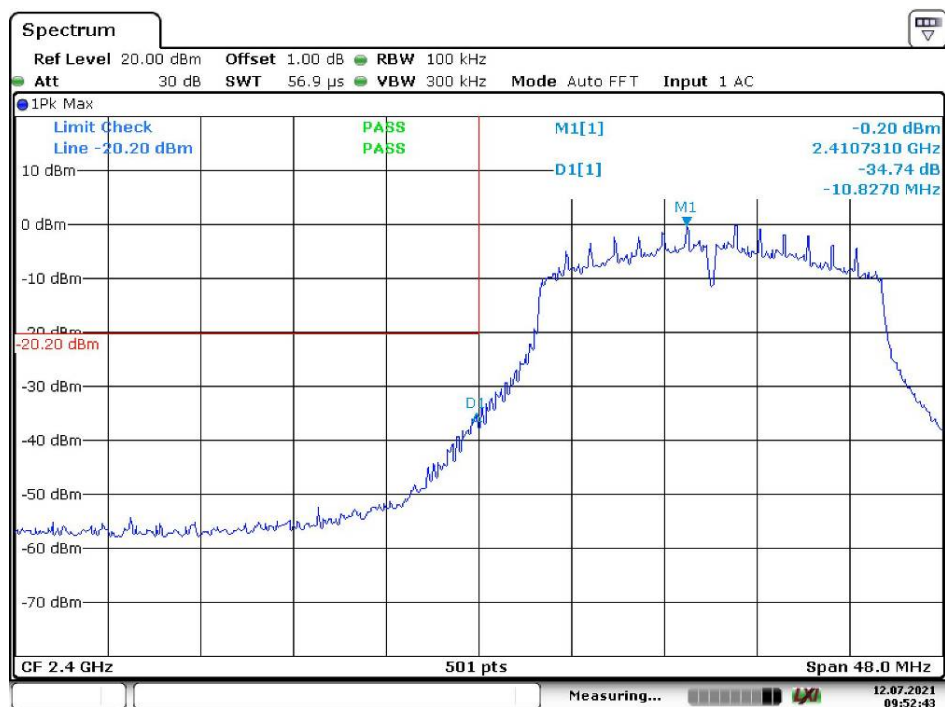
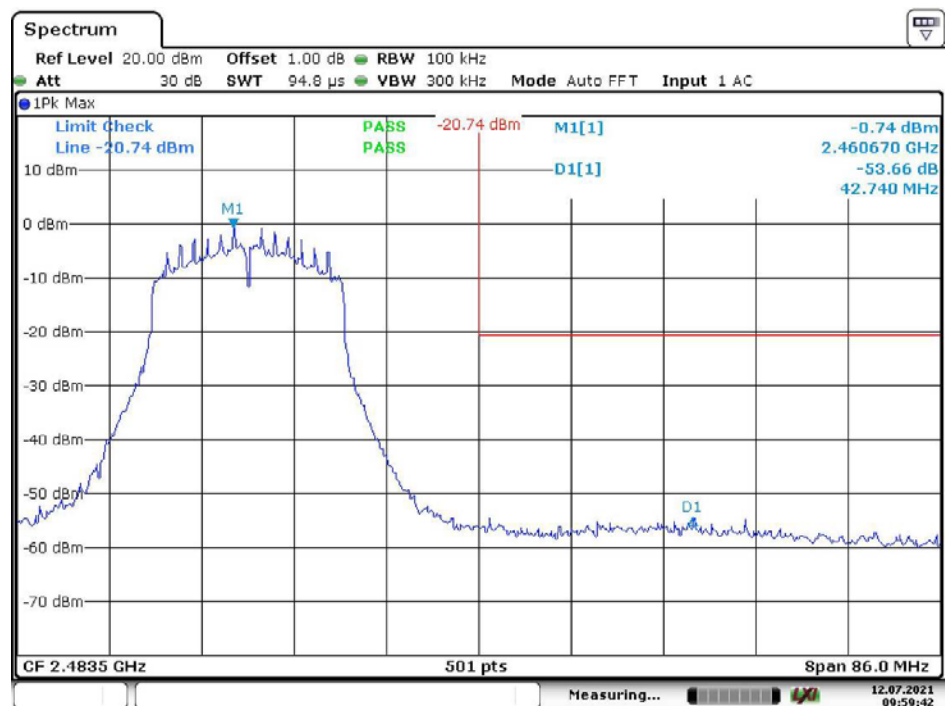


