

TEST REPORT

Report No.: BCTC2601880836-1E

Applicant: High Great Technology Co., Ltd

Product Name: Intelligent Flight Equipment

Test Model: HG-D04

Tested Date: 2026-01-21 to 2026-03-23

Issued Date: 2026-03-27



Shenzhen BCTC Technology Co., Ltd.



Product Name: Intelligent Flight Equipment

Trademark: NA

Model/Type reference: HG-D04

Prepared For: High Great Technology Co., Ltd

Address: Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Street, Longgang District, Shenzhen.

Manufacturer: High Great Technology Co., Ltd

Address: Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Street, Longgang District, Shenzhen.

Prepared By: Shenzhen BCTC Technology Co., Ltd.

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Sample Received Date: 2026-01-21

Sample tested Date: 2026-01-21 to 2026-03-23

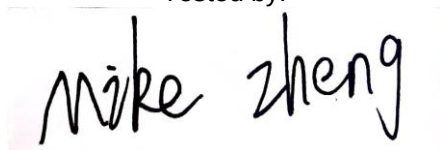
Report No.: BCTC2601880836-1E

Test Standards: Article 2 paragraph 1 of item 19
MIC Notice No.88 Appendix No.43

Test Results: PASS

Remark: This is JAPAN RADIO test report.

Tested by:



Mike Zheng/ Project Handler

Approved by:



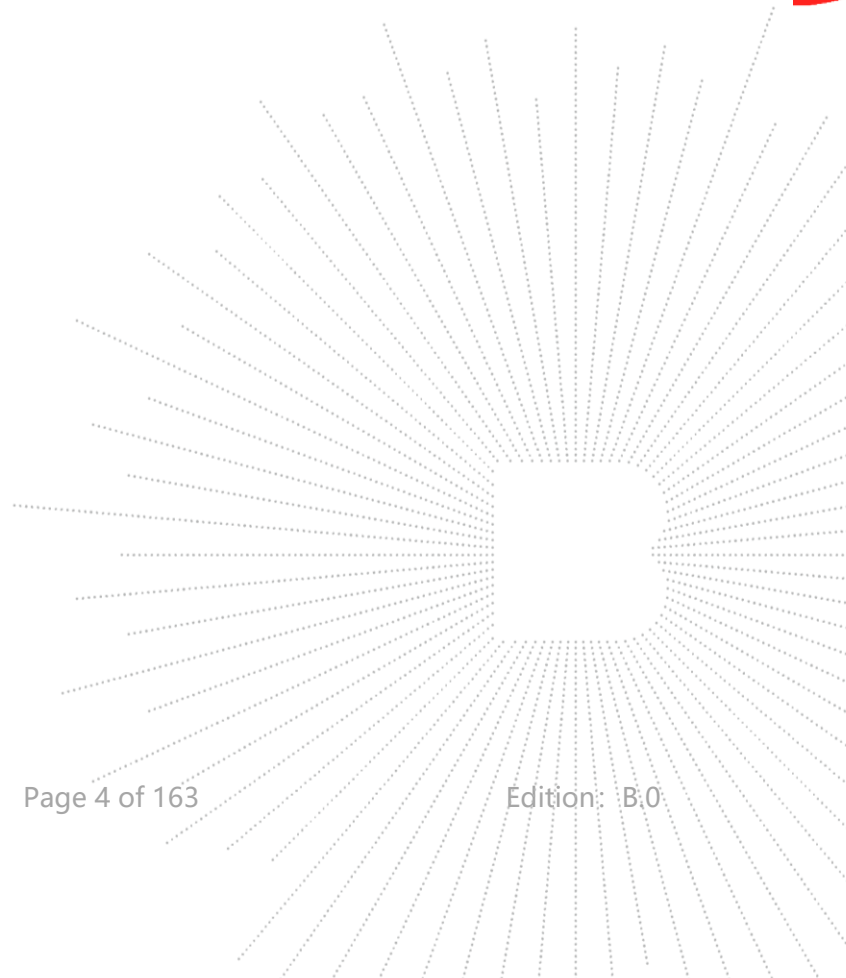
Sewen Guo/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Technology Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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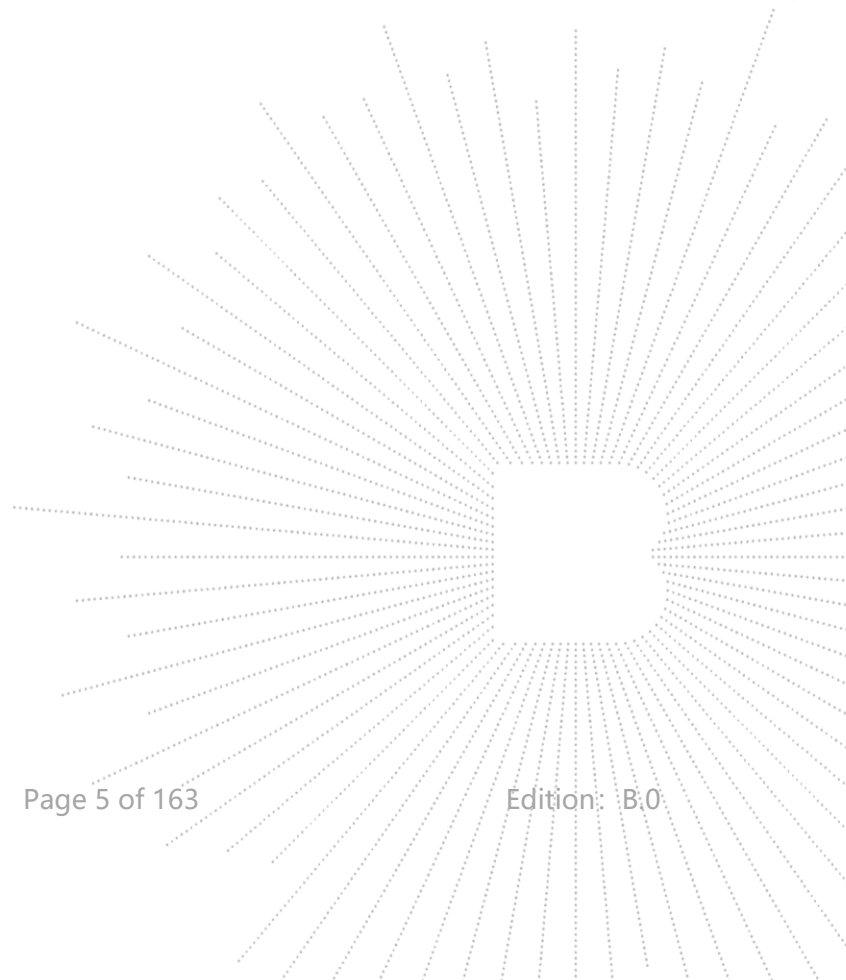
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1. Version

Report No.	Issue Date	Description	Approved
BCTC2601880836-1E	2026-03-27	Original	Valid



2. Test Summary

Article 2 paragraph 1 of item 19	
Description of Test	Result
Frequency Error	Complies
Occupied Bandwidth (99%) and Spread-spectrum Bandwidth (90%)	Complies
Unwanted Emission Intensity	Complies
Antenna Power Error	Complies
Limitation of Collateral Emission of Receiver	Complies
Transmission Antenna Gain (EIRP Antenna Power)	Complies
Transmission Radiation Angle Width (3dB Beamwidth)	N/A
Radio Interference Prevention Capability	Complies
Construction Protection Confirmation	Complies
NOTE: 1)" N/A" denotes test is not applicable in this Test Report	

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3. 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 %.

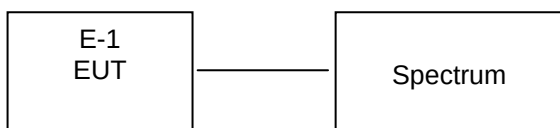
No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 3.2\text{dB}$
2	Radiated Emission Test	$\pm 4.7\text{dB}$
3	RF power, conducted	$\pm 0.16\text{dB}$
4	Spurious emissions, conducted	$\pm 0.21\text{dB}$
5	All emissions, radiated(<1G)	$\pm 4.68\text{dB}$
6	All emissions, radiated(>1G)	$\pm 5.0\text{dB}$
7	frequency error ppm	$\pm 0.5\text{ppm}$

4. Product Information And Test Setup

4.1 Product Information

Model/Type reference:	Intelligent Flight Equipment
Model differences:	N/A
Hardware Version:	N/A
Software Version:	N/A
Operation Frequency:	2412MHz -2472MHz Band for 802.11b/g/n20 2422MHz -2462MHz Band for 802.11n40
Rated RF Output Power Density:	802.11b: 6mW/MHz, 802.11g: 2mW/MHz, 802.11nHT20: 3mW/MHz, 802.11nHT40: 3mW/MHz,
Conducted Power Density:	802.11b: 6.012mW/MHz, 802.11g: 1.626mW/MHz, 802.11nHT20:2.575mW/MHz, 802.11nHT40: 1.618mW/MHz,
Type of Modulation:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
channel space:	5MHz
Antenna installation:	Internal antenna*2
Antenna Gain:	Antenna A 1.58dBi Antenna B 2.79dBi
Remark:	The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information.
Ratings:	DC 14.4V from battery
Battery:	DC 14.4V,5000mAh

4.2 Block Diagram Parameters Of Text Software Setting



4.3 Description Of Support Units (Conducted Mode)

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Intelligent Flight Equipment	N/A	HG-D04	N/A	EUT

Notes:

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

4.4 Channel List

Frequency and Channel list for 802.11b/g/n (HT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	10	2457
2	2417	6	2437	11	2462
3	2422	7	2442	12	2467
4	2427	8	2447	13	2472
		9	2452		

Frequency and Channel list for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	6	2437	9	2452
4	2427	7	2442	10	2457
5	2432	8	2447	11	2462

4.5 Test Mode

Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description	
Mode1	CH01	802.11b
Mode2	CH07	
Mode3	CH13	
Mode4	RX	
Mode5	CH01	802.11g
Mode6	CH07	
Mode7	CH13	
Mode8	RX	
Mode9	CH01	802.11n20
Mode10	CH07	
Mode11	CH13	
Mode12	RX	
Mode13	CH03	802.11n40
Mode14	CH07	
Mode15	CH11	
Mode16	RX	

4.6 Test Conditions

The devices 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	DC 14.4V	DC 15.84V	DC 12.96V
Input to the RF	DC 3.3V	DC 3.3V	DC 3.29V
Voltage variation of the RF circuit	0%	0%	-0.30%

Note:

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

During the input supply voltage to the EUT from the external power source is varied by +/-10%, The voltage variation input to the RF circuit is less than $\pm 1\%$,so only operated in normal voltage to test all regulations.

t.

4.7 Table Of Parameters Of 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 is going to be fixed on the firmware of the final end product power parameters

Test software Version	SecureCRT		
Frequency	2412 MHz	2442 MHz	2472 MHz
Parameters	DEF	DEF	DEF
Frequency	2422 MHz	2442 MHz	2462 MHz
Parameters	DEF	DEF	DEF

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Technology Co., Ltd. Address: Room 101M, Unit 1, Building1, Pengyuan, No.18, Lilang Road, Shanglilang, Nanwan Subdistrict, Longgang District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Spectrum Analyzer	Keysight	N9020A	MY51287403	Aug.30, 2025	Aug.29, 2026
Signal Generator	Keysight	N5182A	MY50144088	Aug.30, 2025	Aug.29, 2026
Power Sensor	MWRFTest	MW100-RFCB	MY51287403	Aug.30, 2025	Aug.29, 2026
Radio frequency control box	MWRFTest	MW100-RFCB	MY50144088	Feb.04, 2026	Feb.03, 2027
Software	Frad	EZ-EMC	FA-03A2 RE	Feb.04, 2026	Feb.03, 2027
Software	Keysight	Keysight.ETSL Test system	1.02.05	Feb.04, 2026	Feb.03, 2027
D.C. Power Supply	LongWei	D-41747 Viersen	6230316	Aug.30, 2025	Aug.29, 2026
Communication test set	R&S	CMW500	157483	Aug.30, 2025	Aug.29, 2026
Programmable constant temperature and humidity test chamber	Auchno	OJN-9606-408 L	19120183	July.9, 2025	July.8, 2026

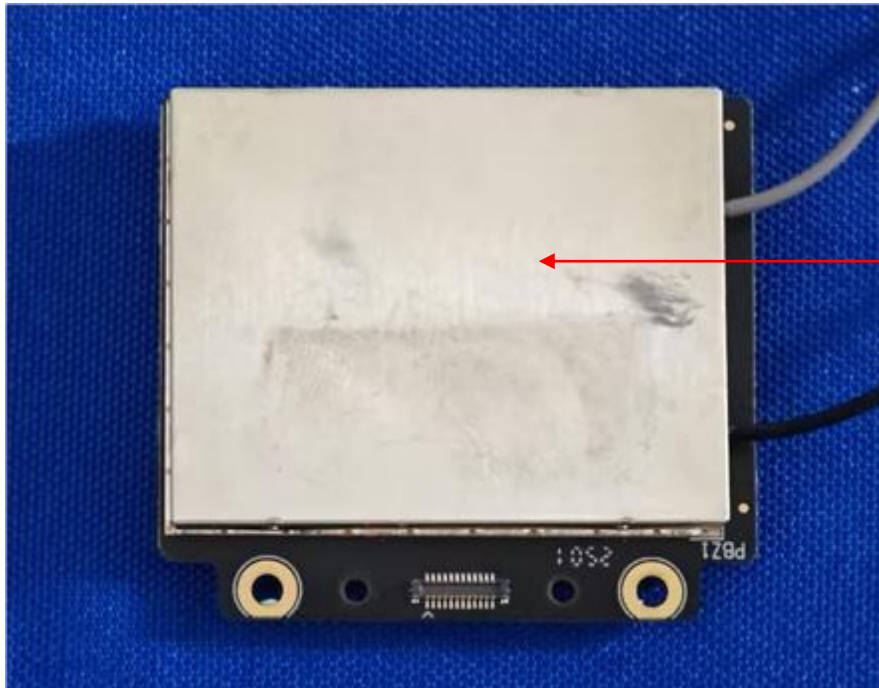
Calibration laboratory: CCIC(Shenzhen) Co., Ltd

● Calibration Information (Article 24-2, Paragraph 4 of the Radio Act)	
☐	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

6. RF Shielding Method

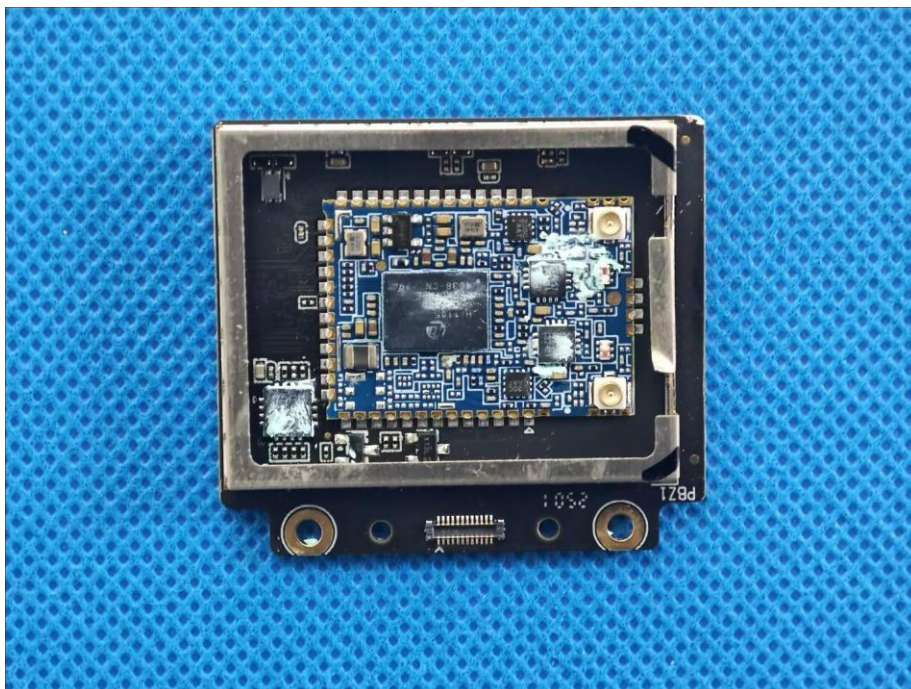
Enclosure:

As shown in the picture above, The product structure is stuck by Soldering, it's shell will have to engineering plastic processing, If the shell will be open, so the product should be damage.



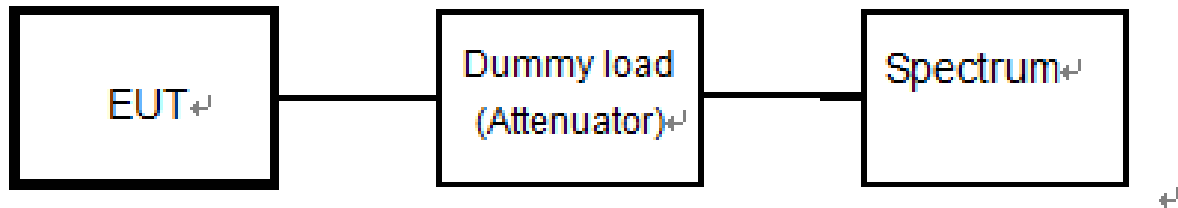
Protective containment
soldering

Terminal number is 42. Pitch is 0.5mm.



7. Frequency Error

7.1 Block Diagram Of Test Setup



7.2 Limit

Item	Limits
Frequency Error	±50ppm

7.3 Measuring Instruments And Setting

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

7.4 Test Procedure

- (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.

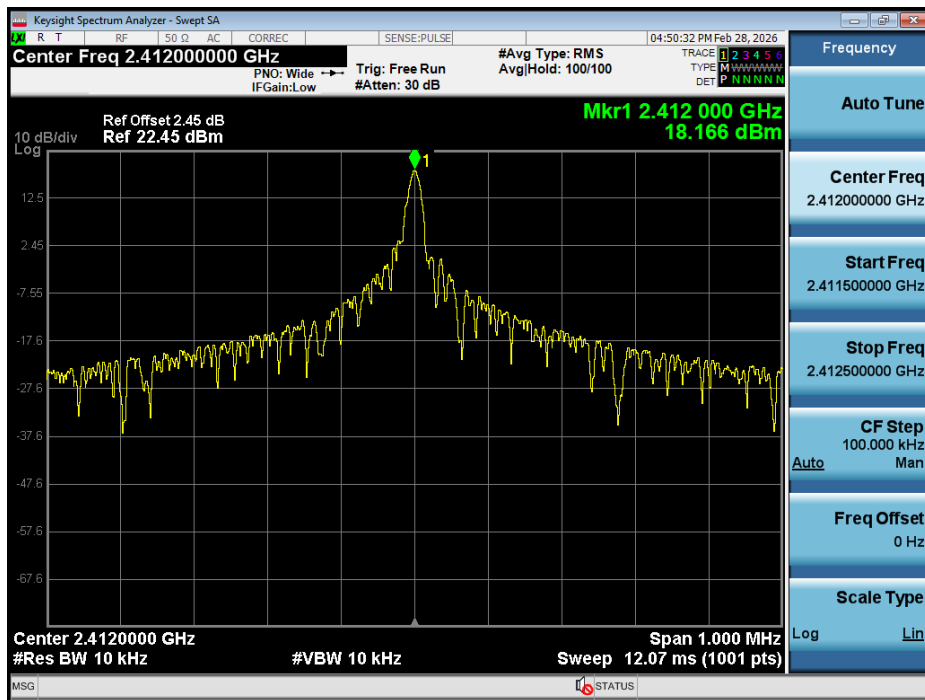
7.5 Test Result

Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 14.4V
Operation Mode:	Transmitting- unmodulation mode		

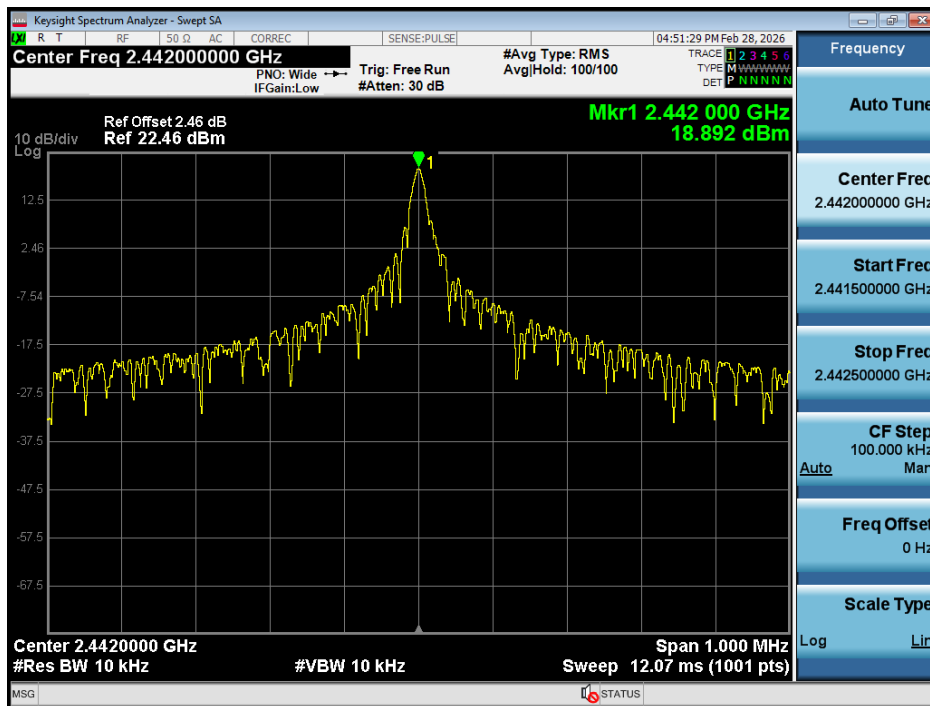
Test Voltage	Test Frequency (MHz)	Measured Frequency (MHz)	Antenna A Frequency Error(ppm)	Antenna B Frequency Error(ppm)	Limit (ppm)	P/F
Normal Voltage	2412	2412	0	0	±50	PASS
	2442	2472	0	0	±50	PASS
	2472	2422	0	0	±50	PASS
	2422	2442	0	0	±50	PASS
	2462	2462	0	0	±50	PASS

Antenna A

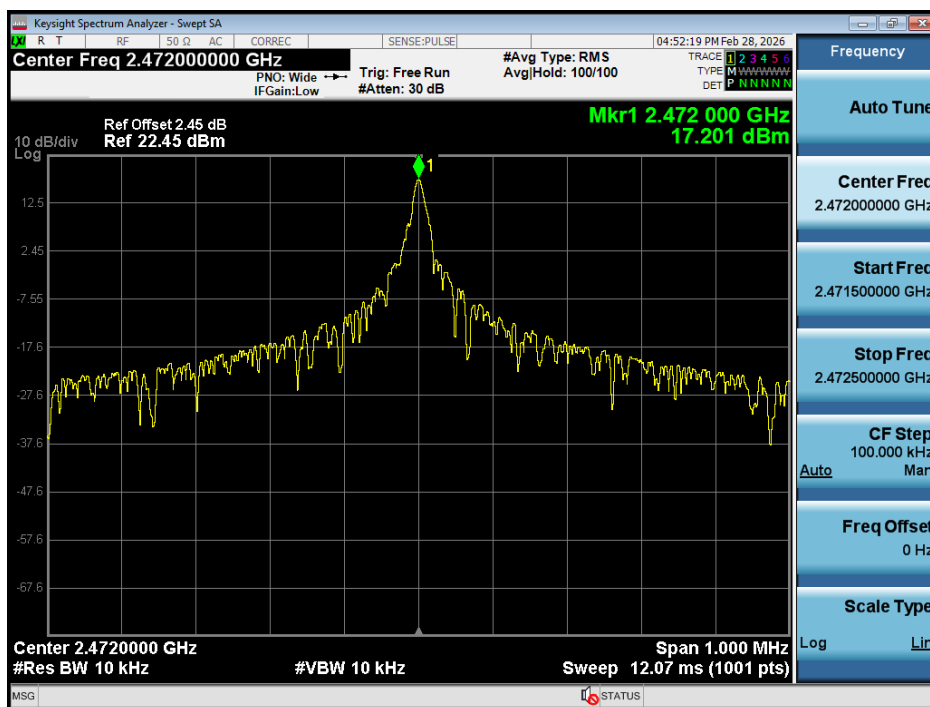
CH01



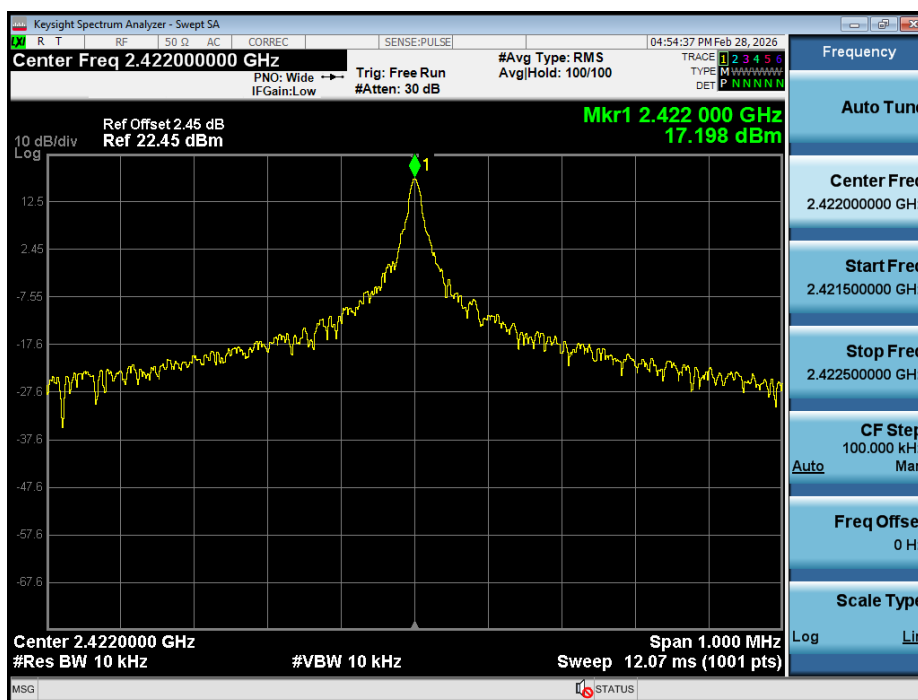
CH07



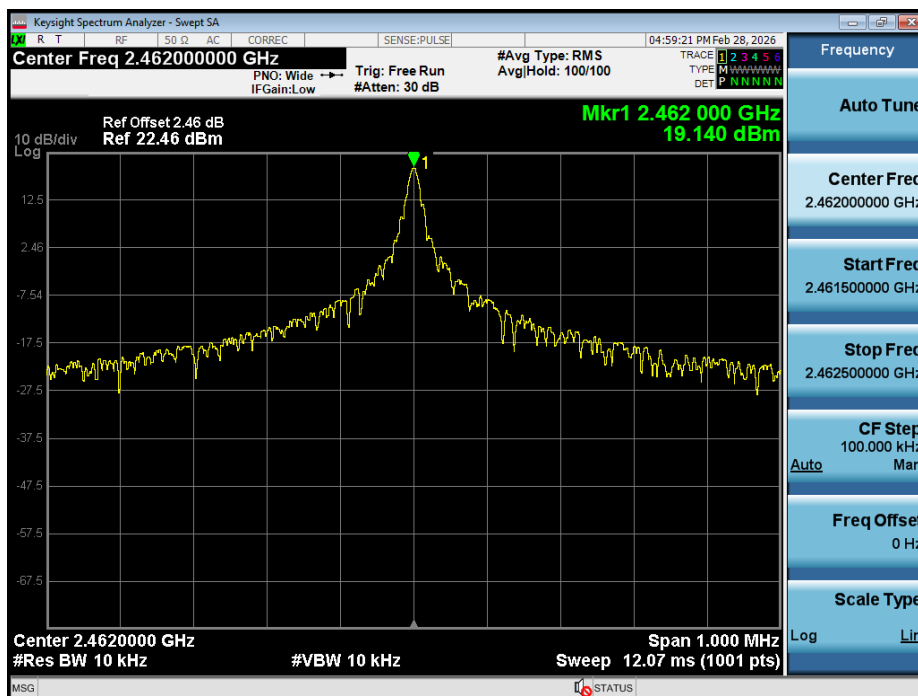
CH13

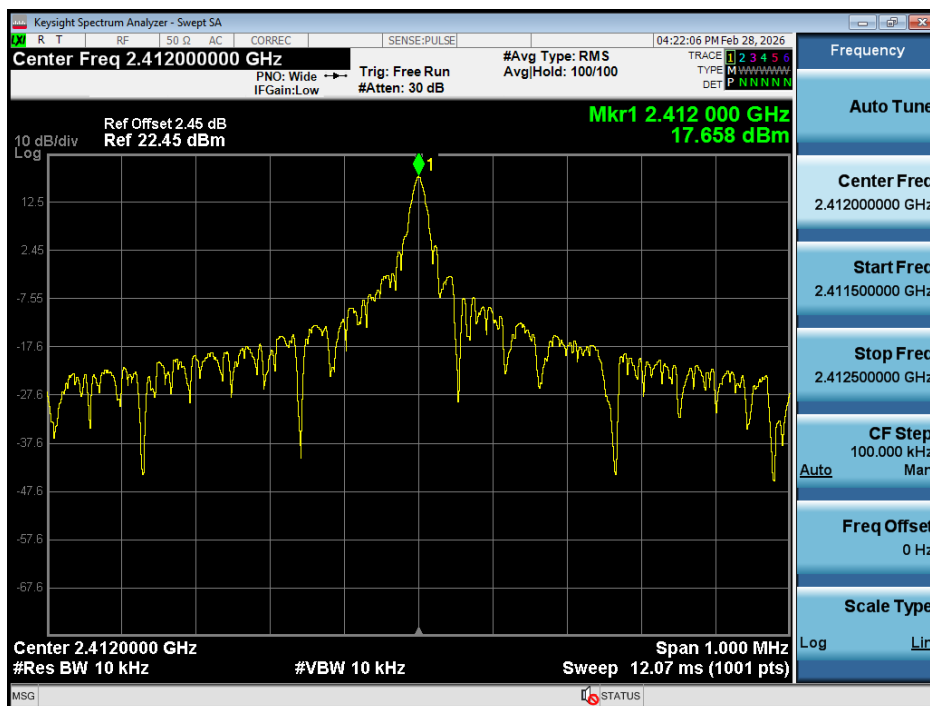
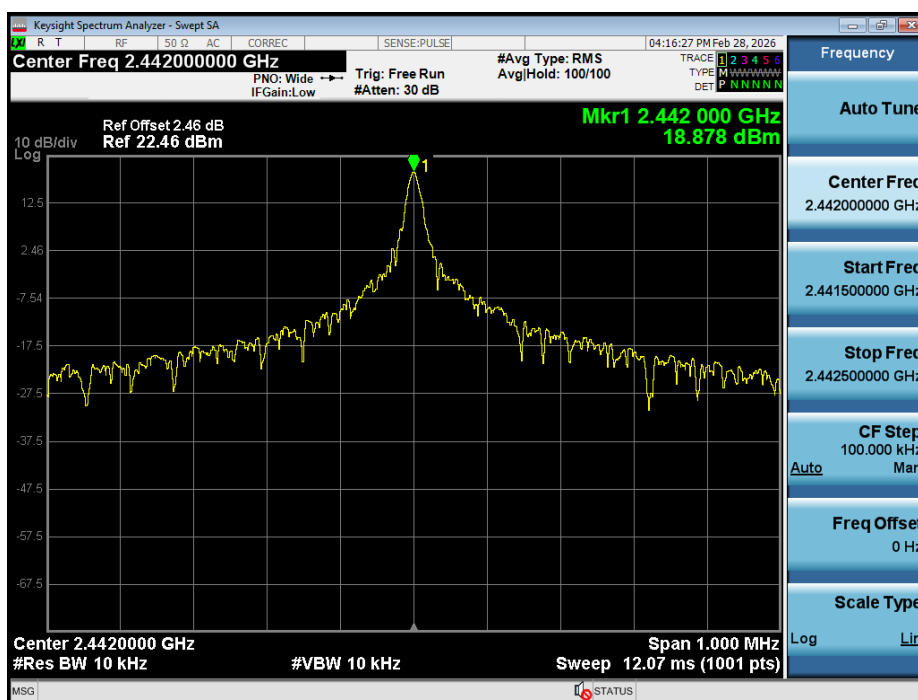


CH03



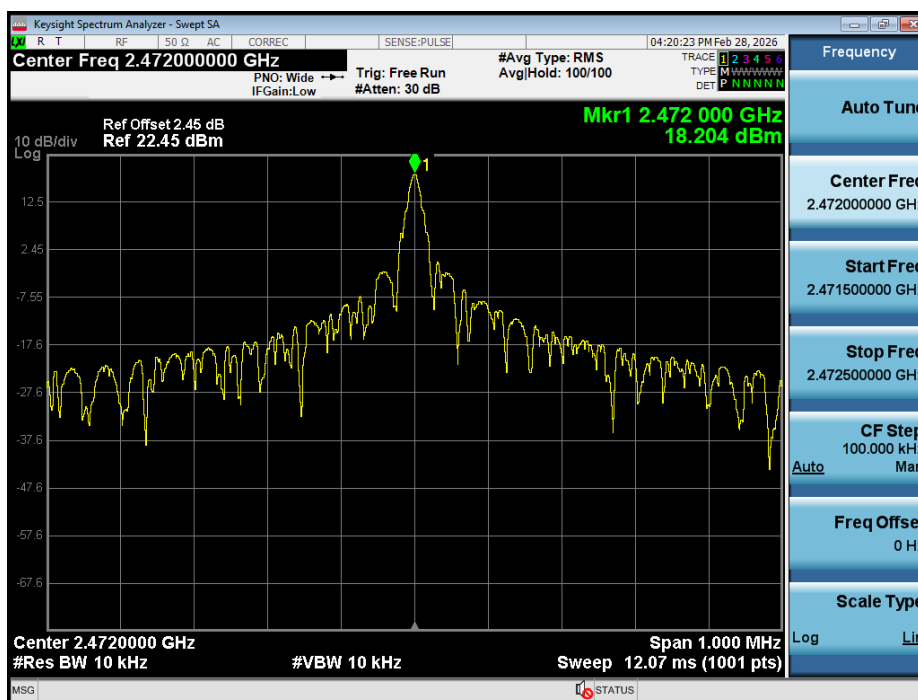
CH11



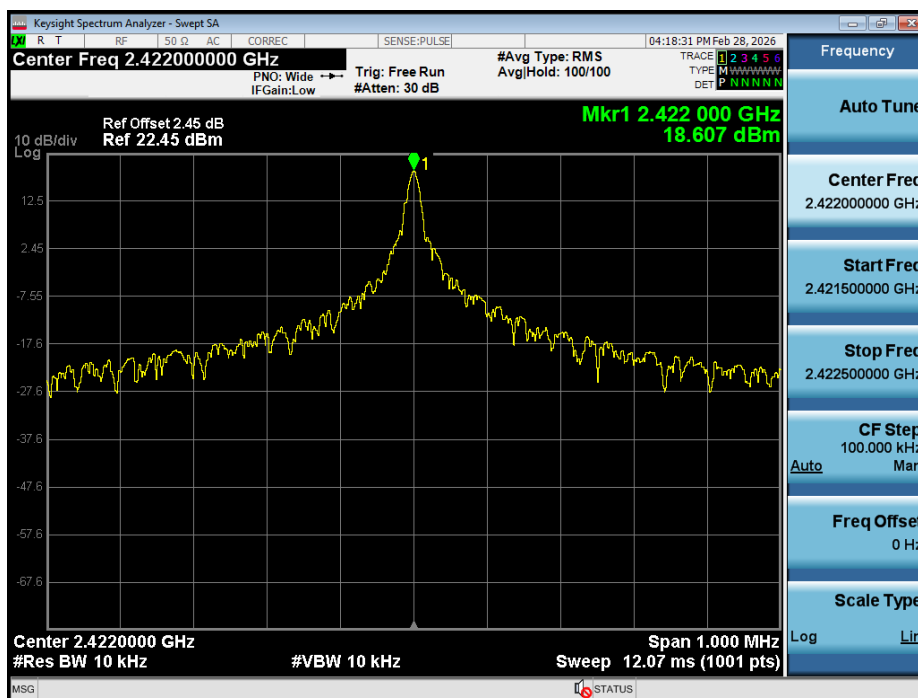
CH01

CH07


CO., LTD

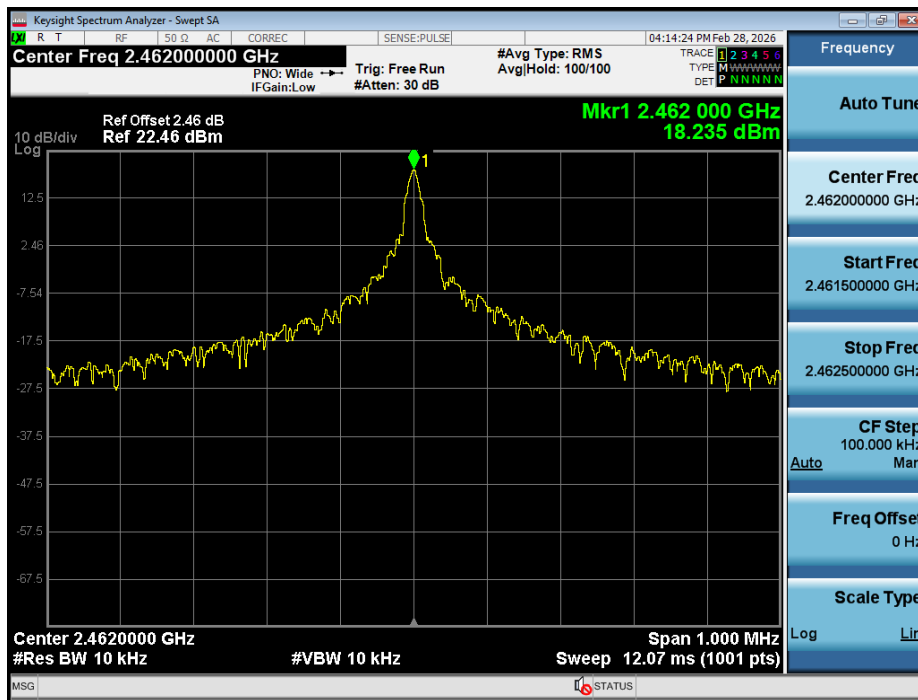
CH13



CH03

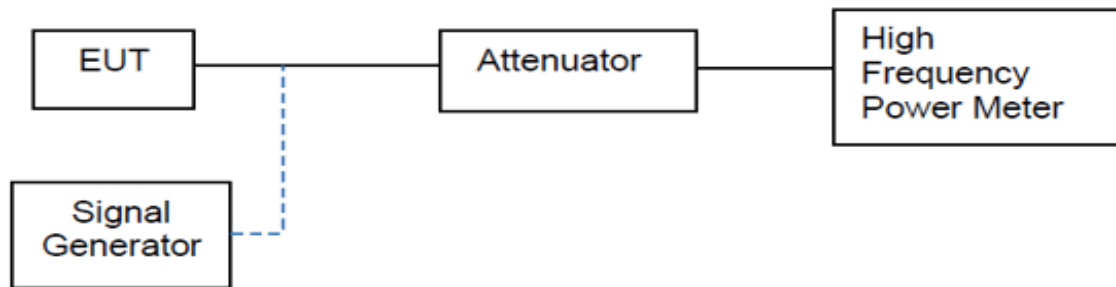


CH11



8. Antenna Power

8.1 Block Diagram Of Test Setup



8.2 Limit

Item	Limits
Antenna Power Density	(1) $\leq 3\text{mW/MHz}$ (FH, FH+DS, FH+OFDM form 2400 - 2483.5 MHz) (2) $\leq 10\text{mW/MHz}$ (OFDM OBW < 26MHz, DS, FH other than (1)) (3) $\leq 5\text{mW}$ (OFDM OBW 26-38MHz) (4) $\leq 10\text{mW}$ (Other than (1) & (2)& (3))
Antenna Power Error	+20% (Base on manufacturer declare antenna power density)

8.3 Test Procedure

Step 1: Connect the EUT to the Spectrum analyser and use the following settings:
 Centre Frequency: The Centre frequency of the channel under test.
 RBW: 1 MHz.
 VBW: 1 MHz.
 Span: Wide enough to cover the complete power envelope of the signal of the EUT.
 Detector: Peak.
 Trace Mode: Max Hold.

Step 2: When the trace is complete, find the peak value of the power envelope and record the frequency.

Step 3: Make the following changes to the settings of the Spectrum analyser:
 Centre Frequency: Equal to the frequency recorded in step 2.
 Span: 0 MHz.
 RBW: 1 MHz.
 VBW: 1 MHz.
 Detector: Peak.

Trace Mode: Max Hold

8.4 Test Result

Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 14.4V
Operation Mode:	Transmitting		

Antenna A:

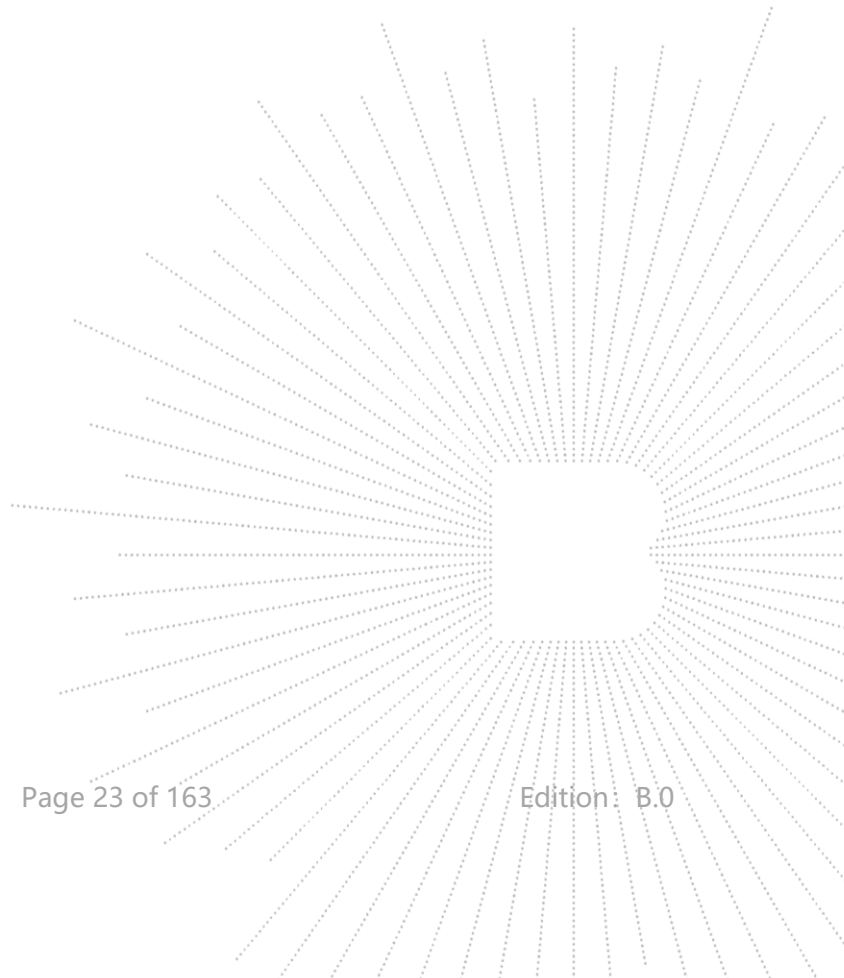
Test voltage (V)	Mode	Channel (MHz)	Antenna Power (dBm/MHz)	Antenna Power (mW/MHz)	Rated output power (mW/MHz)	Tolerance (%)	Limit
DC 14.4V	802.11b	2412	6.84	4.831	5	-3.38	10mW/MHz +20%
		2442	6.96	4.966	5	-0.68	
		2472	6.95	4.955	5	-0.90	
	802.11g	2412	1.23	1.327	2	-33.65	
		2442	1.24	1.33	2	-33.50	
		2472	1.08	1.282	2	-35.90	
	802.11n (HT20)	2412	0.75	1.189	2	-40.55	5mW/MHz +20%
		2442	0.58	1.143	2	-42.85	
		2472	0.63	1.156	2	-42.20	
	802.11n (HT40)	2422	-1.4	0.724	2	-63.80	
		2442	-1.58	0.695	2	-65.25	
		2462	-1.58	0.695	2	-65.25	

Antenna B:

Test voltage (V)	Mode	Channel (MHz)	Antenna Power (dBm/MHz)	Antenna Power (mW/MHz)	Rated output power (mW/MHz)	Tolerance (%)	Limit
DC 14.4V	802.11b	2412	7.66	5.834	6	-2.77	10mW/MHz +20%
		2442	7.67	5.848	6	-2.53	
		2472	7.79	6.012	6	0.20	
	802.11g	2412	2.07	1.611	2	-19.45	
		2442	2.01	1.589	2	-20.55	
		2472	2.11	1.626	2	-18.70	
	802.11n (HT20)	2412	1.42	1.387	2	-30.65	5mW/MHz +20%
		2442	0.02	1.005	2	-49.75	
		2472	1.11	1.291	2	-35.45	
	802.11n (HT40)	2422	-0.49	0.893	2	-55.35	
		2442	-0.96	0.802	2	-59.90	
		2462	-0.9	0.813	2	-59.35	

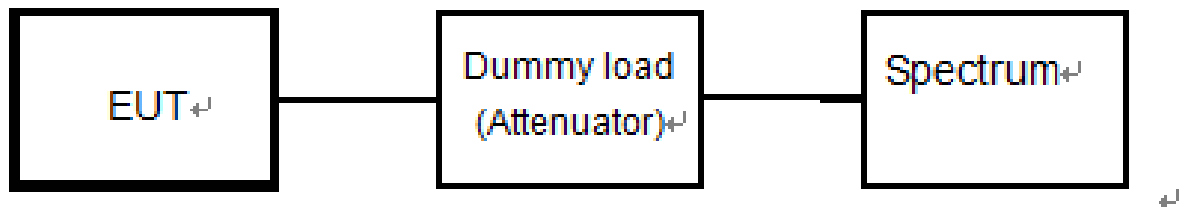
MIMO

Test voltage (V)	Mode	Channel (MHz)	Antenna Power (dBm/MHz)	Antenna Power (mW/MHz)	Rated output power (mW/MHz)	Tolerance (%)	Limit
DC 14.4V	802.11n (HT20)	2412	4.11	2.575	3	-14.17	10mW/MHz +20%
		2442	3.32	2.147	3	-28.43	
		2472	3.89	2.447	3	-18.43	
	802.11n (HT400)	2422	2.09	1.618	3	-46.07	5mW/MHz +20%
		2442	1.75	1.497	3	-50.10	
		2462	1.78	1.508	3	-49.73	



9. Occupied Bandwidth And Spread-Spectrum Bandwidth Measurement

9.1 Block Diagram Of Test Setup



9.2 Limit

Item	Limits
Occupied Band Width:	802.11b,g,n(HT20): 26MHz or less

9.3 Test Procedure

1. Setting of SA is following as: RB: 300kHz / VB:300kHz / SPAN: 40MHz / AT: 30dB Ref: 25.40dBm / 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) or 83.5MHz (For FHSS Device).

3. SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth and must greater than 500kHz.

4. Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.

5. Spread Spectrum Factor limit is greater than 5

6. Spread Factor=Spread Bandwidth/modulation rate. The modulation rate: MR=1.375 for 802.11b, MR=1.5 for 802.11g/n20, MR=3 for 802.11n40.

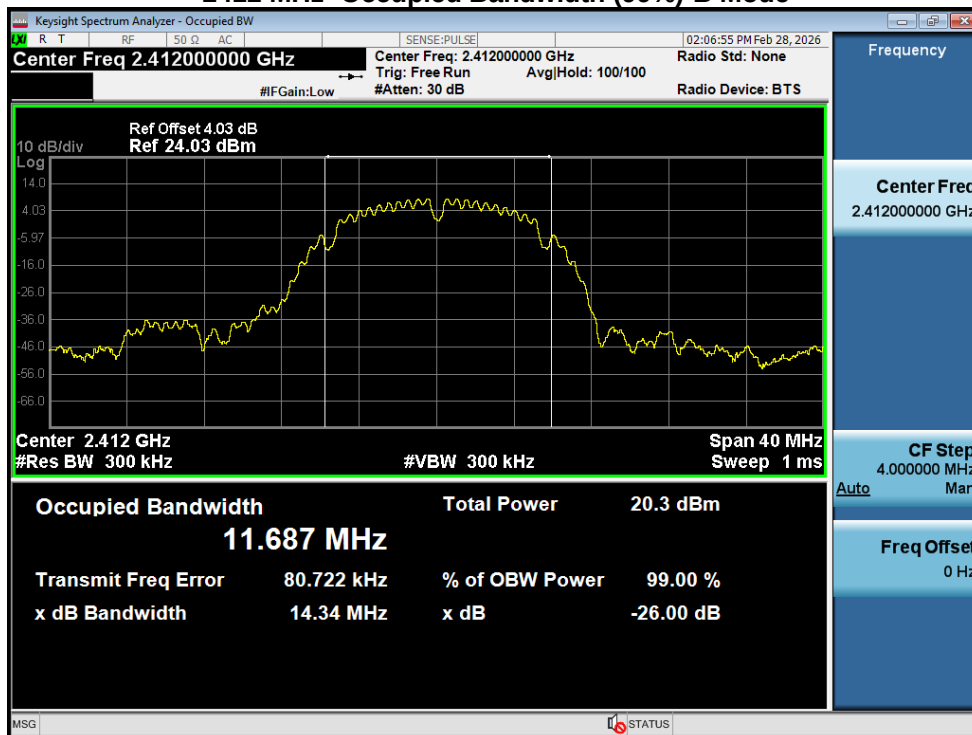
9.4 Test Result

Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 14.4V
Operation Mode:	Transmitting		

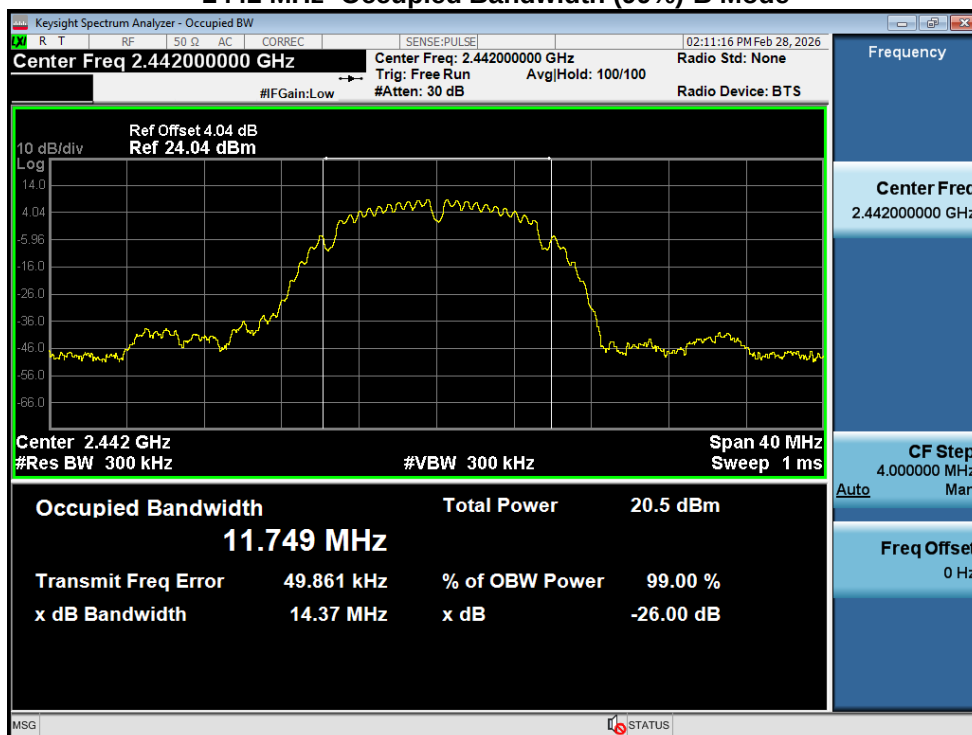
Operation Mode	Test Frequency (MHz)	Antenna A 99% Occupied Bandwidth (MHz)	Antenna B 99% Occupied Bandwidth (MHz)	Verdict
Normal Voltage-b mode	2412	11.687	11.654	Pass
	2442	11.749	11.715	Pass
	2472	11.754	11.733	Pass
Normal Voltage-g mode	2412	16.36	16.359	Pass
	2442	16.375	16.36	Pass
	2472	16.46	16.45	Pass
Normal Voltage-n20 mode	2412	17.425	17.39	Pass
	2442	17.406	17.401	Pass
	2472	17.602	17.592	Pass
Normal Voltage-n40 mode	2422	36.026	35.979	Pass
	2442	36.024	36.056	Pass
	2462	36.03	36.043	Pass

Antenna A:

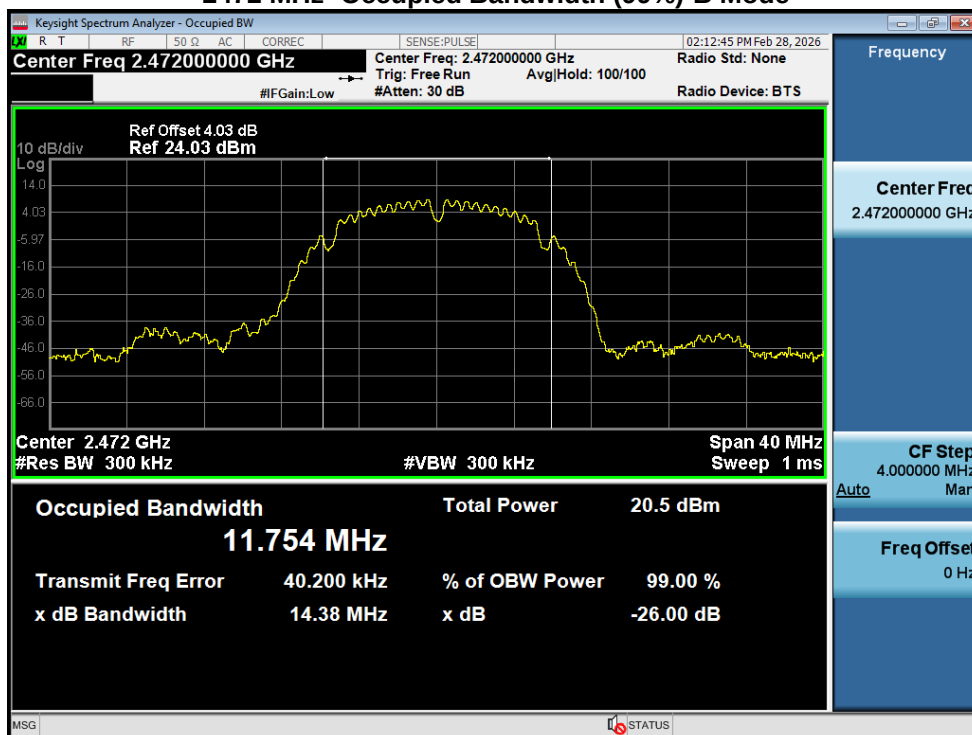
2412 MHz -Occupied Bandwidth (99%)-B Mode



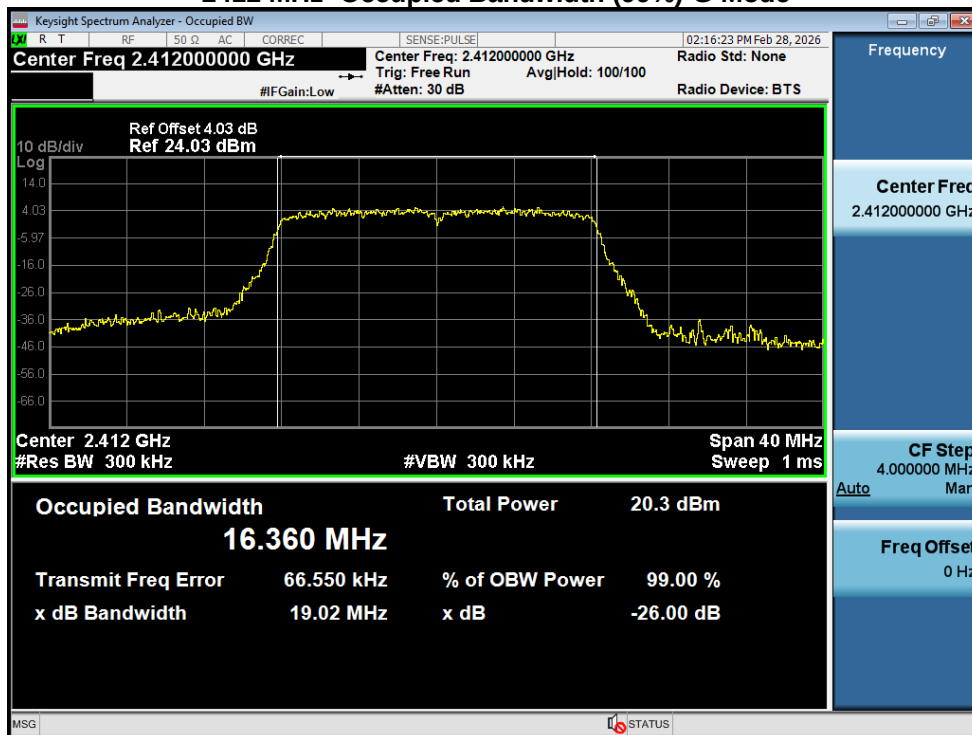
2442 MHz -Occupied Bandwidth (99%)-B Mode



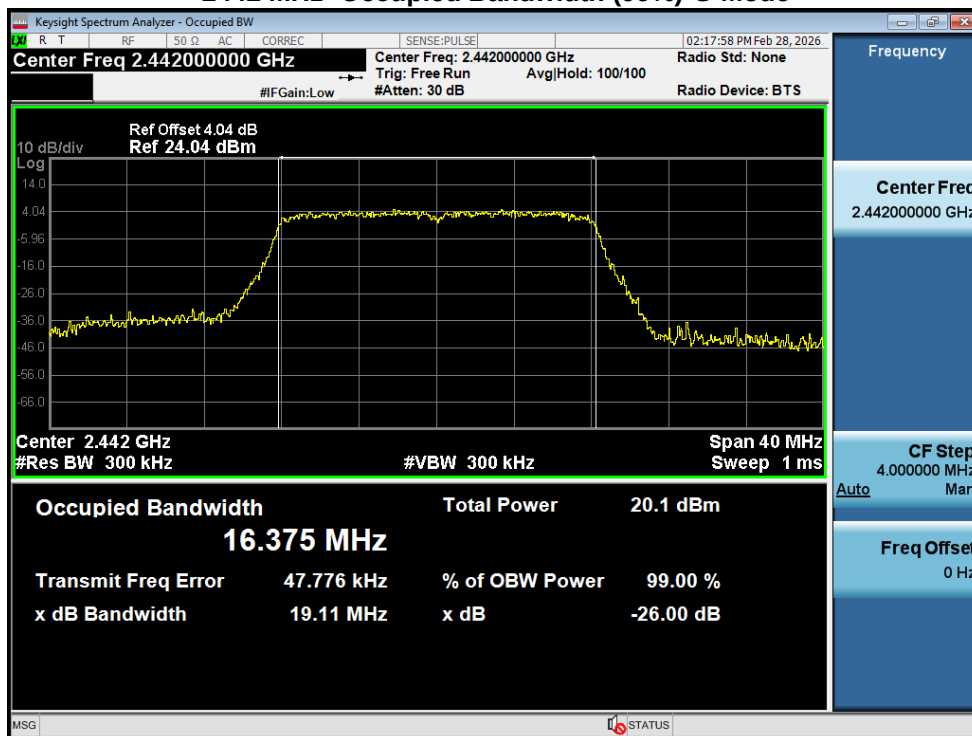
2472 MHz -Occupied Bandwidth (99%)-B Mode



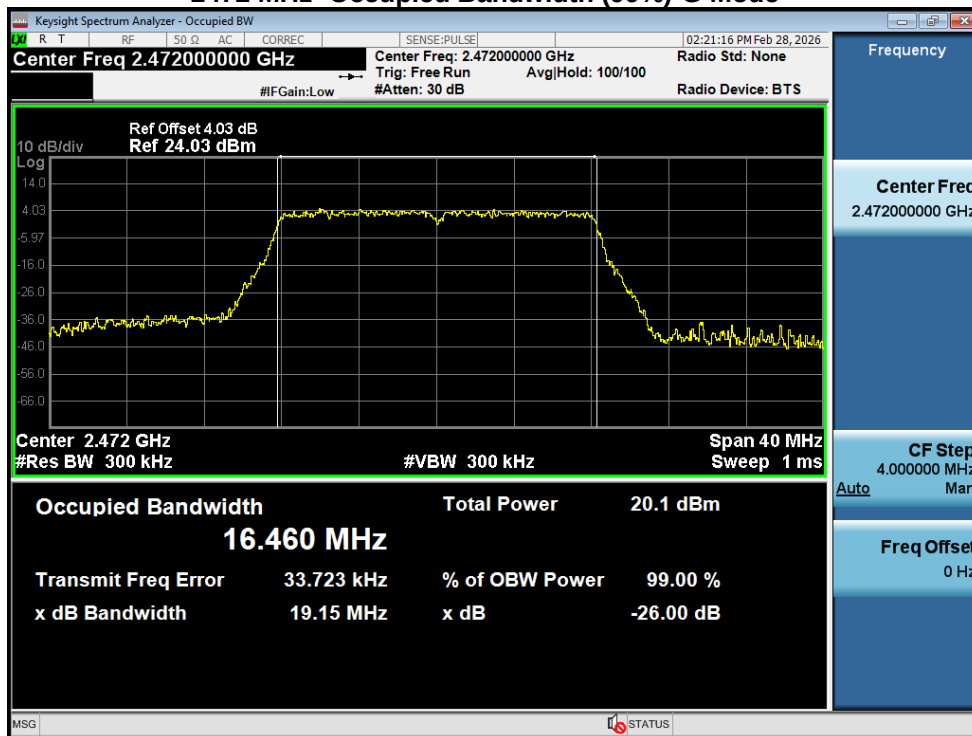
2412 MHz -Occupied Bandwidth (99%)-G Mode



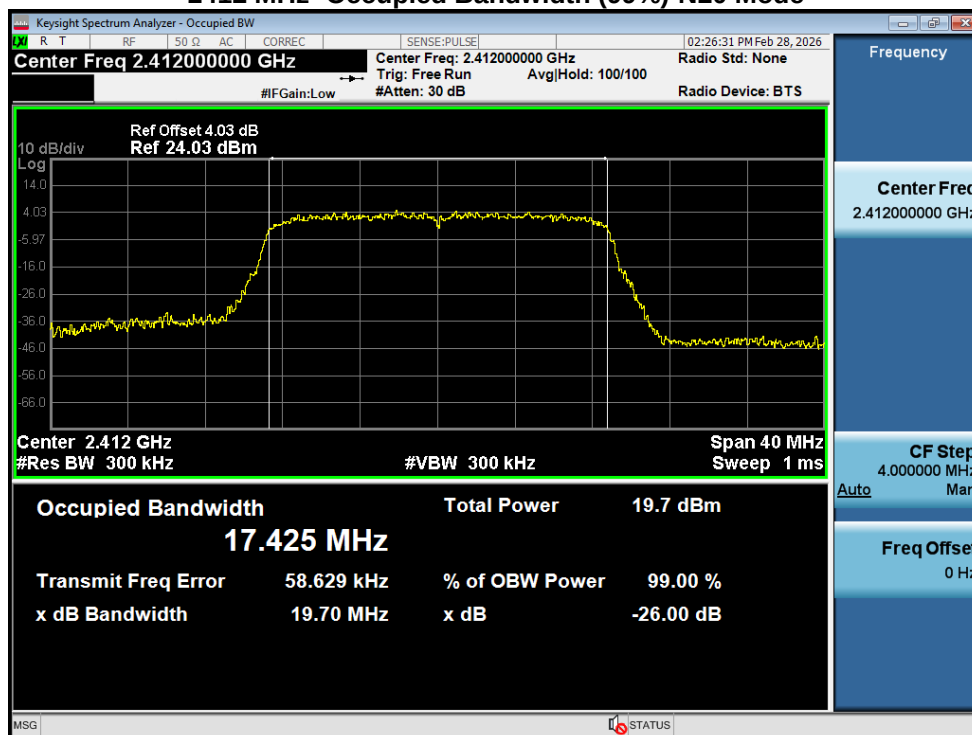
2442 MHz -Occupied Bandwidth (99%)-G Mode



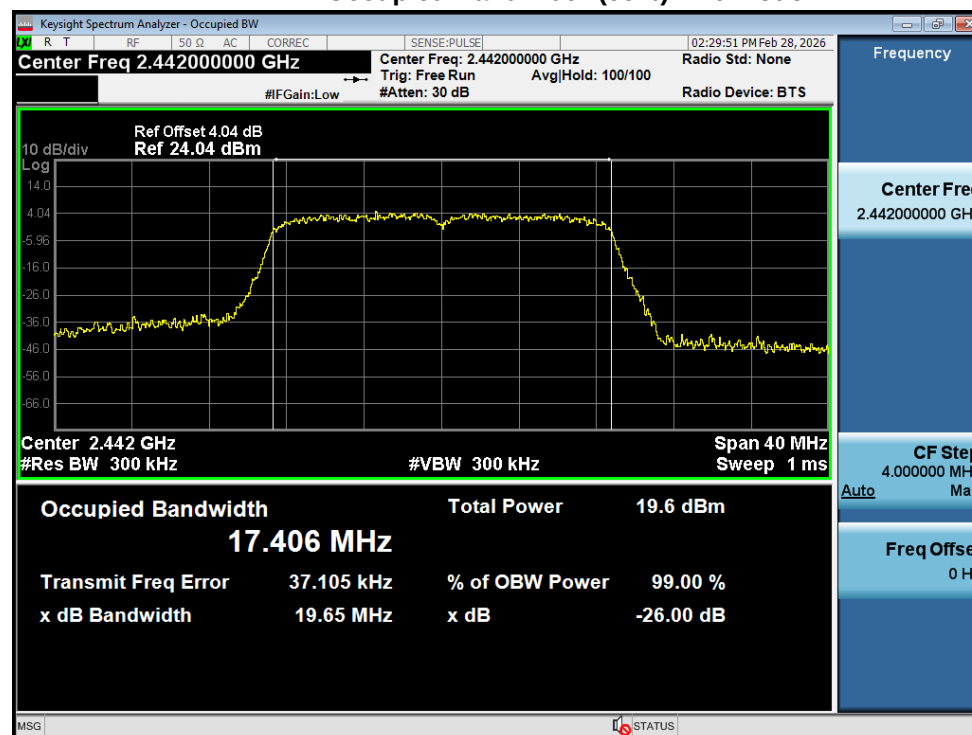
2472 MHz -Occupied Bandwidth (99%)-G Mode



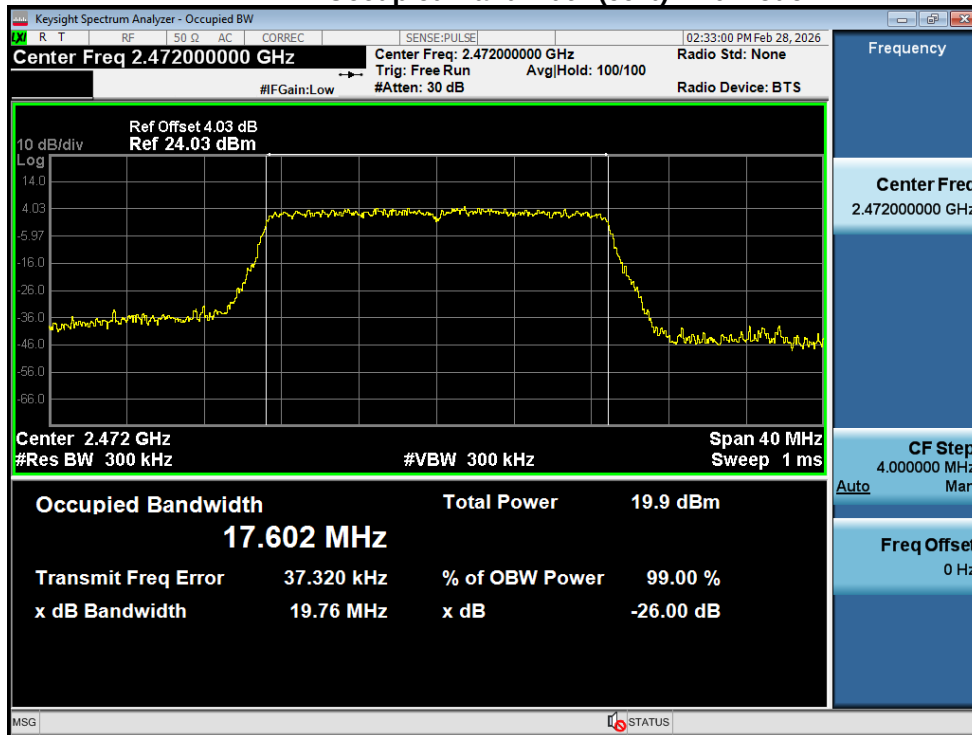
2412 MHz -Occupied Bandwidth (99%)-N20 Mode



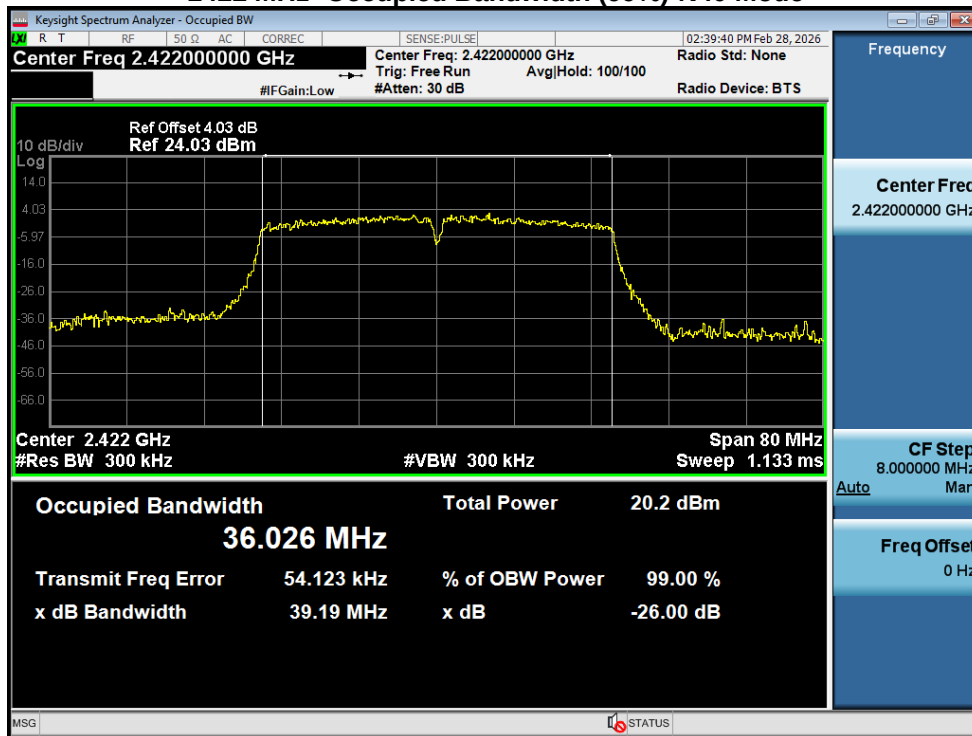
2442 MHz -Occupied Bandwidth (99%)-N20 Mode



2472 MHz -Occupied Bandwidth (99%)-N20 Mode



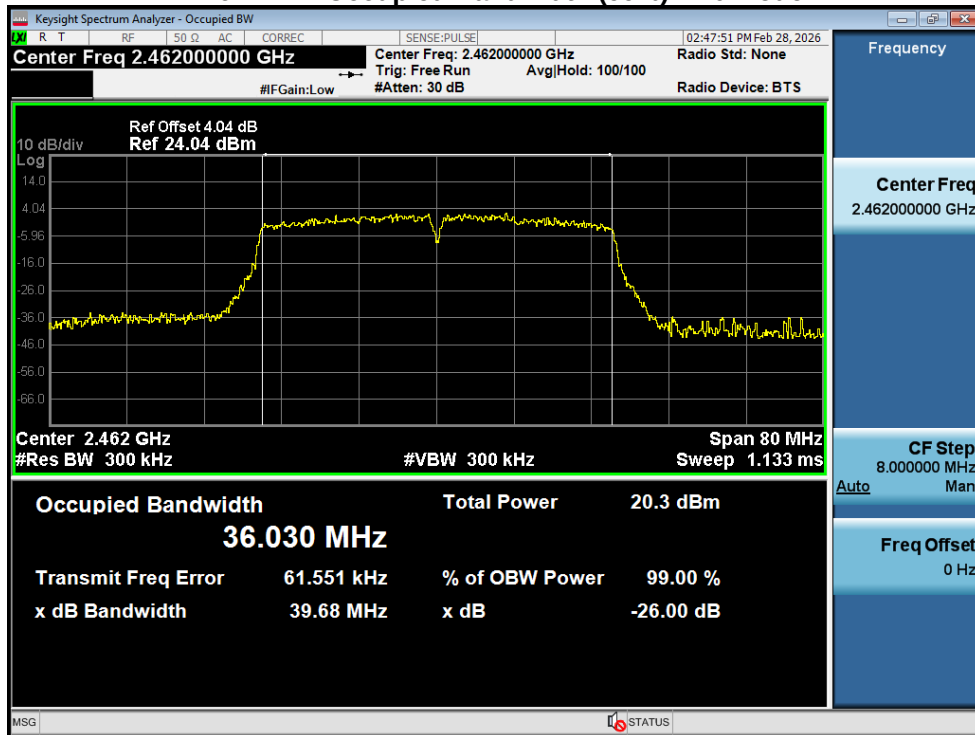
2422 MHz -Occupied Bandwidth (99%)-N40 Mode



2442 MHz -Occupied Bandwidth (99%)-N40 Mode

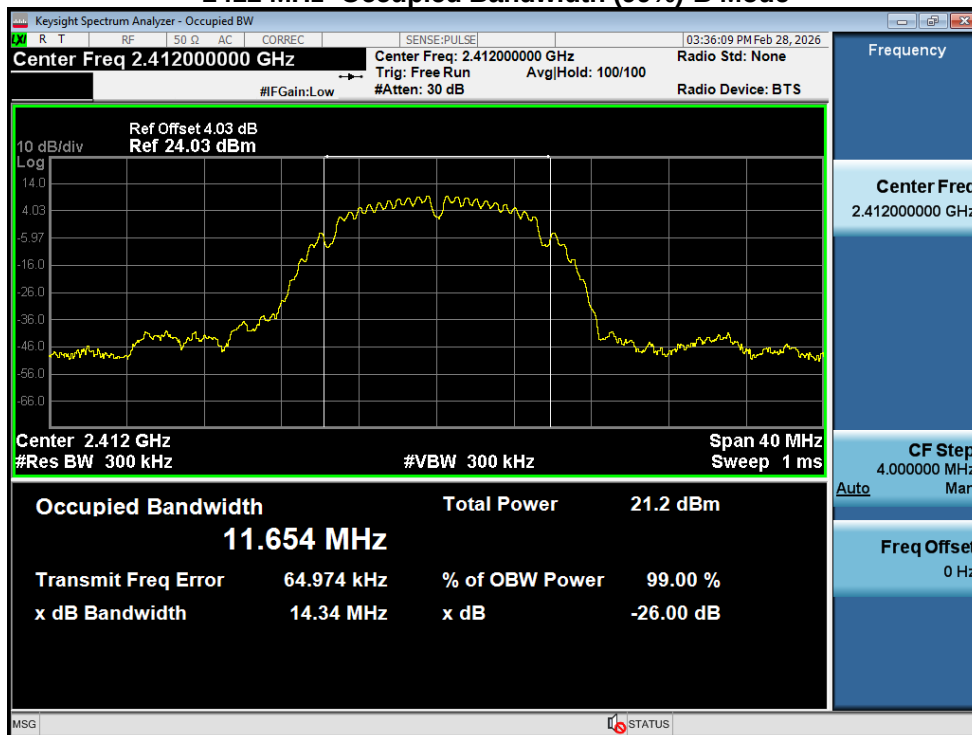


2462 MHz -Occupied Bandwidth (99%)-N40 Mode

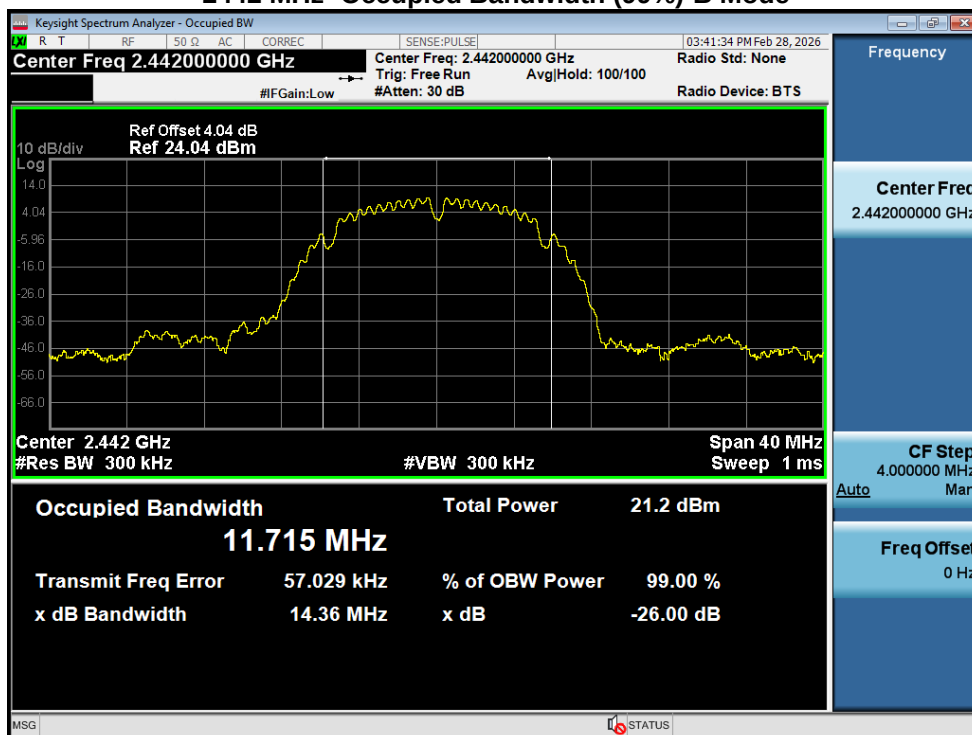


Antenna B:

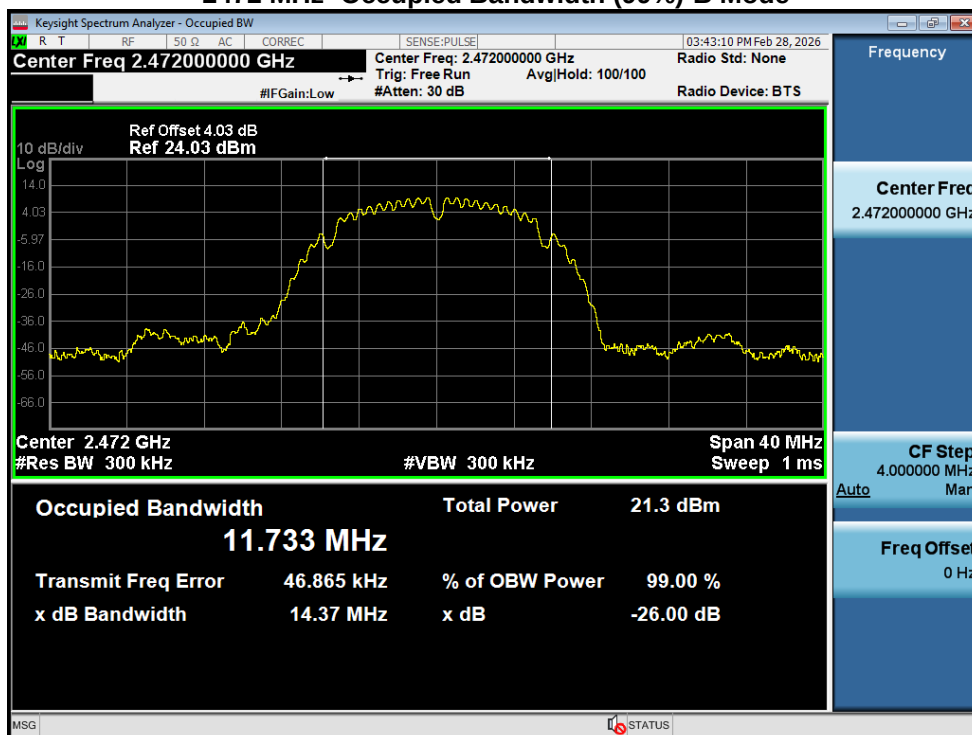
2412 MHz -Occupied Bandwidth (99%)-B Mode



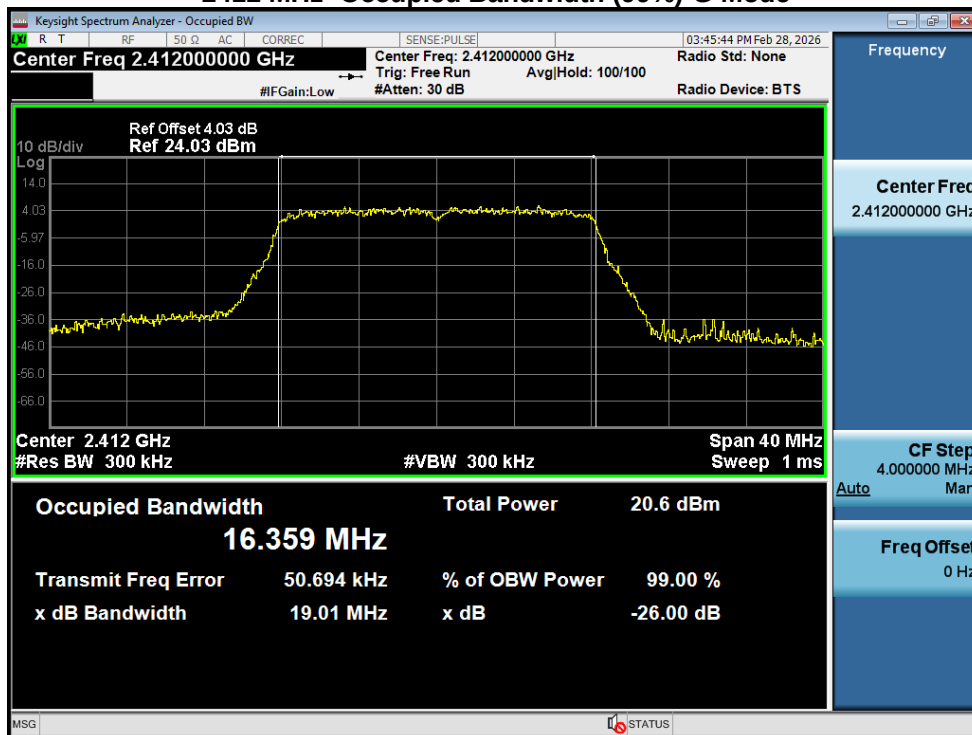
2442 MHz -Occupied Bandwidth (99%)-B Mode



