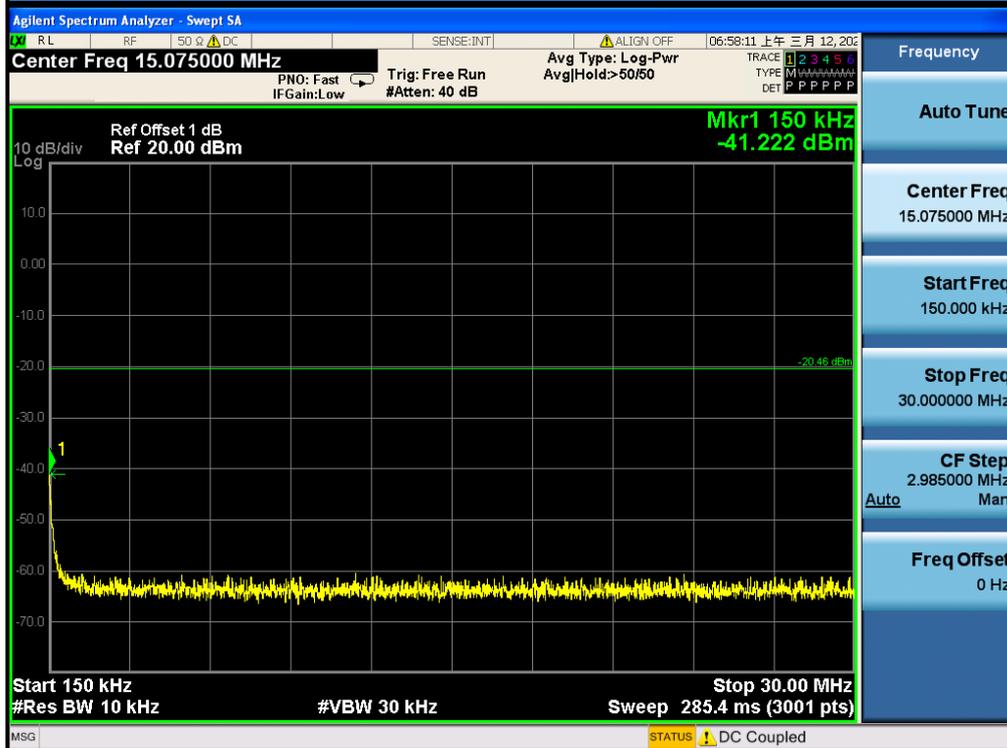


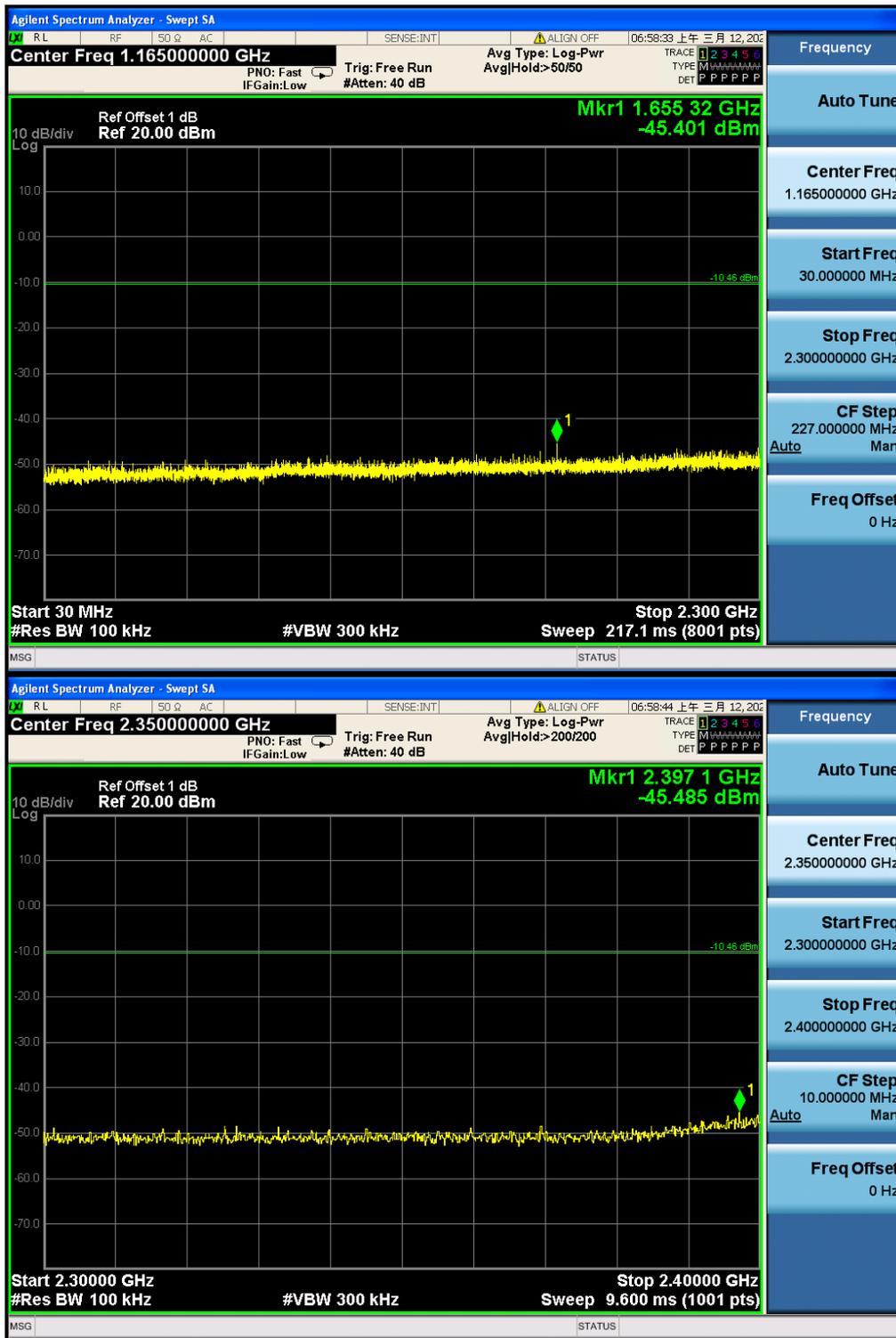
**4.8.1.2.8 802.11 N20\_MIMO\_Middle Channel**

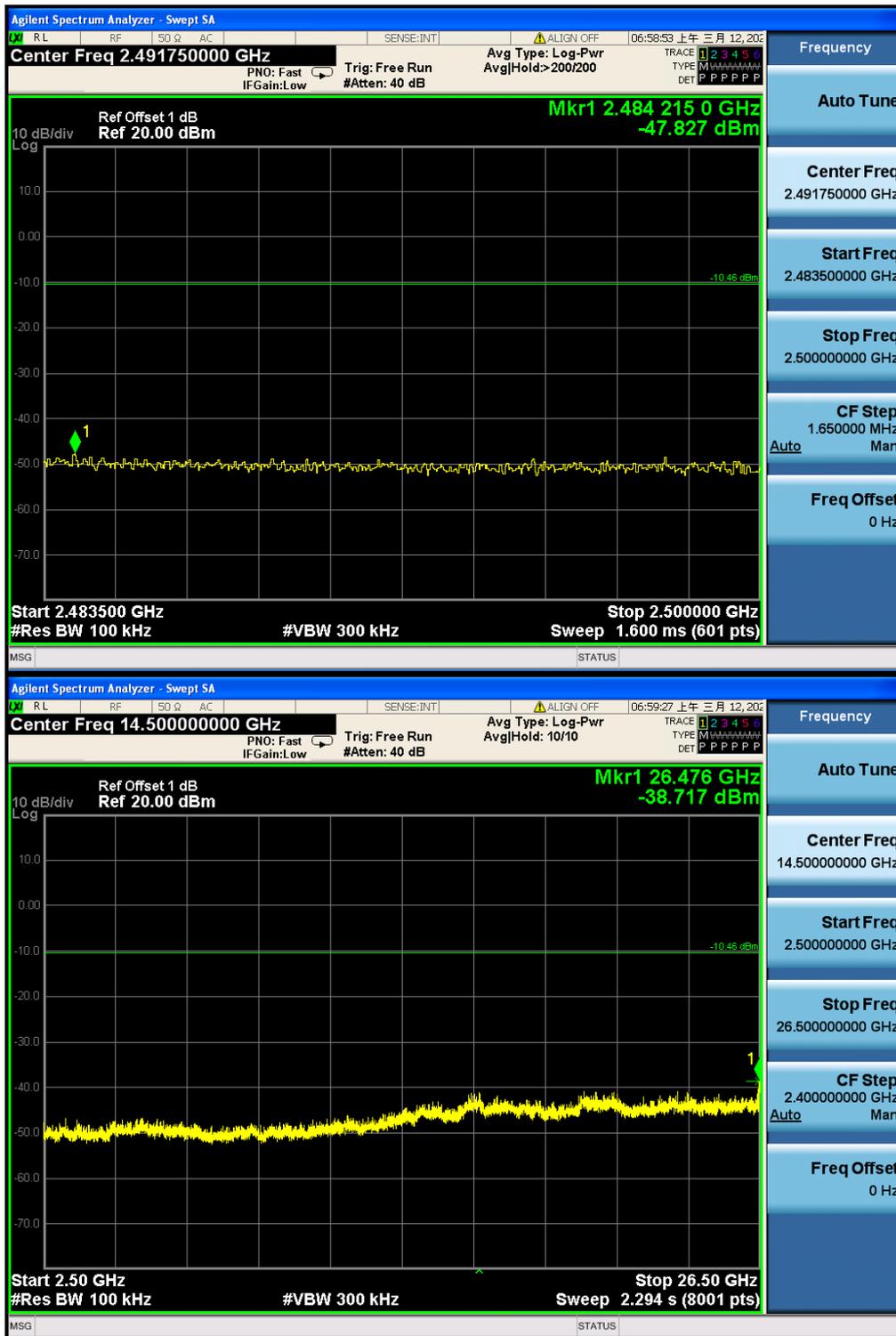


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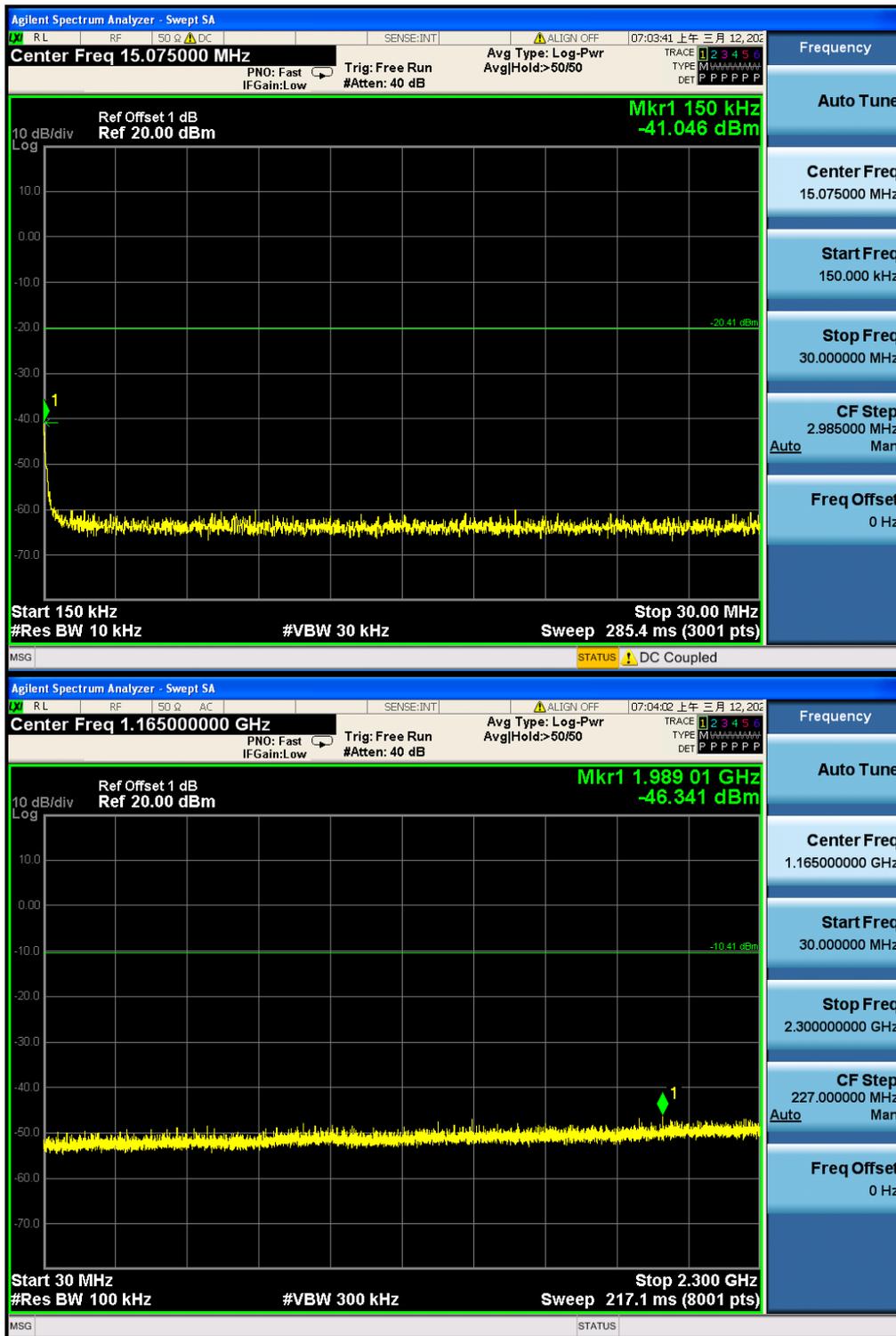


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4.8.1.2.9 802.11 N20 MIMO\_Highest Channel

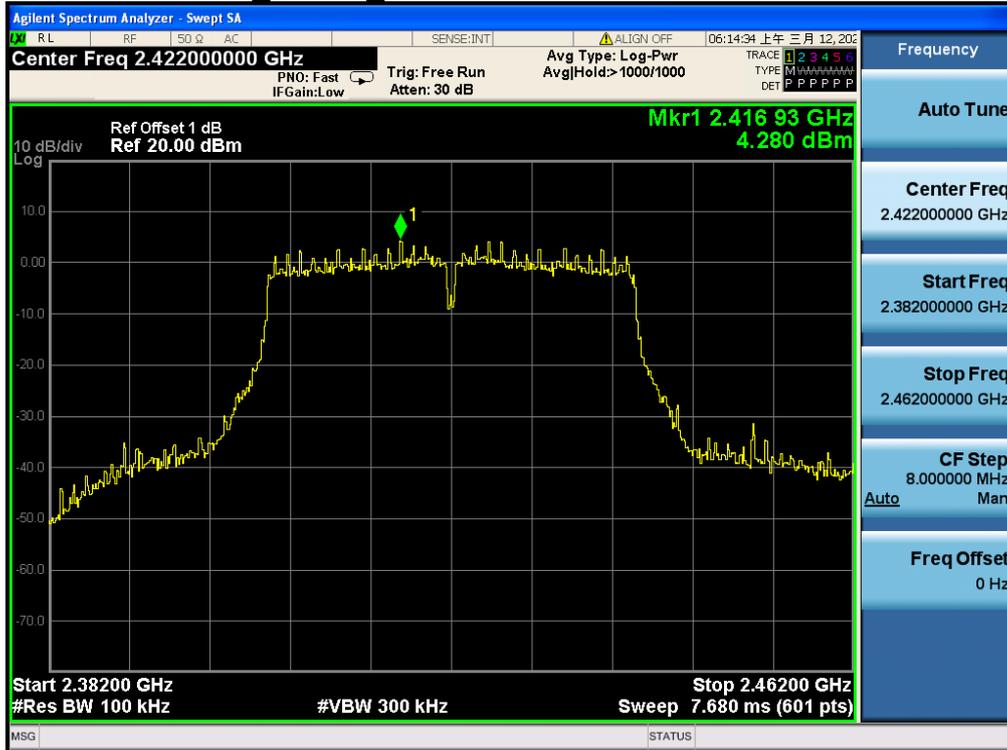






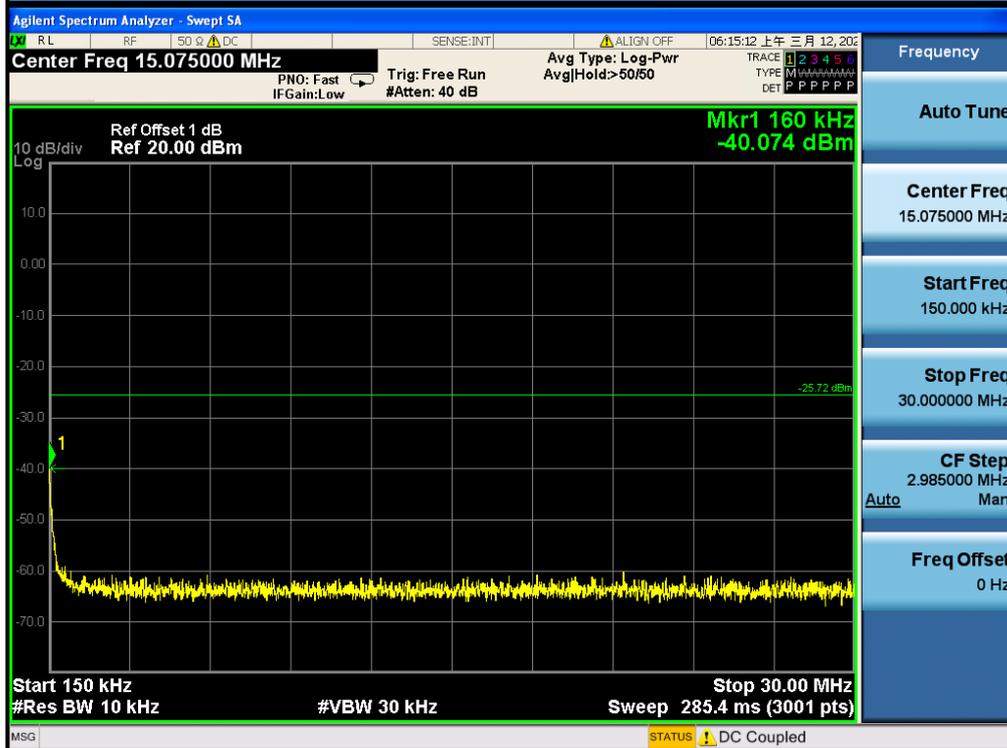


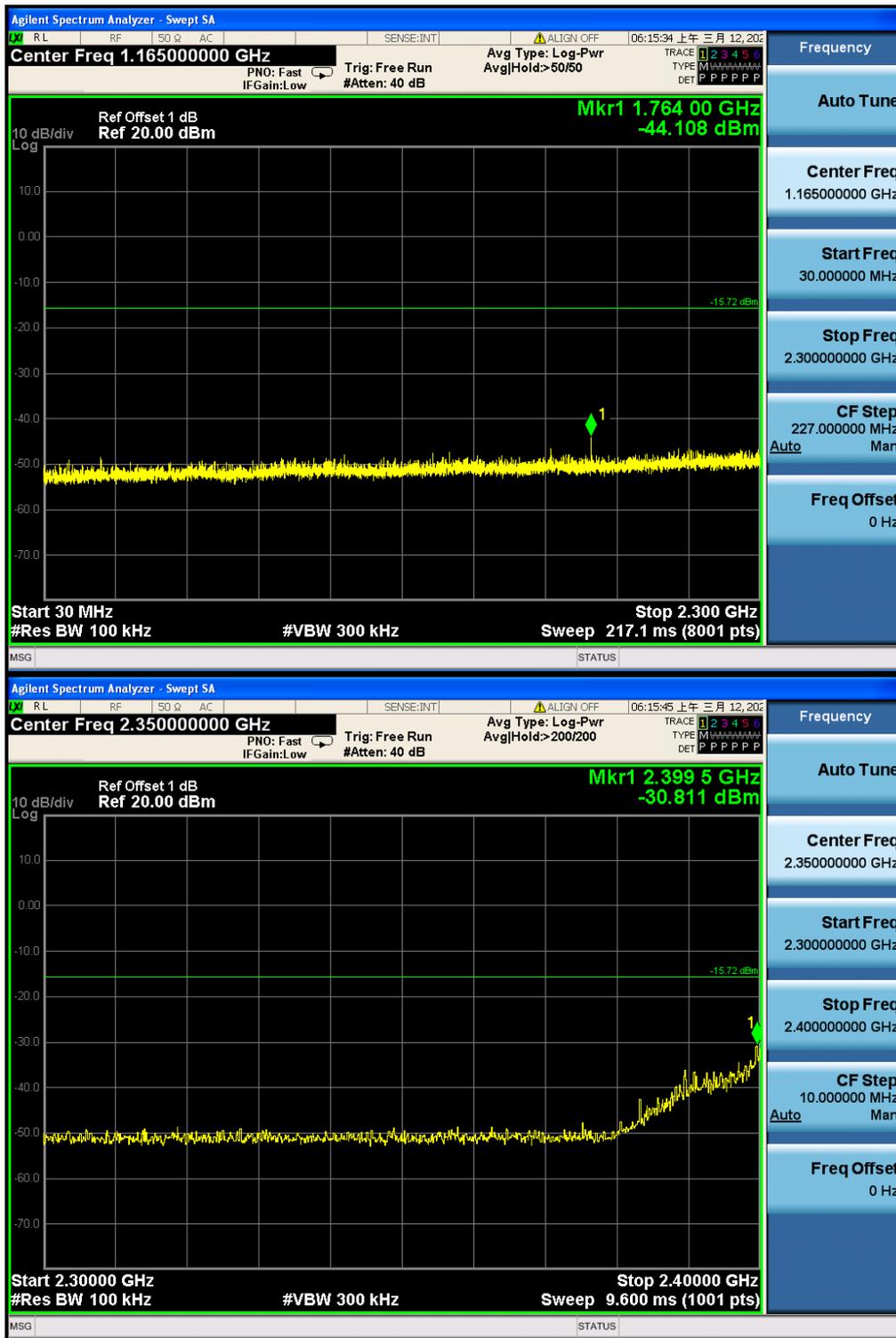
**4.8.1.2.10 802.11N40 MIMO Lowest Channel**

