



——沃德检测——

TEST REPORT

Applicant Name: FJ Dynamics Technology
(Fujian) Co., Ltd.

Product Name: Robotic Lawn Mower

Model: RM21P

Test Report Number: WD26051056RA1

Worldtest (GuangDong) Co., Ltd.

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Applicant Information

Company Name: FJ Dynamics Technology (Fujian) Co., Ltd.
Address: Room 305, Unit 5, Huajian Building, No. 12, 16, and 18, East Keji Road, Shangjie Town, Minhou County, Fuzhou City, Fujian Province, China

Manufacturer Information

Company Name: FJ Dynamics Technology (Fujian) Co., Ltd.
Address: Room 305, Unit 5, Huajian Building, No. 12, 16, and 18, East Keji Road, Shangjie Town, Minhou County, Fuzhou City, Fujian Province, China

EUT Information

EUT Name: Robotic Lawn Mower
Model: RM21P
Brand: 

Sample Received Date: Apr.22, 2026

Sample Status: Normal

Sample ID: WD-YP260422002

Date of Tested: Mar.21, 2026 to Jul.07, 2026

Note:

The product name and model have been updated. The product has changed from having three wheels to having four wheels. The RCM01 lawn mower cutter is placed at the back, while the RM21P is placed at the front. The electronic circuits are exactly the same. The different parts do not involve the electronic circuits, so the original data from the WD26011059RA1 report can be fully cited.

Standard(s)

MIC Notice No.88 Appendix No.43
MIC Article 2-1 Item (19)

Issued By: Worldtest (GuangDong) Co., Ltd.

Address: Room 102 and 201, Building 6, No.6, Gongye North Road, Songshan Lake(SSL), Dongguan, Guangdong, China

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Eazin Zeng / Jul.31, 2026

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Lam Liu / Jul.31, 2026

TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1. SUMMARY OF TEST RESULTS	5
1.1. TEST METHODOLOGY	6
1.2. TEST FACILITIES	6
1.3. MEASUREMENT UNCERTAINTY	6
1.4. TEST EQUIPMENT LIST AND DETAILS	7
2. GENERAL INFORMATION	8
2.1. GENERAL DESCRIPTION OF EUT	8
2.2. ANTENNA LIST	8
2.3. CHANNEL LIST	8
2.4. TEST CHANNEL CONFIGURATION	9
2.5. DESCRIPTION OF AVAILABLE ANTENNAS	9
2.6. THE WORSE CASE POWER SETTING PARAMETER	9
2.7. TEST CONDITIONS	9
2.8. DESCRIPTION OF TEST SETUP	10
2.9. TEST SYSTEM CONFIGURATION	10
2.10. TEST ENVIRONMEN	11
3. TEST PROCEDURES AND RESULTS	12
3.1. Frequency Tolerance	12
3.2. Antenna power, antenna power tolerance and E.I.R.P.	13
3.3. Occupied Bandwidth	14
3.4. Carrier Sensing Function	15
3.5. Duty cycle	16
3.6. Transmitter Spurious Emissions	17
3.7. Receiver Spurious Emissions	18
3.8. Interference Preverntion fuction	19
Appendix A: Frequency Tolerance	20
Test Result	20
Appendix B: Antenna power, antenna power tolerance and E.I.R.P.	27
Test Result	27
Appendix C: Occupied Bandwidth	41
Test Result	41
Appendix D: Transmitter Spurious Emissions	48
Test Result	48
Appendix E: Receiver spurious emissions	79
Test Result	79
Appendix F: Duty cycle	94
Test Result	94
4. PHOTOS	96

RELEASE CONTROL RECORD

Issue No.	Description	Issued Date
WD26051056RA1	Original release.	Jul.31, 2026

1. SUMMARY OF TEST RESULTS

- ☒ No deviations from the test standards
☐ Deviations from the test standards as below description:

Technical requirements for Frequency Hopping equipment

Performed Test Item	Normative References	Test Performed
Antenna power, antenna power tolerance and E.I.R.P.	MIC Notice No. 88 Appendix No. 43 Clause 6	Yes
Carrier Sensing Function 1	MIC Notice No. 88 Appendix No. 43 Clause 8	No (Note 1)
Carrier Sensing Function 2	MIC Notice No. 88 Appendix No. 43 Clause 8	No (Note 2)
Occupied Bandwidth	MIC Notice No. 88 Appendix No. 43 Clause 4	Yes
Frequency Tolerance	MIC Notice No. 88 Appendix No. 43 Clause 3	Yes
Duty Cycle	MIC Notice No. 88 Appendix No. 43	Yes
Transmitter Spurious Emissions	MIC Notice No. 88 Appendix No. 43 Clause 5	Yes
Receiver Spurious Emissions	MIC Notice No. 88 Appendix No. 43 Clause 7	Yes
Interference Prevention function	MIC Notice No. 88 Appendix No. 43 Clause 12	Good

Note 1: Application to transmitting devices which EIRP is less than 【2.14dBi + antenna power limit】 and the shortage of EIRP is compensated by the antenna power, Not applicable to this product.

Note 2: Application to transmitting devices with OFDM modulation and The occupied bandwidth greater than 26MHz, Not applicable to this product.

1.1. TEST METHODOLOGY

All tests were performed in accordance with the procedures documented in MIC Notice No.88 Appendix No.43

1.2. TEST FACILITIES

No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	lenovo	S14 G2 ITL	PF4119QS	Power by adapter
2	Serial cable	N/A	N/A	N/A	Unshielded,0.8m
3	SMA cable	N/A	N/A	N/A	Shielded,0.8m
4	Power cable	N/A	N/A	N/A	Unshielded,0.8m

1.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-7}$
RF Power Conducted	$\pm 1.15\text{dB}$
RF Power Radiated	$\pm 3.5\text{dB}$
Occupied Channel Bandwidth	$\pm 1.17\%$
Spurious Emissions, Conducted	$\pm 1.68\text{dB}$
Spurious Emissions, Radiated	$\pm 3.5\text{dB}$
Humidity	$\pm 1\%$
Temperature	$\pm 0.5^\circ\text{C}$
Time	$\pm 8\%$

1.4. TEST EQUIPMENT LIST AND DETAILS

Measuring Equipment Calibration Information	
Used	Calibration Company Abbreviation
☒	GRGTEST
	Full Name of calibration company GRG METROLOGY & TEST GROUP CO.,LTD.
Calibration Information	
☐	a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio Act
☐	(b) Calibration conducted based on the regulations of Article 135 or 144 of the Measurement Act
☒	(c) Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 of the Radio Act
☐	d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a) through (c) above

RF Conducted Test System					
Equipment	Manufacturer	Model No.	Serial No.	Cal. date	Interval
RF Control Unit	Tonscend	JS0806-2	23F80620689	2025-08-30	1 Year
DC Power Supply	Agilent	E3642A	MY40000323	2025-08-30	1 Year
MClean Robot Vector Signal Generator	Agilent	N5182A	MY50141372	2025-08-30	1 Year
MClean Robot Analog Signal Generator	Agilent	N5181A	MY47421166	2025-08-30	1 Year
Spectrum analyzer	Agilent	N9010A	MY50483285	2026-02-03	1 Year
Software					
Description	Manufacturer	Name		Version	
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System		2.6.77.0518	

2. GENERAL INFORMATION

2.1. GENERAL DESCRIPTION OF EUT

EUT Name	Robotic Lawn Mower
Model Name	RM21P
Radio Technology	IEEE802.11b/g/n HT20
Operation frequency	IEEE 802.11b: 2412MHz—2472MHz IEEE 802.11g: 2412MHz—2472MHz IEEE 802.11n HT20: 2412MHz—2472MHz
Modulation	IEEE 802.11b: DSSS (CCK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20 OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna description	AP6275S: WiFi uses Ant 1 and Ant 2; BT and BLE uses Ant 1

2.2. ANTENNA LIST

Model No.	N/A				
Antenna manufacturer	N/A				
Antenna Delivery	☐	1*TX+1*RX	☒	2*TX+2*RX	☐ 3*TX+3*RX
Antenna technology	☒	SISO			
	☒	MIMO	☒	Basic	
			☐	CDD	
			☐	Beam-forming	
Antenna Type	☐	External	☐	Patch	
			☒	FPC	
			☐	PCB	
	☒	Internal	☐	Ceramic Chip Antenna	
			☐	Metal plate type F antenna	
			☐	stamping antenna	
Antenna Gain Reference	2.48dBi				

2.3. CHANNEL LIST

Channel List for IEEE 802.11b/g/n (20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452	13	2472
2	2417	6	2437	10	2457	/	/
3	2422	7	2442	11	2462	/	/
4	2427	8	2447	12	2467	/	/

2.4. TEST CHANNEL CONFIGURATION

IEEE Std. 802.11	Test Channel Number	Frequency
b	CH 1(Low Channel), CH 7(MID Channel), CH 13(High Channel)	2412 MHz, 2442 MHz, 2472 MHz
g	CH 1(Low Channel), CH 7(MID Channel), CH 13(High Channel)	2412 MHz, 2442 MHz, 2472 MHz
n HT20	CH 1(Low Channel), CH 7(MID Channel), CH 13(High Channel)	2412 MHz, 2442 MHz, 2472 MHz

2.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	Maximum Antenna Gain (dBi)	Uncorrelated directional gain(dBi)
ANT 1	2412 ~ 2472	FPC Antenna	2.48dBi	2.48dBi
ANT 2	2412 ~ 2472	FPC Antenna	2.48dBi	

IEEE Std. 802.11	Transmit and Receive Mode	Description
b	1TX, 1RX	Separate individual antenna can be used as transmitting/receiving.
g	1TX, 1RX	Separate individual antenna can be used as transmitting/receiving.
n HT20	2TX, 2RX	Two antenna can be used as transmitting/receiving simultaneously.

Note: The value of the antenna gain was declared by customer.

2.6. THE WORSE CASE POWER SETTING PARAMETER

The Worst Case Power Setting Parameter under 2400 ~ 2483.5 MHz Band							
Test Software		RF Test Tool.apk					
IEEE Std. 802.11	Transmit Antenna Number	Test Software Setting Value					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 7	CH 13	CH 3	CH 7	CH 11
b SISO	1	default	default	default	N/A		
g SISO	1	default	default	default			
n HT20 MIMO	2	default	default	default			

2.7. TEST CONDITIONS

The WIFI 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.

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input DC Power	51.2 V	56.32V	46.08V
RF Module	3.3V	3.3V	3.3V
Voltage Variation	0	0%	0%

Note: When the external voltage changes by $\pm 10\%$, the voltage variation rate of the WIFI module is 0% or less than 1%. Therefore, the test is only conducted under normal conditions.

2.8. DESCRIPTION OF TEST SETUP

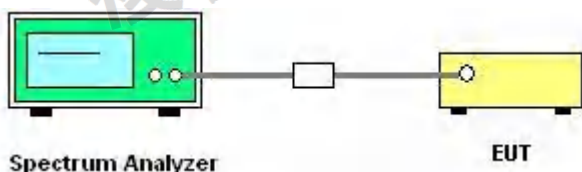
SUPPORT EQUIPMENT

Follow up the claims of the applicant

TEST SETUP

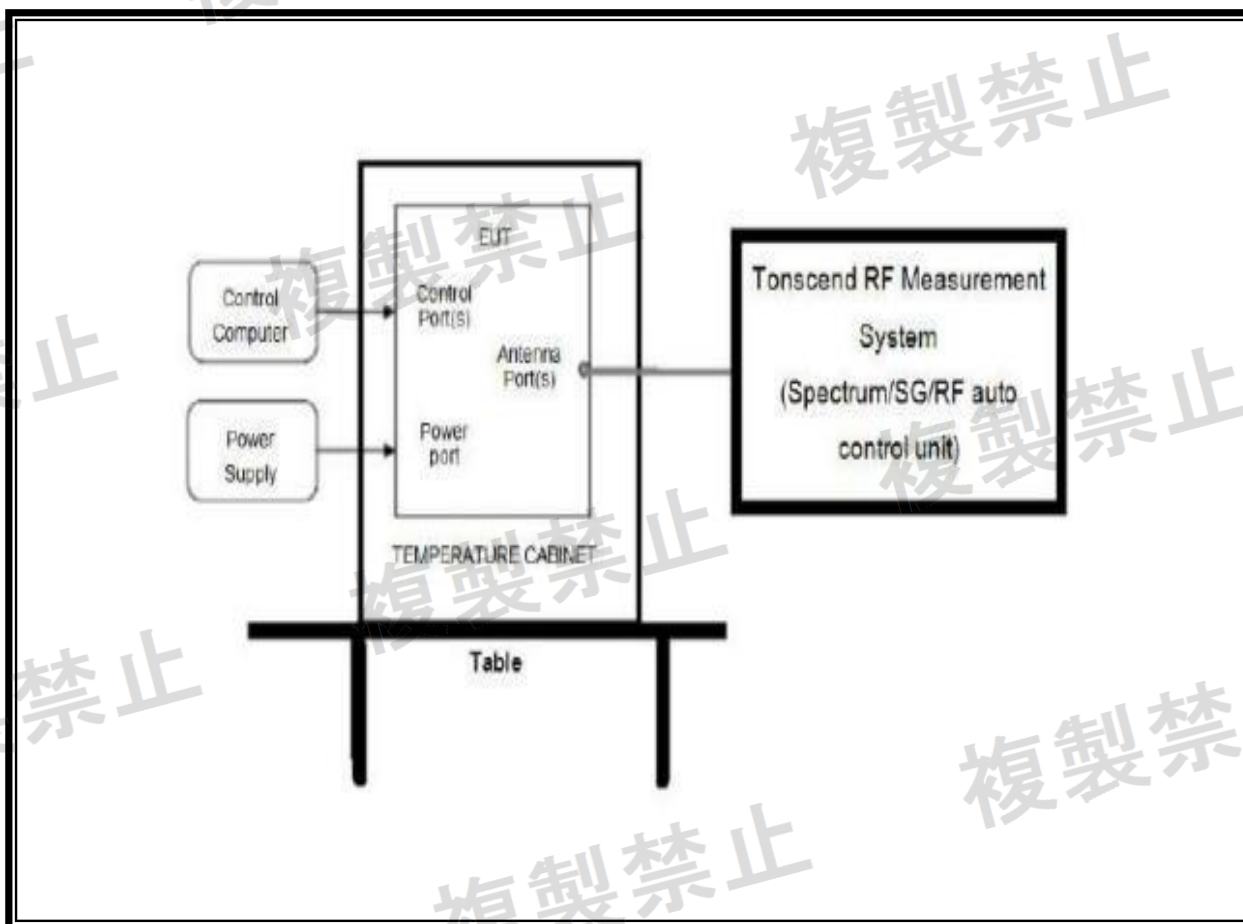
The EUT can work in engineering mode during the testing.

SETUP DIAGRAM FOR TESTS



2.9. TEST SYSTEM CONFIGURATION

Test System(for all test items)



2.10. TEST ENVIRONMEN

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	56
Barometric pressure (mbar)	860-1060	1001

3. TEST PROCEDURES AND RESULTS

3.1. FREQUENCY TOLERANCE

LIMITS

$\leq \pm 50$ ppm

TEST PROCEDURE

1. Frequency accuracy of instrument shall be less than 10% of limits tolerance (5ppm).
2. Three testing methods
 - a. Measure frequency tolerance by the system simulator.
 - b. CW Tone method
Setting of SA is following as: RBW:10kHz / VBW:10kHz.
Marker Max. level to get measuring frequency f.
 - c. 10dB down method
Setting of SA is following as: RBW:10kHz / VBW: 10kHz / Trace: MaxHold
Display line Level = Max. level – 10dB to place two markers, highest(fH) and lowest(fL) frequency
Determine measuring frequency $f = (fH+fL)/2$
3. The frequency tolerance test case is directly measured using the frequency accuracy function of Wifi tester or spectrum analyzer. Then the frequency error formula is $(f-fc)/fc \times 10^{-6}$ ppm and the limit is less than ± 50 ppm.

RESULTS

Please refer to appendix A.

3.2. ANTENNA POWER, ANTENNA POWER TOLERANCE AND E.I.R.P.

LIMITS

Output Power must be 10 mW/MHz or less.

Output Power Tolerance: +20%

TEST PROCEDURE

Search Frequency of Peak Power

Test Frequency: test channel

RBW=VBW=1MHZ,SPAN=40MHZ,Sweep time=Auto,Detector mode=Positive peak

Measure of average burst power

Test Frequency:frequency of peak power

RBW=VBW=1MHZ,SPAN=0Hz,Sweep time=Auto,Detector mode=RMS

Reading Level=burst power

EIRP=D+G

D:antenna power ; G:antenna gain

RESULTS

Please refer to appendix B.

3.3. OCCUPIED BANDWIDTH

LIMIT

≤26 MHz for DSSS&OFDM, ≤83.5 MHz for FHSS

TEST PROCEDURE

A spectrum analyzer or similar device shall be used to observe a sample of the modulated transmitter's radio frequency power output.

1. A positive peak detector function must be used.
2. A measurement instrument with an integrated 99% power bandwidth function may be used to automate the test process.
3. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
4. 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

Spectrum Analyzer Conditions:

RBW : 300kHz

VBW : 300kHz

Span: 40MHz

Sweep time : Auto, Marker : Marker Off

Log scale : 10dB/Div,

Data points : 1001points or more

Detection : Sample, Sweep mode : Continuous

Measurement Procedure and Capture Image

A,B -> Storage -> Average -> Averaging count -> 100 -> enter
Measure -> more -> Occupied Bandwidth -> N% Ratio -> 99%

RESULTS

Please refer to appendix C.

3.4. CARRIER SENSING FUNCTION

LIMIT

Item	Limits (See Article 49-20, Item1-k of the Ordinance Regulating Radio Equipment)
Carrier Sense	Good – EUT stop RF transmission signal after carrier inject to EUT. (On $22.79+Gr-20*\log(f)$ [dBm] (Gr: dBi; f: MHz) or 100mV/m)
Remarks	This test item will be applied to OFDM, $26MHz < BW \leq 38MHz$

TEST PROCEDURE

Test method which surpass to Clause 8,9 of Annex No.43 of MIC Notification No.88.

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

RESULTS

Note:For Carrier Sense Capability

1. Application to transmitting devices which EIRP is less than 2.14dBi+antenna power limit and the shortage of EIRP ic compensated by the antenna.Not applicable to this product.
2. Application to transmitting devices with OFDM modulation and occupied bandwidth greater than 26MHz,Not applicable to this product.

Not applicable

3.5. DUTY CYCLE

LIMITS

N/A

TEST PROCEDURE

A spectrum analyzer or similar device shall be used to observe a sample of the modulated transmitter's radio frequency power output.

1. A positive peak detector function must be used.
2. The center frequency is set to the test frequency and the span is switched to zero.
3. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
4. 'Single sweep' mode may be used to capture a packet over a single scan.

RESULTS

Please refer to appendix F.

3.6. TRANSMITTER SPURIOUS EMISSIONS

LIMITS

$\leq 2.5\mu\text{W}/\text{MHz}$ or less for 30 – 2387 MHz
 $\leq 25\mu\text{W}/\text{MHz}$ or less for 2387 – 2400 MHz
 $\leq 25\mu\text{W}/\text{MHz}$ or less for 2483.5 – 2496.5 MHz
 $\leq 2.5\mu\text{W}/\text{MHz}$ or less for 2496.5 – 12500 MHz

TEST PROCEDURE

A spectrum analyzer or similar device shall be used to observe a sample of the modulated transmitter's radio frequency power output.

1. A positive peak detector function must be used.
2. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
3. 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

Spectrum Analyzer Conditions:

RBW : 1MHz

VBW : 1MHz

Sweep time : Auto

Trace mode:Max hold

Log scale : 10dB/Div,

Data points : 8001points or more

Detection : Peak, Sweep mode : Continuous

RESULTS

Please refer to appendix D.

3.7. RECEIVER SPURIOUS EMISSIONS

LIMITS

$\leq 4\text{nW/MHz}$ for 30 – 1000 MHz

$\leq 20\text{nW/MHz}$ for 1000 – 12750 MHz

TEST PROCEDURE

A spectrum analyzer or similar device shall be used to observe a sample of the modulated transmitter's radio frequency power output.

1. A positive peak detector function must be used.
2. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
3. 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

Spectrum Analyzer Conditions:

RBW : 100kHz(Below 1000MHz)/1MHz(Above 1000MHz)

RBW=VBW

Sweep time : Auto

Trace mode:Max hold

Log scale : 10dB/Div,

Data points : 8001points or more

Detection : Peak, Sweep mode : Continuous

RESULTS

Please refer to appendix E.

3.8. INTERFERENCE PREVENTION FUNCTION

LIMITS

N/A

Requirement:

The EUT shall have the interference prevention capability to transmit or to receive the identification Automatically, so that sender and receiver shall exclude other equipment.

TEST PROCEDURE

In the case that the EUT has the function of automatically transmitting the identification code:

- 1) Transmit the predetermined identification codes from EUT
- 2) Check the transmitted identification codes with the demodulator.

In the case of receiving the identification codes:

- 1) Transmit the predetermined identification codes from the counterpart.
- 2) Check if communication is normal
- 3) Transmit the signal other than predetermined ID codes from the counterpart.
- 4) Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones

Mac: 20-08-EC-AH-3B-2C

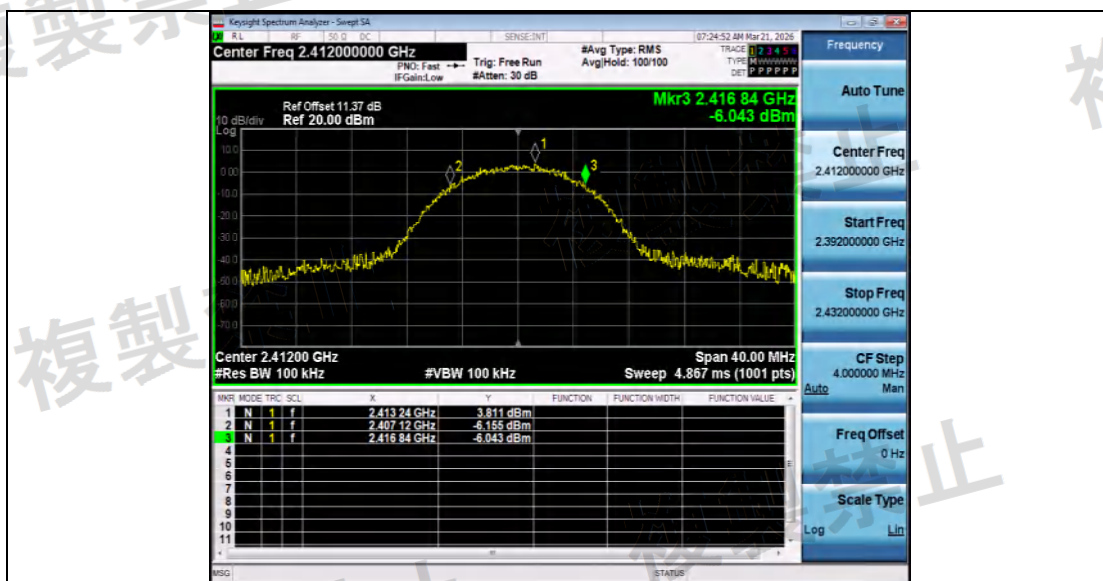
RESULTS

Good, EUT performed relevant functional tests as required, and the product signal was normal.

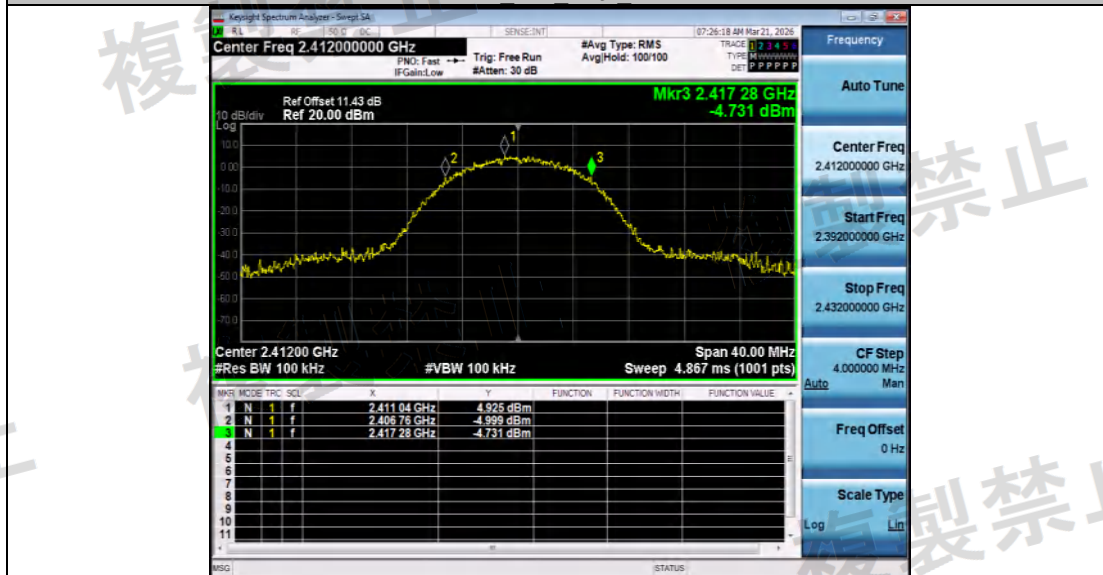
Appendix A: Frequency Tolerance

Test Result

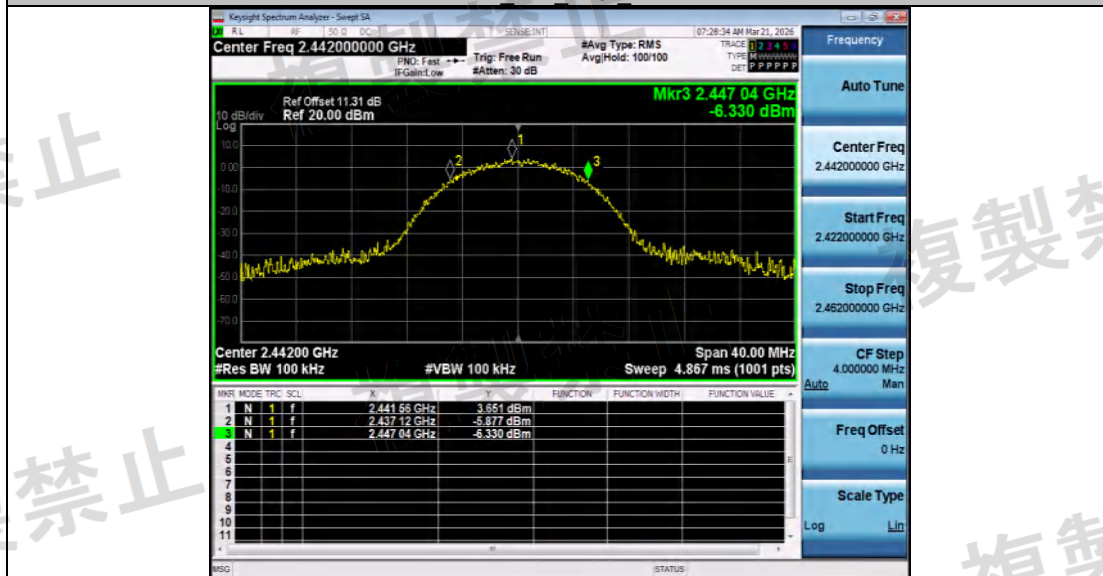
Test Condition	Test Mode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	11B	Ant1	2412	-8.29187	±50	PASS
		Ant2	2412	8.29187	±50	PASS
		Ant1	2442	32.76003	±50	PASS
		Ant2	2442	-24.57003	±50	PASS
		Ant1	2472	40.45307	±50	PASS
		Ant2	2472	-48.54369	±50	PASS
	11G	Ant1	2412	-8.29187	±50	PASS
		Ant2	2412	-8.29187	±50	PASS
		Ant1	2442	-8.19001	±50	PASS
		Ant2	2442	-8.19001	±50	PASS
		Ant1	2472	-8.09062	±50	PASS
		Ant2	2472	-8.09062	±50	PASS
	11N20MIM O	Ant1	2412	-8.29187	±50	PASS
		Ant2	2412	-8.29187	±50	PASS
		Ant1	2442	-8.19001	±50	PASS
		Ant2	2442	-8.19001	±50	PASS
		Ant1	2472	-8.09062	±50	PASS
		Ant2	2472	-8.09062	±50	PASS



