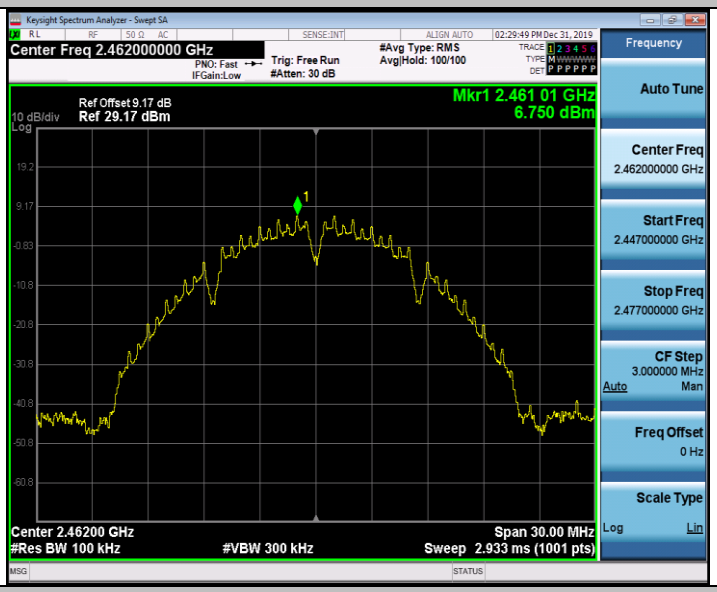
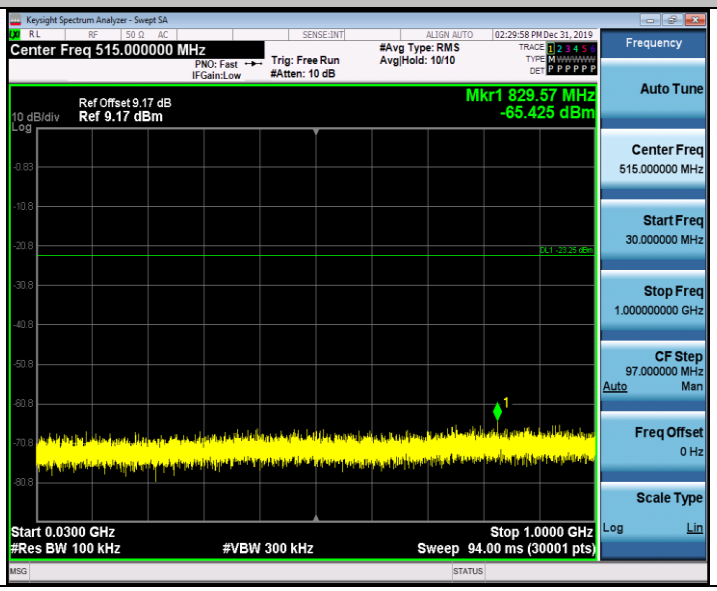
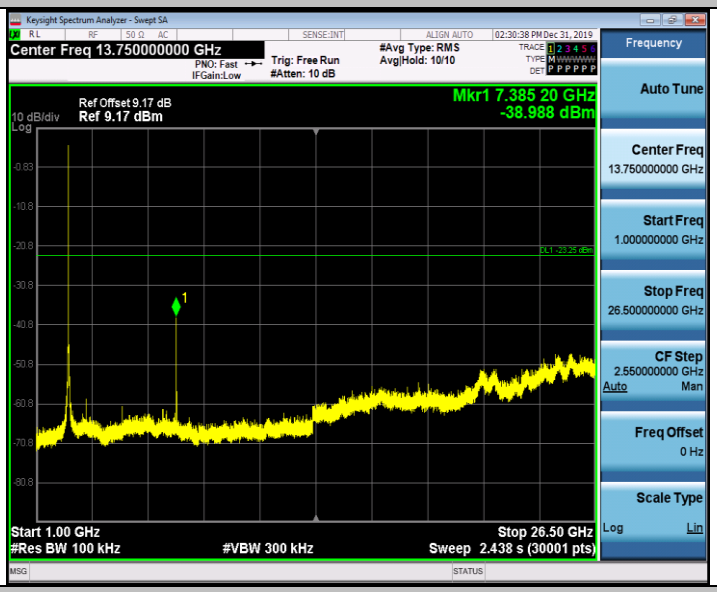
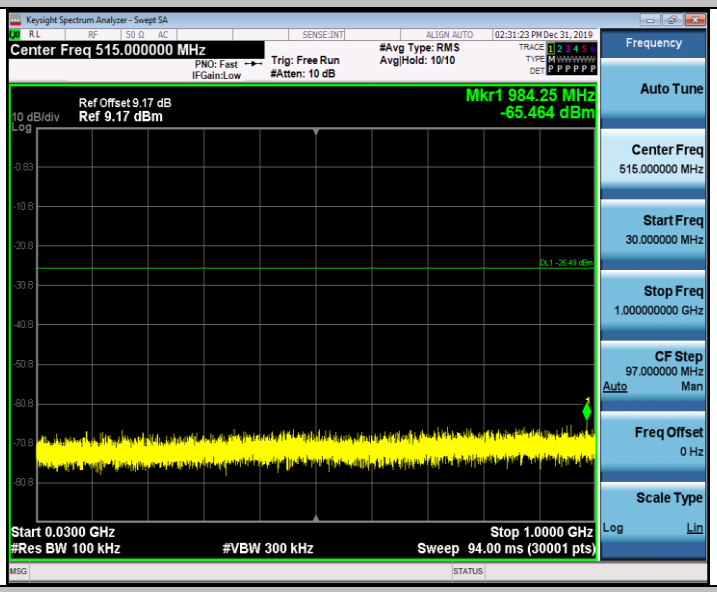
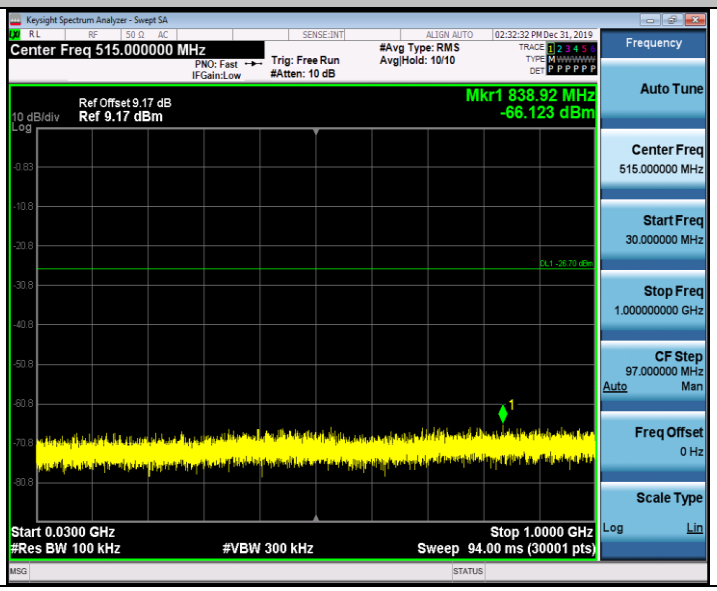
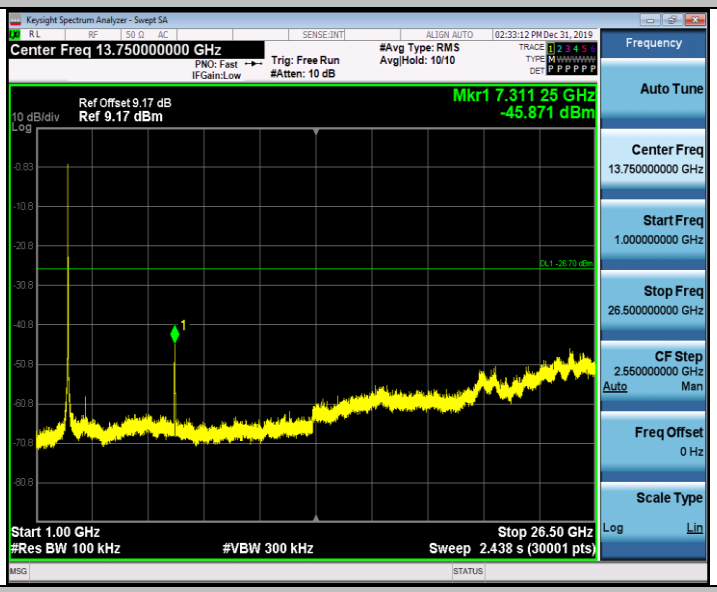
11B_Ant1_2462_0~Reference

11B_Ant1_2462_30~1000


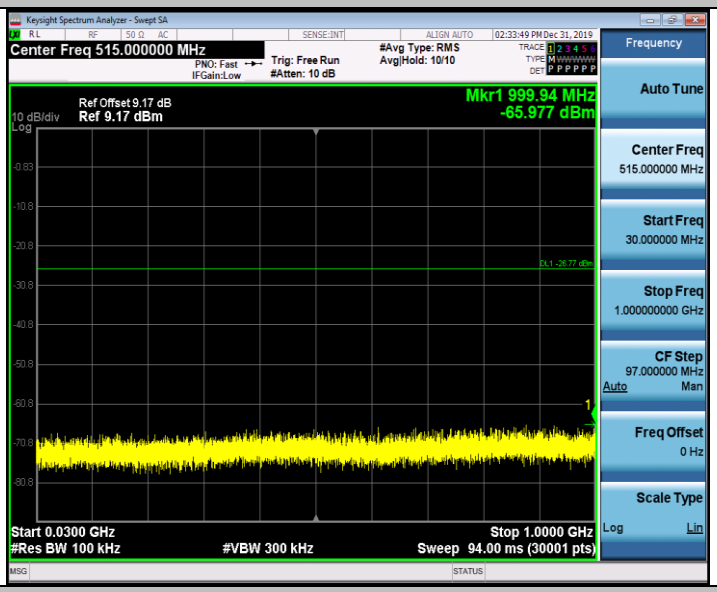
11B_Ant1_2462_1000~26500

11G_Ant1_2412_0~Reference

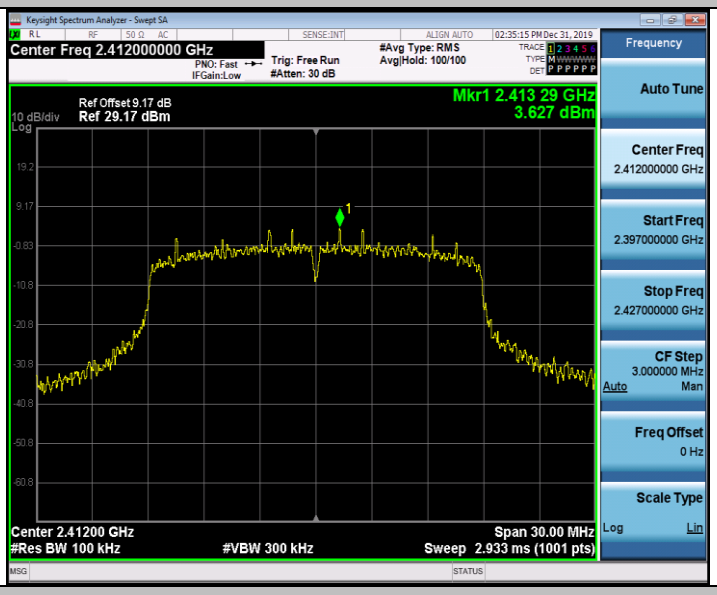
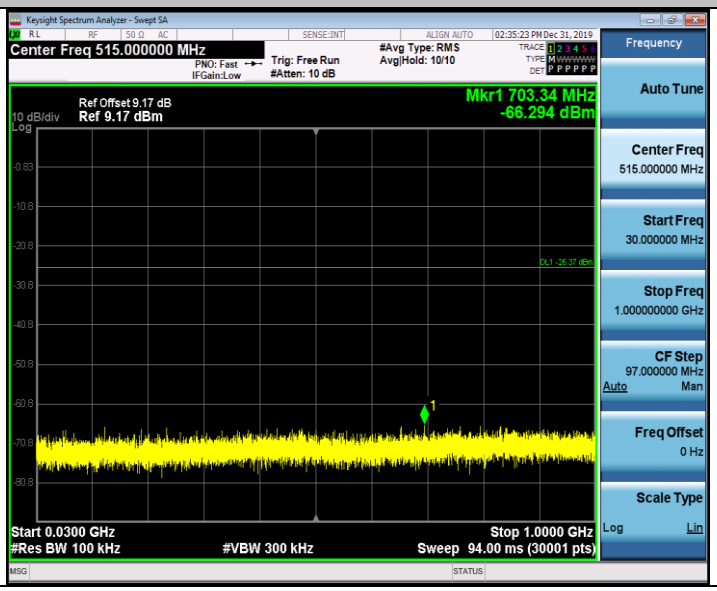

11G_Ant1_2412_30~1000

11G_Ant1_2412_1000~26500


11G_Ant1_2437_0~Reference

11G_Ant1_2437_30~1000


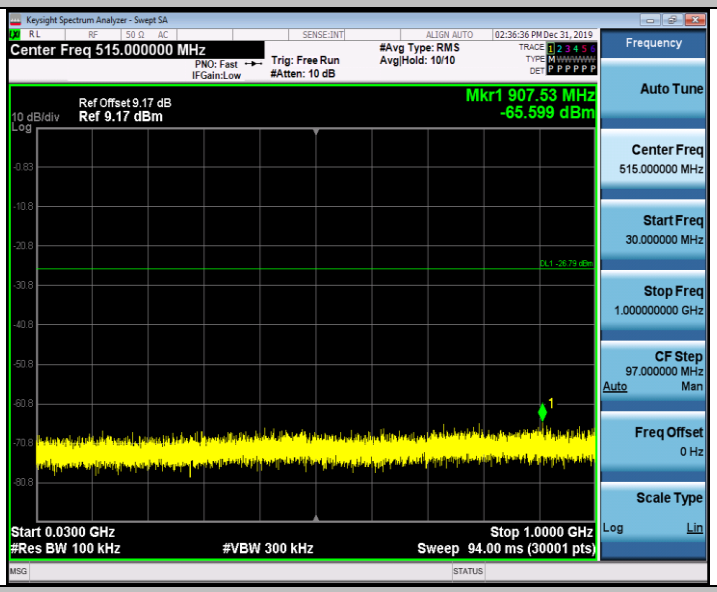
11G_Ant1_2437_1000~26500

11G_Ant1_2462_0~Reference


11G_Ant1_2462_30~1000

11G_Ant1_2462_1000~26500

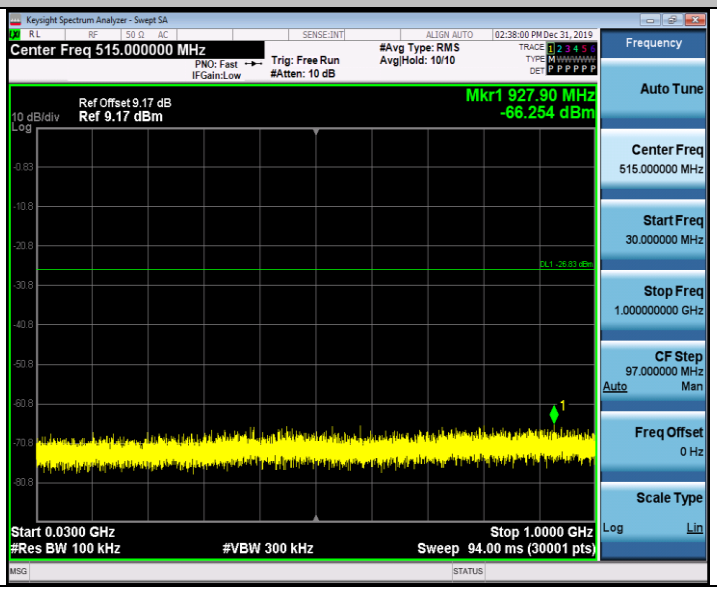

11N20SISO_Ant1_2412_0~Reference

11N20SISO_Ant1_2412_30~1000


11N20SISO_Ant1_2412_1000~26500

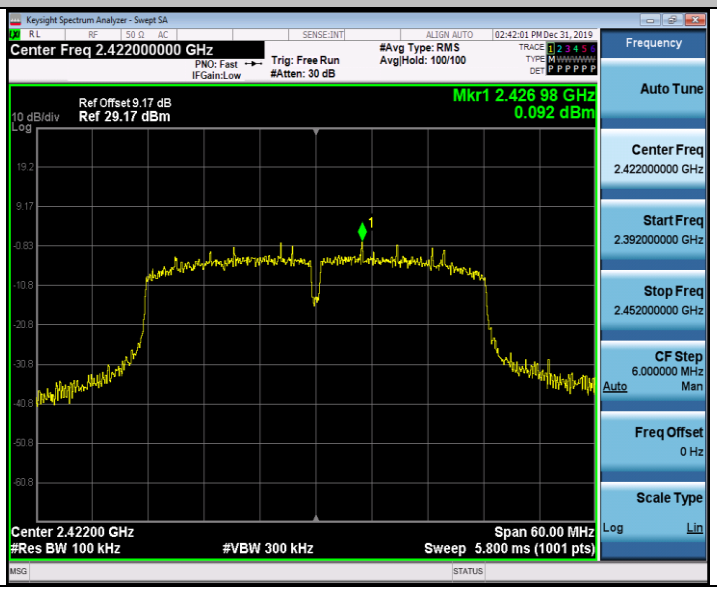
11N20SISO_Ant1_2437_0~Reference

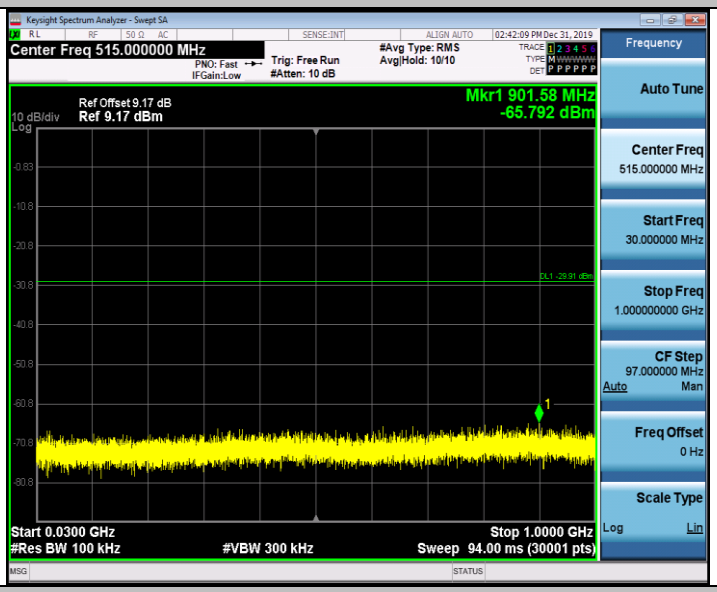

11N20SISO_Ant1_2437_30~1000

11N20SISO_Ant1_2437_1000~26500

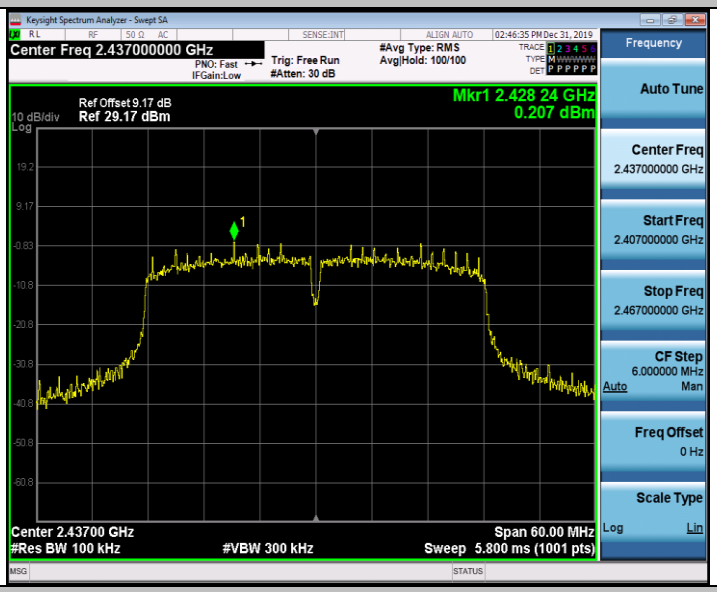
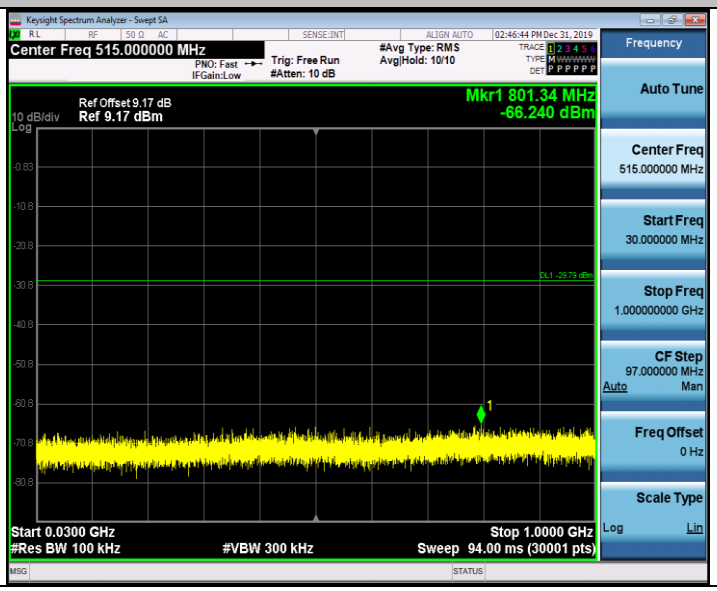

11N20SISO_Ant1_2462_0~Reference

11N20SISO_Ant1_2462_30~1000


11N20SISO_Ant1_2462_1000~26500

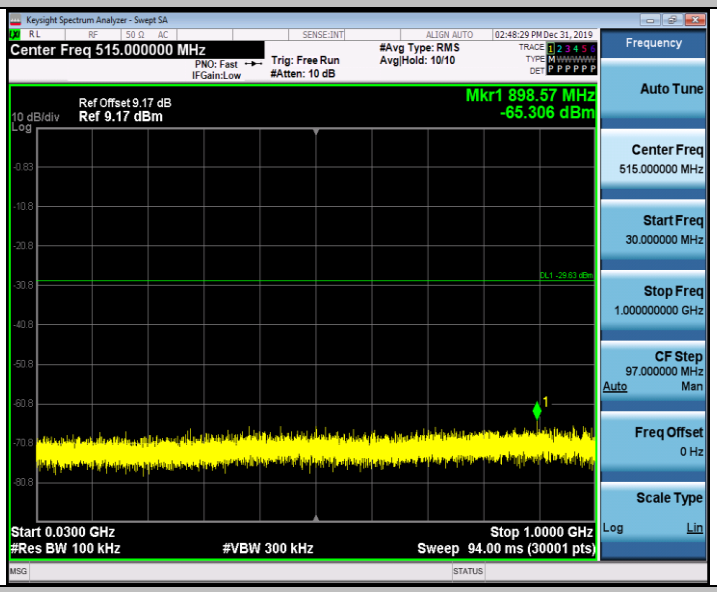
11N40SISO_Ant1_2422_0~Reference


11N40SISO_Ant1_2422_30~1000

11N40SISO_Ant1_2422_1000~26500


11N40SISO_Ant1_2437_0~Reference

11N40SISO_Ant1_2437_30~1000


11N40SISO_Ant1_2437_1000~26500

11N40SISO_Ant1_2452_0~Reference


11N40SISO_Ant1_2452_30~1000

11N40SISO_Ant1_2452_1000~26500


4.5 Radiated Band Edges and Spurious Emission Measurement

4.5.1 Limit of Radiated Band Edges and Spurious Emission

FCC §15.247 (d)

IC RSS-247 5.5

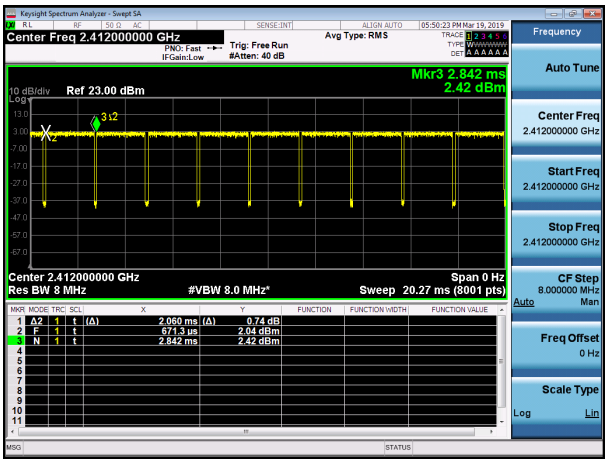
In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

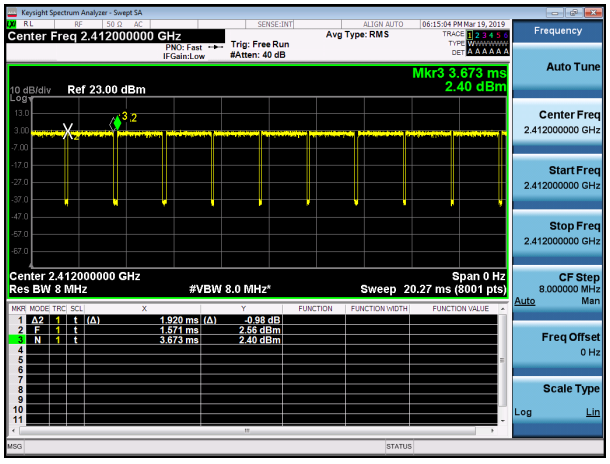
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

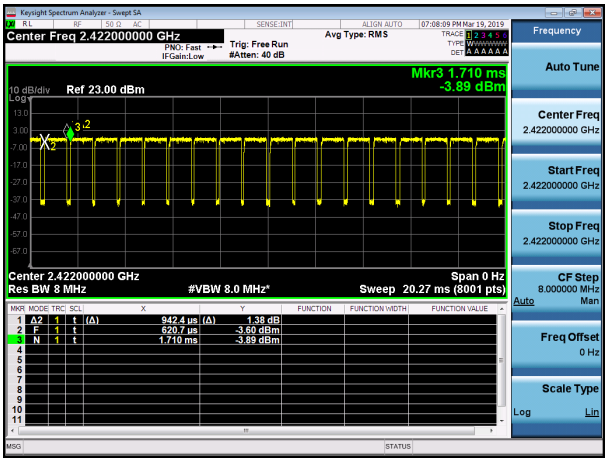
4.5.2 Test Procedures

1. The EUT was placed on a turntable Transmitting with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The measurement distance is 3 meter.
3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntaBle Transmitting (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
4. Set to the maximum power setting and enaBle Transmitting the EUT transmit continuously.
5. 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>1GHz ; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
   (3) For average measurement:
   VBW = 10 Hz, when duty cycle is no less than 98 percent.
   VBW ≥ 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.

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	99.07	12.43	0.08	1 KHz
802.11g	94.87	2.06	0.5	1 KHz
2.4GHz 802.11n HT20	91.33	1.92	0.5	1 KHz
2.4GHz 802.11n HT40	86.51	0.9424	1.1	3 KHz





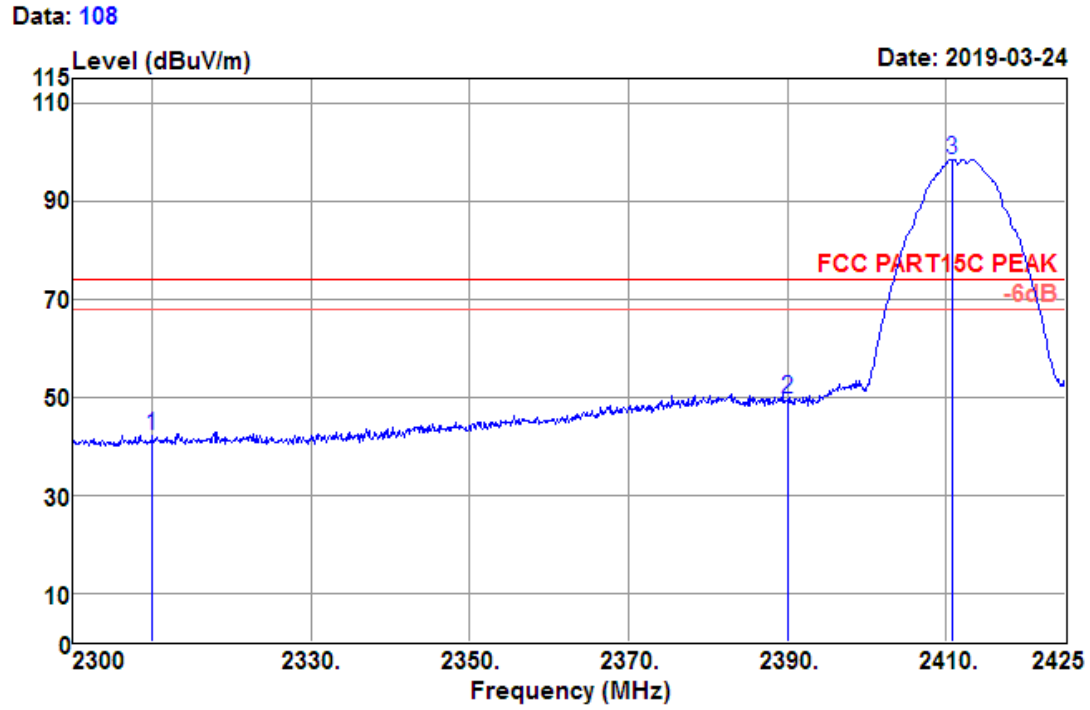


4.5.3 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

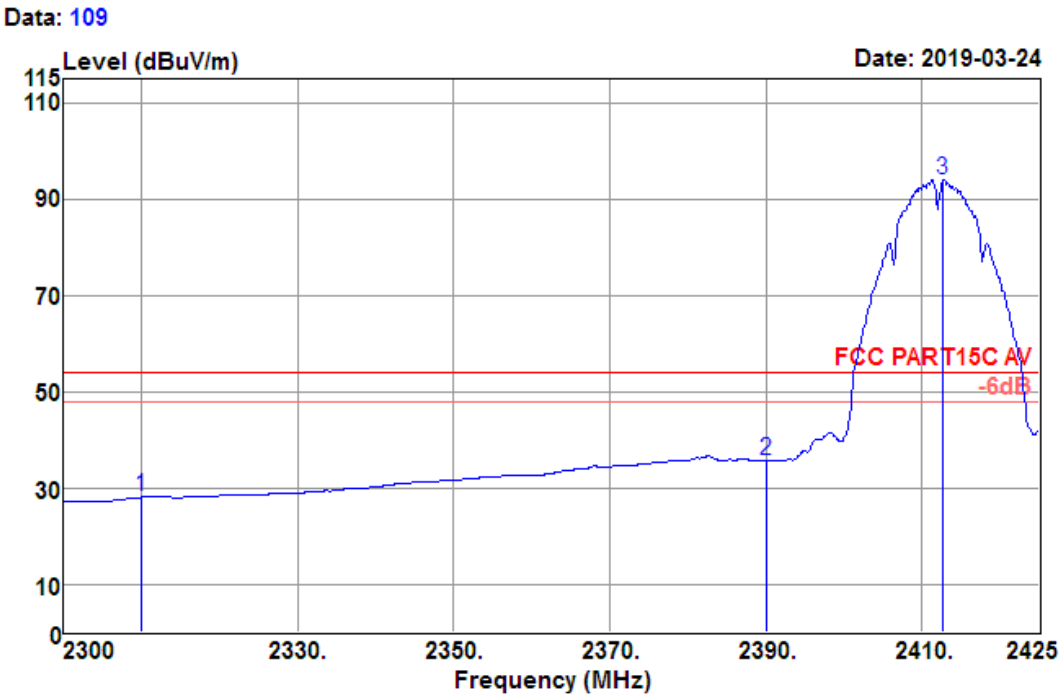
4.5.4 Test Result of Radiated Spurious at Band Edges

Test Mode :	802.11b CH01 (2412 MHz)	**Temperature :**	21~23℃
Test Engineer :	Jack Liu	**Relative Humidity :**	63~65%
Frequencey Range	2.3GHz~2.425GHz	**Polarization :**	Horizontal



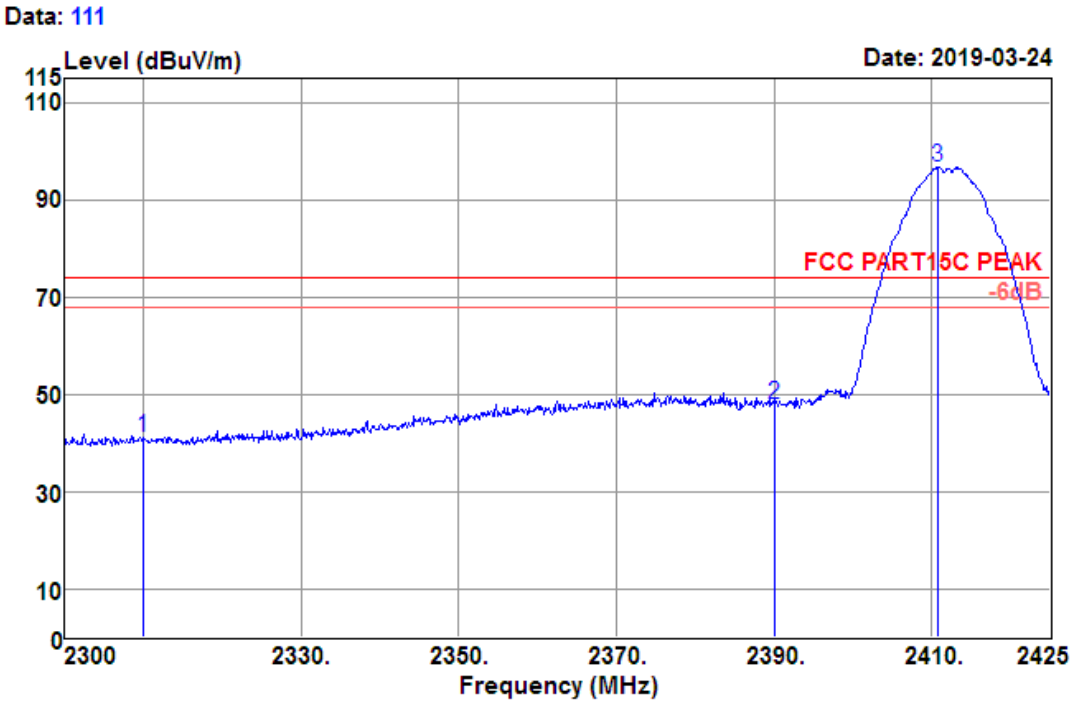
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	47.55	26.91	3.56	35.87	42.15	74.00	-31.85	Peak
2390.000	54.82	27.11	3.64	36.08	49.49	74.00	-24.51	Peak
2410.875	103.83	27.17	3.65	36.13	98.52	74.00	24.52	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal



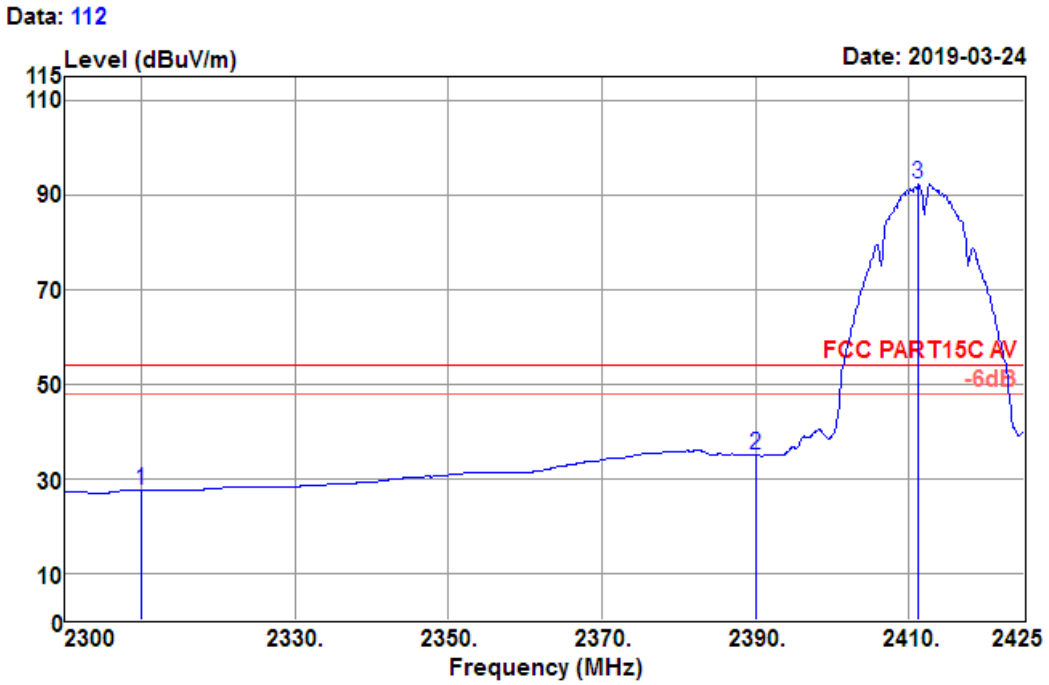
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	33.41	26.91	3.56	35.87	28.01	54.00	-25.99	Average
2390.000	41.11	27.11	3.64	36.08	35.78	54.00	-18.22	Average
2412.750	99.38	27.17	3.65	36.14	94.06	54.00	40.06	Average

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



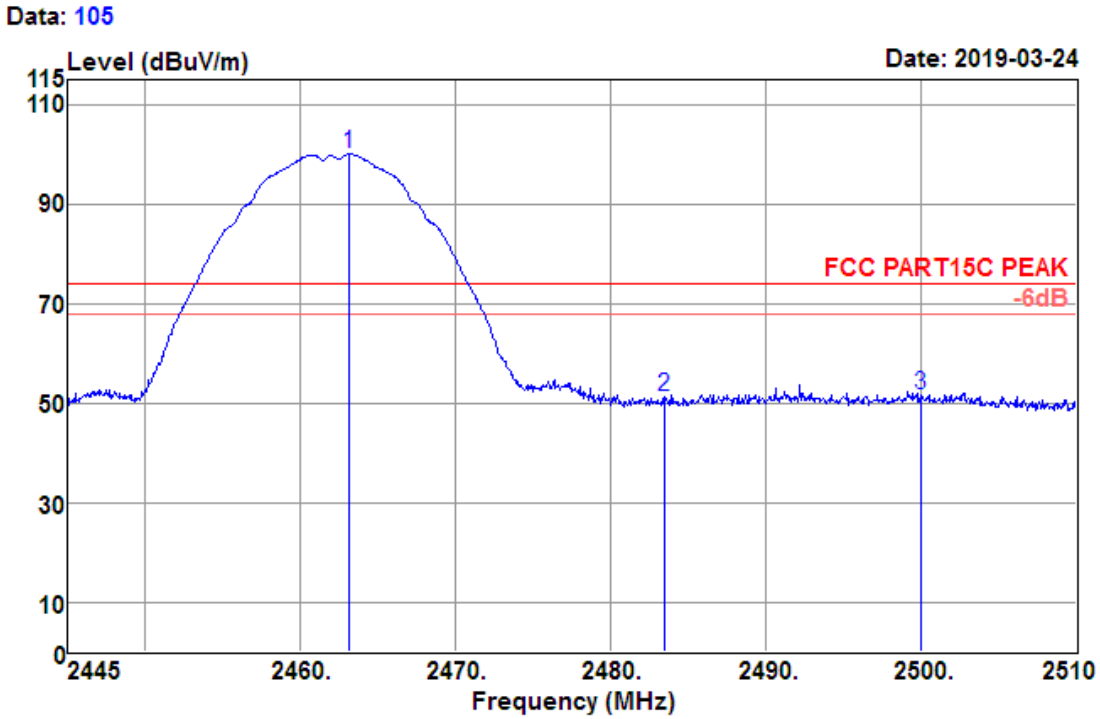
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	46.35	26.91	3.56	35.87	40.95	74.00	-33.05	Peak
2390.000	53.15	27.11	3.64	36.08	47.82	74.00	-26.18	Peak
2410.875	101.95	27.17	3.65	36.13	96.64	74.00	22.64	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