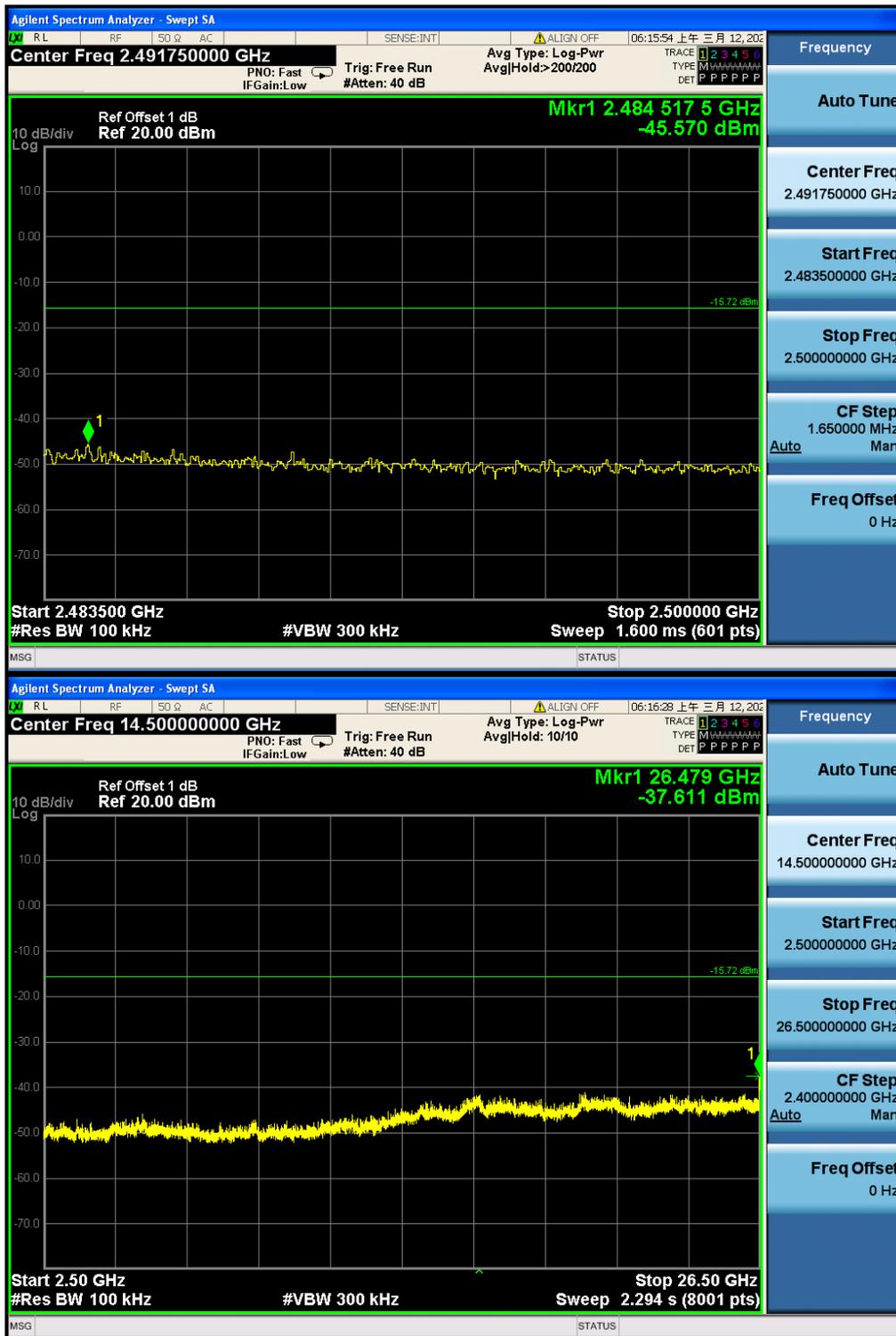


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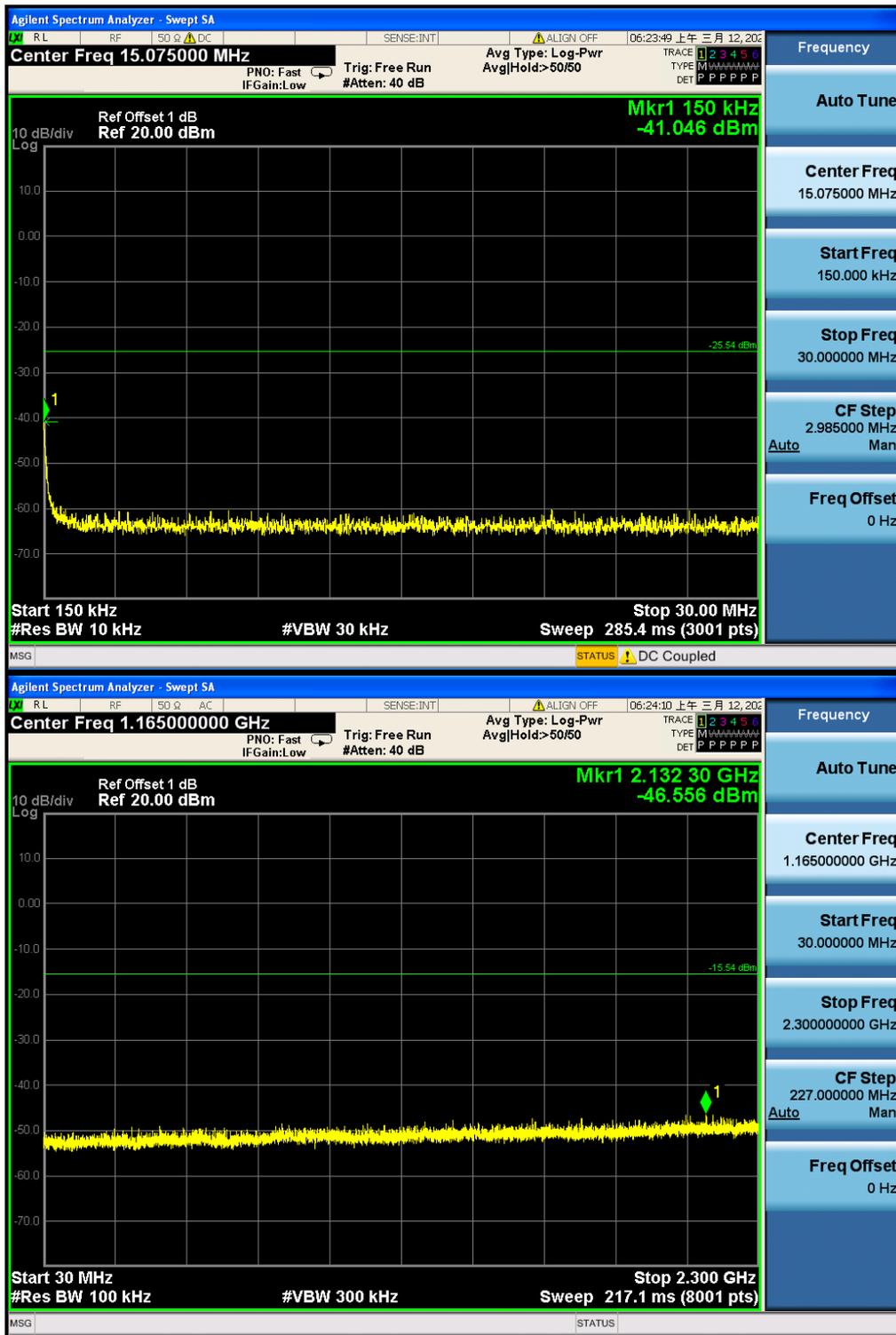


**4.8.1.2.11 802.11 N40 MIMO Middle Channel**

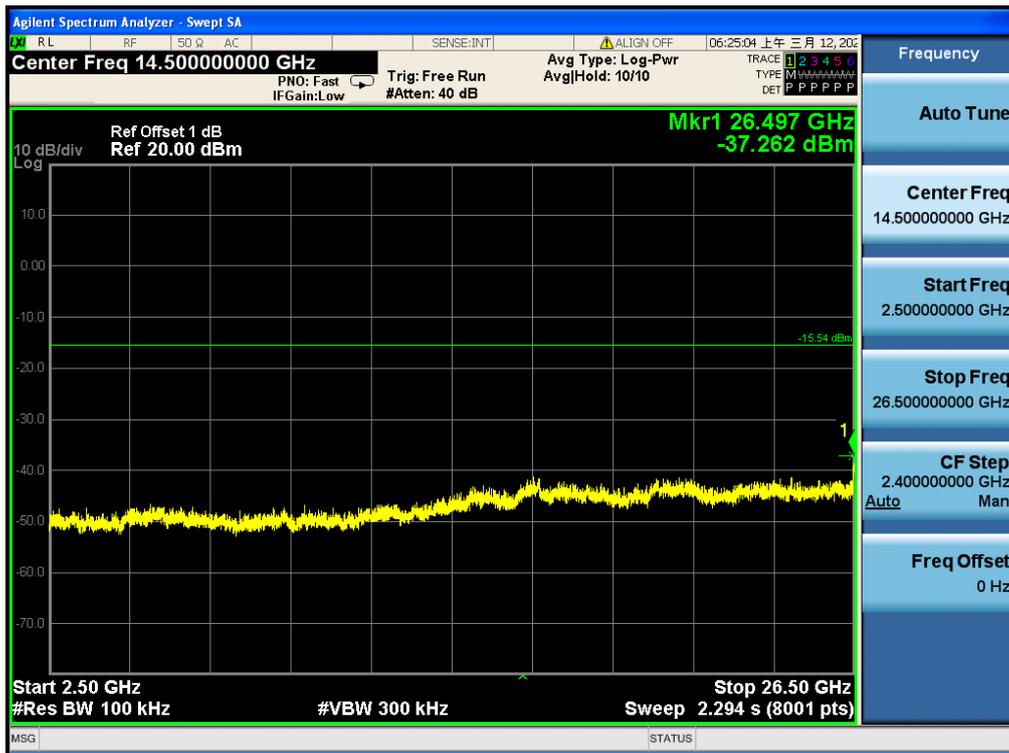


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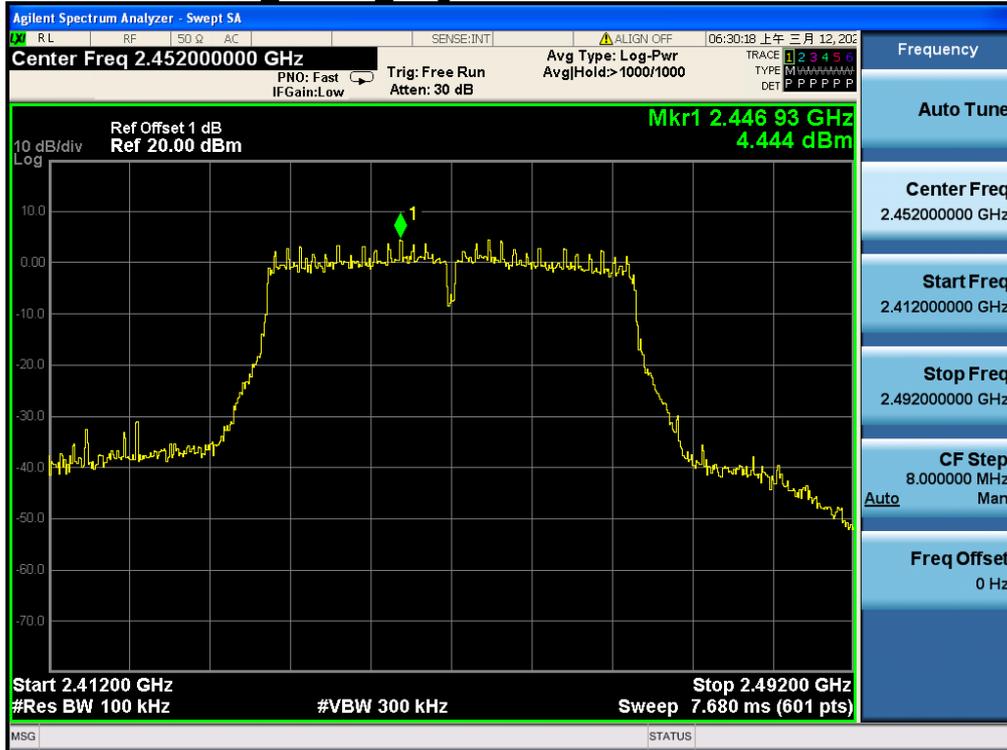




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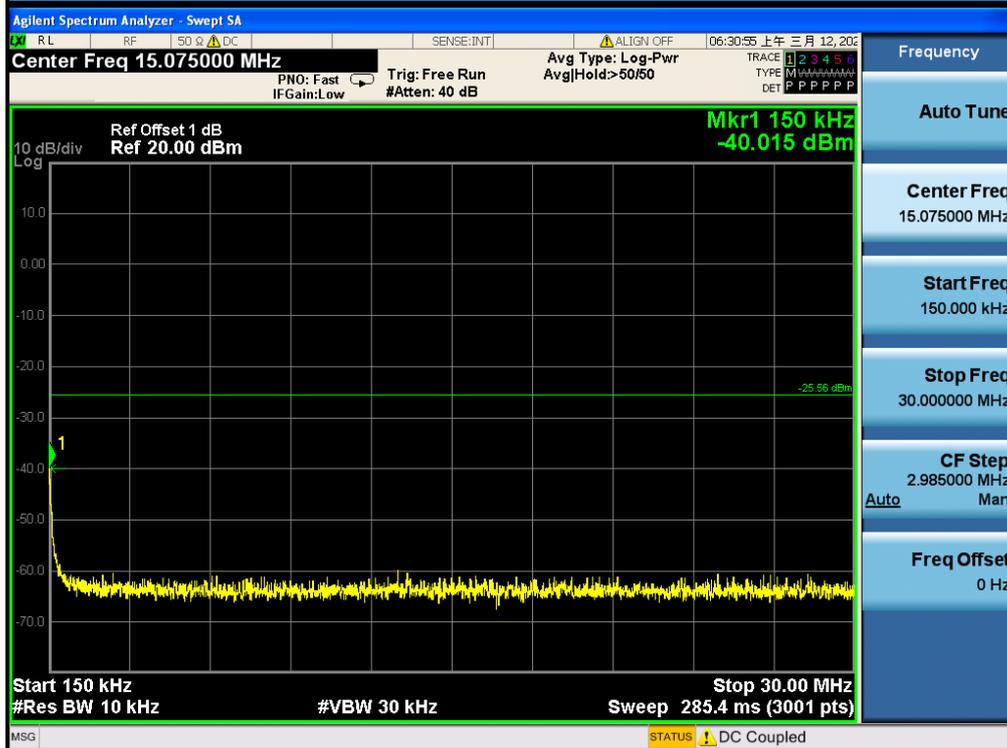
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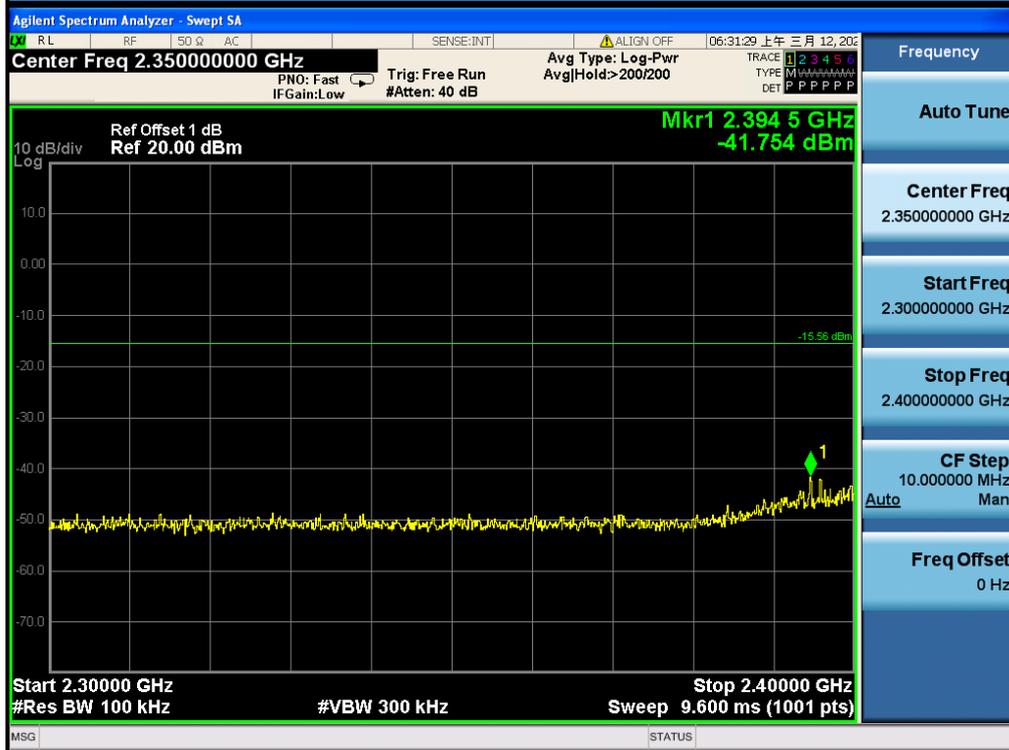
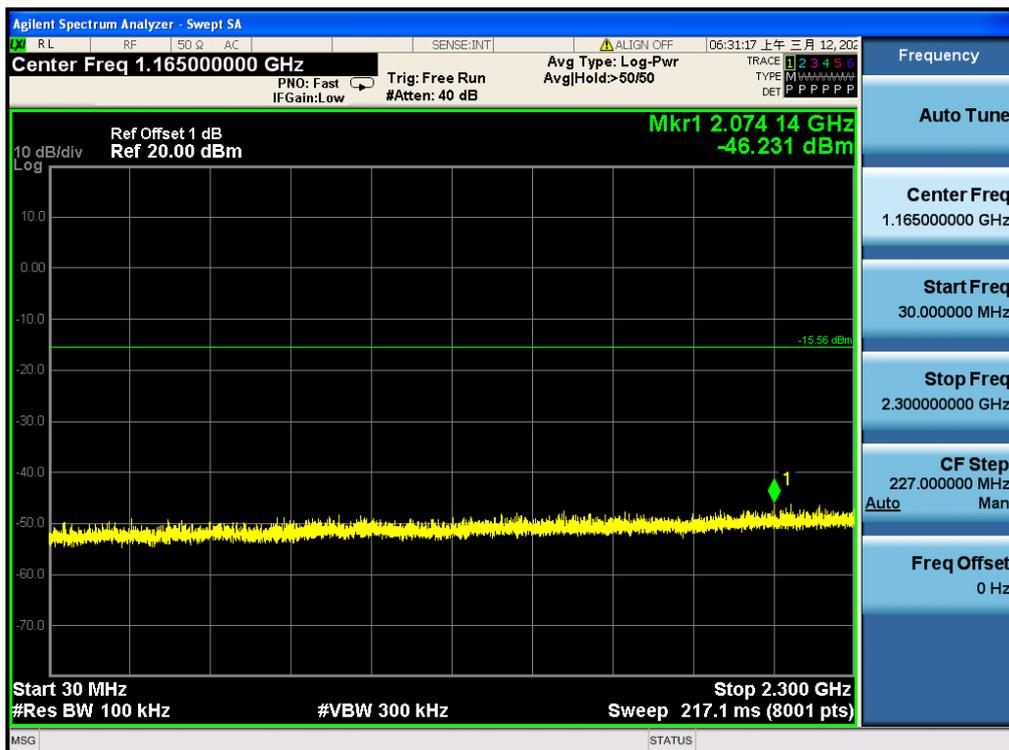
**4.8.1.2.12 802.11 N40 MIMO\_Highest Channel**

