



RF TEST REPORT

Product Name: 5G Smart phone

Model Number: Titan 2 Elite

Issued For : Shanghai Unihertz E-Commerce Co., Ltd

Room 308, Building C, 508 Chundong Rd, Minhang district
Shanghai, China 201108

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park,
No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan
District, Shenzhen, Guangdong, China

Report Number: LGT26D023RF01

Sample Received Date: April 02, 2026

Date of Test: April 02, 2026 ~ May 22, 2026

Date of Issue: May 22, 2026

The test report is effective only with both signature and specialized stamp. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report only apply to the tested sample.

Shenzhen LGT Test Service Co., Ltd.

Tel: 0755-89668180

E-mail: lgt@lgt-cert.com

Web: www.lgt-cert.com

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District,
Shenzhen, Guangdong, China



TEST REPORT CERTIFICATION

Applicant: Shanghai Unihertz E-Commerce Co., Ltd
Address: Room 308, Building C, 508 Chundong Rd, Minhang district Shanghai, China 201108
Manufacturer: Shenzhen OBLUE Communication Technology Co.,Ltd.
Address: Room 702, Hepingdayou industrial and trade industrial park, No. 41, Yonghe Road, Heping Community, Fuhai Street, Baoan District, Shenzhen City,China
Product Name: 5G Smart phone
Trademark: Unihertz
Model Number: Titan 2 Elite
Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
Article 2 Paragraph 1 of Item 19, annex 43 and annex 1, MIC Notice No.88 Appendix No.43	PASS

Prepared by:

chris chen

Chris Chen
Engineer

Approved by:

Vita Li

Vita Li
Technical Director





Table of Contents

1. SUMMARY OF TEST RESULTS	6
1.1 TEST LABORATORY	7
1.2 MEASUREMENT UNCERTAINTY	7
2. GENERAL INFORMATION	8
2.1 GENERAL DESCRIPTION OF THE EUT	8
2.2 DESCRIPTION OF THE TEST MODES	10
2.3 TABLE FOR PARAMETERS OF THE TEST SOFTWARE SETTING	10
2.4 TEST CONDITIONS	10
2.5 TEST ENVIRONMENTAL	10
2.6 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	11
2.7 EQUIPMENTS LIST FOR ALL TEST ITEMS	12
3. FREQUENCY ERROR	13
3.1 LIMIT	13
3.2 TEST PROCEDURES	13
3.3 TEST SETUP	13
3.4 TEST RESULT	13
4. ANTENNA POWER	14
4.1 LIMIT	14
4.2 TEST PROCEDURE	14
4.3 TEST SETUP	14
4.4 TEST DEVIATION	14
4.5 TEST RESULT	14
5. RADIATION POWER	15
5.1 LIMIT	15
5.2 TEST RESULT	15
6. OCCUPIED BANDWIDTH (99%) & SPREAD BANDWIDTH (90%)	16
6.1 LIMIT	16
6.2 TEST PROCEDURE	16
6.3 TEST SETUP	16
6.4 TEST DEVIATION	16
6.5 TEST RESULT	16
7. UNWANTED EMISSION INTENSITY MEASUREMENT	17
7.1 LIMIT	17
7.2 TEST PROCEDURE	17
7.3 TEST SETUP	18
7.4 TEST DEVIATION	18
7.5 TEST RESULT	18



8. DWELL TIME	19
8.1 LIMIT	19
8.2 TEST PROCEDURES	19
8.3 TEST SETUP	19
8.4 TEST RESULT	19
9. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT	20
9.1 LIMIT	20
9.2 TEST PROCEDURES	20
9.3 TEST RESULT	20
10. TRANSMISSION RADIATION ANGLE WIDTH (3DB BEAMWIDTH) MEASUREMENT	21
10.1 LIMIT	21
10.2 TEST PROCEDURES	21
10.3 TEST SETUP	21
10.4 TEST DEVIATION	21
10.5 TEST RESULT	21
11. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT	22
11.1 LIMIT	22
11.2 MEASURING ID CODE SOFTWARE	22
11.3 TEST PROCEDURES	22
11.4 TEST SETUP	22
11.5 TEST DEVIATION	22
11.6 EUT OPERATION DURING TEST	22
11.7 TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILITY	23
APPENDIX I - TEST RESULTS	24
FREQUENCY ERROR	24
TX SPURIOUS EMISSION	26
DWELL TIME	42
RX SPURIOUS EMISSION	49
ANTENNA POWER	56
EIRP POWER	56
OCCUPIED CHANNEL BANDWIDTH (HOPPING)	57
SPREADING BANDWIDTH	59
APPENDIX II - TEST SETUP PHOTOS	61
APPENDIX III - PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	62



Revision History

Rev.	Issue Date	Contents
00	May 22, 2026	Initial Issue



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: annex 43 of Notification No.88.

Rule Section	Description of Test	Judgement
3.2(4)	Frequency Error	PASS
3.2(7)&(8)	Occupied Bandwidth(99%)&Spread-spectrum Bandwidth(90%)	PASS
3.2(6)	Unwanted Emission Intensity	PASS
3.2(3)	Power Error	PASS
3.3	Limitation of Collateral Emission of Receiver	PASS
3.6	Transmission Radiation Power	PASS
3.6	Transmission Radiation Angle Width (3dB Beamwidth)	N/A
3.4	Radio Interference Prevention Capability	PASS
3.2(9)	Spreading Factor	PASS
3.2(11)	Dwell Time	PASS
Note(2)	Carrier Sense Capability	N/A
3.7 Note(3)	Construction Protection Confirmation	PASS

Note:

- (1) "N/A" means test is not applicable in this Test Report.
- (2) Article 2 Paragraph 1 of Item 19.
- (3) Please refer to Japan Radio Protection Declaration.



1.1 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

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	$\pm 0.71\text{dB}$
2	Conducted emission	$\pm 2.80\text{dB}$
3	Temperature	$\pm 0.5^{\circ}\text{C}$

Note: The measurement uncertainty is not included in the test result.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	5G Smart phone	
Test Model Number:	Titan 2 Elite	
Series Number:	N/A	
Model Difference:	N/A	
Product Description:	Operation Frequency:	2402~2480 MHz
	Modulation Type:	GFSK/ π /4-DQPSK/8DPSK
	Number Of Channel:	79 CH
	Antenna Designation:	PIFA Antenna
	Antenna Gain(dBi):	-0.02
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 3.	
Adapter:	Input: AC 100-240V 50/60Hz 0.8A Output: DC 5V 3A 15W or 9V 3A 27W or 12V 2.75A 33W MAX	
Battery:	Capacity: 4050mAh Rated Voltage: 3.84V	
Hardware Version:	G72_V1.0	
Software Version:	Titan 2E_20260326	
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. The antenna information refers to the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.



3.

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

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:

Lowest frequency		Middle frequency		Highest frequency	
00	2402	39	2441	78	2480



2.2 DESCRIPTION OF THE TEST MODES

Pretest Mode	Description
Mode 1	GFSK (CH00 CH39 CH78)
Mode 2	$\pi/4$ -DQPSK (CH00 CH39 CH78)
Mode 3	8DPSK (CH00 CH39 CH78)

2.3 TABLE FOR PARAMETERS OF THE TEST SOFTWARE SETTING

Type	Mode Or Modulation type	Power Class	Software For Testing
BR+EDR	GFSK	Default	Engineering Mode
	$\pi/4$ -DQPSK	Default	
	8DPSK	Default	

2.4 TEST CONDITIONS

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(V)	3.84	4.224	3.456
RF Chip Input DC Power(V)	3.300	3.323	3.284
Voltage Variation (%)	/	0.70	-0.48

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 TEST ENVIRONMENTAL

During the measurement the environmental conditions

Normal Temperature: 24.5°C

Relative Humidity: 53 %

Air Pressure: 101.78 kPa



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.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	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

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until	Classification
Signal Analyzer	Keysight	N9010B	MY60242508	2026-03-03	2027-03-02	(c)
Signal Analyzer	Keysight	N9020A	MY50530994	2026-03-02	2027-03-01	(c)
RF Automatic Test system	MW	MW100-R FCB	MW220324LG -33	2026-03-03	2027-03-02	(c)
MXG Vector Signal Generator	Keysight	N5182B	MY59100717	2026-03-03	2027-03-02	(c)
Temperature& Humidity test chamber	AISRY	LX-1000L	171200018	2025-07-30	2026-07-29	(c)
Attenuator	eastsheep	90db	N.A	2026-03-02	2027-03-01	(c)
Temperature & Humidity	JINGCHUAN G	BT-3	N.A	2026-03-05	2027-03-04	(c)
Digital multimeter	MASTECH	MS8261	MBGBC83053	2025-07-30	2026-07-29	(c)
DC source	Keysight	E3634A	MY58036468	2026-03-05	2027-03-04	(c)

Remark:

(a) Calibration conducted by the National institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph(1) in JRL.

(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (ActNo. 51 of 1992).

(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1). (d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to (c)

From JRL Article 24-2, paragraph 4, Item 2

Notice: Calibration duration for above equipments is 1 year.

Test Equipment Calibration

All of the test equipment is effective use and calibration certification institution, LISAI, the address is No.8.South Street Shi li institute Guangzhou.Guangdong.China



3. FREQUENCY ERROR

3.1 LIMIT

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

3.2 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 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.

3.3 TEST SETUP



3.4 TEST RESULT

For the measurement records, refer to the appendix I.



4. ANTENNA POWER

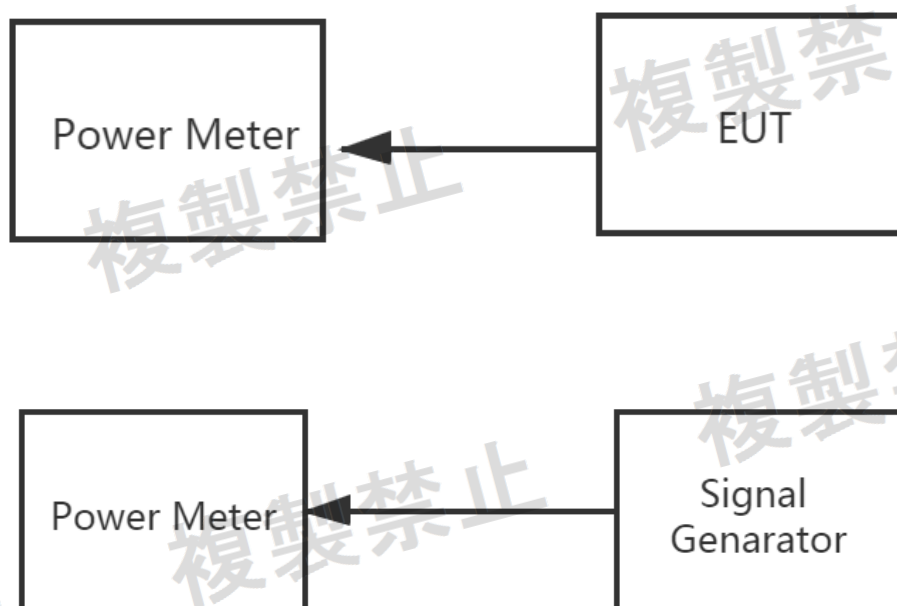
4.1 LIMIT

Item	Limits
Antenna Power Density	$\leq 3\text{mW/MHz}$ (FH form 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%

4.2 TEST PROCEDURE

1. EUT turn to test frequency channel and keep continuous transmitting.
2. Reading the output power from the Power meter as P_{EUT} .
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 P_{EUT} , the level of Signal generator recorded as "P".
5. The antenna power of EUT is "P".
6. EIRP power = "P"+antenna gain.

4.3 TEST SETUP



4.4 TEST DEVIATION

There is no deviation with the original standard.

4.5 TEST RESULT

For the measurement records, refer to the appendix I.



5. RADIATION POWER

5.1 LIMIT

Item	Limits
Radiation power EIRP	FH from 2400 – 2483.5 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

5.2 TEST RESULT

For the measurement records, refer to the appendix I.



6. OCCUPIED BANDWIDTH (99%) & SPREAD BANDWIDTH (90%)

6.1 LIMIT

Item	Limits
Occupied Band Width:	≤83.5MHz (FH;FH+DS;FH+OFDM) ≤26MHz (Others)
Spreading Bandwidth:	No requirement

6.2 TEST PROCEDURE

1. Setting of SA is following as: GFSK/ π /4-DPSK/8 DPSK RB: 1MHz / VB: 1MHz / SPAN: 83.5MHz / AT: 25dB 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 FH or OFDM Device) or 83.5MHz (For FHSS Device).
3. SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth and must greater than 500kHz.

6.3 TEST SETUP



6.4 TEST DEVIATION

There is no deviation with the original standard.

6.5 TEST RESULT

For the measurement records, refer to the appendix I.



7. UNWANTED EMISSION INTENSITY MEASUREMENT

7.1 LIMIT

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

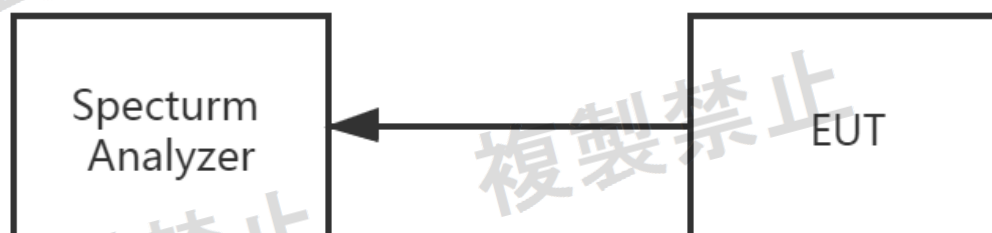
7.2 TEST PROCEDURE

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	30-1000MHz: 1 MHz/1 MHz
	Above 1GHz: 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: Below 1GHz RB: 1MHz / VB: 1MHz, Above 1GHz RB: 1MHz / VB: 1MHz / 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 μW .
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 μW .
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μW .
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 μW .
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 μW .
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.



7.3 TEST SETUP



7.4 TEST DEVIATION

There is no deviation with the original standard.

7.5 TEST RESULT

For the measurement records, refer to the appendix I.



8. DWELL TIME

8.1 LIMIT

Item	Limits
Hopping Freq. Dwell Time	$\leq 0.4 \text{ sec (In } 0.4 \text{ sec} \times \text{spreading rate)}$

8.2 TEST PROCEDURES

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

- The transmitter output (antenna port) was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is more than once pulse time.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.
- Set the EUT for DH5, DH3 and DH1 packet transmitting.
- Measure the maximum time duration of one single pulse.
- Dwell time = $[\text{spreading rate}/79] \times \text{duty-cycle} \times 0.4 \text{ seconds}$. (to be determined for each mode, DH1, DH3, DH5)

8.3 TEST SETUP



8.4 TEST RESULT

Duty-cycle = $[\text{on time}/\text{total time}] \times 100\%$

Dwell time = $[\text{spreading rate}/79] \times \text{duty-cycle} \times 0.4 \text{ seconds}$

For the measurement records, refer to the appendix I.



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) / 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

For the measurement records, refer to the appendix I.



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

10.1 LIMIT

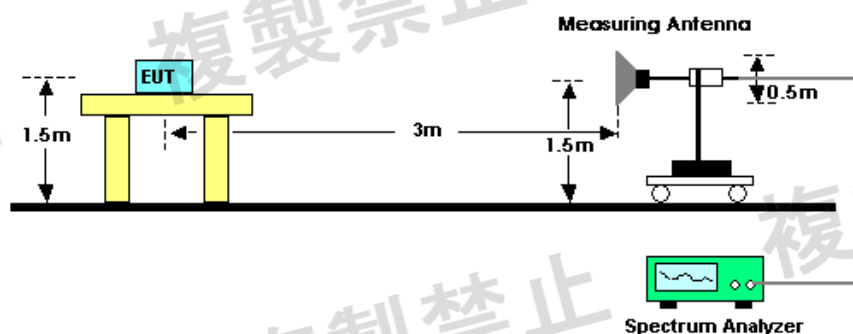
Item	Limits
3dB antenna beam width	$e \leq 360/A$ (The A is 10 in maximum) $A = \{EIRP \text{ Power [mW/MHz]} / \{2.14\text{dBi} + \text{output power (10mW /MHz, 3mW/MHz)}\}\}$ Shall be 1 when A is lower than 1

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 $A = 1$).
 $A = \{EIRP \text{ Power [mW/MHz]} / \{2.14\text{dBi} + \text{output power (10mW /MHz, 3mW/MHz)}\}\}$
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 TEST RESULT

As the EUT max EIRP is less than 6.91dBm/MHz, so the test is not applicable and skipped.



11. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

11.1 LIMIT

Item	Limits
Identification code	≥ 48 bits

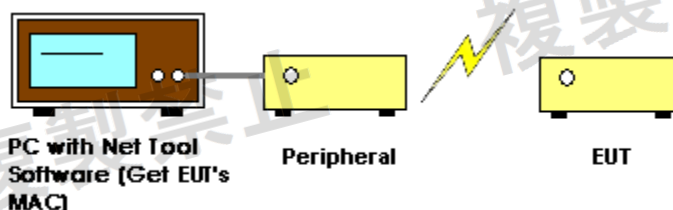
11.2 MEASURING ID CODE SOFTWARE

Item	Limits
MAC IP List	MAC Scan

11.3 TEST PROCEDURES

- In the case that the EUT has the function of automatically transmitting the identification code:
 - Transmit the predetermined identification codes from EUT.
 - Check the transmitted identification codes with the demodulator.
- In the case of receiving the identification code:
 - Transmit the predetermined identification codes from the counterpart.
 - Check if communication is normal.
 - Transmit the signals other than predetermined ID codes from the counterpart.
 - 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 CAPABILIT

The MAC address is FE:E3:7C:7D:60:58.

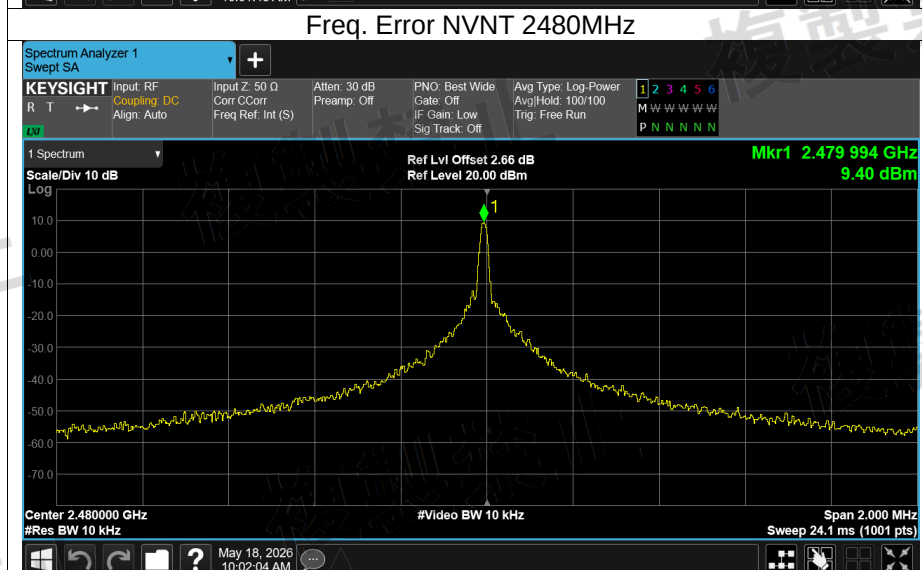
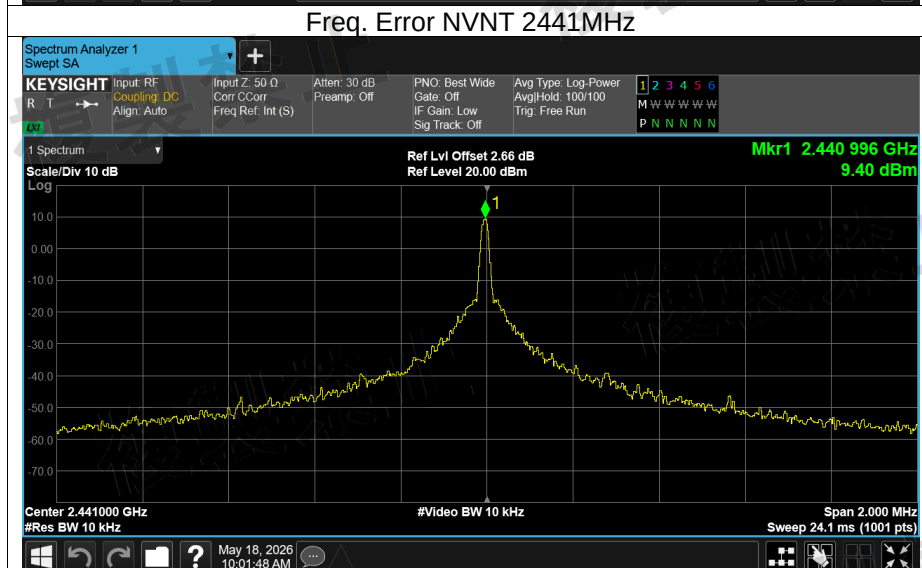
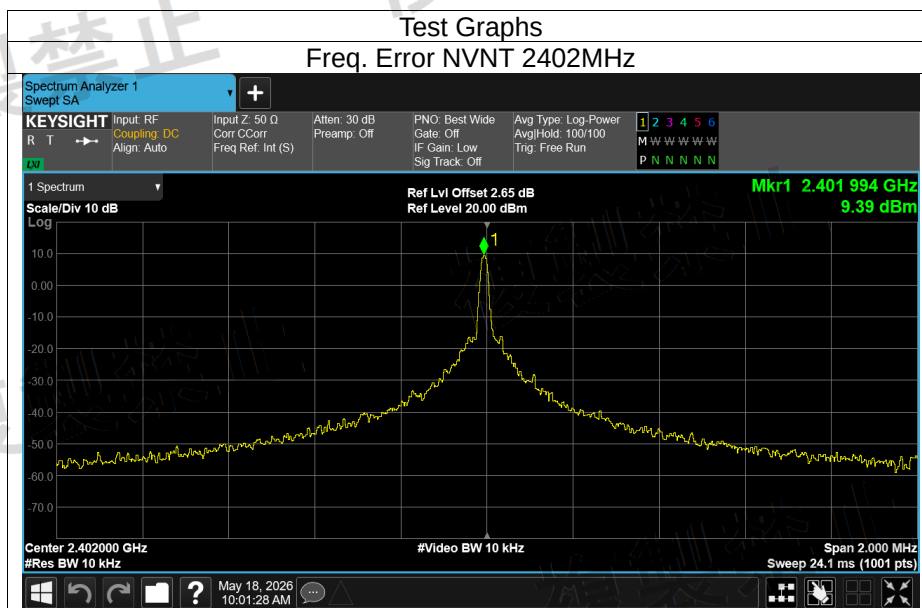