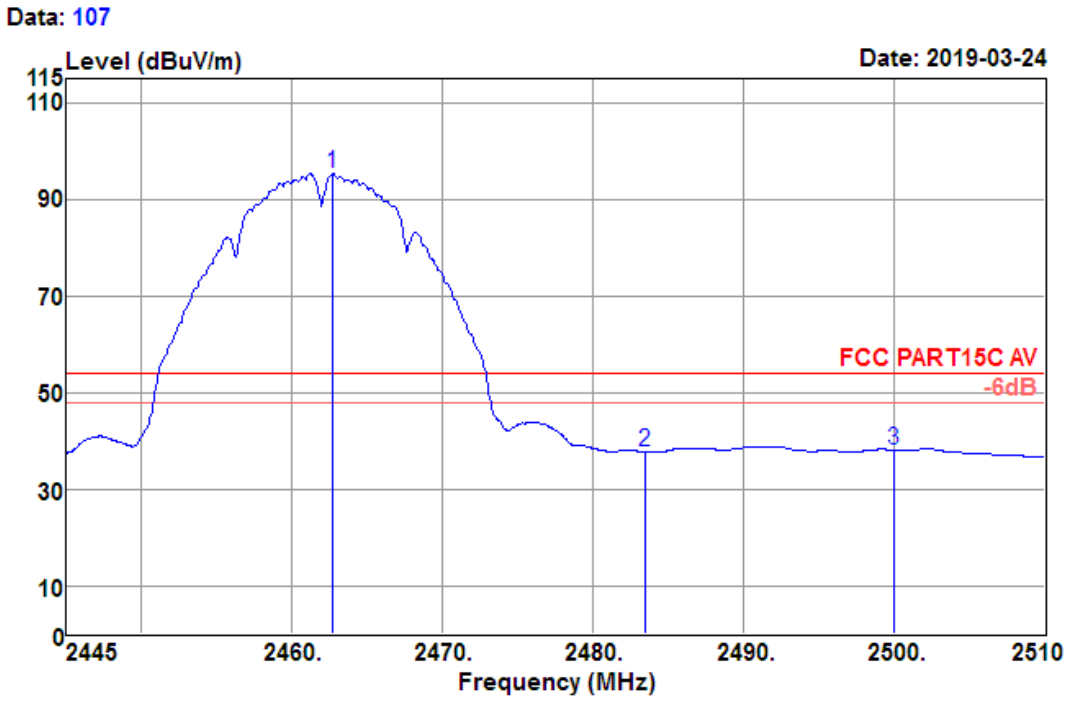
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	32.98	26.91	3.56	35.87	27.58	54.00	-26.42	Average
2390.000	40.25	27.11	3.64	36.08	34.92	54.00	-19.08	Average
2411.250	97.51	27.17	3.65	36.14	92.19	54.00	38.19	Average

Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



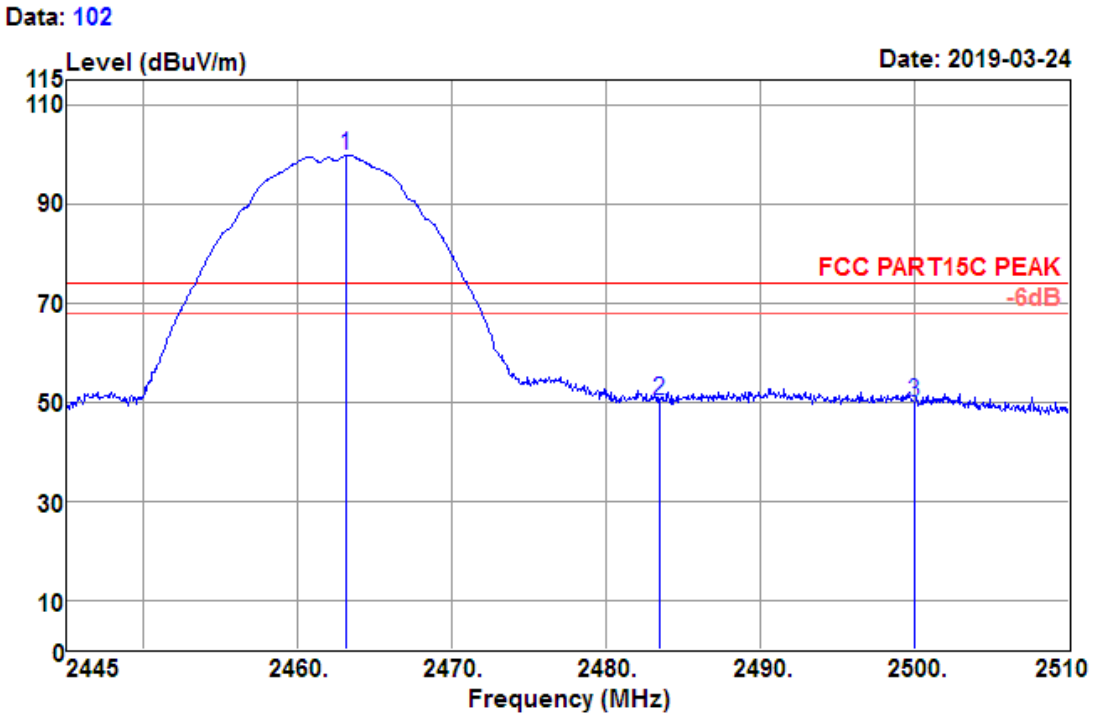
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2463.200	105.29	27.30	3.67	36.27	99.99	74.00	25.99	Peak
2483.500	56.57	27.36	3.68	36.33	51.28	74.00	-22.72	Peak
2500.000	56.92	27.40	3.68	36.37	51.63	74.00	-22.37	Peak

Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



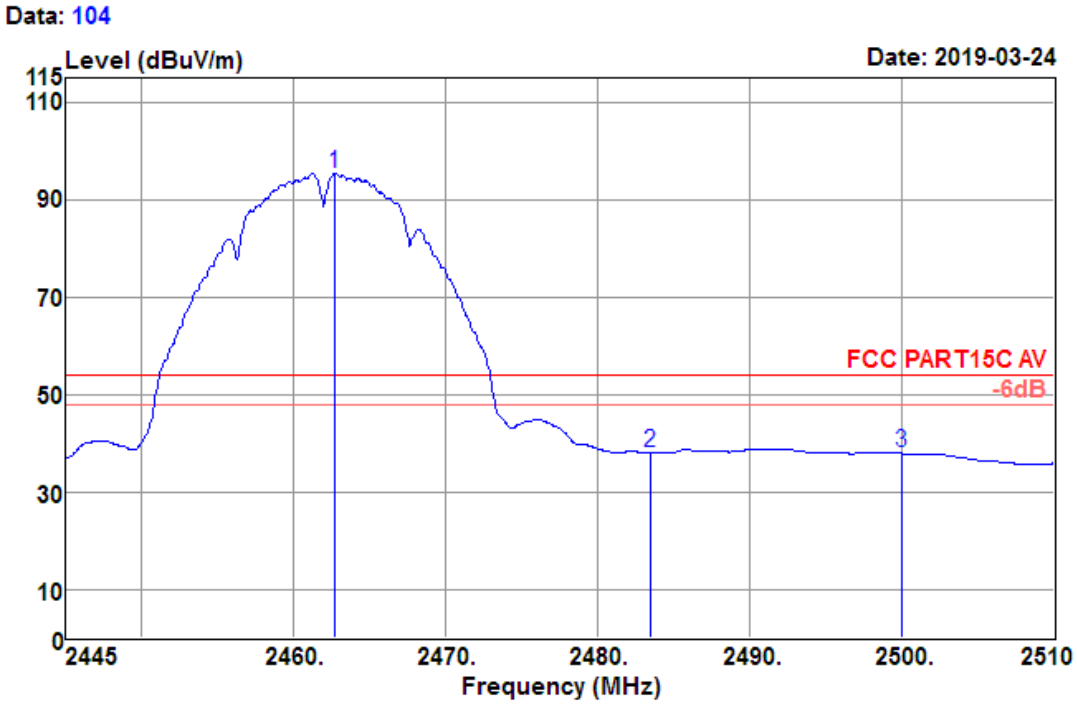
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.745	100.58	27.30	3.67	36.27	95.28	54.00	41.28	Average
2483.480	43.06	27.36	3.68	36.33	37.77	54.00	-16.23	Average
2500.000	43.39	27.40	3.68	36.37	38.10	54.00	-15.90	Average

Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



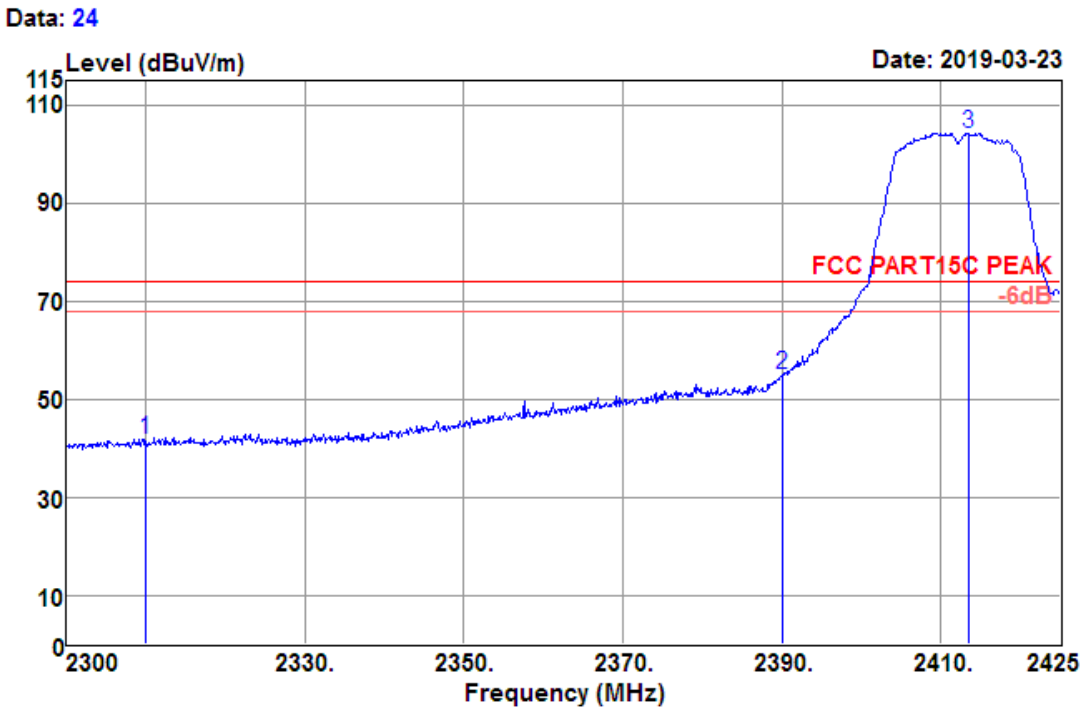
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2463.135	105.02	27.30	3.67	36.27	99.72	74.00	25.72	Peak
2483.480	55.53	27.36	3.68	36.33	50.24	74.00	-23.76	Peak
2500.000	55.23	27.40	3.68	36.37	49.94	74.00	-24.06	Peak

Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



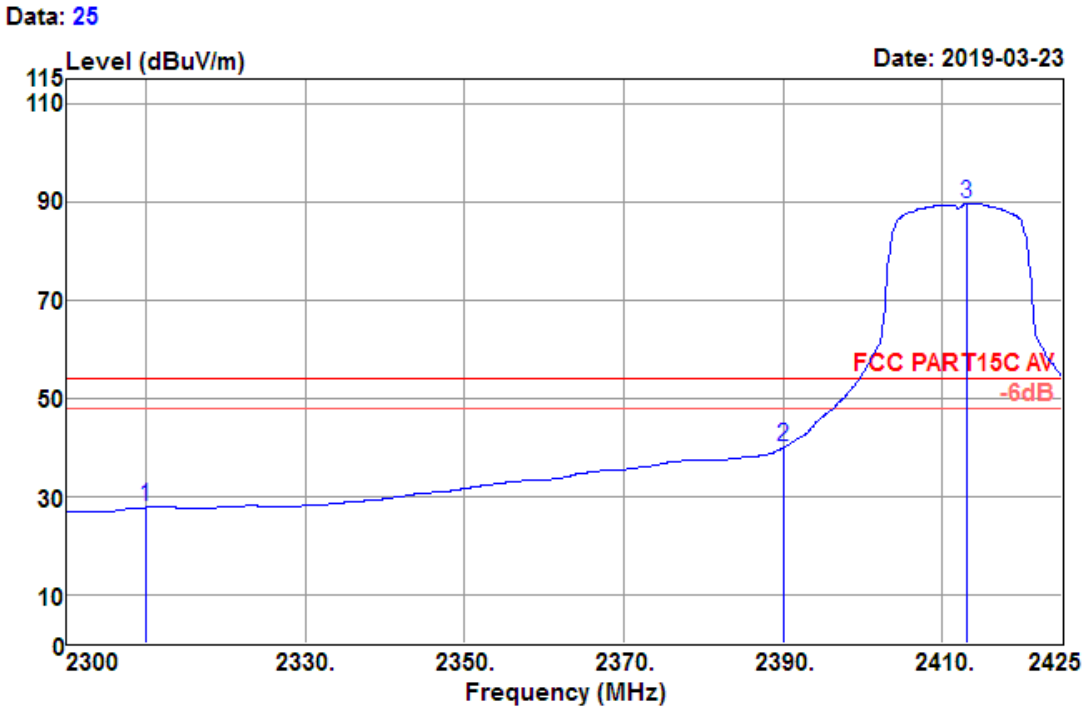
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2462.745	100.77	27.30	3.67	36.27	95.47	54.00	41.47	Average
2483.480	43.18	27.36	3.68	36.33	37.89	54.00	-16.11	Average
2500.000	43.14	27.40	3.68	36.37	37.85	54.00	-16.15	Average

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal



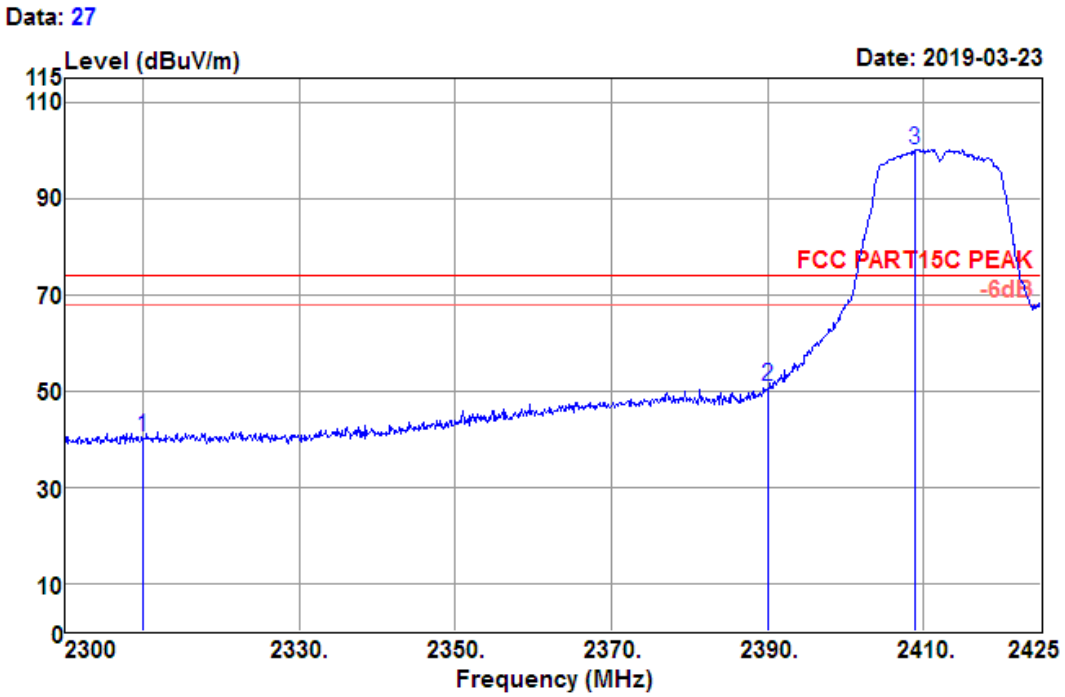
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	47.02	26.91	3.56	35.87	41.62	74.00	-32.38	Peak
2390.000	60.37	27.11	3.64	36.08	55.04	74.00	-18.96	Peak
2413.500	109.59	27.18	3.65	36.14	104.28	74.00	30.28	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal



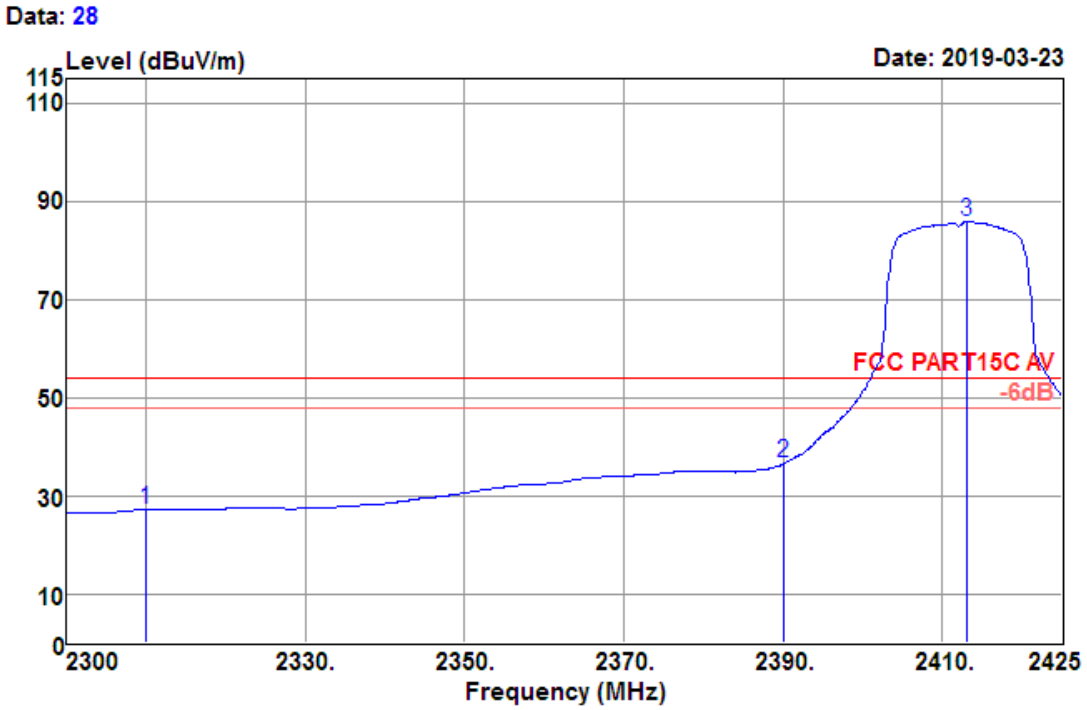
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	33.11	26.91	3.56	35.87	27.71	54.00	-26.29	Average
2390.000	45.36	27.11	3.64	36.08	40.03	54.00	-13.97	Average
2413.125	94.98	27.17	3.65	36.14	89.66	54.00	35.66	Average

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



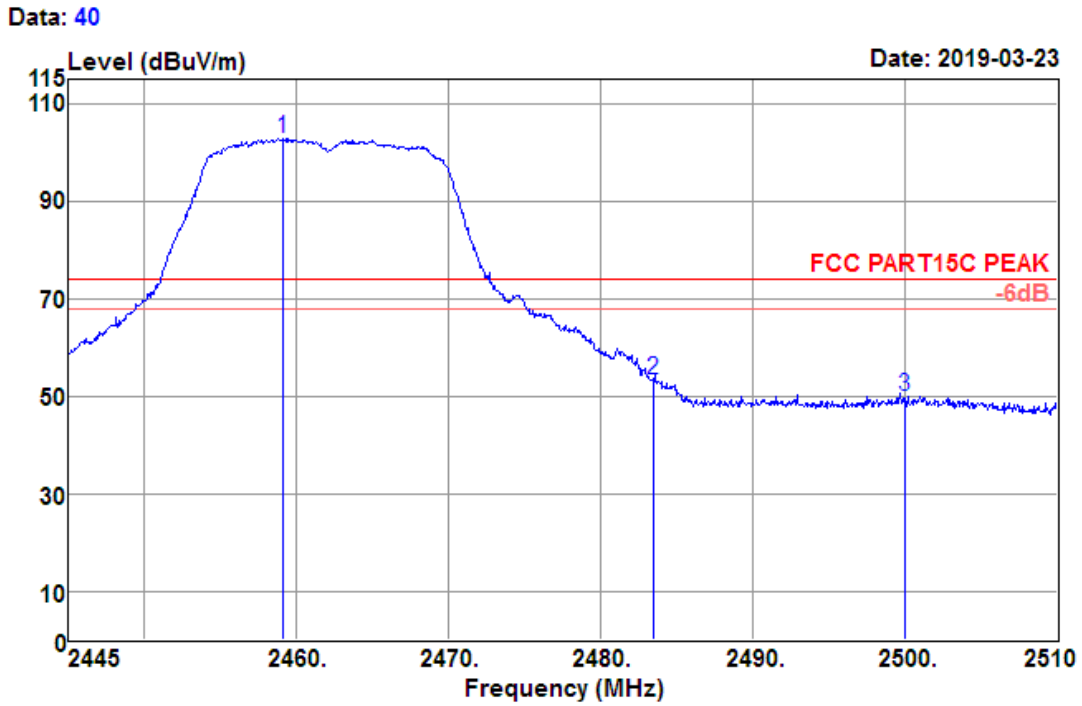
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	45.71	26.91	3.56	35.87	40.31	74.00	-33.69	Peak
2390.000	56.09	27.11	3.64	36.08	50.76	74.00	-23.24	Peak
2409.000	105.51	27.16	3.65	36.13	100.19	74.00	26.19	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



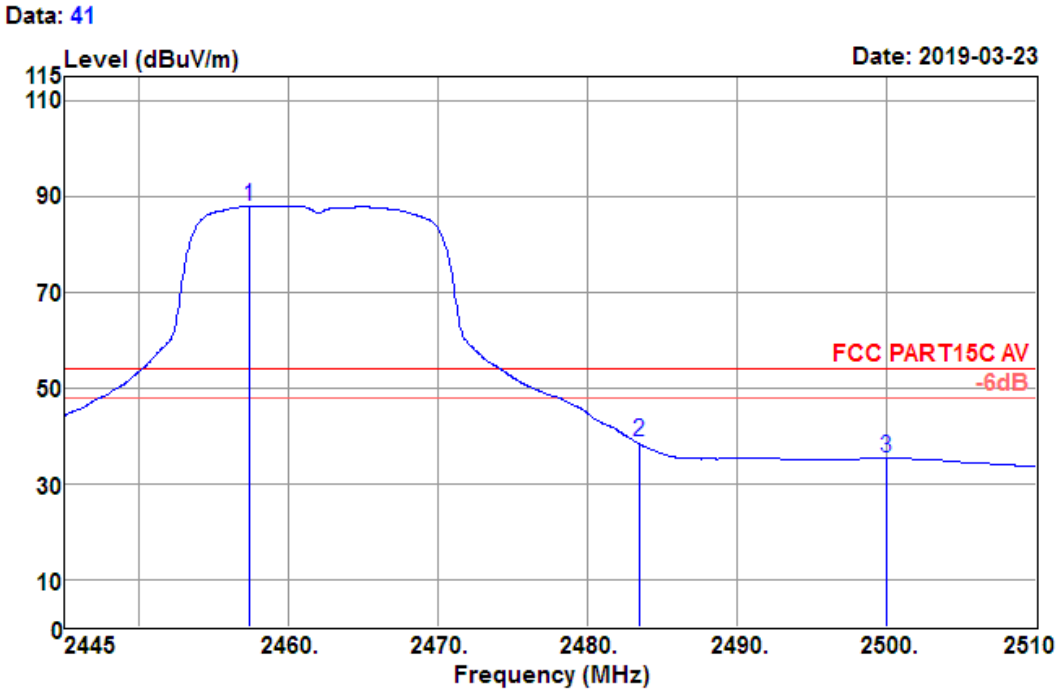
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	32.59	26.91	3.56	35.87	27.19	54.00	-26.81	Average
2390.000	41.93	27.11	3.64	36.08	36.60	54.00	-17.40	Average
2413.000	91.17	27.17	3.65	36.14	85.85	54.00	31.85	Average

Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



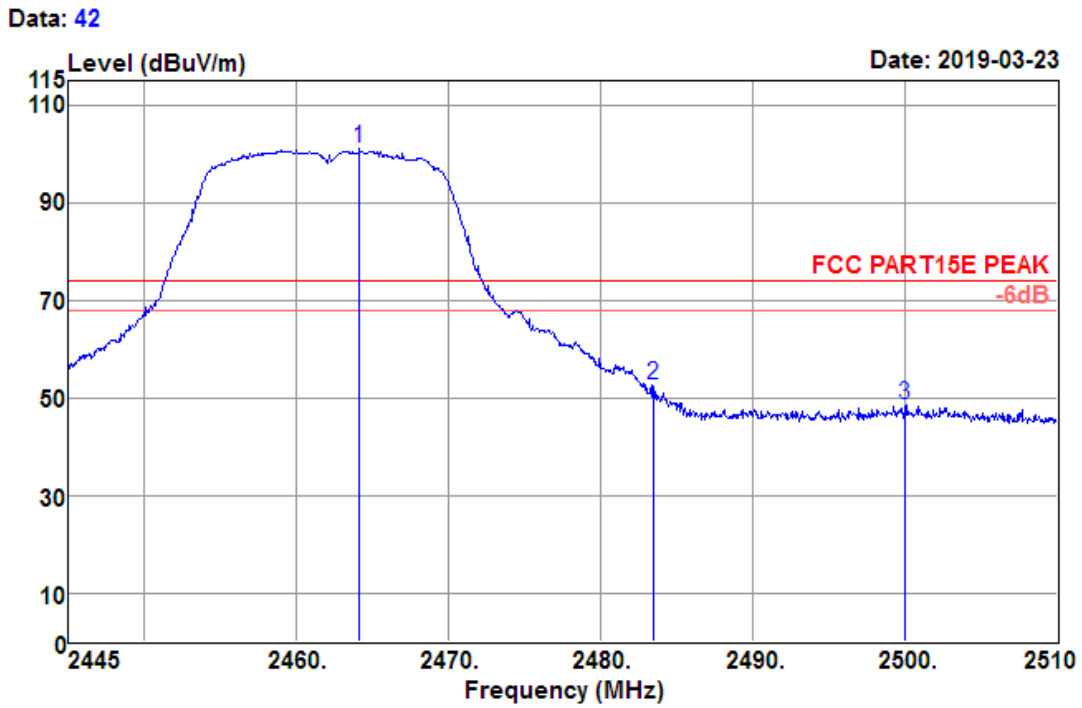
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2459.105	108.16	27.29	3.67	36.26	102.86	74.00	28.86	Peak
2483.500	58.70	27.36	3.68	36.33	53.41	74.00	-20.59	Peak
2500.000	55.05	27.40	3.68	36.37	49.76	74.00	-24.24	Peak

Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



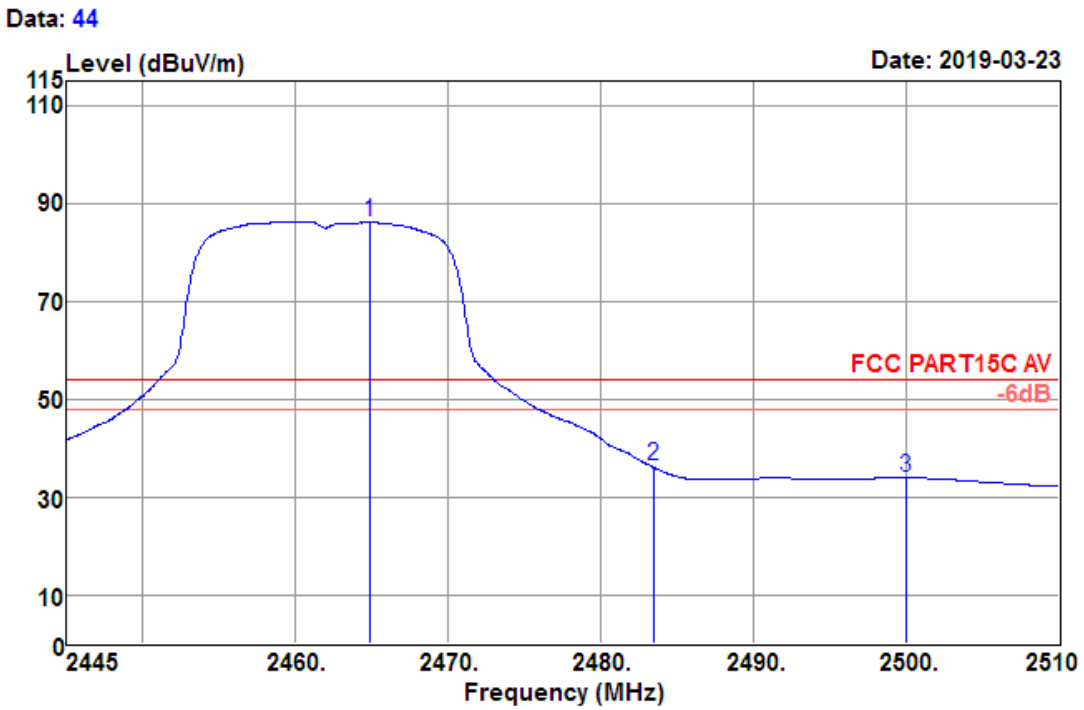
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2457.350	93.30	27.29	3.67	36.26	88.00	54.00	34.00	Average
2483.500	44.00	27.36	3.68	36.33	38.71	54.00	-15.29	Average
2500.000	40.55	27.40	3.68	36.37	35.26	54.00	-18.74	Average

Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



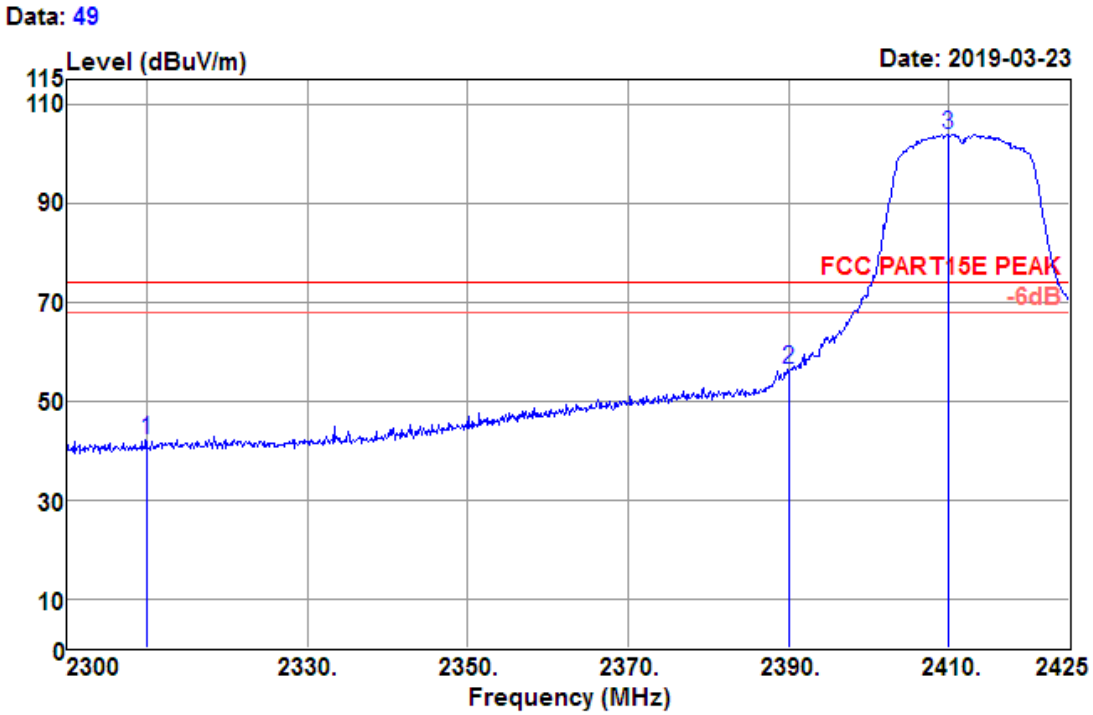
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2464.175	106.25	27.31	3.67	36.28	100.95	74.00	26.95	Peak
2483.500	58.00	27.36	3.68	36.33	52.71	74.00	-21.29	Peak
2500.000	53.97	27.40	3.68	36.37	48.68	74.00	-25.32	Peak

Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



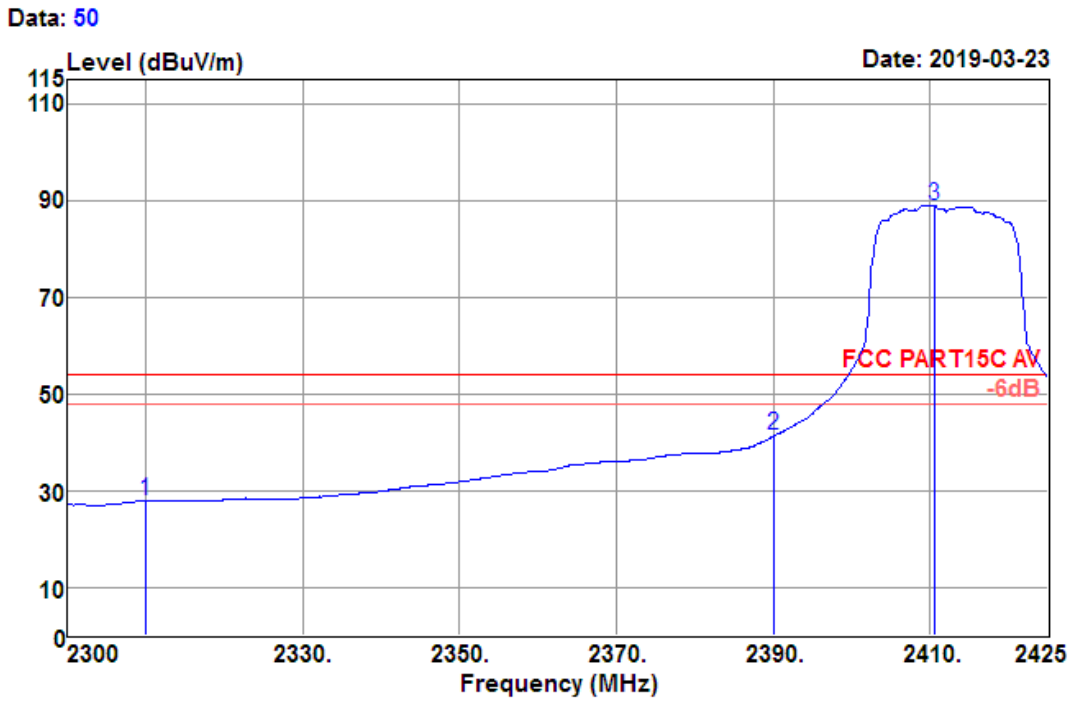
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2464.890	91.47	27.31	3.67	36.28	86.17	54.00	32.17	Average
2483.500	41.66	27.36	3.68	36.33	36.37	54.00	-17.63	Average
2500.000	39.29	27.40	3.68	36.37	34.00	54.00	-20.00	Average

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal



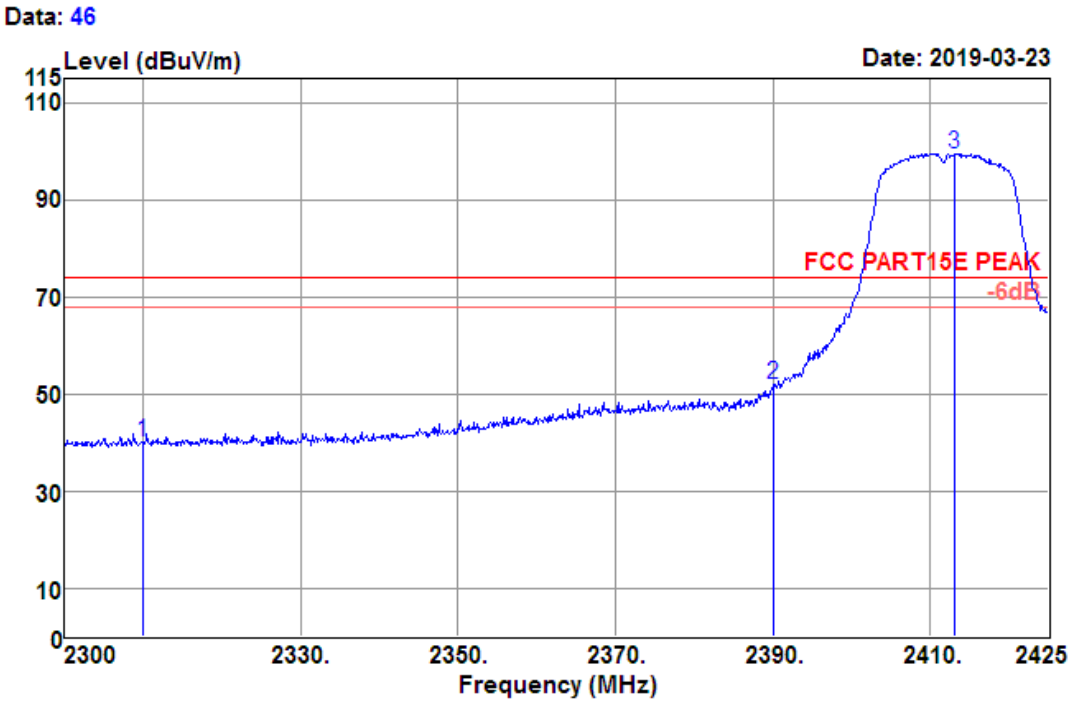
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	47.31	26.91	3.56	35.87	41.91	74.00	-32.09	Peak
2390.000	61.67	27.11	3.64	36.08	56.34	74.00	-17.66	Peak
2409.875	109.24	27.17	3.65	36.13	103.93	74.00	29.93	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal



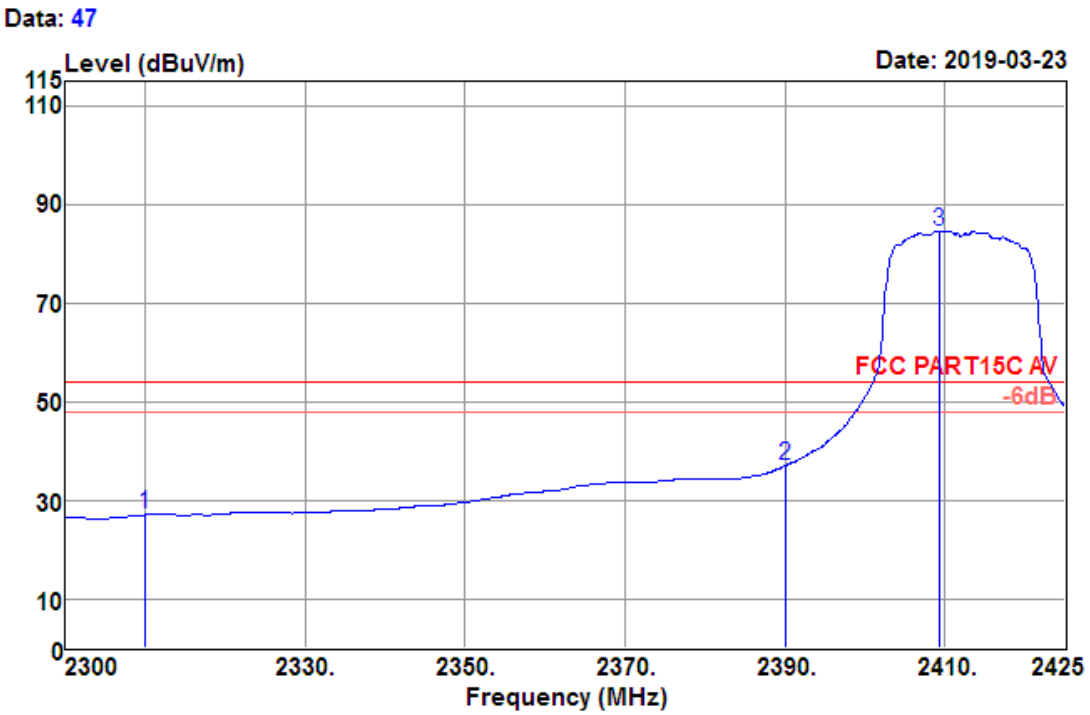
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	33.25	26.91	3.56	35.87	27.85	54.00	-26.15	Average
2390.000	46.74	27.11	3.64	36.08	41.41	54.00	-12.59	Average
2410.500	94.19	27.17	3.65	36.13	88.88	54.00	34.88	Average

