



FCC TEST REPORT

FCC ID: 2BTQ9-D3MINI

On Behalf of

Guangzhou Yoko Electron Co.,Ltd

Smart Desktop POS Terminal

Model No.: See model list

Prepared for : Guangzhou Yoko Electron Co.,Ltd
Address : Room301,Building 2-A, No.7 Huanbaosan Rd. Xintang Town,
Zengcheng District Guangzhou City, 511300, China

Prepared By : Shenzhen Alpha Product Testing Co., Ltd.
Address : Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103,
Shenzhen, Guangdong, China

Report Number : A2507177-C05-R01
Date of Receipt : September 22, 2025
Date of Test : September 22, 2025 - December 10, 2025
Date of Report : December 10, 2025
Version Number : V0
Test Result : Pass

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
1. Summary of Standards And Results	6
1.1. Description of Standards and Results	6
2. General Information.....	7
2.1. Description of Device (EUT)	7
2.2. Accessories of Device (EUT)	8
2.3. Tested Supporting System Details	8
2.4. Block Diagram of connection between EUT and simulators	8
2.5. Test Mode Description	8
2.6. Test Conditions	9
2.7. Test Facility	9
2.8. Measurement Uncertainty	9
2.9. Test Equipment List.....	10
3. Maximum Peak Output power	12
3.1. Limit	12
3.2. Test Procedure.....	12
3.3. Test Setup.....	12
3.4. Test Result	12
4. Bandwidth.....	13
4.1. Limit	13
4.2. Test Procedure.....	13
4.3. Test Result	13
5. Carrier Frequency Separation	24
5.1. Limit	24
5.2. Test Procedure.....	24
5.3. Test Result	24
6. Number Of Hopping Channel	26
6.1. Limit	26
6.2. Test Procedure.....	26
6.3. Test Result	26
7. Dwell Time	28
7.1. Test limit.....	28
7.2. Test Procedure.....	28
7.3. Test Result	28
8. Radiated emissions	38
8.1. Limit	38
8.2. Block Diagram of Test setup	39
8.3. Test Procedure.....	40
8.4. Test Result	40
9. RF Conducted Spurious Emissions	48
9.1. Block diagram of test setup.....	48

9.2. Limits	48
9.3. Test procedure.....	48
9.4. Test result	48
10. Band Edge Compliance.....	58
10.1. Block Diagram of Test Setup	58
10.2. Limit.....	58
10.3. Test Procedure	58
10.4. Test Result	58
11. Band Edge (Conducted).....	62
11.1. Block diagram of test setup.....	62
11.2. Test limits	62
11.3. Test Procedure.....	62
11.4. Test Results	63
12. Power Line Conducted Emissions.....	75
12.1. Block Diagram of Test Setup	75
12.2. Limit.....	75
12.3. Test Procedure	75
12.4. Test Result	75
13. Antenna Requirements.....	80
13.1. Limit.....	80
13.2. Result.....	80
14. Test setup photo	81
14.1. Photo of Radiated Emission test	81
14.2. Photo of Conducted Emission test	83
15. Photos of EUT	84
16. Model list.....	139

TEST REPORT DECLARATION

Applicant : Guangzhou Yoko Electron Co.,Ltd
Address : Room301,Building 2-A, No.7 Huanbaosan Rd. Xintang Town, Zengcheng District
Guangzhou City, 511300, China
Manufacturer : Guangzhou Yoko Electron Co.,Ltd
Address : Room301,Building 2-A, No.7 Huanbaosan Rd. Xintang Town, Zengcheng District
Guangzhou City, 511300, China
EUT Description : Smart Desktop POS Terminal
(A) Model No. : See model list
(B) Trademark : **Yokoscan**

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247

ANSI C63.10:2020

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....: Yanniss Wen
Project Engineer 

Approved by (name + signature).....: Jack Xu
Project Manager 

Date of issue.....: December 10, 2025

Revision History

Revision	Issue Date	Revisions	Revised By
V0	December 10, 2025	Initial released Issue	Yannis Wen

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Test Item	Standards Paragraph	Result
Maximum Peak Output Power	FCC Part 15: 15.247(b)(1) ANSI C63.10 :2020	P
Bandwidth	FCC Part 15: 15.215 ANSI C63.10 :2020	P
Carrier Frequency Separation	FCC Part 15: 15.247(a)(1) ANSI C63.10 :2020	P
Number Of Hopping Channel	FCC Part 15: 15.247(a)(1)(iii) ANSI C63.10 :2020	P
Dwell Time	FCC Part 15: 15.247(a)(1)(iii) ANSI C63.10 :2020	P
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10 :2020	P
Band Edge Compliance	FCC Part 15: 15.247(d) ANSI C63.10 :2020	P
Power Line Conducted Emissions	FCC Part 15: 15.207 ANSI C63.10 :2020	P
Antenna requirement	FCC Part 15: 15.203	P
Note: 1. P is an abbreviation for Pass. 2. F is an abbreviation for Fail. 3. N/A is an abbreviation for Not Applicable. 4. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Description	: Smart Desktop POS Terminal
Model Number	: See model list
Diff	: There is no difference except the name of the model. All tests are made with the D3mini model.
Power supply	: DC 12V from adapter and DC 24V from adapter.

Radio Technology	: Bluetooth BR/EDR
Operation frequency	: 2402-2480MHz
Channel No.	: 79 Channels
Channel spacing	: 1MHz
Modulation type	: GFSK, $\pi/4$ DQPSK, 8DPSK
Antenna Type	: PCB Antenna, max gain -0.93dBi (Antenna information is provided by applicant.)
Software version	: V1.0
Hardware version	: V1.0
Intend use environment	: Residential, commercial and light industrial environment

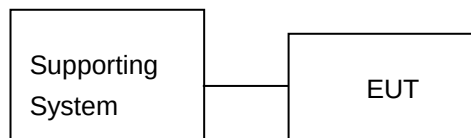
2.2. Accessories of Device (EUT)

Accessories : AC ADAPTER
 Manufacturer : Hunan Dajing Power Technology Co., Ltd.
 Model : ADP-60D24
 INPUT : 100-240V~50/60Hz 1.5A MAX
 OUTPUT : 24.0V = 2.5A 60.0W
 Accessories : AC ADAPTER
 Manufacturer : Hunan Dajing Power Technology Co., Ltd.
 Model : 2102M-120300E
 INPUT : 100-240V~50/60Hz 0.8A MAX
 OUTPUT : +12.0V = 3.0A 36.0W

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or SDoC
1.	Notebook PC	Lenovo	ThinkPad L14	N/A	N/A

2.4. Block Diagram of connection between EUT and simulators



2.5. Test Mode Description

Tested mode, channel information		
Mode	Channel	Frequency (MHz)
GFSK, $\pi/4$ DQPSK, 8DPSK Hopping-off TX mode	Low :CH1	2402
	Middle: CH40	2441
	High: CH79	2480
GFSK, $\pi/4$ DQPSK, 8DPSK Hopping-off RX mode	Low :CH1	2402
	Middle: CH40	2441
	High: CH79	2480
GFSK, $\pi/4$ DQPSK, 8DPSK Hopping-on mode	Hopping	2402-2480

Using QRCT testing software to control EUT work in Continuous TX mode, and select test channel, wireless mode, the power level of the test is set to default.

Note1: All modes have been tested and only the worst data (DH5/2DH5/3DH5) is listed

2.6. Test Conditions

Items	Required	Actual
Temperature range:	15-35°C	24°C
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	980kPa

2.7. Test Facility

Shenzhen Alpha Product Testing Co., Ltd

Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103,
Shenzhen, Guangdong, China

2.8. Measurement Uncertainty

(95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for Power point Conducted Emissions Test	1.63dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.74dB(Polarize: V)
	3.76dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	3.77dB(Polarize: V)
	3.80dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.31 dB(Polarize: V)
	4.30 dB(Polarize: H)
Uncertainty for radio frequency	5.06×10^{-8} GHz
Uncertainty for conducted RF Power	0.40dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

2.9. Test Equipment List

Equipment	Manufacturer	Model No.	Firmware version	Serial No.	Last Cal.	Cal. Due day
9*6*6 anechoic chamber	CHENYU	9*6*6	/	N/A	2025.03.09	4Year
4*4*3 Shielded room	CHENYU	4*4*3	/	N/A	2025.03.09	4Year
Spectrum analyzer	ROHDE&SCHWARZ	FSV40-N	2.3	102137	2025.08.04	1Year
Spectrum analyzer	Agilent	N9020A	A.14.16	MY499100060	2025.08.04	1Year
Test Receiver	ROHDE&SCHWARZ	ESR	2.28 SP1	1316.3003K03 -102082-Wa	2025.08.04	1Year
Test Receiver	ROHDE&SCHWARZ	ESCI	4.42 SP1	101165	2025.08.04	1Year
Bilog Antenna	SCHWARZBECK	VULB 9168	/	VULB 9168#627	2025.08.11	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	/	2106	2025.08.11	2Year
Loop Antenna	SCHWARZBECK	FMZB 1519B	/	00128	2025.08.11	2Year
RF Cable	Resenberger	Cable 1	/	RE1	2025.08.04	1Year
RF Cable	Resenberger	Cable 2	/	RE2	2025.08.04	1Year
RF Cable	Resenberger	Cable 3	/	CE1	2025.08.04	1Year
Amplifier	HP	HP8347A	/	2834A00455	2025.08.04	1Year
Amplifier	Agilent	8449B	/	3008A02664	2025.08.04	1Year
L.I.S.N.#1	SCHWARZBECK	NSLK8126	/	8126-466	2025.08.04	1Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	101043	2025.08.04	1Year
Horn Antenna	SCHWARZBECK	BBHA 9170	/	00946	2025.08.11	2Year
Preamplifier	SKET	LNPA_1840-5 0	/	SK201810180 1	2025.08.04	1 Year
Power Meter	Agilent	E4419B	/	GB40202122	2025.08.04	1 Year
Power Sensor	Agilent	E9300A	/	MY41496628	2025.08.04	1 Year
Power Sensor	Agilent	E9304A	/	MY41496815	2025.08.04	1 Year
Temp. & Humid. Chamber	Teelong	TL-HW408S	/	TL-20191205- 01	2025.07.14	1 Year
Electronic Thermo-Hygrometer	S.H.Qixiang	HTC-1	/	N/A	2025.08.04	1 Year
Switching Mode Power Supply	JUNKE	JK12010S	/	20140927-6	2025.08.04	1 Year
Adjustable attenuator	MWRFtest	N/A	/	N/A	N/A	N/A
10dB Attenuator	Mini-Circuits	DC-6G	/	N/A	N/A	N/A

Software Information			
Test Item	Software Name	Manufacturer	Version
RE	EZ-EMC	Farad	Alpha-3A1
CE	EZ-EMC	Farad	Alpha-3A1
RF-CE	MTS 8310	MWRFtest	V2.0.0.0

3. MAXIMUM PEAK OUTPUT POWER

3.1. Limit

Please refer section 15.247.

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

3.2. Test Procedure

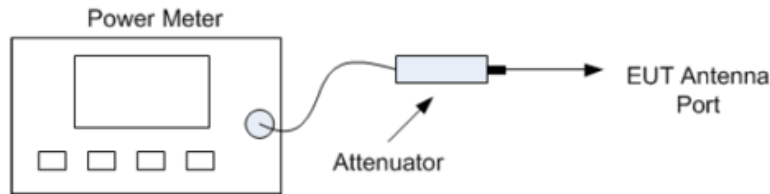
Details see the ANSI C63.10:2020-

3.2.1 Place the EUT on the table and connected to a power meter. The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

3.2.2 At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.

3.2.3 Measure out each mode and each bands Peak output power of EUT

3.3. Test Setup



3.4. Test Result

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	3.484	21	Pass
NVNT	1-DH5	2441	Ant1	4.457	21	Pass
NVNT	1-DH5	2480	Ant1	2.908	21	Pass
NVNT	2-DH5	2402	Ant1	3.788	21	Pass
NVNT	2-DH5	2441	Ant1	4.848	21	Pass
NVNT	2-DH5	2480	Ant1	3.544	21	Pass
NVNT	3-DH5	2402	Ant1	3.99	21	Pass
NVNT	3-DH5	2441	Ant1	5.055	21	Pass
NVNT	3-DH5	2480	Ant1	3.927	21	Pass

4. BANDWIDTH

4.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

4.2. Test Procedure

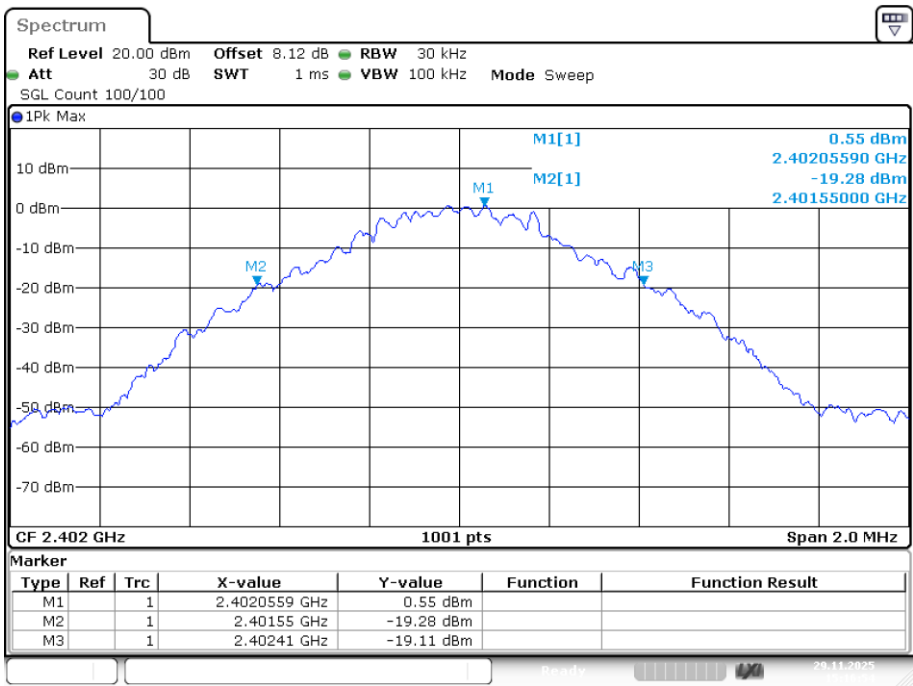
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

4.3. Test Result

-20dB Bandwidth

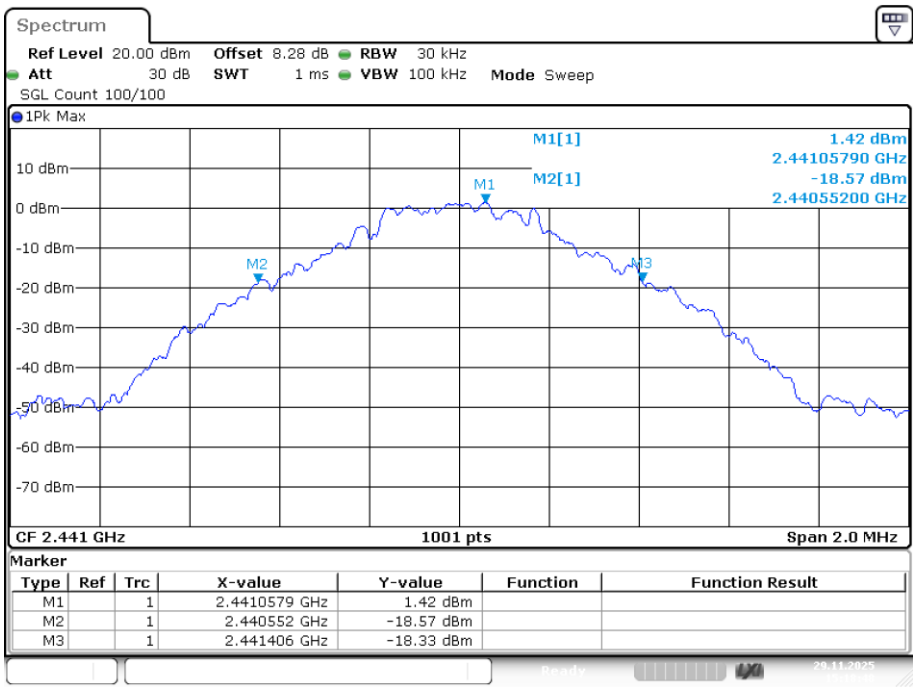
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.86	/	Pass
NVNT	1-DH5	2441	Ant1	0.854	/	Pass
NVNT	1-DH5	2480	Ant1	0.86	/	Pass
NVNT	2-DH5	2402	Ant1	1.318	/	Pass
NVNT	2-DH5	2441	Ant1	1.264	/	Pass
NVNT	2-DH5	2480	Ant1	1.278	/	Pass
NVNT	3-DH5	2402	Ant1	1.252	/	Pass
NVNT	3-DH5	2441	Ant1	1.298	/	Pass
NVNT	3-DH5	2480	Ant1	1.272	/	Pass