APPENDIX I - TEST RESULTS

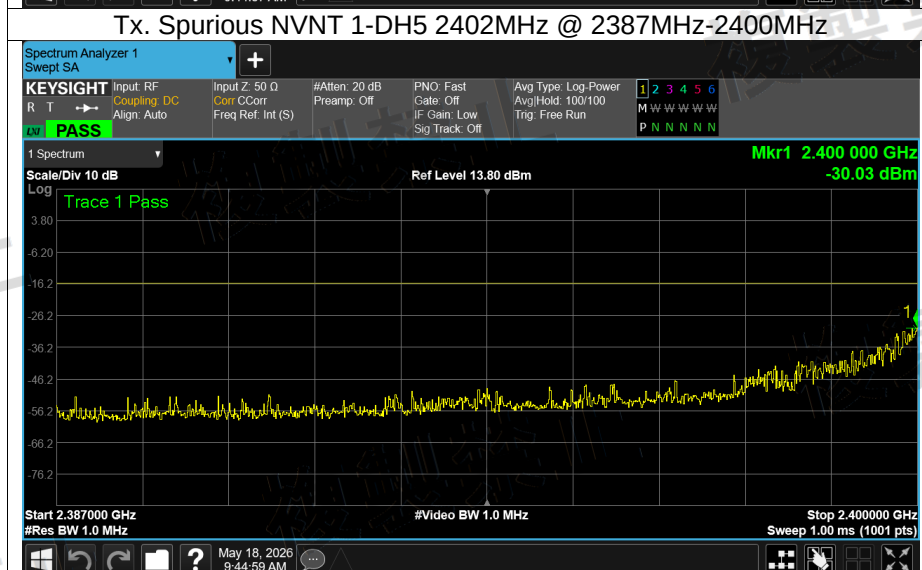
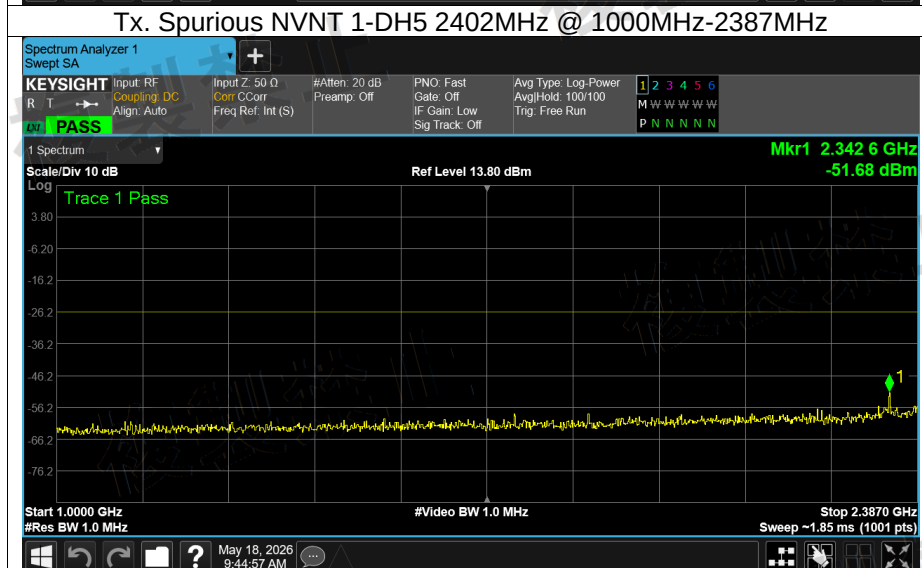
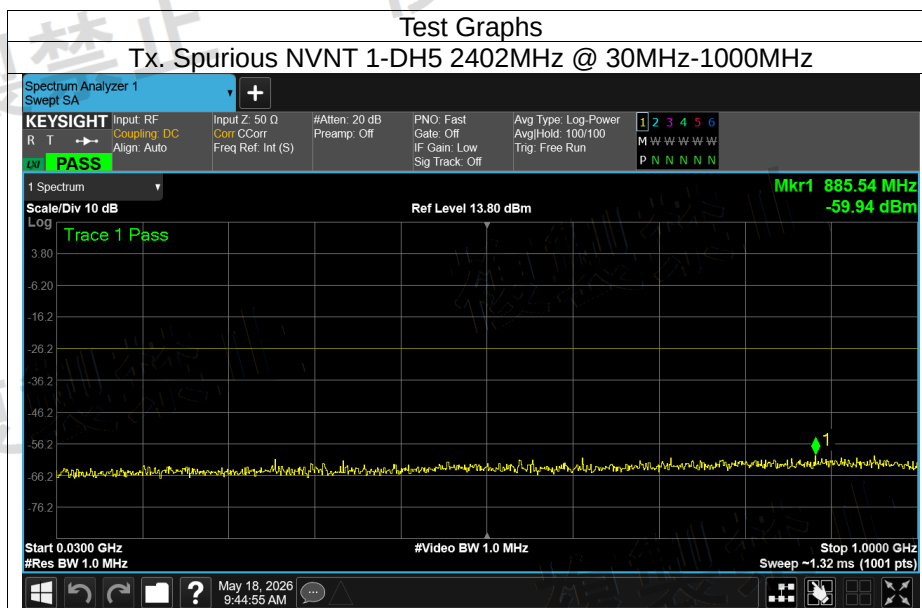
FREQUENCY ERROR

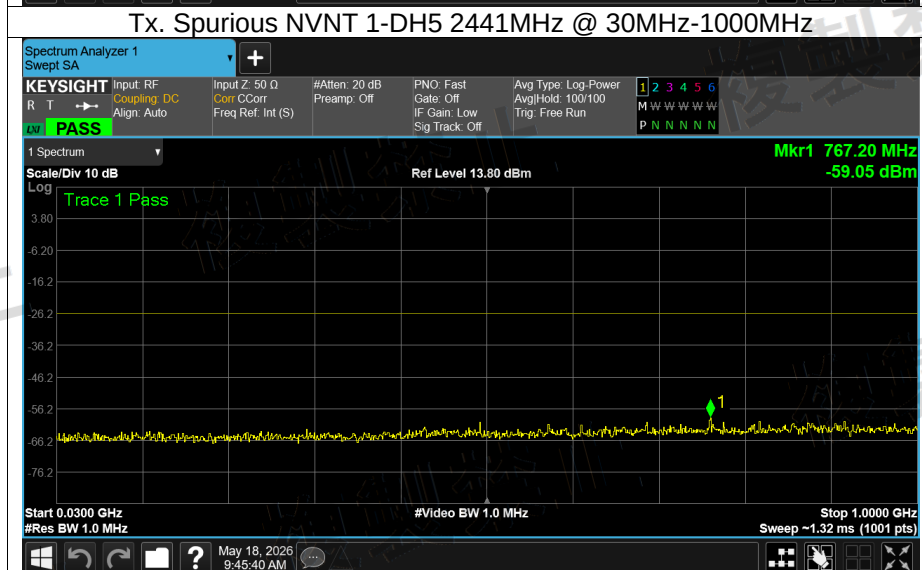
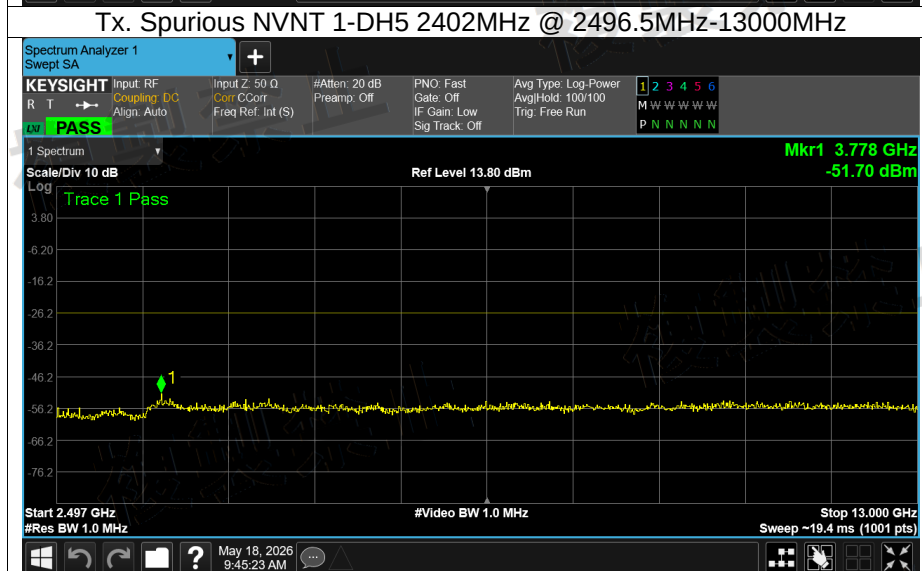
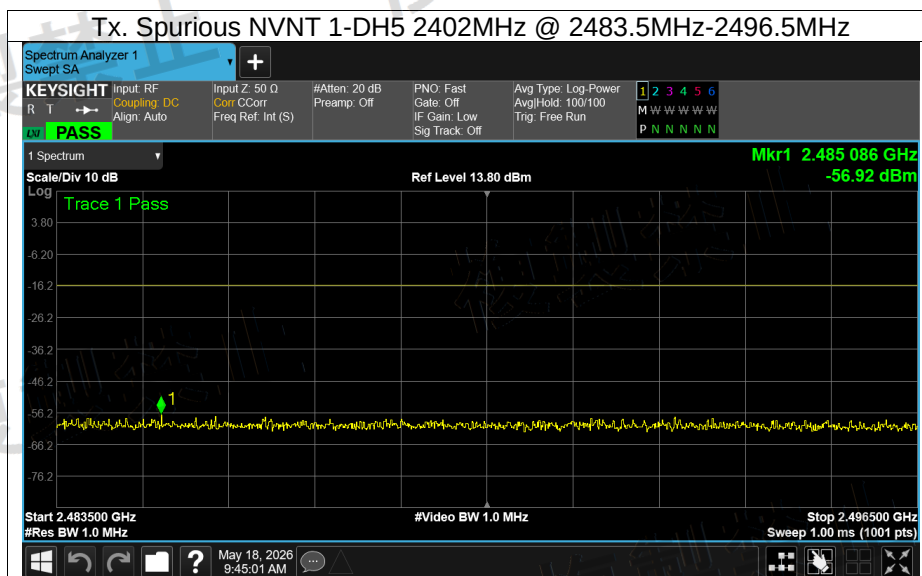
Condition	Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	2402	2401.994	-6000	-2.5	±50	Pass
NVNT	2441	2440.996	-4000	-1.64	±50	Pass
NVNT	2480	2479.994	-6000	-2.42	±50	Pass

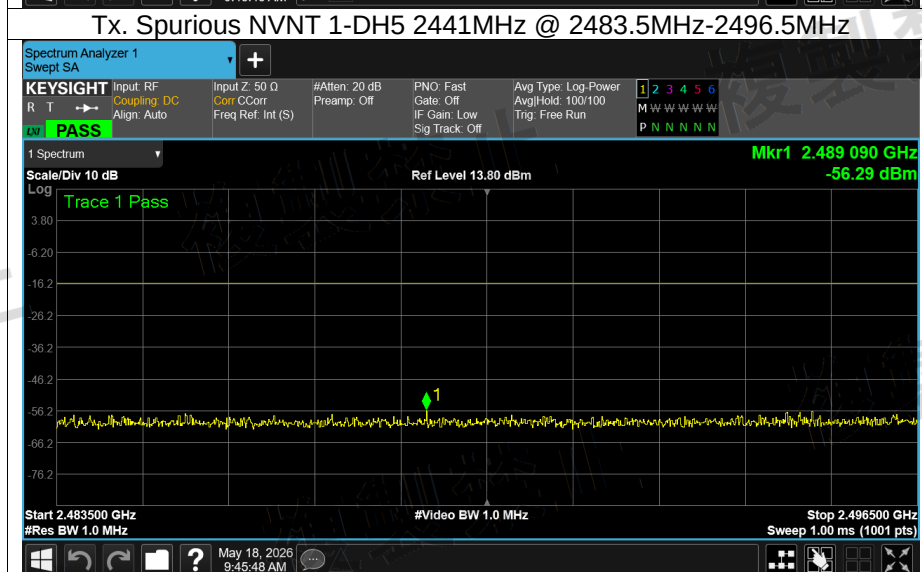
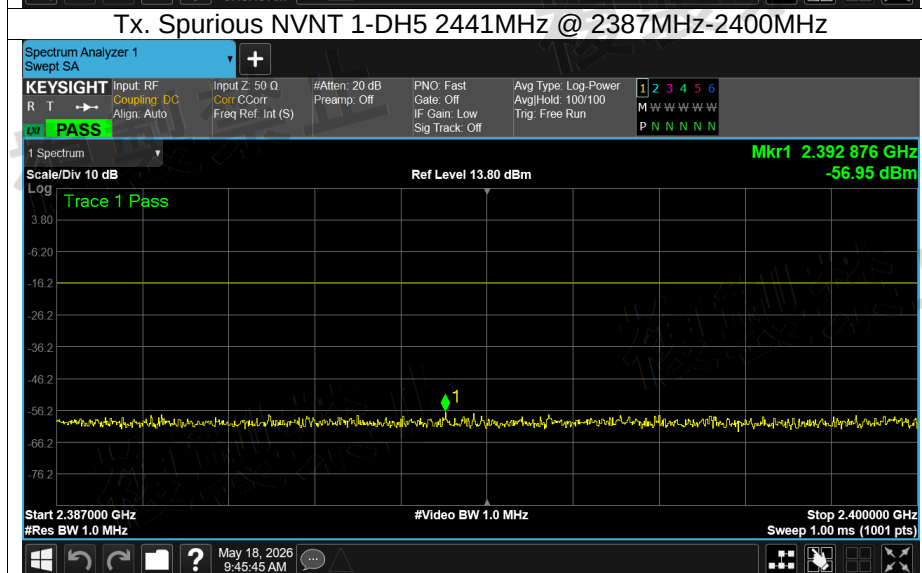
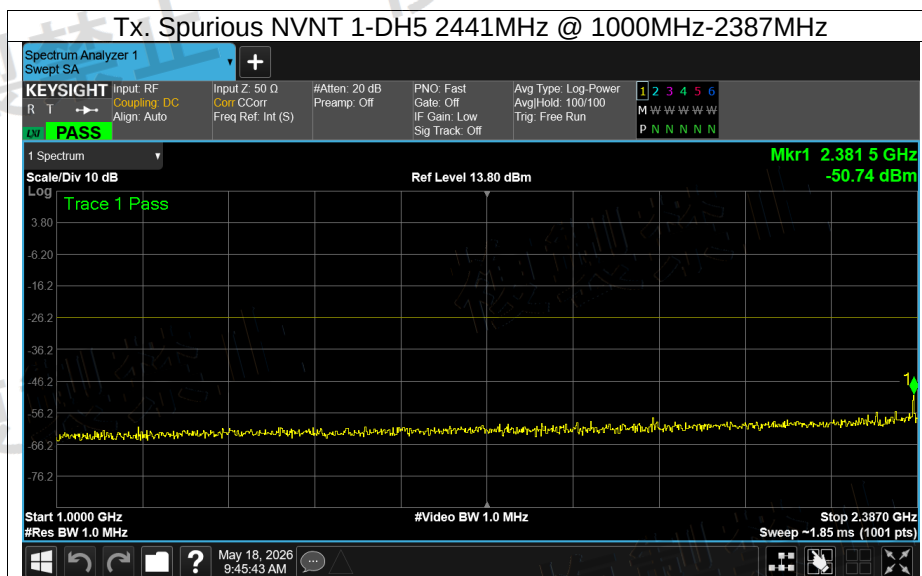


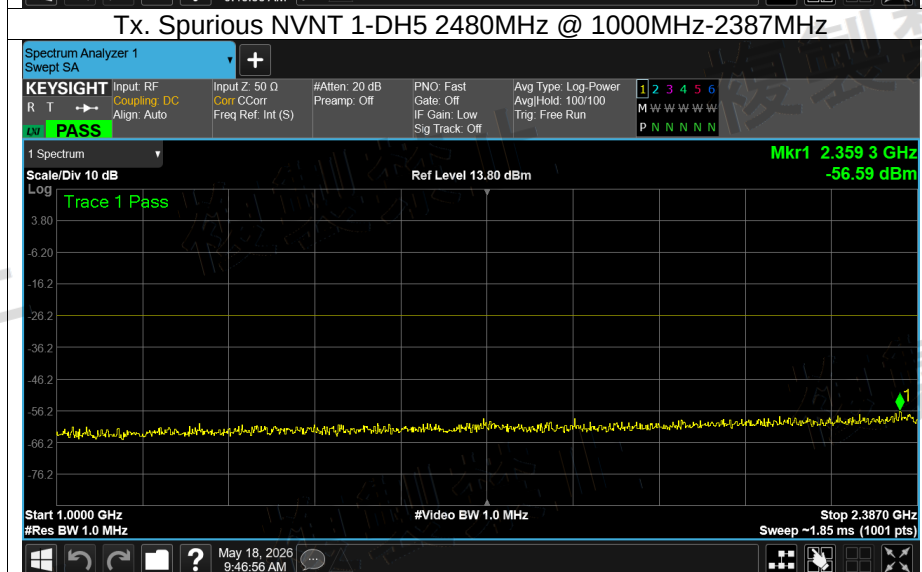
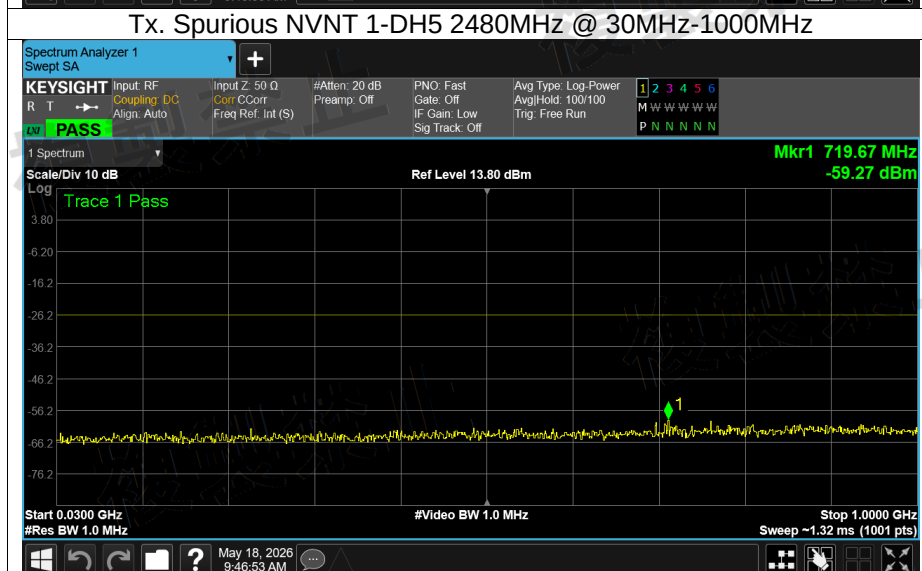
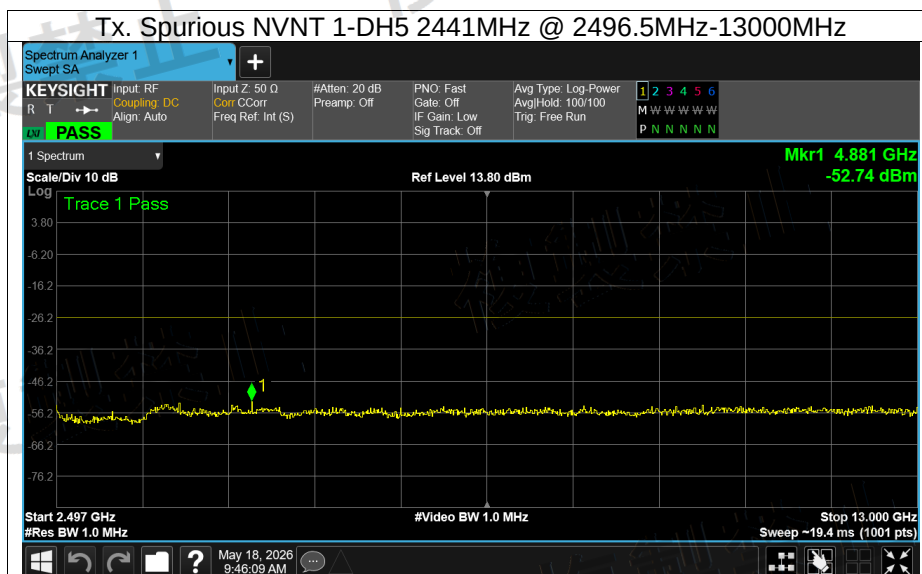
TX SPURIOUS EMISSION