Chain 0,802.11n ht20 Band Edge, Left Side



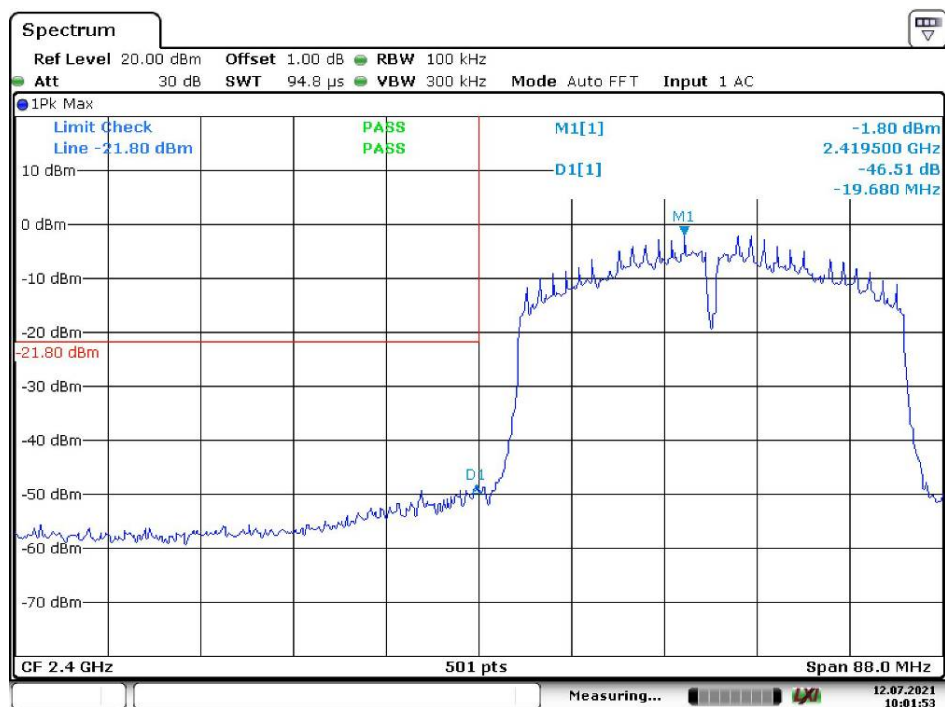
Date: 12.JUL.2021 09:52:44

Chain 0,802.11n ht20 Band Edge, Right Side



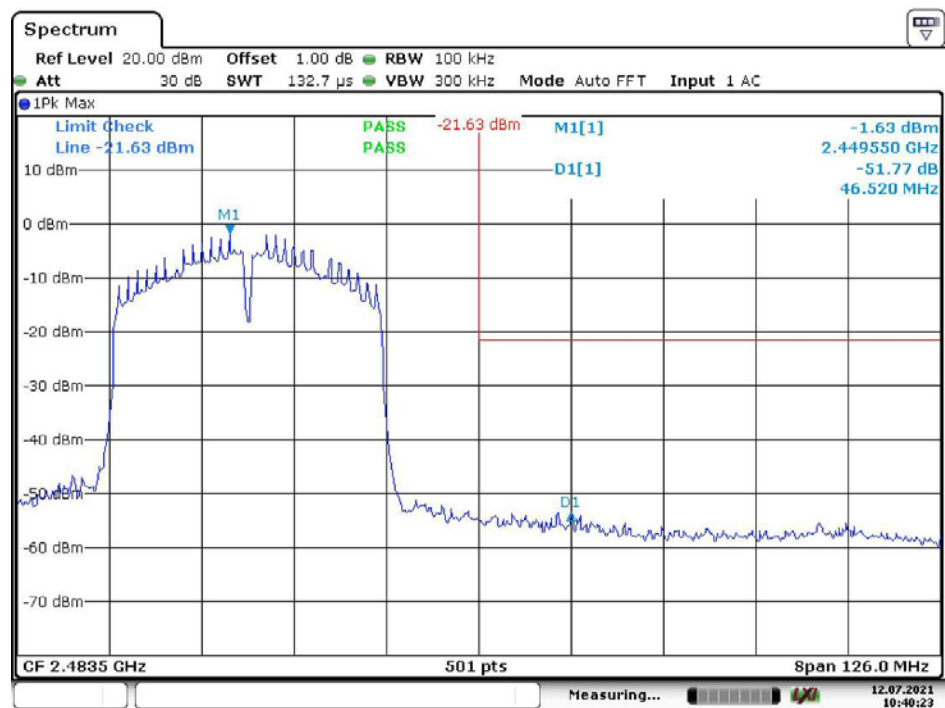
Date: 12.JUL.2021 09:59:42

Chain 0,802.11n ht40 Band Edge, Left Side



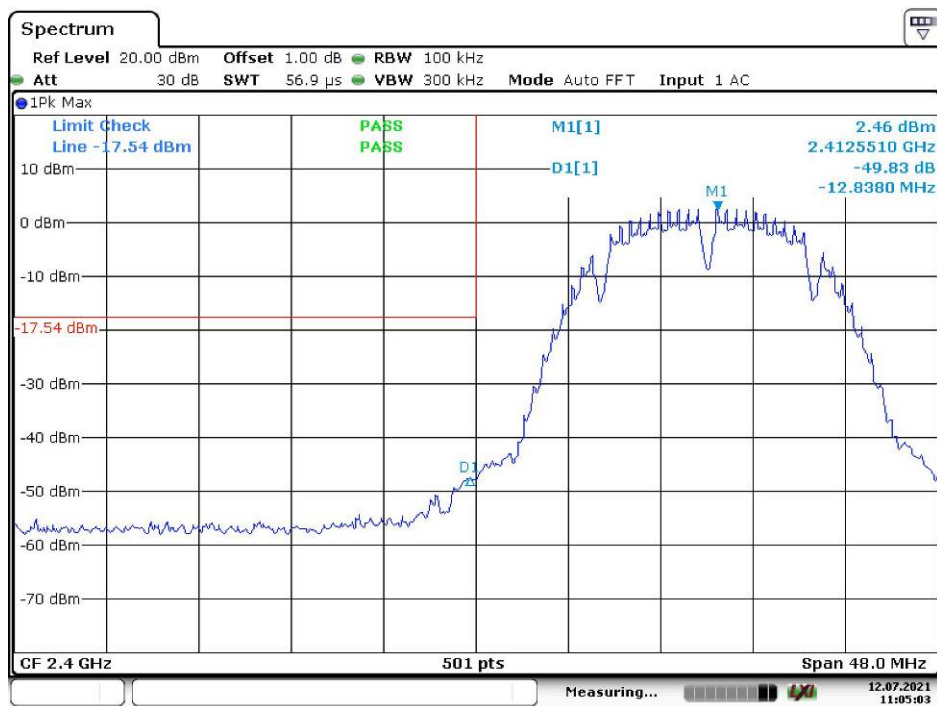
Date: 12.JUL.2021 10:01:54

Chain 0,802.11n ht40 Band Edge, Right Side



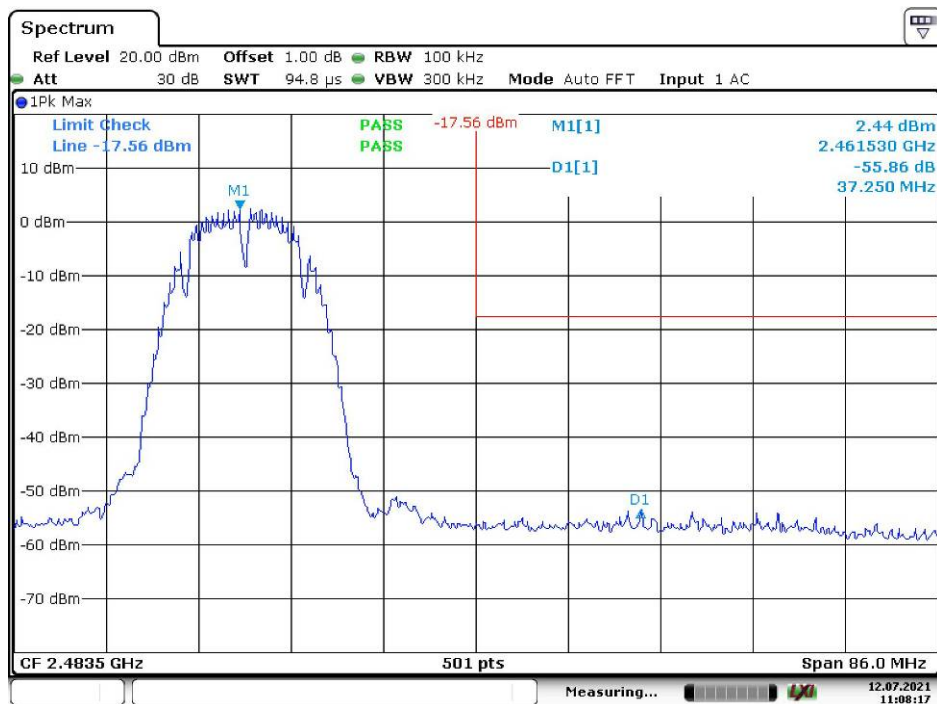
Date: 12.JUL.2021 10:40:23

Chain 1, 802.11b: Band Edge, Left Side



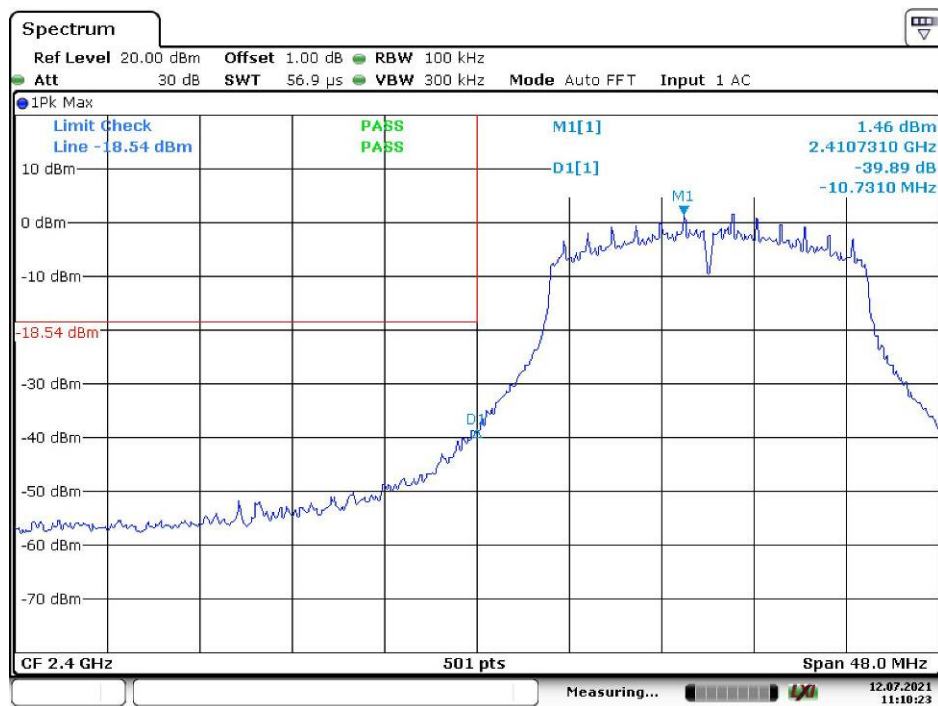
Date: 12.JUL.2021 11:05:03

Chain 1, 802.11b: Band Edge, Right Side



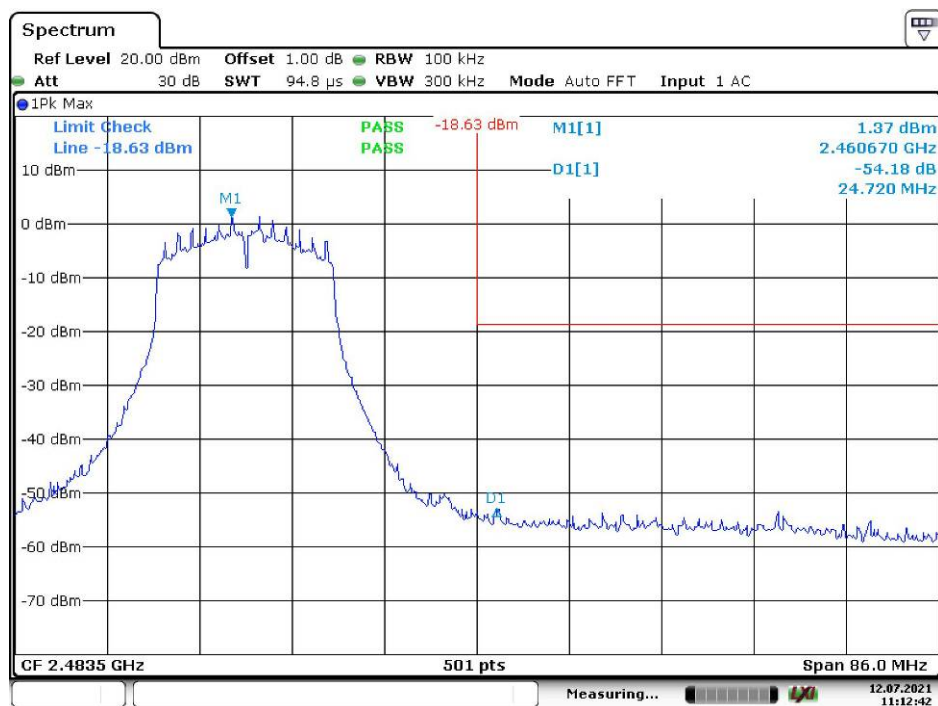
Date: 12.JUL.2021 11:08:18

Chain 1,802.11g: Band Edge, Left Side



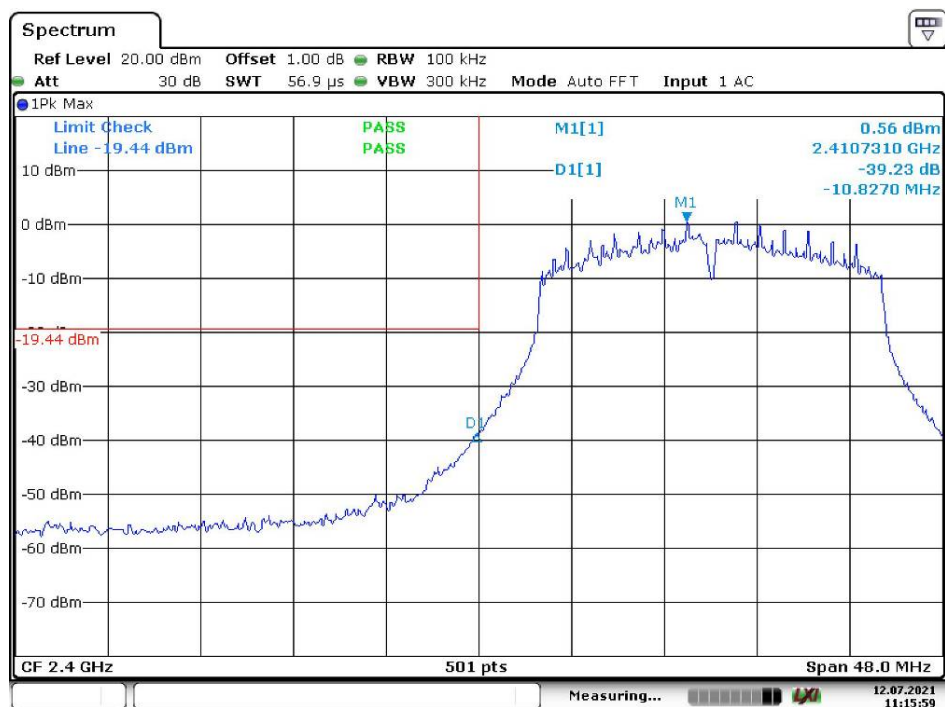
Date: 12.JUL.2021 11:10:23

Chain 1,802.11g: Band Edge, Right Side



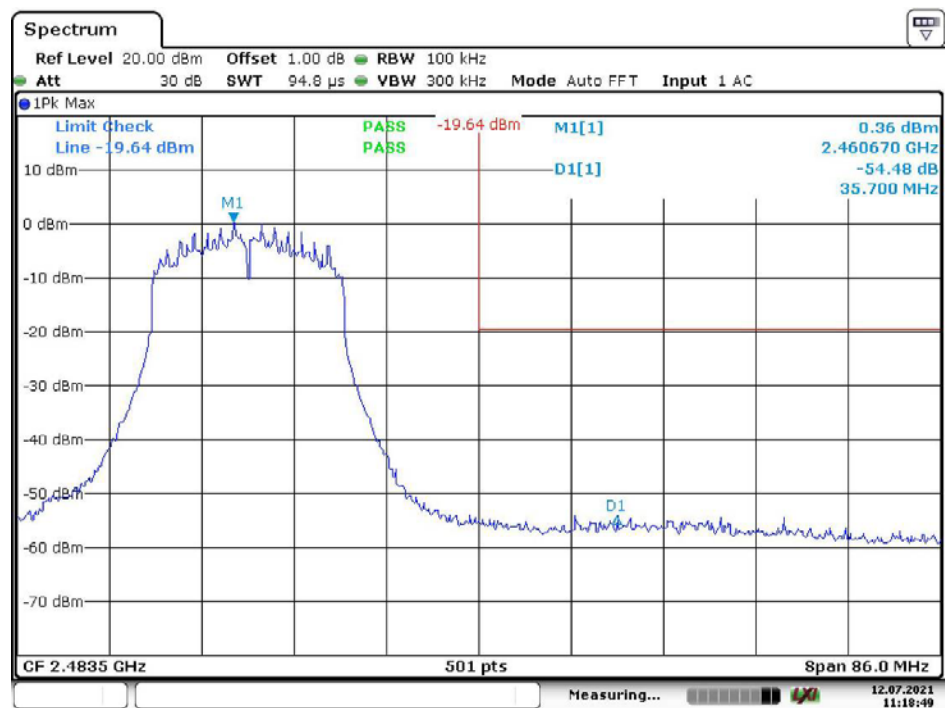
Date: 12.JUL.2021 11:12:43

Chain 1,802.11n ht20 Band Edge, Left Side



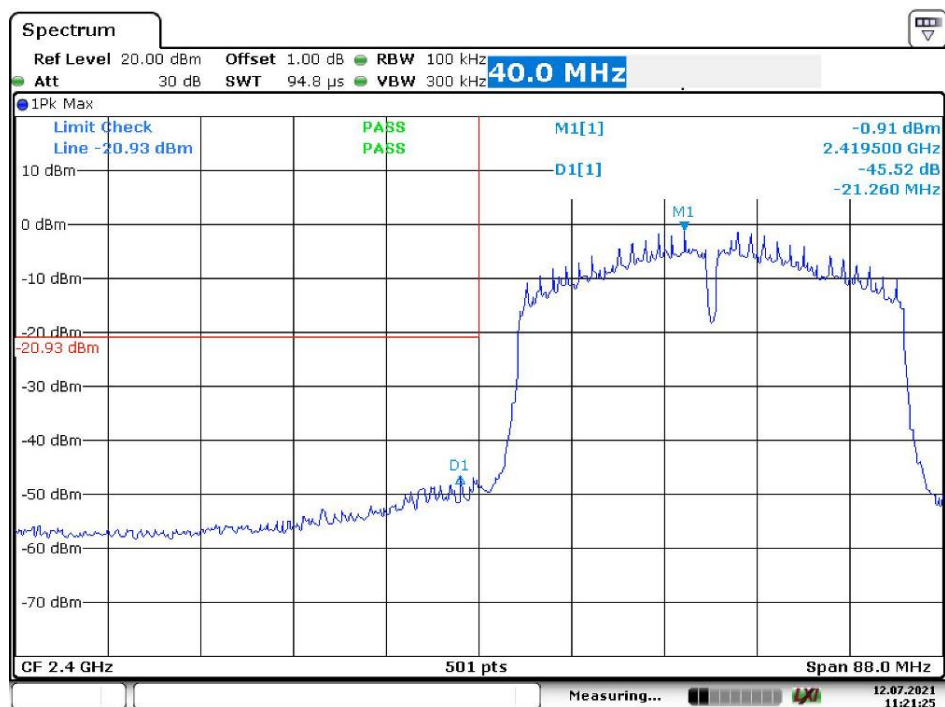
Date: 12.JUL.2021 11:15:59

Chain 1,802.11n ht20 Band Edge, Right Side



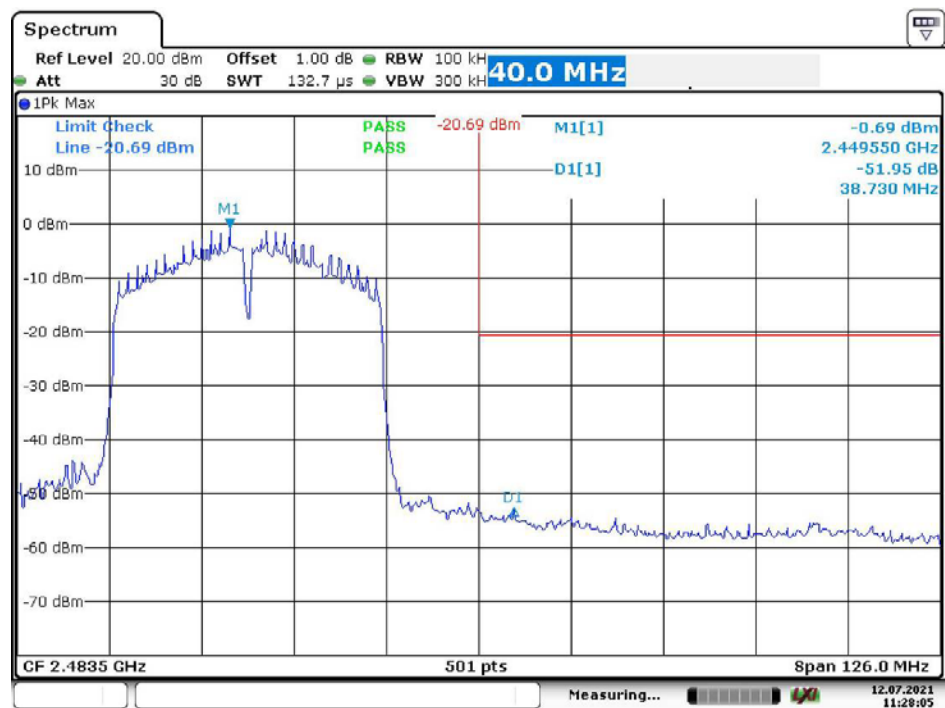
Date: 12.JUL.2021 11:18:49

Chain 1,802.11n ht40 Band Edge, Left Side



Date: 12.JUL.2021 11:21:25

Chain 1,802.11n ht40 Band Edge, Right Side



Date: 12.JUL.2021 11:28:05

FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set the RBW = 3 kHz, VBW = 10 kHz, Set the span to 1.5 times the DTS bandwidth.
4. Use the peak marker function to determine the maximum amplitude level.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESR3	102453	2020-09-12	2021-09-12
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	29.6°C
Relative Humidity:	46 %
ATM Pressure:	100.5 kPa
Test by:	Joe Qiao
Test Date:	2021-07-12~2021-08-10

Test Result: Compliance. Please refer to the following table and plots

Test Mode: Transmitting

Test mode	Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)
			Chain 0	Chain 1	Total	
802.11b	Low	2412	-11.84	-11.22	/	≤8
	Middle	2437	-11.90	-11.35	/	≤8
	High	2462	-12.33	-11.33	/	≤8
802.11g	Low	2412	-14.02	-13.49	/	≤8
	Middle	2437	-13.90	-13.35	/	≤8
	High	2462	-14.10	-13.56	/	≤8
802.11n ht20	Low	2412	-14.39	-13.54	-10.93	≤8
	Middle	2437	-13.86	-13.93	-10.88	≤8
	High	2462	-14.54	-14.88	-11.7	≤8
802.11n ht40	Low	2422	-17.89	-17.96	-14.91	≤8
	Middle	2437	-17.81	-17.90	-14.84	≤8
	High	2452	-18.01	-18.14	-15.06	≤8

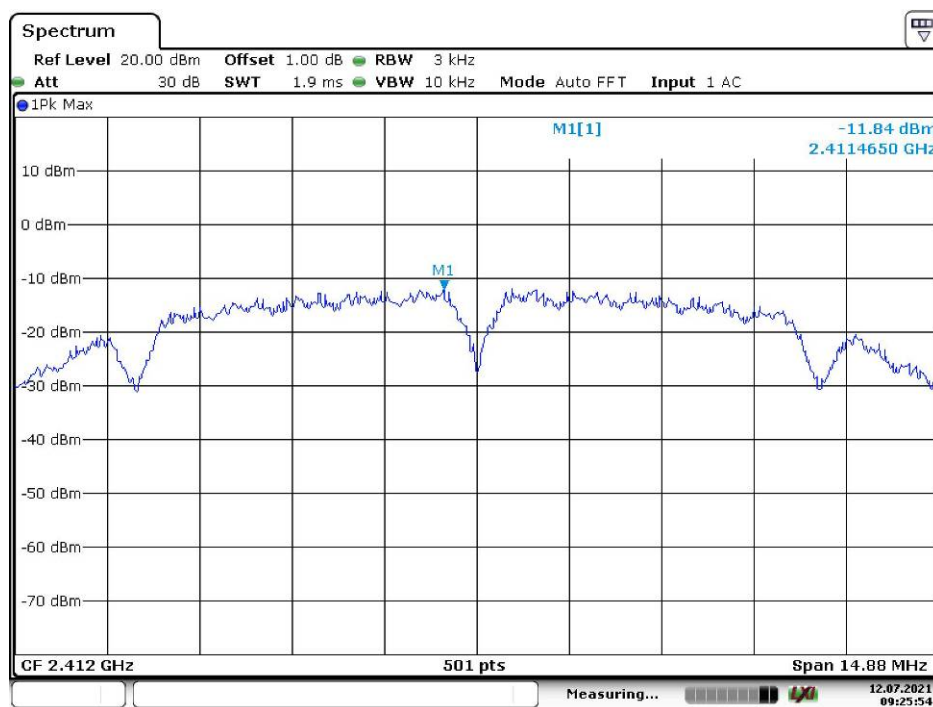
Note 1: The maximum antenna gain is 2.36 dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(N_{\text{ANT}}/N_{\text{SS}}) \text{ dB.}$$

So:

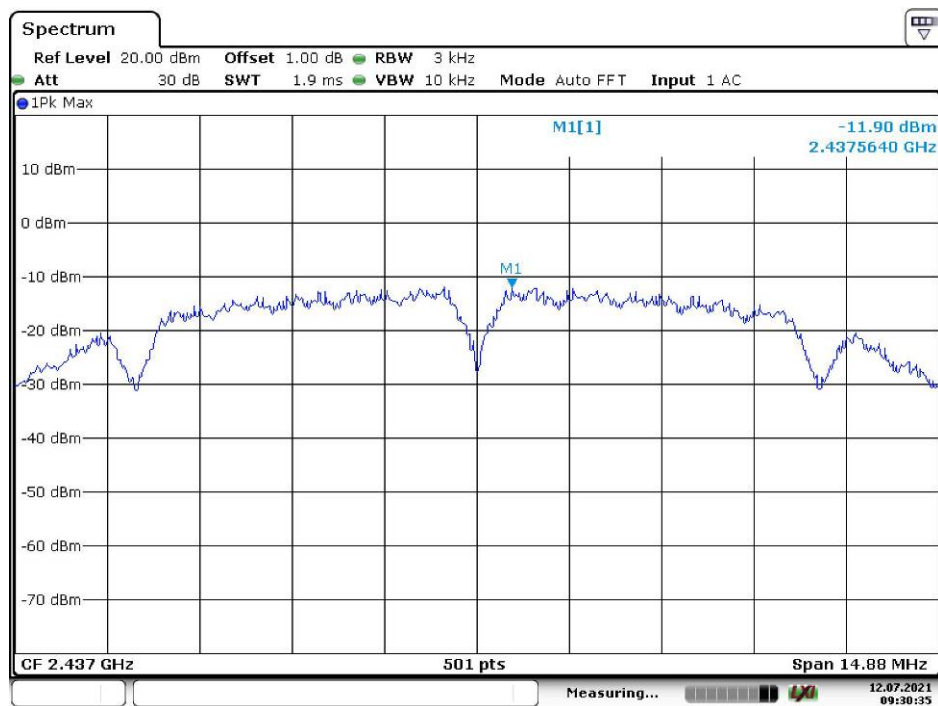
$$\text{Directional gain} = G_{\text{ANT}} + \text{Array Gain} = 2.36 + 10 \cdot \log(2/1) = 5.36 \text{ dBi}$$

