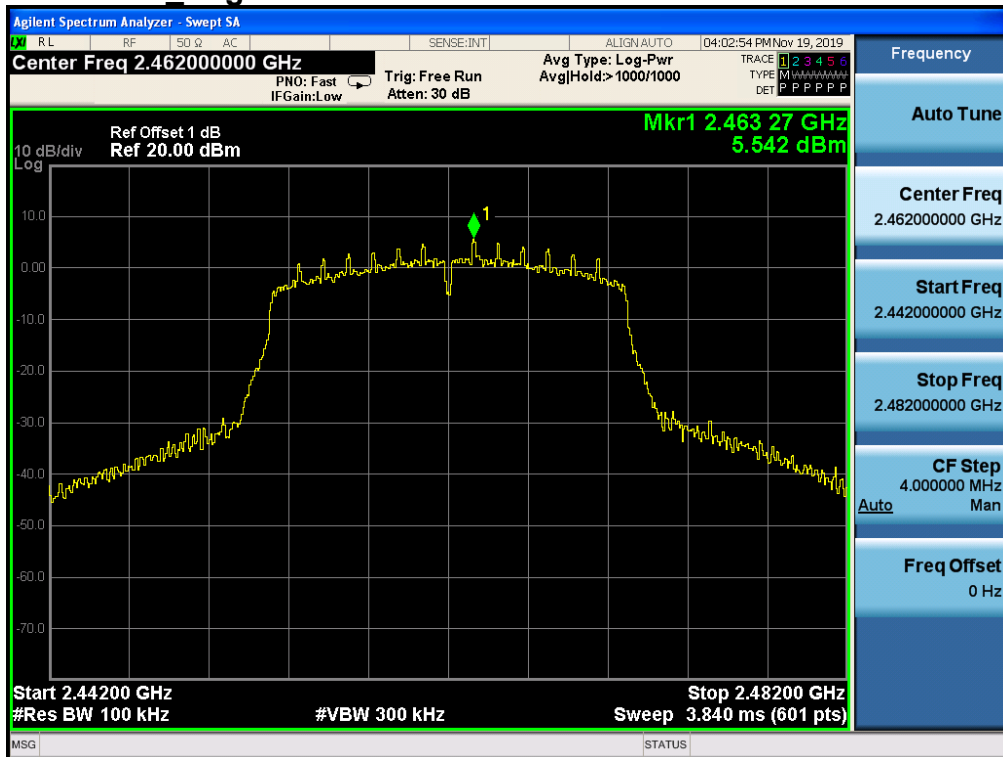
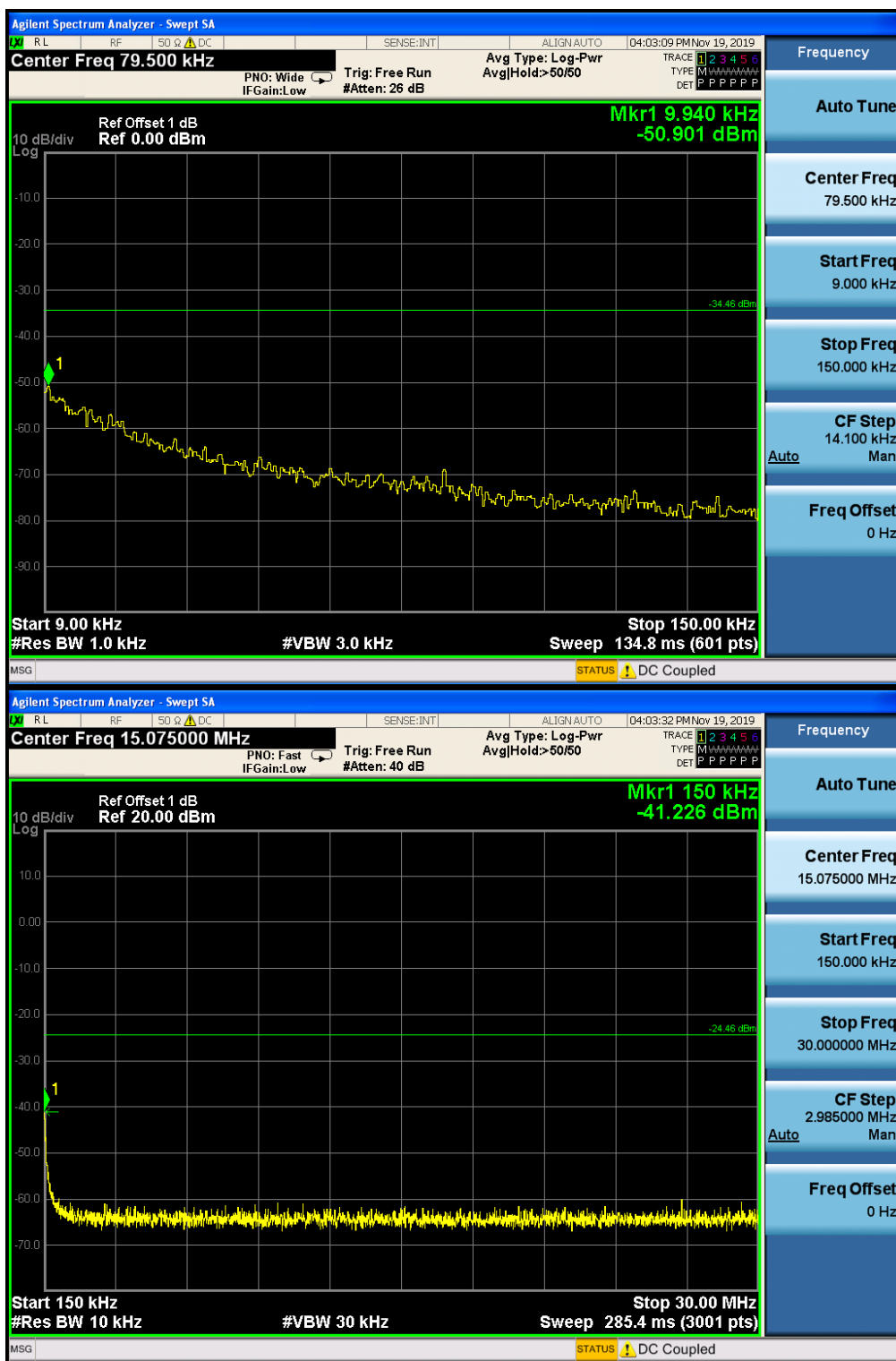


#### 4.8.1.1.9 802.11 N20\_Highest Channel



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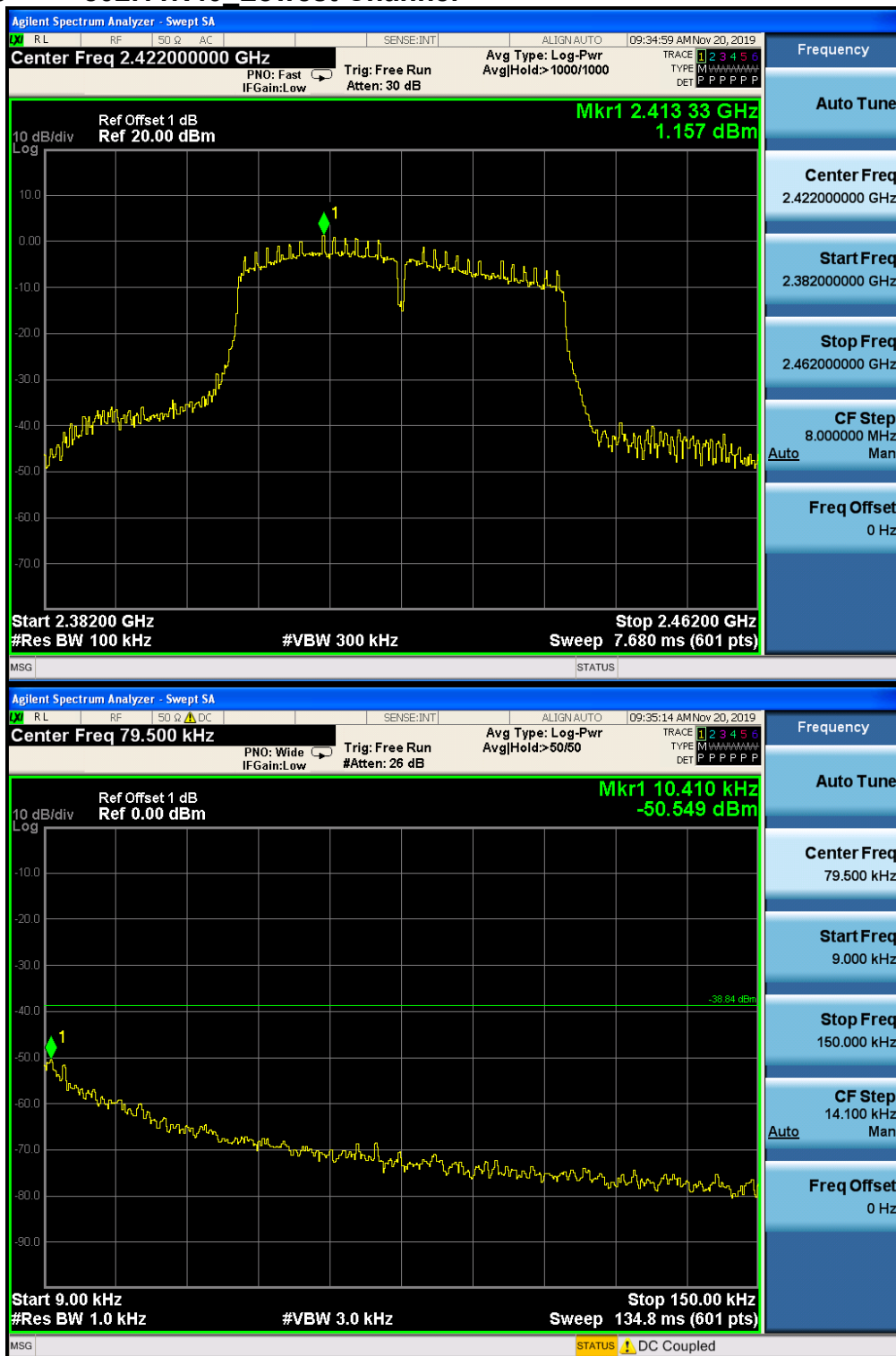


