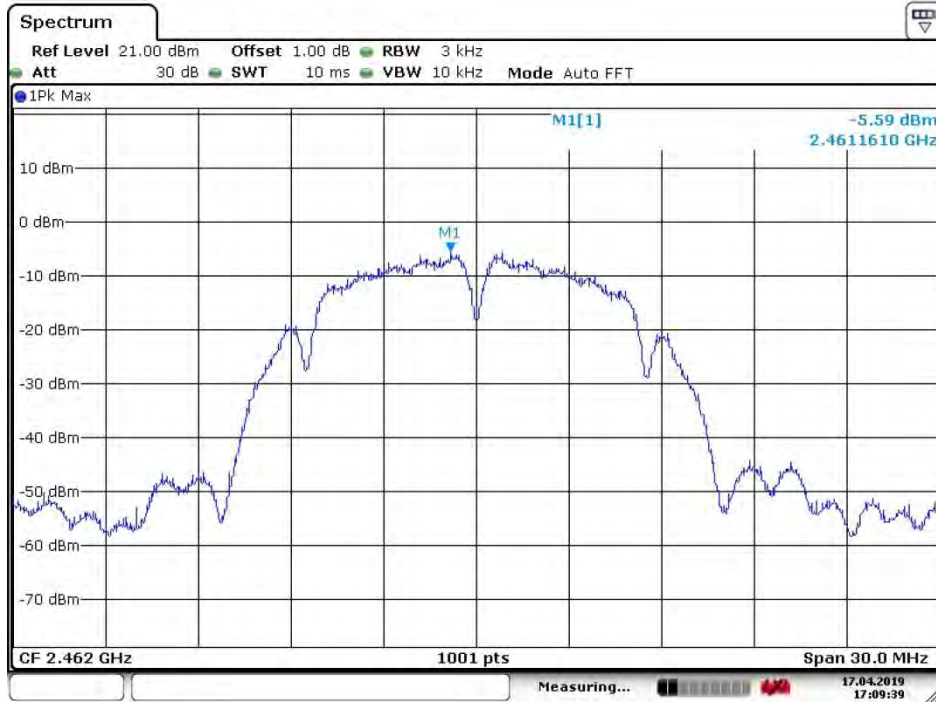
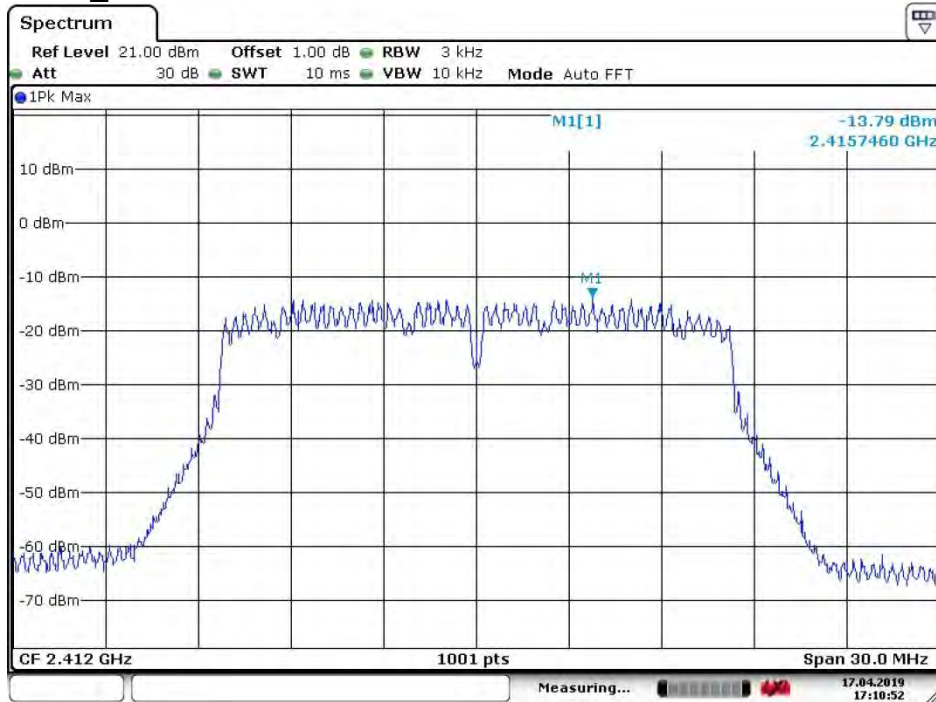


### 4.6.2.2.3 802.11B\_Highest Channel



Date: 17. APR. 2019 17:09:39

### 4.6.2.2.4 802.11G\_Lowest Channel

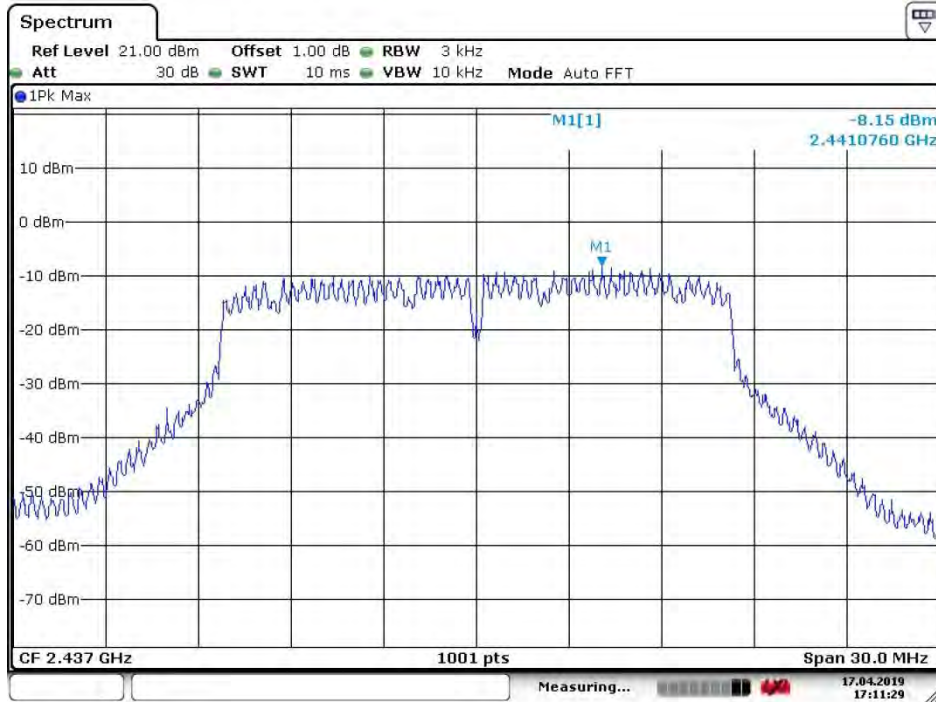


Date: 17. APR. 2019 17:10:52



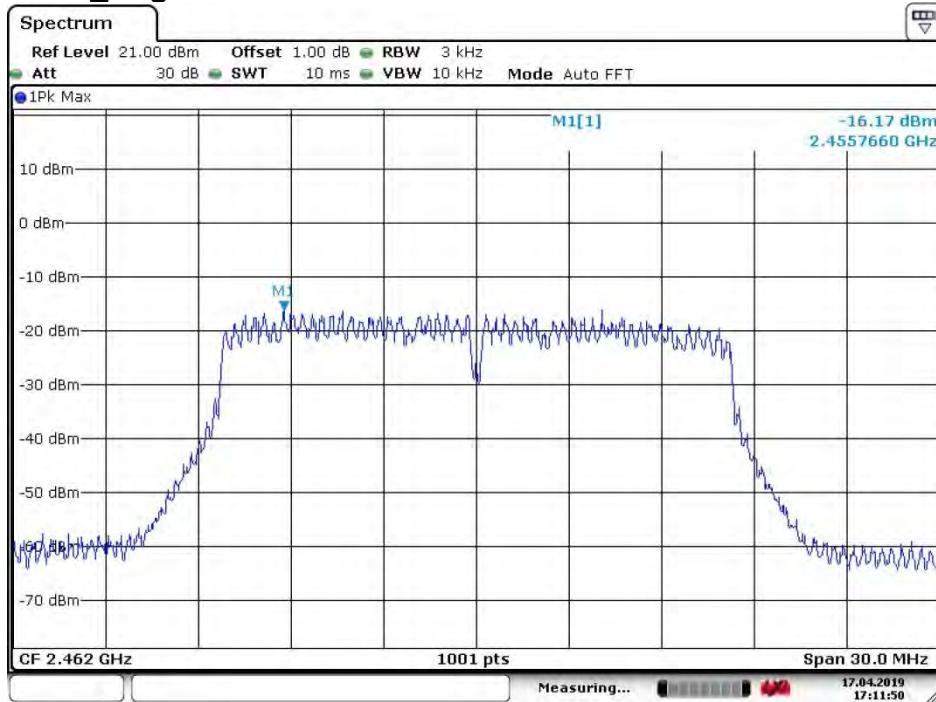
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**4.6.2.2.5 802.11G\_Middle Channel**



Date: 17.APR.2019 17:11:30

**4.6.2.2.6 802.11G\_Highest Channel**

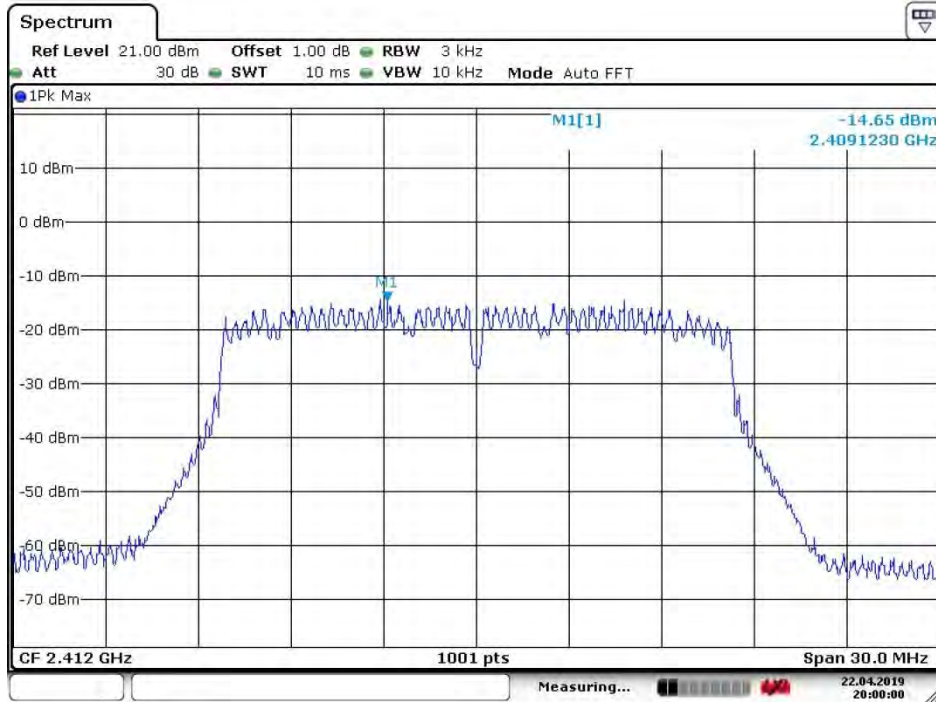


Date: 17.APR.2019 17:11:51



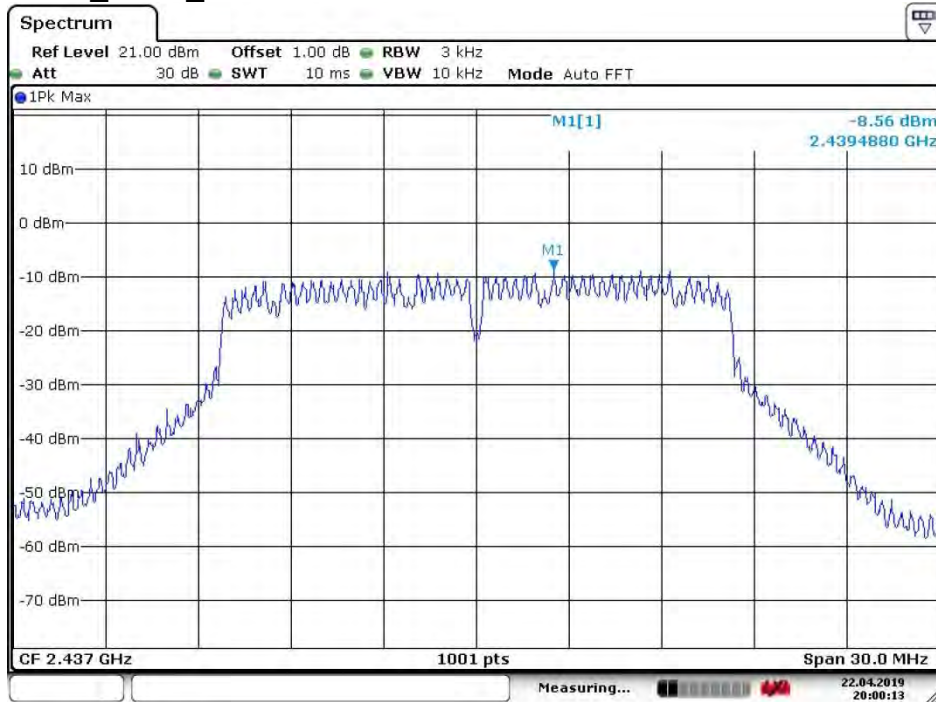


**4.6.2.2.7 802.11G\_CDD\_Lowest Channel**



Date: 22.APR.2019 20:00:00

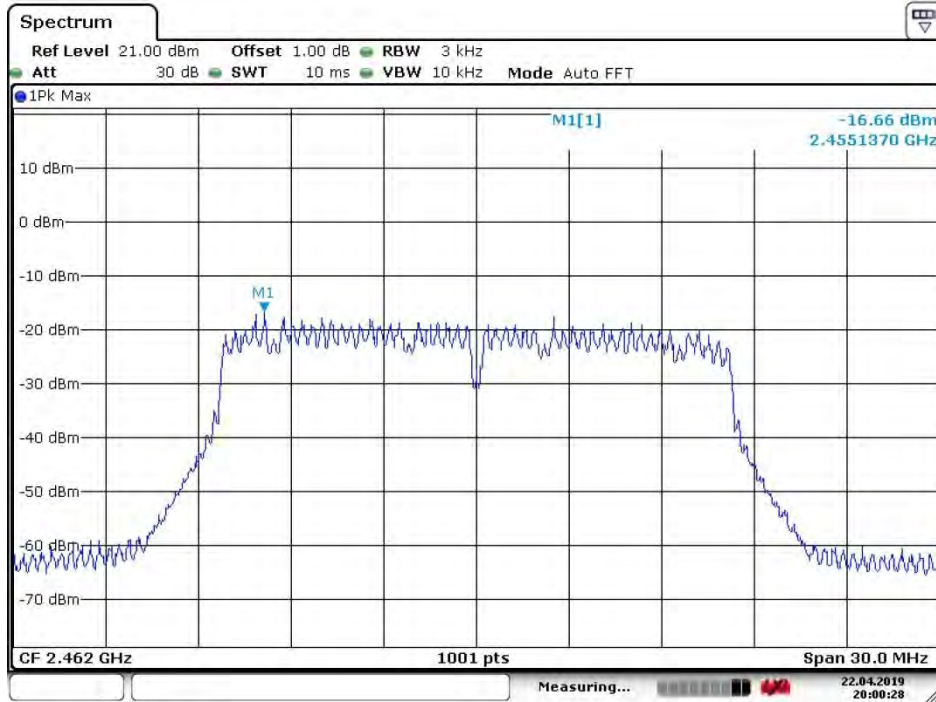
**4.6.2.2.8 802.11G\_CDD\_Middle Channel**



Date: 22.APR.2019 20:00:14

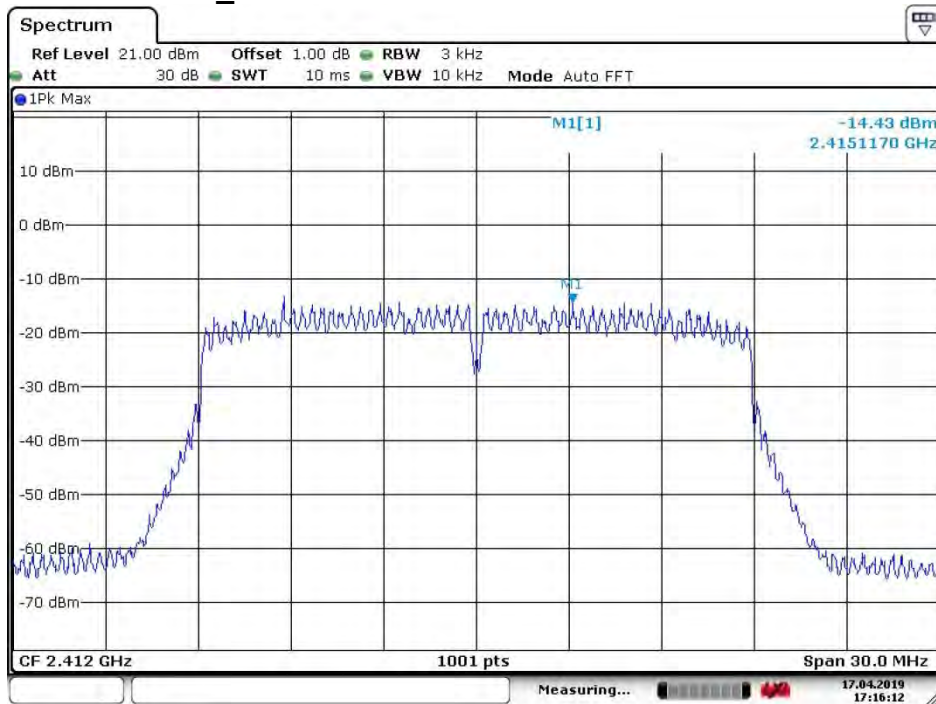


### 4.6.2.2.9 802.11G\_CDD\_Highest Channel



Date: 22.APR.2019 20:00:29

### 4.6.2.2.10 802.11N20\_Lowest Channel

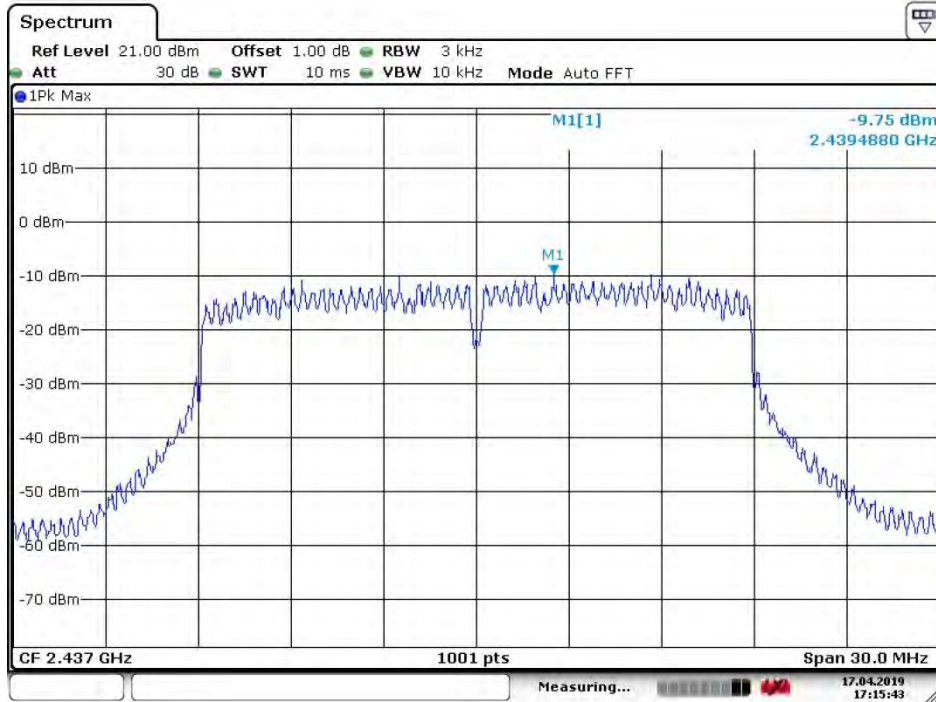


Date: 17.APR.2019 17:16:12



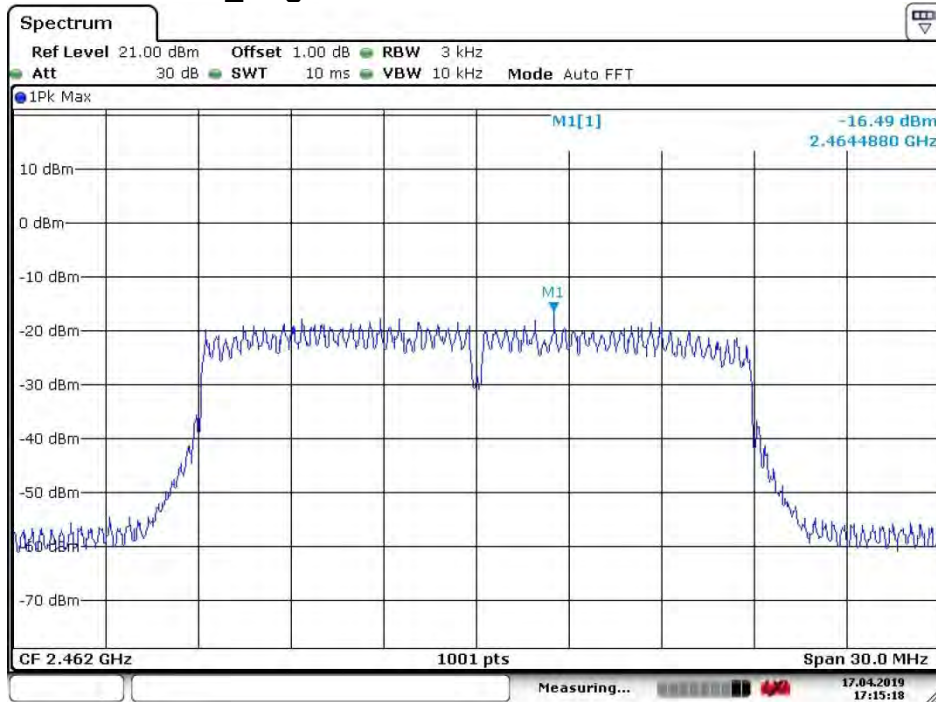


**4.6.2.2.11 802.11 N20\_ Middle Channel**



Date: 17. APR. 2019 17:15:43

**4.6.2.2.12 802.11 N20\_ Highest Channel**

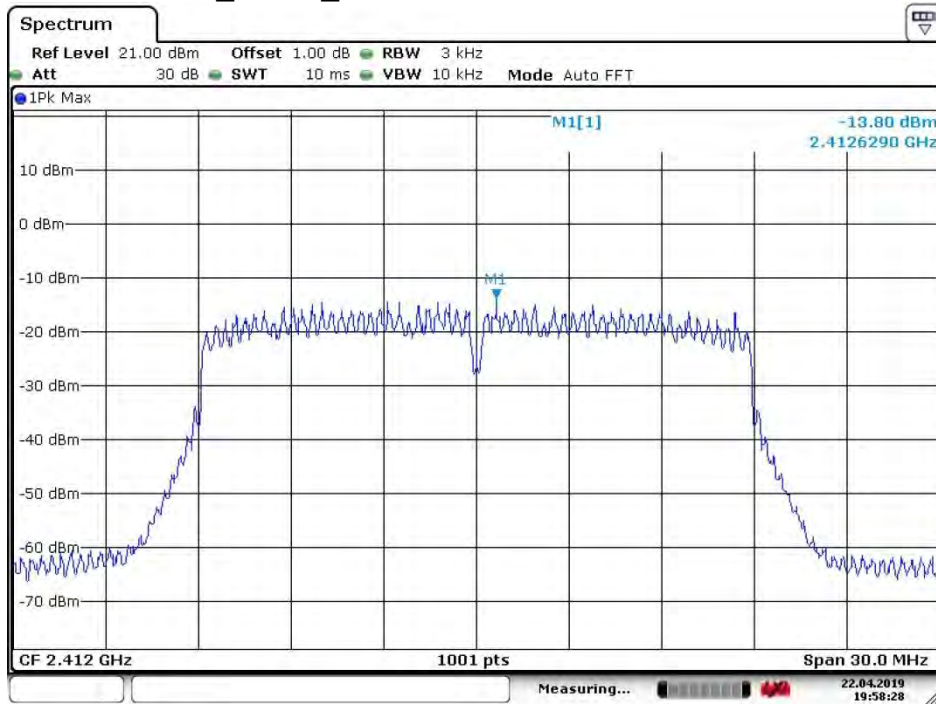


Date: 17. APR. 2019 17:15:19



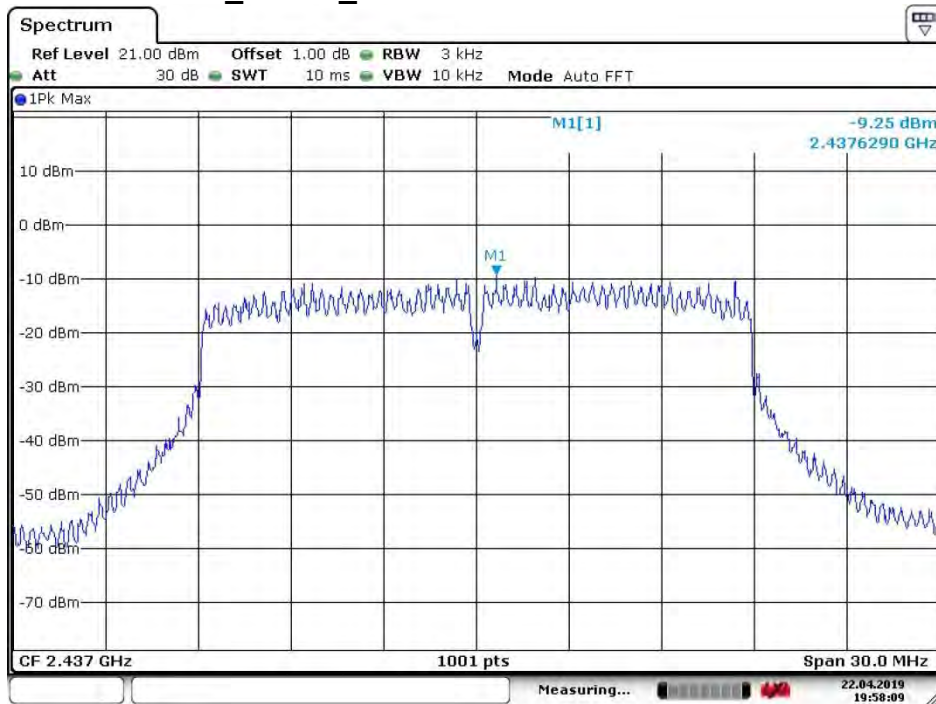
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**4.6.2.2.13 802.11N20\_MIMO\_Lowest Channel**



Date: 22.APR.2019 19:58:29

**4.6.2.2.14 802.11 N20\_MIMO\_Middle Channel**



Date: 22.APR.2019 19:58:08

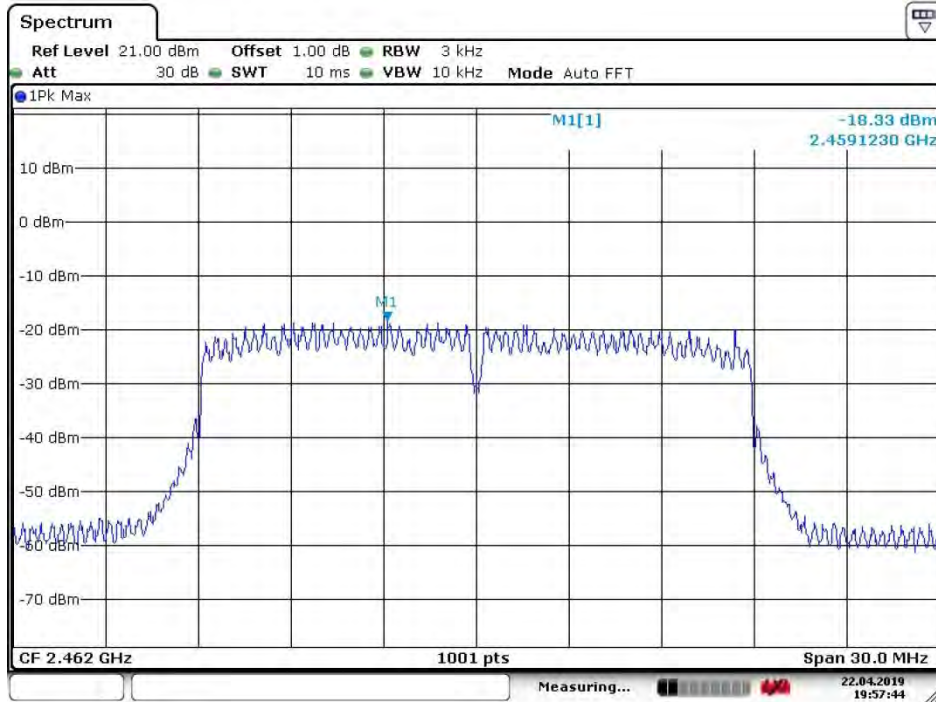


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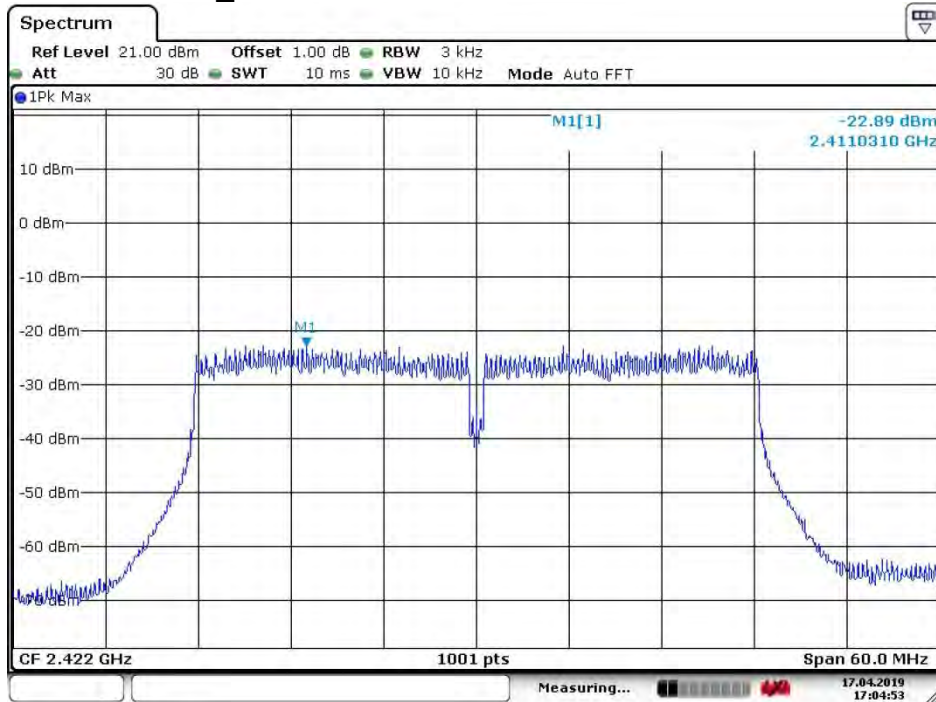