Chain 0, Power Spectral Density, 802.11b Low Channel



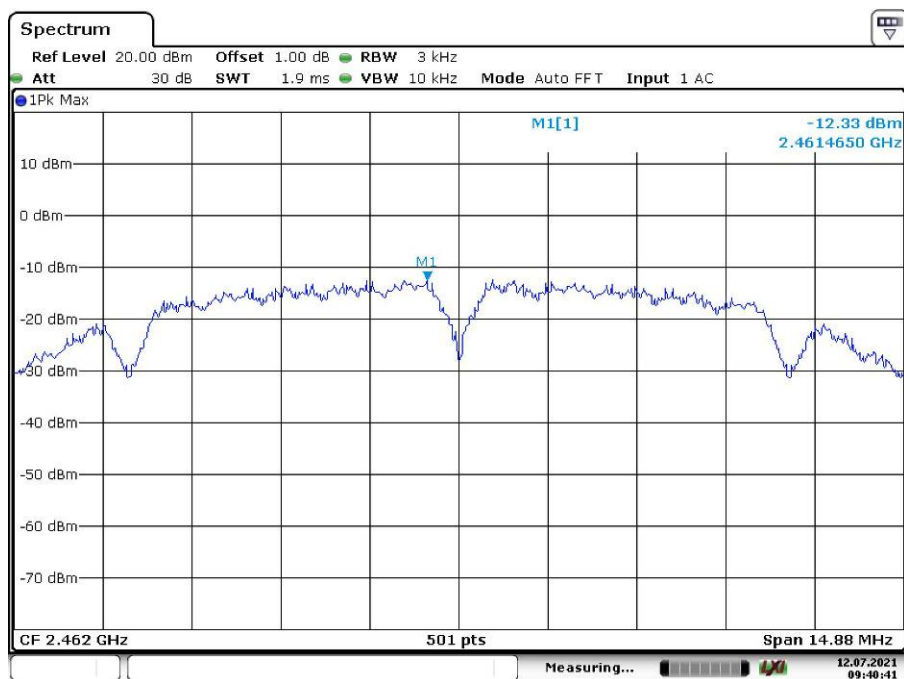
Date: 12.JUL.2021 09:25:54

Chain 0,Power Spectral Density, 802.11b Middle Channel



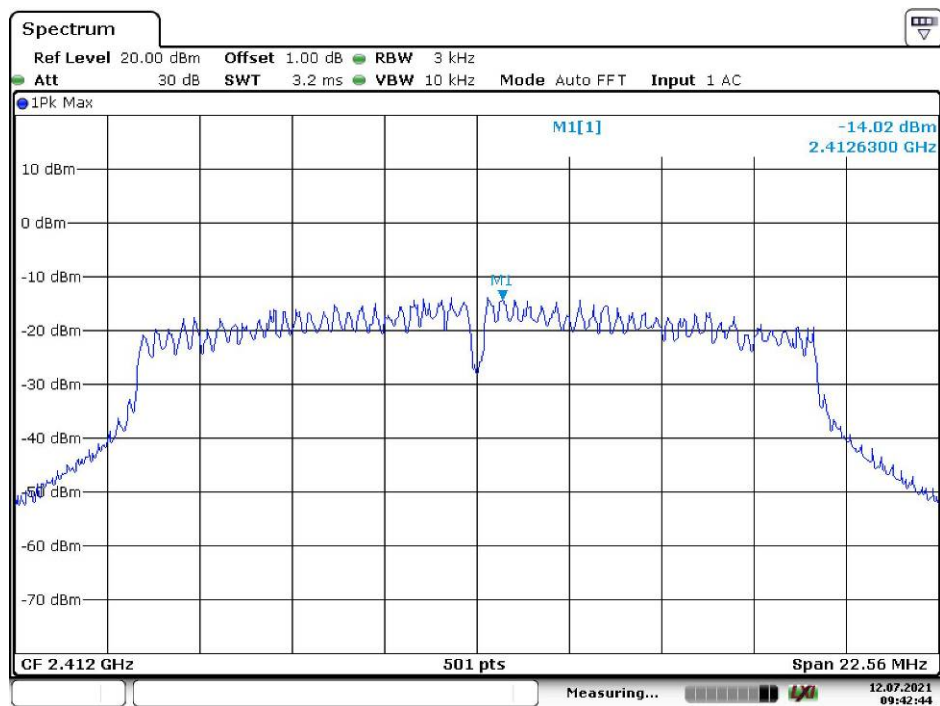
Date: 12.JUL.2021 09:30:35

Chain 0,Power Spectral Density, 802.11b High Channel



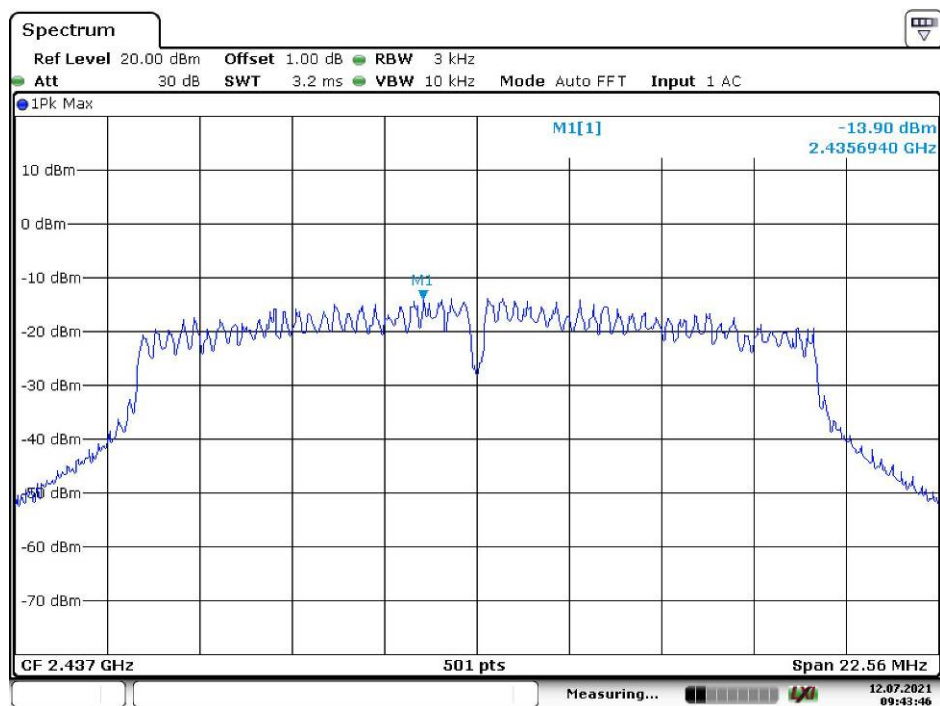
Date: 12.JUL.2021 09:40:41

Chain 0, Power Spectral Density, 802.11g Low Channel



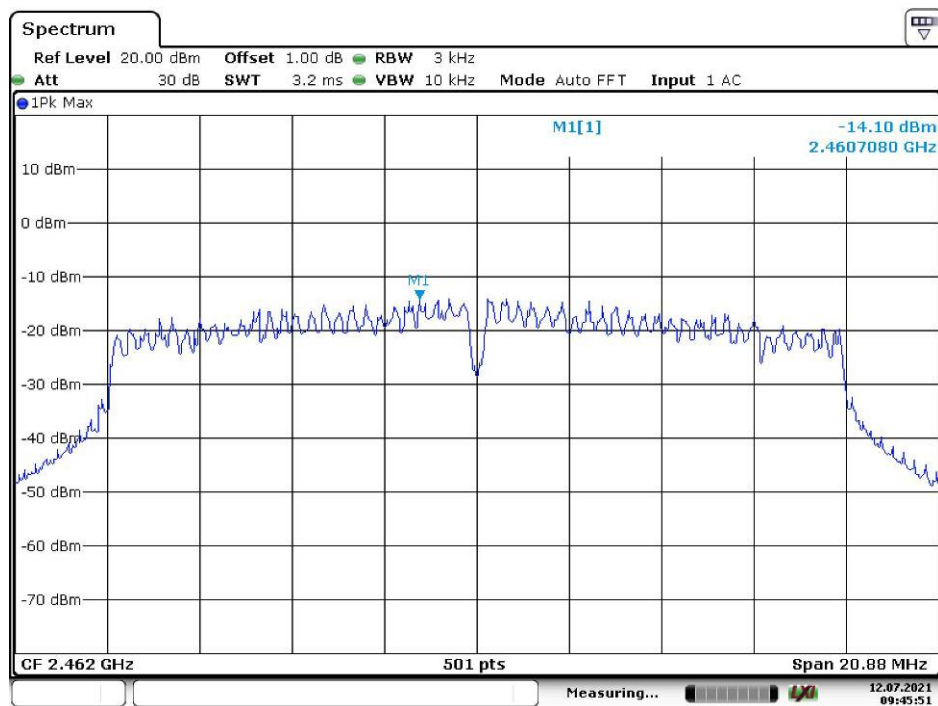
Date: 12.JUL.2021 09:42:45

Chain 0, Power Spectral Density, 802.11g Middle Channel



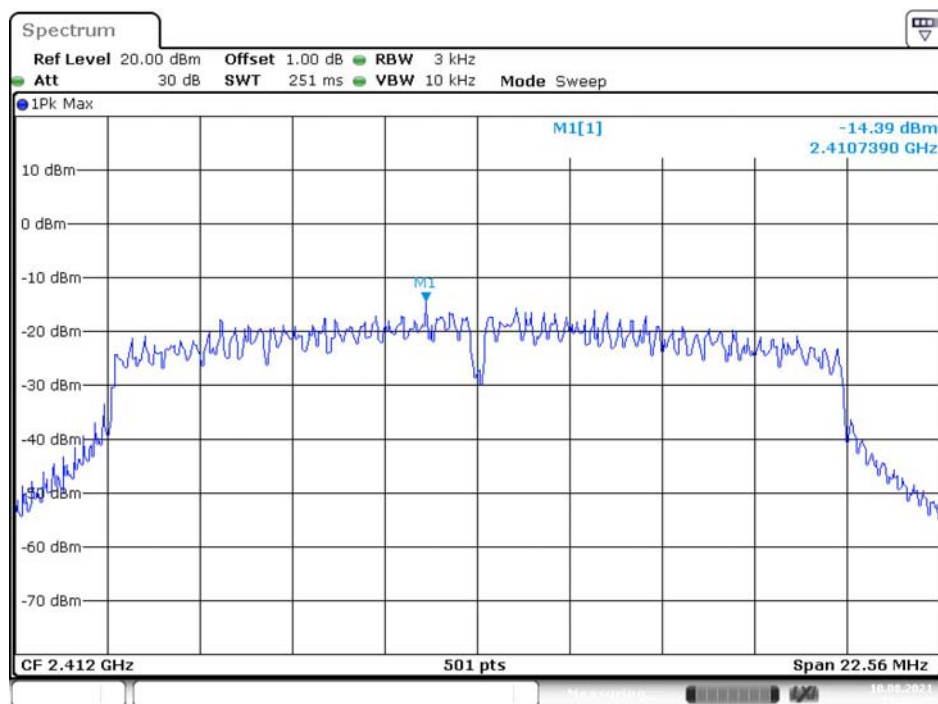
Date: 12.JUL.2021 09:43:47

Chain 0,Power Spectral Density, 802.11g High Channel

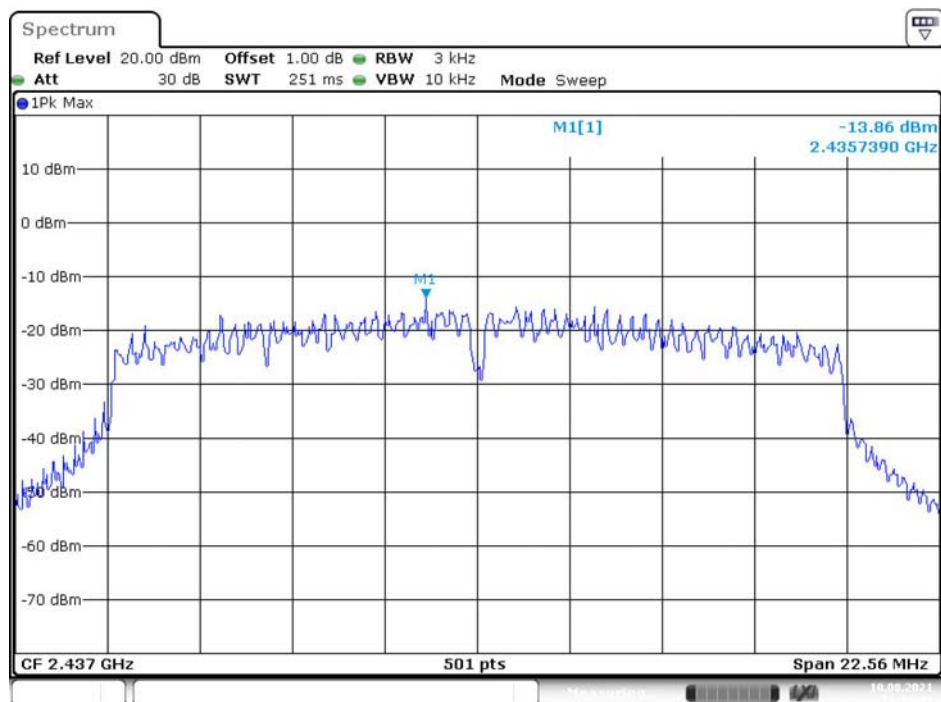


Date: 12.JUL.2021 09:45:51

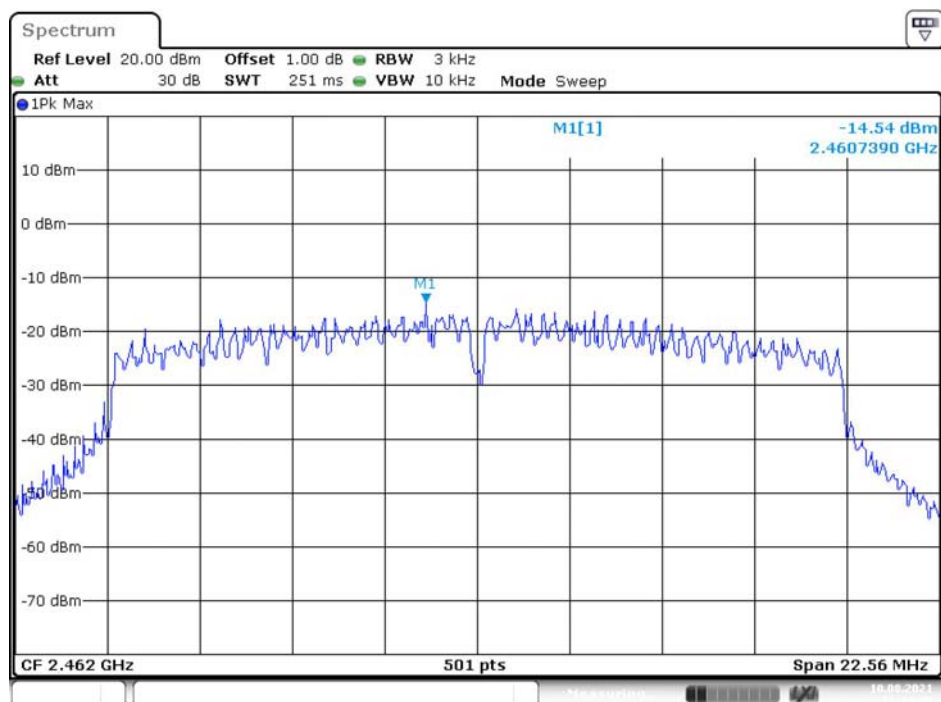
Chain 0,Power Spectral Density, 802.11n ht20 Low Channel



Date: 10.AUG.2021 11:28:28

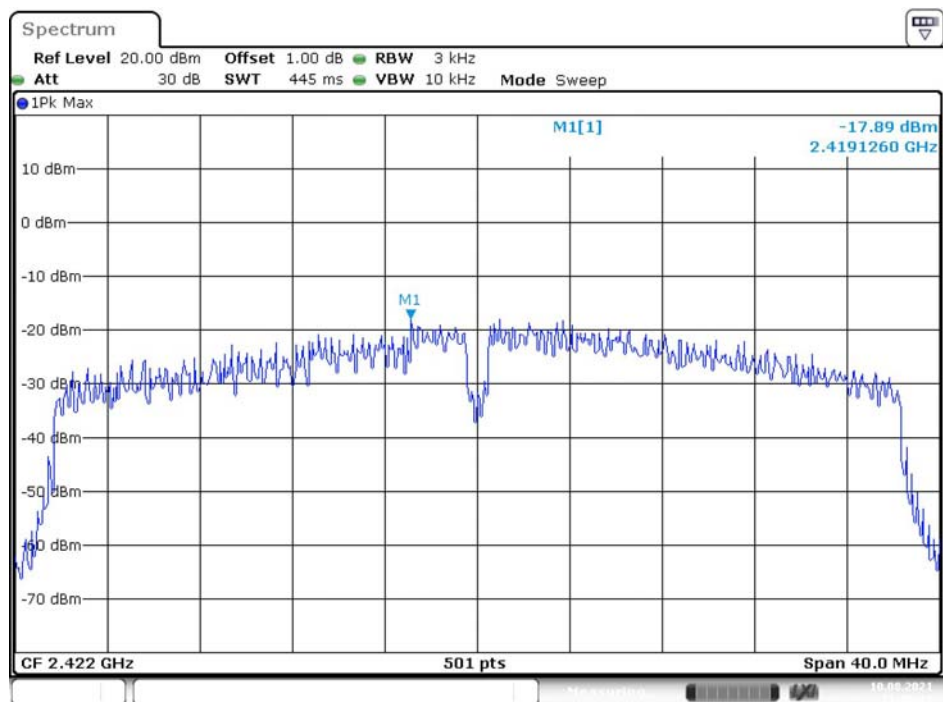
Chain 0,Power Spectral Density, 802.11n ht20 Middle Channel