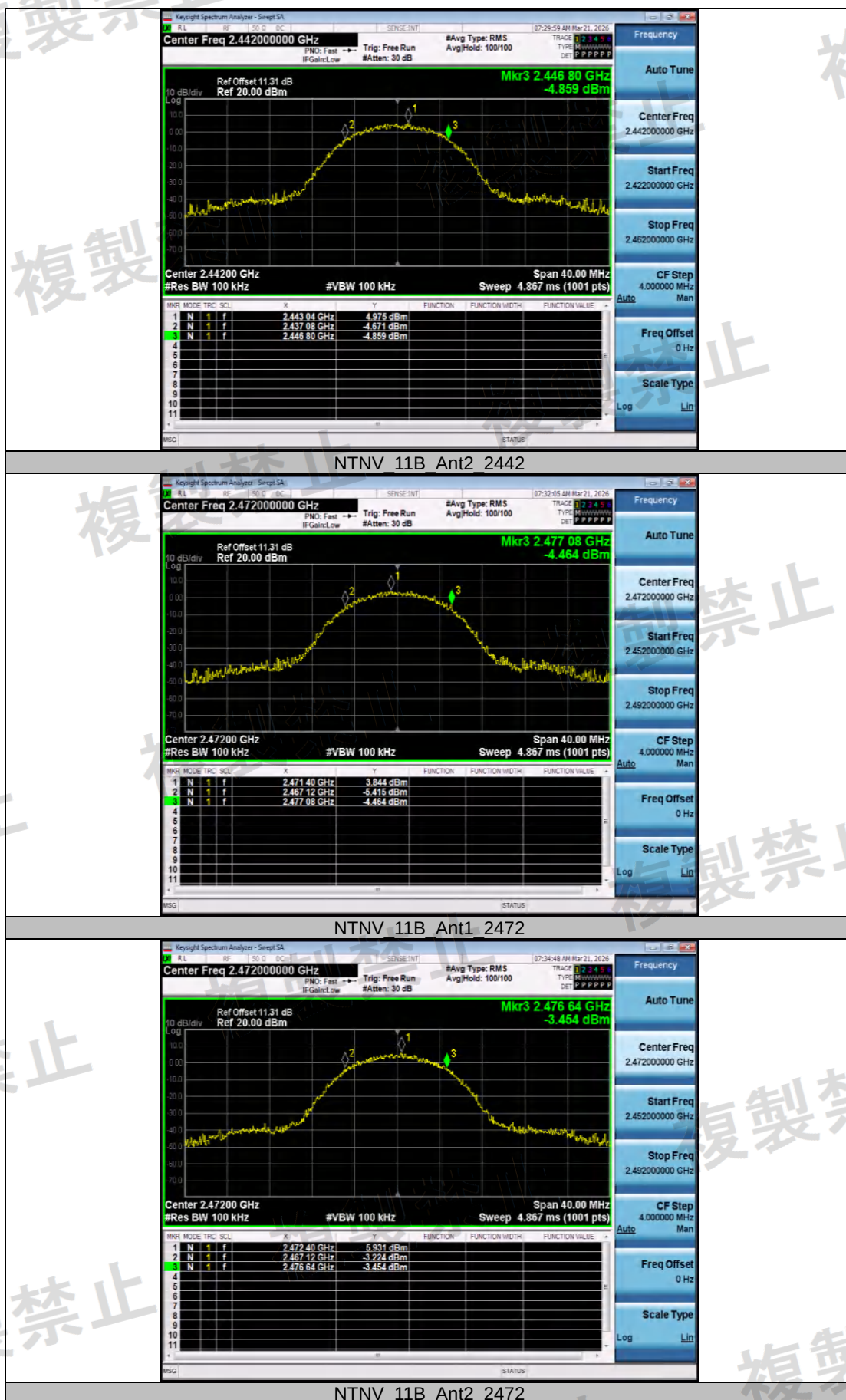
NTNV 11B Ant1 2412

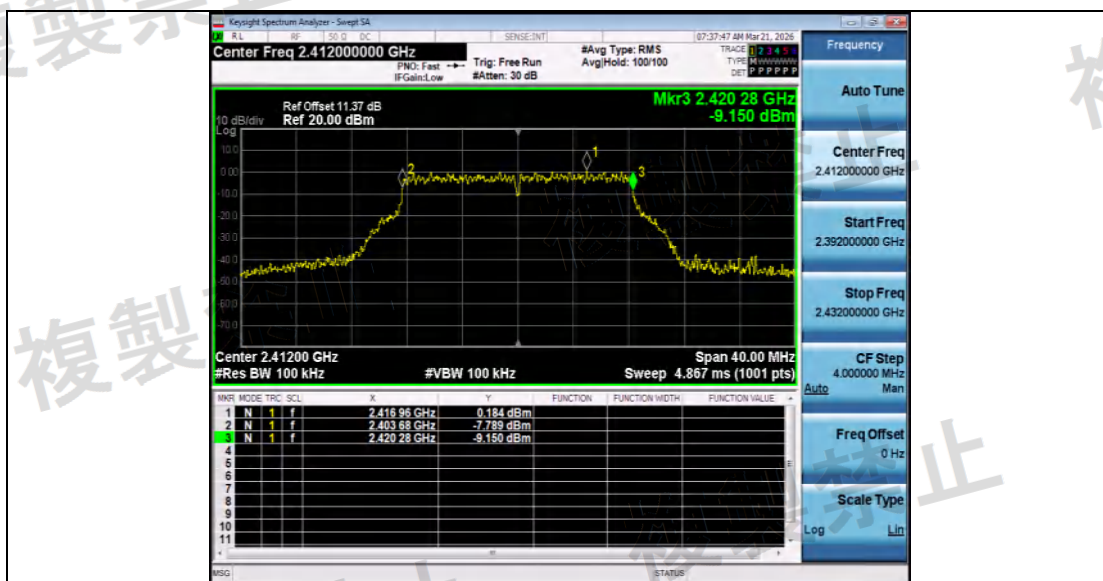


NTNV 11B Ant2 2412



NTNV 11B Ant1 2442

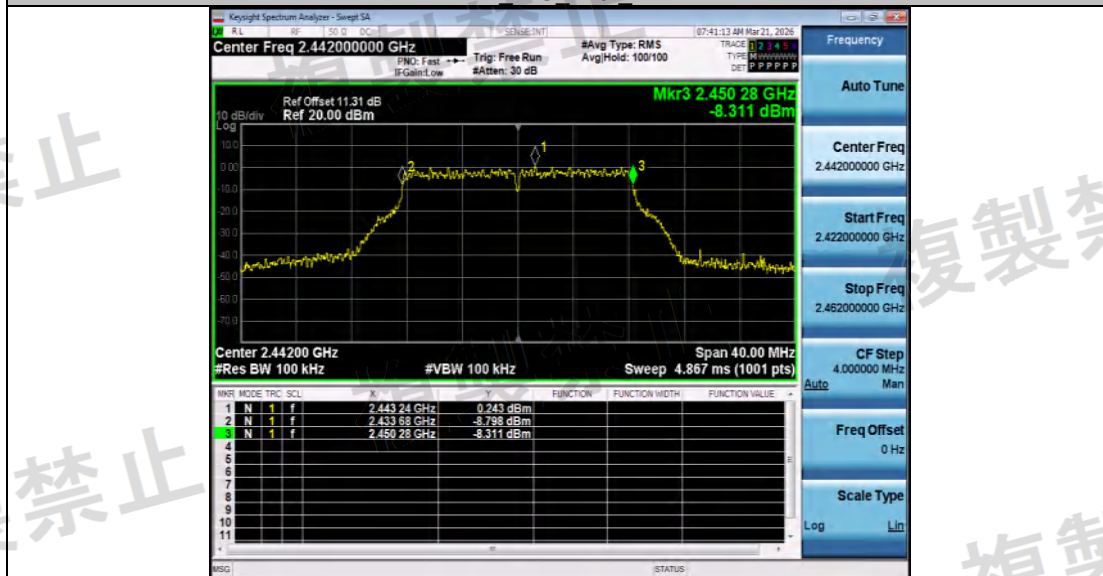




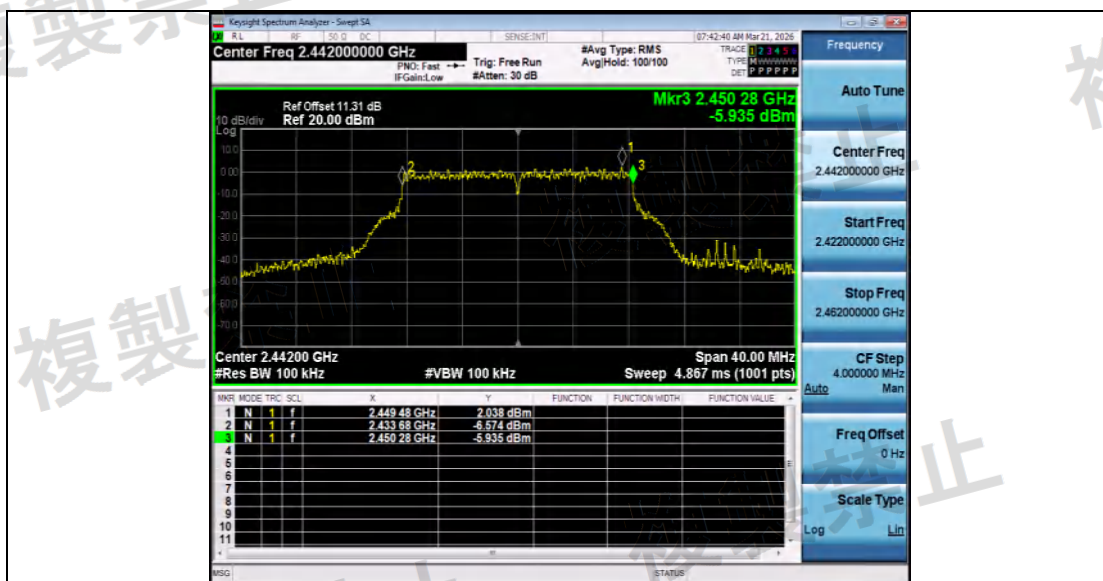
NTNV 11G Ant1 2412



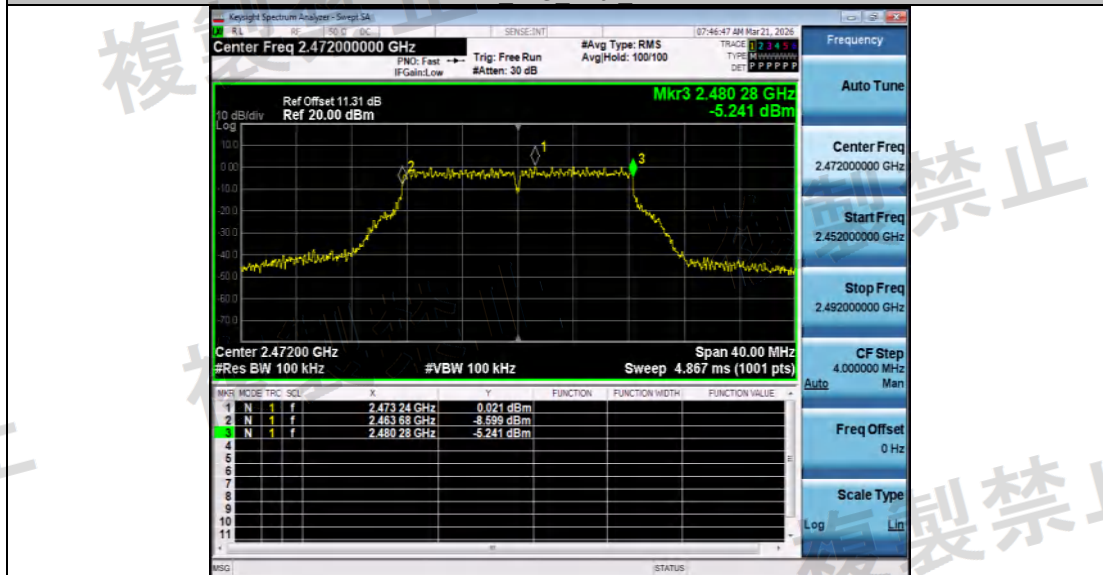
NTNV 11G Ant2 2412



NTNV 11G Ant1 2442



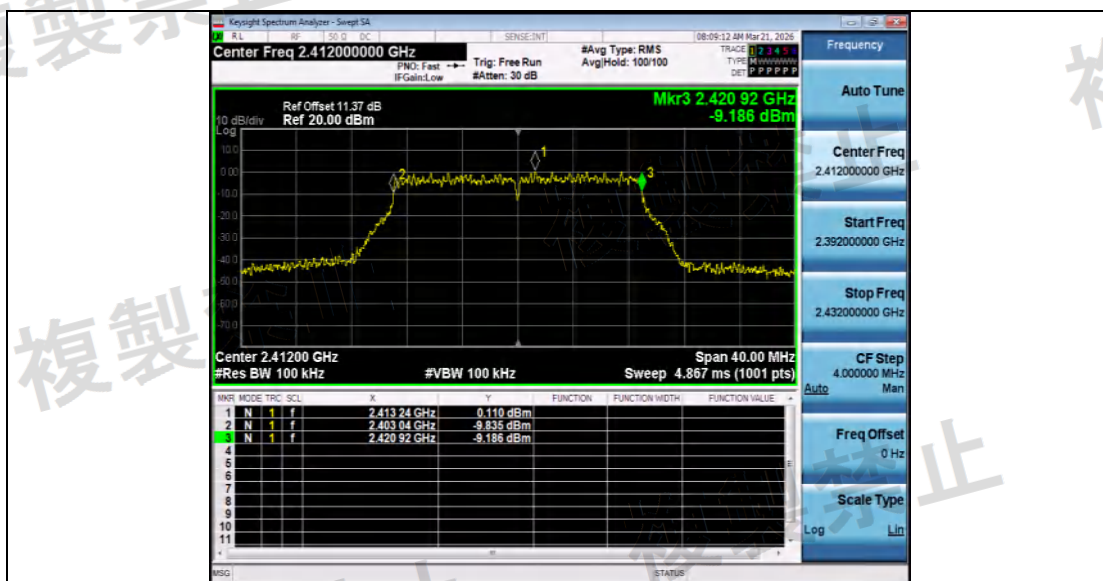
NTN 11G Ant2 2442



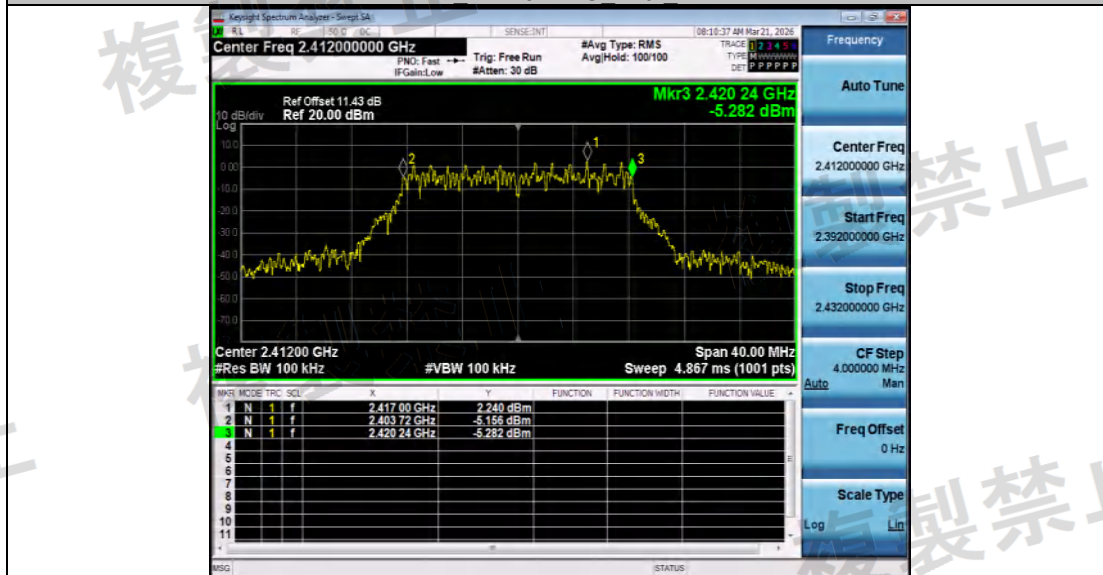
NTN 11G Ant1 2472



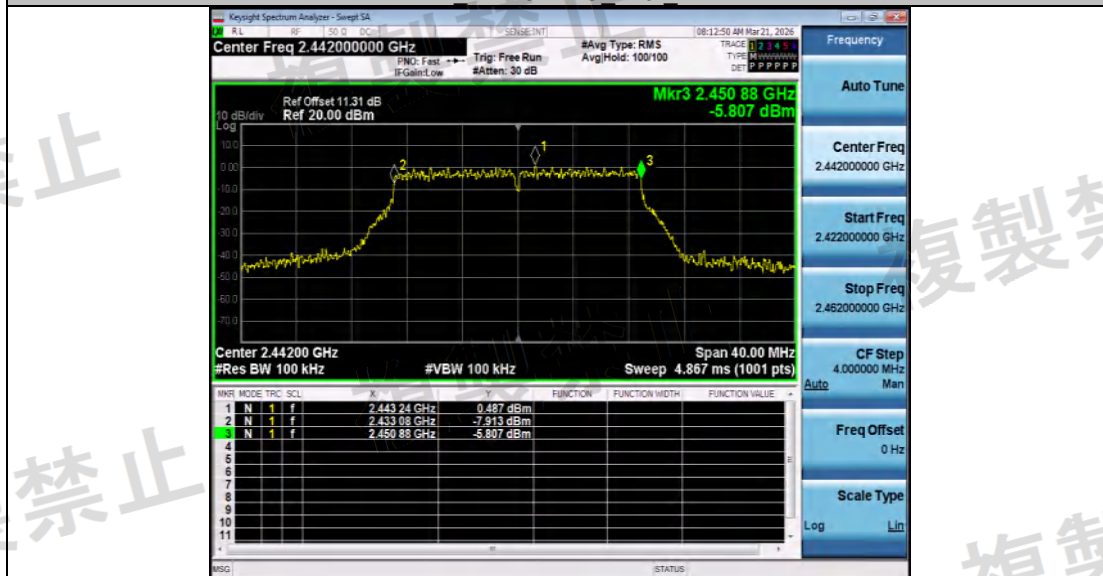
NTN 11G Ant2 2472



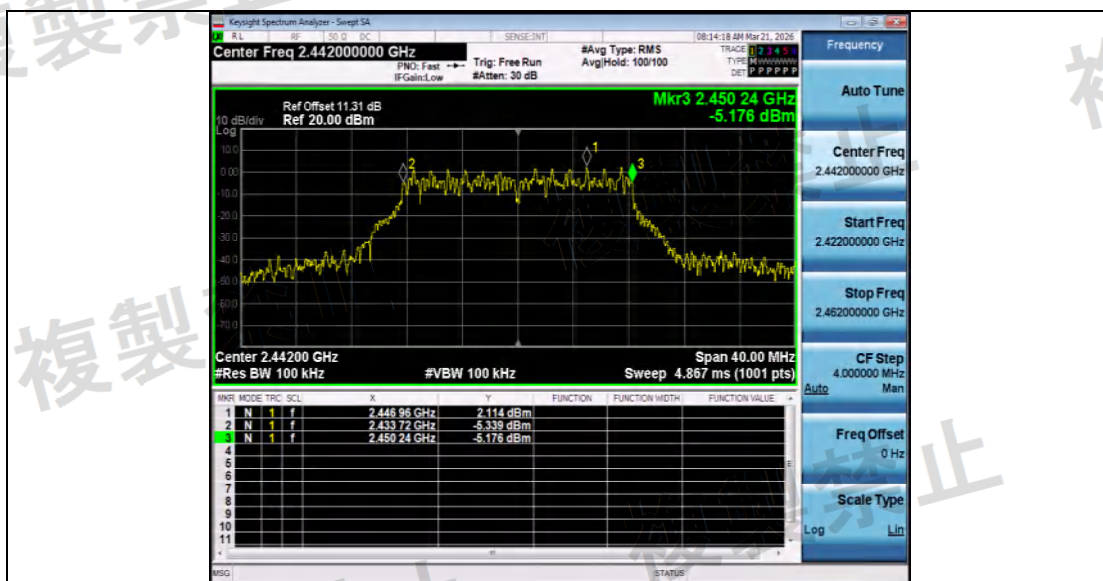
NTNV_11N20MIMO_Ant1_2412



NTNV_11N20MIMO_Ant2_2412



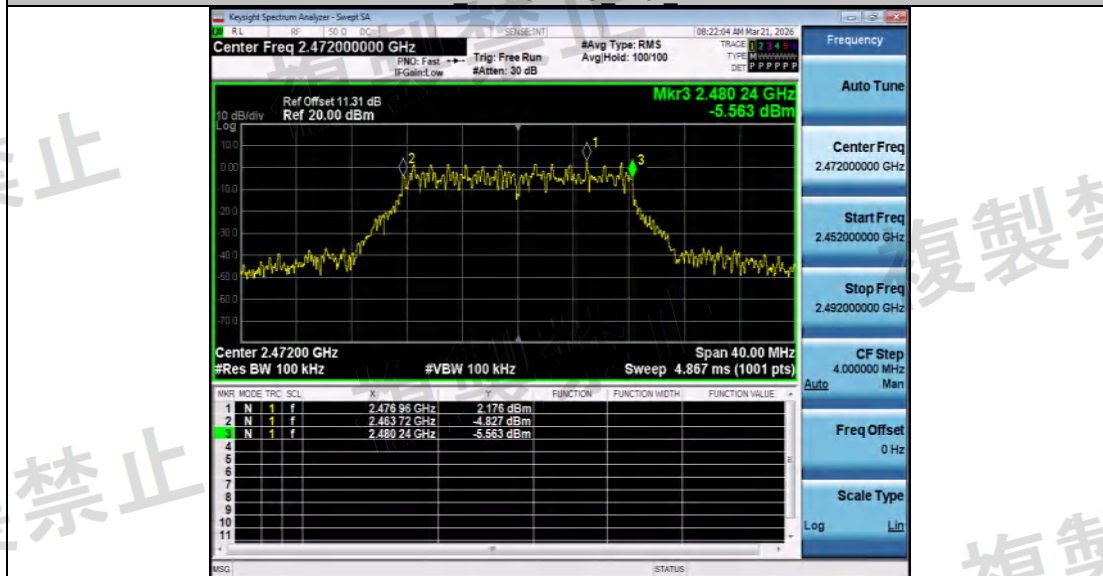
NTNV_11N20MIMO_Ant1_2442



NTNV_11N20MIMO_Ant2_2442



NTNV_11N20MIMO_Ant1_2472



NTNV_11N20MIMO_Ant2_2472

Appendix B: Antenna power, antenna power tolerance and E.I.R.P.

Test Result

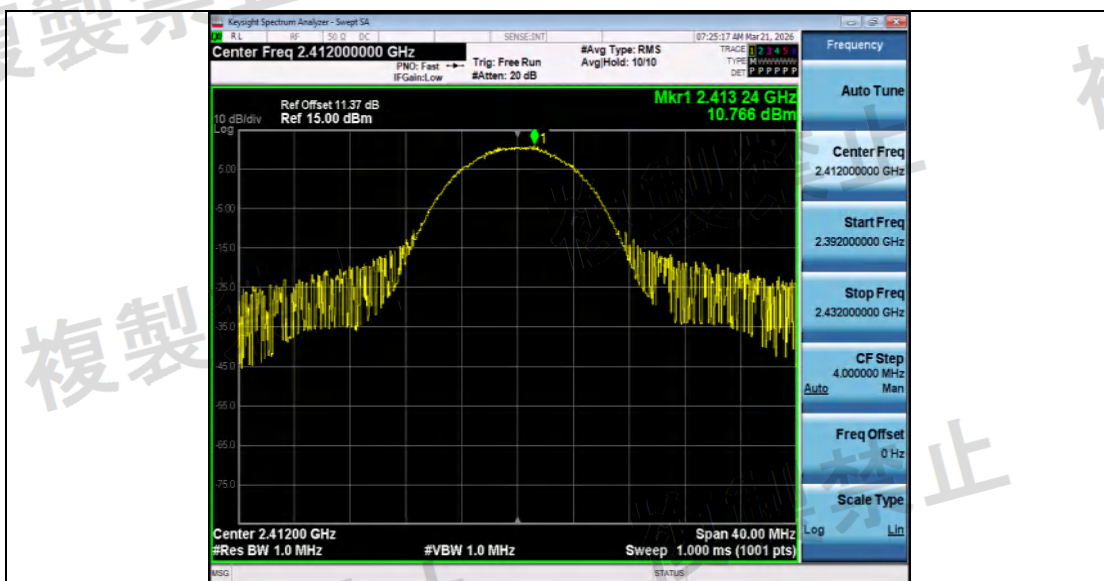
Antenna Power							
Test Condition	Test Mode	Antenna	Freq(MHz)	Result (dBm/MHz)	Result (mW/MHz)	Limit (mW/MHz)	Verdict
NTNV	11B	Ant1	2412	9.00	7.9433	≤10	PASS
		Ant2	2412	9.60	9.1201	≤10	PASS
		Ant1	2442	9.13	8.1846	≤10	PASS
		Ant2	2442	9.60	9.1201	≤10	PASS
		Ant1	2472	9.16	8.2414	≤10	PASS
		Ant2	2472	9.61	9.1411	≤10	PASS
	11G	Ant1	2412	9.11	8.1470	≤10	PASS
		Ant2	2412	8.74	7.4817	≤10	PASS
		Ant1	2442	9.05	8.0353	≤10	PASS
		Ant2	2442	9.37	8.6497	≤10	PASS
		Ant1	2472	9.17	8.2604	≤10	PASS
		Ant2	2472	9.23	8.3753	≤10	PASS
	11N20MIMO	Ant1	2412	2.62	1.8281	≤10	PASS
		Ant2	2412	4.50	2.8184	≤10	PASS
		total	2412	6.67	4.6465	≤10	PASS
		Ant1	2442	2.90	1.9498	≤10	PASS
		Ant2	2442	4.79	3.0130	≤10	PASS
		total	2442	6.96	4.9628	≤10	PASS
		Ant1	2472	4.08	2.5586	≤10	PASS
		Ant2	2472	3.56	2.2699	≤10	PASS
		total	2472	6.84	4.8285	≤10	PASS

Tolerance								
Test Condition	Test Mode	Antenna	Freq(MHz)	Result (mW/MHz)	Rated power	Result (%)	Limit (%)	Verdict
NTNV	11B	Ant1	2412	7.9433	10	-20.567	+20	Pass
		Ant2	2412	9.2897	10	-8.799	+20	Pass
		Ant1	2442	8.1846	10	-18.154	+20	Pass
		Ant2	2442	9.2897	10	-8.799	+20	Pass
		Ant1	2472	8.2414	10	-17.586	+20	Pass
		Ant2	2472	9.6605	10	-8.589	+20	Pass
	11G	Ant1	2412	8.1470	10	7.9433	+20	Pass
		Ant2	2412	7.4817	10	-25.183	+20	Pass
		Ant1	2442	8.0353	10	-19.647	+20	Pass
		Ant2	2442	8.6497	10	-13.503	+20	Pass
		Ant1	2472	8.2604	10	-17.396	+20	Pass
		Ant2	2472	8.3753	10	-16.247	+20	Pass
	11N20MIMO	Ant1	2412	1.8281	10	-81.719	+20	Pass
		Ant2	2412	2.8184	10	-71.816	+20	Pass
		total	2412	4.6465	10	-53.535	+20	Pass
		Ant1	2442	1.9498	10	-80.502	+20	Pass
		Ant2	2442	3.0130	10	-69.87	+20	Pass
		total	2442	4.9628	10	-50.372	+20	Pass
		Ant1	2472	2.5586	10	-74.414	+20	Pass
		Ant2	2472	2.2699	10	-77.301	+20	Pass
		total	2472	4.8285	10	-51.715	+20	Pass

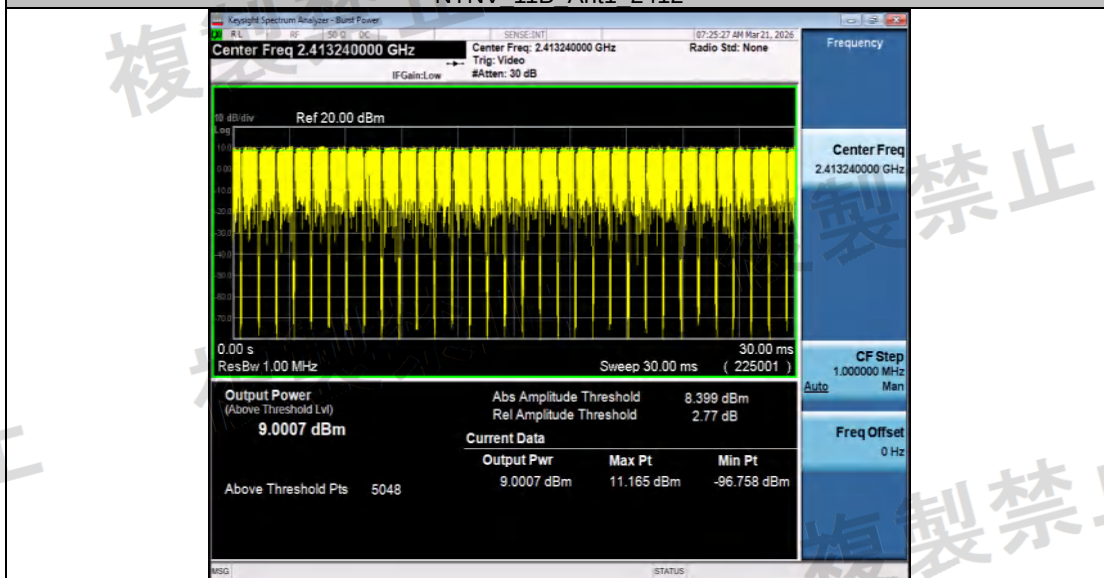
EIRP							
Test Condition	Test Mode	Antenna	Freq(MHz)	Result (dBm/MH)	EIRP (dBm/MH)	Limit (dBm/MH)	Verdict
NTNV	11B	Ant1	2412	9	11.48	≤12.14	PASS
		Ant2	2412	9.6	12.08	≤12.14	PASS
		Ant1	2442	9.13	11.61	≤12.14	PASS
		Ant2	2442	9.6	12.08	≤12.14	PASS
		Ant1	2472	9.16	11.64	≤12.14	PASS
		Ant2	2472	9.61	12.09	≤12.14	PASS
	11G	Ant1	2412	9.11	11.59	≤12.14	PASS
		Ant2	2412	8.74	11.22	≤12.14	PASS
		Ant1	2442	9.05	11.53	≤12.14	PASS
		Ant2	2442	9.37	11.85	≤12.14	PASS
		Ant1	2472	9.17	11.65	≤12.14	PASS
		Ant2	2472	9.23	11.71	≤12.14	PASS
	11N20MIMO	Ant1	2412	2.62	5.1	≤12.14	PASS
		Ant2	2412	4.5	6.98	≤12.14	PASS
		total	2412	6.67	9.15	≤12.14	PASS
		Ant1	2442	2.9	5.38	≤12.14	PASS
		Ant2	2442	4.79	7.27	≤12.14	PASS
		total	2442	6.96	9.44	≤12.14	PASS
		Ant1	2472	4.08	6.56	≤12.14	PASS
		Ant2	2472	3.56	6.04	≤12.14	PASS
		total	2472	6.84	9.32	≤12.14	PASS

Remark:

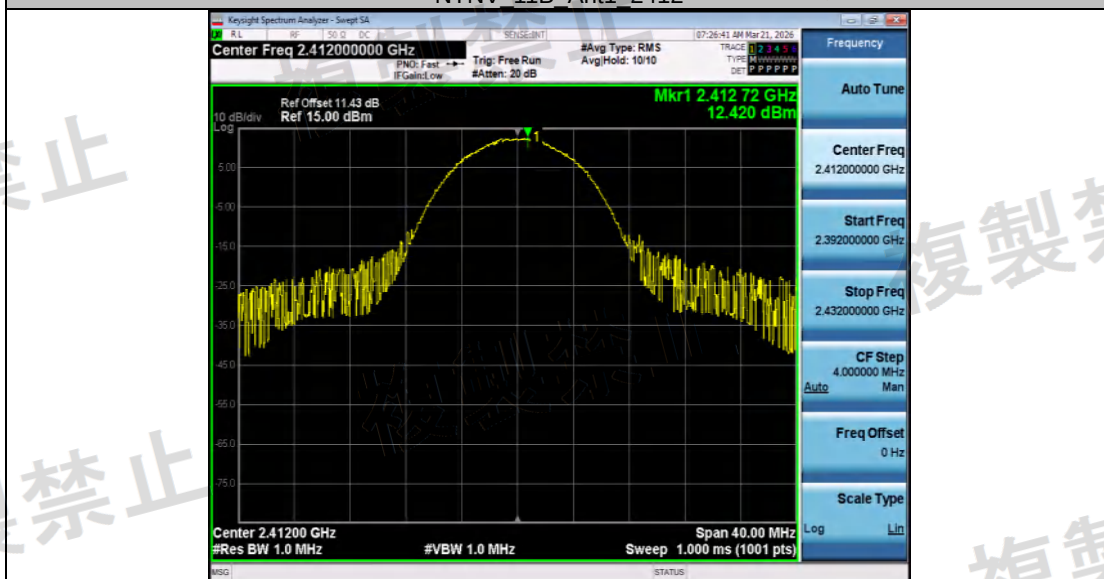
1. EIRP= Antenna Power +Antenna Gain.
2. Antenna Gain 2.48dBi



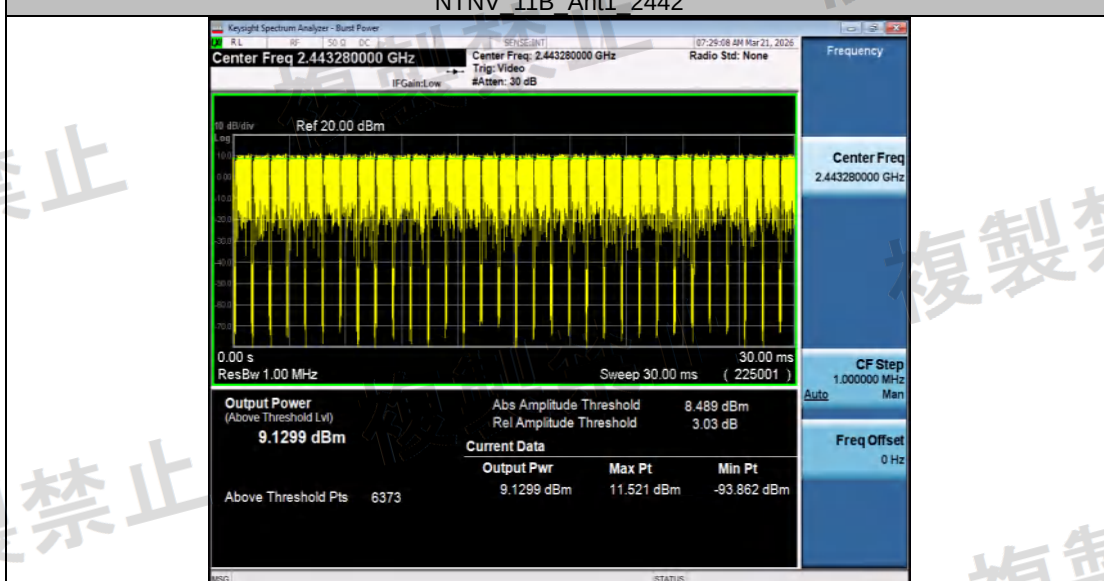
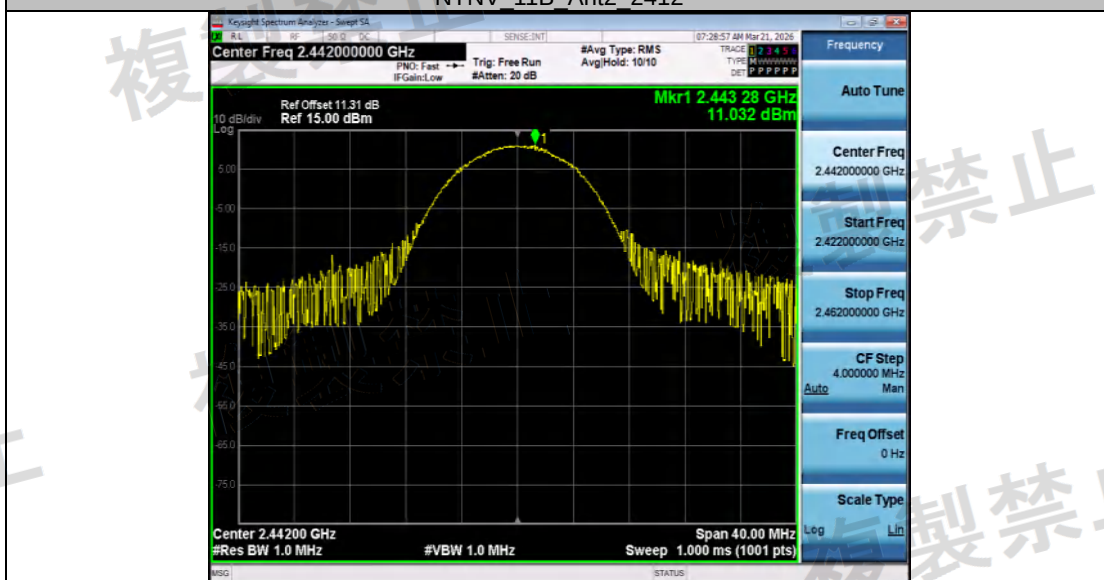
NTNV_11B Ant1 2412