**4.6.2.2.15 802.11 N20\_ MIMO\_Highest Channel**



Date: 22.APR.2019 19:57:44

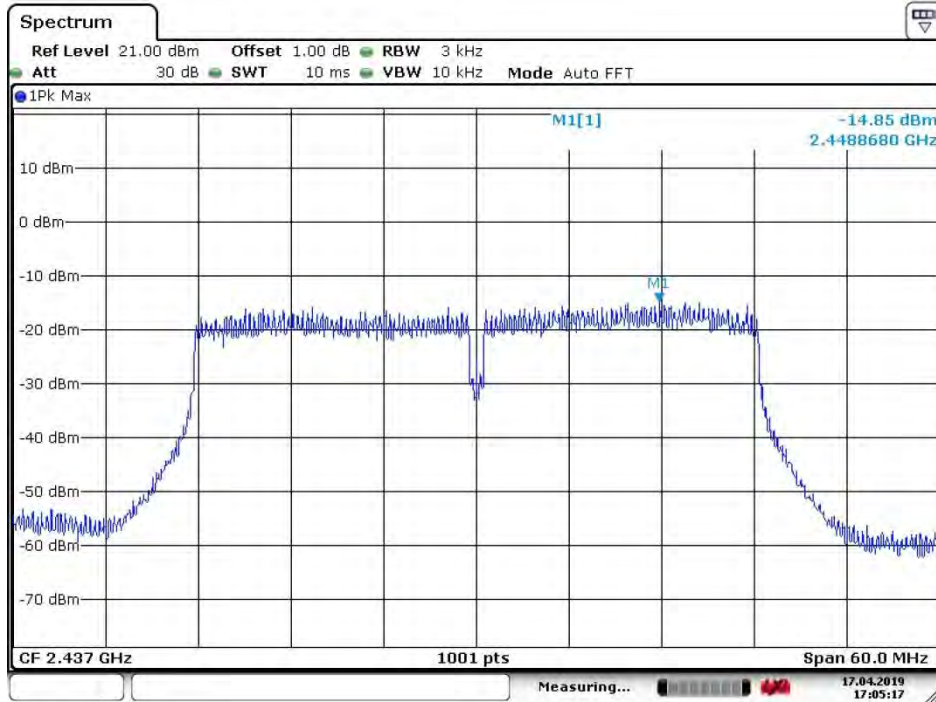
**4.6.2.2.16 802.11N40\_Lowest Channel**



Date: 17.APR.2019 17:04:53

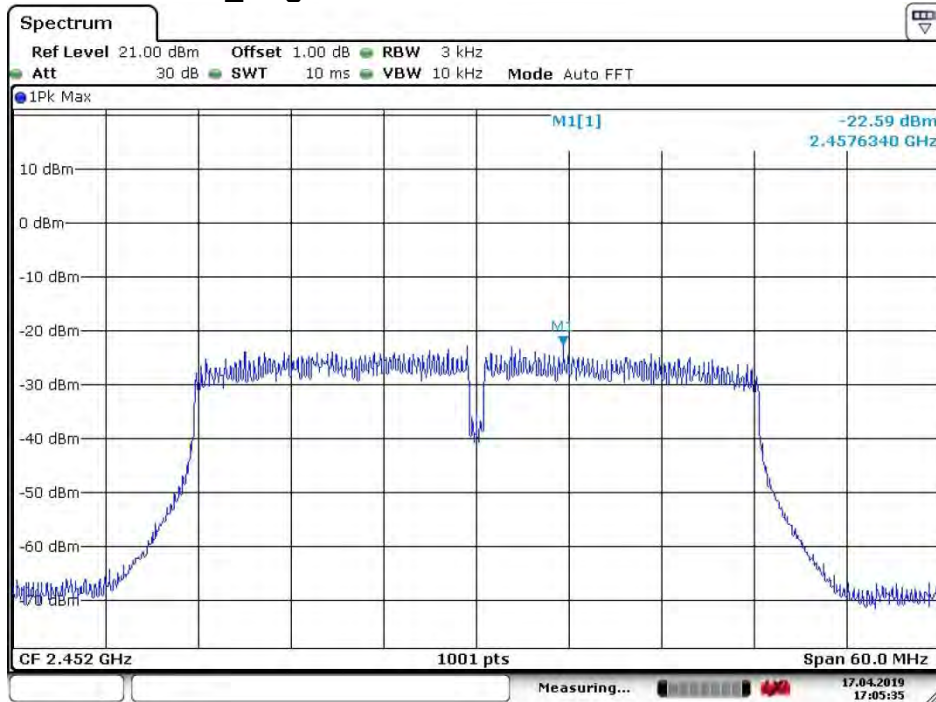


**4.6.2.2.17 802.11 N40\_ Middle Channel**



Date: 17.APR.2019 17:05:17

**4.6.2.2.18 802.11 N40\_ Highest Channel**



Date: 17.APR.2019 17:05:36

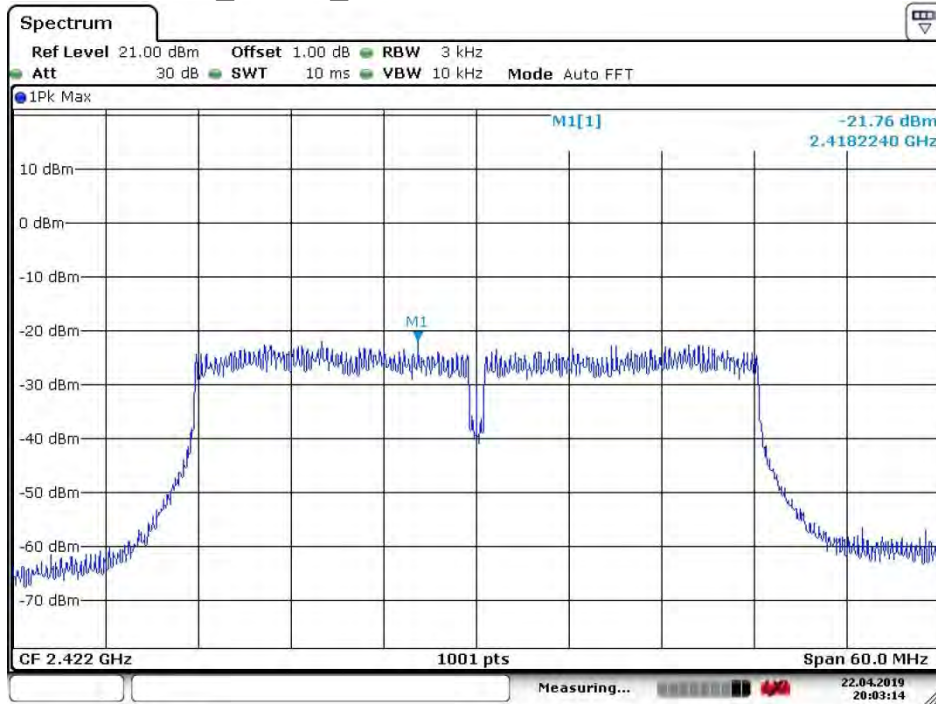


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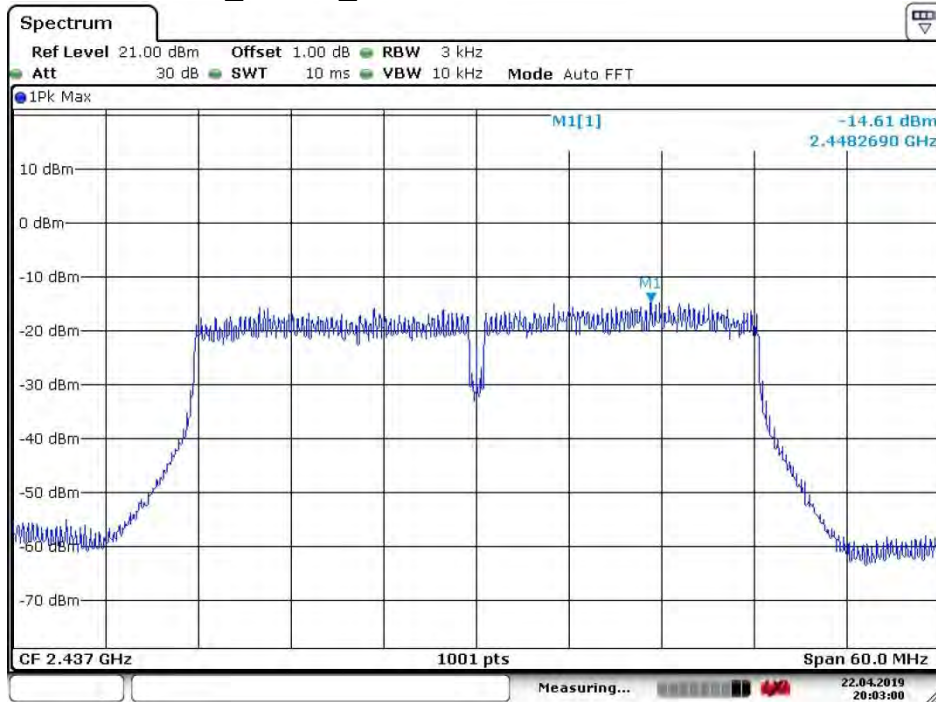


**4.6.2.2.19 802.11N40\_ MIMO\_ Lowest Channel**



Date: 22.APR.2019 20:03:14

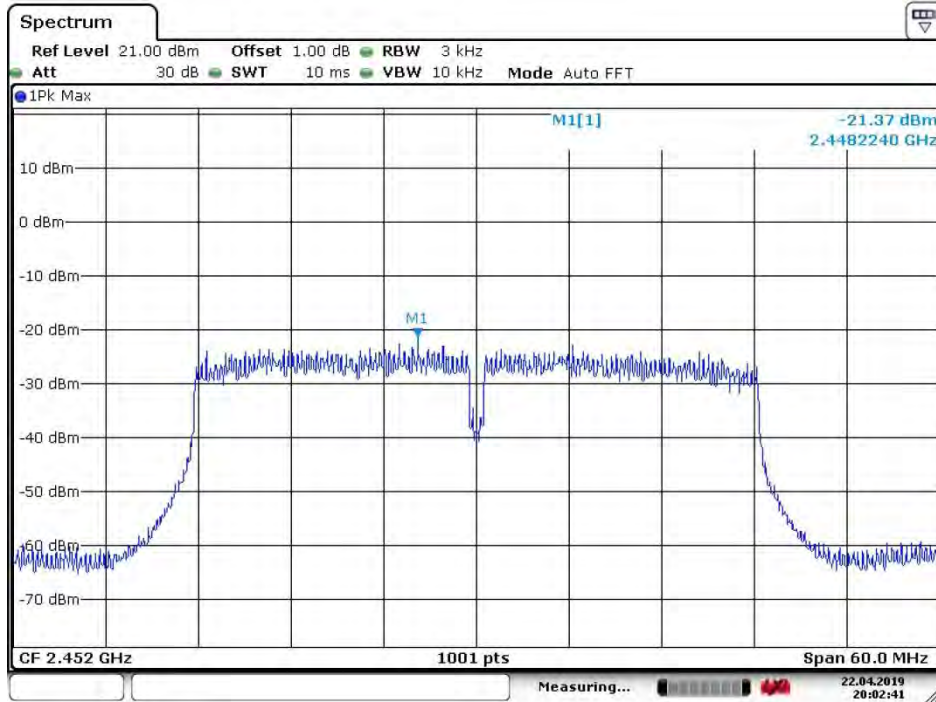
**4.6.2.2.20 802.11 N40\_ MIMO\_ Middle Channel**



Date: 22.APR.2019 20:03:00



**4.6.2.2.21 802.11 N40\_MIMO\_Highest Channel**



Date: 22.APR.2019 20:02:42



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### 4.7 Band-edge for RF Conducted Emissions

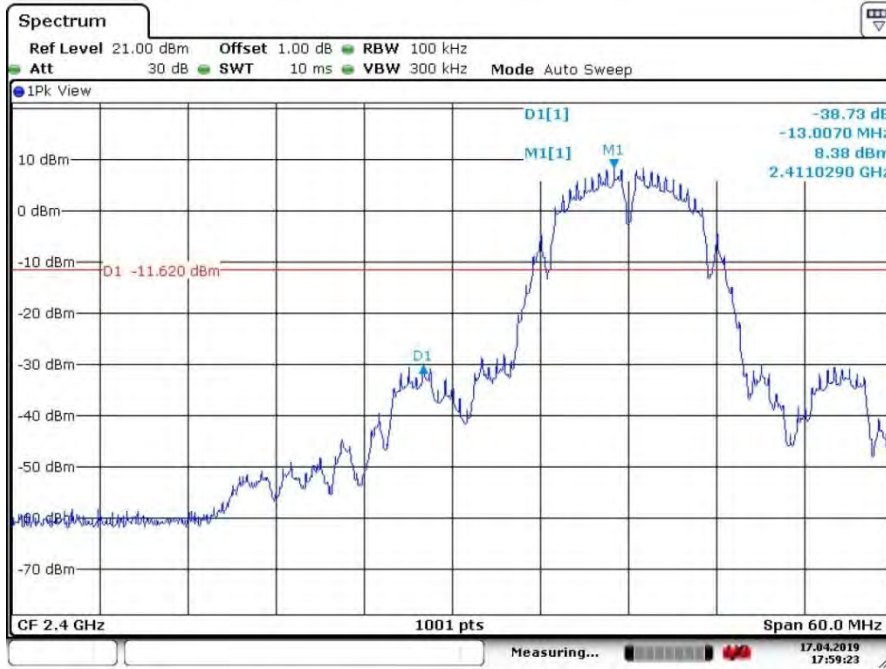
Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10: 2013 Section 11.13
Test Setup:	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G ; 6.5Mbps of rate is the worst case of 802.11N(HT20) ; 13.5Mbps of rate is the worst case of 802.11N(HT40).
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



**4.7.1 Test plots**

**4.7.1.1 ANT1**

**4.7.1.1.1 802.11B\_Lowest Channel**



Date: 17. APR. 2019 17:59:24

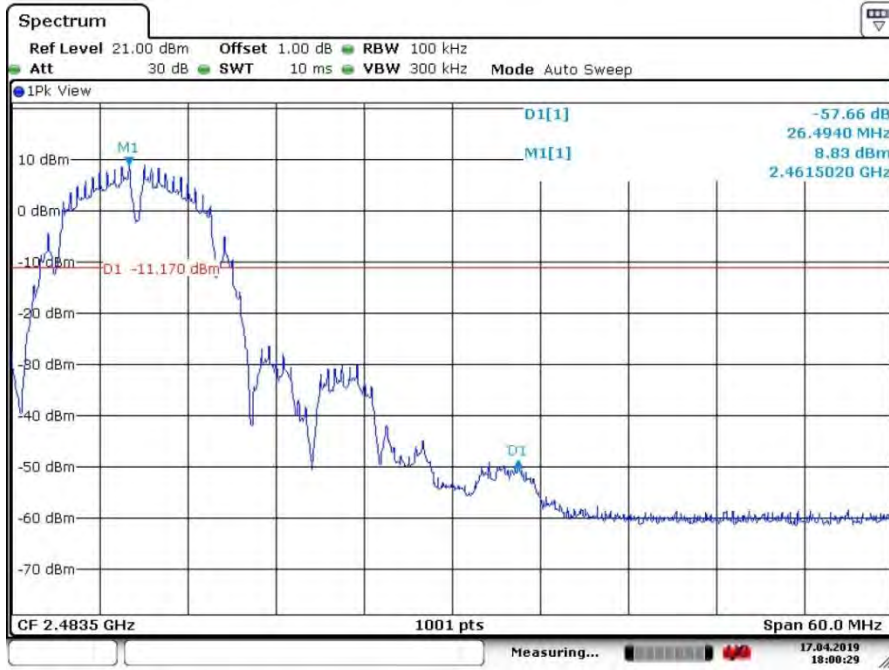


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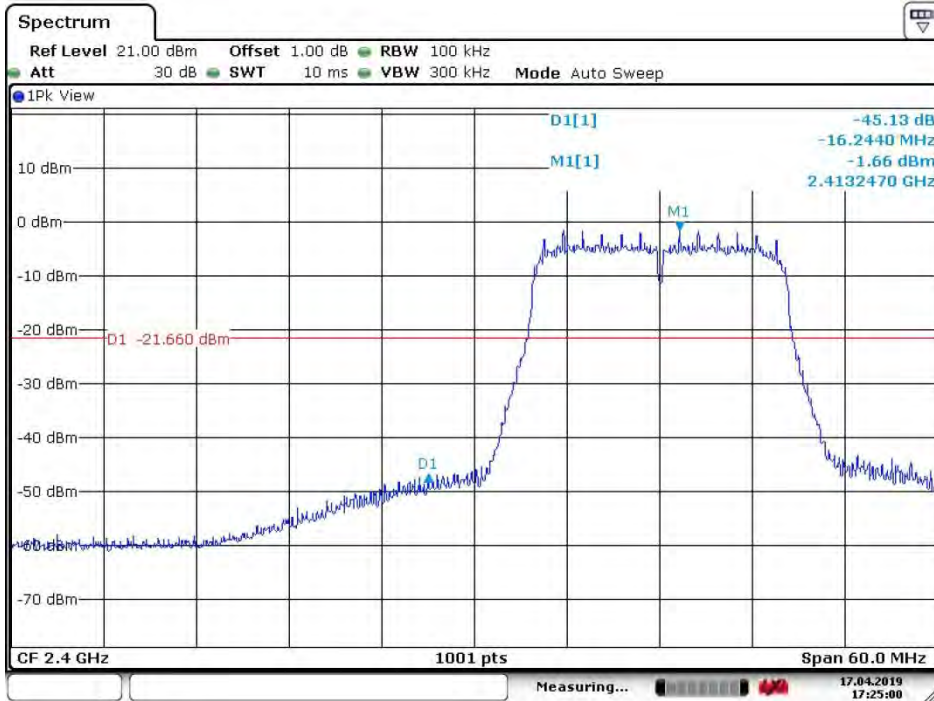


### 4.7.1.1.2 802.11B\_Highest Channel



Date: 17. APR. 2019 18:00:30

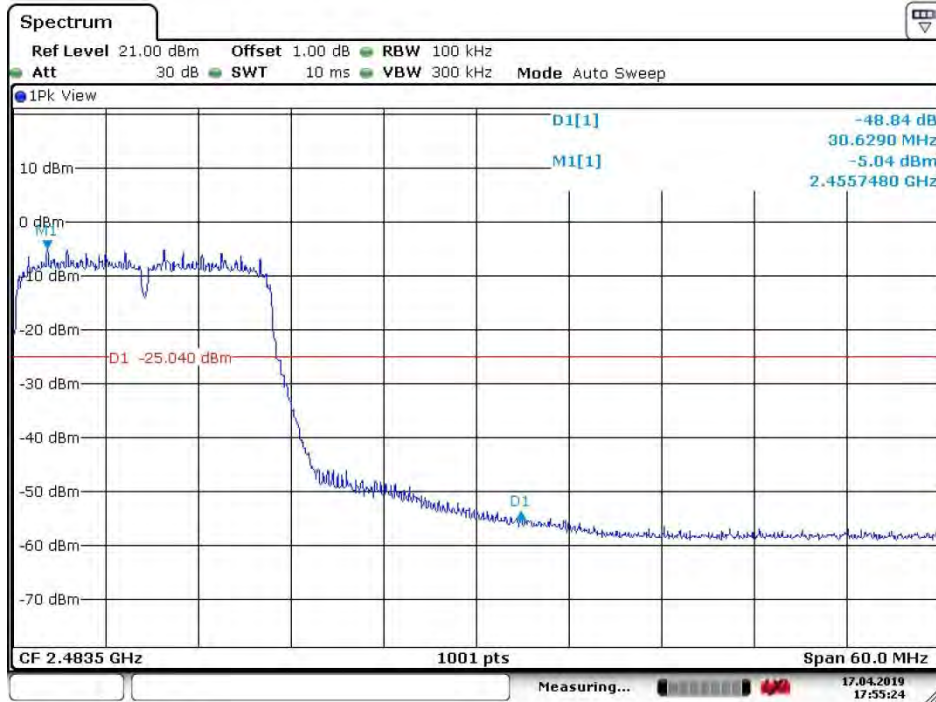
### 4.7.1.1.3 802.11G\_Lowest Channel



Date: 17. APR. 2019 17:25:01

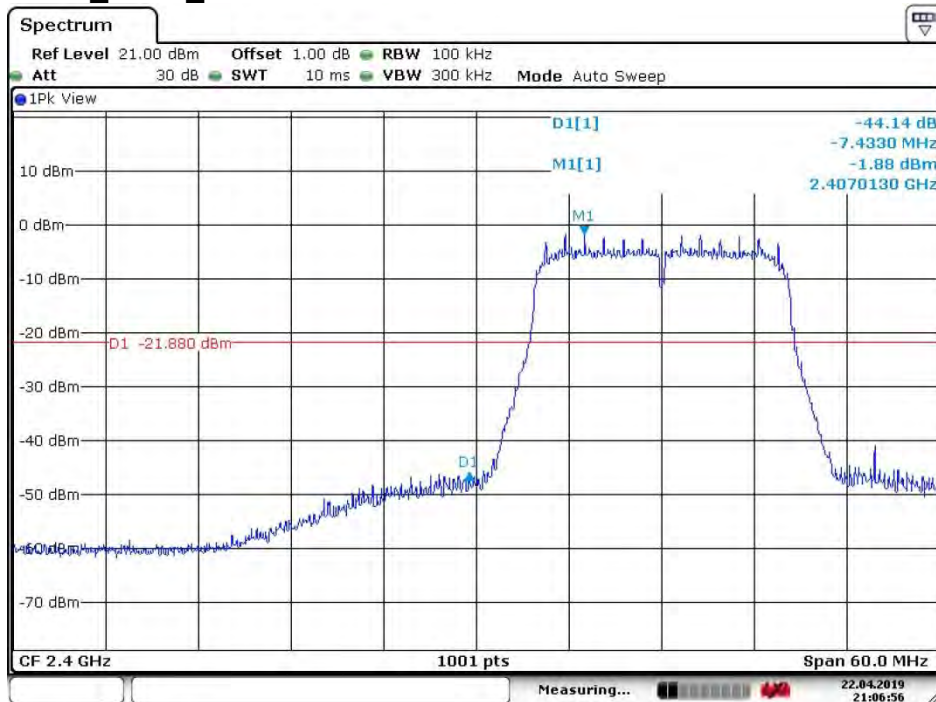


#### 4.7.1.1.4 802.11G\_Highest Channel



Date: 17. APR. 2019 17:55:24

#### 4.7.1.1.5 802.11G\_CDD\_Lowest Channel

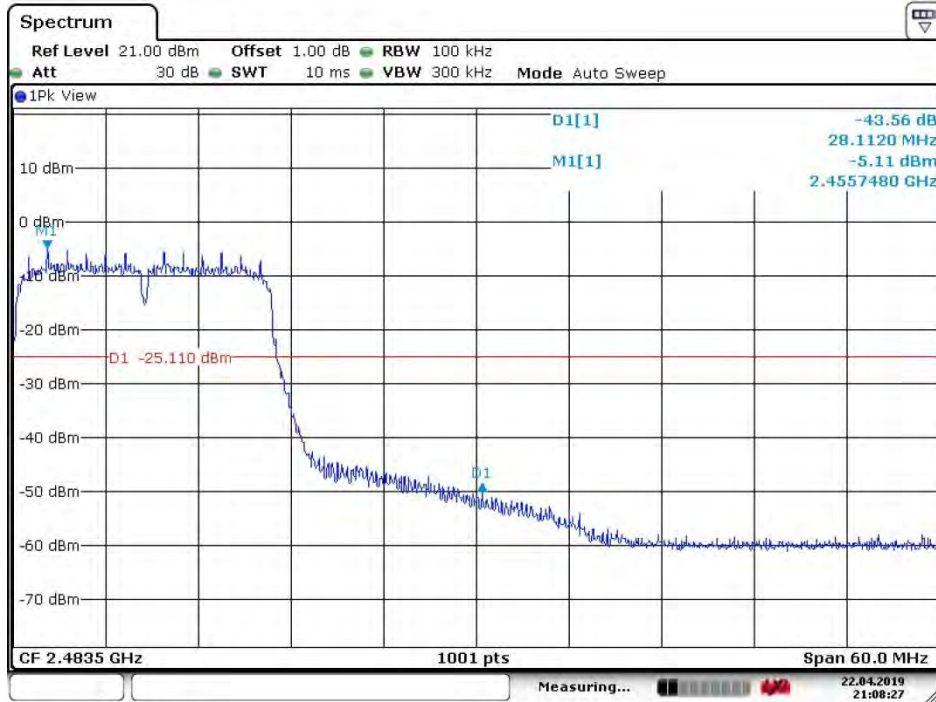


Date: 22. APR. 2019 21:06:56



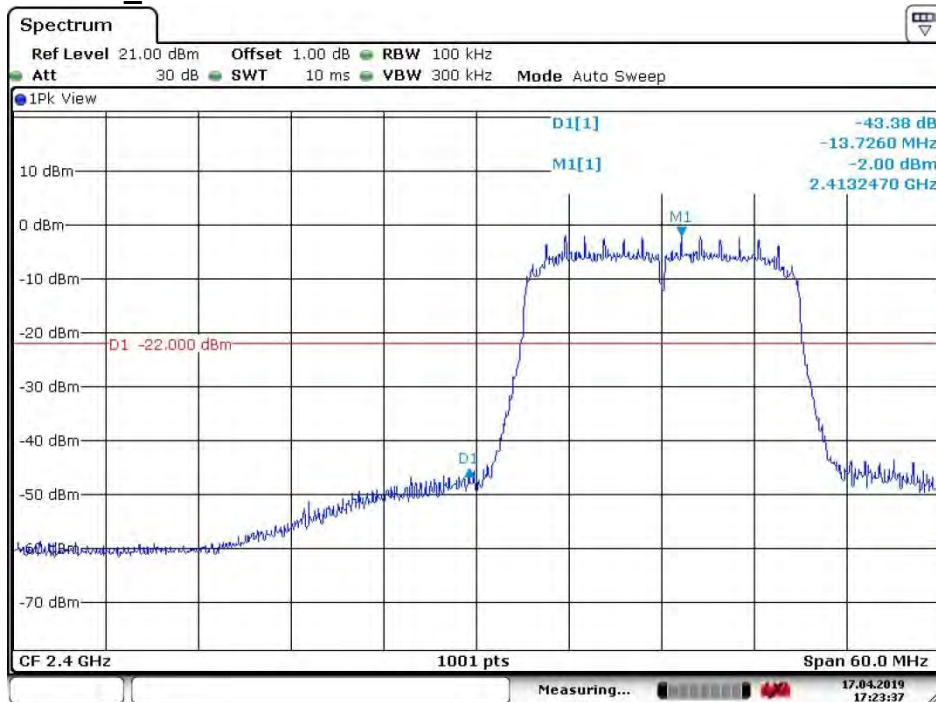


### 4.7.1.1.6 802.11G\_CDD\_Highest Channel



Date: 22.APR.2019 21:08:28

### 4.7.1.1.7 802.11N20\_Lowest Channel



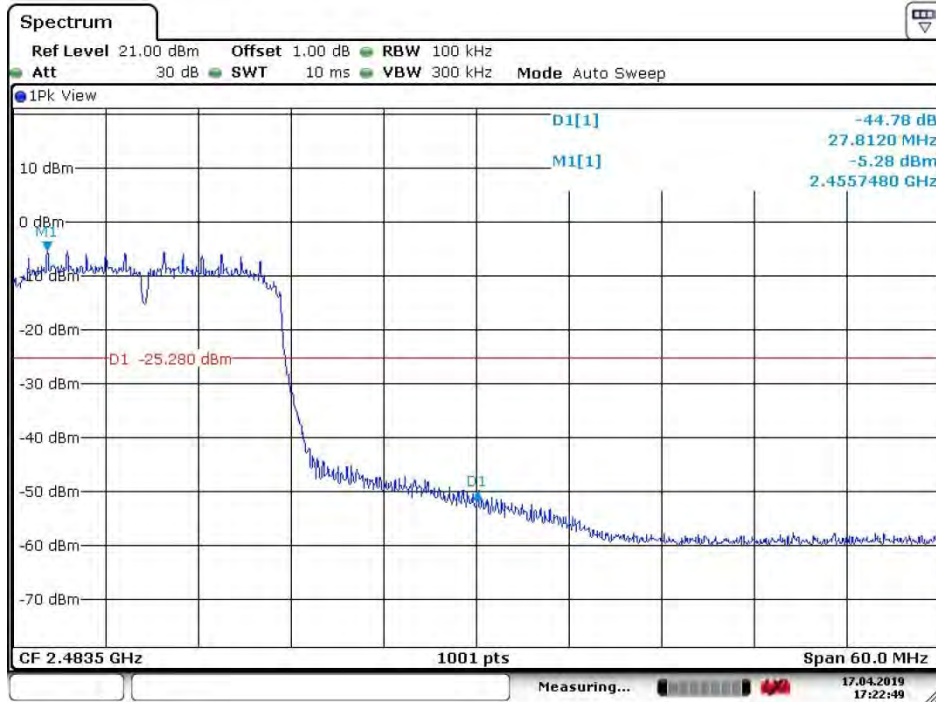
Date: 17.APR.2019 17:23:37



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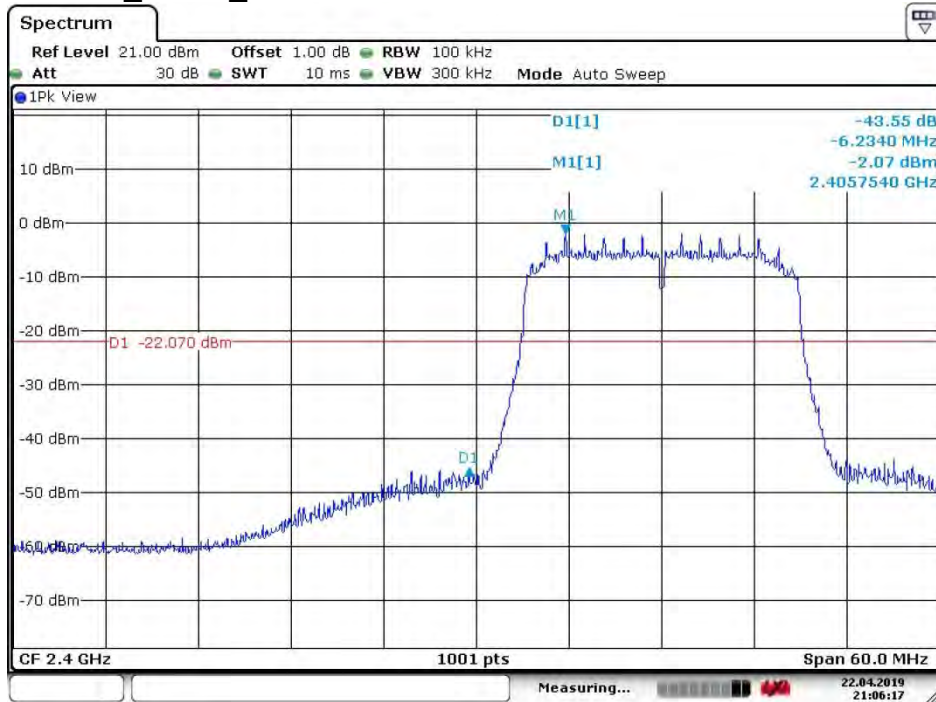
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### 4.7.1.1.8 802.11 N20\_Highest Channel



