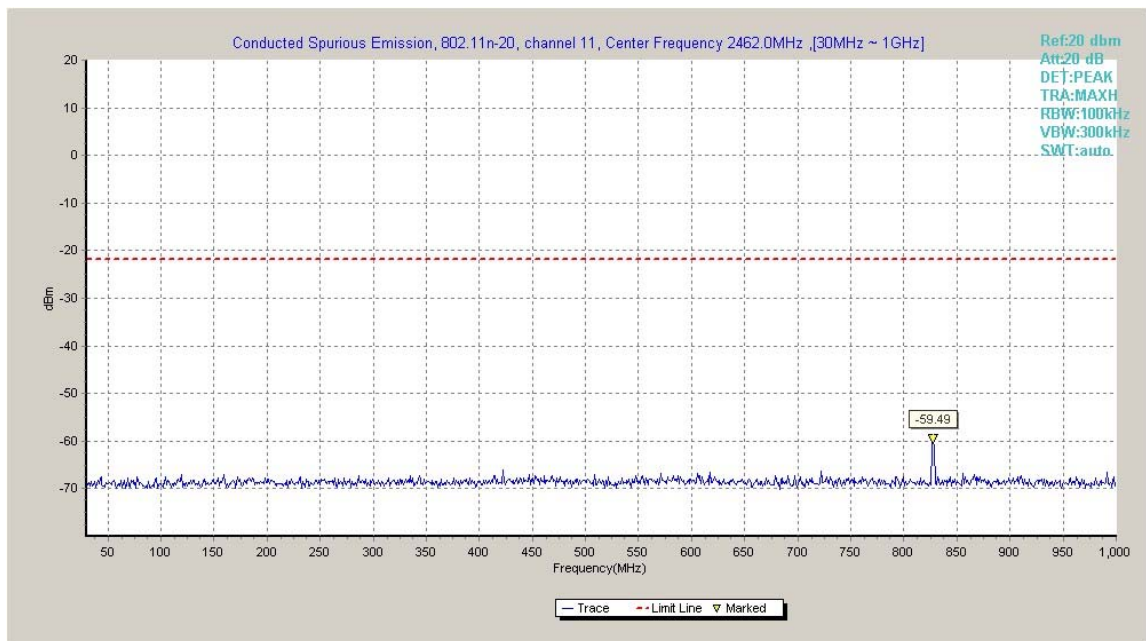
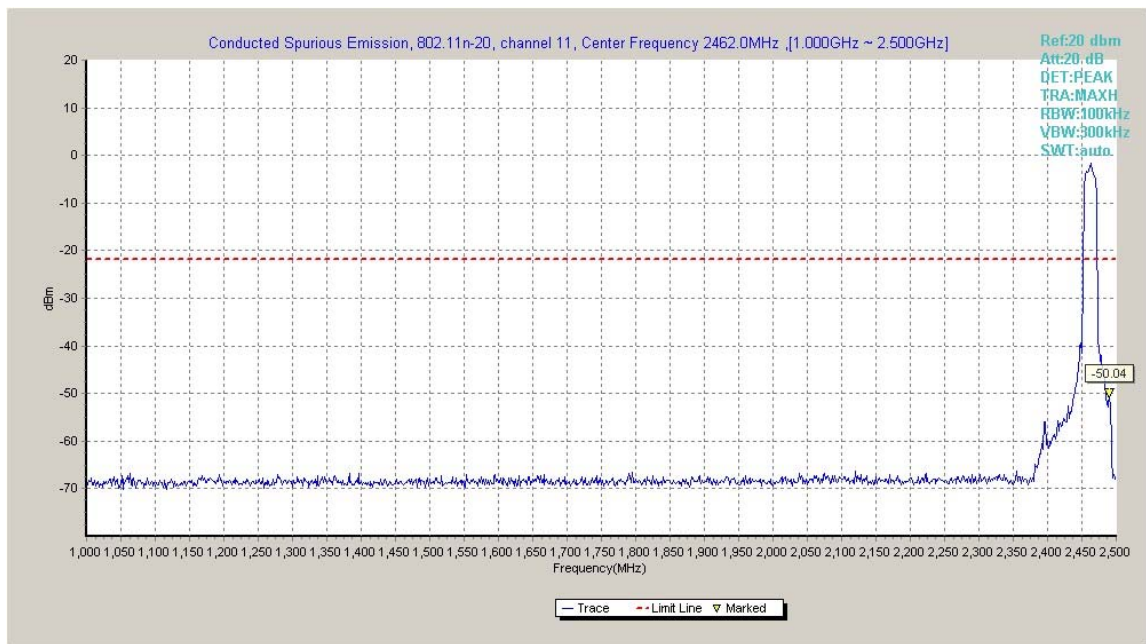


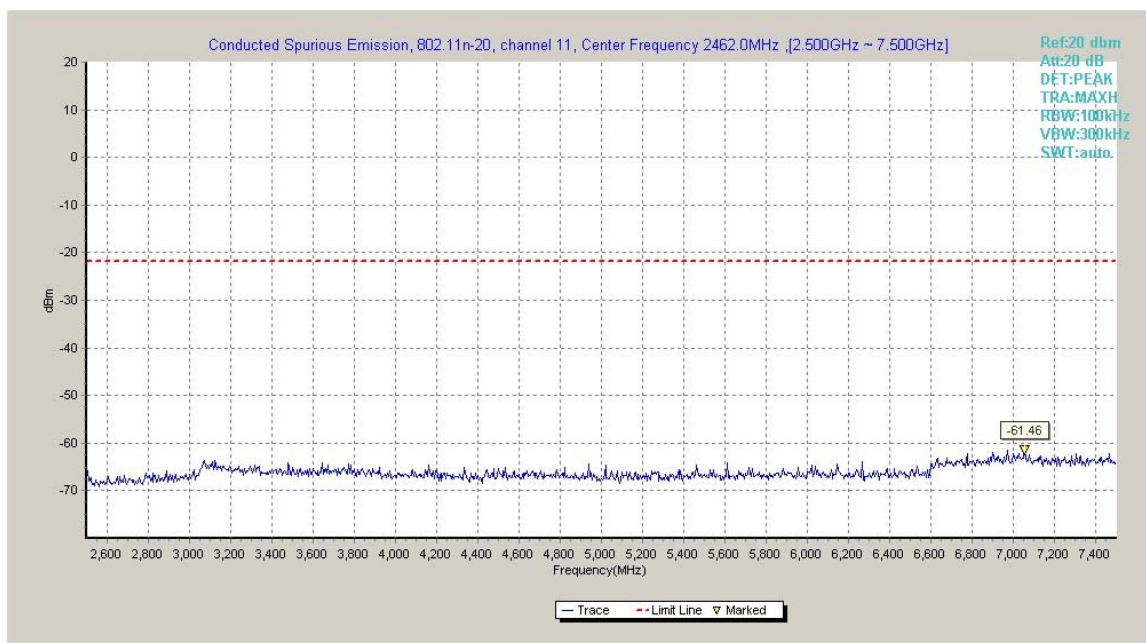
**Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)**



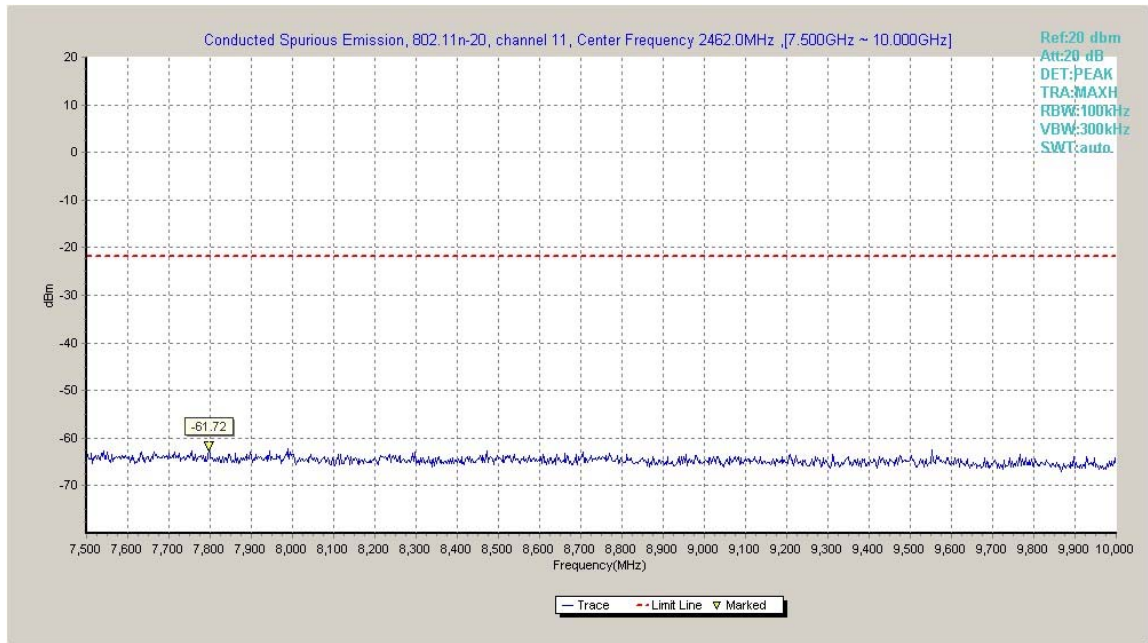
**Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)**



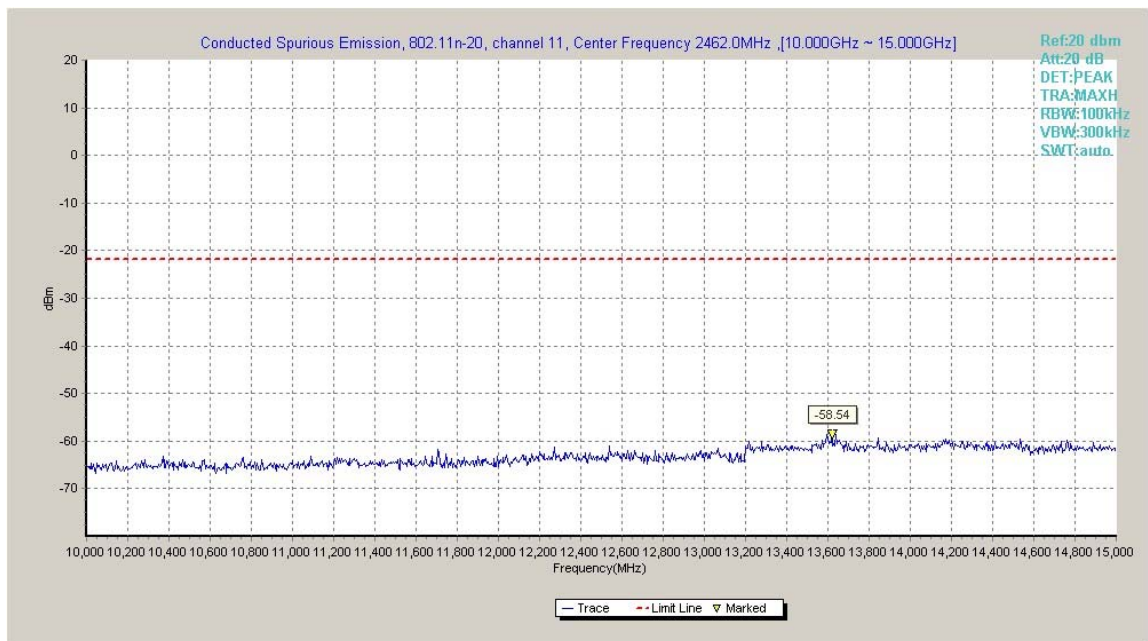
**Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)**



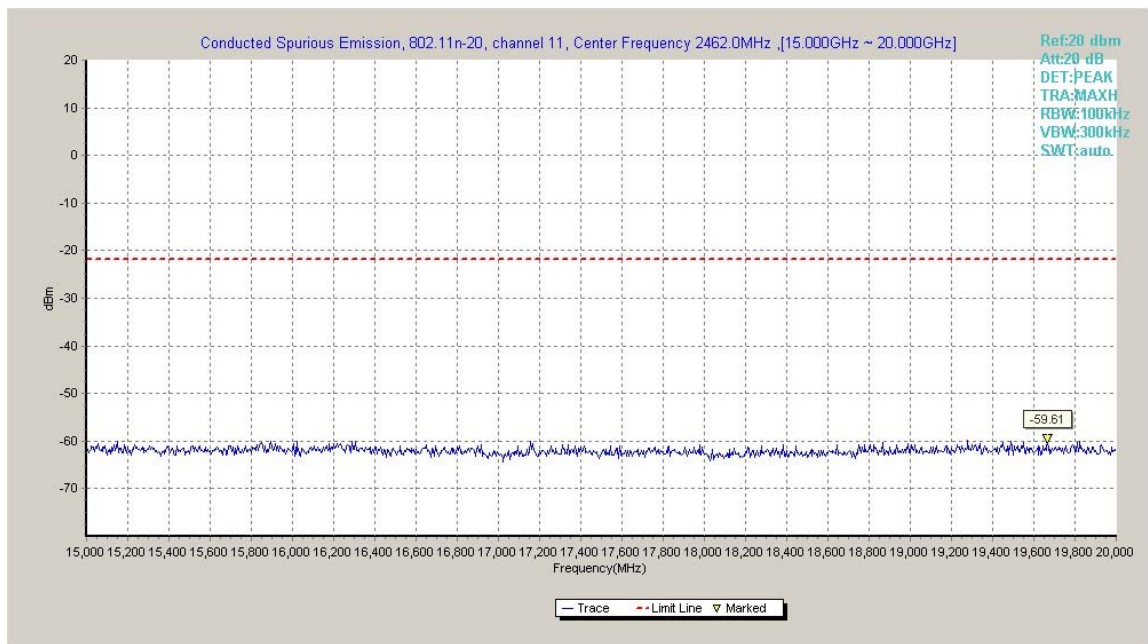
**Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)**



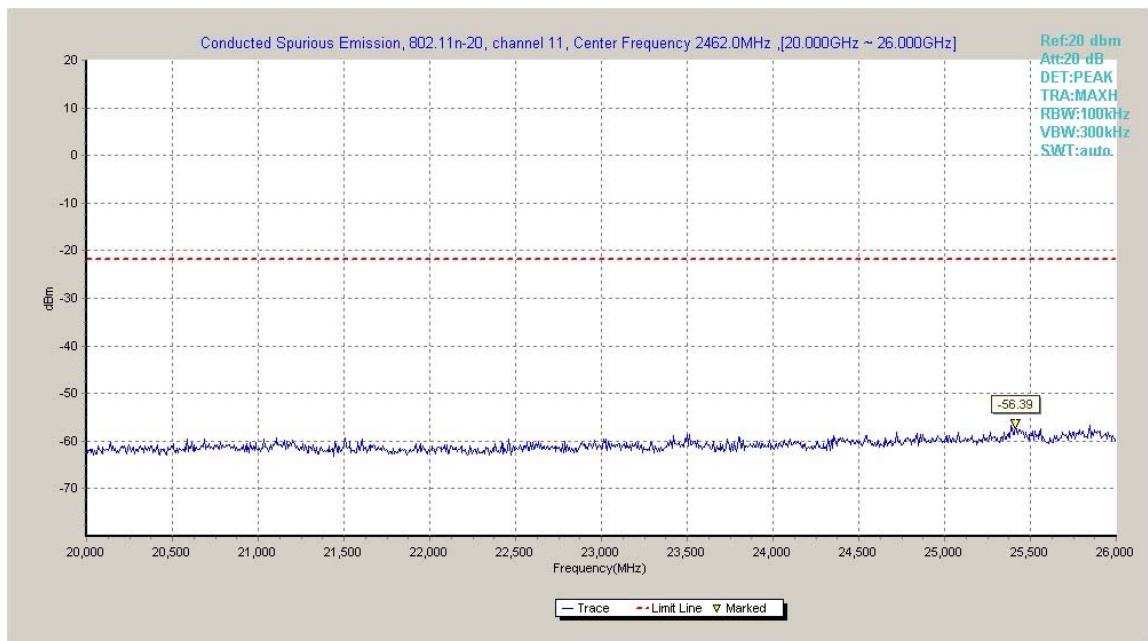
**Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)**