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



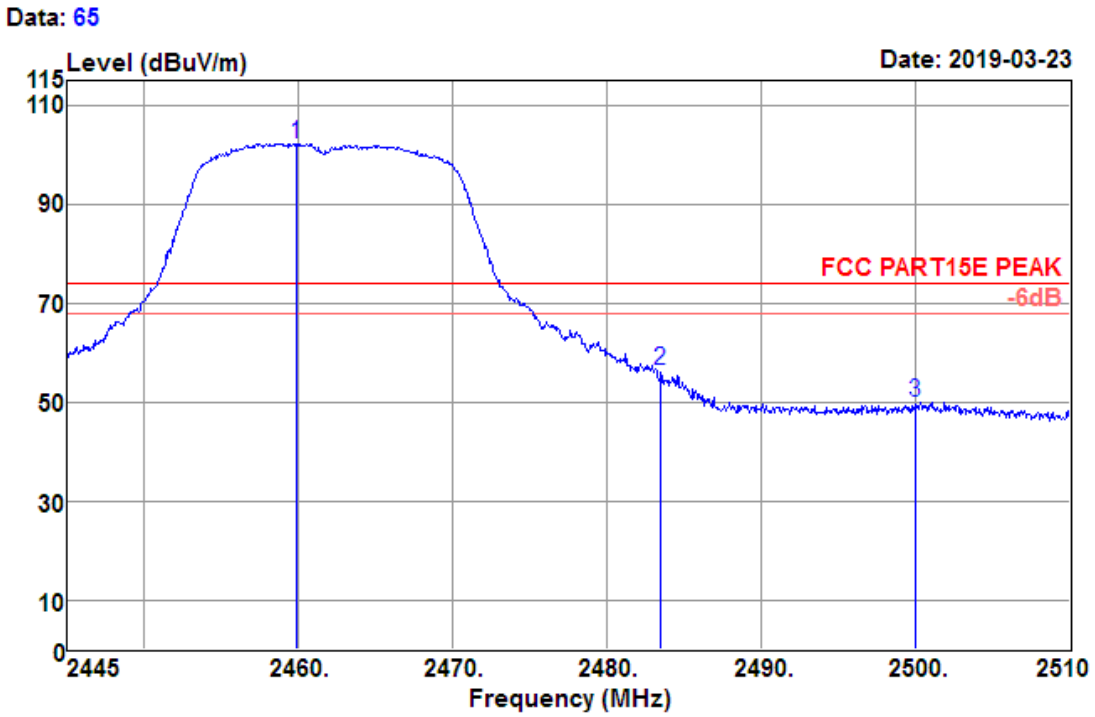
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	45.47	26.91	3.56	35.87	40.07	74.00	-33.93	Peak
2390.000	57.18	27.11	3.64	36.08	51.85	74.00	-22.15	Peak
2413.000	104.90	27.17	3.65	36.14	99.58	74.00	25.58	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



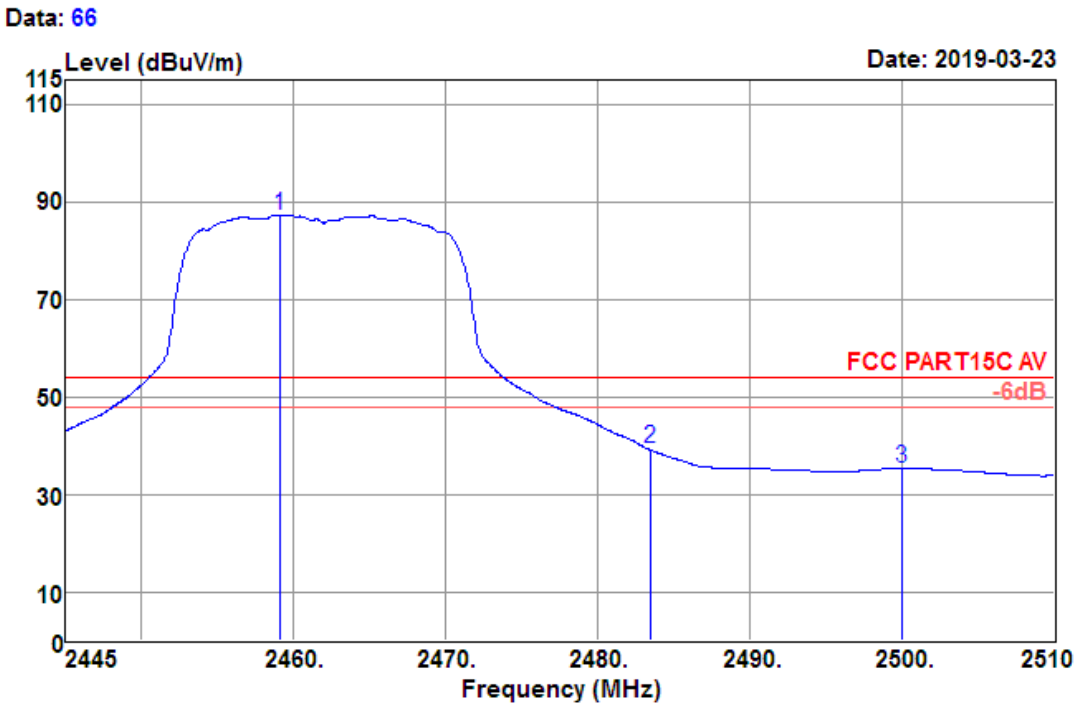
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	32.42	26.91	3.56	35.87	27.02	54.00	-26.98	Average
2390.000	42.48	27.11	3.64	36.08	37.15	54.00	-16.85	Average
2409.250	89.96	27.16	3.65	36.13	84.64	54.00	30.64	Average

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



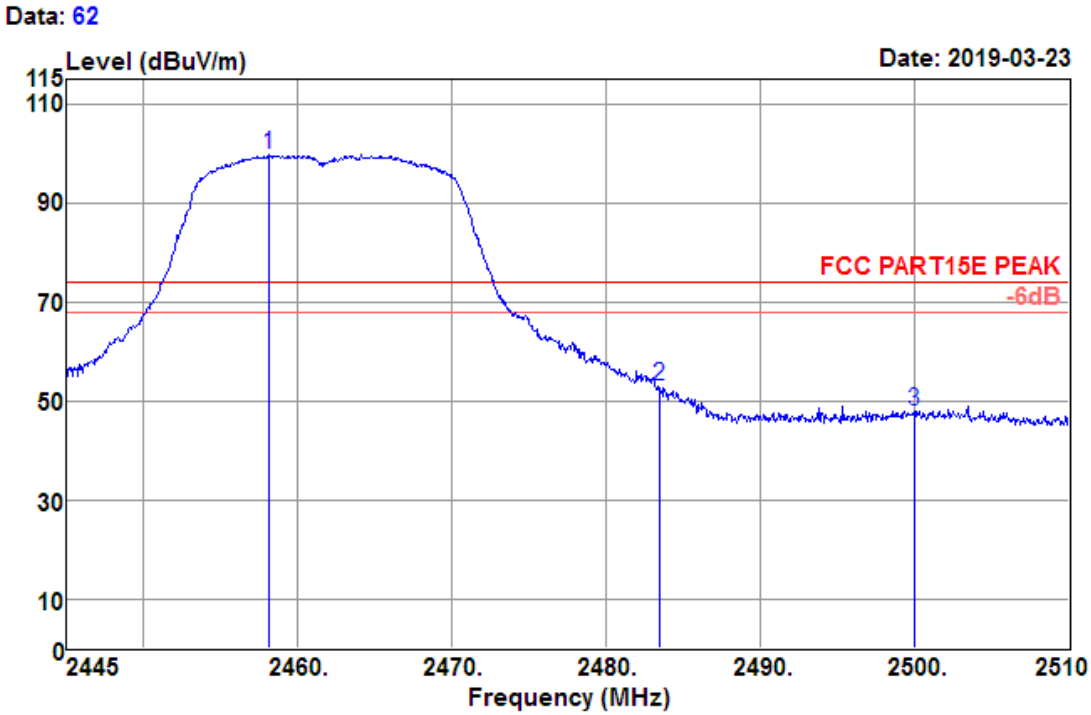
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2459.885	107.54	27.30	3.67	36.26	102.25	74.00	28.25	Peak
2483.500	61.62	27.36	3.68	36.33	56.33	74.00	-17.67	Peak
2500.000	55.23	27.40	3.68	36.37	49.94	74.00	-24.06	Peak

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



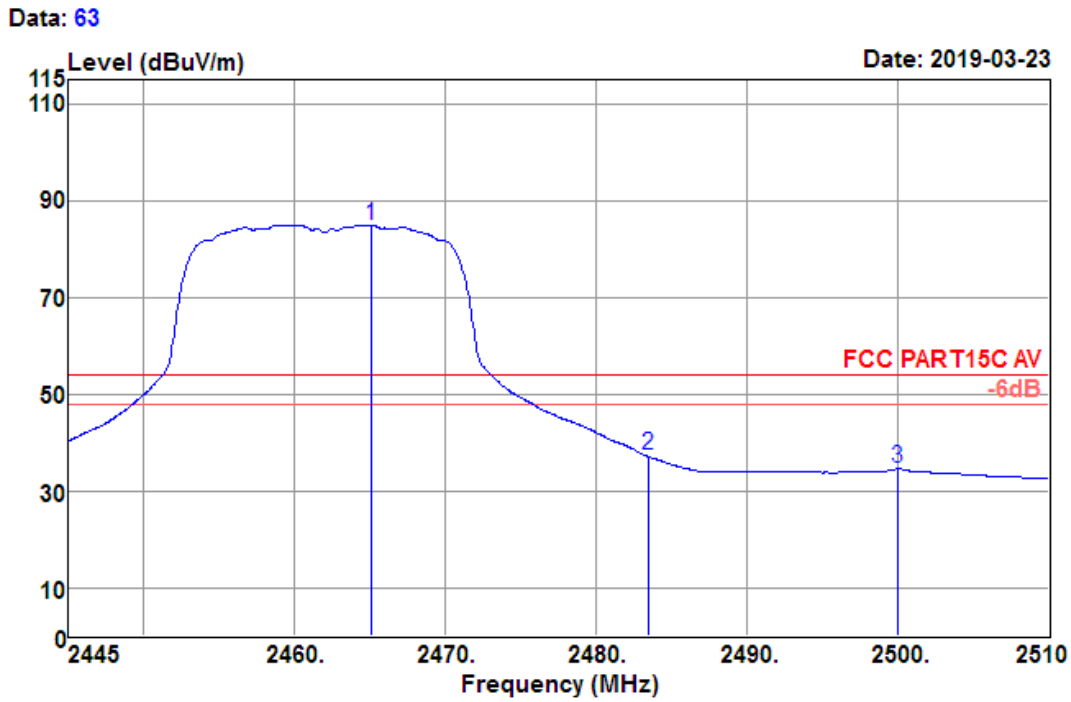
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2459.105	92.55	27.29	3.67	36.26	87.25	54.00	33.25	Average
2483.500	44.66	27.36	3.68	36.33	39.37	54.00	-14.63	Average
2500.000	40.58	27.40	3.68	36.37	35.29	54.00	-18.71	Average

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



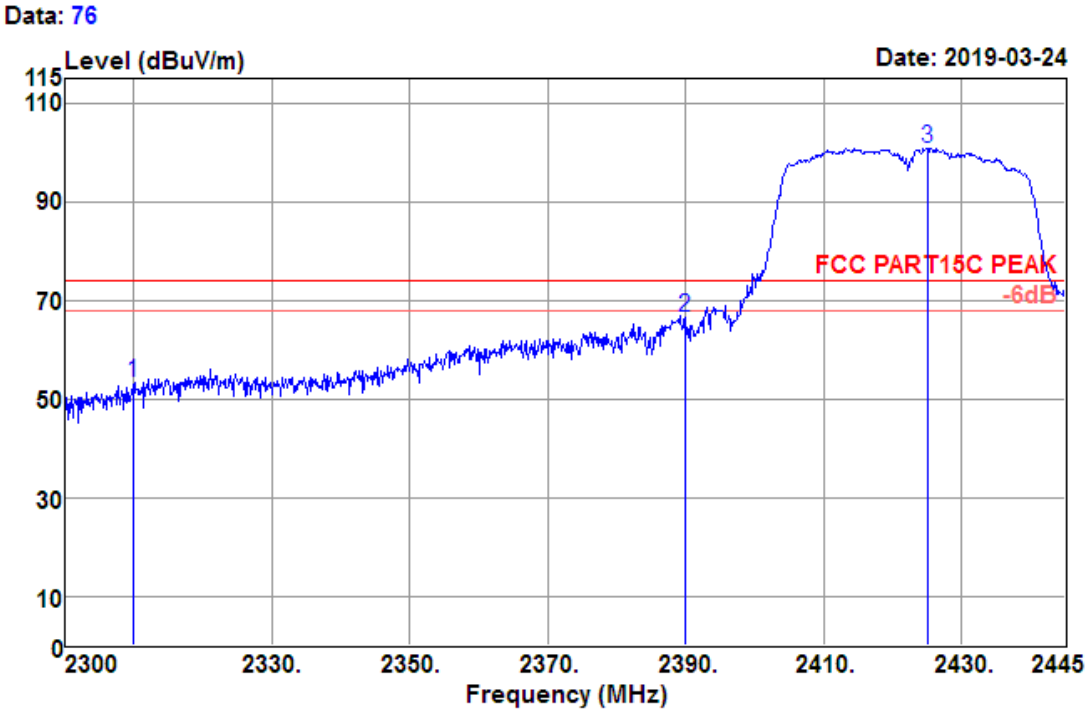
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2458.130	104.96	27.29	3.67	36.26	99.66	74.00	25.66	Peak
2483.500	58.11	27.36	3.68	36.33	52.82	74.00	-21.18	Peak
2500.000	53.12	27.40	3.68	36.37	47.83	74.00	-26.17	Peak

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2465.150	90.24	27.31	3.67	36.28	84.94	54.00	30.94	Average
2483.500	42.63	27.36	3.68	36.33	37.34	54.00	-16.66	Average
2500.000	39.80	27.40	3.68	36.37	34.51	54.00	-19.49	Average

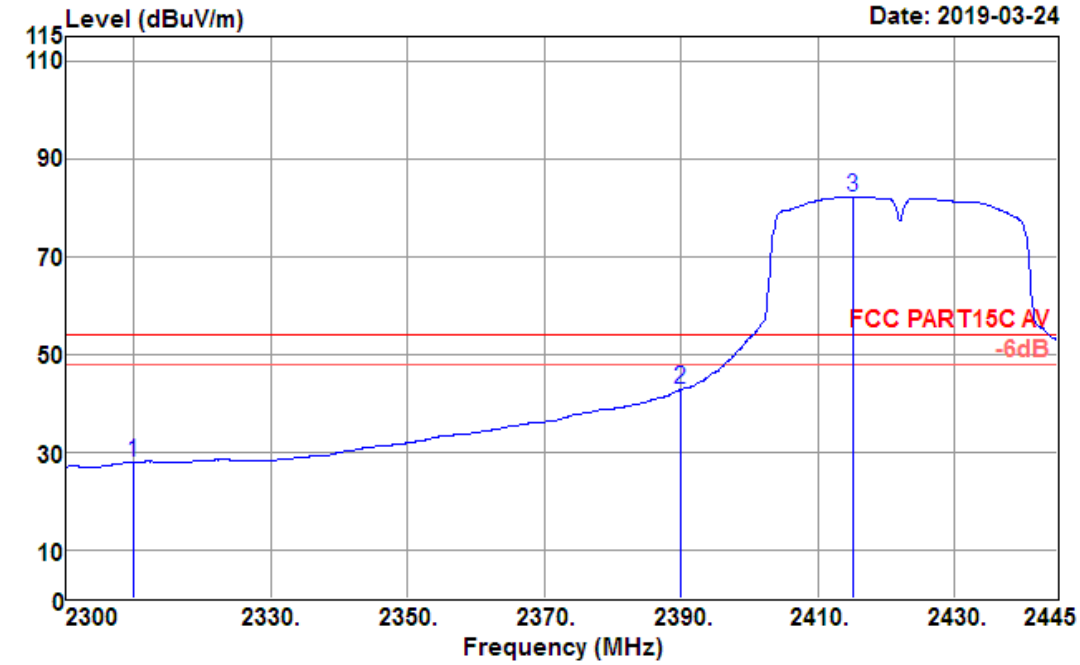
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	58.80	26.91	3.56	35.87	53.40	74.00	-20.60	Peak
2390.000	71.75	27.11	3.64	36.08	66.42	74.00	-7.58	Peak
2425.135	106.19	27.21	3.66	36.17	100.89	74.00	26.89	Peak

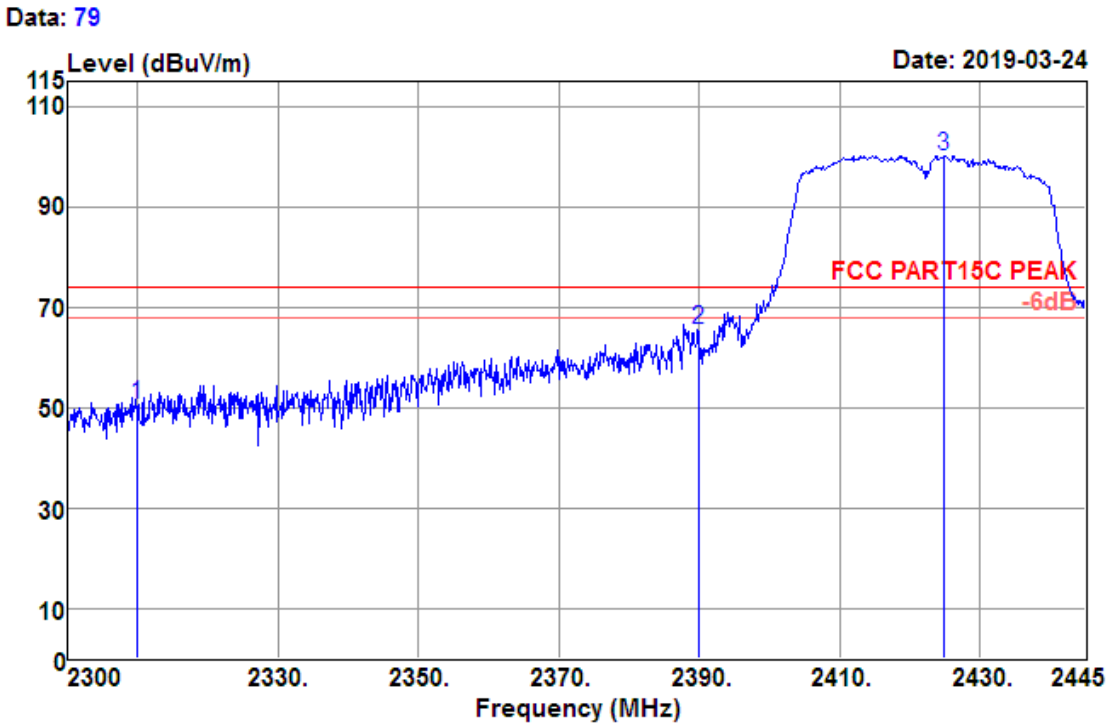
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

Data: 77



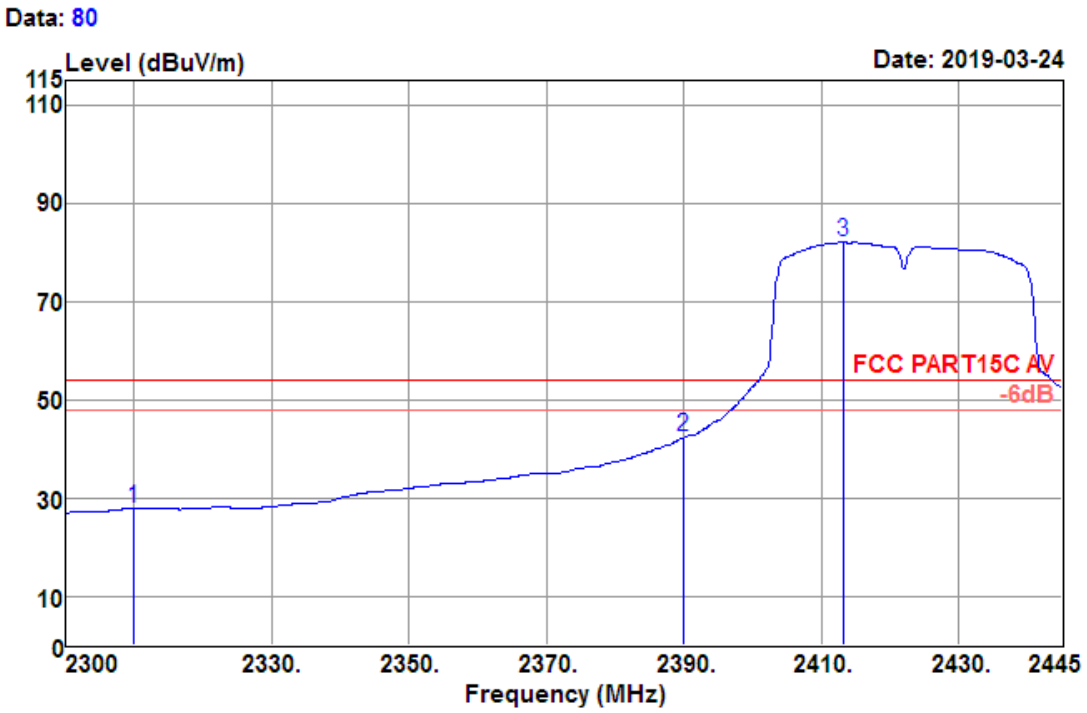
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	33.28	26.91	3.56	35.87	27.88	54.00	-26.12	Average
2390.000	48.17	27.11	3.64	36.08	42.84	54.00	-11.16	Average
2415.275	87.54	27.18	3.66	36.15	82.23	54.00	28.23	Average

Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



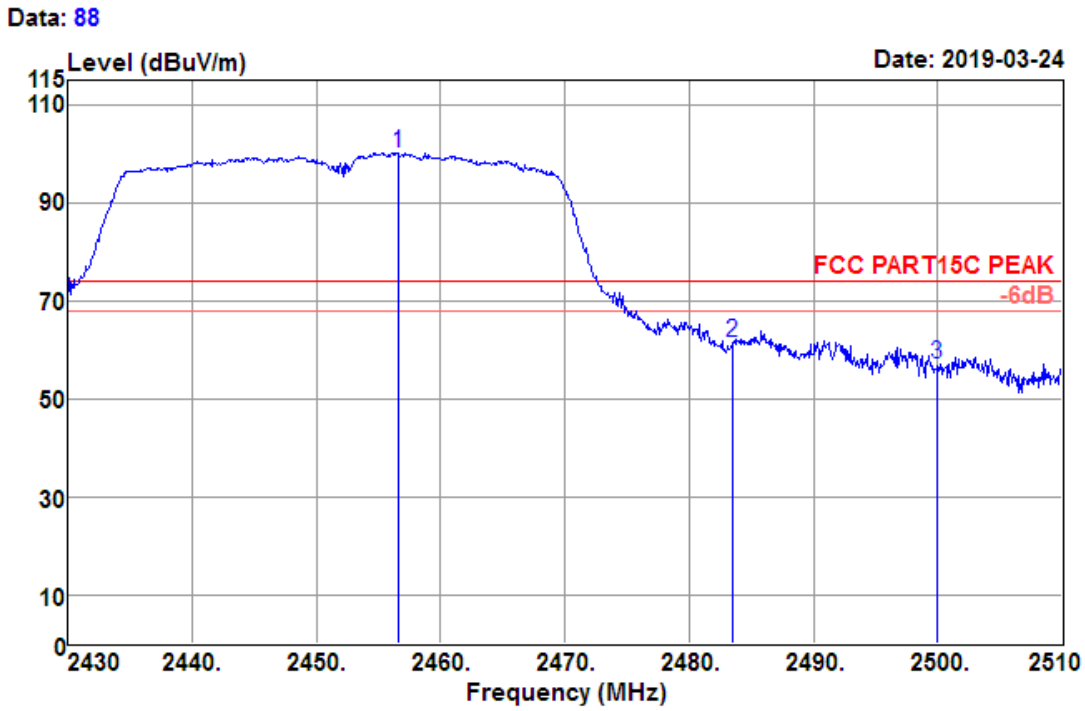
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	55.87	26.91	3.56	35.87	50.47	74.00	-23.53	Peak
2390.000	70.82	27.11	3.64	36.08	65.49	74.00	-8.51	Peak
2424.845	105.54	27.20	3.66	36.17	100.23	74.00	26.23	Peak

Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical



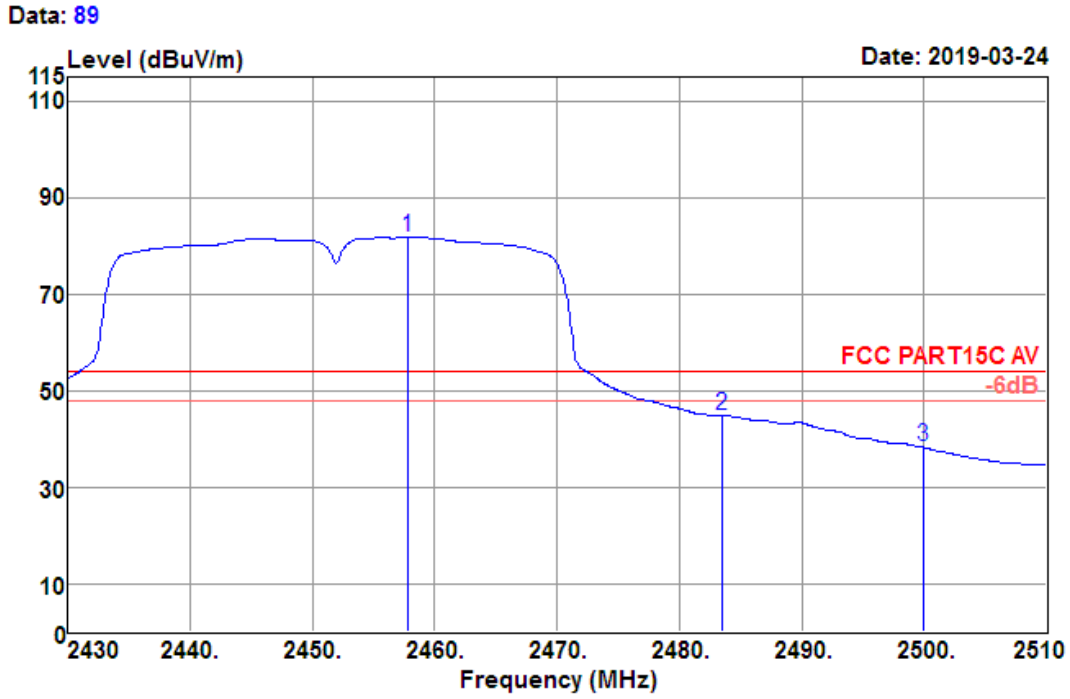
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2310.000	33.30	26.91	3.56	35.87	27.90	54.00	-26.10	Average
2390.000	47.67	27.11	3.64	36.08	42.34	54.00	-11.66	Average
2413.245	87.40	27.17	3.65	36.14	82.08	54.00	28.08	Average

Test Mode :	802.11n HT20 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



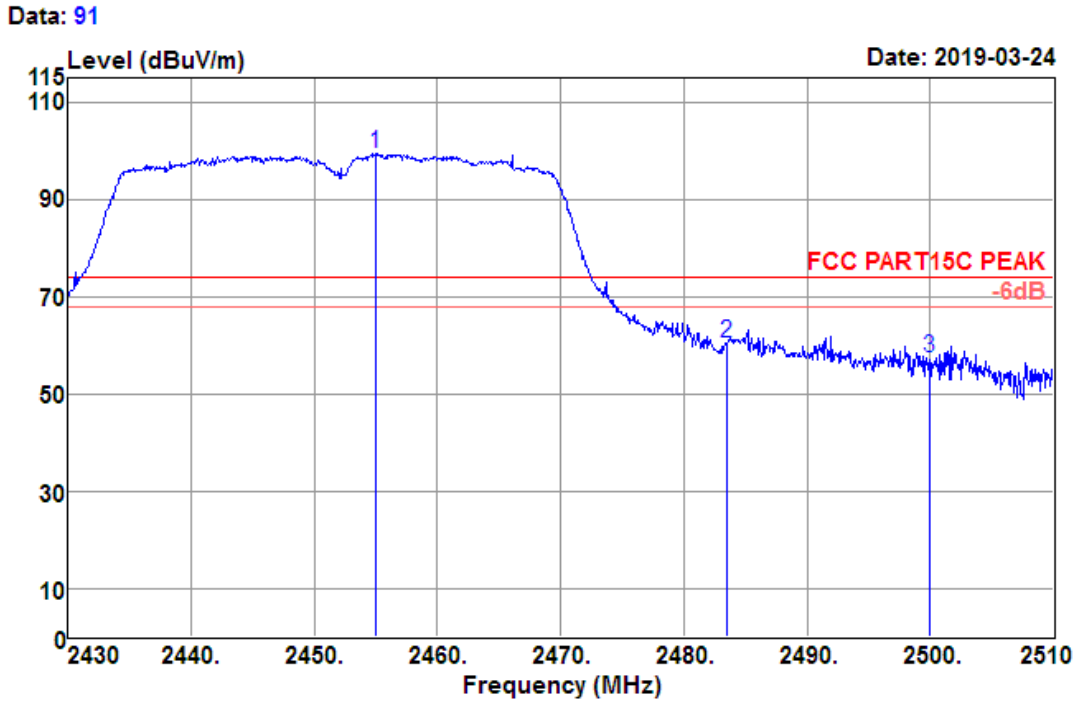
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2456.560	105.50	27.29	3.67	36.26	100.20	74.00	26.20	Peak
2483.500	66.65	27.36	3.68	36.33	61.36	74.00	-12.64	Peak
2500.000	62.24	27.40	3.68	36.37	56.95	74.00	-17.05	Peak

Test Mode :	802.11n HT20 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal



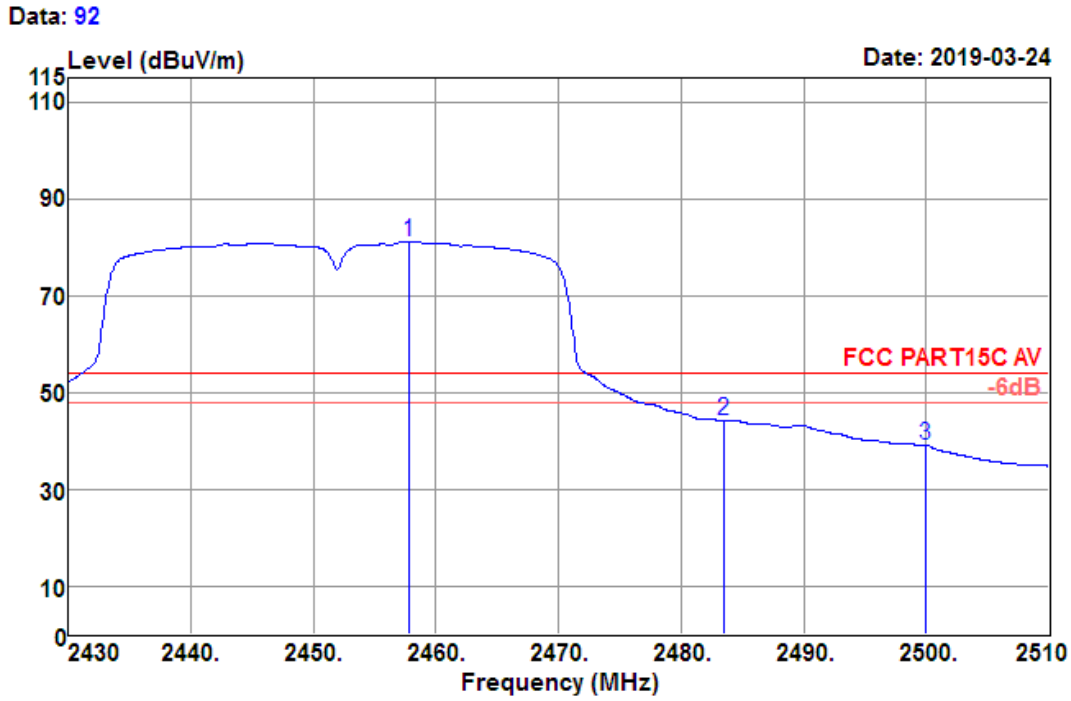
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2457.840	87.11	27.29	3.67	36.26	81.81	54.00	27.81	Average
2483.500	50.03	27.36	3.68	36.33	44.74	54.00	-9.26	Average
2500.000	43.62	27.40	3.68	36.37	38.33	54.00	-15.67	Average

Test Mode :	802.11n HT20 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2454.960	104.66	27.28	3.67	36.25	99.36	74.00	25.36	Peak
2483.500	65.80	27.36	3.68	36.33	60.51	74.00	-13.49	Peak
2500.000	62.60	27.40	3.68	36.37	57.31	74.00	-16.69	Peak

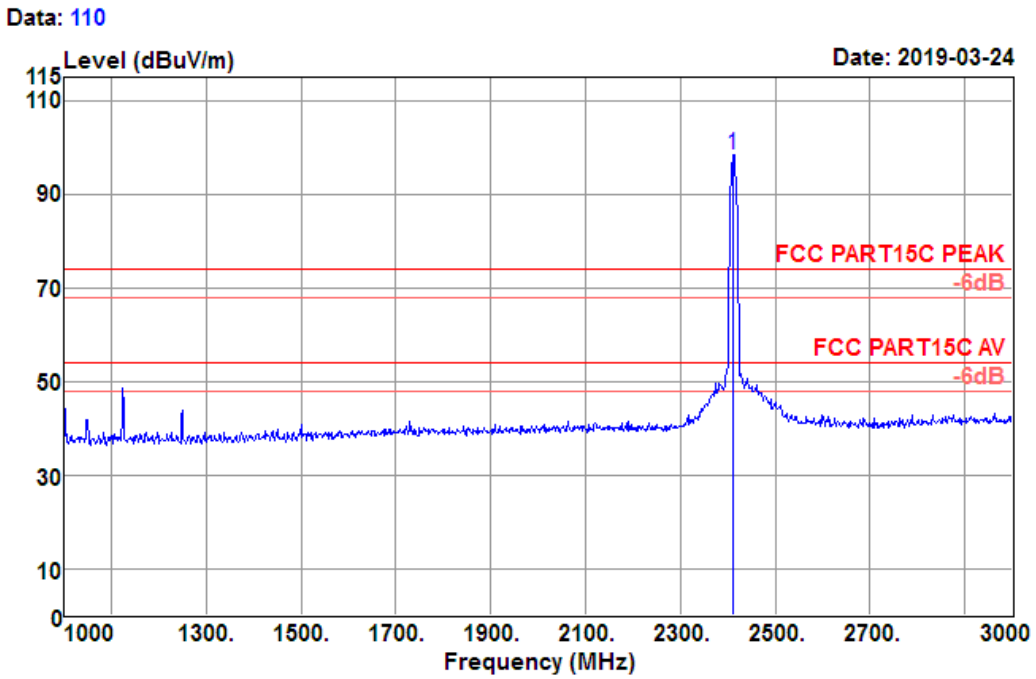
Test Mode :	802.11n HT20 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2457.840	86.39	27.29	3.67	36.26	81.09	54.00	27.09	Average
2483.500	49.50	27.36	3.68	36.33	44.21	54.00	-9.79	Average
2500.000	44.43	27.40	3.68	36.37	39.14	54.00	-14.86	Average

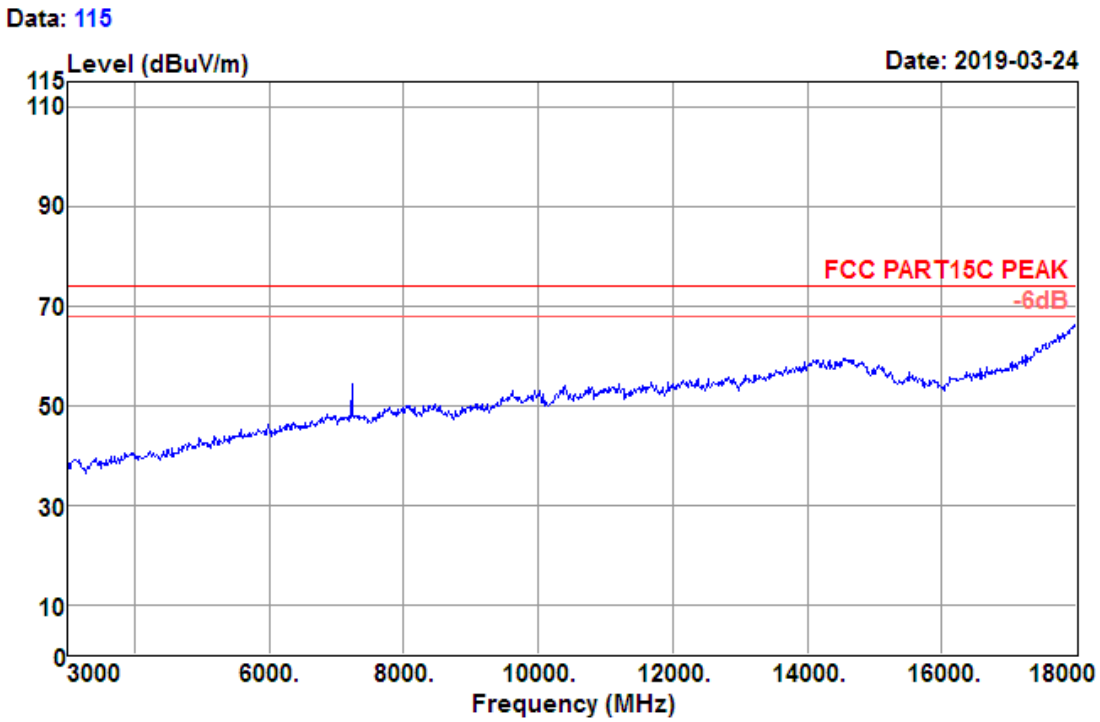
4.5.5 Test Result of Radiated Spurious Emission (1GHz ~ 10th Harmonic)