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



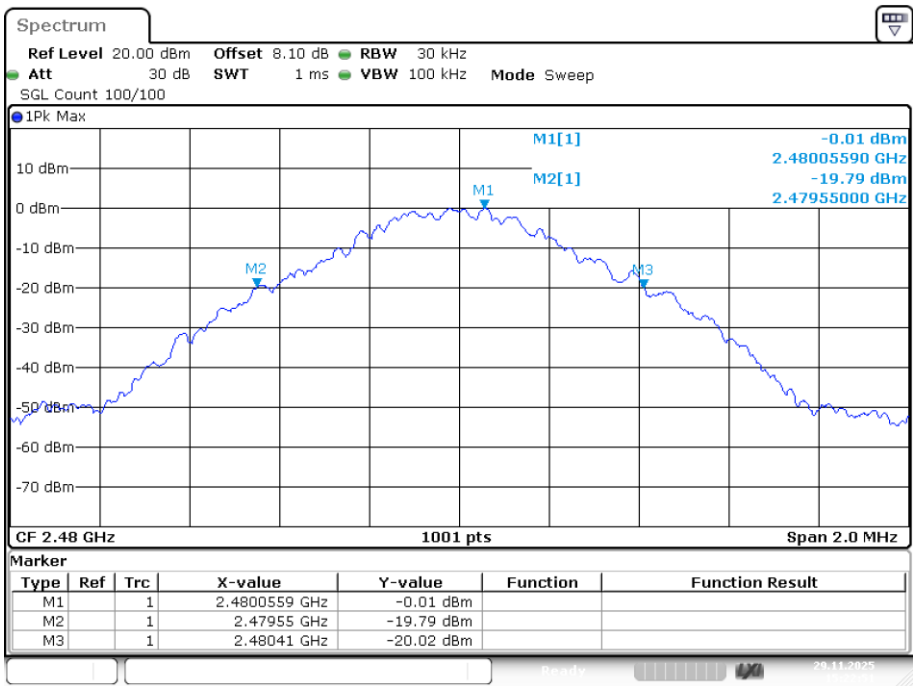
Date: 29.NOV.2025 15:16:54

-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



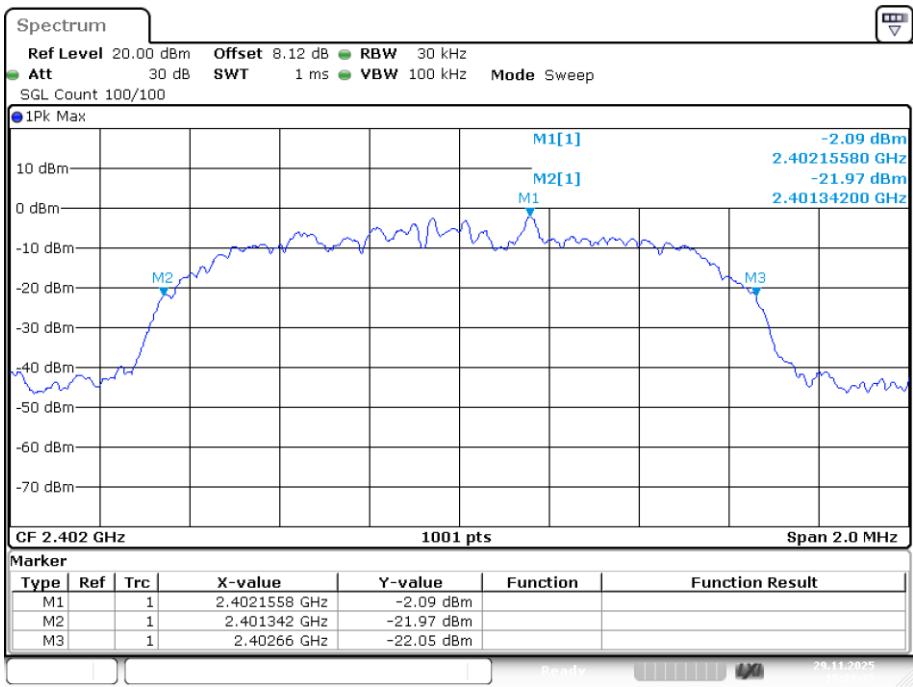
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-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



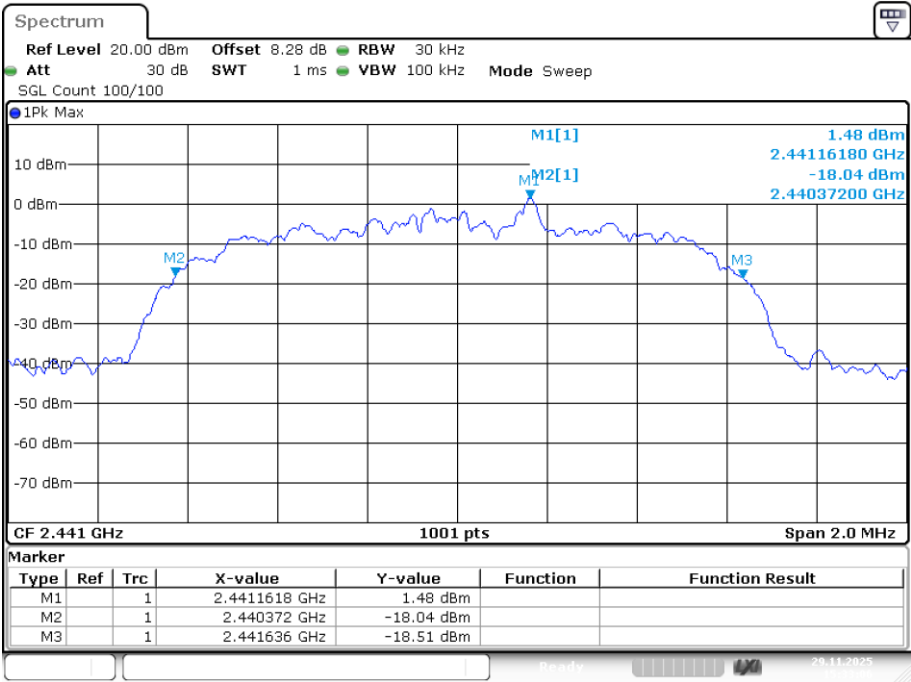
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-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



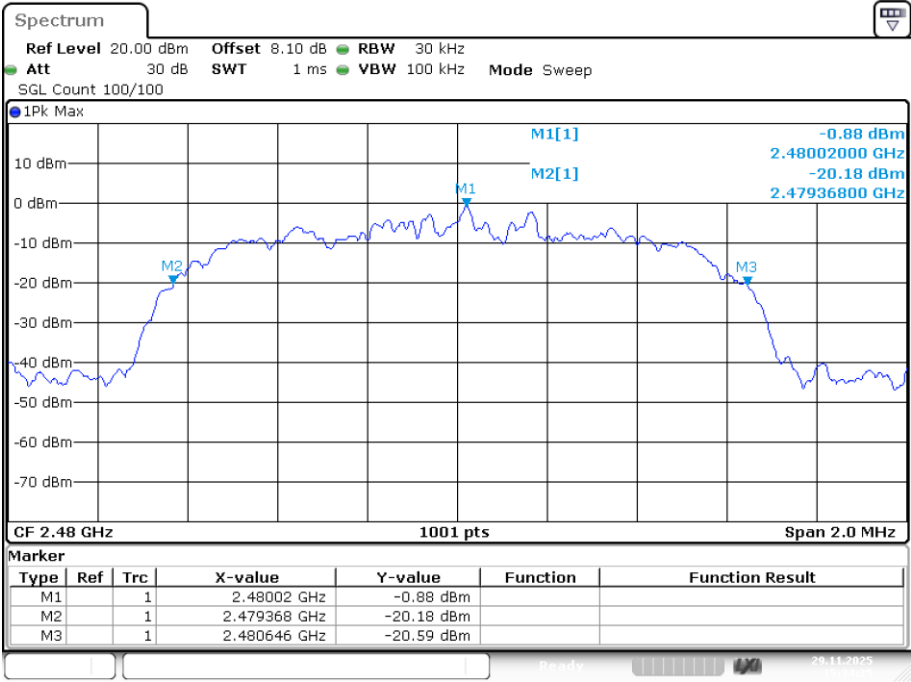
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-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



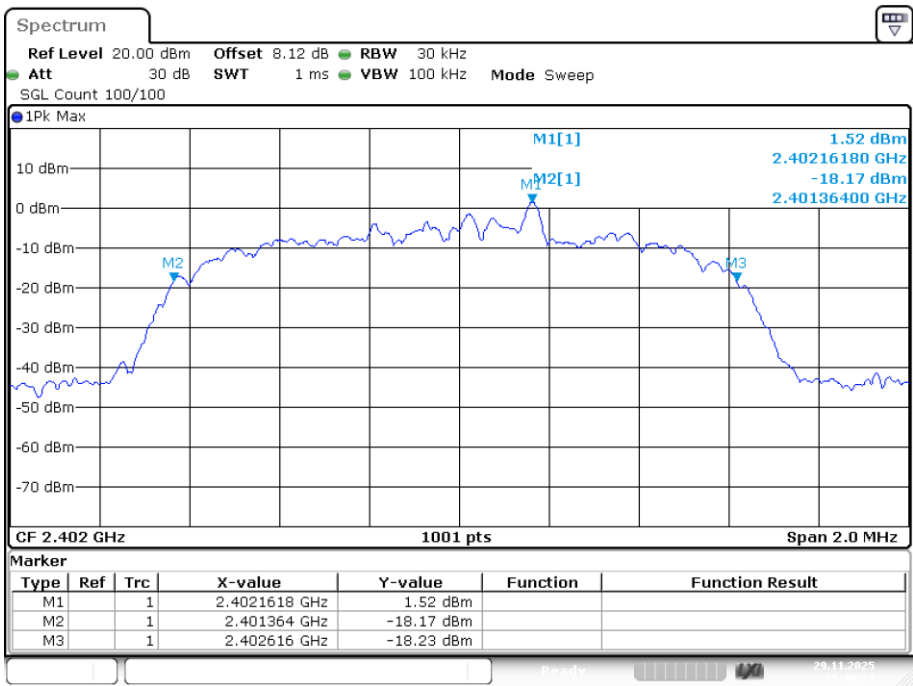
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-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



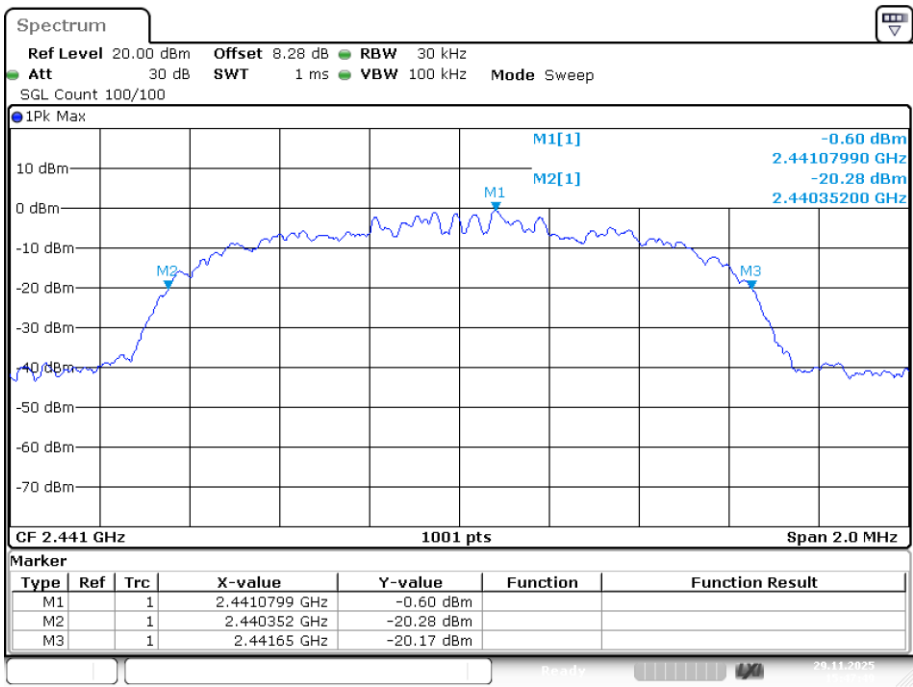
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-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



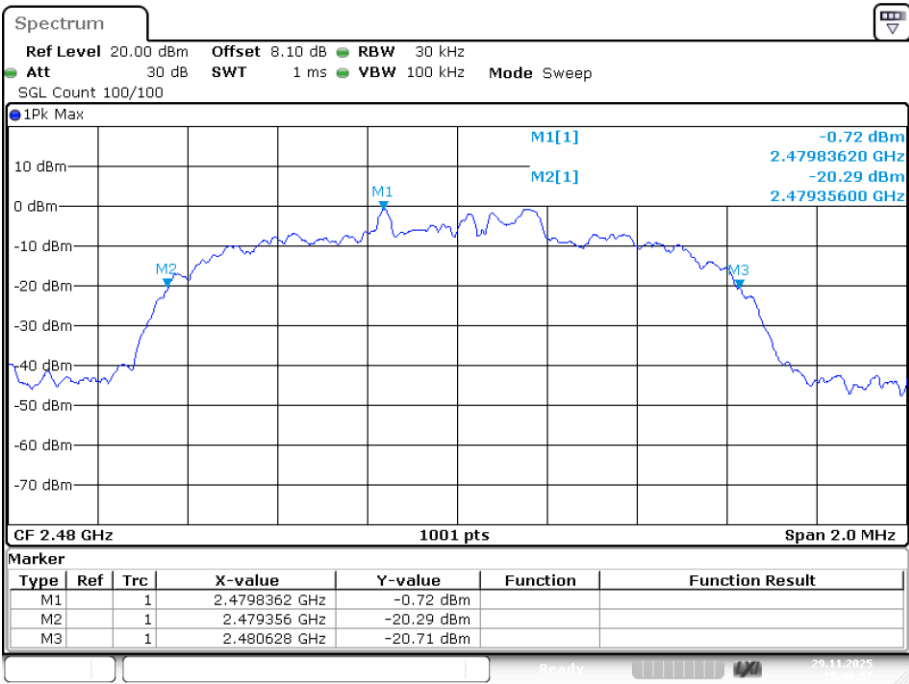
Date: 29.NOV.2025 15:46:27

-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



Date: 29.NOV.2025 15:47:49

-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

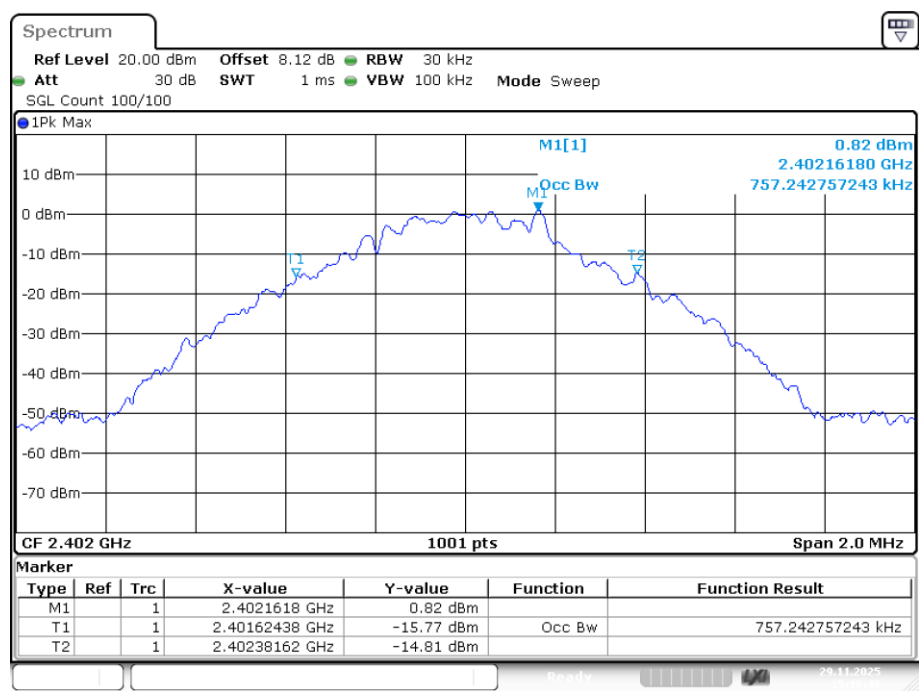


Date: 29.NOV.2025 15:48:57

Occupied Channel Bandwidth

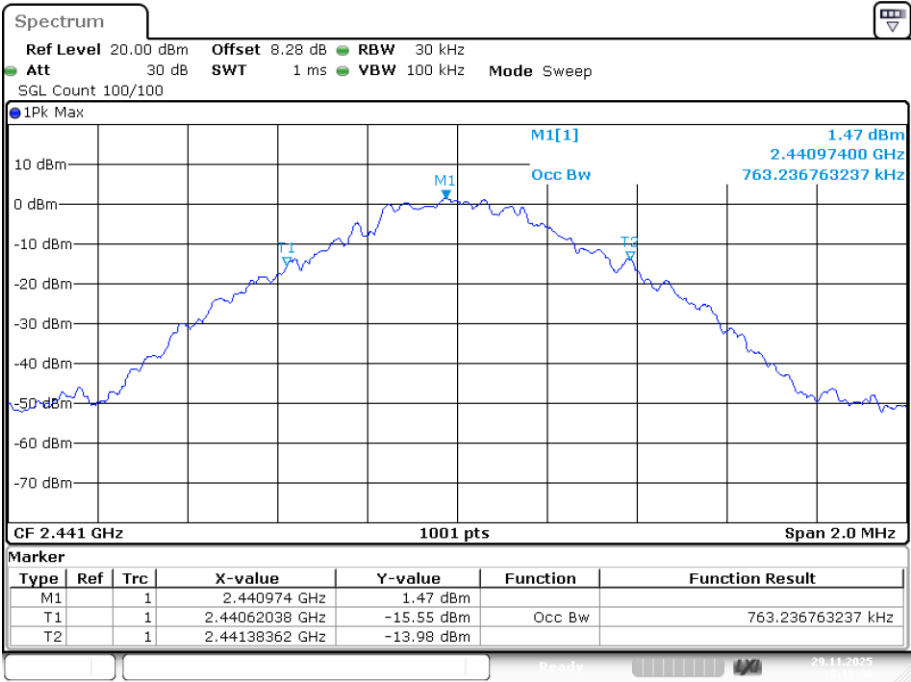
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.757
NVNT	1-DH5	2441	Ant1	0.763
NVNT	1-DH5	2480	Ant1	0.763
NVNT	2-DH5	2402	Ant1	1.161
NVNT	2-DH5	2441	Ant1	1.169
NVNT	2-DH5	2480	Ant1	1.163
NVNT	3-DH5	2402	Ant1	1.163
NVNT	3-DH5	2441	Ant1	1.181
NVNT	3-DH5	2480	Ant1	1.167