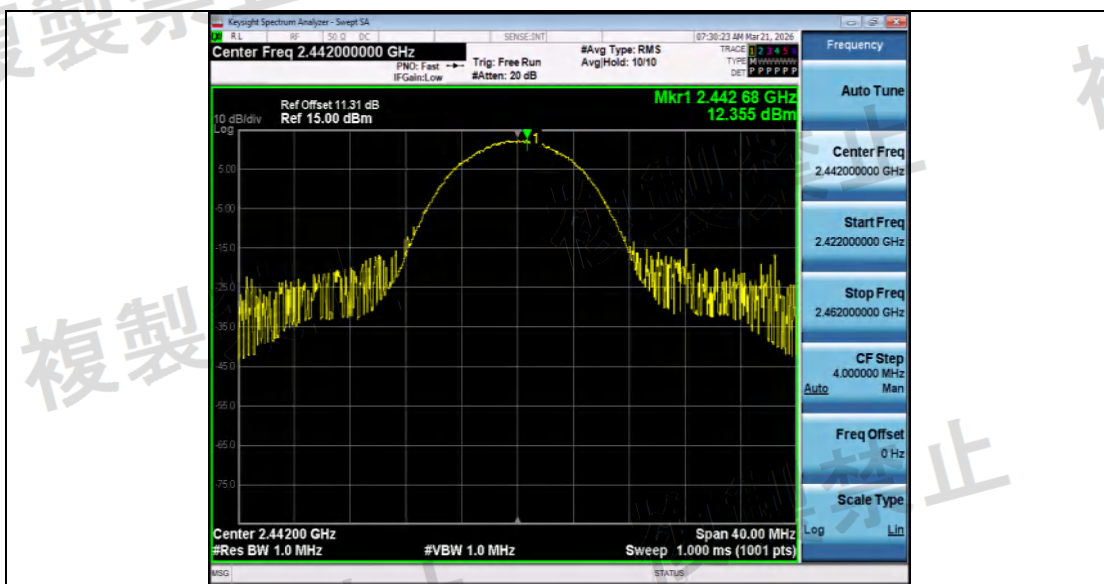


NTNV_11B Ant1 2412

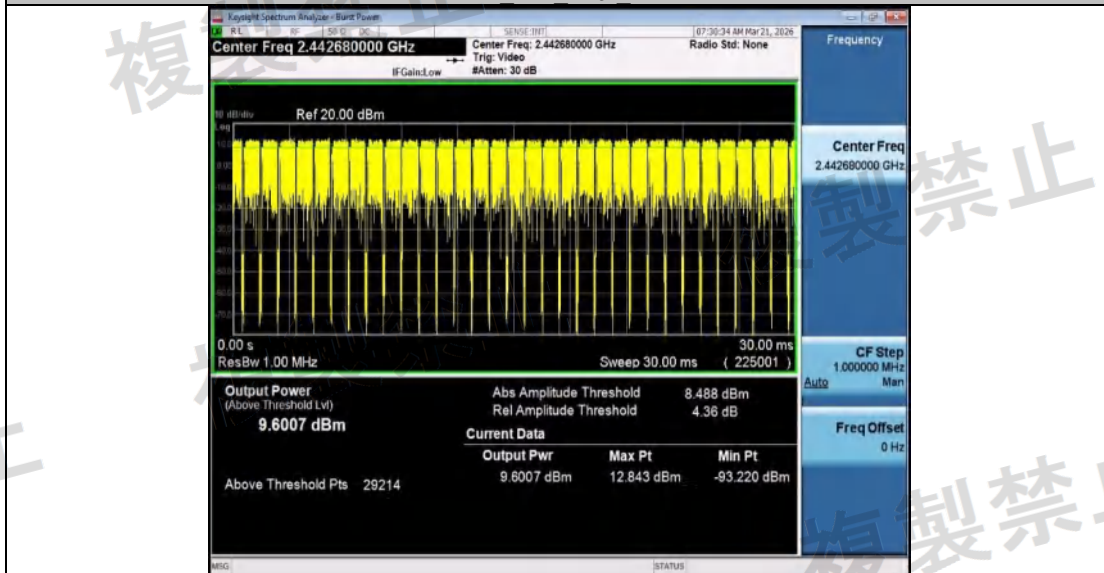


NTNV_11B Ant2 2412

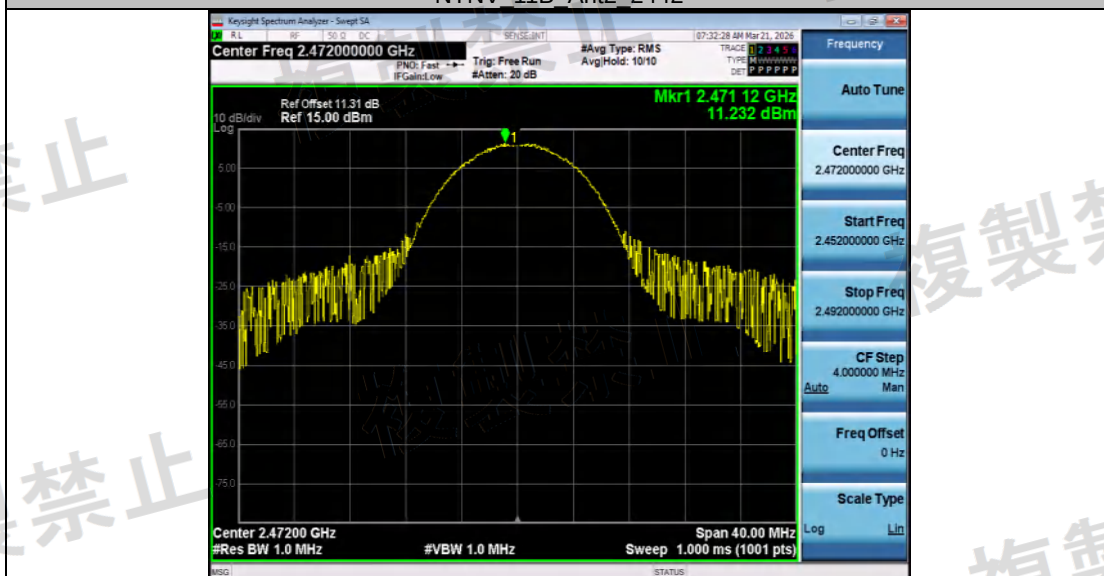




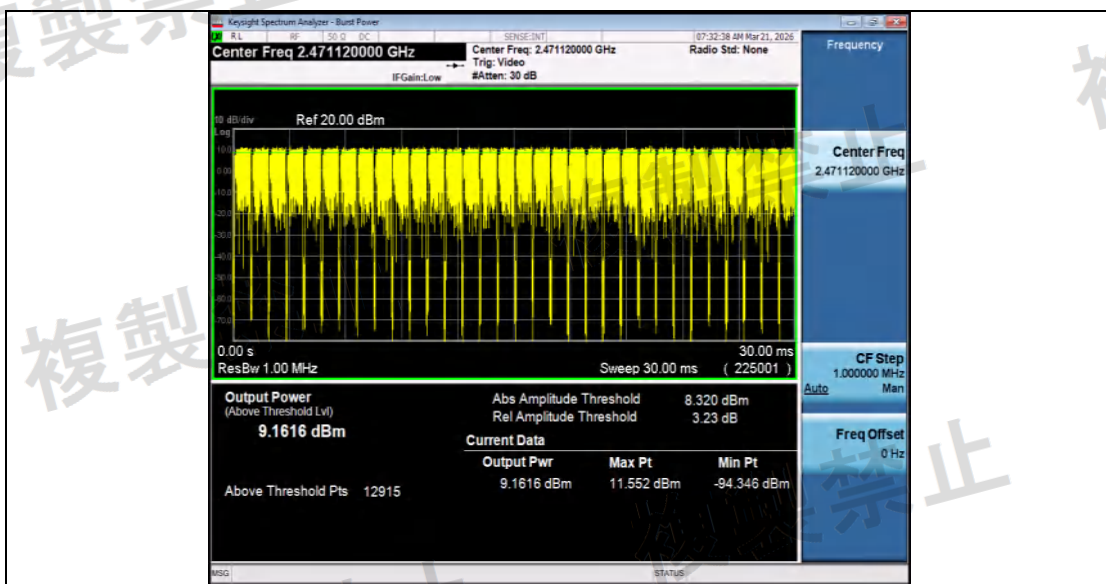
NTNV_11B_Ant2_2442



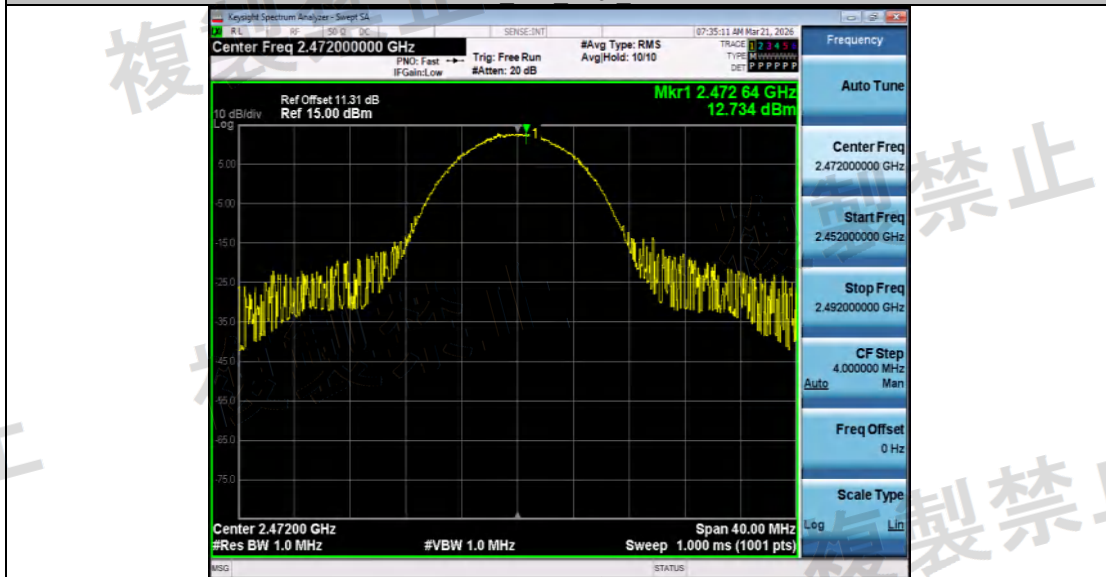
NTNV_11B_Ant2_2442



NTNV_11B_Ant1_2472



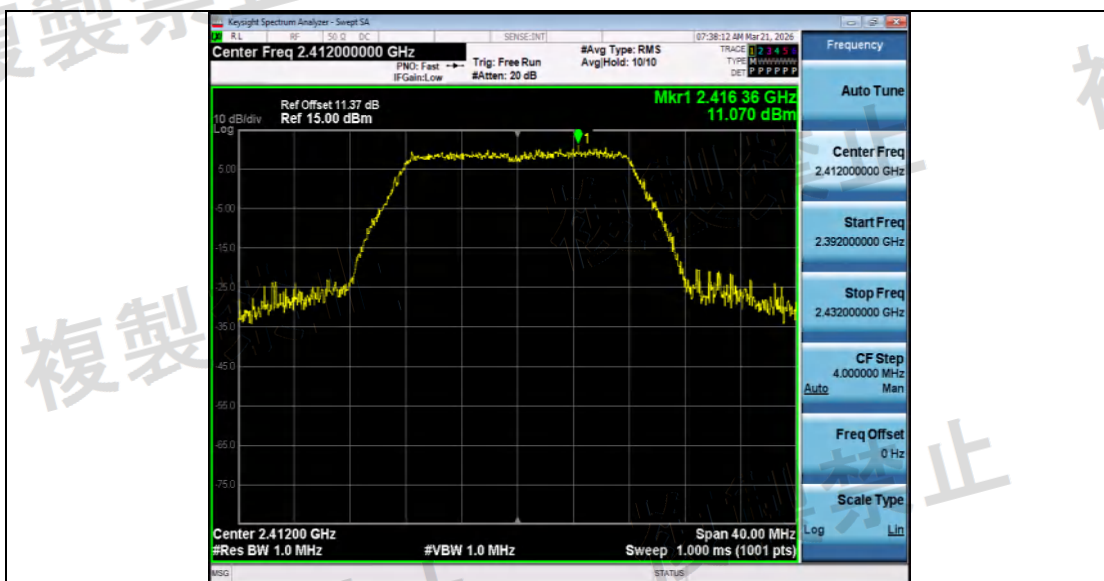
NTNV_11B_Ant1_2472



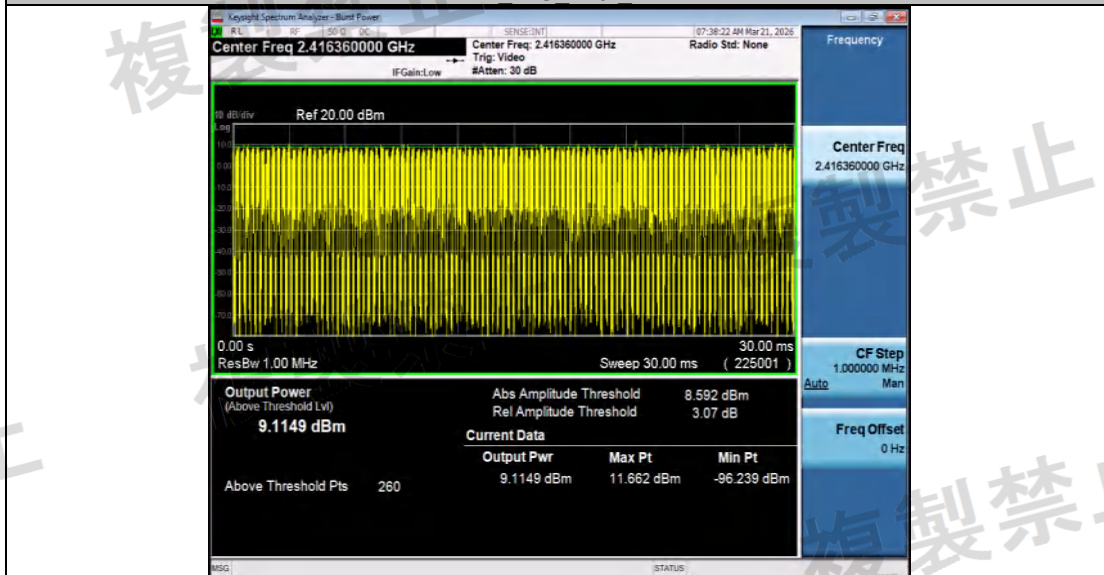
NTNV_11B_Ant2_2472



NTNV_11B_Ant2_2472



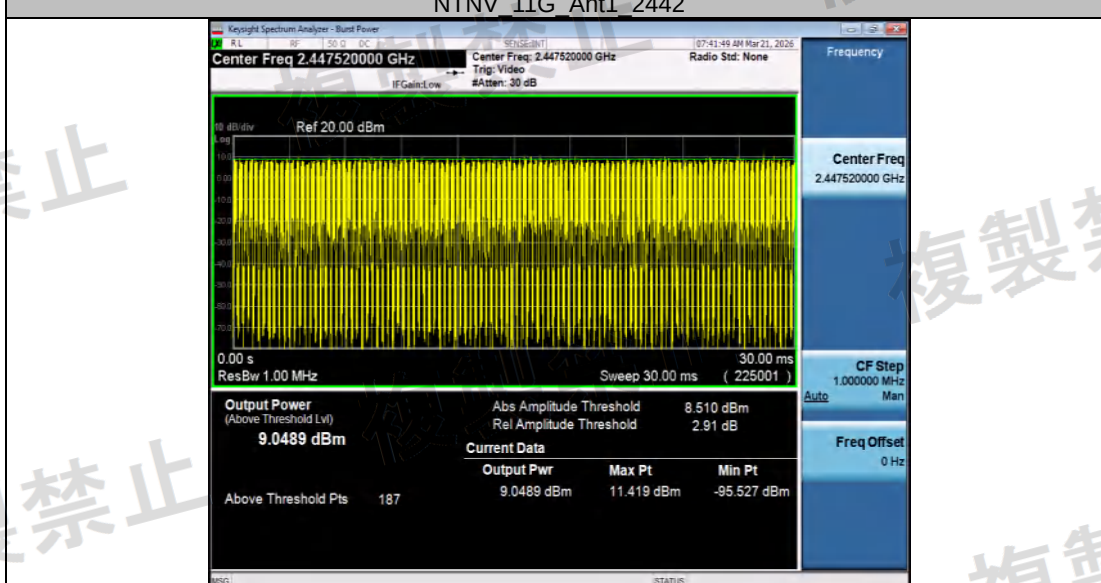
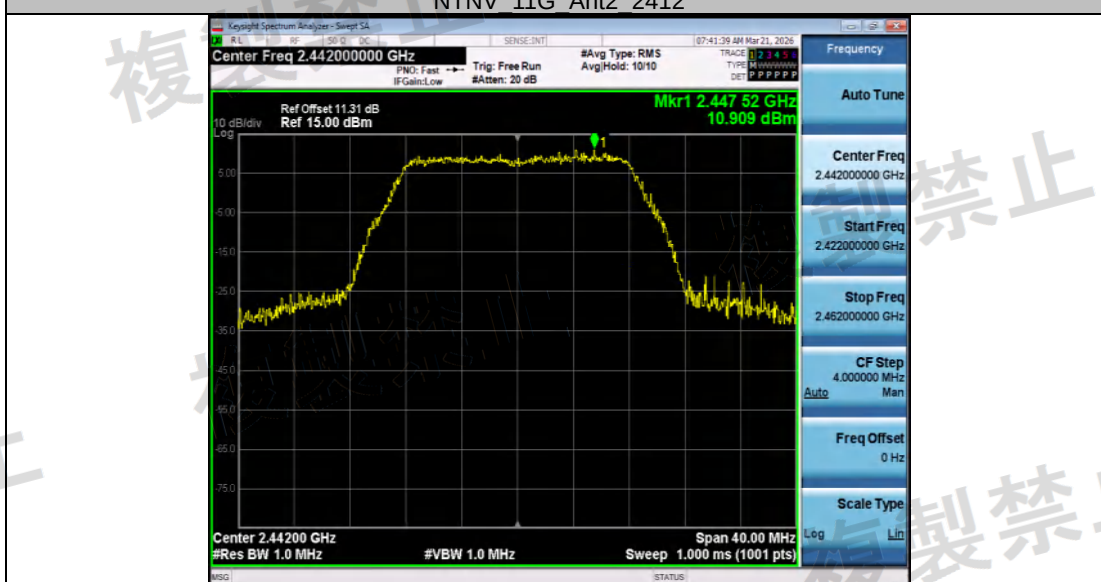
NTNV_11G_Ant1_2412



NTNV_11G_Ant1_2412

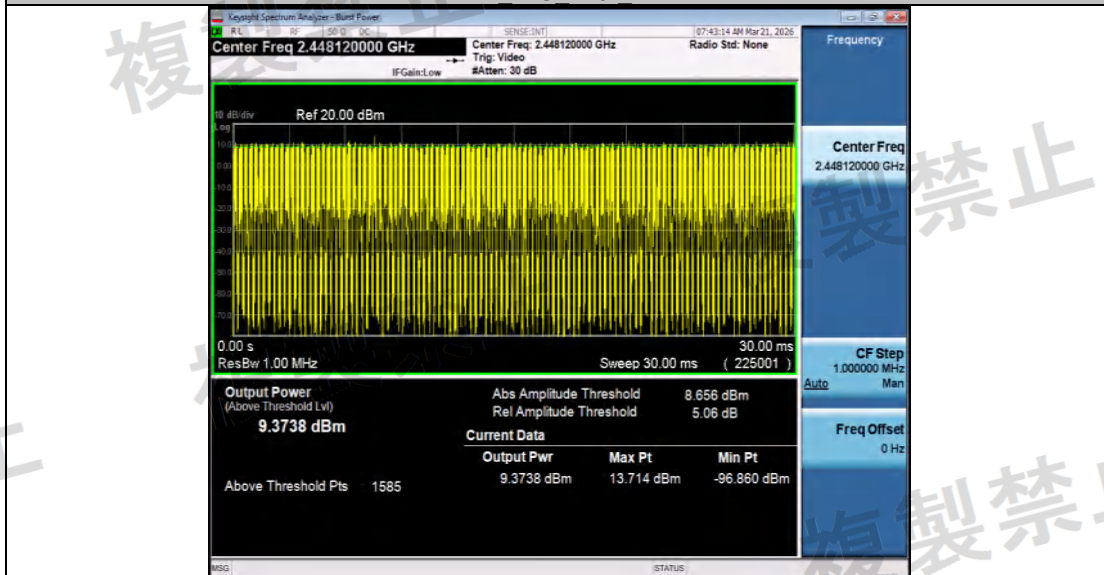


NTNV_11G_Ant2_2412





NTNV_11G_Ant2_2442



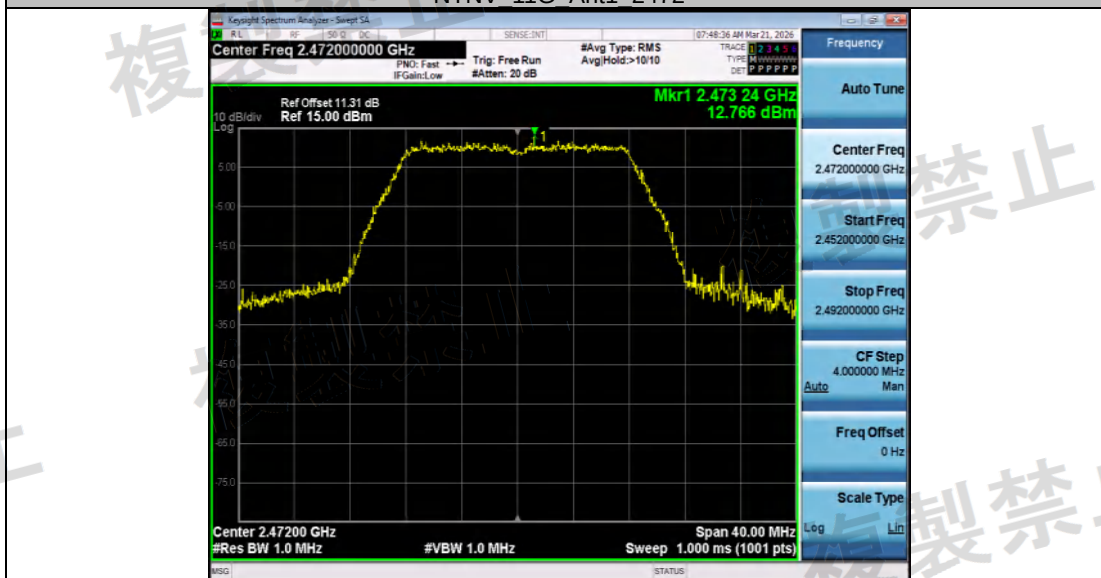
NTNV_11G_Ant2_2442



NTNV_11G_Ant1_2472



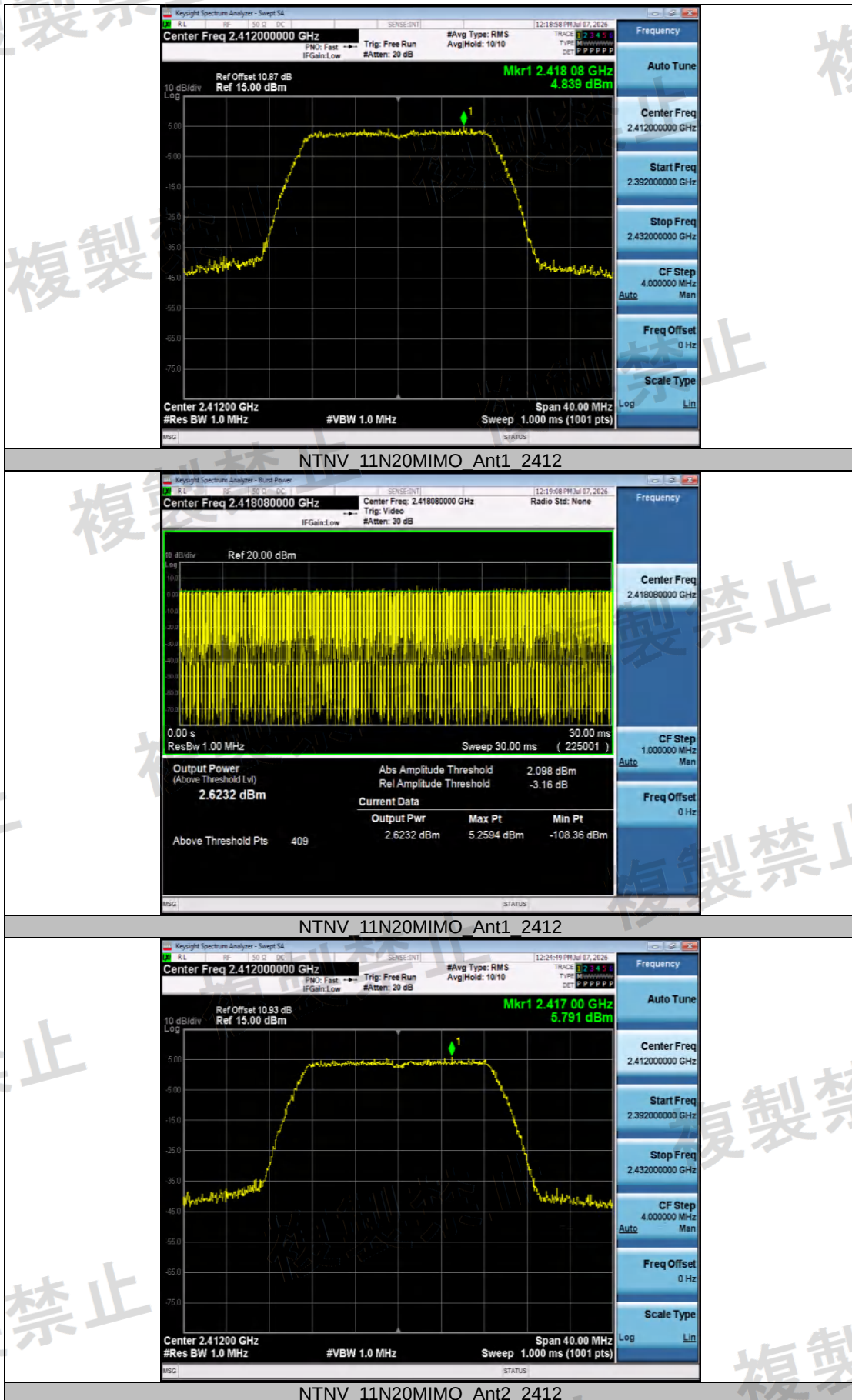
NTNV 11G Ant1 2472



NTNV 11G Ant2 2472



NTNV 11G Ant2 2472





NTNV_11N20MIMO_Ant2_2412



NTNV_11N20MIMO_Ant1_2442



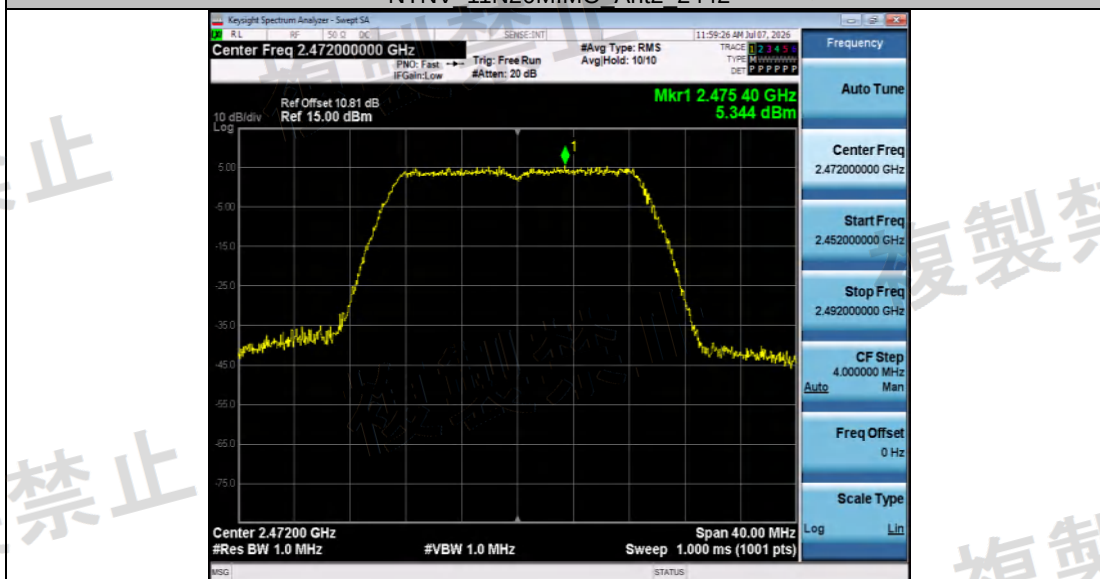
NTNV_11N20MIMO_Ant1_2442



NTNV_11N20MIMO_Ant2_2442



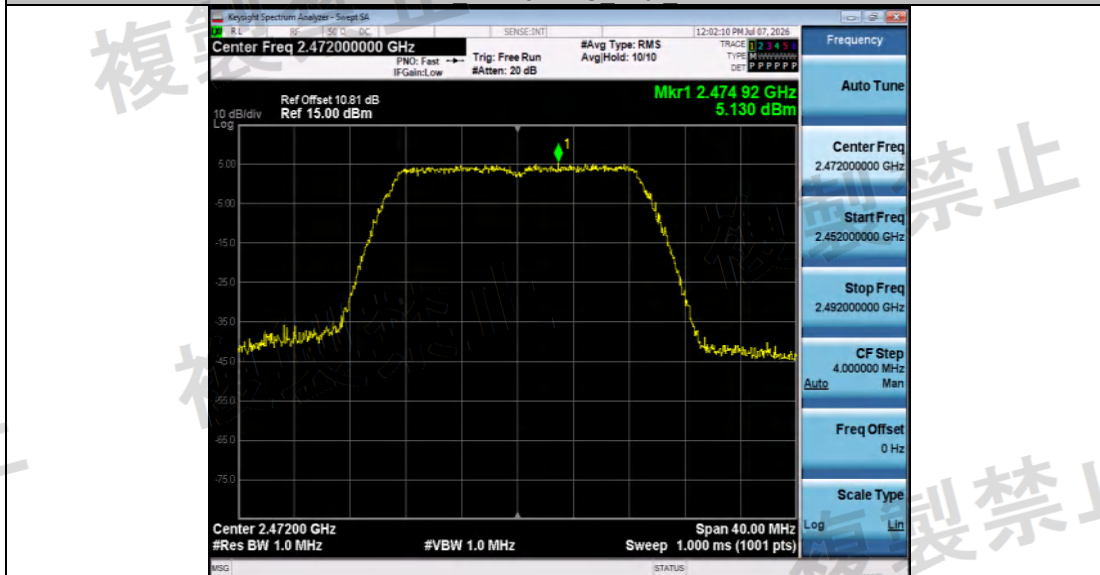
NTNV_11N20MIMO_Ant2_2442



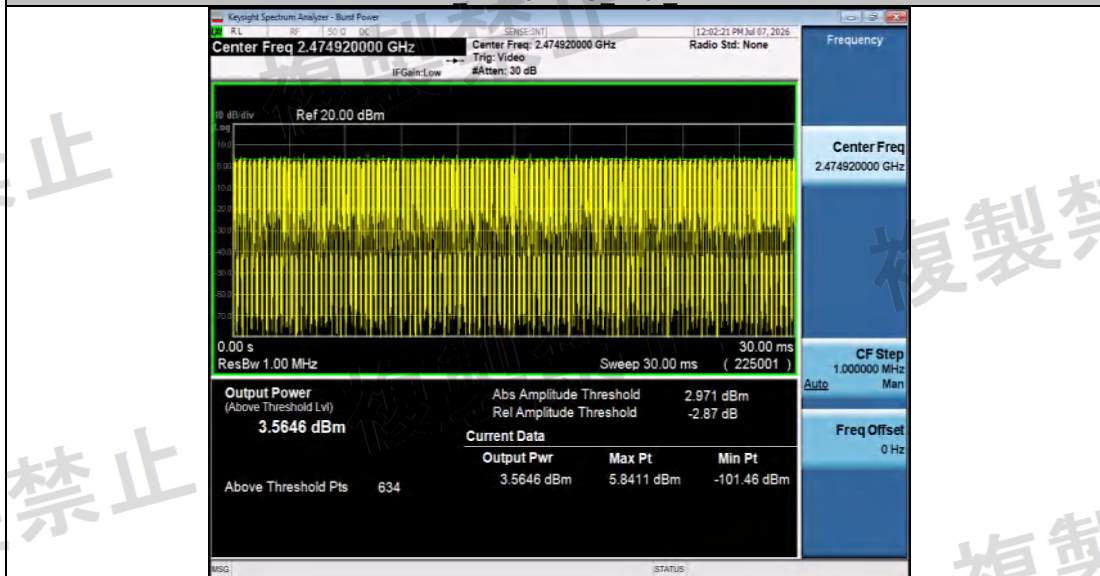
NTNV_11N20MIMO_Ant1_2472



NTNV_11N20MIMO Ant1 2472



NTNV_11N20MIMO Ant2 2472

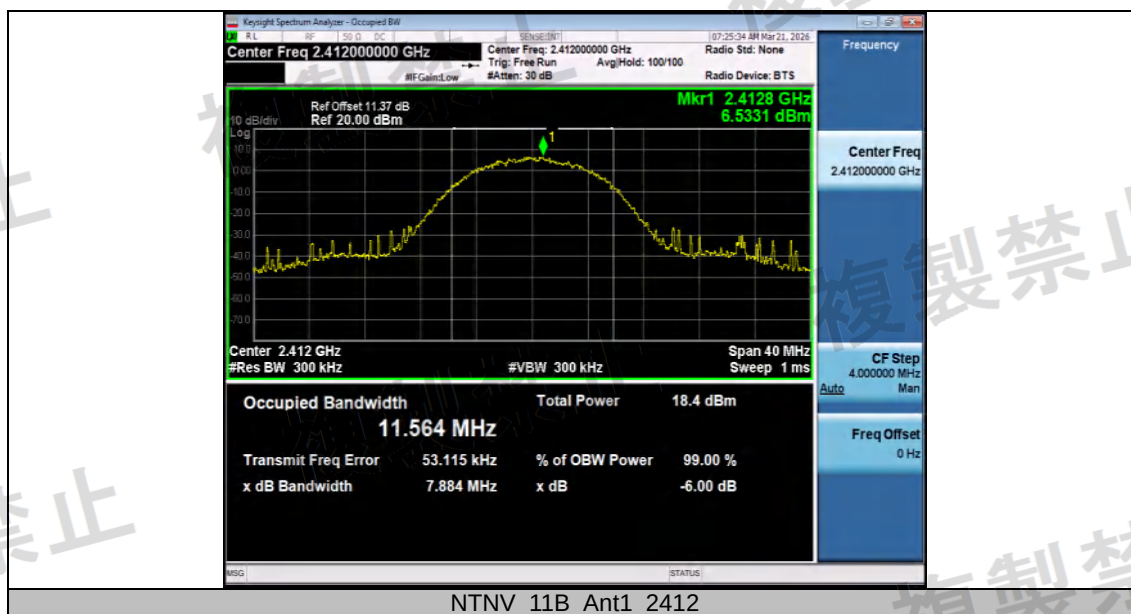


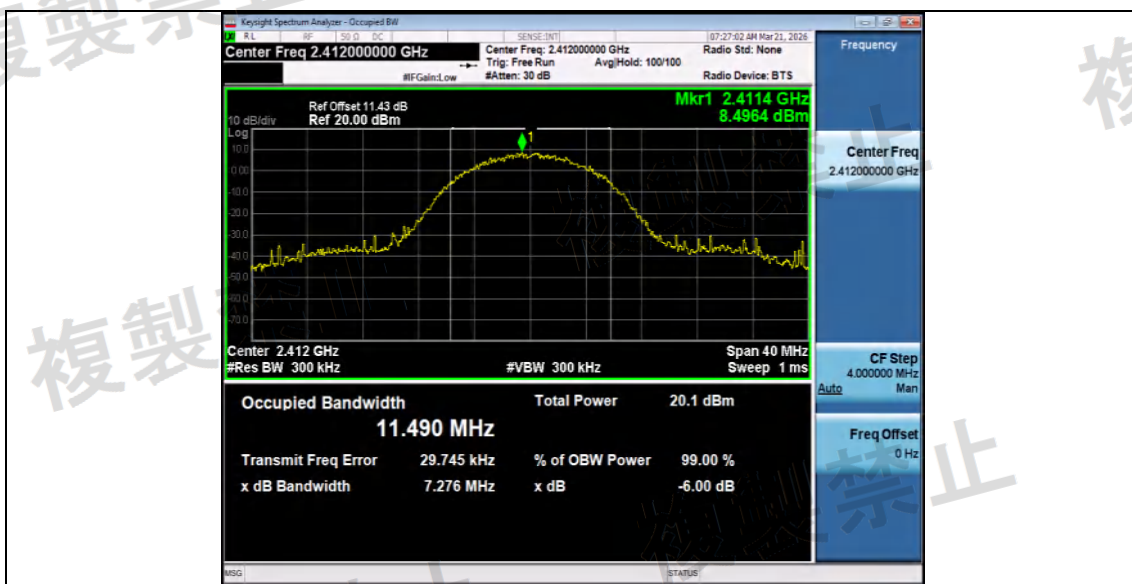
NTNV_11N20MIMO Ant2 2472

Appendix C: Occupied Bandwidth

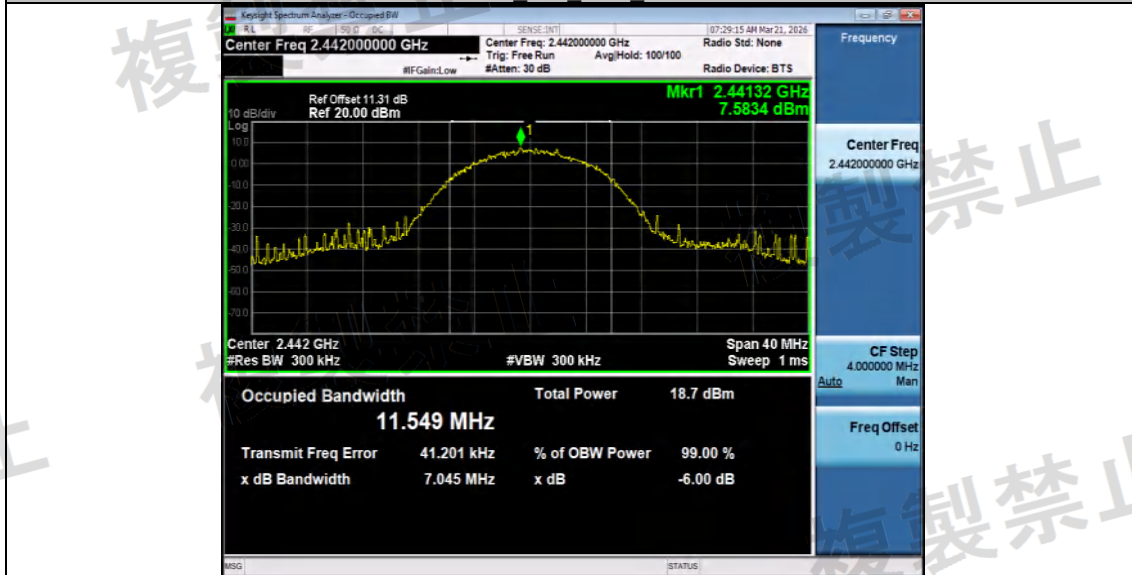
Test Result

Test Condition	Test Mode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	11B	Ant1	2412	11.564	≤26	PASS
		Ant2	2412	11.490	≤26	PASS
		Ant1	2442	11.549	≤26	PASS
		Ant2	2442	11.532	≤26	PASS
		Ant1	2472	11.500	≤26	PASS
		Ant2	2472	11.508	≤26	PASS
	11G	Ant1	2412	16.723	≤26	PASS
		Ant2	2412	16.779	≤26	PASS
		Ant1	2442	16.793	≤26	PASS
		Ant2	2442	16.762	≤26	PASS
		Ant1	2472	16.802	≤26	PASS
		Ant2	2472	16.778	≤26	PASS
	11N20MIMO	Ant1	2412	16.845	≤26	PASS
		Ant2	2412	17.915	≤26	PASS
		Ant1	2442	16.899	≤26	PASS
		Ant2	2442	18.013	≤26	PASS
		Ant1	2472	16.821	≤26	PASS
		Ant2	2472	17.954	≤26	PASS

