Radio Test Report

Report No.:STS2512545W01

Issued for

Shenzhen MegaSig Measurement & Control Technology Co., Ltd.

Rm 402 & 502, Bldg 1, Guangming Digital Manufacturing Park, Gongming, Guangming, Shenzhen, China

Product Name:	Bluetooth Adapter
Brand Name:	MegaSig
Model Name:	U987Q
Series Model(s):	U910, U980, U982, U983, U984C, U985, U986, U916
Test Standard:	Article 2 Paragraph 1 of Item 19 MIC Notice No.88 Appendix No.43

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

TEST REPORT

Applicant's Name	:	Shenzhen MegaSig Measurement & Control Technology Co., Ltd.
Address	:	Rm 402 & 502, Bldg 1, Guangming Digital Manufacturing Park, Gongming, Guangming, Shenzhen, China
Manufacturer's Name	:	Shenzhen MegaSig Measurement & Control Technology Co., Ltd.
Address	:	Rm 402 & 502, Bldg 1, Guangming Digital Manufacturing Park, Gongming, Guangming, Shenzhen, China

Test Specification:

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

Product Description

Product Name	:	Bluetooth Adapter
Brand Name	:	MegaSig
Model Name	:	U987Q
Series Model(s)	:	U910, U980, U982, U983, U984C, U985, U986, U916

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

Testing

Date of receipt of test item	:	31 Dec. 2025
Date (s) of performance of tests	:	31 Dec. 2025 ~ 28 Jan. 2026
Date of Issue	:	28 Jan. 2026
Test Result	:	**Pass**

Testing Engineer : Aaron Bu

(Aaron Bu)

Technical Manager : Skylar Li

(Skylar Li)

Authorized Signatory : Bovey Yang

(Bovey Yang)

SHENZHEN STS TEST SERVICES CO., LTD. TESTING APPROVAL

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Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	28 Jan. 2026	STS2512545W01	ALL	Initial Issue

1. SUMMARY OF TEST RESULTS

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

NOTE:

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

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

1.1 TEST FACTORY

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

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**, where expended 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	±0.751dB
2	Unwanted Emissions, conducted	±2.888dB
3	Frequency tolerance	±0.03ppm
4	Occupied Bandwidth	±3.6%
5	Dwell Time	±3.2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

<table>
<tr><td>Equipment</td><td>Bluetooth Adapter</td></tr>
<tr><td>Brand Name</td><td>MegaSig</td></tr>
<tr><td>Model Name</td><td>U987Q</td></tr>
<tr><td>Series Model(s)</td><td>U910, U980, U982, U983, U984C, U985, U986, U916</td></tr>
<tr><td>Serial model describing</td><td>Only different in model name</td></tr>
<tr><td>Product Description</td><td>The EUT is a Bluetooth Adapter
<table>
<tr><td>Operation Frequency:</td><td>2402~2480 MHz</td></tr>
<tr><td>Modulation Type:</td><td>GFSK/π/4-DQPSK/8DPSK</td></tr>
<tr><td>Bit Rate of Transmitter:</td><td>BT BR(1Mbps): GFSK
BT EDR(2Mbps): π/4-DQPSK
BT EDR(3Mbps): 8DPSK</td></tr>
<tr><td>Number Of Channel:</td><td>79 CH</td></tr>
<tr><td>Antenna Designation:</td><td>Please refer to the Note 3.</td></tr>
<tr><td>Antenna Gain(Peak):</td><td>3.28dBi</td></tr>
</table>
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.</td></tr>
<tr><td>Channel List</td><td>Please refer to the Note 2.</td></tr>
<tr><td>Adapter</td><td>N/A</td></tr>
<tr><td>Battery</td><td>N/A</td></tr>
<tr><td>Hardware version</td><td>25-09-01</td></tr>
<tr><td>Software version</td><td>3.1.3-7</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the Note 1.</td></tr>
</table>

Note:

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

2. Channel List

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		

3. Table for Filed Antenna

Ant.	Antenna Brand	Antenna Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	COWIN	CW-WZ-0064	2.4 GHz external rubber-duck antenna	N/A	3.28	BT Antenna

Note: The antenna information refer 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.

2.2 DESCRIPTION OF THE TEST MODES

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

Pretest Mode	Description
Mode 1	GFSK(CH00 CH78)
Mode 2	π/4-DQPSK (CH00 CH78)
Mode 3	8DPSK(CH00 CH78)
Mode 4	GFSK(Hopping)
Mode 5	π/4-DQPSK(Hopping)
Mode 6	8DPSK(Hopping)
For Conducted Emission	
Final Test Mode	Description
Mode 1	GFSK(CH00 CH78)
Mode 2	π/4-DQPSK (CH00 CH78)
Mode 3	8DPSK(CH00 CH78)
Mode 4	GFSK(Hopping)
Mode 5	π/4-DQPSK(Hopping)
Mode 6	8DPSK(Hopping)

2.3 TEST CONDITIONS

The BT module was tested while in a continuous transmitter/receiver mode.

The EUT was tuned to a low, middle, and high channel for all tests. For all test case pre/scans were completed in all Modes to determine worst case levels

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

- Temperature: 25ºC

- Humidity: 53 %

- Atmospheric pressure: 93 kpa

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input DC Power(V)	5	5.5	4.5
RF Chip Input DC Power(V)	3.215	3.221	3.208
Voltage Variation (%)	/	0.19	-0.22

Note: 1. Voltage Variation (%)

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

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

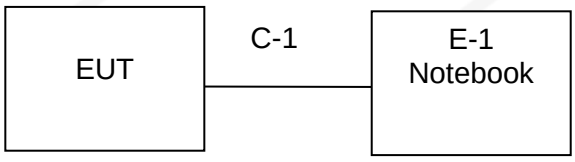
When the input supply voltage to the EUT from the external power source is varied by +/-10%, the output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%, and the DC power fluctuation at the power input PIN 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.

2.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
BT	BR+EDR	GFSK	3.28	5	BlueSuite 3.3.17
		π/4-DQPSK	3.28	5	
		8DPSK	3.28	5	

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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

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

Item	Equipment	Mfr/Brand	Length	Note
C-1	Shielded	NO	150cm	N/A

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

2.7 EQUIPMENTS LIST FOR ALL TEST ITEMS

RF Connected Test Equipment					
Kind of Equipment	**Manufacturer**	**Type No.**	**Serial No.**	**Last calibration**	**Calibrated until**
Signal Generator	Keysight	N5182B	MY57301448	2025.09.26	2026.09.25
Signal Analyzer	Agilent	N9020A	MY51510623	2025.02.22	2026.02.21
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Digital Oscilloscope	Tektronix	TDS1012B	C062149	2025.09.22	2026.09.21
Power Sensor	Keysight	U2021XA	MY55520005	2025.09.25	2026.09.24
Power Divider	eastsheep	PD-0.5/0.6-2S	B519	2025.02.25	2026.02.24
Attenuator	Agilent	8494B	DC-18G	2025.02.25	2026.02.24
DC power supply	HONGSHENG FENG	DPS-305AF	17064939	2025.09.22	2026.09.21
Switch control box	MW	MW100-RFCB	N/A	N/A	N/A
Test SW	MW	MTS 8310_2.0.0.0			

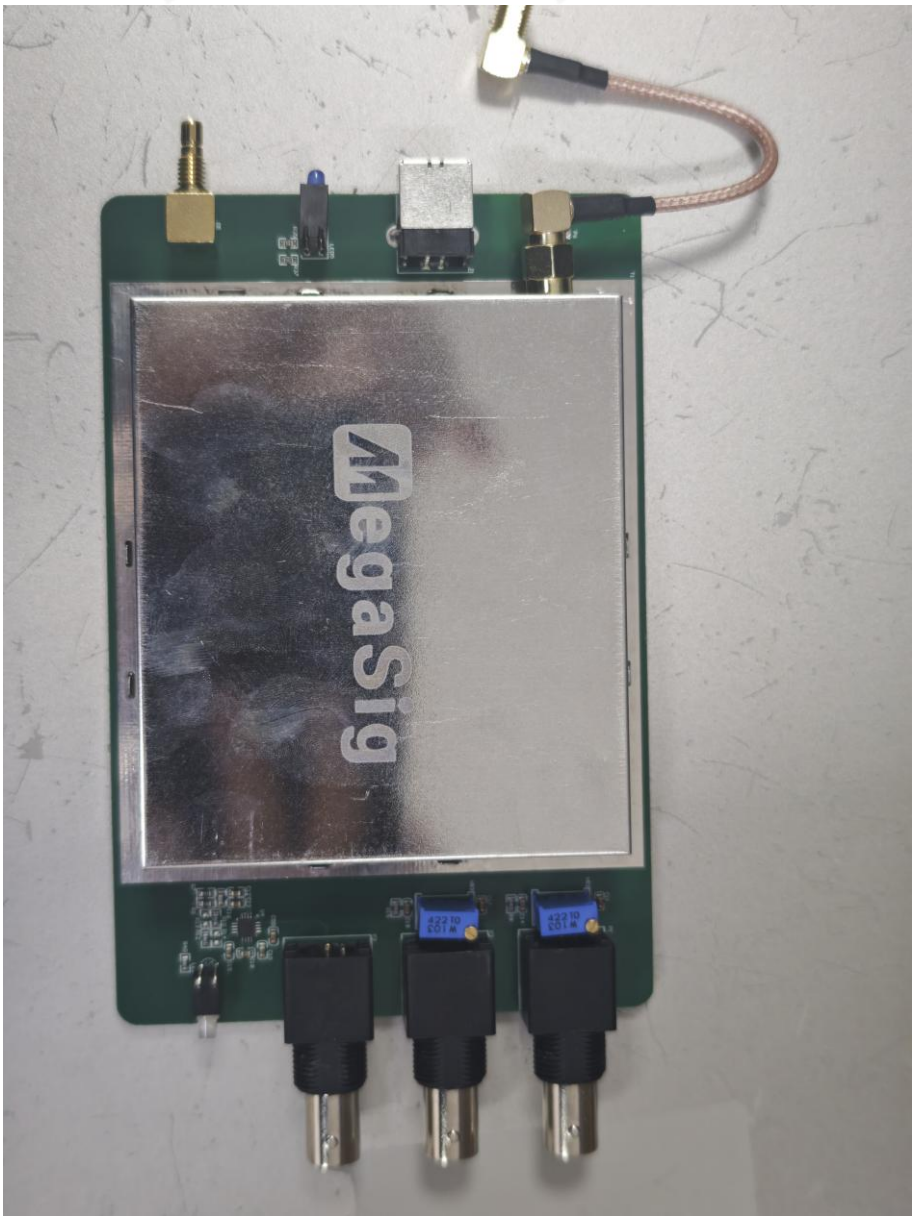
Test Equipment Calibration

All of the test equipment is effective use and calibration certification institution, GRGT, the address is No.8 Chuangyun Rd,Panyu District,Guangzhou,Guangdong,China

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

3. CONSTRUCTION PROTECTION CONFIRMATION

Our products apply for Japanese radio frequency (rf) certification. We use the following methods to prevent unauthorized access and modification of RF and modulation parts. This wireless module uses a shielding cover to prevent users from disassembling and modifying it.
For more information, see the following photo.



4. FREQUENCY ERROR

4.1 LIMIT

Item	Limits
Frequency Error	±50ppm

4.2 TEST PROCEDURES

The following table is the setting of Spectrum Analyzer.

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

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

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

4.3 TEST SETUP



4.4 TEST RESULT

Note: The test data please refer to APPENDIX 1.

5. ANTENNA POWER

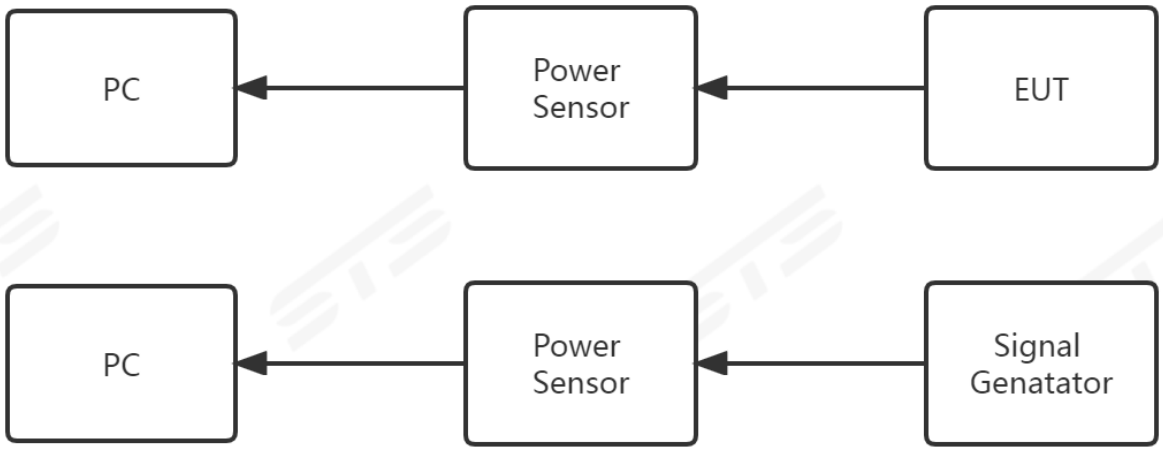
5.1 LIMIT

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

5.2 TEST PROCEDURE

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

5.3 TEST SETUP



5.3 TEST DEVIATION

There is no deviation with the original standard.

5.4 TEST RESULT

Note: The test data please refer to APPENDIX 1.

6. RADIATION POWER

6.1 LIMIT

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

6.2 TEST RESULT

Note: The test data please refer to APPENDIX 1.

7. OCCUPIED BANDWITH (99%)

7.1 LIMIT

Item	Limits
Occupied Band Width:	≤83.5MHz（FH;FH+DS;FH+OFDM） ≤26MHz（Others）

7.2 TEST PROCEDURE

1. Setting of SA is following as: RB: 1MHz / VB: 1MHz / SPAN: Auto / 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 (ForfFH or OFDM Device) or 83.5MHz (For FHSS Device).

7.3 TEST SETUP



7.4 TEST DEVIATION

There is no deviation with the original standard.

7.5 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULT

Note: The test data please refer to APPENDIX 1.

8. UNWANTED EMISSION INTENSITY MEASUREMENT

8.1 LIMIT

Item	Limits
TX Spurious Emission	≦2.5 μW/MHz (30MHz≦f≦1000MHz)
	≦ 2.5 μW/MHz (1000MHz<f≦ 2387MHz)
	≦ 25 μW/MHz (2387MHz<f≦ 2400MHz)
	≦ 25 μW/MHz (2483.5MHz≦ f<2496.5MHz)
	≦2.5μW/MHz (2496.5MHz≦f<12500MHz)

8.2 TEST PROCEDURE

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

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: RB: 1MHz / VB: 1MHz / 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 2.5μW/MHz.
4. Setting of SA is following as 1000MHz and stop frequency 2387MHz. Then to mark peak reading value + cable loss shall be less than 2.5μW/MHz.
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25μW/MHz.
6. SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz. Then to mark peak reading value + cable loss shall be less than 25μW/MHz.
7. SA adjusted to start frequency 2496.5MHz and stop frequency 12750MHz. Then to mark peak reading value + cable loss shall be less than 2.5μW/MHz.
8. If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as Result_Value.

8.3 TEST SETUP



8.4 TEST DEVIATION

There is no deviation with the original standard.

8.5 TEST RESULT

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

9. DWELL TIME

9.1 LIMIT

Item	Limits
Hopping Freq. Dwell Time	≦ 0.4 sec (In 0.4 sec × spreading rate)

9.2 TEST PROCEDURES

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

a. The transmitter output (antenna port) was connected to the spectrum analyzer.

b.Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.

c. Use a video trigger with the trigger level set to enable triggering only on full pulses.

d. Sweep Time is more than once pulse time.

e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.

f .Measure the maximum time duration of one single pulse.

g. Set the EUT for packet transmitting.

h. Measure the maximum time duration of one single pulse.

i. Dwell time = pulse time (ms) x pulse number in 31.6s

9.3 TEST SETUP



9.4 TEST RESULT

Note: The test data please refer to APPENDIX 1.

10. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

10.1 LIMIT

Item	Limits
RX Spurious Emission:	≦ 4nW (f<1GHz)
	≦ 20nW (1GHz≦ f)

10.2 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 < 1GHz, 2nW for f >= 1GHz), 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.

10.3 TEST RESULT

Note: The test data please refer to APPENDIX 1.

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

11.1 LIMIT

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

11.2 TEST PROCEDURES

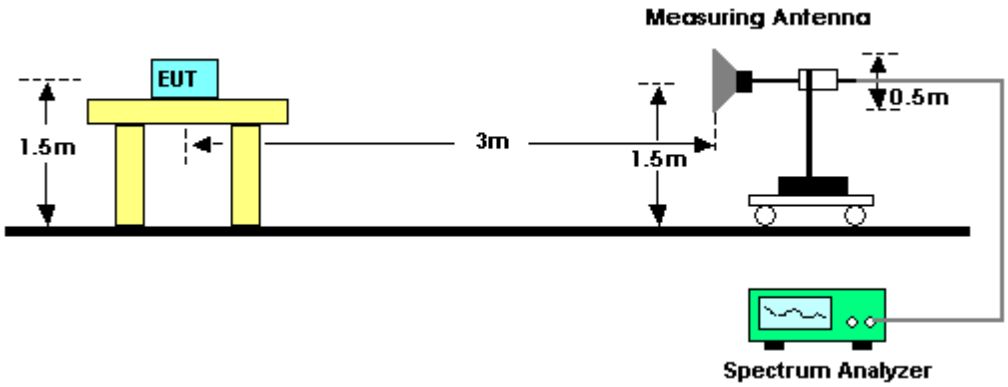
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	0 MHz
RB	1 MHz
VB	1 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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 receving signal position.
3. Rotate directions of the EUT horizontally and ertically to find the maximum receiving power.

4. Move the measuring antenna height up and down within ± 50cm of EUT height and swing it to find the maximum output of measuing antenna. “E” is the half-power beam width (angle between two points at which radiated power becomes 1/2)
5. Caluate 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 Power [mW/MHz] /{2.14dBi+output power (10mW /MHz, 3mW/MHz)}
Shall be 1 when A is lower than 1

11.3 TEST SETUP



11.4 TEST DEVIATION

There is no deviation with the original standard.

11.5 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

11.6 TEST RESULT

Note: The Max EIRP is less than 6.91dBm/MHz, not applicable.

12. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

12.1 LIMIT

Item	Limits
Identification code	≧ 48 bits

12.2 MEASURING ID CODE SOFTWARE

Item	Limits
MAC IP List	MAC Scan

12.3 TEST PROCEDURES

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

a. Transmit the predetermined identification codes from EUT.

b. Check the transmitted identification codes with the demodulator.

2. In the case of receiving the identification ocde:

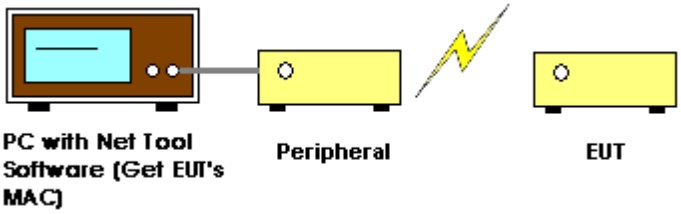
a. Transmit the predetermined identification codes from the counterpart.

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 idnetification codes are different from the predetermined ones.

12.4 TEST SETUP



12.5 TEST DEVIATION

There is no deviation with the original standard.

12.6 EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

12.7 TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILIT

Note: The MAC Address is 00025B00FFO1

APPENDIX 1-TEST DATA

Dwell Time

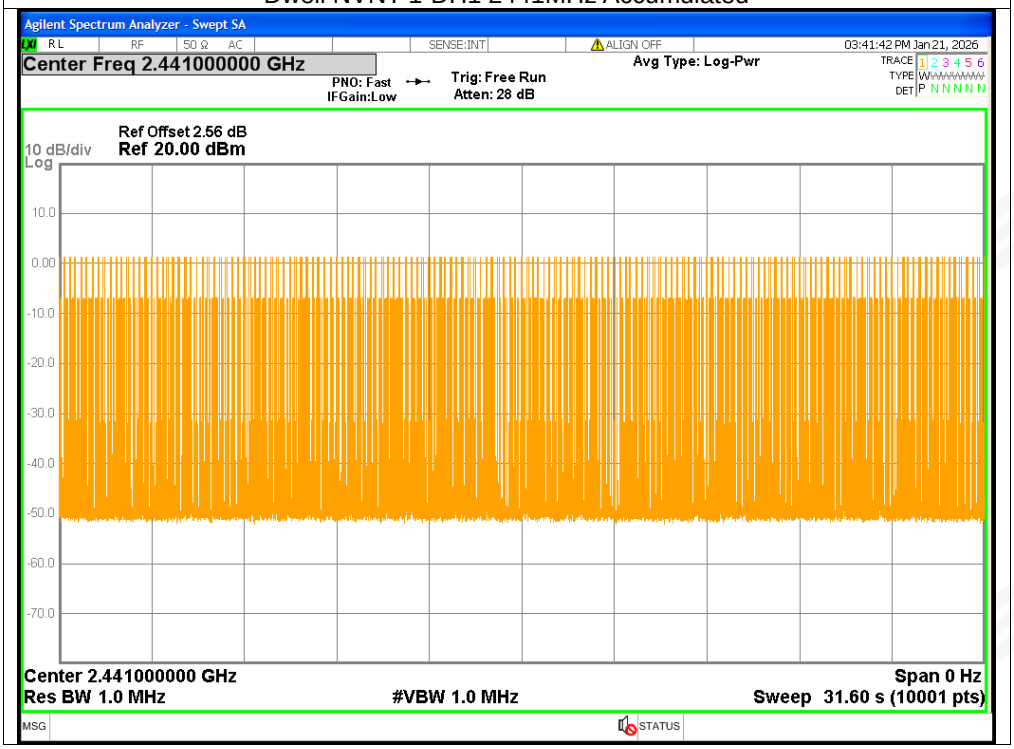
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.383	121.794	318	31600	<=400	Pass
NVNT	1-DH3	2441	1.639	262.24	160	31600	<=400	Pass
NVNT	1-DH5	2441	2.886	337.662	117	31600	<=400	Pass
NVNT	2-DH1	2441	0.385	123.2	320	31600	<=400	Pass
NVNT	2-DH3	2441	1.637	276.653	169	31600	<=400	Pass
NVNT	2-DH5	2441	2.885	323.12	112	31600	<=400	Pass
NVNT	3-DH1	2441	0.385	122.815	319	31600	<=400	Pass
NVNT	3-DH3	2441	1.636	269.94	165	31600	<=400	Pass
NVNT	3-DH5	2441	2.887	317.57	110	31600	<=400	Pass

