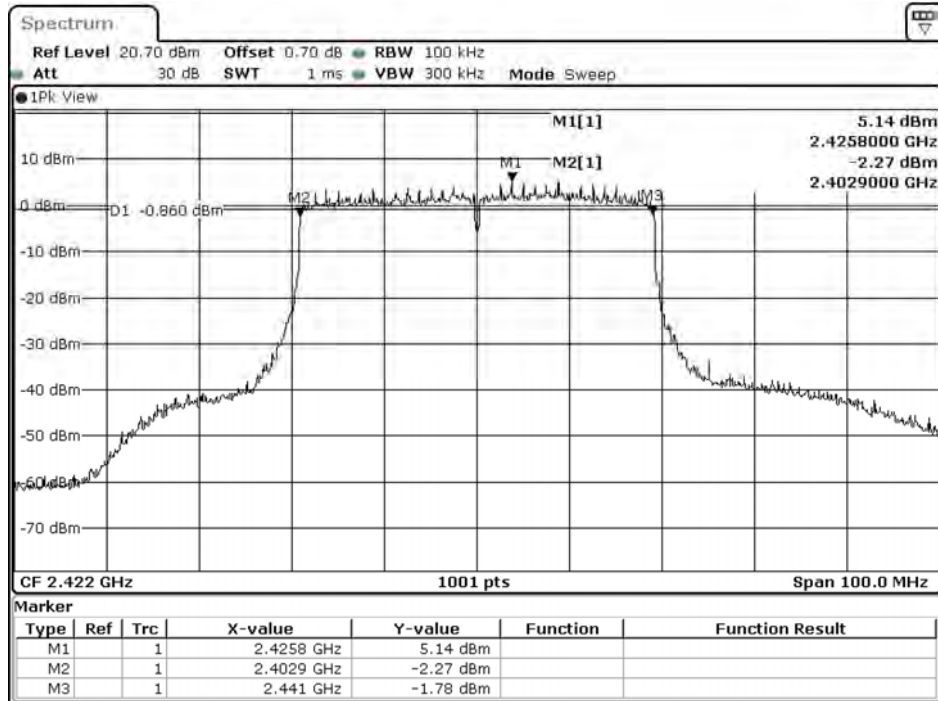
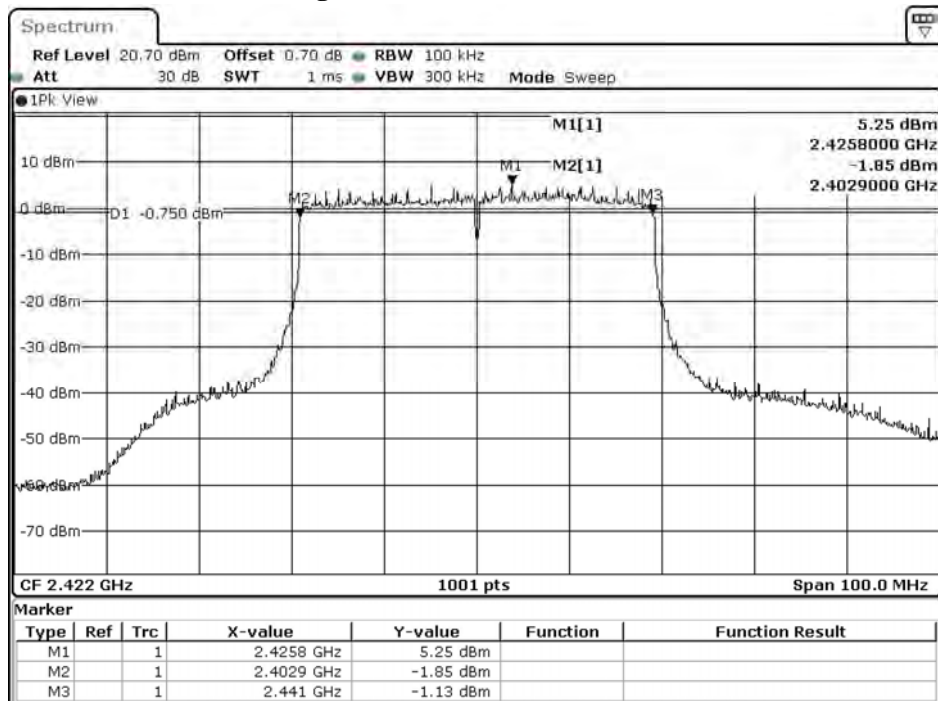


Figure Channel 03: (Chain A)



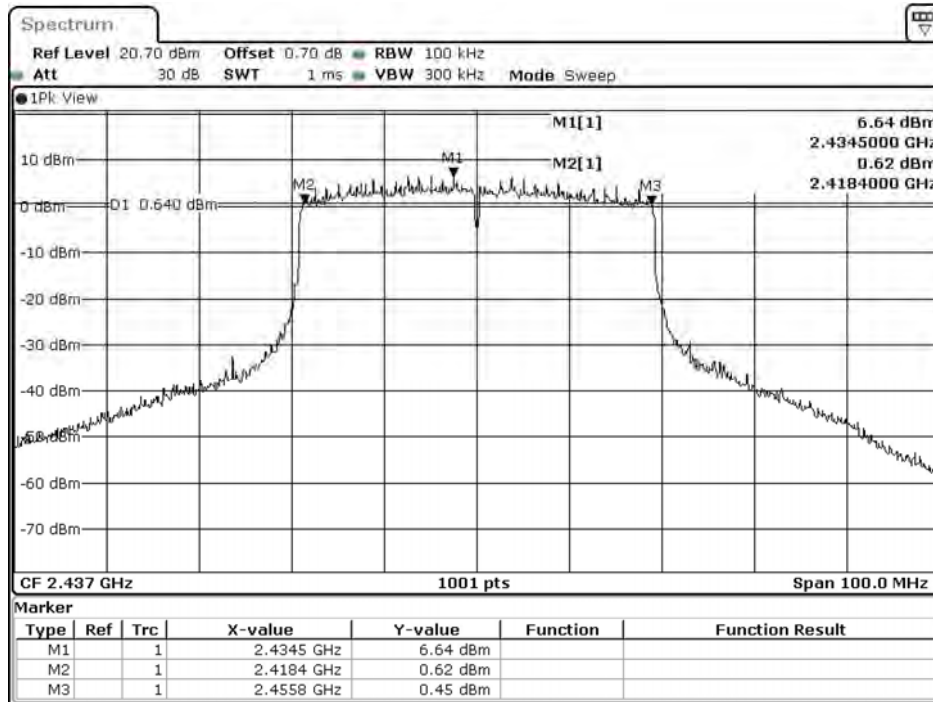
Date: 5.JUL.2020 11:06:37

Figure Channel 03: (Chain B)



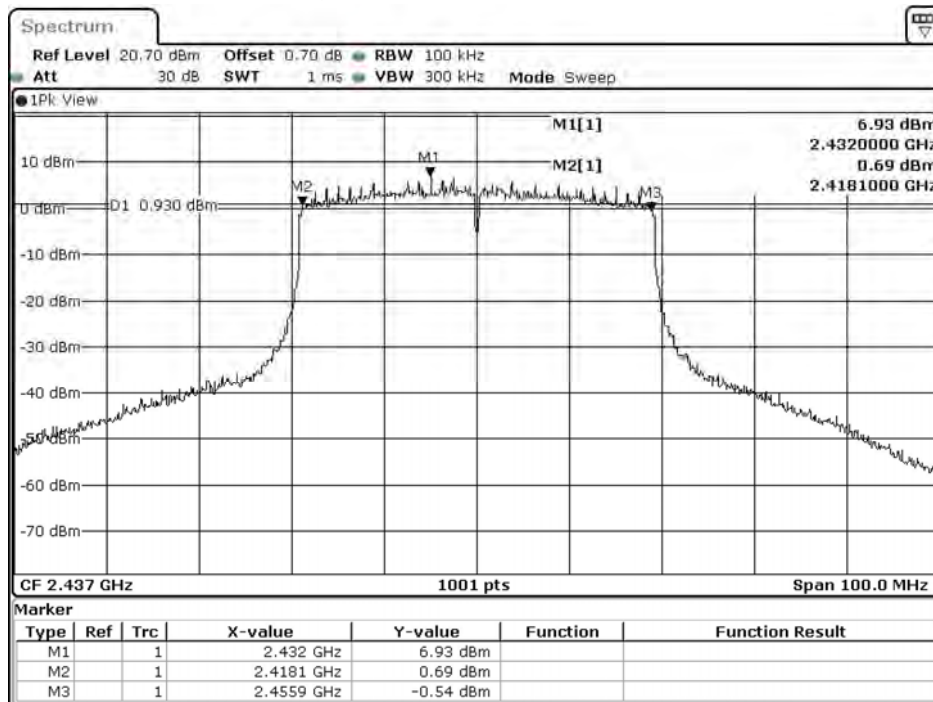
Date: 5.JUL.2020 11:09:41

Figure Channel 06: (Chain A)



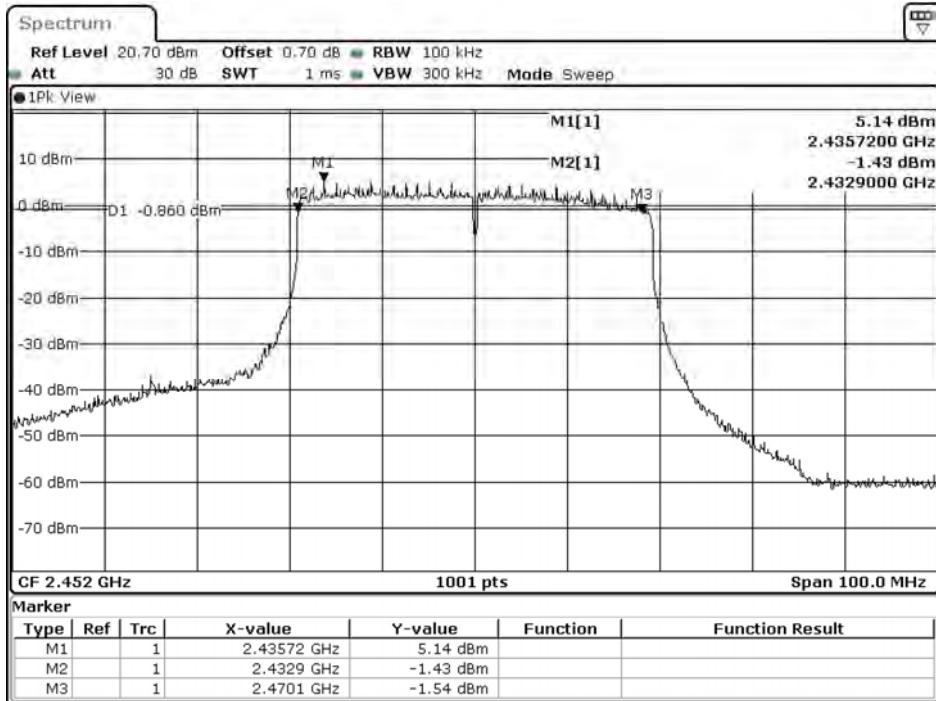
Date: 5.JUL.2020 11:10:43

Figure Channel 06: (Chain B)



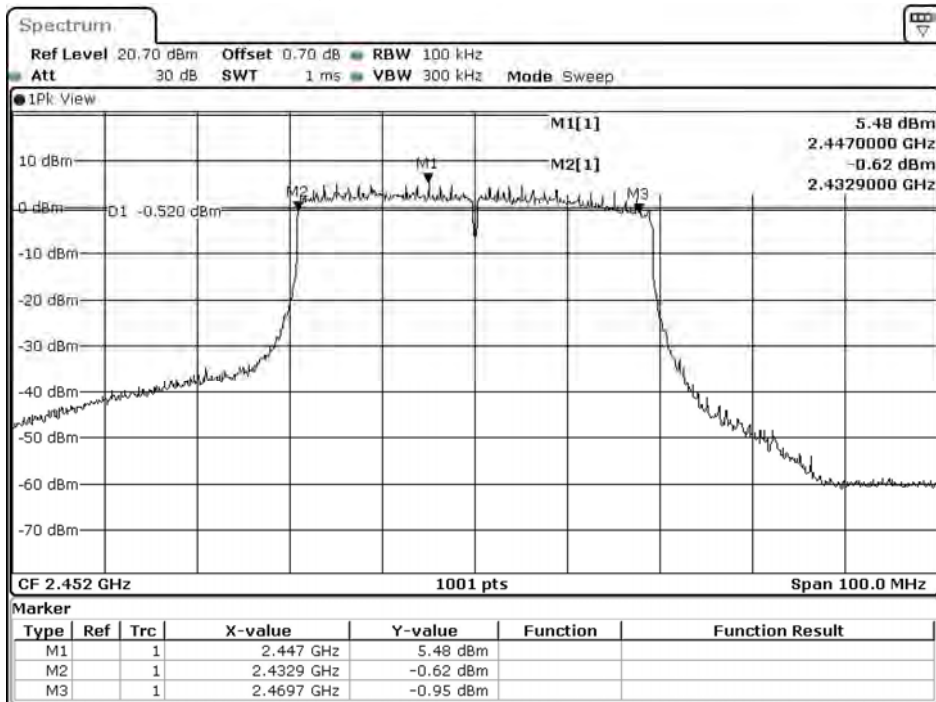
Date: 5.JUL.2020 11:13:47

Figure Channel 09: (Chain A)



Date: 5.JUL.2020 11:13:43

Figure Channel 09: (Chain B)



Date: 5.JUL.2020 11:16:46

Product : LV55
Test Item : 6dB Bandwidth Data
Test Mode : Mode 13: Transmit (802.11ax-20M-BW-Beamforming)
Test Date : 2020/07/07

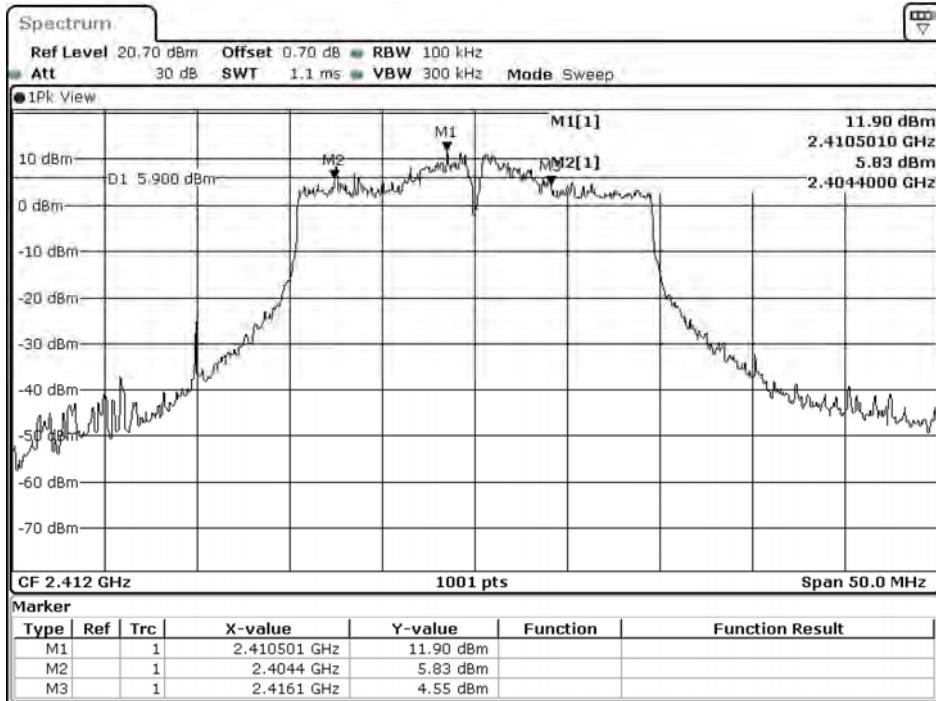
Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	11700	>500	Pass
06	2437	6650	>500	Pass
11	2462	8050	>500	Pass

Chain B

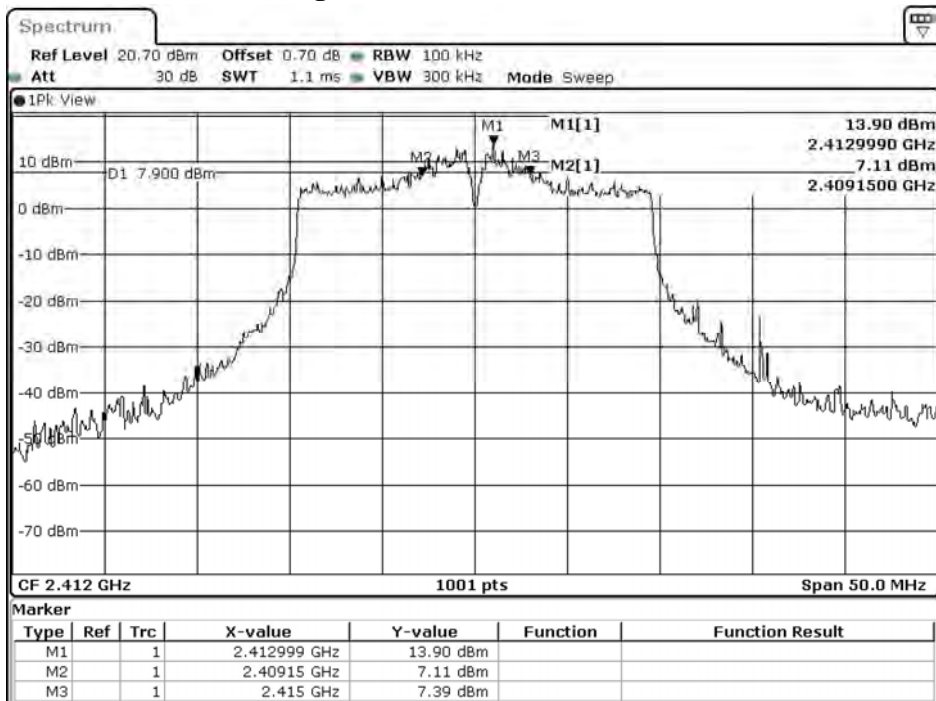
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	5850	>500	Pass
06	2437	6650	>500	Pass
11	2462	10400	>500	Pass

Figure Channel 01: (Chain A)



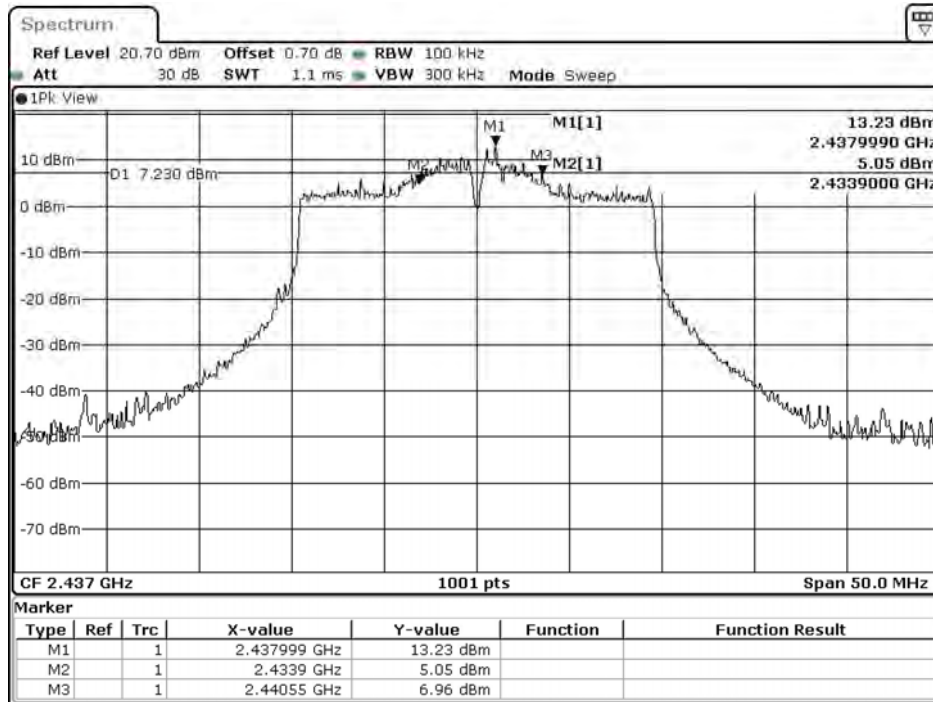
Date: 7.JUL.2020 11:22:10

Figure Channel 01: (Chain B)



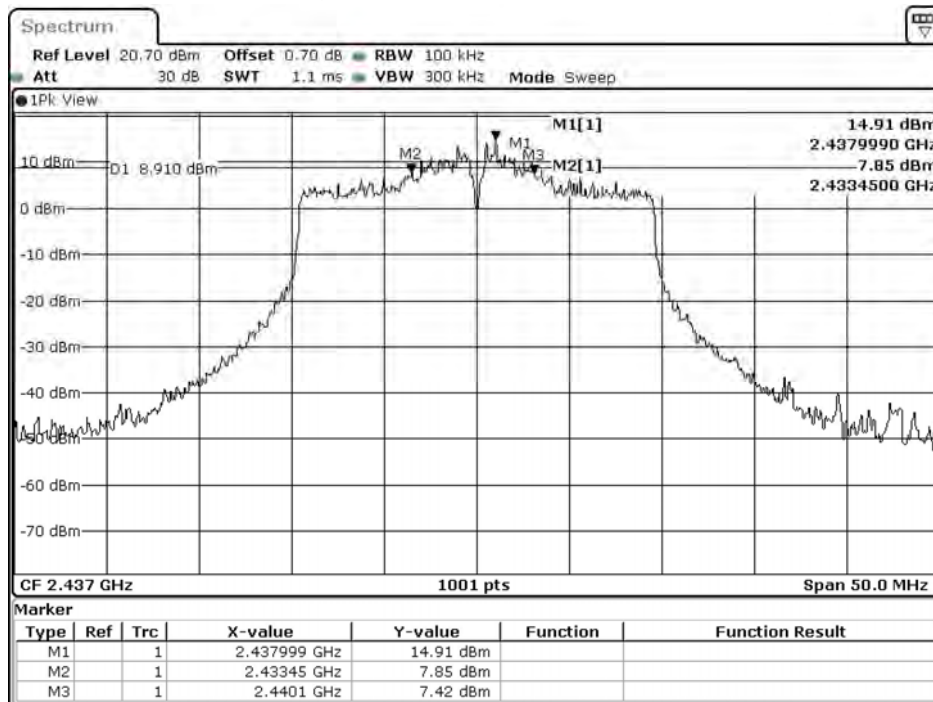
Date: 7.JUL.2020 19:16:48

Figure Channel 06: (Chain A)