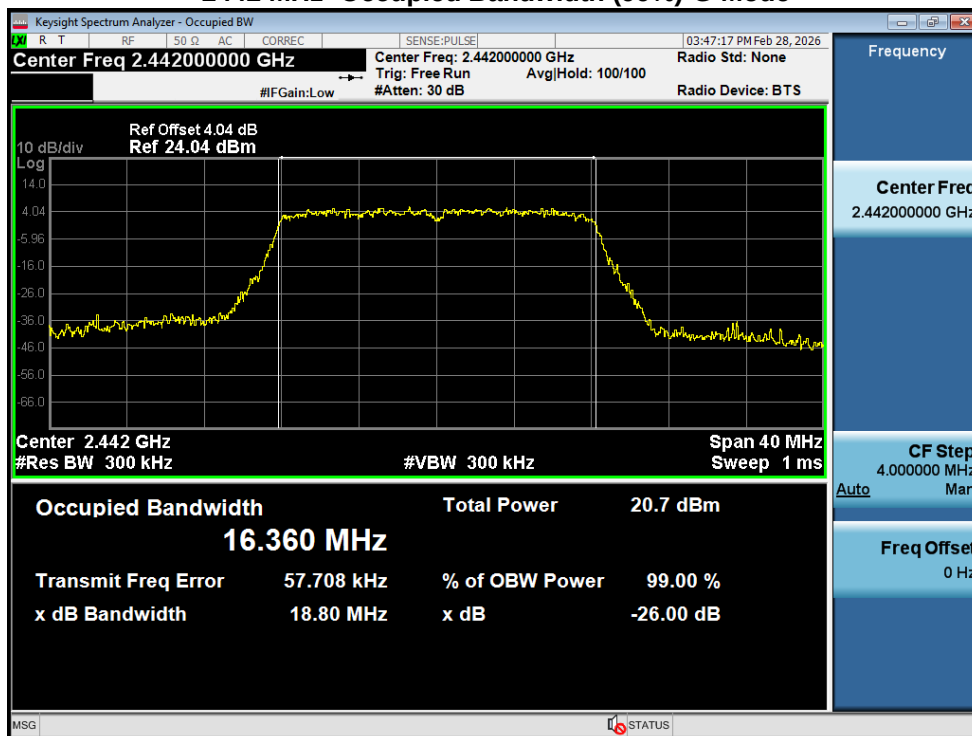
2472 MHz -Occupied Bandwidth (99%)-B Mode



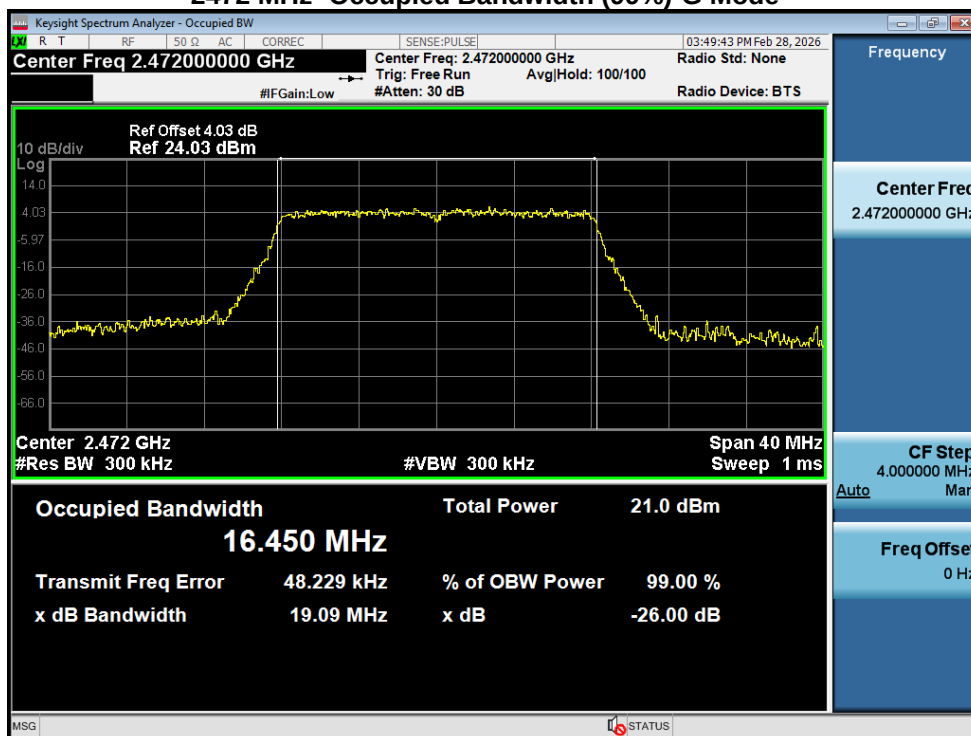
2412 MHz -Occupied Bandwidth (99%)-G Mode



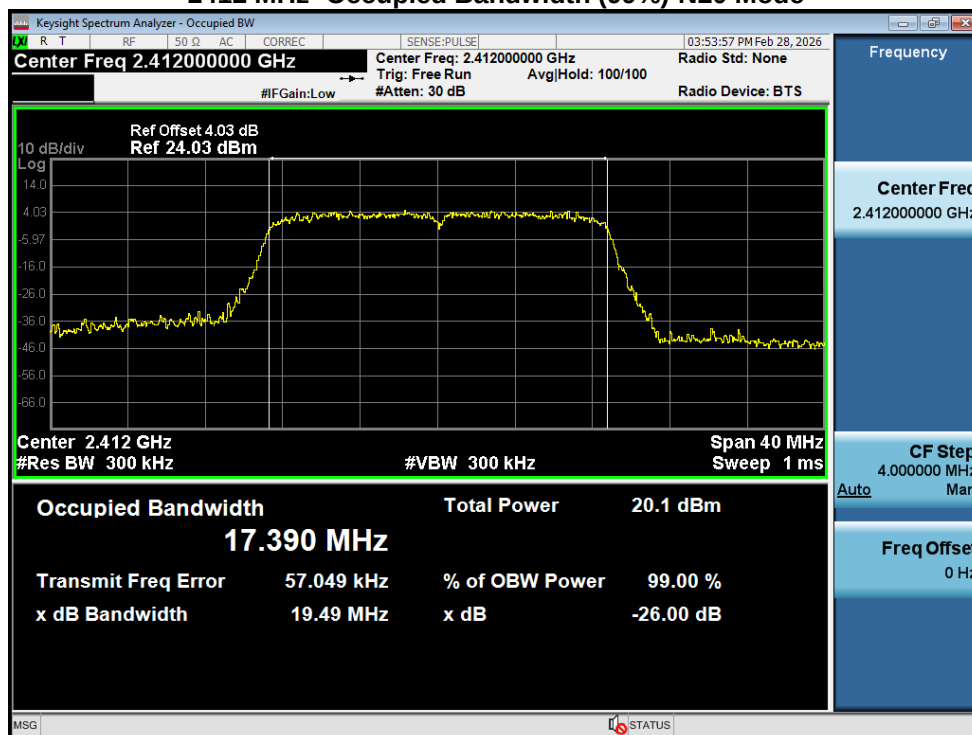
2442 MHz -Occupied Bandwidth (99%)-G Mode



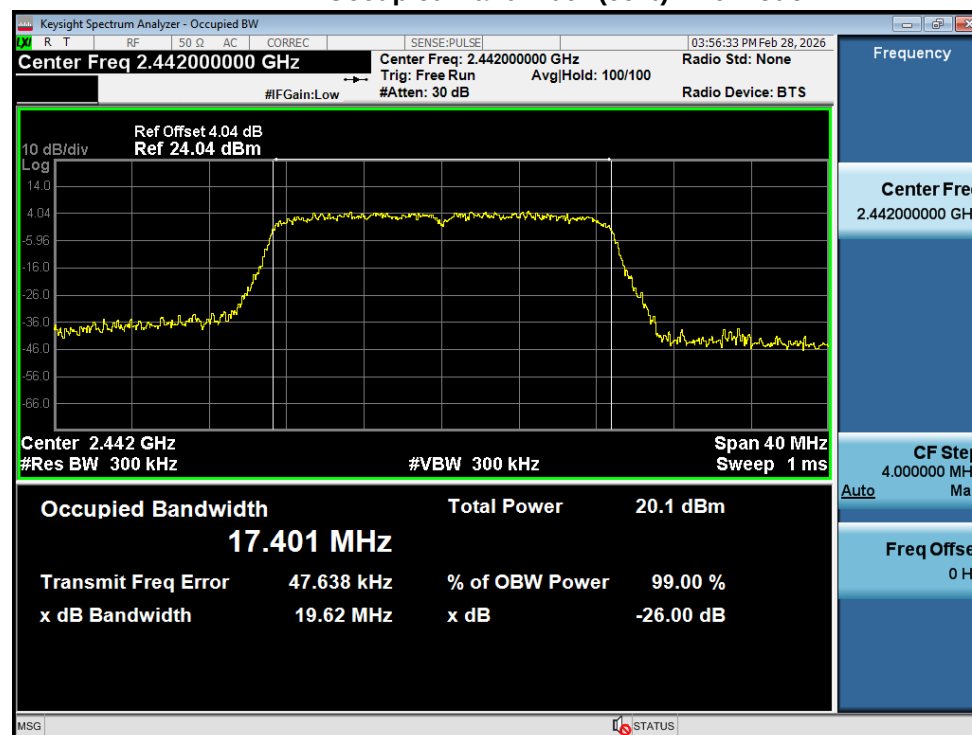
2472 MHz -Occupied Bandwidth (99%)-G Mode



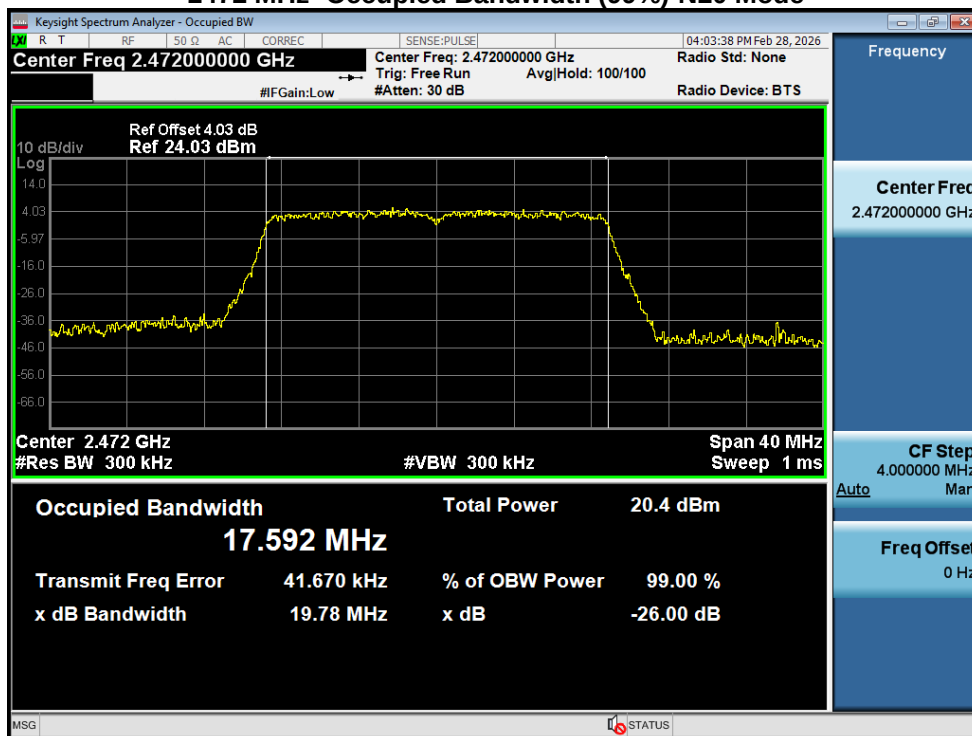
2412 MHz -Occupied Bandwidth (99%)-N20 Mode



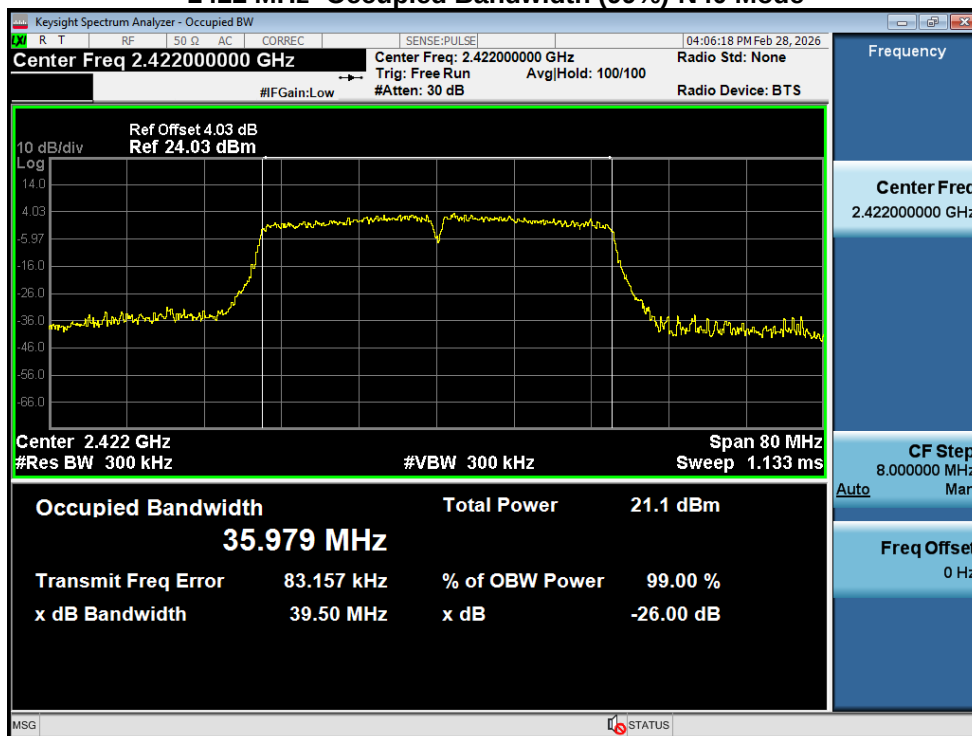
2442 MHz -Occupied Bandwidth (99%)-N20 Mode



2472 MHz -Occupied Bandwidth (99%)-N20 Mode

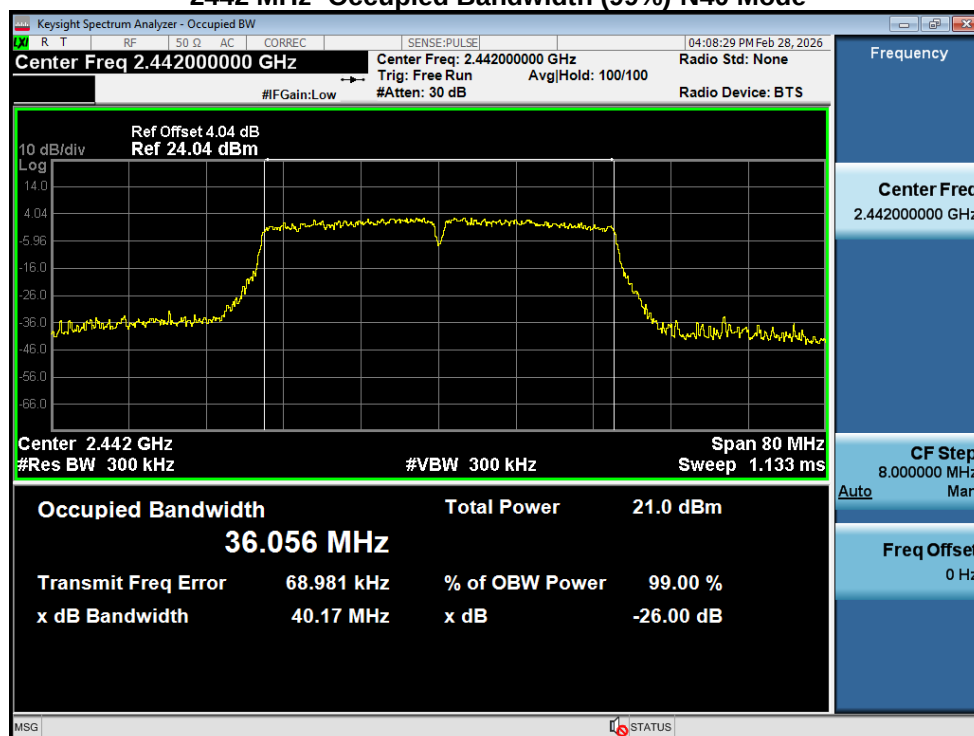


2422 MHz -Occupied Bandwidth (99%)-N40 Mode

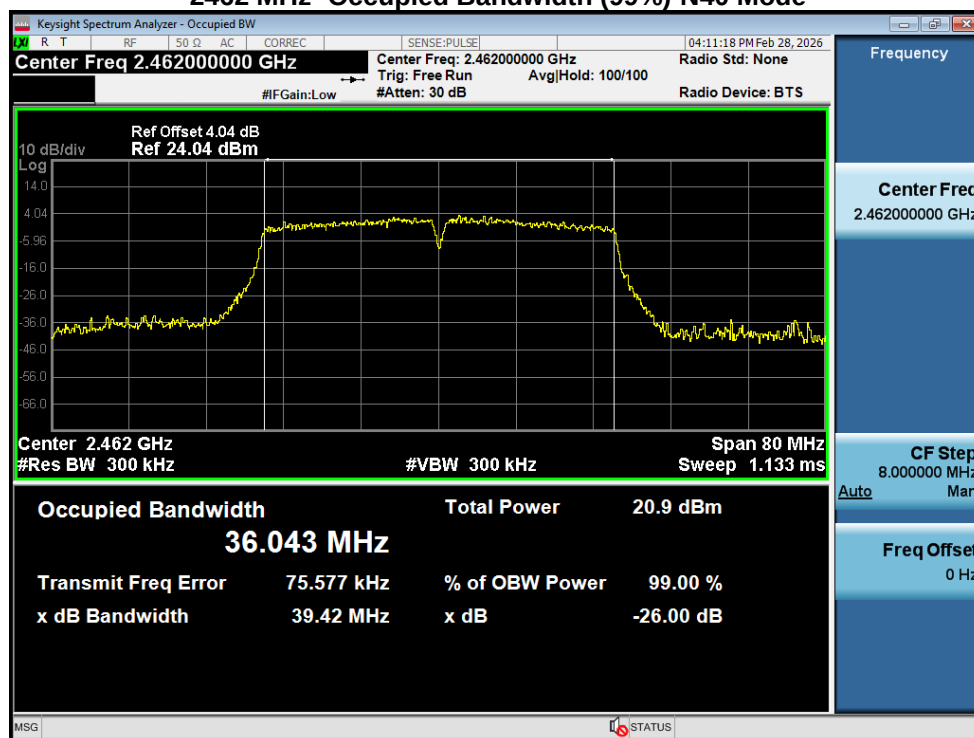


CO., LTD

2442 MHz -Occupied Bandwidth (99%)-N40 Mode

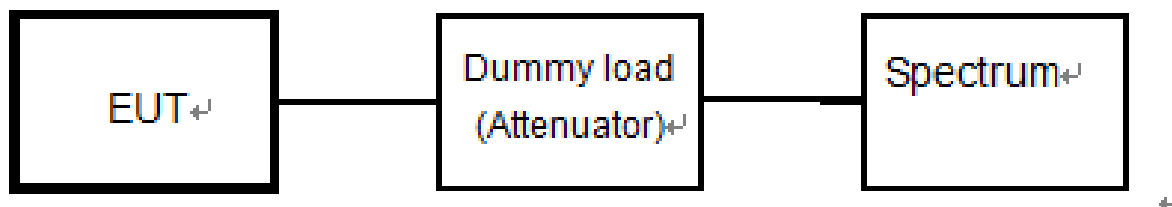


2462 MHz -Occupied Bandwidth (99%)-N40 Mode



10. Unwanted Emission Intensity Measurement

10.1 Block Diagram Of Test Setup



10.2 Limit

Item	Limits
TX Spurious Emission	$\leq 0.25 \mu\text{ W/MHz}$ (-36dBm) ($30\text{MHz} \leq f \leq 1000\text{MHz}$)
	$\leq 2.5 \mu\text{ W/MHz}$ (-26dBm) ($1000\text{MHz} < f \leq 2387\text{MHz}$)
	$\leq 25 \mu\text{ W/MHz}$ (-16dBm) ($2387\text{MHz} < f \leq 2400\text{MHz}$)
	$\leq 25 \mu\text{ W/MHz}$ (-16dBm) ($2483.5\text{MHz} \leq f < 2496.5\text{MHz}$)
	$\leq 2.5 \mu\text{ W/MHz}$ (-26dBm) ($2496.5\text{MHz} \leq f < 12500\text{MHz}$)

10.3 Measuring Instruments And Setting

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

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

10.4 Test Procedure

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: Below 1GHz RB:100KHz / VB:100KHz Above 1GHz RB:1MHz / VB:1MHz / AT: 20dB Ref: 10dBm / 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 0.25 μ W (-36dBm).
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 μ W (-26dBm).
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μ W (-16dBm).
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 μ W (-16dBm)
7. SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 μ W (-26dBm)

10.5 Test Result

Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 14.4V

Antenna A

Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (uW/MHz)	Max RMS Value (uW/MHz)	Limit Start (uW/MHz)	Limit Stop (uW/MHz)	Verdict
NVNT	b	2412	30-1000	938.89	-46.96	NA	0.0201	NA	2.5	2.5	Pass
NVNT	b	2412	1000-2387	2387.00	-42.35	NA	0.0582	NA	2.5	2.5	Pass
NVNT	b	2412	2387-2400	2397.34	-32.93	NA	0.5093	NA	25	25	Pass
NVNT	b	2412	2483.5-2496.5	2492.03	-44.63	NA	0.0344	NA	25	25	Pass
NVNT	b	2412	2496.5-13000	4828.28	-39.57	NA	0.1104	NA	2.5	2.5	Pass
NVNT	b	2442	30-1000	797.27	-47.88	NA	0.0163	NA	2.5	2.5	Pass
NVNT	b	2442	1000-2387	2380.07	-44.95	NA	0.032	NA	2.5	2.5	Pass
NVNT	b	2442	2387-2400	2391.59	-44.86	NA	0.0327	NA	25	25	Pass
NVNT	b	2442	2483.5-2496.5	2490.49	-45.19	NA	0.0303	NA	25	25	Pass
NVNT	b	2442	2496.5-13000	5521.51	-42.08	NA	0.0619	NA	2.5	2.5	Pass
NVNT	b	2472	30-1000	886.51	-46.98	NA	0.02	NA	2.5	2.5	Pass
NVNT	b	2472	1000-2387	2133.18	-45.49	NA	0.0282	NA	2.5	2.5	Pass
NVNT	b	2472	2387-2400	2396.48	-45.60	NA	0.0275	NA	25	25	Pass
NVNT	b	2472	2483.5-2496.5	2486.79	-39.72	NA	0.1067	NA	25	25	Pass
NVNT	b	2472	2496.5-13000	5437.48	-41.47	NA	0.0713	NA	2.5	2.5	Pass
NVNT	g	2412	30-1000	939.86	-48.46	NA	0.0143	NA	2.5	2.5	Pass
NVNT	g	2412	1000-2387	2387.00	-44.22	NA	0.0378	NA	2.5	2.5	Pass
NVNT	g	2412	2387-2400	2396.27	-26.54	NA	2.2182	NA	25	25	Pass
NVNT	g	2412	2483.5-2496.5	2489.39	-45.17	NA	0.0304	NA	25	25	Pass
NVNT	g	2412	2496.5-13000	12159.72	-42.47	NA	0.0566	NA	2.5	2.5	Pass
NVNT	g	2442	30-1000	427.70	-47.80	NA	0.0166	NA	2.5	2.5	Pass
NVNT	g	2442	1000-2387	2135.95	-45.67	NA	0.0271	NA	2.5	2.5	Pass
NVNT	g	2442	2387-2400	2393.81	-45.62	NA	0.0274	NA	25	25	Pass
NVNT	g	2442	2483.5-2496.5	2494.17	-44.13	NA	0.0386	NA	25	25	Pass
NVNT	g	2442	2496.5-13000	5164.39	-41.64	NA	0.0685	NA	2.5	2.5	Pass
NVNT	g	2472	30-1000	796.30	-47.72	NA	0.0169	NA	2.5	2.5	Pass
NVNT	g	2472	1000-2387	2258.01	-45.41	NA	0.0288	NA	2.5	2.5	Pass
NVNT	g	2472	2387-2400	2389.95	-46.01	NA	0.0251	NA	25	25	Pass
NVNT	g	2472	2483.5-2496.5	2490.61	-30.80	NA	0.8318	NA	25	25	Pass
NVNT	g	2472	2496.5-13000	2496.50	-41.72	NA	0.0673	NA	2.5	2.5	Pass
NVNT	n20	2412	30-1000	983.51	-47.23	NA	0.0189	NA	2.5	2.5	Pass
NVNT	n20	2412	1000-2387	2387.00	-44.97	NA	0.0318	NA	2.5	2.5	Pass
NVNT	n20	2412	2387-2400	2395.44	-28.96	NA	1.2706	NA	25	25	Pass
NVNT	n20	2412	2483.5-2496.5	2489.82	-45.28	NA	0.0296	NA	25	25	Pass
NVNT	n20	2412	2496.5-13000	5910.14	-42.53	NA	0.0558	NA	2.5	2.5	Pass
NVNT	n20	2442	30-1000	967.02	-47.70	NA	0.017	NA	2.5	2.5	Pass
NVNT	n20	2442	1000-2387	2217.79	-46.04	NA	0.0249	NA	2.5	2.5	Pass
NVNT	n20	2442	2387-2400	2397.19	-45.63	NA	0.0274	NA	25	25	Pass
NVNT	n20	2442	2483.5-2496.5	2492.95	-45.22	NA	0.0301	NA	25	25	Pass
NVNT	n20	2442	2496.5-13000	12905.47	-42.56	NA	0.0555	NA	2.5	2.5	Pass
NVNT	n20	2472	30-1000	907.85	-48.25	NA	0.015	NA	2.5	2.5	Pass
NVNT	n20	2472	1000-2387	2385.61	-45.43	NA	0.0286	NA	2.5	2.5	Pass
NVNT	n20	2472	2387-2400	2398.47	-45.11	NA	0.0308	NA	25	25	Pass
NVNT	n20	2472	2483.5-2496.5	2485.42	-28.03	NA	1.574	NA	25	25	Pass
NVNT	n20	2472	2496.5-13000	2496.50	-39.82	NA	0.1042	NA	2.5	2.5	Pass
NVNT	n40	2422	30-1000	943.74	-46.75	NA	0.0211	NA	2.5	2.5	Pass
NVNT	n40	2422	1000-2387	2380.07	-33.75	NA	0.4217	NA	2.5	2.5	Pass
NVNT	n40	2422	2387-2400	2399.87	-27.14	NA	1.932	NA	25	25	Pass
NVNT	n40	2422	2483.5-2496.5	2485.46	-42.74	NA	0.0532	NA	25	25	Pass
NVNT	n40	2422	2496.5-13000	5059.35	-42.65	NA	0.0543	NA	2.5	2.5	Pass
NVNT	n40	2442	30-1000	985.45	-47.49	NA	0.0178	NA	2.5	2.5	Pass
NVNT	n40	2442	1000-2387	2134.57	-45.65	NA	0.0272	NA	2.5	2.5	Pass
NVNT	n40	2442	2387-2400	2399.91	-37.00	NA	0.1995	NA	25	25	Pass
NVNT	n40	2442	2483.5-2496.5	2483.54	-32.29	NA	0.5902	NA	25	25	Pass
NVNT	n40	2442	2496.5-13000	2496.50	-37.02	NA	0.1986	NA	2.5	2.5	Pass
NVNT	n40	2462	30-1000	896.21	-48.07	NA	0.0156	NA	2.5	2.5	Pass
NVNT	n40	2462	1000-2387	2195.59	-45.56	NA	0.0278	NA	2.5	2.5	Pass
NVNT	n40	2462	2387-2400	2394.02	-43.07	NA	0.0493	NA	25	25	Pass

NVNT	n40	2462	2483.5-2496.5	2483.54	-25.51	NA	2.8119	NA	25	25	Pass
NVNT	n40	2462	2496.5-13000	2496.50	-32.11	NA	0.6152	NA	2.5	2.5	Pass

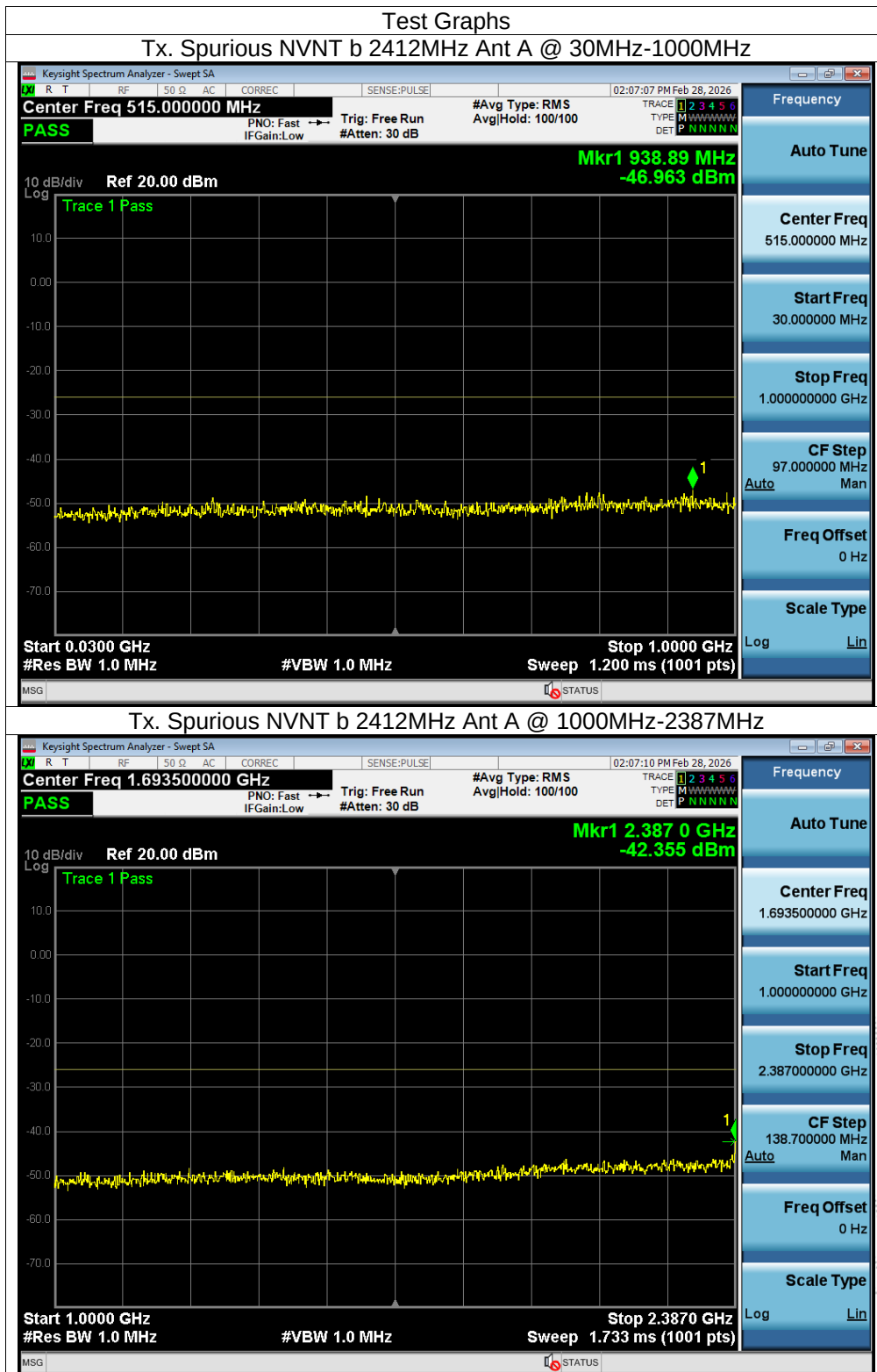
Antenna B

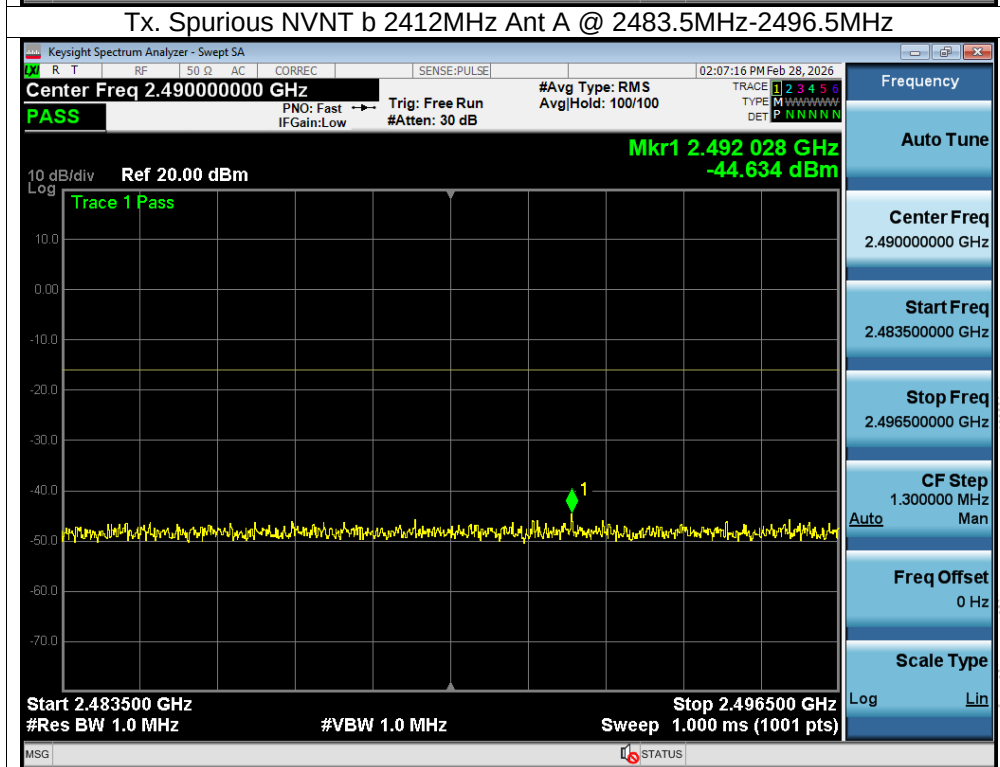
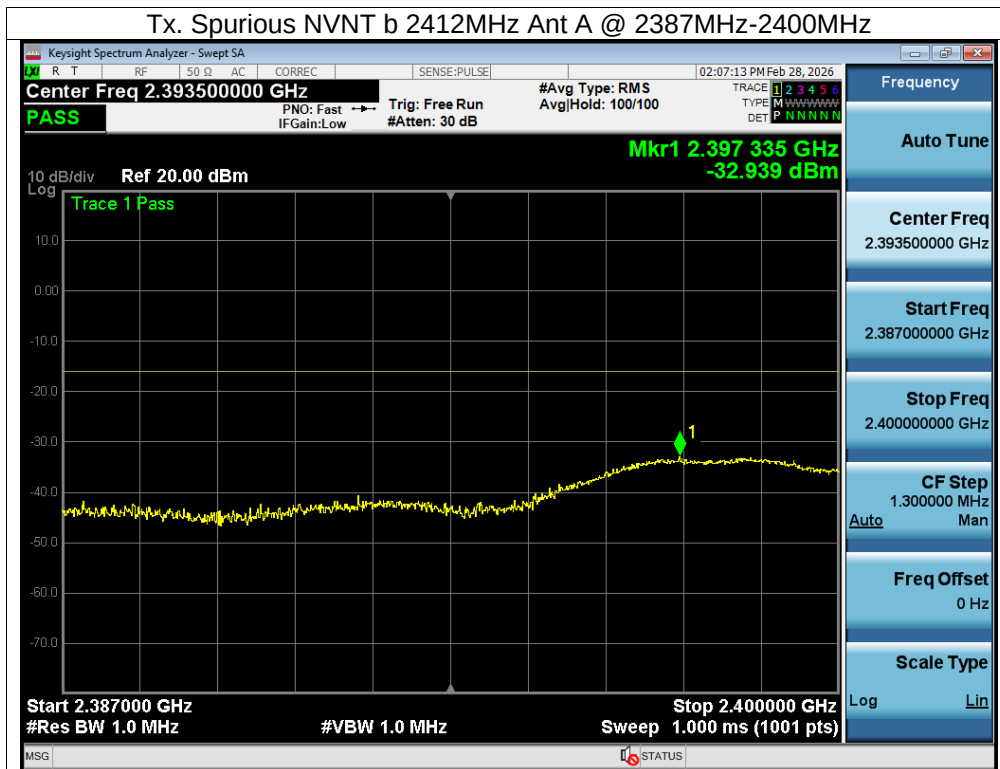
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (uW/MHz)	Max RMS Value (uW/MHz)	Limit Start (uW/MHz)	Limit Stop (uW/MHz)	Verdict
NVNT	b	2412	30-1000	787.57	-47.58	NA	0.0175	NA	2.5	2.5	Pass
NVNT	b	2412	1000-2387	2227.50	-44.98	NA	0.0318	NA	2.5	2.5	Pass
NVNT	b	2412	2387-2400	2398.21	-39.75	NA	0.1059	NA	25	25	Pass
NVNT	b	2412	2483.5-2496.5	2489.70	-45.42	NA	0.0287	NA	25	25	Pass
NVNT	b	2412	2496.5-13000	5490.00	-42.16	NA	0.0608	NA	2.5	2.5	Pass
NVNT	b	2442	30-1000	808.91	-47.54	NA	0.0176	NA	2.5	2.5	Pass
NVNT	b	2442	1000-2387	2380.07	-45.45	NA	0.0285	NA	2.5	2.5	Pass
NVNT	b	2442	2387-2400	2395.57	-45.49	NA	0.0282	NA	25	25	Pass
NVNT	b	2442	2483.5-2496.5	2490.27	-45.66	NA	0.0272	NA	25	25	Pass
NVNT	b	2442	2496.5-13000	12957.99	-42.41	NA	0.0574	NA	2.5	2.5	Pass
NVNT	b	2472	30-1000	716.76	-38.15	NA	0.1531	NA	2.5	2.5	Pass
NVNT	b	2472	1000-2387	2070.76	-45.63	NA	0.0274	NA	2.5	2.5	Pass
NVNT	b	2472	2387-2400	2395.05	-45.23	NA	0.03	NA	25	25	Pass
NVNT	b	2472	2483.5-2496.5	2486.84	-40.18	NA	0.0959	NA	25	25	Pass
NVNT	b	2472	2496.5-13000	4744.25	-42.24	NA	0.0597	NA	2.5	2.5	Pass
NVNT	g	2412	30-1000	975.75	-47.04	NA	0.0198	NA	2.5	2.5	Pass
NVNT	g	2412	1000-2387	2387.00	-42.35	NA	0.0582	NA	2.5	2.5	Pass
NVNT	g	2412	2387-2400	2399.45	-27.24	NA	1.888	NA	25	25	Pass
NVNT	g	2412	2483.5-2496.5	2490.74	-43.75	NA	0.0422	NA	25	25	Pass
NVNT	g	2412	2496.5-13000	5941.65	-42.21	NA	0.0601	NA	2.5	2.5	Pass
NVNT	g	2442	30-1000	988.36	-47.25	NA	0.0188	NA	2.5	2.5	Pass
NVNT	g	2442	1000-2387	2210.85	-45.04	NA	0.0313	NA	2.5	2.5	Pass
NVNT	g	2442	2387-2400	2388.78	-45.82	NA	0.0262	NA	25	25	Pass
NVNT	g	2442	2483.5-2496.5	2495.43	-45.31	NA	0.0294	NA	25	25	Pass
NVNT	g	2442	2496.5-13000	12989.50	-42.28	NA	0.0592	NA	2.5	2.5	Pass
NVNT	g	2472	30-1000	706.09	-44.06	NA	0.0393	NA	2.5	2.5	Pass
NVNT	g	2472	1000-2387	2231.66	-45.19	NA	0.0303	NA	2.5	2.5	Pass
NVNT	g	2472	2387-2400	2392.98	-45.51	NA	0.0281	NA	25	25	Pass
NVNT	g	2472	2483.5-2496.5	2490.49	-29.01	NA	1.256	NA	25	25	Pass
NVNT	g	2472	2496.5-13000	2496.50	-37.48	NA	0.1786	NA	2.5	2.5	Pass
NVNT	n20	2412	30-1000	974.78	-47.88	NA	0.0163	NA	2.5	2.5	Pass
NVNT	n20	2412	1000-2387	2367.58	-44.46	NA	0.0358	NA	2.5	2.5	Pass
NVNT	n20	2412	2387-2400	2399.70	-26.30	NA	2.3442	NA	25	25	Pass
NVNT	n20	2412	2483.5-2496.5	2495.55	-45.55	NA	0.0279	NA	25	25	Pass
NVNT	n20	2412	2496.5-13000	5605.54	-42.33	NA	0.0585	NA	2.5	2.5	Pass
NVNT	n20	2442	30-1000	872.93	-46.97	NA	0.0201	NA	2.5	2.5	Pass
NVNT	n20	2442	1000-2387	2374.52	-45.60	NA	0.0275	NA	2.5	2.5	Pass
NVNT	n20	2442	2387-2400	2388.46	-44.57	NA	0.0349	NA	25	25	Pass
NVNT	n20	2442	2483.5-2496.5	2493.84	-45.26	NA	0.0298	NA	25	25	Pass
NVNT	n20	2442	2496.5-13000	5038.35	-42.05	NA	0.0624	NA	2.5	2.5	Pass
NVNT	n20	2472	30-1000	829.28	-47.61	NA	0.0173	NA	2.5	2.5	Pass
NVNT	n20	2472	1000-2387	2041.64	-45.41	NA	0.0288	NA	2.5	2.5	Pass
NVNT	n20	2472	2387-2400	2398.23	-45.43	NA	0.0286	NA	25	25	Pass
NVNT	n20	2472	2483.5-2496.5	2483.51	-33.81	NA	0.4159	NA	25	25	Pass
NVNT	n20	2472	2496.5-13000	2496.50	-38.52	NA	0.1406	NA	2.5	2.5	Pass
NVNT	n40	2422	30-1000	907.85	-47.78	NA	0.0167	NA	2.5	2.5	Pass
NVNT	n40	2422	1000-2387	2387.00	-30.42	NA	0.9078	NA	2.5	2.5	Pass
NVNT	n40	2422	2387-2400	2400.00	-25.35	NA	2.9174	NA	25	25	Pass
NVNT	n40	2422	2483.5-2496.5	2486.52	-43.60	NA	0.0437	NA	25	25	Pass
NVNT	n40	2422	2496.5-13000	12842.45	-42.40	NA	0.0575	NA	2.5	2.5	Pass
NVNT	n40	2442	30-1000	826.37	-47.87	NA	0.0163	NA	2.5	2.5	Pass
NVNT	n40	2442	1000-2387	2384.23	-44.68	NA	0.034	NA	2.5	2.5	Pass
NVNT	n40	2442	2387-2400	2397.39	-34.62	NA	0.3451	NA	25	25	Pass
NVNT	n40	2442	2483.5-2496.5	2483.98	-36.02	NA	0.25	NA	25	25	Pass
NVNT	n40	2442	2496.5-13000	12411.80	-42.39	NA	0.0577	NA	2.5	2.5	Pass
NVNT	n40	2462	30-1000	705.12	-47.38	NA	0.0183	NA	2.5	2.5	Pass
NVNT	n40	2462	1000-2387	2330.13	-46.19	NA	0.024	NA	2.5	2.5	Pass
NVNT	n40	2462	2387-2400	2394.14	-43.16	NA	0.0483	NA	25	25	Pass
NVNT	n40	2462	2483.5-2496.5	2483.66	-23.71	NA	4.256	NA	25	25	Pass
NVNT	n40	2462	2496.5-13000	2507.00	-32.99	NA	0.5023	NA	2.5	2.5	Pass

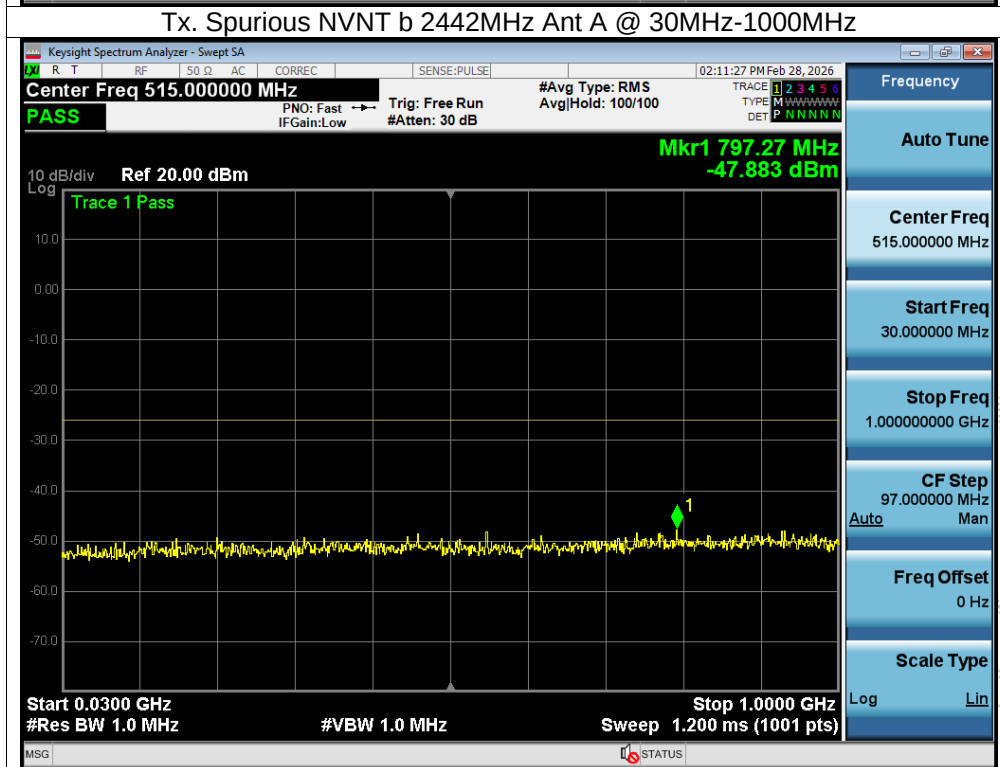
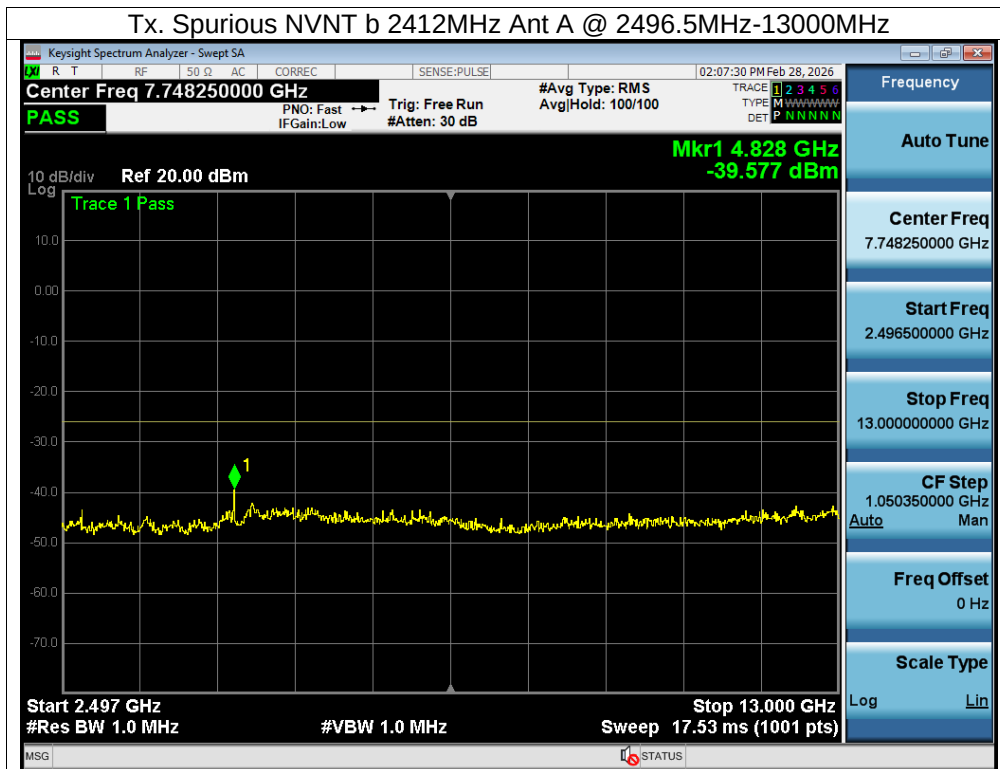
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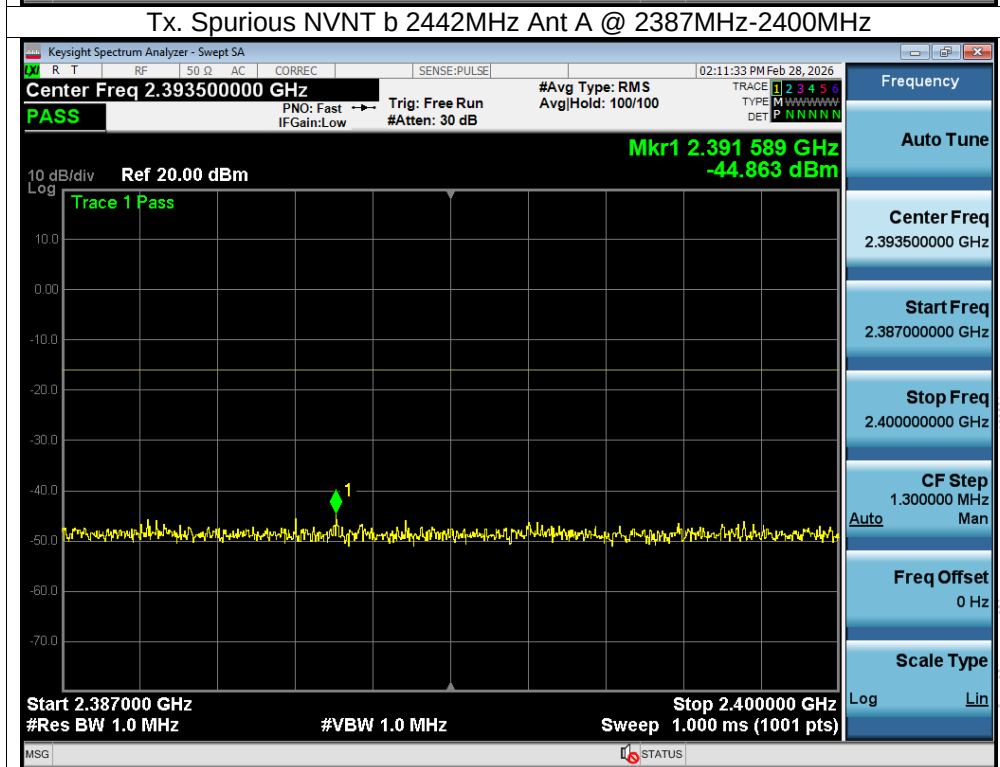
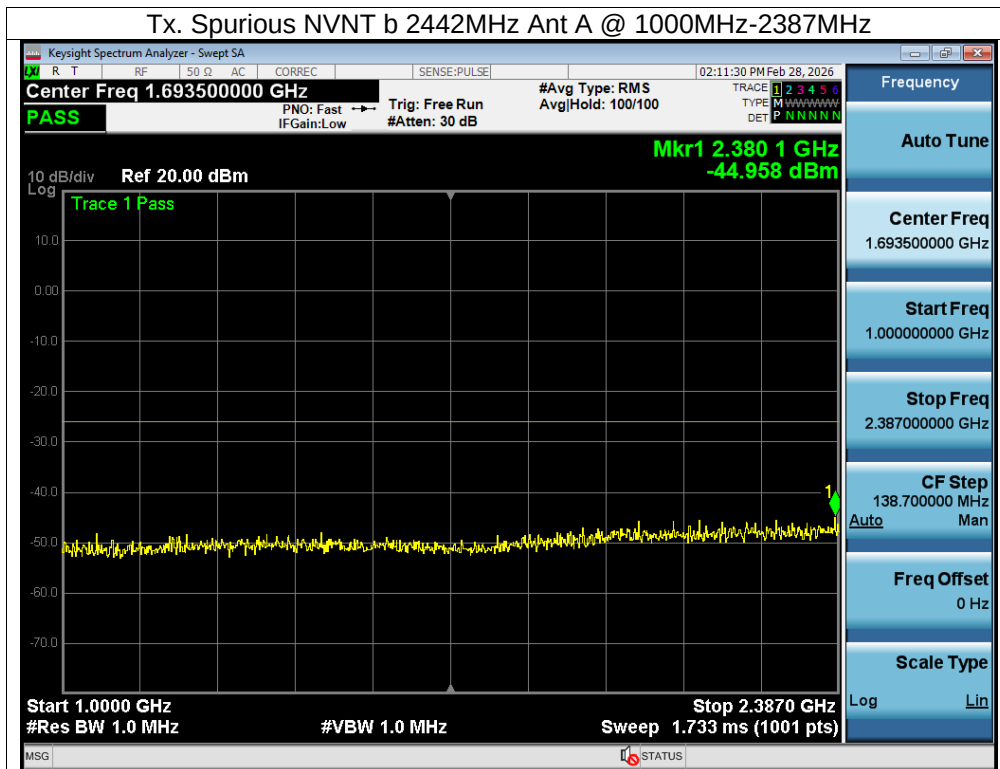
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (Uw/MHz)	Max RMS Value (uW/MHz)	Limit Start (uW/MHz)	Limit Stop (uW/MHz)	Verdict
NVNT	n20	2412	30-1000	730.92	-53.45	NA	0.0045	NA	2.5	2.5	Pass
NVNT	n20	2412	1000-2387	2386.45	-48.13	NA	0.0154	NA	2.5	2.5	Pass
NVNT	n20	2412	2387-2400	2395.89	-30.80	NA	0.8318	NA	25	25	Pass
NVNT	n20	2412	2483.5-2496.5	2490.46	-54.30	NA	0.0037	NA	25	25	Pass
NVNT	n20	2412	2496.5-13000	4817.77	-49.27	NA	0.0118	NA	2.5	2.5	Pass
NVNT	n20	2442	30-1000	898.64	-58.07	NA	0.0016	NA	2.5	2.5	Pass
NVNT	n20	2442	1000-2387	2270.08	-55.40	NA	0.0029	NA	2.5	2.5	Pass
NVNT	n20	2442	2387-2400	2399.31	-52.32	NA	0.0059	NA	25	25	Pass
NVNT	n20	2442	2483.5-2496.5	2483.95	-52.38	NA	0.0058	NA	25	25	Pass
NVNT	n20	2442	2496.5-13000	7322.86	-49.39	NA	0.0115	NA	2.5	2.5	Pass
NVNT	n20	2472	30-1000	922.11	-57.87	NA	0.0016	NA	2.5	2.5	Pass
NVNT	n20	2472	1000-2387	2350.52	-55.06	NA	0.0031	NA	2.5	2.5	Pass
NVNT	n20	2472	2387-2400	2391.76	-54.28	NA	0.0037	NA	25	25	Pass
NVNT	n20	2472	2483.5-2496.5	2488.89	-31.81	NA	0.6592	NA	25	25	Pass
NVNT	n20	2472	2496.5-13000	2496.50	-45.26	NA	0.0298	NA	2.5	2.5	Pass
NVNT	n40	2422	30-1000	906.20	-57.70	NA	0.0017	NA	2.5	2.5	Pass
NVNT	n40	2422	1000-2387	2387.00	-40.26	NA	0.0942	NA	2.5	2.5	Pass
NVNT	n40	2422	2387-2400	2396.71	-28.09	NA	1.5524	NA	25	25	Pass
NVNT	n40	2422	2483.5-2496.5	2483.54	-42.33	NA	0.0585	NA	25	25	Pass
NVNT	n40	2422	2496.5-13000	2496.50	-49.43	NA	0.0114	NA	2.5	2.5	Pass
NVNT	n40	2442	30-1000	731.21	-57.87	NA	0.0016	NA	2.5	2.5	Pass
NVNT	n40	2442	1000-2387	2386.86	-50.70	NA	0.0085	NA	2.5	2.5	Pass
NVNT	n40	2442	2387-2400	2396.08	-38.09	NA	0.1552	NA	25	25	Pass
NVNT	n40	2442	2483.5-2496.5	2483.59	-27.37	NA	1.8323	NA	25	25	Pass
NVNT	n40	2442	2496.5-13000	2498.60	-43.38	NA	0.0459	NA	2.5	2.5	Pass
NVNT	n40	2462	30-1000	729.08	-52.86	NA	0.0052	NA	2.5	2.5	Pass
NVNT	n40	2462	1000-2387	2380.90	-55.25	NA	0.003	NA	2.5	2.5	Pass
NVNT	n40	2462	2387-2400	2399.06	-45.49	NA	0.0282	NA	25	25	Pass
NVNT	n40	2462	2483.5-2496.5	2483.50	-27.41	NA	1.8155	NA	25	25	Pass
NVNT	n40	2462	2496.5-13000	2499.65	-29.99	NA	1.0023	NA	2.5	2.5	Pass

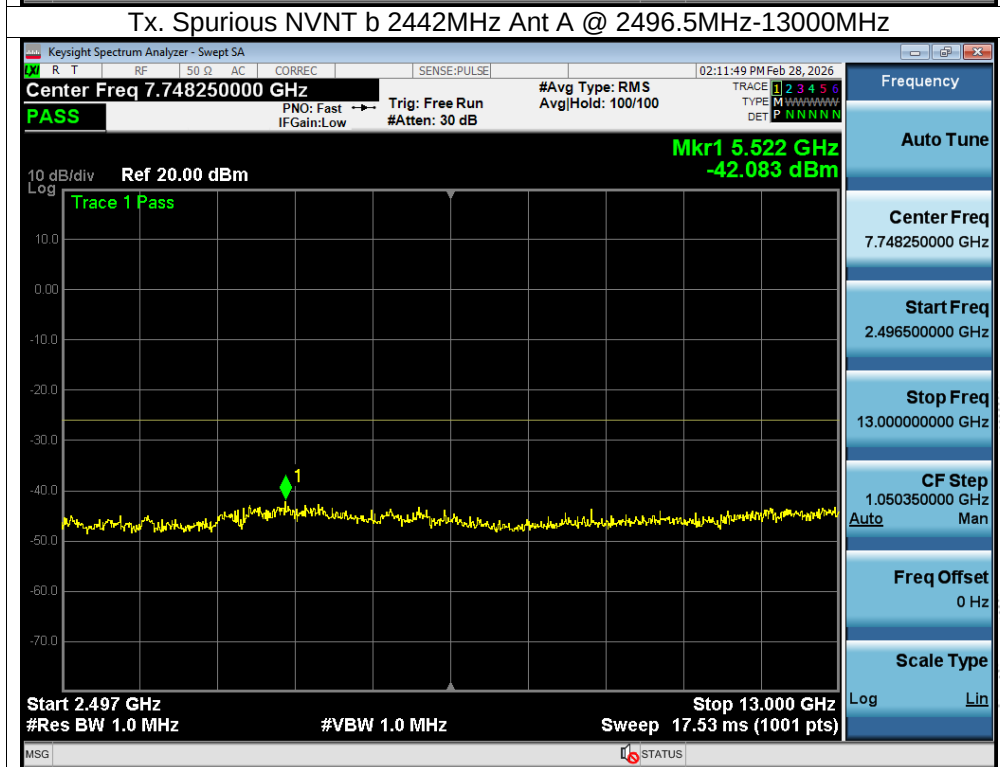
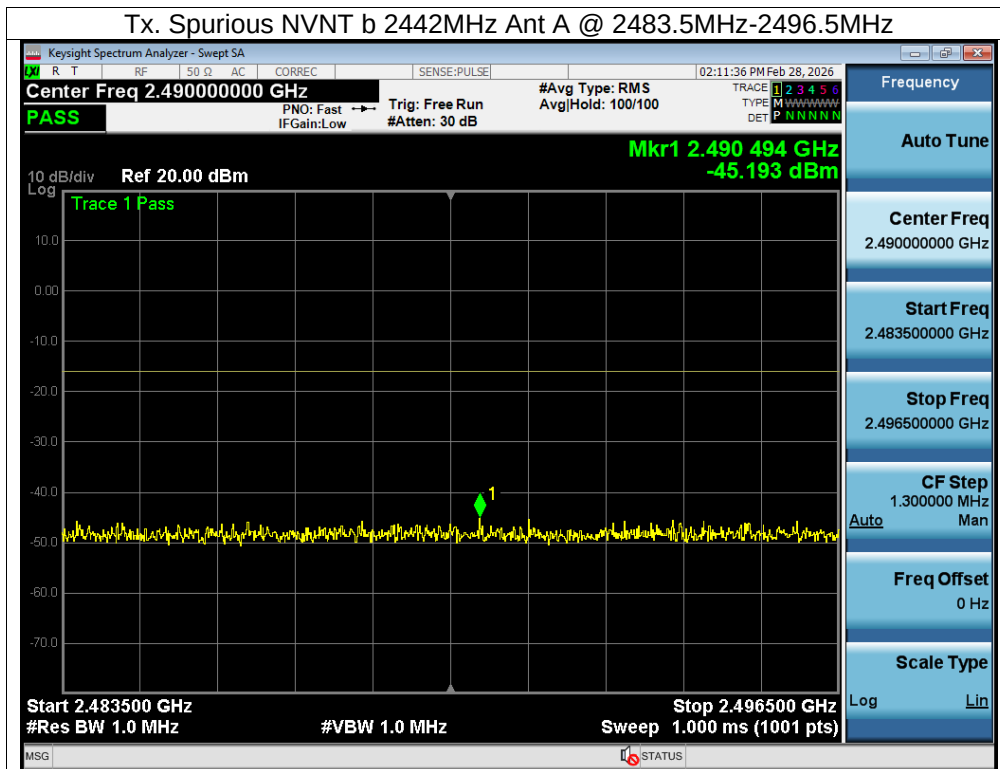
BCTC CO., LTD

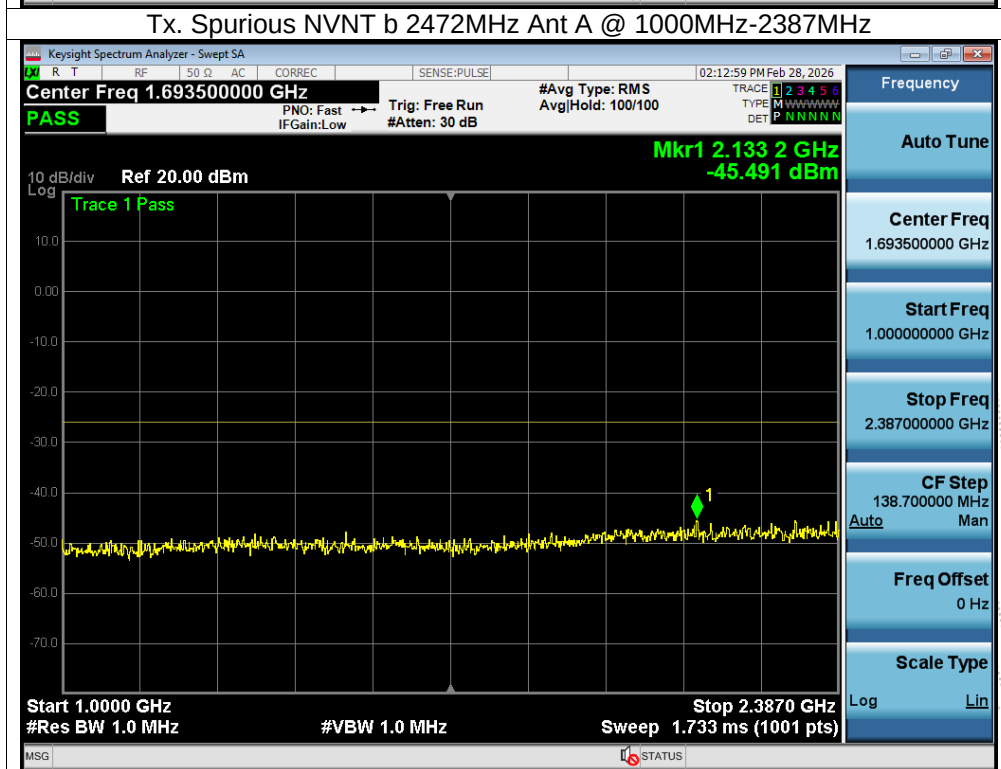
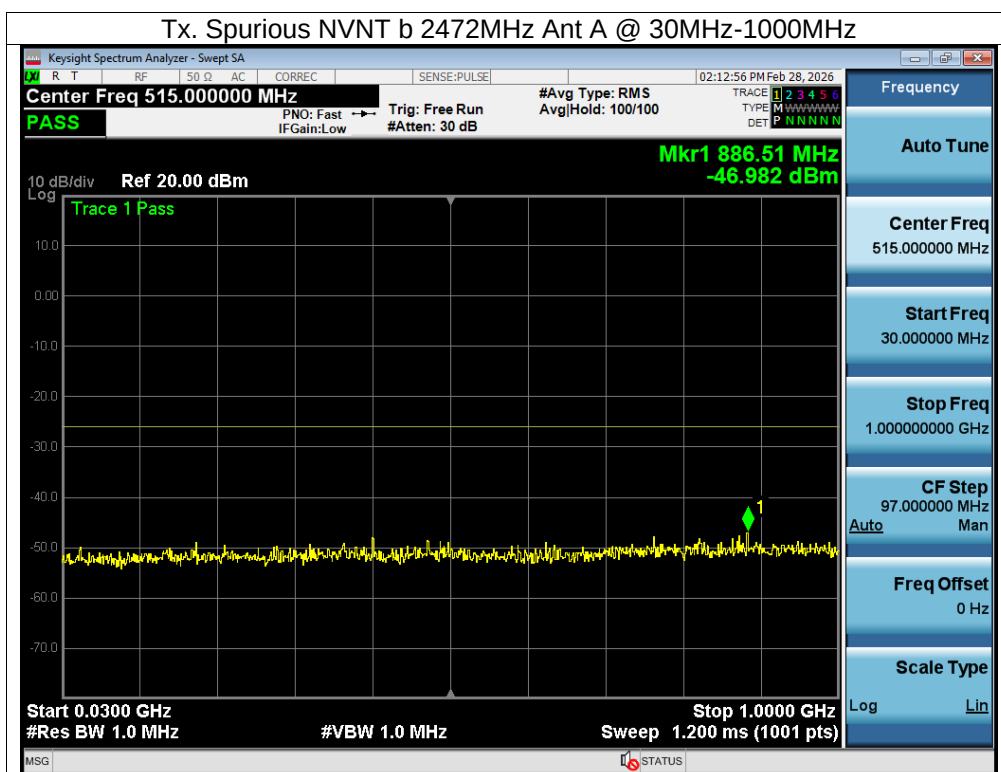




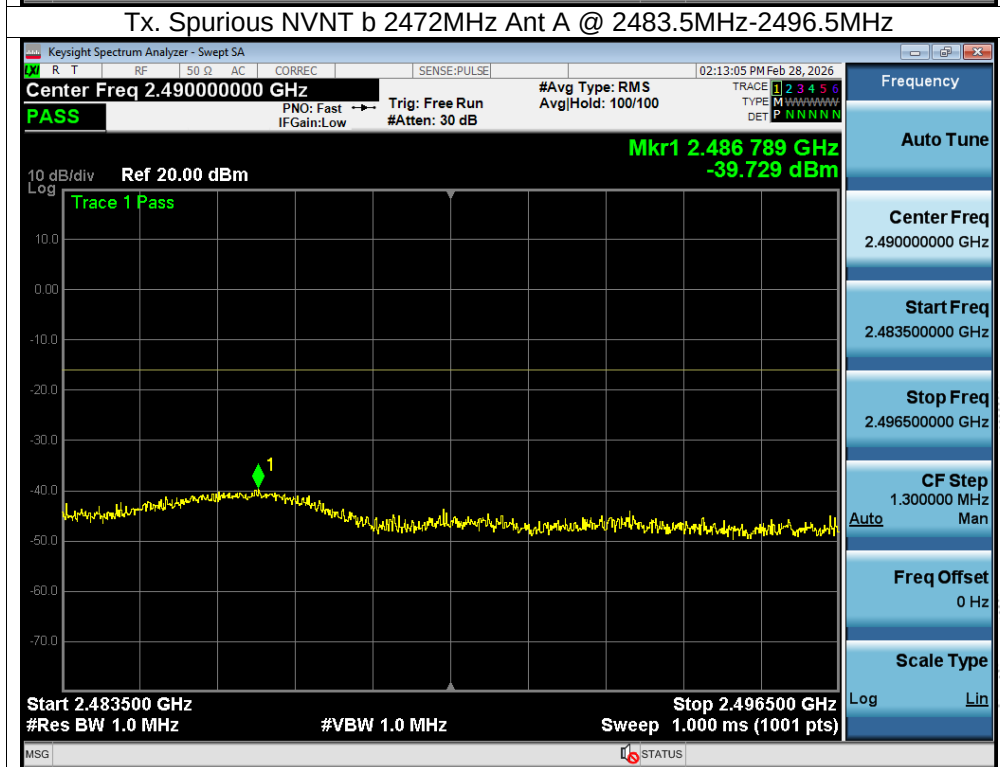
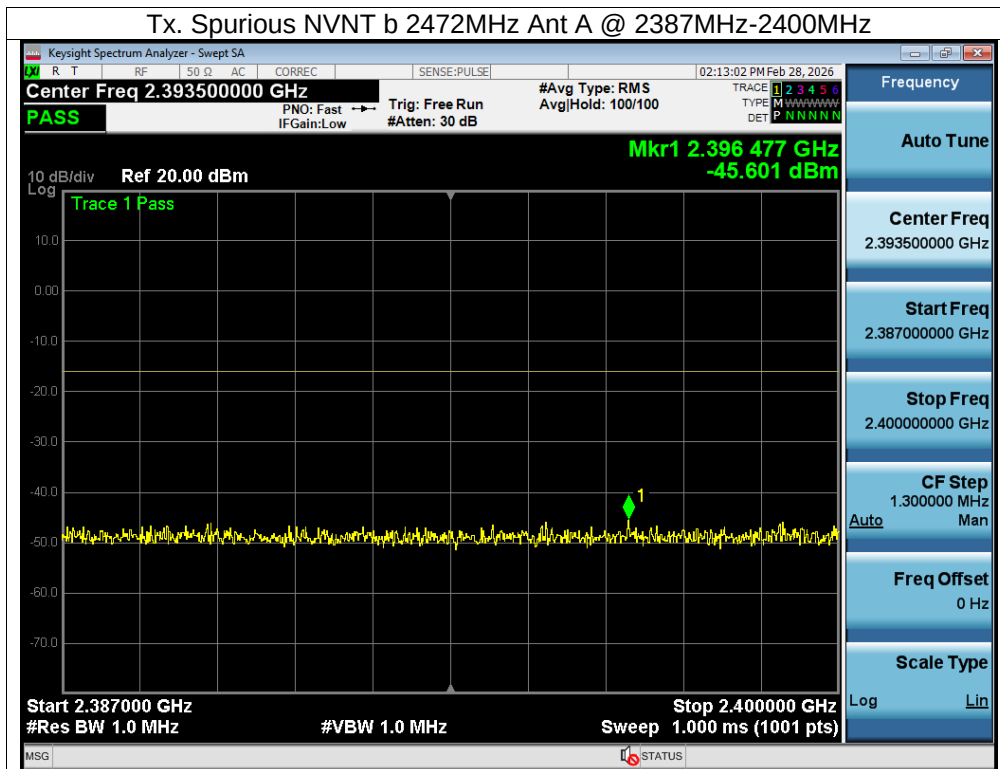


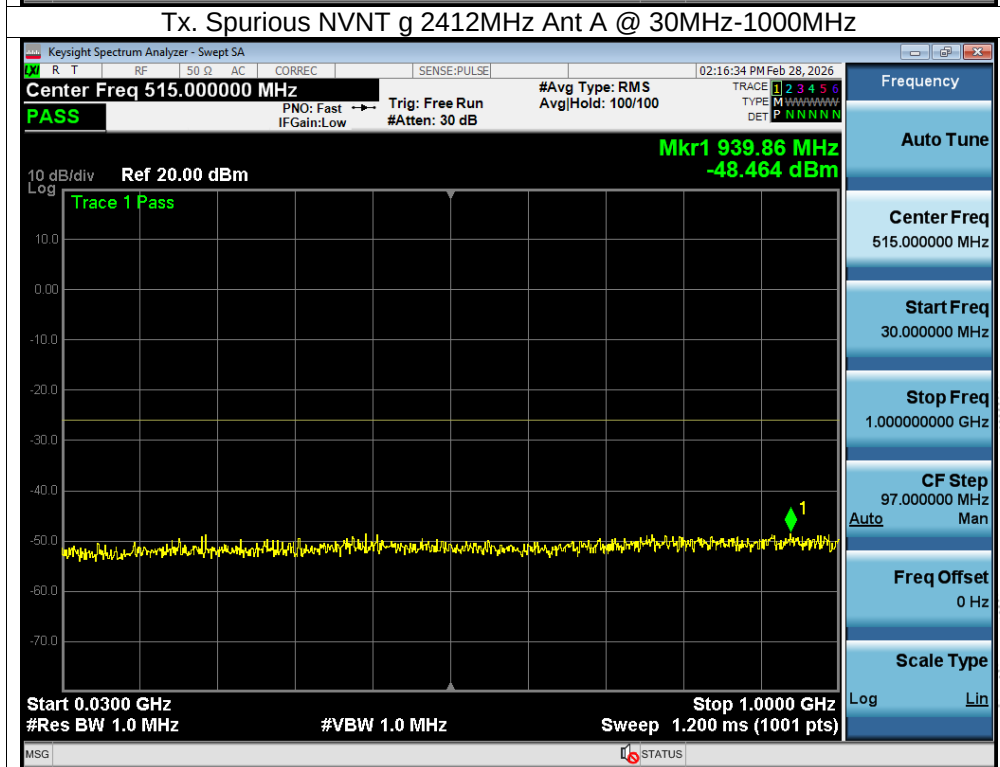
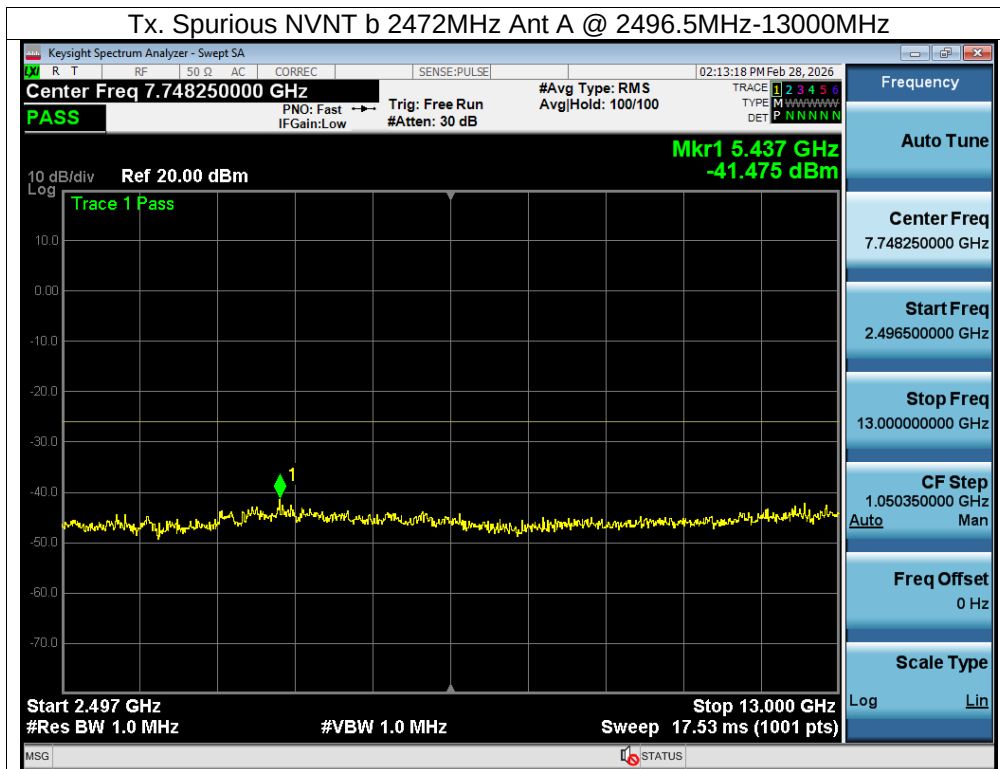


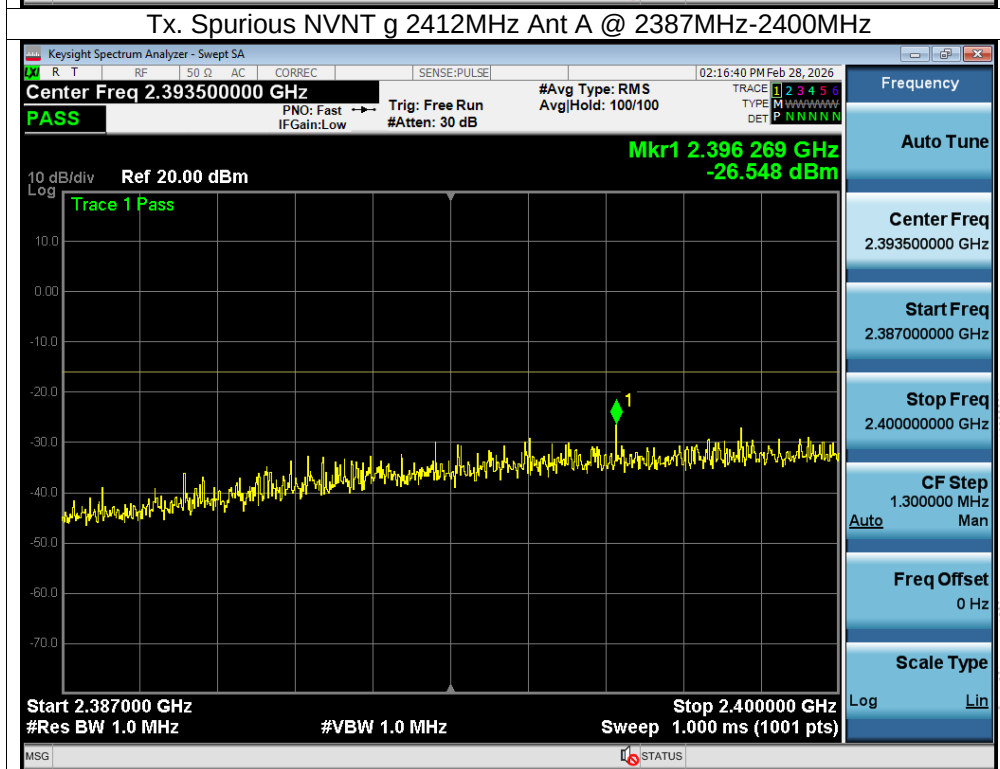
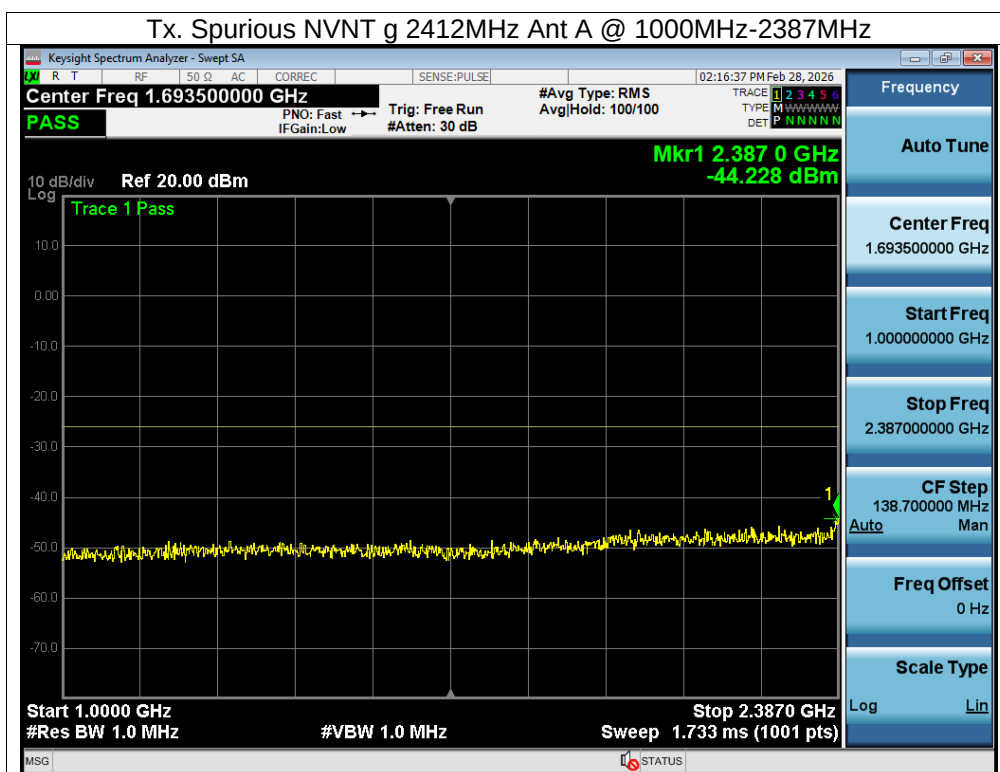


