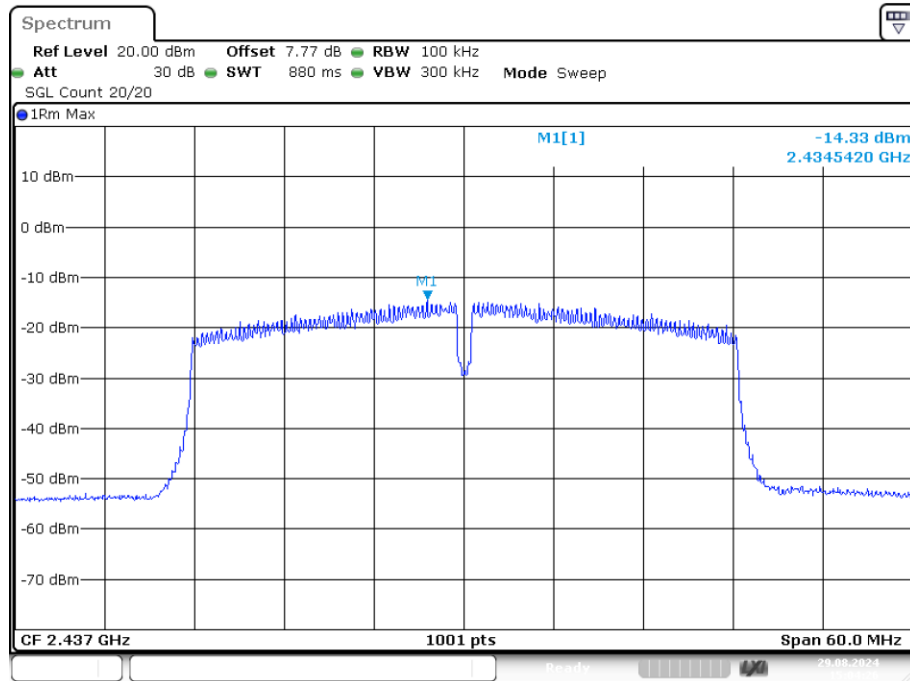
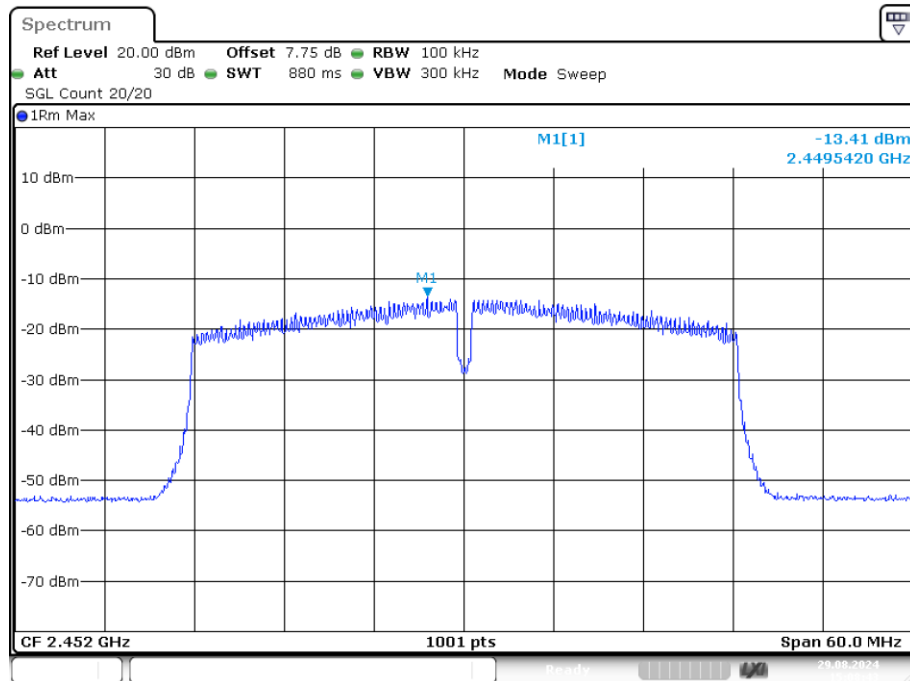




Date: 29.AUG.2024 15:04:26

PSD NVNT n40 2452MHz Ant2



Date: 29.AUG.2024 15:08:43

7. BANDWIDTH

7.1. Test limits

Please refer FCC PART 15: 15.247

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500 kHz.

7.2. Test Procedure

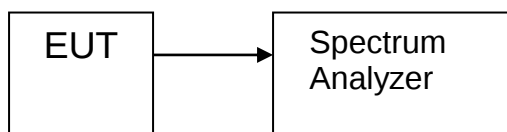
Details see the KDB558074 D01 Meas Guidance v05r02

a) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

b) The test receiver set RBW =1-5%BW, VBW≥3*RBW, Sweep time set auto, detail see the test plot for 99% Bandwidth.

c) The test receiver set RBW = 100kHz, VBW≥3*RBW =300kHz, Sweep time set auto, detail see the test plot for 6dB Bandwidth.

7.3. Test Setup

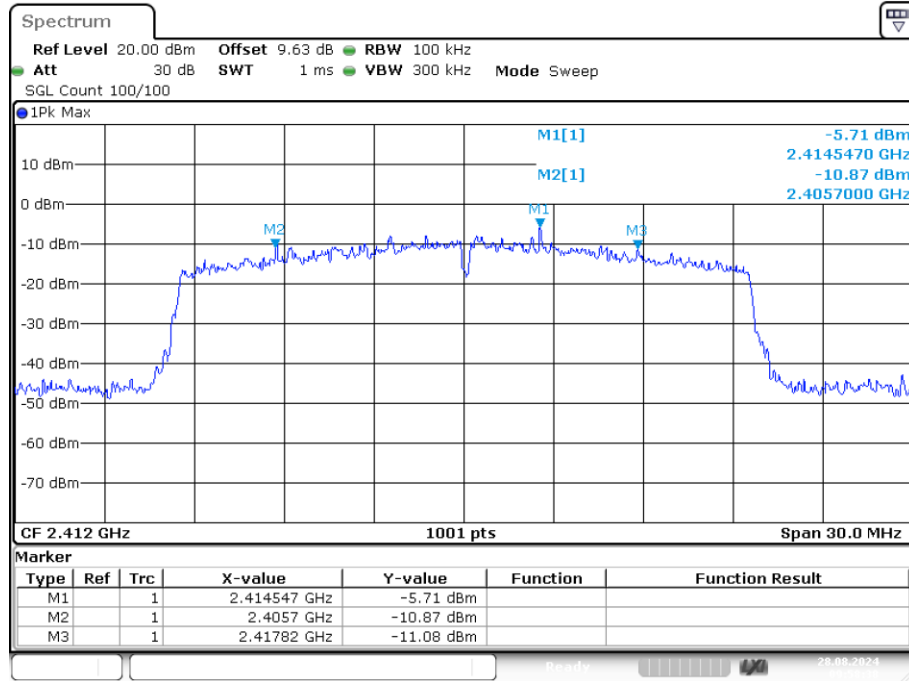


7.4. Test Results

-6dB Bandwidth						
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax20	2412	Ant1	12.12	0.5	Pass
NVNT	ax20	2437	Ant1	12.99	0.5	Pass
NVNT	ax20	2462	Ant1	17.58	0.5	Pass
NVNT	ax40	2422	Ant1	28.86	0.5	Pass
NVNT	ax40	2437	Ant1	17.94	0.5	Pass
NVNT	ax40	2452	Ant1	27.66	0.5	Pass
NVNT	b	2412	Ant1	10.08	0.5	Pass
NVNT	b	2437	Ant1	10.08	0.5	Pass
NVNT	b	2462	Ant1	10.08	0.5	Pass
NVNT	g	2412	Ant1	11.4	0.5	Pass
NVNT	g	2437	Ant1	15.66	0.5	Pass
NVNT	g	2462	Ant1	12.57	0.5	Pass
NVNT	n20	2412	Ant1	10.47	0.5	Pass
NVNT	n20	2437	Ant1	11.28	0.5	Pass
NVNT	n20	2462	Ant1	8.52	0.5	Pass
NVNT	n40	2422	Ant1	21.36	0.5	Pass
NVNT	n40	2437	Ant1	23.94	0.5	Pass
NVNT	n40	2452	Ant1	31.14	0.5	Pass

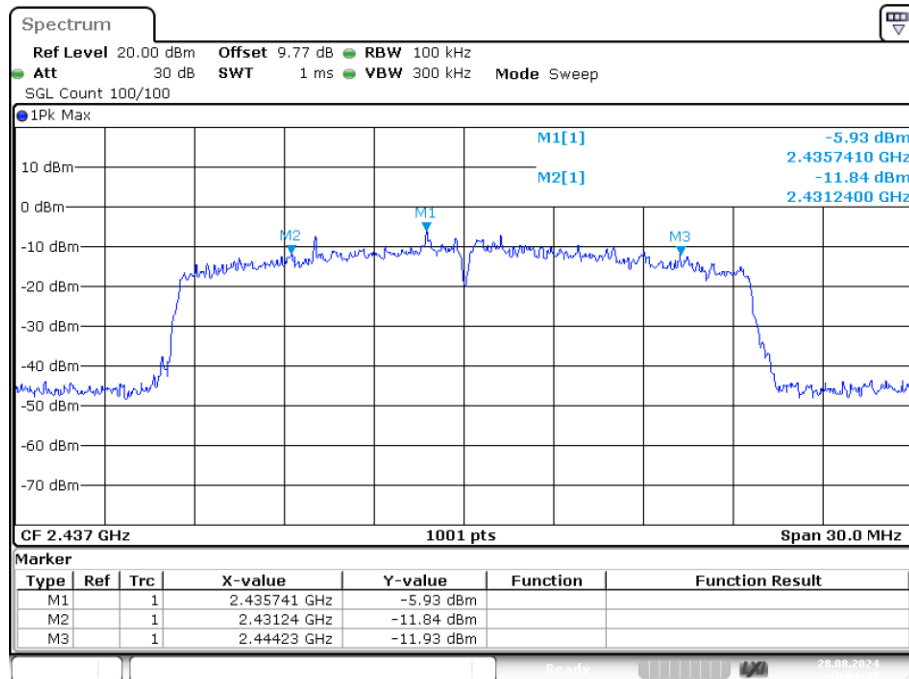
Note: 1. All antennas have been tested, and antenna 1 is the worst data.