OBW NVNT 1-DH5 2402MHz Ant1



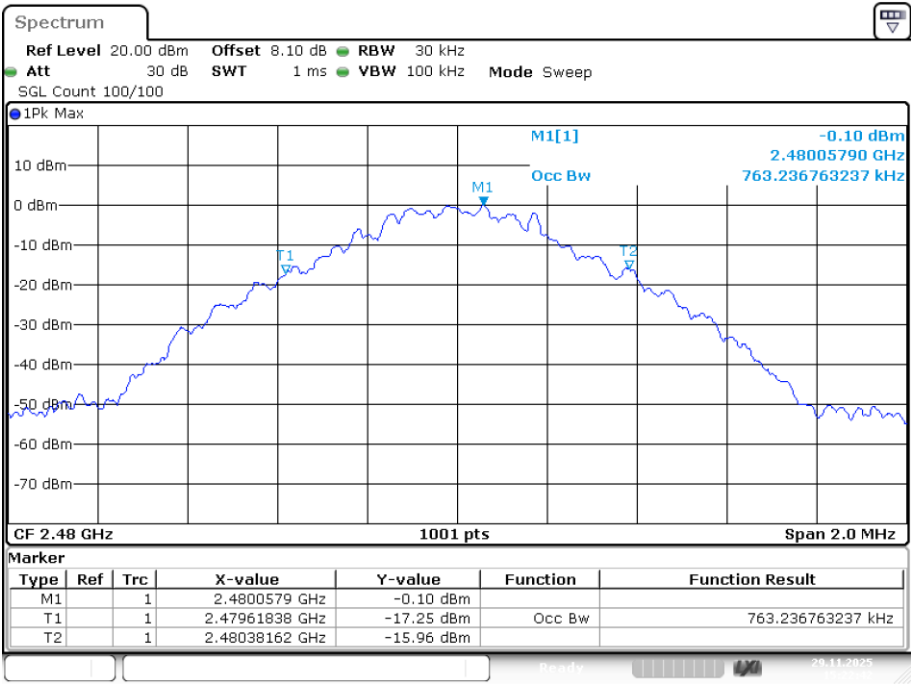
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OBW NVNT 1-DH5 2441MHz Ant1



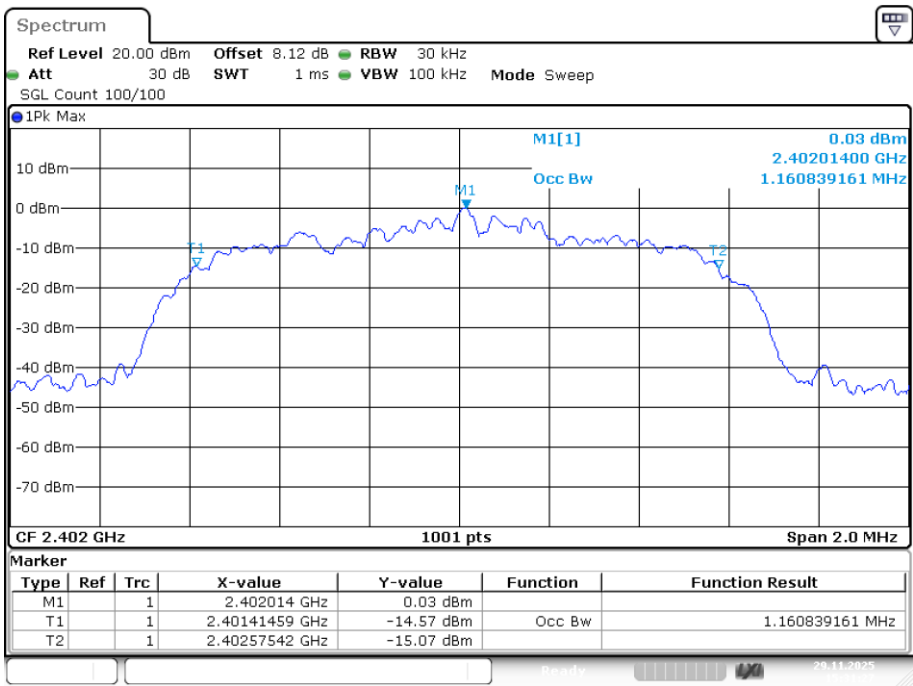
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OBW NVNT 1-DH5 2480MHz Ant1



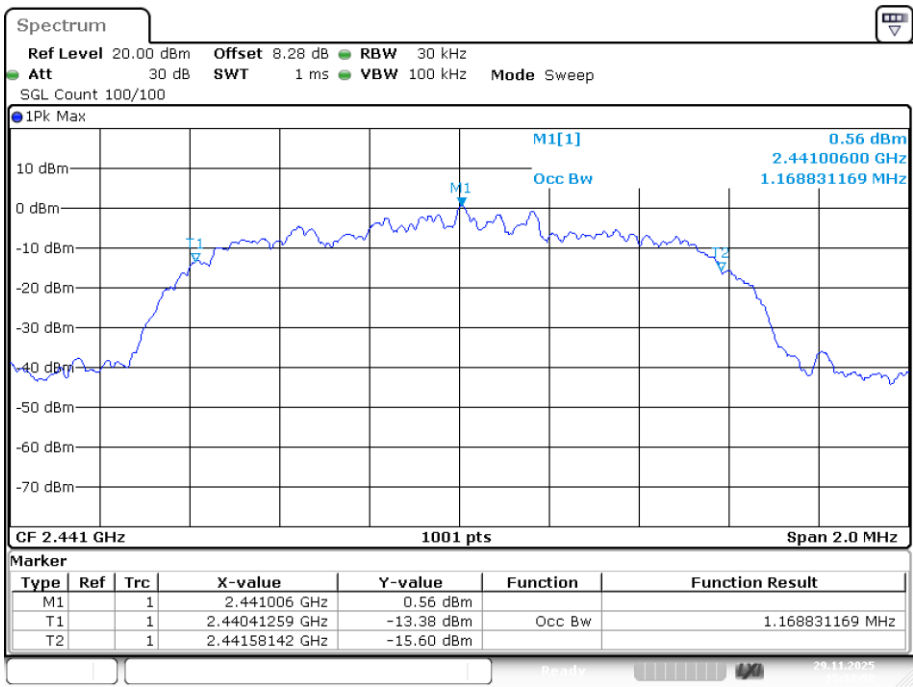
Date: 29.NOV.2025 15:22:43

OBW NVNT 2-DH5 2402MHz Ant1



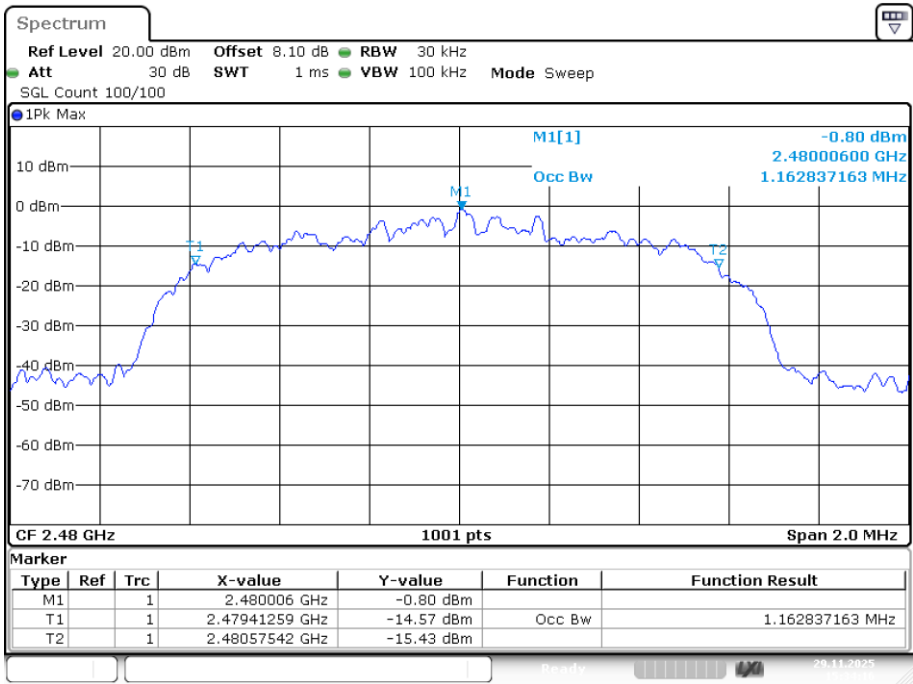
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OBW NVNT 2-DH5 2441MHz Ant1



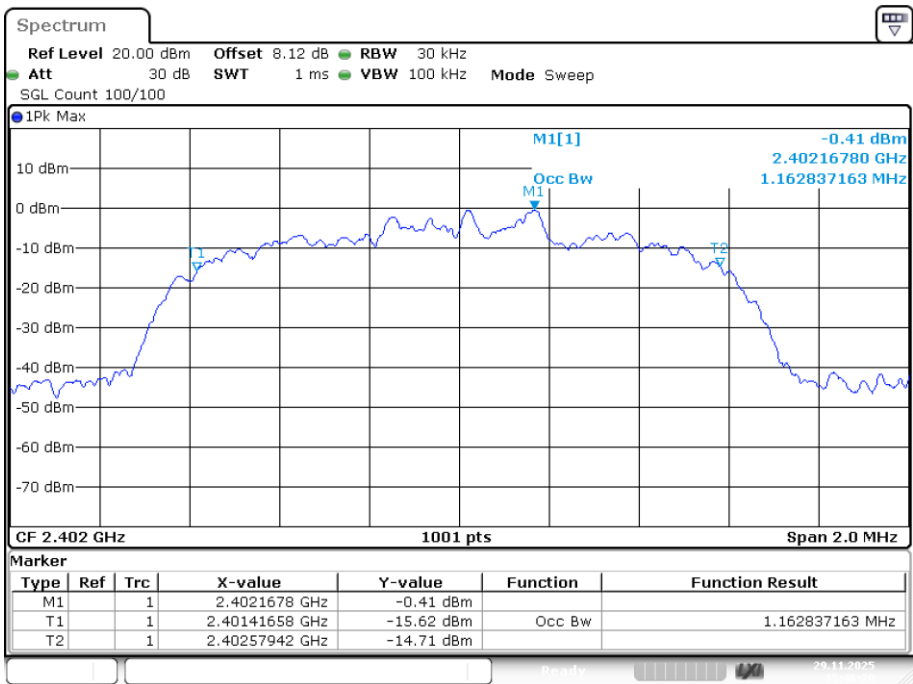
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OBW NVNT 2-DH5 2480MHz Ant1



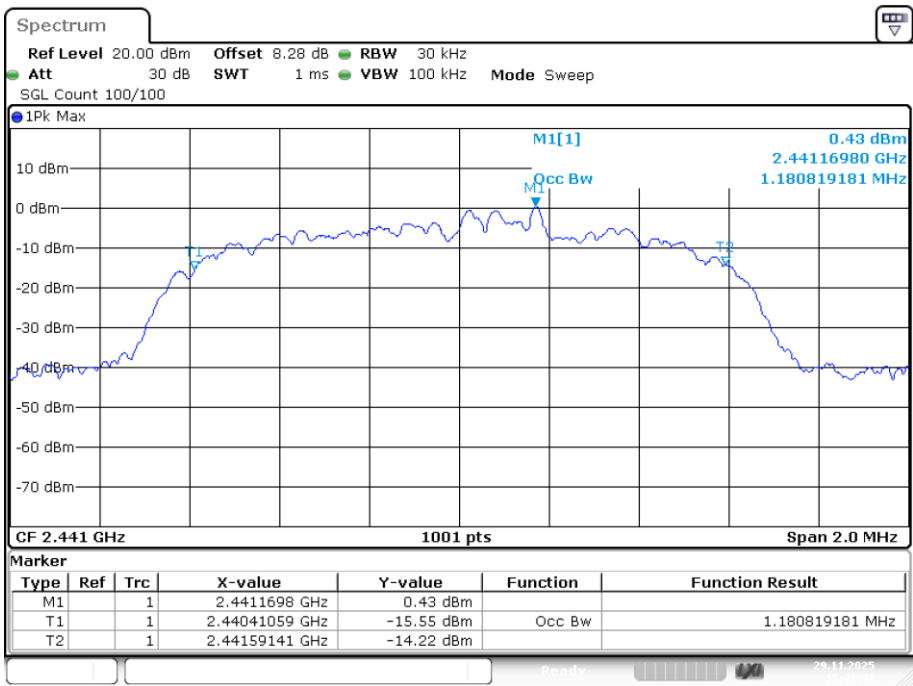
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OBW NVNT 3-DH5 2402MHz Ant1