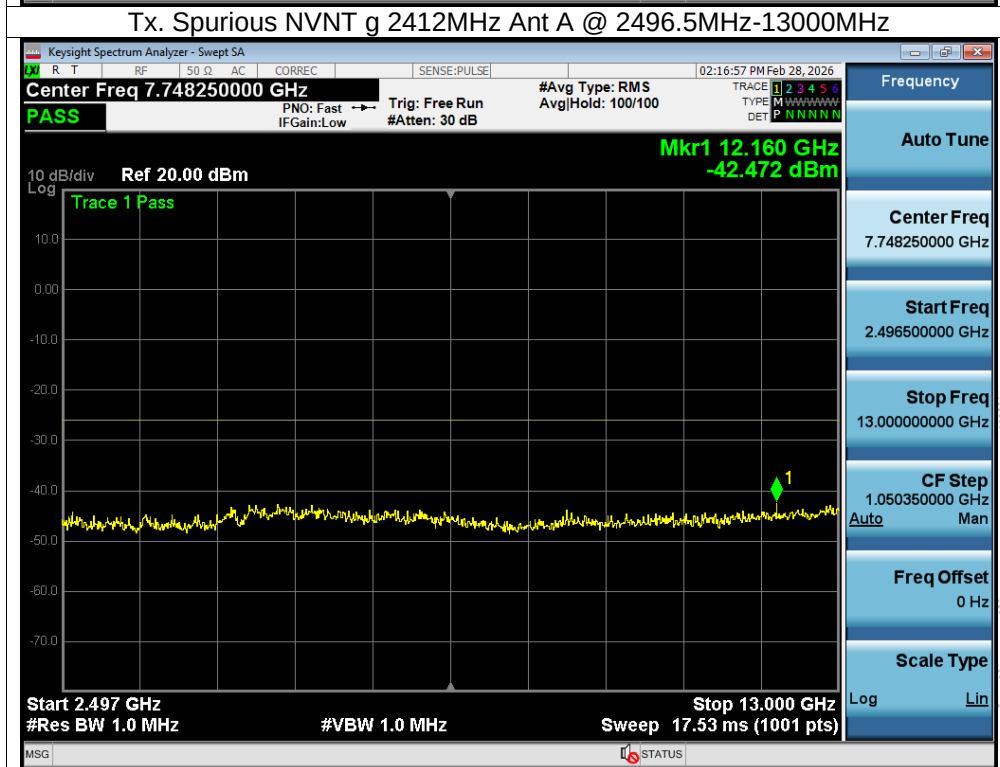
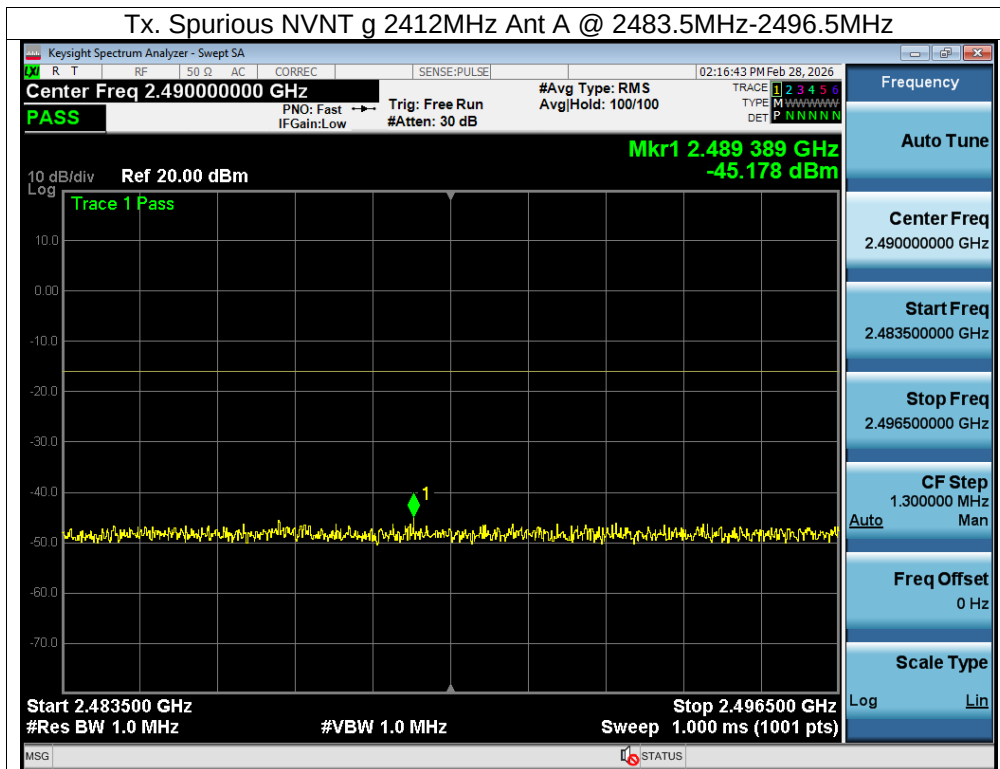


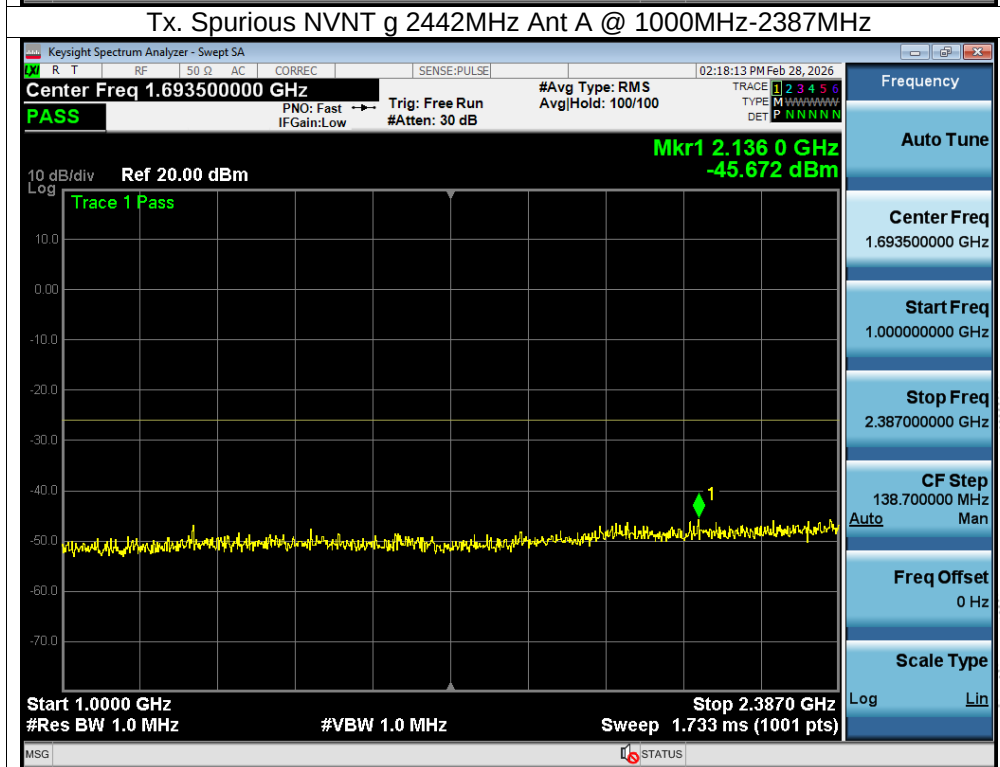
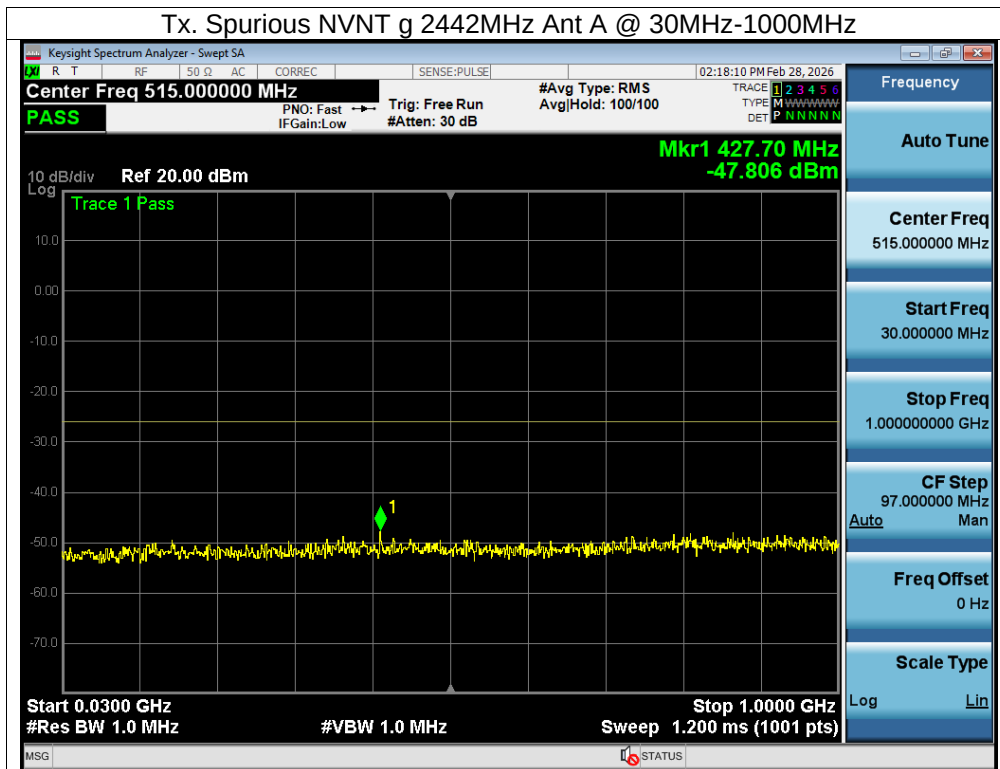
KJ CO., LTD

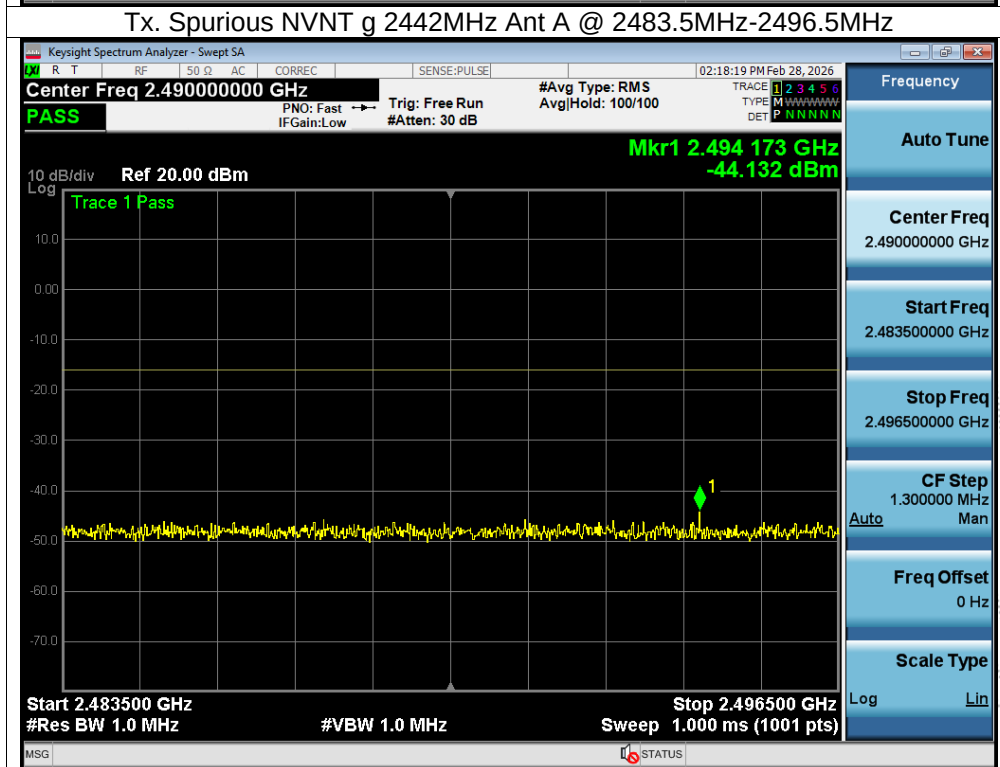
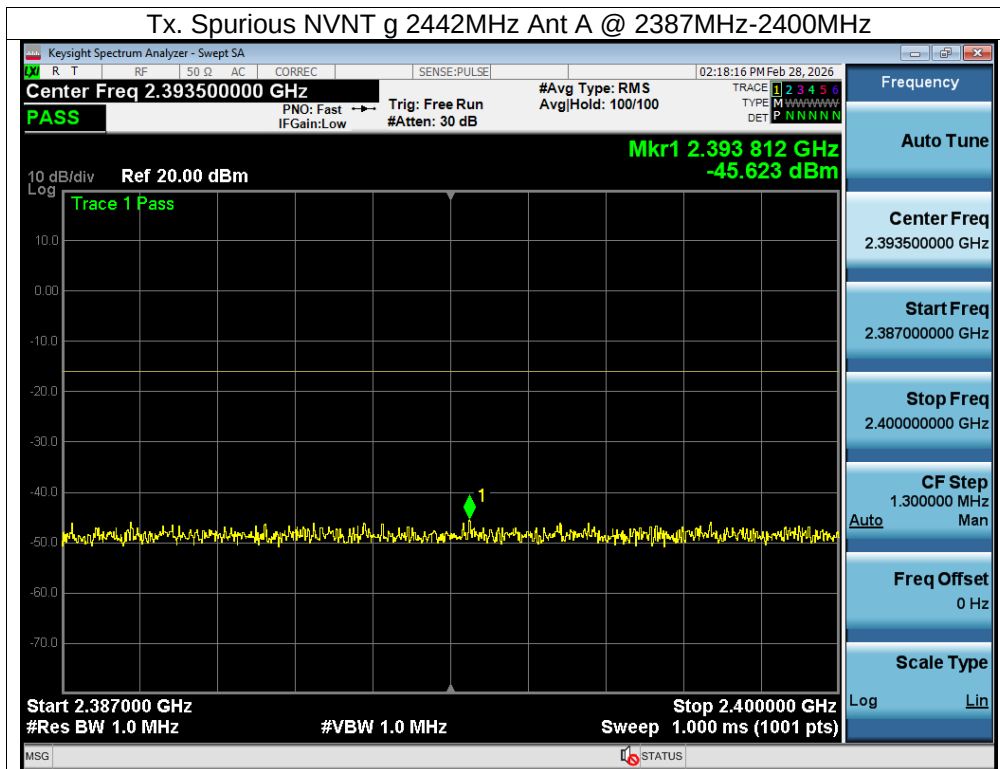


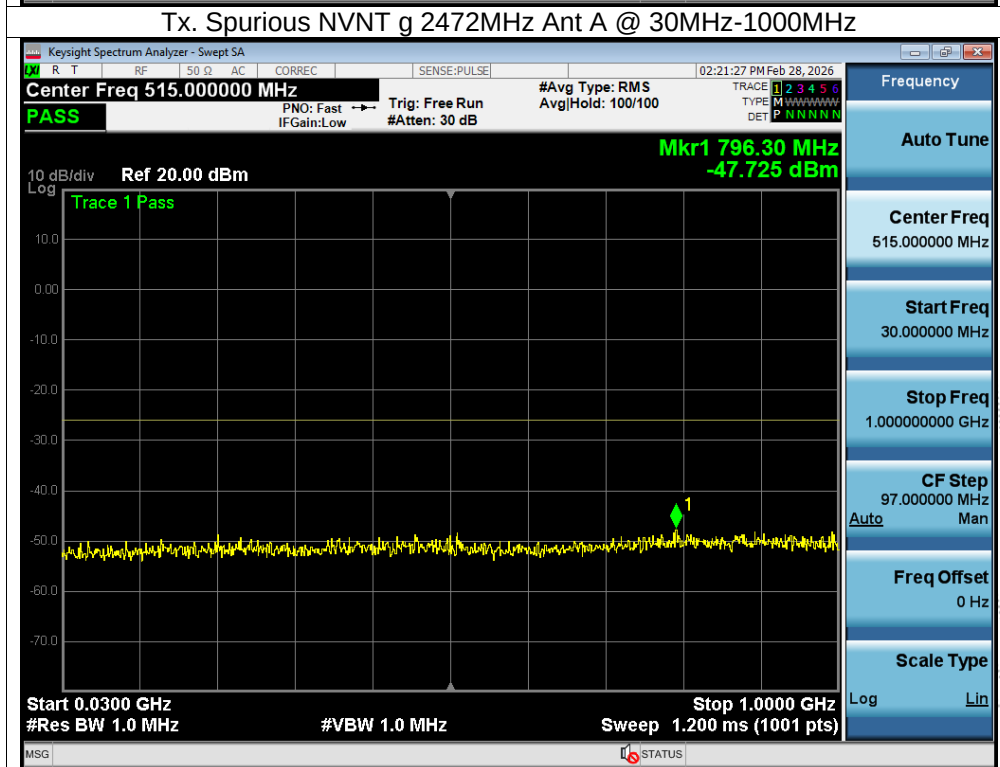
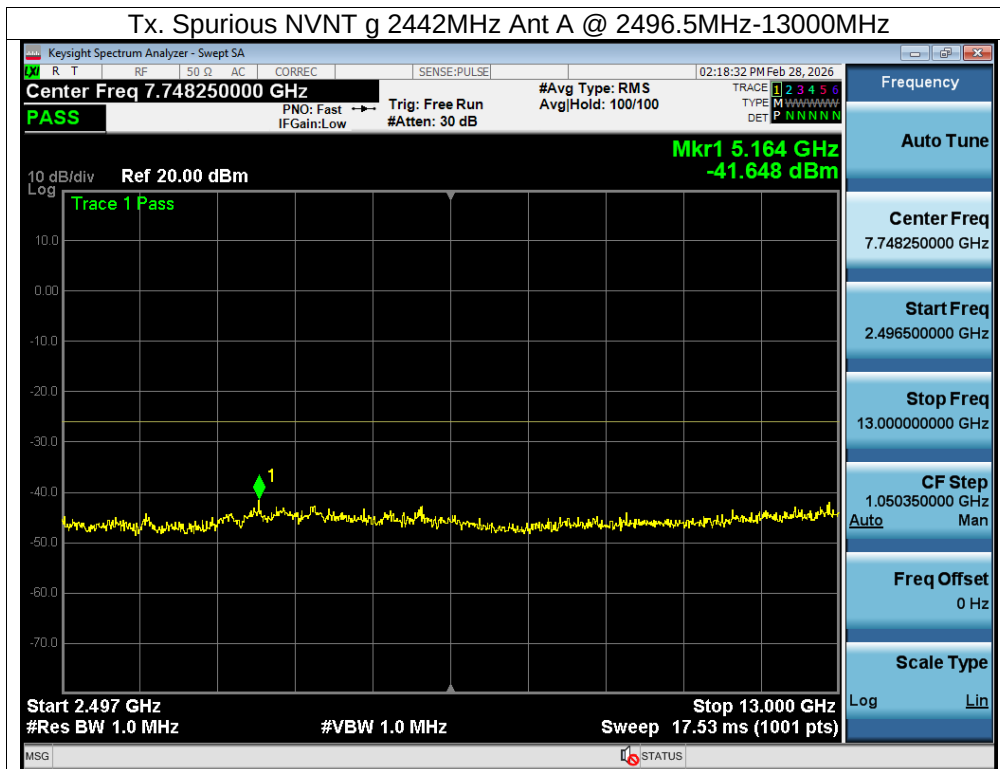


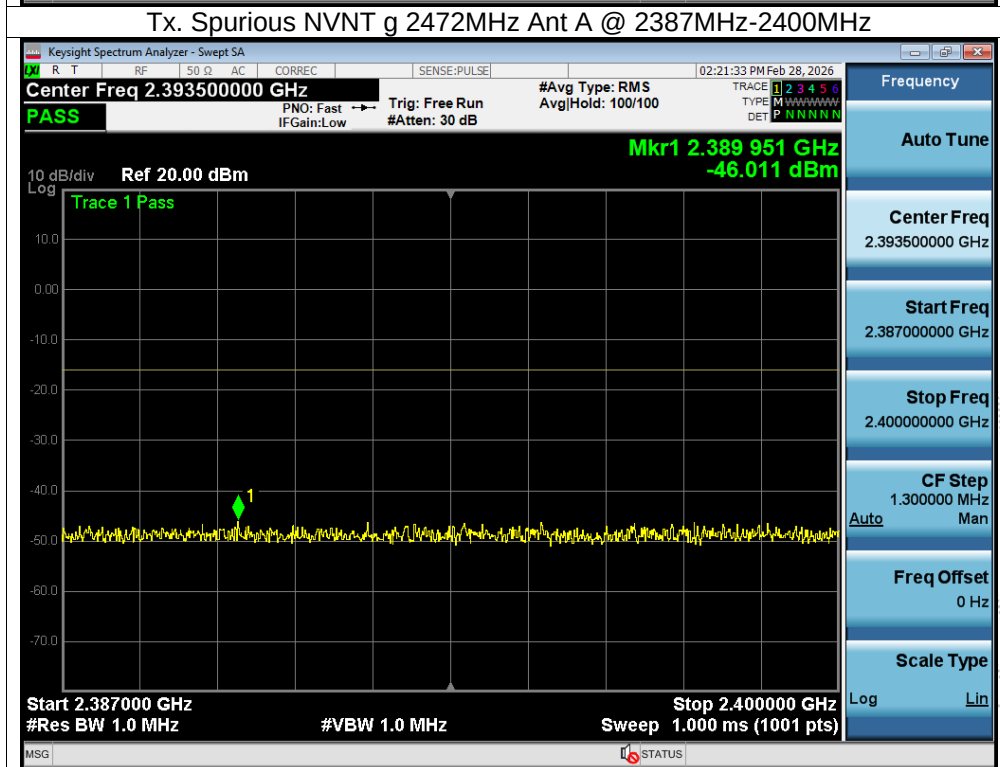
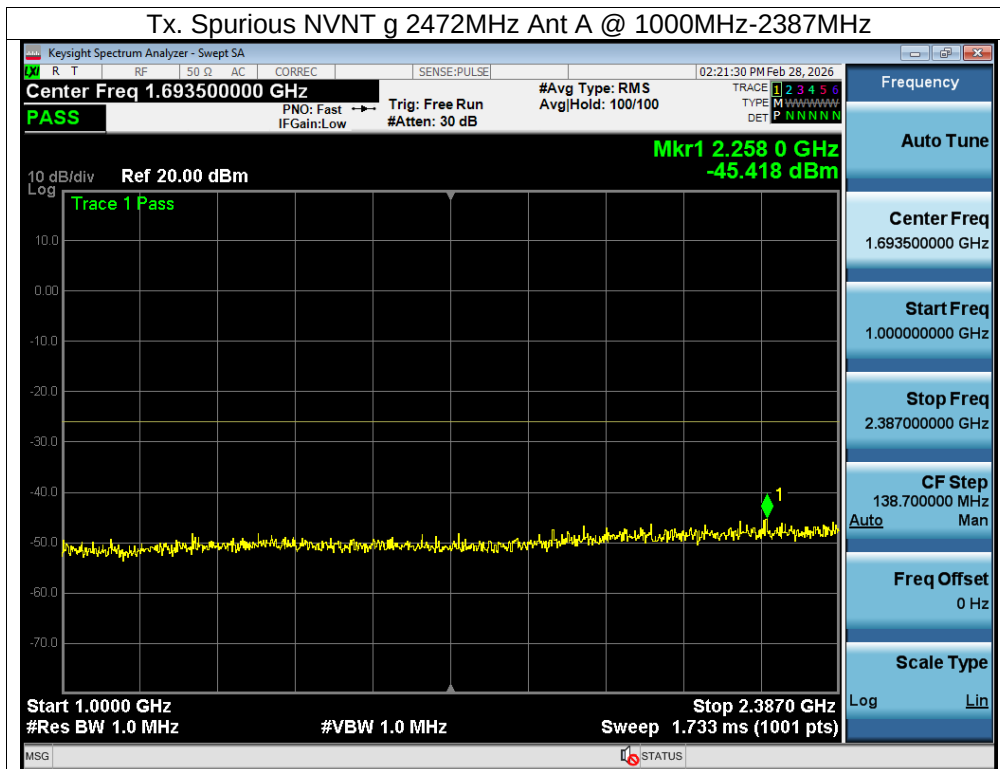


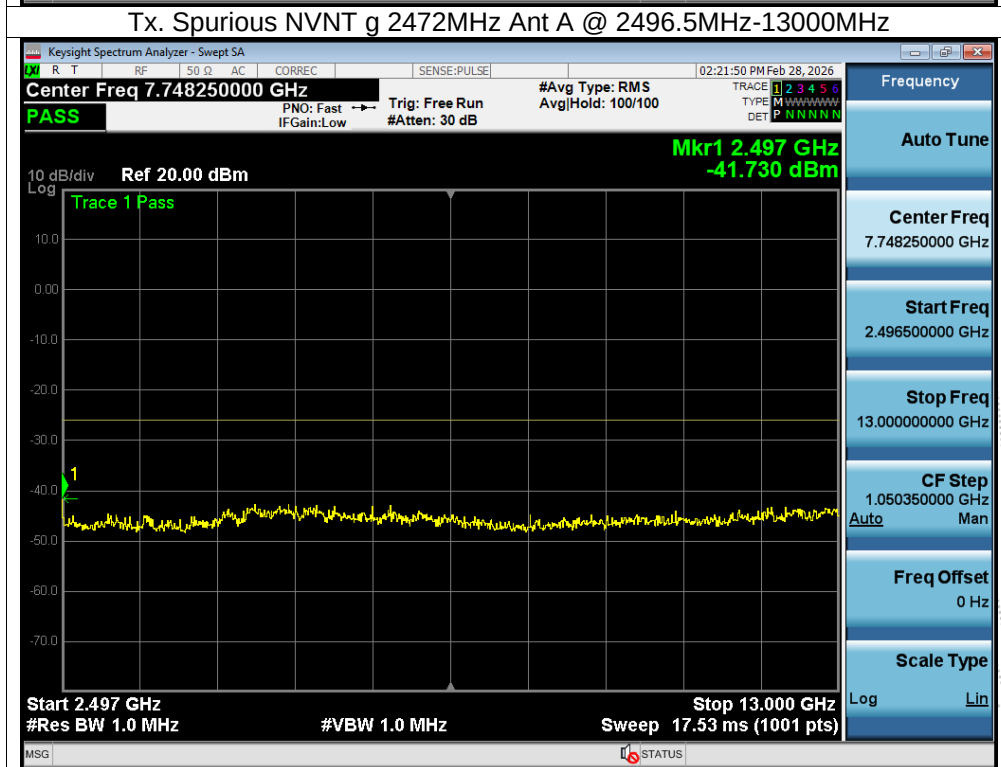
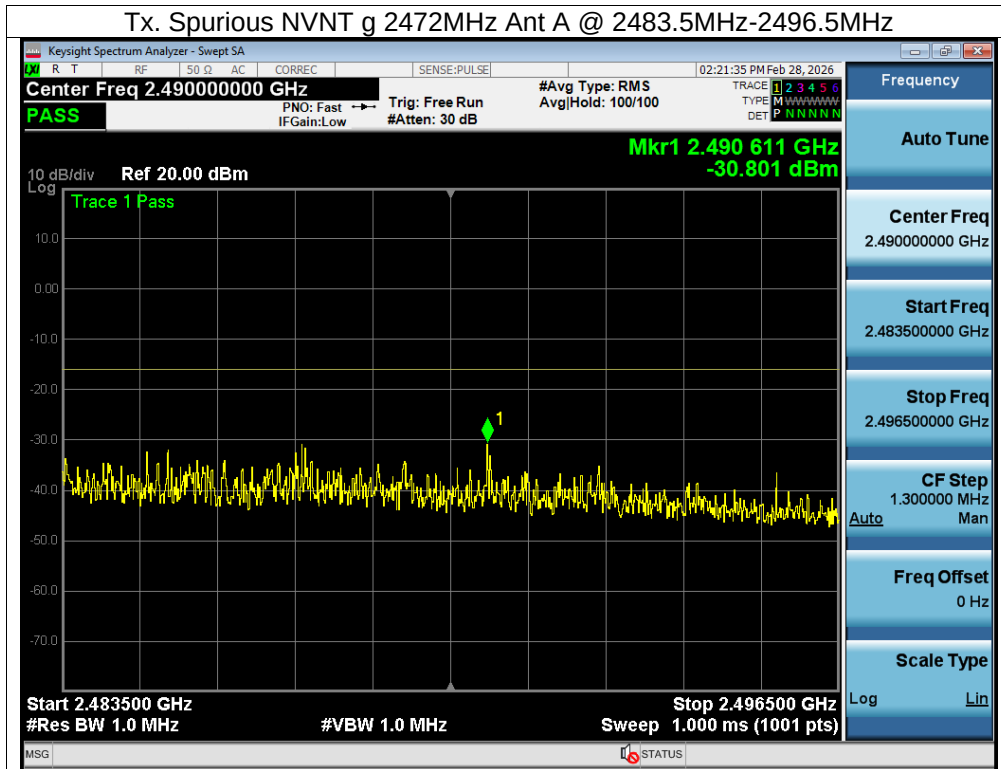


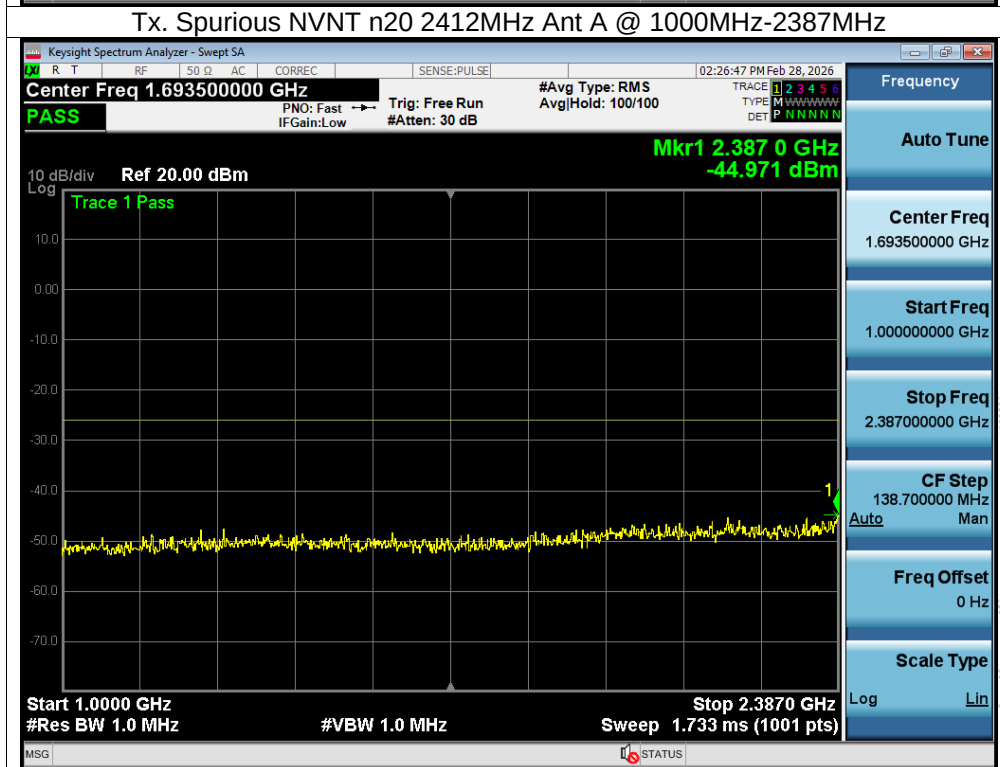
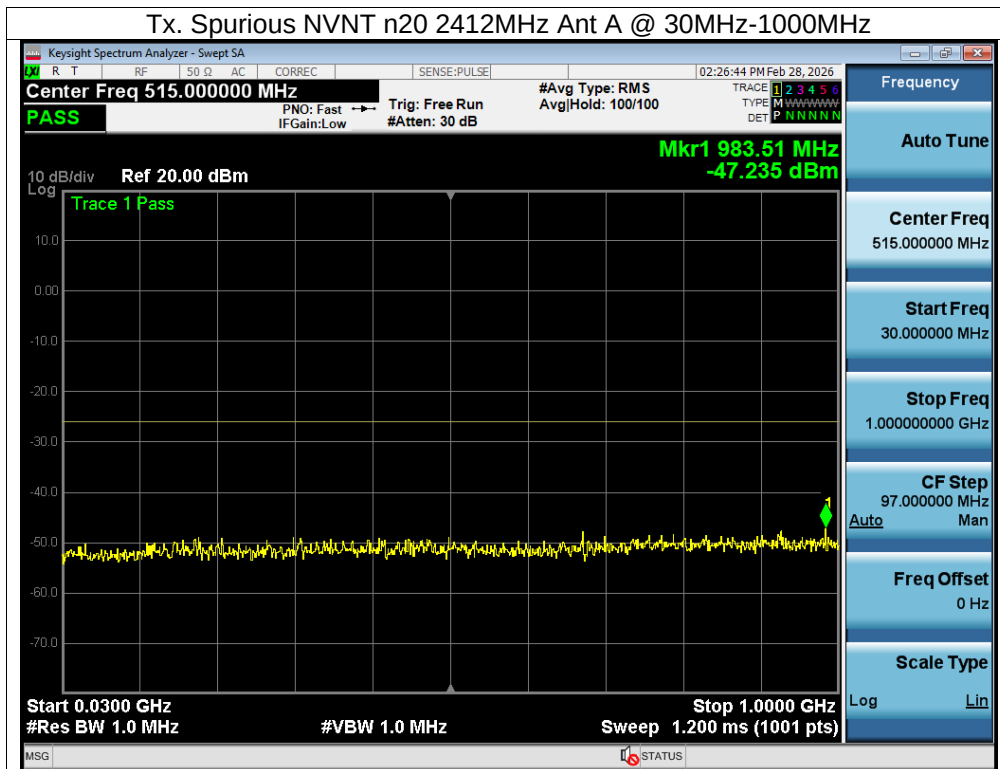


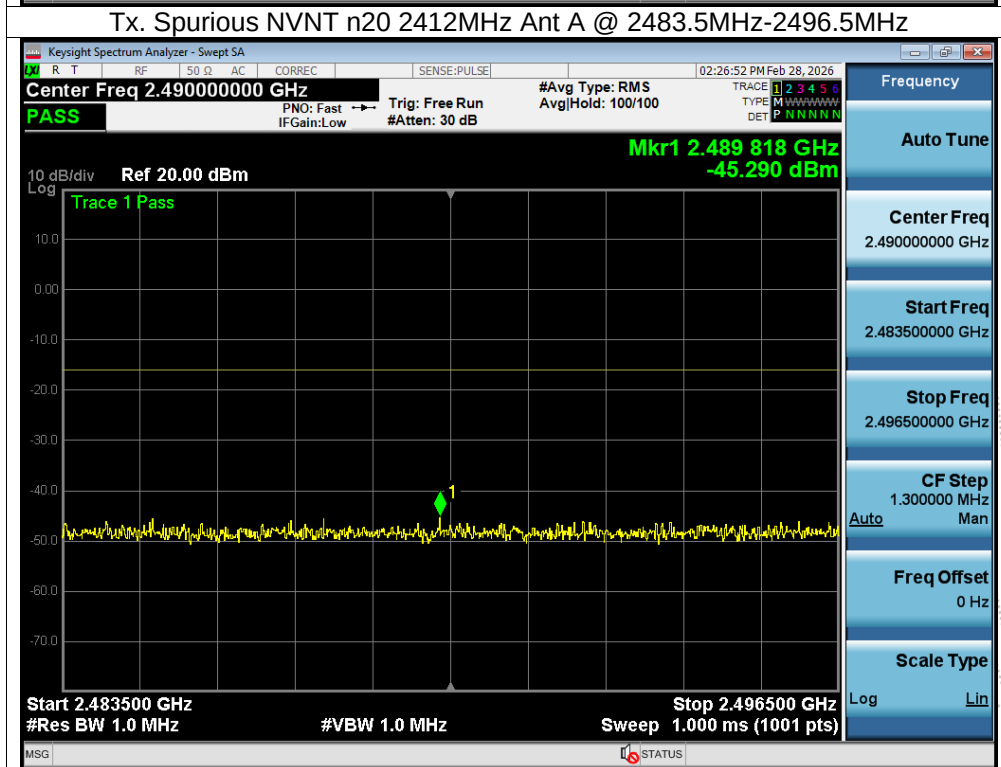
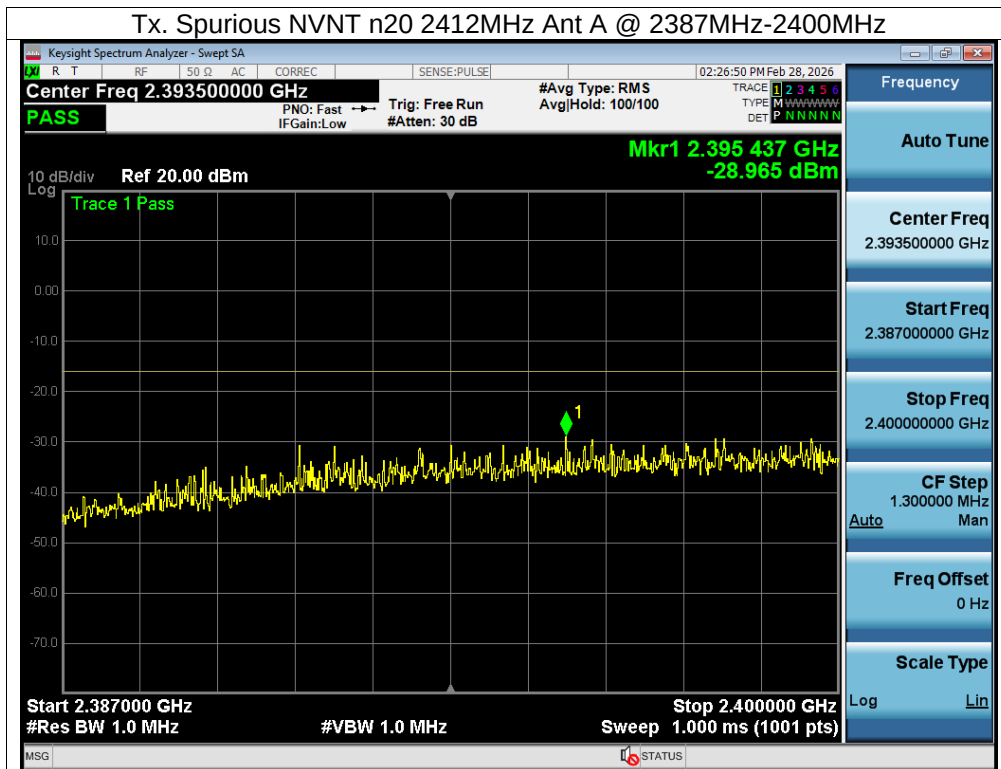


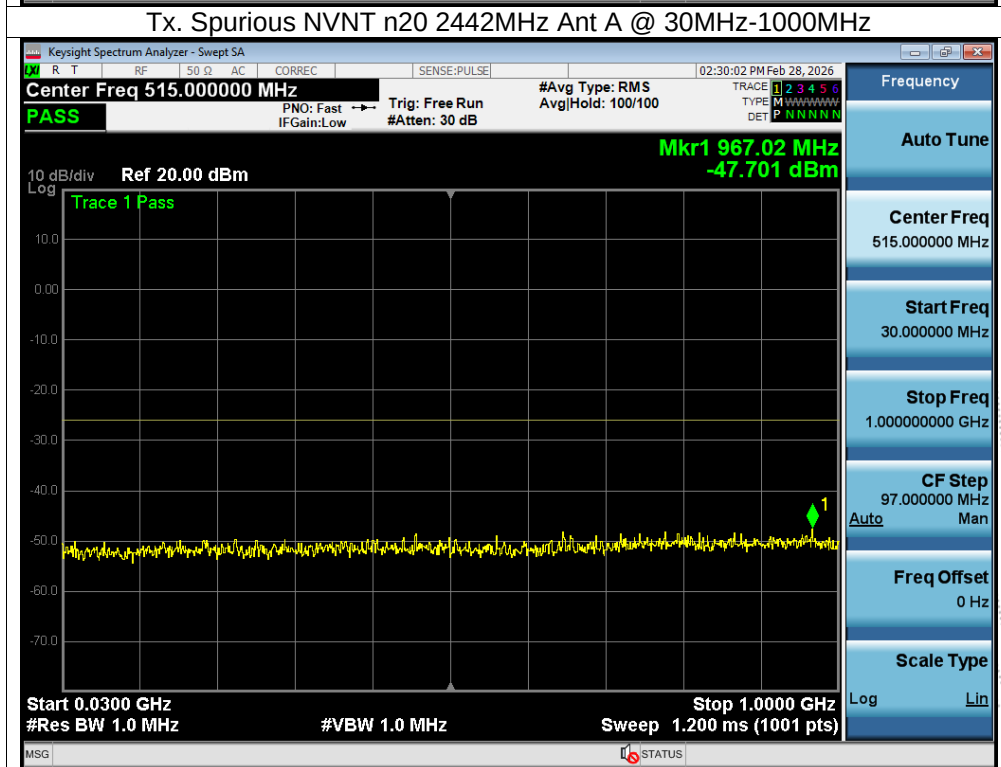
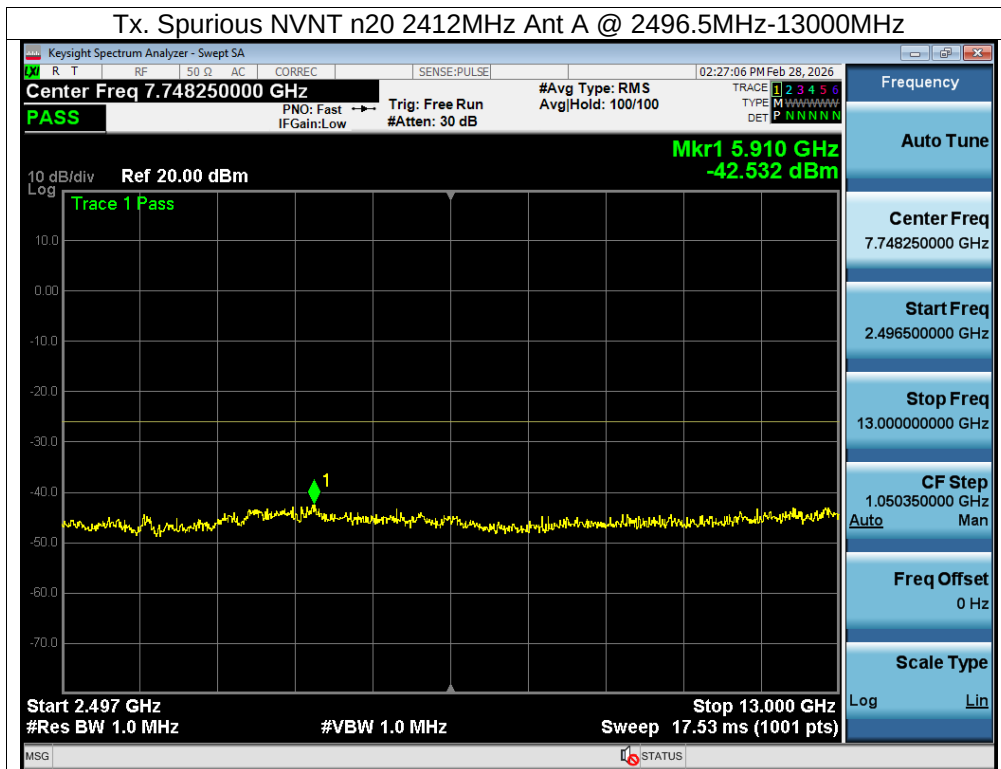


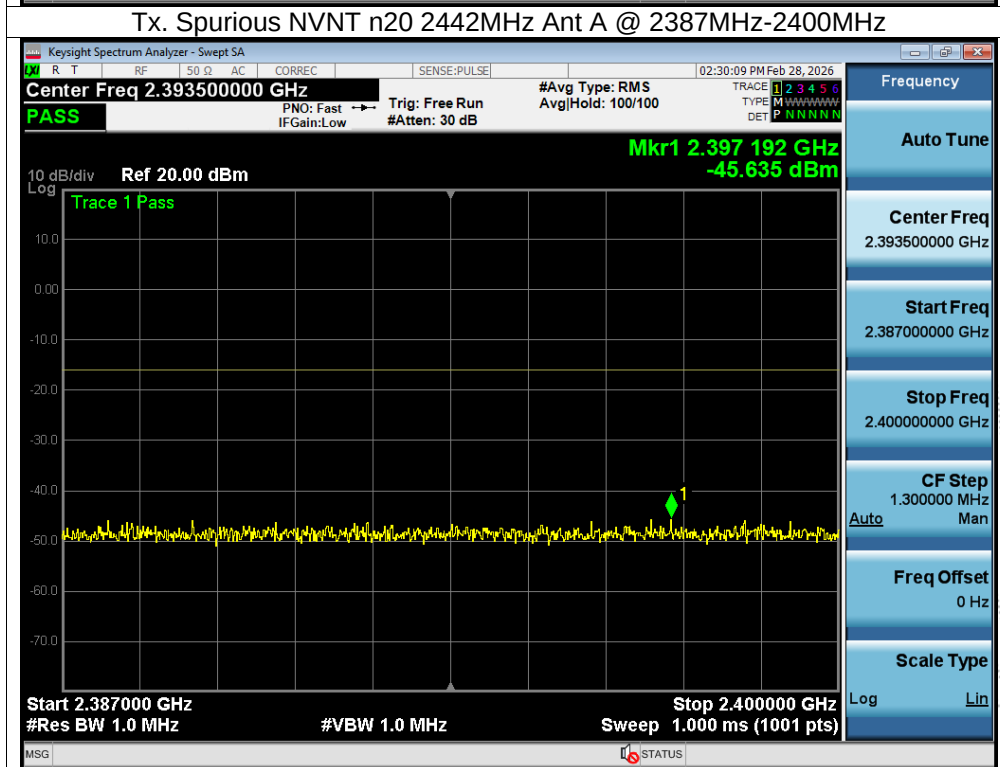
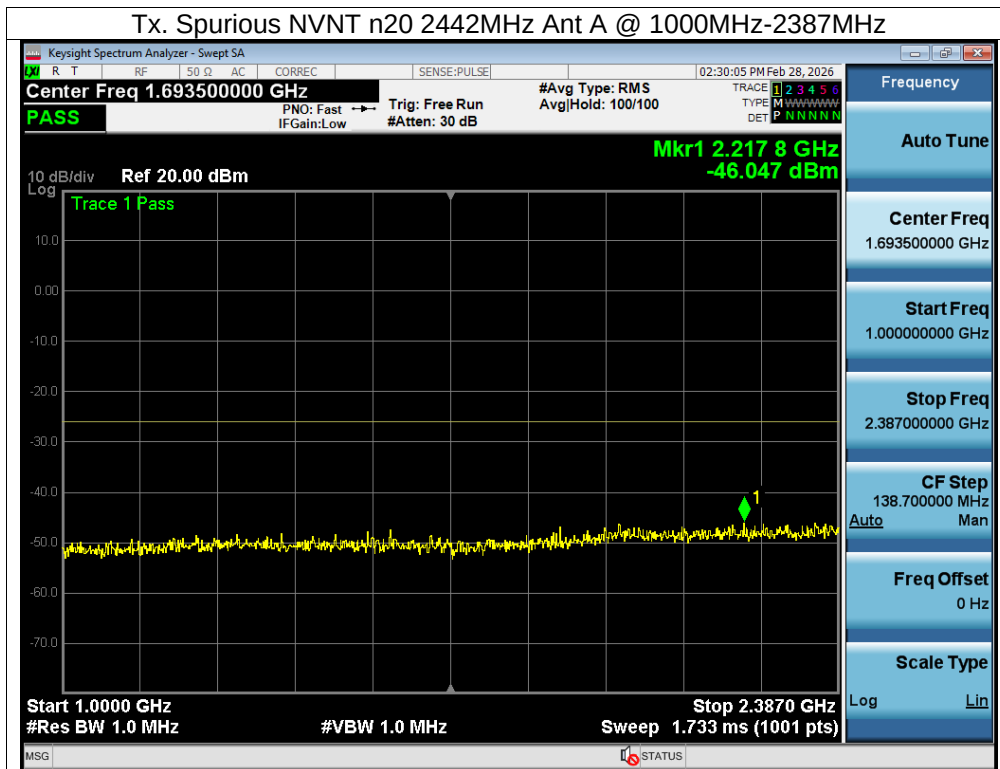


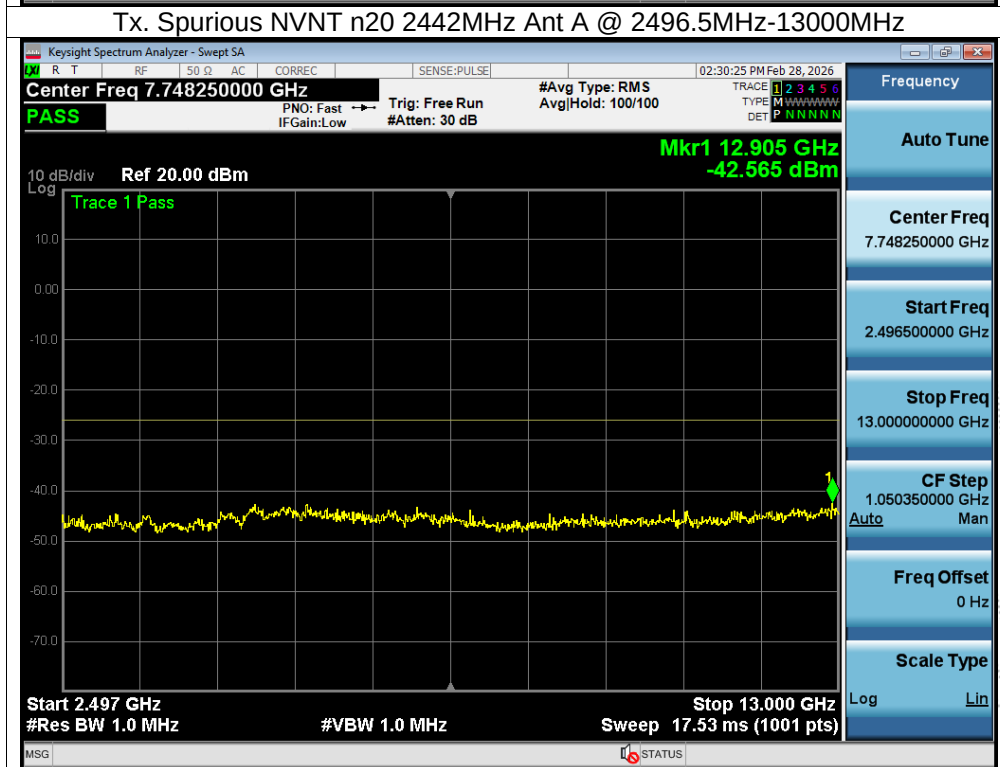
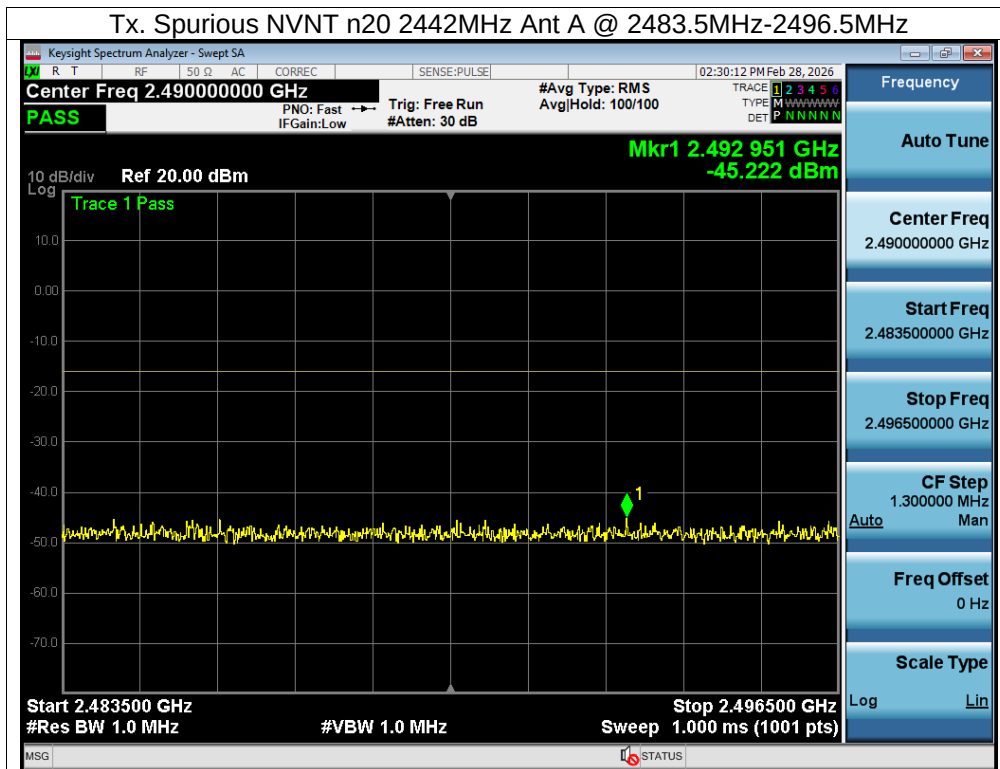


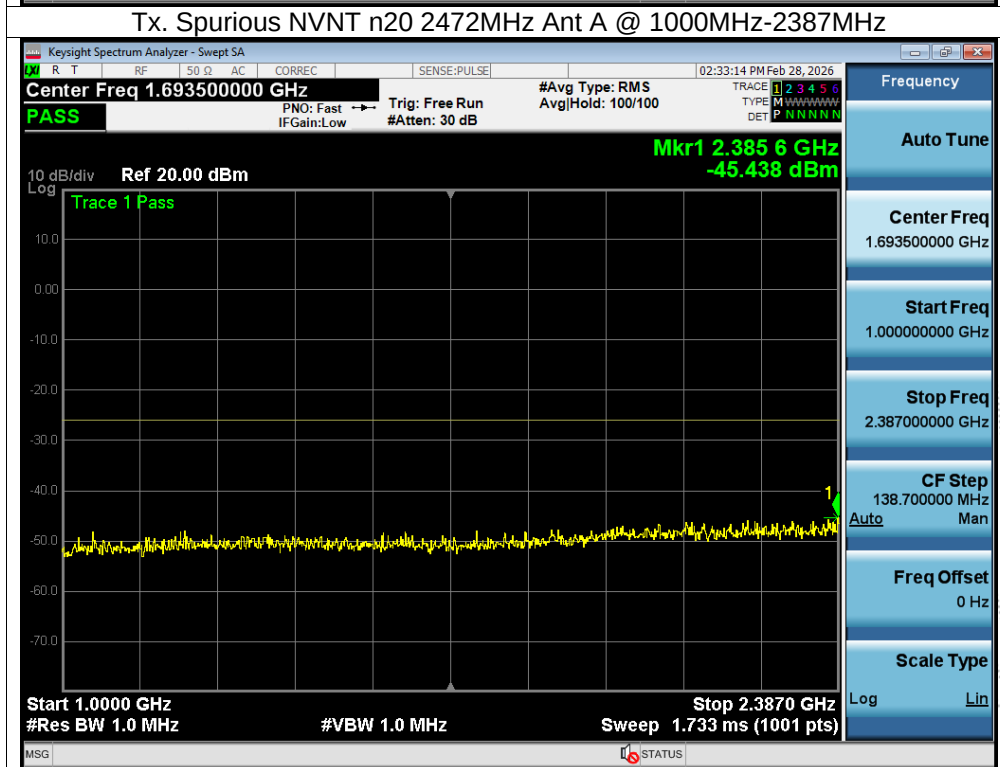
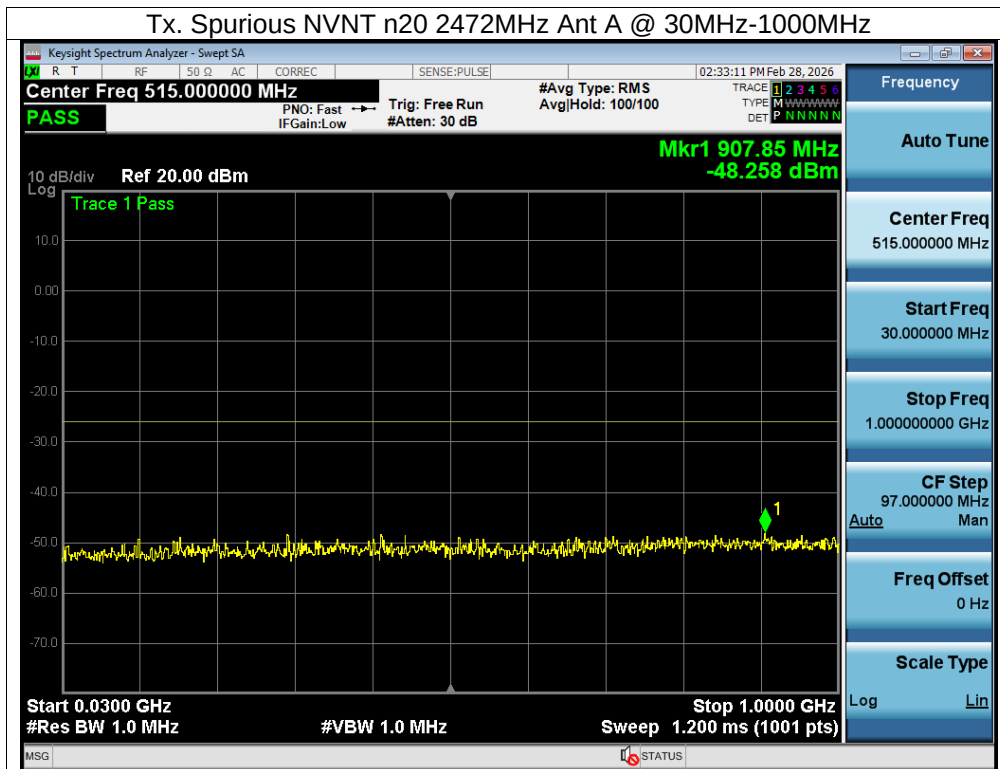


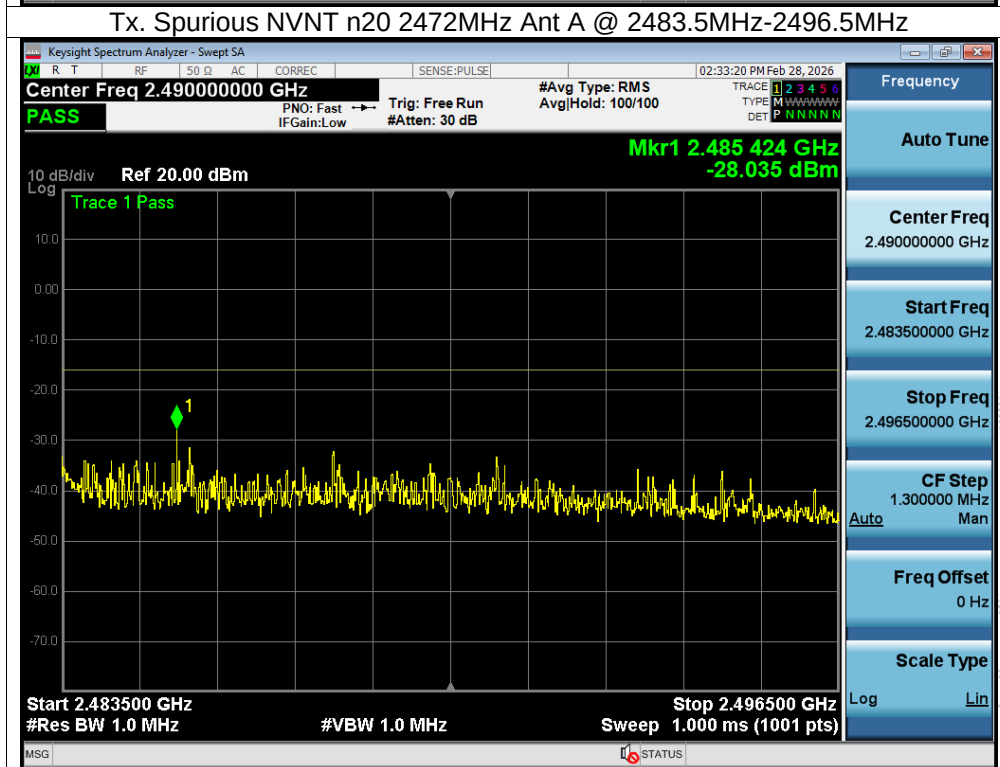
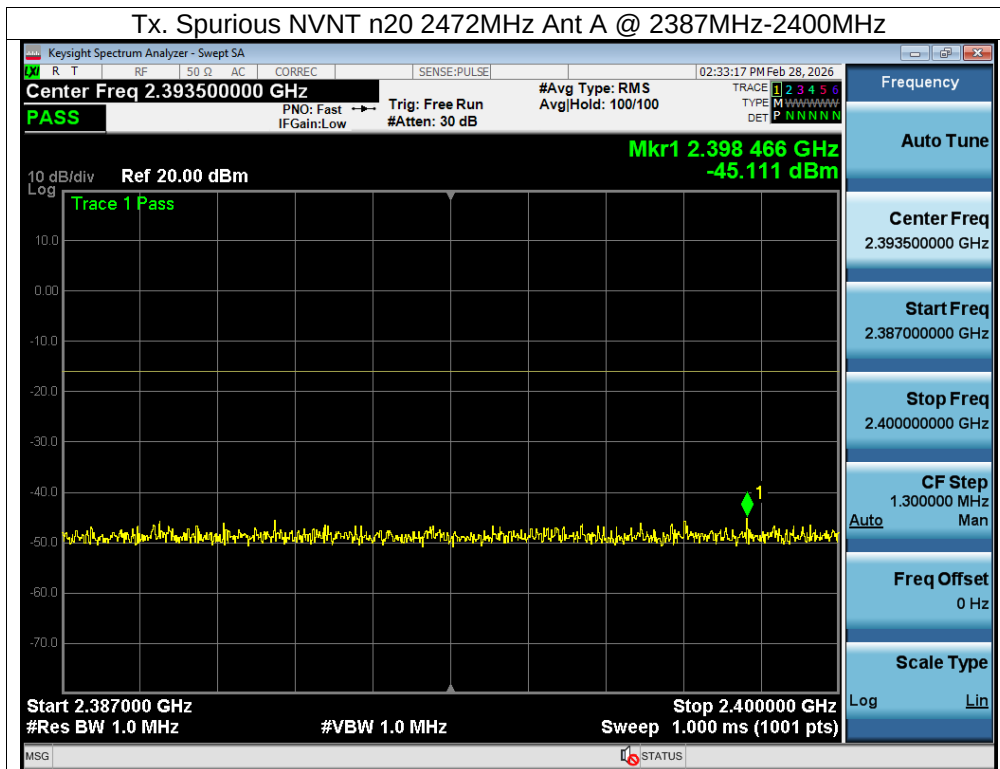


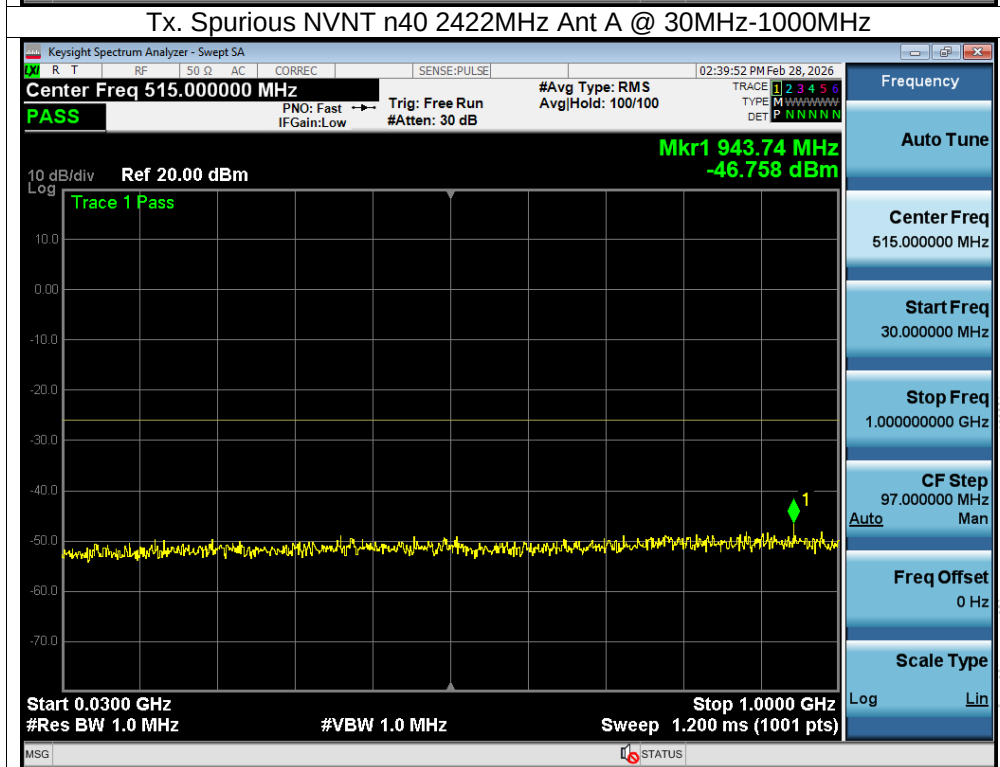
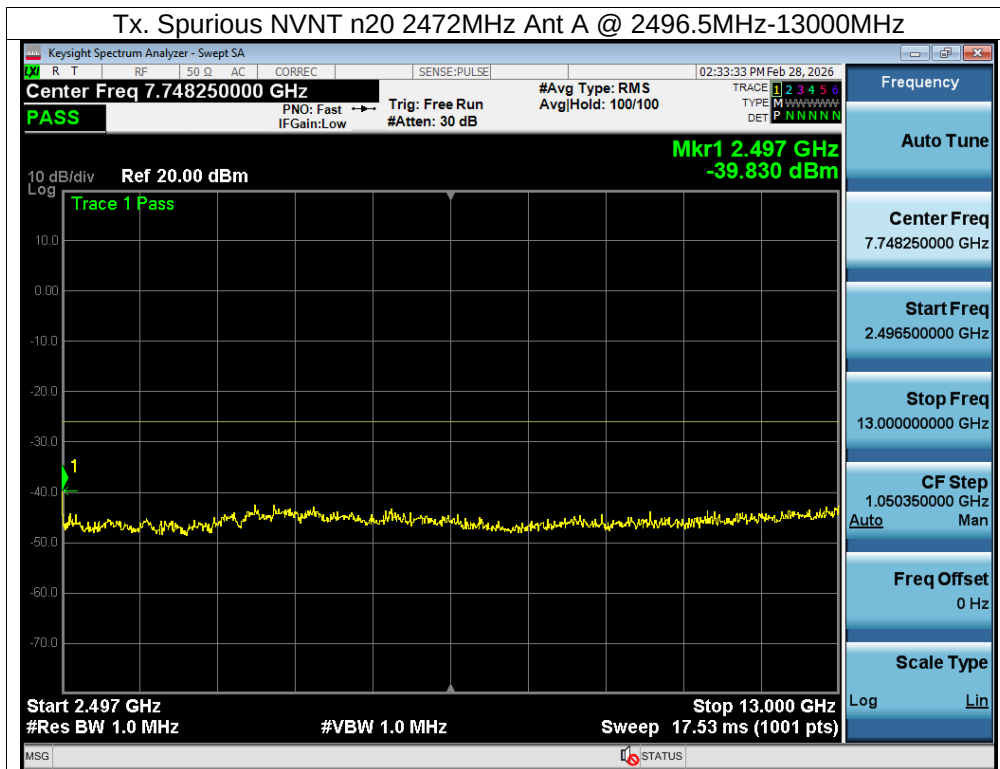


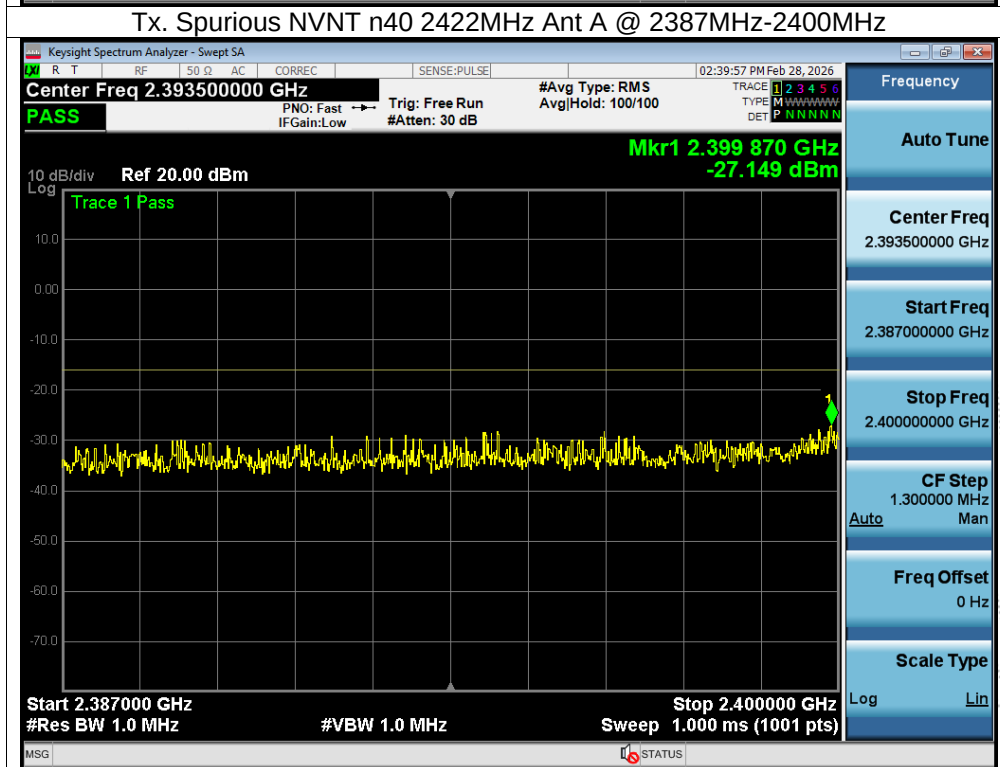
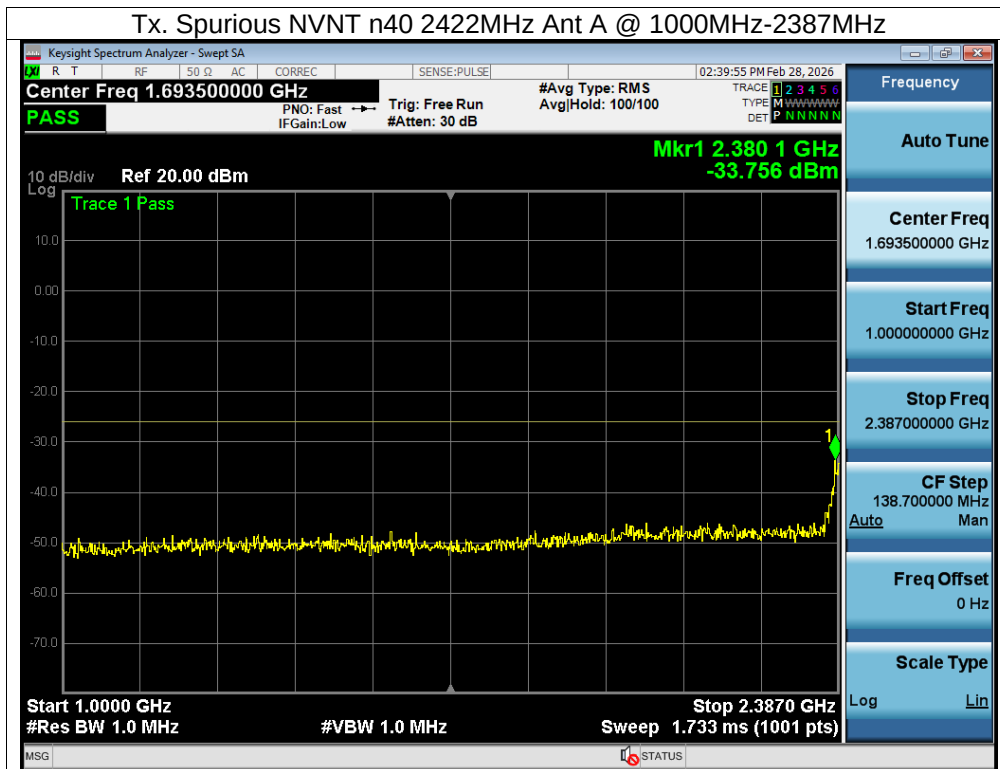


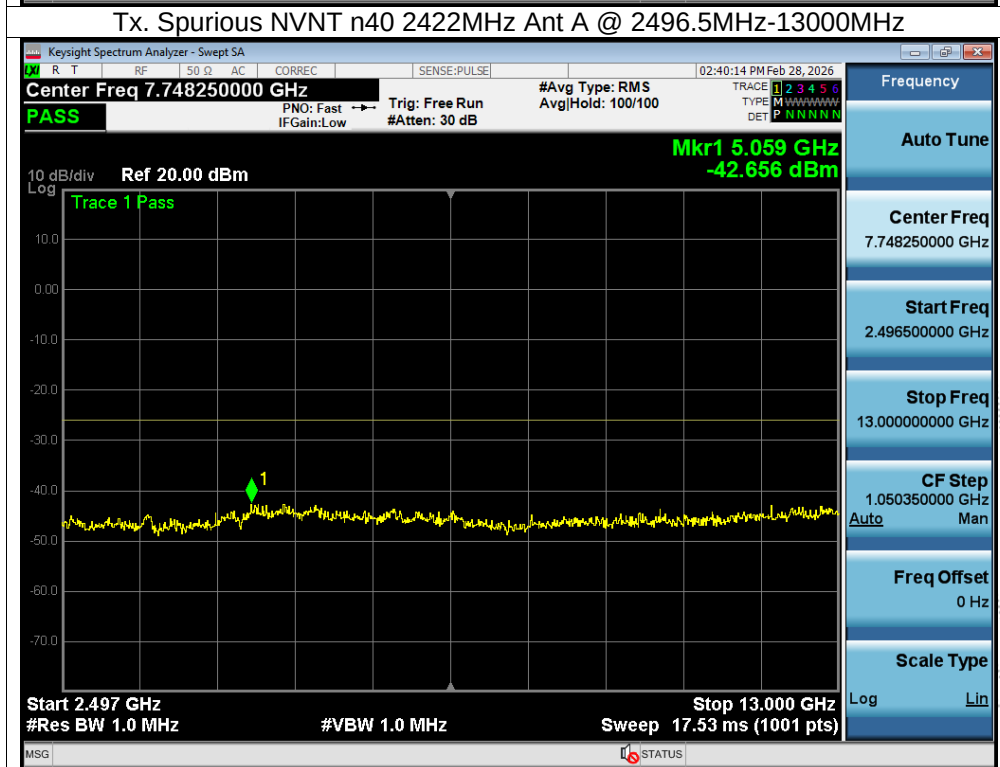
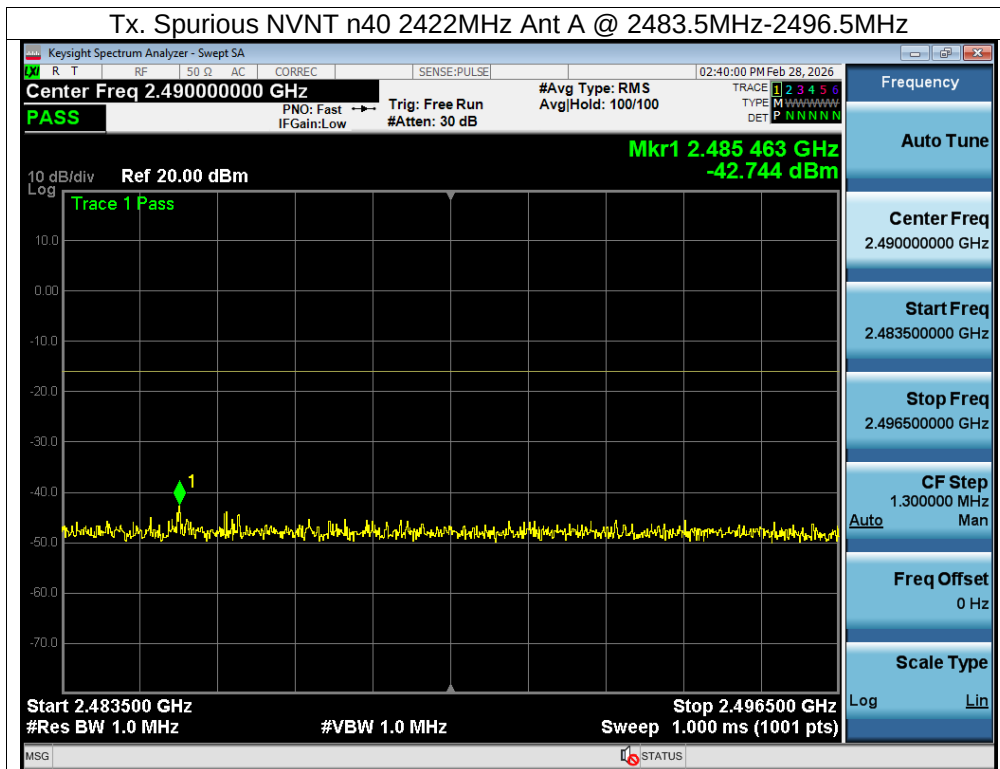


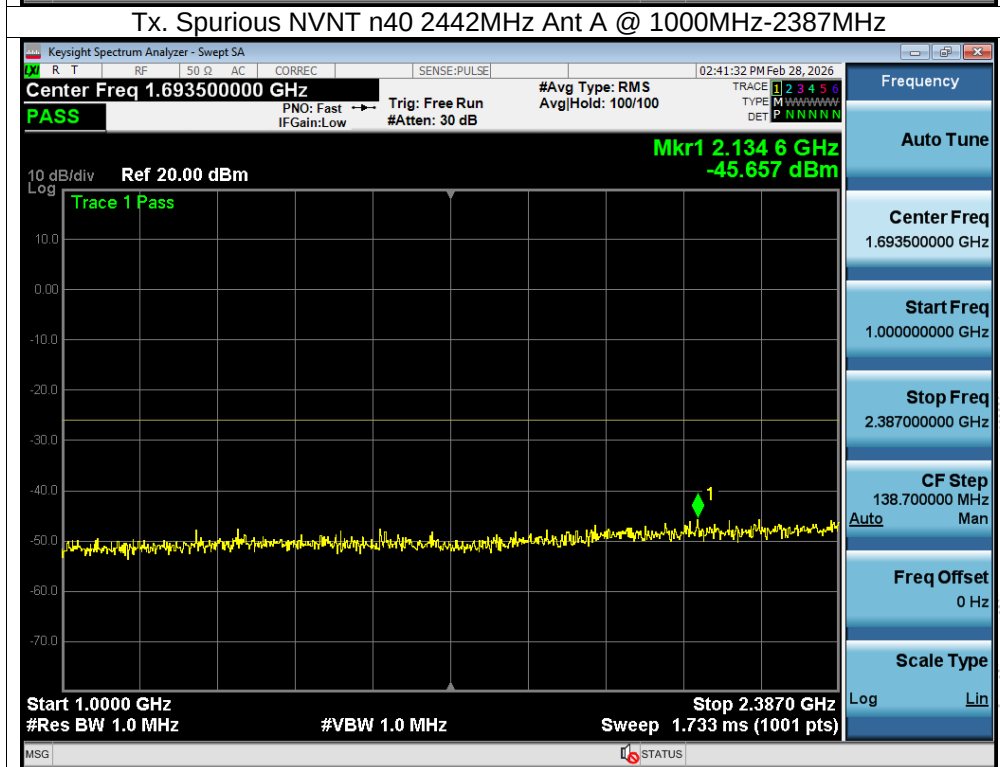
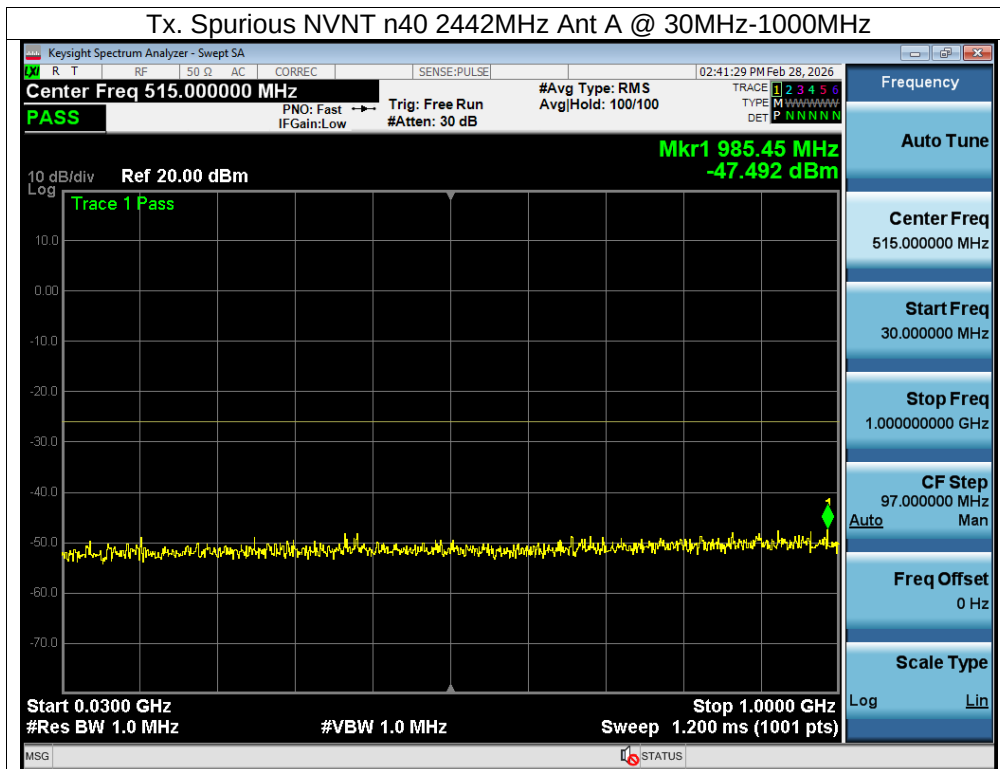


