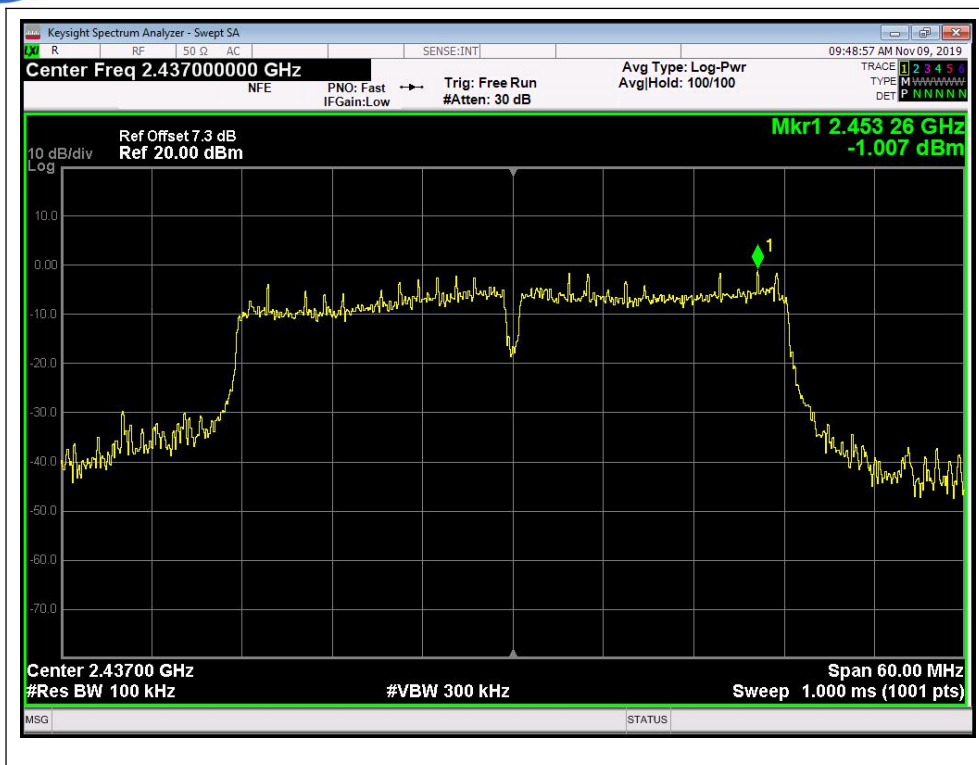
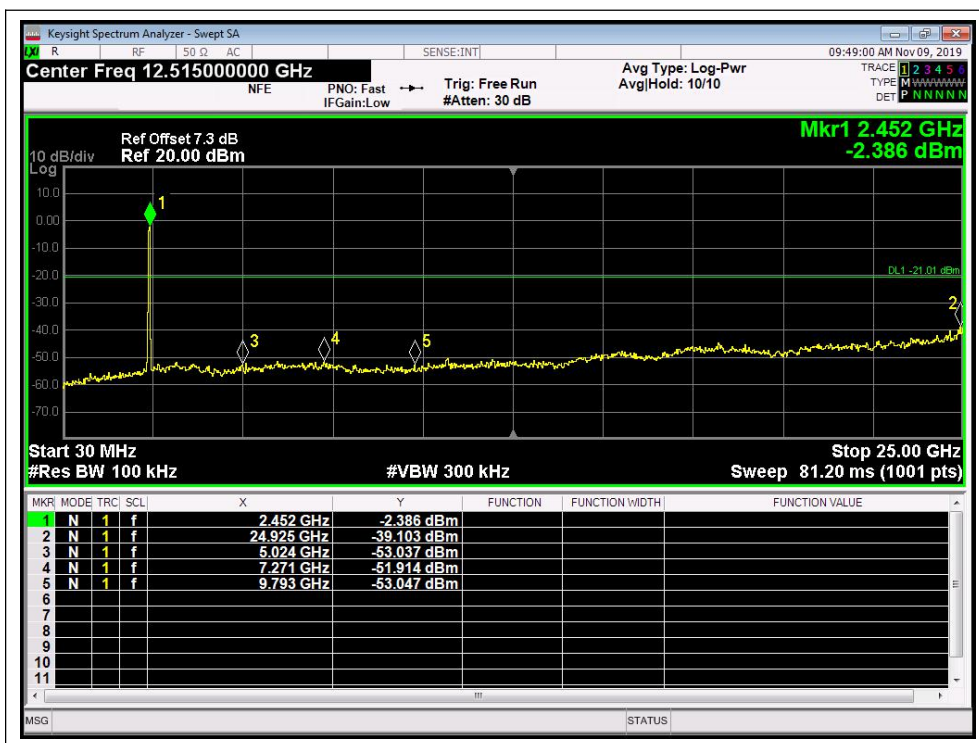
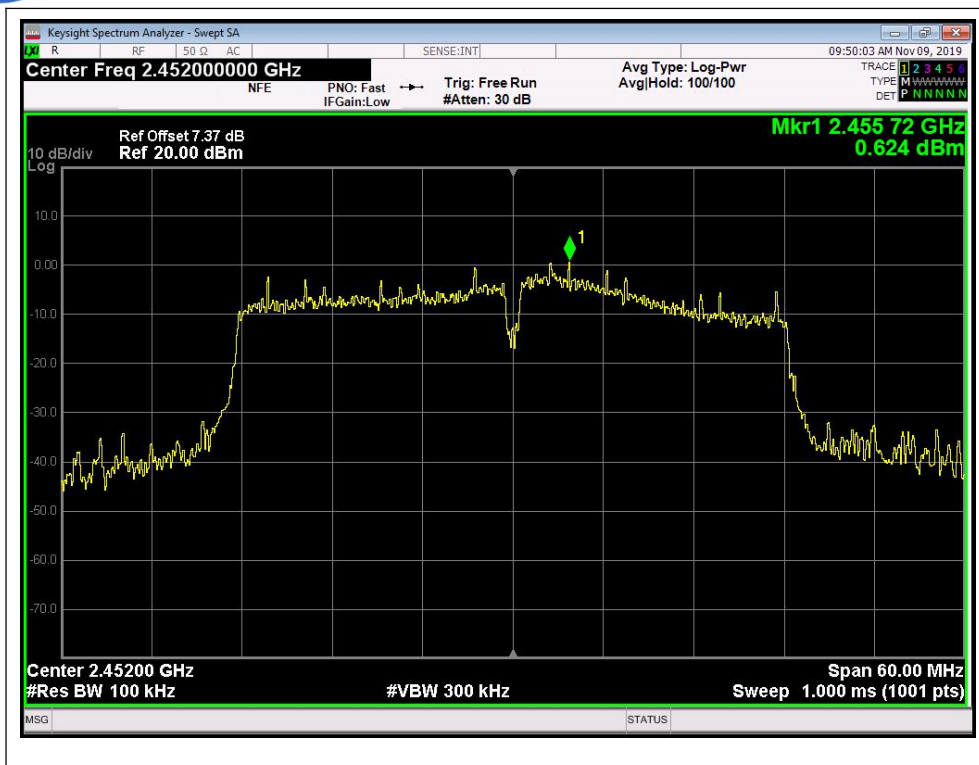




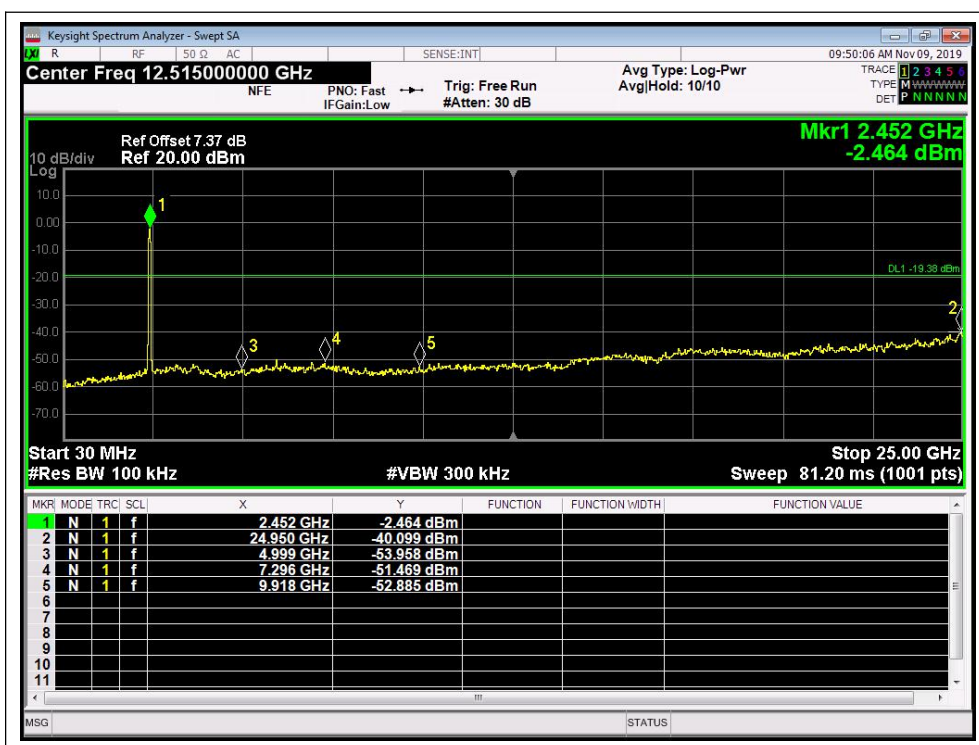
(802.11 HT40, Channel = 6, 30MHz to 25GHz peak power)



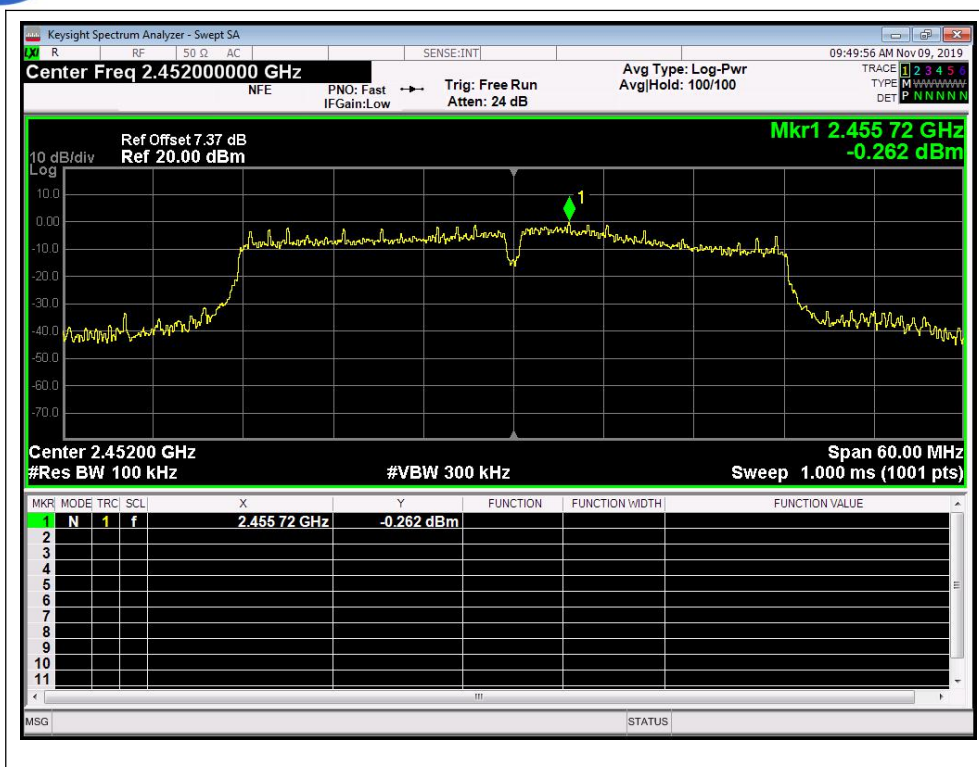
(802.11 HT40, Channel = 6, 30MHz to 25GHz)



(802.11 HT40, Channel = 9, 30MHz to 25GHz peak power)



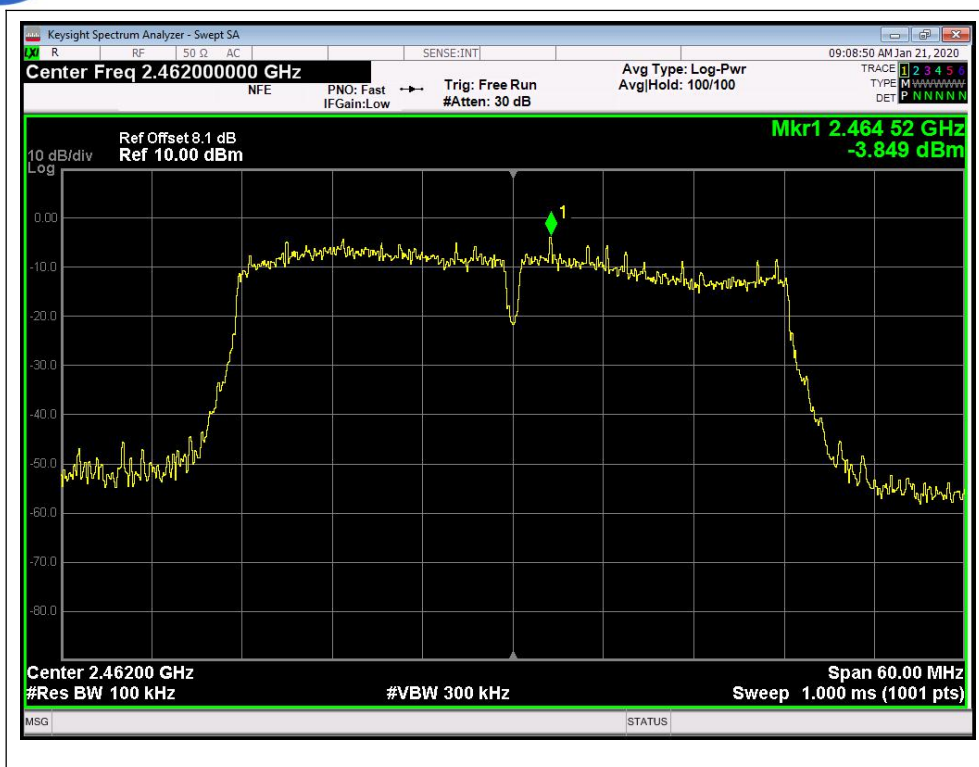
(802.11 HT40, Channel = 9, 30MHz to 25GHz)



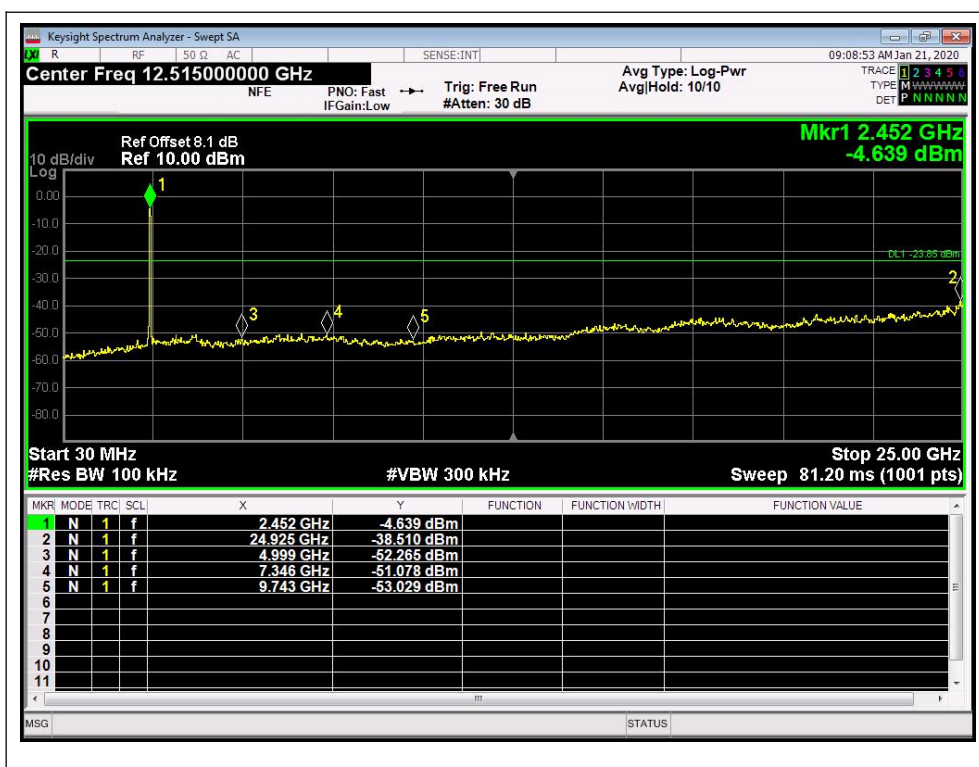
(802.11 HT40, Band Edge @ Channel = 9 peak power)



(802.11 HT40, Band Edge @ Channel = 9)



(802.11 HT40, Channel = 11, 30MHz to 25GHz peak power)



(802.11 HT40, Channel = 11, 30MHz to 25GHz)



(802.11 HT40, Band Edge @ Channel = 11 peak power)



(802.11 HT40, Band Edge @ Channel = 11)

2.5. Power spectral density (PSD)

2.5.1. Requirement

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

2.5.2. Test Description

A. Test Set:



The EUT is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

KDB 558074 D01 v05r02 Section 10.2 was used in order to prove compliance.

B. Equipments List:

Please refer ANNEX B(4).

2.5.3. Test Result

802.11b Test mode

A. Test Verdict:

Spectral power density (dBm/3kHz)				
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
1	2412	-5.24	8	PASS
6	2437	-6.47	8	PASS
11	2462	-4.18	8	PASS
12	2467	-8.06	8	PASS
13	2472	-8.43	8	PASS

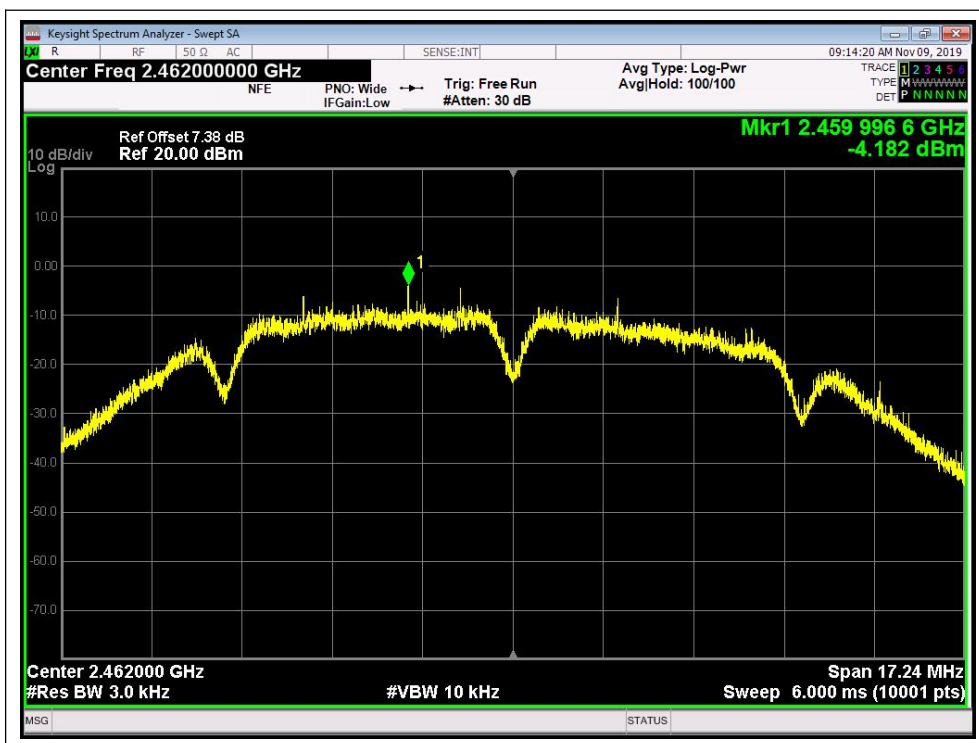
B. Test Plots:



