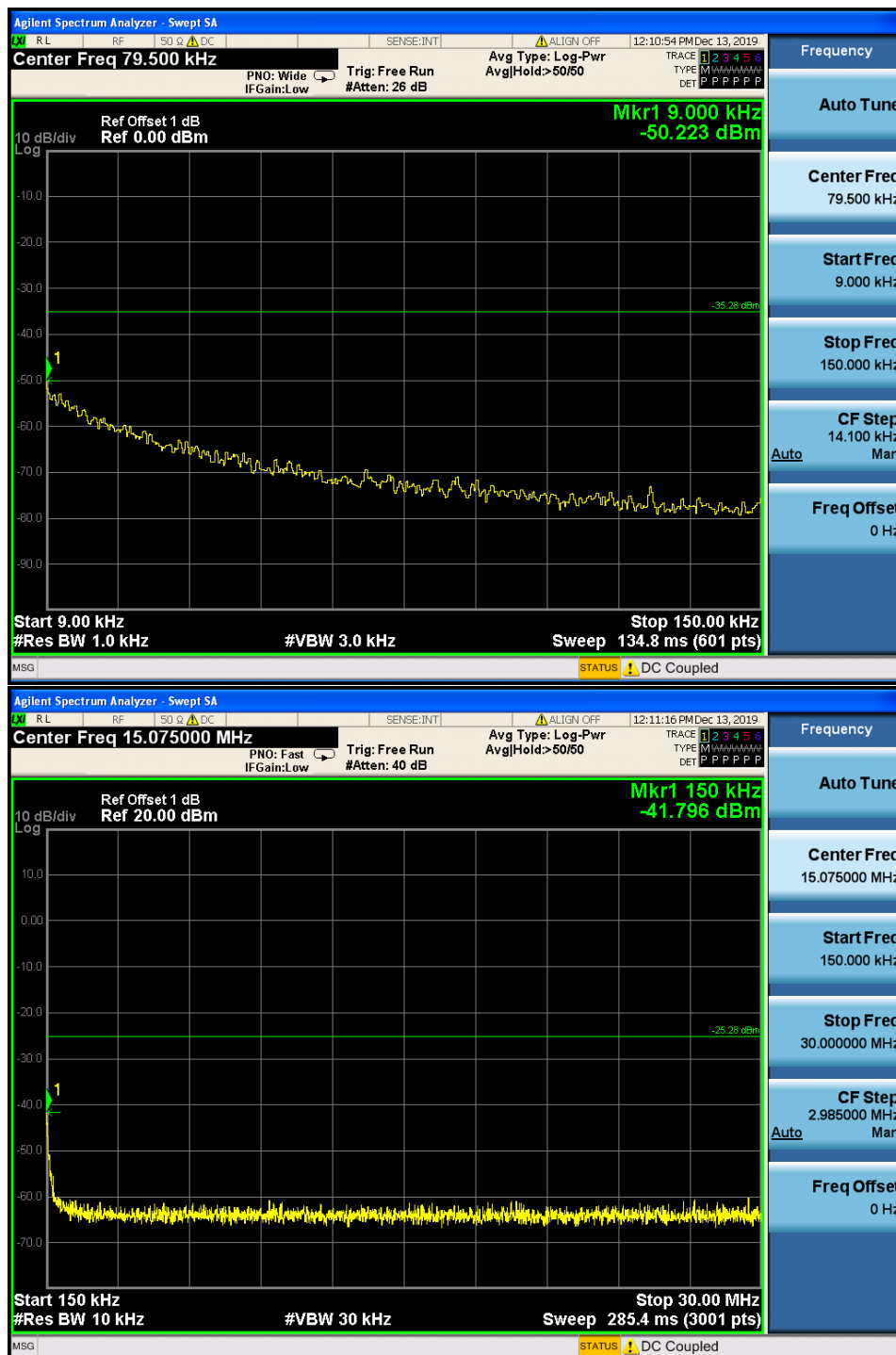
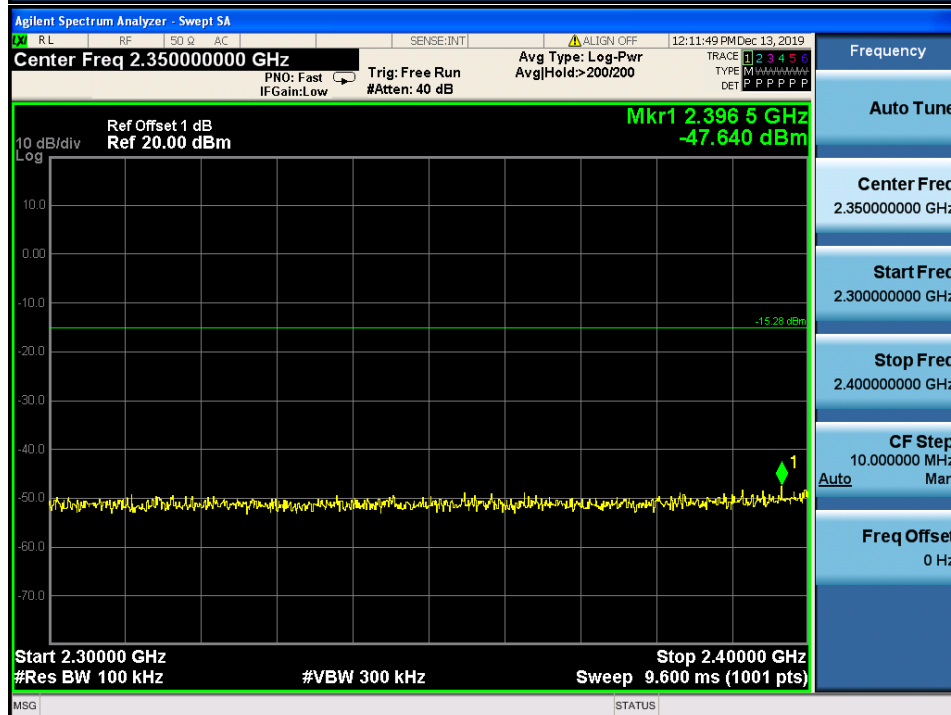
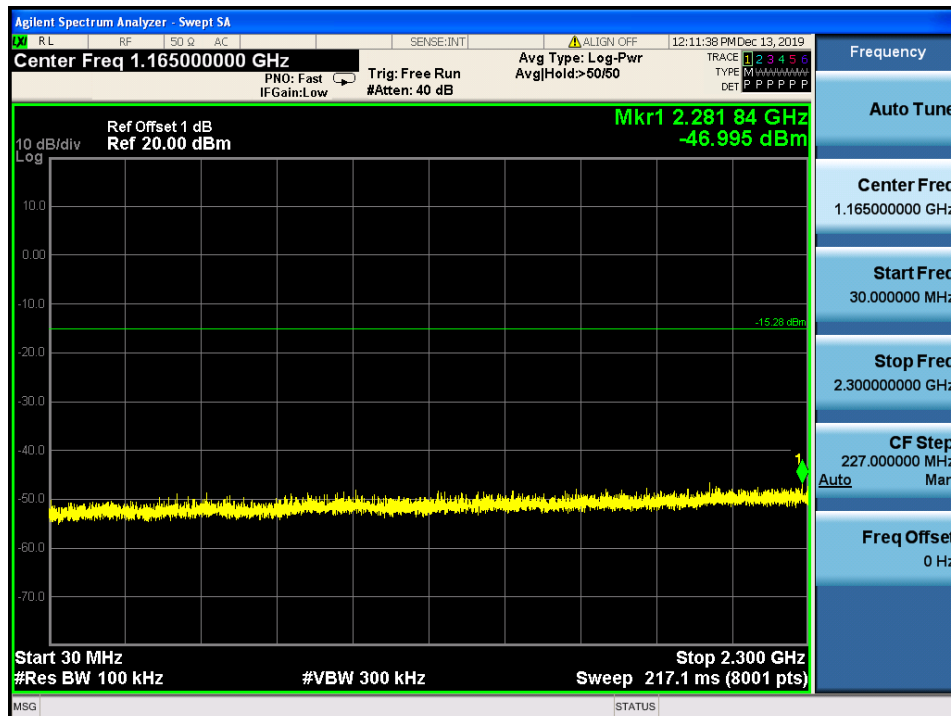


4.8.1.8

802.11 N20_Middle Channel







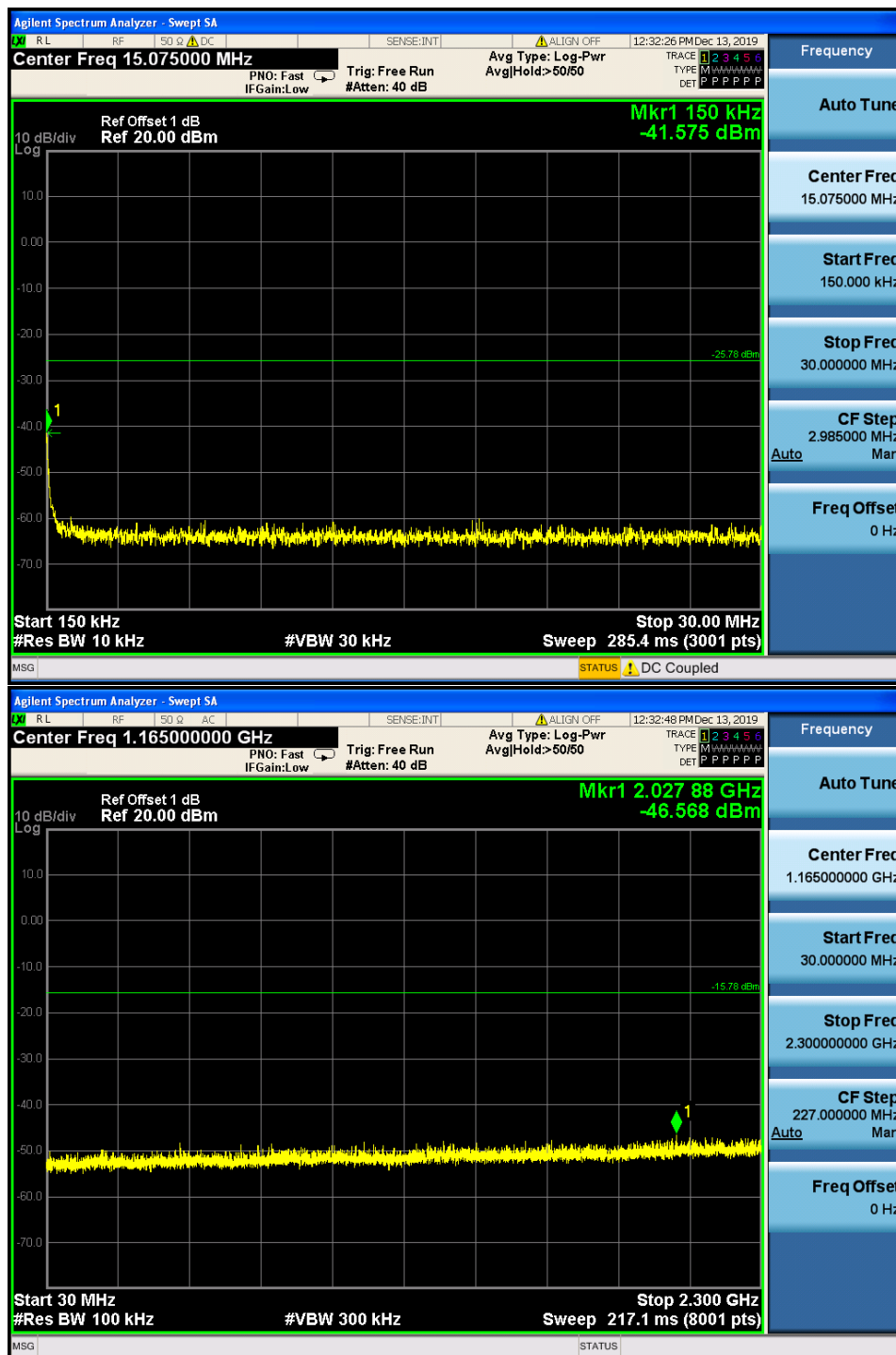
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4.8.1.9 802.11 N20_Highest Channel



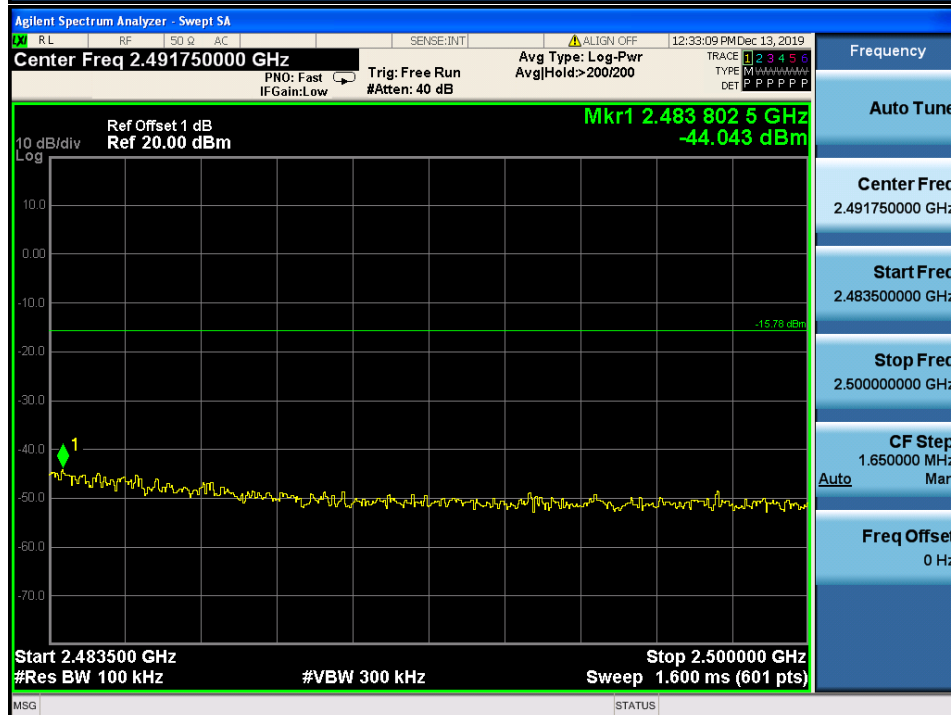
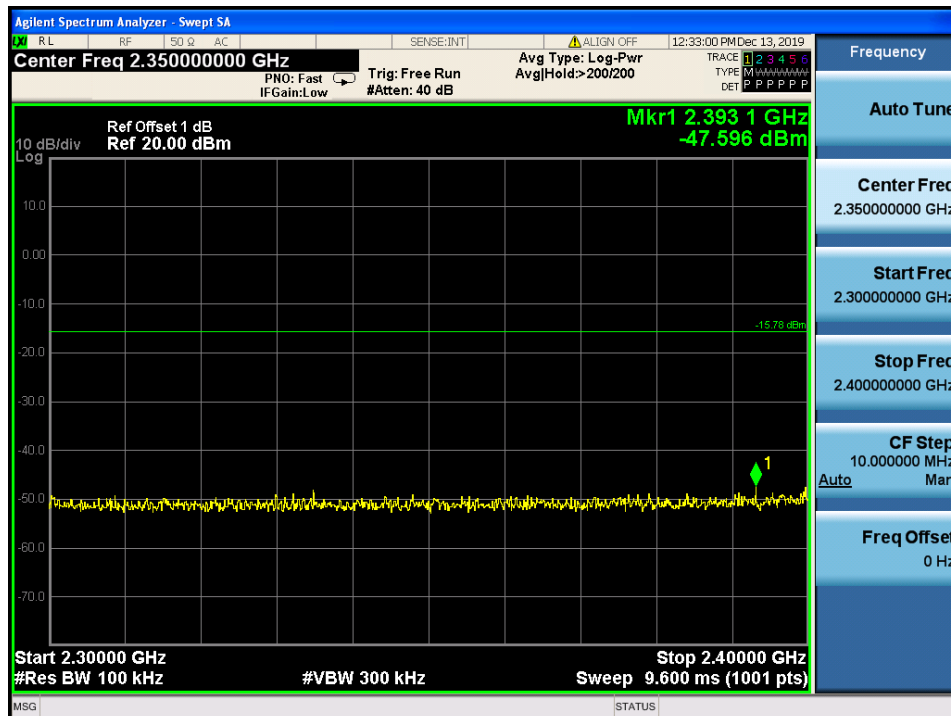