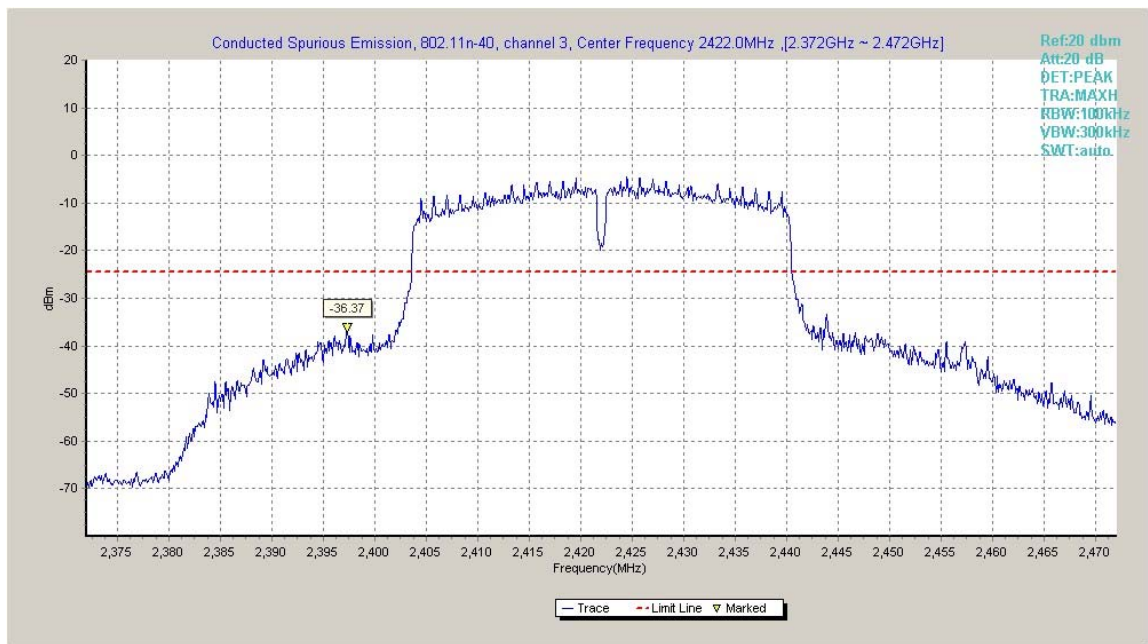
**Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)**



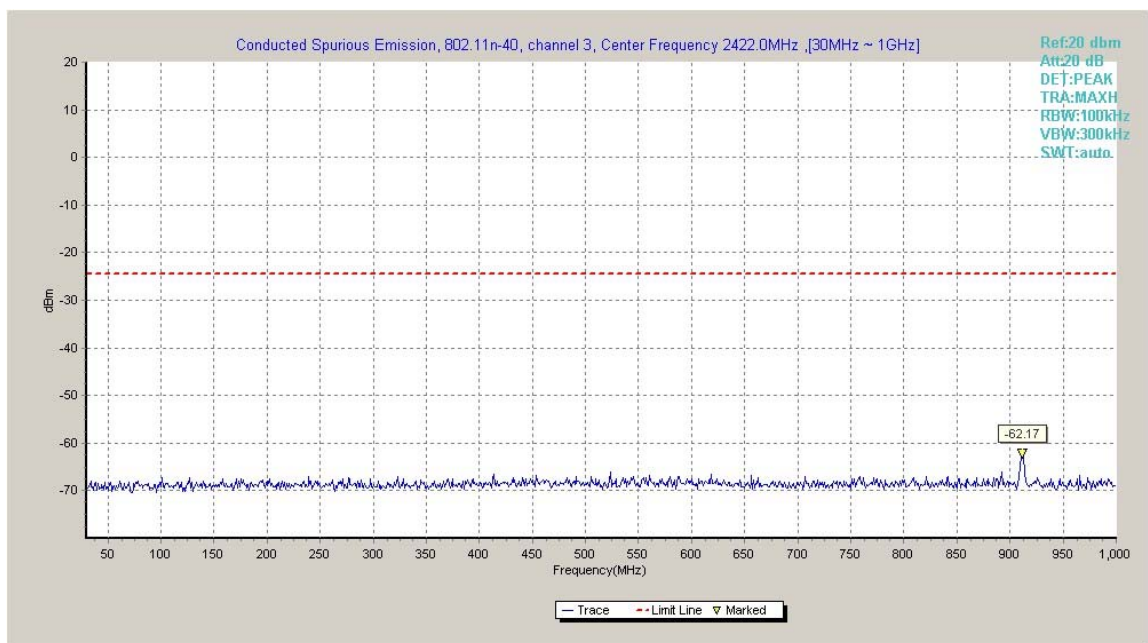
**Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)**



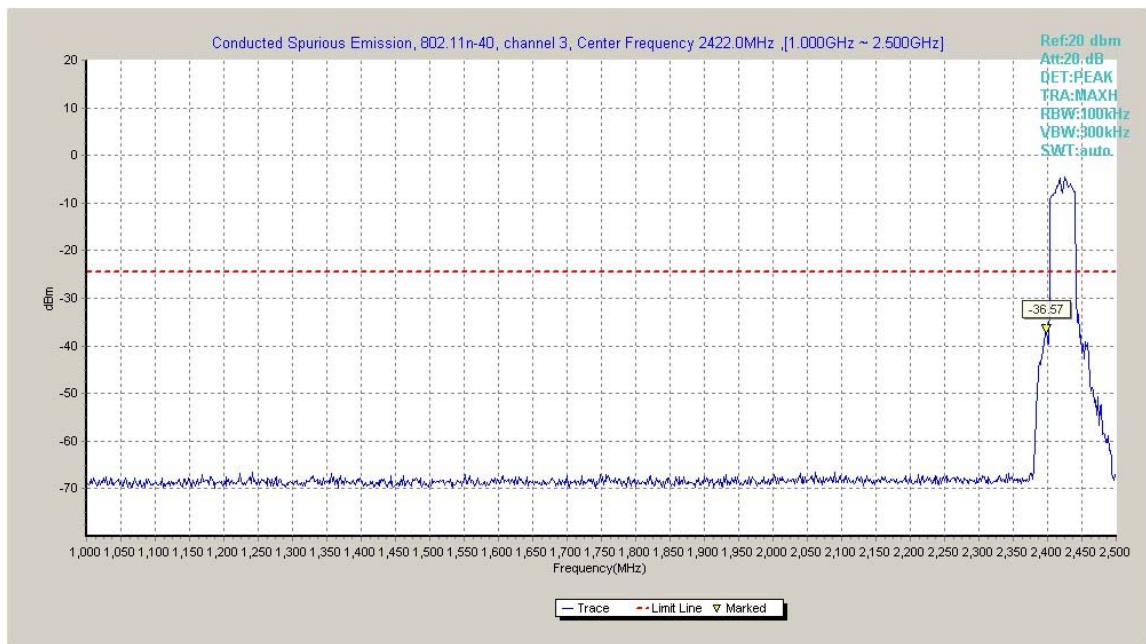
**Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)**



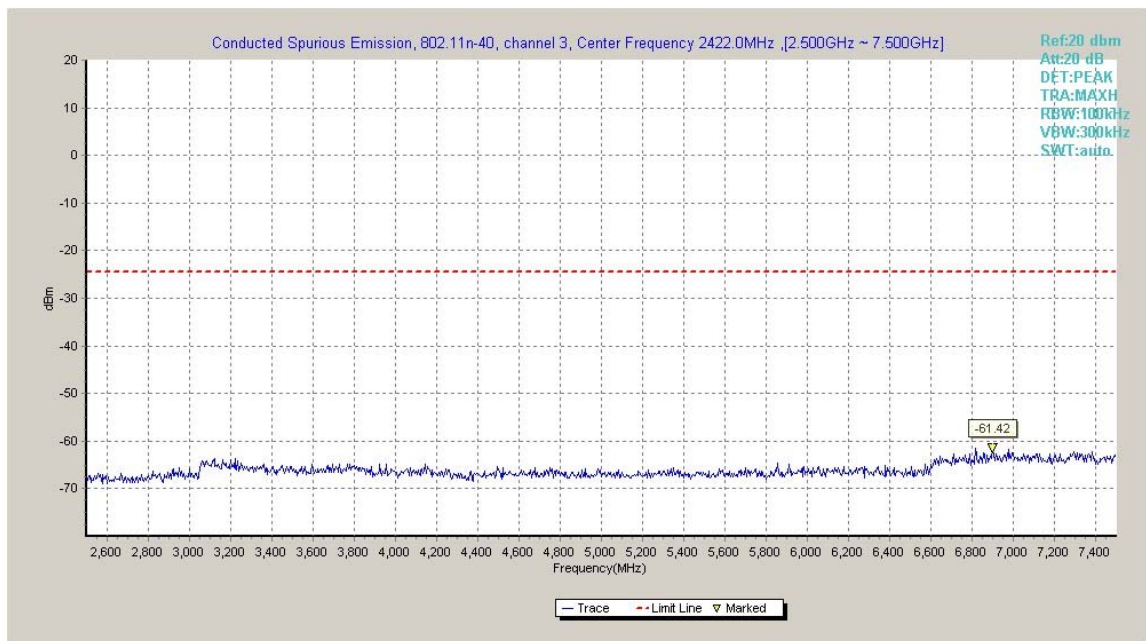
**Fig.A.6.1.73 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)**



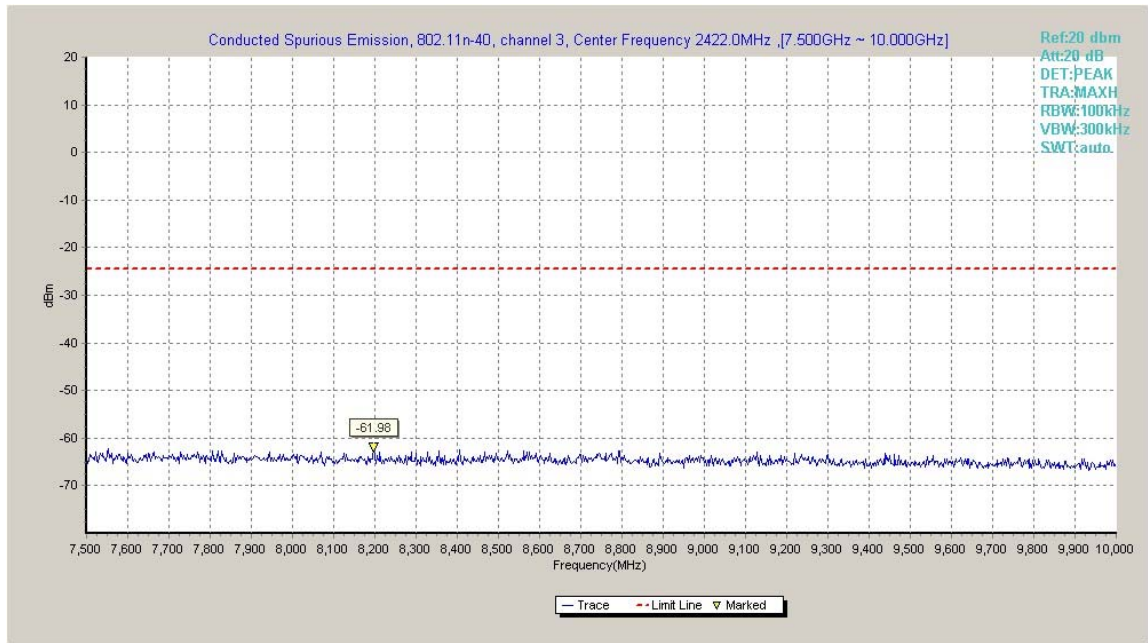
**Fig.A.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)**



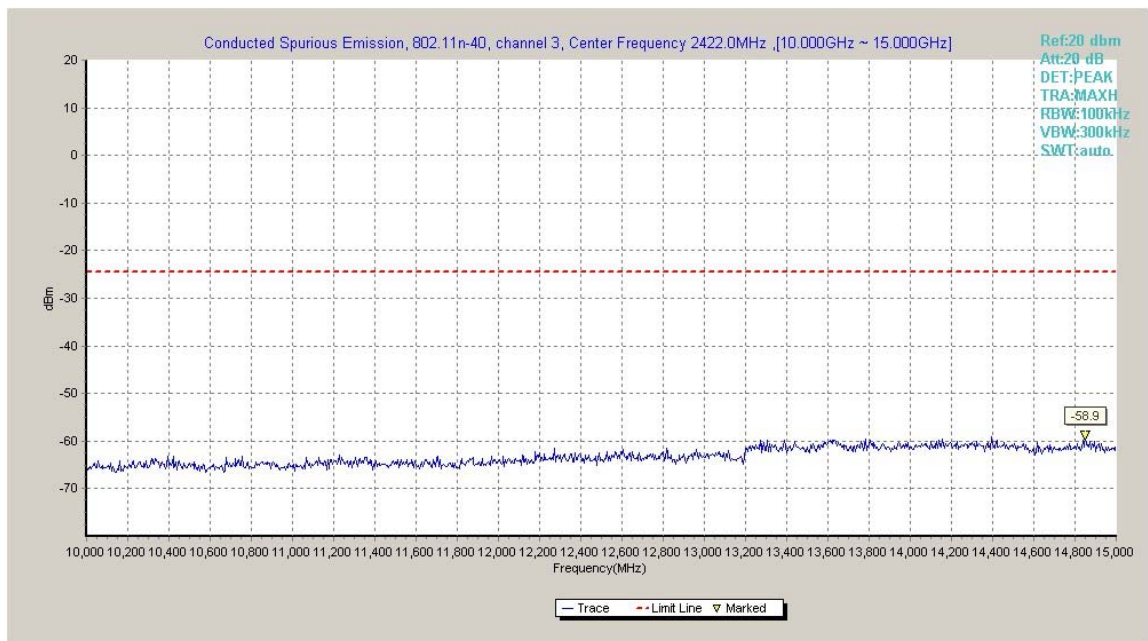
**Fig.A.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)**



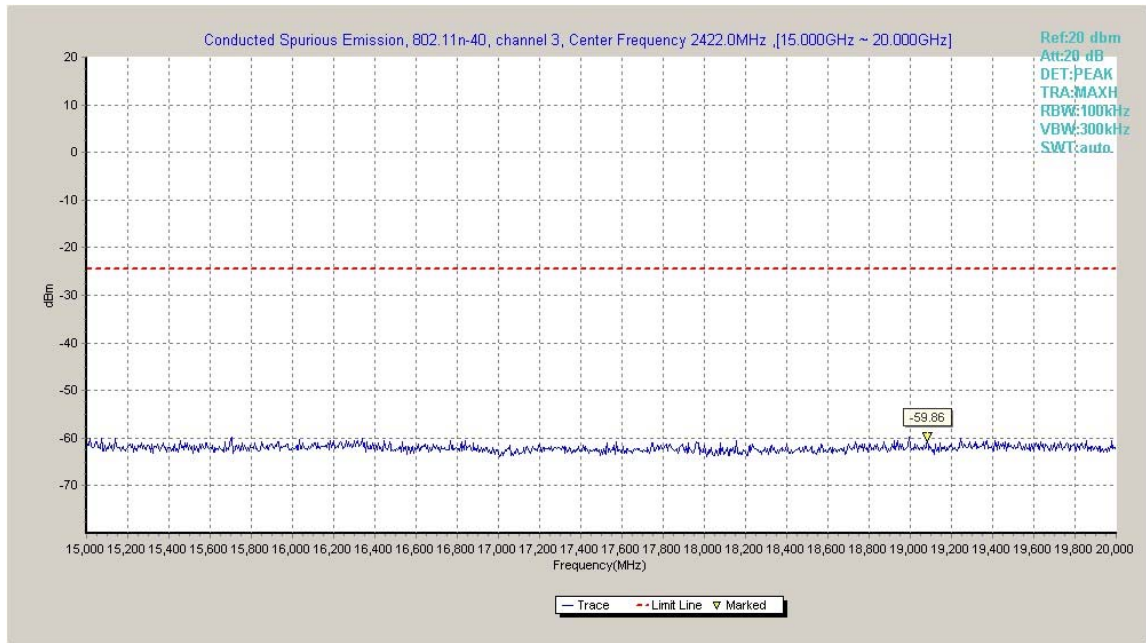
**Fig.A.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)**



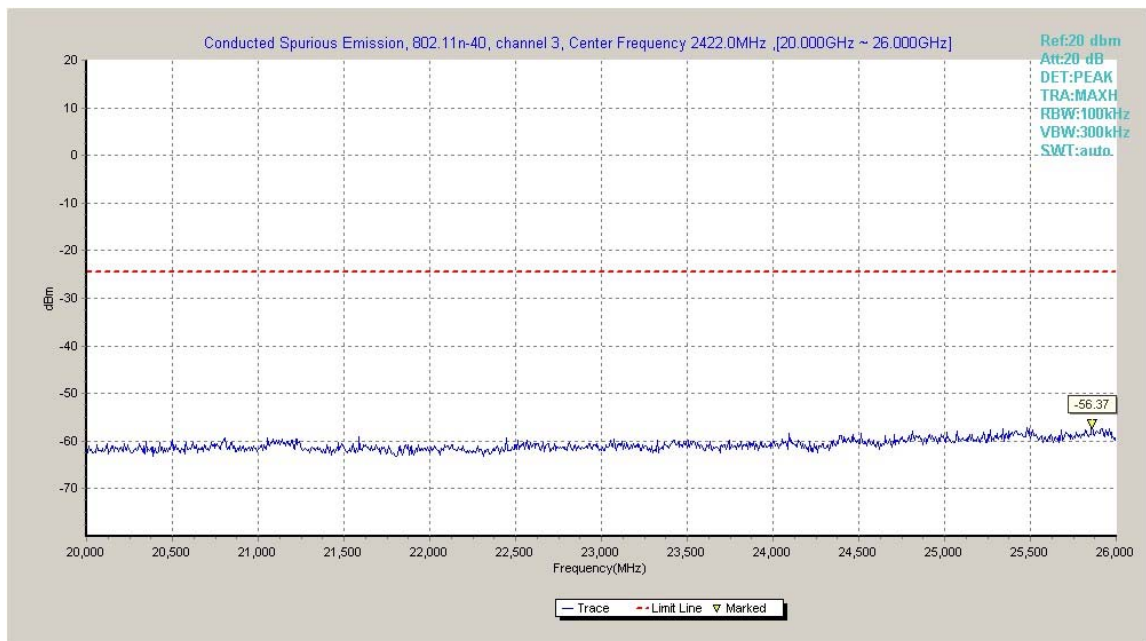
**Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)**



**Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)**

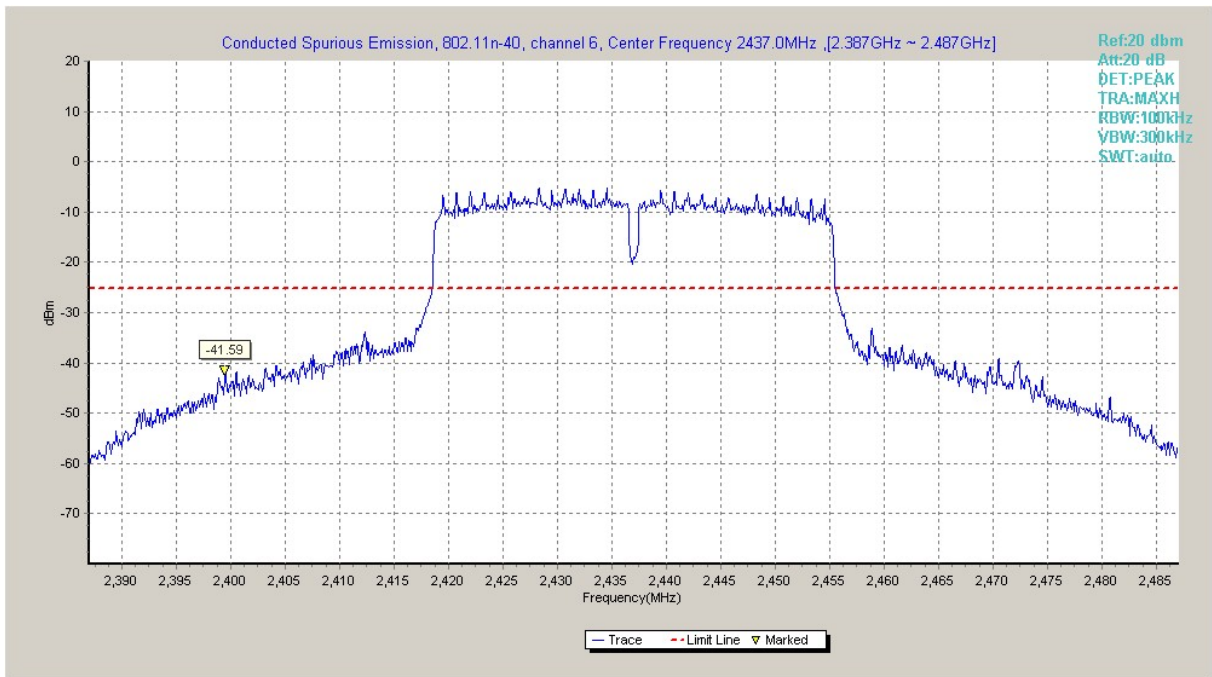


**Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)**

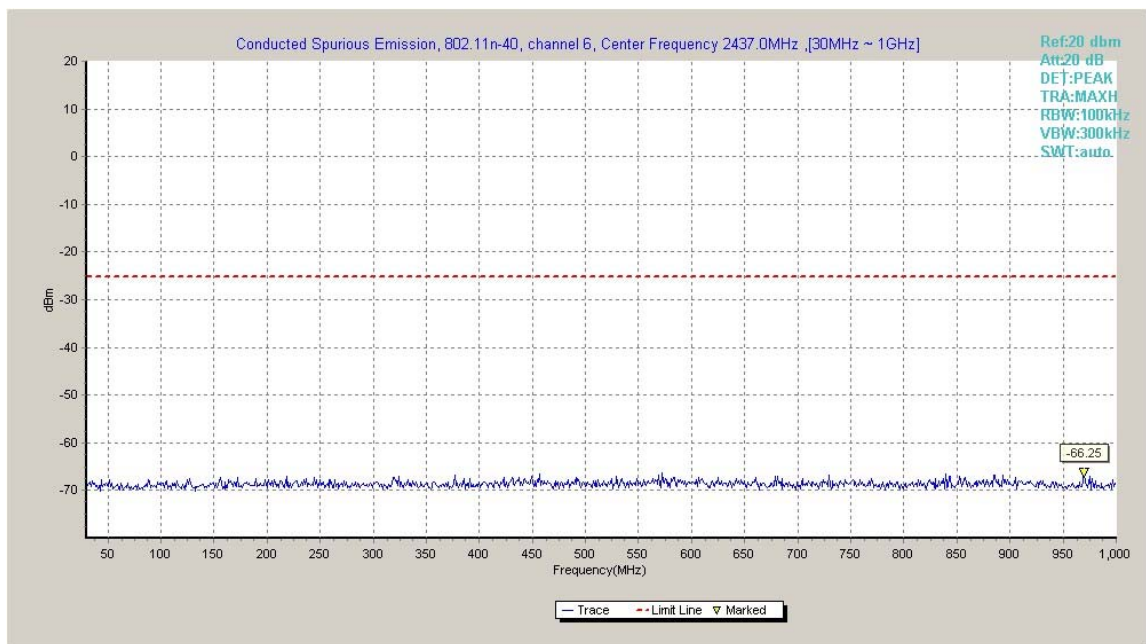


**Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)**

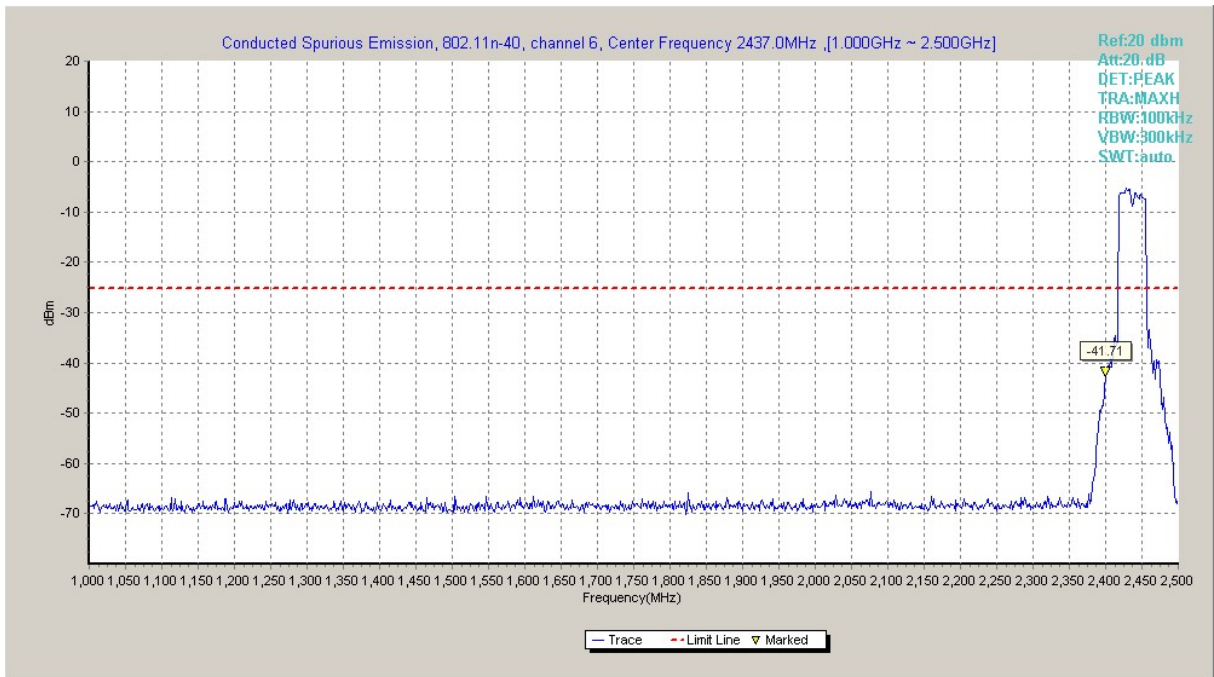




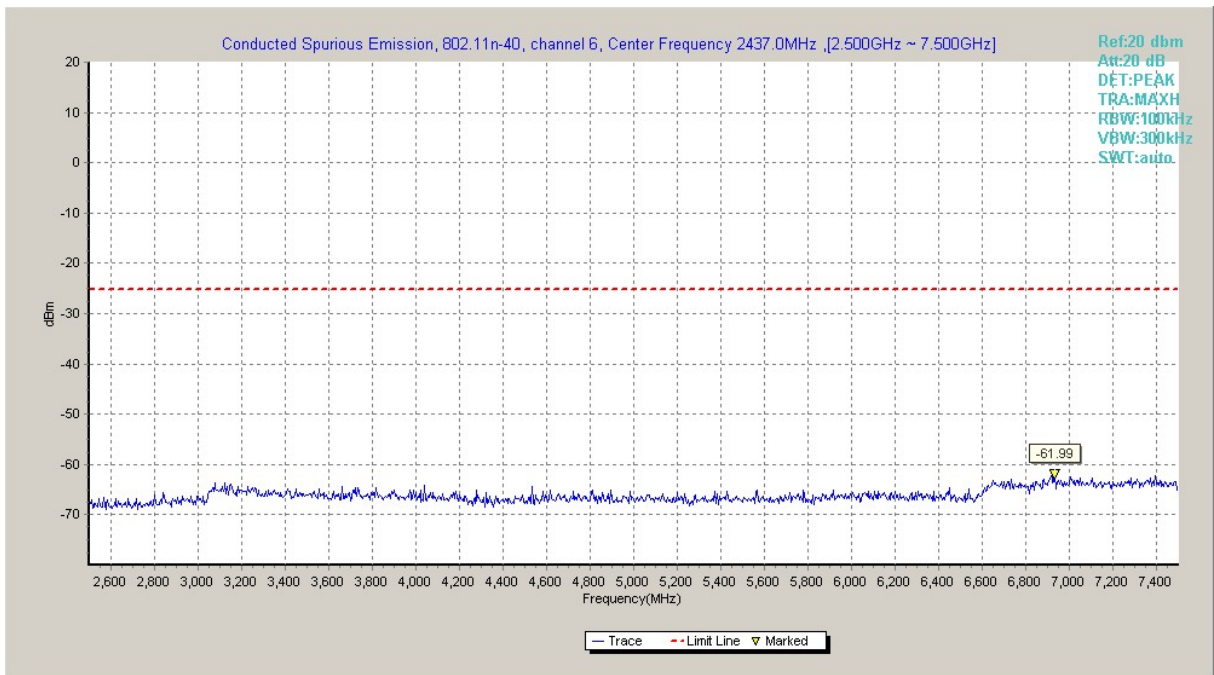
**Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)**



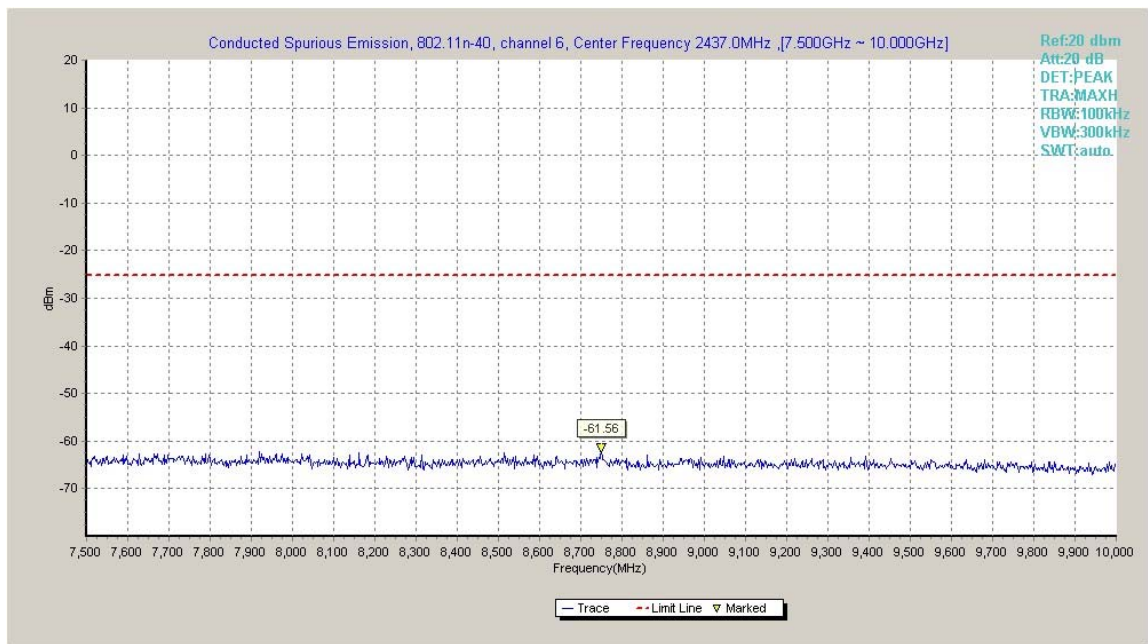
**Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)**



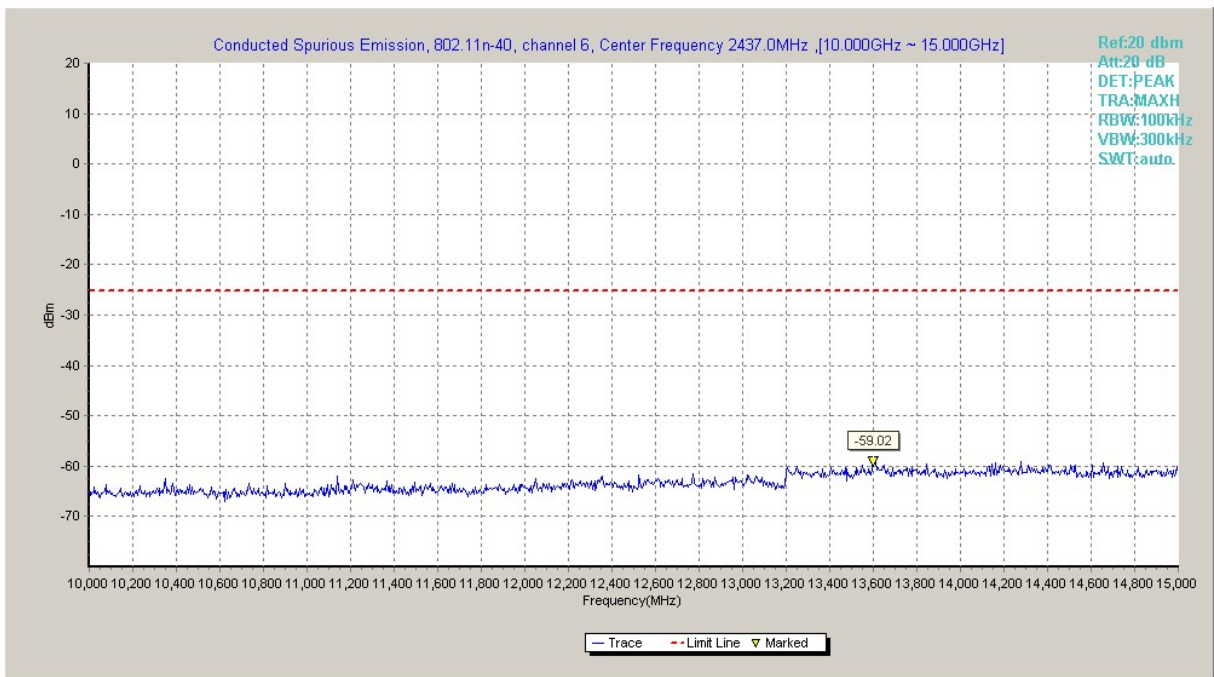
**Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)**