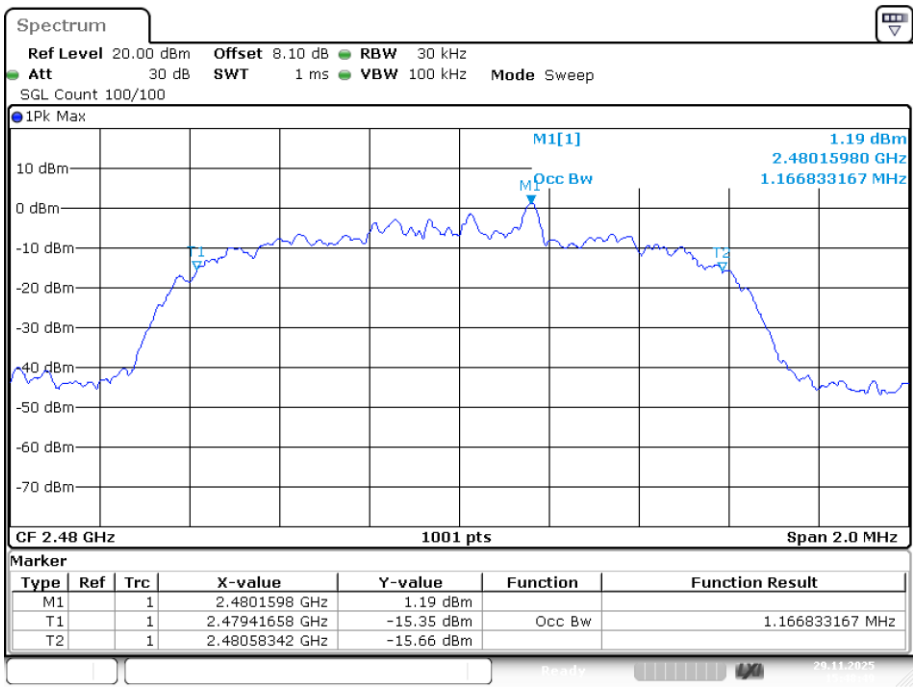
Date: 29.NOV.2025 15:46:19

OBW NVNT 3-DH5 2441MHz Ant1



Date: 29.NOV.2025 15:47:41

OBW NVNT 3-DH5 2480MHz Ant1



Date: 29.NOV.2025 15:48:49

5. CARRIER FREQUENCY SEPARATION

5.1. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

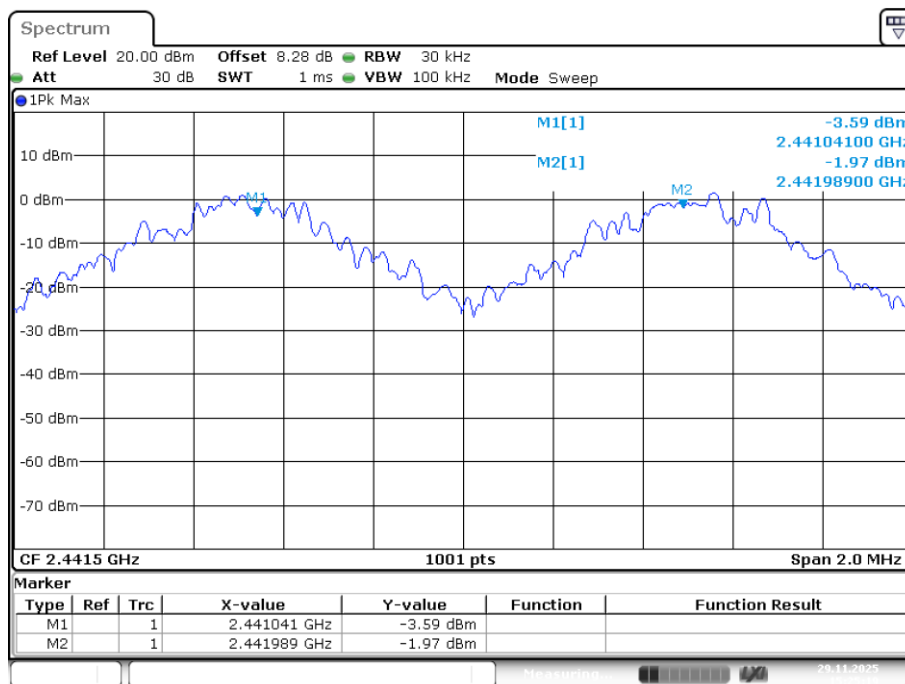
5.2. Test Procedure

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The carrier frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW.

5.3. Test Result

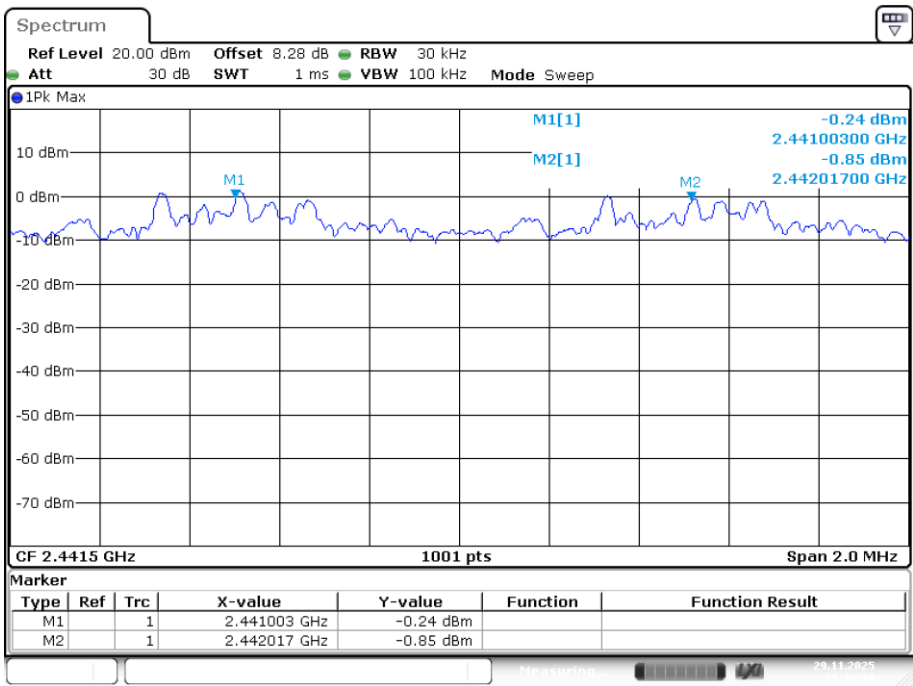
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2441.041	2441.989	0.948	0.854	Pass
NVNT	2-DH5	Ant1	2441.003	2442.017	1.014	0.843	Pass
NVNT	3-DH5	Ant1	2440.977	2441.982	1.005	0.865	Pass

CFS NVNT 1-DH5 2441MHz Ant1



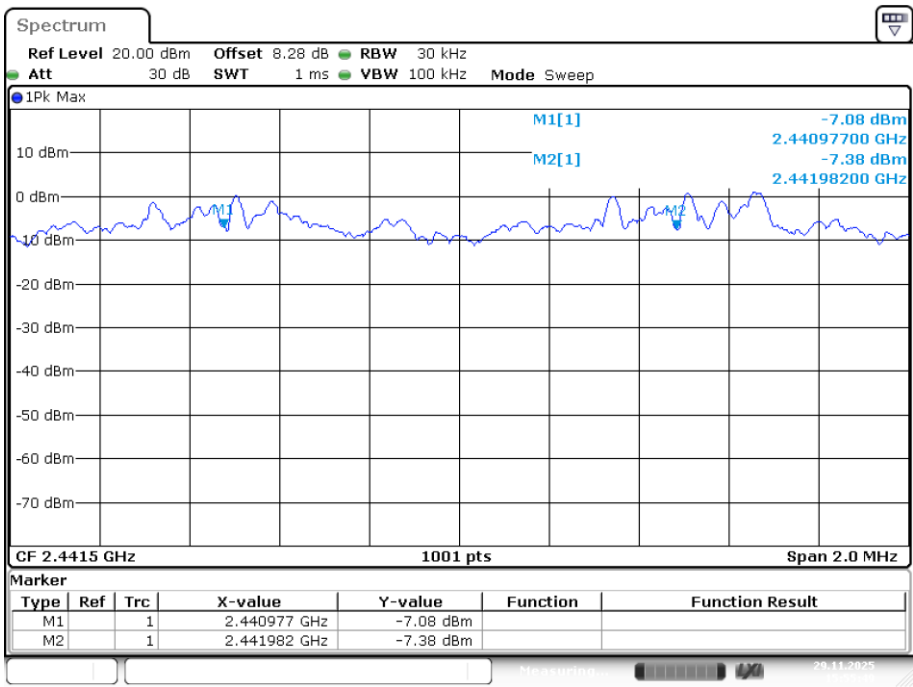
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CFS NVNT 2-DH5 2441MHz Ant1



Date: 29.NOV.2025 15:38:20

CFS NVNT 3-DH5 2441MHz Ant1



Date: 29.NOV.2025 15:55:49

6. NUMBER OF HOPPING CHANNEL

6.1.Limit

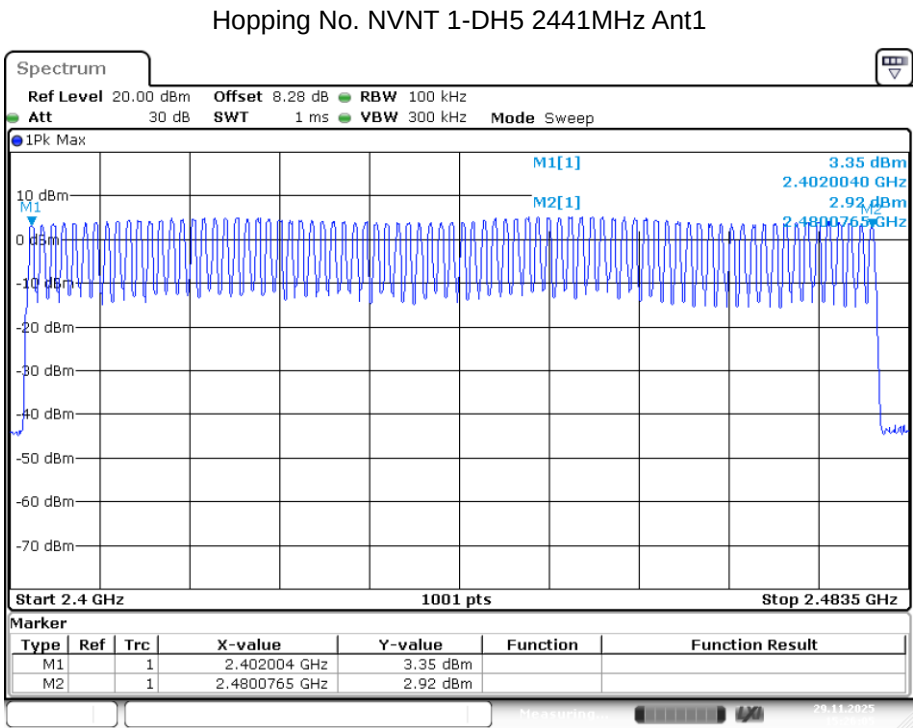
Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

6.2.Test Procedure

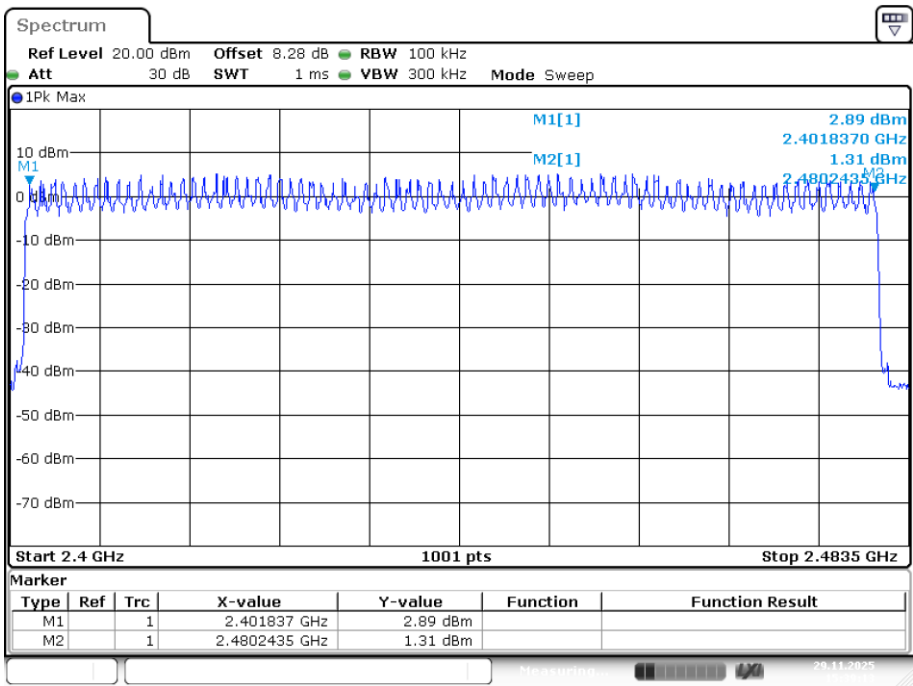
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The number of hopping channel was measured by spectrum analyzer with 100kHz RBW and 300KHz VBW.

6.3.Test Result

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

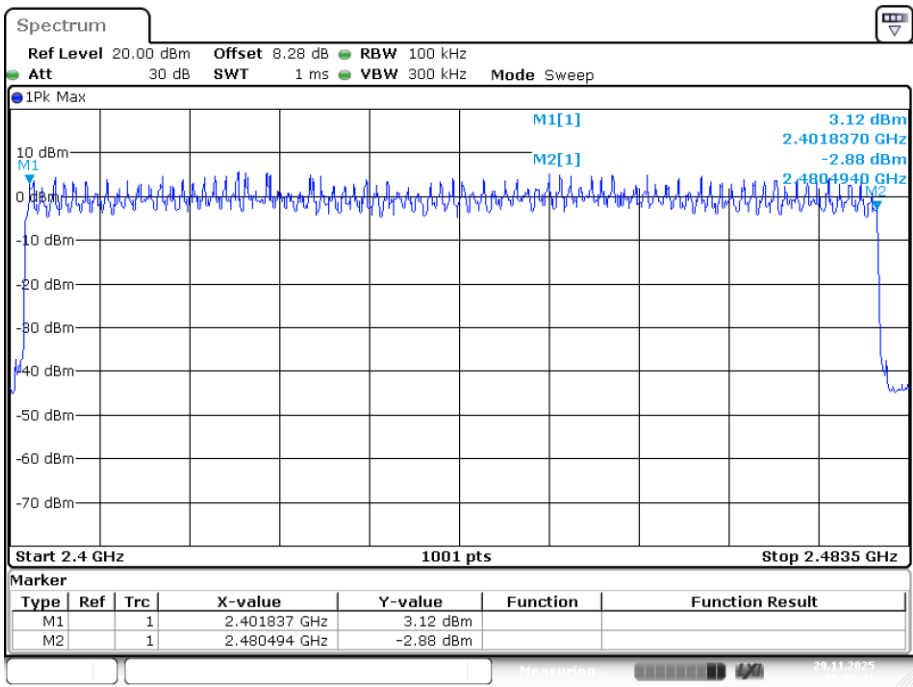


Hopping No. NVNT 2-DH5 2441MHz Ant1



Date: 29.NOV.2025 15:39:13

Hopping No. NVNT 3-DH5 2441MHz Ant1



Date: 29.NOV.2025 15:52:41

7. DWELL TIME

7.1. Test limit

Please refer section 15.247

According to §15.247(a)(1)(iii), Frequency hopping systems operating in the 2400MHz-2483.5 MHz. The average time of occupancy on any frequency shall not greater than 0.4 s within period of 0.4 seconds multiplied by the number of hopping channel employed.

7.2. Test Procedure

7.2.1. Place the EUT on the table and set it in transmitting mode.

7.2.2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

7.2.3. Set center frequency of spectrum analyzer = operating frequency.

7.2.4. Set the spectrum analyzer as RBW=1MHz, VBW=3MHz, Span = 0Hz, Sweep = auto.

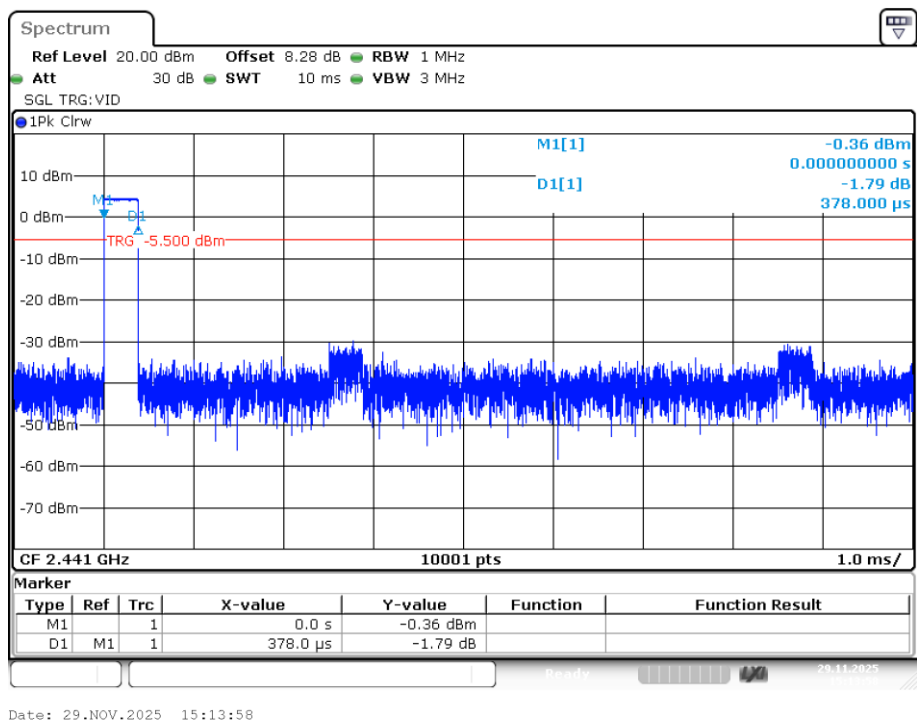
7.2.5. Repeat above procedures until all frequency measured were complete.

