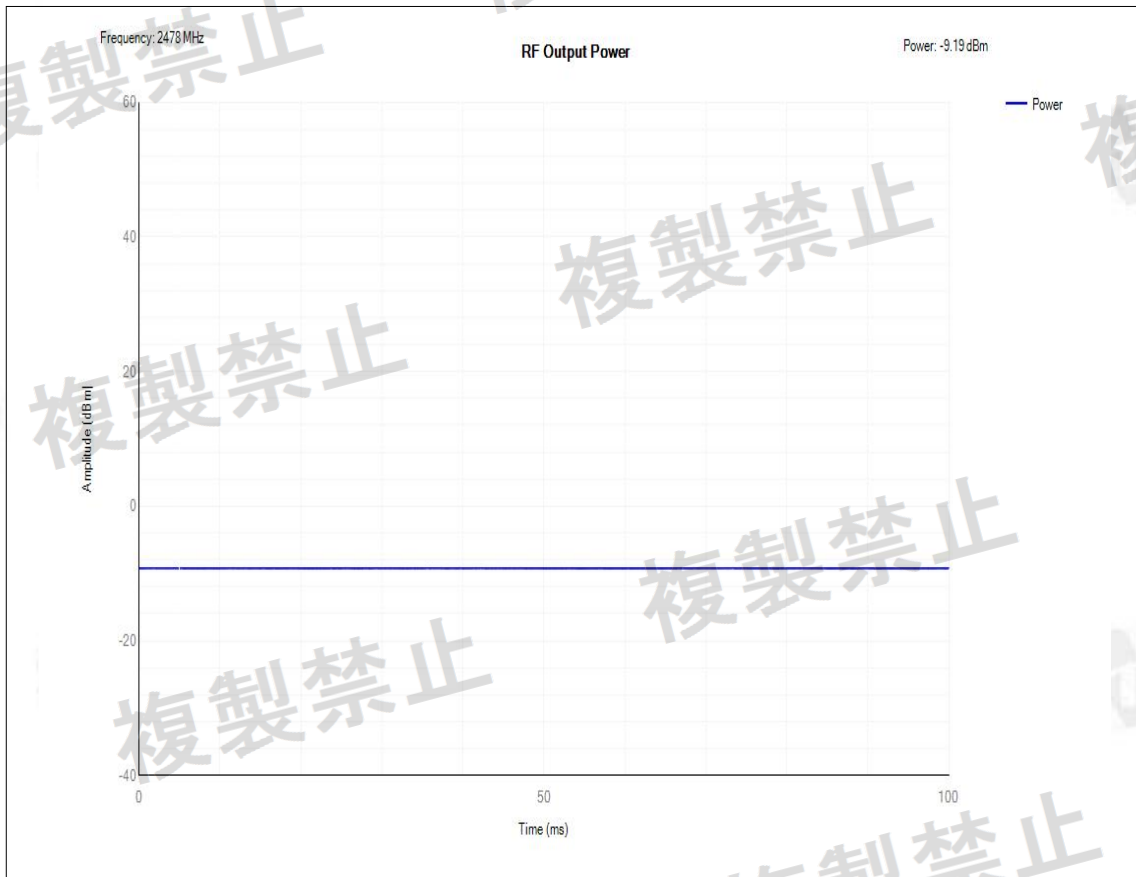
Condition	Mode	Frequency (MHz)	Antenna	Power (dBm)	Power (mW)	Limit (mW)	Declared Power (mW)	Tolerance (%)	Upper Limit (%)	Verdict
NVNT	2.4GHz z 1M	2402	Ant1	-7.52	0.177	10	1	-82.3	20	Pass
NVNT	2.4GHz z 1M	2440	Ant1	-8.12	0.154	10	1	-84.6	20	Pass
NVNT	2.4GHz z 1M	2478	Ant1	-9.19	0.121	10	1	-87.9	20	Pass
NVNT	2.4GHz z 2M	2402	Ant1	-7.53	0.177	10	1	-82.3	20	Pass
NVNT	2.4GHz z 2M	2440	Ant1	-8.12	0.154	10	1	-84.6	20	Pass
NVNT	2.4GHz z 2M	2478	Ant1	-9.19	0.121	10	1	-87.9	20	Pass



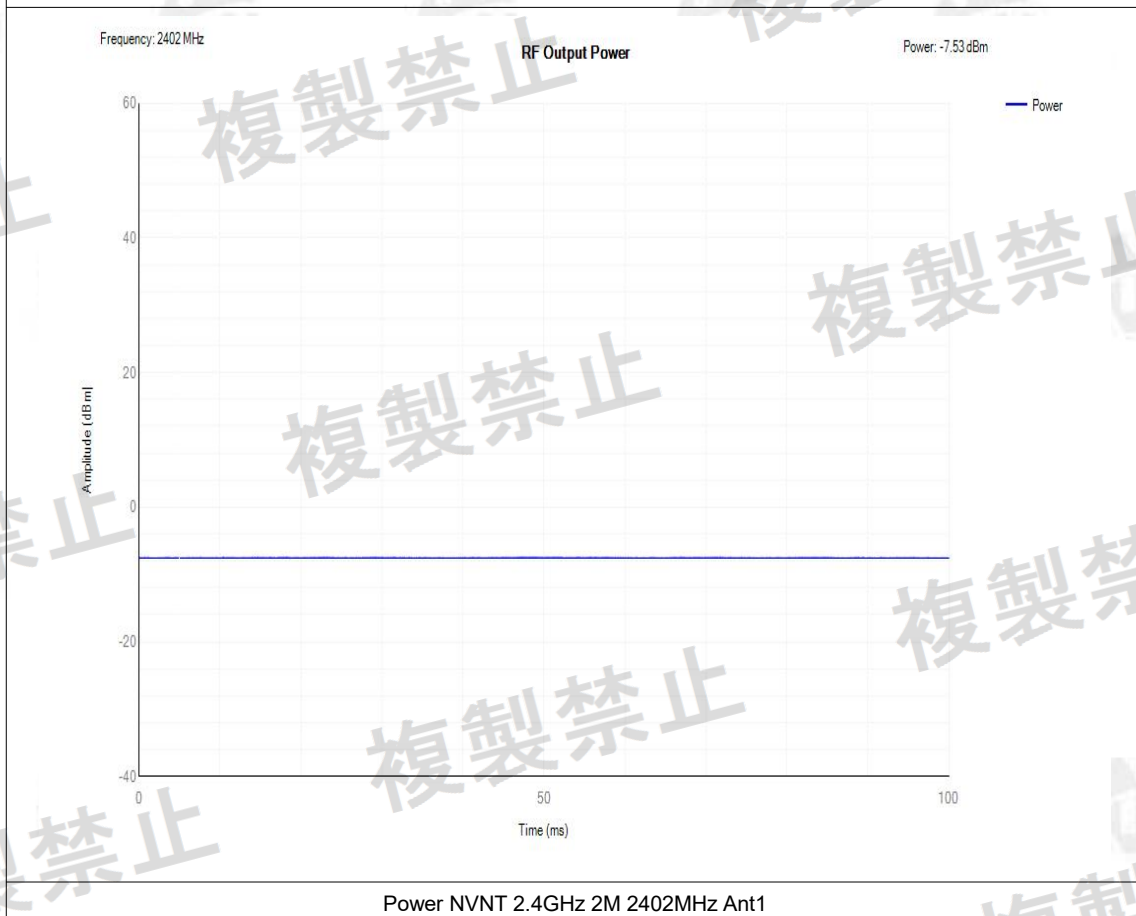
Power NVNT 2.4GHz 1M 2402MHz Ant1



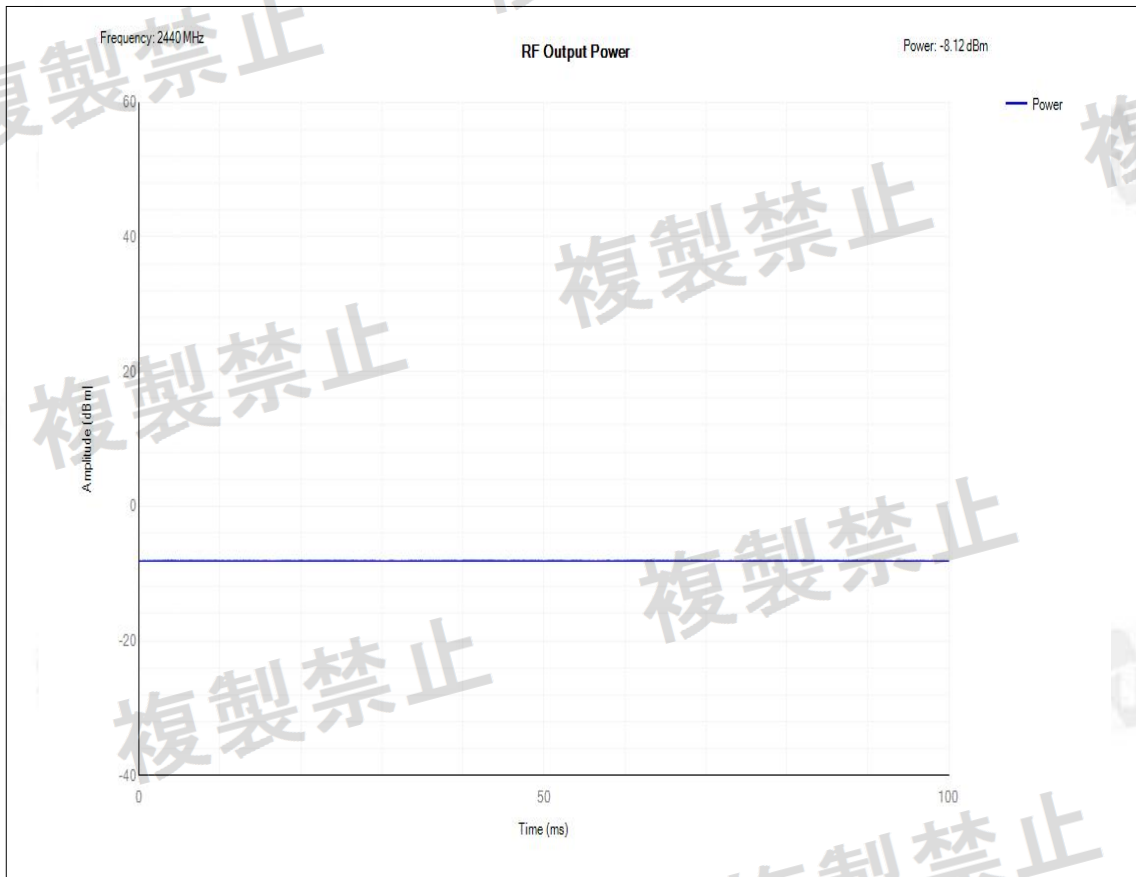
Power NVNT 2.4GHz 1M 2440MHz Ant1



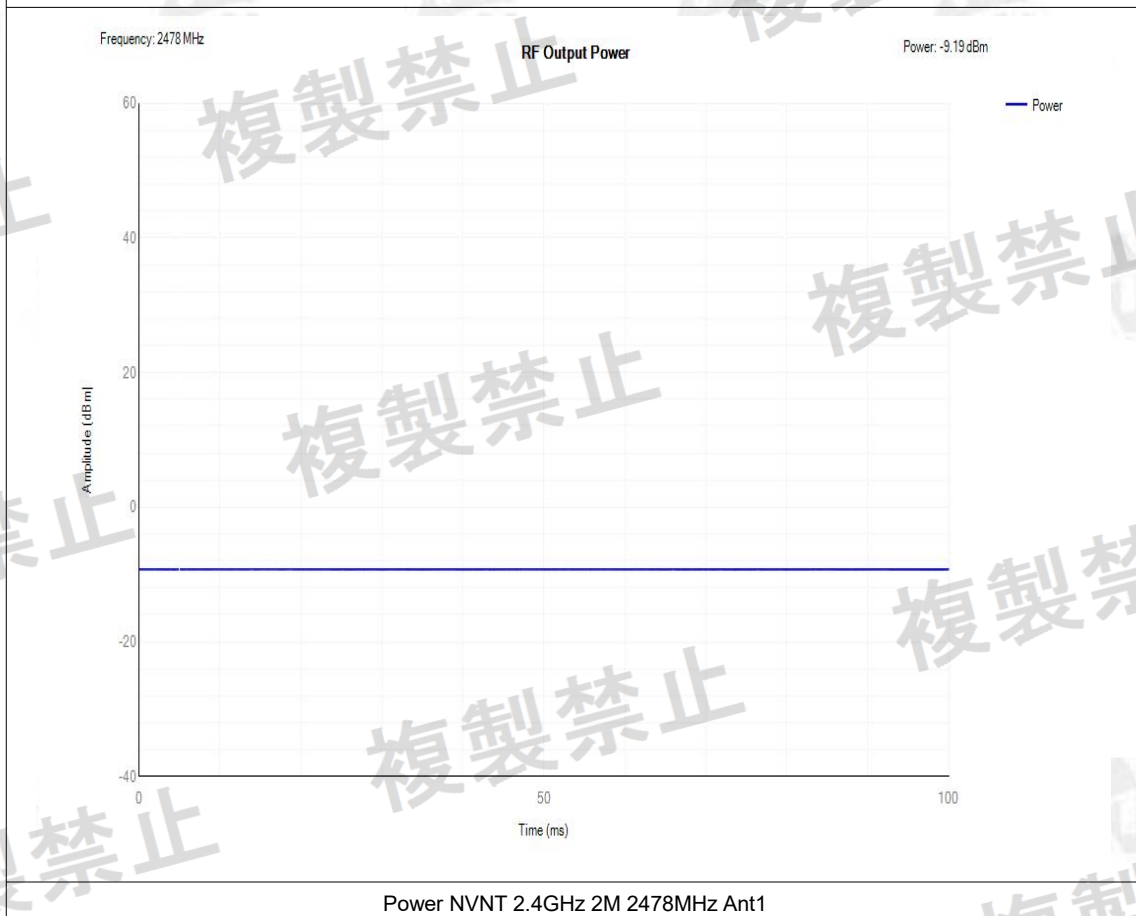
Power NVNT 2.4GHz 1M 2478MHz Ant1



Power NVNT 2.4GHz 2M 2402MHz Ant1



Power NVNT 2.4GHz 2M 2440MHz Ant1



Power NVNT 2.4GHz 2M 2478MHz Ant1



EIRP Power

Condition	Mode	Frequency (MHz)	Antenna	Antenna Power (mW)	Antenna Power (dBm)	Gain (dBi)	EIRP Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4GHz 1M	2402	Ant1	0.177	-7.52	0	-7.52	12.14	Pass
NVNT	2.4GHz 1M	2440	Ant1	0.154	-8.12	0	-8.12	12.14	Pass
NVNT	2.4GHz 1M	2478	Ant1	0.121	-9.19	0	-9.19	12.14	Pass
NVNT	2.4GHz 2M	2402	Ant1	0.177	-7.53	0	-7.53	12.14	Pass
NVNT	2.4GHz 2M	2440	Ant1	0.154	-8.12	0	-8.12	12.14	Pass
NVNT	2.4GHz 2M	2478	Ant1	0.121	-9.19	0	-9.19	12.14	Pass

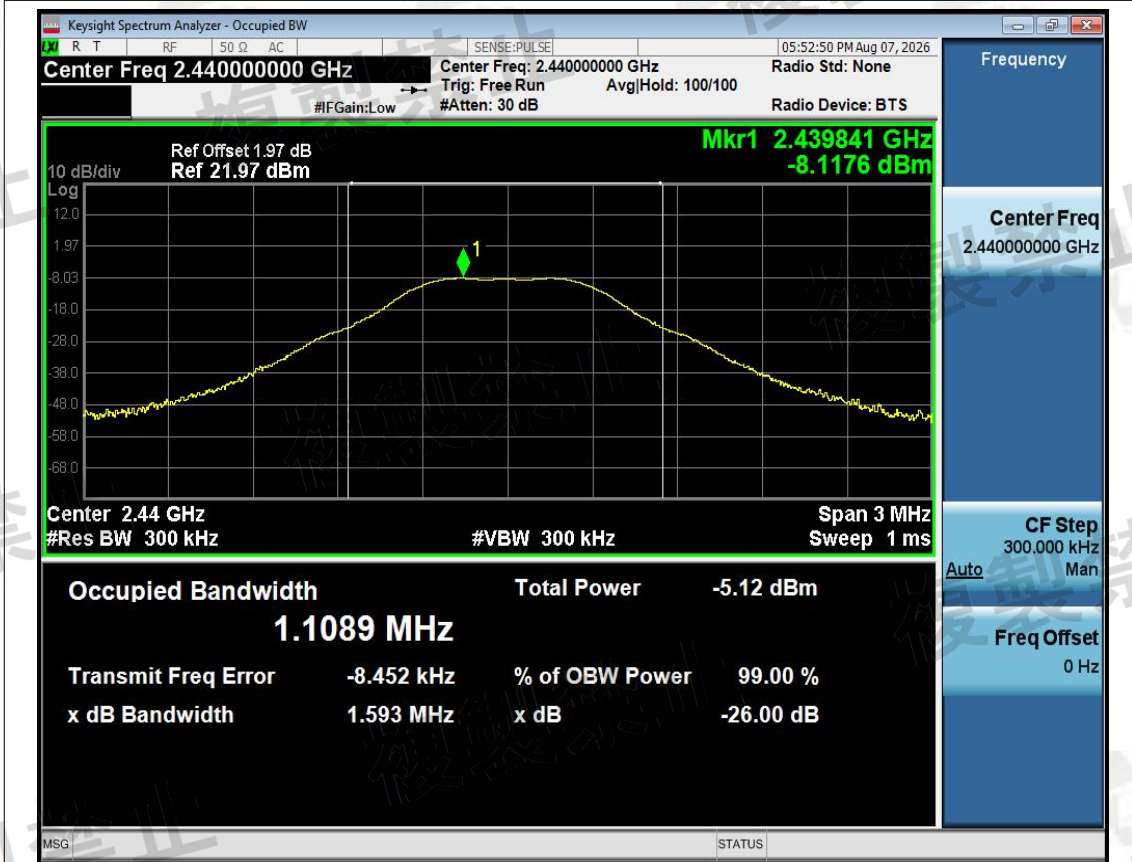


Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	Lower Limit (MHz)	Upper Limit (MHz)	Verdict
NVNT	2.4GHz 1M	2402	Ant1	1.1138	N/A	26	Pass
NVNT	2.4GHz 1M	2440	Ant1	1.1089	N/A	26	Pass
NVNT	2.4GHz 1M	2478	Ant1	1.1177	N/A	26	Pass
NVNT	2.4GHz 2M	2402	Ant1	1.996	N/A	26	Pass
NVNT	2.4GHz 2M	2440	Ant1	1.9945	N/A	26	Pass
NVNT	2.4GHz 2M	2478	Ant1	2.0047	N/A	26	Pass