Test Graphs

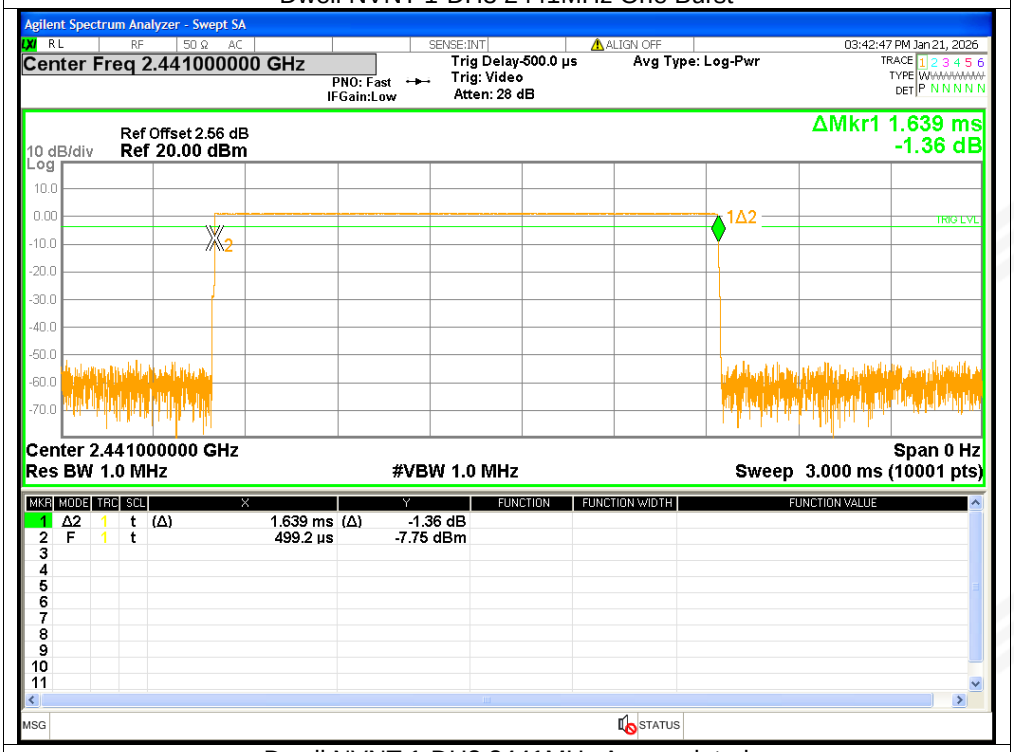
Dwell NVNT 1-DH1 2441MHz One Burst



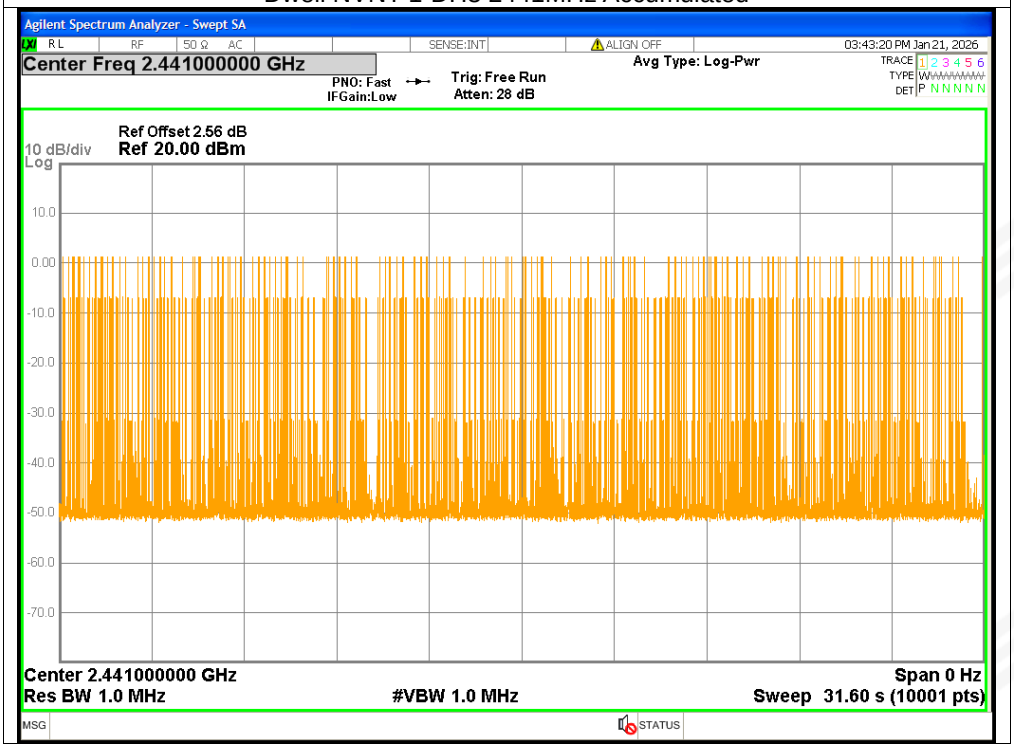
Dwell NVNT 1-DH1 2441MHz Accumulated



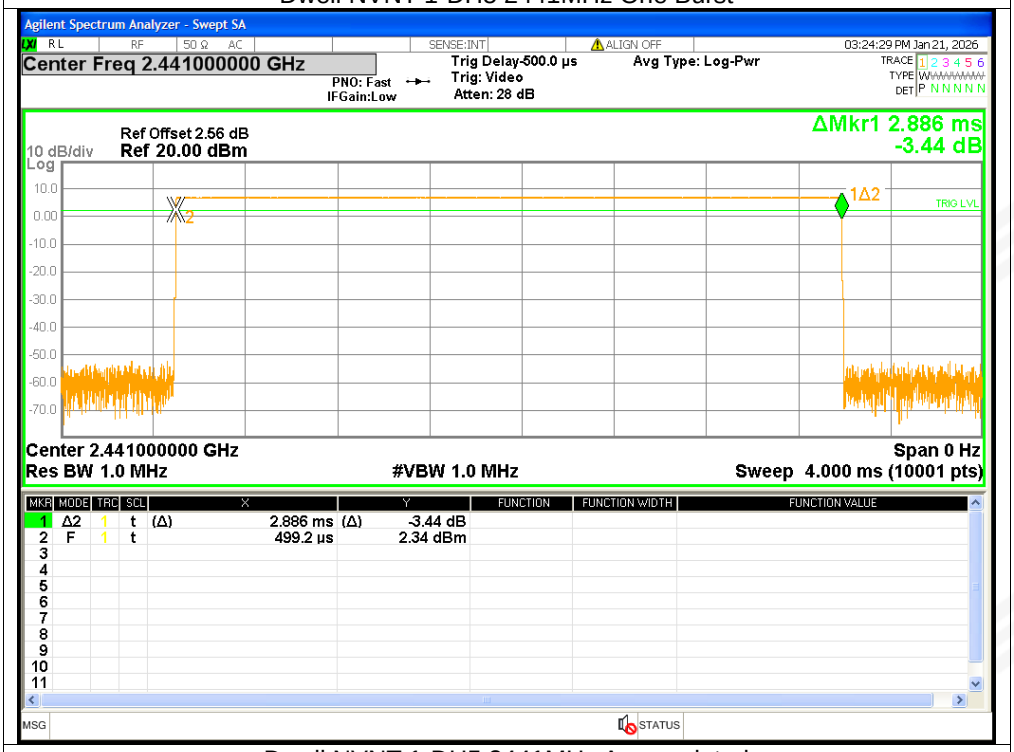
Dwell NVNT 1-DH3 2441MHz One Burst



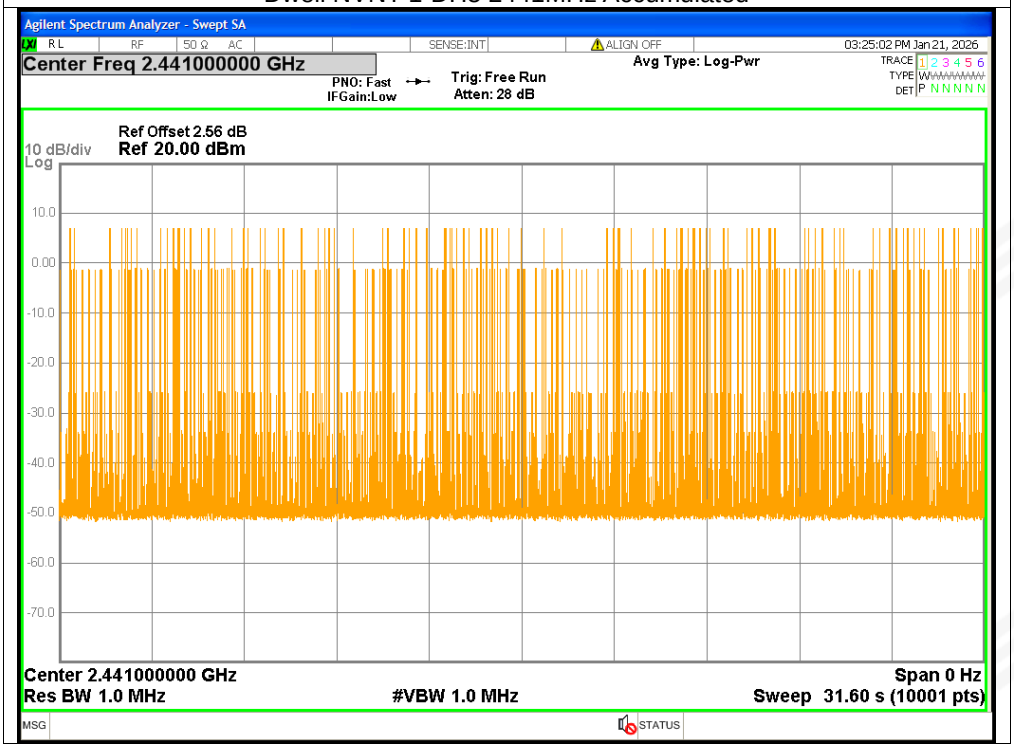
Dwell NVNT 1-DH3 2441MHz Accumulated



Dwell NVNT 1-DH5 2441MHz One Burst



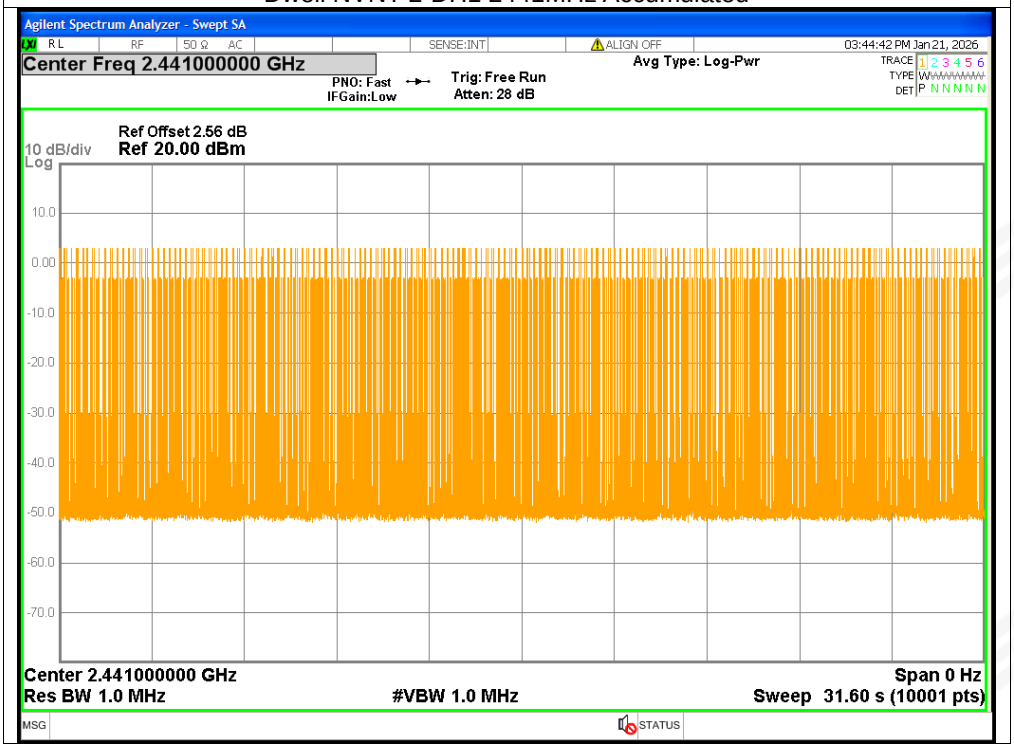
Dwell NVNT 1-DH5 2441MHz Accumulated



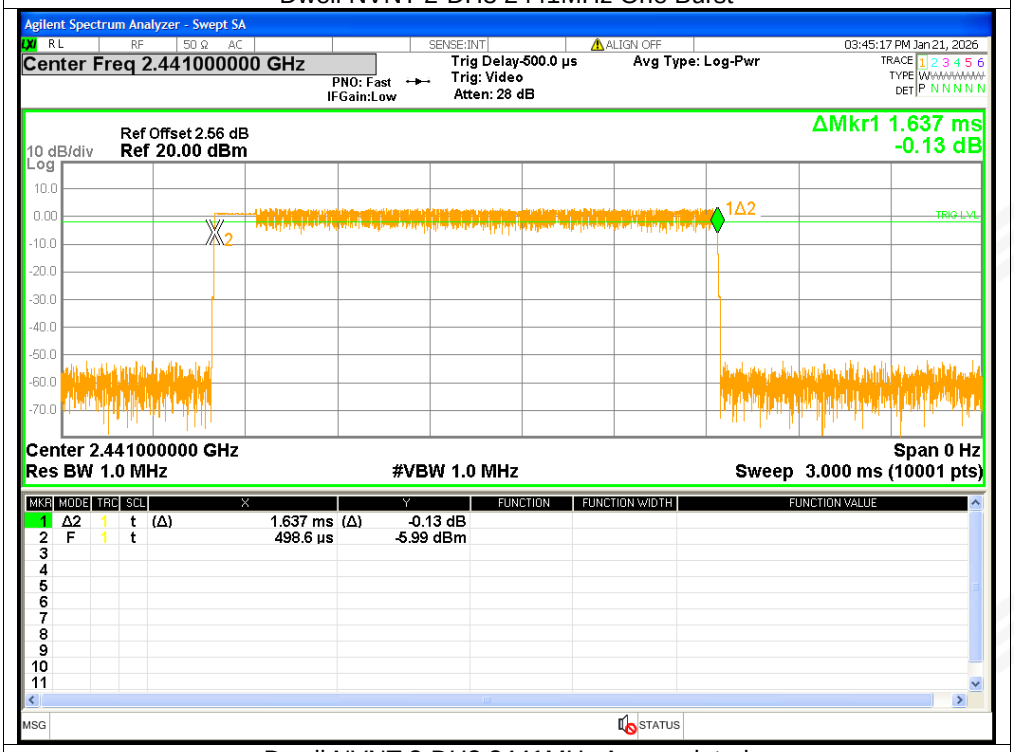
Dwell NVNT 2-DH1 2441MHz One Burst



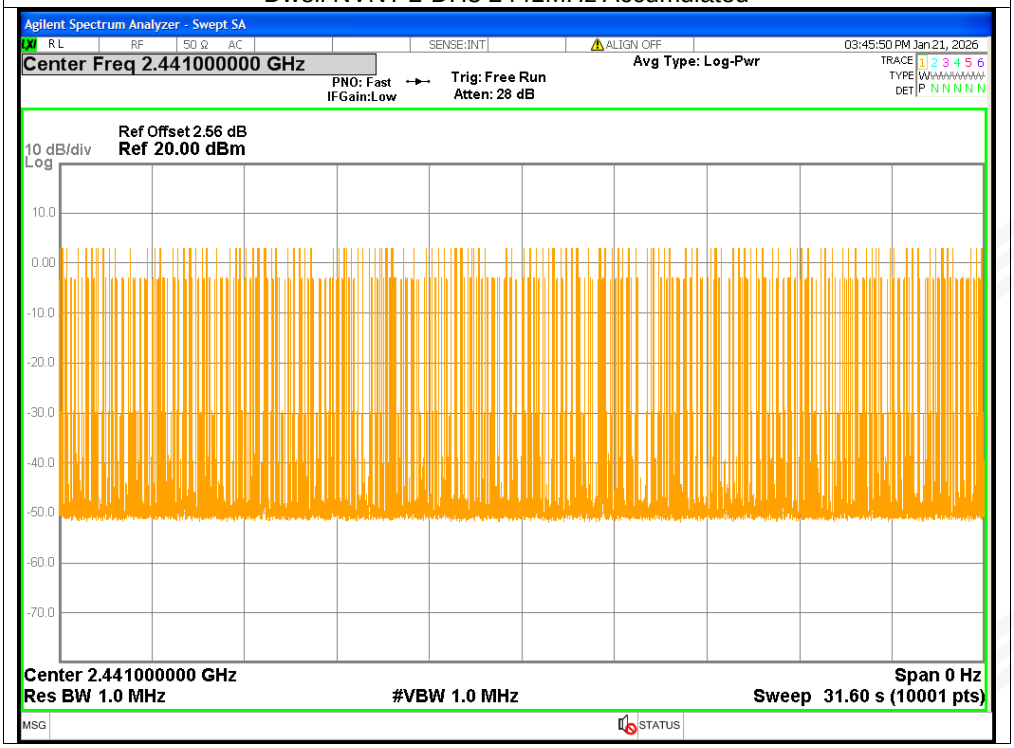
Dwell NVNT 2-DH1 2441MHz Accumulated



Dwell NVNT 2-DH3 2441MHz One Burst



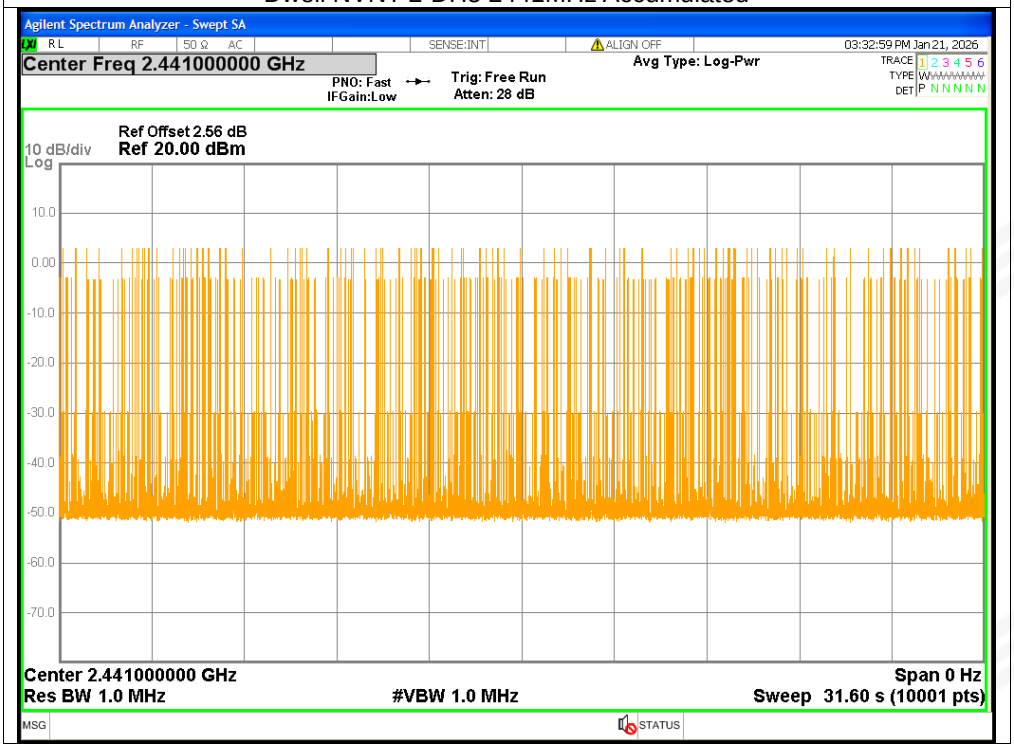
Dwell NVNT 2-DH3 2441MHz Accumulated



Dwell NVNT 2-DH5 2441MHz One Burst



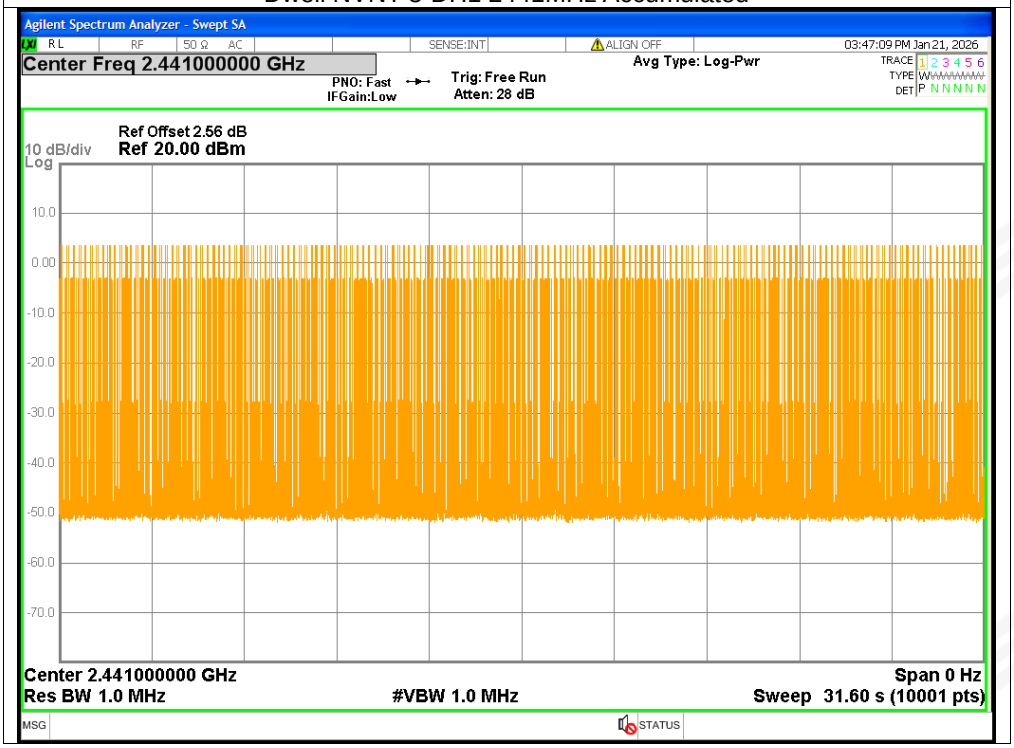
Dwell NVNT 2-DH5 2441MHz Accumulated



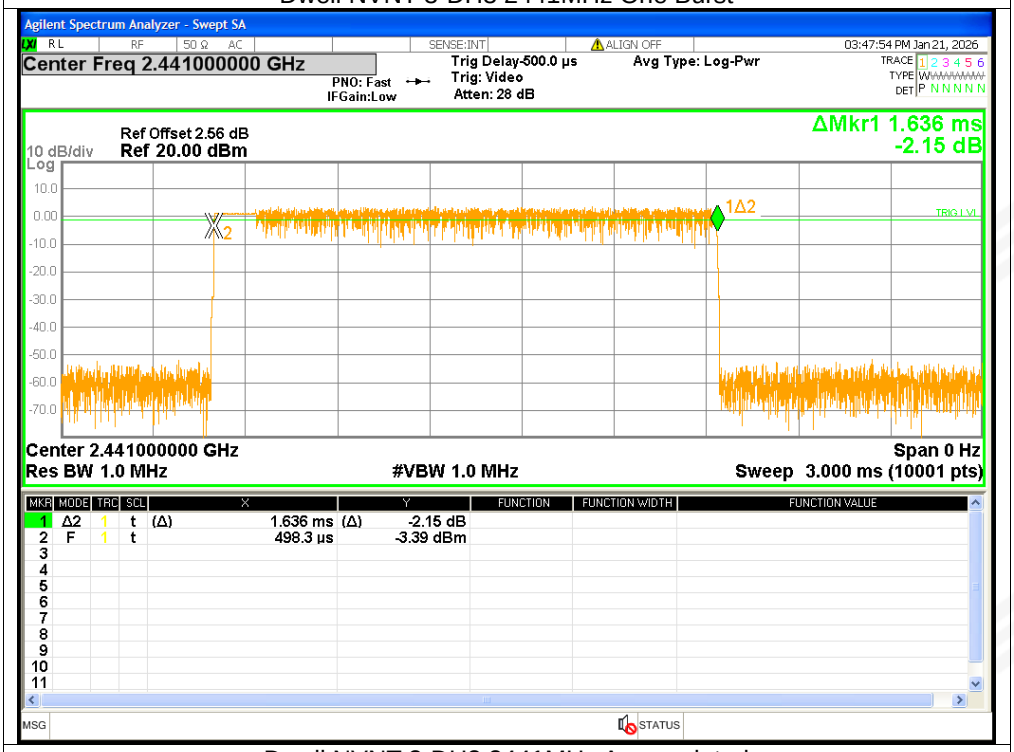
Dwell NVNT 3-DH1 2441MHz One Burst



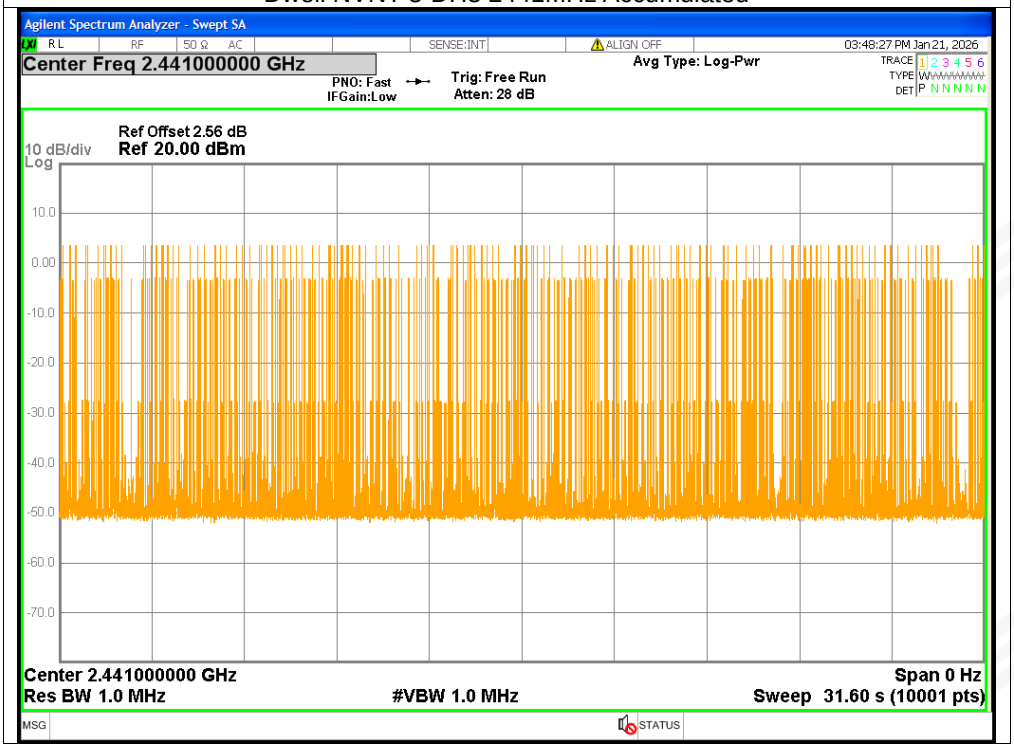
Dwell NVNT 3-DH1 2441MHz Accumulated



Dwell NVNT 3-DH3 2441MHz One Burst



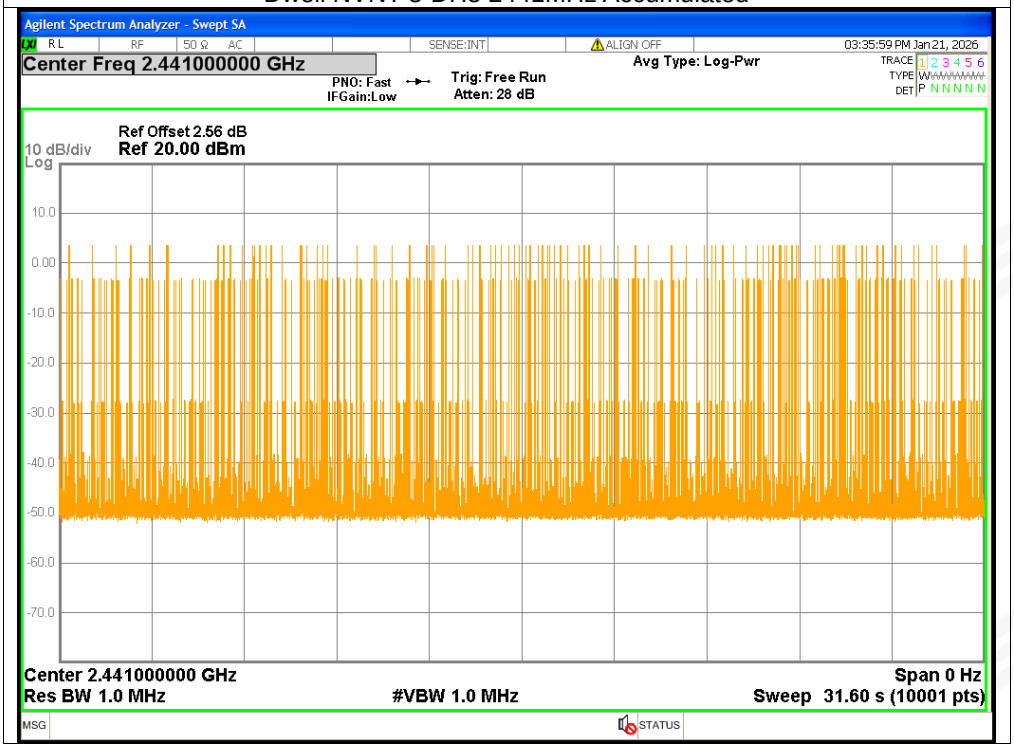
Dwell NVNT 3-DH3 2441MHz Accumulated



Dwell NVNT 3-DH5 2441MHz One Burst



Dwell NVNT 3-DH5 2441MHz Accumulated

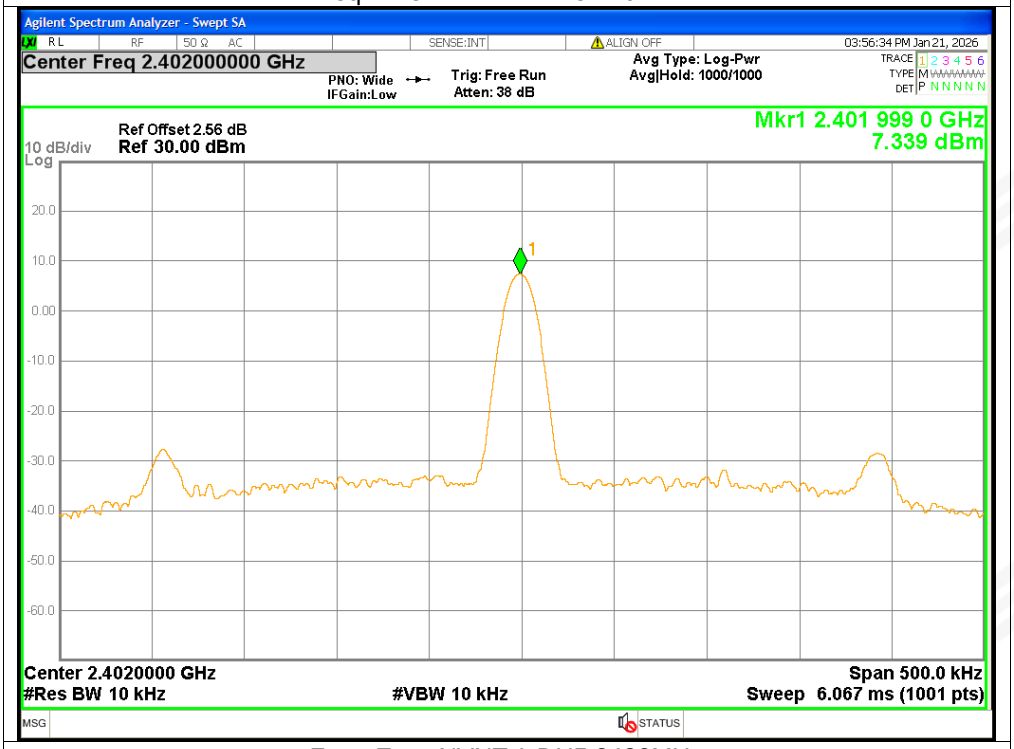


Frequency Error

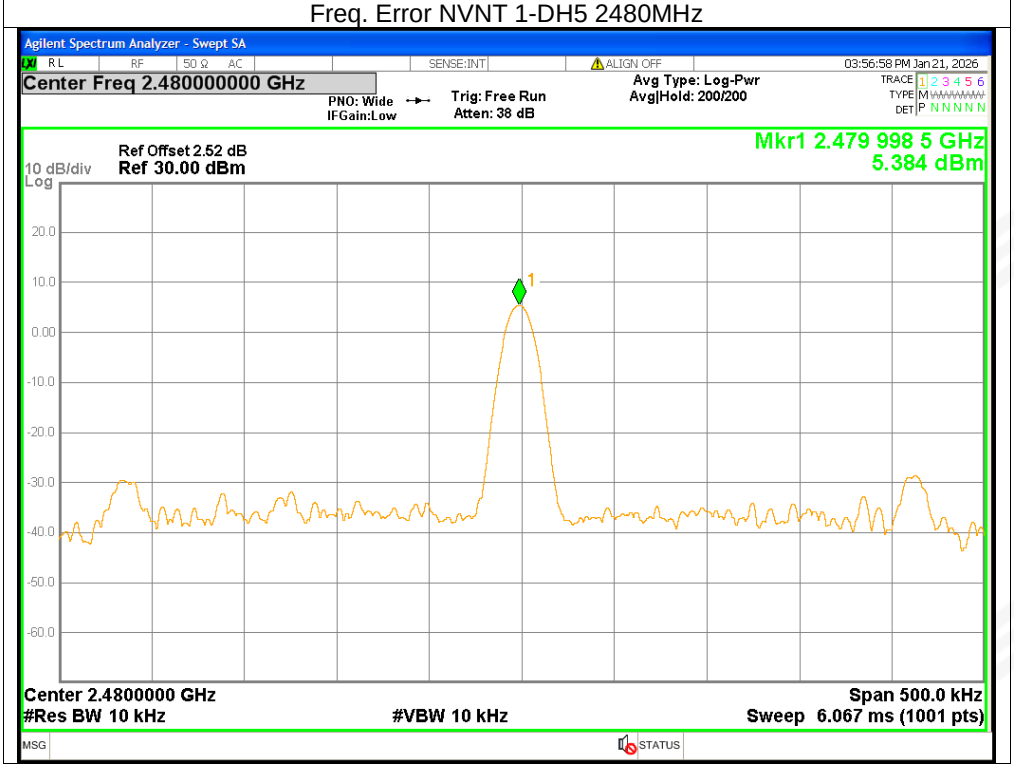
Condition	Mode	Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	1-DH5	2402	2401.999	-1000	-0.42	+-50	Pass
NVNT	1-DH5	2480	2479.9985	-1500	-0.6	+-50	Pass