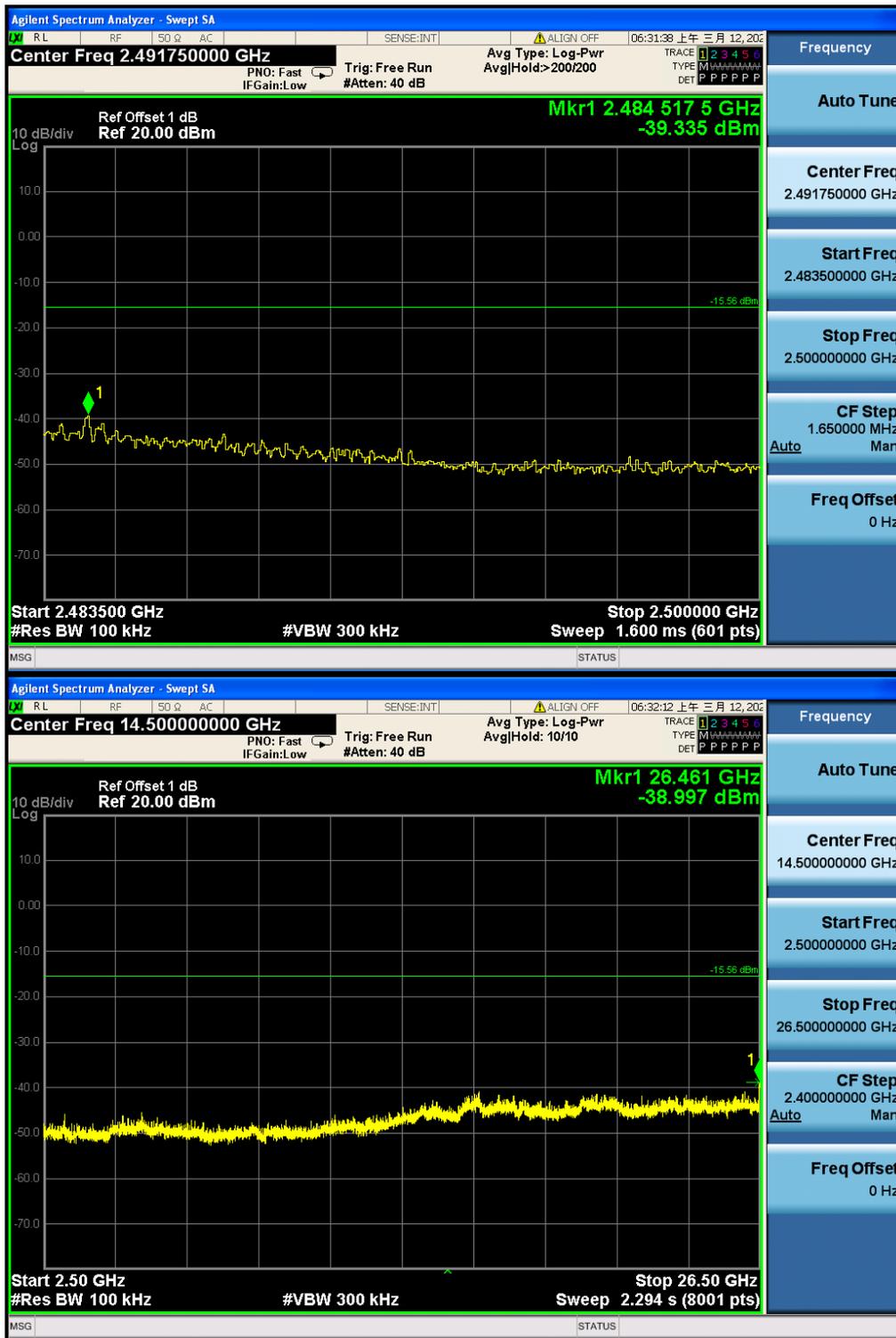


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Remark:

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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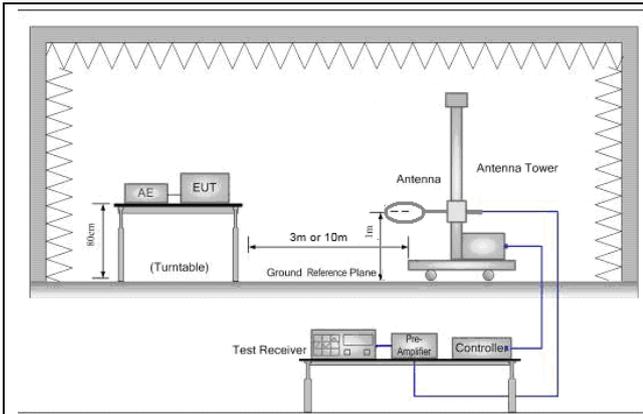


Figure 1. Below 30MHz

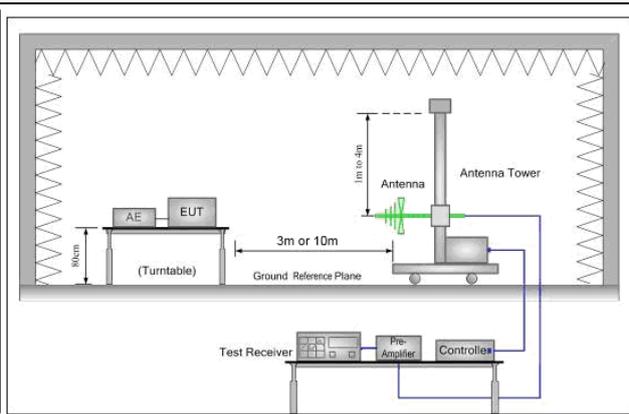


Figure 2. 30MHz to 1GHz

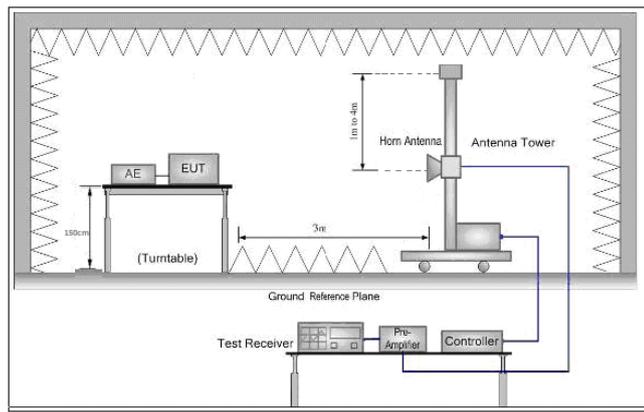


Figure 3. Above 1 GHz

**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 camber. 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 camber. 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  
 On time =  $N_1 * L_1 + N_2 * L_2 + \dots + N_{n-1} * L_{n-1} + N_n * L_n$



	<p>Where N 1 is number of type 1 pulses, L 1 is length of type 1 pulses, etc. Average Emission Level = Peak Emission Level + 20*log(Duty cycl</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:	<p>Pretest the EUT at Charge + Transmitting mode.</p> <p>Through Pre-scan, find the</p> <p>1Mbps of rate is the worst case of 802.11B;</p> <p>6Mbps of rate is the worst case of 802.11G;</p> <p>6.5Mbps of rate is the worst case of 802.11N(HT20);</p> <p>13.5Mbps of rate is the worst case of 802.11N(HT40)</p> <p>For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11B at lowest channel is the worst case. Only the worst case is recorded in the report.</p>
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

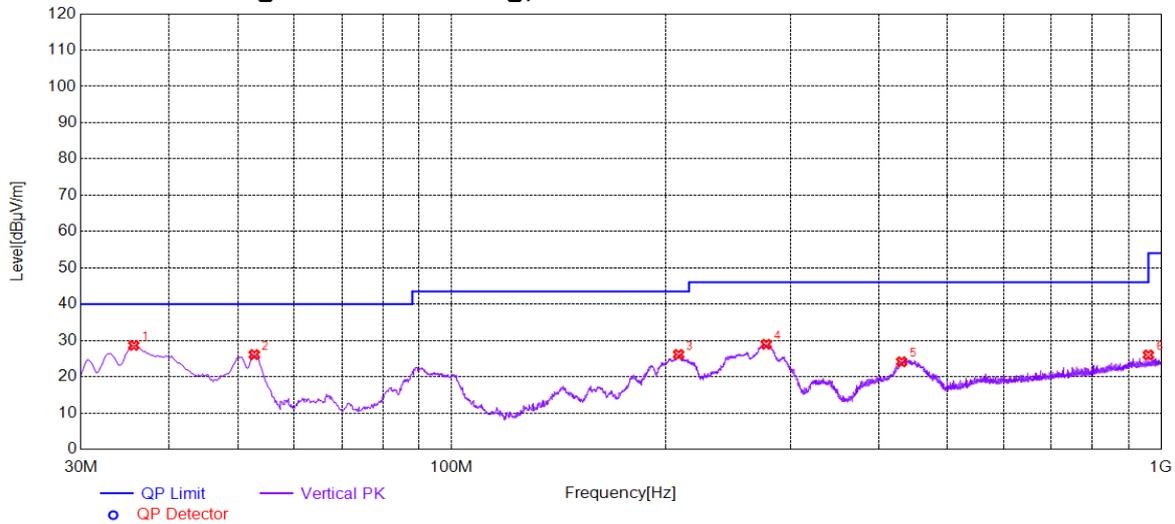


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### 4.9.1 Radiated emission below 1GHz

#### 4.9.1.1 Charge + Transmitting, Vertical



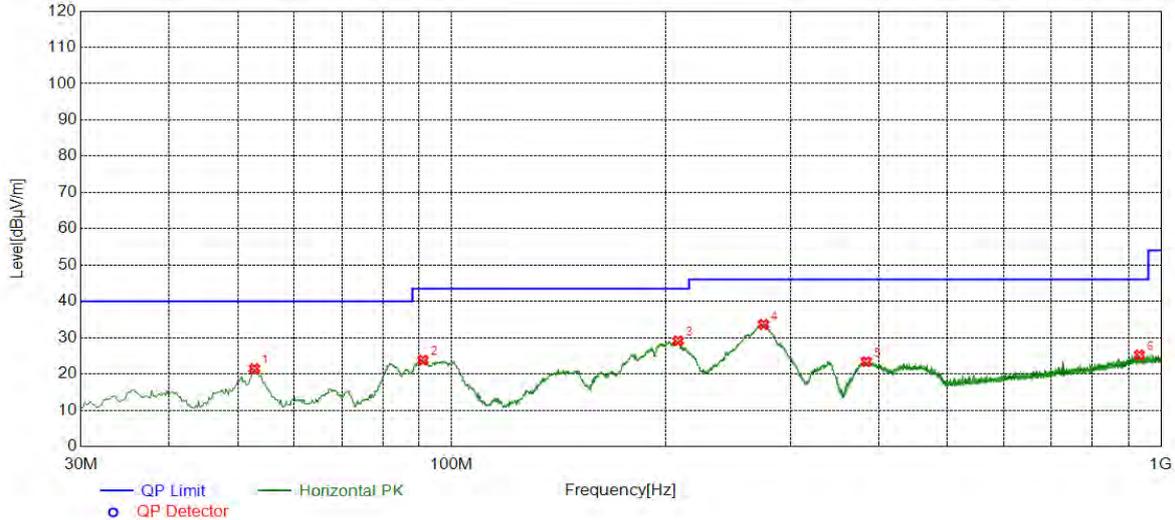
Suspected List								
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1	35.6271	28.61	-29.76	40.00	11.39	293	346	Vertical
2	52.7025	26.08	-30.77	40.00	13.92	246	317	Vertical
3	208.9038	26.14	-31.00	43.50	17.36	202	82	Vertical
4	277.5935	28.93	-29.03	46.00	17.07	186	157	Vertical
5	430.8842	24.11	-24.84	46.00	21.89	243	23	Vertical
6	959.8340	26.00	-15.34	46.00	20.00	156	240	Vertical



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**4.9.1.2 Charge + Transmitting, Horizontal**



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	52.7025	21.42	-30.77	40.00	18.58	212	262	Horizontal
2	91.1222	23.77	-33.53	43.50	19.73	200	57	Horizontal
3	208.5157	29.11	-31.01	43.50	14.39	230	206	Horizontal
4	275.2651	33.63	-29.08	46.00	12.37	129	194	Horizontal
5	384.1208	23.39	-25.94	46.00	22.61	132	54	Horizontal
6	932.2805	25.23	-15.67	46.00	20.77	116	291	Horizontal



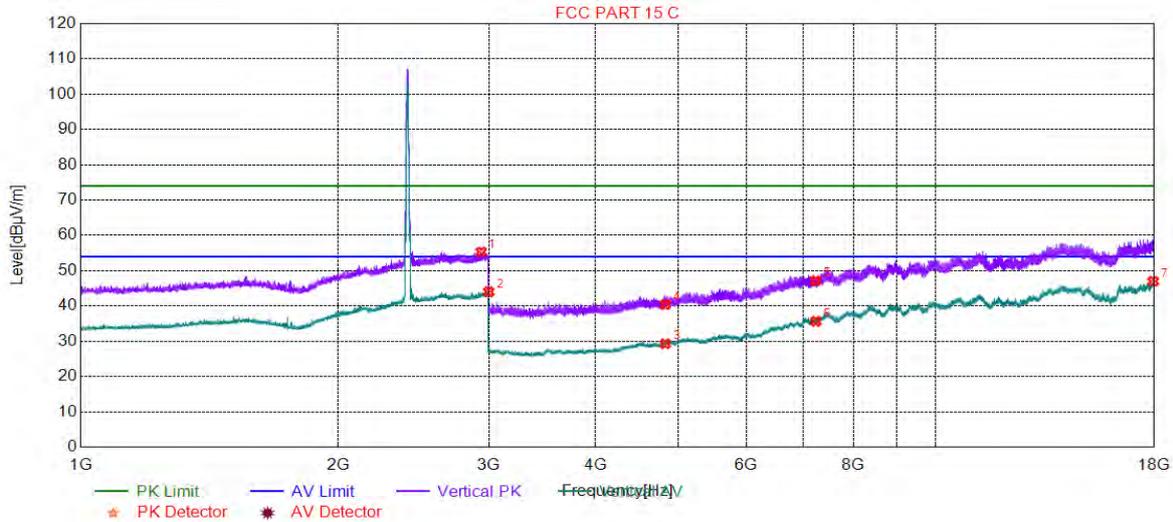
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### 4.9.2 Transmitter emission above 1GHz

#### 4.9.2.1 ANT1

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

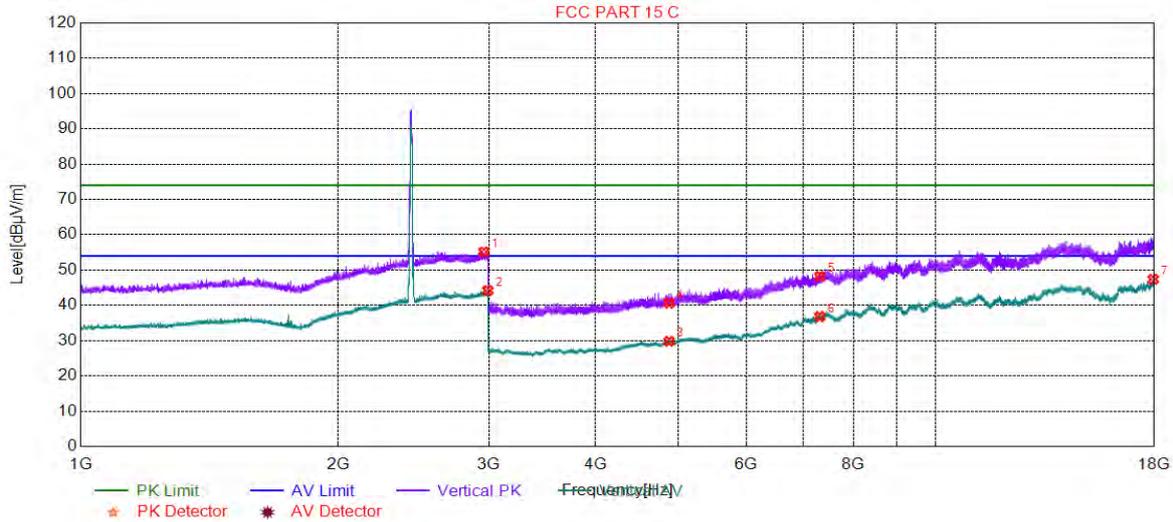


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2938.4846	55.32	9.56	74.00	18.68	288	217	Vertical
2	2998.9998	44.01	9.45	54.00	9.99	154	272	Vertical
3	4824.0000	29.28	-18.21	54.00	24.72	278	320	Vertical
4	4824.0000	40.39	-18.21	74.00	33.61	236	266	Vertical
5	7236.0000	47.14	-9.99	74.00	26.86	252	292	Vertical
6	7236.0000	35.64	-9.99	54.00	18.36	173	191	Vertical
7	17942.247	46.99	0.70	54.00	7.01	157	342	Vertical



