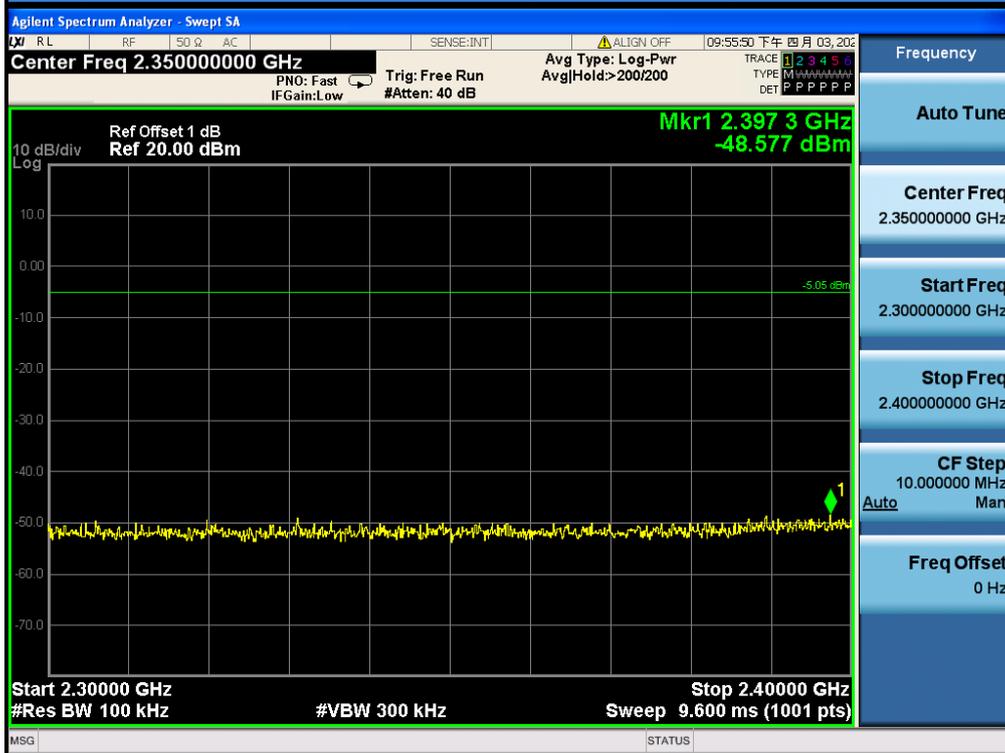
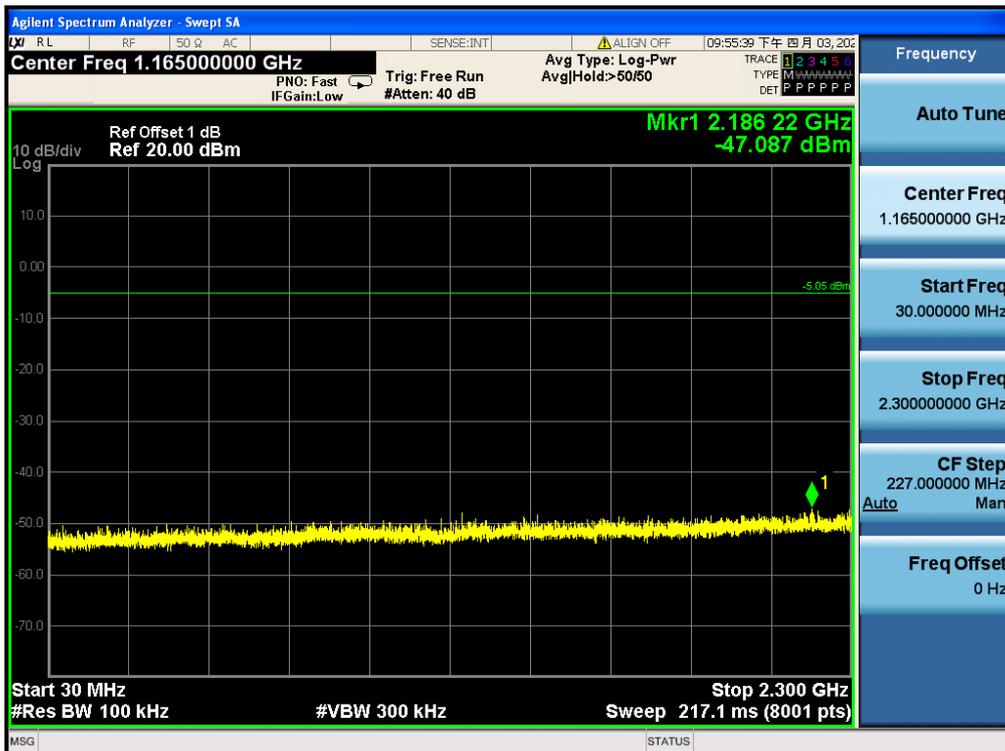


#### 4.8.1.1.9 802.11 N20\_Highest Channel







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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 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:	
-------------	--



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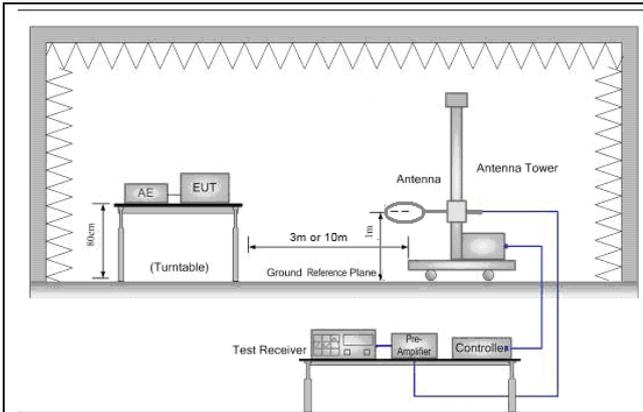


Figure 1. Below 30MHz

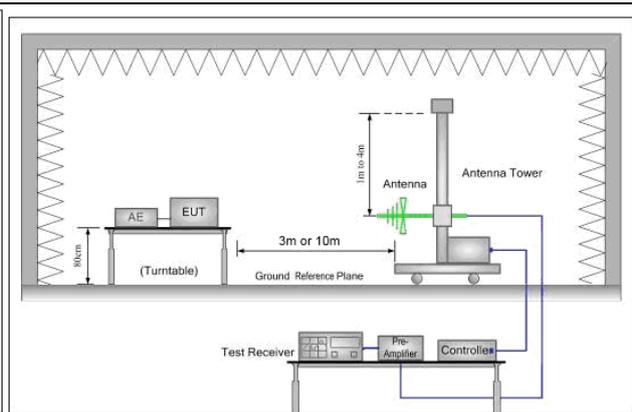


Figure 2. 30MHz to 1GHz

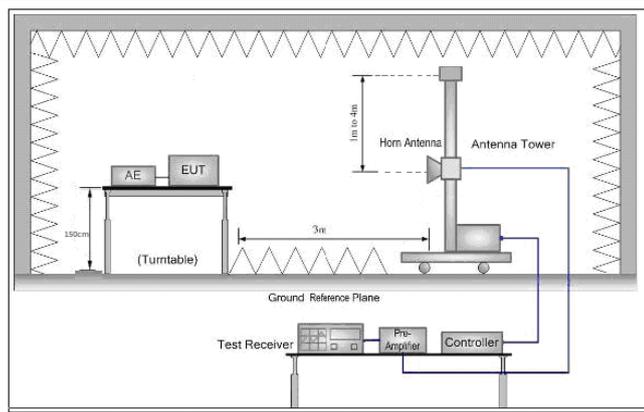


Figure 3. Above 1 GHz

**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 away 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. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for  $f < 1$  GHz, RBW=1MHz for  $f > 1$ GHz ; VBW  $\geq$  RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
  - (3) For average measurement: use duty cycle correction factor method per 15.35(c).  
Duty cycle = On time/100 milliseconds





	<p>On time = <math>N_1 * L_1 + N_2 * L_2 + \dots + N_{n-1} * L_{n-1} + N_n * L_n</math>  Where <math>N_1</math> is number of type 1 pulses, <math>L_1</math> is length of type 1 pulses, etc.  Average Emission Level = Peak Emission Level + <math>20 * \log(\text{Duty cycl}</math></p> <p>f. 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.</p> <p>g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>h. 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 re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</p> <p>i. Test the EUT in the lowest channel, the middle channel, the Highest channel</p> <p>j. 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>k. Repeat above procedures until all frequencies measured was complete.</p>
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Charge + Transmitting mode.
Final Test Mode:	Pretest the EUT at Charge + Transmitting 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); 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.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

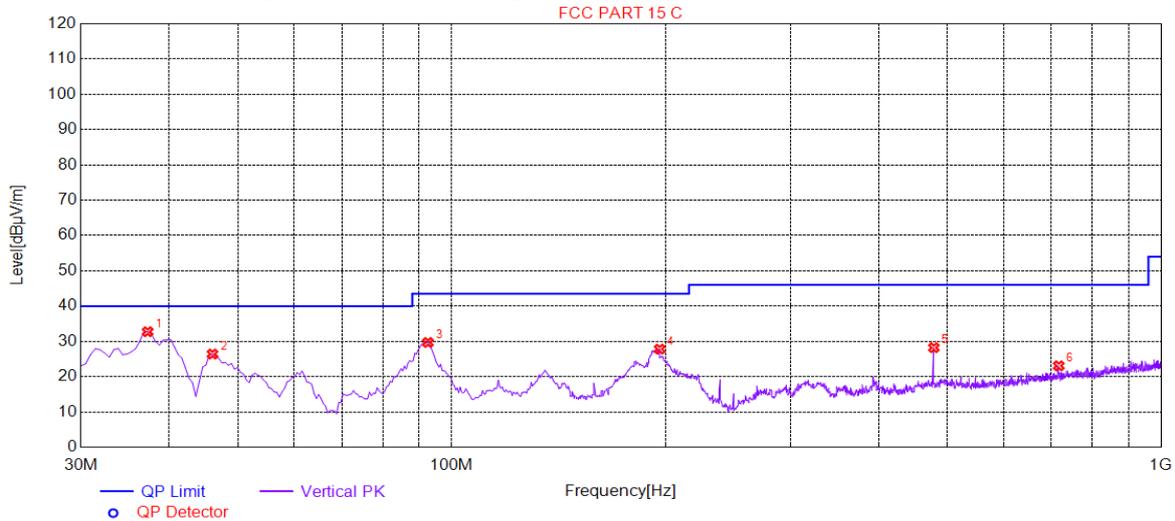


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### 4.9.1 Radiated emission below 1GHz

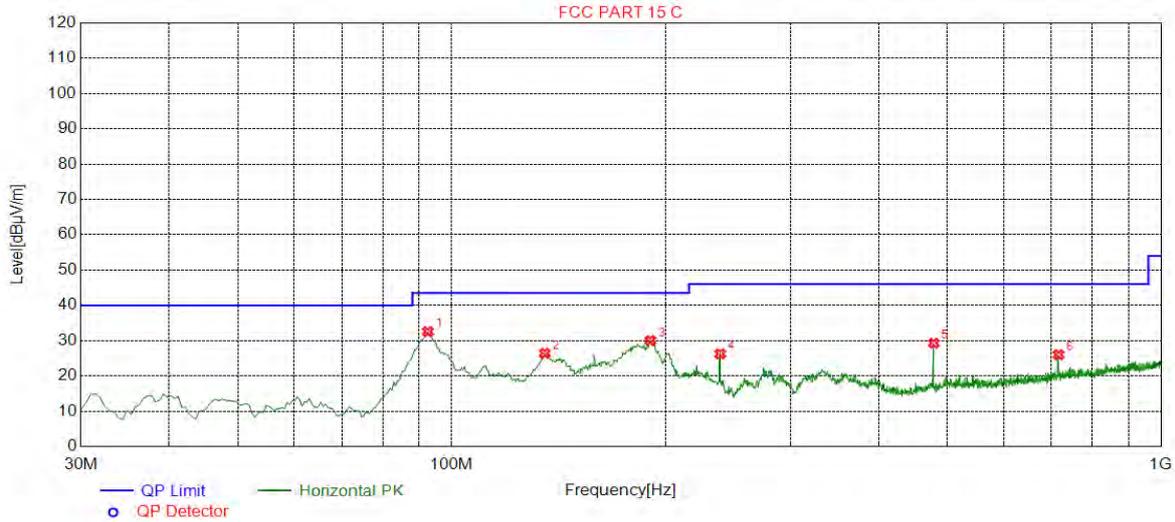
#### 4.9.1.1 Charge + Transmitting, Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	37.2786	32.73	-32.03	40.00	7.27	100	190	Vertical
2	46.0130	26.40	-30.20	40.00	13.60	100	249	Vertical
3	92.5963	29.68	-32.98	43.50	13.82	100	90	Vertical
4	196.438	27.80	-31.19	43.50	15.70	100	115	Vertical
5	478.364	28.21	-23.25	46.00	17.79	100	249	Vertical
6	717.588	23.07	-18.32	46.00	22.93	100	252	Vertical



**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	92.5963	32.54	-32.98	43.50	10.96	200	275	Horizontal
2	135.297	26.40	-35.01	43.50	17.10	200	70	Horizontal
3	190.615	30.03	-31.81	43.50	13.47	100	78	Horizontal
4	239.139	26.27	-29.63	46.00	19.73	100	109	Horizontal
5	478.364	29.26	-23.25	46.00	16.74	200	235	Horizontal
6	717.103	26.01	-18.33	46.00	19.99	100	291	Horizontal

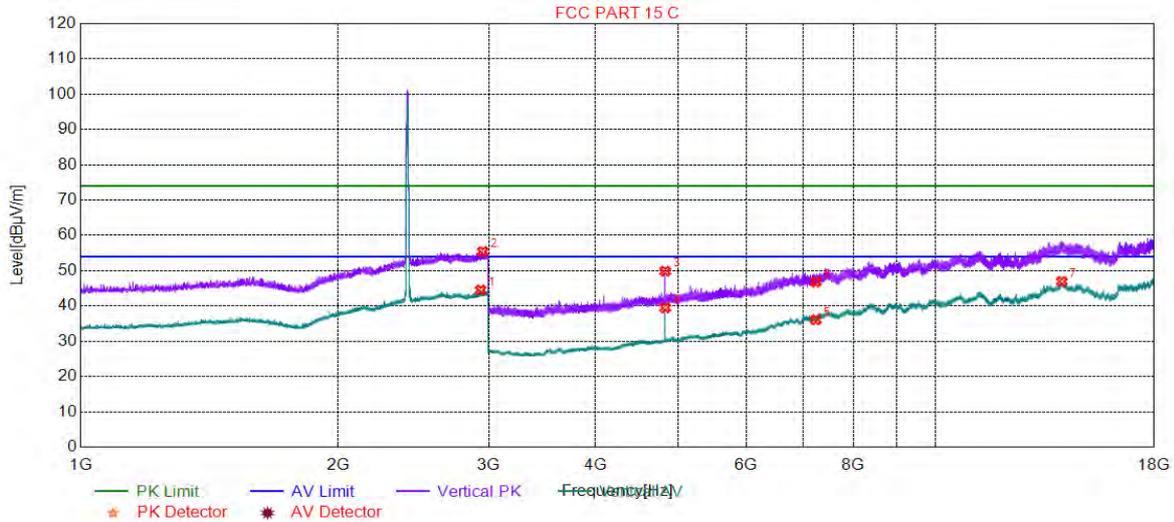


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### 4.9.2 Transmitter emission above 1GHz