Date: 17.APR.2019 17:22:49

### 4.7.1.1.9 802.11N20\_MIMO\_Lowest Channel

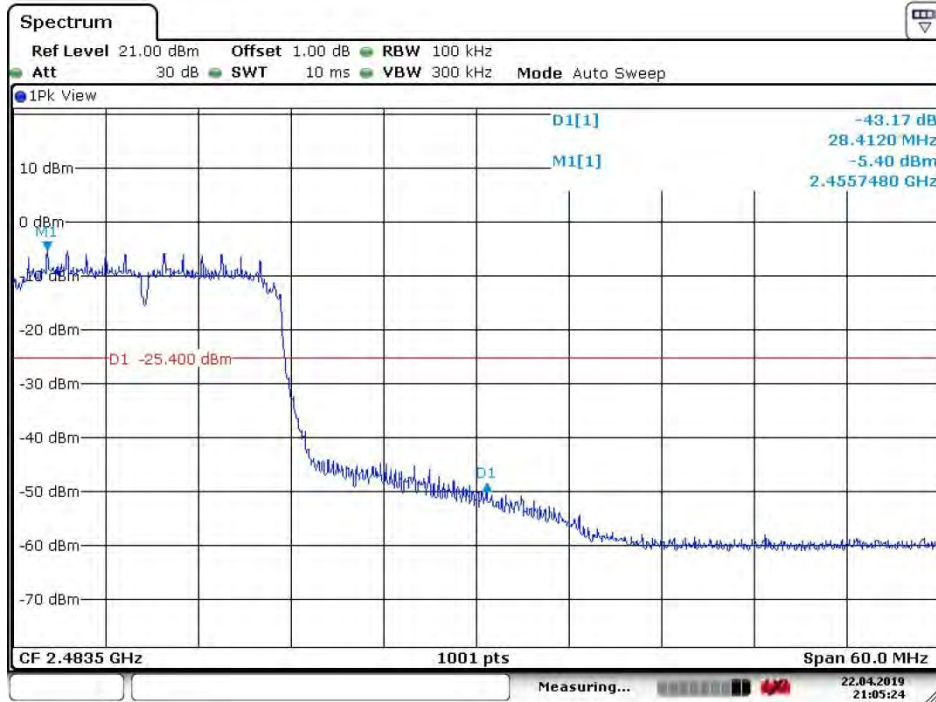


Date: 22.APR.2019 21:06:18



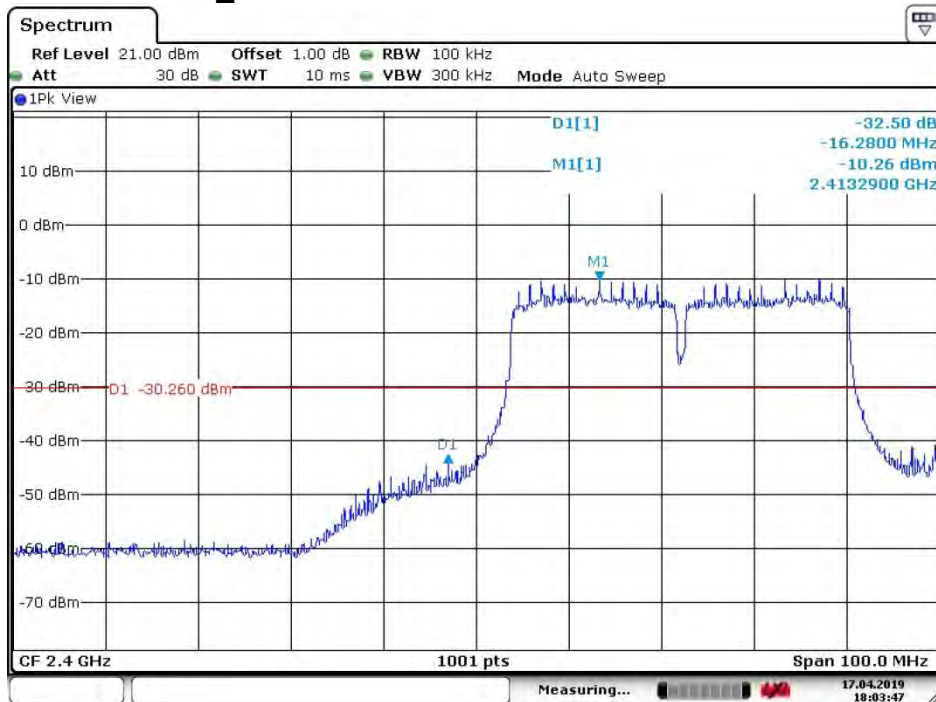


**4.7.1.1.10 802.11 N20\_MIMO\_Highest Channel**



Date: 22.APR.2019 21:05:25

**4.7.1.1.11 802.11N40\_Lowest Channel**

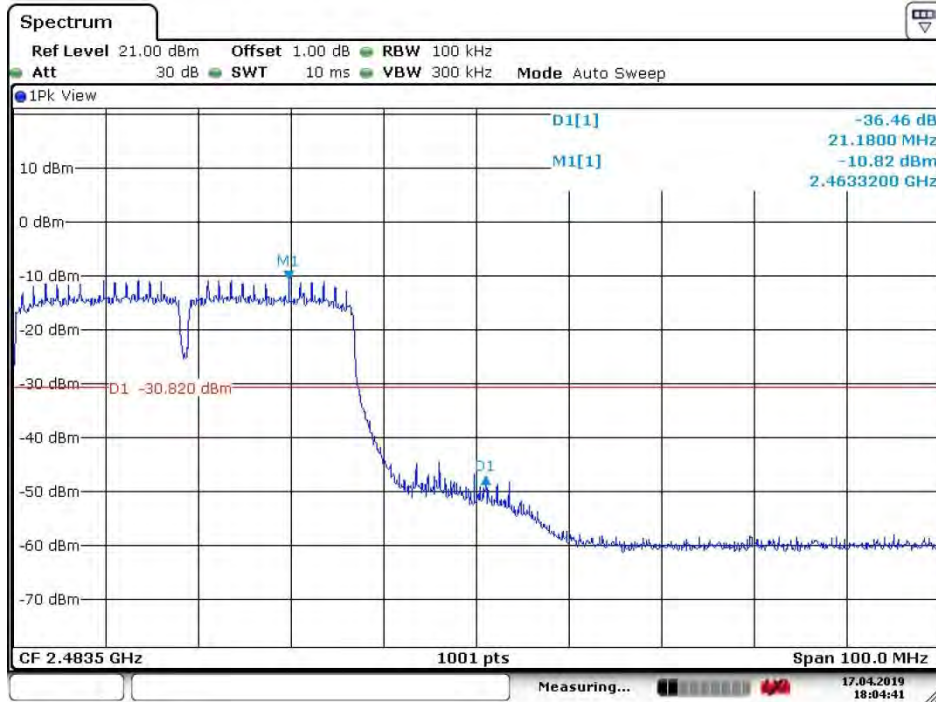


Date: 17.APR.2019 18:03:48



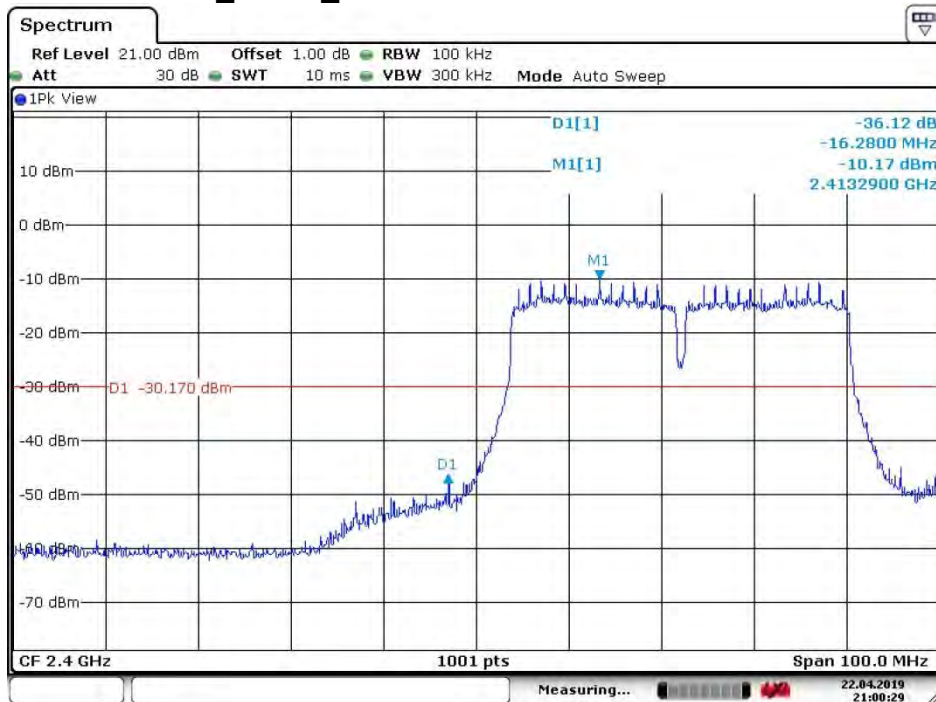


**4.7.1.1.12 802.11 N40\_ Highest Channel**



Date: 17. APR. 2019 18:04:42

**4.7.1.1.13 802.11N40\_MIMO\_Lowest Channel**



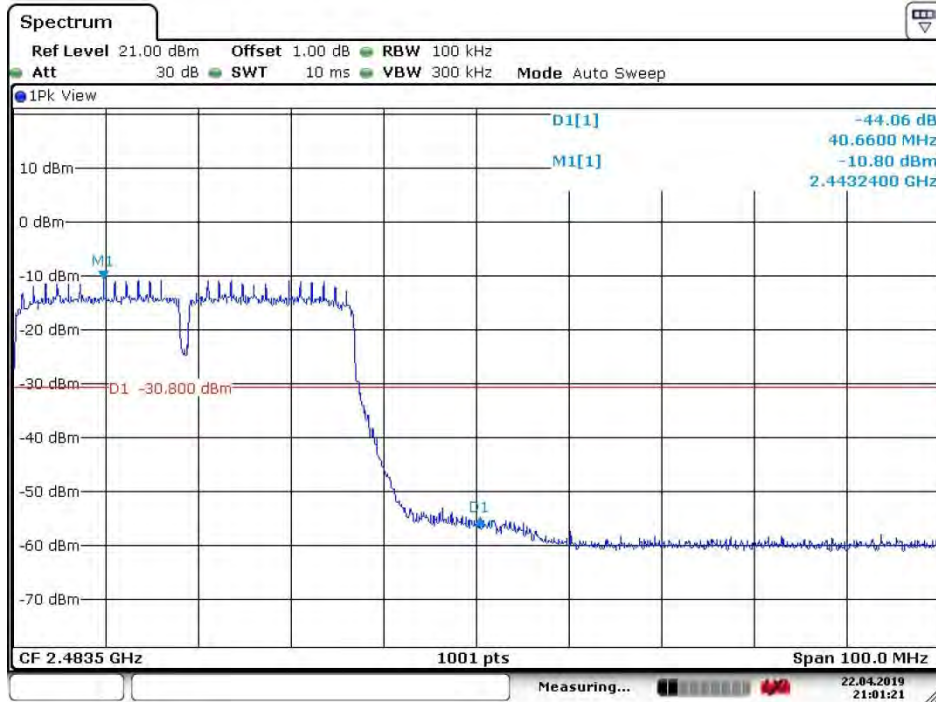
Date: 22. APR. 2019 21:00:29



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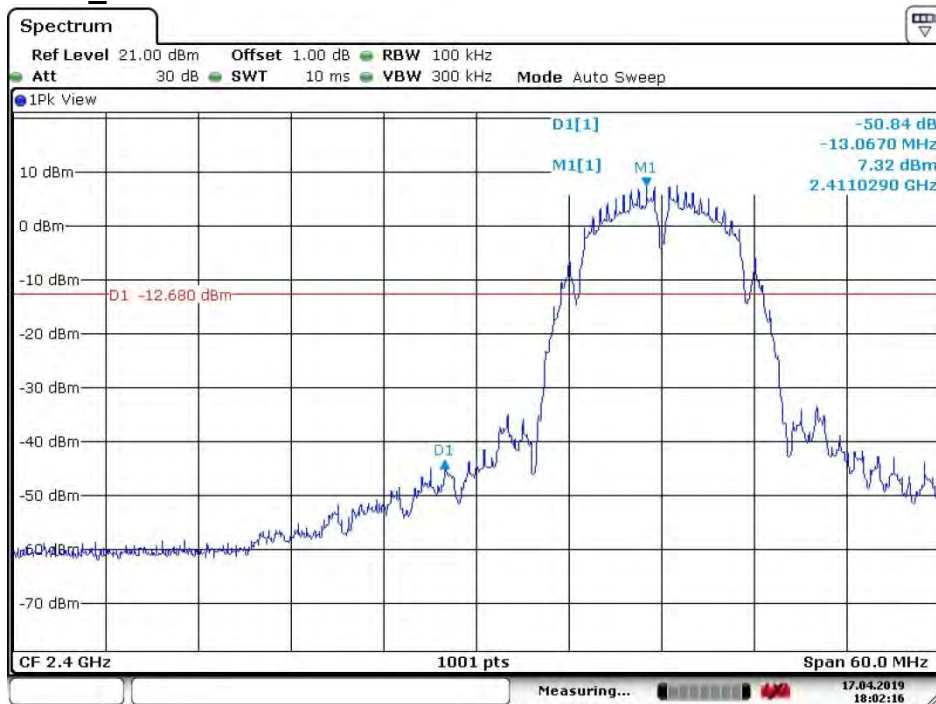
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**4.7.1.1.14 802.11 N40\_MIMO\_Highest Channel**



Date: 22.APR.2019 21:01:22

**4.7.1.2 ANT2**  
**4.7.1.2.1 802.11B\_Lowest Channel**



Date: 17.APR.2019 18:02:17

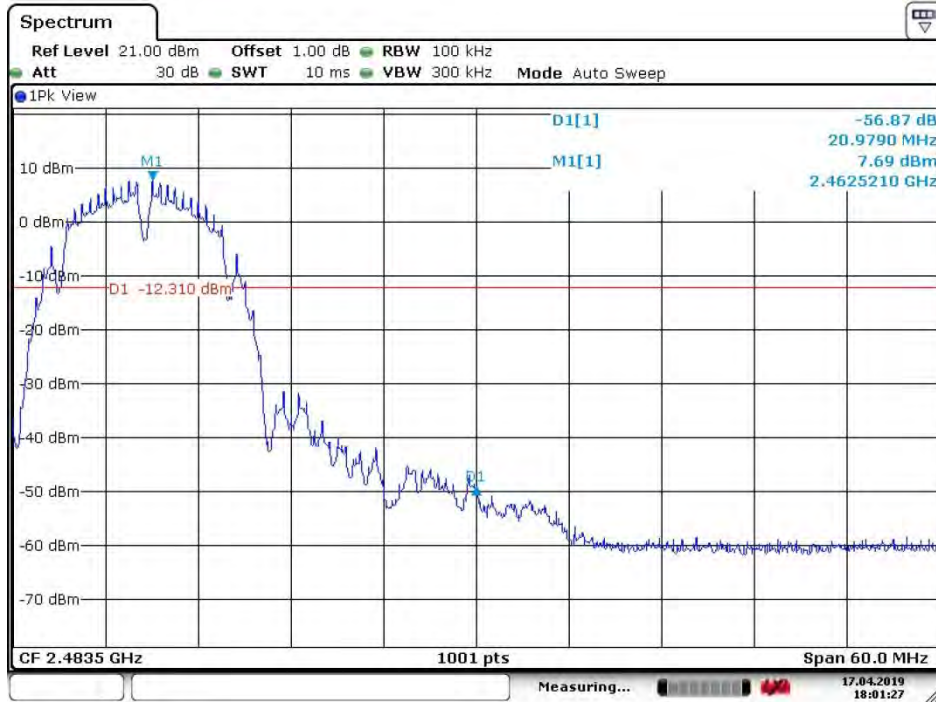


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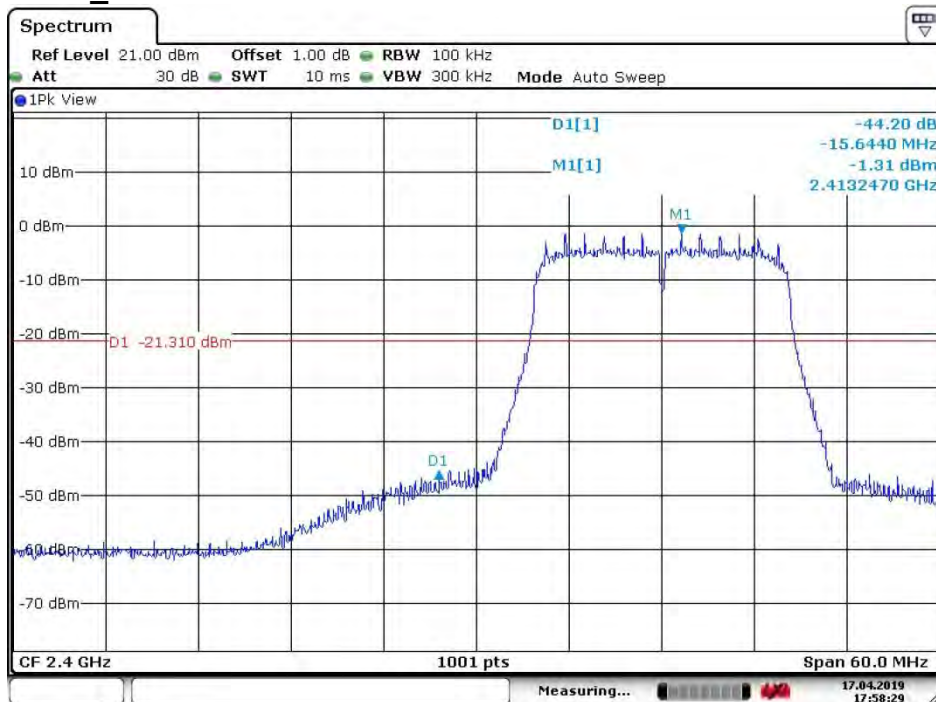


**4.7.1.2.2 802.11B\_Highest Channel**



Date: 17.APR.2019 18:01:27

**4.7.1.2.3 802.11G\_Lowest Channel**



Date: 17.APR.2019 17:58:30

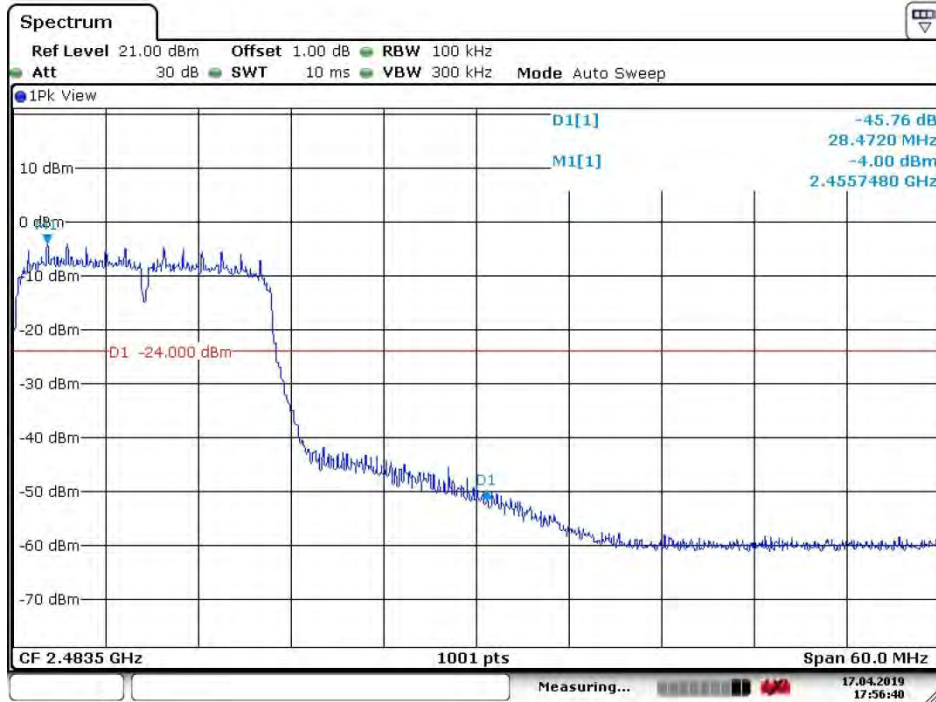


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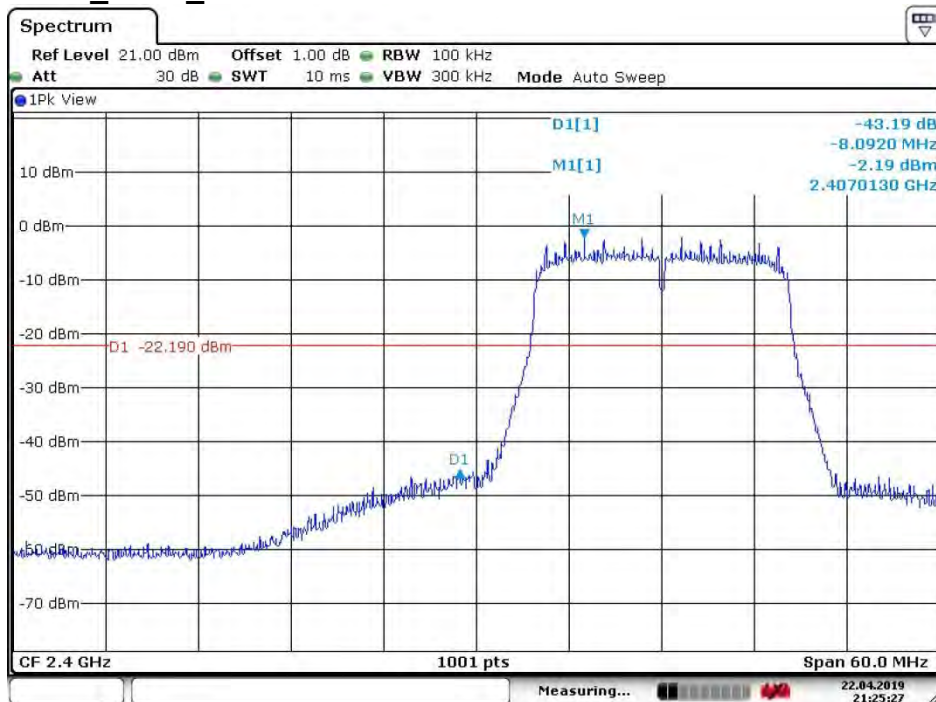


**4.7.1.2.4 802.11G\_Highest Channel**



Date: 17.APR.2019 17:56:40

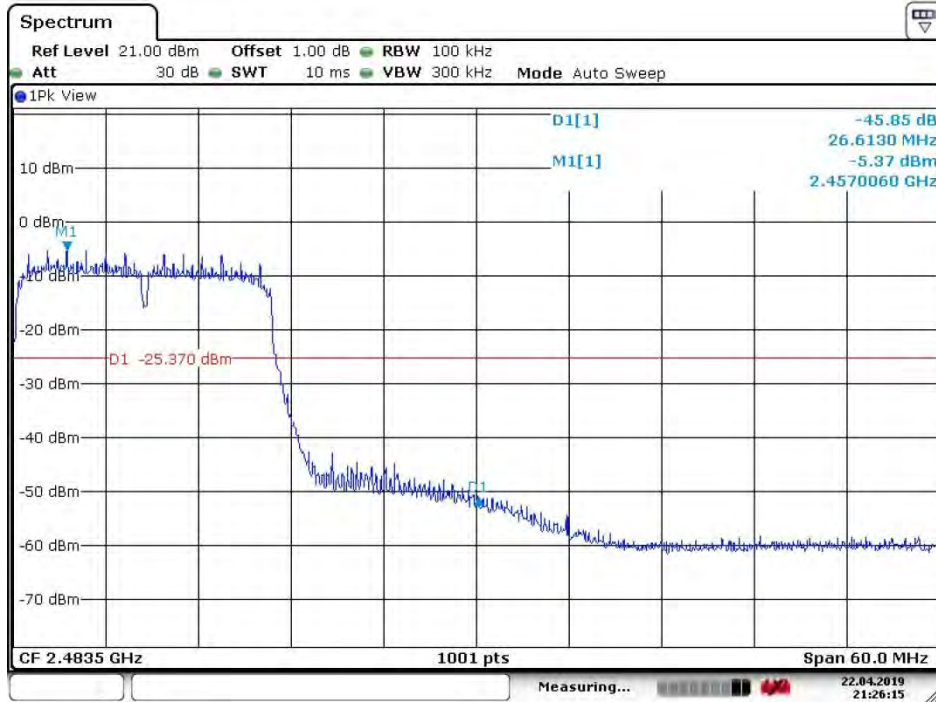
**4.7.1.2.5 802.11G\_CDD\_Lowest Channel**