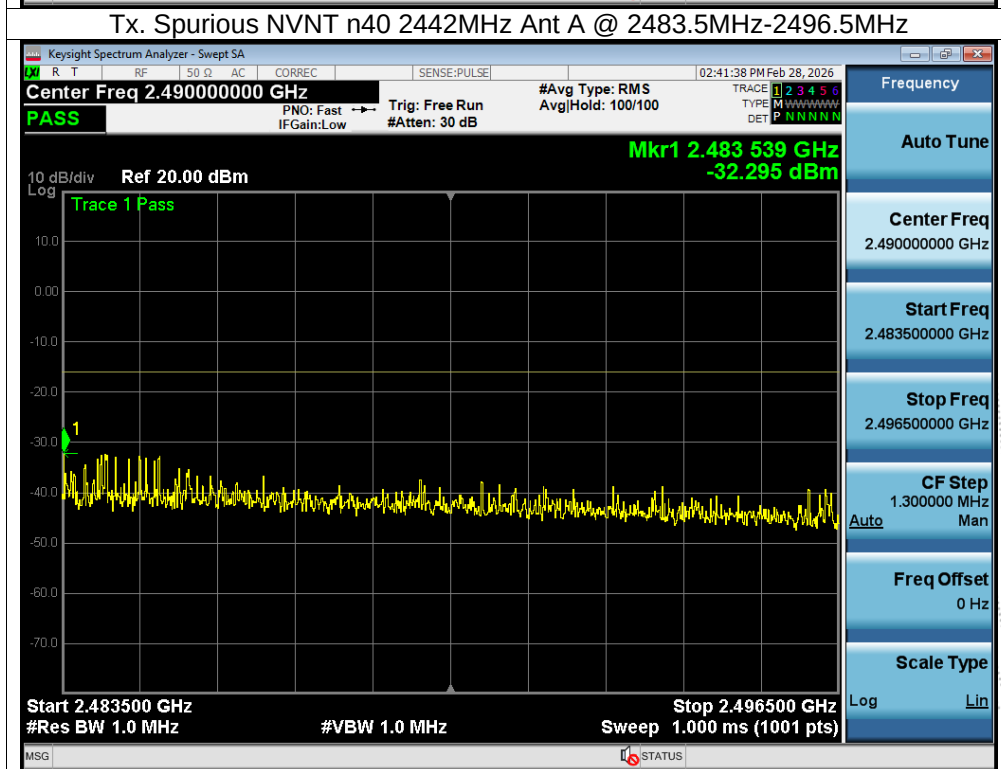
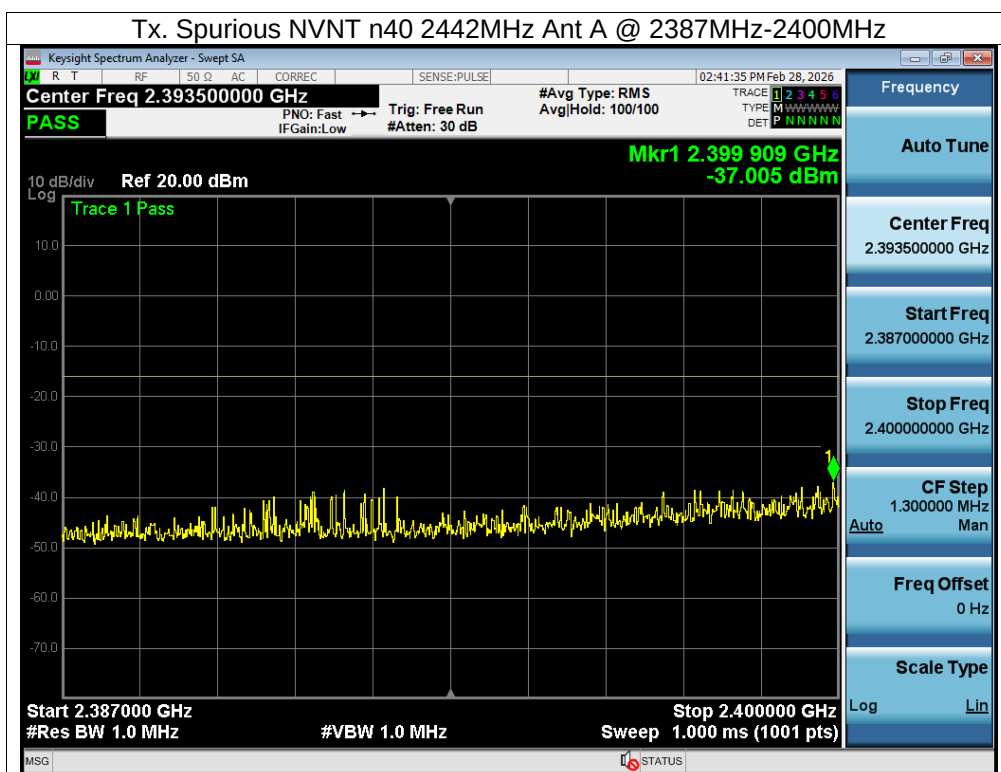


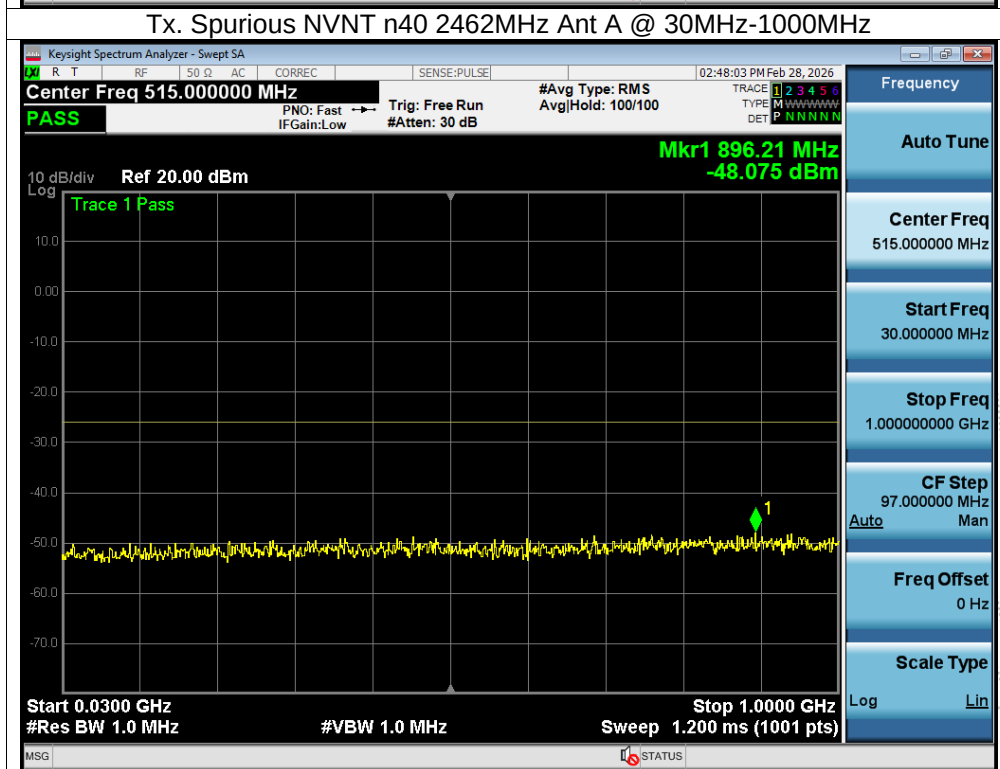
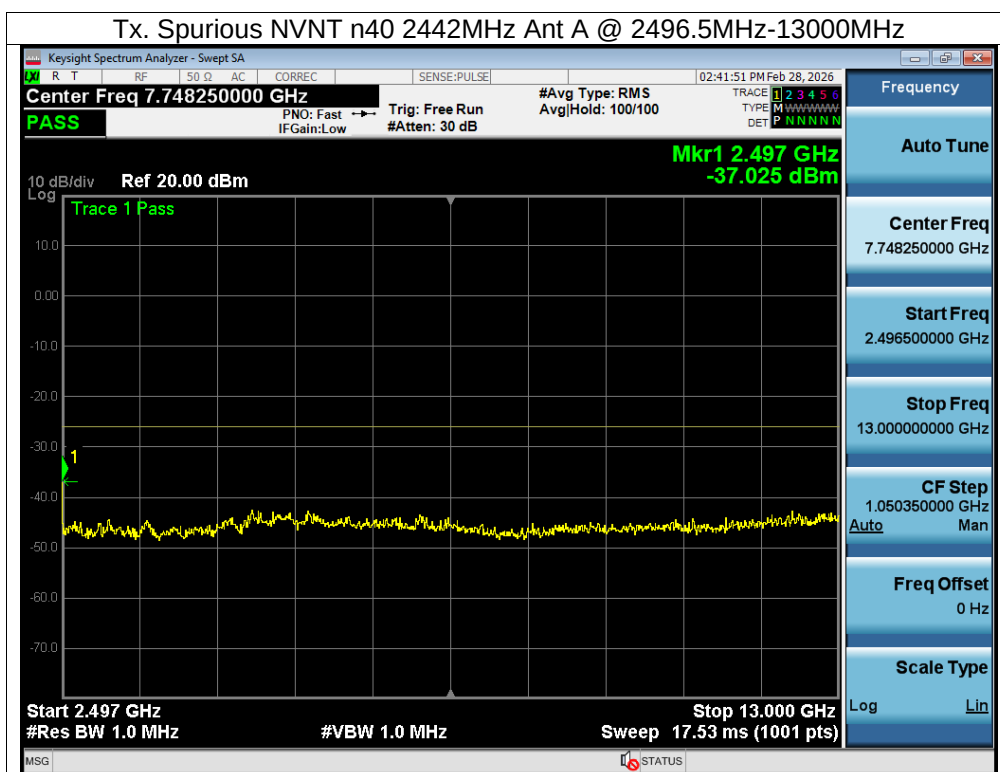


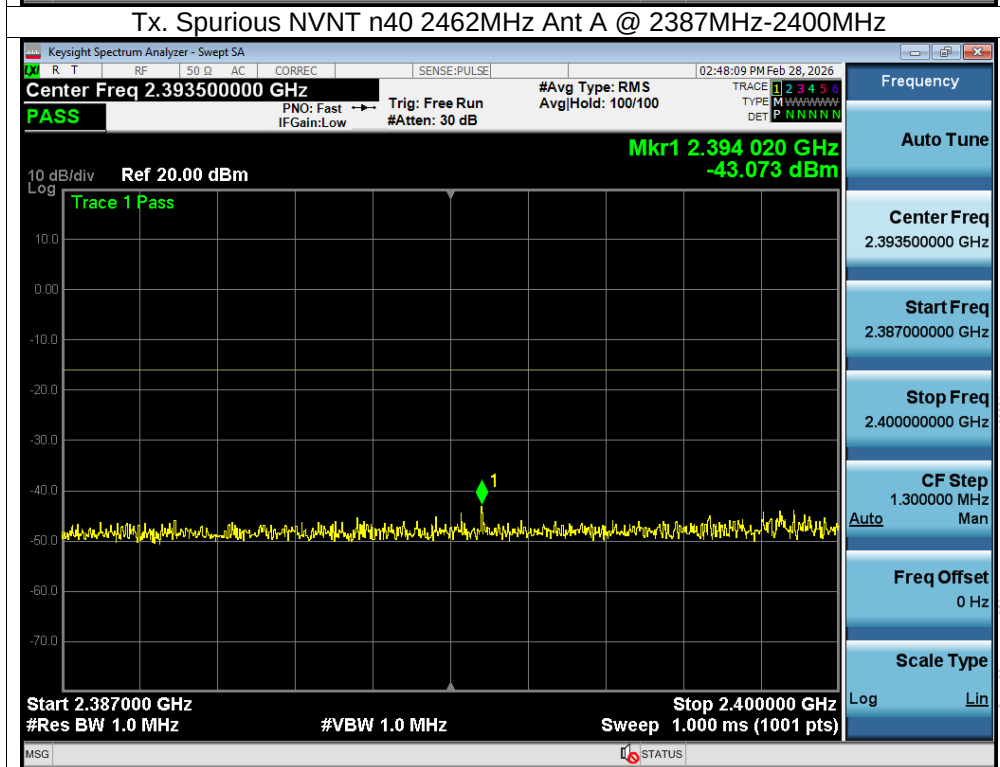
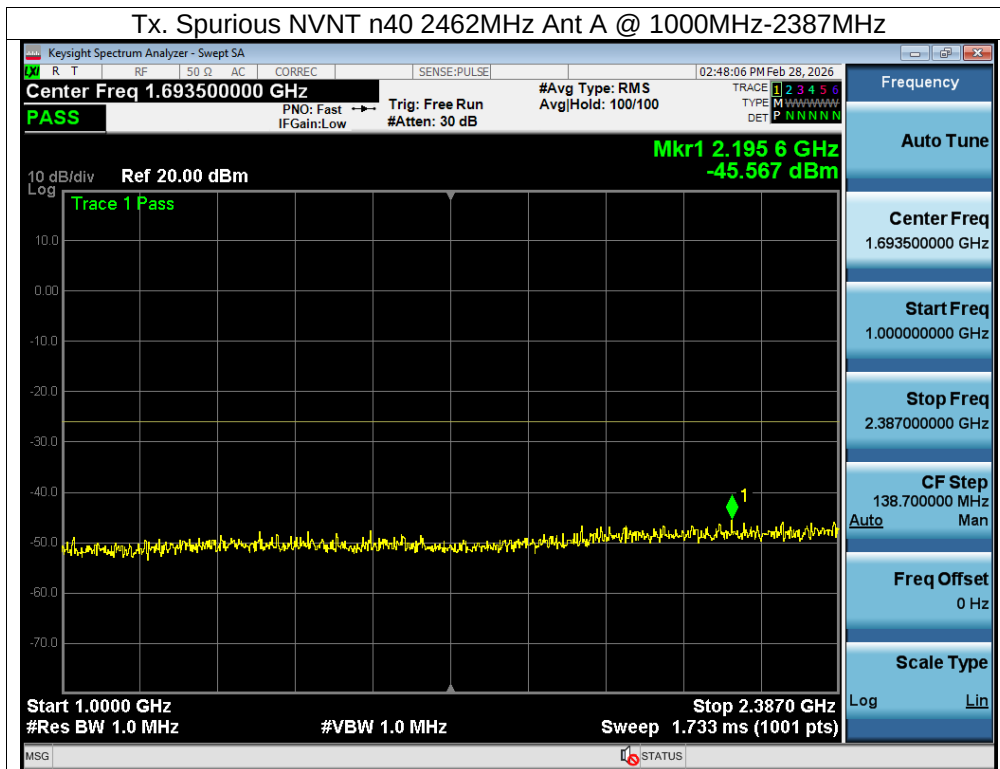


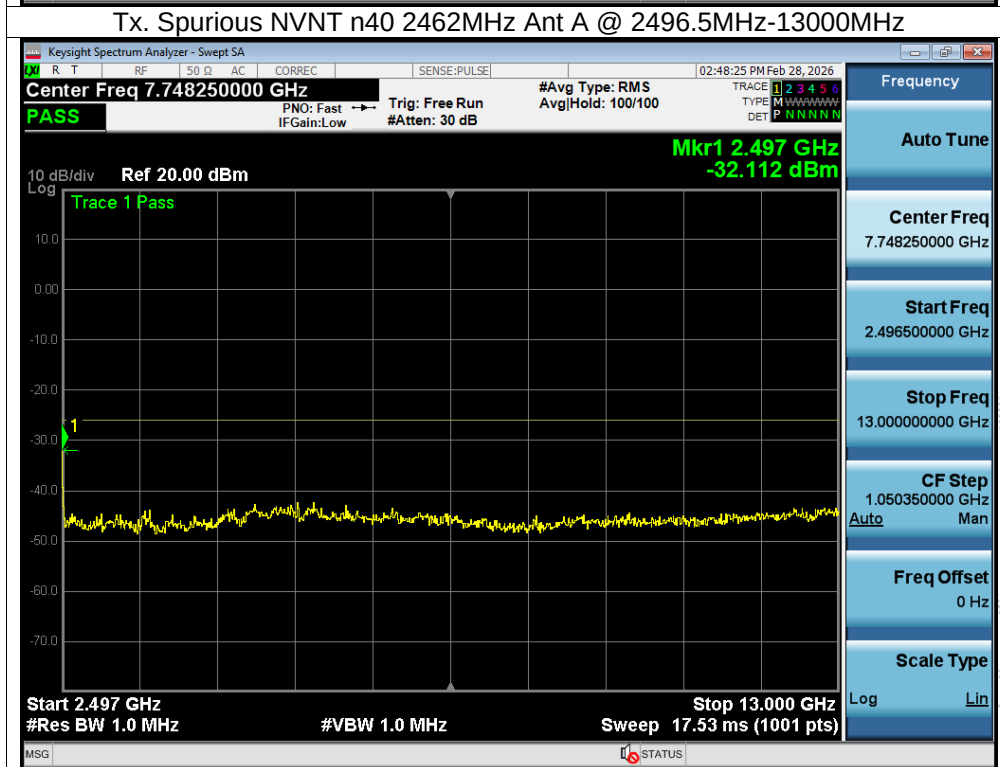
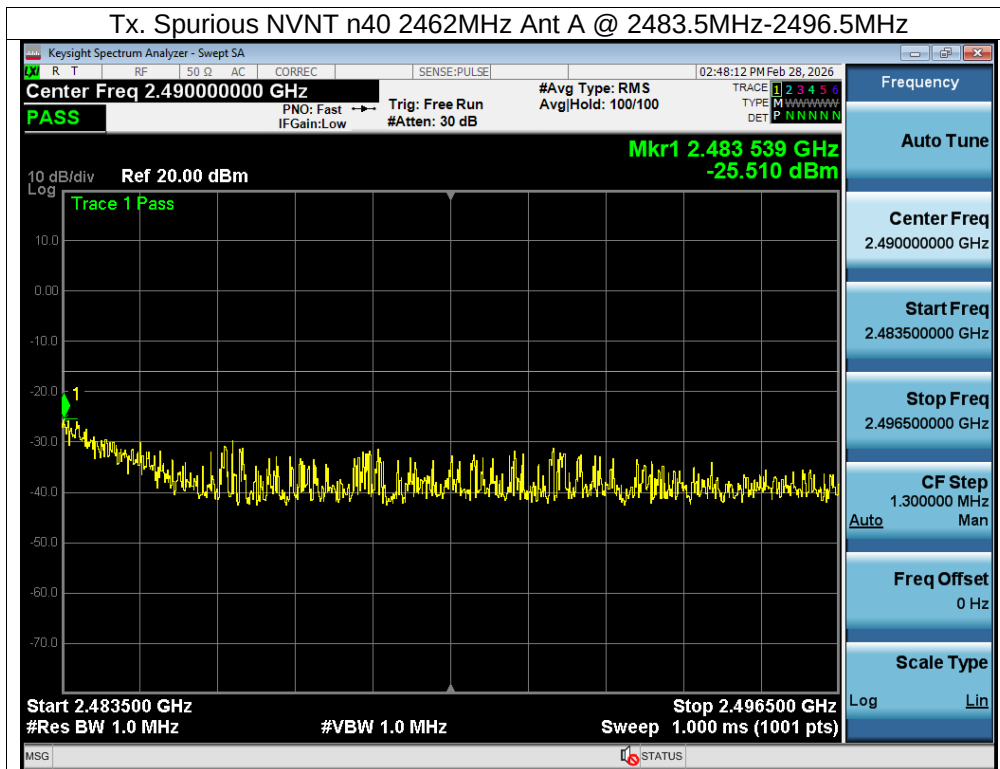


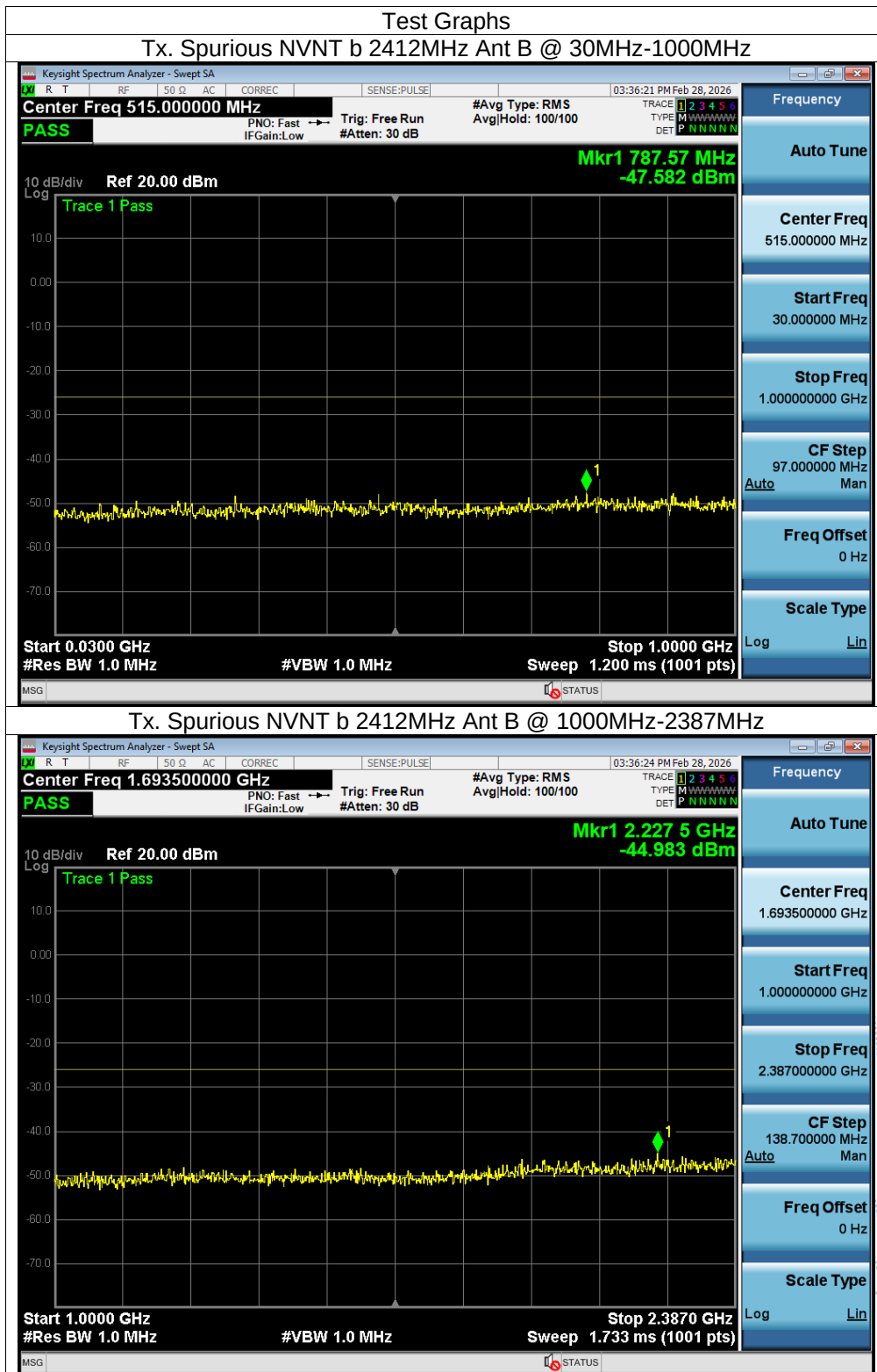


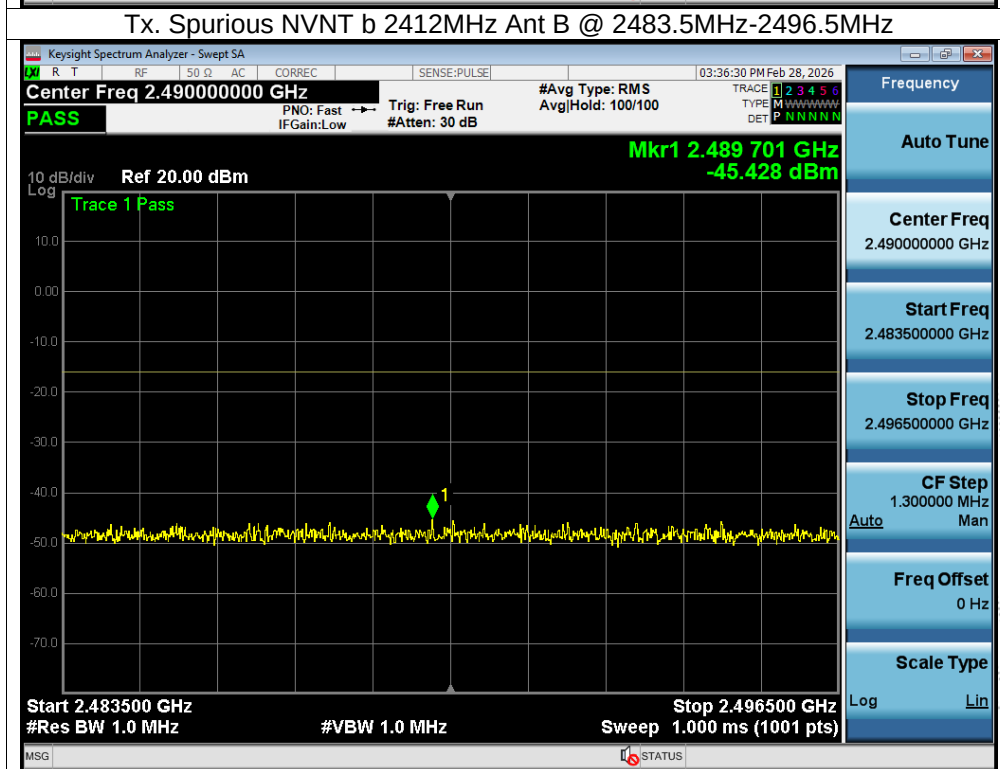
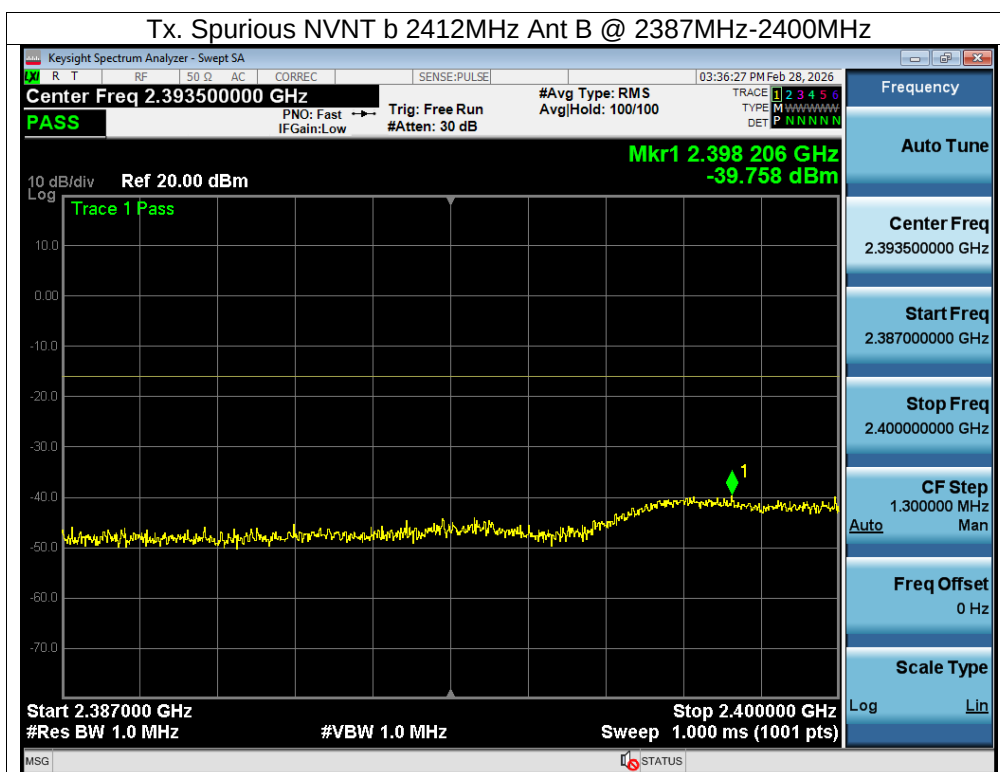


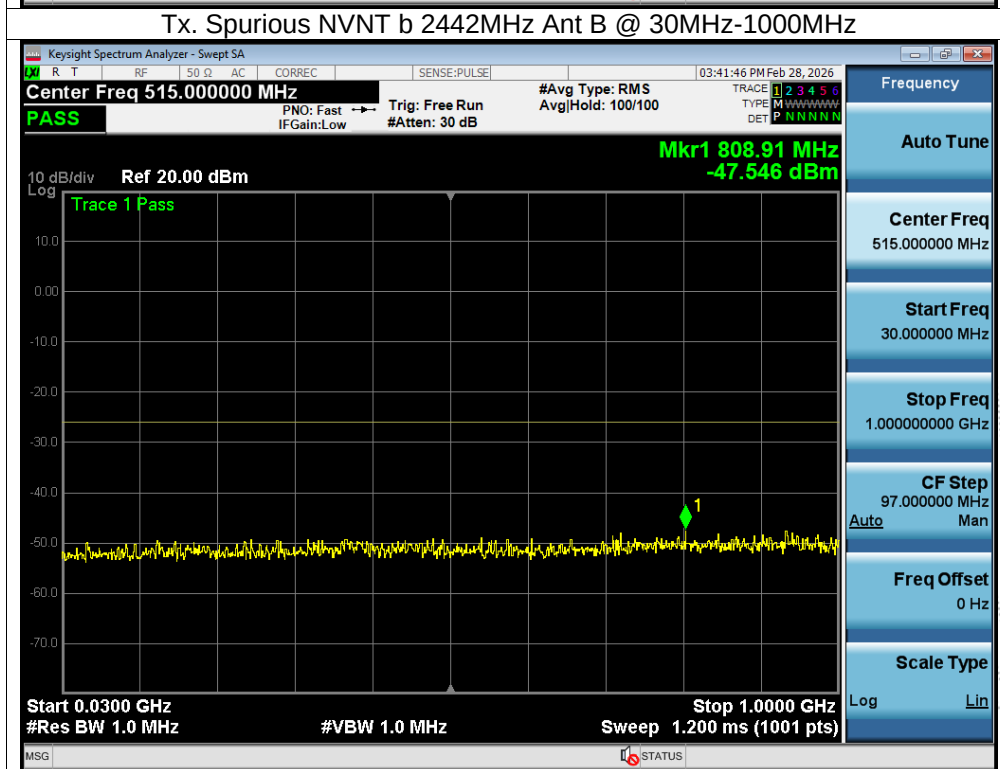
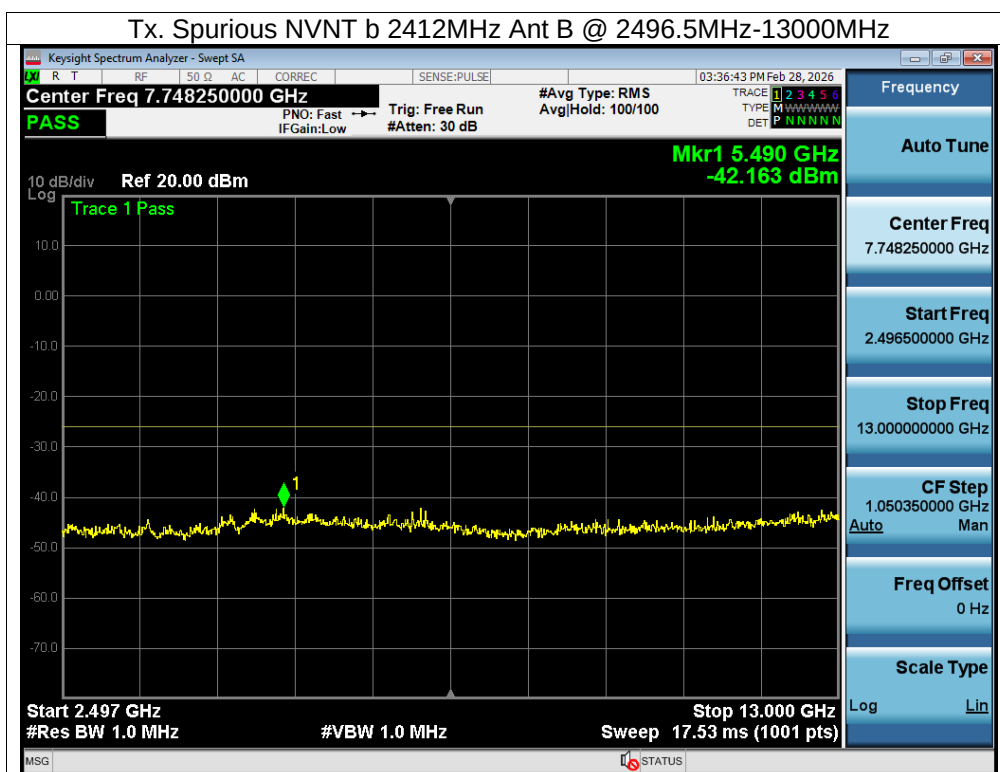


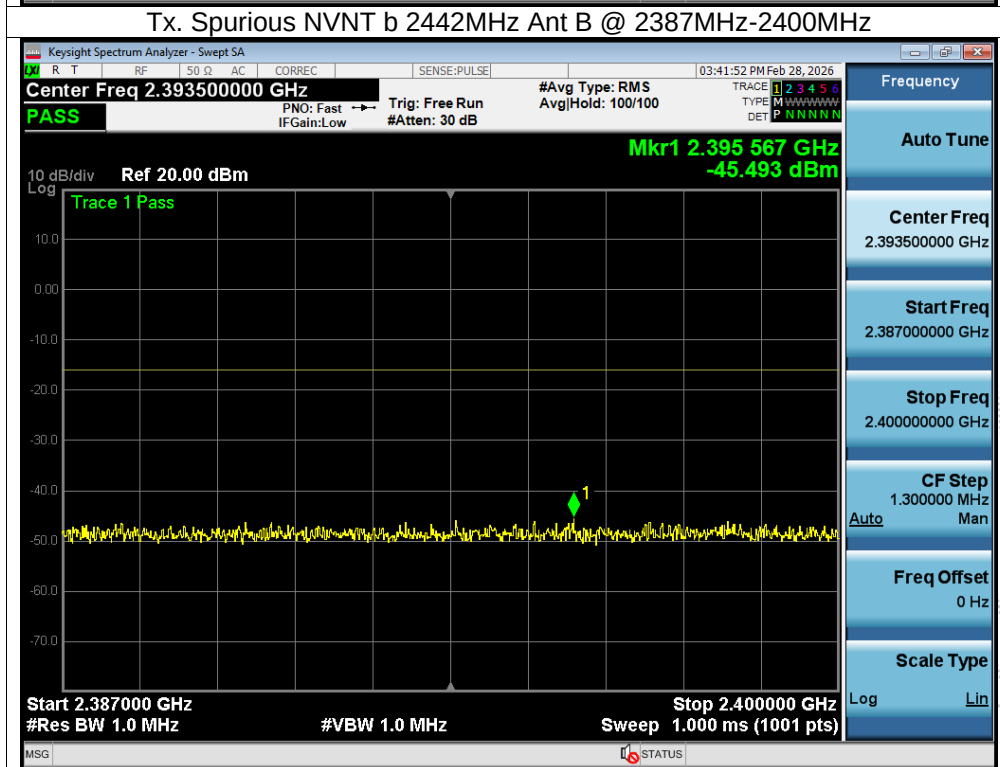
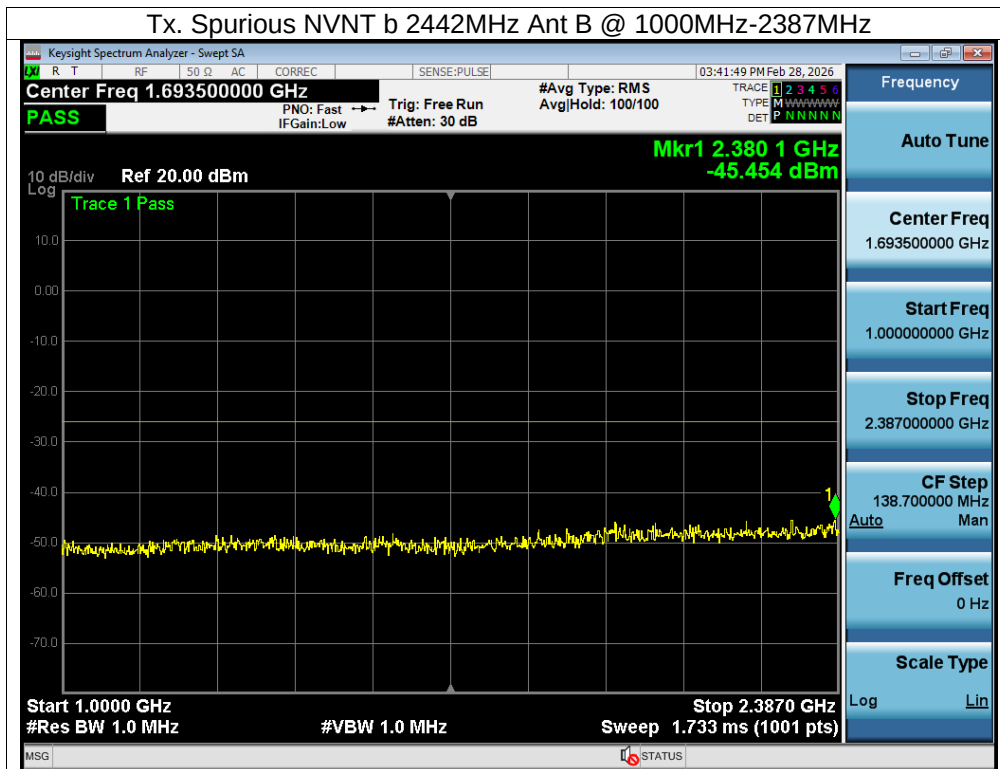


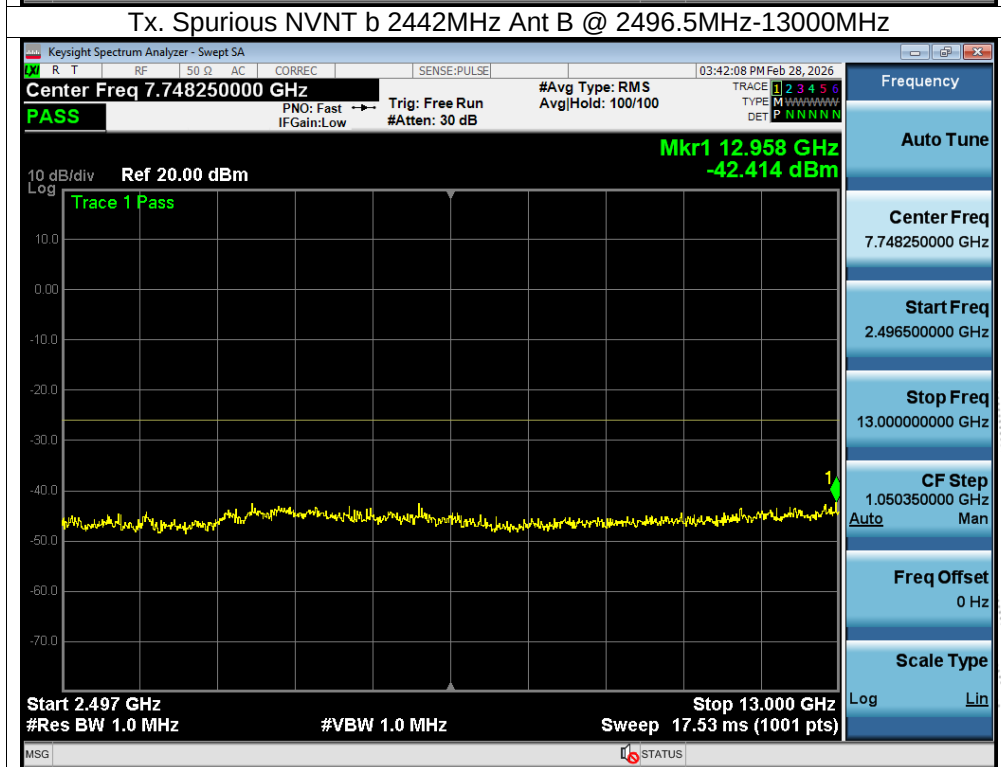
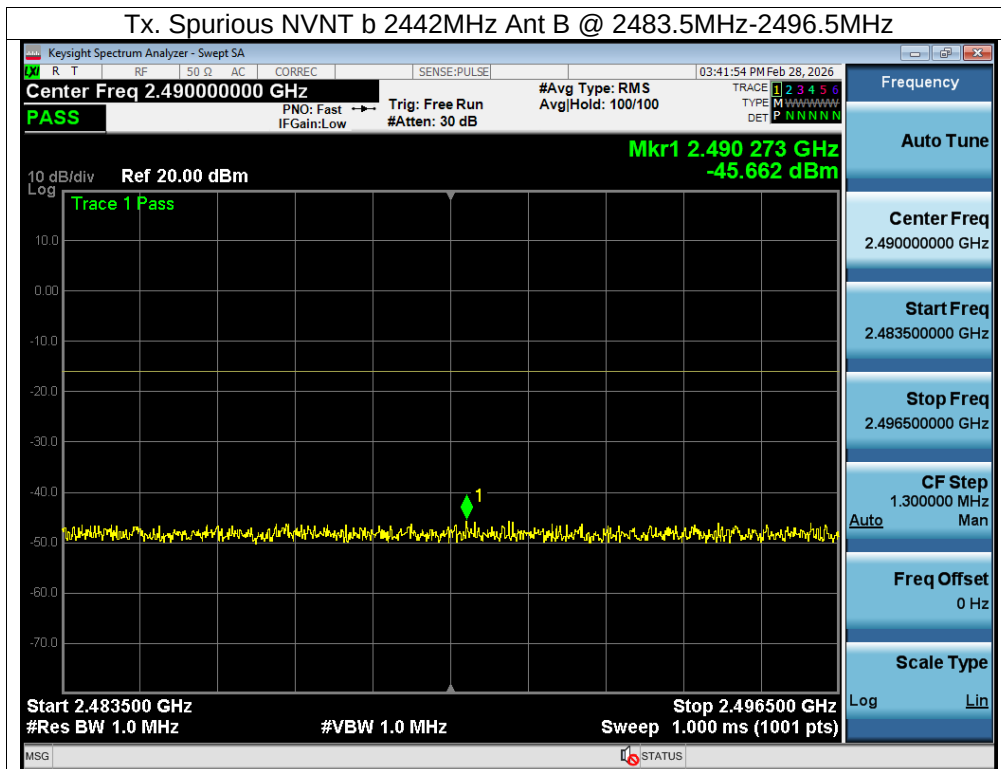


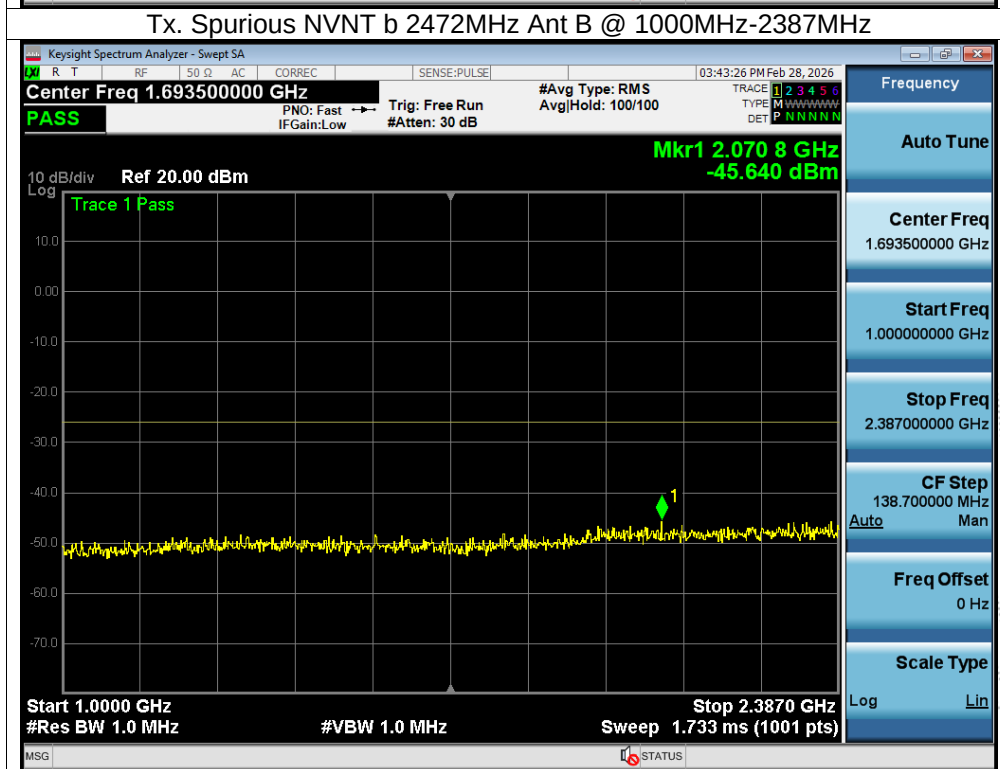
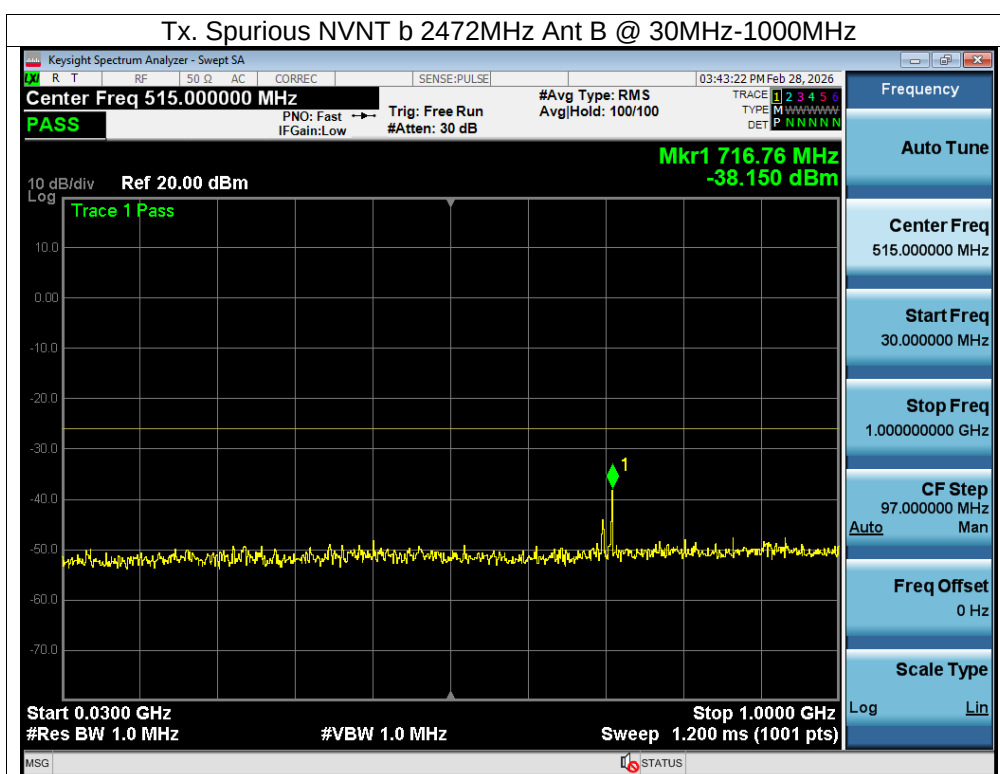




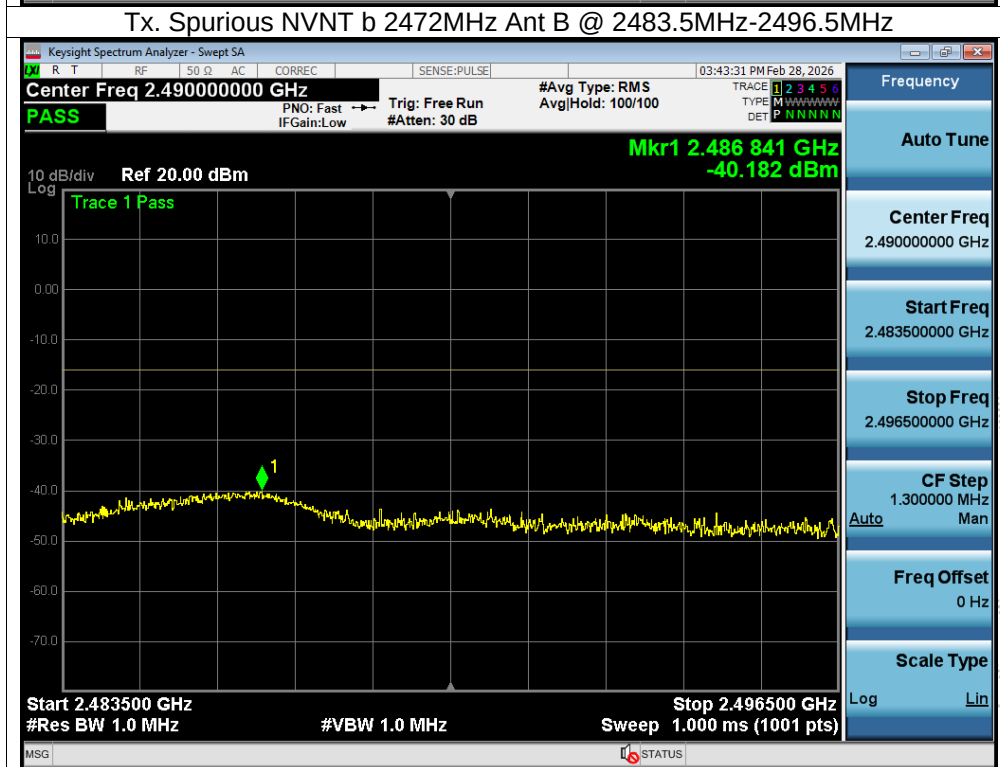
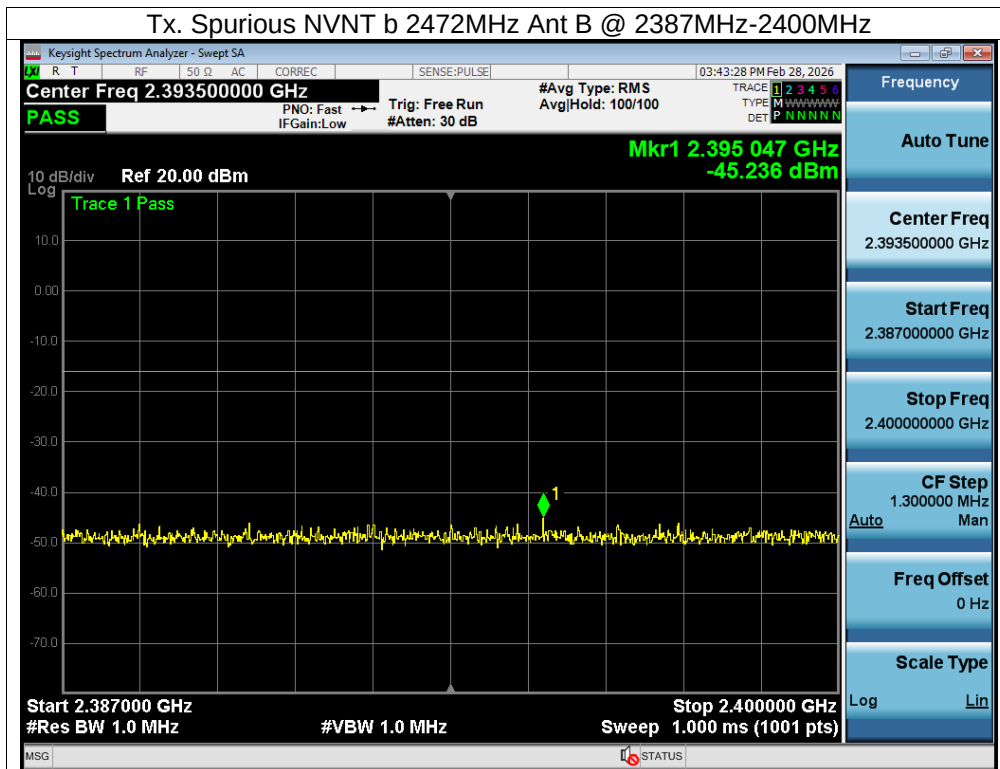


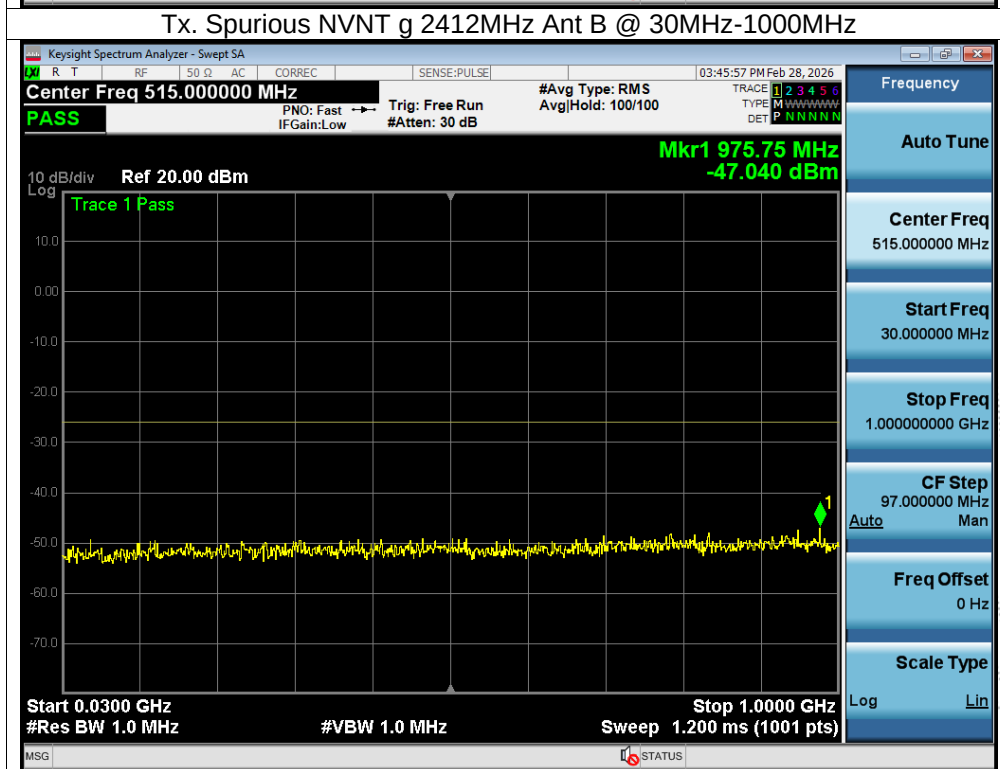
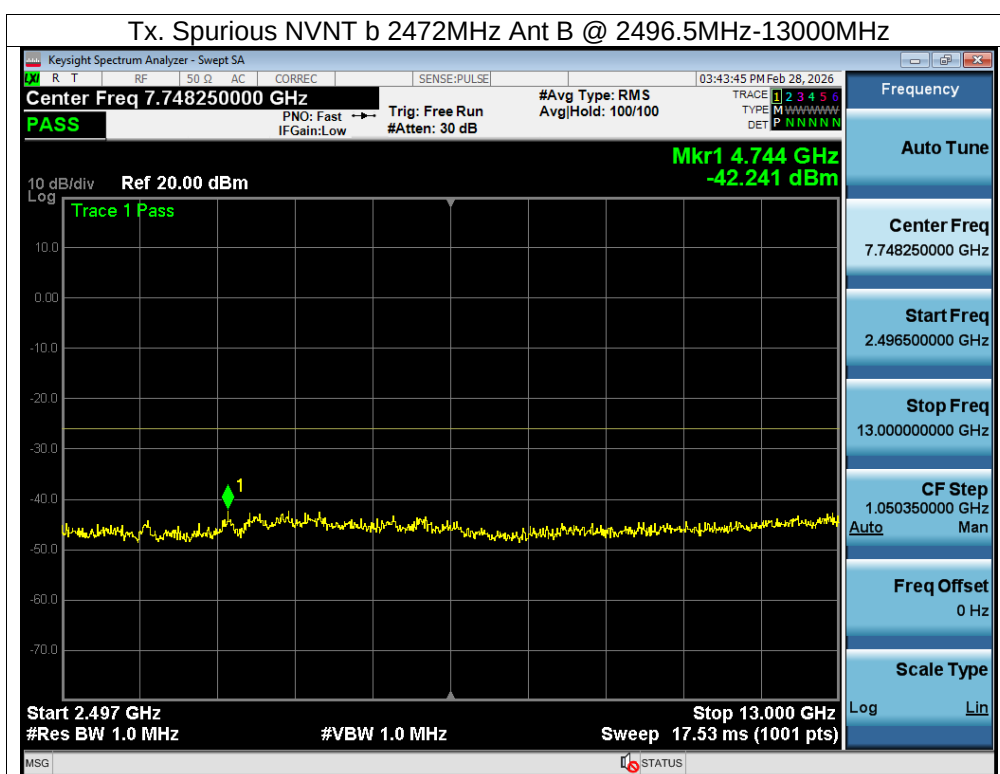


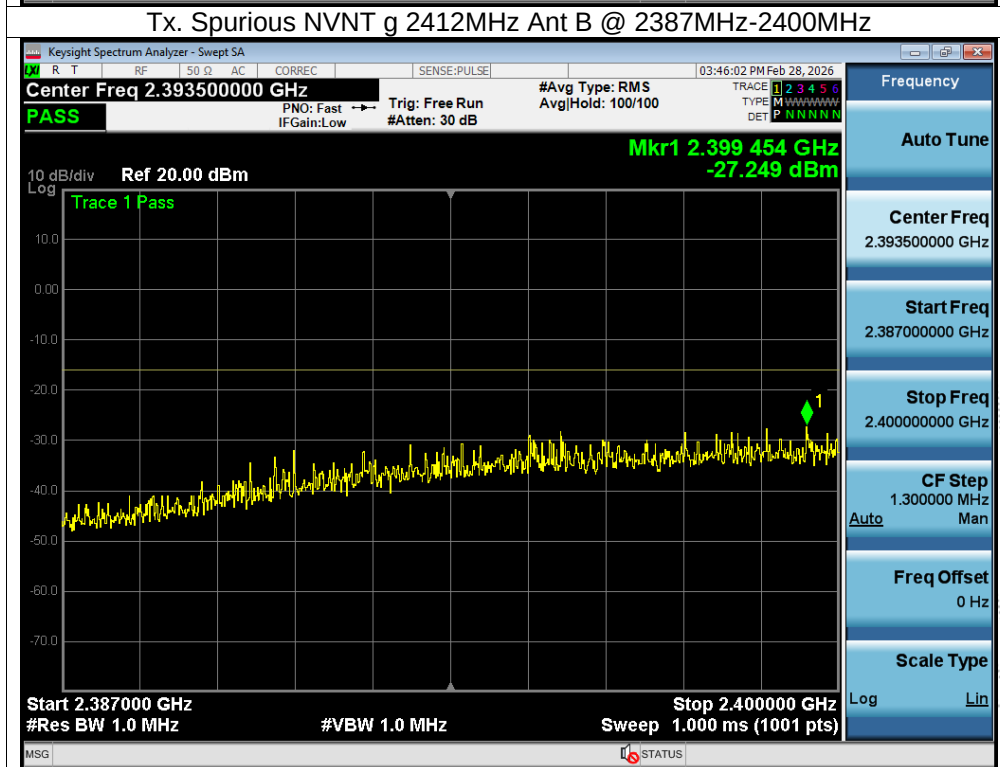
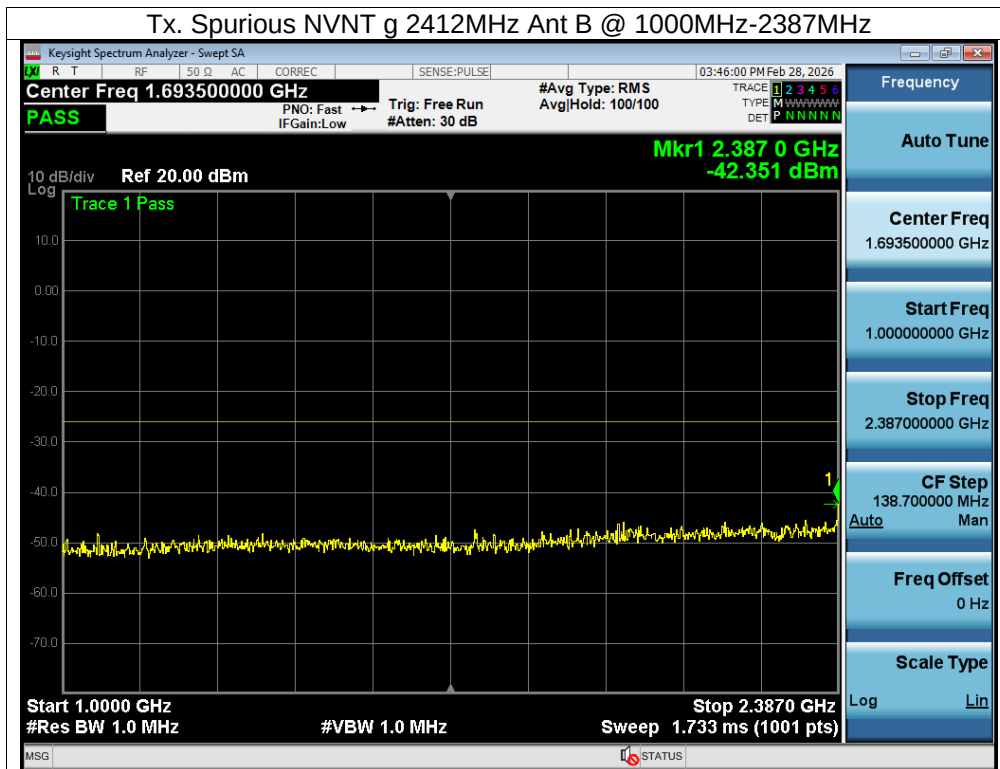


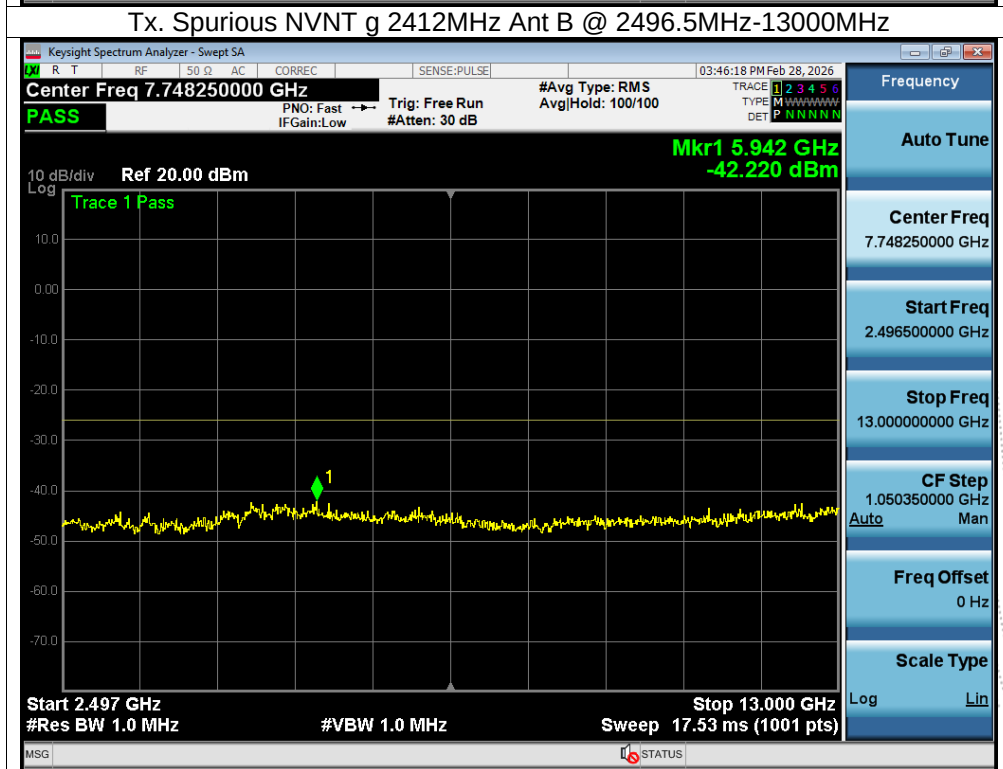
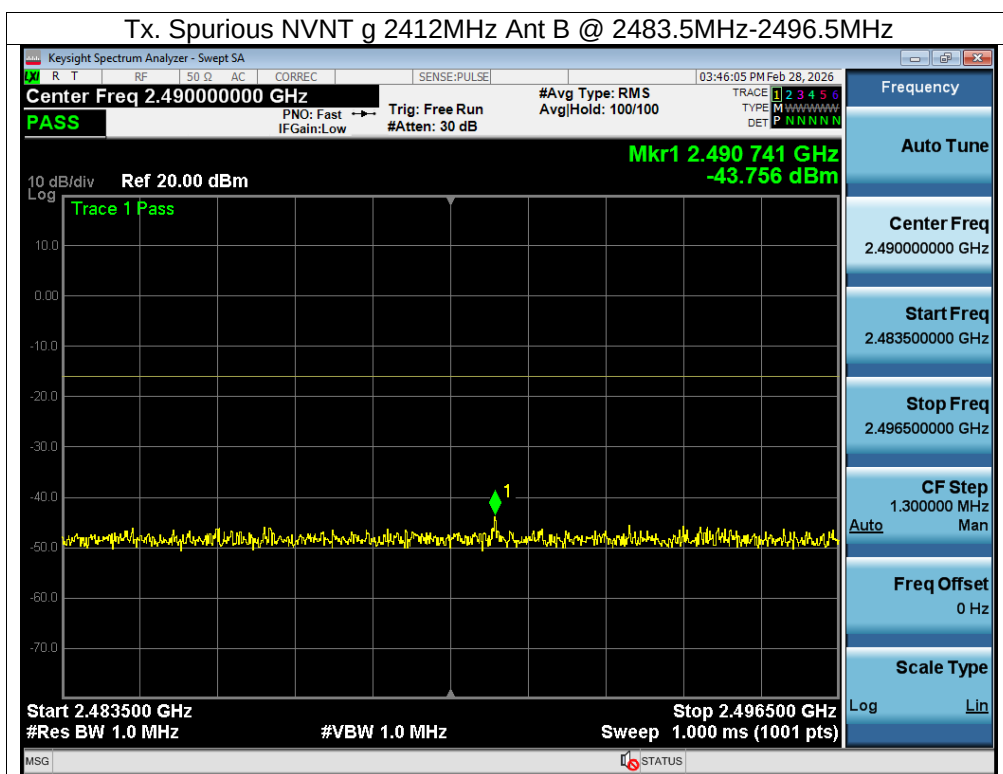


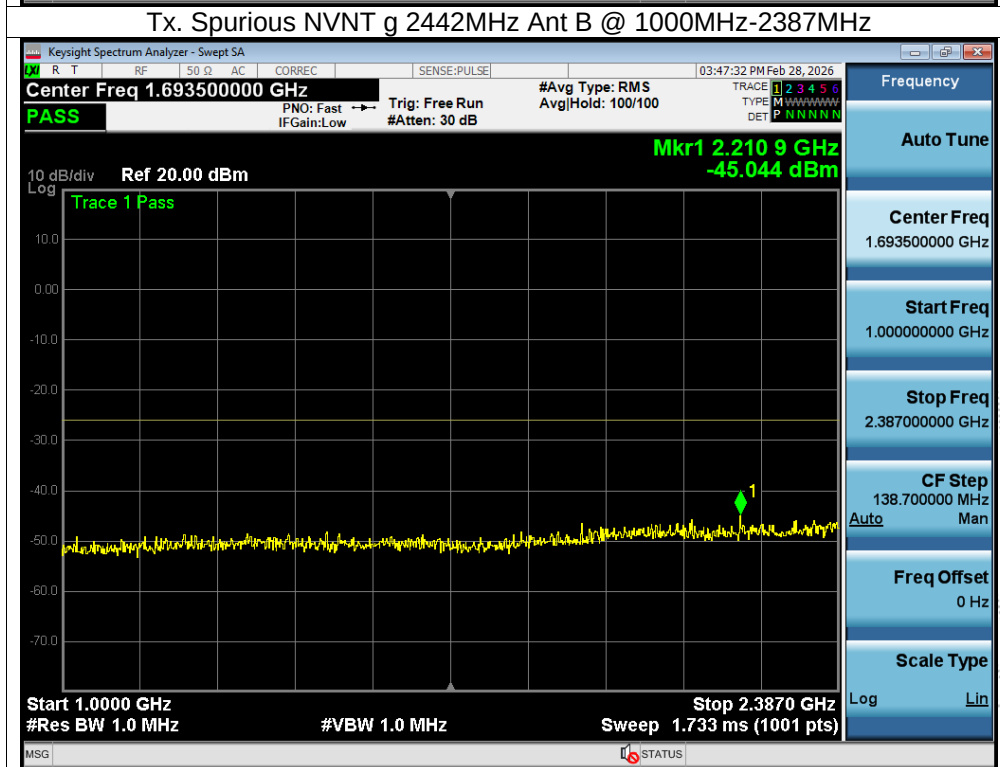
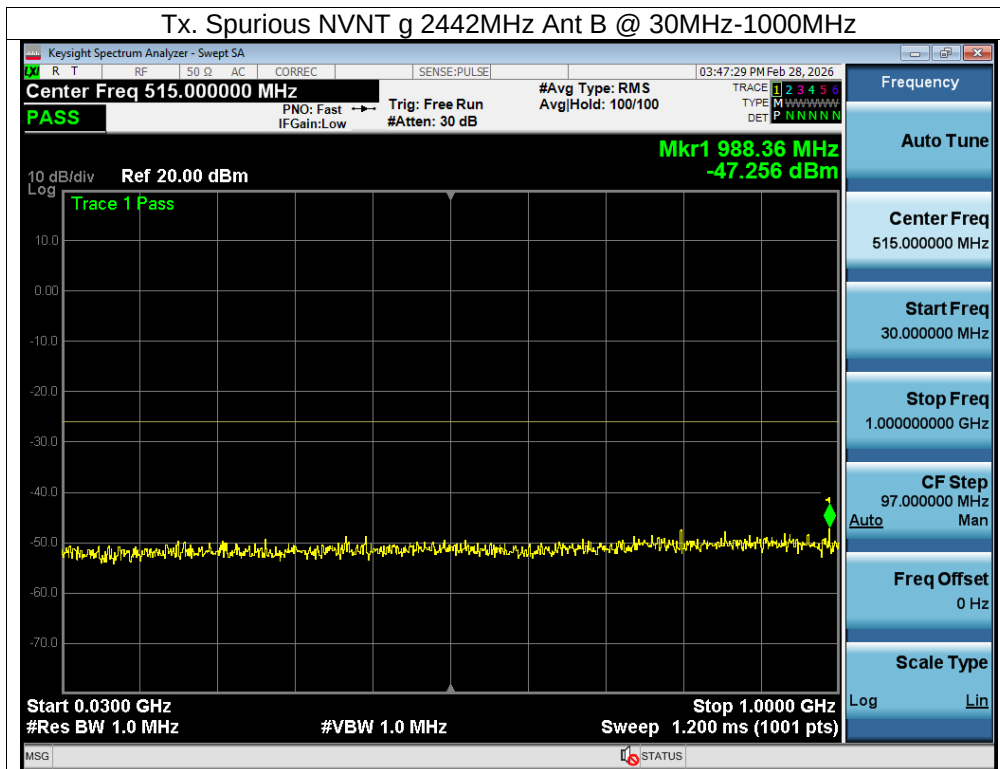
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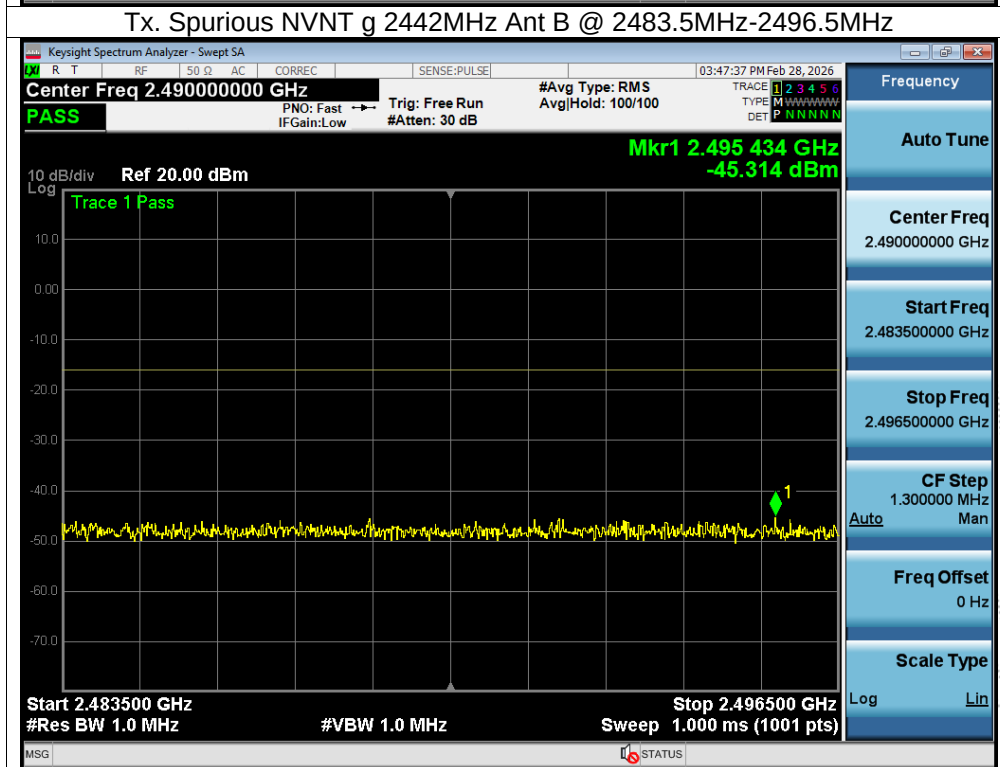
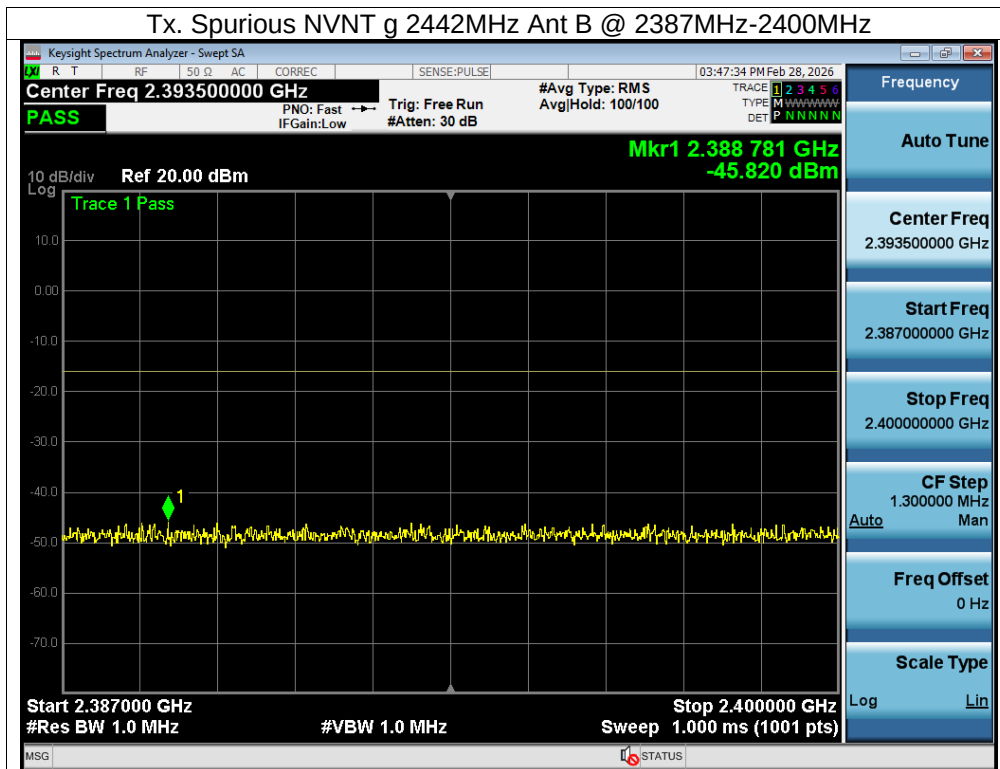


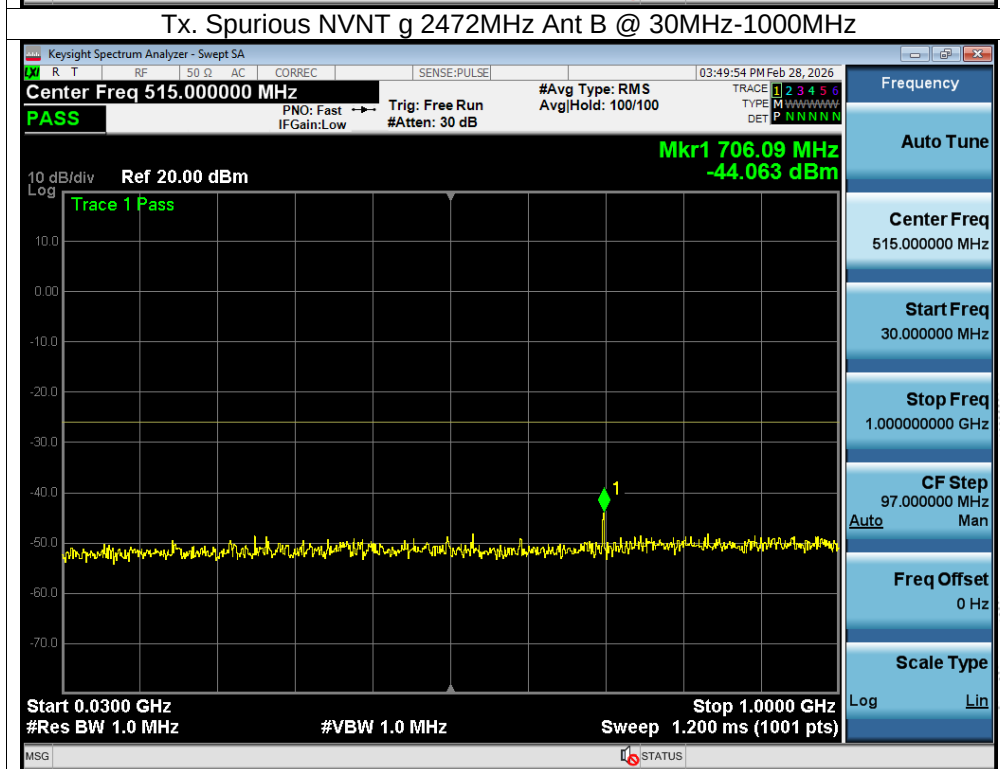
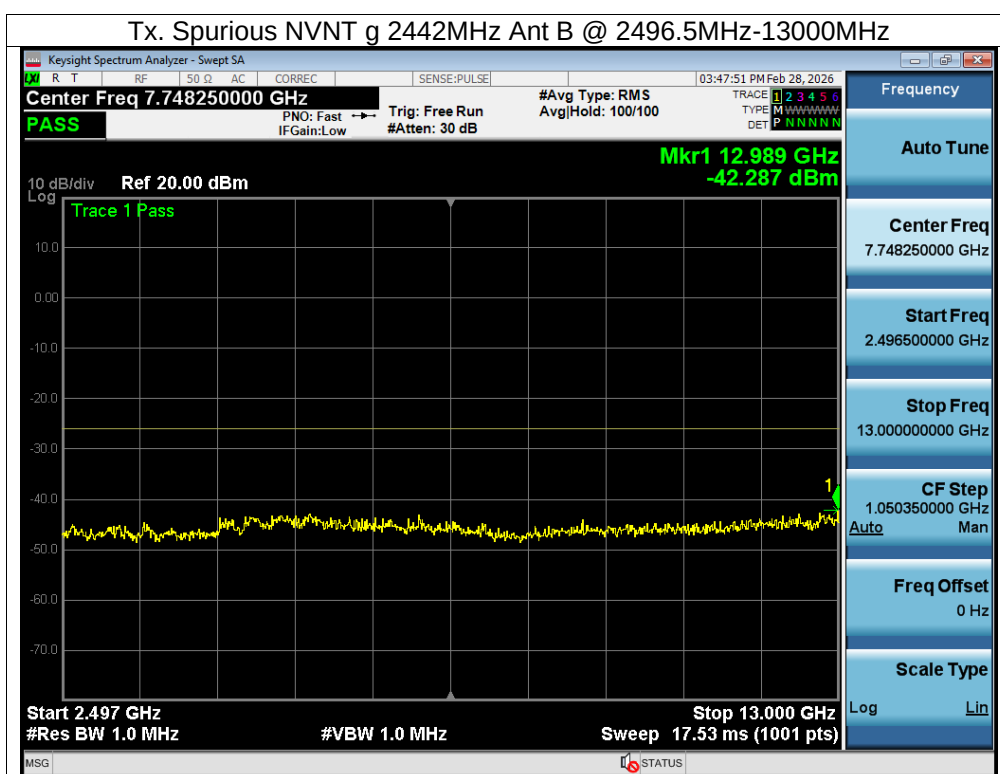