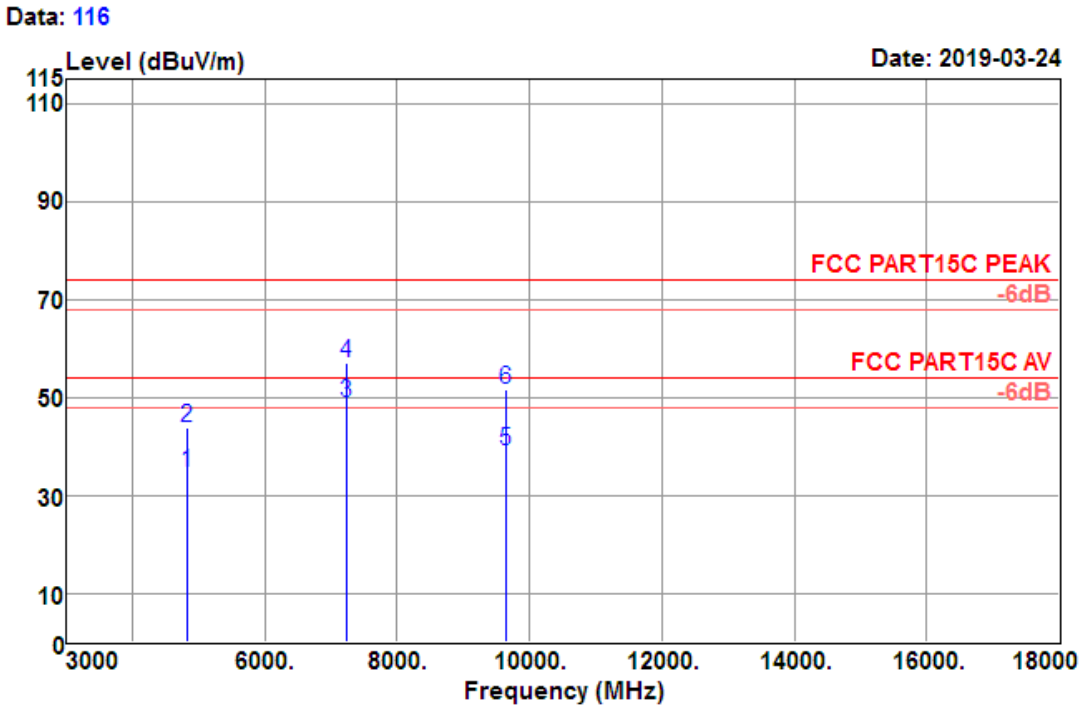
Test Mode :	802.11b CH01 (2412 MHz)	**Temperature :**	21~23℃
Test Engineer :	Jack Liu	**Relative Humidity :**	63~65%
Frequencey Range	1GHz~3GHz	**Polarization :**	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	103.70	27.17	3.65	36.14	98.38	74.00	24.38	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

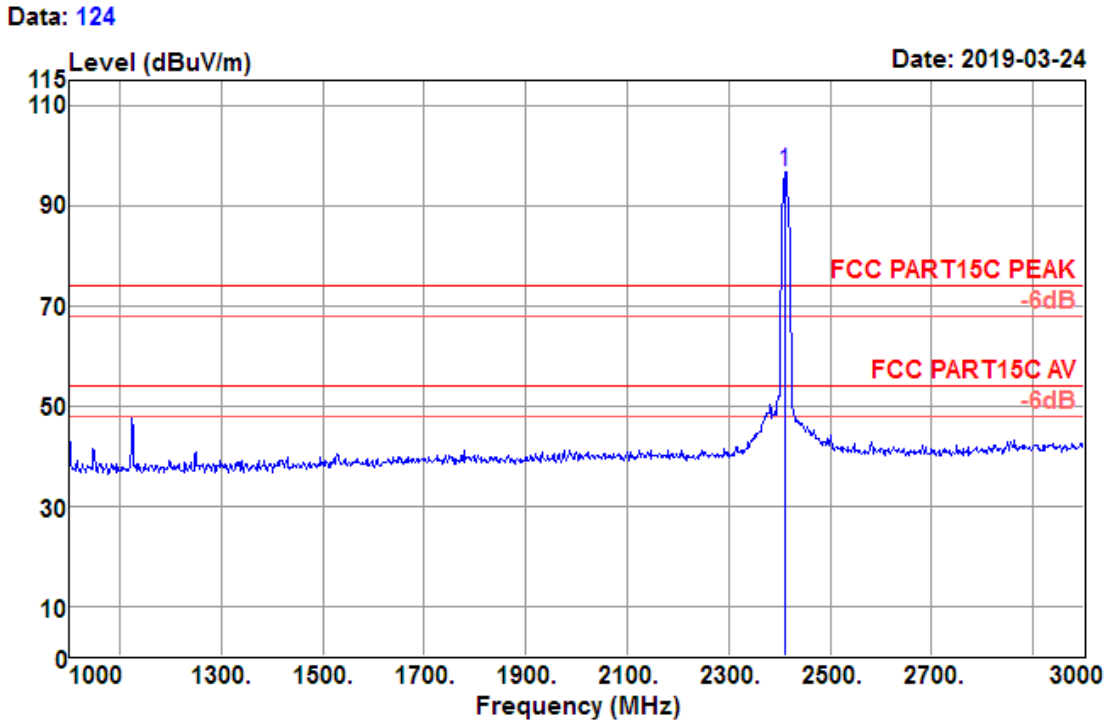




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	34.27	31.28	5.44	36.26	34.73	54.00	-19.27	Average
4824.000	43.22	31.28	5.44	36.26	43.68	74.00	-30.32	Peak
7236.000	40.02	35.94	7.02	34.27	48.71	54.00	-5.29	Average
7236.000	48.32	35.94	7.02	34.27	57.01	74.00	-16.99	Peak
9648.000	27.43	37.87	7.82	34.15	38.97	54.00	-15.03	Average
9648.000	40.01	37.87	7.82	34.15	51.55	74.00	-22.45	Peak

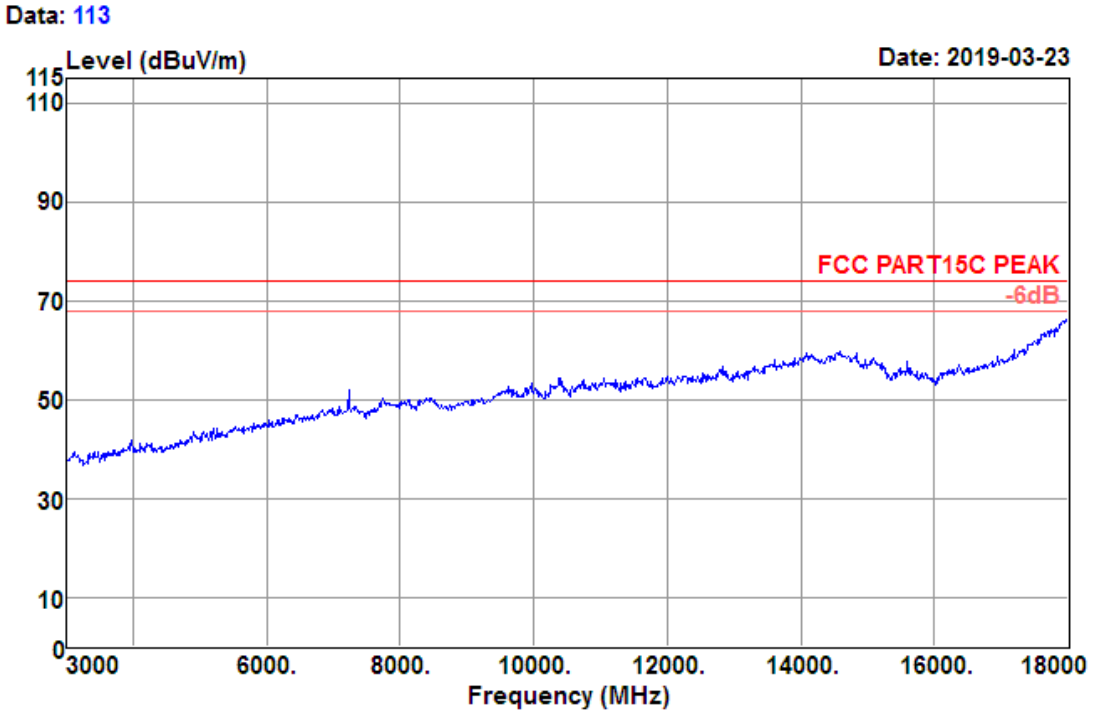
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

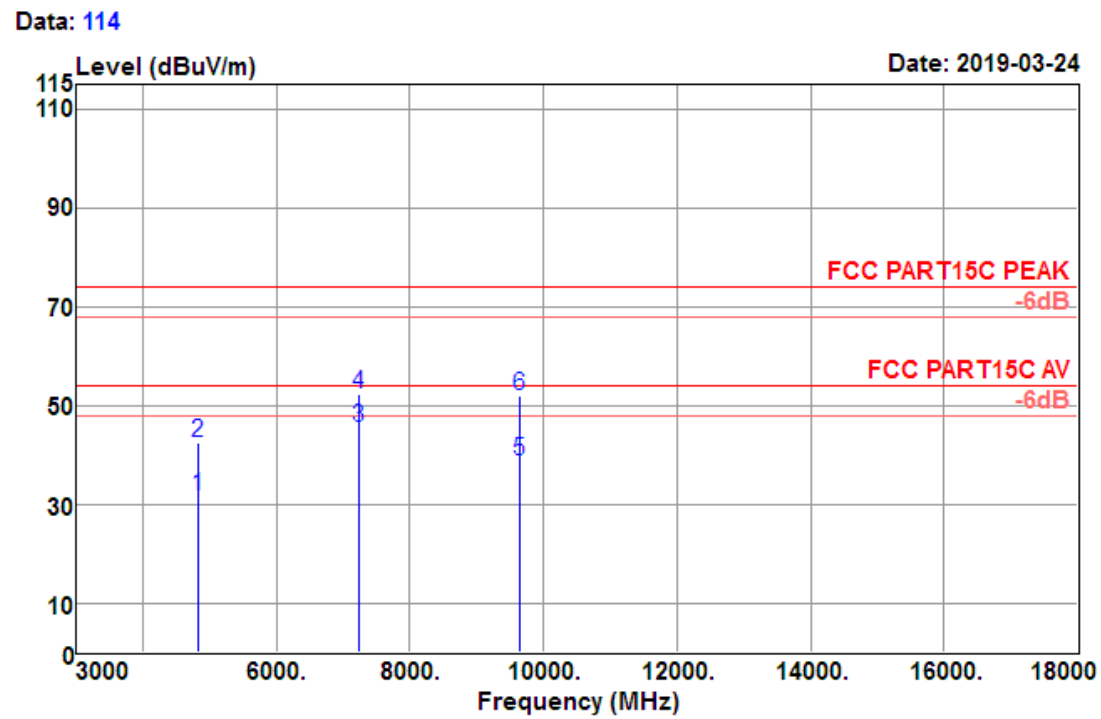
Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	101.98	27.17	3.65	36.14	96.66	74.00	22.66	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

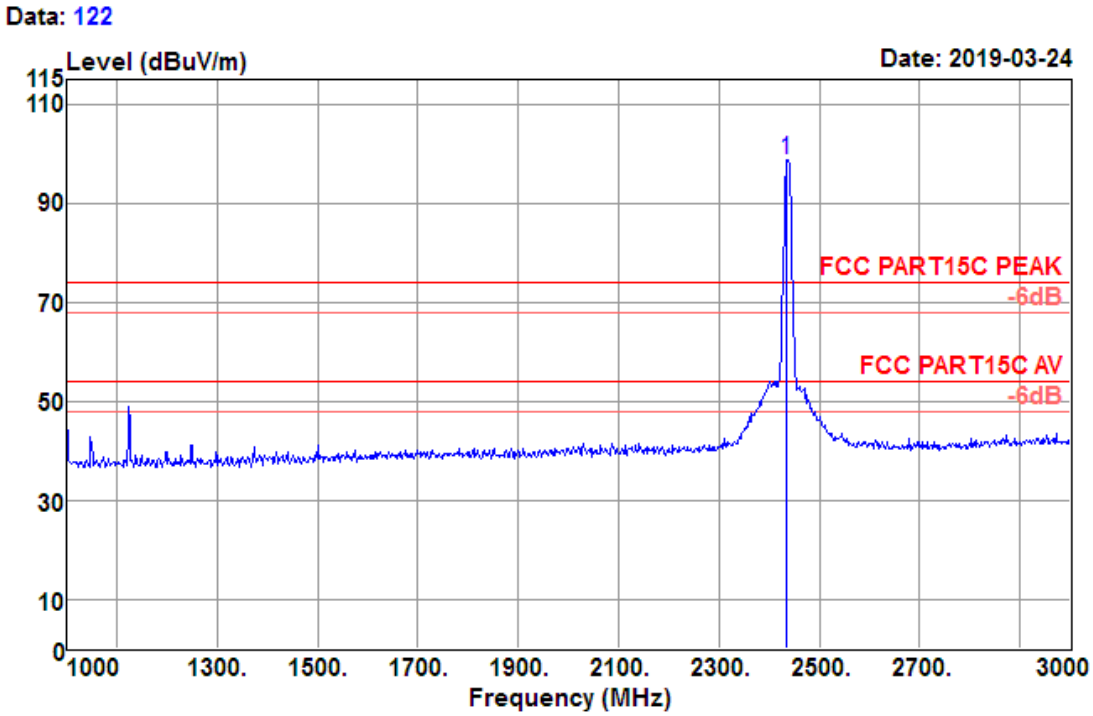




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	31.09	31.28	5.44	36.26	31.55	54.00	-22.45	Average
4824.000	41.95	31.28	5.44	36.26	42.41	74.00	-31.59	Peak
7236.000	36.63	35.94	7.02	34.27	45.32	54.00	-8.68	Average
7236.000	43.73	35.94	7.02	34.27	52.42	74.00	-21.58	Peak
9648.000	27.31	37.87	7.82	34.15	38.85	54.00	-15.15	Average
9648.000	40.23	37.87	7.82	34.15	51.77	74.00	-22.23	Peak

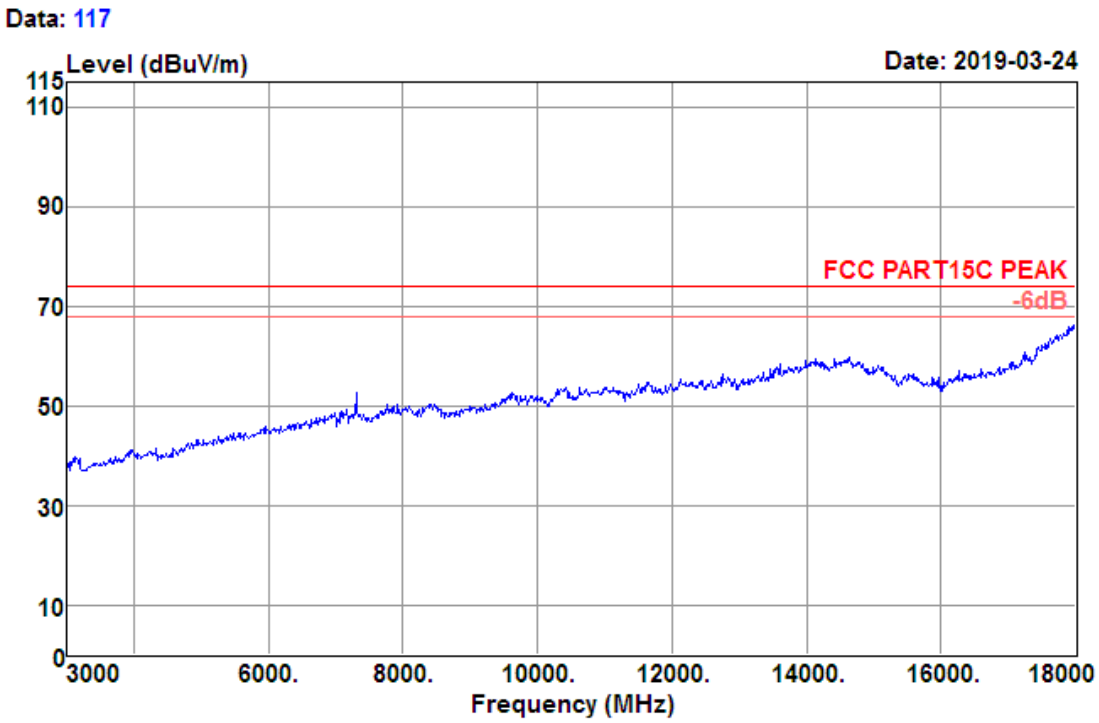
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

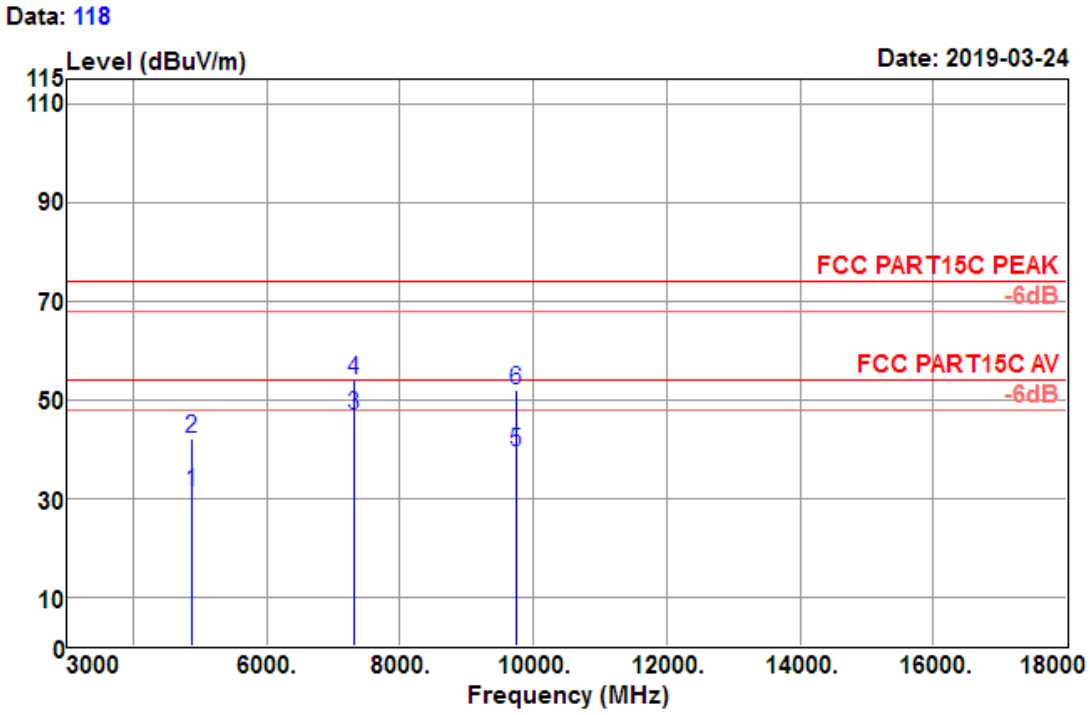
Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2436.000	104.15	27.23	3.66	36.20	98.84	74.00	24.84	Peak

Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

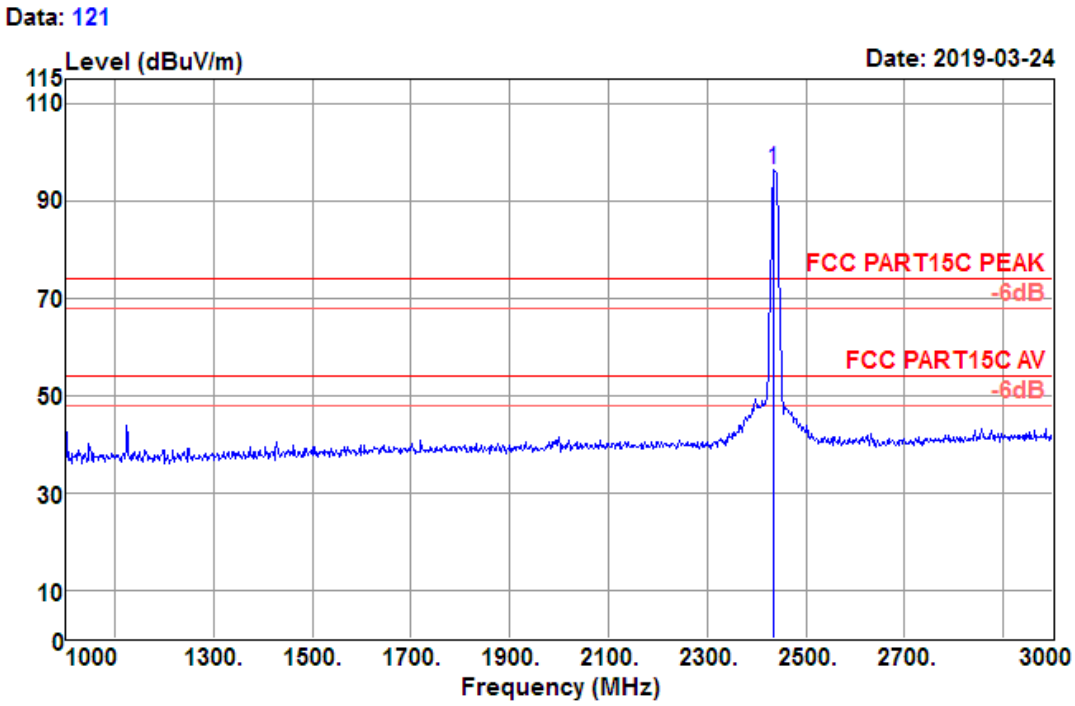




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	30.77	31.40	5.41	36.24	31.34	54.00	-22.66	Average
4874.000	41.58	31.40	5.41	36.24	42.15	74.00	-31.85	Peak
7311.000	37.95	36.12	7.24	34.35	46.96	54.00	-7.04	Average
7311.000	44.88	36.12	7.24	34.35	53.89	74.00	-20.11	Peak
9748.000	27.66	38.05	7.96	34.19	39.48	54.00	-14.52	Average
9748.000	40.14	38.05	7.96	34.19	51.96	74.00	-22.04	Peak

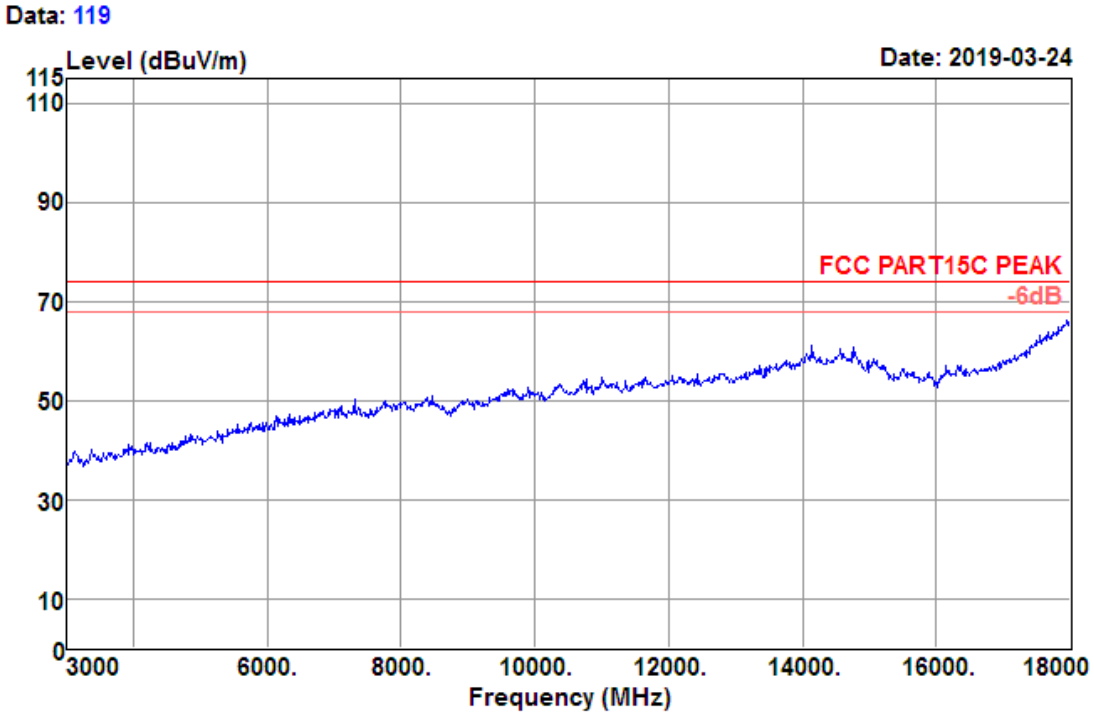
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

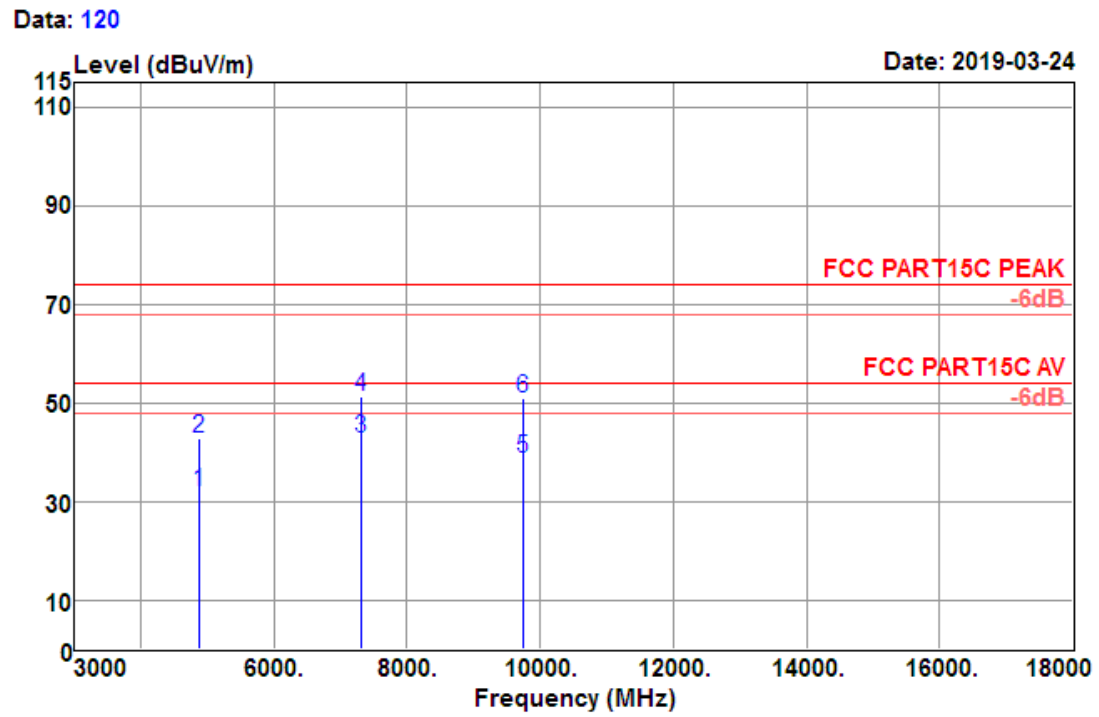
Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2436.000	101.60	27.23	3.66	36.20	96.29	74.00	22.29	Peak

Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

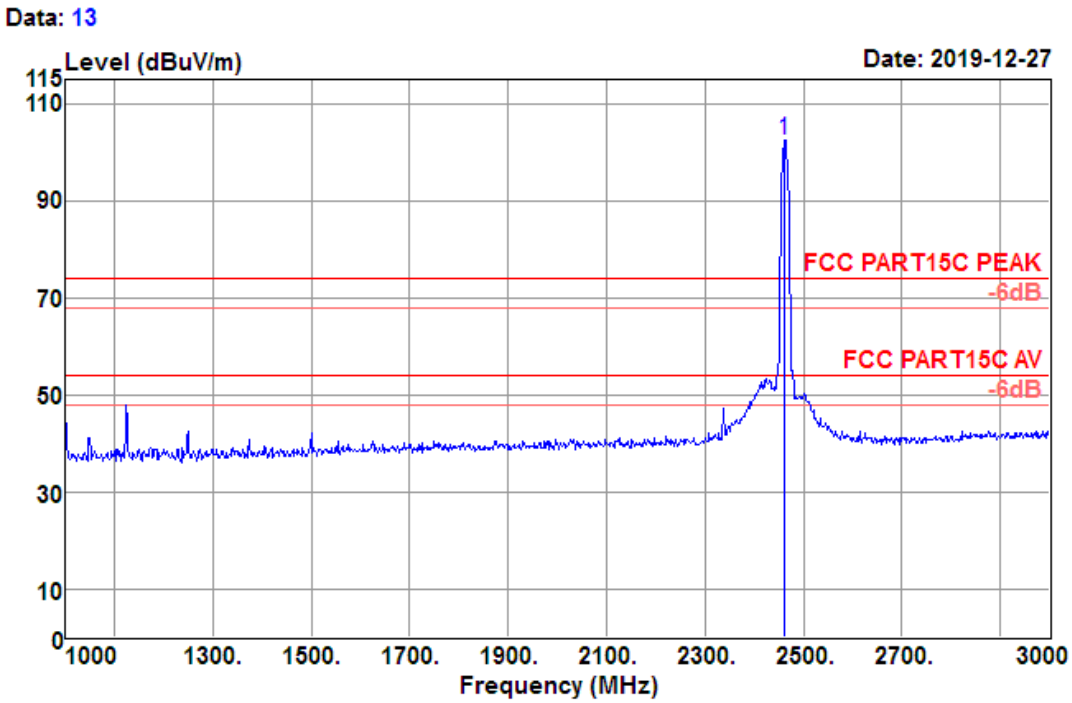




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	31.28	31.40	5.41	36.24	31.85	54.00	-22.15	Average
4874.000	42.03	31.40	5.41	36.24	42.60	74.00	-31.40	Peak
7311.000	33.76	36.12	7.24	34.35	42.77	54.00	-11.23	Average
7311.000	42.18	36.12	7.24	34.35	51.19	74.00	-22.81	Peak
9748.000	27.01	38.05	7.96	34.19	38.83	54.00	-15.17	Average
9748.000	39.18	38.05	7.96	34.19	51.00	74.00	-23.00	Peak

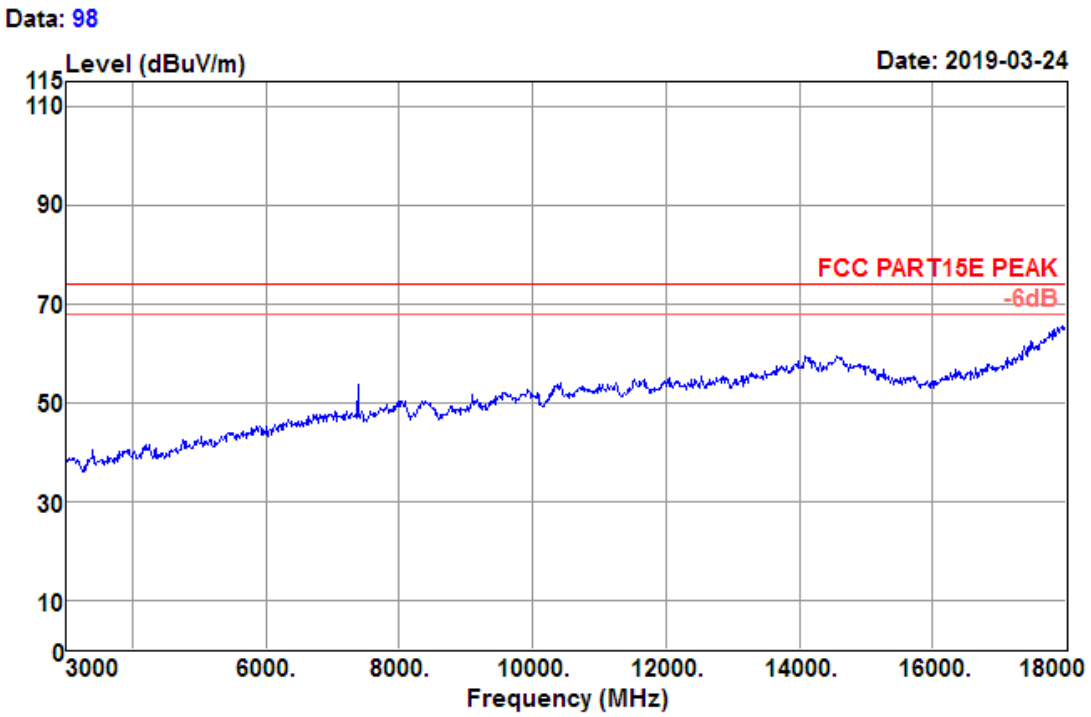
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

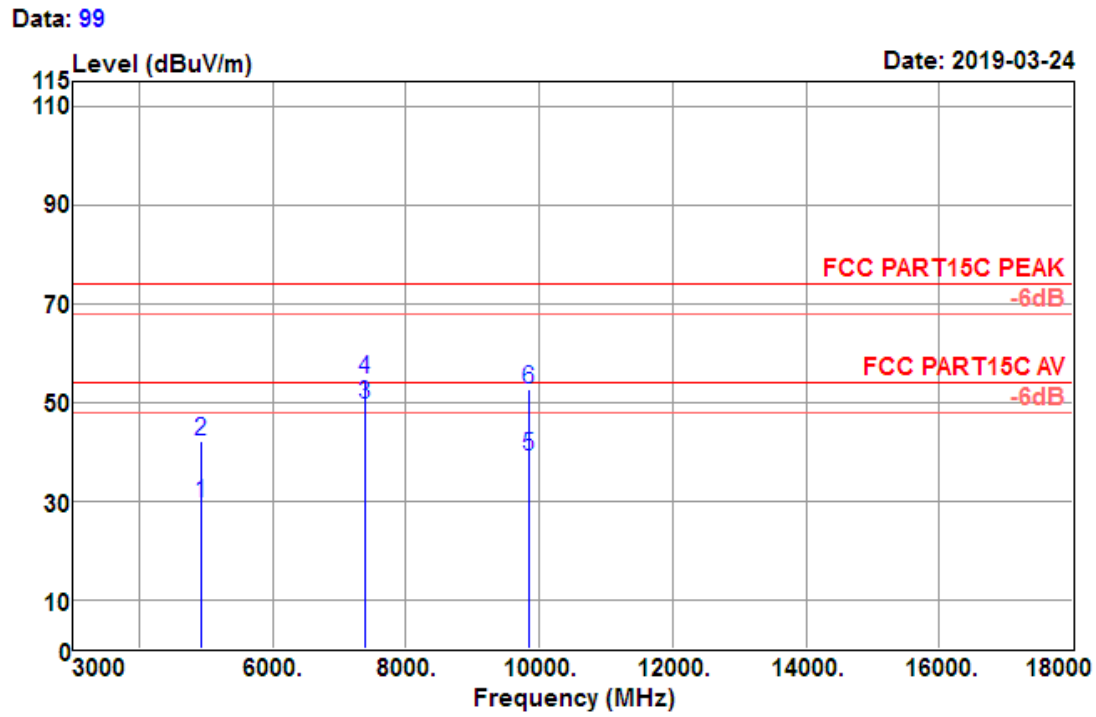
Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.000	71.58	27.30	3.67	0.00	102.55	74.00	28.55	Peak

Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

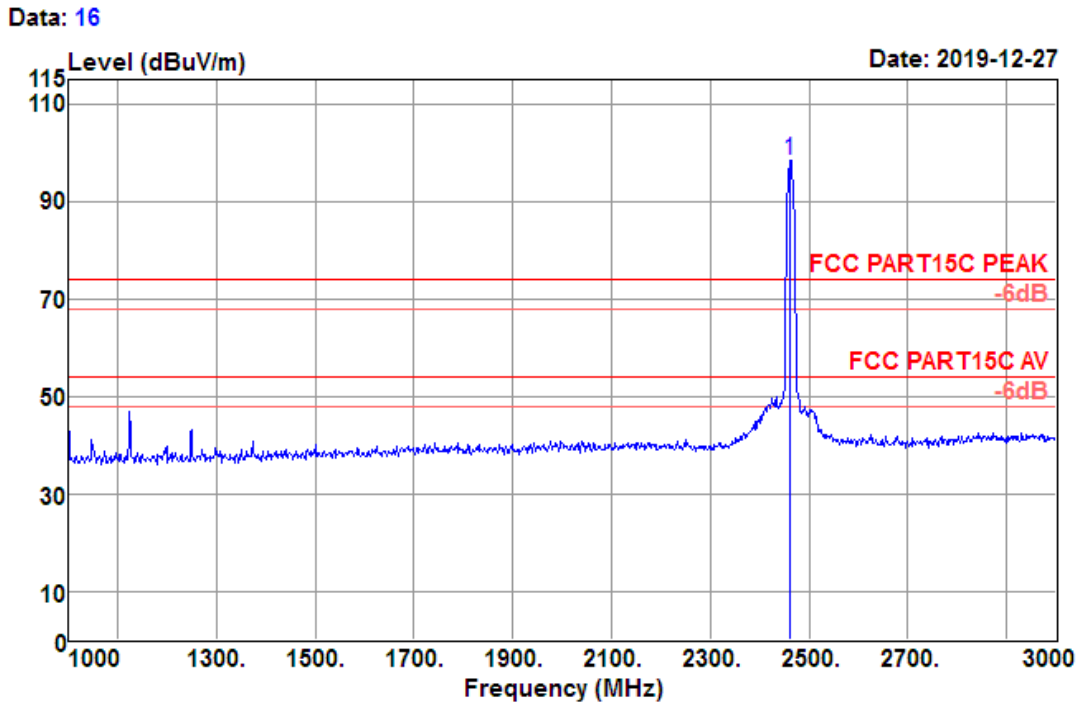




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	28.80	31.52	5.38	36.23	29.47	54.00	-24.53	Average
4924.000	41.51	31.52	5.38	36.23	42.18	74.00	-31.82	Peak
7386.000	40.12	36.29	7.46	34.42	49.45	54.00	-4.55	Average
7386.000	45.37	36.29	7.46	34.42	54.70	74.00	-19.30	Peak
9848.000	27.13	38.23	8.04	34.23	39.17	54.00	-14.83	Average
9848.000	40.61	38.23	8.04	34.23	52.65	74.00	-21.35	Peak

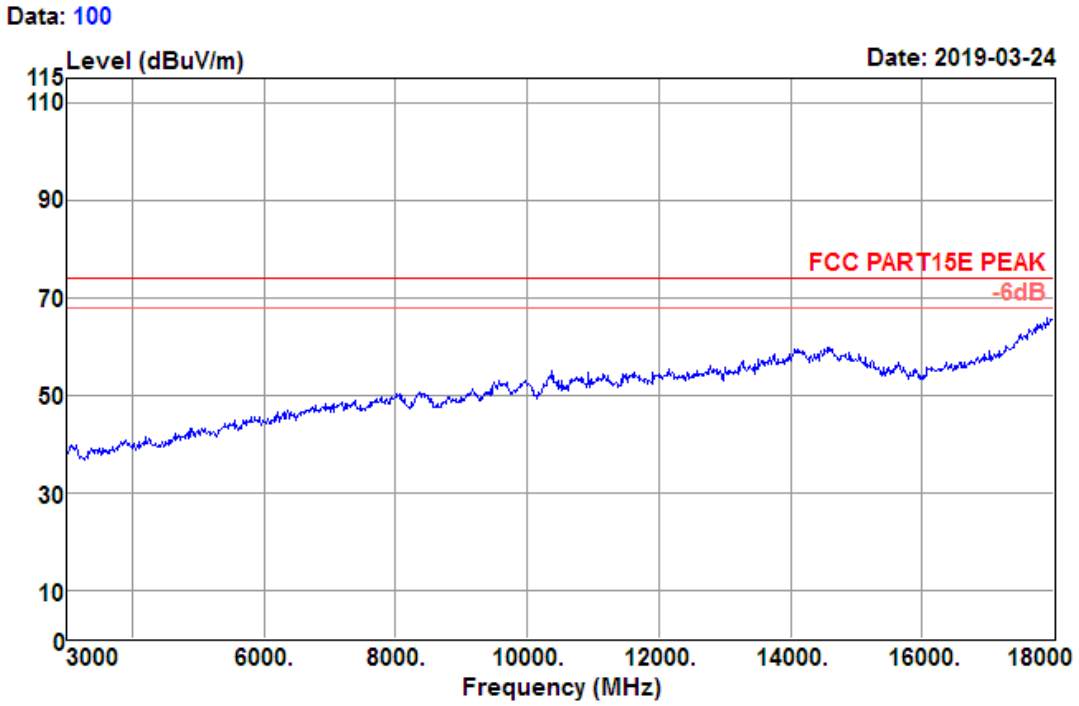
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