Date: 22.APR.2019 21:25:28

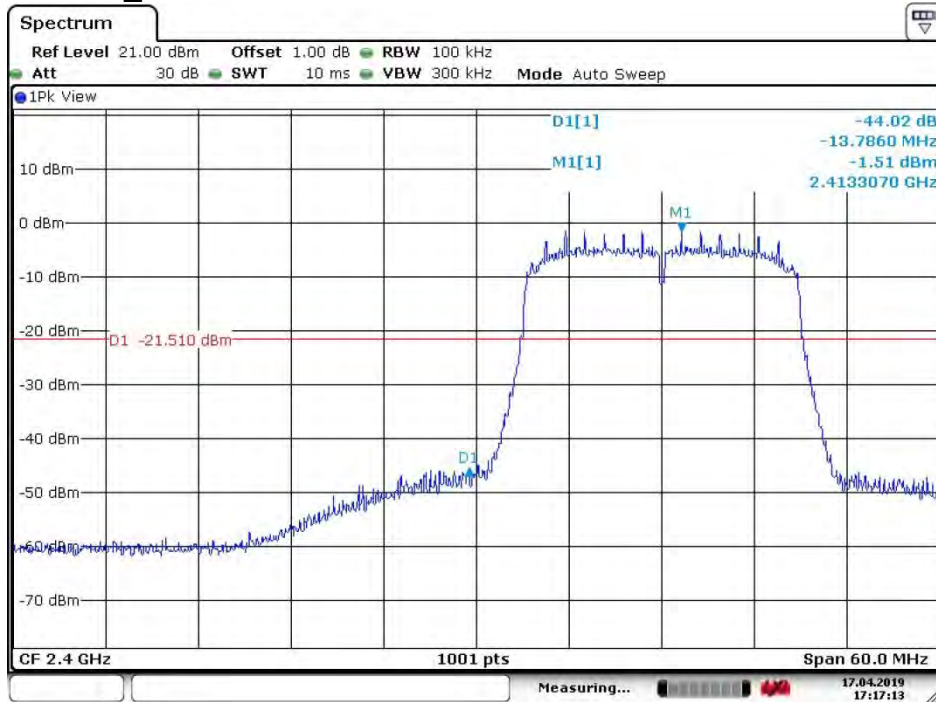


### 4.7.1.2.6 802.11G\_CDD\_Highest Channel



Date: 22.APR.2019 21:26:15

### 4.7.1.2.7 802.11N20\_Lowest Channel

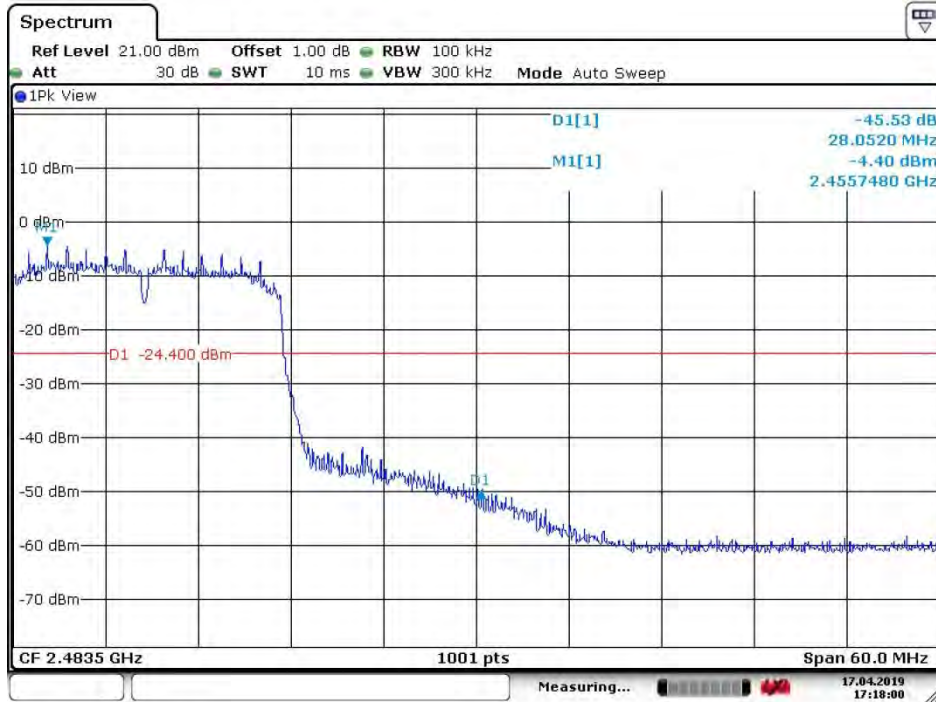


Date: 17.APR.2019 17:17:14



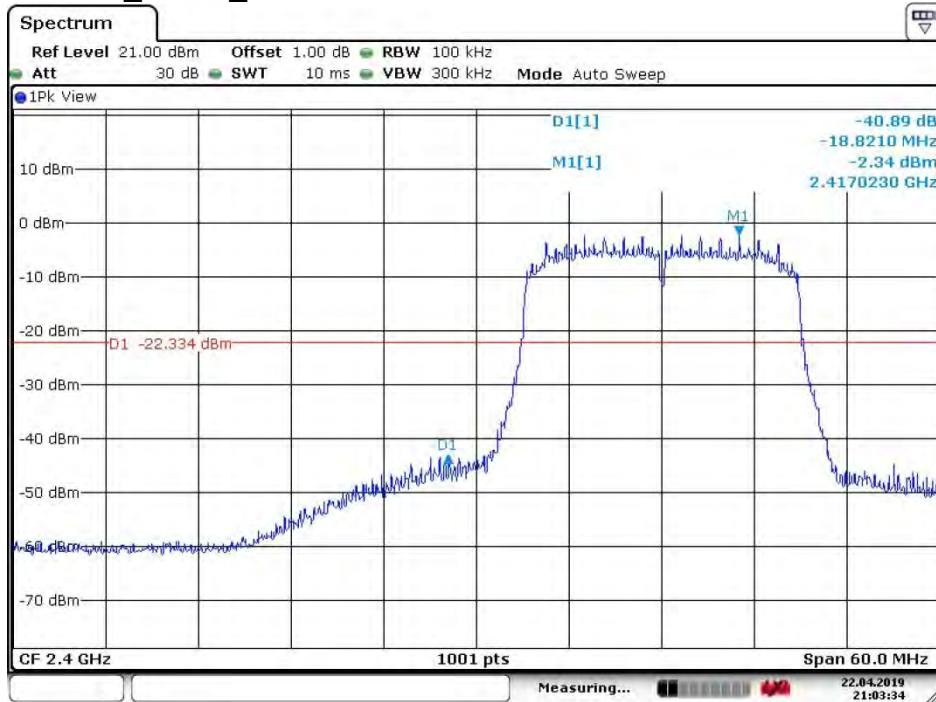


### 4.7.1.2.8 802.11 N20\_ Highest Channel



Date: 17.APR.2019 17:18:00

### 4.7.1.2.9 802.11N20\_MIMO\_Lowest Channel

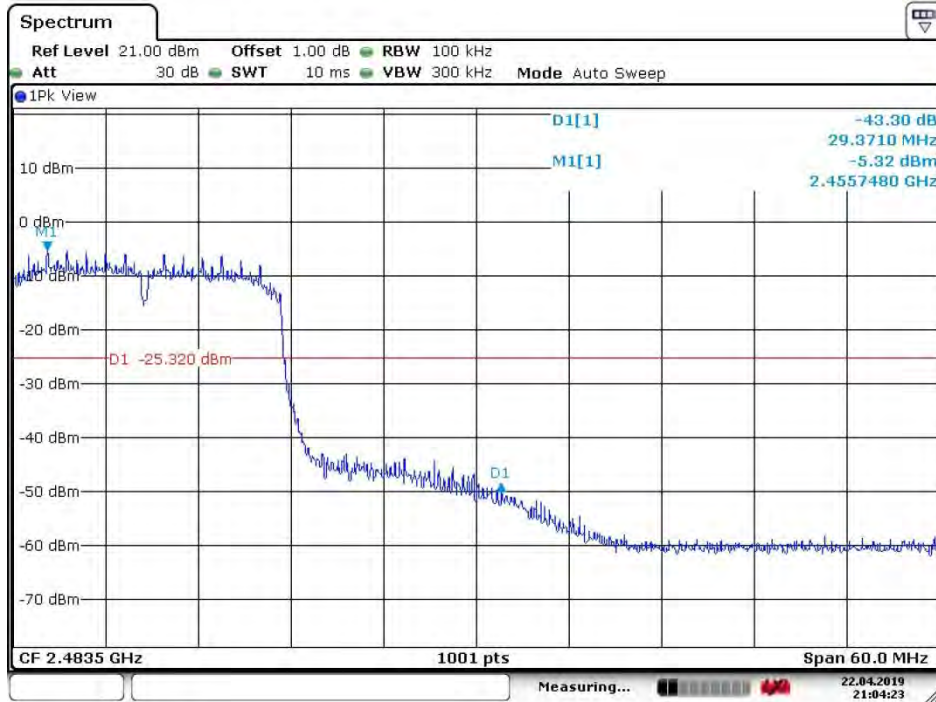


Date: 22.APR.2019 21:03:34



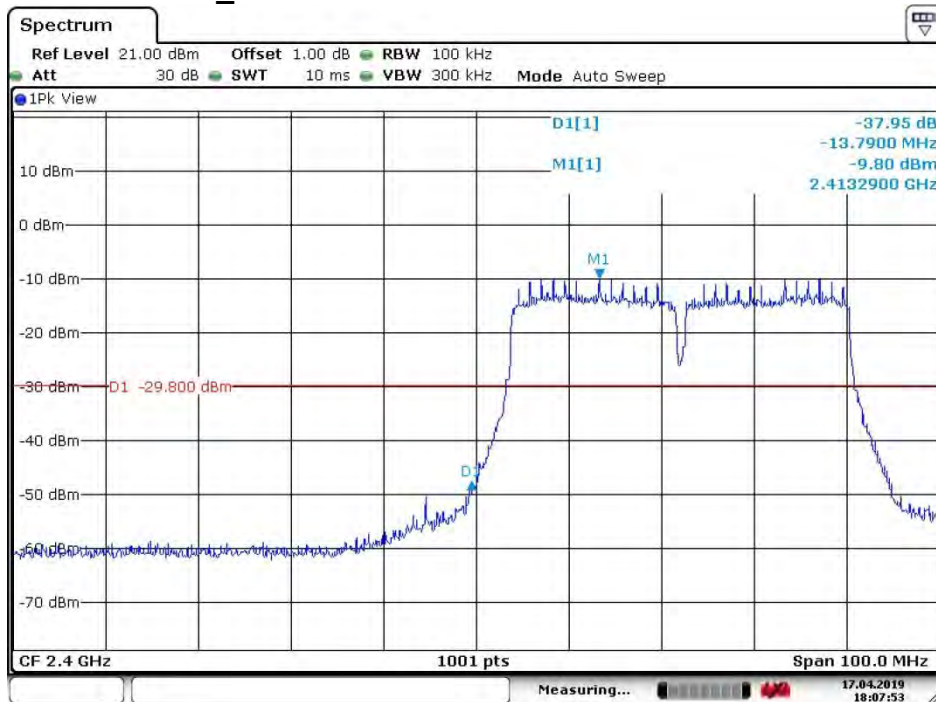


**4.7.1.2.10 802.11 N20\_MIMO\_Highest Channel**



Date: 22.APR.2019 21:04:24

**4.7.1.2.11 802.11N40\_Lowest Channel**



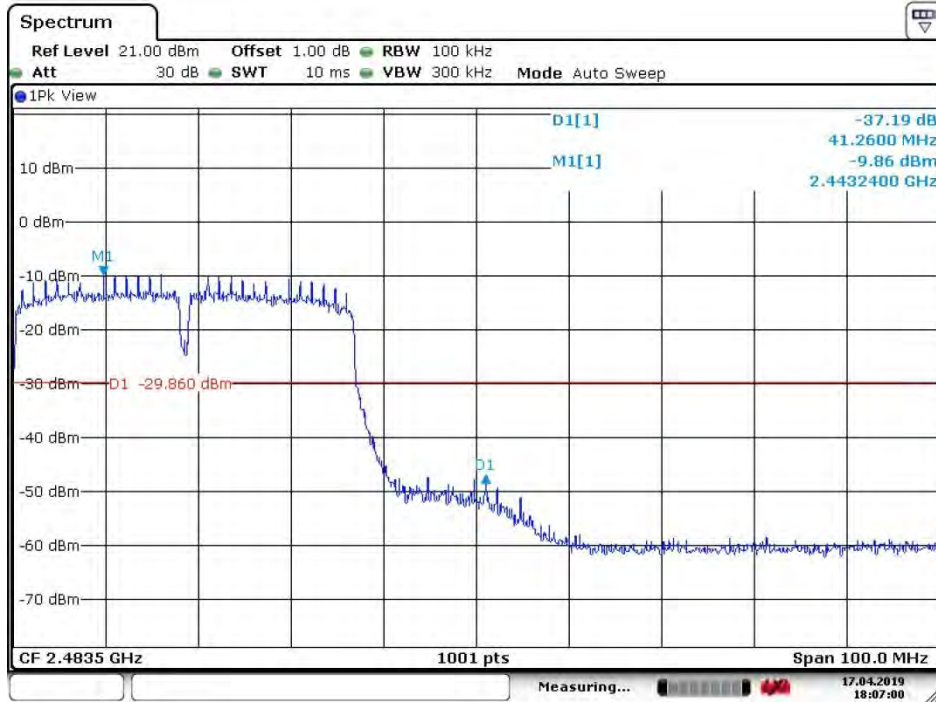
Date: 17.APR.2019 18:07:53



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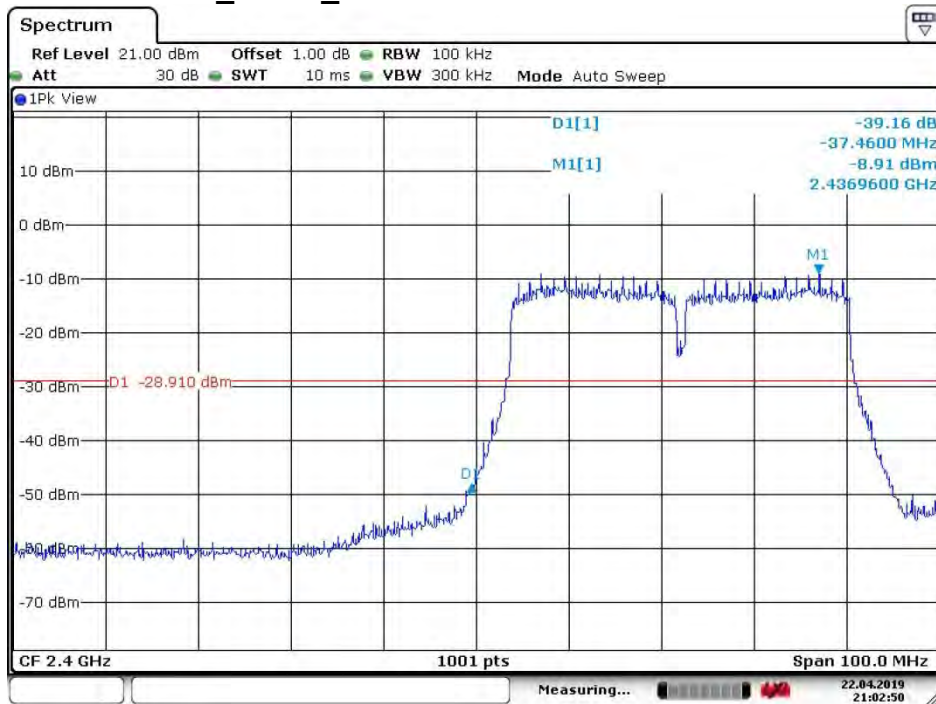
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**4.7.1.2.12 802.11 N40\_ Highest Channel**



Date: 17.APR.2019 18:07:00

**4.7.1.2.13 802.11N40\_MIMO\_Lowest Channel**

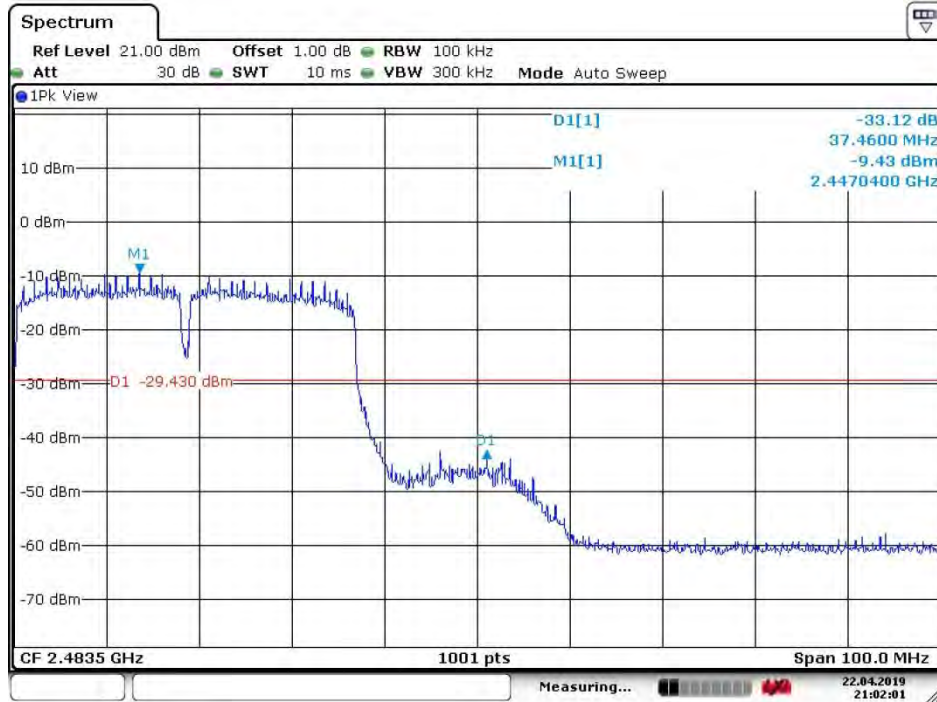


Date: 22.APR.2019 21:02:51





**4.7.1.2.14 802.11 N40\_MIMO\_Highest Channel**



Date: 22.APR.2019 21:02:02



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### 4.8 RF Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10: 2013 Section 11.11
Test Setup:	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G; 6.5Mbps of rate is the worst case of 802.11N(HT20); 13.5Mbps of rate is the worst case of 802.11N(HT40).
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



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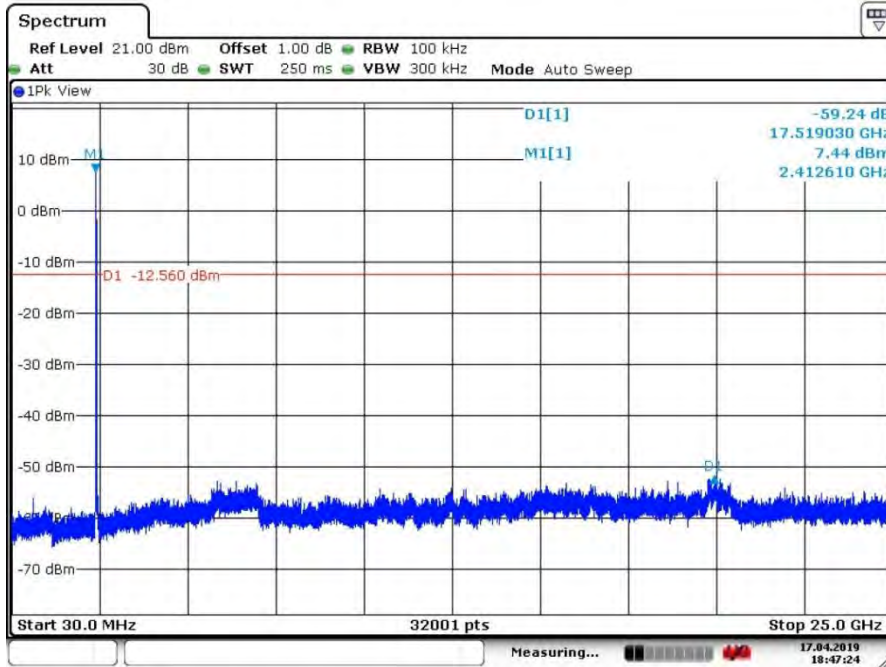
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**4.8.1 Test plots**

**4.8.1.1 ANT1**

**4.8.1.1.1 802.11B\_Lowest Channel**



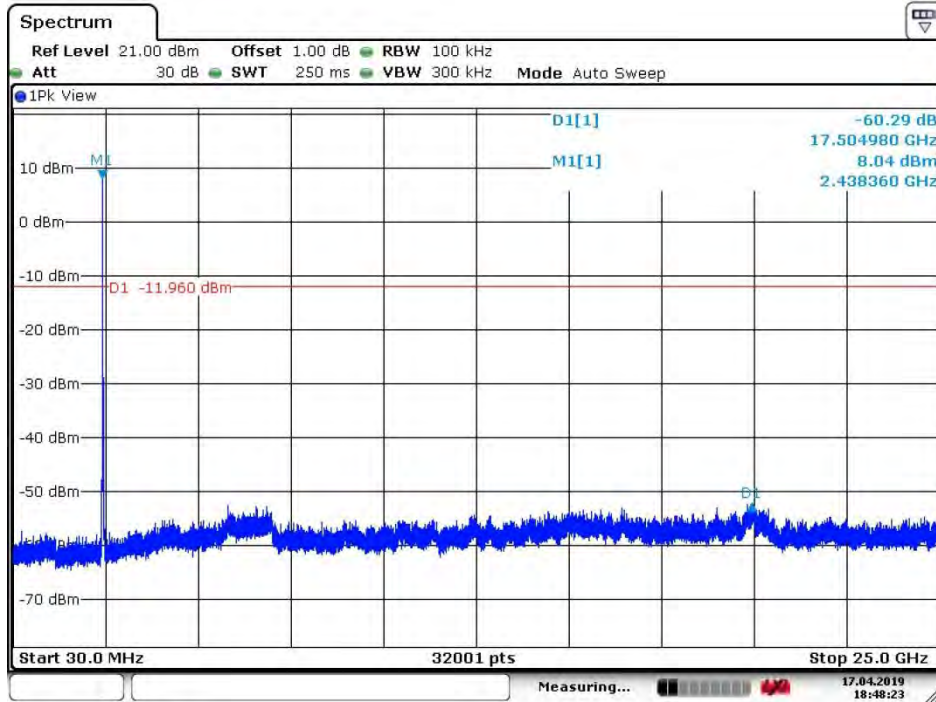
Date: 17.APR.2019 18:47:24



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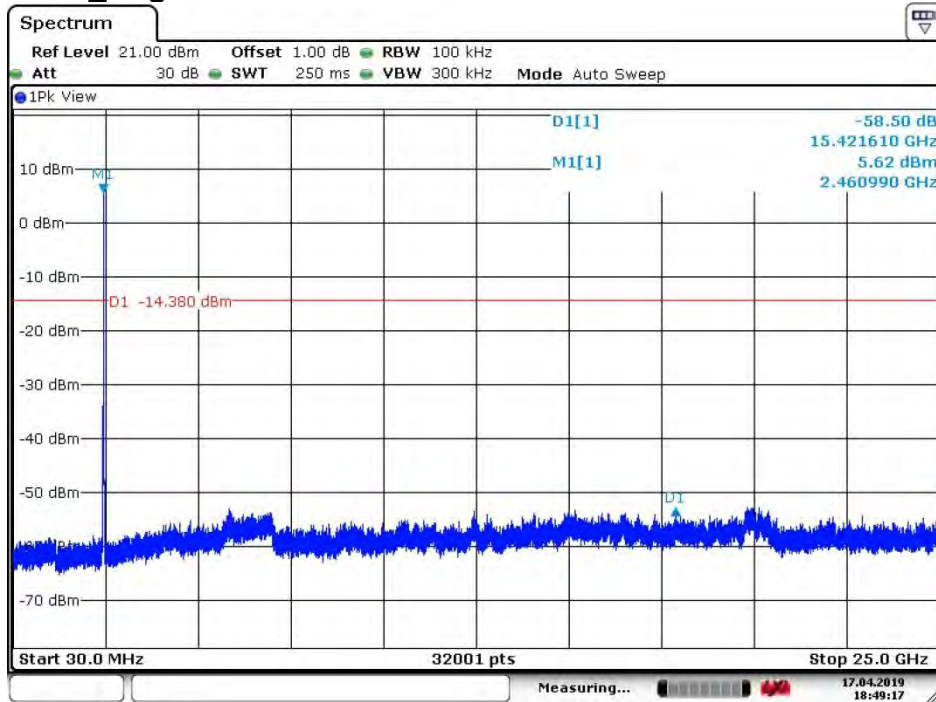
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**4.8.1.1.2 802.11B\_Middle Channel**



Date: 17.APR.2019 18:48:23

**4.8.1.1.3 802.11B\_Highest Channel**



Date: 17.APR.2019 18:49:17

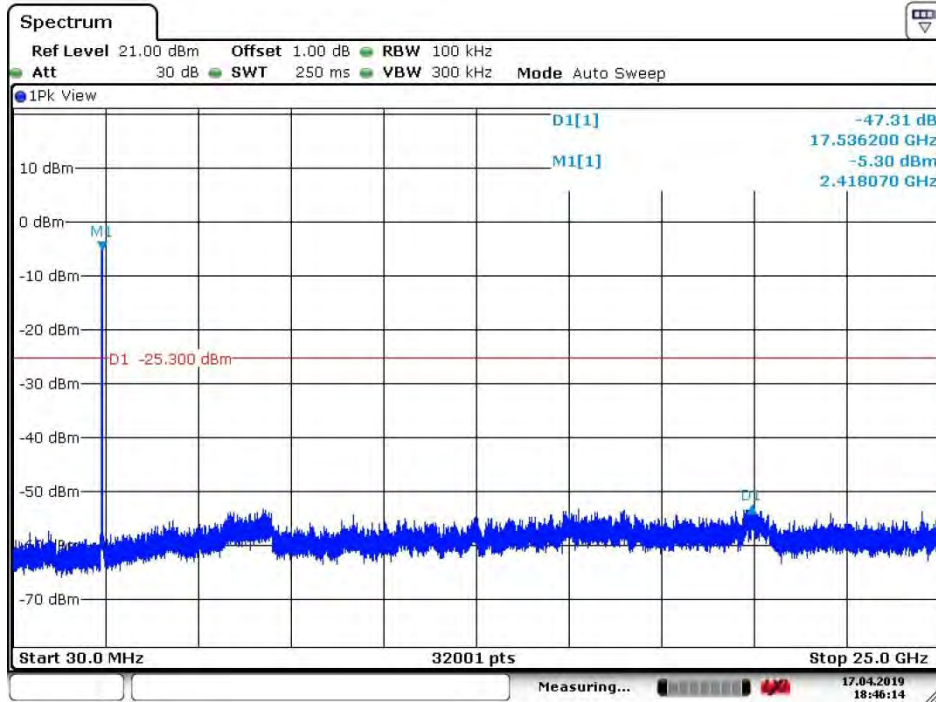


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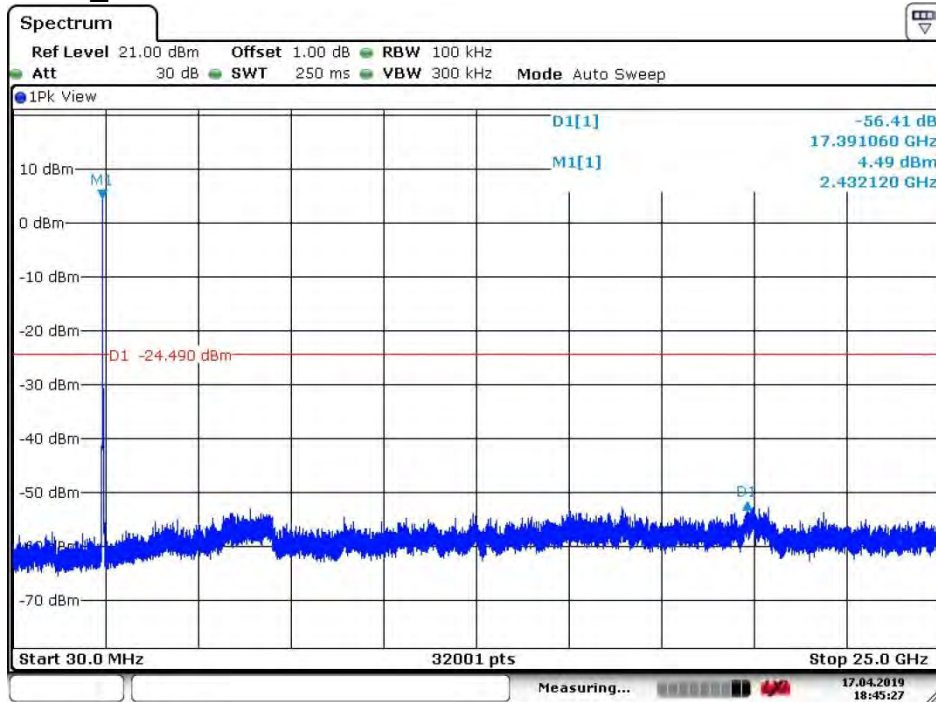


**4.8.1.1.4 802.11G\_Lowest Channel**



Date: 17.APR.2019 18:46:14

**4.8.1.1.5 802.11G\_Middle Channel**



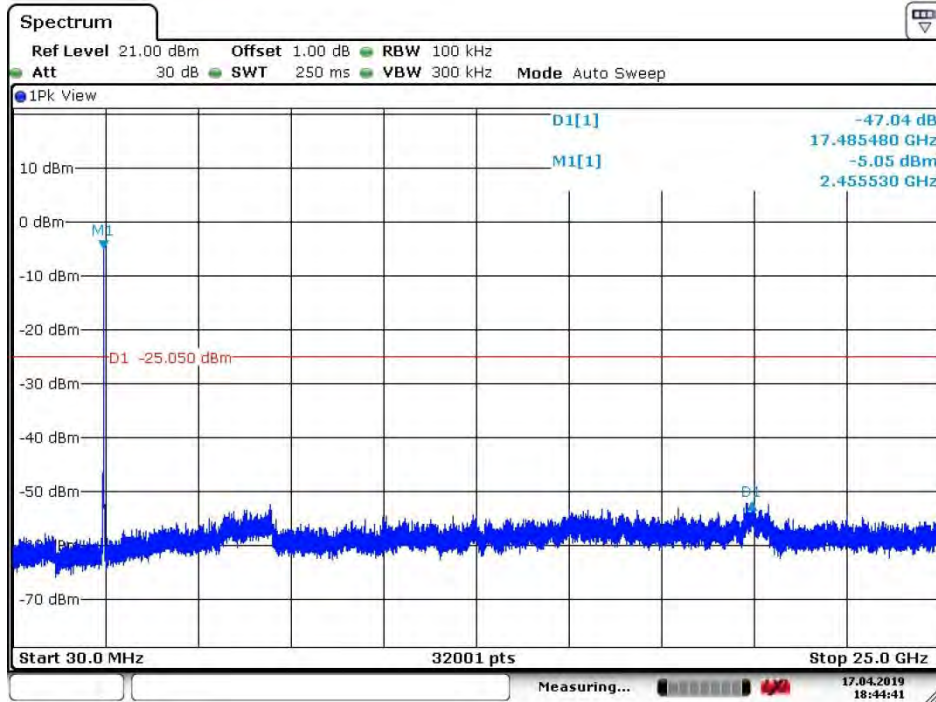
Date: 17.APR.2019 18:45:28



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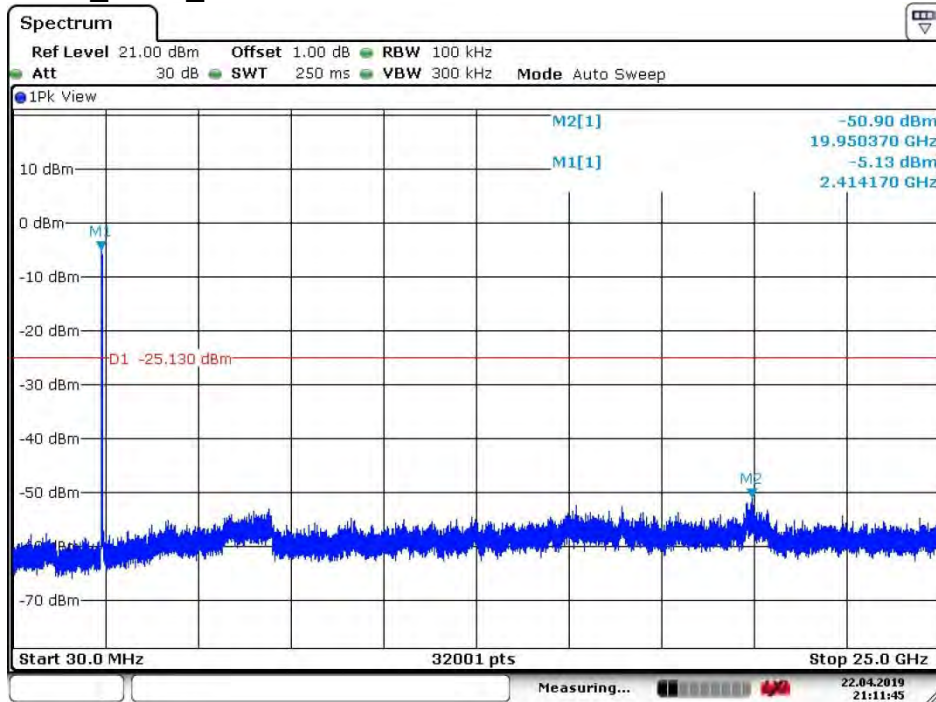
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### 4.8.1.1.6 802.11G\_Highest Channel



Date: 17.APR.2019 18:44:42

### 4.8.1.1.7 802.11G\_CDD\_Lowest Channel

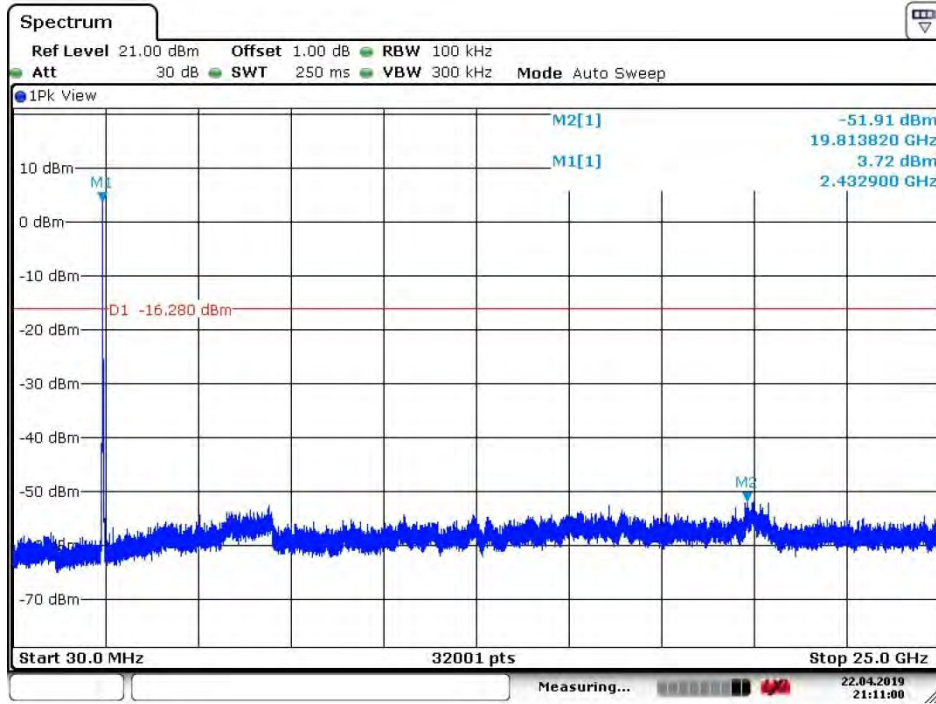


Date: 22.APR.2019 21:11:45



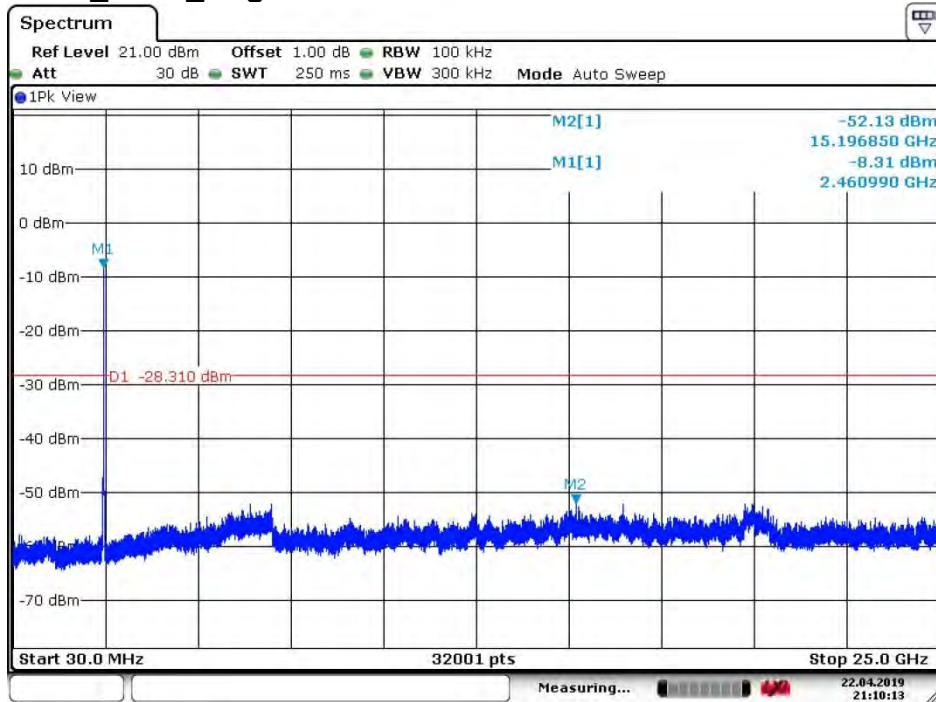


**4.8.1.1.8 802.11G\_CDD\_Middle Channel**



Date: 22.APR.2019 21:11:00

**4.8.1.1.9 802.11G\_CDD\_Highest Channel**



Date: 22.APR.2019 21:10:13

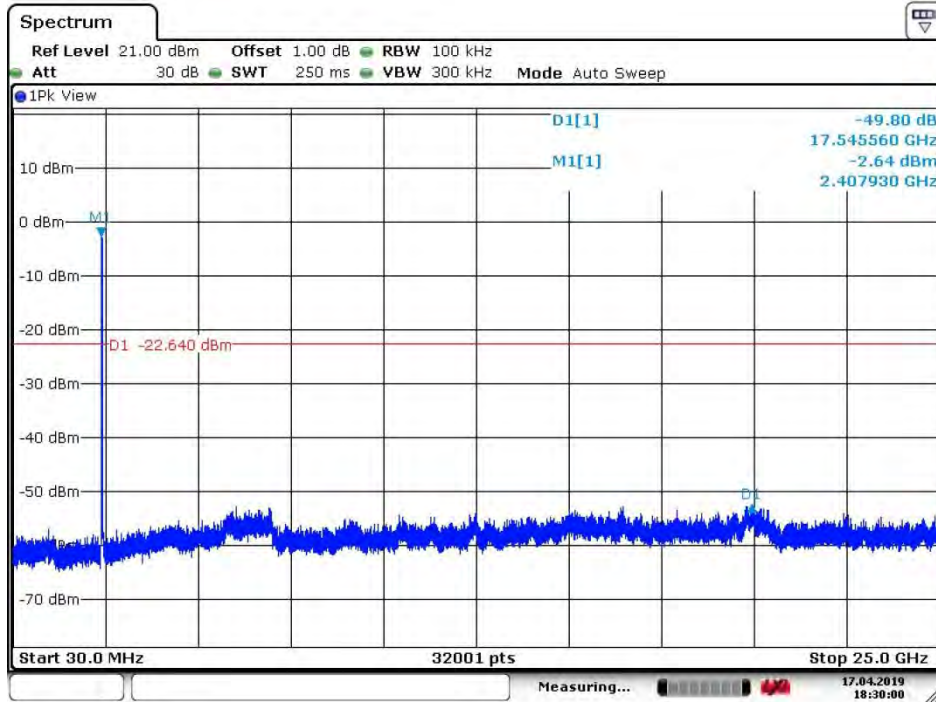


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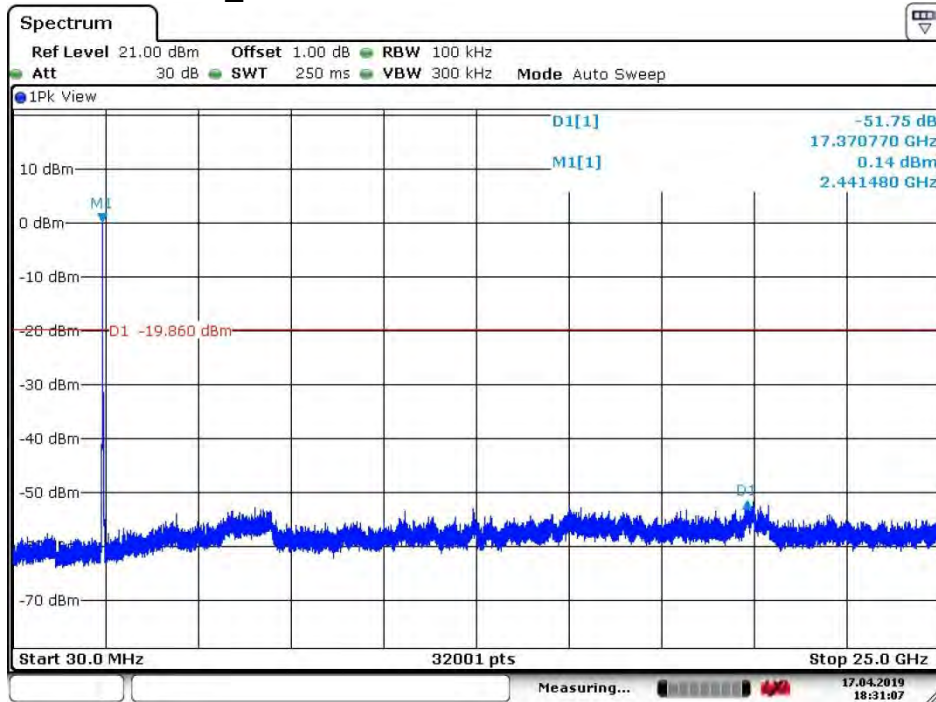
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**4.8.1.1.10 802.11N20\_Lowest Channel**