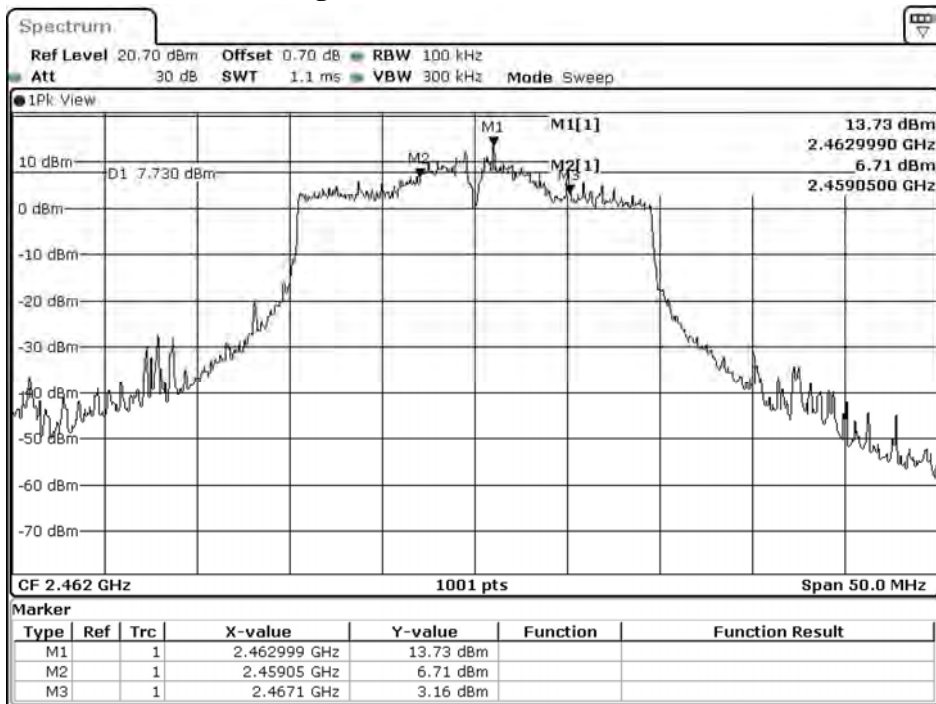
Date: 7.JUL.2020 11:25:15

Figure Channel 06: (Chain B)



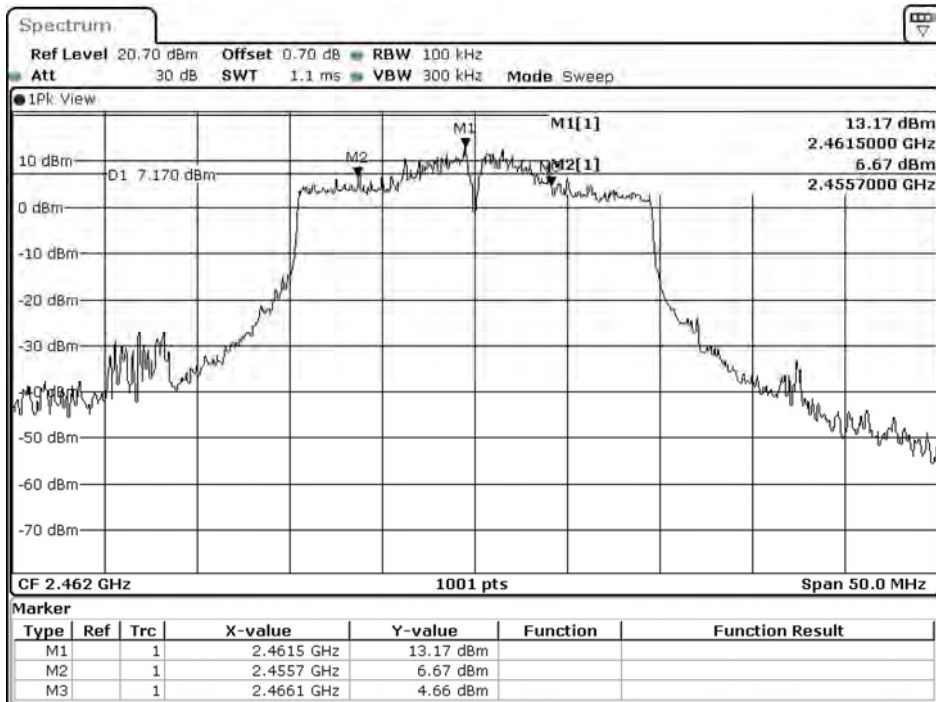
Date: 7.JUL.2020 19:19:53

Figure Channel 11: (Chain A)



Date: 7.JUL.2020 11:28:58

Figure Channel 11: (Chain B)



Date: 7.JUL.2020 19:23:36

Product : LV55
Test Item : 6dB Bandwidth Data
Test Mode : Mode 14: Transmit (802.11ax-40M-BW-Beamforming)
Test Date : 2020/07/07

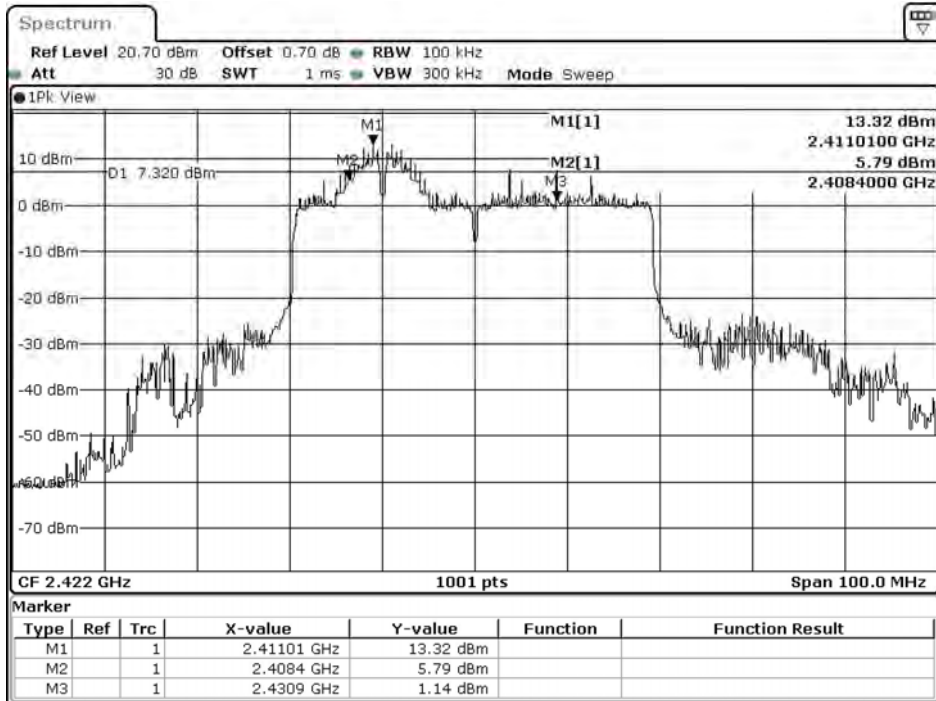
Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	22500	>500	Pass
06	2437	18700	>500	Pass
09	2452	31600	>500	Pass

Chain B

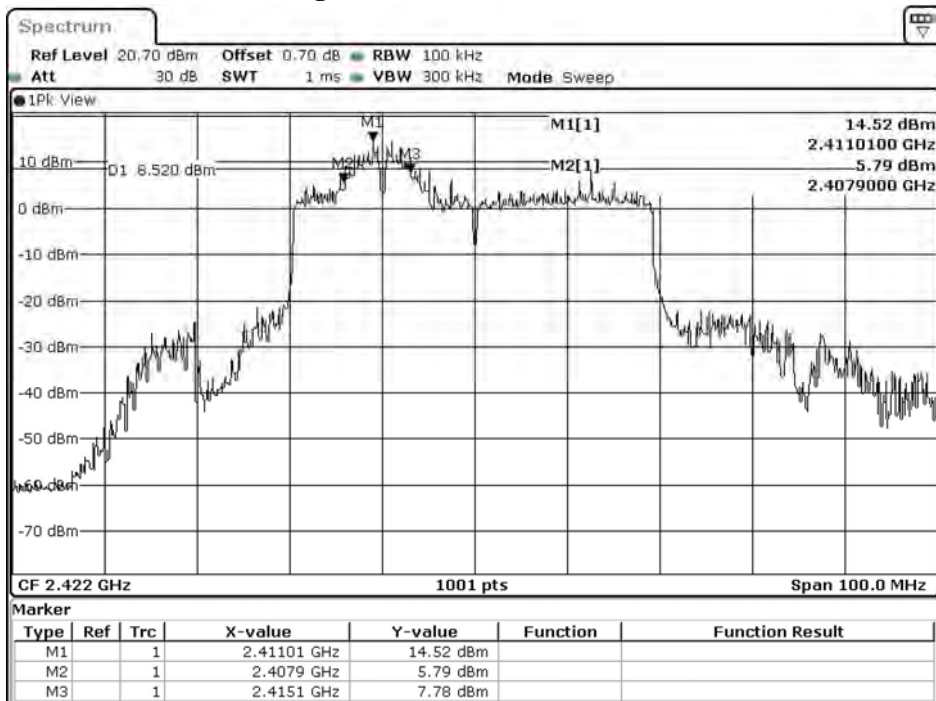
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	7200	>500	Pass
06	2437	18300	>500	Pass
09	2452	7200	>500	Pass

Figure Channel 03: (Chain A)



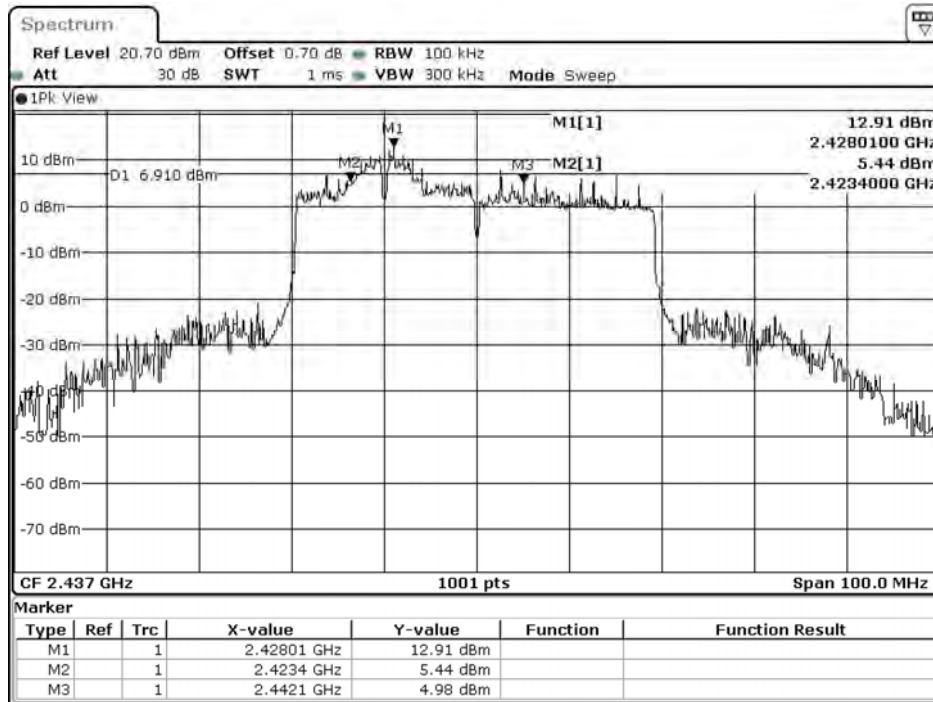
Date: 7.JUL.2020 11:33:00

Figure Channel 03: (Chain B)



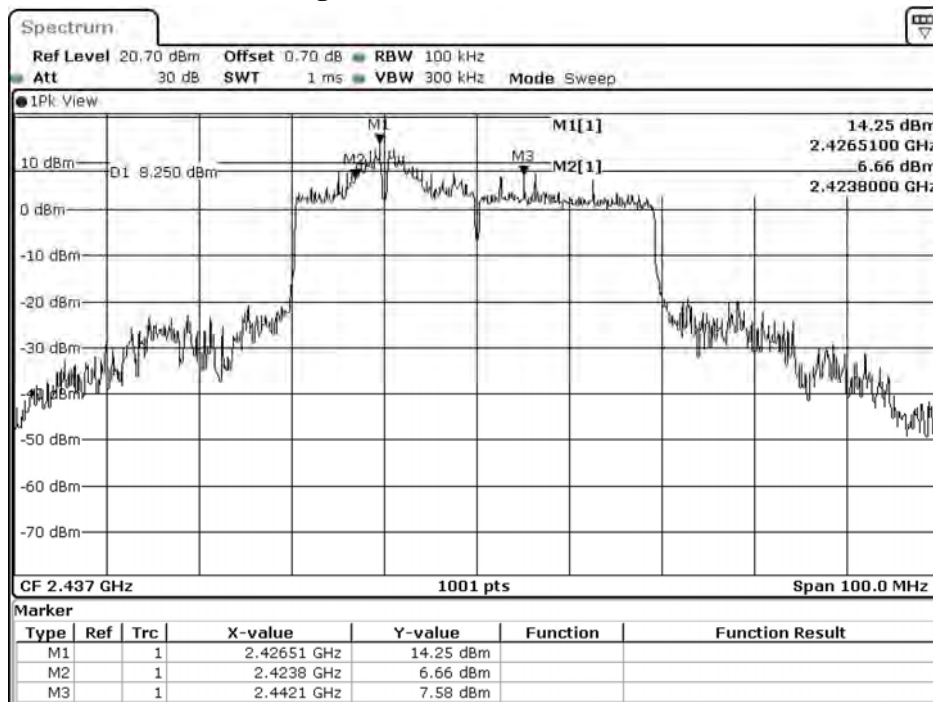
Date: 7.JUL.2020 19:27:37

Figure Channel 06: (Chain A)



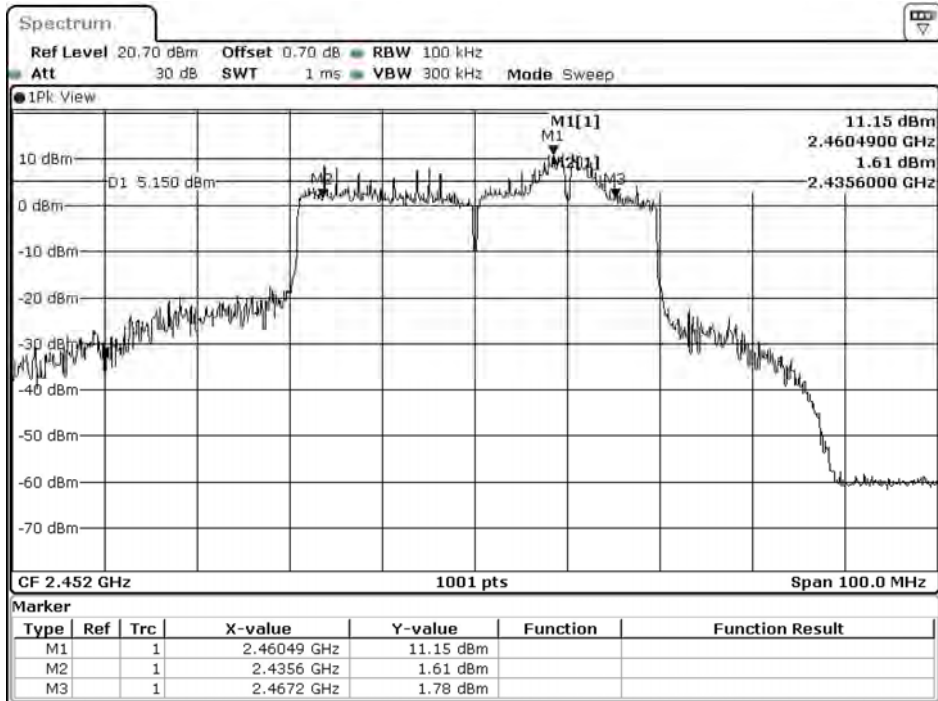
Date: 7.JUL.2020 11:38:07

Figure Channel 06: (Chain B)



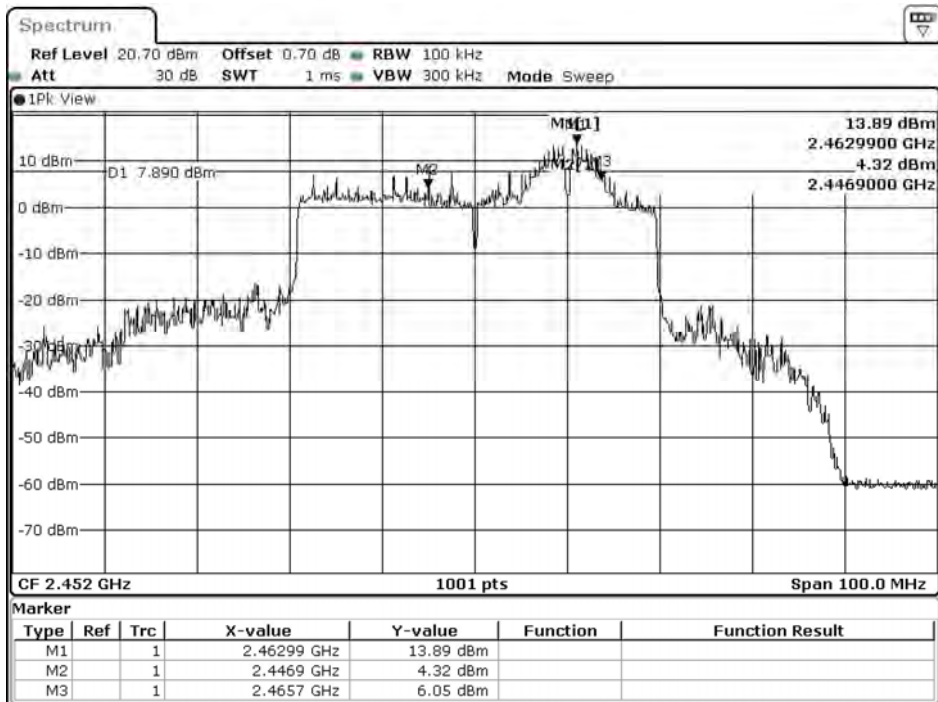
Date: 7.JUL.2020 19:32:46

Figure Channel 09: (Chain A)



Date: 7.JUL.2020 11:41:44

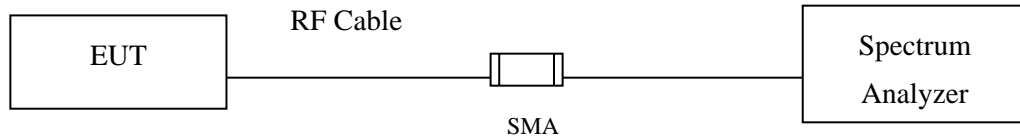
Figure Channel 09: (Chain B)



Date: 7.JUL.2020 12:27:18

8. Power Density

8.1. Test Setup



8.2. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The maximum power spectral density using C63.10 Section 11.10.2 Method PKPSD (peak PSD)

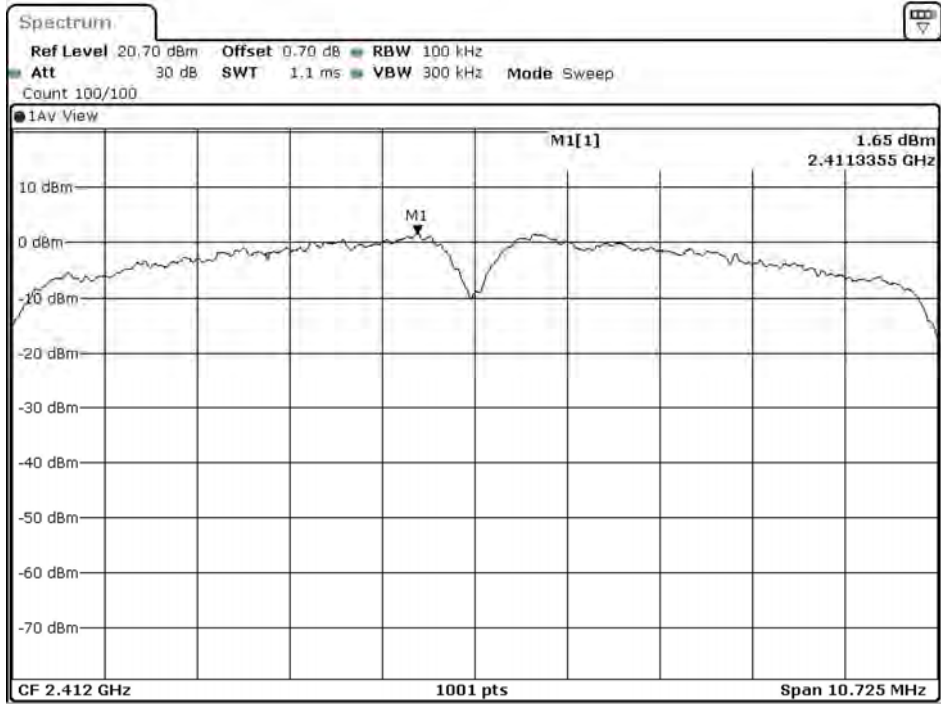
8.4. Test Result of Power Density

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 1: Transmit (802.11b-CDD)
 Test Date : 2020/07/05

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412.000	A	1.650	4.660	≤ 8 dBm	Pass
		B	2.300	5.310	≤ 8 dBm	Pass
06	2437.000	A	1.490	4.500	≤ 8 dBm	Pass
		B	1.730	4.740	≤ 8 dBm	Pass
11	2462.000	A	1.490	4.500	≤ 8 dBm	Pass
		B	2.280	5.290	≤ 8 dBm	Pass

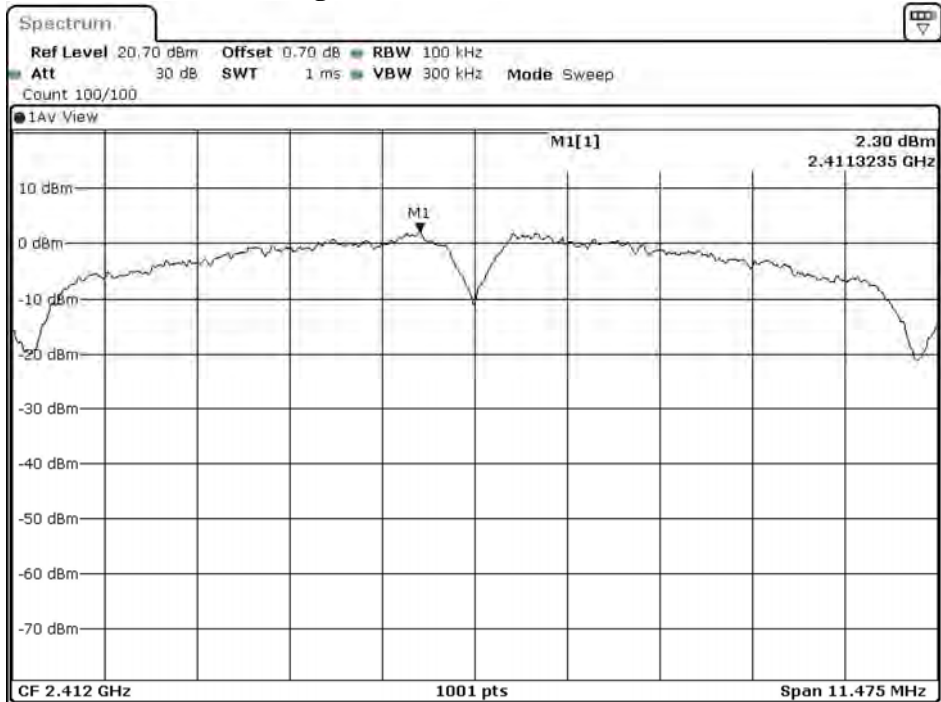
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