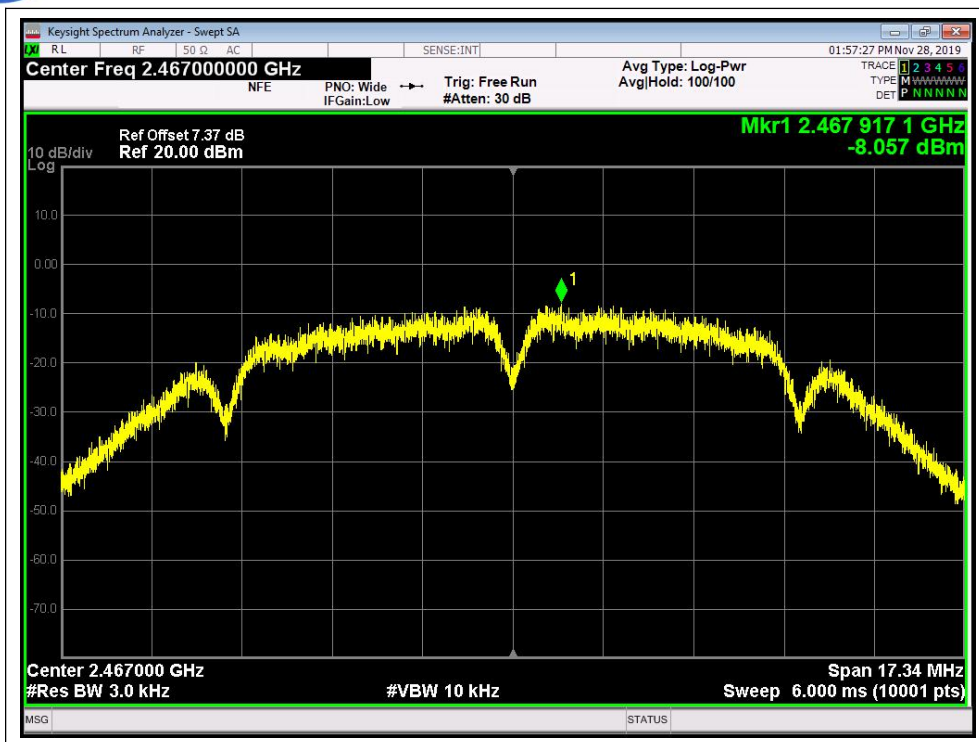
(Channel = 1, 802.11b)



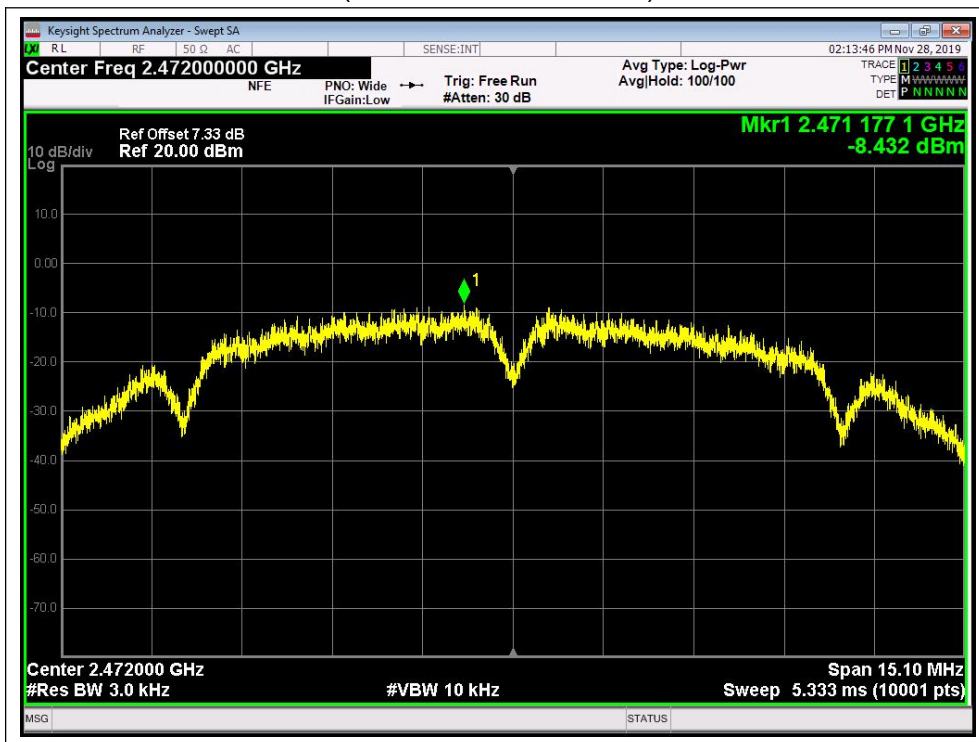
(Channel = 6, 802.11b)



(Channel = 11, 802.11b)



(Channel = 12, 802.11b)



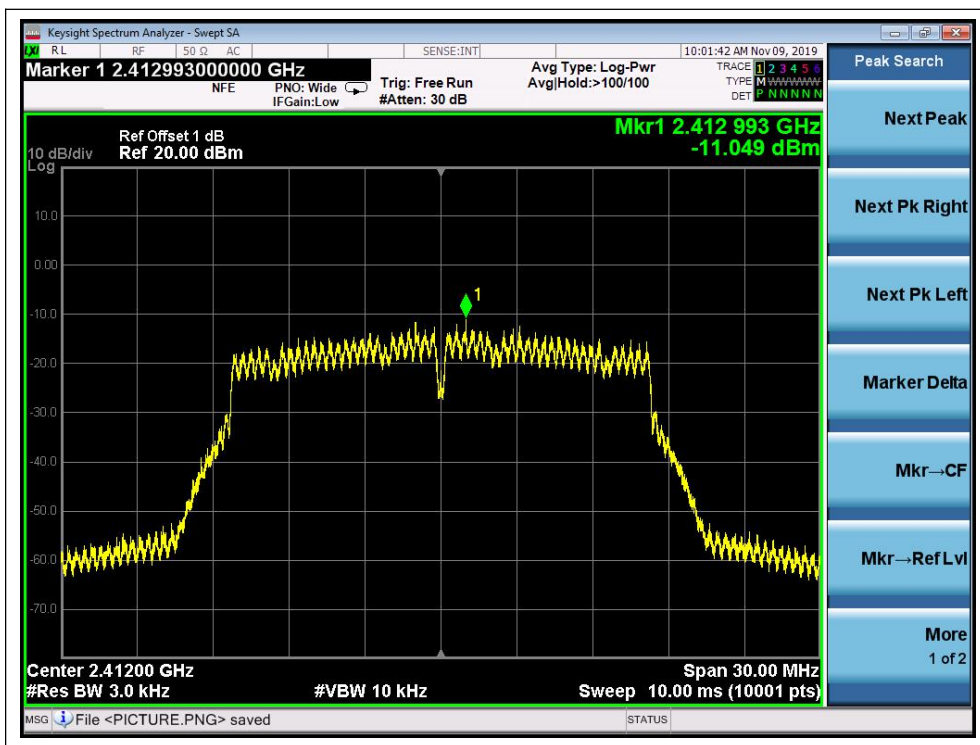
(Channel = 13, 802.11b)



A. Test Verdict:

Spectral power density (dBm/3kHz)				
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
1	2412	-11.05	8	PASS
6	2437	-6.67	8	PASS
11	2462	-5.58	8	PASS
12	2467	-12.00	8	PASS
13	2472	-11.77	8	PASS

B. Test Plots:



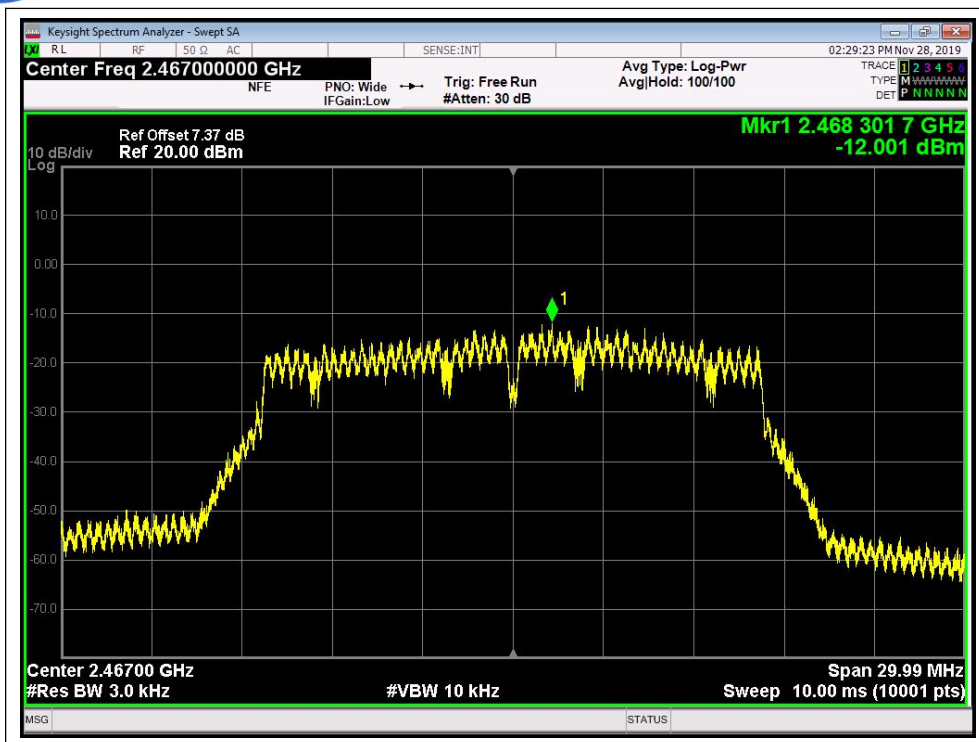
(Channel = 1, 802.11g)



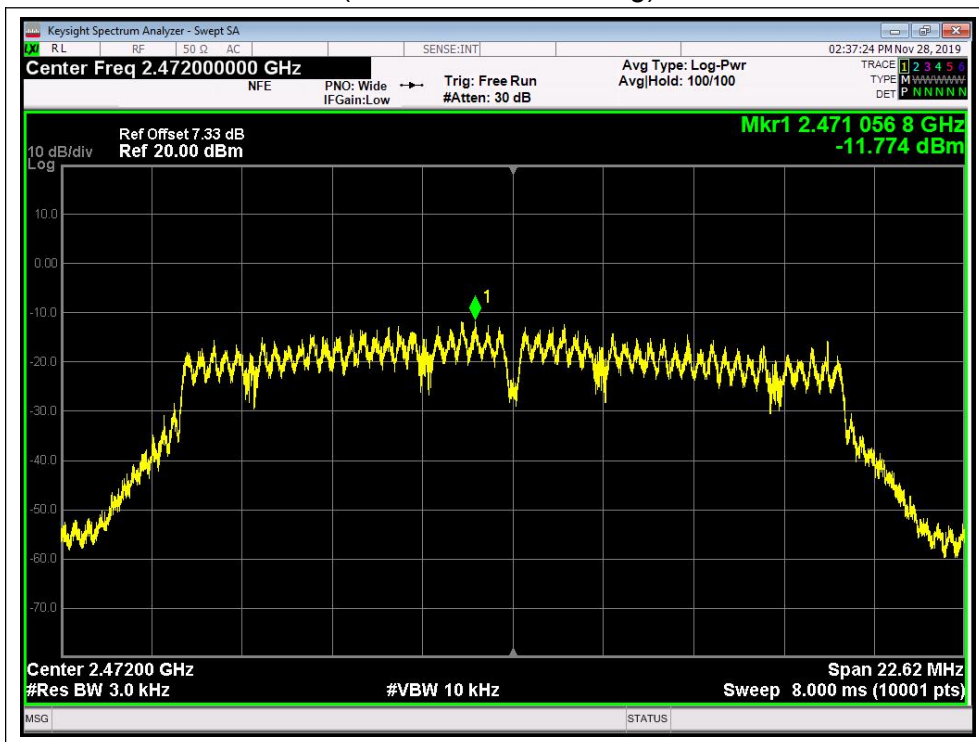
(Channel = 6, 802.11g)



(Channel = 11, 802.11g)



(Channel = 12, 802.11g)



(Channel = 13, 802.11g)

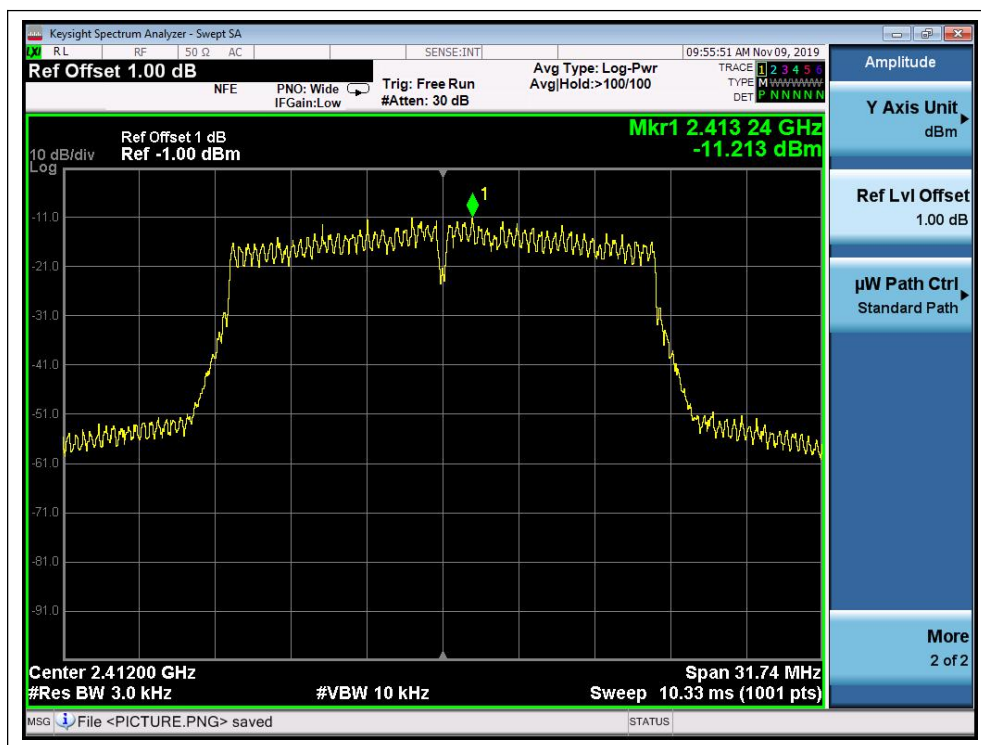


802.11n-20MHz Test mode

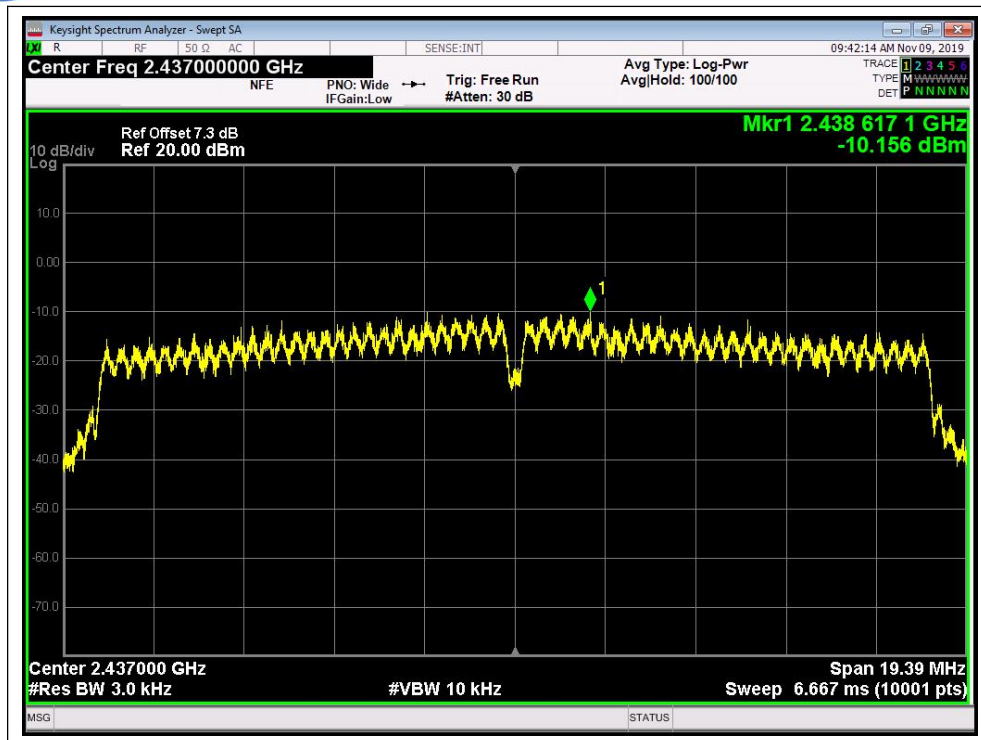
A. Test Verdict:

Spectral power density (dBm/3kHz)				
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
1	2412	-11.21	8	PASS
6	2437	-10.15	8	PASS
11	2462	-9.84	8	PASS
12	2467	-11.80	8	PASS
13	2472	-12.07	8	PASS

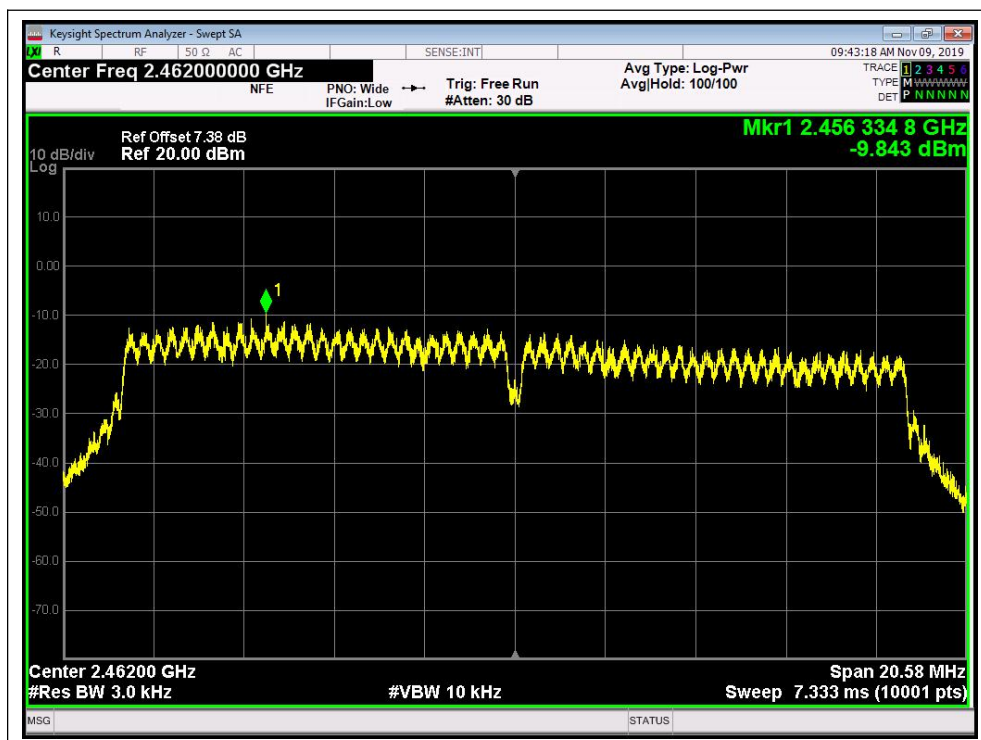
B. Test Plots:



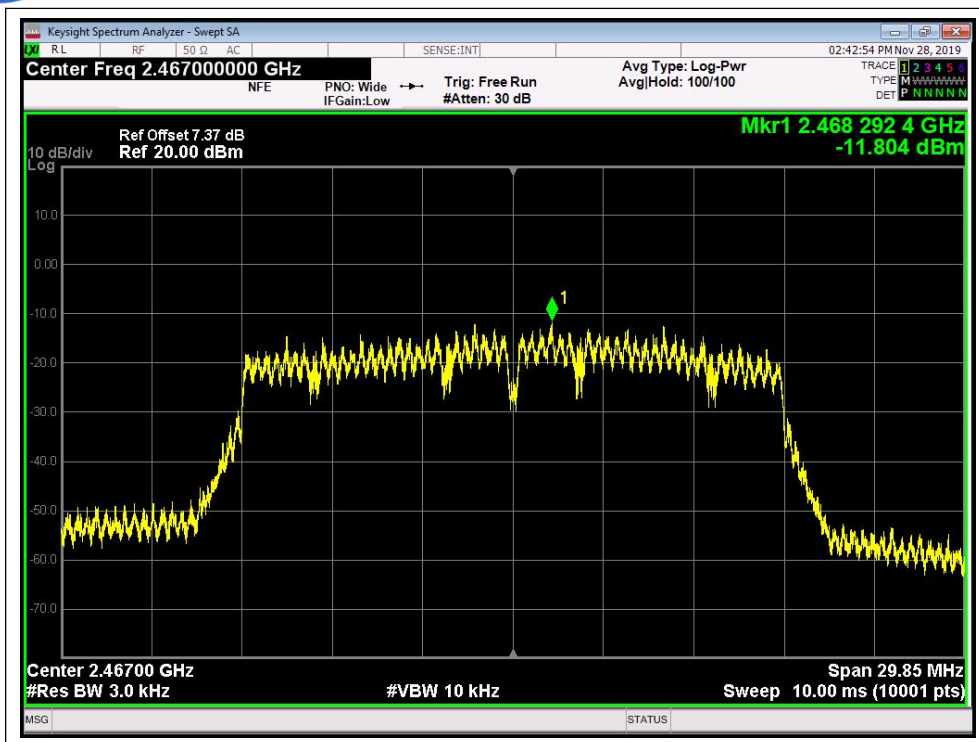
(Channel = 1, 802.11n-20MHz)