Test Graphs

Freq. Error NVNT 1-DH5 2402MHz



Freq. Error NVNT 1-DH5 2480MHz



Antenna Power

Condition	Mode	Frequency (MHz)	Power (dBm/MHz)	Antenna Power (mW/MHz)	Test Result for Antenna Power (mW/MHz)	Declared Power (mW/MHz)	Limit (mW/MHz)	Tolerance (%)	Upper Limit (%)	Verdict
NVNT	1-DH5	2441	7.39	5.483	0.078	0.1	3	-22	20	Pass
NVNT	2-DH5	2441	3.47	2.223	0.031	0.1	3	-69	20	Pass
NVNT	3-DH5	2441	3.71	2.35	0.033	0.1	3	-67	20	Pass

EIRP Power

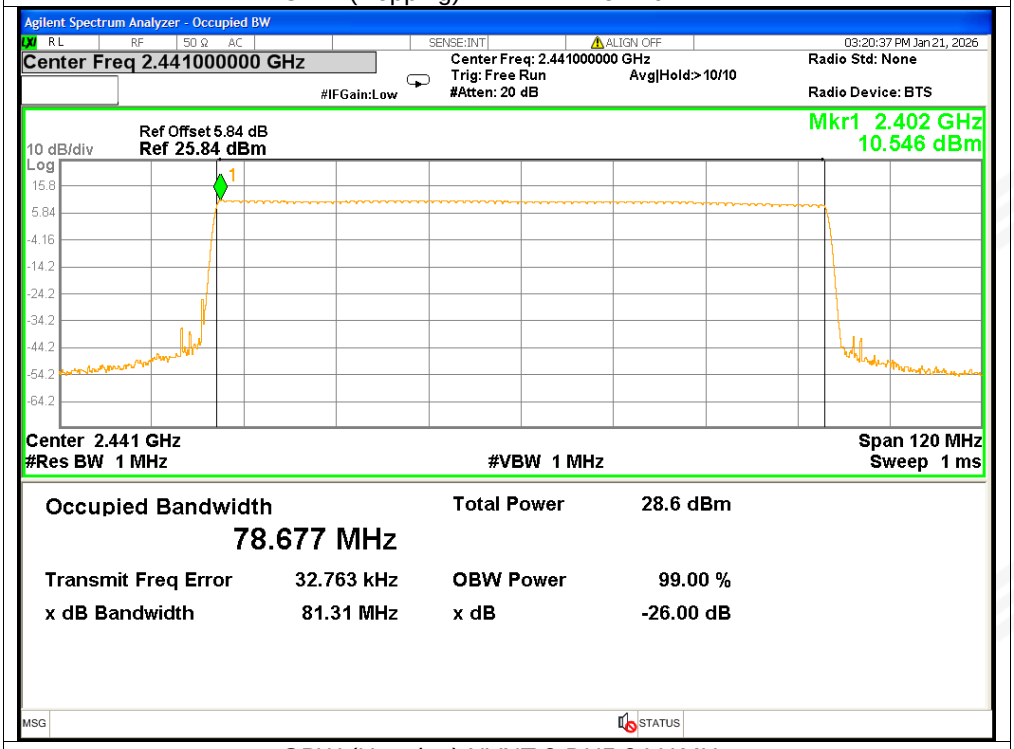
Condition	Mode	Frequency (MHz)	Antenna Power (dBm/MHz)	Gain (dBi)	EIRP Power (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	1-DH5	2441	-11.08	3.28	-7.8	6.91	Pass
NVNT	2-DH5	2441	-15.09	3.28	-11.81	6.91	Pass
NVNT	3-DH5	2441	-14.81	3.28	-11.53	6.91	Pass

Occupied Channel Bandwidth (Hopping)

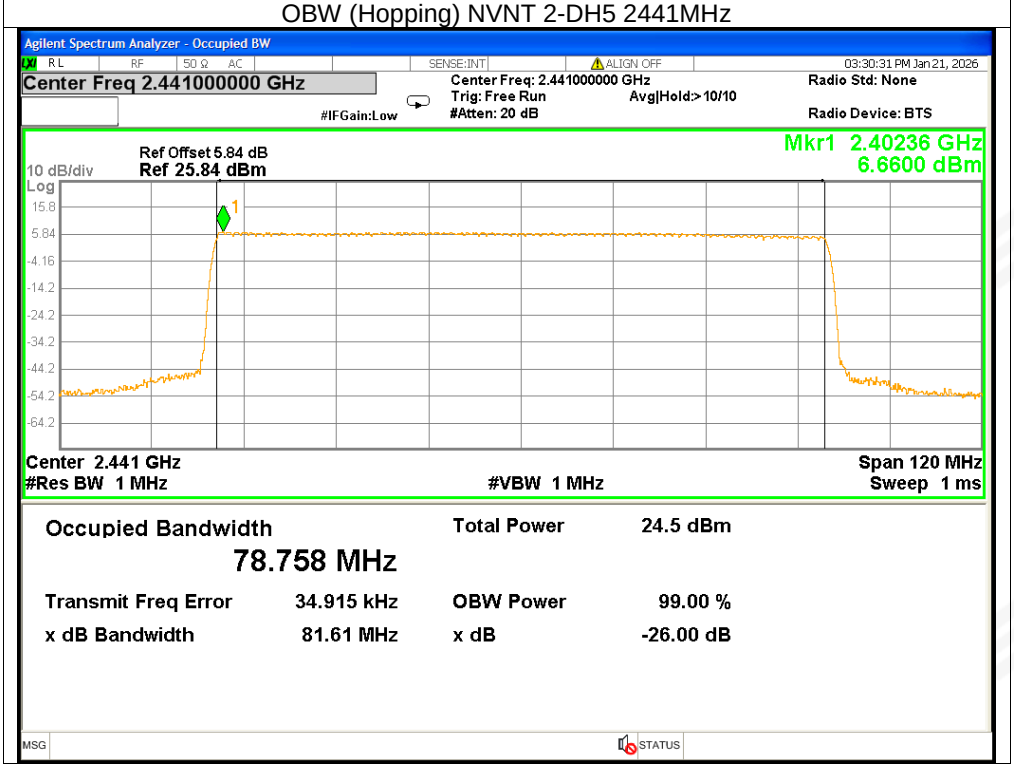
Condition	Mode	Frequency (MHz)	99% OBW (MHz)	Lower Limit (MHz)	Upper Limit (MHz)	Verdict
NVNT	1-DH5	Hopping	78.677	N/A	83.5	Pass
NVNT	2-DH5	Hopping	78.758	N/A	83.5	Pass
NVNT	3-DH5	Hopping	78.747	N/A	83.5	Pass

Test Graphs

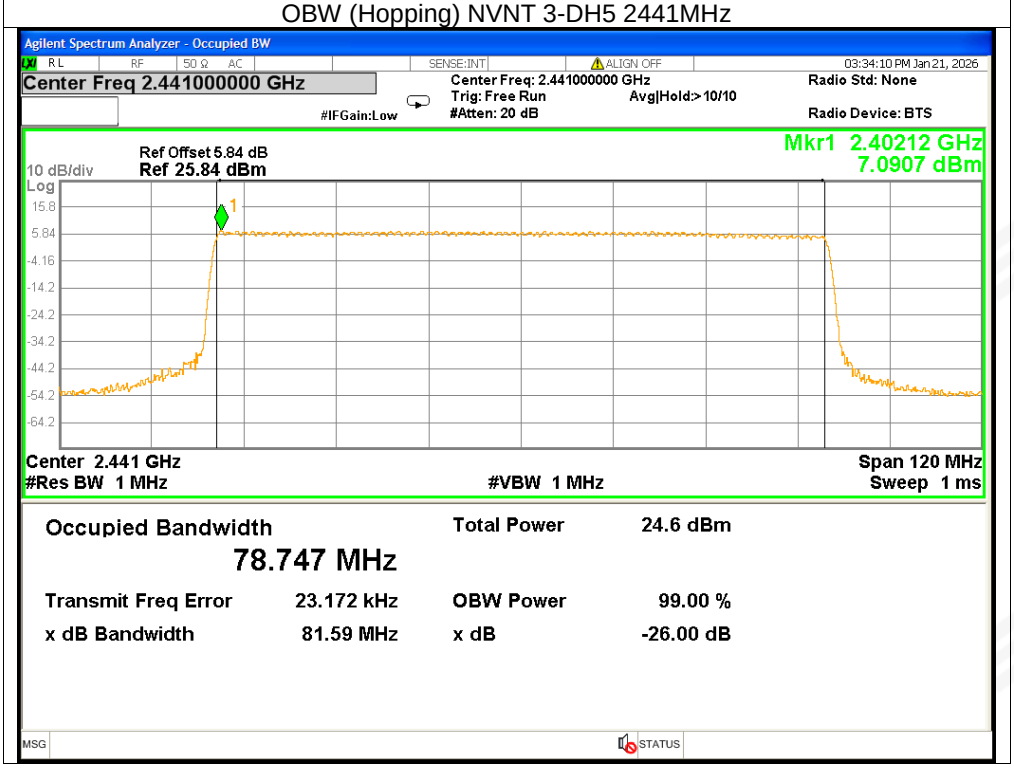
OBW (Hopping) NVNT 1-DH5 2402MHz



OBW (Hopping) NVNT 2-DH5 2441MHz



OBW (Hopping) NVNT 3-DH5 2441MHz

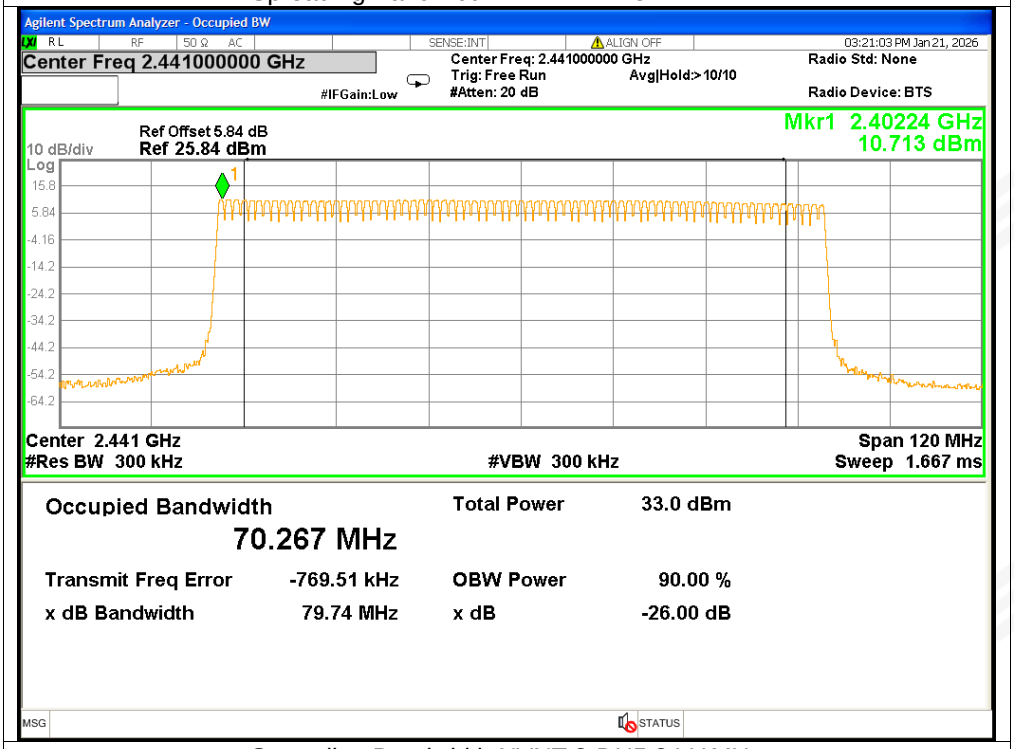


Spreading Bandwidth

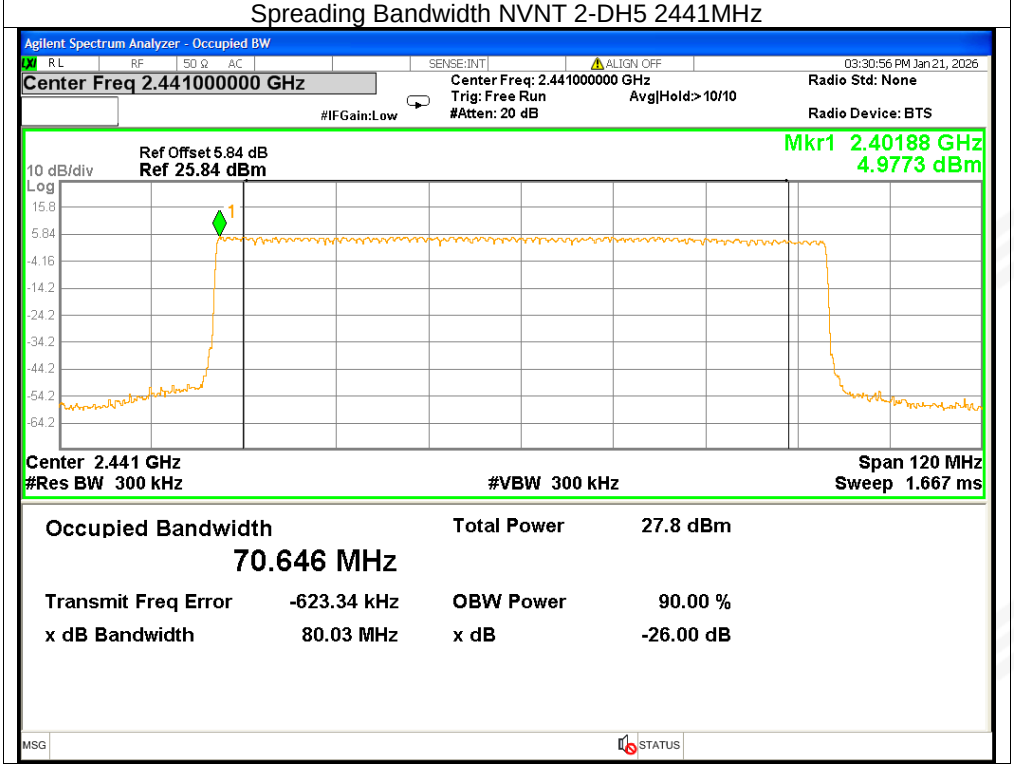
Condition	Mode	Frequency (MHz)	90% OBW (MHz)
NVNT	1-DH5	2441	70.267
NVNT	2-DH5	2441	70.646
NVNT	3-DH5	2441	70.431