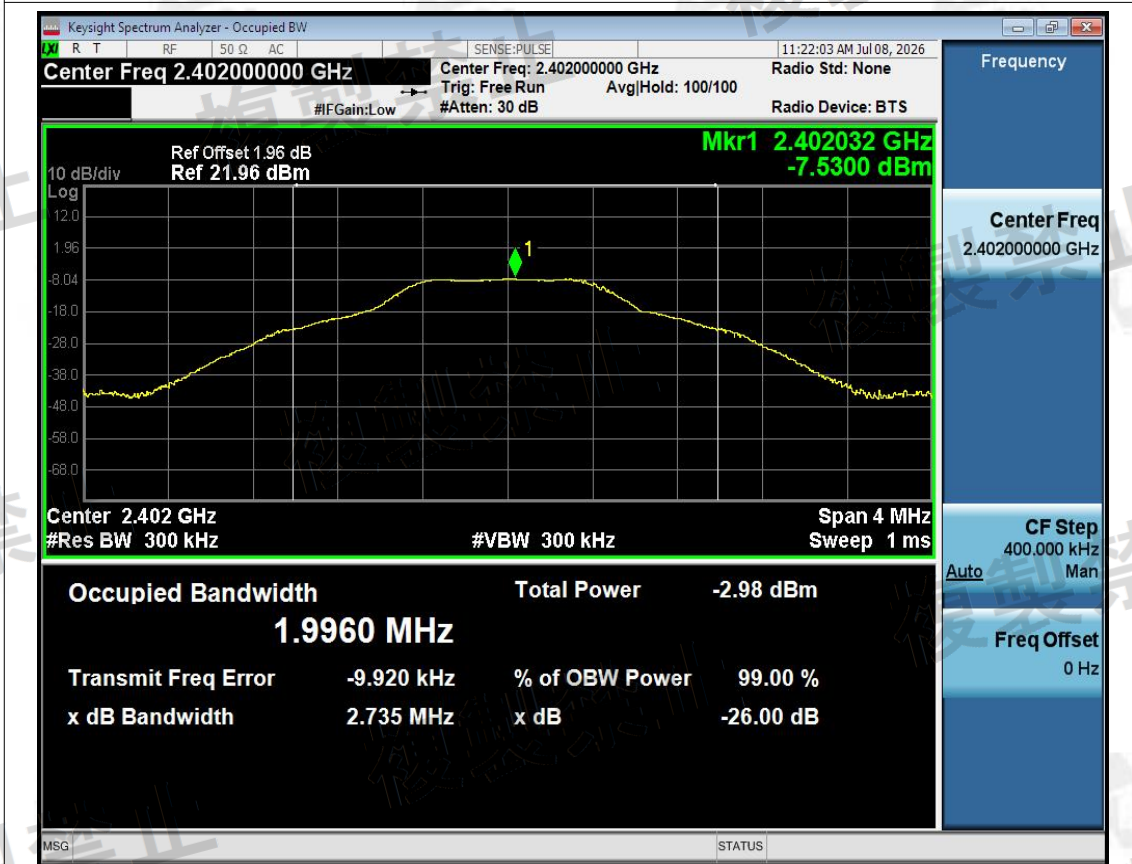
OBW NVNT 2.4GHz 1M 2402MHz Ant1



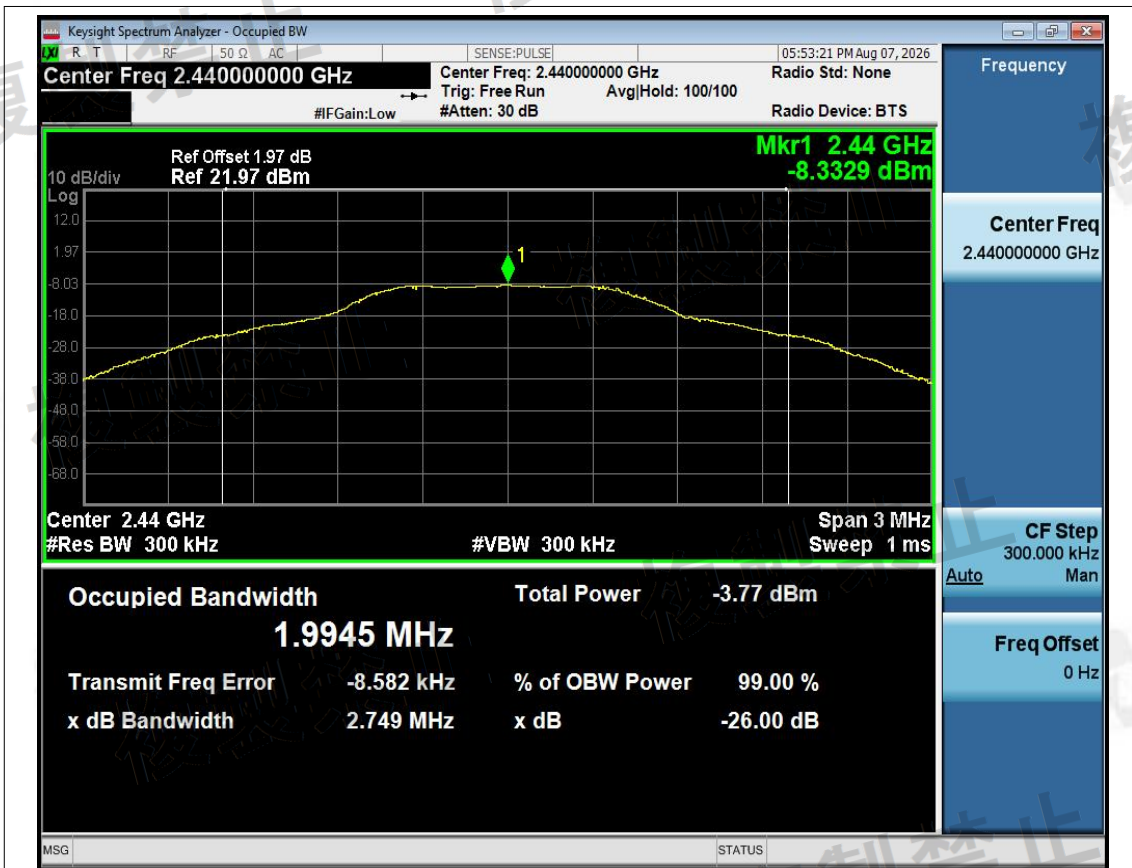
OBW NVNT 2.4GHz 1M 2440MHz Ant1



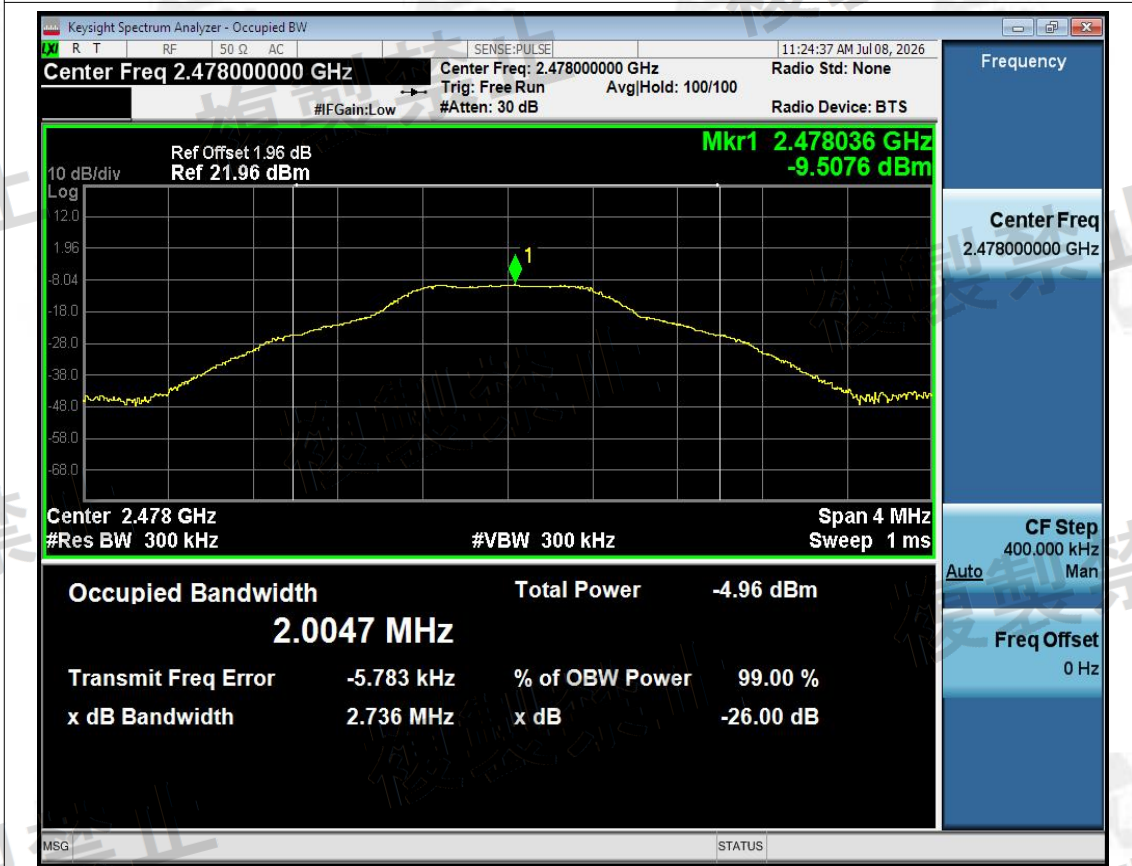
OBW NVNT 2.4GHz 1M 2478MHz Ant1



OBW NVNT 2.4GHz 2M 2402MHz Ant1



OBW NVNT 2.4GHz 2M 2440MHz Ant1



OBW NVNT 2.4GHz 2M 2478MHz Ant1

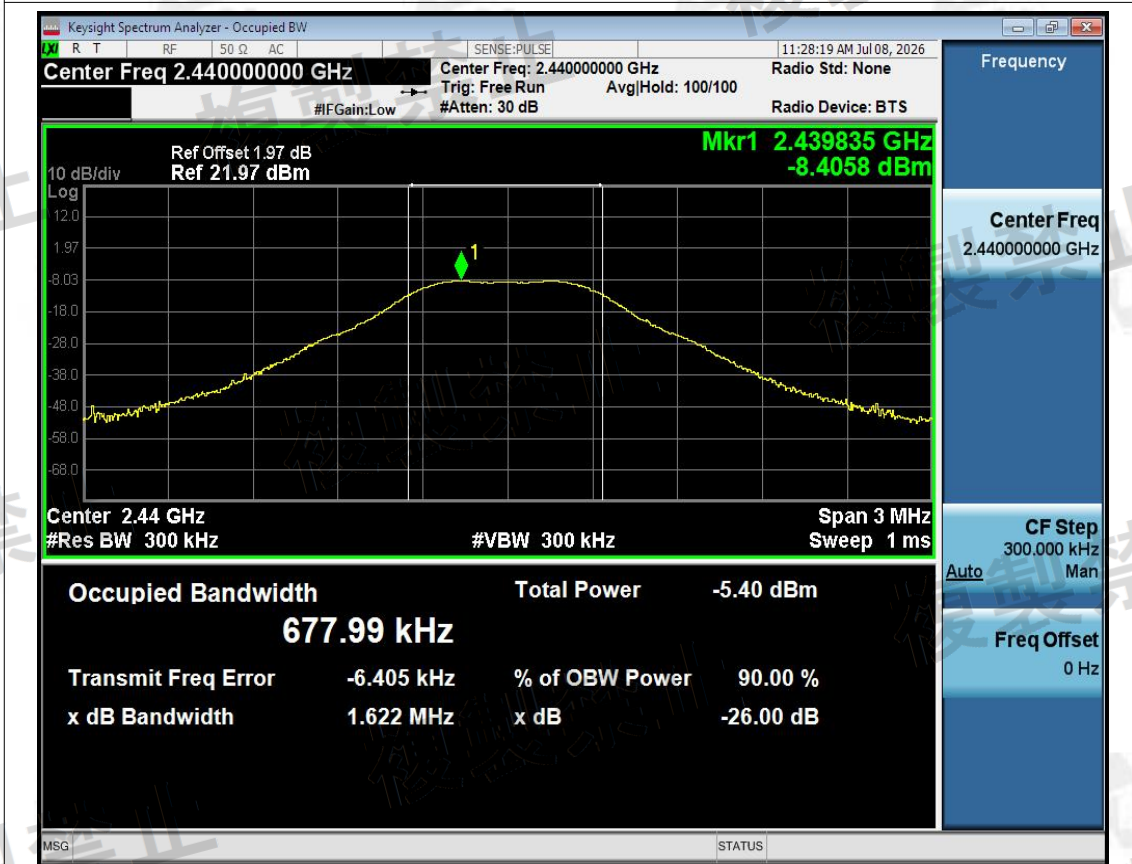


Spreading Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	90% OBW (MHz)
NVNT	2.4GHz 1M	2402	Ant1	0.67602
NVNT	2.4GHz 1M	2440	Ant1	0.67799
NVNT	2.4GHz 1M	2478	Ant1	0.67906
NVNT	2.4GHz 2M	2402	Ant1	1.0346
NVNT	2.4GHz 2M	2440	Ant1	1.0343
NVNT	2.4GHz 2M	2478	Ant1	1.0365



Spreading Bandwidth NVNT 2.4GHz 1M 2402MHz Ant1



Spreading Bandwidth NVNT 2.4GHz 1M 2440MHz Ant1



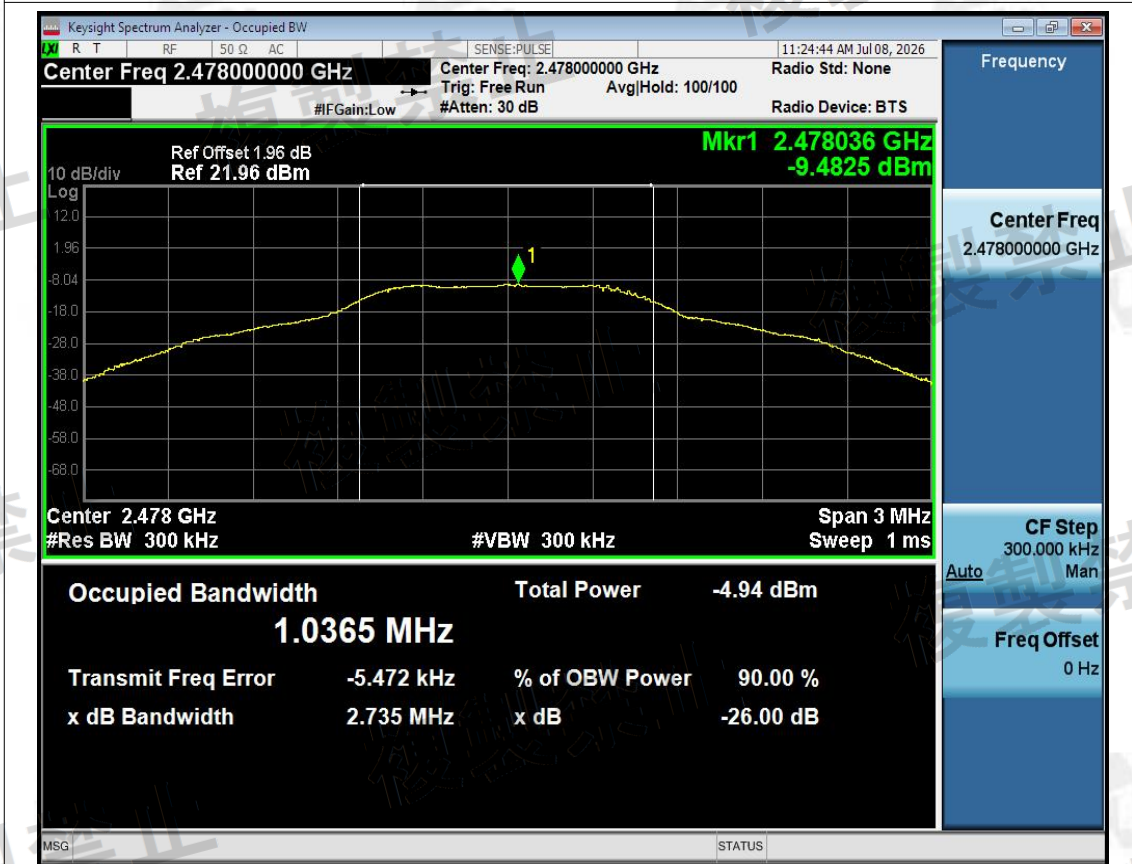
Spreading Bandwidth NVNT 2.4GHz 1M 2478MHz Ant1