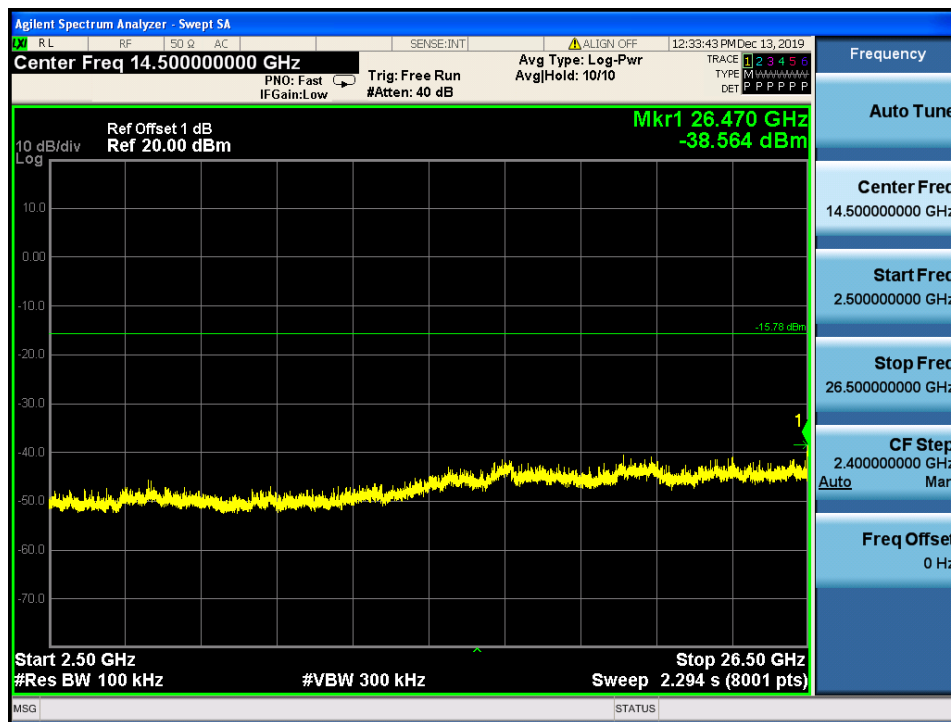
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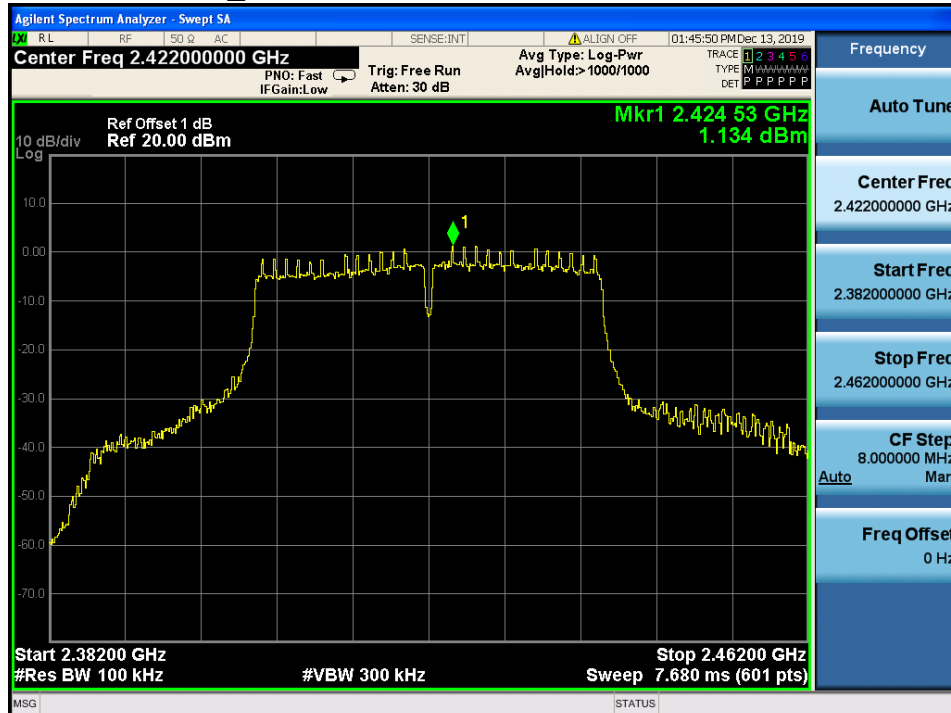
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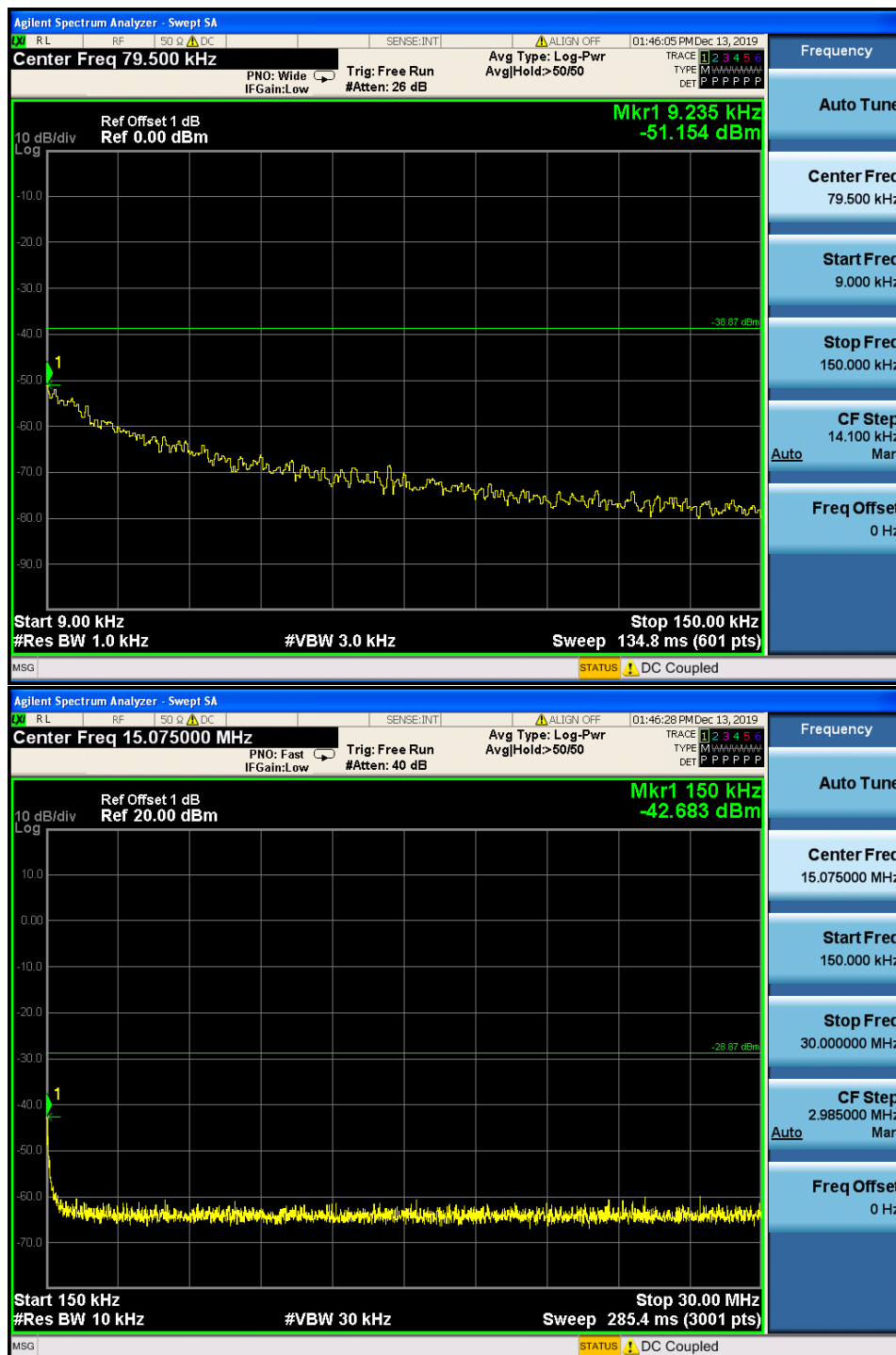


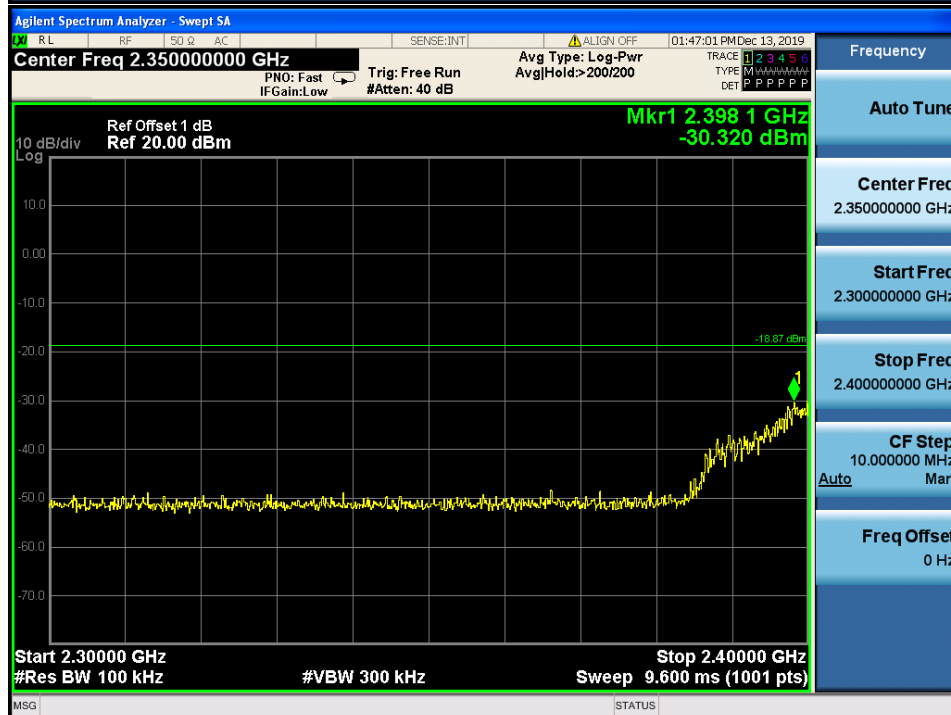
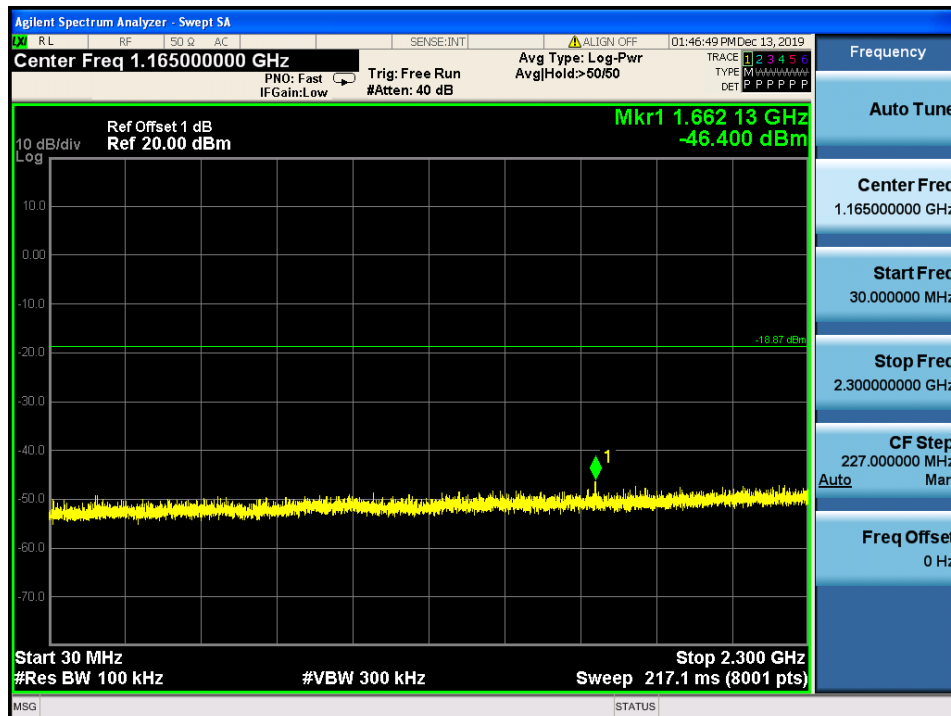


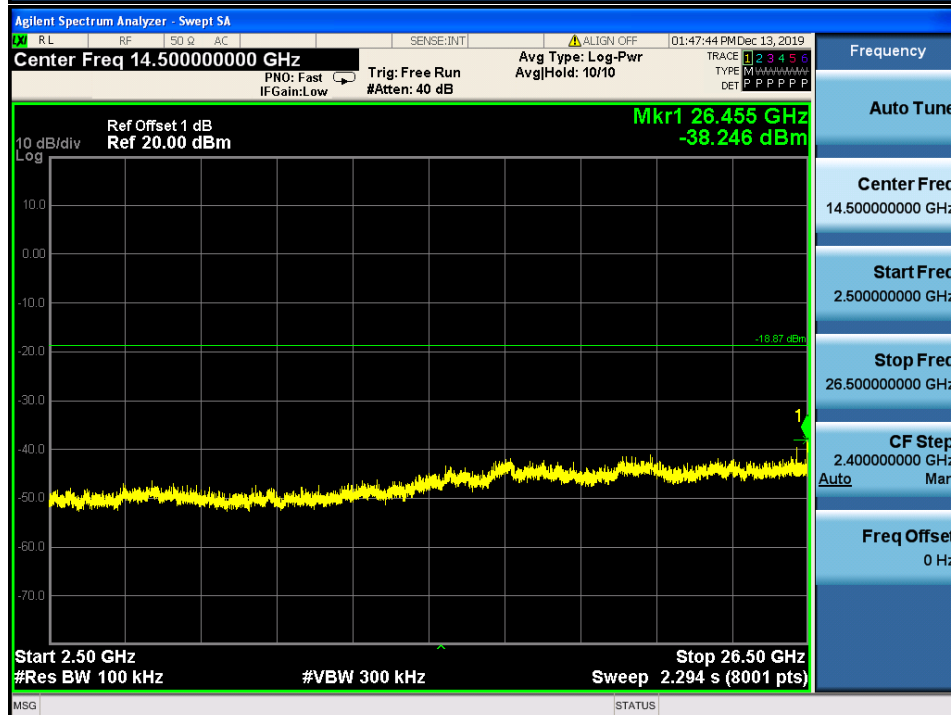
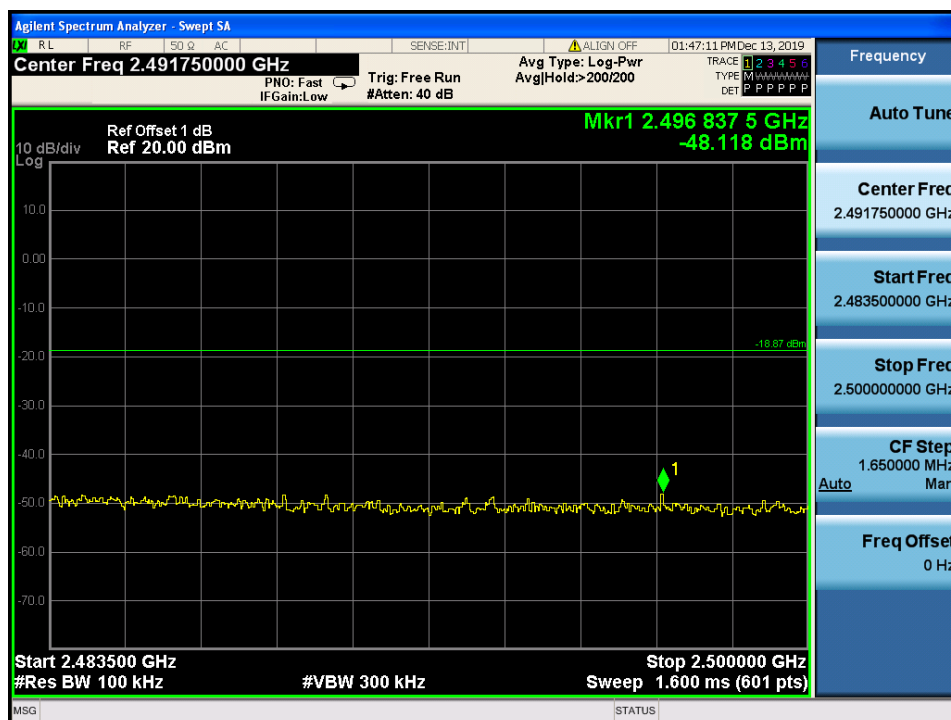
4.8.1.10

802.11N40 Lowest Channel









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4.8.1.11 802.11 N40_Middle Channel