Test Graphs

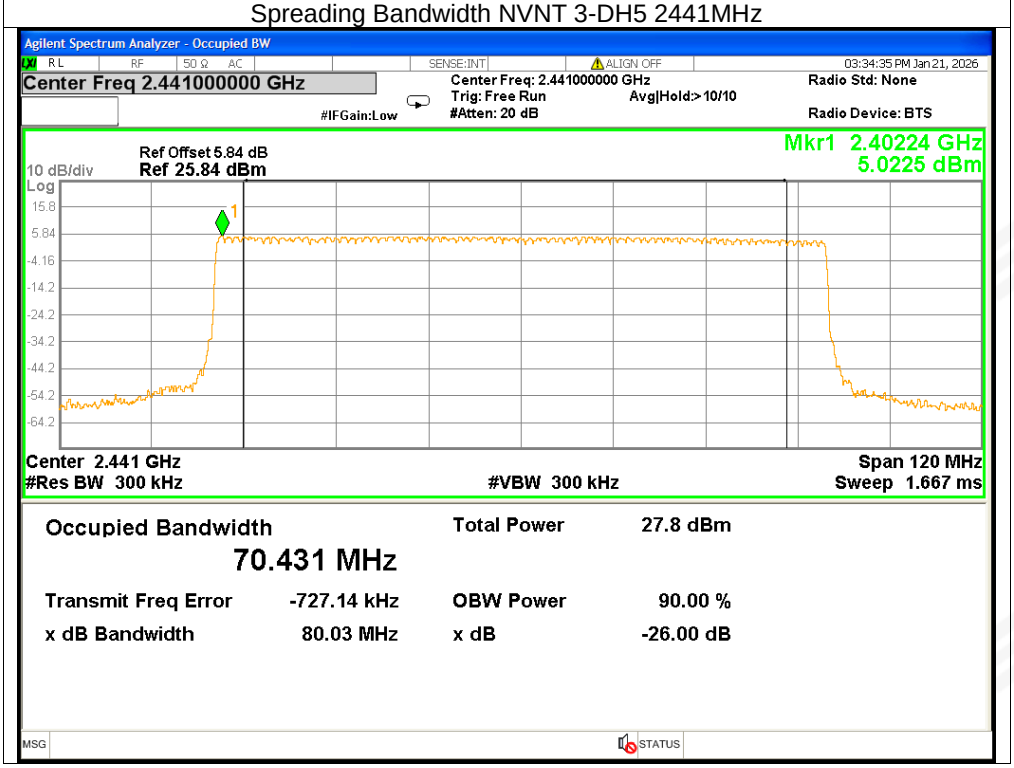
Spreading Bandwidth NVNT 1-DH5 2441MHz



Spreading Bandwidth NVNT 2-DH5 2441MHz



Spreading Bandwidth NVNT 3-DH5 2441MHz

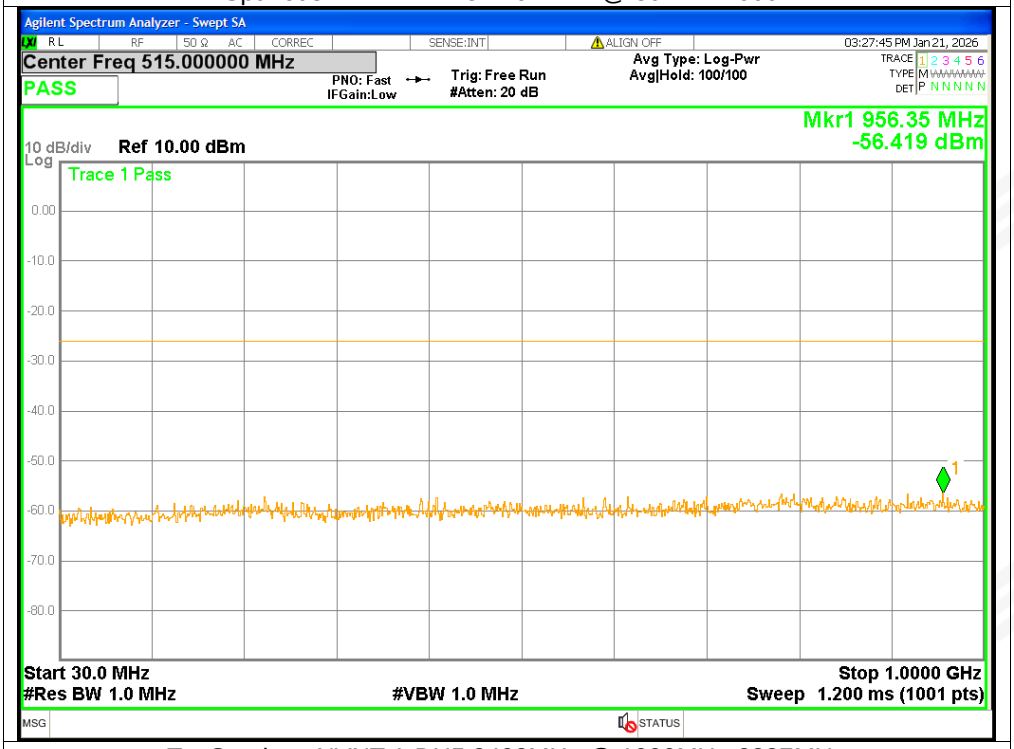


Tx Spurious Emission

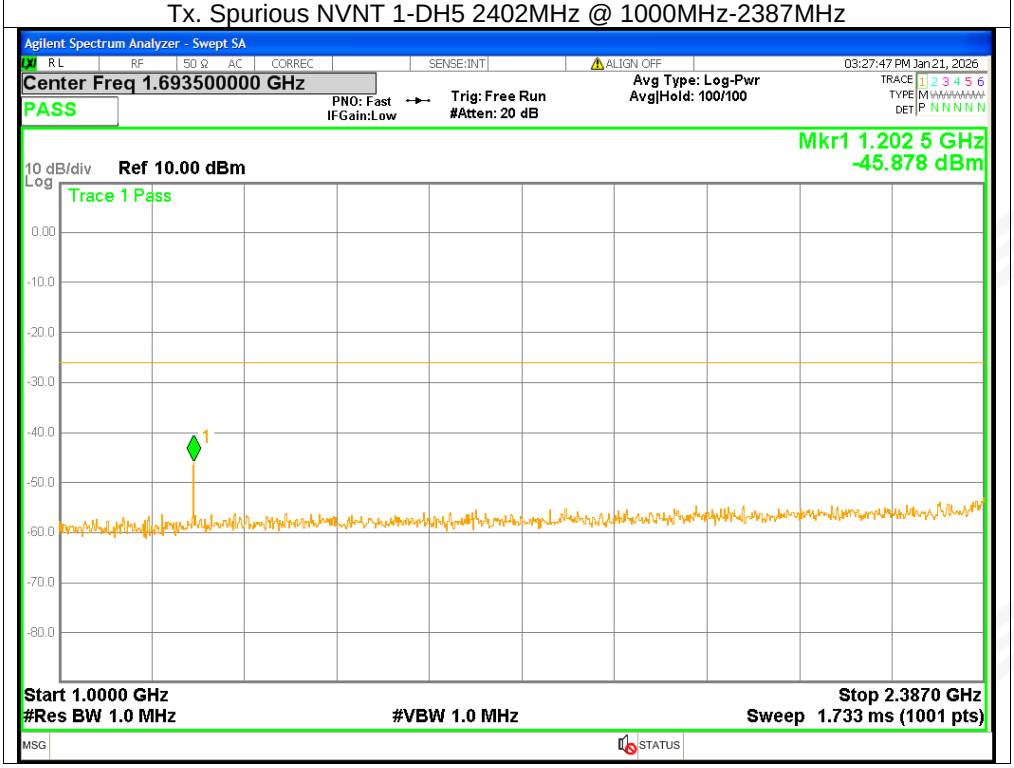
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm/MHz)	Max Value (uW/MHz)	Limit Start(uW/MHz)	Limit Stop (uW/MHz)	Verdict
NVNT	1-DH5	2402	30-1000	956.35	-56.42	0.0023	2.5	2.5	Pass
NVNT	1-DH5	2402	1000-2387	1202.5	-45.88	0.0258	2.5	2.5	Pass
NVNT	1-DH5	2402	2387-2400	2400	-34.07	0.3917	25	25	Pass
NVNT	1-DH5	2402	2483.5-2496.5	2487.93	-53.71	0.0043	25	25	Pass
NVNT	1-DH5	2402	2496.5-13000	4807.27	-32.83	0.5212	2.5	2.5	Pass
NVNT	1-DH5	2480	30-1000	834.13	-55.74	0.0027	2.5	2.5	Pass
NVNT	1-DH5	2480	1000-2387	1241.34	-46.47	0.0225	2.5	2.5	Pass
NVNT	1-DH5	2480	2387-2400	2399.6	-54.43	0.0036	25	25	Pass
NVNT	1-DH5	2480	2483.5-2496.5	2483.97	-46.83	0.0207	25	25	Pass
NVNT	1-DH5	2480	2496.5-13000	4964.82	-34.4	0.3631	2.5	2.5	Pass
NVNT	2-DH5	2402	30-1000	841.89	-56	0.0025	2.5	2.5	Pass
NVNT	2-DH5	2402	1000-2387	1202.5	-46.11	0.0245	2.5	2.5	Pass
NVNT	2-DH5	2402	2387-2400	2399.99	-27.63	1.7258	25	25	Pass
NVNT	2-DH5	2402	2483.5-2496.5	2494.8	-53.72	0.0042	25	25	Pass
NVNT	2-DH5	2402	2496.5-13000	4807.27	-31.35	0.7328	2.5	2.5	Pass
NVNT	2-DH5	2480	30-1000	962.17	-56.26	0.0024	2.5	2.5	Pass
NVNT	2-DH5	2480	1000-2387	1241.34	-45.2	0.0302	2.5	2.5	Pass
NVNT	2-DH5	2480	2387-2400	2399.17	-53.65	0.0043	25	25	Pass
NVNT	2-DH5	2480	2483.5-2496.5	2485.14	-45.33	0.0293	25	25	Pass
NVNT	2-DH5	2480	2496.5-13000	4964.82	-32.7	0.537	2.5	2.5	Pass
NVNT	3-DH5	2402	30-1000	952.47	-56.03	0.0025	2.5	2.5	Pass
NVNT	3-DH5	2402	1000-2387	1202.5	-45.62	0.0274	2.5	2.5	Pass
NVNT	3-DH5	2402	2387-2400	2400	-26.53	2.2233	25	25	Pass
NVNT	3-DH5	2402	2483.5-2496.5	2491.48	-53.75	0.0042	25	25	Pass
NVNT	3-DH5	2402	2496.5-13000	4807.27	-30.65	0.861	2.5	2.5	Pass
NVNT	3-DH5	2480	30-1000	749.74	-56.48	0.0022	2.5	2.5	Pass
NVNT	3-DH5	2480	1000-2387	1241.34	-45.7	0.0269	2.5	2.5	Pass
NVNT	3-DH5	2480	2387-2400	2388.43	-54.43	0.0036	25	25	Pass
NVNT	3-DH5	2480	2483.5-2496.5	2483.86	-41.69	0.0678	25	25	Pass
NVNT	3-DH5	2480	2496.5-13000	4964.82	-32.12	0.6138	2.5	2.5	Pass

Test Graphs

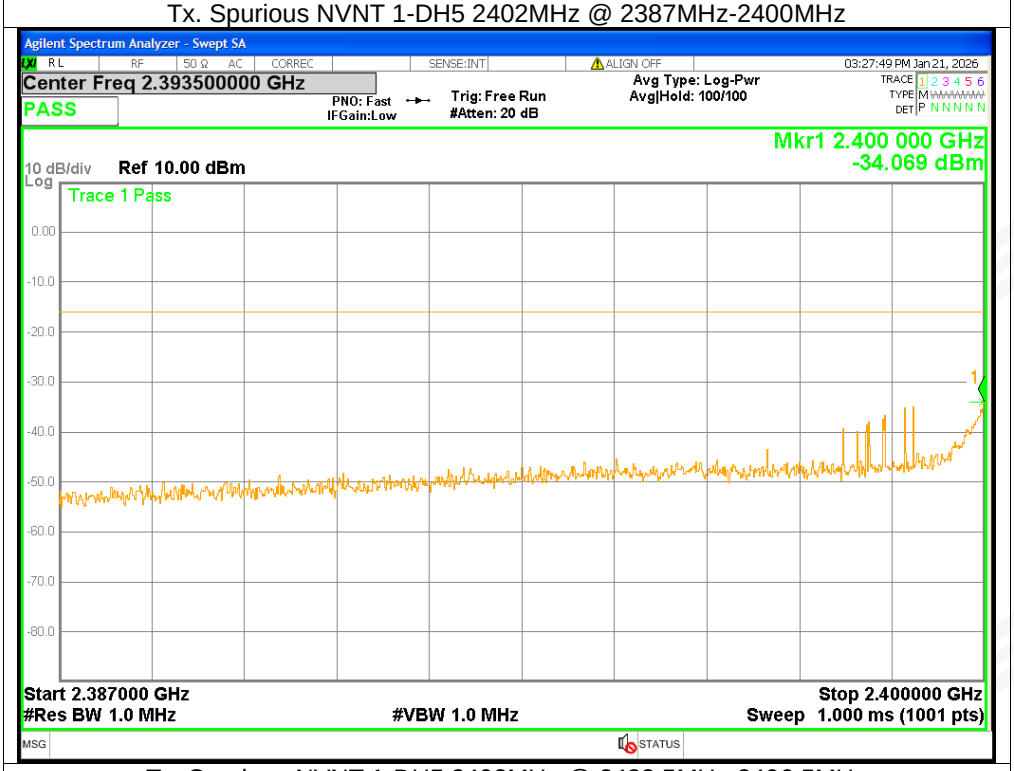
Tx. Spurious NVNT 1-DH5 2402MHz @ 30MHz-1000MHz



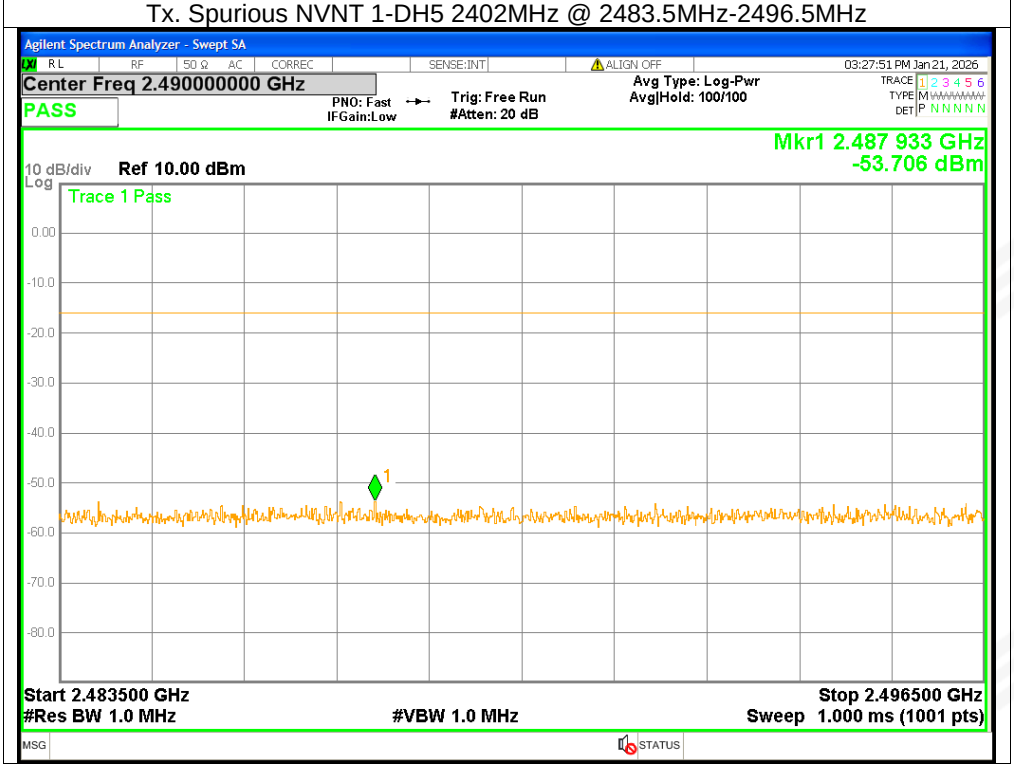
Tx. Spurious NVNT 1-DH5 2402MHz @ 1000MHz-2387MHz



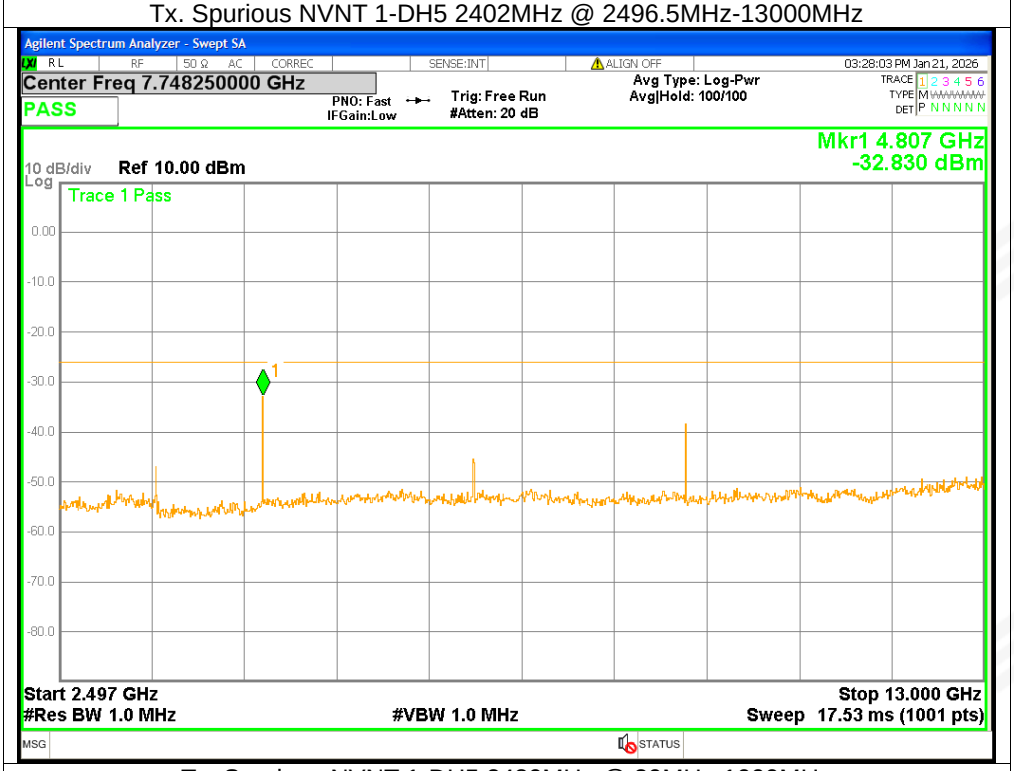
Tx. Spurious NVNT 1-DH5 2402MHz @ 2387MHz-2400MHz



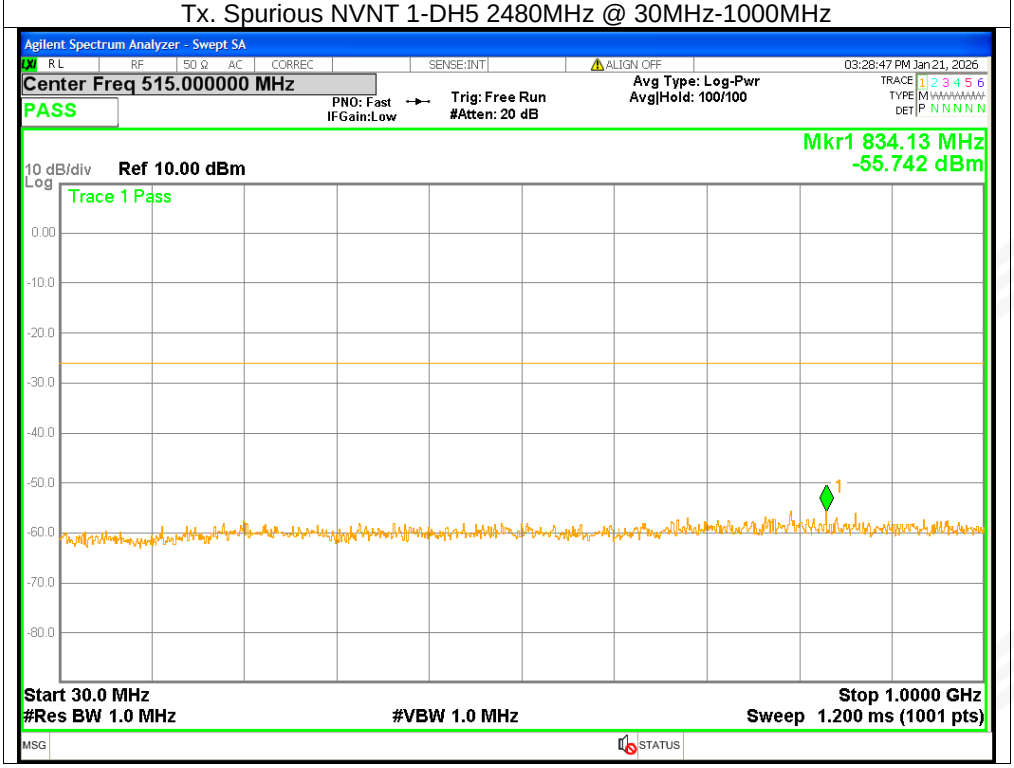
Tx. Spurious NVNT 1-DH5 2402MHz @ 2483.5MHz-2496.5MHz