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



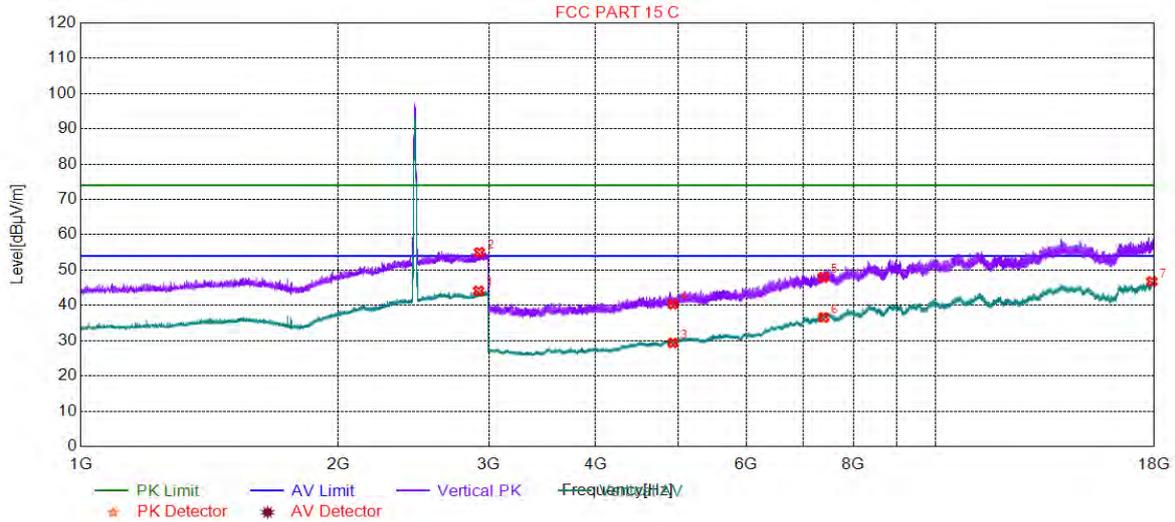
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2959.9900	55.16	9.63	74.00	18.84	267	273	Vertical
2	2991.4979	44.17	9.49	54.00	9.83	204	52	Vertical
3	4874.0000	29.81	-17.99	54.00	24.19	260	126	Vertical
4	4874.0000	40.60	-17.99	74.00	33.40	202	45	Vertical
5	7311.0000	48.24	-9.74	74.00	25.76	185	190	Vertical
6	7311.0000	36.81	-9.74	54.00	17.19	262	190	Vertical
7	17942.797	47.37	0.70	54.00	6.63	159	0	Vertical



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



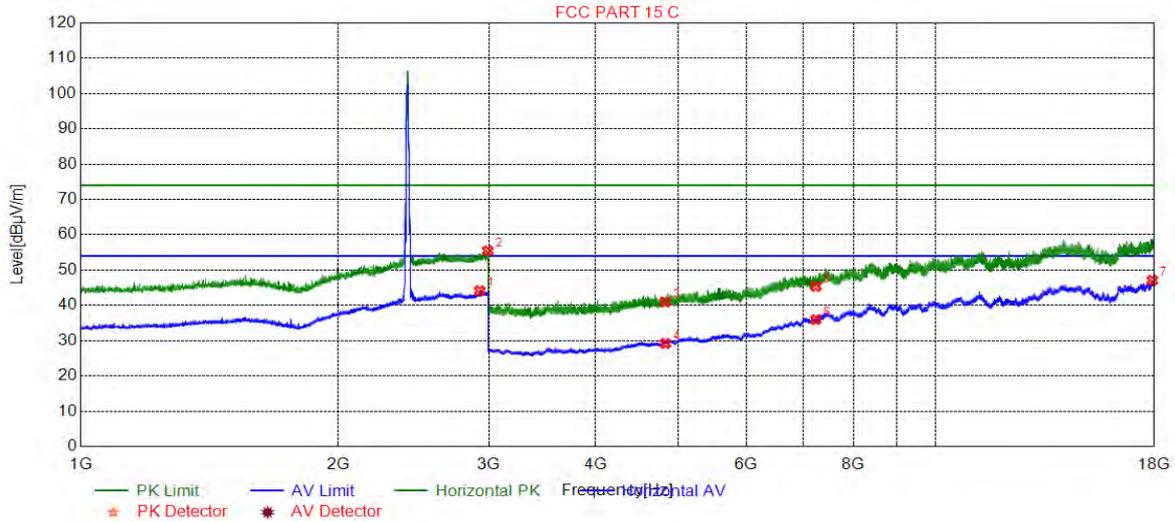
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2918.9797	44.07	9.34	54.00	9.93	200	164	Vertical
2	2924.4811	55.01	9.40	74.00	18.99	288	287	Vertical
3	4924.0000	29.35	-17.72	54.00	24.65	236	18	Vertical
4	4924.0000	40.29	-17.72	74.00	33.71	253	321	Vertical
5	7386.0000	47.94	-9.55	74.00	26.06	296	141	Vertical
6	7386.0000	36.56	-9.55	54.00	17.44	157	141	Vertical
7	17878.443	46.75	0.41	54.00	7.25	232	90	Vertical



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



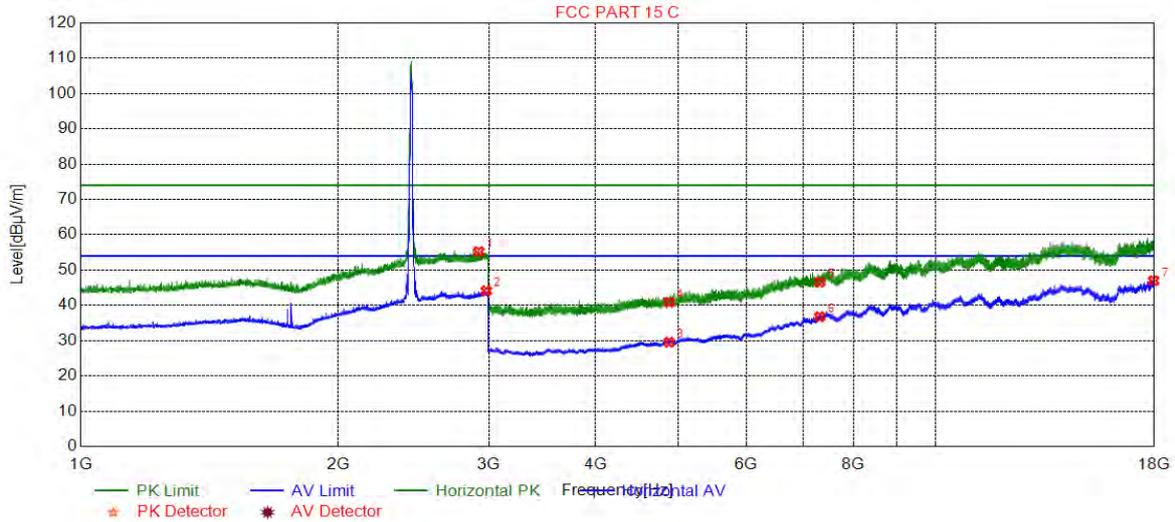
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2927.4819	44.11	9.44	54.00	9.89	225	249	Horizontal
2	2991.9980	55.46	9.49	74.00	18.54	215	58	Horizontal
3	4824.0000	40.97	-18.21	74.00	33.03	156	47	Horizontal
4	4824.0000	29.17	-18.21	54.00	24.83	151	47	Horizontal
5	7236.0000	45.34	-9.99	74.00	28.66	122	291	Horizontal
6	7236.0000	35.92	-9.99	54.00	18.08	198	291	Horizontal
7	17899.345	47.12	0.68	54.00	6.88	153	91	Horizontal



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



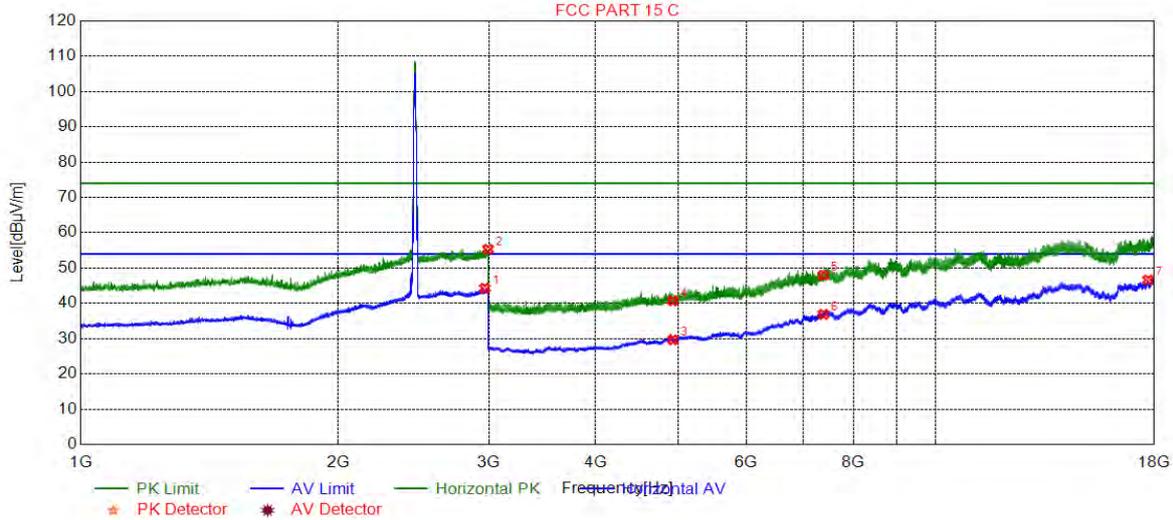
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2919.9800	55.22	9.36	74.00	18.78	196	224	Horizontal
2	2980.4951	44.10	9.54	54.00	9.90	138	32	Horizontal
3	4874.0000	29.56	-17.99	54.00	24.44	152	128	Horizontal
4	4874.0000	40.84	-17.99	74.00	33.16	219	322	Horizontal
5	7311.0000	46.55	-9.74	74.00	27.45	233	132	Horizontal
6	7311.0000	36.76	-9.74	54.00	17.24	160	83	Horizontal
7	17960.398	46.98	0.71	54.00	7.02	197	32	Horizontal



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



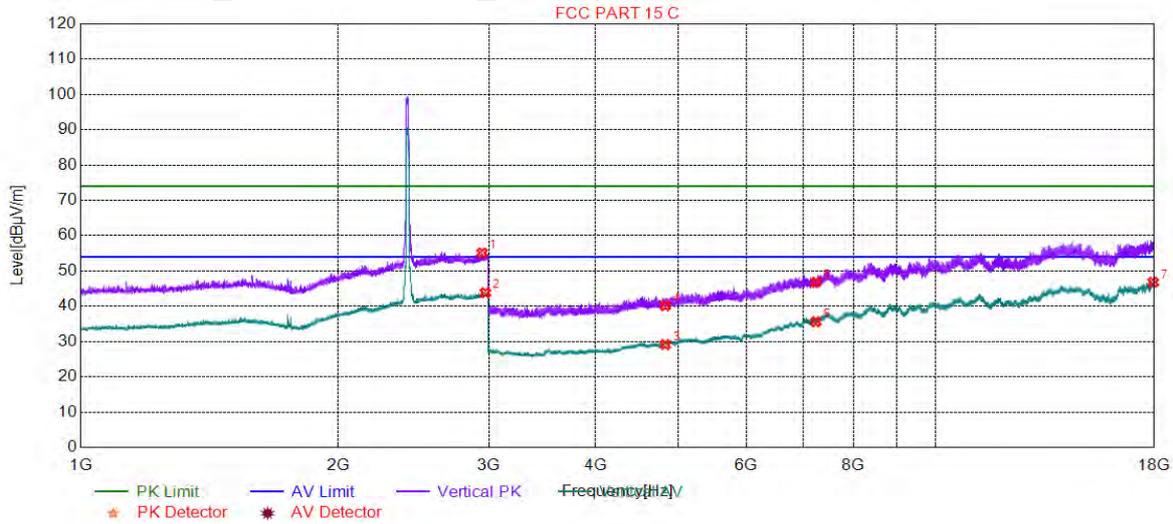
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2967.4919	44.28	9.60	54.00	9.72	186	155	Horizontal
2	2993.9985	55.32	9.48	74.00	18.68	115	59	Horizontal
3	4924.0000	29.65	-17.72	54.00	24.35	165	159	Horizontal
4	4924.0000	40.71	-17.72	74.00	33.29	211	333	Horizontal
5	7386.0000	47.95	-9.55	74.00	26.05	199	241	Horizontal
6	7386.0000	36.86	-9.55	54.00	17.14	192	342	Horizontal
7	17699.685	46.60	1.36	54.00	7.40	179	190	Horizontal



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



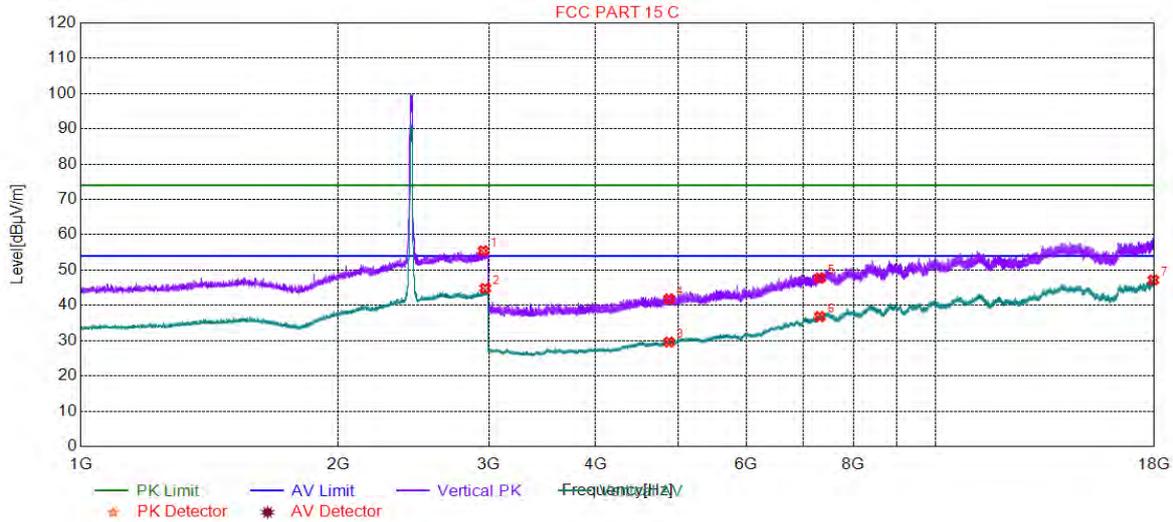
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2946.4866	55.13	9.64	74.00	18.87	212	24	Vertical
2	2971.9930	43.83	9.58	54.00	10.17	153	190	Vertical
3	4824.0000	29.14	-18.21	54.00	24.86	230	18	Vertical
4	4824.0000	40.15	-18.21	74.00	33.85	125	156	Vertical
5	7236.0000	46.78	-9.99	74.00	27.22	155	342	Vertical
6	7236.0000	35.61	-9.99	54.00	18.39	151	39	Vertical
7	17938.946	46.79	0.70	54.00	7.21	208	190	Vertical



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



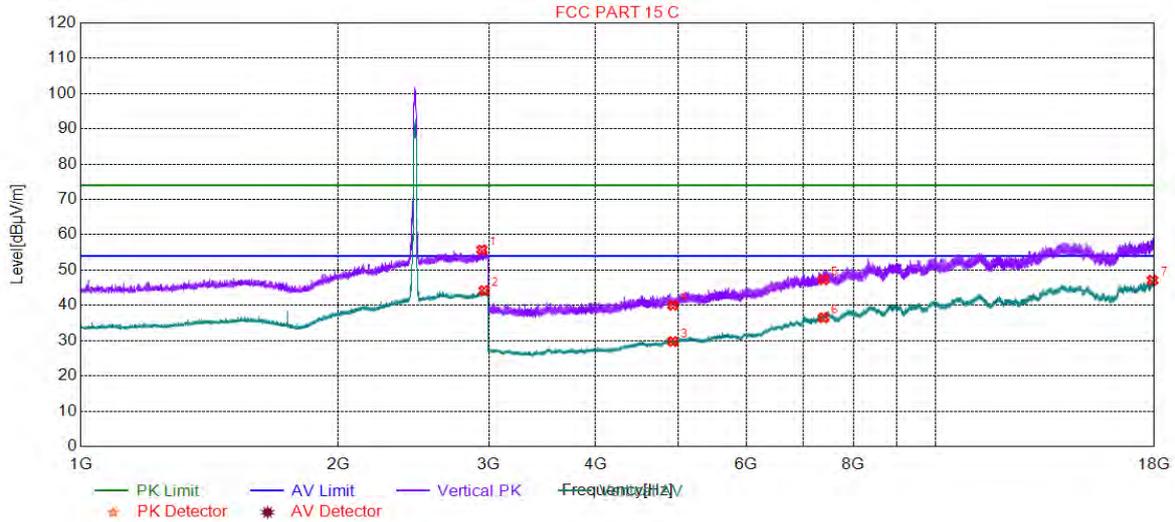
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2955.9890	55.44	9.65	74.00	18.56	288	272	Vertical
2	2970.9927	44.81	9.58	54.00	9.19	187	50	Vertical
3	4874.0000	29.60	-17.99	54.00	24.40	238	266	Vertical
4	4874.0000	41.83	-17.99	74.00	32.17	219	18	Vertical
5	7311.0000	47.75	-9.74	74.00	26.25	164	39	Vertical
6	7311.0000	36.81	-9.74	54.00	17.19	154	39	Vertical
7	17951.597	47.17	0.71	54.00	6.83	299	140	Vertical



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



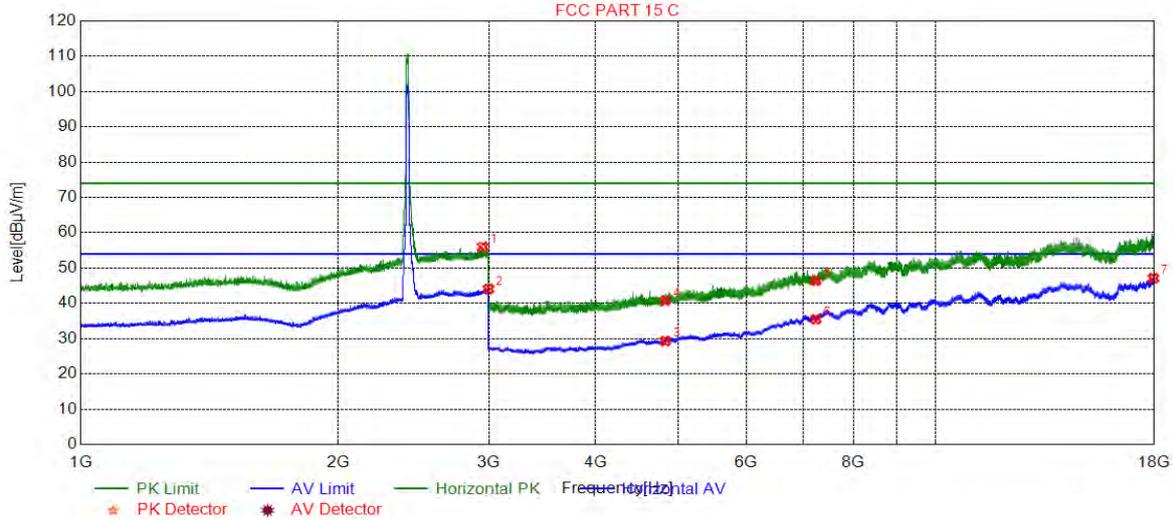
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2944.9862	55.73	9.63	74.00	18.27	102	321	Vertical
2	2962.4906	44.16	9.62	54.00	9.84	171	74	Vertical
3	4924.0000	29.75	-17.72	54.00	24.25	218	160	Vertical
4	4924.0000	40.02	-17.72	74.00	33.98	215	132	Vertical
5	7386.0000	47.28	-9.55	74.00	26.72	195	291	Vertical
6	7386.0000	36.50	-9.55	54.00	17.50	177	342	Vertical
7	17908.695	47.10	0.69	54.00	6.90	172	190	Vertical