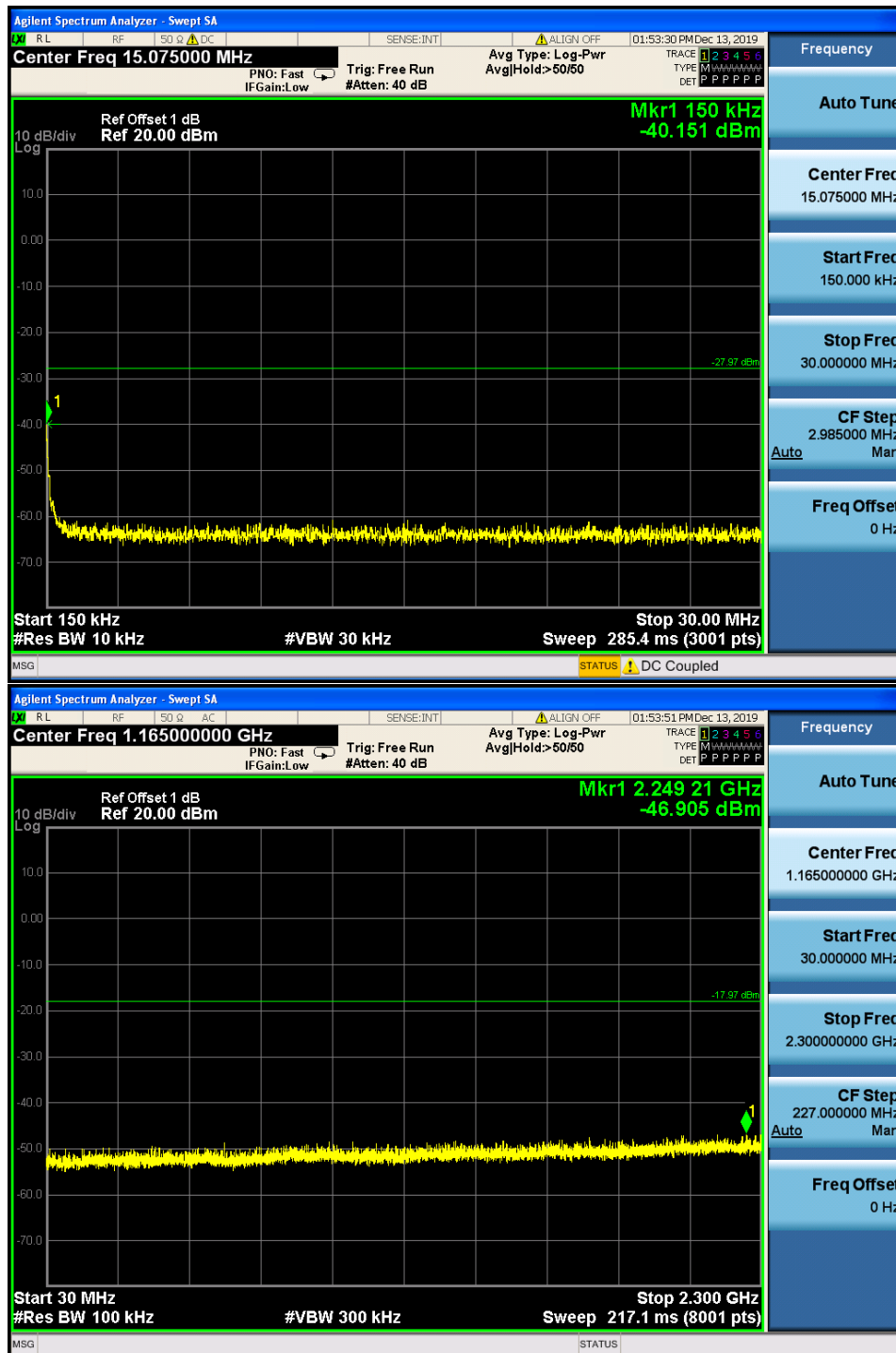


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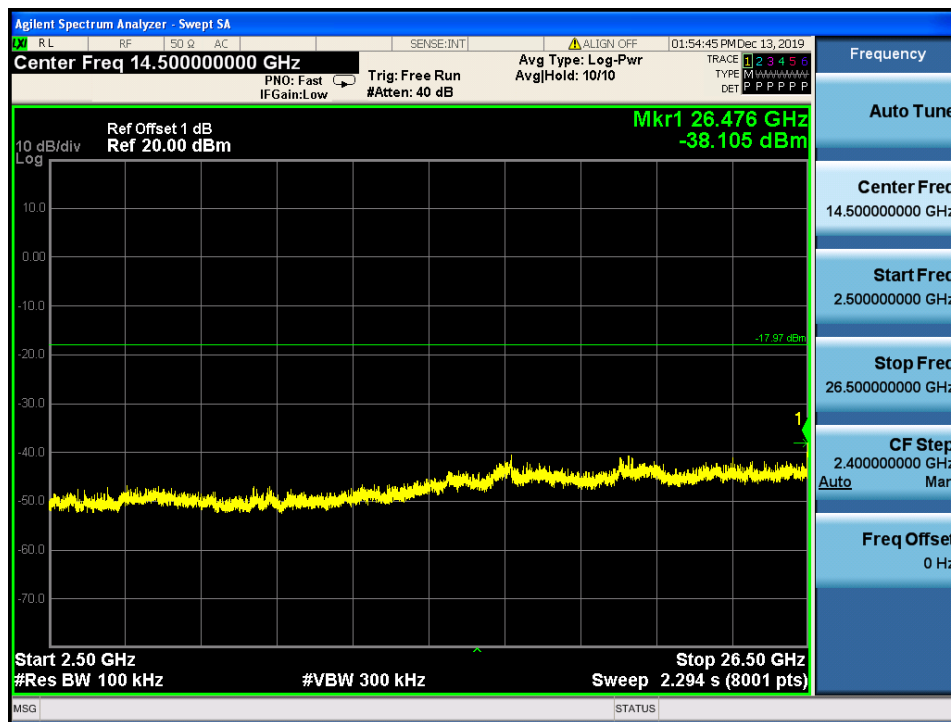
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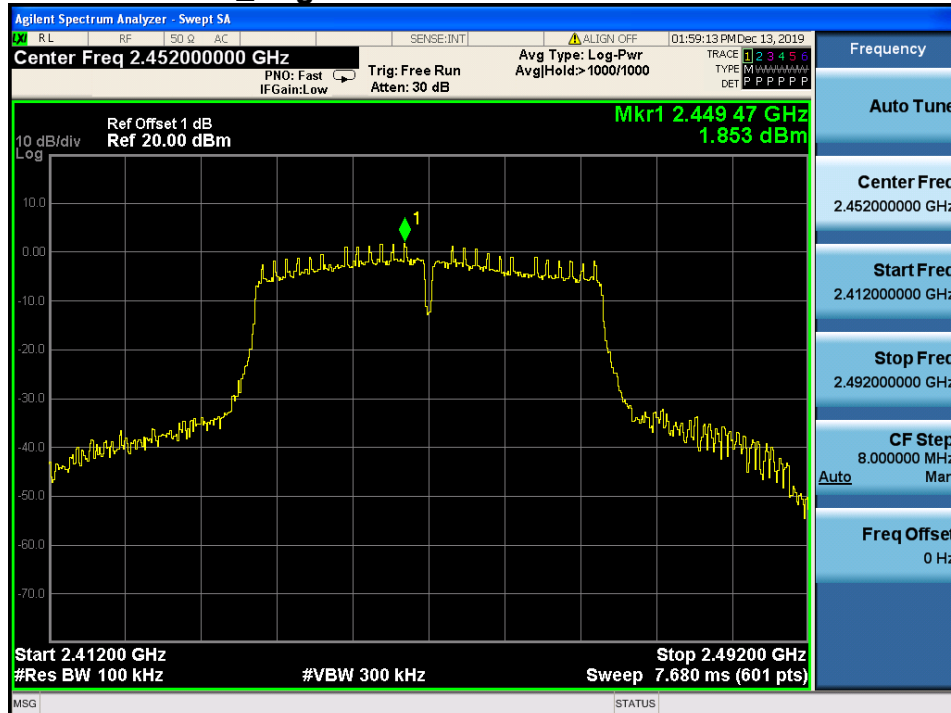
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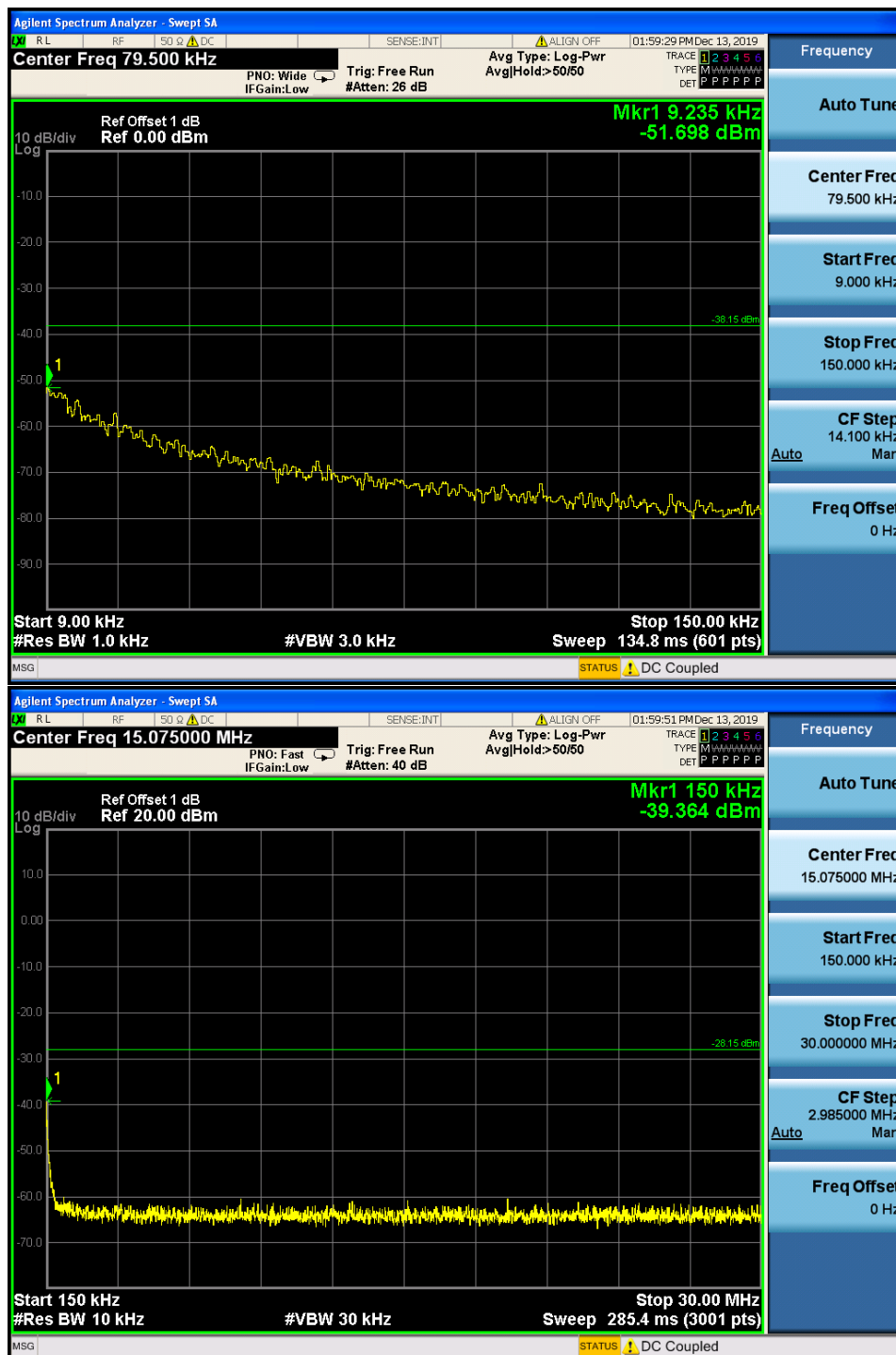




4.8.1.12

802.11 N40_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.



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4.9 Radiated Spurious Emissions

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



Test Setup:

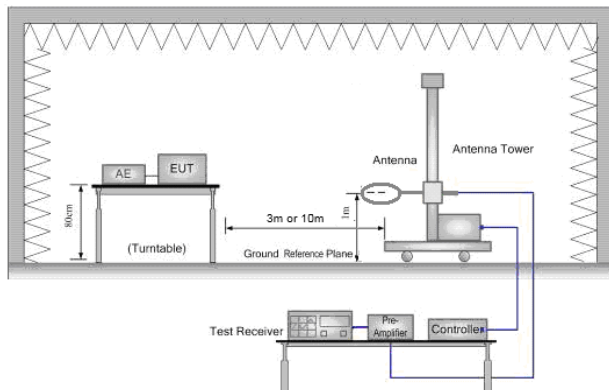


Figure 1. Below 30MHz

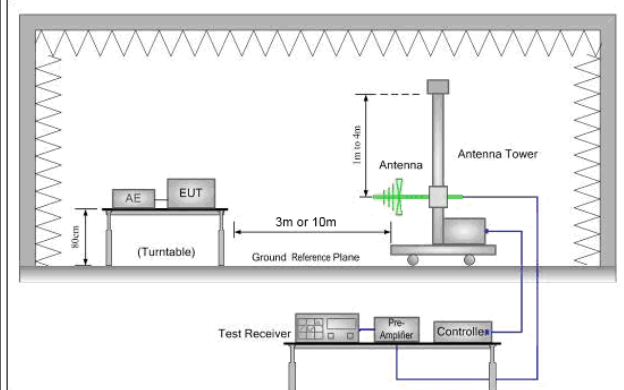


Figure 2. 30MHz to 1GHz

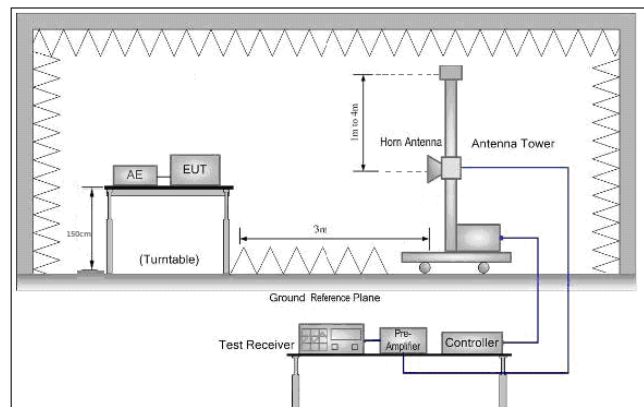


Figure 3. Above 1 GHz

Test Procedure:

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- Use the following spectrum analyzer settings:
 - Span shall wide enough to fully capture the emission being measured;
 - Set RBW=100 kHz for $f < 1 \text{ GHz}$; $\text{VBW} \geq \text{RBW}$; Sweep = auto; Detector function = peak;

Trace = max hold;



	<p>(3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.</p> <p>For average measurement:</p> <ul style="list-style-type: none"> • VBW = 10 Hz, when duty cycle is no less than 98 percent. • $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation. <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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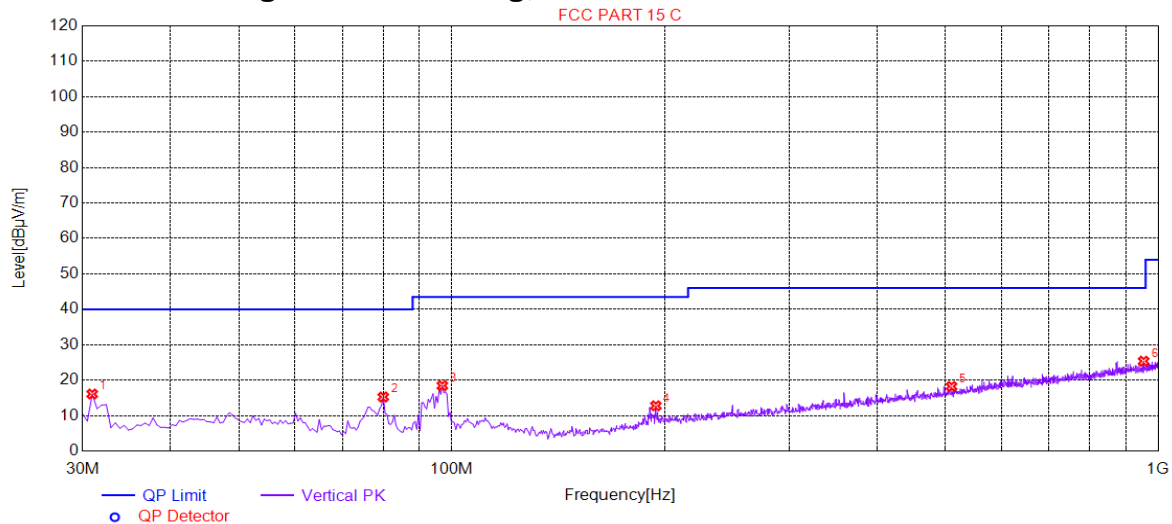
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4.9.1 Radiated emission below 1GHz

4.9.1.1 Charge + Transmitting, Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	30.9705	16.10	-32.82	40.00	23.90	100	356	PK	Vertical
2	79.9800	15.25	-35.88	40.00	24.75	200	291	PK	Vertical
3	96.9635	18.45	-32.21	43.50	25.05	100	44	PK	Vertical
4	194.4972	12.76	-31.40	43.50	30.74	100	222	PK	Vertical
5	509.9050	18.24	-22.43	46.00	27.76	100	90	PK	Vertical
6	953.9020	25.36	-14.42	46.00	20.64	100	163	PK	Vertical



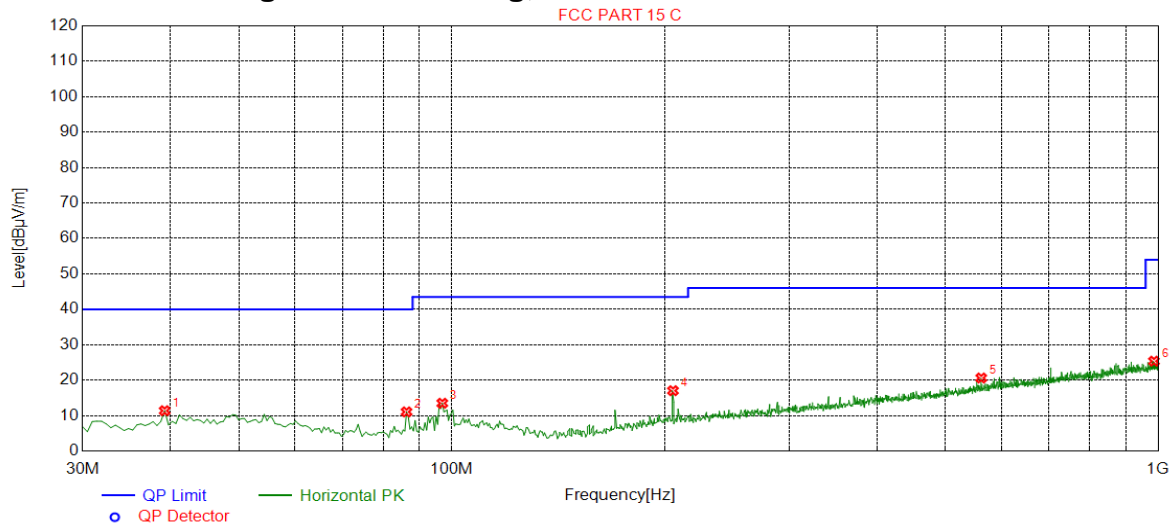
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4.9.1.2 Charge + Transmitting, Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	39.2196	11.37	-31.41	40.00	28.63	200	117	PK	Horizontal
2	86.2881	11.05	-34.32	40.00	28.95	200	104	PK	Horizontal
3	96.9635	13.49	-32.21	43.50	30.01	200	85	PK	Horizontal
4	205.6578	17.03	-30.70	43.50	26.47	200	111	PK	Horizontal
5	561.8259	20.61	-21.13	46.00	25.39	200	98	PK	Horizontal
6	986.4132	25.36	-14.03	54.00	28.64	100	273	PK	Horizontal



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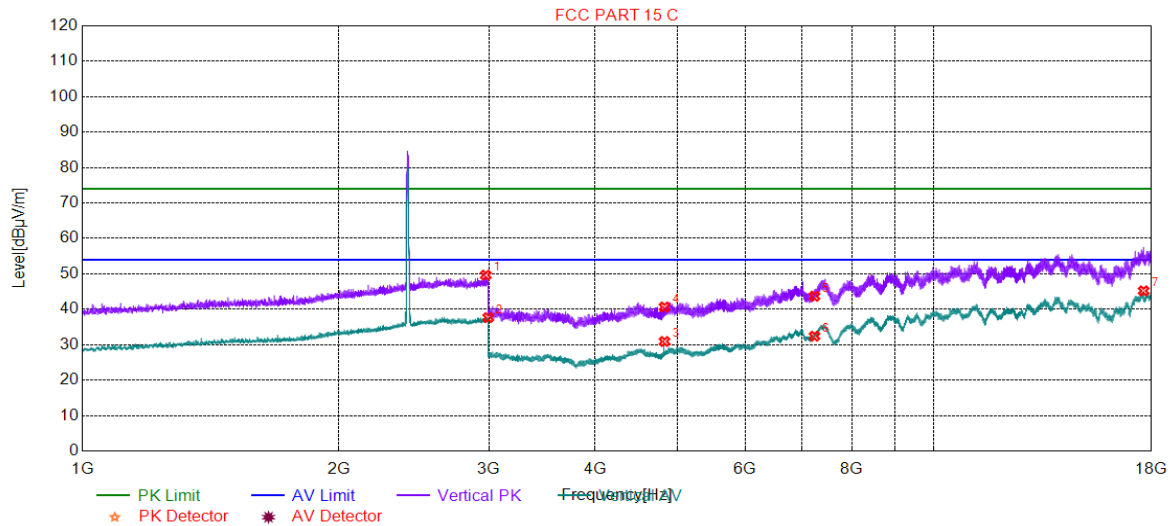
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4.9.2 Transmitter emission above 1GHz

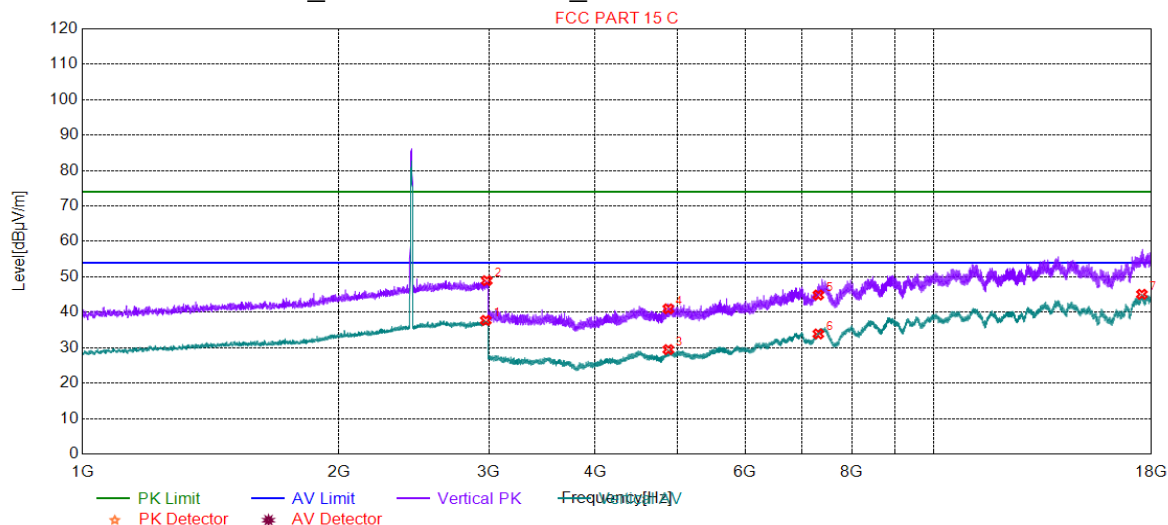
4.9.2.1 802.11B_Lowest Channel_ Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2975.4939	49.64	2.31	74.00	24.36	150	294	PK	Vertical
2	2994.9988	37.65	2.33	54.00	16.35	150	269	AV	Vertical
3	4824.0000	30.91	-20.09	54.00	23.09	150	260	AV	Vertical
4	4824.0000	40.65	-20.09	74.00	33.35	150	260	PK	Vertical
5	7236.0000	43.68	-12.40	74.00	30.32	150	122	PK	Vertical
6	7236.0000	32.42	-12.40	54.00	21.58	150	342	AV	Vertical
7	17616.9808	45.20	1.19	54.00	8.80	150	320	AV	Vertical



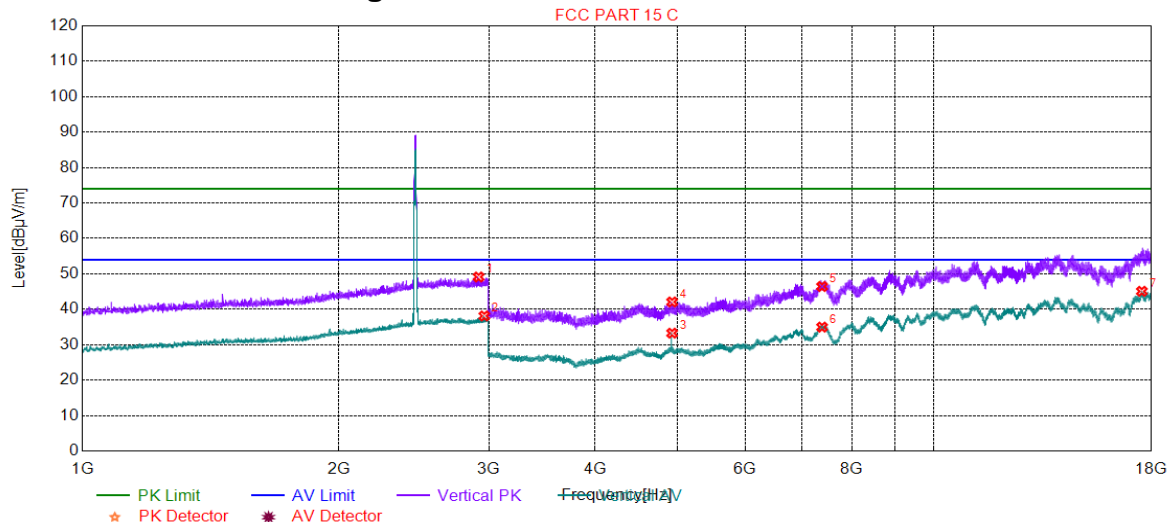
4.9.2.2 802.11B_ Middle Channel_ Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2975.4939	37.72	2.31	54.00	16.28	150	0	AV	Vertical
2	2983.4959	48.93	2.32	74.00	25.07	150	76	PK	Vertical
3	4874.0000	29.47	-19.37	54.00	24.53	150	233	AV	Vertical
4	4874.0000	40.98	-19.37	74.00	33.02	150	206	PK	Vertical
5	7311.0000	44.88	-11.50	74.00	29.12	150	180	PK	Vertical
6	7311.0000	33.90	-11.50	54.00	20.10	150	261	AV	Vertical
7	17533.9767	45.09	0.78	54.00	8.91	150	118	AV	Vertical