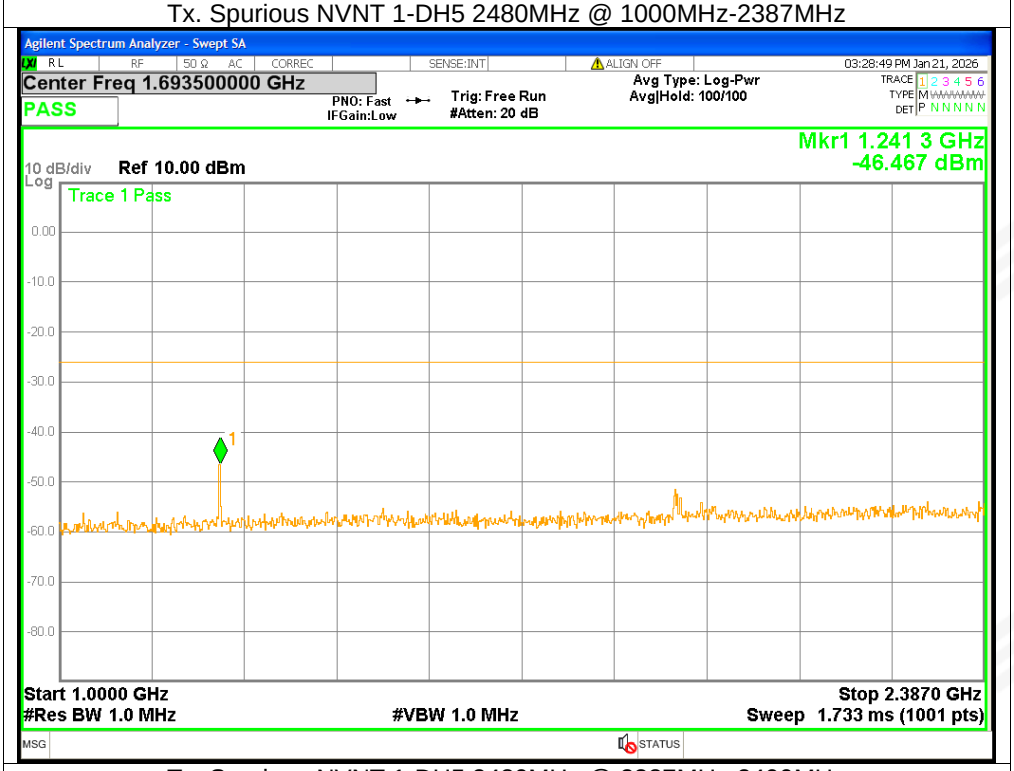
Tx. Spurious NVNT 1-DH5 2402MHz @ 2496.5MHz-13000MHz



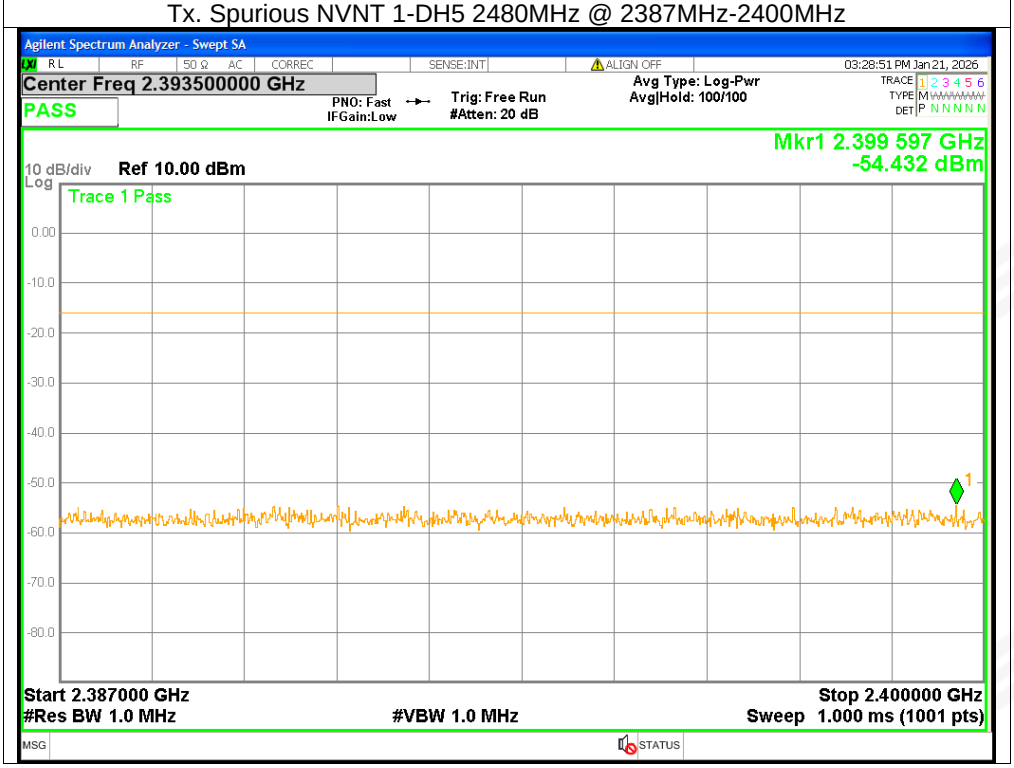
Tx. Spurious NVNT 1-DH5 2480MHz @ 30MHz-1000MHz



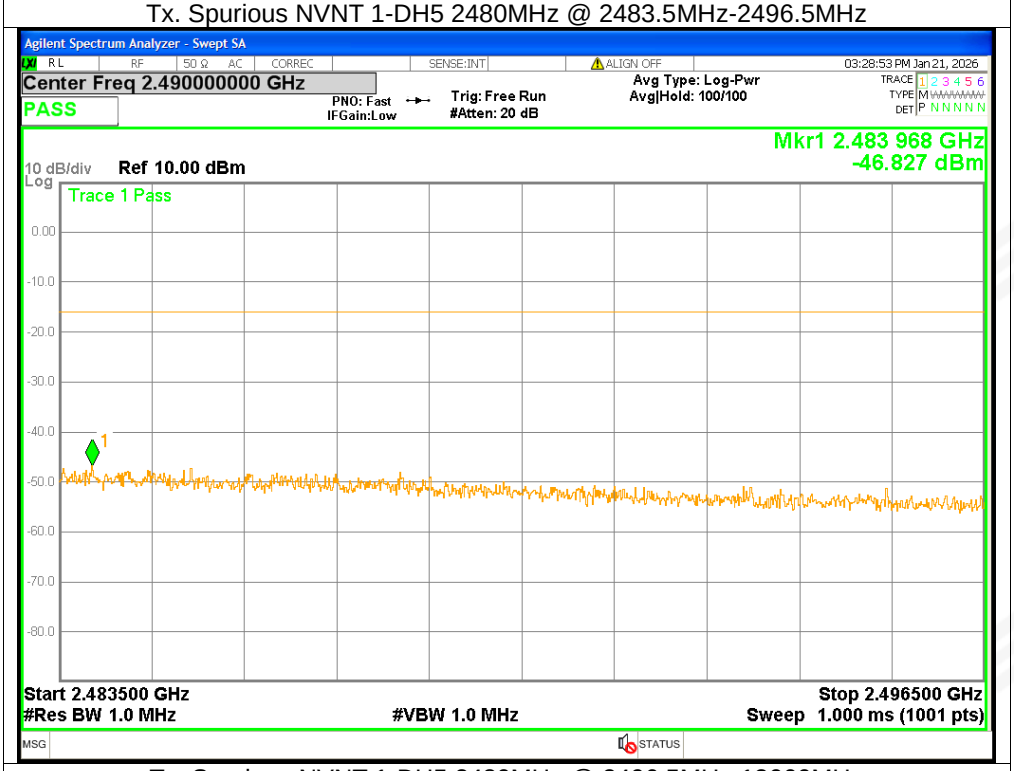
Tx. Spurious NVNT 1-DH5 2480MHz @ 1000MHz-2387MHz



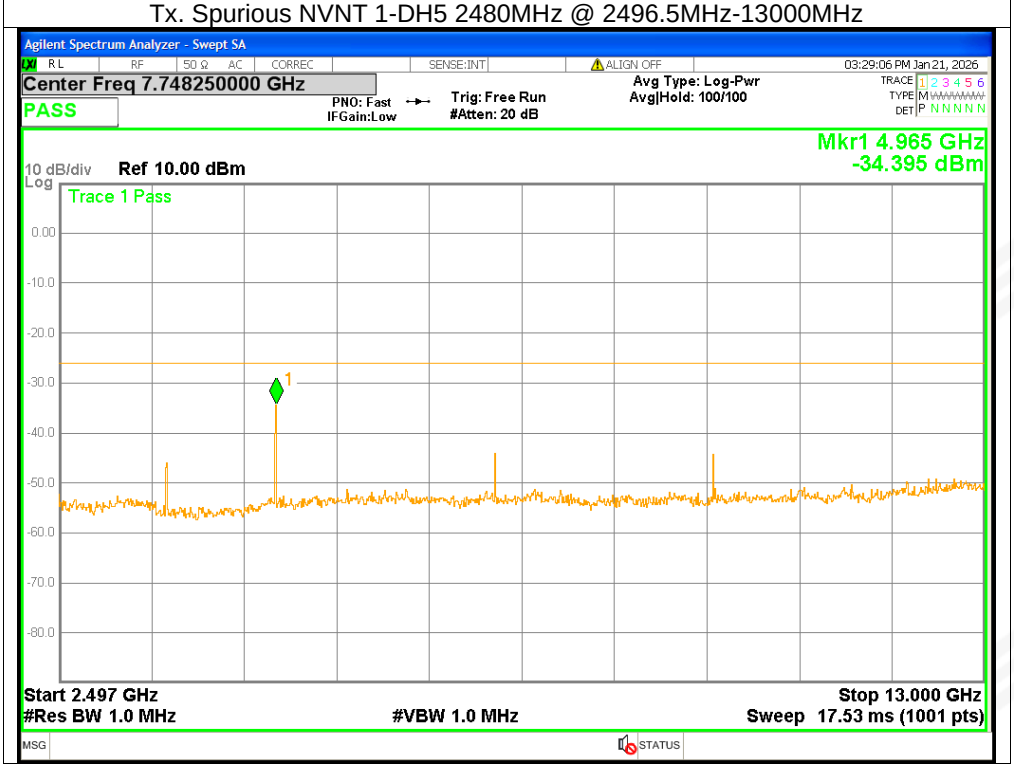
Tx. Spurious NVNT 1-DH5 2480MHz @ 2387MHz-2400MHz



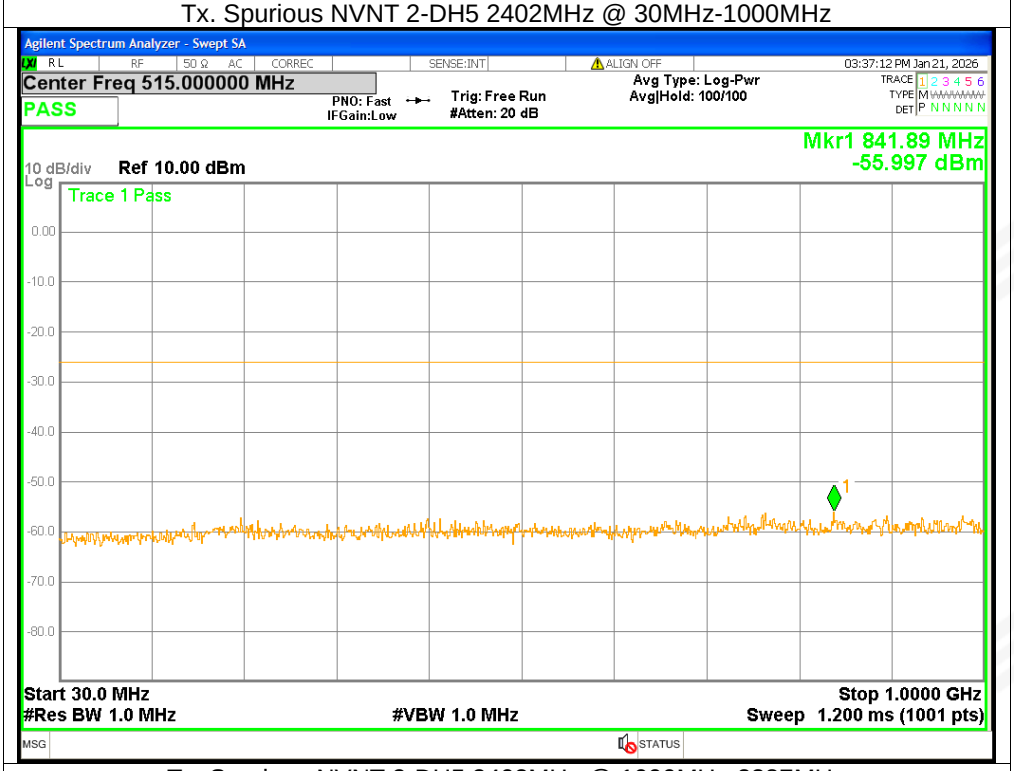
Tx. Spurious NVNT 1-DH5 2480MHz @ 2483.5MHz-2496.5MHz



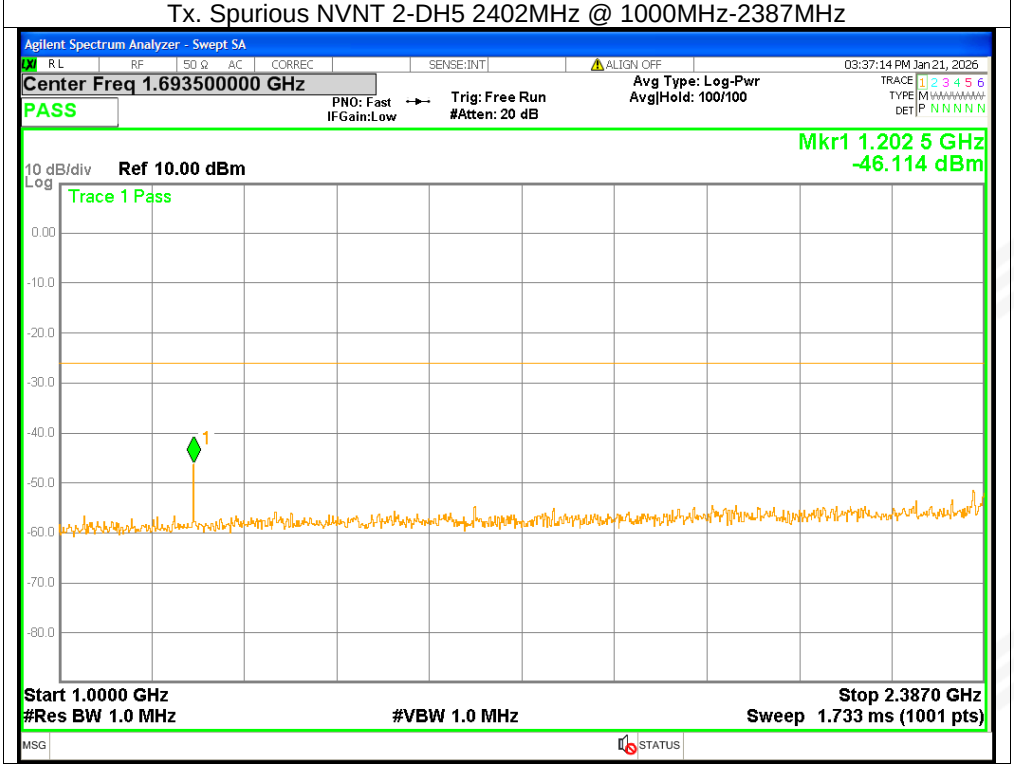
Tx. Spurious NVNT 1-DH5 2480MHz @ 2496.5MHz-13000MHz



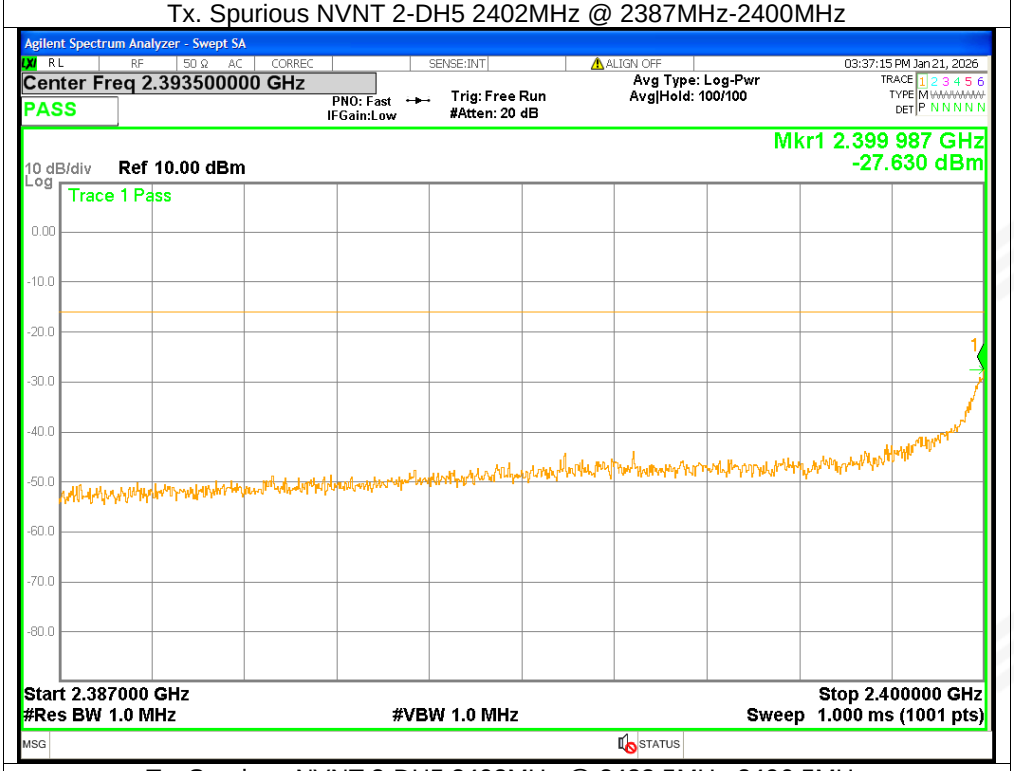
Tx. Spurious NVNT 2-DH5 2402MHz @ 30MHz-1000MHz



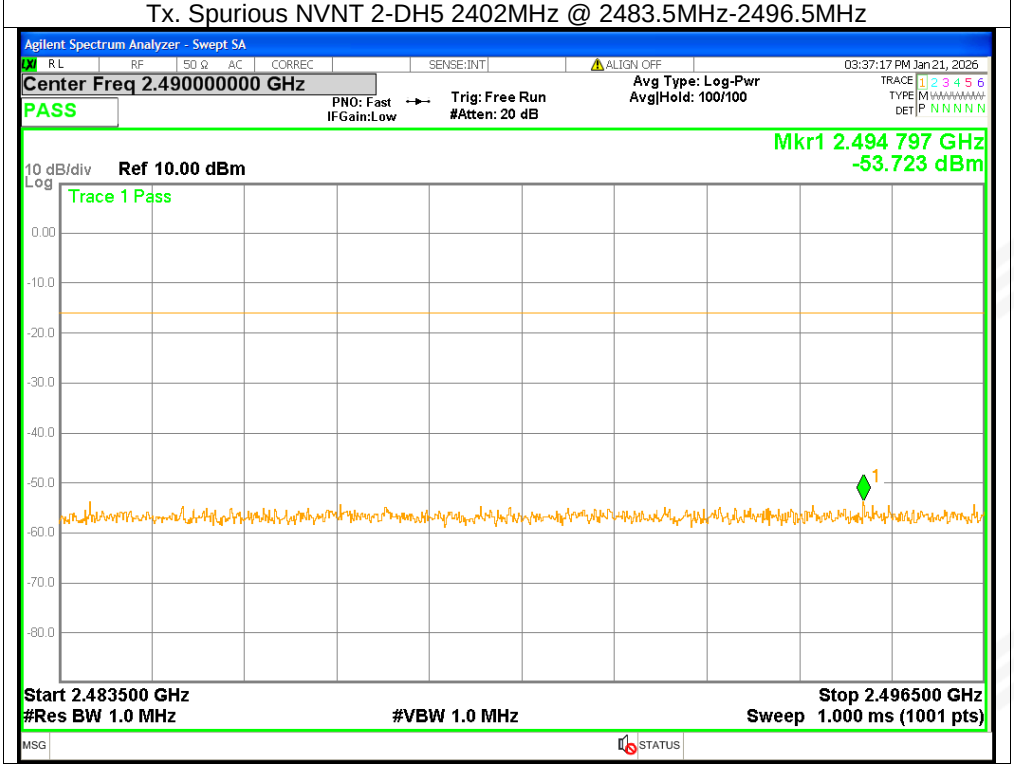
Tx. Spurious NVNT 2-DH5 2402MHz @ 1000MHz-2387MHz



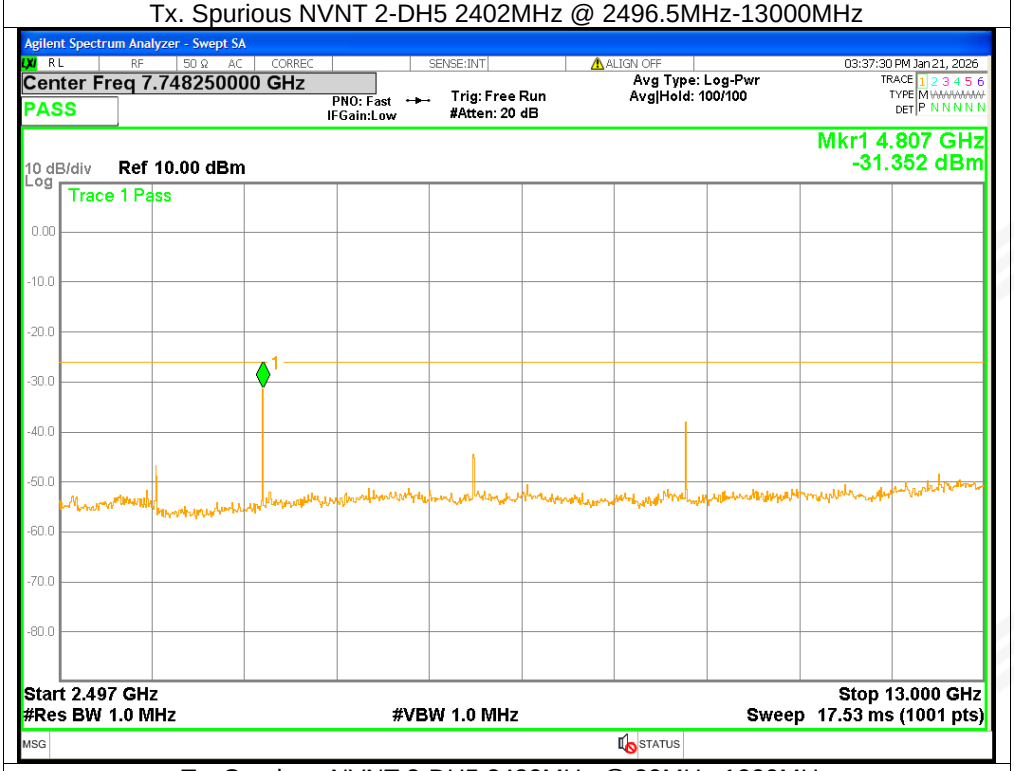
Tx. Spurious NVNT 2-DH5 2402MHz @ 2387MHz-2400MHz