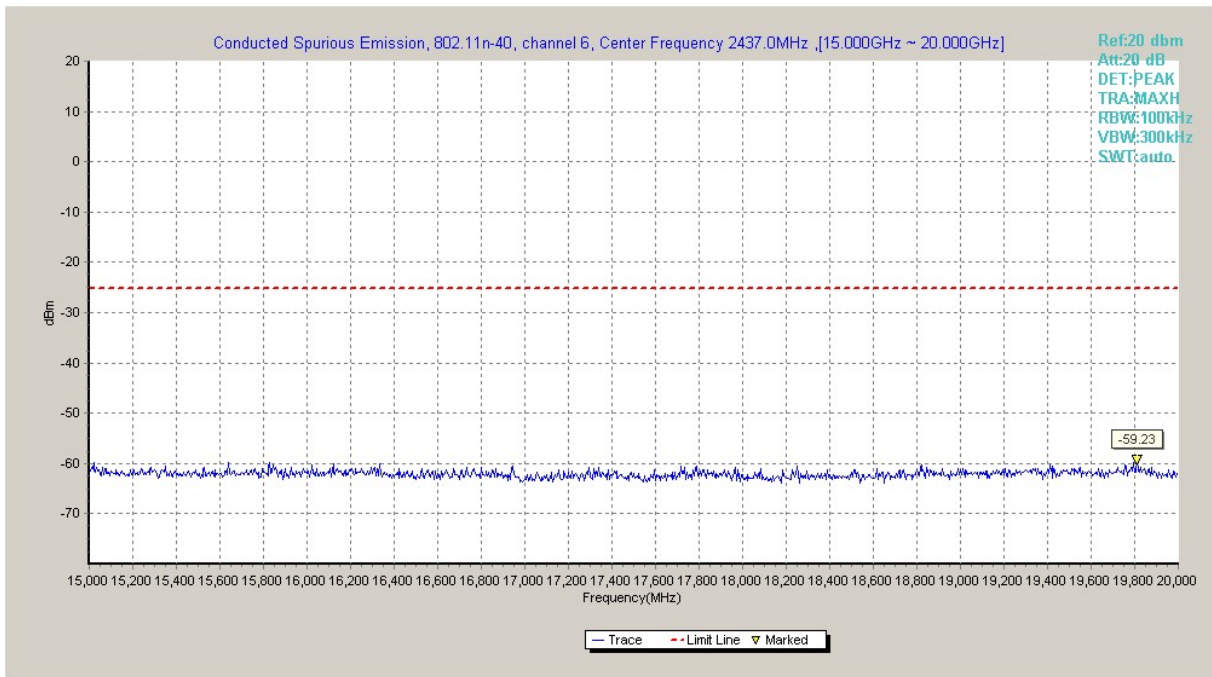
**Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)**



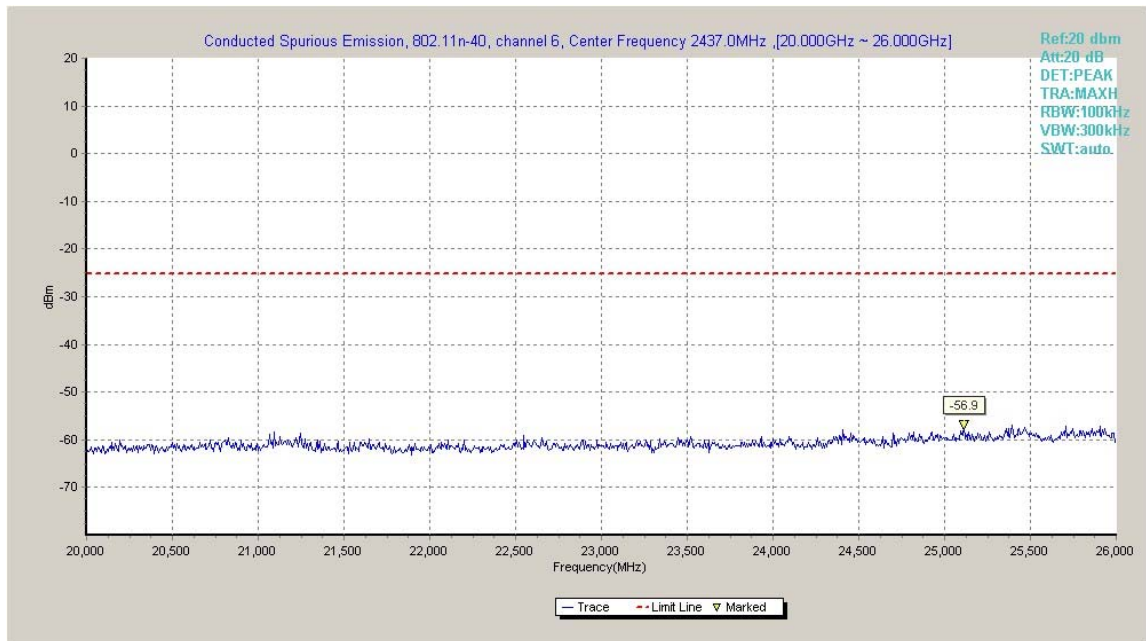
**Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)**



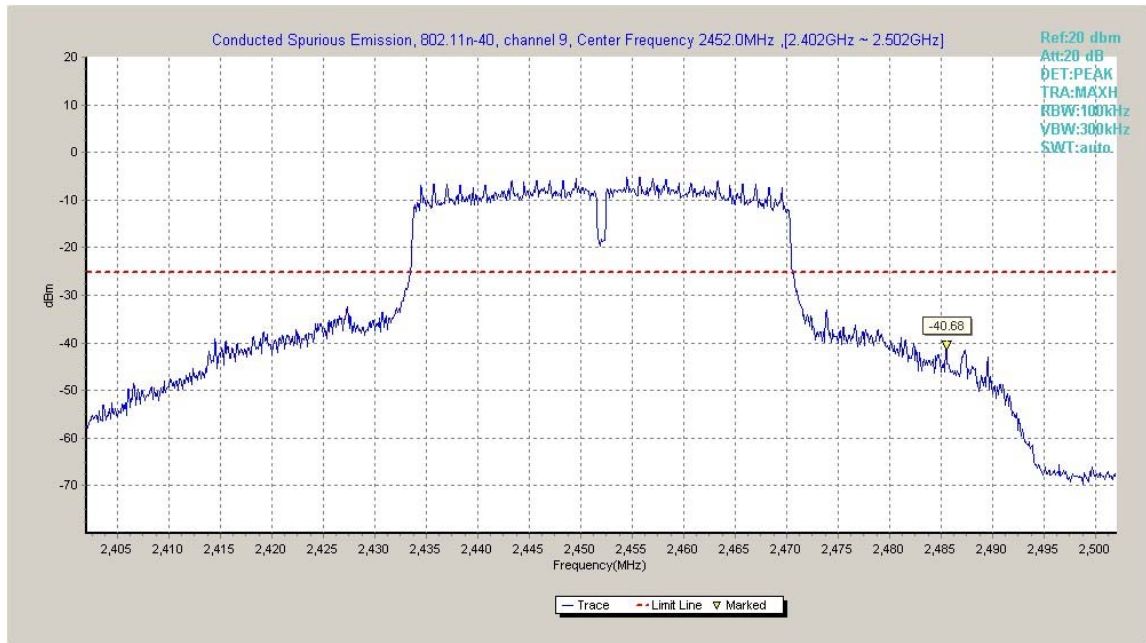
**Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)**



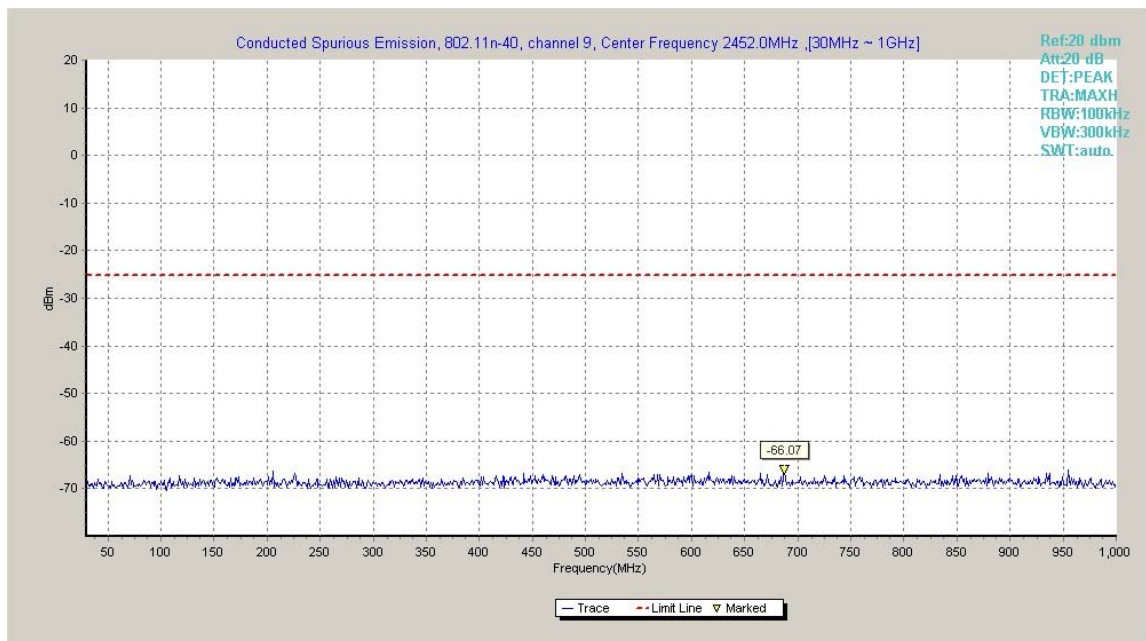
**Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)**



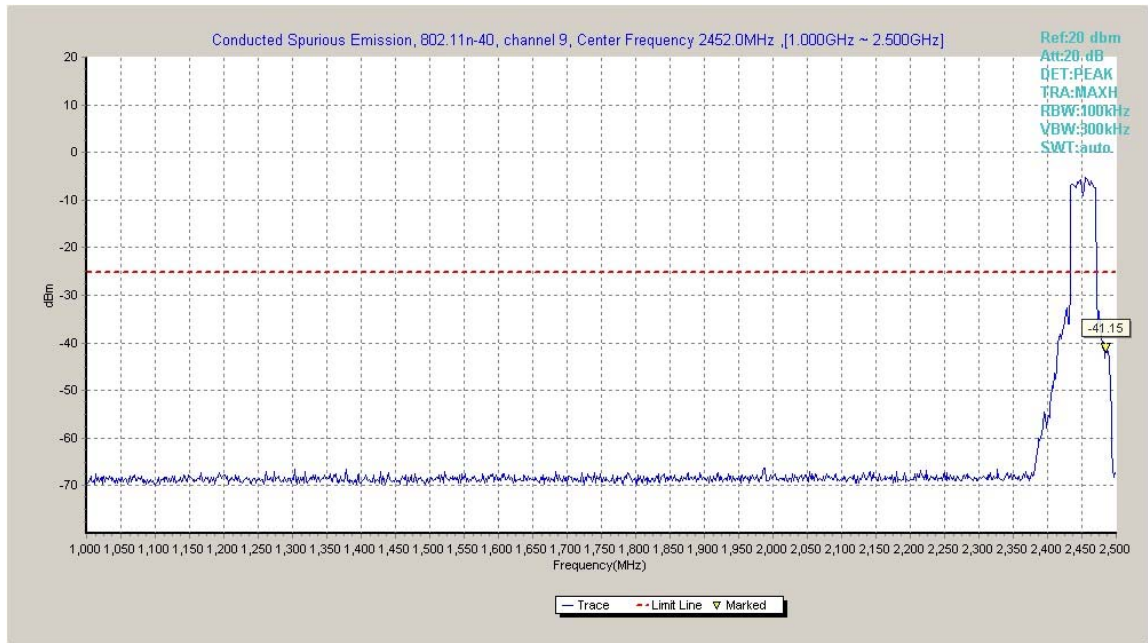
**Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)**



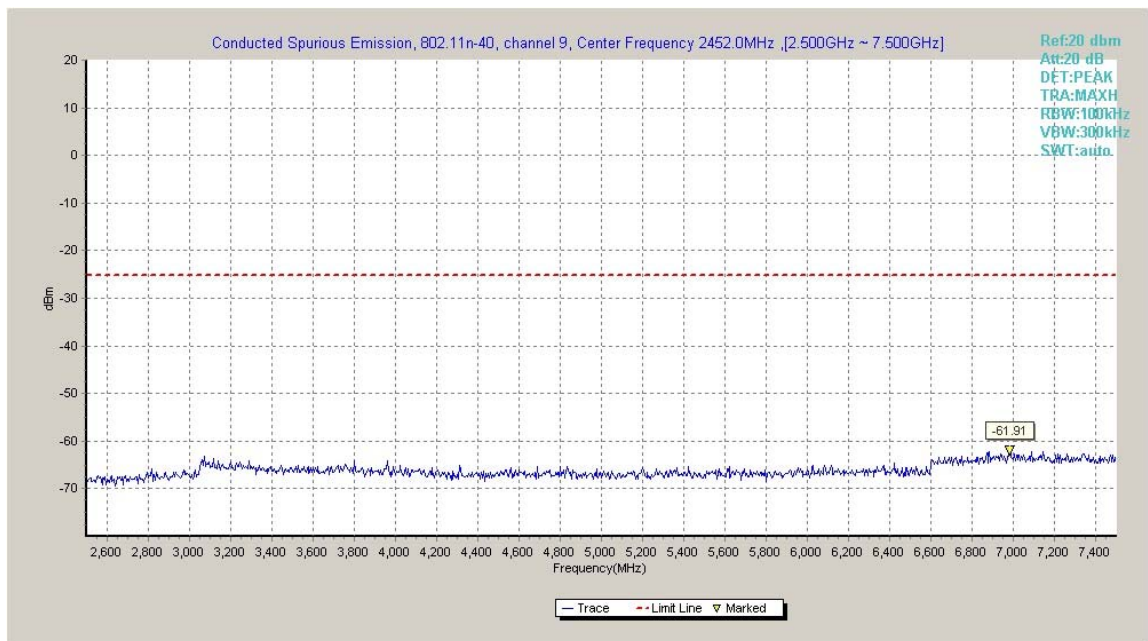
**Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)**



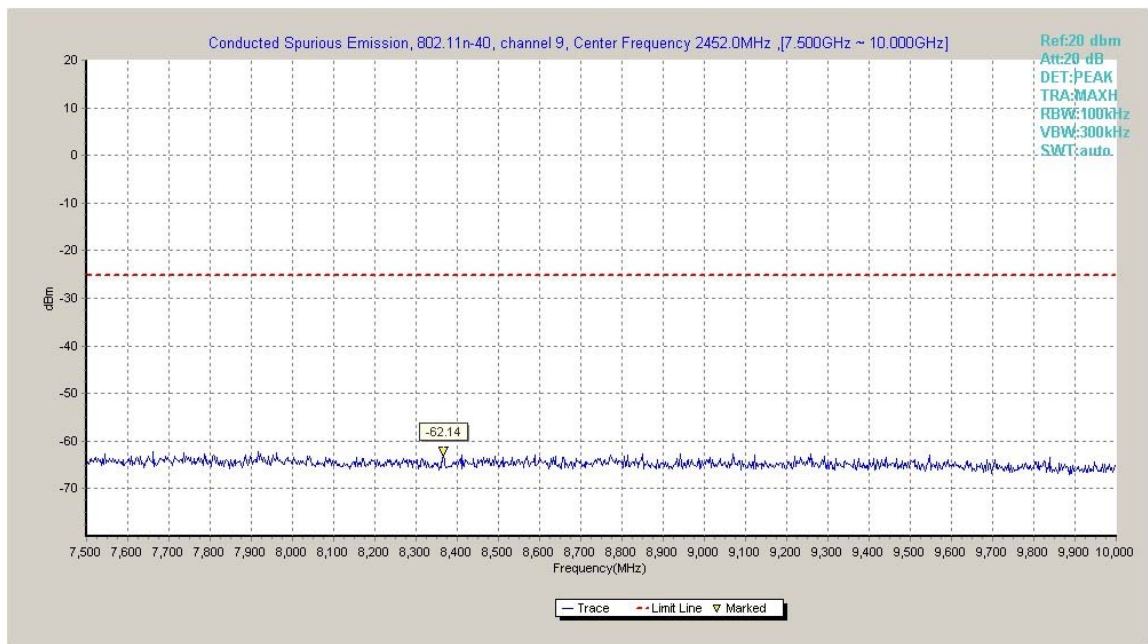
**Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)**