Date: 10.AUG.2021 11:31:42

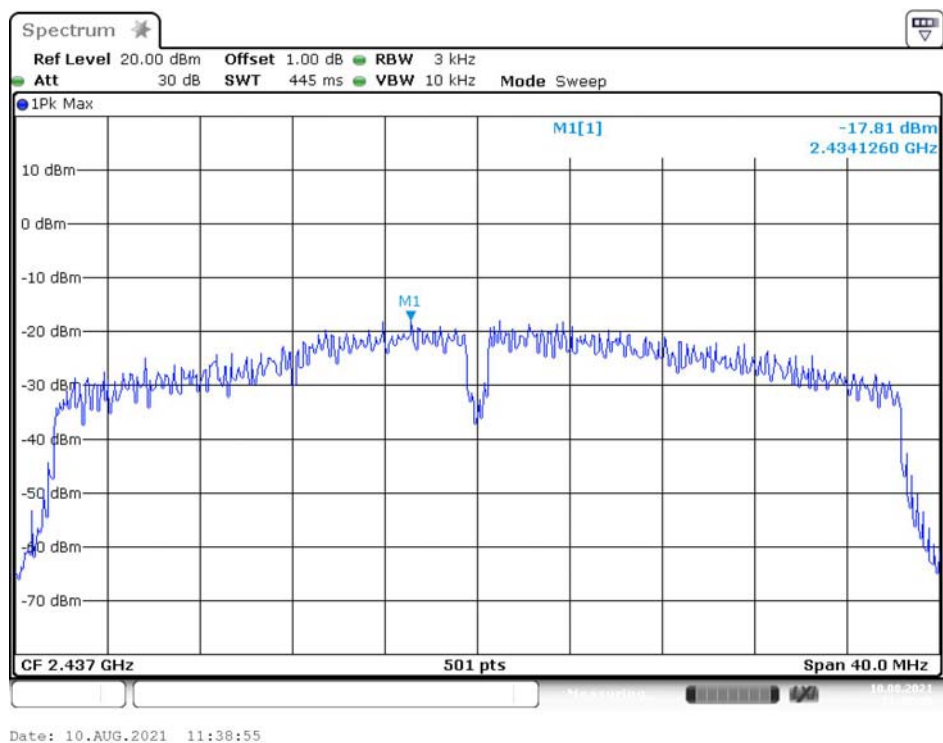
Chain 0,Power Spectral Density, 802.11n ht20 High Channel

Date: 10.AUG.2021 11:33:06

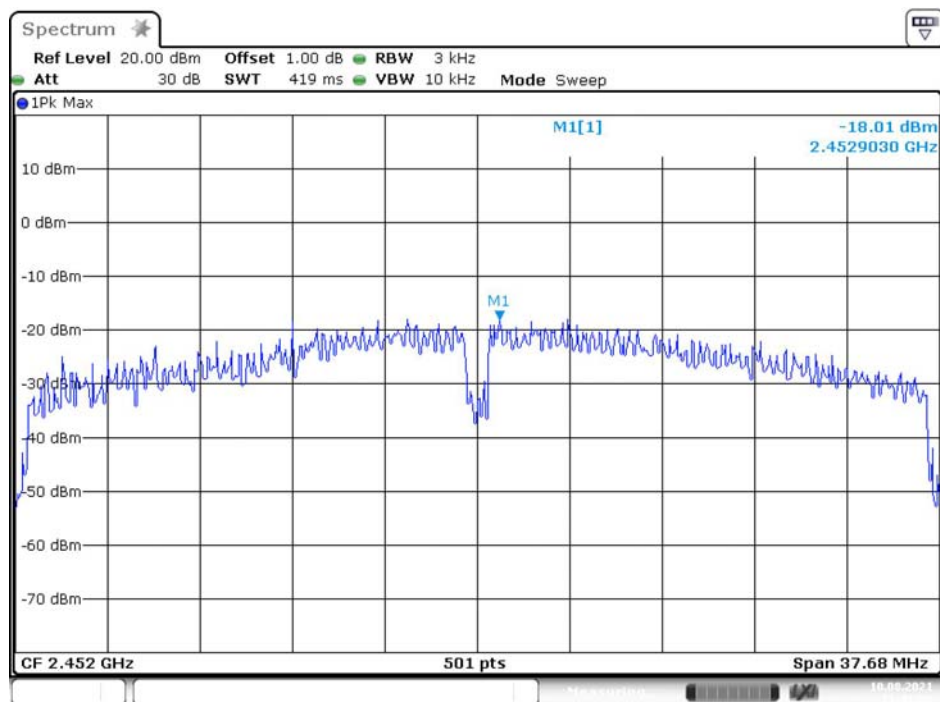
Chain 0,Power Spectral Density, 802.11n ht40 Low Channel