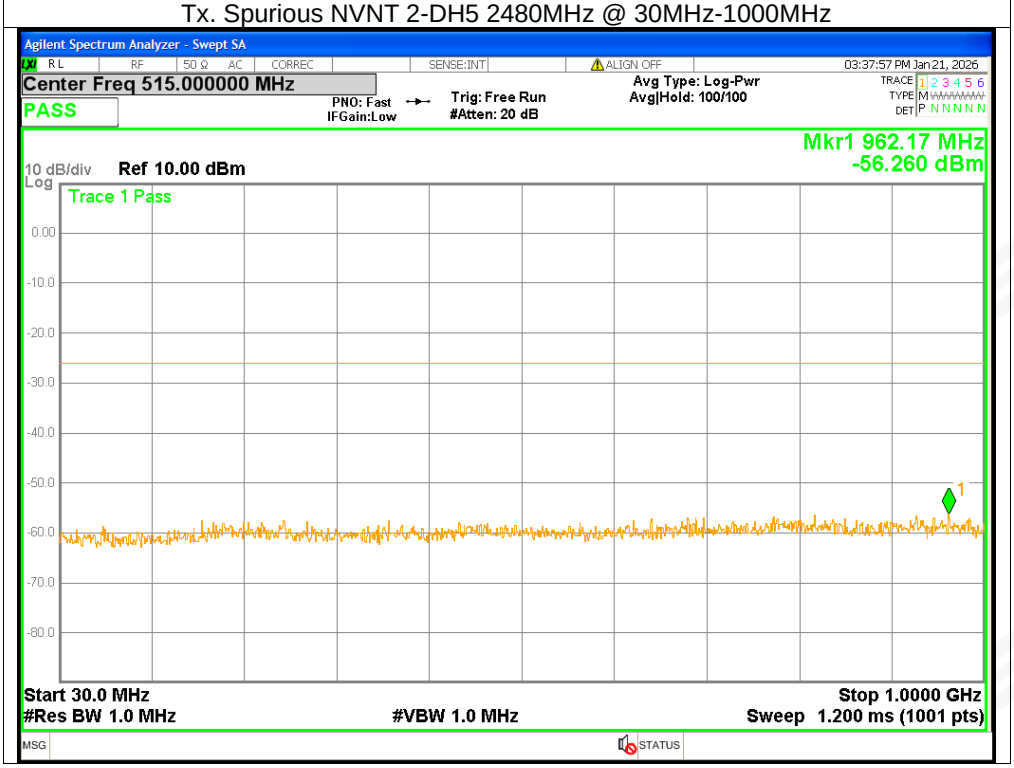
Tx. Spurious NVNT 2-DH5 2402MHz @ 2483.5MHz-2496.5MHz



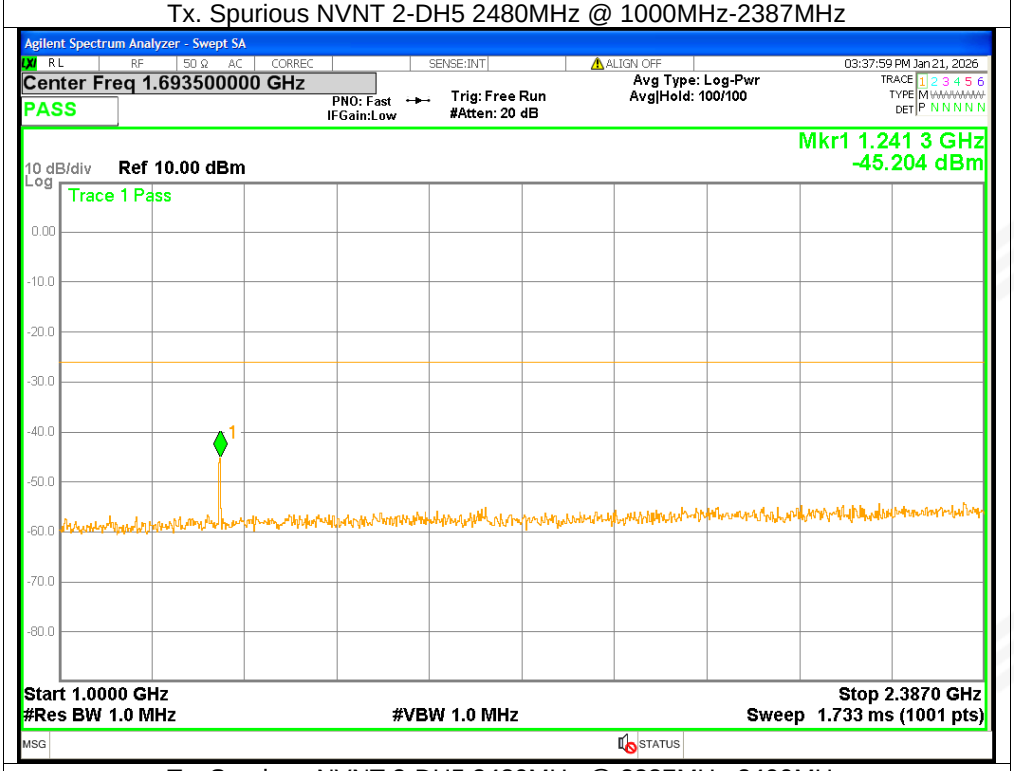
Tx. Spurious NVNT 2-DH5 2402MHz @ 2496.5MHz-13000MHz



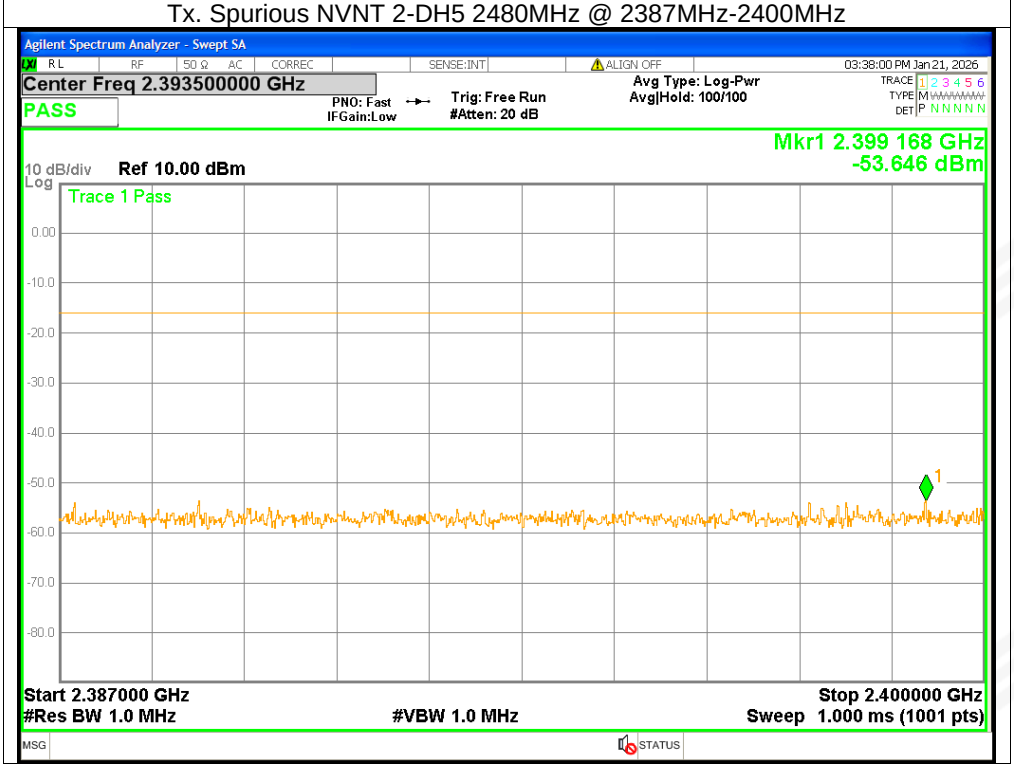
Tx. Spurious NVNT 2-DH5 2480MHz @ 30MHz-1000MHz



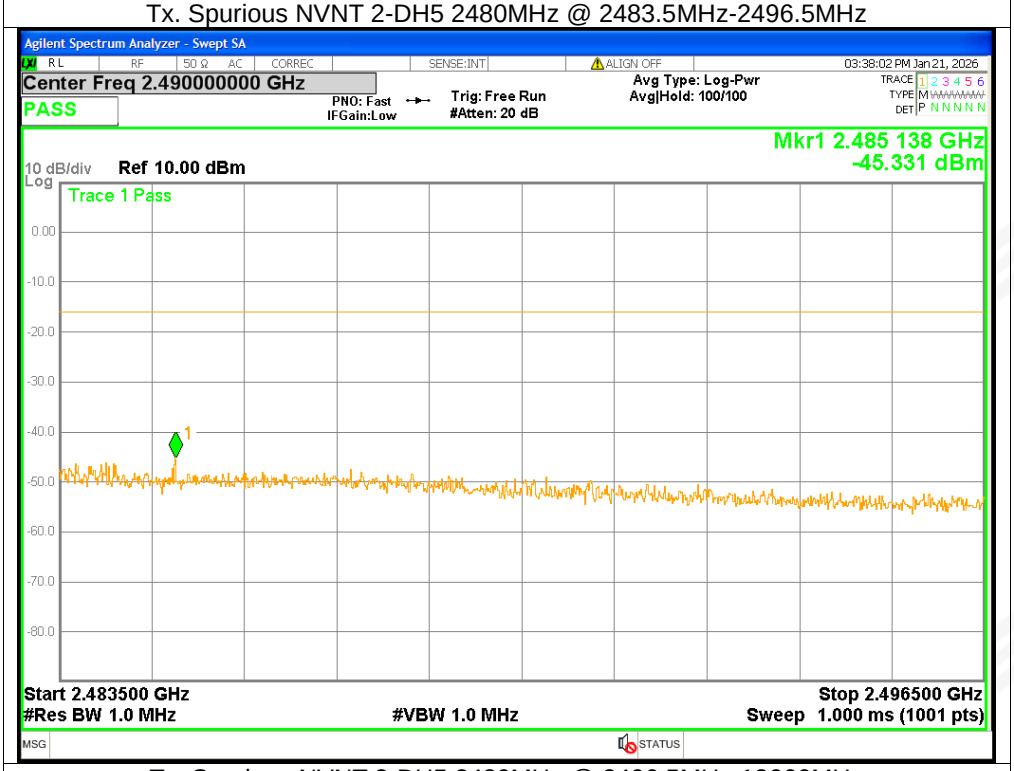
Tx. Spurious NVNT 2-DH5 2480MHz @ 1000MHz-2387MHz



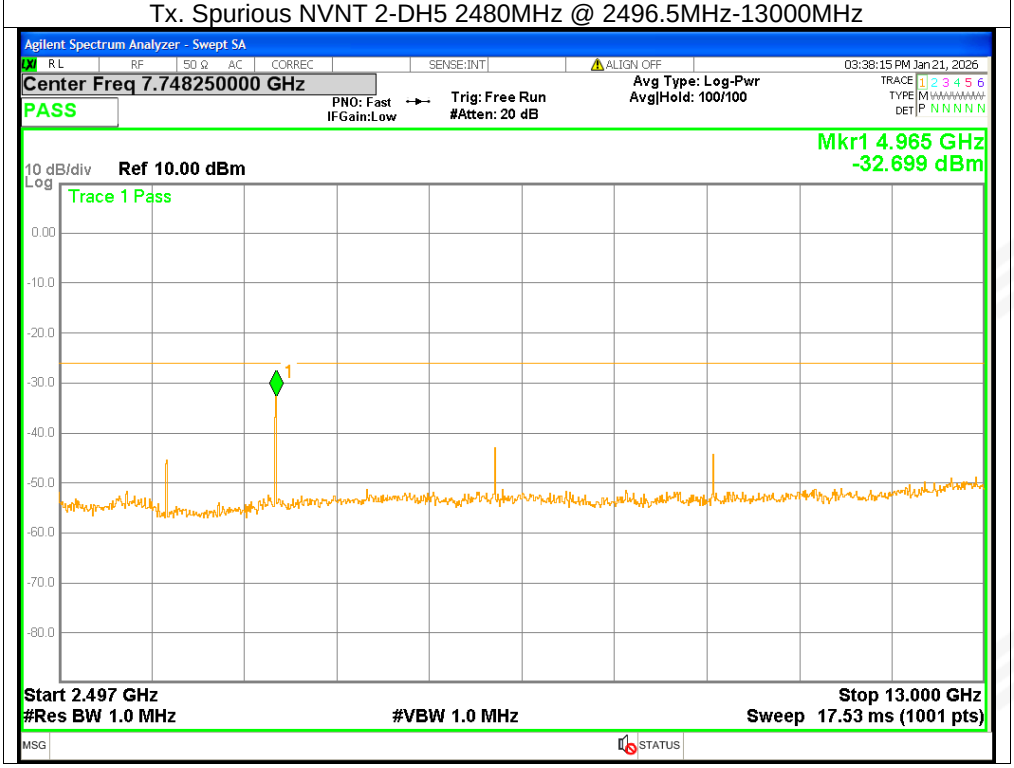
Tx. Spurious NVNT 2-DH5 2480MHz @ 2387MHz-2400MHz



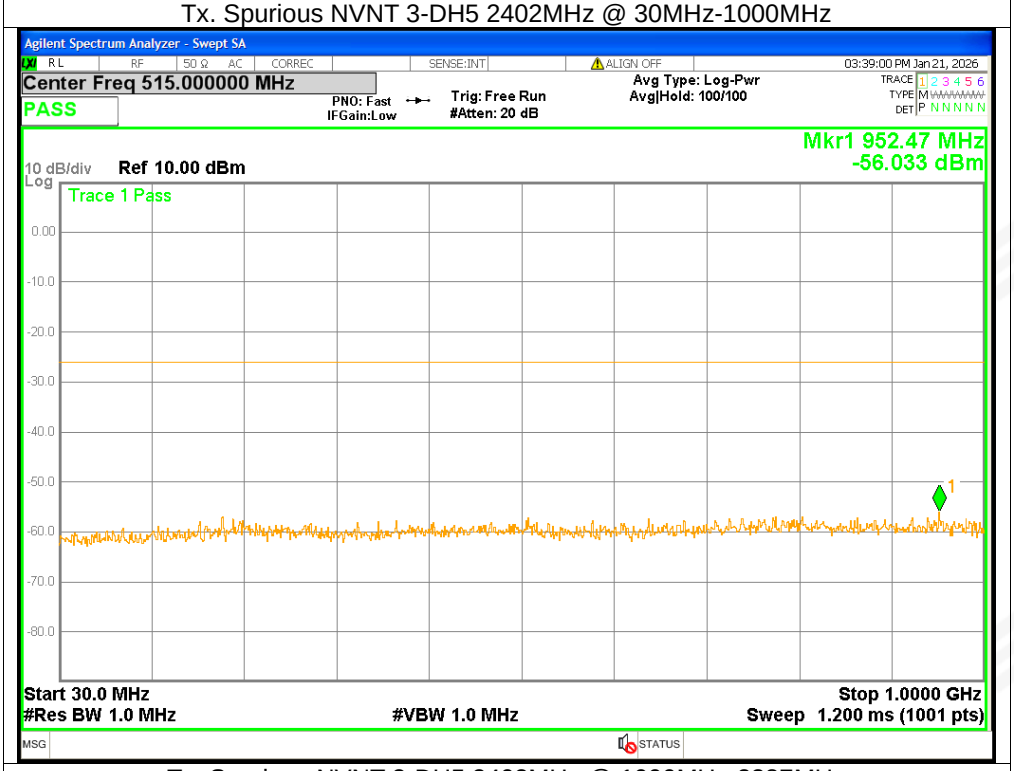
Tx. Spurious NVNT 2-DH5 2480MHz @ 2483.5MHz-2496.5MHz



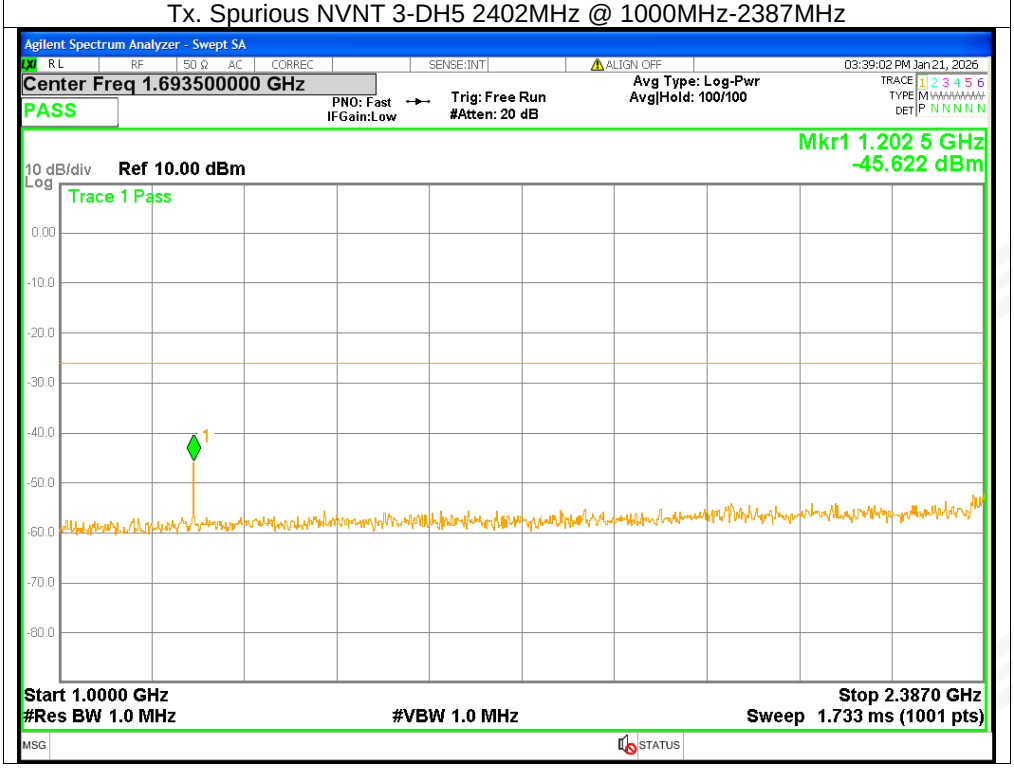
Tx. Spurious NVNT 2-DH5 2480MHz @ 2496.5MHz-13000MHz



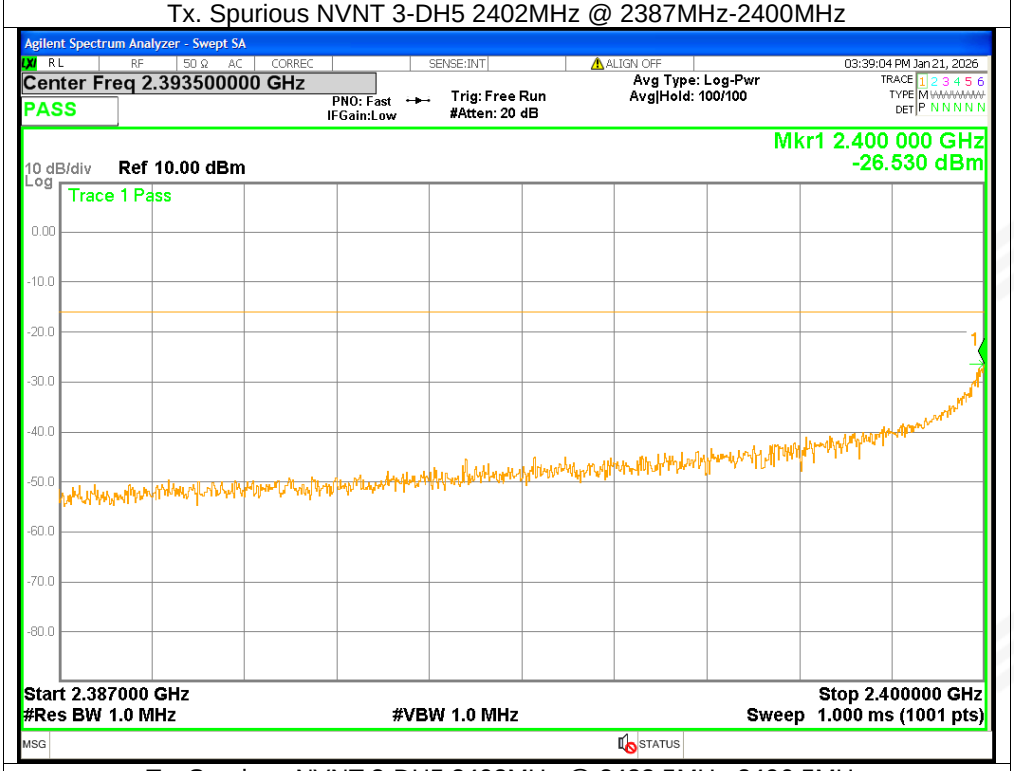
Tx. Spurious NVNT 3-DH5 2402MHz @ 30MHz-1000MHz



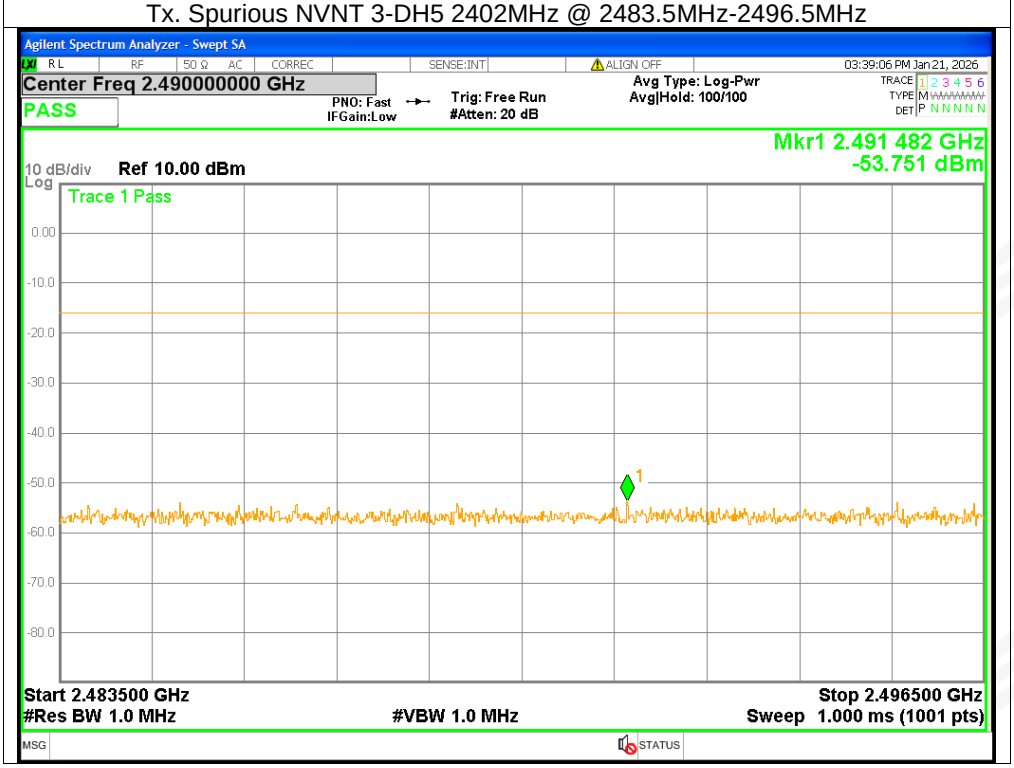
Tx. Spurious NVNT 3-DH5 2402MHz @ 1000MHz-2387MHz