-6dB Bandwidth NVNT ax20 2412MHz Ant1



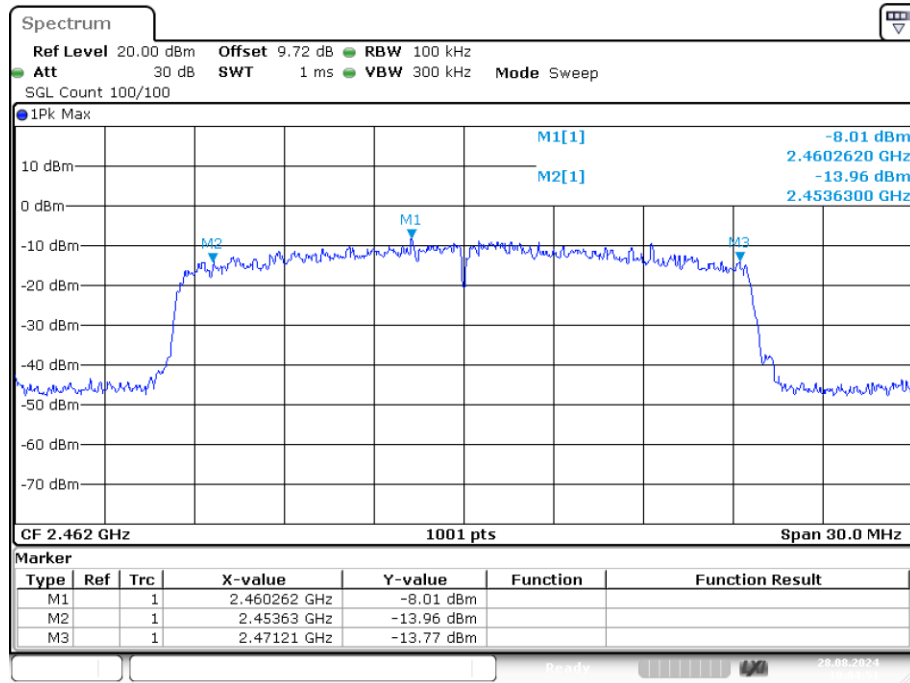
Date: 28.AUG.2024 09:58:39

-6dB Bandwidth NVNT ax20 2437MHz Ant1



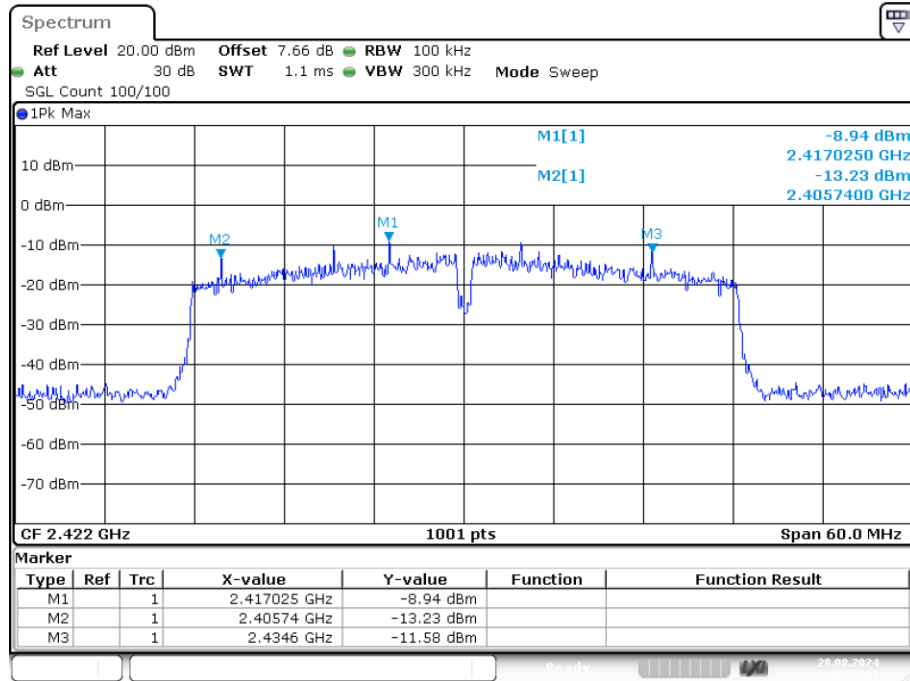
Date: 28.AUG.2024 10:01:46

-6dB Bandwidth NVNT ax20 2462MHz Ant1



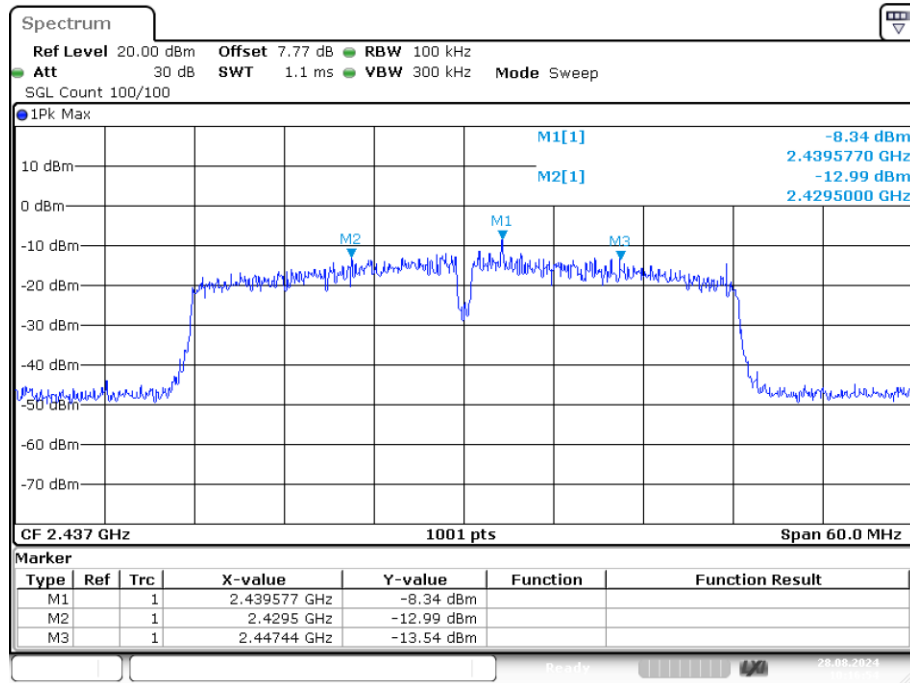
Date: 28.AUG.2024 10:04:50

-6dB Bandwidth NVNT ax40 2422MHz Ant1



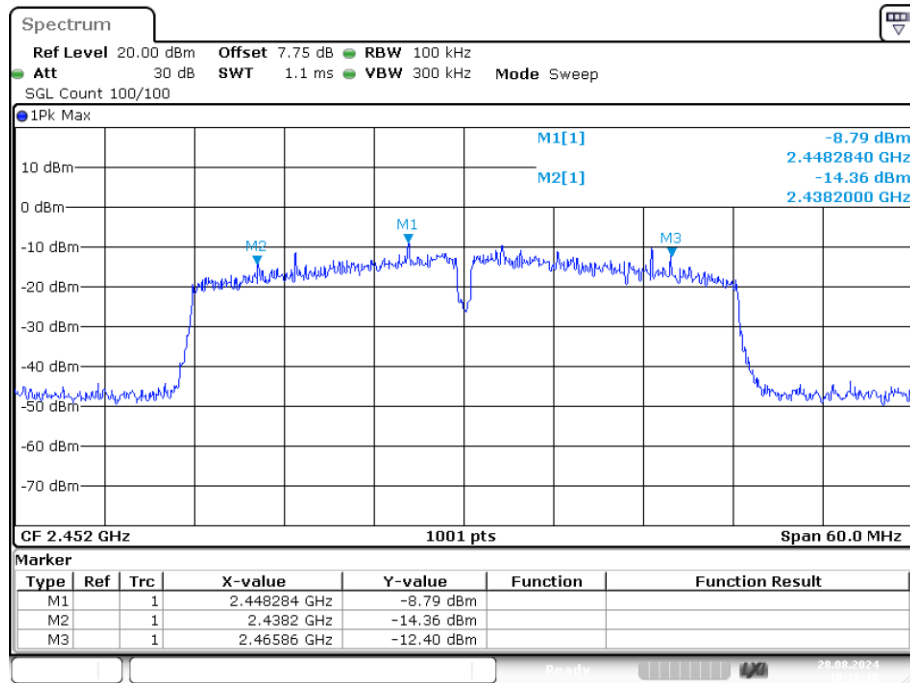
Date: 28.AUG.2024 10:13:06

-6dB Bandwidth NVNT ax40 2437MHz Ant1



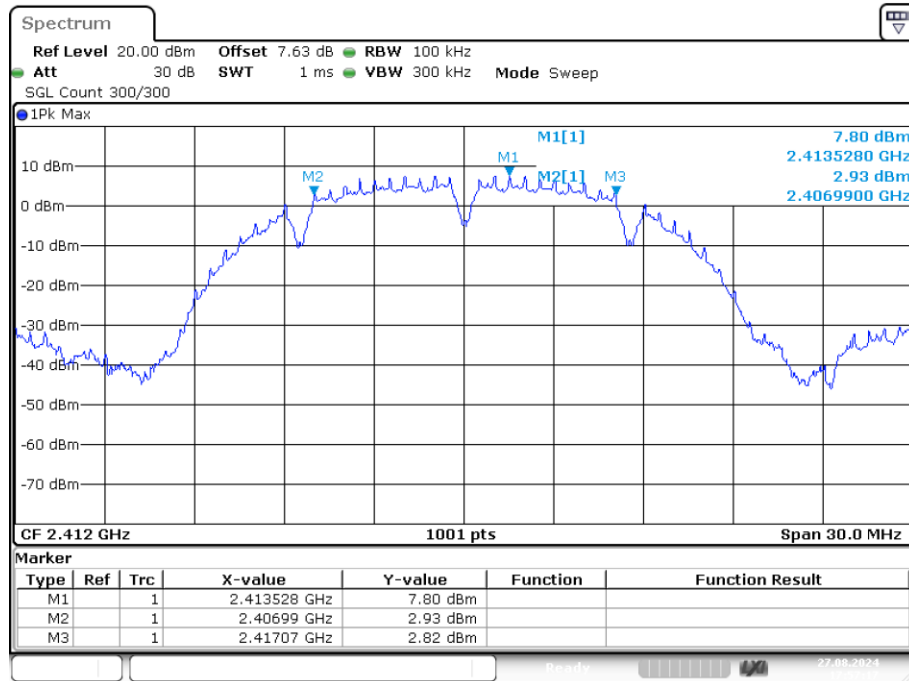
Date: 28.AUG.2024 10:16:53

-6dB Bandwidth NVNT ax40 2452MHz Ant1

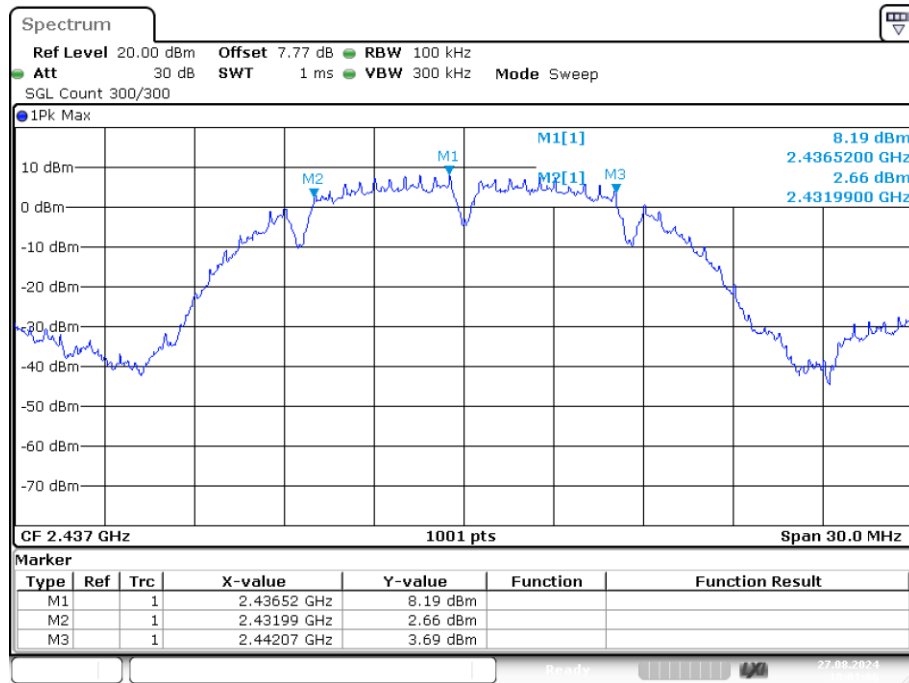


Date: 28.AUG.2024 10:38:17

-6dB Bandwidth NVNT b 2412MHz Ant1

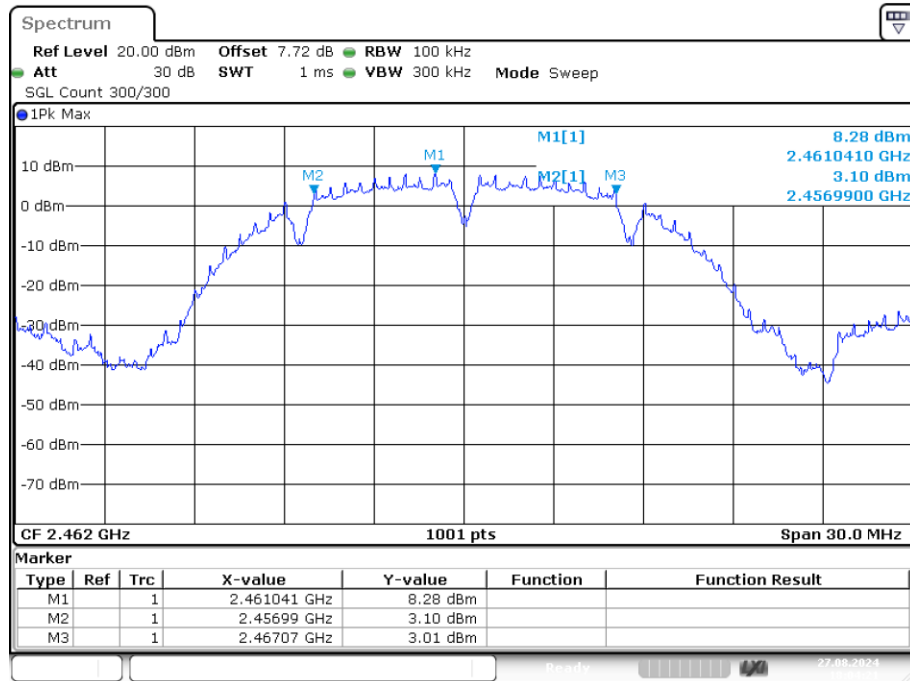


Date: 27.AUG.2024 17:57:16

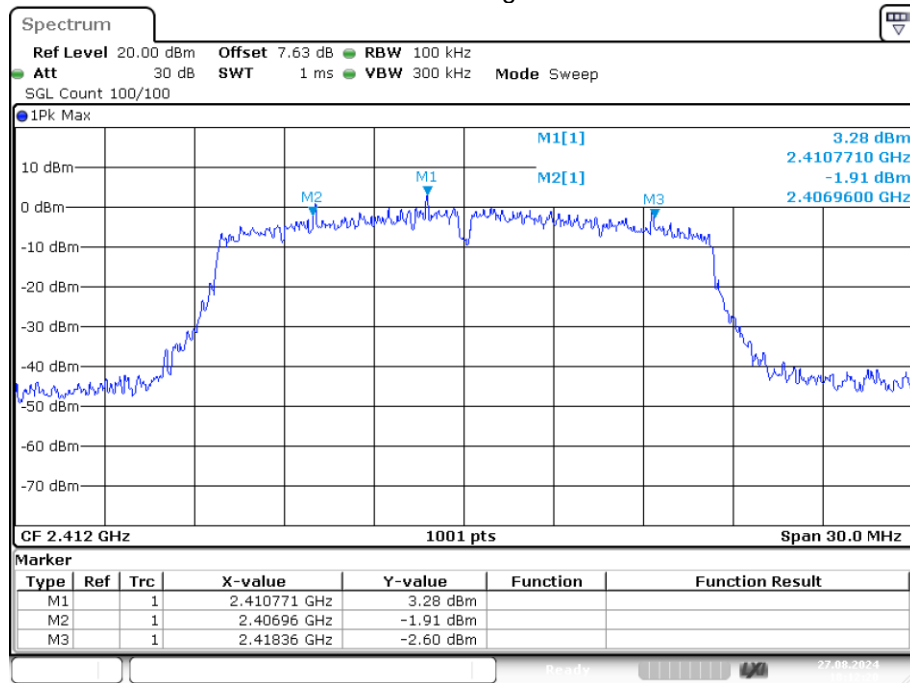
-6dB Bandwidth NVNT b 2437MHz Ant1

Date: 27.AUG.2024 18:01:06

-6dB Bandwidth NVNT b 2462MHz Ant1

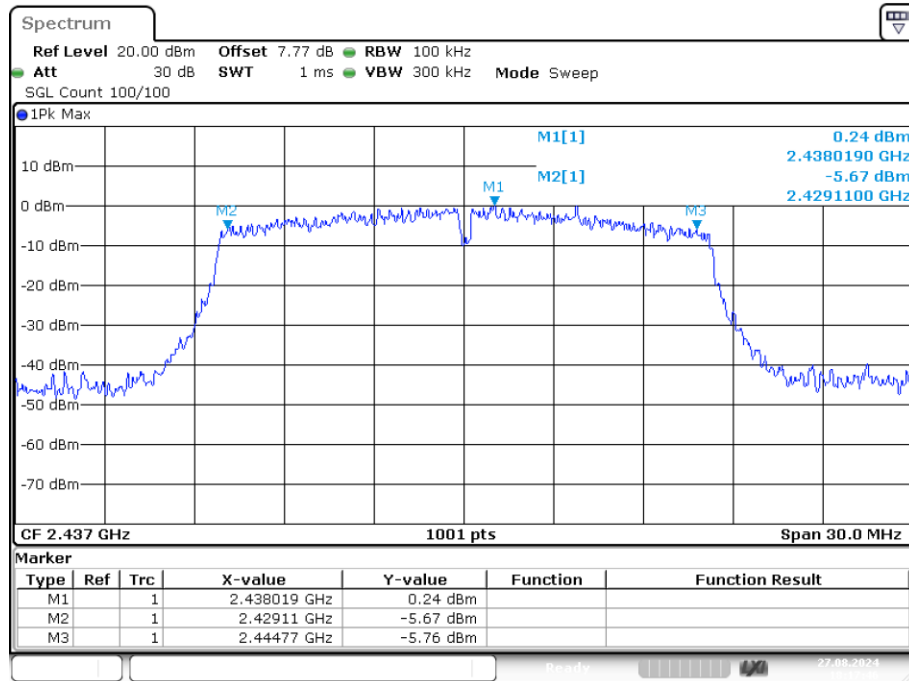


Date: 27.AUG.2024 18:04:20

-6dB Bandwidth NVNT g 2412MHz Ant1

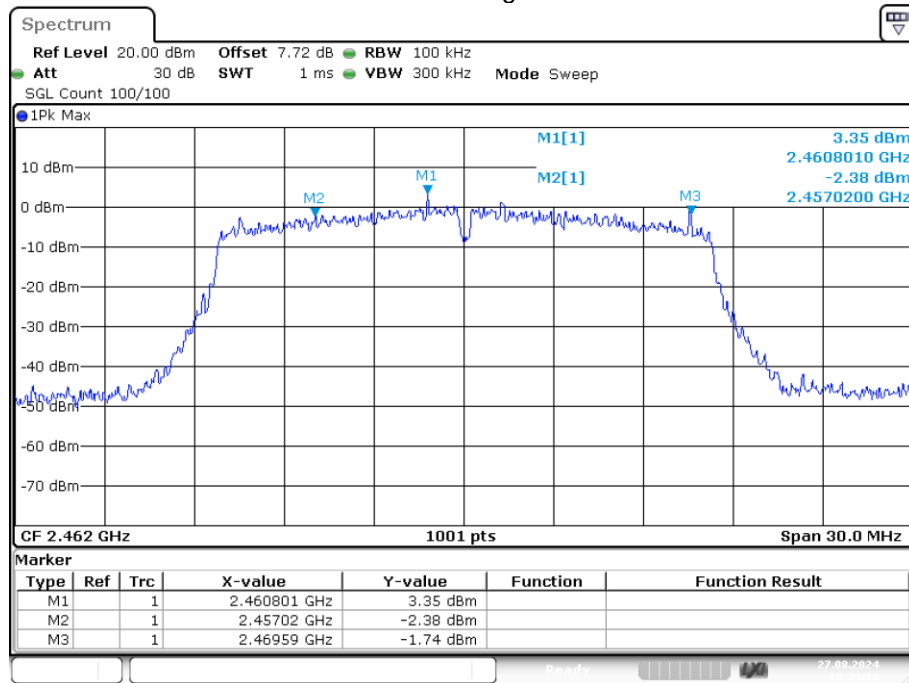
Date: 27.AUG.2024 18:12:20

-6dB Bandwidth NVNT g 2437MHz Ant1



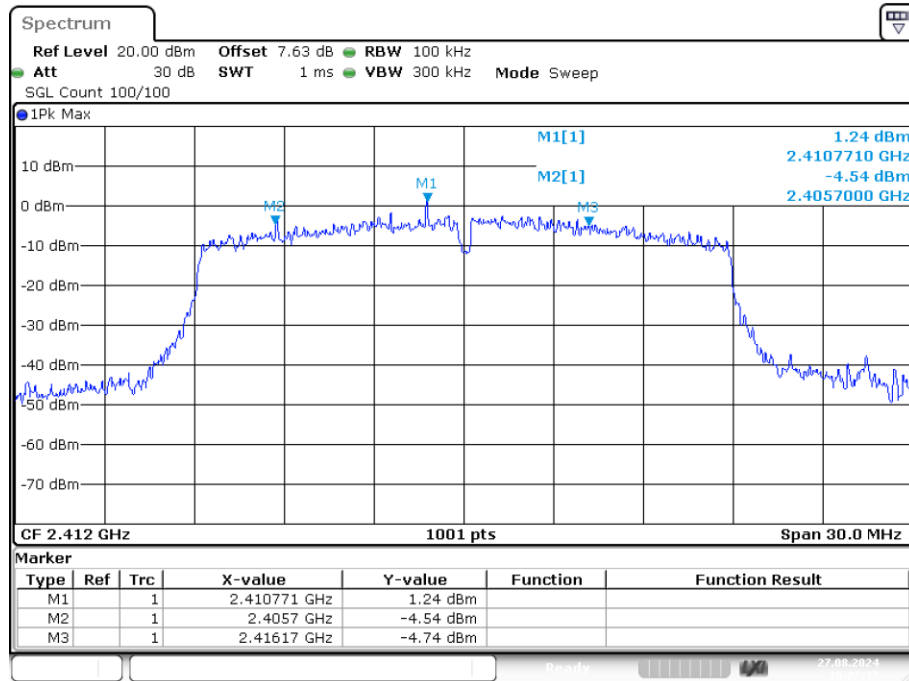
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-6dB Bandwidth NVNT g 2462MHz Ant1