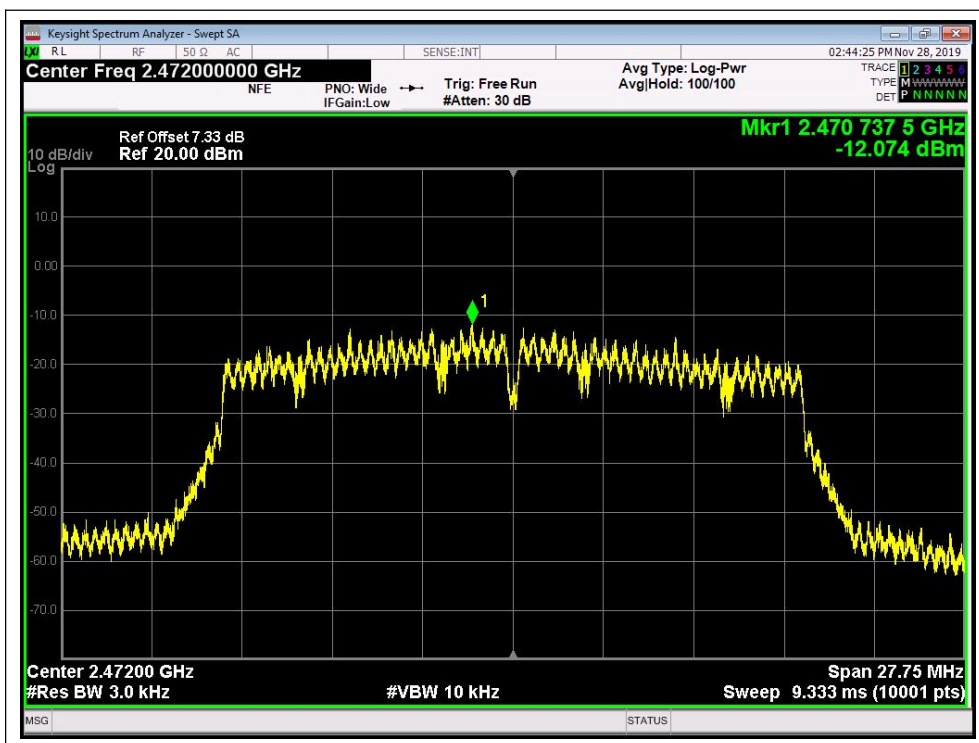
(Channel = 6, 802.11n-20MHz)



(Channel = 11, 802.11n-20MHz)



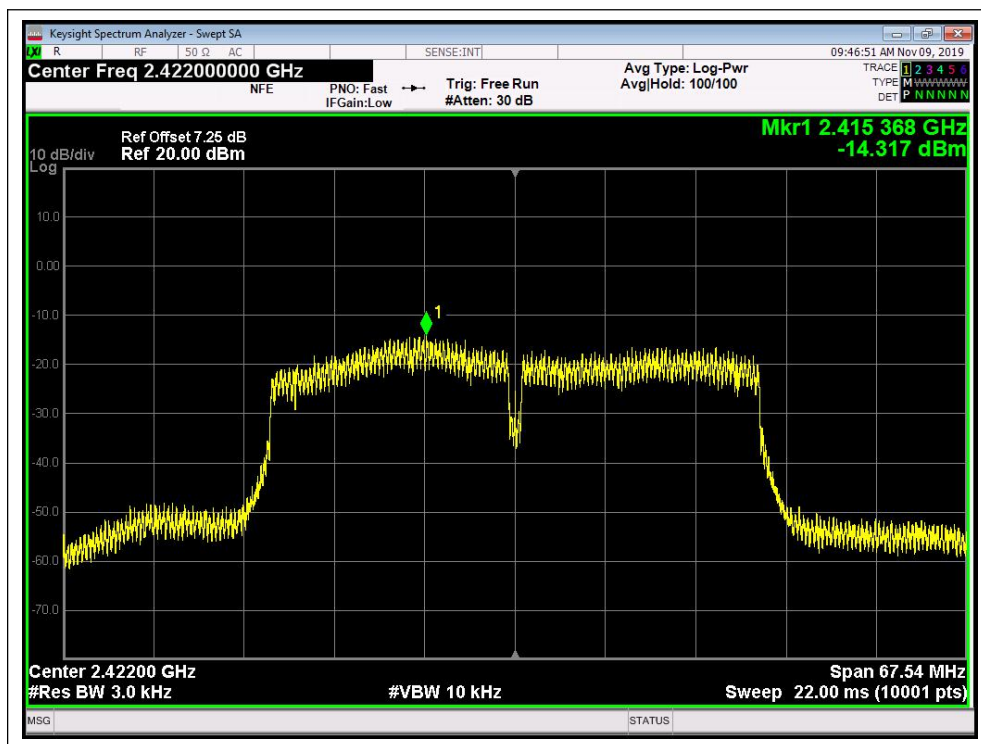
(Channel = 12, 802.11n-20MHz)



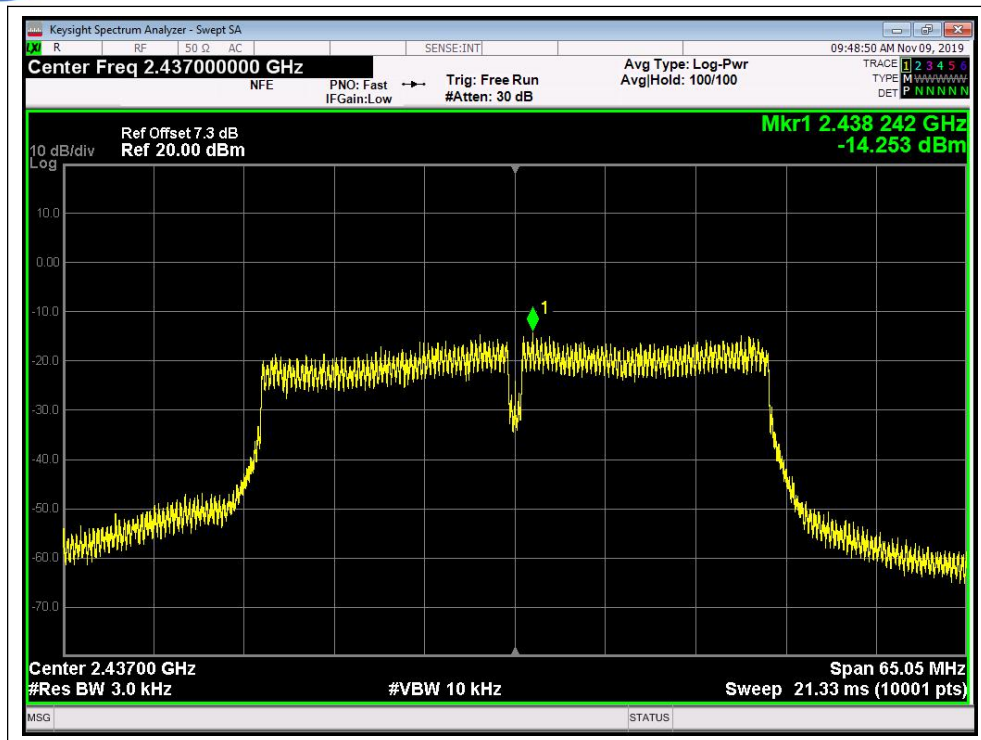
(Channel = 13, 802.11n-20MHz)

**802.11n-40MHz Test mode****A. Test Verdict:**

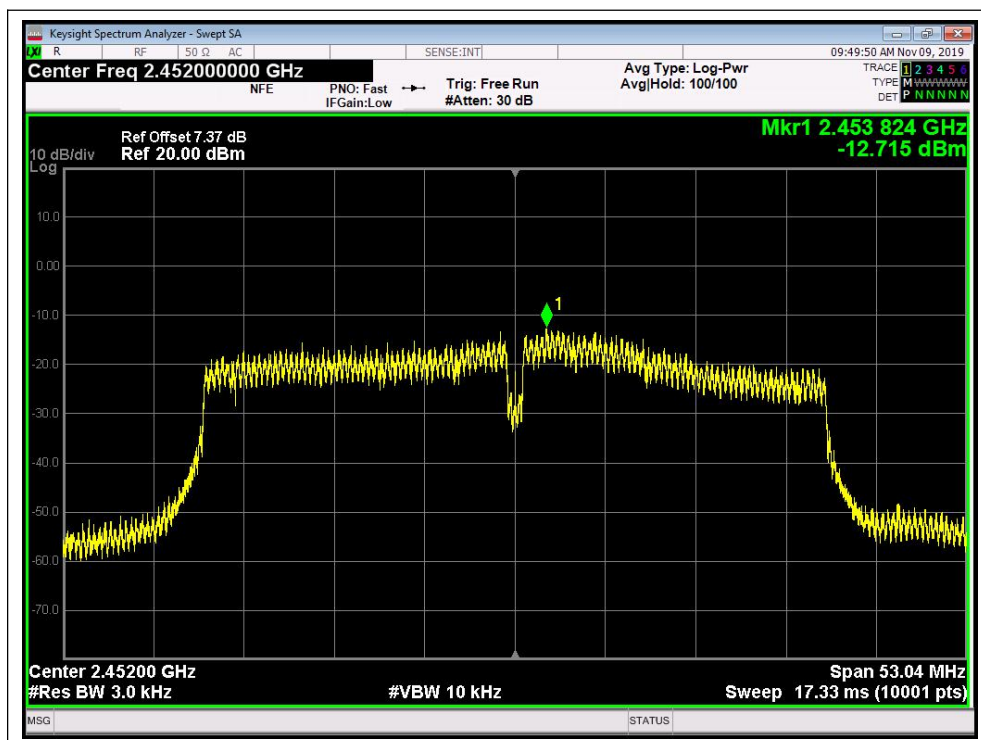
Spectral power density (dBm/3kHz)				
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
3	2422	-14.32	8	PASS
6	2437	-14.25	8	PASS
9	2452	-14.72	8	PASS
11	2462			PASS

B. Test Plots:

(Channel = 3, 802.11n-40MHz)



(Channel = 6, 802.11n-40MHz)



(Channel = 9, 802.11n-40MHz)

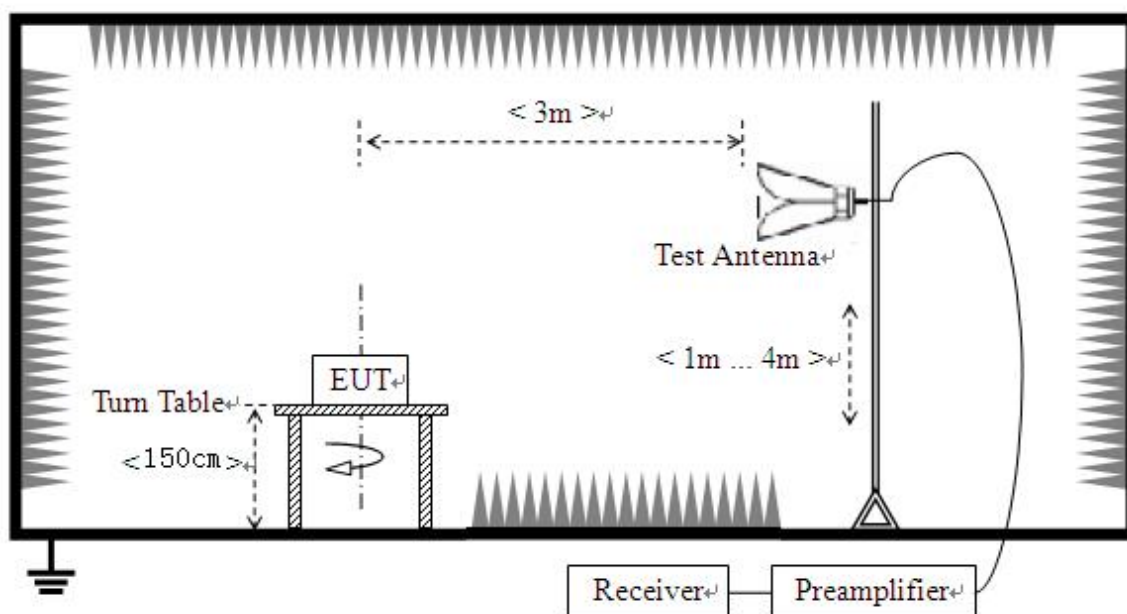
2.6. Restricted Frequency Bands

2.6.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

2.6.2. Test Description

A. Test Setup



The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

KDB 558074 D01 v05r02 Section 12.1 was used in order to prove compliance.



For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna 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.
- d. 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.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

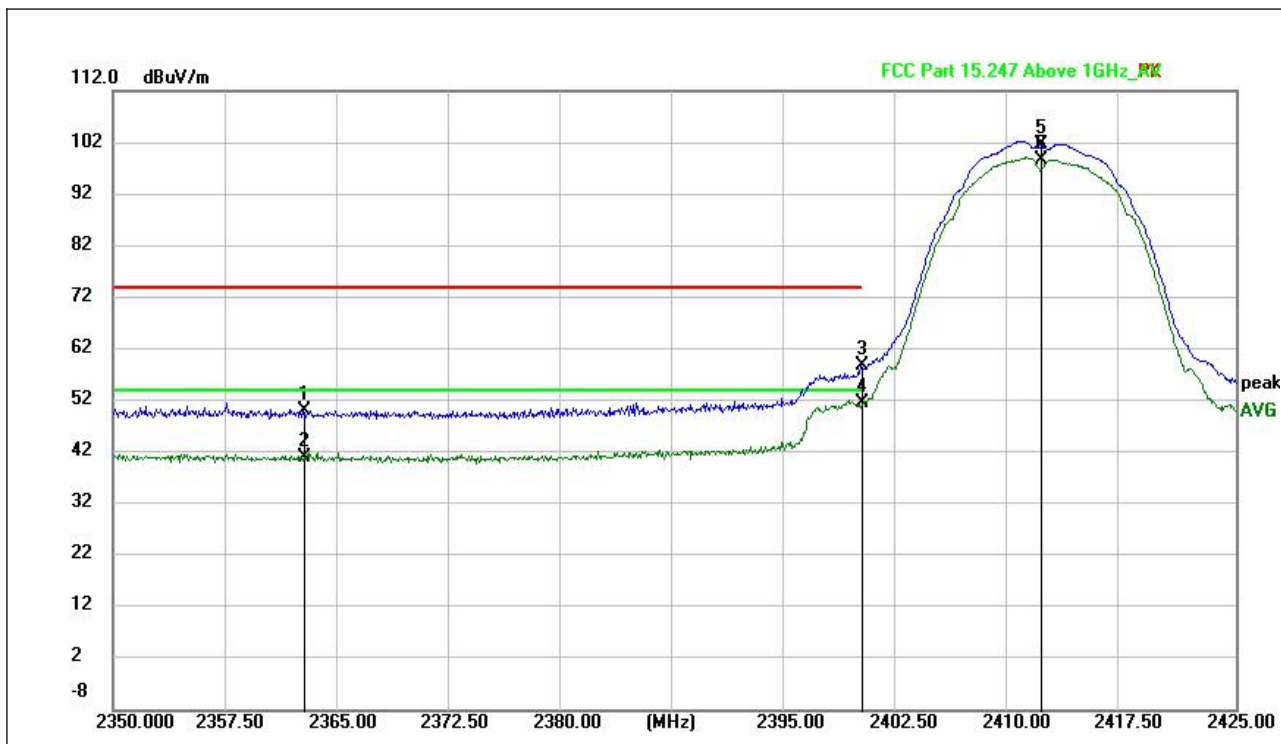
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasipeak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

B. Equipments List:

Please refer ANNEX B(4).

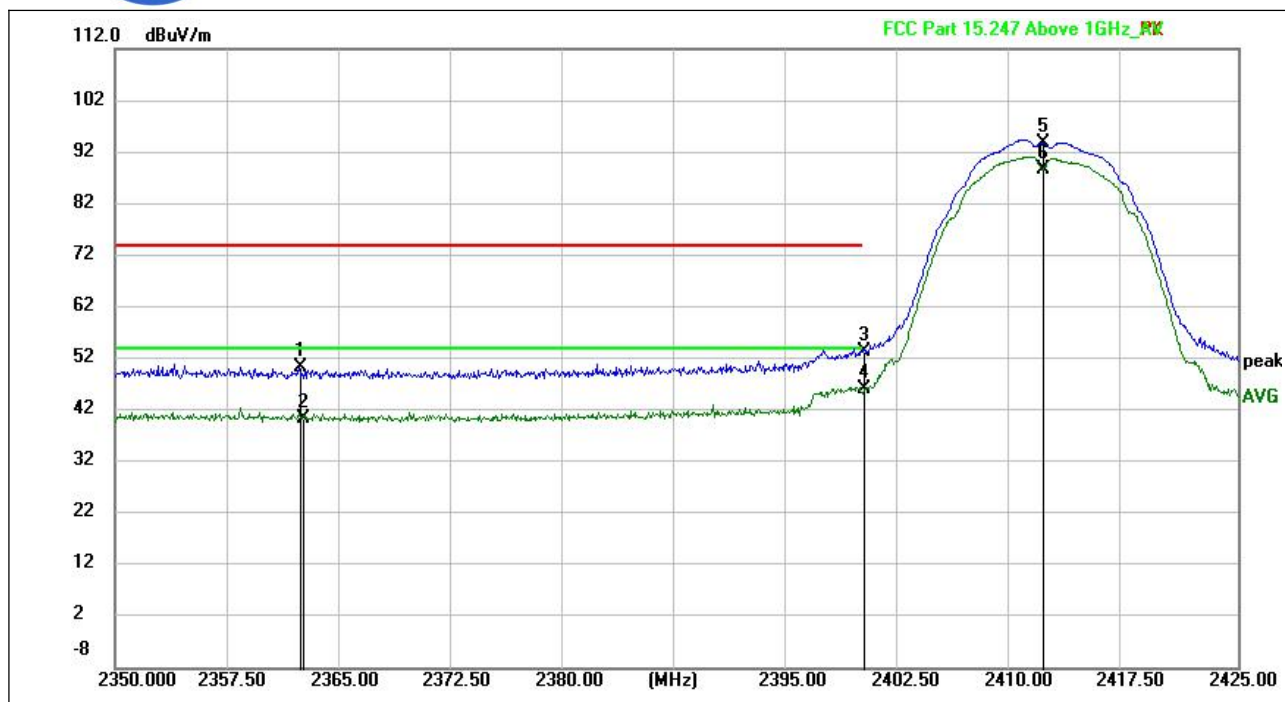
2.6.3. Test Result

802.11b Test mode



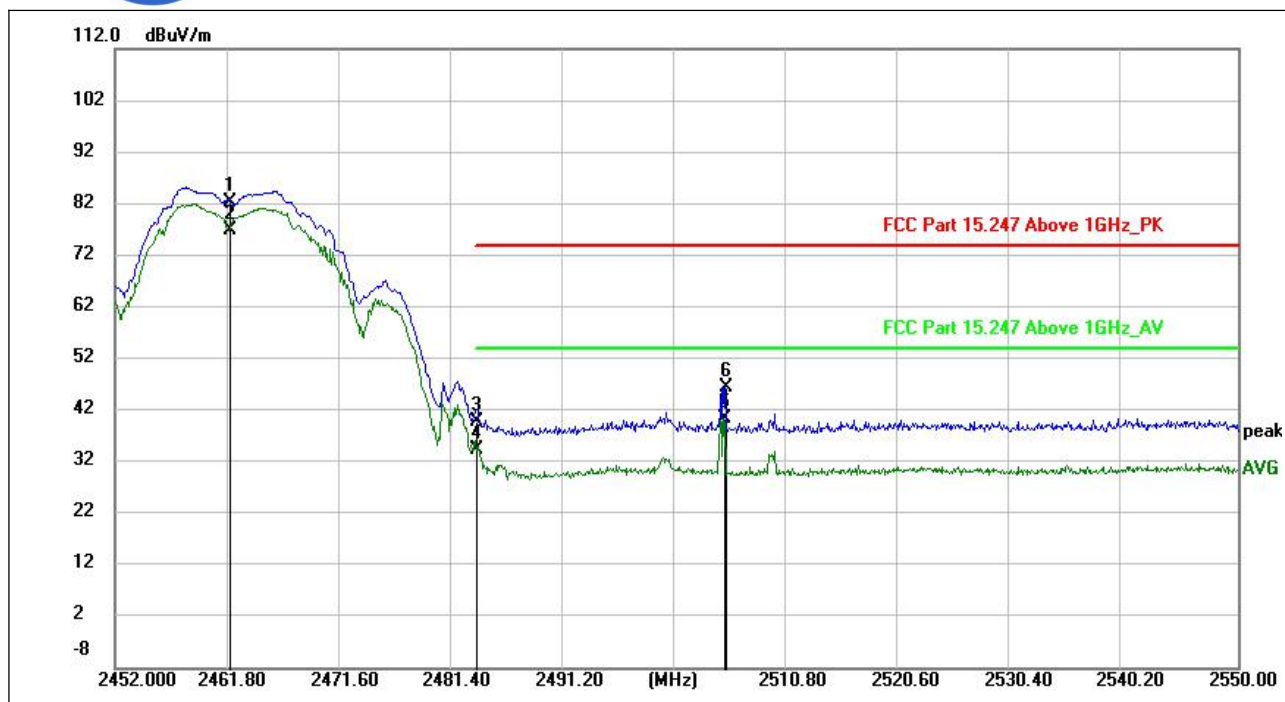
(802.11b _2412MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2362.739	49.93	---	74.00	24.07	H	7.49
2362.821	---	40.91	54.00	13.09	H	7.49
2400.000	58.69	---	74.00	15.31	H	8.70
2400.000	---	51.58	54.00	2.42	H	8.70
2412.000	101.56	---	---	---	H	8.64
2412.000	---	98.54	---	---	H	8.64