7.3. Test Result

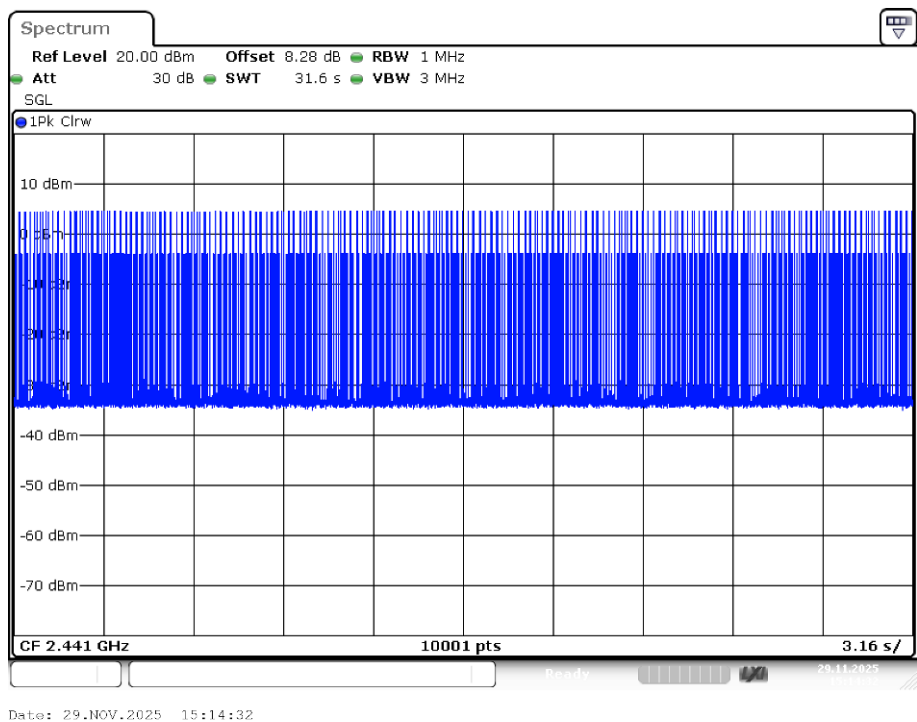
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.378	119.07	315	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.634	259.806	159	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.882	319.902	111	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.385	121.275	315	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.637	255.372	156	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.882	308.374	107	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.385	120.89	314	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.635	255.06	156	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.886	303.03	105	31600	400	Pass