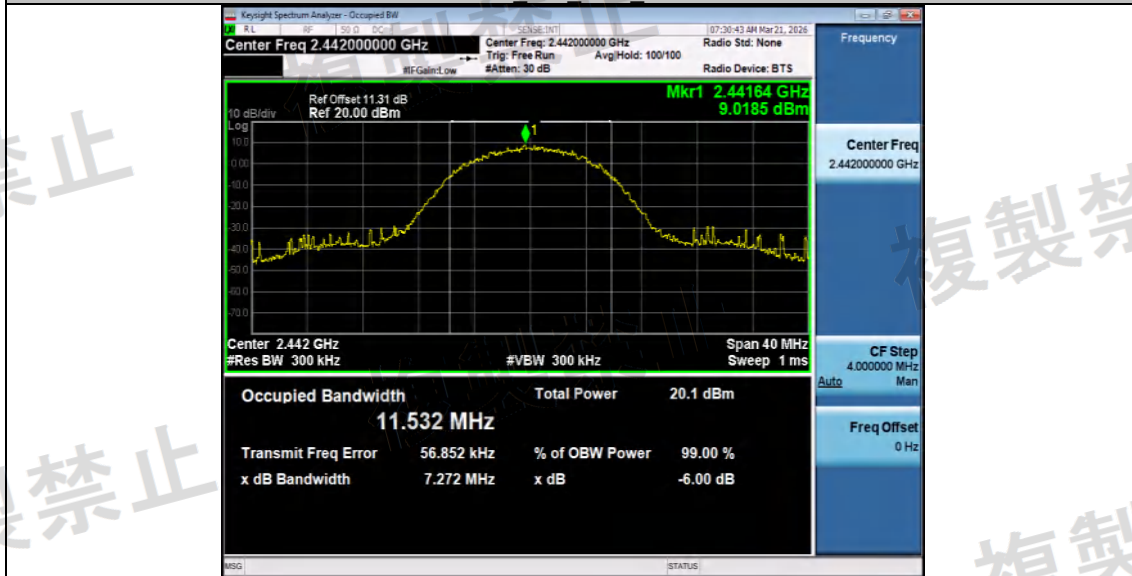




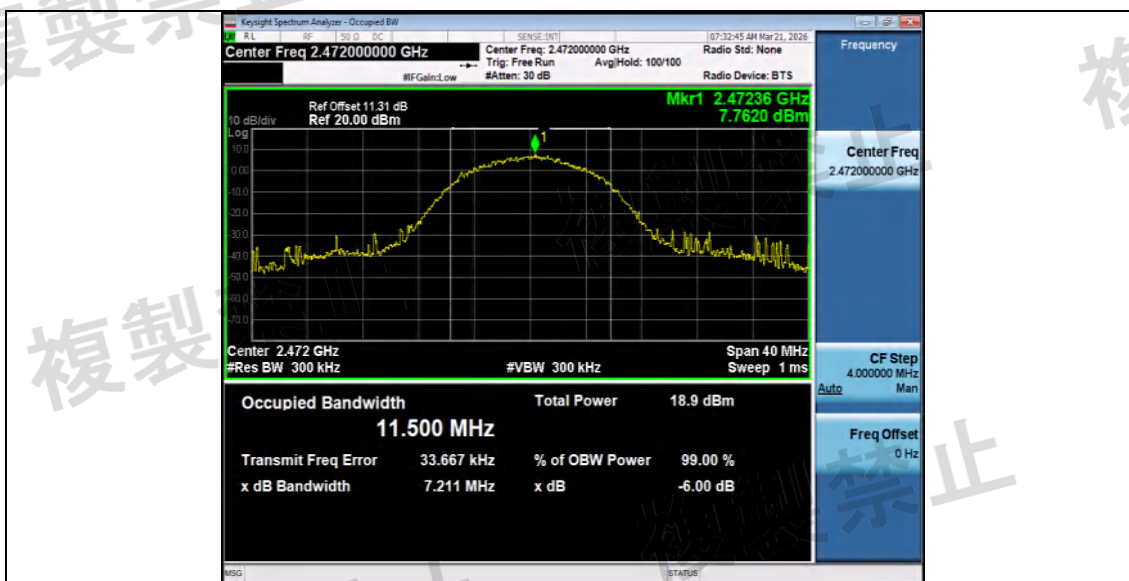
NTNV 11B Ant2 2412



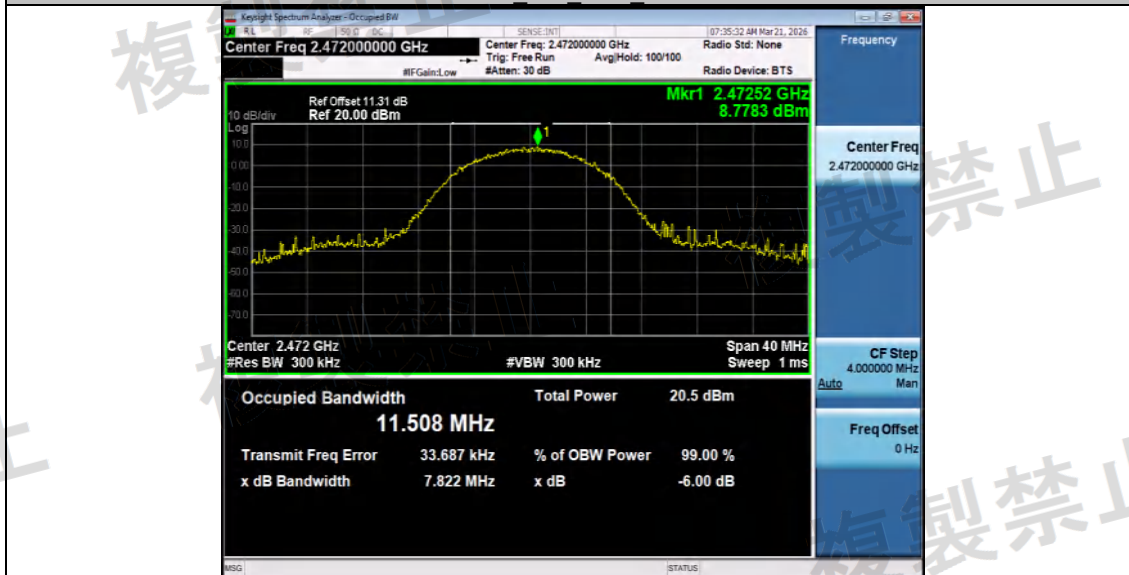
NTNV 11B Ant1 2442



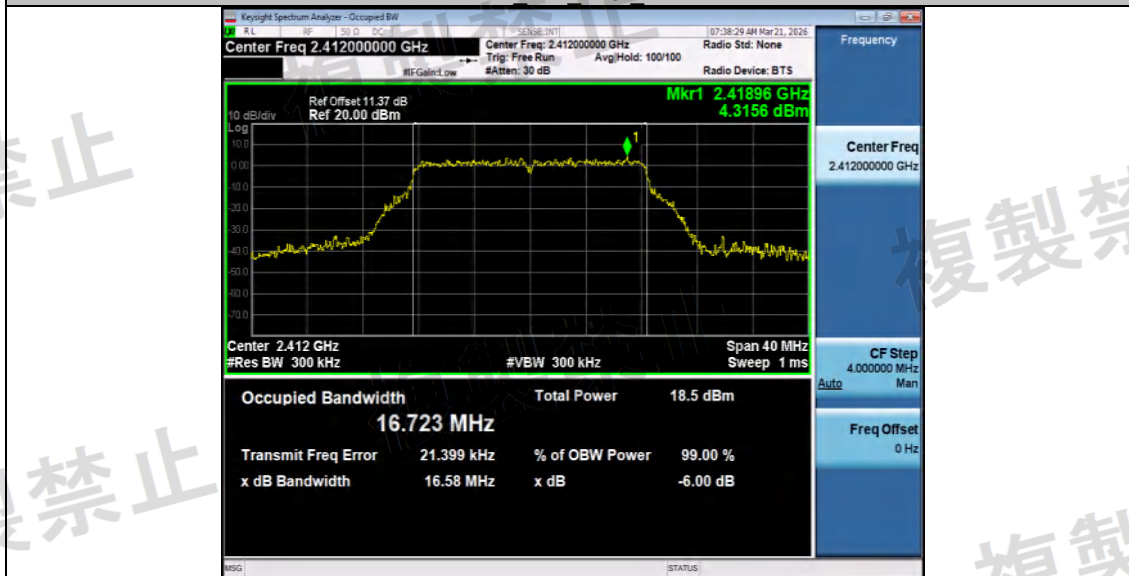
NTNV 11B Ant2 2442



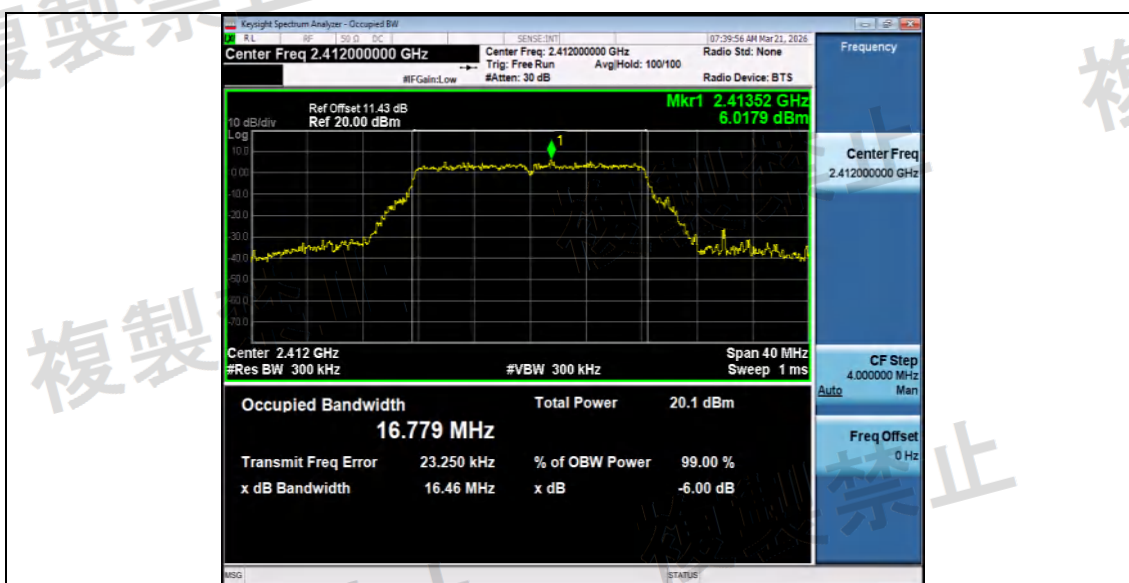
NTNV 11B Ant1 2472



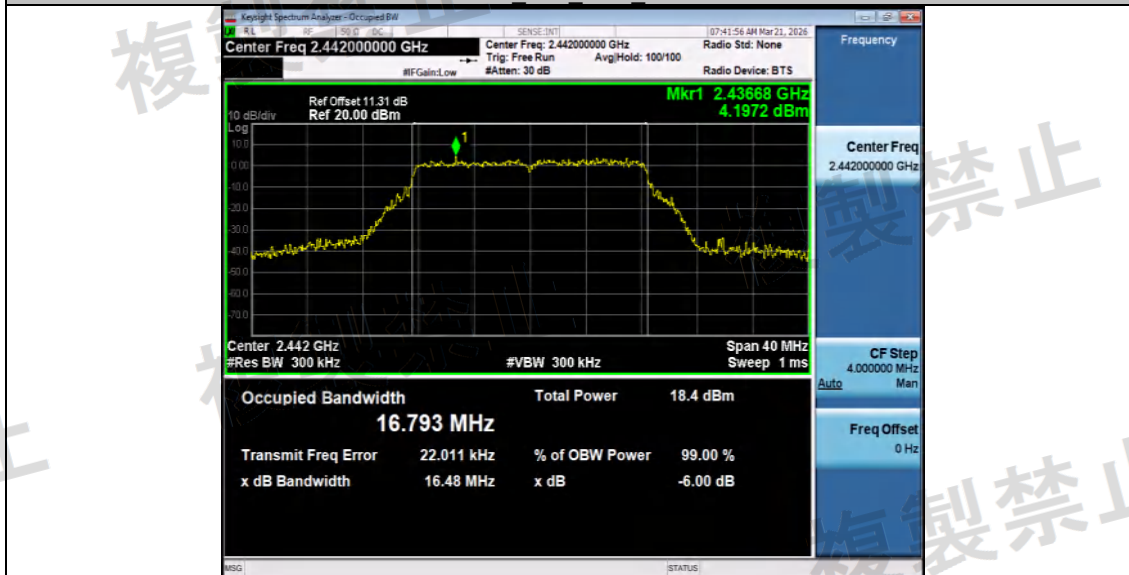
NTNV 11B Ant2 2472



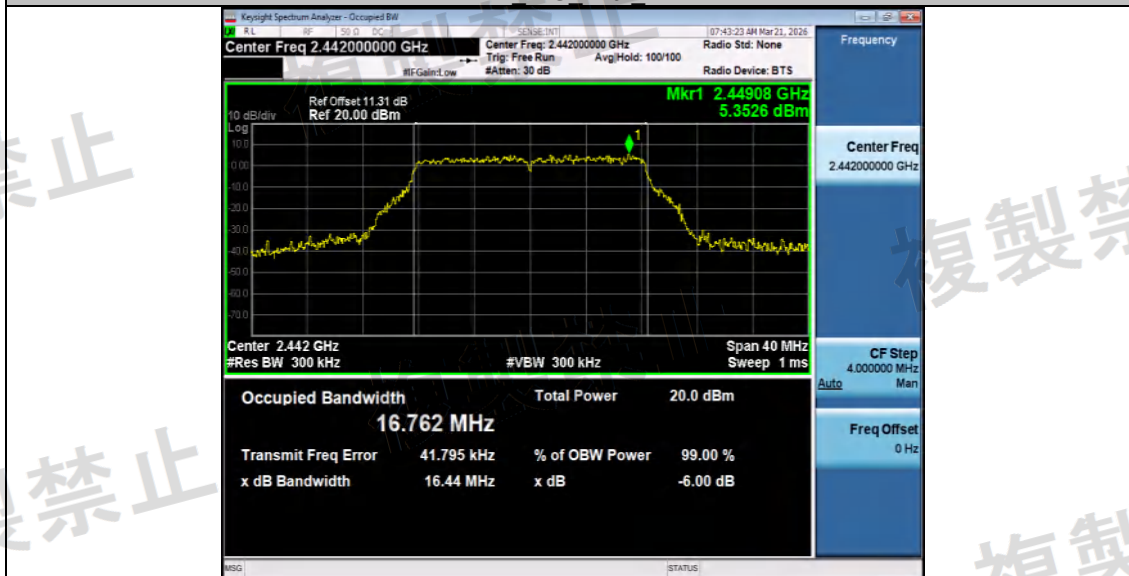
NTNV 11G Ant1 2412



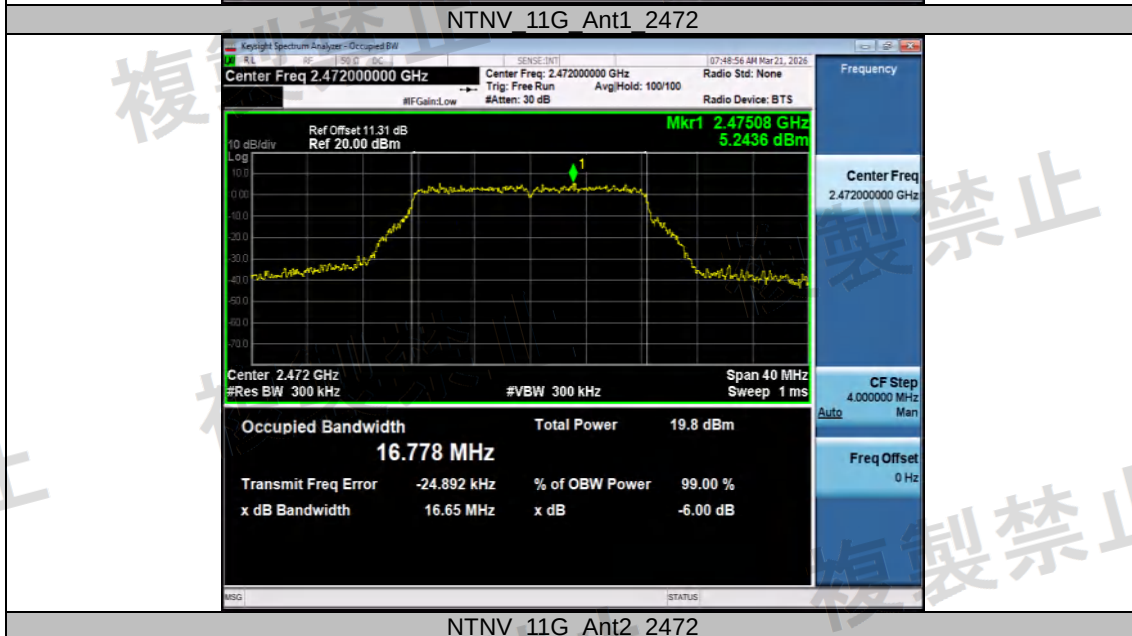
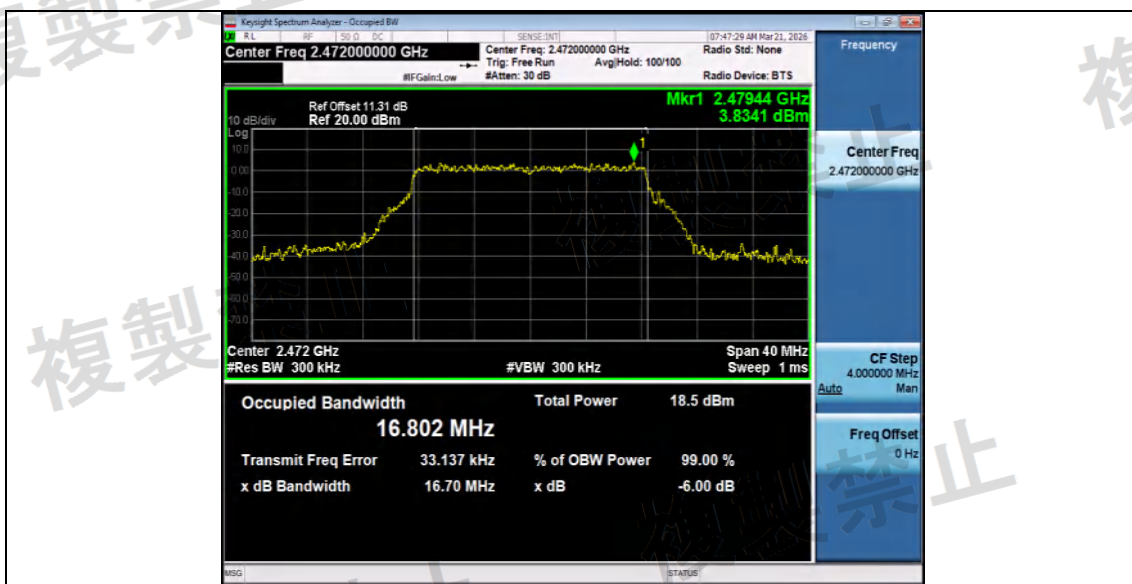
NTNV 11G Ant2 2412



NTNV 11G Ant1 2442



NTNV 11G Ant2 2442





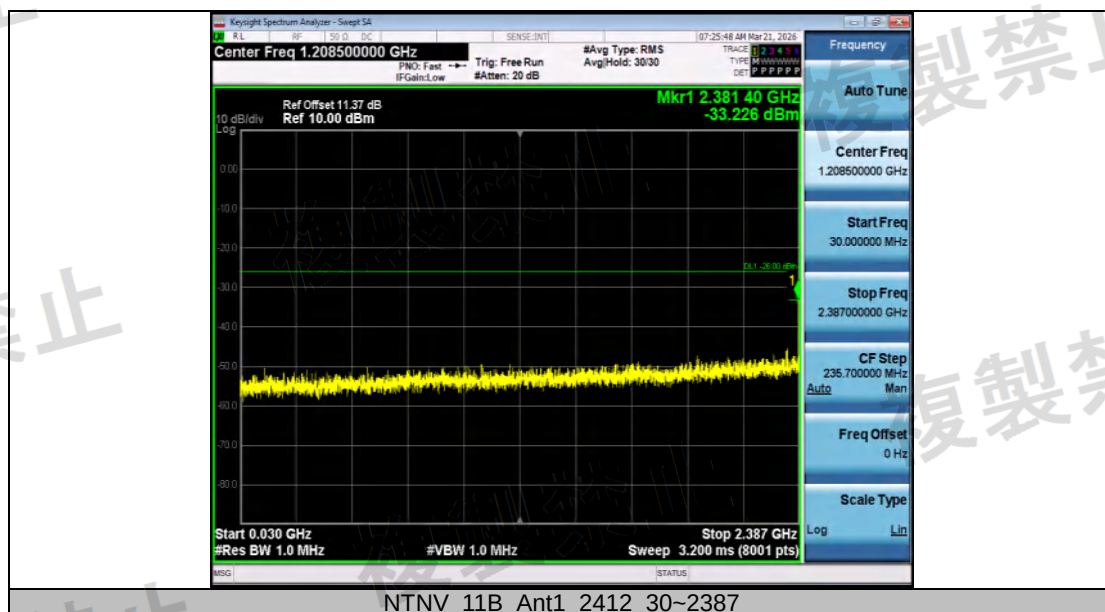


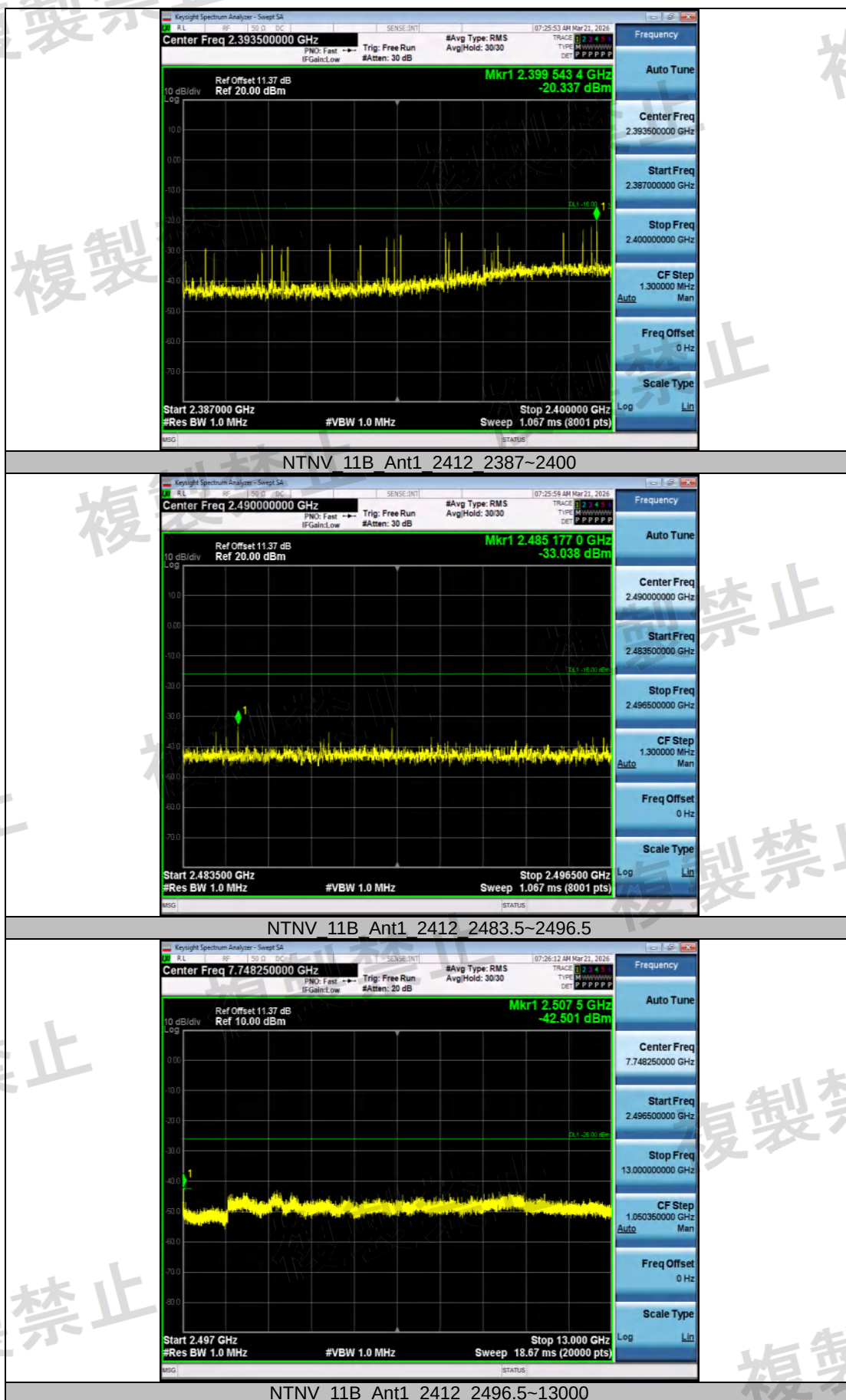
Appendix D: Transmitter Spurious Emissions

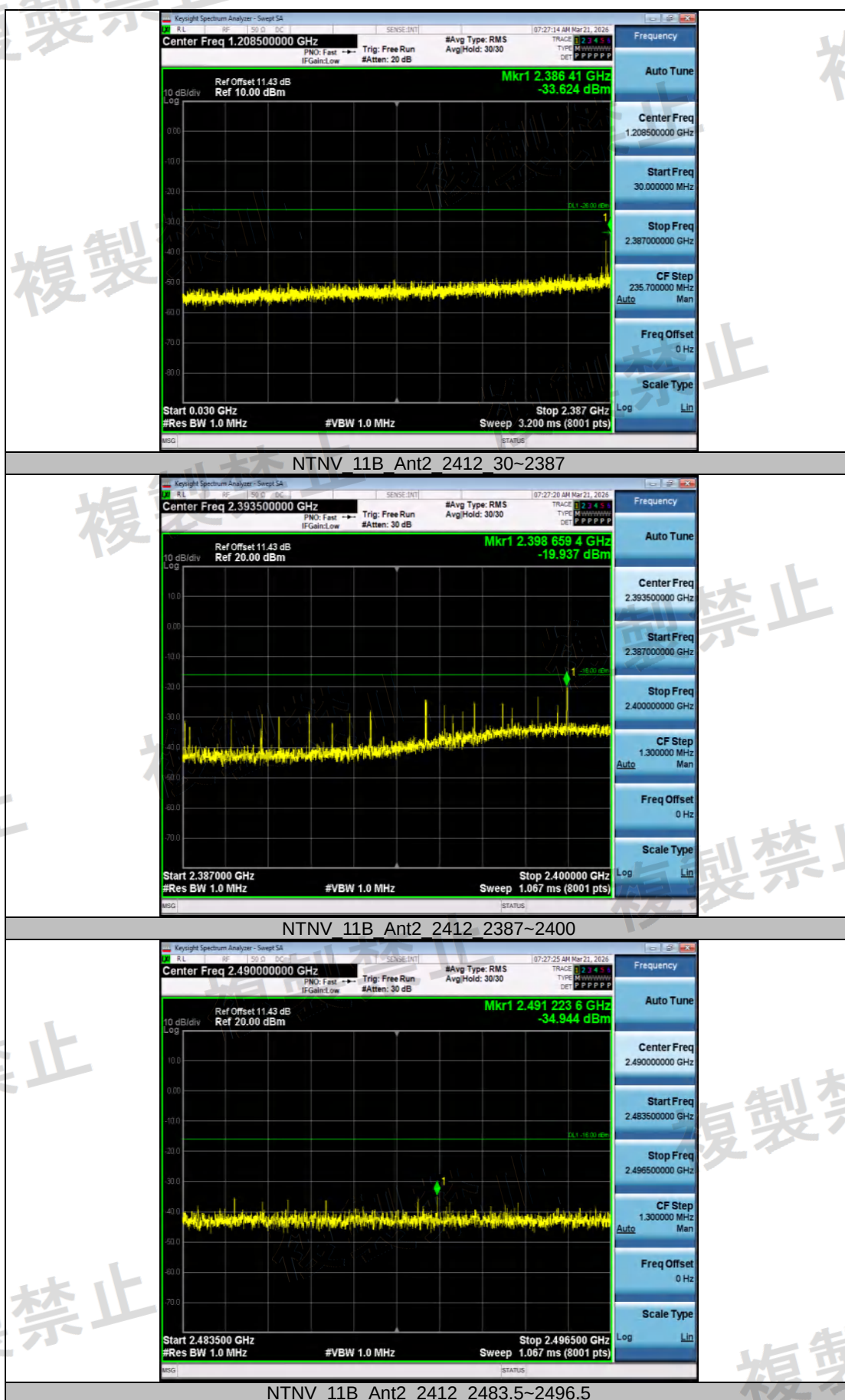
Test Result

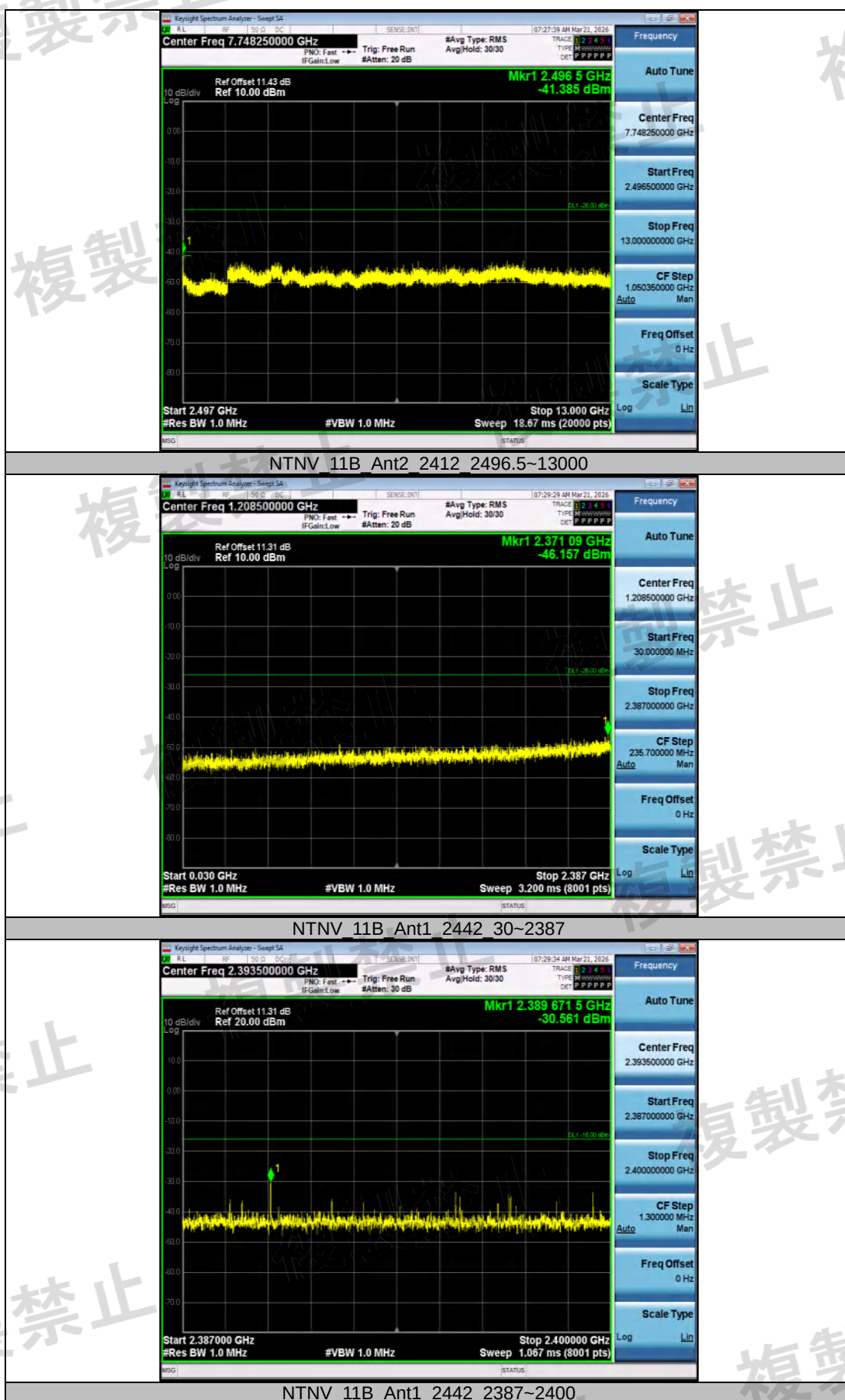
Test Condition	Test Mode	Antenna	Freq(MHz)	Freq.Range [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Result [μW/MHz]	Limit [μW/MHz]	Verdict
NTNV	11B	Ant1	2412	30~2387	-33.23	≤-26	0.47534	≤2.5	PASS
				2387~2400	-20.34	≤-16	9.24698	≤25	PASS
				2483.5~2496.5	-33.04	≤-16	0.49659	≤25	PASS
				2496.5~13000	-42.50	≤-26	0.05623	≤2.5	PASS
		Ant2	2412	30~2387	-33.62	≤-26	0.43451	≤2.5	PASS
				2387~2400	-19.94	≤-16	10.13911	≤25	PASS
				2483.5~2496.5	-34.94	≤-16	0.32063	≤25	PASS
				2496.5~13000	-41.39	≤-26	0.07261	≤2.5	PASS
		Ant1	2442	30~2387	-46.16	≤-26	0.02421	≤2.5	PASS
				2387~2400	-30.56	≤-16	0.87902	≤25	PASS
				2483.5~2496.5	-24.71	≤-16	3.38065	≤25	PASS
				2496.5~13000	-37.56	≤-26	0.17539	≤2.5	PASS
		Ant2	2442	30~2387	-45.84	≤-26	0.02606	≤2.5	PASS
				2387~2400	-31.02	≤-16	0.79068	≤25	PASS
				2483.5~2496.5	-29.93	≤-16	1.01625	≤25	PASS
				2496.5~13000	-43.04	≤-26	0.04966	≤2.5	PASS
		Ant1	2472	30~2387	-46.64	≤-26	0.02168	≤2.5	PASS
				2387~2400	-37.76	≤-16	0.16749	≤25	PASS
				2483.5~2496.5	-17.86	≤-16	16.36817	≤25	See table below
				2496.5~13000	-28.82	≤-26	1.31220	≤2.5	See table below
		Ant2	2472	30~2387	-44.73	≤-26	0.03365	≤2.5	PASS
				2387~2400	-37.60	≤-16	0.17378	≤25	PASS
				2483.5~2496.5	-20.04	≤-16	9.90832	≤25	PASS
				2496.5~13000	-30.80	≤-26	0.83176	≤2.5	PASS
	11G	Ant1	2412	30~2387	-43.82	≤-26	0.04150	≤2.5	PASS
				2387~2400	-22.92	≤-16	5.10505	≤25	PASS
				2483.5~2496.5	-37.52	≤-16	0.17701	≤25	PASS
				2496.5~13000	-41.79	≤-26	0.06622	≤2.5	PASS
		Ant2	2412	30~2387	-41.81	≤-26	0.06592	≤2.5	PASS
				2387~2400	-22.13	≤-16	6.12350	≤25	PASS
				2483.5~2496.5	-38.24	≤-16	0.14997	≤25	PASS
				2496.5~13000	-41.90	≤-26	0.06457	≤2.5	PASS
		Ant1	2442	30~2387	-46.03	≤-26	0.02495	≤2.5	PASS
				2387~2400	-38.79	≤-16	0.13213	≤25	PASS
				2483.5~2496.5	-37.92	≤-16	0.16144	≤25	PASS
				2496.5~13000	-42.79	≤-26	0.05260	≤2.5	PASS
		Ant2	2442	30~2387	-46.66	≤-26	0.02158	≤2.5	PASS
				2387~2400	-38.40	≤-16	0.14454	≤25	PASS
				2483.5~2496.5	-37.55	≤-16	0.17579	≤25	PASS
				2496.5~13000	-43.07	≤-26	0.04932	≤2.5	PASS
		Ant1	2472	30~2387	-45.36	≤-26	0.02911	≤2.5	PASS
				2387~2400	-38.79	≤-16	0.13213	≤25	PASS
				2483.5~2496.5	-19.98	≤-16	10.04616	≤25	PASS
				2496.5~13000	-40.60	≤-26	0.08710	≤2.5	PASS

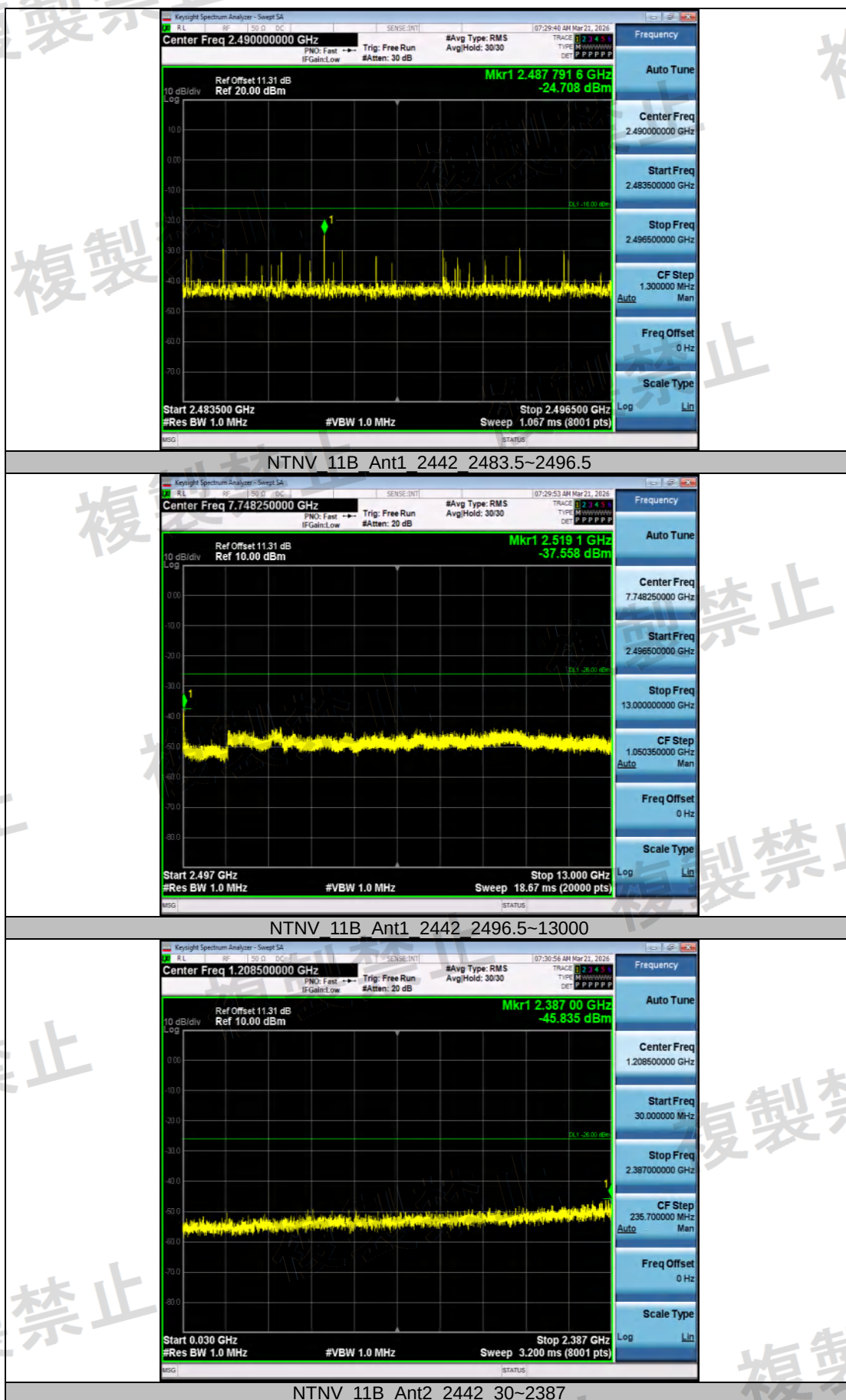
11N20MI MO	Ant2	2472	30~2387	-46.05	≤-26	0.02483	≤2.5	PASS
			2387~2400	-39.22	≤-16	0.11967	≤25	PASS
			2483.5~2496.5	-18.20	≤-16	15.13561	≤25	See table below
			2496.5~13000	-42.36	≤-26	0.05808	≤2.5	PASS
	Ant1	2412	30~2387	-41.53	≤-26	0.07031	≤2.5	PASS
			2387~2400	-24.73	≤-16	3.36512	≤25	PASS
			2483.5~2496.5	-37.27	≤-16	0.18750	≤25	PASS
			2496.5~13000	-42.74	≤-26	0.05321	≤2.5	PASS
	Ant2	2412	30~2387	-40.80	≤-26	0.08318	≤2.5	PASS
			2387~2400	-25.10	≤-16	3.09030	≤25	PASS
			2483.5~2496.5	-37.46	≤-16	0.17947	≤25	PASS
			2496.5~13000	-43.06	≤-26	0.04943	≤2.5	PASS
	Ant1	2442	30~2387	-46.52	≤-26	0.02228	≤2.5	PASS
			2387~2400	-38.91	≤-16	0.12853	≤25	PASS
			2483.5~2496.5	-37.17	≤-16	0.19187	≤25	PASS
			2496.5~13000	-43.11	≤-26	0.04887	≤2.5	PASS
	Ant2	2442	30~2387	-45.36	≤-26	0.02911	≤2.5	PASS
			2387~2400	-38.85	≤-16	0.13032	≤25	PASS
			2483.5~2496.5	-37.72	≤-16	0.16904	≤25	PASS
			2496.5~13000	-43.10	≤-26	0.04898	≤2.5	PASS
	Ant1	2472	30~2387	-40.31	≤-26	0.09311	≤2.5	PASS
			2387~2400	-37.64	≤-16	0.17219	≤25	PASS
			2483.5~2496.5	-21.04	≤-16	7.87046	≤25	PASS
			2496.5~13000	-40.03	≤-26	0.09931	≤2.5	PASS
	Ant2	2472	30~2387	-43.70	≤-26	0.04266	≤2.5	PASS
			2387~2400	-38.98	≤-16	0.12647	≤25	PASS
			2483.5~2496.5	-24.18	≤-16	3.81944	≤25	PASS
			2496.5~13000	-42.85	≤-26	0.05188	≤2.5	PASS