#### 4.9.2.1

#### 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	2935.48	44.51	9.52	54.00	9.49	150	338	Vertical
2	2951.48	55.43	9.67	74.00	18.57	150	56	Vertical
3	4824.18	49.88	-18.21	74.00	24.12	150	240	Vertical
4	4824.58	39.50	-18.21	54.00	14.50	150	260	Vertical
5	7236.00	36.08	-9.99	54.00	17.92	150	95	Vertical
6	7236.00	46.78	-9.99	74.00	27.22	150	248	Vertical
7	14032.6	46.95	2.61	54.00	7.05	150	31	Vertical

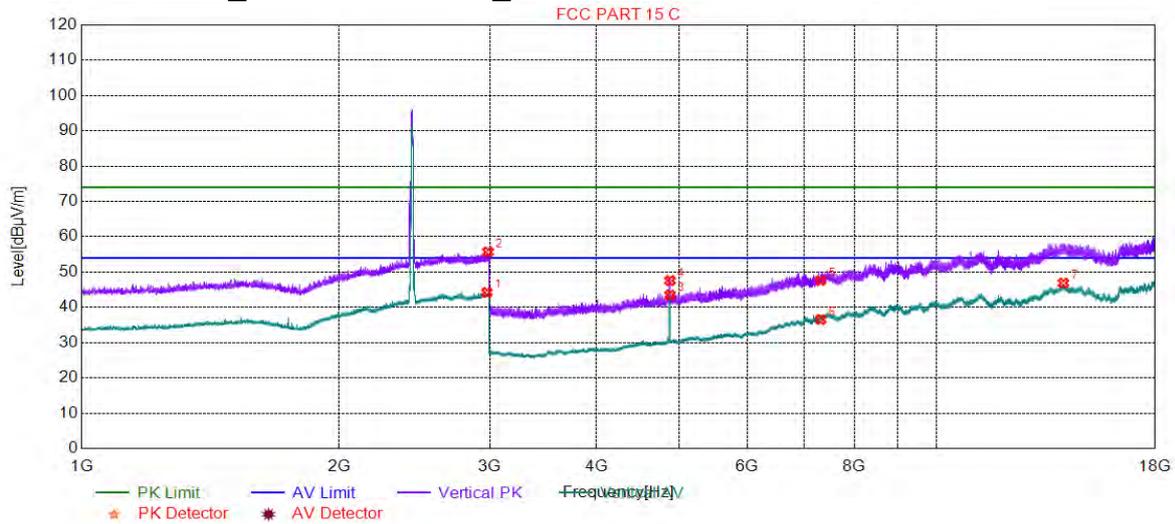


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**4.9.2.1.2 802.11B\_ Middle Channel\_ Vertical**

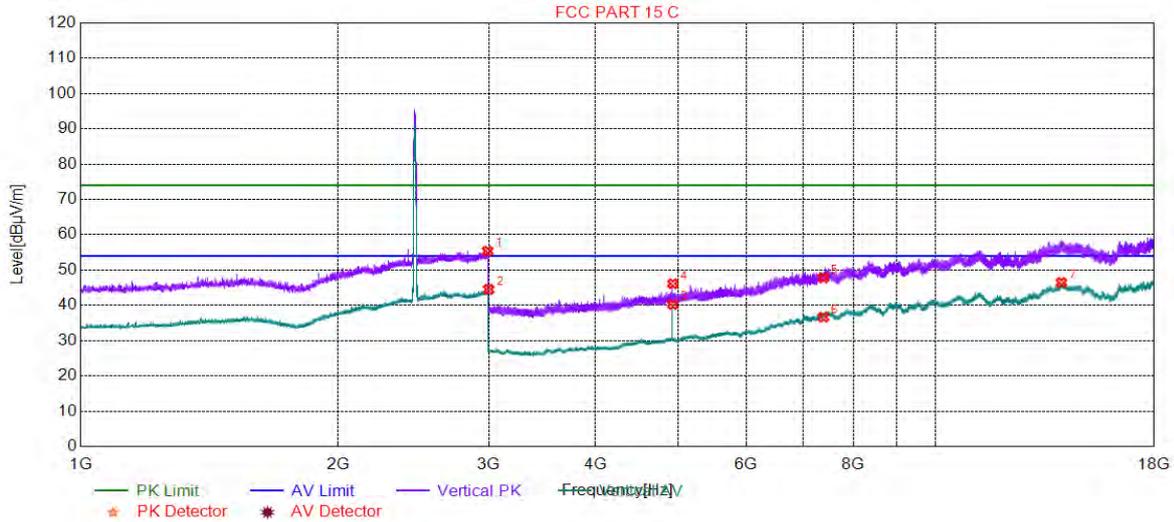


Suspected List								
NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2977.49	44.22	9.55	54.00	9.78	150	138	Vertical
2	2985.99	55.68	9.51	74.00	18.32	150	306	Vertical
3	4874.00	43.47	-17.99	54.00	10.53	150	295	Vertical
4	4874.00	47.58	-17.99	74.00	26.42	150	264	Vertical
5	7311.00	47.60	-9.74	74.00	26.40	150	172	Vertical
6	7311.00	36.53	-9.74	54.00	17.47	150	172	Vertical
7	14052.4	46.85	2.64	54.00	7.15	150	172	Vertical



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

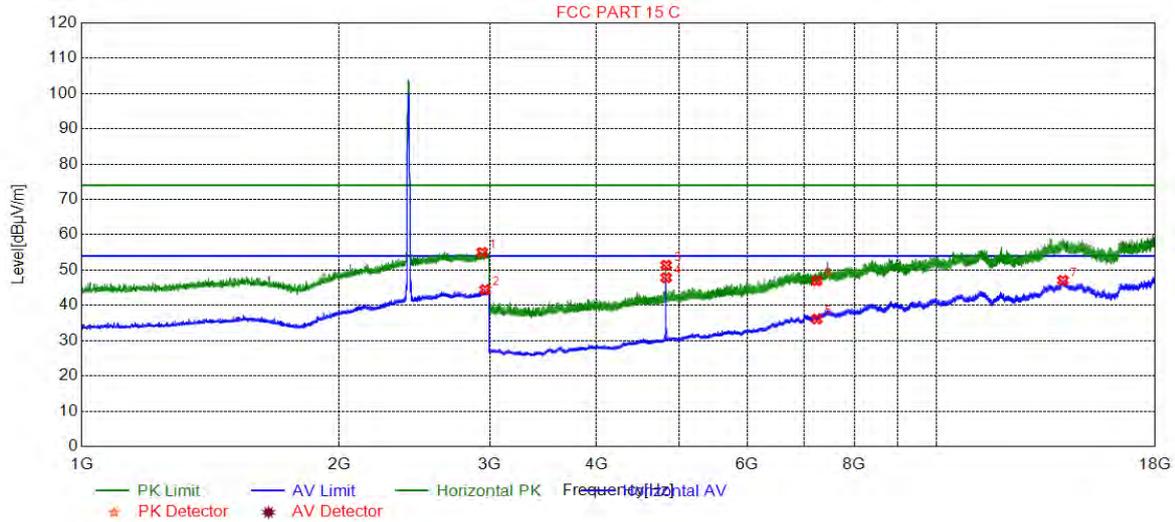


Suspected List								
NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2991.49	55.39	9.49	74.00	18.61	150	281	Vertical
2	2999.49	44.53	9.45	54.00	9.47	150	98	Vertical
3	4924.00	40.25	-17.72	54.00	13.75	150	298	Vertical
4	4924.00	46.13	-17.72	74.00	27.87	150	240	Vertical
5	7386.00	47.79	-9.55	74.00	26.21	150	248	Vertical
6	7386.00	36.65	-9.55	54.00	17.35	150	192	Vertical
7	14015.6	46.48	2.57	54.00	7.52	150	134	Vertical



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**4.9.2.1.4 802.11B\_Lowest Channel\_ Horizontal**



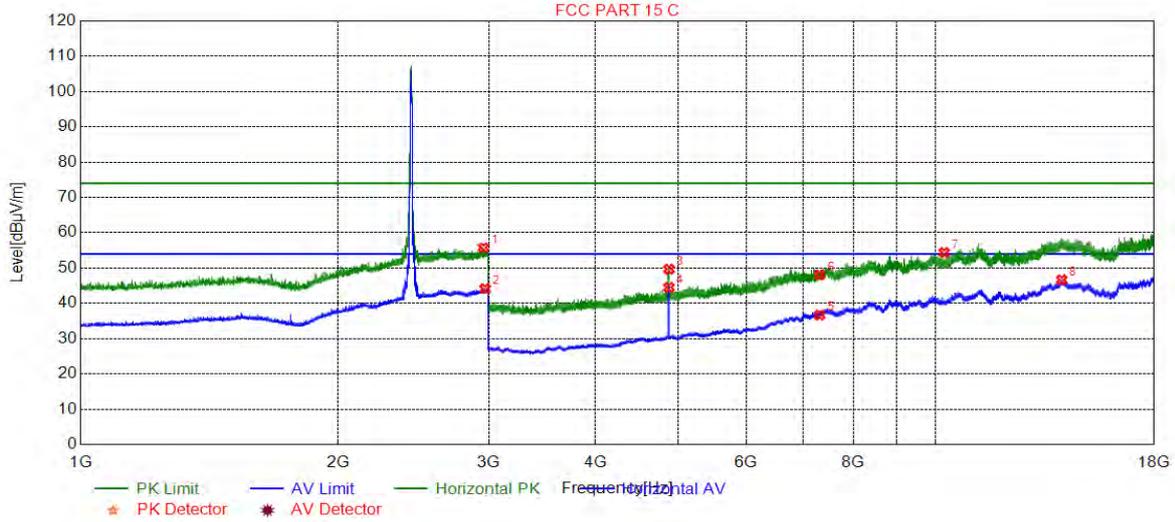
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2939.48	55.01	9.57	74.00	18.99	150	236	Horizontal
2	2962.49	44.43	9.62	54.00	9.57	150	342	Horizontal
3	4824.18	51.38	-18.21	74.00	22.62	150	307	Horizontal
4	4824.58	47.81	-18.21	54.00	6.19	150	340	Horizontal
5	7236.00	36.11	-9.99	54.00	17.89	150	340	Horizontal
6	7236.00	46.90	-9.99	74.00	27.10	150	26	Horizontal
7	14038.1	47.08	2.62	54.00	6.92	150	289	Horizontal



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



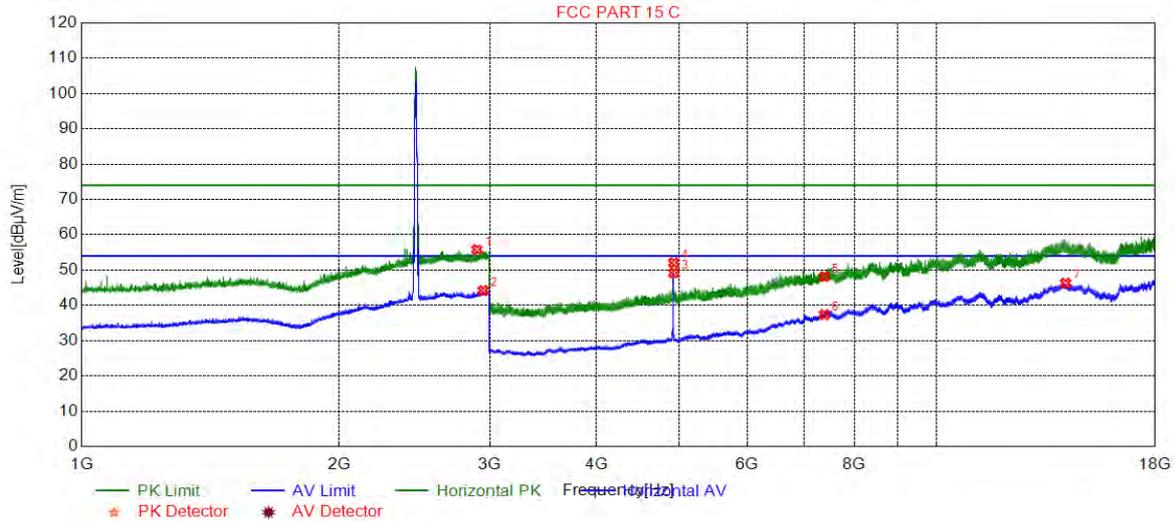
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2957.48	55.76	9.65	74.00	18.24	150	124	Horizontal
2	2970.49	44.15	9.59	54.00	9.85	150	32	Horizontal
3	4874.00	49.67	-17.99	74.00	24.33	150	0	Horizontal
4	4874.00	44.50	-17.99	54.00	9.50	150	15	Horizontal
5	7311.00	36.68	-9.74	54.00	17.32	150	18	Horizontal
6	7311.00	48.06	-9.74	74.00	25.94	150	75	Horizontal
7	10225.3	54.39	-3.85	74.00	19.61	150	75	Horizontal
8	14028.8	46.66	2.60	54.00	7.34	150	18	Horizontal



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**4.9.2.1.6 802.11B\_ Highest Channel\_ Horizontal**