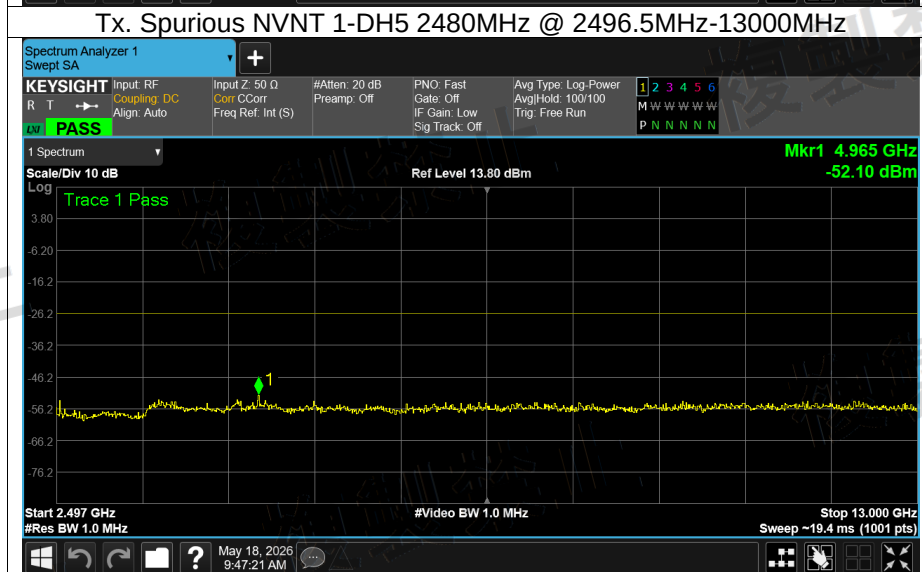
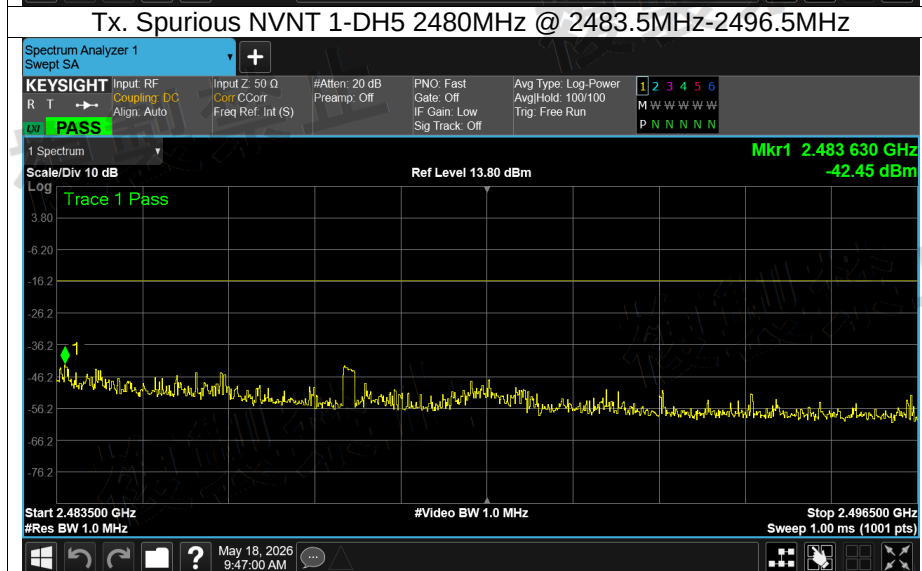
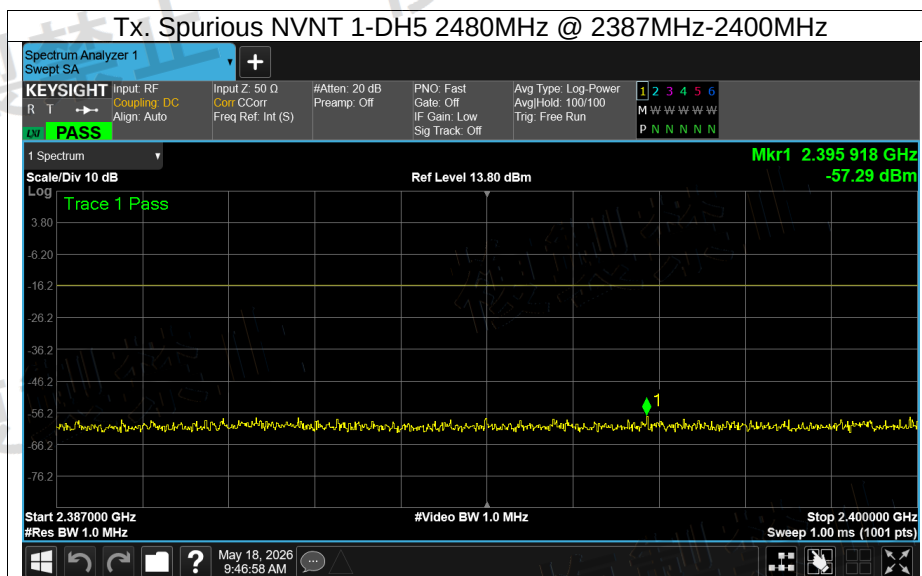
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (uW)	Max RMS Value (uW)	Limit Start (uW)	Limit Stop (uW)	Verdict
NVNT	1-DH5	2402	30-1000	885.54	-59.93	NA	0.001	NA	2.5	2.5	Pass
NVNT	1-DH5	2402	1000-2387	2342.62	-51.68	NA	0.0068	NA	2.5	2.5	Pass
NVNT	1-DH5	2402	2387-2400	2400.00	-30.03	NA	0.9931	NA	25	25	Pass
NVNT	1-DH5	2402	2483.5-2496.5	2485.09	-56.92	NA	0.002	NA	25	25	Pass
NVNT	1-DH5	2402	2496.5-13000	3777.93	-51.70	NA	0.0068	NA	2.5	2.5	Pass
NVNT	1-DH5	2441	30-1000	767.20	-59.05	NA	0.0012	NA	2.5	2.5	Pass
NVNT	1-DH5	2441	1000-2387	2381.45	-50.73	NA	0.0085	NA	2.5	2.5	Pass
NVNT	1-DH5	2441	2387-2400	2392.88	-56.94	NA	0.002	NA	25	25	Pass
NVNT	1-DH5	2441	2483.5-2496.5	2489.09	-56.28	NA	0.0024	NA	25	25	Pass
NVNT	1-DH5	2441	2496.5-13000	4880.79	-52.73	NA	0.0053	NA	2.5	2.5	Pass
NVNT	1-DH5	2480	30-1000	719.67	-59.26	NA	0.0012	NA	2.5	2.5	Pass
NVNT	1-DH5	2480	1000-2387	2359.26	-56.58	NA	0.0022	NA	2.5	2.5	Pass
NVNT	1-DH5	2480	2387-2400	2395.92	-57.28	NA	0.0019	NA	25	25	Pass
NVNT	1-DH5	2480	2483.5-2496.5	2483.63	-42.44	NA	0.057	NA	25	25	Pass
NVNT	1-DH5	2480	2496.5-13000	4964.82	-52.10	NA	0.0062	NA	2.5	2.5	Pass
NVNT	2-DH5	2402	30-1000	741.98	-60.67	NA	0.0009	NA	2.5	2.5	Pass
NVNT	2-DH5	2402	1000-2387	2342.62	-51.46	NA	0.0071	NA	2.5	2.5	Pass
NVNT	2-DH5	2402	2387-2400	2399.78	-20.57	NA	8.77	NA	25	25	Pass
NVNT	2-DH5	2402	2483.5-2496.5	2489.23	-55.78	NA	0.0026	NA	25	25	Pass
NVNT	2-DH5	2402	2496.5-13000	11655.55	-53.10	NA	0.0049	NA	2.5	2.5	Pass
NVNT	2-DH5	2441	30-1000	806.00	-60.28	NA	0.0009	NA	2.5	2.5	Pass
NVNT	2-DH5	2441	1000-2387	2381.45	-50.29	NA	0.0094	NA	2.5	2.5	Pass
NVNT	2-DH5	2441	2387-2400	2399.56	-56.28	NA	0.0024	NA	25	25	Pass
NVNT	2-DH5	2441	2483.5-2496.5	2493.64	-54.07	NA	0.0039	NA	25	25	Pass
NVNT	2-DH5	2441	2496.5-13000	5059.35	-53.07	NA	0.0049	NA	2.5	2.5	Pass
NVNT	2-DH5	2480	30-1000	888.45	-59.65	NA	0.0011	NA	2.5	2.5	Pass
NVNT	2-DH5	2480	1000-2387	2349.55	-56.32	NA	0.0023	NA	2.5	2.5	Pass
NVNT	2-DH5	2480	2387-2400	2394.27	-56.78	NA	0.0021	NA	25	25	Pass
NVNT	2-DH5	2480	2483.5-2496.5	2486.89	-43.41	NA	0.0456	NA	25	25	Pass
NVNT	2-DH5	2480	2496.5-13000	2496.50	-52.73	NA	0.0053	NA	2.5	2.5	Pass
NVNT	3-DH5	2402	30-1000	946.65	-60.47	NA	0.0009	NA	2.5	2.5	Pass
NVNT	3-DH5	2402	1000-2387	2382.84	-49.98	NA	0.01	NA	2.5	2.5	Pass
NVNT	3-DH5	2402	2387-2400	2400.00	-22.40	NA	5.7544	NA	25	25	Pass
NVNT	3-DH5	2402	2483.5-2496.5	2486.94	-55.41	NA	0.0029	NA	25	25	Pass
NVNT	3-DH5	2402	2496.5-13000	5122.38	-52.86	NA	0.0052	NA	2.5	2.5	Pass
NVNT	3-DH5	2441	30-1000	793.39	-60.31	NA	0.0009	NA	2.5	2.5	Pass
NVNT	3-DH5	2441	1000-2387	2381.45	-50.65	NA	0.0086	NA	2.5	2.5	Pass
NVNT	3-DH5	2441	2387-2400	2395.80	-55.29	NA	0.003	NA	25	25	Pass
NVNT	3-DH5	2441	2483.5-2496.5	2488.38	-54.57	NA	0.0035	NA	25	25	Pass
NVNT	3-DH5	2441	2496.5-13000	2496.50	-53.00	NA	0.005	NA	2.5	2.5	Pass
NVNT	3-DH5	2480	30-1000	875.84	-60.59	NA	0.0009	NA	2.5	2.5	Pass
NVNT	3-DH5	2480	1000-2387	2360.65	-55.19	NA	0.003	NA	2.5	2.5	Pass
NVNT	3-DH5	2480	2387-2400	2397.80	-55.47	NA	0.0028	NA	25	25	Pass
NVNT	3-DH5	2480	2483.5-2496.5	2483.64	-41.08	NA	0.078	NA	25	25	Pass
NVNT	3-DH5	2480	2496.5-13000	2496.50	-48.85	NA	0.013	NA	2.5	2.5	Pass

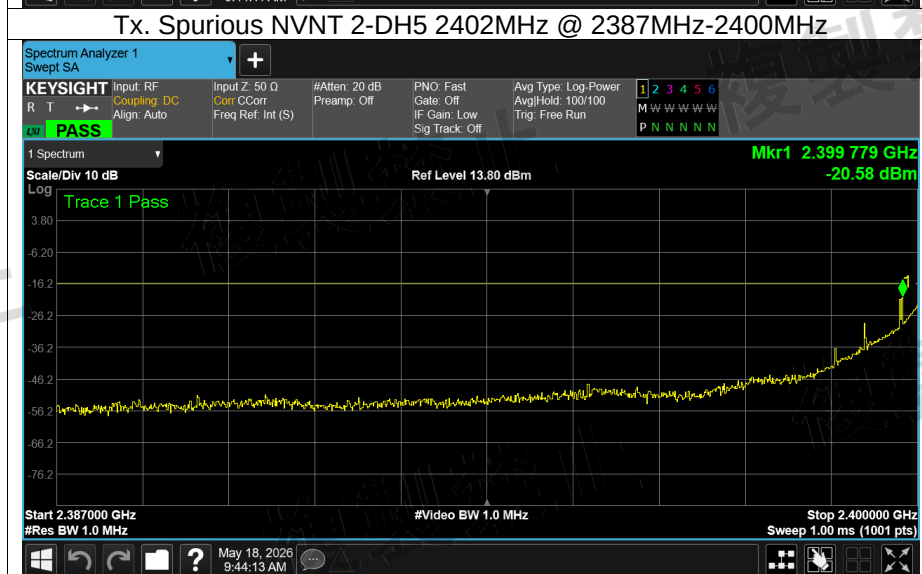
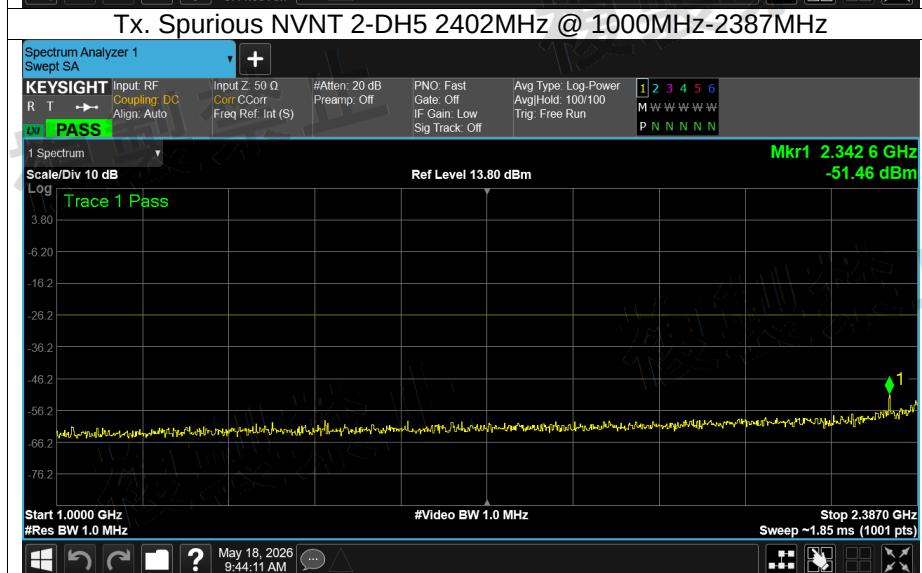
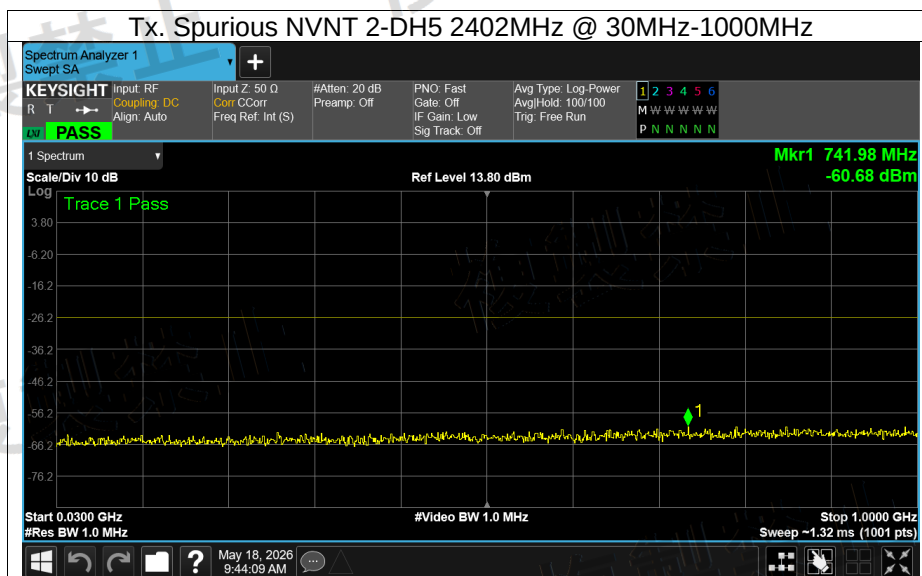


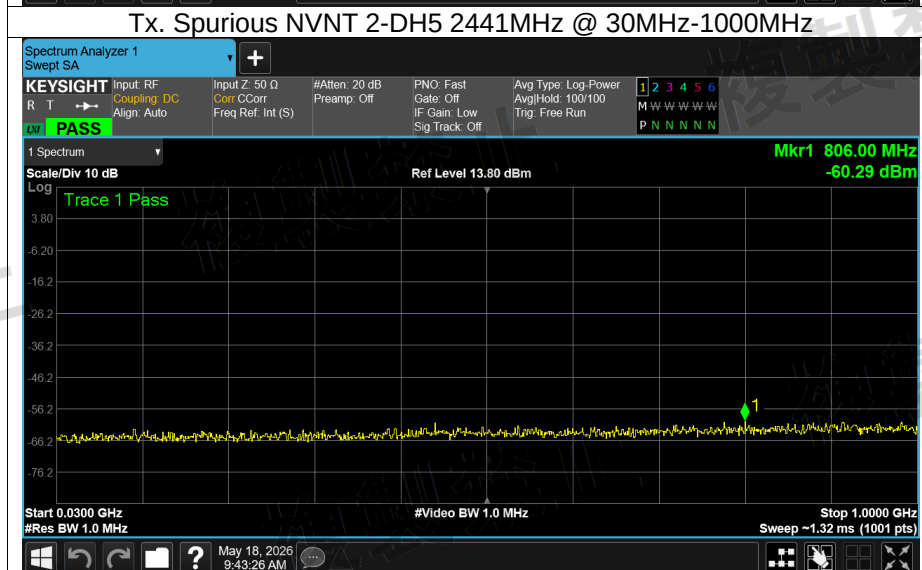
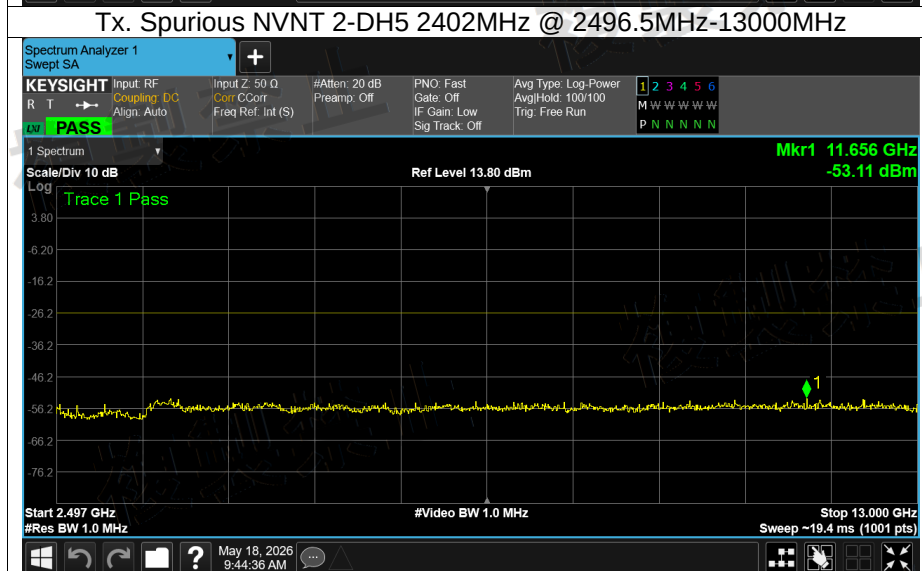
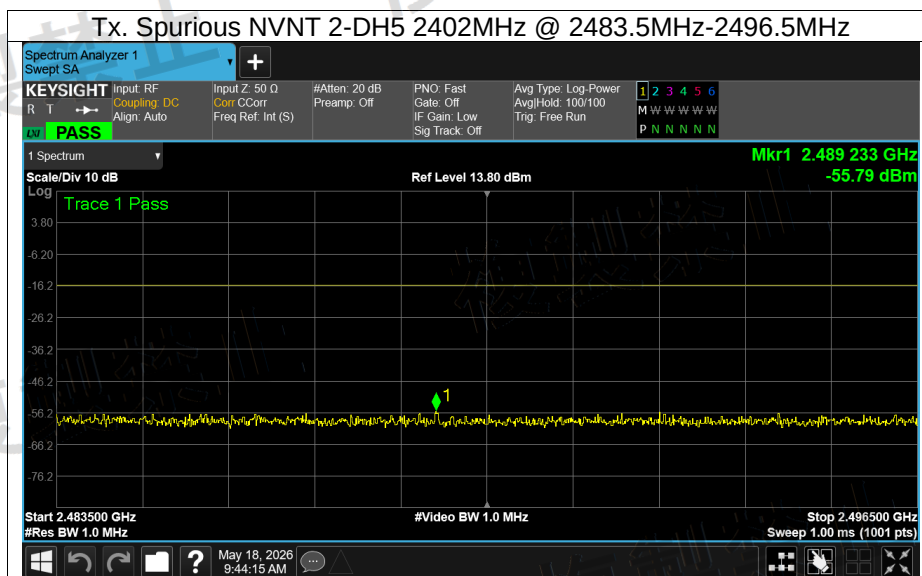


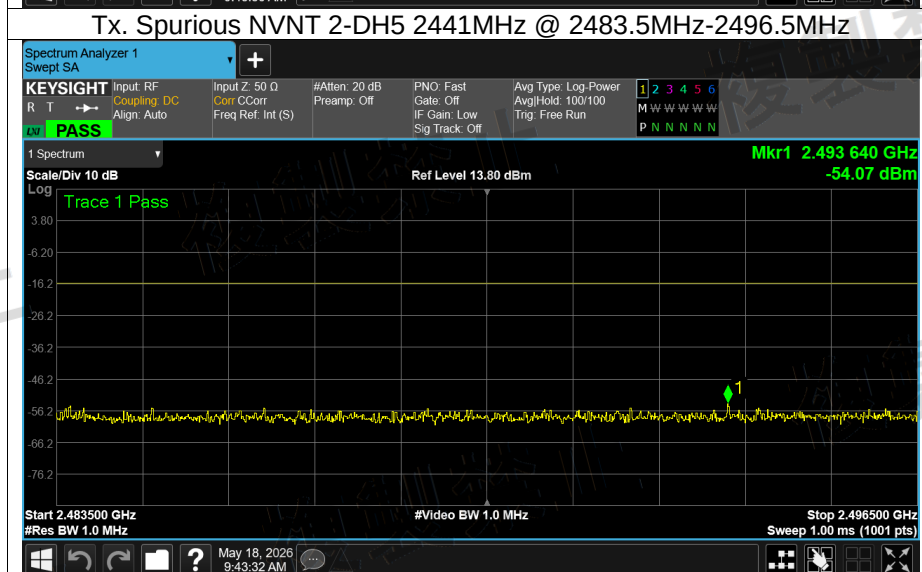
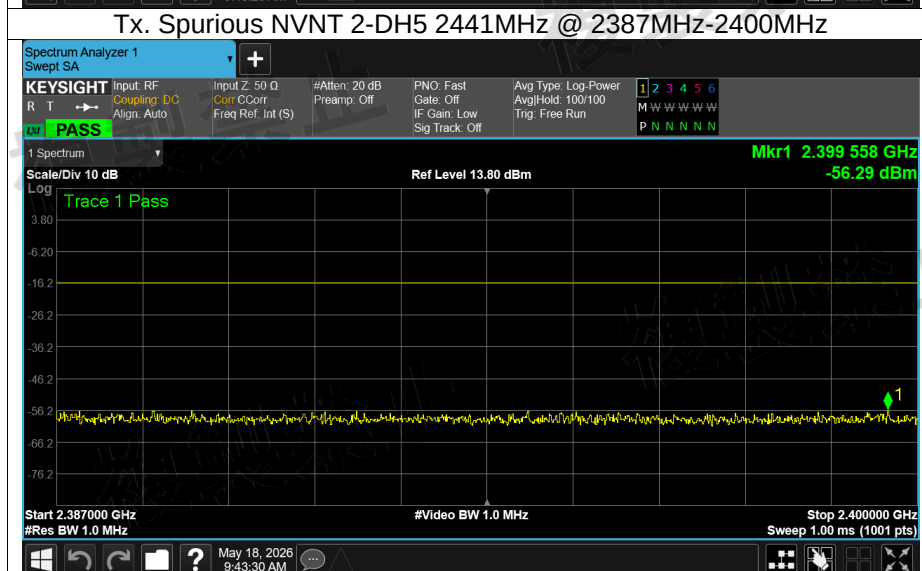
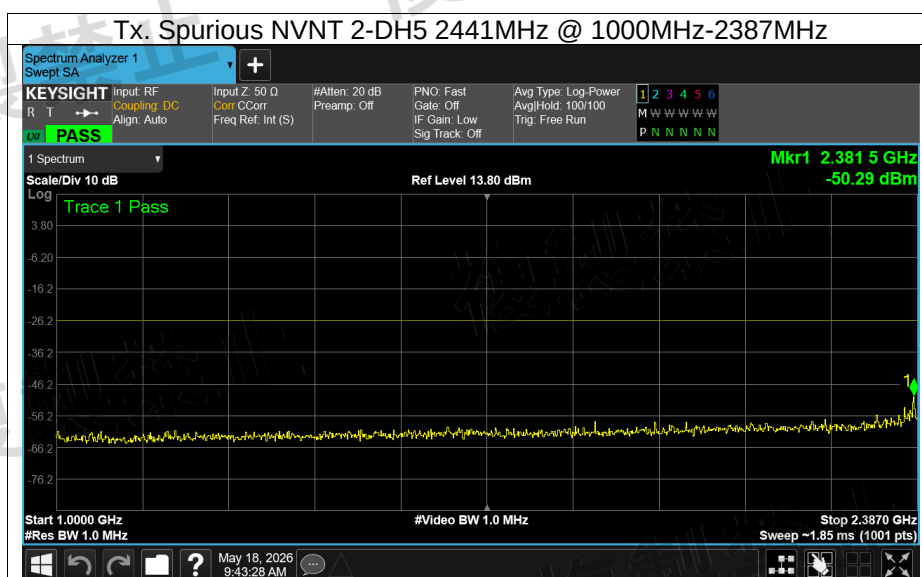