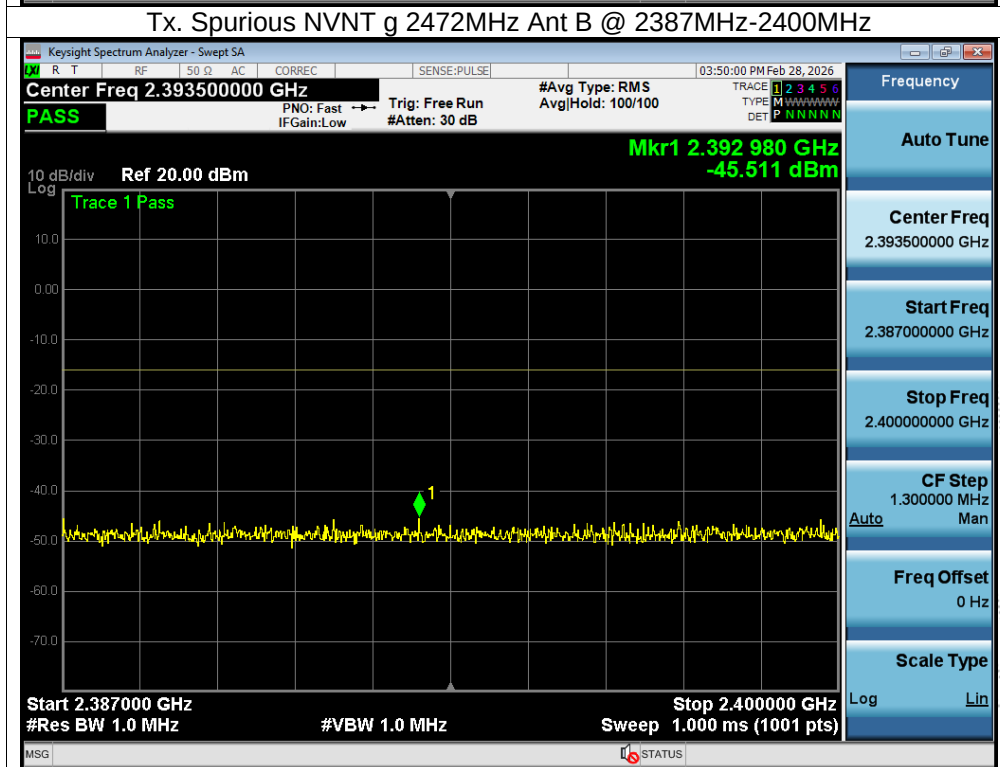
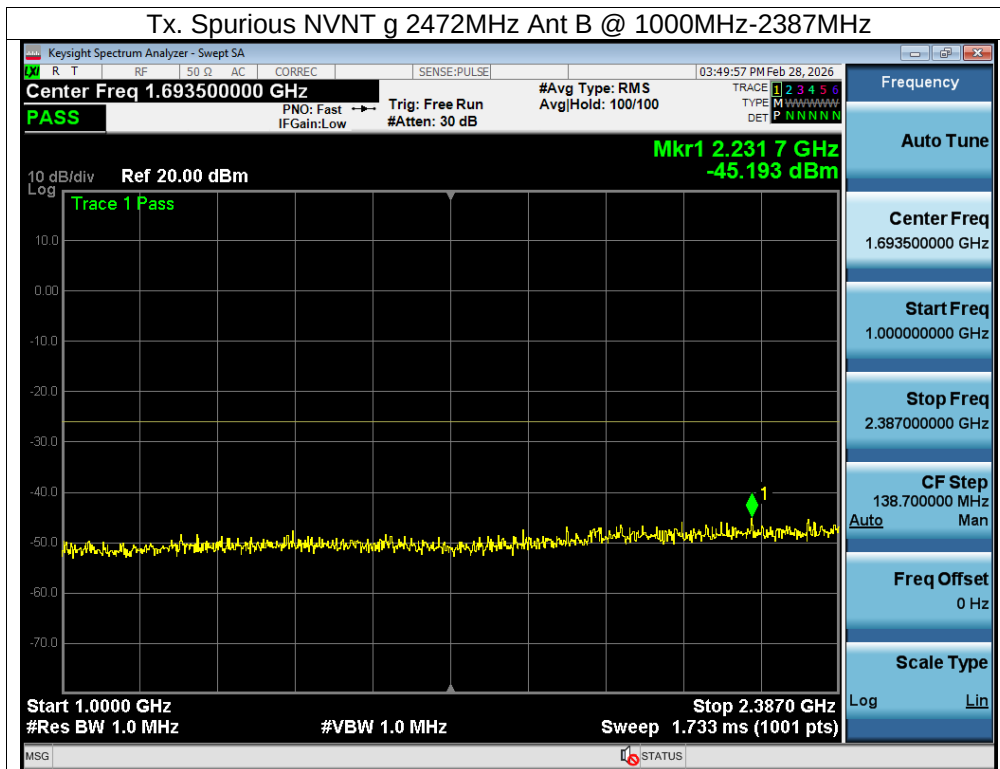


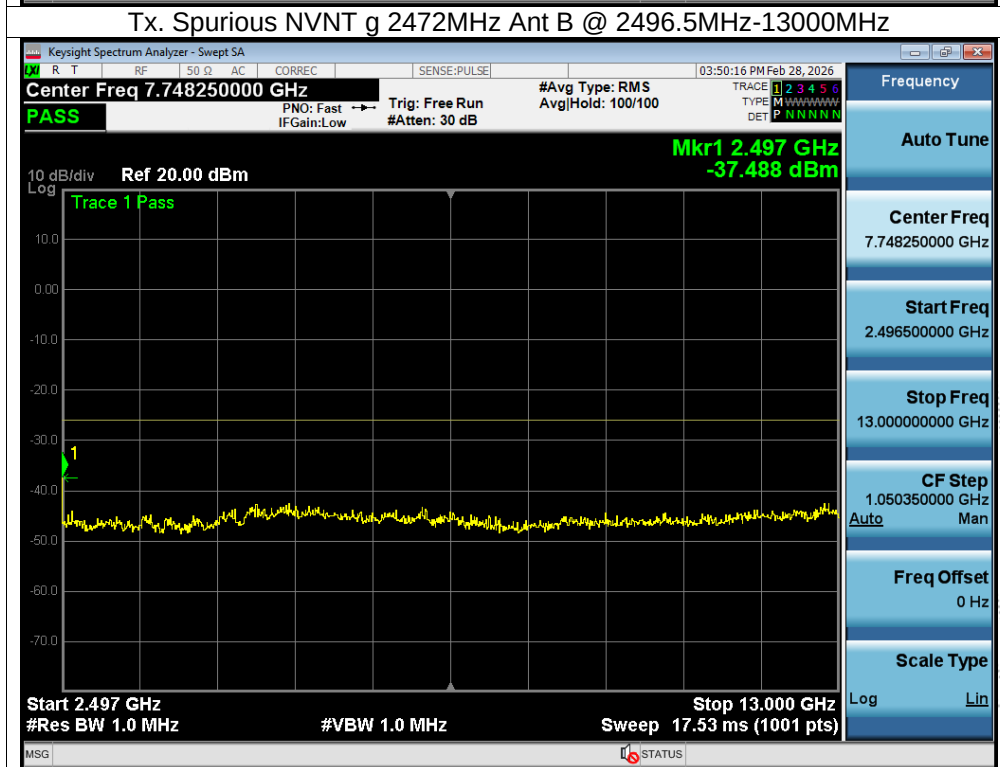
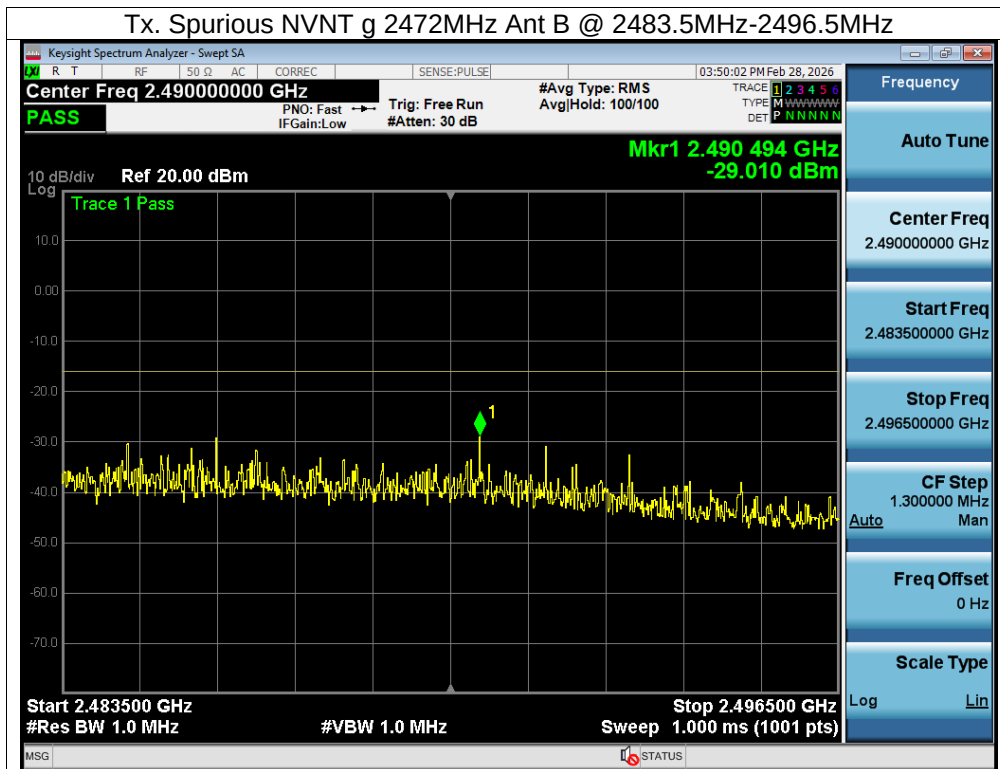


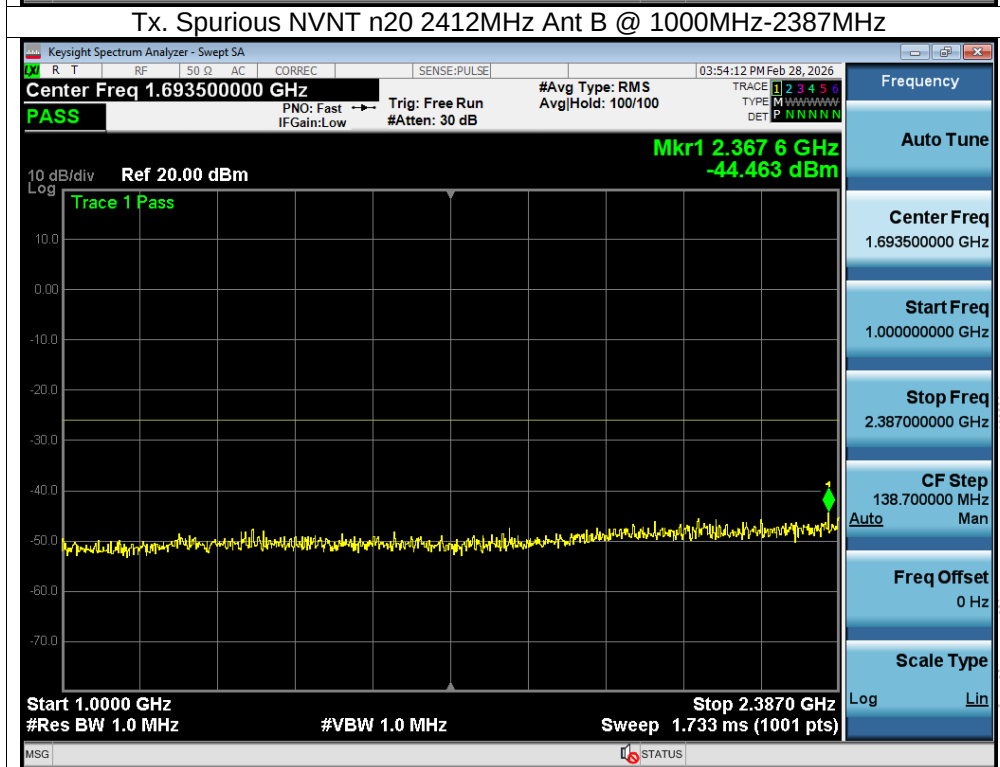
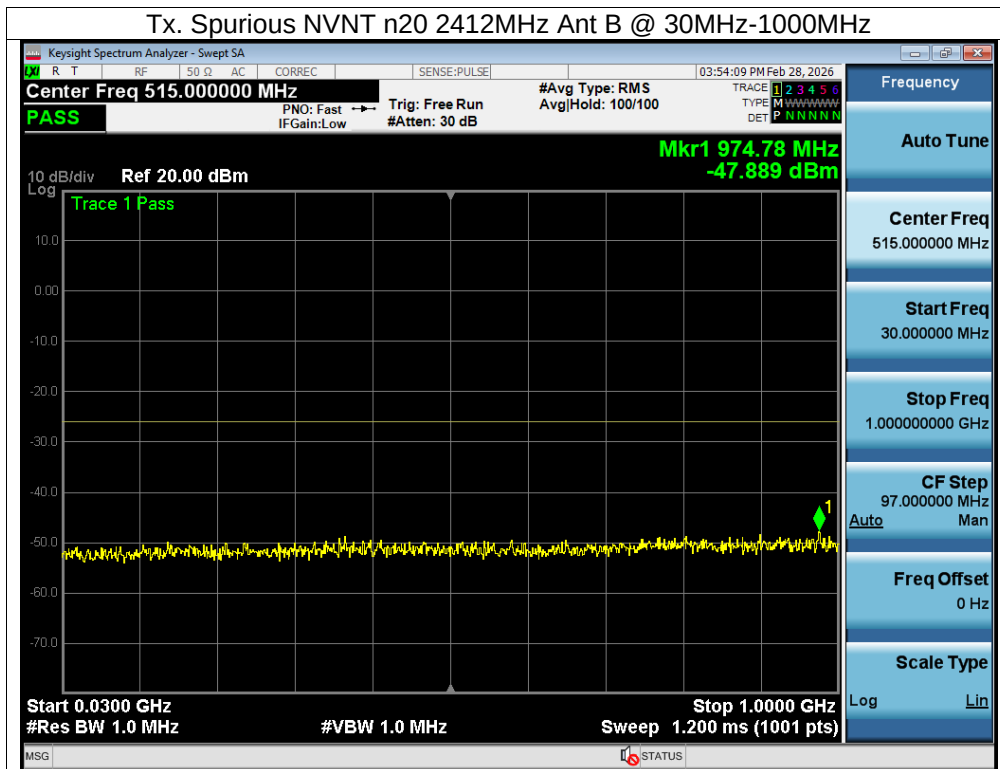


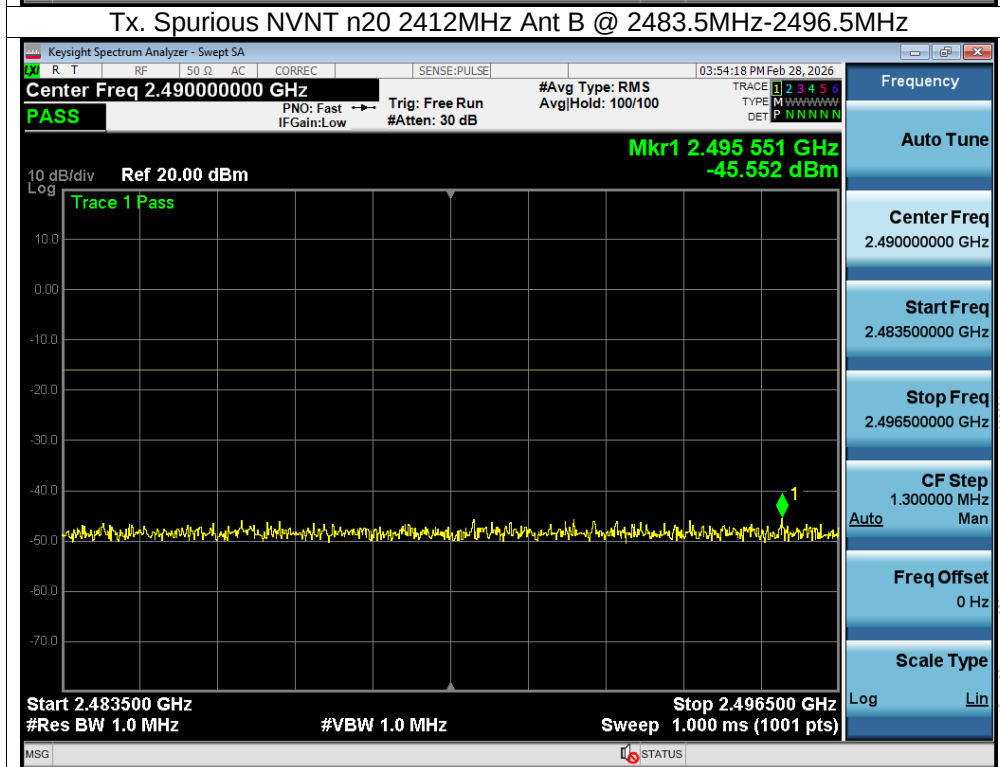
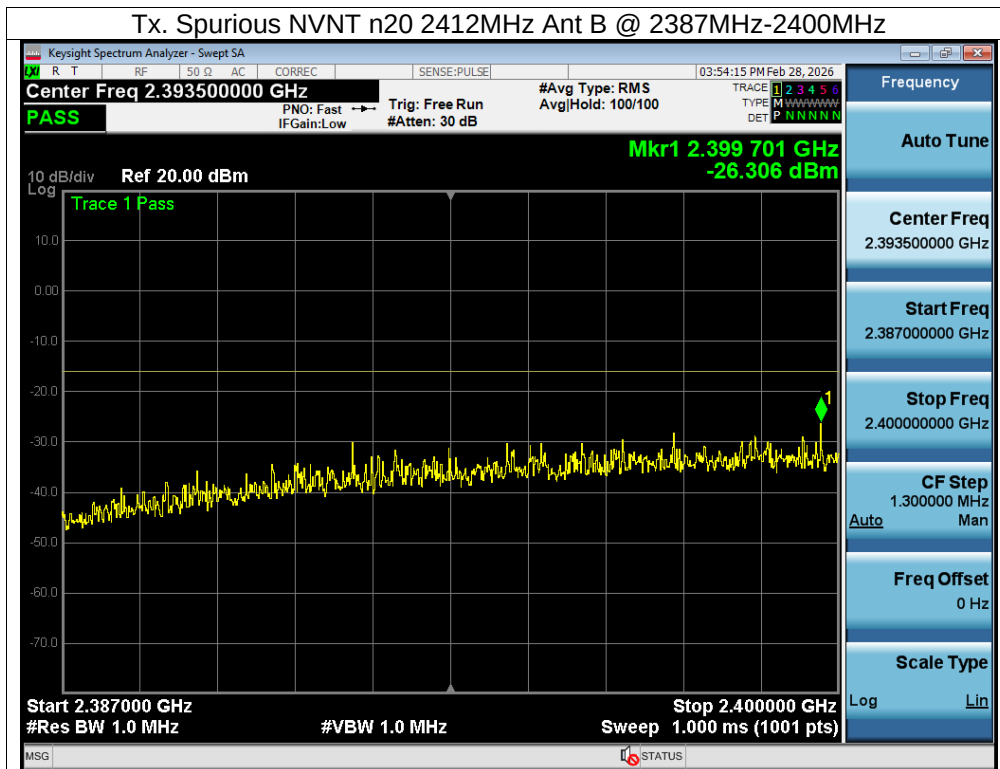


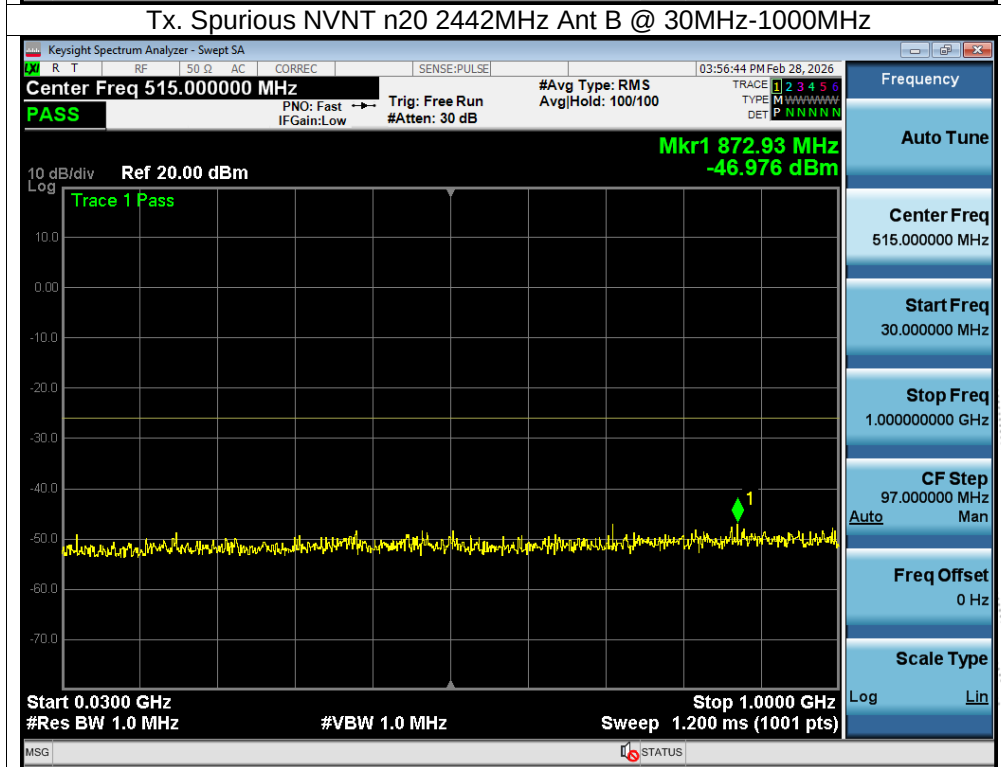
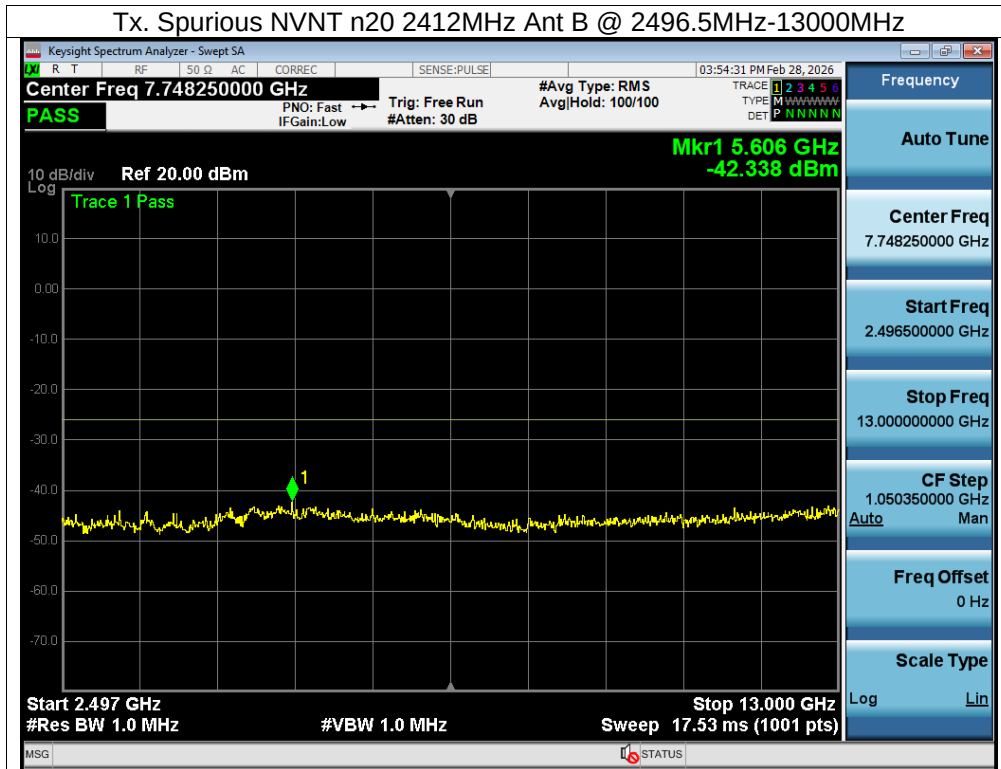


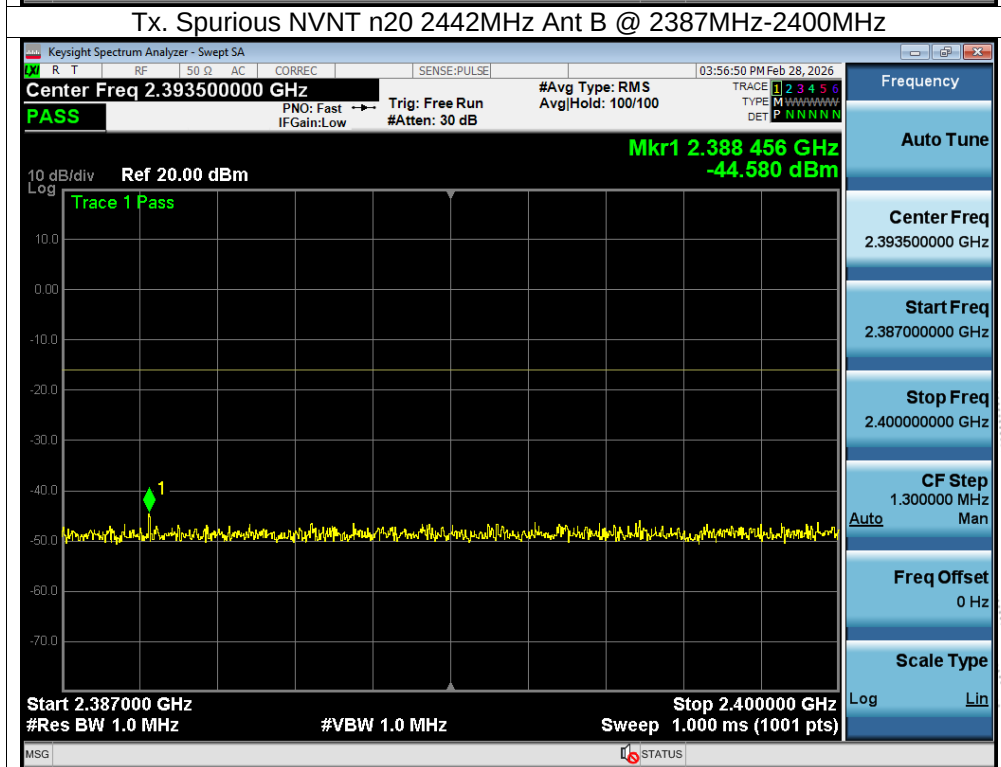
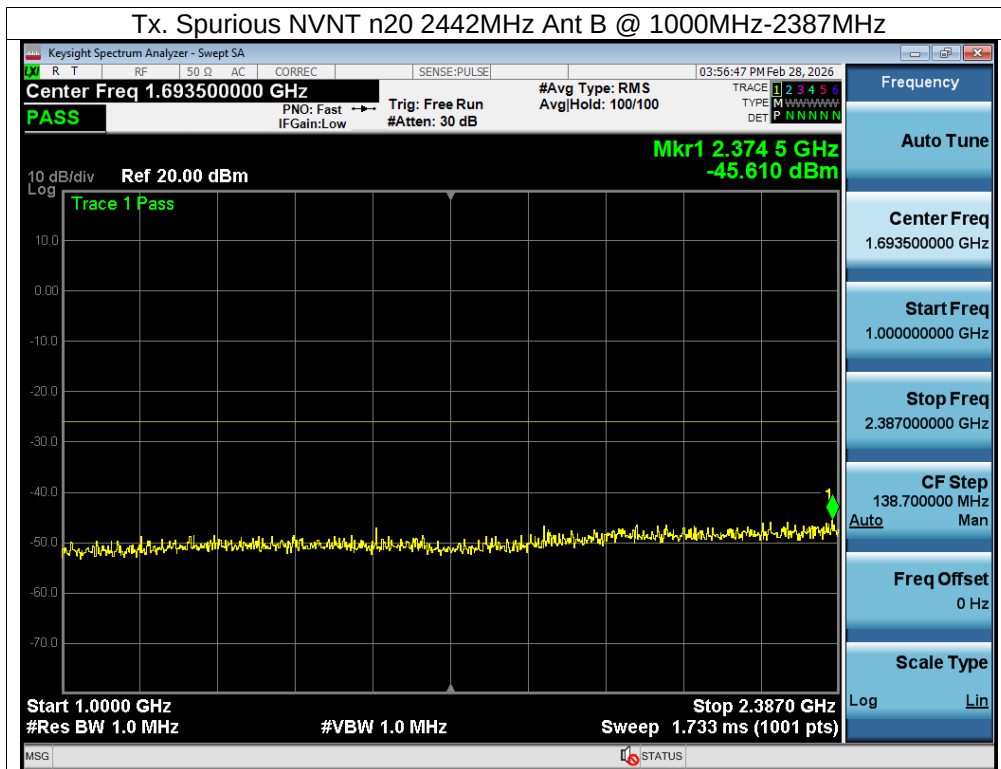


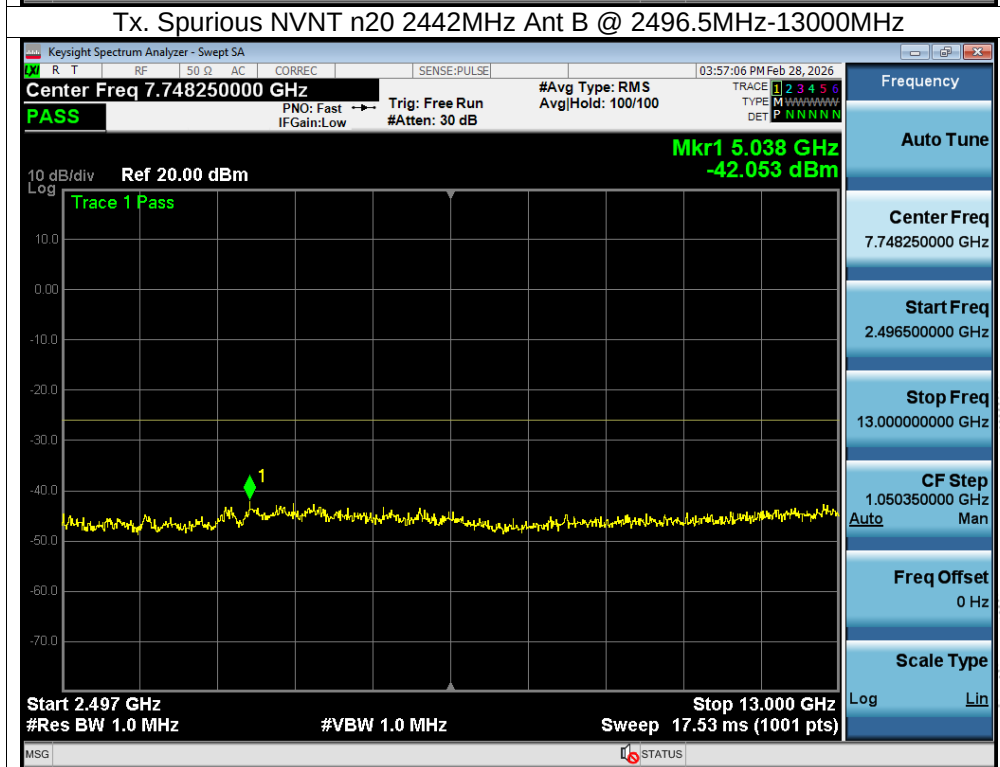
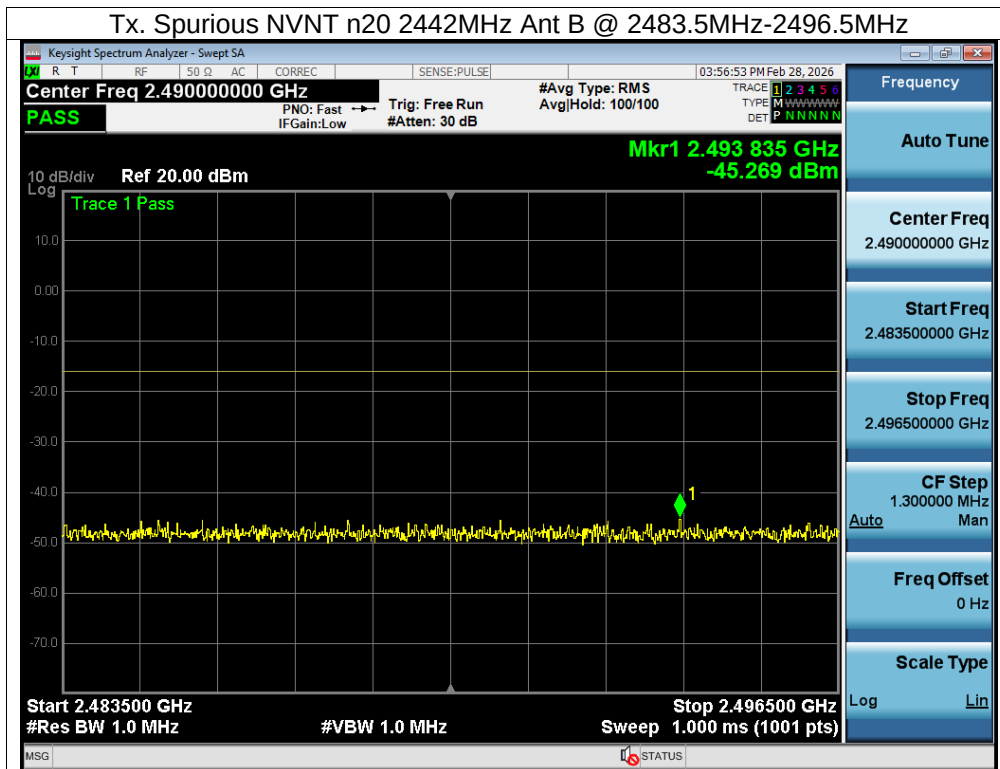


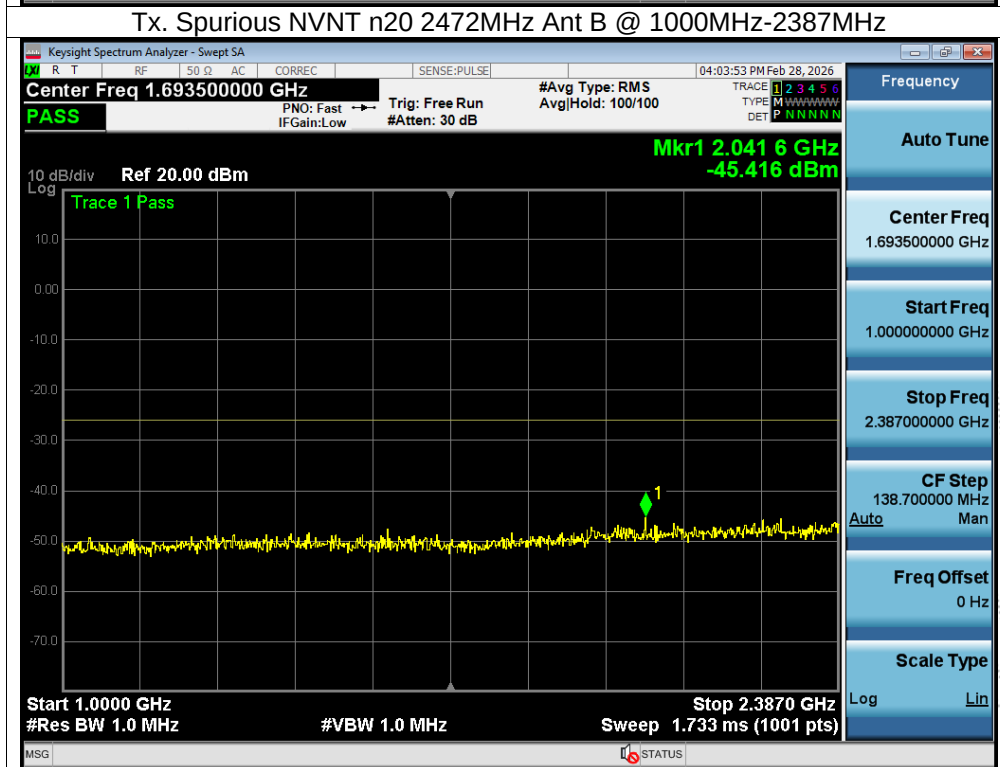
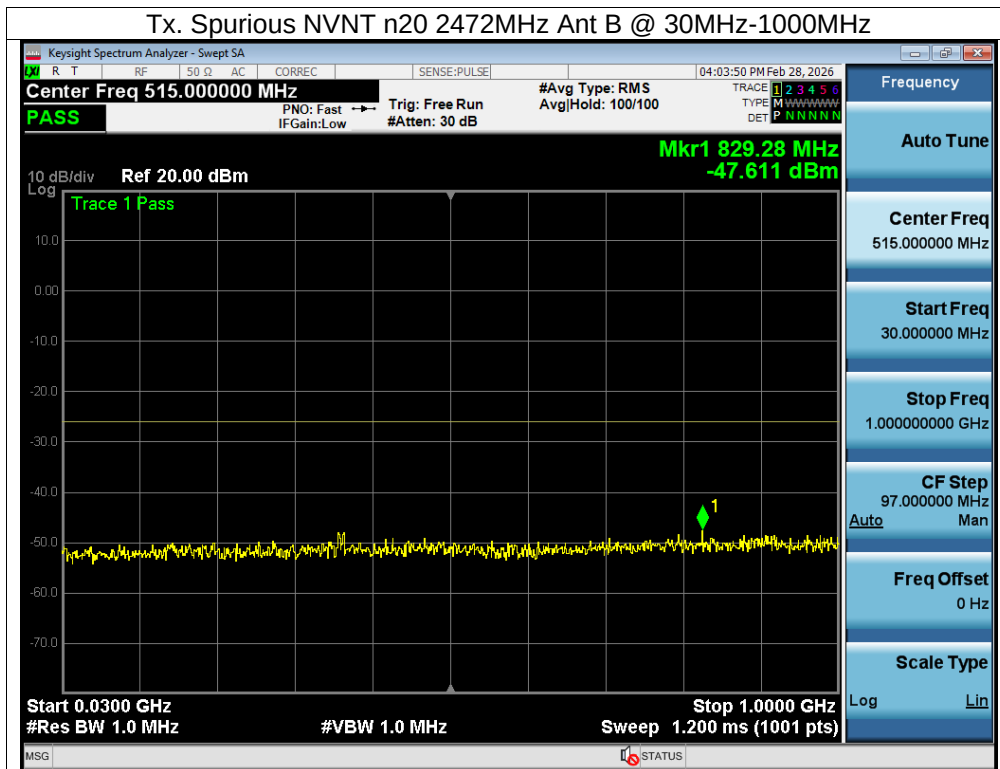


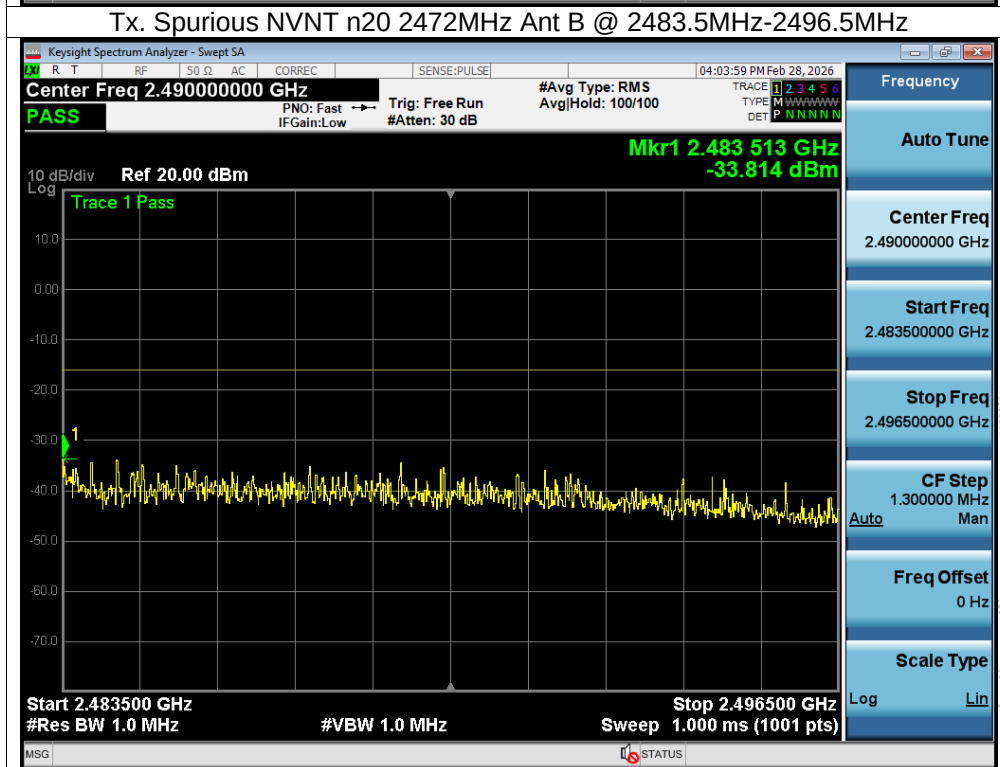
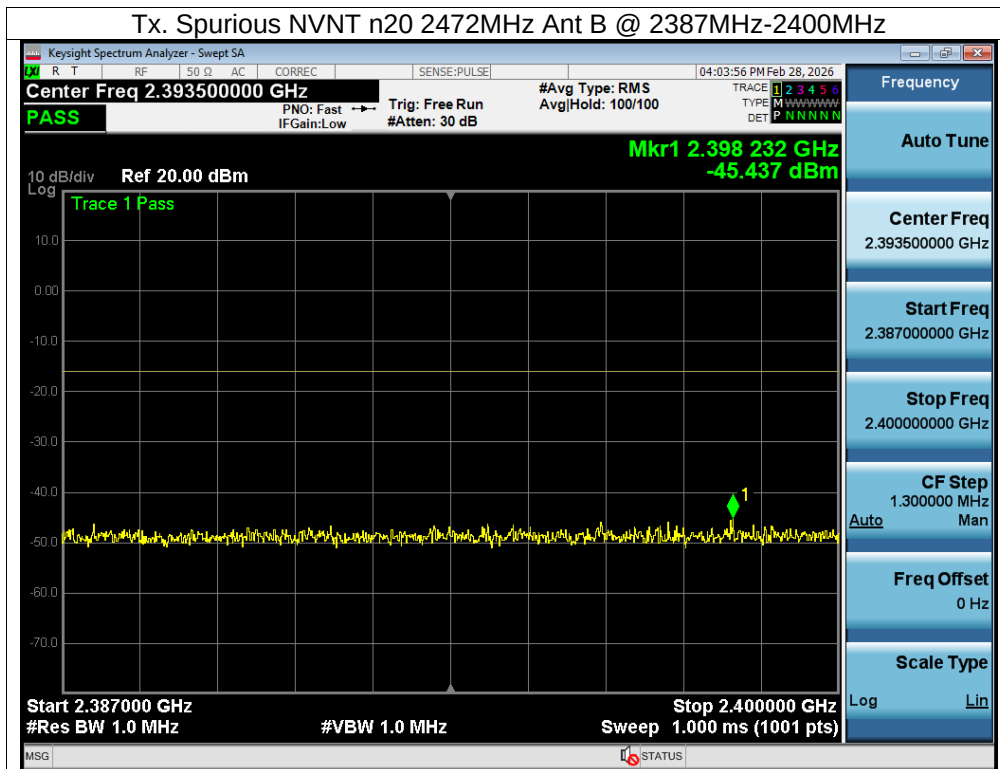


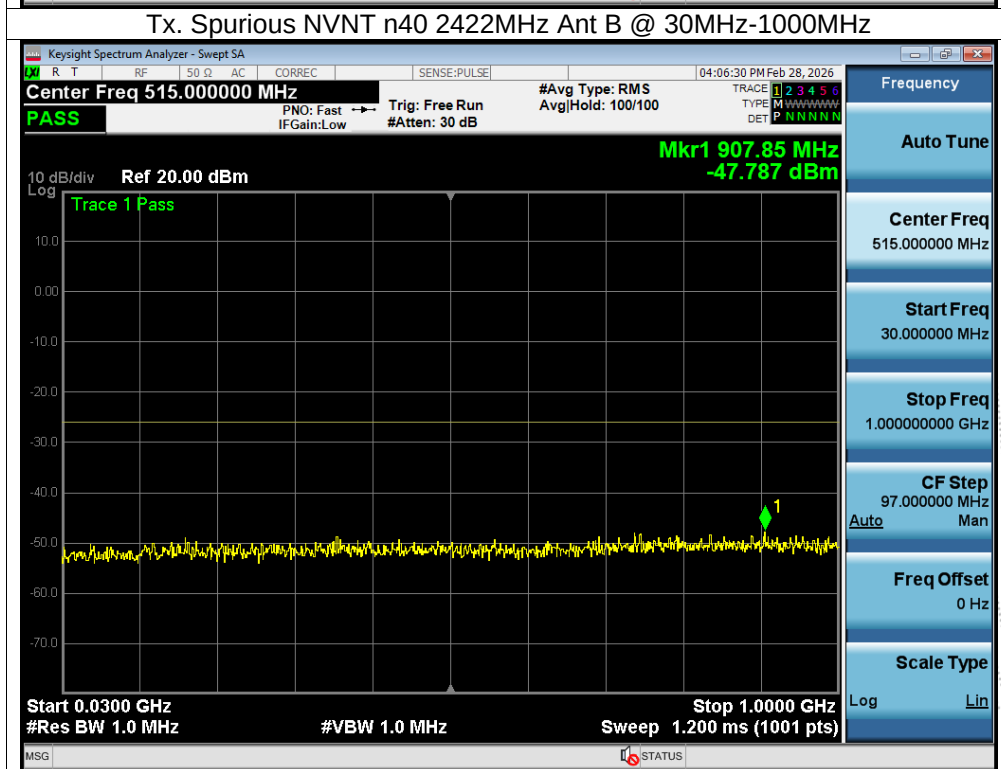
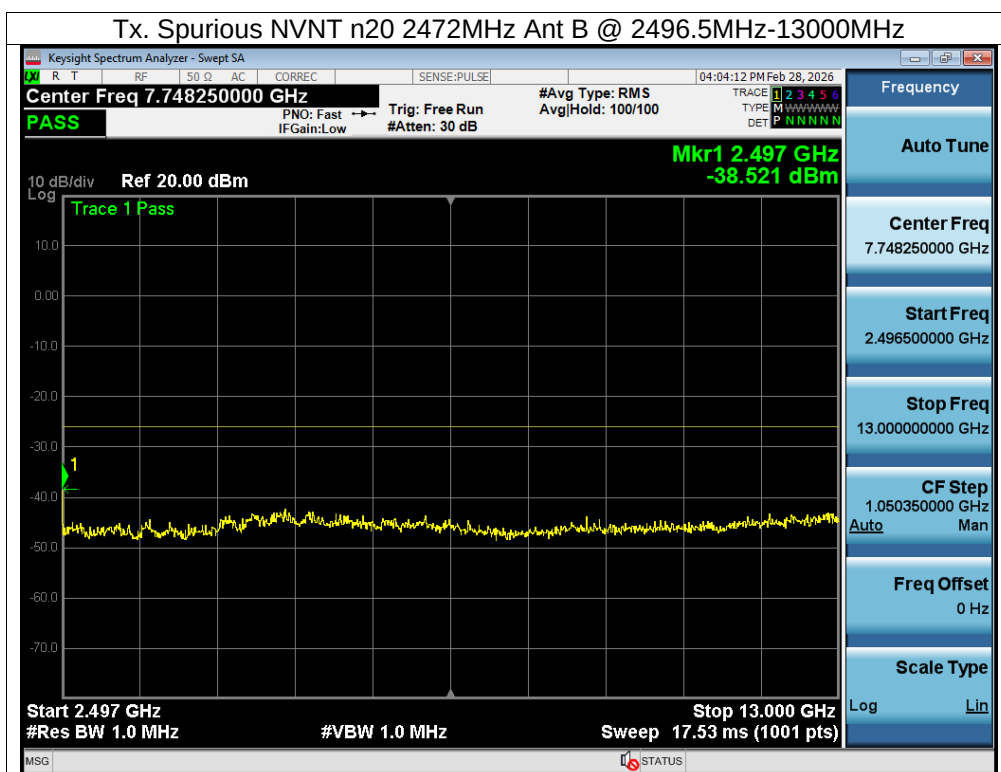


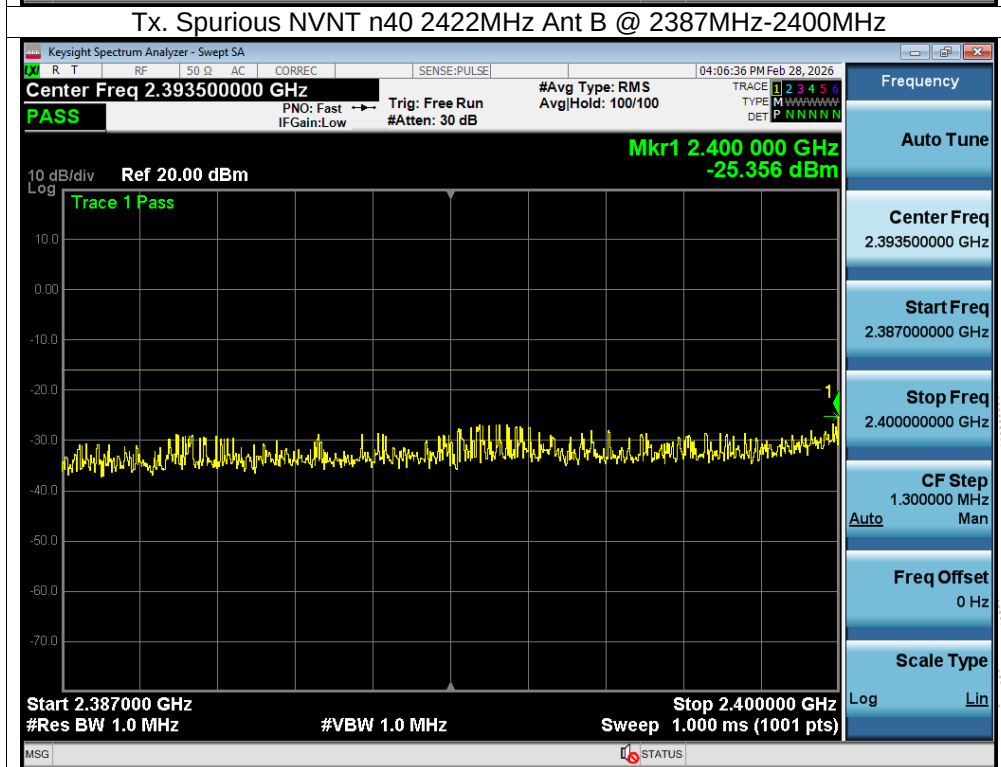
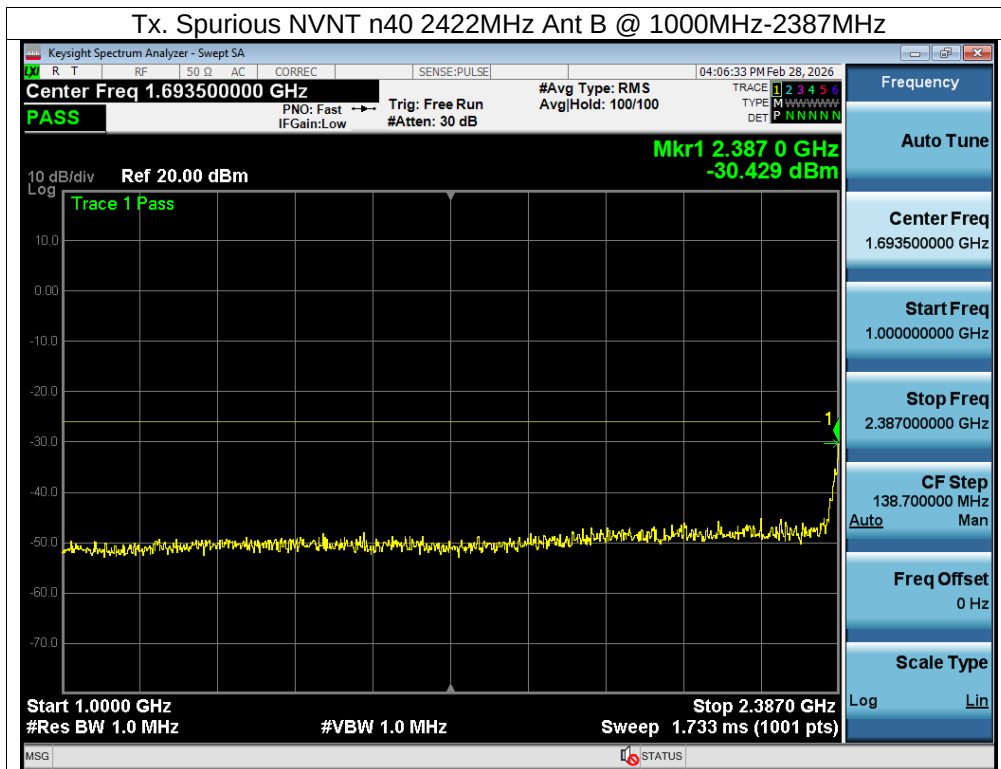


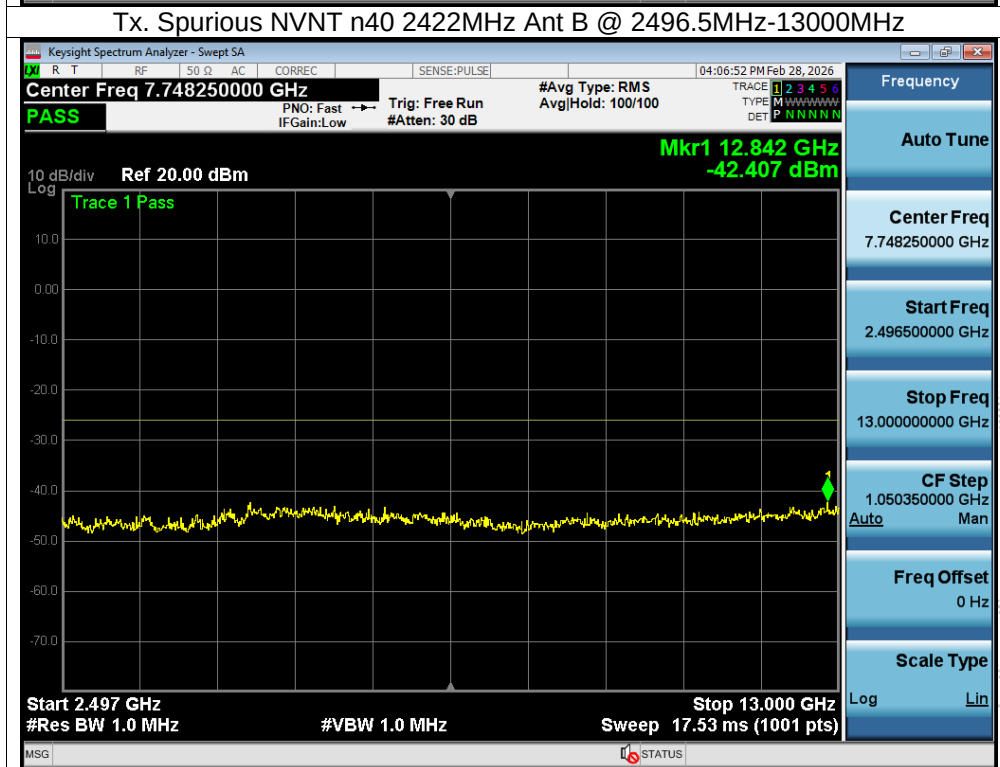
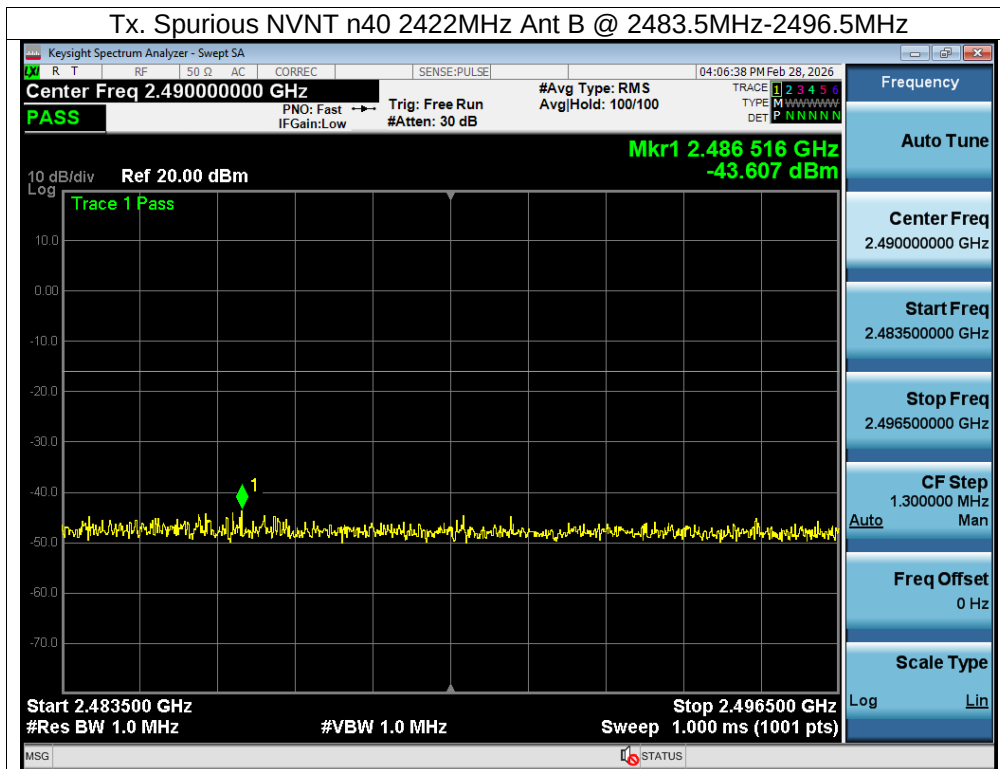


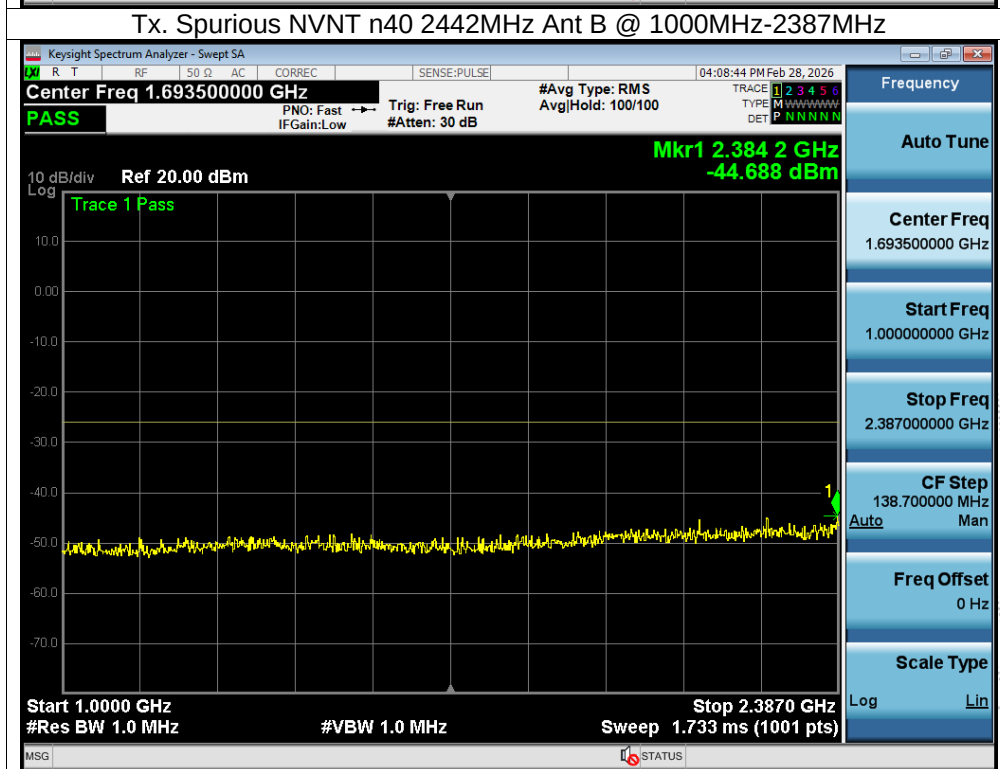
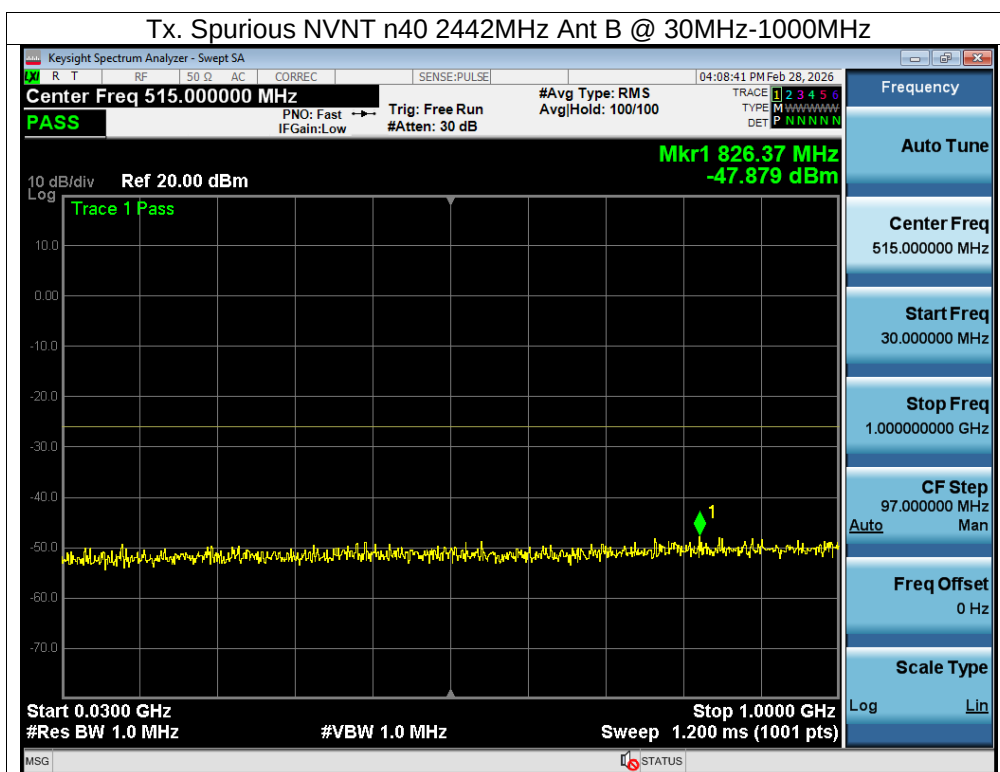


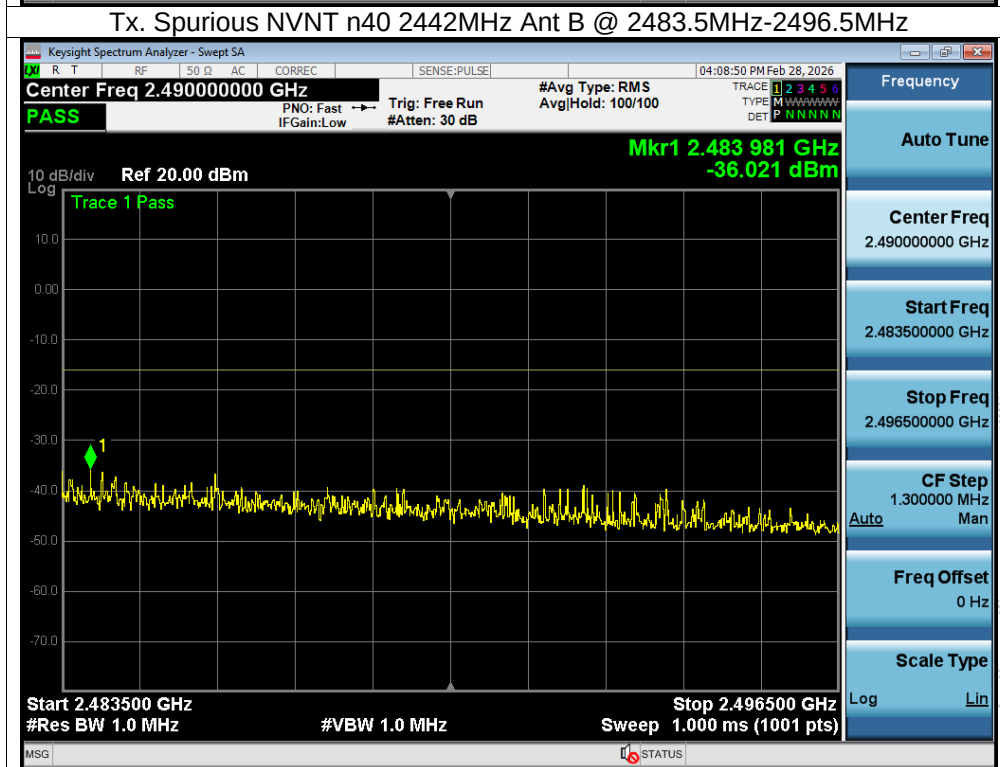
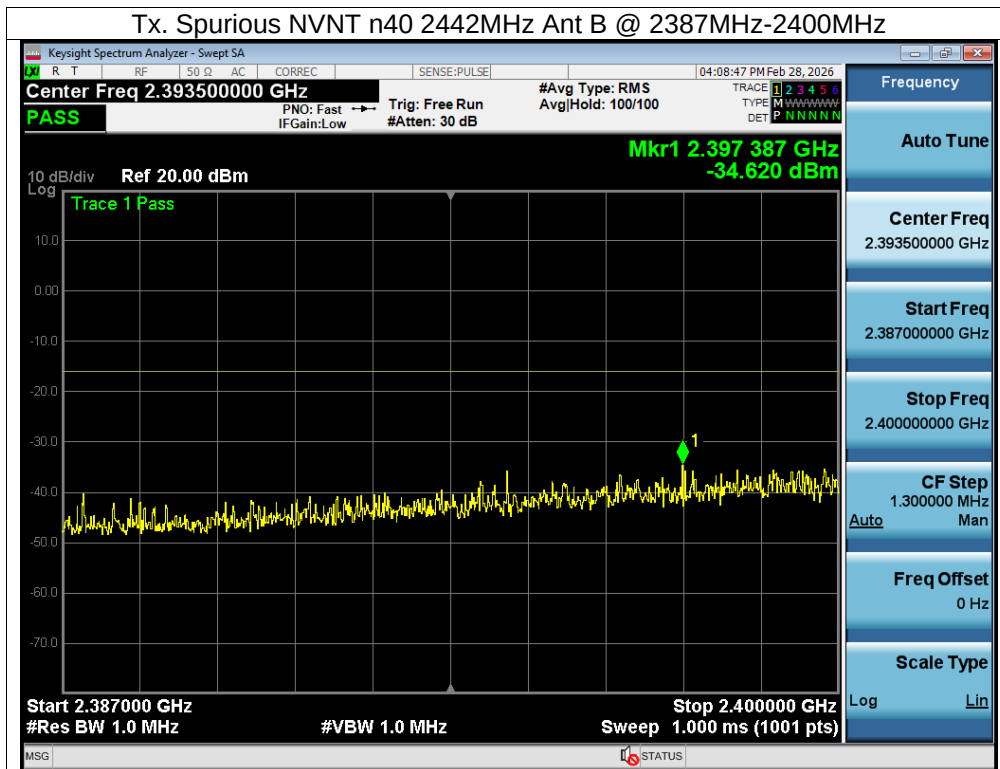


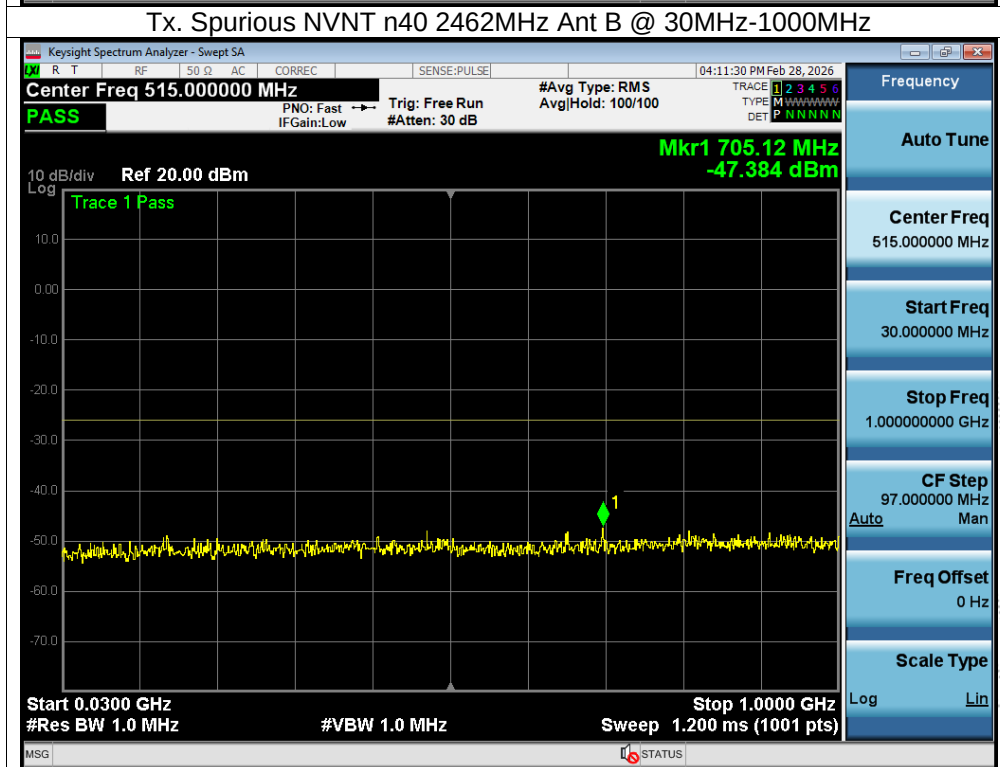
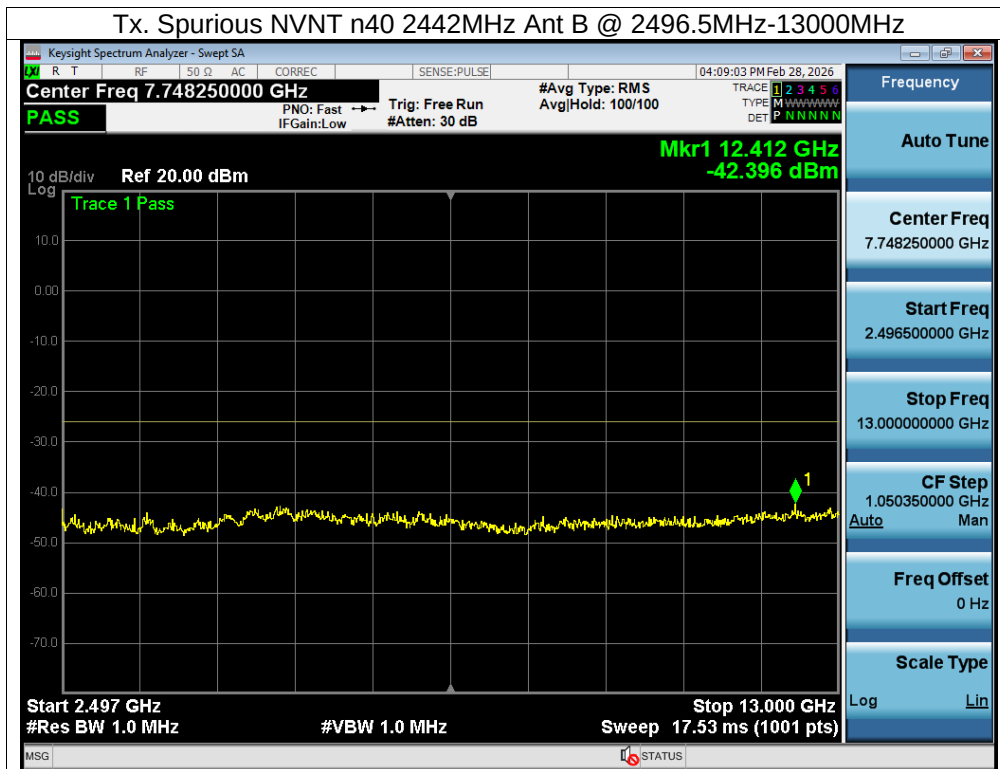


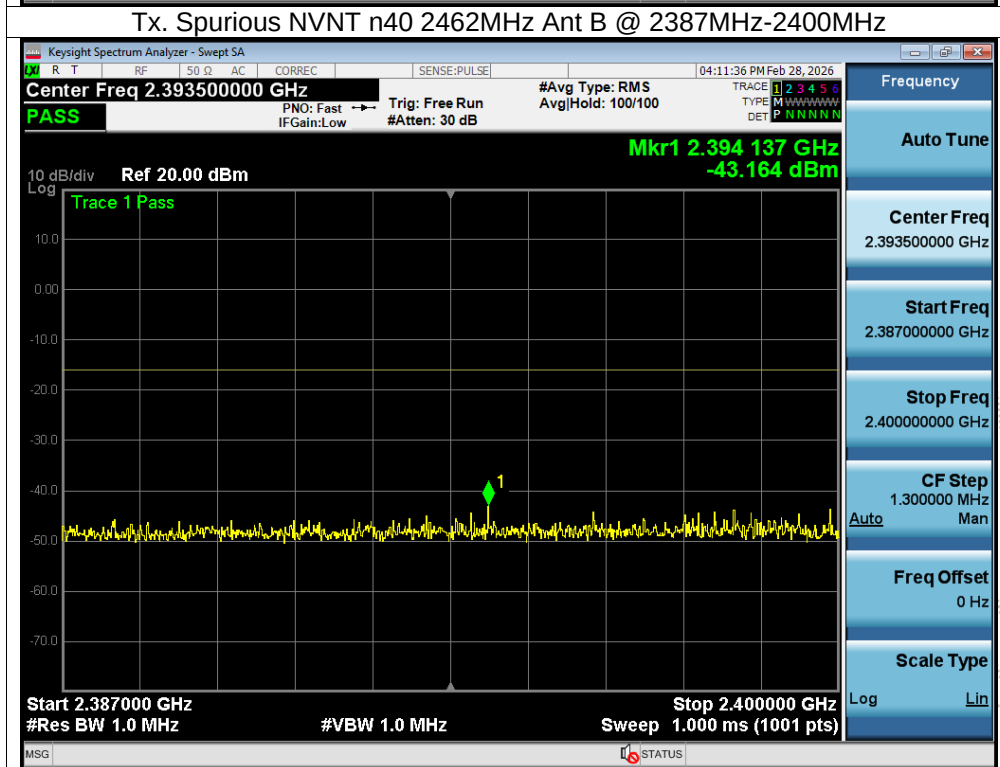
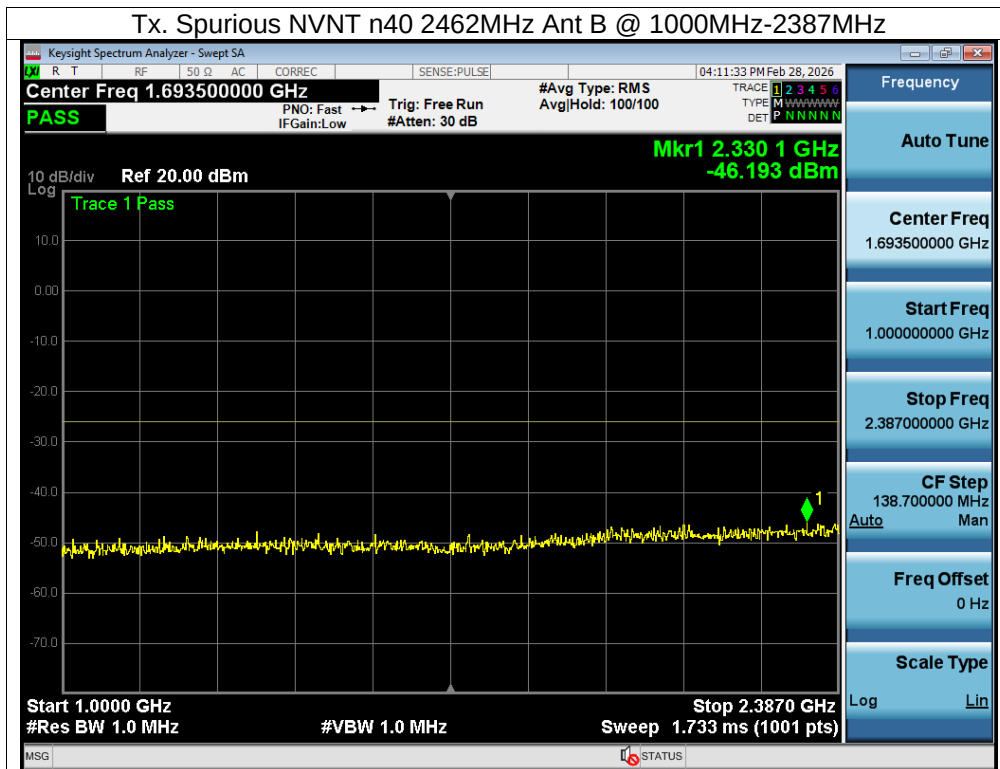


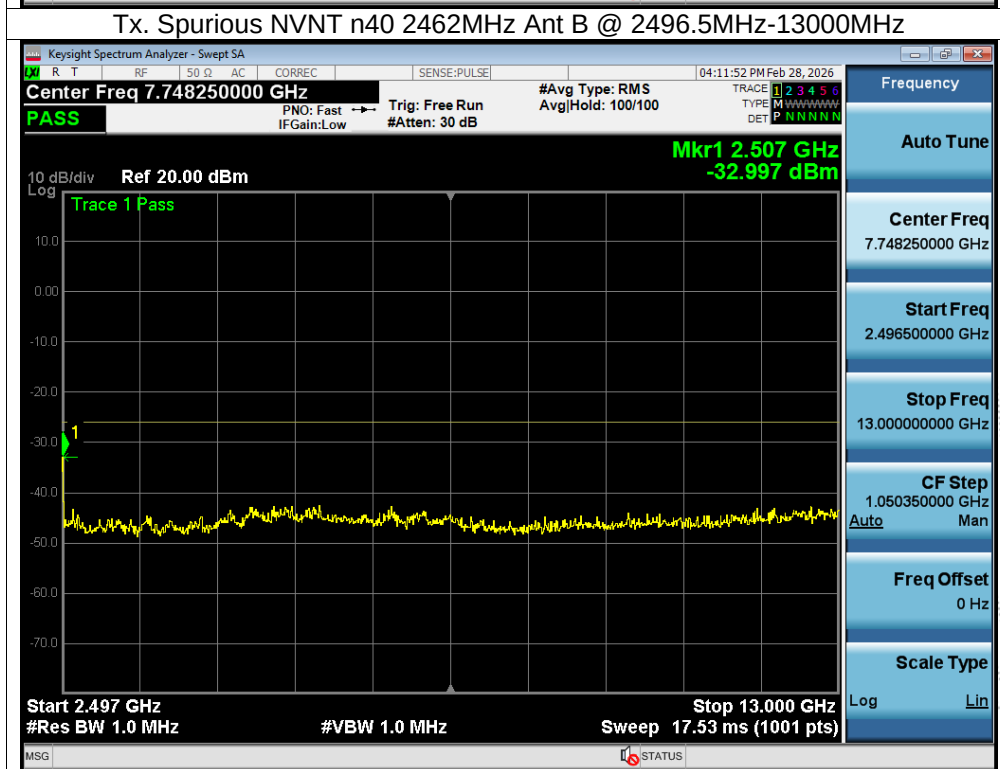
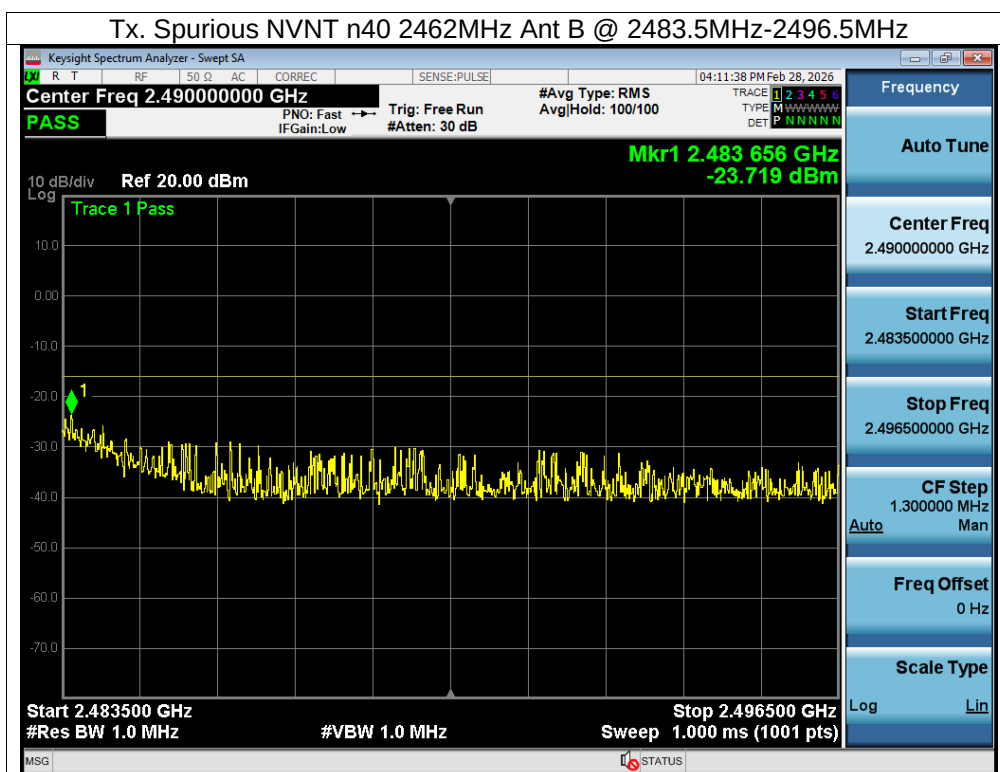










