



Radio Test Report

Report No.: STS2606016W02

Issued for

Ying Shidai Zhi Neng Technology (Shenzhen) Co., Ltd.

No. 301, Block 8, Huafeng Science and Technology Park,
Fengtan Avenue, Tangwei Community, Fuhai Street, Bao'an
District, Shenzhen City, Guangdong, China

Product Name: Projector

Brand Name: N/A

Model Name: F200

Series Model(s): E200

Test Standard: Article 2 Paragraph 1 of Item 19
MIC Notice No.88 Appendix No.43

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.



TEST REPORT

Applicant's Name : Ying Shidai Zhi Neng Technology (Shenzhen)Co., Ltd.
Address..... : No. 301, Block 8, Huafeng Science and Technology Park, Fengtan Avenue, Tangwei Community, Fuhai Street, Bao'an District, Shenzhen City, Guangdong, China

Manufacturer's Name..... : Ying Shidai Zhi Neng Technology (Shenzhen)Co., Ltd.
Address..... : No. 301, Block 8, Huafeng Science and Technology Park, Fengtan Avenue, Tangwei Community, Fuhai Street, Bao'an District, Shenzhen City, Guangdong, China

Test specification:

Standard : Article 2 Paragraph 1 of Item 19
MIC Notice No.88 Appendix No.43

Product Description

Product Name : Projector
Brand Name..... : N/A
Model Name : F200
Series Model(s)..... : E200

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with Article 2 Paragraph 1 of Item 19, MIC Notice No.88 Appendix No.43 requirements. And it is applicable only to the tested sample identified in the report.
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

Testing

Date of receipt of test item : 24 Oct. 2025
Date (s) of performance of tests : 24 Oct. 2025~ 06 Nov. 2025
Date of Issue : 08 June 2026
Test Result : **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Skylar Li

(Skylar Li)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	08 June 2026	STS2606016W02	ALL	Initial Issue



1. SUMMARY OF TEST RESULTS

Article 2 Paragraph 1 of Item 19 of the certification Measurement Project		
Ordinance Regulating Radio Equipment	Description of Test	Judgement
Article 5	Frequency Error	PASS
Article 6	Occupied Bandwidth (99%)	PASS
Article 7	Unwanted Emission Intensity	PASS
Article 14&49-20	Power Error	PASS
Article 24.2	Limitation of Collateral Emission of Receiver	PASS
Article 49-20	Transmission Radiation power	PASS
Article 49-20	Transmission Radiation Angle Width (3dB Beamwidth)	N/A
Article 9-4.5	Radio Interference Prevention Capability	PASS
Article 49-20	Carrier Sense Capability(1)	N/A Note(3)
Article 49-20	Carrier Sense Capability(2)	Note(4)
Article 49-20	Construction Protection Confirmation	PASS

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report.

(2) Article 2 Paragraph 1 of Item 19, MIC Notice No.88 Appendix No.43

(3) 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

(4) Application to transmitting devices which OFDM modulation occupied bandwidth greater than 26MHz.



1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.751\text{dB}$
2	Unwanted Emissions, conducted	$\pm 2.888\text{dB}$
3	Frequency tolerance	$\pm 0.03\text{ppm}$
4	Occupied Channel Bandwidth	$\pm 3.6\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Equipment	Projector	
Brand Name	N/A	
Model Name	F200	
Series Model(s)	E200	
Model Difference	Only the sales models are different, the appearance shapes are different, but the motherboard and circuit design are the same	
Product Description	The EUT is a Projector	
	Operation Frequency:	802.11b/g/n 20: 2412~2472 MHz 802.11n(40MHz):2422~2462MHz
	Modulation Type:	802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM
	Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n(20MHz): MCS7~MCS0:65/58.5/52/39/26/19.5/13/6.5Mbps 802.11n(40MHz): MCS7~MCS0:135/121.5/108/81/54/40.5/27/13.5Mbps
	Number Of Channel:	802.11b/g/n20: 13CH 802.11n 40: 9CH
	Antenna Designation:	Please refer to the Note 3.
	AntennaGain:	2.23 dBi
	Antenna Power:	802.11b: 2.812mW/MHz 802.11g: 2.851mW/MHz 802.11n20: 2.355mW/MHz 802.11n40: 1.365mW/MHz
	Declare power:	802.11b: 5mW/MHz 802.11g: 5mW/MHz 802.11n20: 5mW/MHz 802.11n40: 3mW/MHz
	Duty Cycle:	>98%
Based on the application, features, or specification exhibited in User Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User Manual.		
Channel List	Please refer to the Note 2.	
Rating	Input: AC 100-240V~50/60Hz 1.2A	
Adapter	N/A	
Battery	N/A	
Hardware version	Q2707 -V08	
Software version	RK11_Q2707-V8_EA6621_DymtLauncher_YingDa_Projector_Game_EN_OT A_20250813_V09	



Connecting
I/O Port(s)

Please refer to the Note 1.

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. Operation Frequency of channel

802.11b/g/n(20MHz)		Channel List for 802.11n(40MHz)	
Channel	Frequency	Channel	Frequency
01	2412	03	2422
02	2417	04	2427
03	2422	05	2432
04	2427	06	2437
05	2432	07	2442
06	2437	08	2447
07	2442	09	2452
08	2447	10	2457
09	2452	11	2462
10	2457		
11	2462		
12	2467		
13	2472		

Note: regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:
Carrier Frequency Channel

3.

Ant.	Antenna Brand	Antenna Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1		LA31H2450/500-A33	Ceramic	N/A	2.23	WIFI Antenna

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



2.2 DESCRIPTION OF THE TEST MODES

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

Worst Mode	Description	Data Rate
Mode 1	TX IEEE 802.11b CH01	1 Mbps
Mode 2	TX IEEE 802.11b CH13	1 Mbps
Mode 3	TX IEEE 802.11g CH01	6 Mbps
Mode 4	TX IEEE 802.11g CH13	6 Mbps
Mode 5	TX IEEE 802.11n HT20 CH01	MCS 0
Mode 6	TX IEEE 802.11n HT20 CH13	MCS 0
Mode 7	TX IEEE 802.11n HT40 CH03	MCS 0
Mode 8	TX IEEE 802.11n HT40 CH11	MCS 0

2.3 TABLE FOR PARAMETERS OF THE TEST 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 going to be fixed on the firmware of the final end product.

Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
2.4G WIFI	802.11b	2.23	11	CMD
	802.11g		11	
	802.11n(HT20)		11	
	802.11n(HT40)		10	



2.4 TEST CONDITIONS

The 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.

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 25.3°C
- Humidity: 52 %
- Atmospheric pressure: 93 kpa

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input AC Power(V)	100	110	90
RF Chip Input DC Power(V)	3.307	3.327	3.296
Voltage Variation (%)	/	0.60	-0.33

Note:

1. Voltage Variation (%)

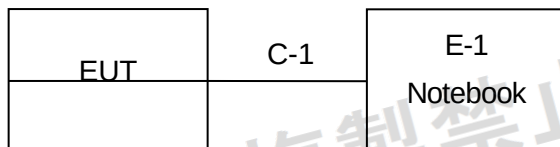
= (RF chip Input high or Low Voltage - RF chip Input Normal Voltage)/ RF chip Input Normal Voltage* 100

2. RF chip Input DC power fluctuation is verified at the power input PIN of the RF chip.

When the input supply voltage to the EUT from the external power source is varied by +/- 10%, the 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%, and the DC power fluctuation at the power input PIN of the RF chip is equal to or less than +/-1%.Exempt extremely high and low supply voltage condition tests, EUT only operated in normal voltage to test all regulations.

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

AC Plug





2.6 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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.

Item	Equipment	Mfr/Brand	Model/Type No.	Note
E-1	Notebook	DELL	Inspiron 3501	N/A
C-1	USB Cable	ZTC	NB-A515A	N/A

Item	Equipment	Mfr/Brand	Length	Note
C-1	Shielded	NO	100cm	N/A

Note:1. For detachable type I/O cable should be specified the length in cm in 『Length』 column.



2.7 EQUIPMENTS LIST FOR ALL TEST ITEMS

RF Connected Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Generator	Keysight	N5182B	MY57301448	2025.09.26	2026.09.25
Signal Analyzer	Agilent	N9020A	MY51510623	2025.02.22	2026.02.21
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Digital Oscilloscope	Tektronix	TDS1012B	C062149	2025.09.22	2026.09.21
Power Sensor	Keysight	U2021XA	MY55520005	45925	46289
Power Divider	eastsheep	PD-0.5/0.6-2 S	B519	2025.02.25	2026.02.24
Attenuator	Agilent	8494B	DC-18G	2025.02.25	2026.02.24
DC power supply	HONGSHEN GFENG	DPS-305AF	17064939	2025.09.22	2026.09.21
Switch control box	MW	MW100-RFC B	N/A	N/A	N/A
Test SW	MW	MTS 8310 2.0.0.0			

Test Equipment Calibration

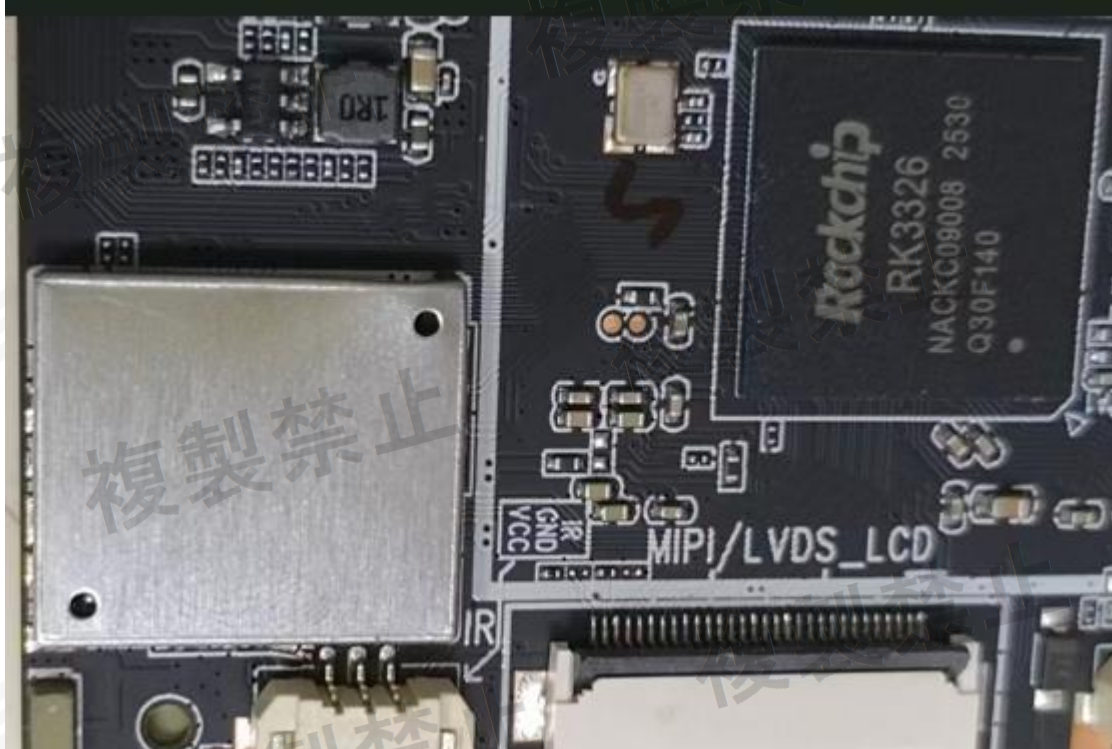
All of the test equipment is effective use and calibration certification institution, GRGT, the address is 163 tianhe district in huangpu road xiping cloud road .Guangzhou, China

Note: The calibration agency listed on the table corresponds to item ii c) of Article 24-2 para graph 4.



3. CONSTRUCTION PROTECTION CONFIRMATION

Our products apply for Japanese radio frequency (rf) certification. We use the following methods to prevent unauthorized access and modification of RF and modulation parts. The high-frequency section and modulation section use SMT technology, not easy to change. (This wireless module uses a shielding cover to prevent users from disassembling and modifying it.) For more information, see the following photo.





4. FREQUENCY ERROR

4.1 LIMIT

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

4.2 TEST PROCEDURES

The following table is the setting of Spectrum Analyzer.

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

- (1) In the case of unmodulated signal (continuous or continuous burst), measure the frequency directly by a spectrum analyzer.
- (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.

4.3 TEST SETUP



4.4 TEST RESULT

Note: The test data please refer to APPENDIX 1.



5. ANTENNA POWER

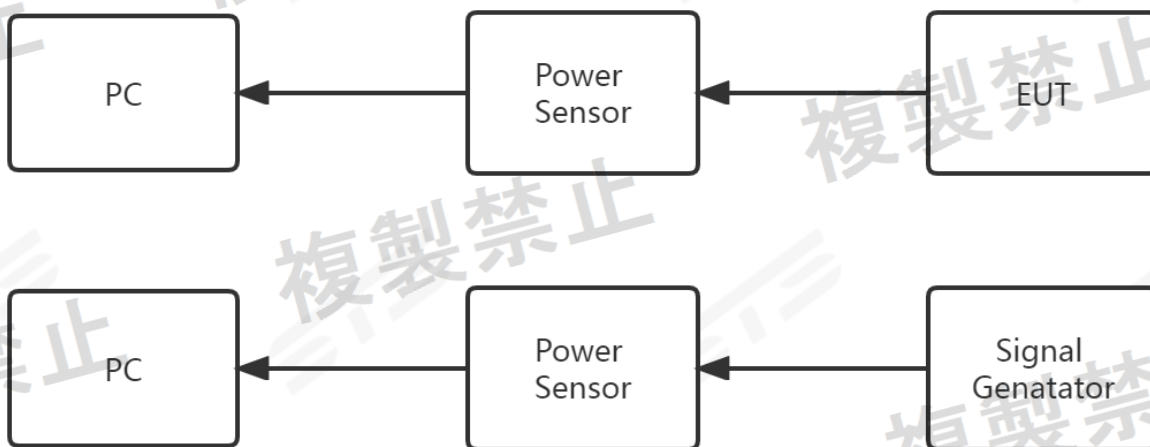
5.1 LIMIT

Item	Limits
Antenna Power Density	$\leq 3\text{mW/MHz}$ (FH from 2400 – 2483.5 MHz) $\leq 10\text{mW/MHz}$ (OFDM,DS from 2400~2483.5MHz, 802.11b/g/n HT20) $\leq 5\text{mW/MHz}$ (OFDM,DS from 2400~2483.5MHz, 802.11n HT40) $\leq 10\text{mW}$ (Other from 2400~2483.5MHz)
Power Error	+20%, No lower limit (Base on manufacturer declare power)

5.2 TEST PROCEDURE

1. EUT turn to test frequency channel and keep continuous transmitting.
2. Reading the output power from the Power sensor as PEUT.
3. Turn the Signal generator to frequency channel the same as the EUT.
4. Turn the level of Signal generator, scan with the power meter until the power equal to PEUT, the level of Signal generator recorded as “P”.
5. The antenna power of EUT is “P”.
6. EIRP power=“P”+antenna gain.
Antenna Power mW/MHz= Antenna Power (mW)/Spreading Bandwidth.

5.3 TEST SETUP



5.4 TEST DEVIATION

There is no deviation with the original standard.



5.5 TEST RESULT

Note: The test data please refer to APPENDIX 1.



6. RADIATION POWER

6.1 LIMIT

Item	Limits
Radiation power EIRP	FH from 2427 - 2470.75 MHz ,EIRP $\leq$ 6.91dBm/MHz CCK/OFDM/DBPSK (2400~2483.5MHz) OFDM or DS other than (802.11b/g/n HT20) EIRP $\leq$ 12.14 dBm/MHz OFDM or DS other than (802.11n HT40) EIRP $\leq$ 9.13dBm/MHz Other from 2400~2483.5MHz: 12.14 dBm or less

6.2 TEST RESULT

Note: The test data please refer to APPENDIX 1.



7. OCCUPIED BANDWIDTH (99%)

7.1 LIMIT

Item	Limits
Occupied Band Width:	$\leq 83.5\text{MHz}$ (FH;FH+DS;FH+OFDM) $\leq 26\text{MHz}$ (Others) 26MHz-40MHz

7.2 TEST PROCEDURE

- Setting of SA is following as: RB: 300KHz / VB: 300KHz / SPAN: 3MHz / AT: 30dB Ref: 10dBm / 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), 83.5MHz (For FHSS Device) or 26MHz-40MHz (For OFDM/OFDMA (HT40/HE40)).

7.3 TEST SETUP



7.4 TEST DEVIATION

There is no deviation with the original standard.

7.5 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULT

Note: The test data please refer to APPENDIX 1.



8. UNWANTED EMISSION INTENSITY MEASUREMENT

8.1 LIMIT

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

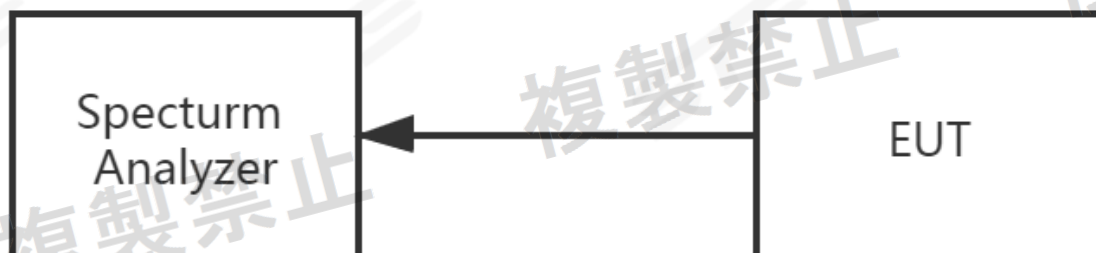
8.2 TEST PROCEDURE

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	1 MHz/1 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: RB: 1MHz / VB: 1MHz / AT: 10dB Ref: 0dBm / Sweep time: Auto/ Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
3. 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 $\mu\text{W/MHz}$.
4. 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 $\mu\text{W/MHz}$.
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 $\mu\text{W/MHz}$.
6. 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 $\mu\text{W/MHz}$.
7. SA adjusted to start frequency 2496.5MHz and stop frequency 12750MHz. Then to mark peak reading value + cable loss shall be less than 2.5 $\mu\text{W/MHz}$.
8. 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.



8.3 TEST SETUP



8.4 TEST DEVIATION

There is no deviation with the original standard.

8.5 TEST RESULT

Note: 1.SA set to from 2.4965GHz to 13GHz, plot shows from 2.497GHz to 13GHz as of SA's default format.The test data please refer to APPENDIX 1.

2. Input compensation coefficient (dB) = Cable Loss (dB)+Gain (dBi)



9. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

9.1 LIMIT

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

9.2 TEST PROCEDURES

Spectrum Parameter	Setting
Attenuation	Auto
RB	100 kHz (below 1GHz emissions) 1 MHz (above 1GHz emissions)
VB	100 kHz (below 1GHz emissions) 1 MHz (above 1GHz emissions)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

1. EUT have the continuous reception mode and fixed only one channelize.
2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
3. 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
4. SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW
5. 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.

9.3 TEST RESULT

Note: The test data please refer to APPENDIX 1.



10. TRANSMISSION RADIATION ANGLE WIDTH (3DB BEAMWIDTH) MEASUREMENT

10.1 LIMIT

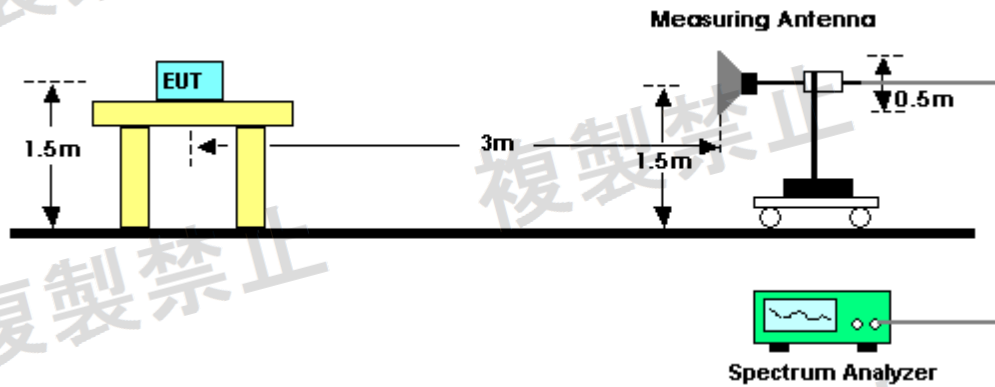
Item	Limits
3dB antenna beam width	$e \leq 360/A$ (The A is 10 in maximum) $A = \{ \text{EIRP Power [mW/MHz]} / \{2.14\text{dBi} + \text{output power (10mW /MHz, 3mW/MHz)} \} \}$ Shall be 1 when A is lower than 1
Note: This test item is not applied for radio equipment with equivalent isotropic radiation power lower than 12.14dBm/MHz, but Antenna Power(Conducted) limit is 10 mW/MHz (10 dBm/MHz), So the test item will not be applied to the transmission antenna which has a gain of 2.14dBi or less	

10.2 TEST PROCEDURES

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	0 MHz
RB	1 MHz
VB	1 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

1. Set EUT and measuring antenna at the same height and roughly facing each other.
2. Set spectrum analyzer with condition in section 11.2 and tune reference level to observe receiving signal position.
3. Rotate directions of the EUT horizontally and vertically to find the maximum receiving power.
4. Move the measuring antenna height up and down within $\pm 50\text{cm}$ of EUT height and swing it to find the maximum output of measuring antenna. "E" is the half-power beam width (angle between two points at which radiated power becomes 1/2)
5. Calculate permitted radiation angle in horizontal and vertical using EIRP measured in another test method.
6. Calculate 3dB antenna beam width by the formula below $360/A$ (If $A < 1$; then $A = 1$).
 $A = \{ \text{EIRP Power [mW/MHz]} / \{2.14\text{dBi} + \text{output power (10mW /MHz, 3mW/MHz)} \} \}$
Shall be 1 when A is lower than 1

10.3 TEST SETUP



10.4 TEST DEVIATION

There is no deviation with the original standard.

10.5 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

10.6 TEST RESULT

Note: The Max EIRP is less than 12.14dBm/MHz, not applicable.

11. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

11.1 LIMIT

Item	Limits
Identification code	≥ 48 bits

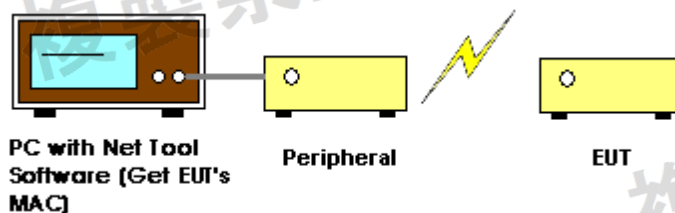
11.2 MEASURING ID CODE SOFTWARE

Item	Limits
MAC IP List	MAC Scan

11.3 TEST PROCEDURES

1. In the case that the EUT has the function of automatically transmitting the identification code:
 - a. Transmit the predetermined identification codes from EUT.
 - b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code:
 - a. Transmit the predetermined identification codes from the counterpart.
 - b. Check if communication is normal.
 - c. Transmit the signals other than predetermined ID codes from the counterpart.
 - d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

11.4 TEST SETUP



11.5 TEST DEVIATION

There is no deviation with the original standard.