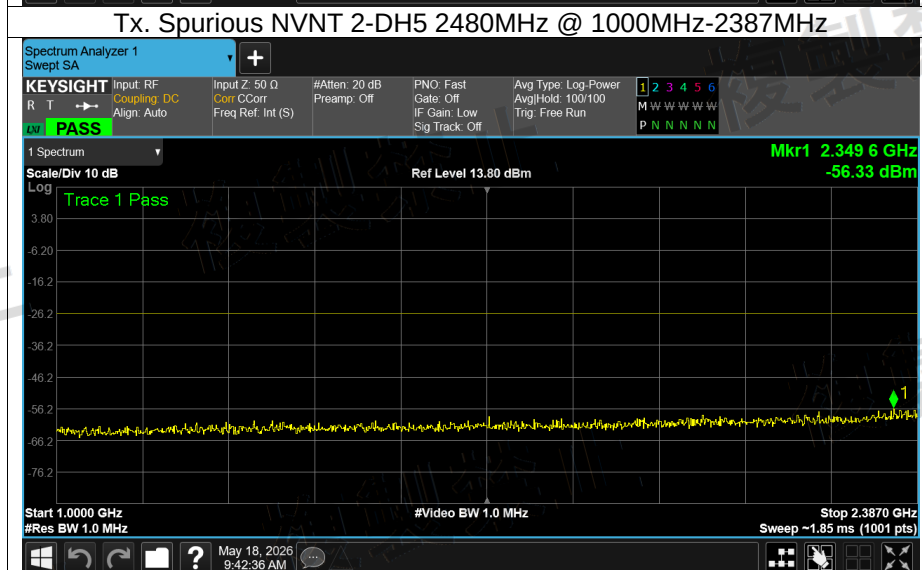
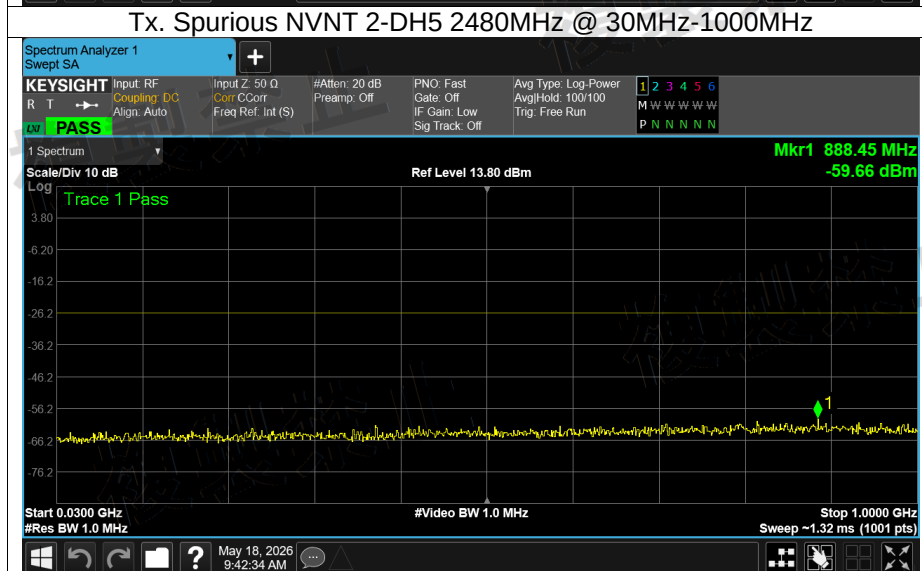
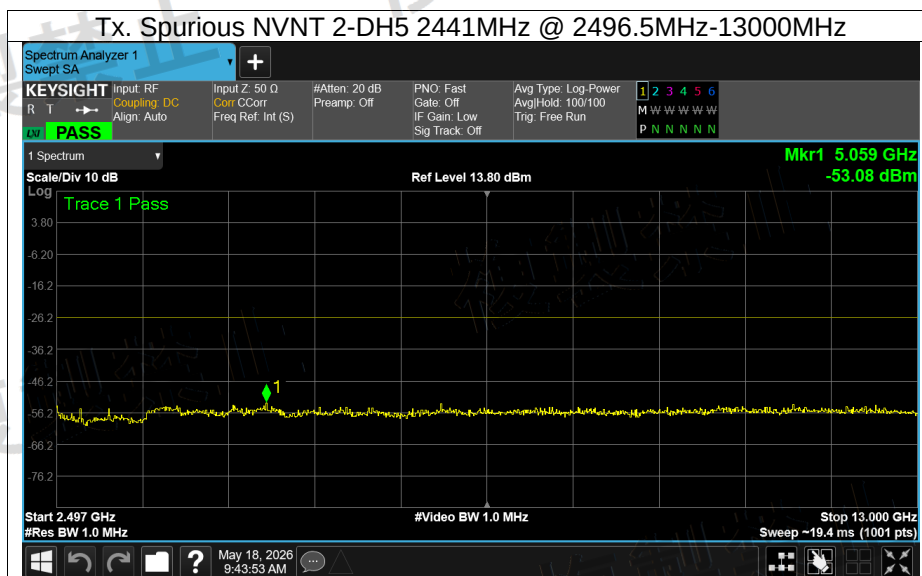


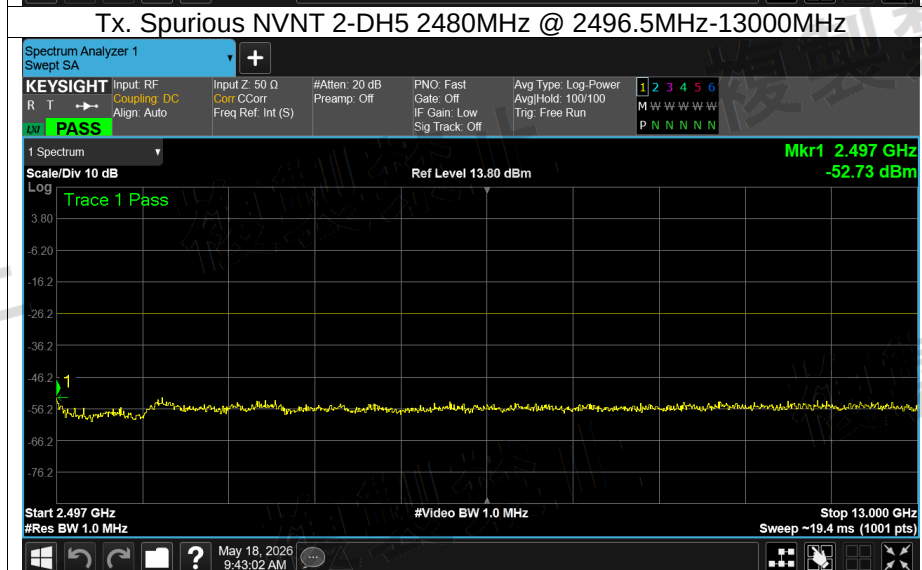
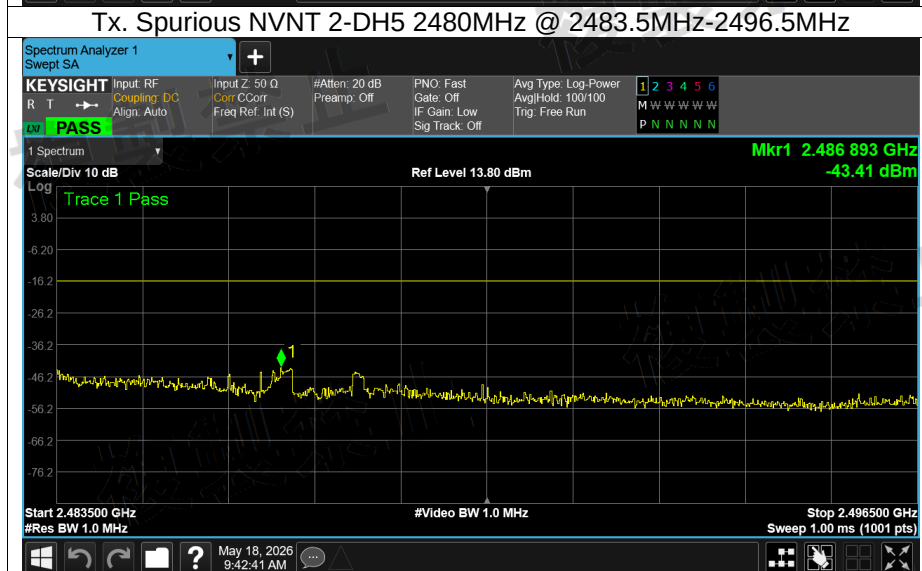
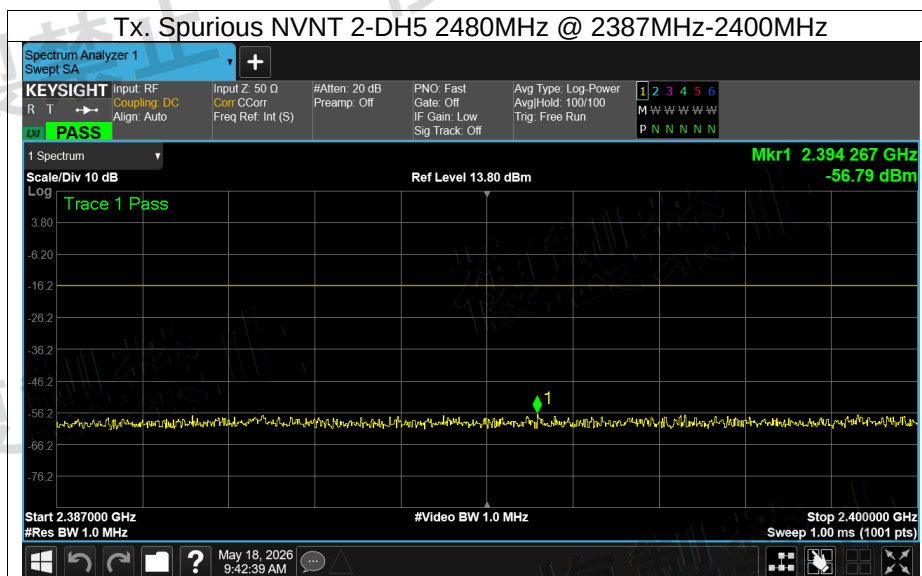


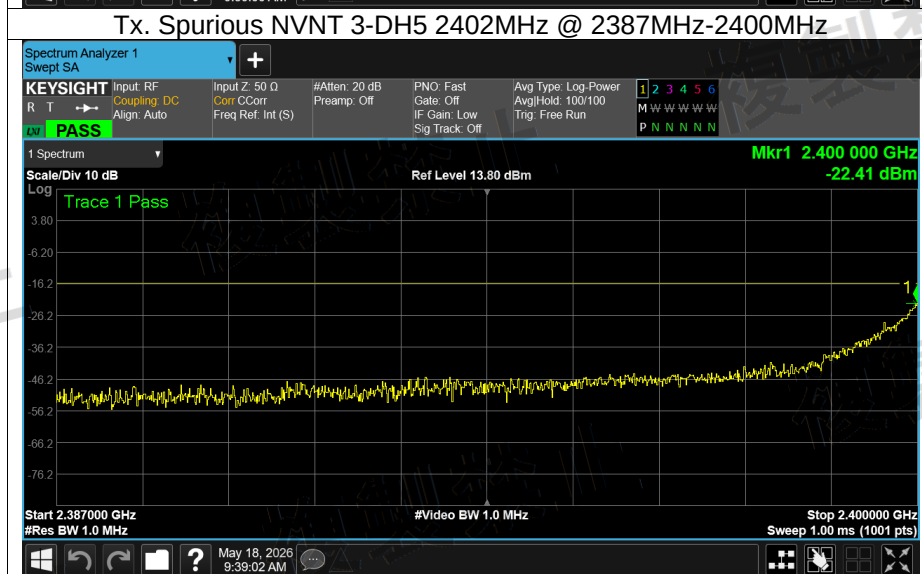
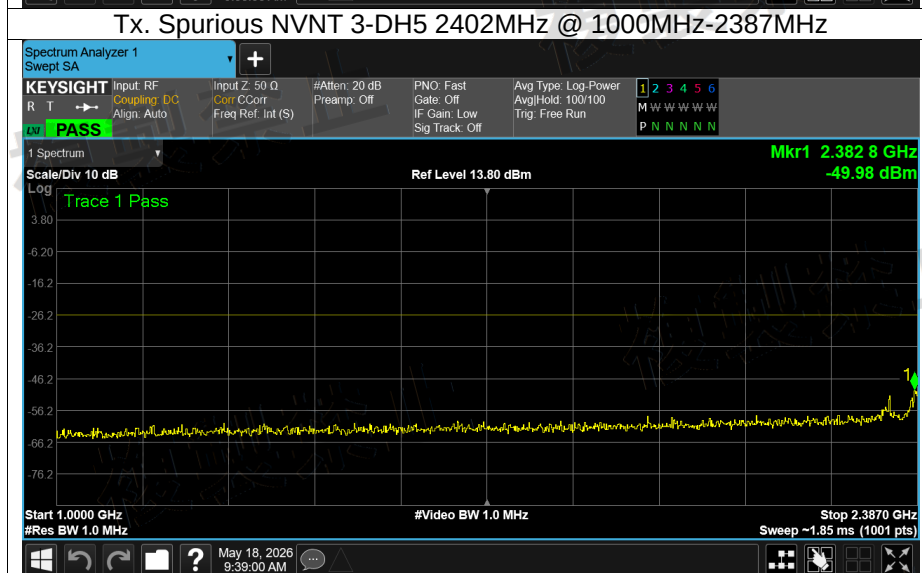
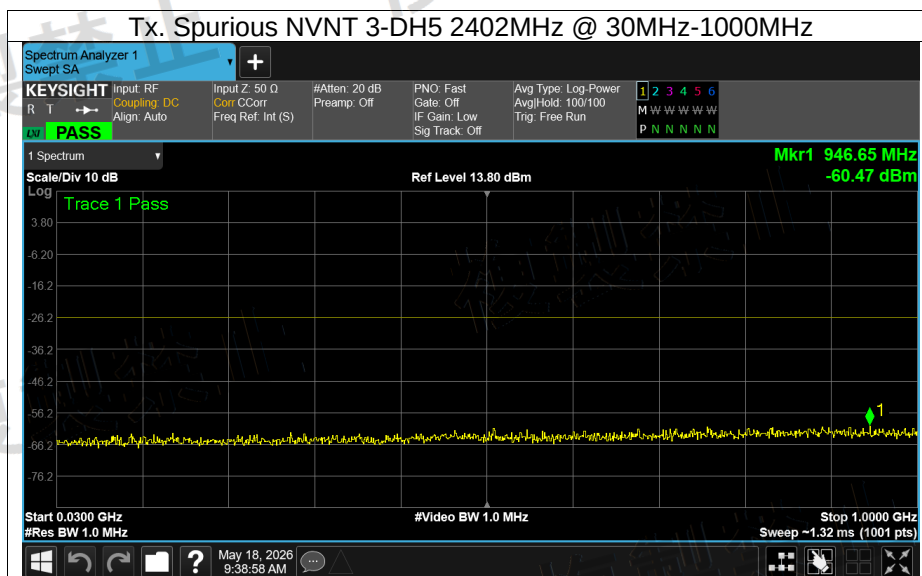


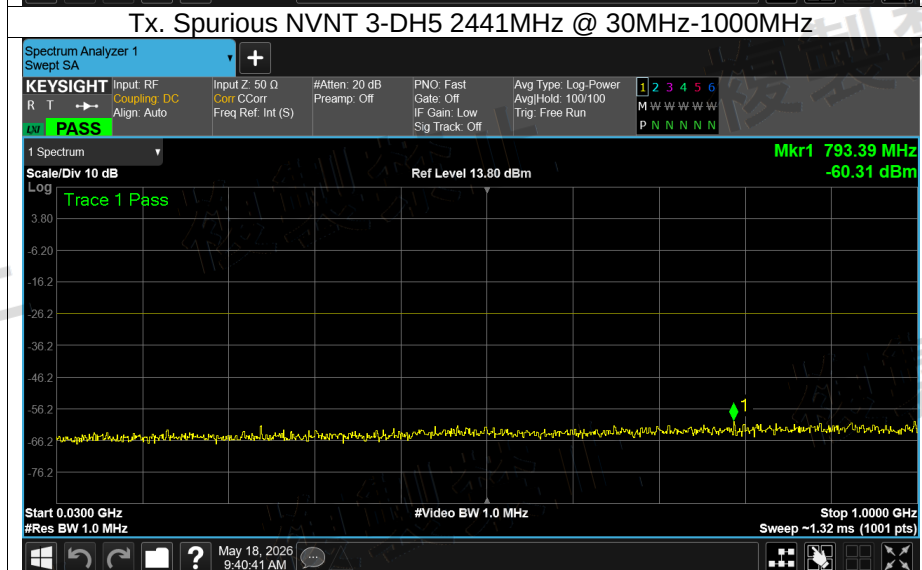
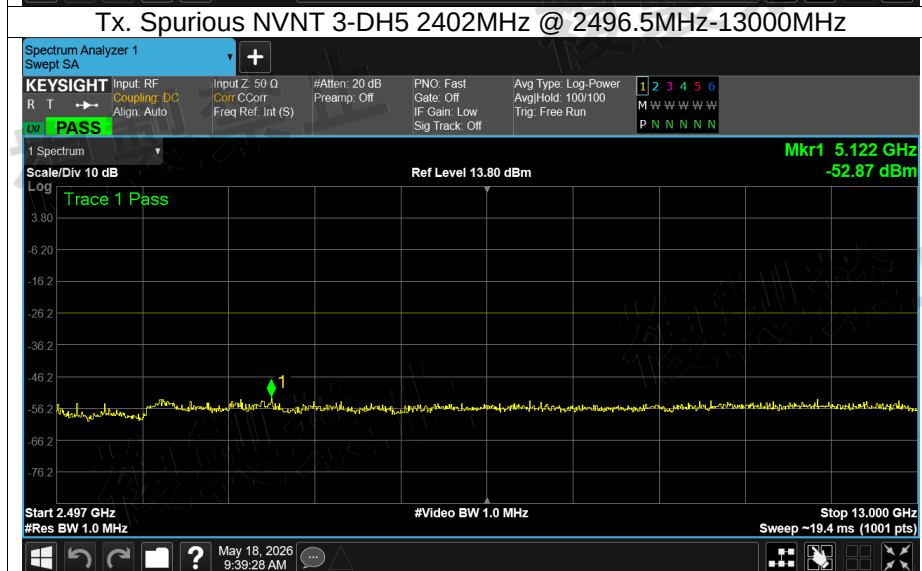
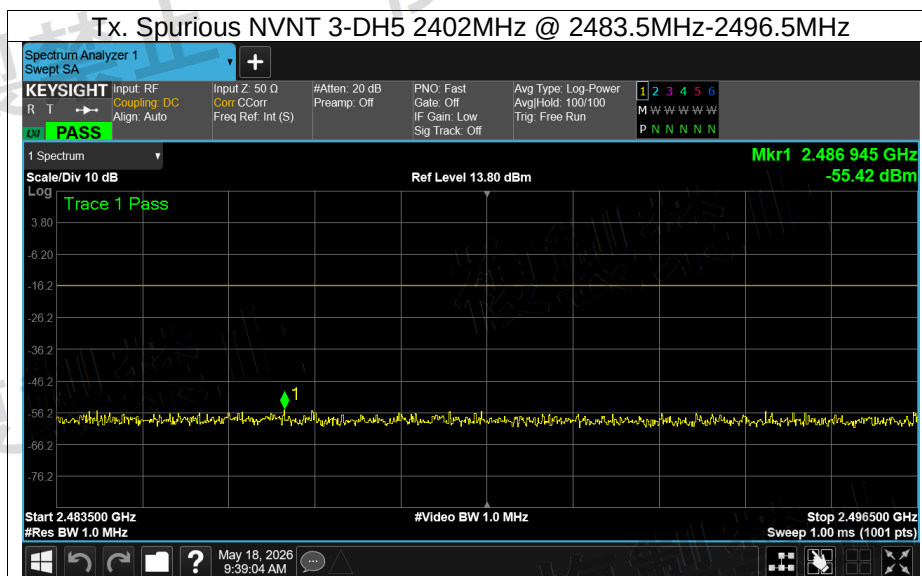