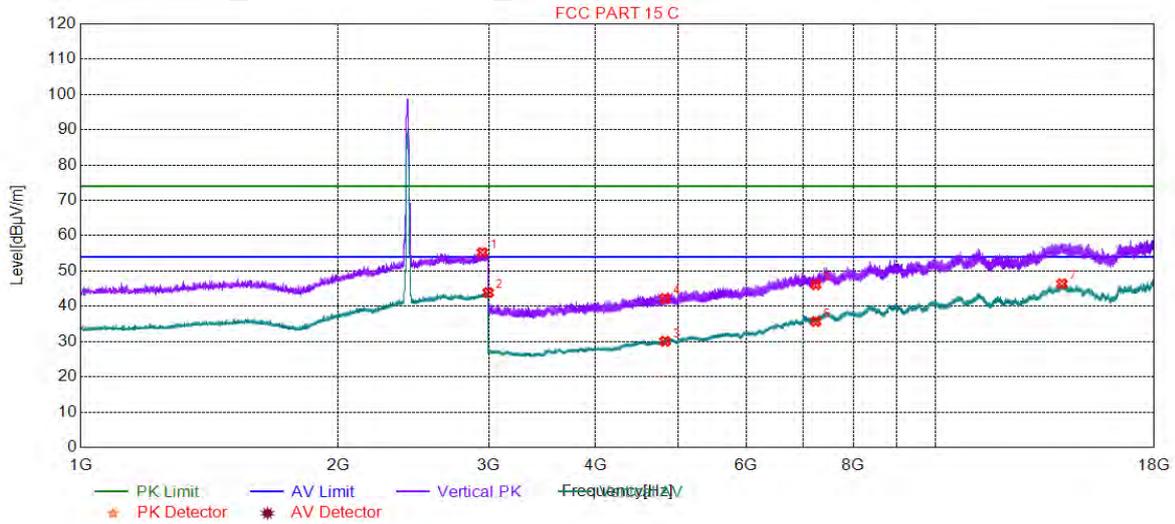
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2898.97	55.80	9.14	74.00	18.20	150	66	Horizontal
2	2946.48	44.17	9.64	54.00	9.83	150	88	Horizontal
3	4924.00	49.16	-17.72	54.00	4.84	150	7	Horizontal
4	4924.00	52.04	-17.72	74.00	21.96	150	7	Horizontal
5	7386.00	48.16	-9.55	74.00	25.84	150	166	Horizontal
6	7386.00	37.36	-9.55	54.00	16.64	150	166	Horizontal
7	14136.0	46.27	2.60	54.00	7.73	150	329	Horizontal



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

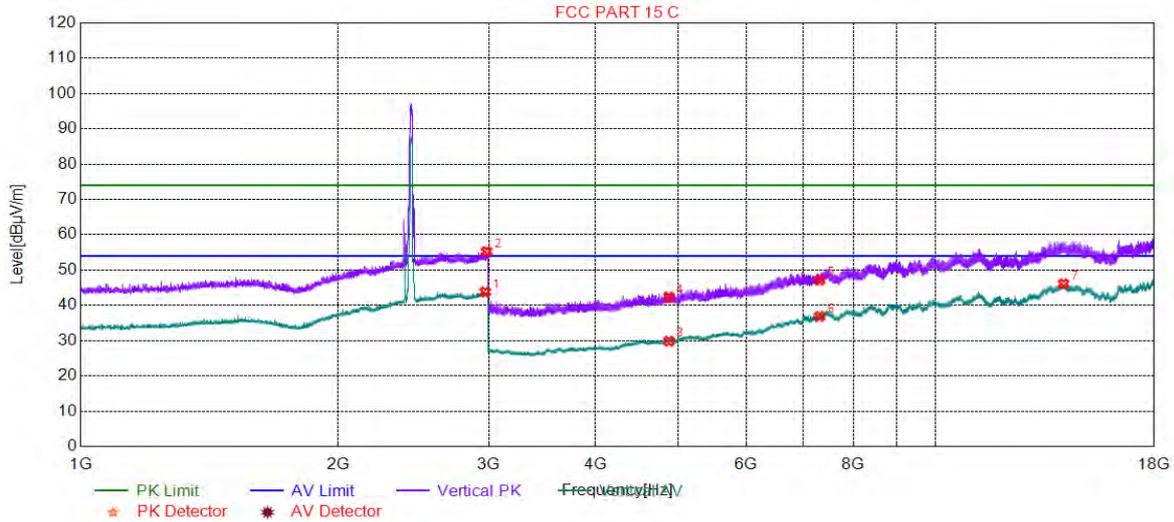


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2949.48	55.23	9.67	74.00	18.77	150	237	Vertical
2	2995.49	43.85	9.47	54.00	10.15	150	196	Vertical
3	4824.00	30.06	-18.21	54.00	23.94	150	327	Vertical
4	4824.00	42.23	-18.21	74.00	31.77	150	134	Vertical
5	7236.00	46.11	-9.99	74.00	27.89	150	199	Vertical
6	7236.00	35.68	-9.99	54.00	18.32	150	148	Vertical
7	14037.0	46.36	2.61	54.00	7.64	150	199	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	2971.49	43.78	9.58	54.00	10.22	150	45	Vertical
2	2983.49	55.23	9.53	74.00	18.77	150	263	Vertical
3	4874.00	29.83	-17.99	54.00	24.17	150	330	Vertical
4	4874.00	42.31	-17.99	74.00	31.69	150	114	Vertical
5	7311.00	47.14	-9.74	74.00	26.86	150	182	Vertical
6	7311.00	36.89	-9.74	54.00	17.11	150	40	Vertical
7	14097.5	46.10	2.74	54.00	7.90	150	232	Vertical

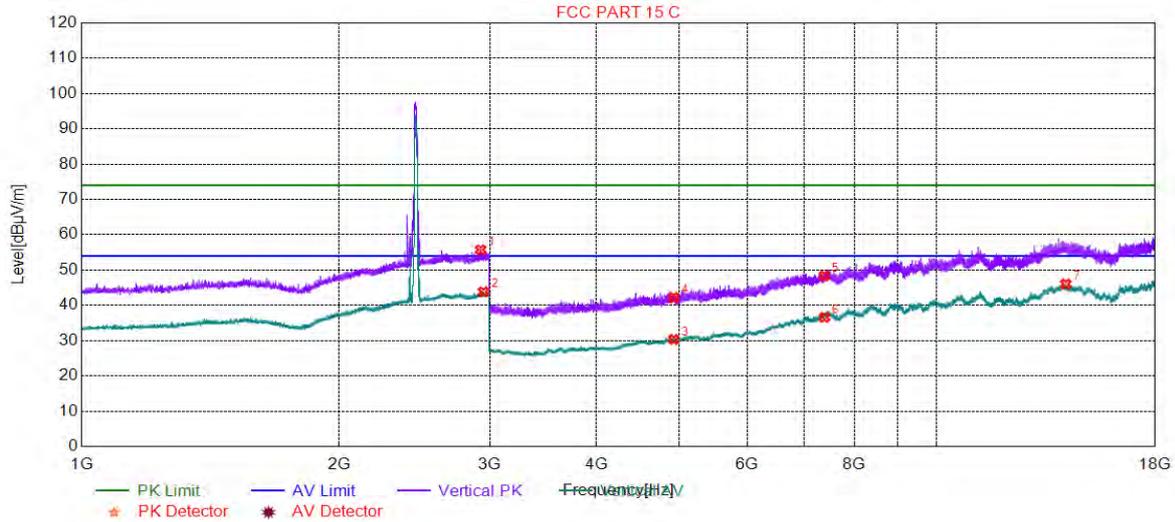


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**4.9.2.1.9 802.11G\_ Highest Channel\_ Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2927.48	55.73	9.44	74.00	18.27	150	238	Vertical
2	2949.48	43.84	9.67	54.00	10.16	150	170	Vertical
3	4924.00	30.32	-17.72	54.00	23.68	150	330	Vertical
4	4924.00	42.19	-17.72	74.00	31.81	150	30	Vertical
5	7386.00	48.37	-9.55	74.00	25.63	150	242	Vertical
6	7386.00	36.59	-9.55	54.00	17.41	150	20	Vertical
7	14143.7	46.05	2.56	54.00	7.95	150	295	Vertical

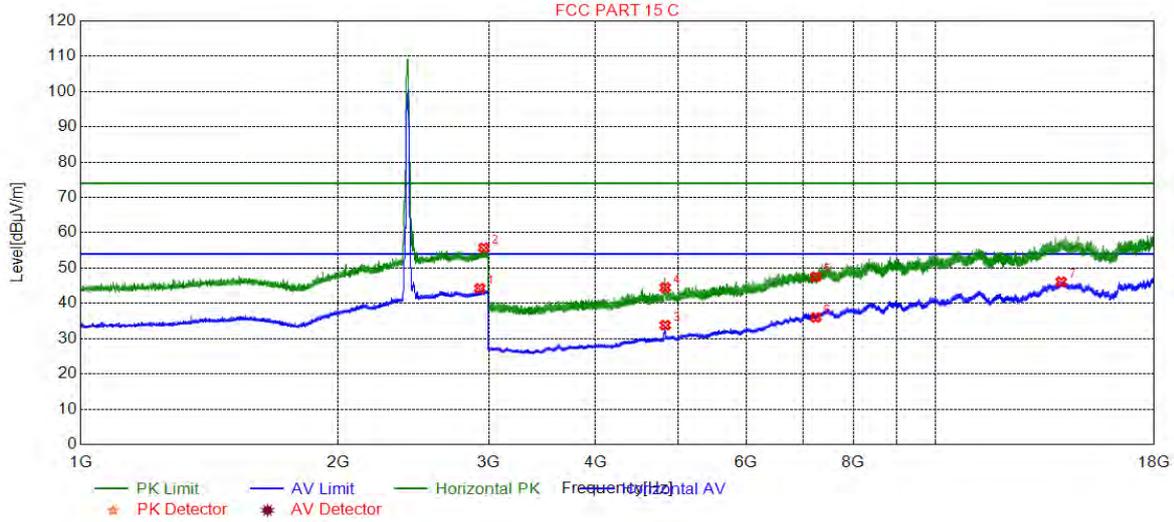


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**4.9.2.1.10 802.11G\_Lowest Channel\_Horizontal**



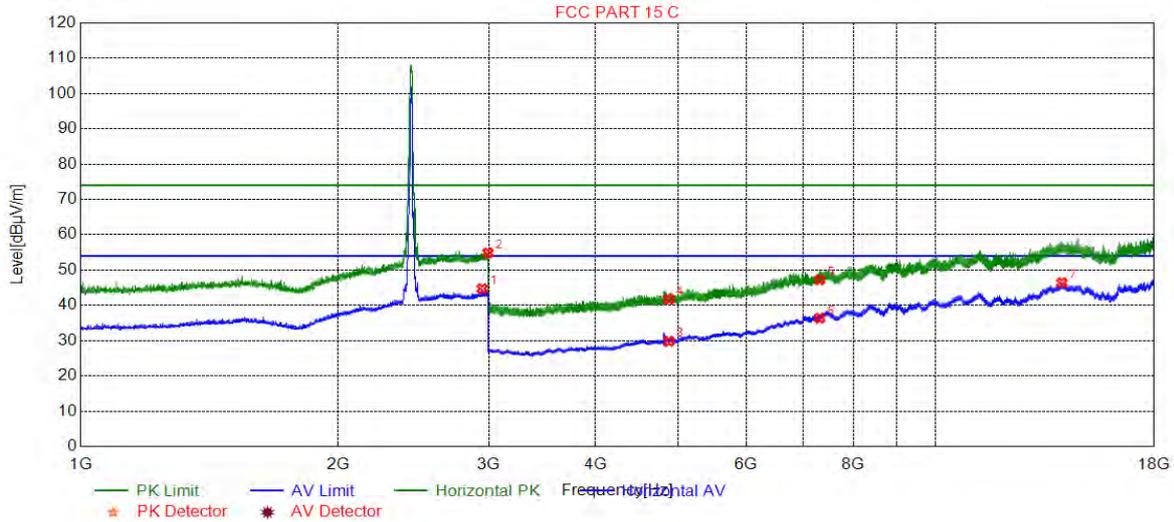
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2928.98	44.24	9.45	54.00	9.76	150	108	Horizontal
2	2958.98	55.76	9.64	74.00	18.24	150	2	Horizontal
3	4824.00	33.80	-18.21	54.00	20.20	150	0	Horizontal
4	4824.00	44.45	-18.21	74.00	29.55	150	16	Horizontal
5	7236.00	47.50	-9.99	74.00	26.50	150	215	Horizontal
6	7236.00	35.99	-9.99	54.00	18.01	150	154	Horizontal
7	14011.2	46.11	2.56	54.00	7.89	150	323	Horizontal



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

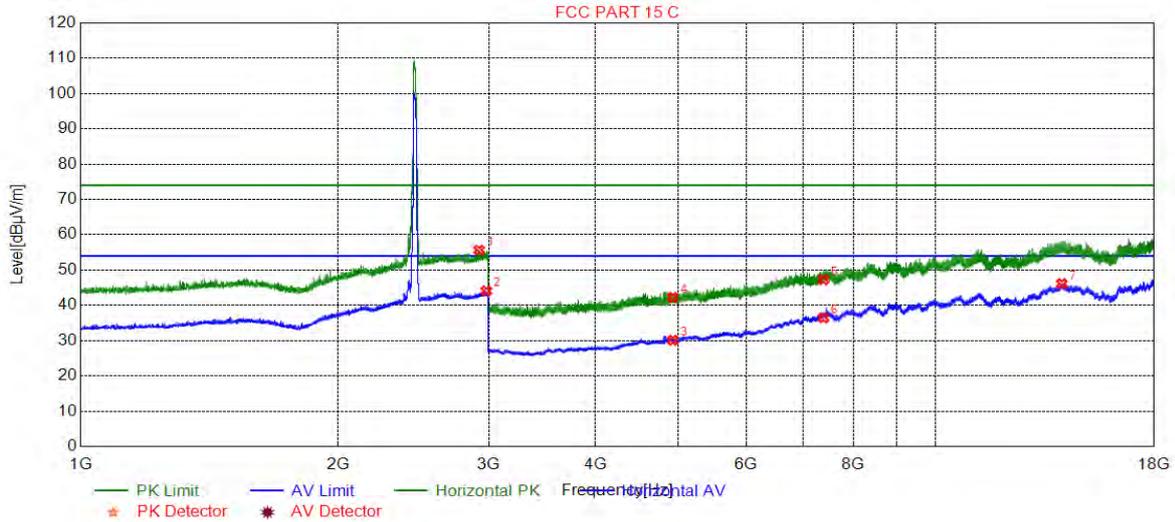


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2947.98	44.69	9.66	54.00	9.31	150	206	Horizontal
2	2993.99	54.86	9.48	74.00	19.14	150	42	Horizontal
3	4874.00	29.82	-17.99	54.00	24.18	150	0	Horizontal
4	4874.00	41.74	-17.99	74.00	32.26	150	231	Horizontal
5	7311.00	47.23	-9.74	74.00	26.77	150	22	Horizontal
6	7311.00	36.37	-9.74	54.00	17.63	150	292	Horizontal
7	14036.5	46.43	2.61	54.00	7.57	150	292	Horizontal