Note: Total Dwell Time= Pulse Time* Burst Count

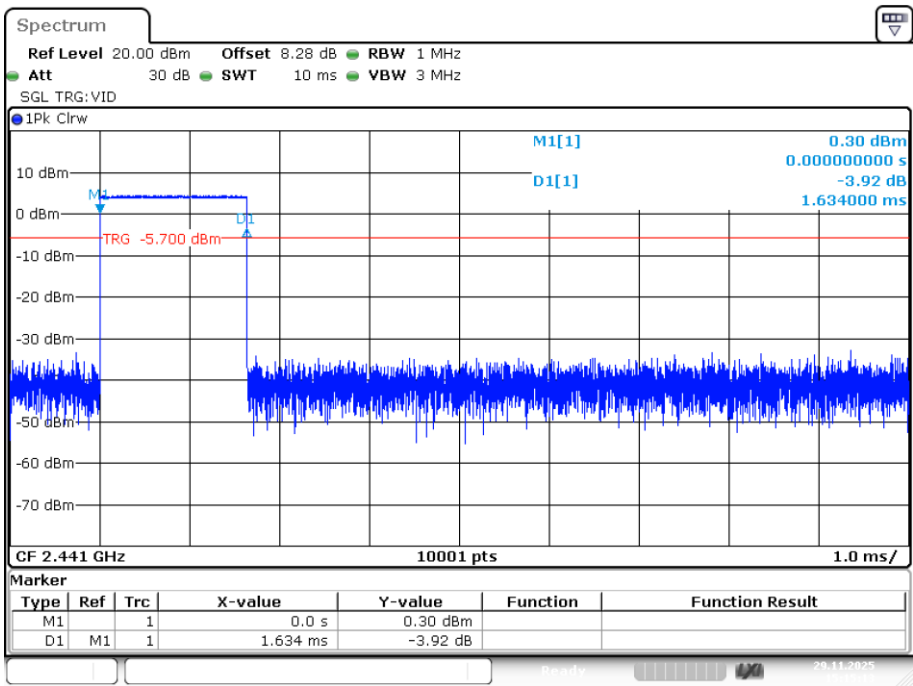
Dwell NVNT 1-DH1 2441MHz Ant1 One Burst



Dwell NVNT 1-DH1 2441MHz Ant1 Accumulated

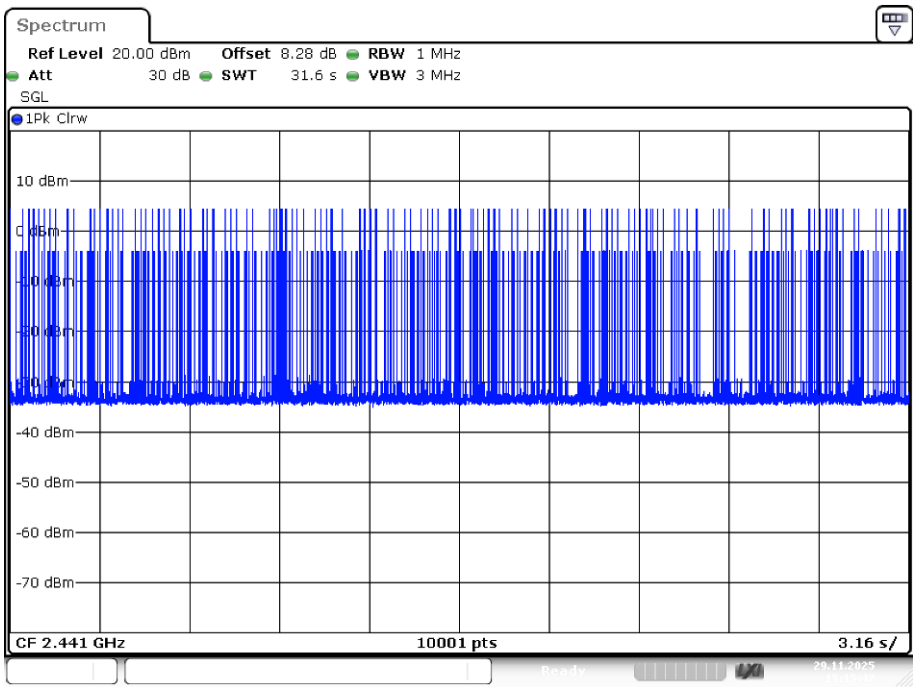


Dwell NVNT 1-DH3 2441MHz Ant1 One Burst



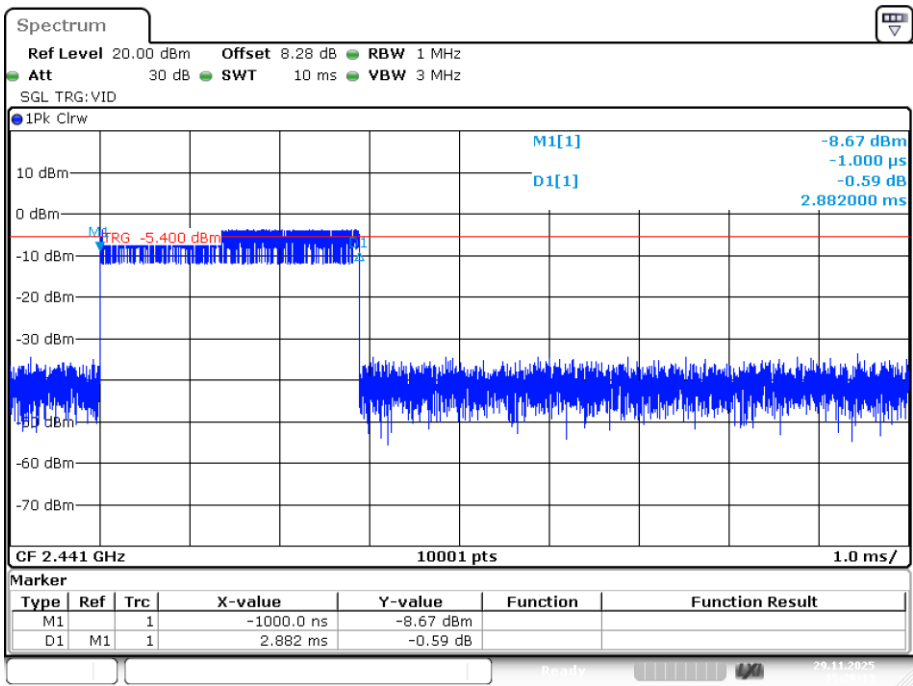
Date: 29.NOV.2025 15:15:13

Dwell NVNT 1-DH3 2441MHz Ant1 Accumulated



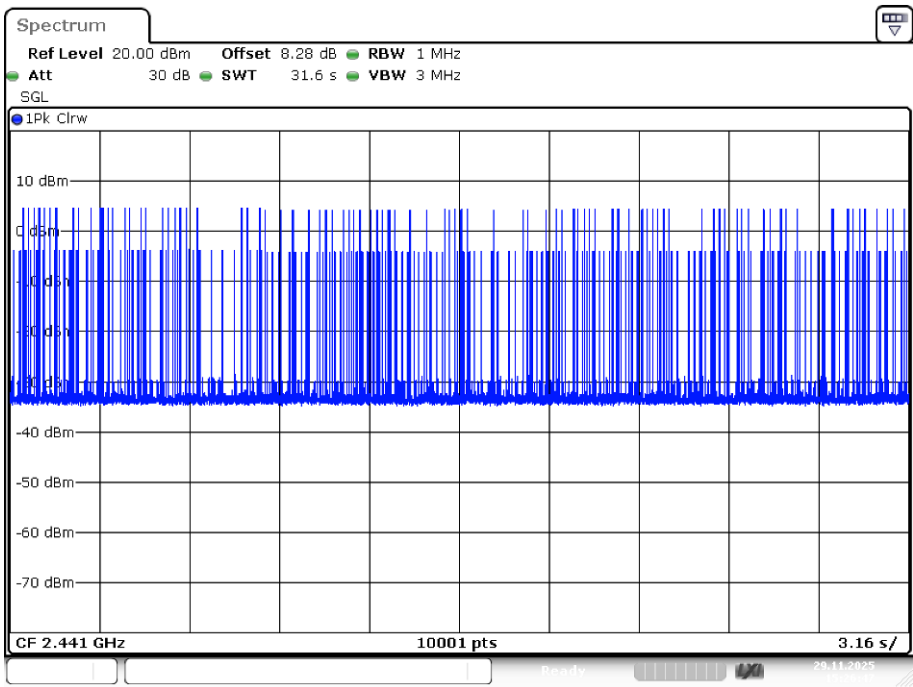
Date: 29.NOV.2025 15:15:47

Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



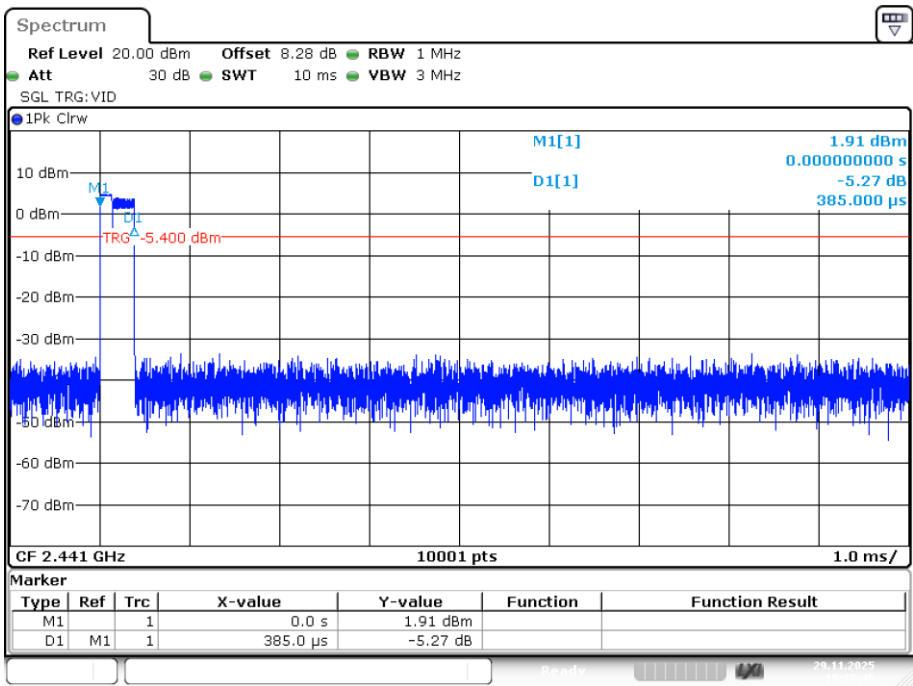
Date: 29.NOV.2025 15:26:12

Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



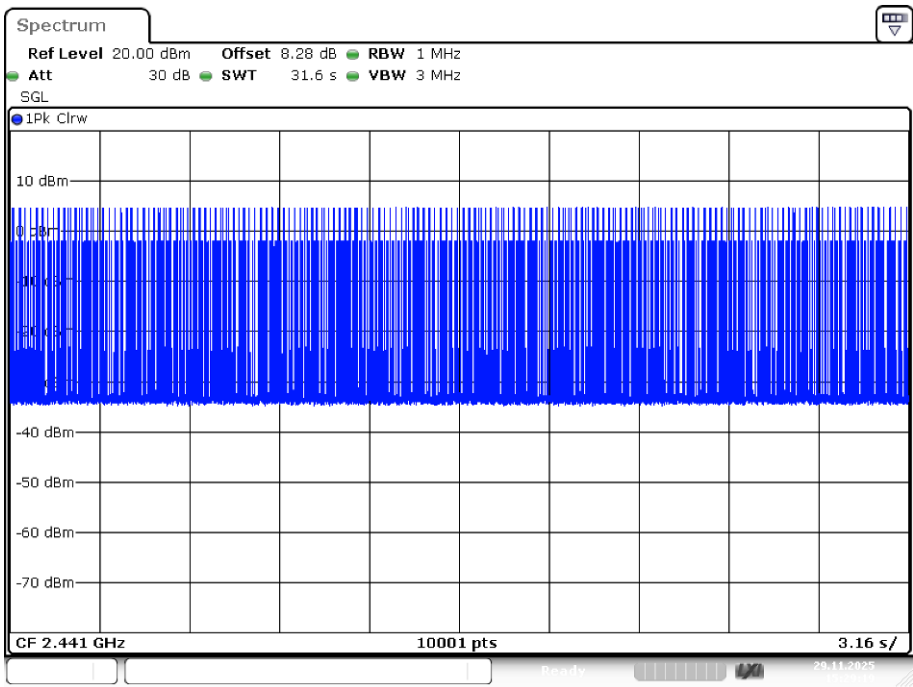
Date: 29.NOV.2025 15:26:47

Dwell NVNT 2-DH1 2441MHz Ant1 One Burst



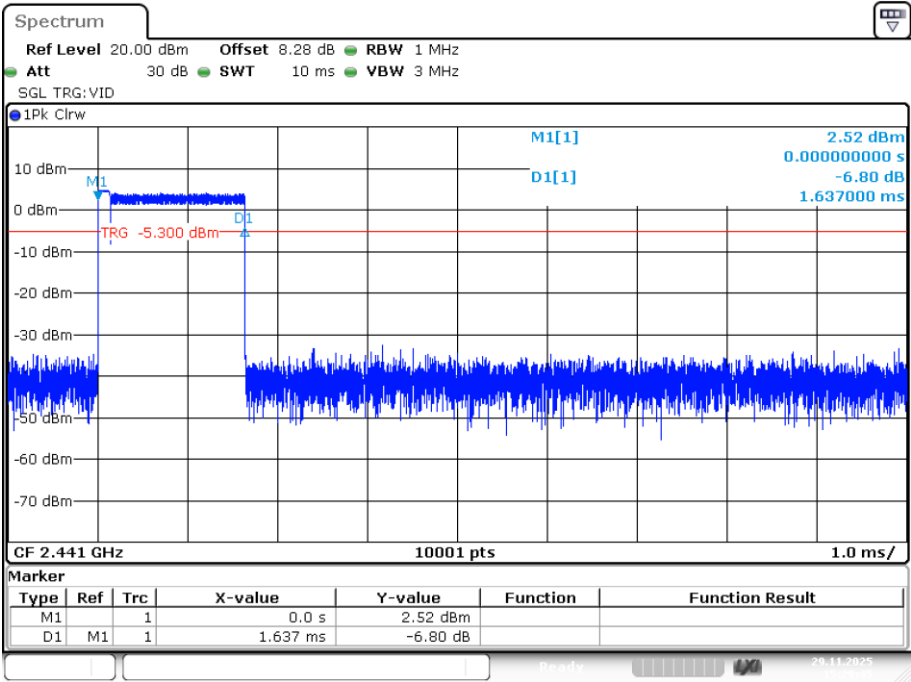
Date: 29.NOV.2025 15:28:44

Dwell NVNT 2-DH1 2441MHz Ant1 Accumulated



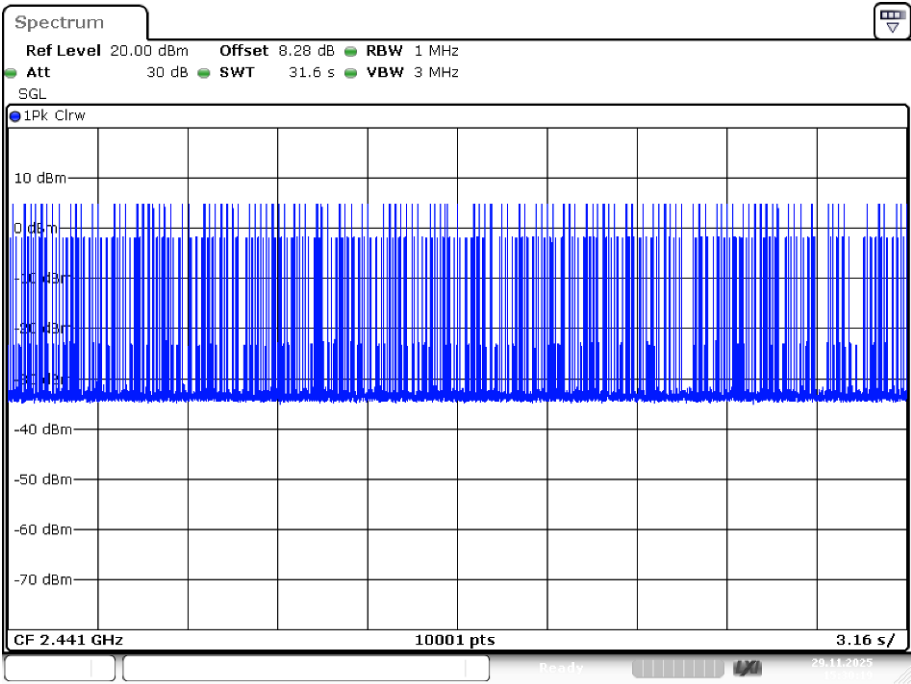
Date: 29.NOV.2025 15:29:19

Dwell NVNT 2-DH3 2441MHz Ant1 One Burst



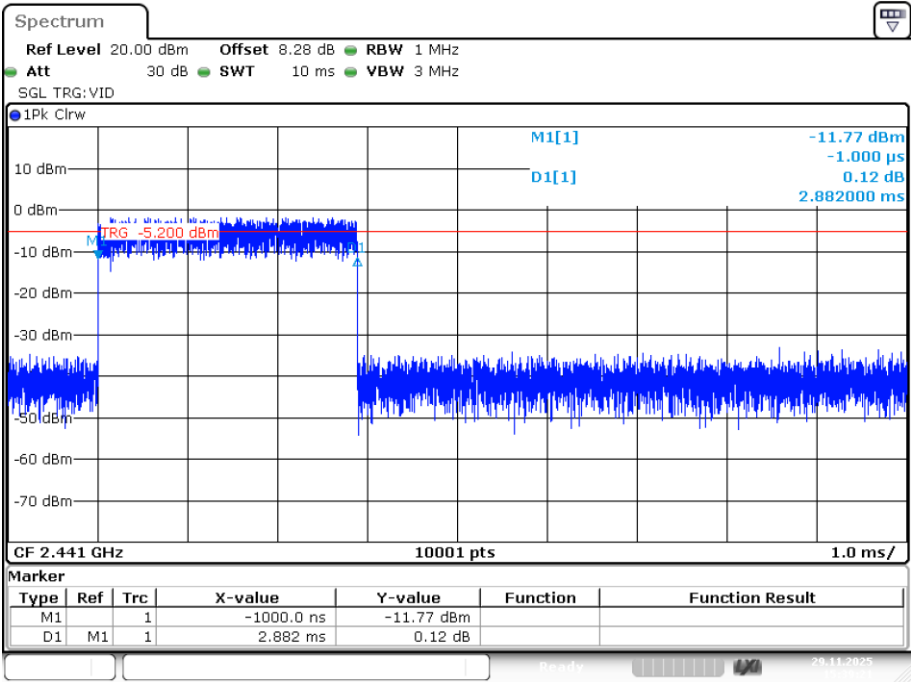
Date: 29.NOV.2025 15:29:45

Dwell NVNT 2-DH3 2441MHz Ant1 Accumulated



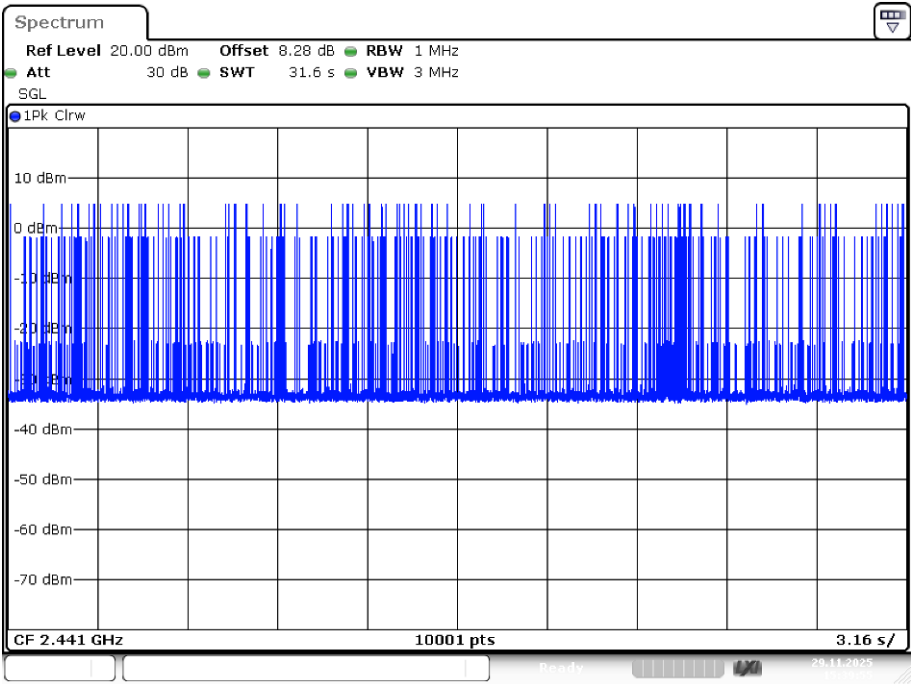
Date: 29.NOV.2025 15:30:19

Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



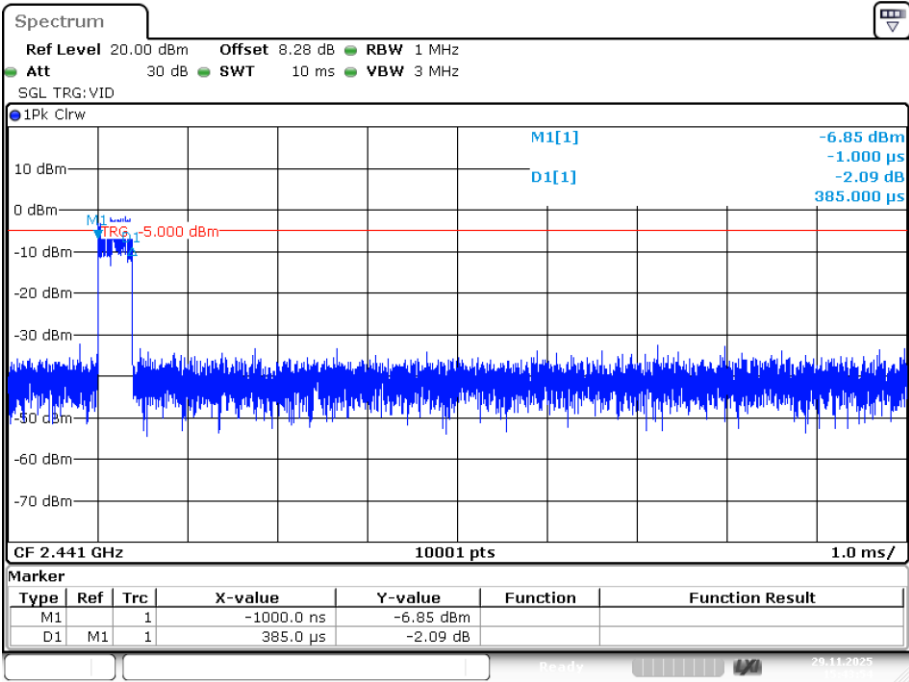
Date: 29.NOV.2025 15:39:21

Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated



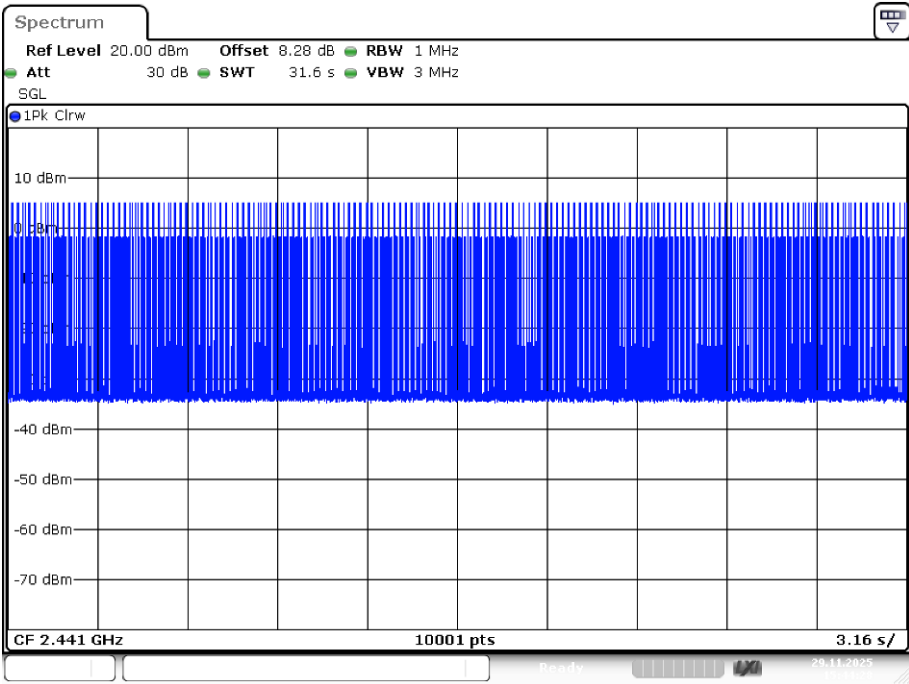
Date: 29.NOV.2025 15:39:55

Dwell NVNT 3-DH1 2441MHz Ant1 One Burst



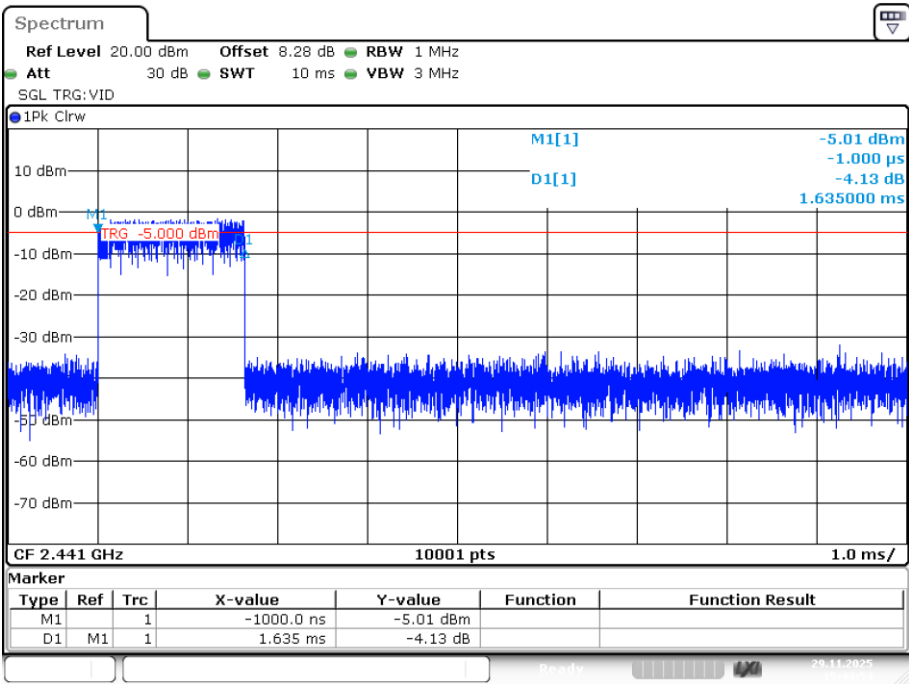
Date: 29.NOV.2025 15:43:54

Dwell NVNT 3-DH1 2441MHz Ant1 Accumulated



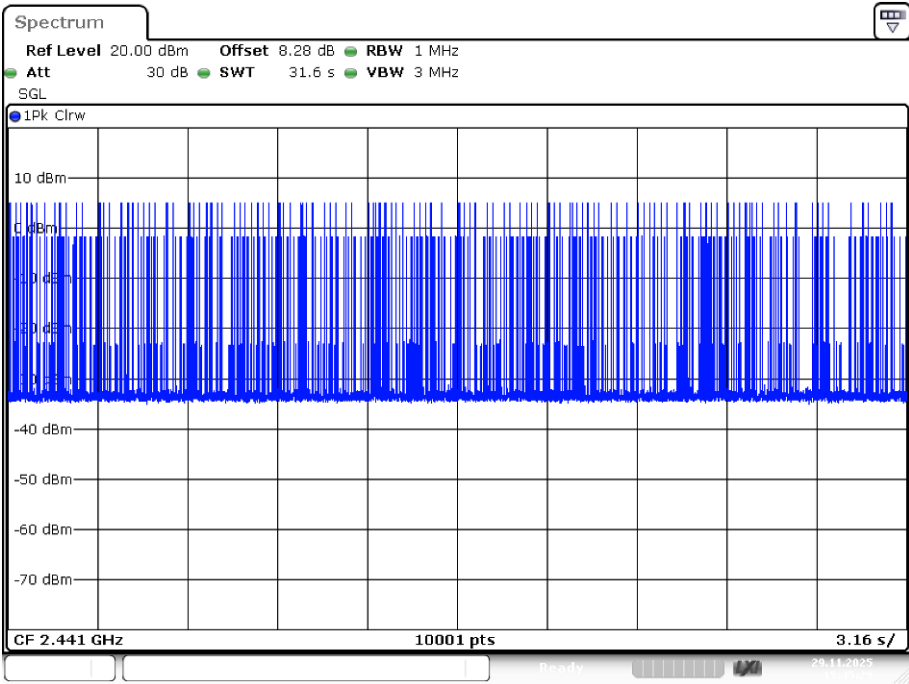
Date: 29.NOV.2025 15:44:28

Dwell NVNT 3-DH3 2441MHz Ant1 One Burst



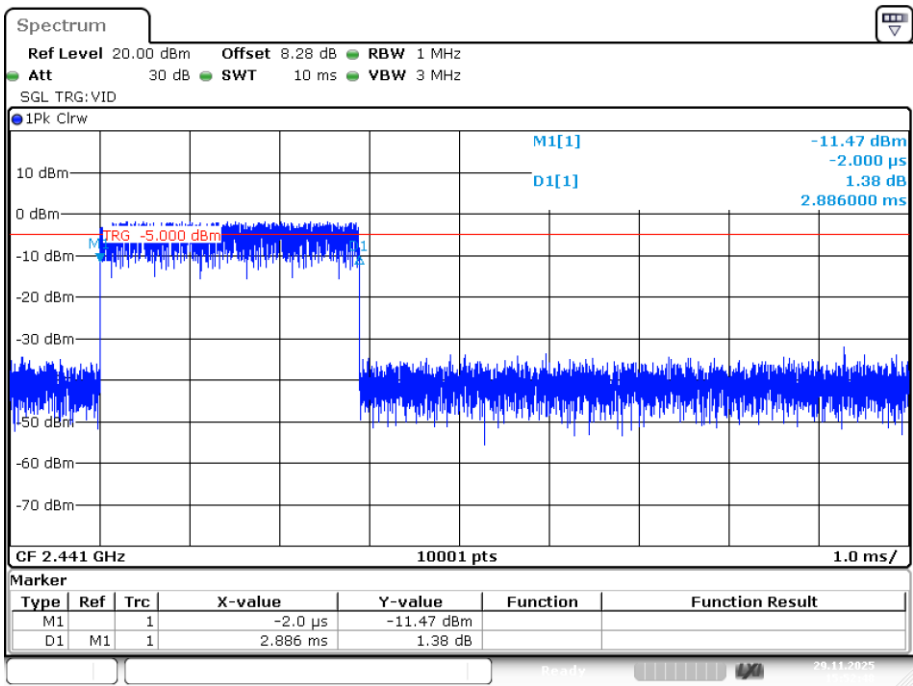
Date: 29.NOV.2025 15:44:55

Dwell NVNT 3-DH3 2441MHz Ant1 Accumulated



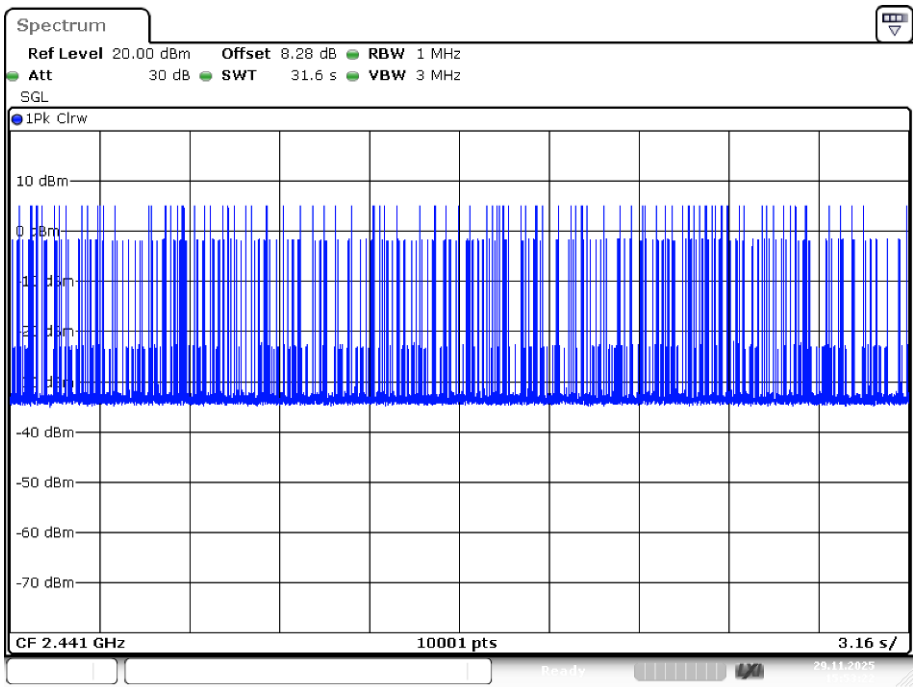
Date: 29.NOV.2025 15:45:29

Dwell NVNT 3-DH5 2441MHz Ant1 One Burst



Date: 29.NOV.2025 15:52:48

Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated



Date: 29.NOV.2025 15:53:22

8. RADIATED EMISSIONS

8.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

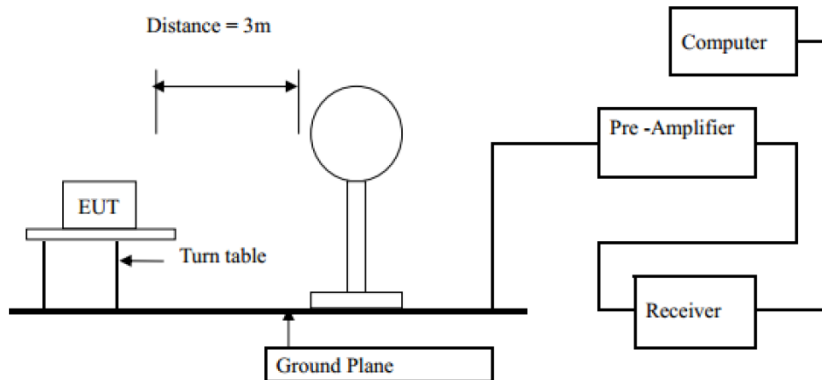
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

15.209 Limit

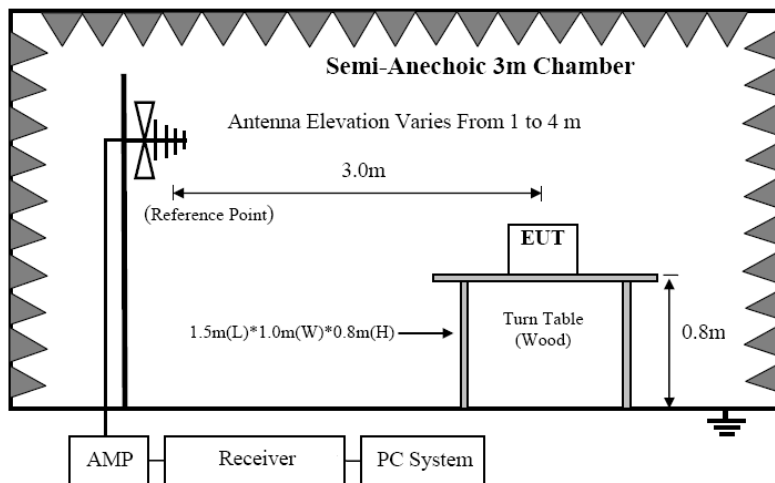
FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
0.009-0.490	300	2400/F(KHz)	/
0.490-1.705	30	24000/F(KHz)	/
1.705-30	30	30	29.5
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

8.2. Block Diagram of Test setup

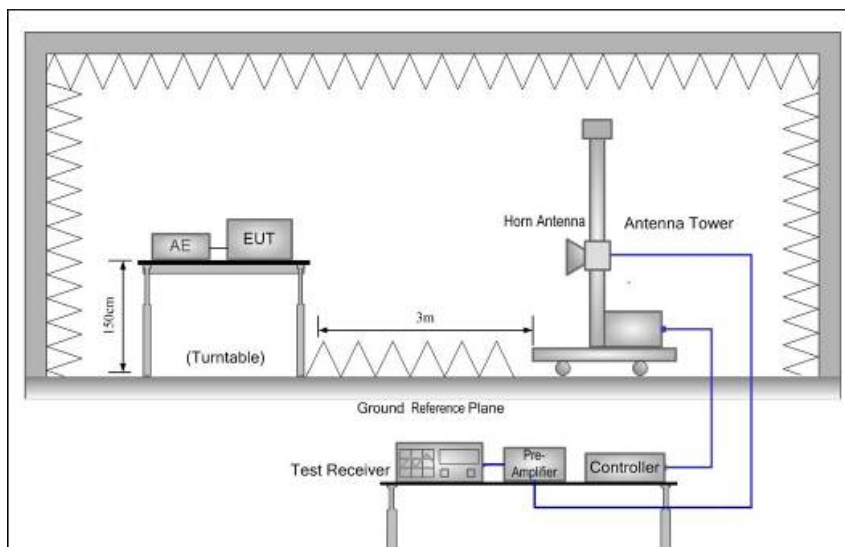
8.2.1 In 3m Anechoic Chamber Test Setup Diagram for below 30MHz