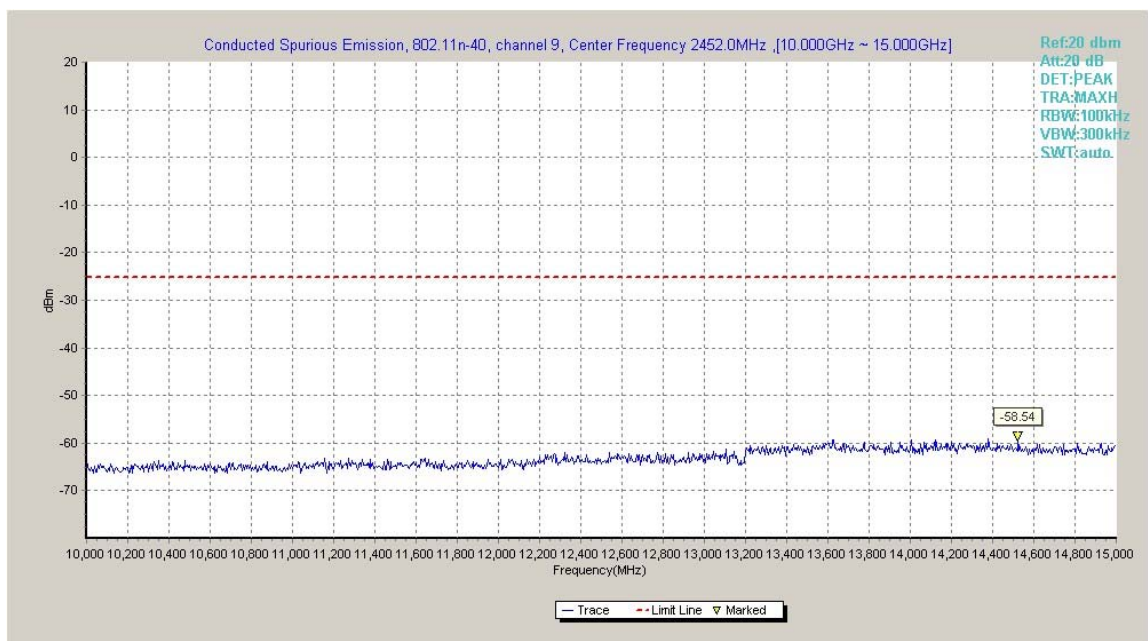
**Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)**



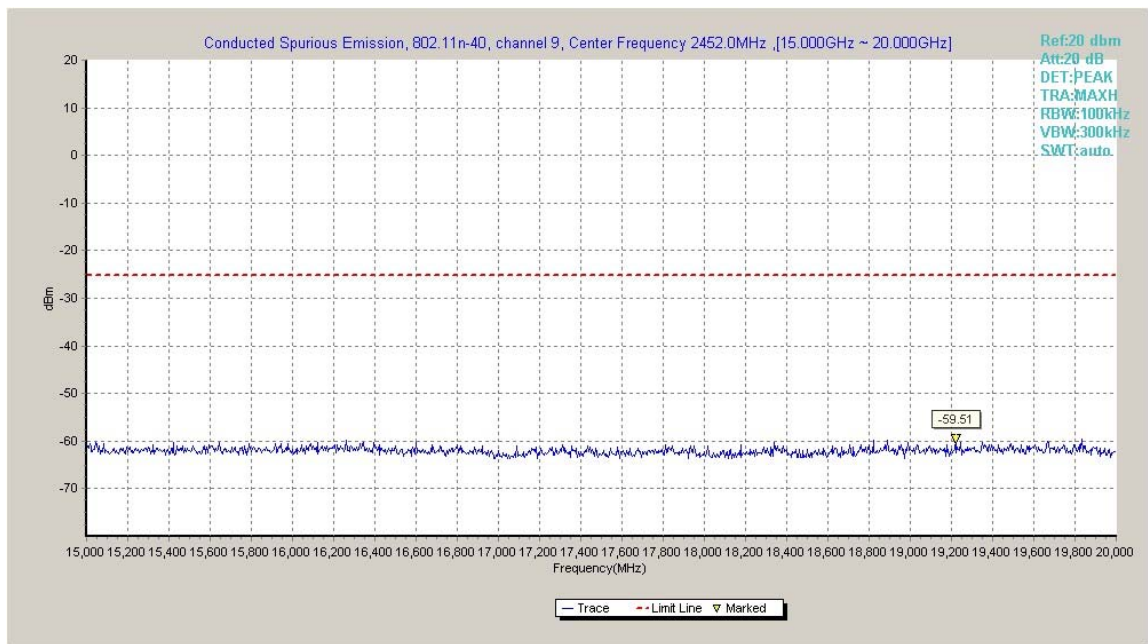
**Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)**



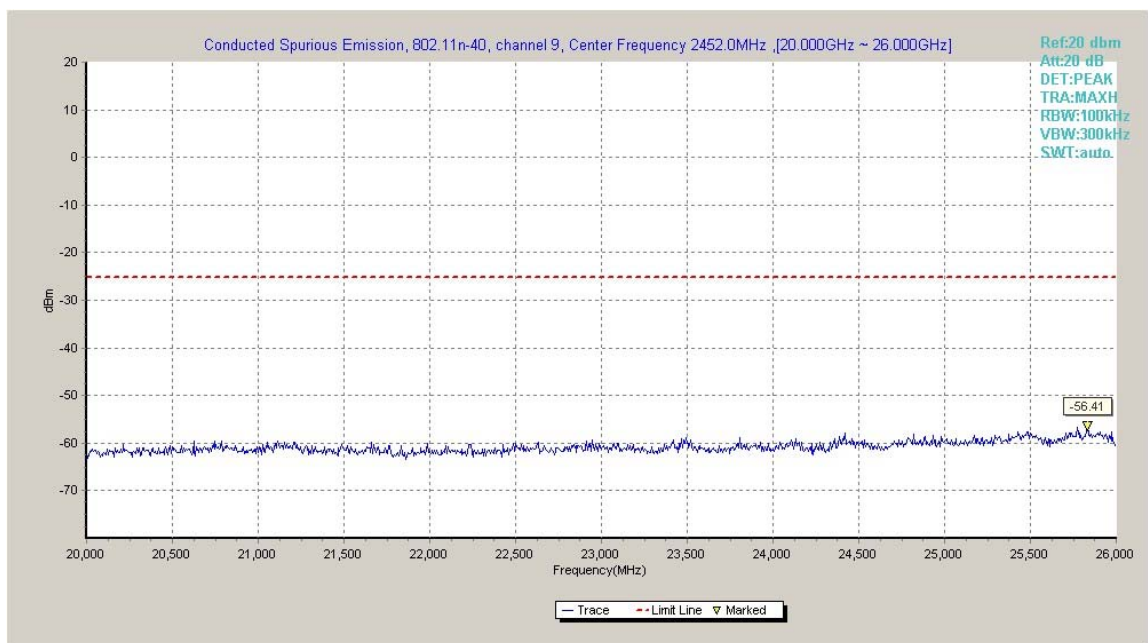
**Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)**



**Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)**



**Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)**



**Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)**



**A.6.2 Transmitter Spurious Emission - Radiated**

**Method of Measurement: See ANSI C63.10-2013-clause 6.4 & 6.5 & 6.6**

**Measurement Limit:**

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output 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) (see § 15.205(c)).

**Limit in restricted band:**

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Field strength(µV/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

**Test Condition**

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

**EUT ID: EUT1**

**Measurement Results for Set.10:**

**802.11b mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.43GHz	Fig.A.6.2.1	<b>P</b>
	1	1 GHz ~ 3 GHz	Fig.A.6.2.2	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.3	<b>P</b>
	6	9 kHz ~30 MHz	Fig.A.6.2.4	<b>P</b>
		30 MHz ~1 GHz	Fig.A.6.2.5	<b>P</b>
		1 GHz ~ 3 GHz	Fig.A.6.2.6	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.7	<b>P</b>
	Power	18 GHz~ 26.5 GHz	Fig.A.6.2.8	<b>P</b>
		2.45GHz ~2.5GHz	Fig.A.6.2.9	<b>P</b>
		11	1 GHz ~ 3 GHz	Fig.A.6.2.10
3 GHz ~ 18 GHz	Fig.A.6.2.11		<b>P</b>	

**802.11g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.A.6.2.12	<b>P</b>
	1	1 GHz ~ 3 GHz	Fig.A.6.2.13	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.14	<b>P</b>
	6	30 MHz ~1 GHz	Fig.A.6.2.15	<b>P</b>
		1 GHz ~ 3 GHz	Fig.A.6.2.16	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.17	<b>P</b>
		18 GHz~ 26.5 GHz	Fig.A.6.2.18	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.19	<b>P</b>
	11	1 GHz ~ 3 GHz	Fig.A.6.2.20	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.21	<b>P</b>

**802.11n-HT20 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power	2.38GHz ~2.43GHz	Fig.A.6.2.22	<b>P</b>
	1	1 GHz ~ 3 GHz	Fig.A.6.2.23	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.24	<b>P</b>
	6	30 MHz ~1 GHz	Fig.A.6.2.25	<b>P</b>
		1 GHz ~ 3 GHz	Fig.A.6.2.26	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.27	<b>P</b>
		18 GHz~ 26.5 GHz	Fig.A.6.2.28	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.29	<b>P</b>
	11	1 GHz ~ 3 GHz	Fig.A.6.2.30	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.31	<b>P</b>

**802.11n-HT40 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	Power	2.38GHz ~2.43GHz	Fig.A.6.2.32	<b>P</b>
	3	1 GHz ~ 3 GHz	Fig.A.6.2.33	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.34	<b>P</b>
	6	30 MHz ~1 GHz	Fig.A.6.2.35	<b>P</b>
		1 GHz ~ 3 GHz	Fig.A.6.2.36	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.37	<b>P</b>
		18 GHz~ 26.5 GHz	Fig.A.6.2.38	<b>P</b>
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.39	<b>P</b>
	9	1 GHz ~ 3 GHz	Fig.A.6.2.40	<b>P</b>
		3 GHz ~ 18 GHz	Fig.A.6.2.41	<b>P</b>

**Conclusion: Pass**

**Note:**

A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

$P_{Mea}$  is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result= $P_{Mea}+A_{Rpl}= P_{Mea}+Cable Loss+Antenna Factor$

**802.11b-Average**

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2386.846	46.7	2.9	32.0	11.88	54.0	7.3	H
2387.378	46.8	2.9	32.0	11.94	54.0	7.2	V
4824.000	37.73	-17.3	34.5	20.55	54.0	16.3	H
7236.000	38.51	-17.6	36.1	19.98	54.0	15.5	V
9648.000	39.42	-17.4	37.0	19.79	54.0	14.6	V
12060.000	41.55	-17.2	39.3	19.49	54.0	12.4	V

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2380.900	46.8	2.9	32.1	11.87	54.0	7.2	V
2487.300	47.8	2.9	32.7	12.23	54.0	6.2	H
4873.500	36.51	-18.3	34.5	20.32	54.0	17.5	H
7311.000	37.02	-18.6	36.1	19.56	54.0	17.0	V
9748.500	39.63	-17.3	37.2	19.76	54.0	14.4	H
12184.500	40.65	-17.7	39.2	19.11	54.0	13.3	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.980	47.6	2.9	32.7	11.92	54.0	6.4	V
2484.280	47.5	2.9	32.7	11.83	54.0	6.5	H
4924.500	35.91	-19.0	34.5	20.37	54.0	18.1	V
7386.000	38.62	-17.3	36.0	19.83	54.0	15.4	V
9847.500	38.79	-18.1	37.3	19.59	54.0	15.2	H
12310.500	40.24	-17.9	39.2	18.93	54.0	13.8	H

**802.11b-Peak**

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2385.987	60.0	2.9	32.0	25.10	74.0	14.0	H
2389.310	59.6	2.9	32.0	24.76	74.0	14.4	V
17505.000	59.5	-14.4	41.2	32.74	74.0	14.5	H
17953.500	59.3	-13.6	40.8	32.04	74.0	14.7	H
17985.750	59.3	-13.6	40.8	32.09	74.0	14.7	H
17720.250	59.2	-13.2	41.0	31.44	74.0	14.8	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2341.400	49.1	-27.7	31.5	45.27	74.0	24.9	H
2533.600	51.8	-26.8	32.8	45.80	74.0	22.2	H
17651.250	60.1	-13.1	41.1	32.05	74.0	13.9	V
17925.750	59.7	-13.6	40.9	32.37	74.0	14.3	H
17848.500	59.6	-13.5	40.9	32.14	74.0	14.4	V
17943.750	59.4	-13.6	40.8	32.15	74.0	14.6	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2485.110	61.1	2.9	32.7	25.41	74.0	12.9	H
2487.710	61.4	2.9	32.6	25.85	74.0	12.6	V
17940.750	59.6	-13.6	40.8	32.33	74.0	14.4	V
17700.750	59.5	-13.2	41.0	31.62	74.0	14.5	H
17681.250	59.4	-13.1	41.1	31.45	74.0	14.6	H
17589.000	59.3	-13.5	41.1	31.65	74.0	14.7	V

**802.11g - Average**

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.582	46.7	2.9	32.0	11.89	54.0	7.3	V
2387.448	46.8	2.9	32.0	11.91	54.0	7.2	H
4824.000	37.29	-17.3	34.5	20.11	54.0	16.7	V
7236.000	38.29	-17.6	36.1	19.76	54.0	15.7	H
9648.000	39.40	-17.4	37.0	19.76	54.0	14.6	V
12060.000	41.56	-17.2	39.3	19.50	54.0	12.4	V

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2385.600	46.9	2.9	32.0	12.03	54.0	7.1	H
2486.600	47.9	2.9	32.7	12.24	54.0	6.1	H
4873.500	36.43	-18.3	34.5	20.24	54.0	17.6	V
7311.000	36.93	-18.6	36.1	19.47	54.0	17.1	V
9748.500	39.60	-17.3	37.2	19.73	54.0	14.4	V
12184.500	40.65	-17.7	39.2	19.11	54.0	13.4	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.620	48.1	2.9	32.8	12.43	54.0	5.9	H
2483.730	48.1	2.9	32.8	12.40	54.0	5.9	H
4924.500	35.90	-19.0	34.5	20.36	54.0	18.1	H
7386.000	38.68	-17.3	36.0	19.89	54.0	15.3	H
9847.500	38.79	-18.1	37.3	19.59	54.0	15.2	V
12310.500	40.20	-17.9	39.2	18.89	54.0	13.8	V

**802.11g - Peak**

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2386.538	59.7	2.9	32.0	24.81	74.0	14.3	H
2389.128	59.6	2.9	32.0	24.70	74.0	14.4	H
17776.500	60.0	-13.4	41.0	32.41	74.0	14.0	H
17719.500	59.4	-13.2	41.0	31.56	74.0	14.6	V
17970.000	59.3	-13.6	40.8	32.11	74.0	14.7	V
17763.000	59.3	-13.3	41.0	31.64	74.0	14.7	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2365.000	49.1	-27.3	31.9	44.43	74.0	24.9	H
2546.600	51.4	-26.8	33.0	45.11	74.0	22.6	H
17705.250	60.8	-13.2	41.0	32.93	74.0	13.2	V
17744.250	60.7	-13.3	41.0	33.02	74.0	13.3	H
17613.000	60.0	-13.2	41.1	32.14	74.0	14.0	V
17939.250	59.5	-13.6	40.8	32.27	74.0	14.5	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.790	65.8	2.9	32.8	30.14	74.0	8.2	V
2483.910	65.8	2.9	32.7	30.10	74.0	8.2	H
17955.750	59.4	-13.6	40.8	32.13	74.0	14.6	H
17970.750	59.3	-13.6	40.8	32.15	74.0	14.7	H
17594.250	59.3	-13.4	41.1	31.62	74.0	14.7	H
17980.500	59.2	-13.6	40.8	32.05	74.0	14.8	V

**802.11n-HT20-Average**

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2387.224	46.8	2.9	32.0	11.89	54.0	7.2	H
2388.638	46.8	2.9	32.0	11.93	54.0	7.2	H
4824.000	37.30	-17.3	34.5	20.13	54.0	16.7	V
7236.000	38.21	-17.6	36.1	19.68	54.0	15.8	H
9648.000	39.37	-17.4	37.0	19.74	54.0	14.6	V
12060.000	41.51	-17.2	39.3	19.44	54.0	12.5	V

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.500	46.9	2.9	32.0	12.04	54.0	7.1	H
2486.800	47.9	2.9	32.7	12.29	54.0	6.1	H
4873.500	36.36	-18.3	34.5	20.17	54.0	17.6	V
7311.000	36.96	-18.6	36.1	19.50	54.0	17.0	V
9748.500	39.61	-17.3	37.2	19.74	54.0	14.4	V
12184.500	40.64	-17.7	39.2	19.10	54.0	13.4	V

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.620	48.1	2.9	32.8	12.40	54.0	5.9	V
2483.750	48.1	2.9	32.8	12.37	54.0	5.9	H
4924.500	35.84	-19.0	34.5	20.29	54.0	18.2	H
7386.000	38.66	-17.3	36.0	19.88	54.0	15.3	H
9847.500	38.86	-18.1	37.3	19.66	54.0	15.1	H
12310.500	40.12	-17.9	39.2	18.82	54.0	13.9	H