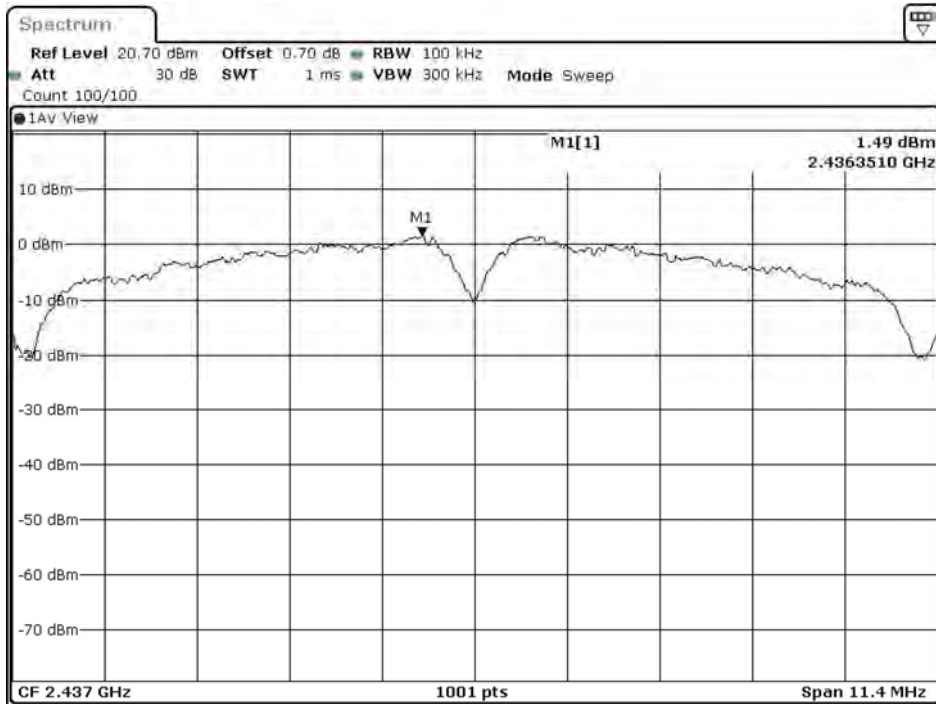
Date: 5 JUL 2020 10:32:14

Figure Channel 01: (Chain B)



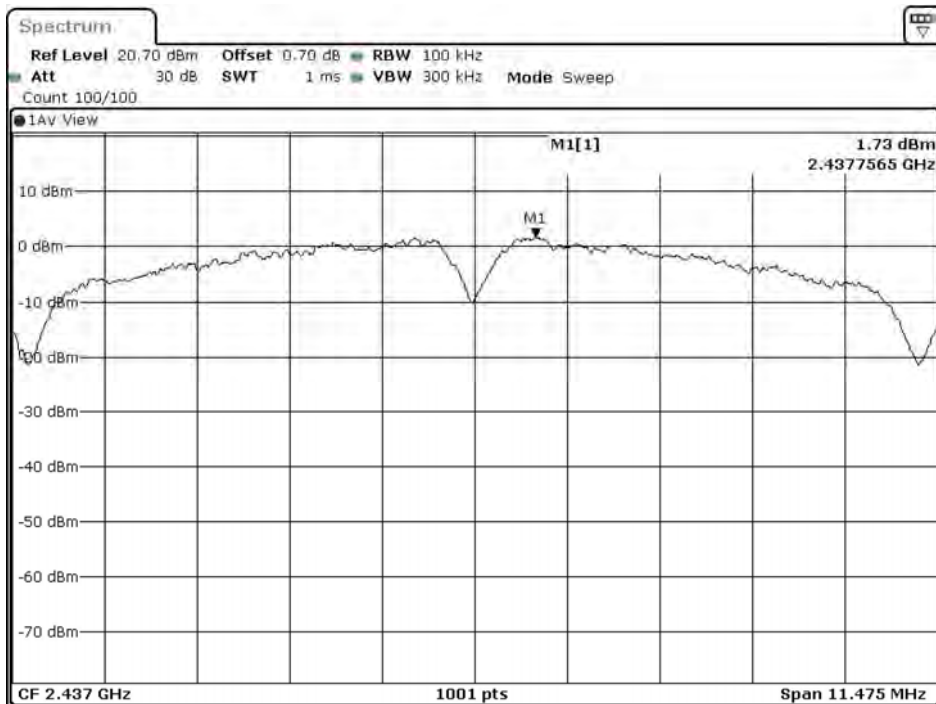
Date: 5 JUL 2020 10:35:18

Figure Channel 06: (Chain A)



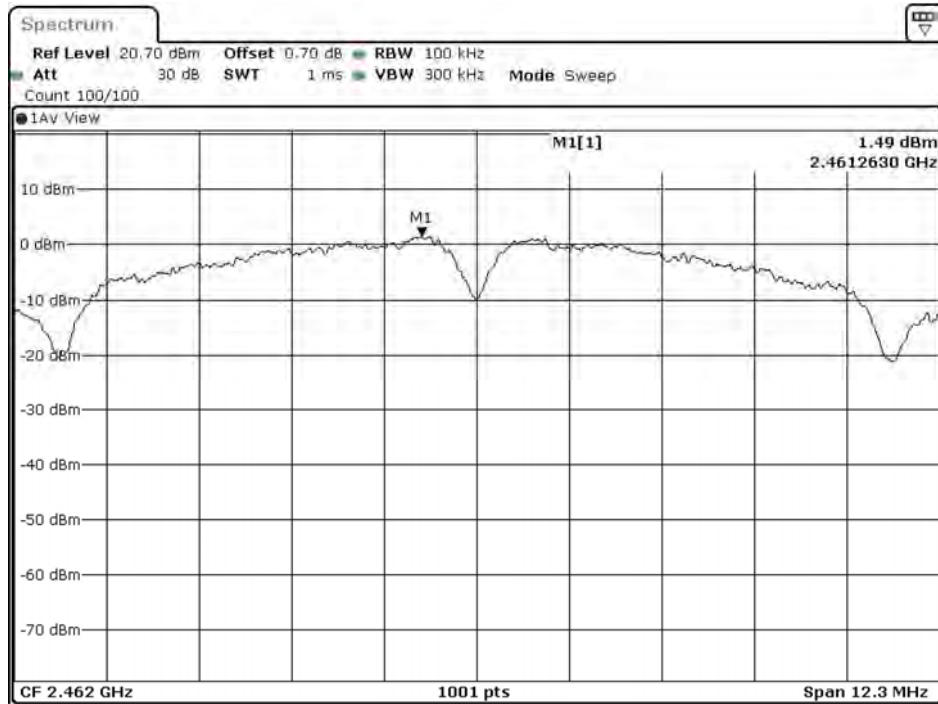
Date: 5.JUL.2020 10:35:30

Figure Channel 06: (Chain B)



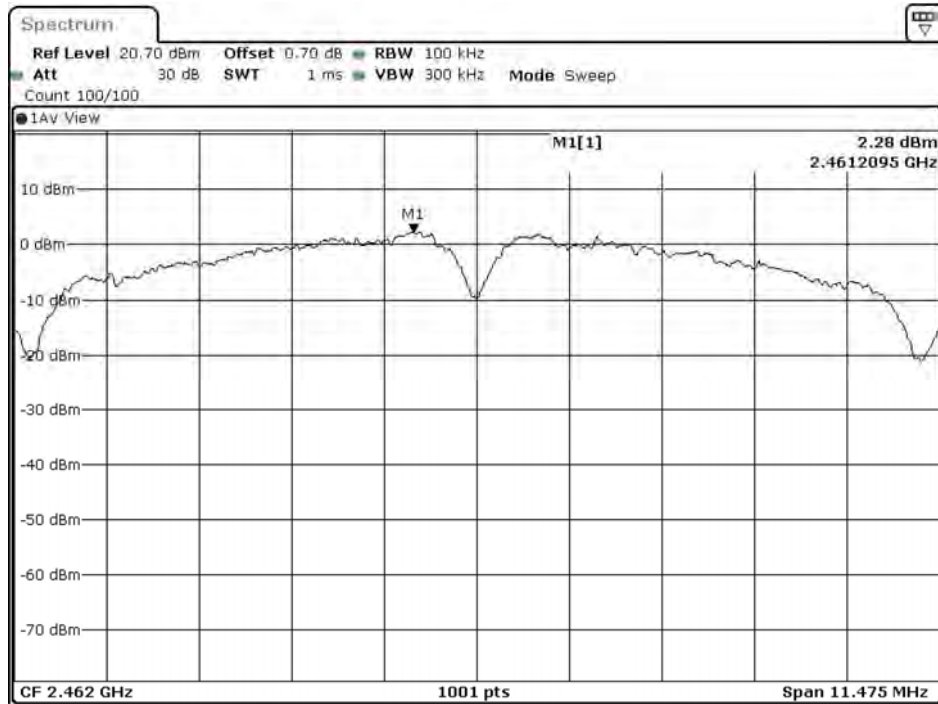
Date: 5.JUL.2020 10:38:34

Figure Channel 11: (Chain A)



Date: 5.JUL.2020 10:38:47

Figure Channel 11: (Chain B)



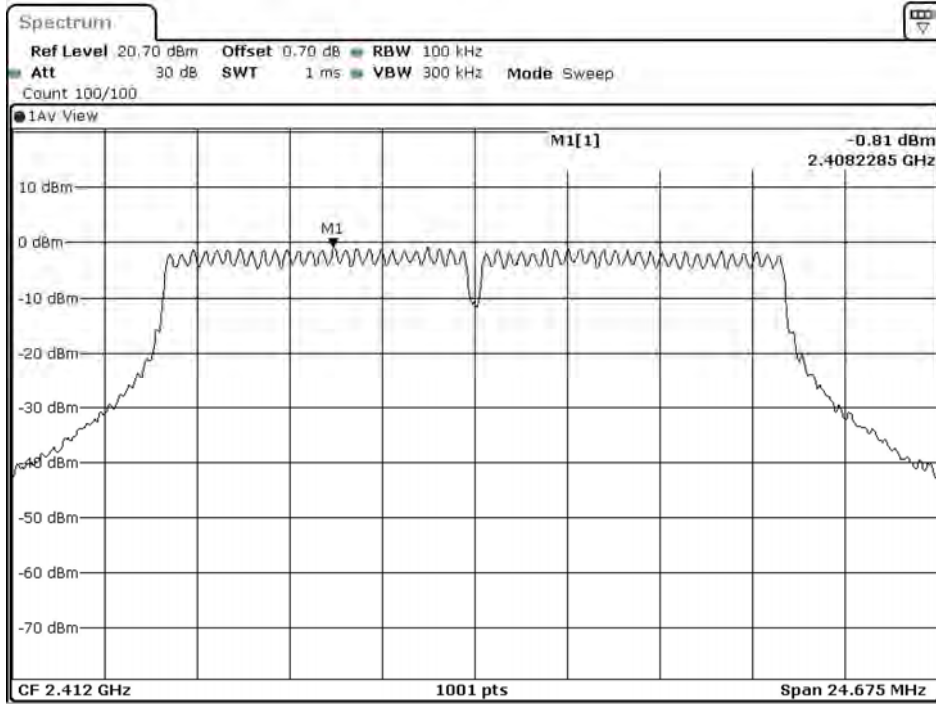
Date: 5.JUL.2020 10:41:50

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 2: Transmit (802.11g-CDD)
 Test Date : 2020/07/05

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412.000	A	-0.810	2.200	≤ 8 dBm	Pass
		B	-0.690	2.320	≤ 8 dBm	Pass
06	2437.000	A	-0.140	2.870	≤ 8 dBm	Pass
		B	-0.240	2.770	≤ 8 dBm	Pass
11	2462.000	A	-0.760	2.250	≤ 8 dBm	Pass
		B	-0.460	2.550	≤ 8 dBm	Pass

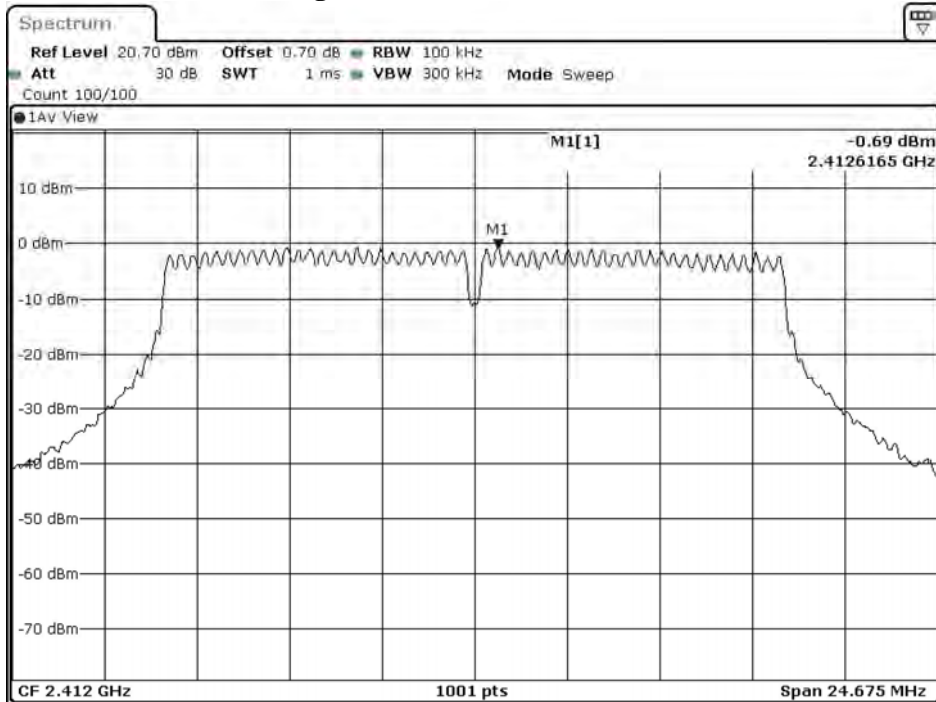
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



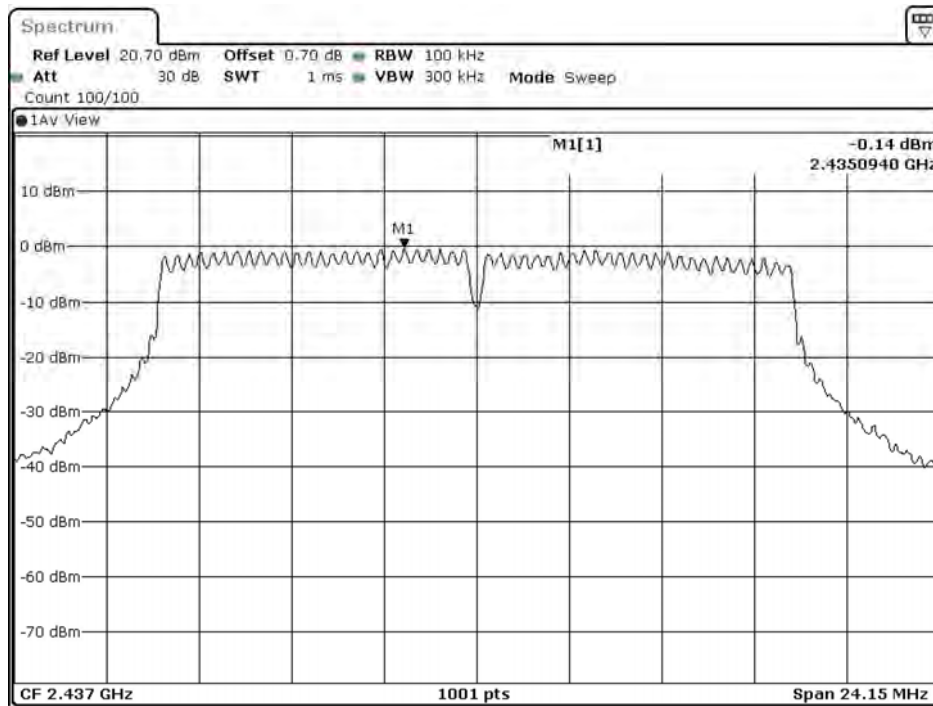
Date: 5 JUL 2020 10:42:46

Figure Channel 01: (Chain B)



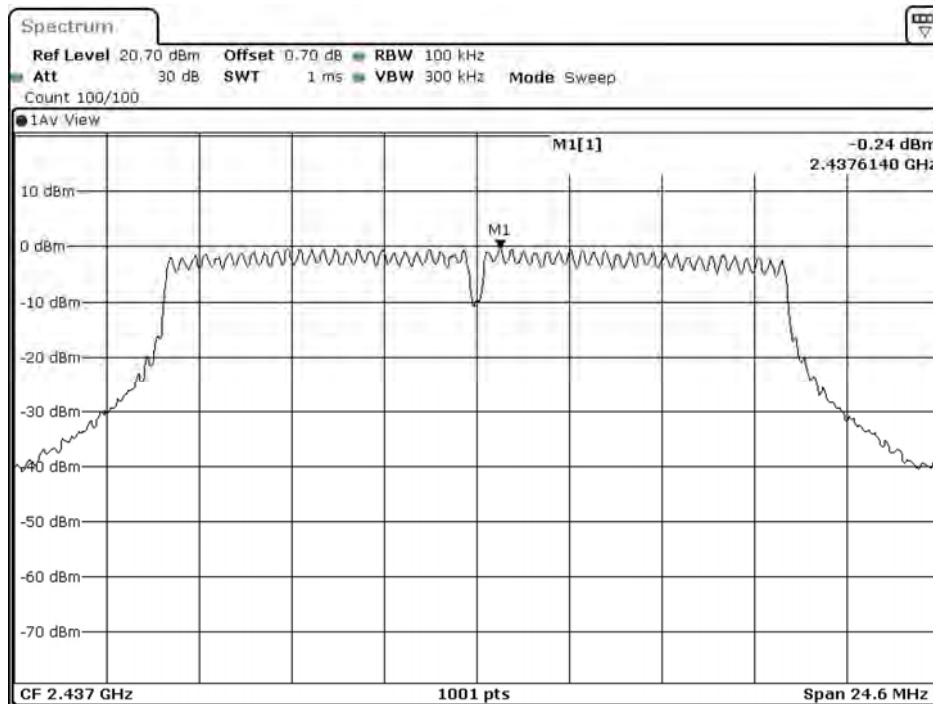
Date: 5 JUL 2020 10:45:50

Figure Channel 06: (Chain A)



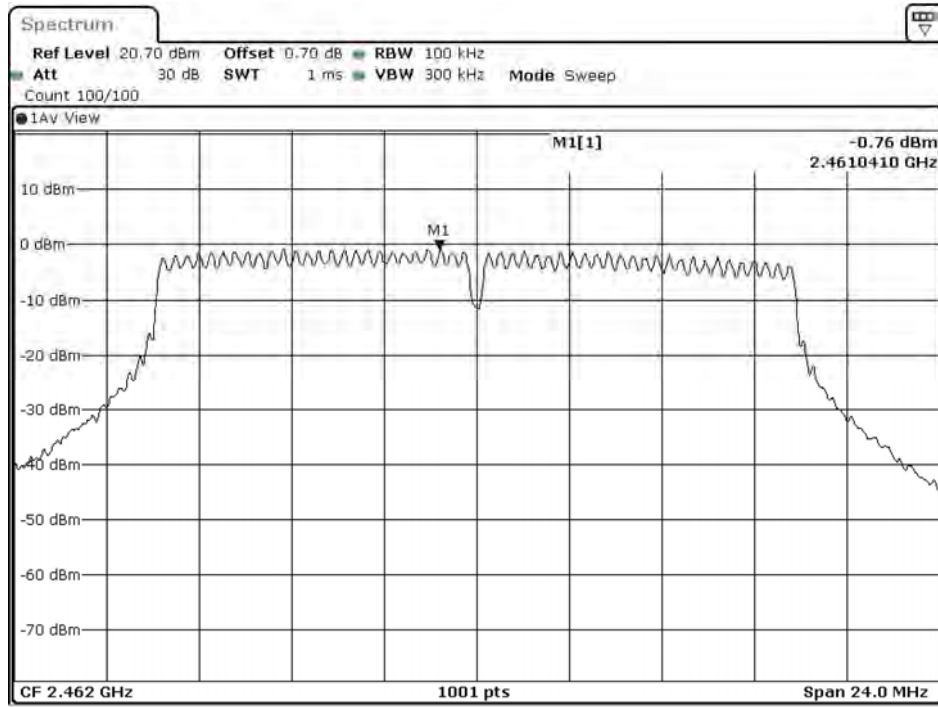
Date: 5.JUL.2020 10:45:45

Figure Channel 06: (Chain B)



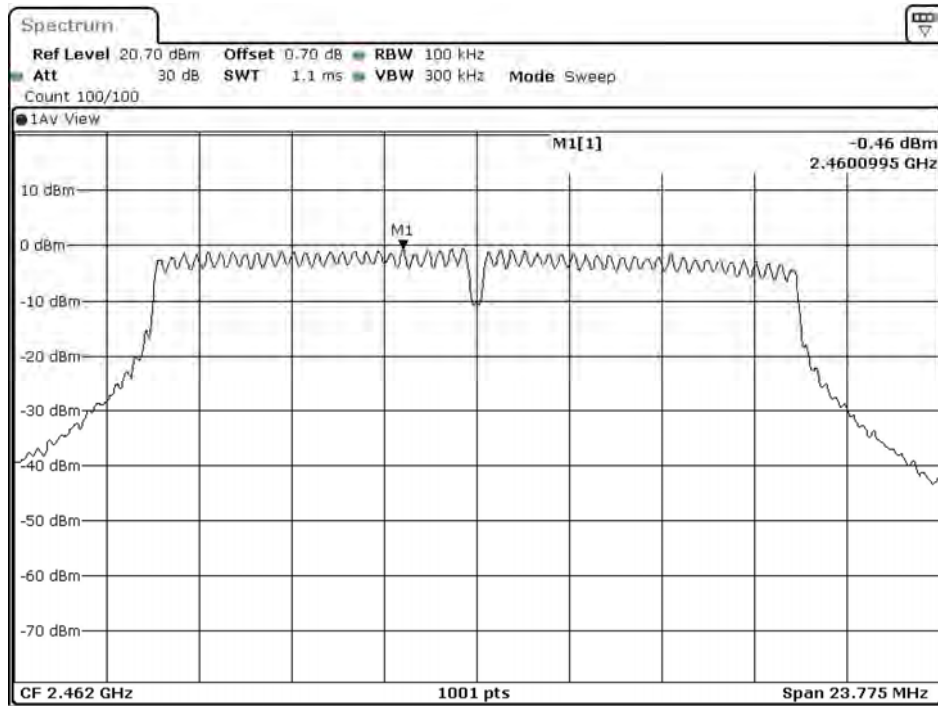
Date: 5.JUL.2020 10:48:49

Figure Channel 11: (Chain A)