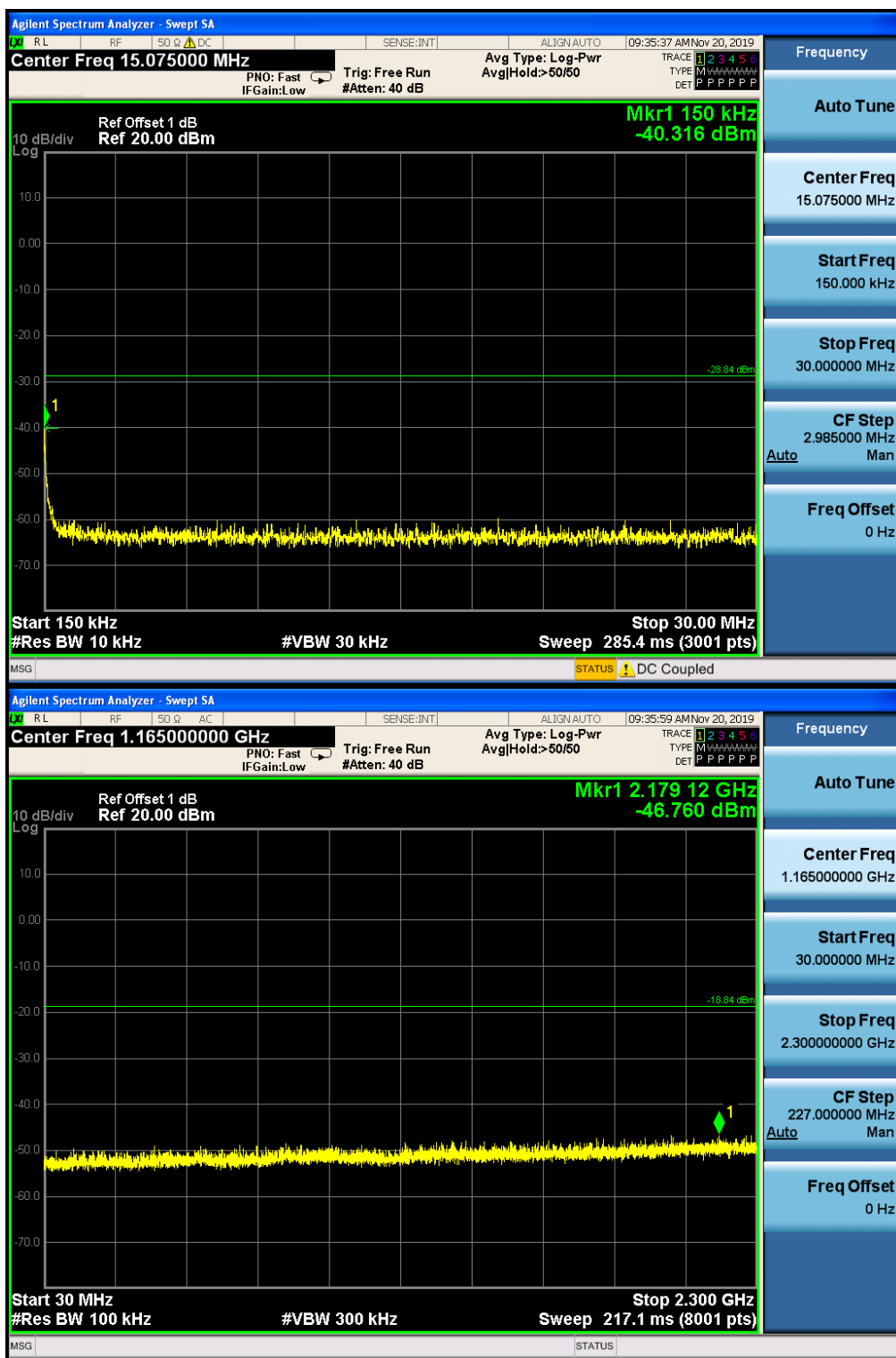




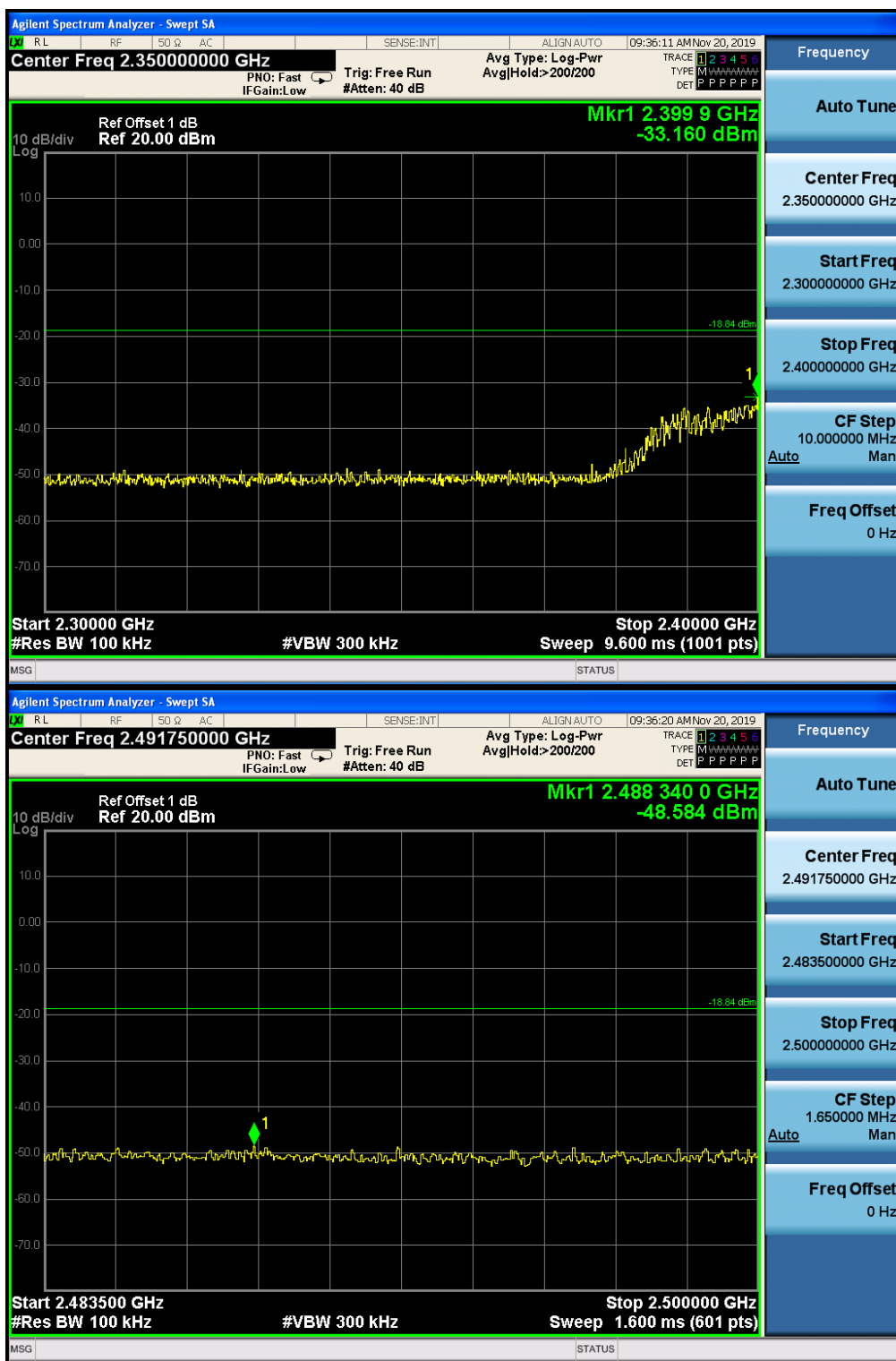


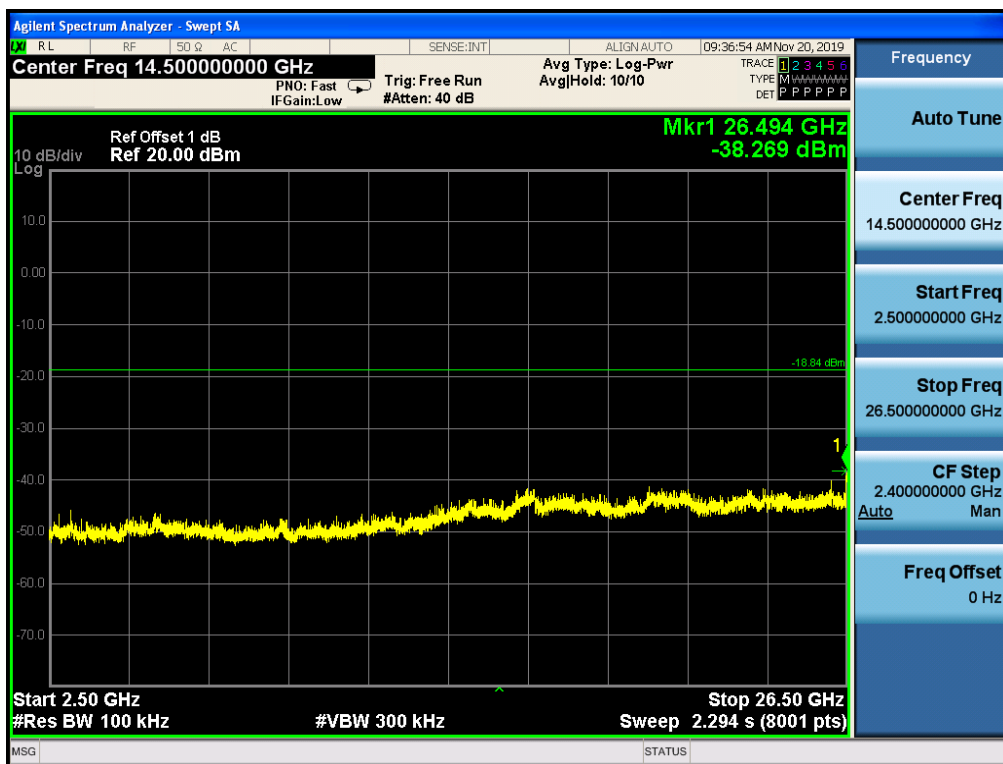
## 4.8.1.1.10 802.11N40 Lowest Channel



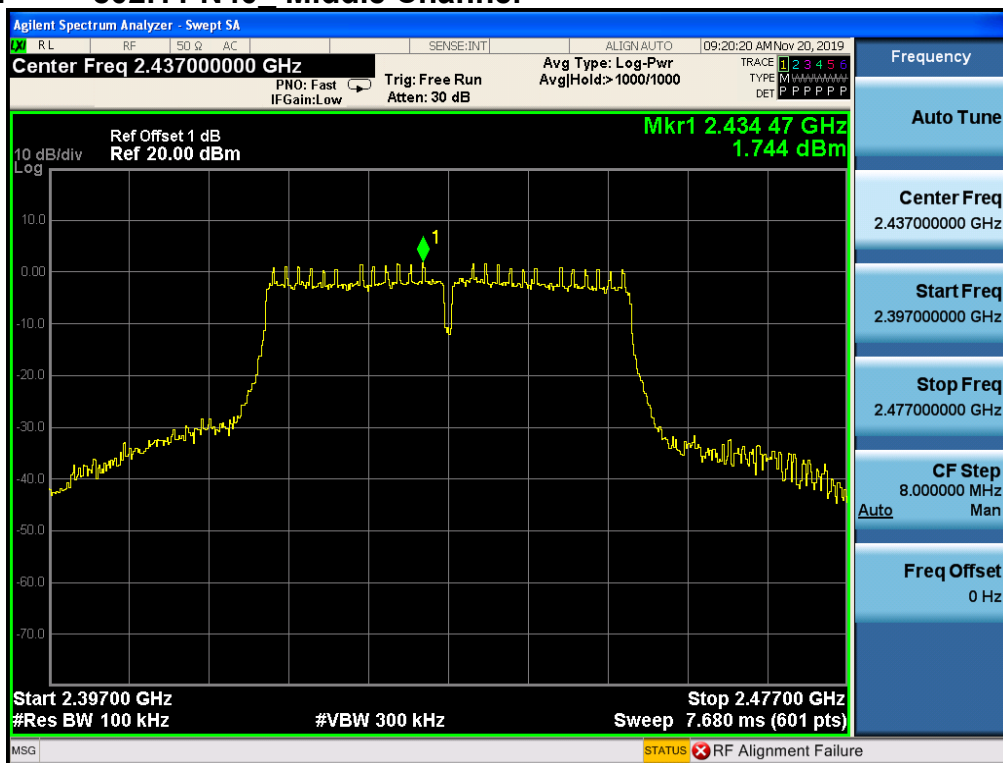




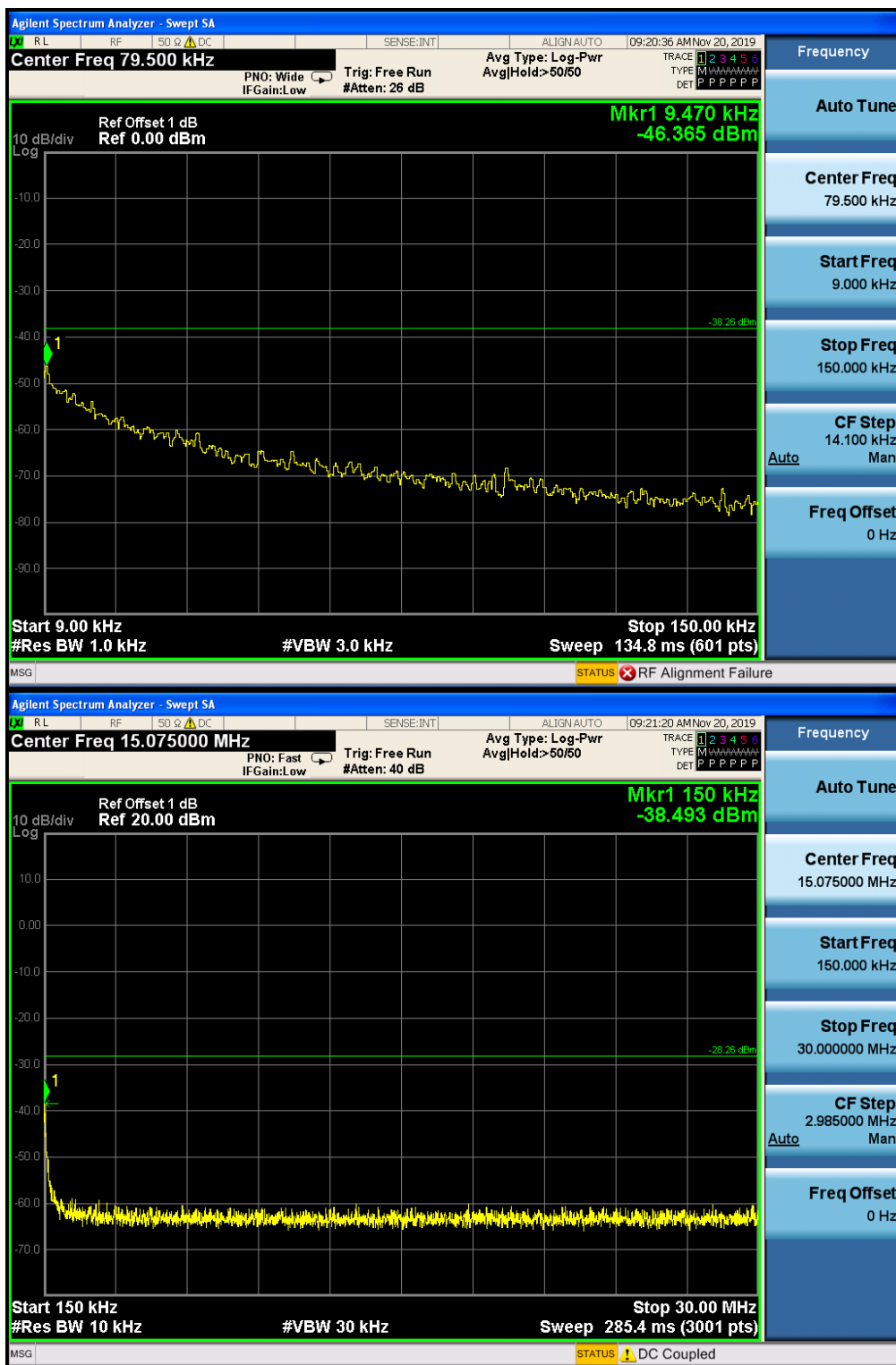


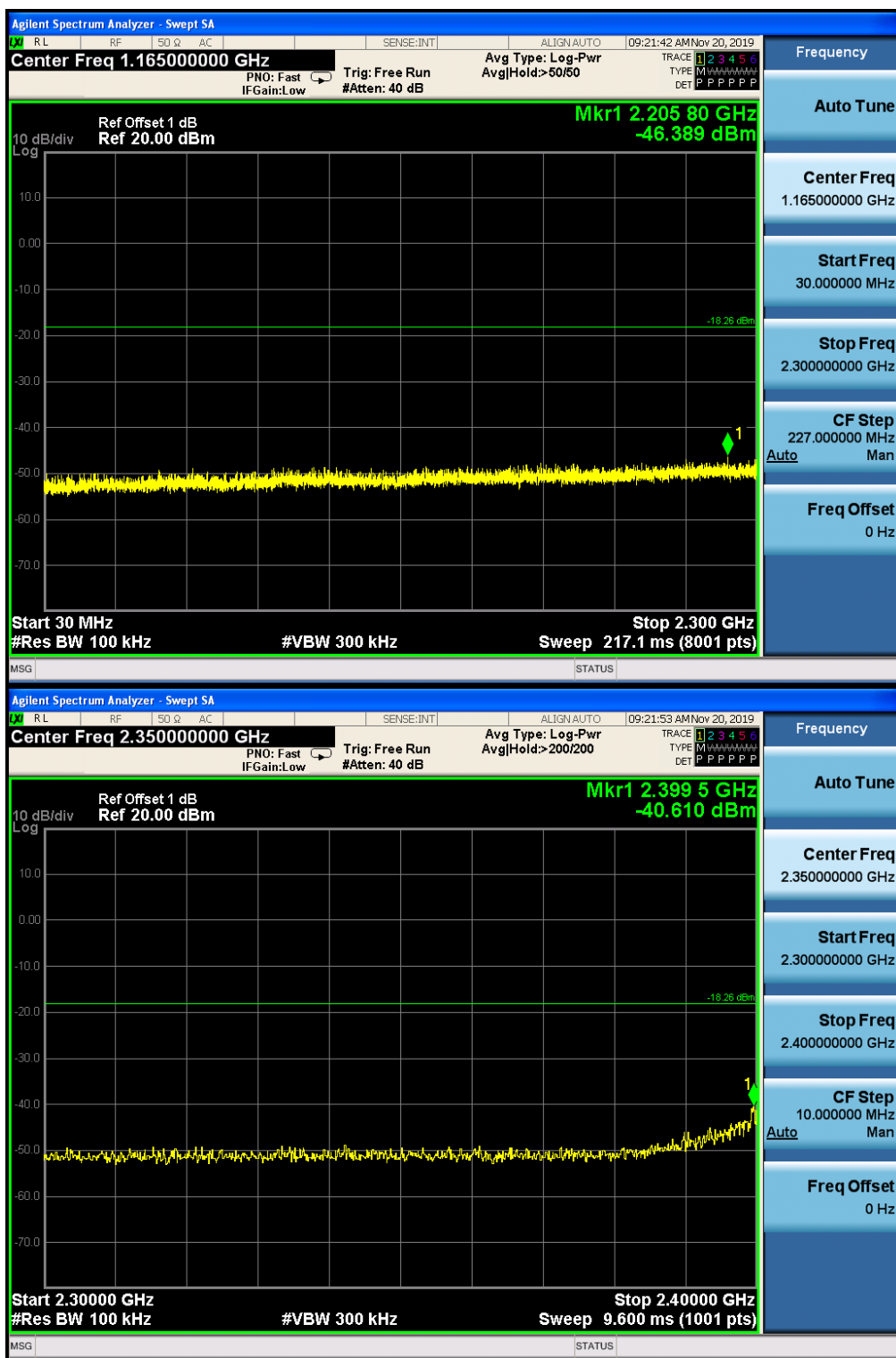


## 4.8.1.1.11 802.11 N40\_Middle Channel





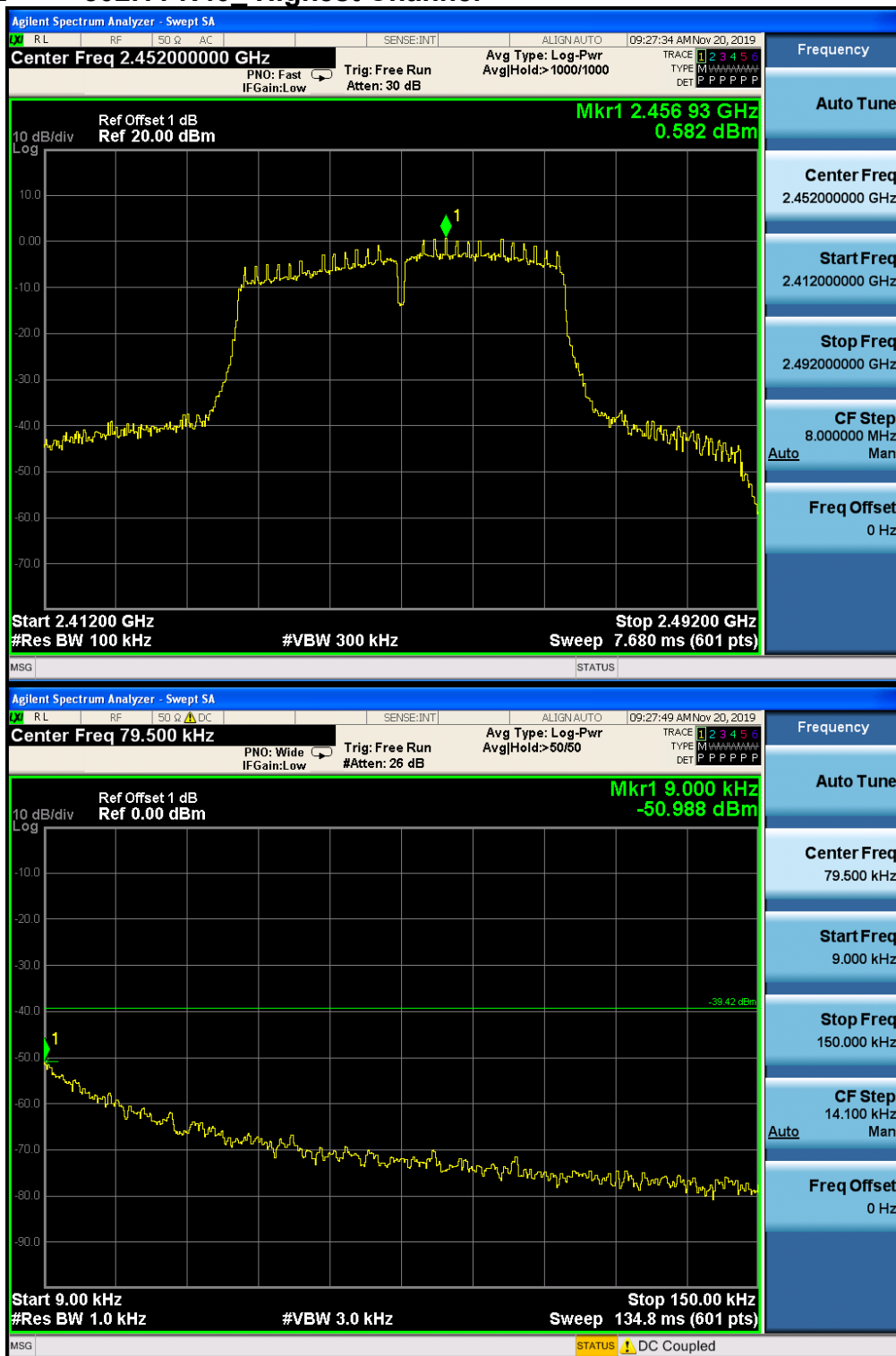


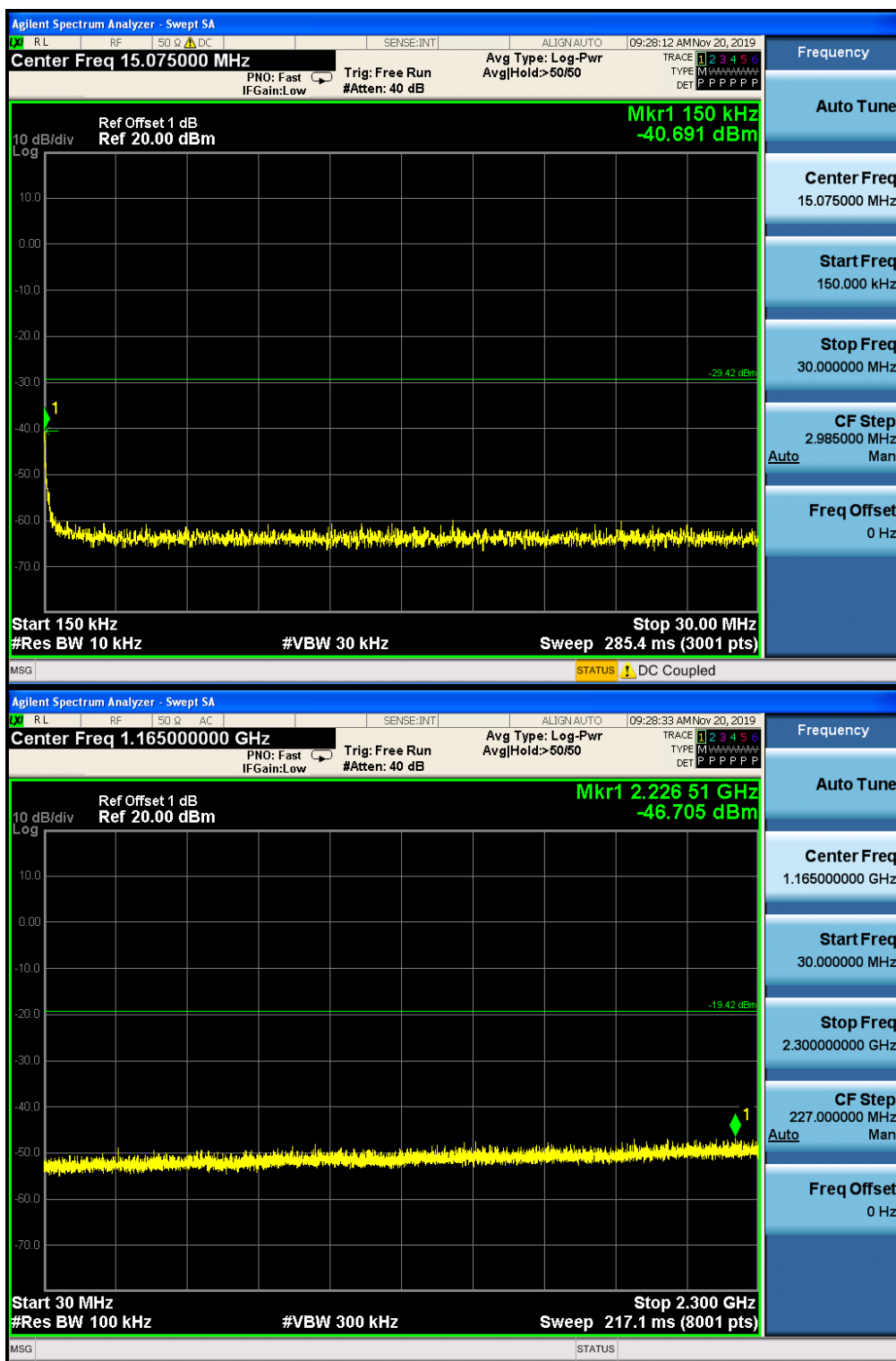






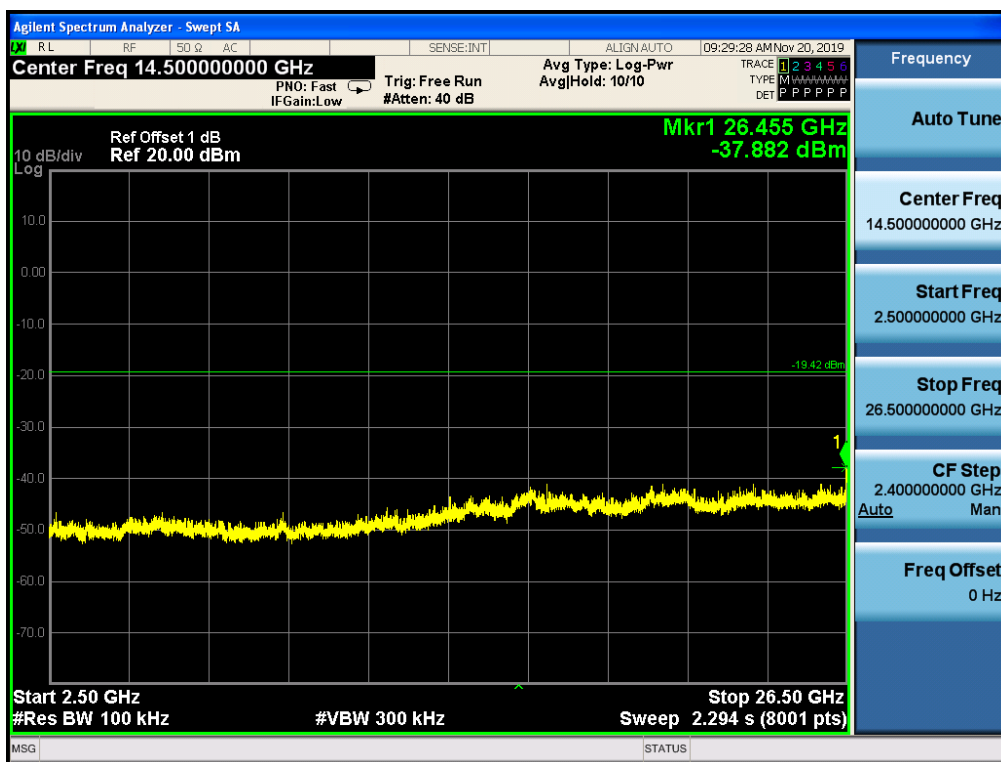
#### 4.8.1.1.12 802.11 N40\_Highest Channel