11.6 EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.



11.7 TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILITY

Note: The MAC Address is 0A:ED:01:2F:14:8E

12. CARRIER SENSE CAPABILITY

12.1 INTERFERENCE PREVENTION FUNCTION

12.2 TEST REQUIREMENT

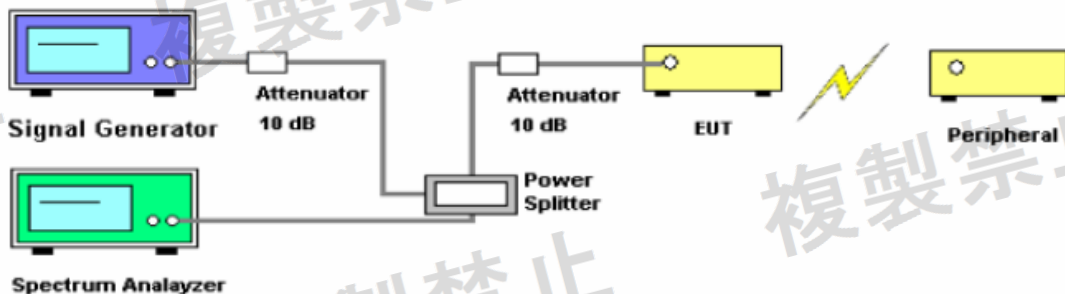
MIC Notice No.88 Appendix No.43

Article 2, Paragraph 1, Item 19 Rules Section 10

12.3 TEST PROCEDURE

1. SG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SG and power level is $(on\ 22.79 + G - 20 \cdot \log(f) \text{ dBm})$ (G is the antenna gain, f is the test Frequency).
2. Turn off the RF signal of the SG.
3. EUT have transmitted the maximum modulation signal and fixed channelize.
4. Setting of SA :RBW/VBW=1MHz/1MHz, Span=50MHz, Sweep time=auto, Sweep mode=continuous, Detect mode=positive peak
5. SG RF signal on.

❖ Measurement System Diagram

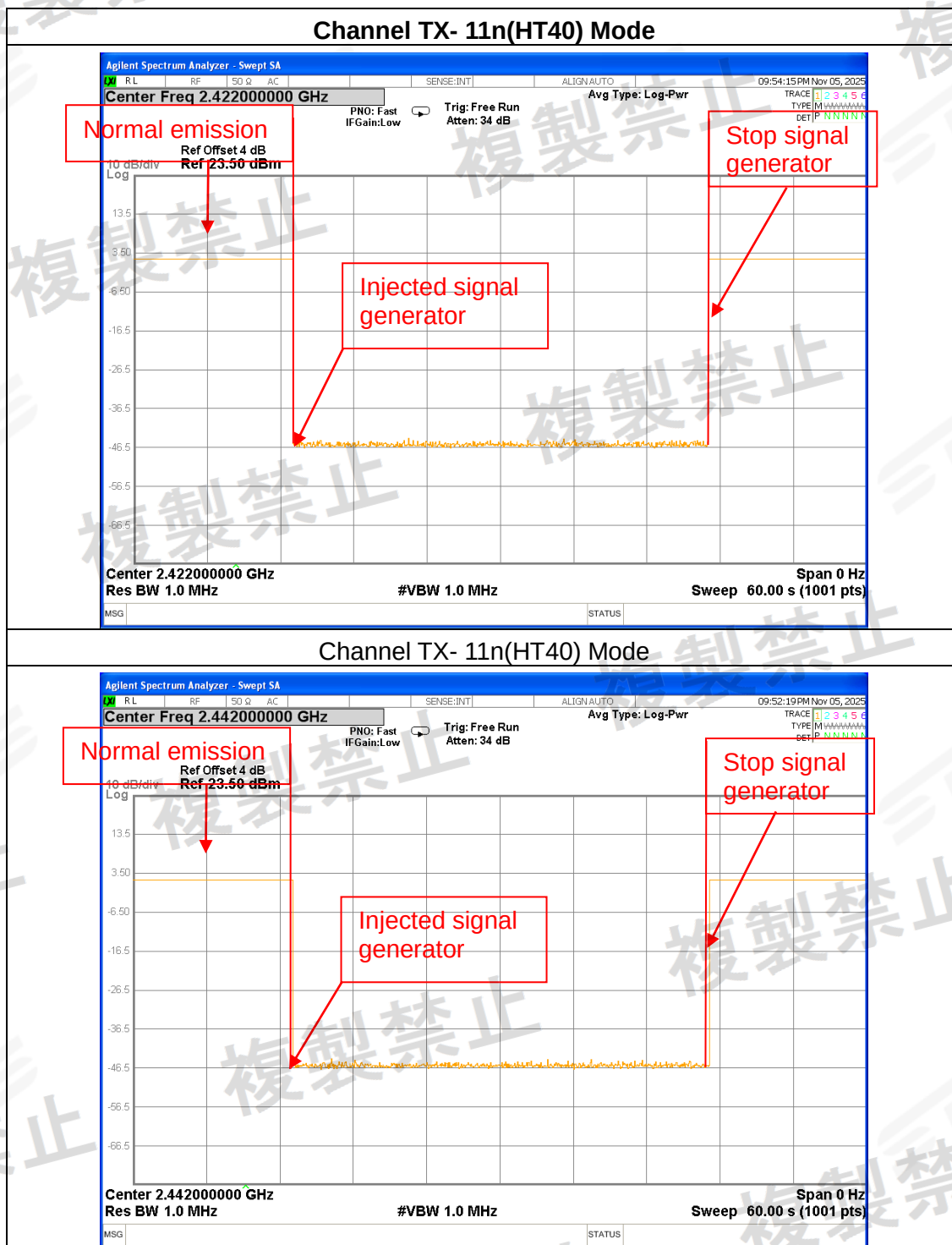


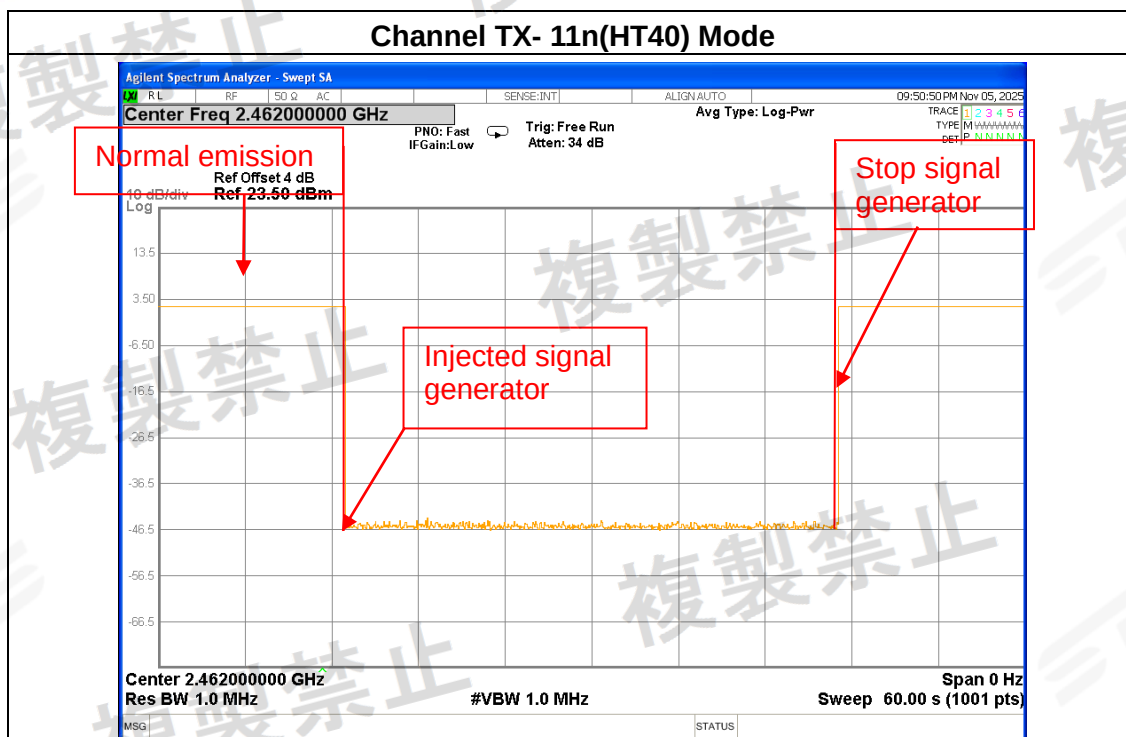
❖ Conditions of Application Equipment (EUT)

- The EUT state shall be “normal mode link with wireless router”.



12.4 TEST RESULT







13. NUMBER OF CARRIER

13.1 LIMIT

The OFDM system shall have one or more carriers per 1MHz bandwidth

13.2 TEST PROCEDURE

1. Setting of SA is following as: RB: 300KHz / VB: 300KHz / SPAN: 3MHz / AT: 30dB Ref: 10dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
2. 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), 83.5MHz (For FHSS Device) or 26MHz-40MHz (For OFDM/OFDMA (HT40/HE40)).

13.3 TEST SETUP



13.4 TEST DEVIATION

There is no deviation with the original standard.

13.5 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

13.6 TEST RESULT

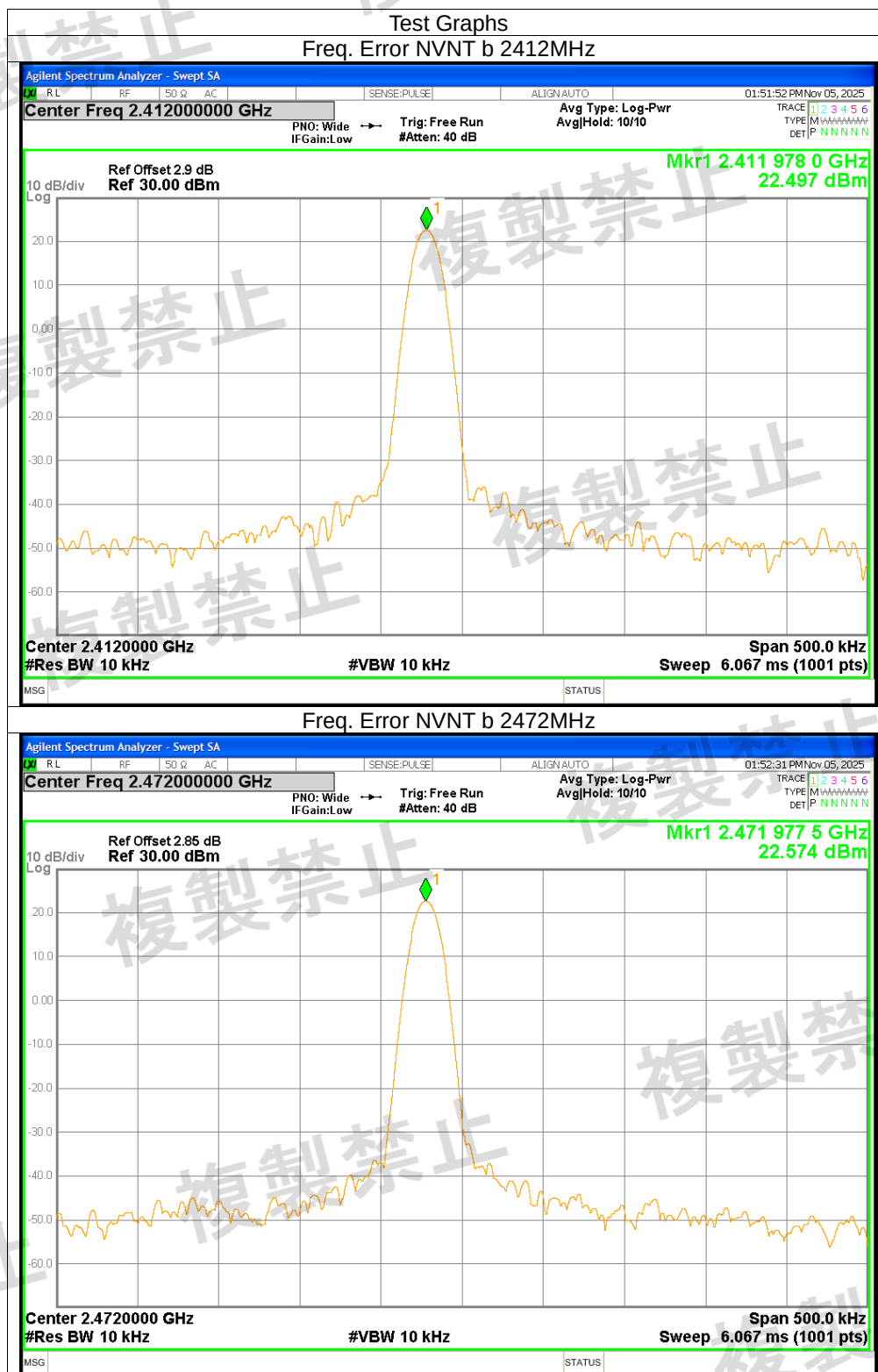
Note: Pass, this device conform the conditions.

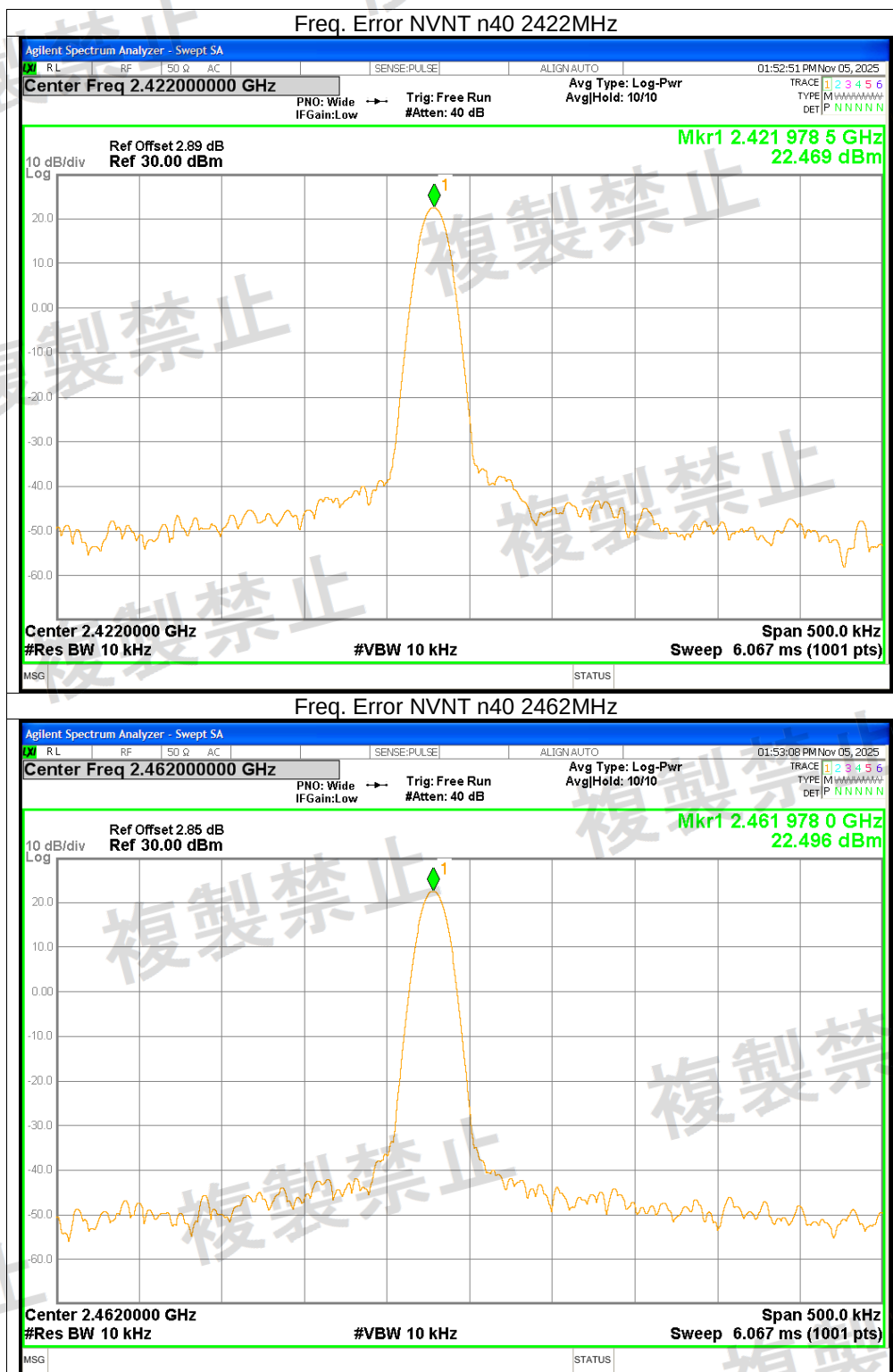


APPENDIX 1-TEST DATA

Frequency Error

Condition	Mode	Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	b	2412	2411.978	-22000	-9.12	+50	Pass
NVNT	b	2472	2471.9775	-22500	-9.1	+50	Pass
NVNT	n40	2422	2421.9785	-21500	-8.88	+50	Pass
NVNT	n40	2462	2461.978	-22000	-8.94	+50	Pass







Antenna Power

Condition	Mode	Frequency (MHz)	Power (dBm/MHz)	Antenna Power (mW/MHz)	Limit (mW/MHz)	Declared Power (mW/MHz)	Tolerance (%)	Upper Limit (%)	Verdict
NVNT	b	2412	4.16	2.606	10	5	-47.88	20	Pass
NVNT	b	2472	4.49	2.812	10	5	-43.76	20	Pass
NVNT	g	2412	4.55	2.851	10	5	-42.98	20	Pass
NVNT	g	2472	3.93	2.472	10	5	-50.56	20	Pass
NVNT	n20	2412	3.72	2.355	10	5	-52.9	20	Pass
NVNT	n20	2472	3.67	2.328	10	5	-53.44	20	Pass
NVNT	n40	2422	1.35	1.365	5	3	-54.5	20	Pass
NVNT	n40	2462	1.27	1.34	5	3	-55.33	20	Pass



EIRP Power

Condition	Mode	Frequency (MHz)	Antenna Power (dBm/MHz)	Gain (dBi)	EIRP Power (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	b	2412	4.16	2.23	6.39	12.14	Pass
NVNT	b	2472	4.49	2.23	6.72	12.14	Pass
NVNT	g	2412	4.55	2.23	6.78	12.14	Pass
NVNT	g	2472	3.93	2.23	6.16	12.14	Pass
NVNT	n20	2412	3.72	2.23	5.95	12.14	Pass
NVNT	n20	2472	3.67	2.23	5.9	12.14	Pass
NVNT	n40	2422	1.35	2.23	3.58	9.13	Pass
NVNT	n40	2462	1.27	2.23	3.5	9.13	Pass



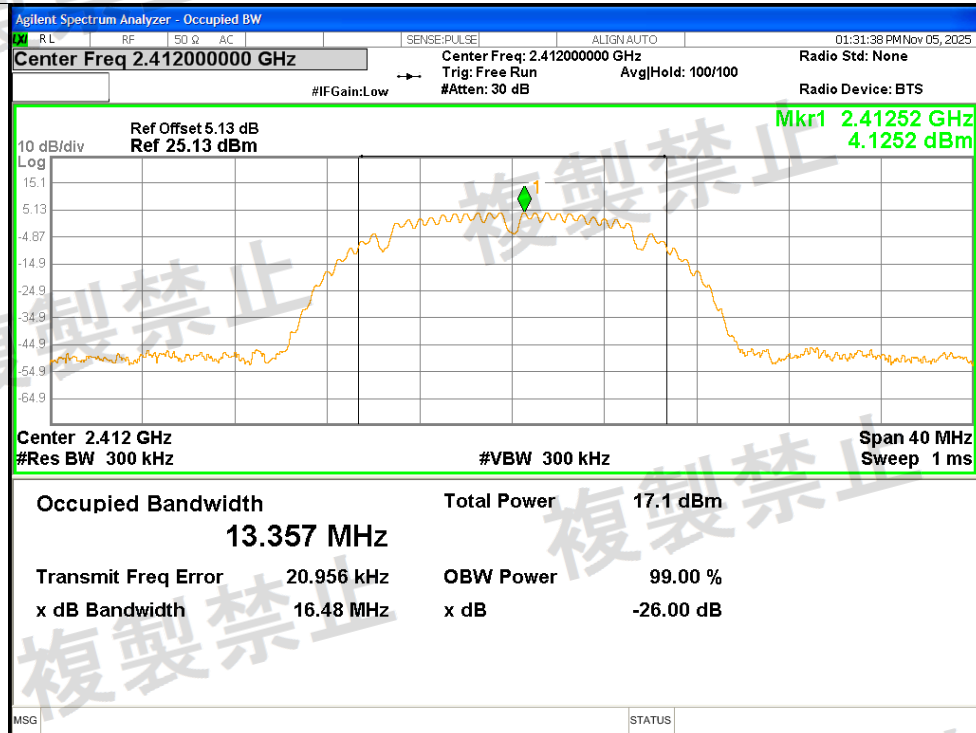
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	99% OBW (MHz)	Lower Limit (MHz)	Upper Limit (MHz)	Verdict
NVNT	b	2412	13.357	N/A	26	Pass
NVNT	b	2472	13.346	N/A	26	Pass
NVNT	g	2412	16.669	N/A	26	Pass
NVNT	g	2472	16.475	N/A	26	Pass
NVNT	n20	2412	17.862	N/A	26	Pass
NVNT	n20	2472	17.661	N/A	26	Pass
NVNT	n40	2422	35.905	26	40	Pass
NVNT	n40	2462	36.163	26	40	Pass