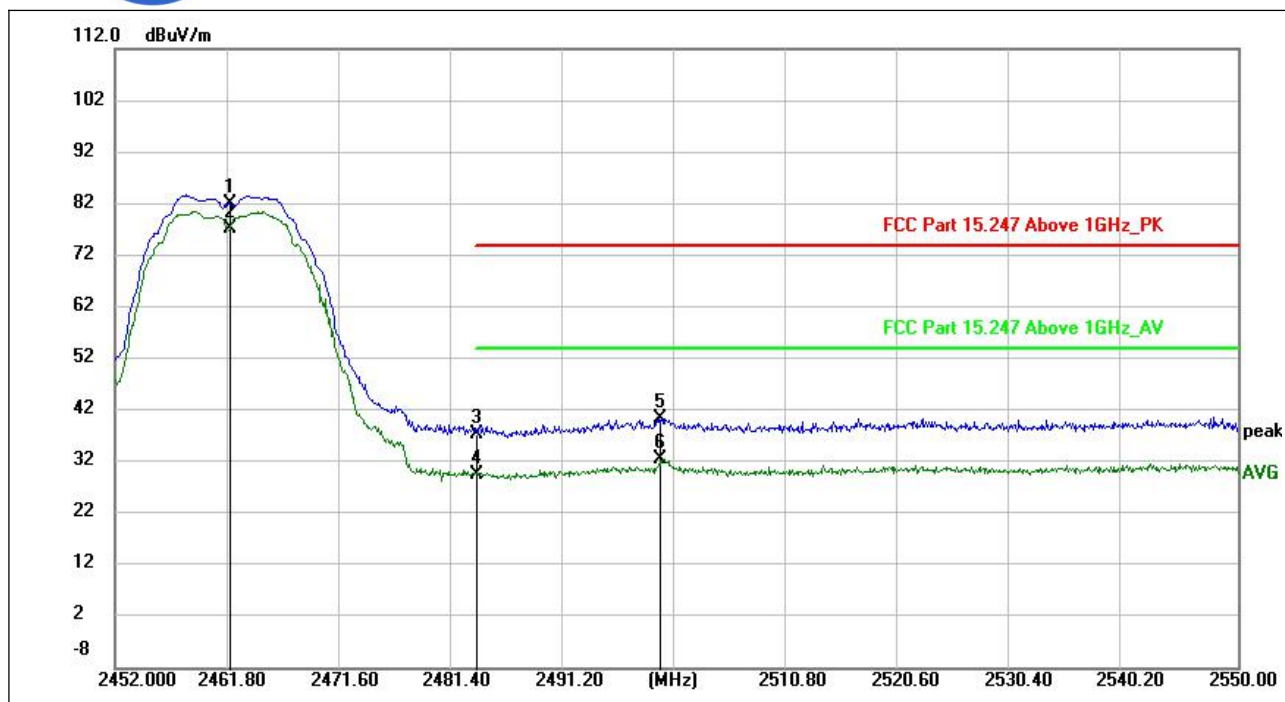
(802.11b _2412MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB/m)
2362.341	50.27	---	74.00	23.73	V	7.49
2362.559	---	40.30	54.00	13.70	V	7.50
2400.000	53.31	---	74.00	20.69	V	8.70
2400.000	---	46.20	54.00	7.80	V	8.70
2412.000	93.68	---	---	---	V	8.64
2412.000	---	88.53	---	---	V	8.64



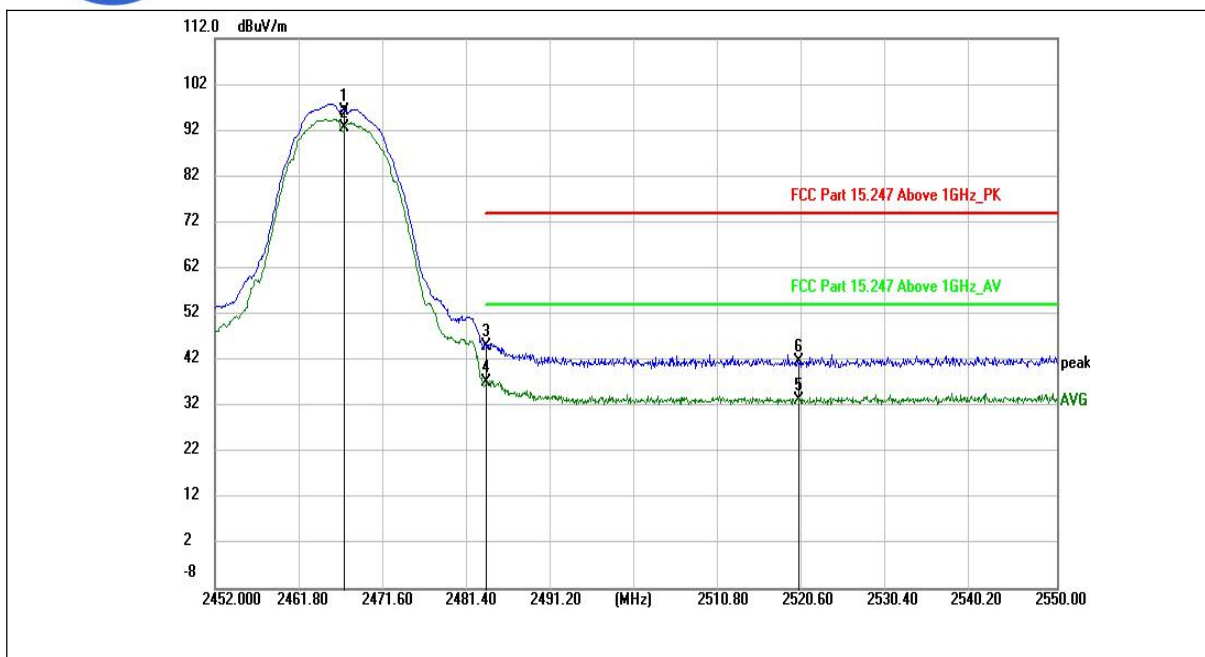
(802.11b_2462MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	82.24	---	---	---	H	7.88
2462.000	---	76.91	---	---	H	7.88
2483.500	39.72	---	74.00	34.28	H	8.36
2483.500	---	34.42	54.00	19.58	H	8.36
2505.180	40.38	---	74.00	13.62	H	8.31
2505.224	---	46.48	54.00	27.52	H	8.31



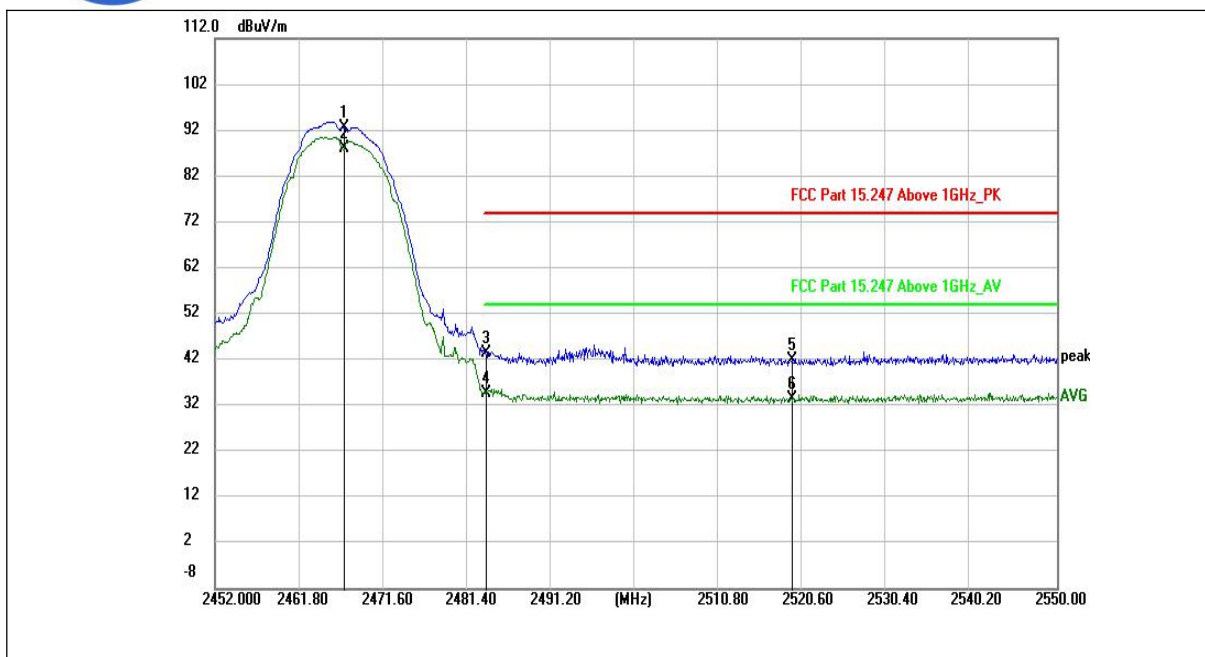
(802.11b _2462MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	81.91	---	---	---	V	7.88
2462.000	---	77.30	---	---	V	7.88
2483.500	37.28	---	74.00	36.72	V	8.36
2483.500	---	29.52	54.00	24.48	V	8.36
2499.500	40.49	---	74.00	33.51	V	8.34
2499.500	---	32.57	54.00	21.43	V	8.34



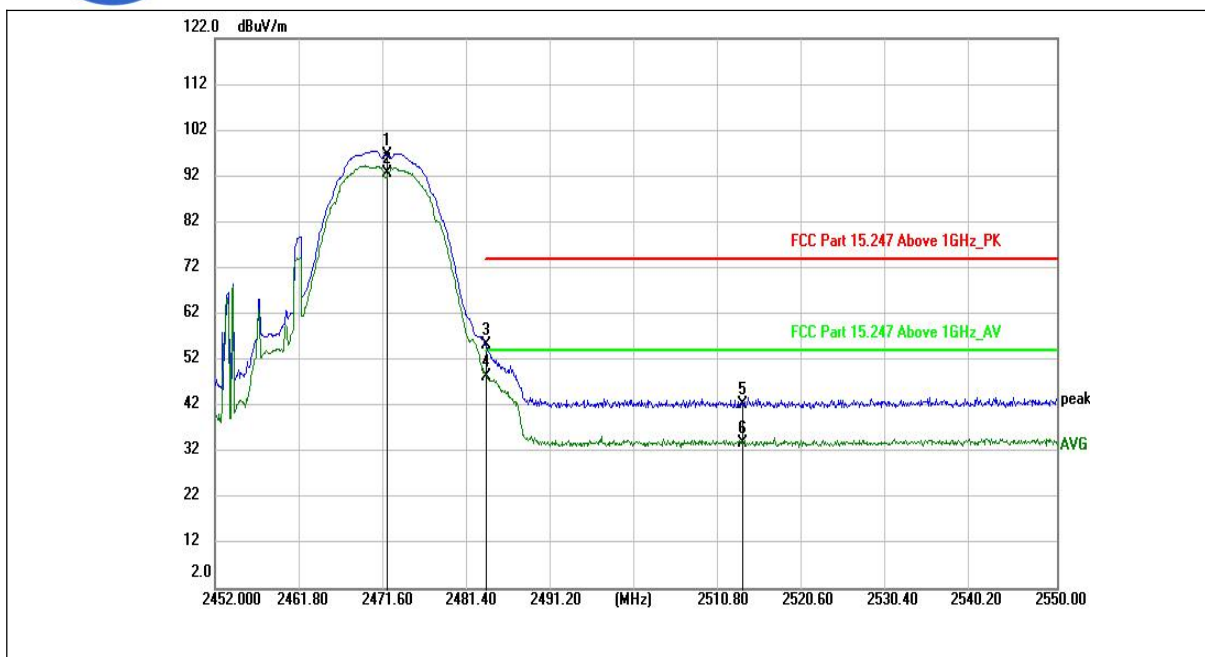
(802.11b _2467MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2467.000	96.05	---	---	---	H	7.88
2467.000	---	92.56	---	---	H	7.88
2483.500	45.03	---	74.00	28.97	H	8.36
2483.500	---	37.13	54.00	16.87	H	8.36
2519.840	---	33.11	54.00	20.89	H	8.31
2519.934	41.55	---	74.00	32.45	H	8.31



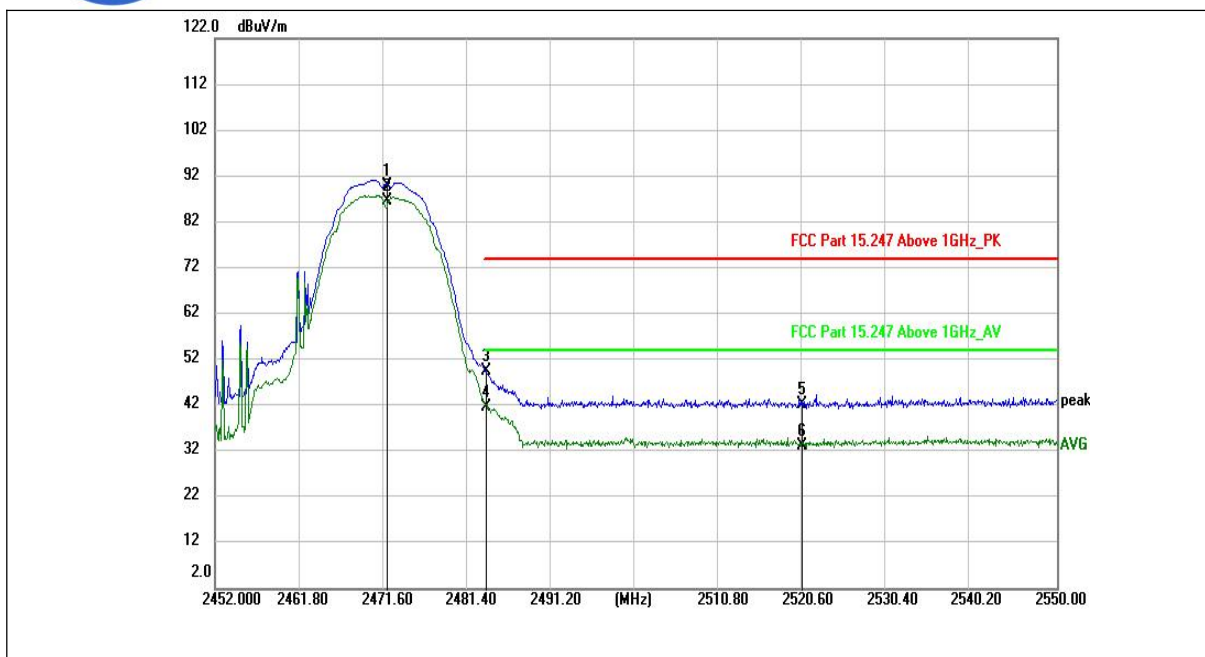
(802.11b_2467MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2467.000	92.48	---	---	---	V	7.88
2467.000	---	88.08	---	---	V	7.88
2483.500	43.37	---	74.00	30.63	V	8.36
2483.500	---	34.58	54.00	19.42	V	8.36
2519.061	41.83	---	74.00	32.17	V	8.34
2519.091	---	33.48	54.00	20.52	V	8.34



(802.11b _2472MHz, Antenna Horizontal)

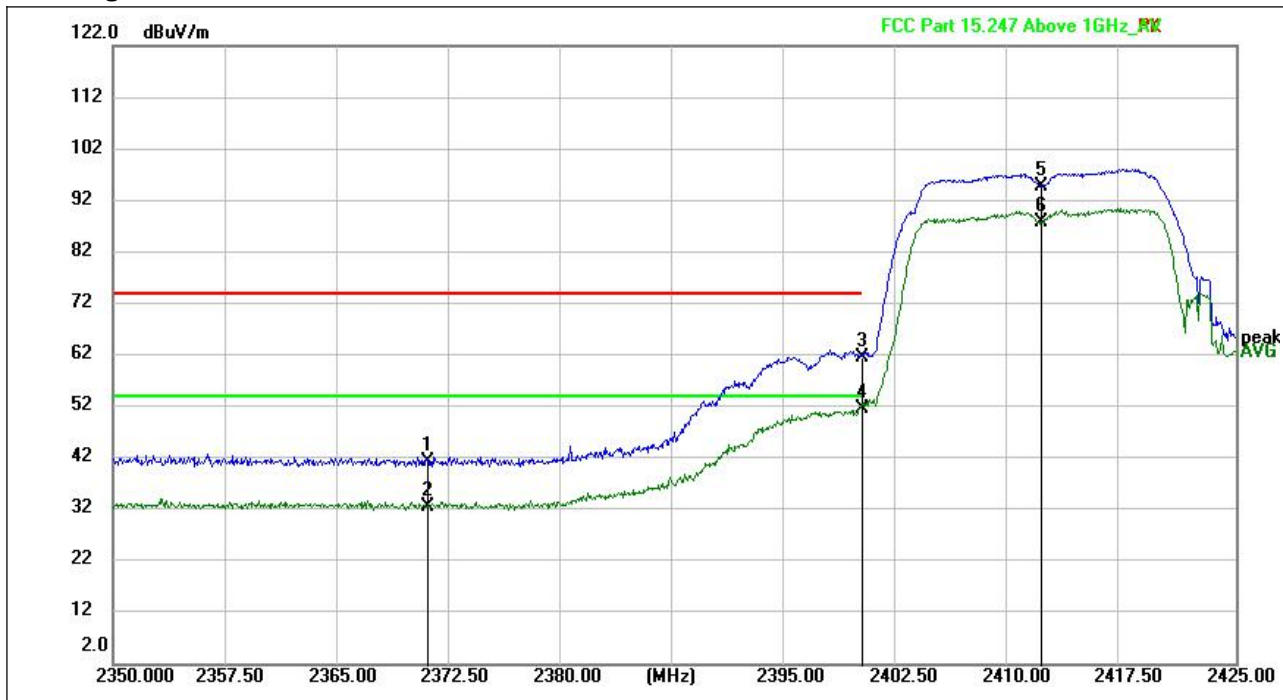
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2472.000	96.61	---	---	---	H	7.88
2472.000	---	92.75	---	---	H	7.88
2483.500	55.28	---	74.00	18.72	H	8.36
2483.500	---	48.41	54.00	5.59	H	8.36
2513.353	42.34	---	74.00	31.66	H	8.31
2513.353	---	33.71	54.00	20.29	H	8.31



(802.11b_2472MHz, Antenna Vertical)

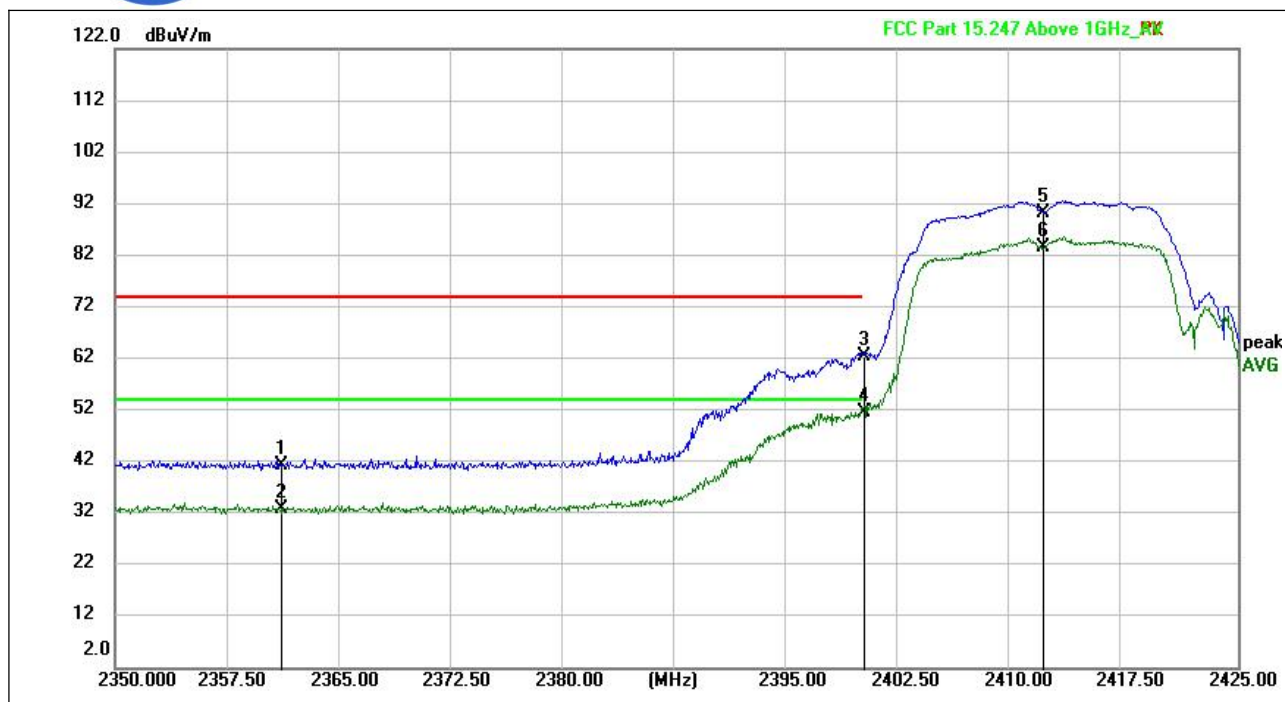
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2472.000	89.80	---	---	---	V	7.88
2472.000	---	86.62	---	---	V	7.88
2483.500	49.41	---	74.00	24.59	V	8.36
2483.500	---	41.53	54.00	12.47	V	8.36
2520.321	42.15	---	74.00	31.85	V	8.34
2520.321	---	33.18	54.00	20.82	V	8.34