Spreading Bandwidth NVNT 2.4GHz 2M 2402MHz Ant1



Spreading Bandwidth NVNT 2.4GHz 2M 2440MHz Ant1



Spreading Bandwidth NVNT 2.4GHz 2M 2478MHz Ant1



Tx Spurious Emission

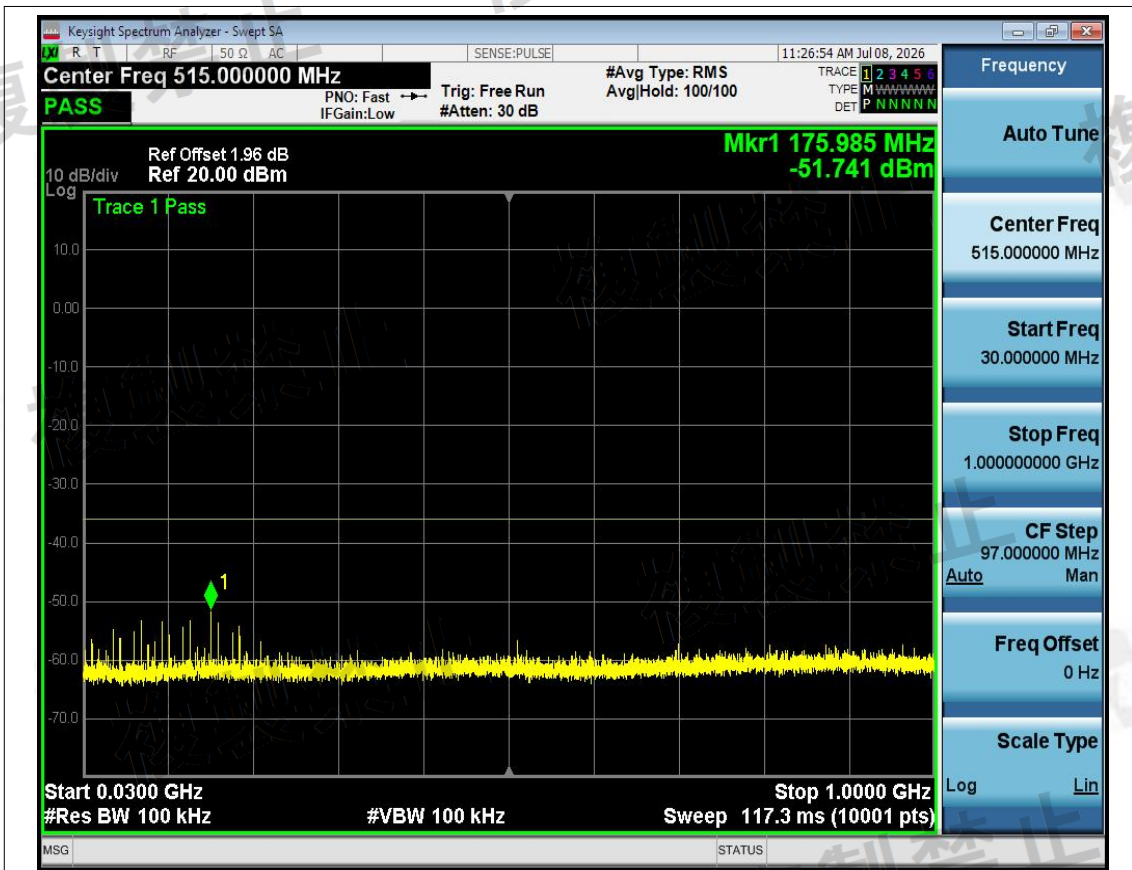
Condi tion	Mod e	Frequ ency (MHz)	Ante nna	Range (MHz)	Emiss ion Frequ ency (MHz)	Ma x Pe ak Val ue (dB m /M Hz)	Ma x RM S Val ue (d Bm /M Hz)	Max Peak Value (uW/ MHz)	Max RMS Value (uW/ MHz)	Limit Start(uW /MHz)	Limit Stop (uW/ MHz)	Ver dict
NVNT	2.4 GHz 1M	2402	Ant1	30-1000	175.99	-51. 74	NA	0.006 7	NA	0.25	0.25	Pas s
NVNT	2.4 GHz 1M	2402	Ant1	1000-23 87	2385.7 5	-41. 55	NA	0.07	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 1M	2402	Ant1	2387-24 00	2394.1 0	-42. 61	NA	0.054 8	NA	25	25	Pas s
NVNT	2.4 GHz 1M	2402	Ant1	2483.5-2 496.5	2489.7 6	-45. 53	NA	0.028	NA	25	25	Pas s
NVNT	2.4 GHz 1M	2402	Ant1	2496.5-1 3000	4804.1 2	-44. 15	NA	0.038 5	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 1M	2440	Ant1	30-1000	152.03	-52. 18	NA	0.006 1	NA	0.25	0.25	Pas s
NVNT	2.4 GHz 1M	2440	Ant1	1000-23 87	2239.9 8	-43. 90	NA	0.040 7	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 1M	2440	Ant1	2387-24 00	2395.1 0	-46. 25	NA	0.023 7	NA	25	25	Pas s
NVNT	2.4 GHz 1M	2440	Ant1	2483.5-2 496.5	2485.4 3	-46. 64	NA	0.021 7	NA	25	25	Pas s
NVNT	2.4 GHz 1M	2440	Ant1	2496.5-1 3000	5774.6 4	-44. 31	NA	0.037 1	NA	2.5	2.5	Pas s
NVNT	2.4 GHz	2478	Ant1	30-1000	175.99	-51. 84	NA	0.006 5	NA	0.25	0.25	Pas s



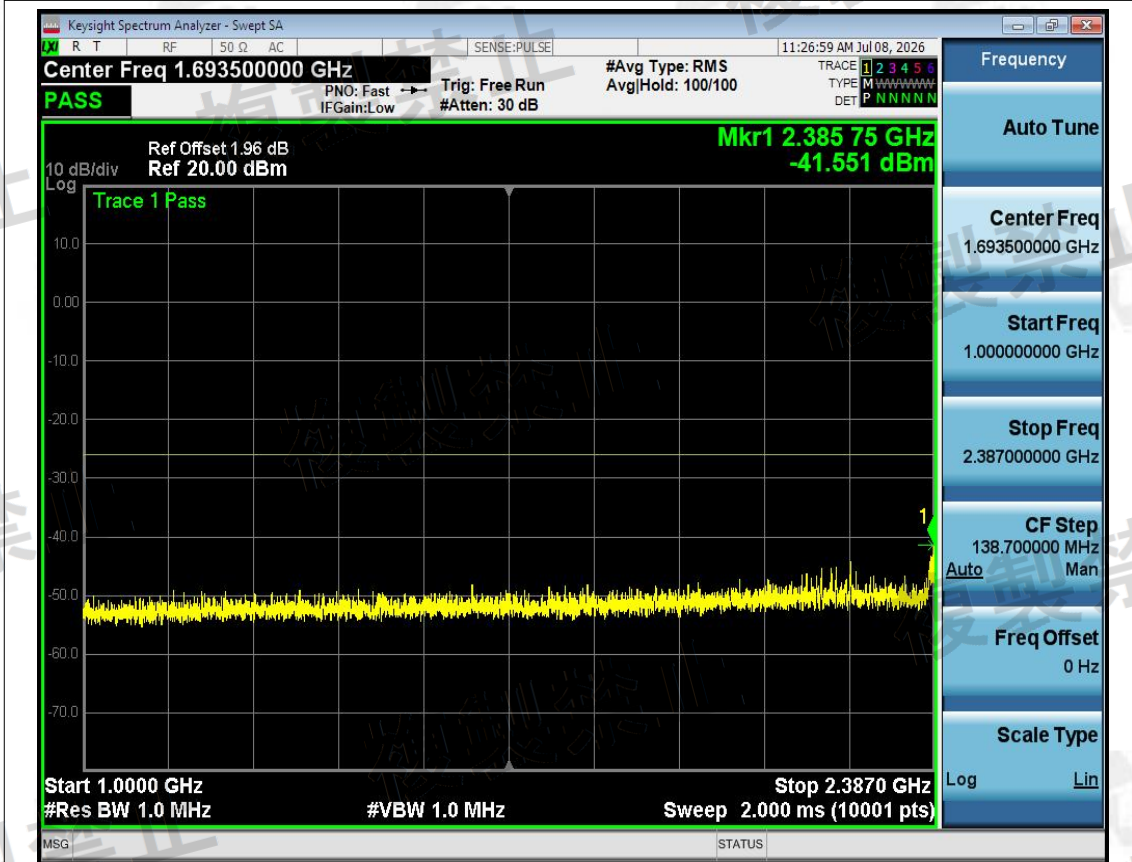
	1M											
NVNT	2.4 GHz 1M	2478	Ant1	1000-23 87	2302.2 5	-43. 71	NA	0.042 6	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 1M	2478	Ant1	2387-24 00	2397.5 3	-45. 67	NA	0.027 1	NA	25	25	Pas s
NVNT	2.4 GHz 1M	2478	Ant1	2483.5-2 496.5	2494.1 1	-41. 69	NA	0.067 8	NA	25	25	Pas s
NVNT	2.4 GHz 1M	2478	Ant1	2496.5-1 3000	6215.7 9	-44. 06	NA	0.039 3	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 2M	2402	Ant1	30-1000	175.99	-52. 06	NA	0.006 2	NA	0.25	0.25	Pas s
NVNT	2.4 GHz 2M	2402	Ant1	1000-23 87	2386.3 1	-40. 96	NA	0.080 2	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 2M	2402	Ant1	2387-24 00	2400.0 0	-32. 48	NA	0.564 9	NA	25	25	Pas s
NVNT	2.4 GHz 2M	2402	Ant1	2483.5-2 496.5	2490.4 2	-46. 05	NA	0.024 8	NA	25	25	Pas s
NVNT	2.4 GHz 2M	2402	Ant1	2496.5-1 3000	4804.1 2	-43. 85	NA	0.041 2	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 2M	2440	Ant1	30-1000	175.99	-51. 58	NA	0.007	NA	0.25	0.25	Pas s
NVNT	2.4 GHz 2M	2440	Ant1	1000-23 87	2264.8 1	-43. 74	NA	0.042 3	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 2M	2440	Ant1	2387-24 00	2393.0 0	-46. 18	NA	0.024 1	NA	25	25	Pas s
NVNT	2.4 GHz 2M	2440	Ant1	2483.5-2 496.5	2495.6 0	-46. 46	NA	0.022 6	NA	25	25	Pas s
NVNT	2.4 GHz 2M	2440	Ant1	2496.5-1 3000	5241.0 6	-44. 05	NA	0.039 4	NA	2.5	2.5	Pas s
NVNT	2.4	2478	Ant1	30-1000	175.99	-51.	NA	0.007	NA	0.25	0.25	Pas



	GHz 2M				21		6				s
NVNT	2.4 GHz 2M	2478	Ant1	1000-23 87	2294.0 7	-44. 21	NA 0.037 9	NA	2.5	2.5	Pas s
NVNT	2.4 GHz 2M	2478	Ant1	2387-24 00	2390.0 9	-46. 17	NA 0.024 2	NA	25	25	Pas s
NVNT	2.4 GHz 2M	2478	Ant1	2483.5-2 496.5	2494.4 7	-41. 19	NA 0.076	NA	25	25	Pas s
NVNT	2.4 GHz 2M	2478	Ant1	2496.5-1 3000	5205.3 5	-42. 37	NA 0.057 9	NA	2.5	2.5	Pas s



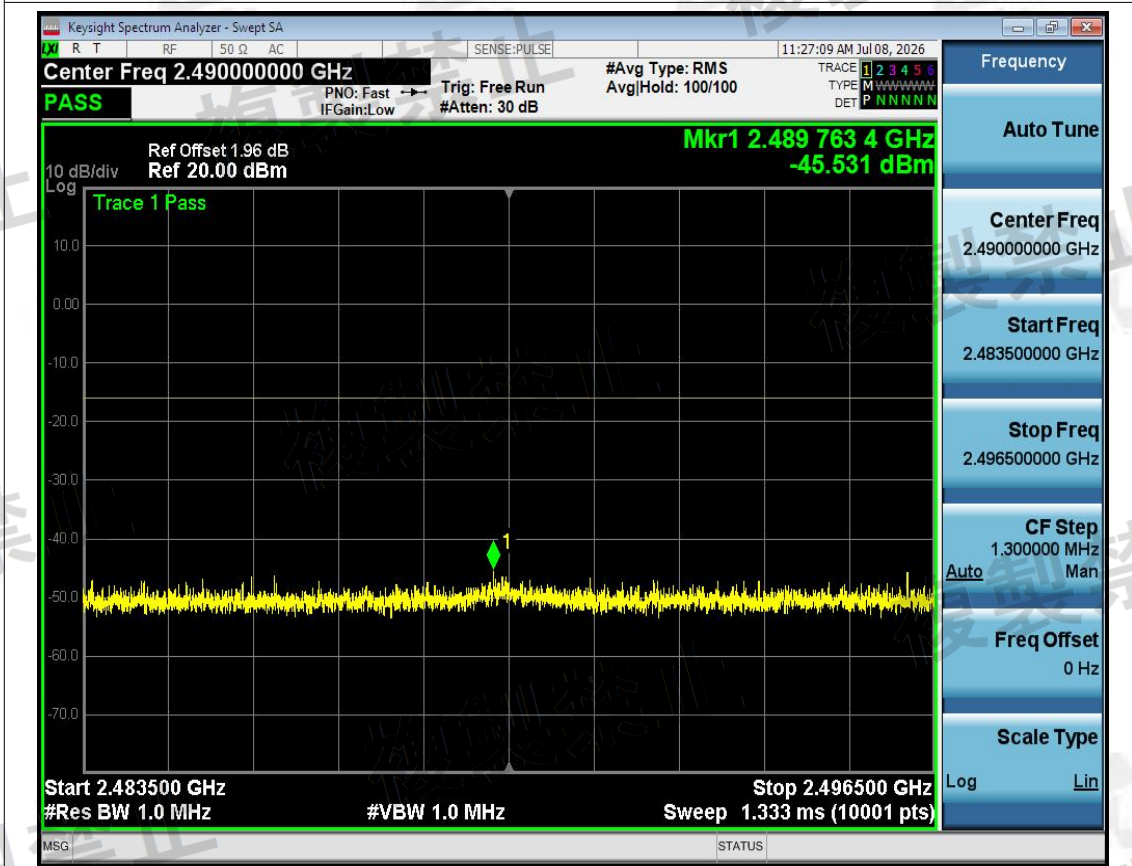
Tx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 30MHz-1000MHz



Tx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 1000MHz-2387MHz



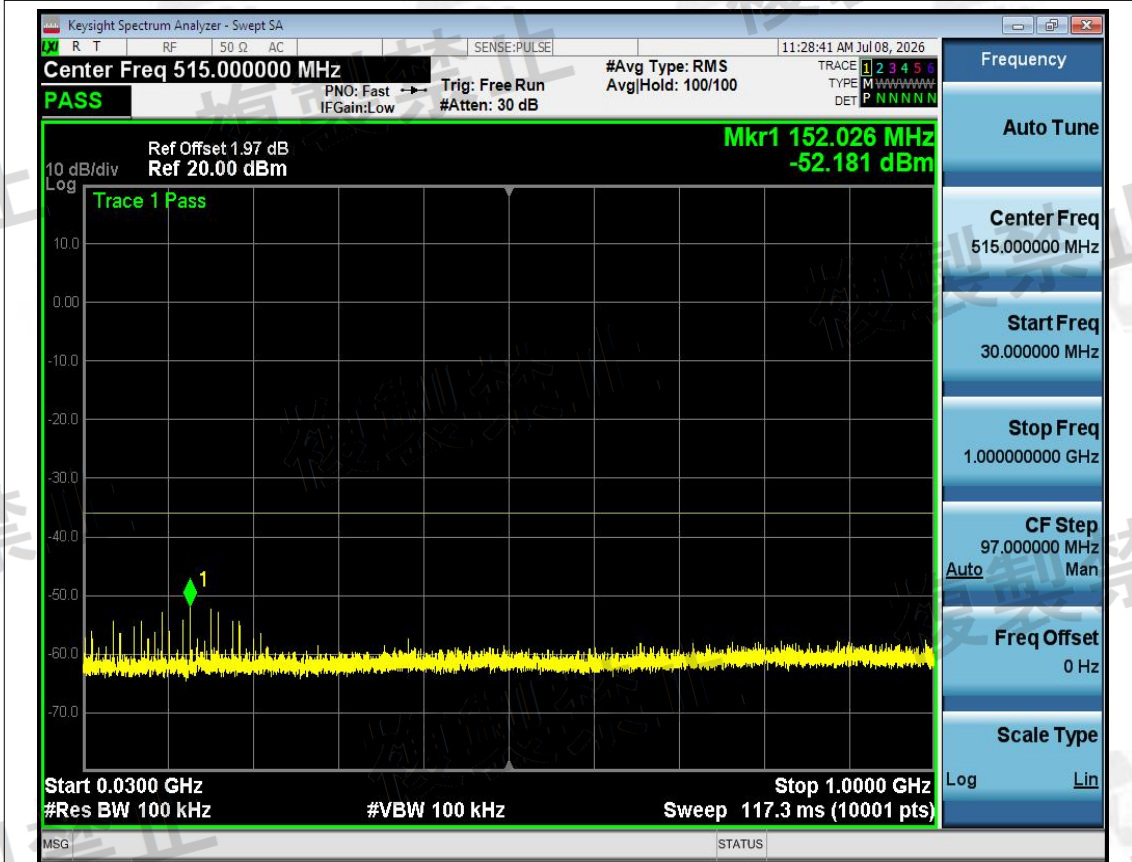
Tx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 2387MHz-2400MHz



Tx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 2483.5MHz-2496.5MHz



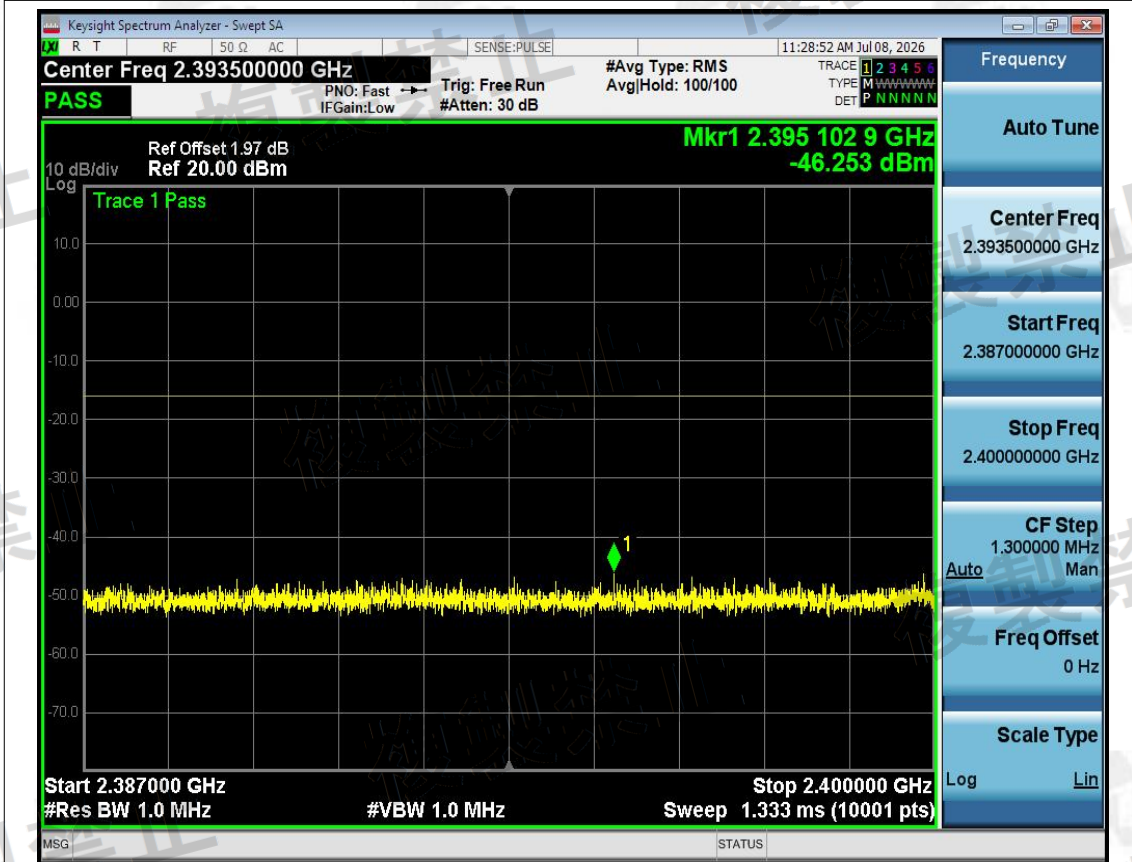
Tx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 2496.5MHz-13000MHz