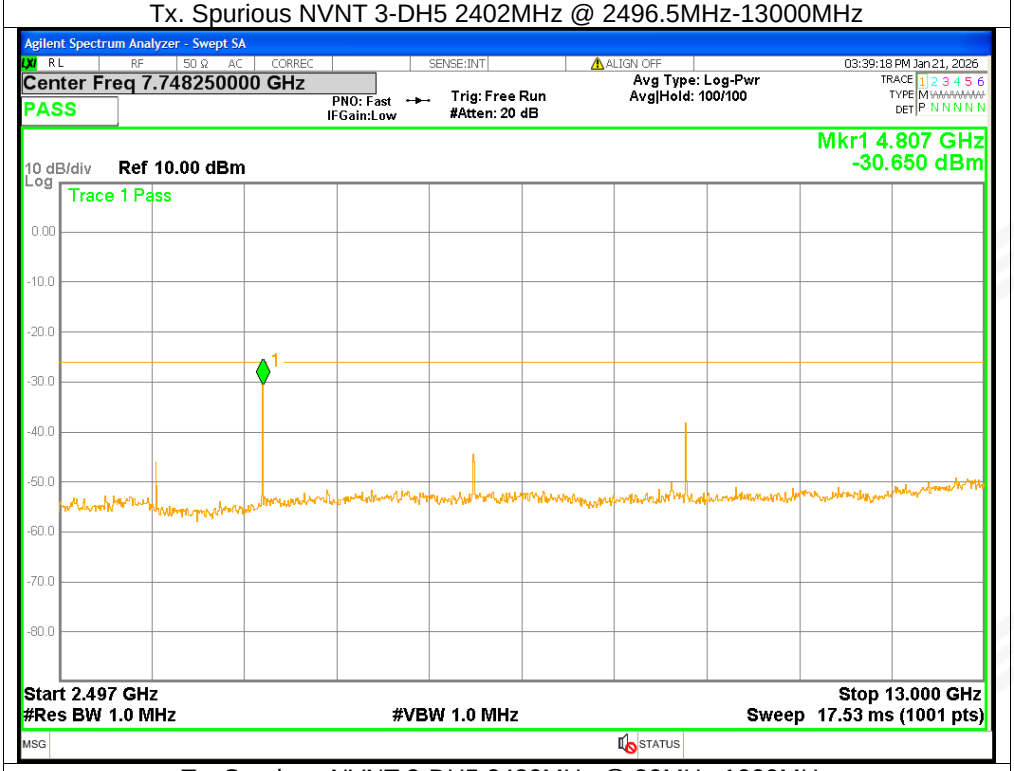
Tx. Spurious NVNT 3-DH5 2402MHz @ 2387MHz-2400MHz



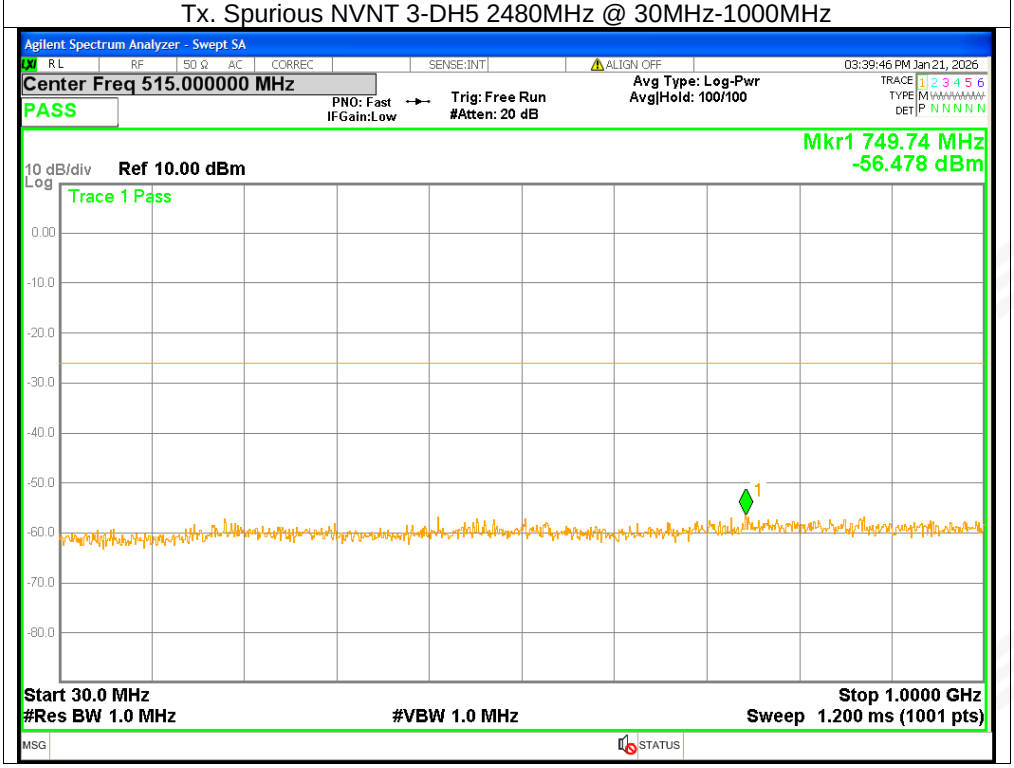
Tx. Spurious NVNT 3-DH5 2402MHz @ 2483.5MHz-2496.5MHz



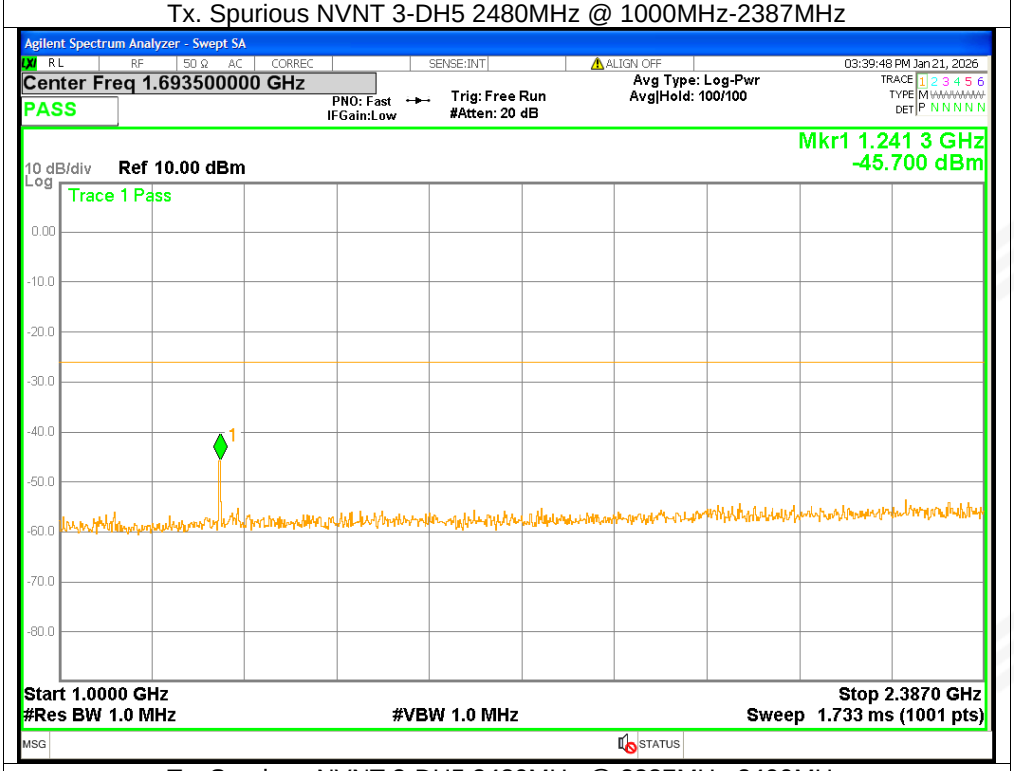
Tx. Spurious NVNT 3-DH5 2402MHz @ 2496.5MHz-13000MHz



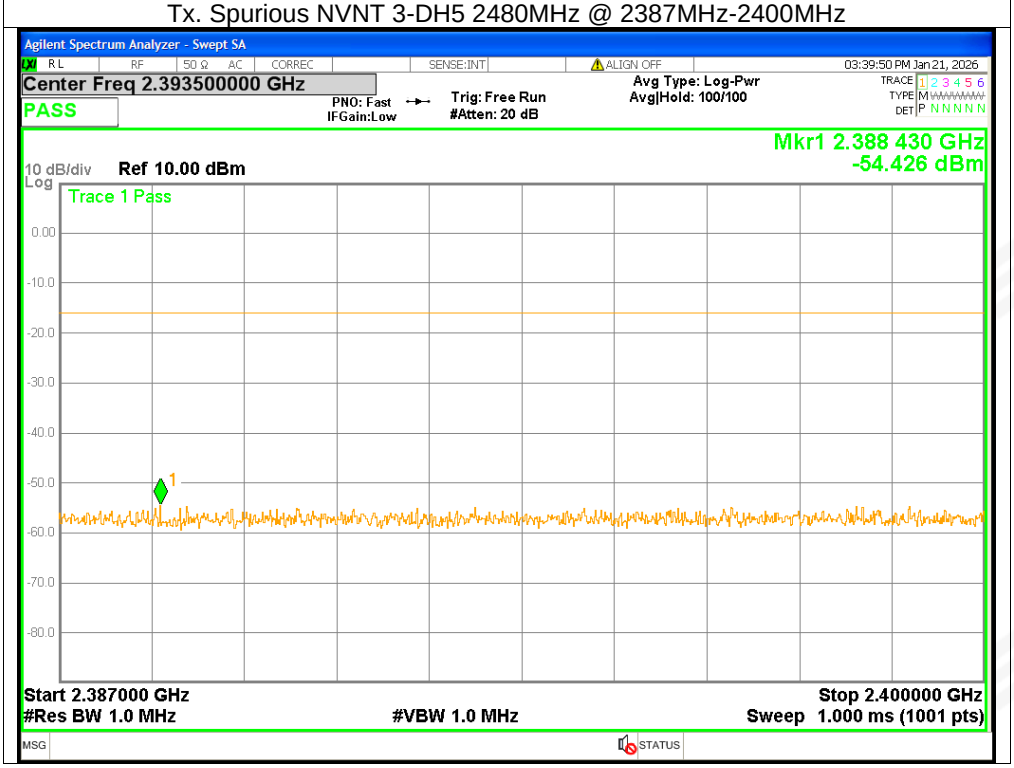
Tx. Spurious NVNT 3-DH5 2480MHz @ 30MHz-1000MHz



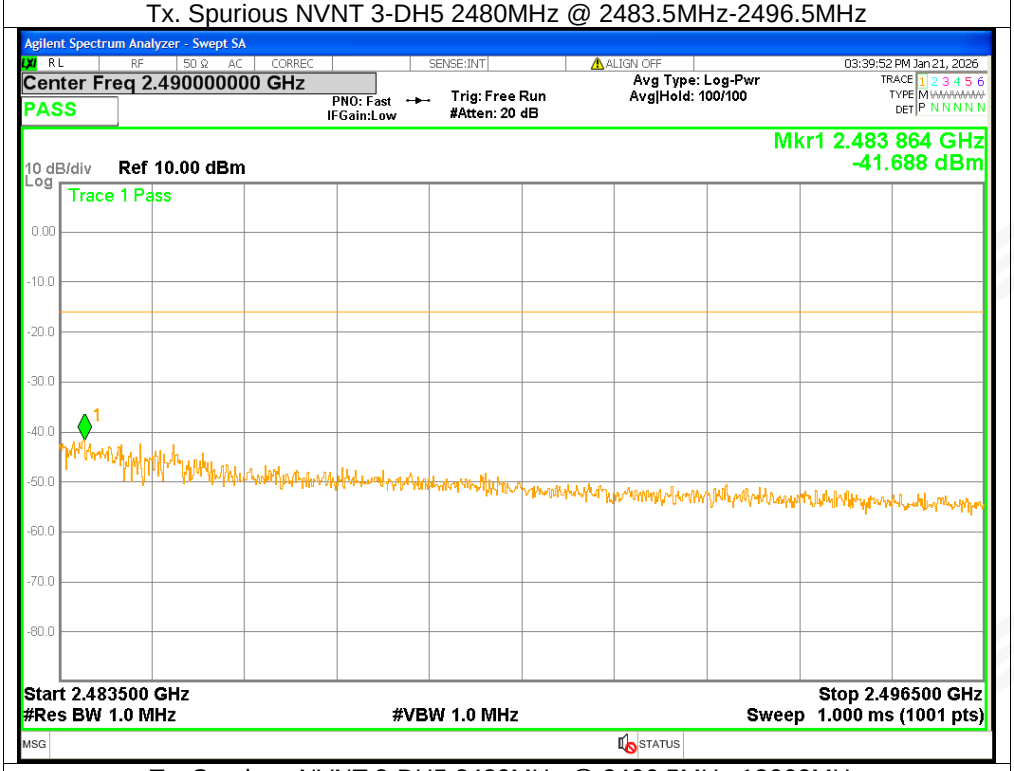
Tx. Spurious NVNT 3-DH5 2480MHz @ 1000MHz-2387MHz



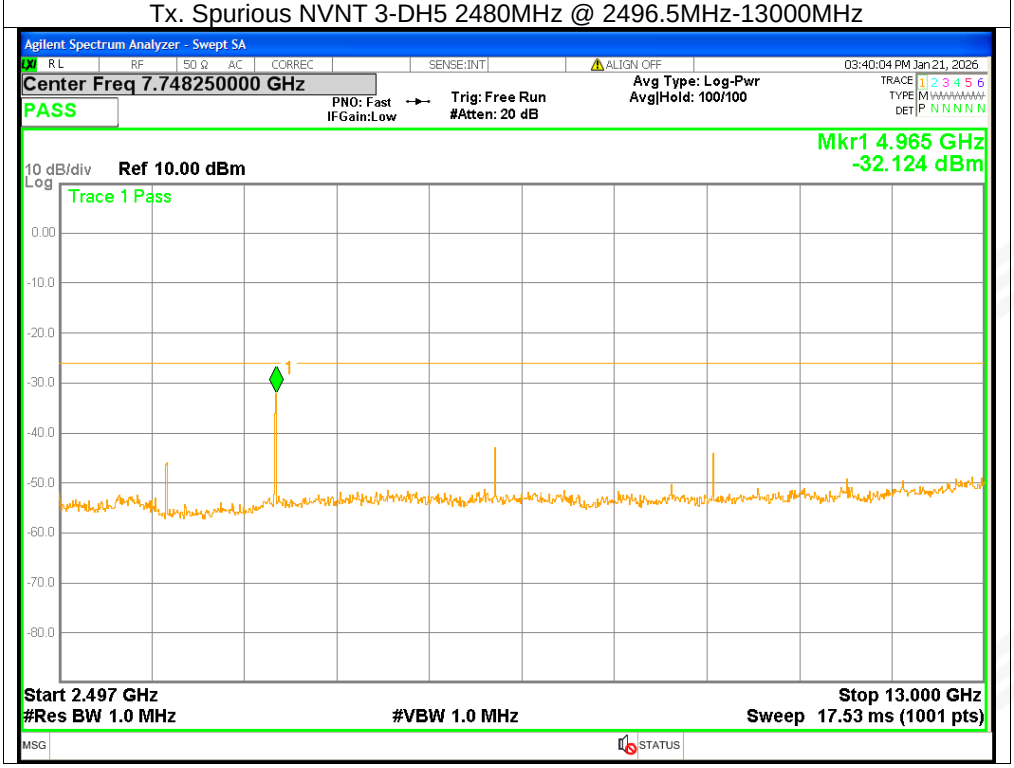
Tx. Spurious NVNT 3-DH5 2480MHz @ 2387MHz-2400MHz



Tx. Spurious NVNT 3-DH5 2480MHz @ 2483.5MHz-2496.5MHz



Tx. Spurious NVNT 3-DH5 2480MHz @ 2496.5MHz-13000MHz

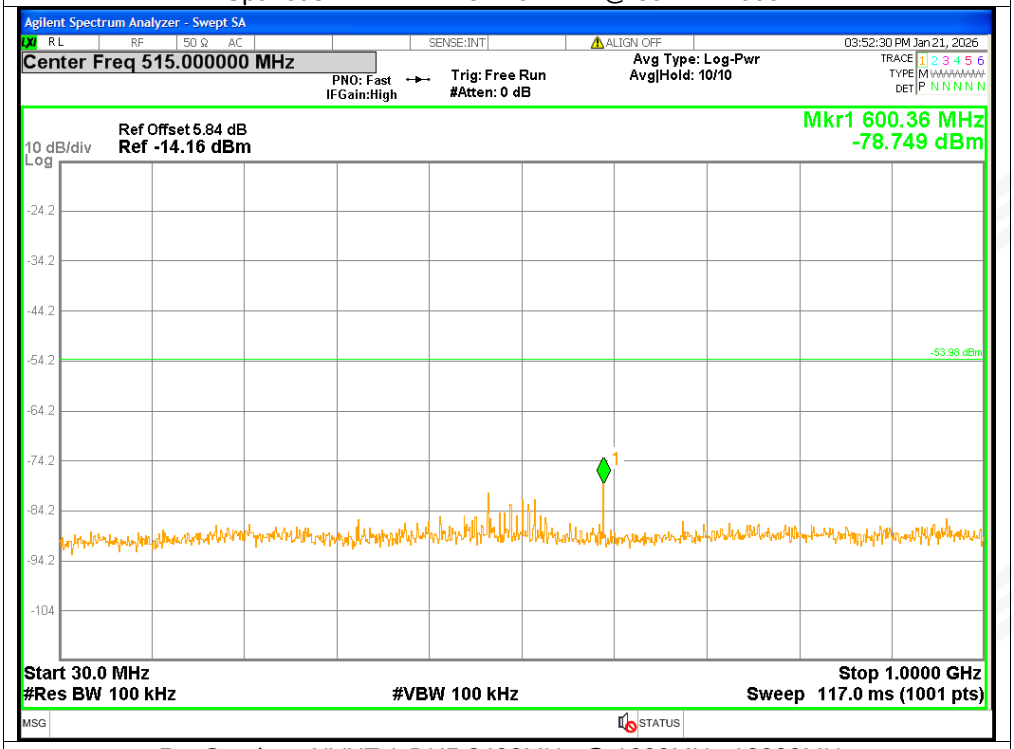


Rx Spurious Emission

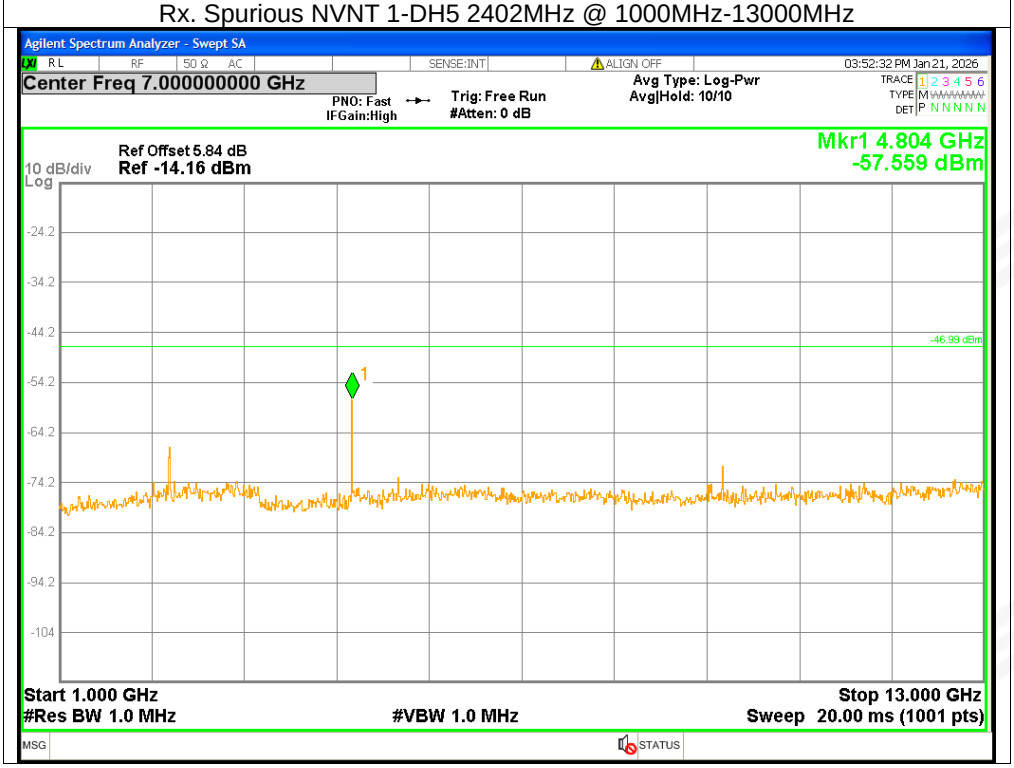
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	Max Value (nW)	Limit (nW)	Verdict
NVNT	1-DH5	2402	30-1000	600.36	-78.75	0.0133	4	Pass
NVNT	1-DH5	2402	1000-13000	4804	-57.56	1.7539	20	Pass
NVNT	1-DH5	2480	30-1000	619.76	-77.45	0.018	4	Pass
NVNT	1-DH5	2480	1000-13000	4960	-56.18	2.4099	20	Pass
NVNT	2-DH5	2402	30-1000	600.36	-78.01	0.0158	4	Pass
NVNT	2-DH5	2402	1000-13000	4804	-57.43	1.8072	20	Pass
NVNT	2-DH5	2480	30-1000	619.76	-78.39	0.0145	4	Pass
NVNT	2-DH5	2480	1000-13000	4960	-56.06	2.4774	20	Pass
NVNT	3-DH5	2402	30-1000	600.36	-78.35	0.0146	4	Pass
NVNT	3-DH5	2402	1000-13000	4804	-57.54	1.762	20	Pass
NVNT	3-DH5	2480	30-1000	619.76	-77.88	0.0163	4	Pass
NVNT	3-DH5	2480	1000-13000	4960	-56.15	2.4266	20	Pass

Test Graphs

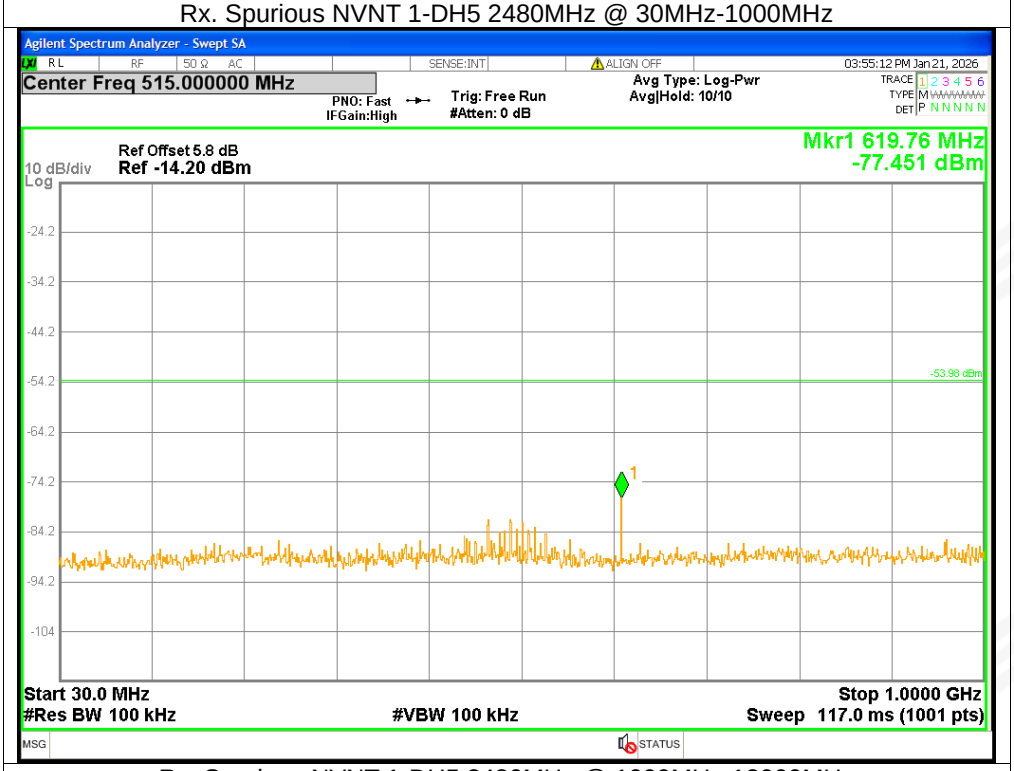
Rx. Spurious NVNT 1-DH5 2402MHz @ 30MHz-1000MHz