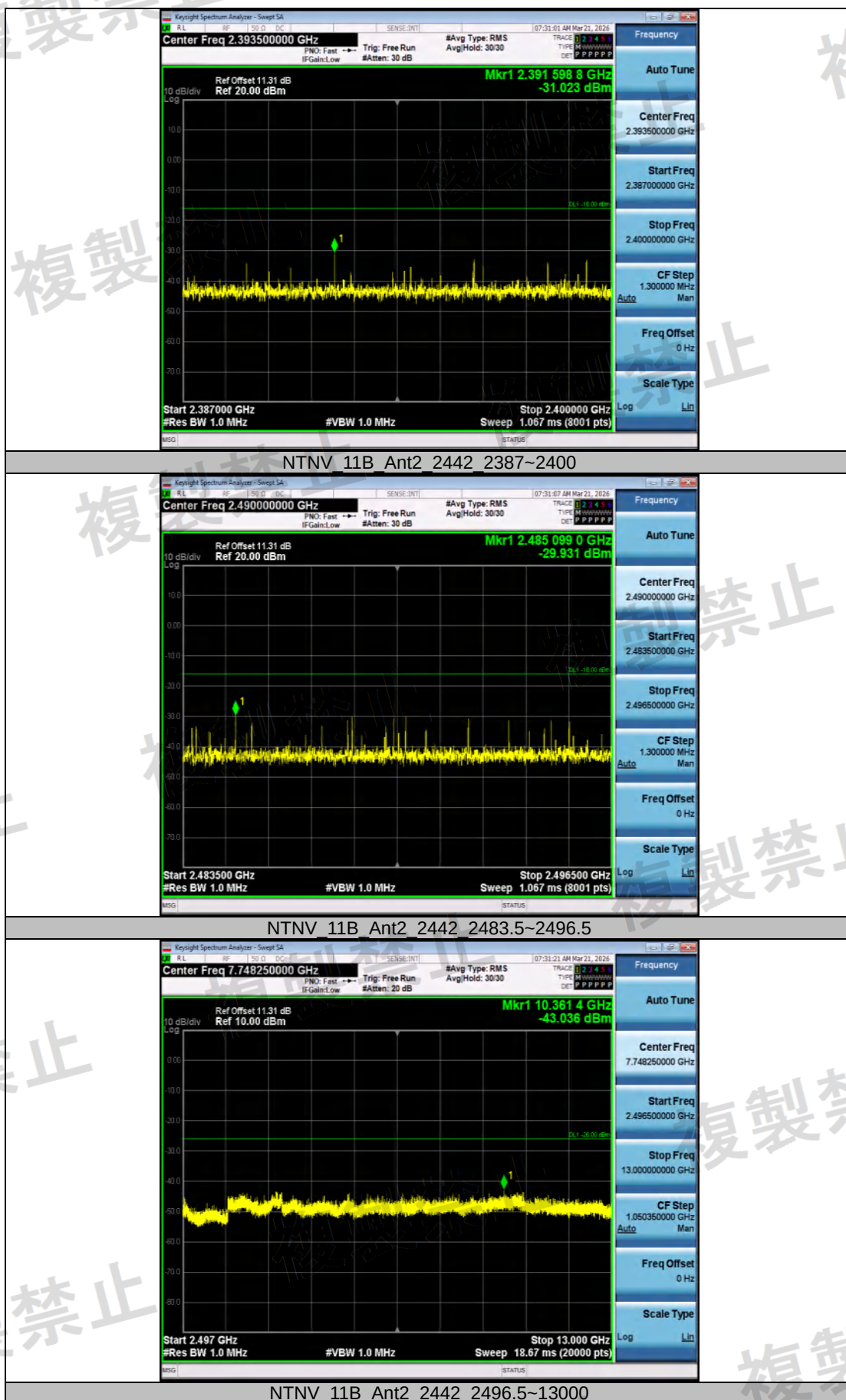


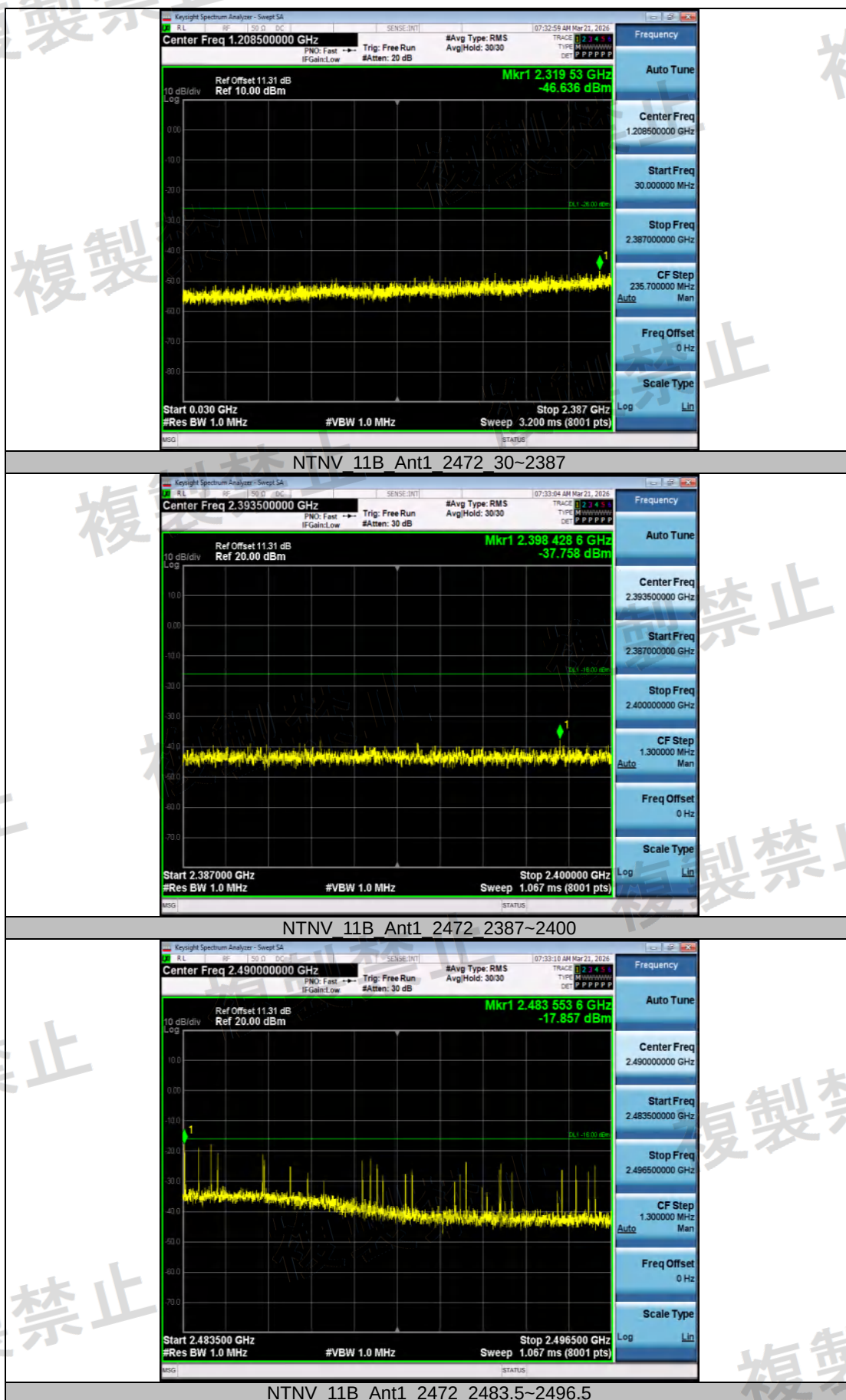


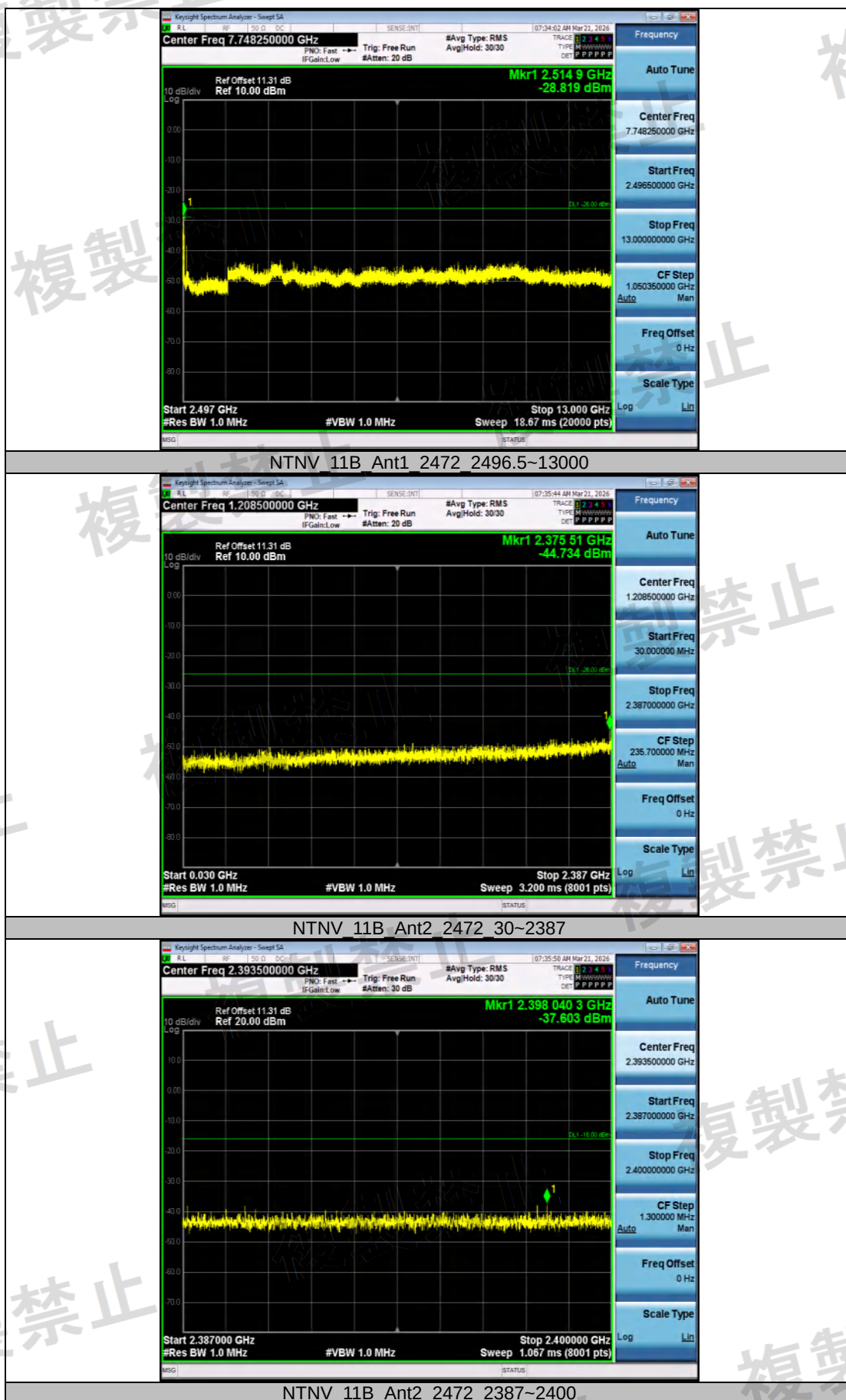


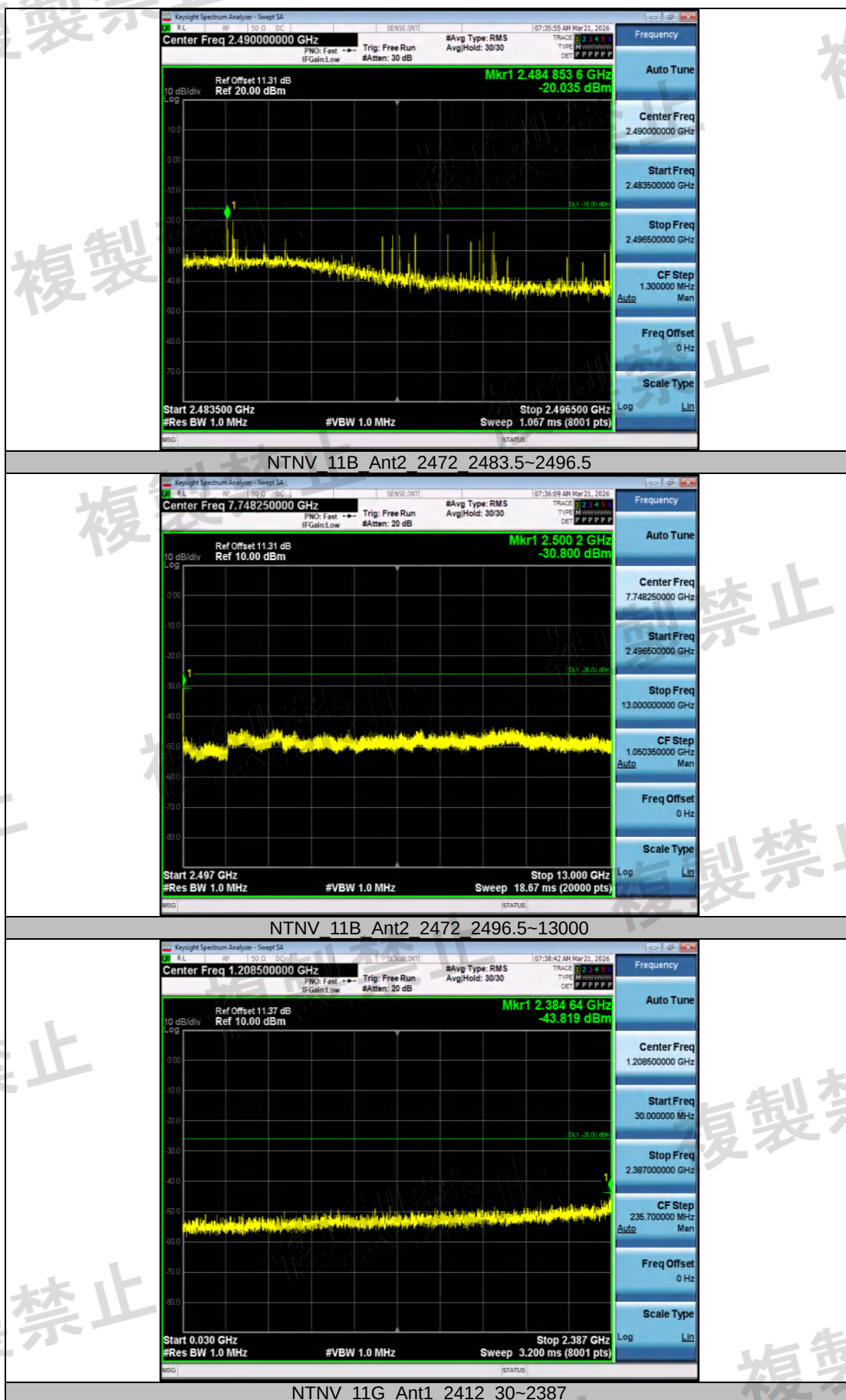


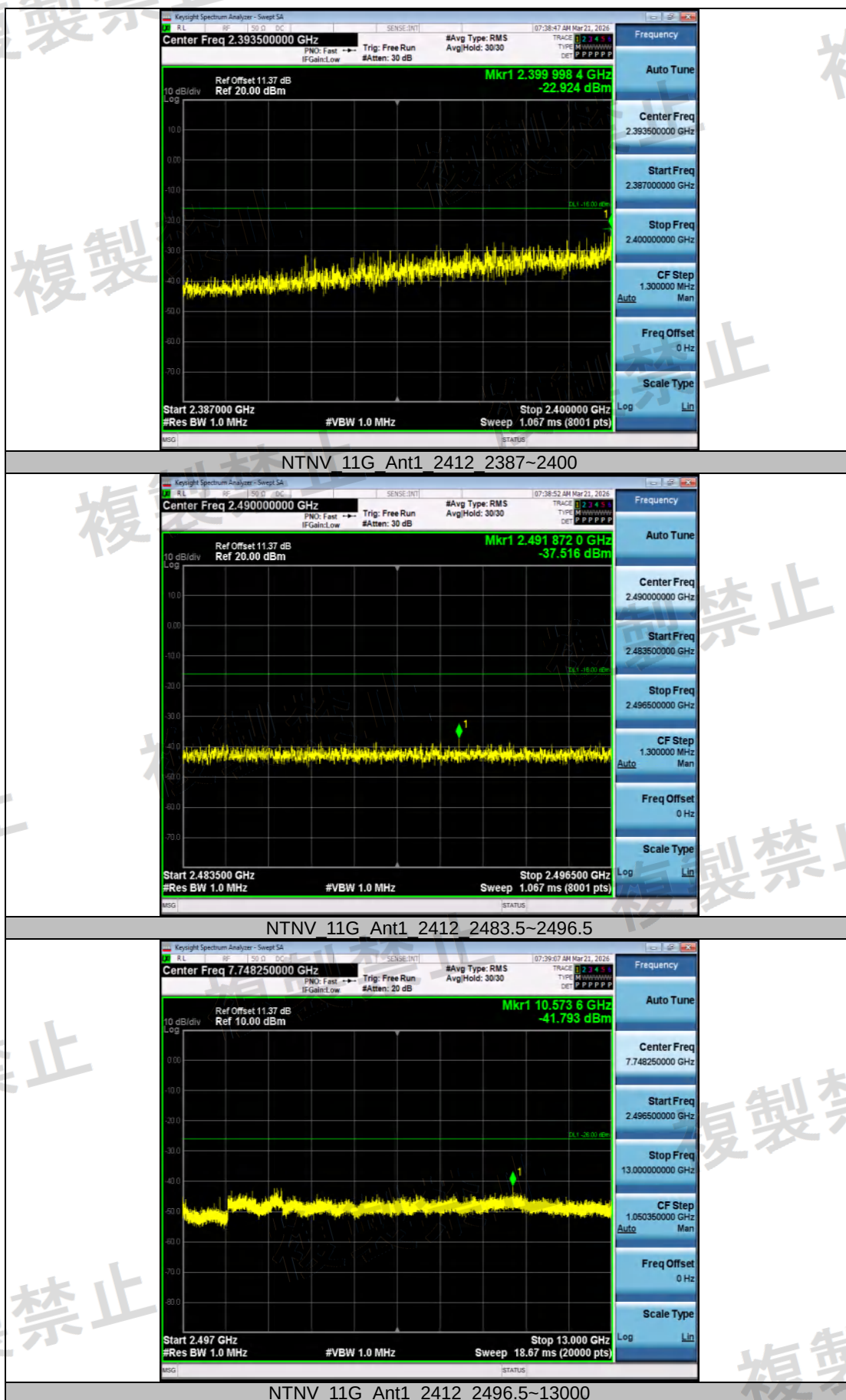


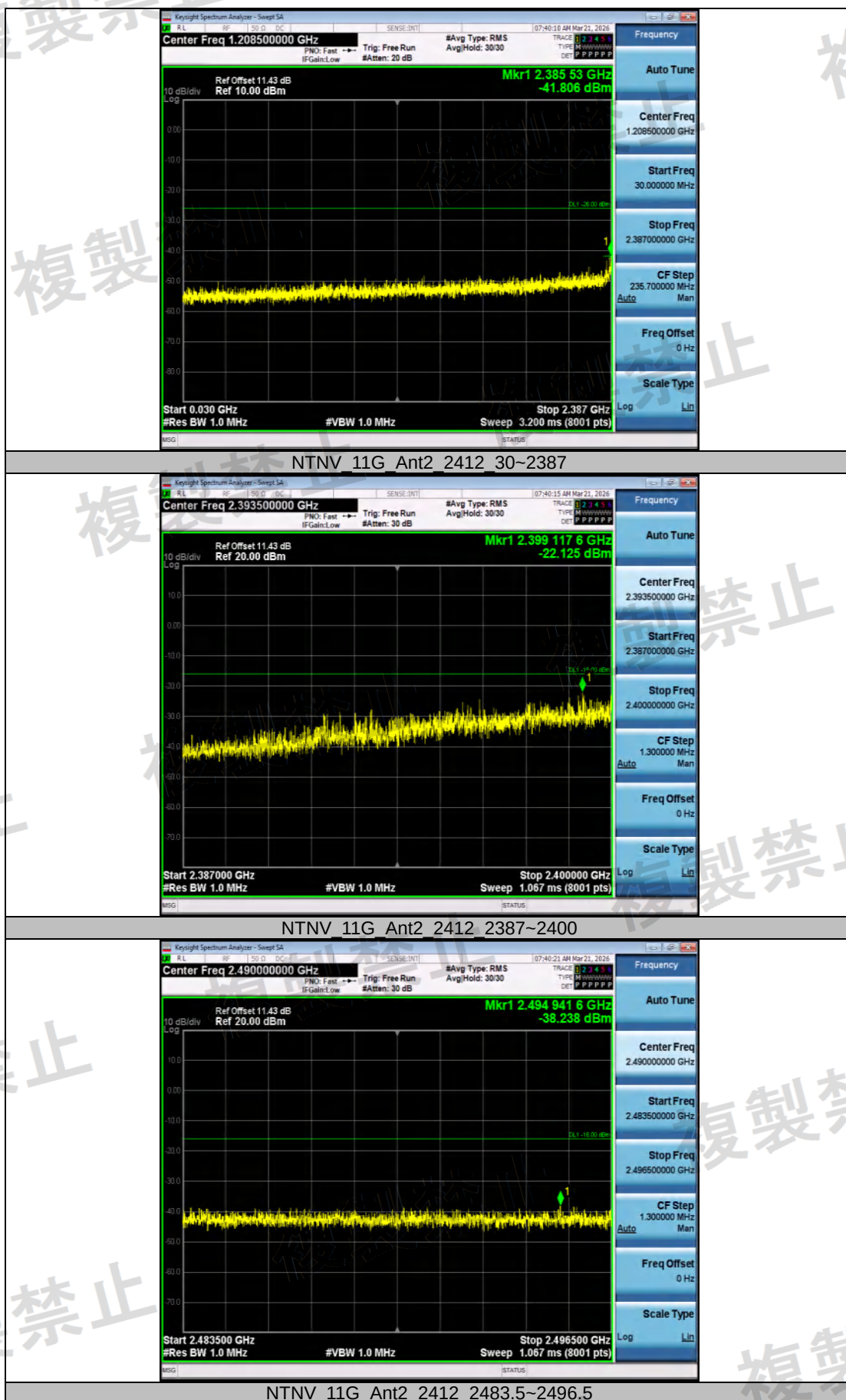


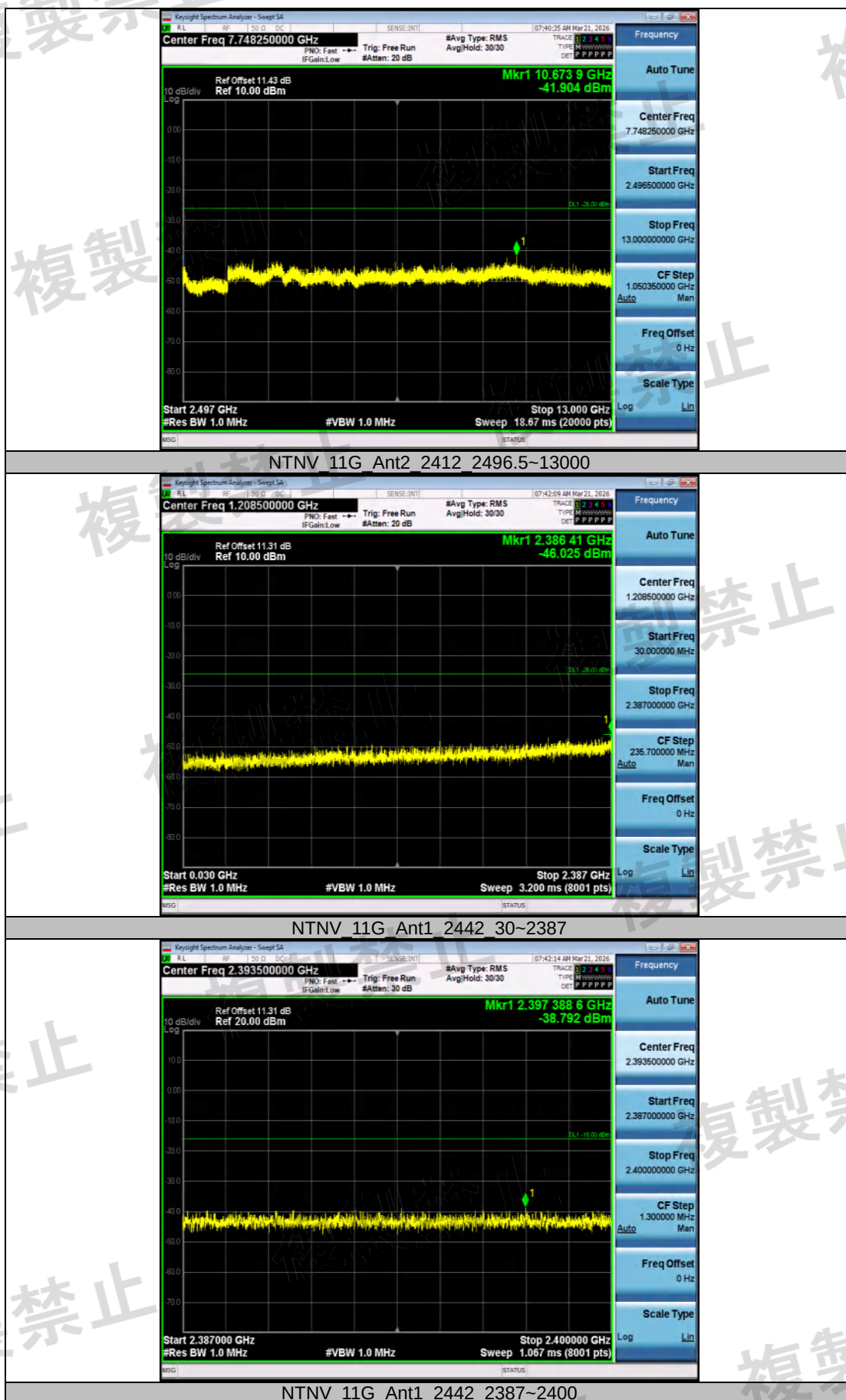


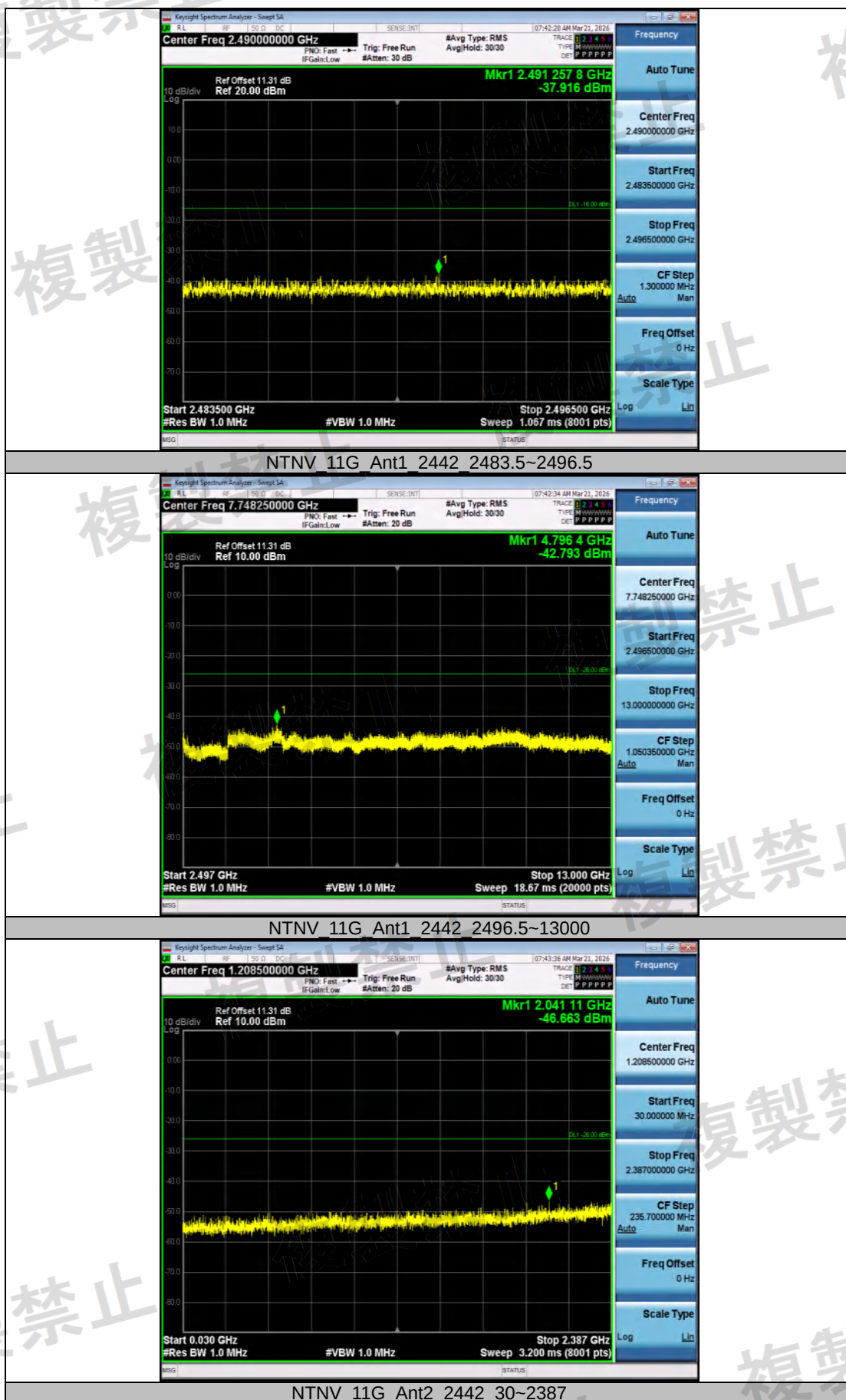


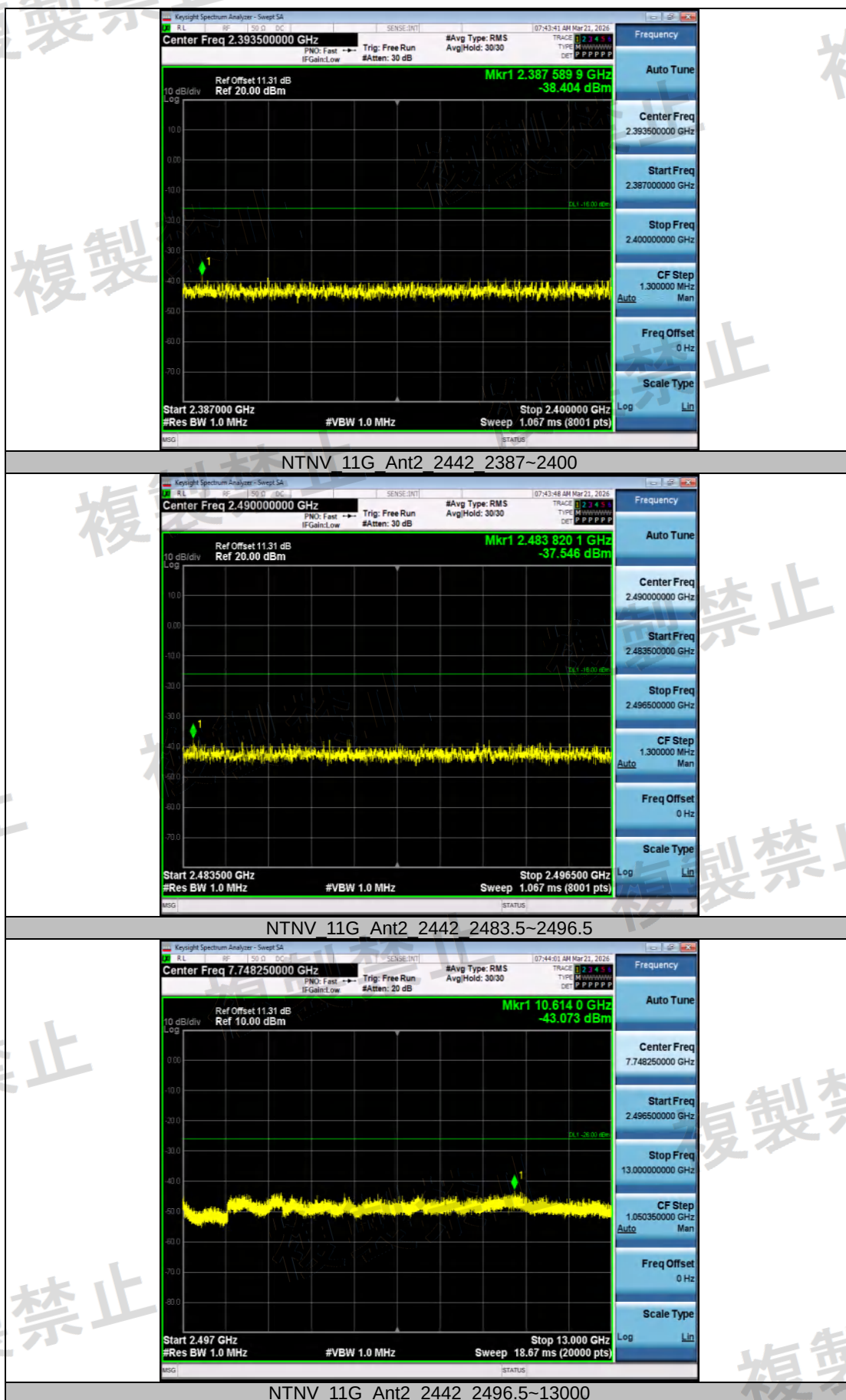


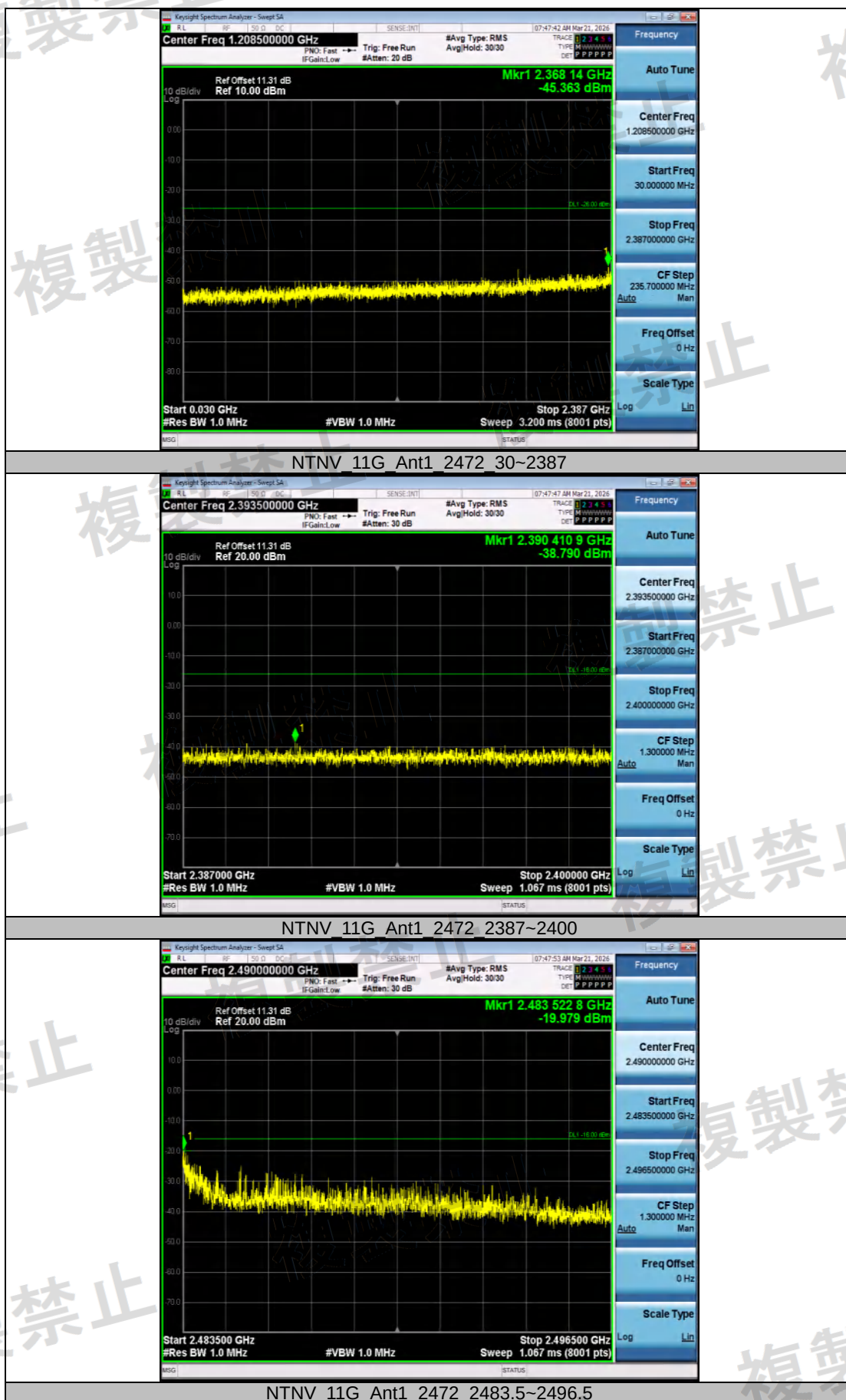


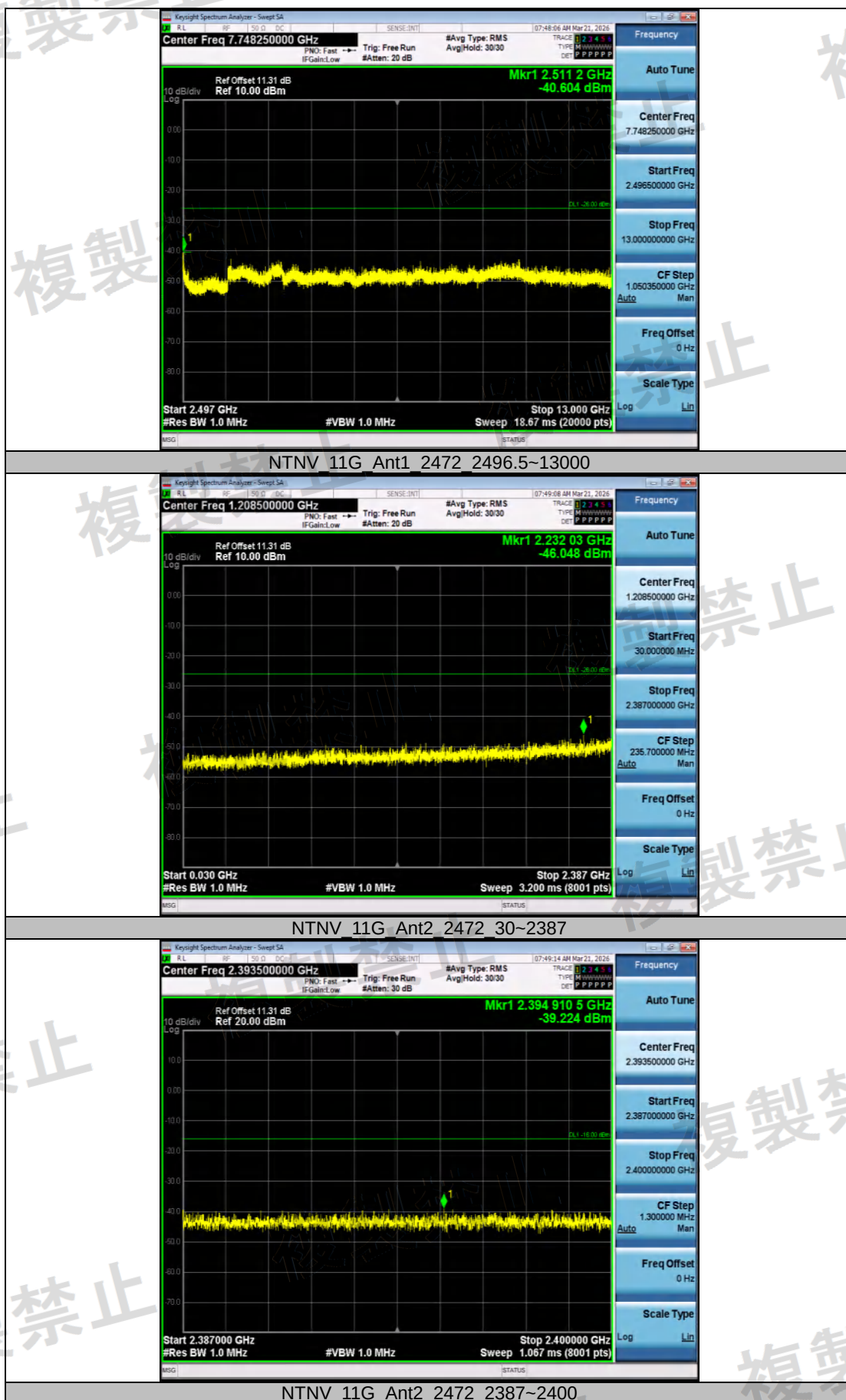


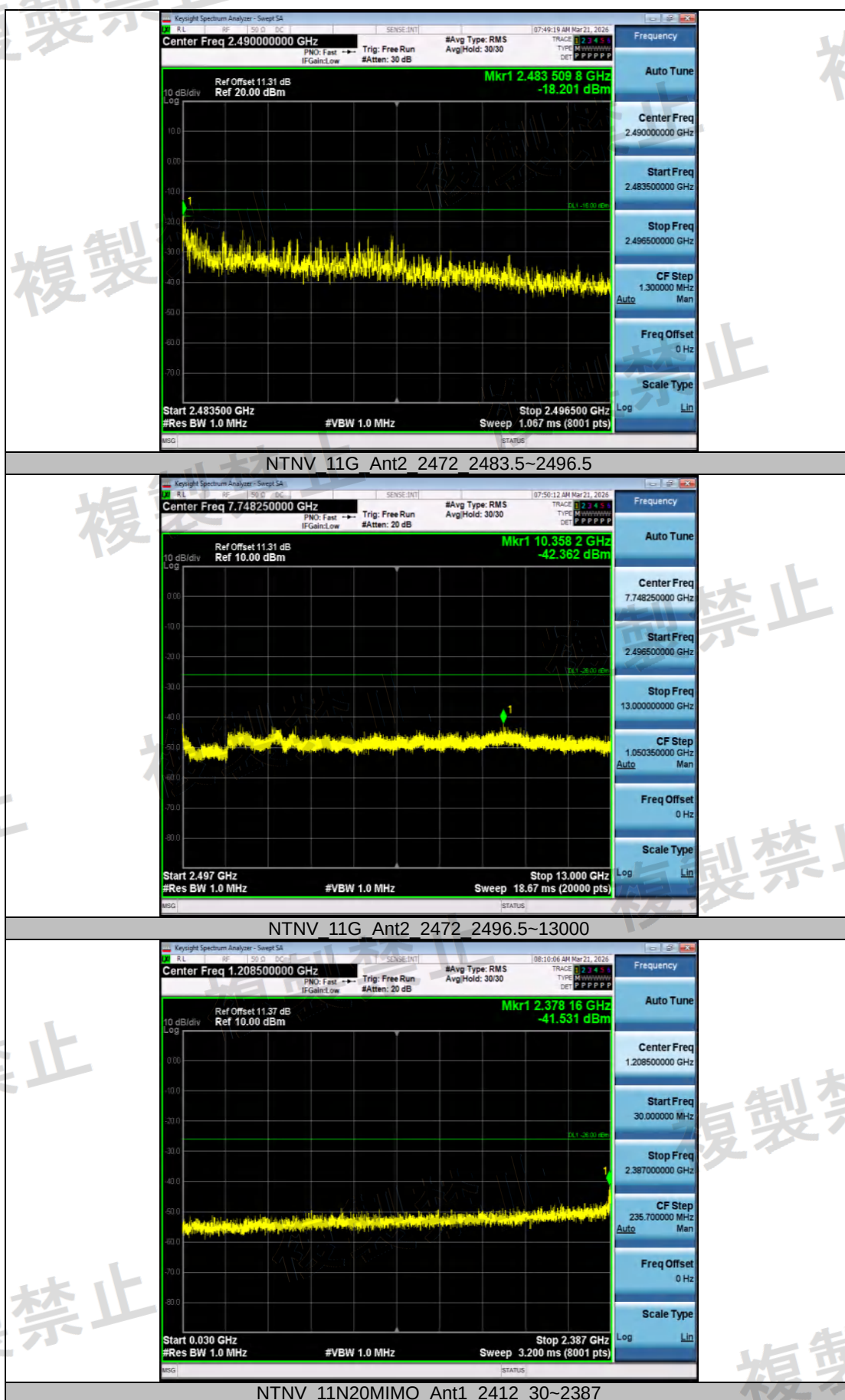


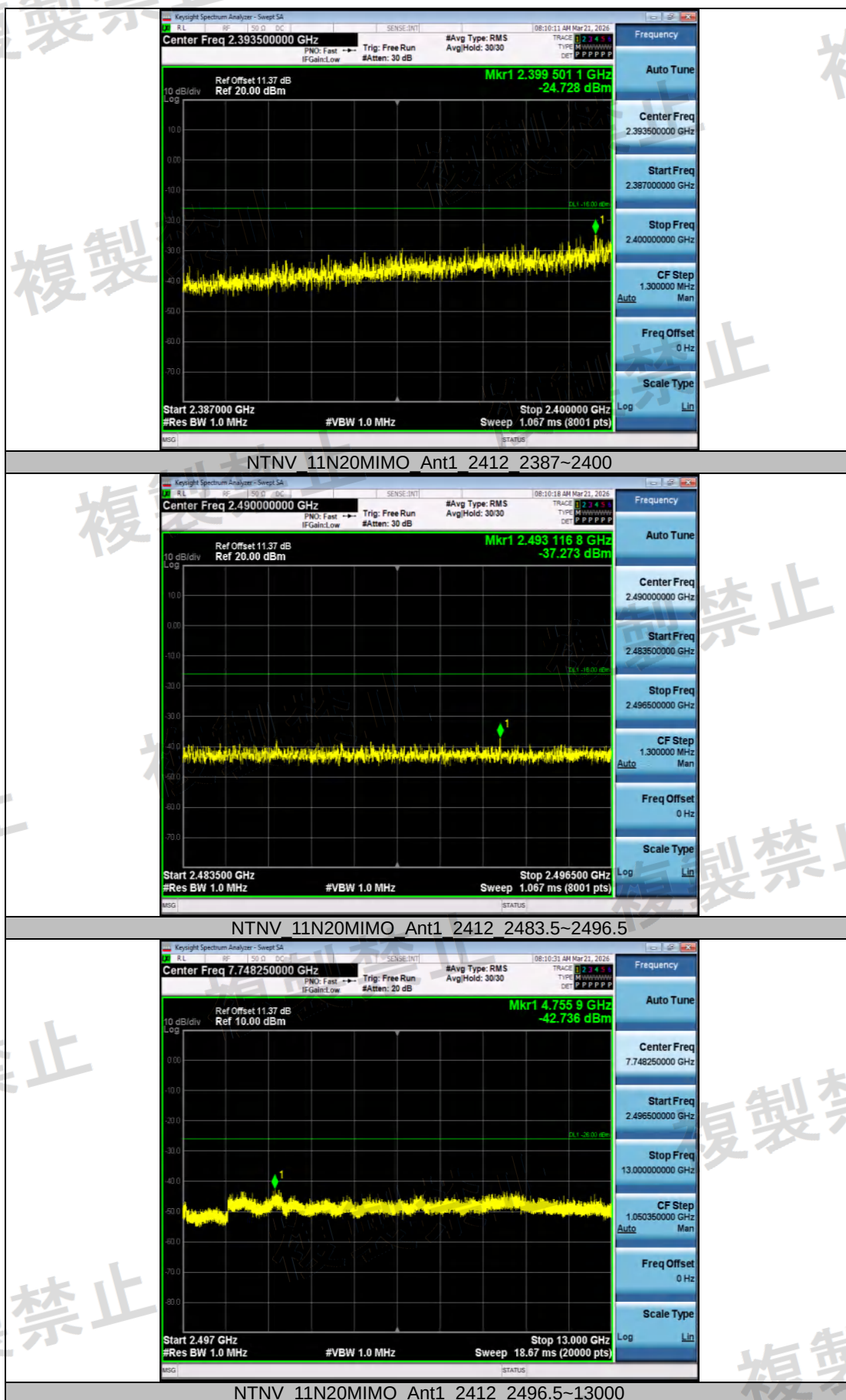


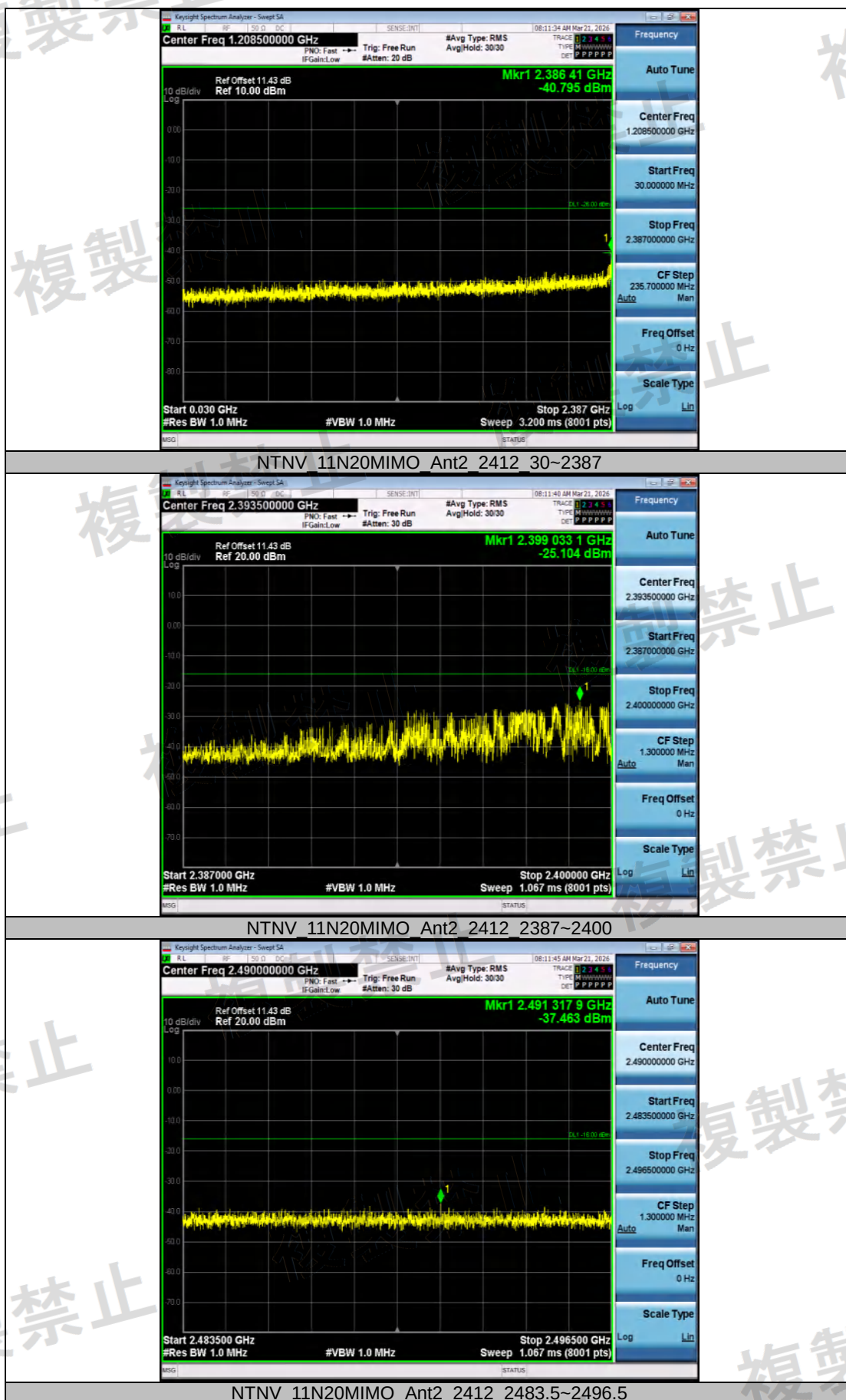


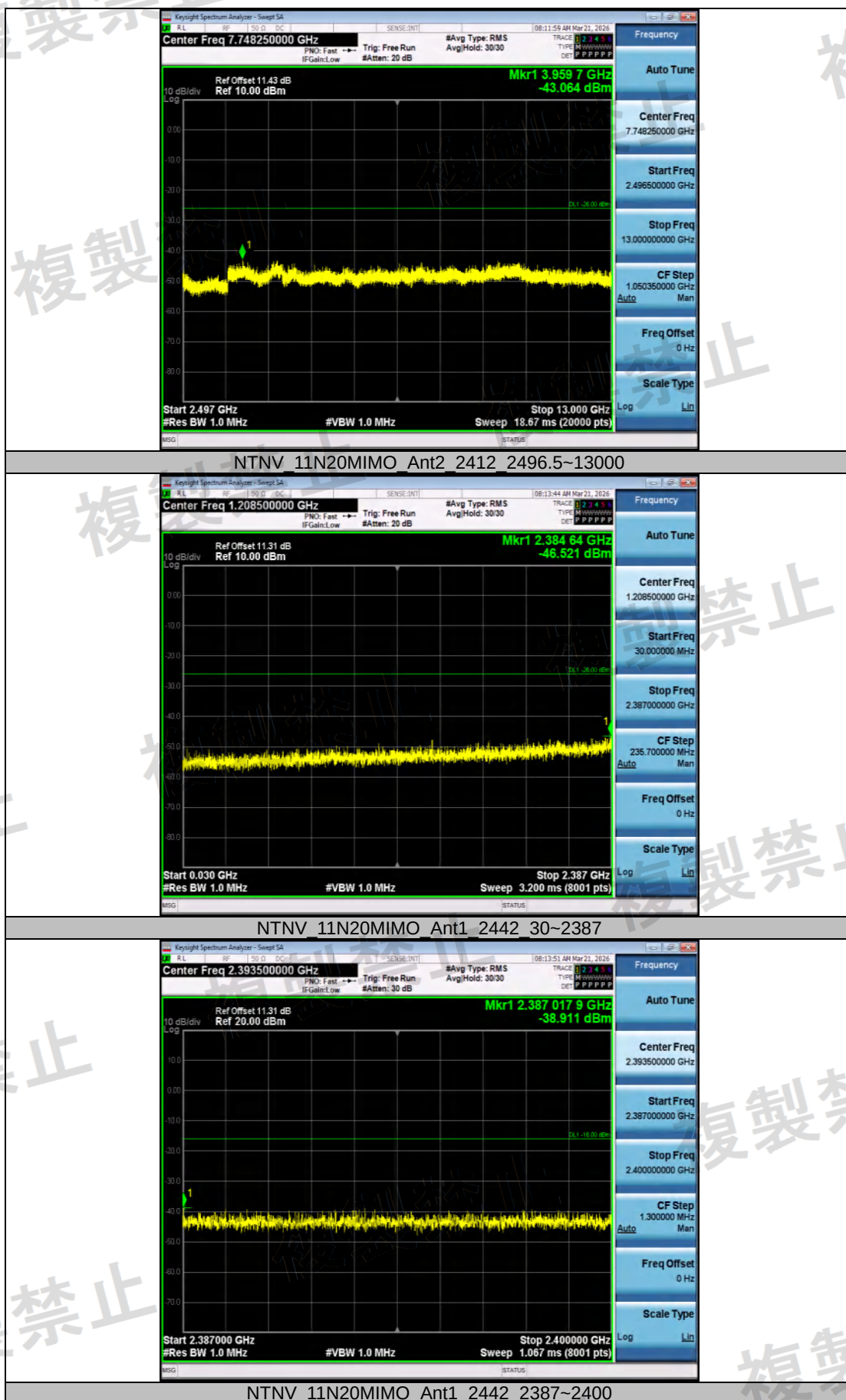


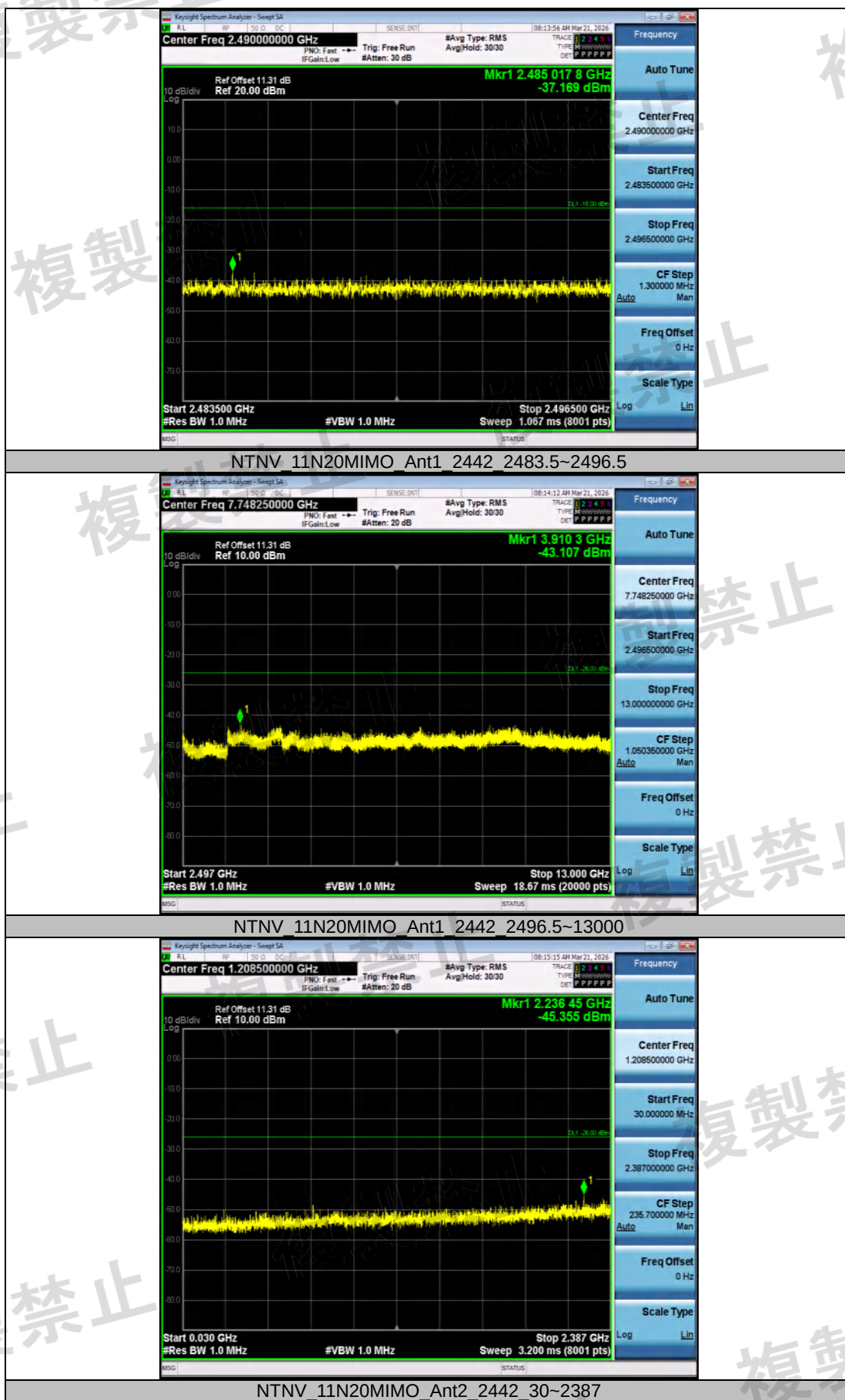


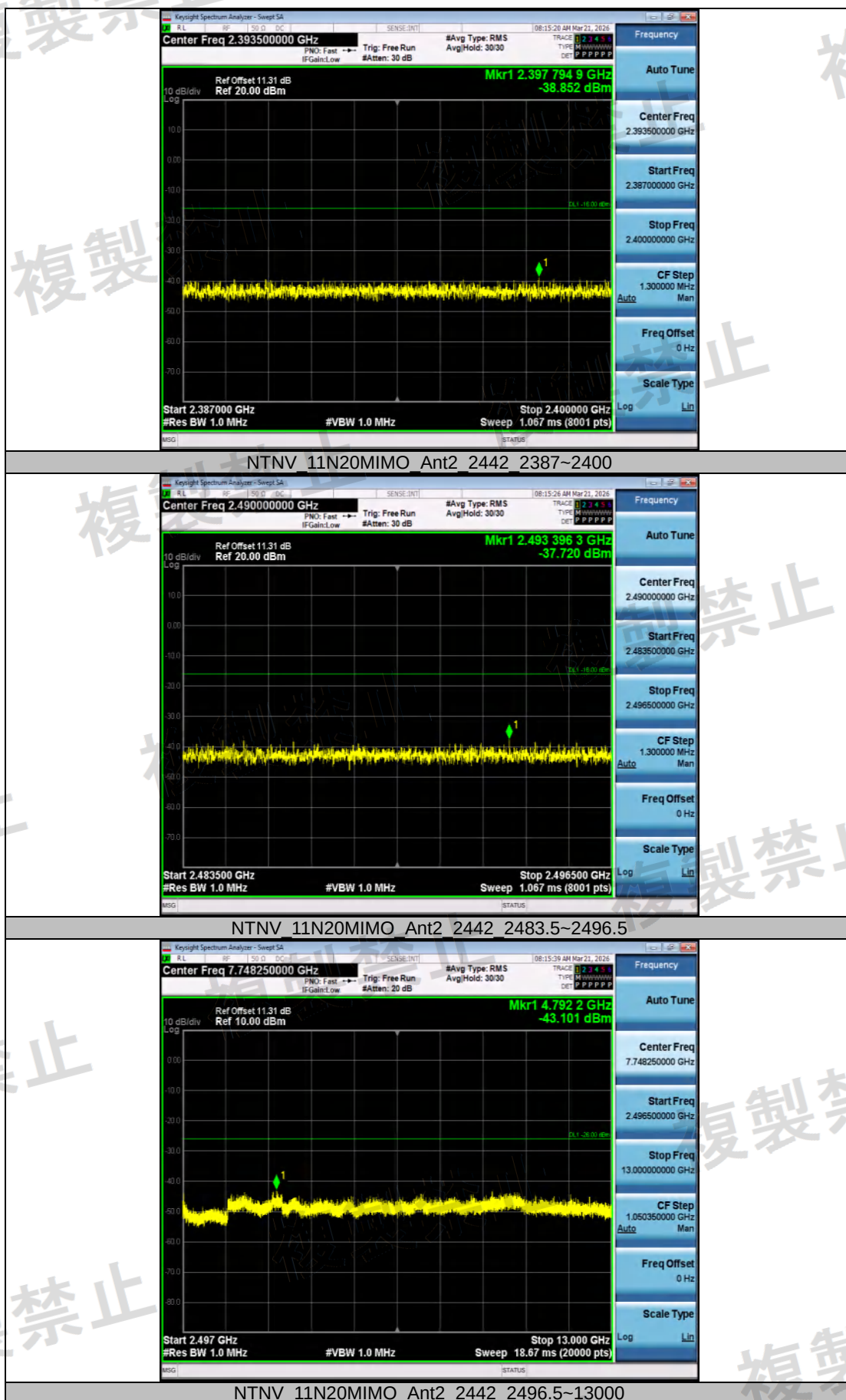


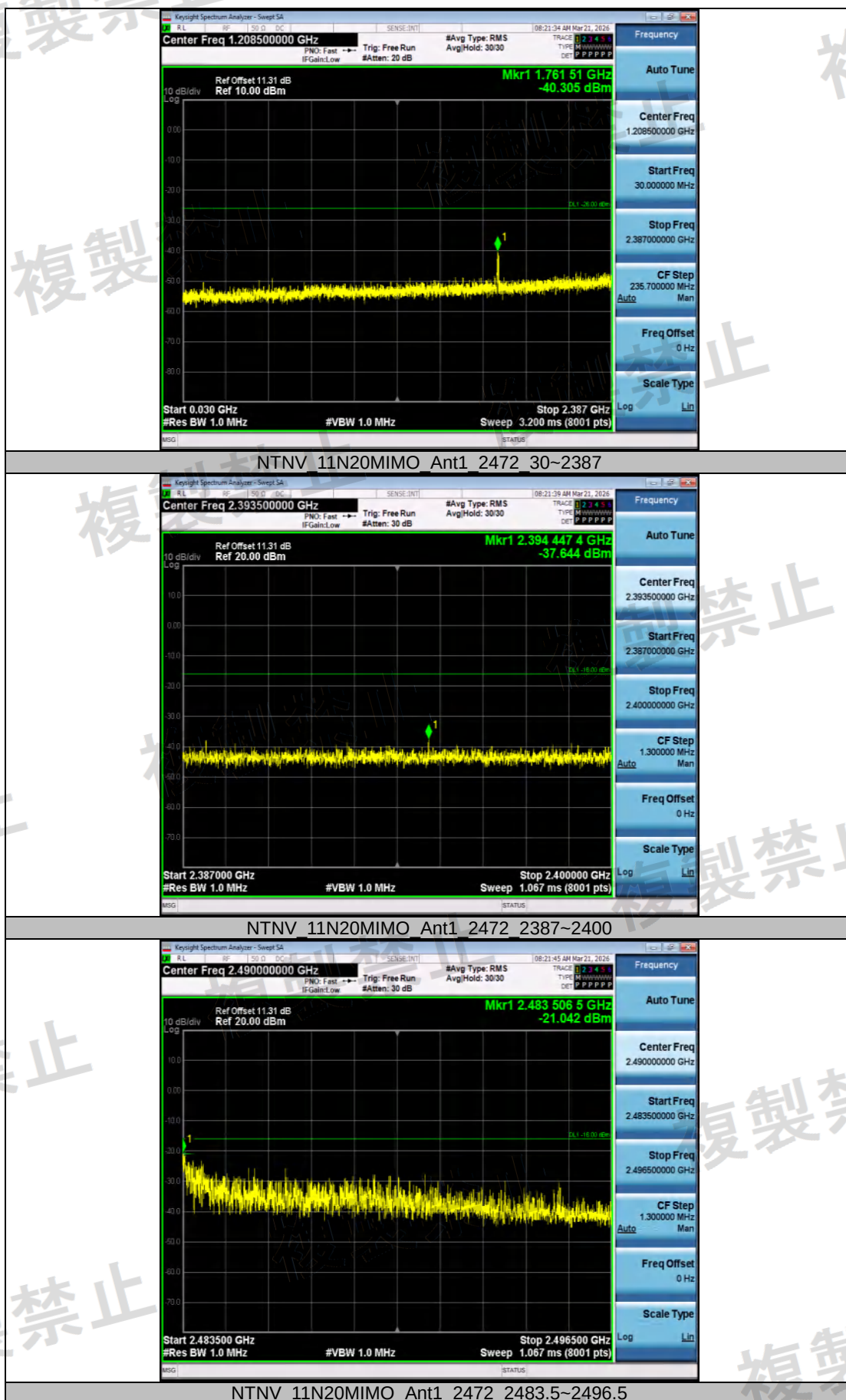


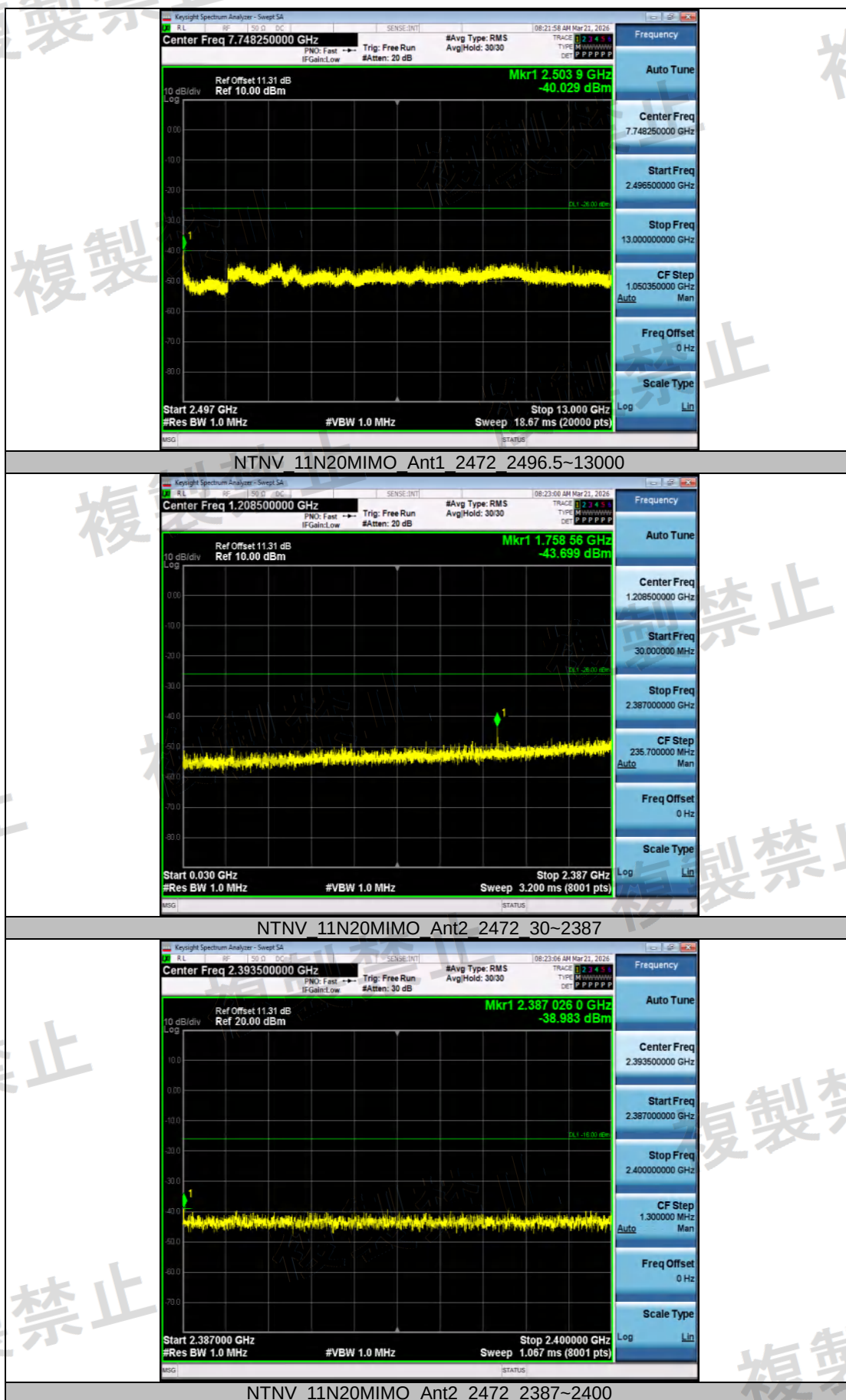


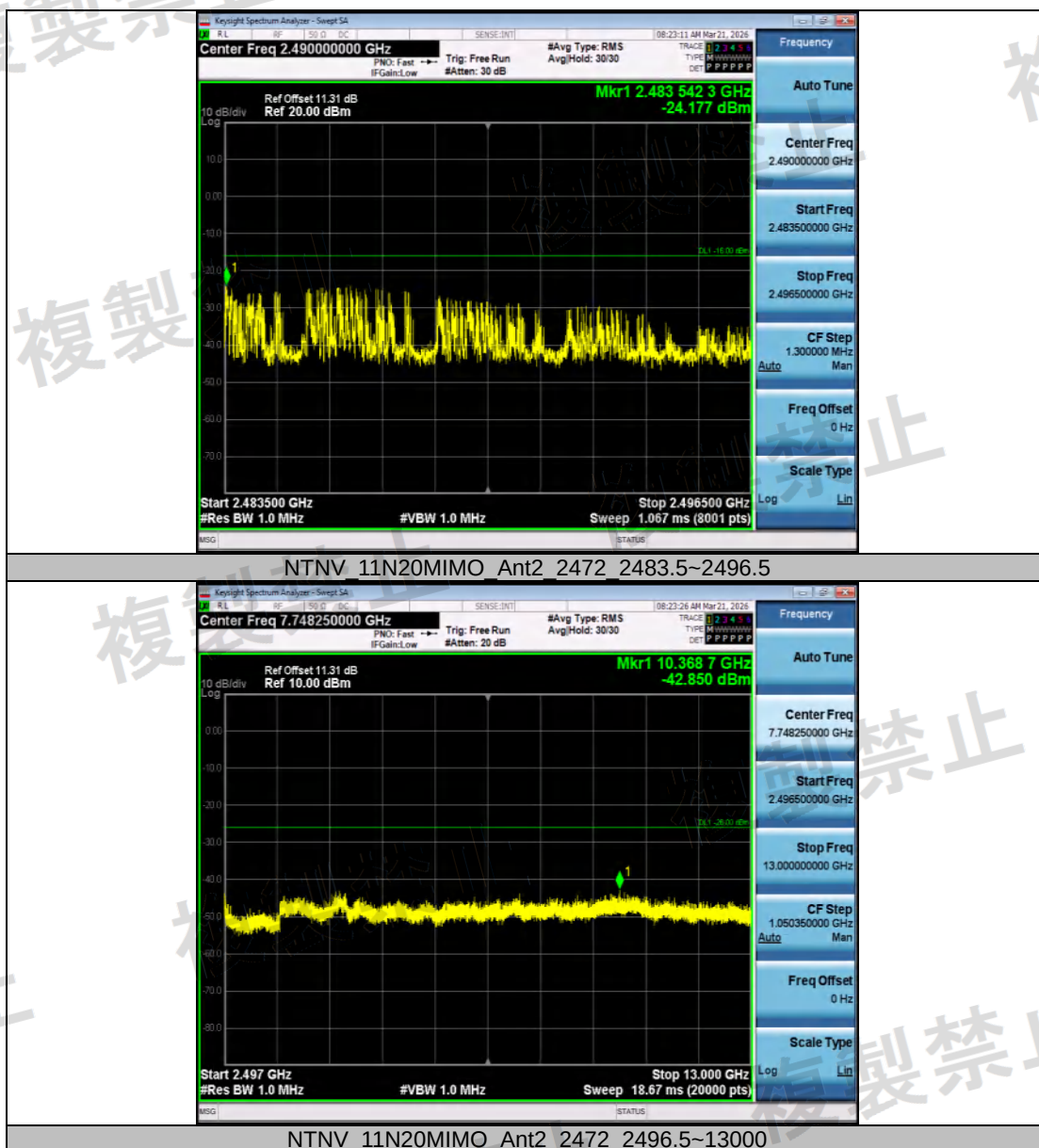






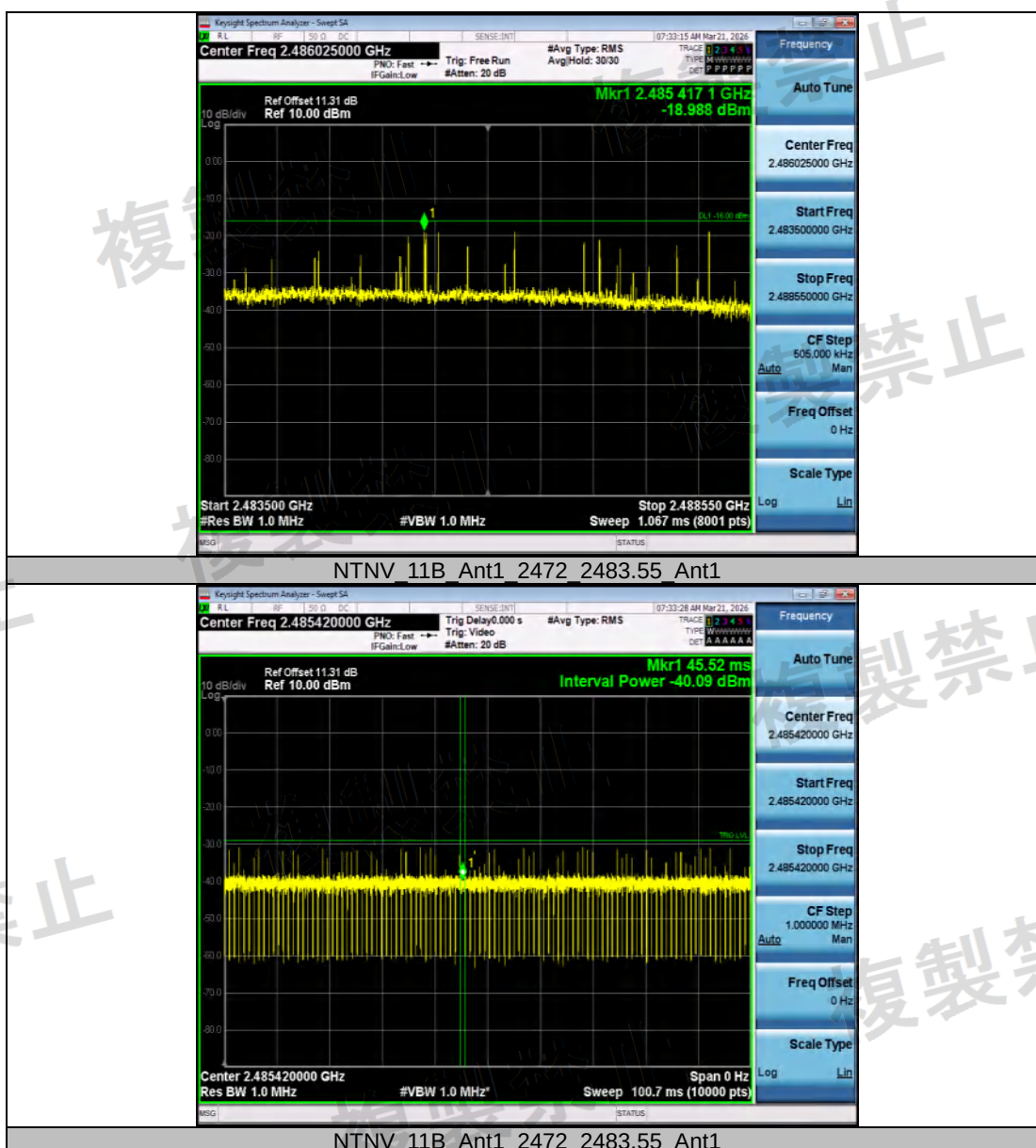




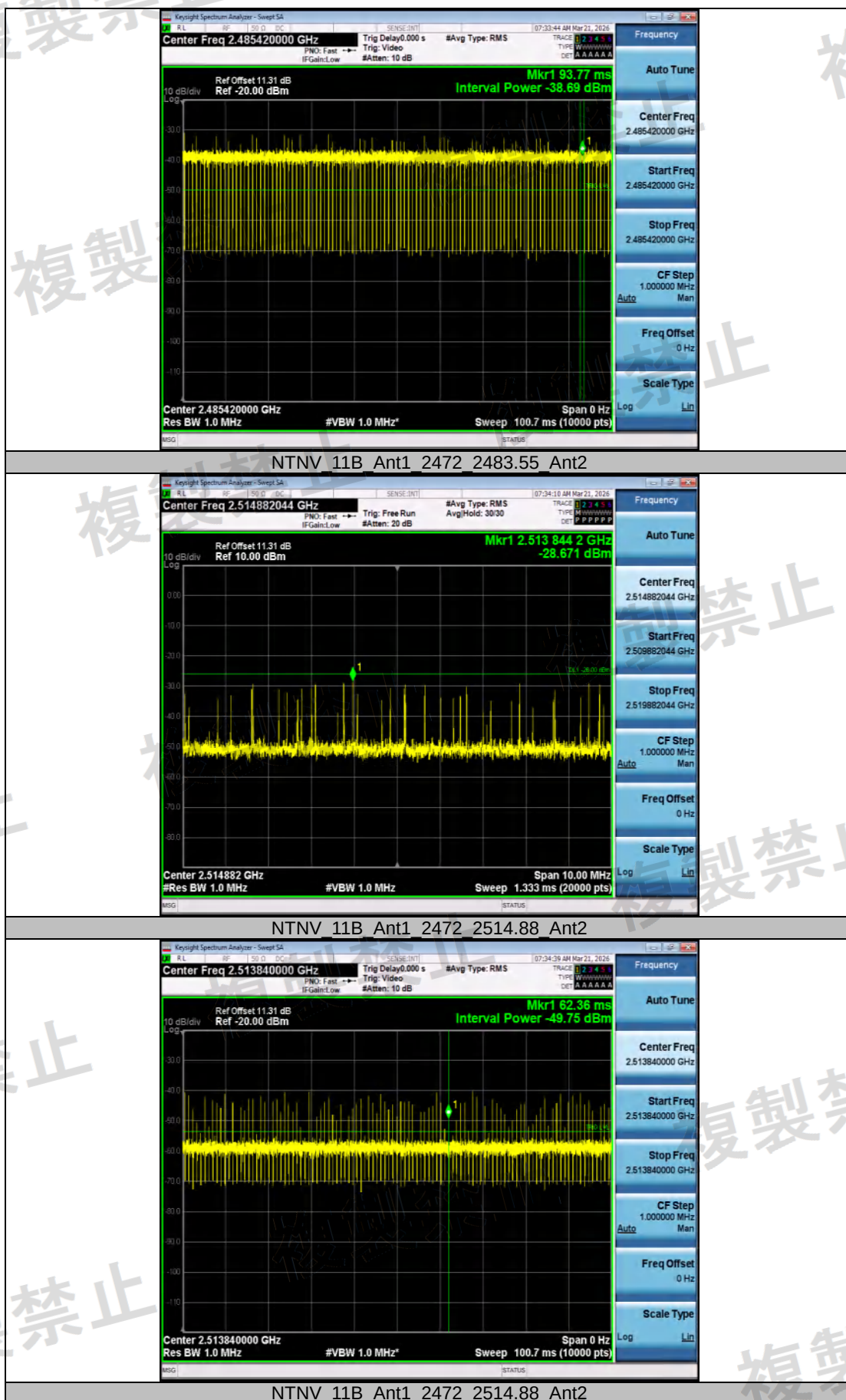


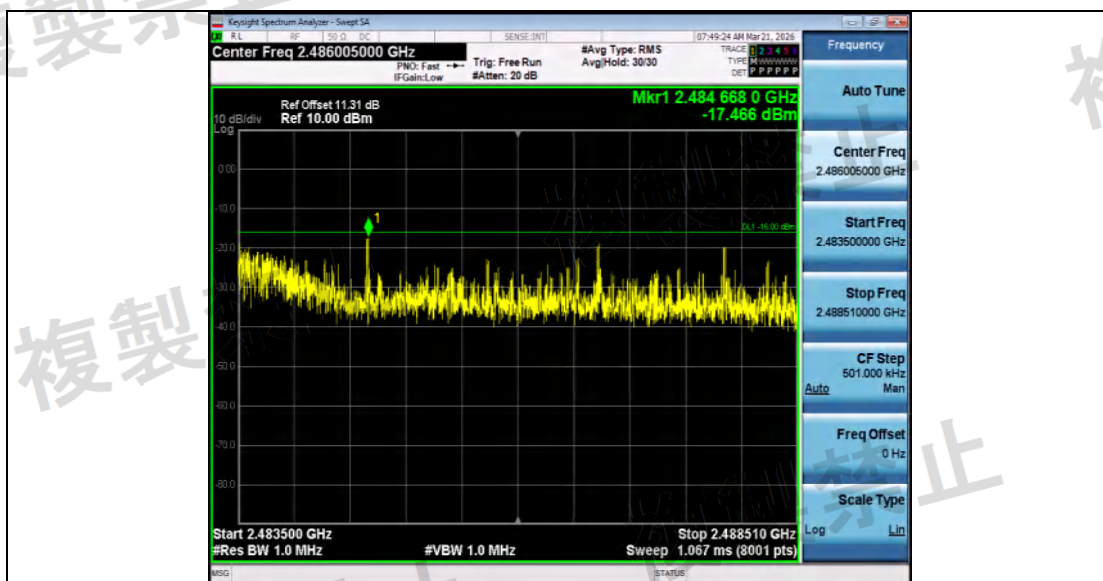
Test Result_Step2

Test Condition	Test Mode	PreScan In Ant	Channel	Ant	Freq. [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Result [μ W/MHz]	Limit [μ W/MHz]	Verdict
NTNV	11B	Ant1	2472	Ant1	2485.42	-40.09	≤ -16	0.09795	≤ 25	PASS
				Ant1	2513.84	-43.66	≤ -26	0.04305	≤ 2.5	PASS