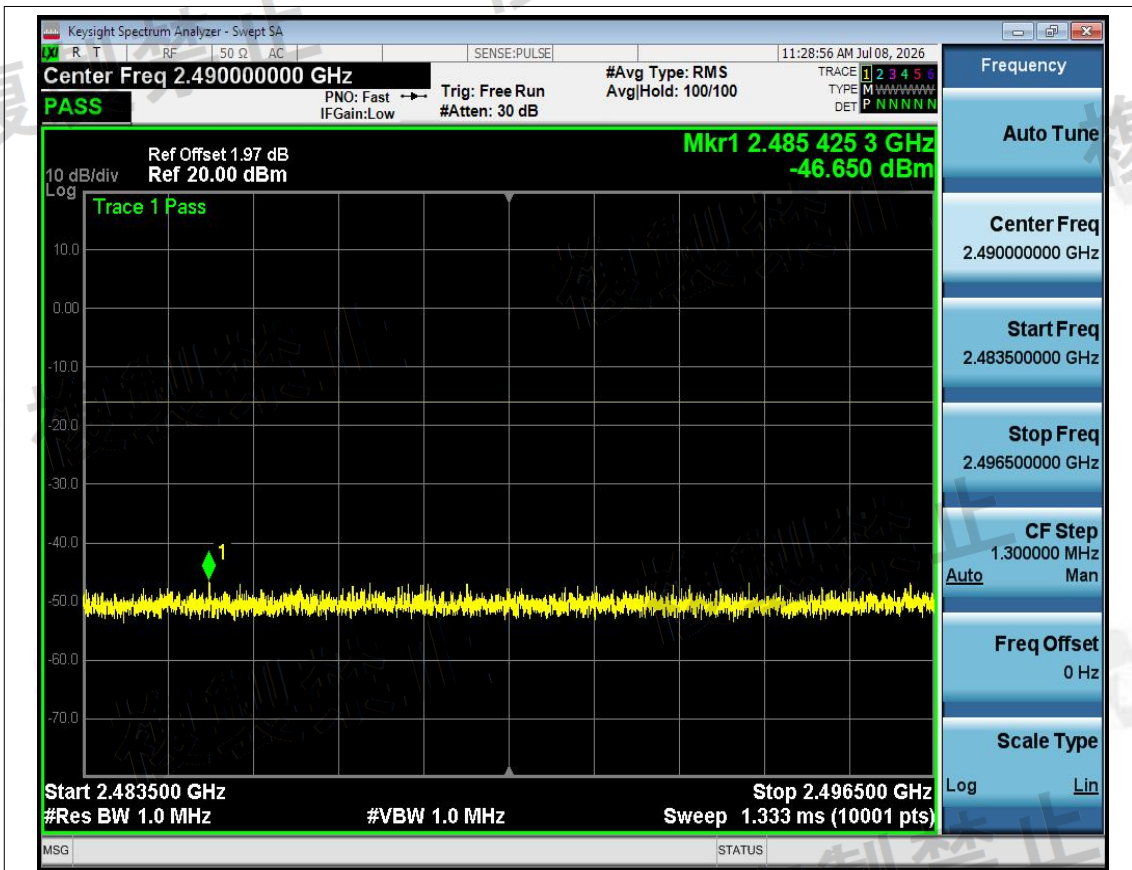
Tx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 30MHz-1000MHz



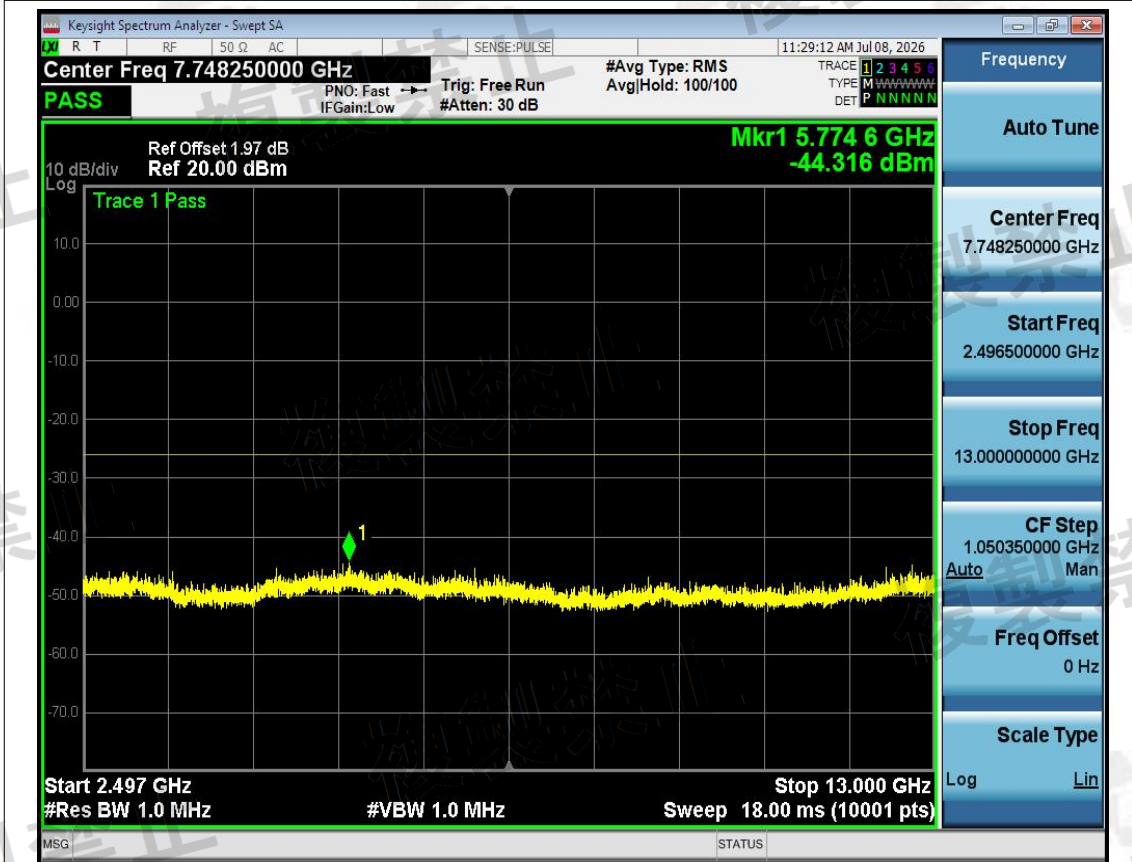
Tx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 1000MHz-2387MHz



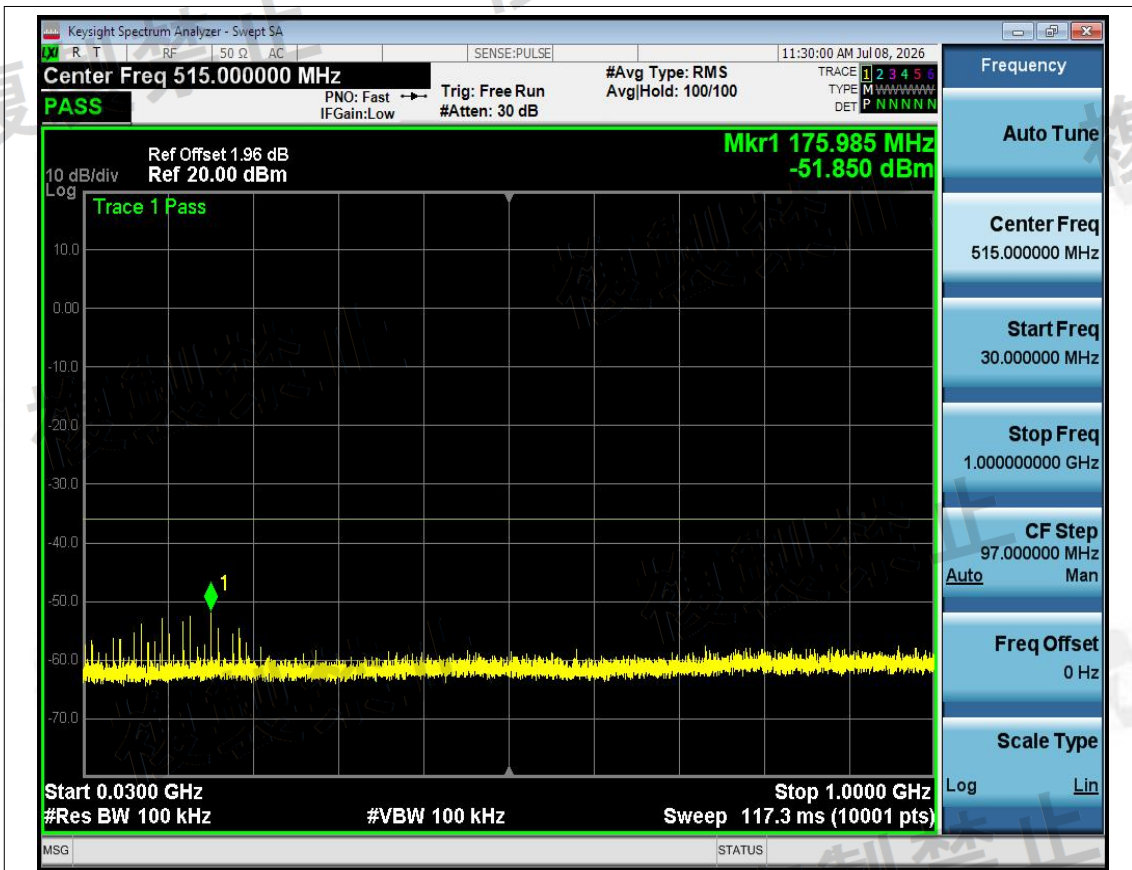
Tx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 2387MHz-2400MHz



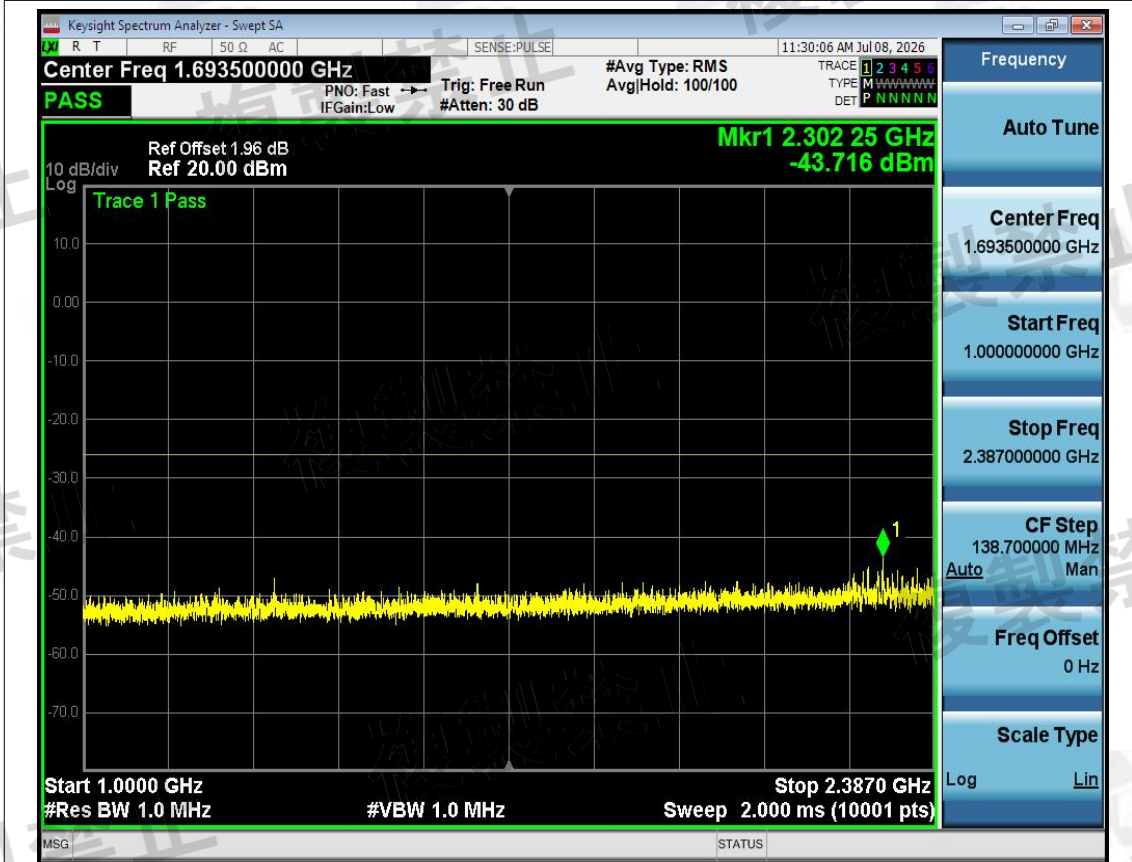
Tx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 2483.5MHz-2496.5MHz



Tx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 2496.5MHz-13000MHz



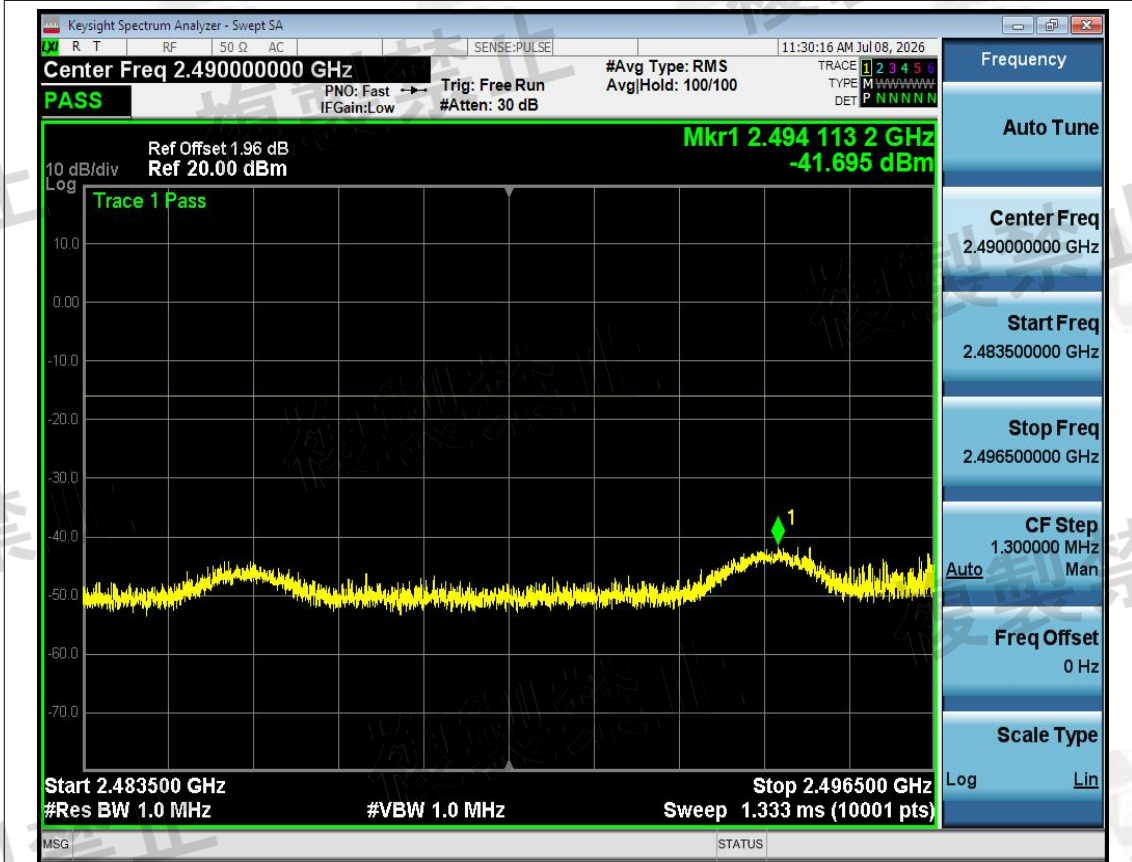
Tx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 30MHz-1000MHz



Tx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 1000MHz-2387MHz



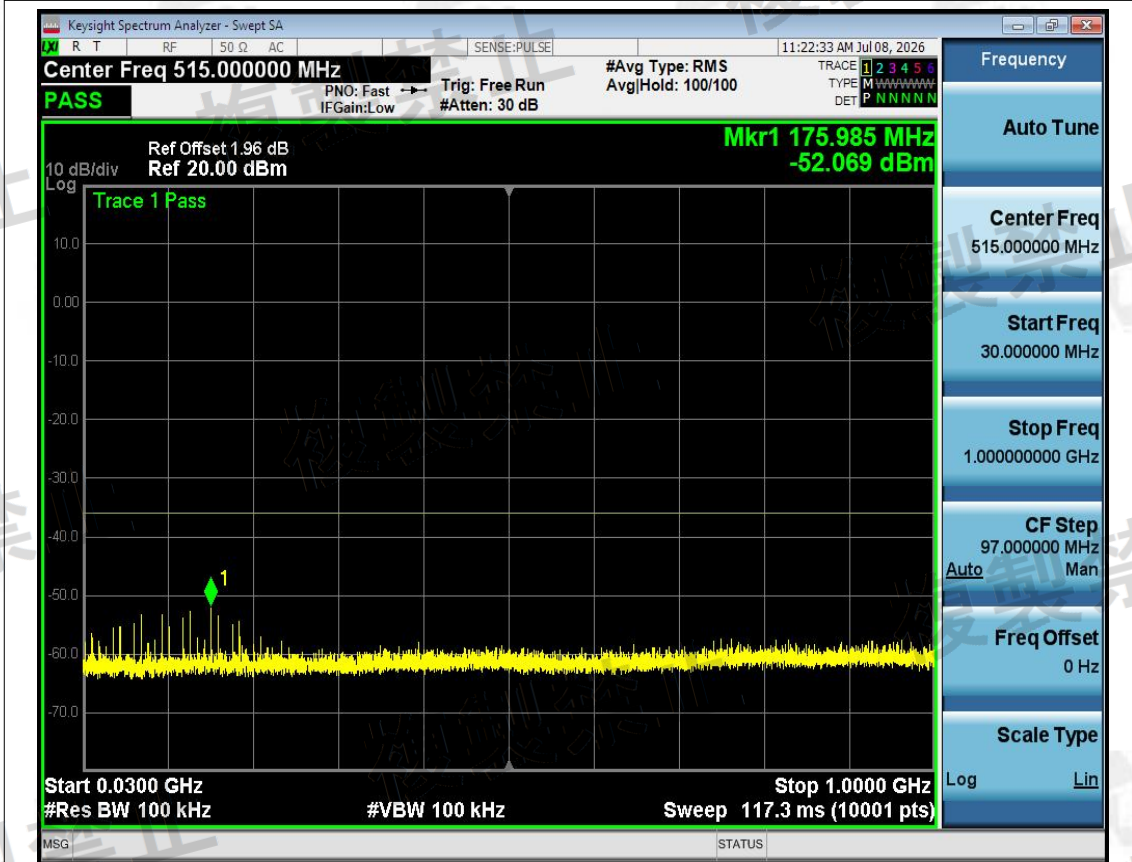
Tx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 2387MHz-2400MHz