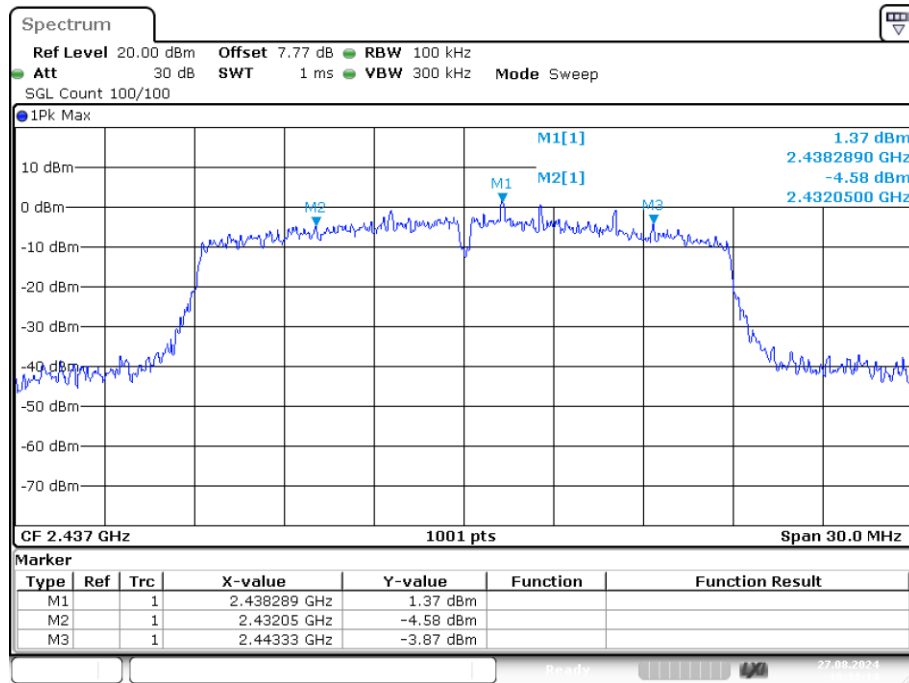
Date: 27.AUG.2024 18:24:14

-6dB Bandwidth NVNT n20 2412MHz Ant1



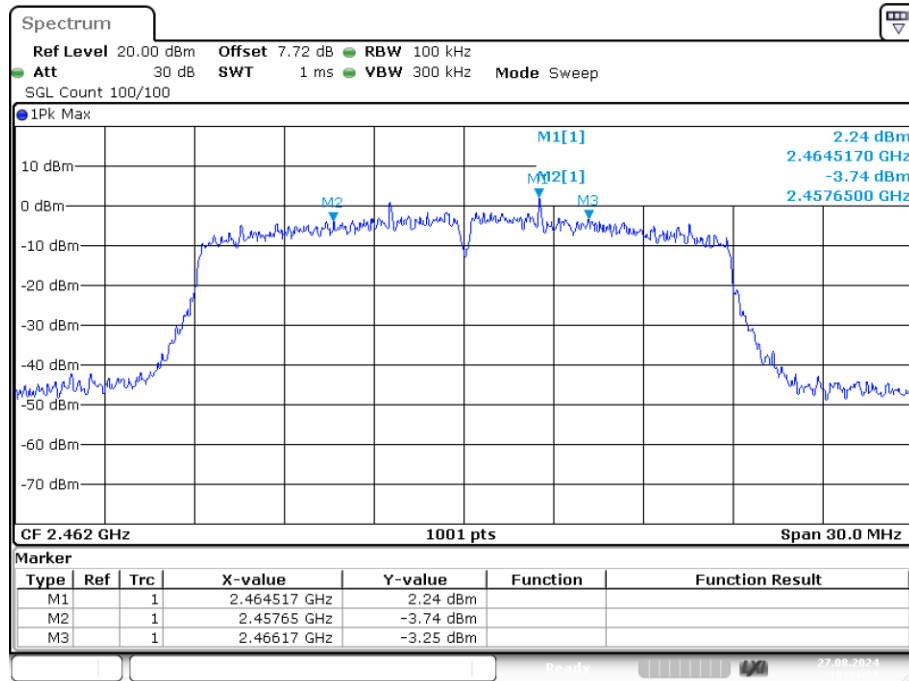
Date: 27.AUG.2024 18:27:37

-6dB Bandwidth NVNT n20 2437MHz Ant1



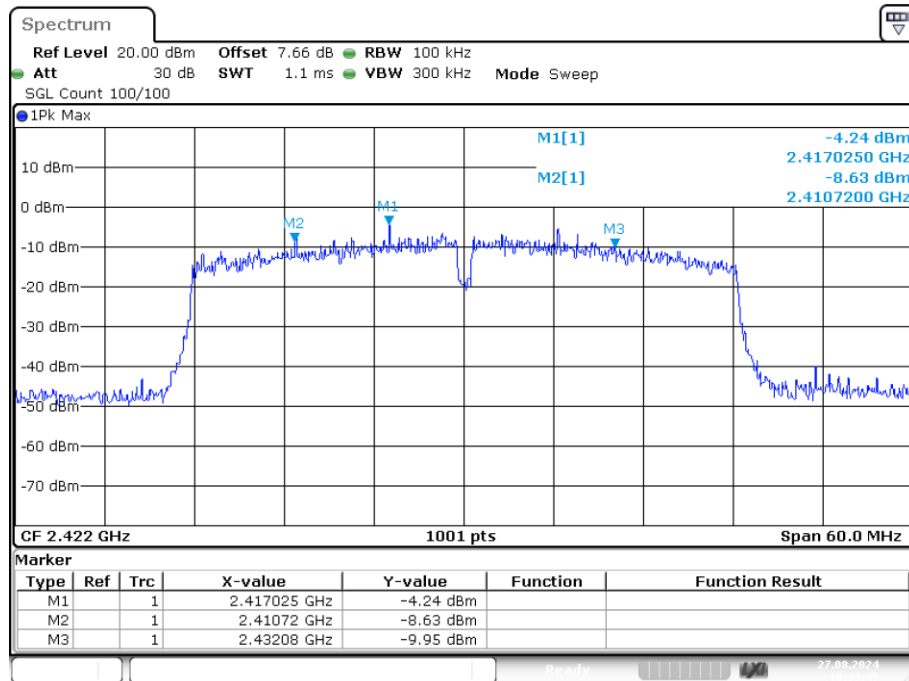
Date: 27.AUG.2024 18:31:14

-6dB Bandwidth NVNT n20 2462MHz Ant1



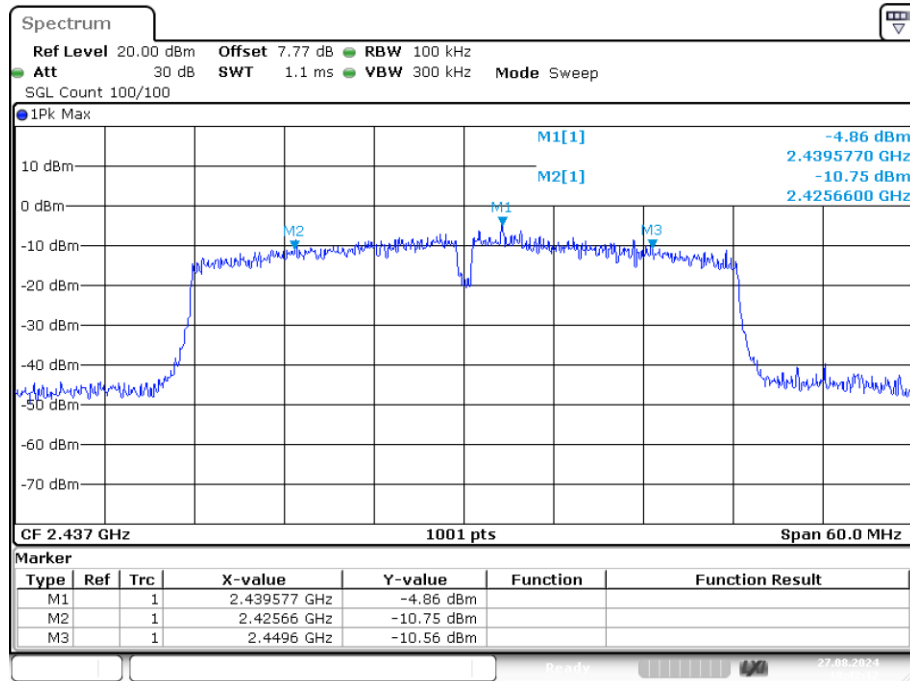
Date: 27.AUG.2024 18:34:37

-6dB Bandwidth NVNT n40 2422MHz Ant1



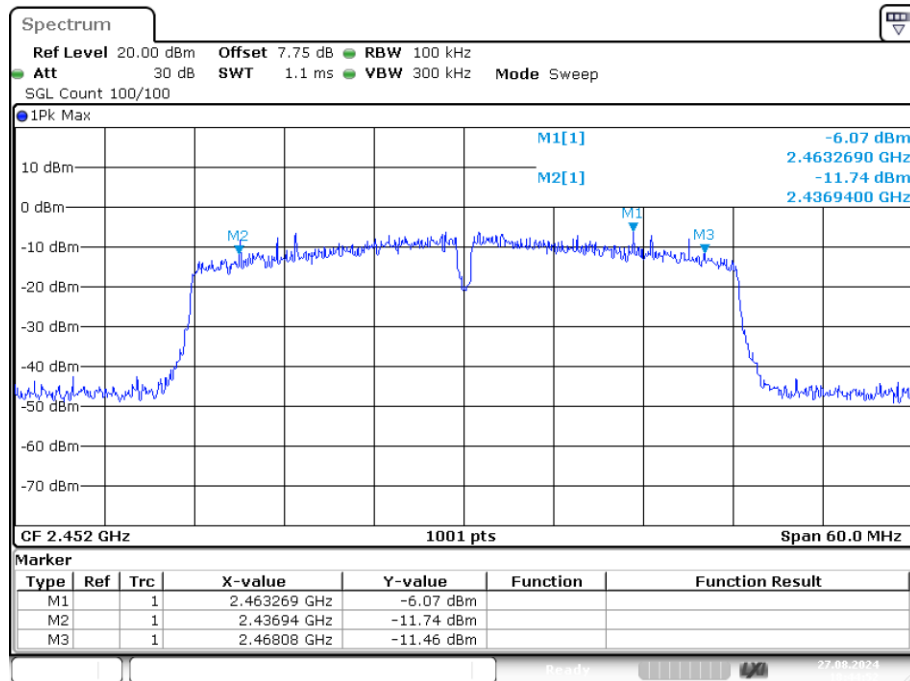
Date: 27.AUG.2024 18:39:45

-6dB Bandwidth NVNT n40 2437MHz Ant1



Date: 27.AUG.2024 18:42:13

-6dB Bandwidth NVNT n40 2452MHz Ant1



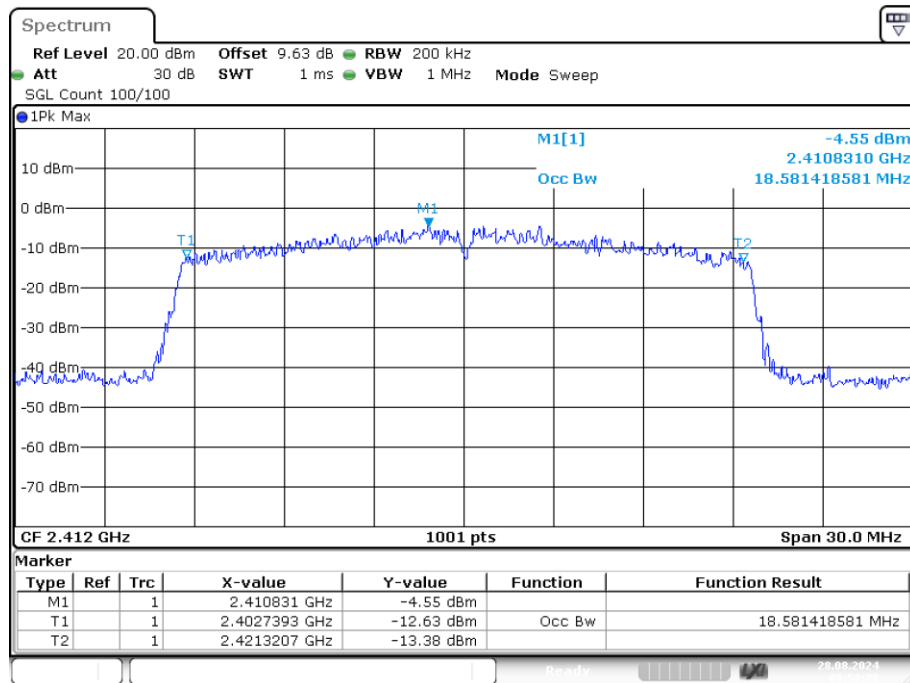
Date: 27.AUG.2024 18:44:51

Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax20	2412	Ant1	18.581
NVNT	ax20	2437	Ant1	18.611
NVNT	ax20	2462	Ant1	18.581
NVNT	ax40	2422	Ant1	35.544
NVNT	ax40	2437	Ant1	35.604
NVNT	ax40	2452	Ant1	35.544
NVNT	b	2412	Ant1	14.026
NVNT	b	2437	Ant1	14.086
NVNT	b	2462	Ant1	14.086
NVNT	g	2412	Ant1	16.184
NVNT	g	2437	Ant1	16.124
NVNT	g	2462	Ant1	16.154
NVNT	n20	2412	Ant1	17.293
NVNT	n20	2437	Ant1	17.233
NVNT	n20	2462	Ant1	17.263
NVNT	n40	2422	Ant1	35.485
NVNT	n40	2437	Ant1	35.544
NVNT	n40	2452	Ant1	35.544

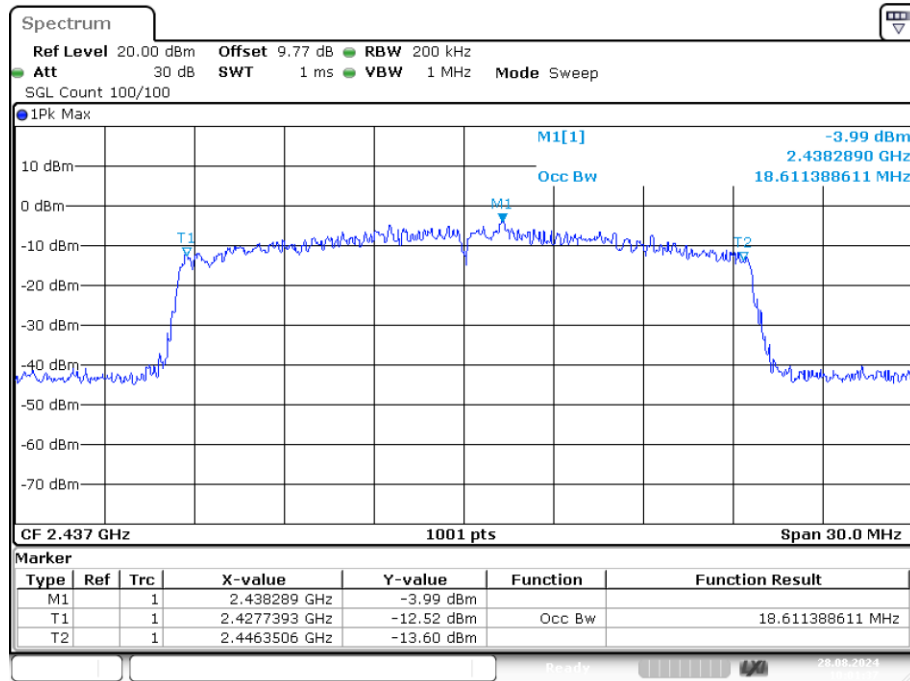
Note: 1. All antennas have been tested, and antenna 1 is the worst data.

OBW NVNT ax20 2412MHz Ant1



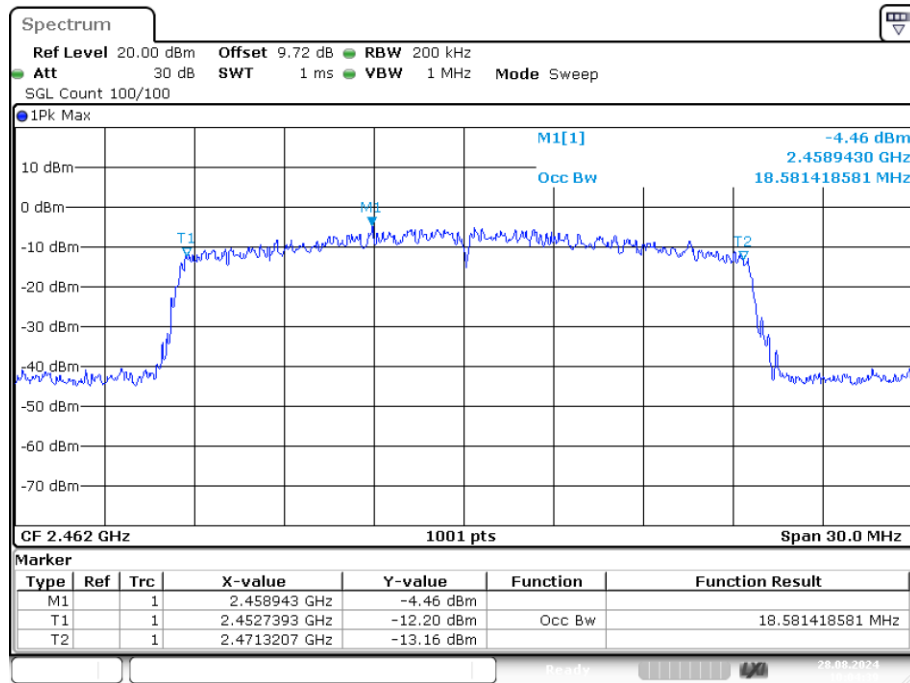
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OBW NVNT ax20 2437MHz Ant1



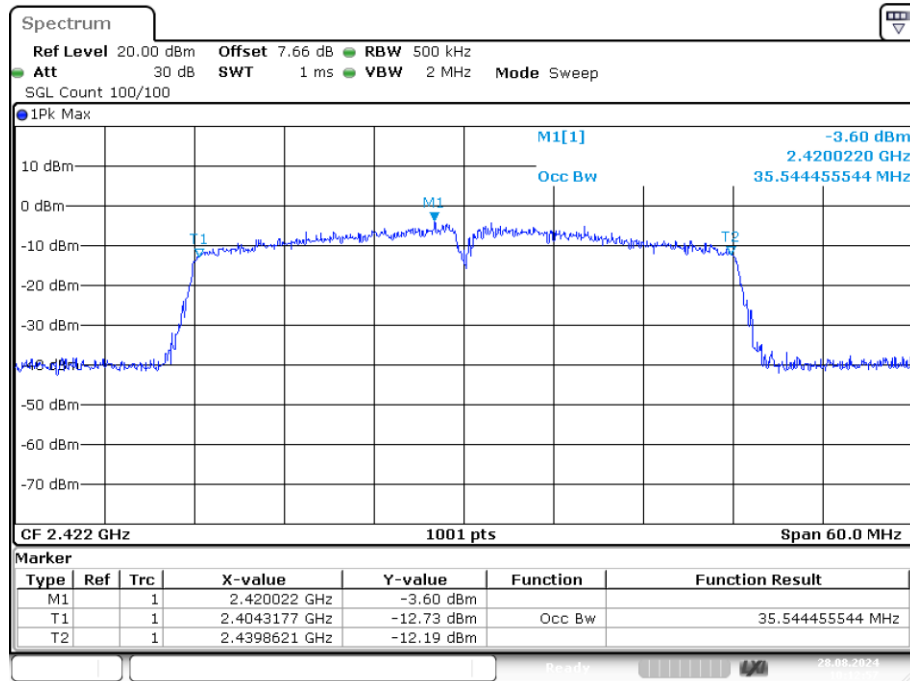
Date: 28.AUG.2024 10:01:36

OBW NVNT ax20 2462MHz Ant1



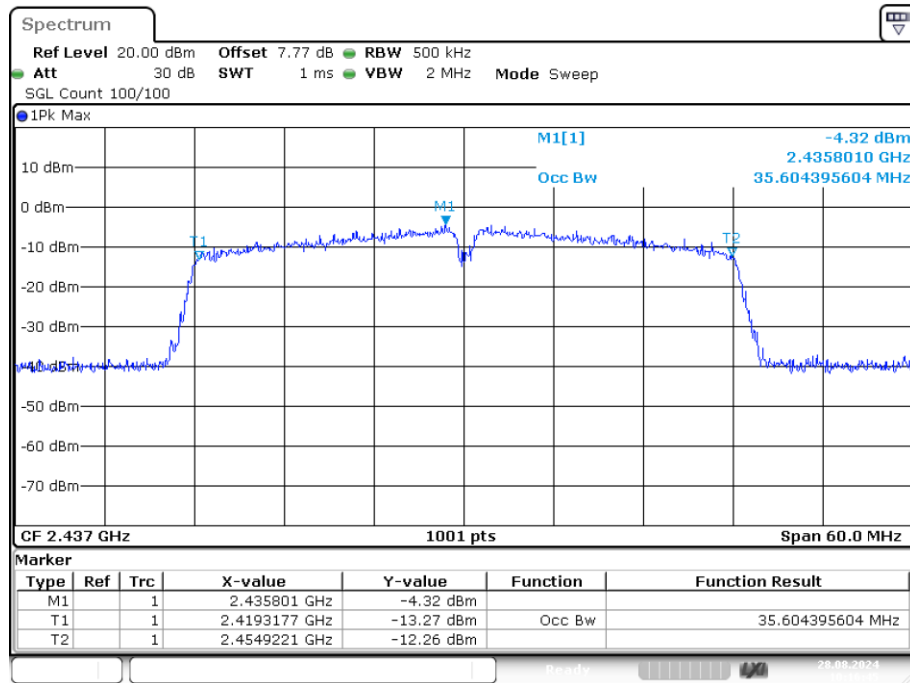
Date: 28.AUG.2024 10:04:39

OBW NVNT ax40 2422MHz Ant1



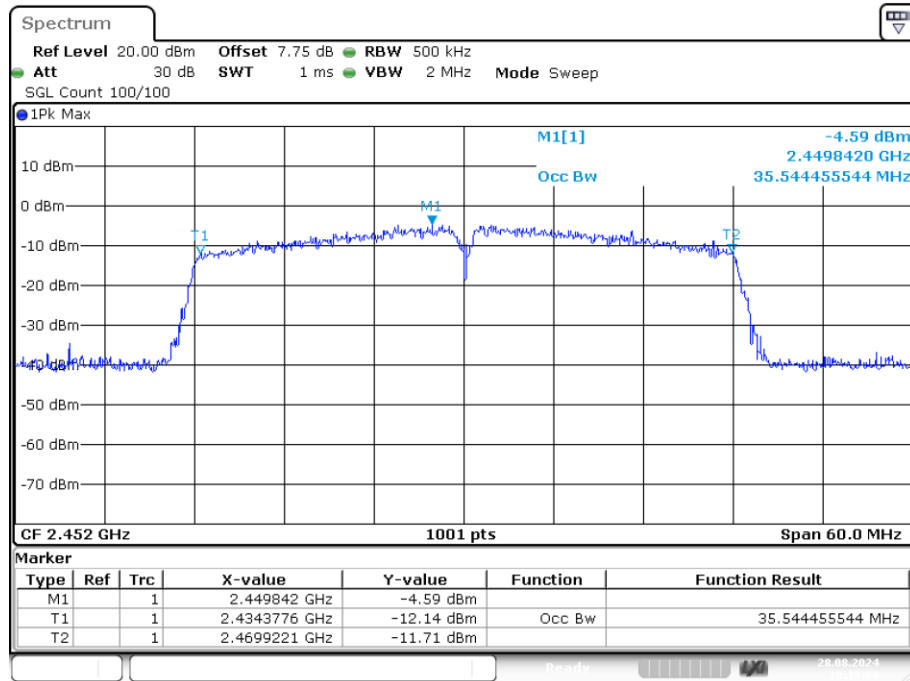
Date: 28.AUG.2024 10:12:57

OBW NVNT ax40 2437MHz Ant1



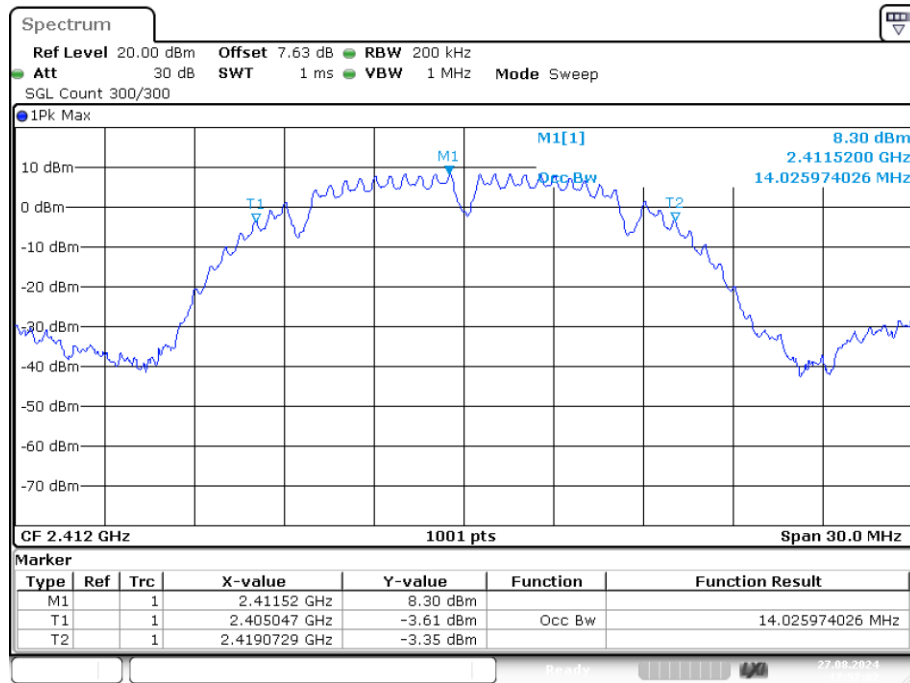
Date: 28.AUG.2024 10:16:45

OBW NVNT ax40 2452MHz Ant1



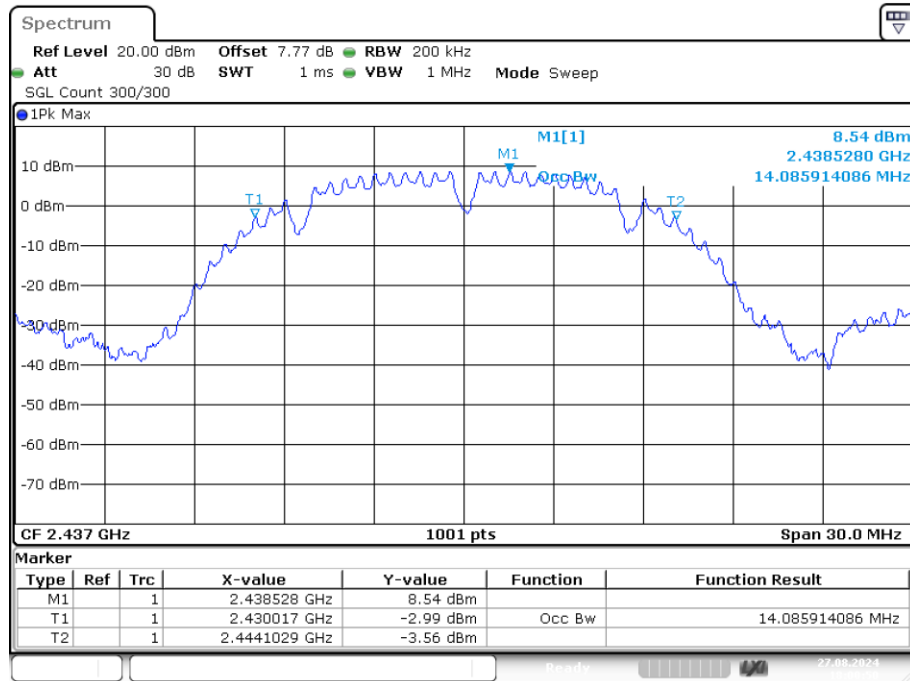
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OBW NVNT b 2412MHz Ant1