				Ant2	2485.42	-38.69	≤ -16	0.13521	≤ 25	PASS
				Ant2	2513.84	-49.75	≤ -26	0.01059	≤ 2.5	PASS
	11G	Ant2	2472	Ant1	2484.67	-39.84	≤ -16	0.10375	≤ 25	PASS
				Ant2	2484.67	-36.35	≤ -16	0.23174	≤ 25	PASS

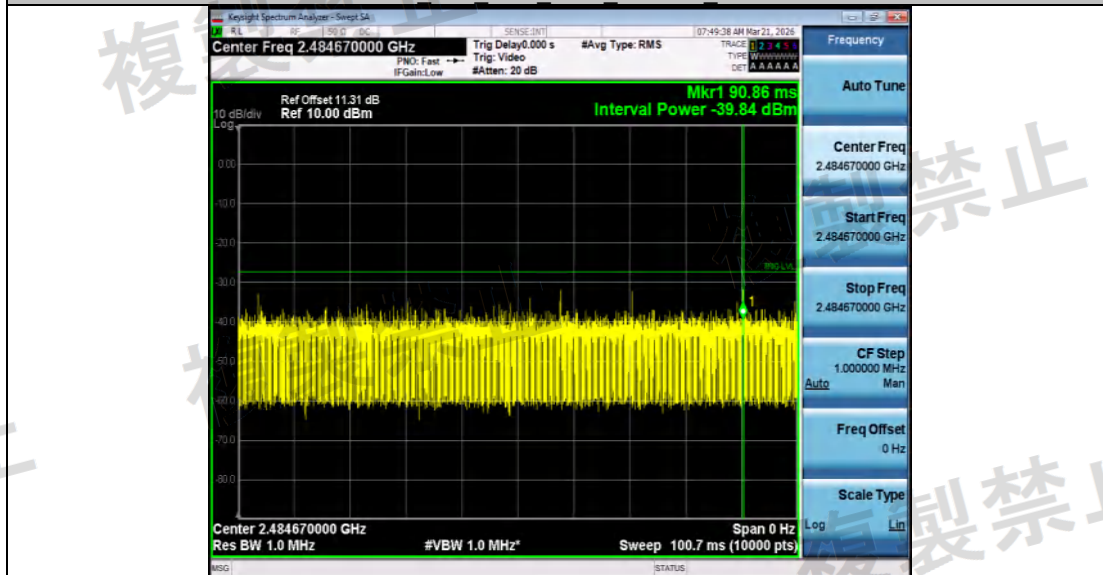




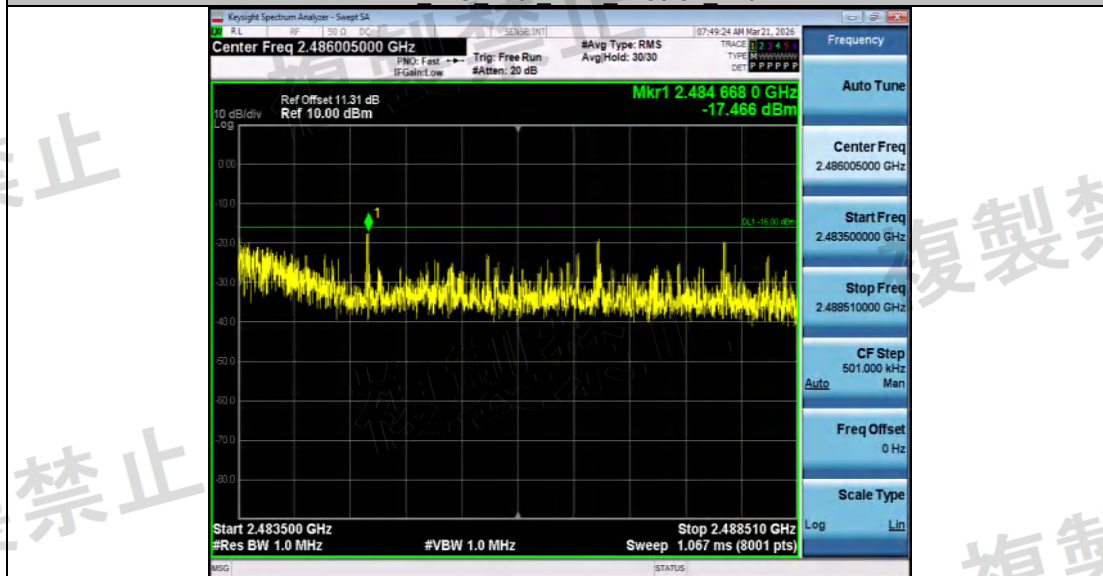




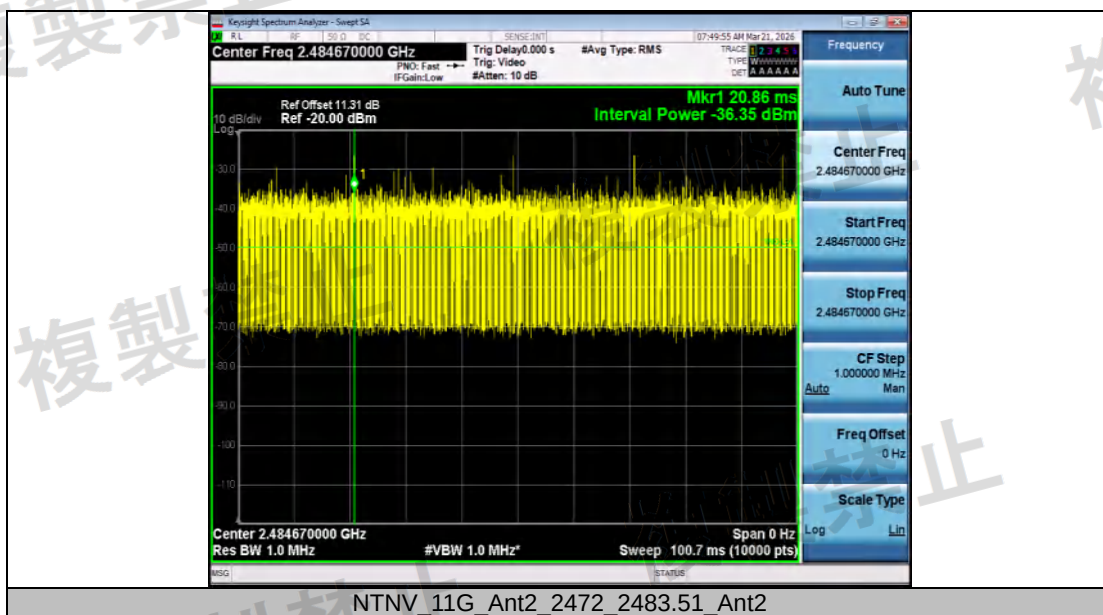
NTNV 11G Ant2 2472 2483.51 Ant1



NTNV 11G Ant2 2472 2483.51 Ant1



NTNV_11G_Ant2_2472_2483.51_Ant2

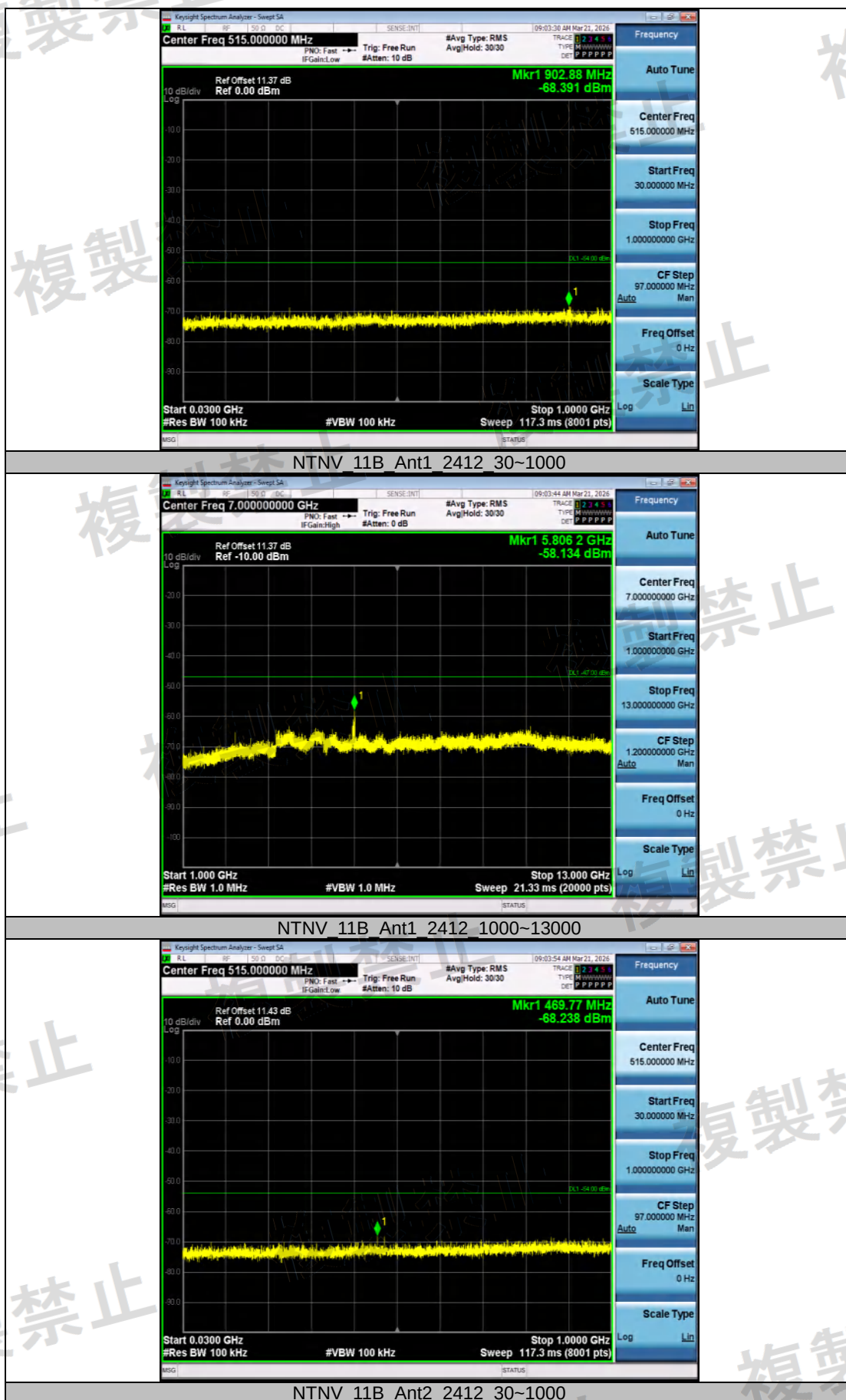


Note: 802.11n all test values margin for Transmitter Spurious Emissions are above limit 3Db, So complied with MIMO transmit requirement.

Appendix E: Receiver spurious emissions

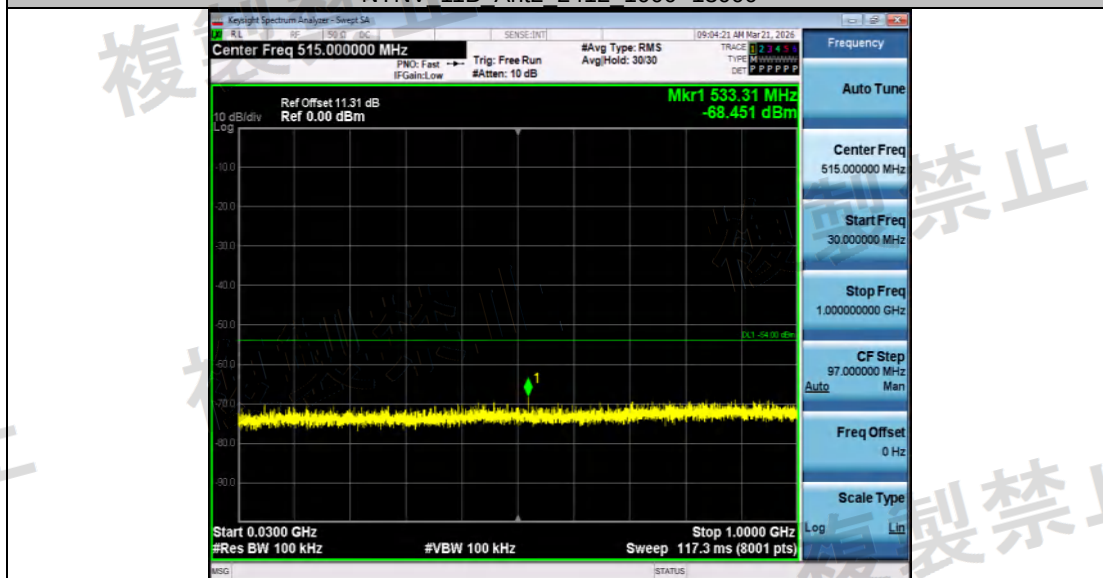
Test Result

Test Condition	Test Mode	Antenna	Freq(MHz)	Freq.Range [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Result [nW/MHz]	Limit [nW/MHz]	Verdict
NTNV	11B	Ant1	2412	30~1000	-68.39	≤-54	0.14488	≤4	PASS
				1000~13000	-58.13	≤-47	1.53815	≤20	PASS
		Ant2	2412	30~1000	-68.24	≤-54	0.14997	≤4	PASS
				1000~13000	-60.37	≤-47	0.91833	≤20	PASS
		Ant1	2442	30~1000	-68.45	≤-54	0.14289	≤4	PASS
				1000~13000	-62.32	≤-47	0.58614	≤20	PASS
		Ant2	2442	30~1000	-68.73	≤-54	0.13397	≤4	PASS
				1000~13000	-54.05	≤-47	3.93550	≤20	See table below
		Ant1	2472	30~1000	-67.90	≤-54	0.16218	≤4	PASS