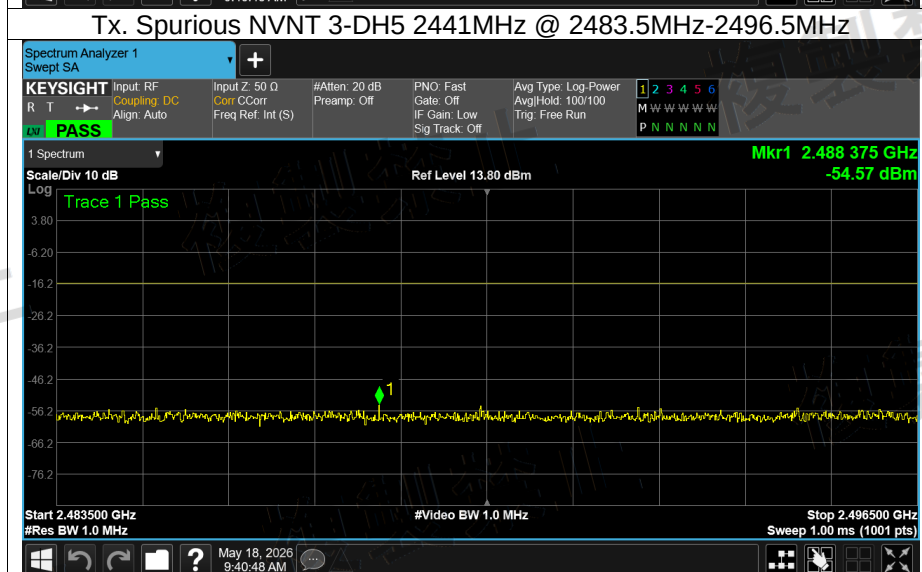
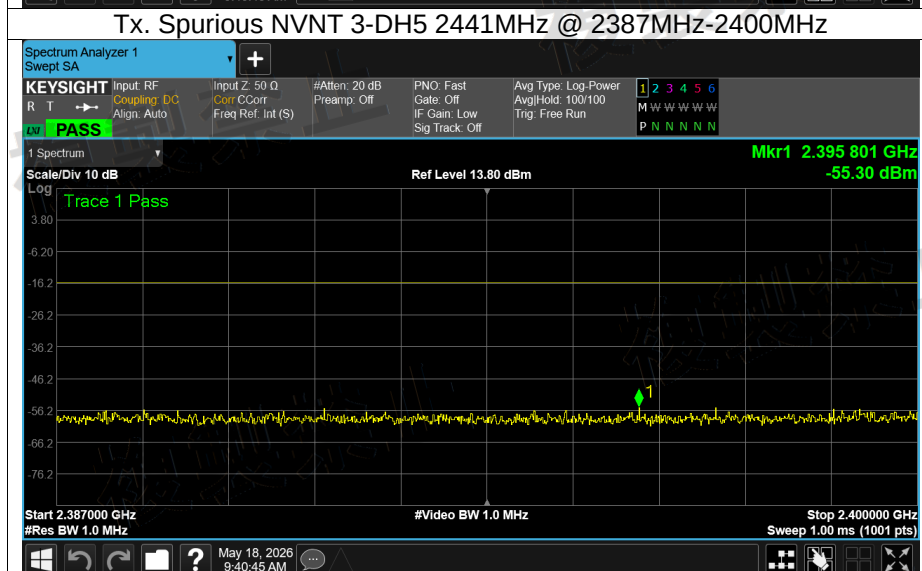
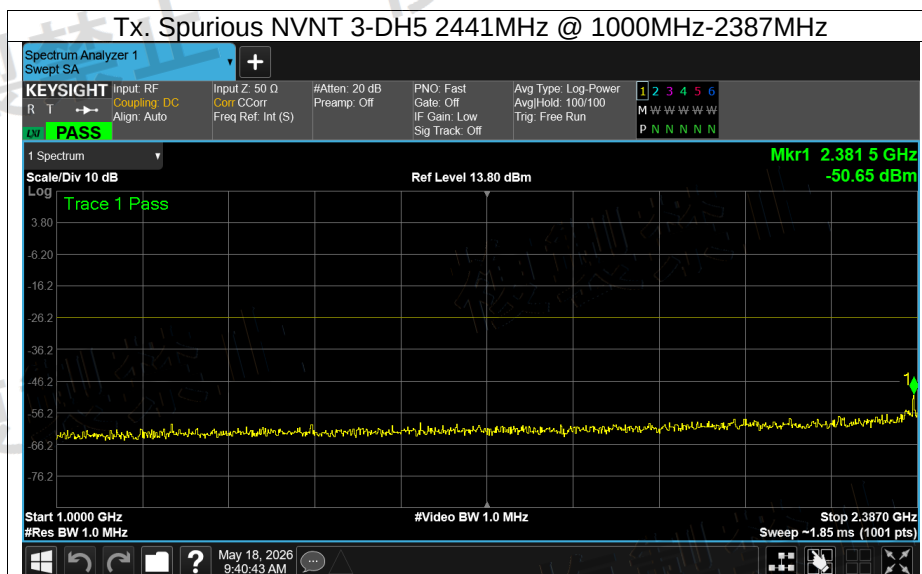


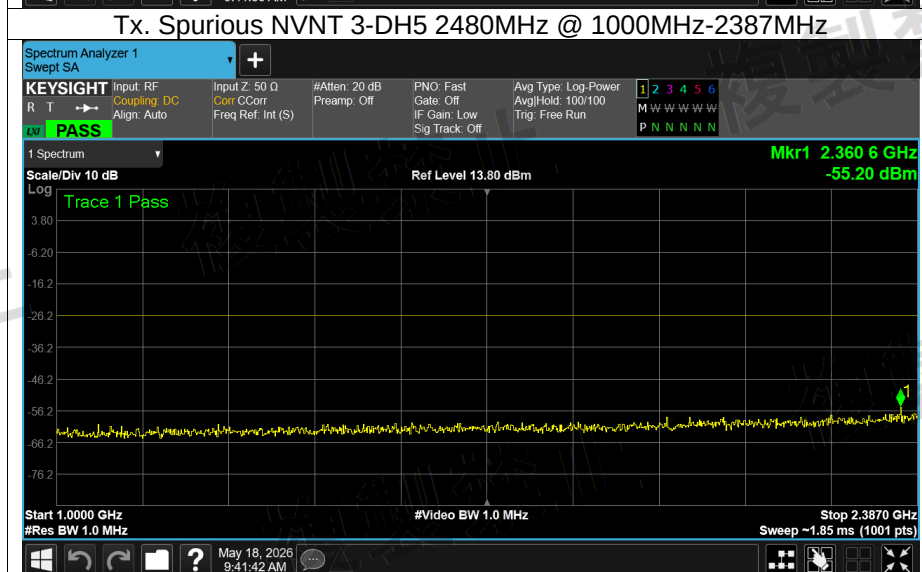
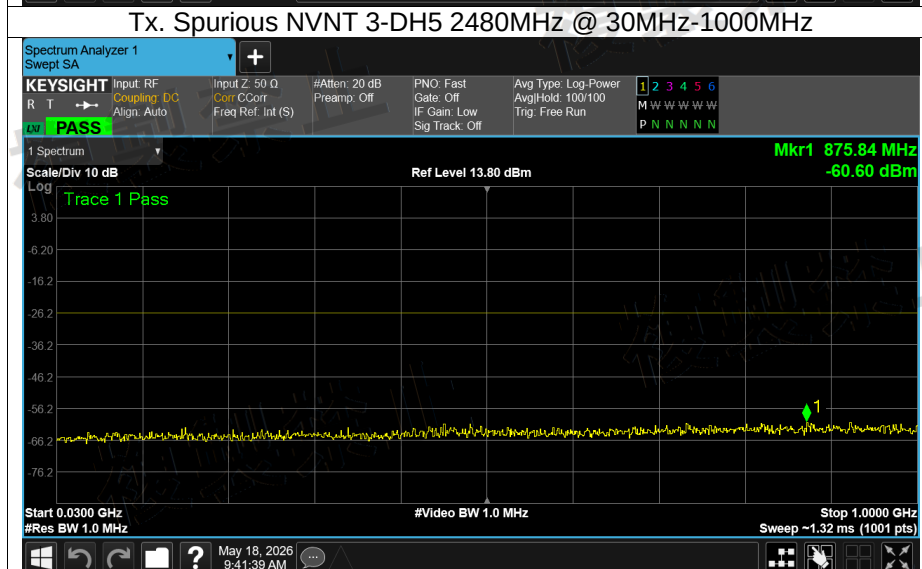
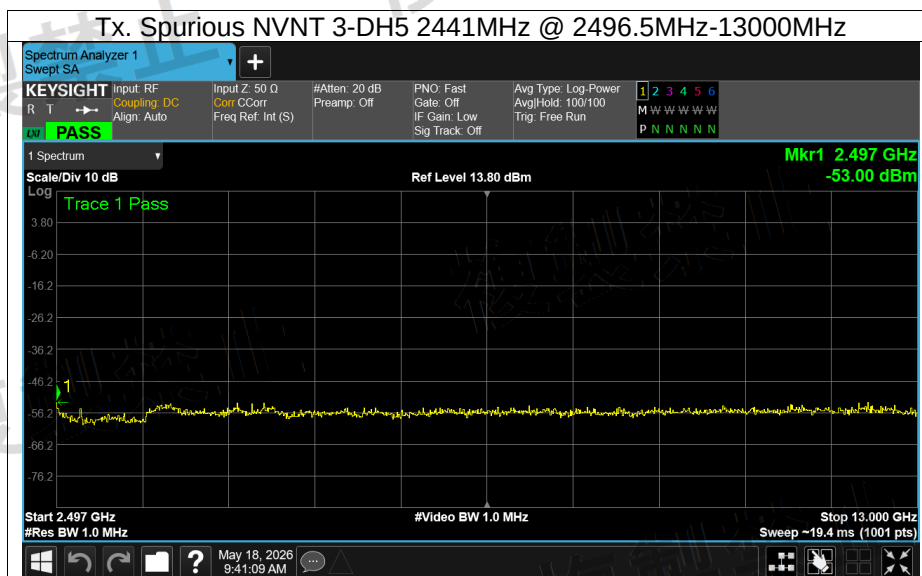


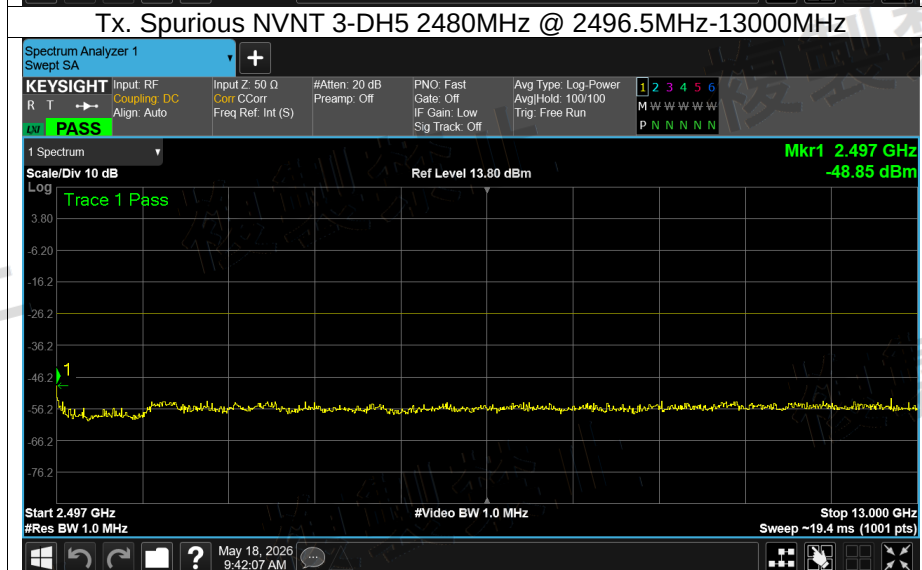
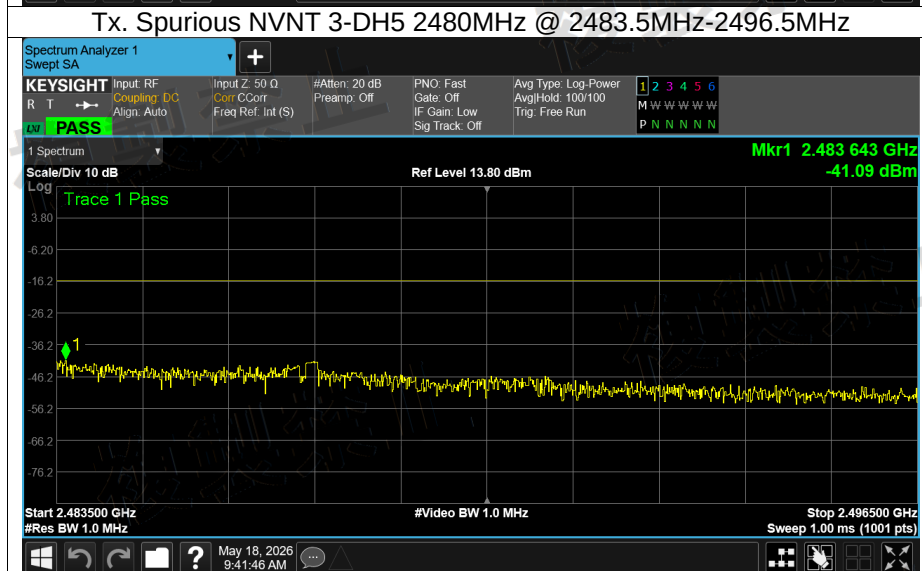
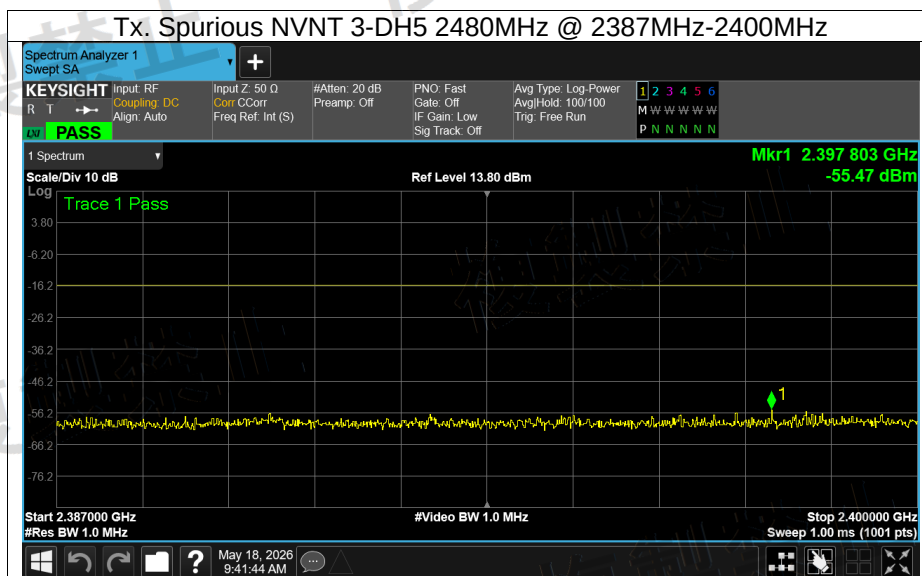








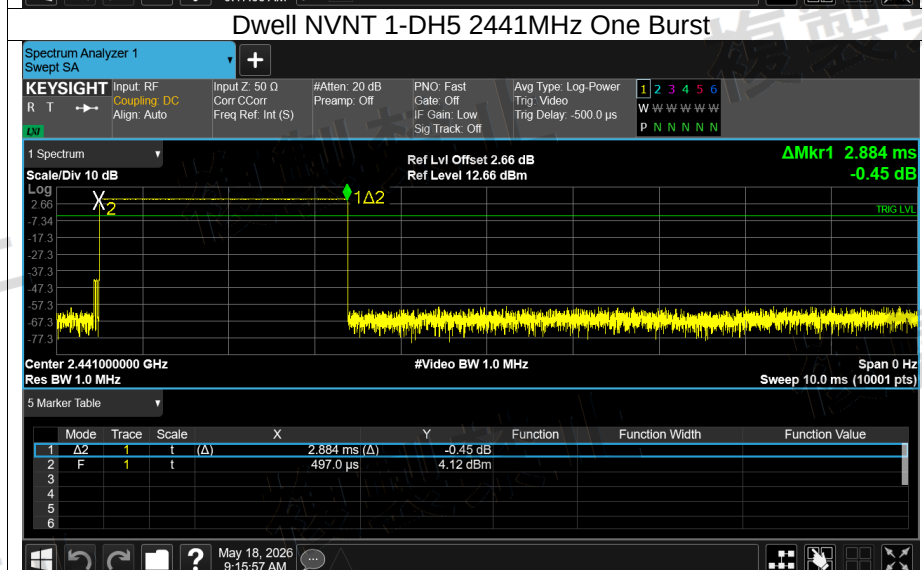
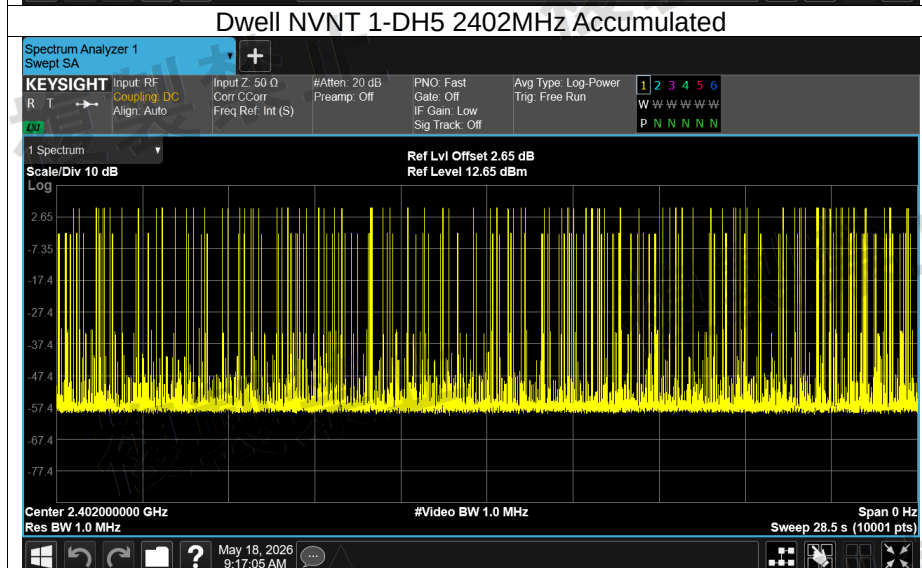
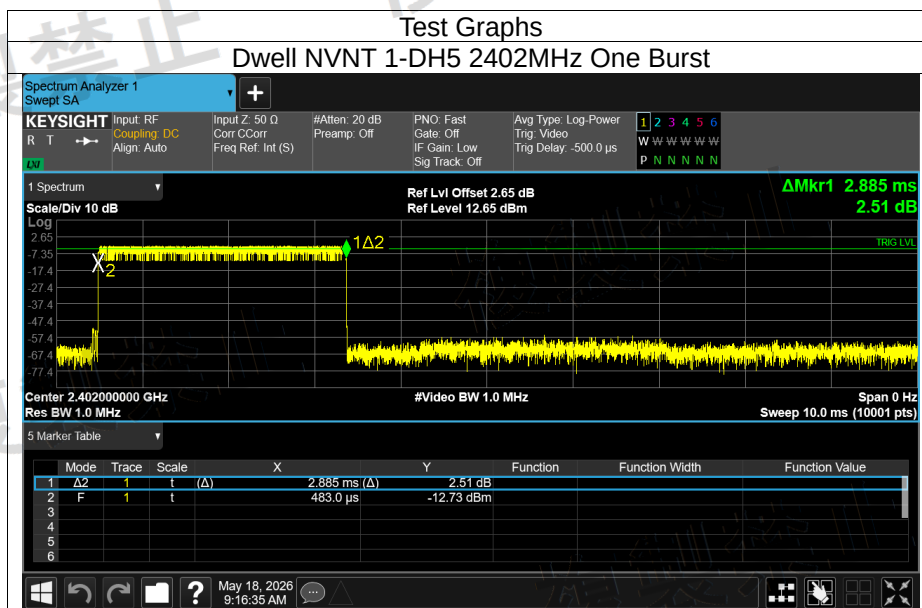


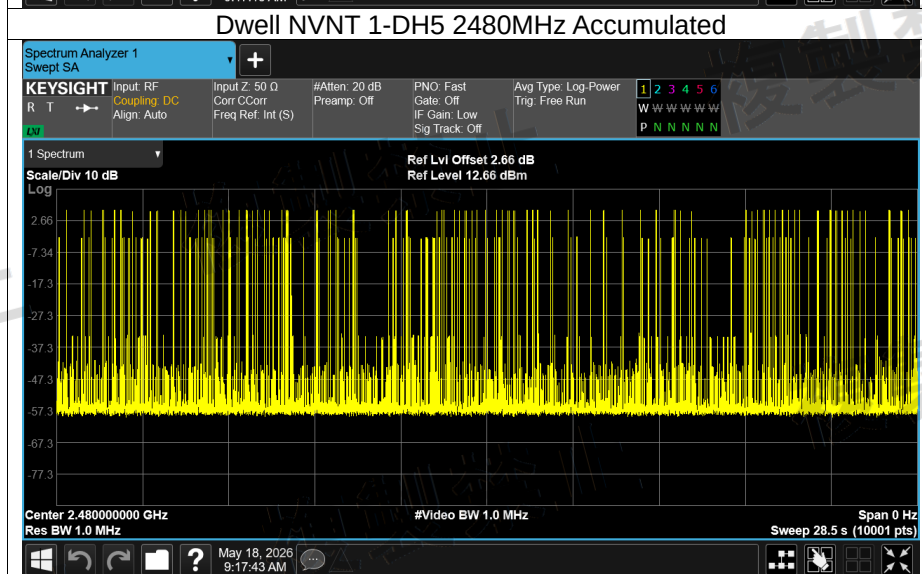
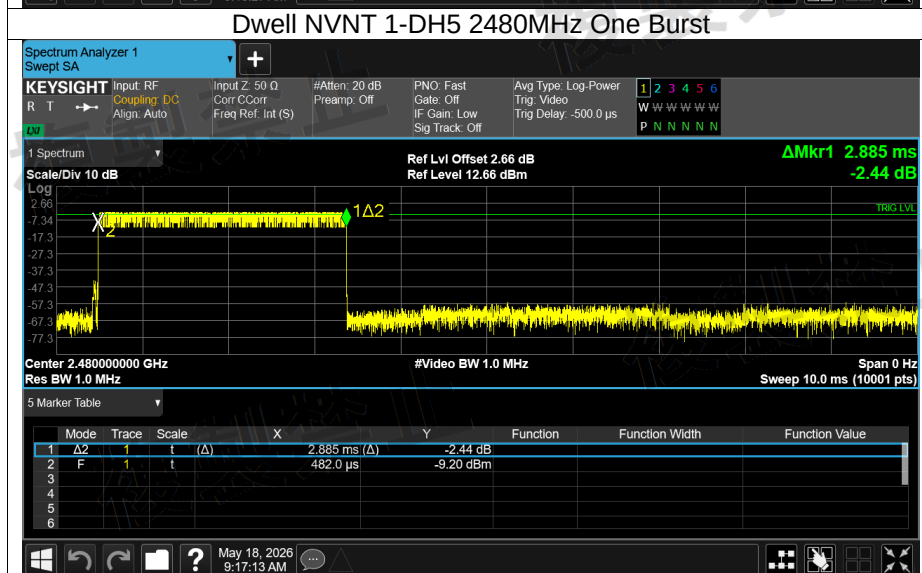
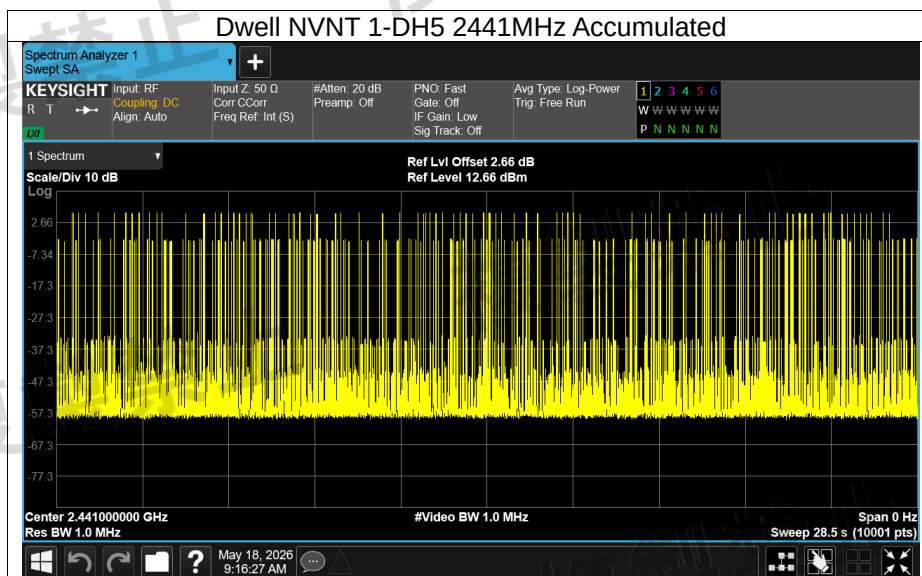