8.2.2 In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



8.2.3 In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

8.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and simulator as shown in section 1.4 and 6.1
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
 - (a) Change work frequency or channel of device if practicable.
 - (b) Change modulation type of device if practicable.
 - (c) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2020on Radiated Emission test.
- (6) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure.

8.4. Test Result

We have scanned the 10th harmonic from 9KHz to the EUT's highest frequency.
Detailed information please see the following page.

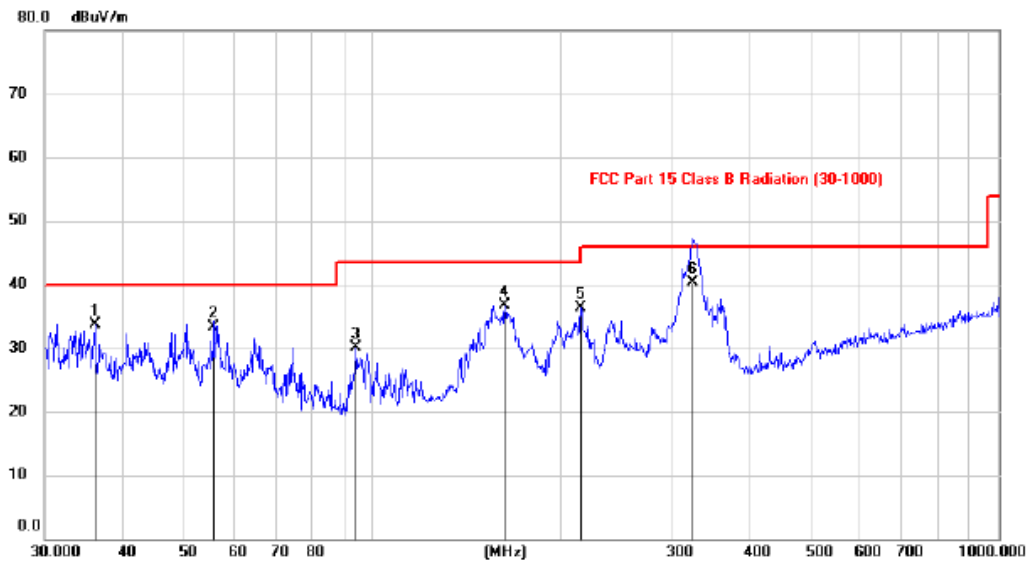
From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

From 30MHz to 1000MHz: Conclusion: PASS

ADP-60D24

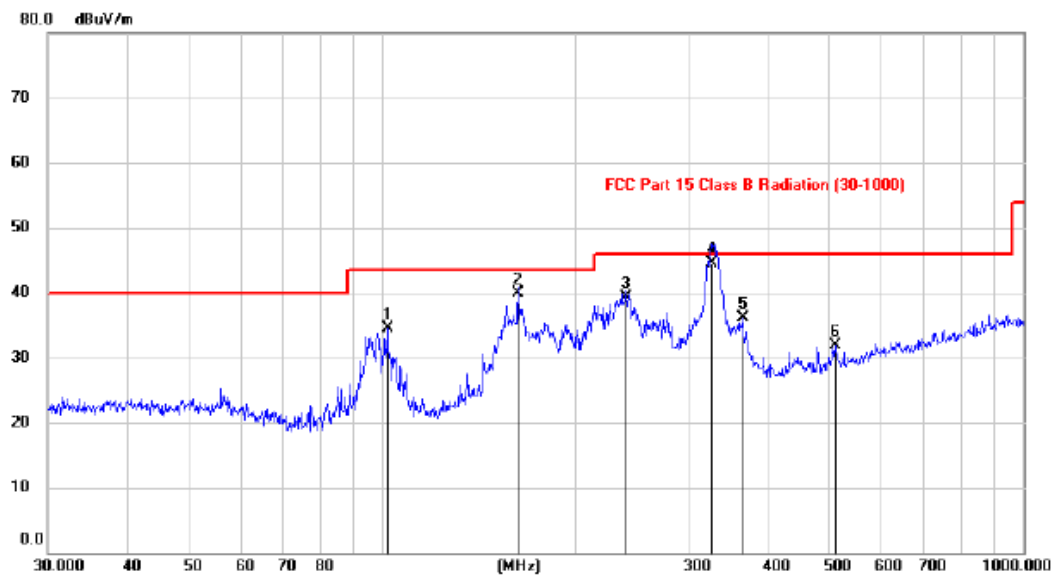
Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	dBuV	Factor	ment			Height	Degree	
					dBuV/m	dBuV/m		cm	degree	Comment
1		36.0091	19.92	13.75	33.67	40.00	-6.33	peak		
2		55.8961	19.82	13.57	33.39	40.00	-6.61	QP		
3		94.3731	19.65	10.42	30.07	43.50	-13.43	peak		
4		162.7437	21.90	14.78	36.68	43.50	-6.82	peak		
5		216.0240	24.82	11.47	36.29	46.00	-9.71	peak		
6	*	324.6458	25.52	14.72	40.24	46.00	-5.76	QP		

Note: 1. *: Maximum data; x: Over limit; !: over margin.

2. Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Horizontal:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		101.8822	23.43	11.03	34.46	43.50	-9.04	peak		
2		162.7437	25.14	14.78	39.92	43.50	-3.58	QP		
3		239.5950	26.69	12.54	39.23	46.00	-6.77	QP		
4	*	325.8623	29.79	14.74	44.53	46.00	-1.47	QP		
5		364.3873	20.58	15.52	36.10	46.00	-9.90	peak		
6		509.9244	13.57	18.38	31.95	46.00	-14.05	peak		

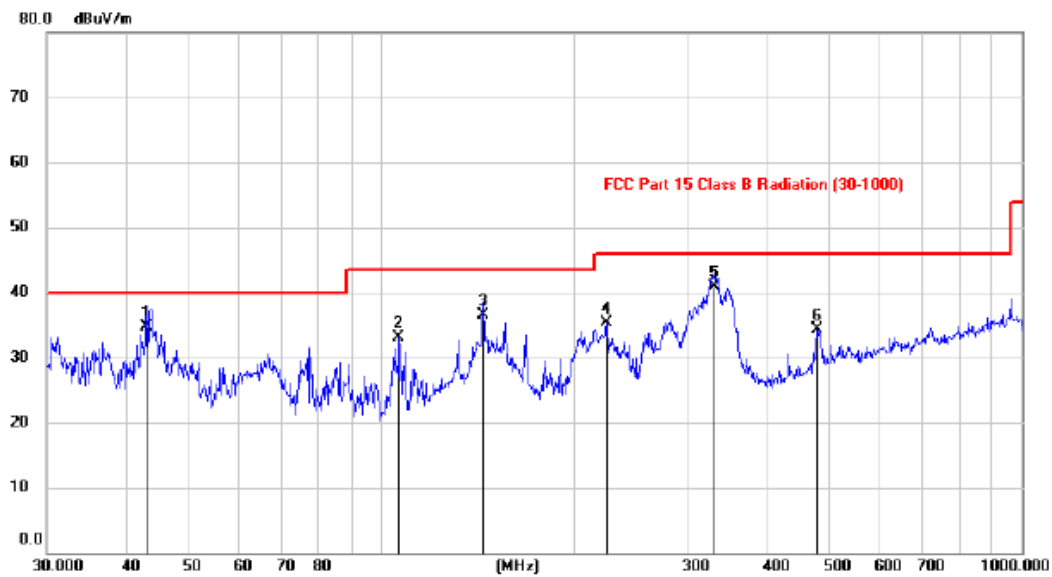
Note: 1. *: Maximum data; x: Over limit; !: over margin.

2. Measurement = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Cable Loss.

Remark: All modes have been tested, and only worst data of GFSK (2402MHz) was listed in this report.

2102M-120300E

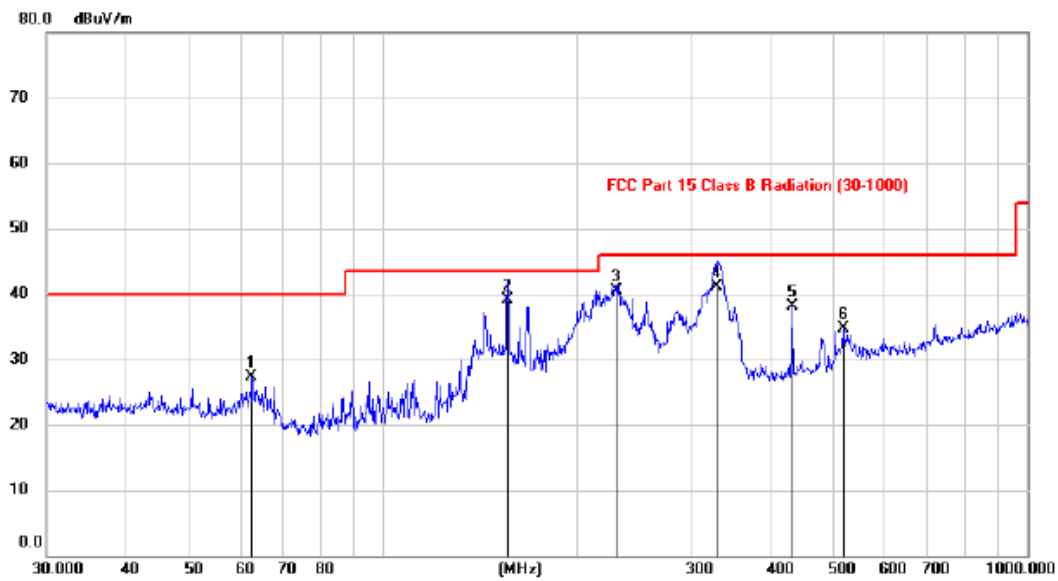
Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		42.9550	20.57	14.23	34.80	40.00	-5.20	QP		
2		106.6589	21.66	11.50	33.16	43.50	-10.34	peak		
3		144.1156	21.95	14.62	36.57	43.50	-6.93	QP		
4		224.9396	23.36	12.02	35.38	46.00	-10.62	peak		
5	*	331.3160	26.09	14.85	40.94	46.00	-5.06	QP		
6		479.9663	16.44	17.95	34.39	46.00	-11.61	peak		

Note: 1. *: Maximum data; x: Over limit; !: over margin.