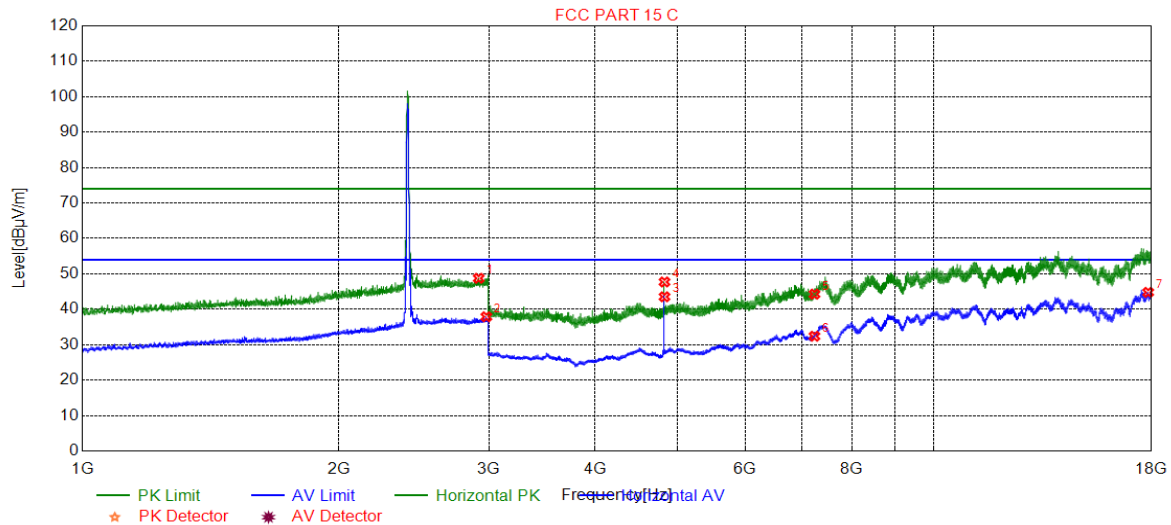
4.9.2.3 802.11B_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2918.4796	49.12	2.27	74.00	24.88	150	173	PK	Vertical
2	2963.4909	38.12	2.30	54.00	15.88	150	259	AV	Vertical
3	4924.0000	33.27	-18.87	54.00	20.73	150	288	AV	Vertical
4	4924.0000	42.07	-18.87	74.00	31.93	150	232	PK	Vertical
5	7386.0000	46.43	-10.72	74.00	27.57	150	288	PK	Vertical
6	7386.0000	34.97	-10.72	54.00	19.03	150	124	AV	Vertical
7	17533.4767	45.08	0.78	54.00	8.92	150	18	AV	Vertical



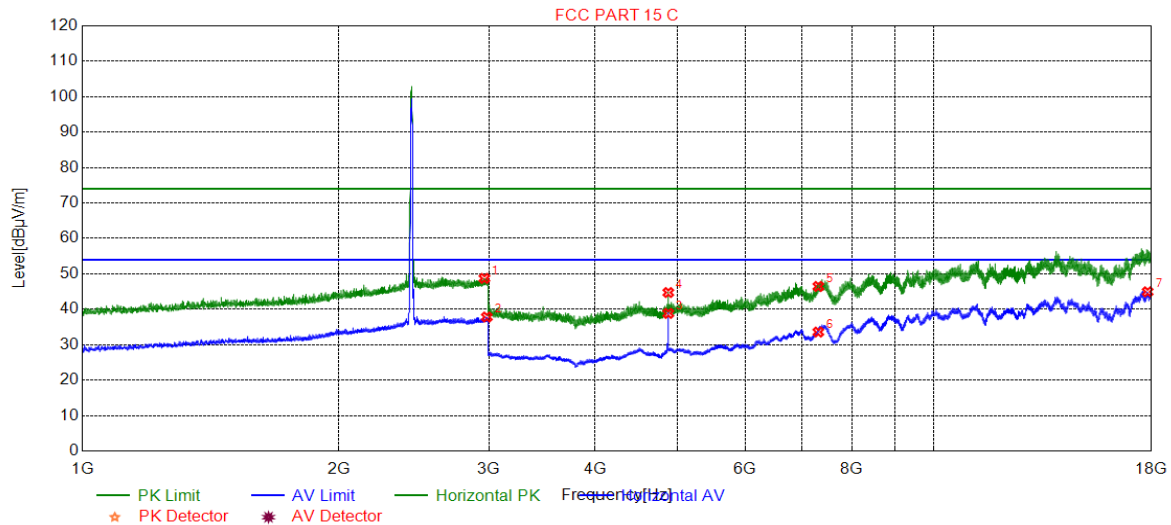
4.9.2.4 802.11B_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2918.9797	48.75	2.27	74.00	25.25	150	66	PK	Horizontal
2	2980.4951	37.89	2.32	54.00	16.11	150	344	AV	Horizontal
3	4824.0000	43.53	-20.09	54.00	10.47	150	315	AV	Horizontal
4	4824.0000	47.71	-20.09	74.00	26.29	150	315	PK	Horizontal
5	7236.0000	44.28	-12.40	74.00	29.72	150	260	PK	Horizontal
6	7236.0000	32.40	-12.40	54.00	21.60	150	69	AV	Horizontal
7	17836.9919	44.79	-0.90	54.00	9.21	150	220	AV	Horizontal



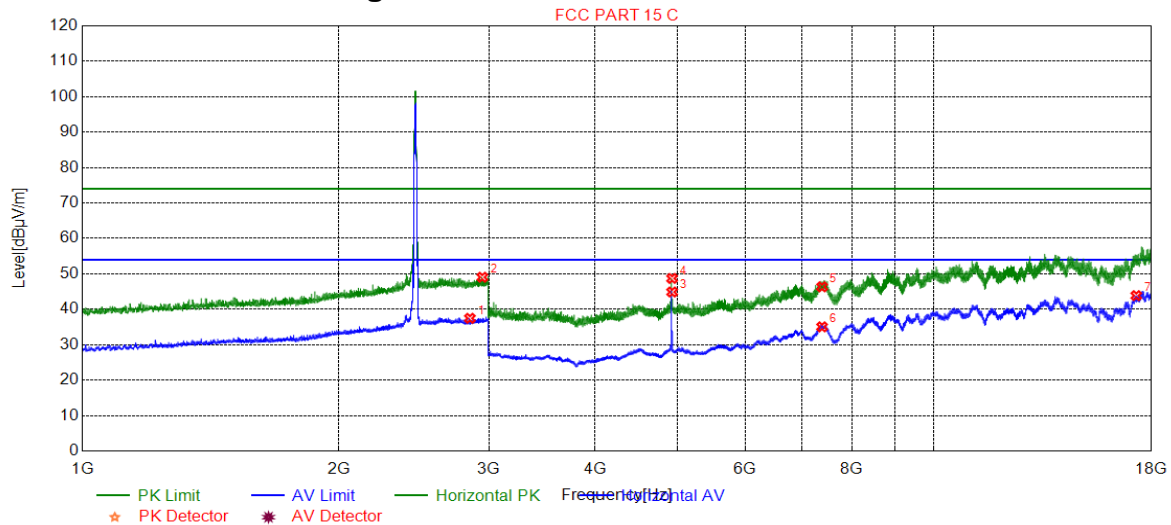
4.9.2.5 802.11B_ Middle Channel_ Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2964.4911	48.72	2.31	74.00	25.28	150	293	PK	Horizontal
2	2983.9960	37.81	2.32	54.00	16.19	150	150	AV	Horizontal
3	4874.0000	38.84	-19.37	54.00	15.16	150	315	AV	Horizontal
4	4874.0000	44.73	-19.37	74.00	29.27	150	260	PK	Horizontal
5	7311.0000	46.45	-11.50	74.00	27.55	150	288	PK	Horizontal
6	7311.0000	33.57	-11.50	54.00	20.43	150	15	AV	Horizontal
7	17808.9905	44.94	-0.80	54.00	9.06	150	219	AV	Horizontal



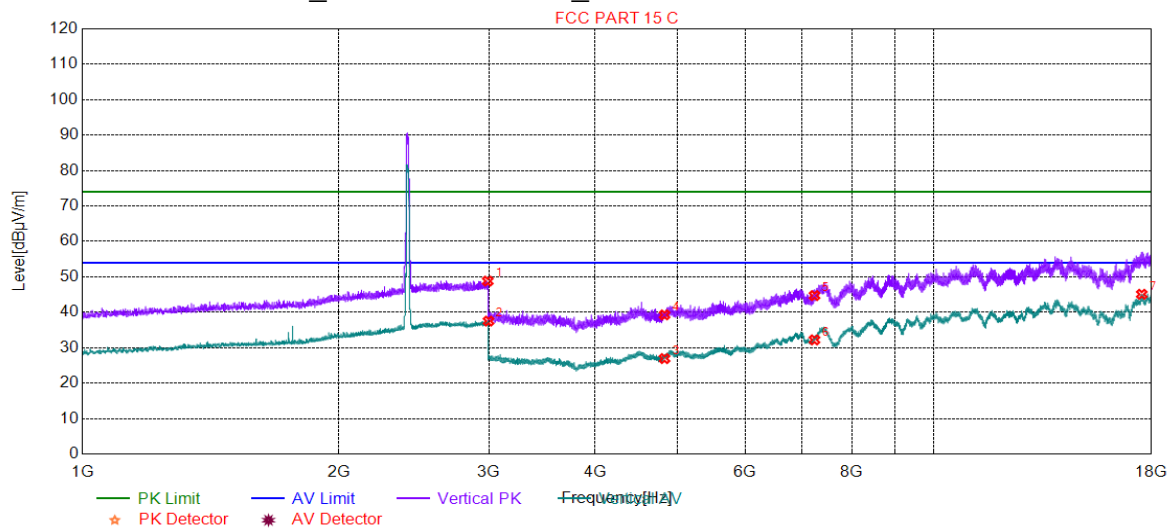
4.9.2.6 802.11B_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2850.4626	37.46	2.20	54.00	16.54	150	347	PK	Horizontal
2	2947.9870	49.05	2.29	74.00	24.95	150	174	AV	Horizontal
3	4924.0000	44.88	-18.87	54.00	9.12	150	315	AV	Horizontal
4	4924.0000	48.71	-18.87	74.00	25.29	150	315	PK	Horizontal
5	7386.0000	46.34	-10.72	74.00	27.66	150	342	PK	Horizontal
6	7386.0000	35.05	-10.72	54.00	18.95	150	232	AV	Horizontal
7	17270.9635	43.86	-1.31	54.00	10.14	150	360	AV	Horizontal



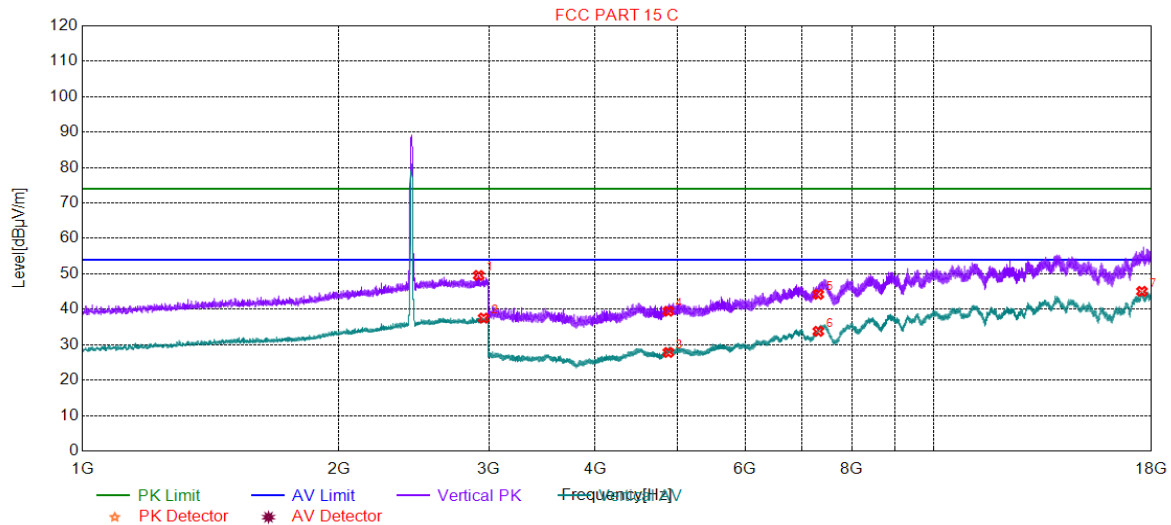
4.9.2.7 802.11G_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2991.4979	48.80	2.32	74.00	25.20	150	221	PK	Vertical
2	2997.4994	37.51	2.33	54.00	16.49	150	343	AV	Vertical
3	4824.0000	26.93	-20.09	54.00	27.07	150	68	AV	Vertical
4	4824.0000	39.27	-20.09	74.00	34.73	150	95	PK	Vertical
5	7236.0000	44.72	-12.40	74.00	29.28	150	177	PK	Vertical
6	7236.0000	32.22	-12.40	54.00	21.78	150	287	AV	Vertical
7	17529.9765	45.09	0.73	54.00	8.91	150	68	AV	Vertical



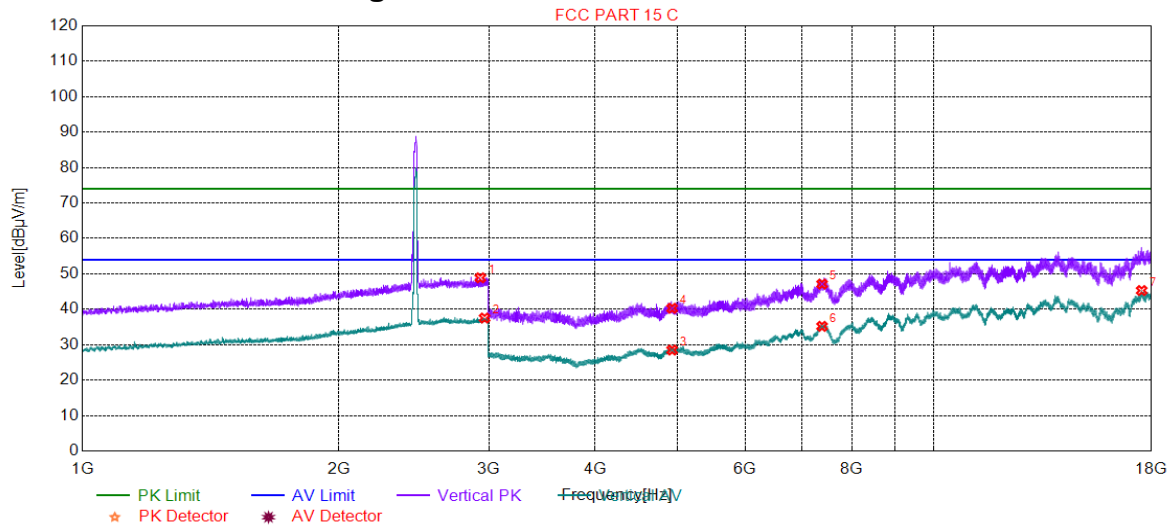
4.9.2.8 802.11G_Middle Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2918.9797	49.56	2.27	74.00	24.44	150	15	PK	Vertical
2	2957.9895	37.52	2.30	54.00	16.48	150	137	AV	Vertical
3	4874.0000	27.82	-19.37	54.00	26.18	150	287	AV	Vertical
4	4874.0000	39.45	-19.37	74.00	34.55	150	260	PK	Vertical
5	7311.0000	44.22	-11.50	74.00	29.78	150	342	PK	Vertical
6	7311.0000	33.78	-11.50	54.00	20.22	150	260	AV	Vertical
7	17536.9768	45.06	0.82	54.00	8.94	150	318	AV	Vertical



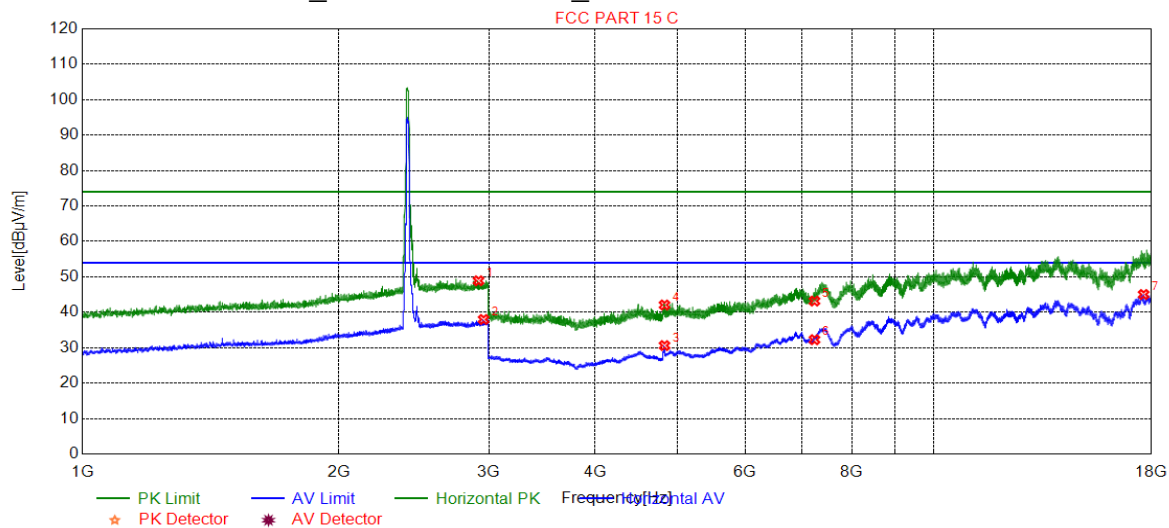
4.9.2.9 802.11G_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2932.4831	48.88	2.28	74.00	25.12	150	101	PK	Vertical
2	2965.9915	37.53	2.31	54.00	16.47	150	150	AV	Vertical
3	4924.0000	28.49	-18.87	54.00	25.51	150	222	AV	Vertical
4	4924.0000	40.28	-18.87	74.00	33.72	150	310	PK	Vertical
5	7386.0000	47.12	-10.72	74.00	26.88	150	108	PK	Vertical
6	7386.0000	35.19	-10.72	54.00	18.81	150	342	AV	Vertical
7	17524.9762	45.29	0.67	54.00	8.71	150	168	AV	Vertical