Date: 5.JUL.2020 10:48:56

Figure Channel 11: (Chain B)



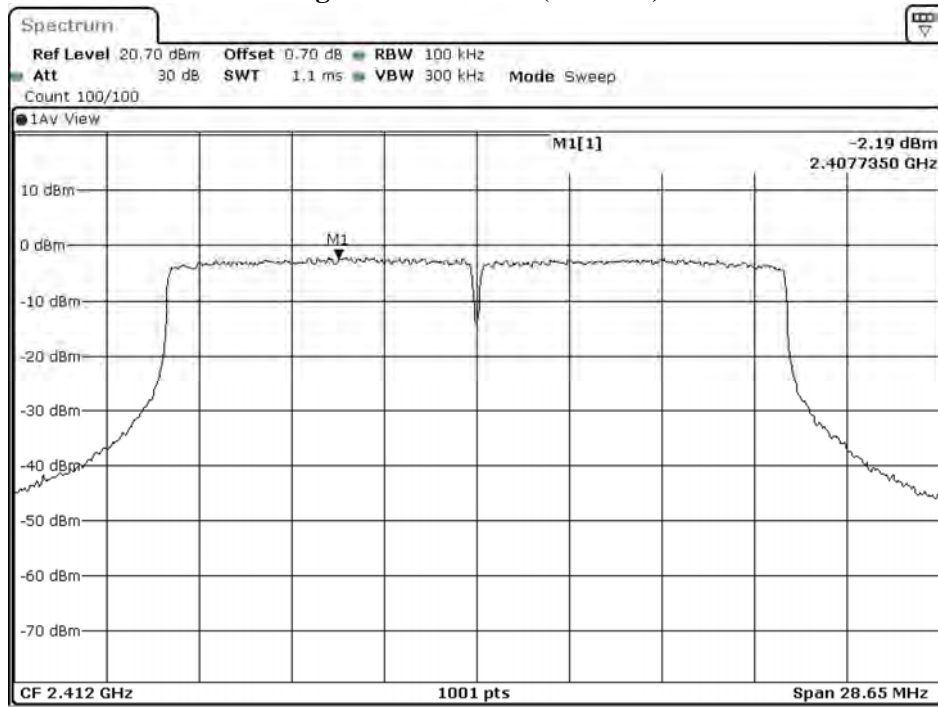
Date: 5.JUL.2020 10:52:00

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 7: Transmit (802.11ax-20M-BW-CDD) (RU Config-Full)
 Test Date : 2020/07/05

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412.000	A	-2.190	0.820	≤ 8 dBm	Pass
		B	-2.020	0.990	≤ 8 dBm	Pass
06	2437.000	A	-1.160	1.850	≤ 8 dBm	Pass
		B	-1.530	1.480	≤ 8 dBm	Pass
11	2462.000	A	-1.740	1.270	≤ 8 dBm	Pass
		B	-1.860	1.150	≤ 8 dBm	Pass

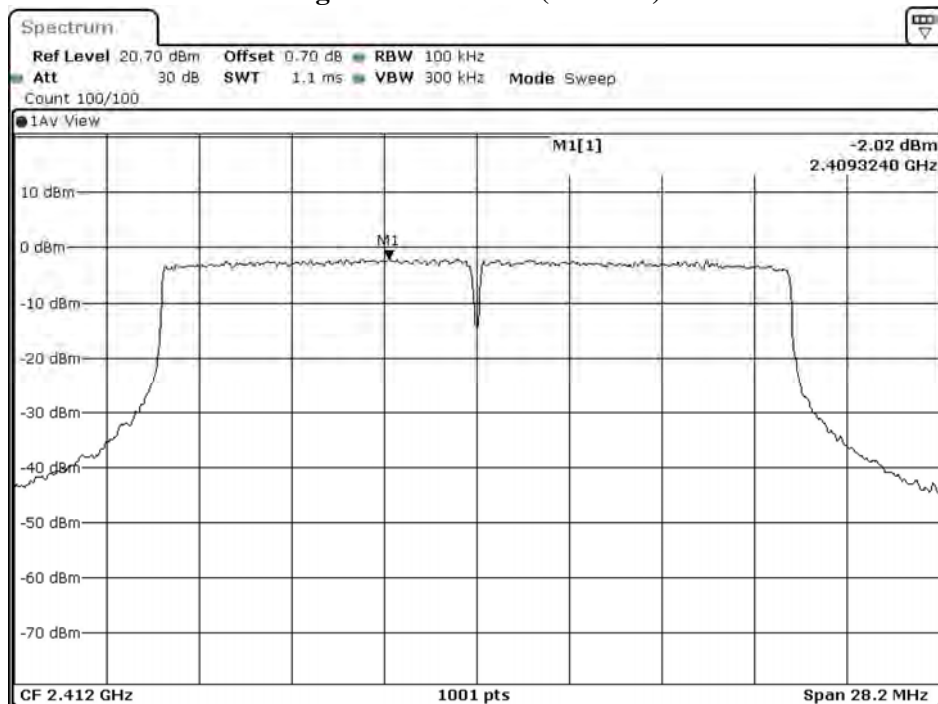
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



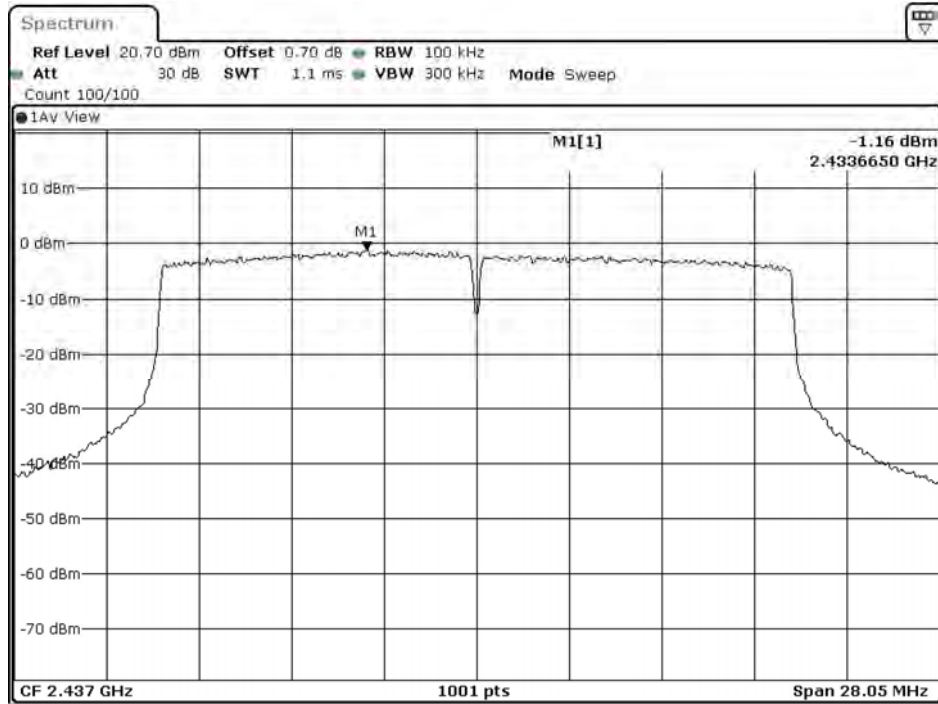
Date: 5 JUL 2020 10:57:49

Figure Channel 01: (Chain B)



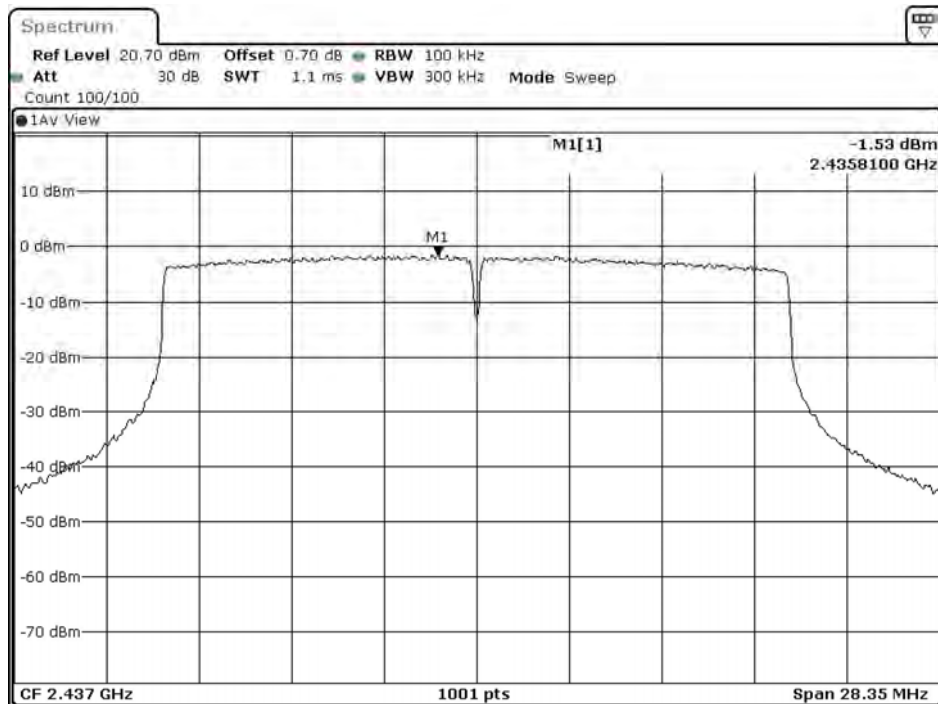
Date: 5 JUL 2020 11:00:53

Figure Channel 06: (Chain A)



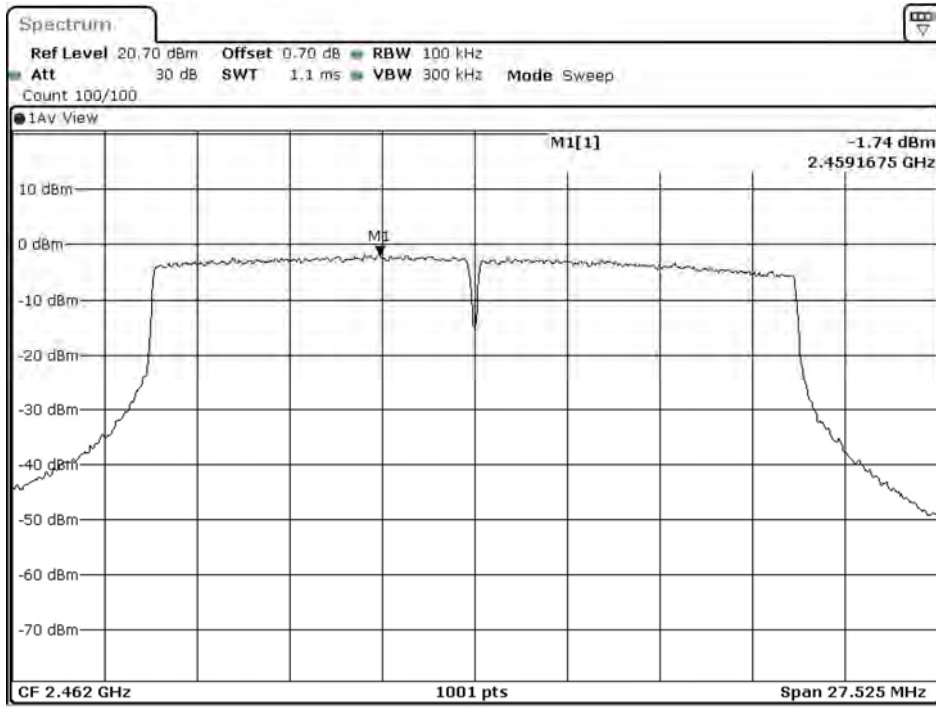
Date: 5.JUL.2020 11:00:53

Figure Channel 06: (Chain B)



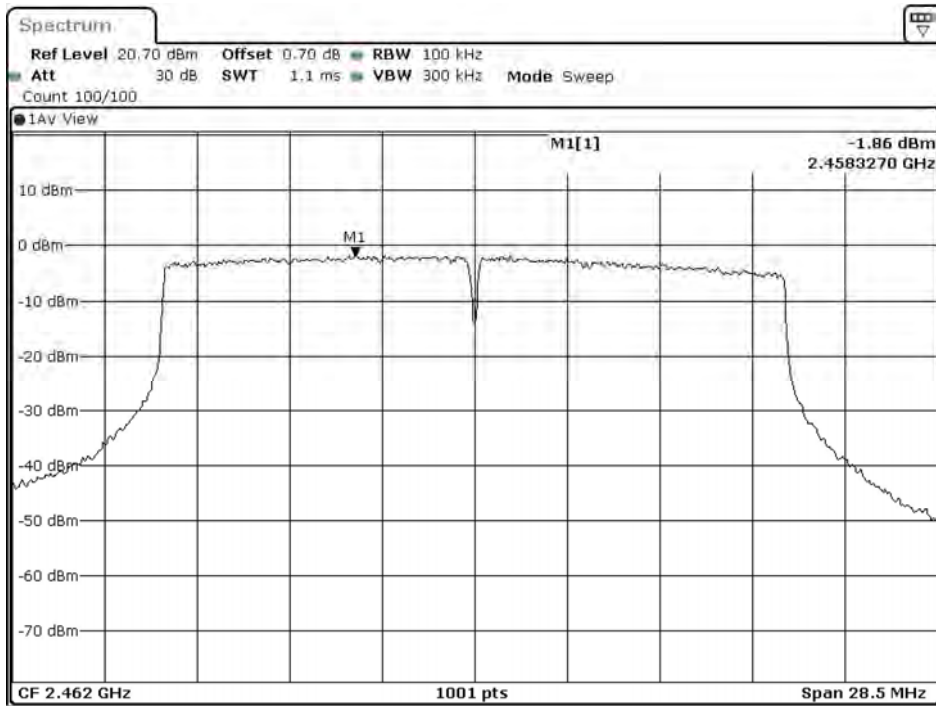
Date: 5.JUL.2020 11:03:57

Figure Channel 11: (Chain A)



Date: 5.JUL.2020 11:03:56

Figure Channel 11: (Chain B)



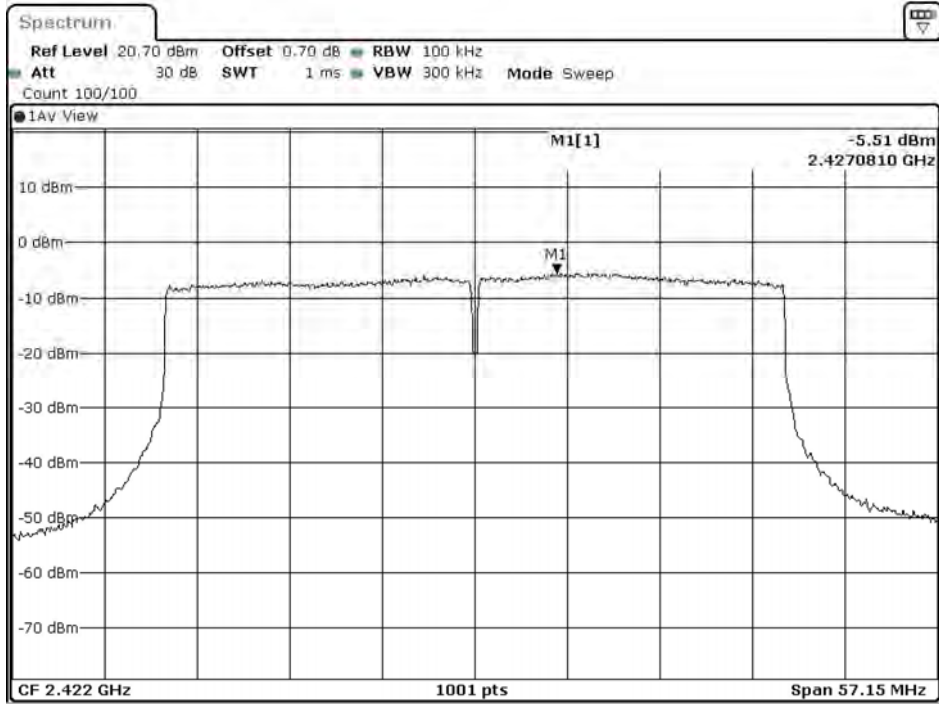
Date: 5.JUL.2020 11:07:00

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 8: Transmit (802.11ax-40M-BW-CDD) (RU Config-Full)
 Test Date : 2020/07/05

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
03	2422.000	A	-5.510	-2.500	≤ 8 dBm	Pass
		B	-5.220	-2.210	≤ 8 dBm	Pass
06	2437.000	A	-3.990	-0.980	≤ 8 dBm	Pass
		B	-4.210	-1.200	≤ 8 dBm	Pass
09	2452.000	A	-5.670	-2.660	≤ 8 dBm	Pass
		B	-5.470	-2.460	≤ 8 dBm	Pass

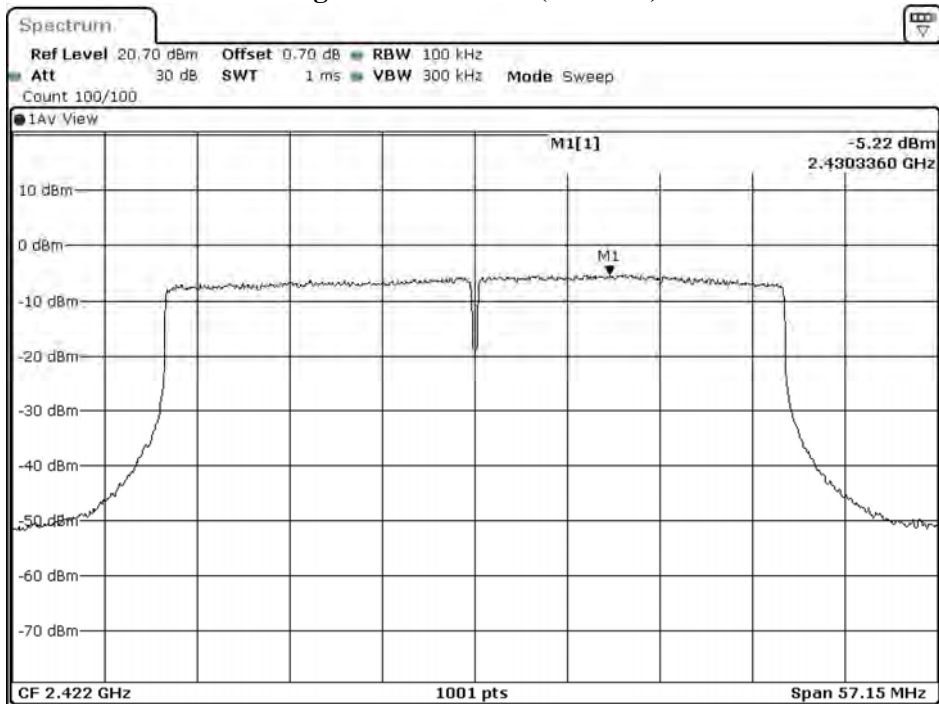
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 03: (Chain A)



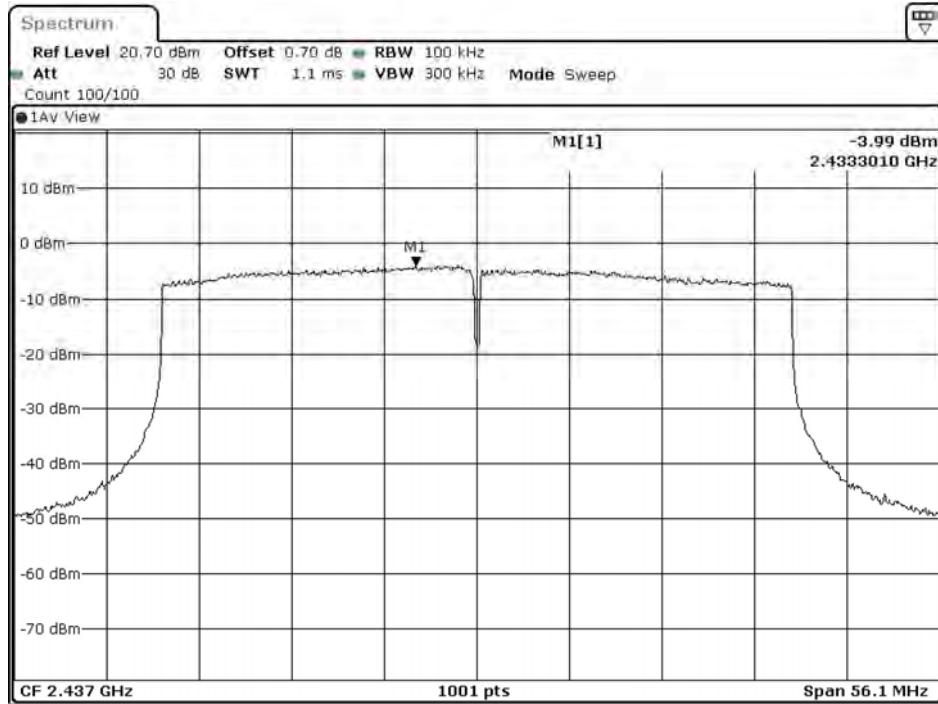
Date: 5 JUL 2020 11:07:01

Figure Channel 03: (Chain B)