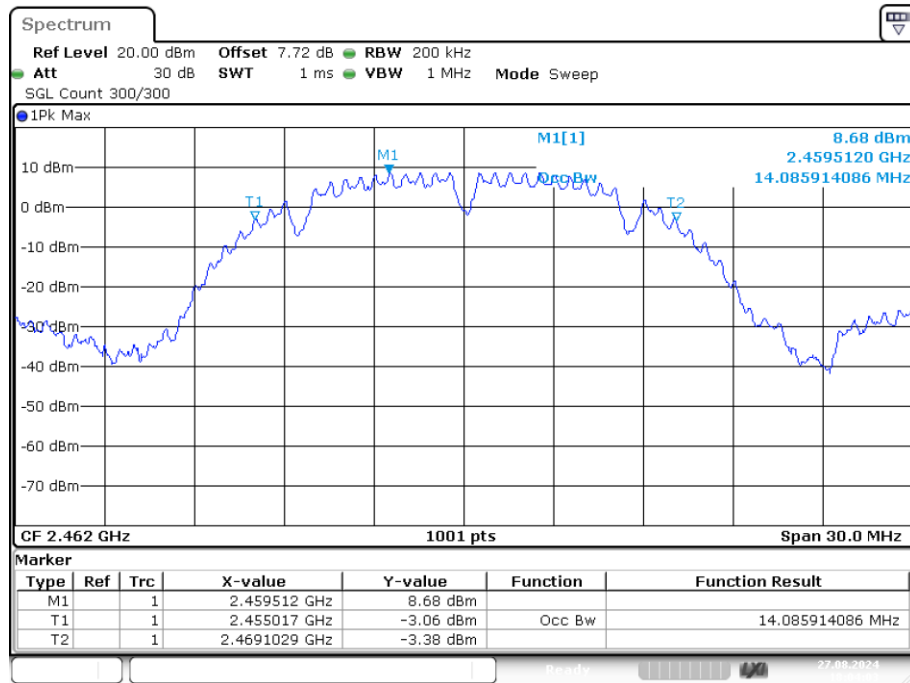
Date: 27.AUG.2024 17:57:01

OBW NVNT b 2437MHz Ant1



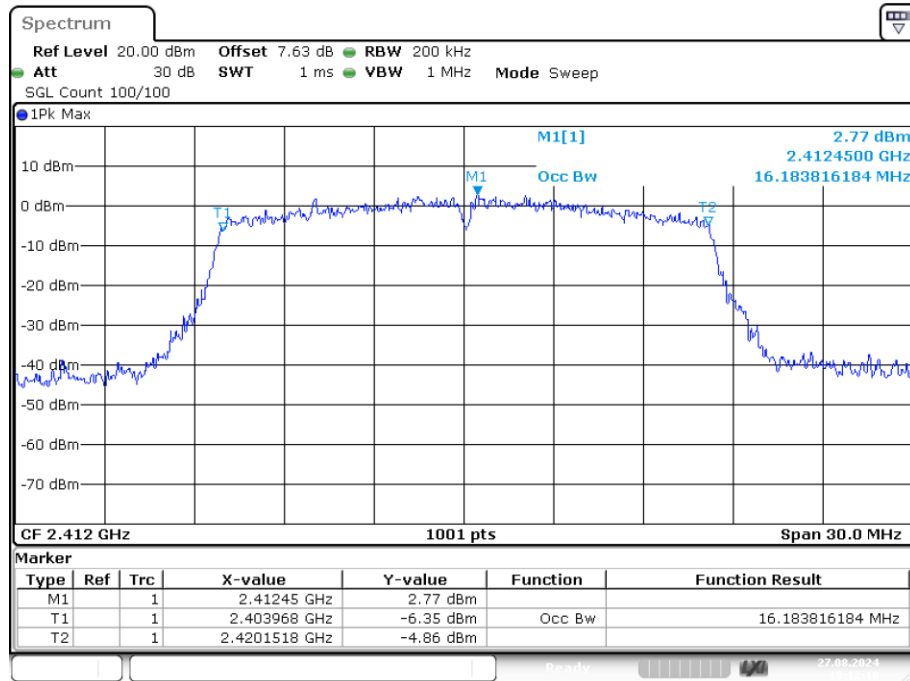
Date: 27.AUG.2024 18:00:50

OBW NVNT b 2462MHz Ant1



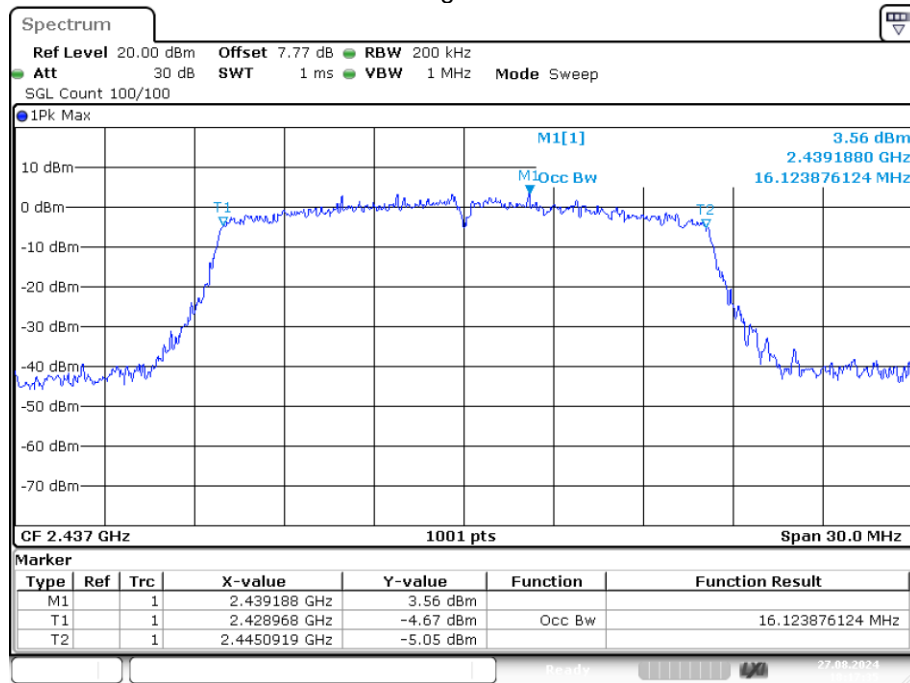
Date: 27.AUG.2024 18:04:02

OBW NVNT g 2412MHz Ant1



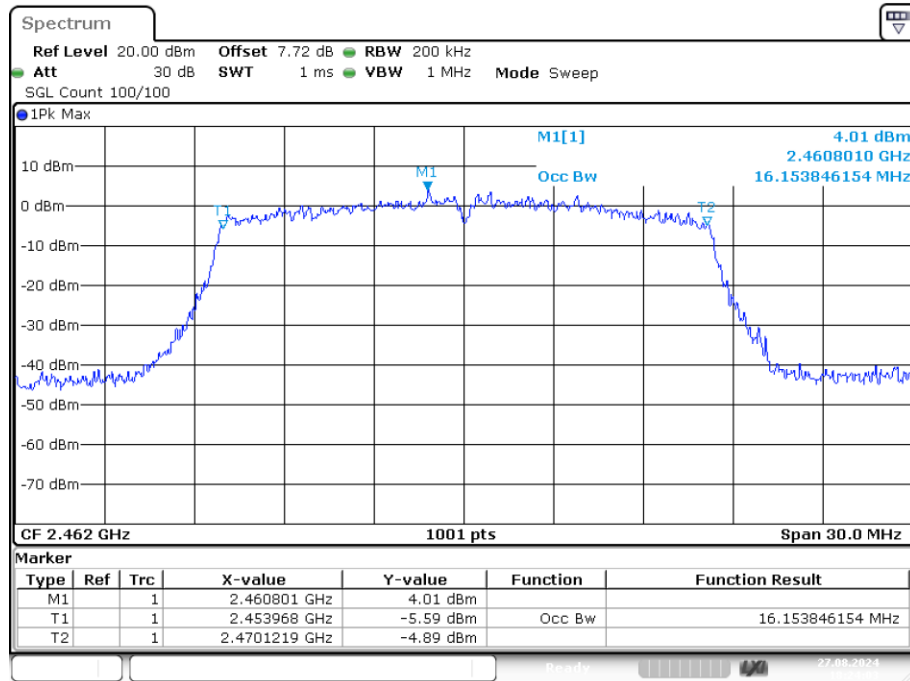
Date: 27.AUG.2024 18:12:10

OBW NVNT g 2437MHz Ant1



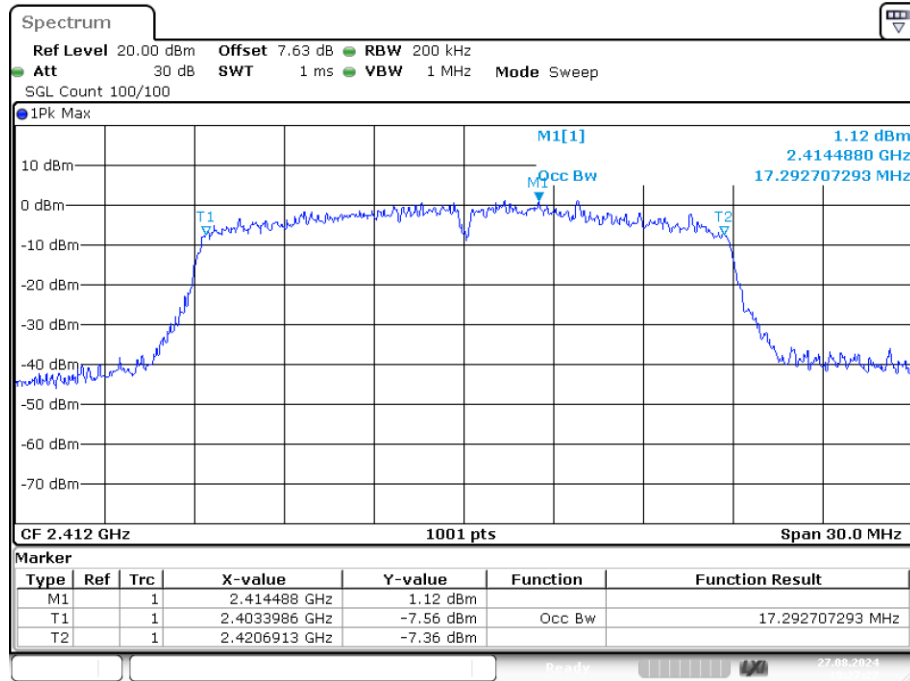
Date: 27.AUG.2024 18:17:35

OBW NVNT g 2462MHz Ant1



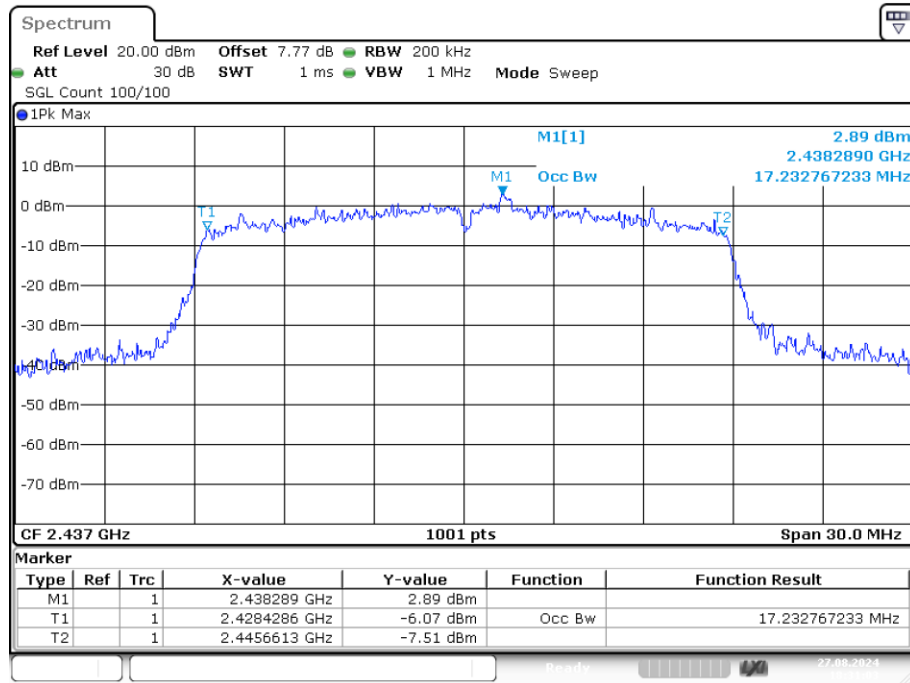
Date: 27.AUG.2024 18:24:03

OBW NVNT n20 2412MHz Ant1



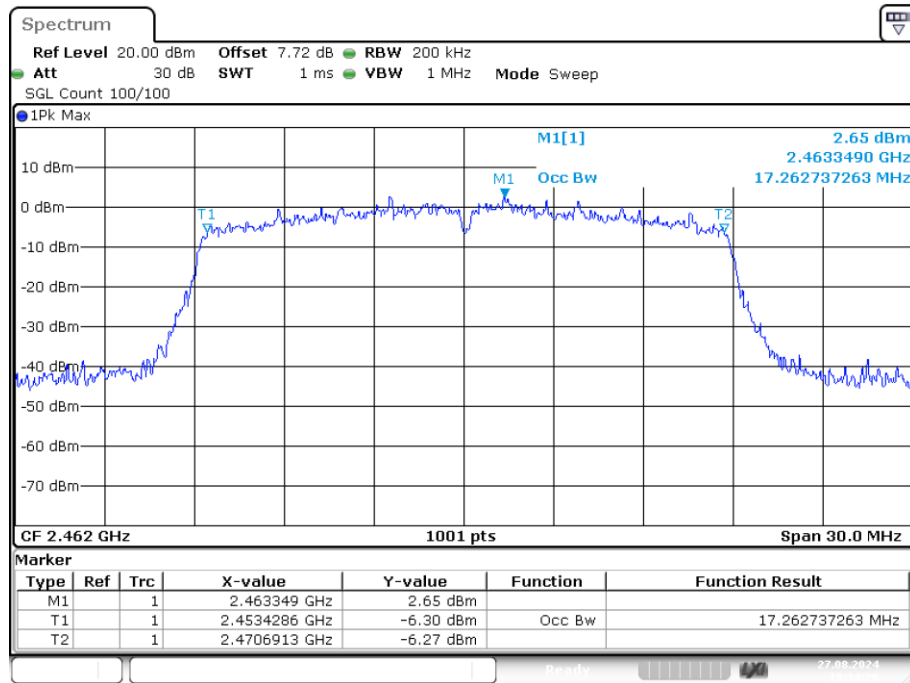
Date: 27.AUG.2024 18:27:27

OBW NVNT n20 2437MHz Ant1



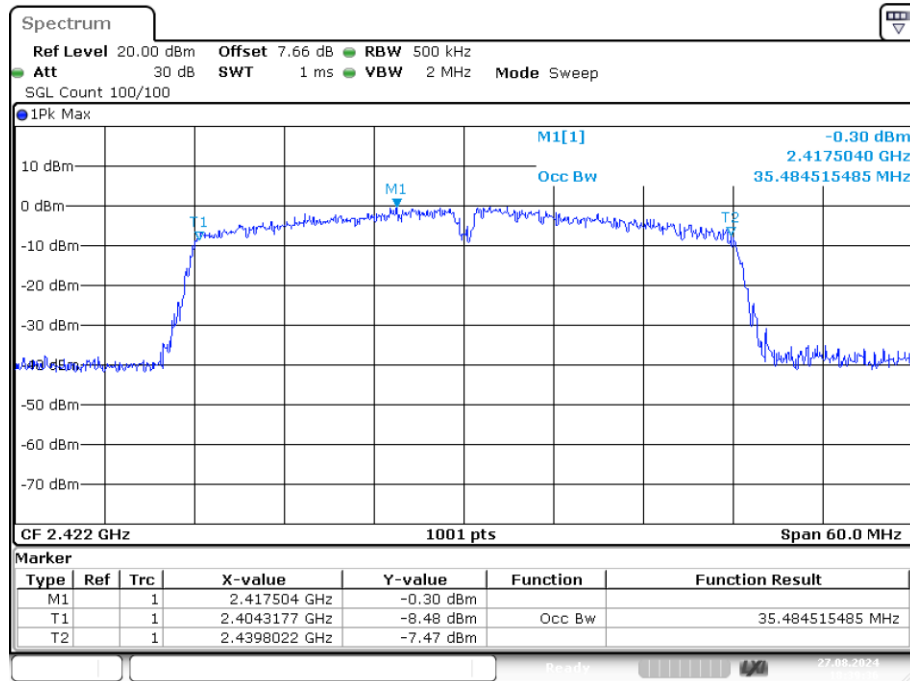
Date: 27.AUG.2024 18:31:03

OBW NVNT n20 2462MHz Ant1



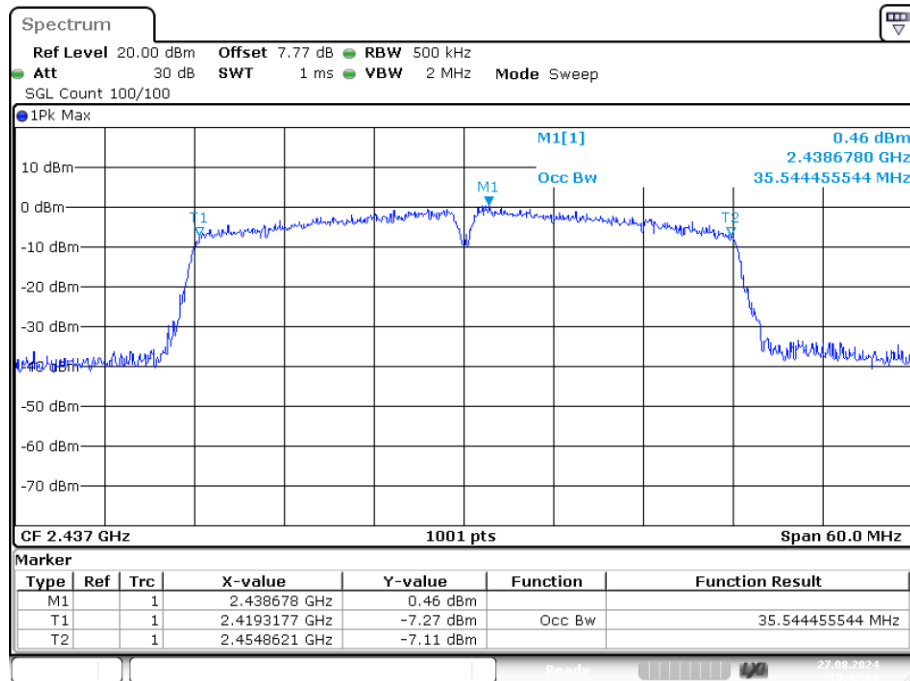
Date: 27.AUG.2024 18:34:26

OBW NVNT n40 2422MHz Ant1



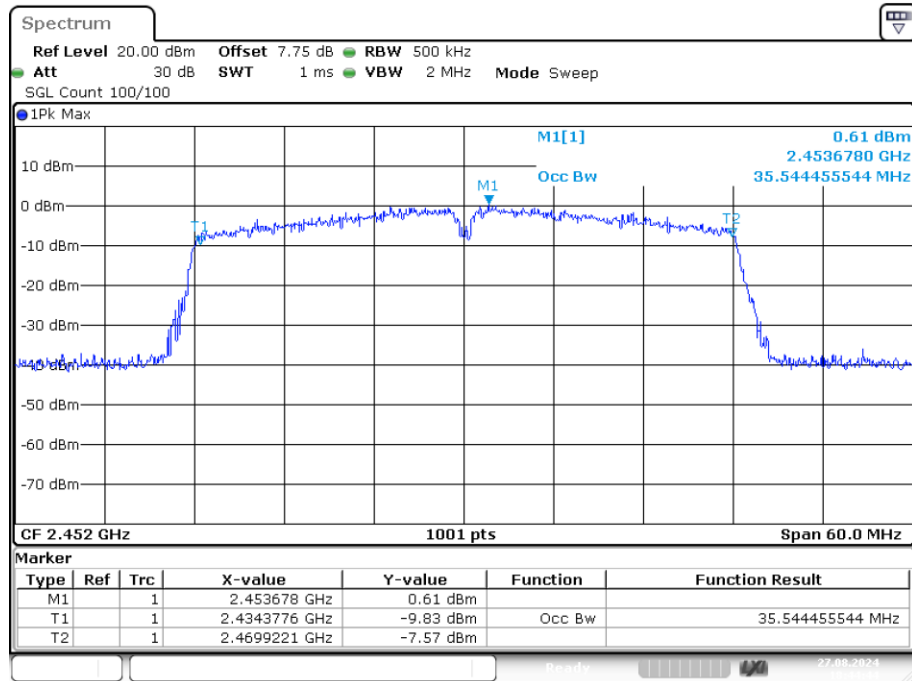
Date: 27.AUG.2024 18:39:37

OBW NVNT n40 2437MHz Ant1



Date: 27.AUG.2024 18:42:05

OBW NVNT n40 2452MHz Ant1



Date: 27.AUG.2024 18:44:43

8. BAND EDGE CHECK

8.1. Test limits

Please refer FCC PART 15: 15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits and RSS-GEN limits.

8.2. Test Procedure

Details see the KDB558074 D01 Meas Guidance v05r02

8.2.1 Put the EUT on a 1.5m high table, power on the EUT. Emissions were scanned and measured rotating the EUT to 360 degrees, Find the maximum Emission