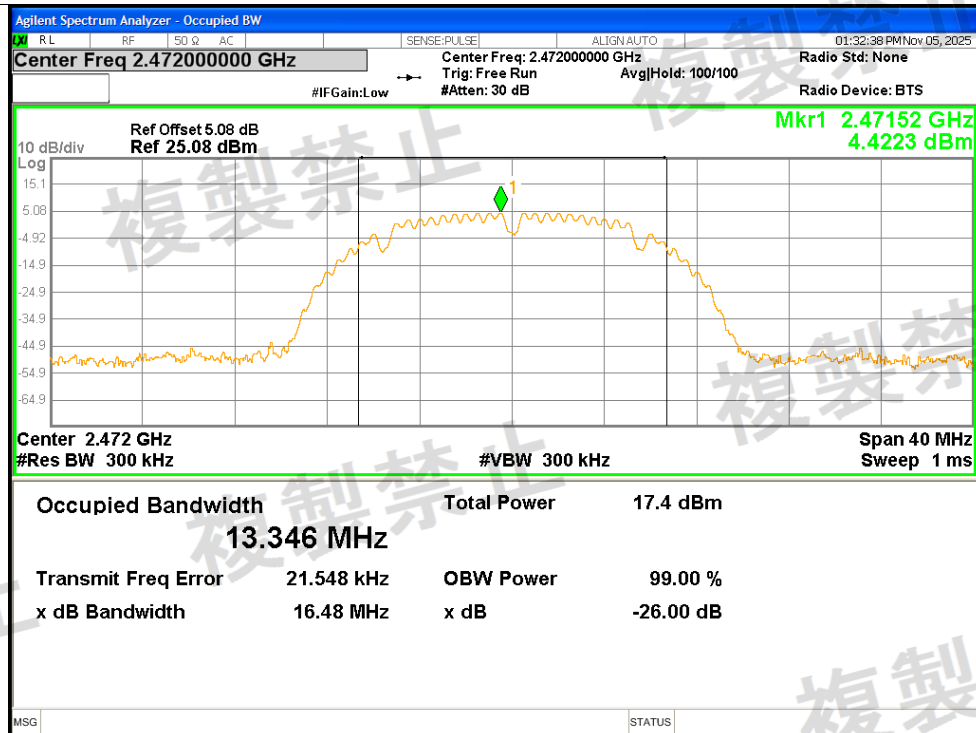


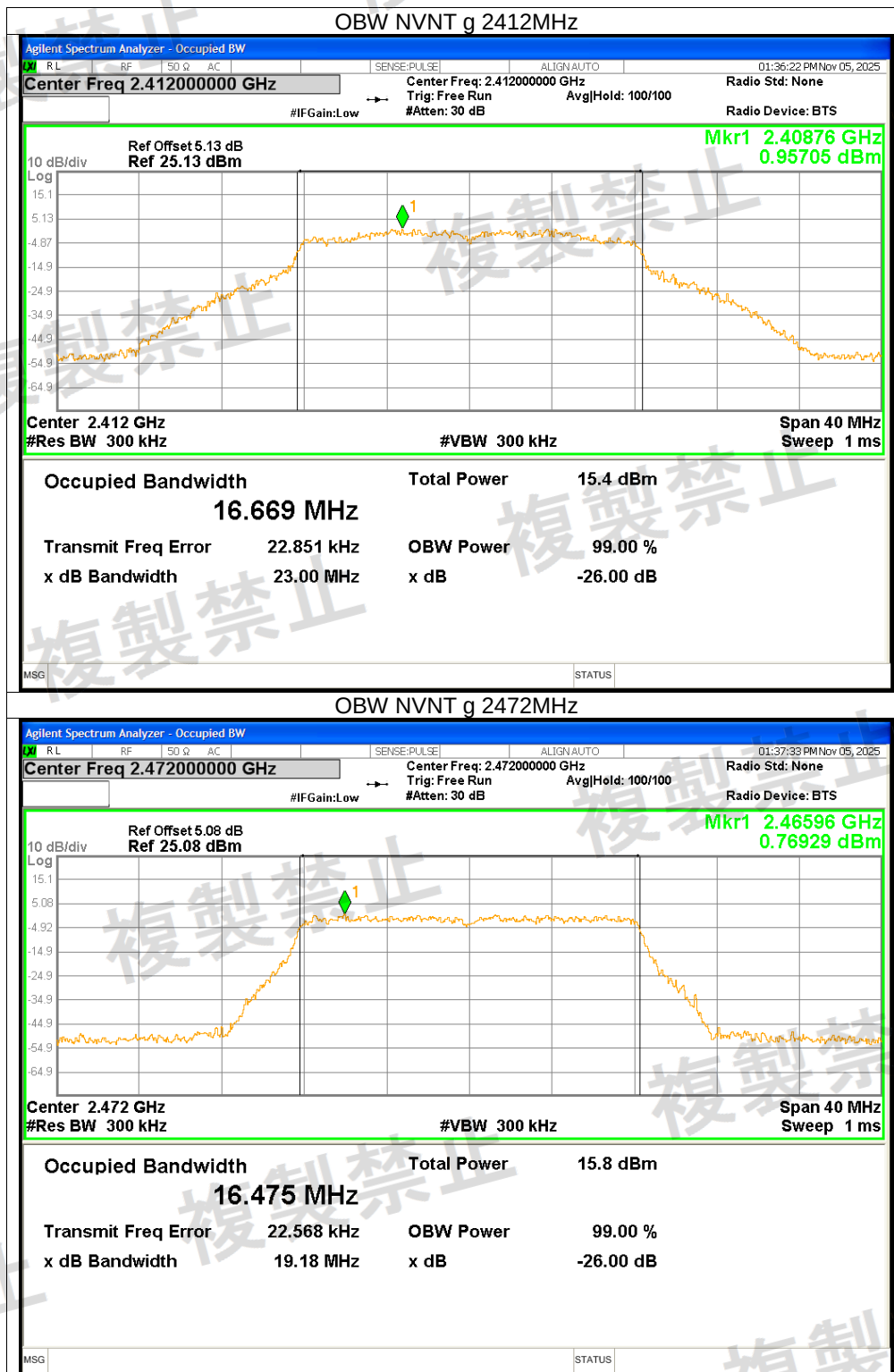
Test Graphs

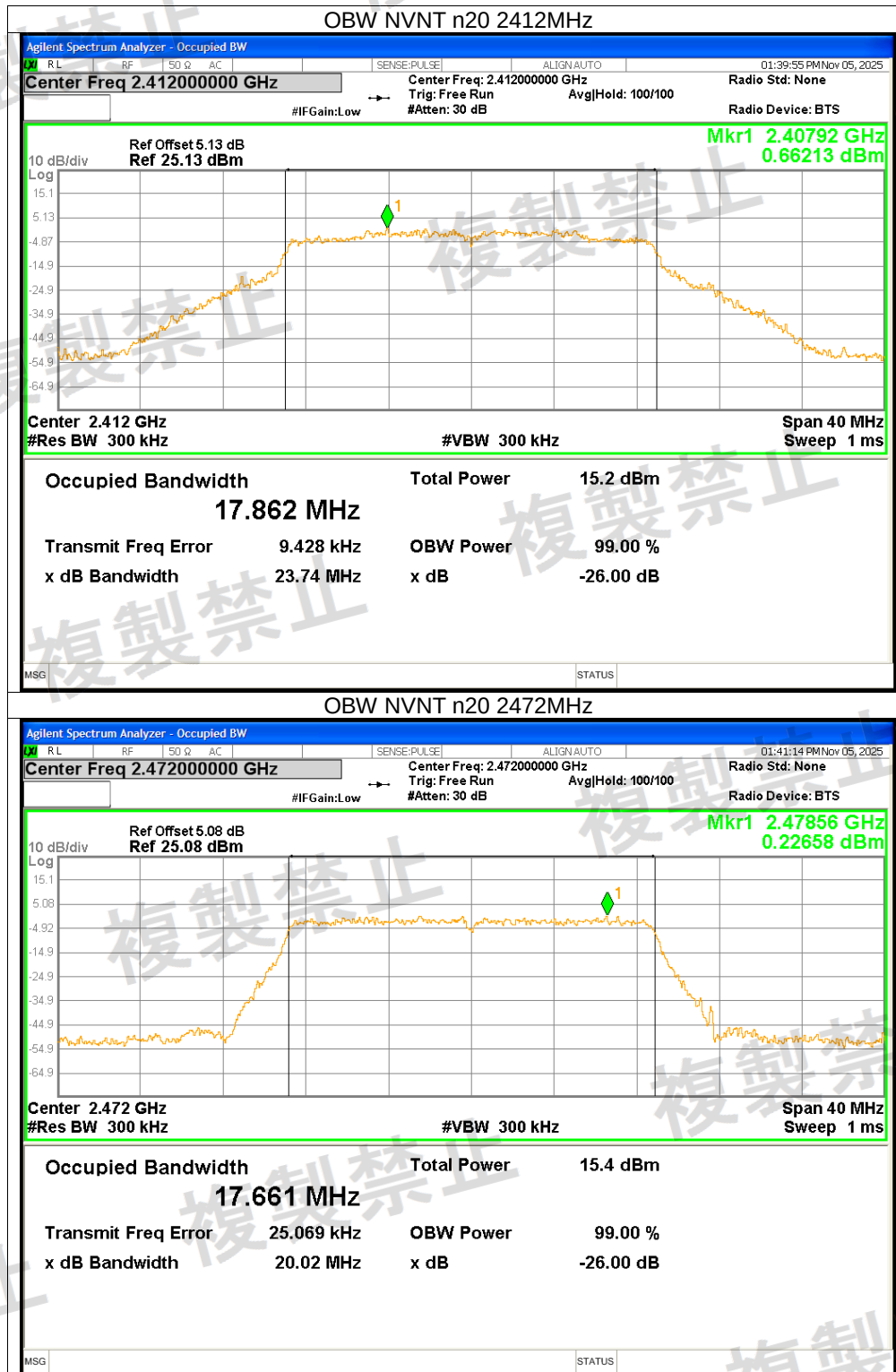
OBW NVNT b 2412MHz

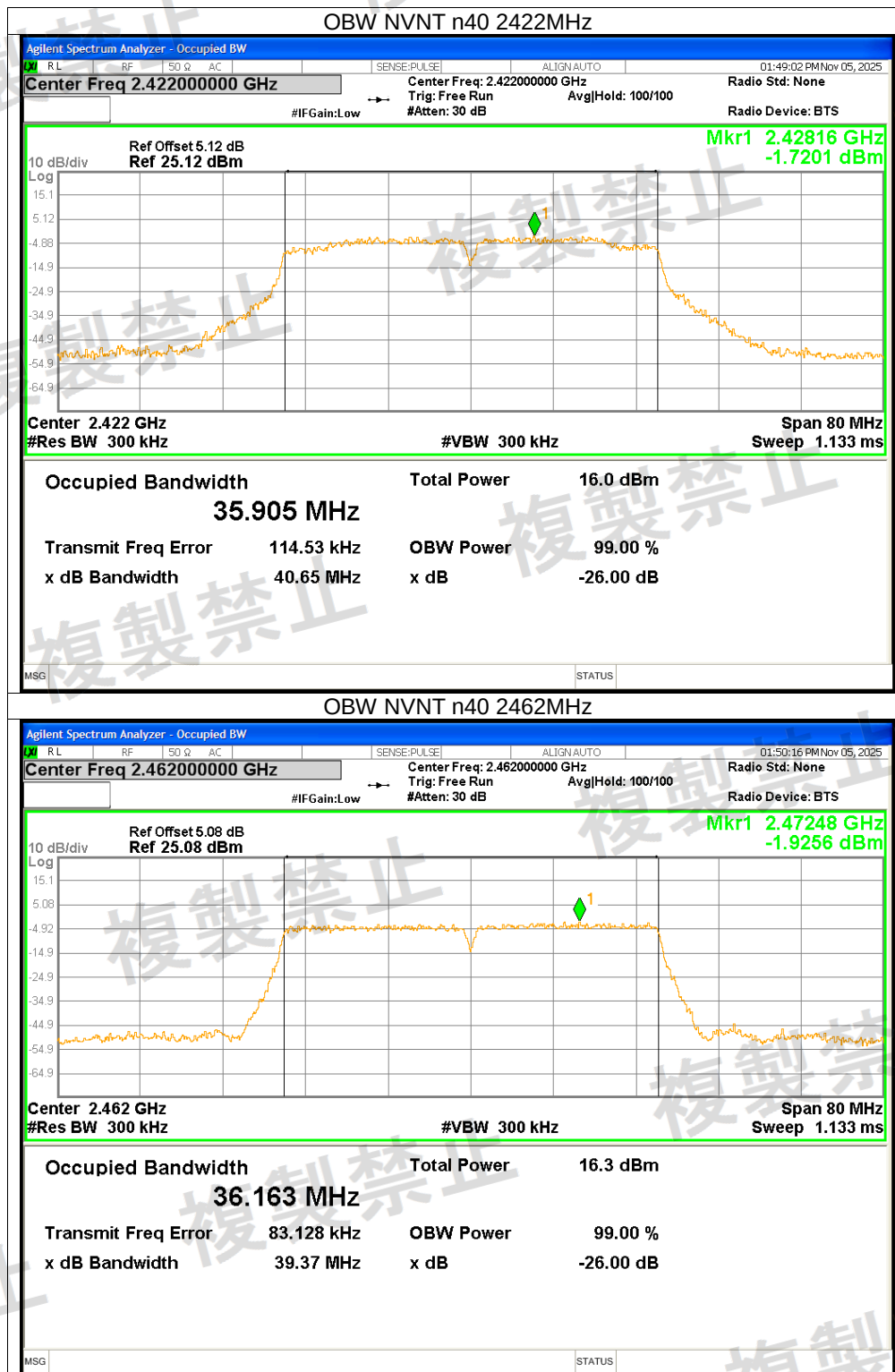


OBW NVNT b 2472MHz











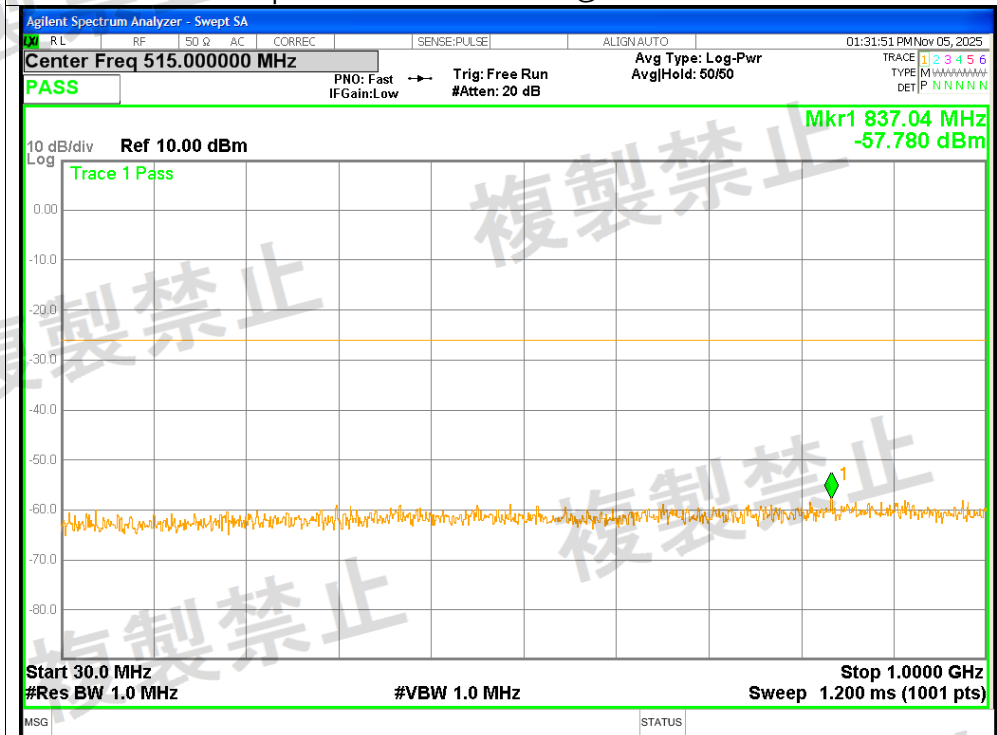
Tx Spurious Emission

Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm/MHz)	Max Value (uW/MHz)	Limit Start(uW/MHz)	Limit Stop (uW/MHz)	Verdict
NVNT	b	2412	30-1000	837.04	-57.78	0.0017	2.5	2.5	Pass
NVNT	b	2412	1000-2387	2387	-48.82	0.0131	2.5	2.5	Pass
NVNT	b	2412	2387-2400	2396	-44.07	0.0392	25	25	Pass
NVNT	b	2412	2483.5-2496.5	2493.57	-50.92	0.0081	25	25	Pass
NVNT	b	2412	2496.5-13000	2654.05	-50.19	0.0096	2.5	2.5	Pass
NVNT	b	2472	30-1000	800.18	-57.64	0.0017	2.5	2.5	Pass
NVNT	b	2472	1000-2387	2384.23	-51.93	0.0064	2.5	2.5	Pass
NVNT	b	2472	2387-2400	2399.9	-50.66	0.0086	25	25	Pass
NVNT	b	2472	2483.5-2496.5	2485.58	-44.6	0.0347	25	25	Pass
NVNT	b	2472	2496.5-13000	2496.5	-46.88	0.0205	2.5	2.5	Pass
NVNT	g	2412	30-1000	737.37	-57.43	0.0018	2.5	2.5	Pass
NVNT	g	2412	1000-2387	2380.97	-53	0.005	2.5	2.5	Pass
NVNT	g	2412	2387-2400	2399.78	-19.45	11.3501	25	25	Pass
NVNT	g	2412	2483.5-2496.5	2487.4	-52.52	0.0056	25	25	Pass
NVNT	g	2412	2496.5-13000	12256.35	-50.34	0.0092	2.5	2.5	Pass
NVNT	g	2472	30-1000	770.93	-58.08	0.0016	2.5	2.5	Pass
NVNT	g	2472	1000-2387	2224.1	-54.13	0.0039	2.5	2.5	Pass
NVNT	g	2472	2387-2400	2397.74	-52.26	0.0059	25	25	Pass
NVNT	g	2472	2483.5-2496.5	2483.71	-37.69	0.1702	25	25	Pass
NVNT	g	2472	2496.5-13000	12103.53	-50.29	0.0094	2.5	2.5	Pass
NVNT	n20	2412	30-1000	820.45	-57.93	0.0016	2.5	2.5	Pass
NVNT	n20	2412	1000-2387	2382.28	-52.75	0.0053	2.5	2.5	Pass
NVNT	n20	2412	2387-2400	2399.92	-18.53	14.0281	25	25	Pass
NVNT	n20	2412	2483.5-2496.5	2493.53	-52.97	0.005	25	25	Pass
NVNT	n20	2412	2496.5-13000	12268.43	-49.94	0.0101	2.5	2.5	Pass
NVNT	n20	2472	30-1000	928.32	-57.12	0.0019	2.5	2.5	Pass
NVNT	n20	2472	1000-2387	2293.31	-53.93	0.004	2.5	2.5	Pass
NVNT	n20	2472	2387-2400	2388.87	-52.75	0.0053	25	25	Pass
NVNT	n20	2472	2483.5-2496.5	2483.58	-36.36	0.2312	25	25	Pass
NVNT	n20	2472	2496.5-13000	12369.26	-50.71	0.0085	2.5	2.5	Pass
NVNT	n40	2422	30-1000	999.85	-57.02	0.002	2.5	2.5	Pass
NVNT	n40	2422	1000-2387	2386.51	-45.23	0.03	2.5	2.5	Pass
NVNT	n40	2422	2387-2400	2399.96	-25.93	2.5527	25	25	Pass
NVNT	n40	2422	2483.5-2496.5	2489.35	-52.02	0.0063	25	25	Pass
NVNT	n40	2422	2496.5-13000	12168.65	-50.11	0.0097	2.5	2.5	Pass
NVNT	n40	2462	30-1000	985.06	-57.34	0.0018	2.5	2.5	Pass
NVNT	n40	2462	1000-2387	2326.94	-53.68	0.0043	2.5	2.5	Pass
NVNT	n40	2462	2387-2400	2391.68	-52.15	0.0061	25	25	Pass
NVNT	n40	2462	2483.5-2496.5	2483.55	-32.65	0.5433	25	25	Pass
NVNT	n40	2462	2496.5-13000	2496.5	-47.7	0.017	2.5	2.5	Pass