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



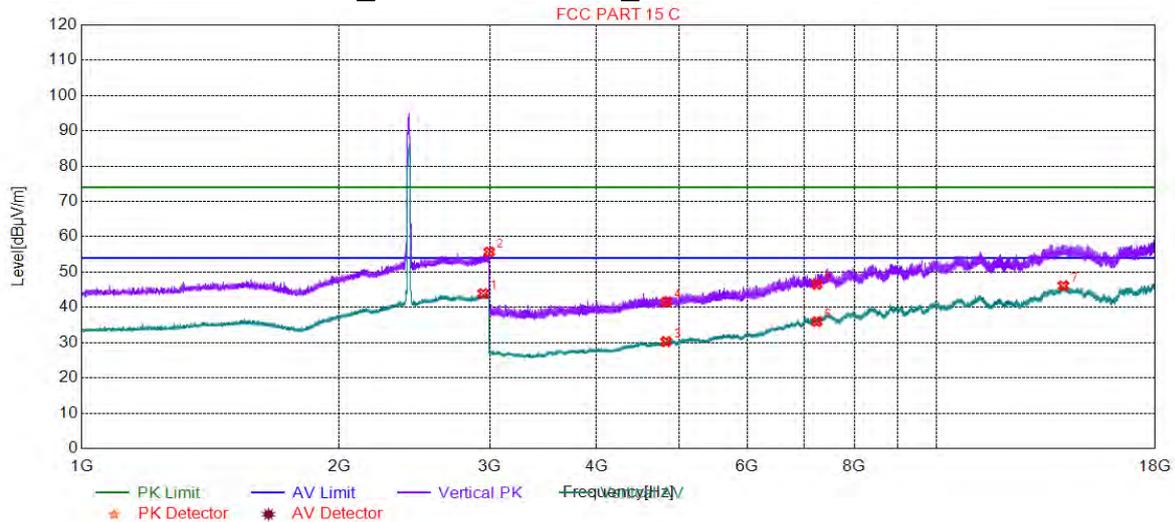
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2923.48	55.65	9.39	74.00	18.35	150	342	Horizontal
2	2980.99	44.08	9.54	54.00	9.92	150	178	Horizontal
3	4924.00	30.11	-17.72	54.00	23.89	150	120	Horizontal
4	4924.00	42.26	-17.72	74.00	31.74	150	28	Horizontal
5	7386.00	47.26	-9.55	74.00	26.74	150	183	Horizontal
6	7386.00	36.46	-9.55	54.00	17.54	150	287	Horizontal
7	14033.7	46.13	2.61	54.00	7.87	150	343	Horizontal



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



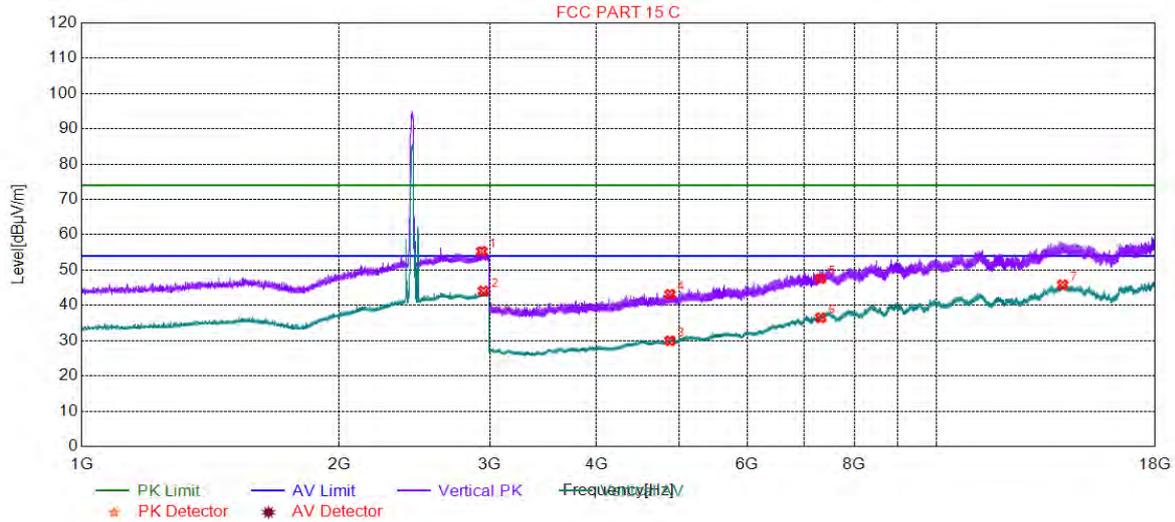
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2947.48	43.89	9.65	54.00	10.11	150	210	Vertical
2	2995.99	55.70	9.47	74.00	18.30	150	319	Vertical
3	4824.00	30.29	-18.21	54.00	23.71	150	303	Vertical
4	4824.00	41.52	-18.21	74.00	32.48	150	181	Vertical
5	7236.00	46.53	-9.99	74.00	27.47	150	169	Vertical
6	7236.00	35.95	-9.99	54.00	18.05	150	221	Vertical
7	14056.3	46.11	2.65	54.00	7.89	150	360	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	2936.48	55.28	9.53	74.00	18.72	150	73	Vertical
2	2949.48	44.06	9.67	54.00	9.94	150	250	Vertical
3	4874.00	29.96	-17.99	54.00	24.04	150	250	Vertical
4	4874.00	43.09	-17.99	74.00	30.91	150	307	Vertical
5	7311.00	47.51	-9.74	74.00	26.49	150	340	Vertical
6	7311.00	36.45	-9.74	54.00	17.55	150	187	Vertical
7	14027.7	45.81	2.60	54.00	8.19	150	26	Vertical

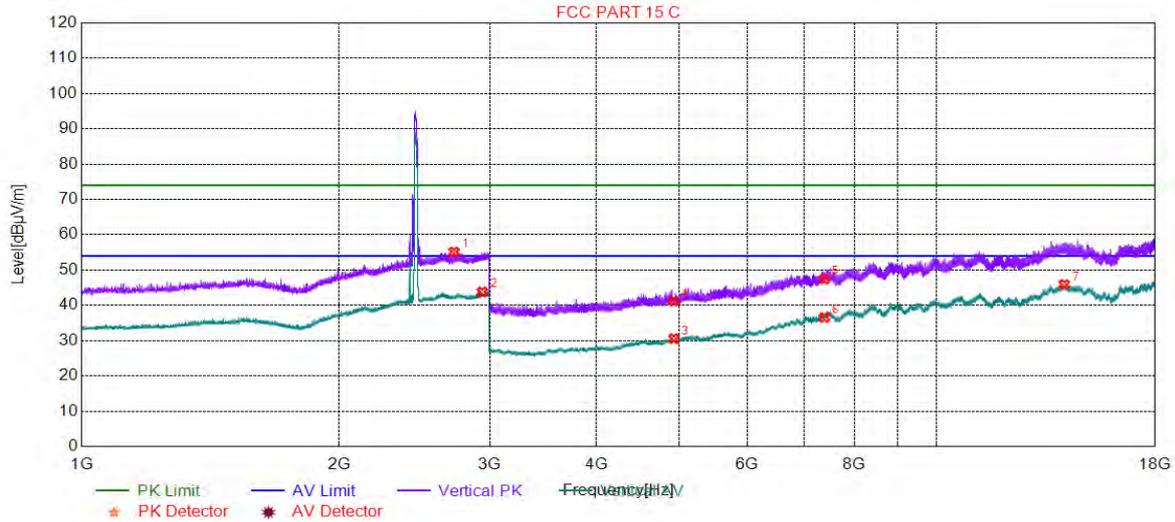


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**4.9.2.1.15 802.11N20\_ Highest Channel\_ Vertical**



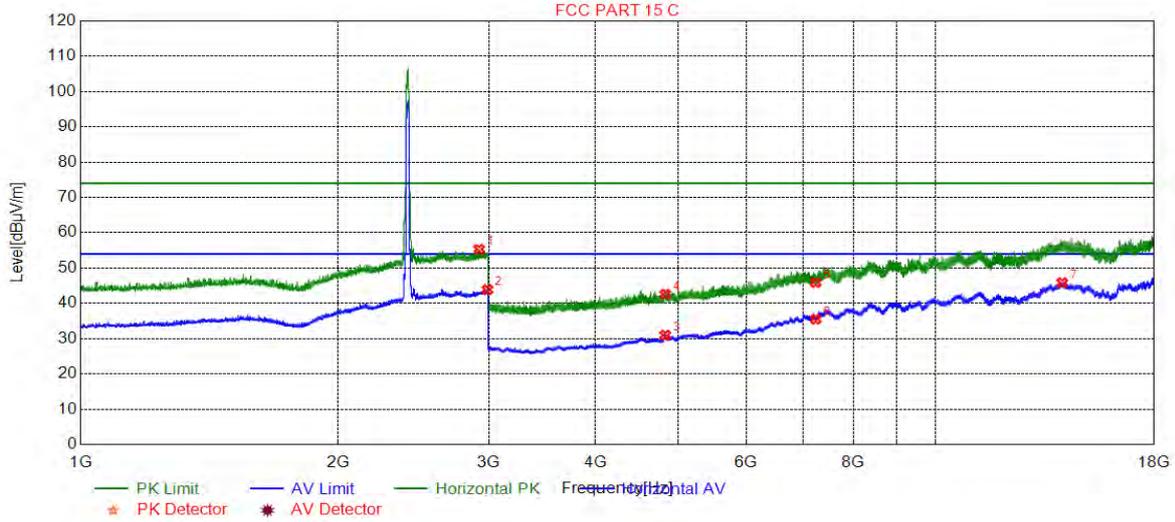
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2725.43	55.13	8.85	74.00	18.87	150	334	Vertical
2	2939.98	43.82	9.57	54.00	10.18	150	142	Vertical
3	4924.00	30.57	-17.72	54.00	23.43	150	339	Vertical
4	4924.00	41.18	-17.72	74.00	32.82	150	195	Vertical
5	7386.00	47.44	-9.55	74.00	26.56	150	172	Vertical
6	7386.00	36.55	-9.55	54.00	17.45	150	222	Vertical
7	14087.6	45.92	2.72	54.00	8.08	150	21	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	2923.98	55.33	9.40	74.00	18.67	150	138	Horizontal
2	2989.49	43.87	9.50	54.00	10.13	150	124	Horizontal
3	4824.00	30.98	-18.21	54.00	23.02	150	341	Horizontal
4	4824.00	42.60	-18.21	74.00	31.40	150	1	Horizontal
5	7236.00	45.86	-9.99	74.00	28.14	150	179	Horizontal
6	7236.00	35.51	-9.99	54.00	18.49	150	295	Horizontal
7	14050.8	45.86	2.64	54.00	8.14	150	19	Horizontal

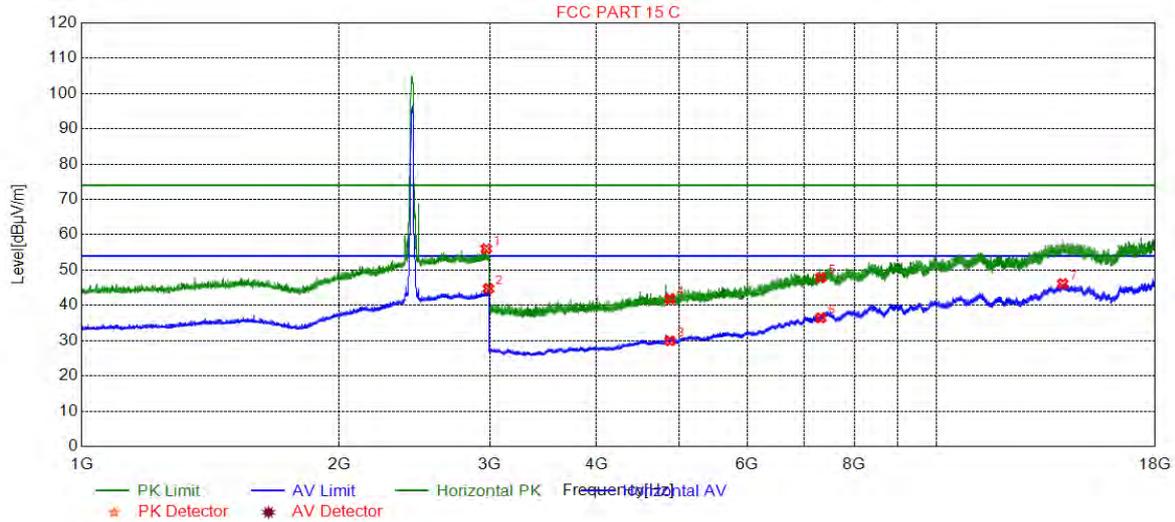


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**4.9.2.1.17 802.11N20\_ Middle Channel\_ Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2971.99	56.05	9.58	74.00	17.95	150	112	Horizontal
2	2989.49	44.73	9.50	54.00	9.27	150	98	Horizontal
3	4874.00	29.93	-17.99	54.00	24.07	150	311	Horizontal
4	4874.00	41.81	-17.99	74.00	32.19	150	56	Horizontal
5	7311.00	47.85	-9.74	74.00	26.15	150	21	Horizontal
6	7311.00	36.43	-9.74	54.00	17.57	150	227	Horizontal
7	14028.2	46.13	2.60	54.00	7.87	150	227	Horizontal

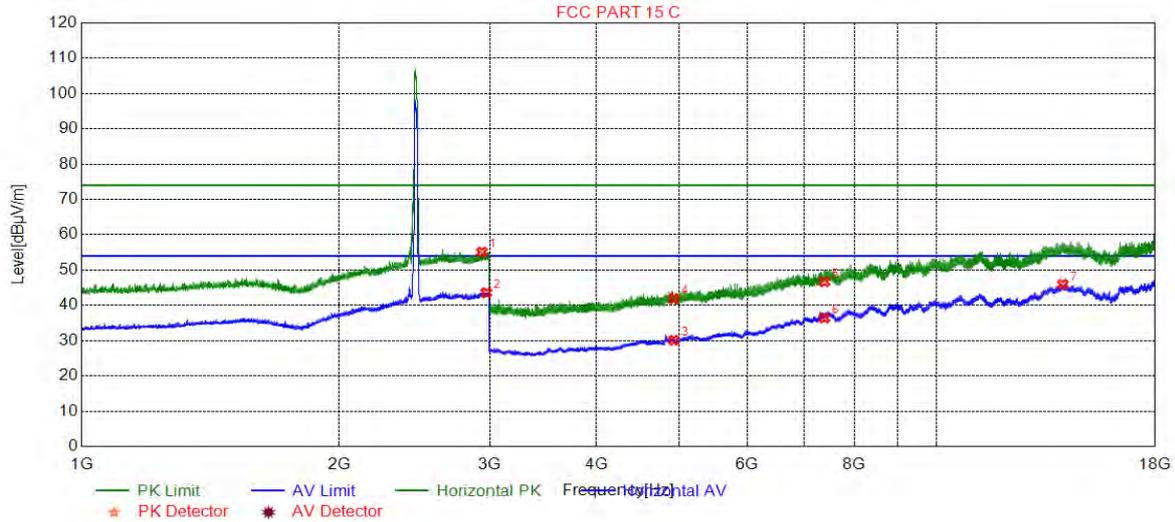


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**4.9.2.1.18 802.11N20\_ Highest Channel\_ Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2937.98	55.11	9.55	74.00	18.89	150	286	Horizontal
2	2971.99	43.56	9.58	54.00	10.44	150	232	Horizontal
3	4924.00	30.10	-17.72	54.00	23.90	150	226	Horizontal
4	4924.00	41.95	-17.72	74.00	32.05	150	310	Horizontal
5	7386.00	46.67	-9.55	74.00	27.33	150	129	Horizontal
6	7386.00	36.38	-9.55	54.00	17.62	150	18	Horizontal
7	14032.1	45.96	2.60	54.00	8.04	150	342	Horizontal