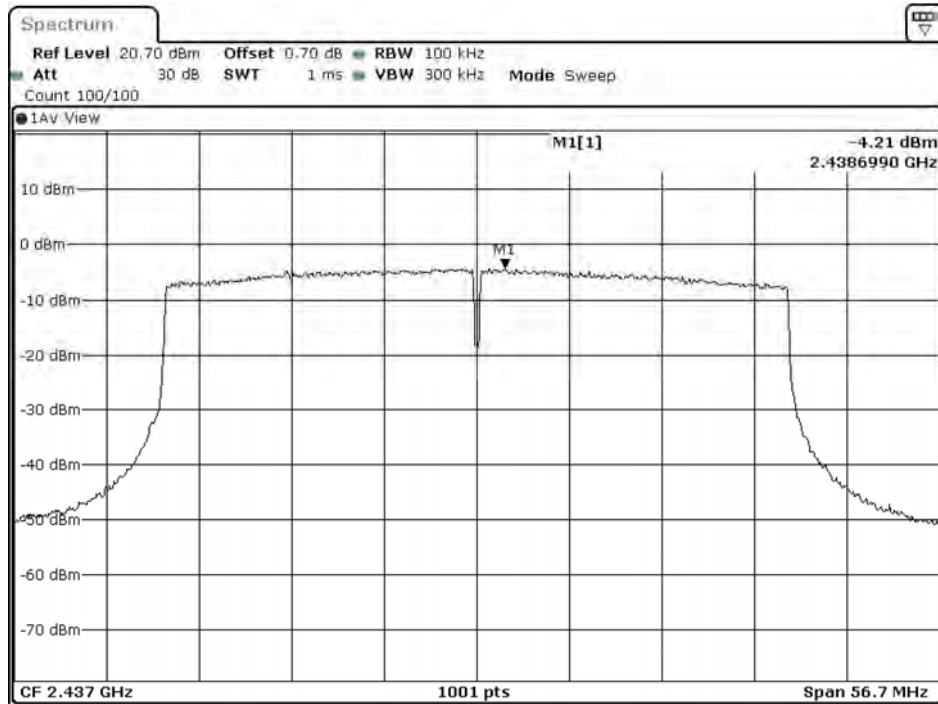
Date: 5 JUL 2020 11:10:05

Figure Channel 06: (Chain A)



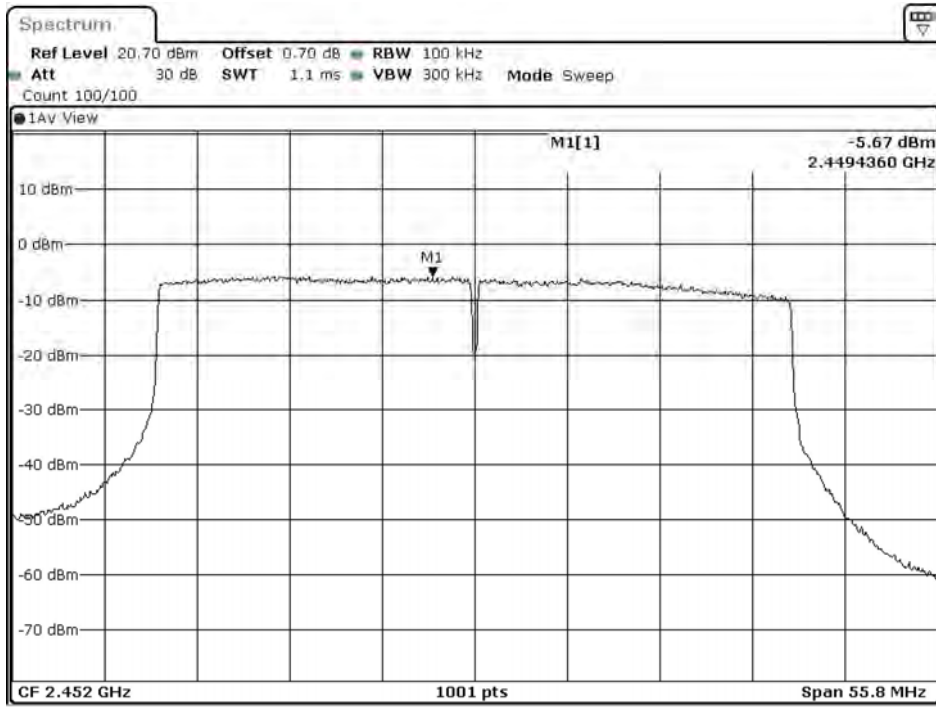
Date: 5.JUL.2020 11:11:07

Figure Channel 06: (Chain B)



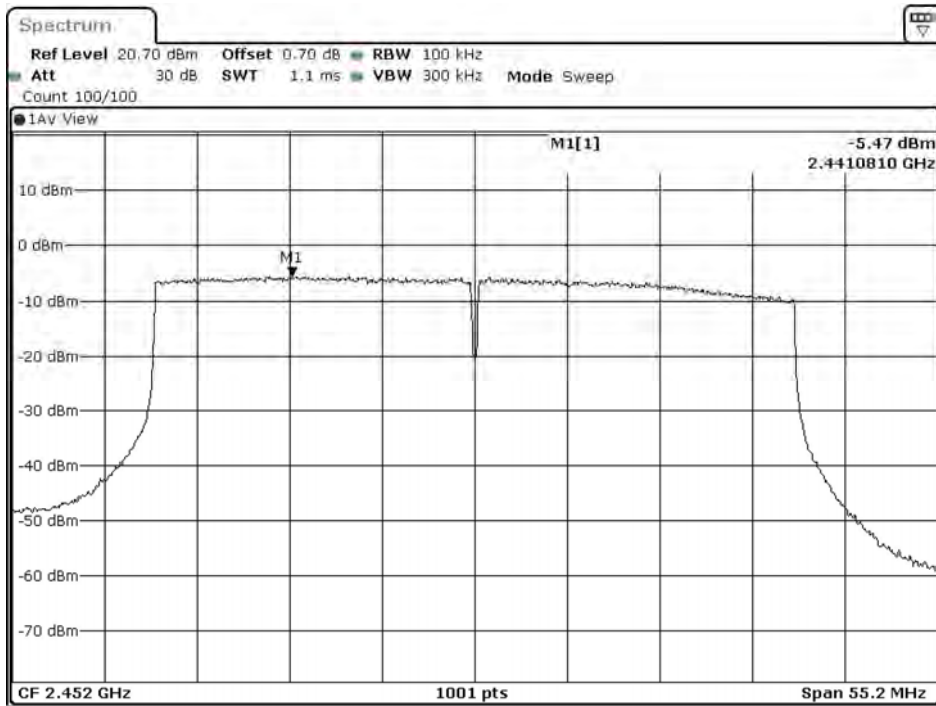
Date: 5.JUL.2020 11:14:11

Figure Channel 09: (Chain A)



Date: 5.JUL.2020 11:14:06

Figure Channel 09: (Chain B)



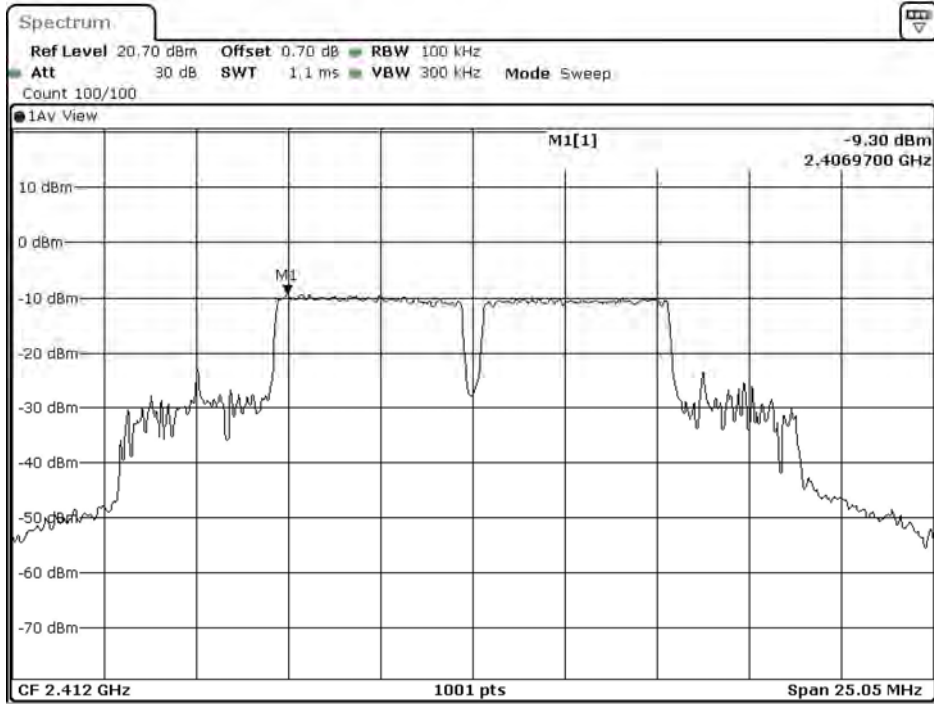
Date: 5.JUL.2020 11:17:10

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 7: Transmit (802.11ax-20M-BW-CDD) (RU Config-center mode)
 Test Date : 2020/07/05

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412.000	A	-9.300	-6.290	$\leq 8\text{dBm}$	Pass
		B	-8.780	-5.770	$\leq 8\text{dBm}$	Pass
11	2462.000	A	-7.700	-4.690	$\leq 8\text{dBm}$	Pass
		B	-7.270	-4.260	$\leq 8\text{dBm}$	Pass

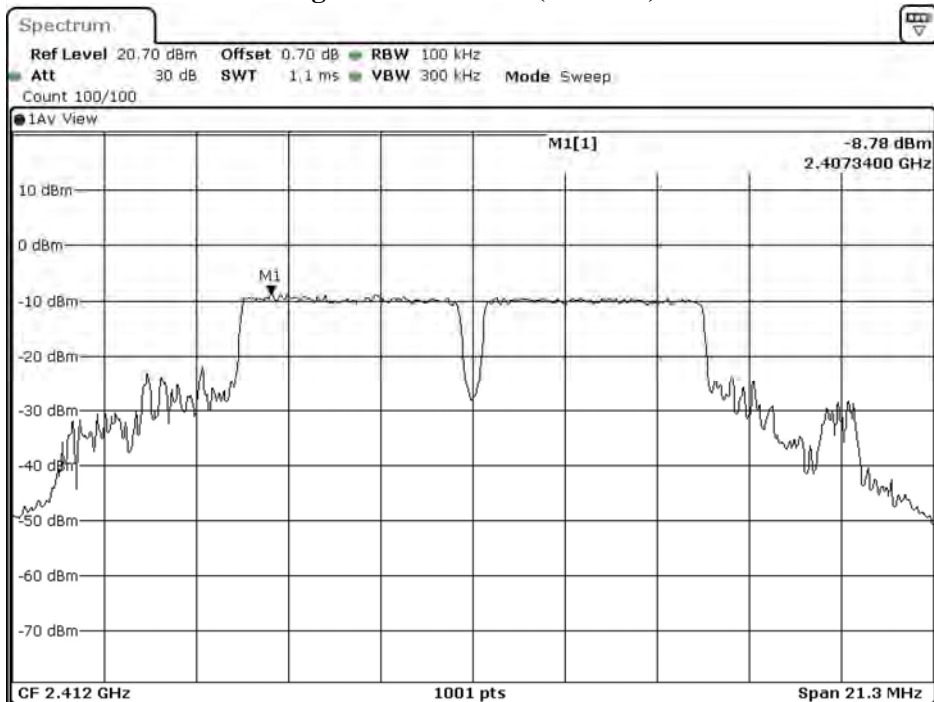
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



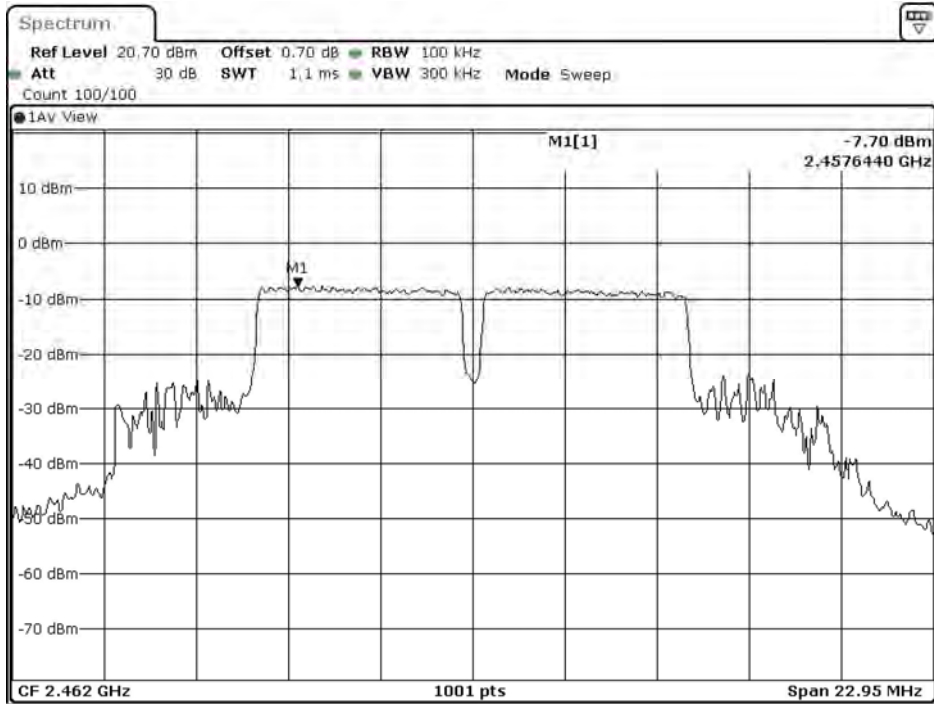
Date: 7.JUL.2020 10:06:37

Figure Channel 01: (Chain B)



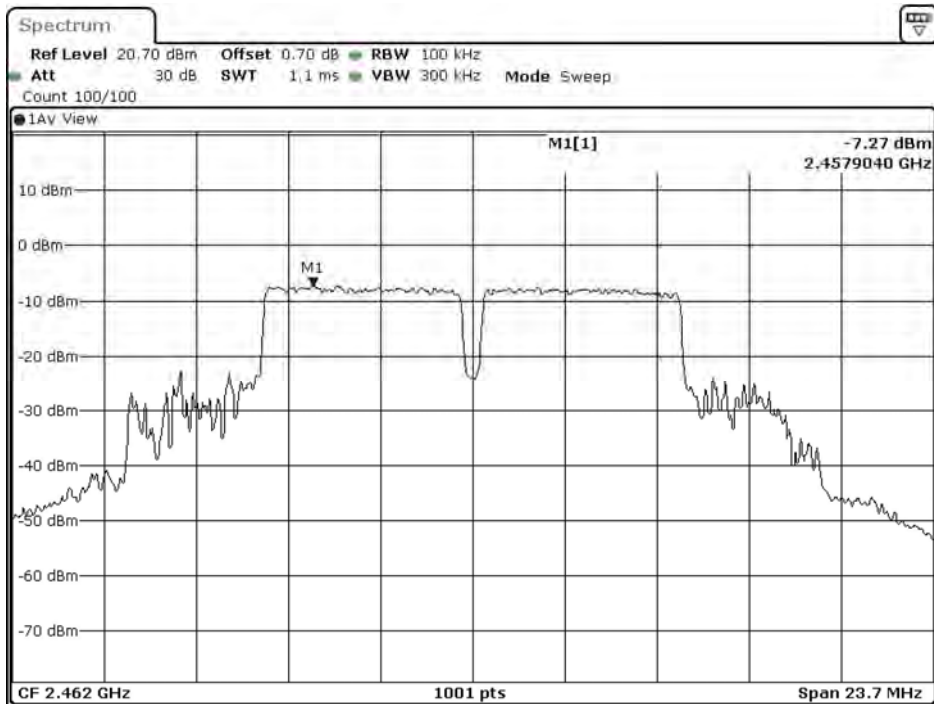
Date: 7.JUL.2020 10:09:40

Figure Channel 11: (Chain A)



Date: 7.JUL.2020 10:09:21

Figure Channel 11: (Chain B)



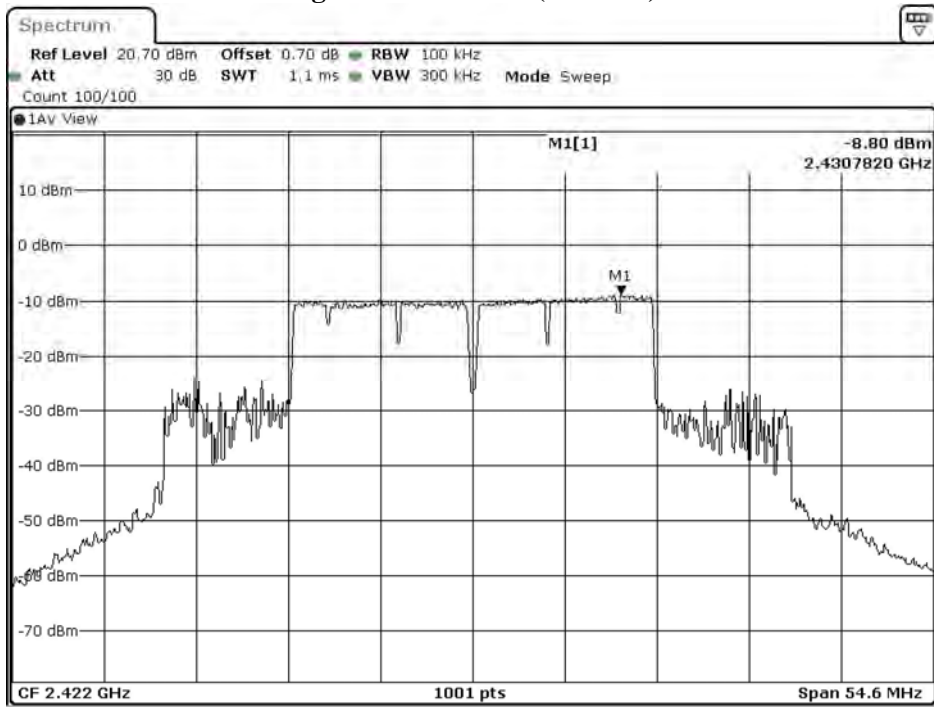
Date: 7.JUL.2020 10:12:25

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 8: Transmit (802.11ax-40M-BW-CDD) (RU Config-center mode)
 Test Date : 2020/07/07

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
03	2422.000	A	-8.800	-5.790	$\leq 8\text{dBm}$	Pass
		B	-8.810	-5.800	$\leq 8\text{dBm}$	Pass
09	2452.000	A	-7.190	-4.180	$\leq 8\text{dBm}$	Pass
		B	-6.980	-3.970	$\leq 8\text{dBm}$	Pass

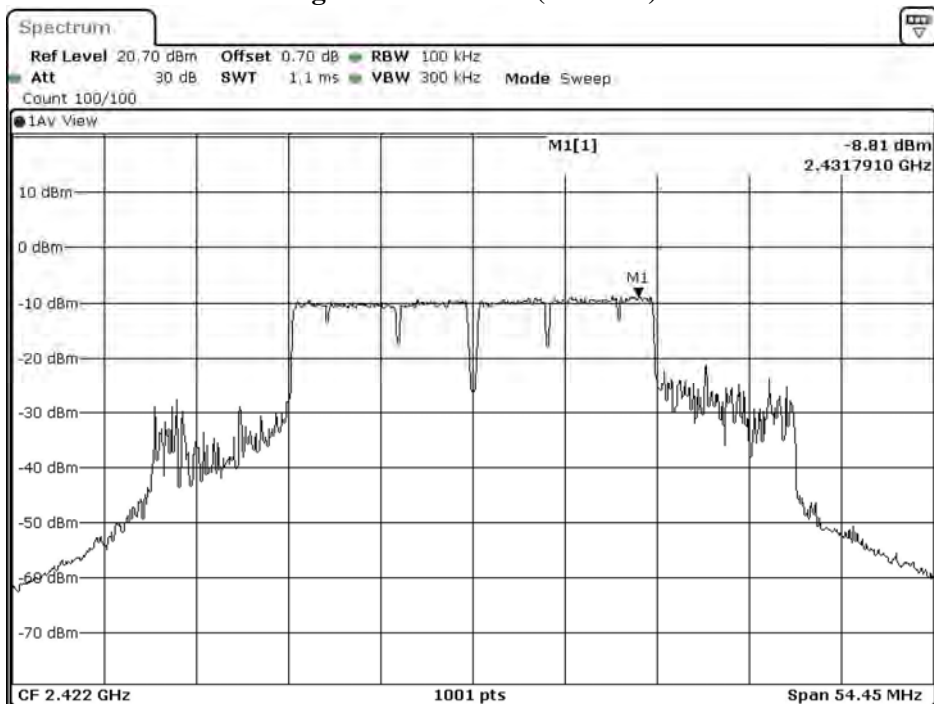
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 03: (Chain A)



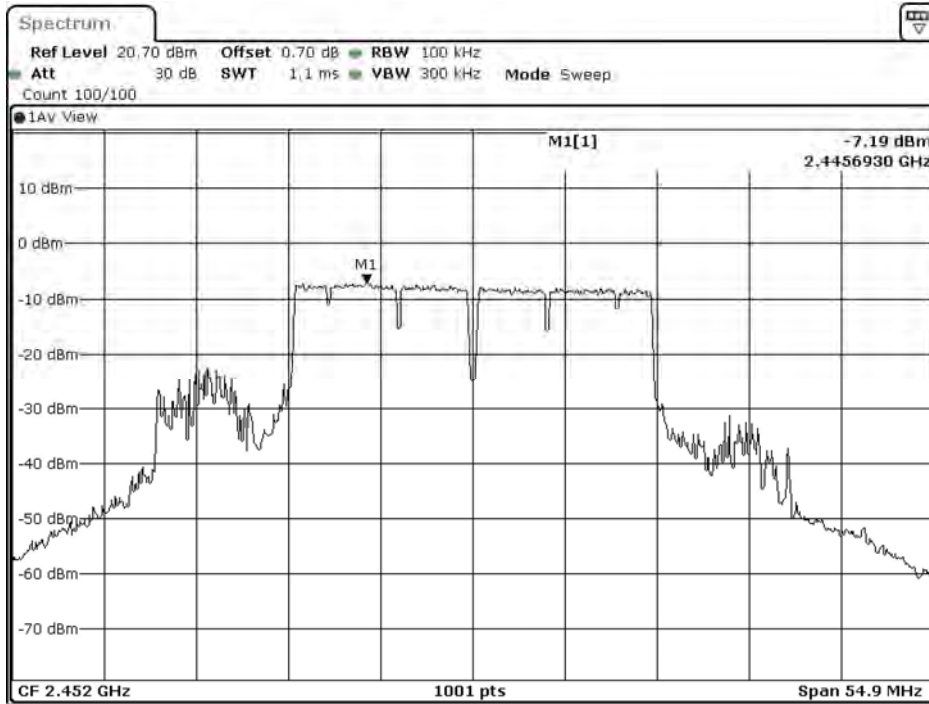
Date: 7.JUL.2020 10:26:29

Figure Channel 03: (Chain B)