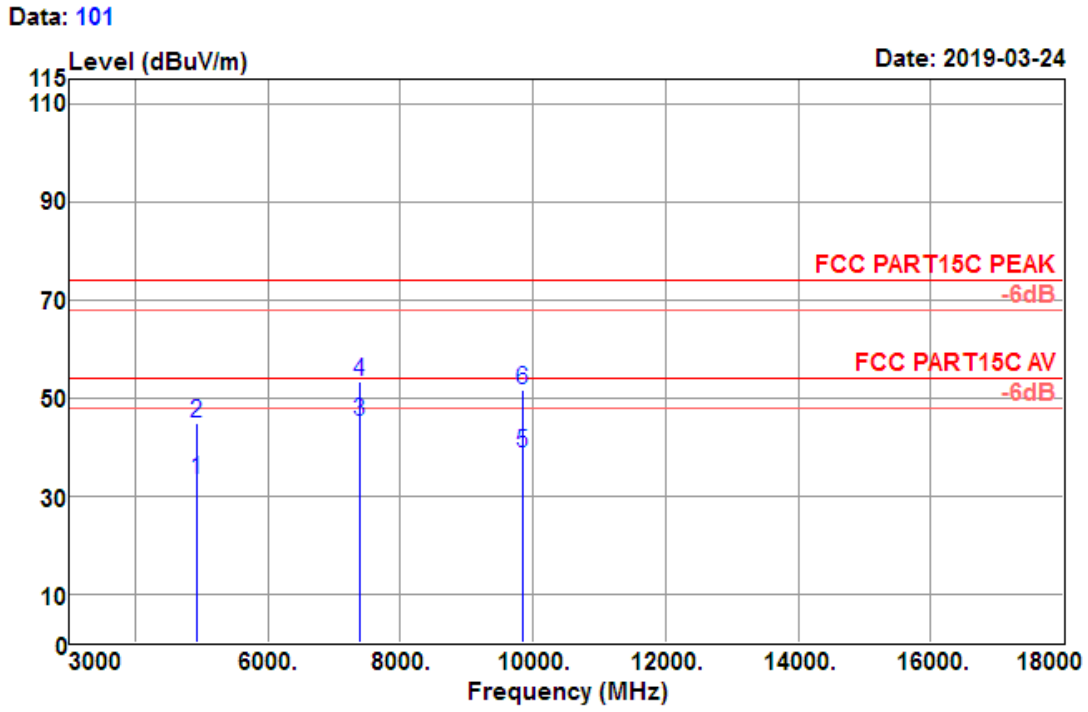
Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2462.000	67.54	27.30	3.67	0.00	98.51	74.00	24.51	Peak

Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

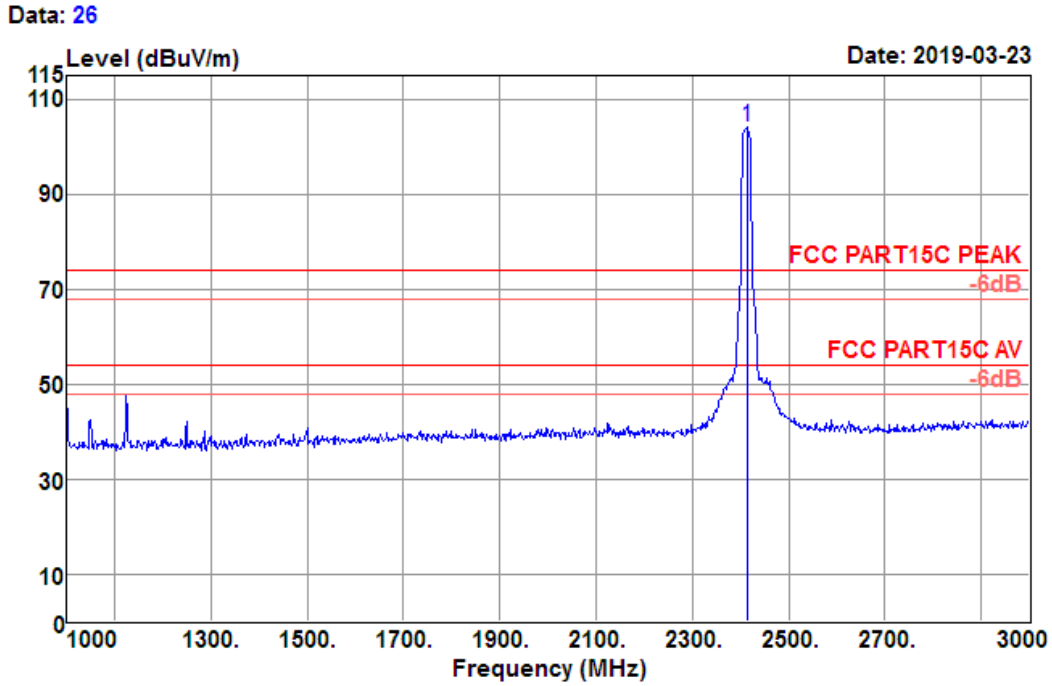




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	32.56	31.52	5.38	36.23	33.23	54.00	-20.77	Average
4924.000	43.97	31.52	5.38	36.23	44.64	74.00	-29.36	Peak
7386.000	35.65	36.29	7.46	34.42	44.98	54.00	-9.02	Average
7386.000	44.09	36.29	7.46	34.42	53.42	74.00	-20.58	Peak
9848.000	26.61	38.23	8.04	34.23	38.65	54.00	-15.35	Average
9848.000	39.39	38.23	8.04	34.23	51.43	74.00	-22.57	Peak

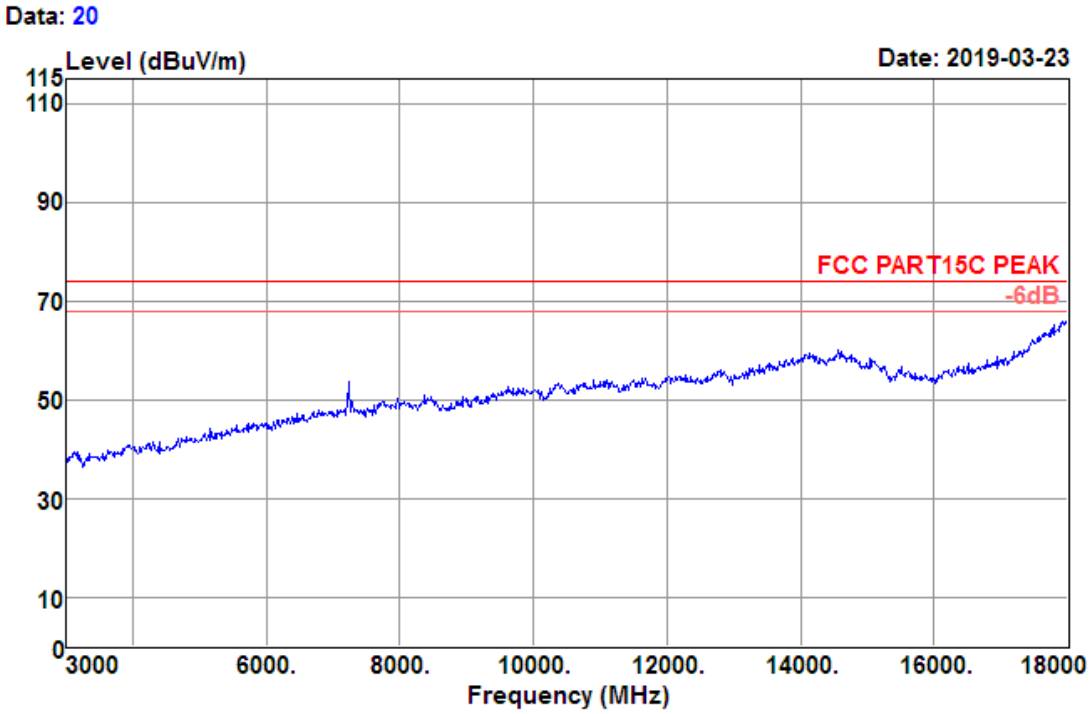
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal

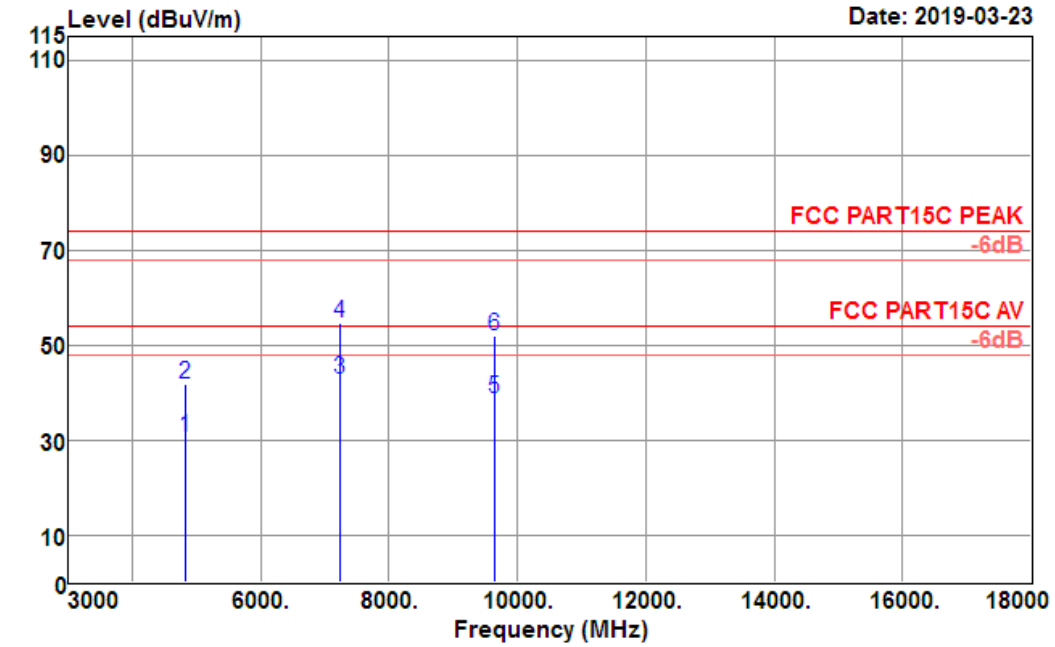


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2414.000	109.37	27.18	3.65	36.14	104.06	74.00	30.06	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal



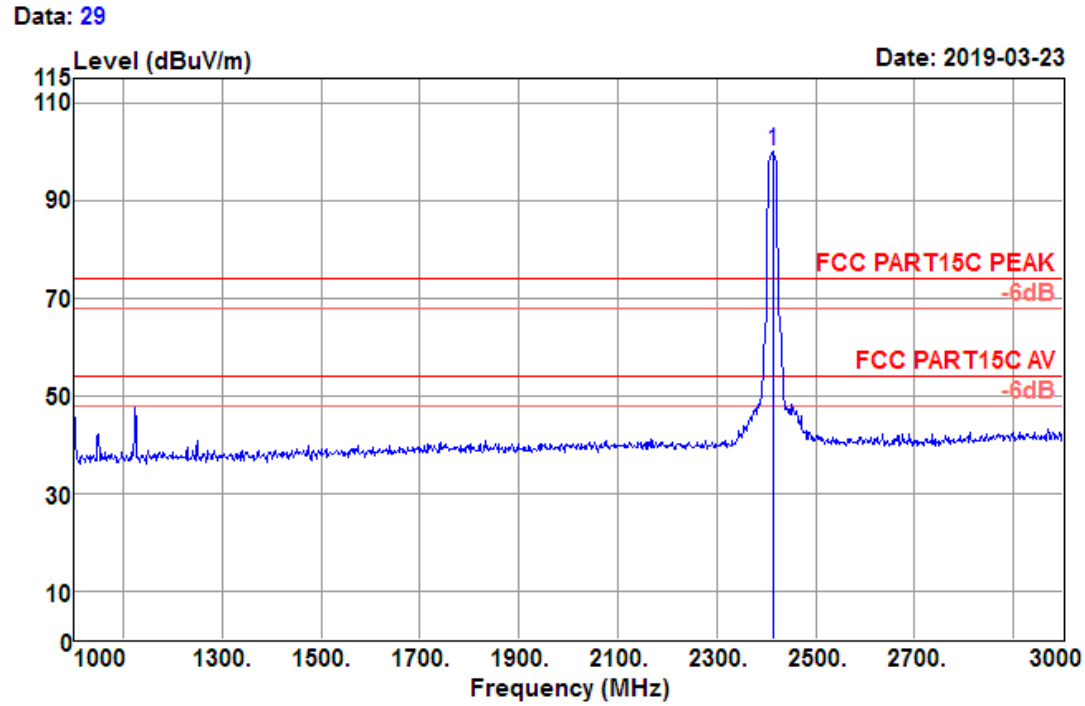
Data: 21



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	30.25	31.28	5.44	36.26	30.71	54.00	-23.29	Average
4824.000	41.44	31.28	5.44	36.26	41.90	74.00	-32.10	Peak
7236.000	34.12	35.94	7.02	34.27	42.81	54.00	-11.19	Average
7236.000	46.08	35.94	7.02	34.27	54.77	74.00	-19.23	Peak
9648.000	27.00	37.87	7.82	34.15	38.54	54.00	-15.46	Average
9648.000	40.45	37.87	7.82	34.15	51.99	74.00	-22.01	Peak

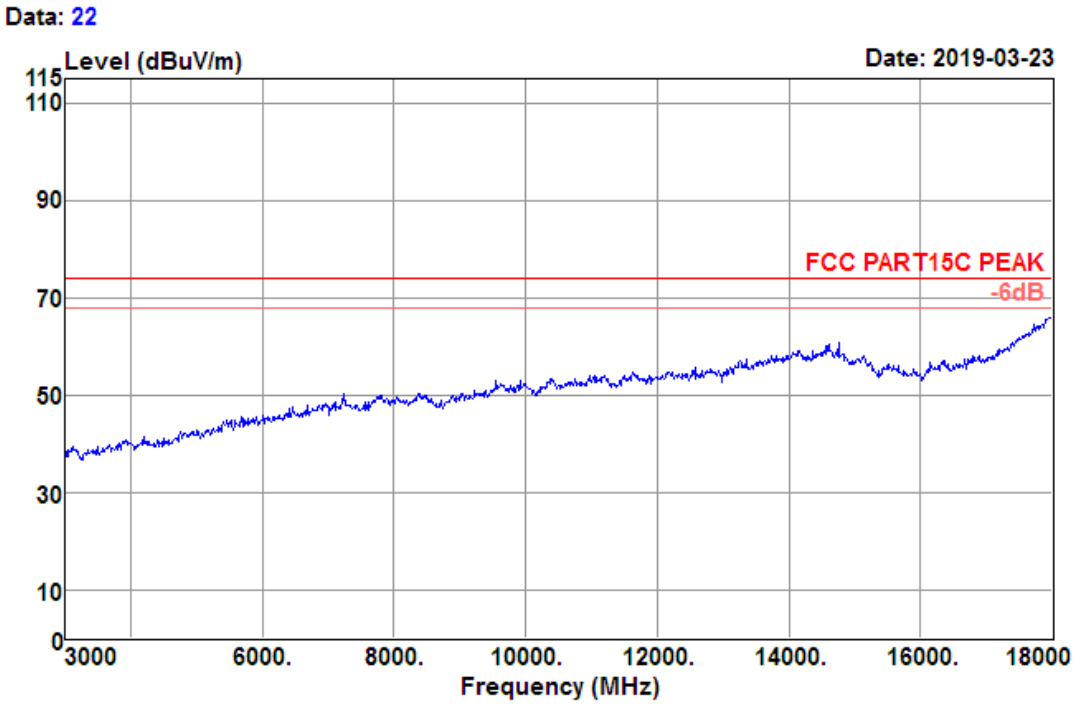
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

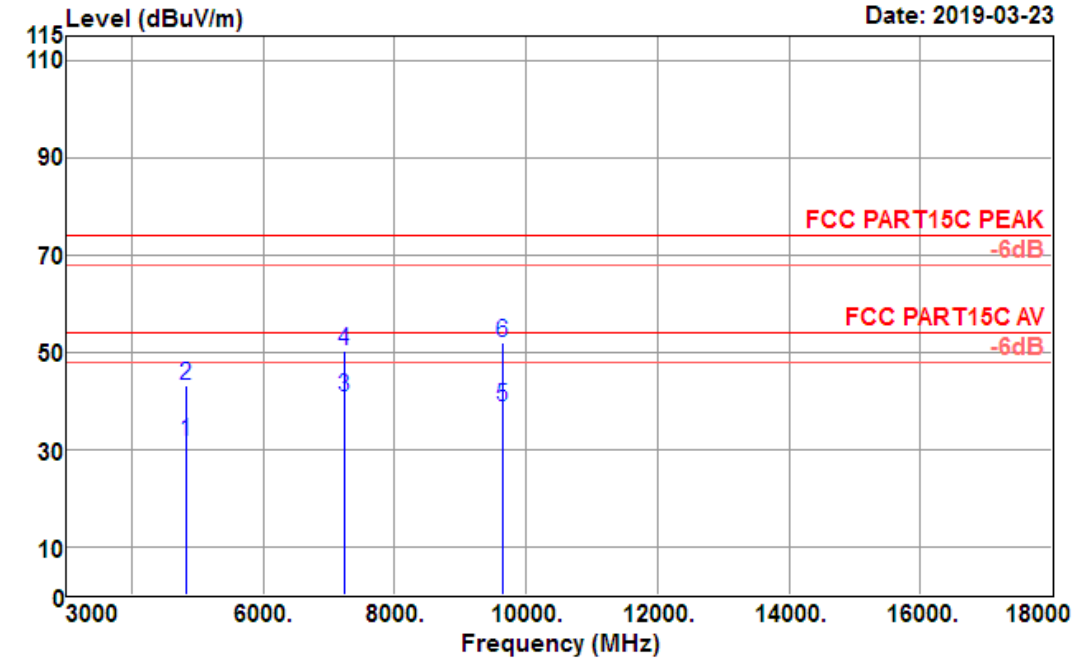
Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2414.000	105.54	27.18	3.65	36.14	100.23	74.00	26.23	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

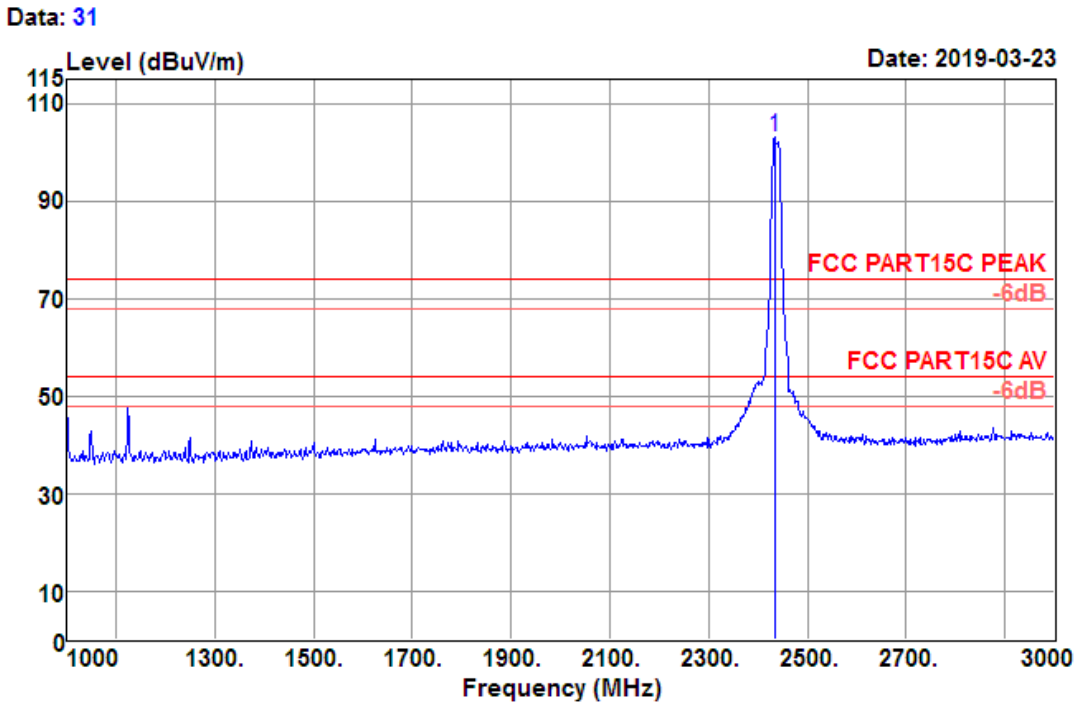




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	31.10	31.28	5.44	36.26	31.56	54.00	-22.44	Average
4824.000	42.52	31.28	5.44	36.26	42.98	74.00	-31.02	Peak
7236.000	32.14	35.94	7.02	34.27	40.83	54.00	-13.17	Average
7236.000	41.55	35.94	7.02	34.27	50.24	74.00	-23.76	Peak
9648.000	27.12	37.87	7.82	34.15	38.66	54.00	-15.34	Average
9648.000	40.32	37.87	7.82	34.15	51.86	74.00	-22.14	Peak

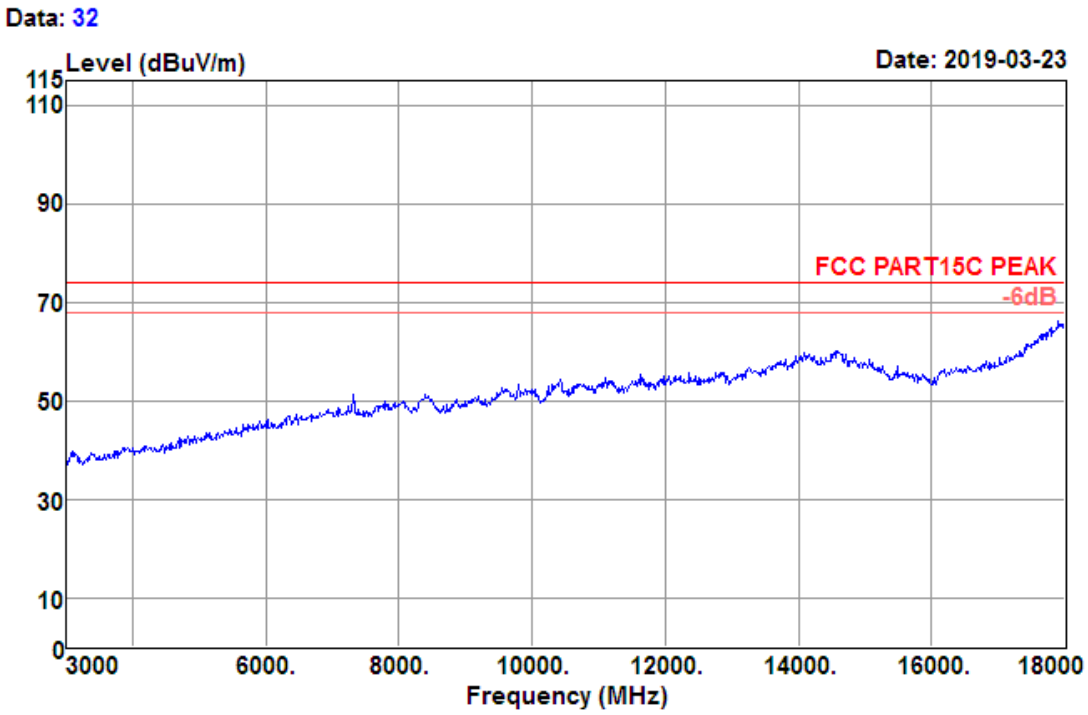
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

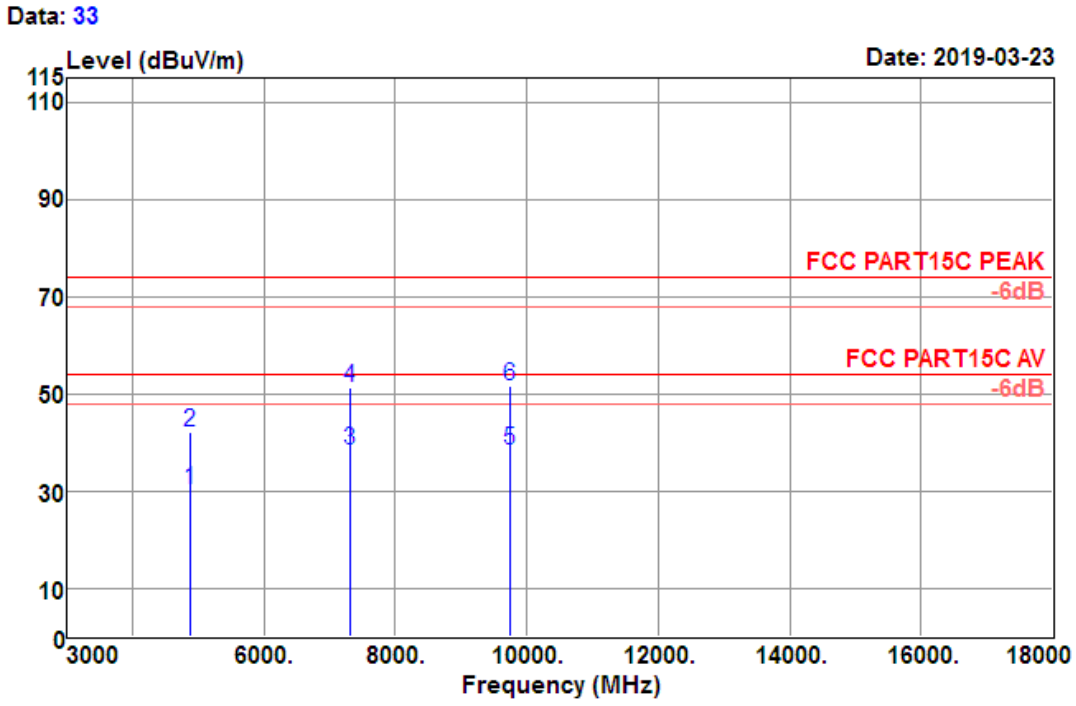
Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2434.000	108.41	27.23	3.66	36.20	103.10	74.00	29.10	Peak

Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

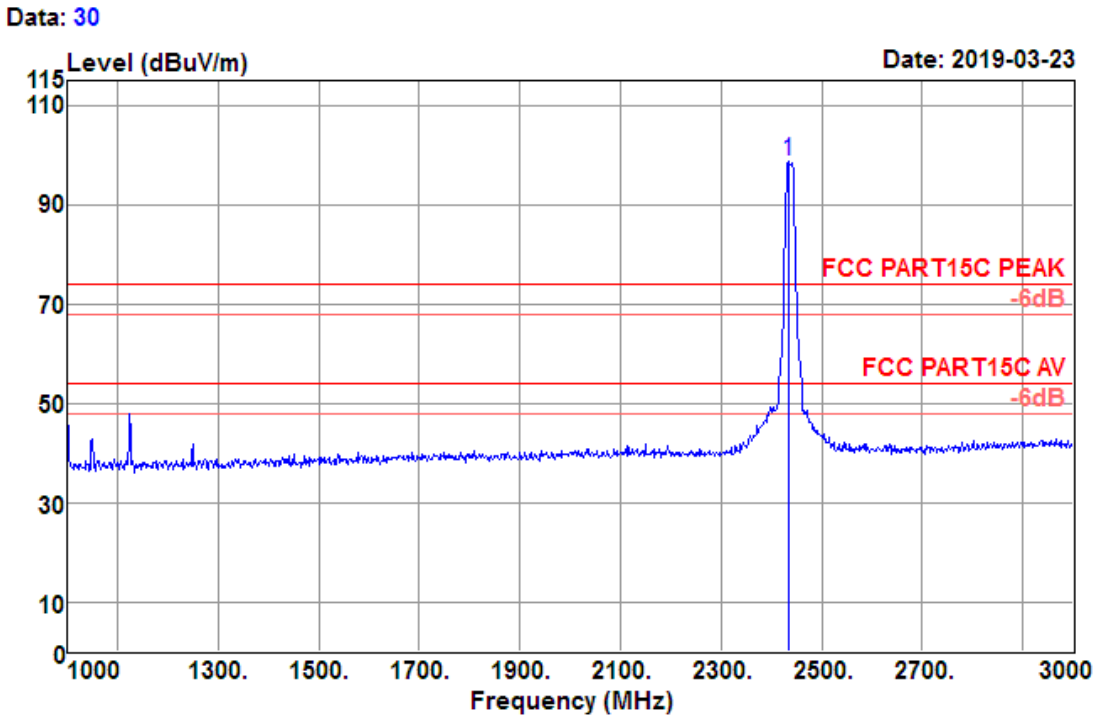




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	29.75	31.40	5.41	36.24	30.32	54.00	-23.68	Average
4874.000	41.63	31.40	5.41	36.24	42.20	74.00	-31.80	Peak
7311.000	29.44	36.12	7.24	34.35	38.45	54.00	-15.55	Average
7311.000	42.15	36.12	7.24	34.35	51.16	74.00	-22.84	Peak
9748.000	26.47	38.05	7.96	34.19	38.29	54.00	-15.71	Average
9748.000	39.86	38.05	7.96	34.19	51.68	74.00	-22.32	Peak

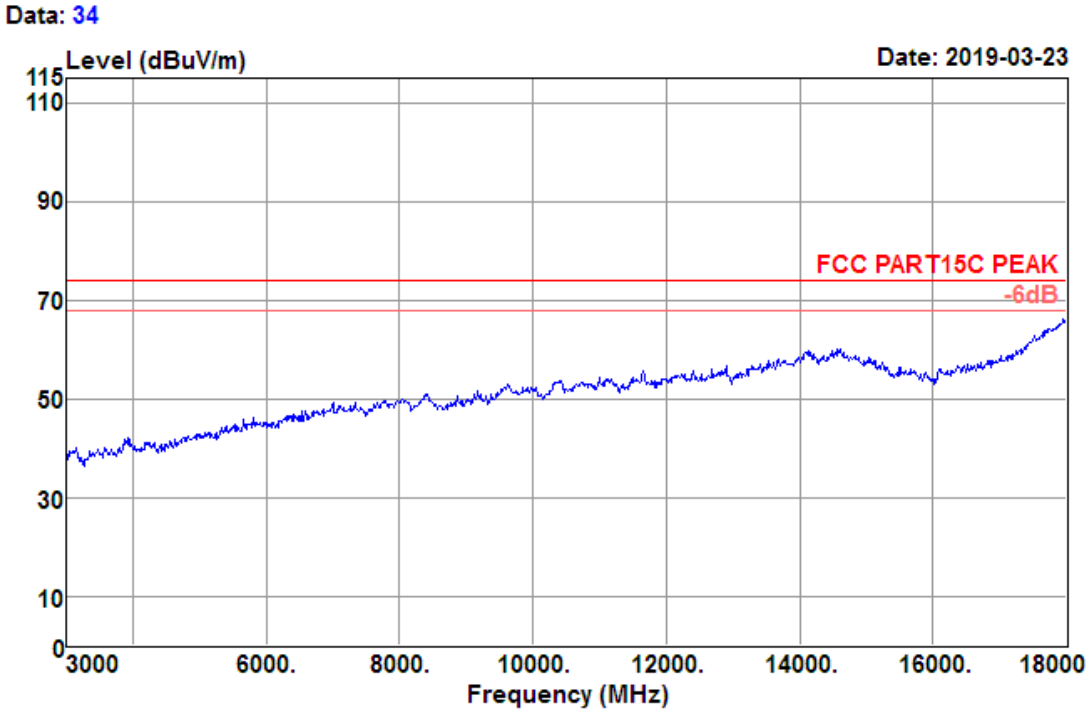
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

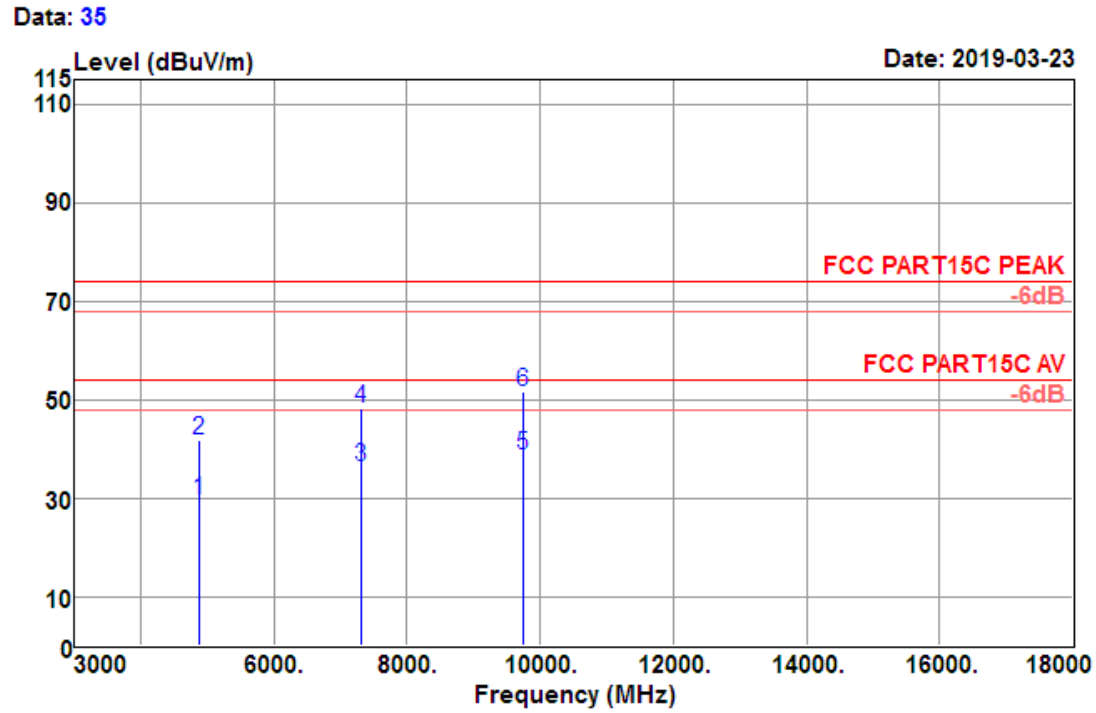
Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2434.000	104.18	27.23	3.66	36.20	98.87	74.00	24.87	Peak

Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

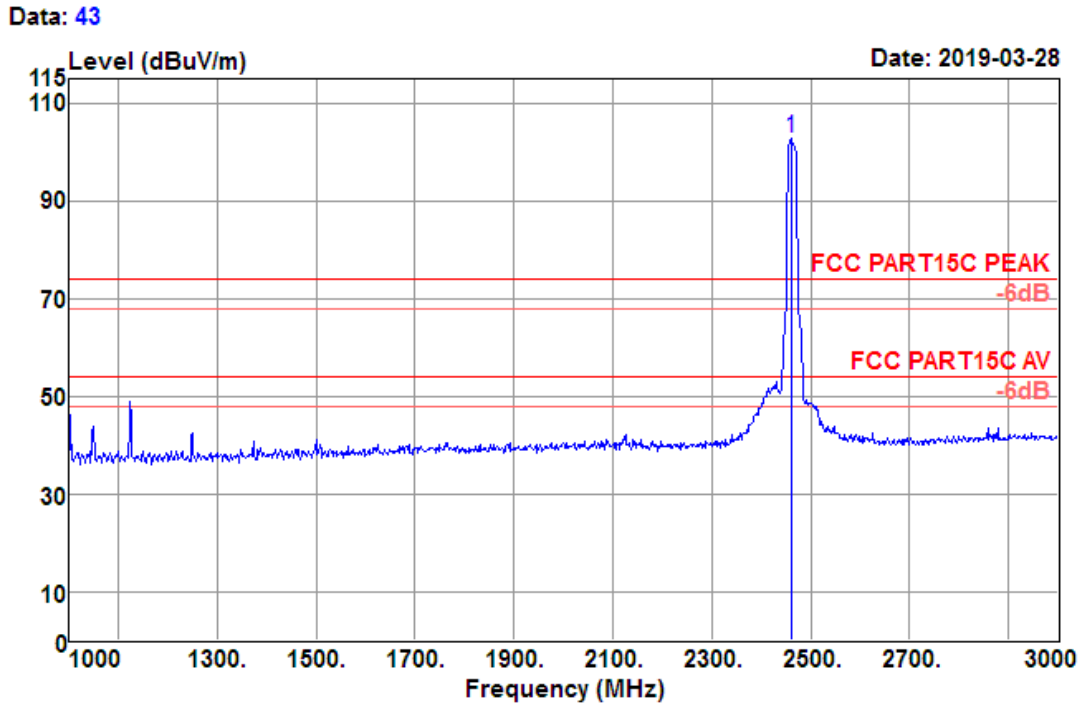




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	29.10	31.40	5.41	36.24	29.67	54.00	-24.33	Average
4874.000	41.24	31.40	5.41	36.24	41.81	74.00	-32.19	Peak
7311.000	27.23	36.12	7.24	34.35	36.24	54.00	-17.76	Average
7311.000	39.27	36.12	7.24	34.35	48.28	74.00	-25.72	Peak
9748.000	26.84	38.05	7.96	34.19	38.66	54.00	-15.34	Average
9748.000	39.68	38.05	7.96	34.19	51.50	74.00	-22.50	Peak

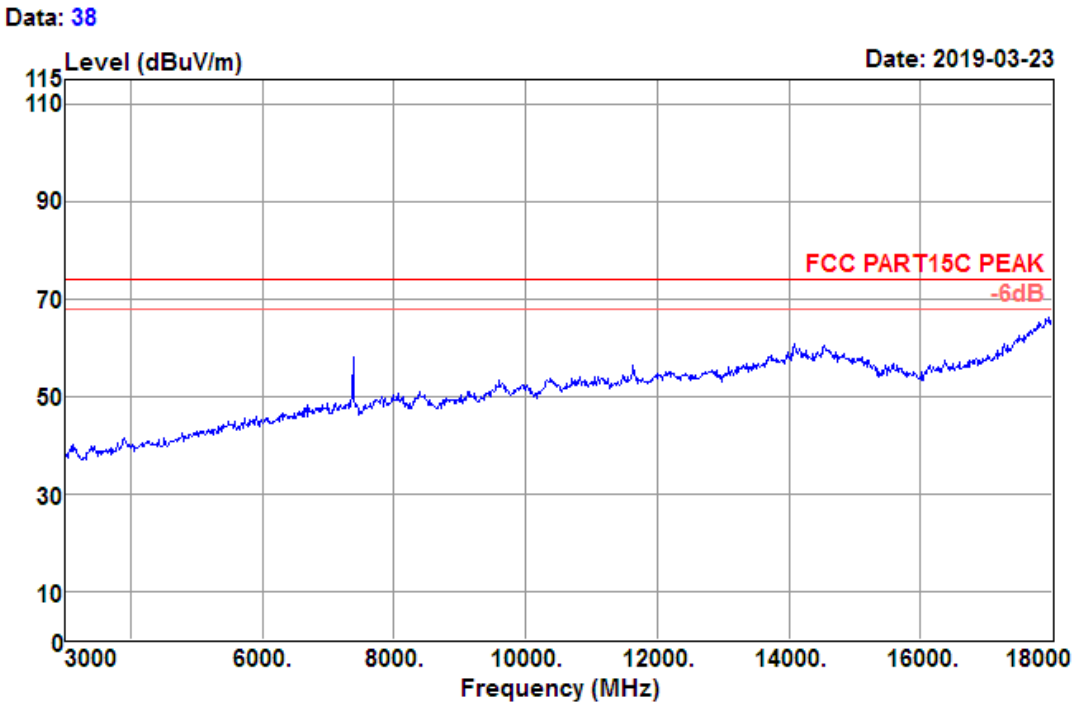
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

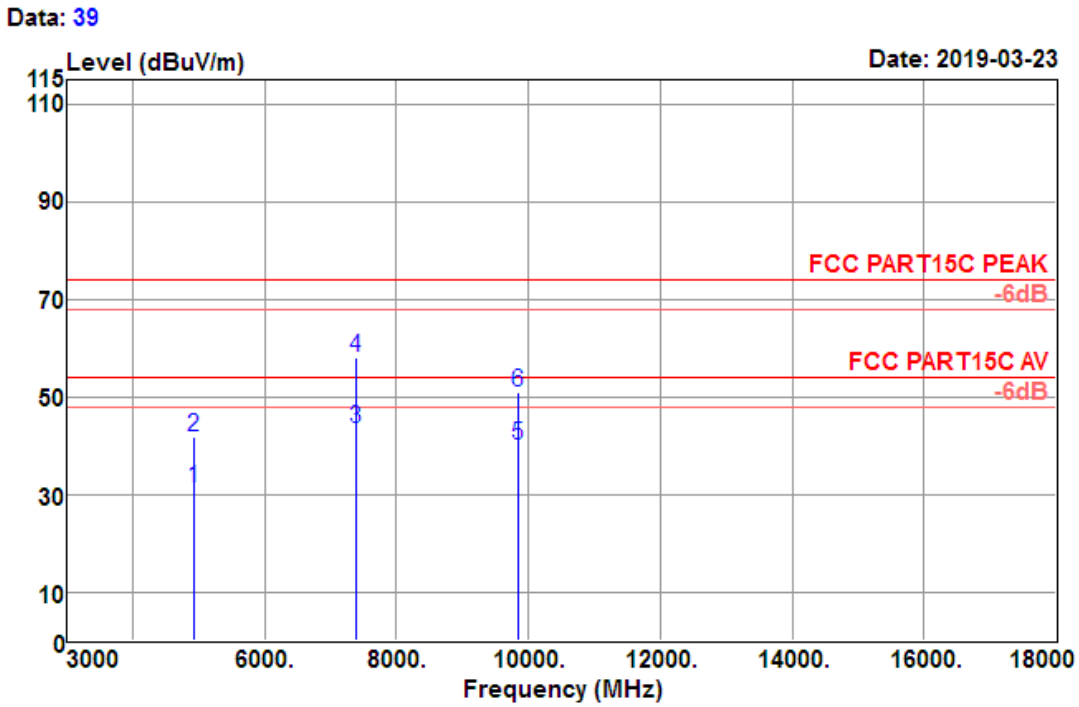
Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2460.000	107.97	27.30	3.67	36.26	102.68	74.00	28.68	Peak