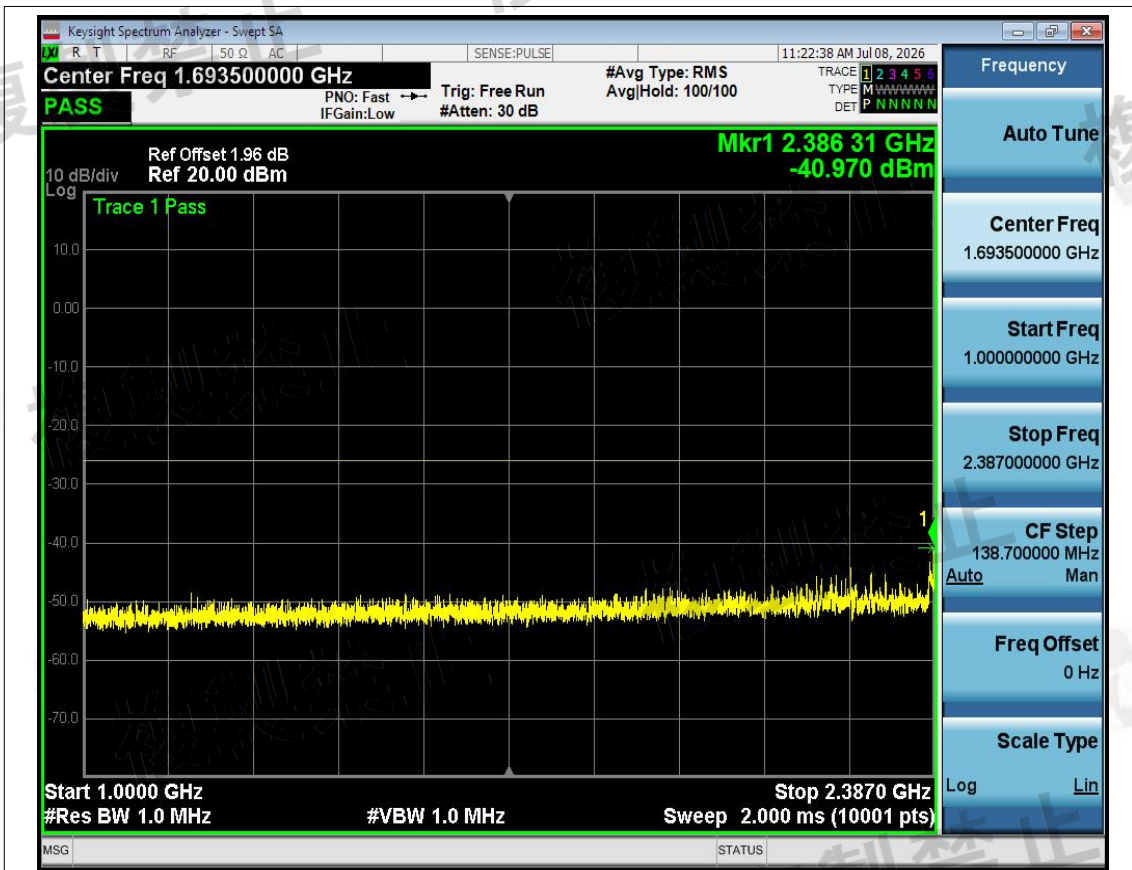
Tx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 2483.5MHz-2496.5MHz



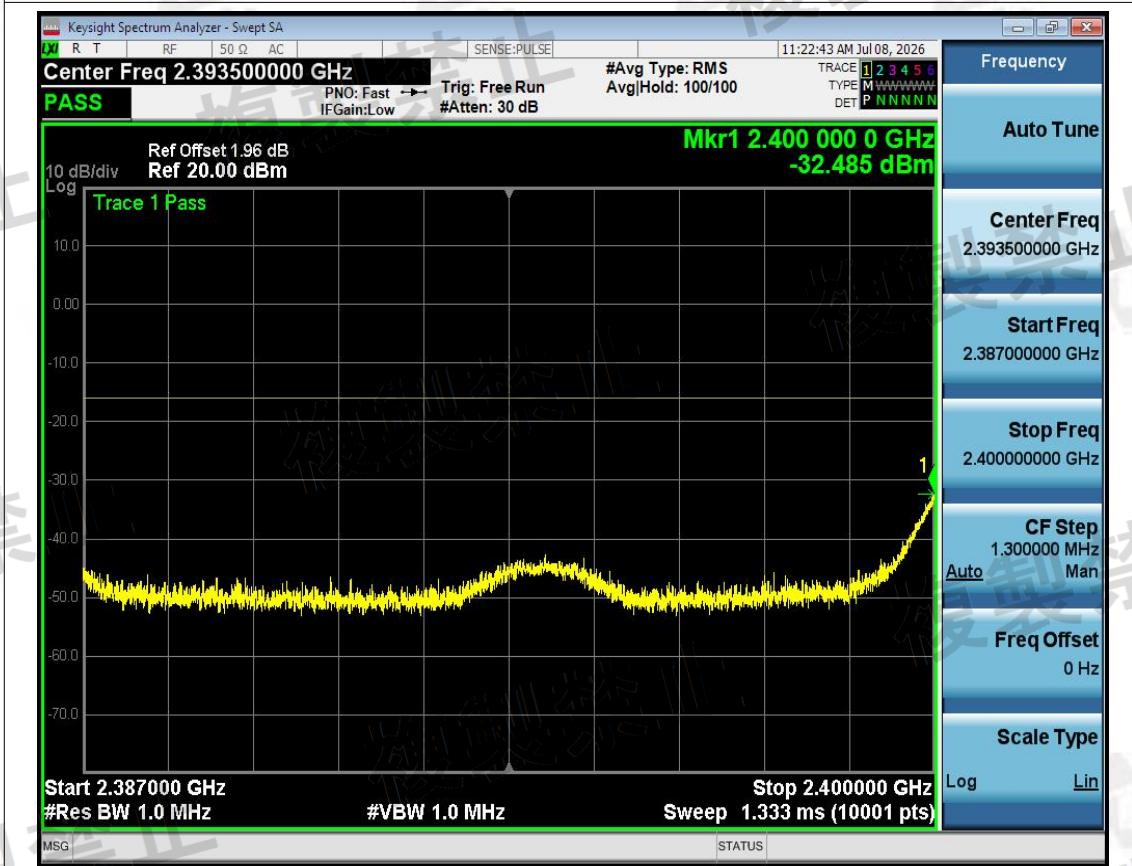
Tx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 2496.5MHz-13000MHz



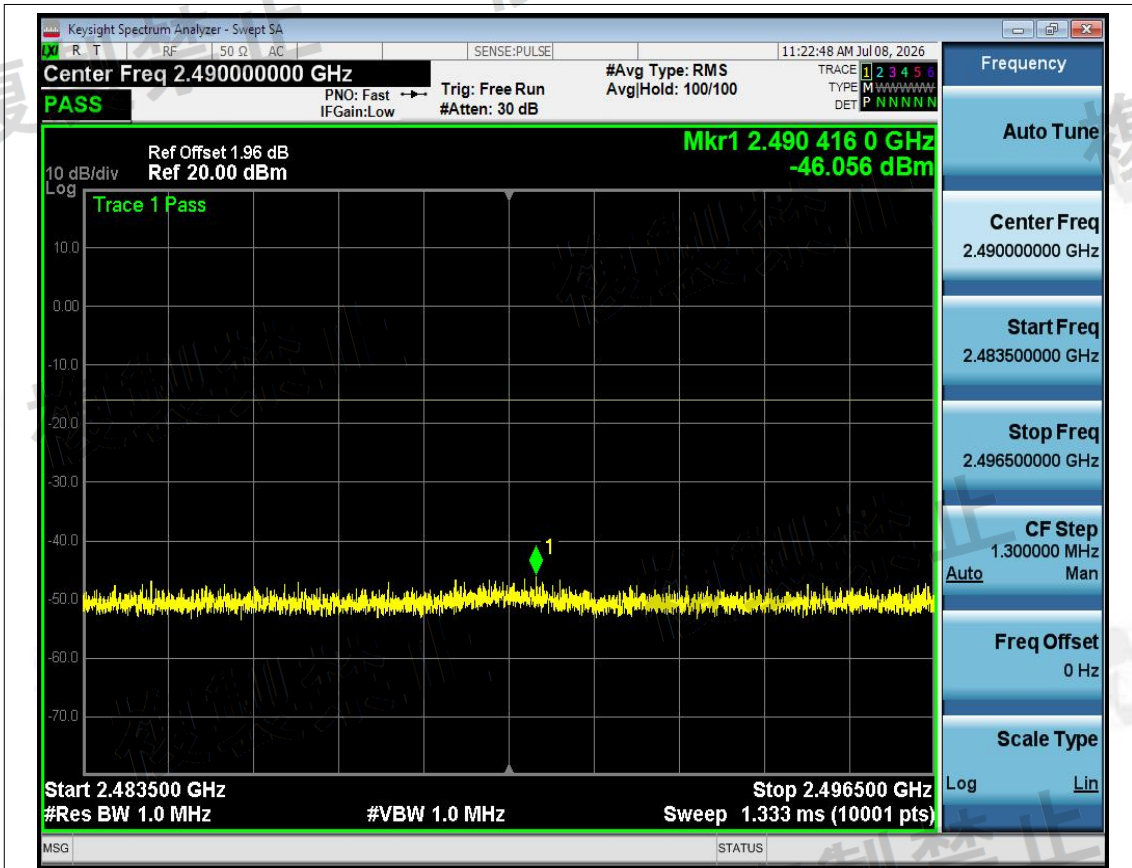
Tx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 30MHz-1000MHz



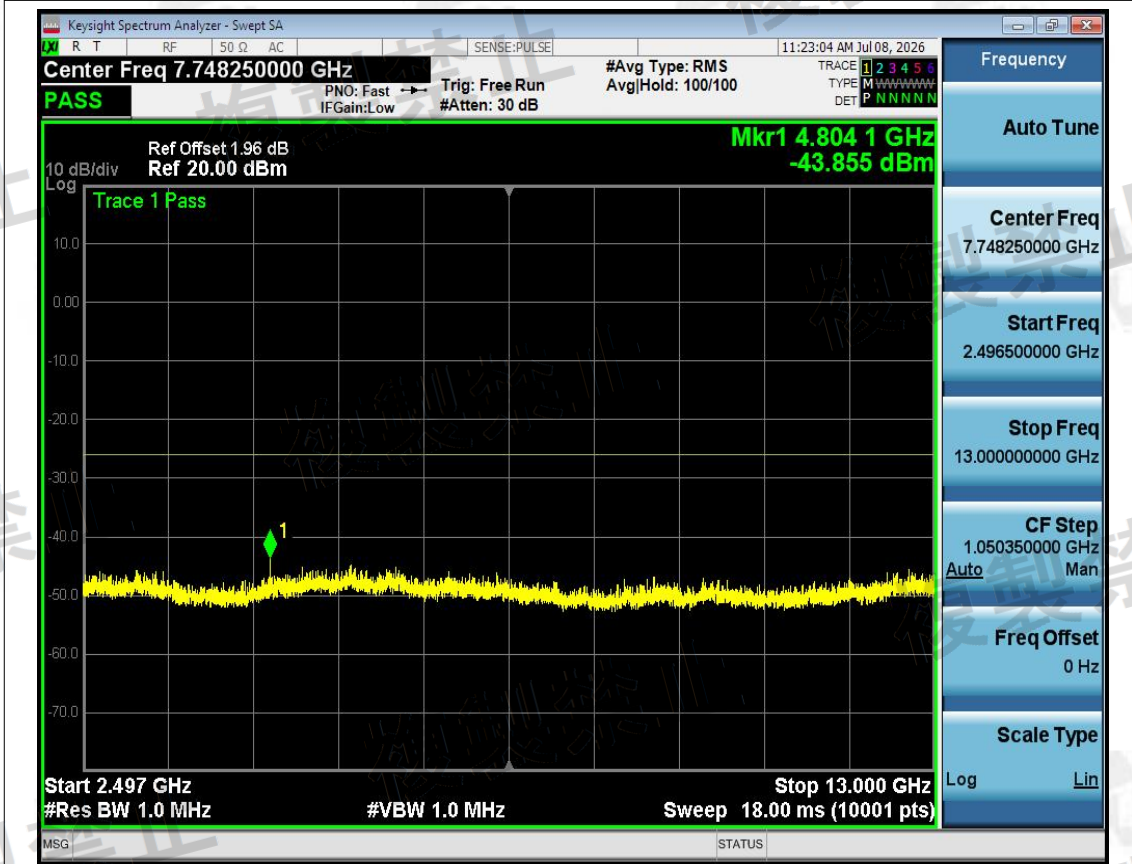
Tx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 1000MHz-2387MHz



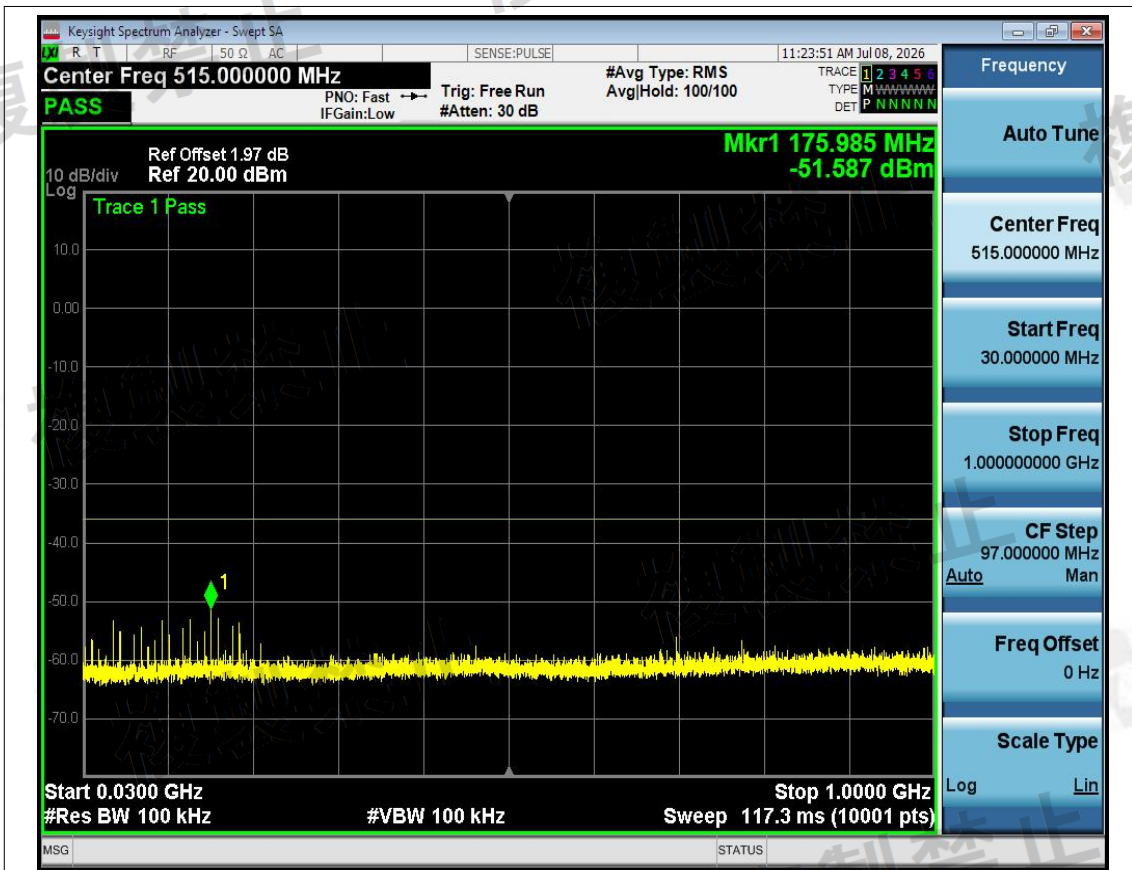
Tx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 2387MHz-2400MHz