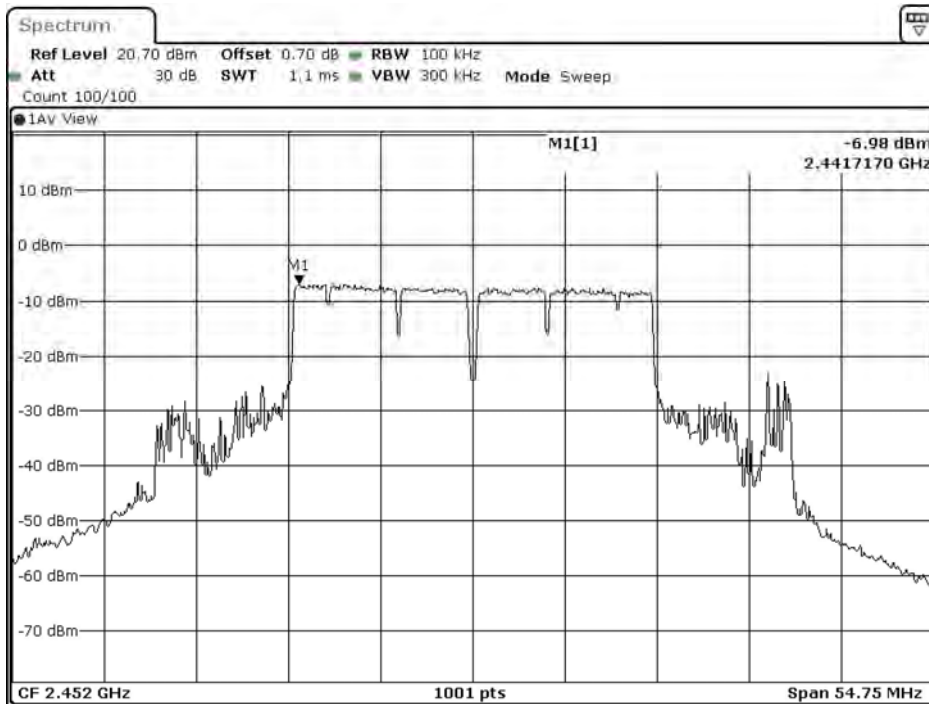
Date: 7.JUL.2020 10:29:32

Figure Channel 09: (Chain A)



Date: 7.JUL.2020 10:32:08

Figure Channel 09: (Chain B)



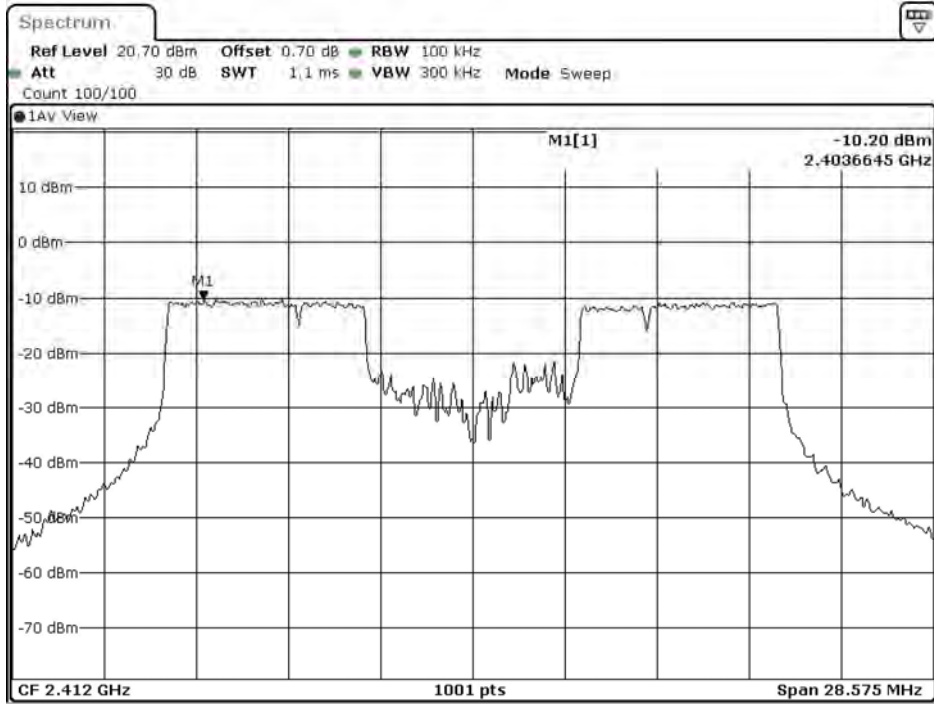
Date: 7.JUL.2020 10:35:11

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 7: Transmit (802.11ax-20M-BW-CDD) (RU Config-edges mode)
 Test Date : 2020/07/05

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412.000	A	-10.200	-7.190	≤ 8 dBm	Pass
		B	-10.320	-7.310	≤ 8 dBm	Pass
11	2462.000	A	-8.860	-5.850	≤ 8 dBm	Pass
		B	-8.410	-5.400	≤ 8 dBm	Pass

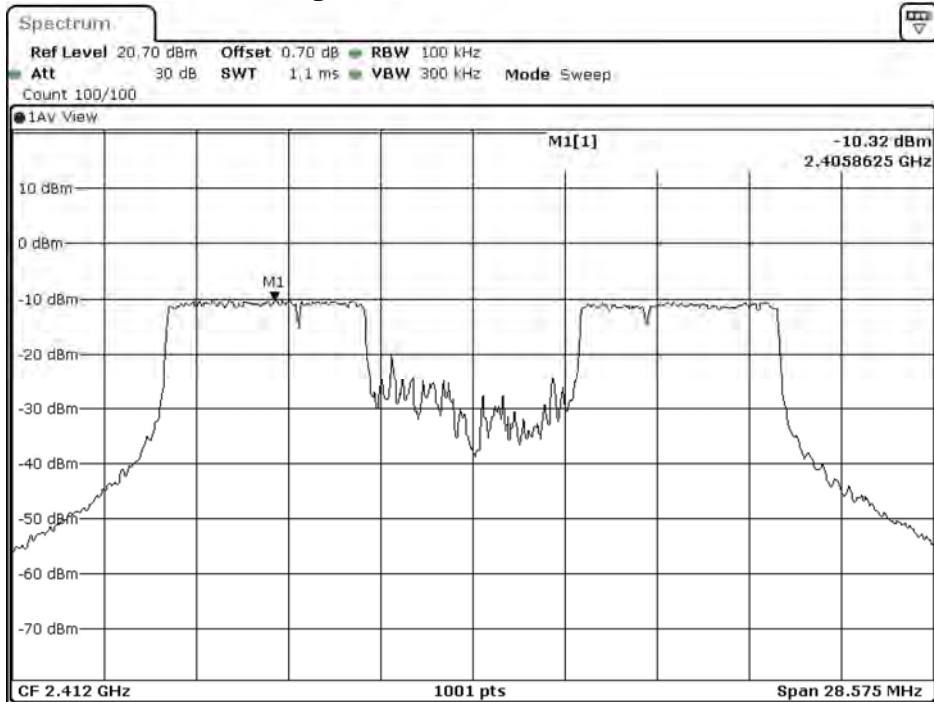
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



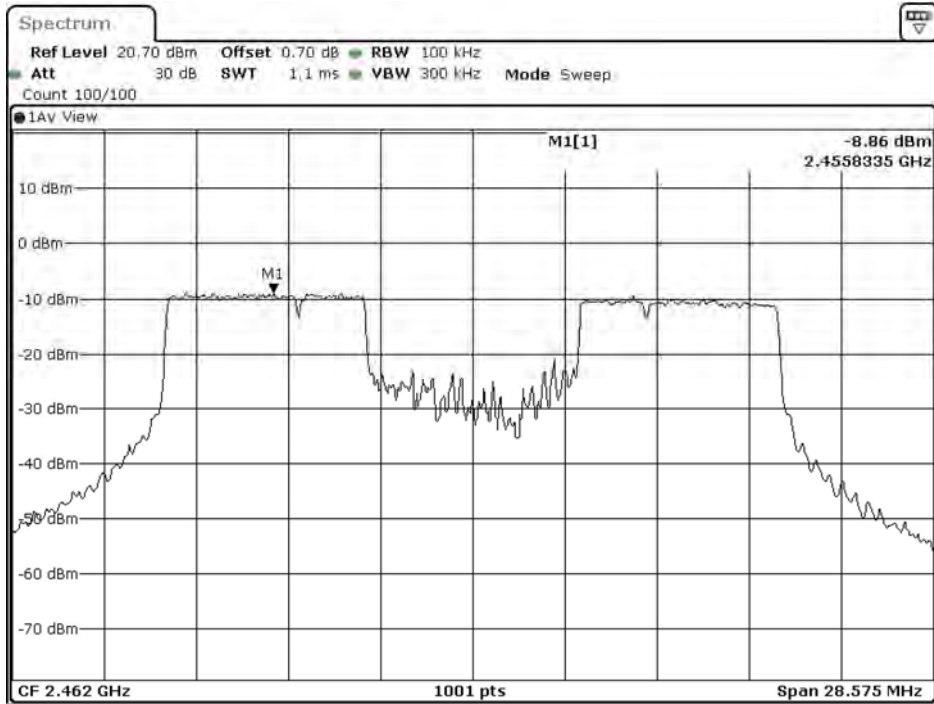
Date: 7.JUL.2020 09:41:45

Figure Channel 01: (Chain B)



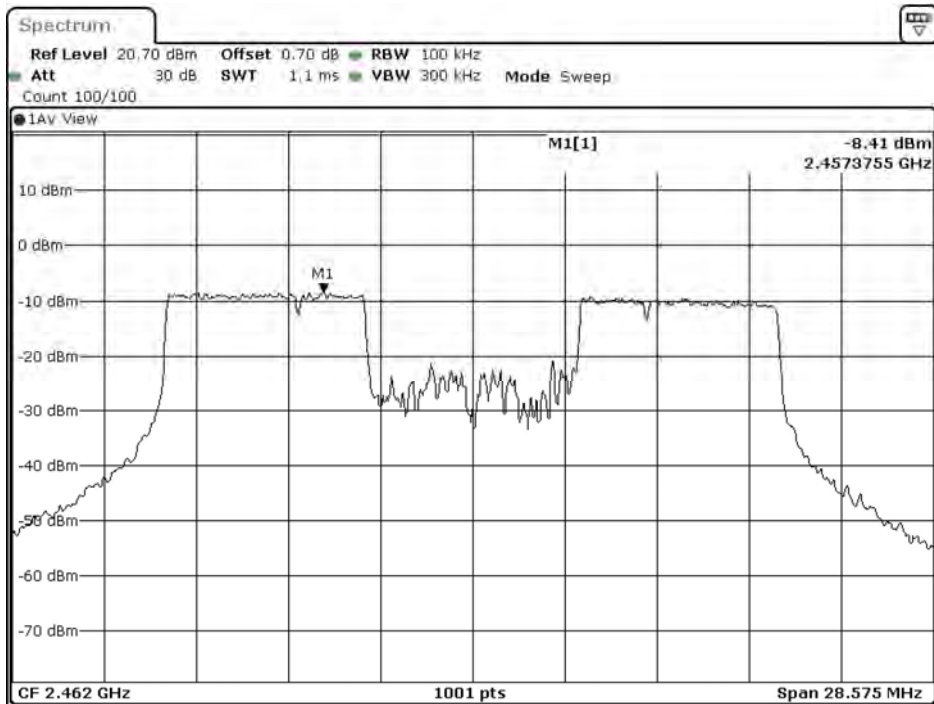
Date: 7.JUL.2020 09:44:49

Figure Channel 11: (Chain A)



Date: 7.JUL.2020 09:49:10

Figure Channel 11: (Chain B)



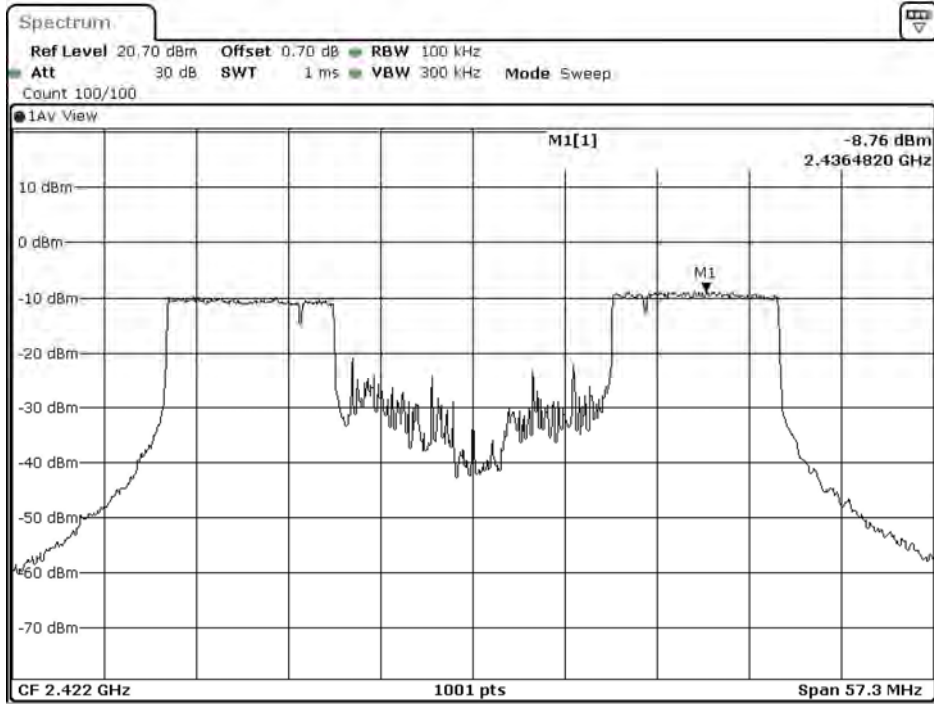
Date: 7.JUL.2020 09:52:13

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 8: Transmit (802.11ax-40M-BW-CDD) (RU Config-edges mode)
 Test Date : 2020/07/07

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
03	2422.000	A	-8.760	-5.750	$\leq 8\text{dBm}$	Pass
		B	-8.750	-5.740	$\leq 8\text{dBm}$	Pass
09	2452.000	A	-6.730	-3.720	$\leq 8\text{dBm}$	Pass
		B	-6.470	-3.460	$\leq 8\text{dBm}$	Pass

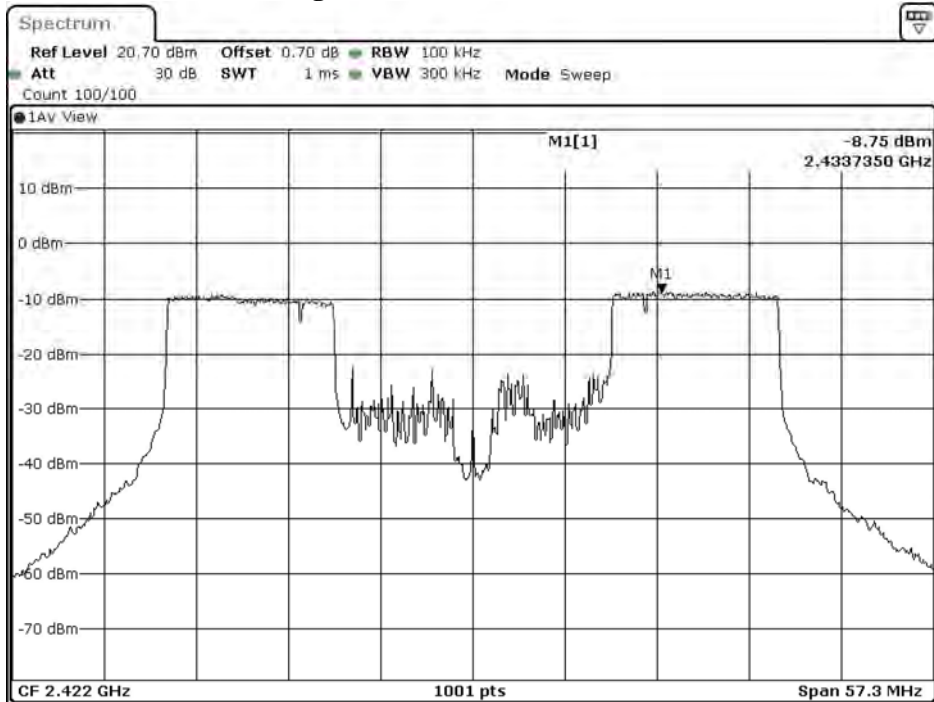
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 03: (Chain A)



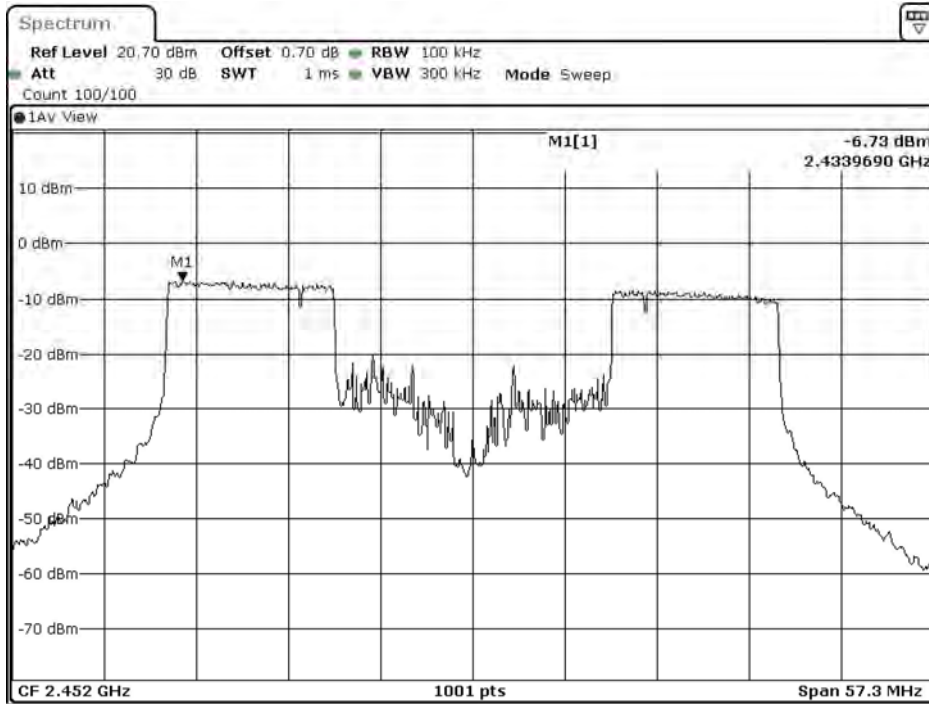
Date: 7.JUL.2020 09:55:03

Figure Channel 03: (Chain B)



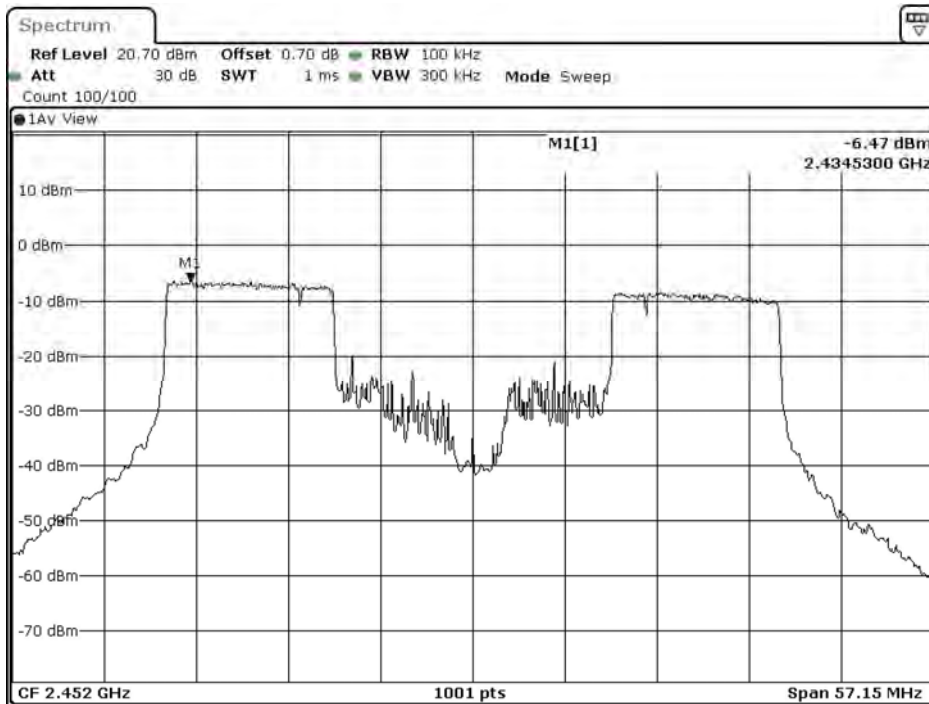
Date: 7.JUL.2020 09:58:06

Figure Channel 09: (Chain A)



Date: 7.JUL.2020 09:57:51

Figure Channel 09: (Chain B)



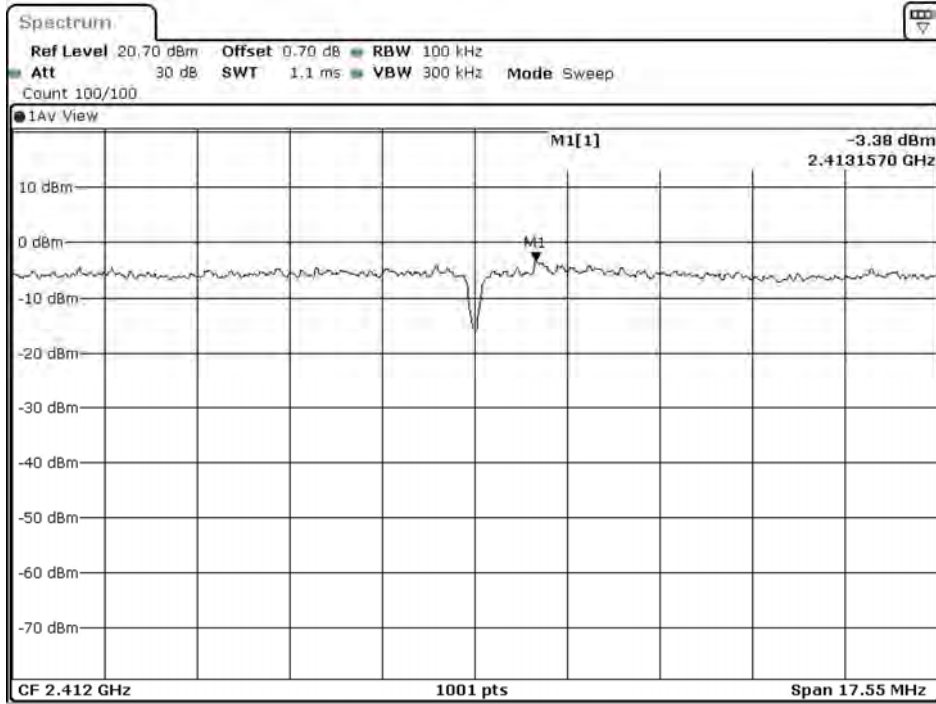
Date: 7.JUL.2020 10:00:54

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 13: Transmit (802.11ax-20M-BW-Beamforming)
 Test Date : 2020/07/07