Date: 17.APR.2019 18:30:00

**4.8.1.1.11 802.11 N20\_ Middle Channel**

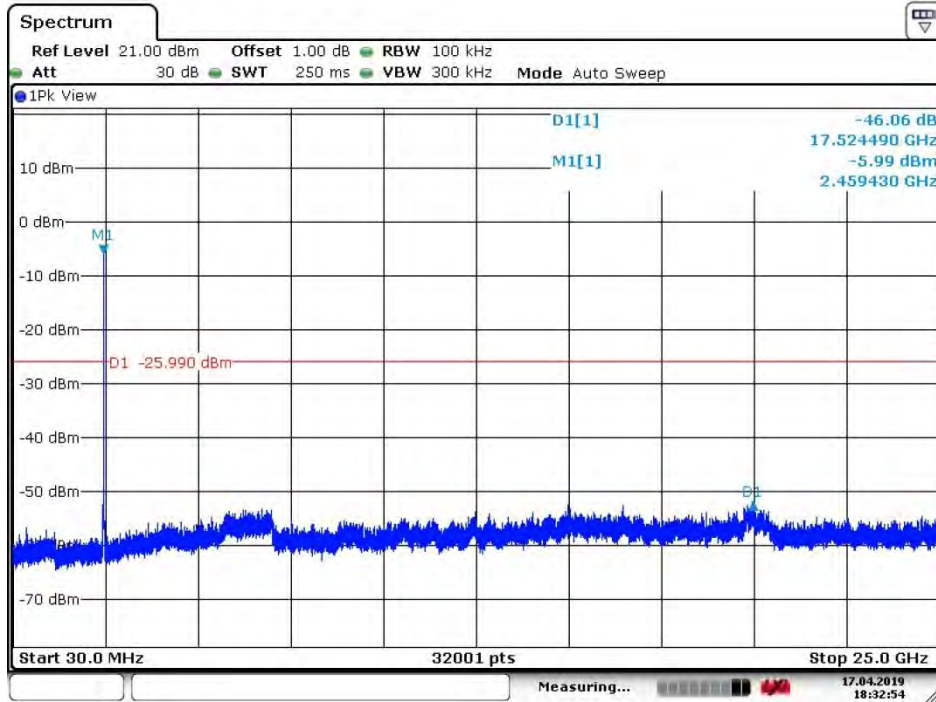


Date: 17.APR.2019 18:31:08



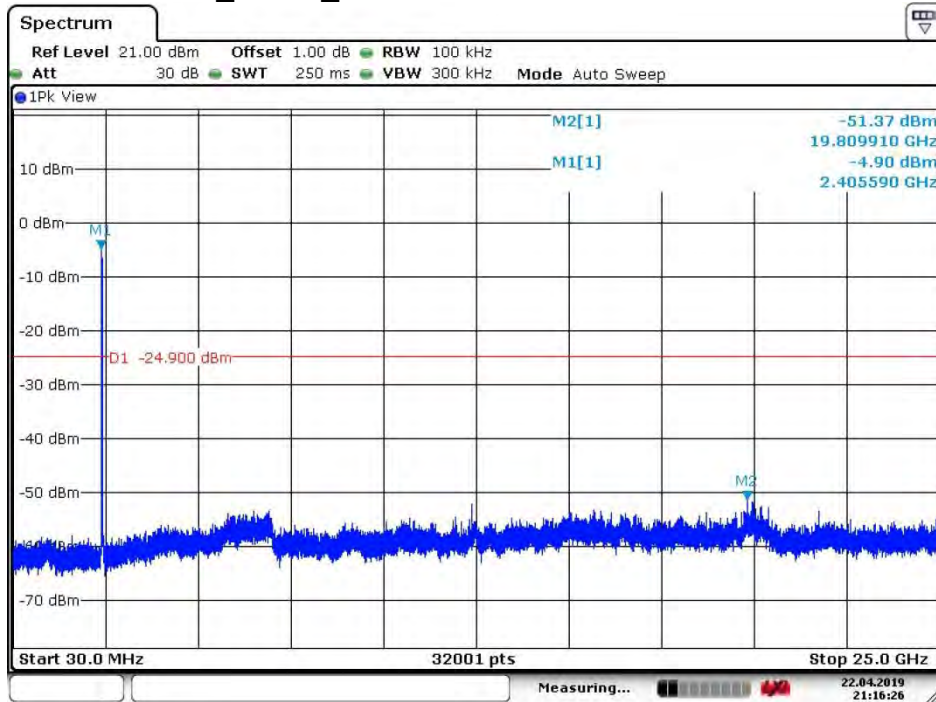


**4.8.1.1.12 802.11 N20\_ Highest Channel**



Date: 17.APR.2019 18:32:54

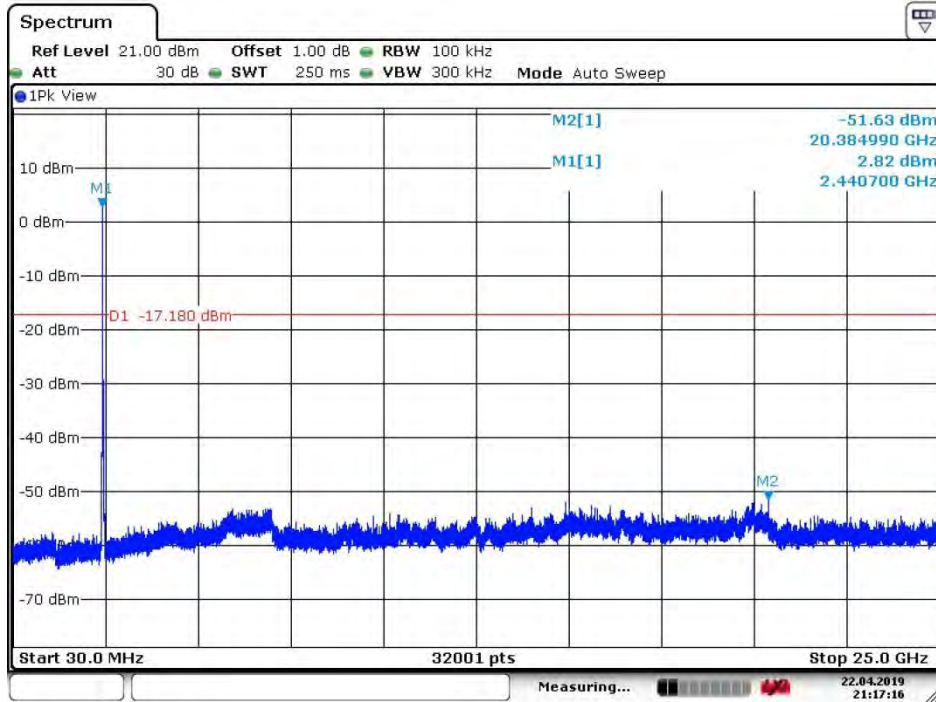
**4.8.1.1.13 802.11N20\_MIMO\_Lowest Channel**



Date: 22.APR.2019 21:16:27

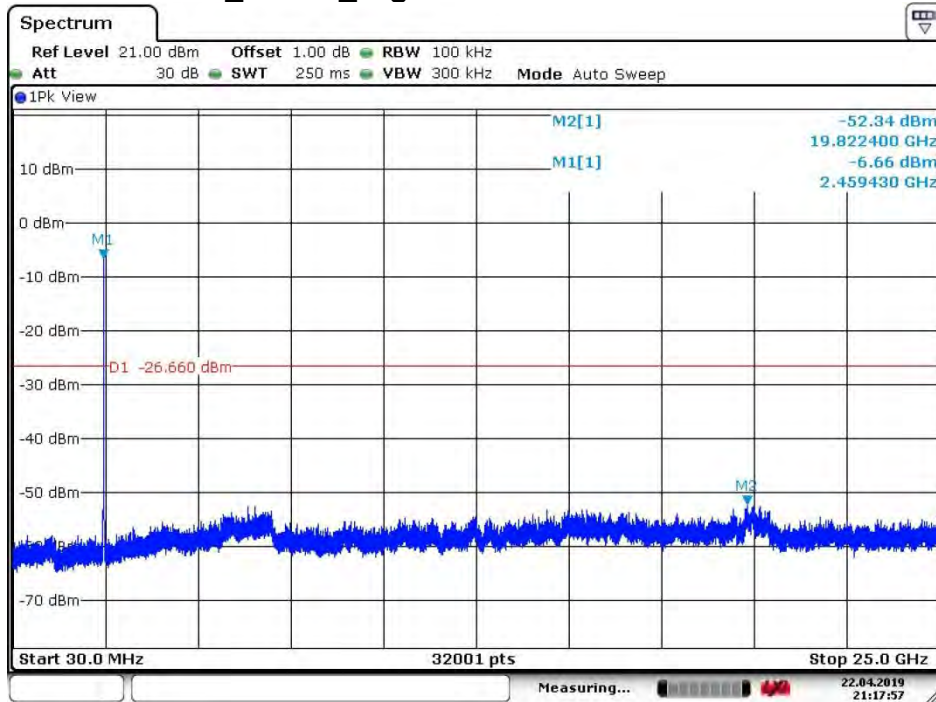


**4.8.1.1.14 802.11 N20\_ MIMO\_ Middle Channel**



Date: 22.APR.2019 21:17:16

**4.8.1.1.15 802.11 N20\_ MIMO\_ Highest Channel**

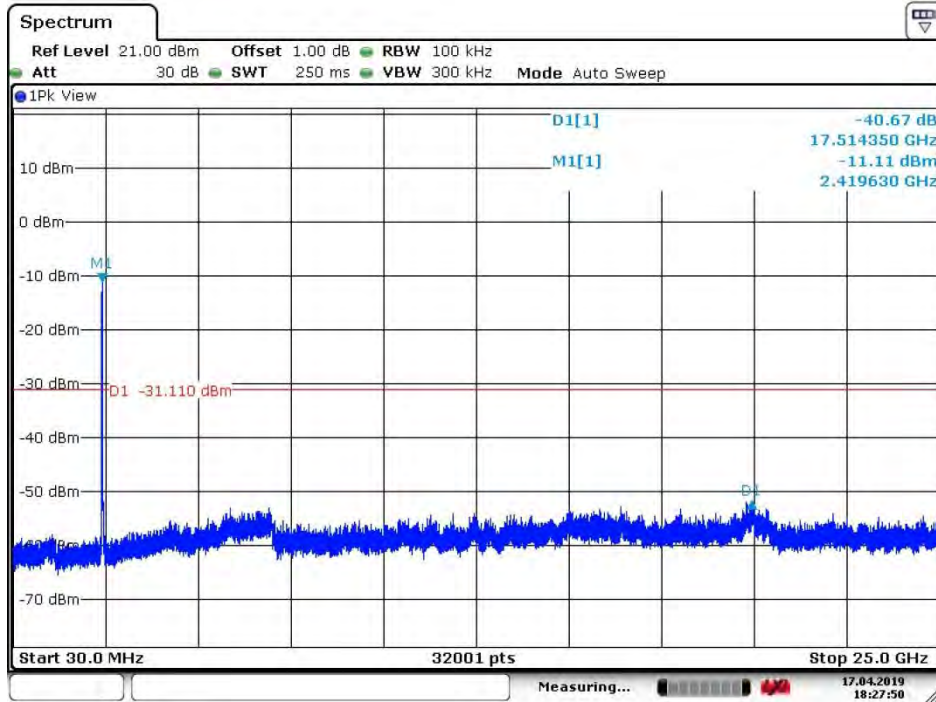


Date: 22.APR.2019 21:17:57



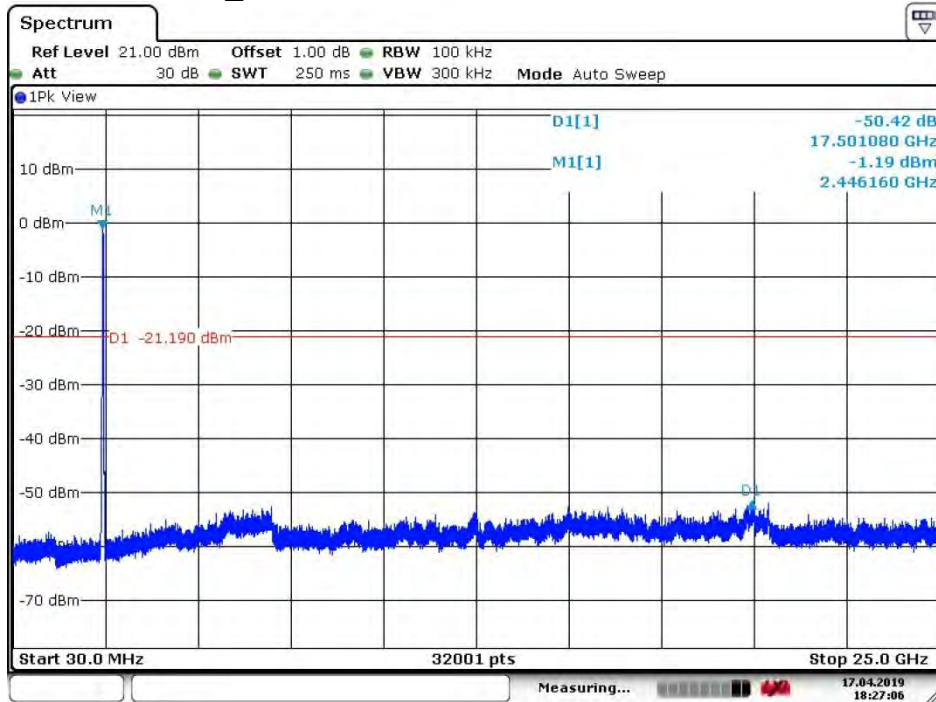


**4.8.1.1.16 802.11N40\_Lowest Channel**



Date: 17.APR.2019 18:27:51

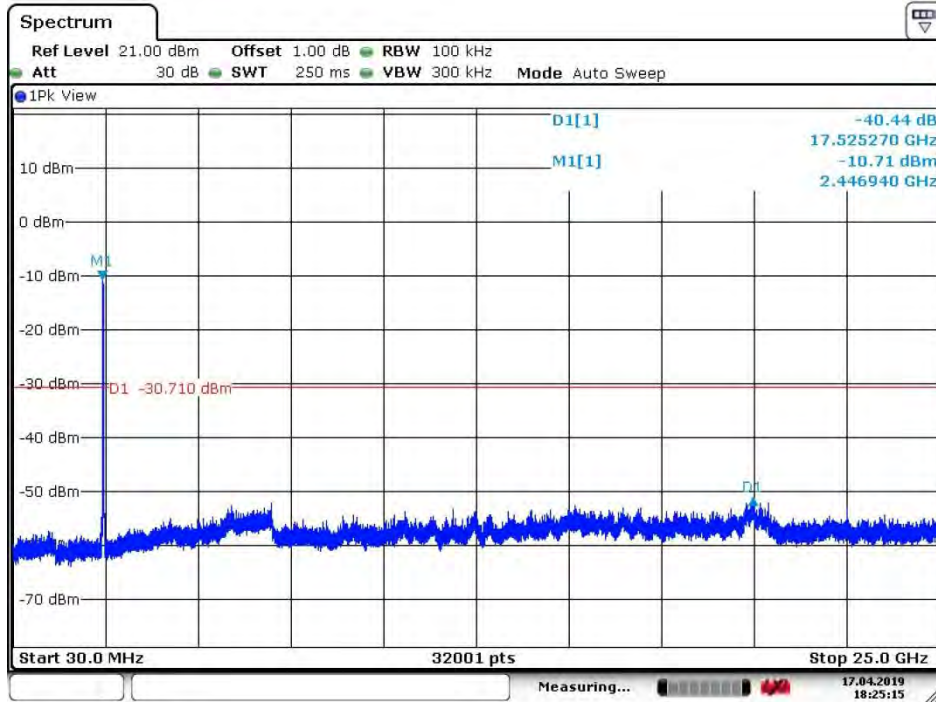
**4.8.1.1.17 802.11 N40\_Middle Channel**



Date: 17.APR.2019 18:27:06

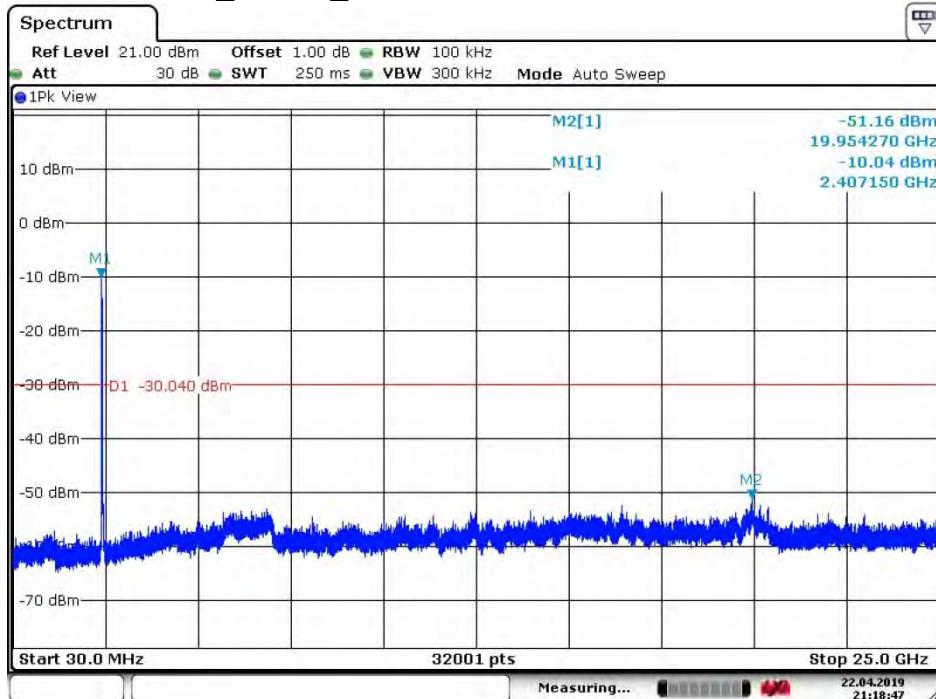


**4.8.1.1.18 802.11 N40\_ Highest Channel**



Date: 17.APR.2019 18:25:16

**4.8.1.1.19 802.11N40\_ MIMO\_Lowest Channel**



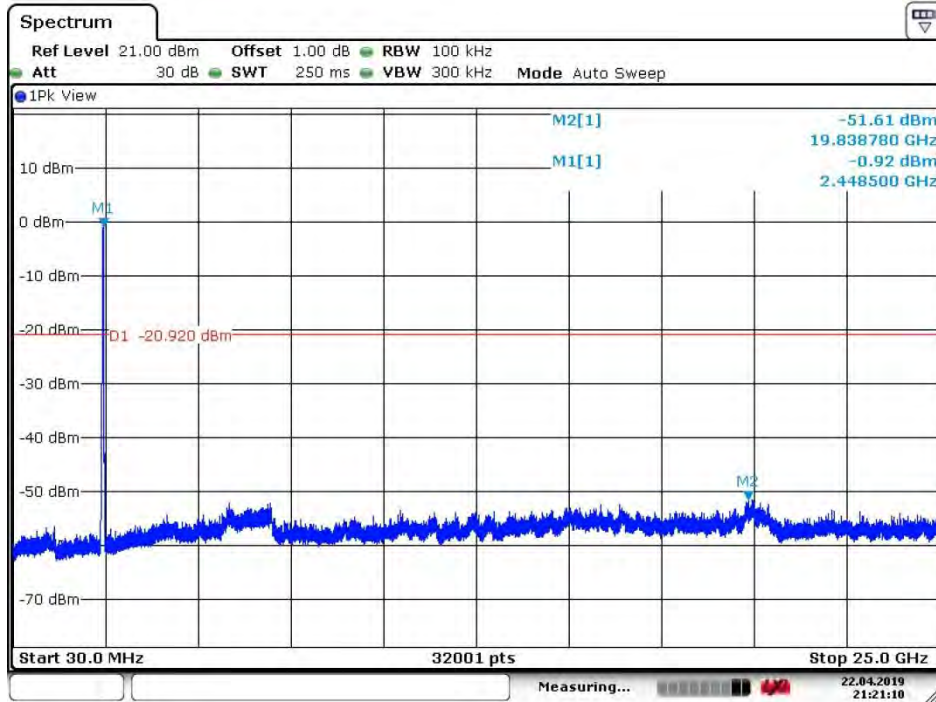
Date: 22.APR.2019 21:18:48



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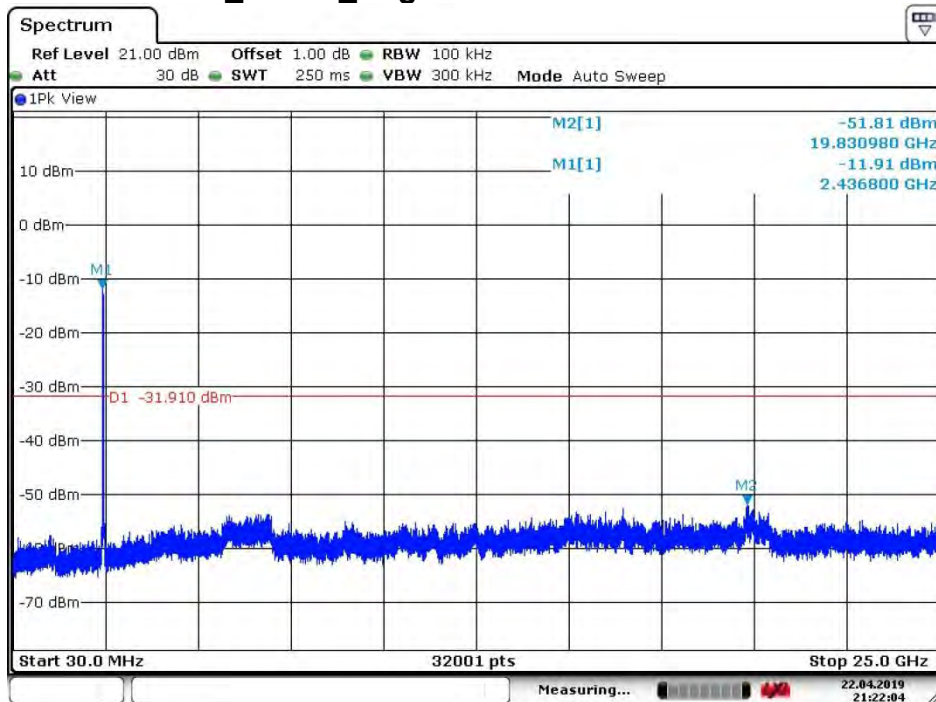


**4.8.1.1.20 802.11 N40\_ MIMO\_ Middle Channel**



Date: 22.APR.2019 21:21:11

**4.8.1.1.21 802.11 N40\_ MIMO\_ Highest Channel**



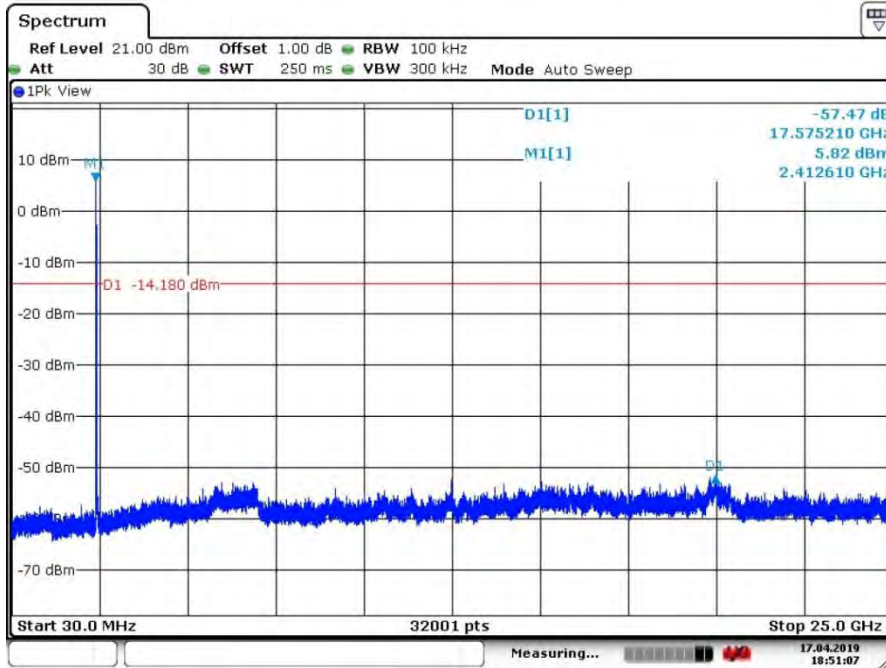
Date: 22.APR.2019 21:22:05



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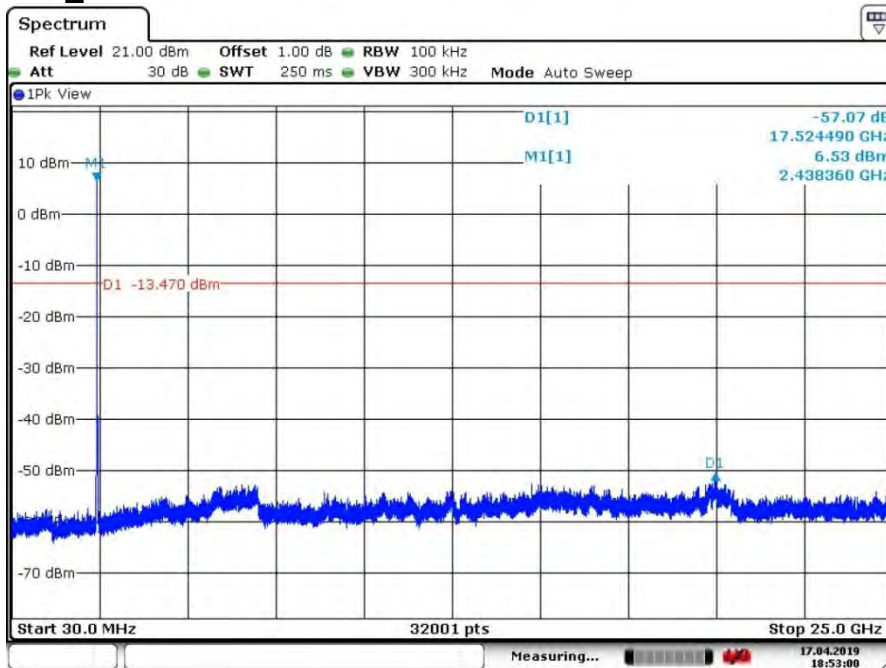
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**4.8.1.2 ANT2**  
**4.8.1.2.1 802.11B\_Lowest Channel**



Date: 17.APR.2019 18:51:07

**4.8.1.2.2 802.11B\_Middle Channel**



Date: 17.APR.2019 18:53:00

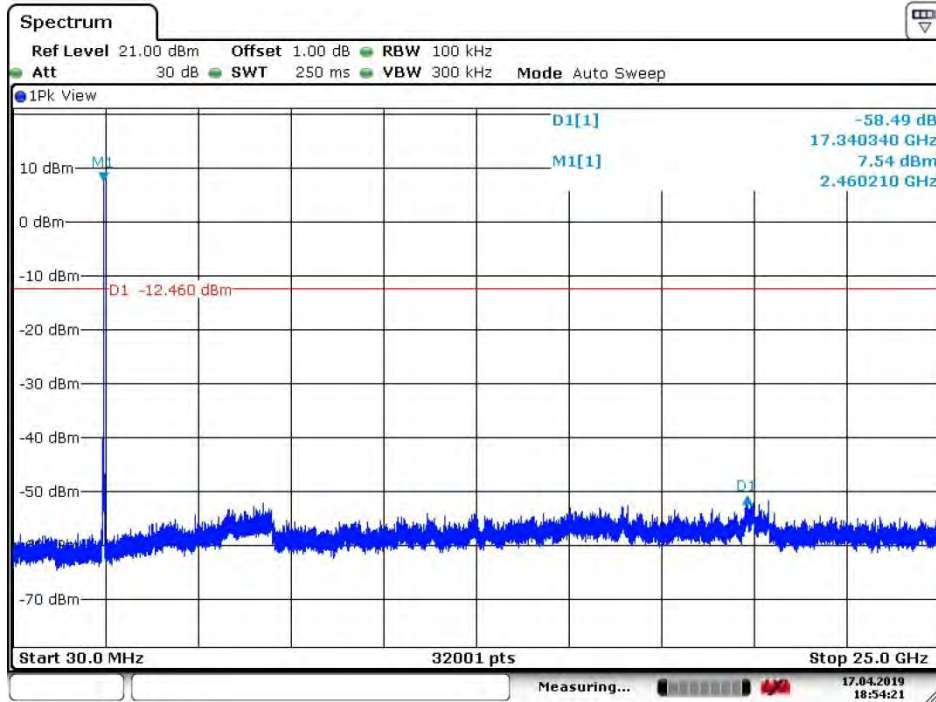


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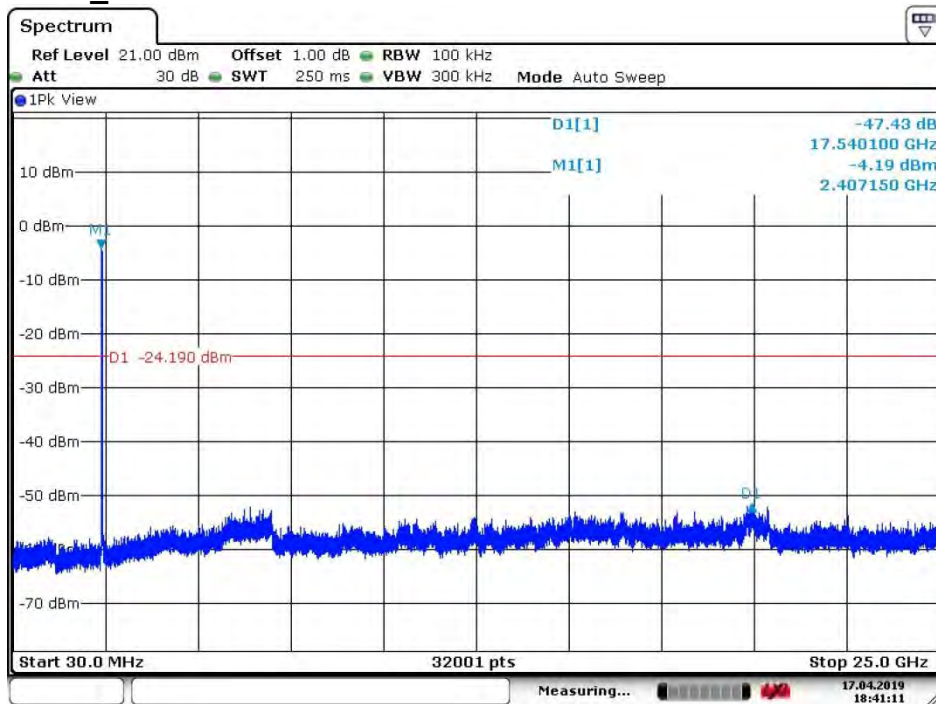