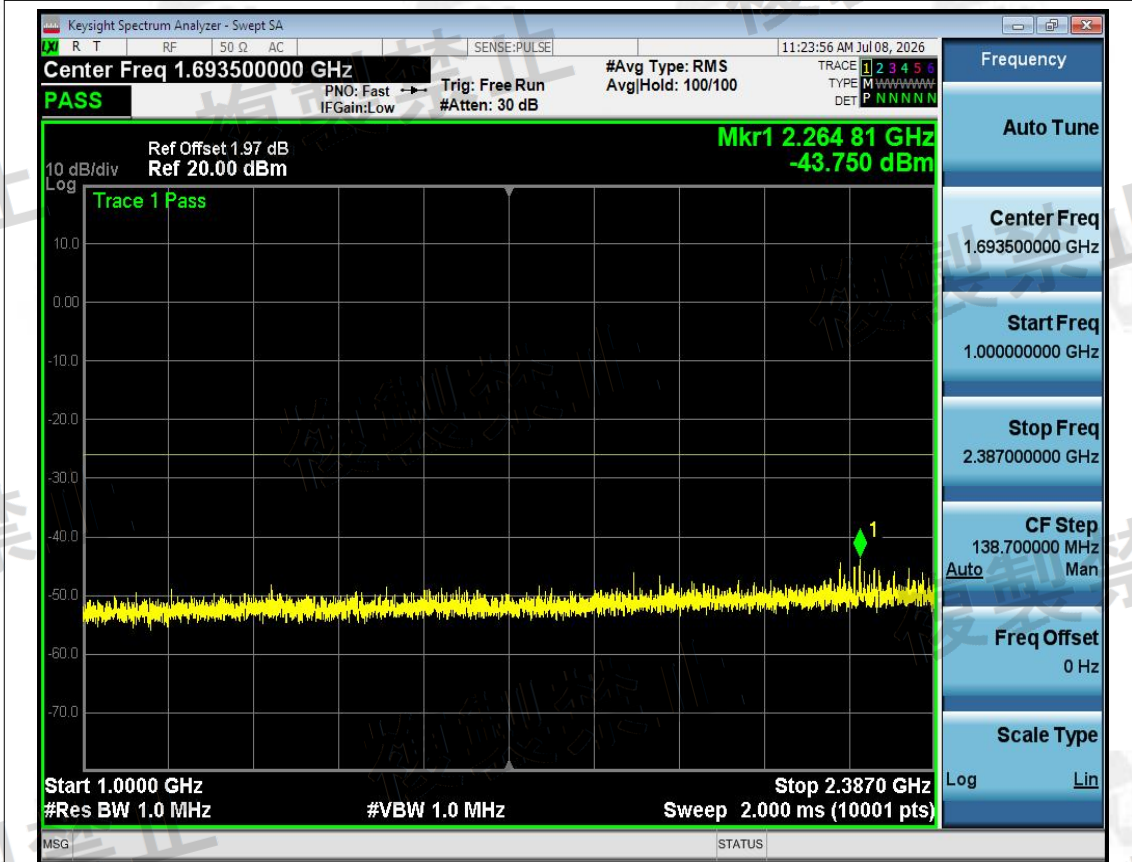
Tx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 2483.5MHz-2496.5MHz



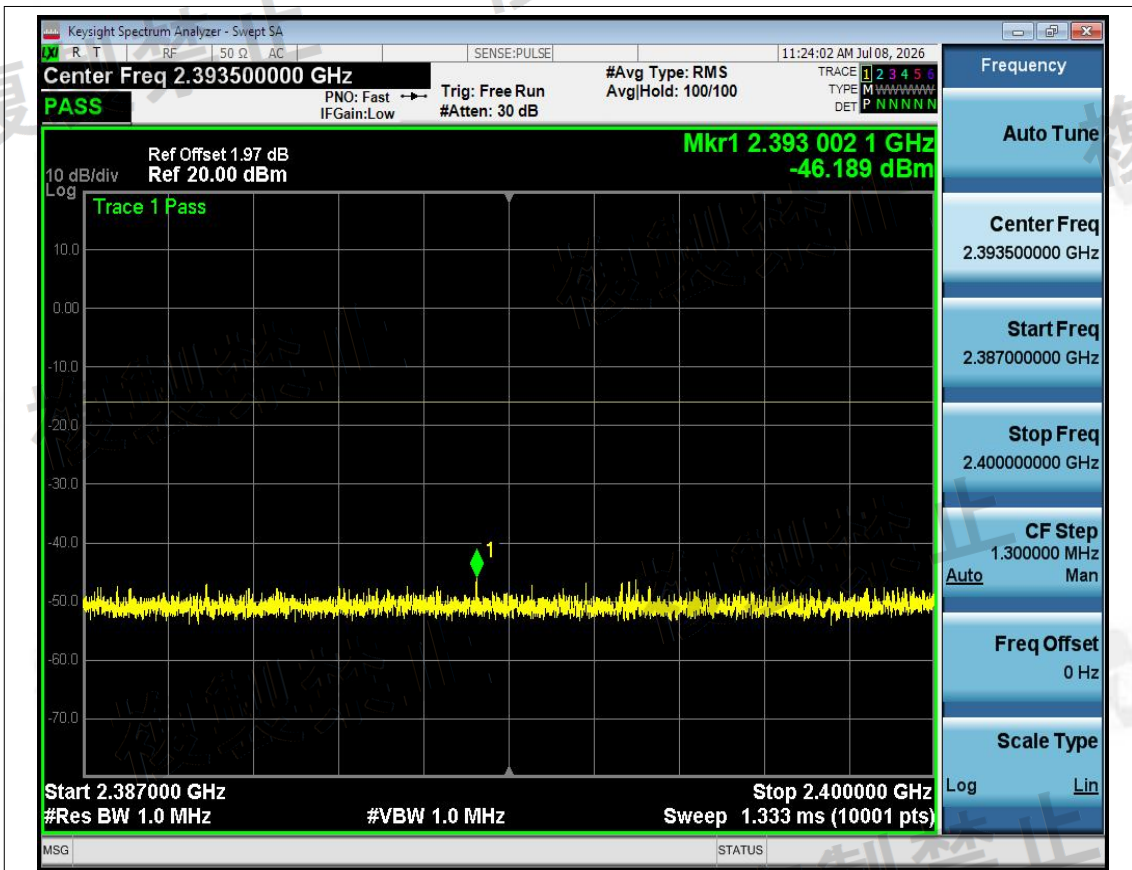
Tx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 2496.5MHz-13000MHz



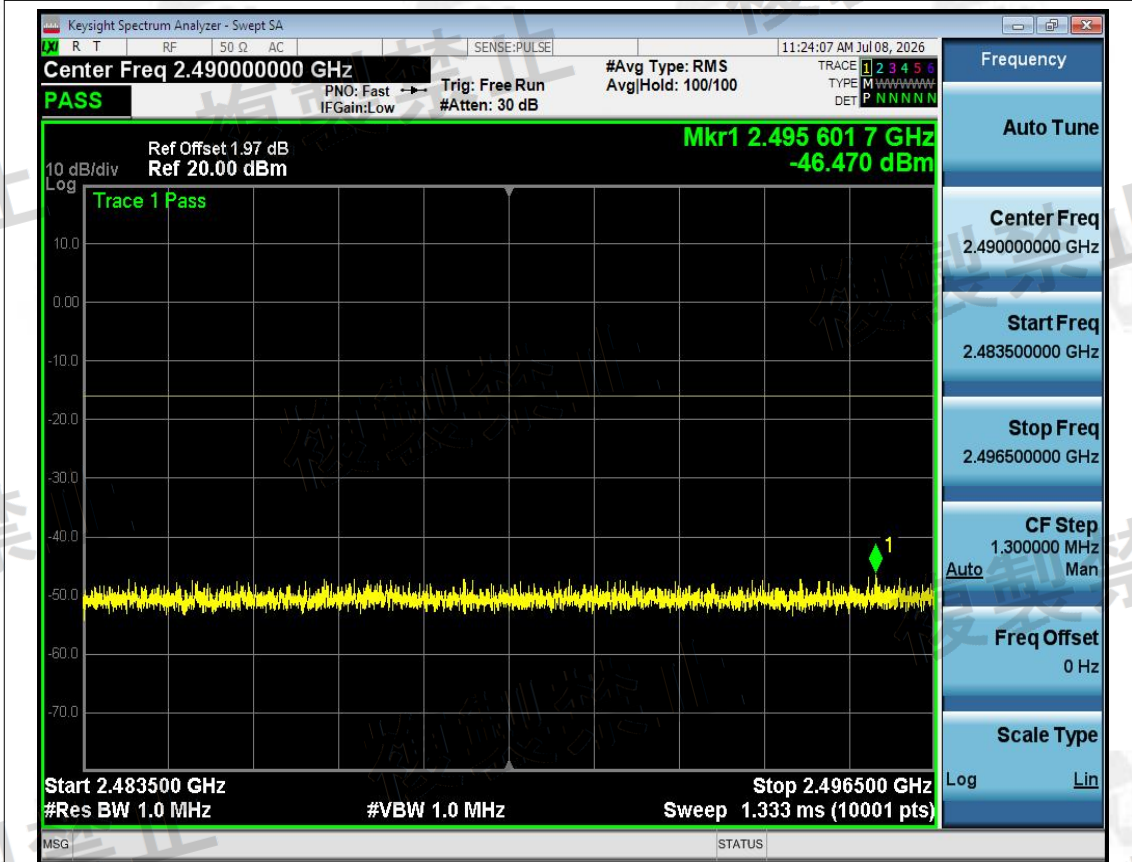
Tx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 30MHz-1000MHz



Tx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 1000MHz-2387MHz



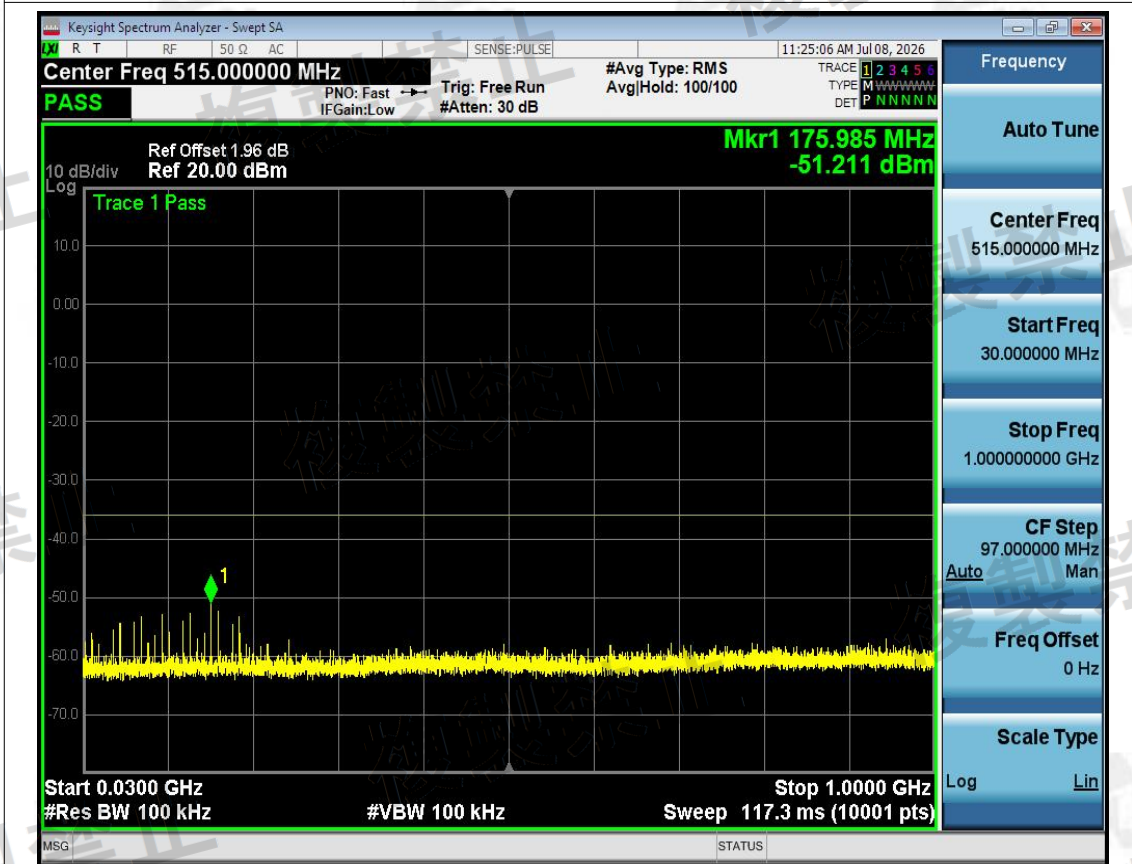
Tx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 2387MHz-2400MHz



Tx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 2483.5MHz-2496.5MHz



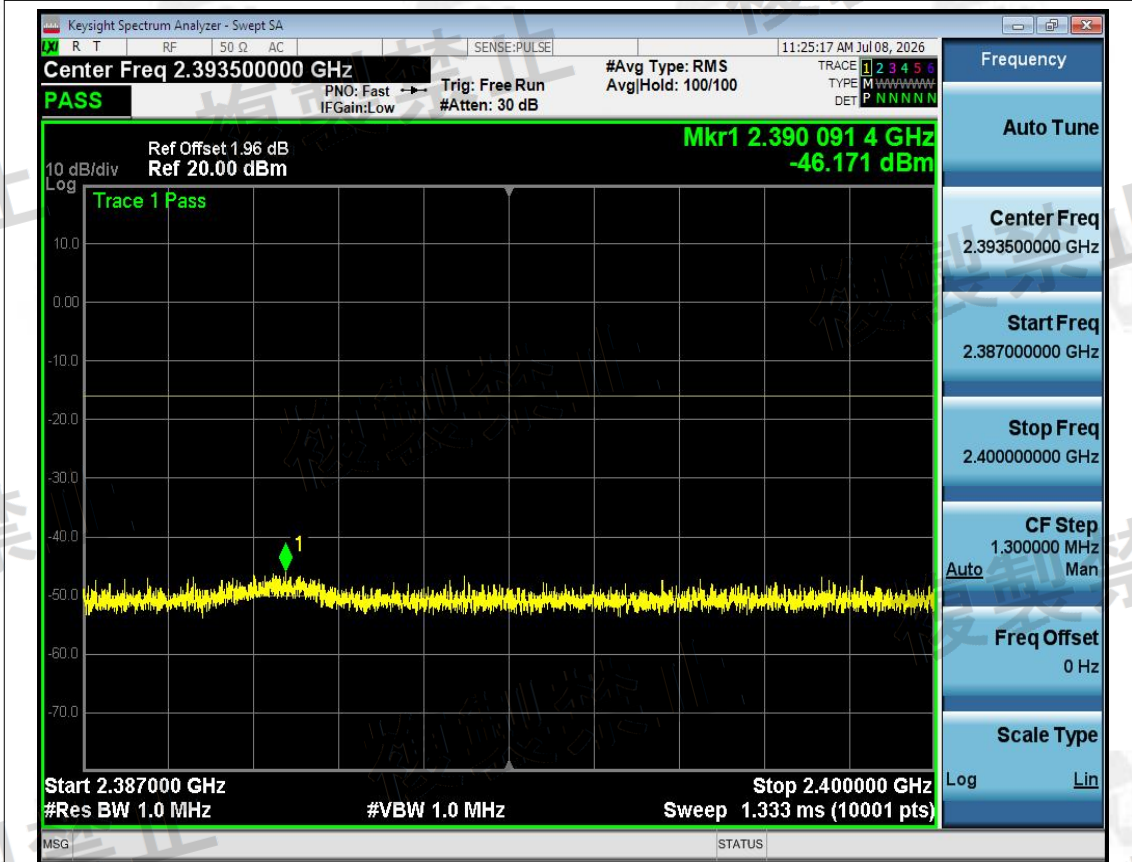
Tx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 2496.5MHz-13000MHz



Tx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 30MHz-1000MHz



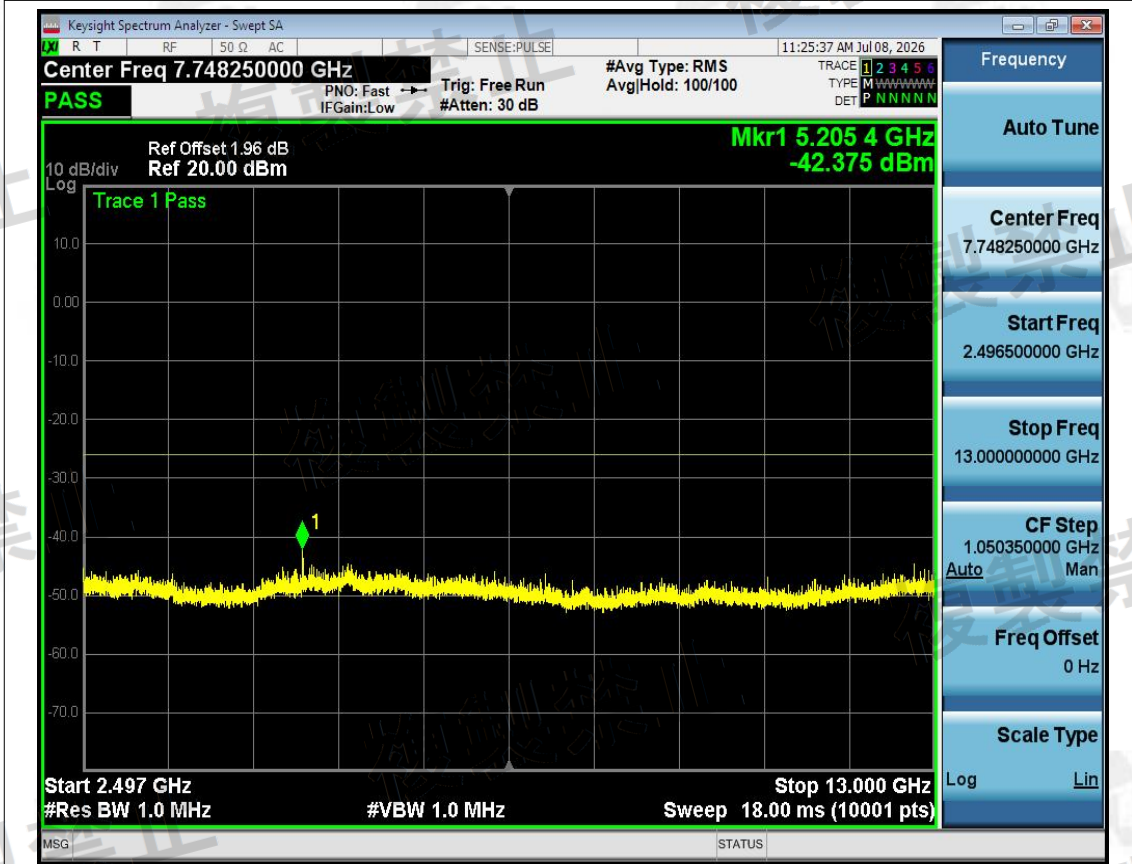
Tx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 1000MHz-2387MHz