## 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.



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## 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 or 10m (Semi-Anechoic Chamber)				
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:	
-------------	--



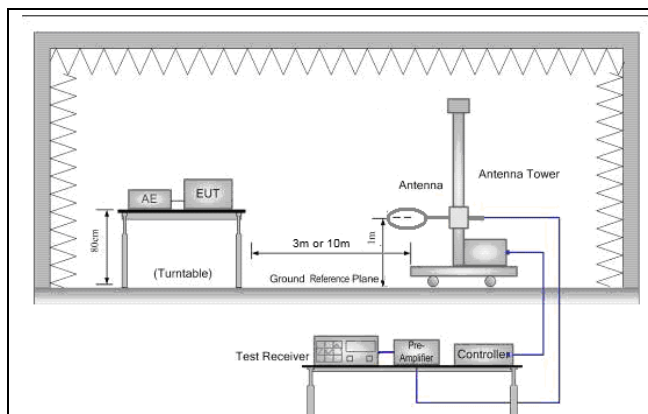


Figure 1. Below 30MHz

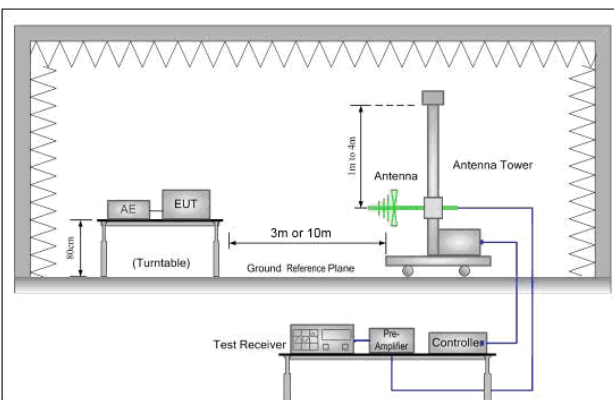


Figure 2. 30MHz to 1GHz

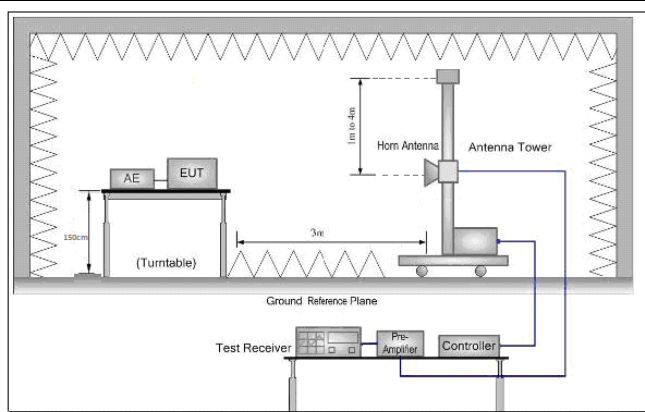


Figure 3. Above 1 GHz

**Test Procedure:**

- 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.
- 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.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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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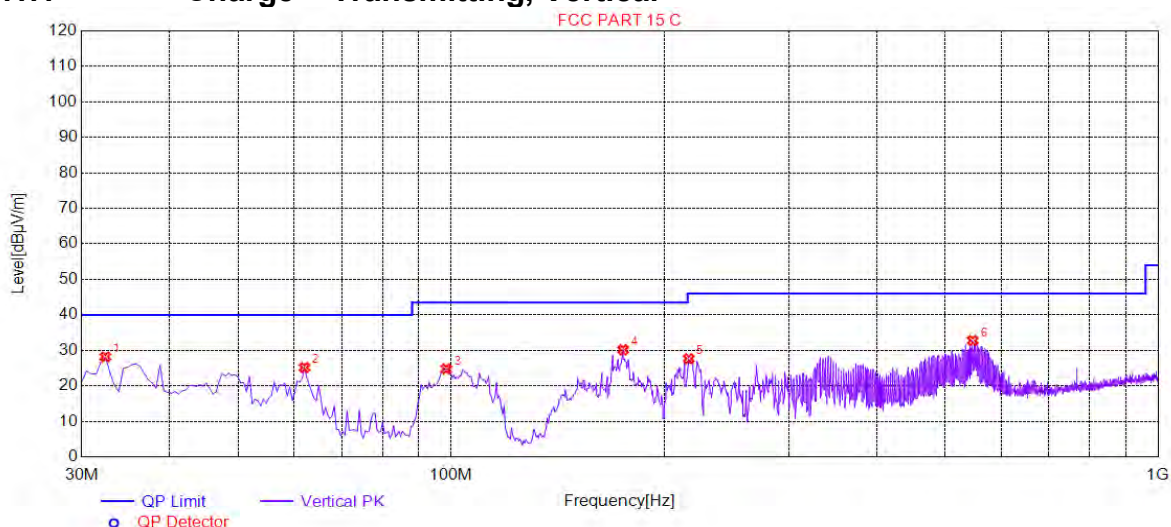
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#### 4.9.1 Radiated emission below 1GHz

##### 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	32.4262	28.18	-32.80	40.00	11.82	100	173	Vertical
2	62.0260	25.17	-32.16	40.00	14.83	100	302	Vertical
3	98.4192	24.77	-31.96	43.50	18.73	100	99	Vertical
4	175.0875	30.16	-33.25	43.50	13.34	100	348	Vertical
5	216.8184	27.65	-30.42	46.00	18.35	100	28	Vertical
6	546.7834	32.79	-21.53	46.00	13.21	100	139	Vertical



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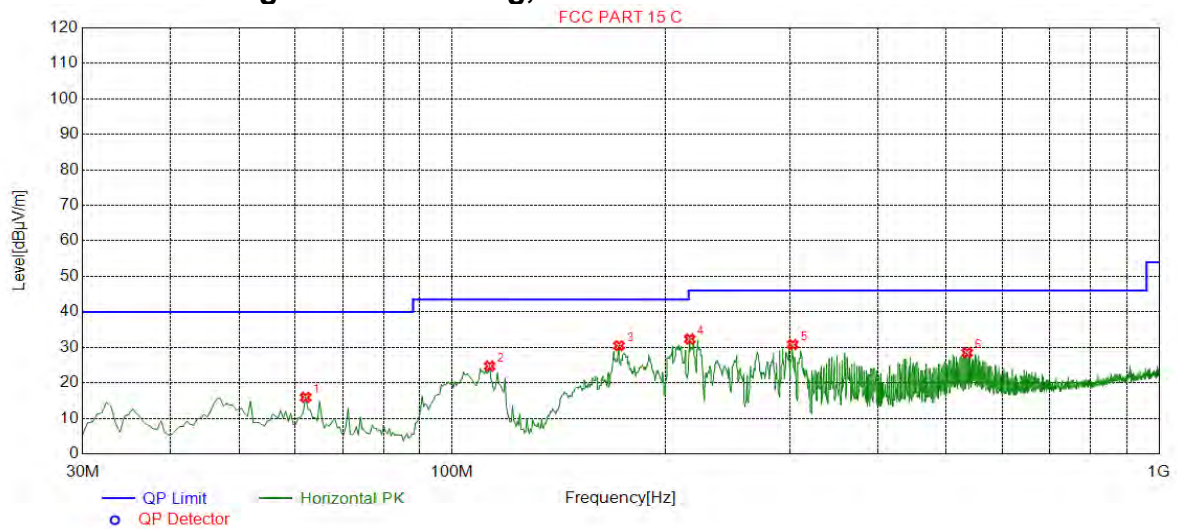
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#### 4.9.1.2 Charge + Transmitting, Horizontal



#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	62.0260	15.92	-32.16	40.00	24.08	100	344	Horizontal
2	112.9765	24.73	-32.16	43.50	18.77	100	246	Horizontal
3	172.1761	30.47	-33.46	43.50	13.03	100	214	Horizontal
4	216.8184	32.34	-30.42	46.00	13.66	100	217	Horizontal
5	303.1916	30.78	-27.76	46.00	15.22	100	86	Horizontal
6	535.1376	28.50	-21.81	46.00	17.50	100	110	Horizontal

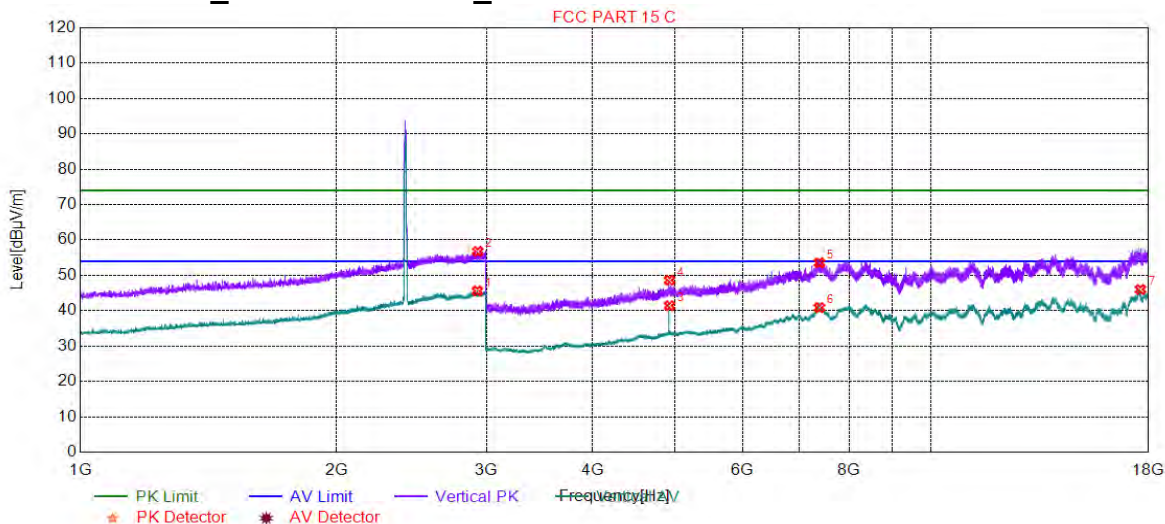




## 4.9.2 Transmitter emission above 1GHz

### 4.9.2.1 ANT1

#### 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	2927.4819	45.59	11.40	54.00	8.41	150	32	Vertical
2	2930.9827	56.78	11.39	74.00	17.22	150	301	Vertical
3	4924.0000	41.40	-14.43	54.00	12.60	150	38	Vertical
4	4924.0000	48.63	-14.43	74.00	25.37	150	148	Vertical
5	7386.0000	53.55	-5.71	74.00	20.45	150	38	Vertical
6	7386.0000	40.87	-5.71	54.00	13.13	150	206	Vertical
7	17605.9803	46.02	1.47	54.00	7.98	150	319	Vertical



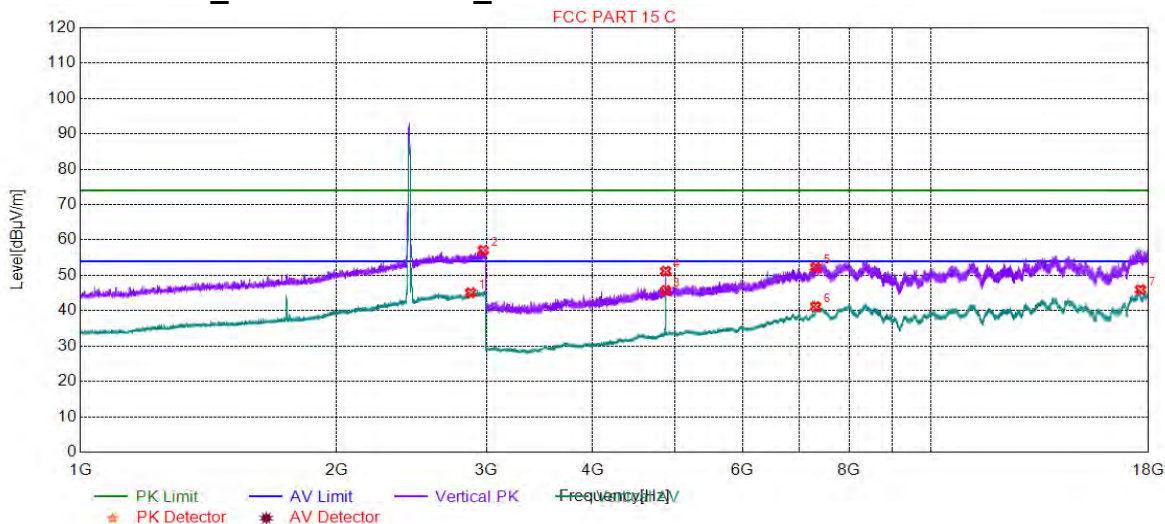
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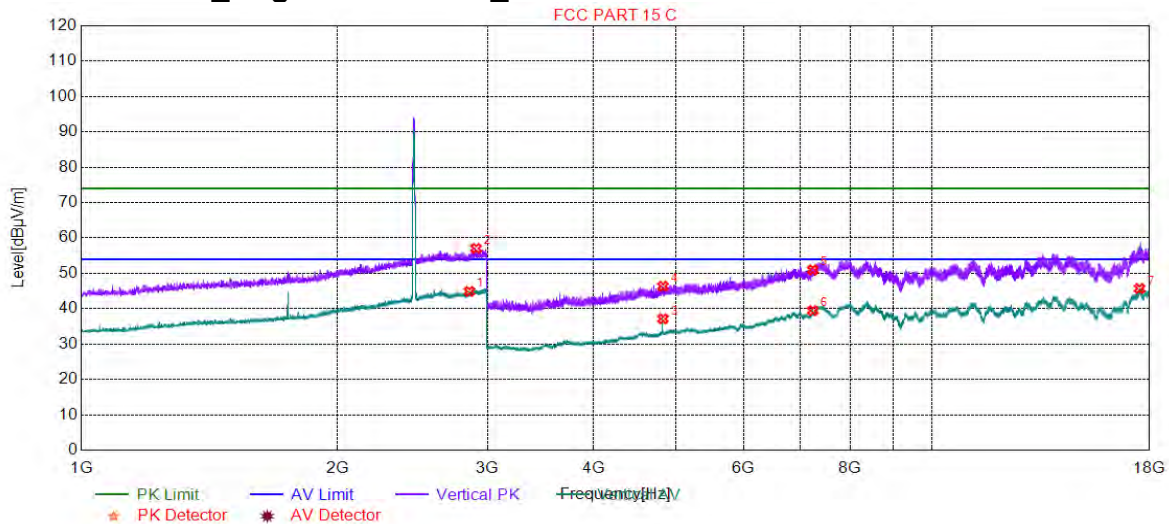
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#### 4.9.2.1.2 802.11B\_ Middle Channel\_ Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2873.9685	45.07	11.21	54.00	8.93	150	112	Vertical
2	2974.4936	57.09	11.37	74.00	16.91	150	54	Vertical
3	4874.0000	45.71	-14.68	54.00	8.29	150	179	Vertical
4	4874.0000	51.19	-14.68	74.00	22.81	150	179	Vertical
5	7311.0000	52.26	-6.24	74.00	21.74	150	342	Vertical
6	7311.0000	41.16	-6.24	54.00	12.84	150	0	Vertical
7	17608.4804	45.96	1.41	54.00	8.04	150	270	Vertical

#### 4.9.2.1.3 802.11B\_ Highest Channel\_ Vertical



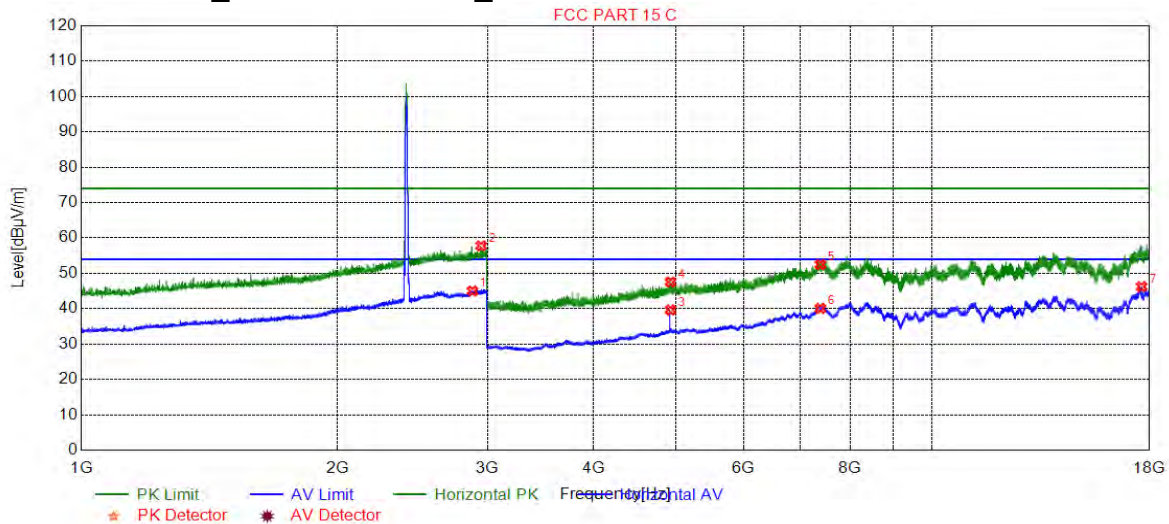
#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2857.4644	44.89	11.08	54.00	9.11	150	256	Vertical
2	2909.9775	57.06	11.41	74.00	16.94	150	33	Vertical
3	4824.0000	37.15	-14.90	54.00	16.85	150	69	Vertical
4	4824.0000	46.34	-14.90	74.00	27.66	150	152	Vertical
5	7236.0000	50.98	-6.82	74.00	23.02	150	342	Vertical
6	7236.0000	39.46	-6.82	54.00	14.54	150	206	Vertical
7	17516.9758	45.70	0.57	54.00	8.30	150	268	Vertical