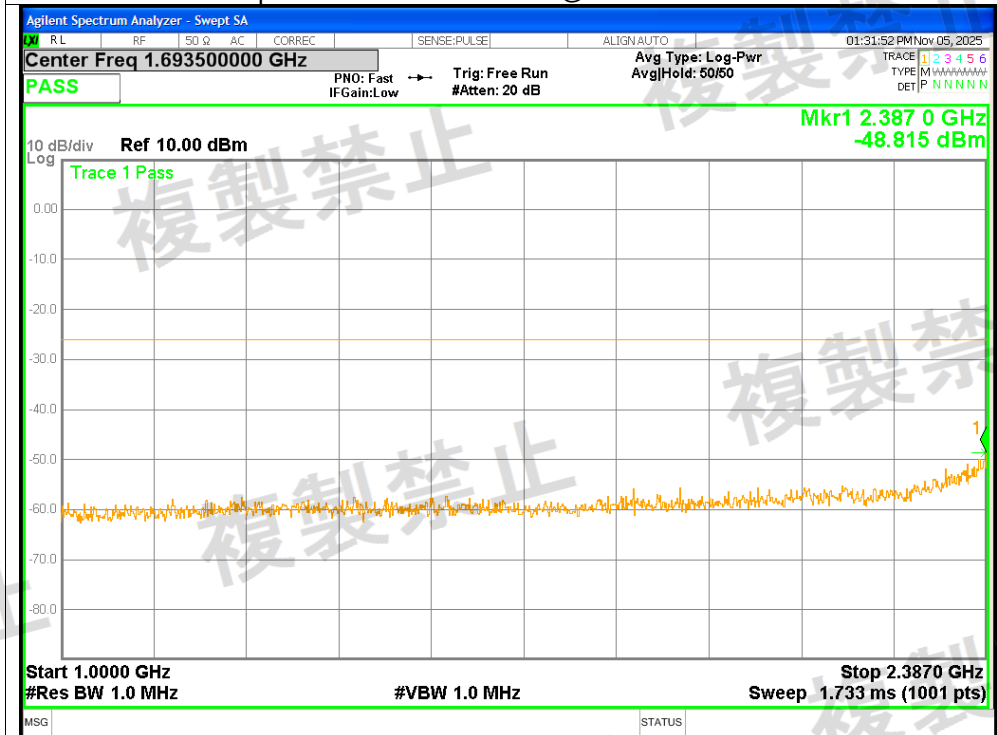


Test Graphs

Tx. Spurious NVNT b 2412MHz @ 30MHz-1000MHz

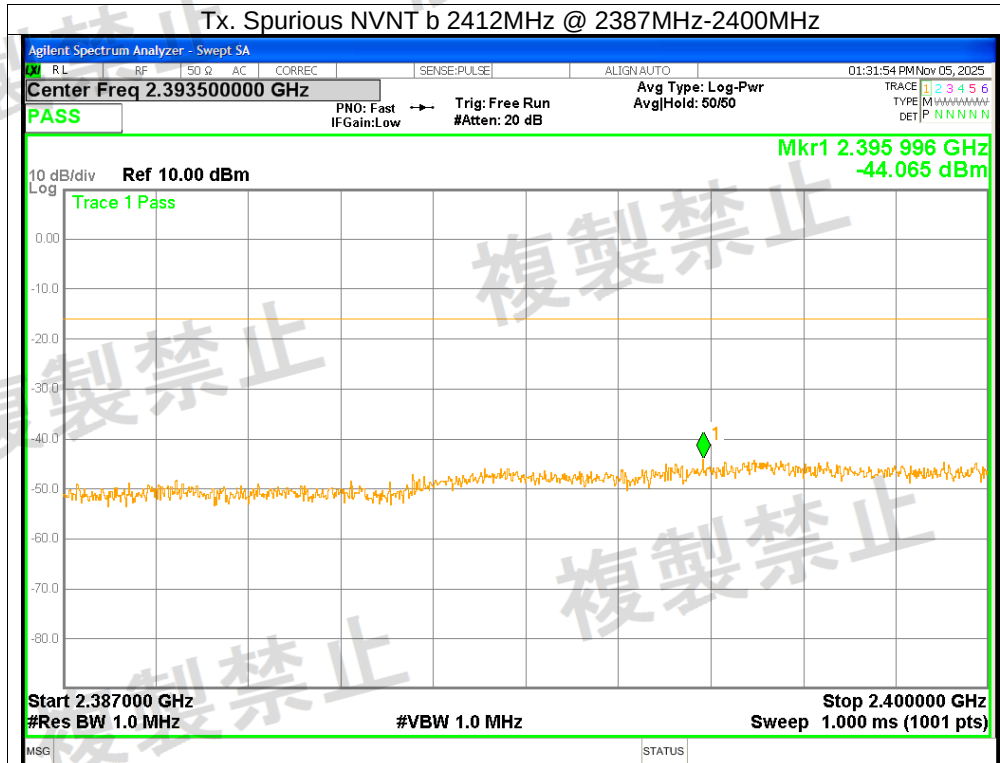


Tx. Spurious NVNT b 2412MHz @ 1000MHz-2387MHz

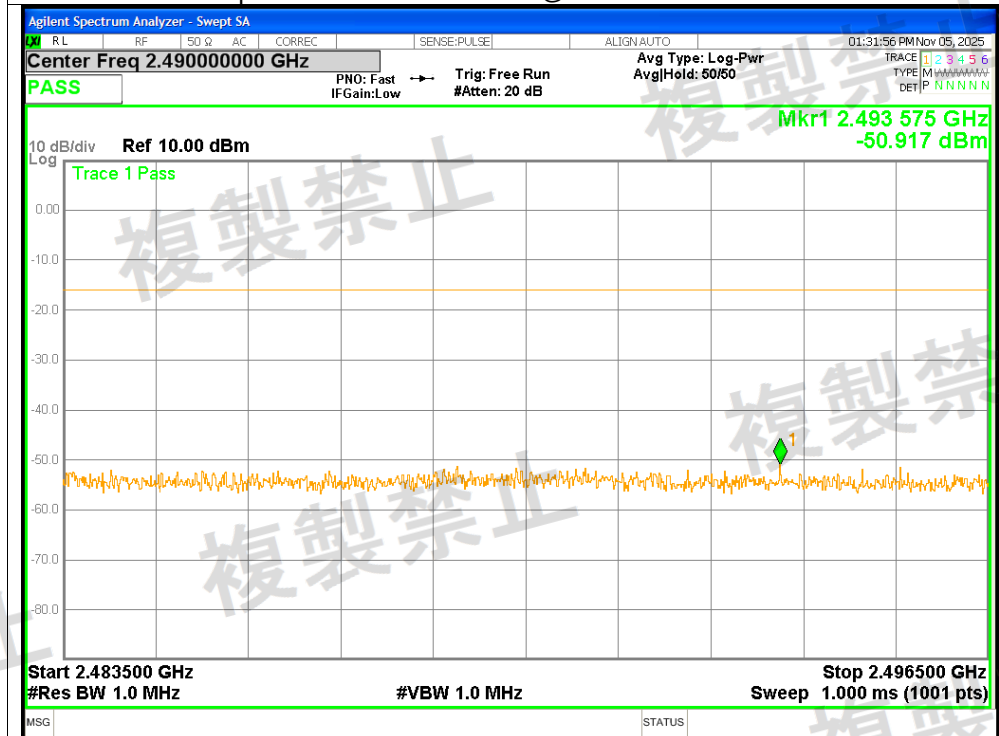


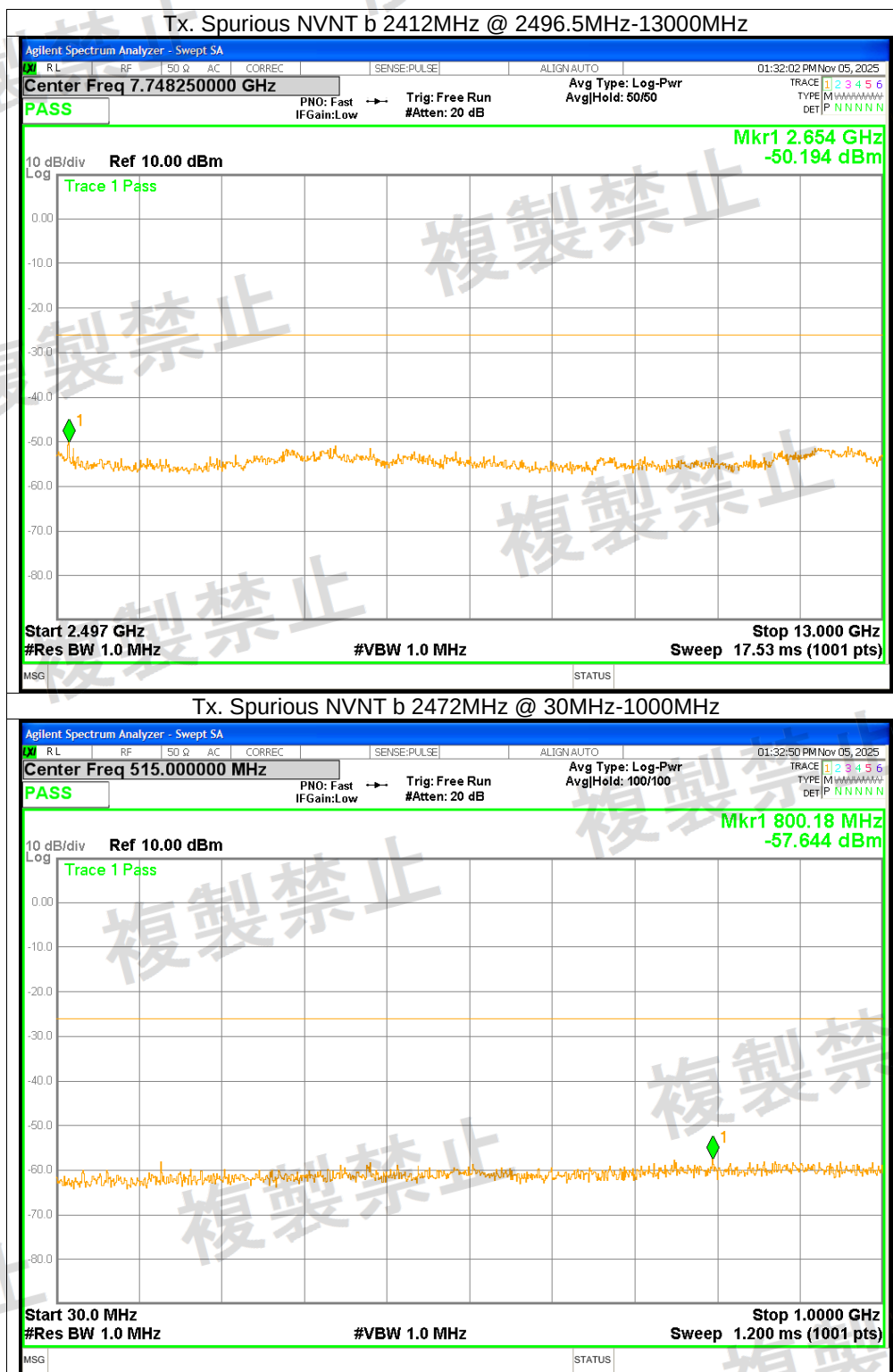


Tx. Spurious NVNT b 2412MHz @ 2387MHz-2400MHz



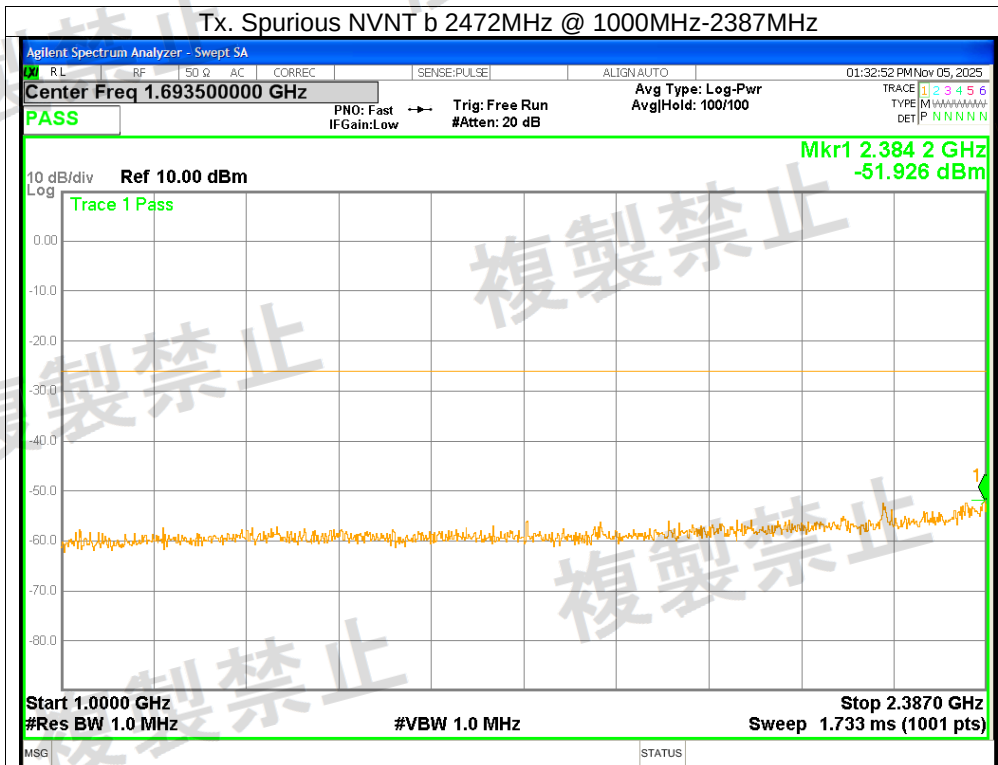
Tx. Spurious NVNT b 2412MHz @ 2483.5MHz-2496.5MHz



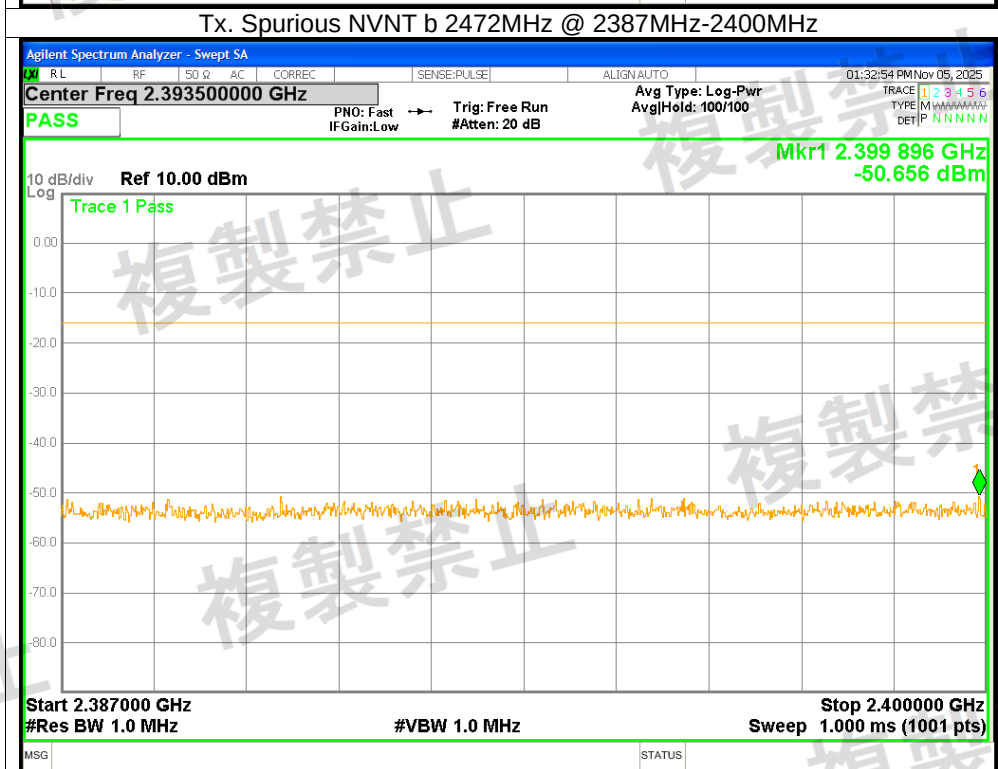


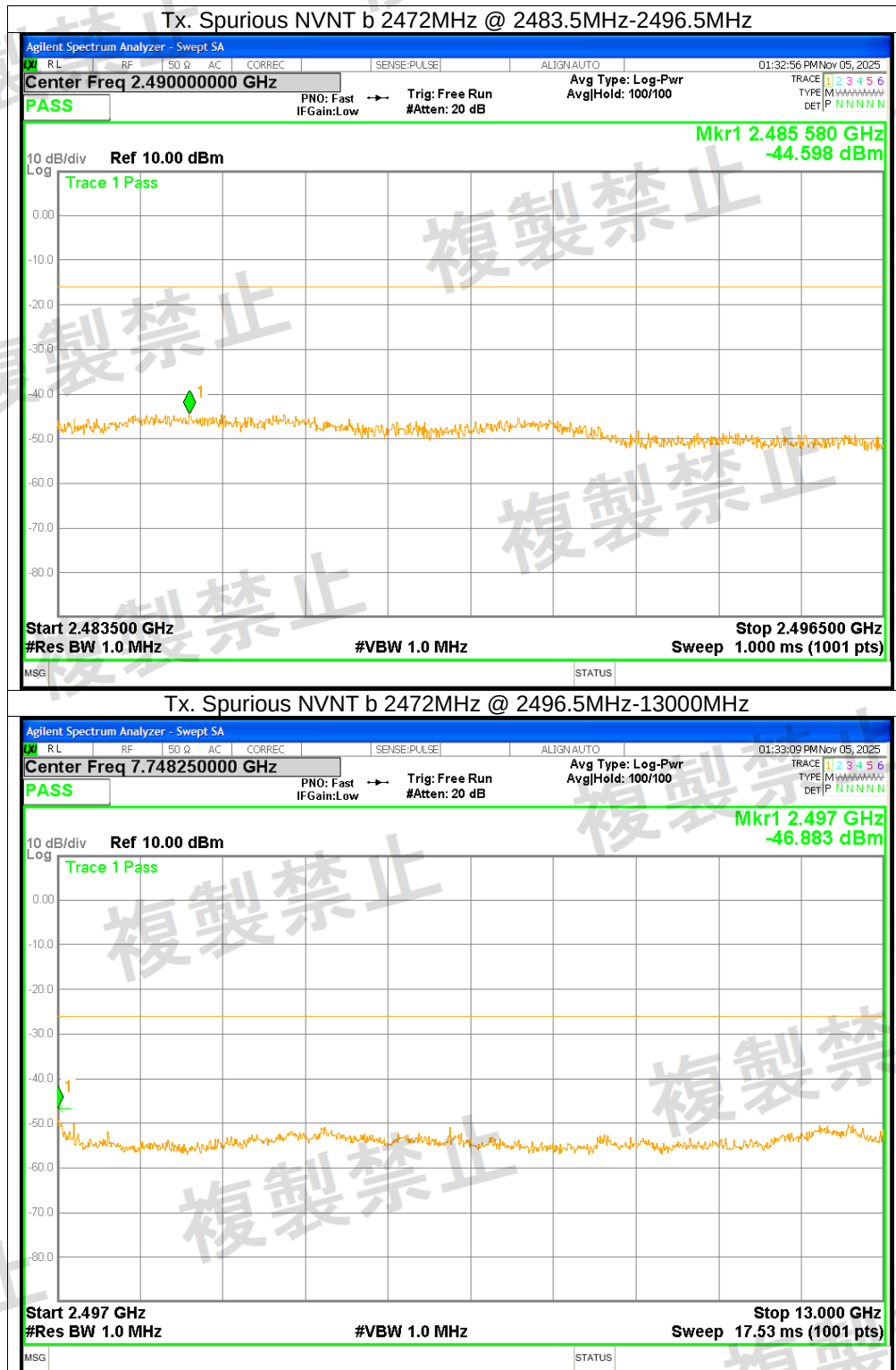


Tx. Spurious NVNT b 2472MHz @ 1000MHz-2387MHz



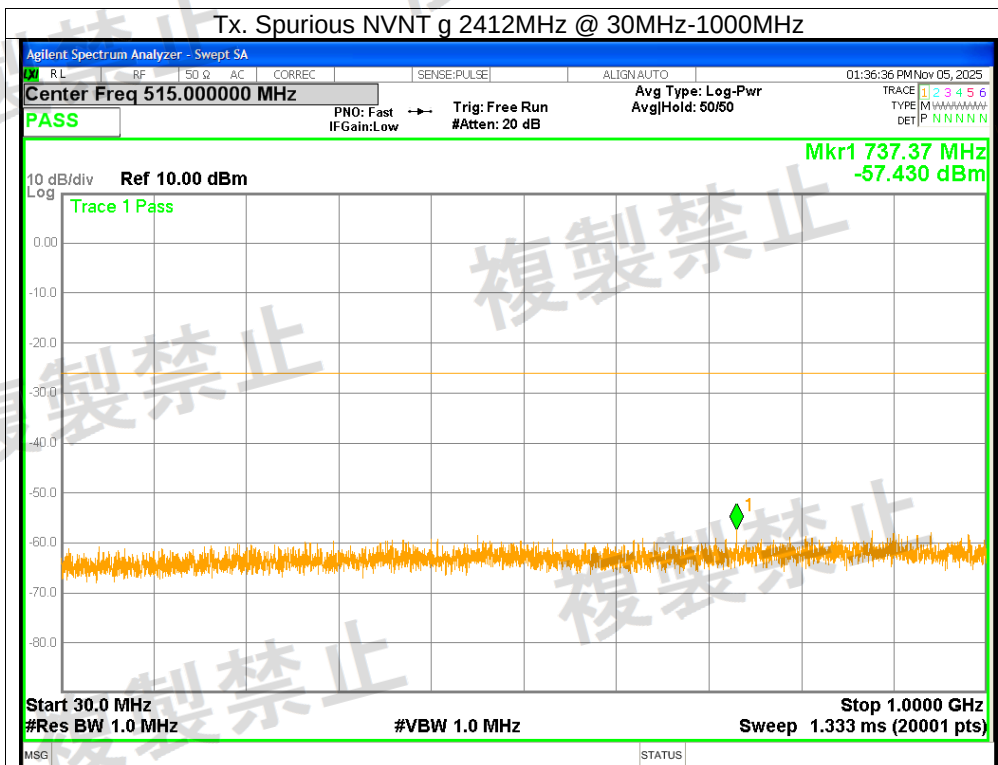
Tx. Spurious NVNT b 2472MHz @ 2387MHz-2400MHz