**4.8.1.2.3 802.11B\_Highest Channel**



Date: 17.APR.2019 18:54:22

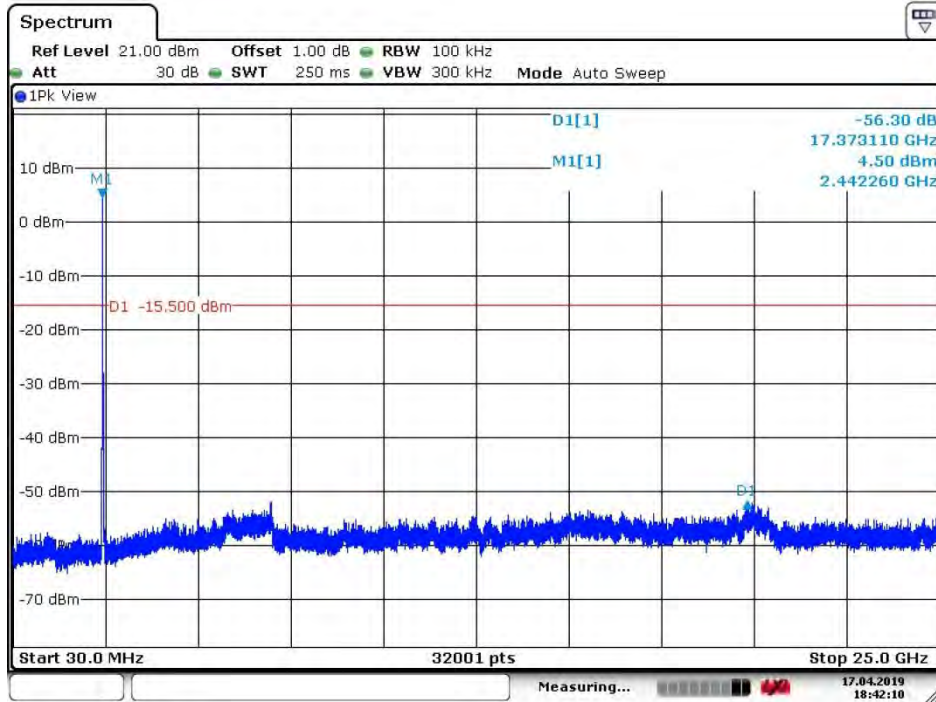
**4.8.1.2.4 802.11G\_Lowest Channel**



Date: 17.APR.2019 18:41:12

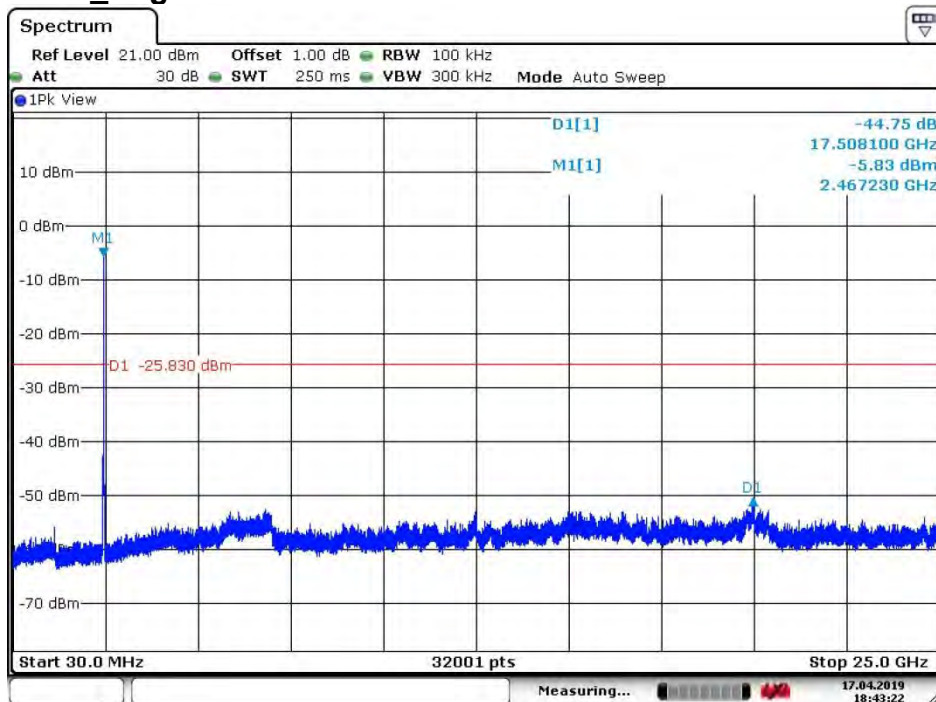


#### 4.8.1.2.5 802.11G\_Middle Channel



Date: 17.APR.2019 18:42:10

#### 4.8.1.2.6 802.11G\_Highest Channel

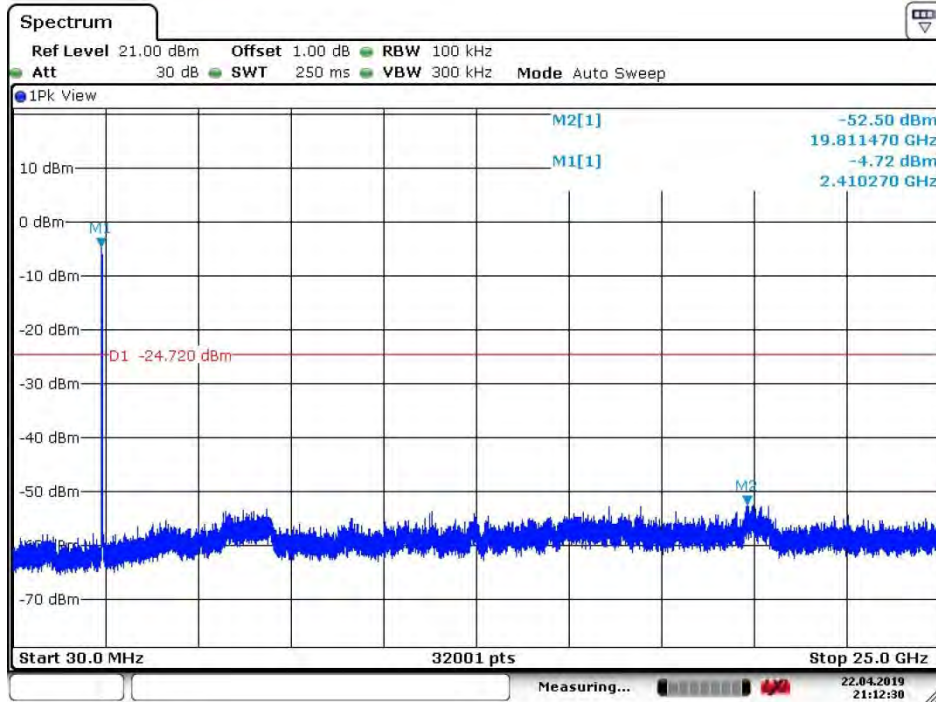


Date: 17.APR.2019 18:43:22



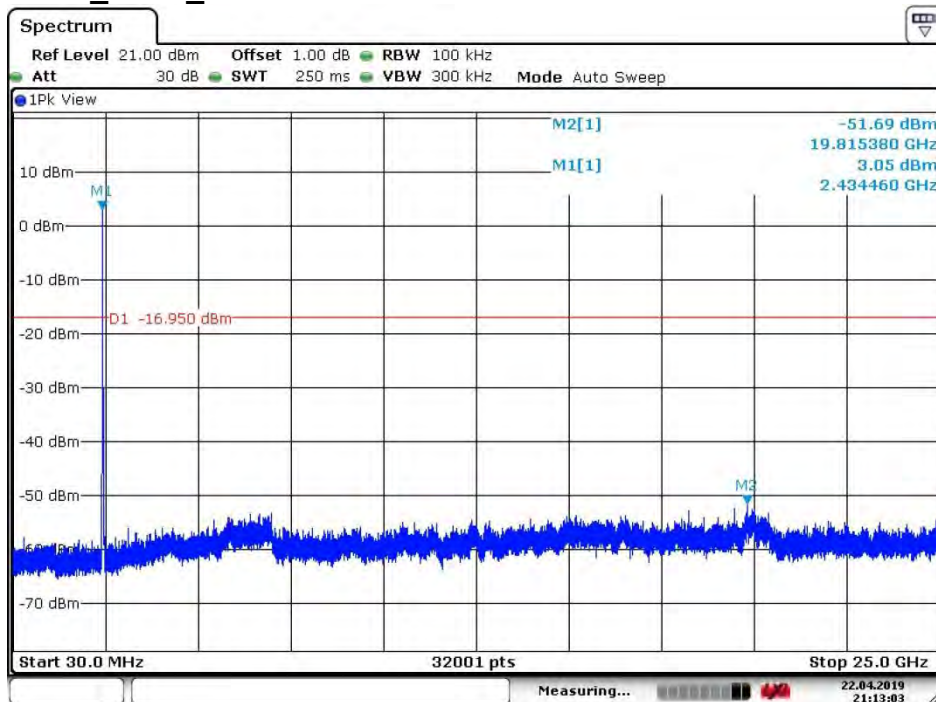


**4.8.1.2.7 802.11G\_CDD\_Lowest Channel**



Date: 22.APR.2019 21:12:31

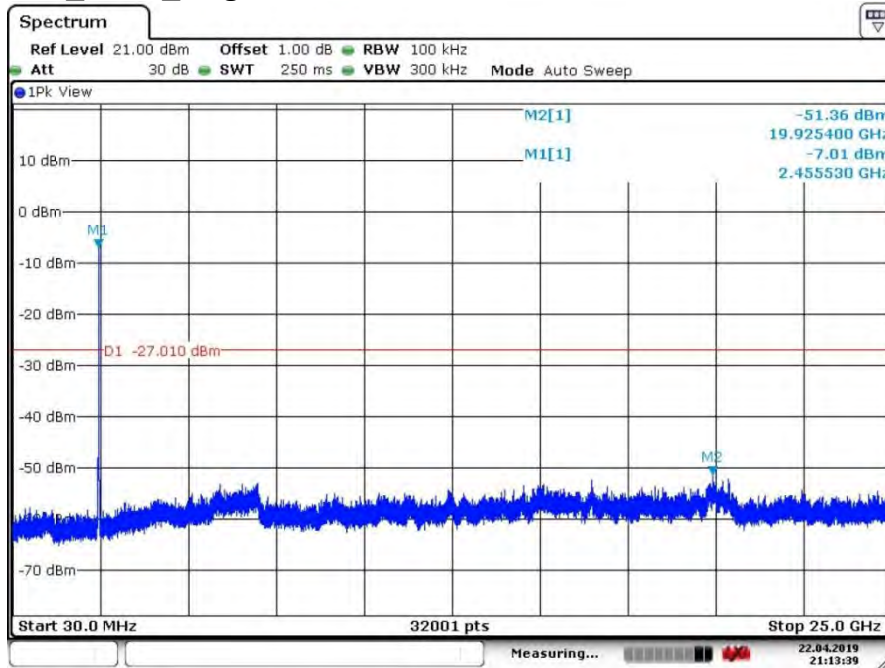
**4.8.1.2.8 802.11G\_CDD\_Middle Channel**



Date: 22.APR.2019 21:13:03

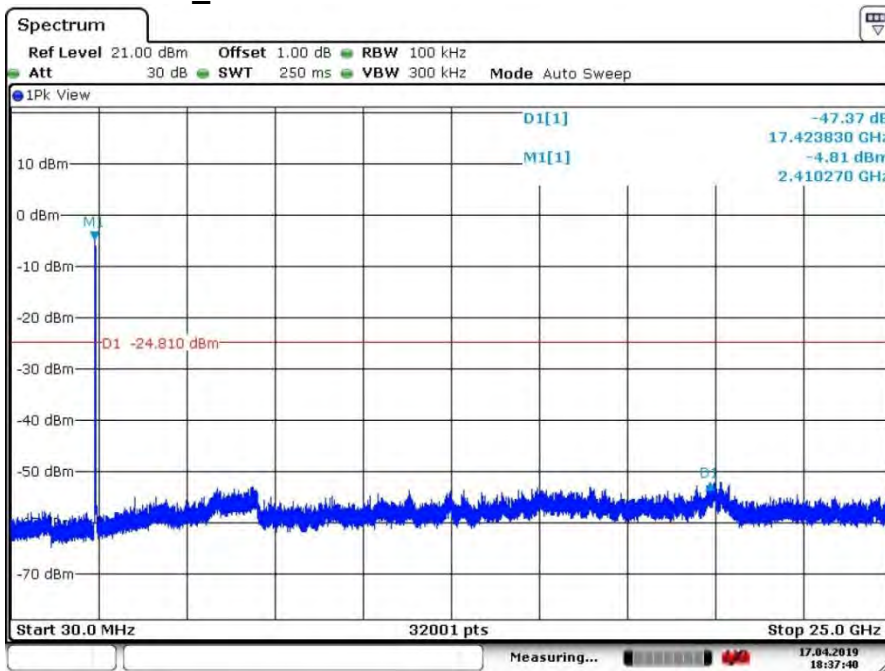


### 4.8.1.2.9 802.11G\_CDD\_Highest Channel



Date: 22 APR 2019 21:13:39

### 4.8.1.2.10 802.11N20\_Lowest Channel

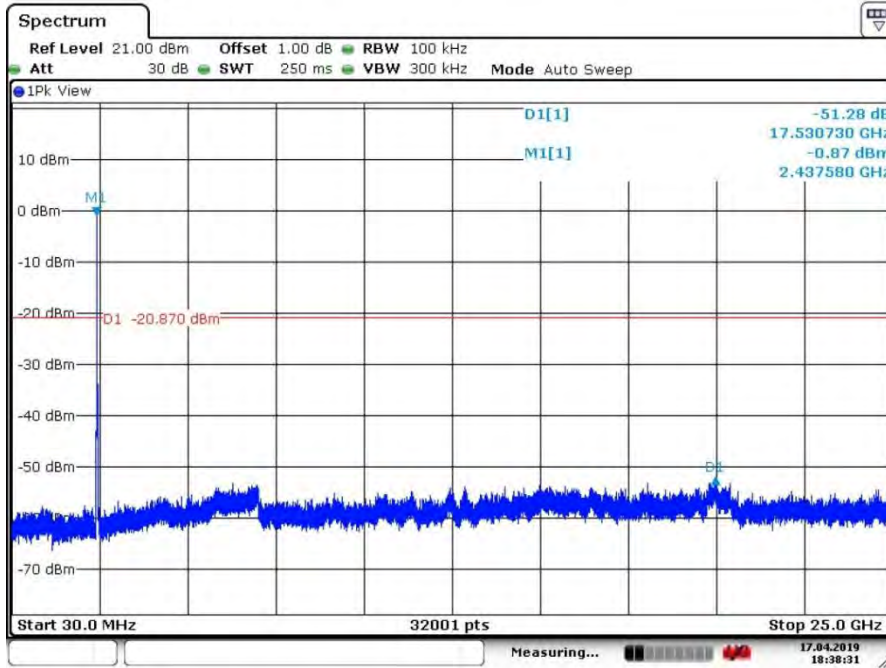


Date: 17 APR 2019 18:37:40



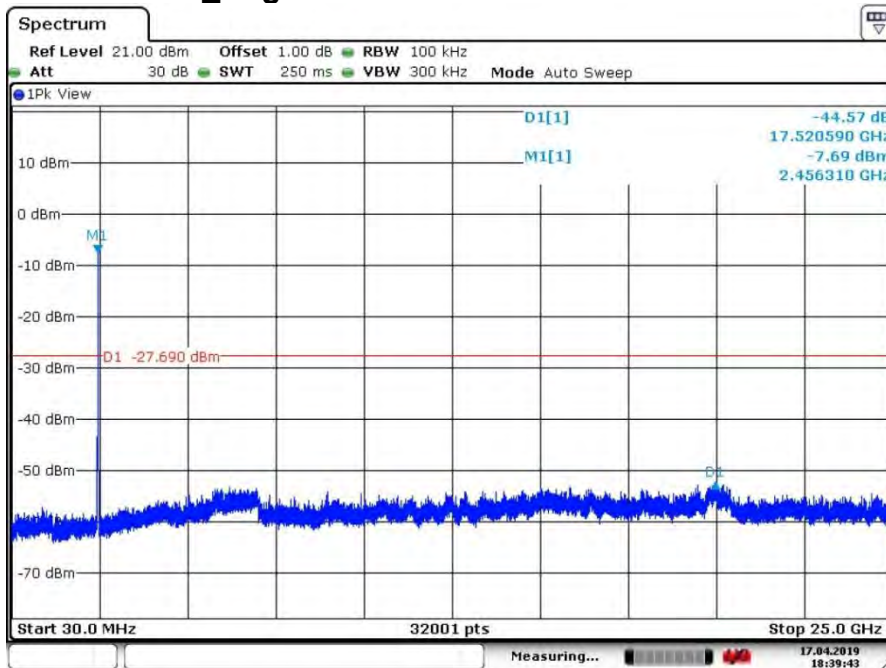


**4.8.1.2.11 802.11 N20\_ Middle Channel**



Date: 17. APR. 2019 18:38:32

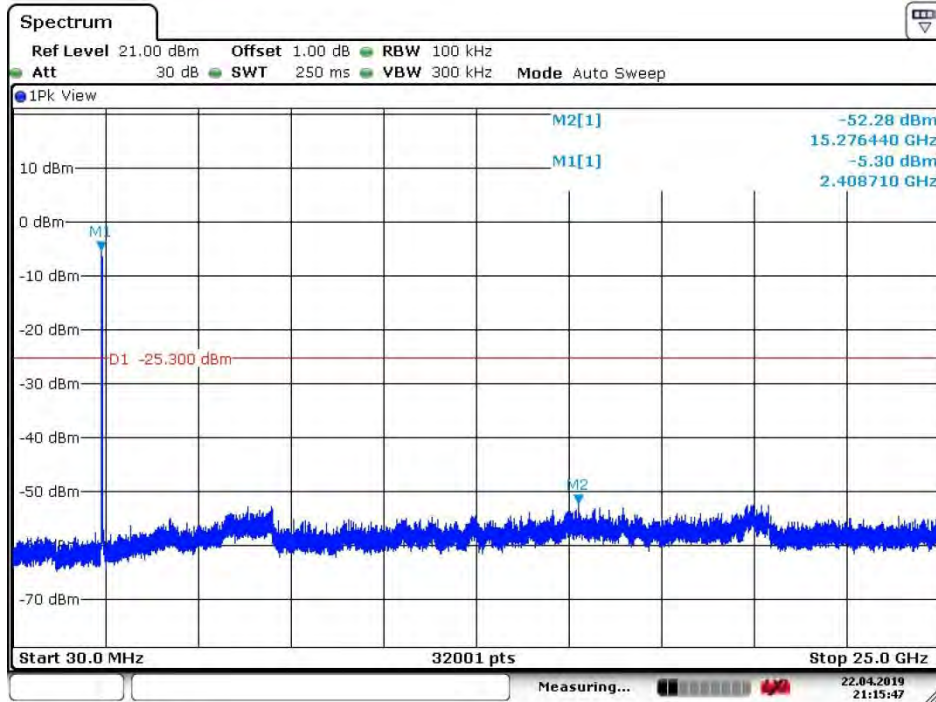
**4.8.1.2.12 802.11 N20\_ Highest Channel**



Date: 17. APR. 2019 18:39:43

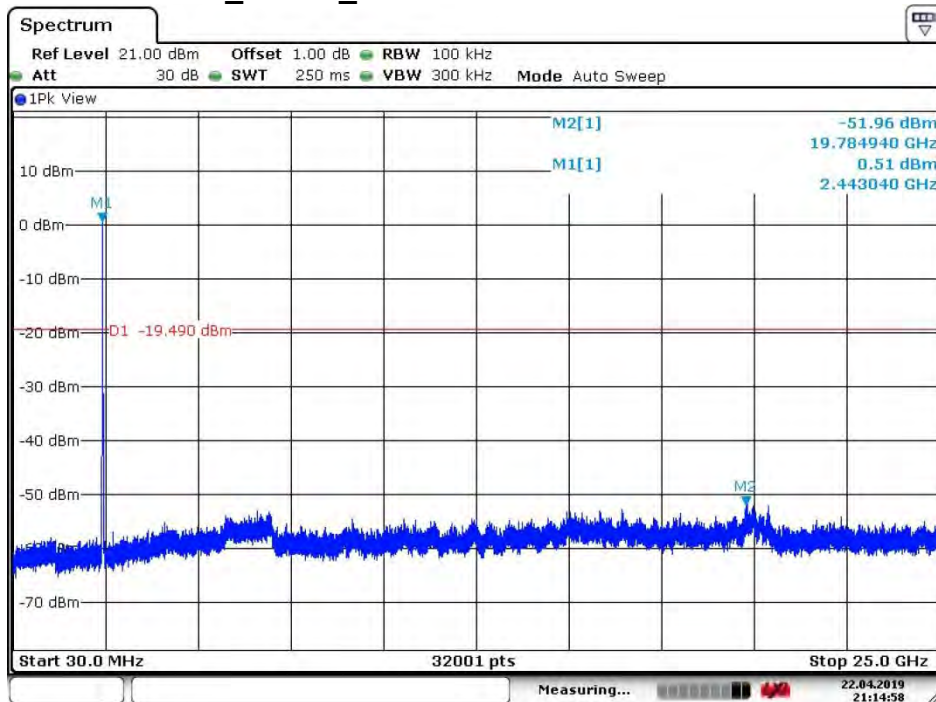


**4.8.1.2.13 802.11N20\_MIMO\_Lowest Channel**



Date: 22.APR.2019 21:15:47

**4.8.1.2.14 802.11 N20\_MIMO\_Middle Channel**

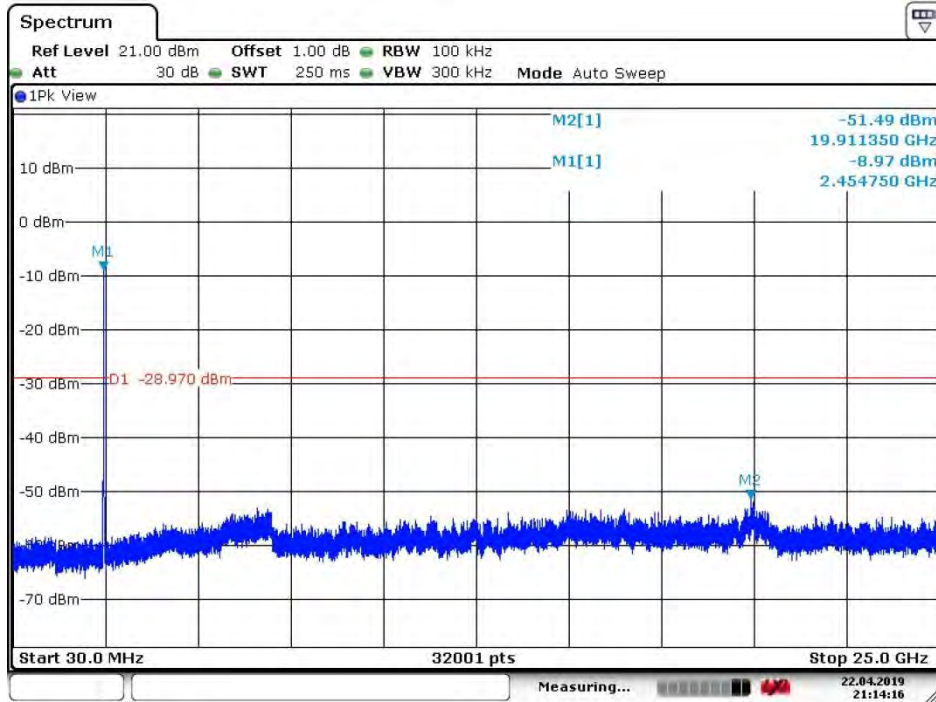


Date: 22.APR.2019 21:14:59



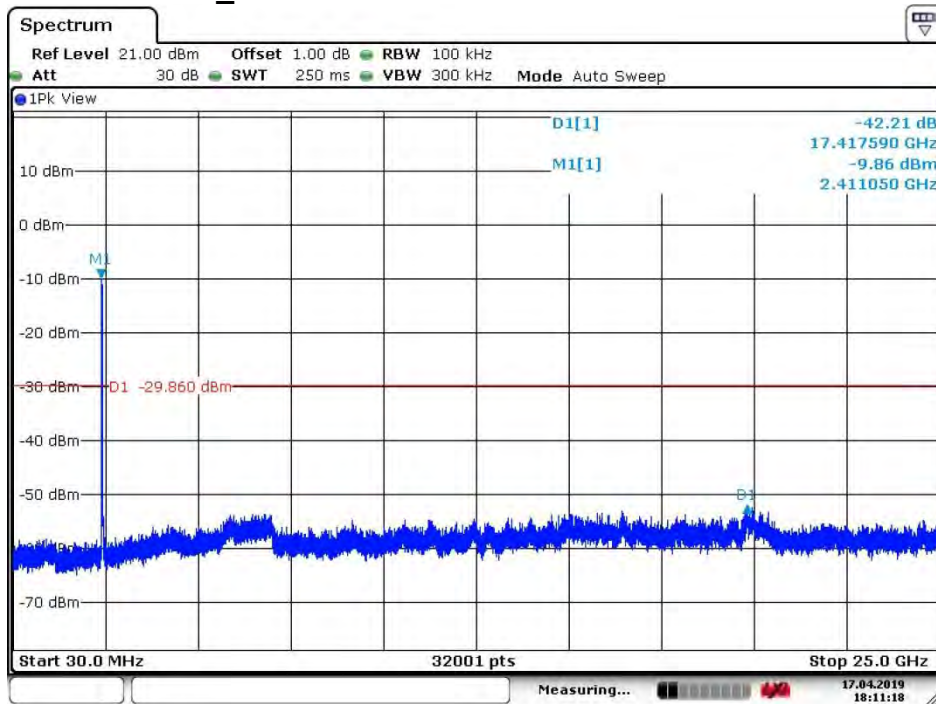


**4.8.1.2.15 802.11 N20\_ MIMO\_Highest Channel**



Date: 22.APR.2019 21:14:16

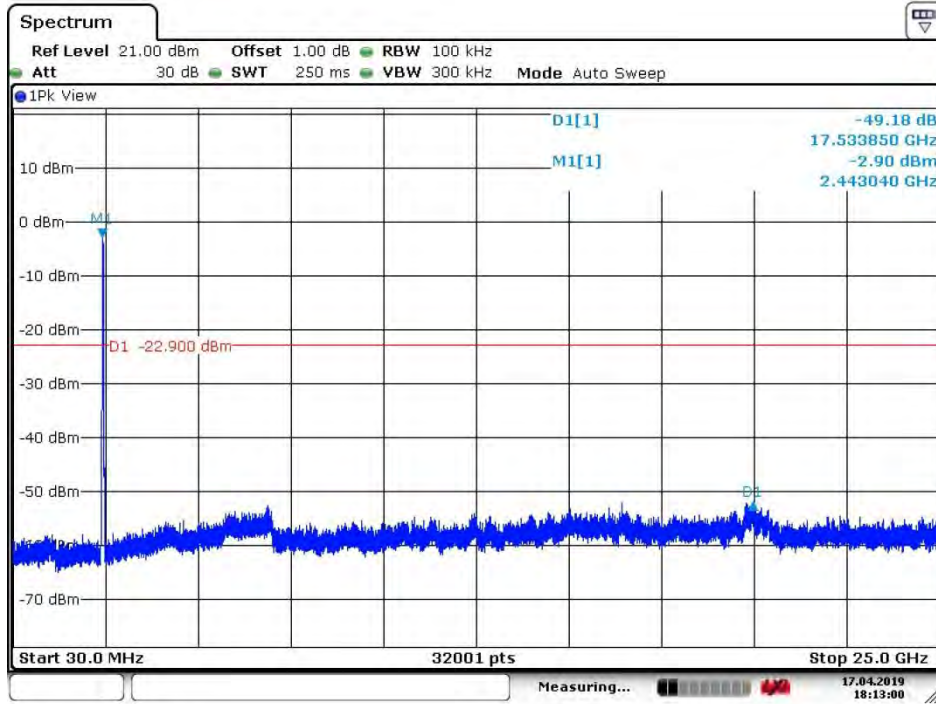
**4.8.1.2.16 802.11N40\_Lowest Channel**