				1000~13000	-62.20	≤-47	0.60256	≤20	PASS
		Ant2	2472	30~1000	-68.50	≤-54	0.14125	≤4	PASS
				1000~13000	-62.94	≤-47	0.50816	≤20	PASS
	11G	Ant1	2412	30~1000	-68.62	≤-54	0.13740	≤4	PASS
				1000~13000	-62.99	≤-47	0.50234	≤20	PASS
		Ant2	2412	30~1000	-68.13	≤-54	0.15382	≤4	PASS
				1000~13000	-62.70	≤-47	0.53703	≤20	PASS
		Ant1	2442	30~1000	-68.56	≤-54	0.13932	≤4	PASS
				1000~13000	-63.29	≤-47	0.46881	≤20	PASS
		Ant2	2442	30~1000	-68.28	≤-54	0.14859	≤4	PASS
				1000~13000	-62.84	≤-47	0.52000	≤20	PASS
		Ant1	2472	30~1000	-68.75	≤-54	0.13335	≤4	PASS
				1000~13000	-63.06	≤-47	0.49431	≤20	PASS
		Ant2	2472	30~1000	-68.51	≤-54	0.14093	≤4	PASS
				1000~13000	-63.44	≤-47	0.45290	≤20	PASS
	11N20MIMO	Ant1	2412	30~1000	-68.57	≤-54	0.13900	≤4	PASS
				1000~13000	-63.62	≤-47	0.43451	≤20	PASS
		Ant2	2412	30~1000	-68.55	≤-54	0.13964	≤4	PASS
				1000~13000	-62.81	≤-47	0.52360	≤20	PASS
		Ant1	2442	30~1000	-67.91	≤-54	0.16181	≤4	PASS
				1000~13000	-63.34	≤-47	0.46345	≤20	PASS
		Ant2	2442	30~1000	-68.39	≤-54	0.14488	≤4	PASS
				1000~13000	-60.47	≤-47	0.89743	≤20	PASS
		Ant1	2472	30~1000	-68.70	≤-54	0.13490	≤4	PASS
				1000~13000	-63.15	≤-47	0.48417	≤20	PASS
		Ant2	2472	30~1000	-68.44	≤-54	0.14322	≤4	PASS
				1000~13000	-63.08	≤-47	0.49204	≤20	PASS