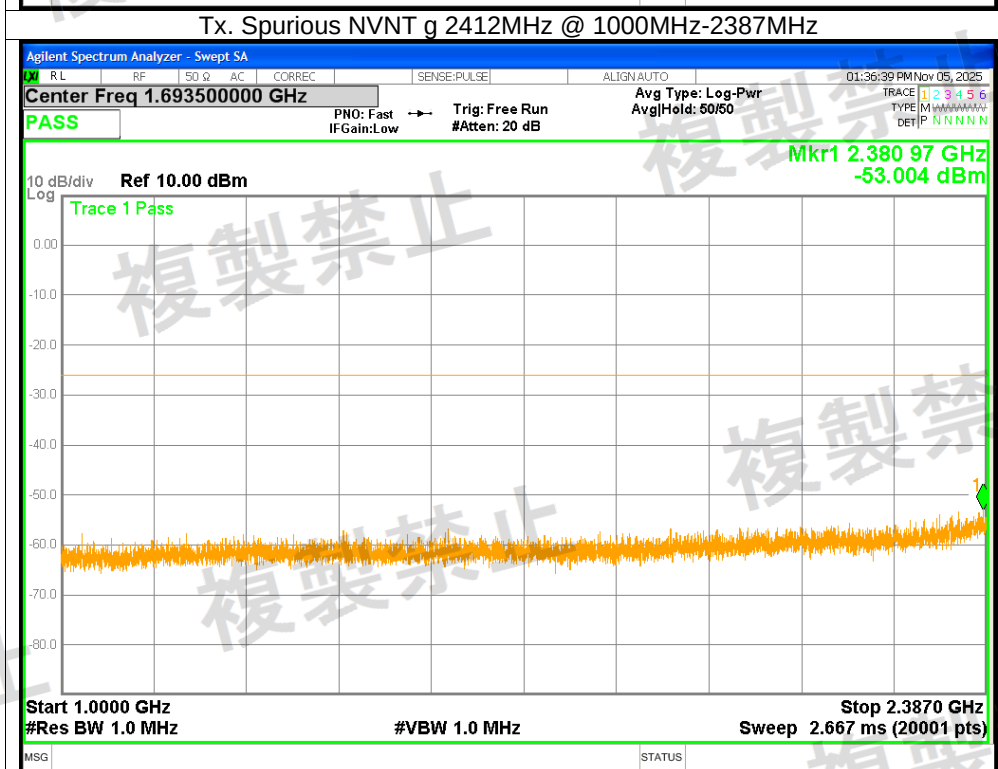




Tx. Spurious NVNT g 2412MHz @ 30MHz-1000MHz

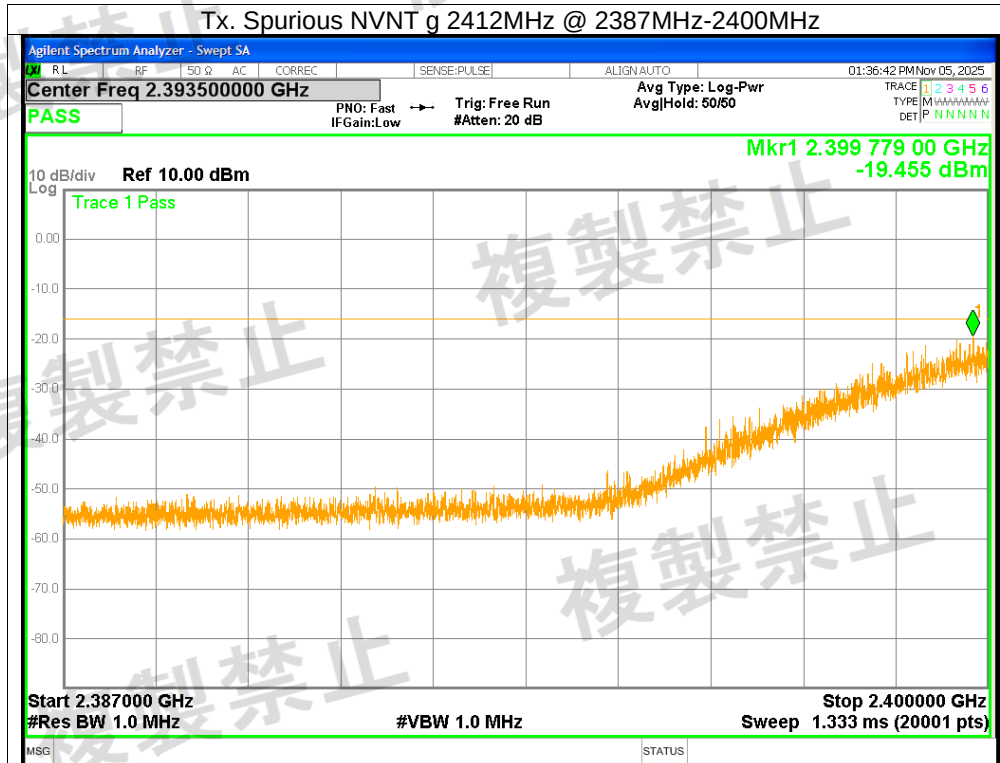


Tx. Spurious NVNT g 2412MHz @ 1000MHz-2387MHz

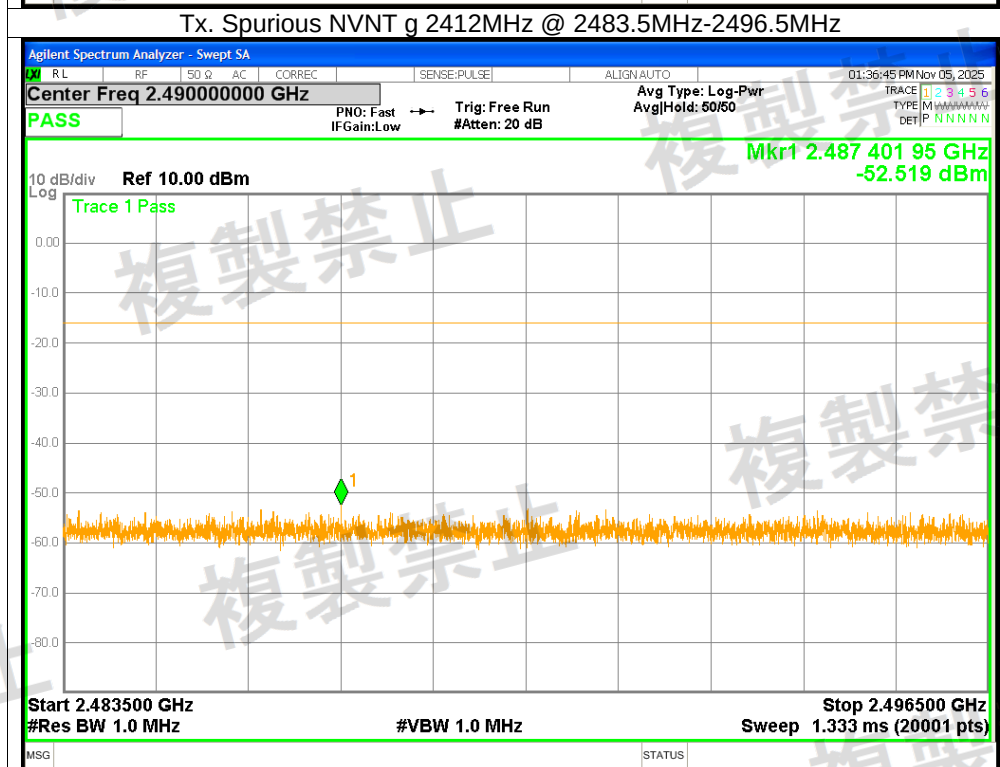


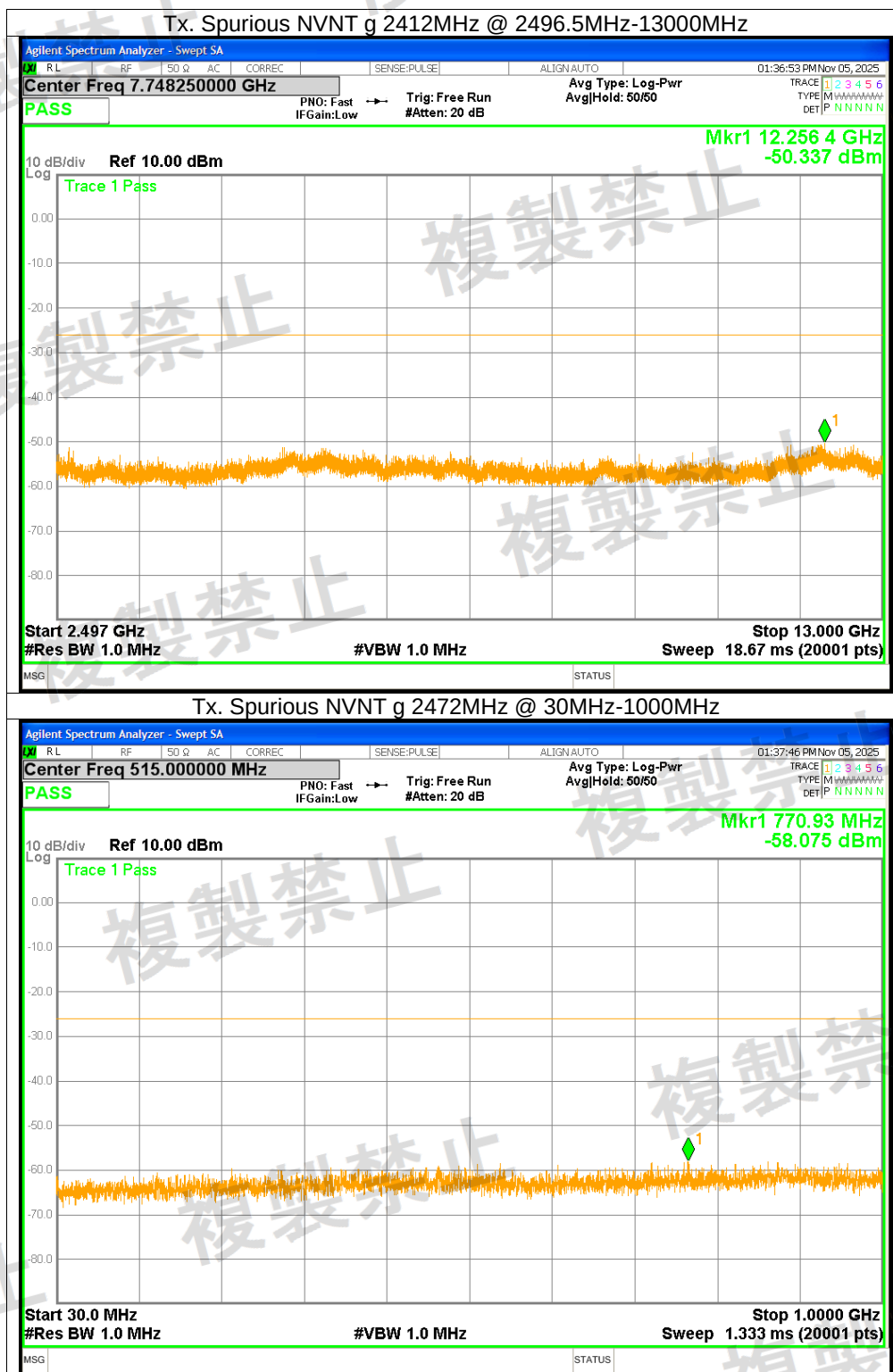


Tx. Spurious NVNT g 2412MHz @ 2387MHz-2400MHz



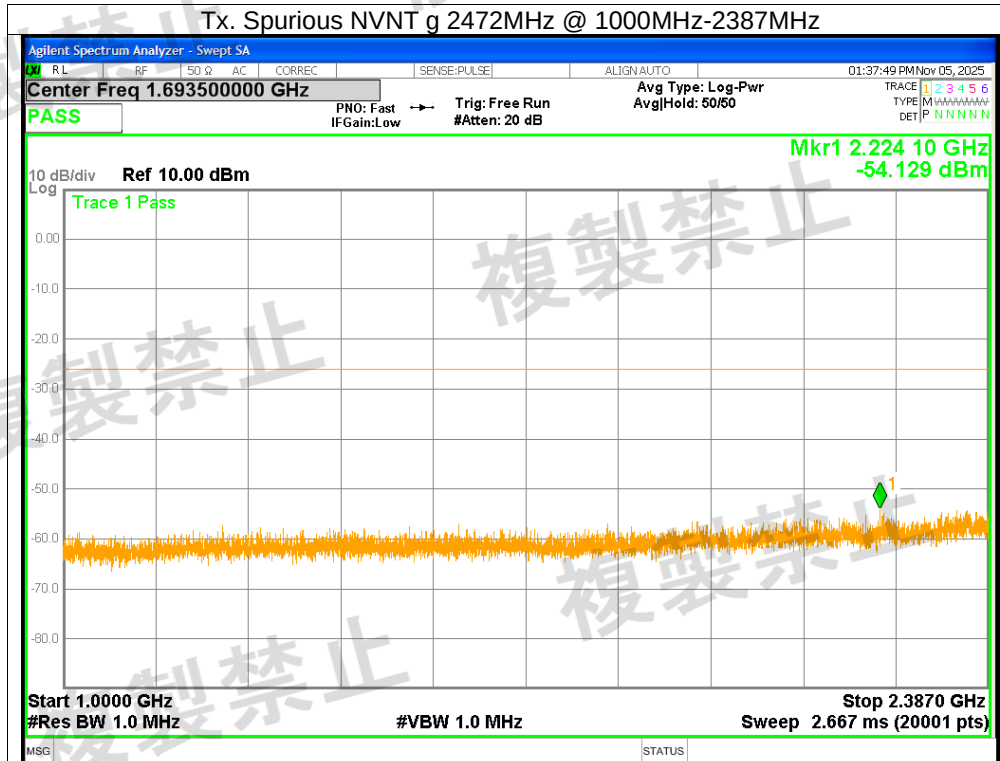
Tx. Spurious NVNT g 2412MHz @ 2483.5MHz-2496.5MHz



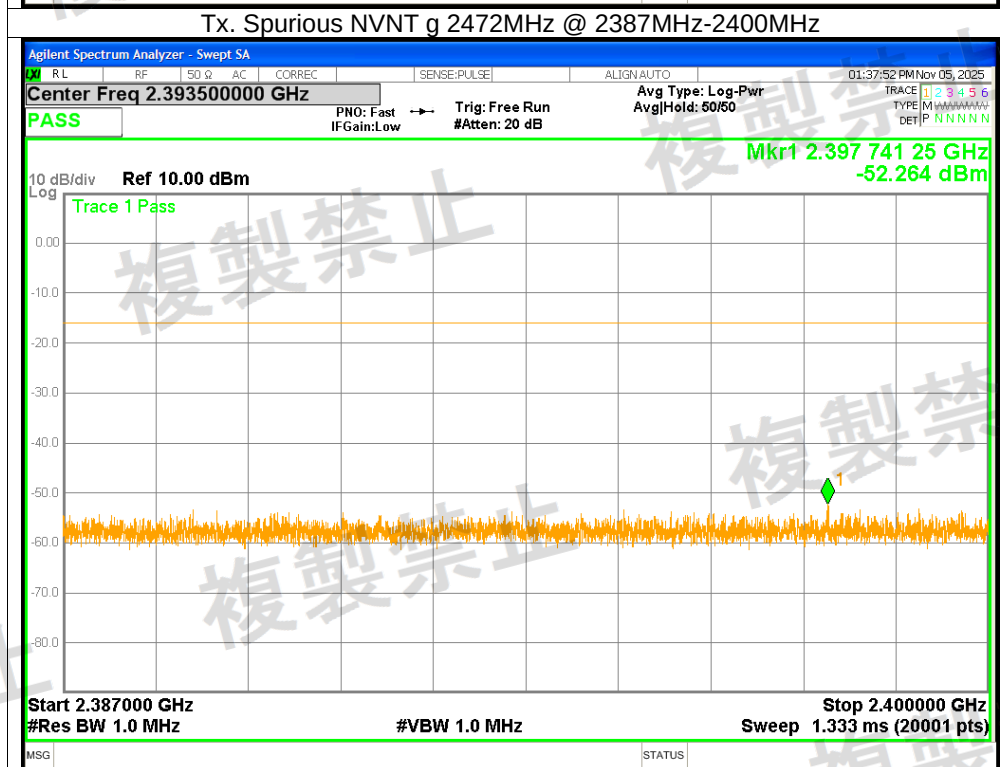


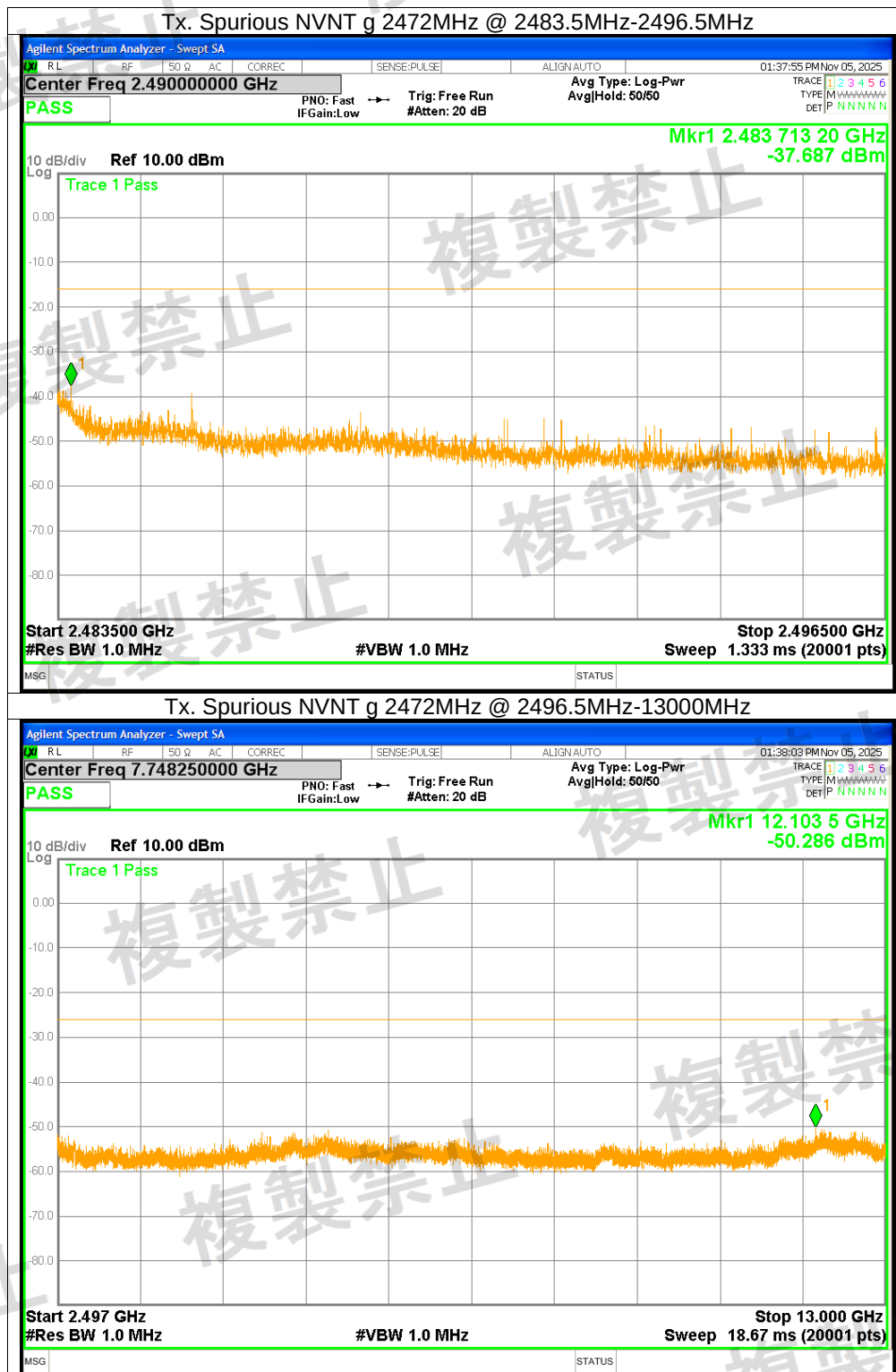


Tx. Spurious NVNT g 2472MHz @ 1000MHz-2387MHz



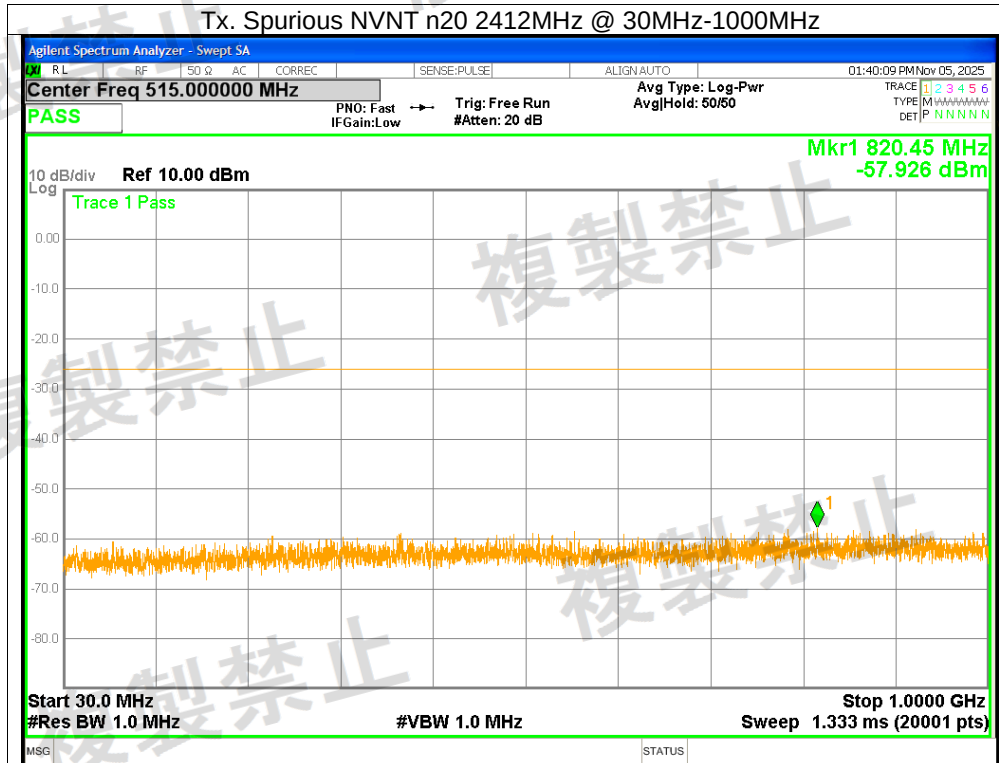
Tx. Spurious NVNT g 2472MHz @ 2387MHz-2400MHz