8.2.2 Check the spurious emissions out of band.

8.2.3 RBW 1MHz, VBW 3MHz, peak detector for peak value, RBW 1MHz, VBW 10Hz, RMS detector for AV value.

8.3. Test Setup

Same as 5.2.2.

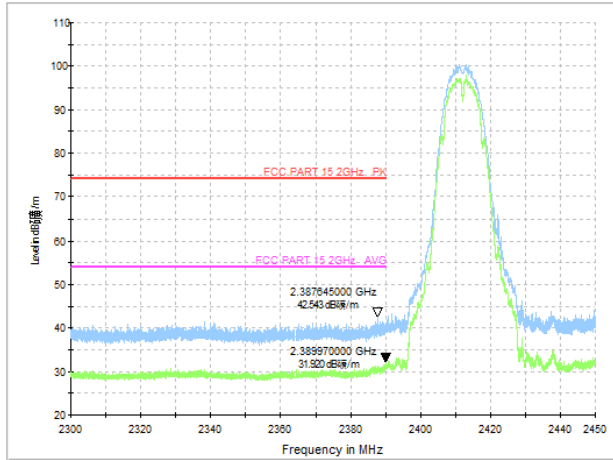
8.4. Test Results

PASS.

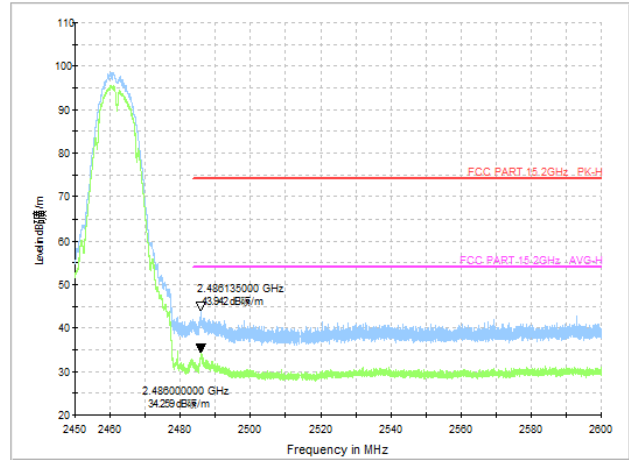
Detailed information please see the following page.

Radiation testing

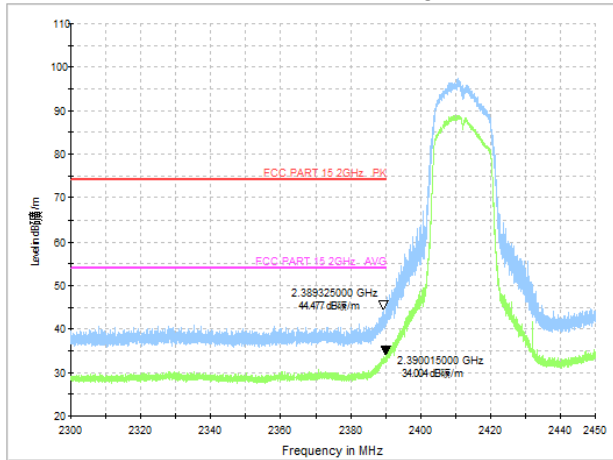
Test Mode: IEEE 802.11b-Low



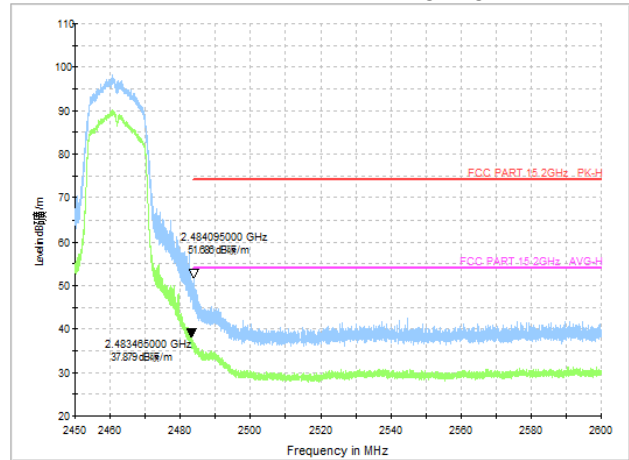
Test Mode: IEEE 802.11b-High



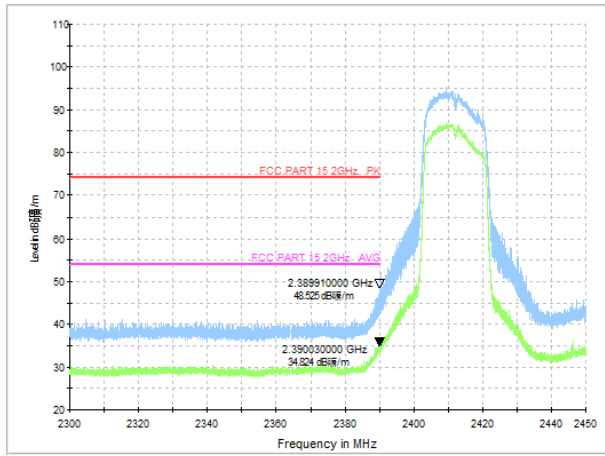
Test Mode: IEEE 802.11g-Low



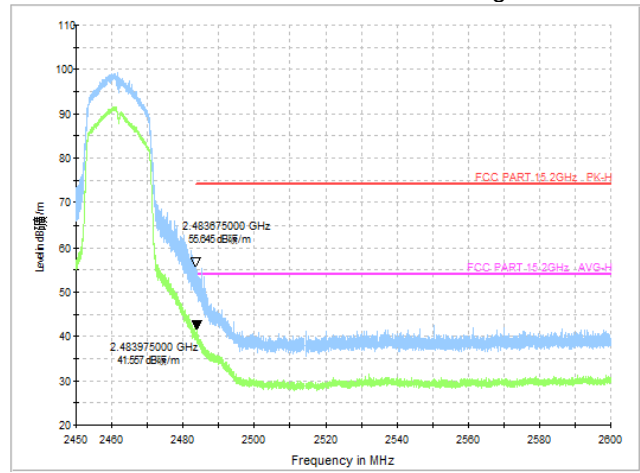
Test Mode: IEEE 802.11g-High



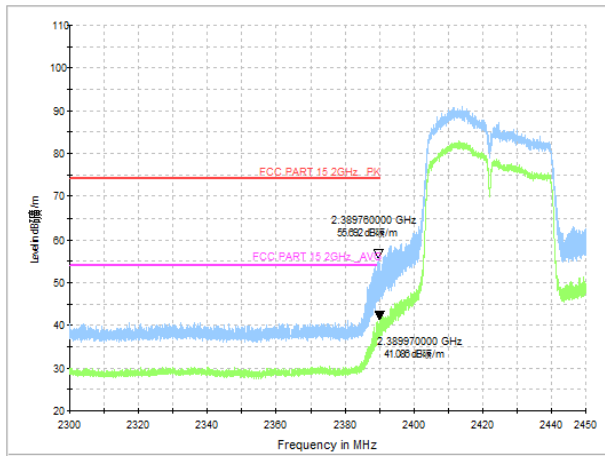
Test Mode: IEEE 802.11n20-Low



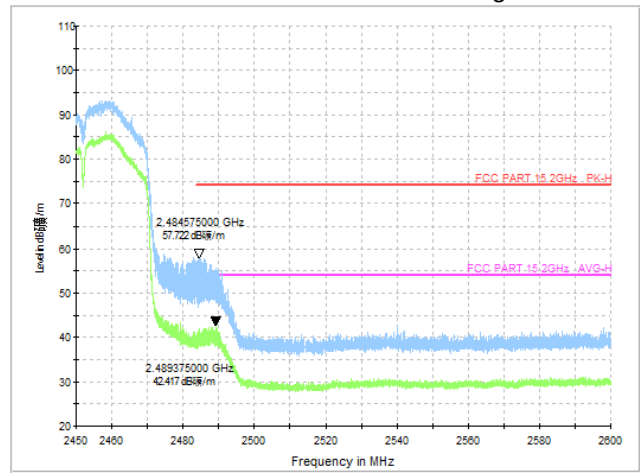
Test Mode: IEEE 802.11n20-High



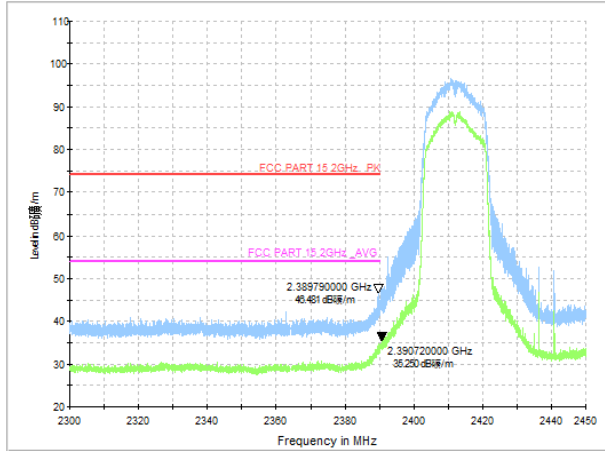
Test Mode: IEEE 802.11n40-Low



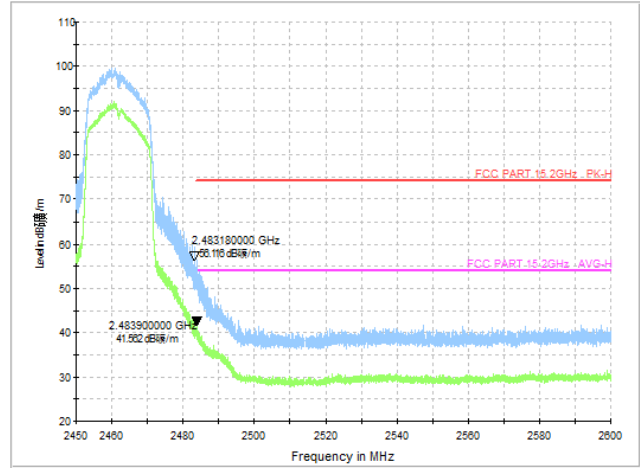
Test Mode: IEEE 802.11n40-High



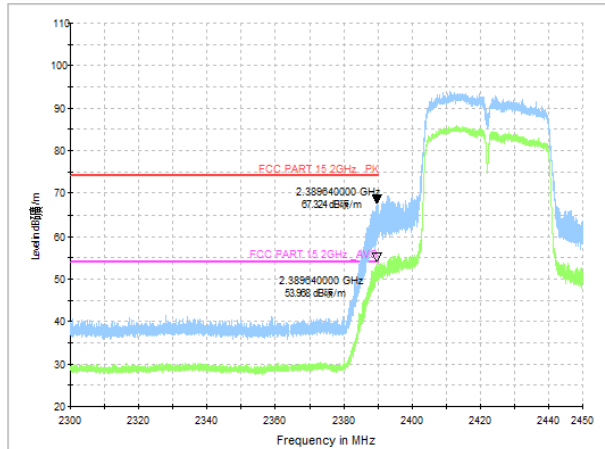
Test Mode: IEEE 802.11ax20-Low



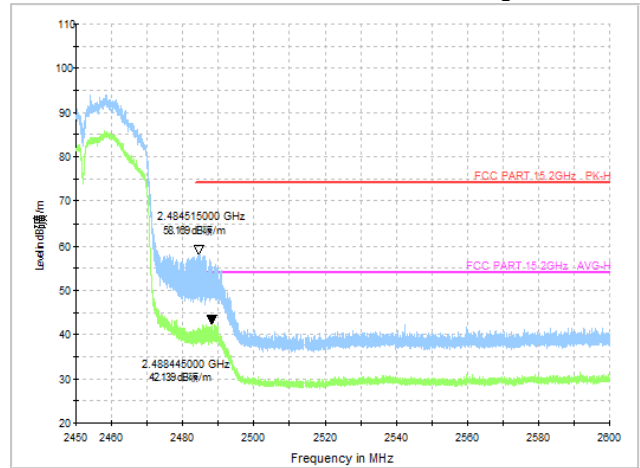
Test Mode: IEEE 802.11ax20-High



Test Mode: IEEE 802.11ax40-Low



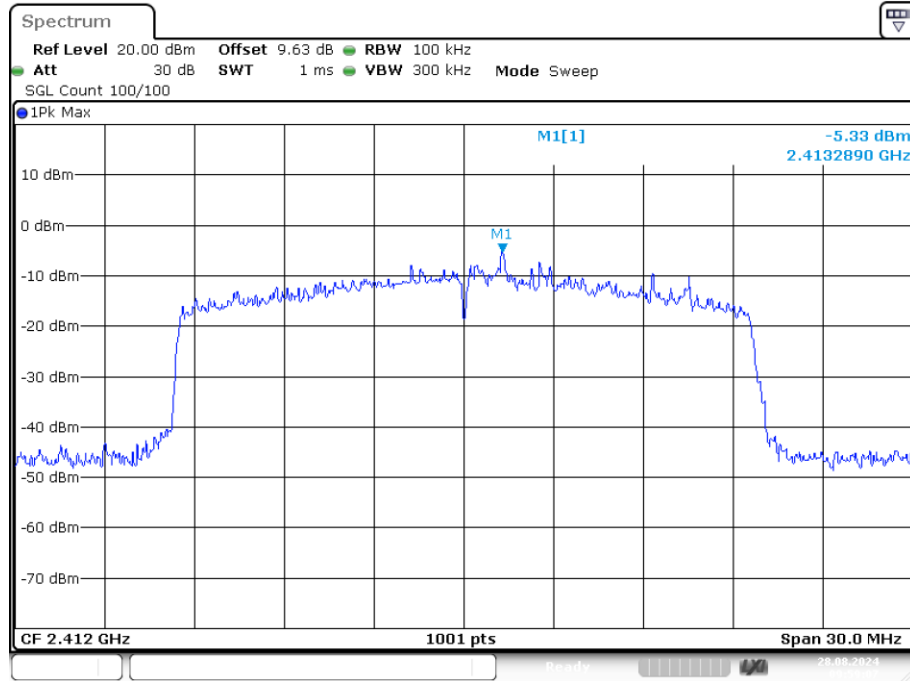
Test Mode: IEEE 802.11ax40-High



Conduction method testing

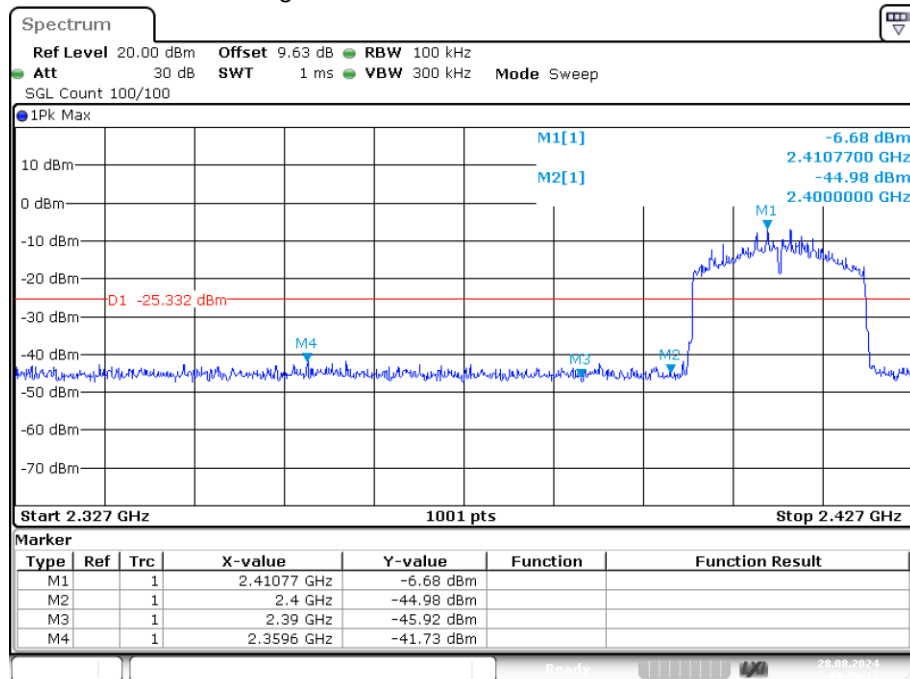
Note: 1. All antennas have been tested, and antenna 1 is the worst data.