802.11g Test mode



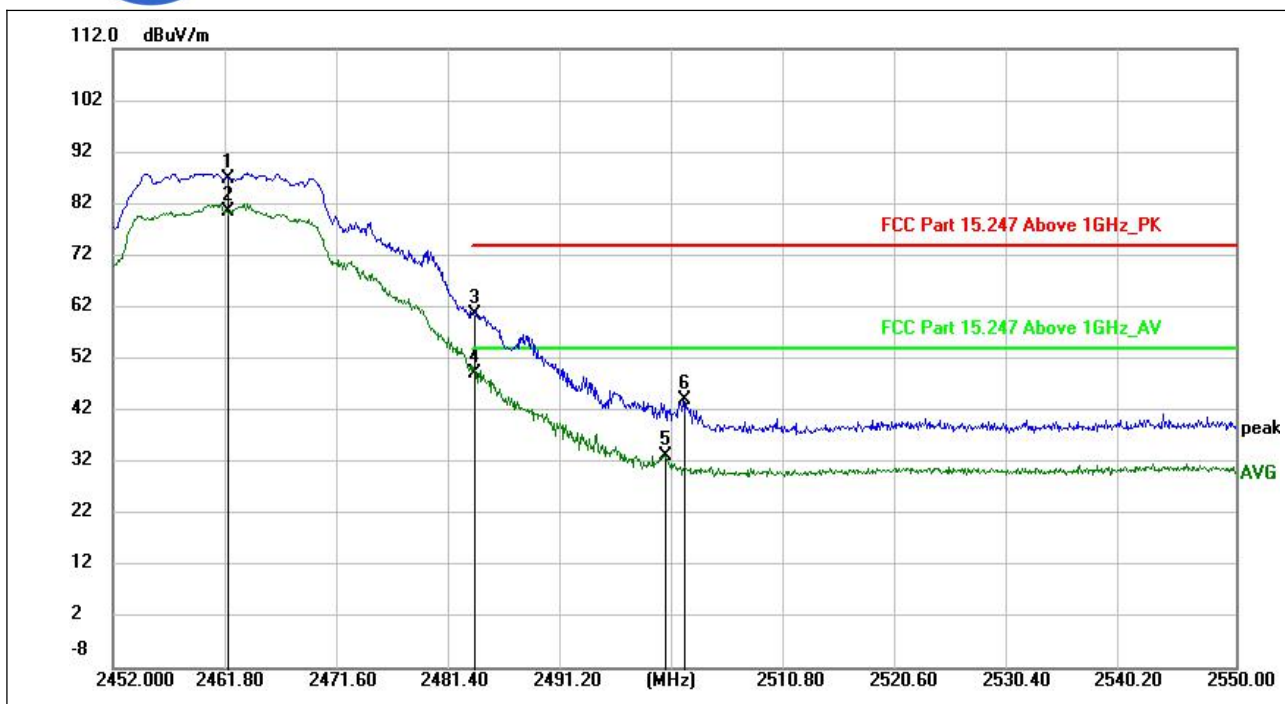
(802.11g _2412MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2371.037	41.32	---	74.00	32.68	H	7.33
2371.037	---	32.66	54.00	21.34	H	7.33
2400.000	61.66	---	74.00	12.34	H	8.70
2400.000	---	51.51	54.00	2.49	H	8.70
2412.000	94.70	---	---	---	H	8.64
2412.000	---	87.73	---	---	H	8.64



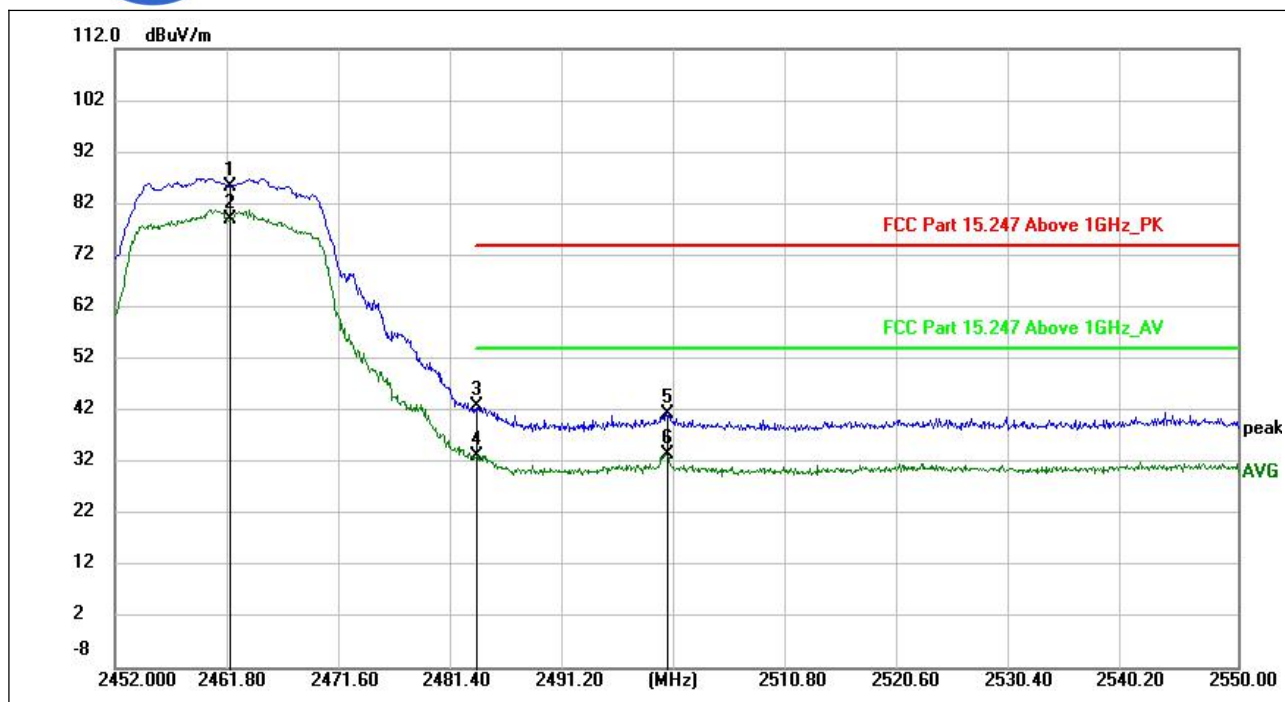
(802.11g _2412MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2361.104	41.25	---	74.00	32.75	V	7.52
2361.104	---	32.77	54.00	21.23	V	7.52
2400.000	62.38	---	74.00	11.62	V	8.70
2400.000	---	51.50	54.00	2.50	V	8.70
2412.000	90.20	---	---	---	V	8.64
2412.000	---	83.50	---	---	V	8.64



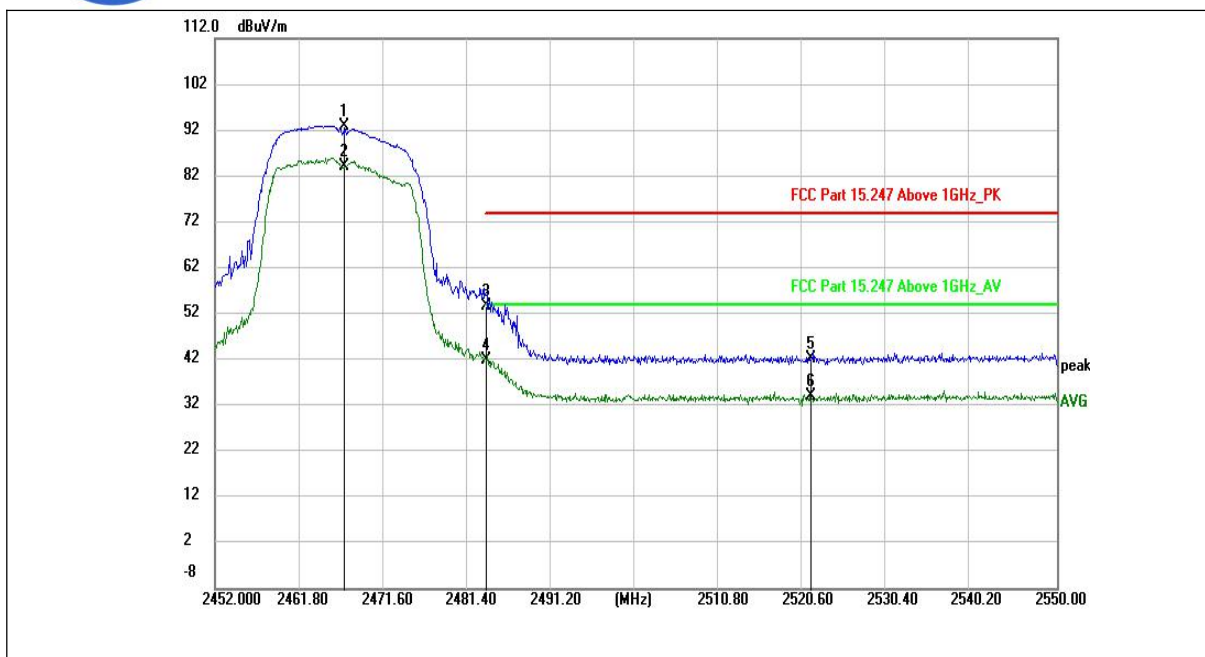
(802.11g _2462MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	86.93	---	---	---	H	7.88
2462.000	---	80.37	---	---	H	7.88
2483.500	60.52	---	74.00	13.48	H	8.36
2483.500	---	49.03	54.00	4.97	H	8.36
2500.142	---	33.22	54.00	20.78	H	8.33
2501.799	43.99	---	74.00	30.01	H	8.33



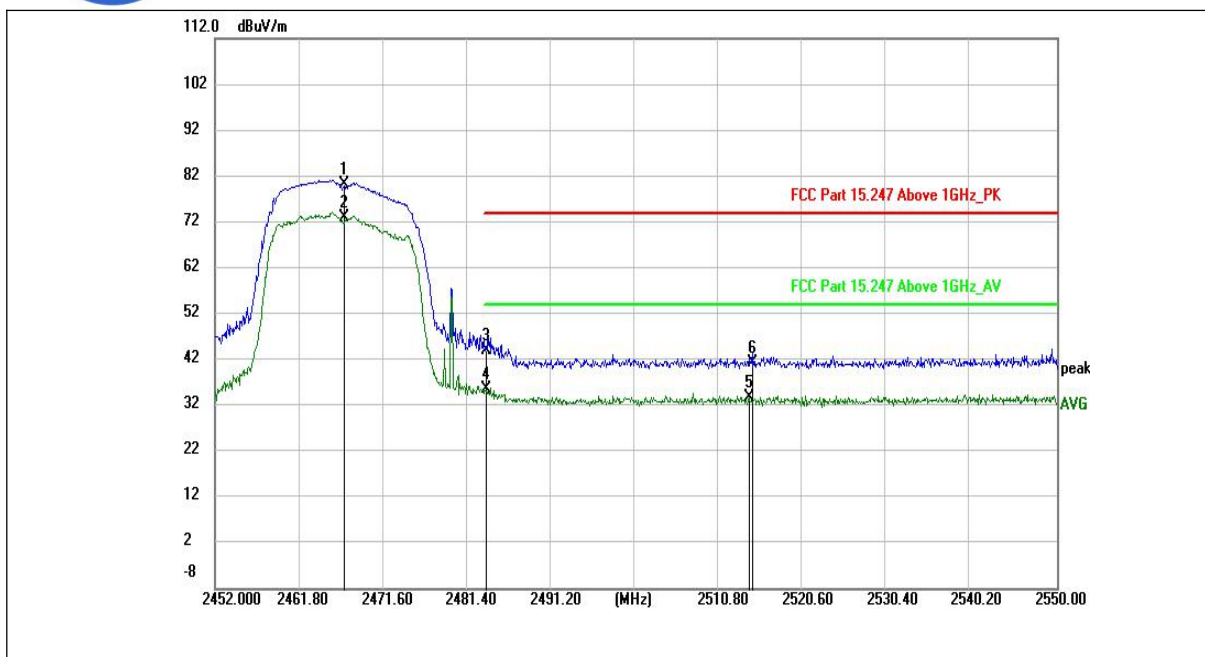
(802.11g _2462MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	85.34	---	---	---	V	7.88
2462.000	---	79.02	---	---	V	7.88
2483.500	42.69	---	74.00	31.31	V	8.36
2483.500	---	33.29	54.00	20.71	V	8.36
2500.167	41.27	---	74.00	32.73	V	8.33
2500.167	---	33.58	54.00	20.42	V	8.33



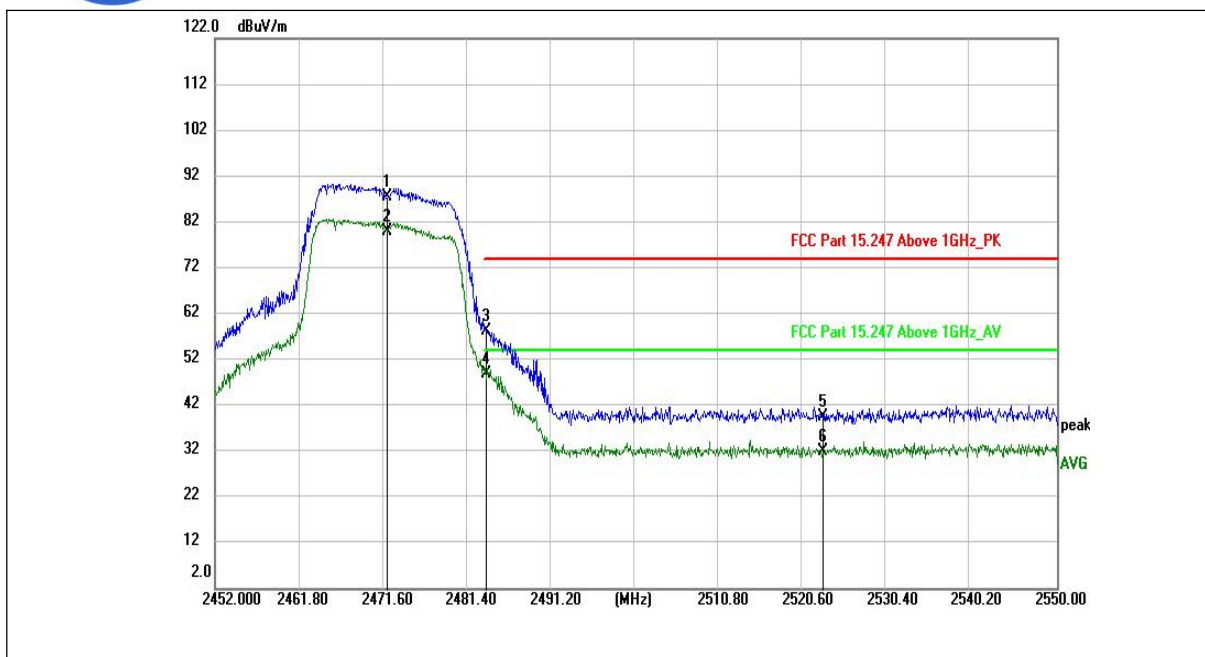
(802.11g _2467MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2467.000	92.74	---	---	---	H	7.88
2467.000	---	84.24	---	---	H	7.88
2483.500	53.73	---	74.00	20.27	H	8.36
2483.500	---	41.76	54.00	12.24	H	8.36
2521.301	42.22	---	74.00	31.78	H	8.31
2521.301	---	33.92	54.00	20.08	H	8.31



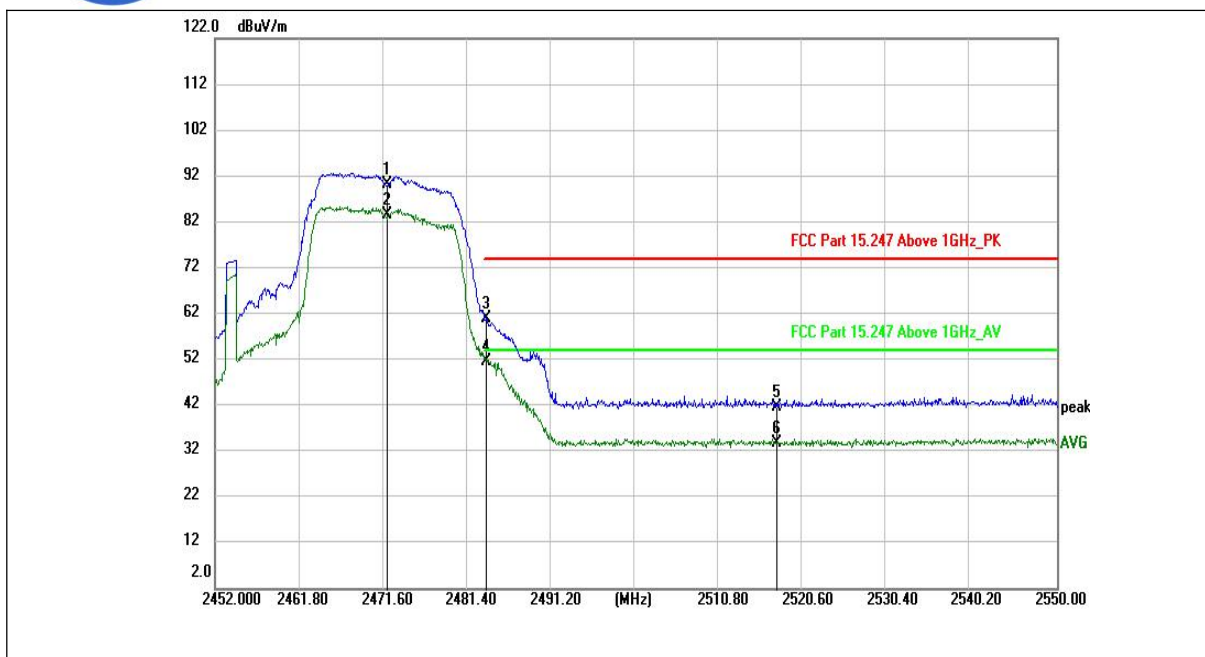
(802.11g _2467MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2467.000	80.28	---	---	---	V	7.88
2467.000	---	73.02	---	---	V	7.88
2483.500	44.05	---	74.00	29.95	V	8.36
2483.500	---	35.52	54.00	18.48	V	8.36
2514.166	---	33.67	54.00	20.33	V	8.34
2514.446	41.36	---	74.00	32.64	V	8.34



(802.11g _2472MHz, Antenna Horizontal)