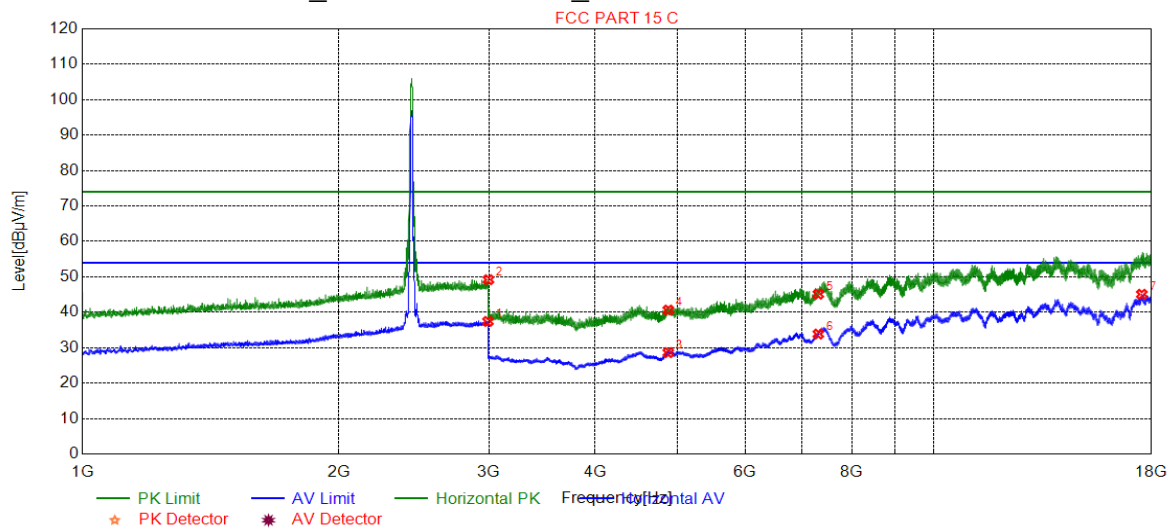
4.9.2.10 802.11G_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2917.4794	48.89	2.27	74.00	25.11	150	113	PK	Horizontal
2	2957.9895	37.97	2.30	54.00	16.03	150	355	AV	Horizontal
3	4824.0000	30.61	-20.09	54.00	23.39	150	315	AV	Horizontal
4	4824.0000	42.07	-20.09	74.00	31.93	150	315	PK	Horizontal
5	7236.0000	43.17	-12.40	74.00	30.83	150	42	PK	Horizontal
6	7236.0000	32.27	-12.40	54.00	21.73	150	14	AV	Horizontal
7	17618.4809	45.02	1.15	54.00	8.98	150	270	AV	Horizontal



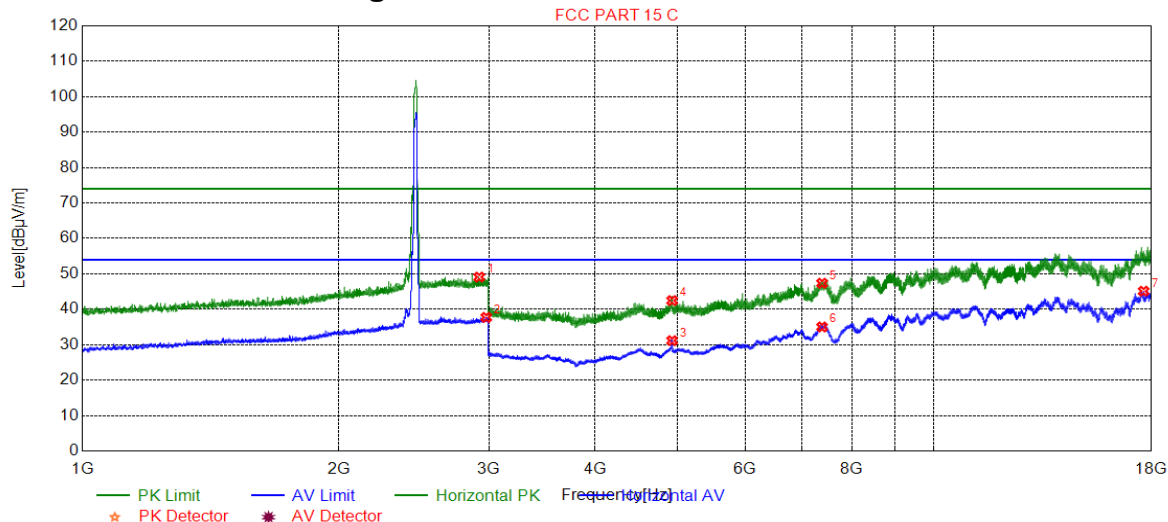
4.9.2.11 802.11G_ Middle Channel_ Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2992.9983	37.43	2.33	54.00	16.57	150	249	AV	Horizontal
2	2996.4991	49.20	2.33	74.00	24.80	150	52	PK	Horizontal
3	4874.0000	28.61	-19.37	54.00	25.39	150	227	AV	Horizontal
4	4874.0000	40.63	-19.37	74.00	33.37	150	227	PK	Horizontal
5	7311.0000	45.12	-11.50	74.00	28.88	150	342	PK	Horizontal
6	7311.0000	33.86	-11.50	54.00	20.14	150	62	AV	Horizontal
7	17532.4766	45.09	0.77	54.00	8.91	150	118	AV	Horizontal



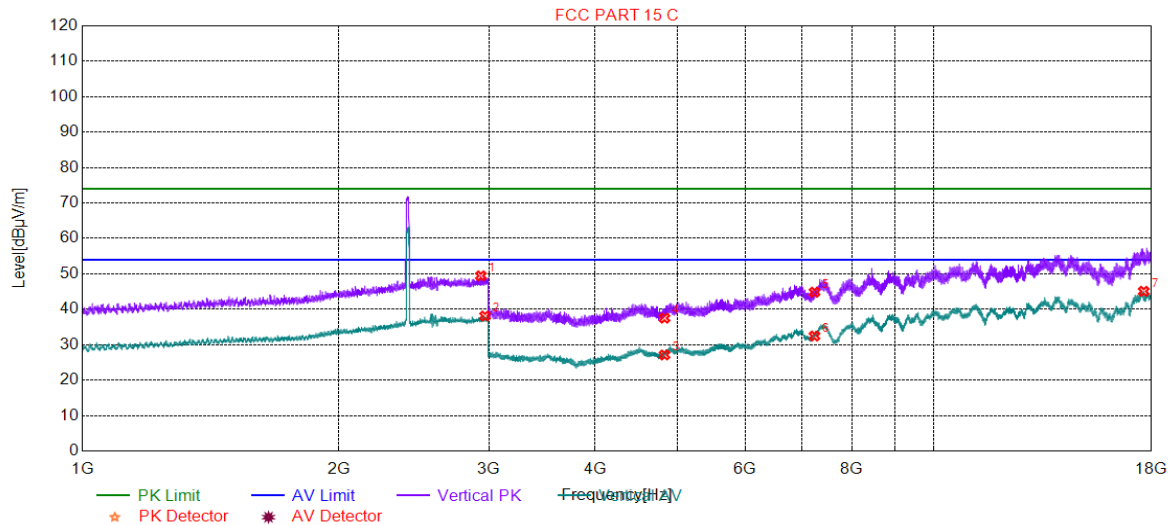
4.9.2.12 802.11G_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2923.4809	49.09	2.28	74.00	24.91	150	257	PK	Horizontal
2	2979.4949	37.71	2.32	54.00	16.29	150	29	AV	Horizontal
3	4924.0000	31.15	-18.87	54.00	22.85	150	315	AV	Horizontal
4	4924.0000	42.45	-18.87	74.00	31.55	150	315	PK	Horizontal
5	7386.0000	47.35	-10.72	74.00	26.65	150	27	PK	Horizontal
6	7386.0000	35.02	-10.72	54.00	18.98	150	205	AV	Horizontal
7	17617.9809	45.10	1.16	54.00	8.90	150	274	AV	Horizontal



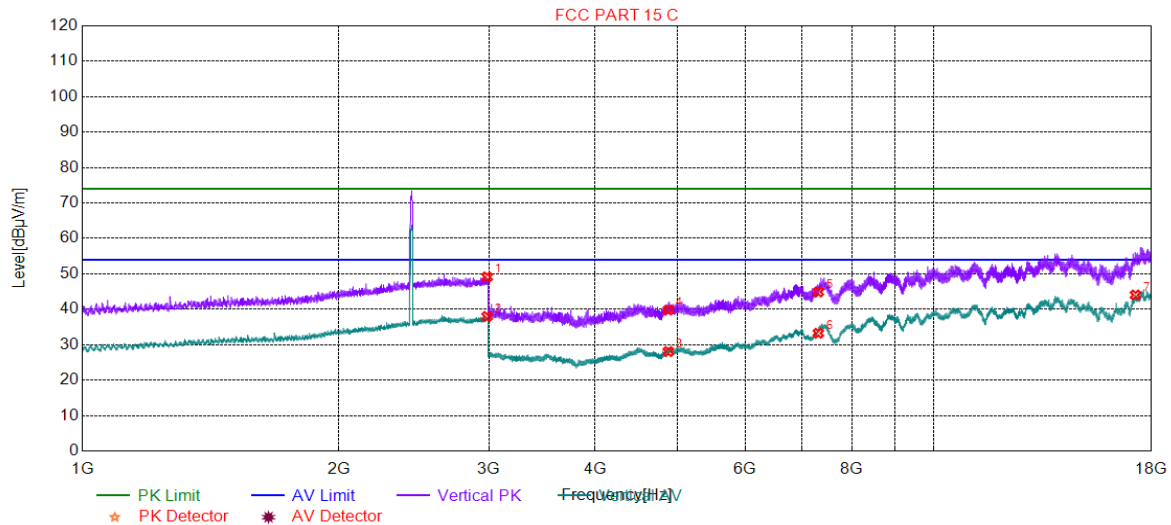
4.9.2.13 802.11N20_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2936.4841	49.44	2.29	74.00	24.56	150	117	PK	Vertical
2	2969.4924	38.10	2.31	54.00	15.90	150	278	AV	Vertical
3	4824.0000	27.12	-20.09	54.00	26.88	150	152	AV	Vertical
4	4824.0000	37.51	-20.09	74.00	36.49	150	260	PK	Vertical
5	7236.0000	44.83	-12.40	74.00	29.17	150	97	PK	Vertical
6	7236.0000	32.46	-12.40	54.00	21.54	150	179	AV	Vertical
7	17623.4812	45.07	1.02	54.00	8.93	150	169	AV	Vertical



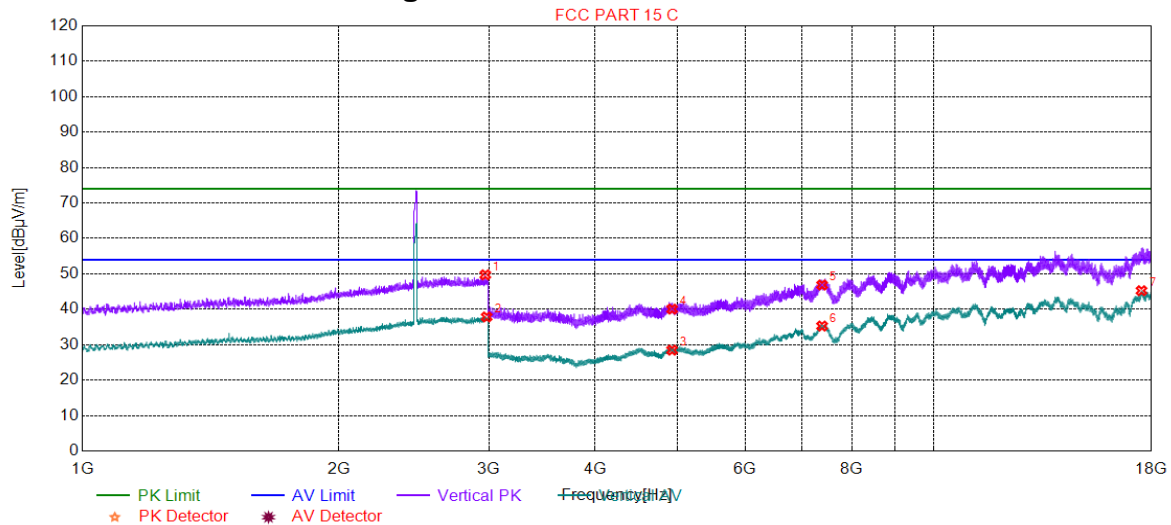
4.9.2.14 802.11N20_Middle Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2985.9965	49.14	2.32	74.00	24.86	150	103	PK	Vertical
2	2985.9965	37.98	2.32	54.00	16.02	150	263	AV	Vertical
3	4874.0000	28.07	-19.37	54.00	25.93	150	43	AV	Vertical
4	4874.0000	39.79	-19.37	74.00	34.21	150	0	PK	Vertical
5	7311.0000	44.88	-11.50	74.00	29.12	150	125	PK	Vertical
6	7311.0000	33.25	-11.50	54.00	20.75	150	179	AV	Vertical
7	17235.9618	44.05	-1.47	54.00	9.95	150	169	AV	Vertical



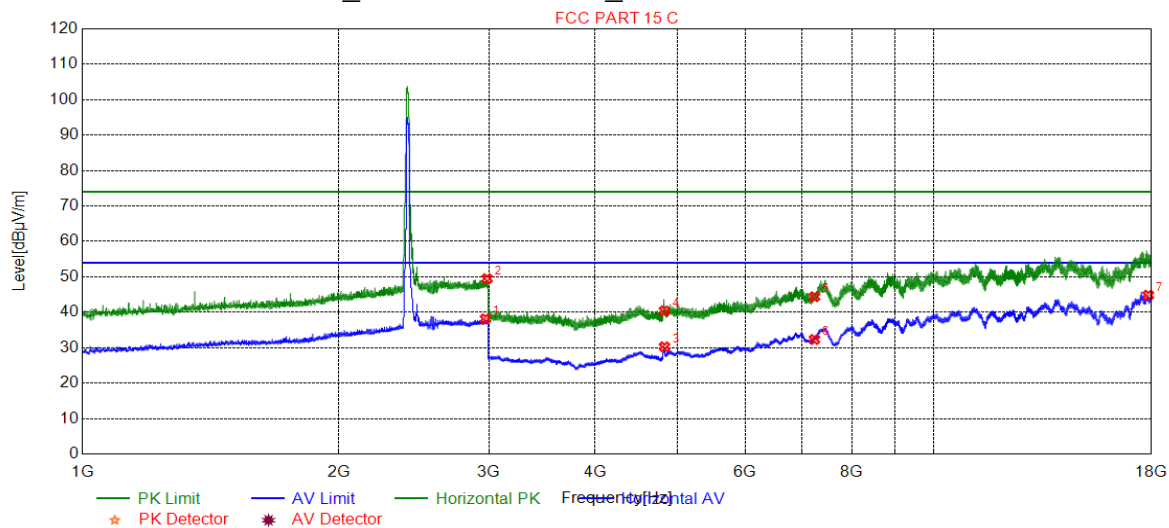
4.9.2.15 802.11N20_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2971.4929	49.73	2.31	74.00	24.27	150	328	PK	Vertical
2	2982.4956	37.84	2.32	54.00	16.16	150	17	AV	Vertical
3	4924.0000	28.47	-18.87	54.00	25.53	150	178	AV	Vertical
4	4924.0000	40.05	-18.87	74.00	33.95	150	70	PK	Vertical
5	7386.0000	46.86	-10.72	74.00	27.14	150	342	PK	Vertical
6	7386.0000	35.27	-10.72	54.00	18.73	150	206	AV	Vertical
7	17515.4758	45.25	0.55	54.00	8.75	150	218	AV	Vertical



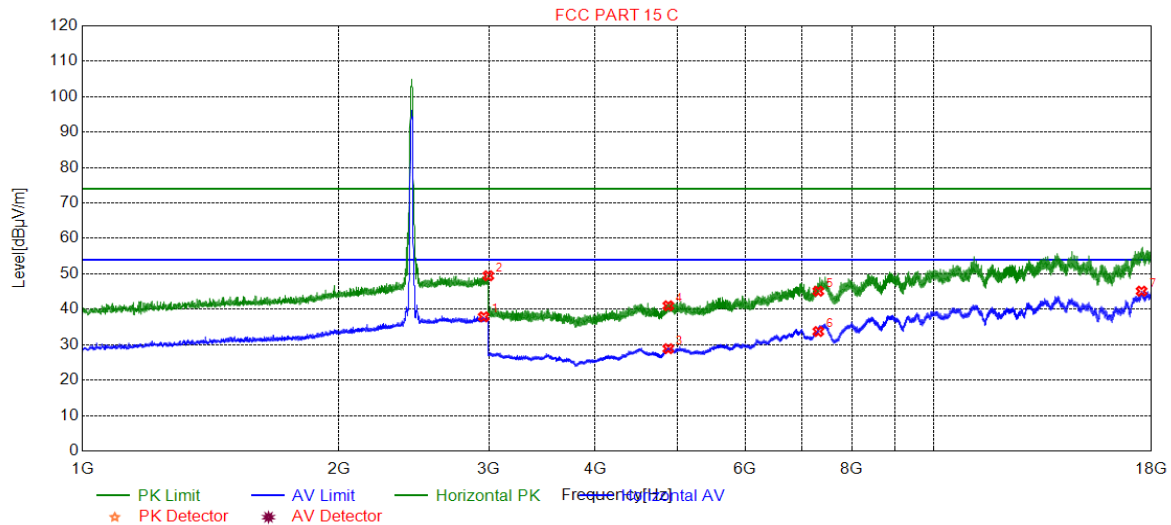
4.9.2.16 802.11N20_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2972.9932	38.16	2.31	54.00	15.84	150	134	AV	Horizontal
2	2985.4964	49.49	2.32	74.00	24.51	150	109	PK	Horizontal
3	4824.0000	30.26	-20.09	54.00	23.74	150	315	AV	Horizontal
4	4824.0000	40.39	-20.09	74.00	33.61	150	342	PK	Horizontal
5	7236.0000	44.40	-12.40	74.00	29.60	150	42	PK	Horizontal
6	7236.0000	32.32	-12.40	54.00	21.68	150	342	AV	Horizontal
7	17841.4921	44.83	-0.91	54.00	9.17	150	269	AV	Horizontal



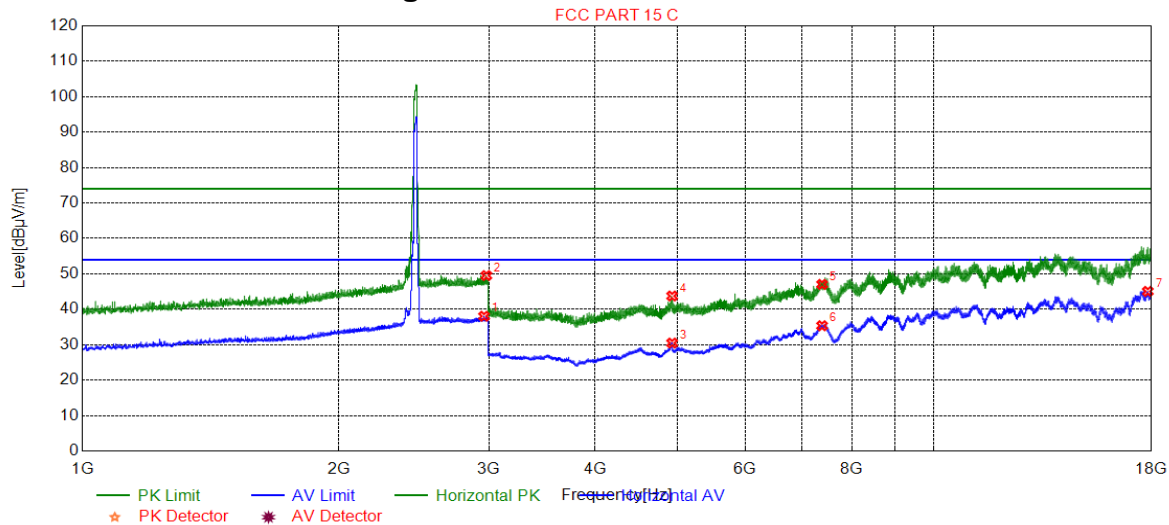
4.9.2.17 802.11N20_ Middle Channel_ Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2958.9897	37.88	2.30	54.00	16.12	150	111	AV	Horizontal
2	2995.9990	49.46	2.33	74.00	24.54	150	307	PK	Horizontal
3	4874.0000	28.88	-19.37	54.00	25.12	150	342	AV	Horizontal
4	4874.0000	41.00	-19.37	74.00	33.00	150	169	PK	Horizontal
5	7311.0000	45.11	-11.50	74.00	28.89	150	86	PK	Horizontal
6	7311.0000	33.73	-11.50	54.00	20.27	150	169	AV	Horizontal
7	17520.4760	45.12	0.61	54.00	8.88	150	269	AV	Horizontal