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

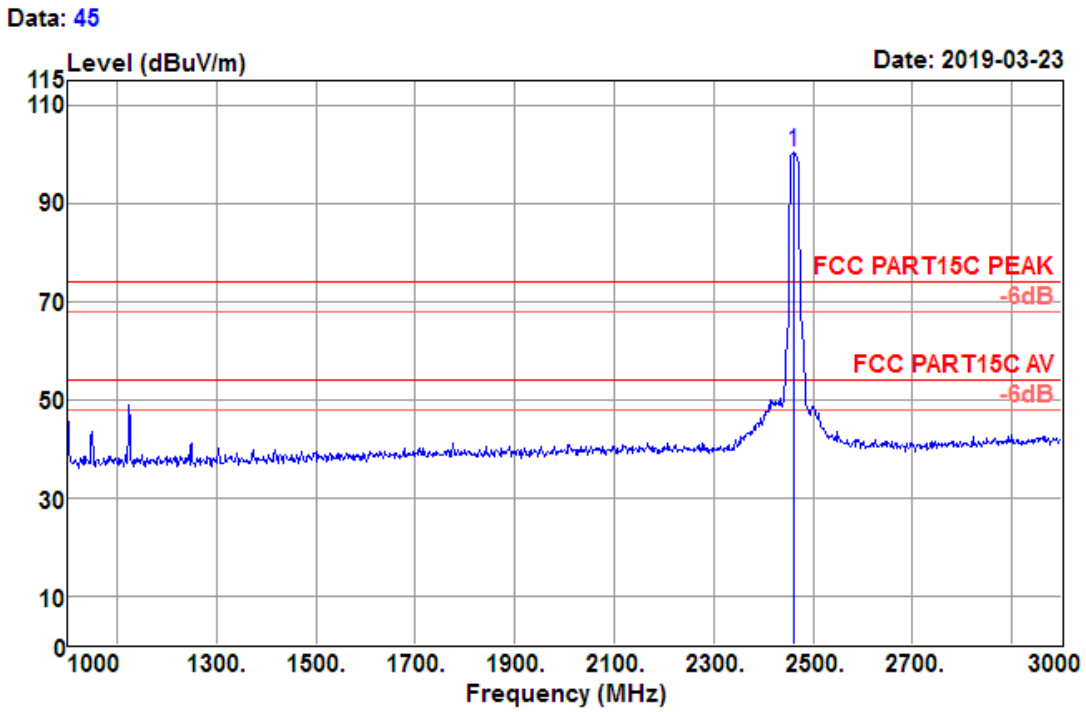




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	30.46	31.52	5.38	36.23	31.13	54.00	-22.87	Average
4924.000	41.21	31.52	5.38	36.23	41.88	74.00	-32.12	Peak
7386.000	34.17	36.29	7.46	34.42	43.50	54.00	-10.50	Average
7386.000	48.60	36.29	7.46	34.42	57.93	74.00	-16.07	Peak
9848.000	27.98	38.23	8.04	34.23	40.02	54.00	-13.98	Average
9848.000	38.99	38.23	8.04	34.23	51.03	74.00	-22.97	Peak

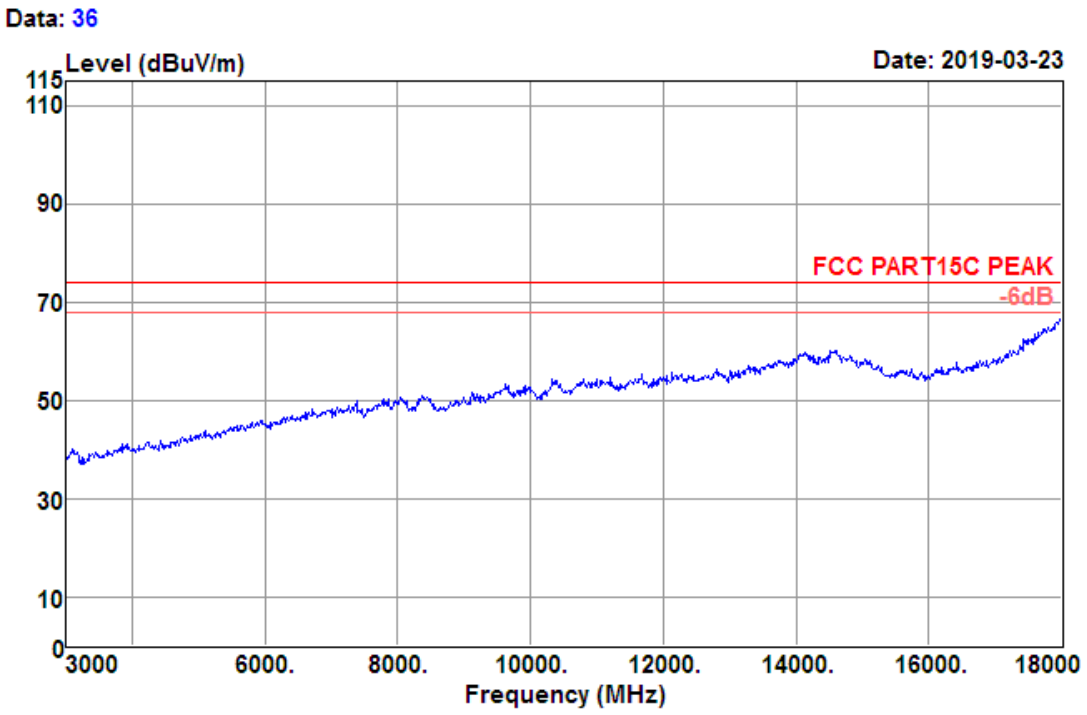
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical

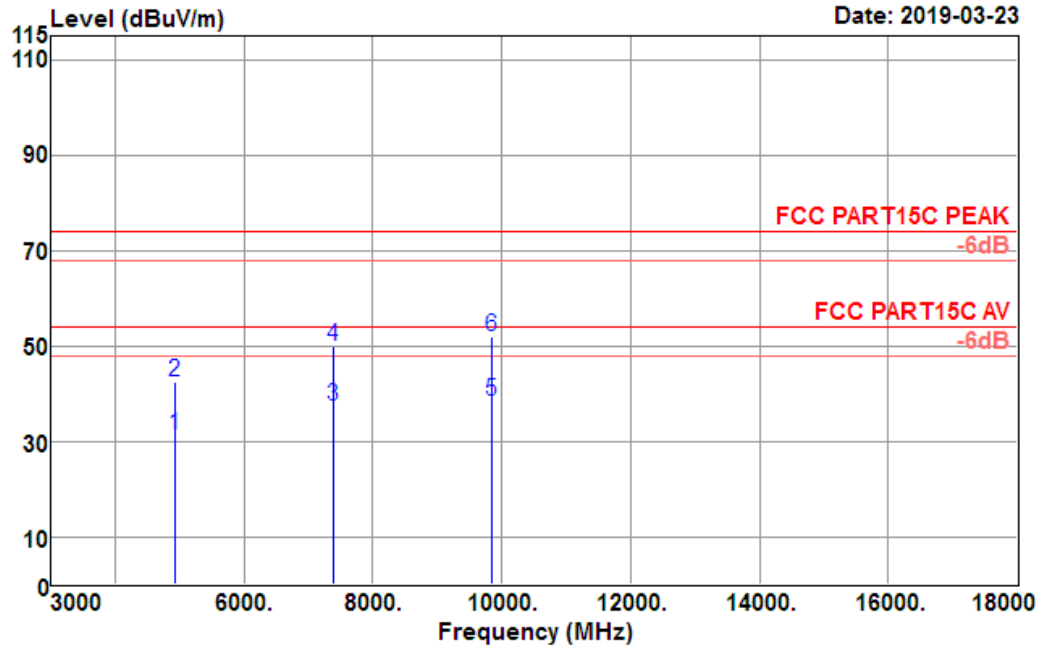


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2460.000	105.78	27.30	3.67	36.26	100.49	74.00	26.49	Peak

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical



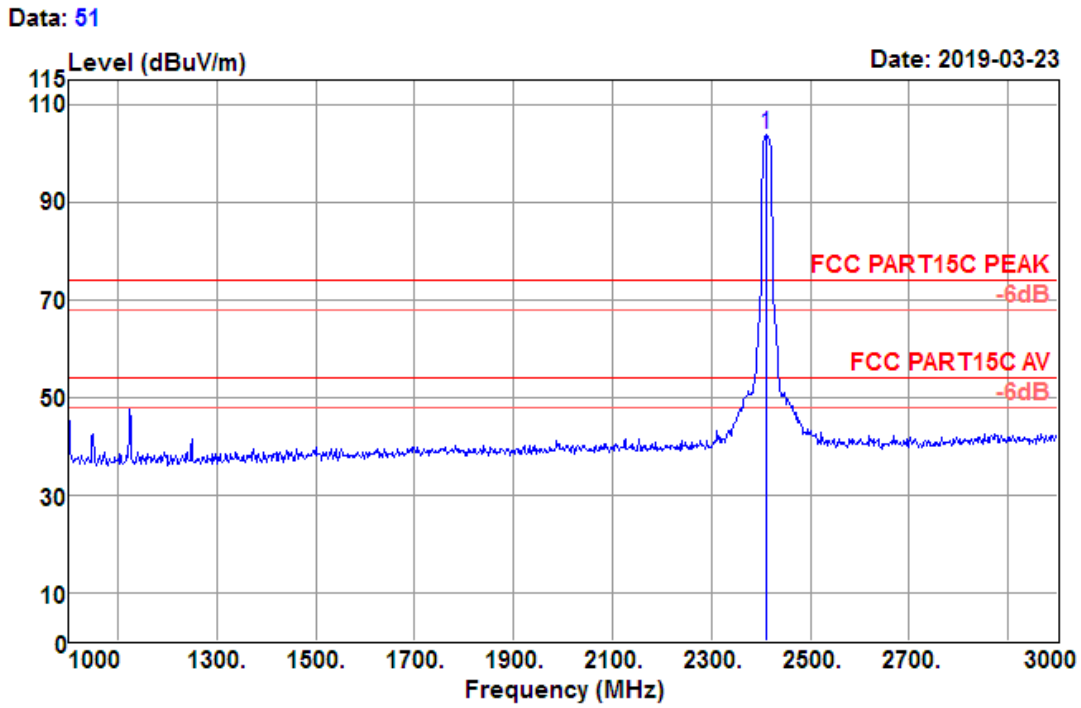
Data: 37



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	30.52	31.52	5.38	36.23	31.19	54.00	-22.81	Average
4924.000	41.62	31.52	5.38	36.23	42.29	74.00	-31.71	Peak
7386.000	27.85	36.29	7.46	34.42	37.18	54.00	-16.82	Average
7386.000	40.50	36.29	7.46	34.42	49.83	74.00	-24.17	Peak
9848.000	26.43	38.23	8.04	34.23	38.47	54.00	-15.53	Average
9848.000	39.73	38.23	8.04	34.23	51.77	74.00	-22.23	Peak

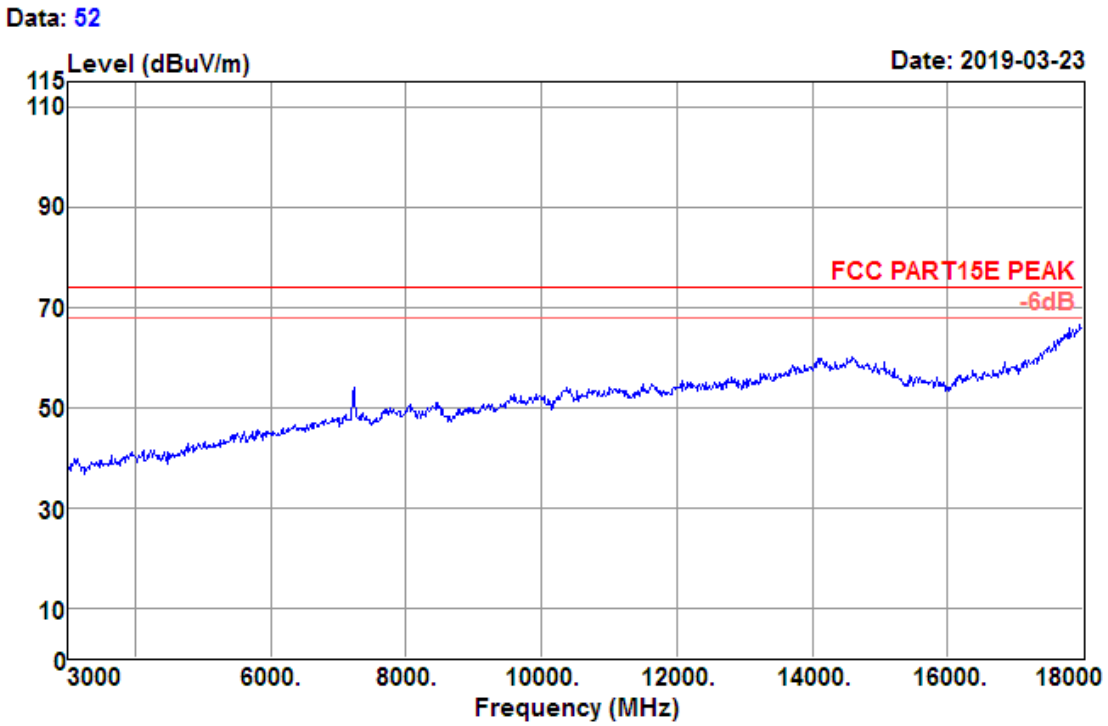
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

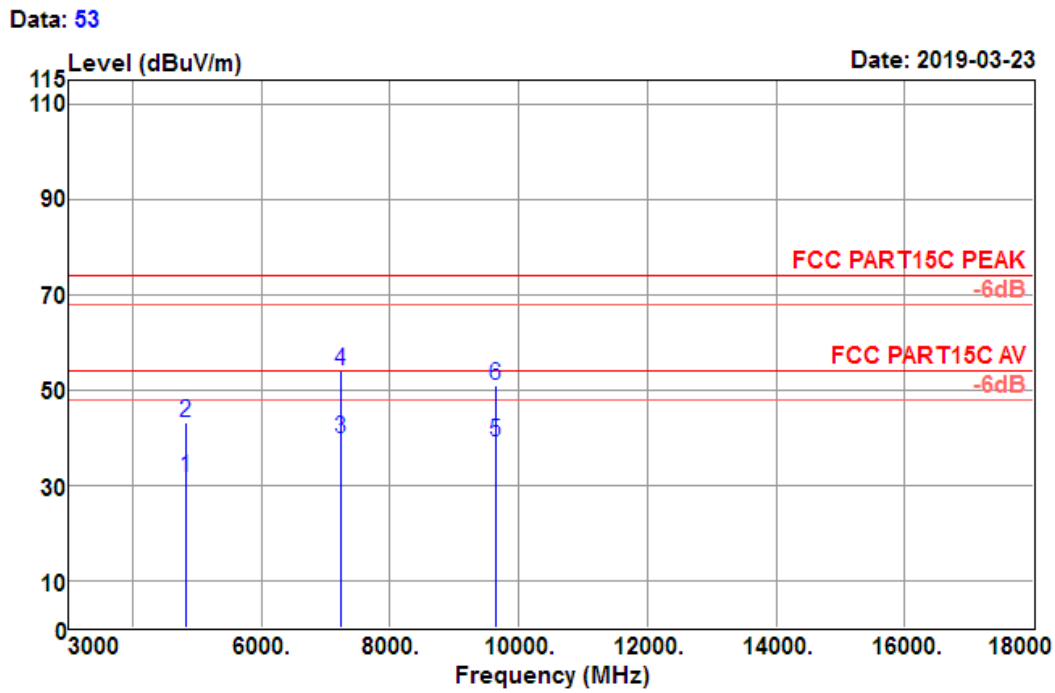
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2410.000	109.11	27.17	3.65	36.13	103.80	74.00	29.80	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

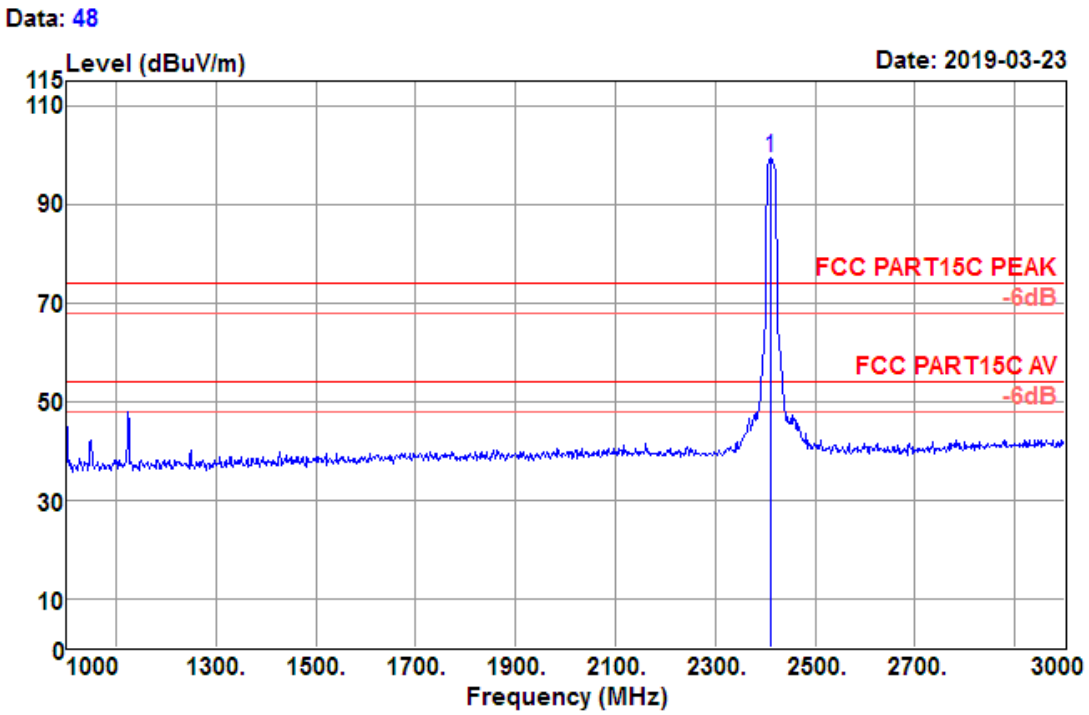




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	31.03	31.28	5.44	36.26	31.49	54.00	-22.51	Average
4824.000	42.77	31.28	5.44	36.26	43.23	74.00	-30.77	Peak
7236.000	31.12	35.94	7.02	34.27	39.81	54.00	-14.19	Average
7236.000	45.31	35.94	7.02	34.27	54.00	74.00	-20.00	Peak
9648.000	27.51	37.87	7.82	34.15	39.05	54.00	-14.95	Average
9648.000	39.52	37.87	7.82	34.15	51.06	74.00	-22.94	Peak

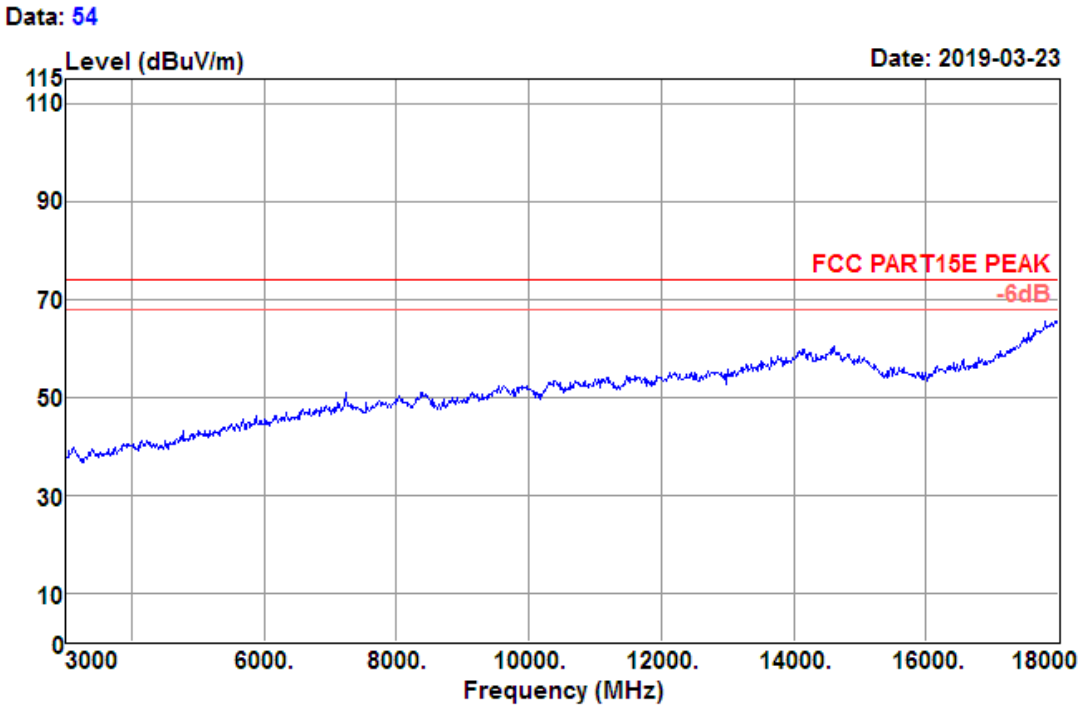
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

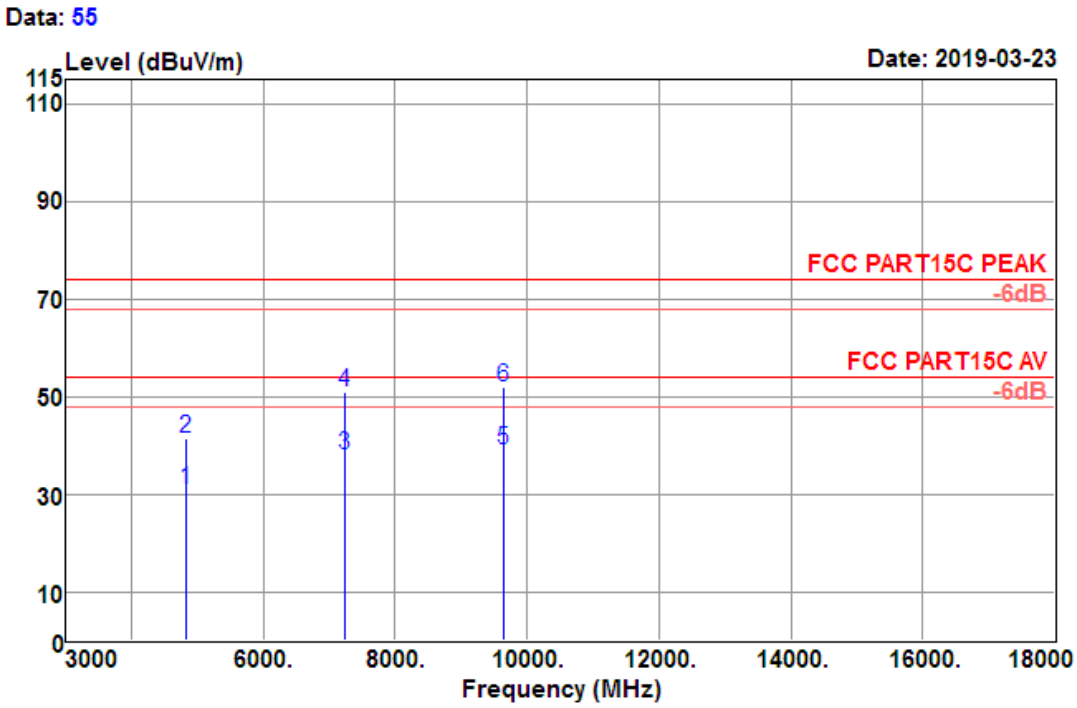
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2410.000	104.69	27.17	3.65	36.13	99.38	74.00	25.38	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

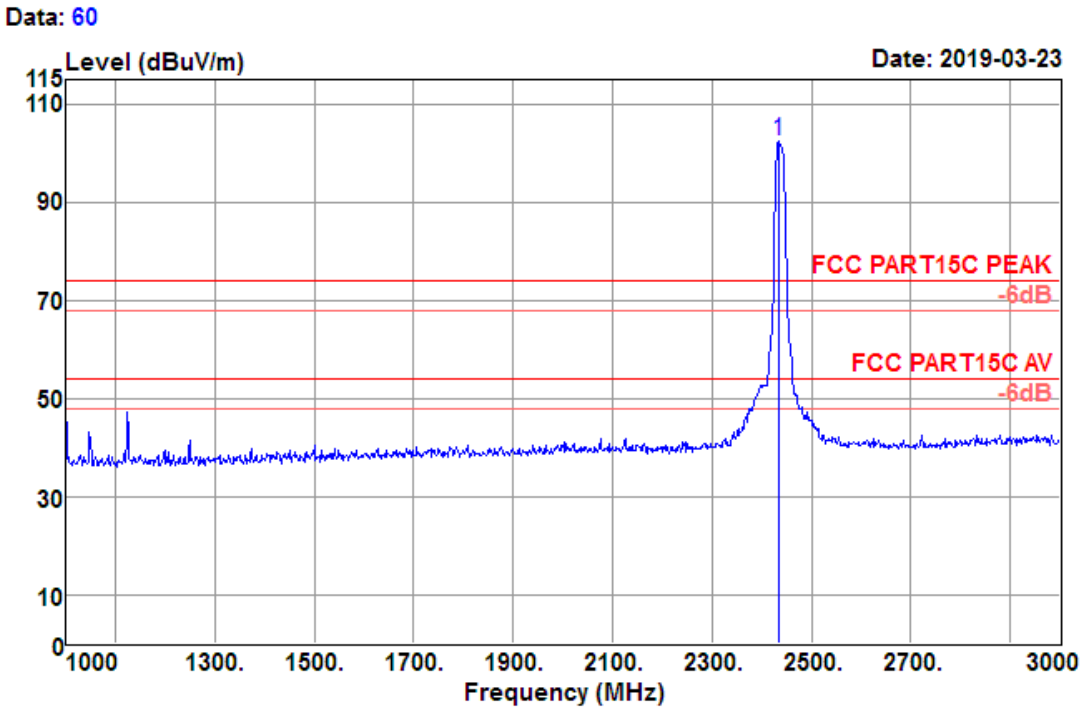




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	30.41	31.28	5.44	36.26	30.87	54.00	-23.13	Average
4824.000	41.09	31.28	5.44	36.26	41.55	74.00	-32.45	Peak
7236.000	29.41	35.94	7.02	34.27	38.10	54.00	-15.90	Average
7236.000	42.05	35.94	7.02	34.27	50.74	74.00	-23.26	Peak
9648.000	27.43	37.87	7.82	34.15	38.97	54.00	-15.03	Average
9648.000	40.23	37.87	7.82	34.15	51.77	74.00	-22.23	Peak

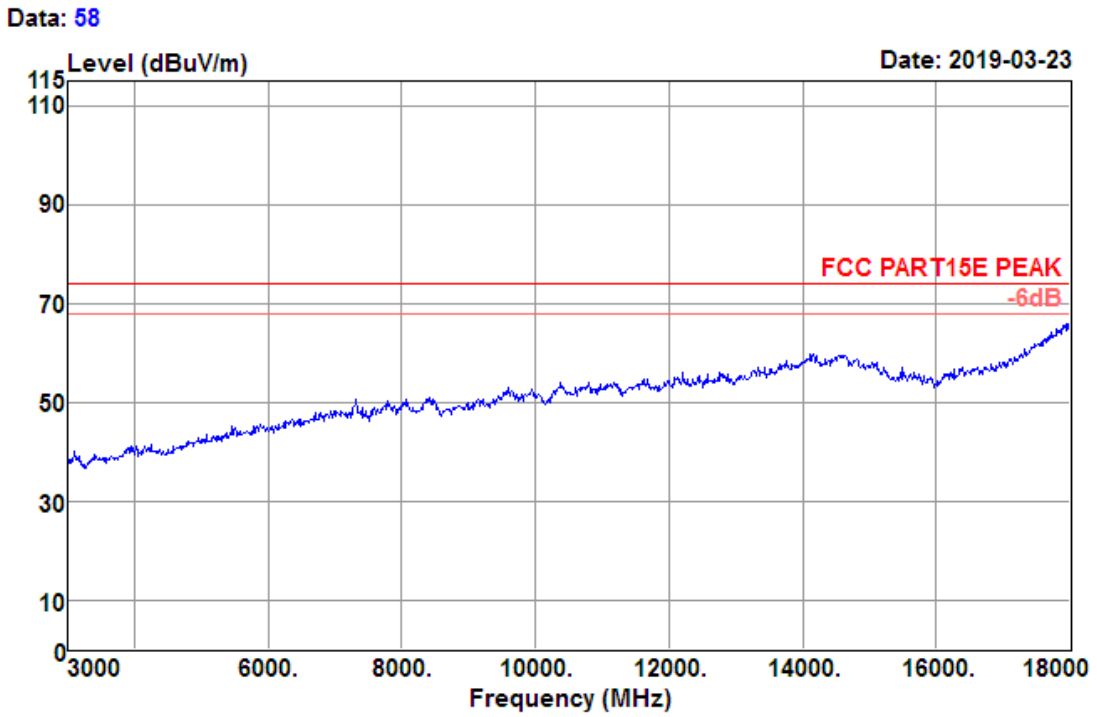
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

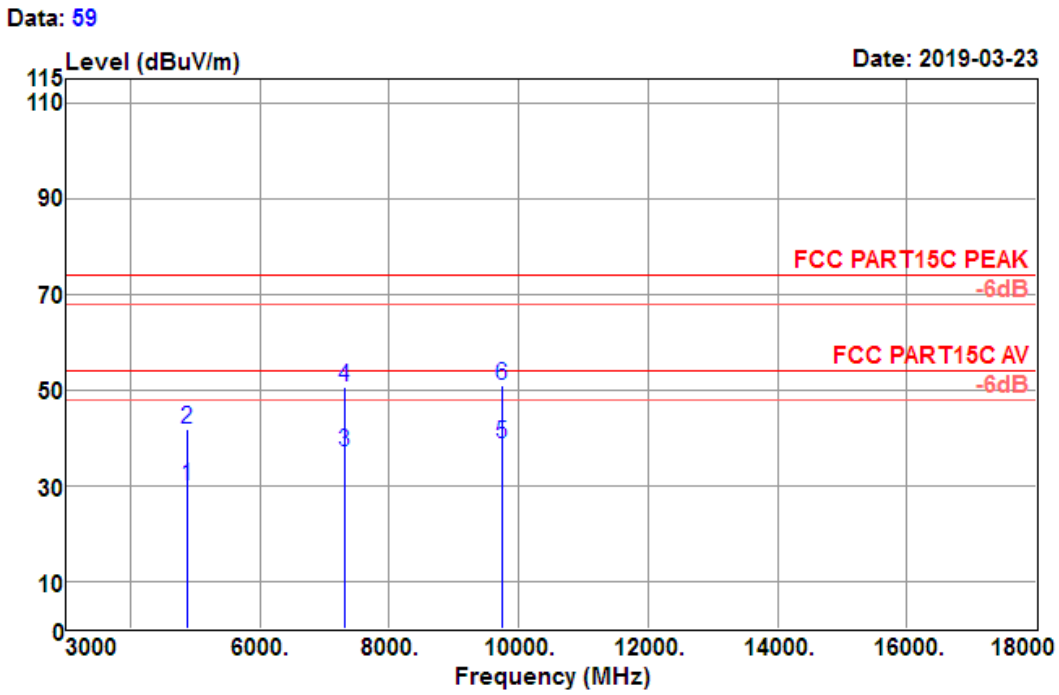
Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2434.000	107.66	27.23	3.66	36.20	102.35	74.00	28.35	Peak

Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

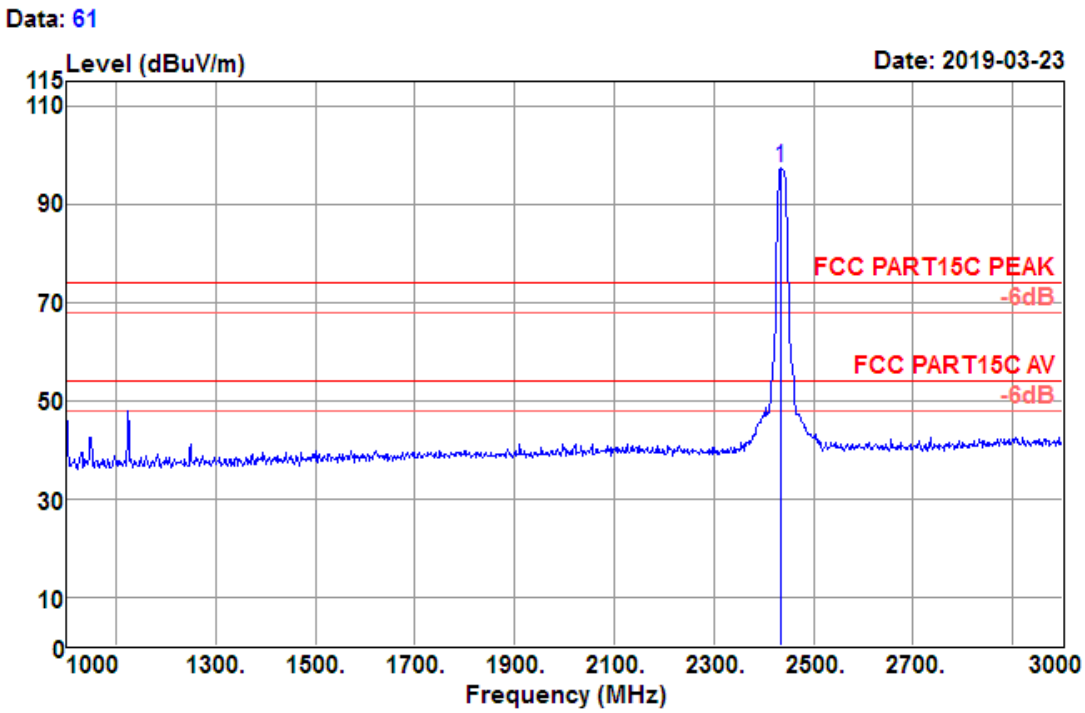




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	29.43	31.40	5.41	36.24	30.00	54.00	-24.00	Average
4874.000	41.19	31.40	5.41	36.24	41.76	74.00	-32.24	Peak
7311.000	27.86	36.12	7.24	34.35	36.87	54.00	-17.13	Average
7311.000	41.63	36.12	7.24	34.35	50.64	74.00	-23.36	Peak
9748.000	26.89	38.05	7.96	34.19	38.71	54.00	-15.29	Average
9748.000	39.12	38.05	7.96	34.19	50.94	74.00	-23.06	Peak

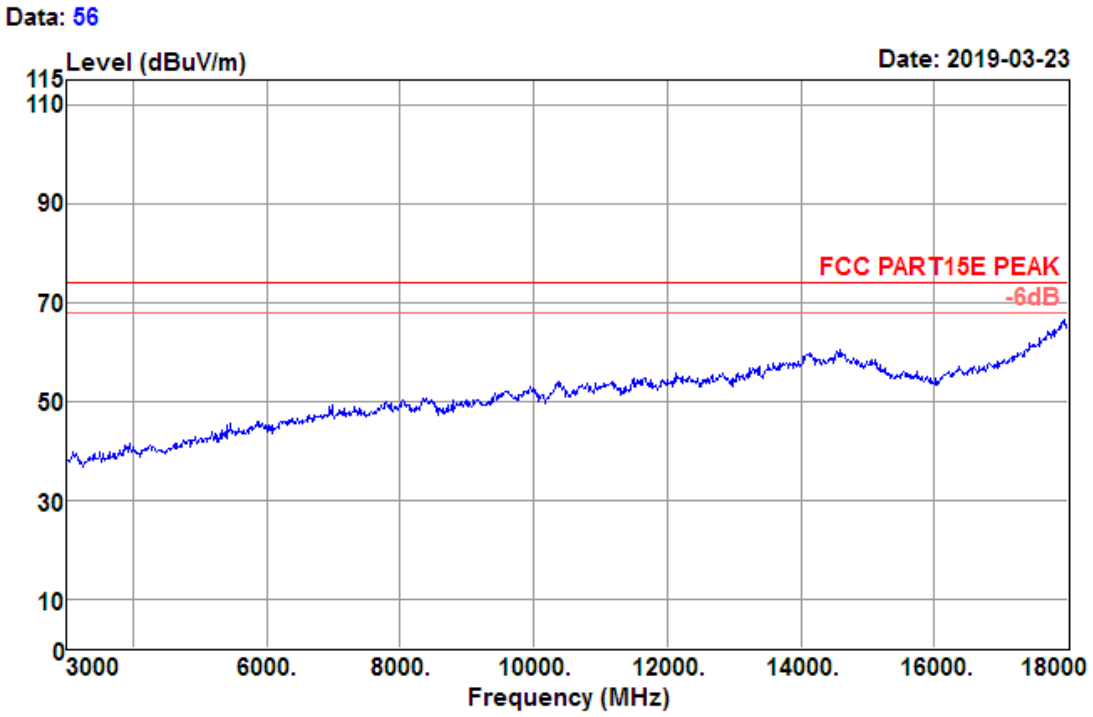
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

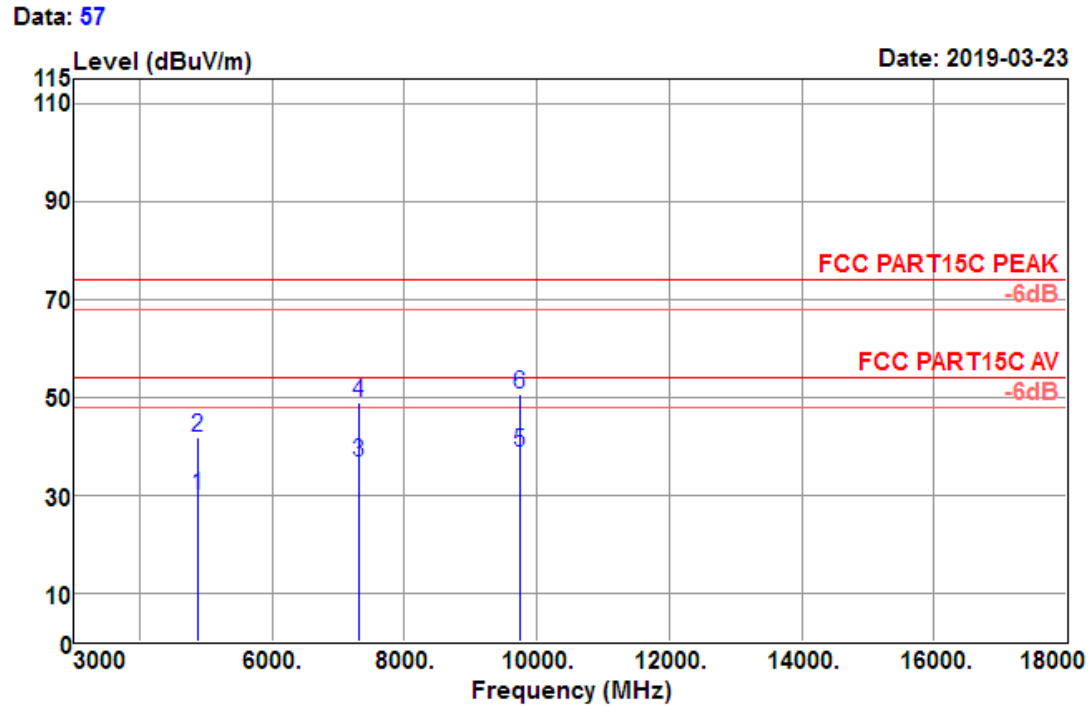
Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2434.000	102.75	27.23	3.66	36.20	97.44	74.00	23.44	Peak

Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

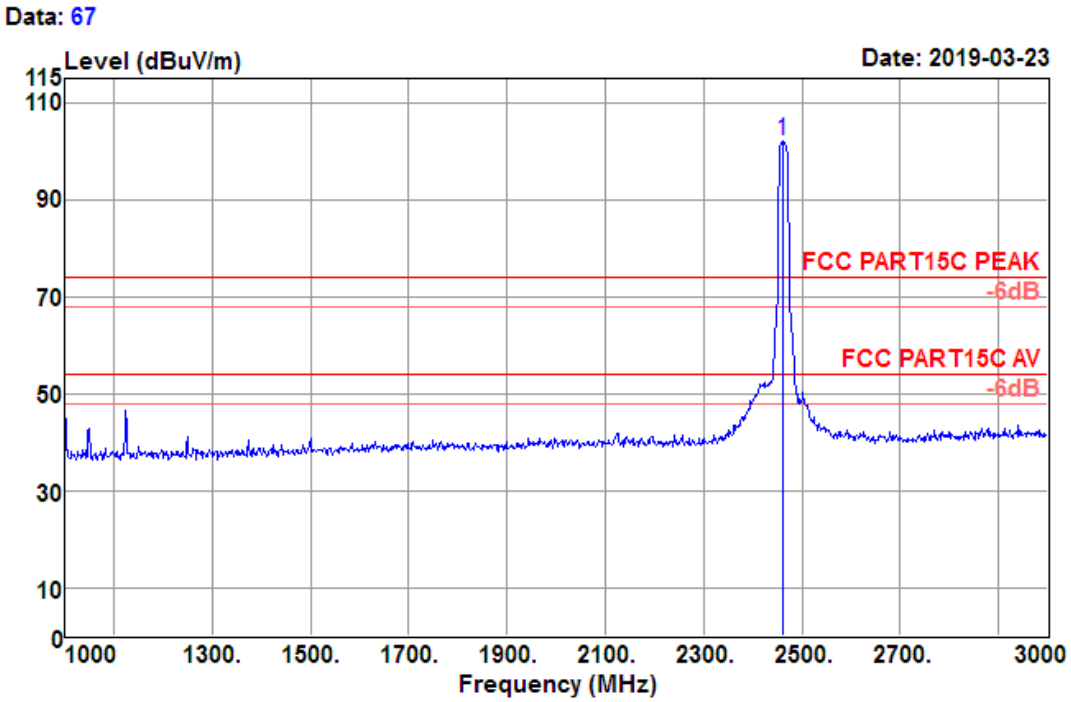




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	29.36	31.40	5.41	36.24	29.93	54.00	-24.07	Average
4874.000	41.26	31.40	5.41	36.24	41.83	74.00	-32.17	Peak
7311.000	27.58	36.12	7.24	34.35	36.59	54.00	-17.41	Average
7311.000	39.80	36.12	7.24	34.35	48.81	74.00	-25.19	Peak
9748.000	27.01	38.05	7.96	34.19	38.83	54.00	-15.17	Average
9748.000	38.70	38.05	7.96	34.19	50.52	74.00	-23.48	Peak

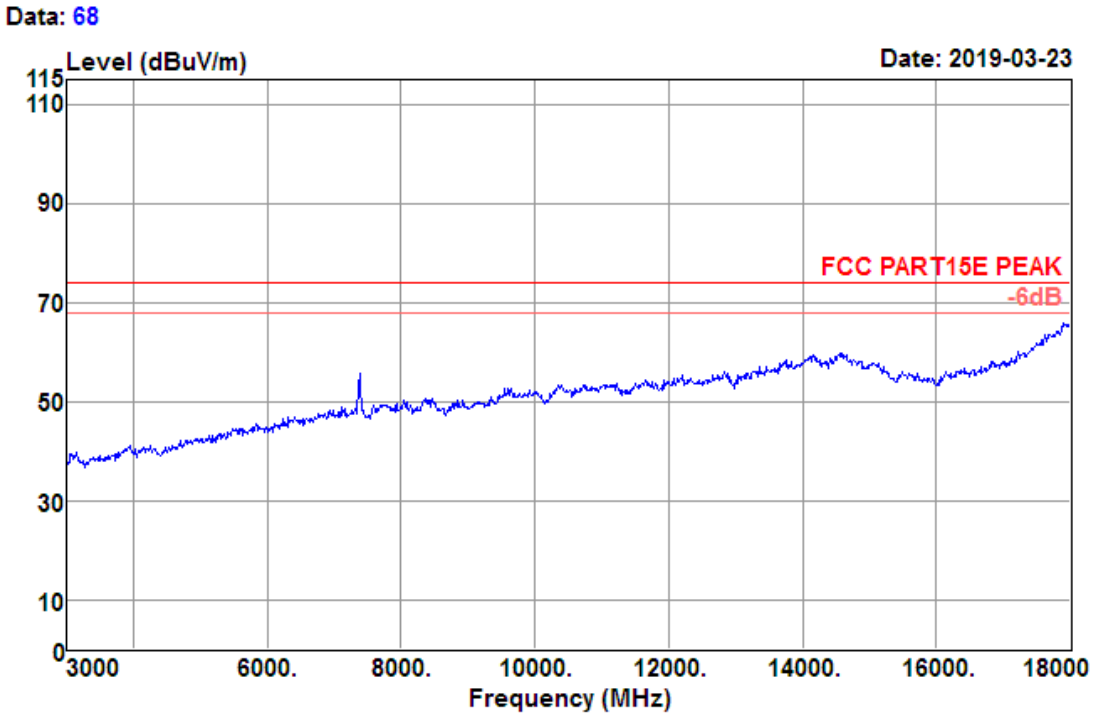
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

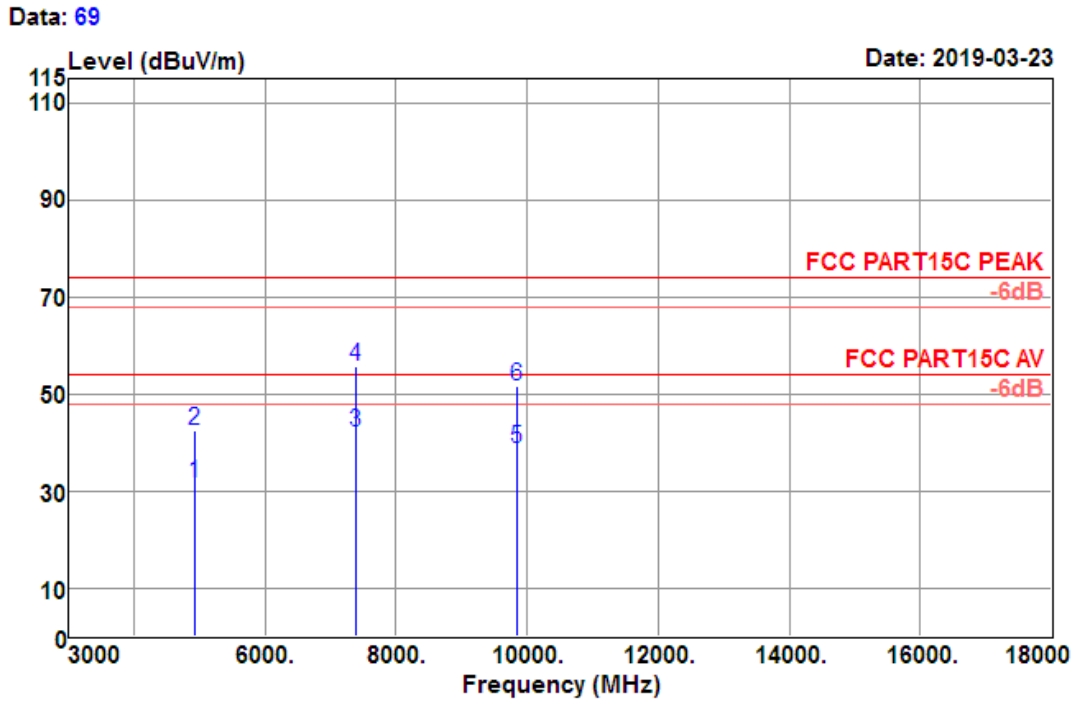
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2460.000	107.42	27.30	3.67	36.26	102.13	74.00	28.13	Peak

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

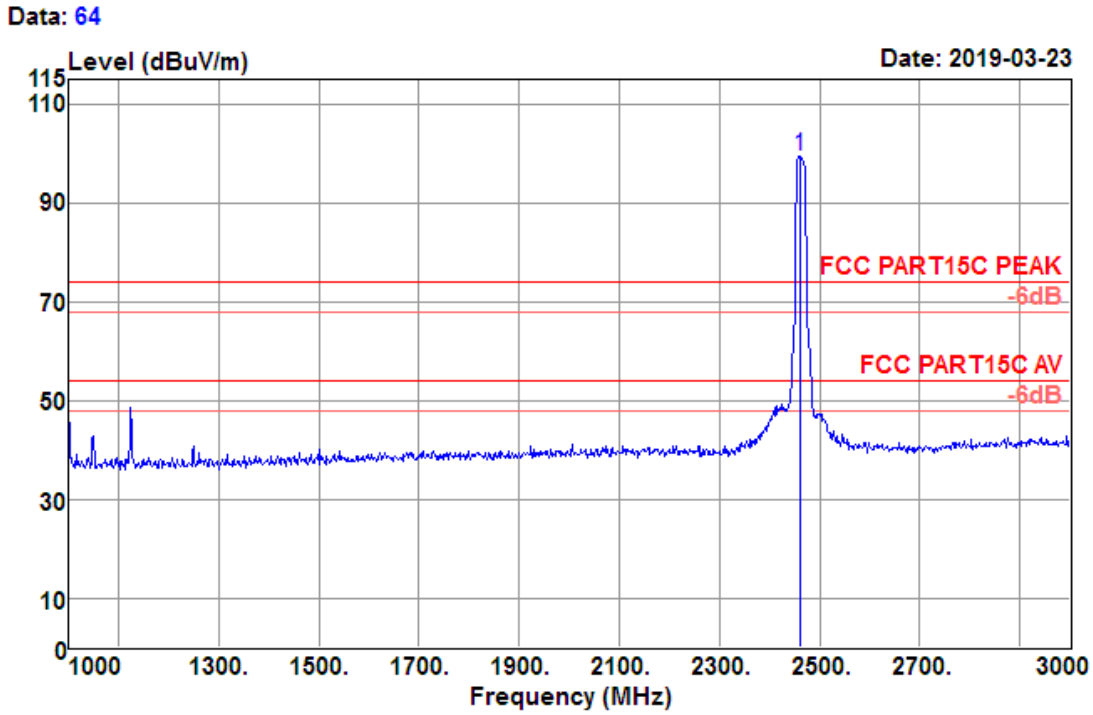




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	30.81	31.52	5.38	36.23	31.48	54.00	-22.52	Average
4924.000	41.67	31.52	5.38	36.23	42.34	74.00	-31.66	Peak
7386.000	32.64	36.29	7.46	34.42	41.97	54.00	-12.03	Average
7386.000	46.42	36.29	7.46	34.42	55.75	74.00	-18.25	Peak
9848.000	26.78	38.23	8.04	34.23	38.82	54.00	-15.18	Average
9848.000	39.40	38.23	8.04	34.23	51.44	74.00	-22.56	Peak

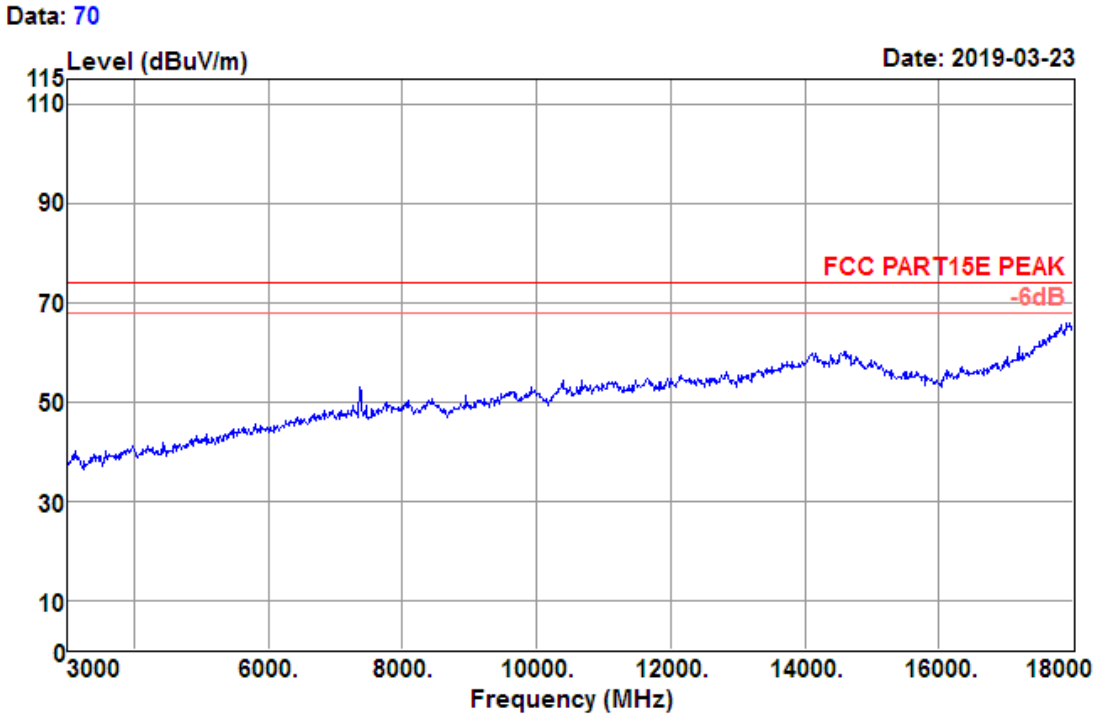
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

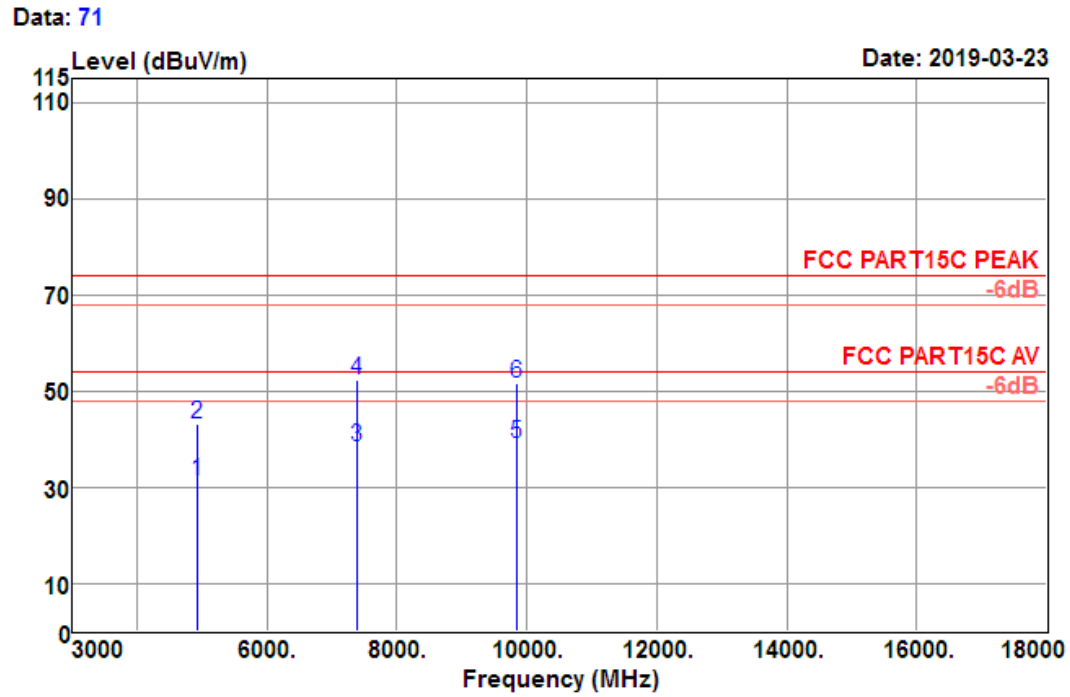
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2460.000	104.76	27.30	3.67	36.26	99.47	74.00	25.47	Peak

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

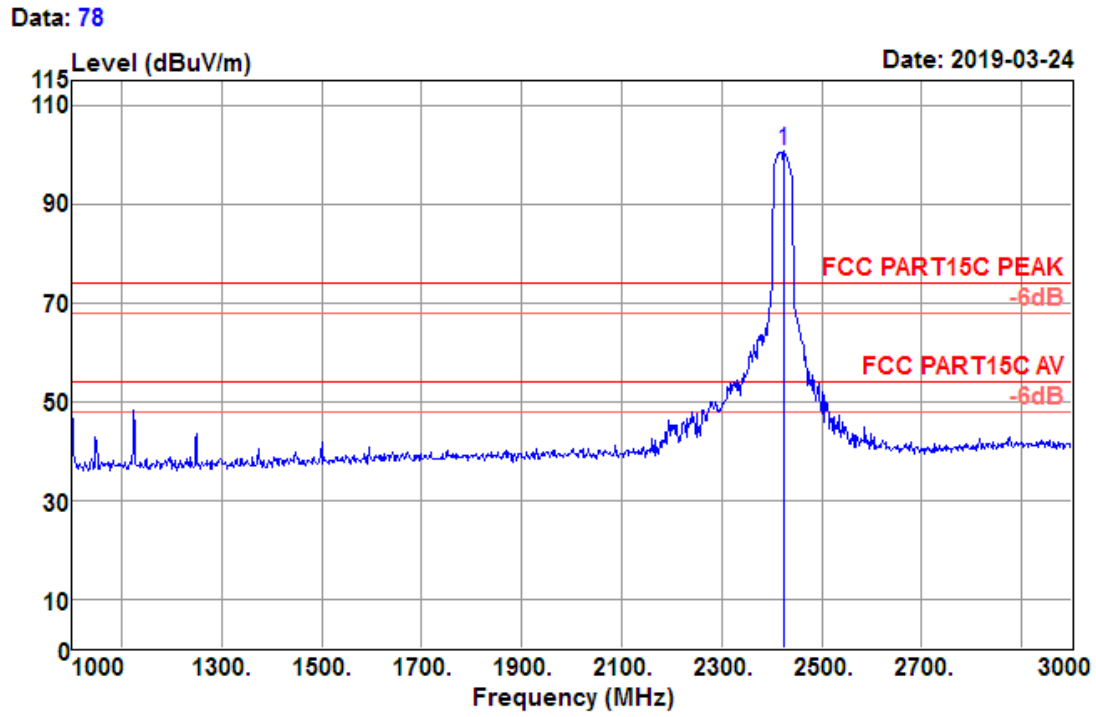




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	30.70	31.52	5.38	36.23	31.37	54.00	-22.63	Average
4924.000	42.32	31.52	5.38	36.23	42.99	74.00	-31.01	Peak
7386.000	29.12	36.29	7.46	34.42	38.45	54.00	-15.55	Average
7386.000	42.87	36.29	7.46	34.42	52.20	74.00	-21.80	Peak
9848.000	26.98	38.23	8.04	34.23	39.02	54.00	-14.98	Average
9848.000	39.44	38.23	8.04	34.23	51.48	74.00	-22.52	Peak

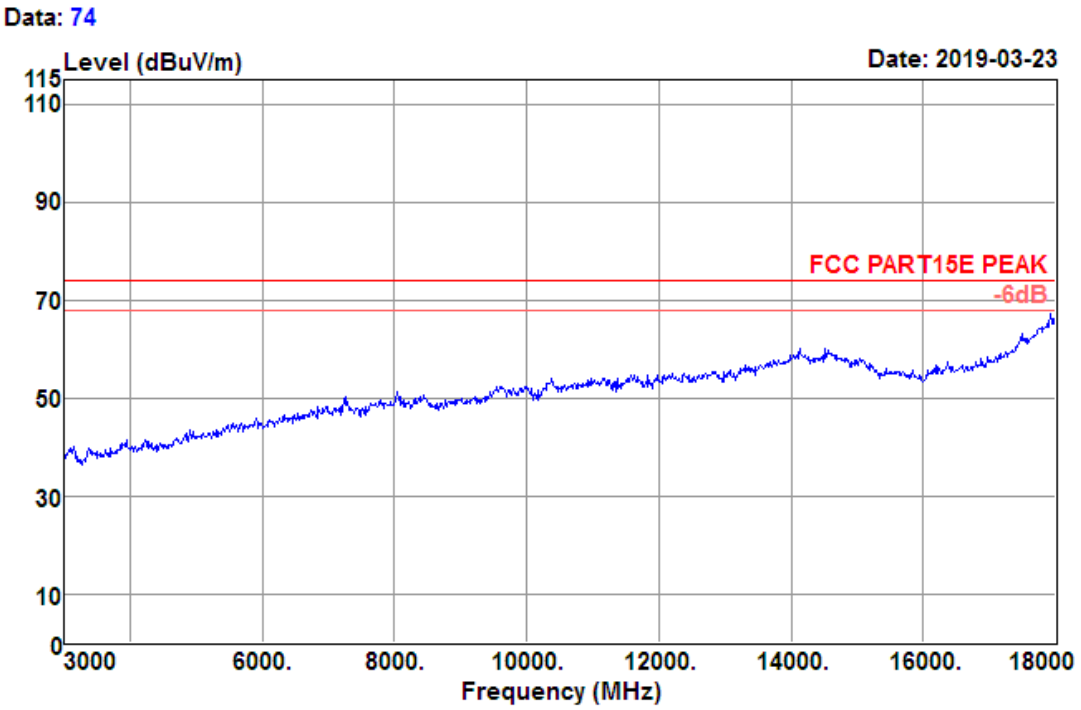
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

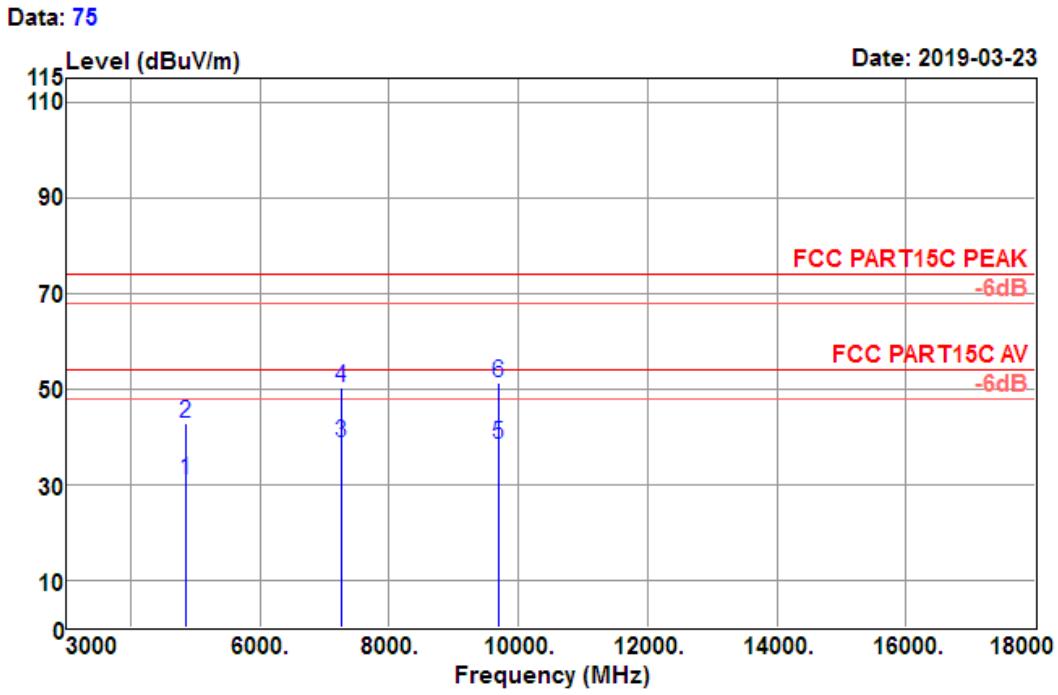
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2426.000	106.12	27.21	3.66	36.17	100.82	74.00	26.82	Peak

Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

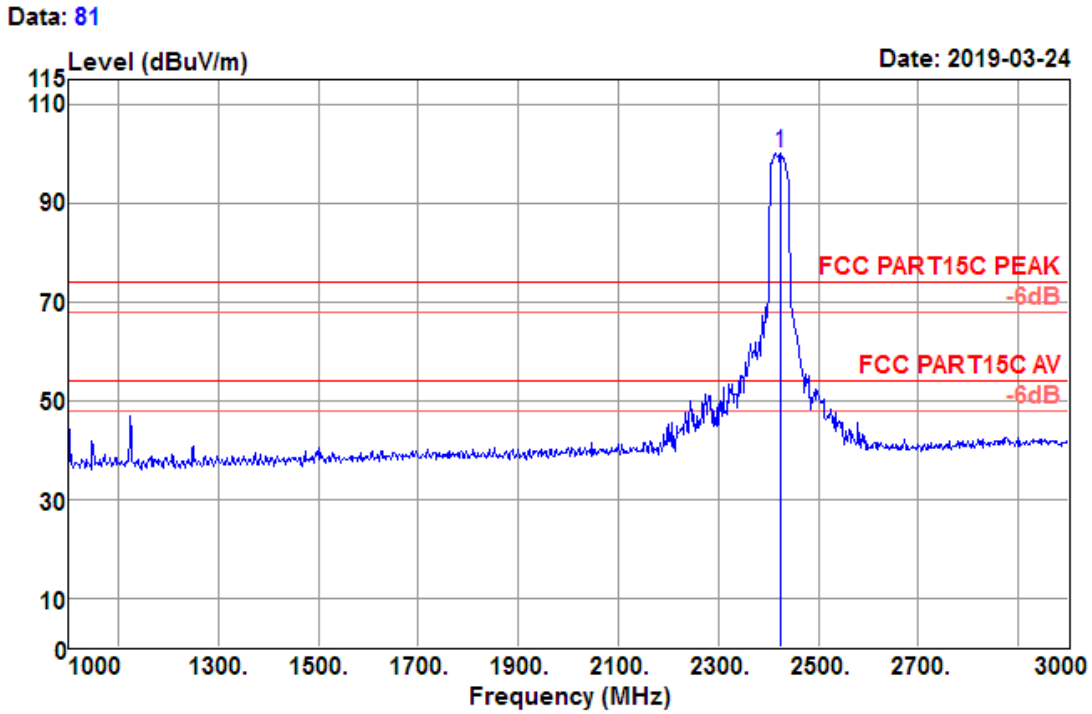




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4844.000	30.39	31.33	5.43	36.25	30.90	54.00	-23.10	Average
4844.000	42.20	31.33	5.43	36.25	42.71	74.00	-31.29	Peak
7266.000	29.84	36.01	7.11	34.30	38.66	54.00	-15.34	Average
7266.000	41.39	36.01	7.11	34.30	50.21	74.00	-23.79	Peak
9688.000	26.80	37.94	7.88	34.16	38.46	54.00	-15.54	Average
9688.000	39.69	37.94	7.88	34.16	51.35	74.00	-22.65	Peak

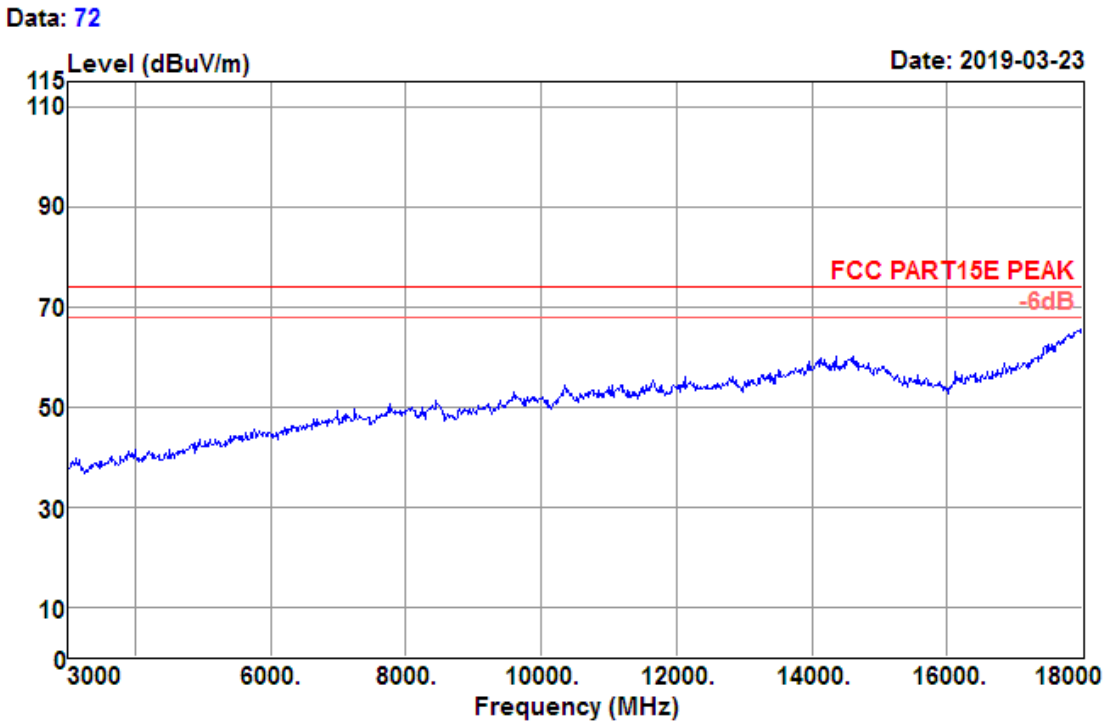
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

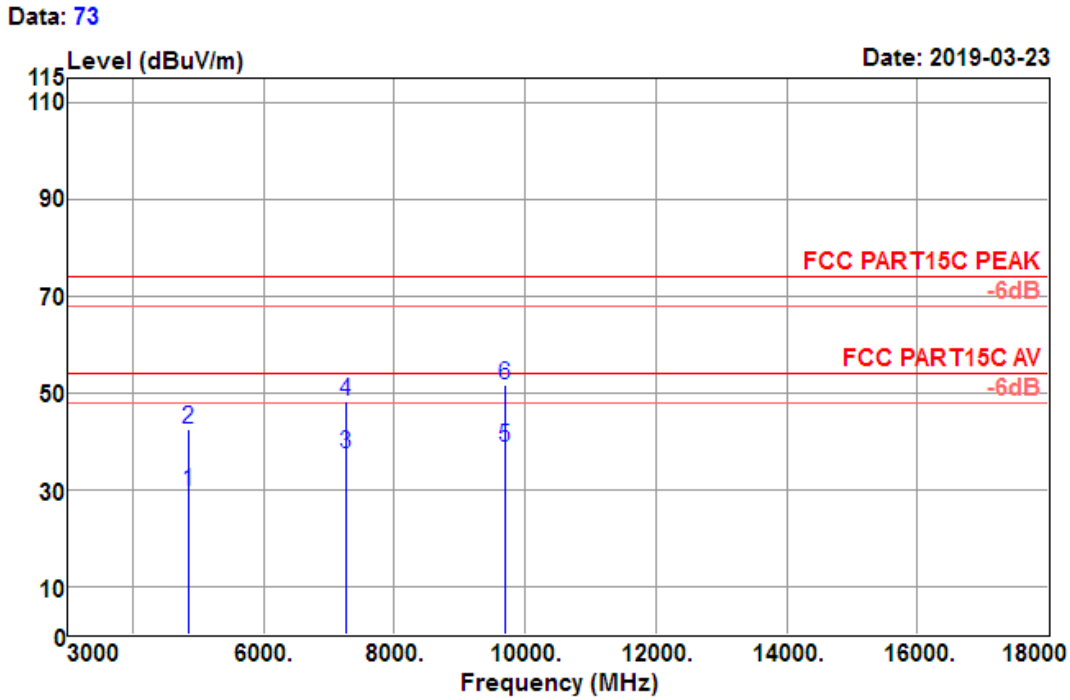
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2426.000	105.44	27.21	3.66	36.17	100.14	74.00	26.14	Peak

Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

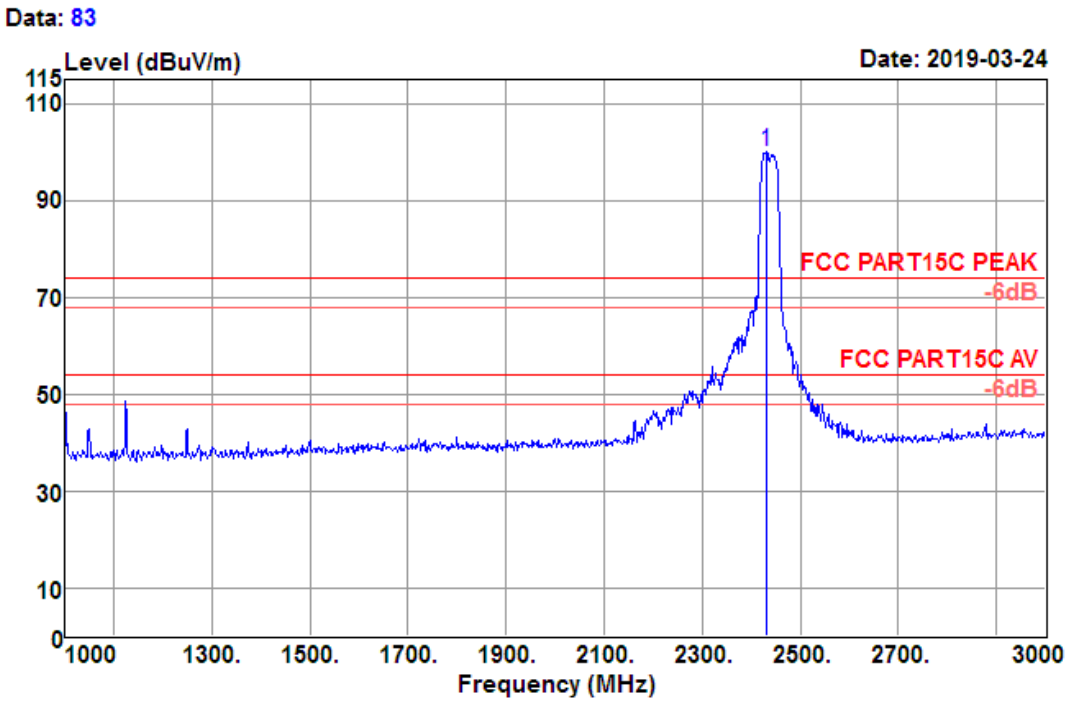




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4844.000	29.13	31.33	5.43	36.25	29.64	54.00	-24.36	Average
4844.000	41.82	31.33	5.43	36.25	42.33	74.00	-31.67	Peak
7266.000	28.36	36.01	7.11	34.30	37.18	54.00	-16.82	Average
7266.000	39.51	36.01	7.11	34.30	48.33	74.00	-25.67	Peak
9688.000	26.93	37.94	7.88	34.16	38.59	54.00	-15.41	Average
9688.000	40.01	37.94	7.88	34.16	51.67	74.00	-22.33	Peak

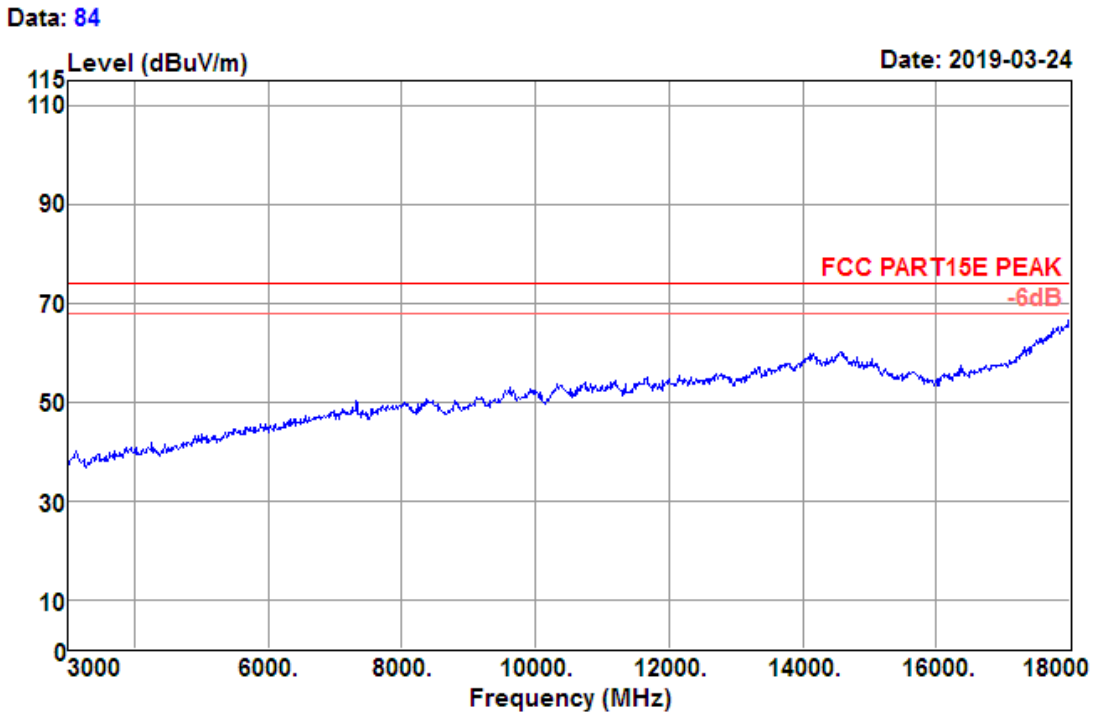
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

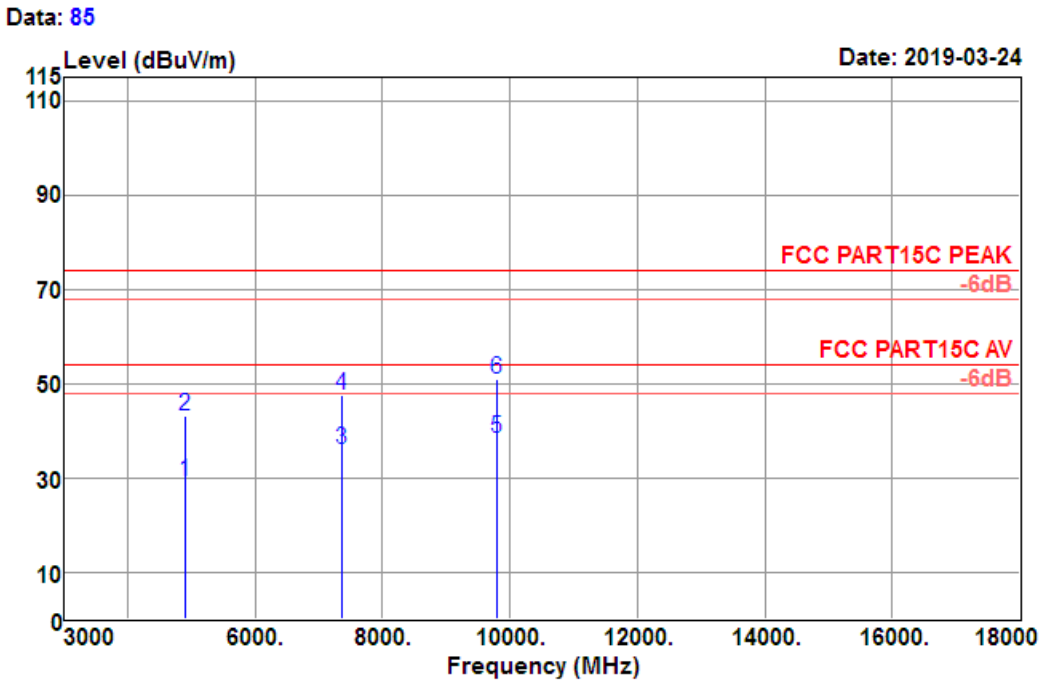
Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2430.000	105.54	27.22	3.66	36.19	100.23	74.00	26.23	Peak

Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

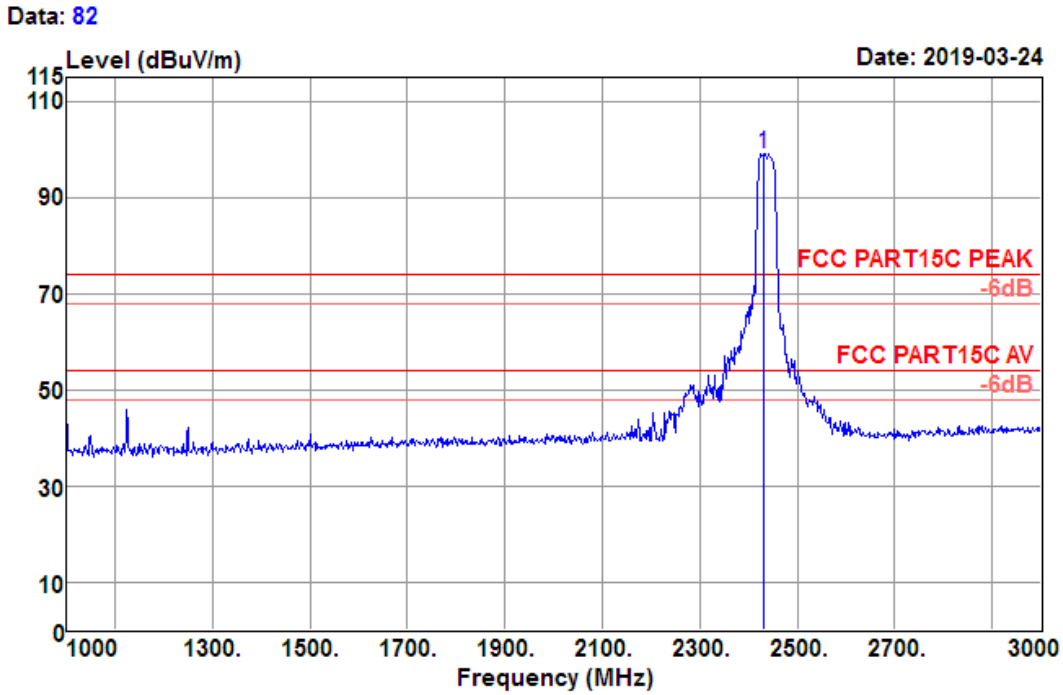




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4904.000	28.64	31.47	5.39	36.23	29.27	54.00	-24.73	Average
4904.000	42.41	31.47	5.39	36.23	43.04	74.00	-30.96	Peak
7356.000	26.77	36.22	7.37	34.39	35.97	54.00	-18.03	Average
7356.000	38.44	36.22	7.37	34.39	47.64	74.00	-26.36	Peak
9808.000	26.38	38.15	8.03	34.22	38.34	54.00	-15.66	Average
9808.000	39.09	38.15	8.03	34.22	51.05	74.00	-22.95	Peak

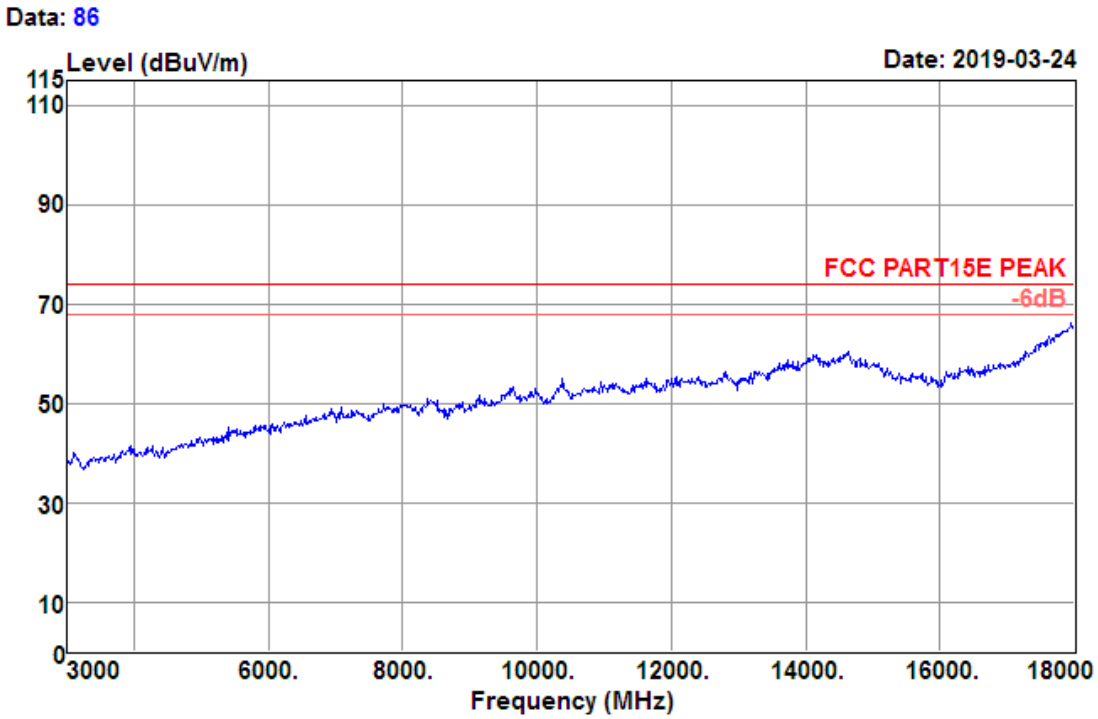
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

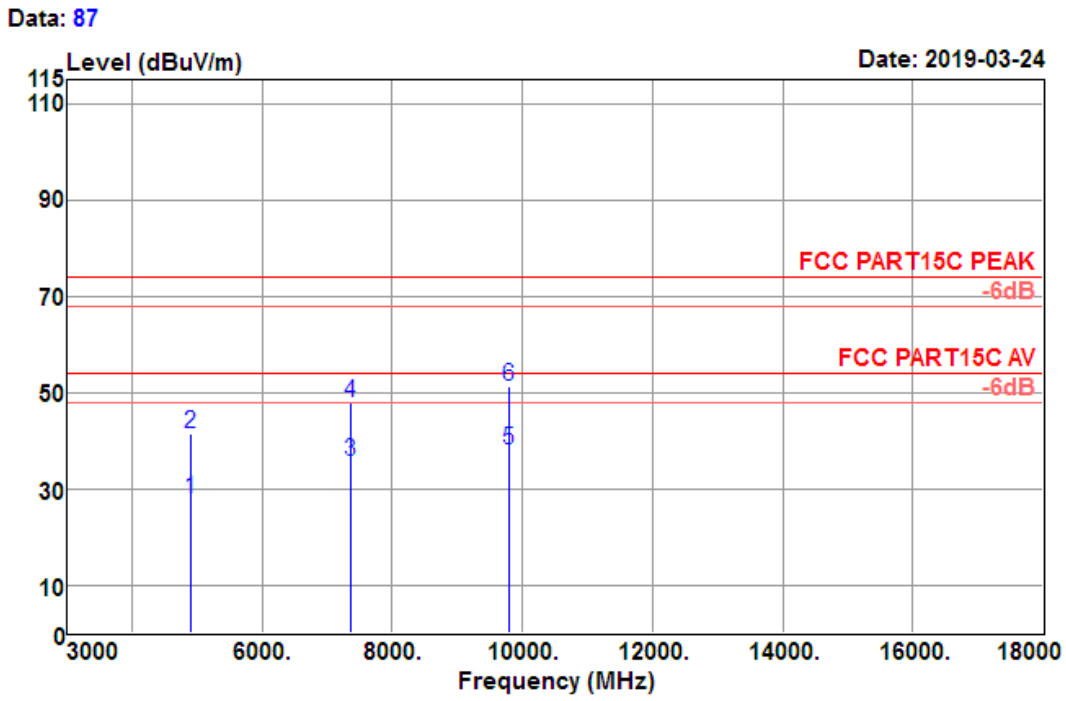
Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2430.000	104.47	27.22	3.66	36.19	99.16	74.00	25.16	Peak

Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

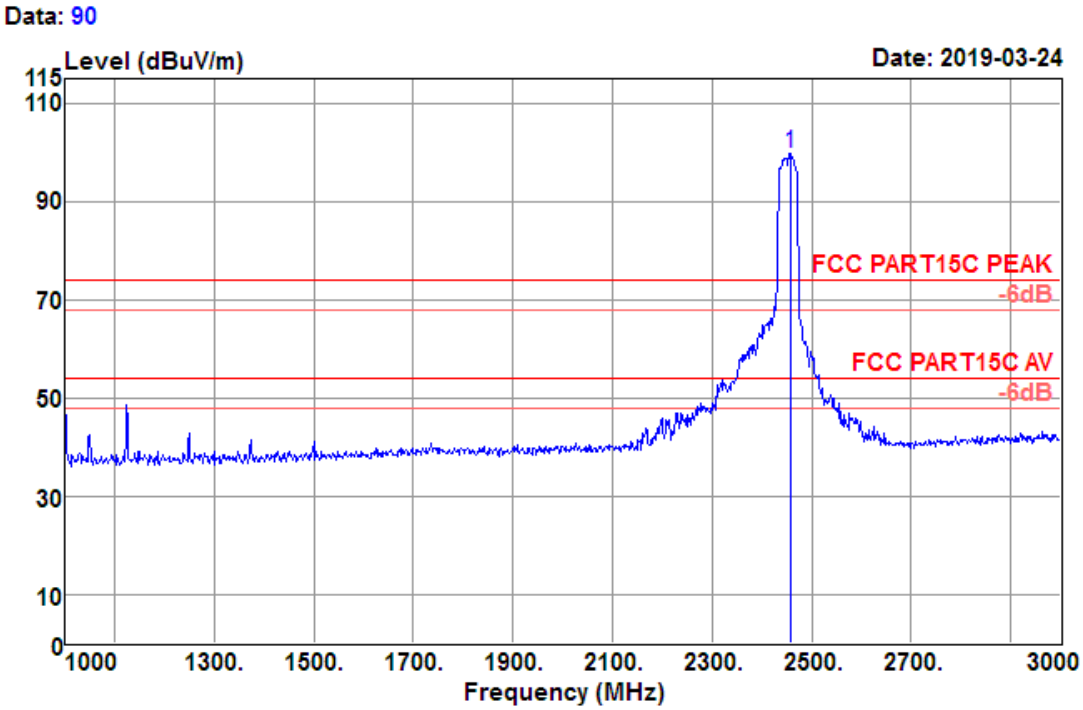




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4904.000	27.32	31.47	5.39	36.23	27.95	54.00	-26.05	Average
4904.000	40.92	31.47	5.39	36.23	41.55	74.00	-32.45	Peak
7356.000	26.48	36.22	7.37	34.39	35.68	54.00	-18.32	Average
7356.000	38.64	36.22	7.37	34.39	47.84	74.00	-26.16	Peak
9808.000	26.15	38.15	8.03	34.22	38.11	54.00	-15.89	Average
9808.000	39.37	38.15	8.03	34.22	51.33	74.00	-22.67	Peak

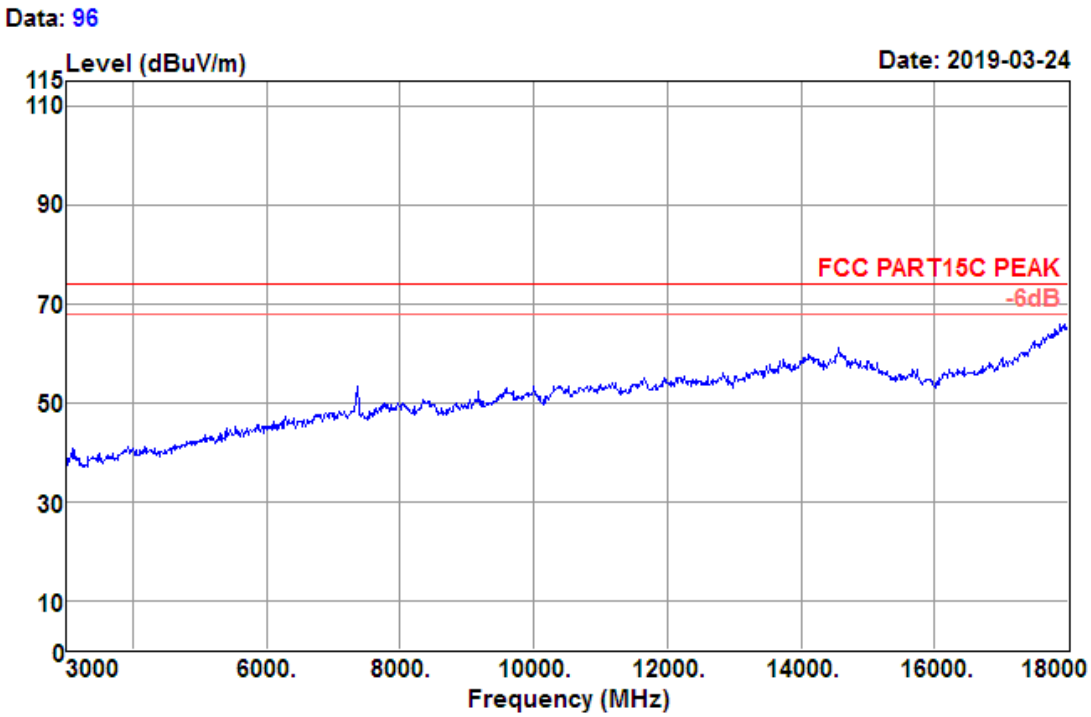
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

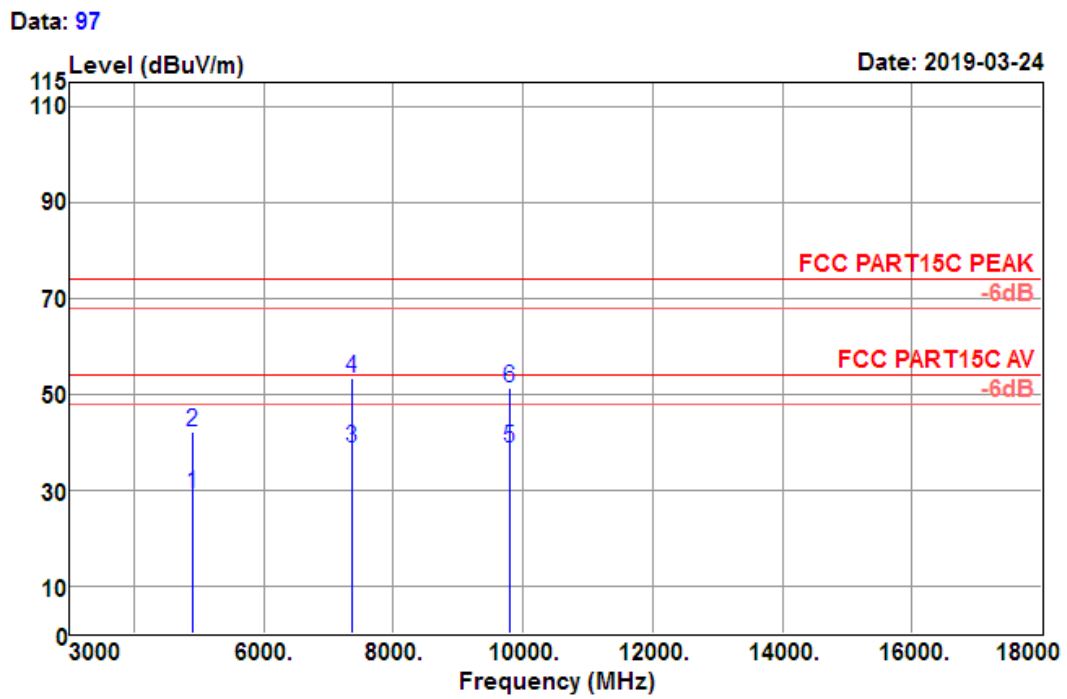
Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2458.000	105.21	27.29	3.67	36.26	99.91	74.00	25.91	Peak

Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

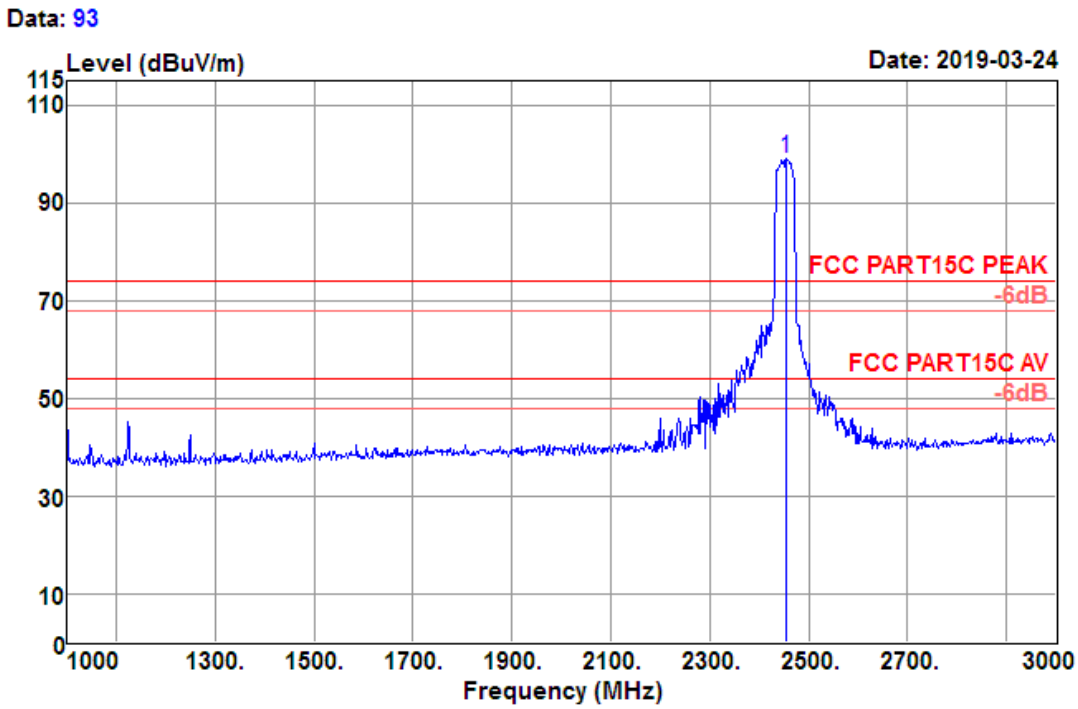




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4904.000	28.43	31.47	5.39	36.23	29.06	54.00	-24.94	Average
4904.000	41.47	31.47	5.39	36.23	42.10	74.00	-31.90	Peak
7356.000	29.42	36.22	7.37	34.39	38.62	54.00	-15.38	Average
7356.000	44.03	36.22	7.37	34.39	53.23	74.00	-20.77	Peak
9808.000	26.82	38.15	8.03	34.22	38.78	54.00	-15.22	Average
9808.000	39.16	38.15	8.03	34.22	51.12	74.00	-22.88	Peak

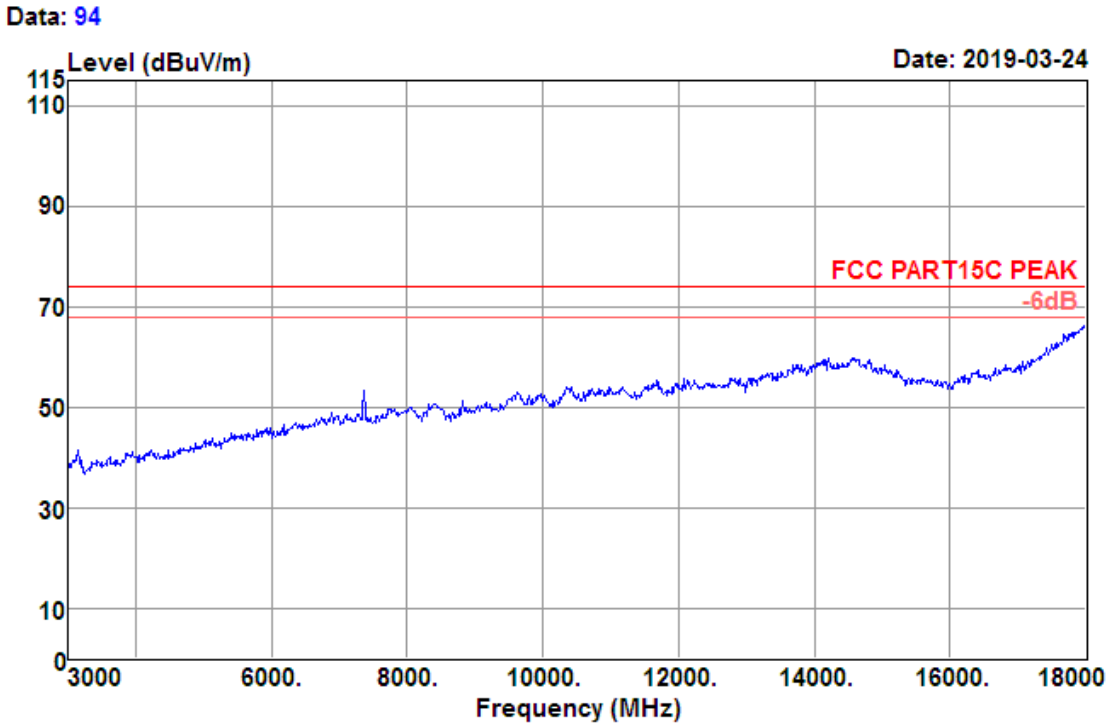
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

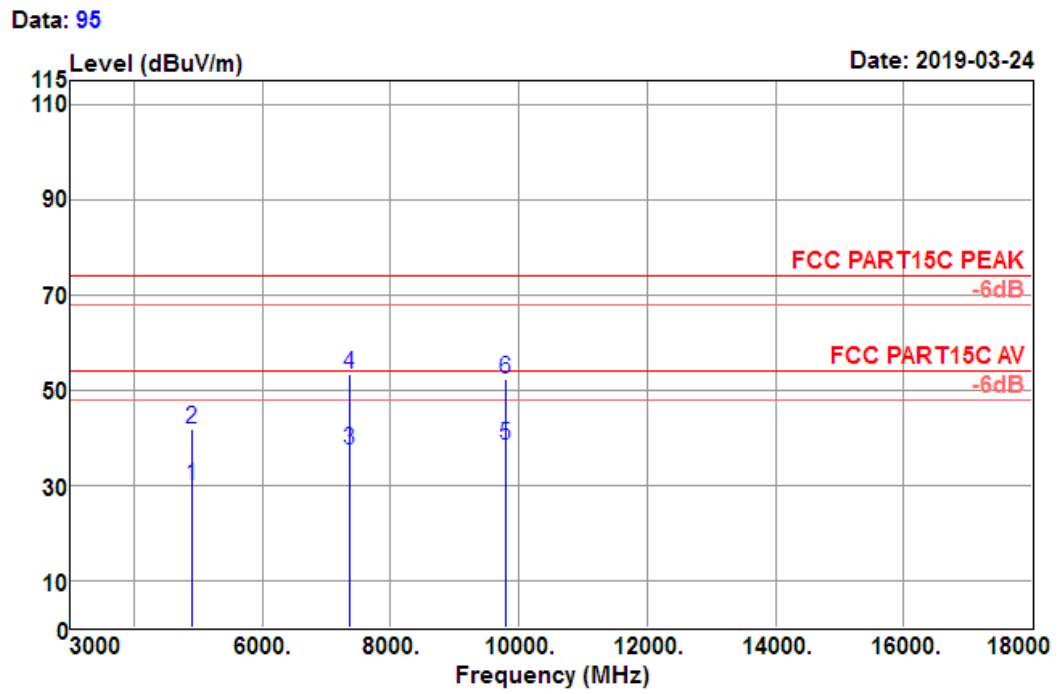
Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2456.000	104.43	27.29	3.67	36.25	99.14	74.00	25.14	Peak

Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical



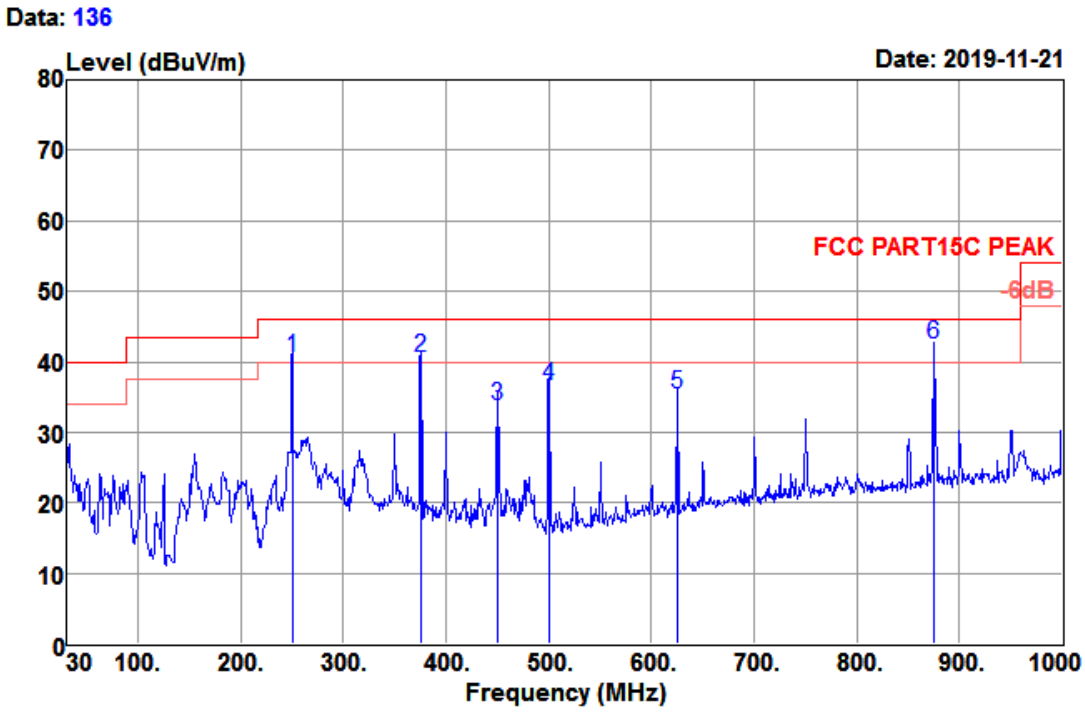


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4904.000	29.18	31.47	5.39	36.23	29.81	54.00	-24.19	Average
4904.000	41.05	31.47	5.39	36.23	41.68	74.00	-32.32	Peak
7356.000	27.98	36.22	7.37	34.39	37.18	54.00	-16.82	Average
7356.000	43.97	36.22	7.37	34.39	53.17	74.00	-20.83	Peak
9808.000	26.50	38.15	8.03	34.22	38.46	54.00	-15.54	Average
9808.000	40.34	38.15	8.03	34.22	52.30	74.00	-21.70	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

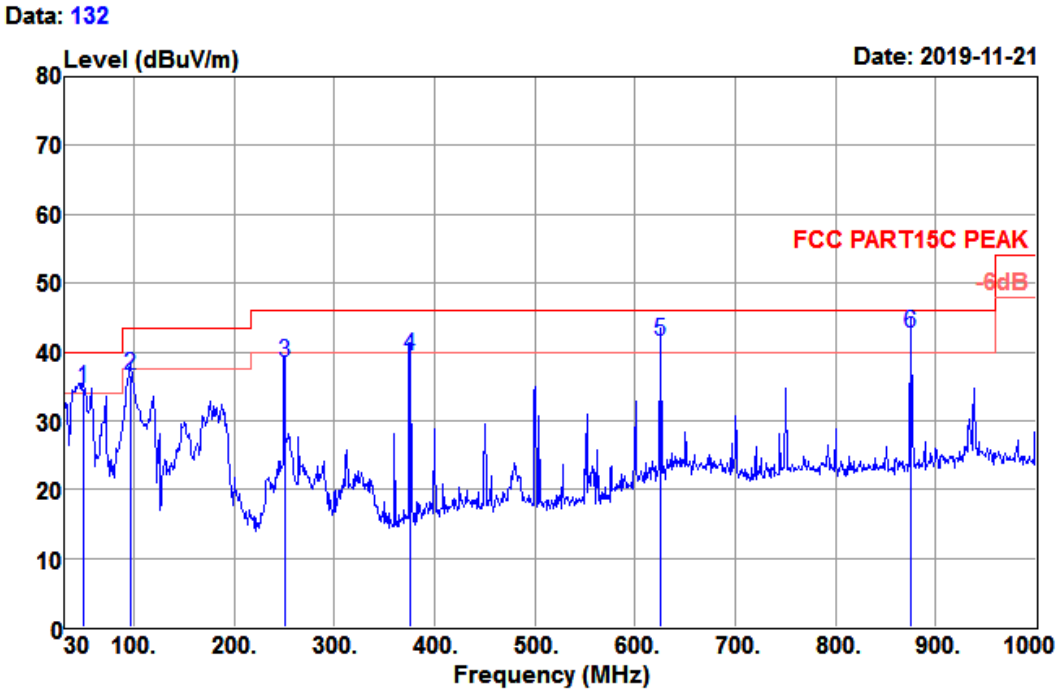
4.5.6 Test Result of Radiated Spurious Emission (30MHz ~ 1GHz)

Test Mode :	802.11b CH01(2412MHz)	**Temperature :**	21~23℃
Test Engineer :	Jack Liu	**Relative Humidity :**	63~65%
Frequencey Range	30MHz~1GHz	**Polarization :**	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
250.190	57.63	13.10	2.54	32.68	40.59	46.00	-5.41	QP
375.320	54.85	15.31	3.18	32.78	40.56	46.00	-5.44	QP
450.010	45.83	17.30	3.38	32.85	33.66	46.00	-12.34	QP
500.450	47.83	17.91	3.64	32.90	36.48	46.00	-9.52	QP
625.580	43.61	20.36	3.99	32.52	35.44	46.00	-10.56	QP
875.840	46.23	23.16	4.88	31.89	42.38	46.00	-3.62	QP

Test Mode :	802.11b CH01(2412MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	63~65%
Frequencey Range	30MHz~1GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
49.400	52.82	12.70	1.65	32.50	34.67	40.00	-5.33	QP
95.960	58.61	8.76	1.90	32.58	36.69	43.50	-6.81	QP
250.190	55.59	13.10	2.54	32.68	38.55	46.00	-7.45	QP
375.320	53.79	15.31	3.18	32.78	39.50	46.00	-6.50	QP
625.580	49.83	20.36	3.99	32.52	41.66	46.00	-4.34	QP
875.840	46.61	23.16	4.88	31.89	42.76	46.00	-3.24	QP

4.6 AC Conducted Emission Measurement

4.6.1 Limit of AC Conducted Emission

FCC §15.207

IC RSS-GEN 8.8

For equipment 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 or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following taBle Transmitting.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

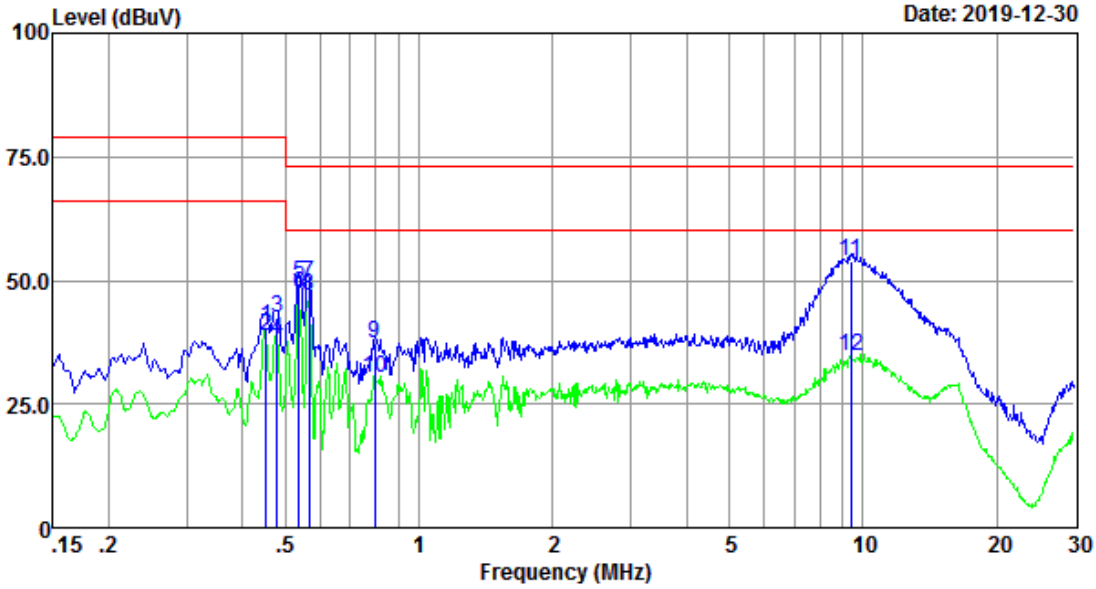
*Decreases with the logarithm of the frequency.

4.6.2 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

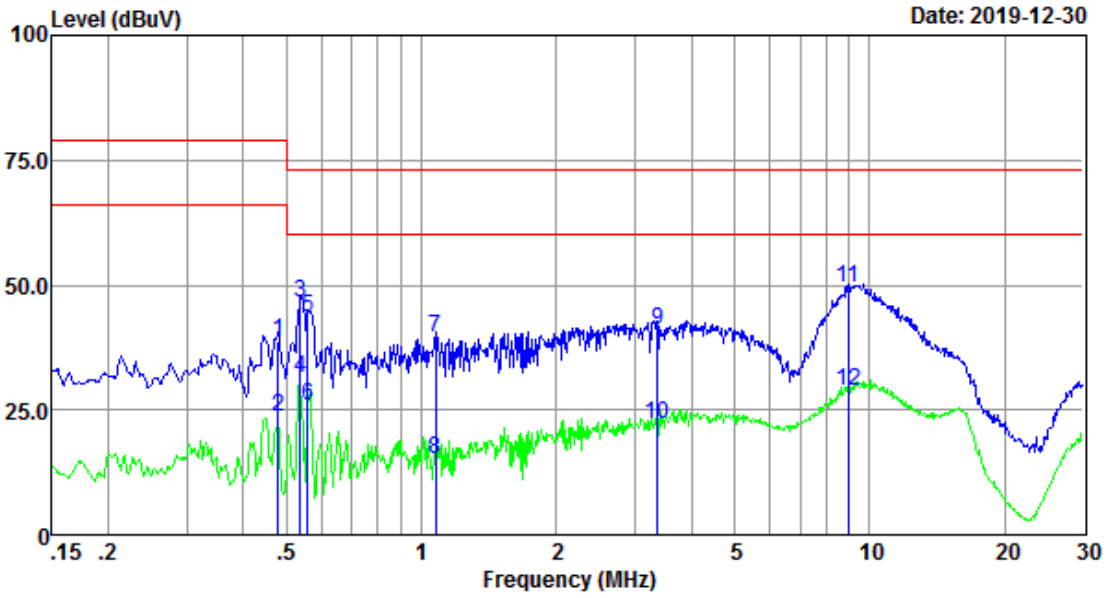
4.6.3 Test Result of AC Conducted Emission

Test Mode :	Mode 1	**Temperature :**	21~23℃
Test Engineer :	Victorique Gao	**Relative Humidity :**	41~43%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	SD Card +RJ45(LAN) Link + WLAN Link + Adapter		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.452	30.82	9.71	0.04	40.57	79.00	-38.43	QP
0.452	28.93	9.71	0.04	38.68	66.00	-27.32	Average
0.479	32.85	9.72	0.04	42.61	79.00	-36.39	QP
0.479	28.12	9.72	0.04	37.88	66.00	-28.12	Average
0.538	39.85	9.73	0.04	49.62	73.00	-23.38	QP
0.538	37.49	9.73	0.04	47.26	60.00	-12.74	Average
0.564	39.61	9.73	0.04	49.38	73.00	-23.62	QP
0.564	36.98	9.73	0.04	46.75	60.00	-13.25	Average
0.796	27.58	9.78	0.04	37.40	73.00	-35.60	QP
0.796	20.56	9.78	0.04	30.38	60.00	-29.62	Average
9.401	43.82	9.98	0.10	53.90	73.00	-19.10	QP
9.401	24.56	9.98	0.10	34.64	60.00	-25.36	Average

Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Victorique Gao	Relative Humidity :	41~43%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	SD Card +RJ45(LAN) Link + WLAN Link + Adapter		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.479	28.92	9.64	0.04	38.60	79.00	-40.40	QP
0.479	13.84	9.64	0.04	23.52	66.00	-42.48	Average
0.538	36.85	9.65	0.04	46.54	73.00	-26.46	QP
0.538	21.58	9.65	0.04	31.27	60.00	-28.73	Average
0.558	33.89	9.65	0.04	43.58	73.00	-29.42	QP
0.558	16.10	9.65	0.04	25.79	60.00	-34.21	Average
1.077	29.63	9.69	0.05	39.37	73.00	-33.63	QP
1.077	5.48	9.69	0.05	15.22	60.00	-44.78	Average
3.364	31.27	9.76	0.07	41.10	73.00	-31.90	QP
3.364	12.39	9.76	0.07	22.22	60.00	-37.78	Average
8.964	39.57	9.85	0.10	49.52	73.00	-23.48	QP
8.964	18.75	9.85	0.10	28.70	60.00	-31.30	Average

4.7 Antenna Requirements

4.7.1 Standard Applicable Transmitting

According to antenna requirement of §15.203.

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsiBle Transmitting party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be re-placed by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsiBle Transmitting for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded..

And according to §15.247(4)(1), system operating in the 2400-2483.5MHz bands that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 Antenna Connected Construction

An embedded-in antenna design is used.

4.7.3 Antenna Gain

The antenna peak gain of EUT is 2dBi less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

No antenna other than that furnished by the responsible party shall be used with the device. This device use a permanently attached antennas. The use of a standard antenna jack or electrical connector is prohibited. This device is compliant with FCC Part 15.203.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY56070788	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY56510025	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY57030005	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY56510018	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY56480002	2019-01-23	2020-01-22	Conducted
Thermal Chamber	Sanmtest	SMC-408-CD	2435	2018-07-05	2019-07-04	Conducted
Thermal Chamber	Sanmtest	SMC-408-CD	2435	2019-05-09	2020-05-08	Conducted
Base Station	R&S	CMW 270	101231	2019-01-23	2020-01-22	Conducted

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV 40	101433	2019-02-18	2020-02-17	Radiation
Amplifier	Sonoma	310	363917	2019-01-22	2020-01-21	Radiation
Amplifier	Schwarzbeck	BBV 9718	327	2019-01-22	2020-01-21	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2018-07-18	2019-07-17	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2019-05-15	2020-05-14	Radiation
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	2017/3/3	2020/3/2	Radiation
Broadband Antenna	Schwarzbeck	VULB 9168	9168-757	2017-03-03	2020-03-02	Radiation
Horn Antenna	Schwarzbeck	BBHA 9120 D	1677	2017-03-03	2020-03-02	Radiation
Horn Antenna	COM-POWER	AH-1840	101117	2018-06-20	2021-06-19	Radiation
Test Software	Audix	E3	6.111221a	N/A	N/A	Radiation
Filter	Micro-Tronics	BRM 50702	G266	N/A	N/A	Radiation

N/A: No Calibration Required

6 Uncertainty of Evaluation

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.60dB
Radiated emissions	30MHz ~ 1GMHz	5.05dB
	1GHz ~ 18GHz	5.06 dB
	18GHz ~ 40GHz	3.65dB

MEASUREMENT	UNCERTAINTY
Occupied Channel Bandwidth	±0.1%
RF output power, conducted	±1.2dB
Power density, conducted	±1.2dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.