## 4.9.2.1.4 802.11B\_Lowest Channel\_ Horizontal

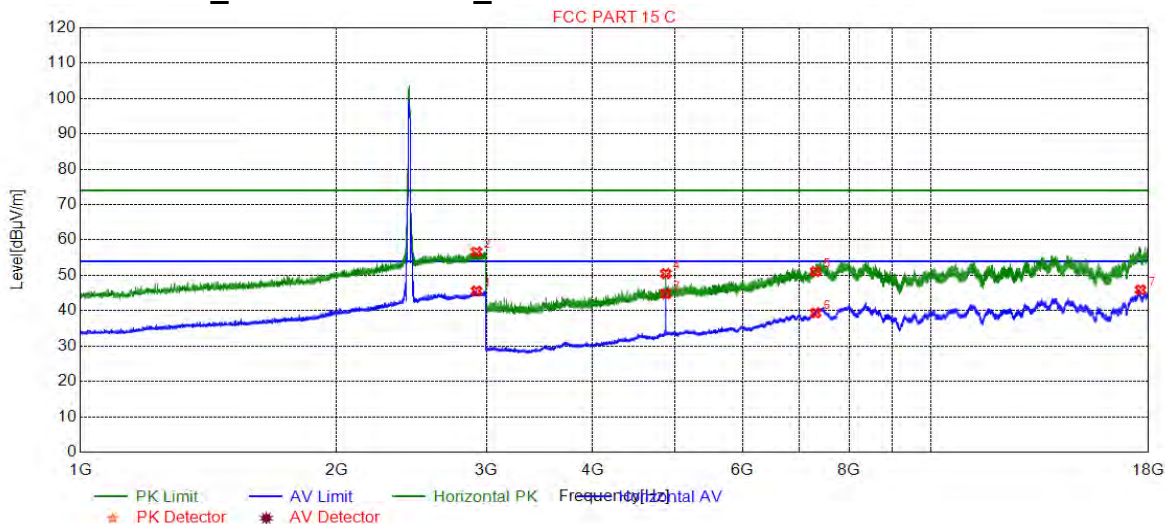


## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2880.9702	45.01	11.26	54.00	8.99	150	183	Horizontal
2	2949.9875	57.75	11.39	74.00	16.25	150	351	Horizontal
3	4924.0000	39.65	-14.43	54.00	14.35	150	342	Horizontal
4	4924.0000	47.59	-14.43	74.00	26.41	150	206	Horizontal
5	7386.0000	52.49	-5.71	74.00	21.51	150	70	Horizontal
6	7386.0000	40.08	-5.71	54.00	13.92	150	315	Horizontal
7	17614.9807	46.23	1.24	54.00	7.77	150	270	Horizontal



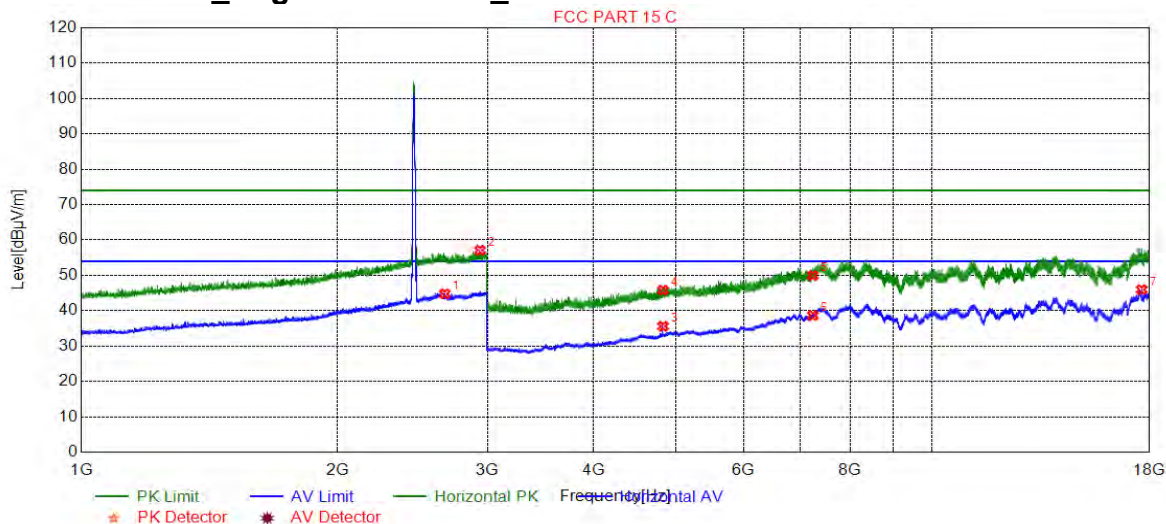
#### 4.9.2.1.5 802.11B\_ Middle Channel\_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2921.4804	45.57	11.40	54.00	8.43	150	239	Horizontal
2	2921.9805	56.66	11.40	74.00	17.34	150	300	Horizontal
3	4874.0000	44.76	-14.68	54.00	9.24	150	152	Horizontal
4	4874.0000	50.49	-14.68	74.00	23.51	150	152	Horizontal
5	7311.0000	51.09	-6.24	74.00	22.91	150	342	Horizontal
6	7311.0000	39.39	-6.24	54.00	14.61	150	98	Horizontal
7	17608.9804	45.91	1.40	54.00	8.09	150	360	Horizontal



## 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	2673.9185	44.80	10.15	54.00	9.20	150	24	Horizontal
2	2940.4851	57.10	11.39	74.00	16.90	150	24	Horizontal
3	4824.0000	35.59	-14.90	54.00	18.41	150	150	Horizontal
4	4824.0000	45.83	-14.90	74.00	28.17	150	150	Horizontal
5	7236.0000	49.94	-6.82	74.00	24.06	150	123	Horizontal
6	7236.0000	38.64	-6.82	54.00	15.36	150	96	Horizontal
7	17616.9808	45.97	1.19	54.00	8.03	150	18	Horizontal



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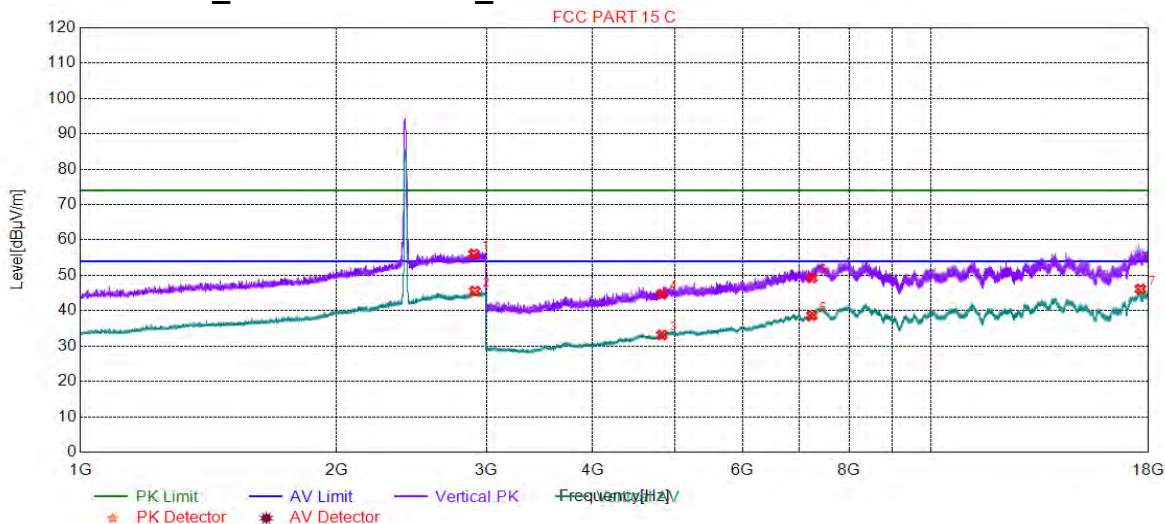
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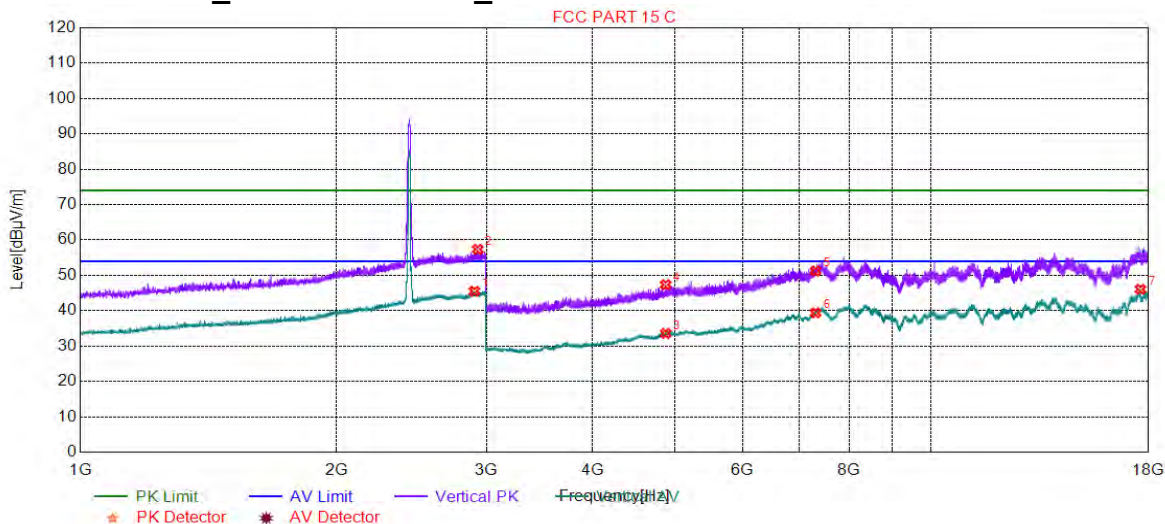
#### 4.9.2.1.7 802.11G\_Lowest Channel\_ Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2900.9752	56.09	11.41	74.00	17.91	150	4	Vertical
2	2907.9770	45.53	11.41	54.00	8.47	150	157	Vertical
3	4824.0000	33.14	-14.90	54.00	20.86	150	97	Vertical
4	4824.0000	44.67	-14.90	74.00	29.33	150	151	Vertical
5	7236.0000	49.32	-6.82	74.00	24.68	150	43	Vertical
6	7236.0000	38.62	-6.82	54.00	15.38	150	97	Vertical
7	17606.4803	46.12	1.46	54.00	7.88	150	67	Vertical



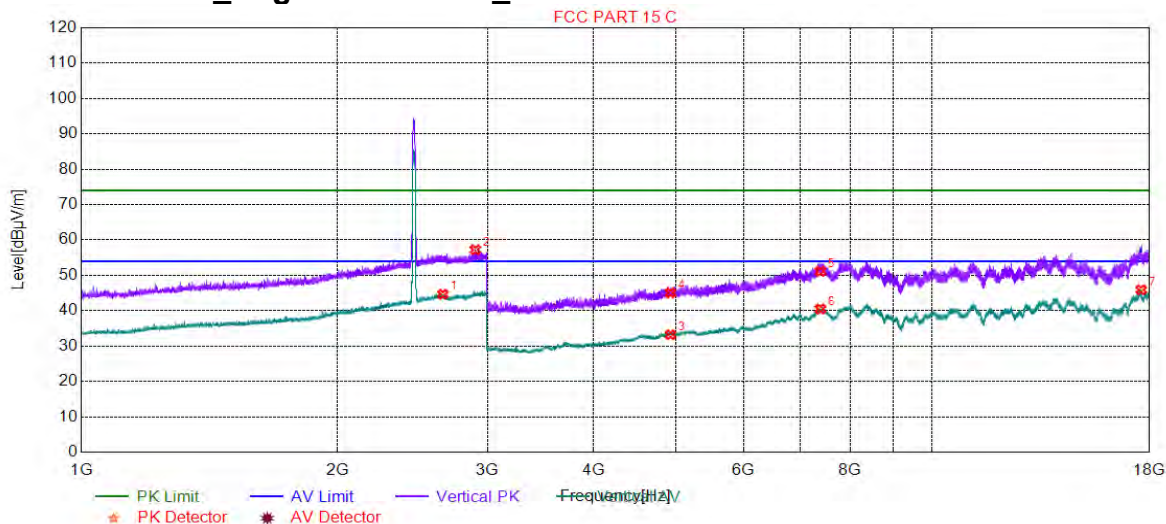
#### 4.9.2.1.8 802.11G\_ Middle Channel\_ Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2903.9760	45.50	11.41	54.00	8.50	150	3	Vertical
2	2930.4826	57.35	11.39	74.00	16.65	150	95	Vertical
3	4874.0000	33.58	-14.68	54.00	20.42	150	96	Vertical
4	4874.0000	47.35	-14.68	74.00	26.65	150	232	Vertical
5	7311.0000	51.23	-6.24	74.00	22.77	150	68	Vertical
6	7311.0000	39.41	-6.24	54.00	14.59	150	123	Vertical
7	17606.4803	46.07	1.46	54.00	7.93	150	220	Vertical



## 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	2659.9150	44.65	10.21	54.00	9.35	150	2	Vertical
2	2903.9760	57.23	11.41	74.00	16.77	150	22	Vertical
3	4924.0000	33.20	-14.43	54.00	20.80	150	151	Vertical
4	4924.0000	45.06	-14.43	74.00	28.94	150	260	Vertical
5	7386.0000	51.14	-5.71	74.00	22.86	150	233	Vertical
6	7386.0000	40.48	-5.71	54.00	13.52	150	260	Vertical
7	17598.4799	45.91	1.61	54.00	8.09	150	360	Vertical



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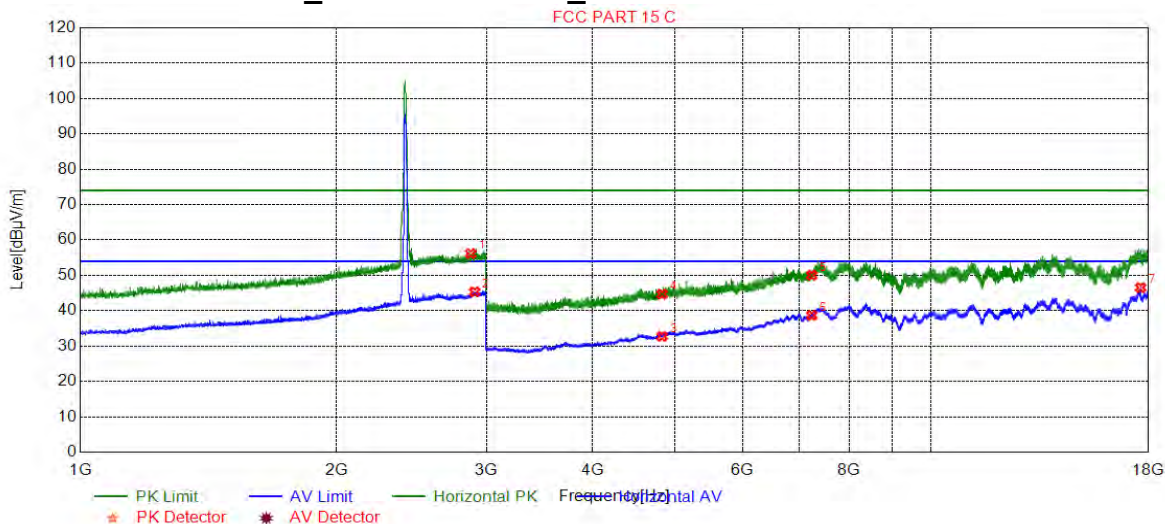
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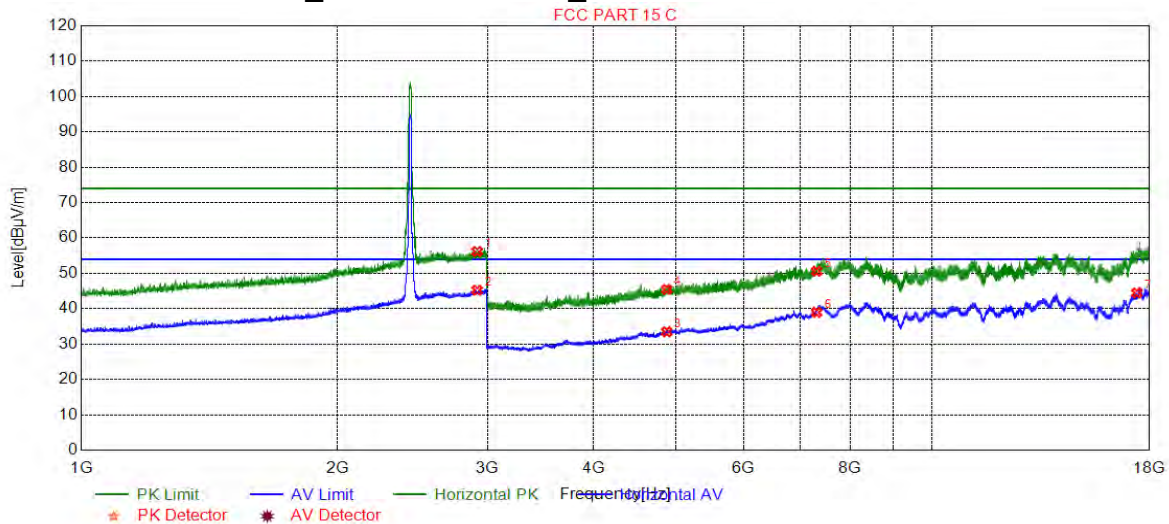


#### 4.9.2.1.10 802.11G\_Lowest Channel\_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2874.4686	56.16	11.21	74.00	17.84	150	119	Horizontal
2	2905.9765	45.34	11.41	54.00	8.66	150	322	Horizontal
3	4824.0000	32.74	-14.90	54.00	21.26	150	206	Horizontal
4	4824.0000	44.67	-14.90	74.00	29.33	150	152	Horizontal
5	7236.0000	50.03	-6.82	74.00	23.97	150	124	Horizontal
6	7236.0000	38.68	-6.82	54.00	15.32	150	152	Horizontal
7	17616.9808	46.54	1.19	54.00	7.46	150	18	Horizontal

#### 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	2917.9795	56.20	11.40	74.00	17.80	150	97	Horizontal
2	2917.9795	45.22	11.40	54.00	8.78	150	358	Horizontal
3	4874.0000	33.47	-14.68	54.00	20.53	150	261	Horizontal
4	4874.0000	45.46	-14.68	74.00	28.54	150	0	Horizontal
5	7311.0000	50.59	-6.24	74.00	23.41	150	234	Horizontal
6	7311.0000	38.97	-6.24	54.00	15.03	150	97	Horizontal
7	17393.4697	44.44	-1.00	54.00	9.56	150	118	Horizontal



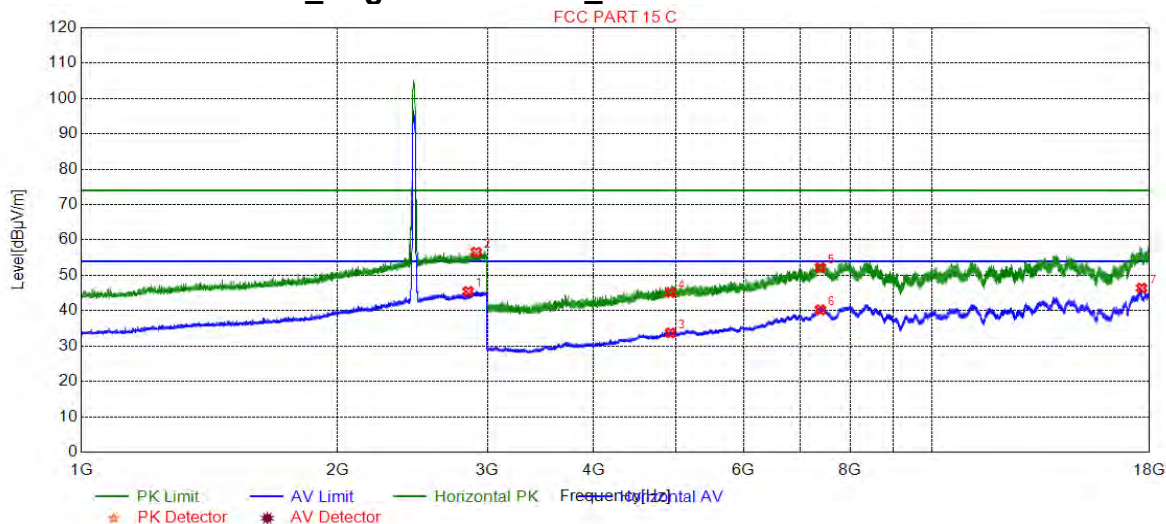
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## 4.9.2.1.12 802.11G\_ Highest Channel\_ Horizontal