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



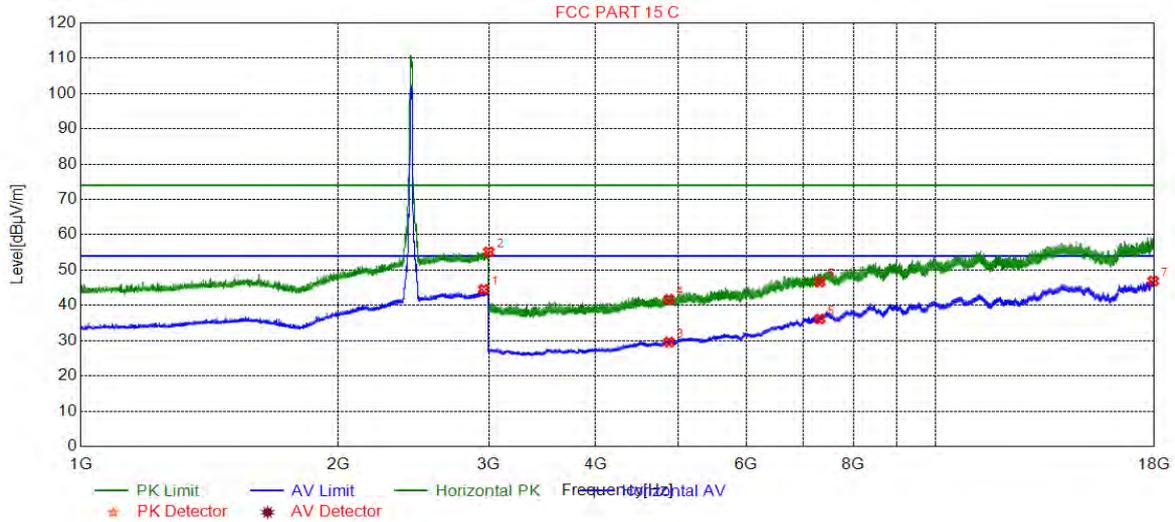
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2952.4881	55.98	9.67	74.00	18.02	204	18	Horizontal
2	2997.4994	44.05	9.46	54.00	9.95	105	114	Horizontal
3	4824.0000	29.32	-18.21	54.00	24.68	180	18	Horizontal
4	4824.0000	40.77	-18.21	74.00	33.23	112	101	Horizontal
5	7236.0000	46.42	-9.99	74.00	27.58	186	90	Horizontal
6	7236.0000	35.48	-9.99	54.00	18.52	194	342	Horizontal
7	17954.347	47.12	0.71	54.00	6.88	168	39	Horizontal



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



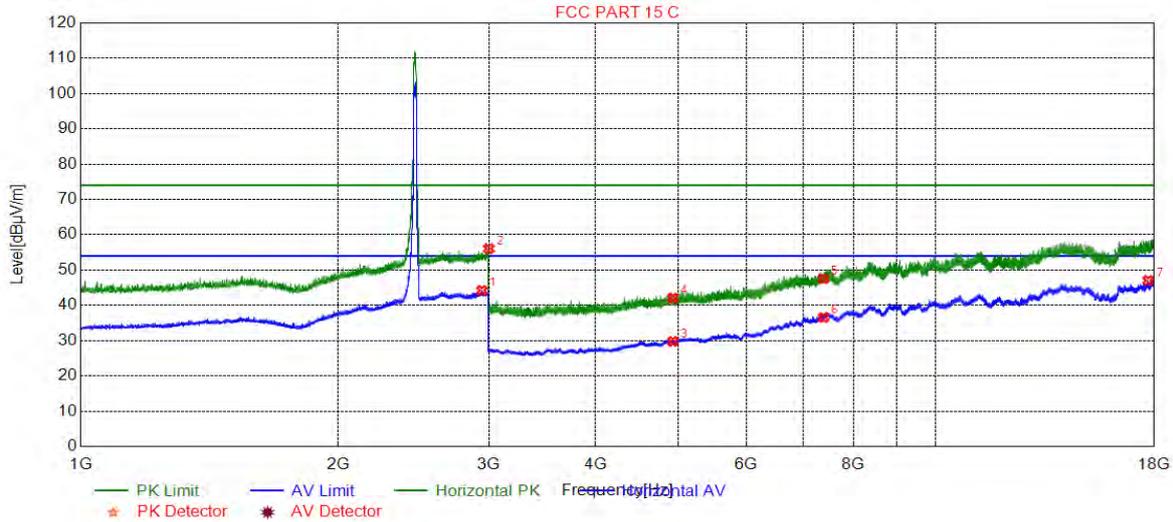
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2958.4896	44.51	9.64	54.00	9.49	136	211	Horizontal
2	2999.4999	55.15	9.45	74.00	18.85	147	141	Horizontal
3	4874.0000	29.58	-17.99	54.00	24.42	138	18	Horizontal
4	4874.0000	41.66	-17.99	74.00	32.34	233	240	Horizontal
5	7311.0000	46.59	-9.74	74.00	27.41	141	292	Horizontal
6	7311.0000	36.12	-9.74	54.00	17.88	105	35	Horizontal
7	17947.197	46.87	0.70	54.00	7.13	113	188	Horizontal



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



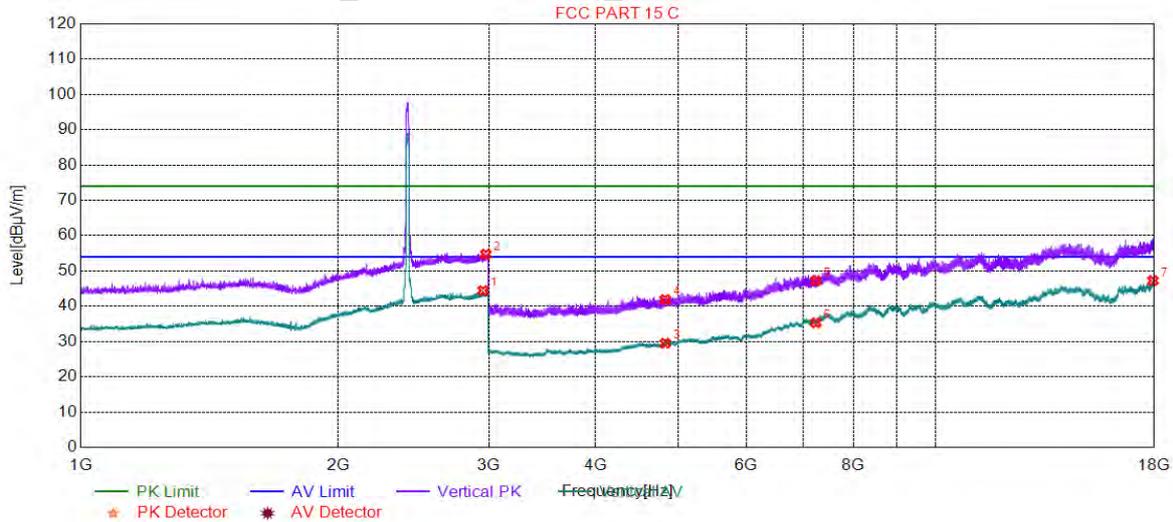
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2945.4864	44.21	9.63	54.00	9.79	141	169	Horizontal
2	2999.4999	56.05	9.45	74.00	17.95	148	293	Horizontal
3	4924.0000	29.77	-17.72	54.00	24.23	126	73	Horizontal
4	4924.0000	42.09	-17.72	74.00	31.91	226	293	Horizontal
5	7386.0000	47.51	-9.55	74.00	26.49	189	342	Horizontal
6	7386.0000	36.53	-9.55	54.00	17.47	190	190	Horizontal
7	17703.535	47.06	1.29	54.00	6.94	146	140	Horizontal



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



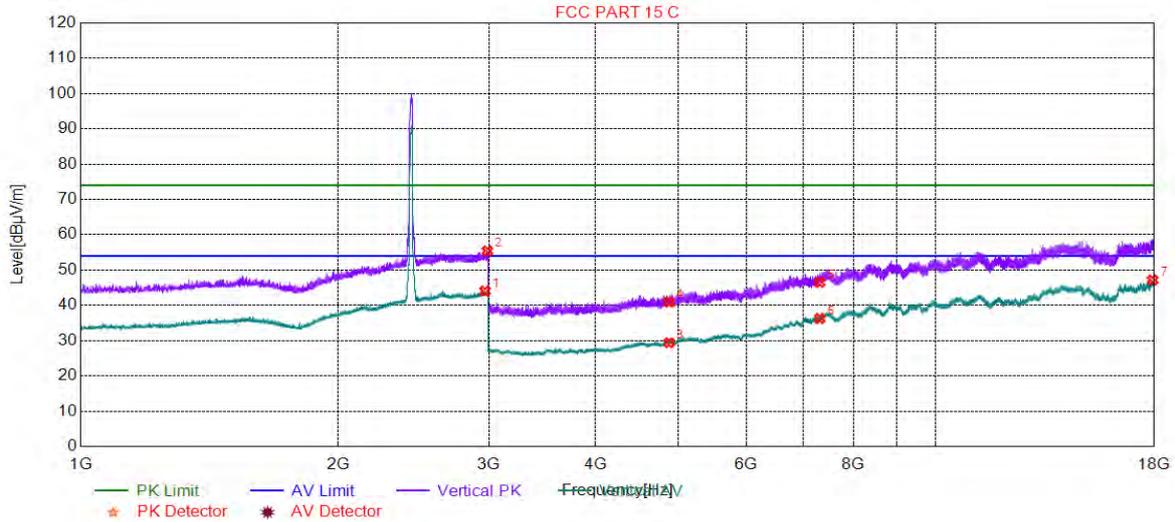
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2953.9885	44.40	9.66	54.00	9.60	233	40	Vertical
2	2975.9940	54.73	9.56	74.00	19.27	256	301	Vertical
3	4824.0000	29.53	-18.21	54.00	24.47	240	293	Vertical
4	4824.0000	41.89	-18.21	74.00	32.11	281	45	Vertical
5	7236.0000	47.19	-9.99	74.00	26.81	216	38	Vertical
6	7236.0000	35.30	-9.99	54.00	18.70	193	89	Vertical
7	17931.796	47.24	0.70	54.00	6.76	157	241	Vertical



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



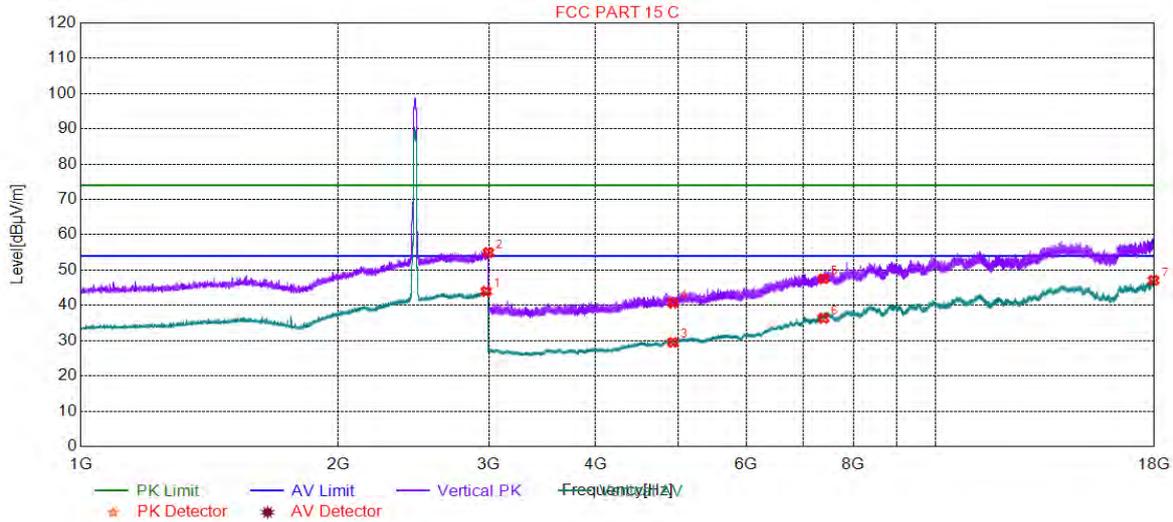
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2968.9922	44.03	9.59	54.00	9.97	178	39	Vertical
2	2988.4971	55.41	9.50	74.00	18.59	191	39	Vertical
3	4874.0000	29.40	-17.99	54.00	24.60	223	45	Vertical
4	4874.0000	40.90	-17.99	74.00	33.10	158	210	Vertical
5	7311.0000	46.49	-9.74	74.00	27.51	216	0	Vertical
6	7311.0000	36.25	-9.74	54.00	17.75	275	241	Vertical
7	17914.745	47.17	0.69	54.00	6.83	245	90	Vertical



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



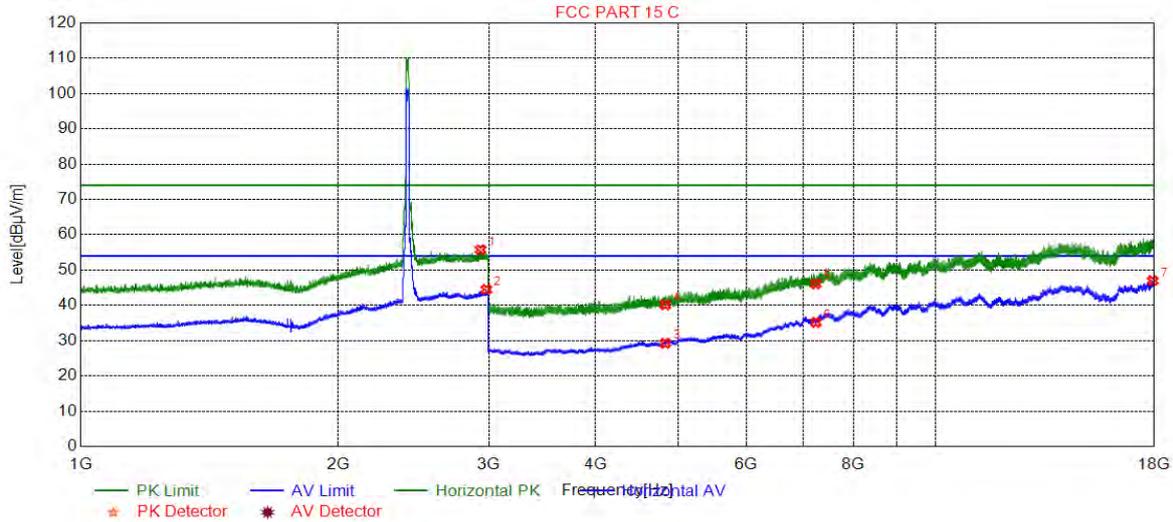
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2978.9947	43.95	9.55	54.00	10.05	287	246	Vertical
2	2996.9993	54.96	9.46	74.00	19.04	292	260	Vertical
3	4924.0000	29.52	-17.72	54.00	24.48	227	46	Vertical
4	4924.0000	40.67	-17.72	74.00	33.33	287	156	Vertical
5	7386.0000	47.52	-9.55	74.00	26.48	200	242	Vertical
6	7386.0000	36.35	-9.55	54.00	17.65	206	292	Vertical
7	17958.197	47.08	0.71	54.00	6.92	242	92	Vertical



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



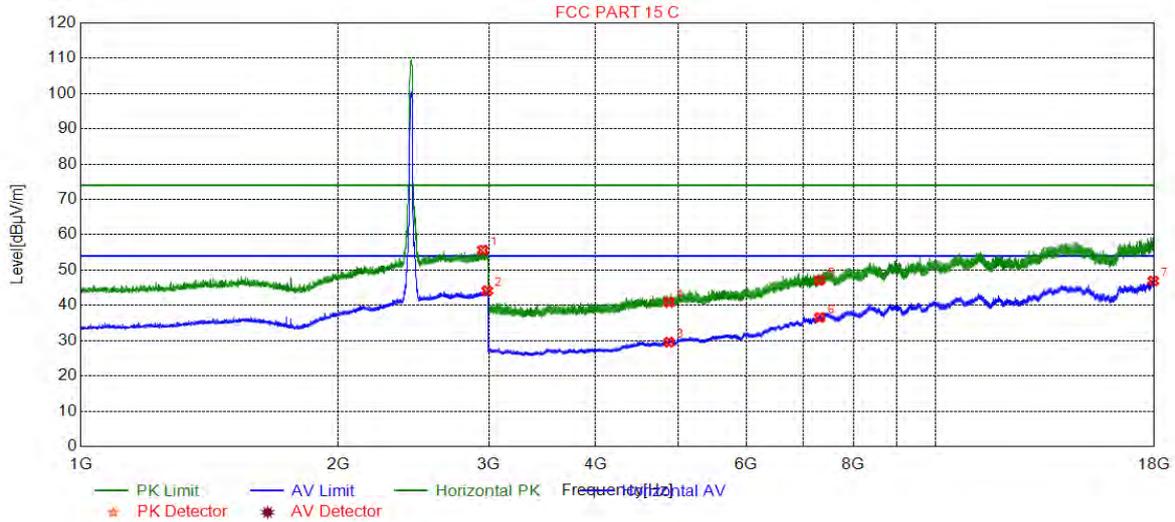
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2933.9835	55.75	9.51	74.00	18.25	112	358	Horizontal
2	2980.9952	44.50	9.54	54.00	9.50	194	236	Horizontal
3	4824.0000	29.25	-18.21	54.00	24.75	206	237	Horizontal
4	4824.0000	40.14	-18.21	74.00	33.86	149	237	Horizontal
5	7236.0000	46.08	-9.99	74.00	27.92	159	0	Horizontal
6	7236.0000	35.17	-9.99	54.00	18.83	213	291	Horizontal
7	17916.945	46.98	0.70	54.00	7.02	192	40	Horizontal



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



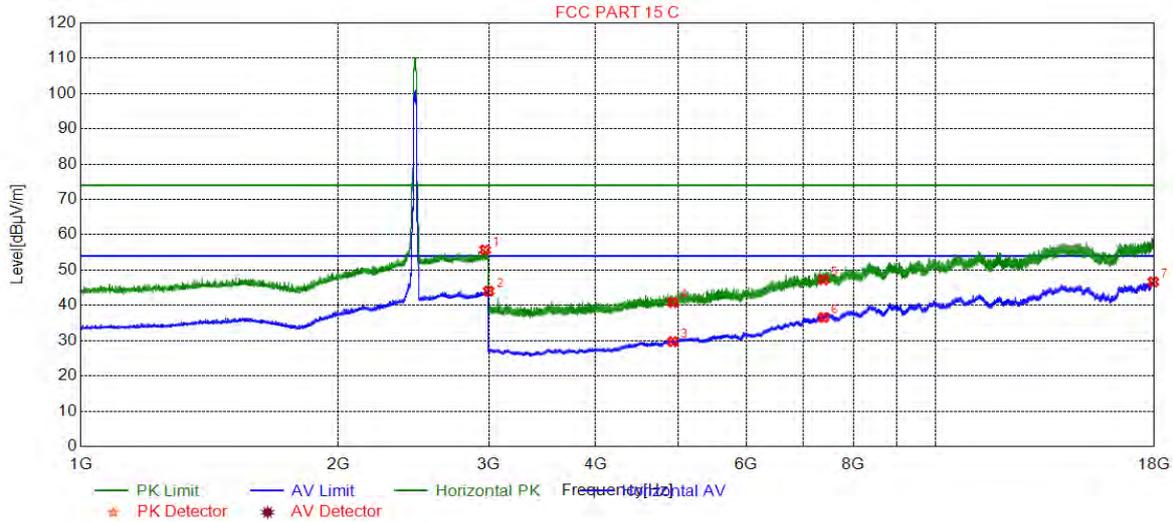
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2952.4881	55.66	9.67	74.00	18.34	225	334	Horizontal
2	2987.4969	44.11	9.51	54.00	9.89	225	127	Horizontal
3	4874.0000	29.57	-17.99	54.00	24.43	142	302	Horizontal
4	4874.0000	40.85	-17.99	74.00	33.15	217	47	Horizontal
5	7311.0000	47.06	-9.74	74.00	26.94	201	186	Horizontal
6	7311.0000	36.56	-9.74	54.00	17.44	126	186	Horizontal
7	17944.997	46.90	0.70	54.00	7.10	155	342	Horizontal