Band Edge NVNT ax20 2412MHz Ant1 Ref



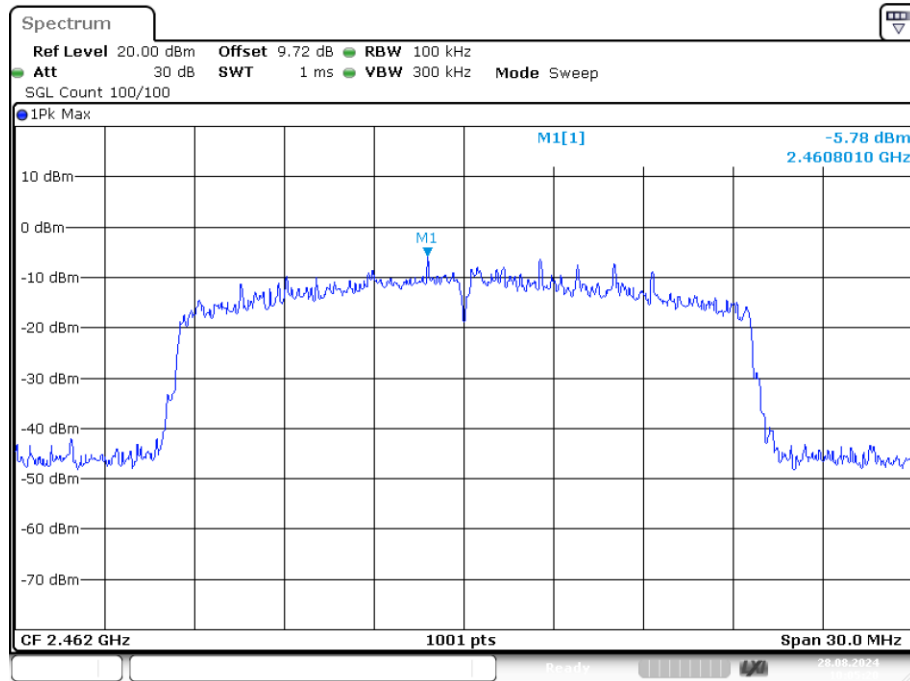
Date: 28.AUG.2024 09:59:07

Band Edge NVNT ax20 2412MHz Ant1 Emission



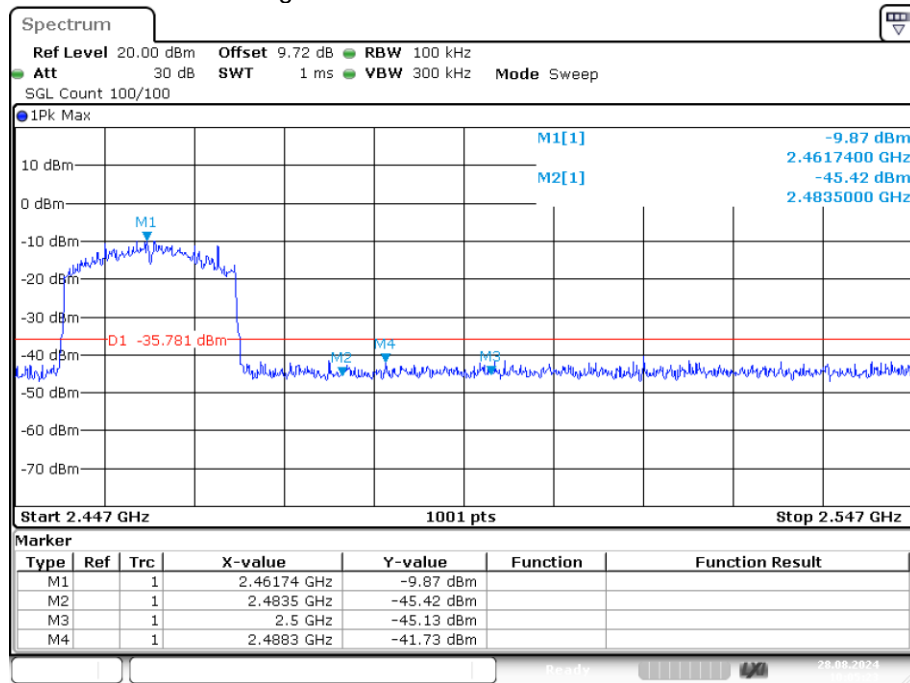
Date: 28.AUG.2024 09:59:11

Band Edge NVNT ax20 2462MHz Ant1 Ref



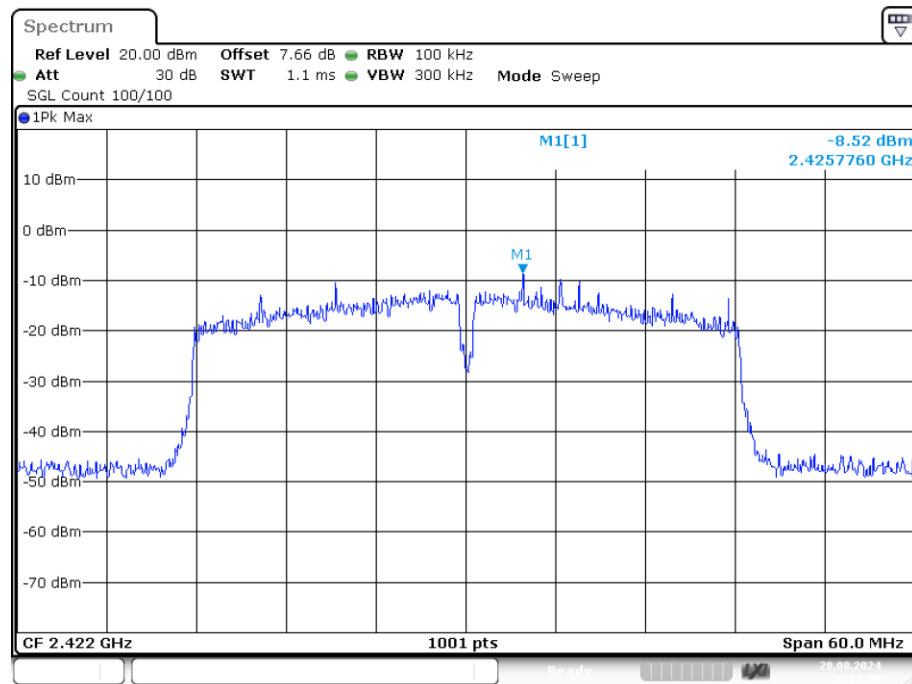
Date: 28.AUG.2024 10:05:20

Band Edge NVNT ax20 2462MHz Ant1 Emission



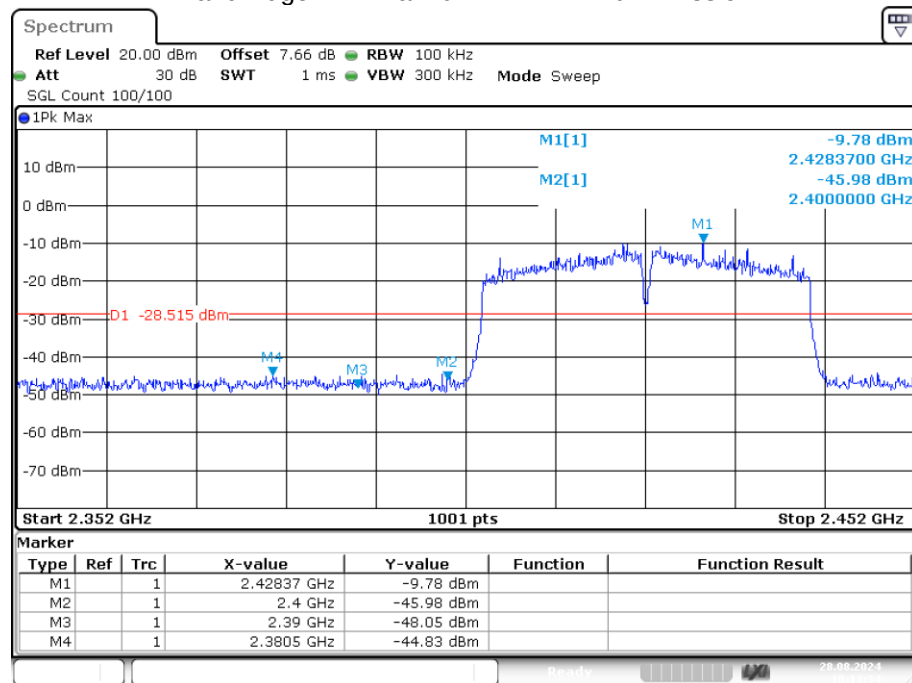
Date: 28.AUG.2024 10:05:23

Band Edge NVNT ax40 2422MHz Ant1 Ref



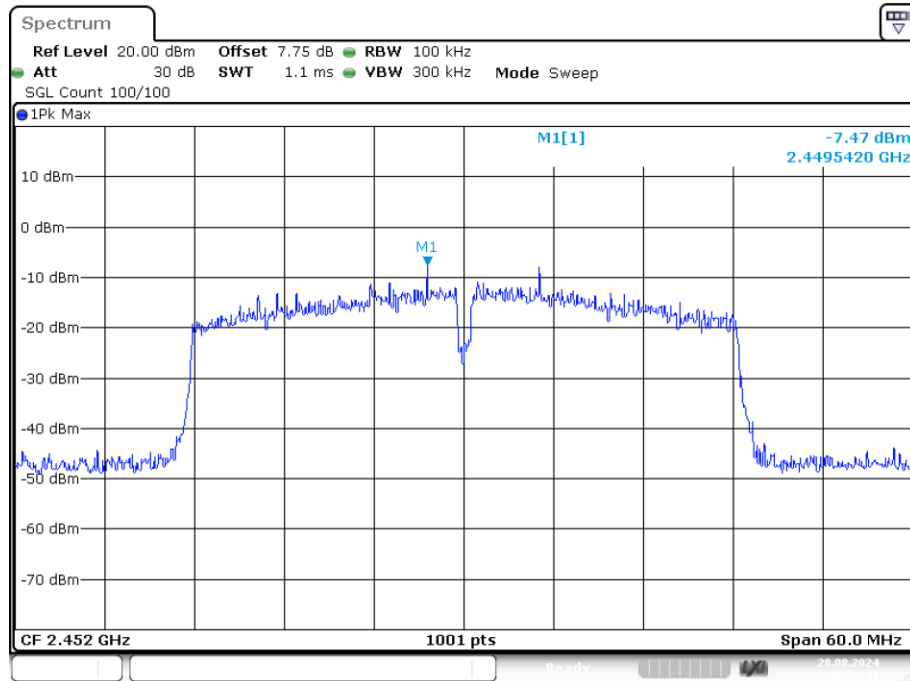
Date: 28.AUG.2024 10:13:30

Band Edge NVNT ax40 2422MHz Ant1 Emission



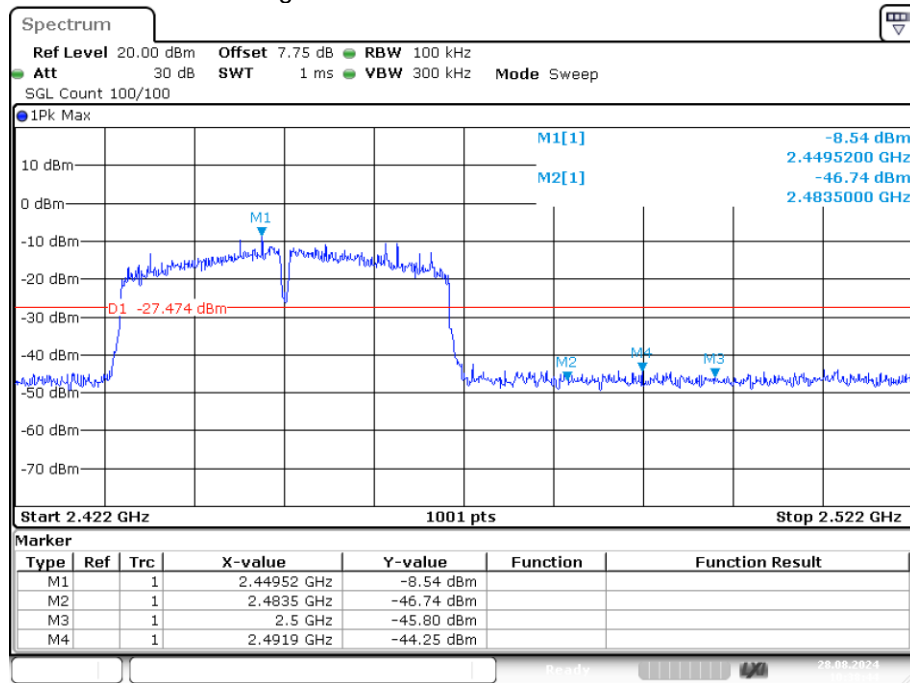
Date: 28.AUG.2024 10:13:34

Band Edge NVNT ax40 2452MHz Ant1 Ref



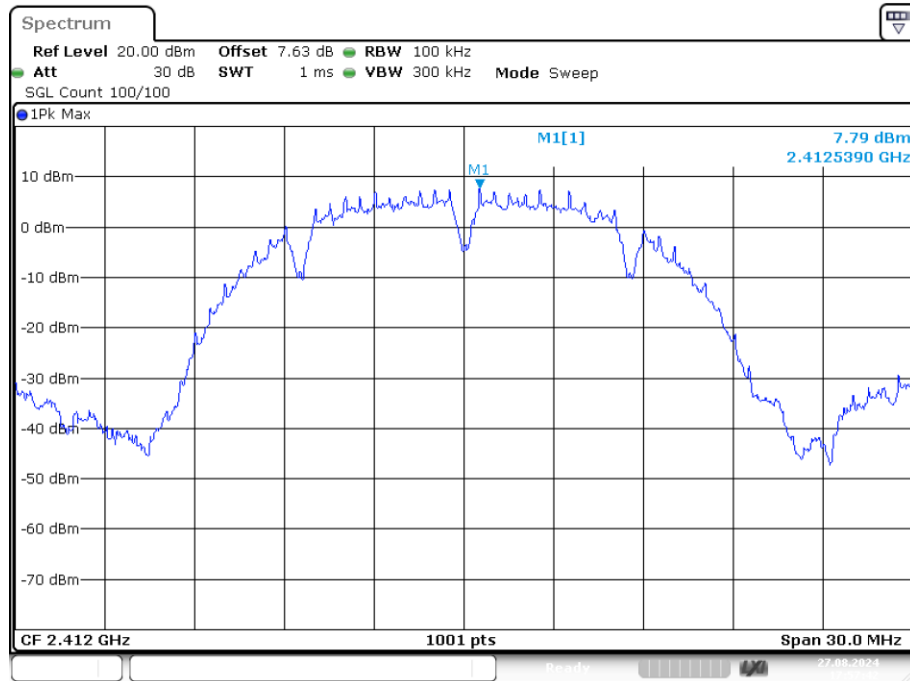
Date: 28.AUG.2024 10:38:41

Band Edge NVNT ax40 2452MHz Ant1 Emission



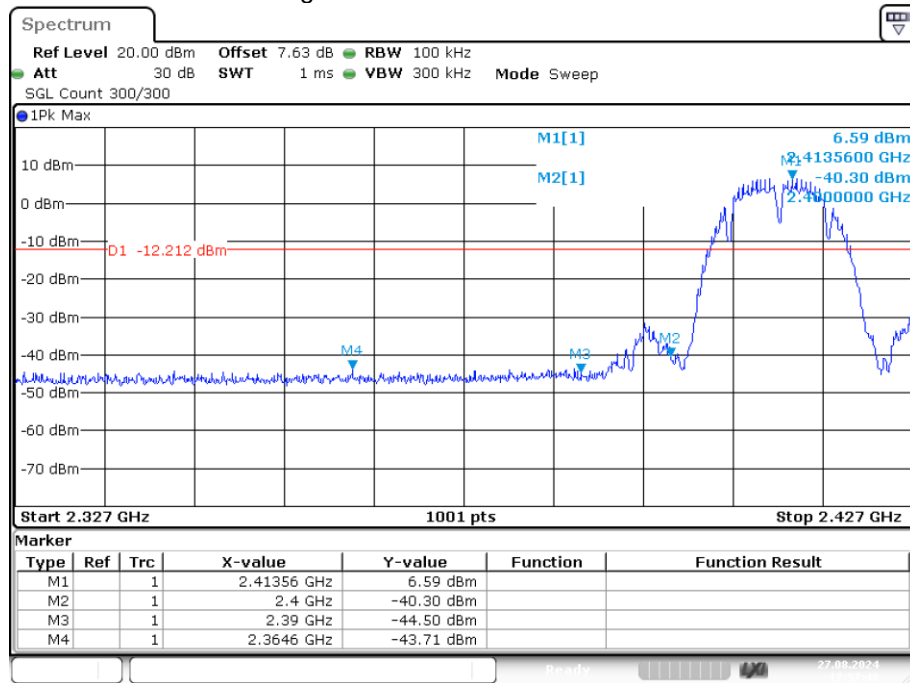
Date: 28.AUG.2024 10:38:45

Band Edge NVNT b 2412MHz Ant1 Ref



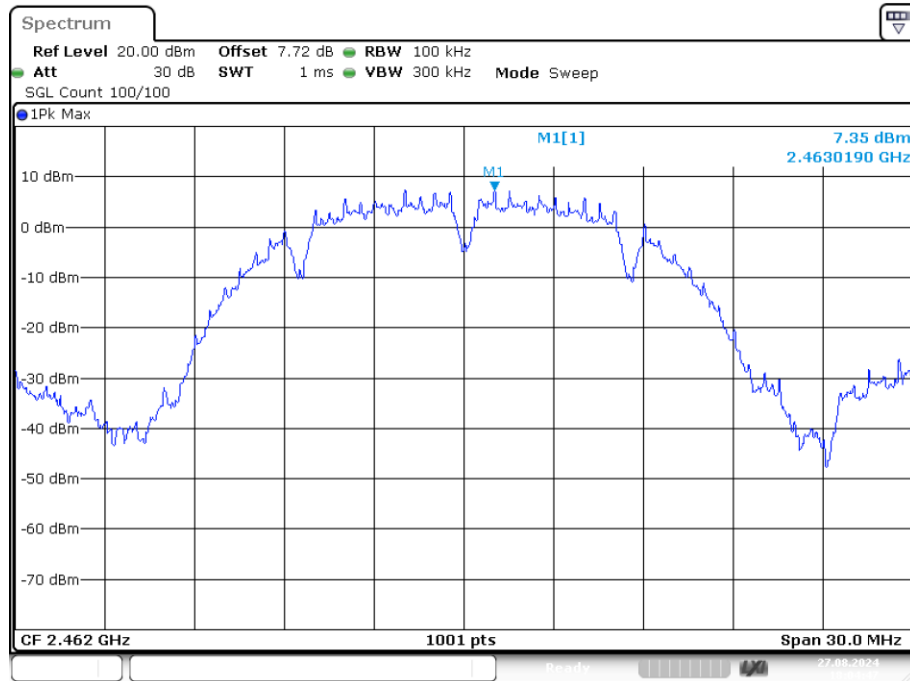
Date: 27.AUG.2024 17:57:41

Band Edge NVNT b 2412MHz Ant1 Emission



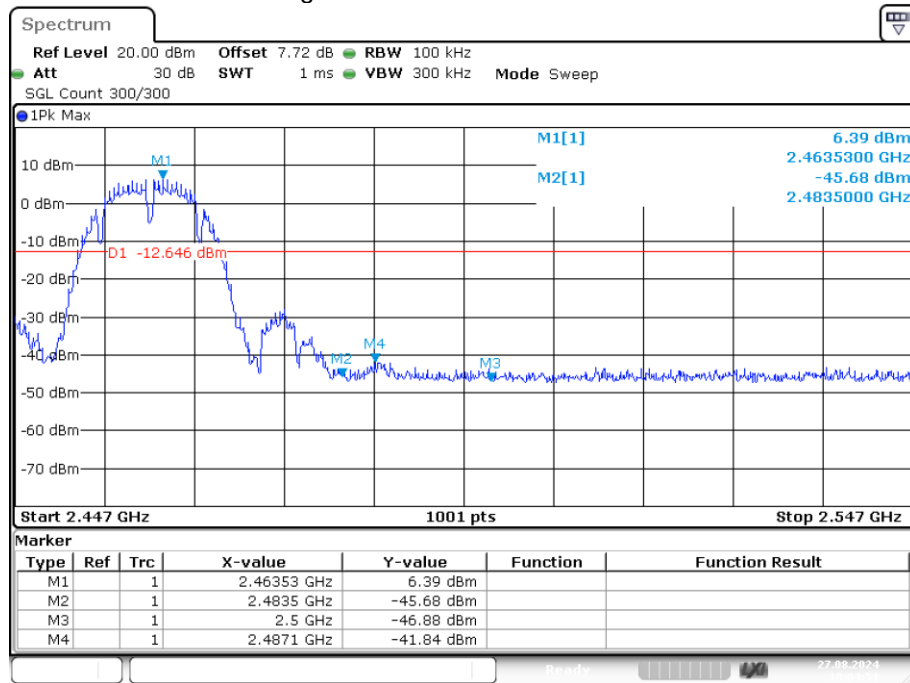