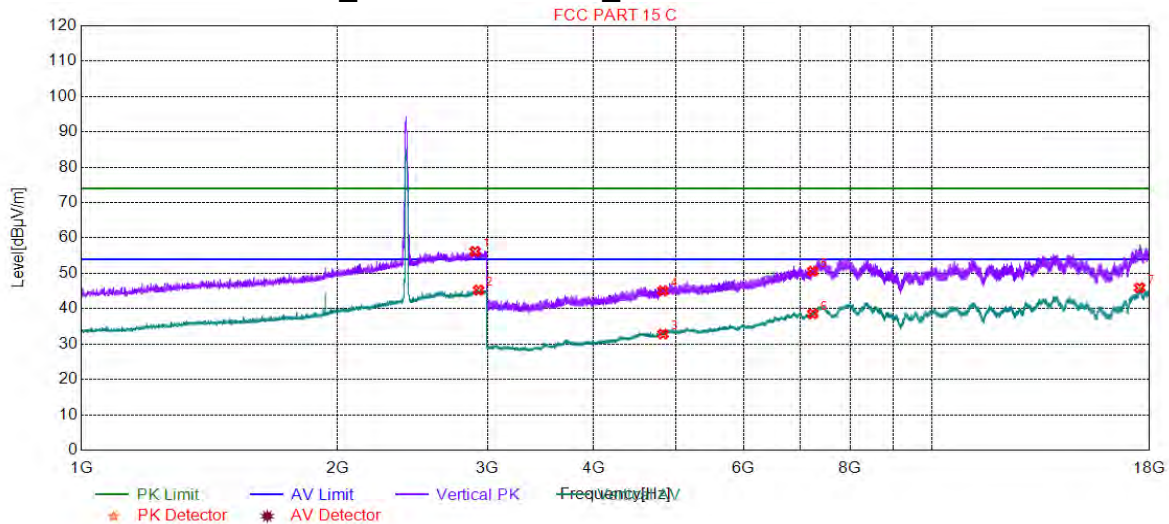
## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2848.9622	45.46	11.02	54.00	8.54	150	293	Horizontal
2	2911.9780	56.58	11.40	74.00	17.42	150	37	Horizontal
3	4924.0000	33.73	-14.43	54.00	20.27	150	206	Horizontal
4	4924.0000	45.13	-14.43	74.00	28.87	150	342	Horizontal
5	7386.0000	52.20	-5.71	74.00	21.80	150	233	Horizontal
6	7386.0000	40.25	-5.71	54.00	13.75	150	288	Horizontal
7	17612.9806	46.42	1.29	54.00	7.58	150	269	Horizontal





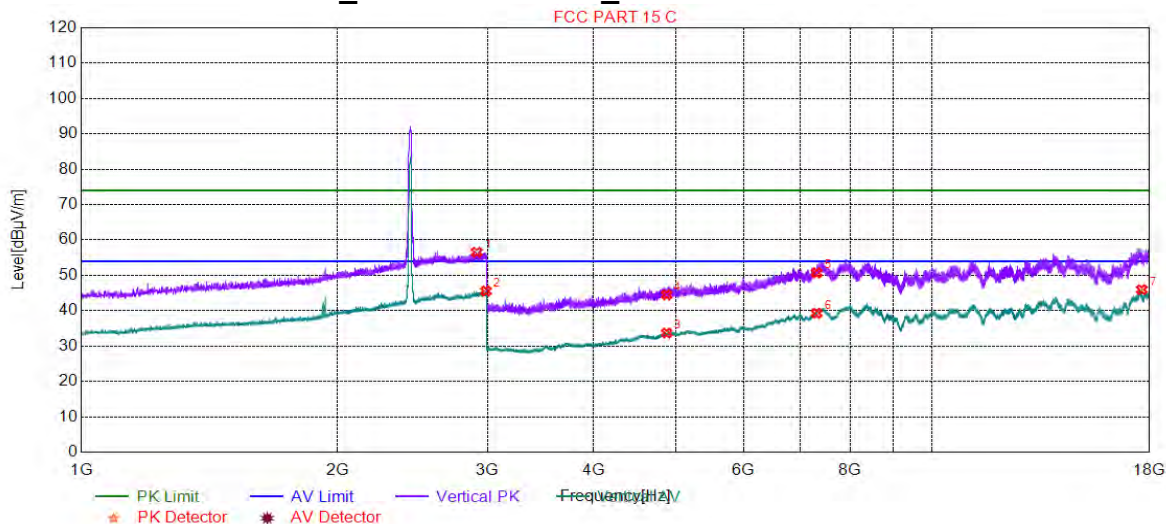
## 4.9.2.1.13 802.11N20\_Lowest Channel\_Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2901.4754	56.23	11.41	74.00	17.77	150	134	Vertical
2	2929.4824	45.26	11.40	54.00	8.74	150	9	Vertical
3	4824.0000	32.83	-14.90	54.00	21.17	150	0	Vertical
4	4824.0000	45.07	-14.90	74.00	28.93	150	206	Vertical
5	7236.0000	50.59	-6.82	74.00	23.41	150	288	Vertical
6	7236.0000	38.57	-6.82	54.00	15.43	150	314	Vertical
7	17518.4759	45.92	0.59	54.00	8.08	150	18	Vertical



## 4.9.2.1.14 802.11N20\_Middle Channel\_Vertical

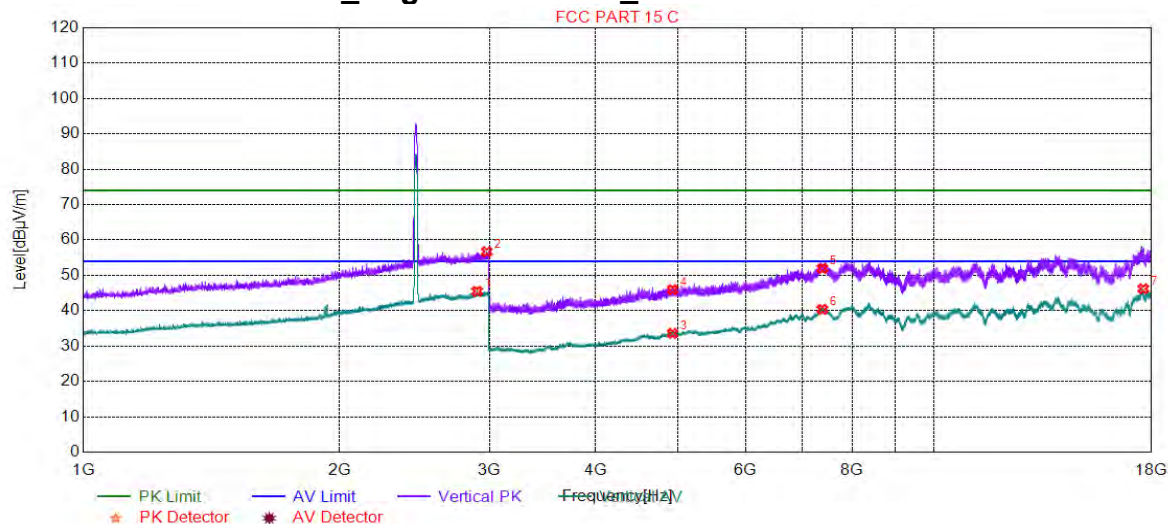


## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2915.4789	56.56	11.40	74.00	17.44	150	55	Vertical
2	2988.4971	45.56	11.37	54.00	8.44	150	252	Vertical
3	4874.0000	33.69	-14.68	54.00	20.31	150	98	Vertical
4	4874.0000	44.50	-14.68	74.00	29.50	150	262	Vertical
5	7311.0000	50.70	-6.24	74.00	23.30	150	98	Vertical
6	7311.0000	39.28	-6.24	54.00	14.72	150	315	Vertical
7	17619.9810	45.97	1.11	54.00	8.03	150	68	Vertical



## 4.9.2.1.15 802.11N20\_ Highest Channel\_ Vertical



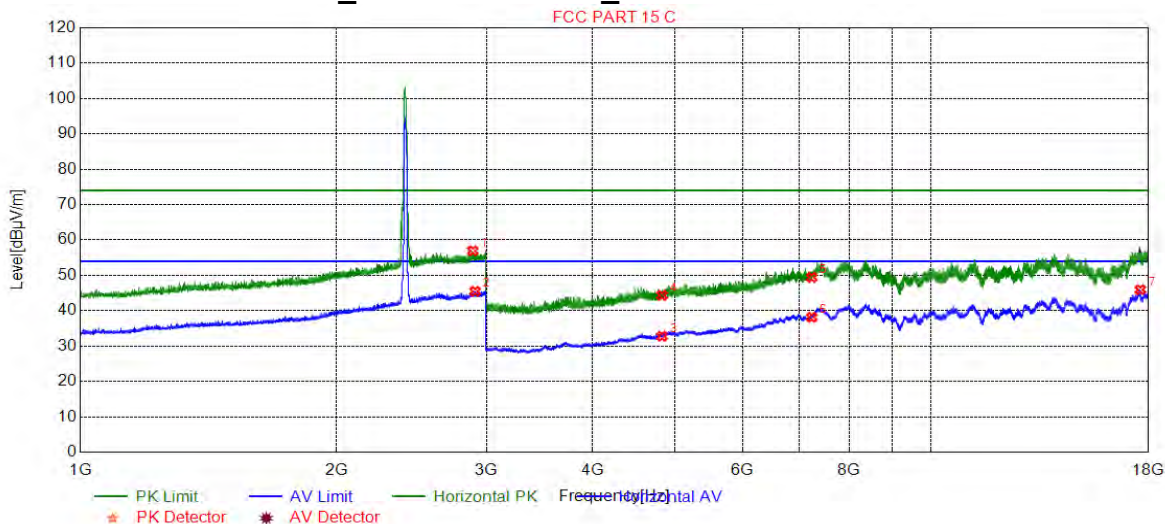
## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2902.9757	45.49	11.41	54.00	8.51	150	332	Vertical
2	2978.9947	56.69	11.37	74.00	17.31	150	19	Vertical
3	4924.0000	33.59	-14.43	54.00	20.41	150	42	Vertical
4	4924.0000	45.96	-14.43	74.00	28.04	150	69	Vertical
5	7386.0000	51.97	-5.71	74.00	22.03	150	151	Vertical
6	7386.0000	40.37	-5.71	54.00	13.63	150	179	Vertical
7	17600.9800	46.19	1.60	54.00	7.81	150	118	Vertical





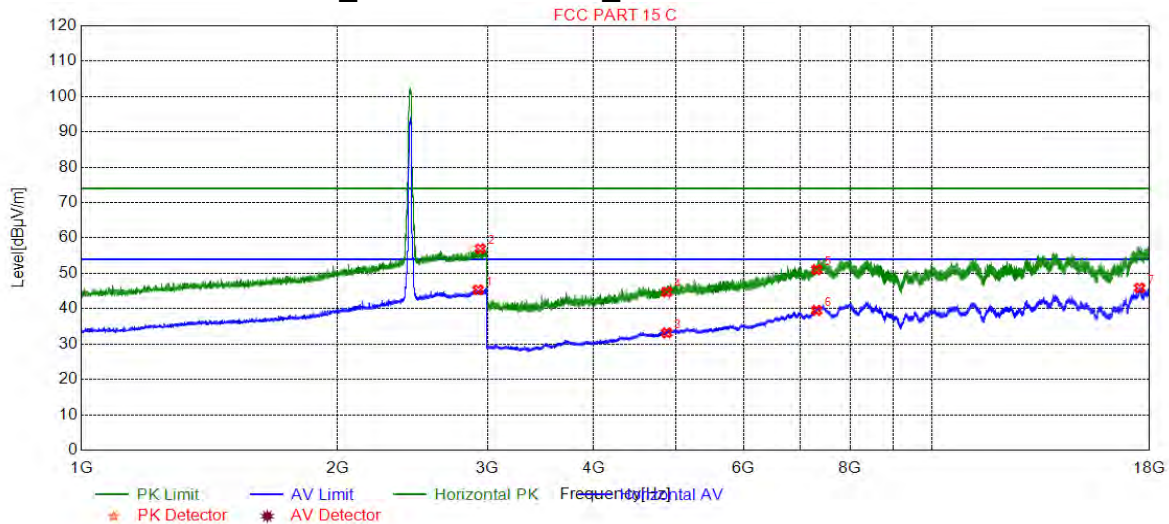
#### 4.9.2.1.16 802.11N20\_Lowest Channel\_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2891.4729	56.95	11.34	74.00	17.05	150	159	Horizontal
2	2909.4774	45.48	11.41	54.00	8.52	150	145	Horizontal
3	4824.0000	32.79	-14.90	54.00	21.21	150	314	Horizontal
4	4824.0000	44.34	-14.90	74.00	29.66	150	0	Horizontal
5	7236.0000	49.42	-6.82	74.00	24.58	150	342	Horizontal
6	7236.0000	38.14	-6.82	54.00	15.86	150	287	Horizontal
7	17604.4802	45.94	1.51	54.00	8.06	150	316	Horizontal



## 4.9.2.1.17 802.11N20\_Middle Channel\_Horizontal

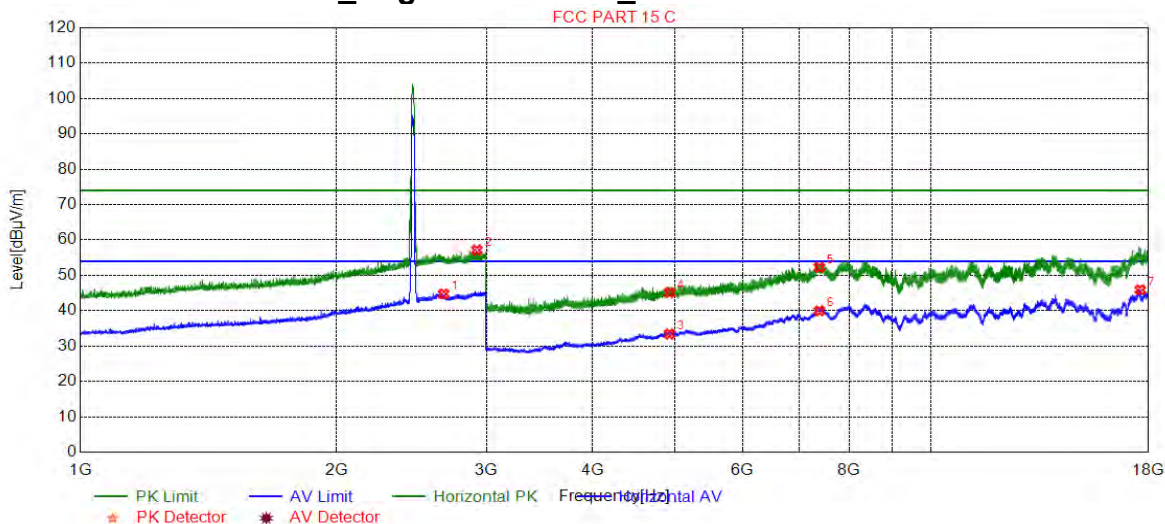


## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2925.4814	45.34	11.40	54.00	8.66	150	103	Horizontal
2	2941.9855	57.00	11.39	74.00	17.00	150	301	Horizontal
3	4874.0000	33.18	-14.68	54.00	20.82	150	206	Horizontal
4	4874.0000	44.69	-14.68	74.00	29.31	150	43	Horizontal
5	7311.0000	51.04	-6.24	74.00	22.96	150	97	Horizontal
6	7311.0000	39.52	-6.24	54.00	14.48	150	287	Horizontal
7	17518.9759	45.89	0.59	54.00	8.11	150	18	Horizontal



#### 4.9.2.1.18 802.11N20\_ Highest Channel\_ Horizontal

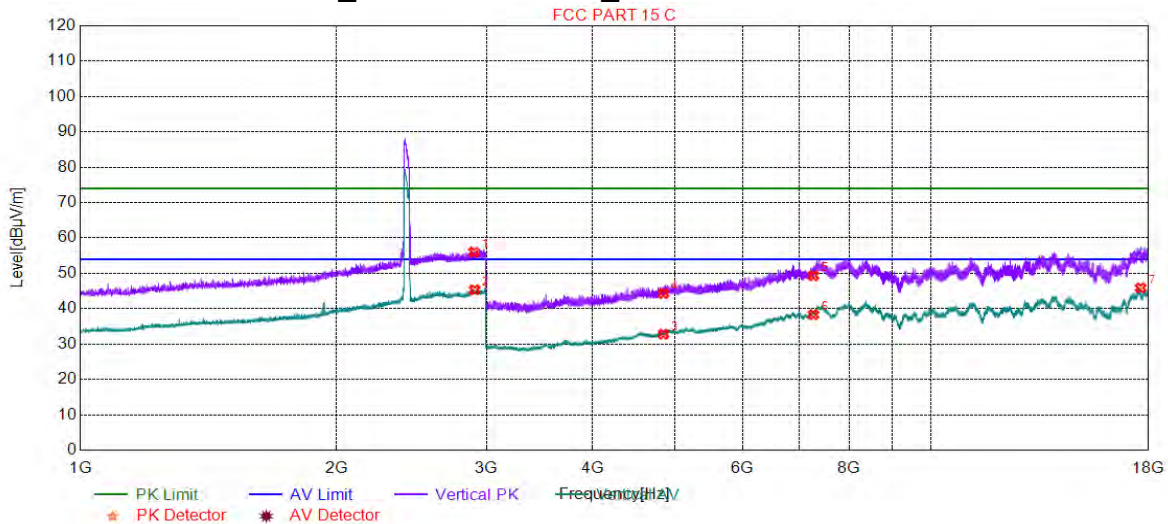


Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2671.9180	44.74	10.16	54.00	9.26	150	149	Horizontal
2	2923.4809	57.15	11.40	74.00	16.85	150	333	Horizontal
3	4924.0000	33.42	-14.43	54.00	20.58	150	13	Horizontal
4	4924.0000	45.12	-14.43	74.00	28.88	150	40	Horizontal
5	7386.0000	52.26	-5.71	74.00	21.74	150	178	Horizontal
6	7386.0000	39.95	-5.71	54.00	14.05	150	68	Horizontal
7	17598.9799	45.91	1.62	54.00	8.09	150	219	Horizontal