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412.000	A	-3.380	-0.370	≤ 8 dBm	Pass
		B	-2.320	0.690	≤ 8 dBm	Pass
06	2437.000	A	-4.370	-1.360	≤ 8 dBm	Pass
		B	-2.820	0.190	≤ 8 dBm	Pass
11	2462.000	A	-3.570	-0.560	≤ 8 dBm	Pass
		B	-2.880	0.130	≤ 8 dBm	Pass

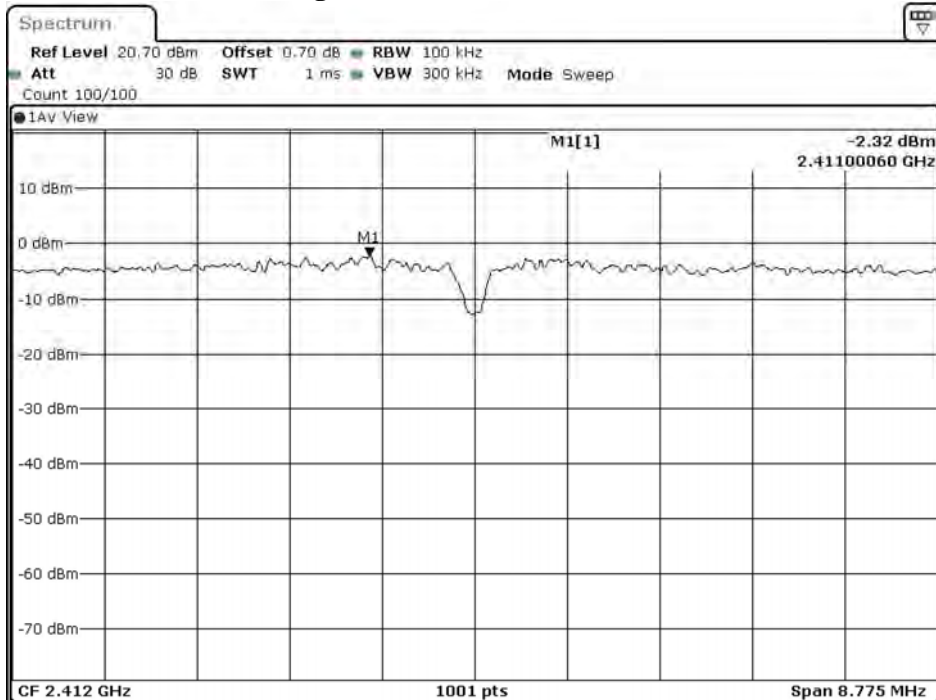
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 01: (Chain A)



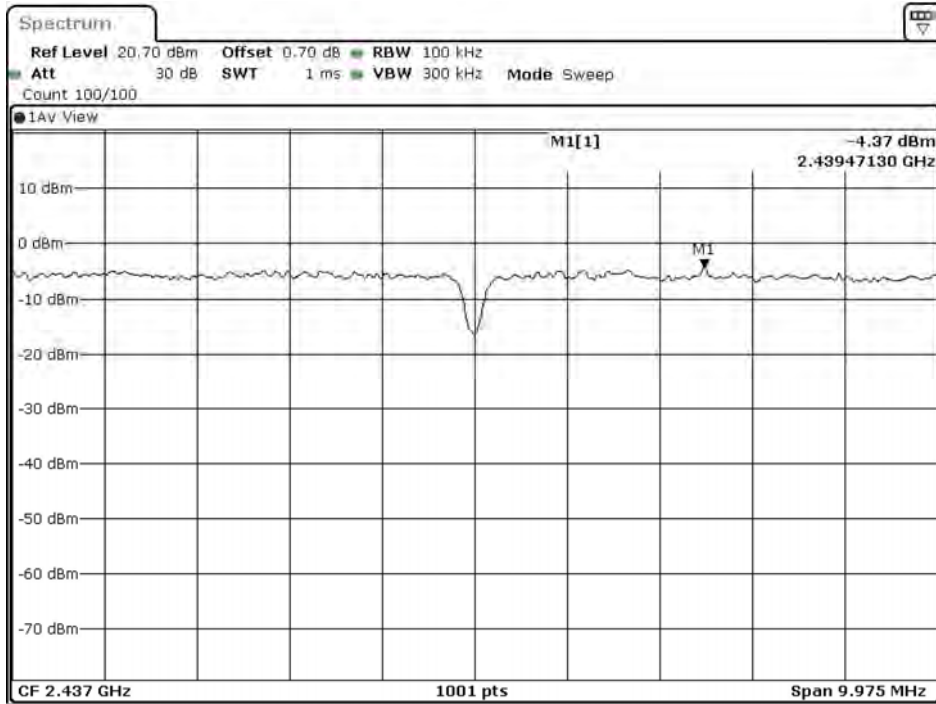
Date: 7.JUL.2020 11:22:34

Figure Channel 01: (Chain B)



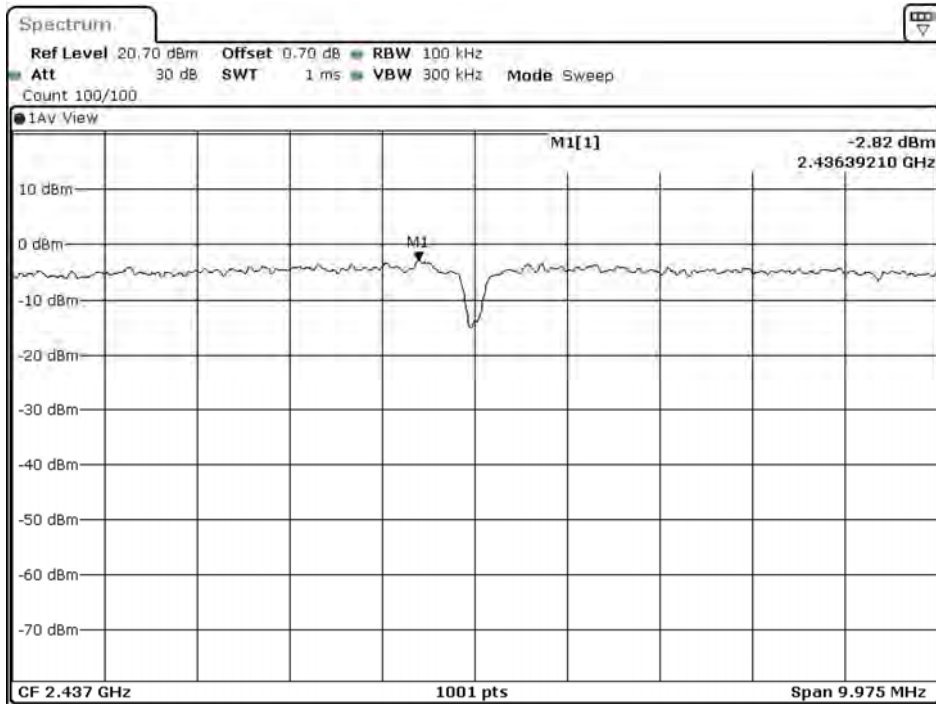
Date: 7.JUL.2020 19:17:12

Figure Channel 06: (Chain A)



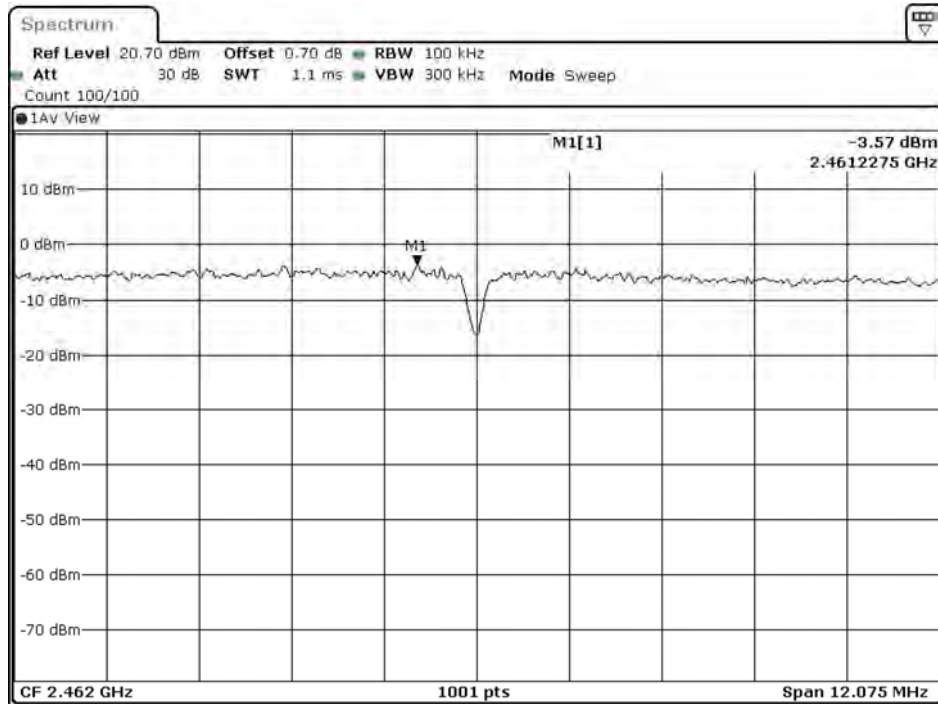
Date: 7.JUL.2020 11:25:38

Figure Channel 06: (Chain B)



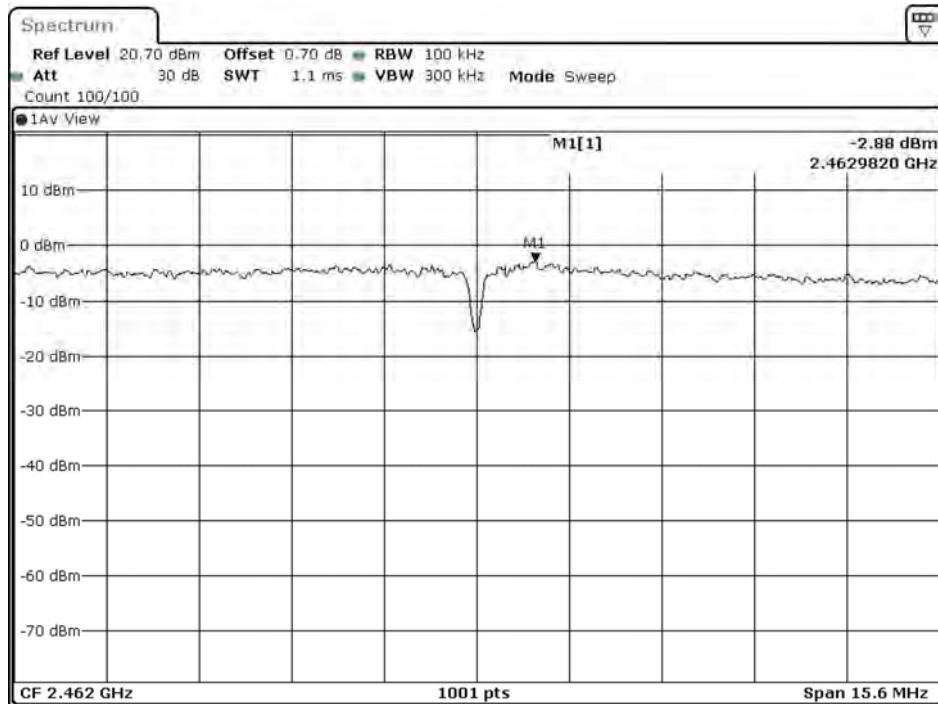
Date: 7.JUL.2020 19:20:17

Figure Channel 11: (Chain A)



Date: 7.JUL.2020 11:29:21

Figure Channel 11: (Chain B)



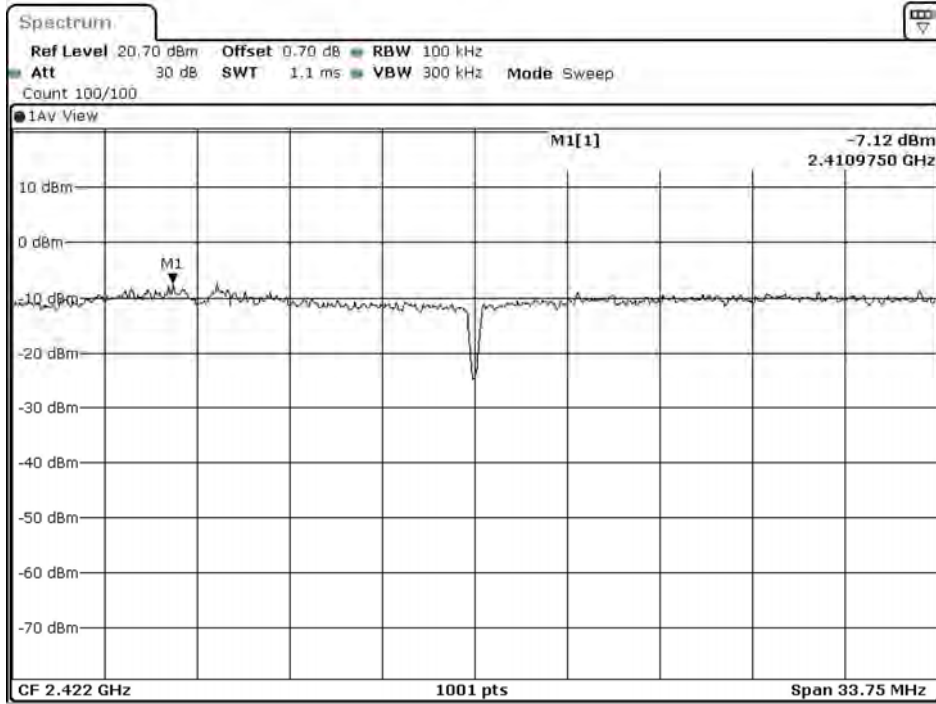
Date: 7.JUL.2020 19:24:00

Product : LV55
 Test Item : Power Density Data
 Test Mode : Mode 14: Transmit (802.11ax-40M-BW-Beamforming)
 Test Date : 2020/07/07

Channel No.	Frequency (MHz)	Chain	Power Density (dBm/3kHz)	Total Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
03	2422.000	A	-7.120	-4.110	≤ 8 dBm	Pass
		B	-7.860	-4.850	≤ 8 dBm	Pass
06	2437.000	A	-5.820	-2.810	≤ 8 dBm	Pass
		B	-3.580	-0.570	≤ 8 dBm	Pass
09	2452.000	A	-6.590	-3.580	≤ 8 dBm	Pass
		B	-5.600	-2.590	≤ 8 dBm	Pass

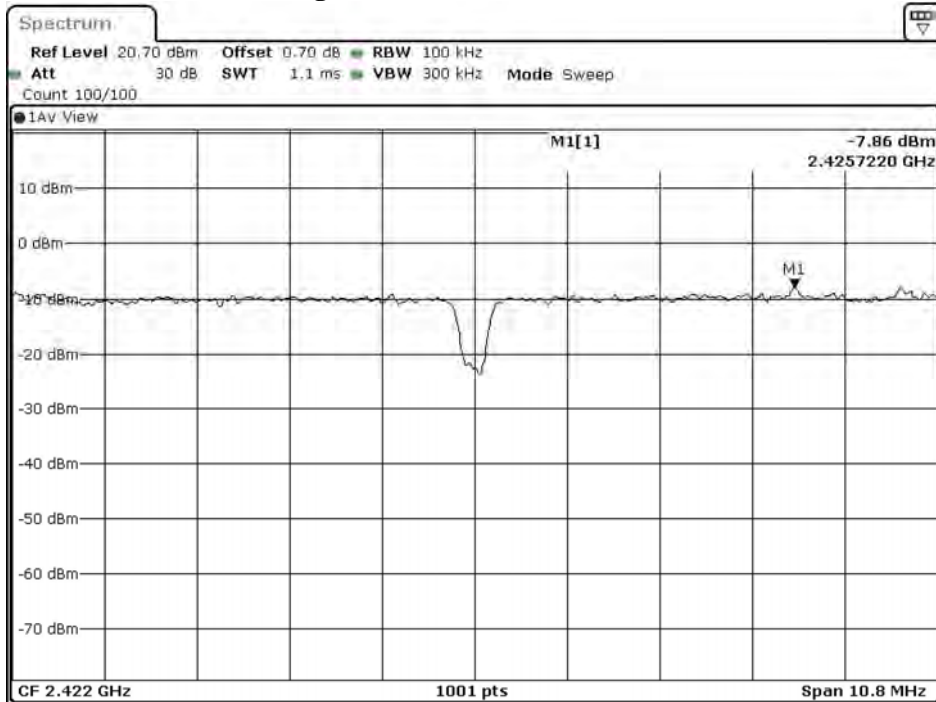
Note: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 03: (Chain A)



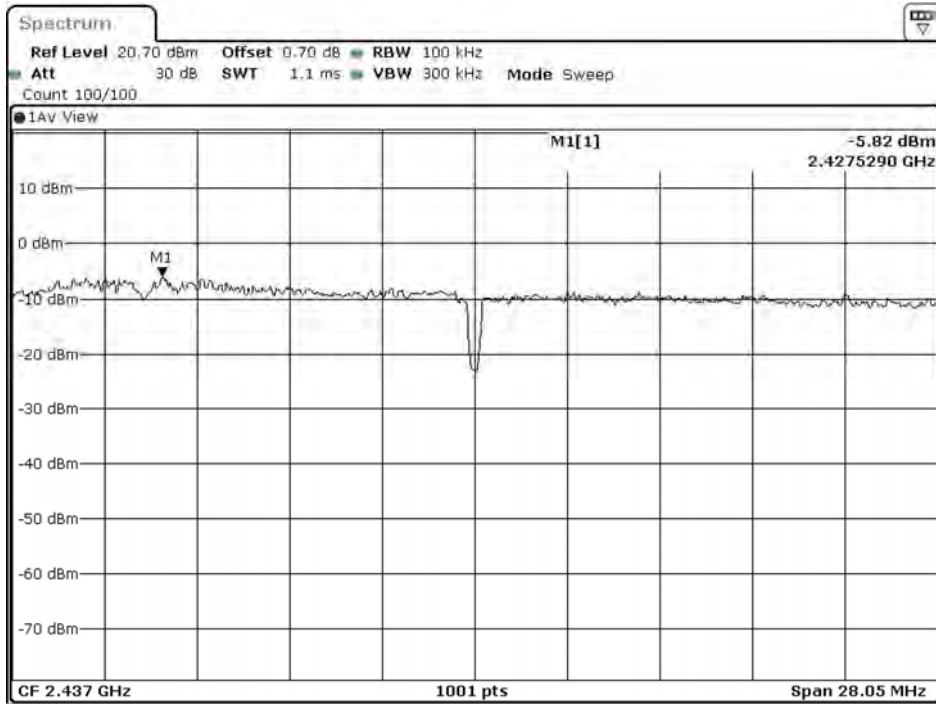
Date: 7.JUL.2020 11:33:23

Figure Channel 03: (Chain B)



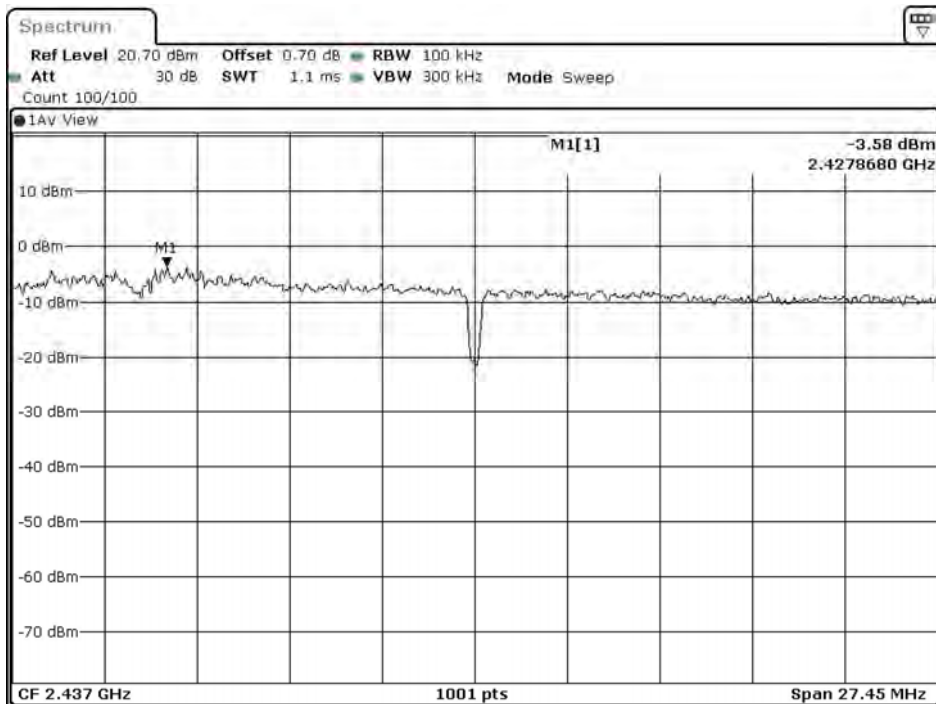
Date: 7.JUL.2020 19:28:01

Figure Channel 06: (Chain A)



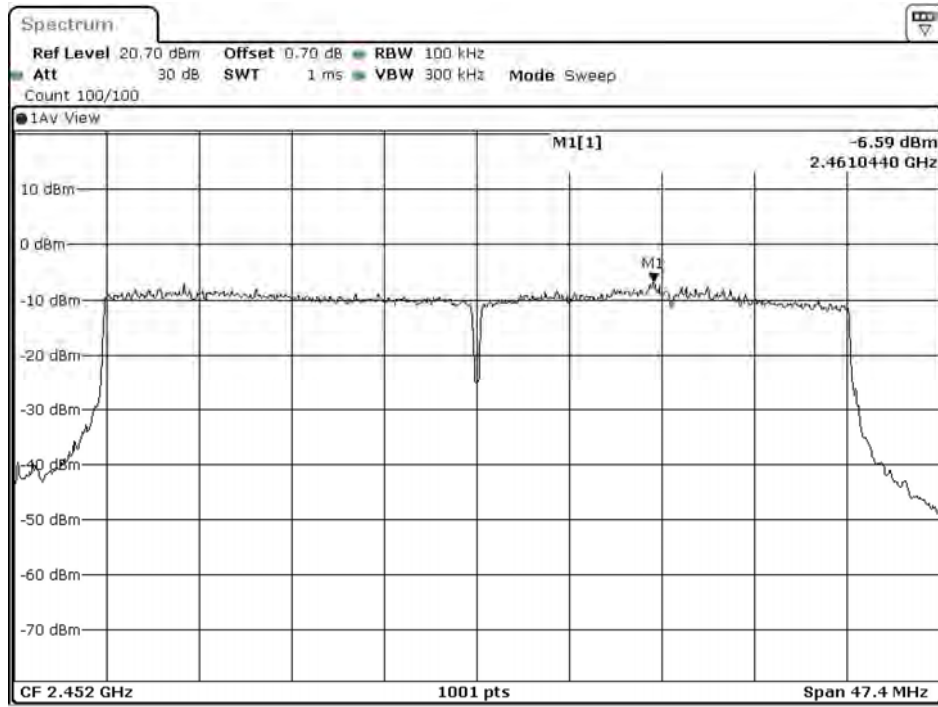
Date: 7.JUL.2020 11:38:31

Figure Channel 06: (Chain B)