Chain 0,Power Spectral Density, 802.11n ht40 Middle Channel

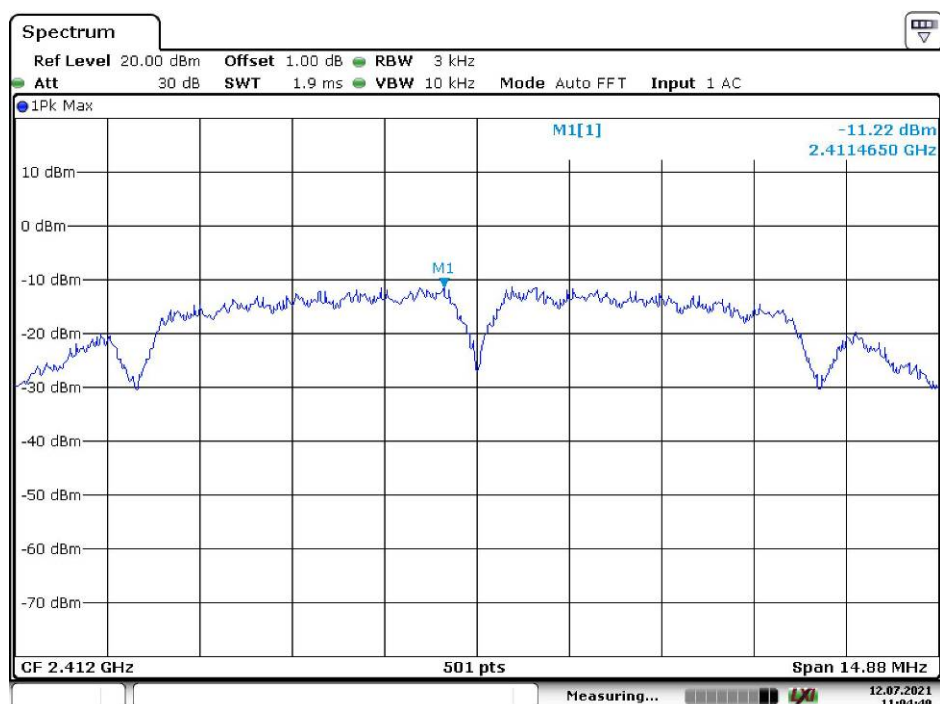


Chain 0, Power Spectral Density, 802.11n ht40 High Channel



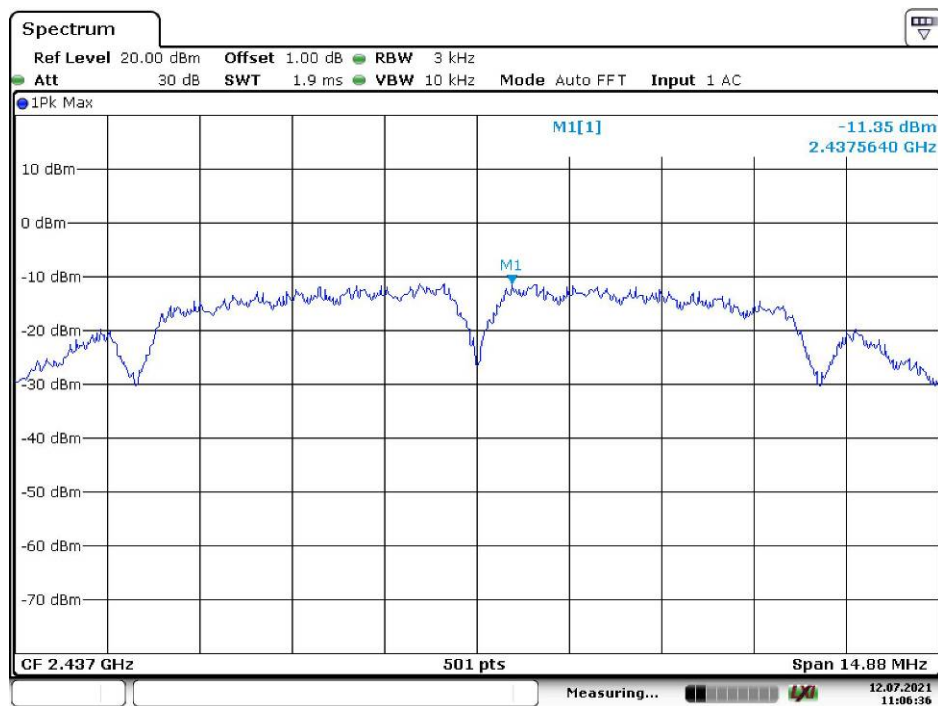
Date: 10.AUG.2021 11:41:29

Chain 1, Power Spectral Density, 802.11b Low Channel



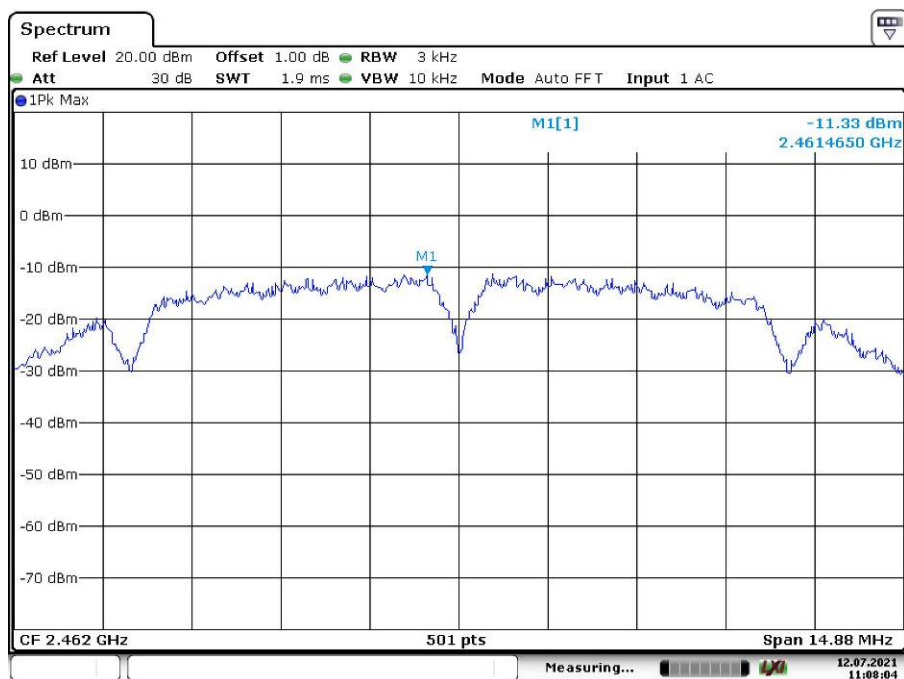
Date: 12.JUL.2021 11:04:49

Chain 1, Power Spectral Density, 802.11b Middle Channel



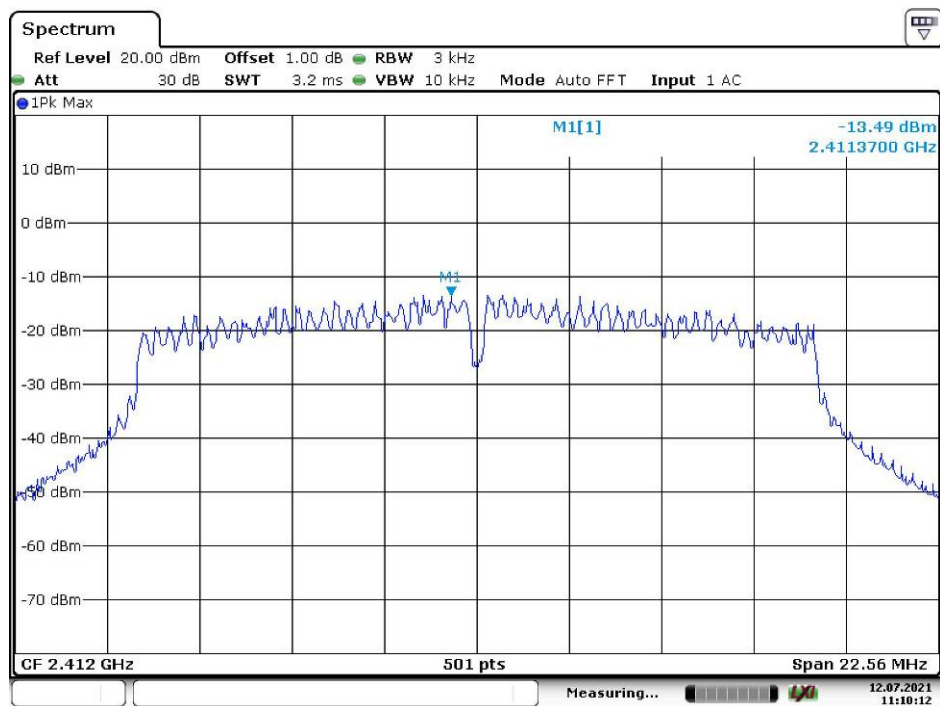
Date: 12.JUL.2021 11:06:36

Chain 1, Power Spectral Density, 802.11b High Channel



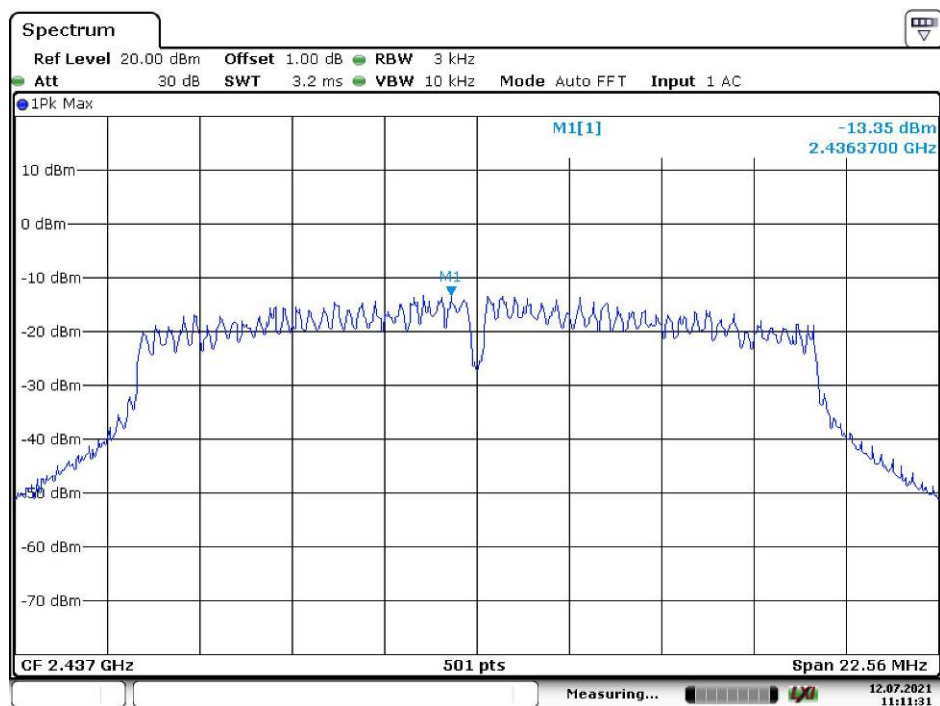
Date: 12.JUL.2021 11:08:04

Chain1,Power Spectral Density, 802.11g Low Channel



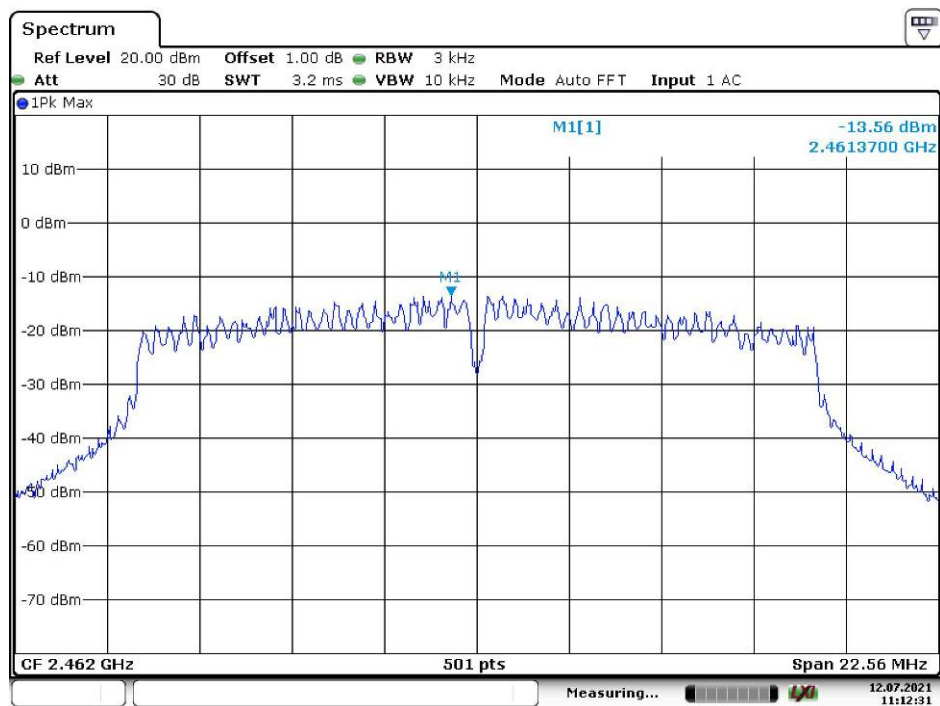
Date: 12.JUL.2021 11:10:12

Chain 1,Power Spectral Density, 802.11g Middle Channel



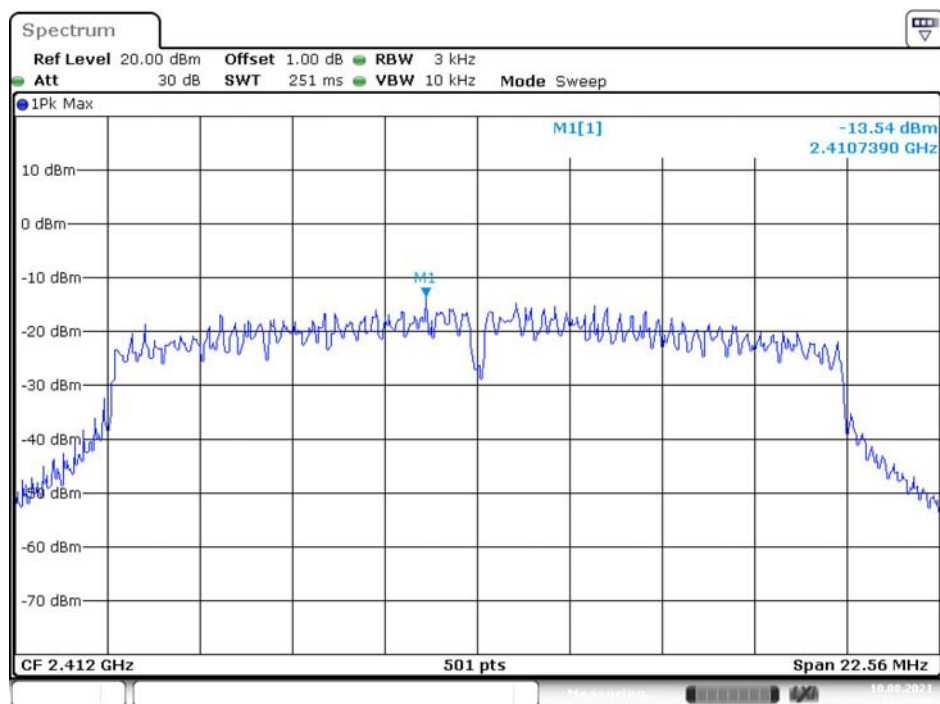