**802.11n-HT20-Peak**

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2385.580	59.5	2.9	32.0	24.60	74.0	14.5	H
2388.554	59.4	2.9	32.0	24.53	74.0	14.6	H
17933.250	60.3	-13.6	40.9	32.99	74.0	13.7	V
17727.000	60.2	-13.2	41.0	32.44	74.0	13.8	V
17212.500	59.6	-14.4	41.2	32.80	74.0	14.4	H
17655.750	59.5	-13.1	41.1	31.44	74.0	14.5	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2363.400	49.9	-27.4	31.9	45.35	74.0	24.1	H
2554.800	51.3	-26.8	33.1	45.00	74.0	22.7	V
17244.000	60.0	-14.2	41.2	32.98	74.0	14.0	H
17762.250	59.6	-13.3	41.0	31.92	74.0	14.4	H
17265.750	59.5	-14.1	41.2	32.37	74.0	14.5	H
17601.750	59.3	-13.3	41.1	31.48	74.0	14.7	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.000	62.8	2.9	32.7	27.12	74.0	11.2	H
2484.140	61.6	2.9	32.7	25.91	74.0	12.4	H
17752.500	60.0	-13.3	41.0	32.27	74.0	14.0	V
17662.500	59.9	-13.1	41.1	31.88	74.0	14.1	V
17595.750	59.8	-13.4	41.1	32.06	74.0	14.2	H
17633.250	59.6	-13.0	41.1	31.52	74.0	14.4	V

**802.11n-HT40-Average**

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.254	47.4	2.9	32.0	12.59	54.0	6.6	H
2389.982	47.5	2.9	32.0	12.69	54.0	6.5	H
4843.500	37.60	-17.5	34.5	20.63	54.0	17.7	H
7266.000	37.36	-18.8	36.1	20.02	54.0	16.0	H
9688.500	40.42	-16.5	37.1	19.81	54.0	16.0	H
12109.500	41.32	-17.3	39.3	19.36	54.0	13.5	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.400	46.9	2.9	32.0	12.06	54.0	7.1	H
2495.200	47.6	2.9	32.4	12.21	54.0	6.4	H
4873.500	36.88	-18.3	34.5	20.69	54.0	17.1	V
7311.000	37.13	-18.6	36.1	19.66	54.0	16.9	H
9748.500	39.64	-17.3	37.2	19.77	54.0	14.4	H
12184.500	40.73	-17.7	39.2	19.19	54.0	13.3	V

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.610	48.3	2.9	32.8	12.62	54.0	5.7	H
2484.010	48.3	2.9	32.7	12.63	54.0	5.7	H
4903.500	36.35	-18.8	34.5	20.62	54.0	17.7	H
7356.000	37.97	-18.0	36.1	19.90	54.0	16.0	V
9808.500	38.00	-18.8	37.3	19.53	54.0	16.0	H
12259.500	40.51	-17.8	39.2	19.14	54.0	13.5	H

**802.11n-HT40-Peak**

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.506	66.3	2.9	32.0	31.42	74.0	7.7	H
2389.926	65.9	2.9	32.0	31.04	74.0	8.1	H
17965.500	59.6	-13.6	40.8	32.40	74.0	14.4	V
17289.000	59.5	-13.9	41.2	32.28	74.0	14.5	H
17674.500	59.3	-13.1	41.1	31.34	74.0	14.7	V
17740.500	59.2	-13.3	41.0	31.52	74.0	14.8	H

Ch6

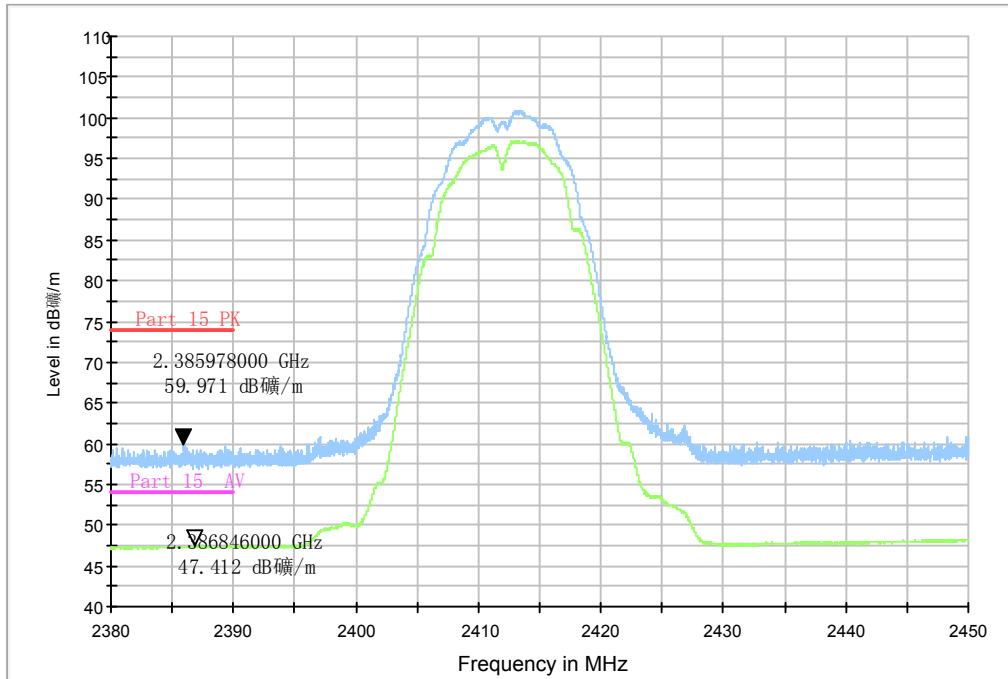
Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2367.000	50.4	-27.2	32.0	45.64	74.0	23.6	H
2539.400	51.9	-26.8	32.9	45.83	74.0	22.1	H
17649.750	60.1	-13.0	41.1	32.10	74.0	13.9	H
17646.750	59.9	-13.0	41.1	31.90	74.0	14.1	V
17345.250	59.9	-14.3	41.2	32.95	74.0	14.1	V
17285.250	59.6	-13.9	41.2	32.35	74.0	14.4	H

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.190	66.6	2.9	32.7	30.94	74.0	7.4	H
2484.610	66.9	2.9	32.7	31.19	74.0	7.1	V
17617.500	60.2	-13.2	41.1	32.25	74.0	13.8	H
17939.250	60.2	-13.6	40.8	32.91	74.0	13.8	V
17782.500	60.1	-13.4	41.0	32.56	74.0	13.9	H
17622.000	59.7	-13.1	41.1	31.76	74.0	14.3	H

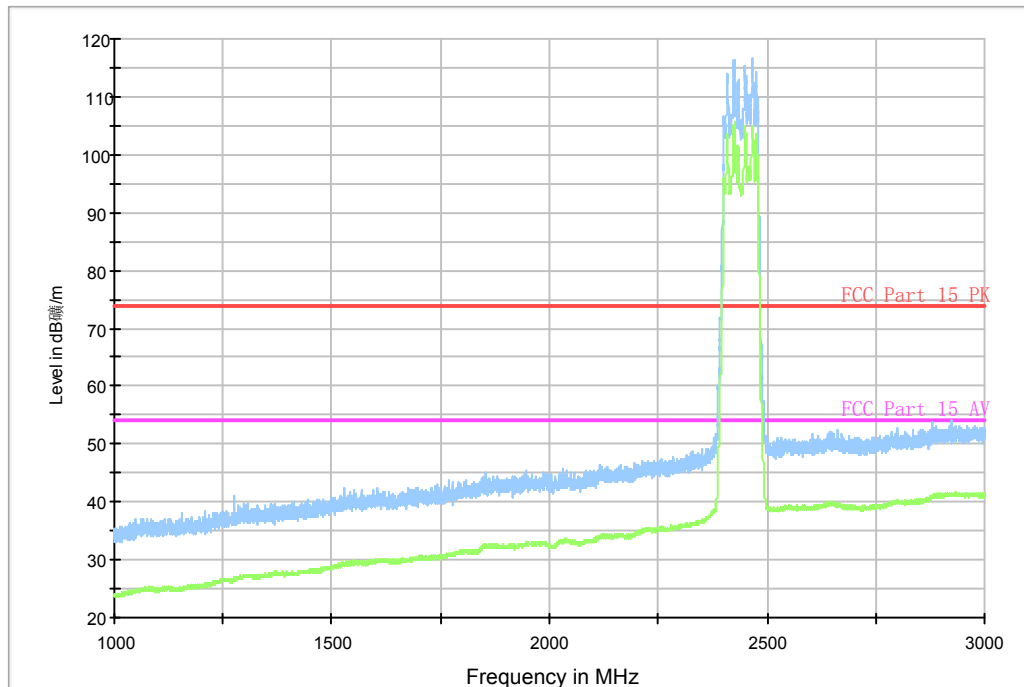
**Test graphs as below:**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz**

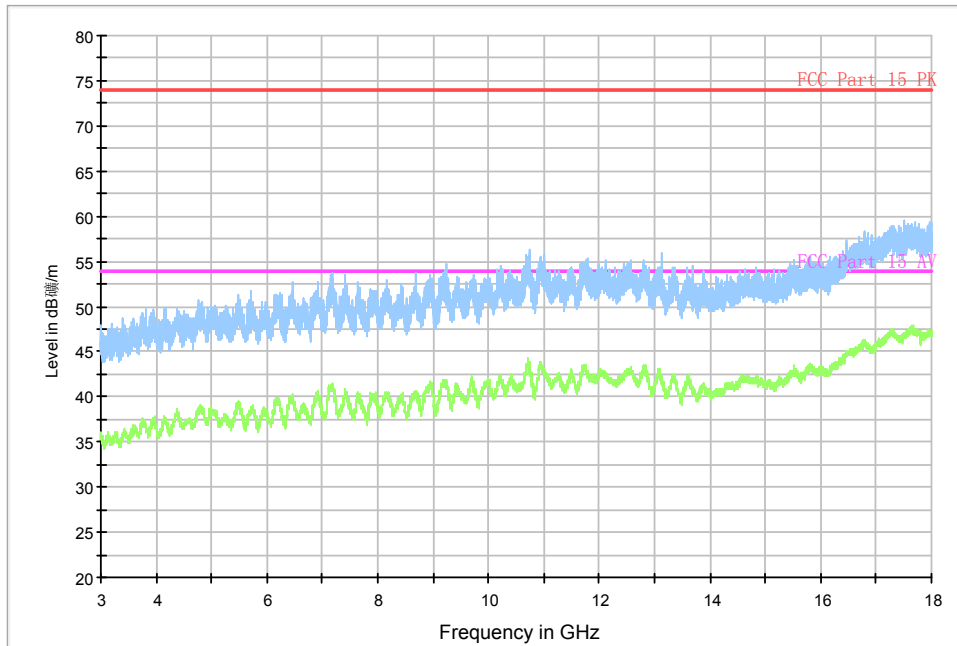
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

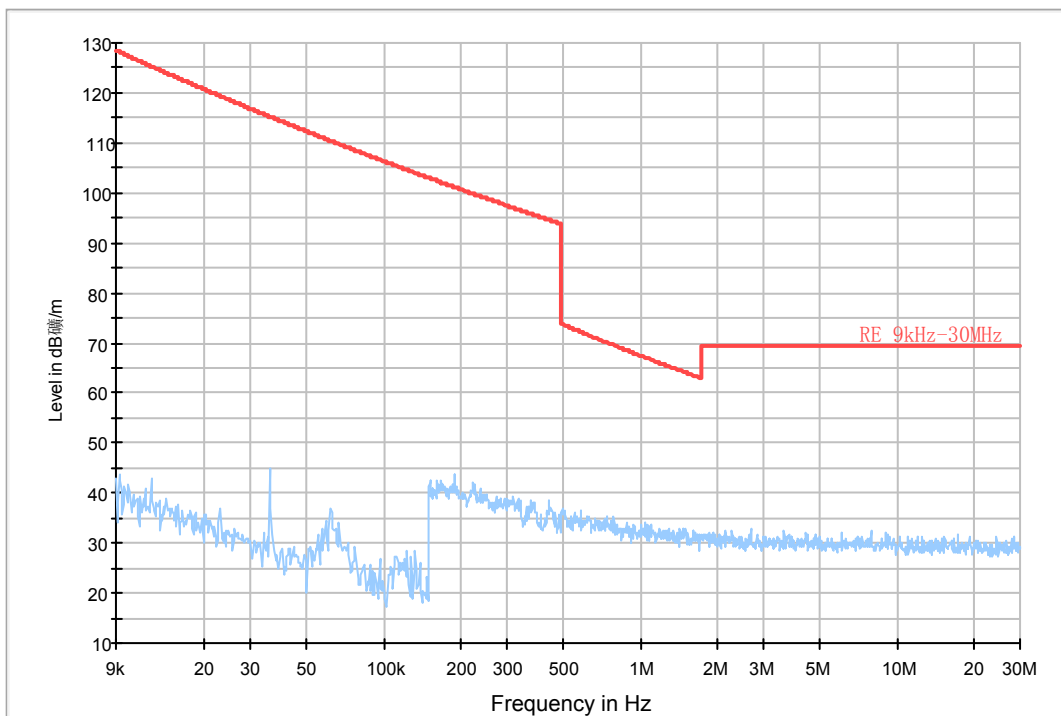
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (802.11b, Ch1, 1 GHz-3 GHz)**

RE - 3GHz-18GHz



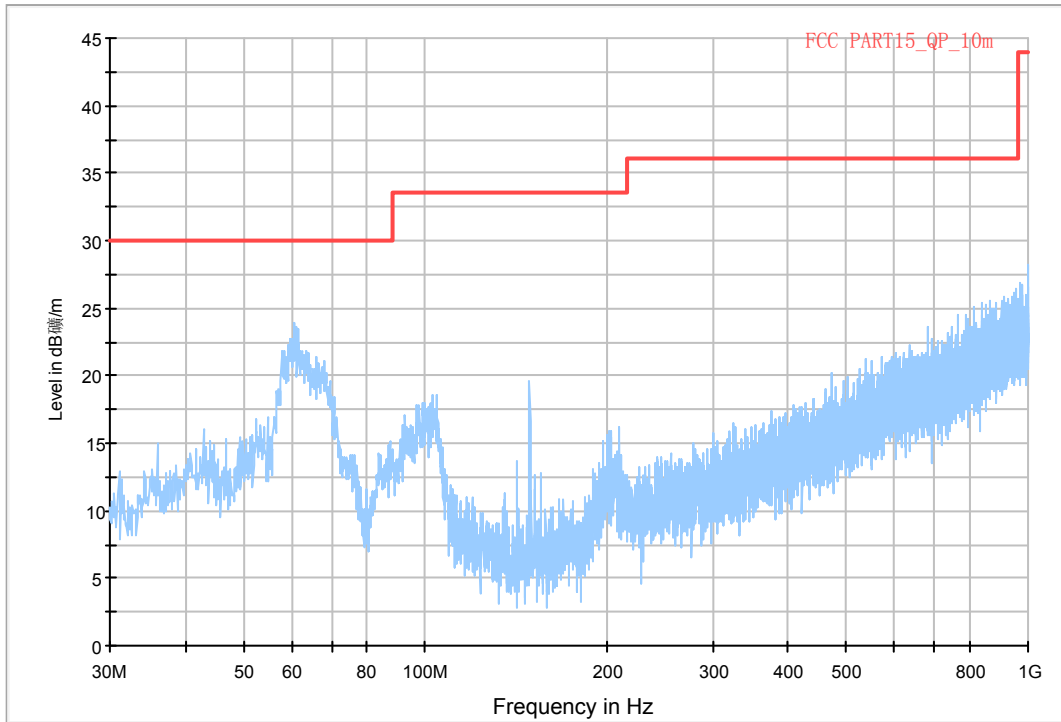
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (802.11b, Ch1, 3 GHz-18 GHz)**

RE 9kHz-30MHz



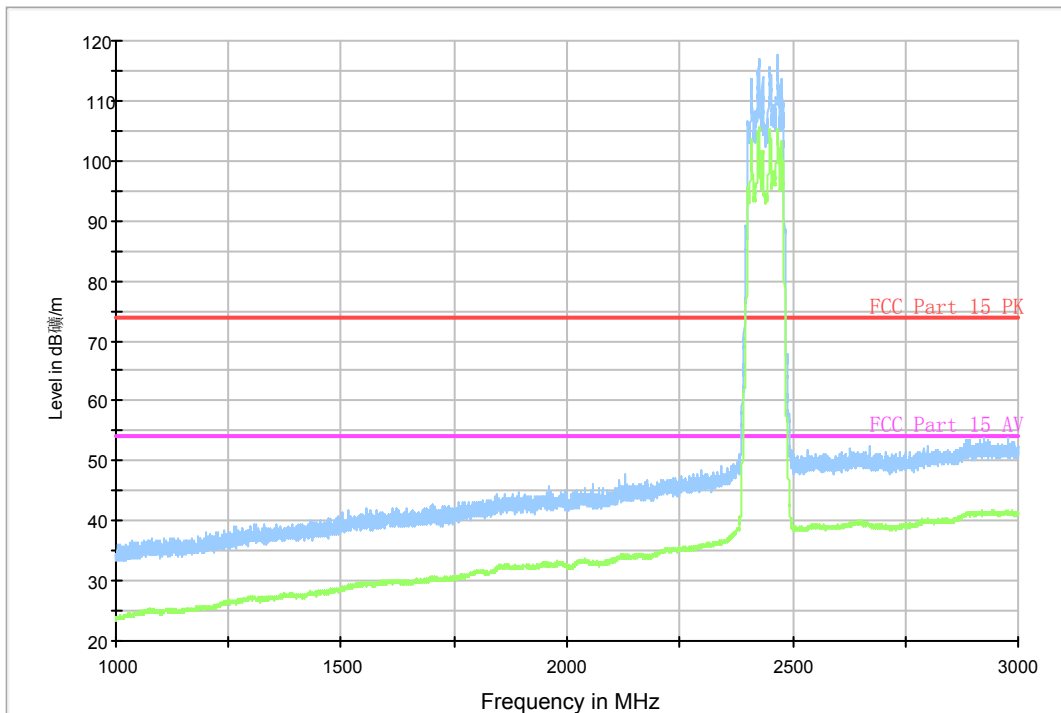
**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 9kHz-30 MHz)**