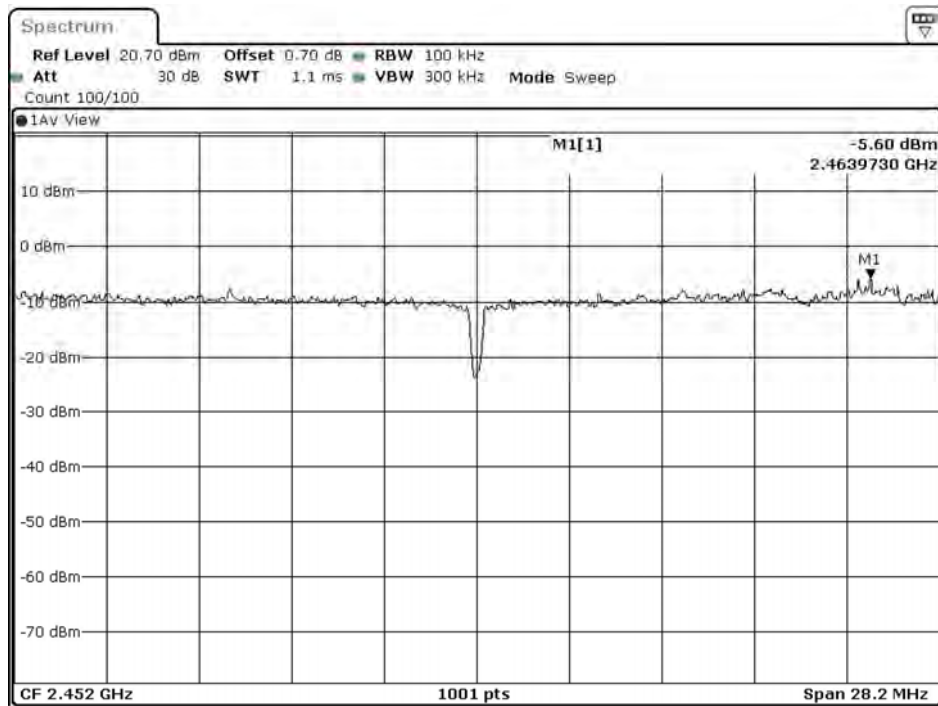
Date: 7.JUL.2020 19:33:09

Figure Channel 09: (Chain A)



Date: 7.JUL.2020 11:42:08

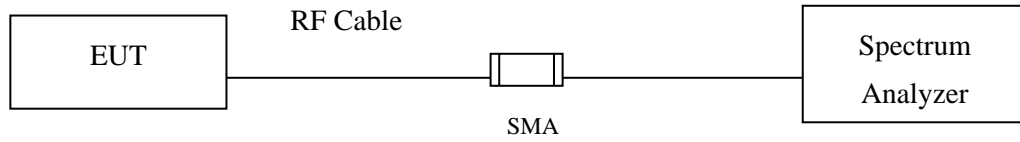
Figure Channel 09: (Chain B)



Date: 7.JUL.2020 12:27:42

9. Duty Cycle

9.1. Test Setup



9.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to ANSI C63.10 2013 for compliance to FCC 47CFR 15.247 requirements.

9.3. Test Result of Duty Cycle

Product : LV55
 Test Item : Duty Cycle
 Test Mode : Mode 15: Transmit (CDD)
 Test Date : 2020/07/03

Duty Cycle Formula:

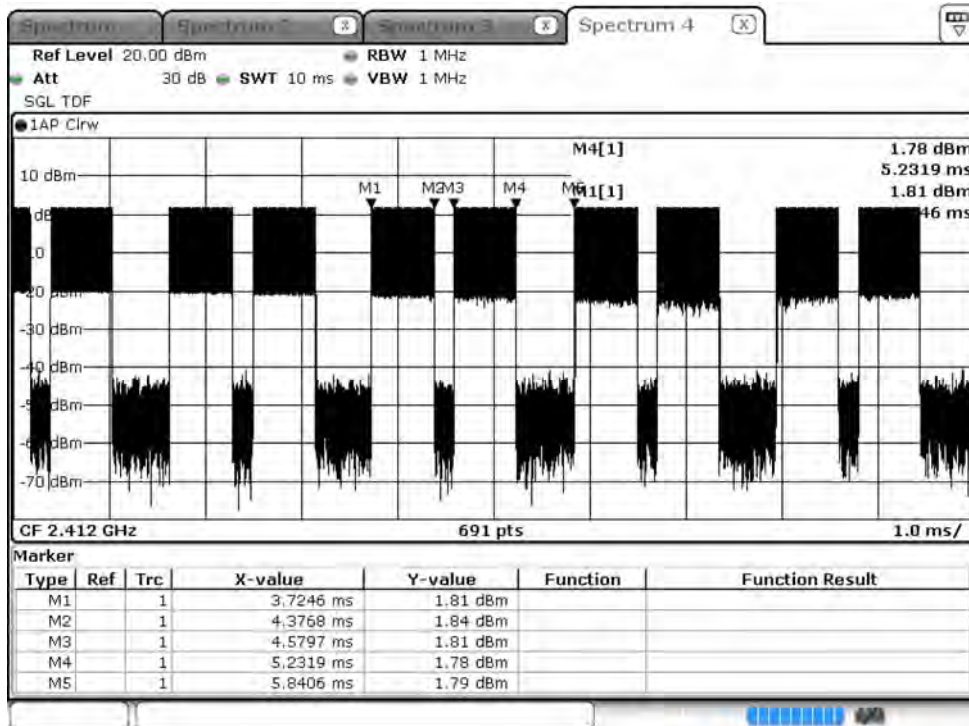
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$

$$\text{Duty Factor} = 10 \text{ Log} (1/\text{Duty Cycle})$$

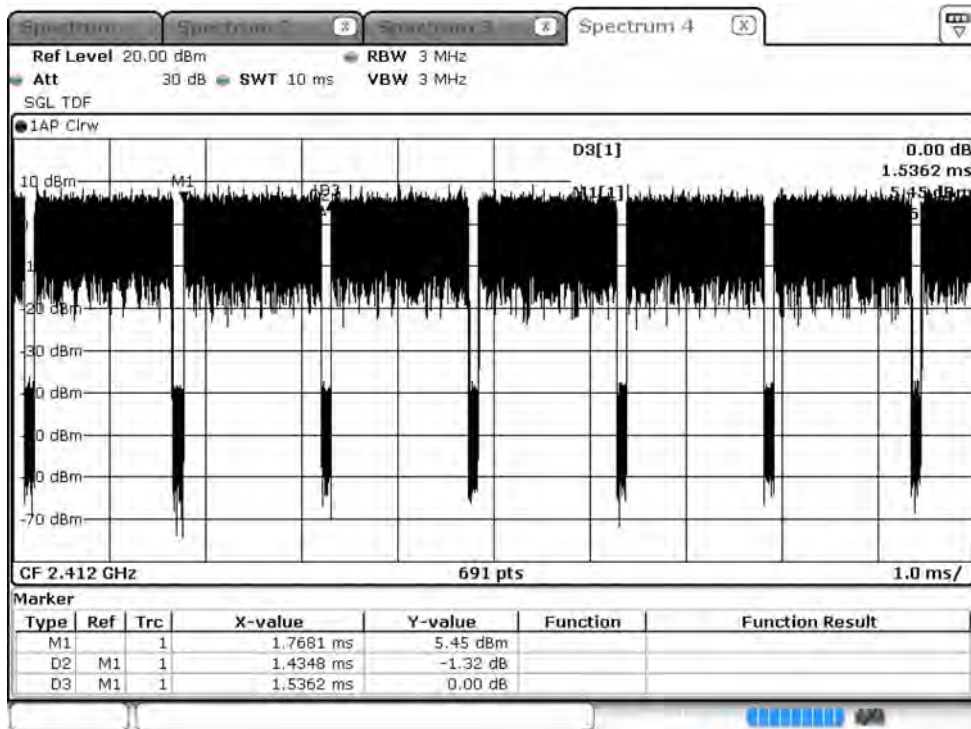
Results:

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	1.3044	2.1160	61.64	2.10
802.11g	1.4348	1.5362	93.40	0.30
802.11ax20 (RU Config-Full)	5.4638	5.7391	95.20	0.21
802.11ax40 (RU Config-Full)	5.4638	5.6812	96.17	0.17
802.11ax20 (RU Config-edges mode)	3.1884	3.5507	89.80	0.47
802.11ax40 (RU Config-edges mode)	3.3623	3.8986	86.24	0.64

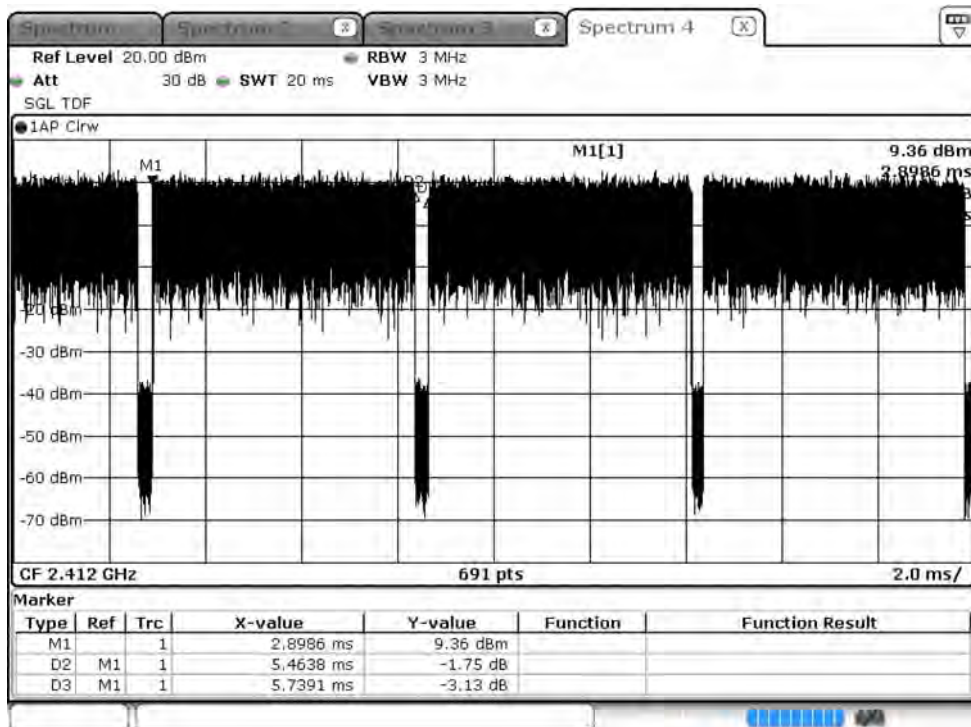
802.11b



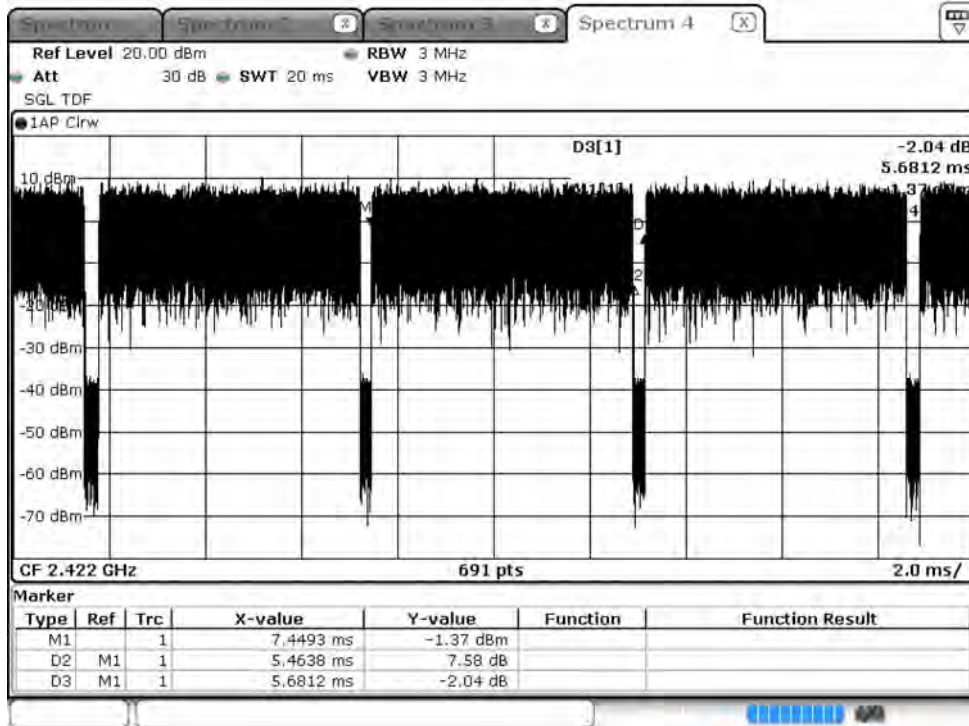
802.11g



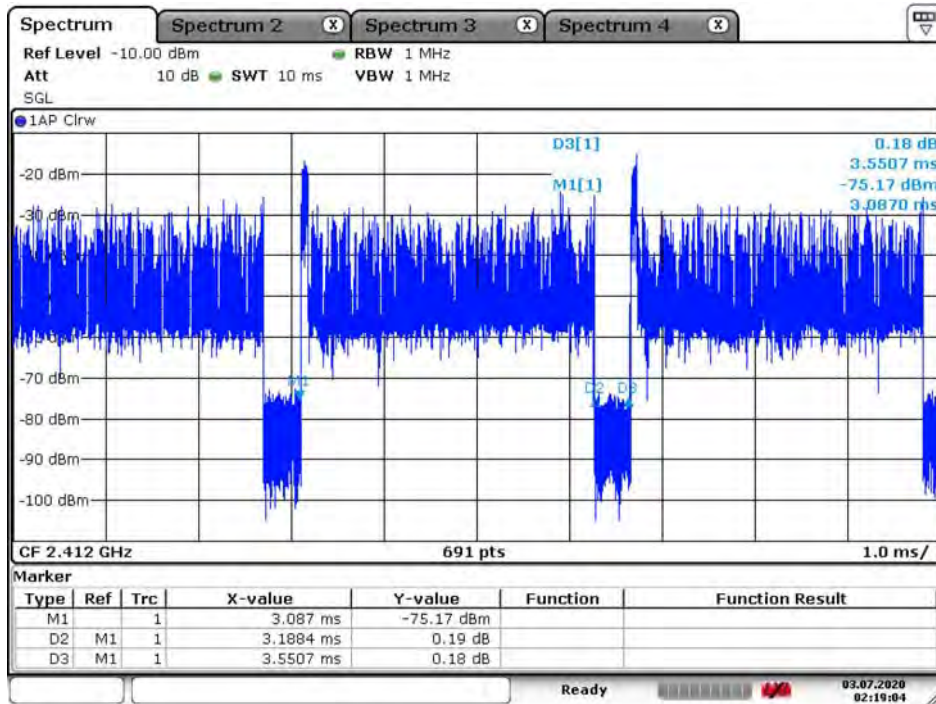
802.11ax20 (RU Config-Full)



802.11ax40 (RU Config-Full)

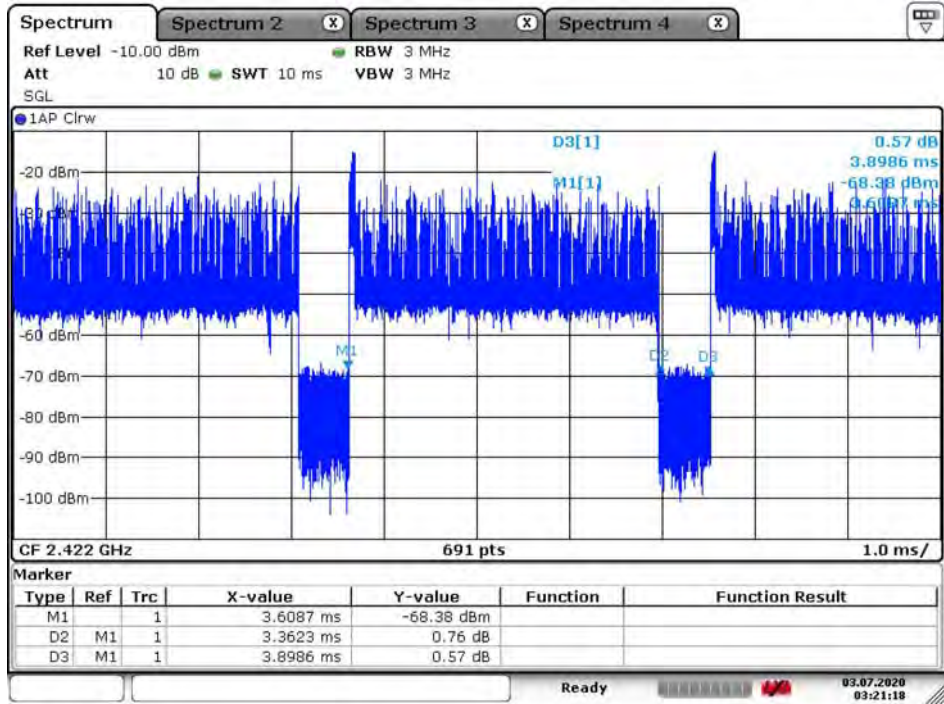


802.11ax20 (RU Config-edges mode)



Date: 3.JUL.2020 02:19:04

802.11ax40 (RU Config-edges mode)



Date: 3.JUL.2020 03:21:19

Product : LV55
 Test Item : Duty Cycle
 Test Mode : Mode 16: Transmit (Beamforming)
 Test Date : 2020/06/29

Duty Cycle Formula:

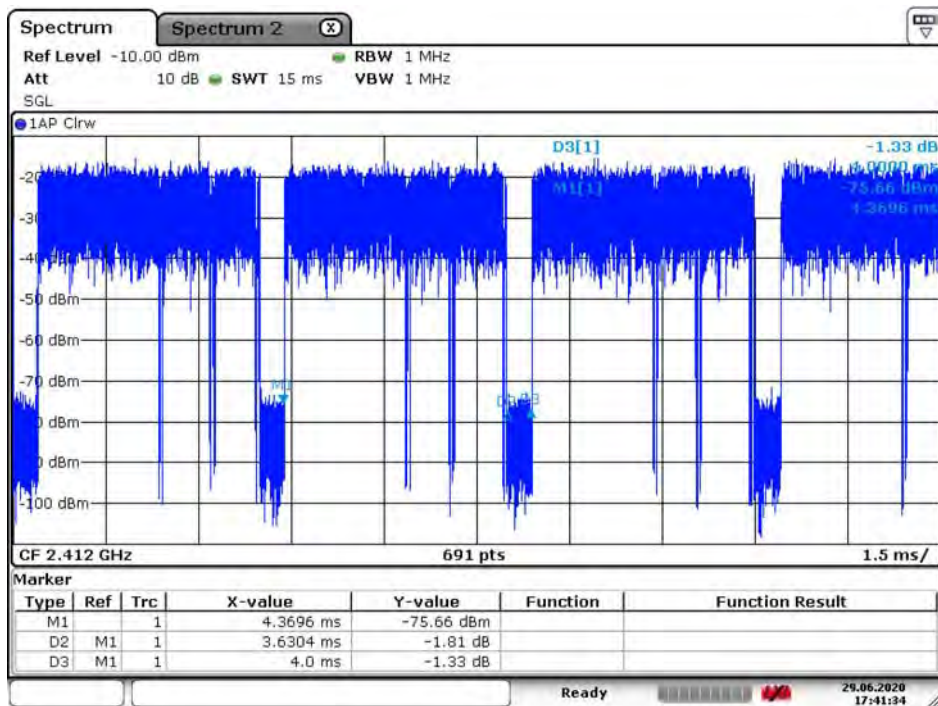
$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$

$$\text{Duty Factor} = 10 \text{ Log} (1/\text{Duty Cycle})$$

Results:

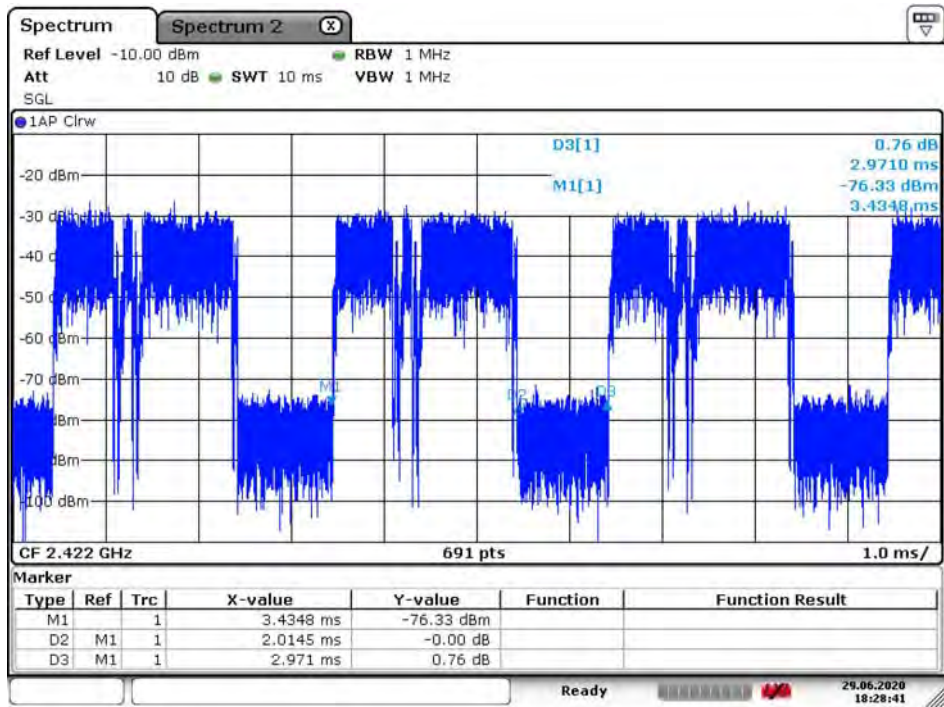
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11ax20	3.6304	4.0000	90.76	0.42
802.11ax40	2.0145	2.9710	67.81	1.69

802.11ax20



Date: 29 JUN 2020 17:41:34

802.11ax40



Date: 29 JUN 2020 18:28:42

10. EMI Reduction Method During Compliance Testing

No modification was made during testing.