Date: 27.AUG.2024 17:57:48

Band Edge NVNT b 2462MHz Ant1 Ref



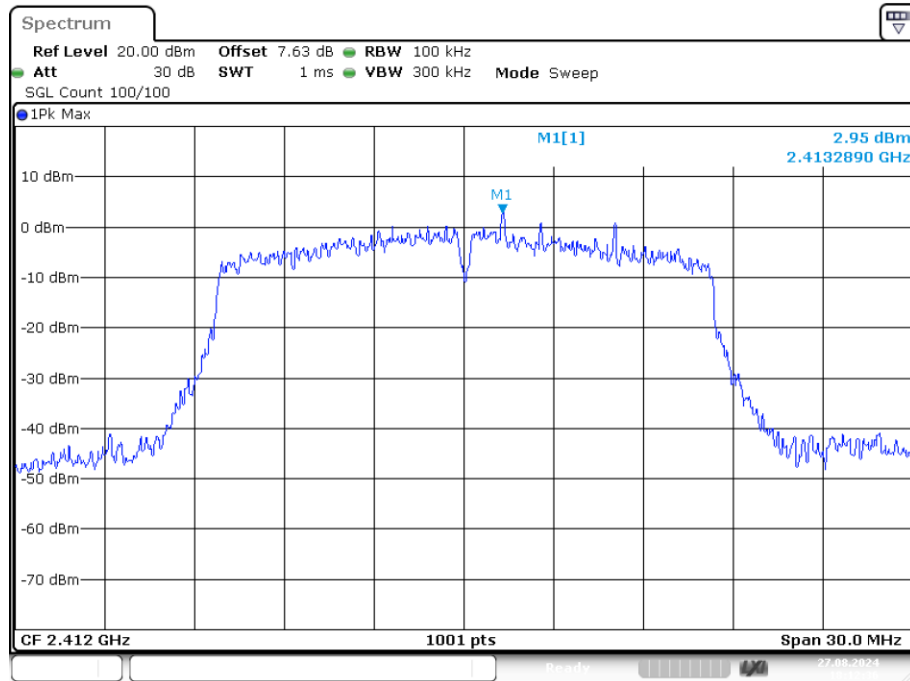
Date: 27.AUG.2024 18:04:46

Band Edge NVNT b 2462MHz Ant1 Emission



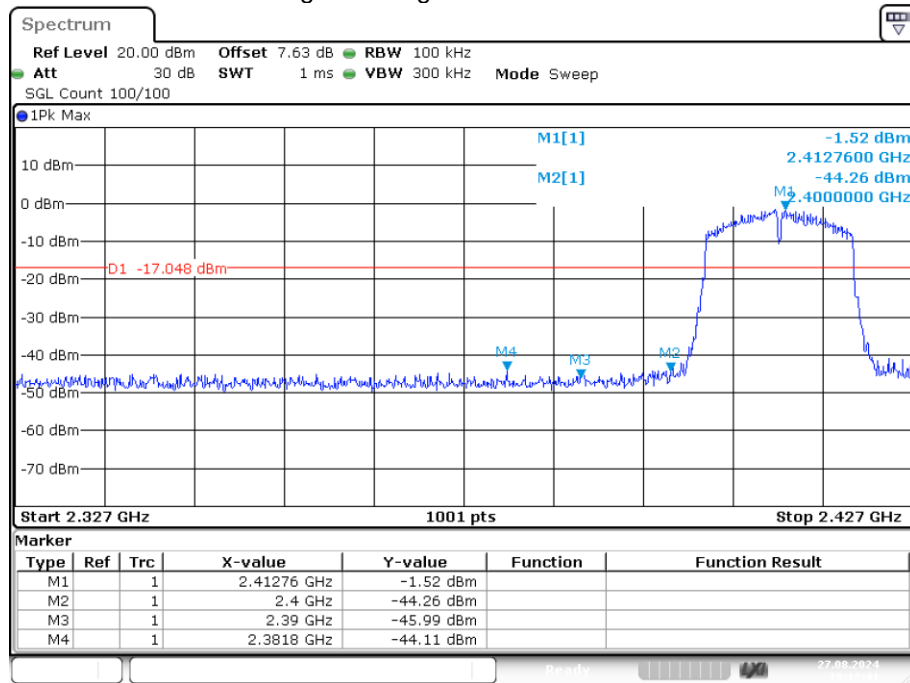
Date: 27.AUG.2024 18:04:51

Band Edge NVNT g 2412MHz Ant1 Ref



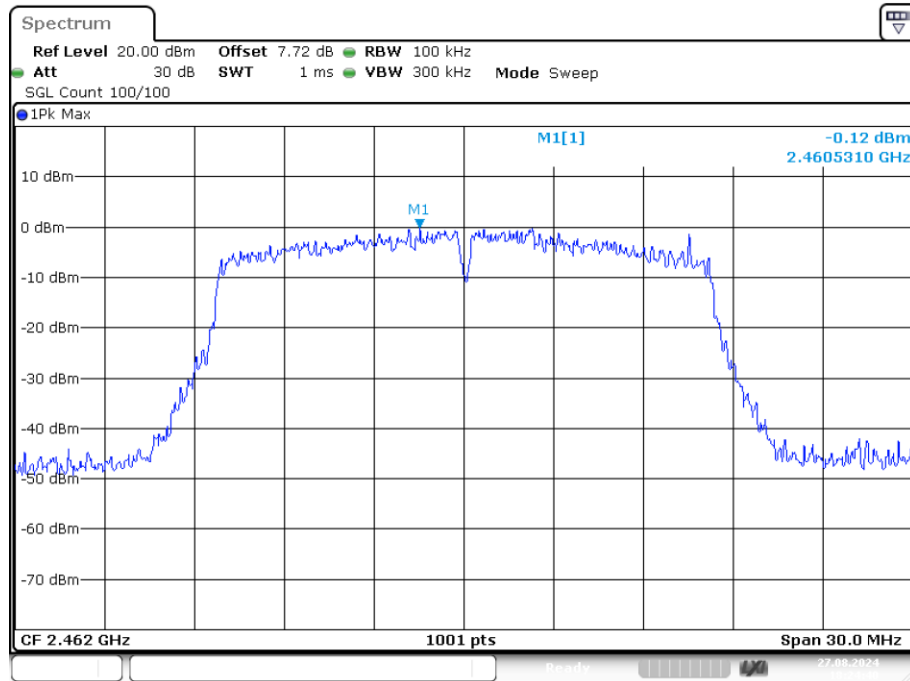
Date: 27.AUG.2024 18:12:36

Band Edge NVNT g 2412MHz Ant1 Emission



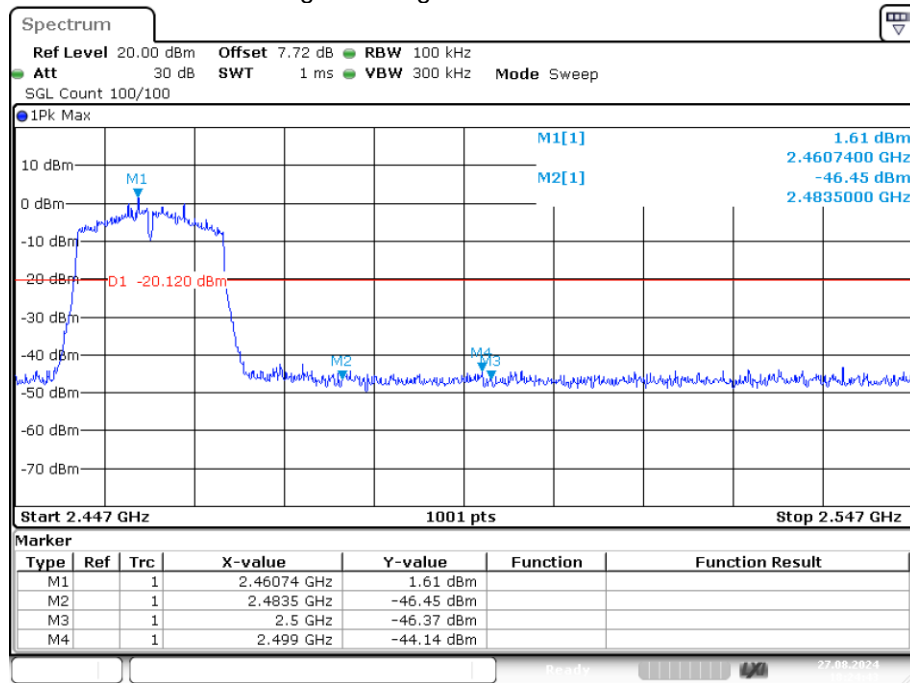
Date: 27.AUG.2024 18:12:40

Band Edge NVNT g 2462MHz Ant1 Ref



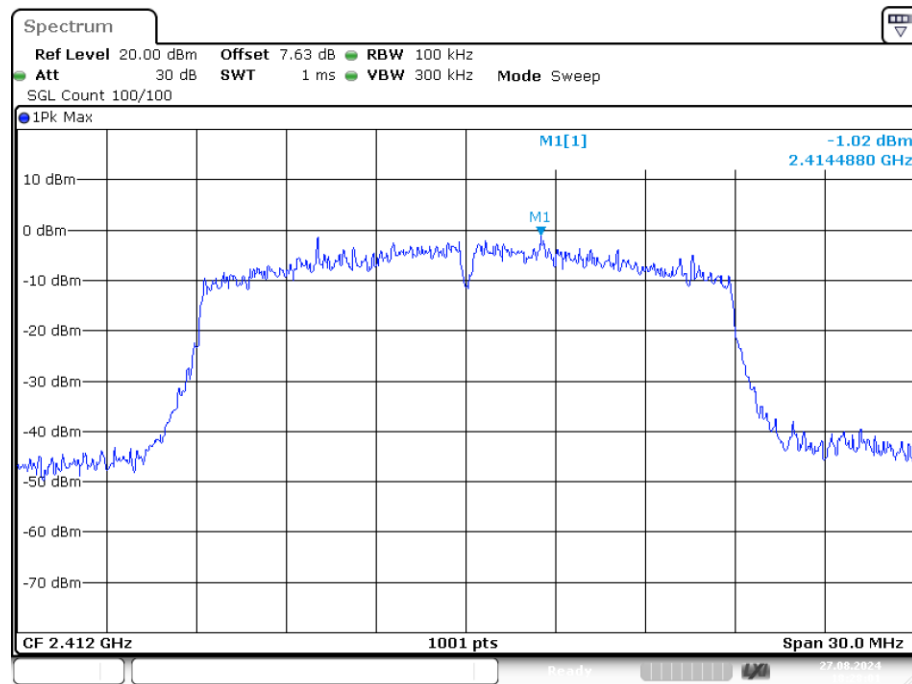
Date: 27.AUG.2024 18:24:40

Band Edge NVNT g 2462MHz Ant1 Emission



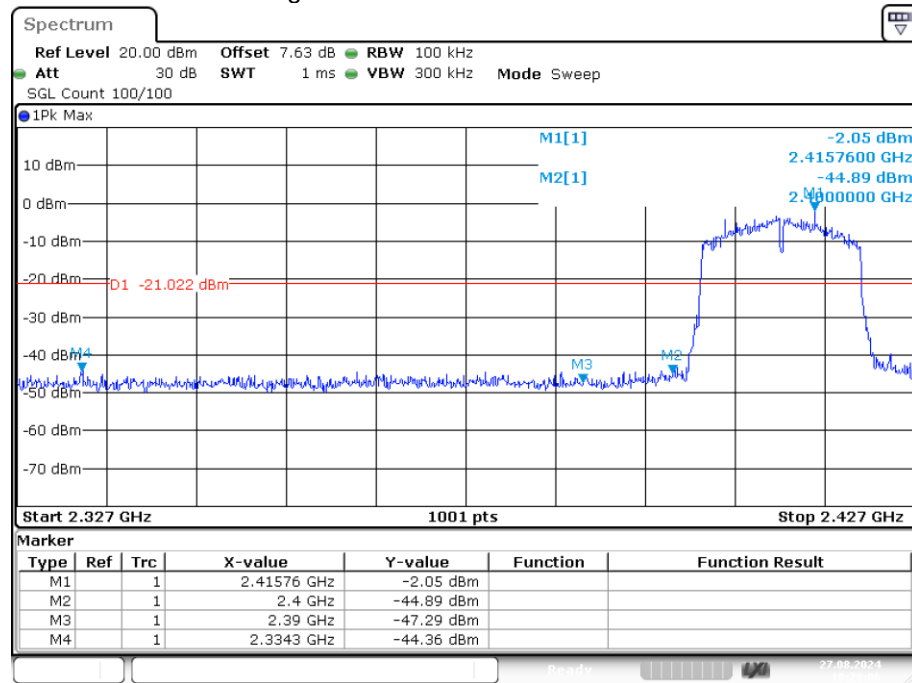
Date: 27.AUG.2024 18:24:43

Band Edge NVNT n20 2412MHz Ant1 Ref



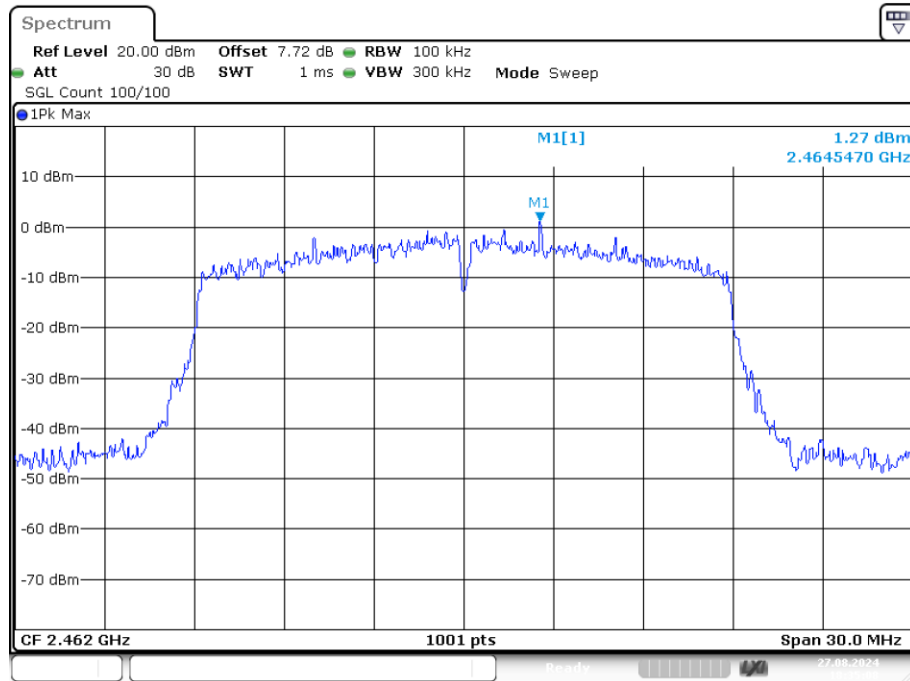
Date: 27.AUG.2024 18:28:01

Band Edge NVNT n20 2412MHz Ant1 Emission



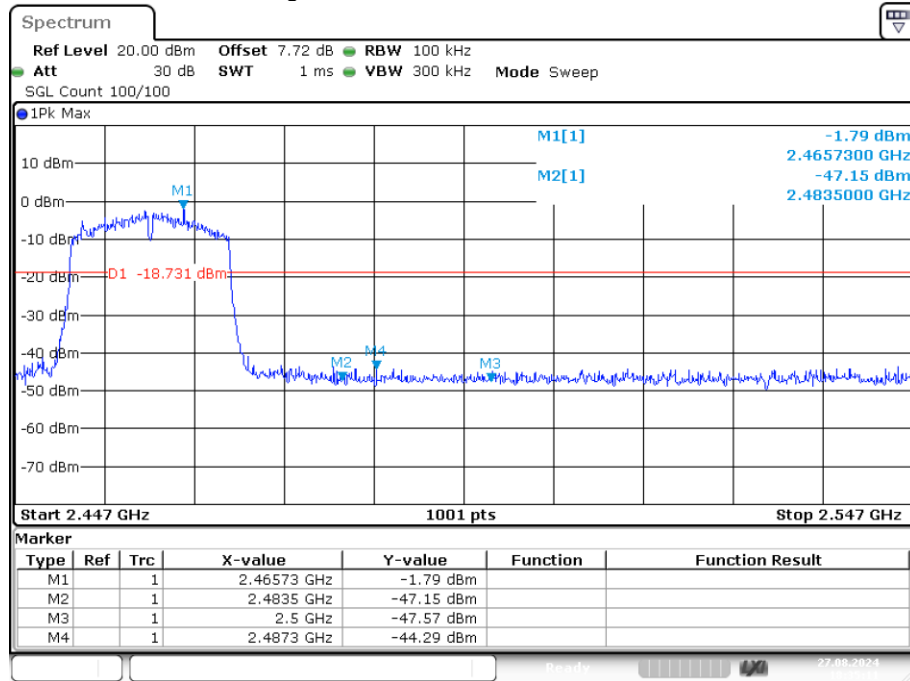
Date: 27.AUG.2024 18:28:05

Band Edge NVNT n20 2462MHz Ant1 Ref



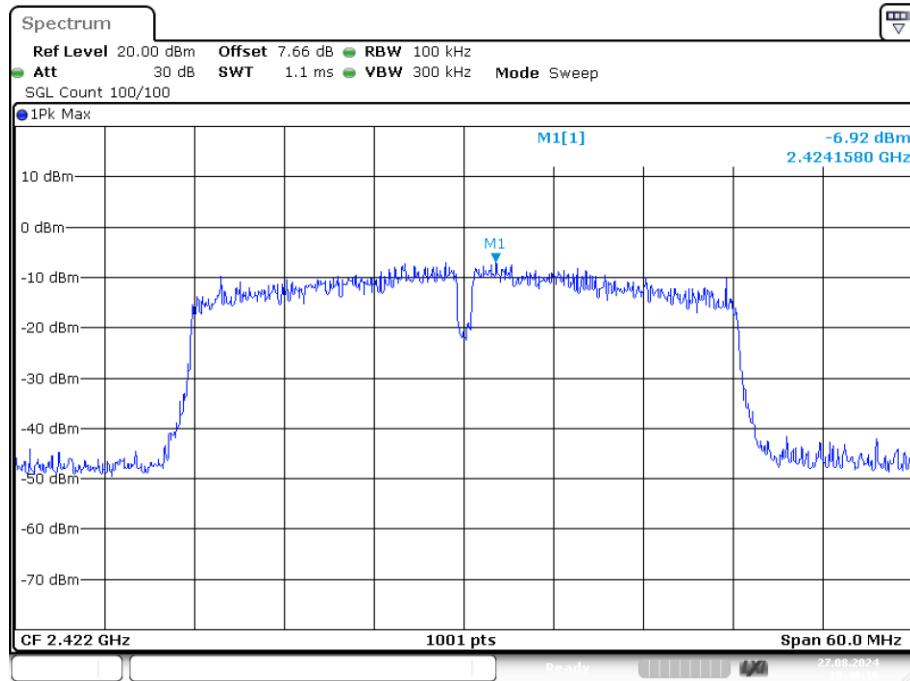
Date: 27.AUG.2024 18:35:08

Band Edge NVNT n20 2462MHz Ant1 Emission