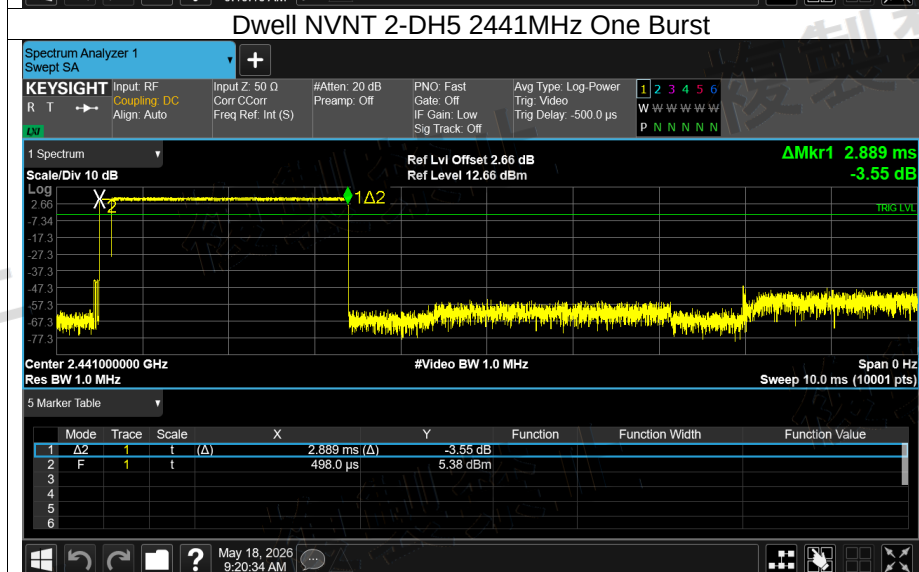
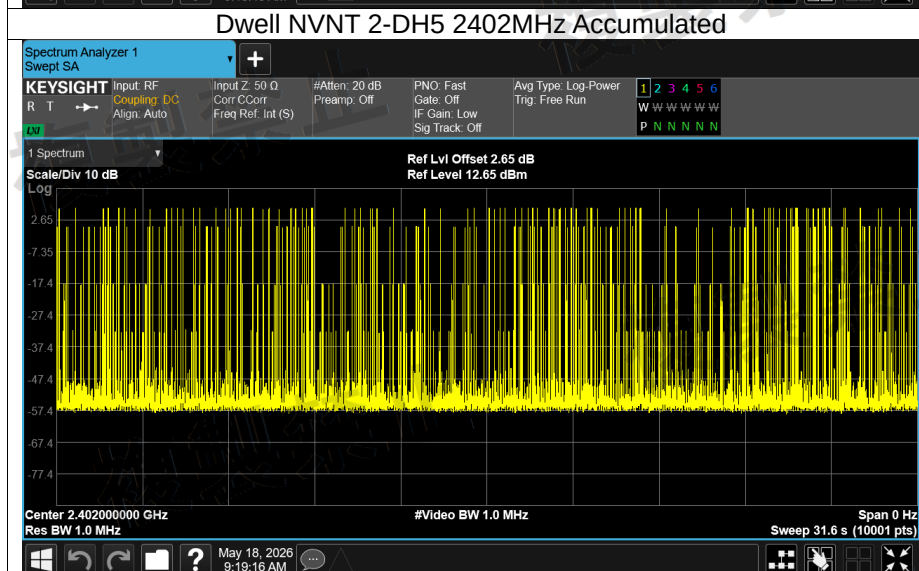
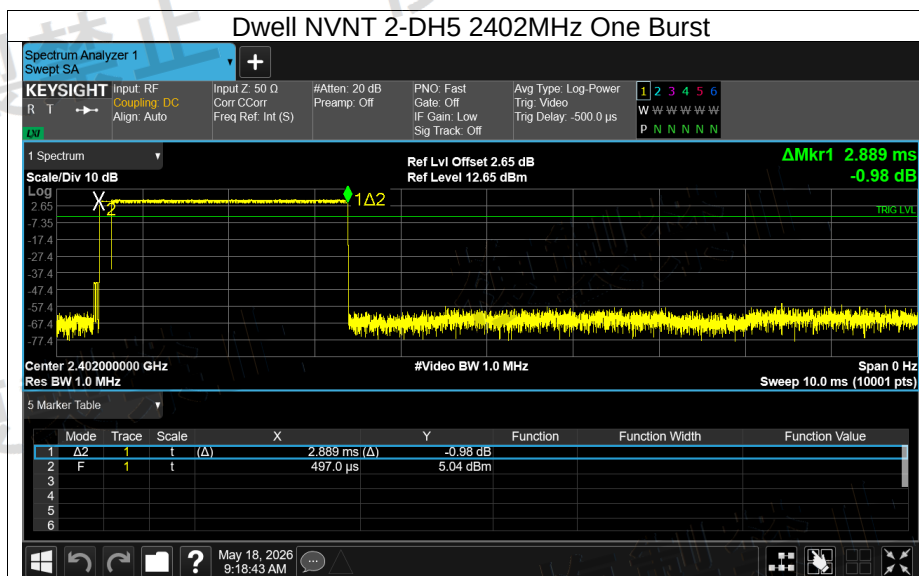


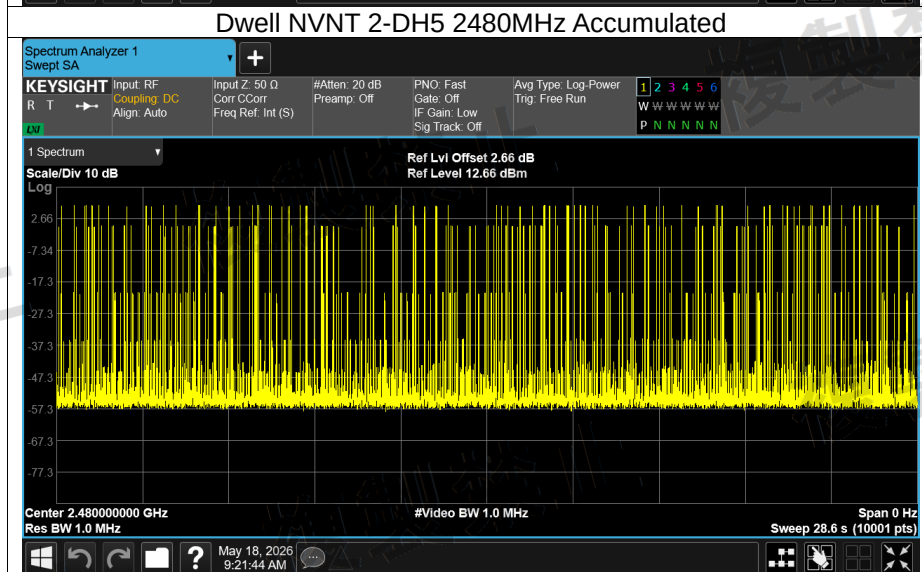
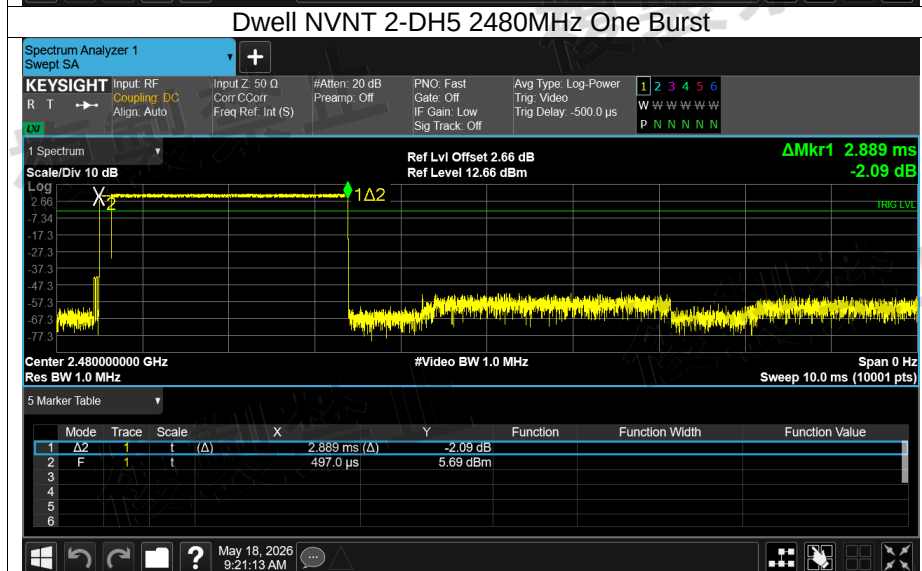
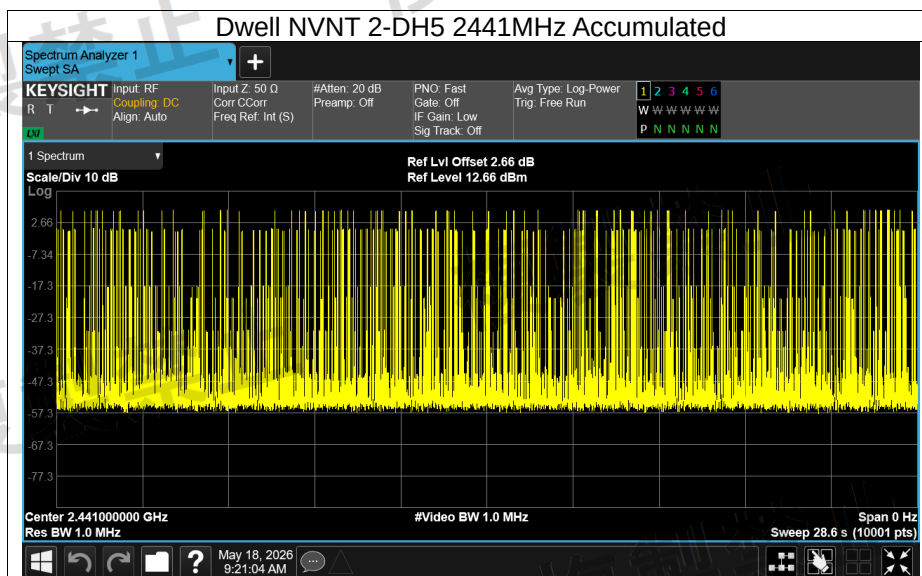
DWELL TIME

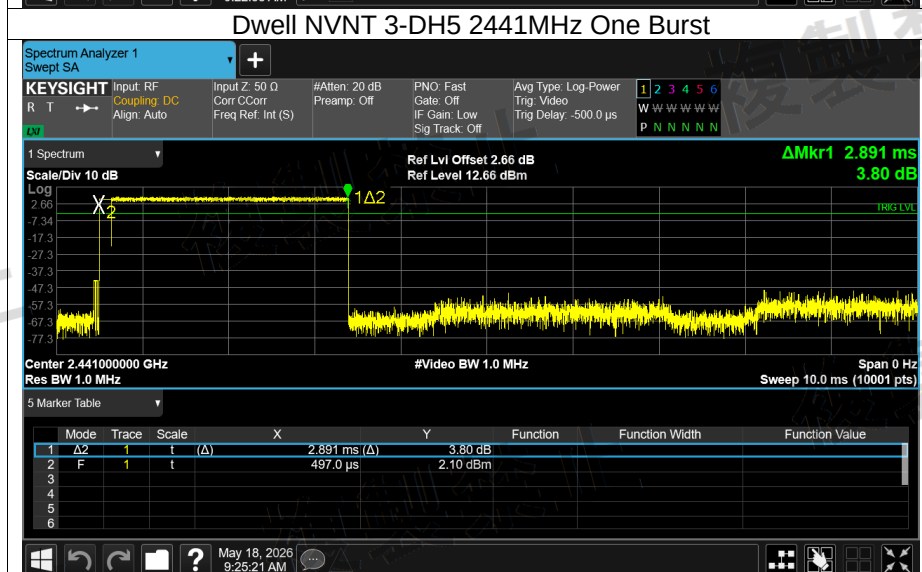
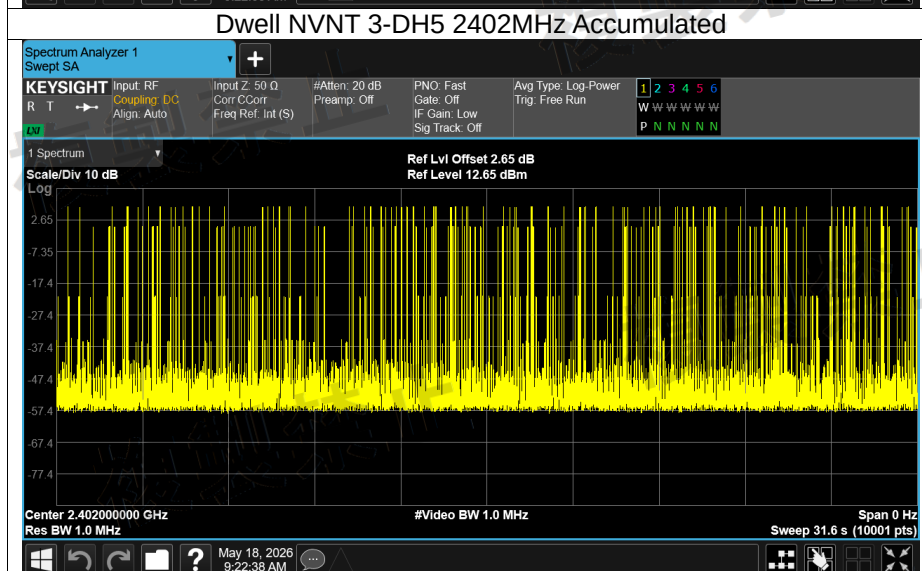
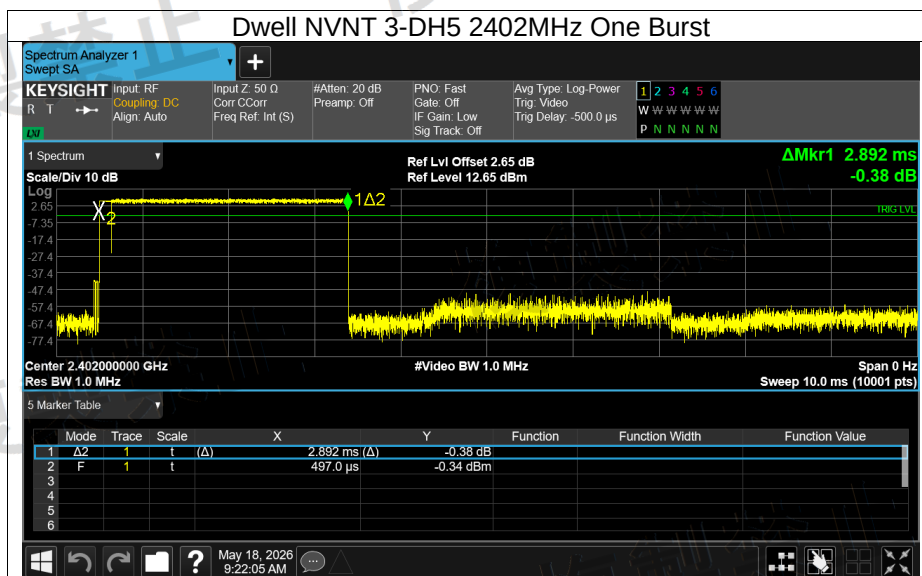
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	2.885	279.845	97	28534	400	Pass
NVNT	1-DH5	2441	2.884	273.98	95	28534	400	Pass
NVNT	1-DH5	2480	2.885	291.385	101	28534	400	Pass
NVNT	2-DH5	2402	2.889	300.456	104	31600	400	Pass
NVNT	2-DH5	2441	2.889	268.677	93	28552.8	400	Pass
NVNT	2-DH5	2480	2.889	245.565	85	28552.8	400	Pass
NVNT	3-DH5	2402	2.892	300.768	104	31600	400	Pass
NVNT	3-DH5	2441	2.891	260.19	90	28628	400	Pass
NVNT	3-DH5	2480	2.891	271.754	94	28628	400	Pass

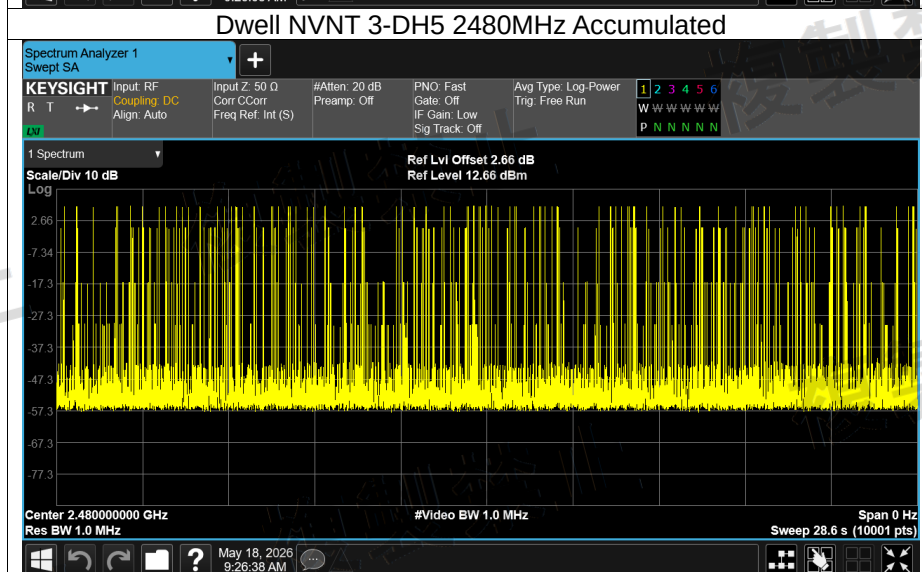
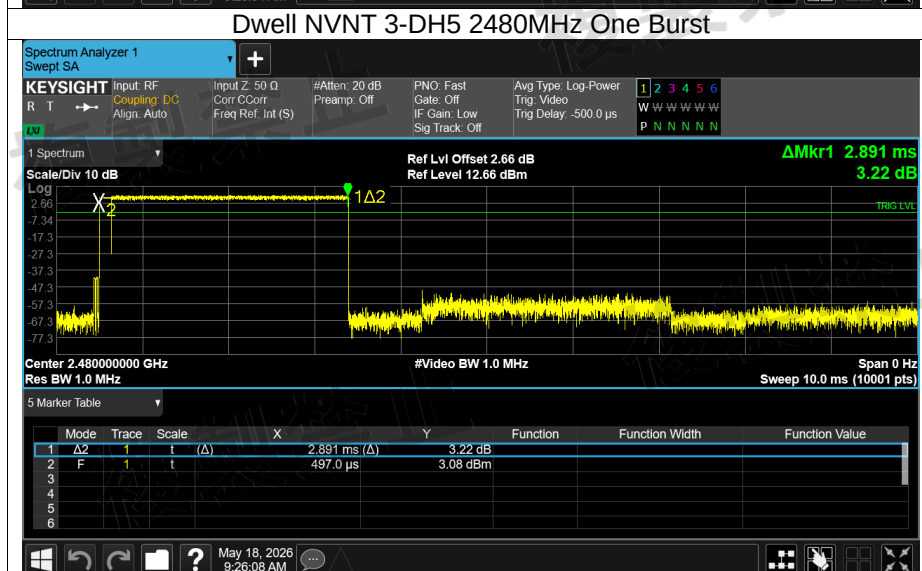
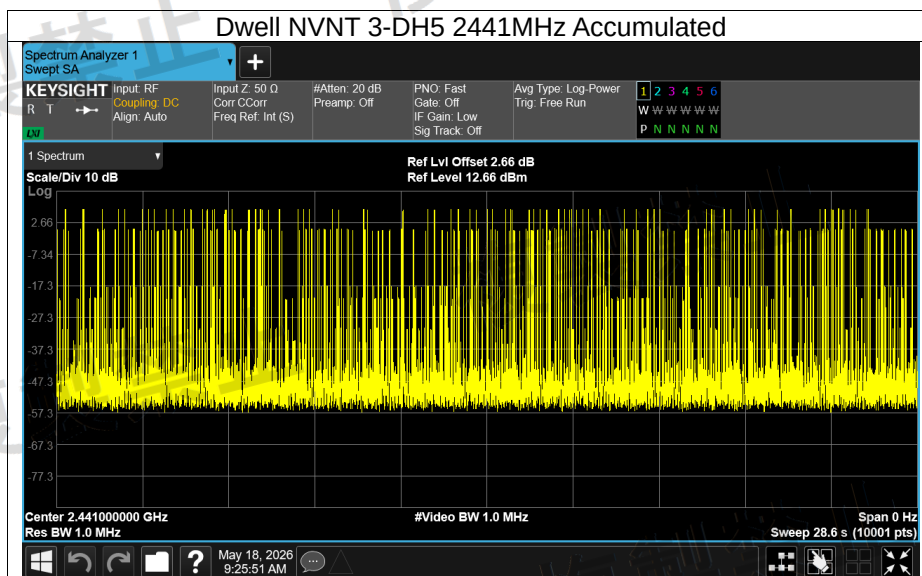