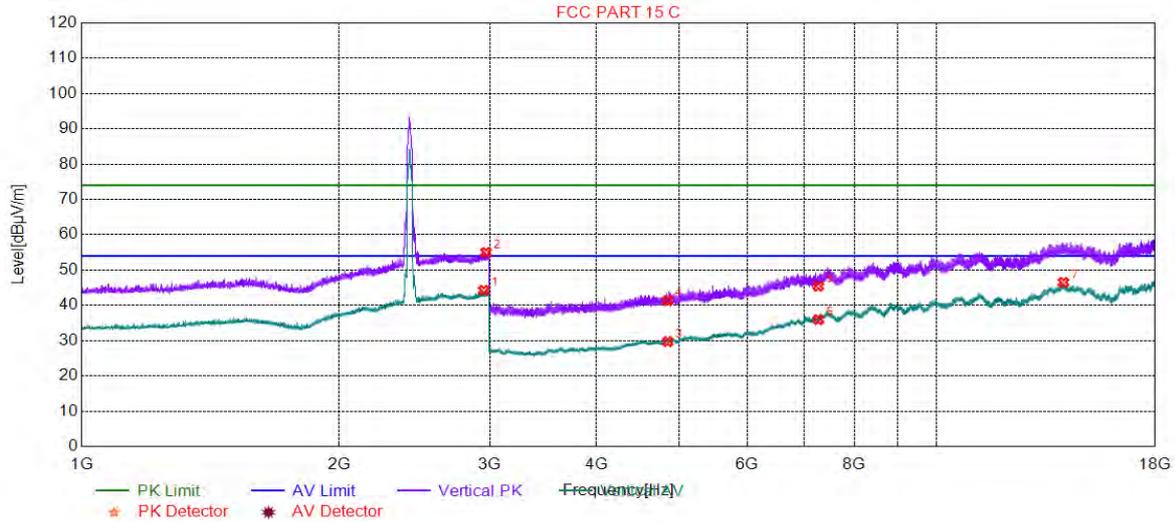


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**4.9.2.1.19 802.11N40\_Lowest Channel\_Vertical**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2951.98	44.25	9.67	54.00	9.75	150	61	Vertical
2	2969.49	55.01	9.59	74.00	18.99	150	33	Vertical
3	4844.00	29.74	-18.13	54.00	24.26	150	278	Vertical
4	4844.00	41.34	-18.13	74.00	32.66	150	334	Vertical
5	7266.00	45.42	-9.88	74.00	28.58	150	230	Vertical
6	7266.00	35.92	-9.88	54.00	18.08	150	351	Vertical
7	14056.3	46.51	2.65	54.00	7.49	150	126	Vertical

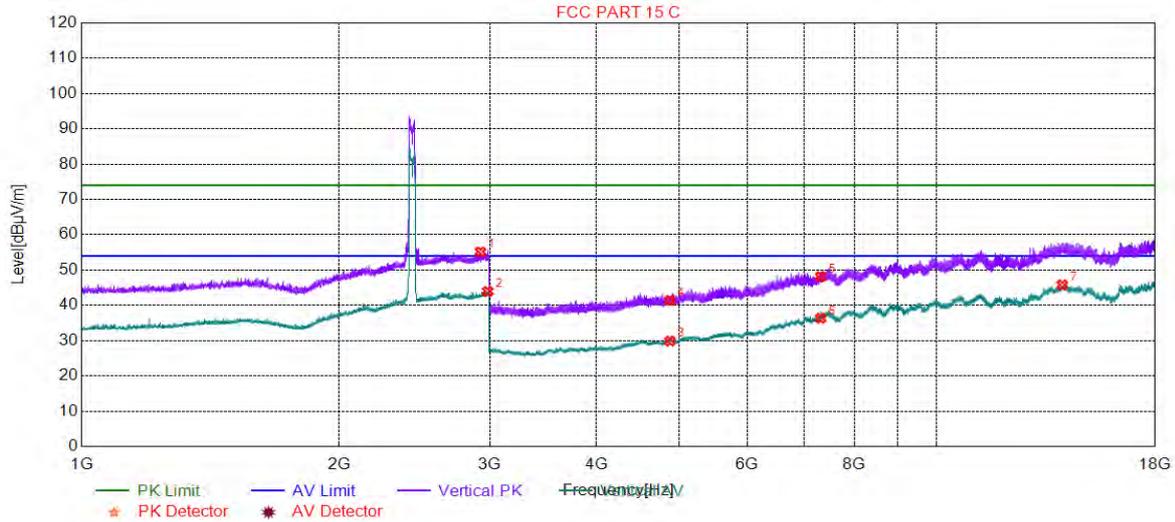


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**4.9.2.1.20 802.11N40\_ Middle Channel\_ Vertical**



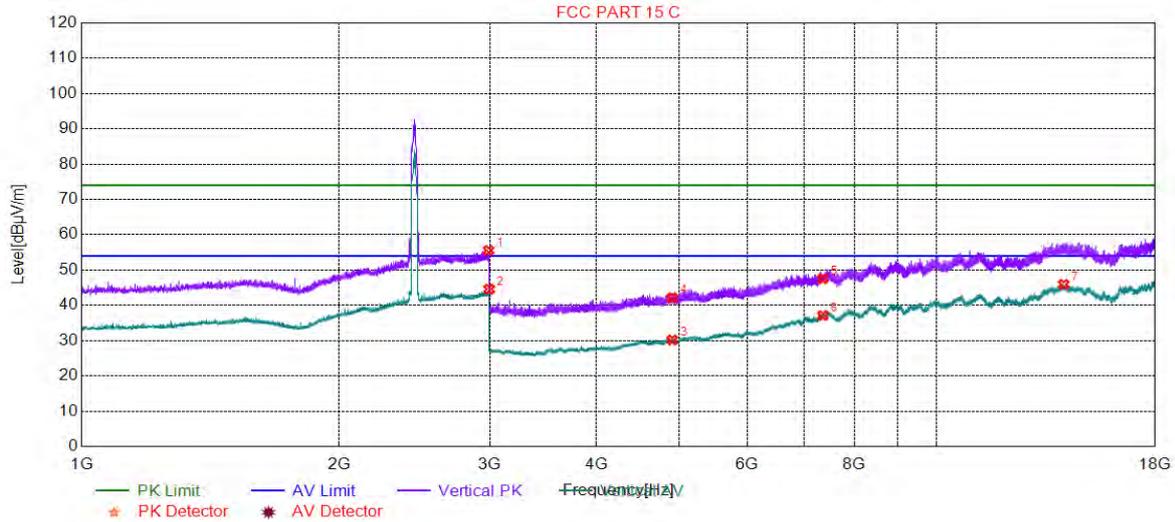
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2925.98	55.16	9.42	74.00	18.84	150	358	Vertical
2	2983.99	43.94	9.52	54.00	10.06	150	251	Vertical
3	4874.00	29.84	-17.99	54.00	24.16	150	78	Vertical
4	4874.00	41.39	-17.99	74.00	32.61	150	296	Vertical
5	7311.00	48.14	-9.74	74.00	25.86	150	37	Vertical
6	7311.00	36.33	-9.74	54.00	17.67	150	222	Vertical
7	14009.0	45.81	2.56	54.00	8.19	150	335	Vertical



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



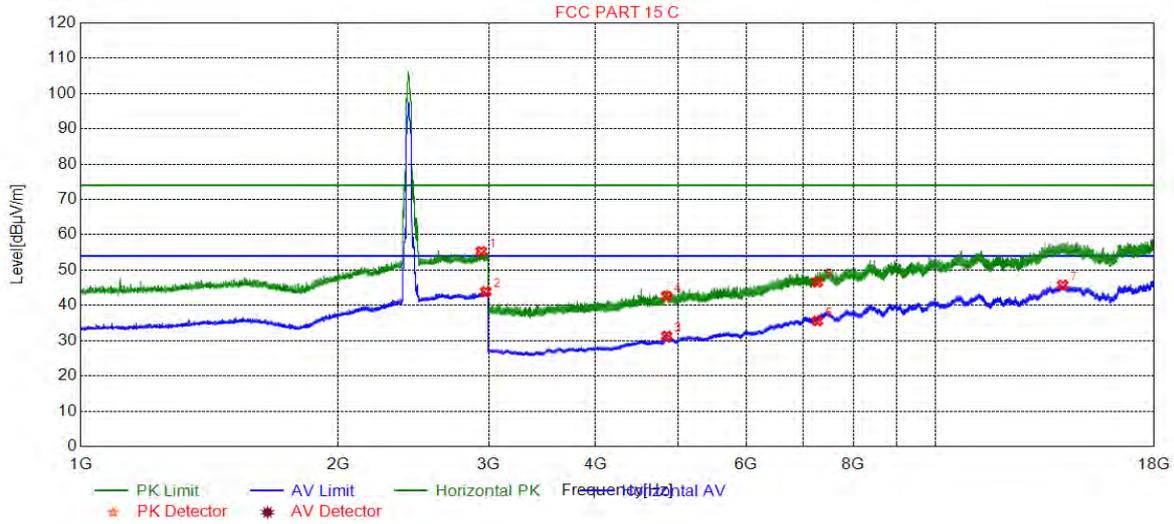
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2990.49	55.55	9.49	74.00	18.45	150	142	Vertical
2	2995.49	44.56	9.47	54.00	9.44	150	197	Vertical
3	4904.00	30.18	-17.85	54.00	23.82	150	302	Vertical
4	4904.00	42.17	-17.85	74.00	31.83	150	302	Vertical
5	7356.00	47.55	-9.62	74.00	26.45	150	27	Vertical
6	7356.00	37.08	-9.62	54.00	16.92	150	89	Vertical
7	14065.6	45.94	2.67	54.00	8.06	150	89	Vertical



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**4.9.2.1.22 802.11N40\_Lowest Channel\_Horizontal**



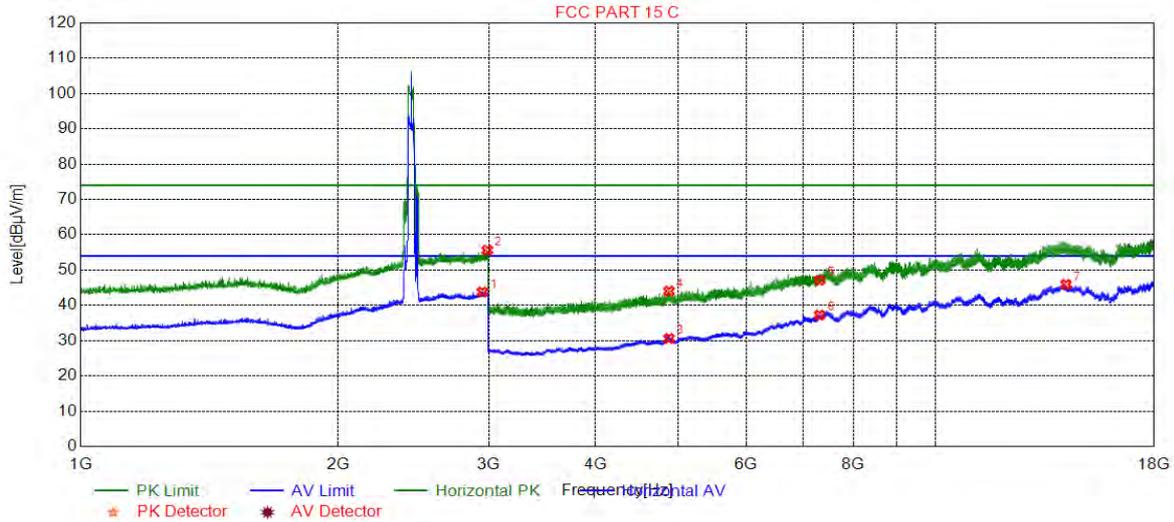
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2939.98	55.30	9.57	74.00	18.70	150	218	Horizontal
2	2975.99	43.88	9.56	54.00	10.12	150	110	Horizontal
3	4844.00	31.26	-18.13	54.00	22.74	150	335	Horizontal
4	4844.00	42.61	-18.13	74.00	31.39	150	87	Horizontal
5	7266.00	46.55	-9.88	74.00	27.45	150	284	Horizontal
6	7266.00	35.58	-9.88	54.00	18.42	150	284	Horizontal
7	14065.6	45.77	2.67	54.00	8.23	150	229	Horizontal



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**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	2948.98	43.78	9.67	54.00	10.22	150	96	Horizontal
2	2987.99	55.62	9.51	74.00	18.38	150	315	Horizontal
3	4874.00	30.62	-17.99	54.00	23.38	150	13	Horizontal
4	4874.00	44.01	-17.99	74.00	29.99	150	341	Horizontal
5	7311.00	47.09	-9.74	74.00	26.91	150	344	Horizontal
6	7311.00	37.24	-9.74	54.00	16.76	150	190	Horizontal
7	14193.8	45.93	2.36	54.00	8.07	150	293	Horizontal