Date: 12.JUL.2021 11:11:32

Chain1,Power Spectral Density, 802.11g High Channel

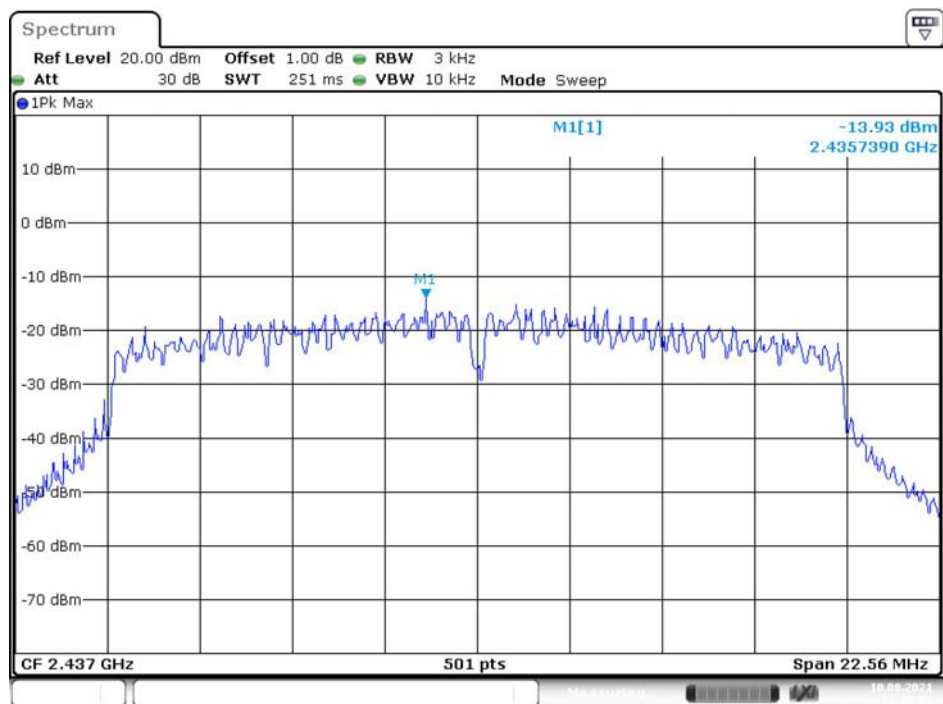


Date: 12.JUL.2021 11:12:32

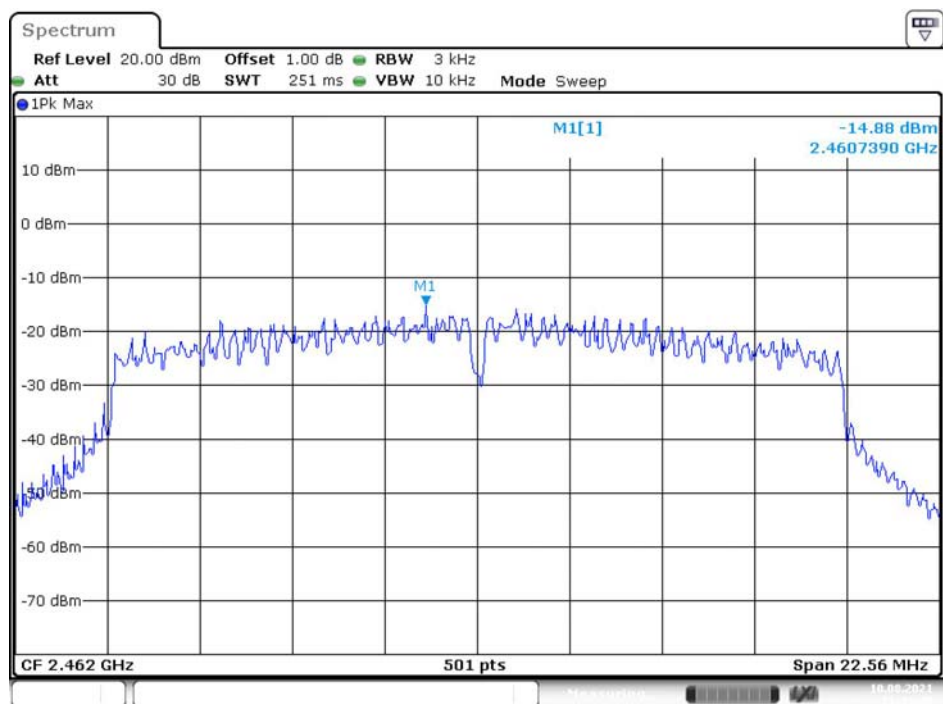
Chain1,Power Spectral Density, 802.11n ht20 Low Channel



Date: 10.AUG.2021 11:29:33

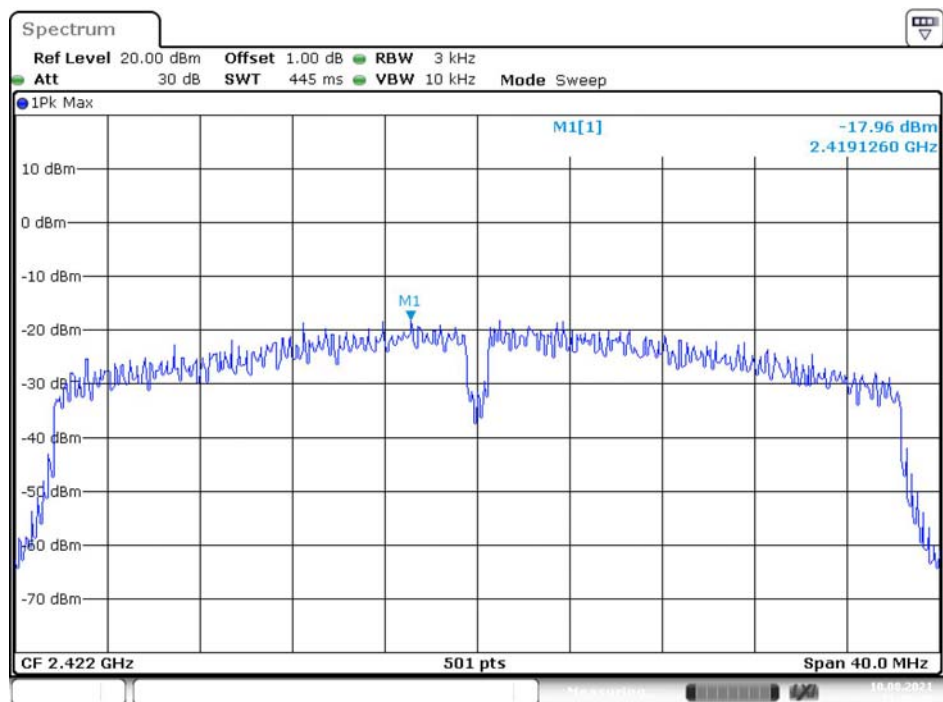
Chain 1,Power Spectral Density, 802.11n ht20 Middle Channel

Date: 10.AUG.2021 11:32:04

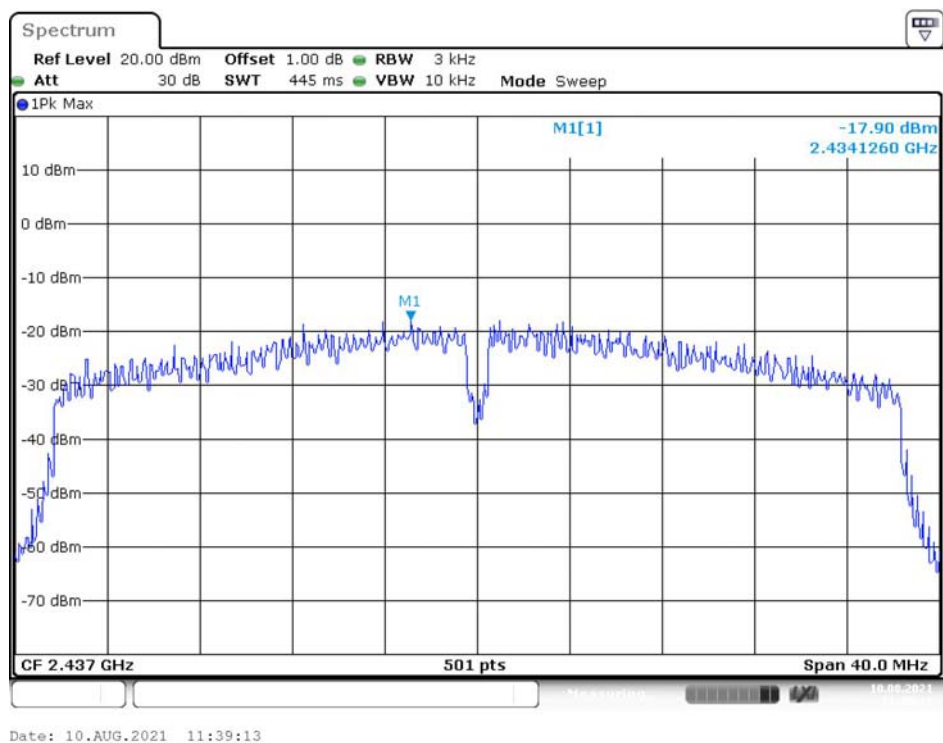
Chain 1,Power Spectral Density, 802.11n ht20 High Channel

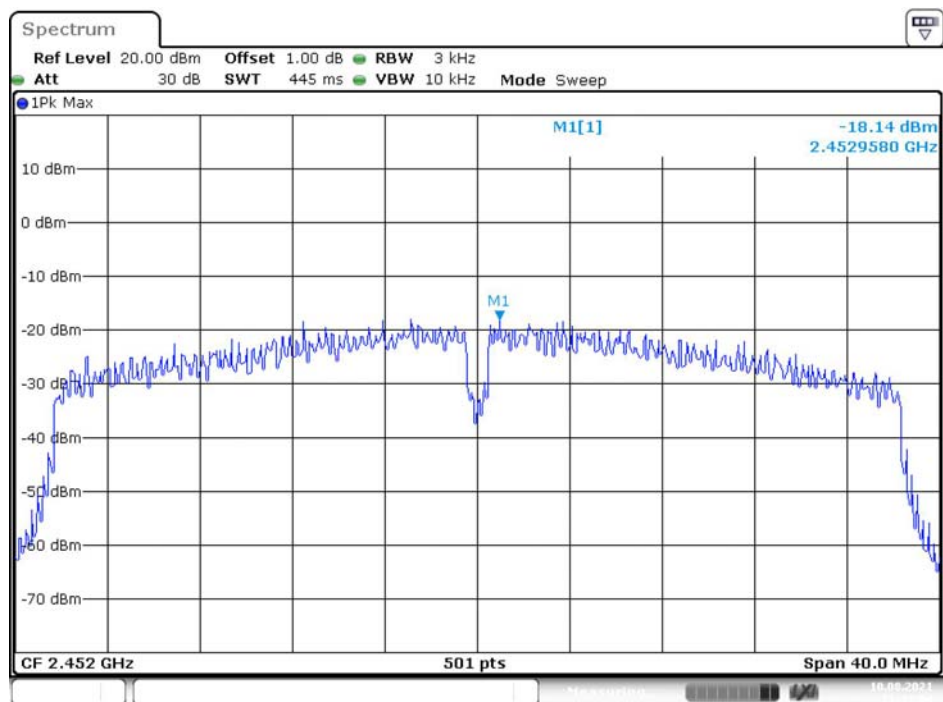
Date: 10.AUG.2021 11:33:26

Chain 1,Power Spectral Density, 802.11n ht40 Low Channel



Chain 1,Power Spectral Density, 802.11n ht40 Middle Channel



Chain 1,Power Spectral Density, 802.11n ht40 High Channel

Date: 10.AUG.2021 11:42:04

******* END OF REPORT *******