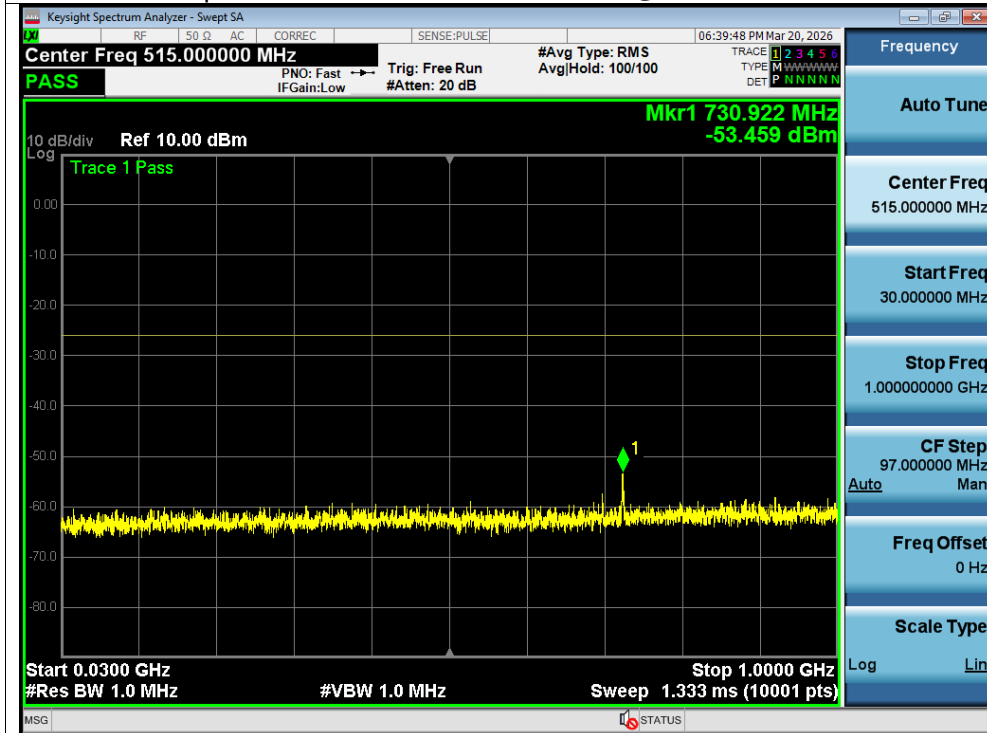


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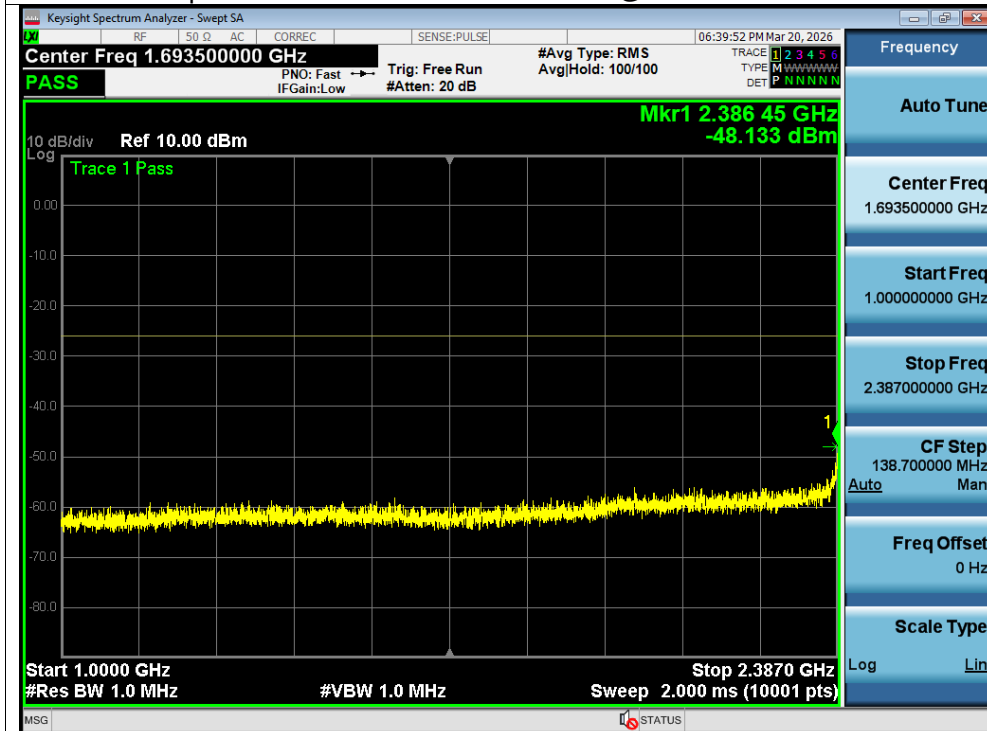


Test Graphs

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

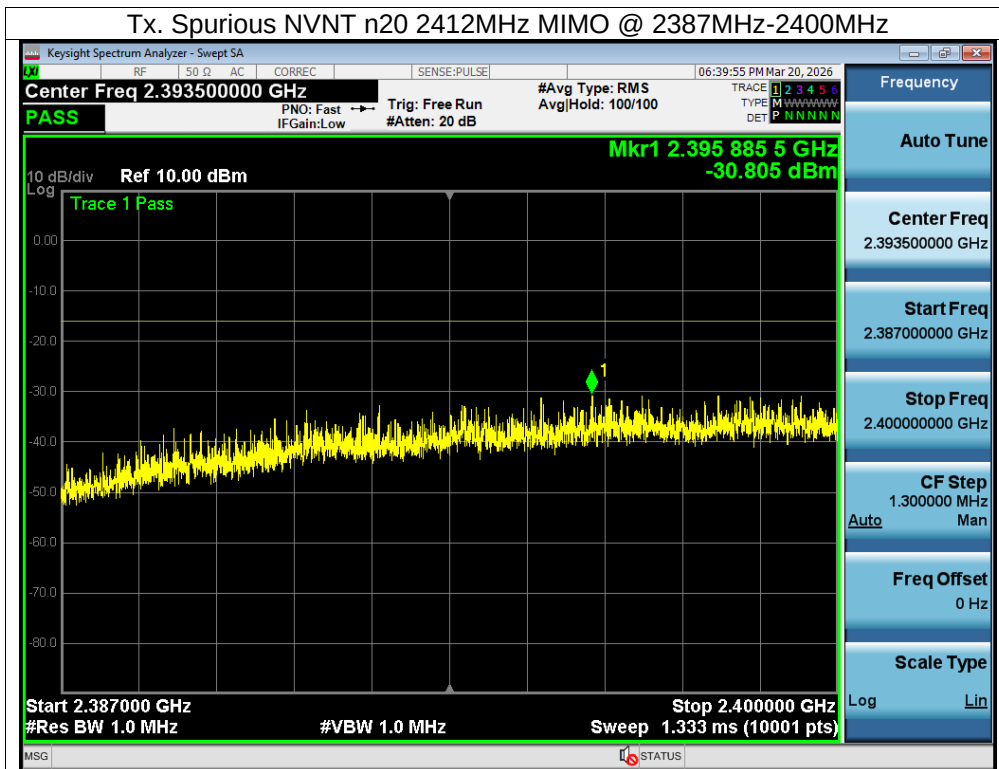


Tx. Spurious NVNT n20 2412MHz MIMO @ 1000MHz-2387MHz

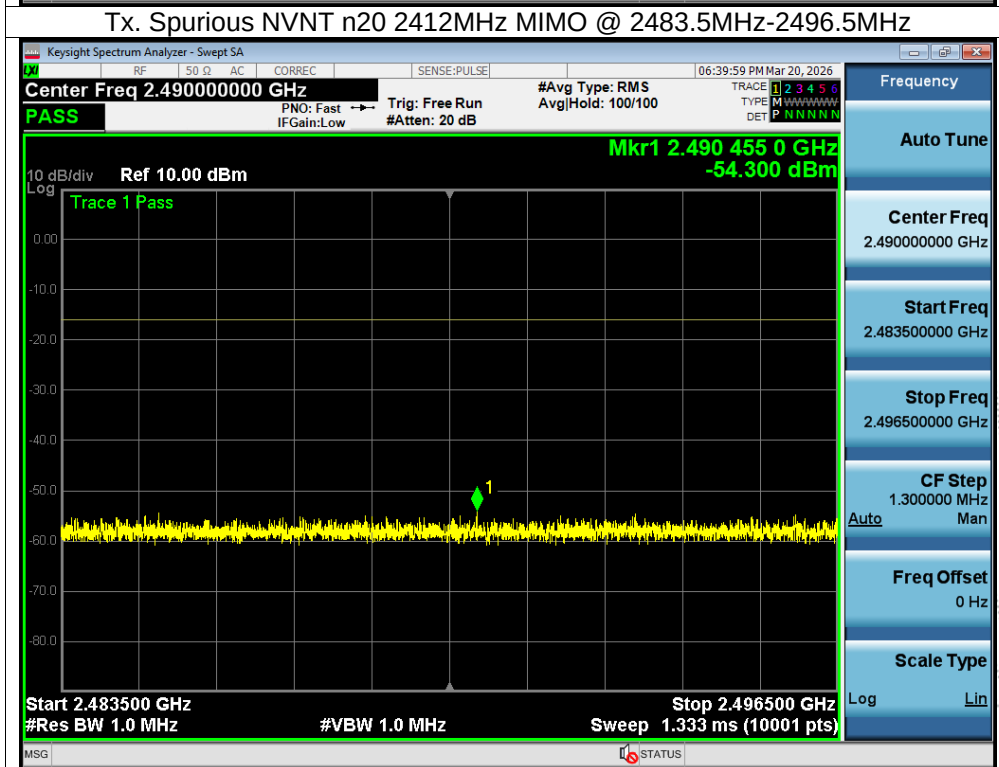


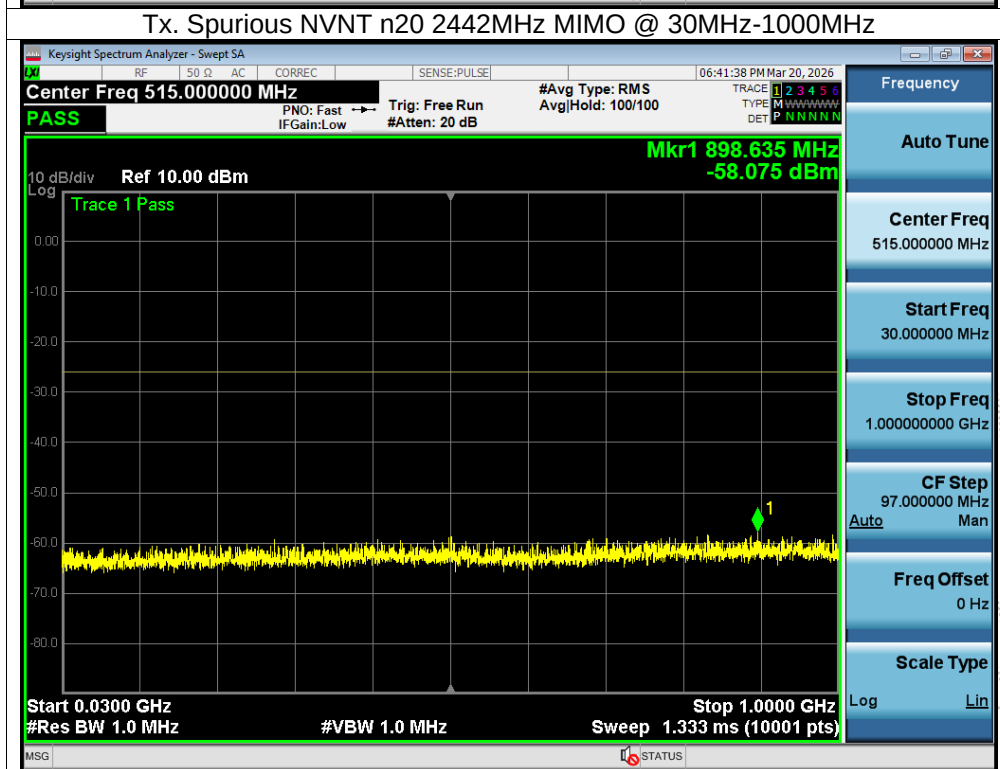
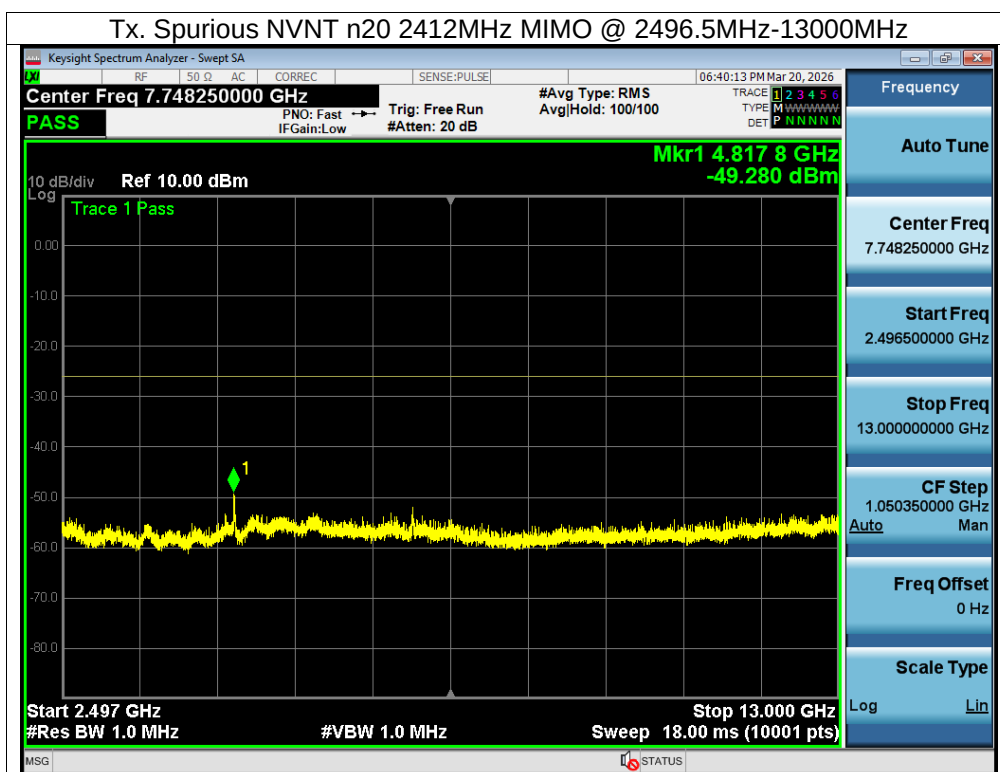


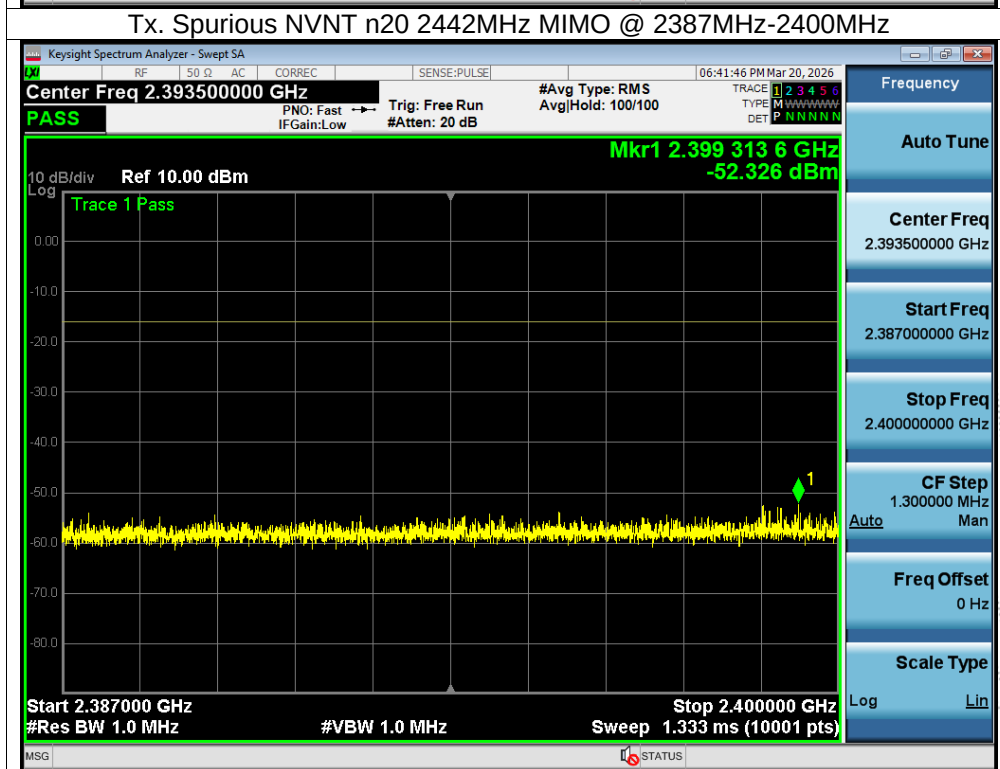
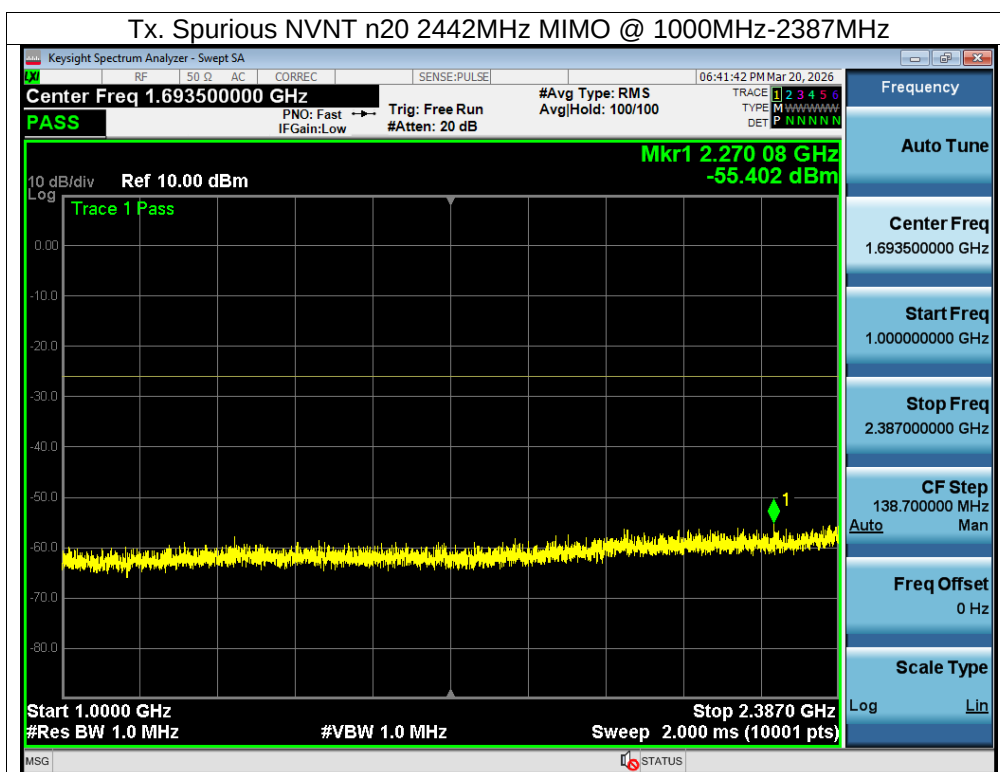
Tx. Spurious NVNT n20 2412MHz MIMO @ 2387MHz-2400MHz

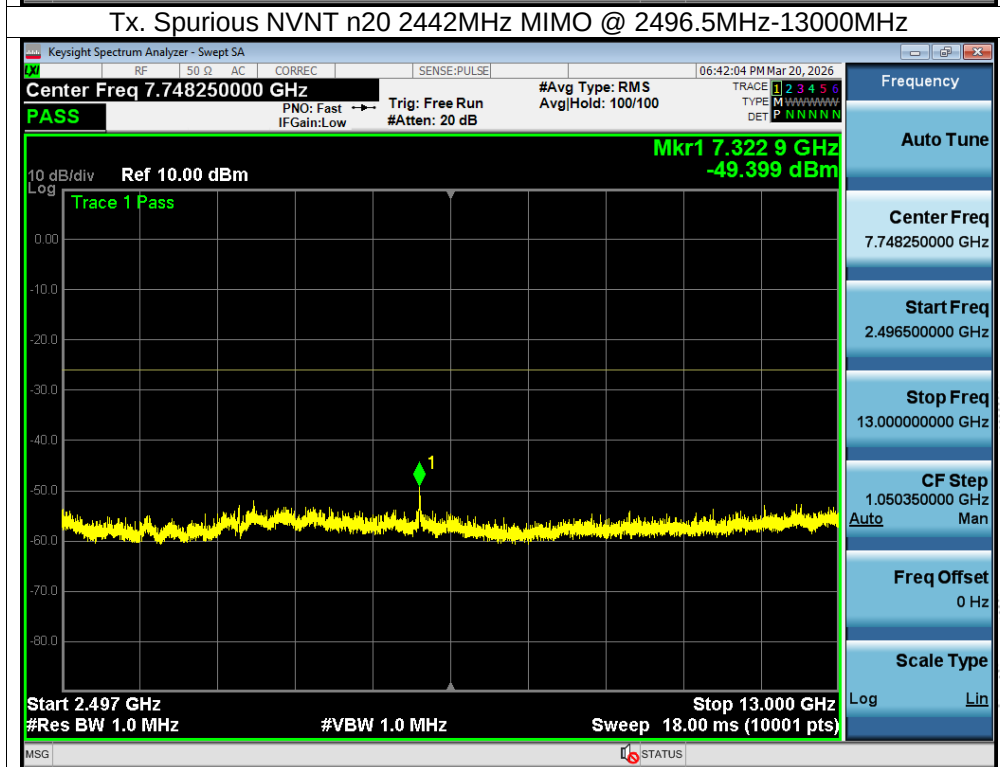
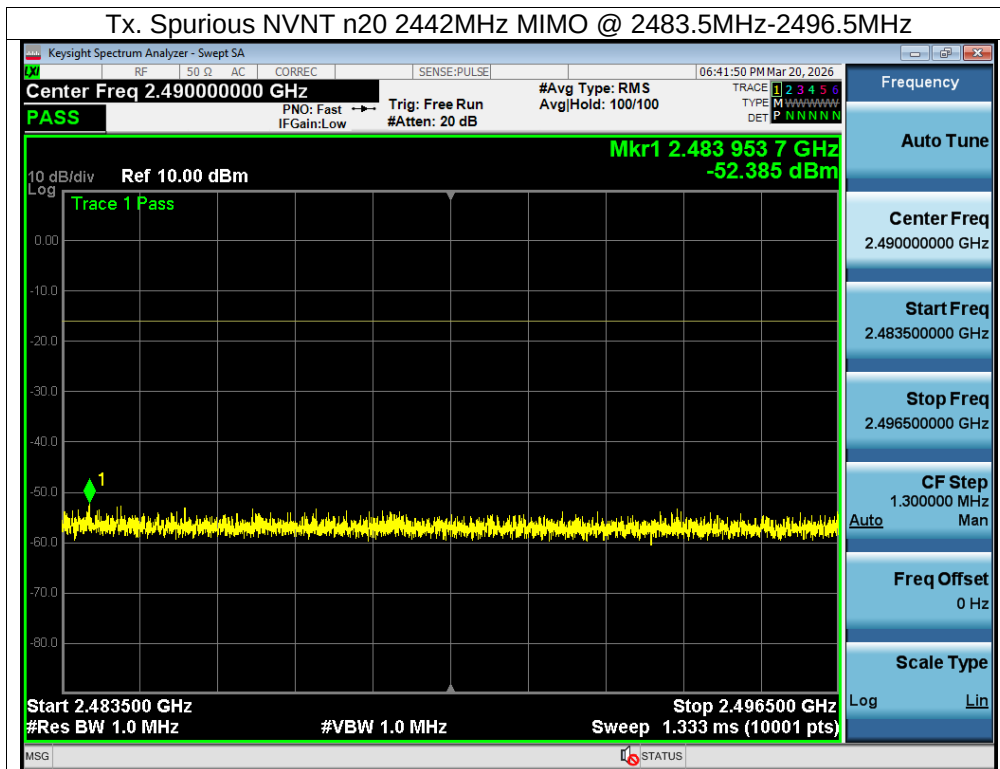


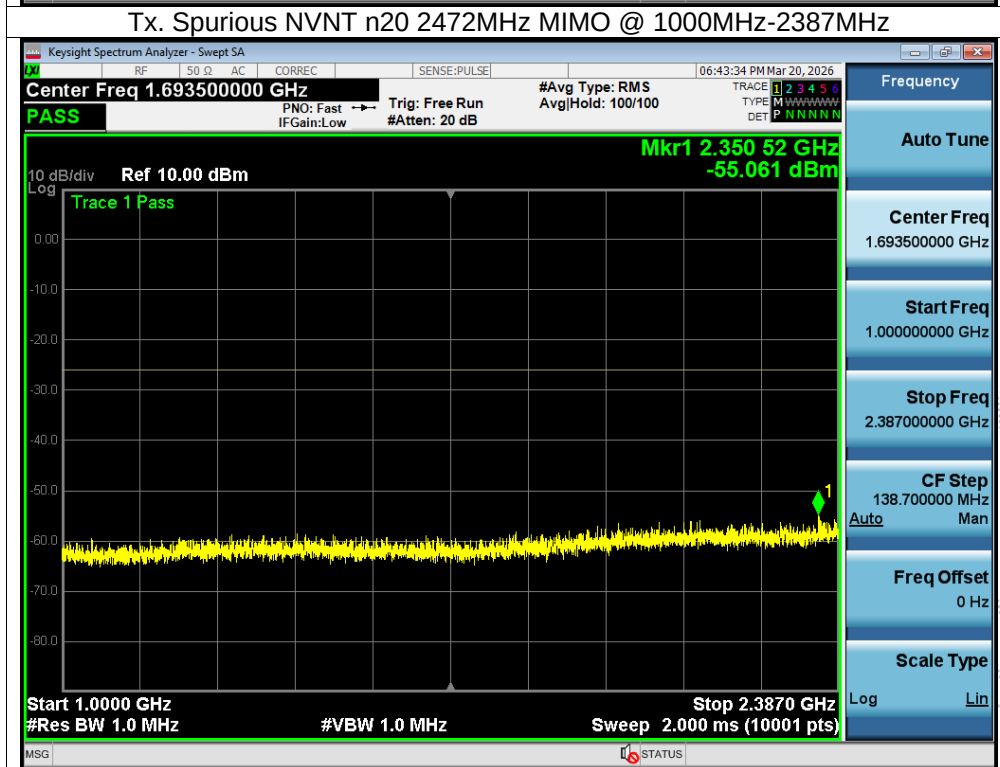
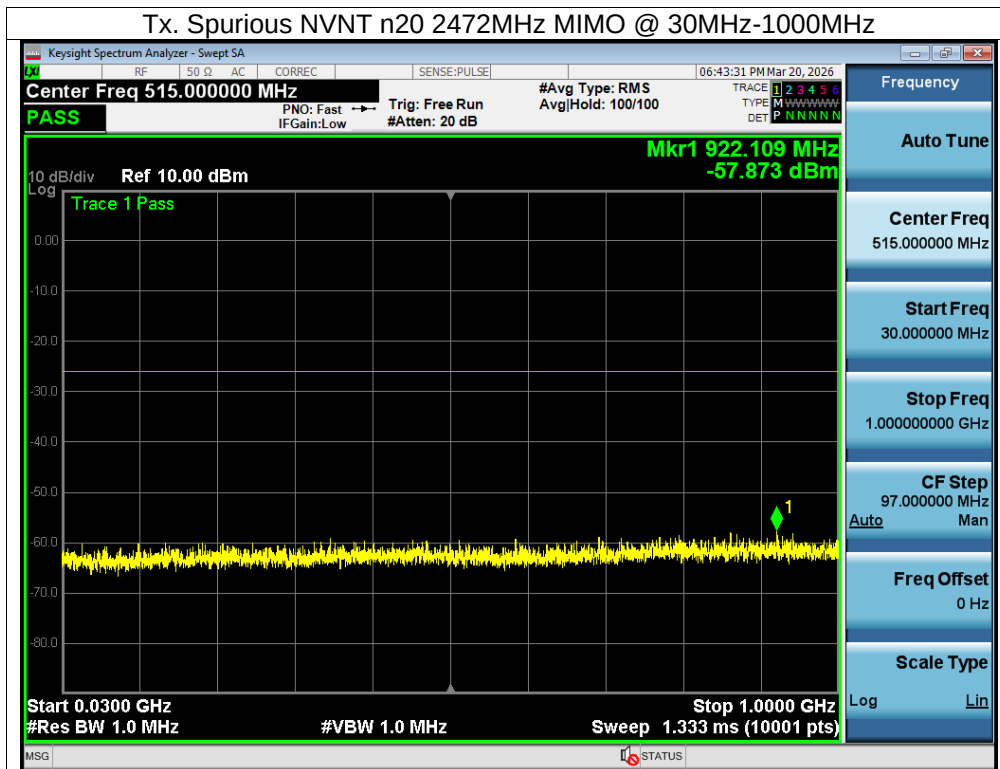
Tx. Spurious NVNT n20 2412MHz MIMO @ 2483.5MHz-2496.5MHz

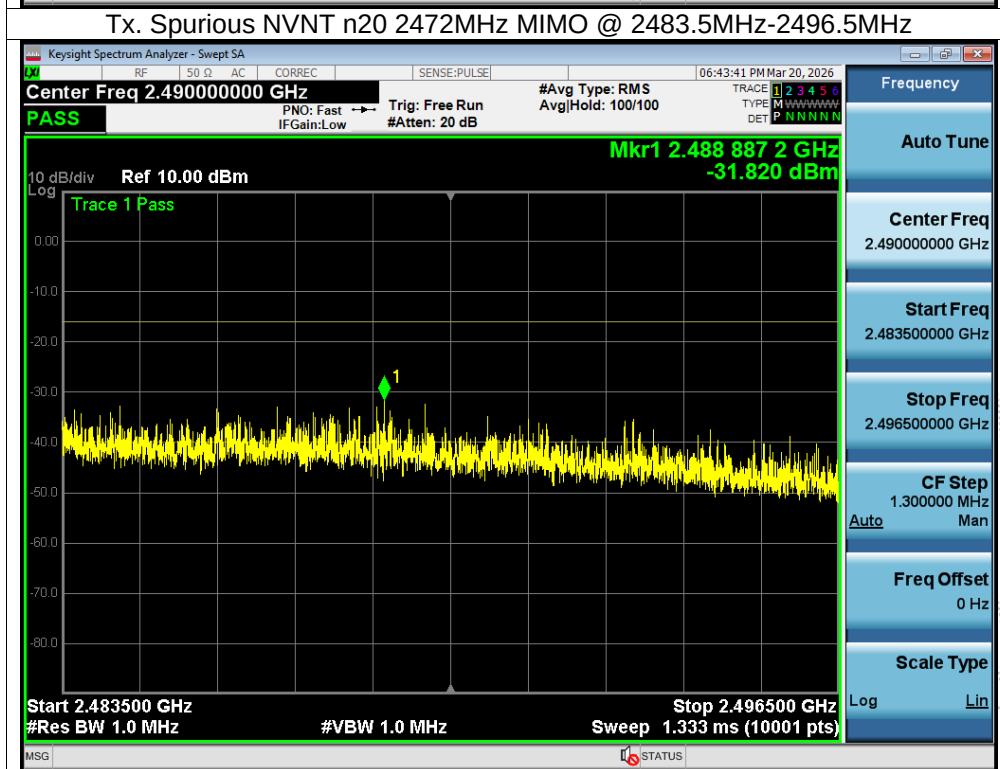
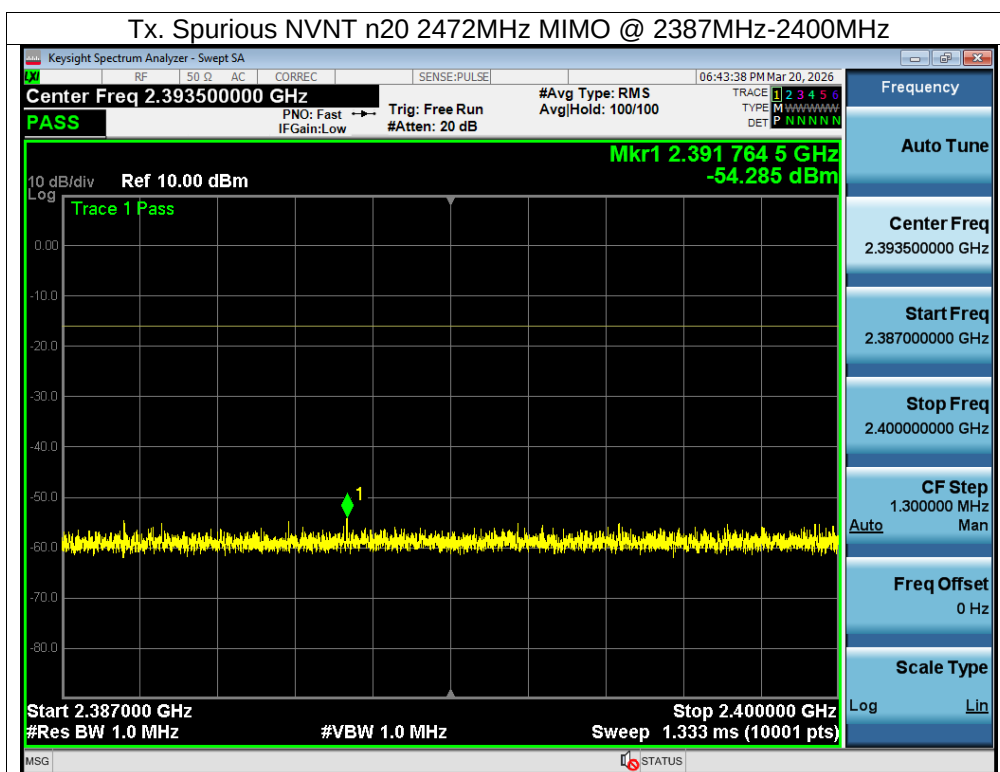


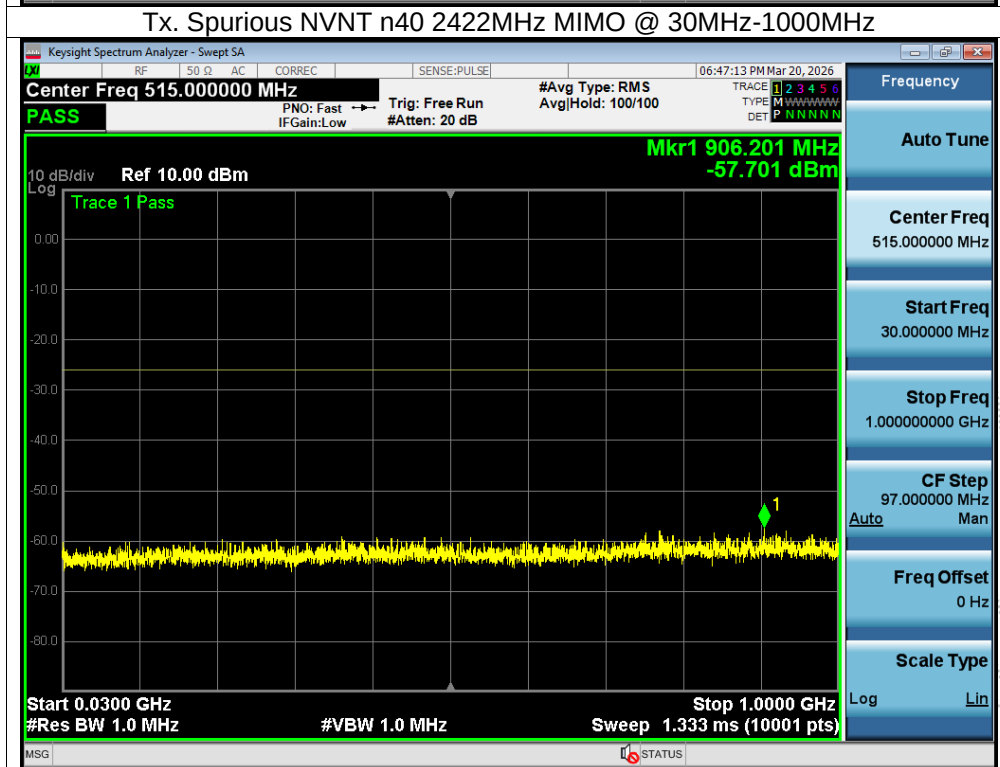
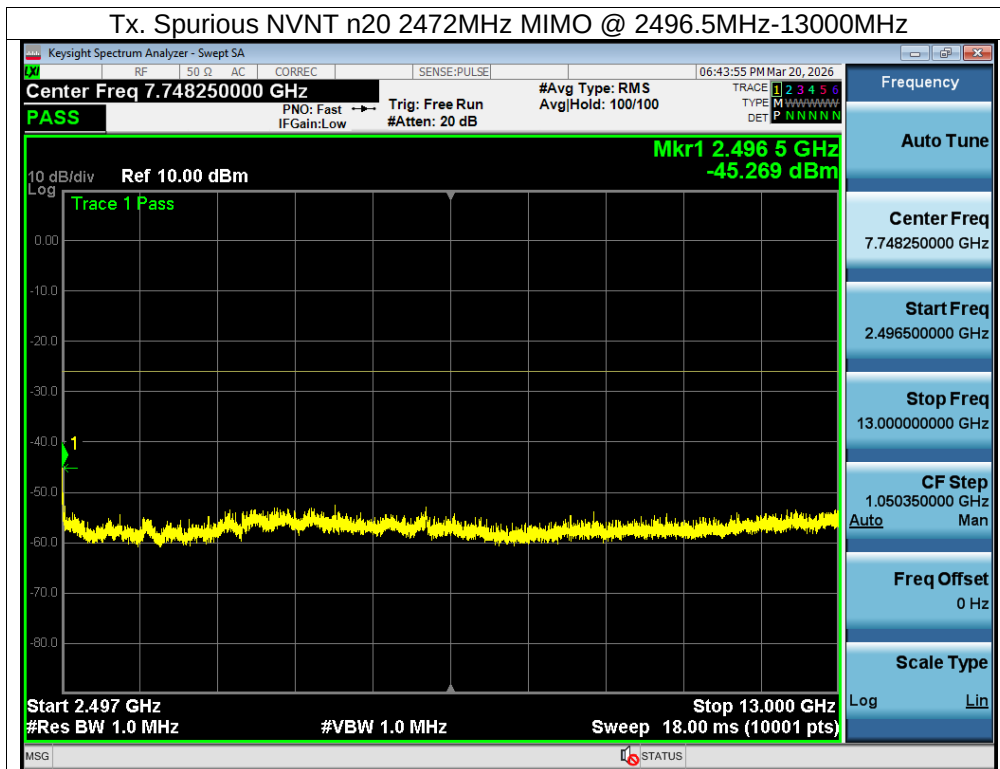




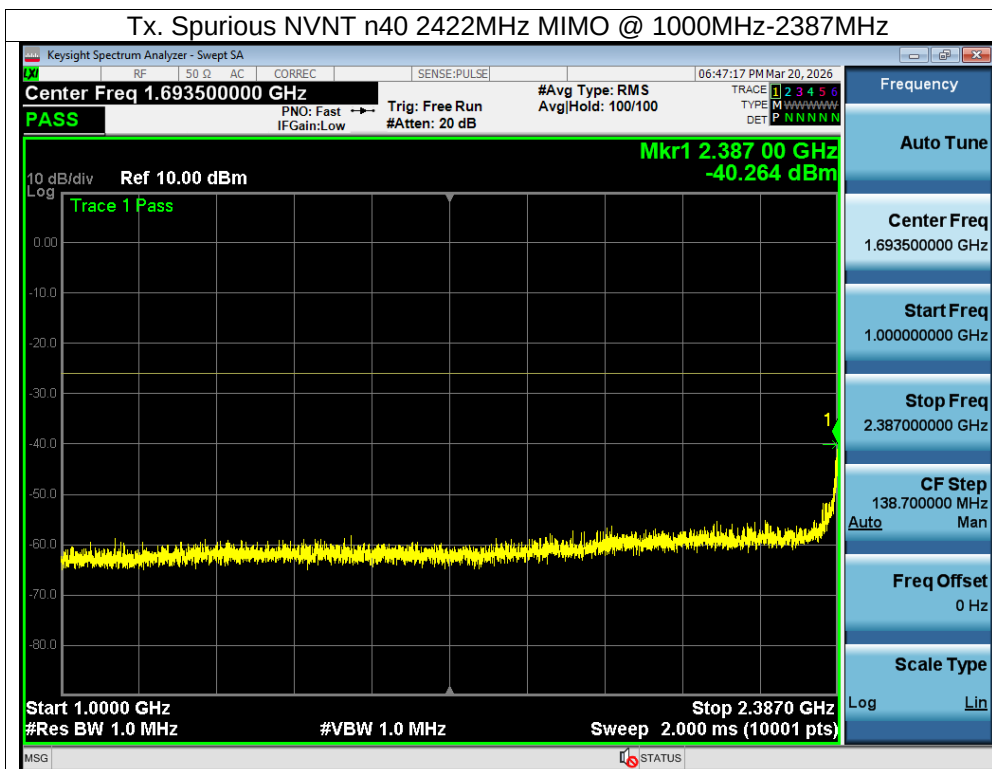




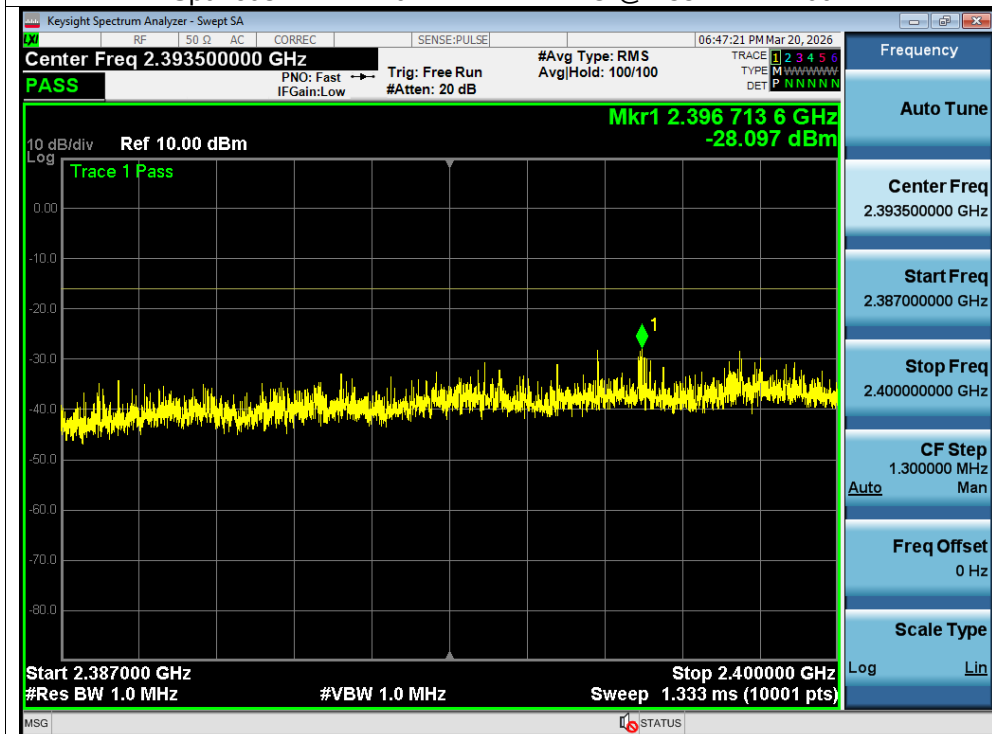


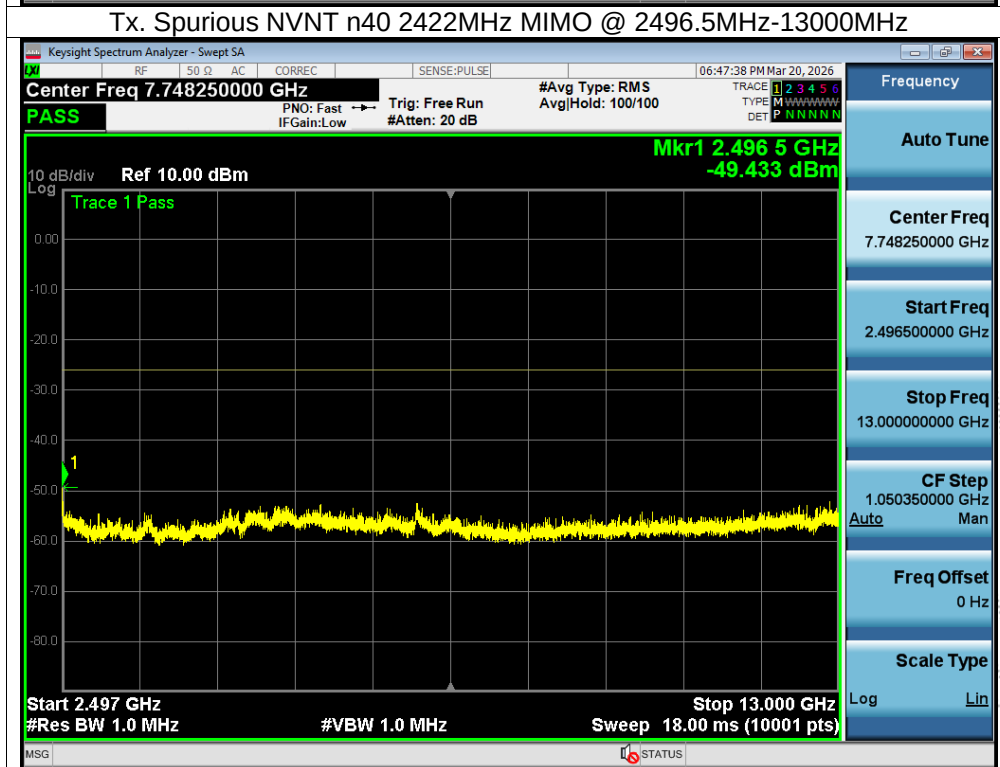
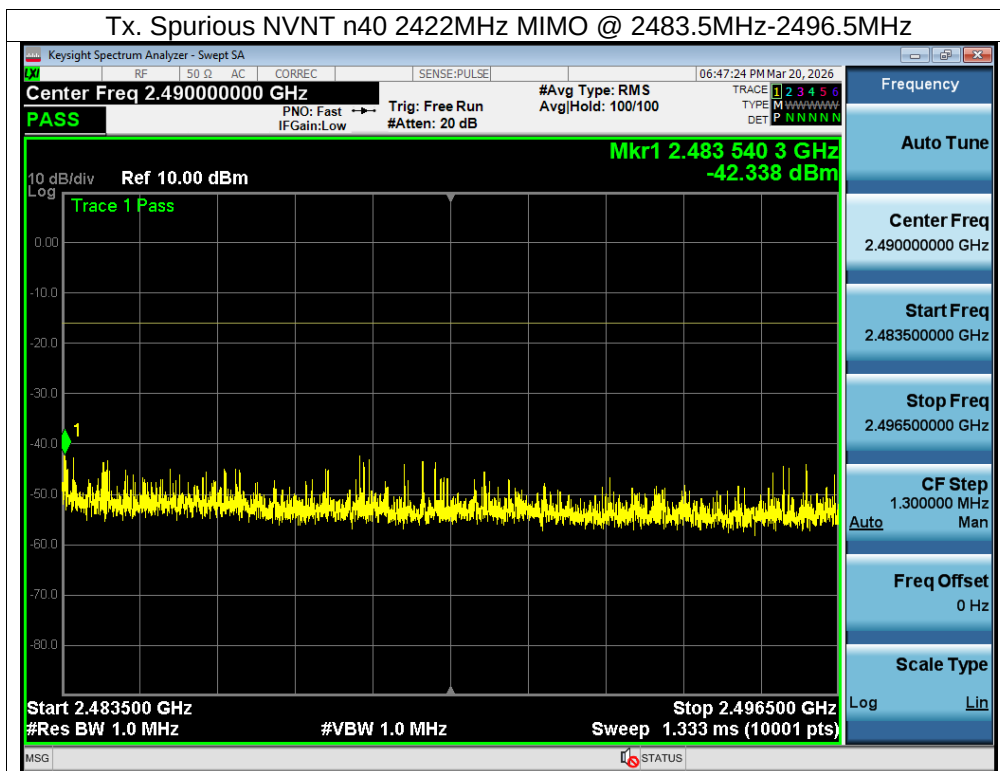


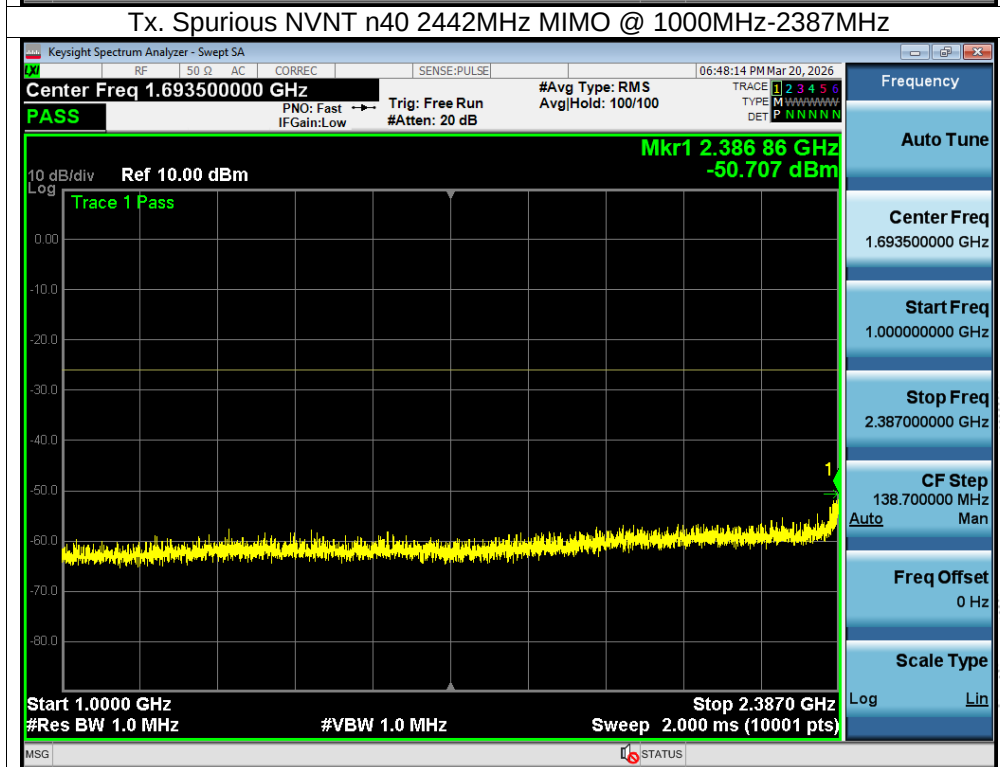
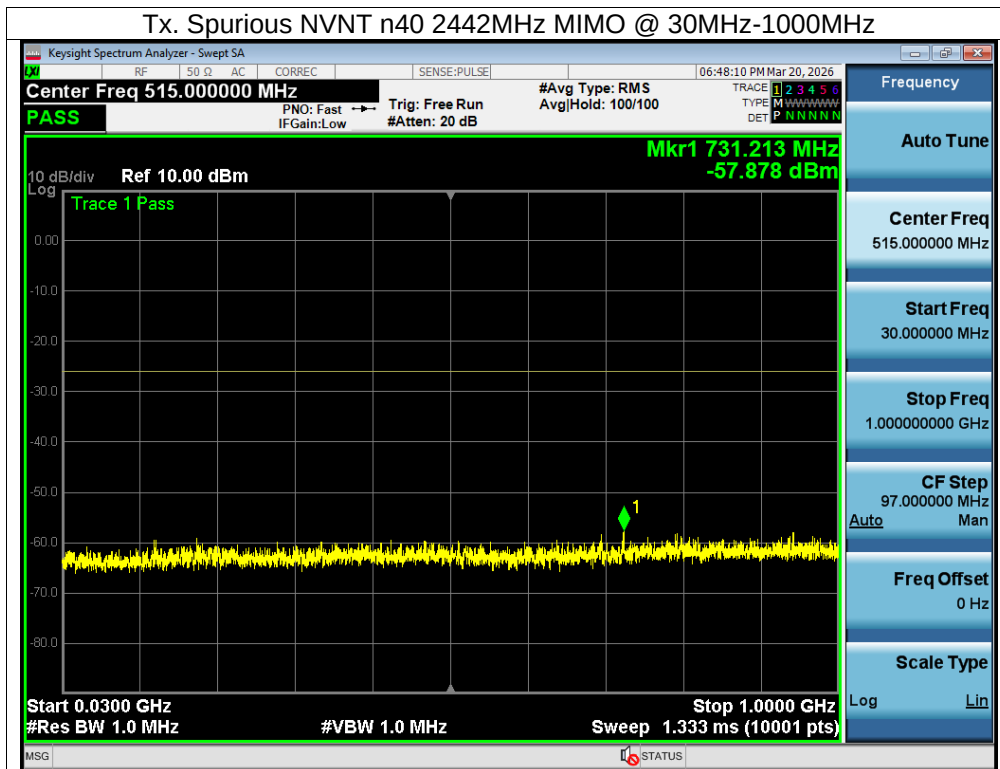
Tx. Spurious NVNT n40 2422MHz MIMO @ 1000MHz-2387MHz

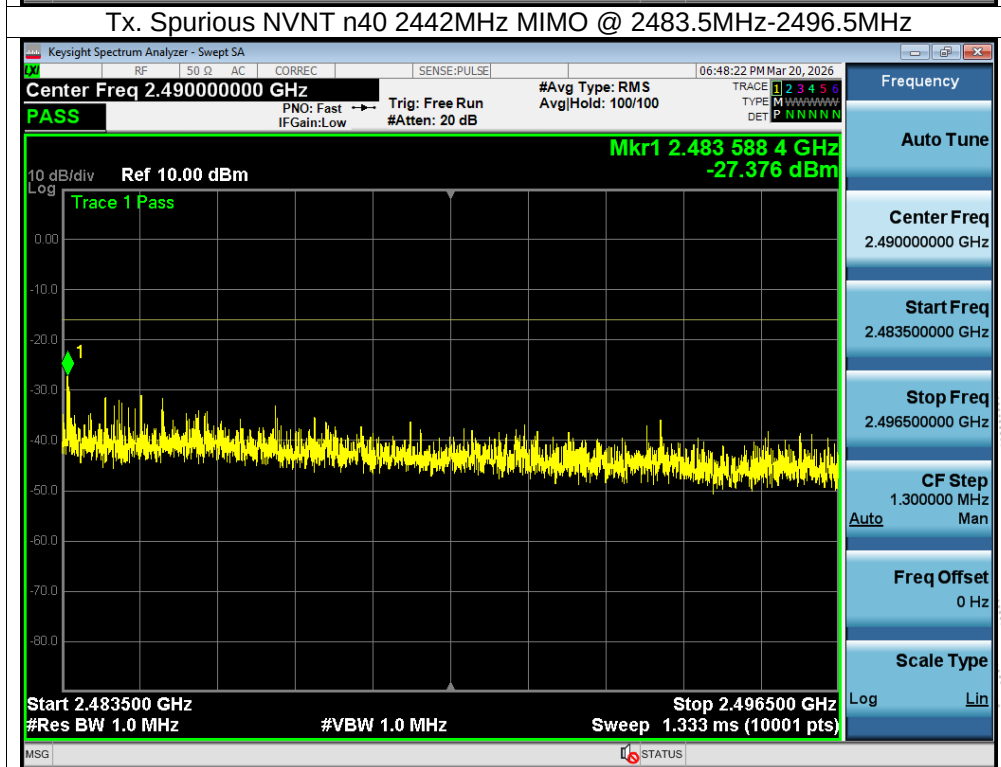
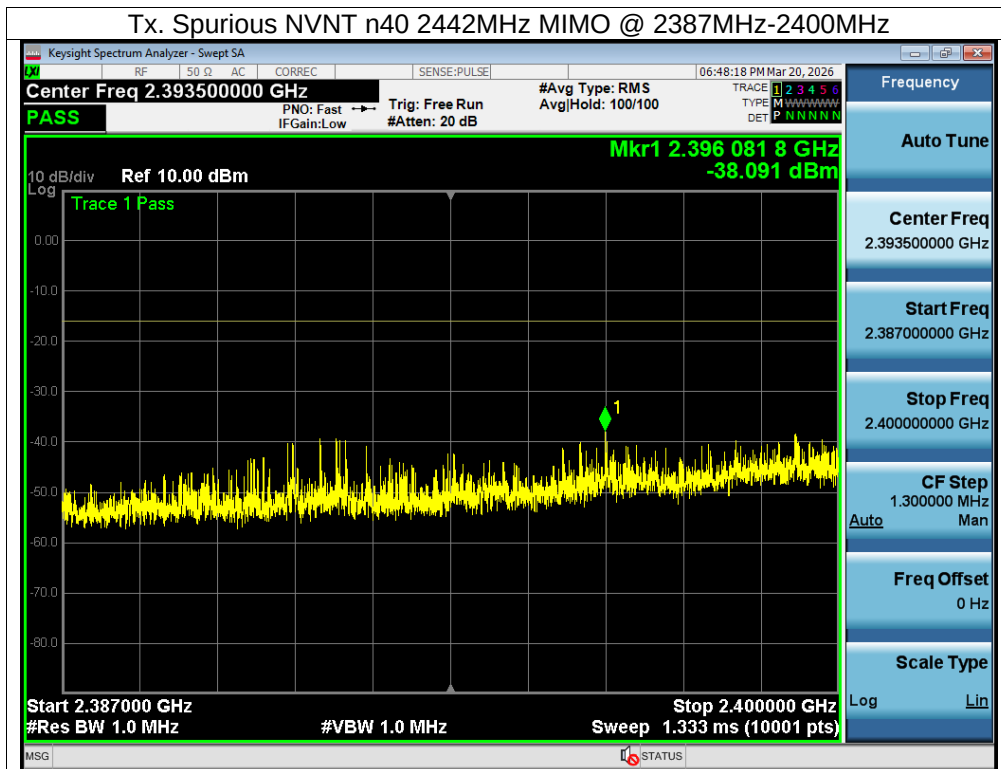


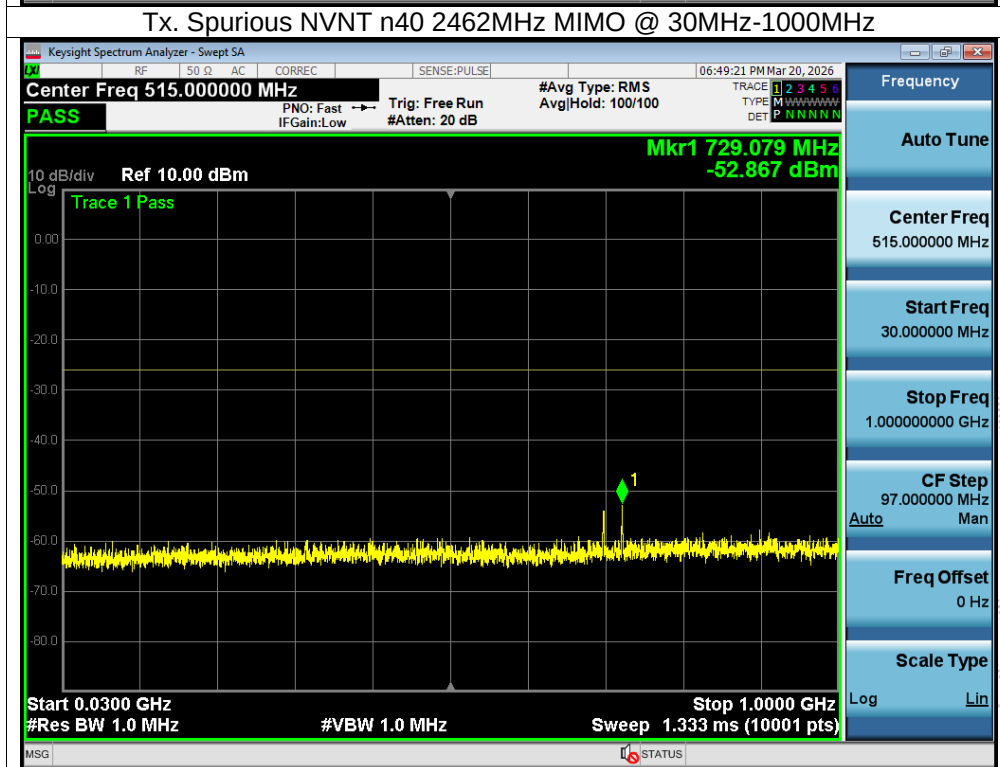
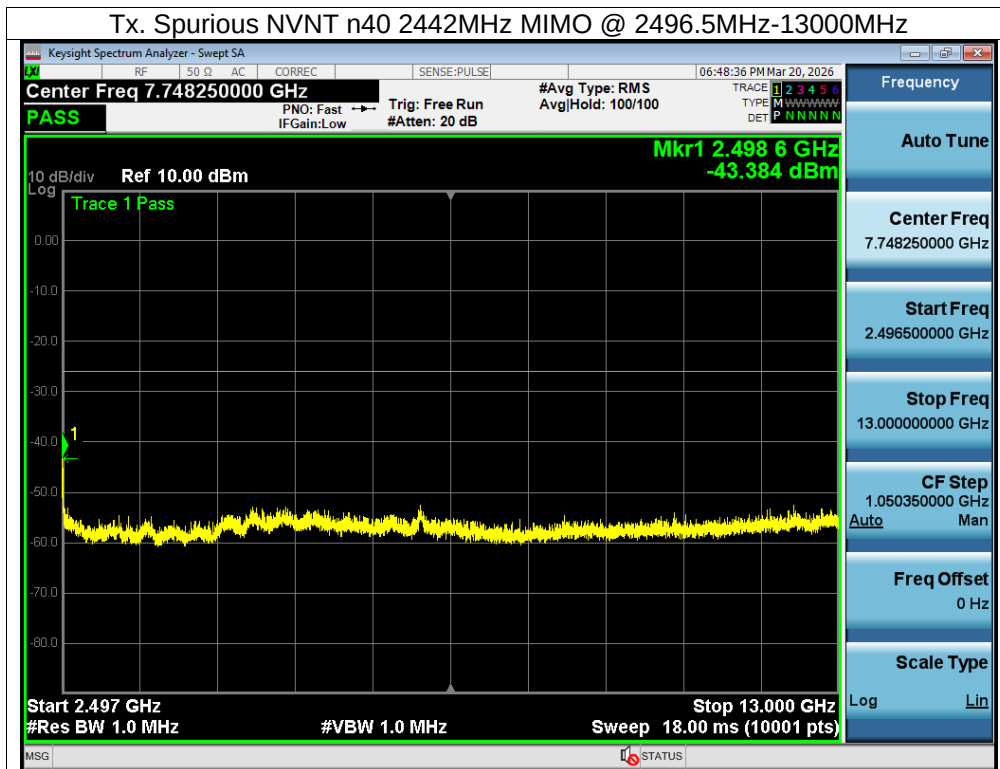
Tx. Spurious NVNT n40 2422MHz MIMO @ 2387MHz-2400MHz

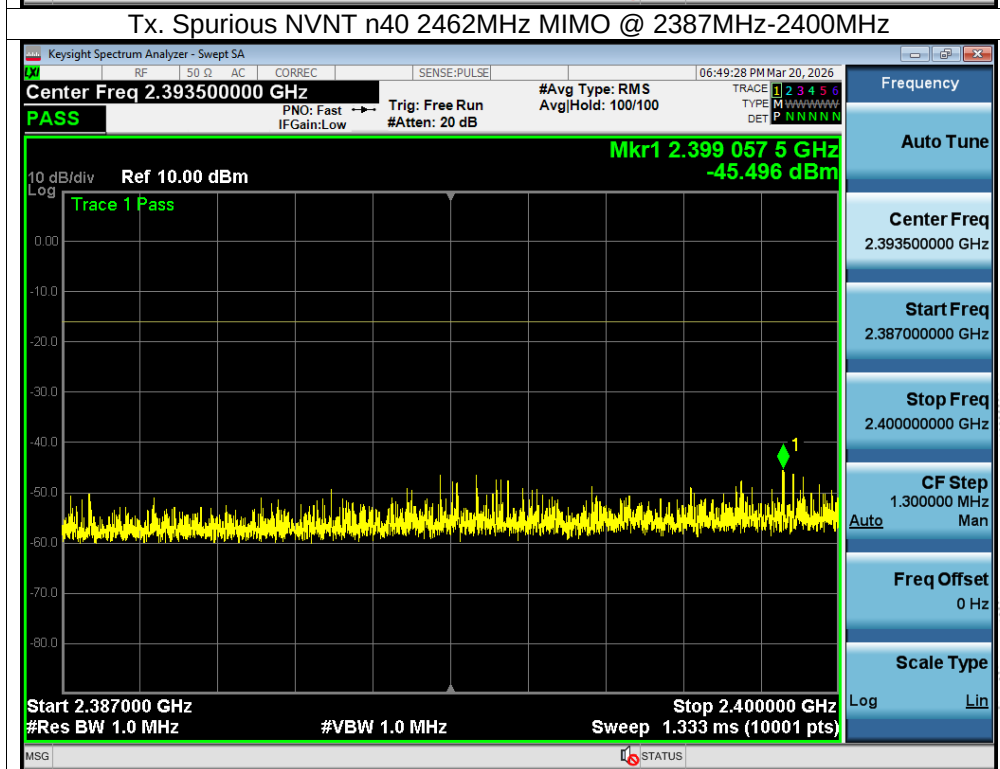
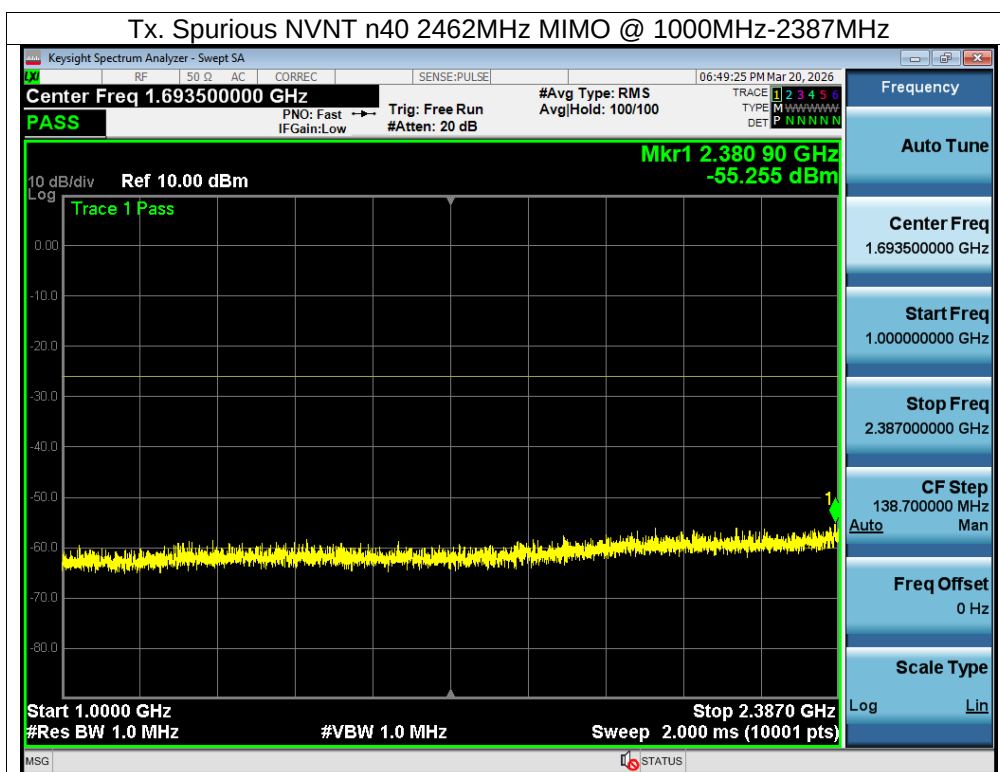


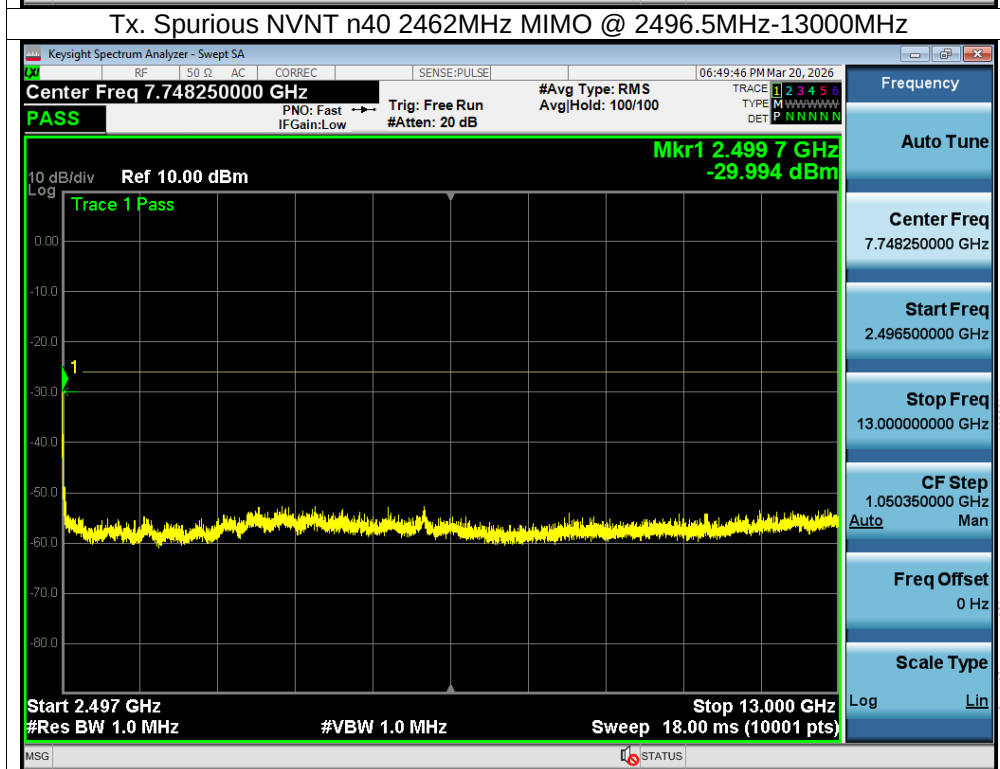
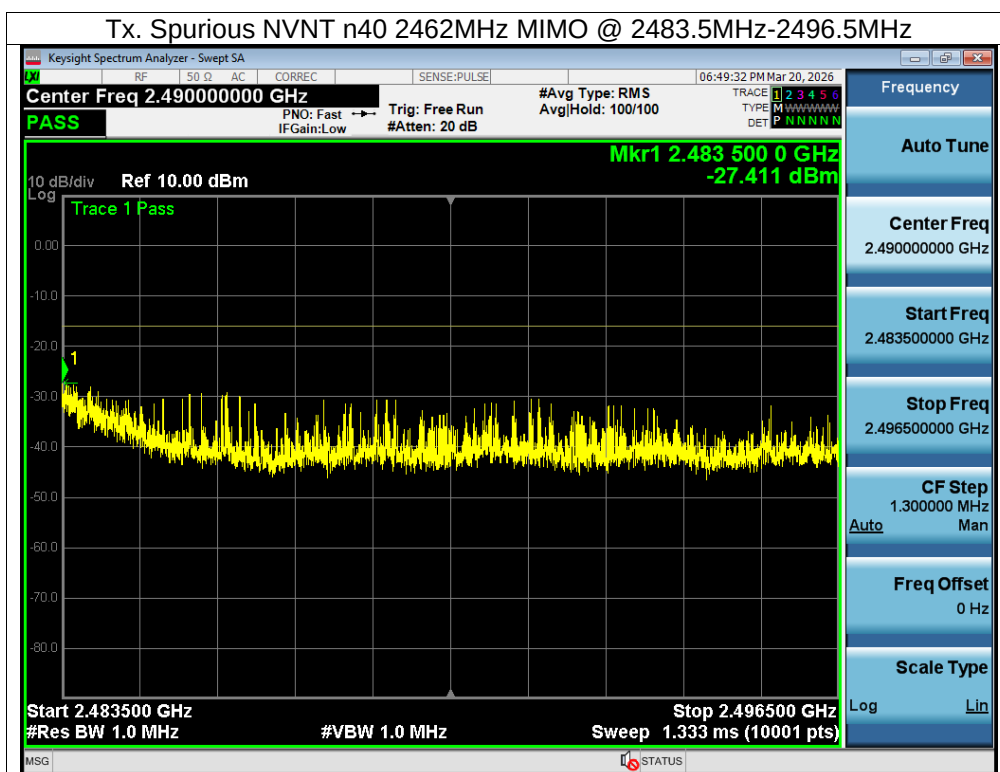






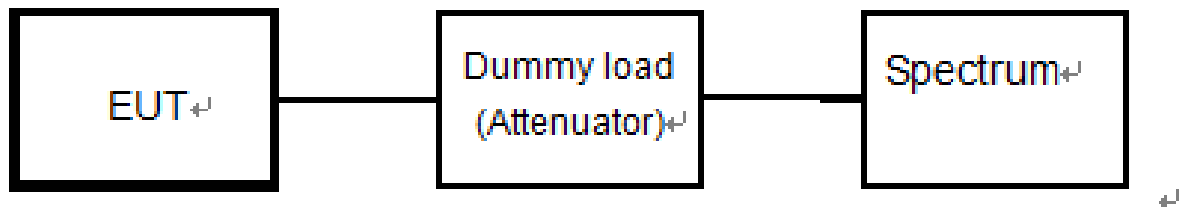






11. Imitation Of Collateral Emission Of Receiver Measurement

11.1 Block Diagram Of Test Setup



11.2 Limit

Item	Limits
RX Spurious Emission:	$\leq 4\text{nW}$ (-54dBm) (30MHz-1GHz)
	$\leq 20\text{nW}$ (-47dBm) (1GHz-12.5GHz)

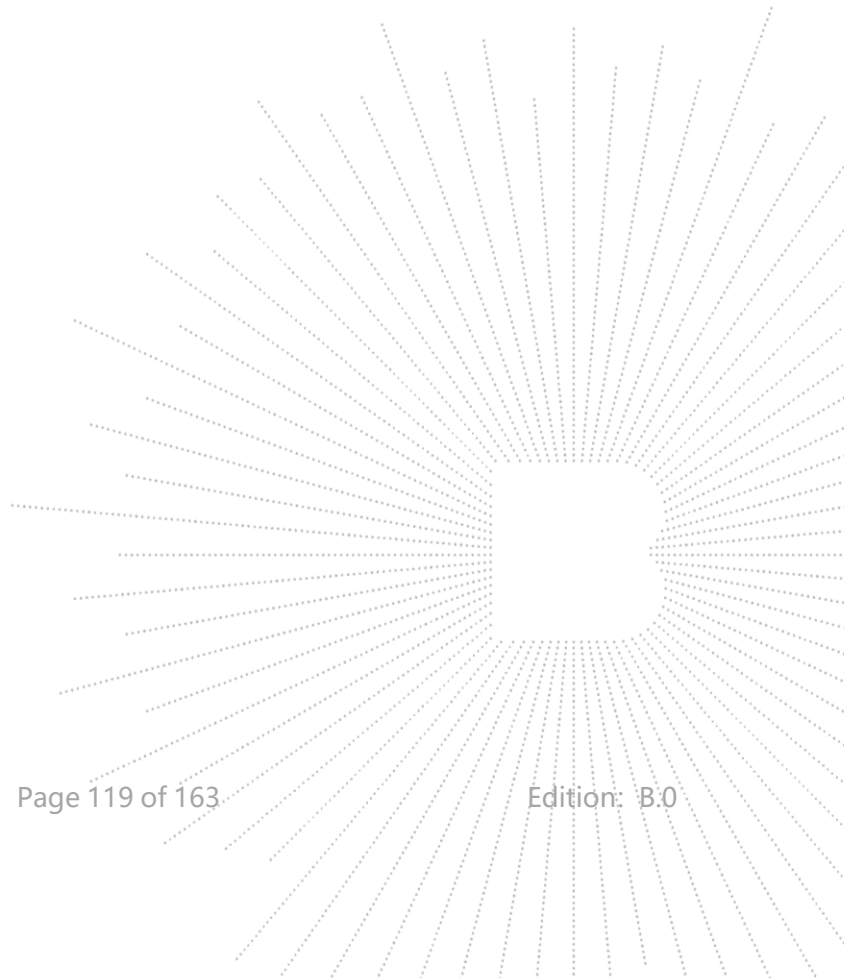
11.3 Measuring Instruments And Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
RB	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

11.4 Test Procedure

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: 6dB / Ref: -20dBm / 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.