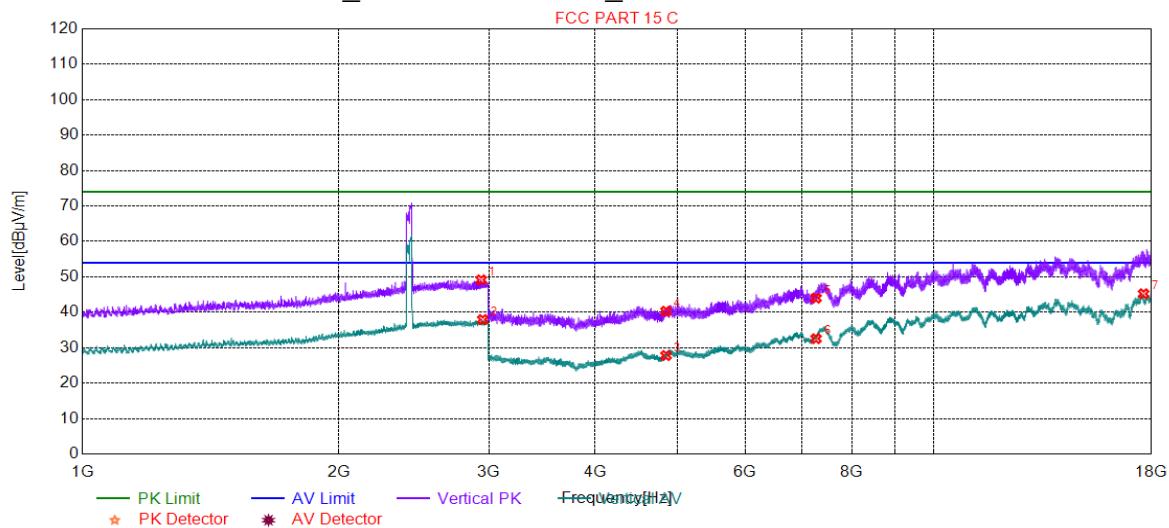
4.9.2.18 802.11N20_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2961.4904	38.04	2.30	54.00	15.96	150	234	AV	Horizontal
2	2980.4951	49.52	2.32	74.00	24.48	150	36	PK	Horizontal
3	4924.0000	30.47	-18.87	54.00	23.53	150	205	AV	Horizontal
4	4924.0000	43.76	-18.87	74.00	30.24	150	315	PK	Horizontal
5	7386.0000	47.03	-10.72	74.00	26.97	150	124	PK	Horizontal
6	7386.0000	35.36	-10.72	54.00	18.64	150	124	AV	Horizontal
7	17819.4910	45.05	-0.84	54.00	8.95	150	220	AV	Horizontal



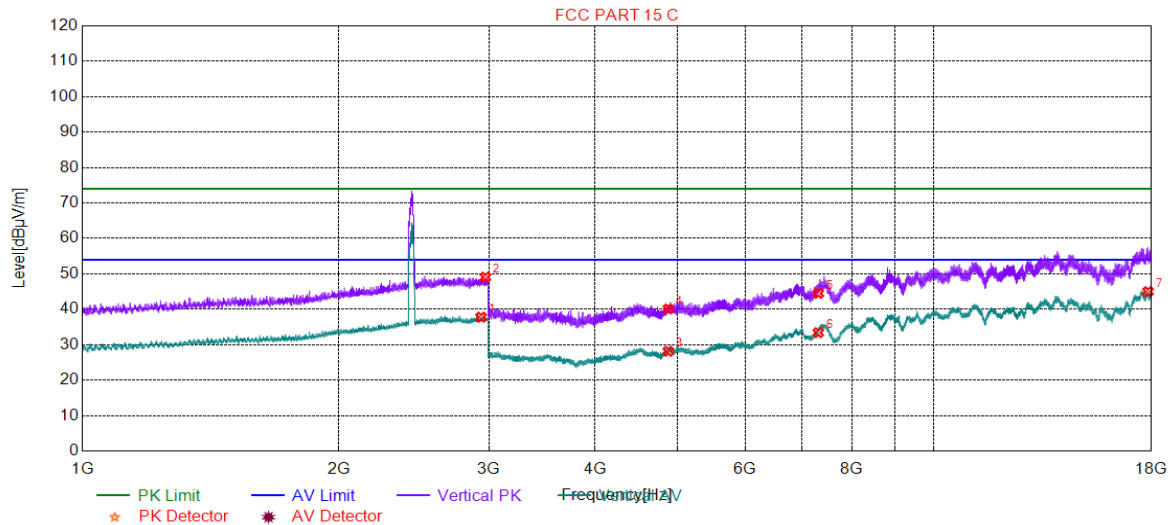
4.9.2.19 802.11N40_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2938.9847	49.16	2.29	74.00	24.84	150	17	PK	Vertical
2	2950.9877	37.94	2.30	54.00	16.06	150	311	AV	Vertical
3	4844.0000	27.80	-19.80	54.00	26.20	150	15	AV	Vertical
4	4844.0000	40.31	-19.80	74.00	33.69	150	151	PK	Vertical
5	7266.0000	44.00	-12.03	74.00	30.00	150	15	PK	Vertical
6	7266.0000	32.55	-12.03	54.00	21.45	150	260	AV	Vertical
7	17617.4809	45.23	1.18	54.00	8.77	150	18	AV	Vertical



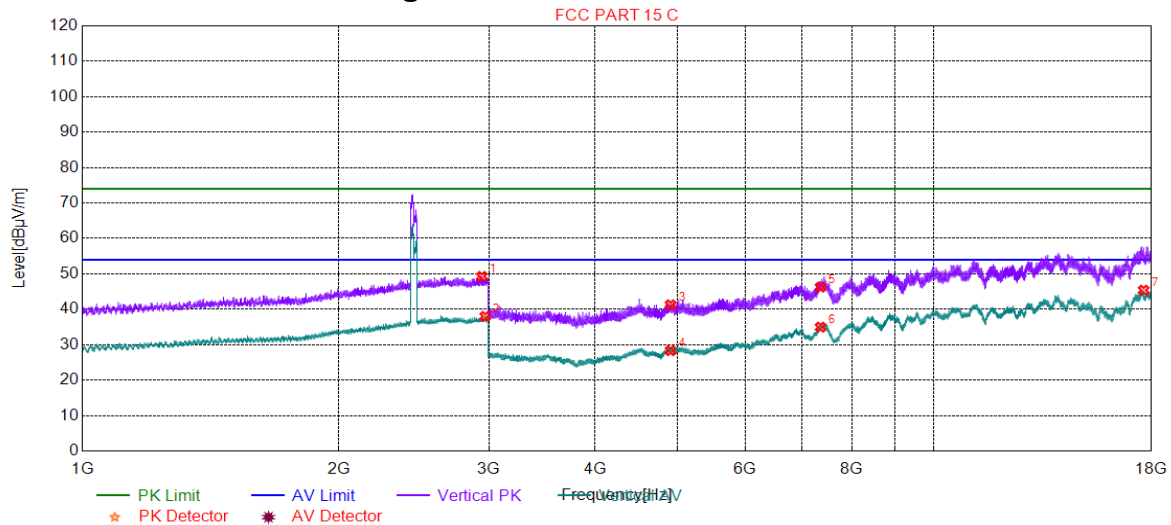
4.9.2.20 802.11N40_Middle Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2938.4846	37.79	2.29	54.00	16.21	150	66	AV	Vertical
2	2972.4931	49.09	2.31	74.00	24.91	150	17	PK	Vertical
3	4874.0000	28.15	-19.37	54.00	25.85	150	205	AV	Vertical
4	4874.0000	40.10	-19.37	74.00	33.90	150	233	PK	Vertical
5	7311.0000	44.48	-11.50	74.00	29.52	150	69	PK	Vertical
6	7311.0000	33.42	-11.50	54.00	20.58	150	260	AV	Vertical
7	17827.9914	45.00	-0.87	54.00	9.00	150	118	AV	Vertical



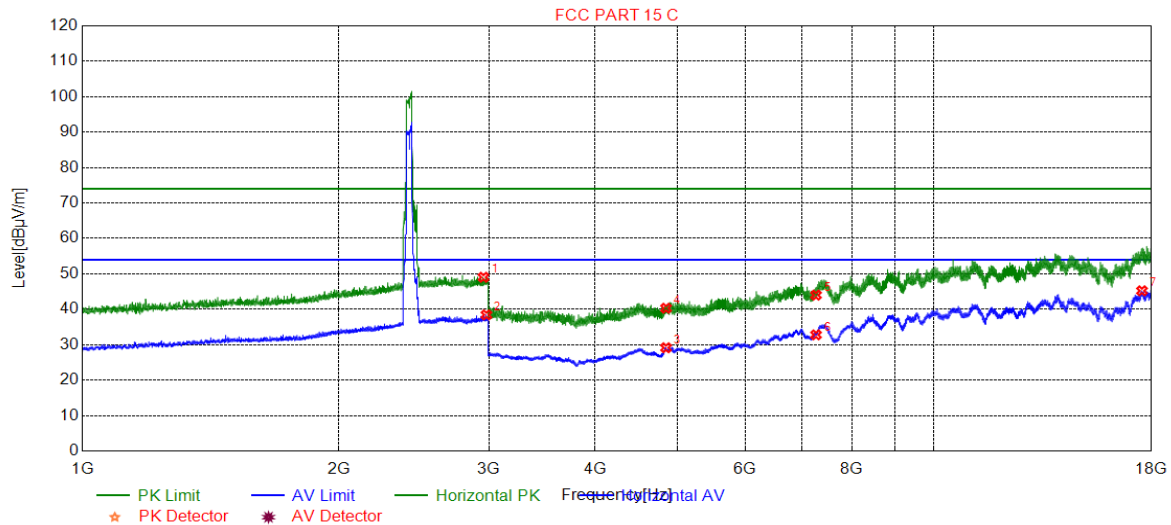
4.9.2.21 802.11N40_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2943.9860	49.28	2.29	74.00	24.72	150	241	PK	Vertical
2	2971.4929	37.99	2.31	54.00	16.01	150	179	AV	Vertical
3	4904.0000	41.26	-18.98	74.00	32.74	150	259	PK	Vertical
4	4904.0000	28.32	-18.98	54.00	25.68	150	68	AV	Vertical
5	7356.0000	46.24	-11.03	74.00	27.76	150	287	PK	Vertical
6	7356.0000	34.97	-11.03	54.00	19.03	150	287	AV	Vertical
7	17619.9810	45.38	1.11	54.00	8.62	150	268	AV	Vertical



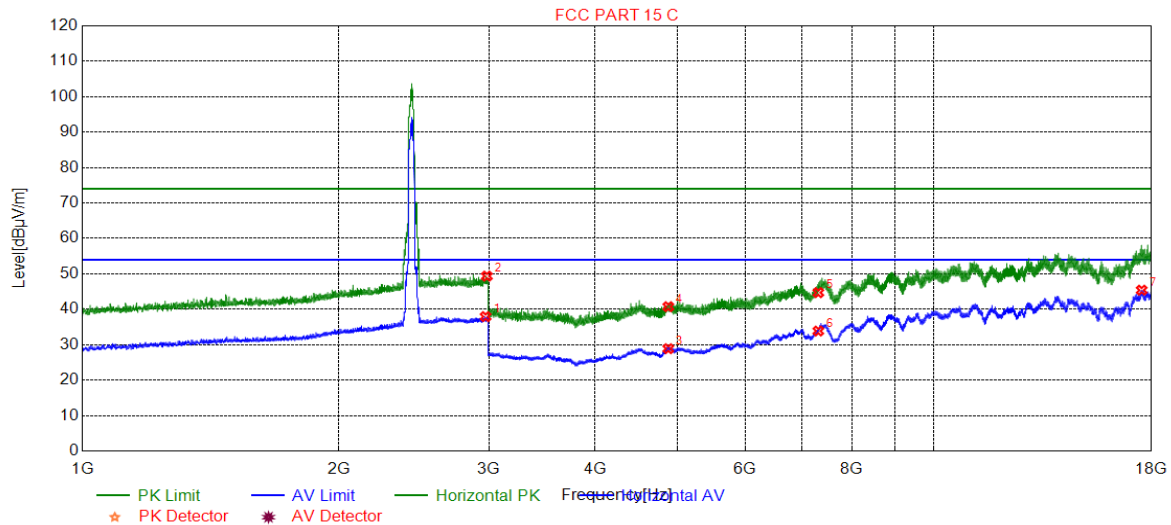
4.9.2.22 802.11N40_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2956.9892	49.04	2.30	74.00	24.96	150	343	PK	Horizontal
2	2980.4951	38.43	2.32	54.00	15.57	150	1	AV	Horizontal
3	4844.0000	29.15	-19.80	54.00	24.85	150	342	AV	Horizontal
4	4844.0000	40.31	-19.80	74.00	33.69	150	151	PK	Horizontal
5	7266.0000	44.00	-12.03	74.00	30.00	150	15	PK	Horizontal
6	7266.0000	32.79	-12.03	54.00	21.21	150	147	AV	Horizontal
7	17538.9769	45.22	0.85	54.00	8.78	150	270	AV	Horizontal



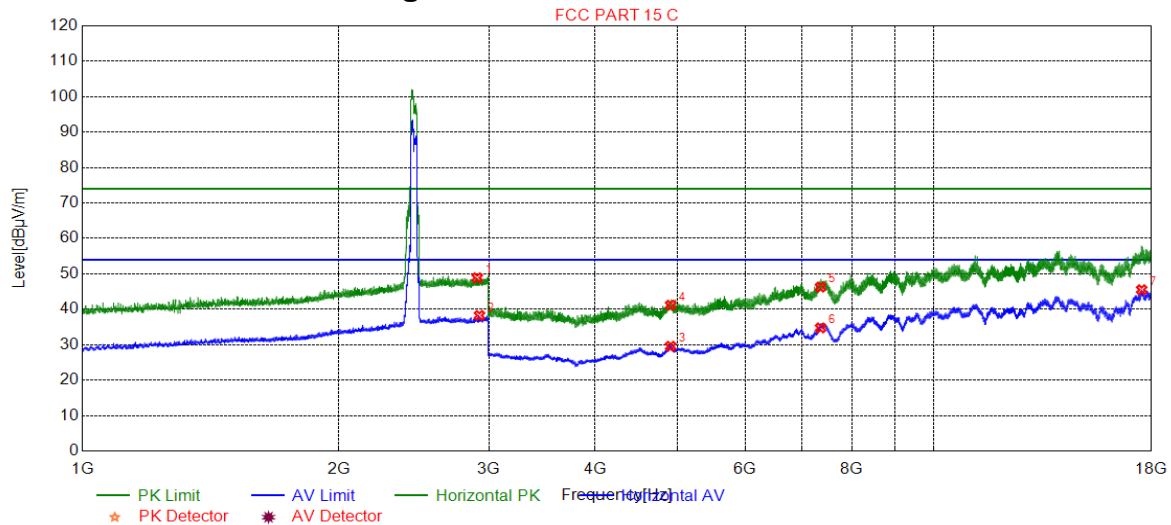
4.9.2.23 802.11N40_ Middle Channel_ Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2973.9935	37.93	2.31	54.00	16.07	150	282	AV	Horizontal
2	2984.4961	49.36	2.32	74.00	24.64	150	171	PK	Horizontal
3	4874.0000	28.88	-19.37	54.00	25.12	150	179	AV	Horizontal
4	4874.0000	40.74	-19.37	74.00	33.26	150	151	PK	Horizontal
5	7311.0000	44.70	-11.50	74.00	29.30	150	69	PK	Horizontal
6	7311.0000	33.87	-11.50	54.00	20.13	150	179	AV	Horizontal
7	17525.4763	45.40	0.68	54.00	8.60	150	270	AV	Horizontal



4.9.2.24 802.11N40_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2907.4769	48.89	2.27	74.00	25.11	150	34	PK	Horizontal
2	2924.9812	38.25	2.28	54.00	15.75	150	46	AV	Horizontal
3	4904.0000	29.56	-18.98	54.00	24.44	150	0	AV	Horizontal
4	4904.0000	41.18	-18.98	74.00	32.82	150	288	PK	Horizontal
5	7356.0000	46.27	-11.03	74.00	27.73	150	43	PK	Horizontal
6	7356.0000	34.75	-11.03	54.00	19.25	150	342	AV	Horizontal
7	17525.9763	45.53	0.68	54.00	8.47	150	169	AV	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:

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

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.



4.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205		
Test Method:	ANSI C63.10: 2013 Section 11.12		
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m @3m)	Remark
	30MHz-88MHz	40.0	Quasi-peak Value
	88MHz-216MHz	43.5	Quasi-peak Value
	216MHz-960MHz	46.0	Quasi-peak Value
	960MHz-1GHz	54.0	Quasi-peak Value
	Above 1GHz	54.0	Average Value
		74.0	Peak Value
Test Setup:			

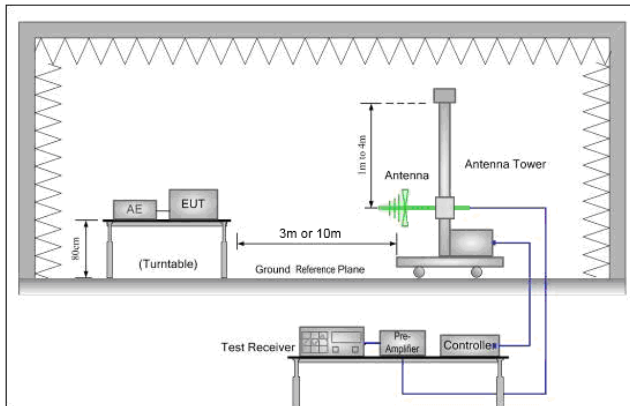


Figure 1. 30MHz to 1GHz

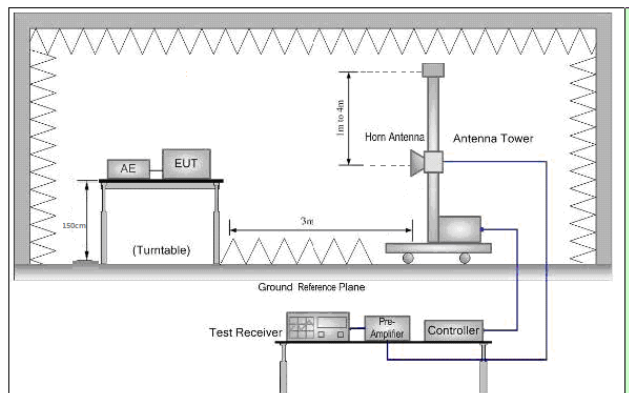


Figure 2. Above 1 GHz

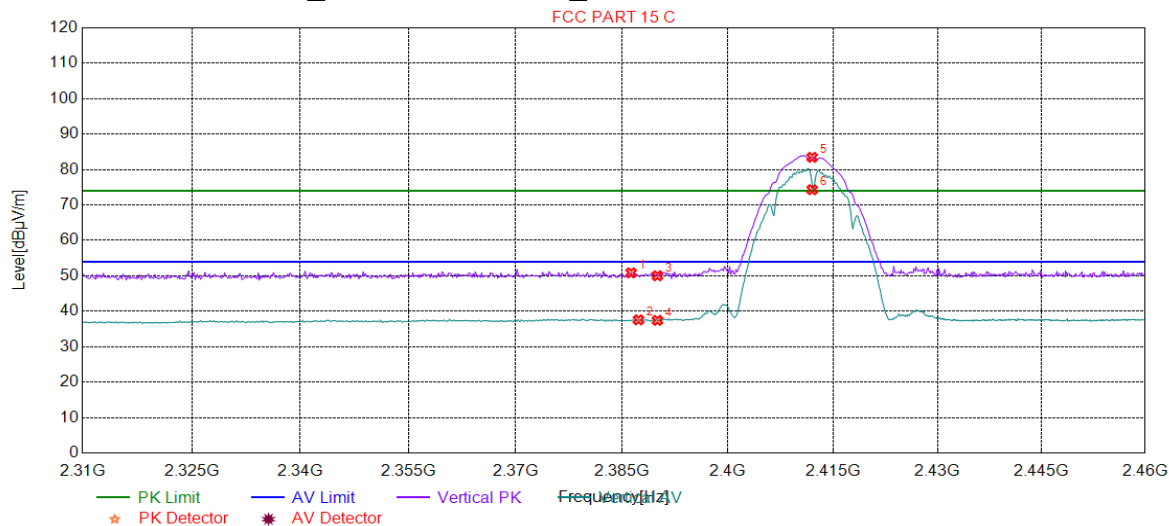


Test Procedure:	<p>a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>b. For above 1GHz, the EUT was placed on the top of 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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>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</p> <p>h. Test the EUT in the lowest channel , the Highest channel</p> <p>i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.</p> <p>j. Repeat above procedures until all frequencies measured was complete.</p>
Exploratory Test Mode:	<p>Transmitting with all kind of modulations, data rates.</p> <p>Charge + Transmitting mode.</p>
Final Test Mode:	<p>Pretest the EUT at Charge +Transmitting mode.</p> <p>Through Pre-scan, find the</p> <p>1Mbps of rate is the worst case of 802.11B;</p> <p>6Mbps of rate is the worst case of 802.11G ;</p> <p>6.5Mbps of rate is the worst case of 802.11N(HT20);</p> <p>13.5Mbps of rate is the worst case of 802.11N(HT40).</p> <p>Only the worst case is recorded in the report.</p>
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