Tx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 2387MHz-2400MHz



Tx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 2483.5MHz-2496.5MHz



Tx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 2496.5MHz-13000MHz

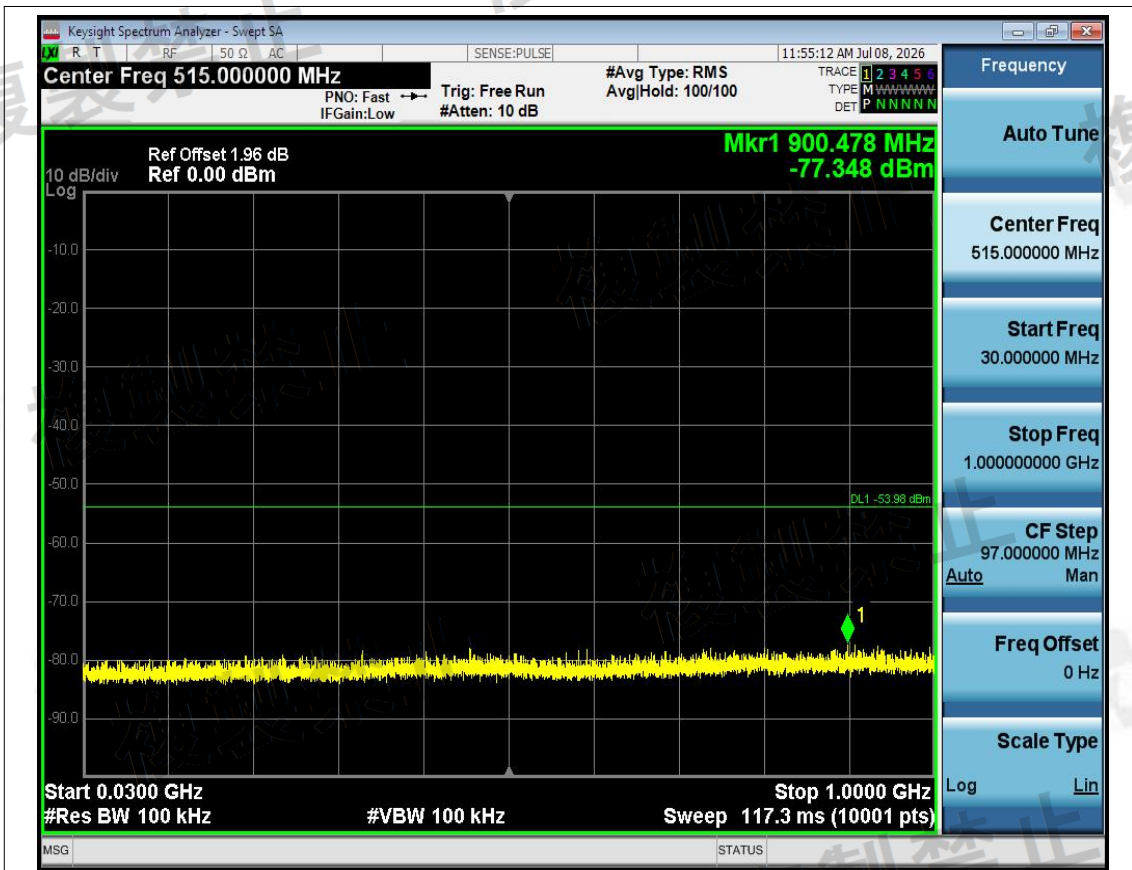


Rx Spurious Emission

Condi tion	Mode	Frequen cy (MHz)	Anten na	Range (MHz)	Emissio n Frequen cy (MHz)	Max Peak Valu e (dB m)	Max RMS Valu e (dB m)	Max Peak Valu e (nW)	Max RM S Valu e (nW)	Lim it (nW)	Verdi ct
NVNT	2.4G Hz 1M	2402	Ant1	30-1000	900.48	-77.3 5	NA	0.018 4	NA	4	Pass
NVNT	2.4G Hz 1M	2402	Ant1	1000-130 00	5802.40	-64.2 2	NA	0.378 4	NA	20	Pass
NVNT	2.4G Hz 1M	2440	Ant1	30-1000	833.35	-77.1 1	NA	0.019 5	NA	4	Pass
NVNT	2.4G Hz 1M	2440	Ant1	1000-130 00	5756.80	-64.7 4	NA	0.335 7	NA	20	Pass
NVNT	2.4G Hz 1M	2478	Ant1	30-1000	771.18	-77.1 5	NA	0.019 3	NA	4	Pass
NVNT	2.4G Hz 1M	2478	Ant1	1000-130 00	5293.60	-64.0 7	NA	0.391 7	NA	20	Pass
NVNT	2.4G Hz 2M	2402	Ant1	30-1000	925.41	-77.3 9	NA	0.018 2	NA	4	Pass
NVNT	2.4G Hz 2M	2402	Ant1	1000-130 00	5785.60	-65.2 5	NA	0.298 5	NA	20	Pass
NVNT	2.4G Hz 2M	2440	Ant1	30-1000	914.74	-76.8 9	NA	0.020 5	NA	4	Pass
NVNT	2.4G Hz 2M	2440	Ant1	1000-130 00	5800.00	-64.7 7	NA	0.333 4	NA	20	Pass
NVNT	2.4G Hz 2M	2478	Ant1	30-1000	749.35	-77.2 2	NA	0.019	NA	4	Pass
NVNT	2.4G Hz	2478	Ant1	1000-130 00	5674.00	-64.9 7	NA	0.318 4	NA	20	Pass



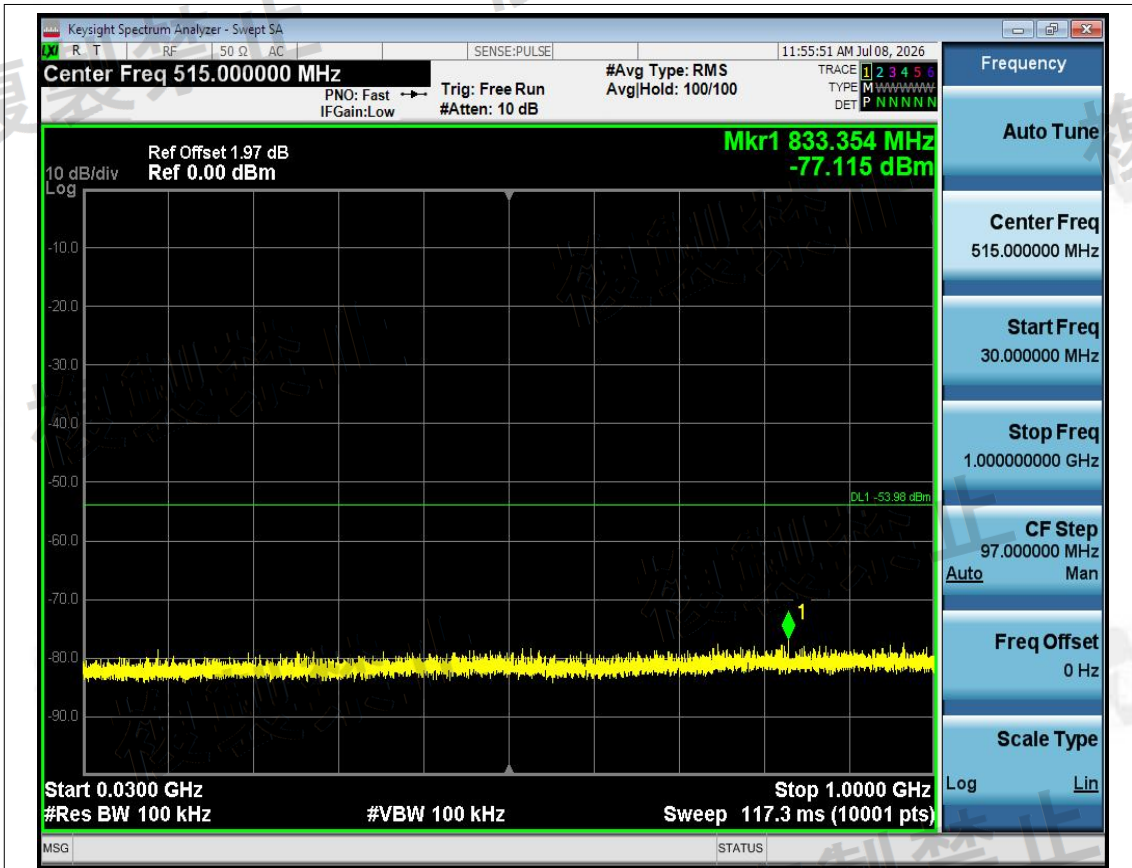
	2M									
--	----	--	--	--	--	--	--	--	--	--



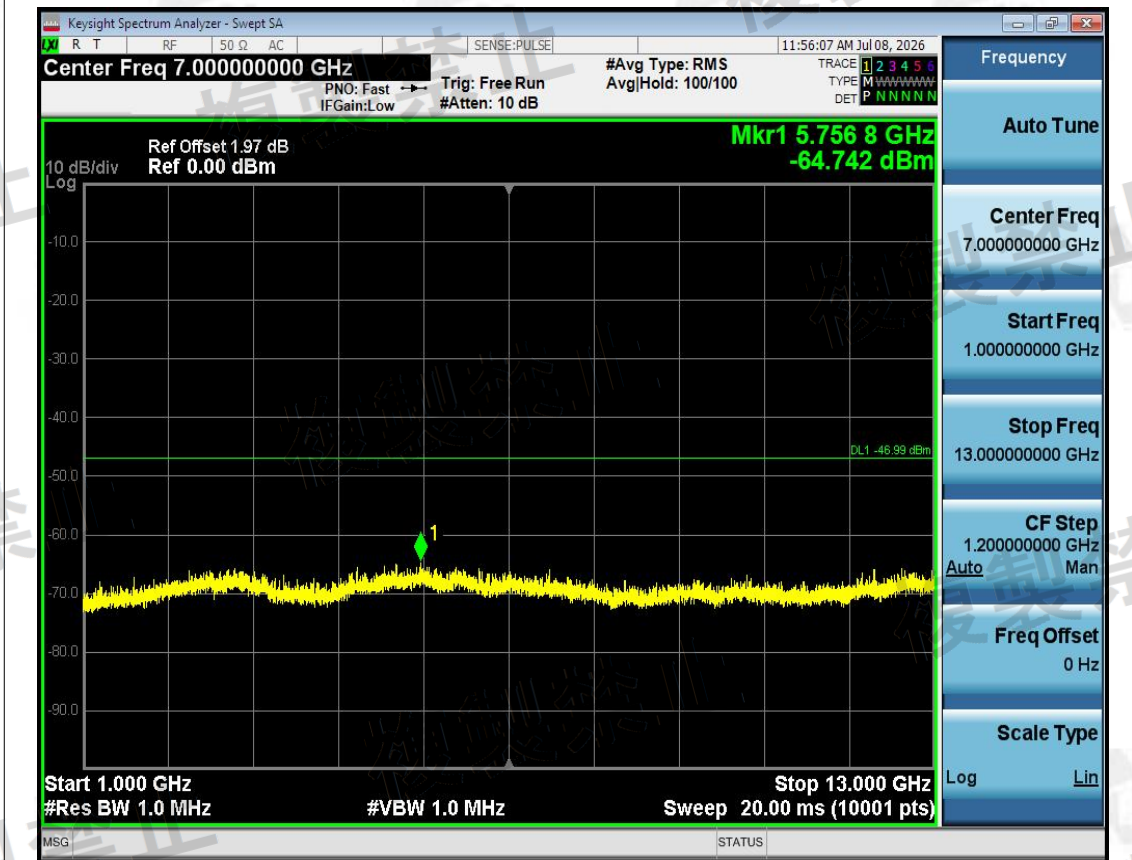
Rx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 30MHz-1000MHz



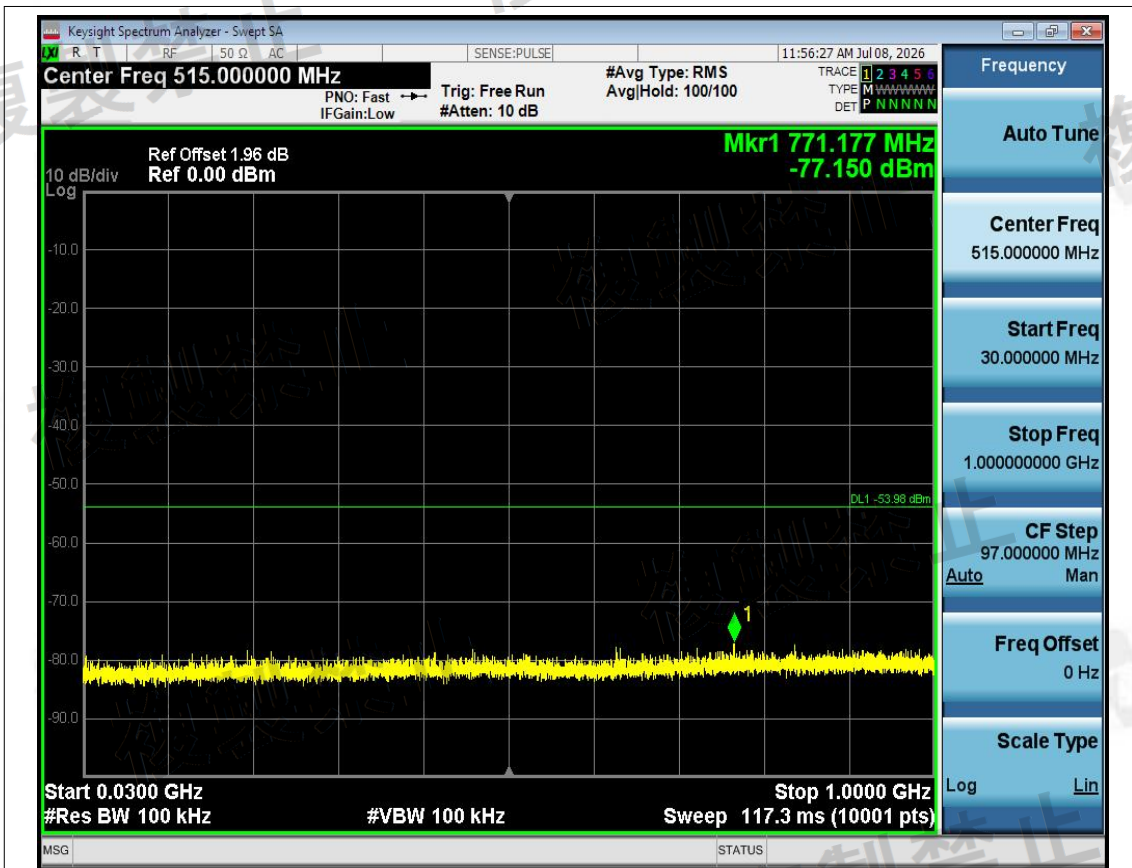
Rx. Spurious NVNT 2.4GHz 1M 2402MHz Ant1 @ 1000MHz-13000MHz



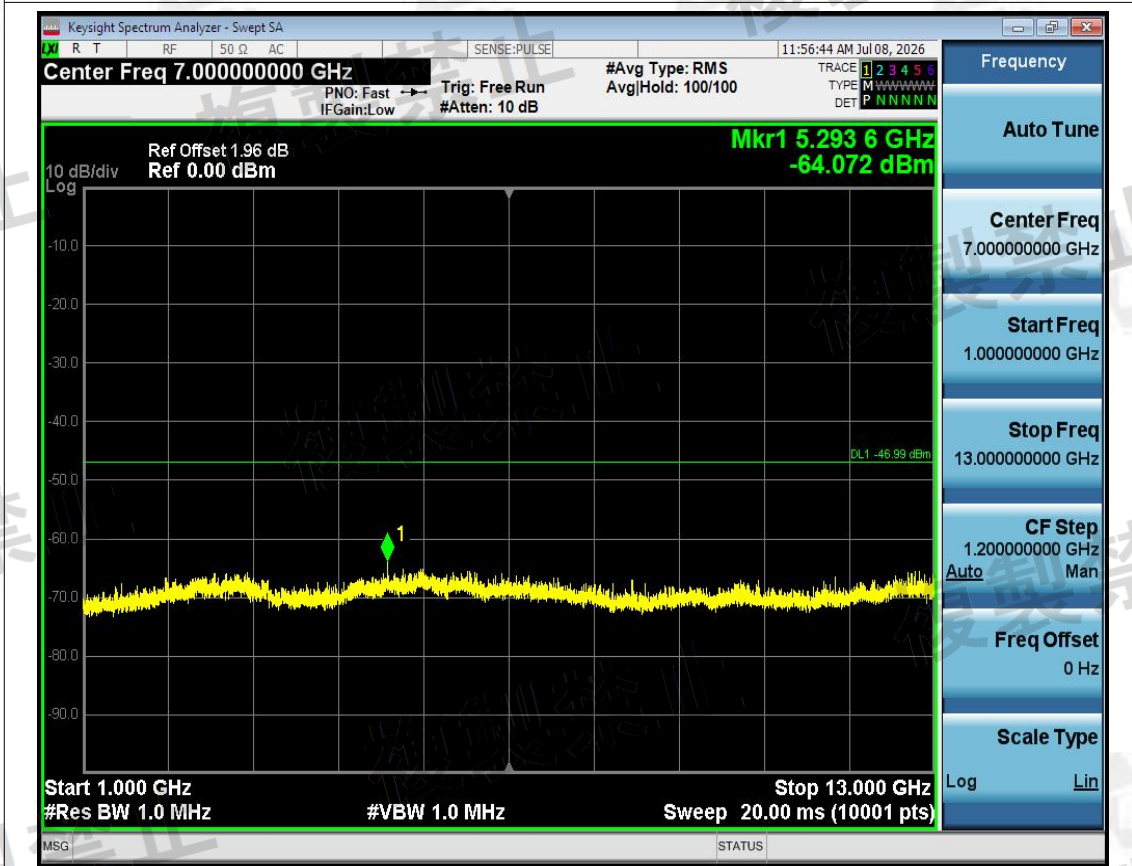
Rx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 30MHz-1000MHz