11.5 Test Result

Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 14.4V

Antenna A

Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (nW)	Max RMS Value (nW)	Limit (nW)	Verdict
NVNT	b	2412	30-1000	897.18	-88.29	NA	0.0015	NA	4	Pass
NVNT	b	2412	1000-13000	5188.00	-69.83	NA	0.104	NA	20	Pass
NVNT	b	2442	30-1000	985.45	-87.93	NA	0.0016	NA	4	Pass
NVNT	b	2442	1000-13000	5188.00	-70.68	NA	0.0855	NA	20	Pass
NVNT	b	2472	30-1000	919.49	-87.76	NA	0.0017	NA	4	Pass
NVNT	b	2472	1000-13000	5176.00	-70.33	NA	0.0927	NA	20	Pass
NVNT	g	2412	30-1000	704.15	-84.17	NA	0.0038	NA	4	Pass
NVNT	g	2412	1000-13000	5176.00	-70.28	NA	0.0938	NA	20	Pass
NVNT	g	2442	30-1000	925.31	-87.81	NA	0.0017	NA	4	Pass
NVNT	g	2442	1000-13000	5176.00	-69.42	NA	0.1143	NA	20	Pass
NVNT	g	2472	30-1000	903.00	-88.02	NA	0.0016	NA	4	Pass
NVNT	g	2472	1000-13000	5188.00	-70.20	NA	0.0955	NA	20	Pass
NVNT	n20	2412	30-1000	826.37	-88.29	NA	0.0015	NA	4	Pass
NVNT	n20	2412	1000-13000	5176.00	-69.76	NA	0.1057	NA	20	Pass
NVNT	n20	2442	30-1000	932.10	-86.69	NA	0.0021	NA	4	Pass
NVNT	n20	2442	1000-13000	5176.00	-69.92	NA	0.1019	NA	20	Pass
NVNT	n20	2472	30-1000	874.87	-87.26	NA	0.0019	NA	4	Pass
NVNT	n20	2472	1000-13000	5176.00	-69.77	NA	0.1054	NA	20	Pass
NVNT	n40	2422	30-1000	729.37	-86.50	NA	0.0022	NA	4	Pass
NVNT	n40	2422	1000-13000	5176.00	-70.18	NA	0.0959	NA	20	Pass
NVNT	n40	2442	30-1000	511.12	-88.21	NA	0.0015	NA	4	Pass
NVNT	n40	2442	1000-13000	5176.00	-69.36	NA	0.1159	NA	20	Pass
NVNT	n40	2462	30-1000	938.89	-87.87	NA	0.0016	NA	4	Pass
NVNT	n40	2462	1000-13000	2452.00	-68.96	NA	0.1271	NA	20	Pass

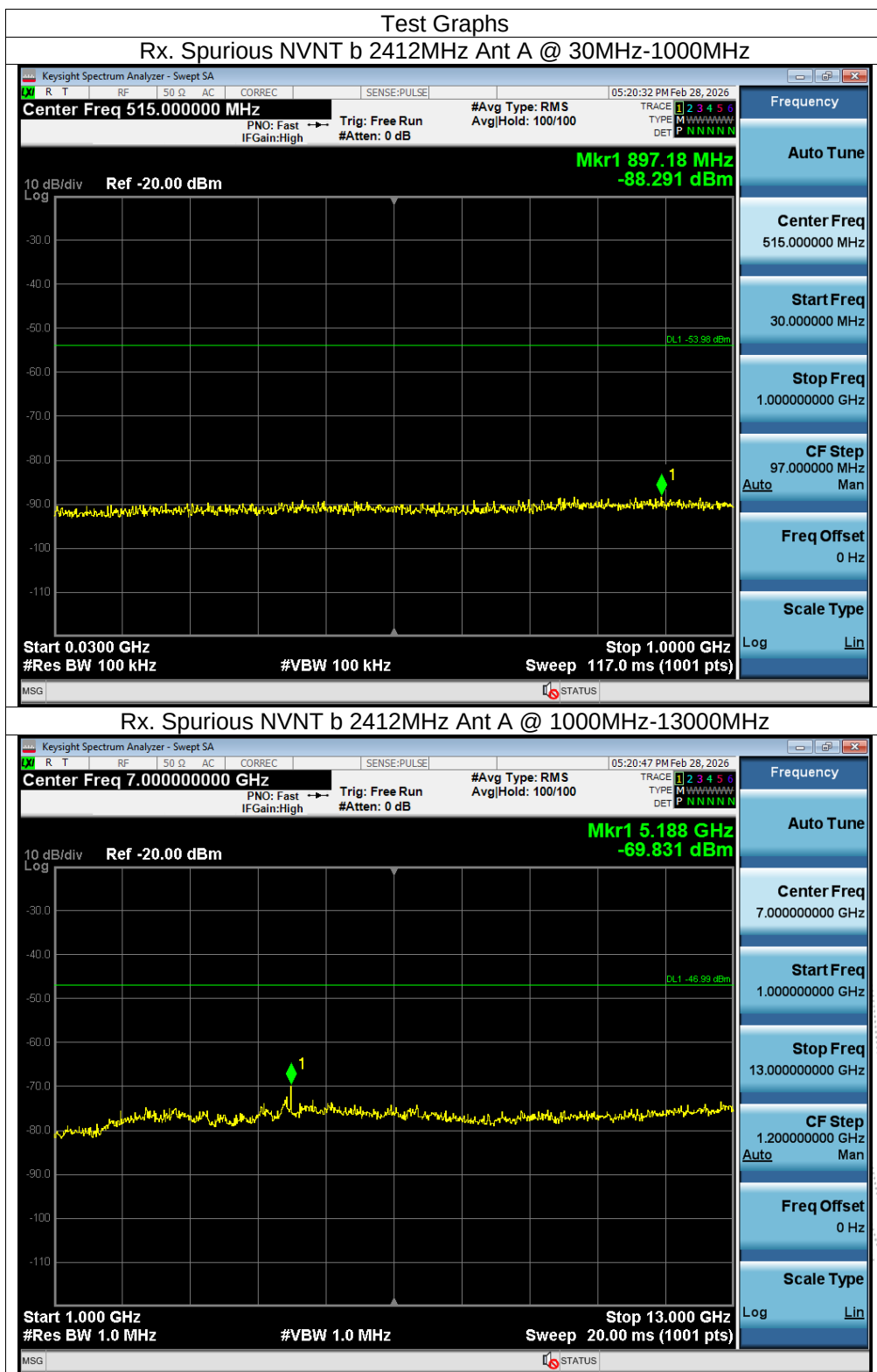
Antenna B

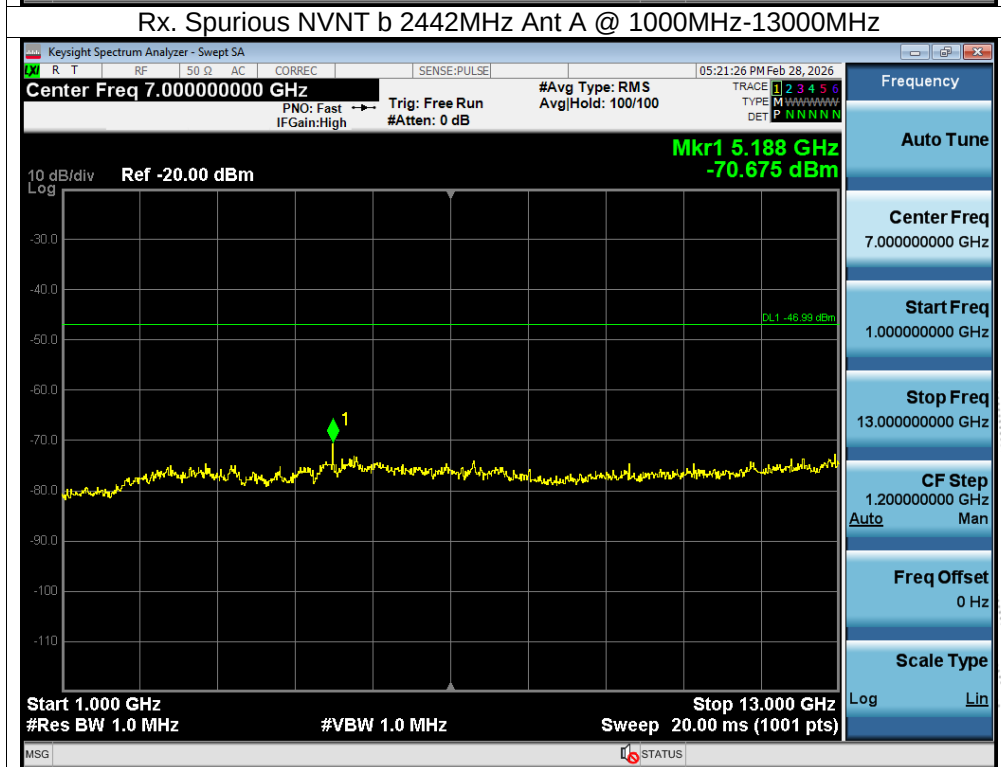
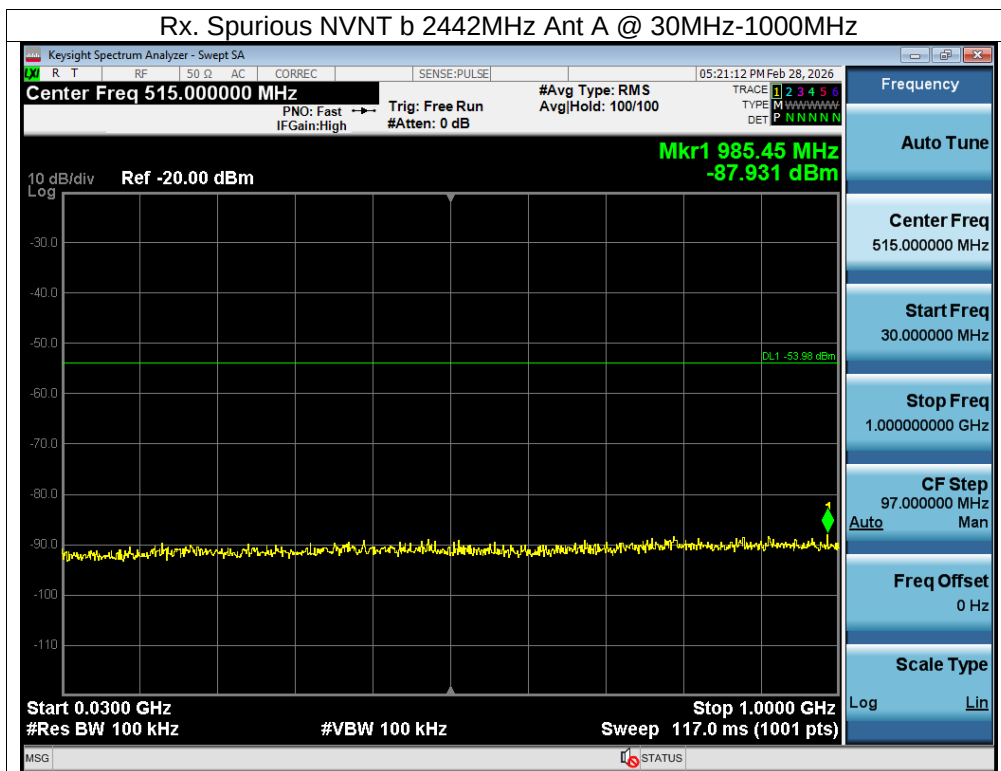
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (nW)	Max RMS Value (nW)	Limit (nW)	Verdict
NVNT	b	2412	30-1000	481.05	-87.28	NA	0.0019	NA	4	Pass
NVNT	b	2412	1000-13000	12976.00	-72.91	NA	0.0512	NA	20	Pass
NVNT	b	2442	30-1000	906.88	-88.41	NA	0.0014	NA	4	Pass
NVNT	b	2442	1000-13000	12868.00	-73.39	NA	0.0458	NA	20	Pass
NVNT	b	2472	30-1000	901.06	-88.28	NA	0.0015	NA	4	Pass
NVNT	b	2472	1000-13000	5476.00	-72.76	NA	0.053	NA	20	Pass
NVNT	g	2412	30-1000	493.66	-88.32	NA	0.0015	NA	4	Pass
NVNT	g	2412	1000-13000	5452.00	-72.25	NA	0.0596	NA	20	Pass
NVNT	g	2442	30-1000	350.10	-88.27	NA	0.0015	NA	4	Pass
NVNT	g	2442	1000-13000	5896.00	-72.65	NA	0.0543	NA	20	Pass
NVNT	g	2472	30-1000	937.92	-87.97	NA	0.0016	NA	4	Pass
NVNT	g	2472	1000-13000	5092.00	-73.39	NA	0.0458	NA	20	Pass
NVNT	n20	2412	30-1000	704.15	-79.69	NA	0.0107	NA	4	Pass
NVNT	n20	2412	1000-13000	5116.00	-72.95	NA	0.0507	NA	20	Pass
NVNT	n20	2442	30-1000	713.85	-87.86	NA	0.0016	NA	4	Pass
NVNT	n20	2442	1000-13000	12856.00	-73.28	NA	0.047	NA	20	Pass
NVNT	n20	2472	30-1000	999.03	-88.17	NA	0.0015	NA	4	Pass
NVNT	n20	2472	1000-13000	5488.00	-72.33	NA	0.0585	NA	20	Pass
NVNT	n40	2422	30-1000	876.81	-87.33	NA	0.0018	NA	4	Pass
NVNT	n40	2422	1000-13000	7336.00	-73.51	NA	0.0446	NA	20	Pass
NVNT	n40	2442	30-1000	414.12	-87.98	NA	0.0016	NA	4	Pass
NVNT	n40	2442	1000-13000	5536.00	-73.27	NA	0.0471	NA	20	Pass
NVNT	n40	2462	30-1000	763.32	-88.50	NA	0.0014	NA	4	Pass
NVNT	n40	2462	1000-13000	5524.00	-72.94	NA	0.0508	NA	20	Pass

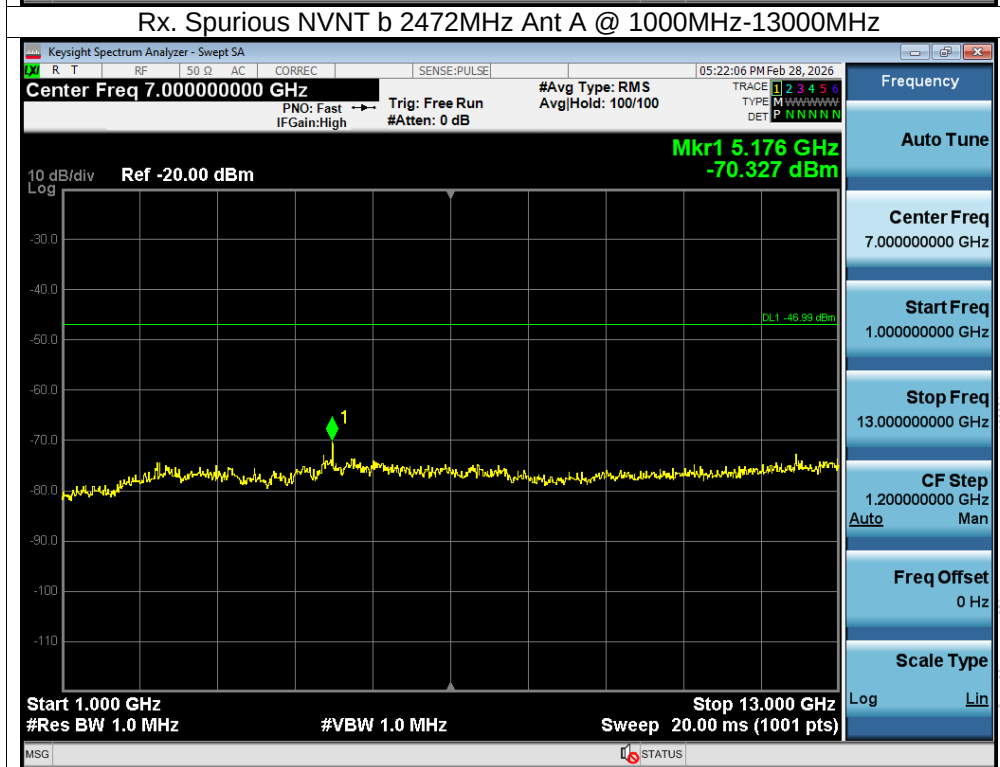
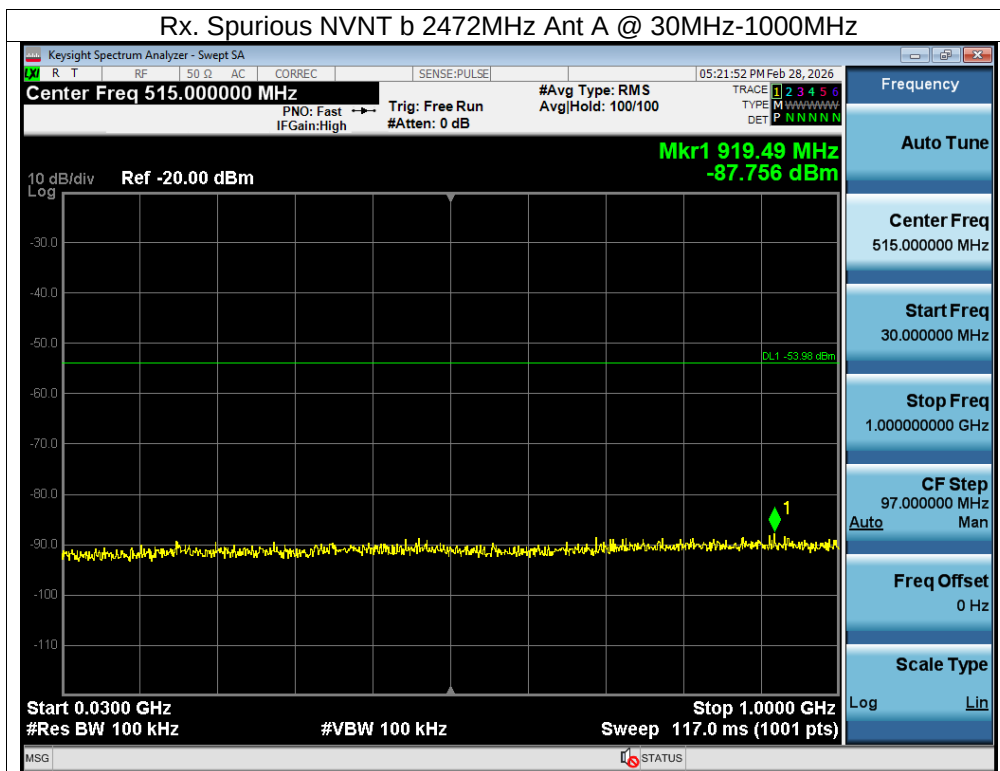
MIMO

Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Peak Value (dBm)	Max RMS Value (dBm)	Max Peak Value (nW)	Max RMS Value (nW)	Limit (nW)	Verdict
NVNT	n20	2412	30-1000	911.73	-79.16	NA	0.0121	NA	4	Pass
NVNT	n20	2412	1000-13000	5776.00	-58.82	NA	1.3122	NA	20	Pass
NVNT	n20	2442	30-1000	904.94	-72.75	NA	0.0531	NA	4	Pass
NVNT	n20	2442	1000-13000	2476.00	-70.47	NA	0.0897	NA	20	Pass
NVNT	n20	2472	30-1000	77.53	-81.28	NA	0.0074	NA	4	Pass
NVNT	n20	2472	1000-13000	12880.00	-73.35	NA	0.0462	NA	20	Pass
NVNT	n40	2422	30-1000	704.15	-78.90	NA	0.0129	NA	4	Pass
NVNT	n40	2422	1000-13000	5776.00	-60.90	NA	0.8128	NA	20	Pass
NVNT	n40	2442	30-1000	906.88	-71.81	NA	0.0659	NA	4	Pass
NVNT	n40	2442	1000-13000	2548.00	-66.74	NA	0.2118	NA	20	Pass
NVNT	n40	2462	30-1000	713.85	-54.80	-91.78	3.3113	0.0007	4	Pass
NVNT	n40	2462	1000-13000	5776.00	-57.93	NA	1.6106	NA	20	Pass

SHENZHEN

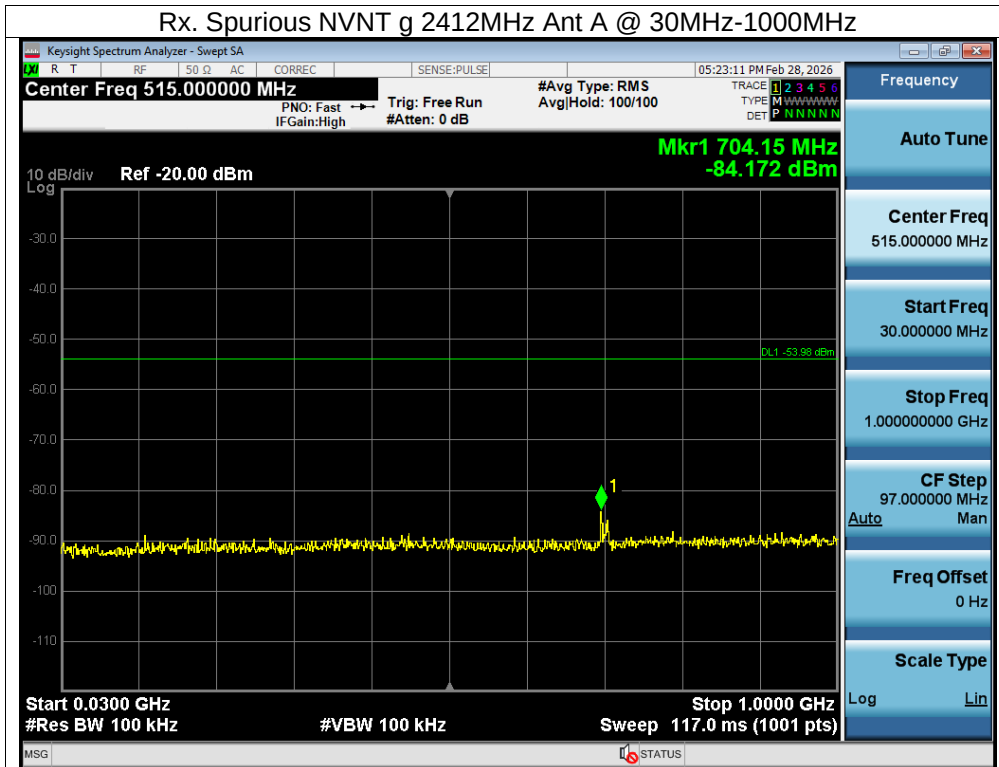




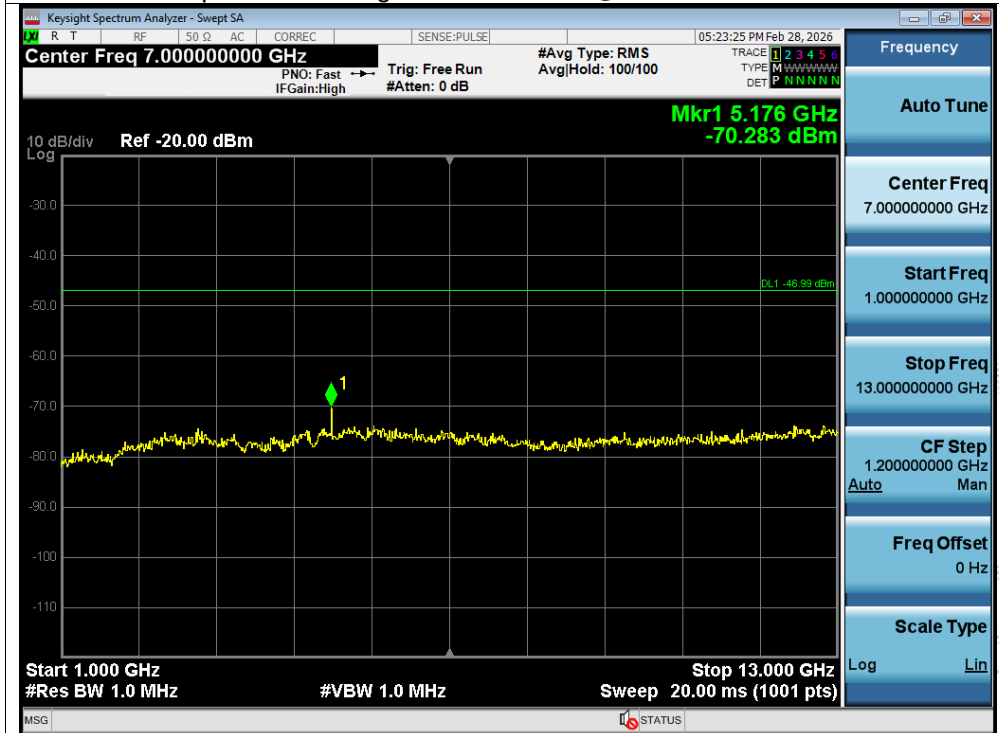


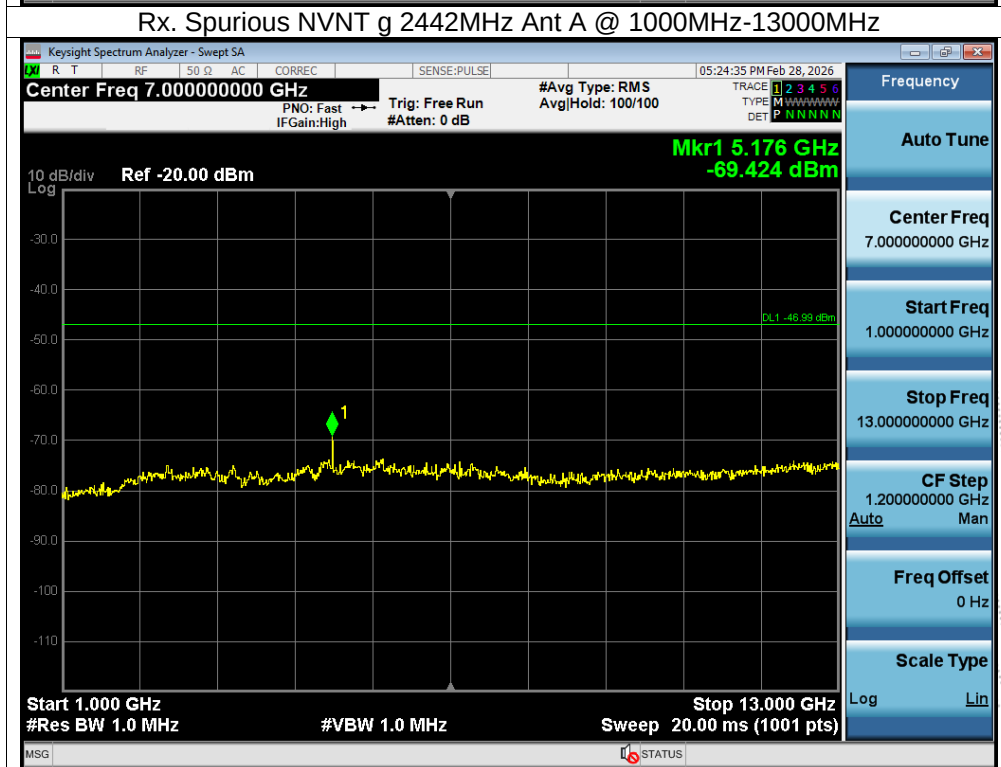
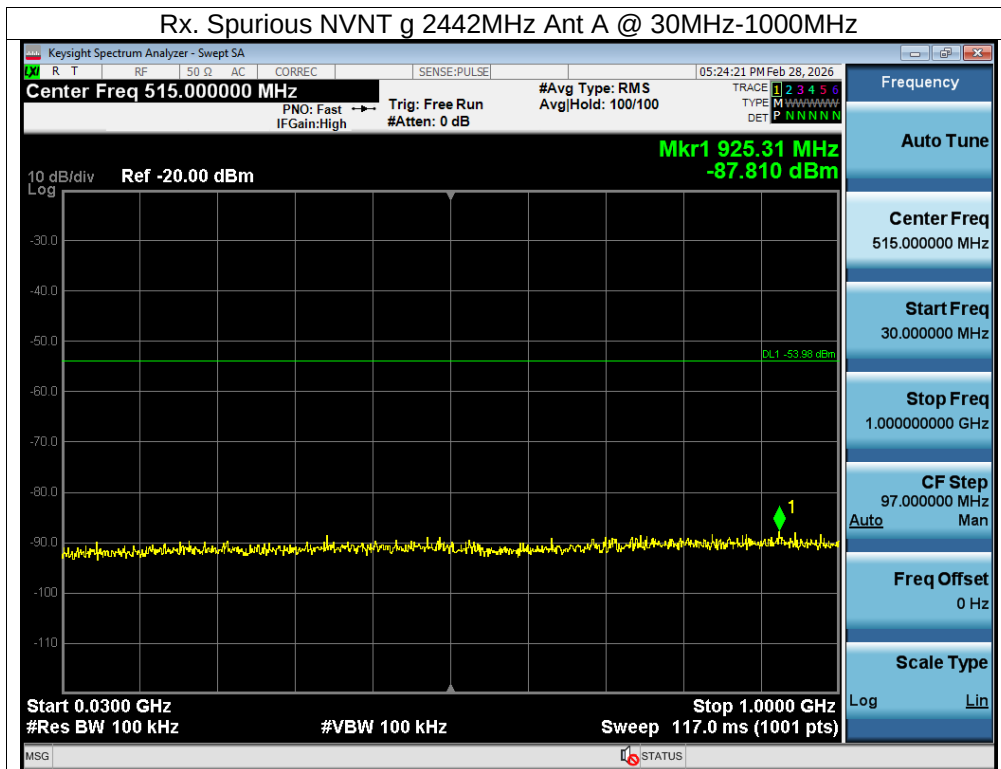


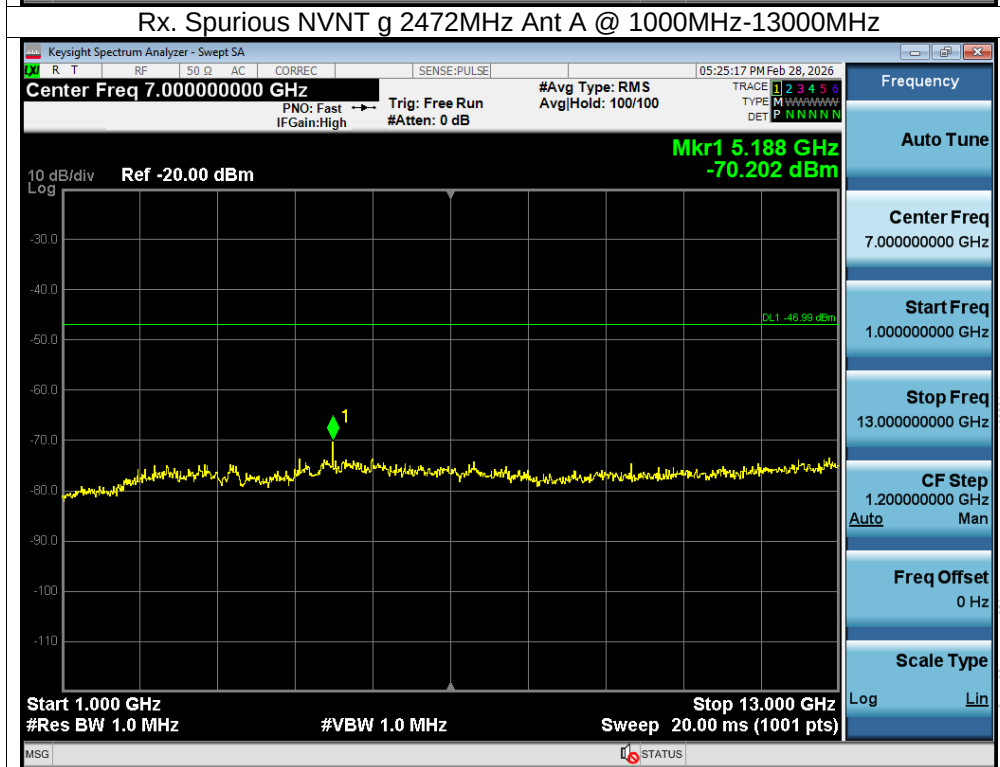
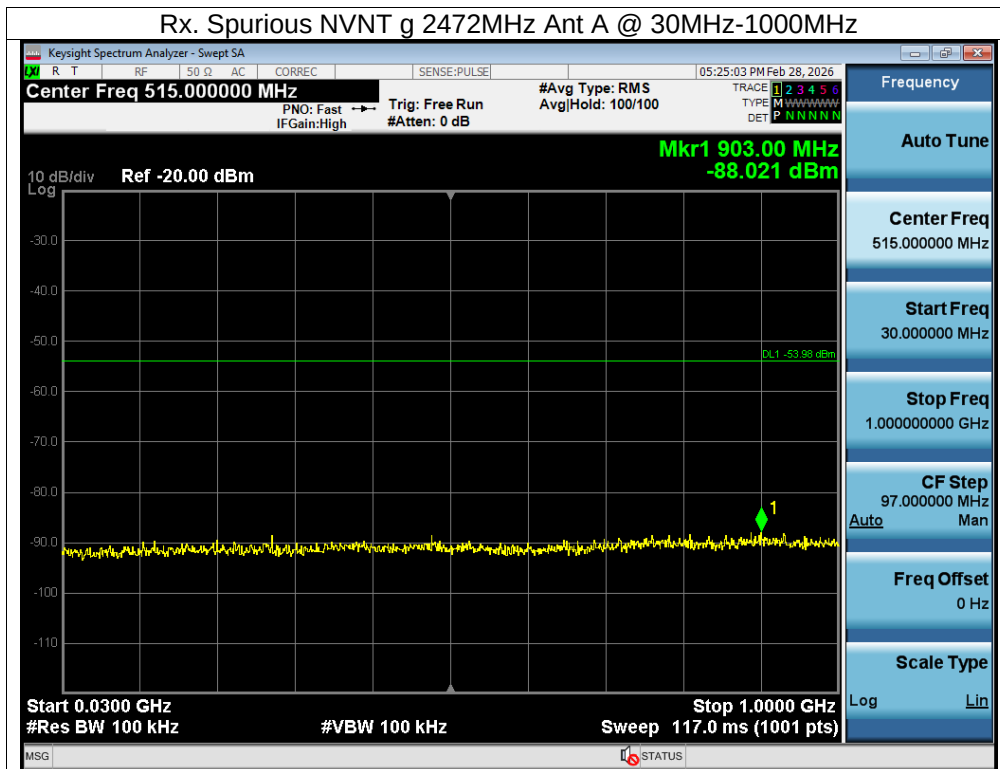
Rx. Spurious NVNT g 2412MHz Ant A @ 30MHz-1000MHz

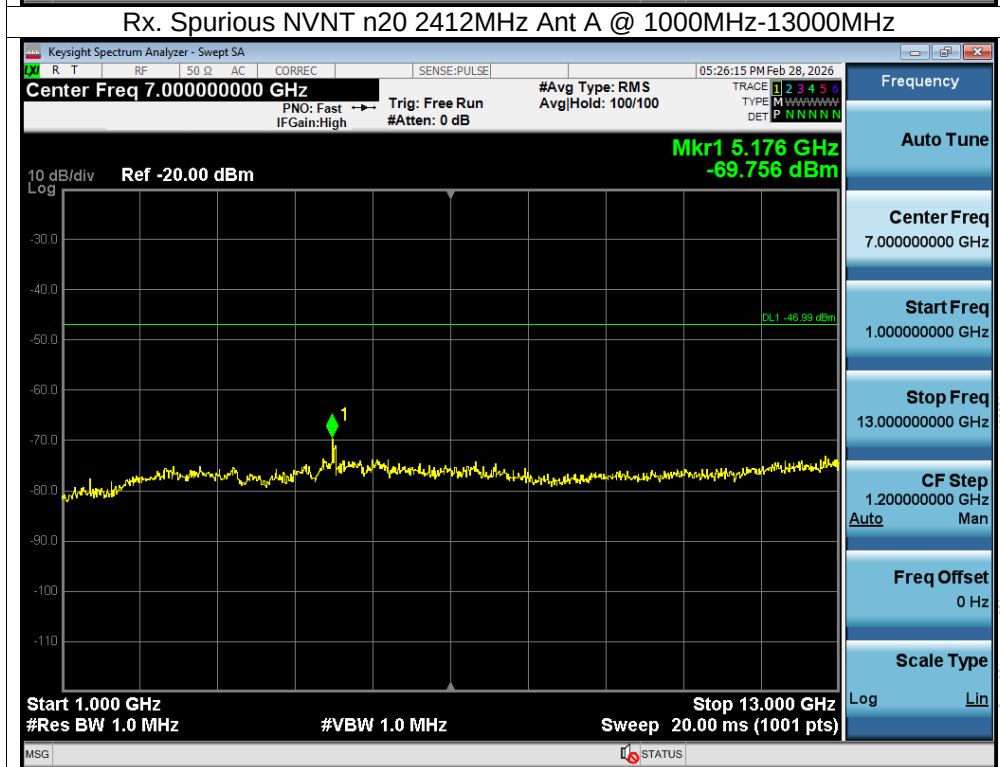
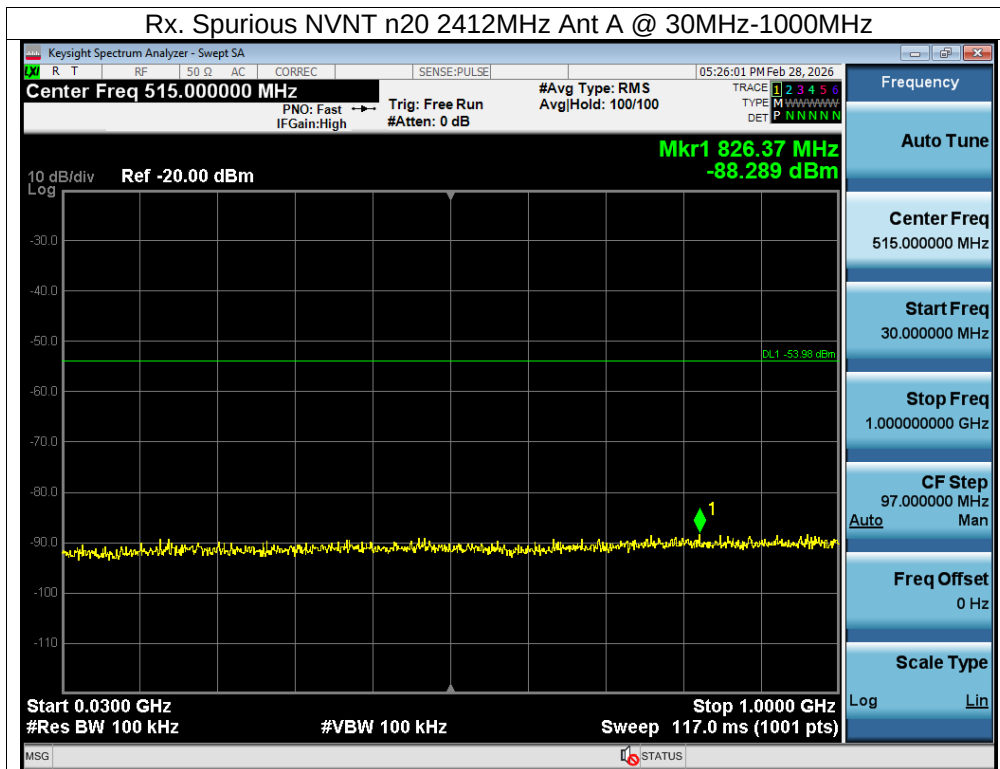


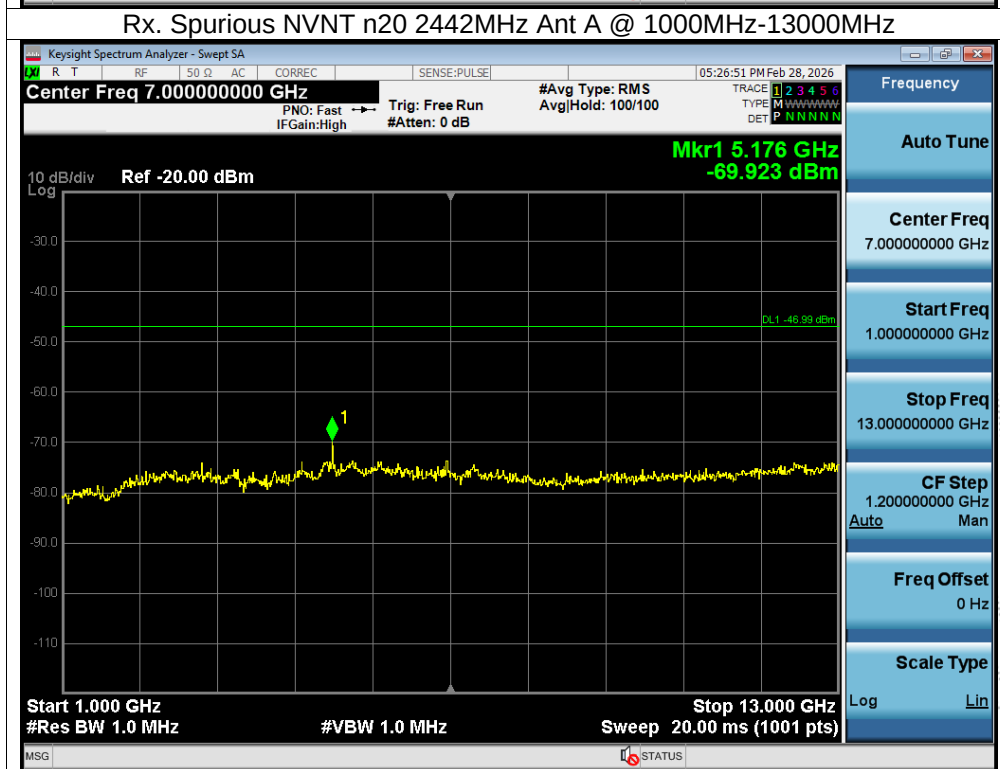
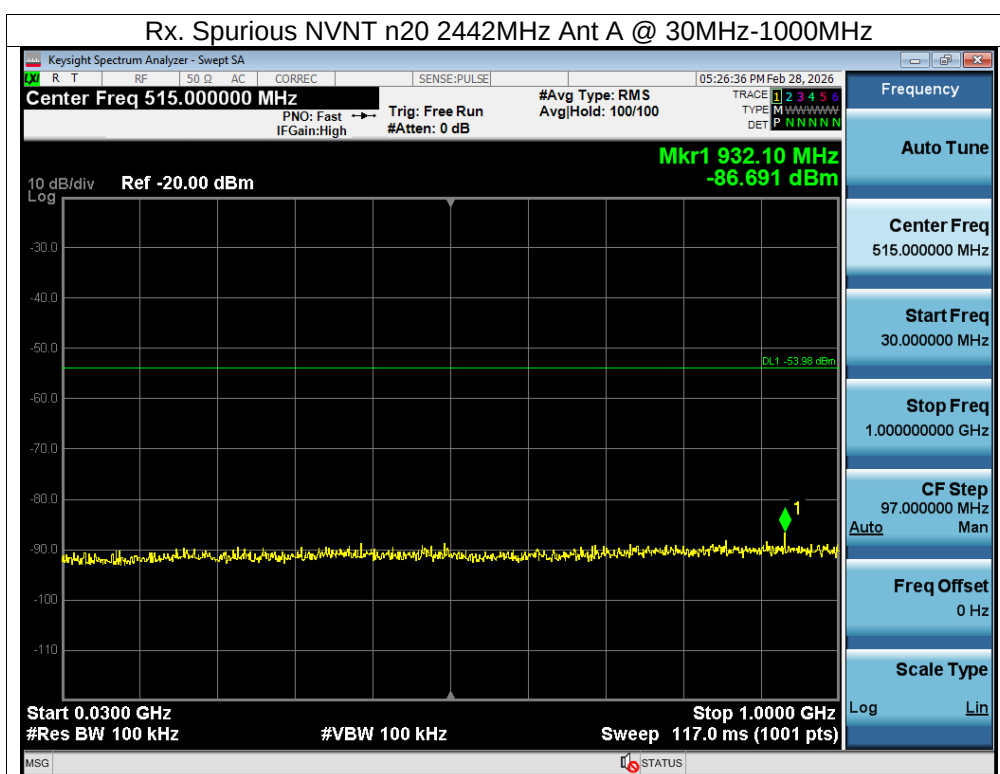
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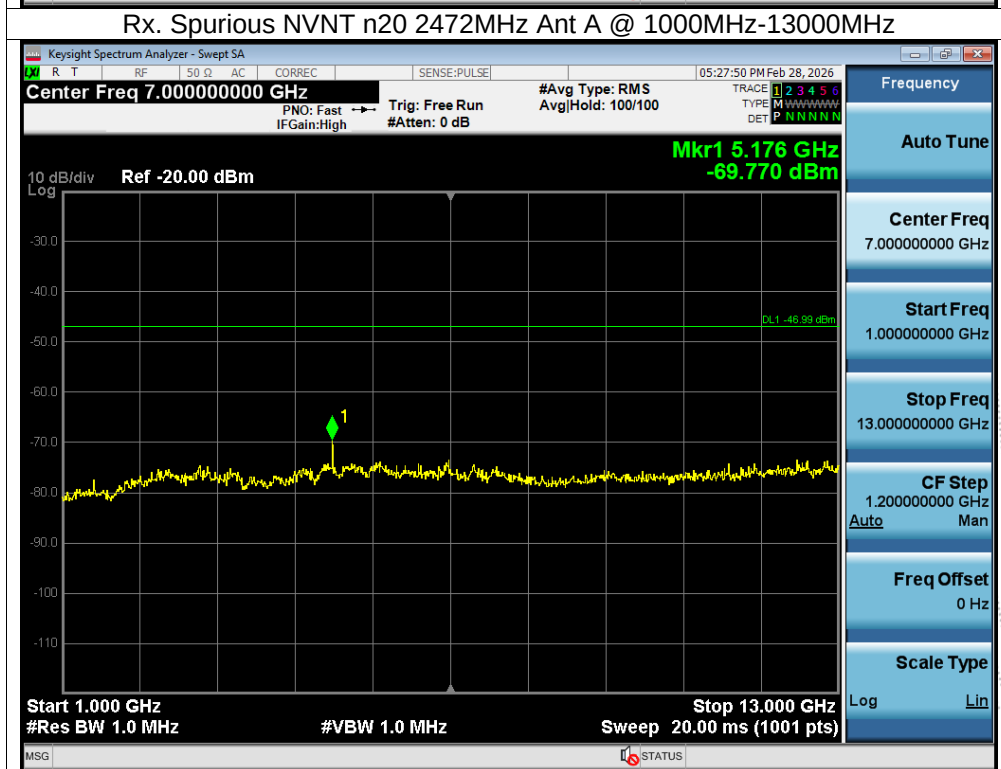
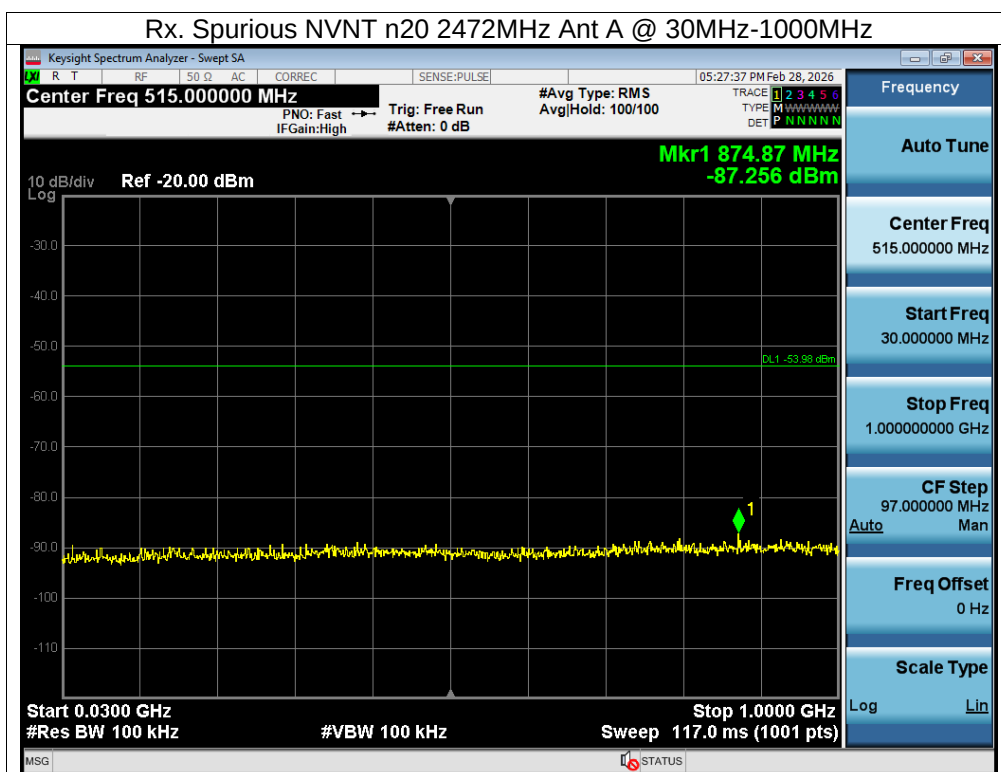


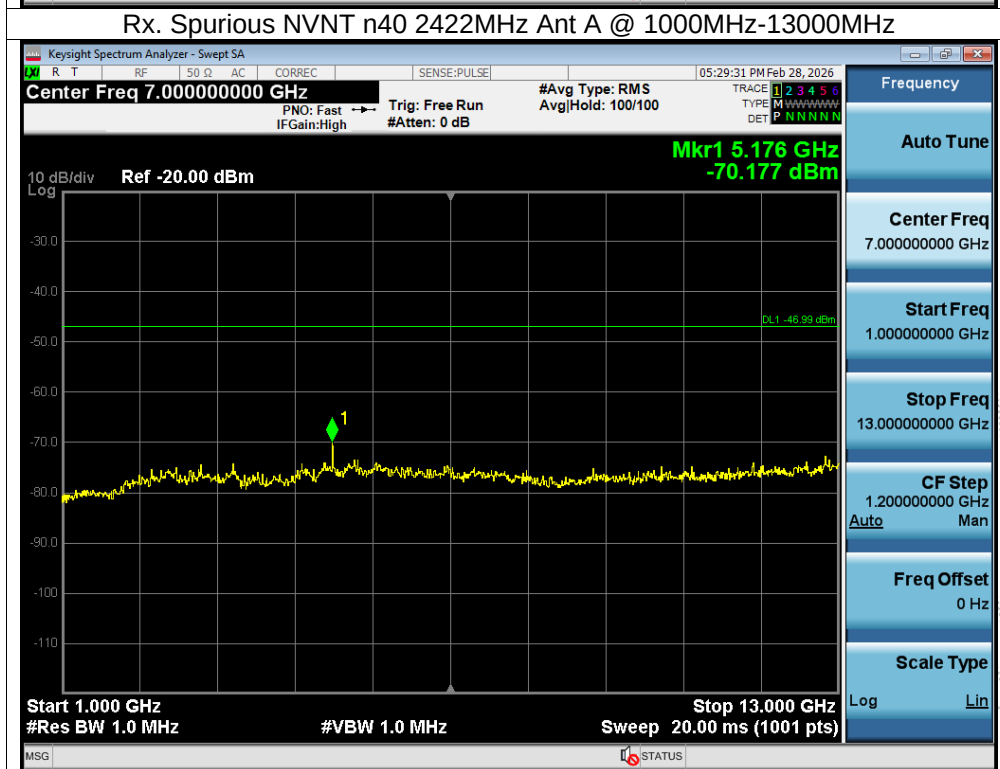
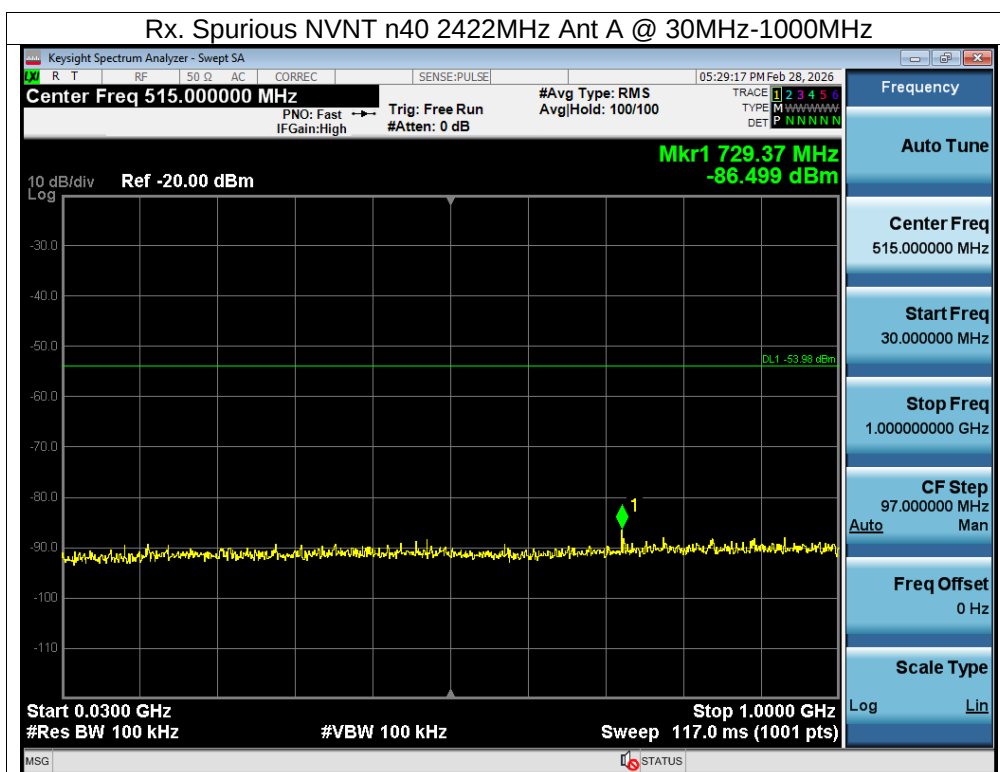


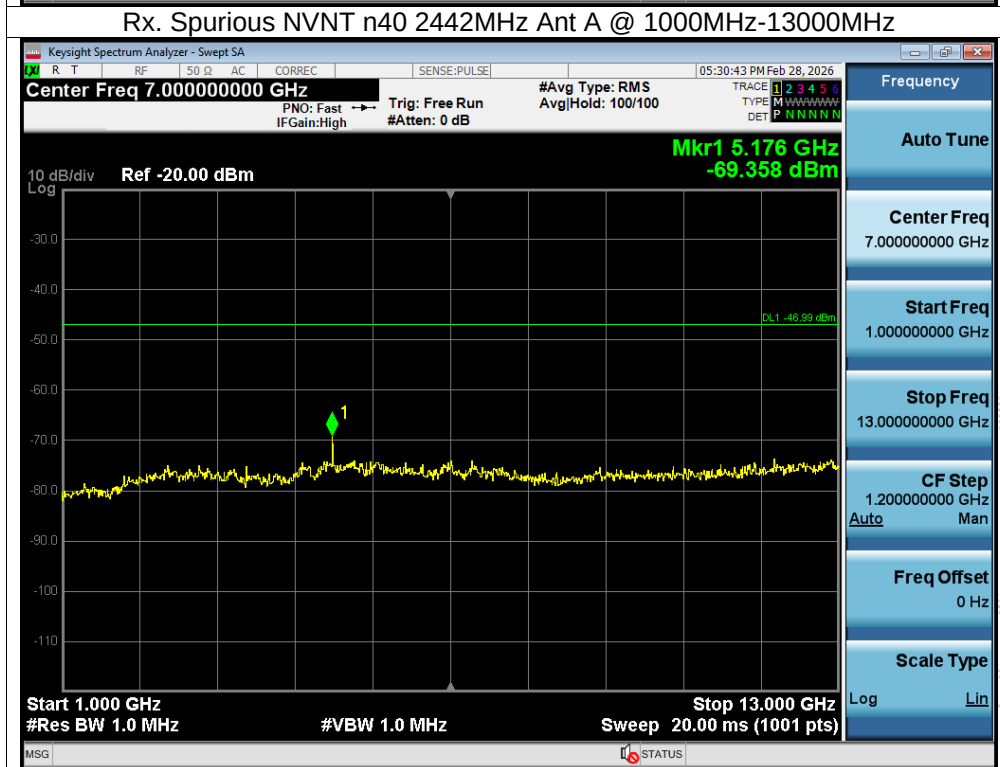
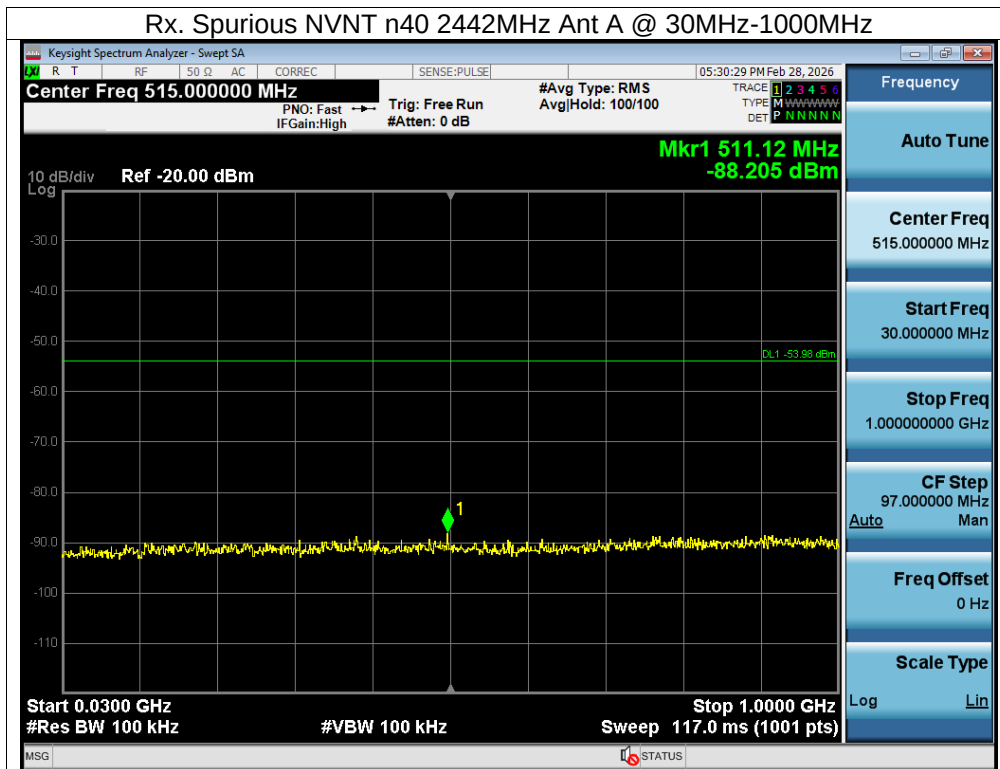


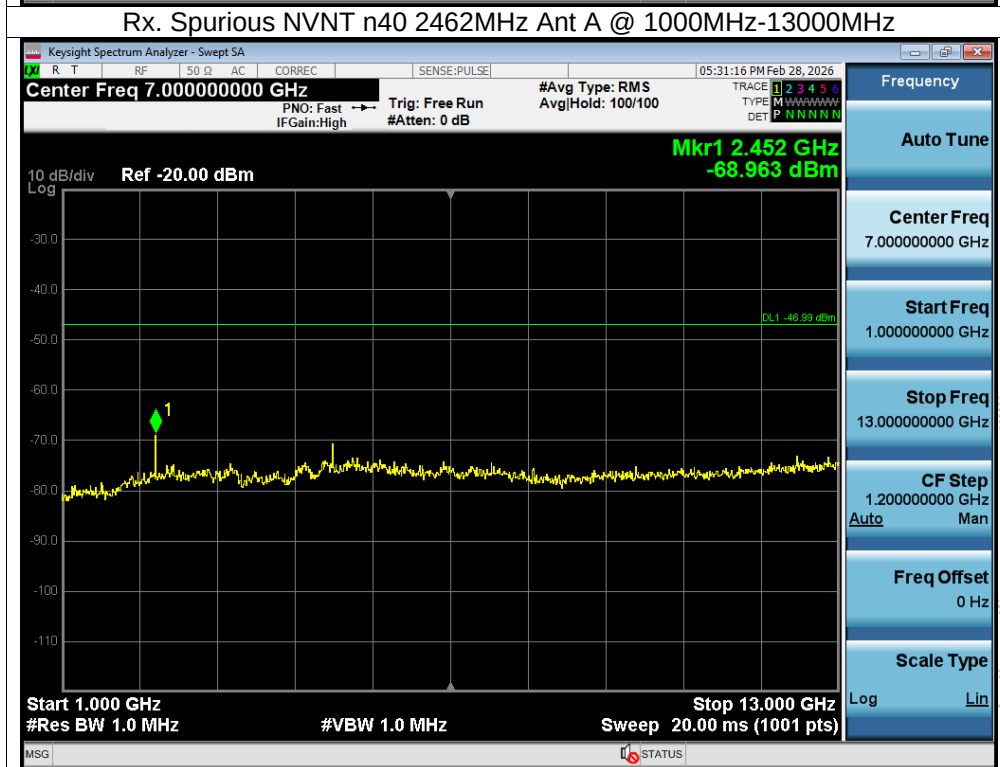
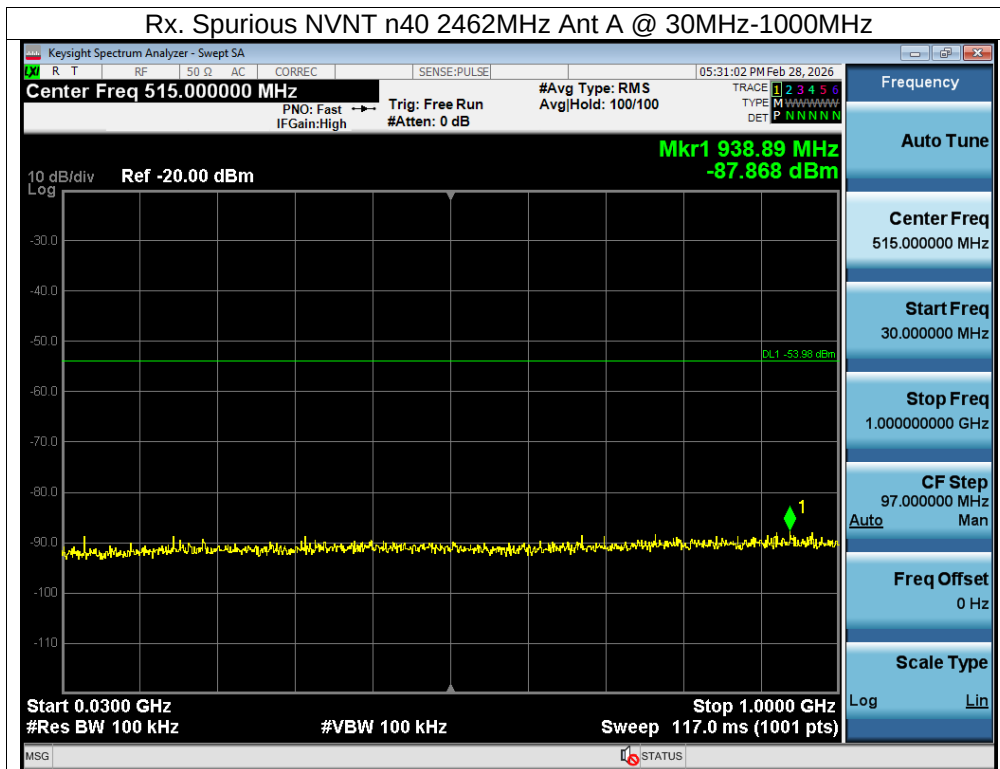


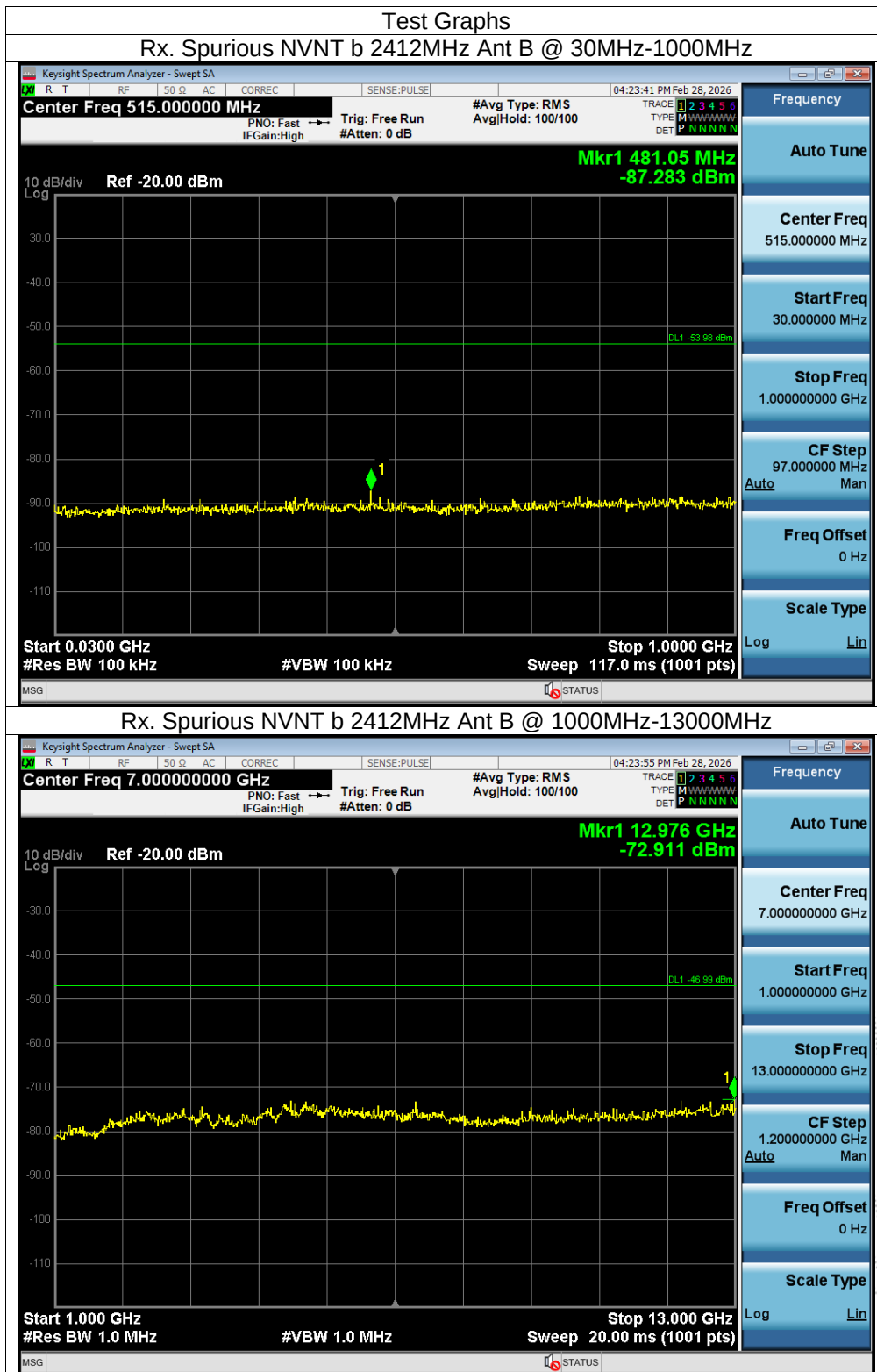


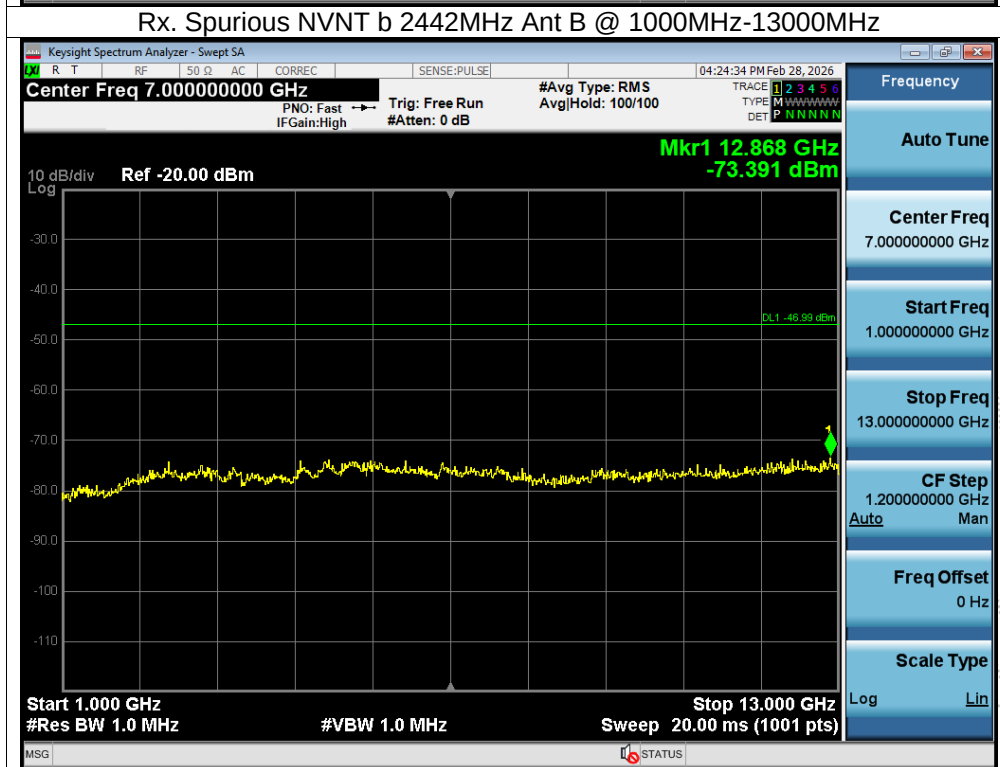
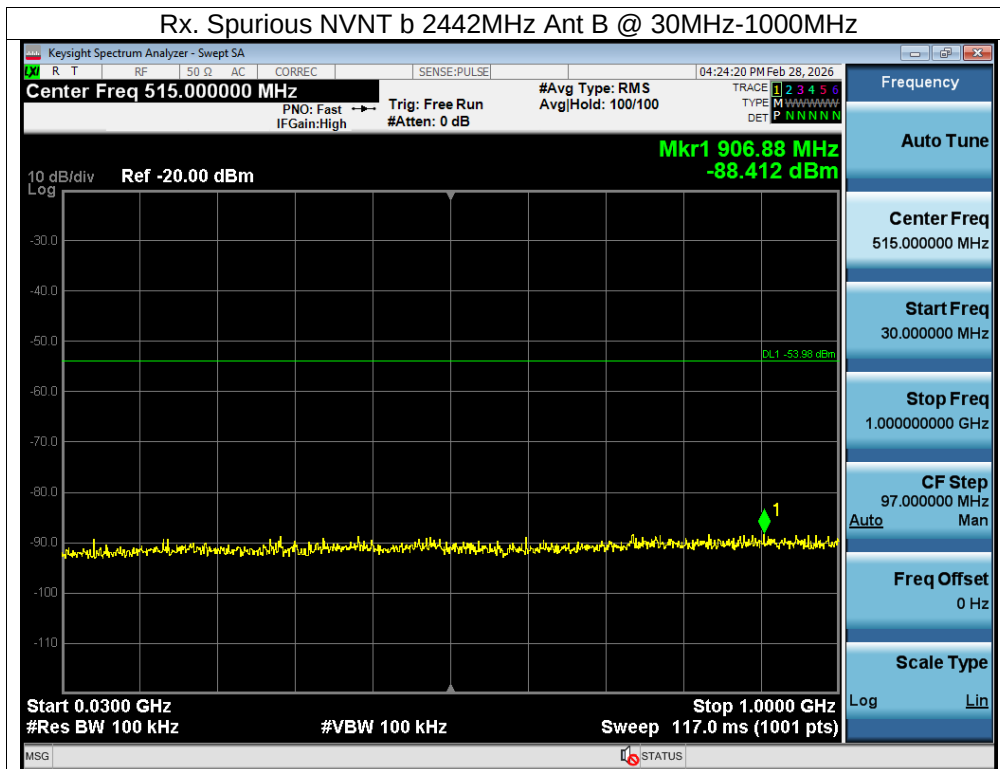


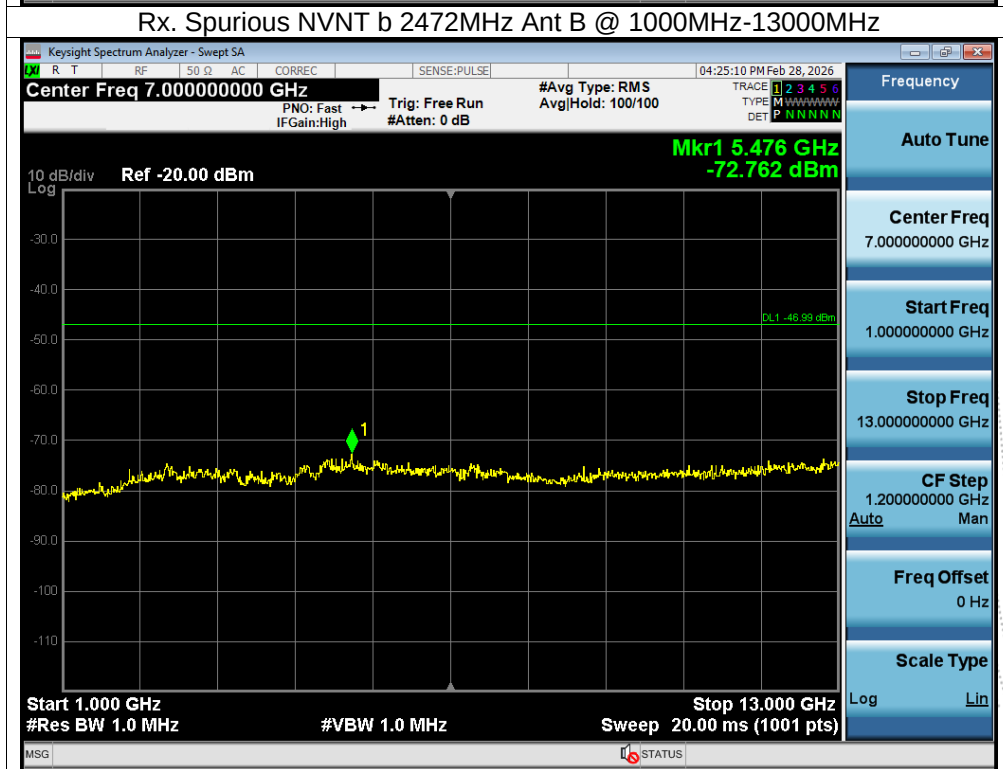
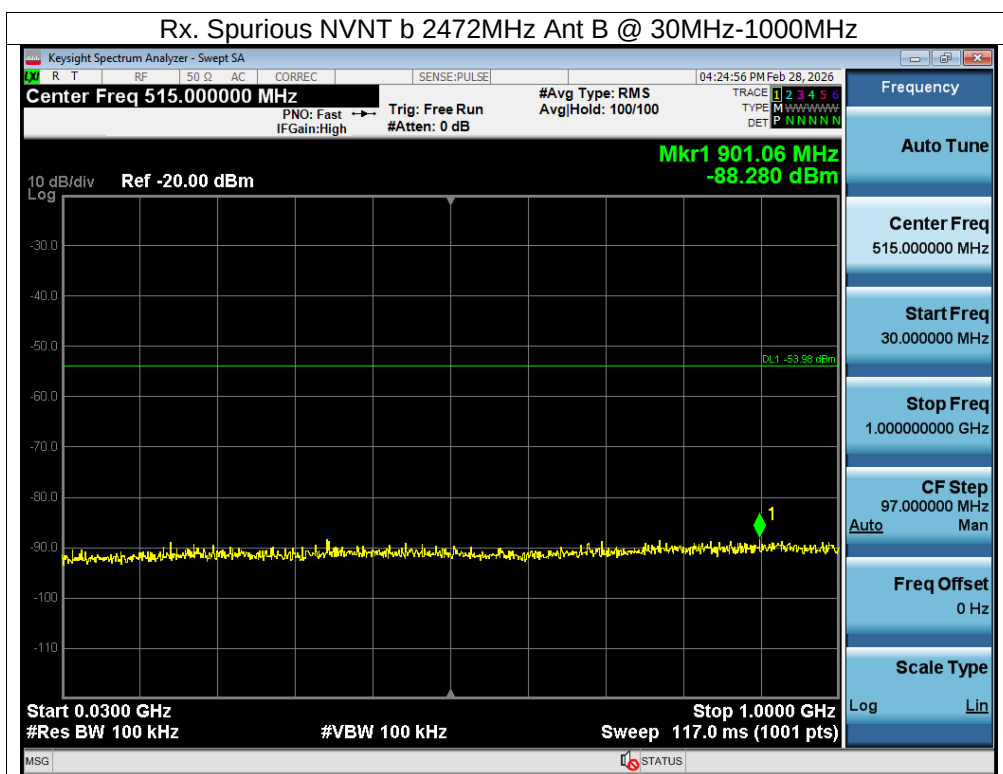


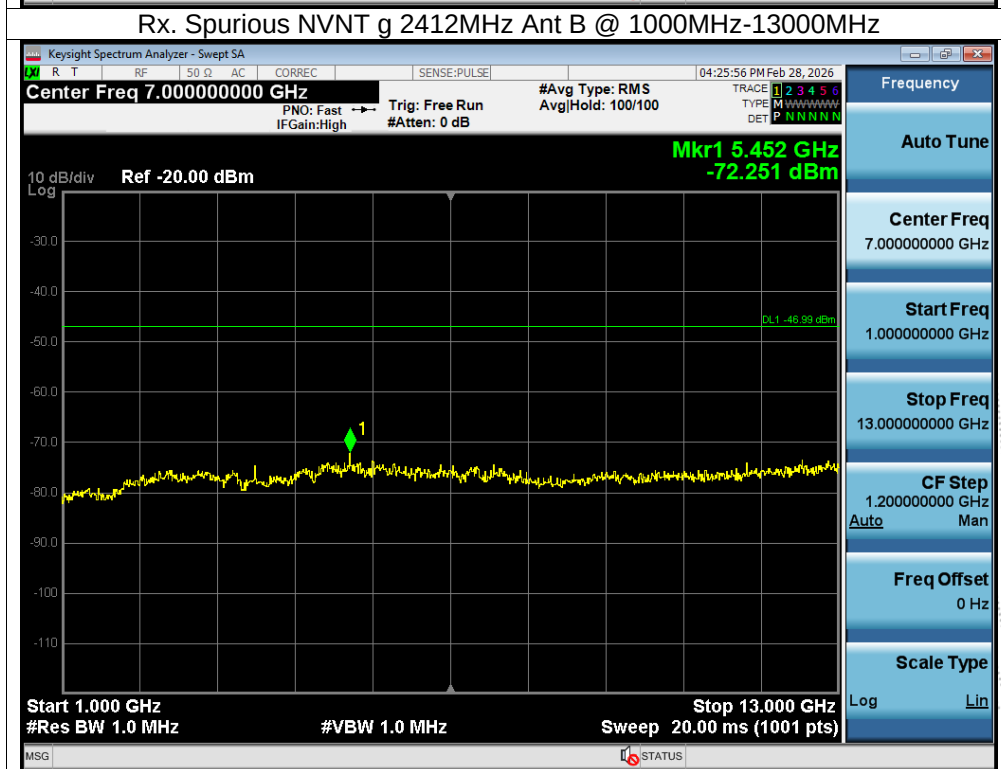
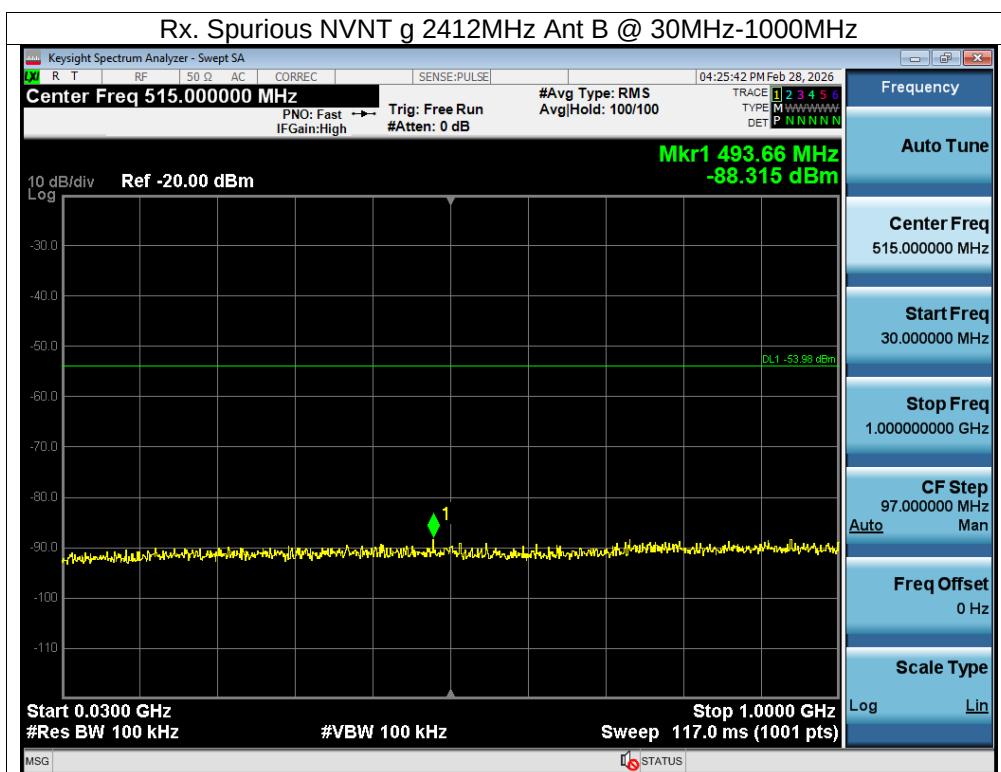


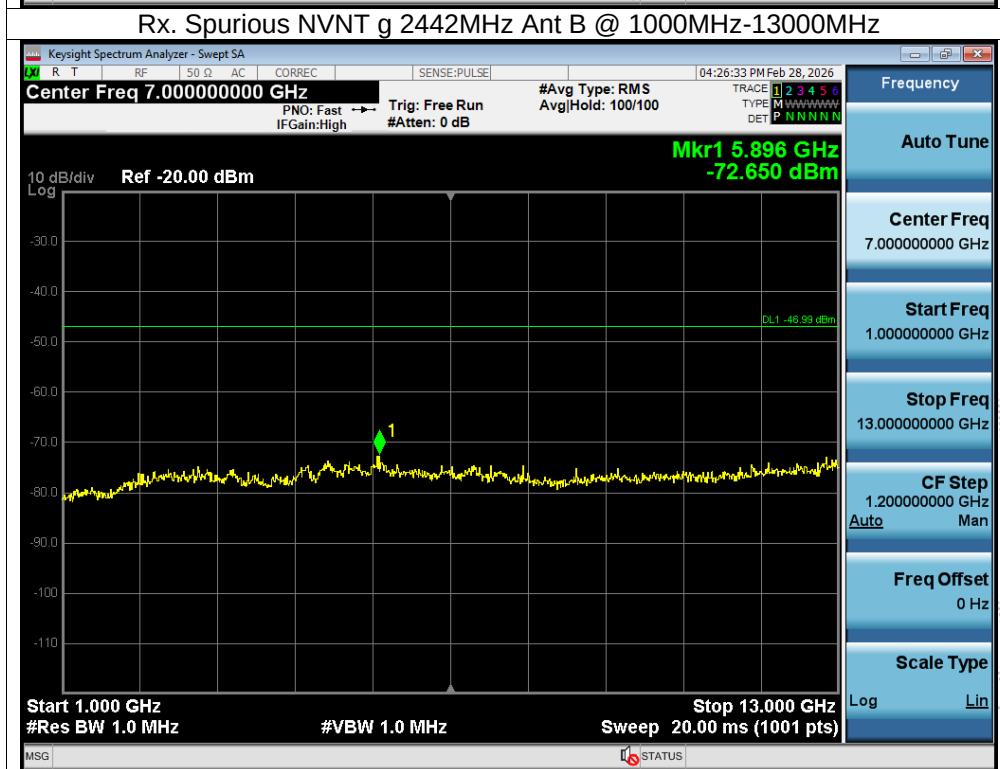
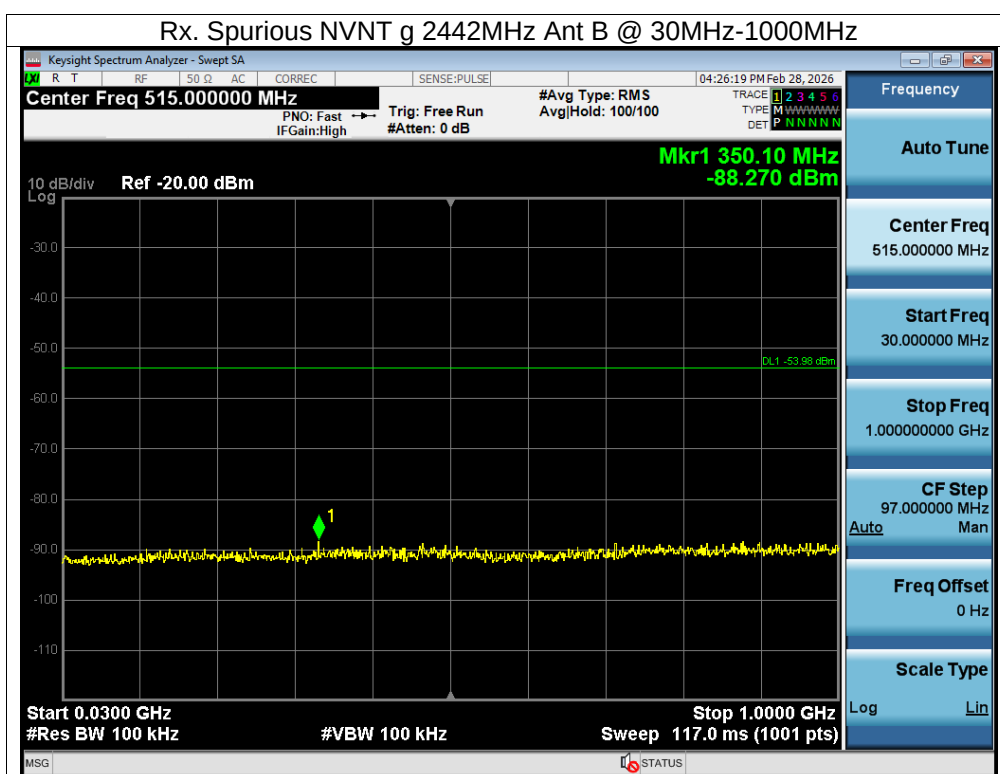