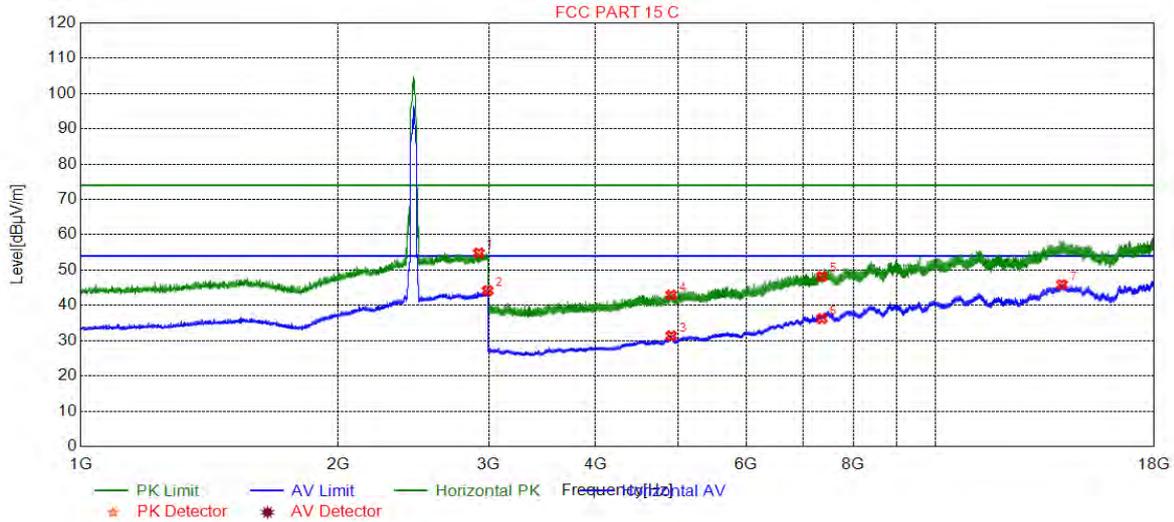


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**4.9.2.1.24 802.11N40\_ Highest Channel\_ Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2920.48	54.83	9.36	74.00	19.17	150	40	Horizontal
2	2991.49	44.13	9.49	54.00	9.87	150	82	Horizontal
3	4904.00	31.35	-17.85	54.00	22.65	150	9	Horizontal
4	4904.00	42.90	-17.85	74.00	31.10	150	324	Horizontal
5	7356.00	48.19	-9.62	74.00	25.81	150	156	Horizontal
6	7356.00	36.22	-9.62	54.00	17.78	150	326	Horizontal
7	14039.2	45.88	2.62	54.00	8.12	150	42	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:			

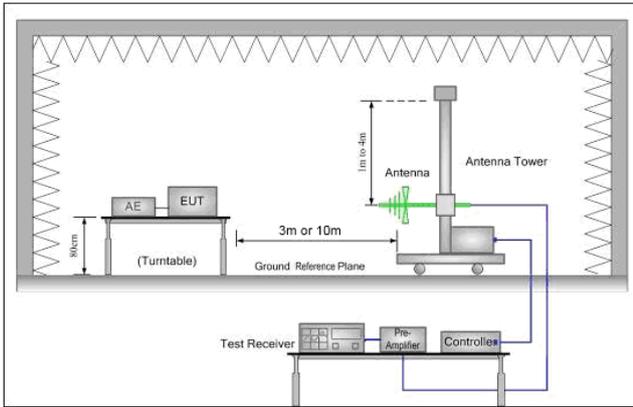


Figure 1. 30MHz to 1GHz

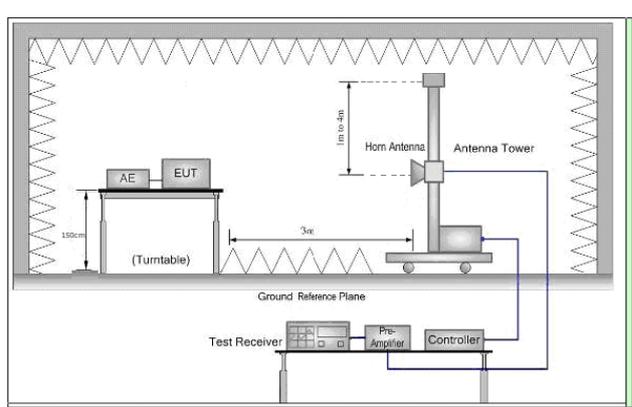


Figure 2. Above 1 GHz

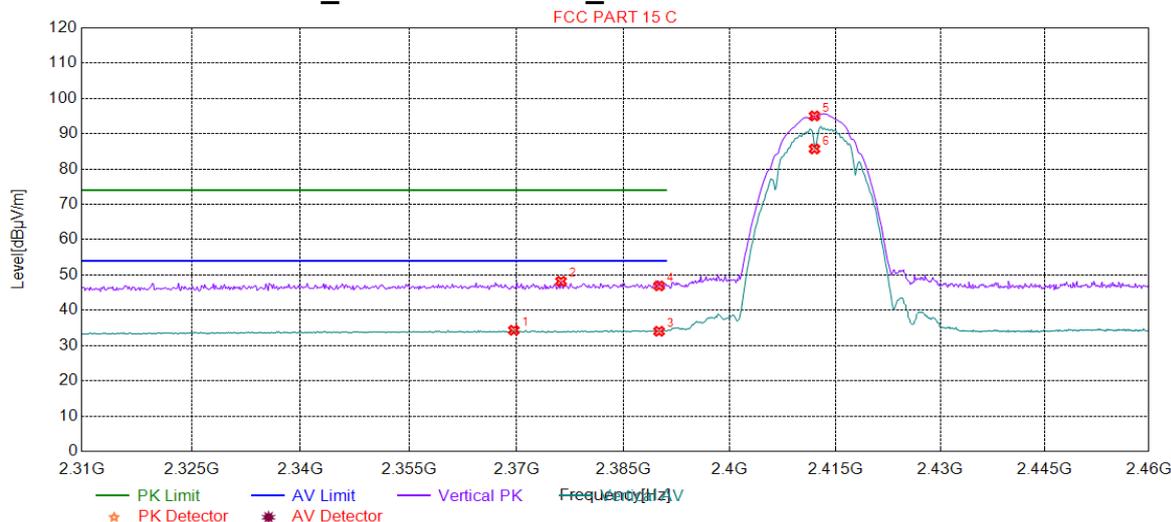


<p>Test Procedure:</p>	<ol style="list-style-type: none"> <li>a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>b. For 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 chamber. 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> </ol>
<p>Exploratory Test Mode:</p>	<p>Transmitting with all kind of modulations, data rates. Charge + Transmitting mode.</p>
<p>Final Test Mode:</p>	<p>Pretest the EUT at Charge +Transmitting 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); Only the worst case is recorded in the report.</p>
<p>Instruments Used:</p>	<p>Refer to section 5.10 for details</p>
<p>Test Results:</p>	<p>Pass</p>



Test plot as follows:

**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	2369.60	34.32	7.79	54.00	19.68	150	100	Vertical
2	2376.21	48.21	7.78	74.00	25.79	150	349	Vertical
3	2390.00	34.03	7.77	54.00	19.97	150	237	Vertical
4	2390.00	46.90	7.77	74.00	27.10	150	168	Vertical
5	2412.00	95.06	7.81	0.00	-95.06	150	248	Vertical
6	2412.00	85.71	7.81	0.00	-85.71	150	38	Vertical

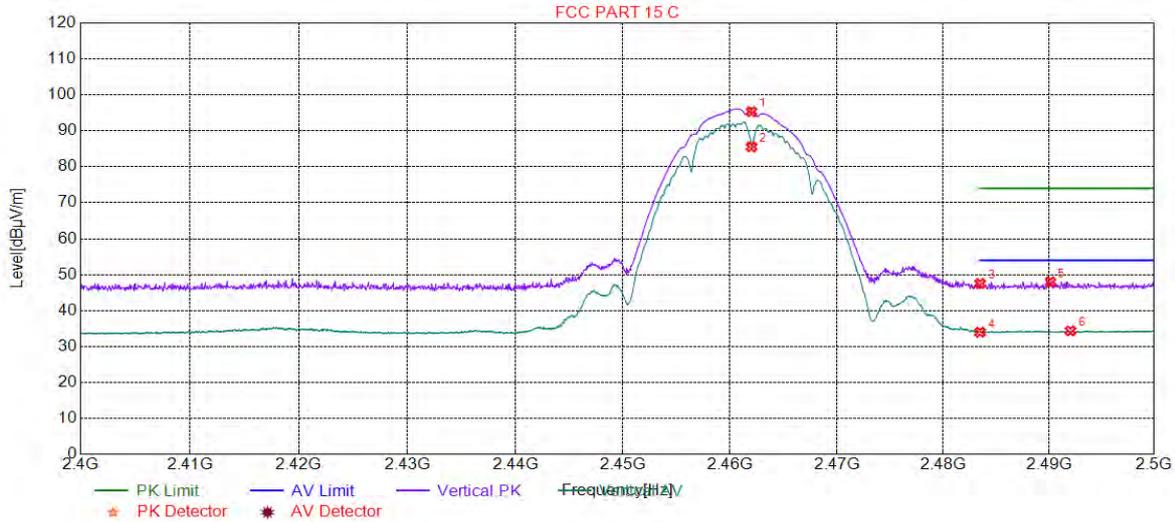


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 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

**4.10.1.2 802.11B\_ Highest Channel\_ Vertical**



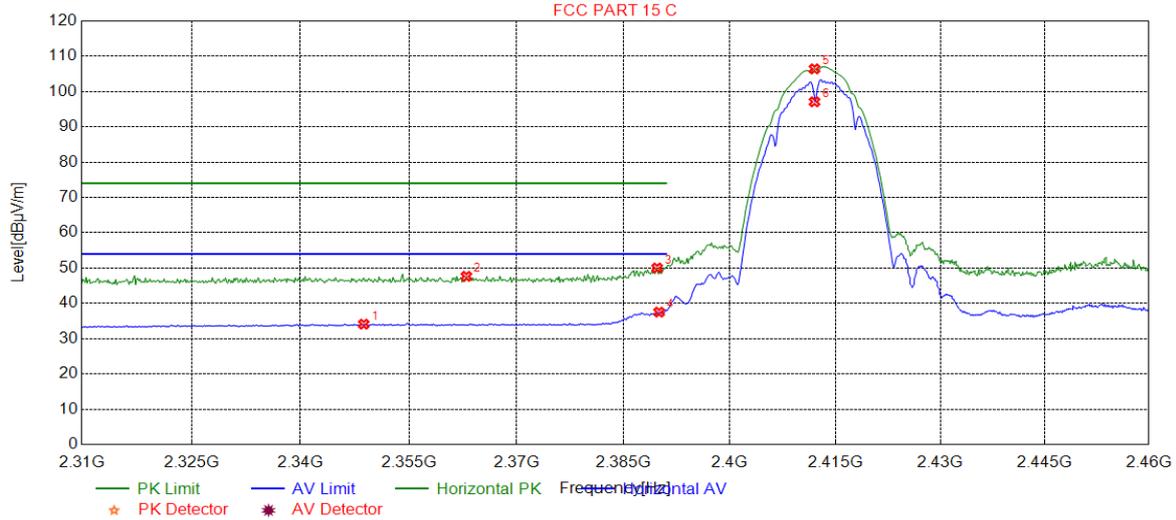
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.00	95.36	7.98	0.00	-95.36	150	19	Vertical
2	2462.00	85.57	7.98	0.00	-85.57	150	14	Vertical
3	2483.50	47.52	8.01	74.00	26.48	150	296	Vertical
4	2483.50	33.98	8.01	54.00	20.02	150	118	Vertical
5	2490.14	47.99	8.02	74.00	26.01	150	95	Vertical
6	2492.04	34.36	8.02	54.00	19.64	150	205	Vertical



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**4.10.1.3 802.11B\_Lowest Channel\_Horizontal**

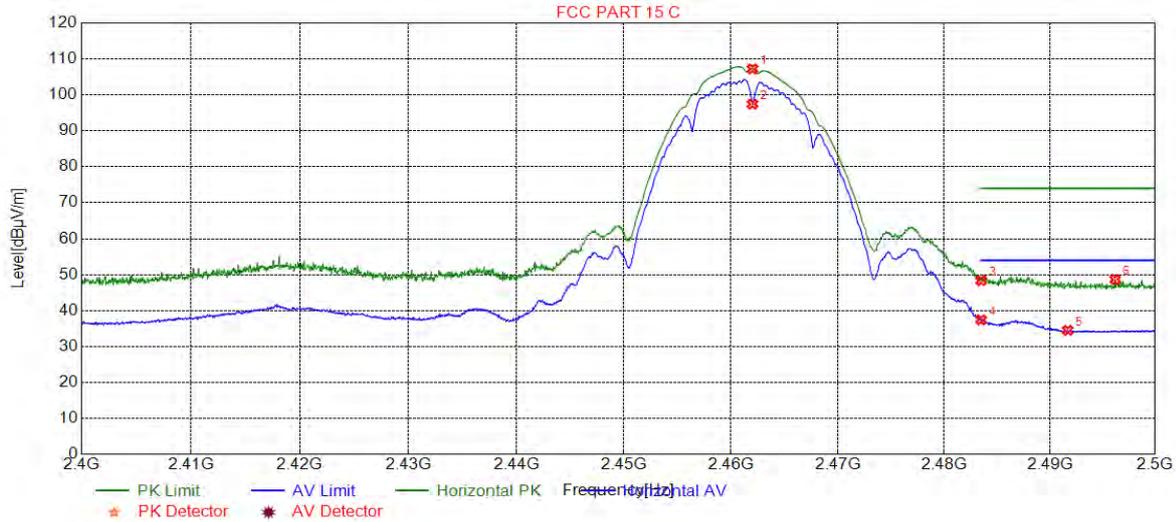


Suspected List								
NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2348.73	34.09	7.80	54.00	19.91	150	214	Horizontal
2	2363.00	47.65	7.80	74.00	26.35	150	126	Horizontal
3	2389.72	50.01	7.77	74.00	23.99	150	202	Horizontal
4	2390.00	37.51	7.77	54.00	16.49	150	210	Horizontal
5	2412.00	106.44	7.81	0.00	-106.44	150	210	Horizontal
6	2412.00	97.10	7.81	0.00	-97.10	150	210	Horizontal



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



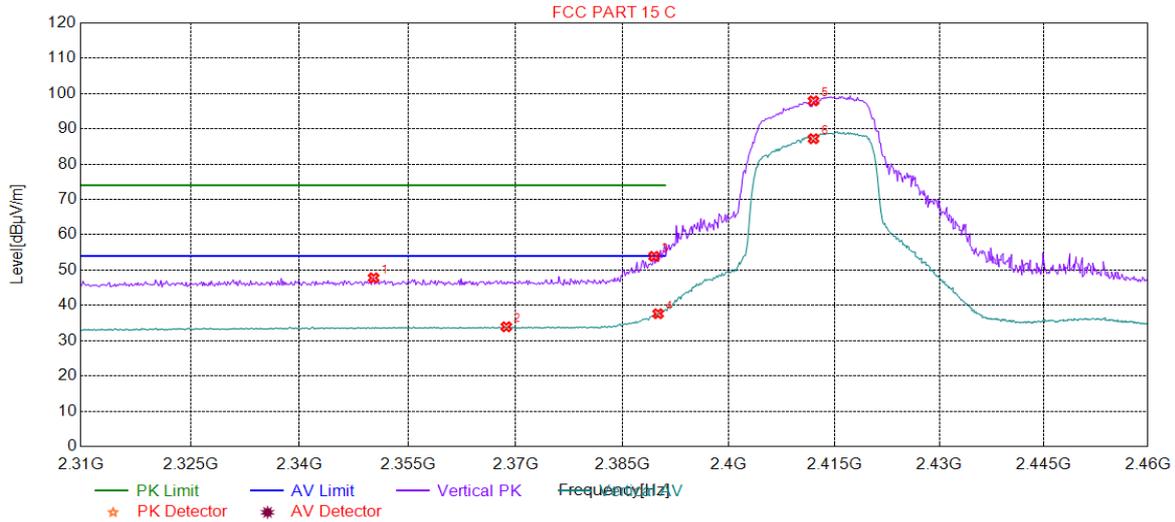
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.00	107.24	7.98	0.00	-107.24	150	204	Horizontal
2	2462.00	97.44	7.98	0.00	-97.44	150	210	Horizontal
3	2483.50	48.33	8.01	74.00	25.67	150	210	Horizontal
4	2483.50	37.42	8.01	54.00	16.58	150	210	Horizontal
5	2491.69	34.49	8.02	54.00	19.51	150	204	Horizontal
6	2496.19	48.65	8.03	74.00	25.35	150	144	Horizontal