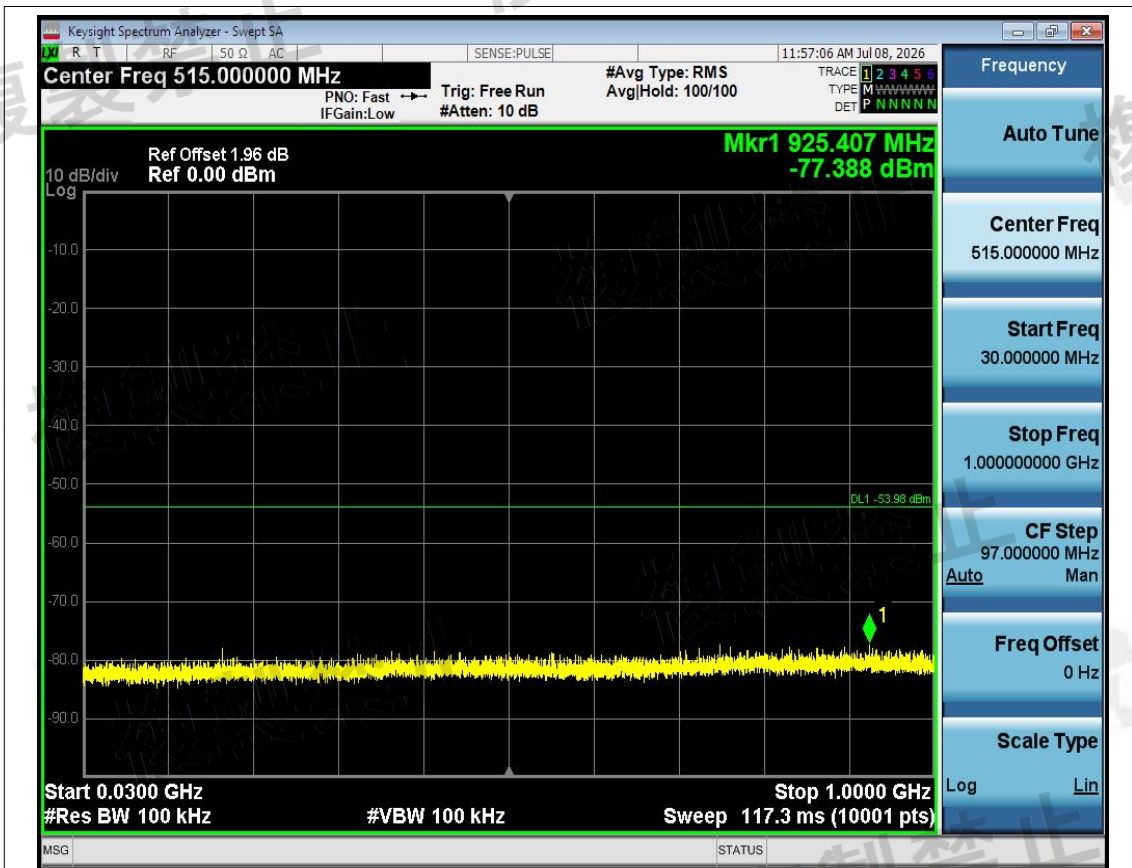
Rx. Spurious NVNT 2.4GHz 1M 2440MHz Ant1 @ 1000MHz-13000MHz



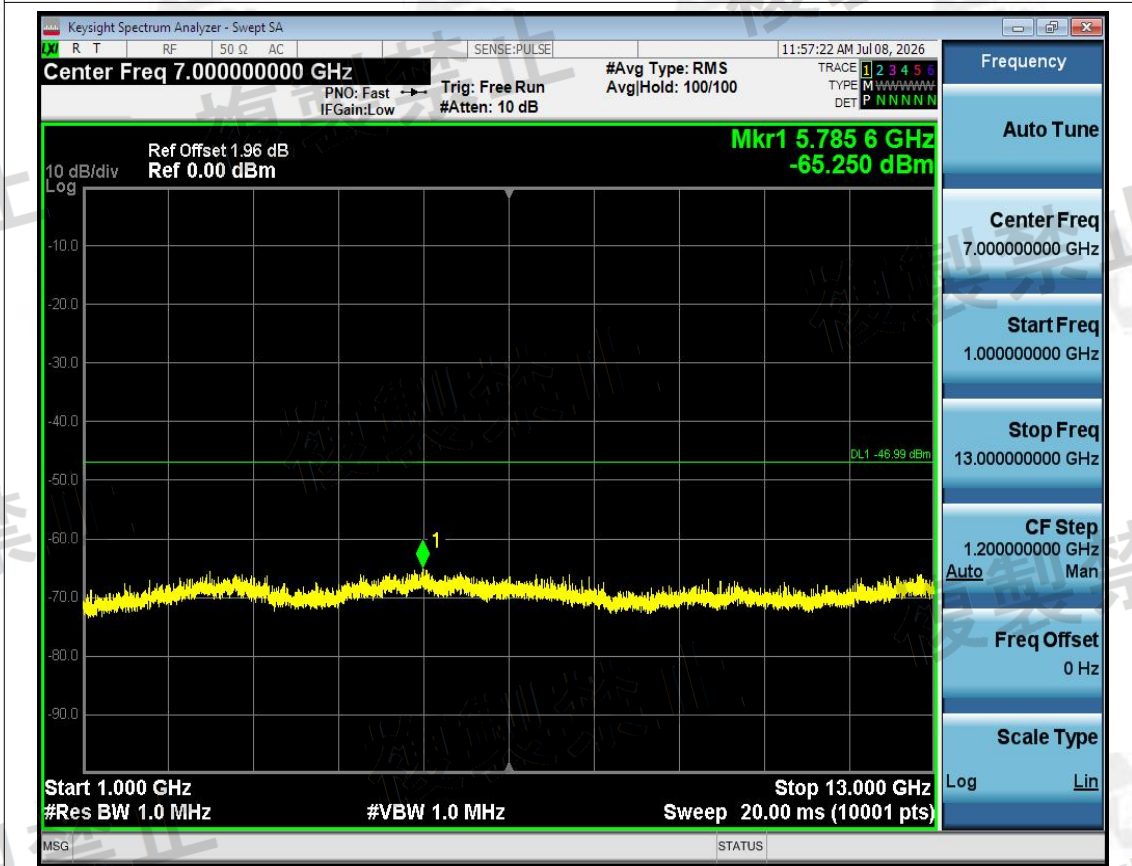
Rx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 30MHz-1000MHz



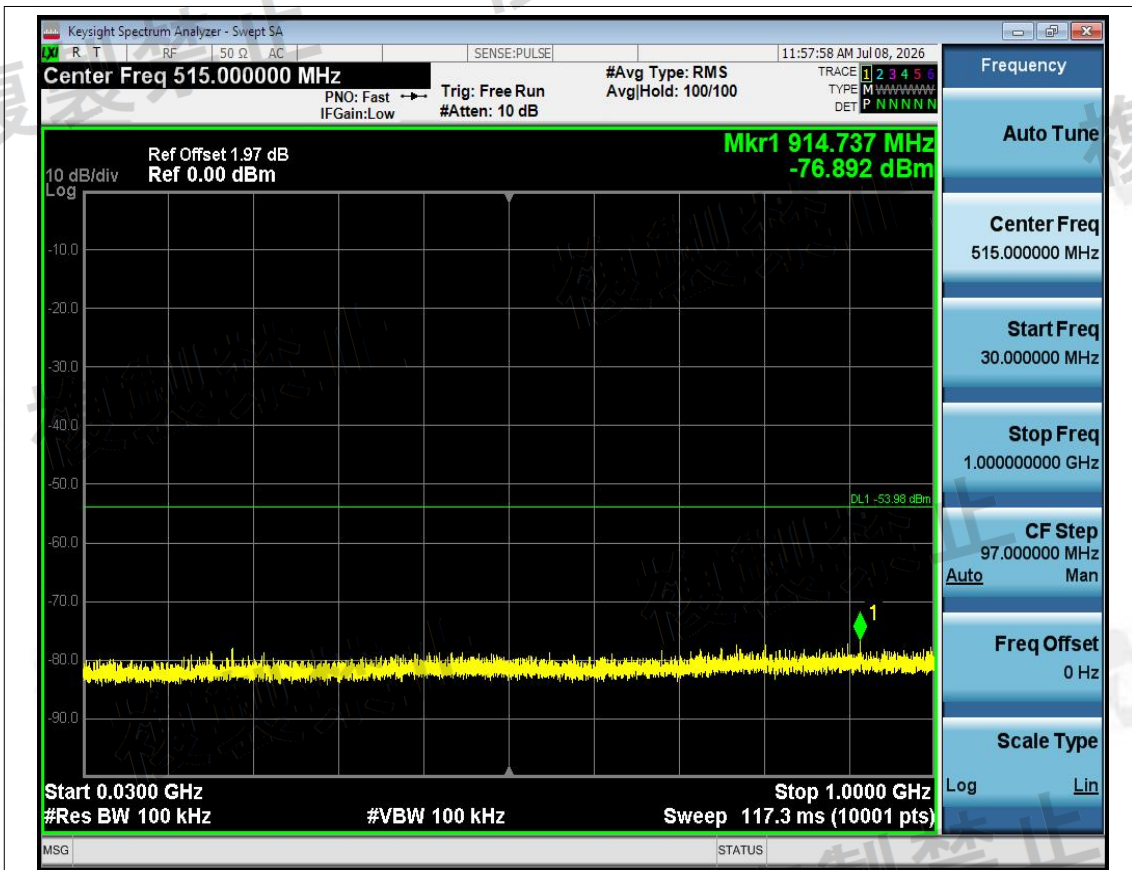
Rx. Spurious NVNT 2.4GHz 1M 2478MHz Ant1 @ 1000MHz-13000MHz



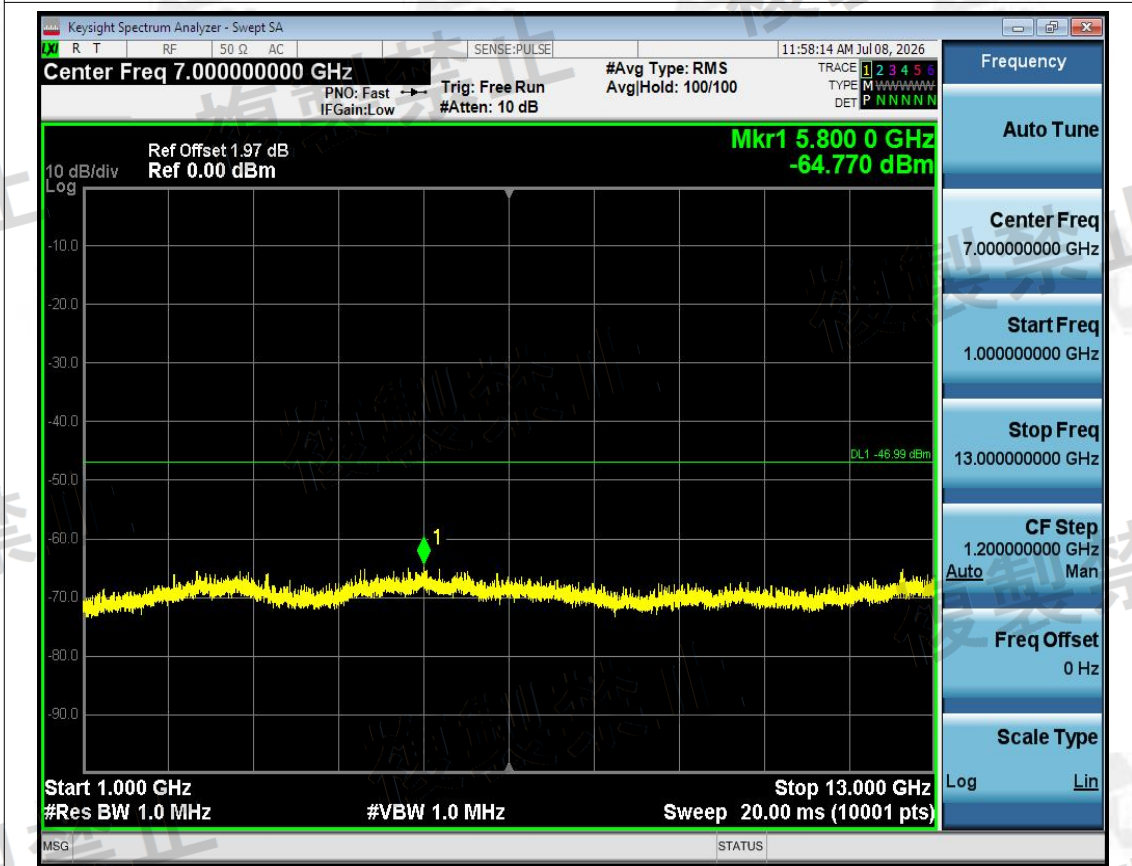
Rx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 30MHz-1000MHz



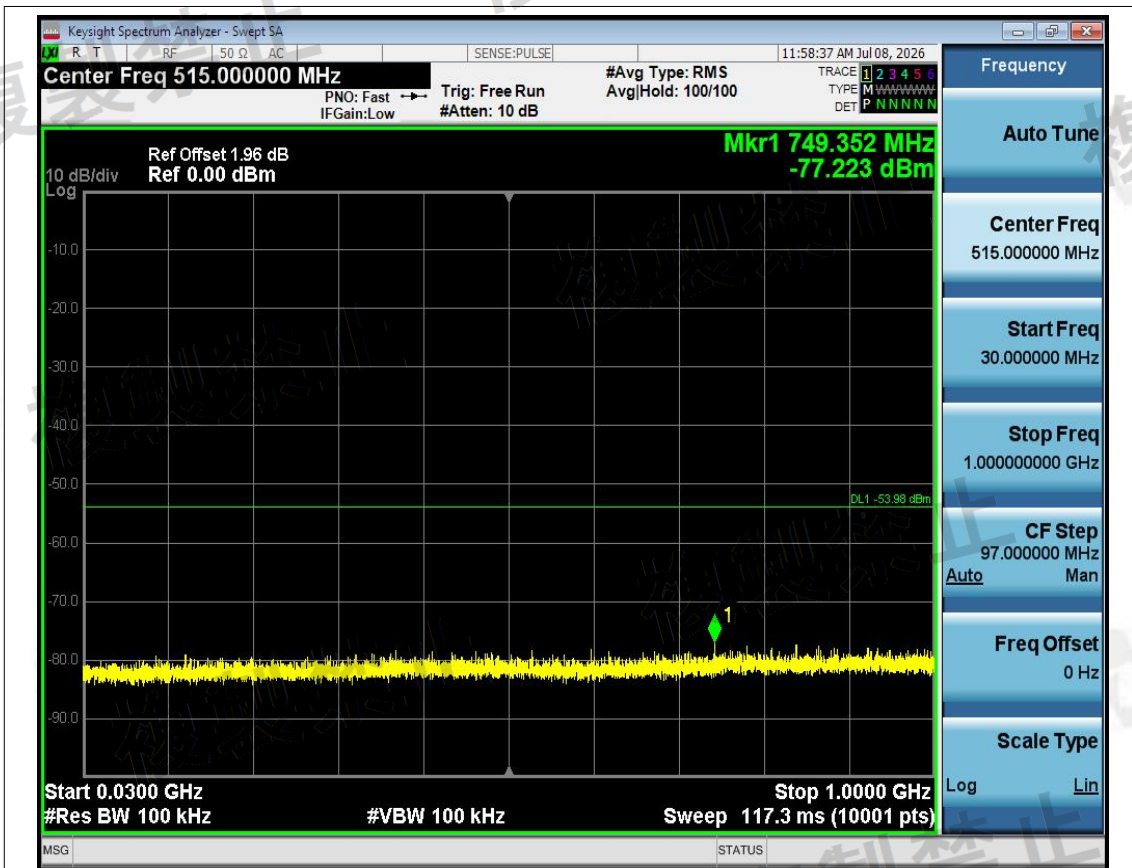
Rx. Spurious NVNT 2.4GHz 2M 2402MHz Ant1 @ 1000MHz-13000MHz



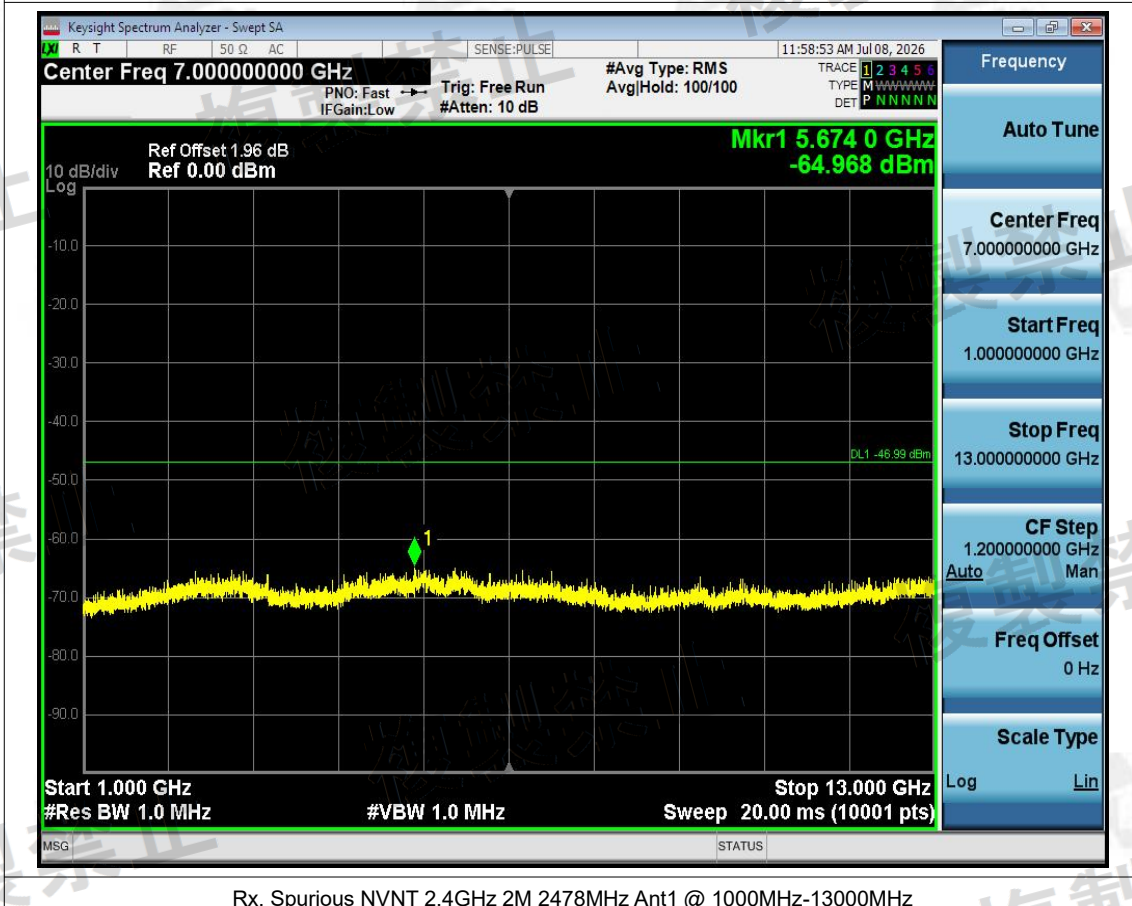
Rx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 30MHz-1000MHz



Rx. Spurious NVNT 2.4GHz 2M 2440MHz Ant1 @ 1000MHz-13000MHz



Rx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 30MHz-1000MHz



Rx. Spurious NVNT 2.4GHz 2M 2478MHz Ant1 @ 1000MHz-13000MHz