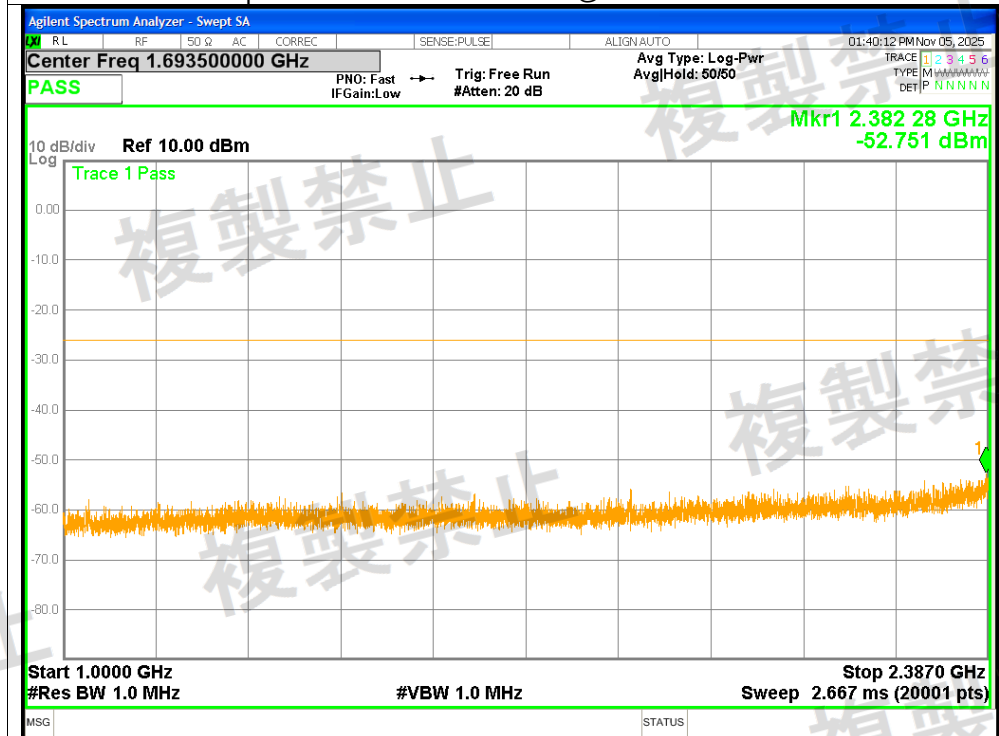


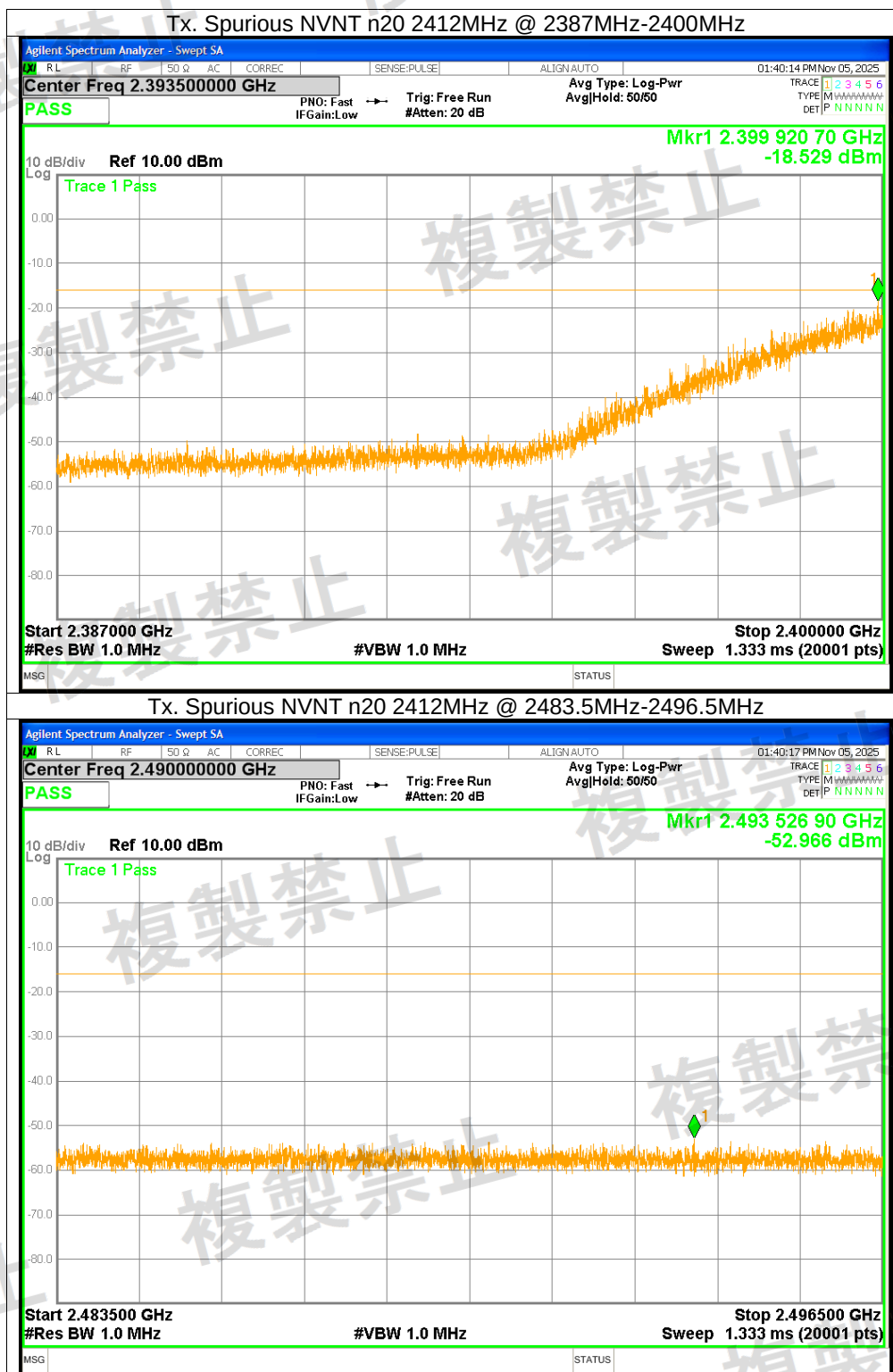


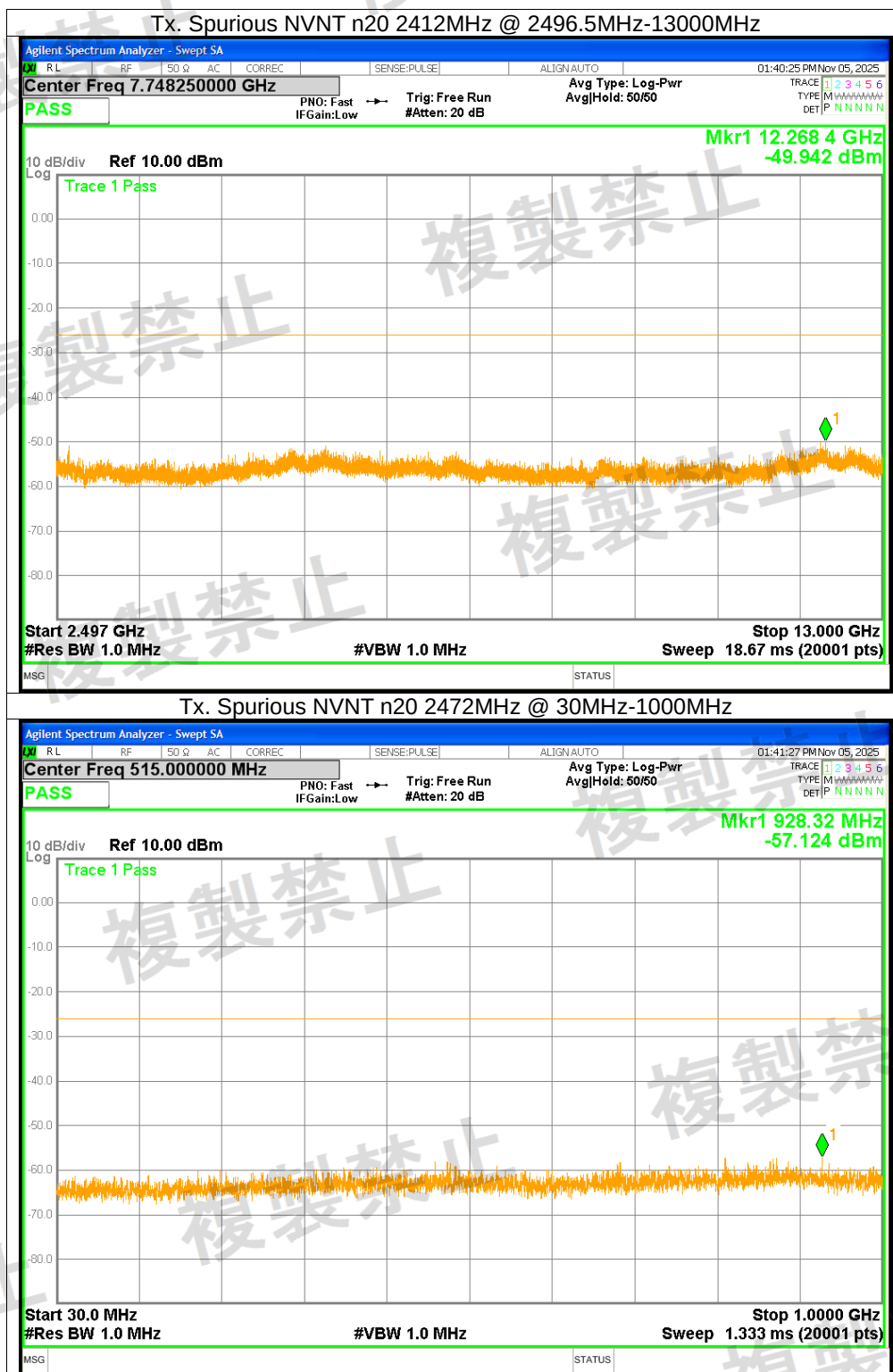
Tx. Spurious NVNT n20 2412MHz @ 30MHz-1000MHz

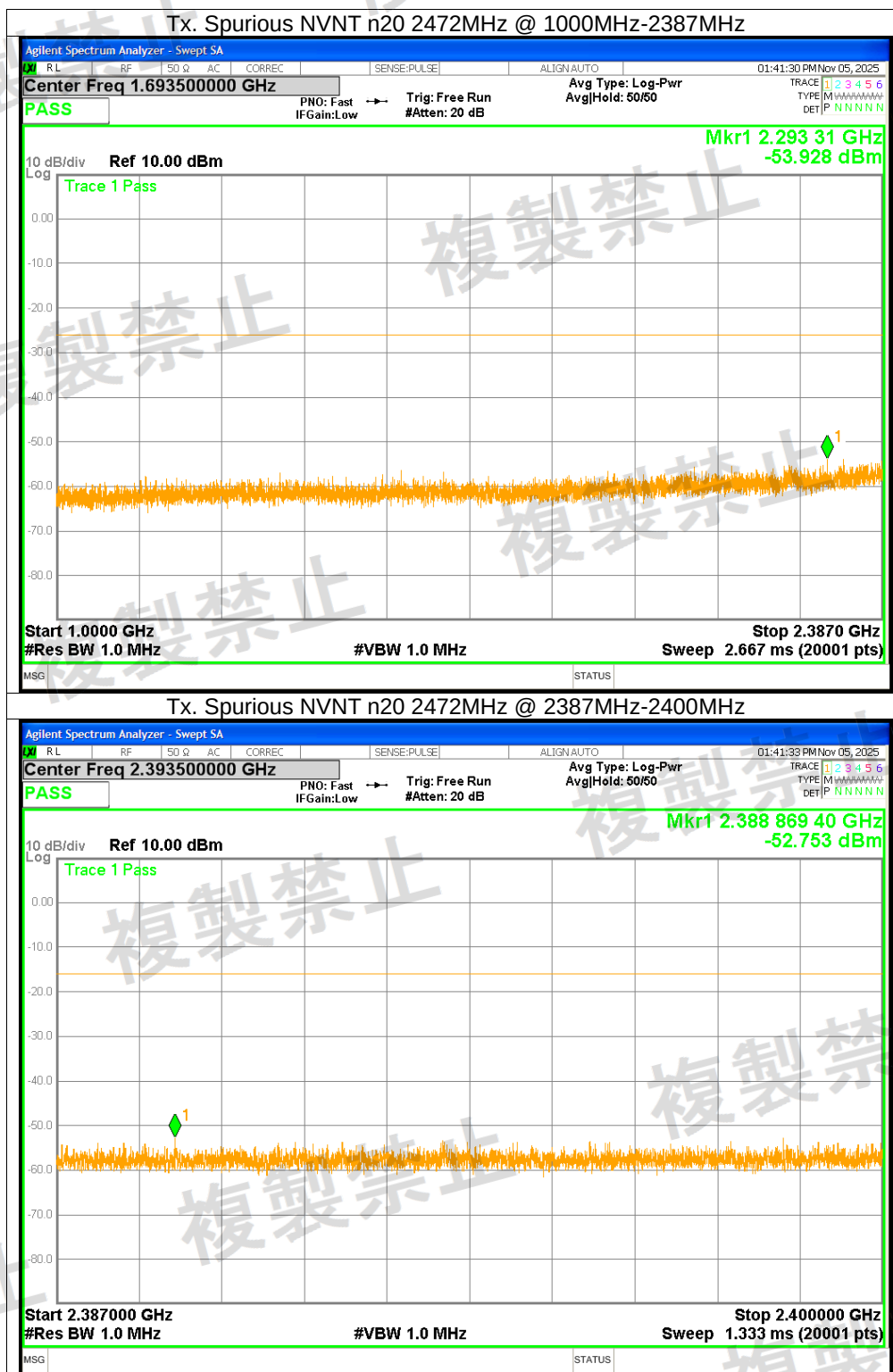


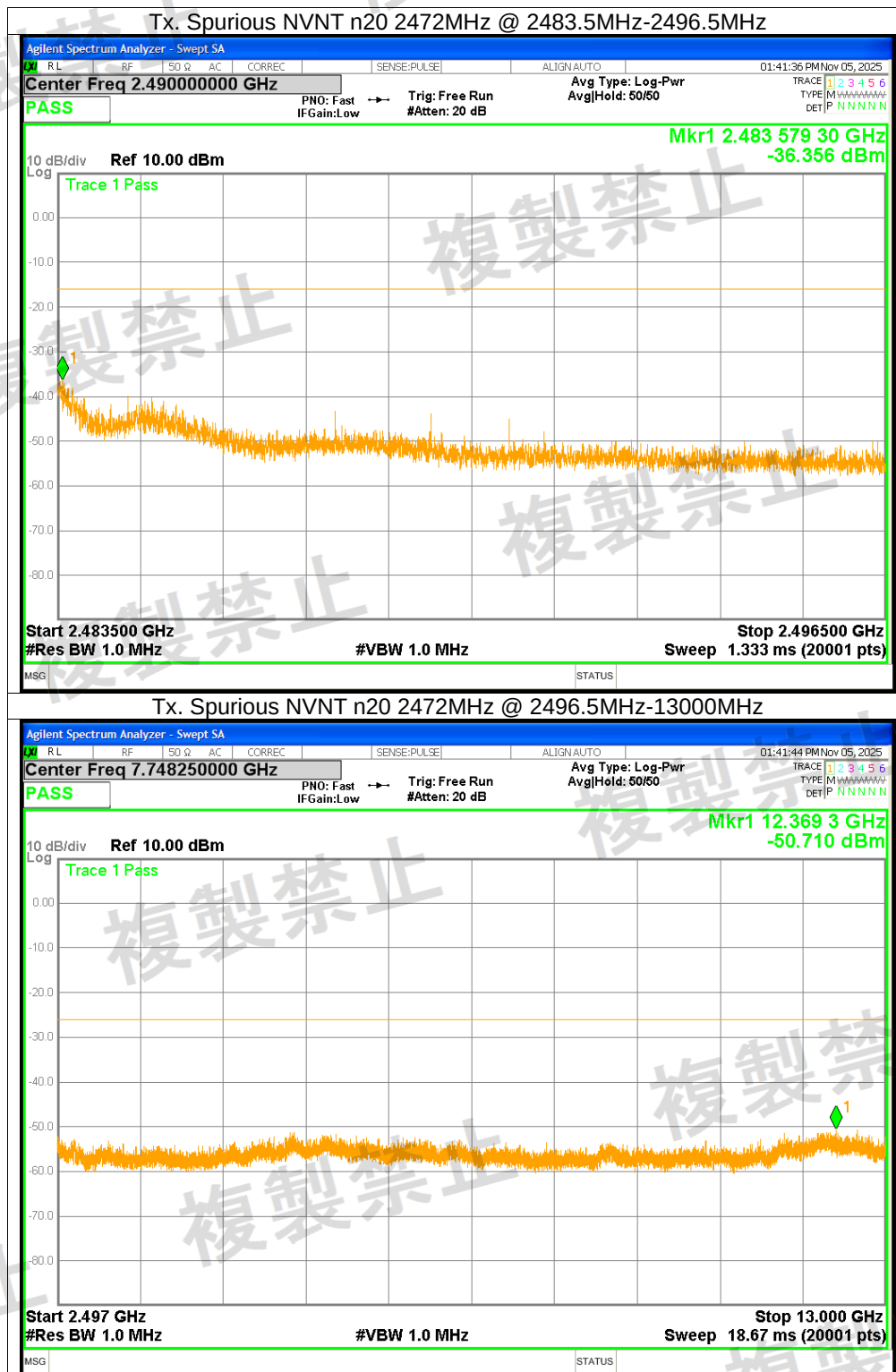
Tx. Spurious NVNT n20 2412MHz @ 1000MHz-2387MHz