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**4.10.1.5 802.11G\_Lowest Channel\_Vertical**



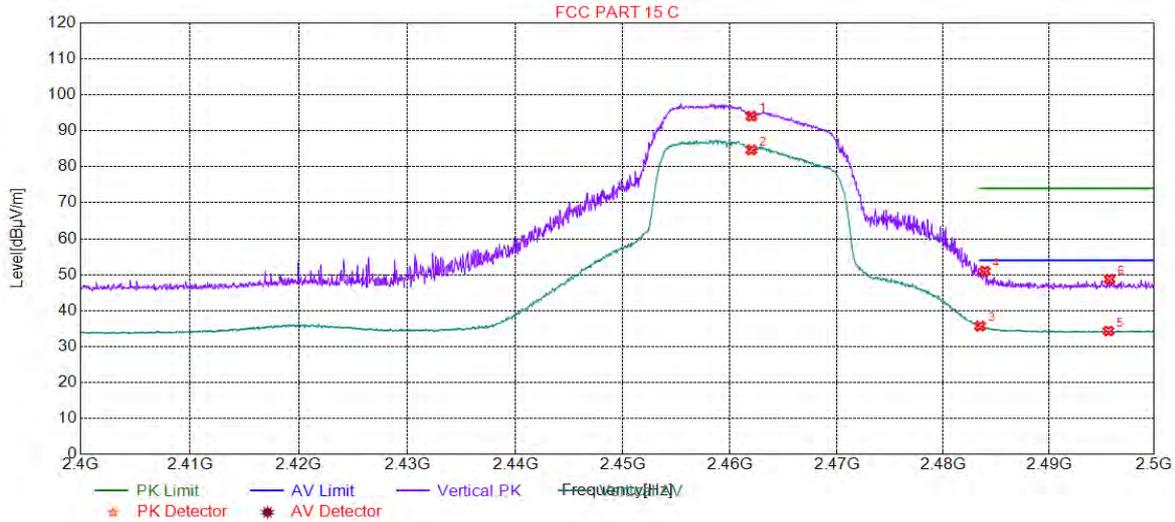
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2350.24	47.78	7.81	74.00	26.22	150	119	Vertical
2	2368.70	33.92	7.79	54.00	20.08	150	331	Vertical
3	2389.42	53.88	7.77	74.00	20.12	150	244	Vertical
4	2390.00	37.62	7.77	54.00	16.38	150	248	Vertical
5	2412.00	97.92	7.81	0.00	-97.92	150	248	Vertical
6	2412.00	87.21	7.81	0.00	-87.21	150	248	Vertical



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

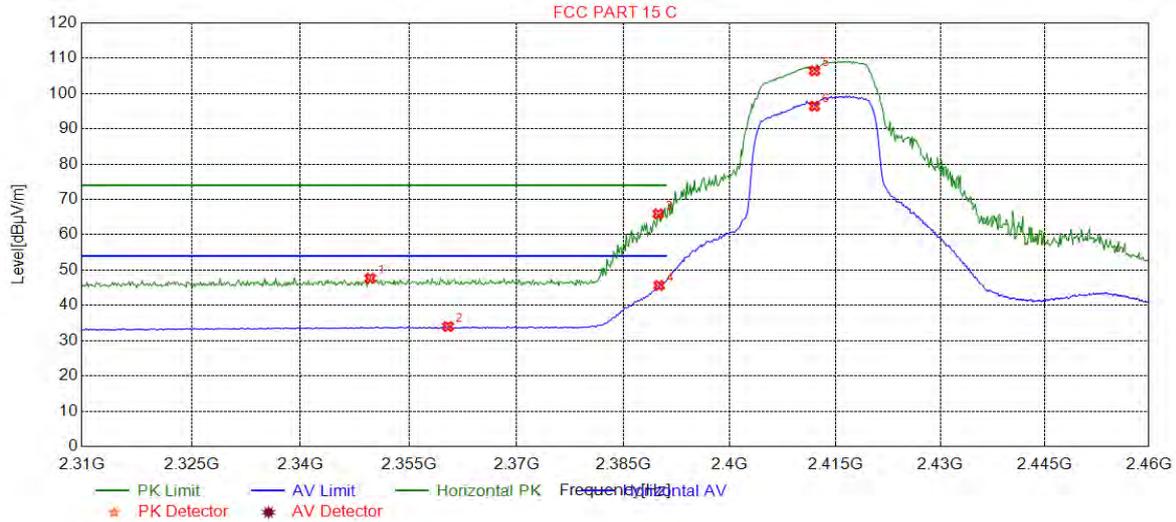


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.00	94.06	7.98	0.00	-94.06	150	357	Vertical
2	2462.00	84.69	7.98	0.00	-84.69	150	19	Vertical
3	2483.50	35.67	8.01	54.00	18.33	150	45	Vertical
4	2483.94	50.97	8.01	74.00	23.03	150	55	Vertical
5	2495.64	34.31	8.02	54.00	19.69	150	178	Vertical
6	2495.74	48.73	8.02	74.00	25.27	150	281	Vertical



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**4.10.1.7 802.11G\_Lowest Channel\_Horizontal**



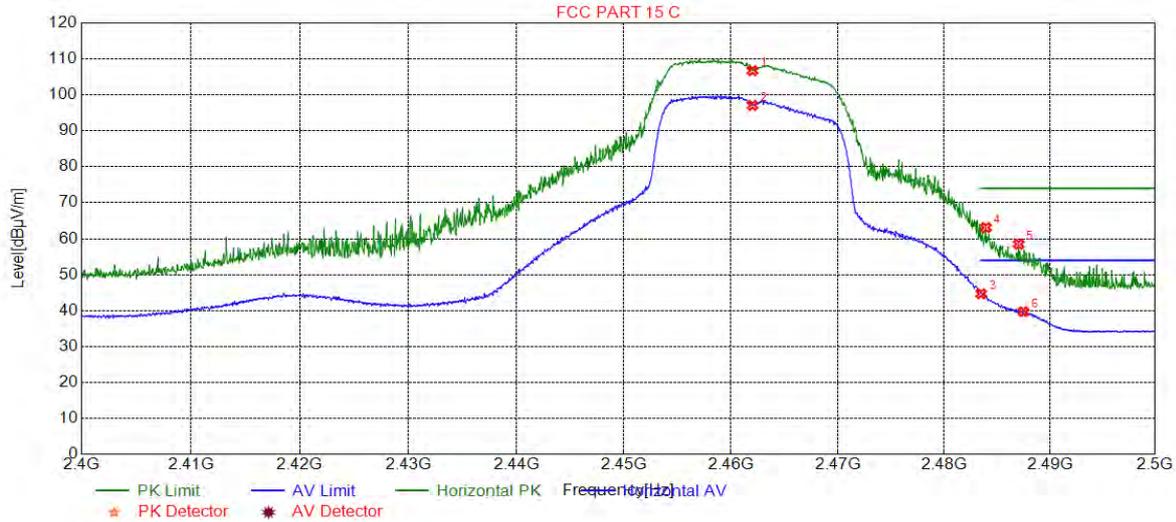
Suspected List								
NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2349.63	47.67	7.81	74.00	26.33	150	140	Horizontal
2	2360.45	33.99	7.80	54.00	20.01	150	4	Horizontal
3	2389.87	65.92	7.77	74.00	8.08	150	218	Horizontal
4	2390.00	45.63	7.77	54.00	8.37	150	210	Horizontal
5	2412.00	106.43	7.81	0.00	-106.43	150	202	Horizontal
6	2412.00	96.43	7.81	0.00	-96.43	150	202	Horizontal



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



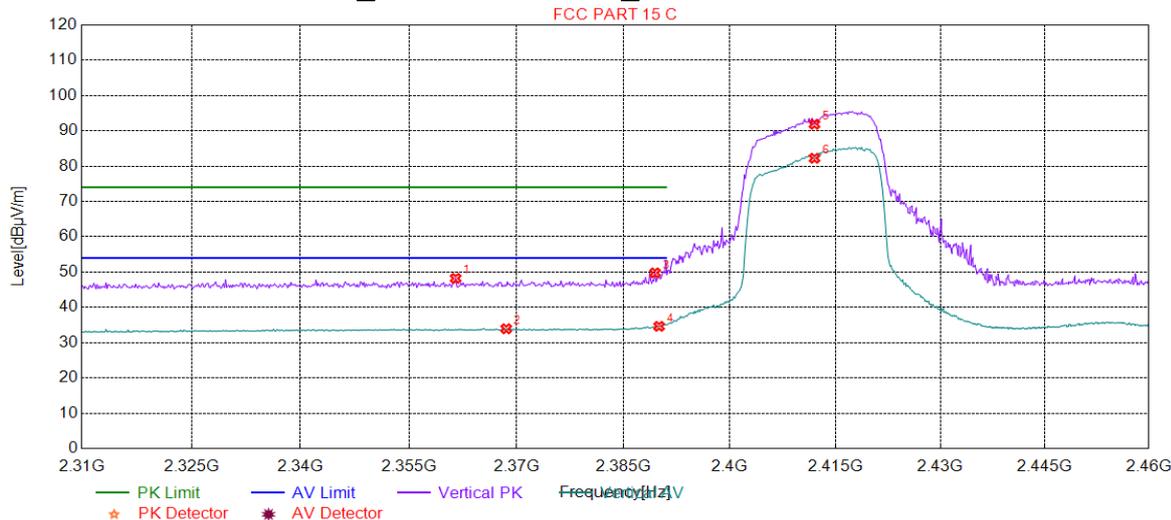
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.00	106.76	7.98	0.00	-106.76	150	207	Horizontal
2	2462.00	97.09	7.98	0.00	-97.09	150	212	Horizontal
3	2483.50	44.68	8.01	54.00	9.32	150	212	Horizontal
4	2483.94	63.08	8.01	74.00	10.92	150	207	Horizontal
5	2487.04	58.46	8.01	74.00	15.54	150	212	Horizontal
6	2487.49	39.69	8.01	54.00	14.31	150	212	Horizontal



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**4.10.1.9 802.11N20\_Lowest Channel\_Vertical**



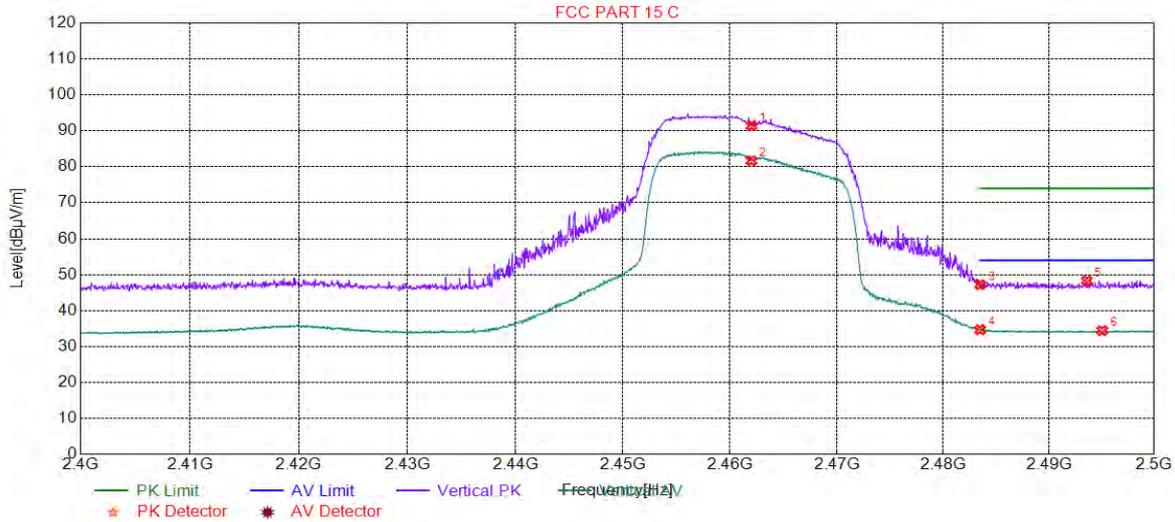
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2361.50	48.21	7.80	74.00	25.79	150	343	Vertical
2	2368.55	33.92	7.79	54.00	20.08	150	351	Vertical
3	2389.42	49.77	7.77	74.00	24.23	150	269	Vertical
4	2390.00	34.61	7.77	54.00	19.39	150	14	Vertical
5	2412.00	91.89	7.81	0.00	-91.89	150	252	Vertical
6	2412.00	82.24	7.81	0.00	-82.24	150	252	Vertical



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



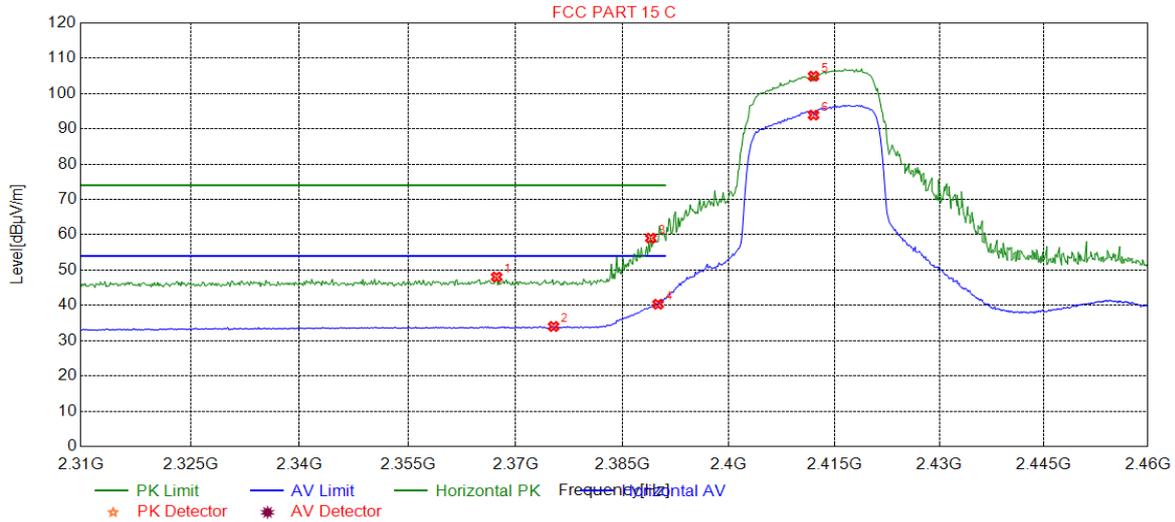
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.00	91.43	7.98	0.00	-91.43	150	19	Vertical
2	2462.00	81.70	7.98	0.00	-81.70	150	19	Vertical
3	2483.50	47.20	8.01	74.00	26.80	150	332	Vertical
4	2483.50	34.67	8.01	54.00	19.33	150	234	Vertical
5	2493.59	48.31	8.02	74.00	25.69	150	343	Vertical
6	2495.04	34.43	8.02	54.00	19.57	150	14	Vertical