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



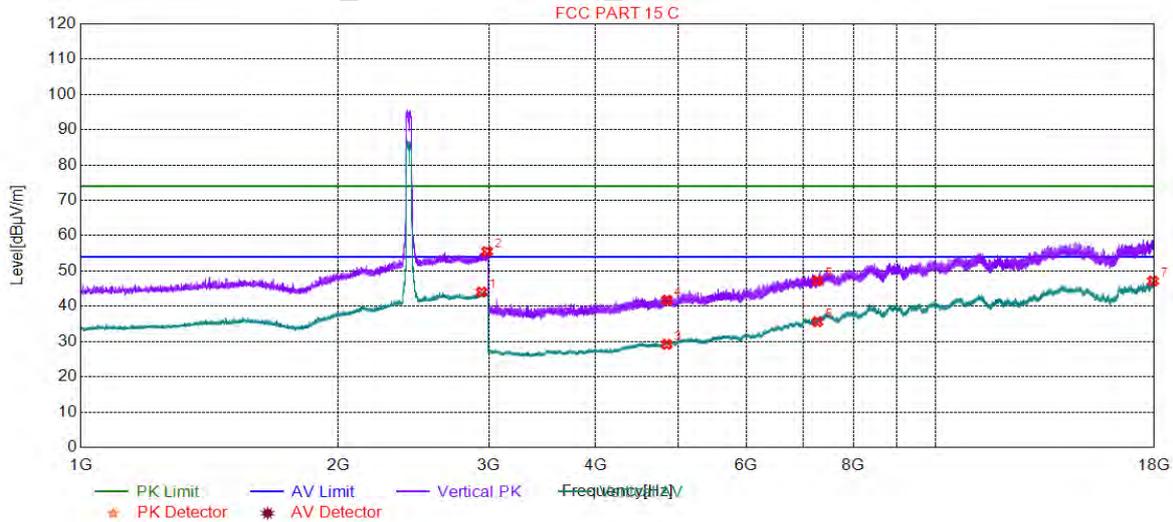
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2969.4924	55.73	9.59	74.00	18.27	289	275	Horizontal
2	2998.4996	44.02	9.46	54.00	9.98	226	136	Horizontal
3	4924.0000	29.71	-17.72	54.00	24.29	169	100	Horizontal
4	4924.0000	40.79	-17.72	74.00	33.21	265	183	Horizontal
5	7386.0000	47.22	-9.55	74.00	26.78	244	241	Horizontal
6	7386.0000	36.54	-9.55	54.00	17.46	272	342	Horizontal
7	17946.097	46.64	0.70	54.00	7.36	212	241	Horizontal



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



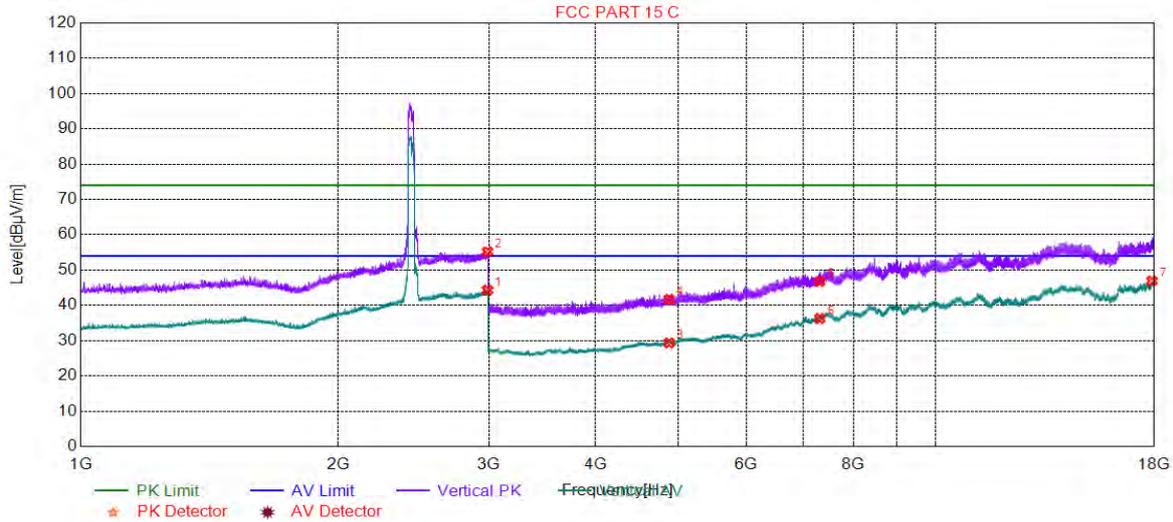
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2941.9855	44.01	9.59	54.00	9.99	195	259	Vertical
2	2985.4964	55.50	9.52	74.00	18.50	217	150	Vertical
3	4844.0000	29.21	-18.13	54.00	24.79	295	101	Vertical
4	4844.0000	41.68	-18.13	74.00	32.32	227	155	Vertical
5	7266.0000	47.22	-9.88	74.00	26.78	201	190	Vertical
6	7266.0000	35.58	-9.88	54.00	18.42	257	342	Vertical
7	17931.246	47.14	0.70	54.00	6.86	276	140	Vertical



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**4.9.2.1.20 802.11N40\_Middle Channel\_Vertical**



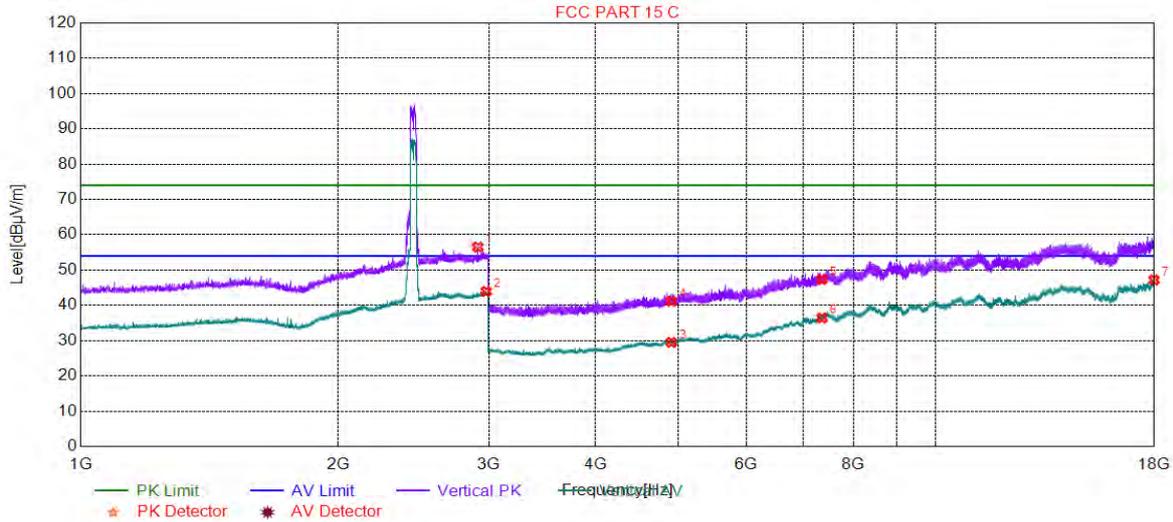
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2988.9972	44.30	9.50	54.00	9.70	299	151	Vertical
2	2989.4974	55.20	9.50	74.00	18.80	220	342	Vertical
3	4874.0000	29.35	-17.99	54.00	24.65	197	18	Vertical
4	4874.0000	41.68	-17.99	74.00	32.32	194	209	Vertical
5	7311.0000	46.77	-9.74	74.00	27.23	291	342	Vertical
6	7311.0000	36.27	-9.74	54.00	17.73	198	291	Vertical
7	17878.994	46.91	0.41	54.00	7.09	261	191	Vertical



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



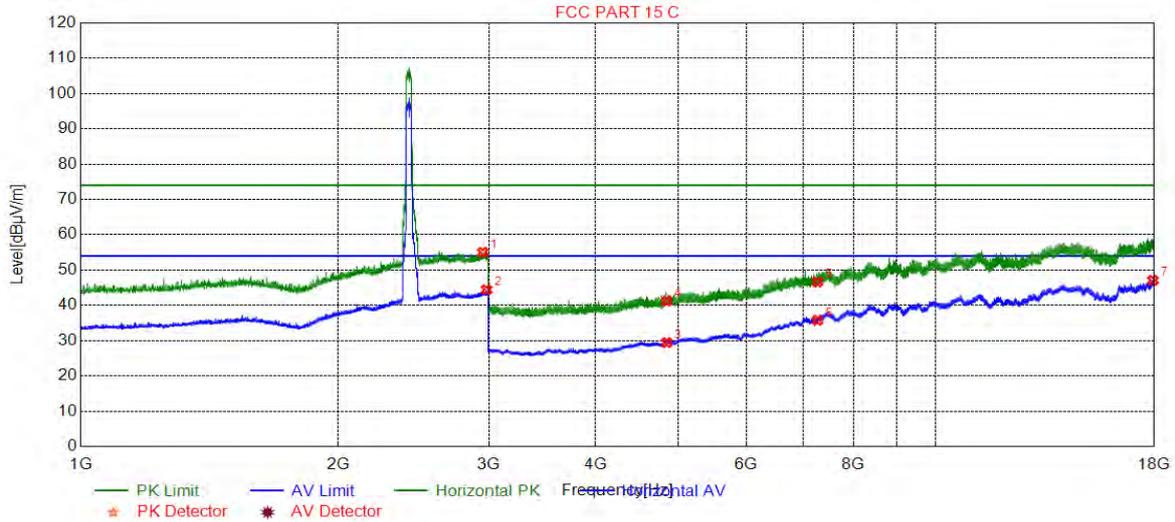
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2912.9782	56.51	9.28	74.00	17.49	169	108	Vertical
2	2979.4949	43.95	9.54	54.00	10.05	177	315	Vertical
3	4904.0000	29.51	-17.85	54.00	24.49	175	18	Vertical
4	4904.0000	41.16	-17.85	74.00	32.84	261	159	Vertical
5	7356.0000	47.33	-9.62	74.00	26.67	274	33	Vertical
6	7356.0000	36.40	-9.62	54.00	17.60	263	342	Vertical
7	17979.099	47.20	0.71	54.00	6.80	168	84	Vertical



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



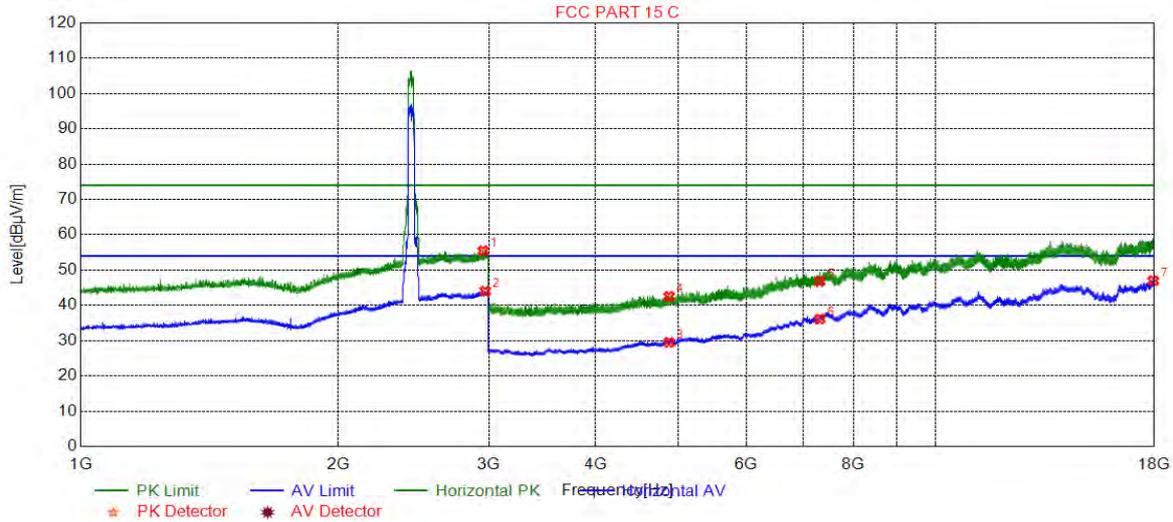
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2951.9880	55.03	9.67	74.00	18.97	175	346	Horizontal
2	2981.9955	44.41	9.53	54.00	9.59	142	155	Horizontal
3	4844.0000	29.44	-18.13	54.00	24.56	158	210	Horizontal
4	4844.0000	41.21	-18.13	74.00	32.79	145	45	Horizontal
5	7266.0000	46.61	-9.88	74.00	27.39	143	0	Horizontal
6	7266.0000	35.77	-9.88	54.00	18.23	121	141	Horizontal
7	17928.496	47.10	0.70	54.00	6.90	236	90	Horizontal



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



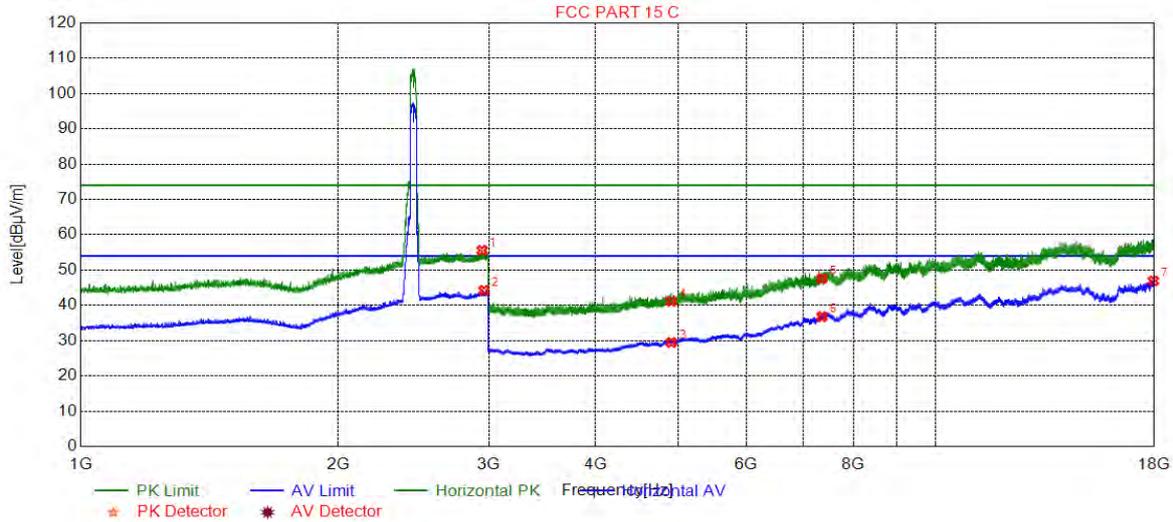
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2954.9887	55.44	9.66	74.00	18.56	178	74	Horizontal
2	2971.4929	44.01	9.58	54.00	9.99	158	18	Horizontal
3	4874.0000	29.50	-17.99	54.00	24.50	221	348	Horizontal
4	4874.0000	42.51	-17.99	74.00	31.49	150	265	Horizontal
5	7311.0000	46.80	-9.74	74.00	27.20	115	190	Horizontal
6	7311.0000	36.10	-9.74	54.00	17.90	134	241	Horizontal
7	17943.897	46.96	0.70	54.00	7.04	144	342	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	2946.4866	55.56	9.64	74.00	18.44	156	128	Horizontal
2	2960.4901	44.23	9.63	54.00	9.77	158	346	Horizontal
3	4904.0000	29.47	-17.85	54.00	24.53	217	18	Horizontal
4	4904.0000	41.17	-17.85	74.00	32.83	212	163	Horizontal
5	7356.0000	47.57	-9.62	74.00	26.43	208	33	Horizontal
6	7356.0000	36.79	-9.62	54.00	17.21	116	291	Horizontal
7	17952.147	46.91	0.71	54.00	7.09	247	241	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:			

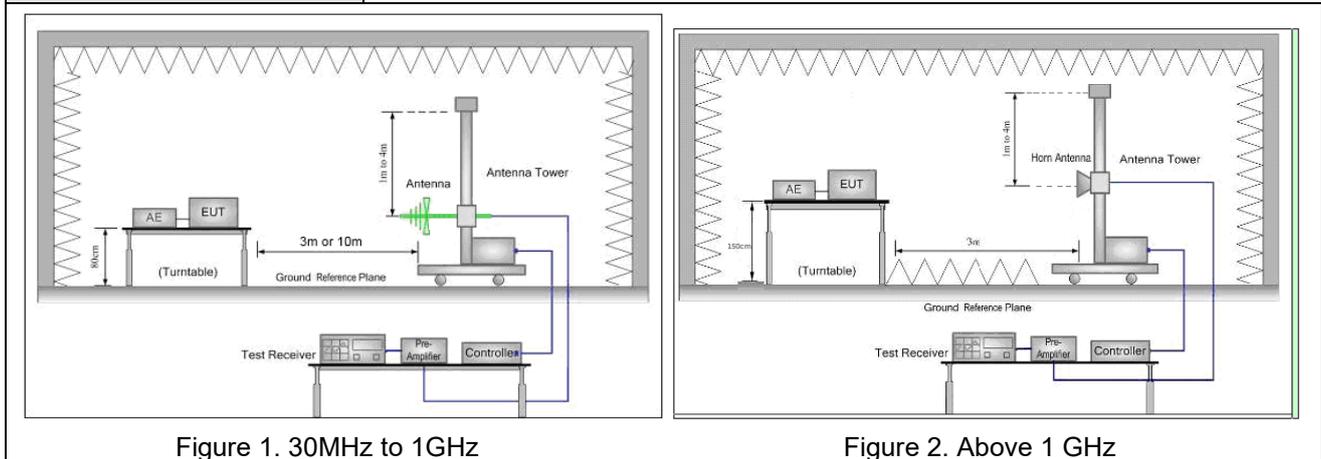


Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz



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Shenzhen Branch Inspection & Testing Services Laboratory

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No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012063 f (86-755) 26710594 www.sgsgroup.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012063 f (86-755) 26710594 sgs.china@sgs.com

<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); 13.5Mbps of rate is the worst case of 802.11N(HT40). 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>



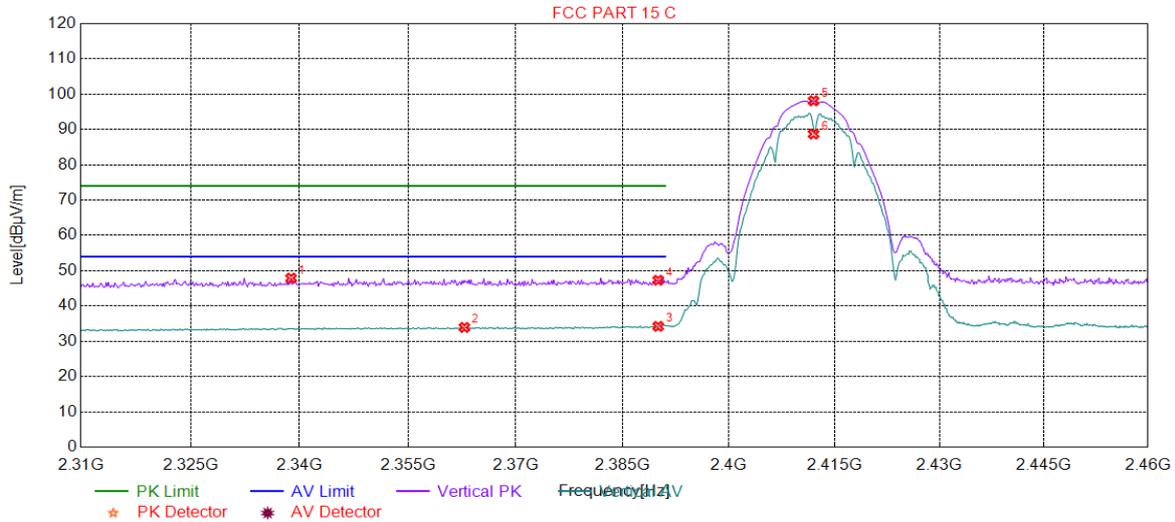
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Test plot as follows:

**4.10.1 ANT1**

**4.10.1.1 802.11B\_Lowest Channel\_Vertical**



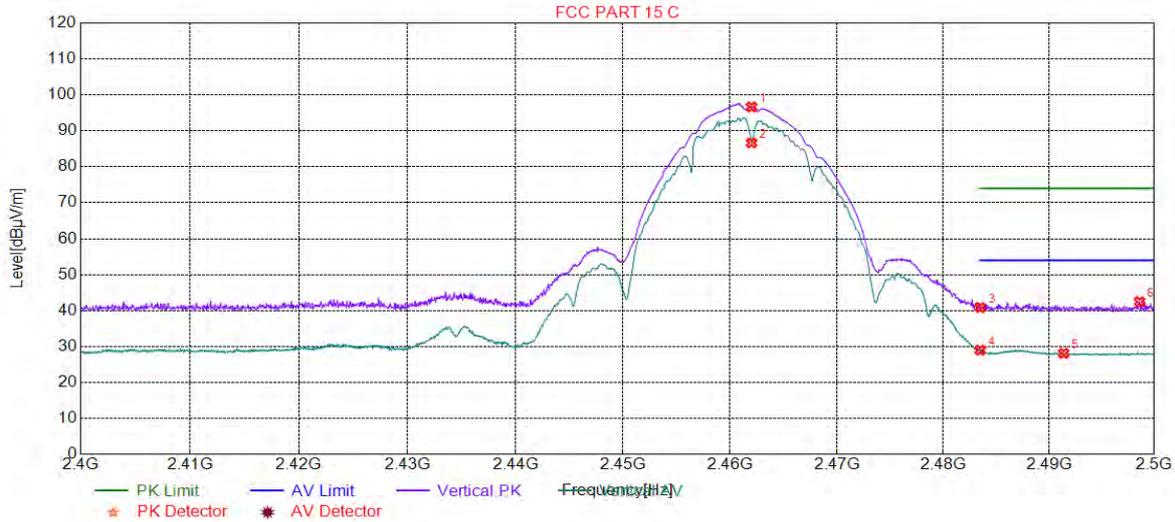
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2338.8288	47.90	7.71	74.00	26.10	163	104	Vertical
2	2362.8529	33.92	7.80	54.00	20.08	286	7	Vertical
3	2390.0000	34.23	7.77	54.00	19.77	190	239	Vertical
4	2390.0000	47.29	7.77	74.00	26.71	294	268	Vertical
5	2412.0000	98.14	7.81	0.00	-98.14	160	288	Vertical
6	2412.0000	88.72	7.81	0.00	-88.72	261	292	Vertical



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



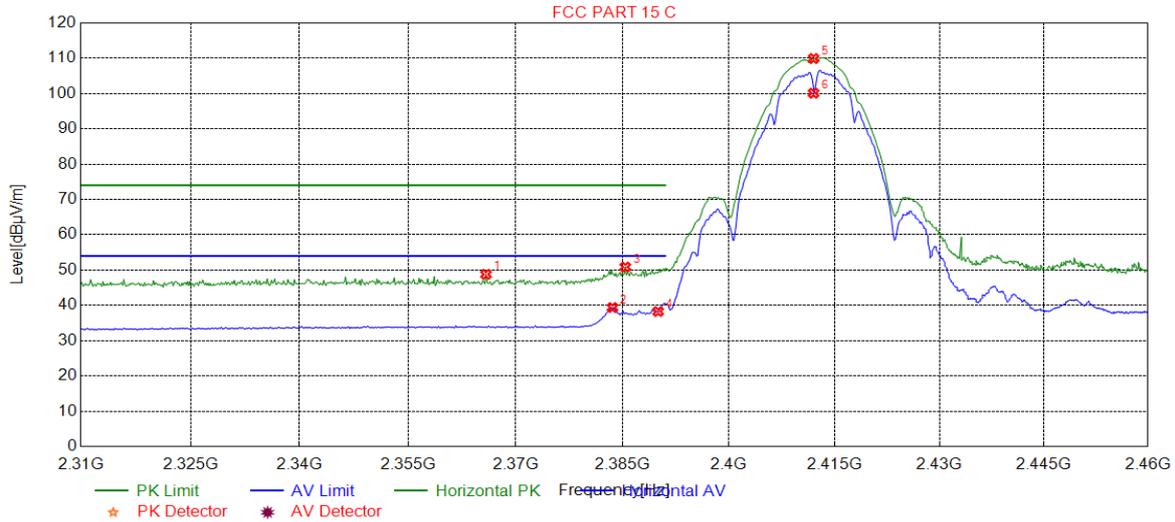
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	96.67	7.98	0.00	-96.67	226	325	Vertical
2	2462.0000	86.65	7.98	0.00	-86.65	213	325	Vertical
3	2483.5000	40.85	8.01	74.00	33.15	154	314	Vertical
4	2483.5000	28.99	8.01	54.00	25.01	240	248	Vertical
5	2491.3957	28.13	8.02	54.00	25.87	208	88	Vertical
6	2498.5993	42.47	8.03	74.00	31.53	222	336	Vertical



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



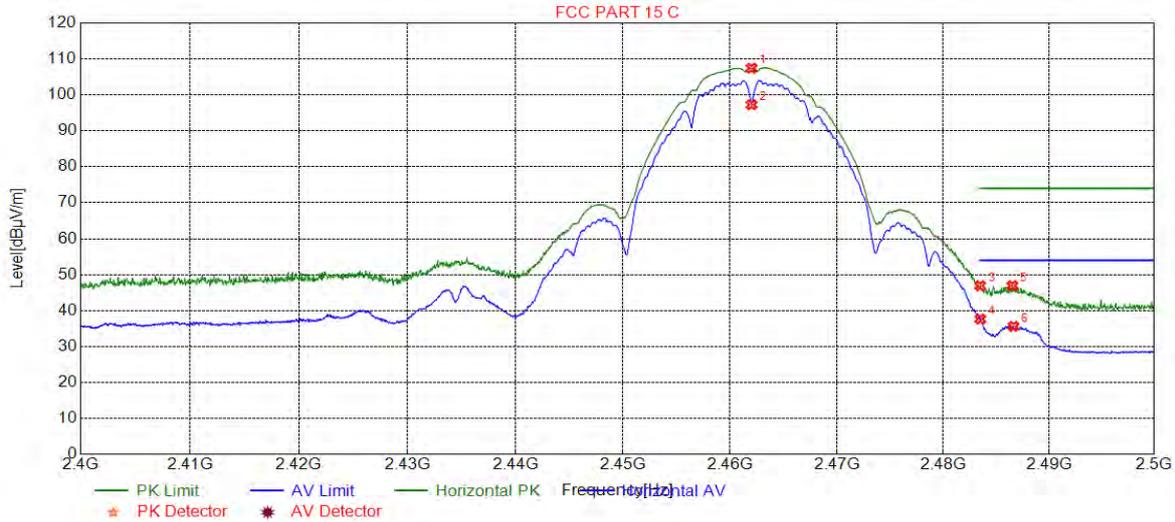
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2365.8559	48.79	7.79	74.00	25.21	122	296	Horizontal
2	2383.5736	39.38	7.78	54.00	14.62	172	50	Horizontal
3	2385.3754	50.85	7.77	74.00	23.15	144	97	Horizontal
4	2390.0000	38.25	7.77	54.00	15.75	169	204	Horizontal
5	2412.0000	109.94	7.81	0.00	-109.94	217	54	Horizontal
6	2412.0000	100.11	7.81	0.00	-100.11	125	50	Horizontal



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



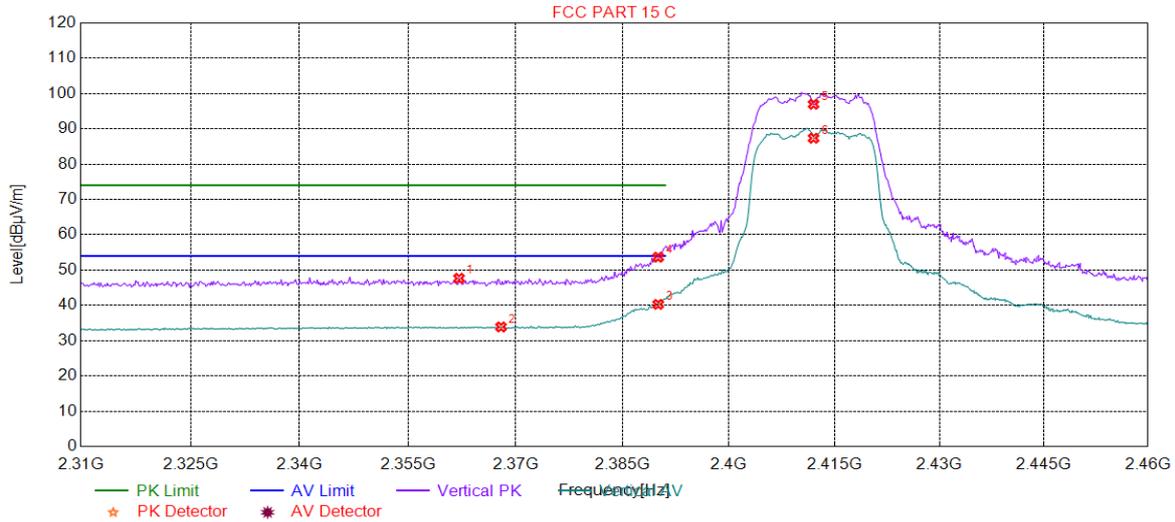
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	107.43	7.98	0.00	-107.43	183	46	Horizontal
2	2462.0000	97.27	7.98	0.00	-97.27	108	46	Horizontal
3	2483.5000	46.92	8.01	74.00	27.08	106	206	Horizontal
4	2483.5000	37.65	8.01	54.00	16.35	117	200	Horizontal
5	2486.5433	46.94	8.01	74.00	27.06	175	206	Horizontal
6	2486.6433	35.59	8.01	54.00	18.41	245	200	Horizontal



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



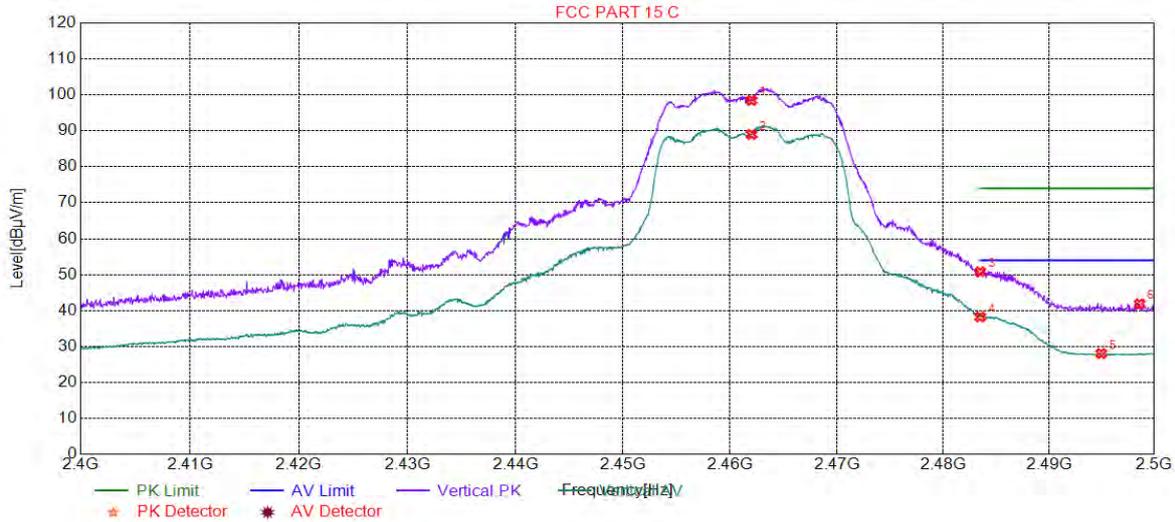
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2362.1021	47.66	7.80	74.00	26.34	197	346	Vertical
2	2367.9580	33.87	7.79	54.00	20.13	159	176	Vertical
3	2390.0000	40.27	7.77	54.00	13.73	247	73	Vertical
4	2390.0000	53.64	7.77	74.00	20.36	262	69	Vertical
5	2412.0000	96.98	7.81	0.00	-96.98	252	238	Vertical
6	2412.0000	87.36	7.81	0.00	-87.36	210	238	Vertical



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



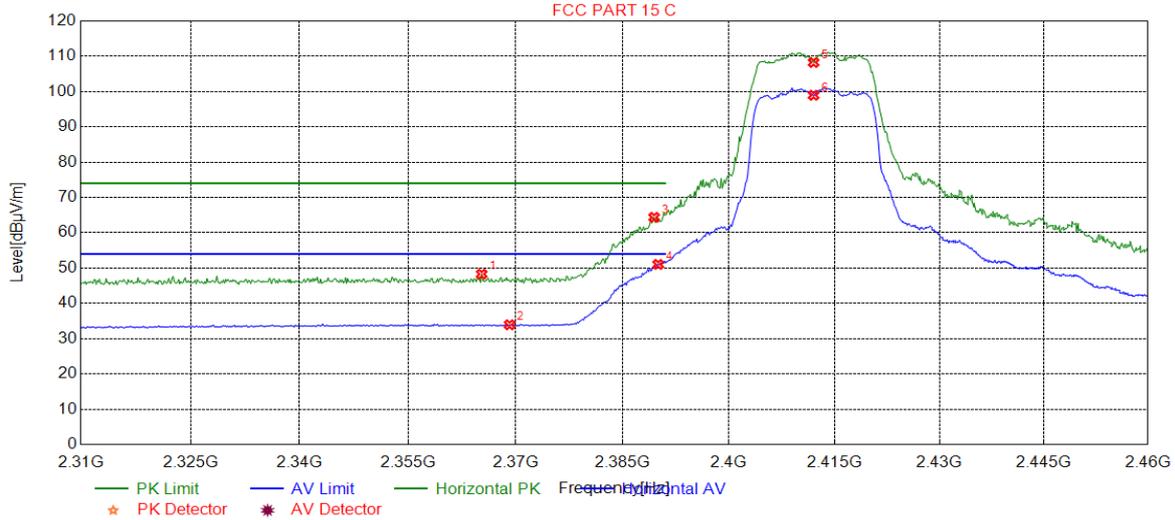
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	98.46	7.98	0.00	-98.46	228	148	Vertical
2	2462.0000	89.00	7.98	0.00	-89.00	182	148	Vertical
3	2483.5000	50.79	8.01	74.00	23.21	202	148	Vertical
4	2483.5000	38.24	8.01	54.00	15.76	182	214	Vertical
5	2494.9475	28.06	8.02	54.00	25.94	262	264	Vertical
6	2498.5993	41.88	8.03	74.00	32.12	153	292	Vertical



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



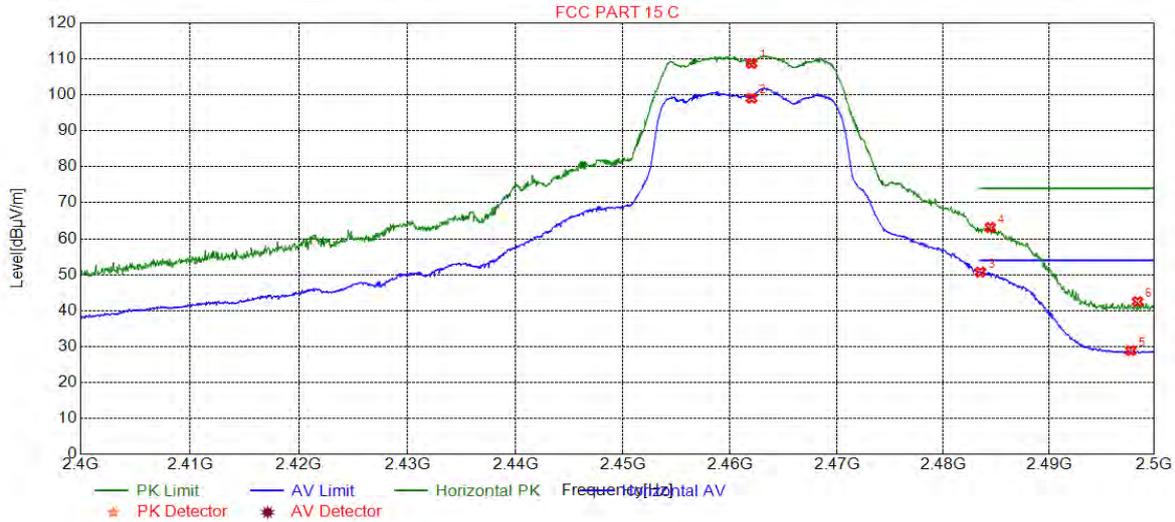
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2365.2553	48.28	7.79	74.00	25.72	194	210	Horizontal
2	2369.1592	33.91	7.79	54.00	20.09	101	201	Horizontal
3	2389.4294	64.37	7.77	74.00	9.63	204	201	Horizontal
4	2390.0000	50.83	7.77	54.00	3.17	180	201	Horizontal
5	2412.0000	108.25	7.81	0.00	-108.25	213	238	Horizontal
6	2412.0000	98.96	7.81	0.00	-98.96	225	235	Horizontal



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



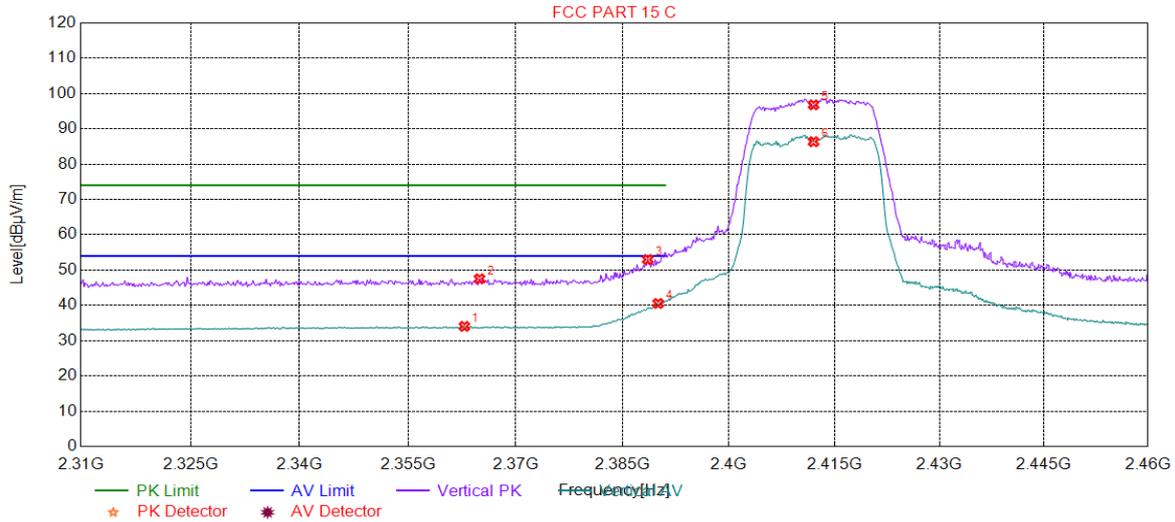
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	108.74	7.98	0.00	-108.74	156	251	Horizontal
2	2462.0000	99.08	7.98	0.00	-99.08	208	251	Horizontal
3	2483.5000	50.70	8.01	54.00	3.30	227	201	Horizontal
4	2484.4422	63.11	8.01	74.00	10.89	220	201	Horizontal
5	2497.7489	28.85	8.03	54.00	25.15	129	201	Horizontal
6	2498.3992	42.50	8.03	74.00	31.50	196	190	Horizontal