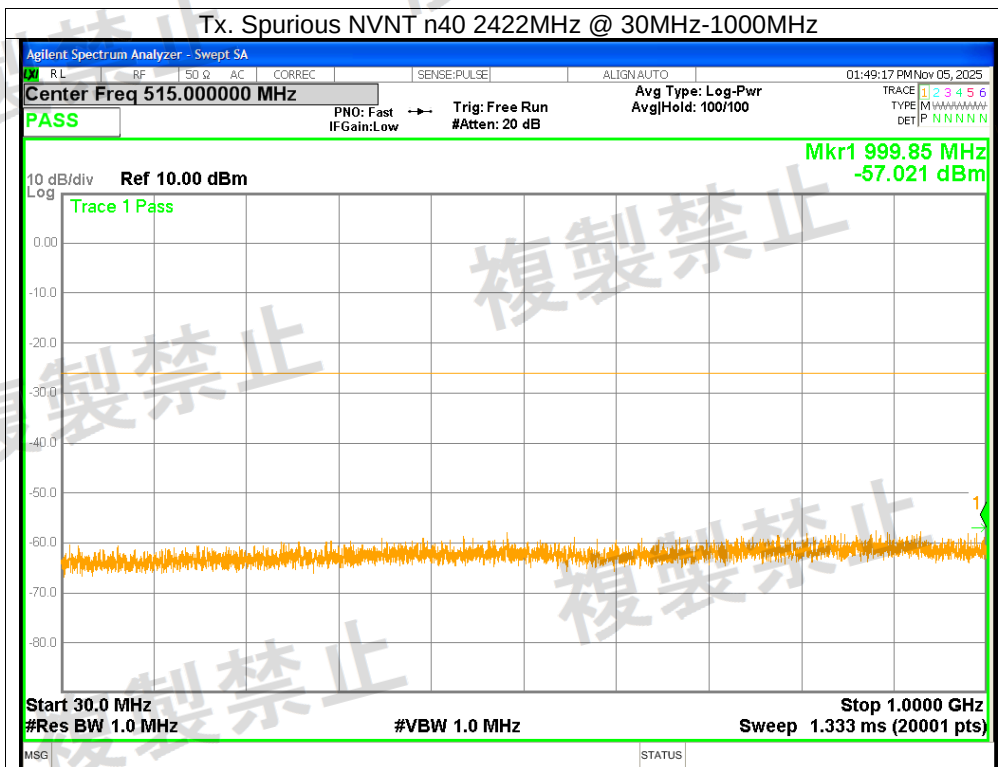




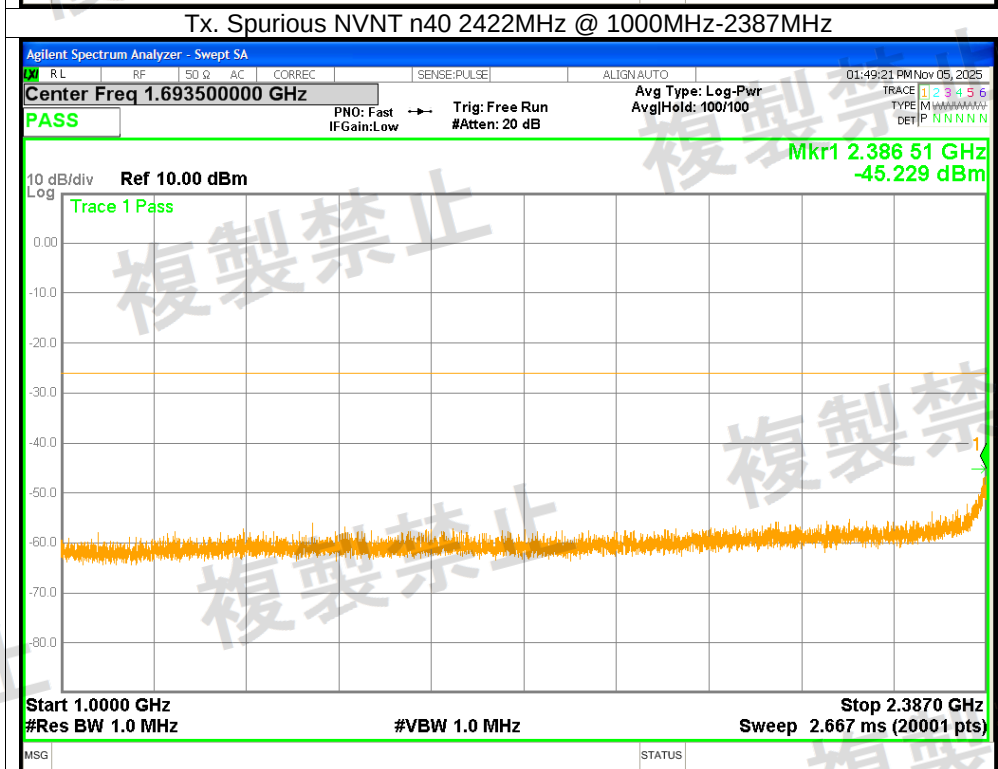


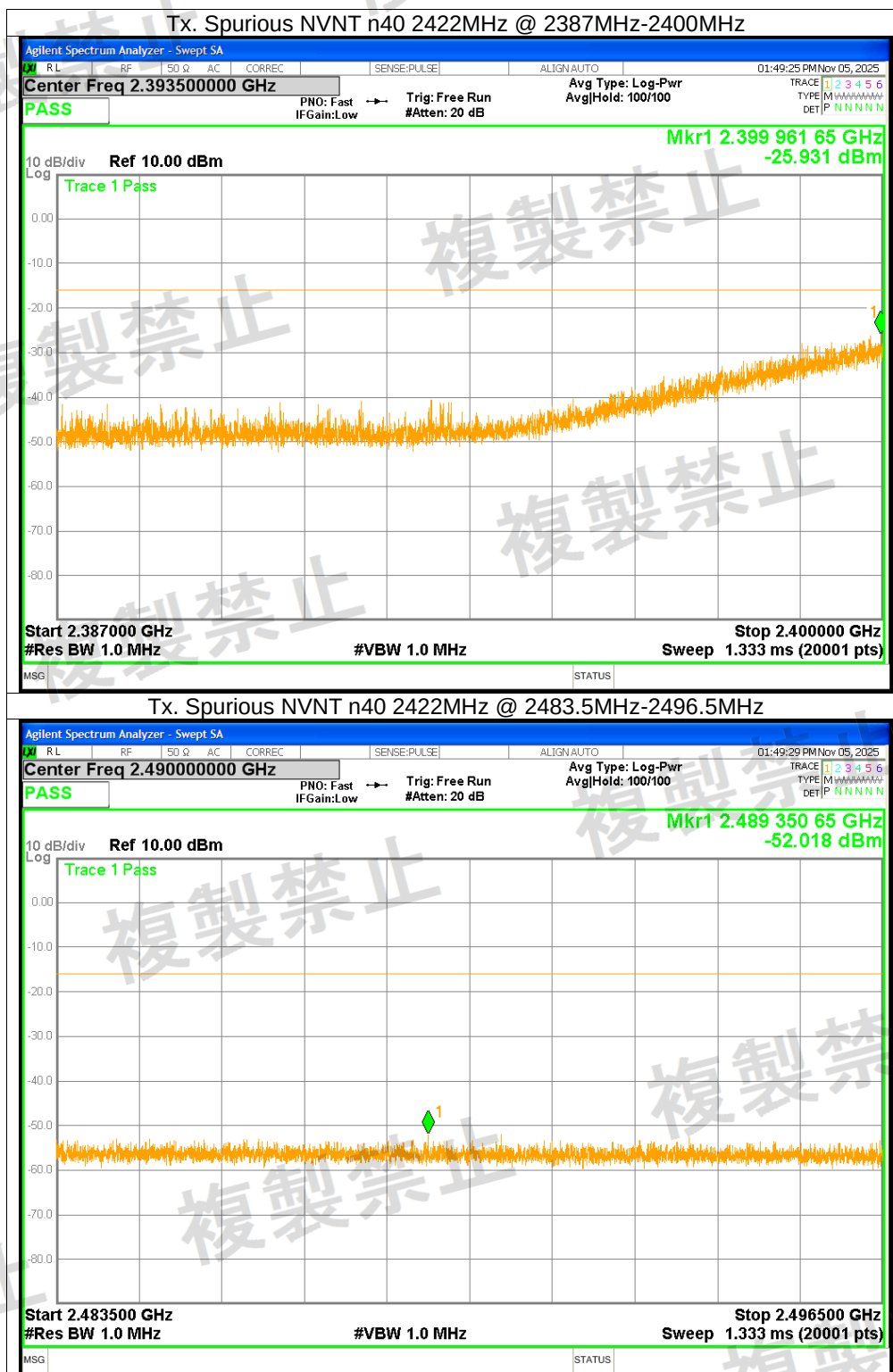


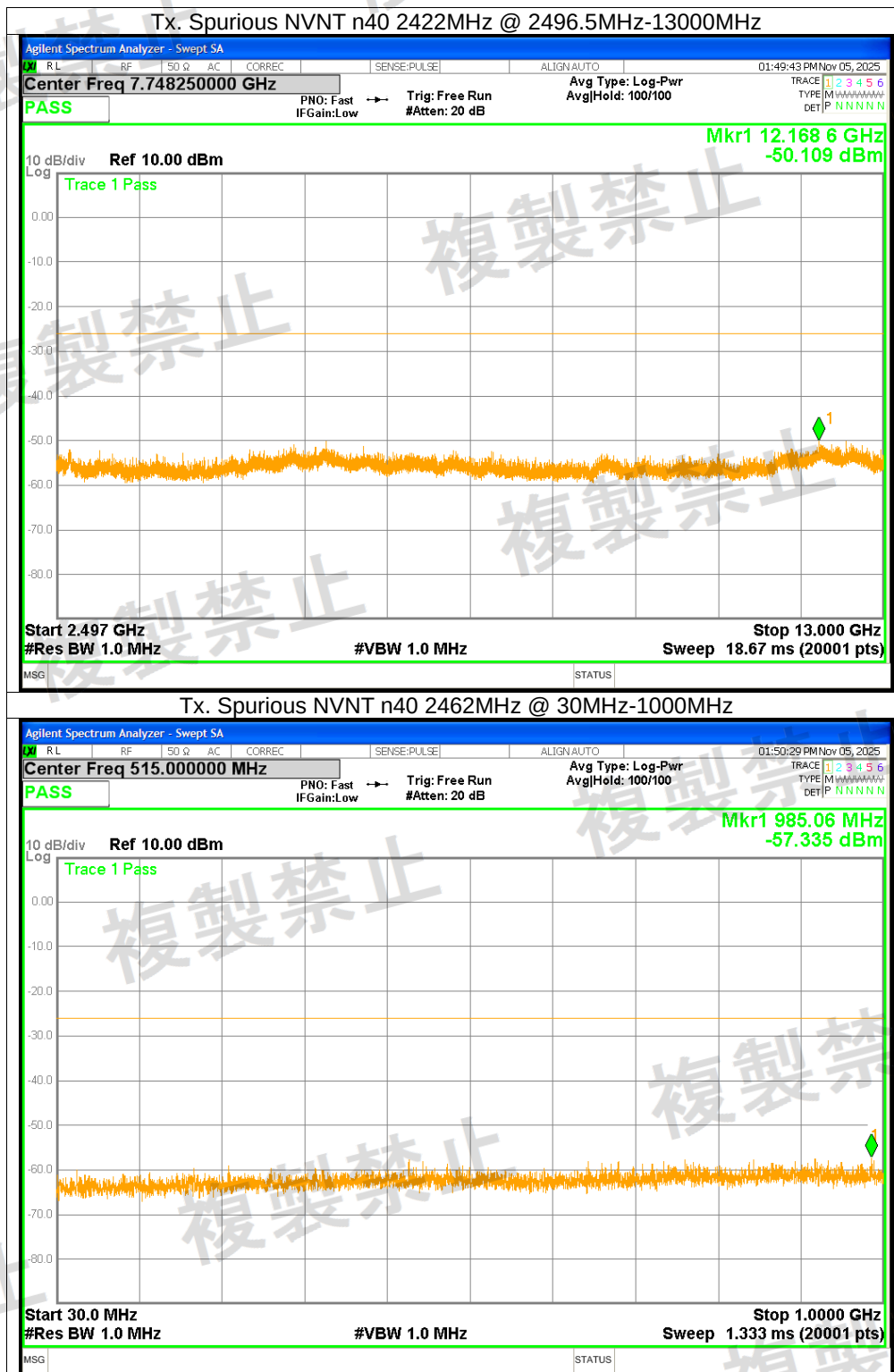
Tx. Spurious NVNT n40 2422MHz @ 30MHz-1000MHz

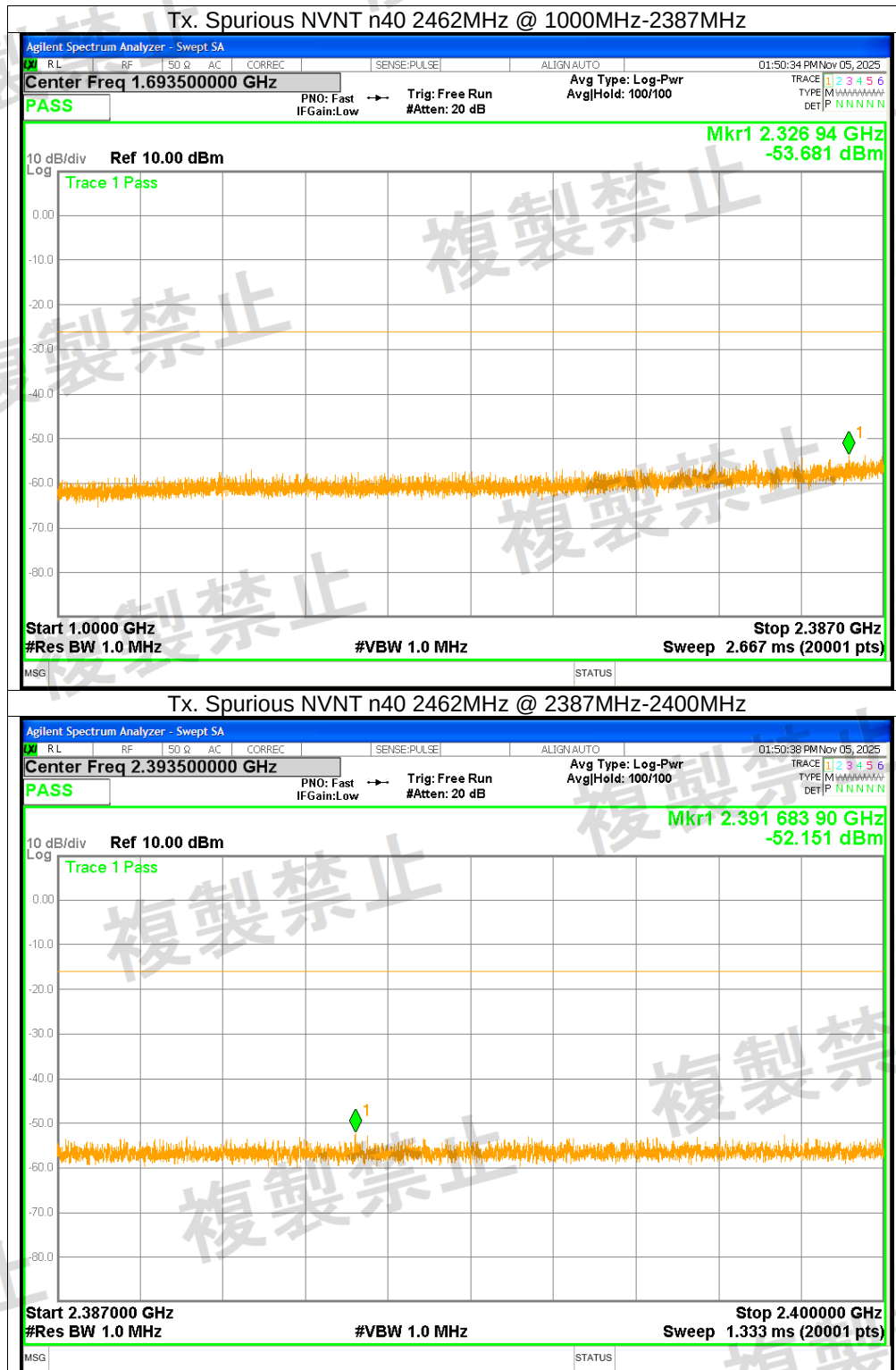


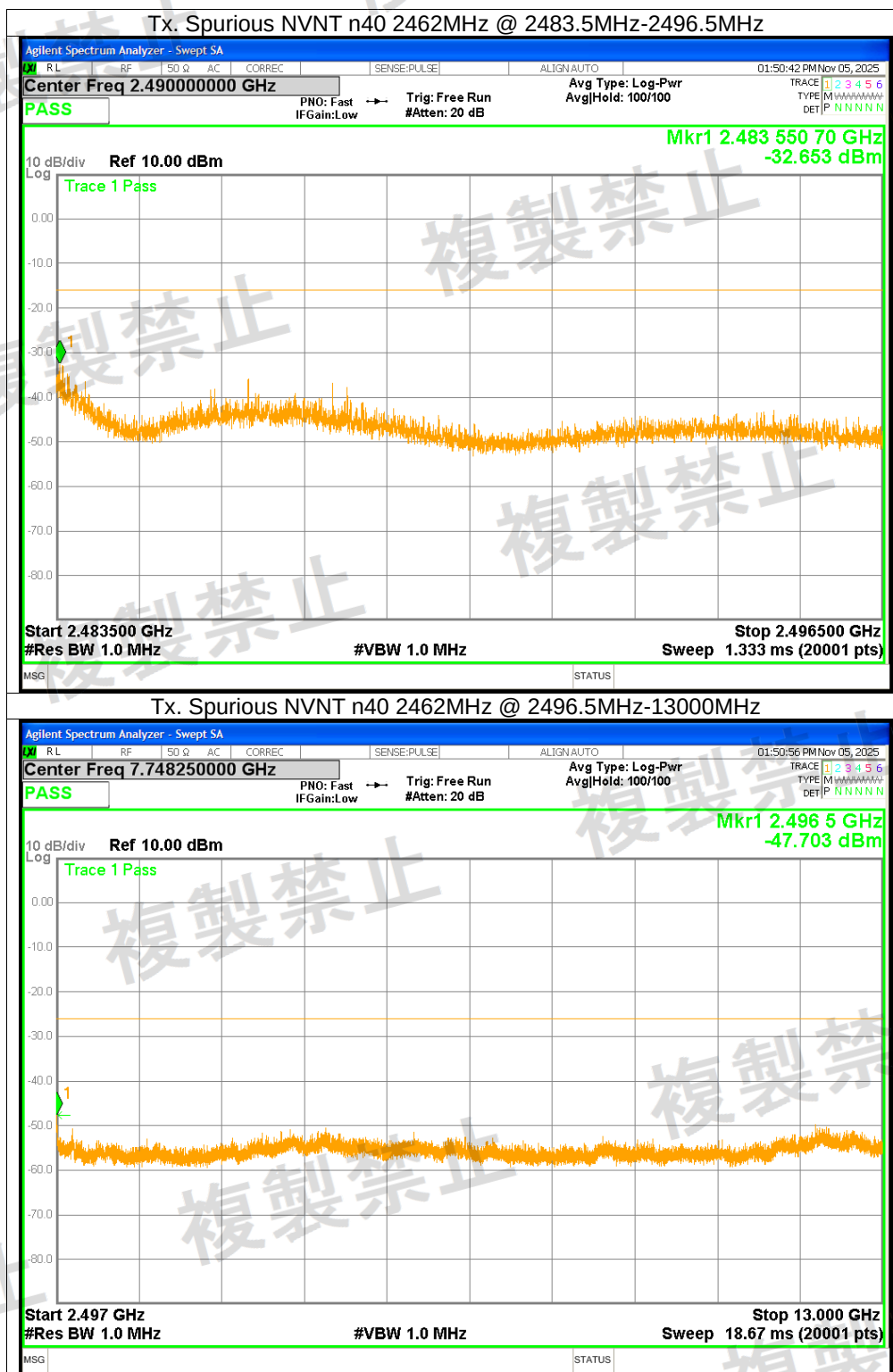
Tx. Spurious NVNT n40 2422MHz @ 1000MHz-2387MHz







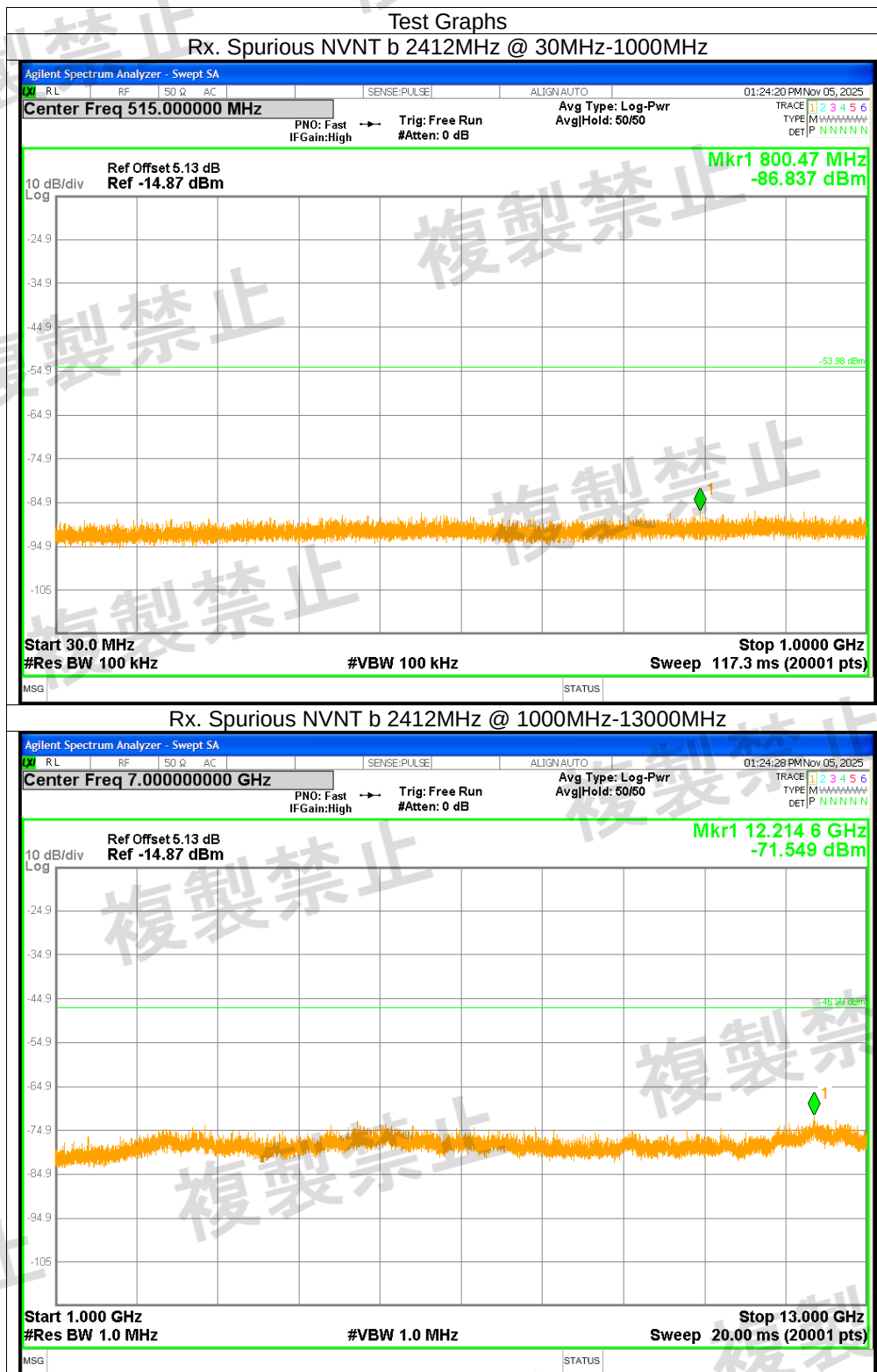


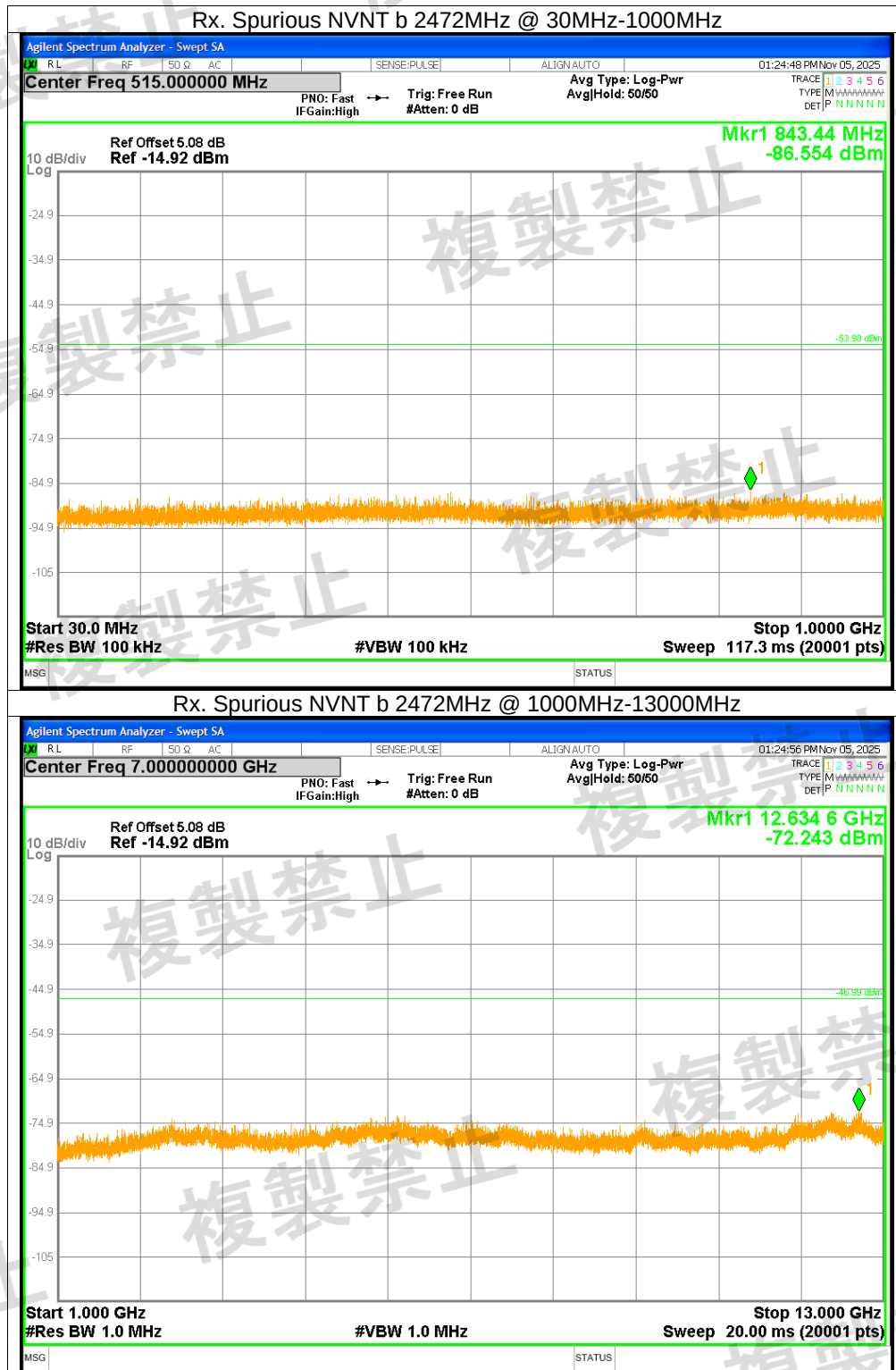




Rx Spurious Emission

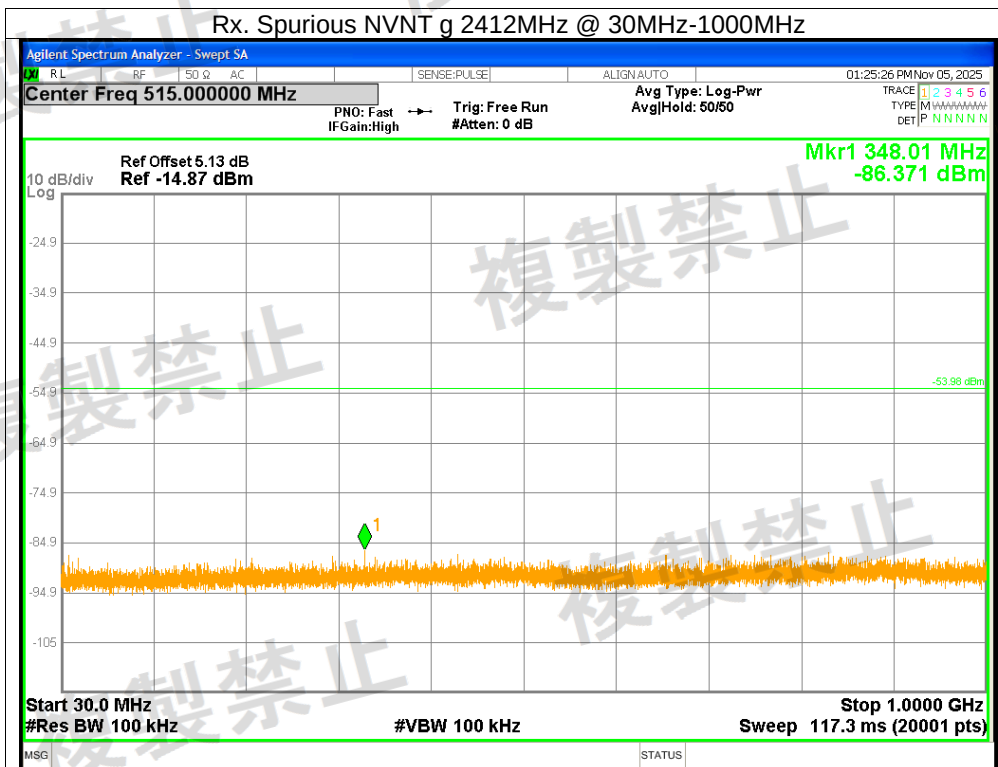
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	Max Value (nW)	Limit (nW)	Verdict
NVNT	b	2412	30-1000	800.47	-86.84	0.0021	4	Pass
NVNT	b	2412	1000-13000	12214.6	-71.55	0.07	20	Pass
NVNT	b	2472	30-1000	843.44	-86.55	0.0022	4	Pass
NVNT	b	2472	1000-13000	12634.6	-72.24	0.0597	20	Pass
NVNT	g	2412	30-1000	348.01	-86.37	0.0023	4	Pass
NVNT	g	2412	1000-13000	12113.8	-72.3	0.0589	20	Pass
NVNT	g	2472	30-1000	745.96	-86.39	0.0023	4	Pass
NVNT	g	2472	1000-13000	12215.8	-71.74	0.067	20	Pass
NVNT	n20	2412	30-1000	962.61	-86.76	0.0021	4	Pass
NVNT	n20	2412	1000-13000	12236.2	-71.95	0.0638	20	Pass
NVNT	n20	2472	30-1000	500.5	-87.13	0.0019	4	Pass
NVNT	n20	2472	1000-13000	5266	-71.49	0.071	20	Pass
NVNT	n40	2422	30-1000	863.28	-87.22	0.0019	4	Pass
NVNT	n40	2422	1000-13000	12668.8	-72.39	0.0577	20	Pass
NVNT	n40	2462	30-1000	965.37	-86.92	0.002	4	Pass
NVNT	n40	2462	1000-13000	12173.2	-73.23	0.0475	20	Pass