Test plot as follows:

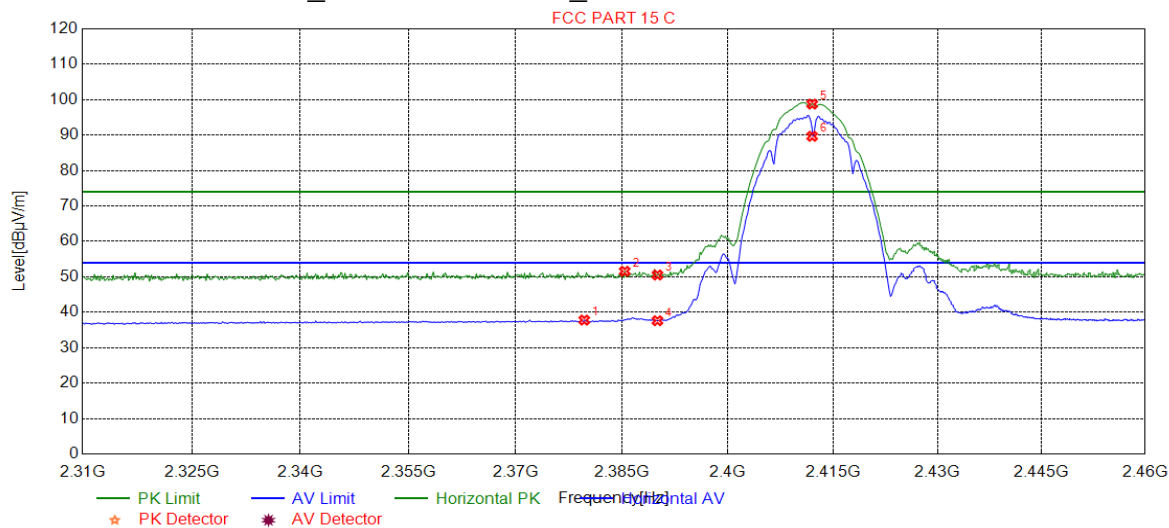
4.10.1.1 802.11B_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2386.2763	50.86	1.23	74.00	23.14	150	199	PK	Vertical
2	2387.3273	37.59	1.23	54.00	16.41	150	286	AV	Vertical
3	2390.0000	50.02	1.25	74.00	23.98	150	163	PK	Vertical
4	2390.0000	37.45	1.25	54.00	16.55	150	109	AV	Vertical
5	2412.0000	83.46	1.32	74.00	-9.46	150	228	PK	Vertical
6	2412.0000	74.32	1.32	54.00	-20.32	150	228	AV	Vertical



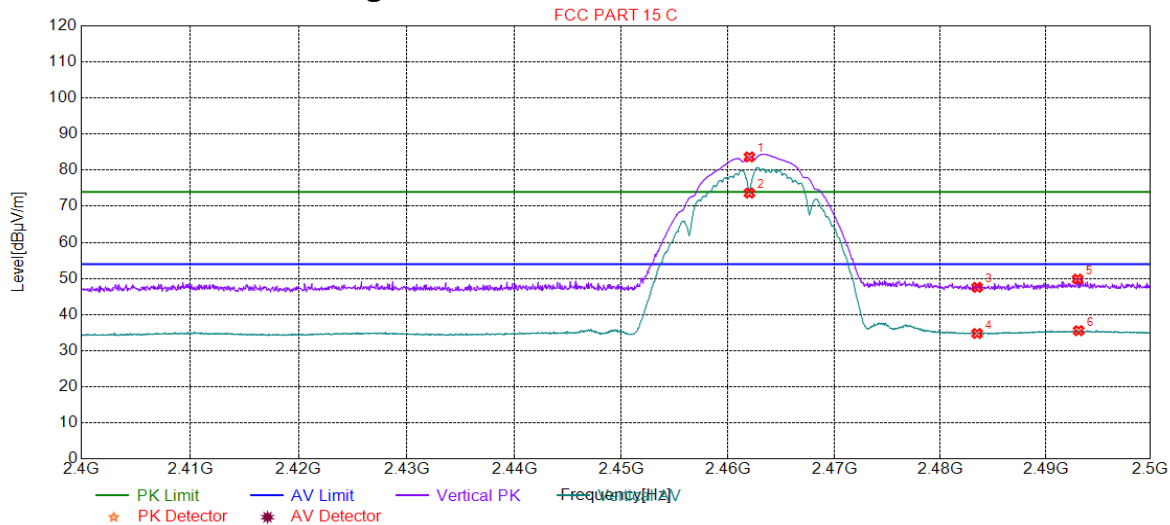
4.10.1.2 802.11B_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2379.6697	37.80	1.20	54.00	16.20	150	192	AV	Horizontal
2	2385.3754	51.58	1.23	74.00	22.42	150	339	PK	Horizontal
3	2390.0000	50.53	1.25	74.00	23.47	150	287	PK	Horizontal
4	2390.0000	37.63	1.25	54.00	16.37	150	31	AV	Horizontal
5	2412.0000	98.76	1.32	74.00	-24.76	150	64	PK	Horizontal
6	2412.0000	89.67	1.32	54.00	-35.67	150	64	AV	Horizontal



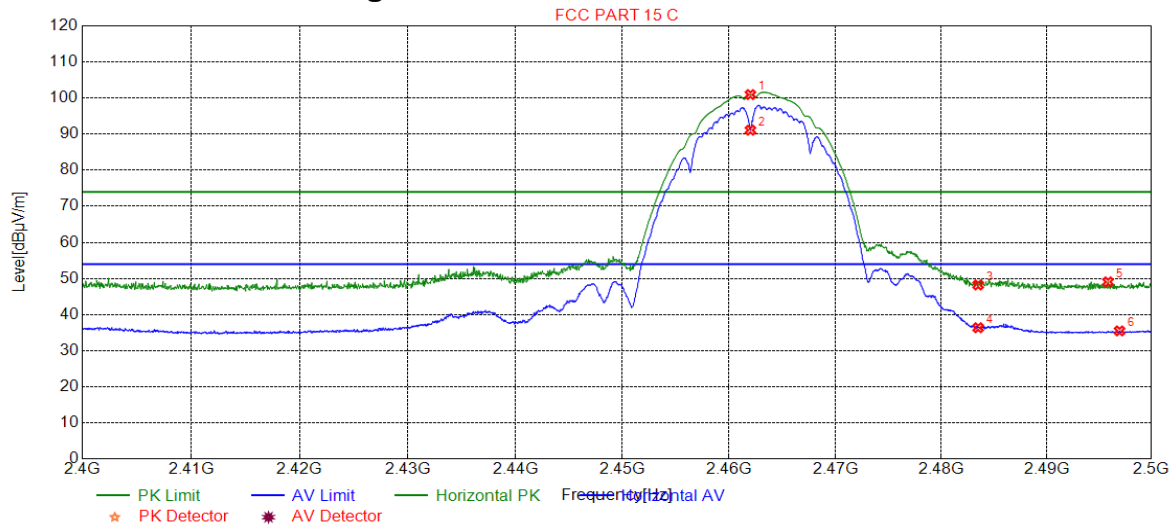
4.10.1.3 802.11B_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.0000	83.68	1.46	74.00	-9.68	150	171	PK	Vertical
2	2462.0000	73.67	1.46	54.00	-19.67	150	171	AV	Vertical
3	2483.5000	47.55	1.52	74.00	26.45	150	73	PK	Vertical
4	2483.5000	34.76	1.52	54.00	19.24	150	171	AV	Vertical
5	2493.0465	49.83	1.55	74.00	24.17	150	178	PK	Vertical
6	2493.1466	35.54	1.55	54.00	18.46	150	211	AV	Vertical



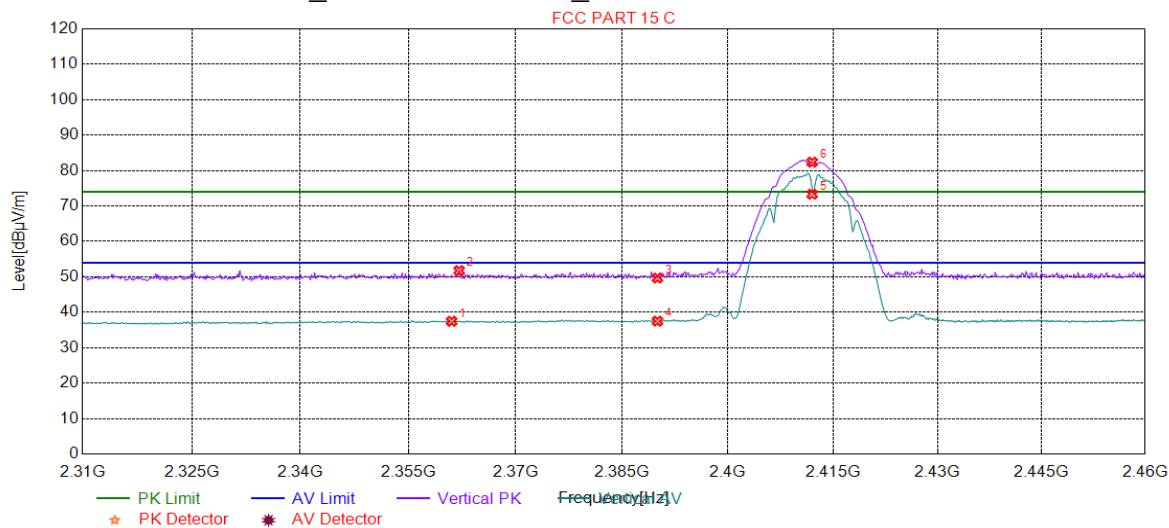
4.10.1.4 802.11B_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.0000	100.95	1.46	74.00	-26.95	150	48	PK	Horizontal
2	2462.0000	91.09	1.46	54.00	-37.09	150	48	AV	Horizontal
3	2483.5000	48.21	1.52	74.00	25.79	150	26	PK	Horizontal
4	2483.5000	36.36	1.52	54.00	17.64	150	135	AV	Horizontal
5	2495.8479	49.06	1.56	74.00	24.94	150	320	PK	Horizontal
6	2496.9485	35.48	1.56	54.00	18.52	150	75	AV	Horizontal



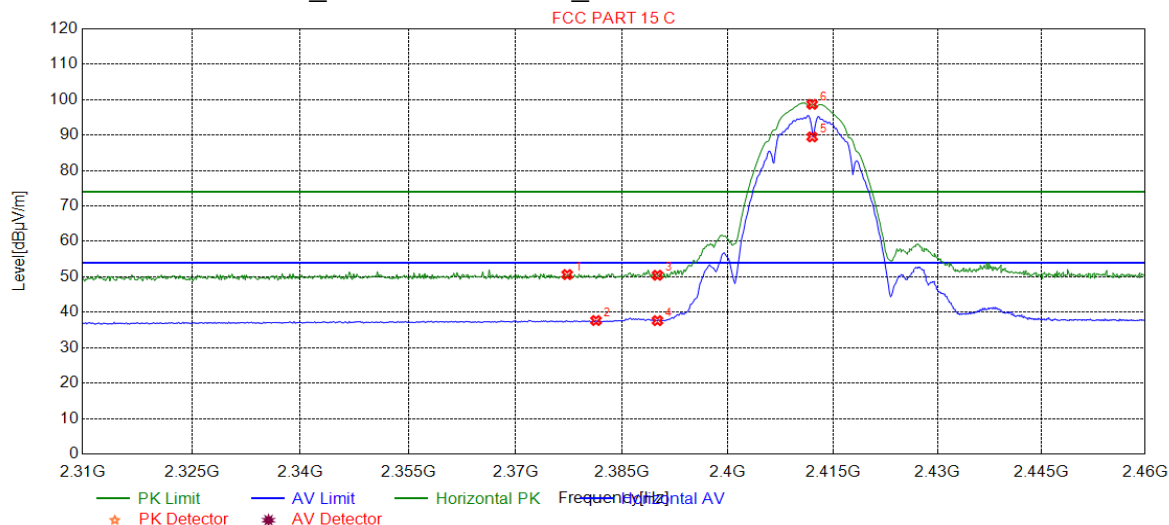
4.10.1.5 802.11G_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2361.0511	37.47	1.12	54.00	16.53	150	91	AV	Vertical
2	2362.1021	51.78	1.12	74.00	22.22	150	289	PK	Vertical
3	2390.0000	49.67	1.25	74.00	24.33	150	111	PK	Vertical
4	2390.0000	37.50	1.25	54.00	16.50	150	119	AV	Vertical
5	2412.0000	73.33	1.32	54.00	-19.33	150	165	AV	Vertical
6	2412.0000	82.37	1.32	74.00	-8.37	150	165	PK	Vertical



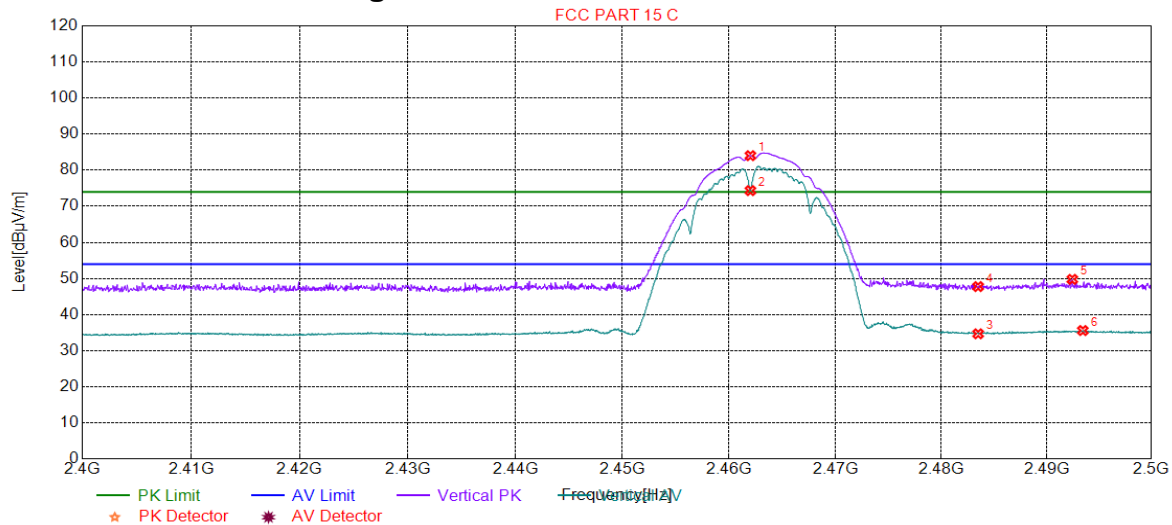
4.10.1.6 802.11G_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2377.2673	50.65	1.19	74.00	23.35	150	287	PK	Horizontal
2	2381.3213	37.68	1.21	54.00	16.32	150	25	AV	Horizontal
3	2390.0000	50.46	1.25	74.00	23.54	150	95	PK	Horizontal
4	2390.0000	37.64	1.25	54.00	16.36	150	50	AV	Horizontal
5	2412.0000	89.50	1.32	54.00	-35.50	150	50	AV	Horizontal
6	2412.0000	98.69	1.32	74.00	-24.69	150	149	PK	Horizontal



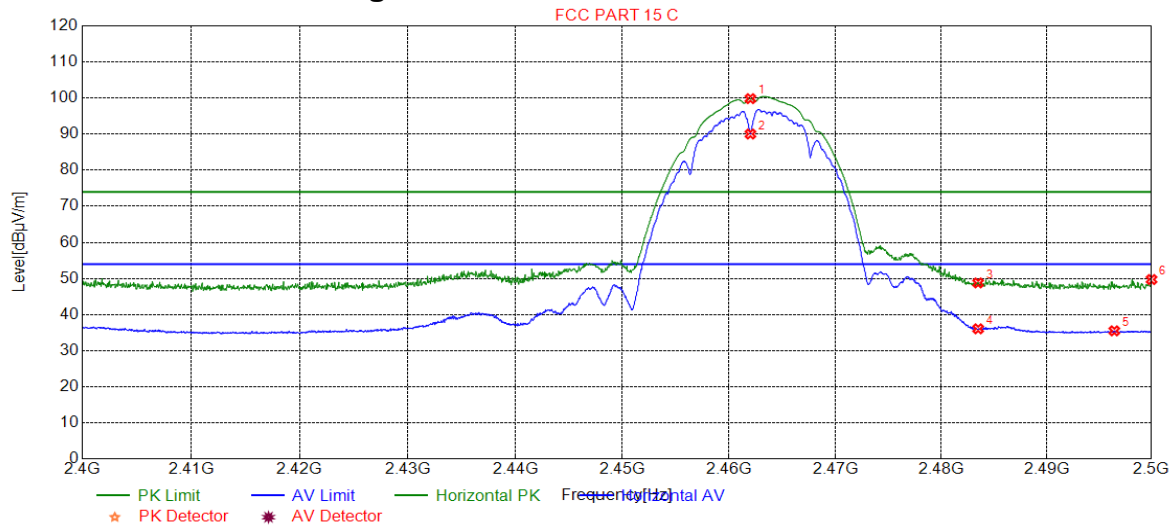
4.10.1.7 802.11G_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.0000	84.03	1.46	74.00	-10.03	150	166	PK	Vertical
2	2462.0000	74.34	1.46	54.00	-20.34	150	166	AV	Vertical
3	2483.5000	34.67	1.52	54.00	19.33	150	230	AV	Vertical
4	2483.5000	47.76	1.52	74.00	26.24	150	58	PK	Vertical
5	2492.4462	49.76	1.55	74.00	24.24	150	68	PK	Vertical
6	2493.4467	35.58	1.55	54.00	18.42	150	278	AV	Vertical



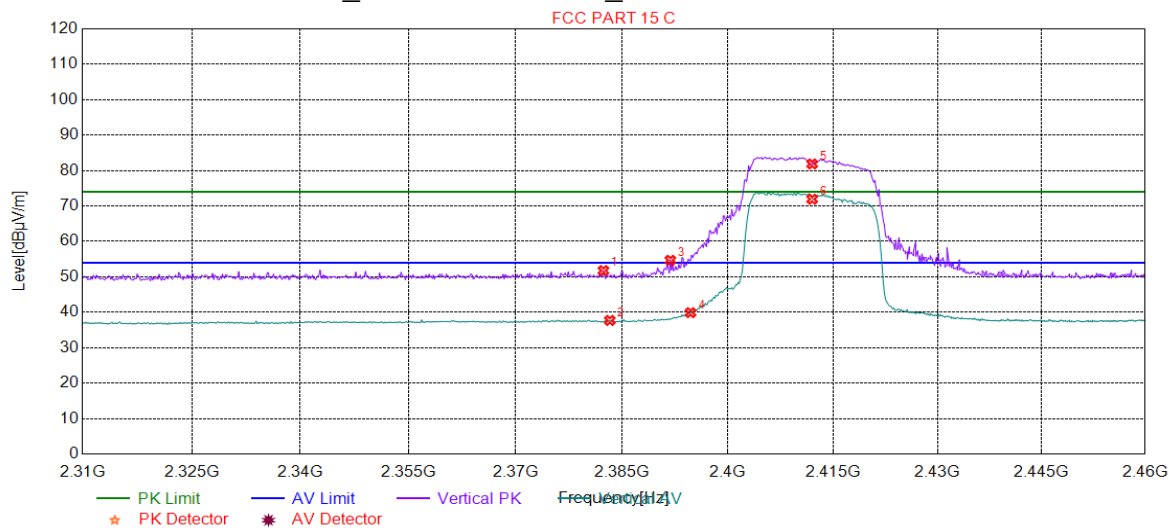
4.10.1.8 802.11G_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.0000	99.83	1.46	74.00	-25.83	150	52	PK	Horizontal
2	2462.0000	90.02	1.46	54.00	-36.02	150	57	AV	Horizontal
3	2483.5000	48.77	1.52	74.00	25.23	150	336	PK	Horizontal
4	2483.5000	36.06	1.52	54.00	17.94	150	57	AV	Horizontal
5	2496.4482	35.49	1.56	54.00	18.51	150	89	AV	Horizontal
6	2500.0000	49.71	1.57	74.00	24.29	150	166	PK	Horizontal