Normal RE\_30M-1GHz\_10m



**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 30 MHz-1 GHz)**

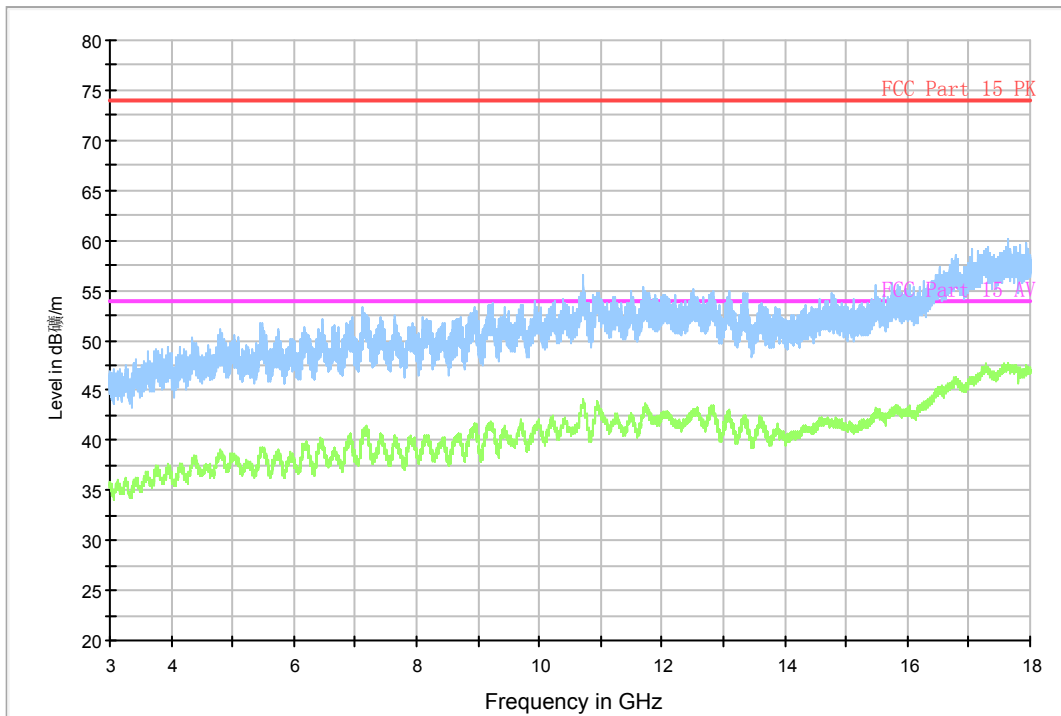
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



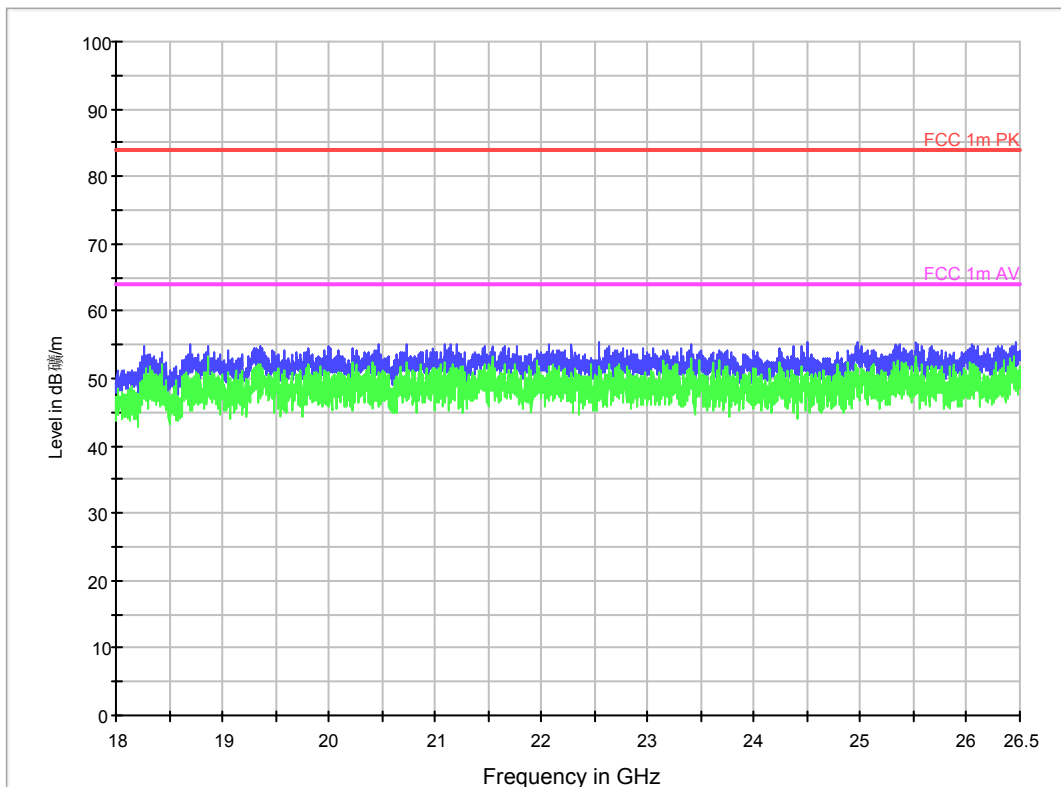
Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

**Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 1 GHz-3 GHz)**

RE - 3GHz-18GHz

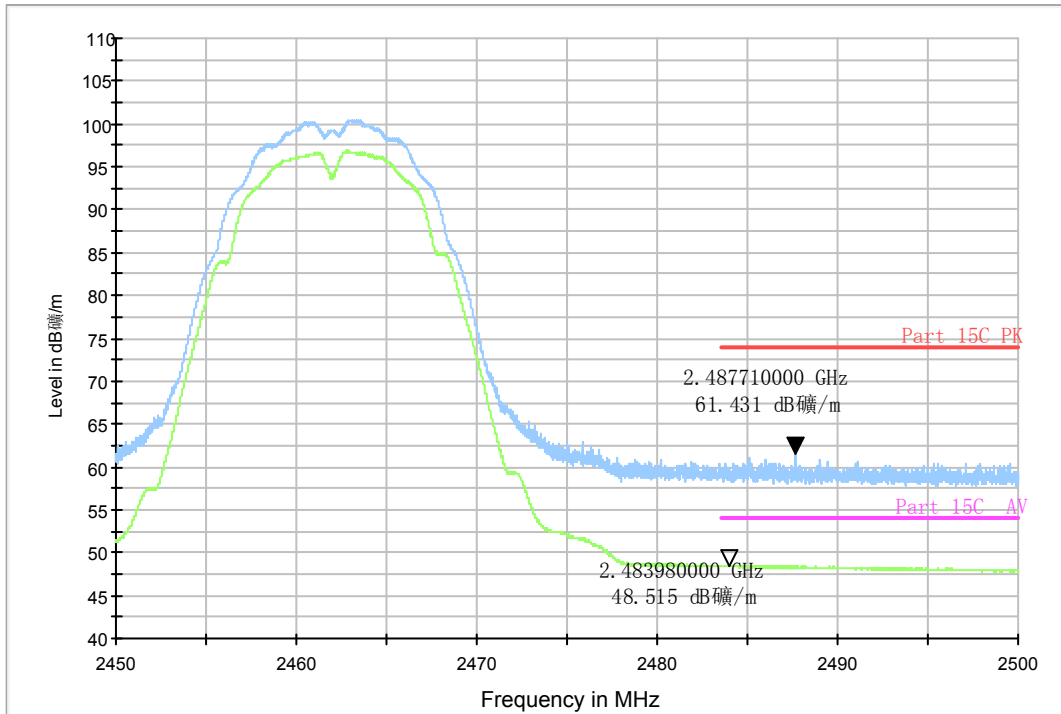


**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 3 GHz-18 GHz)**



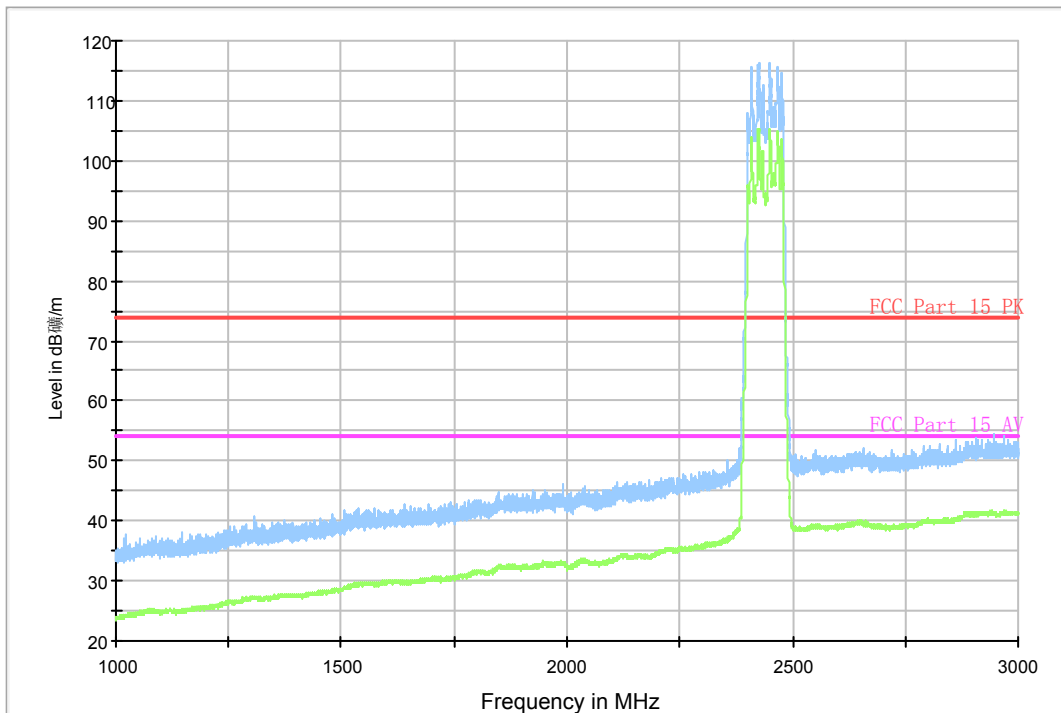
**Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 18GHz – 26.5GHz)**

RE - Power-2.45GHz-2.5GHz



**Fig.A.6.2.9 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**

RE - TX - WLAN BT +AV+PK\_1GHz-3GHz

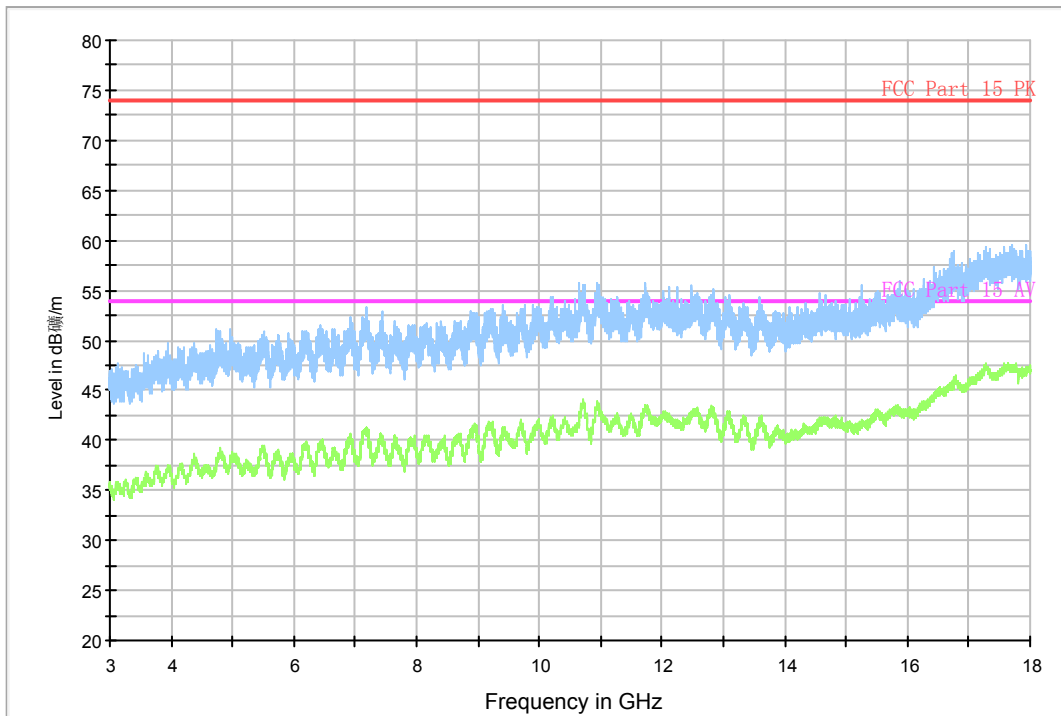


Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

**Fig.A.6.2.10 Transmitter Spurious Emission - Radiated (802.11b, Ch11, 1 GHz-3 GHz)**

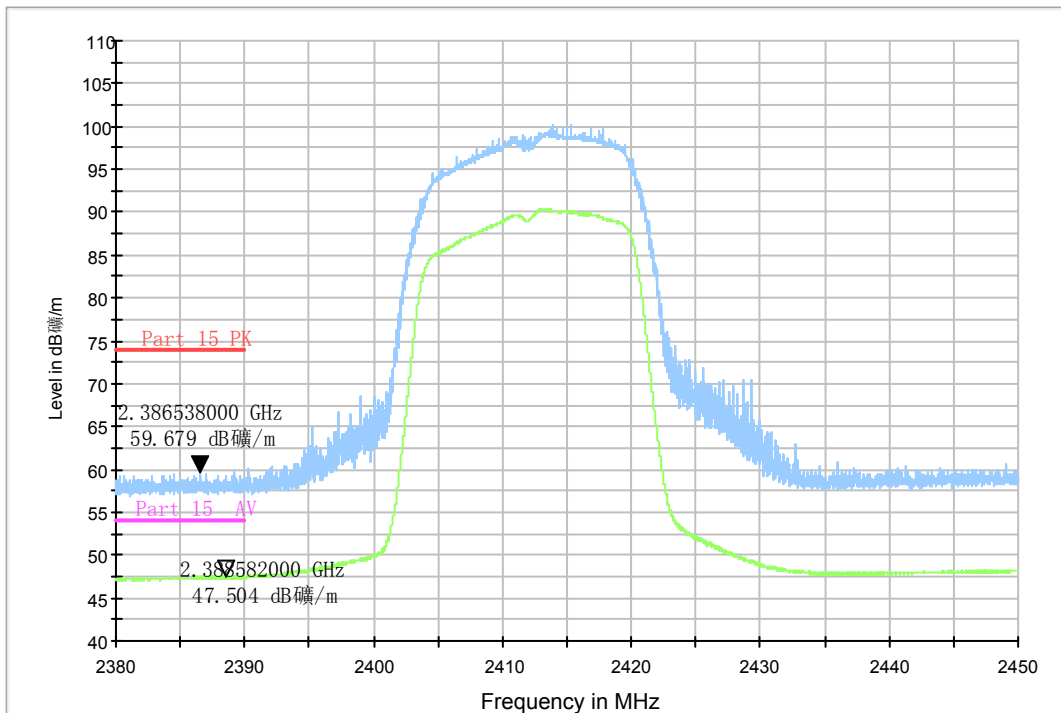


RE - 3GHz-18GHz



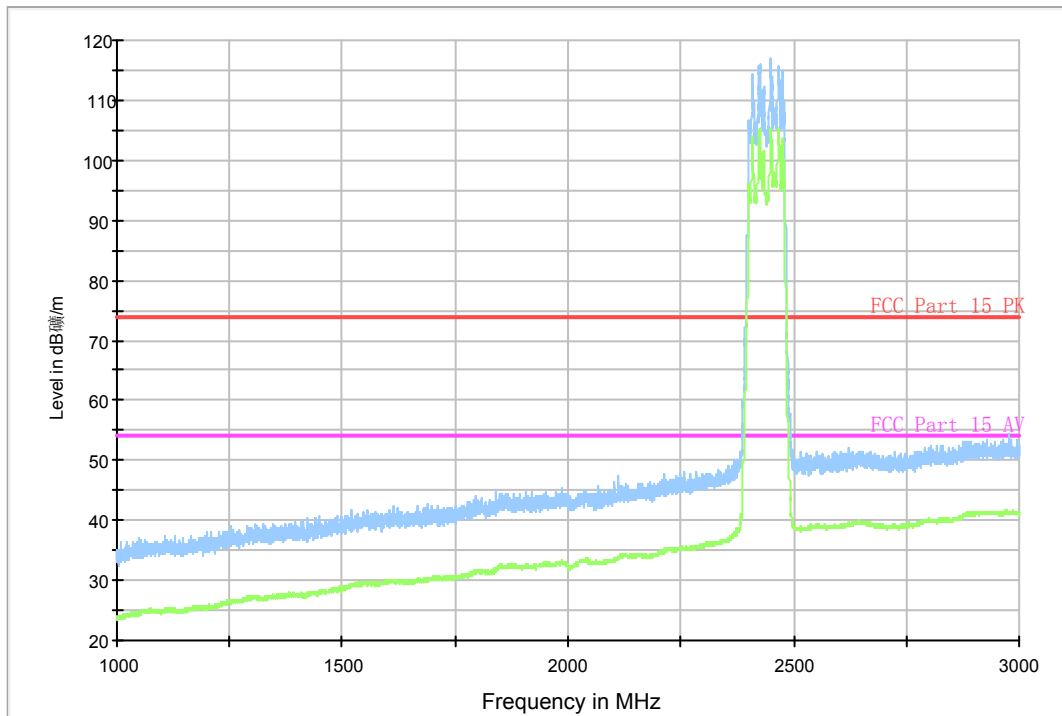
**Fig.A.6.2.11 Transmitter Spurious Emission - Radiated (802.11b, Ch11, 3 GHz-18 GHz)**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.12 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz**