#### 4.9.2.1.19 802.11N40\_Lowest Channel\_Vertical



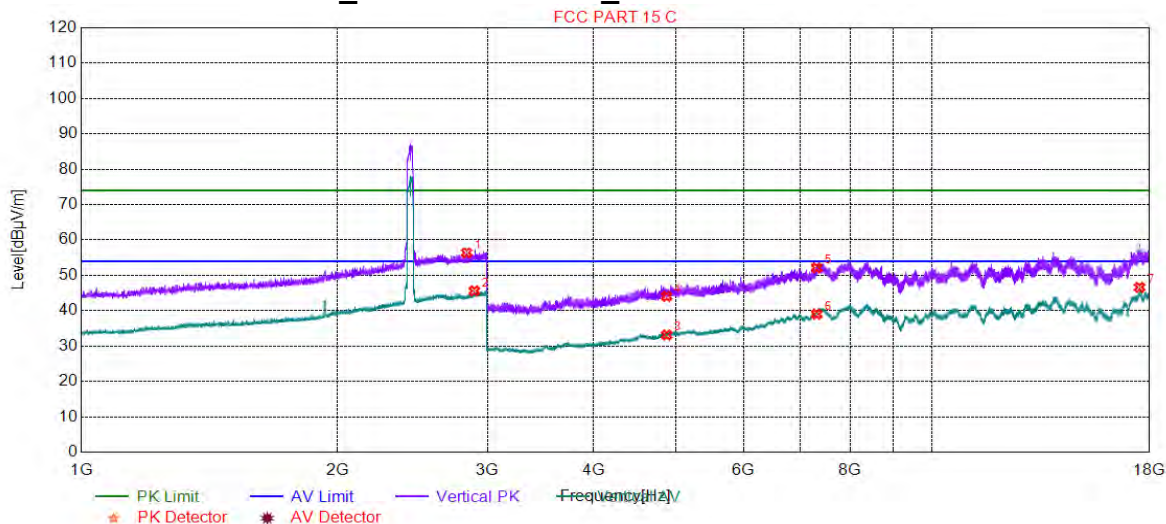
Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2901.4754	56.03	11.41	74.00	17.97	150	145	Vertical
2	2905.9765	45.35	11.41	54.00	8.65	150	295	Vertical
3	4844.0000	32.81	-14.81	54.00	21.19	150	15	Vertical
4	4844.0000	44.30	-14.81	74.00	29.70	150	260	Vertical
5	7266.0000	49.34	-6.58	74.00	24.66	150	179	Vertical
6	7266.0000	38.34	-6.58	54.00	15.66	150	315	Vertical
7	17613.4807	45.89	1.28	54.00	8.11	150	360	Vertical



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## 4.9.2.1.20 802.11N40\_Middle Channel\_Vertical

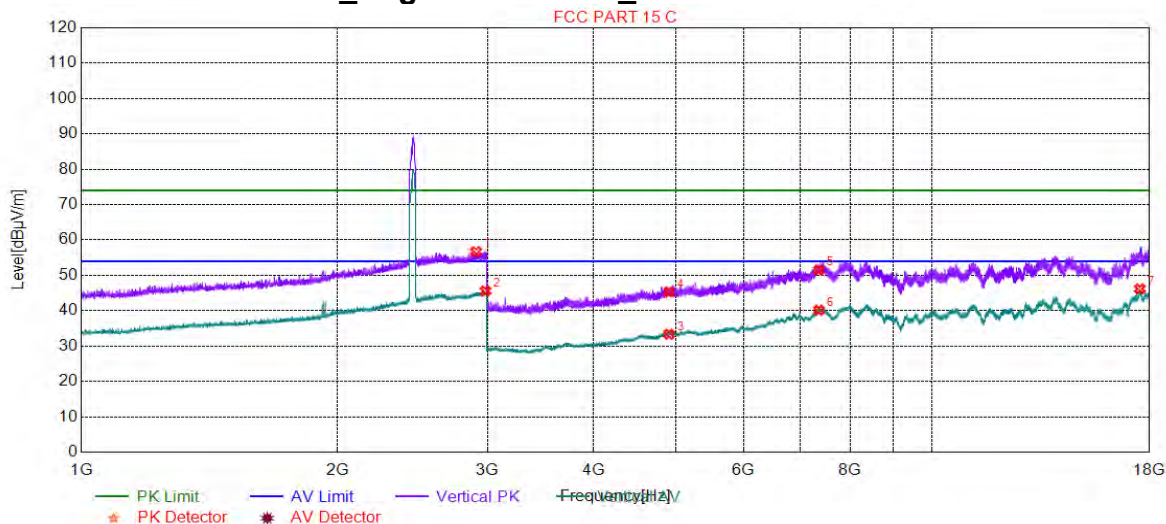


## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2836.4591	56.40	10.92	74.00	17.60	150	12	Vertical
2	2895.9740	45.60	11.38	54.00	8.40	150	104	Vertical
3	4874.0000	33.13	-14.68	54.00	20.87	150	16	Vertical
4	4874.0000	44.05	-14.68	74.00	29.95	150	288	Vertical
5	7311.0000	52.13	-6.24	74.00	21.87	150	43	Vertical
6	7311.0000	39.04	-6.24	54.00	14.96	150	234	Vertical
7	17517.9759	46.60	0.58	54.00	7.40	150	360	Vertical



## 4.9.2.1.21 802.11N40\_ Highest Channel\_ Vertical



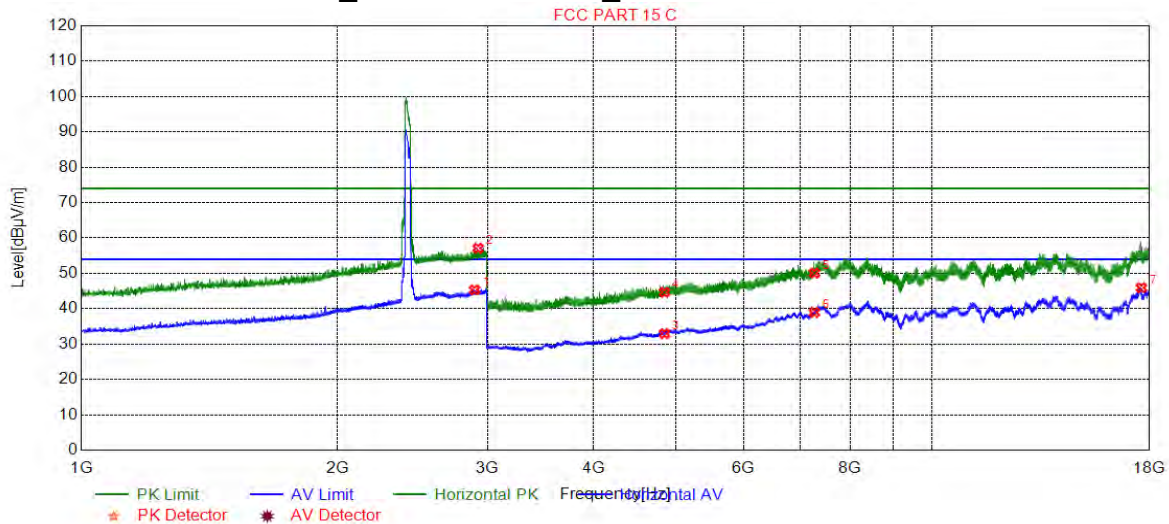
## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2909.9775	56.70	11.41	74.00	17.30	150	157	Vertical
2	2984.9962	45.60	11.37	54.00	8.40	150	272	Vertical
3	4904.0000	33.34	-14.54	54.00	20.66	150	234	Vertical
4	4904.0000	45.31	-14.54	74.00	28.69	150	42	Vertical
5	7356.0000	51.48	-5.92	74.00	22.52	150	261	Vertical
6	7356.0000	40.14	-5.92	54.00	13.86	150	342	Vertical
7	17526.4763	46.18	0.69	54.00	7.82	150	319	Vertical





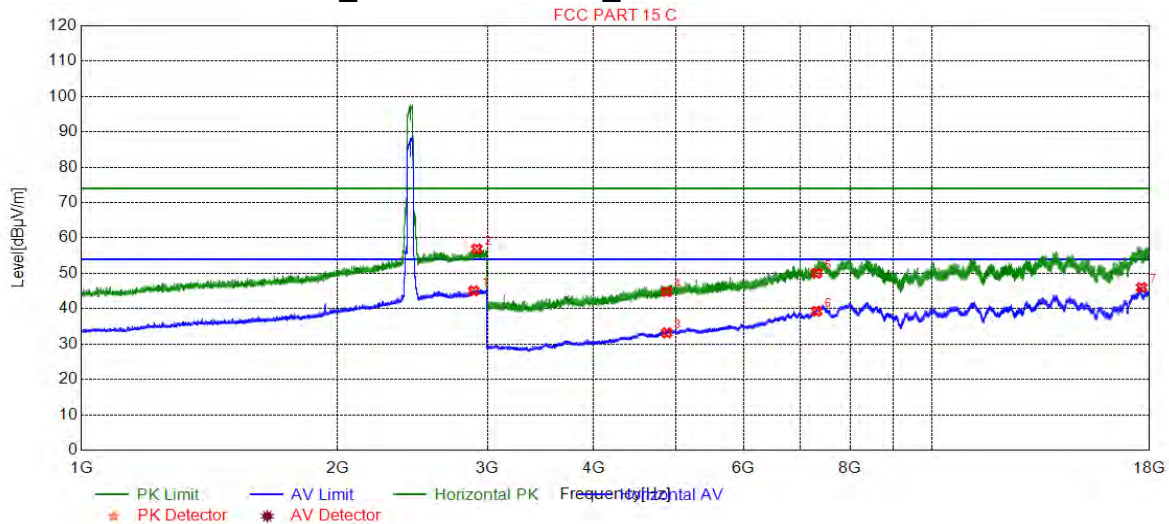
#### 4.9.2.1.22 802.11N40\_Lowest Channel\_Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2898.4746	45.32	11.40	54.00	8.68	150	41	Horizontal
2	2924.9812	57.10	11.40	74.00	16.90	150	294	Horizontal
3	4844.0000	32.96	-14.81	54.00	21.04	150	15	Horizontal
4	4844.0000	44.63	-14.81	74.00	29.37	150	124	Horizontal
5	7266.0000	50.06	-6.58	74.00	23.94	150	0	Horizontal
6	7266.0000	38.95	-6.58	54.00	15.05	150	179	Horizontal
7	17606.4803	45.93	1.46	54.00	8.07	150	217	Horizontal



#### 4.9.2.1.23 802.11N40\_ Middle Channel\_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2890.9727	45.04	11.34	54.00	8.96	150	313	Horizontal
2	2915.4789	56.91	11.40	74.00	17.09	150	232	Horizontal
3	4874.0000	33.15	-14.68	54.00	20.85	150	125	Horizontal
4	4874.0000	44.78	-14.68	74.00	29.22	150	97	Horizontal
5	7311.0000	50.03	-6.24	74.00	23.97	150	179	Horizontal
6	7311.0000	39.28	-6.24	54.00	14.72	150	97	Horizontal
7	17614.4807	46.01	1.25	54.00	7.99	150	18	Horizontal

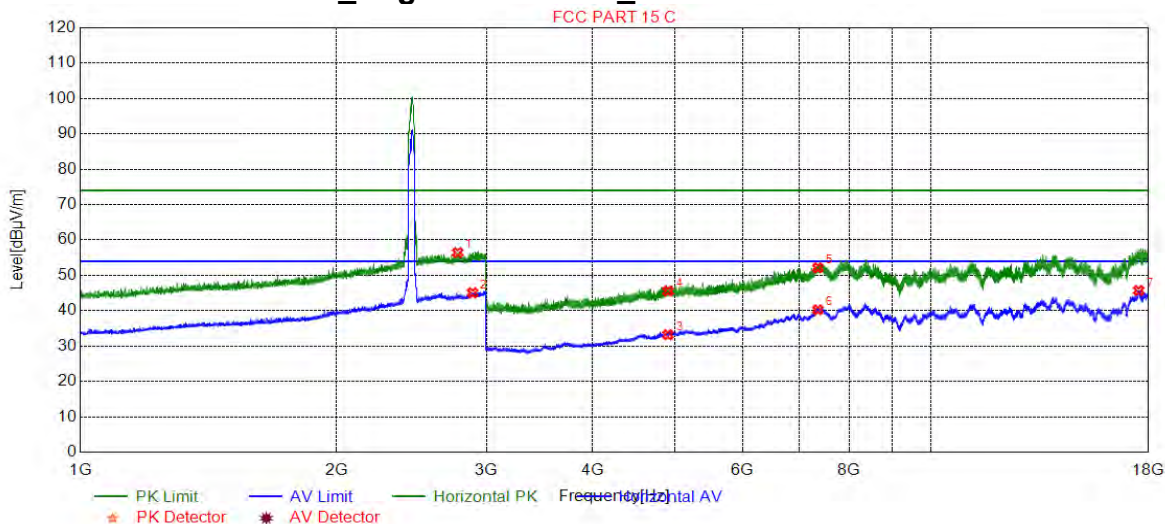


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#### 4.9.2.1.24 802.11N40\_ Highest Channel\_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2775.9440	56.44	10.50	74.00	17.56	150	283	Horizontal
2	2889.9725	45.07	11.33	54.00	8.93	150	133	Horizontal
3	4904.0000	33.20	-14.54	54.00	20.80	150	287	Horizontal
4	4904.0000	45.55	-14.54	74.00	28.45	150	205	Horizontal
5	7356.0000	52.12	-5.92	74.00	21.88	150	97	Horizontal
6	7356.0000	40.24	-5.92	54.00	13.76	150	205	Horizontal
7	17524.9762	45.71	0.67	54.00	8.29	150	168	Horizontal

#### Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz and 18GHz to 25GHz 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.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.
- 4) All Modes have been tested, but only the worst case data displayed in this report.



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#### 4.10 Restricted bands around fundamental frequency

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 or 10m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m @3m)	Remark
	30MHz-88MHz	40.0	Quasi-peak Value
	88MHz-216MHz	43.5	Quasi-peak Value
	216MHz-960MHz	46.0	Quasi-peak Value
	960MHz-1GHz	54.0	Quasi-peak Value
	Above 1GHz	54.0	Average Value
		74.0	Peak Value
Test Setup:			

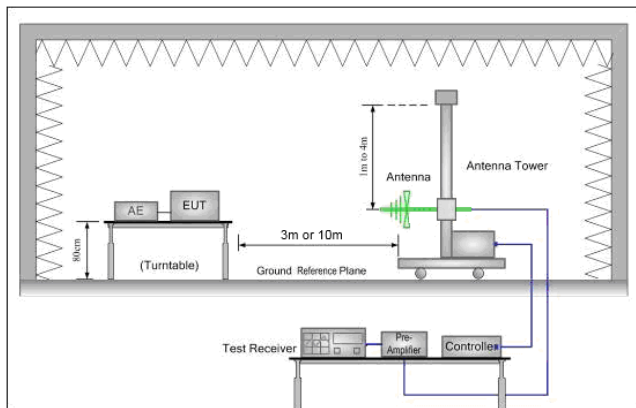


Figure 1. 30MHz to 1GHz

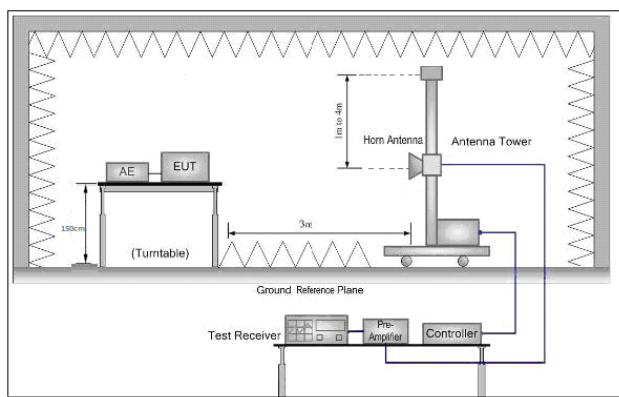


Figure 2. Above 1 GHz





Test Procedure:	<ul style="list-style-type: none"> <li>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 camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>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 camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>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.</li> <li>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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</li> <li>h. Test the EUT in the lowest channel , the Highest channel</li> <li>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.</li> <li>j. Repeat above procedures until all frequencies measured was complete.</li> </ul>
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Charge + Transmitting mode.
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>Only the worst case is recorded in the report.</p>
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

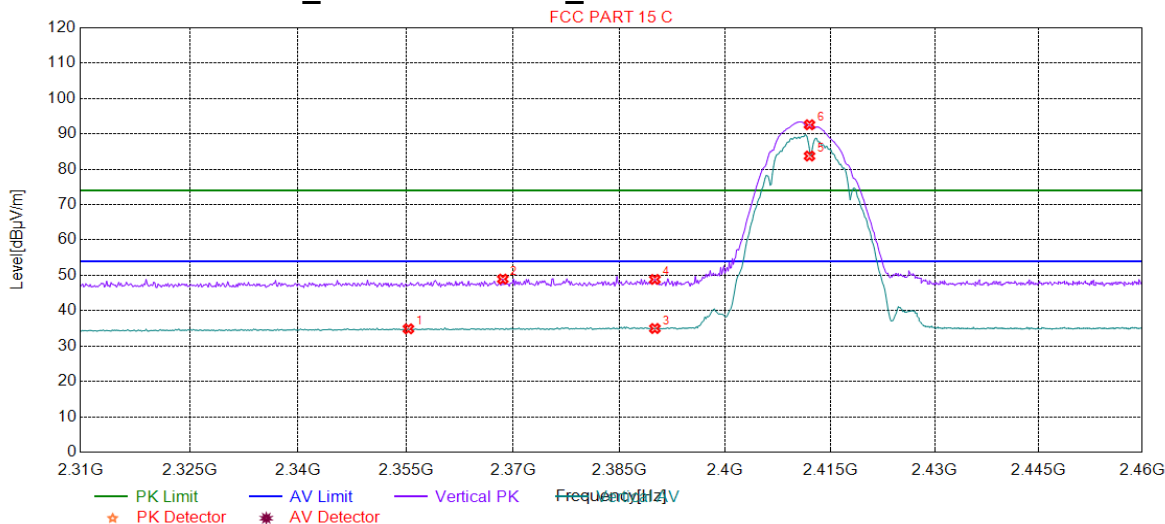




Test plot as follows:

#### 4.10.1 ANT1

##### 4.10.1.1 802.11B\_Lowest Channel\_ Vertical



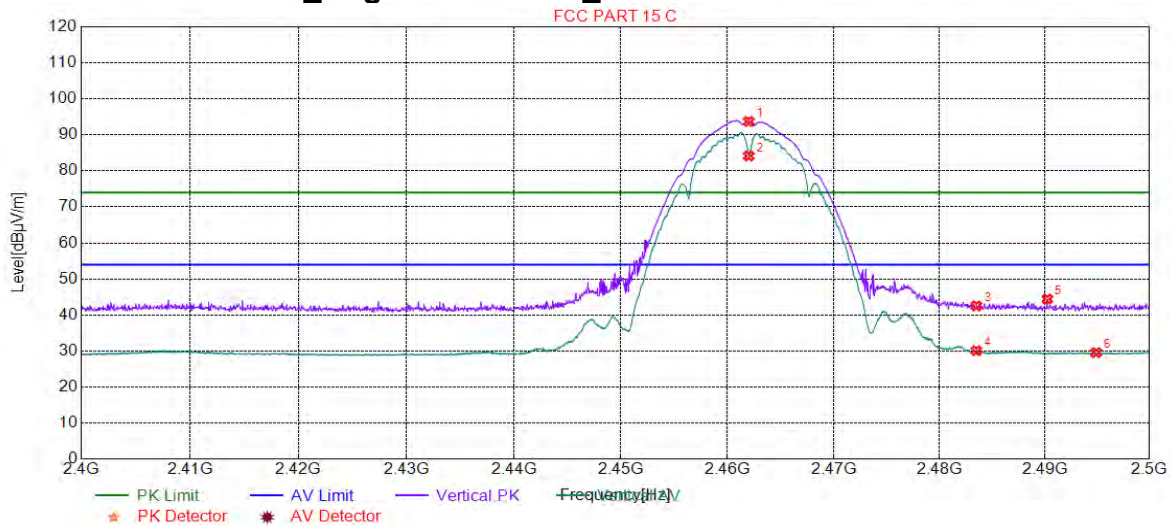
#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2355.3453	34.88	9.08	54.00	19.12	150	26	Vertical
2	2368.5586	48.94	9.13	74.00	25.06	150	261	Vertical
3	2390.0000	34.98	9.20	54.00	19.02	150	299	Vertical
4	2390.0000	48.85	9.20	74.00	25.15	150	308	Vertical
5	2412.0000	83.73	9.27	54.00	-29.73	150	287	Vertical
6	2412.0000	92.58	9.27	74.00	-18.58	150	291	Vertical