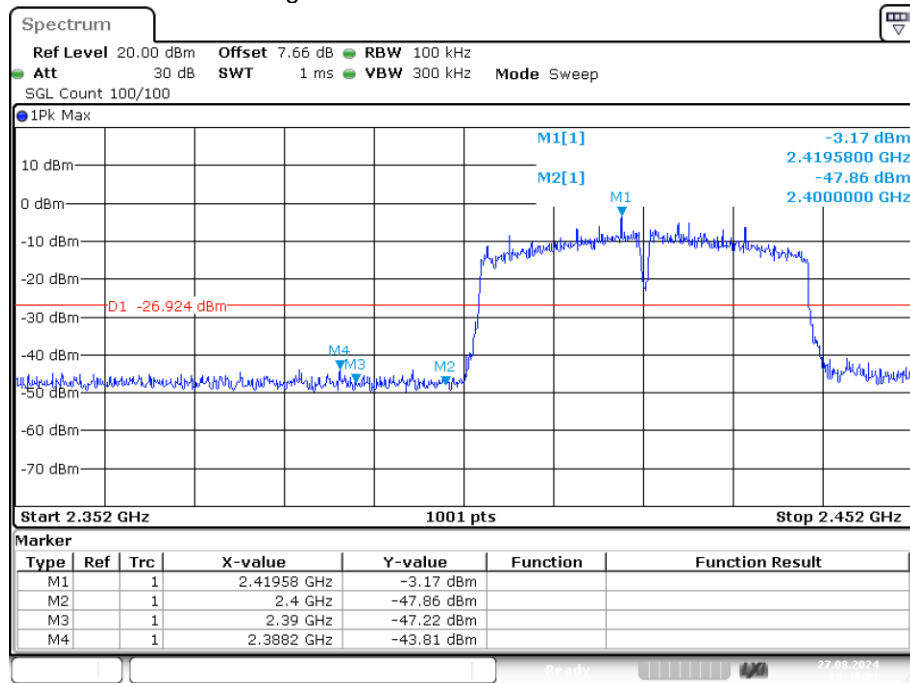
Date: 27.AUG.2024 18:35:11

Band Edge NVNT n40 2422MHz Ant1 Ref



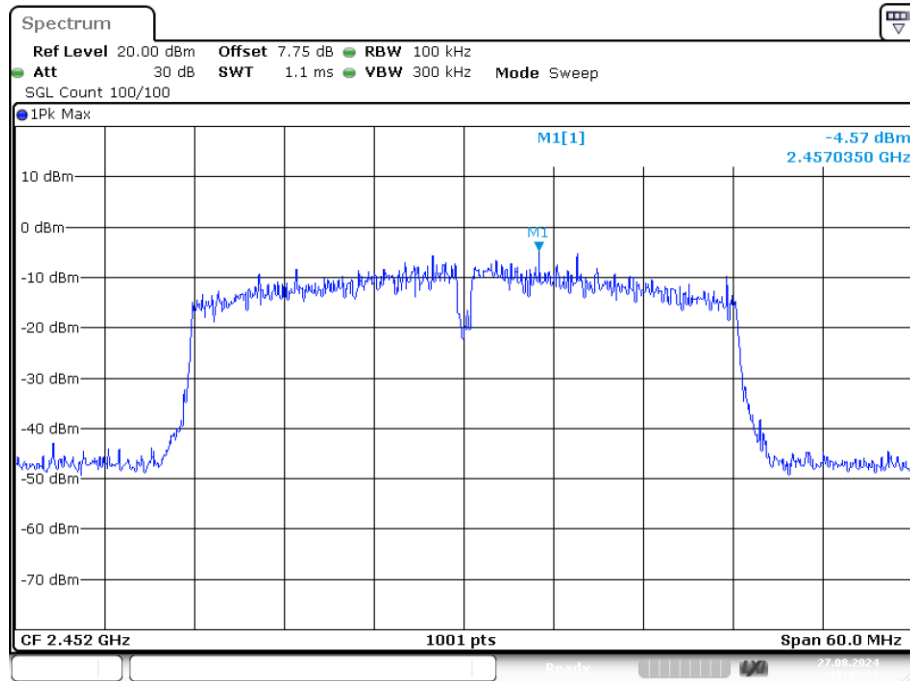
Date: 27.AUG.2024 18:40:16

Band Edge NVNT n40 2422MHz Ant1 Emission



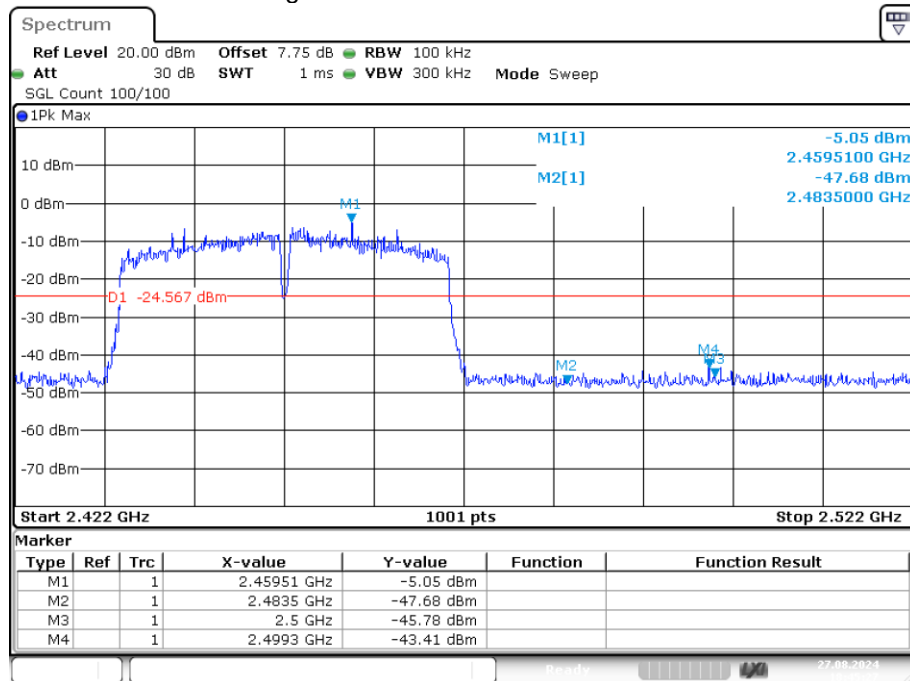
Date: 27.AUG.2024 18:40:20

Band Edge NVNT n40 2452MHz Ant1 Ref



Date: 27.AUG.2024 18:45:23

Band Edge NVNT n40 2452MHz Ant1 Emission



Date: 27.AUG.2024 18:45:27

9. ANTENNA REQUIREMENT

9.1. Standard Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

9.2. Antenna Connected Construction

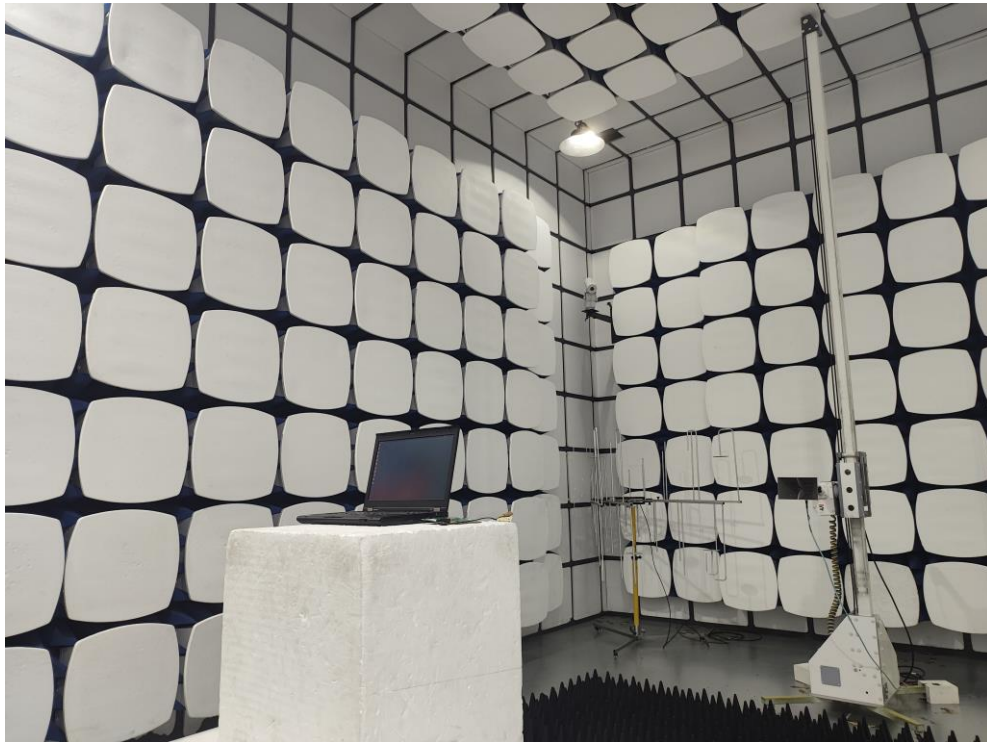
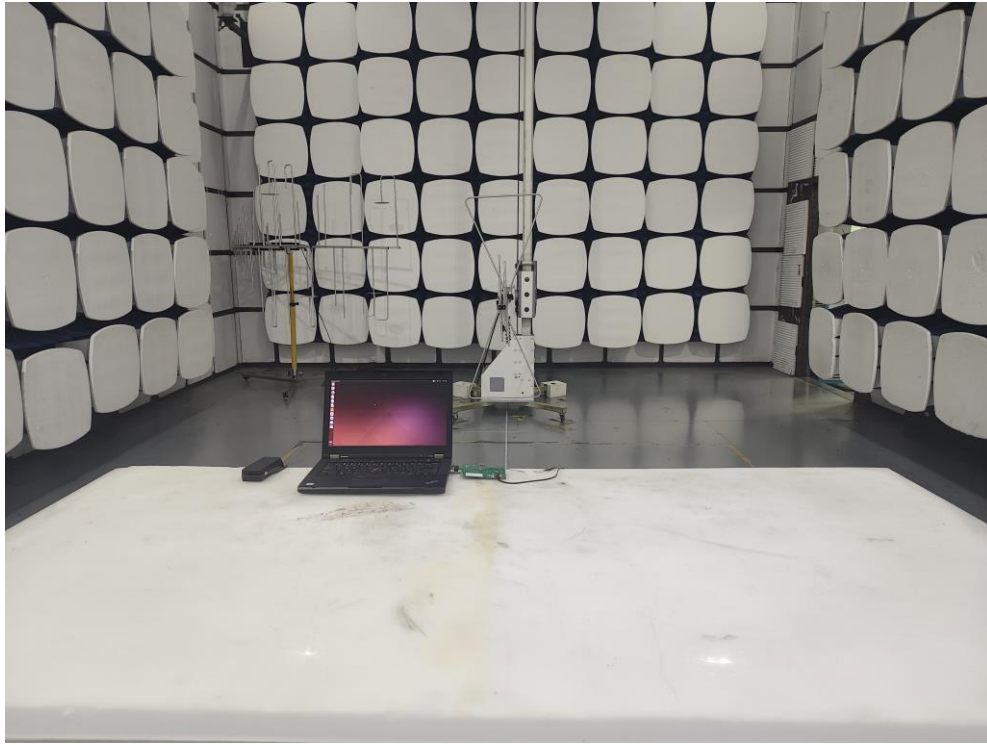
The antenna connector is unique antenna and no consideration of replacement. Please see EUT photo for details.

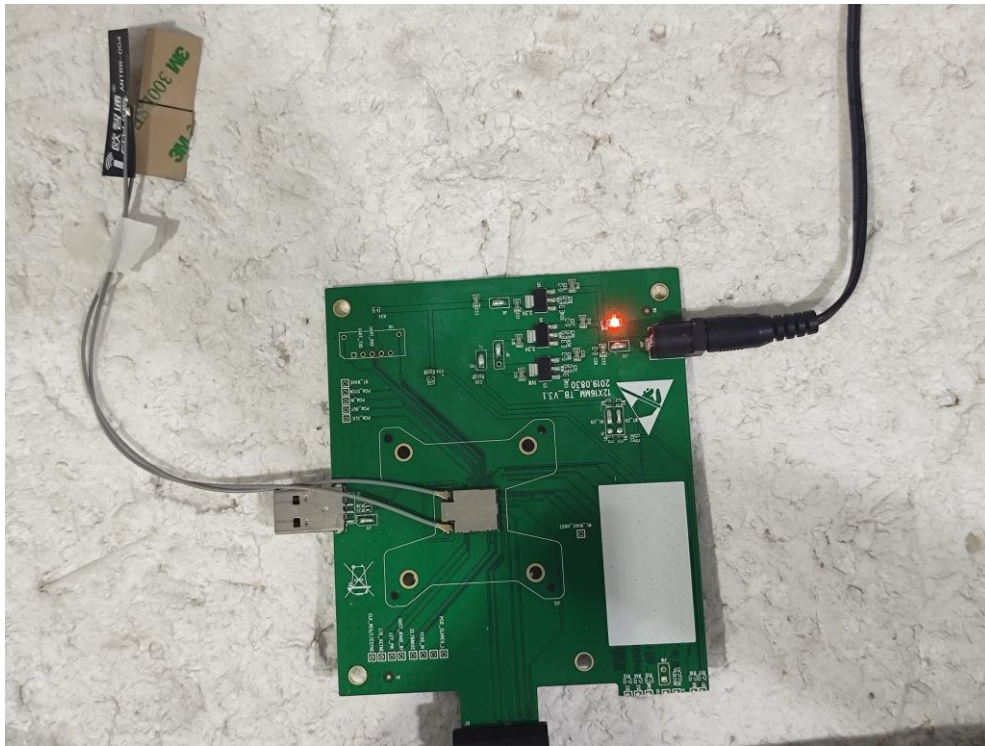
9.3. Results

The EUT antenna is PIFA Antenna. It complies with the standard requirement.

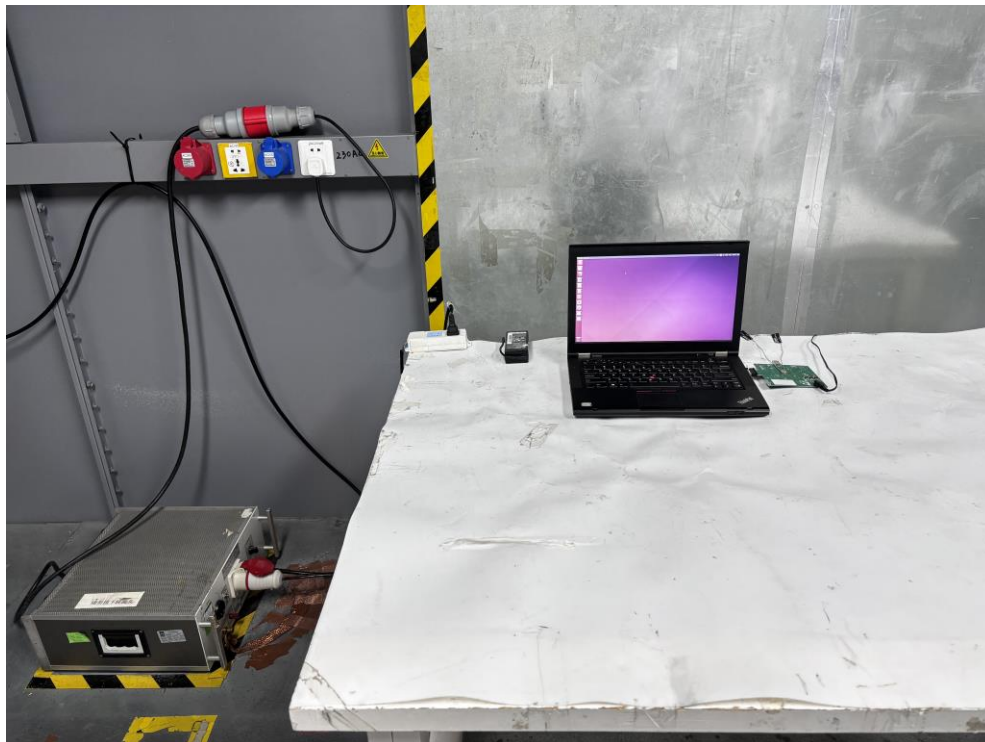
10. TEST SETUP PHOTO

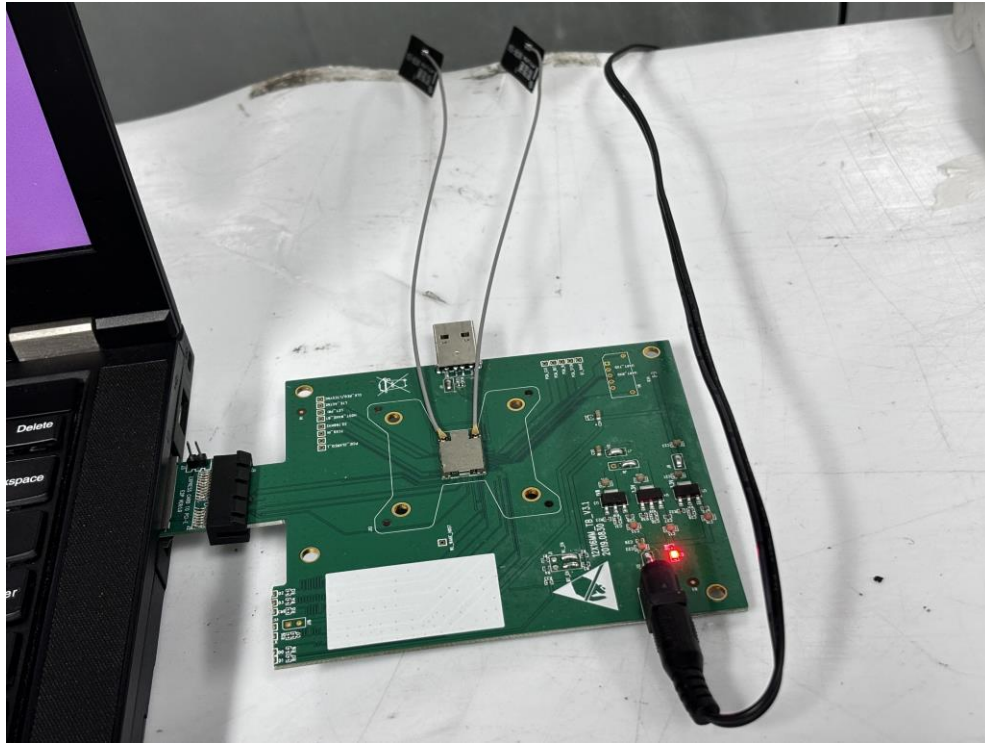
10.1. Photo of Radiated Emission test





10.2.Photo of Conducted Emission test





-----END OF REPORT-----