2. Measurement = Reading Level + Correct Factor; Correct Factor = Antenna Factor + Cable Loss.

Horizontal:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		62.6360	14.69	12.65	27.34	40.00	-12.66	peak		
2	*	156.2750	23.96	15.05	39.01	43.50	-4.49	QP		
3		229.5612	28.20	12.28	40.48	46.00	-5.52	QP		
4		330.0791	26.28	14.82	41.10	46.00	-4.90	QP		
5		431.7880	20.97	17.12	38.09	46.00	-7.91	peak		
6		517.6109	16.07	18.54	34.61	46.00	-11.39	peak		

Note:1. *:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Remark: All modes have been tested, and only worst data of GFSK (2402MHz) was listed in this report.

From 1G-25GHz

Test Mode: GFSK TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4804	47.26	V	33.95	10.18	34.26	57.13	74	-16.87	PK
4804	36.64	V	33.95	10.18	34.26	46.51	54	-7.49	AV
7206	/	/	/	/	/	/	/	/	/
9608	/	/	/	/	/	/	/	/	/
4804	46.01	H	33.95	10.18	34.26	55.88	74	-18.12	PK
4804	37.83	H	33.95	10.18	34.26	47.70	54	-6.30	AV
7206	/	/	/	/	/	/	/	/	/
9608	/	/	/	/	/	/	/	/	/
Test Mode: GFSK TX Mid									
4882	43.87	V	33.93	10.2	34.29	53.71	74	-20.29	PK
4882	33.09	V	33.93	10.2	34.29	42.93	54	-11.07	AV
7323	/	/	/	/	/	/	/	/	/
9764	/	/	/	/	/	/	/	/	/
4882	43.41	H	33.93	10.2	34.29	53.25	74	-20.75	PK
4882	36.48	H	33.93	10.2	34.29	46.32	54	-7.68	AV
7323	/	/	/	/	/	/	/	/	/
9764	/	/	/	/	/	/	/	/	/
Test Mode: GFSK TX High									
4960	45.55	V	33.93	10.2	34.29	55.39	74	-18.61	PK
4960	33.39	V	33.93	10.2	34.29	43.23	54	-10.77	AV
7440	/	/	/	/	/	/	/	/	/
9920	/	/	/	/	/	/	/	/	/
4960	44.71	H	33.93	10.2	34.29	54.55	74	-19.45	PK
4960	34.96	H	33.93	10.2	34.29	44.80	54	-9.20	AV
7440	/	/	/	/	/	/	/	/	/
9920	/	/	/	/	/	/	/	/	/

Note:

1, Result = Read level + Antenna factor + cable loss-Amp factor

2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

Note:

1, Result = Read level + Antenna factor + cable loss-Amp factor

2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

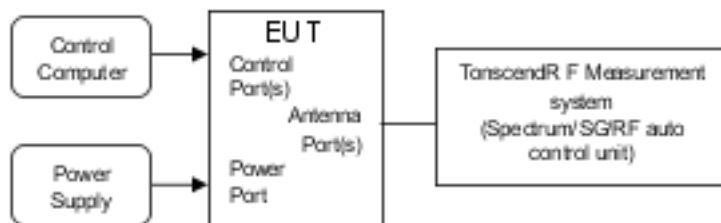
Note:

1, Result = Read level + Antenna factor + cable loss-Amp factor

2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

9. RF CONDUCTED SPURIOUS EMISSIONS

9.1. Block diagram of test setup



9.2. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB.

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

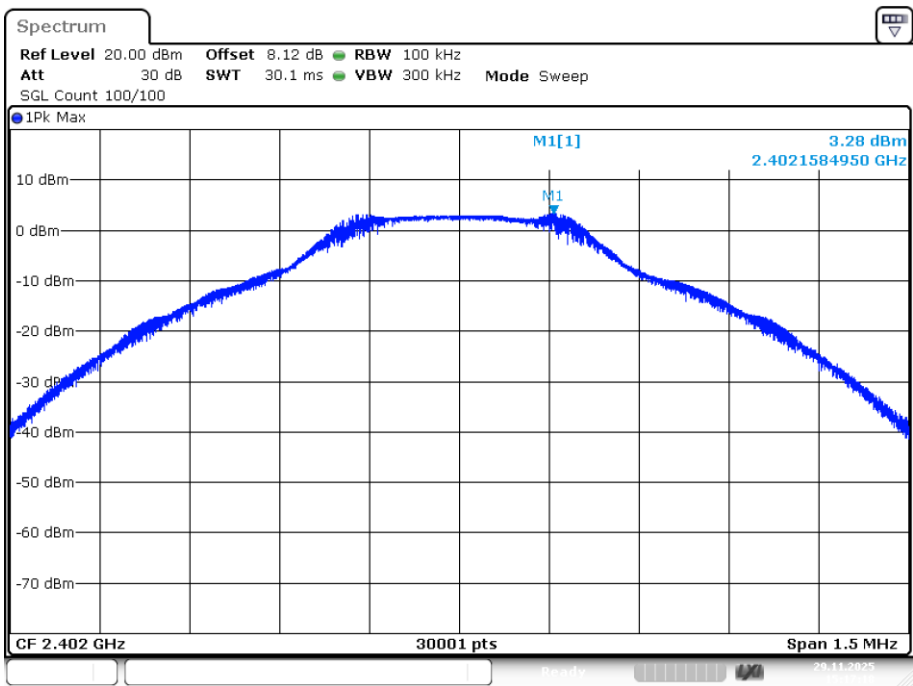
9.3. Test procedure

The test receiver set RBW = 100kHz, VBW $\geq$ 3*RBW =300kHz, sweep time set auto

9.4. Test result

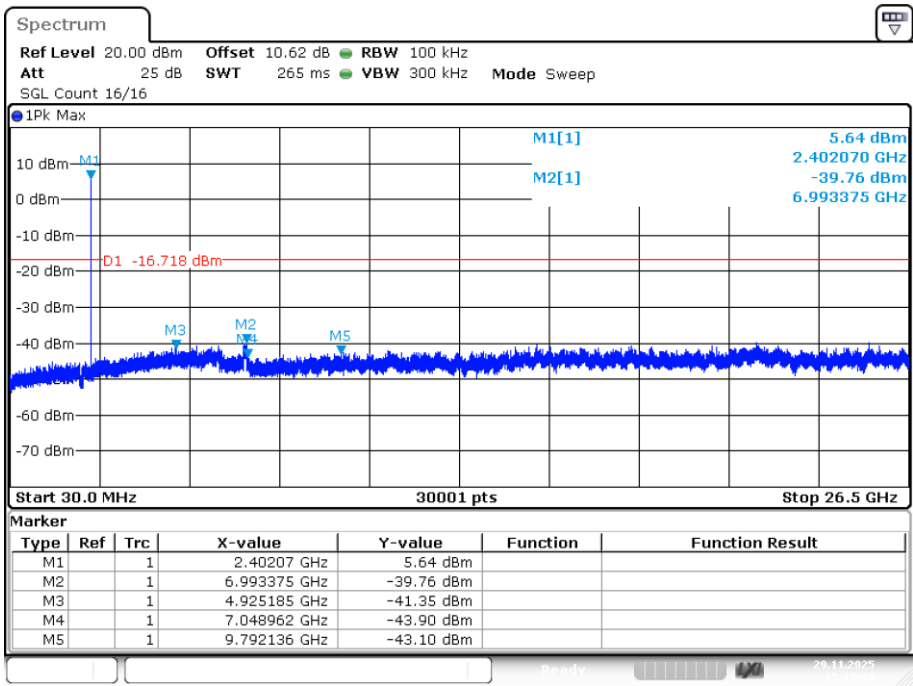
PASS

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



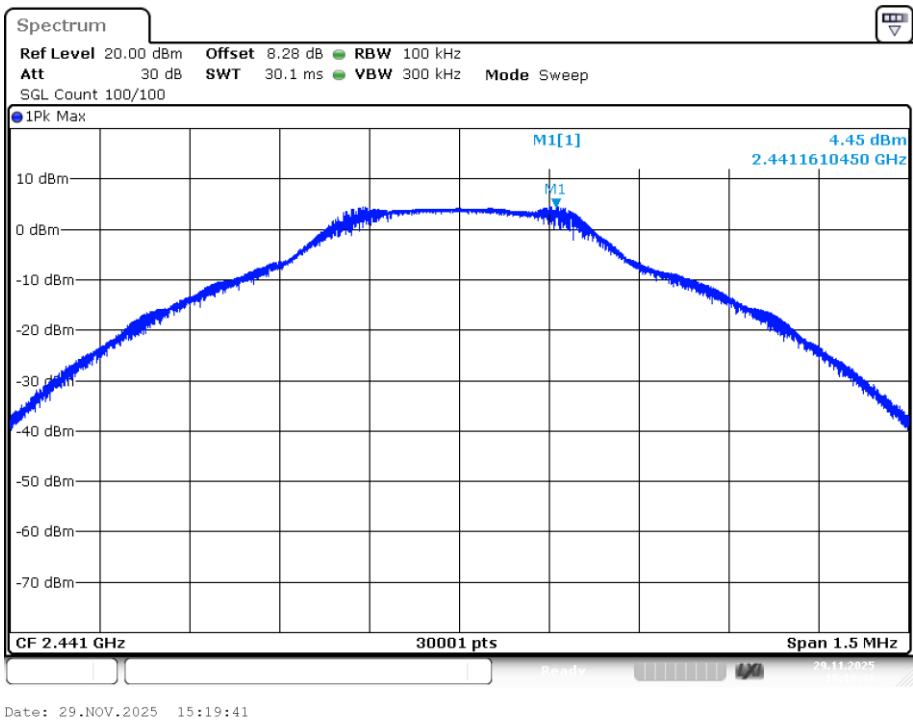
Date: 29.NOV.2025 15:17:17

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

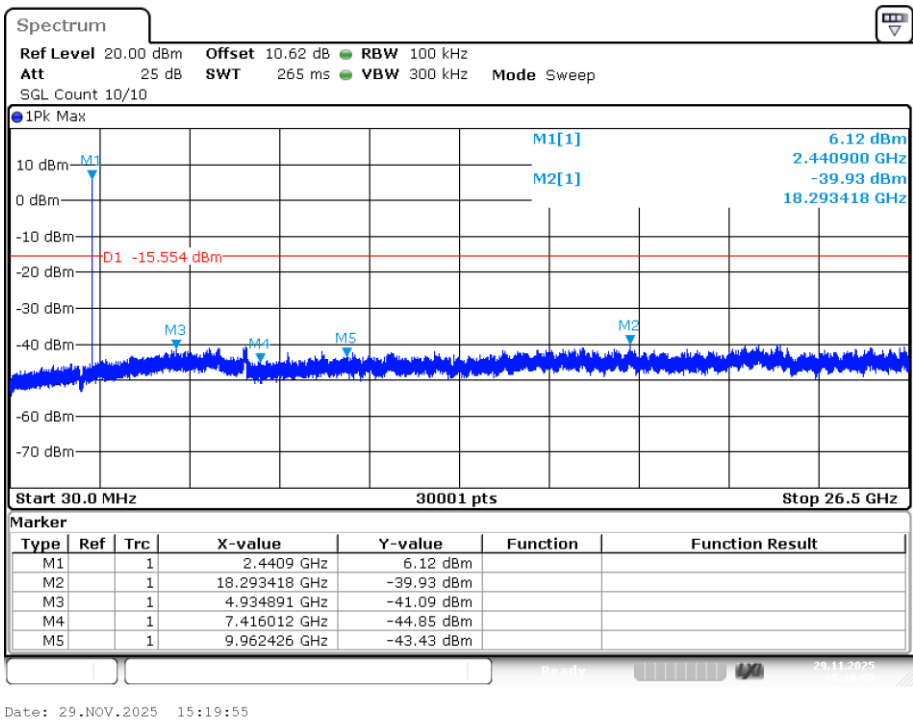


Date: 29.NOV.2025 15:17:37

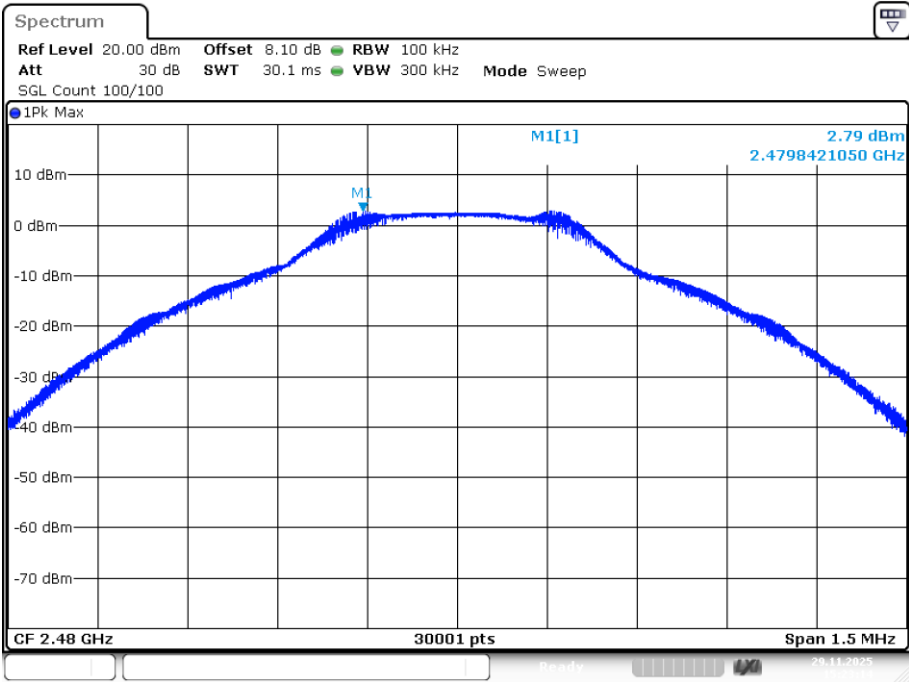
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

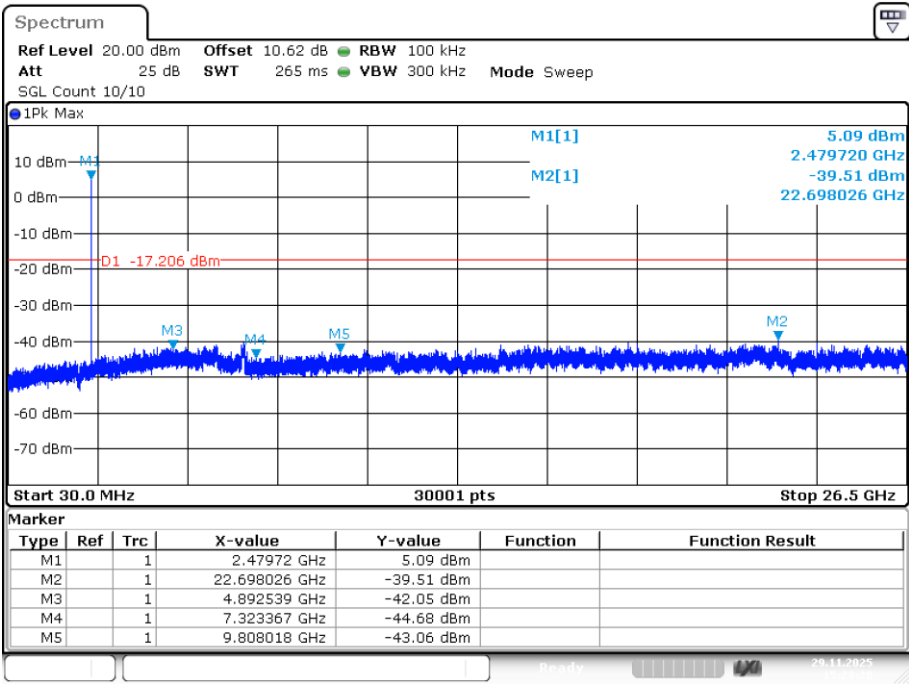


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



Date: 29.NOV.2025 15:23:13

Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



Date: 29.NOV.2025 15:23:27