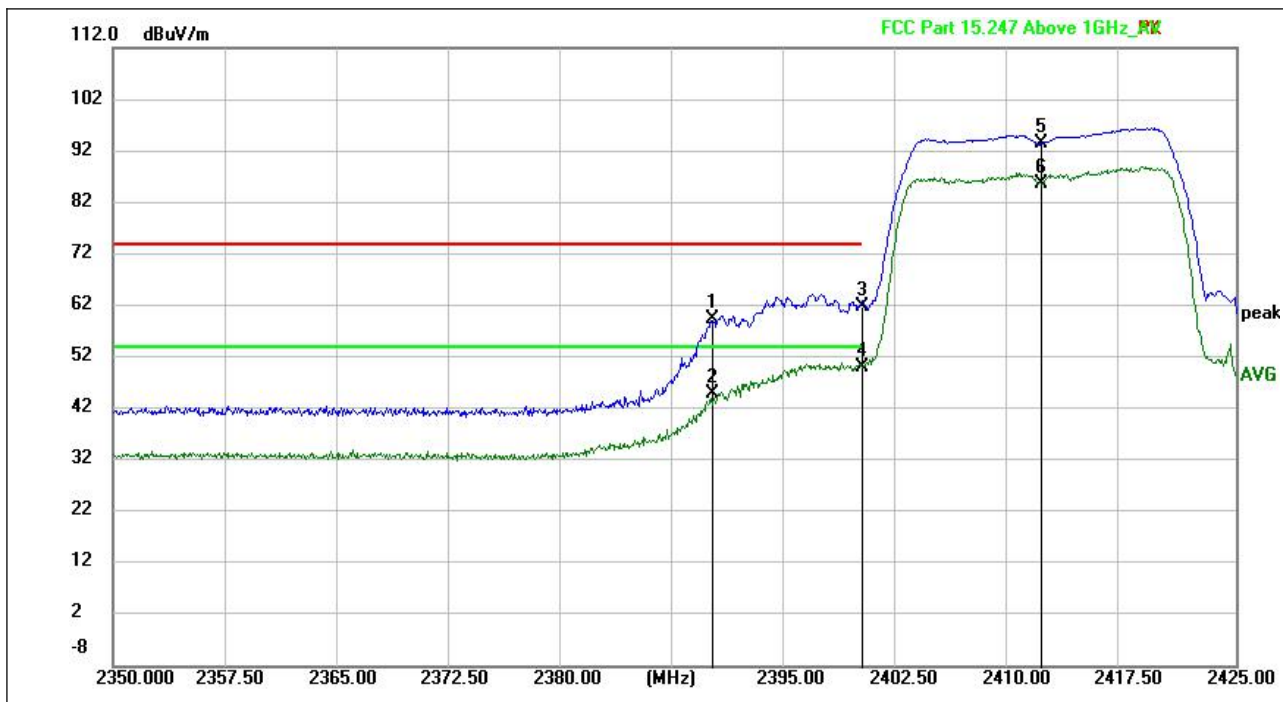
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2472.000	87.54	---	---	---	H	7.88
2472.000	---	80.04	---	---	H	7.88
2483.500	58.38	---	74.00	15.62	H	8.36
2483.500	---	48.91	54.00	5.09	H	8.36
2522.746	39.44	---	74.00	34.56	H	8.31
2522.746	---	32.12	54.00	21.88	H	8.31



(802.11g_2472MHz, Antenna Vertical)

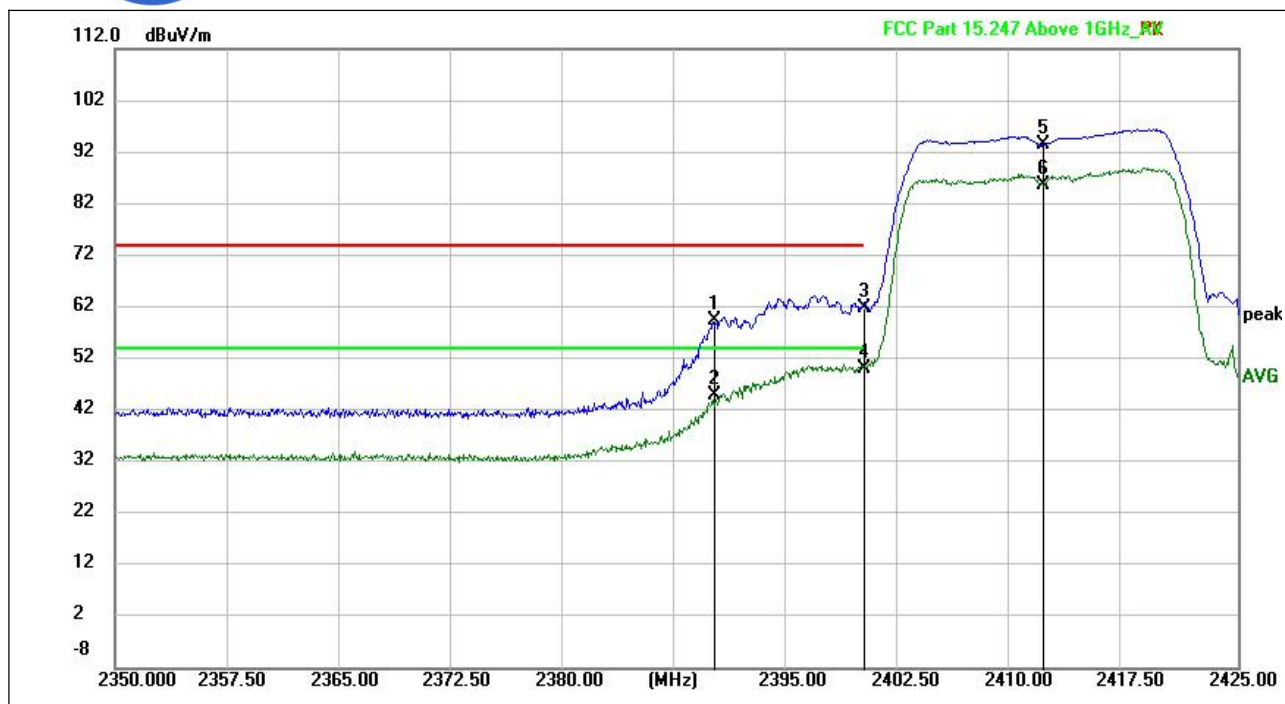
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2472.000	90.29	---	---	---	V	7.88
2472.000	---	83.59	---	---	V	7.88
2483.500	60.99	---	74.00	13.01	V	8.36
2483.500	---	51.50	54.00	2.50	V	8.36
2517.302	41.76	---	74.00	32.24	V	8.34
2517.302	---	33.87	54.00	20.13	V	8.34

802.11n-20MHz Test mode



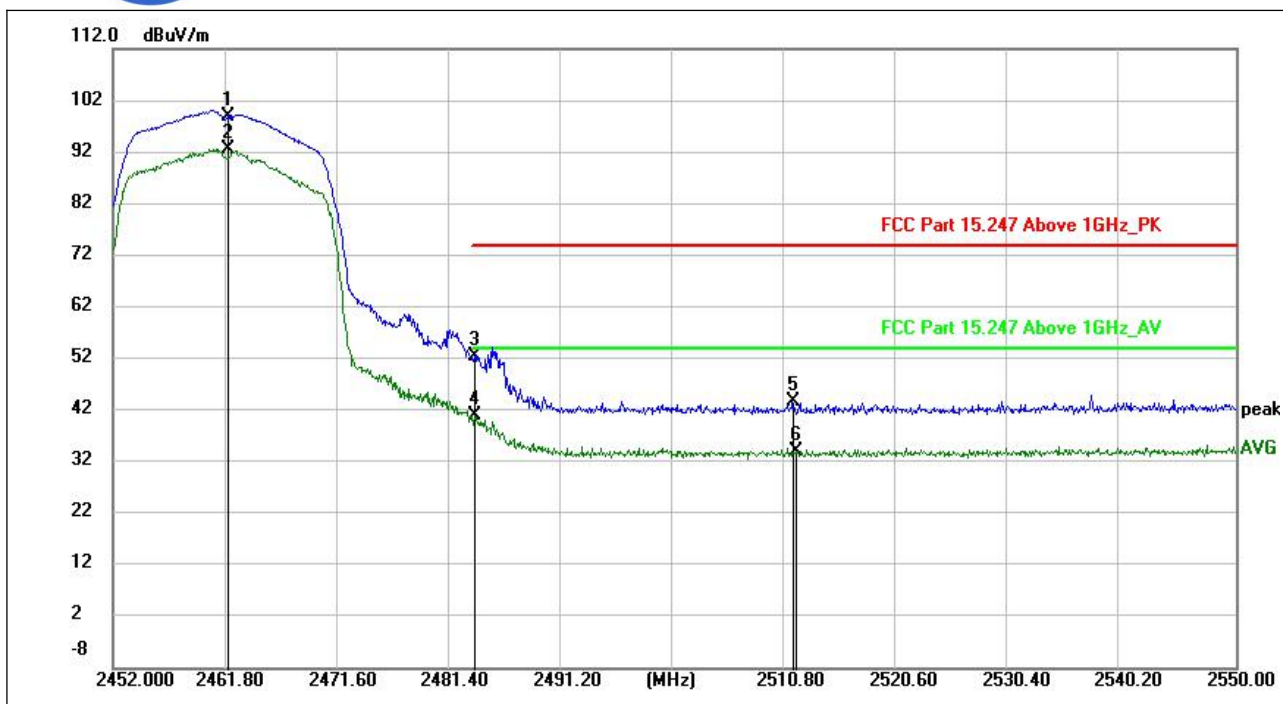
(802.11n_20M_2412MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2390.000	59.42	---	74.00	14.58	H	7.99
2390.000	---	44.78	54.00	9.22	H	7.99
2400.000	61.69	---	74.00	12.31	H	8.70
2400.000	---	49.99	54.00	4.01	H	8.70
2412.000	93.54	---	---	---	H	8.64
2412.000	---	85.68	---	---	H	8.64



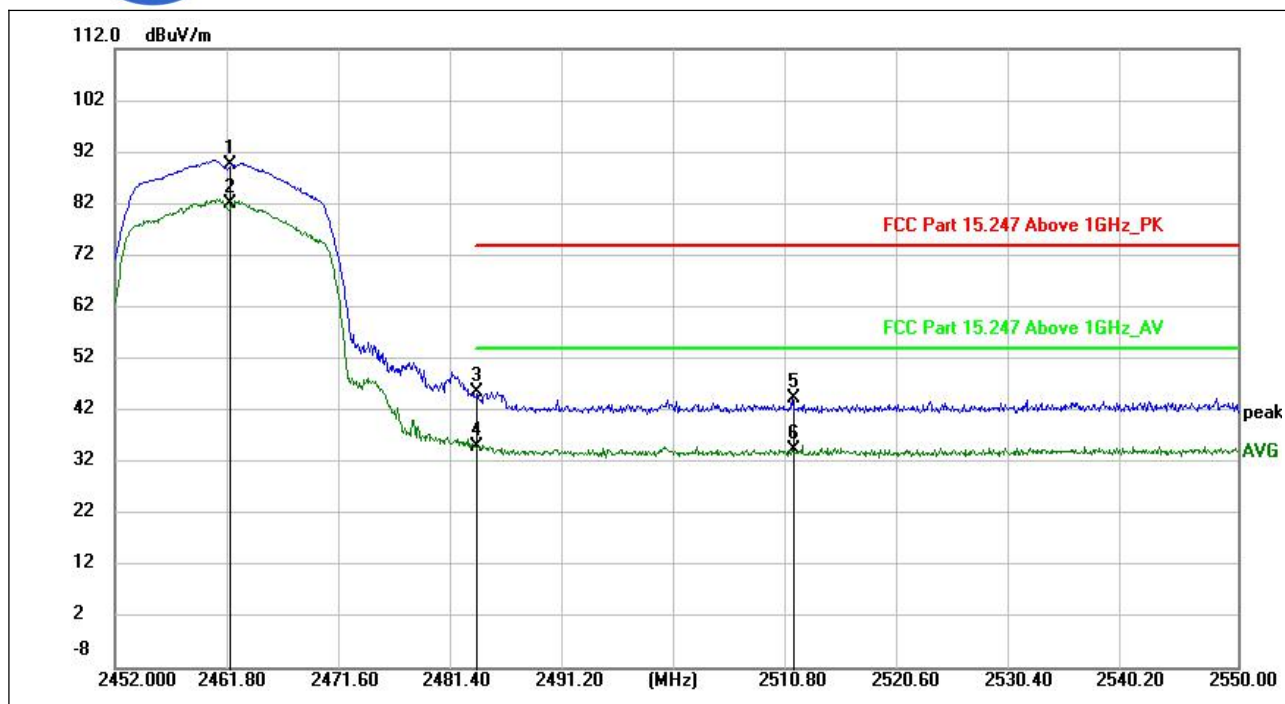
(802.11n_20M_2412MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB/m)
2390.000	59.42	---	74.00	14.58	V	7.99
2390.000	---	44.78	54.00	9.22	V	7.99
2400.000	61.69	---	74.00	12.31	V	8.70
2400.000	---	49.99	54.00	4.01	V	8.70
2412.000	93.54	---	---	---	V	8.64
2412.000	---	85.68	---	---	V	8.64



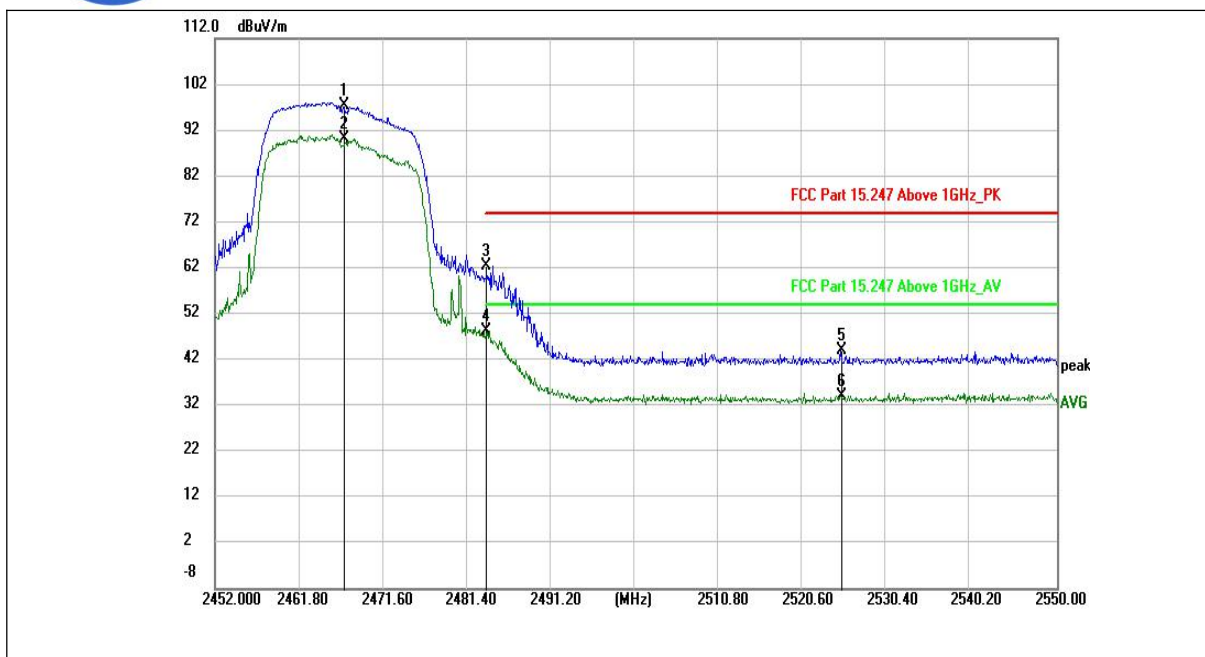
(802.11n_20M_2462MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	98.77	---	---	---	H	7.88
2462.000	---	92.45	---	---	H	7.88
2483.500	52.57	---	74.00	21.43	H	8.36
2483.500	---	41.10	54.00	12.90	H	8.36
2511.383	43.74	---	74.00	30.26	H	8.27
2511.648	---	34.21	54.00	19.79	H	8.27



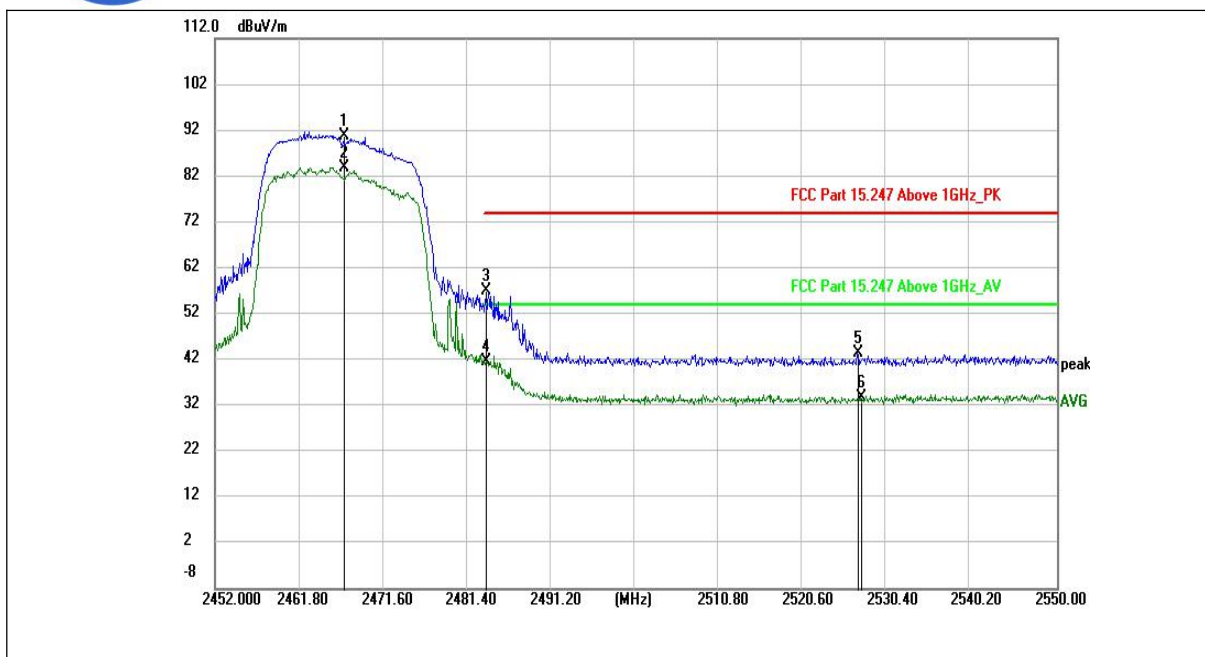
(802.11n_20M_2462MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	89.61	---	---	---	V	7.88
2462.000	---	82.15	---	---	V	7.88
2483.500	45.63	---	74.00	28.37	V	8.36
2483.500	---	34.89	54.00	19.11	V	8.36
2511.128	44.17	---	74.00	29.83	V	8.28
2511.128	---	34.42	54.00	19.58	V	8.28



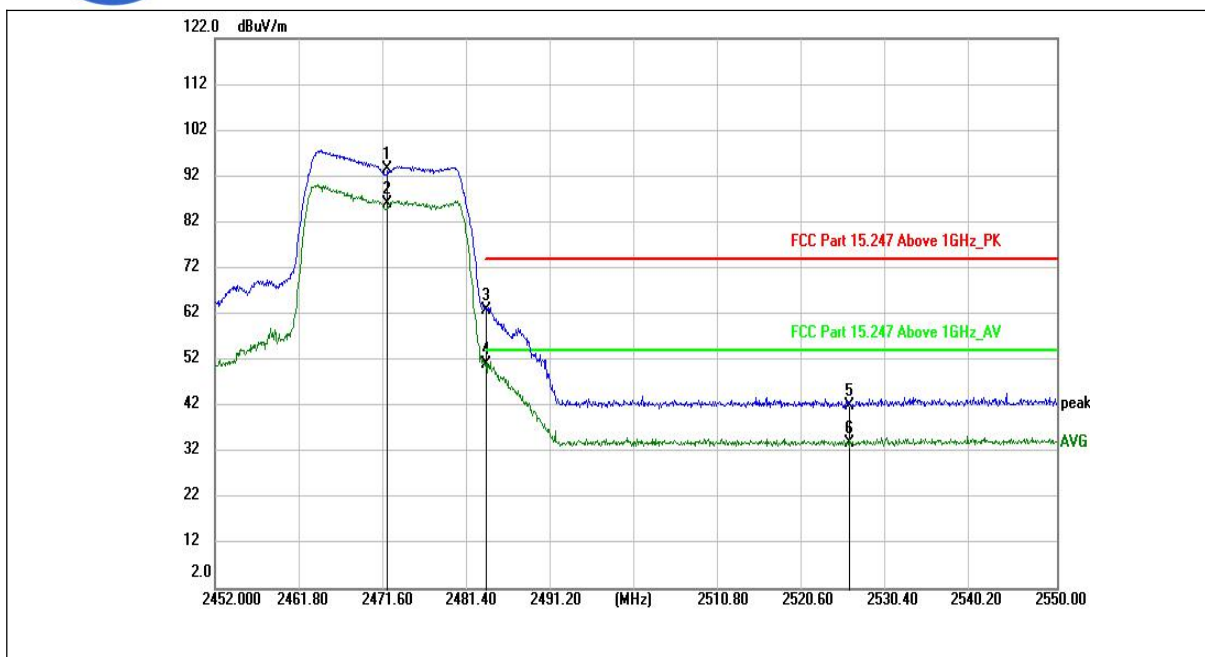
(802.11n_20M_2467MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2467.000	97.37	---	---	---	H	7.88
2467.000	---	90.24	---	---	H	7.88
2483.500	62.41	---	74.00	11.59	H	8.36
2483.500	---	48.25	54.00	5.75	H	8.36
2524.868	43.90	---	74.00	30.10	H	8.31
2524.868	---	34.13	54.00	19.87	H	8.31