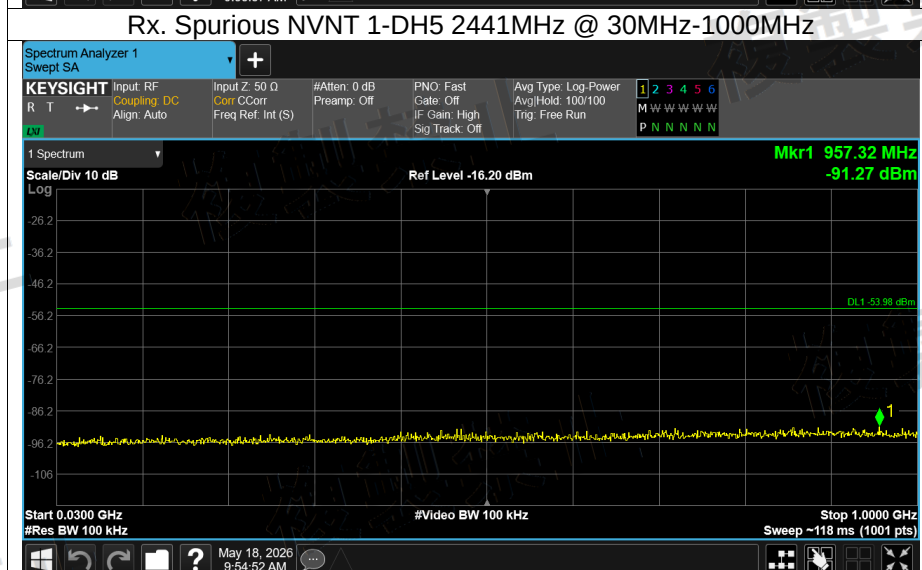
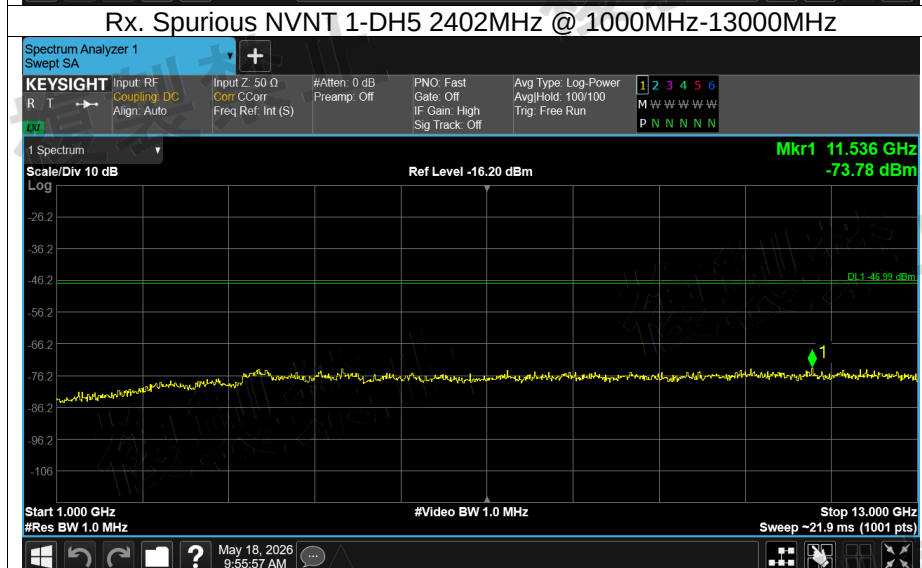
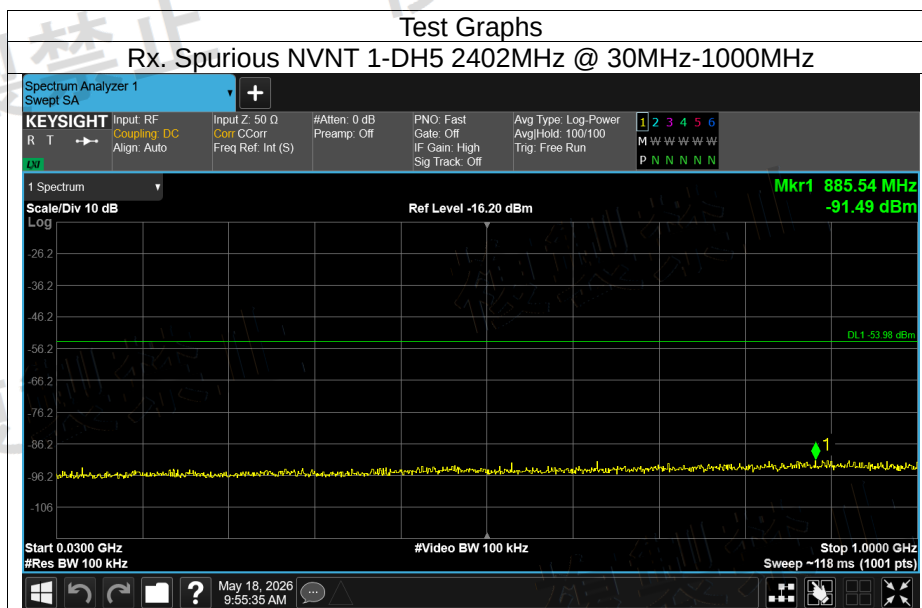


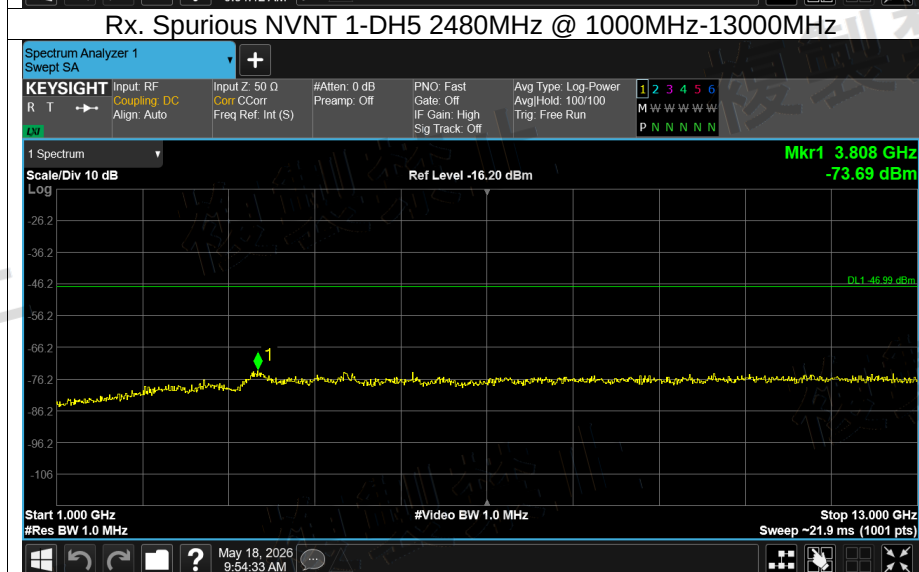
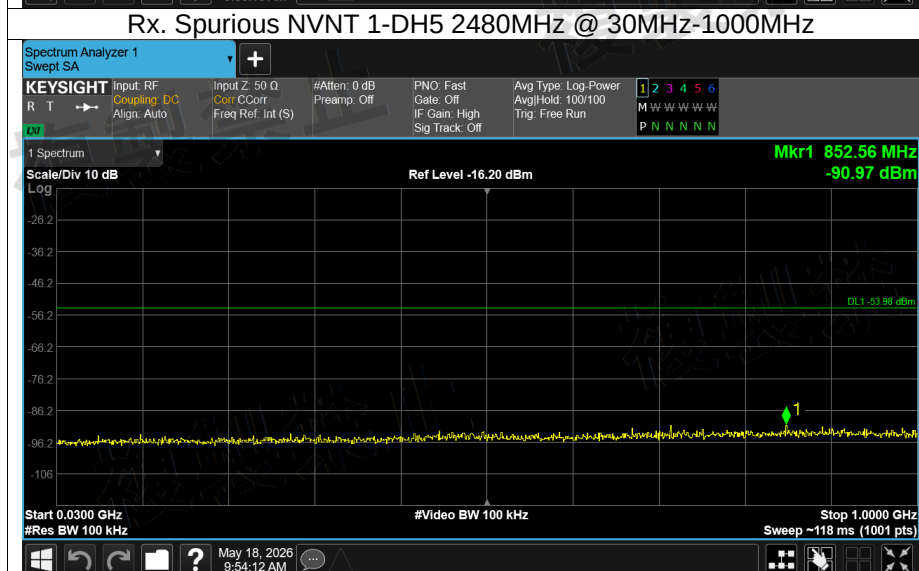
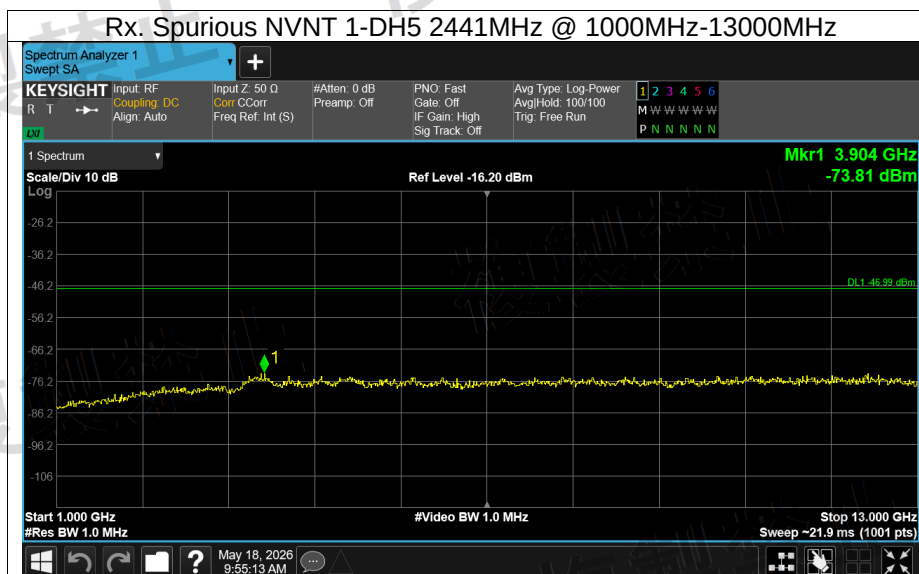


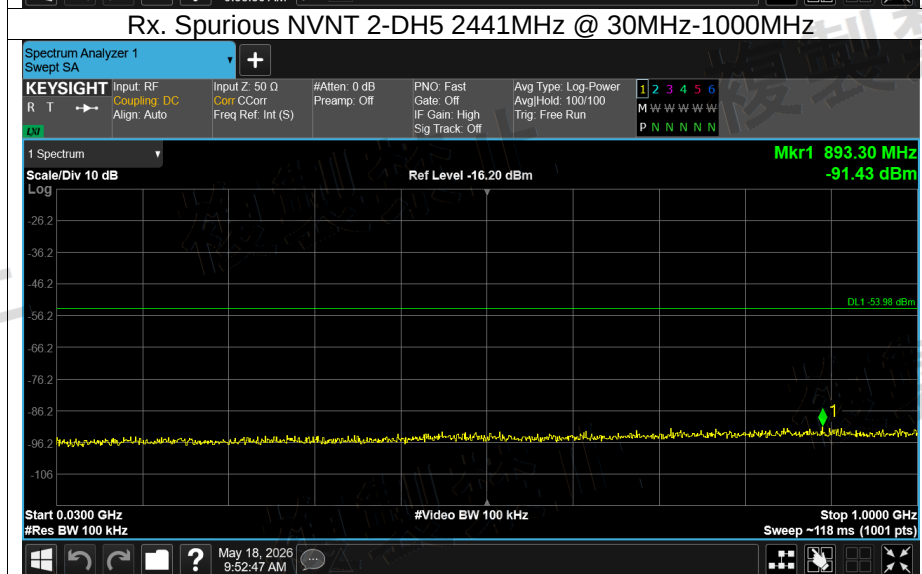
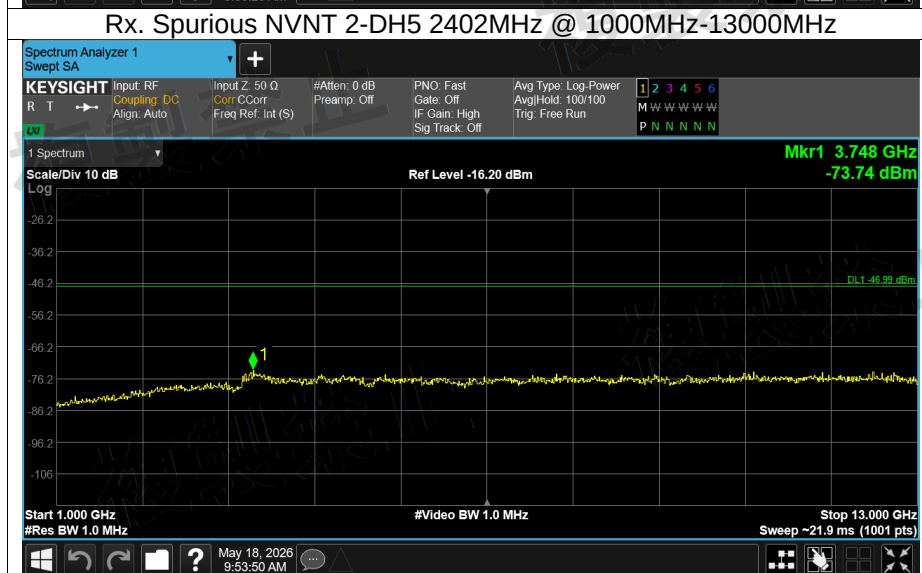
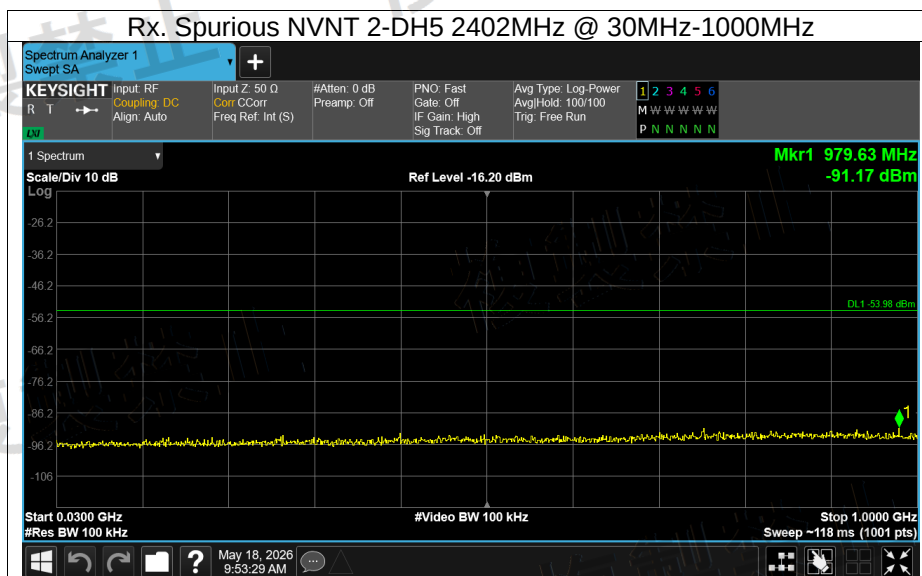


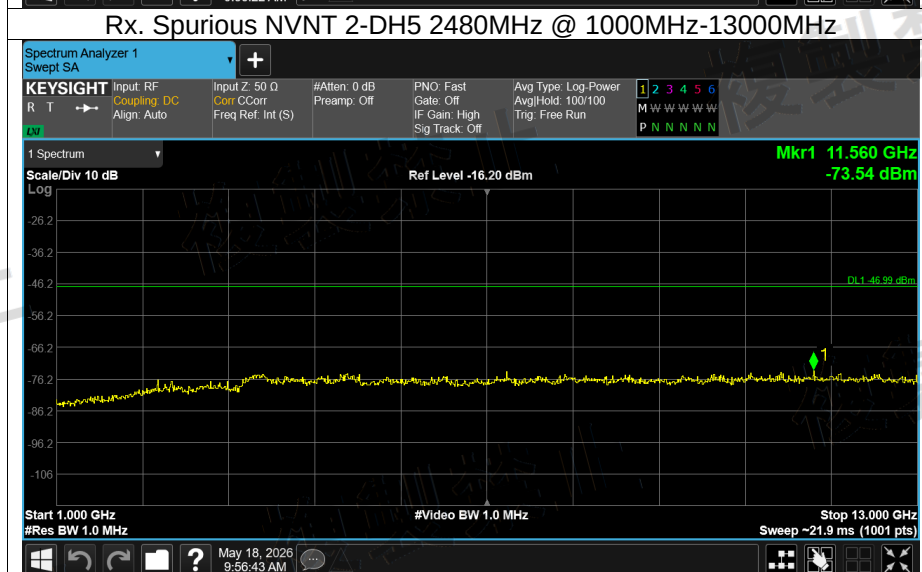
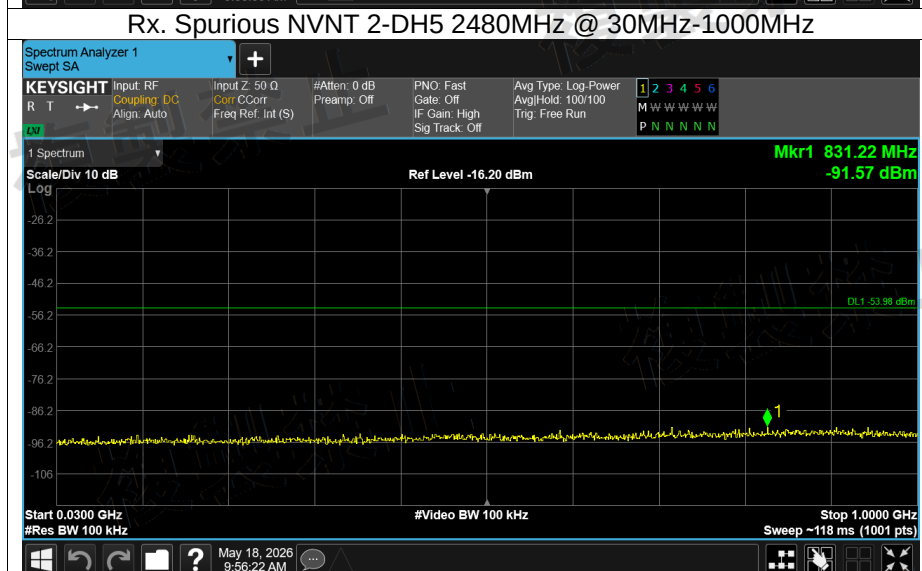
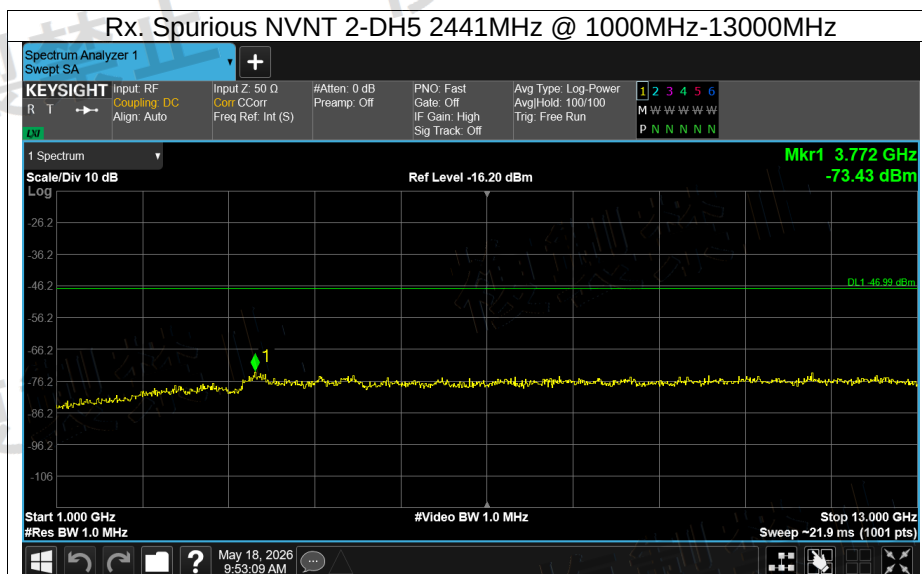
RX SPURIOUS EMISSION