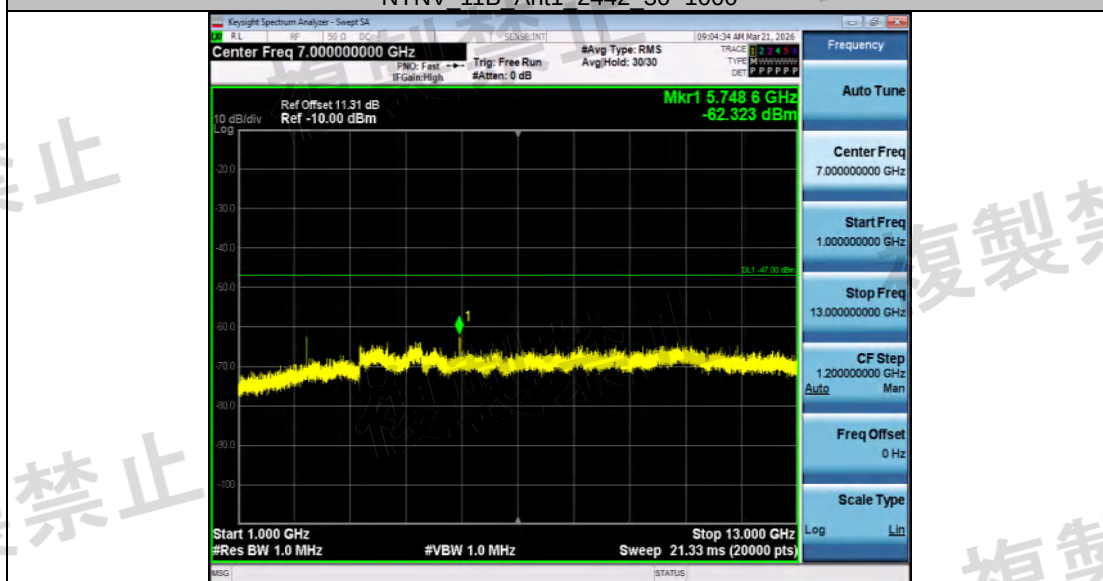




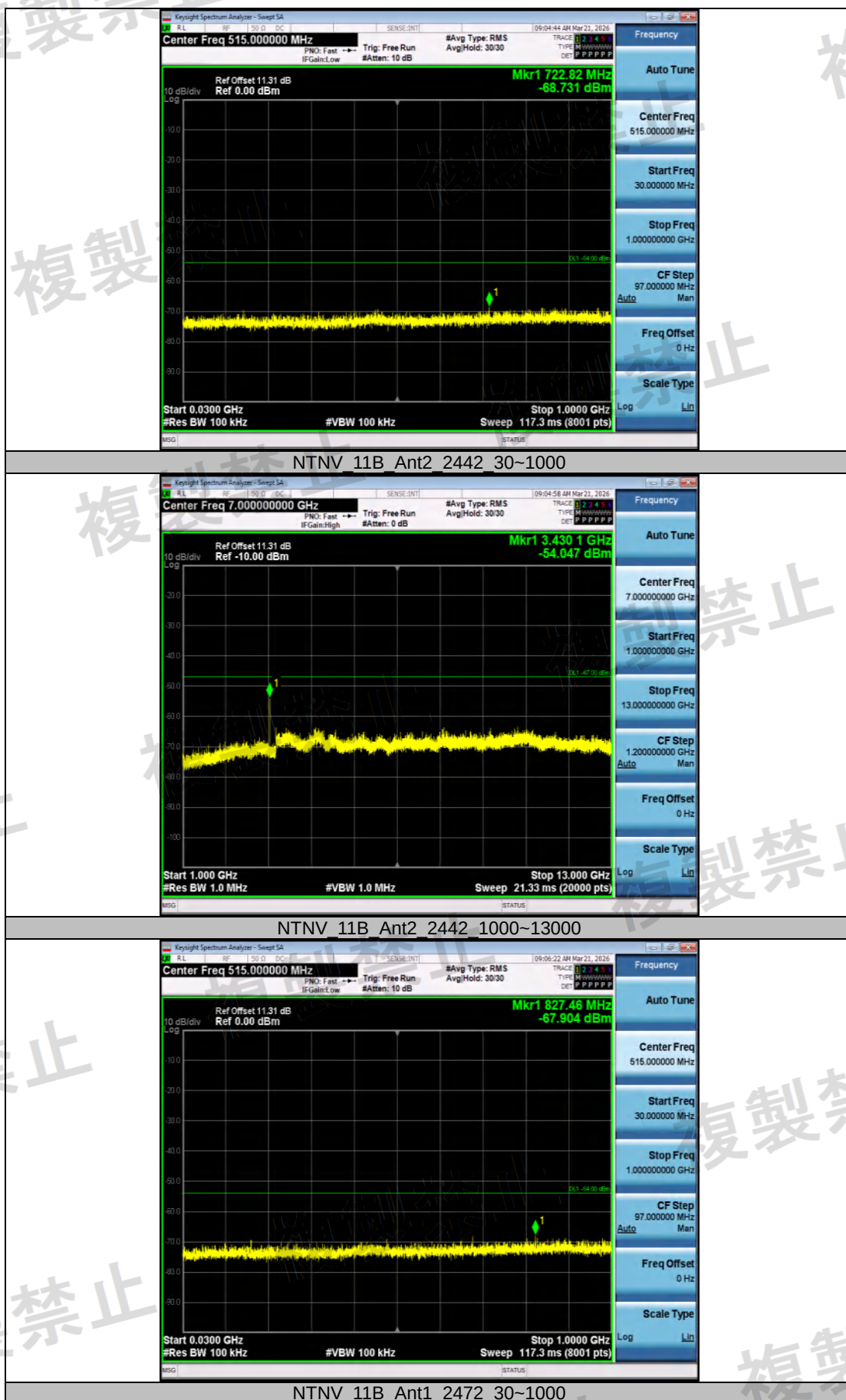
NTNV_11B_Ant2_2412_1000~13000

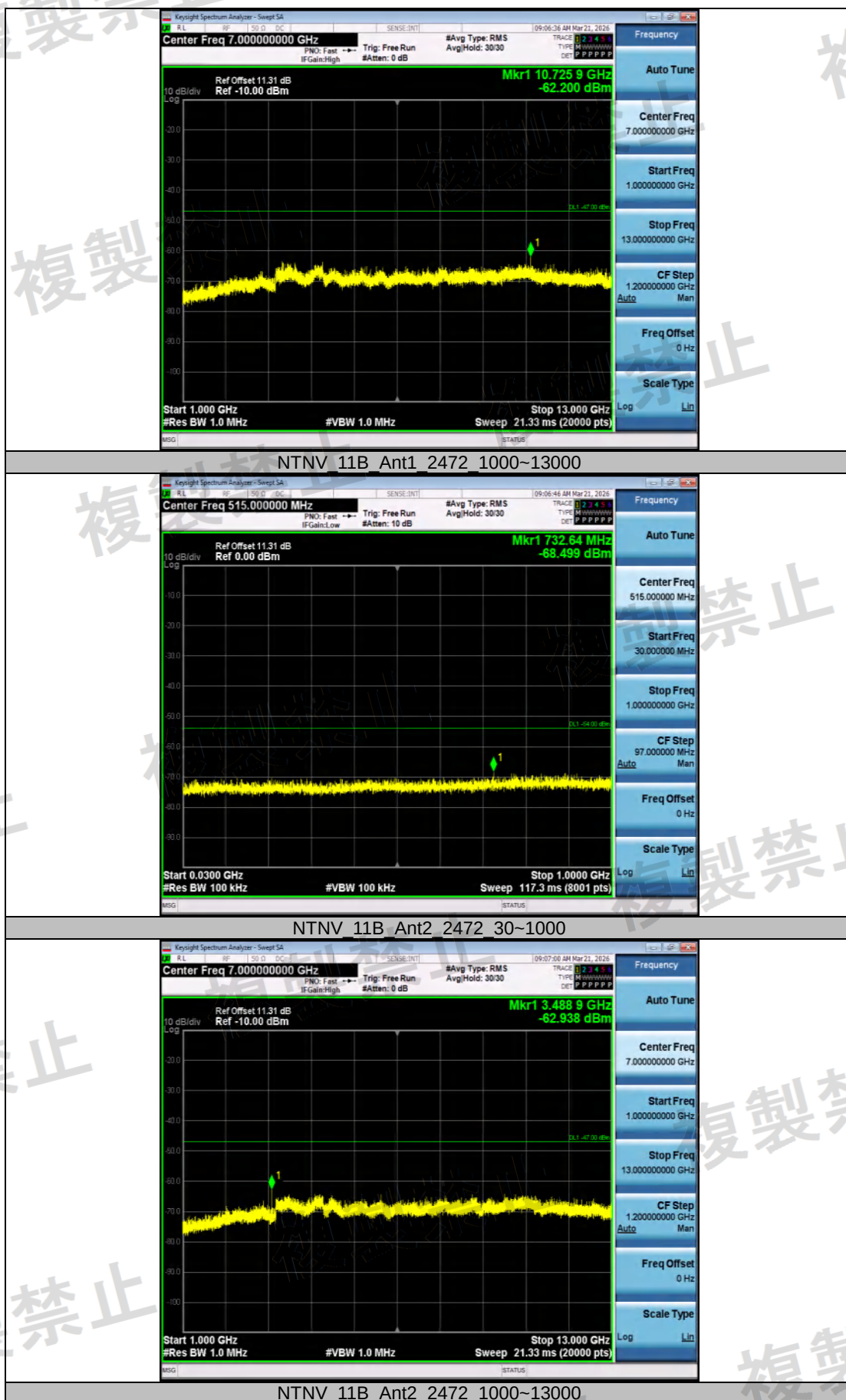


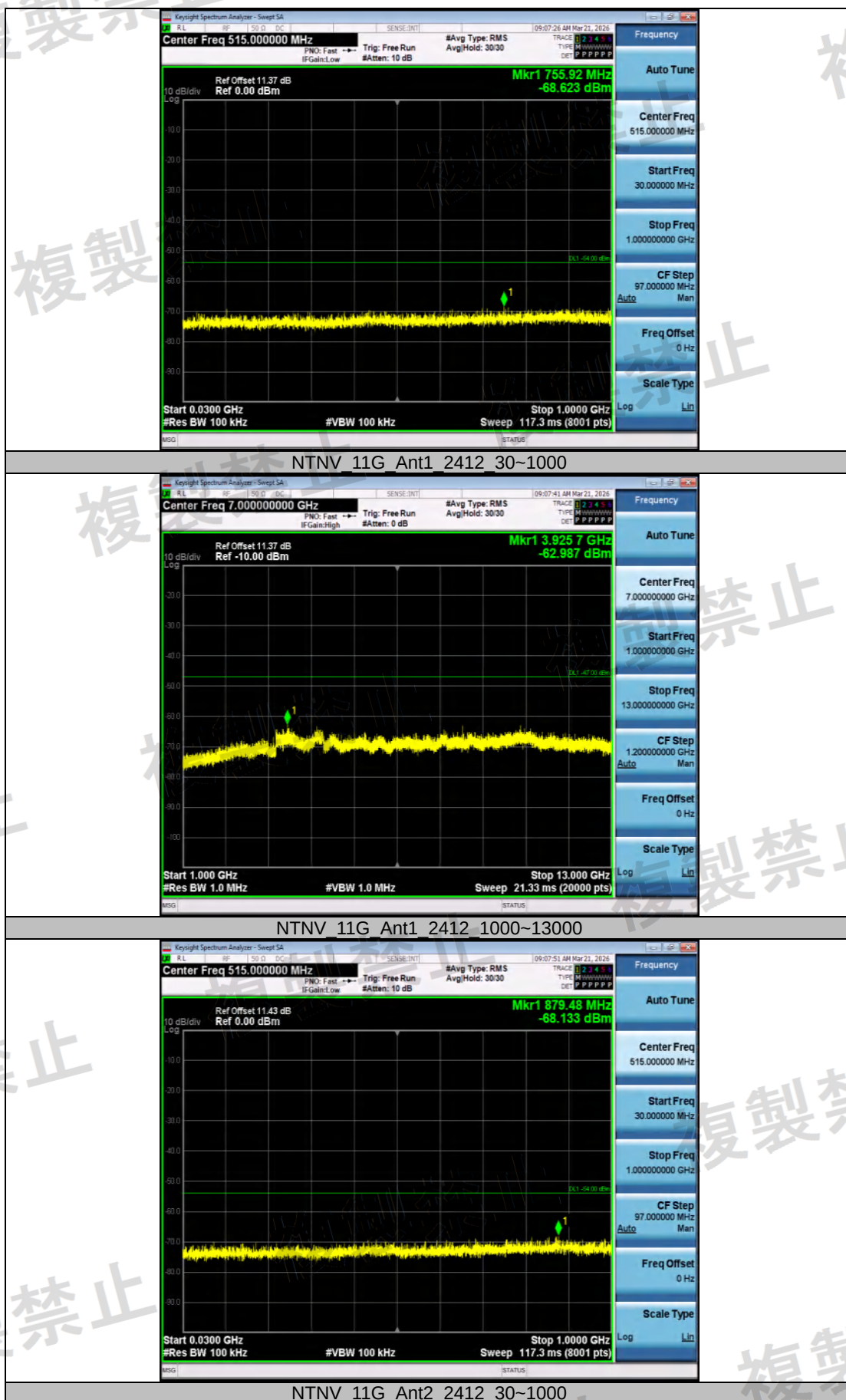
NTNV_11B_Ant1_2442_30~1000

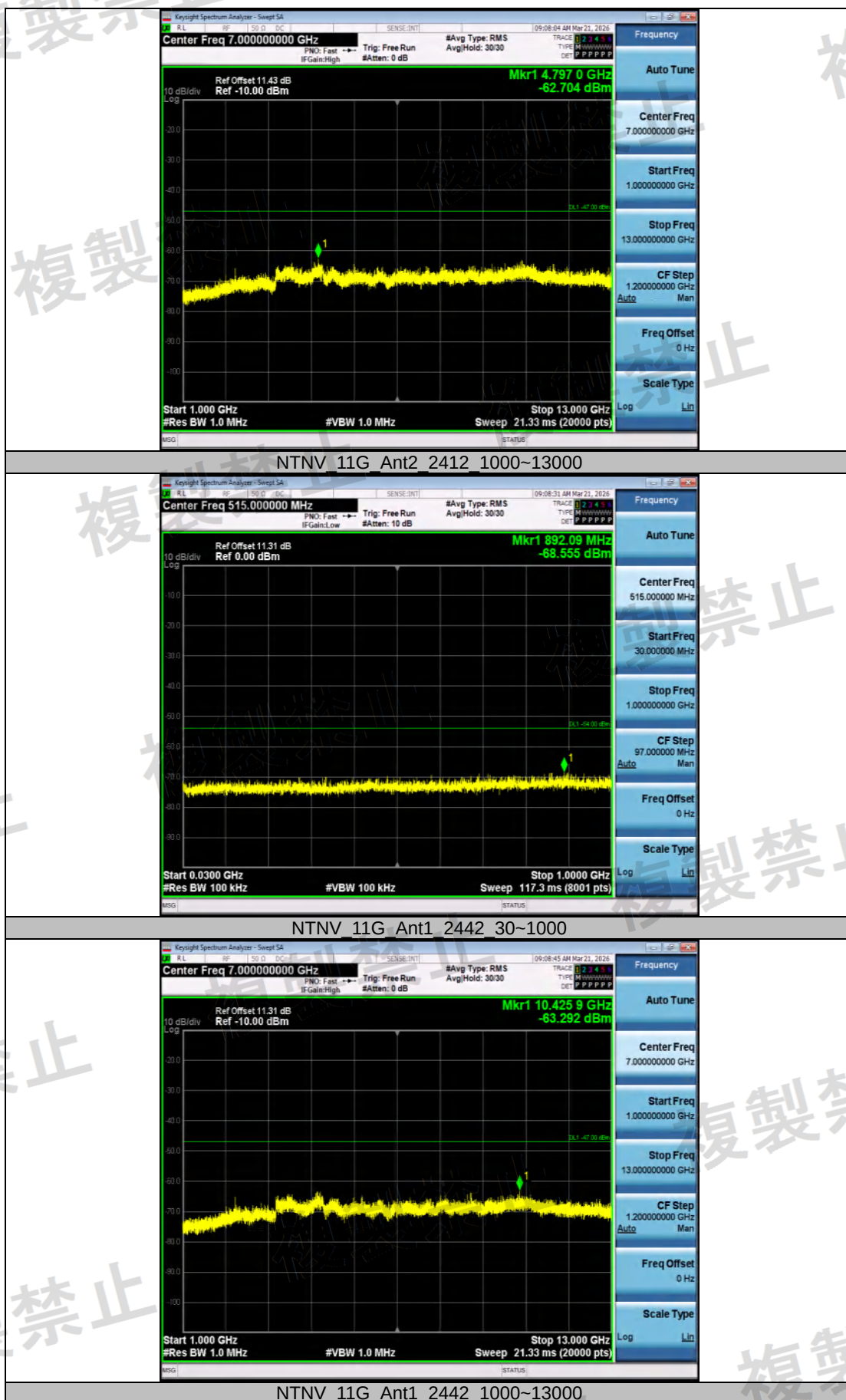


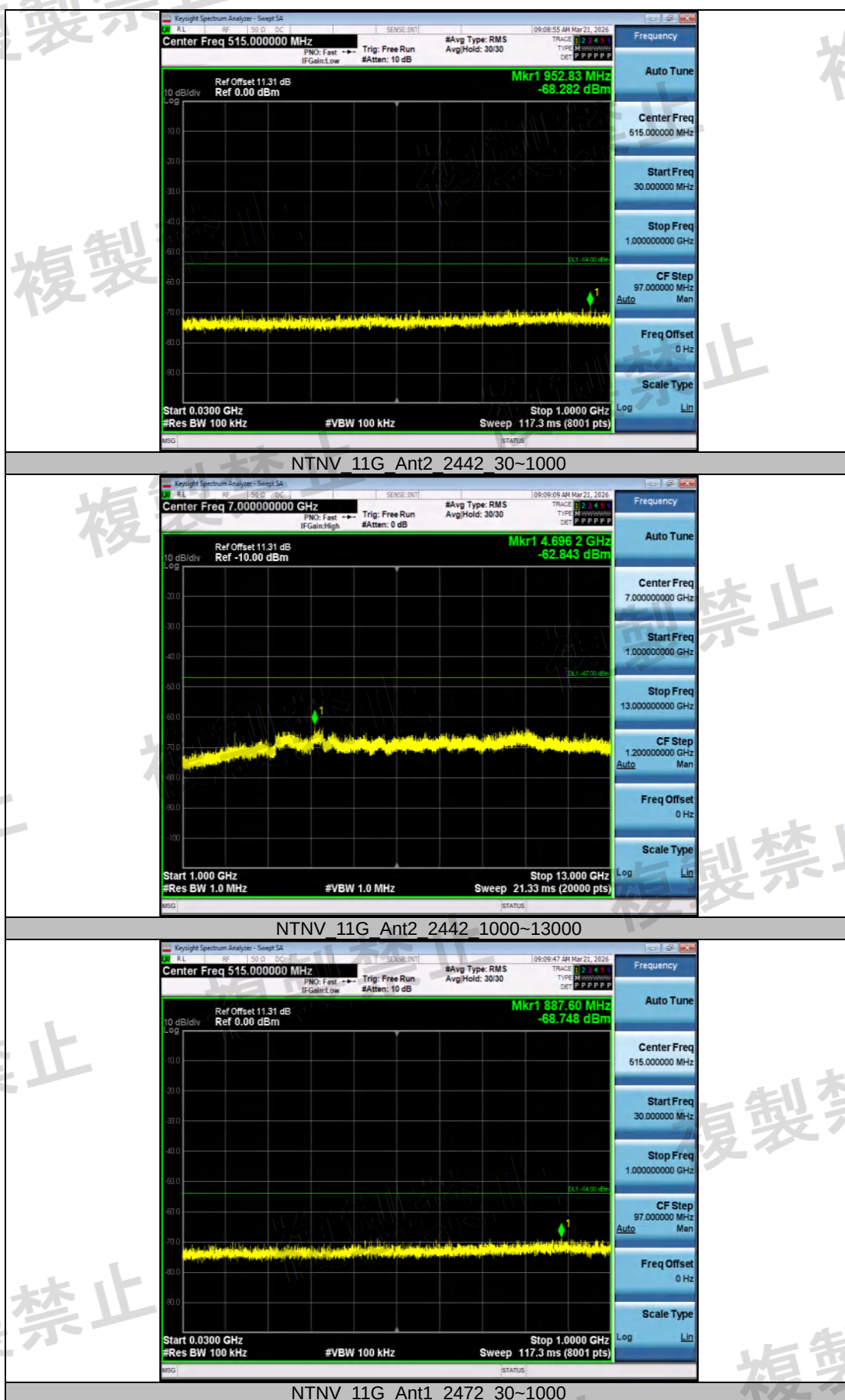
NTNV_11B_Ant1_2442_1000~13000

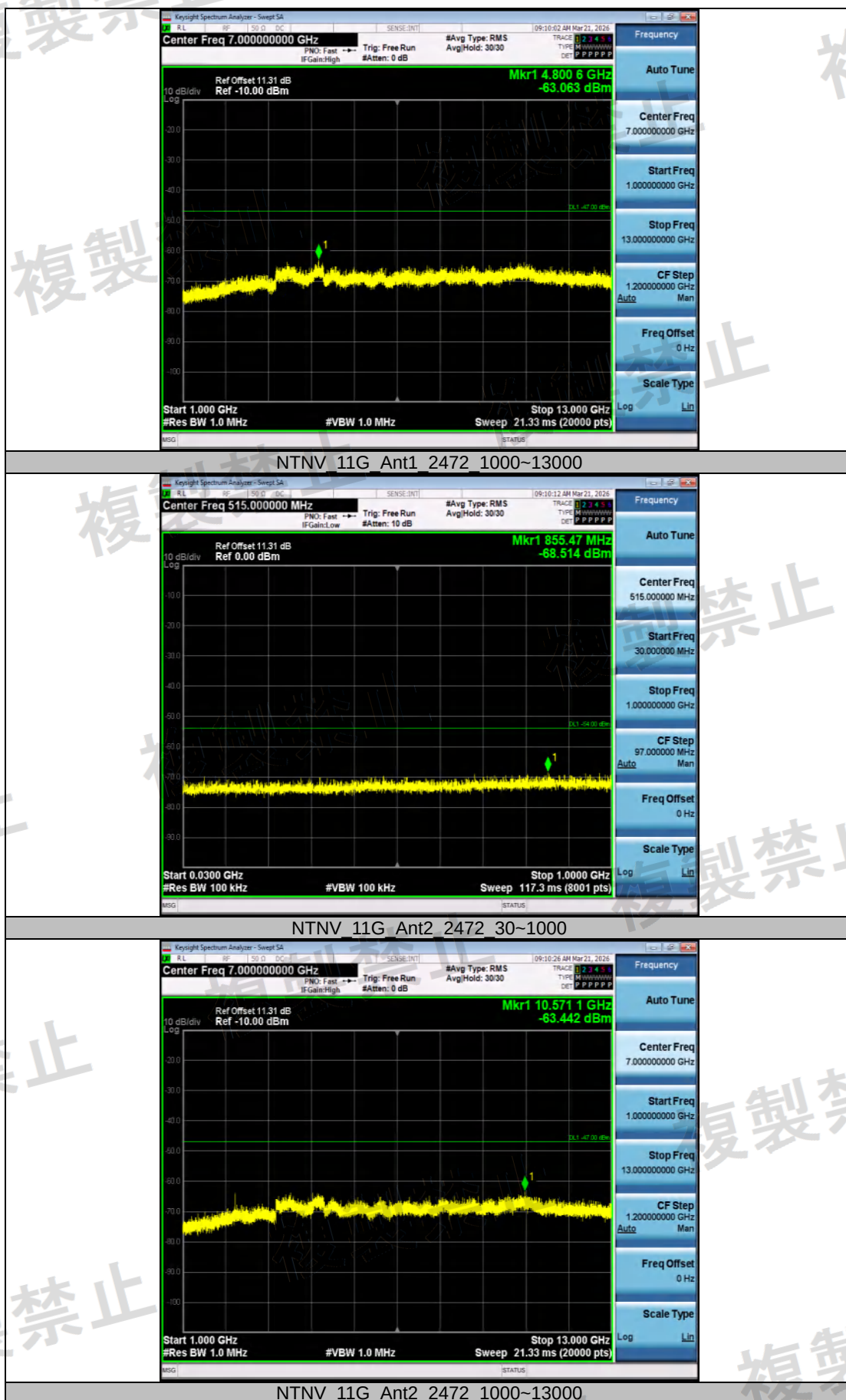


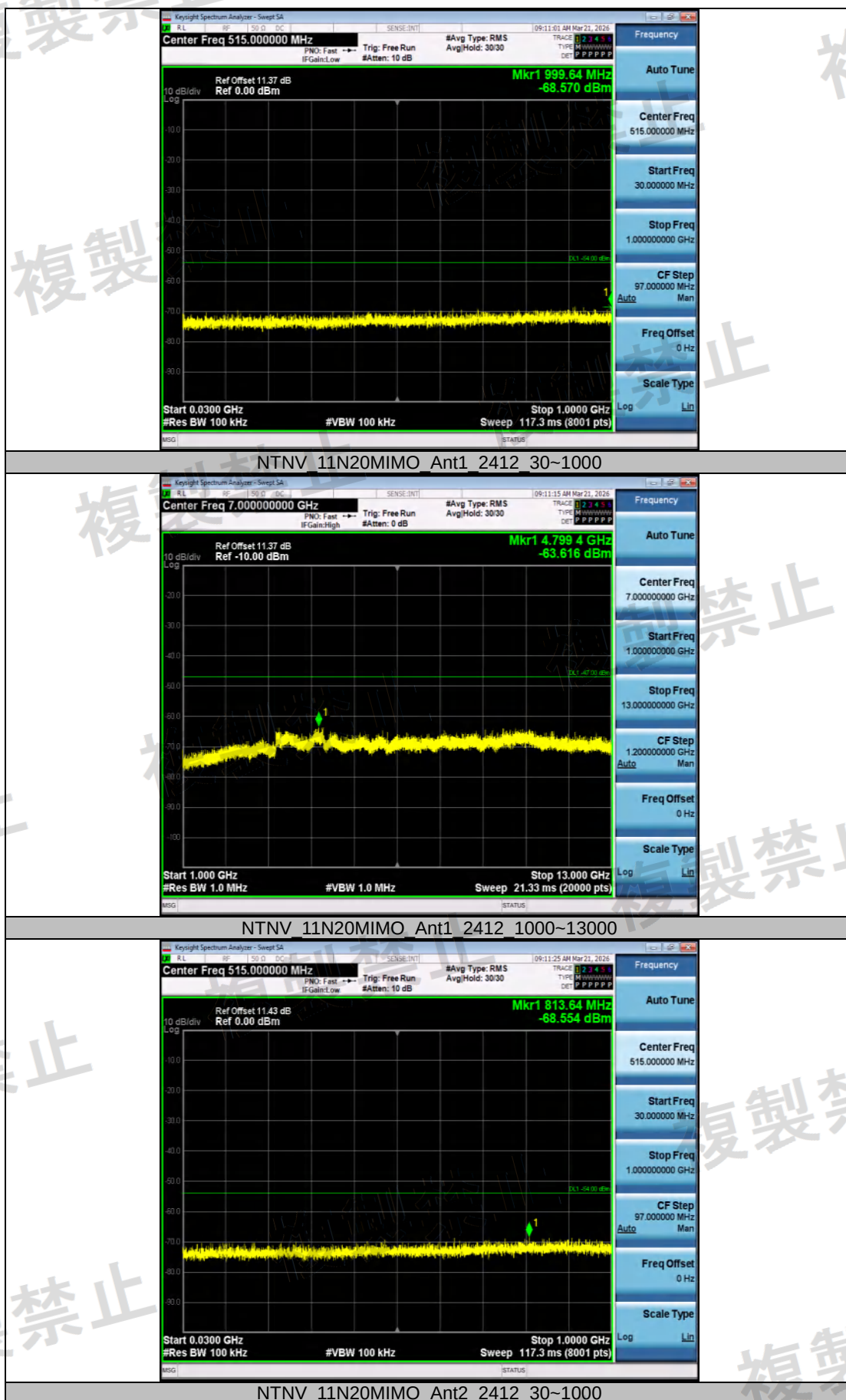


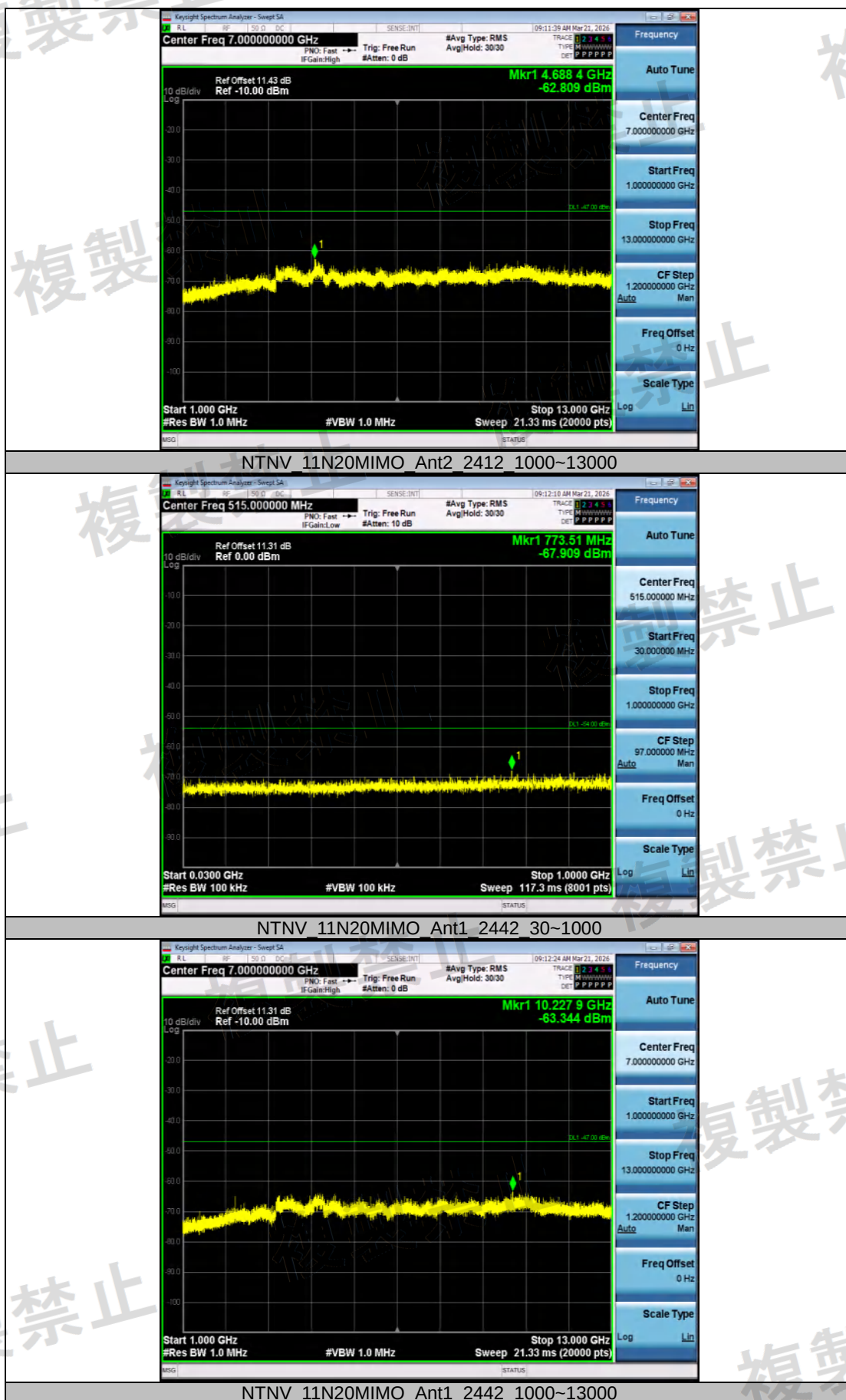


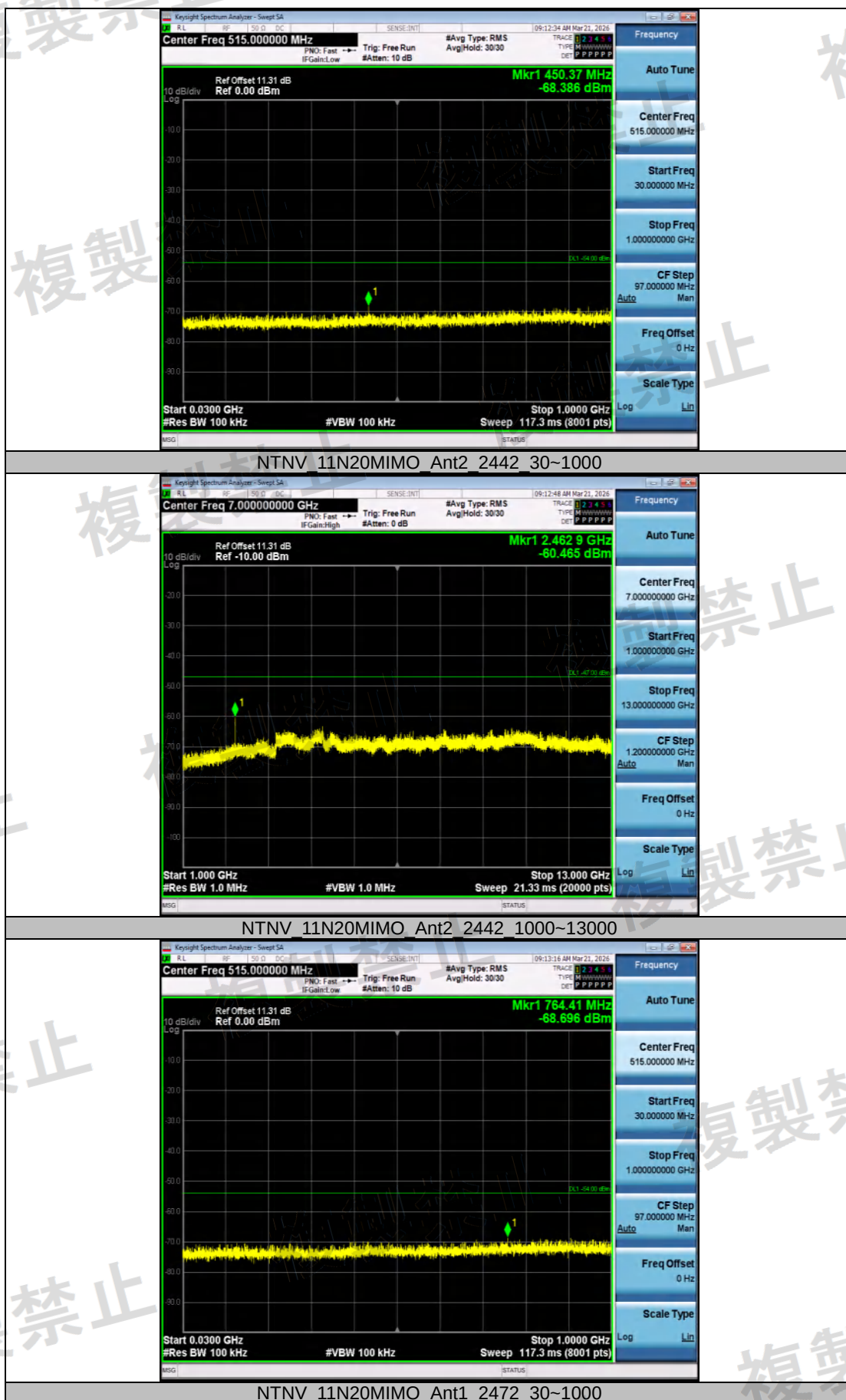


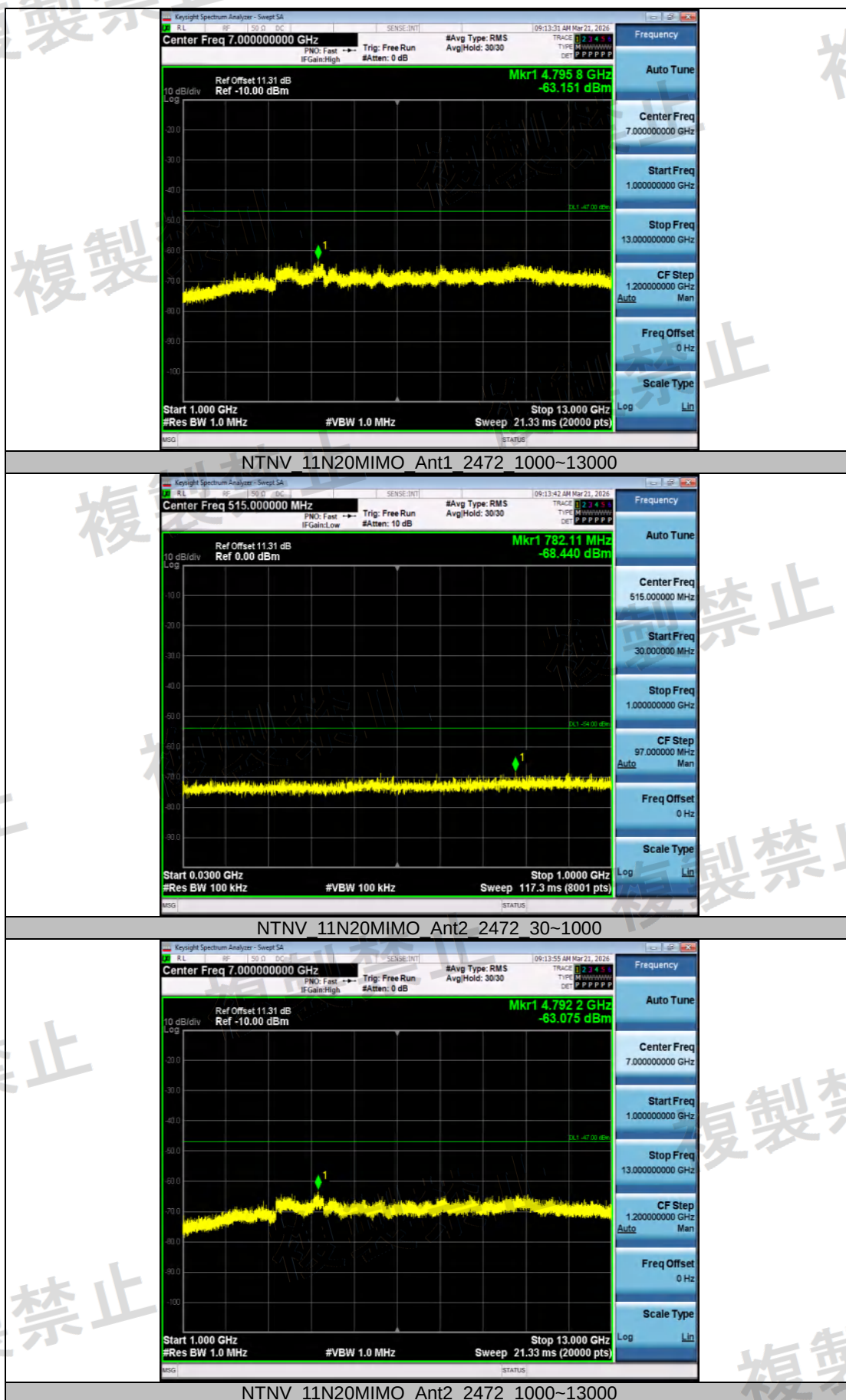






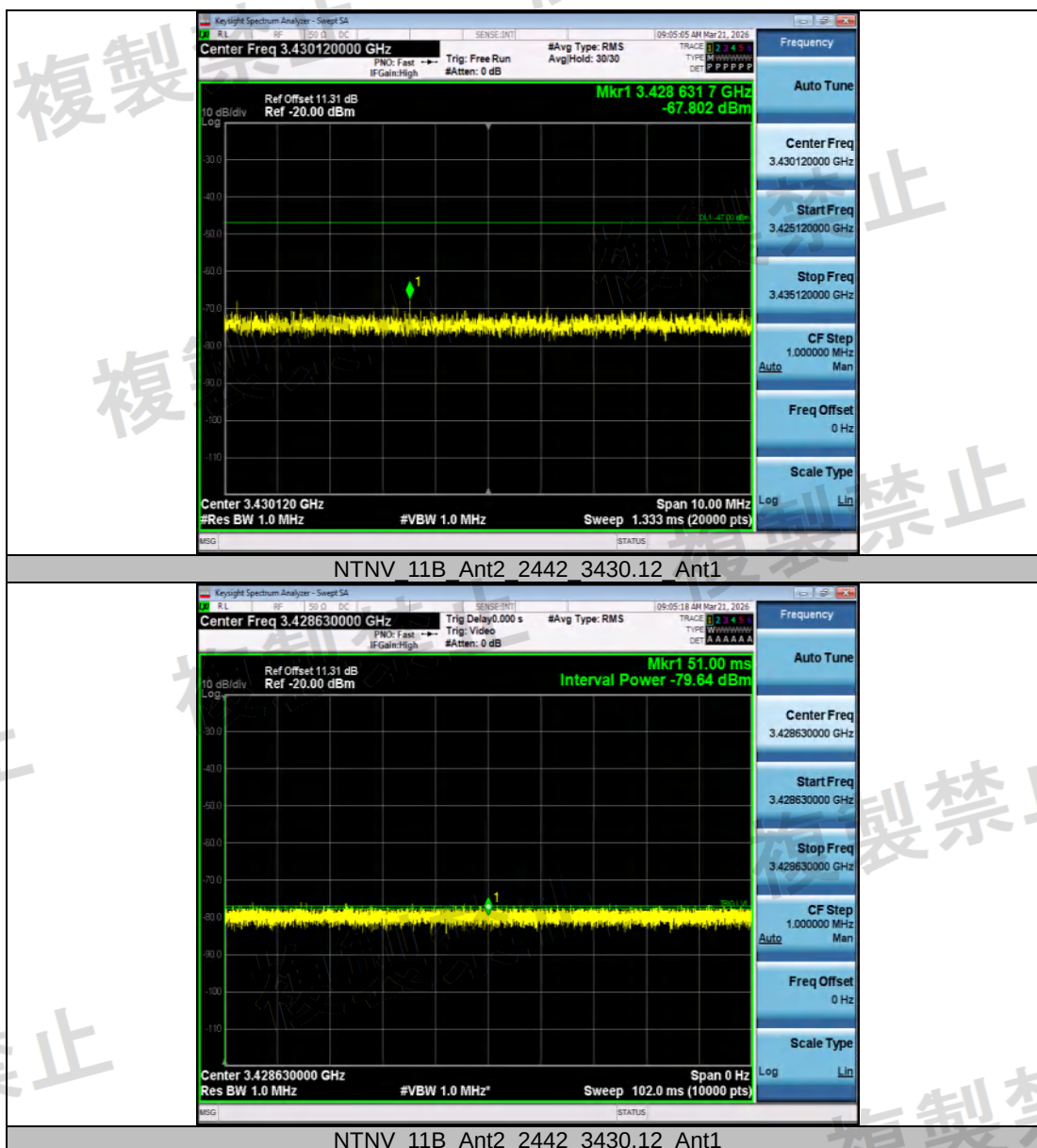


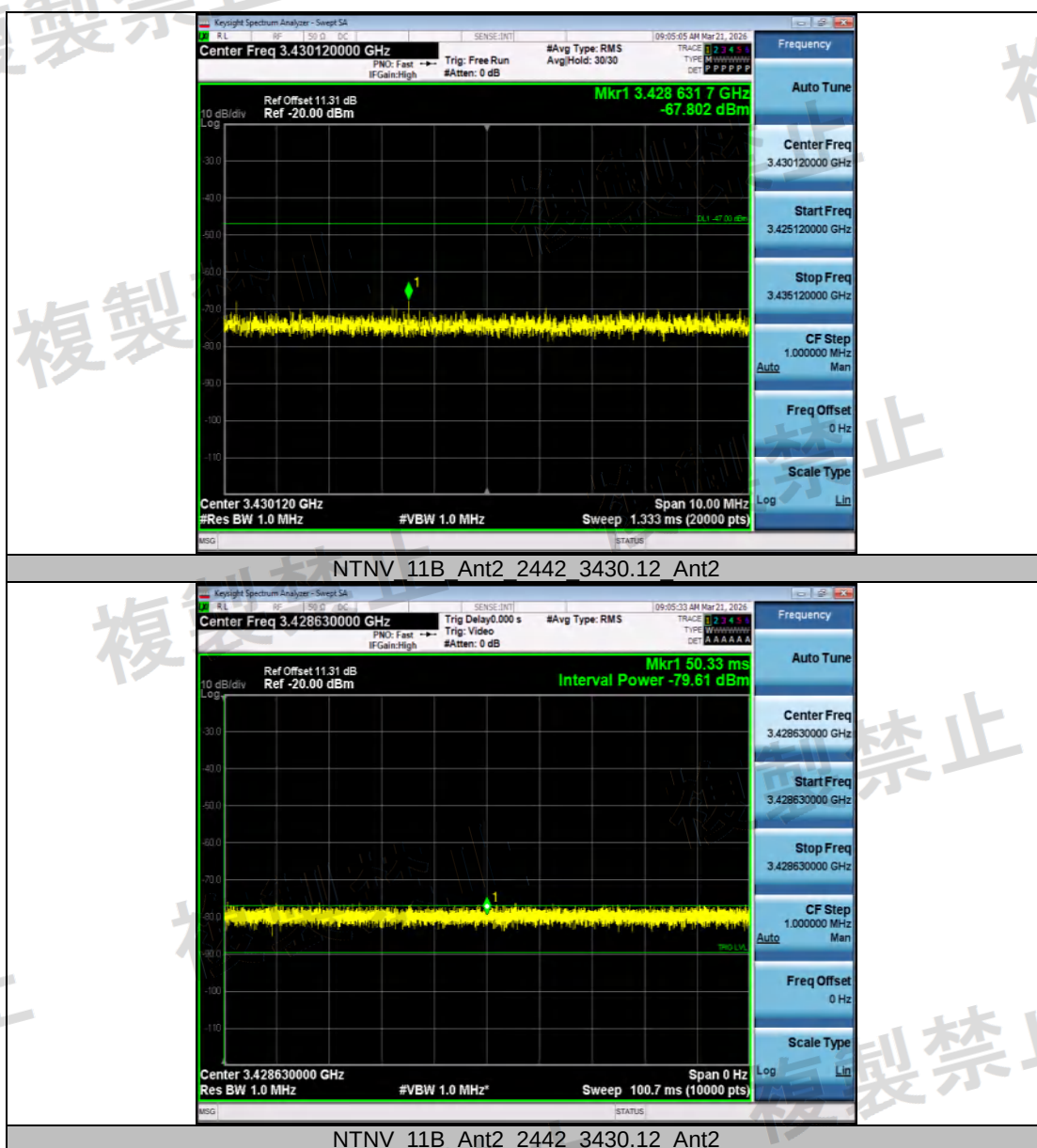




Test Result_Step2

Test Condition	Test Mode	PreScan In Ant	Channel	Ant	Freq. [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Result [nW/MHz]	Limit [nW/MHz]	Verdict
NTNV	11B	Ant2	2442	Ant1	3428.63	-79.64	≤-47	0.01086	≤20	PASS
				Ant2	3428.63	-79.61	≤-47	0.01094	≤20	PASS





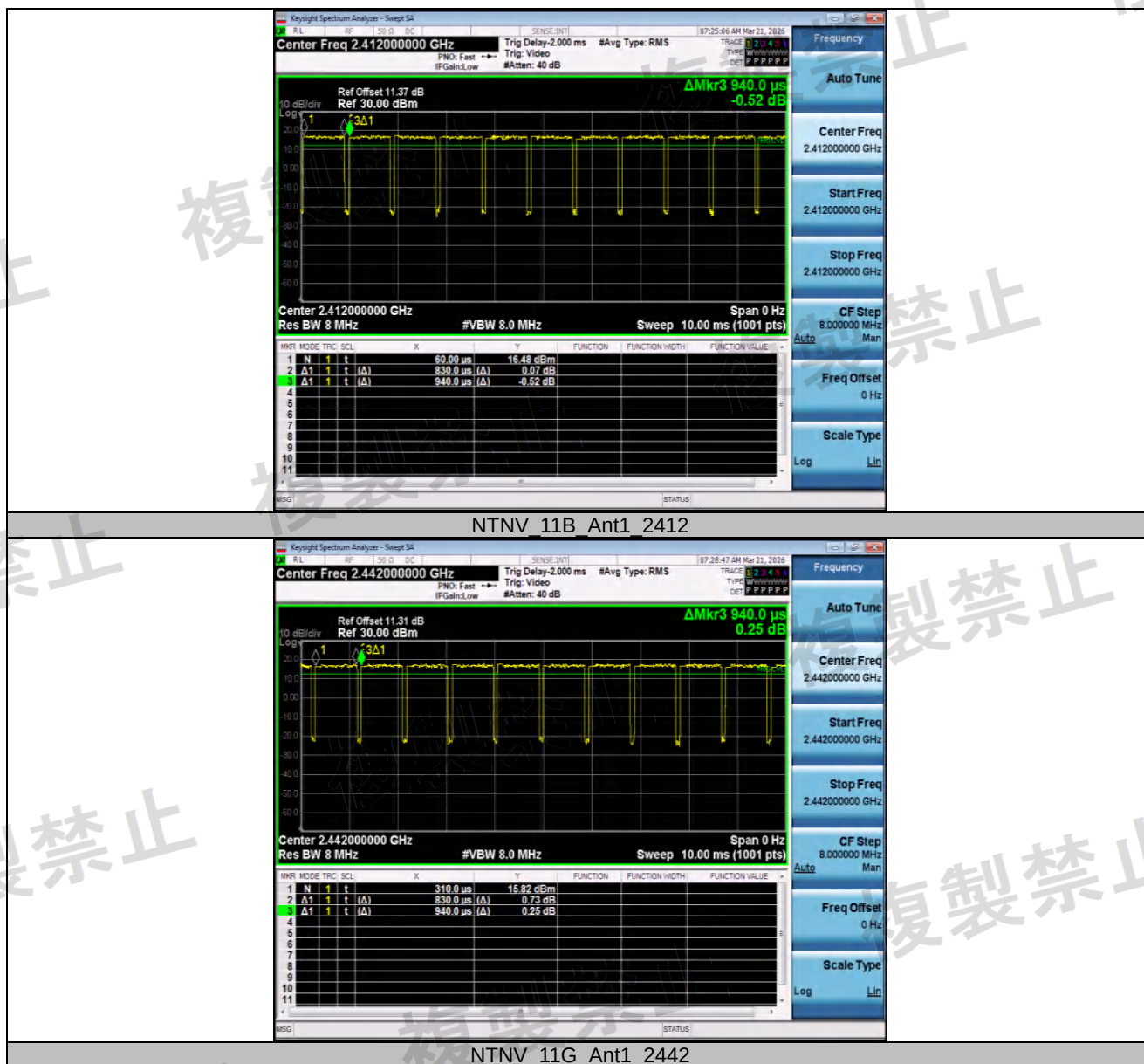
Note: 802.11n all test values margin for Transmitter Spurious Emissions are above limit 3Db, So complied with MIMO transmit requirement.

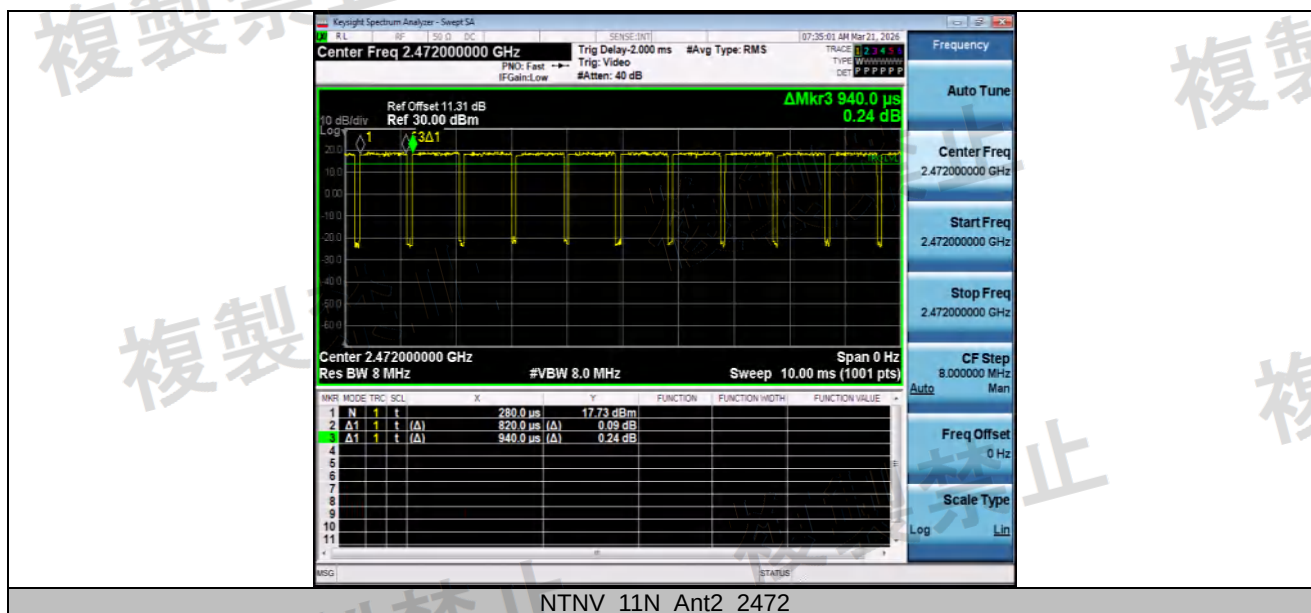
Appendix F: Duty cycle

Test Result

Test Mode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Verdict
11B	Ant1	2412	0.83	0.94	88.30	---
11G	Ant1	2442	0.83	0.94	88.30	---
11N20MIMO	Ant2	2472	0.82	0.94	87.23	---

All the modes have been tested, and only the data of the worst mode is displayed.





4. PHOTOS

1. Appendix I Test photo
2. Appendix II Exterior photo
3. Appendix II Interior photo

--- END ---