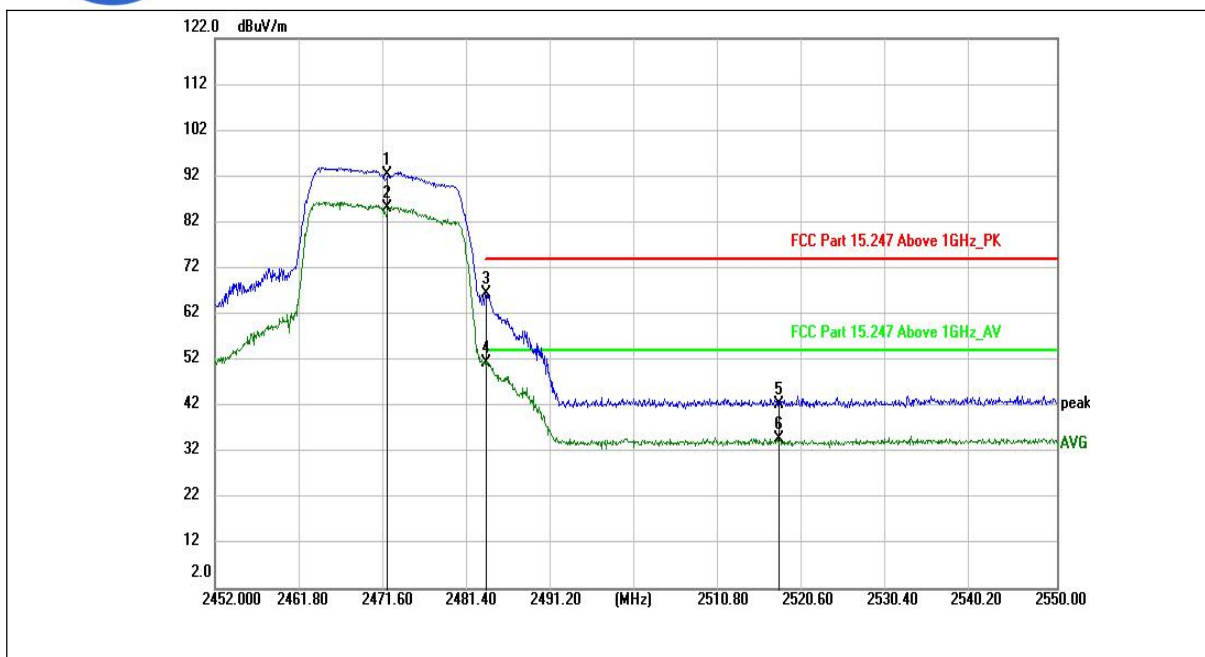
(802.11n_20M _2467MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2467.000	90.88	---	---	---	V	7.88
2467.000	---	83.94	---	---	V	7.88
2483.500	57.09	---	74.00	16.91	V	8.36
2483.500	---	41.74	54.00	12.26	V	8.36
2526.818	43.32	---	74.00	30.68	V	8.34
2527.210	---	33.67	54.00	20.33	V	8.34



(802.11n_20M_2472MHz, Antenna Horizontal)

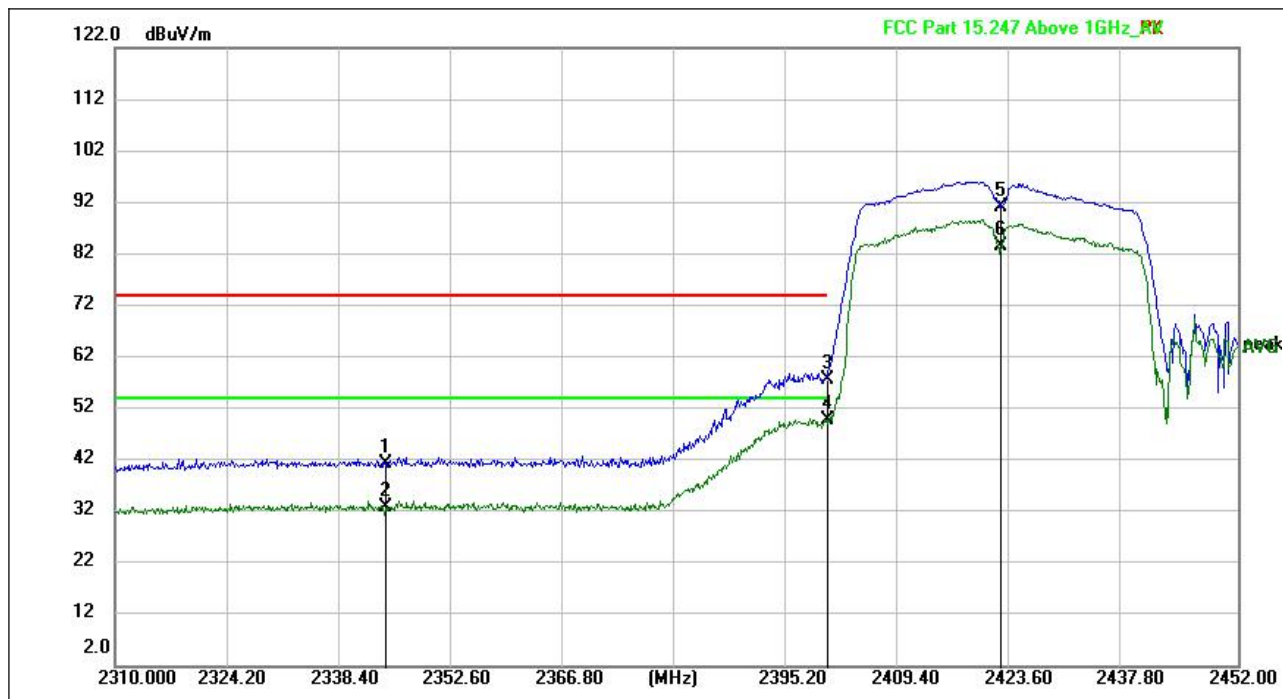
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2472.000	93.45	---	---	---	H	8.03
2472.000	---	86.07	---	---	H	8.03
2483.500	62.83	---	74.00	11.17	H	8.36
2483.500	---	51.04	54.00	2.96	H	8.36
2525.730	41.87	---	74.00	32.13	H	8.34
2525.730	---	33.70	54.00	20.30	H	8.34



(802.11n_20M_2472MHz, Antenna Vertical)

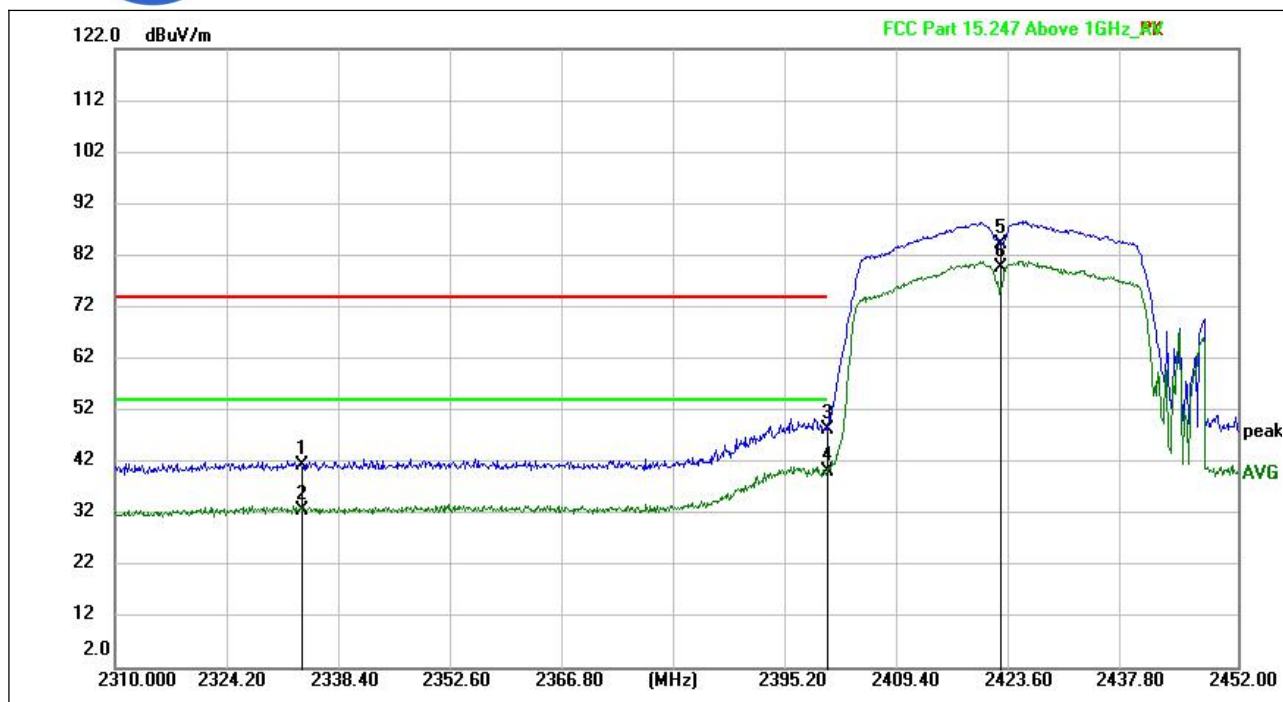
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2472.000	92.16	---	---	---	V	8.03
2472.000	---	85.07	---	---	V	8.03
2483.500	66.39	---	74.00	7.61	V	8.36
2483.500	---	50.90	54.00	3.10	V	8.36
2517.601	42.24	---	74.00	31.76	V	8.24
2517.601	---	34.68	54.00	19.32	V	8.24

802.11n-40MHz Test mode



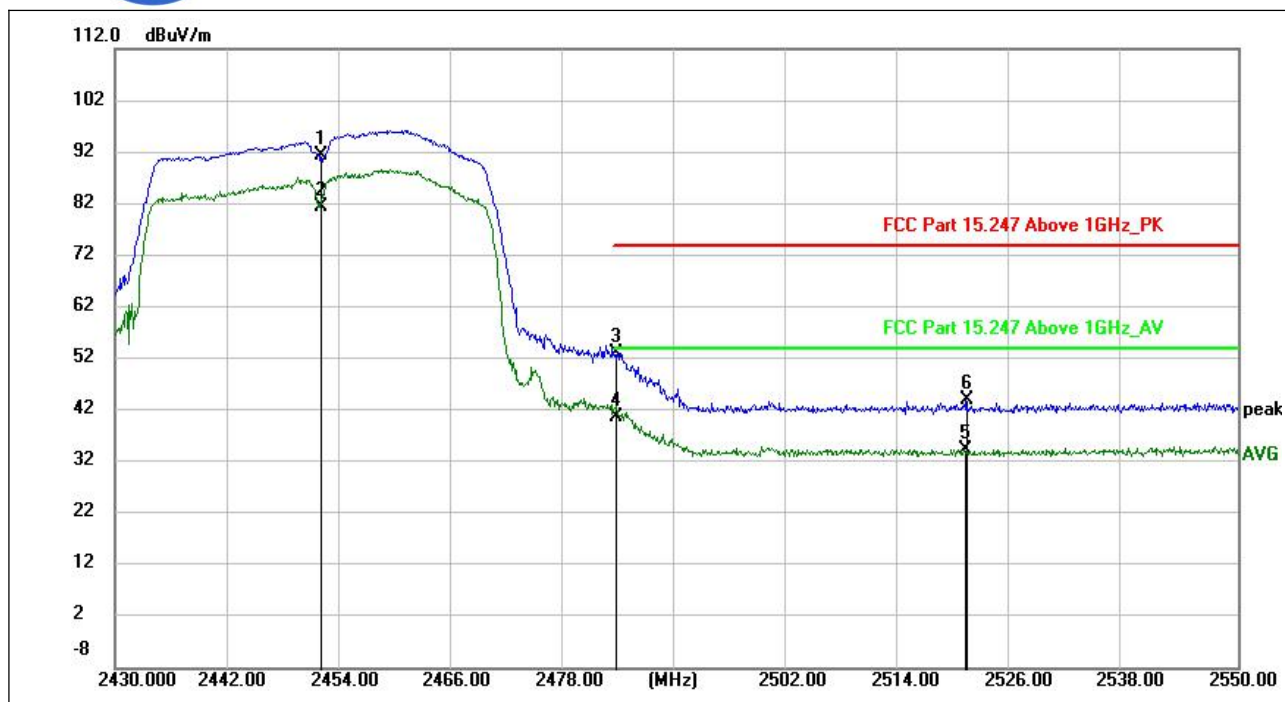
(802.11n_40M _2422MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2344.215	41.20	---	74.00	32.80	H	7.62
2344.215	---	32.93	54.00	21.07	H	7.62
2400.000	57.49	---	74.00	16.51	H	8.70
2400.000	---	49.86	54.00	4.14	H	8.70
2422.000	91.24	---	---	---	H	8.62
2422.000	---	83.59	---	---	H	8.62



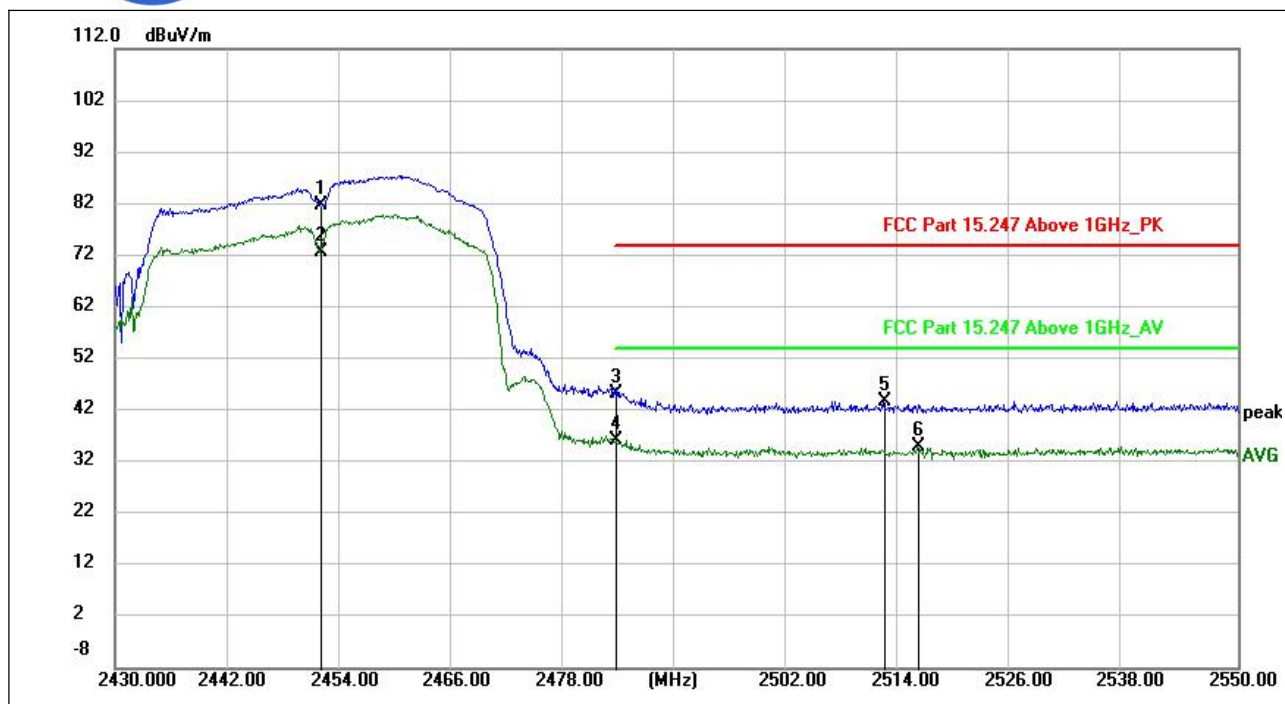
(802.11n_40M_2422MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2333.622	41.20	---	74.00	32.80	V	7.42
2333.622	---	32.61	54.00	21.39	V	7.42
2400.000	48.33	---	74.00	25.67	V	8.70
2400.000	---	40.24	54.00	13.76	V	8.70
2422.000	84.06	---	---	---	V	8.62
2422.000	---	79.52	---	---	V	8.62



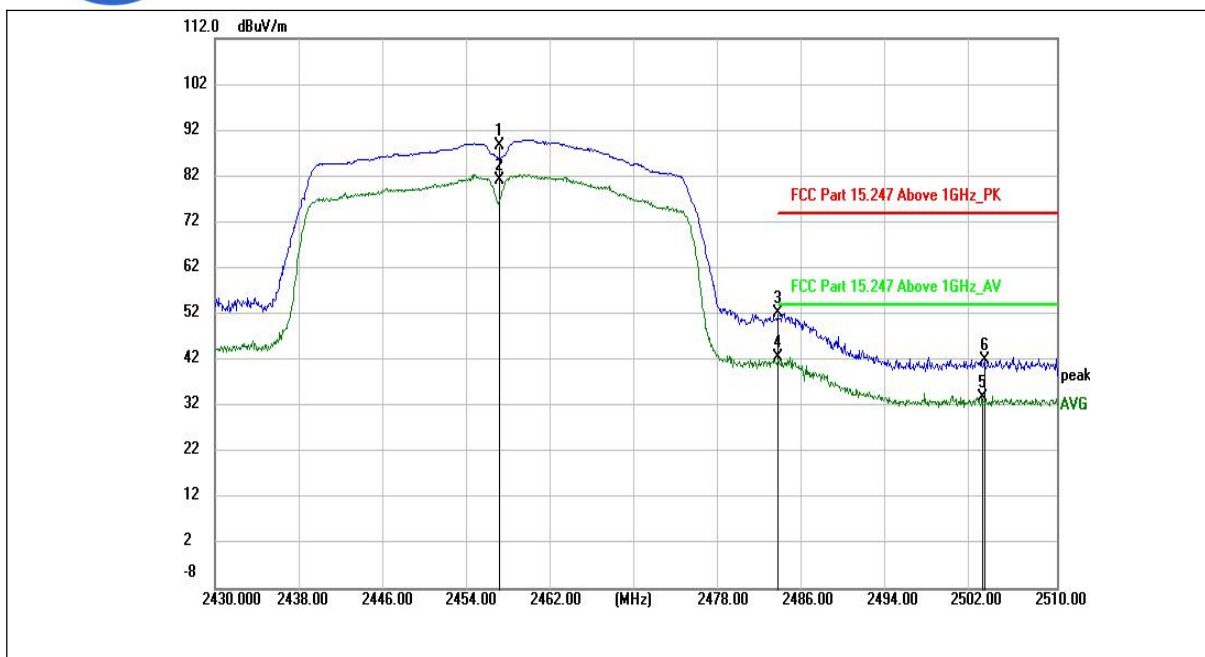
(802.11n_40M _2452MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2452.000	91.22	---	---	---	H	7.74
2452.000	---	81.28	---	---	H	7.74
2483.500	52.93	---	74.00	21.07	H	8.36
2483.500	---	40.83	54.00	13.17	H	8.36
2520.888	---	34.38	54.00	19.62	H	8.26
2521.038	44.13	---	74.00	29.87	H	8.26



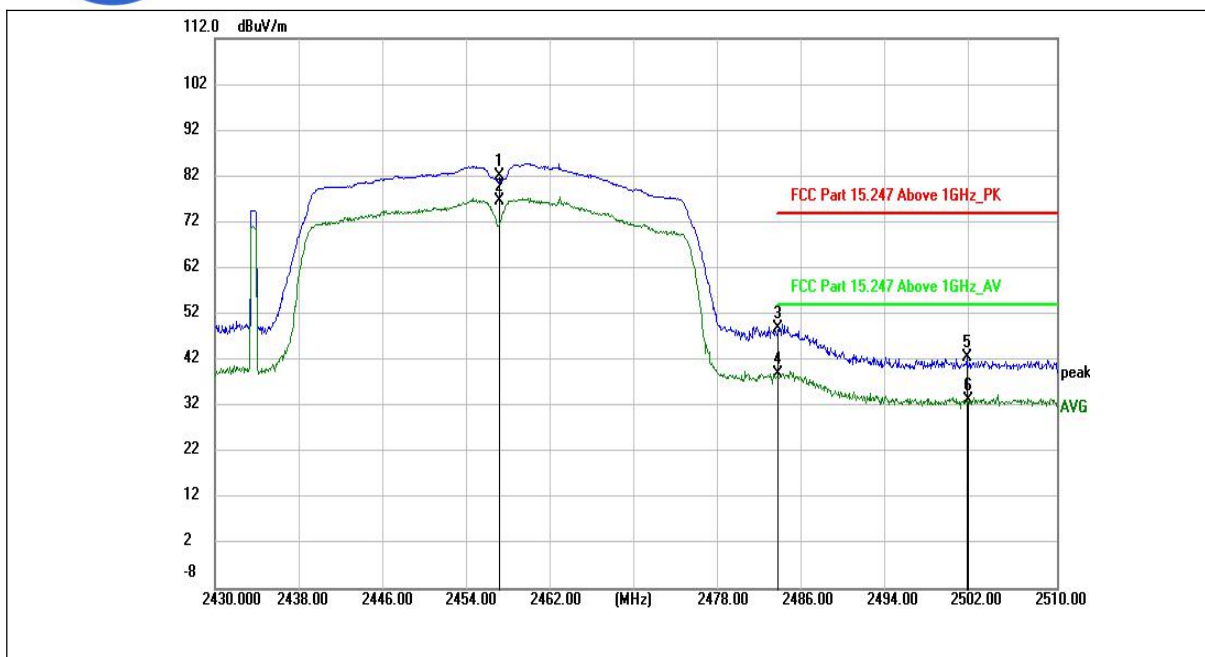
(802.11n_40M_2452MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2452.000	81.77	---	---	---	V	7.74
2452.000	---	72.54	---	---	V	7.74
2483.500	45.26	---	74.00	28.74	V	8.36
2483.500	---	36.06	54.00	17.94	V	8.36
2512.194	43.59	---	74.00	30.41	V	8.28
2515.824	---	34.94	54.00	19.06	V	8.26