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**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	2367.35	48.03	7.79	74.00	25.97	150	13	Horizontal
2	2375.31	34.01	7.78	54.00	19.99	150	211	Horizontal
3	2388.97	59.03	7.77	74.00	14.97	150	198	Horizontal
4	2390.00	40.31	7.77	54.00	13.69	150	211	Horizontal
5	2412.00	104.93	7.81	0.00	-104.93	150	211	Horizontal
6	2412.00	93.91	7.81	0.00	-93.91	150	211	Horizontal

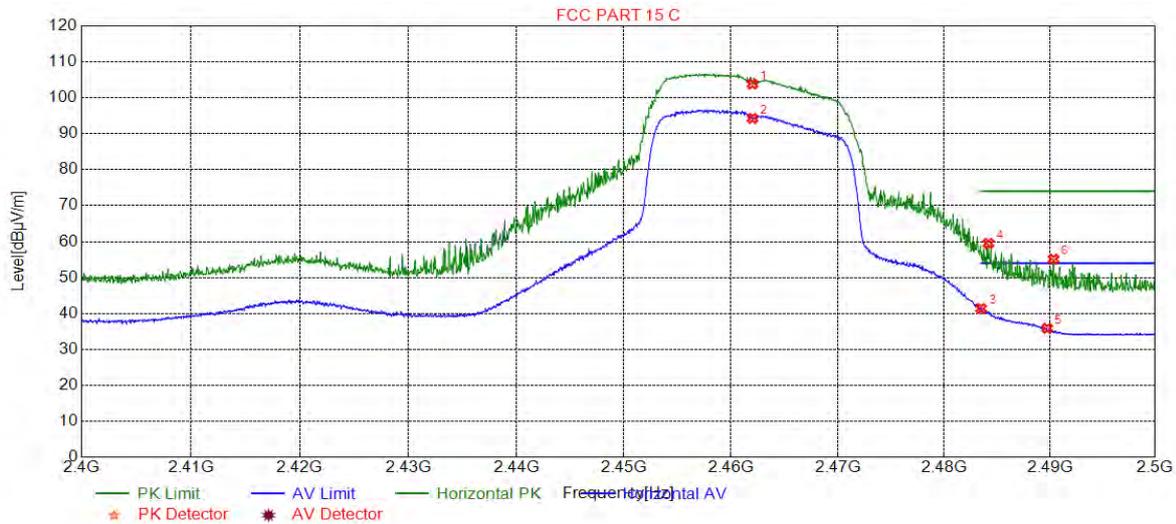


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**4.10.1.12 802.11N20\_ Highest Channel\_ Horizontal**

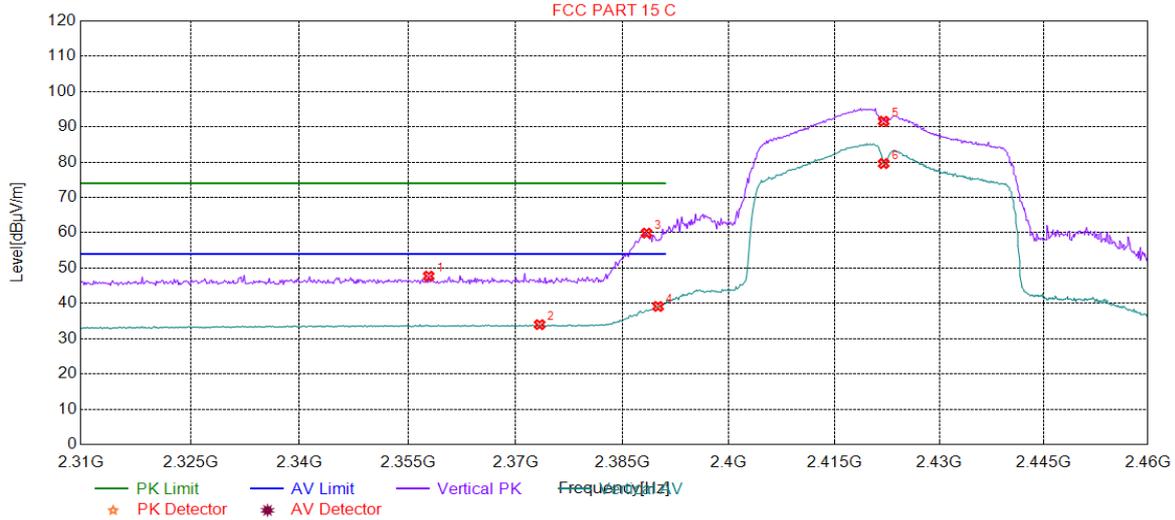


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.00	103.83	7.98	0.00	-103.83	150	210	Horizontal
2	2462.00	94.28	7.98	0.00	-94.28	150	204	Horizontal
3	2483.50	41.39	8.01	54.00	12.61	150	204	Horizontal
4	2484.19	59.49	8.01	74.00	14.51	150	210	Horizontal
5	2489.74	35.85	8.02	54.00	18.15	150	210	Horizontal
6	2490.34	55.12	8.02	74.00	18.88	150	336	Horizontal



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**4.10.1.13 802.11N40\_Lowest Channel\_Vertical**



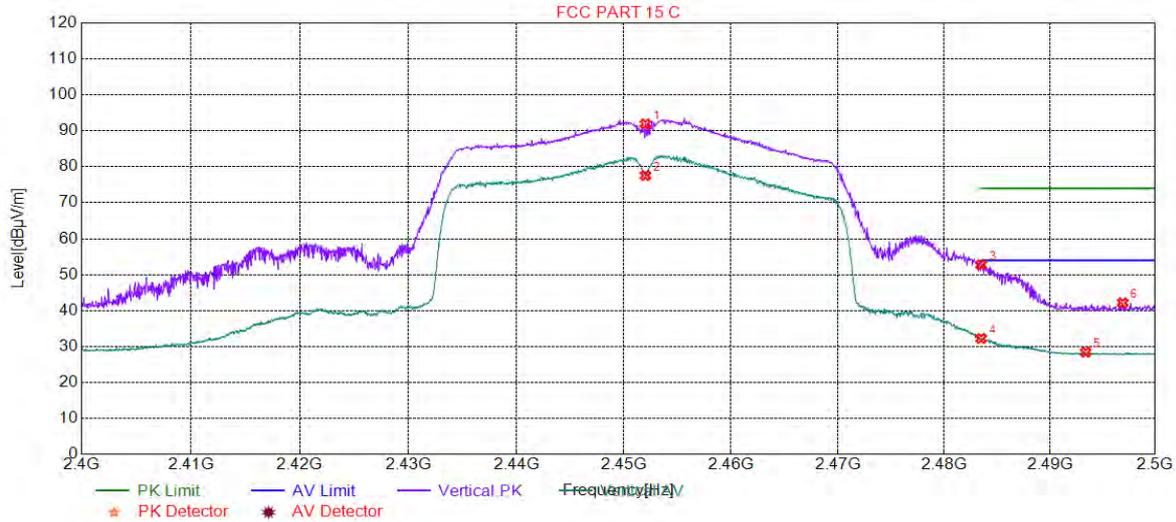
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2357.89	47.72	7.80	74.00	26.28	150	358	Vertical
2	2373.36	33.95	7.79	54.00	20.05	150	180	Vertical
3	2388.37	59.90	7.77	74.00	14.10	150	342	Vertical
4	2390.00	39.12	7.77	54.00	14.88	150	38	Vertical
5	2422.00	91.60	7.85	0.00	-91.60	150	42	Vertical
6	2422.00	79.61	7.85	0.00	-79.61	150	42	Vertical



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



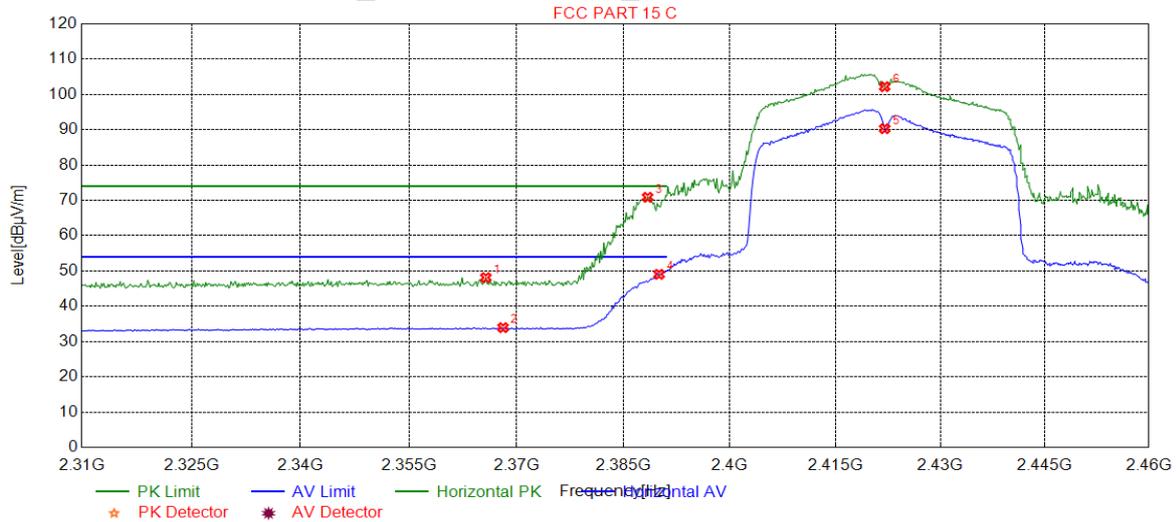
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.00	91.93	7.97	0.00	-91.93	150	340	Vertical
2	2452.00	77.59	7.97	0.00	-77.59	150	340	Vertical
3	2483.50	52.78	8.01	74.00	21.22	150	14	Vertical
4	2483.50	32.24	8.01	54.00	21.76	150	14	Vertical
5	2493.39	28.42	8.02	54.00	25.58	150	107	Vertical
6	2496.89	42.13	8.03	74.00	31.87	150	352	Vertical



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**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	2365.70	48.12	7.79	74.00	25.88	150	256	Horizontal
2	2368.10	33.93	7.79	54.00	20.07	150	94	Horizontal
3	2388.37	70.87	7.77	74.00	3.13	150	210	Horizontal
4	2390.00	49.05	7.77	54.00	4.95	150	210	Horizontal
5	2422.00	90.30	7.85	0.00	-90.30	150	210	Horizontal
6	2422.00	102.21	7.85	0.00	-102.21	150	214	Horizontal

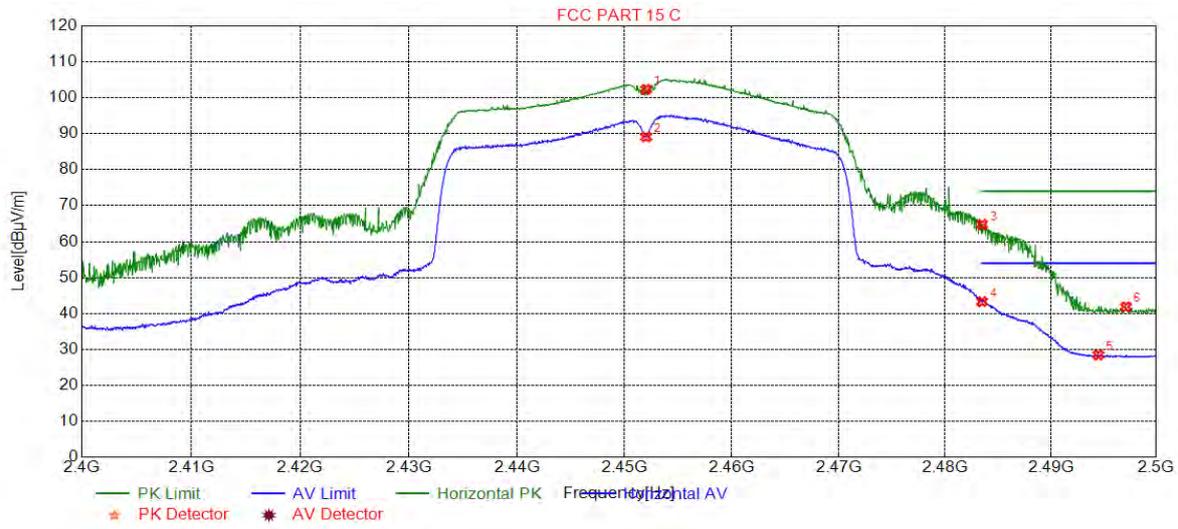


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**4.10.1.16 802.11N40\_ Highest Channel\_ Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.00	102.34	7.97	0.00	-102.34	150	210	Horizontal
2	2452.00	89.10	7.97	0.00	-89.10	150	204	Horizontal
3	2483.50	64.76	8.01	74.00	9.24	150	204	Horizontal
4	2483.50	43.28	8.01	54.00	10.72	150	204	Horizontal
5	2494.49	28.45	8.02	54.00	25.55	150	204	Horizontal
6	2497.09	41.86	8.03	74.00	32.14	150	30	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:

$$\text{Final Test Level} = \text{Receiver Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Preamplifier Factor}$$

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	±0.75dB
2	RF power density, conducted	±2.84dB
3	Spurious emissions, conducted	±0.75dB
4	Radiated Spurious emission test	±4.5dB (30MHz-1GHz)
		±4.8dB (1GHz-25GHz)
5	Conduct emission test	±3.12 dB (9KHz- 30MHz)
6	Temperature test	±1°C
7	Humidity test	±3%
8	DC and low frequency voltages	±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	2020/4/13	2021/4/12
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	2020/2/11	2021/2/10
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2020/3/22	2021/3/21

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	2020/1/3	2021/1/2
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	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	2020/3/22	2021/3/21



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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	2020/3/22	2021/3/21
Band filter	N/A	N/A	SEM023-01	N/A	N/A
<b>RE in Chamber</b>					
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	2020/3/22	2021/3/21

## 7 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of Set-Up for ZR/2020/40003.

The End



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