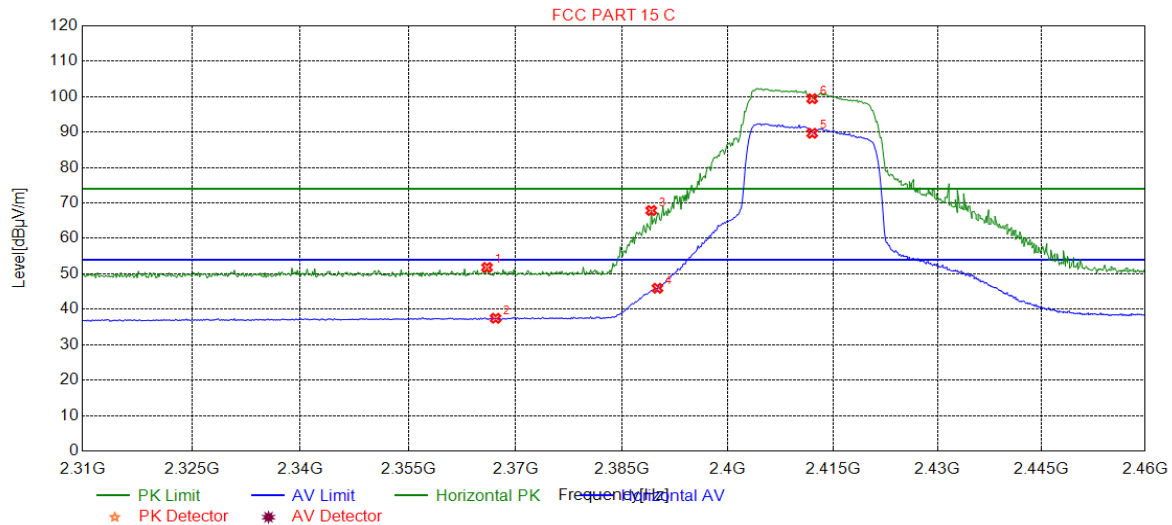
4.10.1.9 802.11N20_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2382.3724	51.77	1.21	74.00	22.23	150	121	PK	Vertical
2	2383.2733	37.71	1.22	54.00	16.29	150	263	AV	Vertical
3	2391.8318	54.69	1.25	74.00	19.31	150	247	PK	Vertical
4	2394.6847	39.90	1.27	54.00	14.10	150	97	AV	Vertical
5	2412.0000	81.87	1.32	74.00	-7.87	150	251	PK	Vertical
6	2412.0000	71.92	1.32	54.00	-17.92	150	251	AV	Vertical



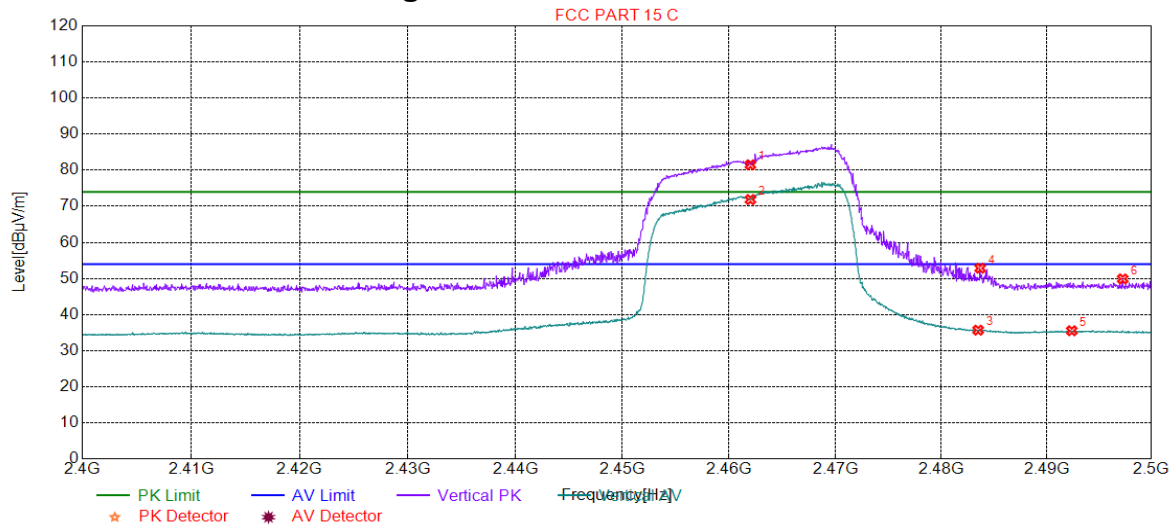
4.10.1.10 802.11N20_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2366.0060	51.81	1.14	74.00	22.19	150	280	PK	Horizontal
2	2367.2072	37.47	1.15	54.00	16.53	150	58	AV	Horizontal
3	2389.1291	67.88	1.24	74.00	6.12	150	40	PK	Horizontal
4	2390.0000	45.94	1.25	54.00	8.06	150	174	AV	Horizontal
5	2412.0000	89.68	1.32	54.00	-35.68	150	178	AV	Horizontal
6	2412.0000	99.43	1.32	74.00	-25.43	150	40	PK	Horizontal



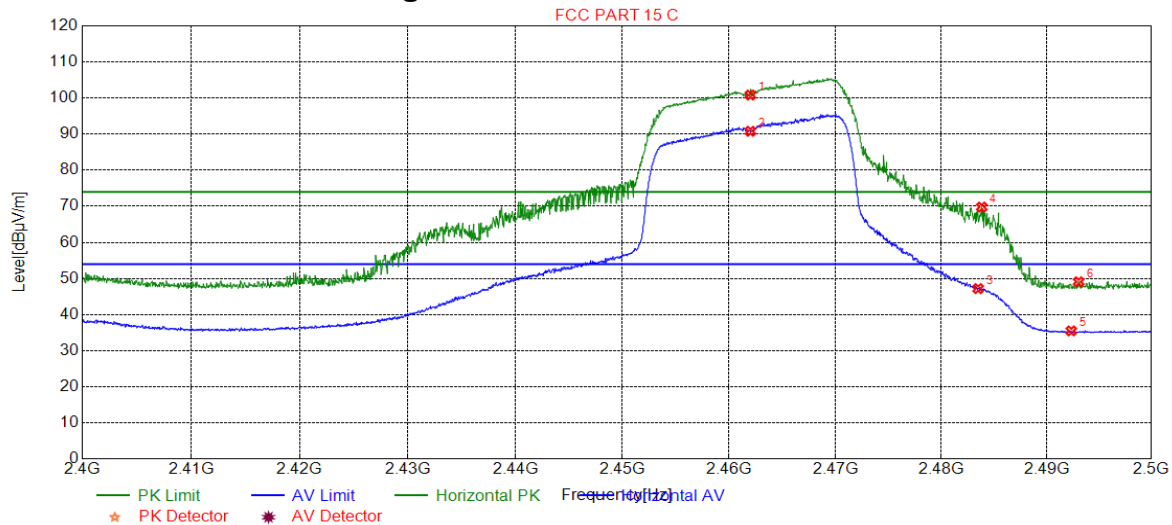
4.10.1.11 802.11N20_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.0000	81.49	1.46	74.00	-7.49	150	221	PK	Vertical
2	2462.0000	71.86	1.46	54.00	-17.86	150	133	AV	Vertical
3	2483.5000	35.69	1.52	54.00	18.31	150	78	AV	Vertical
4	2483.6918	52.85	1.52	74.00	21.15	150	221	PK	Vertical
5	2492.3962	35.52	1.55	54.00	18.48	150	14	AV	Vertical
6	2497.2486	49.89	1.56	74.00	24.11	150	326	PK	Vertical



4.10.1.12 802.11N20_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2462.0000	100.83	1.46	74.00	-26.83	150	189	PK	Horizontal
2	2462.0000	90.79	1.46	54.00	-36.79	150	189	AV	Horizontal
3	2483.5000	47.20	1.52	54.00	6.80	150	194	AV	Horizontal
4	2483.8419	69.79	1.52	74.00	4.21	150	26	PK	Horizontal
5	2492.3462	35.48	1.55	54.00	18.52	150	64	AV	Horizontal
6	2493.0465	49.09	1.55	74.00	24.91	150	37	PK	Horizontal



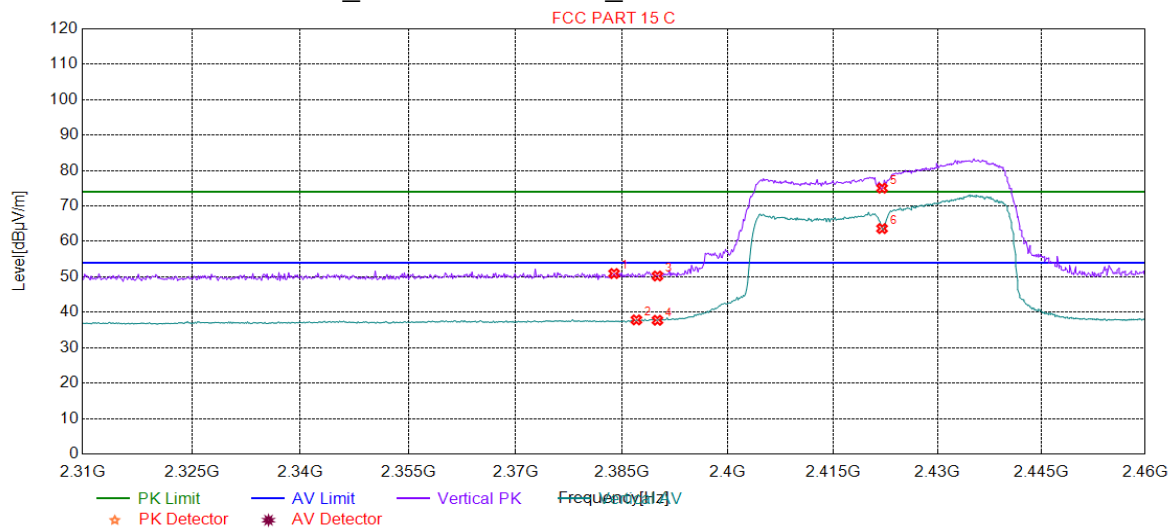
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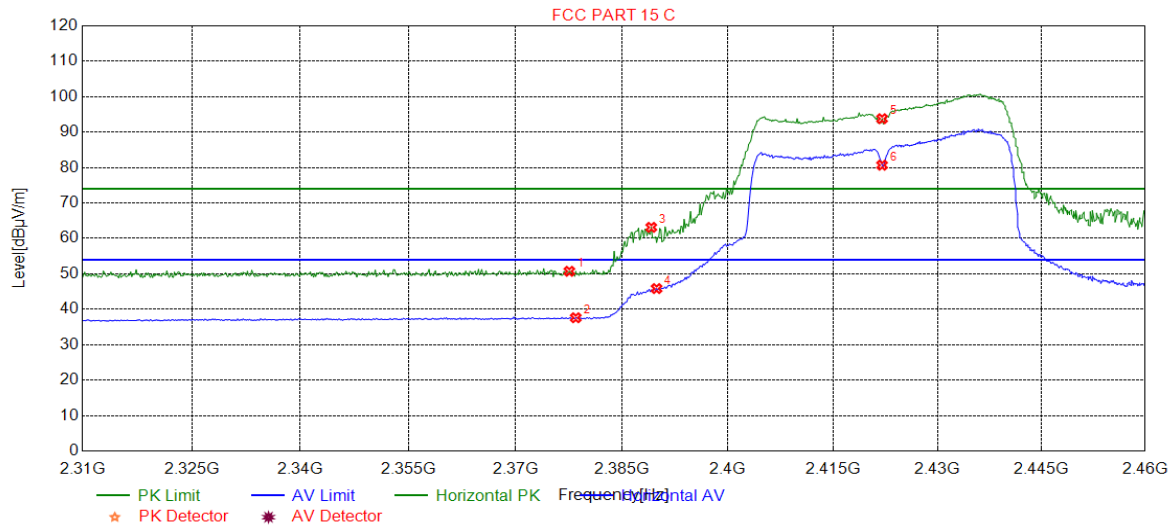
4.10.1.13 802.11N40_Lowest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2383.8739	50.94	1.22	74.00	23.06	150	240	PK	Vertical
2	2387.0270	37.86	1.23	54.00	16.14	150	72	AV	Vertical
3	2390.0000	50.25	1.25	74.00	23.75	150	213	PK	Vertical
4	2390.0000	37.75	1.25	54.00	16.25	150	132	AV	Vertical
5	2422.0000	75.03	1.35	74.00	-1.03	150	283	PK	Vertical
6	2422.0000	63.63	1.35	54.00	-9.63	150	279	AV	Vertical



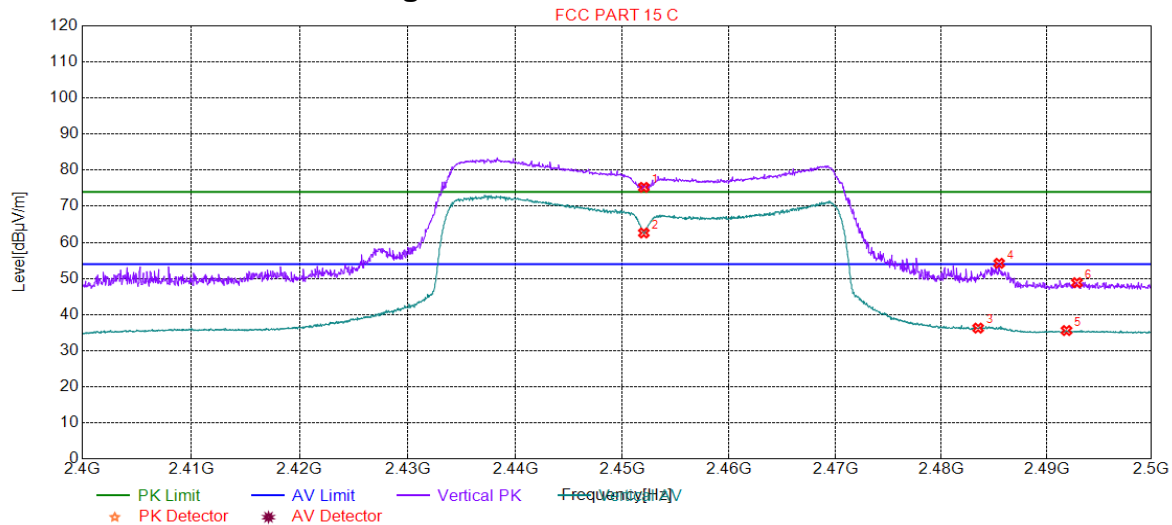
4.10.1.14 802.11N40_Lowest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2377.5676	50.72	1.19	74.00	23.28	150	176	PK	Horizontal
2	2378.4685	37.61	1.20	54.00	16.39	150	180	AV	Horizontal
3	2389.1291	63.13	1.24	74.00	10.87	150	27	PK	Horizontal
4	2389.8799	45.85	1.25	54.00	8.15	150	24	AV	Horizontal
5	2422.0000	93.79	1.35	74.00	-19.79	150	31	PK	Horizontal
6	2422.0000	80.67	1.35	54.00	-26.67	150	27	AV	Horizontal



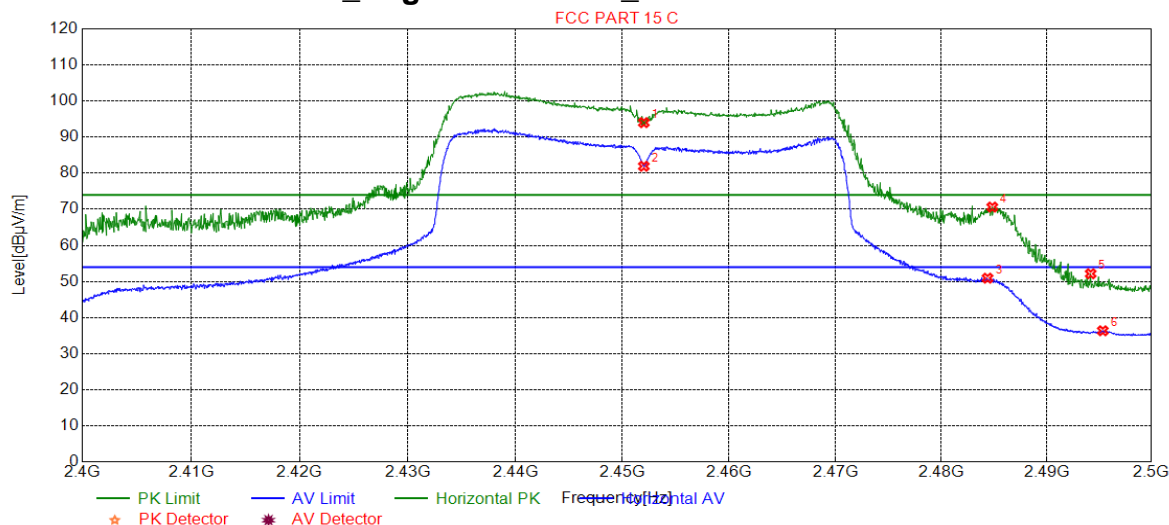
4.10.1.15 802.11N40_Highest Channel_Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2452.0000	75.25	1.44	74.00	-1.25	150	149	PK	Vertical
2	2452.0000	62.61	1.44	54.00	-8.61	150	231	AV	Vertical
3	2483.5000	36.25	1.52	54.00	17.75	150	144	AV	Vertical
4	2485.4927	54.21	1.53	74.00	19.79	150	144	PK	Vertical
5	2491.8959	35.58	1.55	54.00	18.42	150	14	AV	Vertical
6	2492.8964	48.83	1.55	74.00	25.17	150	262	PK	Vertical



4.10.1.16 802.11N40_Highest Channel_Horizontal



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
1	2452.0000	94.01	1.44	74.00	-20.01	150	190	PK	Horizontal
2	2452.0000	81.92	1.44	54.00	-27.92	150	162	AV	Horizontal
3	2484.3922	50.92	1.53	54.00	3.08	150	168	AV	Horizontal
4	2484.8424	70.61	1.53	74.00	3.39	150	168	PK	Horizontal
5	2494.1971	52.15	1.55	74.00	21.85	150	162	PK	Horizontal
6	2495.3477	36.34	1.56	54.00	17.66	150	173	AV	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.



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

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



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6 Equipment List

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

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Duedate
				(yyyy-mm-dd)	(yyyy-mm-dd)
DC Power Supply	Agilent Technologies Inc	66311B	W009-09	2019/7/15	2020/7/15
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2019/1/13	2020/1/12
Coaxial Cable	SGS	N/A	SEM031-01	2019/6/12	2020/6/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2019/7/14	2020/7/14
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/27	2019/11/27

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

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Measurement Software	AUDIX	e3V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019/6/12	2020/6/11
EXA Signal Analyzer (10Hz-26.5GHz)	Agilent Technologies Inc	N9010A	SEM004-09	2019/3/12	2020/3/11
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26



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7 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for ZR/2019/A0003.

The End