Date: 17.APR.2019 18:11:18

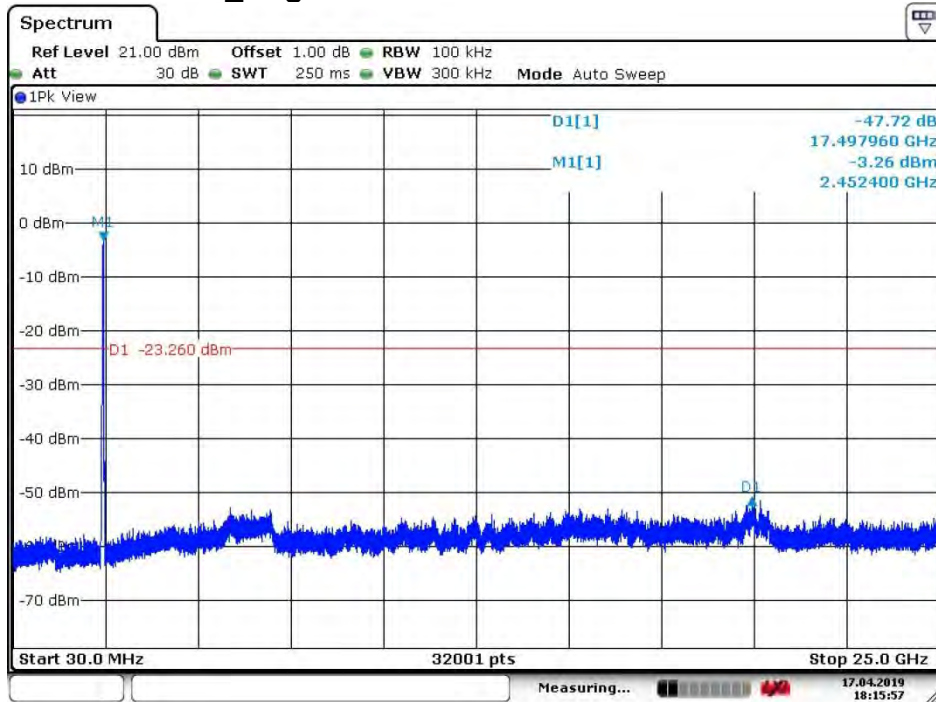


**4.8.1.2.17 802.11 N40\_ Middle Channel**



Date: 17.APR.2019 18:13:00

**4.8.1.2.18 802.11 N40\_ Highest Channel**

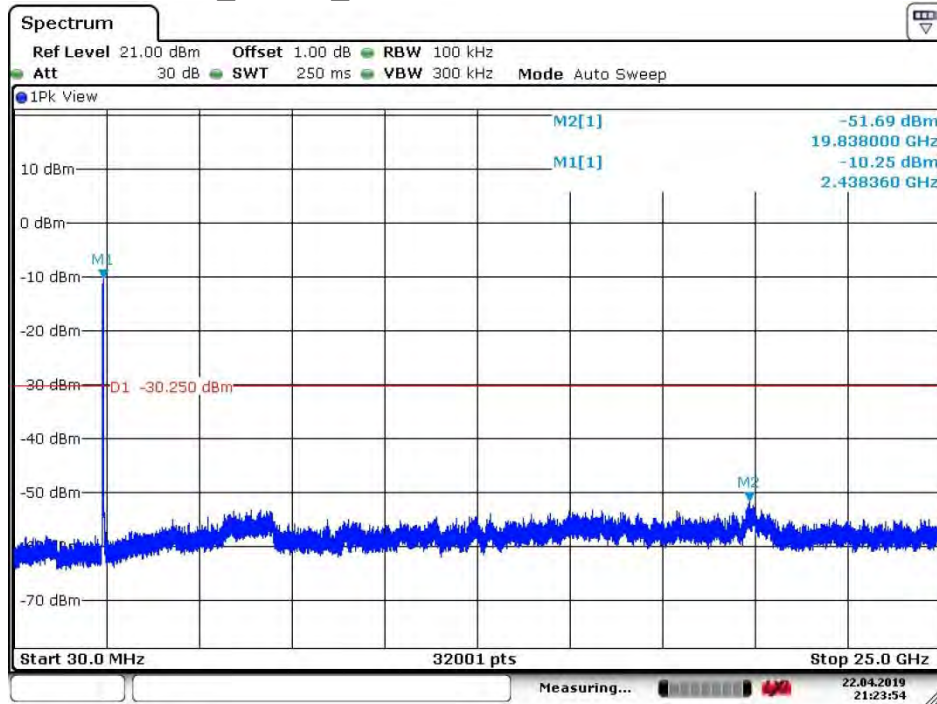


Date: 17.APR.2019 18:15:57



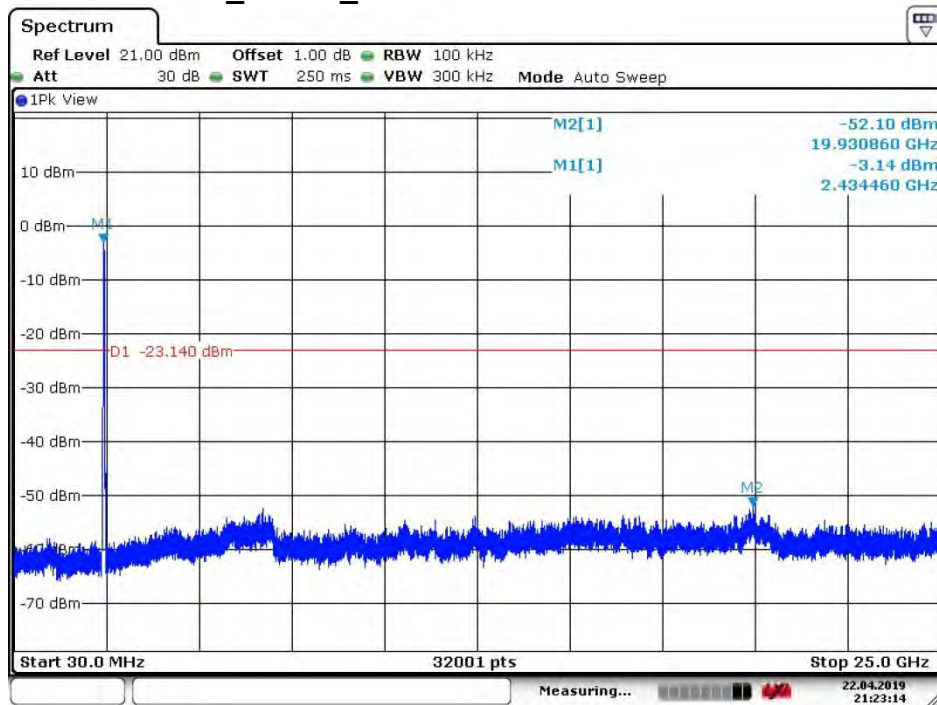


**4.8.1.2.19 802.11N40\_ MIMO\_ Lowest Channel**



Date: 22.APR.2019 21:23:54

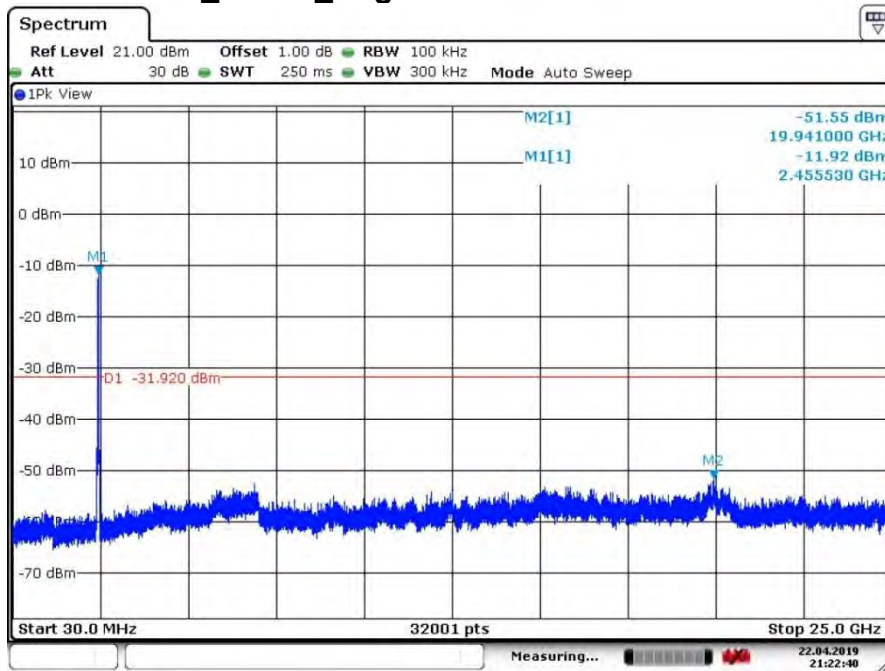
**4.8.1.2.20 802.11 N40\_ MIMO\_ Middle Channel**



Date: 22.APR.2019 21:23:14



**4.8.1.2.21 802.11 N40\_ MIMO\_ Highest Channel**



Date: 22.APR.2019 21:22:40

**Remark:**

Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz was very low, and the above harmonics were the highest point could be found when testing, The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.





### 4.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205				
Test Method:	ANSI C63.10 :2013 Section 11.12				
Test Site:	Measurement Distance: 3m				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100 kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Peak		1MHz	10Hz	Average	
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F (kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F (kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
Remark: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.					

Test Setup:	
-------------	--



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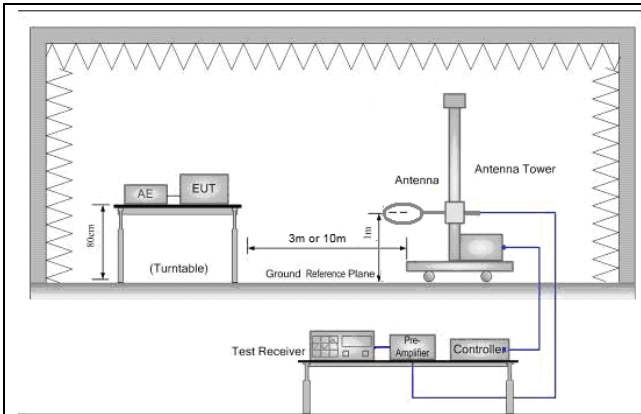


Figure 1. Below 30MHz

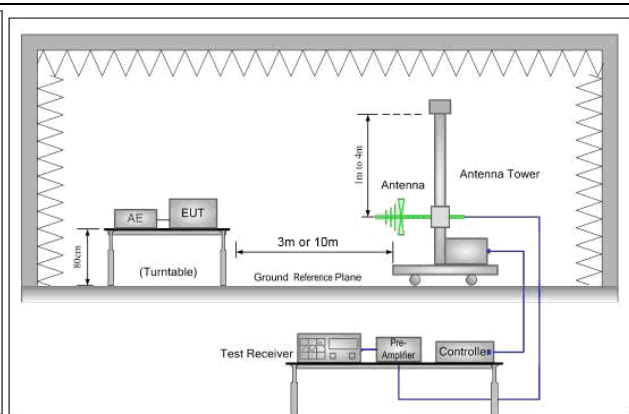


Figure 2. 30MHz to 1GHz

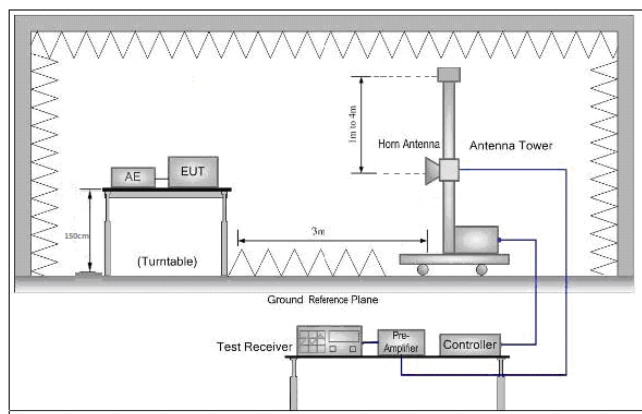


Figure 3. Above 1 GHz

**Test Procedure:**

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation
- c. The EUT was set 3 or 10 meters from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be





	<p>re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</p> <p>h. Test the EUT in the lowest channel, the middle channel ,the Highest channel</p> <p>i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.</p> <p>j. Repeat above procedures until all frequencies measured was complete.</p>
Exploratory Test Mode:	<p>Transmitting with all kind of modulations, data rates.</p> <p>Charge + Transmitting mode.</p>
Final Test Mode:	<p>Pretest the EUT at Charge + Transmitting mode.</p> <p>Through Pre-scan, find the</p> <p>1Mbps of rate is the worst case of 802.11B;</p> <p>6Mbps of rate is the worst case of 802.11G;</p> <p>6.5Mbps of rate is the worst case of 802.11N(HT20);</p> <p>13.5Mbps of rate is the worst case of 802.11N(HT40)</p> <p>For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11B at lowest channel is the worst case. Only the worst case is recorded in the report.</p>
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



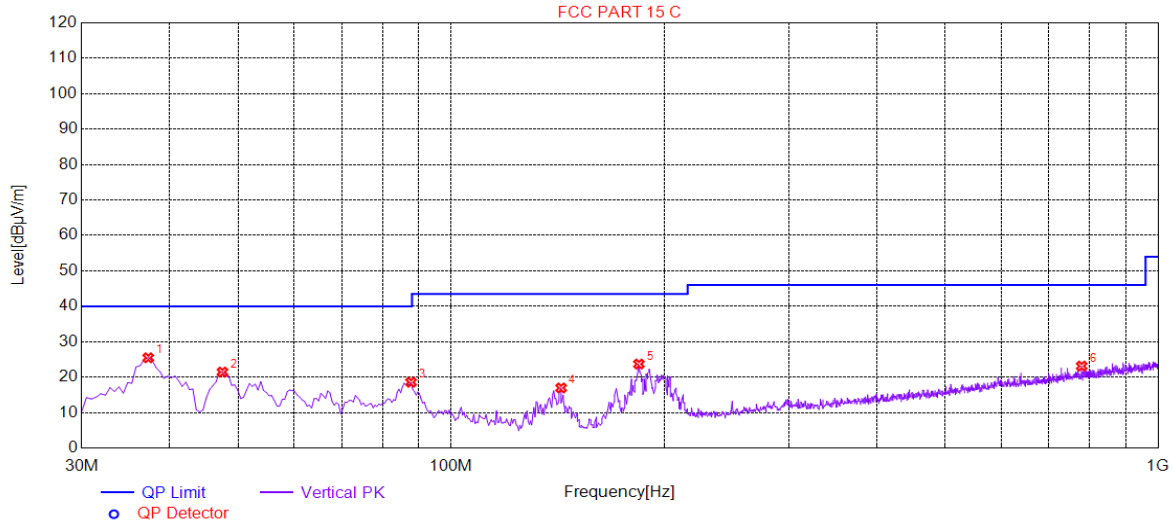
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### 4.9.1 Radiated emission below 1GHz

#### 4.9.1.1 Charge + Transmitting, Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	37.2786	25.47	-32.03	40.00	14.53	100	52	Vertical
2	47.4687	21.44	-30.20	40.00	18.56	100	96	Vertical
3	87.7439	18.56	-33.97	40.00	21.44	100	13	Vertical
4	143.061	16.96	-35.08	43.50	26.54	200	312	Vertical
5	184.307	23.70	-32.47	43.50	19.80	100	3	Vertical
6	779.699	23.13	-17.16	46.00	22.87	200	149	Vertical

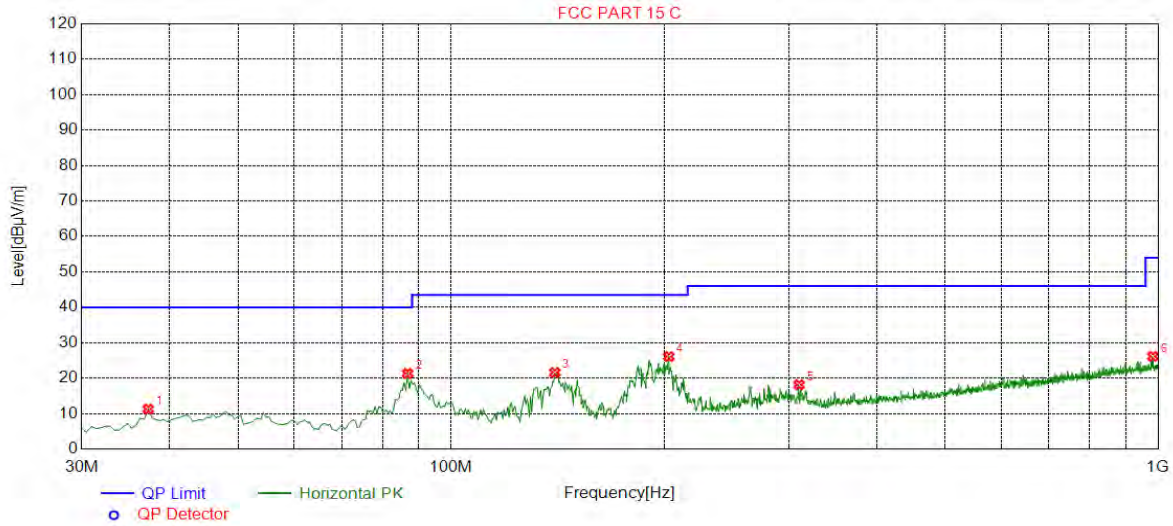


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**4.9.1.2 Charge + Transmitting, Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	37.2786	11.27	-32.03	40.00	28.73	100	65	Horizontal
2	86.7734	21.34	-34.20	40.00	18.66	200	25	Horizontal
3	140.150	21.59	-35.20	43.50	21.91	200	239	Horizontal
4	203.231	26.11	-30.75	43.50	17.39	200	220	Horizontal
5	310.470	18.14	-27.55	46.00	27.86	100	299	Horizontal
6	983.016	26.15	-14.07	54.00	27.85	200	268	Horizontal



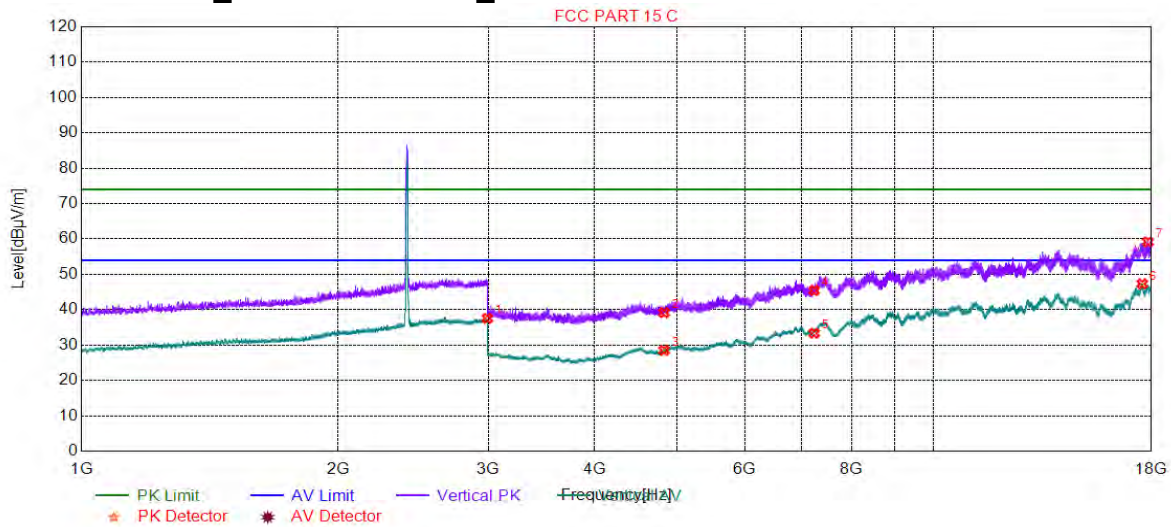
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### 4.9.2 Transmitter emission above 1GHz

#### 4.9.2.1 SISO

##### 4.9.2.1.1 802.11B\_Lowest Channel\_Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2992.49	37.55	2.32	54.00	16.45	150	19	Vertical
2	4824.00	39.15	-20.09	74.00	34.85	150	149	Vertical
3	4824.00	28.52	-20.09	54.00	25.48	150	342	Vertical
4	7236.00	45.46	-12.40	74.00	28.54	150	181	Vertical
5	7236.00	33.36	-12.40	54.00	20.64	150	165	Vertical
6	17551.4	47.32	1.01	54.00	6.68	150	357	Vertical
7	17828.9	59.18	-0.87	74.00	14.82	150	331	Vertical

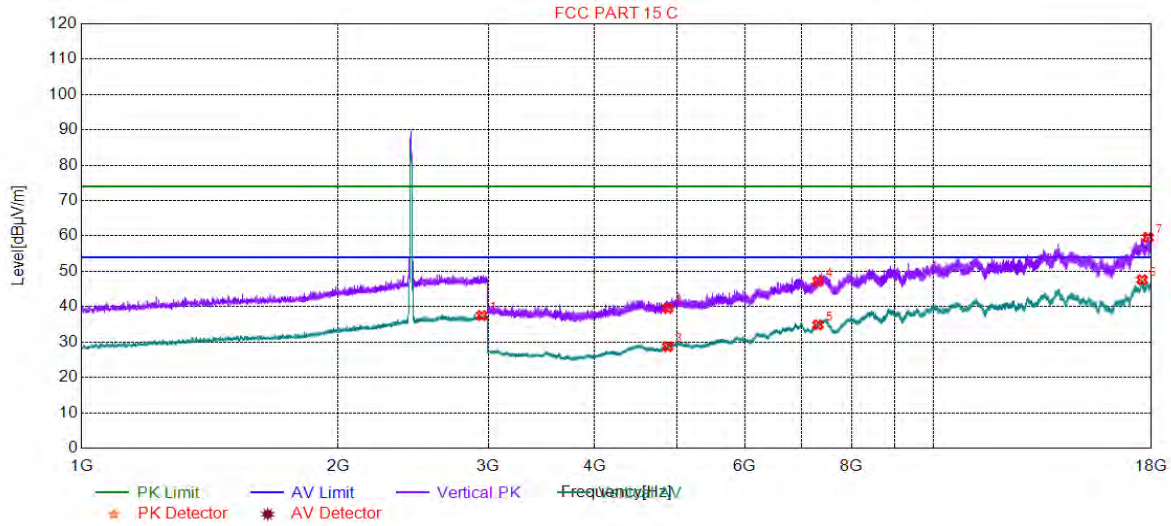


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**4.9.2.1.2 802.11B\_Middle Channel\_Vertical**



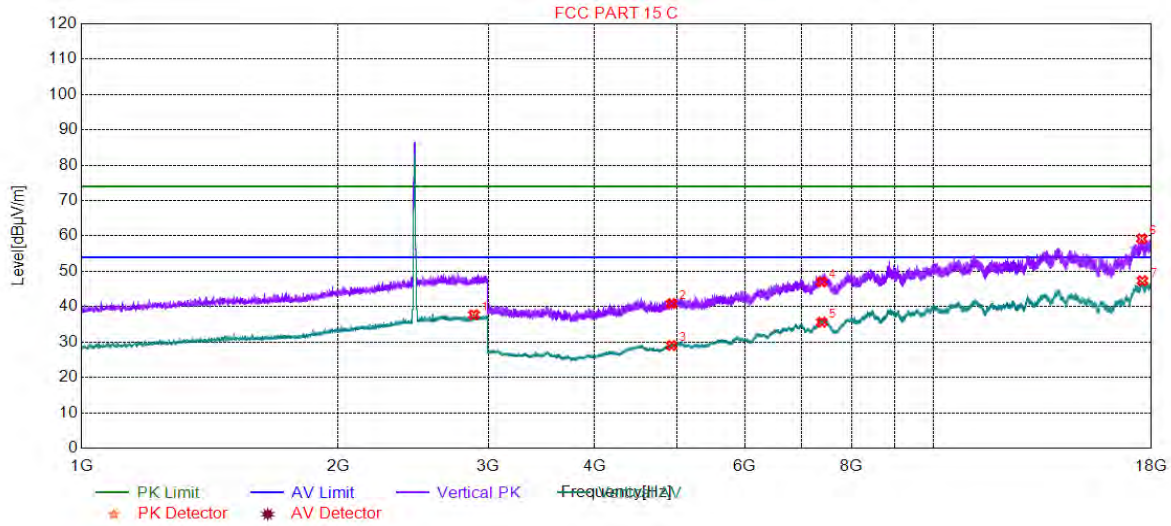
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2948.48	37.50	2.29	54.00	16.50	150	198	Vertical
2	4874.00	39.57	-19.37	74.00	34.43	150	342	Vertical
3	4874.00	28.72	-19.37	54.00	25.28	150	278	Vertical
4	7311.00	47.21	-11.50	74.00	26.79	150	181	Vertical
5	7311.00	34.88	-11.50	54.00	19.12	150	326	Vertical
6	17550.4	47.63	1.00	54.00	6.37	150	160	Vertical
7	17827.9	59.60	-0.87	74.00	14.40	150	132	Vertical



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**4.9.2.1.3 802.11B\_Highest Channel\_Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2885.97	37.75	2.24	54.00	16.25	150	262	Vertical
2	4924.00	40.87	-18.87	74.00	33.13	150	261	Vertical
3	4924.00	29.04	-18.87	54.00	24.96	150	310	Vertical
4	7386.00	46.99	-10.72	74.00	27.01	150	100	Vertical
5	7386.00	35.63	-10.72	54.00	18.37	150	326	Vertical
6	17532.9	59.22	0.77	74.00	14.78	150	132	Vertical
7	17559.9	47.34	1.12	54.00	6.66	150	357	Vertical

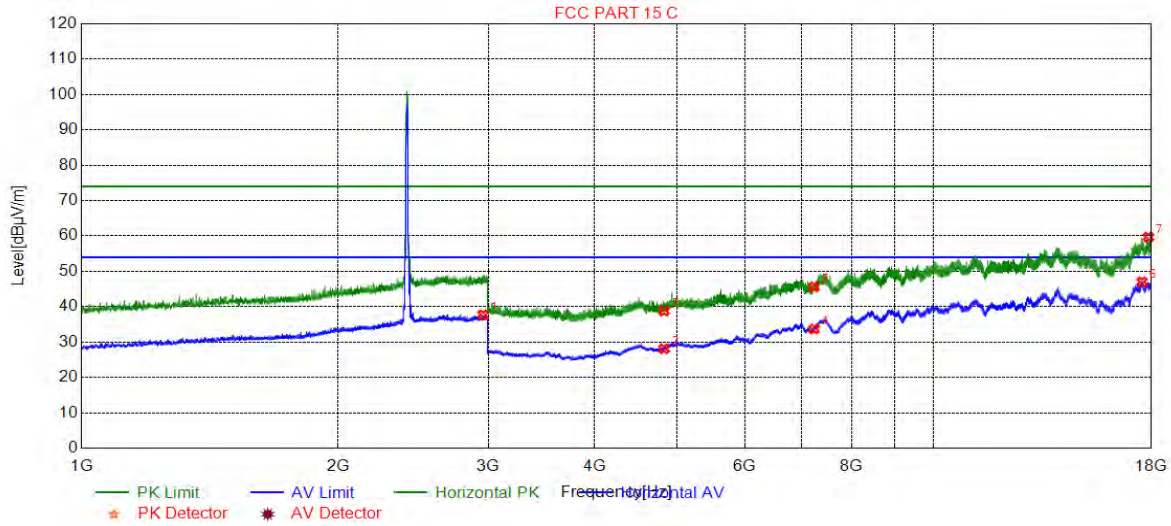


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**4.9.2.1.4 802.11B\_Lowest Channel\_Horizontal**



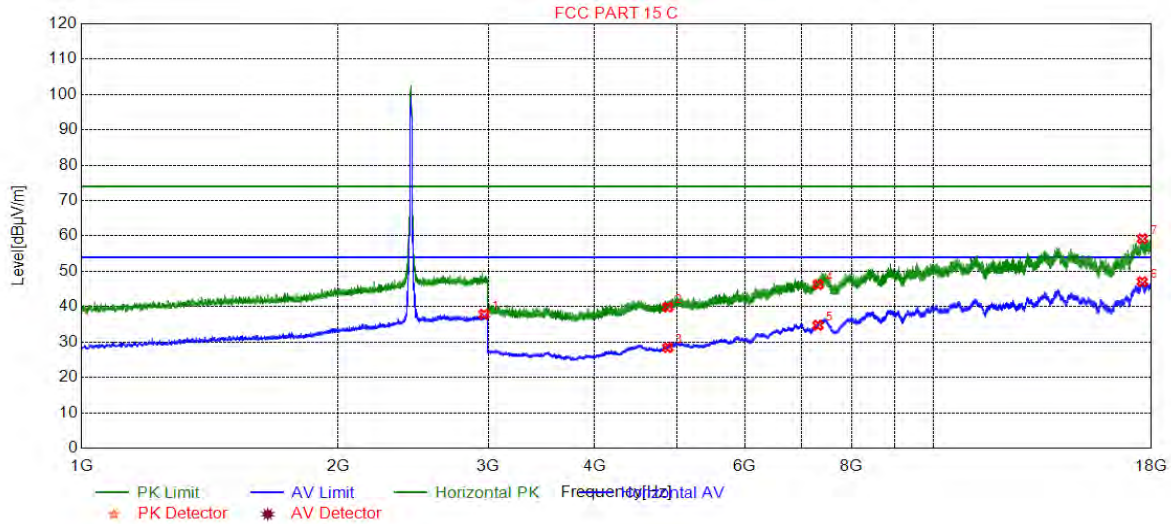
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2958.48	37.72	2.30	54.00	16.28	150	108	Horizontal
2	4824.00	28.10	-20.09	54.00	25.90	150	272	Horizontal
3	4824.00	38.78	-20.09	74.00	35.22	150	342	Horizontal
4	7236.00	33.69	-12.40	54.00	20.31	150	192	Horizontal
5	7236.00	45.61	-12.40	74.00	28.39	150	240	Horizontal
6	17546.4	47.03	0.94	54.00	6.97	150	103	Horizontal
7	17849.9	59.69	-0.94	74.00	14.31	150	331	Horizontal



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**4.9.2.1.5 802.11B\_ Middle Channel\_ Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2965.99	37.87	2.31	54.00	16.13	150	114	Horizontal
2	4874.00	39.89	-19.37	74.00	34.11	150	245	Horizontal
3	4874.00	28.44	-19.37	54.00	25.56	150	147	Horizontal
4	7311.00	46.26	-11.50	74.00	27.74	150	326	Horizontal
5	7311.00	34.74	-11.50	54.00	19.26	150	326	Horizontal
6	17554.4	47.08	1.05	54.00	6.92	150	160	Horizontal
7	17557.9	59.22	1.09	74.00	14.78	150	273	Horizontal

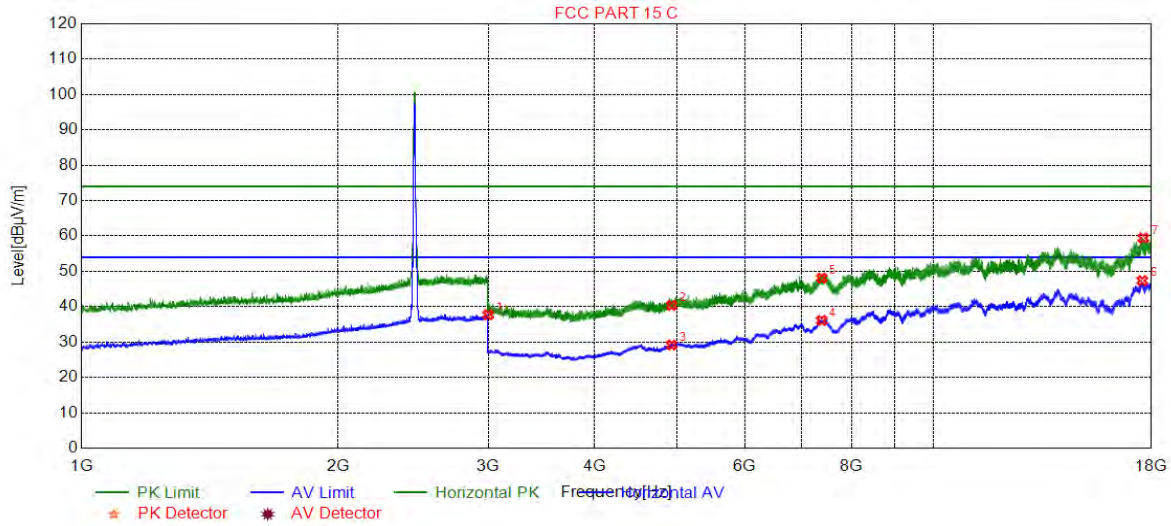


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**4.9.2.1.6 802.11B\_Highest Channel\_Horizontal**



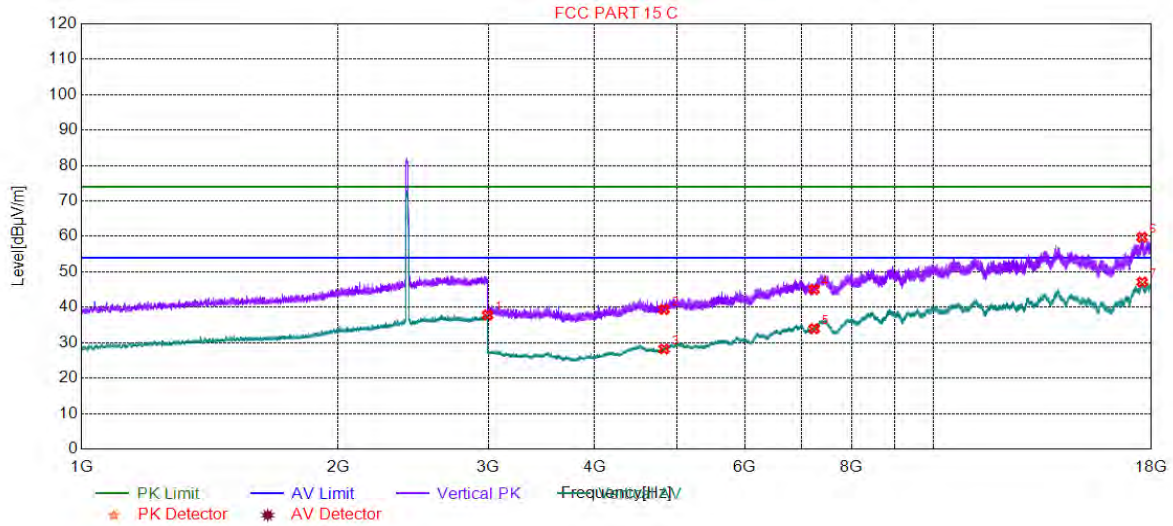
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	3000.00	37.71	2.33	54.00	16.29	150	105	Horizontal
2	4924.00	40.35	-18.87	74.00	33.65	150	221	Horizontal
3	4924.00	29.16	-18.87	54.00	24.84	150	342	Horizontal
4	7386.00	36.10	-10.72	54.00	17.90	150	258	Horizontal
5	7386.00	48.10	-10.72	74.00	25.90	150	221	Horizontal
6	17553.4	47.37	1.03	54.00	6.63	150	132	Horizontal
7	17606.9	59.41	1.45	74.00	14.59	150	132	Horizontal