## 4.10.1.2 802.11B\_Highest Channel\_Vertical

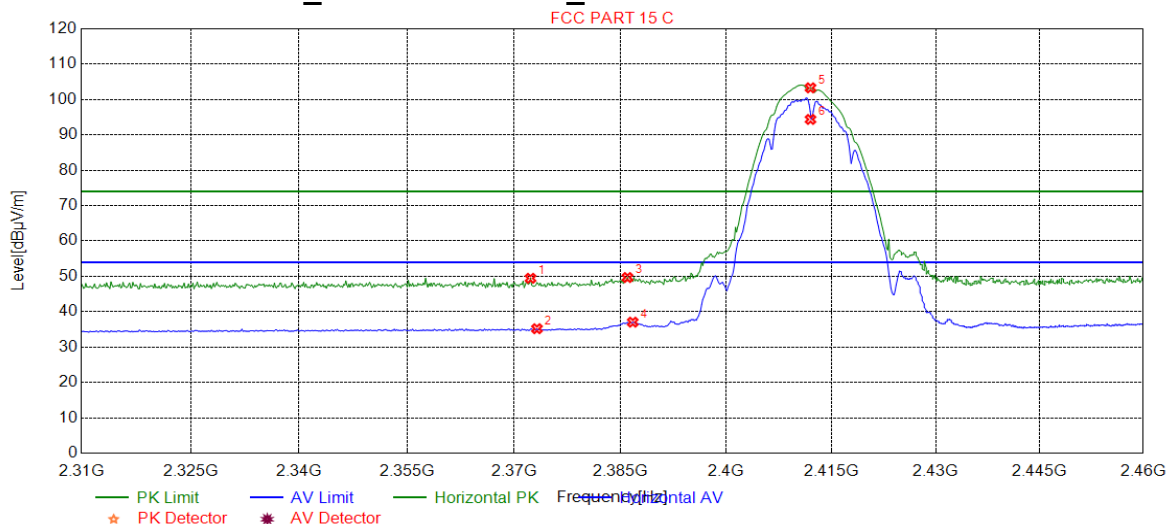


## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	93.75	9.43	74.00	-19.75	150	56	Vertical
2	2462.0000	84.15	9.43	54.00	-30.15	150	67	Vertical
3	2483.5000	42.52	9.50	74.00	31.48	150	30	Vertical
4	2483.5000	30.09	9.50	54.00	23.91	150	80	Vertical
5	2490.2451	44.42	9.52	74.00	29.58	150	0	Vertical
6	2494.8974	29.56	9.53	54.00	24.44	150	30	Vertical



#### 4.10.1.3 802.11B\_Lowest Channel\_ Horizontal

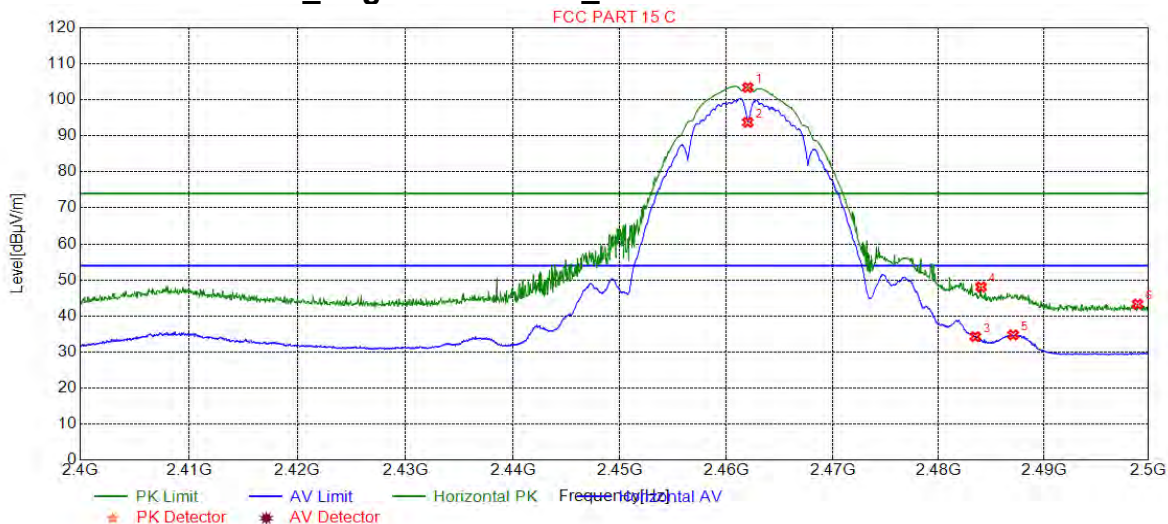


#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2372.3123	49.45	9.14	74.00	24.55	150	200	Horizontal
2	2373.2132	35.20	9.14	54.00	18.80	150	304	Horizontal
3	2385.9760	49.67	9.18	74.00	24.33	150	214	Horizontal
4	2386.7267	37.05	9.19	54.00	16.95	150	207	Horizontal
5	2412.0000	103.30	9.27	74.00	-29.30	150	166	Horizontal
6	2412.0000	94.37	9.27	54.00	-40.37	150	166	Horizontal



#### 4.10.1.4 802.11B\_ Highest Channel\_ Horizontal



#### Suspected List

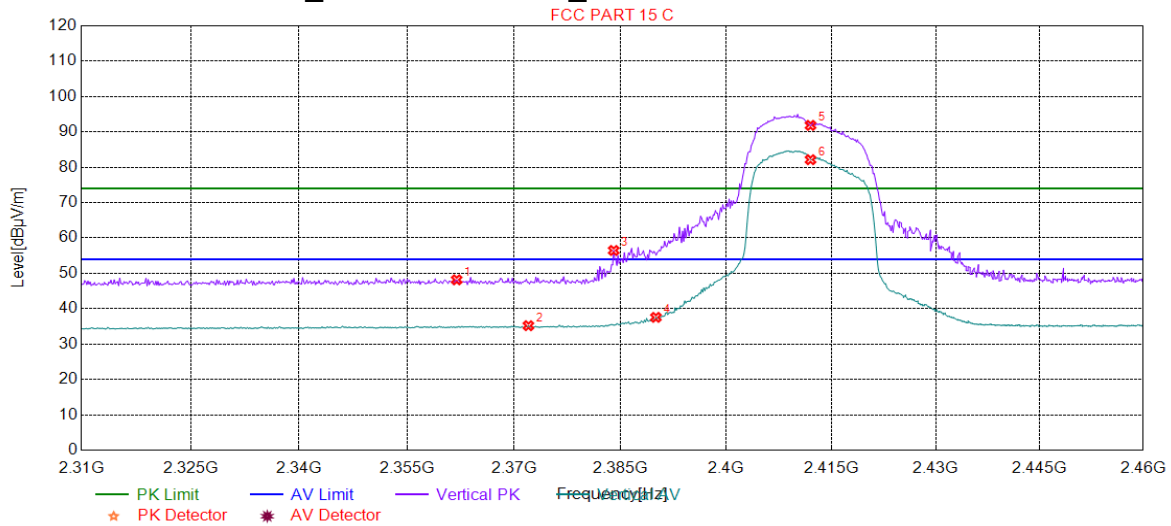
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	103.45	9.43	74.00	-29.45	150	202	Horizontal
2	2462.0000	93.76	9.43	54.00	-39.76	150	208	Horizontal
3	2483.5000	34.28	9.50	54.00	19.72	150	202	Horizontal
4	2484.0420	48.06	9.50	74.00	25.94	150	202	Horizontal
5	2487.0935	34.75	9.51	54.00	19.25	150	208	Horizontal
6	2498.9495	43.31	9.55	74.00	30.69	150	171	Horizontal







#### 4.10.1.5 802.11G\_Lowest Channel\_Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2361.9520	48.18	9.10	74.00	25.82	150	103	Vertical
2	2372.0120	35.20	9.14	54.00	18.80	150	169	Vertical
3	2384.0240	56.47	9.18	74.00	17.53	150	88	Vertical
4	2390.0000	37.56	9.20	54.00	16.44	150	322	Vertical
5	2412.0000	91.84	9.27	74.00	-17.84	150	83	Vertical
6	2412.0000	82.14	9.27	54.00	-28.14	150	88	Vertical



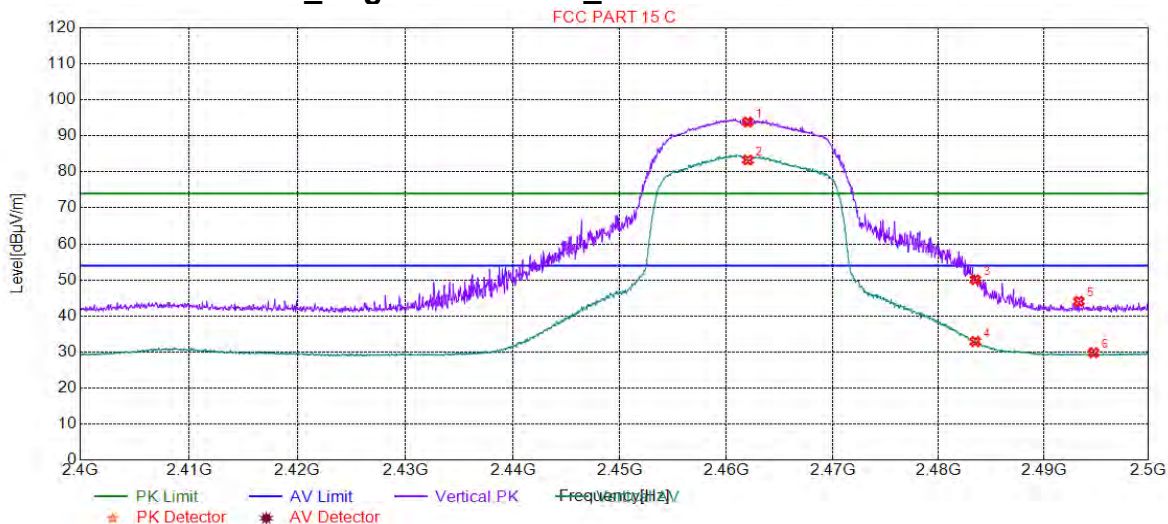
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#### 4.10.1.6 802.11G\_ Highest Channel\_ Vertical



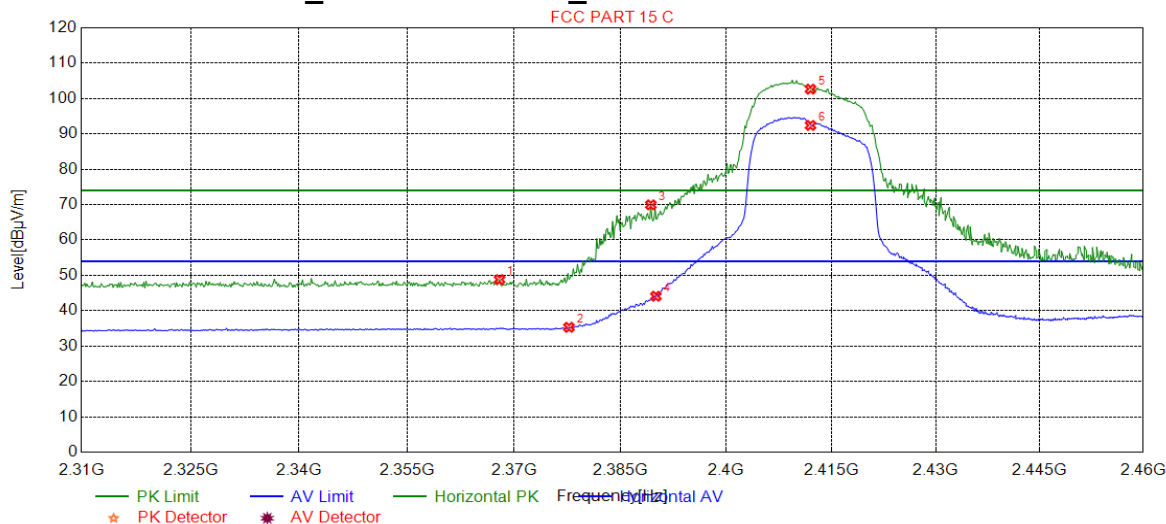
#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	93.81	9.43	74.00	-19.81	150	69	Vertical
2	2462.0000	83.29	9.43	54.00	-29.29	150	76	Vertical
3	2483.5000	50.07	9.50	74.00	23.93	150	51	Vertical
4	2483.5000	32.90	9.50	54.00	21.10	150	88	Vertical
5	2493.3467	44.07	9.53	74.00	29.93	150	265	Vertical
6	2494.7474	29.79	9.53	54.00	24.21	150	309	Vertical





#### 4.10.1.7 802.11G\_Lowest Channel\_ Horizontal



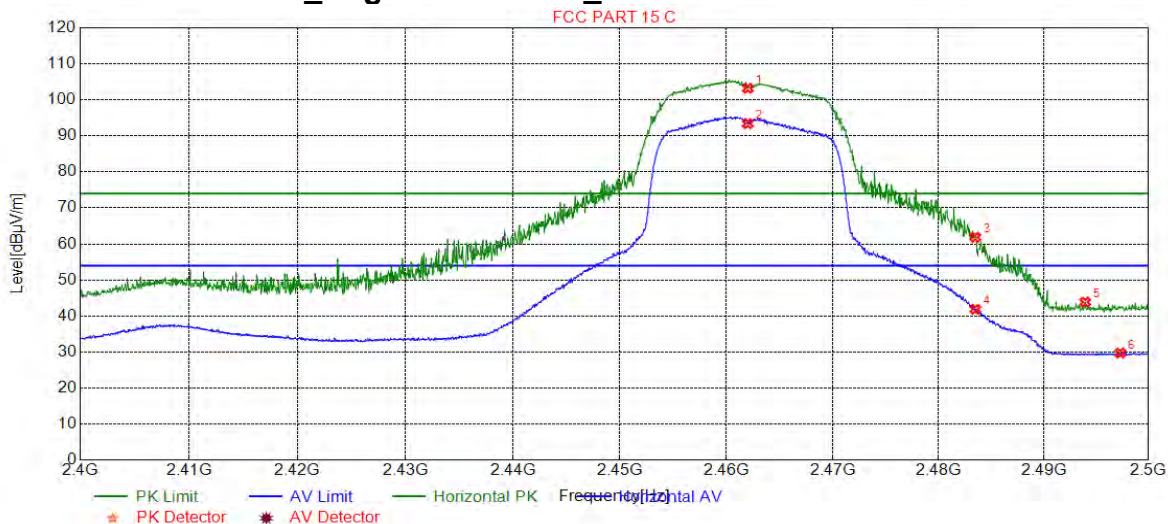
#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2367.9580	48.81	9.12	74.00	25.19	150	258	Horizontal
2	2377.7177	35.31	9.16	54.00	18.69	150	208	Horizontal
3	2389.2793	69.94	9.19	74.00	4.06	150	213	Horizontal
4	2390.0000	44.09	9.20	54.00	9.91	150	213	Horizontal
5	2412.0000	102.66	9.27	74.00	-28.66	150	360	Horizontal
6	2412.0000	92.40	9.27	54.00	-38.40	150	220	Horizontal





#### 4.10.1.8 802.11G\_ Highest Channel\_ Horizontal



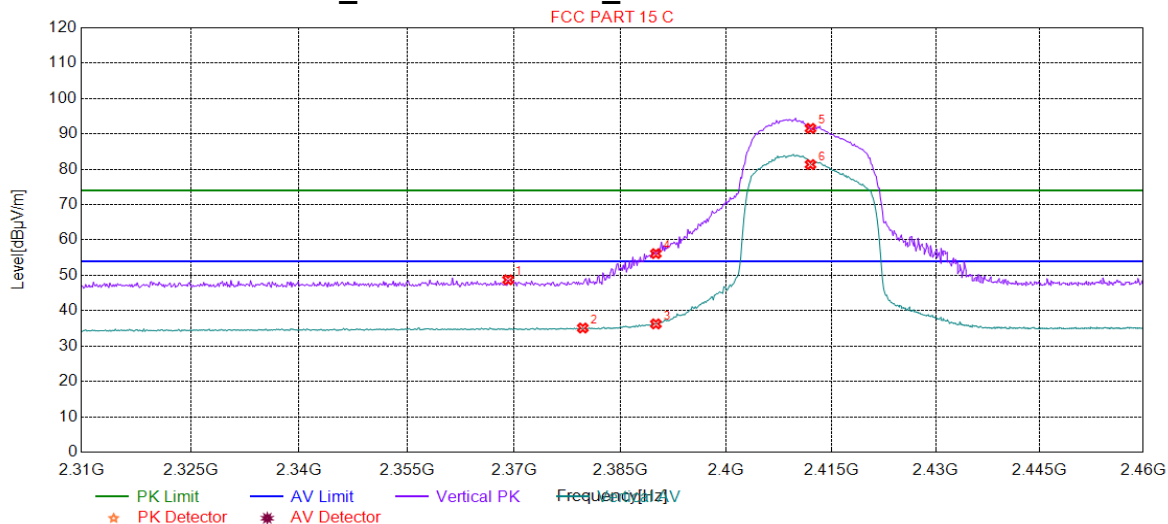
#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	103.22	9.43	74.00	-29.22	150	214	Horizontal
2	2462.0000	93.40	9.43	54.00	-39.40	150	214	Horizontal
3	2483.5000	61.87	9.50	74.00	12.13	150	214	Horizontal
4	2483.5000	41.86	9.50	54.00	12.14	150	214	Horizontal
5	2493.9470	43.85	9.53	74.00	30.15	150	173	Horizontal
6	2497.2986	29.73	9.54	54.00	24.27	150	74	Horizontal





#### 4.10.1.9 802.11N20\_Lowest Channel\_Vertical



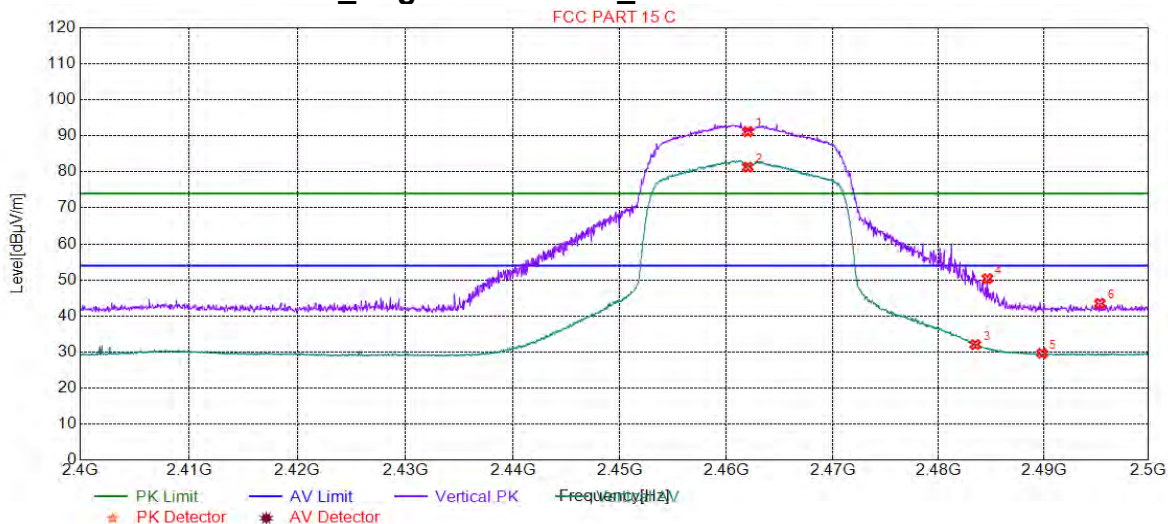
Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2369.1592	48.74	9.13	74.00	25.26	150	12	Vertical
2	2379.6697	35.11	9.16	54.00	18.89	150	248	Vertical
3	2390.0000	36.27	9.20	54.00	17.73	150	82	Vertical
4	2390.0000	56.16	9.20	74.00	17.84	150	127	Vertical
5	2412.0000	91.56	9.27	74.00	-17.56	150	82	Vertical
6	2412.0000	81.33	9.27	54.00	-27.33	150	82	Vertical