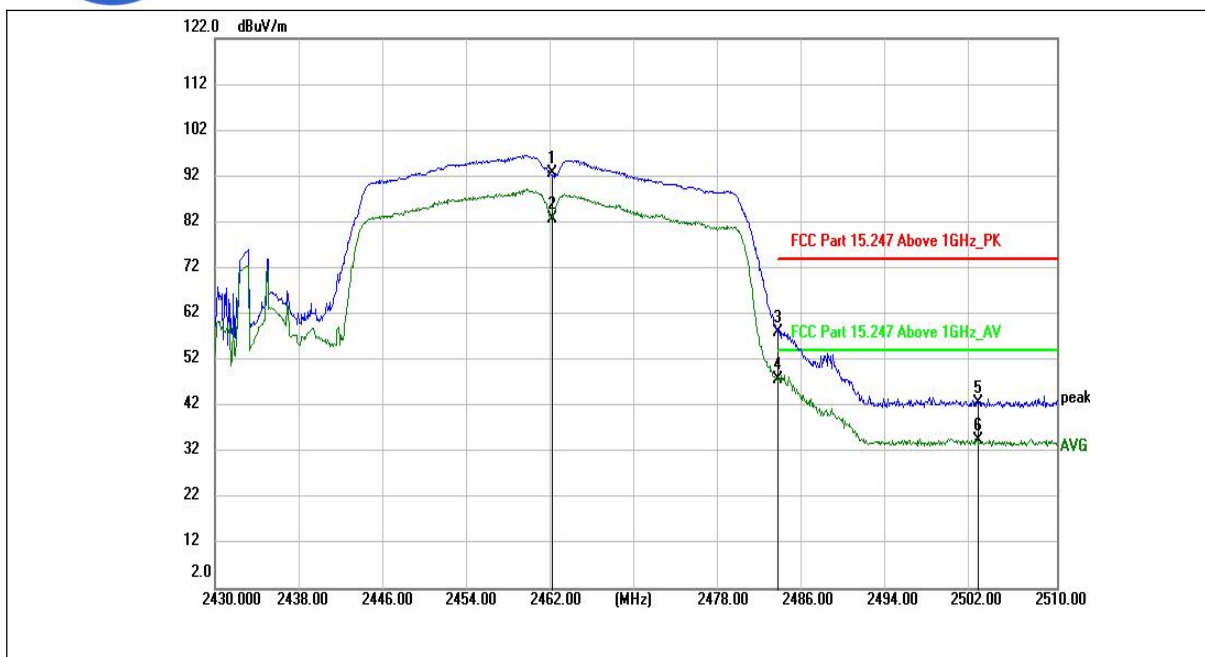
(802.11n_40M_2457MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2457.000	88.55	---	---	---	H	7.82
2457.000	---	81.02	---	---	H	7.82
2483.500	52.26	---	74.00	21.74	H	8.36
2483.500	---	42.37	54.00	11.63	H	8.36
2502.936	---	33.76	54.00	20.24	H	8.32
2503.140	41.78	---	74.00	32.22	H	8.32



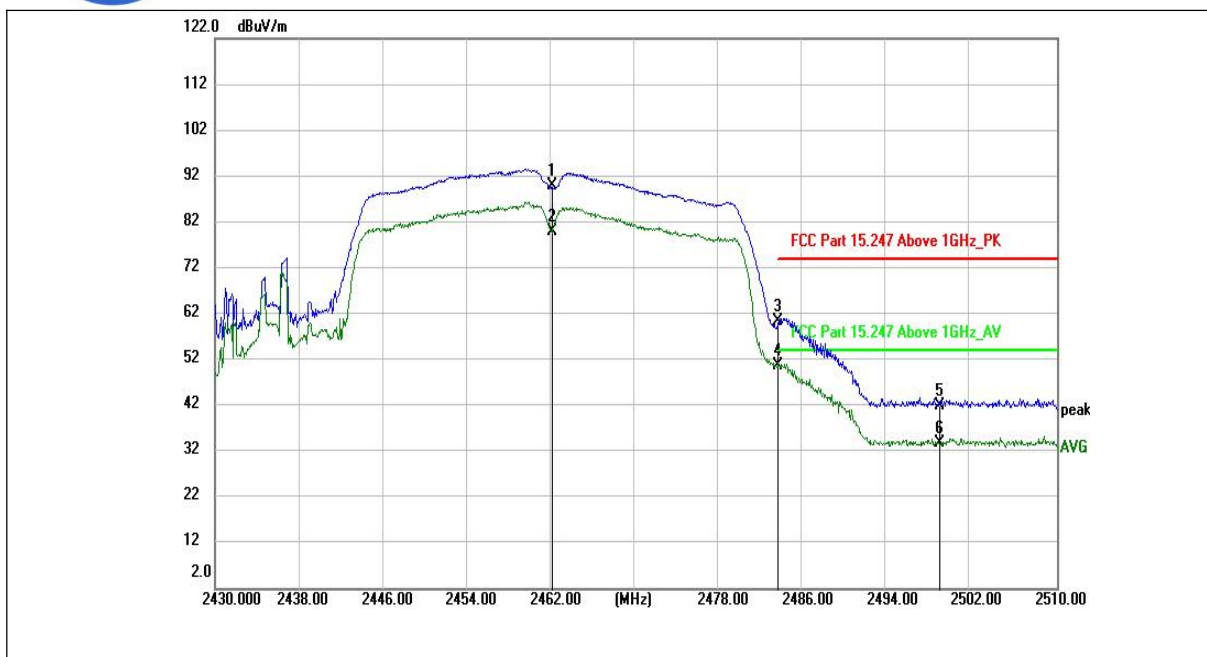
(802.11n_40M _2457MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2457.000	82.02	---	---	---	V	7.82
2457.000	---	76.71	---	---	V	7.82
2483.500	48.69	---	74.00	25.31	V	8.36
2483.500	---	38.82	54.00	15.18	V	8.36
2501.500	42.41	---	74.00	31.59	V	8.32
2501.532	---	33.30	54.00	20.70	V	8.32



(802.11n_40M_2462MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	92.48	---	---	---	H	7.88
2462.000	---	82.75	---	---	H	7.88
2483.500	57.93	---	74.00	16.07	H	8.36
2483.500	---	47.60	54.00	6.40	H	8.36
2502.536	42.66	---	74.00	31.34	H	8.33
2502.536	---	34.33	54.00	19.67	H	8.33



(802.11n_40M _2462MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
2462.000	89.86	---	---	---	V	7.88
2462.000	---	79.95	---	---	V	7.88
2483.500	60.37	---	74.00	13.63	V	8.36
2483.500	---	50.71	54.00	3.29	V	8.36
2498.804	42.08	---	74.00	31.92	V	8.34
2498.804	---	33.68	54.00	20.32	V	8.34

2.7. Conducted Emission

2.7.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

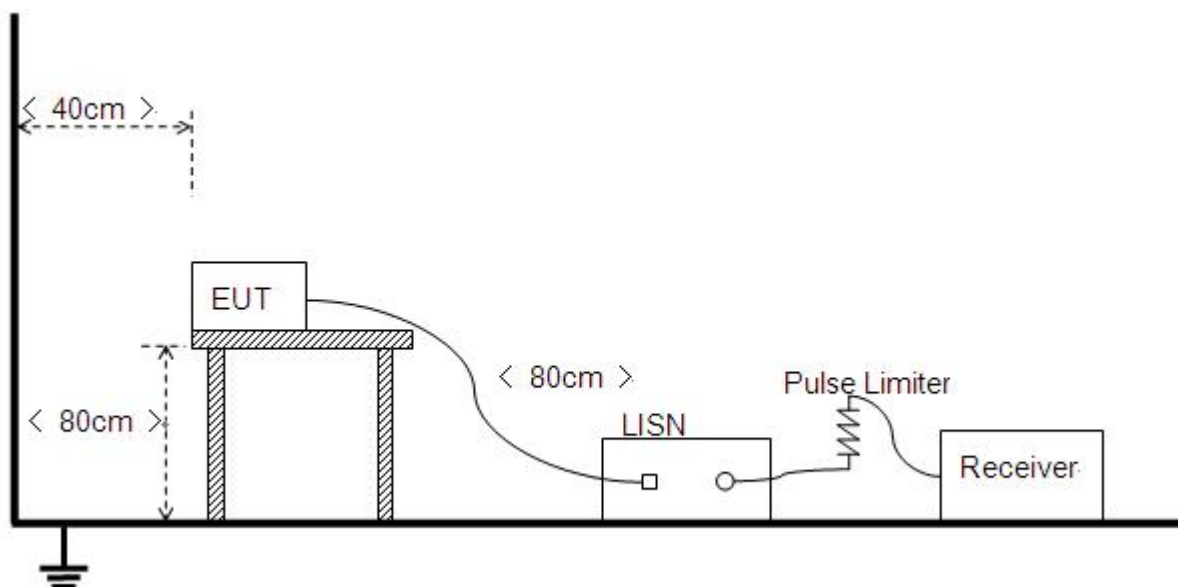
Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

- The lower limit shall apply at the band edges.
- The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

2.7.2. Test Description

A. Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10 2013.



B. Equipments List:

Please refer ANNEX B(4).

2.7.3. Test Result

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

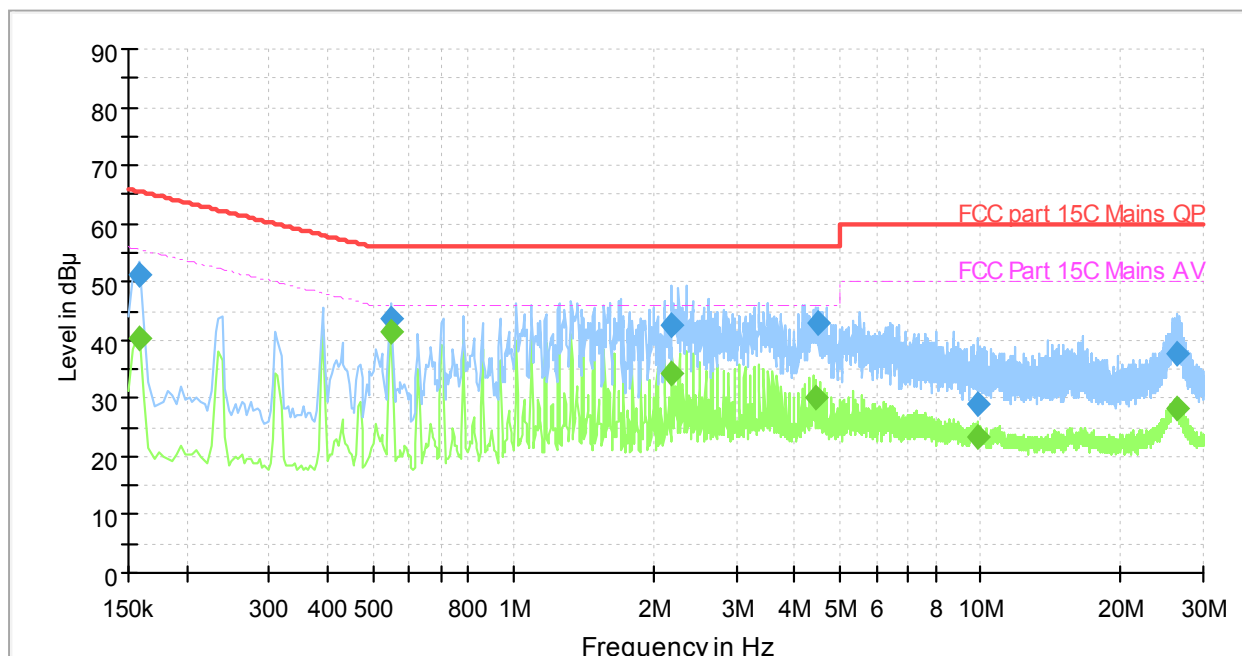
A. Test setup:

The EUT configuration of the emission tests is EUT +Wlan Link.

Note: The test voltage is AC 120V/60Hz.

B. Test Plots:

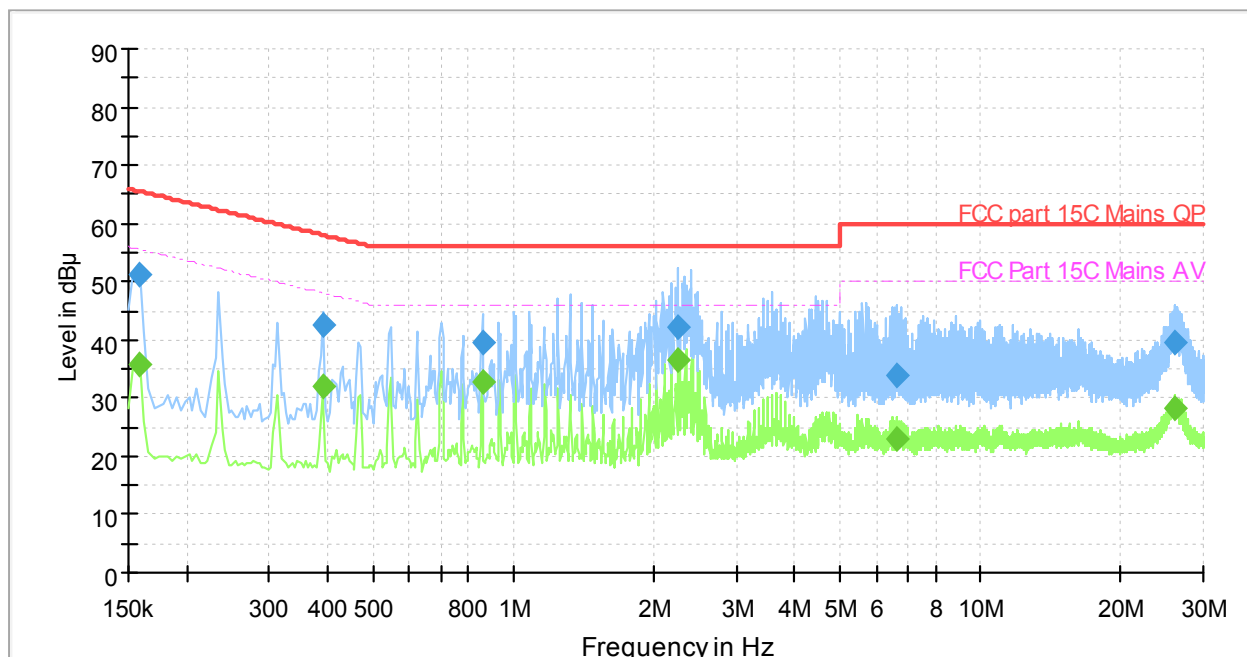
Full Spectrum



(Plot A: L Phase)

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.158000	51.31	---	65.57	14.26	L1	10.2
0.158000	---	40.28	55.57	15.28	L1	10.2
0.546000	43.81	---	56.00	12.19	L1	10.2
0.546000	---	41.45	46.00	4.55	L1	10.2
2.186000	42.49	---	56.00	13.51	L1	10.3
2.190000	---	34.30	46.00	11.70	L1	10.3
4.462000	---	30.30	46.00	15.70	L1	10.4
4.470000	42.81	---	56.00	13.19	L1	10.4
9.910000	28.94	---	60.00	31.06	L1	10.7
9.914000	---	23.27	50.00	26.73	L1	10.7
26.278000	37.48	---	60.00	22.52	L1	10.6
26.326000	---	28.09	50.00	21.91	L1	10.6

Full Spectrum



(Plot A: N Phase)

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.158000	---	35.71	55.57	19.86	N	10.2
0.158000	51.20	---	65.57	14.37	N	10.2
0.390000	---	32.04	48.06	16.03	N	10.2
0.390000	42.73	---	58.06	15.33	N	10.2
0.858000	---	32.80	46.00	13.20	N	10.3
0.858000	39.46	---	56.00	16.54	N	10.3
2.254000	42.15	---	56.00	13.85	N	10.3
2.262000	---	36.39	46.00	9.61	N	10.3
6.614000	33.78	---	60.00	26.22	N	10.5
6.614000	---	22.97	50.00	27.03	N	10.5
26.022000	---	28.26	50.00	21.74	N	10.5
26.190000	39.67	---	60.00	20.33	N	10.5



2.8. Radiated Emission

2.8.1. Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note:

For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

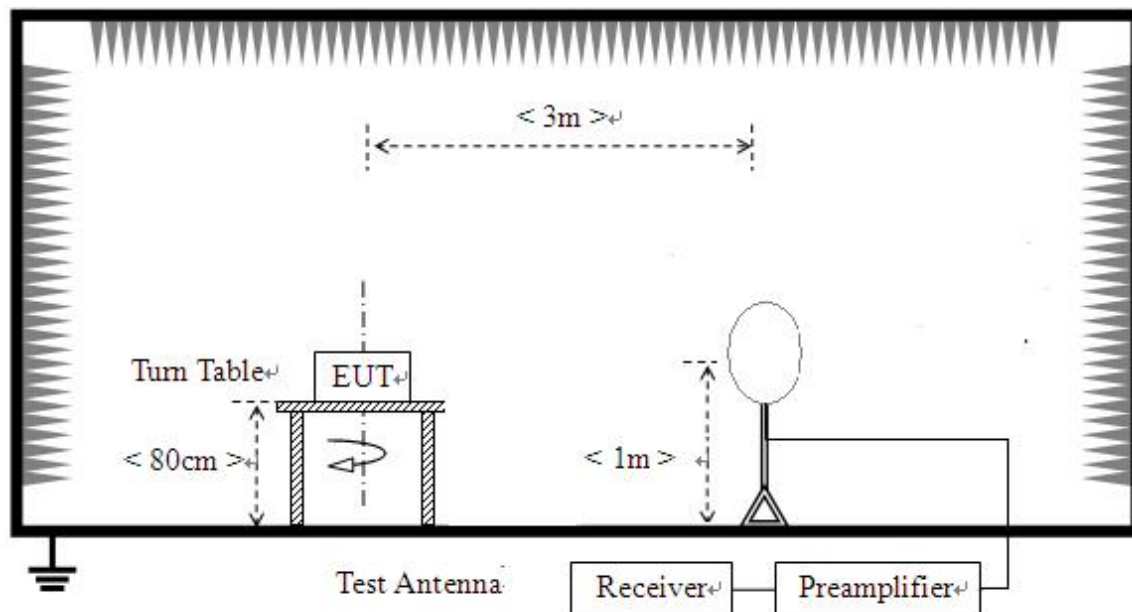
For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK)

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table)

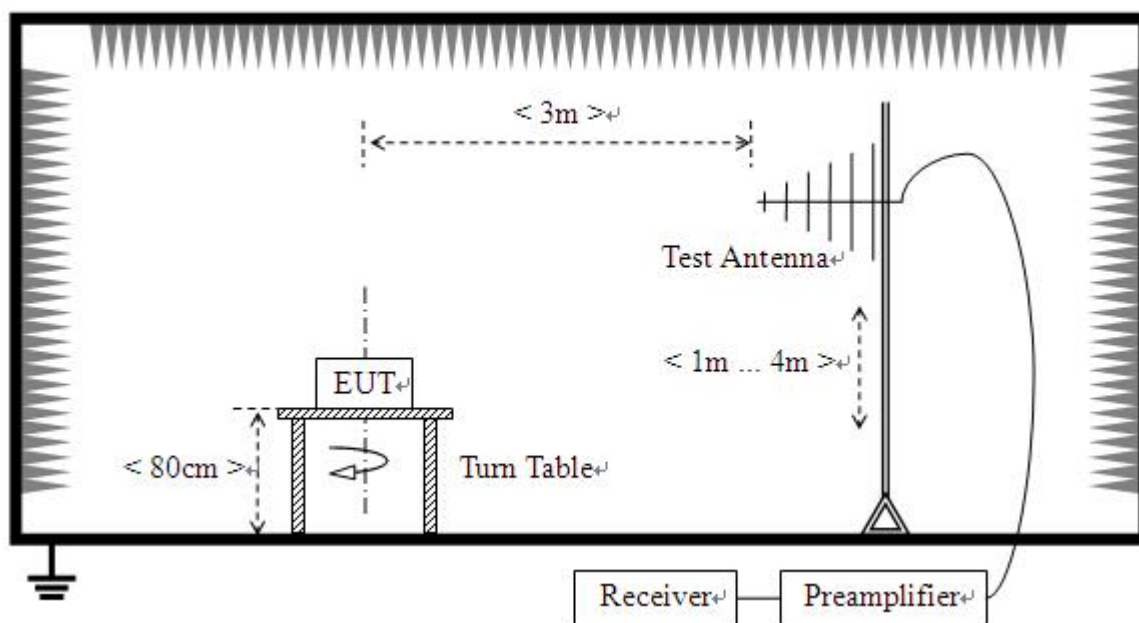
2.8.2. Test Description

A. Test Setup:

- 1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



3) For radiated emissions above 1GHz