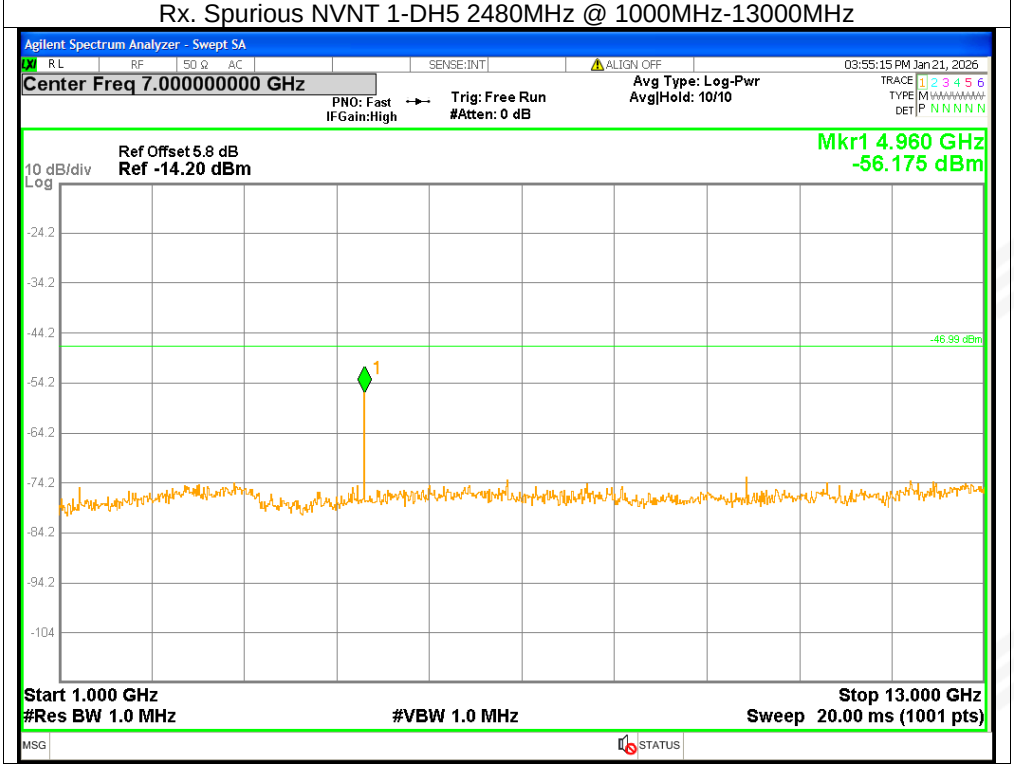
Rx. Spurious NVNT 1-DH5 2402MHz @ 1000MHz-13000MHz



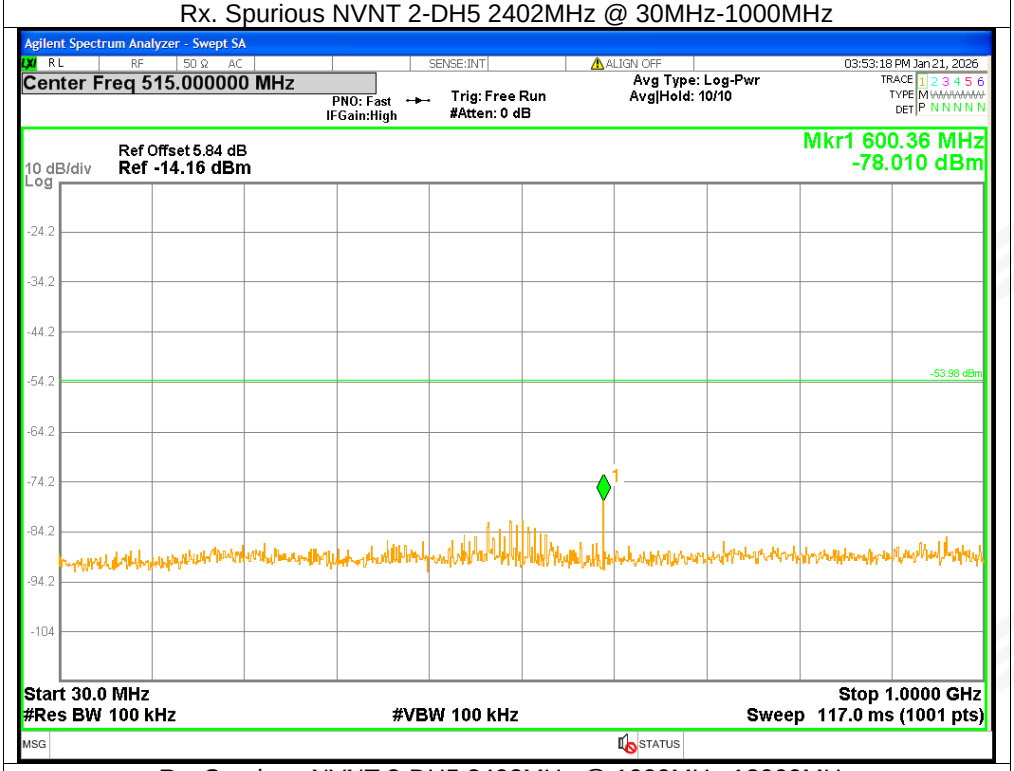
Rx. Spurious NVNT 1-DH5 2480MHz @ 30MHz-1000MHz



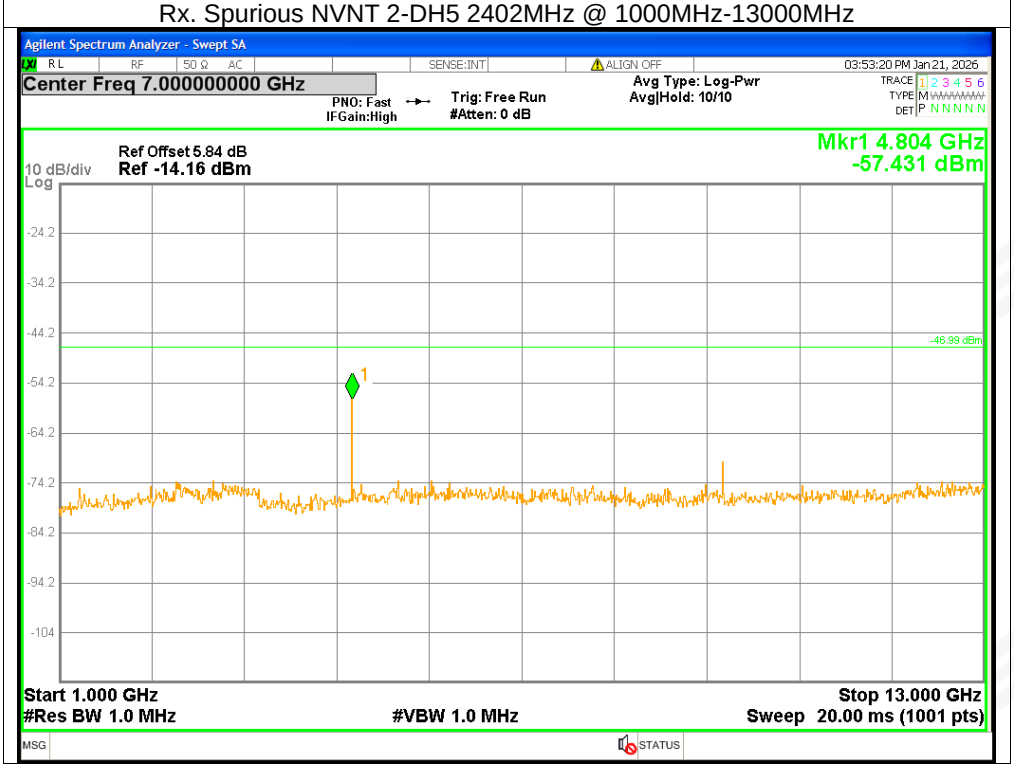
Rx. Spurious NVNT 1-DH5 2480MHz @ 1000MHz-13000MHz



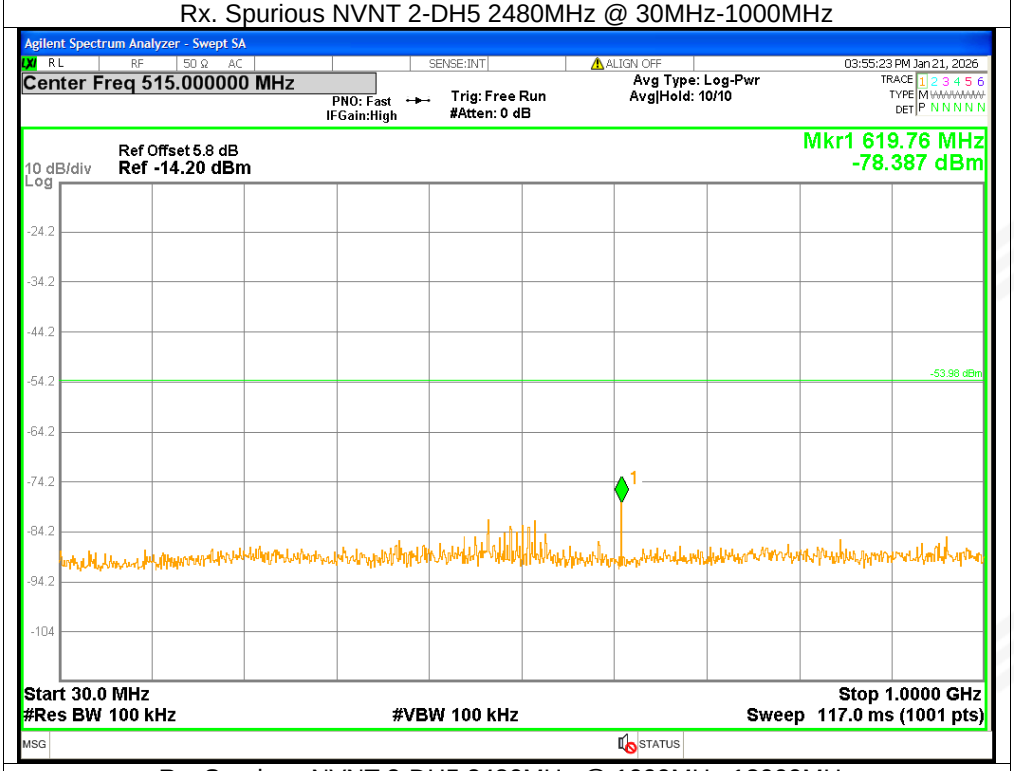
Rx. Spurious NVNT 2-DH5 2402MHz @ 30MHz-1000MHz



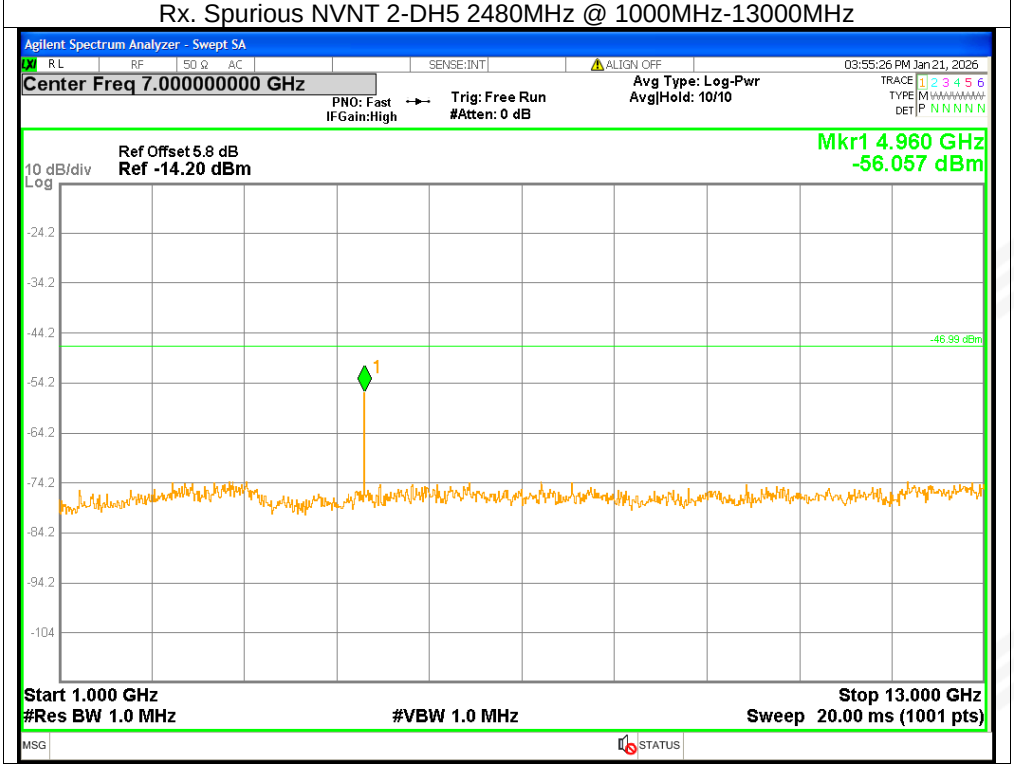
Rx. Spurious NVNT 2-DH5 2402MHz @ 1000MHz-13000MHz



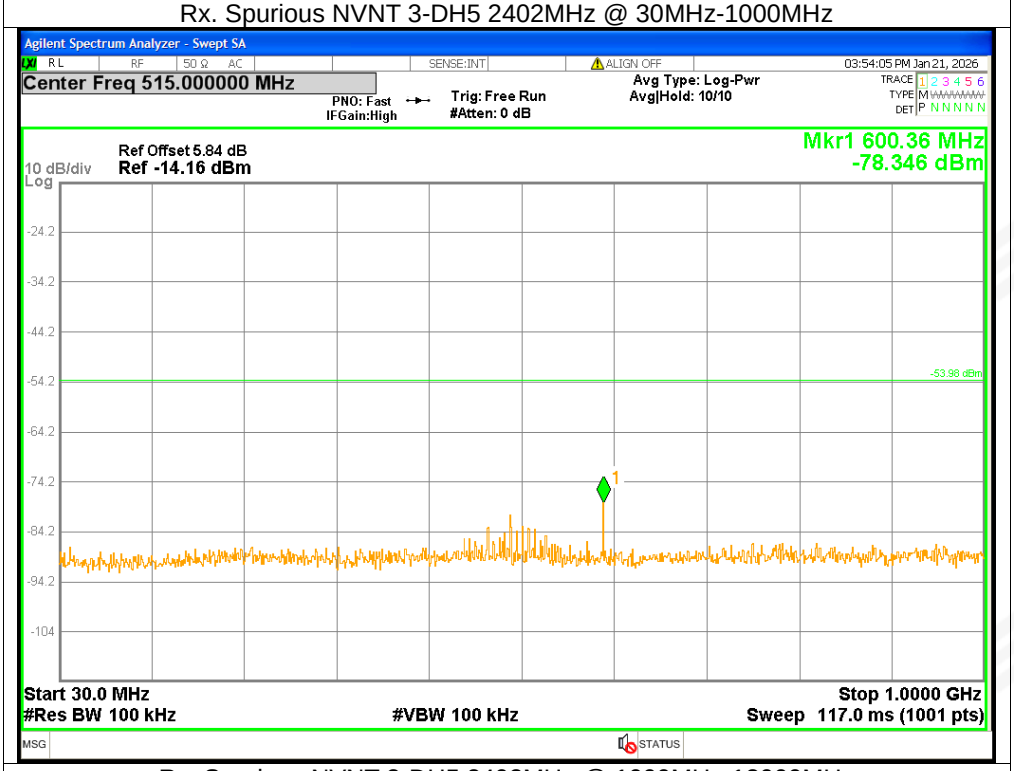
Rx. Spurious NVNT 2-DH5 2480MHz @ 30MHz-1000MHz



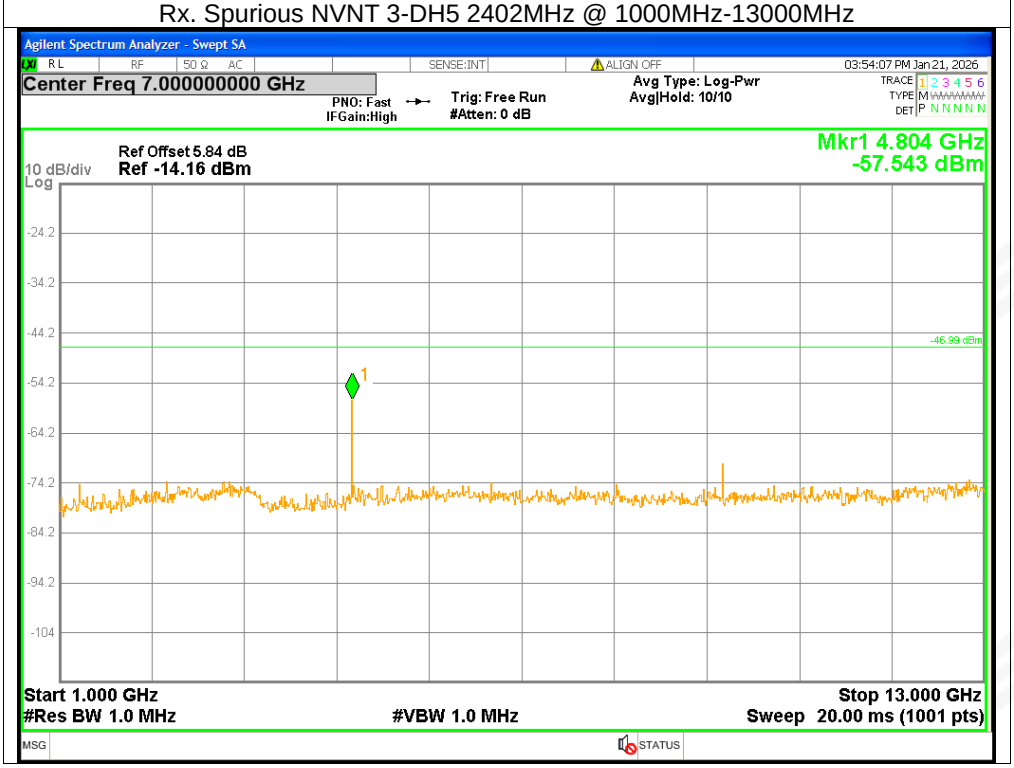
Rx. Spurious NVNT 2-DH5 2480MHz @ 1000MHz-13000MHz



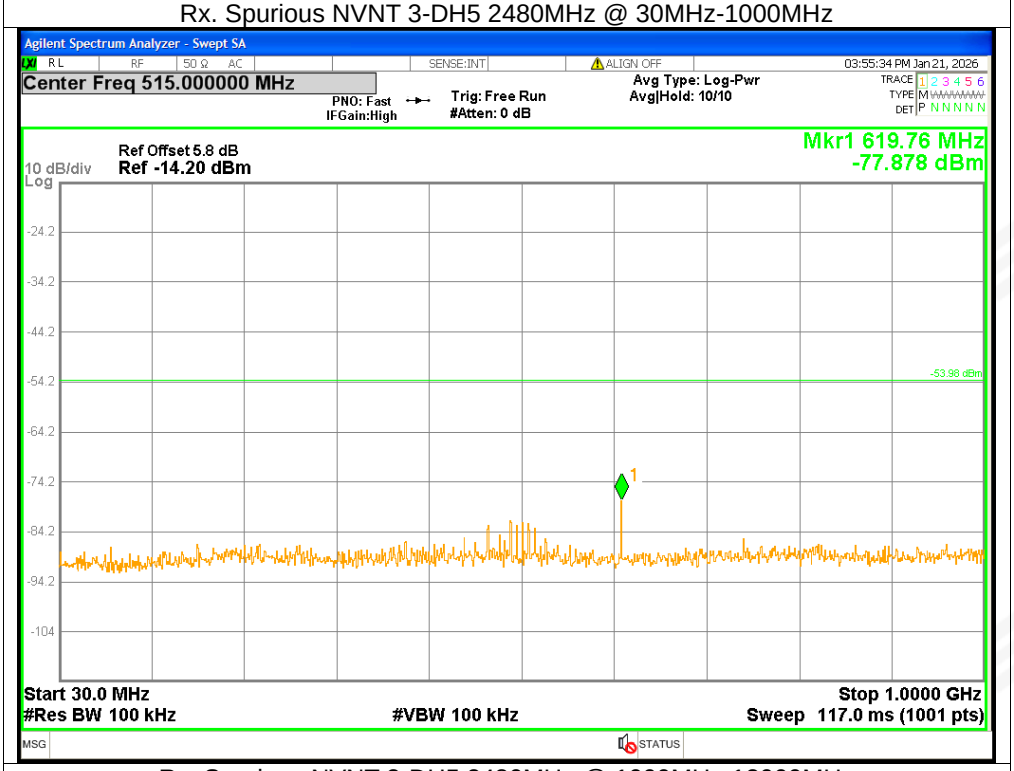
Rx. Spurious NVNT 3-DH5 2402MHz @ 30MHz-1000MHz



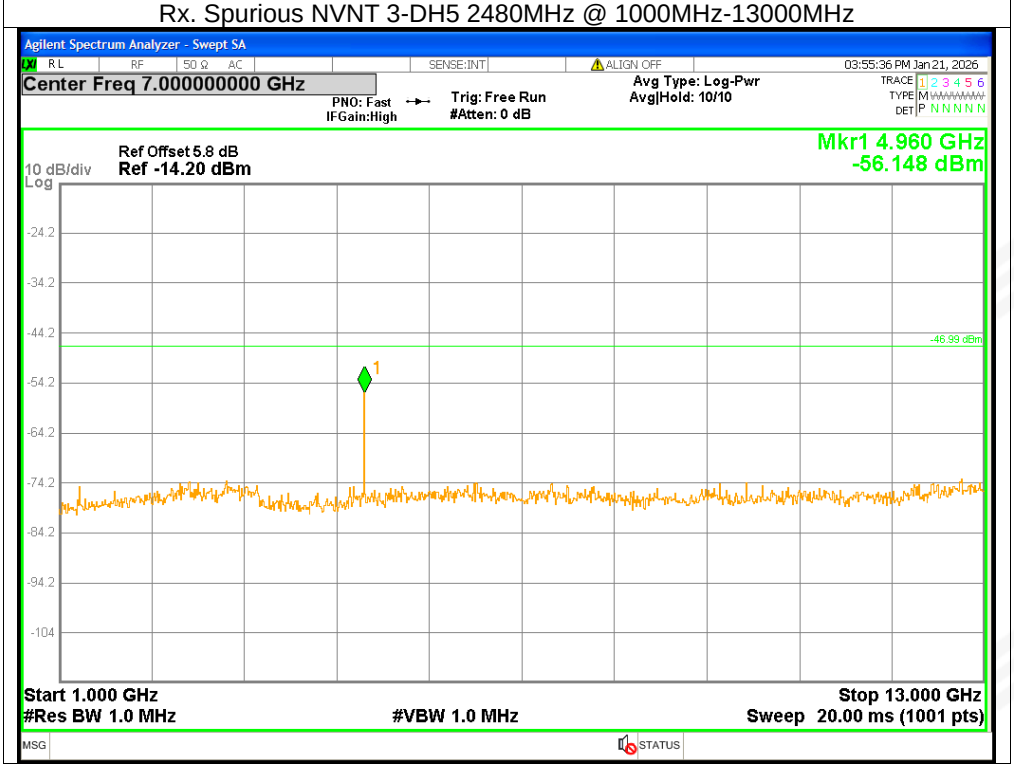
Rx. Spurious NVNT 3-DH5 2402MHz @ 1000MHz-13000MHz



Rx. Spurious NVNT 3-DH5 2480MHz @ 30MHz-1000MHz



Rx. Spurious NVNT 3-DH5 2480MHz @ 1000MHz-13000MHz



APPENDIX 2-EUT TEST PHOTO

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

※※※※END OF THE REPORT※※※※※