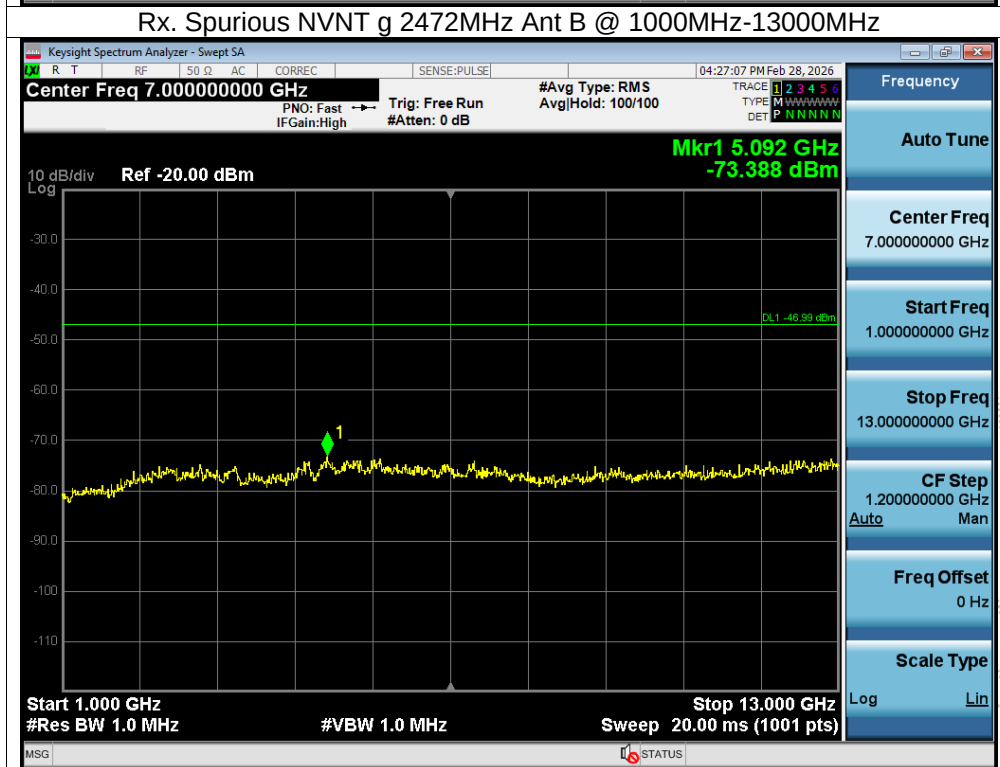
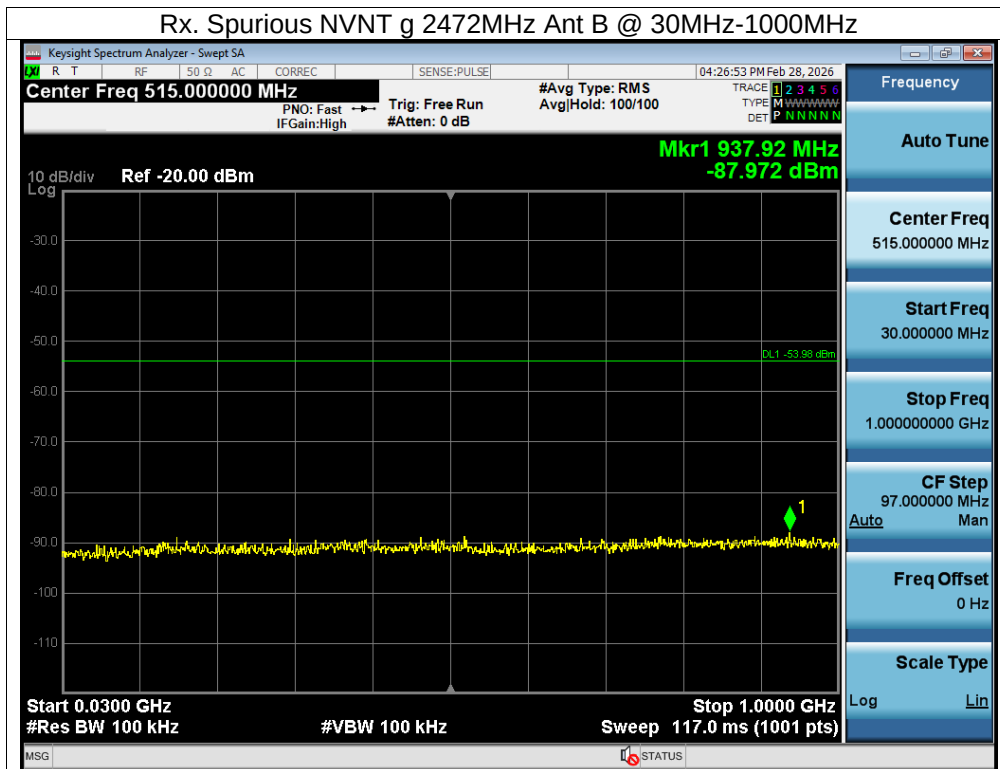


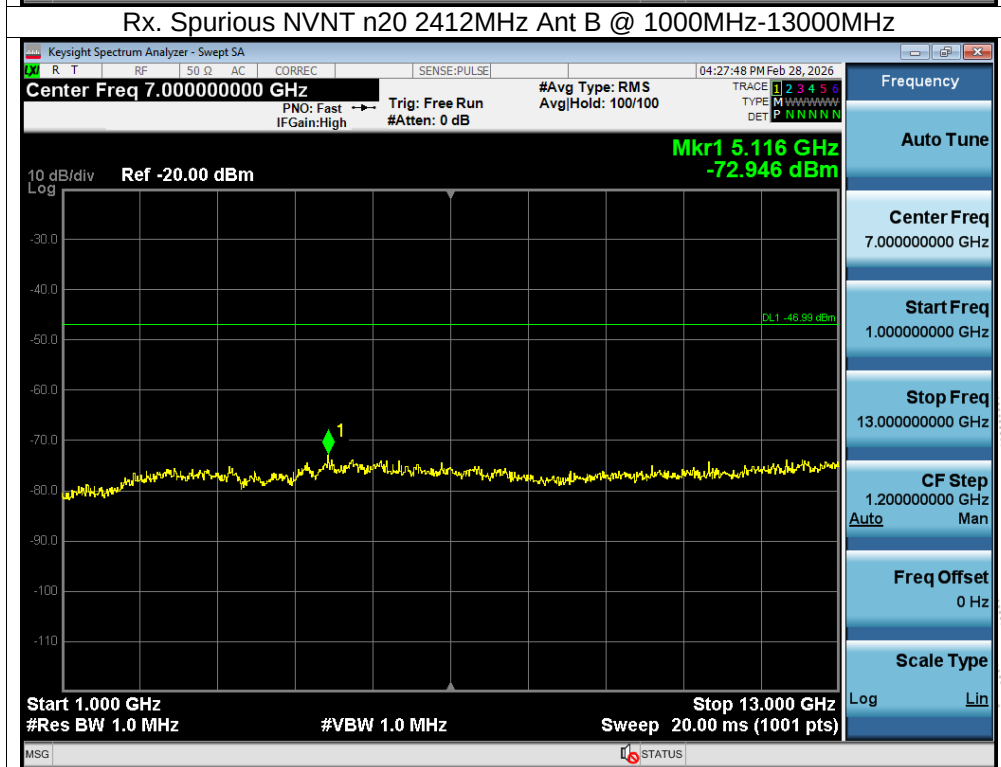
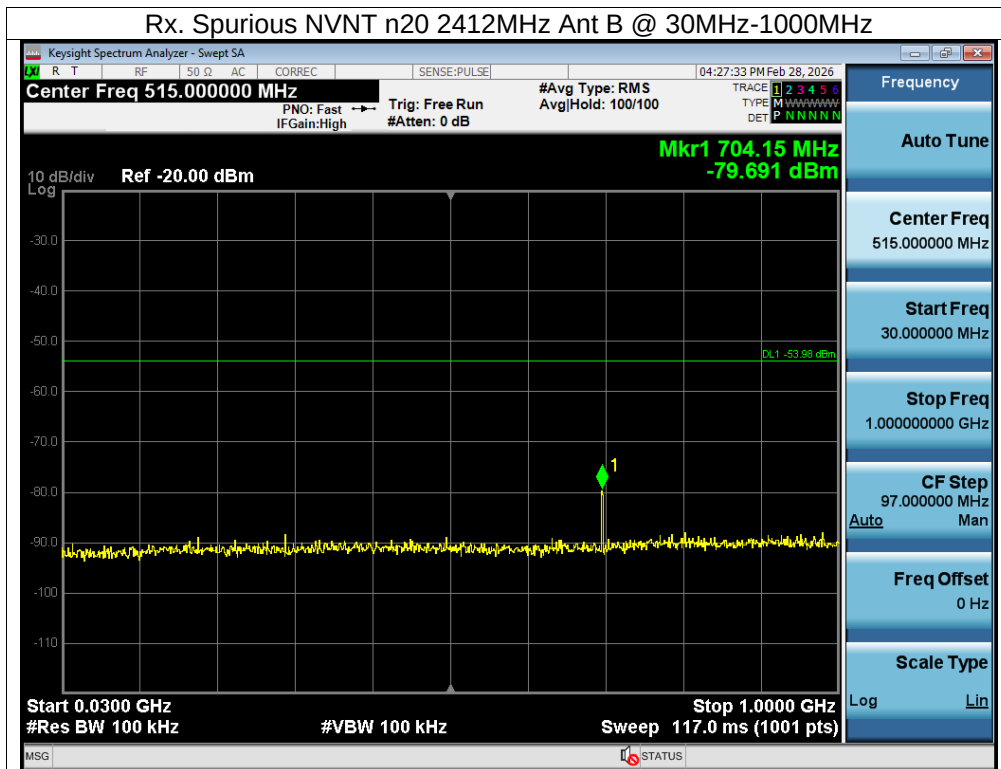


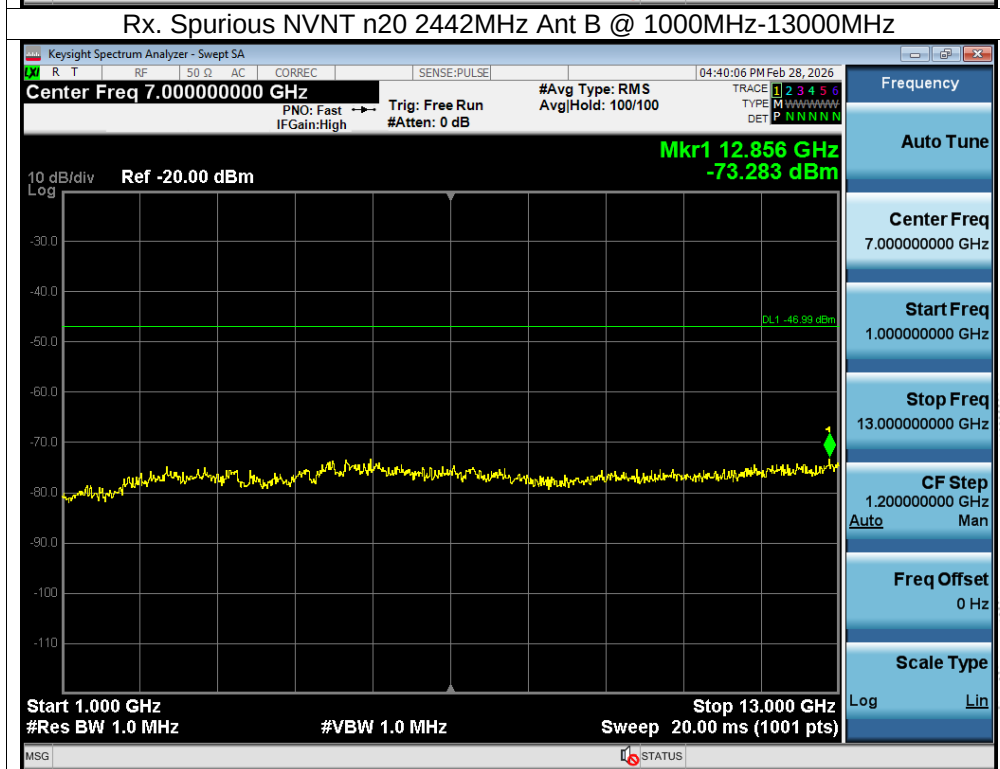
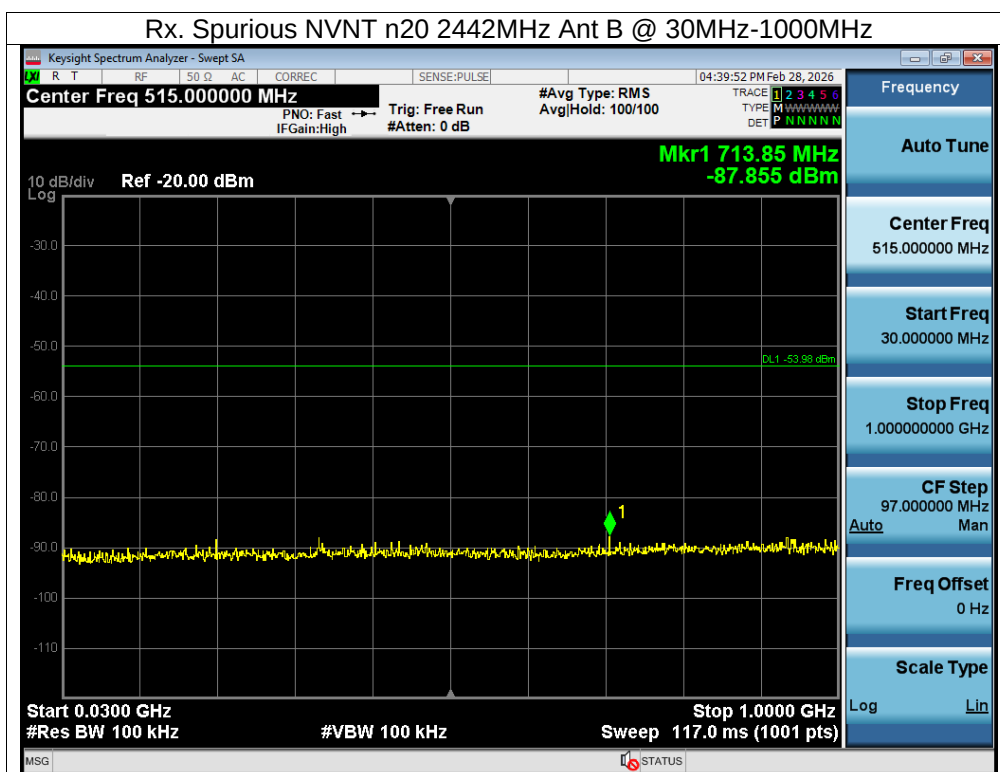


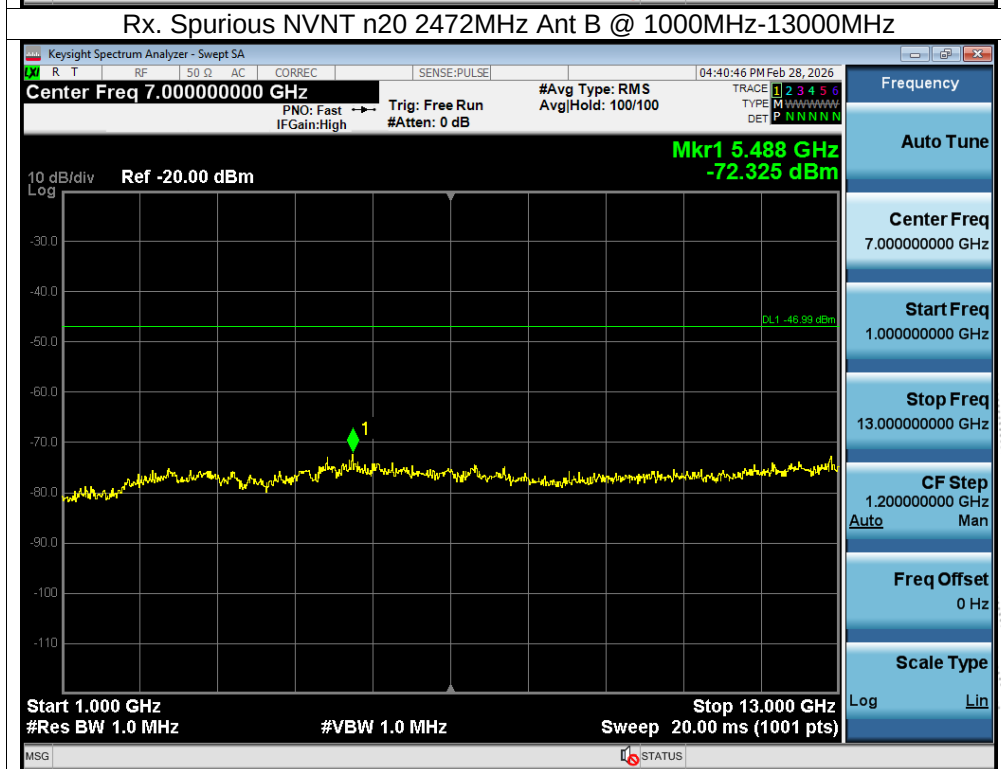
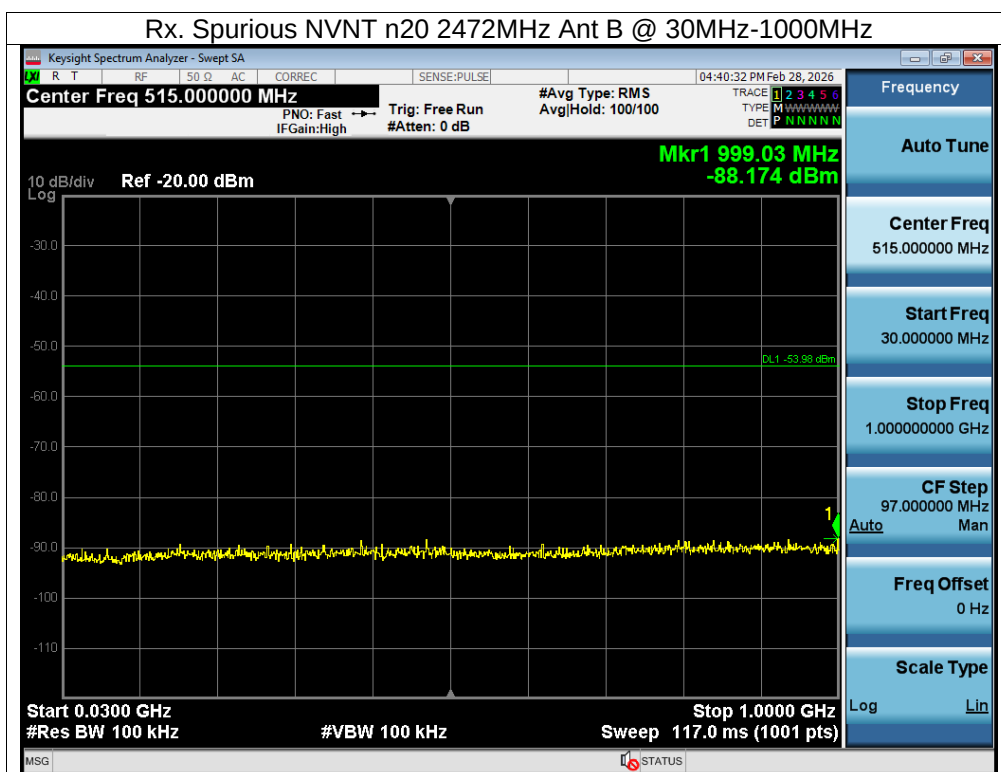


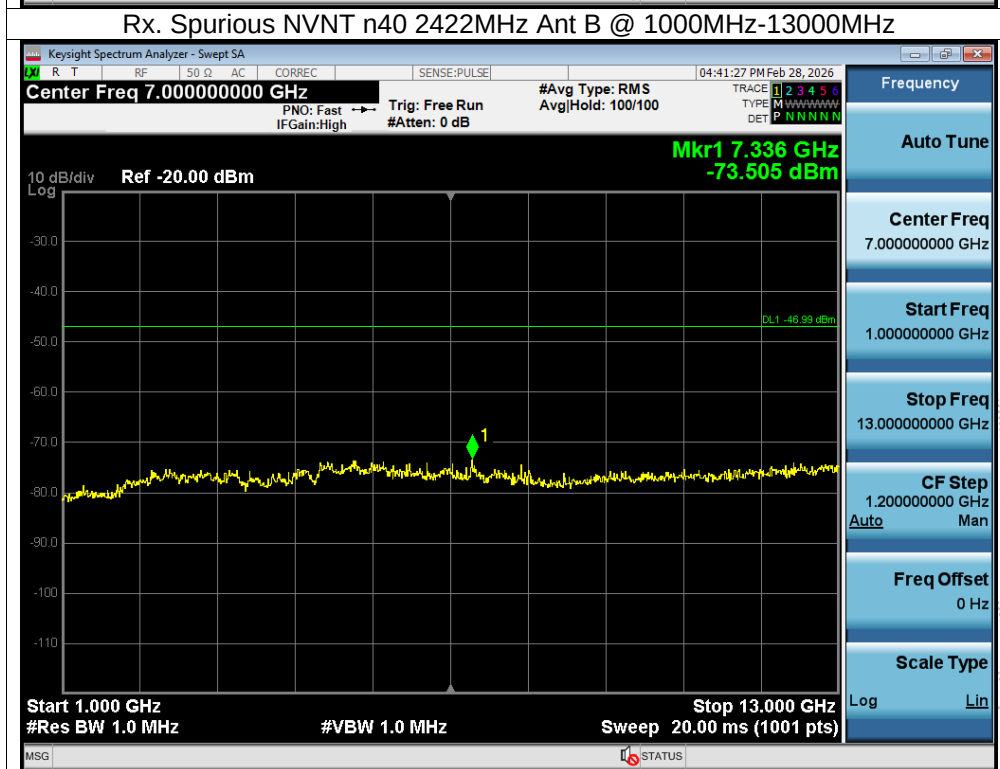
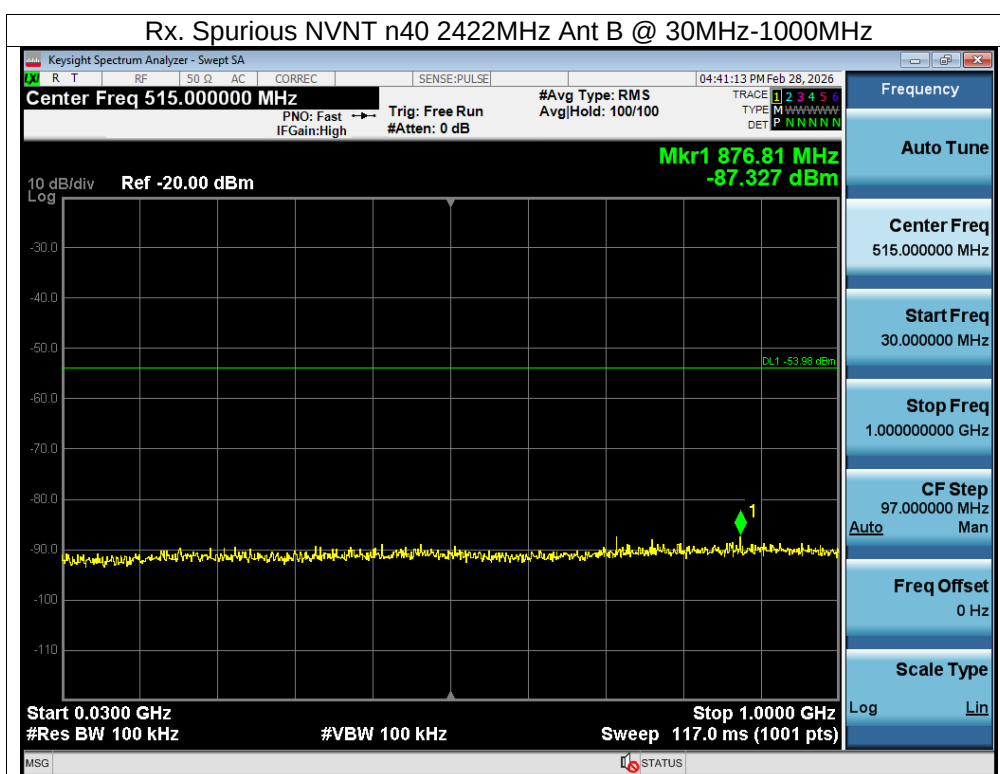
CO., LTD

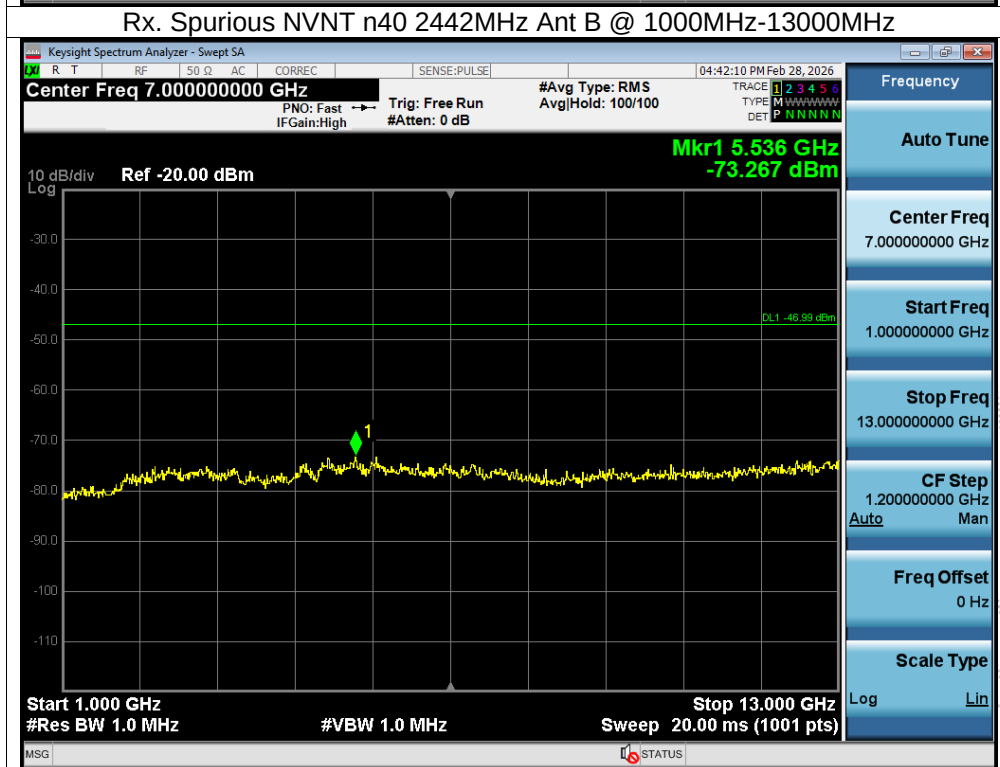
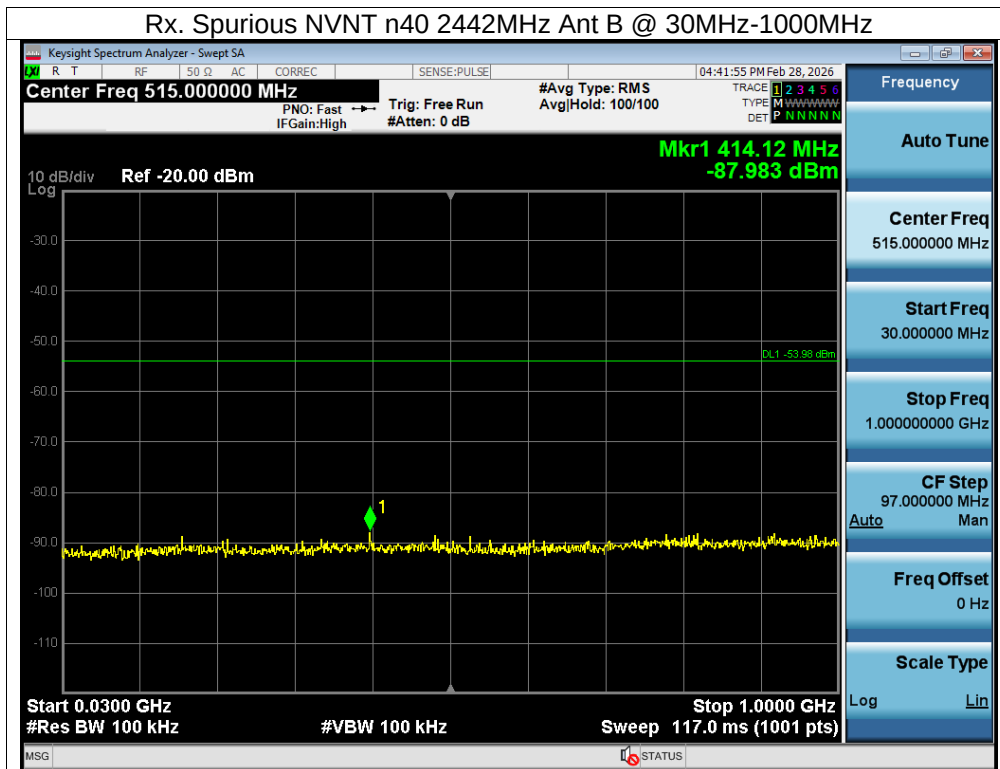


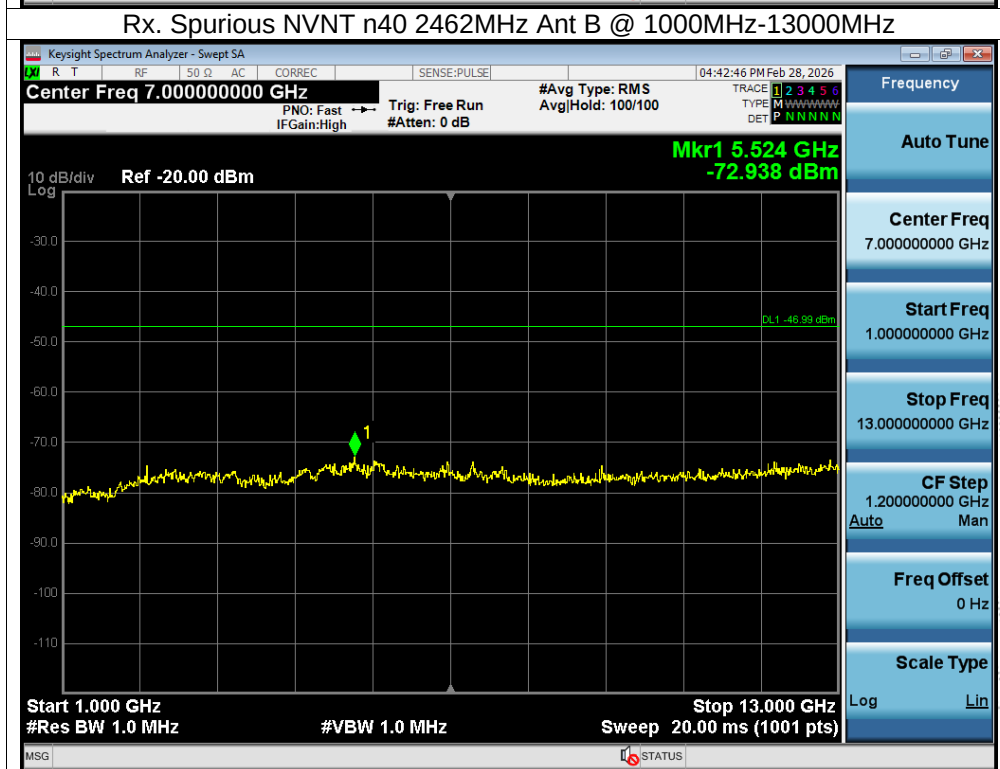
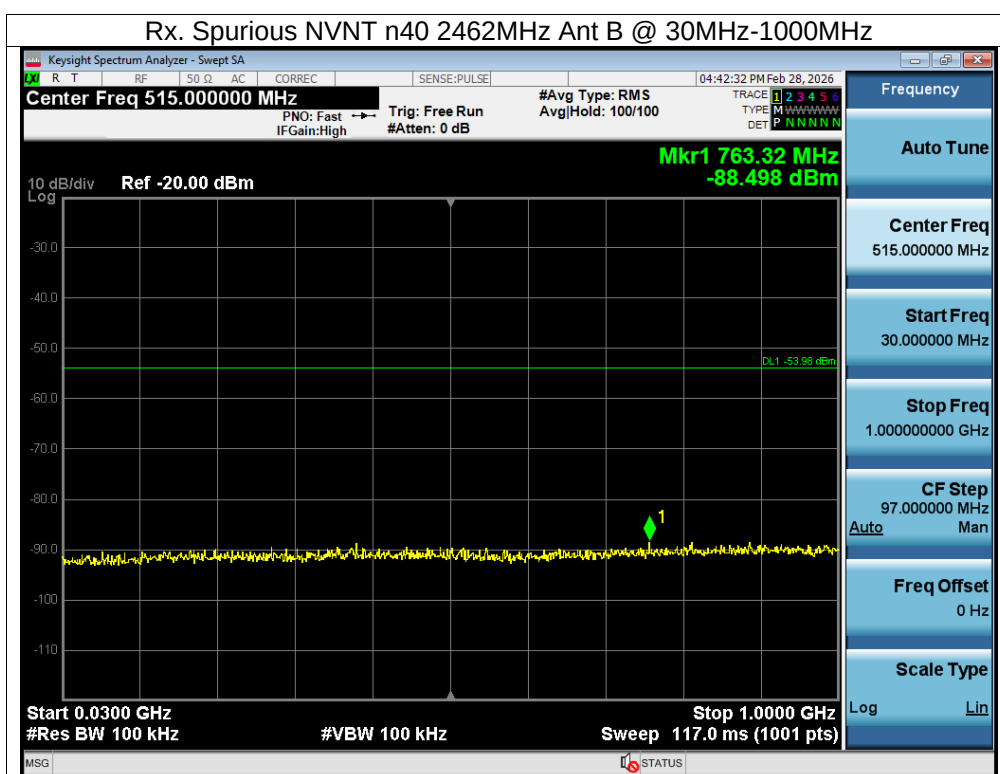






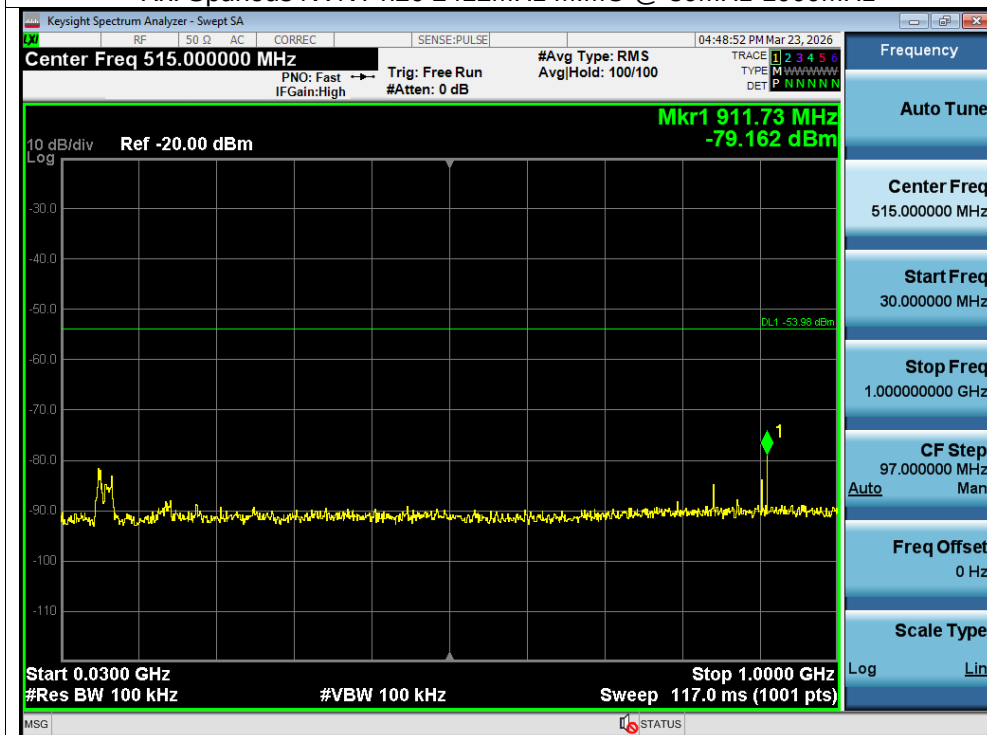




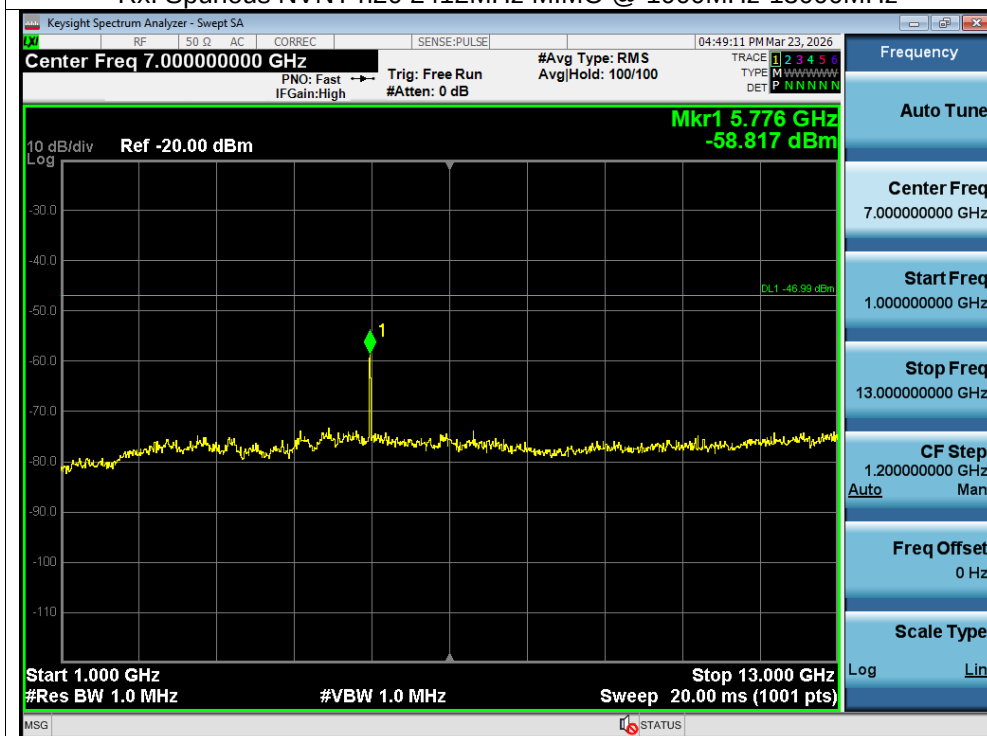


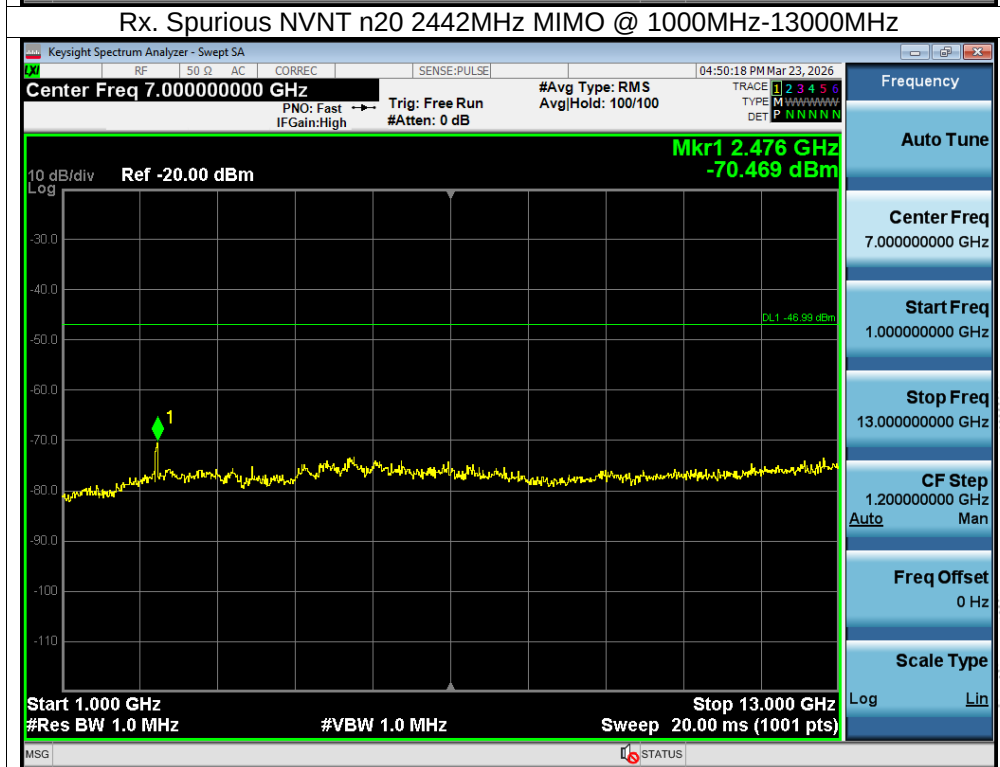
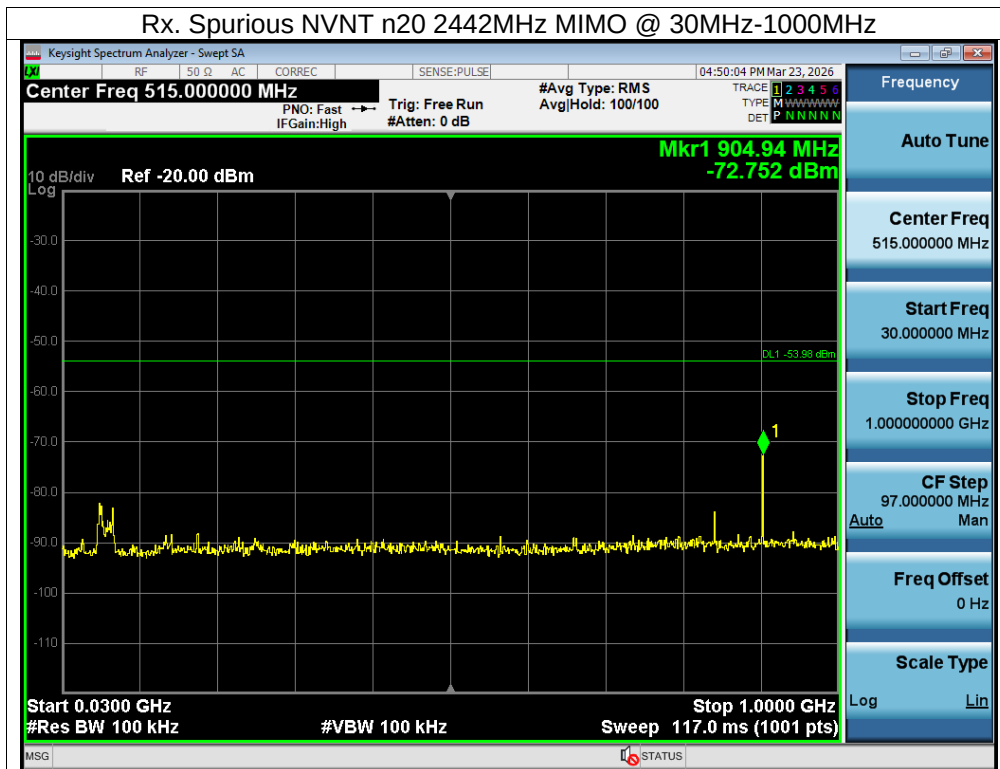
Test Graphs

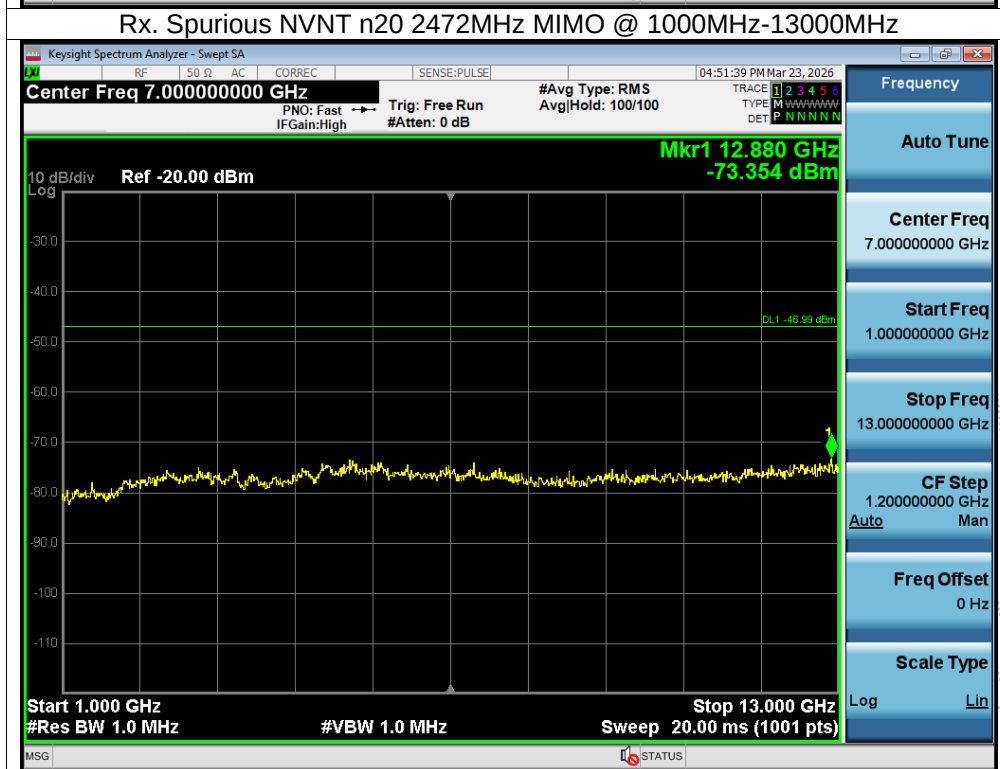
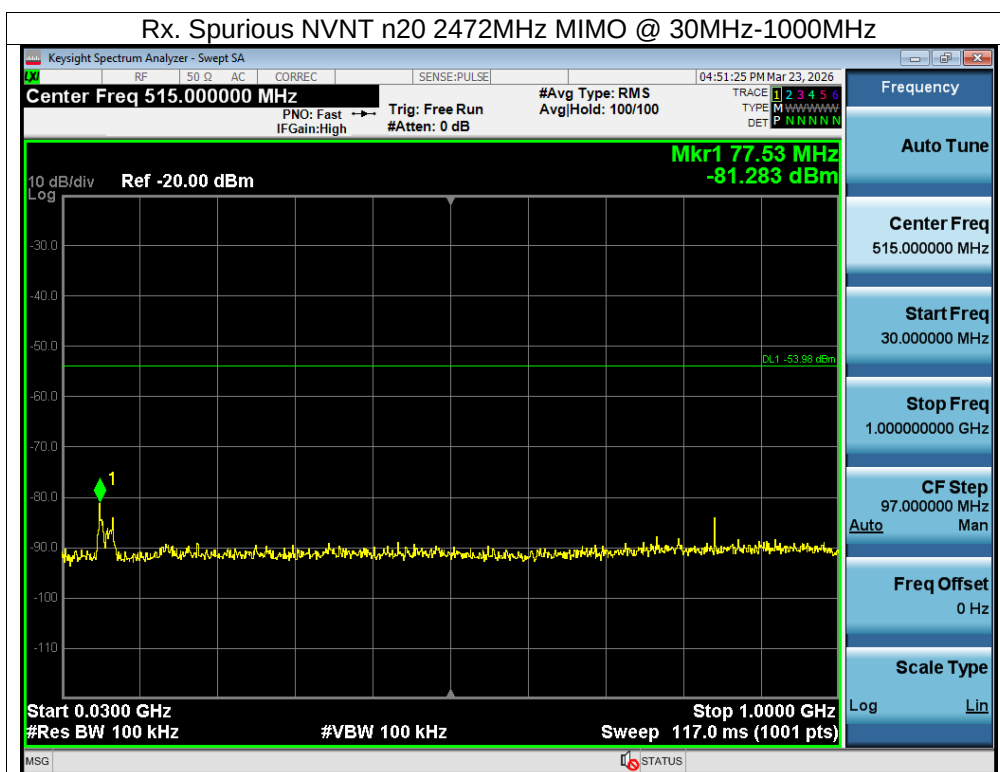
Rx. Spurious NVNT n20 2412MHz MIMO @ 30MHz-1000MHz

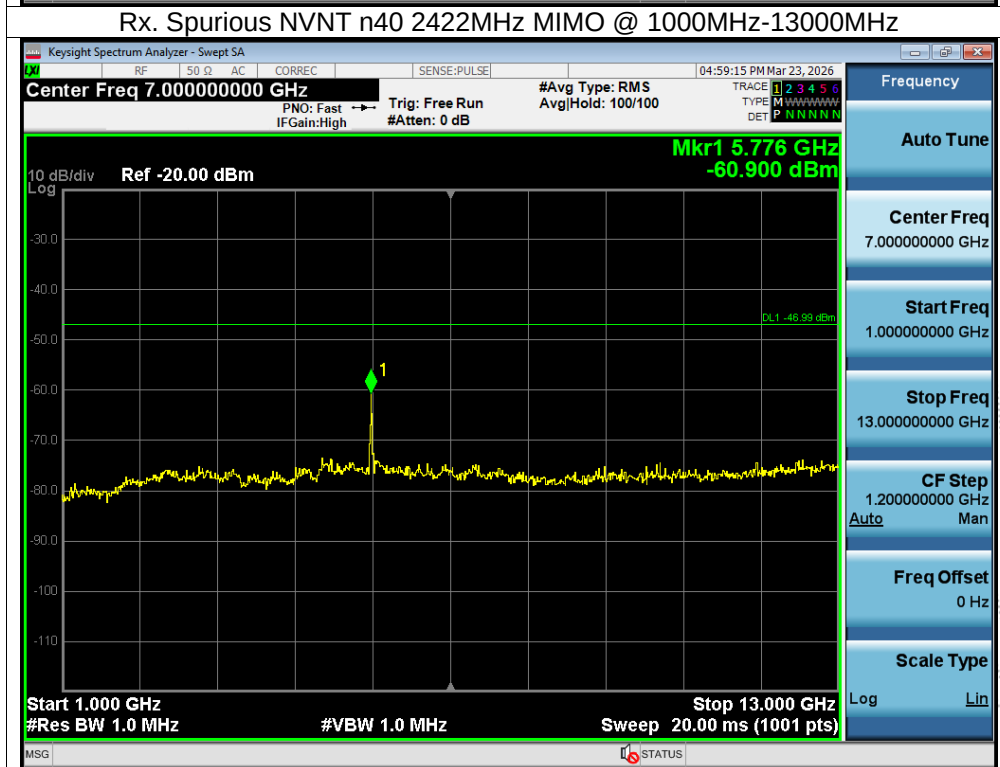
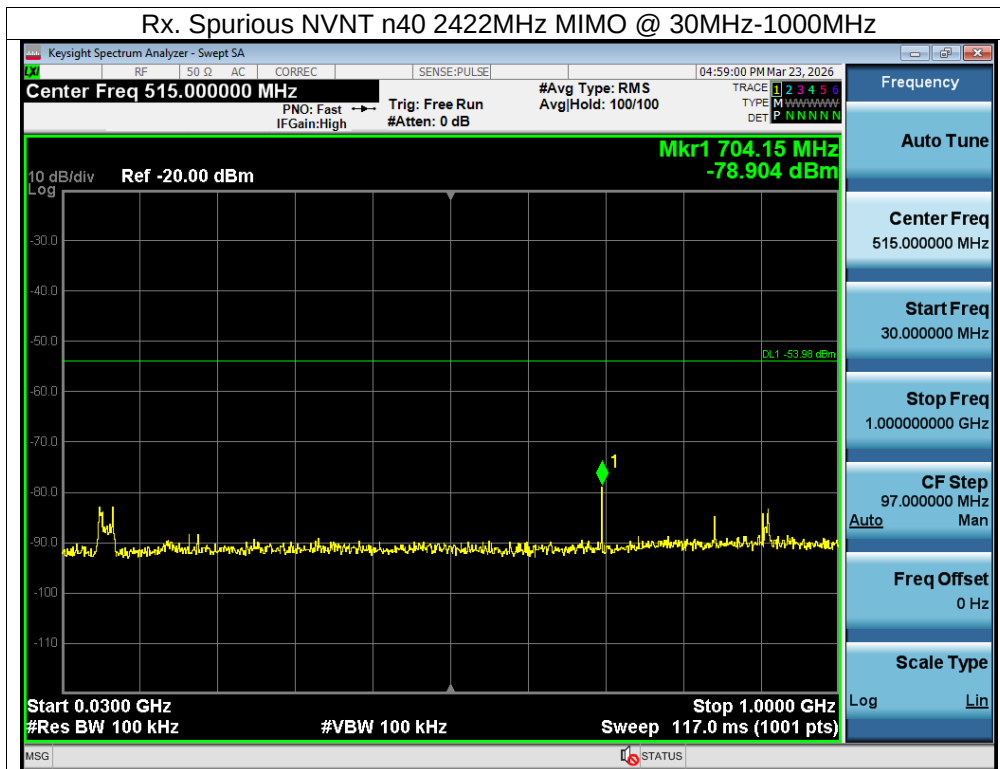


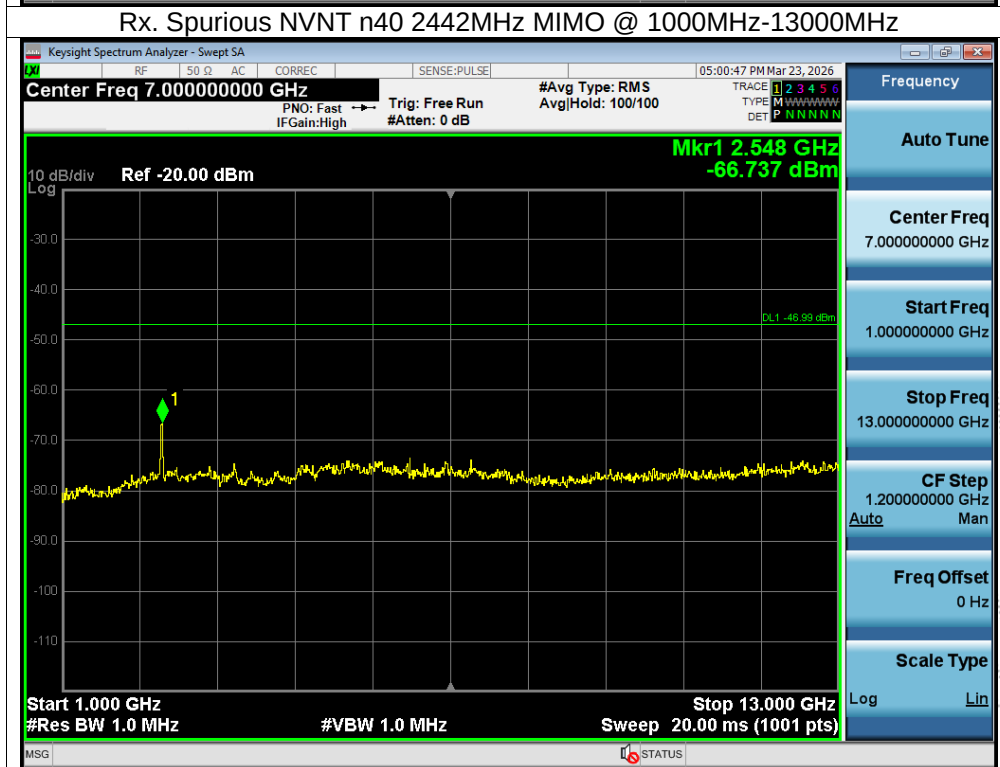
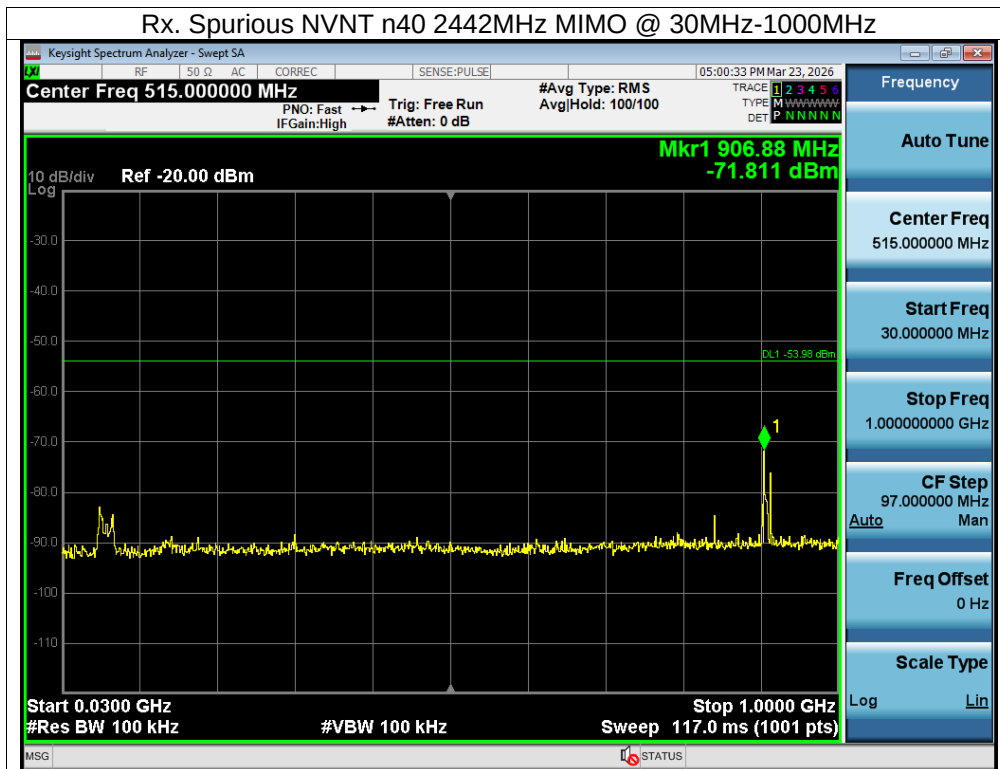
Rx. Spurious NVNT n20 2412MHz MIMO @ 1000MHz-13000MHz

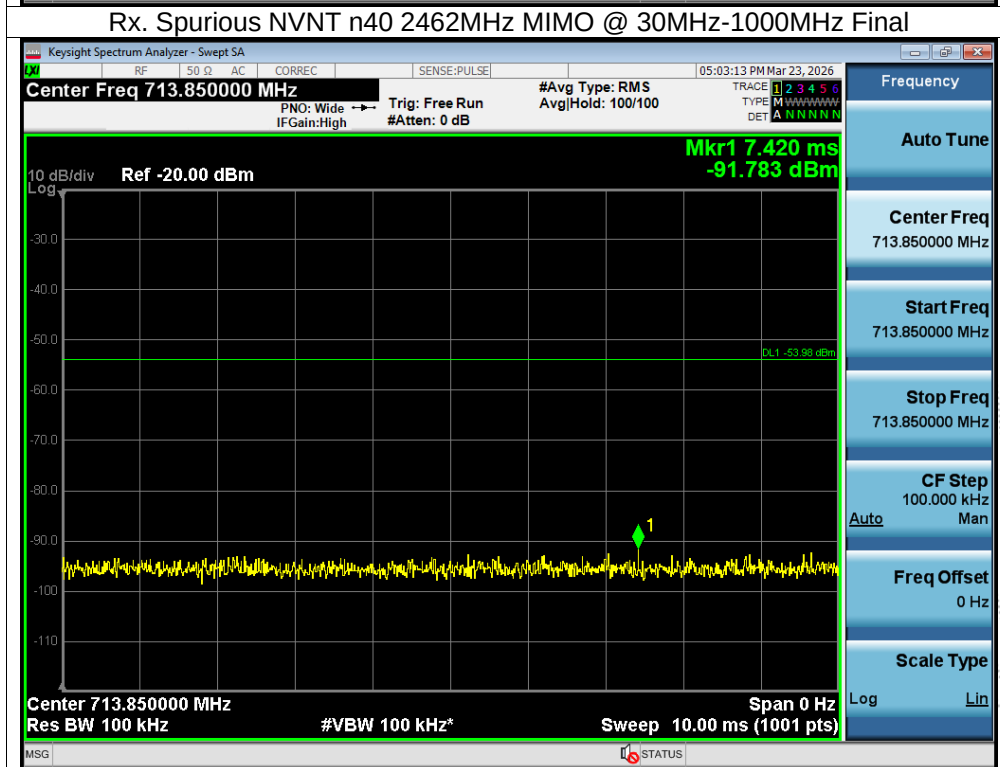
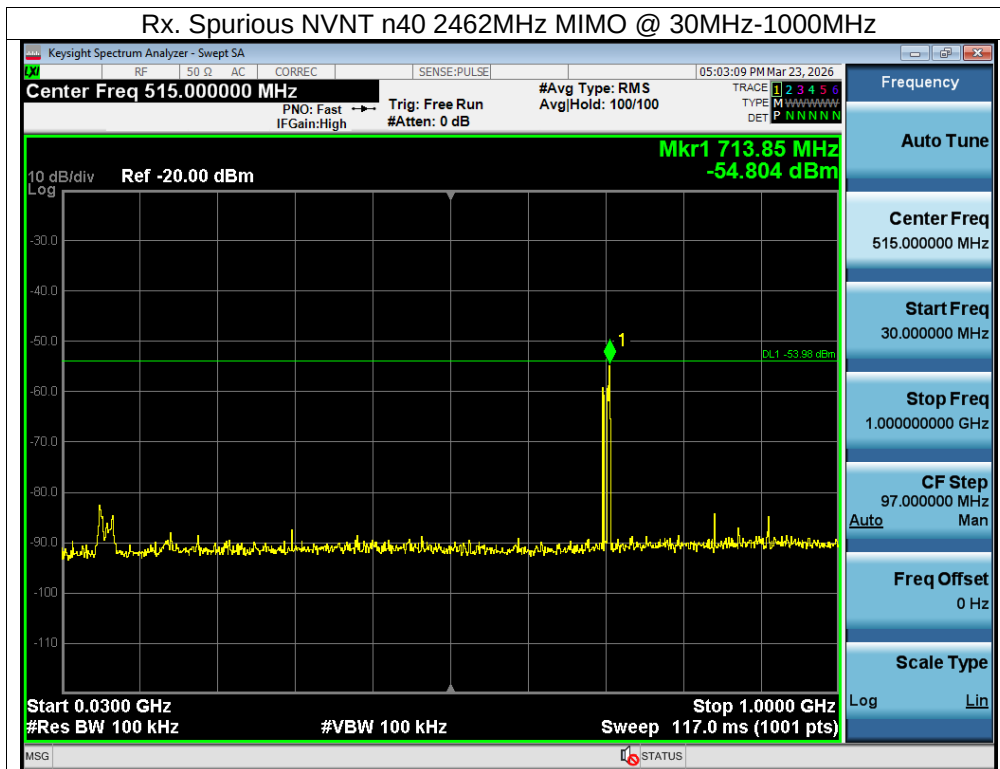


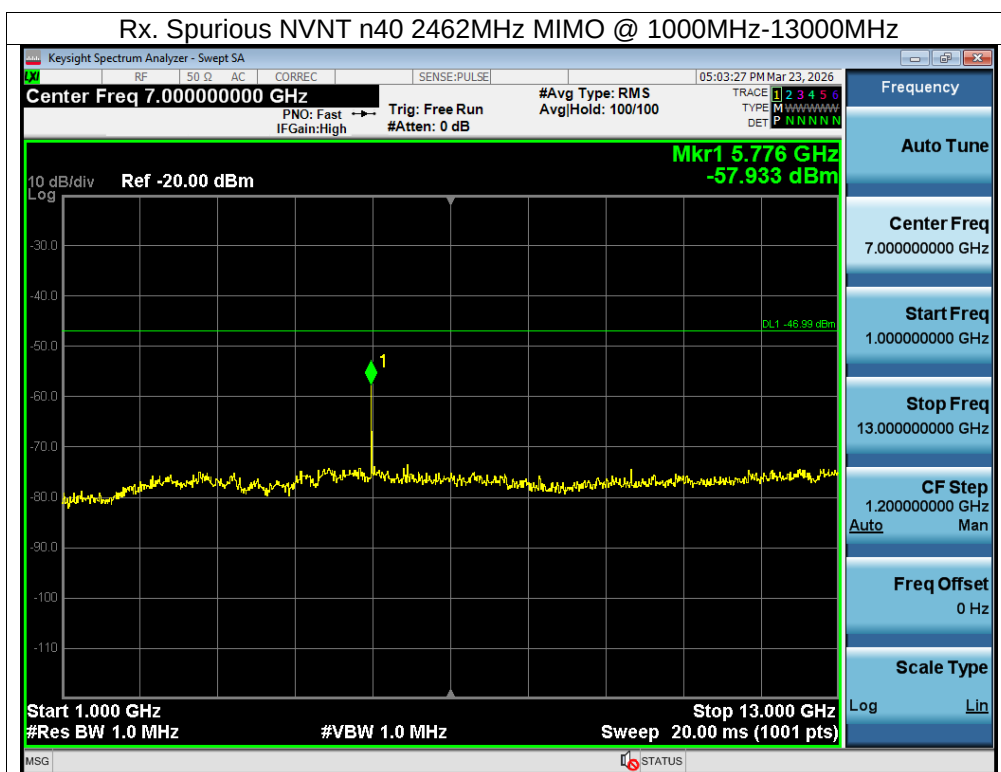








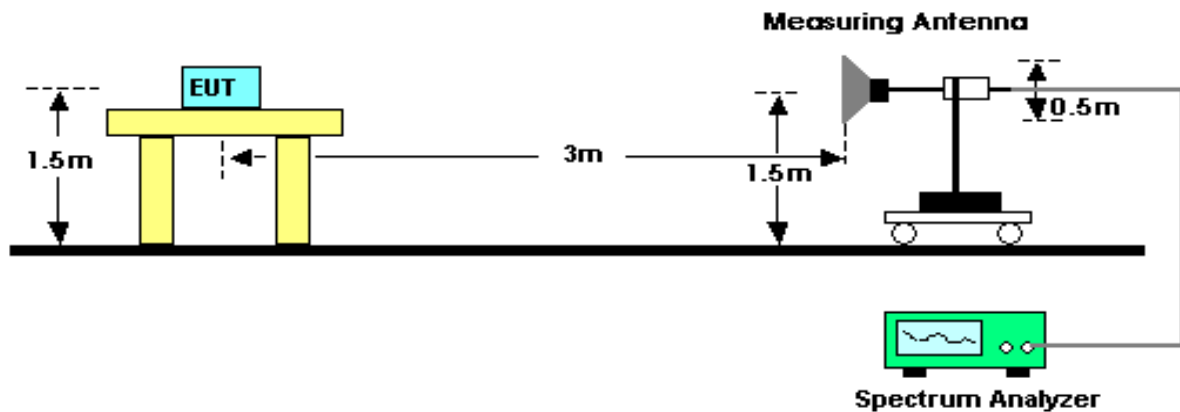




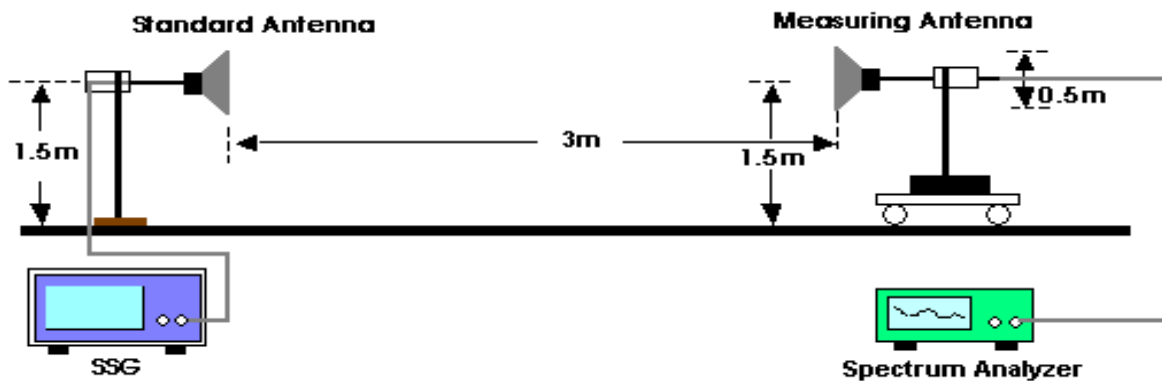
12. Transmission Antenna Gain (EIRP Antenna Power) Measurement

12.1 Block Diagram Of Test Setup

For EUT radiation measurement



For standard antenna measurement



12.2 Limit

Modulation	Frequency band	Antenna power	Max EIRP	
			Non-directional	Beam directional ^{Note1}
DS	2,400-2,483.5MHz	10mW/MHz	12.14dBm/MHz	22.14dBm/MHz
OFDM1	2,400-2,483.5MHz	10mW/MHz	12.14dBm/MHz	22.14dBm/MHz
OFDM2	2,400-2,483.5MHz	5mW/MHz	9.14dBm/MHz	19.14dBm/MHz
FH,DS-FH, FH-OFDM	2,400-2,483.5MHz	3mW/MHz	6.91dBm/MHz	16.91dBm/MHz
	2,427-2,470.75MHz	10mW/MHz	12.14dBm/MHz	22.14dBm/MHz
Other than those above	2,400-2,483.5MHz	10mW	12.14dBm	22.14dBm

Note : OFDM 1 in the modulation method column indicates that the occupied frequency band width is 26

MHz or less, and OFDM 2 indicates the occupied frequency bandwidth exceeding 26 MHz and 38 MHz or less.

12.3 Measuring Instruments And Setting

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

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

12.4 Test Procedure

1. Set EUT ad measuring antenna at the same height and roughly facing each other.
2. 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 the measuring antenna. The output level at the spectrum analyzer is read sa "E".
3. Remove the EUT from the turn table and put the replacing antenna facing to measuring antenna at same height. Set the standard signal generator (SSG) at same frequency and transmit on then receive the signal
4. Swing the replacing antenna give a maximum receiving level.
5. Move the measuring antenna height up and down within $\pm 50\text{cm}$ of replacing antenna height and swing it to find the maximum receiving level.
6. Set SSG output power at Pt to give the equivalent output level of "E" or caluate Pt with SSG output which gives the nearest of "E" and difference ($\pm 1\text{dB}$). Record the Pt.
7. Calculate EIRP by the formula below $\text{EIRP} = \text{Gt} - \text{L} + \text{Pt}$.
 Gt: gain of replacing antenna (dBi)
 L: feeder loss between SSG and replacing antenna
 Pt: Output power of the SSG
8. If the antenna for the EUT has circular polarization, sum of V-field and H-field will be result if measuring antenna is linear polarization.

12.5 Test Result

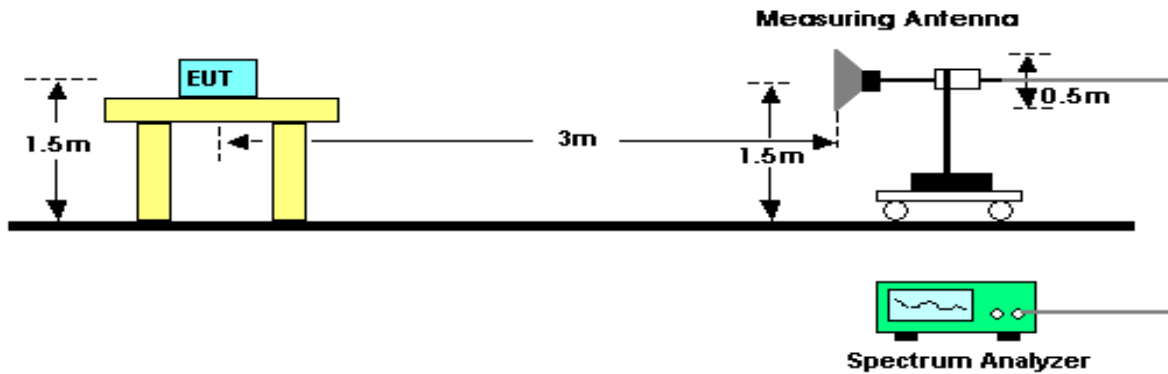
Test voltage (V)	Mode	Channel (MHz)	Antenna A Power (dBm/MHz)	ANT (dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)
DC 14.4V	802.11b	2412	6.84	1.58	8.42	12.14
		2442	6.96	1.58	8.54	
		2472	6.95	1.58	8.53	
	802.11g	2412	1.23	1.58	2.81	
		2442	1.24	1.58	2.82	
		2472	1.08	1.58	2.66	
	802.11n(HT20)	2412	0.75	1.58	2.33	
		2442	0.58	1.58	2.16	
		2472	0.63	1.58	2.21	
	802.11n(HT40)	2422	-1.4	1.58	0.18	9.14
		2442	-1.58	1.58	0	
		2462	-1.58	1.58	0	

Test voltage (V)	Mode	Channel (MHz)	Antenna B Power (dBm/MHz)	ANT (dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)
DC 14.4V	802.11b	2412	7.66	2.79	10.45	12.14
		2442	7.67	2.79	10.46	
		2472	7.79	2.79	10.58	
	802.11g	2412	2.07	2.79	4.86	
		2442	2.01	2.79	4.8	
		2472	2.11	2.79	4.9	
	802.11n(HT20)	2412	1.42	2.79	4.21	
		2442	0.02	2.79	2.81	
		2472	1.11	2.79	3.9	
	802.11n(HT40)	2422	-0.49	2.79	2.3	9.14
		2442	-0.96	2.79	1.83	
		2462	-0.9	2.79	1.89	

Test voltage (V)	Mode	Channel (MHz)	MIMO Power (dBm/MHz)	ANT (dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)
DC 14.4V	802.11n(HT20)	2412	4.11	2.79	6.9	12.14
		2442	3.32	2.79	6.11	
		2472	3.89	2.79	6.68	
	802.11n(HT40)	2422	2.09	2.79	4.88	9.14
		2442	1.75	2.79	4.54	
		2462	1.78	2.79	4.57	

13. Transmission Radiation Angle Width (3dB Beamwidth) Measurement

13.1 Block Diagram Of Test Setup



13.2 Limit

Item	Limits
3dB antenna beam width	$360/A$ (If $A < 1$; then $A = 1$) $A = \{ \text{EIRP Power [mW]} / 16.36 \text{ for DS, OFDM} \}$ or $A = \{ \text{EIRP Power [mW]} / 4.9 \text{ for FH} \}$
Note ₁ : $A = \text{E.I.R.P.} / (2.14\text{dBi} + \text{"Antenna Power (limit)" of each modulation method (*3mW/MHz, 10mW/MHz, etc.)}$ Note ₂ : 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	

13.3 Measuring Instruments And Setting

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

13.4 Test Procedure

1. Set EUT and measuring antenna at the same height and roughly facing each other.
2. Set spectrum analyzer with condition in section 4.7.2 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. The output level at the spectrum analyzer is read as "E"
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 $A=1$).

$A = \{\text{EIRP Power [mW]} / 16.36 \text{ for DS, OFDM}\}$ or

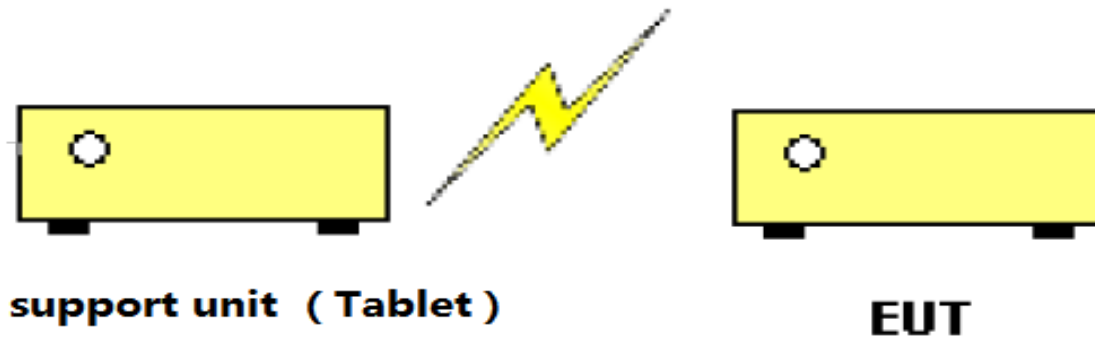
$A = \{\text{EIRP Power [mW]} / 4.9 \text{ for FH}\}$

13.5 Test Result

N/A (Not Applicable)

14. Radio Interference Prevention Capability Measurement

14.1 Block Diagram Of Test Setup



14.2 Limit

Item	Limits
Identification code	≥ 48 bits

14.3 Measuring Instruments And Setting

Item	Limits
MAC IP List	MAC Scan

14.4 Test Procedure

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.

14.5 Test Result

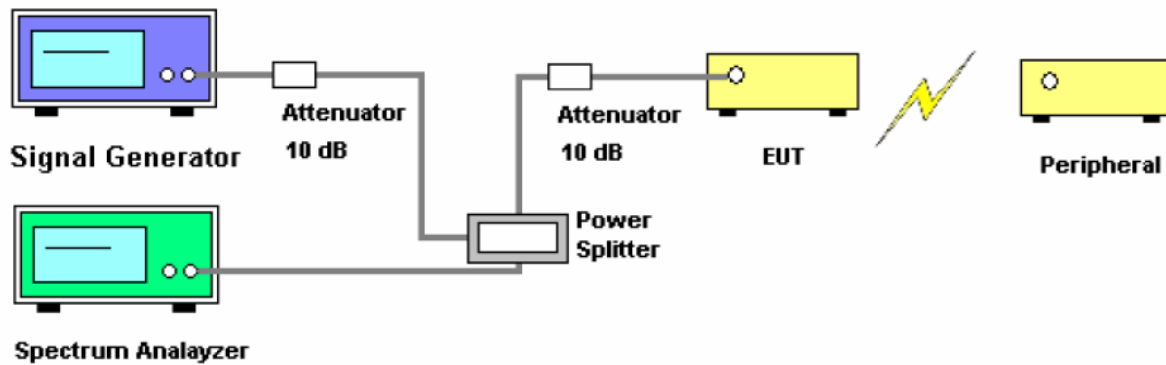
Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 14.4V
Operation Mode:	Transmitting-		

Test result:	CONFORM
--------------	---------

MAC: 24:35:57: ed: 69:33

15. Carrier Sense Capability Measurement

15.1 Block Diagram Of Test Setup



15.2 Limit

EUT stop RF transmission signal after carrier inject to EUT

15.3 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.
6. EUT shall be stop the transmitted any signal and SG RF signal off, the EUT will be continuous transmitted signal.

15.4 Test Result

Mode	Channel	Result		
		Normal Voltage	High Voltage	Low Voltage
802.11n40	CH3	Pass	Pass	Pass
	CH7	Pass	Pass	Pass
	CH11	Pass	Pass	Pass

Note: For this test just evaluate the mode which bandwidth $\geq 26 \text{ MHz}$.

16. Duty Cycle Of Test Signal

16.1 Standard Requirement

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage

16.2 Formula

Duty Cycle = $T_{on} / (T_{on} + T_{off})$

16.3 Test Procedure

1. Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = Peak

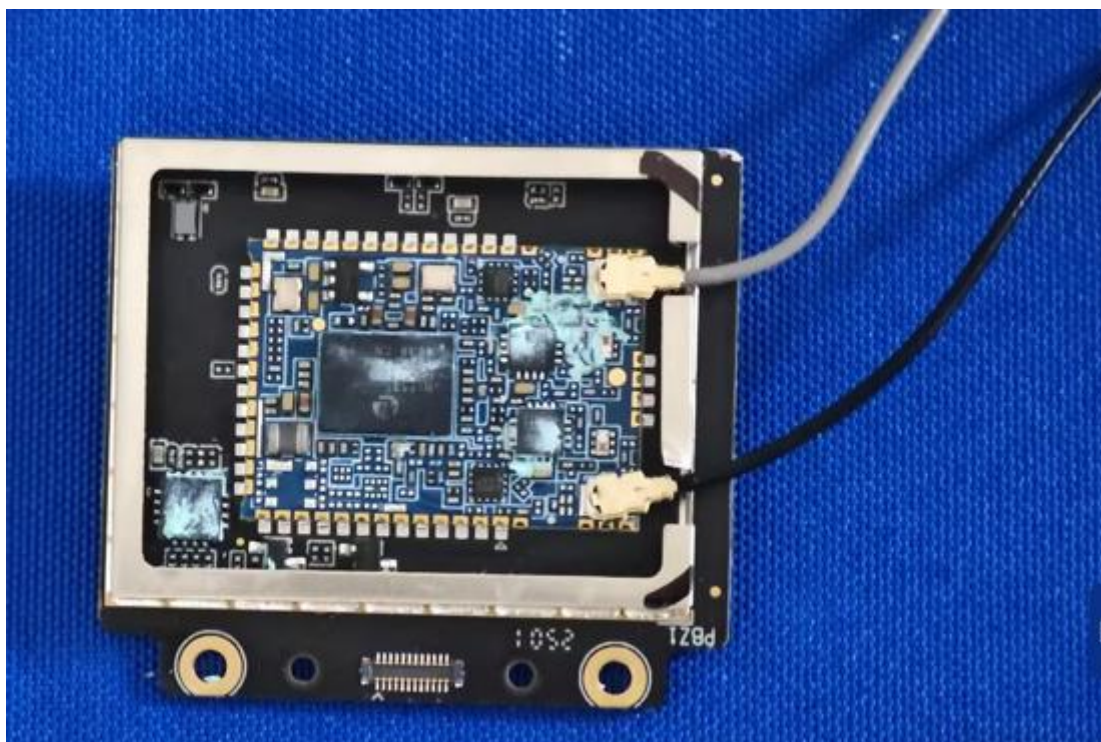
16.4 Test Result

Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 14.4V
Operation Mode:	Transmitting		

Operation mode	Duty Cycle(%)	Duty Fator (dB)
802.11b	100	0
802.11g	100	0
802.11n(HT20)	100	0
802.11n(HT40)	100	0

17. EUT Test Setup Photographs

Measurement Photos



STATEMENT

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. The quality system of our laboratory is in accordance with ISO/IEC17025.
8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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***** END *****