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#### 4.10.1.10 802.11N20\_ Highest Channel\_ Vertical



#### Suspected List

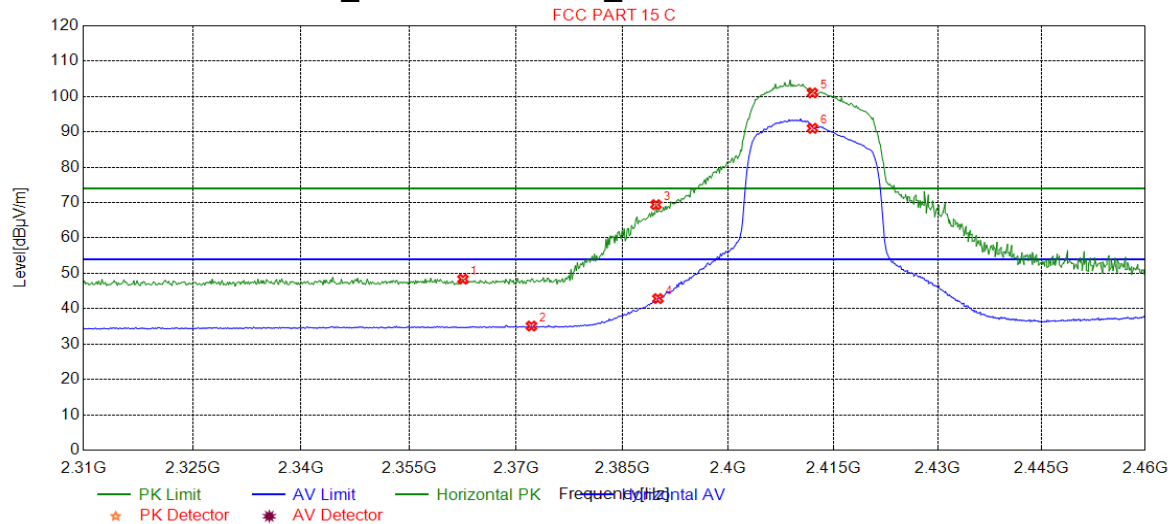
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	91.19	9.43	74.00	-17.19	150	168	Vertical
2	2462.0000	81.32	9.43	54.00	-27.32	150	63	Vertical
3	2483.5000	32.06	9.50	54.00	21.94	150	82	Vertical
4	2484.6423	50.36	9.50	74.00	23.64	150	89	Vertical
5	2489.8449	29.61	9.52	54.00	24.39	150	251	Vertical
6	2495.3477	43.51	9.54	74.00	30.49	150	346	Vertical







4.10.1.11 802.11N20\_Lowest Channel\_Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2362.5526	48.37	9.11	74.00	25.63	150	22	Horizontal
2	2372.1622	35.10	9.14	54.00	18.90	150	210	Horizontal
3	2389.7297	69.43	9.20	74.00	4.57	150	200	Horizontal
4	2390.0000	42.86	9.20	54.00	11.14	150	22	Horizontal
5	2412.0000	101.03	9.27	74.00	-27.03	150	200	Horizontal
6	2412.0000	91.02	9.27	54.00	-37.02	150	210	Horizontal



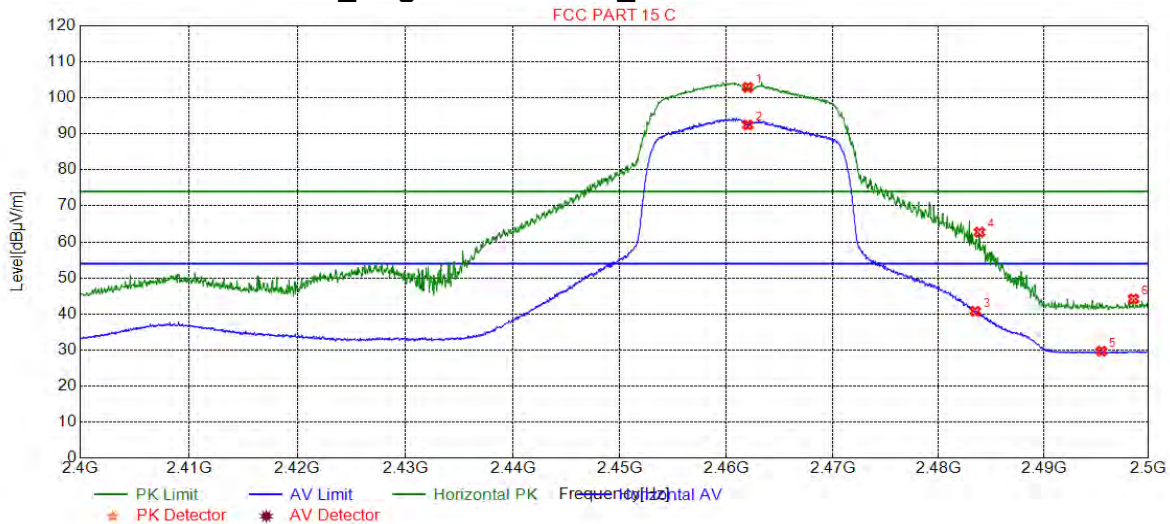
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## 4.10.1.12 802.11N20\_ Highest Channel\_ Horizontal



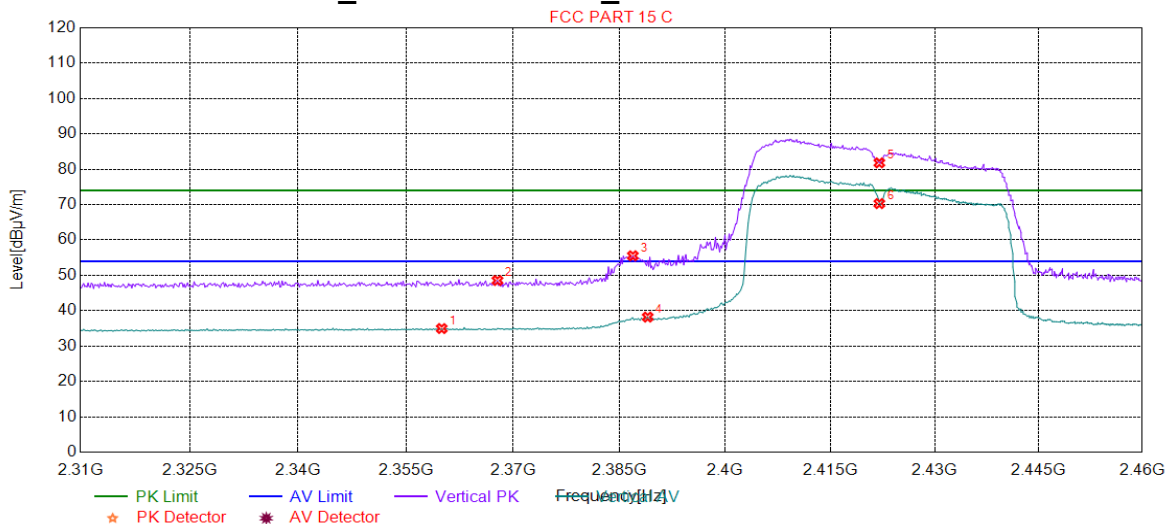
## Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	102.90	9.43	74.00	-28.90	150	216	Horizontal
2	2462.0000	92.48	9.43	54.00	-38.48	150	211	Horizontal
3	2483.5000	40.76	9.50	54.00	13.24	150	211	Horizontal
4	2483.8919	62.69	9.50	74.00	11.31	150	216	Horizontal
5	2495.4977	29.67	9.54	54.00	24.33	150	360	Horizontal
6	2498.5493	44.18	9.55	74.00	29.82	150	185	Horizontal





4.10.1.13 802.11N40\_Lowest Channel\_Vertical



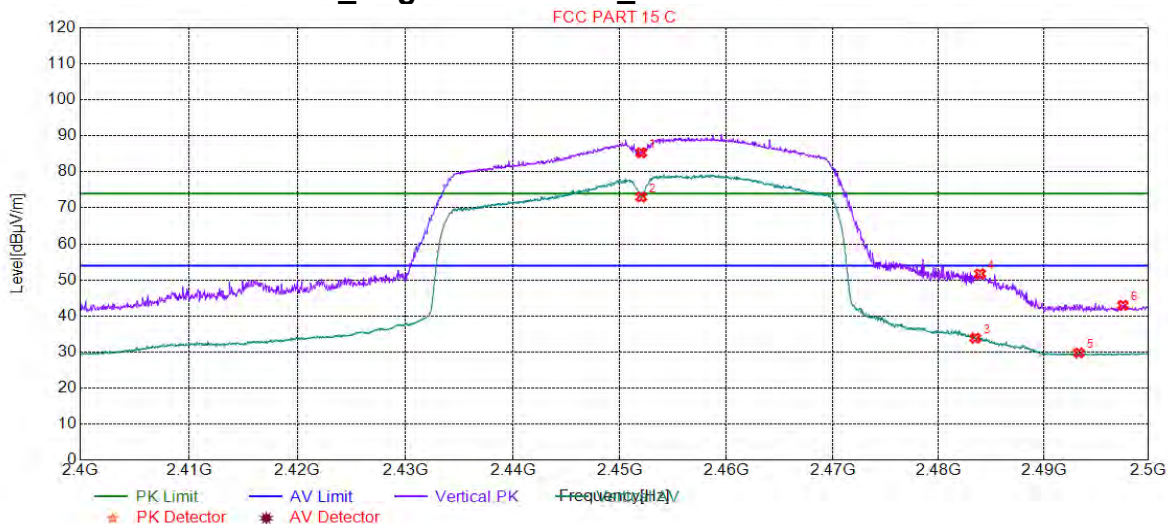
Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2360.0000	34.96	9.10	54.00	19.04	150	94	Vertical
2	2367.8078	48.54	9.12	74.00	25.46	150	141	Vertical
3	2386.8769	55.54	9.19	74.00	18.46	150	301	Vertical
4	2388.9790	38.20	9.19	54.00	15.80	150	68	Vertical
5	2422.0000	81.81	9.30	74.00	-7.81	150	296	Vertical
6	2422.0000	70.29	9.30	54.00	-16.29	150	301	Vertical





#### 4.10.1.14 802.11N40\_ Highest Channel\_ Vertical



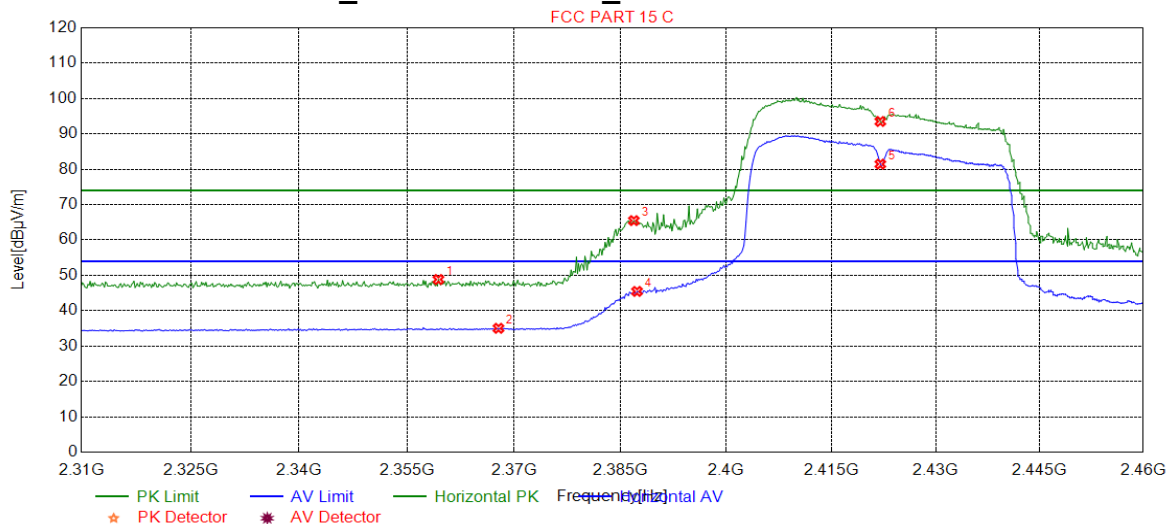
#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.0000	85.29	9.40	74.00	-11.29	150	79	Vertical
2	2452.0000	73.03	9.40	54.00	-19.03	150	189	Vertical
3	2483.5000	33.87	9.50	54.00	20.13	150	189	Vertical
4	2483.9420	51.71	9.50	74.00	22.29	150	189	Vertical
5	2493.3467	29.76	9.53	54.00	24.24	150	279	Vertical
6	2497.5488	42.98	9.54	74.00	31.02	150	98	Vertical





#### 4.10.1.15 802.11N40\_Lowest Channel\_Horizontal

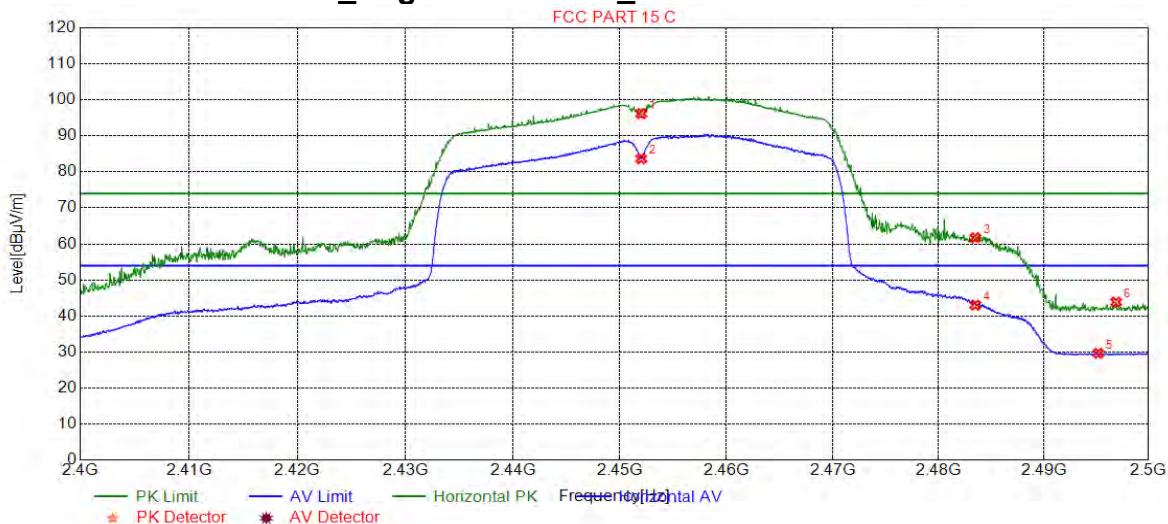


#### Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2359.3994	48.83	9.10	74.00	25.17	150	212	Horizontal
2	2367.8078	35.03	9.12	54.00	18.97	150	352	Horizontal
3	2386.8769	65.48	9.19	74.00	8.52	150	190	Horizontal
4	2387.3273	45.46	9.19	54.00	8.54	150	195	Horizontal
5	2422.0000	81.45	9.30	54.00	-27.45	150	190	Horizontal
6	2422.0000	93.51	9.30	74.00	-19.51	150	203	Horizontal



#### 4.10.1.16 802.11N40\_ Highest Channel\_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.0000	96.12	9.40	74.00	-22.12	150	203	Horizontal
2	2452.0000	83.65	9.40	54.00	-29.65	150	203	Horizontal
3	2483.5000	61.73	9.50	74.00	12.27	150	203	Horizontal
4	2483.5000	43.02	9.50	54.00	10.98	150	203	Horizontal
5	2495.1976	29.63	9.53	54.00	24.37	150	304	Horizontal
6	2496.8984	43.84	9.54	74.00	30.16	150	43	Horizontal

#### Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

All Modes have been tested, but only the worst case data displayed in this report.



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## 5 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	$\pm 0.75\text{dB}$
2	RF power density, conducted	$\pm 2.84\text{dB}$
3	Spurious emissions, conducted	$\pm 0.75\text{dB}$
4	Radiated Spurious emission test	$\pm 4.5\text{dB}$ (30MHz-1GHz)
		$\pm 4.8\text{dB}$ (1GHz-25GHz)
5	Conduct emission test	$\pm 3.12\text{ dB}$ (9KHz- 30MHz)
6	Temperature test	$\pm 1^{\circ}\text{C}$
7	Humidity test	$\pm 3\%$
8	DC and low frequency voltages	$\pm 0.5\%$



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## 6 Equipment List

Conducted Emission					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal. Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017/5/10	2020/5/9
LISN	Rohde & Schwarz	ENV216	SEM007-01	2019/7/14	2020/7/14
LISN	ETS-LINDGREN	Feb-16	SEM007-02	2019/4/1	2020/3/31
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2019/6/12	2020/6/11
2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	EMC0122	2019/2/11	2020/2/10
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2019/3/2	2020/3/1

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal. Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
DC Power Supply	Agilent Technologies Inc	66311B	W009-09	2019/7/15	2020/7/15
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2019/1/13	2020/1/12
Coaxial Cable	SGS	N/A	SEM031-01	2019/6/12	2020/6/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2019/7/14	2020/7/14
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2019/10/27	2020/10/27
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2019/7/14	2020/7/14

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal. Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017/8/5	2020/8/4
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2019/6/12	2020/6/11
MXE EMI Receiver (20Hz-8.4GHz)	Agilent Technologies	N9038A	SEM004-05	2019/7/14	2020/7/14
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017/6/27	2020/6/26
Pre-amplifier (0.1-1.3GHz)	Agilent Technologies	8447D	SEM005-01	2019/3/2	2020/3/1

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal. Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Measurement Software	AUDIX	e3V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019/6/12	2020/6/11
EXA Signal Analyzer (10Hz-26.5GHz)	Agilent Technologies Inc	N9010A	SEM004-09	2019/3/12	2020/3/11
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Horn Antenna (0.8-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/4/13	2021/4/12
Pre-amplifier(0.1-1.3GHz)	HP	8447D	SEM005-02	2019/7/14	2020/7/14
Low Noise Amplifier(100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2019/9/3	2020/9/2
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2019/3/2	2020/3/1
Band filter	N/A	N/A	SEM023-01	N/A	N/A



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RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2018/3/31	2021/3/30
EMI Test Receiver (9k-7GHz)	Rohde & Schwarz	ESR	SEM004-03	2019/3/2	2020/3/1
Trilog-Broadband Antenna(25M-2GHz)	Schwarzbeck	VULB9168	SEM003-18	2018/3/15	2020/3/14
Pre-amplifier (9k-1GHz)	Sonoma	310N	SEM005-03	2019/3/12	2020/3/11
Loop Antenna (9kHz-30MHz)	ETS-Lindgren	6502	SEM003-08	2017/8/22	2020/8/21
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2019/6/12	2020/6/11

## 7 Photographs for Set-Up

Refer to Appendix A - Photographs of Set-Up for ZR/2019/B0013.

The End



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