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



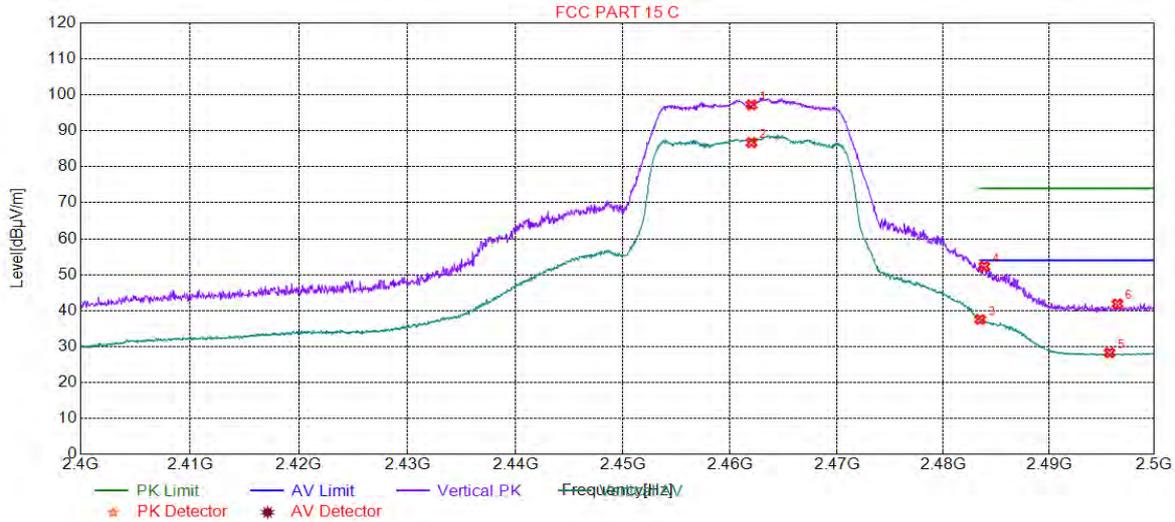
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2362.8529	34.03	7.80	54.00	19.97	278	62	Vertical
2	2364.9550	47.52	7.80	74.00	26.48	288	342	Vertical
3	2388.5285	52.97	7.77	74.00	21.03	262	257	Vertical
4	2390.0000	40.53	7.77	54.00	13.47	217	265	Vertical
5	2412.0000	96.81	7.81	0.00	-96.81	217	108	Vertical
6	2412.0000	86.37	7.81	0.00	-86.37	160	261	Vertical



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

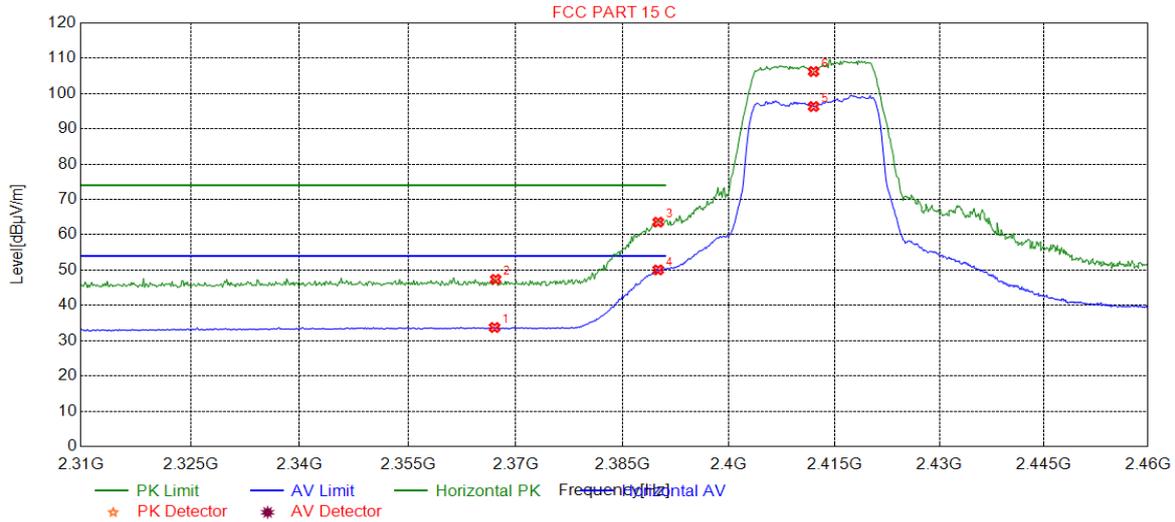


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	97.19	7.98	0.00	-97.19	217	215	Vertical
2	2462.0000	86.73	7.98	0.00	-86.73	295	215	Vertical
3	2483.5000	37.50	8.01	54.00	16.50	277	243	Vertical
4	2483.8919	52.28	8.01	74.00	21.72	233	259	Vertical
5	2495.7479	28.26	8.02	54.00	25.74	162	346	Vertical
6	2496.4982	41.86	8.03	74.00	32.14	174	237	Vertical



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**4.10.1.11 802.11N20\_Lowest Channel\_Horizontal**

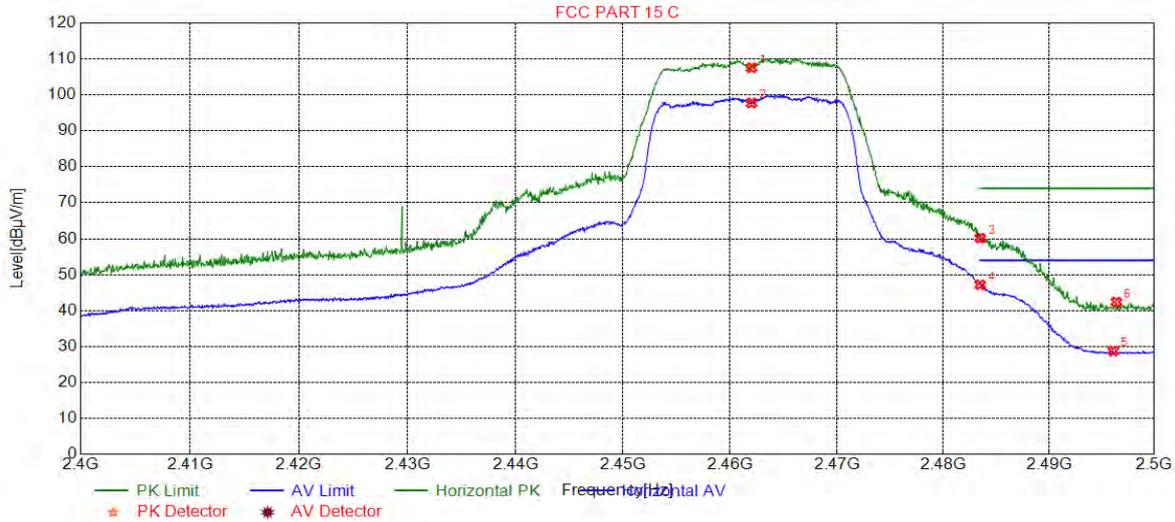


Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2367.0571	33.71	7.79	54.00	20.29	123	268	Horizontal
2	2367.2072	47.37	7.79	74.00	26.63	238	252	Horizontal
3	2390.0000	63.57	7.77	74.00	10.43	187	54	Horizontal
4	2390.0000	50.04	7.77	54.00	3.96	171	54	Horizontal
5	2412.0000	96.34	7.81	0.00	-96.34	229	240	Horizontal
6	2412.0000	106.26	7.81	0.00	-106.26	154	240	Horizontal



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



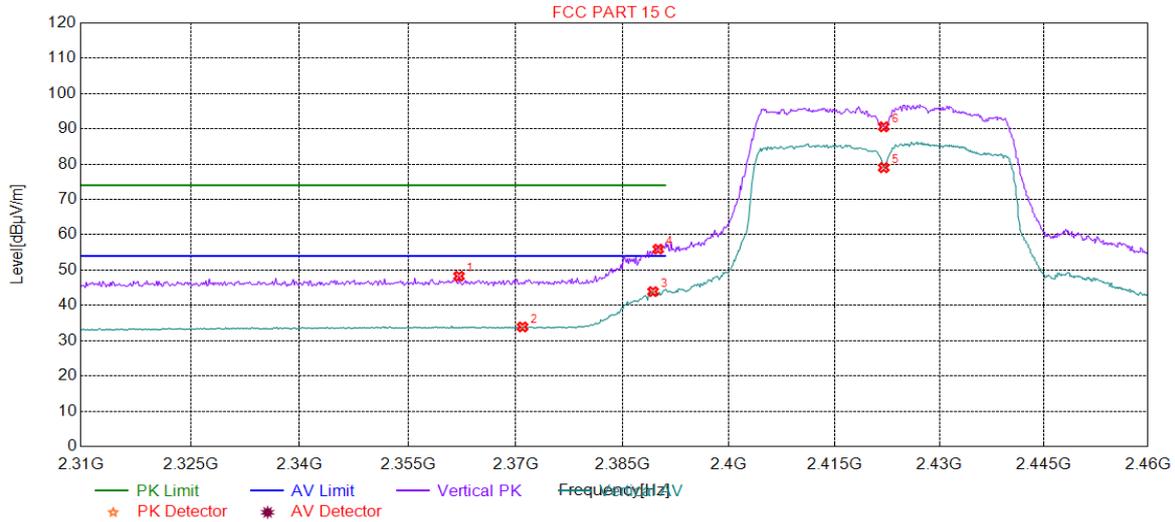
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	107.54	7.98	0.00	-107.54	166	210	Horizontal
2	2462.0000	97.73	7.98	0.00	-97.73	219	232	Horizontal
3	2483.5000	60.15	8.01	74.00	13.85	189	41	Horizontal
4	2483.5000	47.17	8.01	54.00	6.83	218	41	Horizontal
5	2496.0980	28.73	8.03	54.00	25.27	155	199	Horizontal
6	2496.3982	42.37	8.03	74.00	31.63	244	35	Horizontal



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



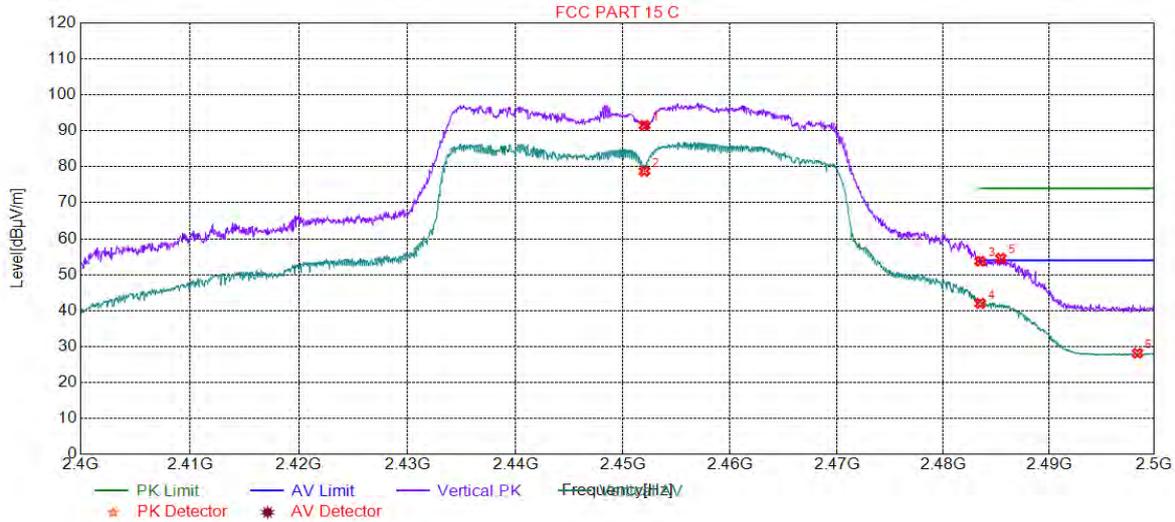
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2362.1021	48.27	7.80	74.00	25.73	292	171	Vertical
2	2370.9610	33.87	7.79	54.00	20.13	224	21	Vertical
3	2389.2793	43.88	7.77	54.00	10.12	293	240	Vertical
4	2390.0000	55.92	7.77	74.00	18.08	223	240	Vertical
5	2422.0000	79.01	7.85	0.00	-79.01	272	95	Vertical
6	2422.0000	90.59	7.85	0.00	-90.59	253	240	Vertical



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



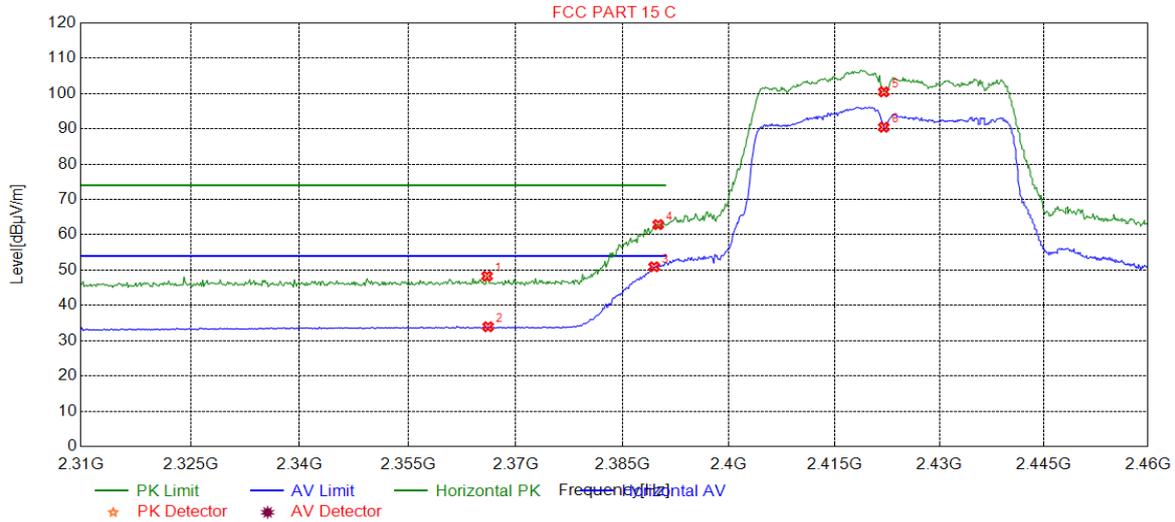
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.0000	91.57	7.97	0.00	-91.57	262	153	Vertical
2	2452.0000	78.78	7.97	0.00	-78.78	279	217	Vertical
3	2483.5000	53.73	8.01	74.00	20.27	191	217	Vertical
4	2483.5000	42.01	8.01	54.00	11.99	296	222	Vertical
5	2485.4427	54.55	8.01	74.00	19.45	237	217	Vertical
6	2498.3992	28.14	8.03	54.00	25.86	273	42	Vertical



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**4.10.1.15 802.11N40\_Lowest Channel\_Horizontal**



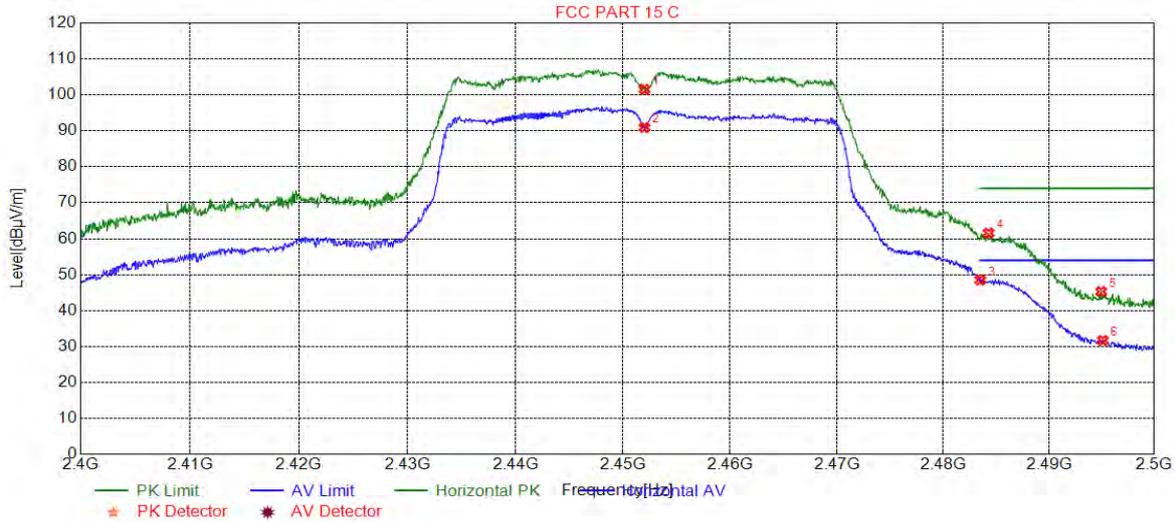
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2366.0060	48.28	7.79	74.00	25.72	135	128	Horizontal
2	2366.1562	33.93	7.79	54.00	20.07	129	240	Horizontal
3	2389.4294	50.92	7.77	54.00	3.08	197	198	Horizontal
4	2390.0000	62.88	7.77	74.00	11.12	179	202	Horizontal
5	2422.0000	100.49	7.85	0.00	-100.49	219	202	Horizontal
6	2422.0000	90.46	7.85	0.00	-90.46	214	206	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	2452.0000	101.54	7.97	0.00	-101.54	182	52	Horizontal
2	2452.0000	90.93	7.97	0.00	-90.93	112	57	Horizontal
3	2483.5000	48.49	8.01	54.00	5.51	147	212	Horizontal
4	2484.2921	61.57	8.01	74.00	12.43	177	212	Horizontal
5	2494.9475	45.27	8.02	74.00	28.73	182	207	Horizontal
6	2495.0975	31.70	8.02	54.00	22.30	123	201	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)

Lab A:

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	Temperature test	±1°C
5	Humidity test	±3%
6	DC and low frequency voltages	±0.5%

Lab B:

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.0dB (150kHz to 30MHz)
2	Radiated Emission	± 4.8dB (Below 1GHz)
		± 4.8dB (1GHz to 6GHz)
		± 4.5dB (6GHz to 18GHz)
		± 5.02dB (Above 18GHz)



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## 6 Equipment List

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

CE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2019-09-07	2020-09-06
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-04-01	2019-07-16	2020-07-15
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2019-12-06	2020-12-05
Measurement Software	Tonscend	TS+ CE V2.5	XAW02-05-02	NCR	NCR

### RSE Test System



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Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
MXA signal analyzer	Keysight	N9020A	XAW01-06-01	2019-06-27	2020-06-26
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2019-09-07	2020-09-06
Receiving antenna (30MHz~3GHz)	Schwarzbeck	VULB 9163	XAW01-09-01	2019-10-13	2021-10-12
Receiving antenna (1GHz~18GHz)	Schwarzbeck	BBHA 9120D	XAW01-09-02	2019-10-13	2021-10-12
Receiving antenna (15GHz~40GHz)	Schwarzbeck	BBHA 9170	XAW01-09-03	2019-10-13	2021-10-12
Directional antenna rack controller	Max-Full	MF-7802BS	XAW03-03-01	NCR	NCR
High-speed antenna rack controller	Max-Full	MF-7802	XAW03-04-01	NCR	NCR
Filter bank	Tonscend	JS0806-F	XAW03-05-01	NCR	NCR
Filter bank	Tonscend	JS0806s	XAW03-05-02	NCR	NCR
Amplifier	Tonscend	TAP00903040	XAW01-41-01	2019-11-18	2020-11-17
Amplifier	Tonscend	TAP01018048	XAW01-41-02	2019-11-18	2020-11-17
Amplifier	Tonscend	TAP18040048	XAW01-41-03	2019-12-03	2020-12-02
Amplifier	Shanghai Steed	YX28980930	XAW01-41-06	2019-11-18	2020-11-17
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2019-12-06	2020-12-05
Measurement Software	Tonscend	TS+ RSE V3.0.0.2	XAW02-05-01	NCR	NCR



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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

## 7 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of Set-Up for ZR/2020/20029.

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The End



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