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**4.9.2.1.7 802.11G\_Lowest Channel\_Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2994.99	37.80	2.33	54.00	16.20	150	80	Vertical
2	4824.00	39.39	-20.09	74.00	34.61	150	67	Vertical
3	4824.00	28.23	-20.09	54.00	25.77	150	19	Vertical
4	7236.00	45.06	-12.40	74.00	28.94	150	0	Vertical
5	7236.00	33.96	-12.40	54.00	20.04	150	178	Vertical
6	17541.9	59.78	0.89	74.00	14.22	150	246	Vertical
7	17551.4	47.13	1.01	54.00	6.87	150	302	Vertical

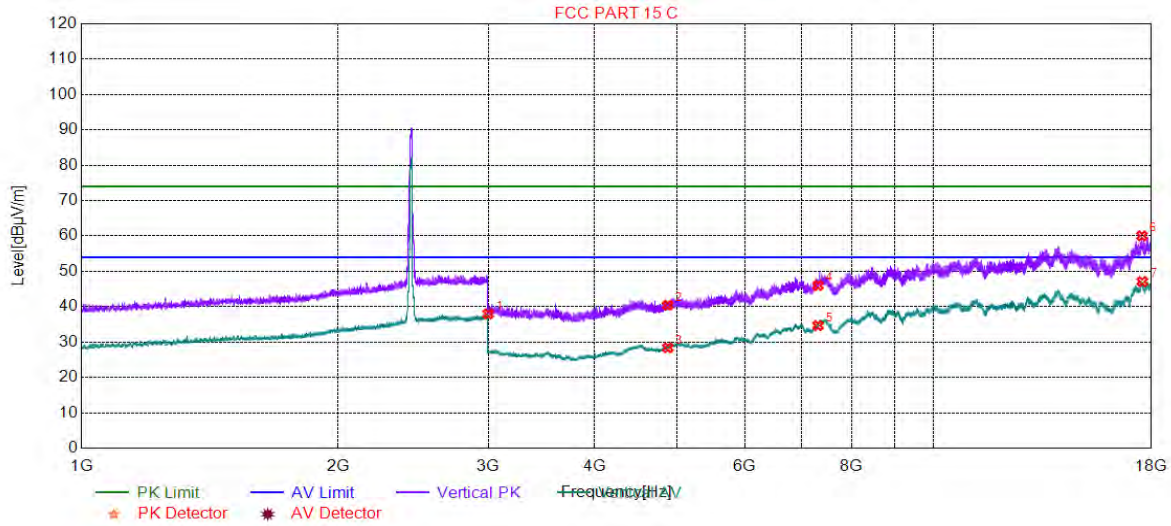


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**4.9.2.1.8 802.11G\_Middle Channel\_Vertical**



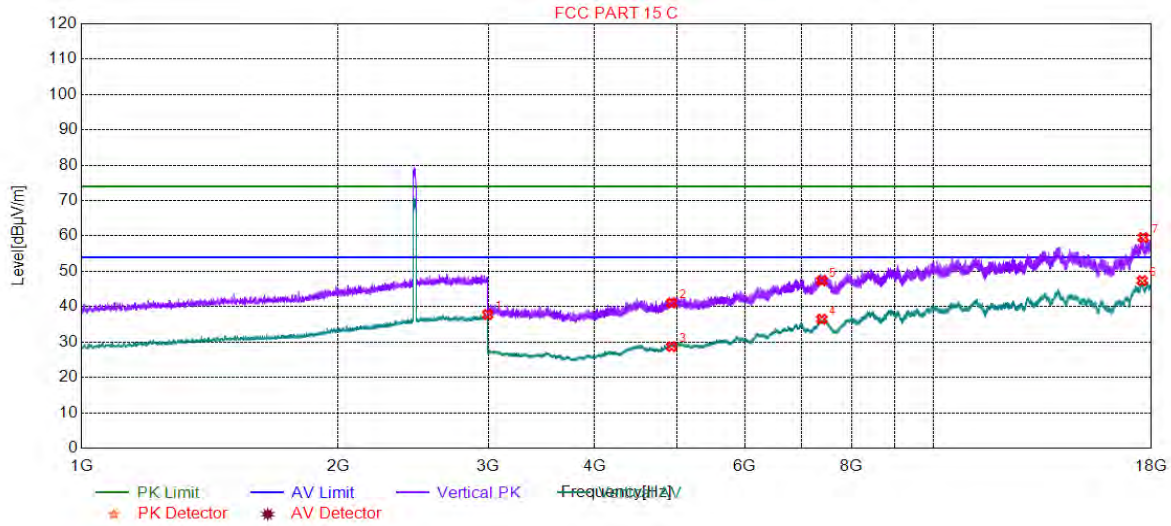
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	3000.00	37.95	2.33	54.00	16.05	150	17	Vertical
2	4874.00	40.42	-19.37	74.00	33.58	150	52	Vertical
3	4874.00	28.40	-19.37	54.00	25.60	150	133	Vertical
4	7311.00	46.00	-11.50	74.00	28.00	150	133	Vertical
5	7311.00	34.67	-11.50	54.00	19.33	150	198	Vertical
6	17542.9	60.04	0.90	74.00	13.96	150	218	Vertical
7	17556.4	47.11	1.07	54.00	6.89	150	104	Vertical



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**4.9.2.1.9 802.11G\_Highest Channel\_Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2995.99	37.78	2.33	54.00	16.22	150	127	Vertical
2	4924.00	41.08	-18.87	74.00	32.92	150	3	Vertical
3	4924.00	28.72	-18.87	54.00	25.28	150	342	Vertical
4	7386.00	36.46	-10.72	54.00	17.54	150	34	Vertical
5	7386.00	47.34	-10.72	74.00	26.66	150	342	Vertical
6	17551.4	47.37	1.01	54.00	6.63	150	18	Vertical
7	17605.9	59.55	1.47	74.00	14.45	150	304	Vertical

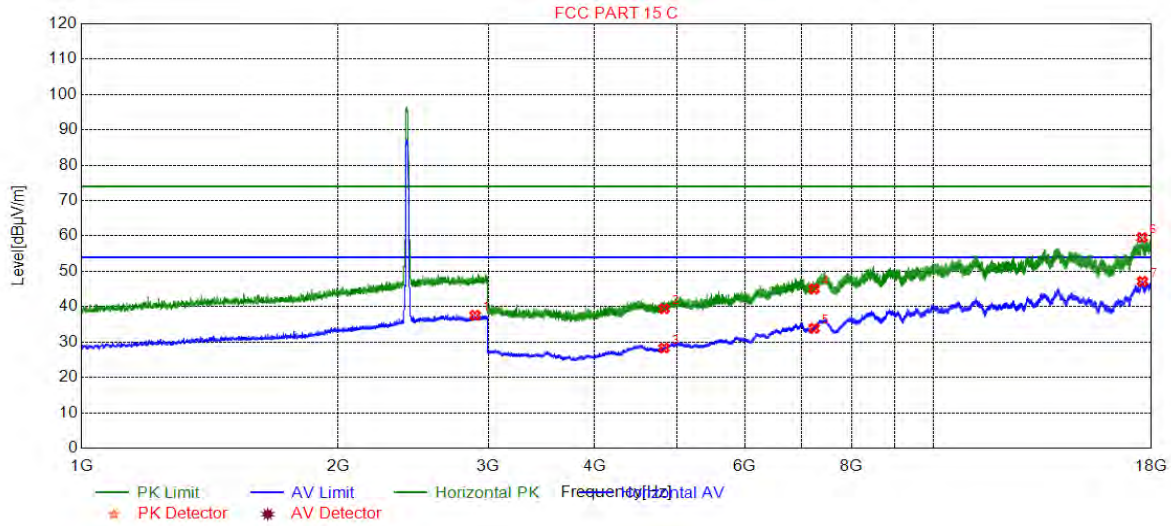


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**4.9.2.1.10 802.11G\_Lowest Channel\_Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2895.47	37.56	2.25	54.00	16.44	150	0	Horizontal
2	4824.00	39.43	-20.09	74.00	34.57	150	0	Horizontal
3	4824.00	28.31	-20.09	54.00	25.69	150	92	Horizontal
4	7236.00	45.03	-12.40	74.00	28.97	150	274	Horizontal
5	7236.00	33.91	-12.40	54.00	20.09	150	191	Horizontal
6	17543.4	59.54	0.91	74.00	14.46	150	245	Horizontal
7	17564.4	47.14	1.18	54.00	6.86	150	302	Horizontal

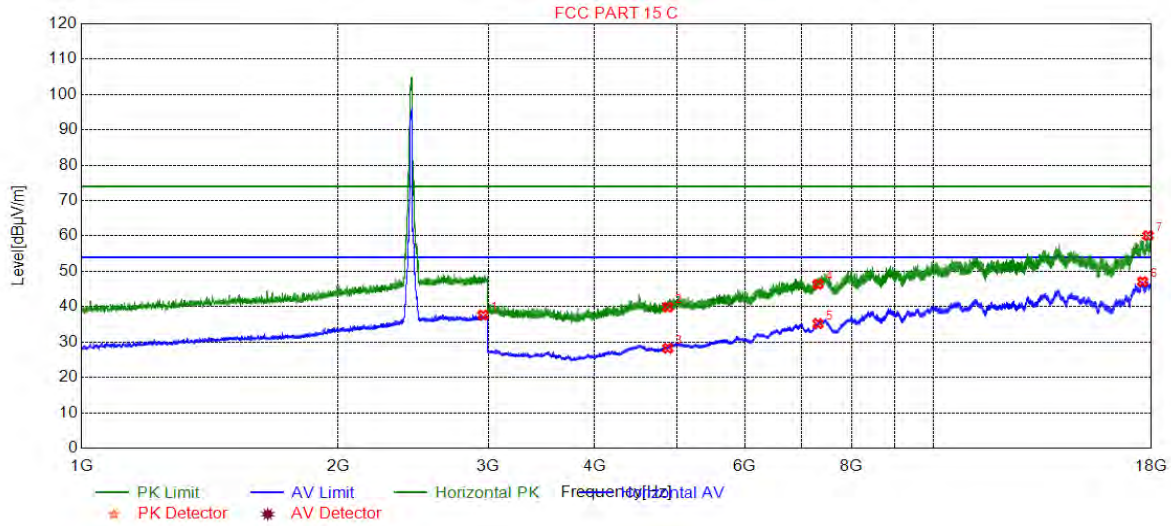


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**4.9.2.1.11 802.11G\_Middle Channel\_Horizontal**



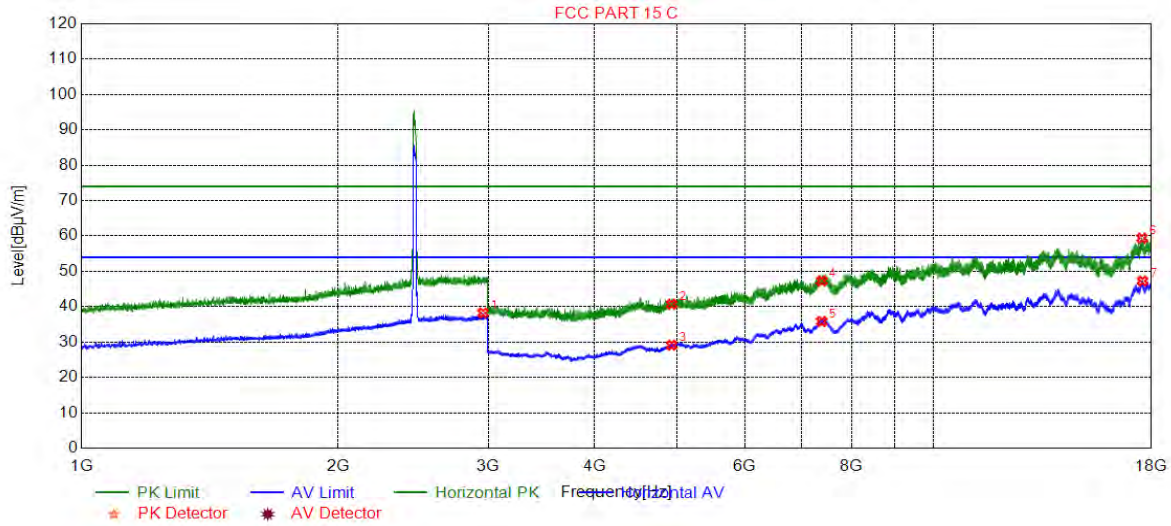
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2957.98	37.64	2.30	54.00	16.36	150	208	Horizontal
2	4874.00	39.87	-19.37	74.00	34.13	150	228	Horizontal
3	4874.00	28.25	-19.37	54.00	25.75	150	228	Horizontal
4	7311.00	46.35	-11.50	74.00	27.65	150	38	Horizontal
5	7311.00	35.22	-11.50	54.00	18.78	150	277	Horizontal
6	17572.4	47.09	1.28	54.00	6.91	150	196	Horizontal
7	17838.4	60.10	-0.90	74.00	13.90	150	196	Horizontal



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**4.9.2.1.12 802.11G\_Highest Channel\_Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2957.48	38.24	2.30	54.00	15.76	150	81	Horizontal
2	4924.00	40.71	-18.87	74.00	33.29	150	277	Horizontal
3	4924.00	29.12	-18.87	54.00	24.88	150	190	Horizontal
4	7386.00	47.30	-10.72	74.00	26.70	150	123	Horizontal
5	7386.00	35.82	-10.72	54.00	18.18	150	11	Horizontal
6	17543.4	59.40	0.91	74.00	14.60	150	358	Horizontal
7	17568.4	47.27	1.23	54.00	6.73	150	18	Horizontal

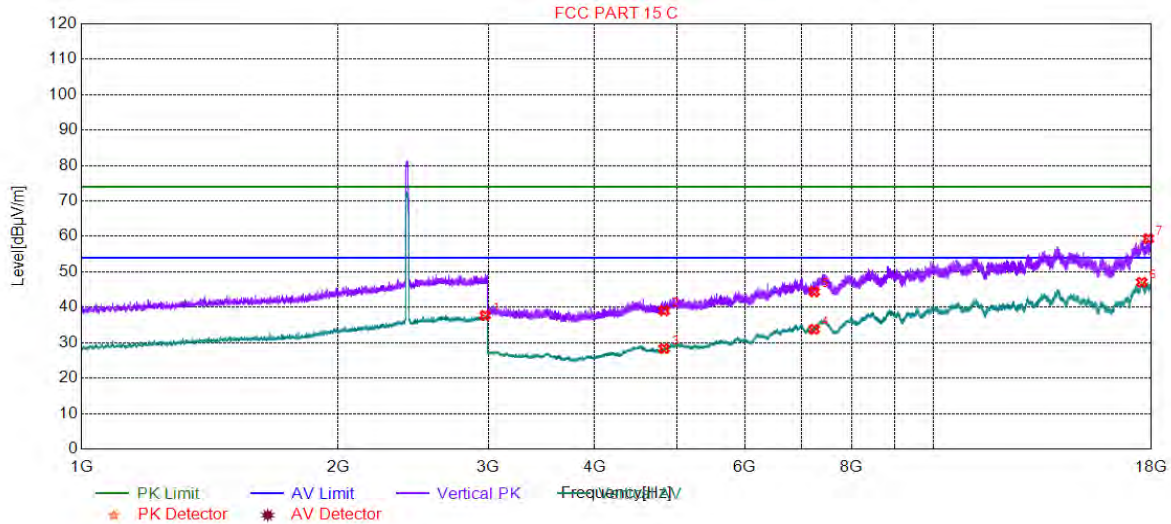


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**4.9.2.1.13 802.11N20\_Lowest Channel\_Vertical**



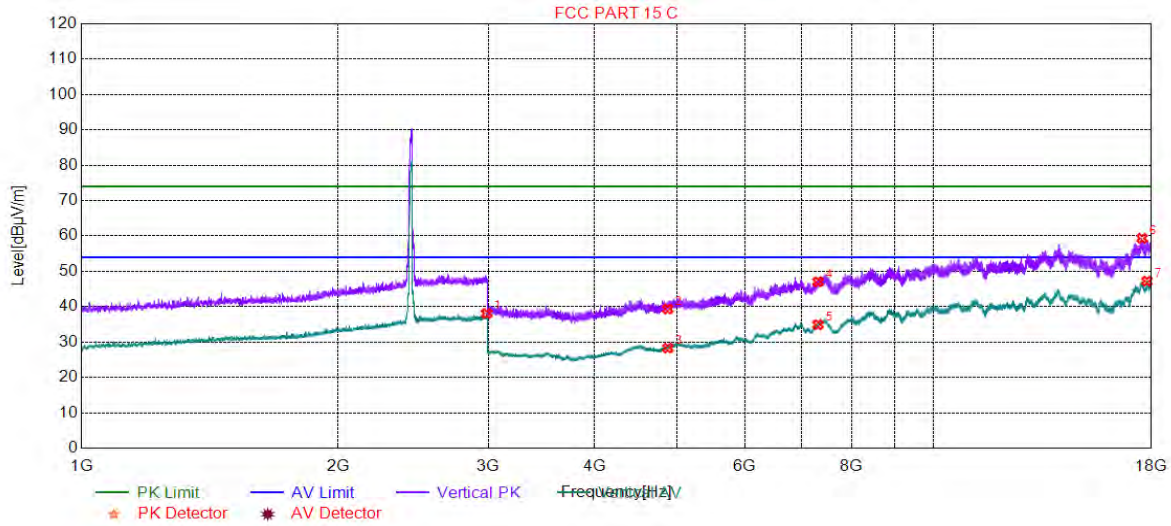
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2974.49	37.72	2.31	54.00	16.28	150	33	Vertical
2	4824.00	39.01	-20.09	74.00	34.99	150	179	Vertical
3	4824.00	28.36	-20.09	54.00	25.64	150	277	Vertical
4	7236.00	33.78	-12.40	54.00	20.22	150	51	Vertical
5	7236.00	44.39	-12.40	74.00	29.61	150	179	Vertical
6	17530.9	47.08	0.75	54.00	6.92	150	218	Vertical
7	17846.4	59.37	-0.93	74.00	14.63	150	104	Vertical



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**4.9.2.1.14 802.11N20\_Middle Channel\_Vertical**



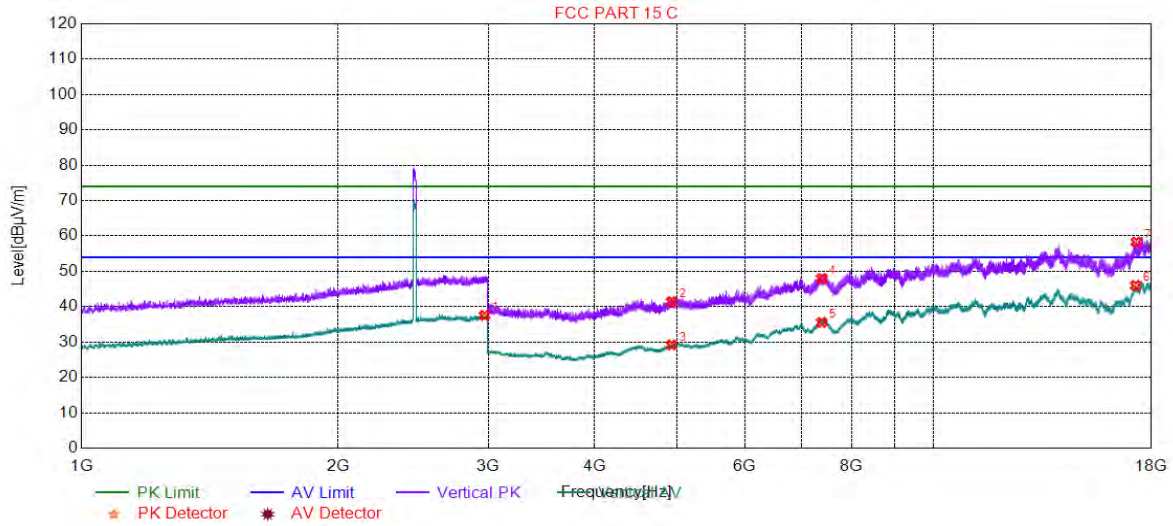
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2987.99	38.07	2.32	54.00	15.93	150	41	Vertical
2	4874.00	39.35	-19.37	74.00	34.65	150	211	Vertical
3	4874.00	28.30	-19.37	54.00	25.70	150	179	Vertical
4	7311.00	47.07	-11.50	74.00	26.93	150	114	Vertical
5	7311.00	34.93	-11.50	54.00	19.07	150	342	Vertical
6	17543.9	59.34	0.91	74.00	14.66	150	188	Vertical
7	17778.9	47.22	-0.81	54.00	6.78	150	245	Vertical



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**4.9.2.1.15 802.11N20\_Highest Channel\_Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2970.49	37.54	2.31	54.00	16.46	150	161	Vertical
2	4924.00	41.45	-18.87	74.00	32.55	150	197	Vertical
3	4924.00	29.17	-18.87	54.00	24.83	150	230	Vertical
4	7386.00	47.96	-10.72	74.00	26.04	150	213	Vertical
5	7386.00	35.56	-10.72	54.00	18.44	150	342	Vertical
6	17247.9	46.03	-1.41	54.00	7.97	150	357	Vertical
7	17279.4	58.29	-1.27	74.00	15.71	150	357	Vertical

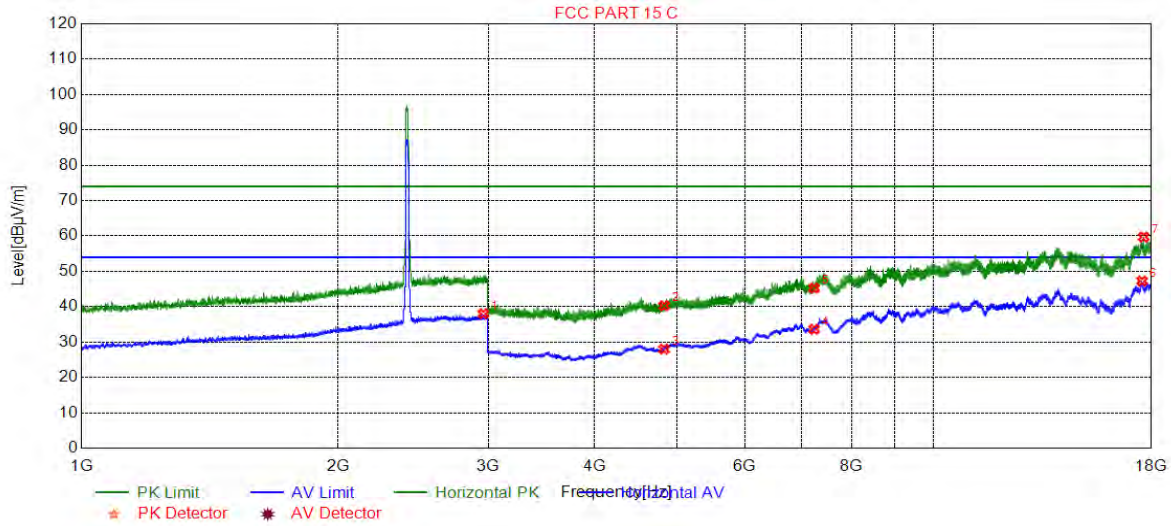


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**4.9.2.1.16 802.11N20\_Lowest Channel\_Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2960.49	38.00	2.30	54.00	16.00	150	208	Horizontal
2	4824.00	40.26	-20.09	74.00	33.74	150	342	Horizontal
3	4824.00	28.01	-20.09	54.00	25.99	150	74	Horizontal
4	7236.00	33.61	-12.40	54.00	20.39	150	0	Horizontal
5	7236.00	45.25	-12.40	74.00	28.75	150	0	Horizontal
6	17546.9	47.26	0.95	54.00	6.74	150	332	Horizontal
7	17624.4	59.71	0.99	74.00	14.29	150	247	Horizontal

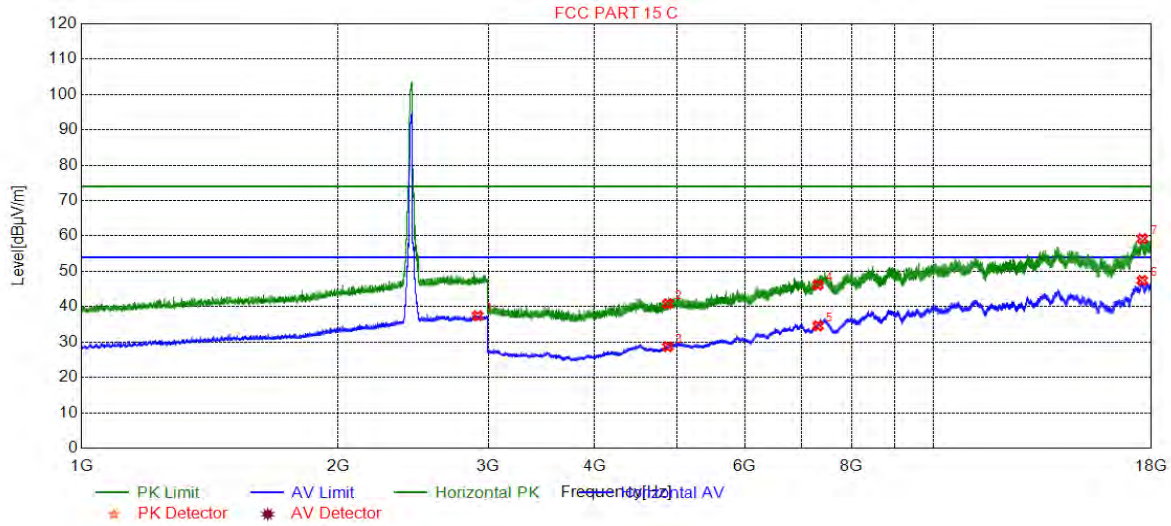


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**4.9.2.1.17 802.11N20\_Middle Channel\_Horizontal**



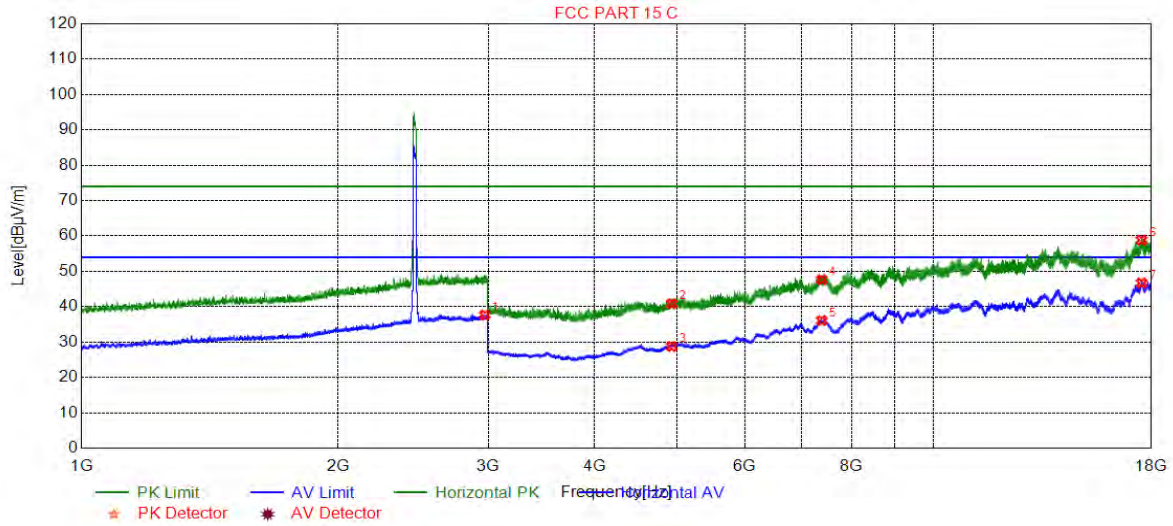
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2915.97	37.43	2.27	54.00	16.57	150	265	Horizontal
2	4874.00	40.84	-19.37	74.00	33.16	150	237	Horizontal
3	4874.00	28.69	-19.37	54.00	25.31	150	342	Horizontal
4	7311.00	46.16	-11.50	74.00	27.84	150	326	Horizontal
5	7311.00	34.58	-11.50	54.00	19.42	150	105	Horizontal
6	17555.4	47.41	1.06	54.00	6.59	150	18	Horizontal
7	17557.9	59.22	1.09	74.00	14.78	150	310	Horizontal



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**4.9.2.1.18 802.11N20\_Highest Channel\_Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2971.99	37.67	2.31	54.00	16.33	150	335	Horizontal
2	4924.00	40.84	-18.87	74.00	33.16	150	228	Horizontal
3	4924.00	28.77	-18.87	54.00	25.23	150	261	Horizontal
4	7386.00	47.65	-10.72	74.00	26.35	150	196	Horizontal
5	7386.00	36.07	-10.72	54.00	17.93	150	245	Horizontal
6	17519.4	58.83	0.60	74.00	15.17	150	47	Horizontal
7	17525.9	46.71	0.68	54.00	7.29	150	274	Horizontal



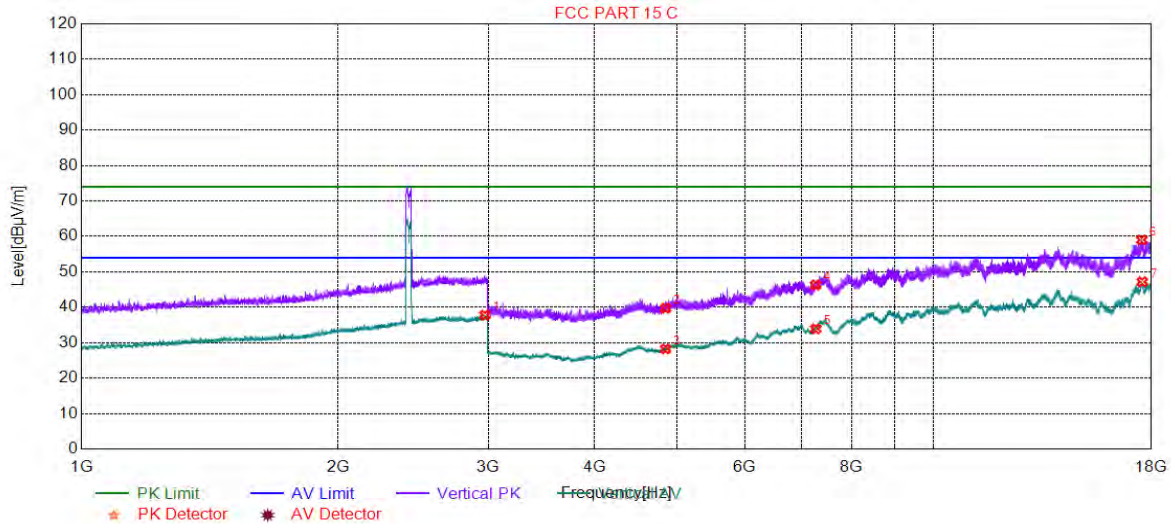
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**4.9.2.1.19 802.11N40\_Lowest Channel\_Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2973.99	37.80	2.31	54.00	16.20	150	17	Vertical
2	4844.00	39.73	-19.80	74.00	34.27	150	148	Vertical
3	4844.00	28.25	-19.80	54.00	25.75	150	4	Vertical
4	7266.00	46.30	-12.03	74.00	27.70	150	278	Vertical
5	7266.00	33.92	-12.03	54.00	20.08	150	99	Vertical
6	17534.4	59.01	0.79	74.00	14.99	150	113	Vertical
7	17553.9	47.18	1.04	54.00	6.82	150	113	Vertical



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