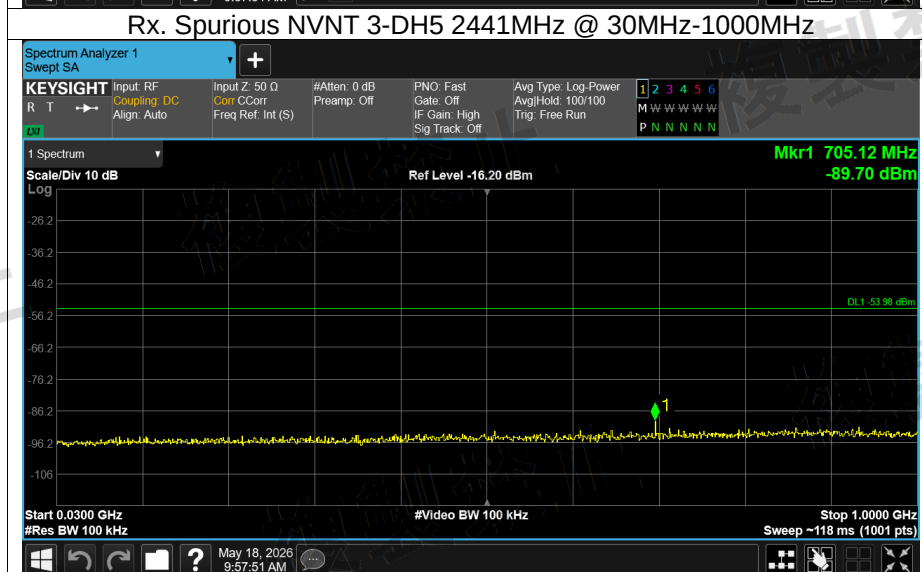
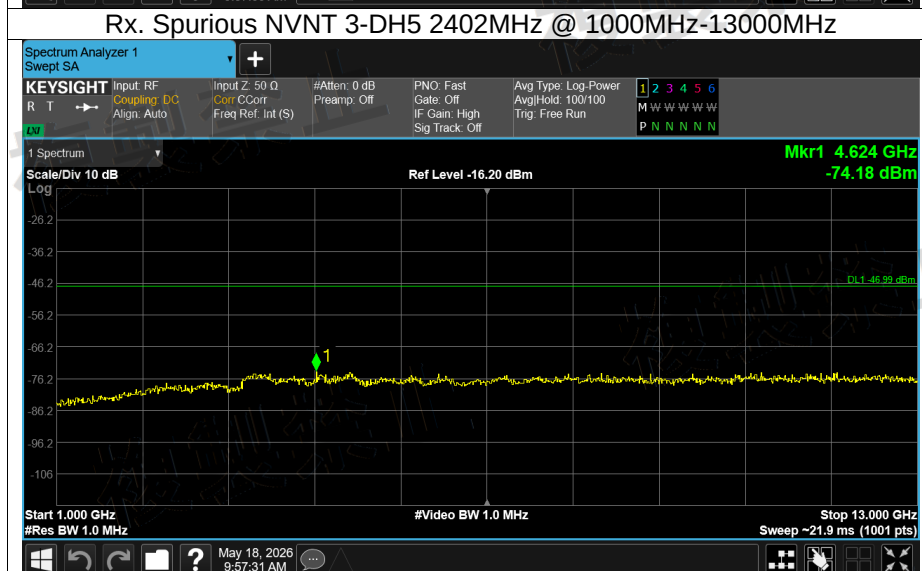
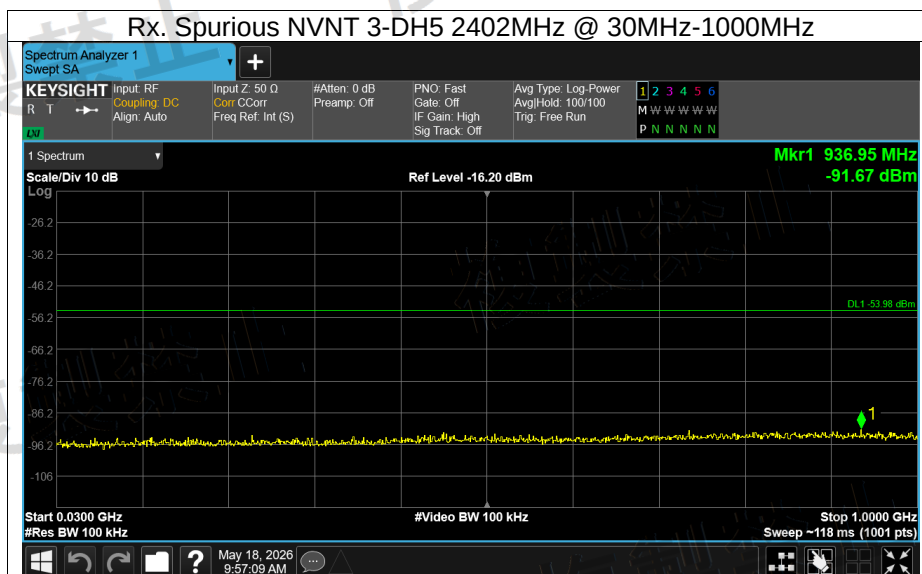
Condit ion	Mode	Frequen cy (MHz)	Range (MHz)	Emission Frequenc y (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (nW)	Max RMS Value (nW)	Limit (nW)	Verdi ct
NVNT	1-DH5	2402	30-1000	885.54	-91.49	NA	0.0007	NA	4	Pass
NVNT	1-DH5	2402	1000-13000	11536.00	-73.78	NA	0.0419	NA	20	Pass
NVNT	1-DH5	2441	30-1000	957.32	-91.27	NA	0.0007	NA	4	Pass
NVNT	1-DH5	2441	1000-13000	3904.00	-73.81	NA	0.0416	NA	20	Pass
NVNT	1-DH5	2480	30-1000	852.56	-90.97	NA	0.0008	NA	4	Pass
NVNT	1-DH5	2480	1000-13000	3808.00	-73.69	NA	0.0428	NA	20	Pass
NVNT	2-DH5	2402	30-1000	979.63	-91.17	NA	0.0008	NA	4	Pass
NVNT	2-DH5	2402	1000-13000	3748.00	-73.74	NA	0.0423	NA	20	Pass
NVNT	2-DH5	2441	30-1000	893.30	-91.43	NA	0.0007	NA	4	Pass
NVNT	2-DH5	2441	1000-13000	3772.00	-73.43	NA	0.0454	NA	20	Pass
NVNT	2-DH5	2480	30-1000	831.22	-91.57	NA	0.0007	NA	4	Pass
NVNT	2-DH5	2480	1000-13000	11560.00	-73.54	NA	0.0443	NA	20	Pass
NVNT	3-DH5	2402	30-1000	936.95	-91.67	NA	0.0007	NA	4	Pass
NVNT	3-DH5	2402	1000-13000	4624.00	-74.18	NA	0.0382	NA	20	Pass
NVNT	3-DH5	2441	30-1000	705.12	-89.70	NA	0.0011	NA	4	Pass
NVNT	3-DH5	2441	1000-13000	12424.00	-73.49	NA	0.0448	NA	20	Pass
NVNT	3-DH5	2480	30-1000	705.12	-90.40	NA	0.0009	NA	4	Pass
NVNT	3-DH5	2480	1000-13000	8956.00	-74.37	NA	0.0366	NA	20	Pass

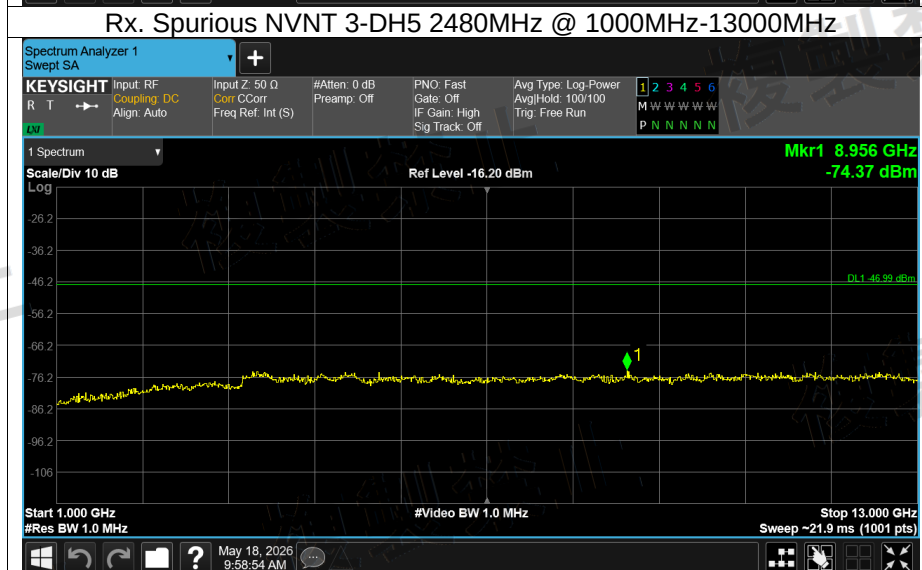
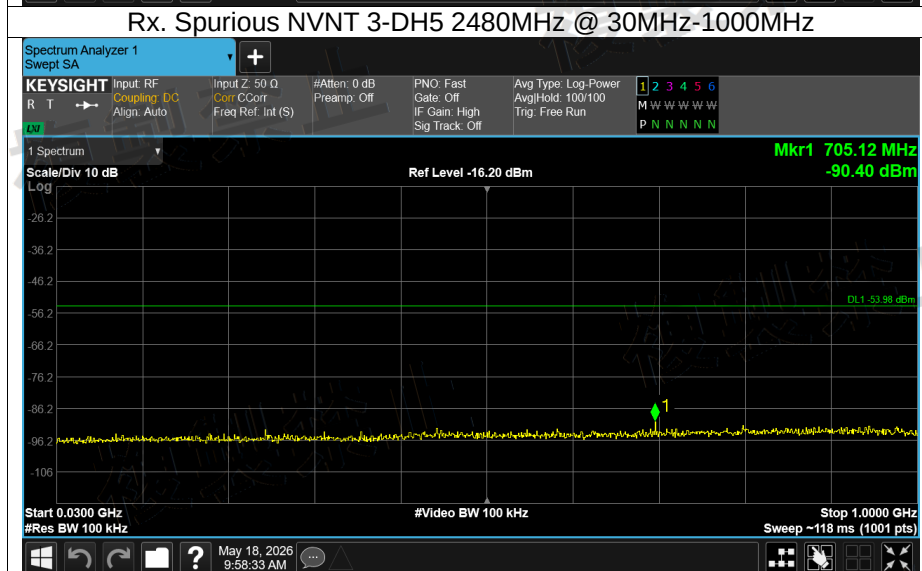
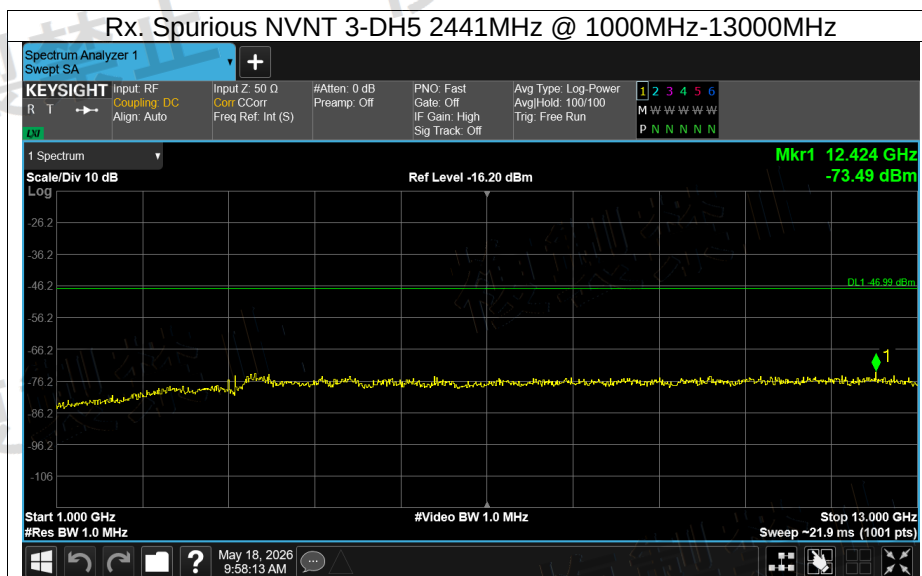














ANTENNA POWER

Condition	Mode	Frequency (MHz)	Power Reading (dBm)	Power Reading (mW)	Spread Bandwidth (MHz)	Antenna Power (mW/MHz)	Declared Power (mW/MHz)	Limit (mW/MHz)	Tolerance (%)	Upper Limit (%)	Verdict
NVNT	1-DH5	Hopping	6.02	3.999	71.335	0.056	0.1	3	-44	20	Pass
NVNT	2-DH5	Hopping	6.87	4.864	71.382	0.068	0.1	3	-32	20	Pass
NVNT	3-DH5	Hopping	7.08	5.105	71.57	0.071	0.1	3	-29	20	Pass

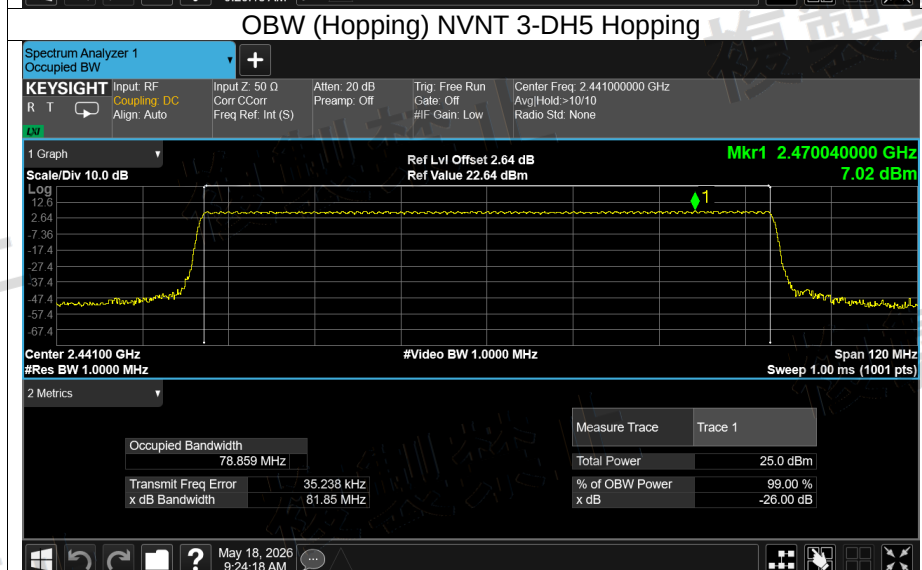
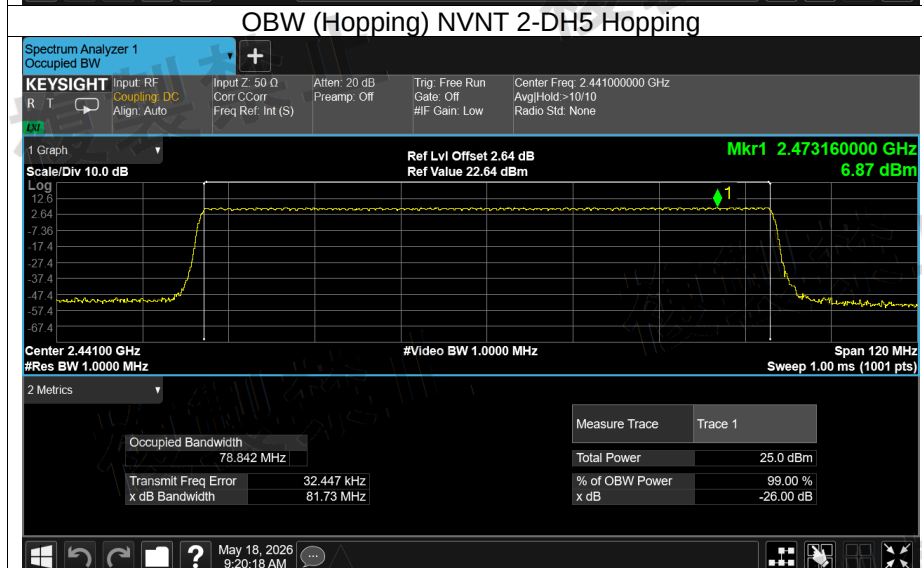
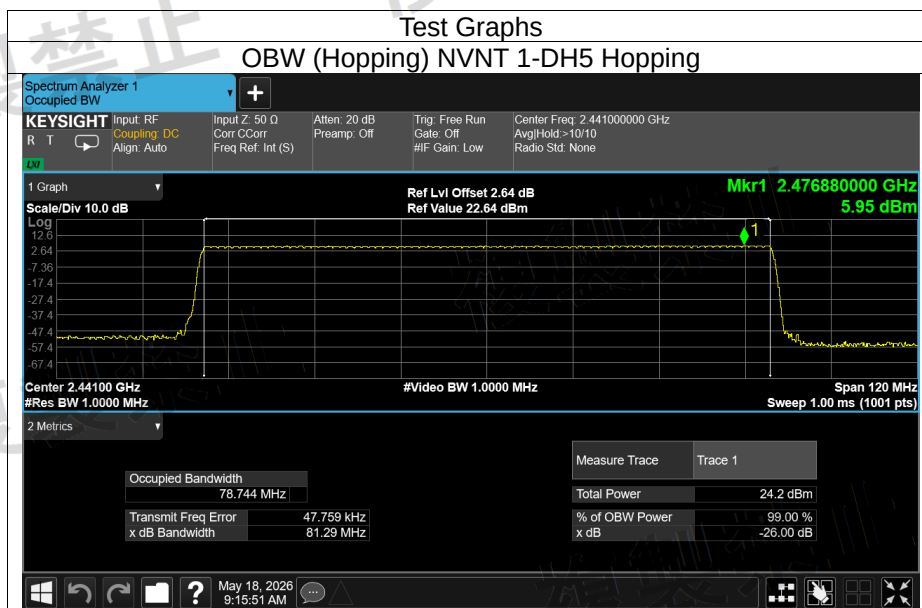
EIRP POWER

Condition	Mode	Frequency (MHz)	Antenna Power (dBm/MHz)	Gain (dBi)	EIRP Power (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	1-DH5	Hopping	-12.52	-0.02	-12.54	6.91	Pass
NVNT	2-DH5	Hopping	-11.67	-0.02	-11.69	6.91	Pass
NVNT	3-DH5	Hopping	-11.49	-0.02	-11.51	6.91	Pass



OCCUPIED CHANNEL BANDWIDTH (HOPPING)

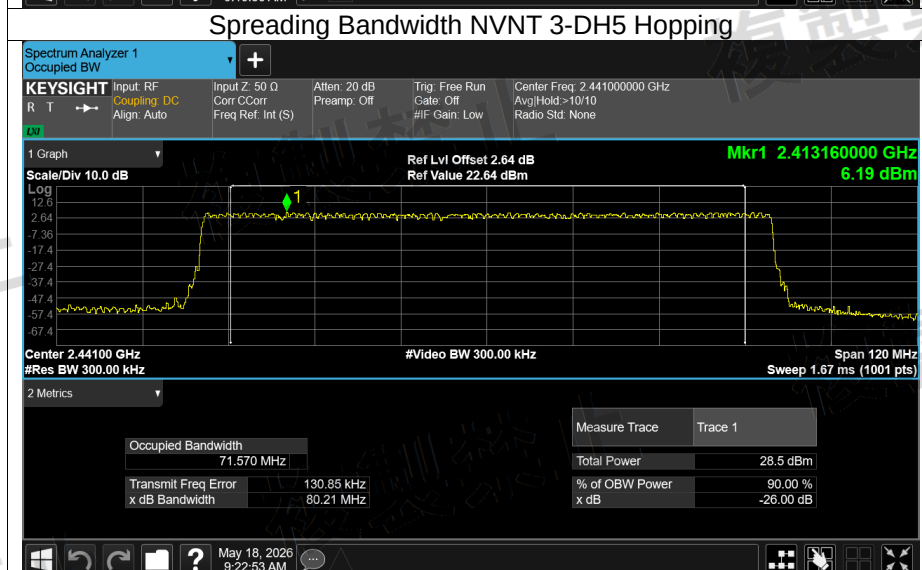
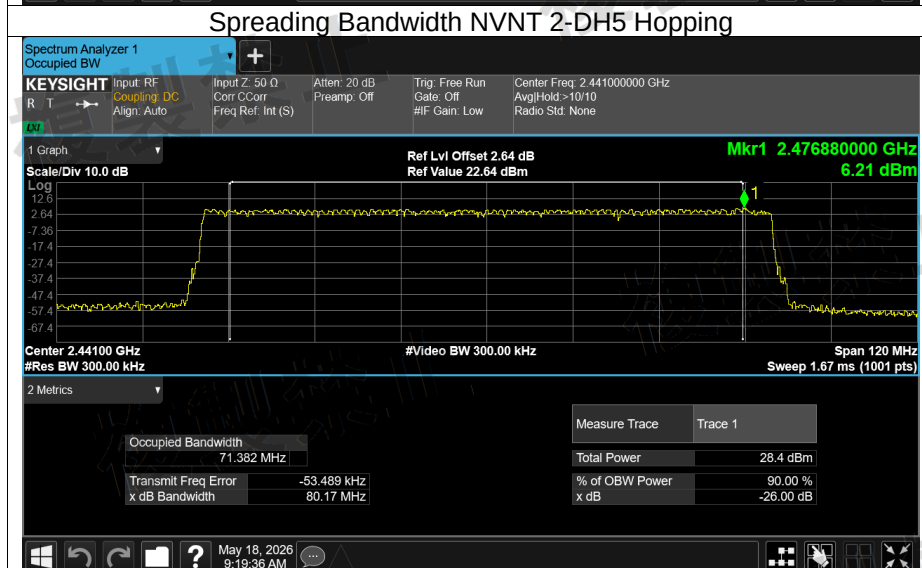
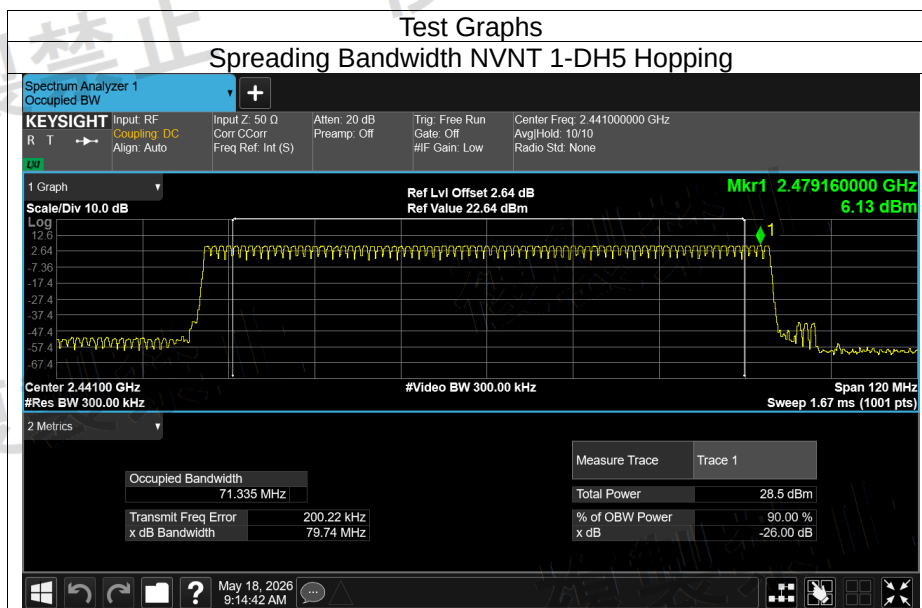
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	1-DH5	Hopping	78.745
NVNT	2-DH5	Hopping	78.842
NVNT	3-DH5	Hopping	78.859





SPREADING BANDWIDTH

Condition	Mode	Frequency (MHz)	90% OBW (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Hopping	71.335	0.5	Pass
NVNT	2-DH5	Hopping	71.382	0.5	Pass
NVNT	3-DH5	Hopping	71.57	0.5	Pass





APPENDIX II - TEST SETUP PHOTOS





APPENDIX III - PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

Note: Please see the attached Titan 2 Elite_EUT Photos.

※※※※※END OF THE REPORT※※※※※