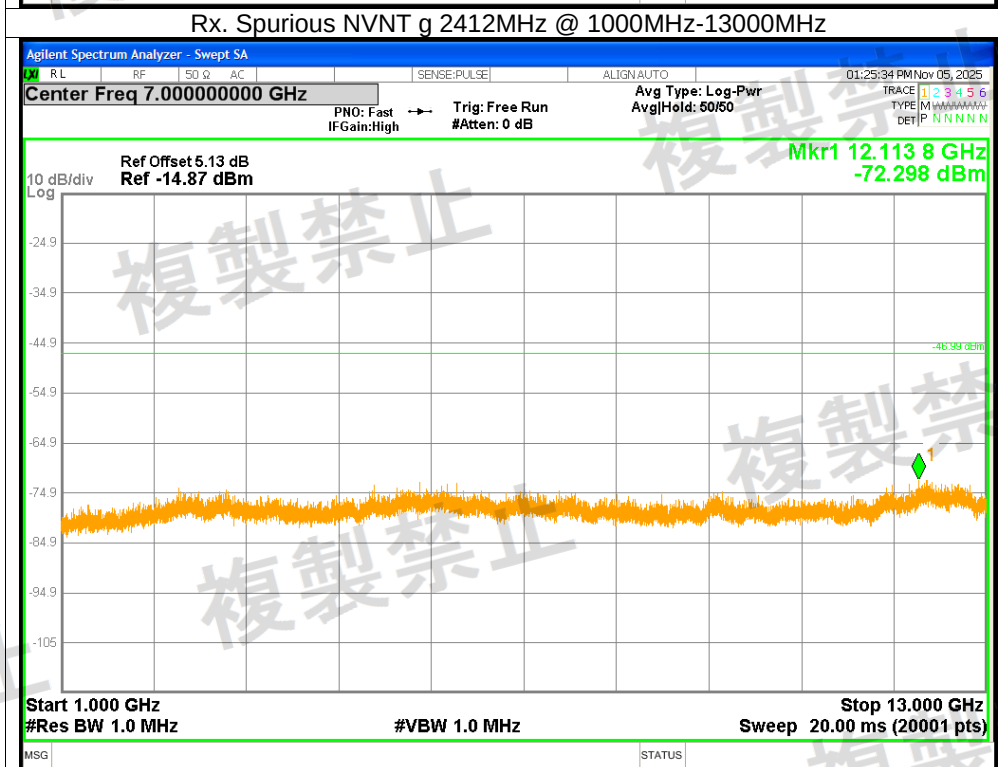


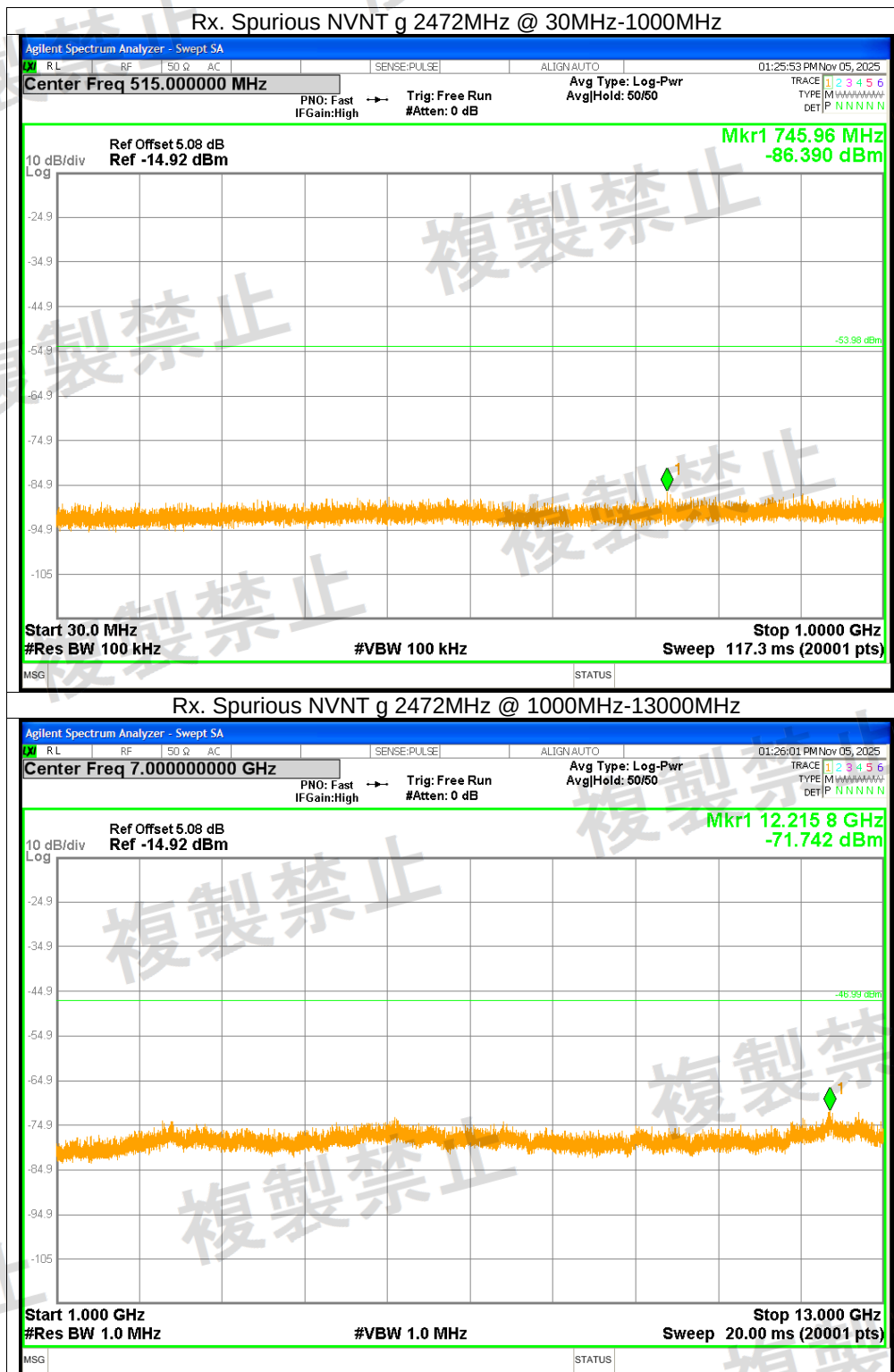


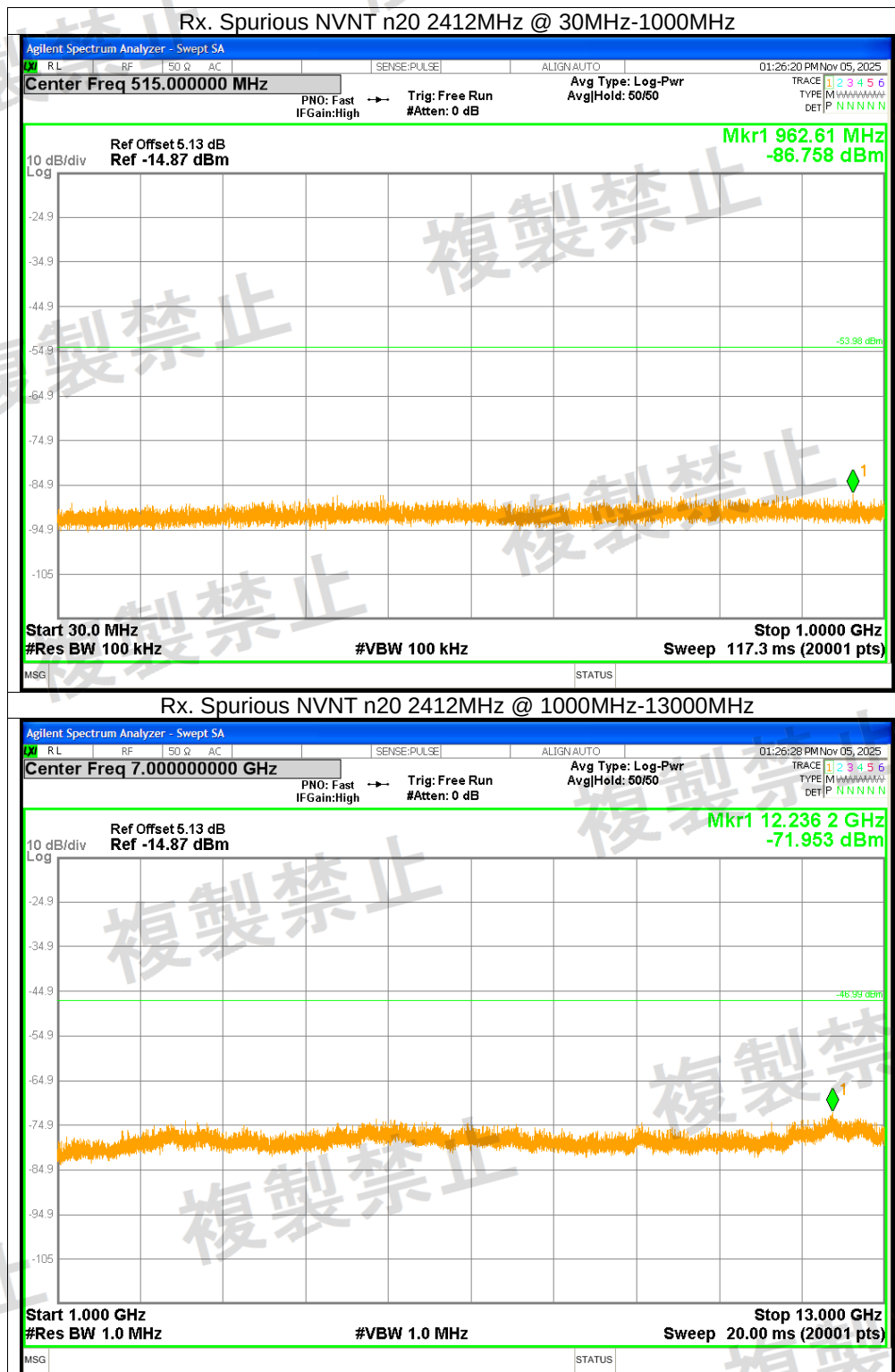
Rx. Spurious NVNT g 2412MHz @ 30MHz-1000MHz

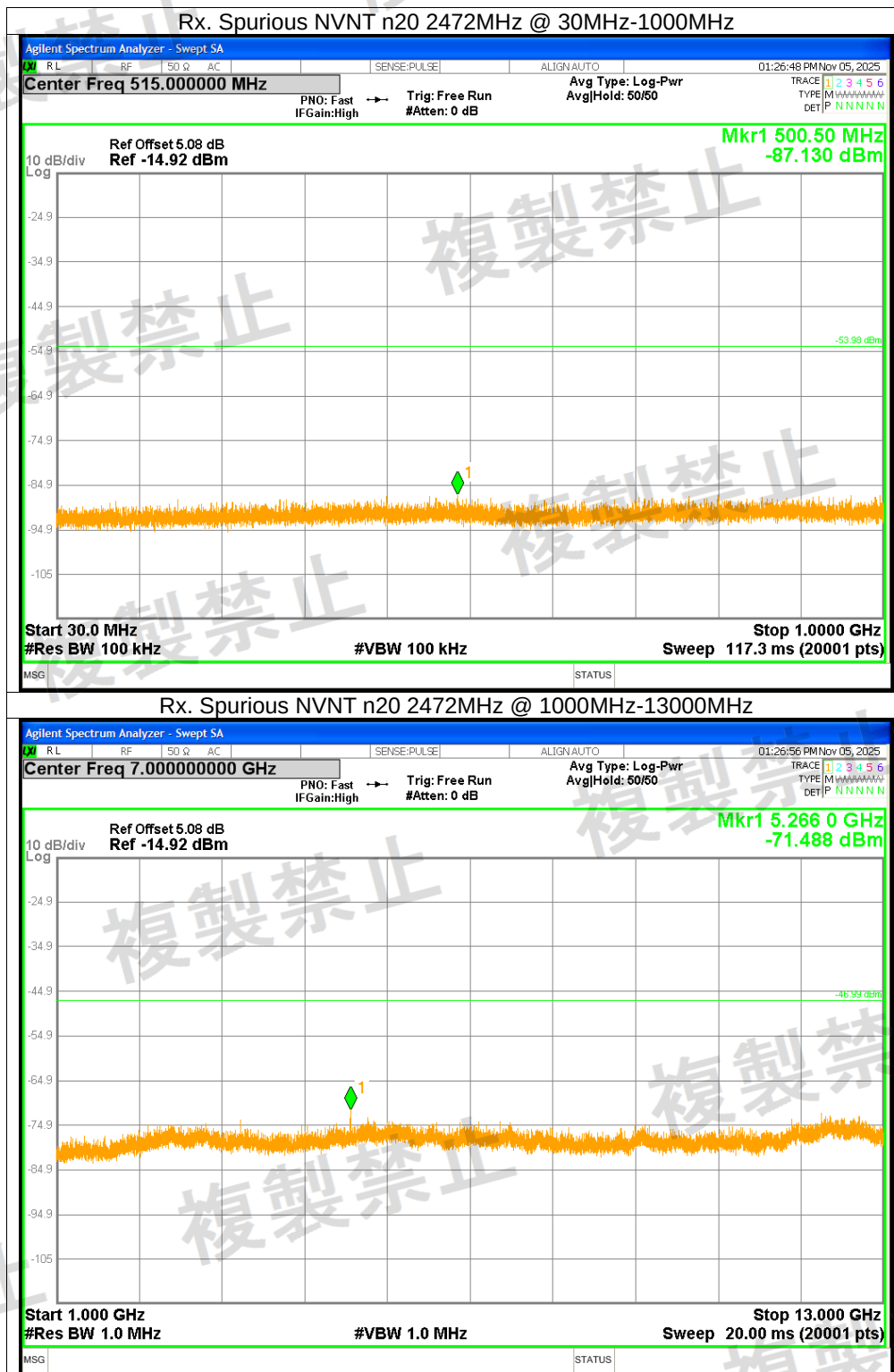


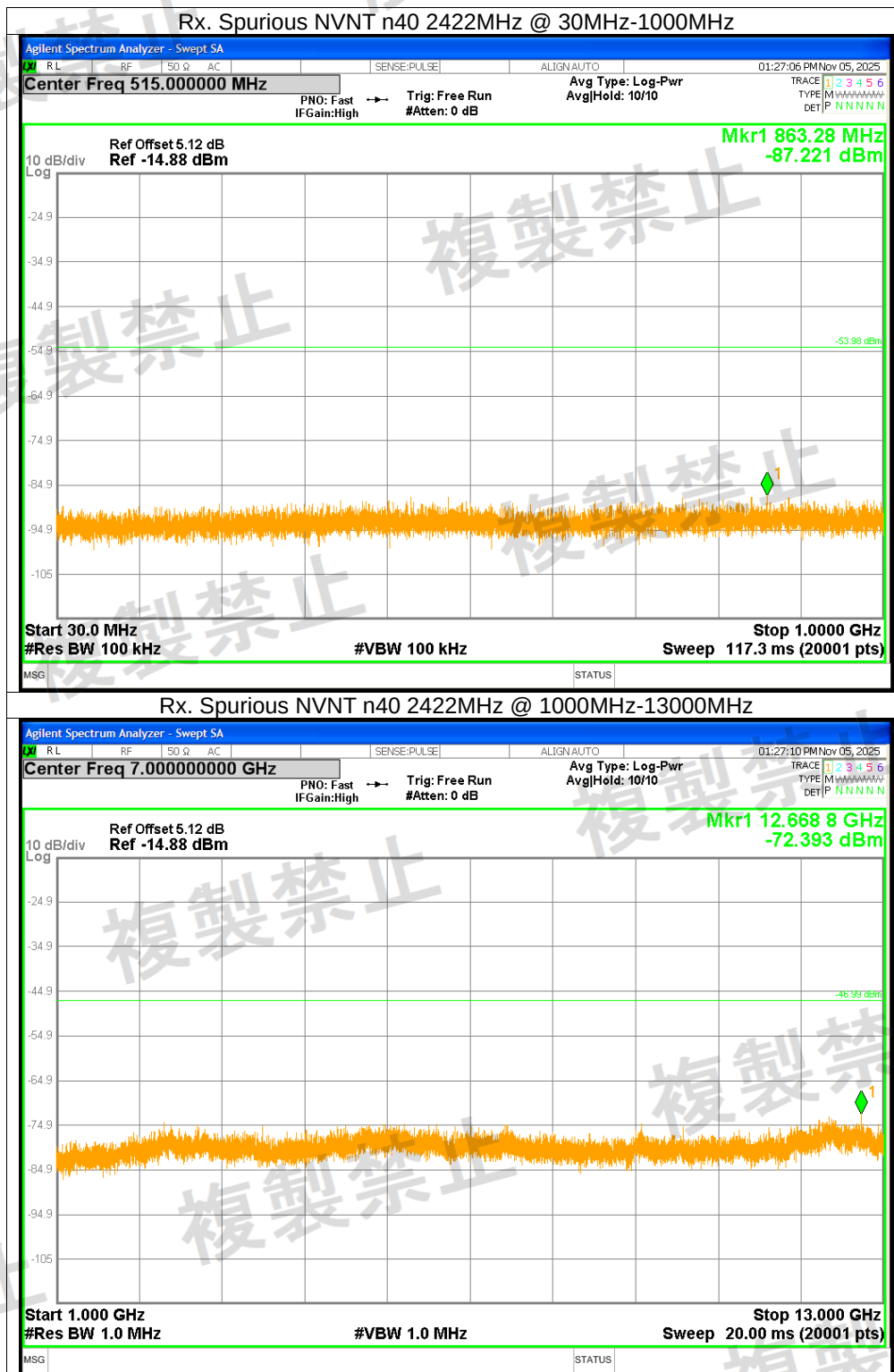
Rx. Spurious NVNT g 2412MHz @ 1000MHz-13000MHz

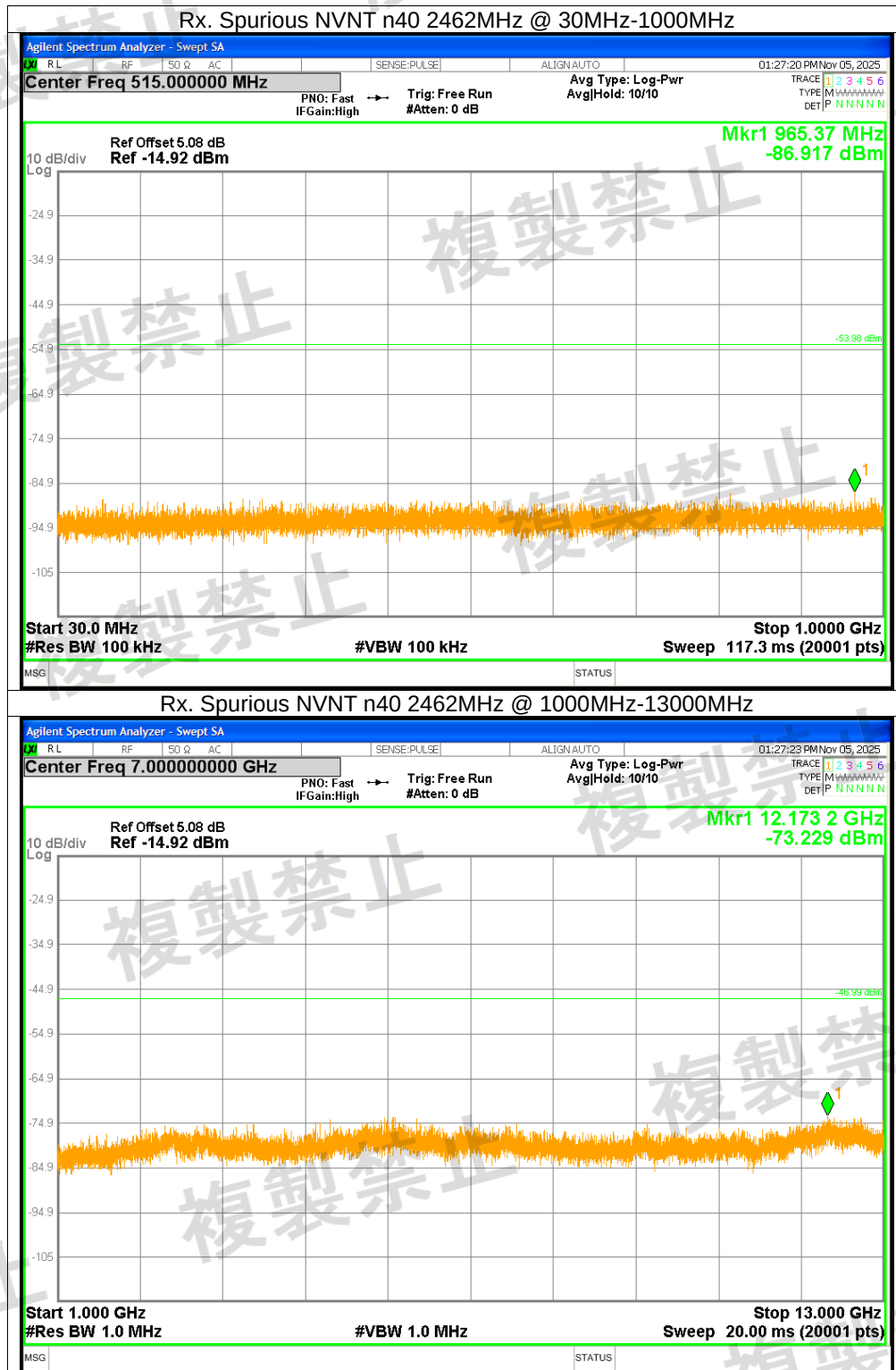














APPENDIX 2-EUT TEST PHOTO

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

※※※※END OF THE REPORT※※※※※