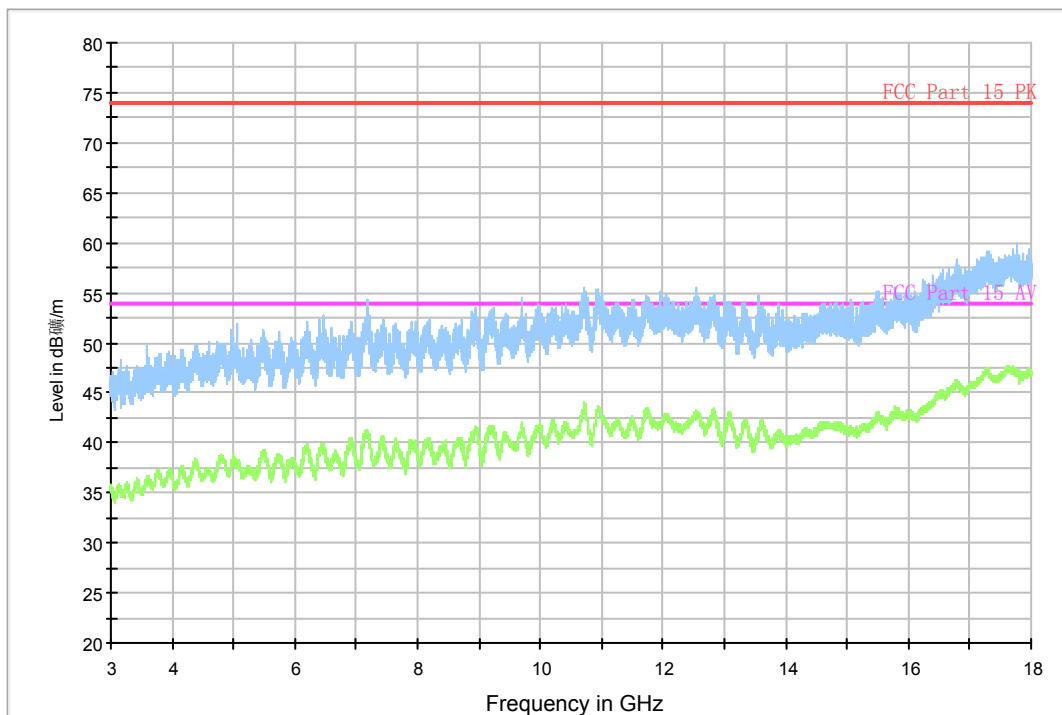
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

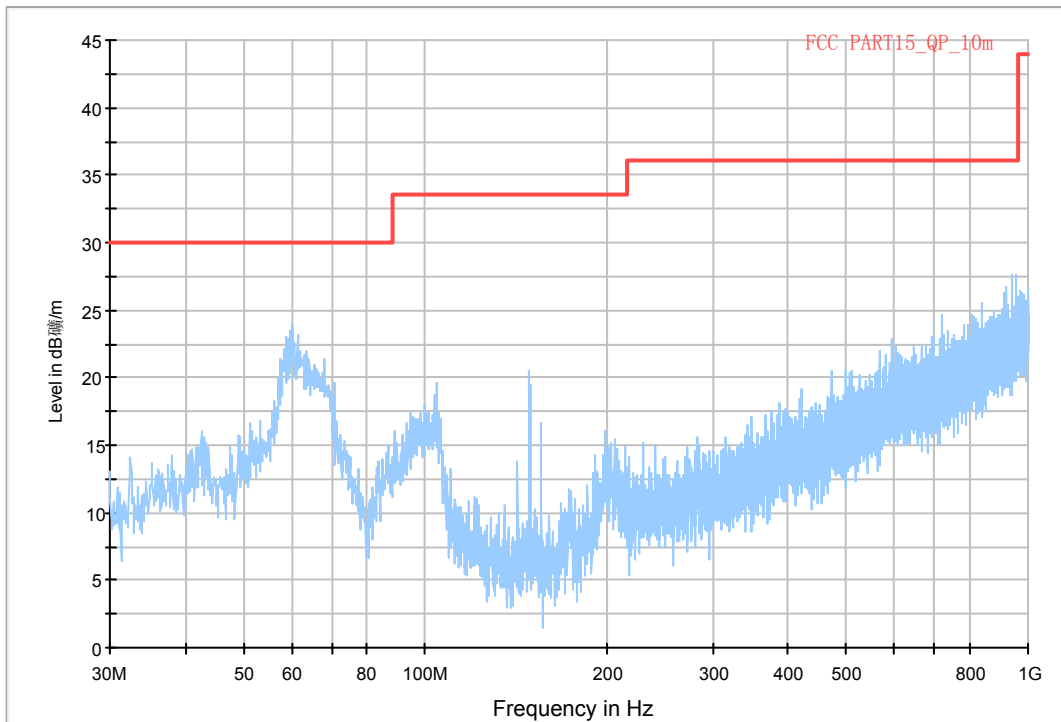
**Fig.A.6.2.13 Transmitter Spurious Emission - Radiated (802.11g, Ch1, 1 GHz-3 GHz)**

RE - 3GHz-18GHz



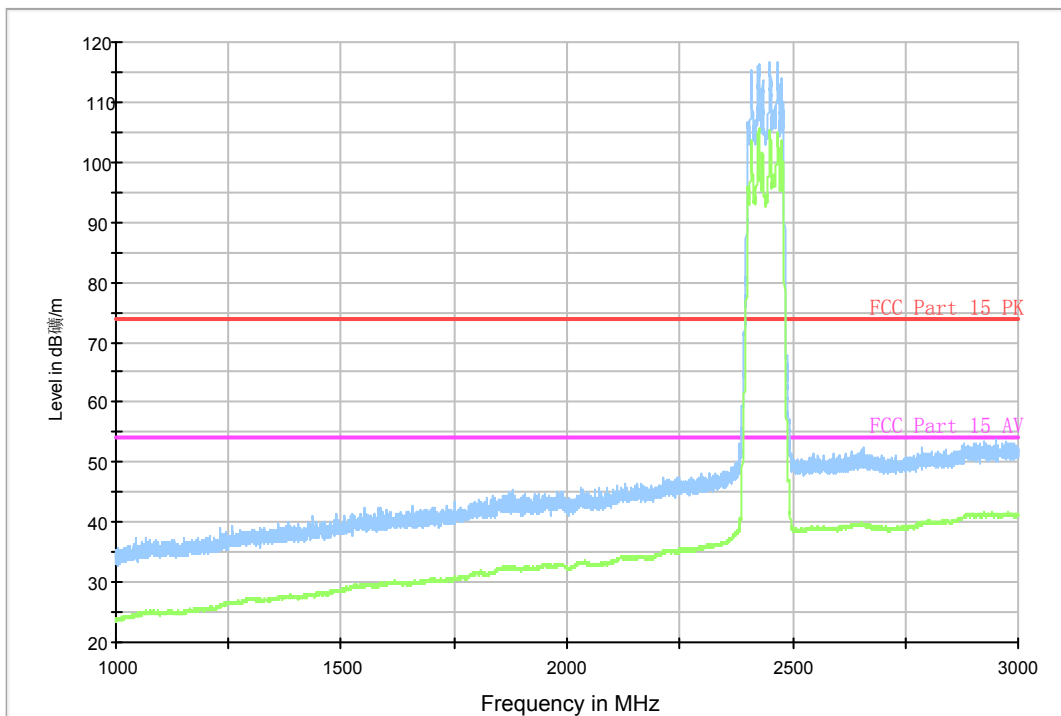
**Fig.A.6.2.14 Transmitter Spurious Emission - Radiated (802.11g, Ch1, 3 GHz-18 GHz)**

Normal RE\_30M-1GHz\_10m



**Fig.A.6.2.15 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 30 MHz-1 GHz)**

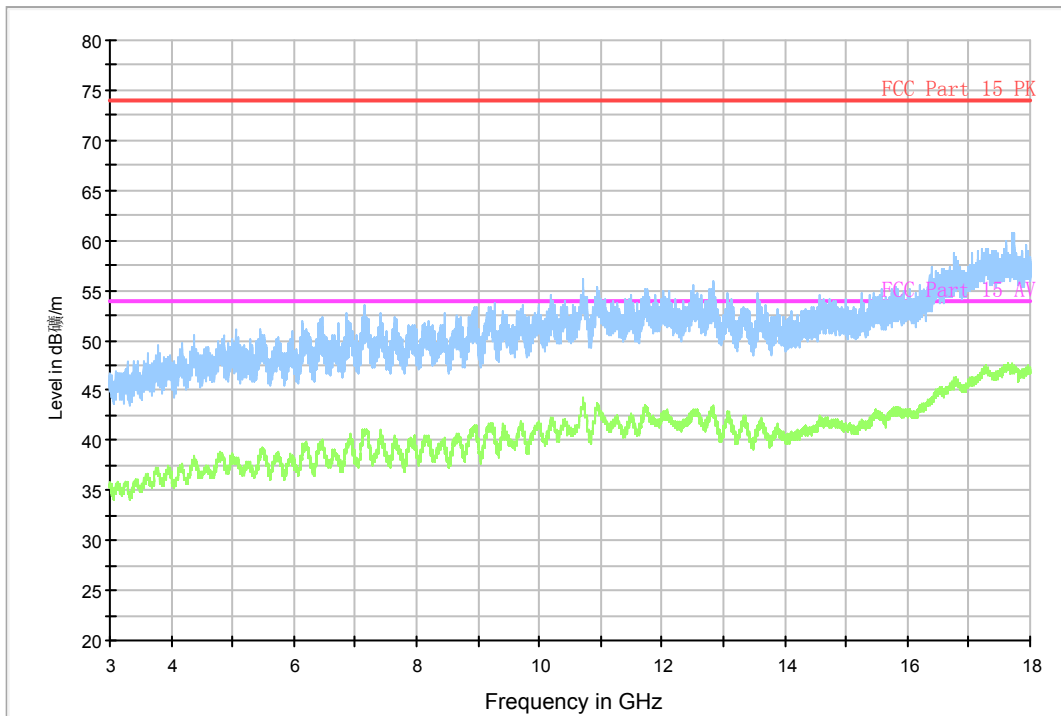
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



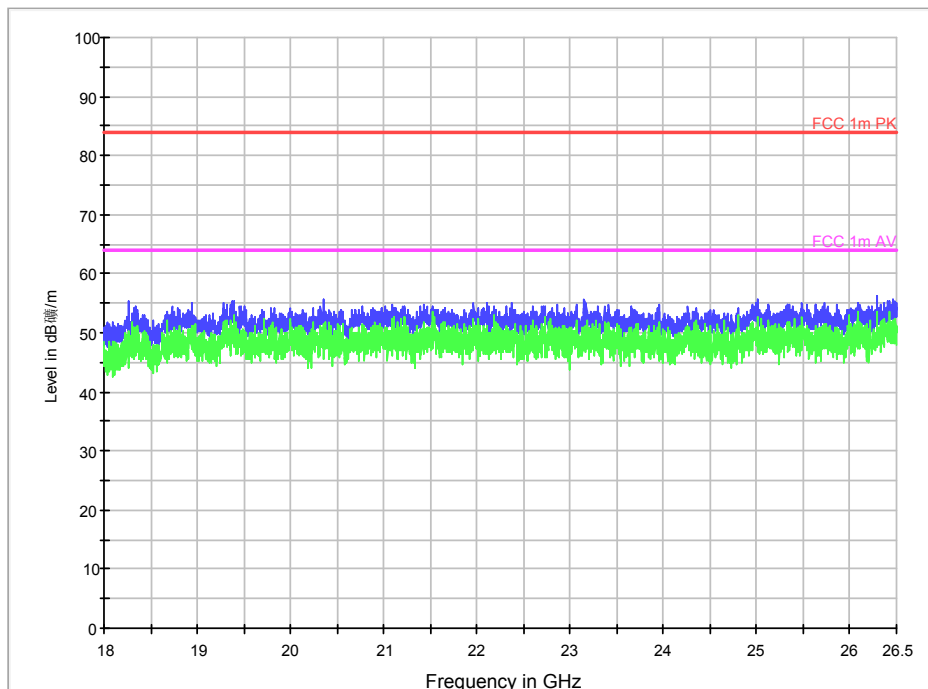
Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

**Fig.A.6.2.16 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 1 GHz-3 GHz)**

RE - 3GHz-18GHz

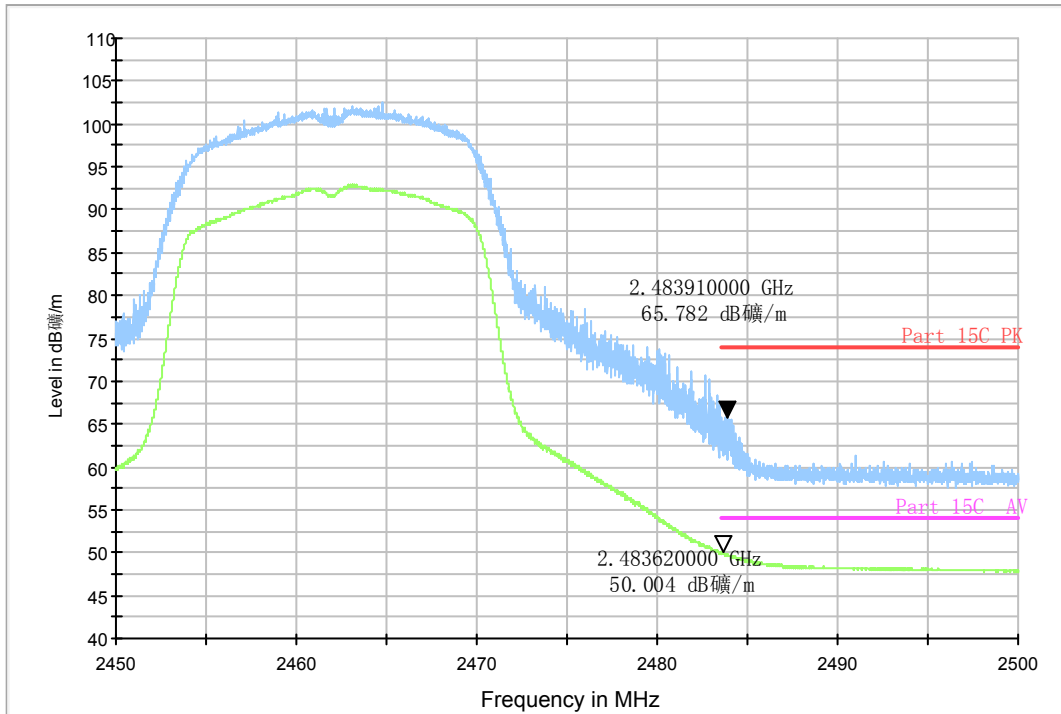


**Fig.A.6.2.17 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 3 GHz-18 GHz)**



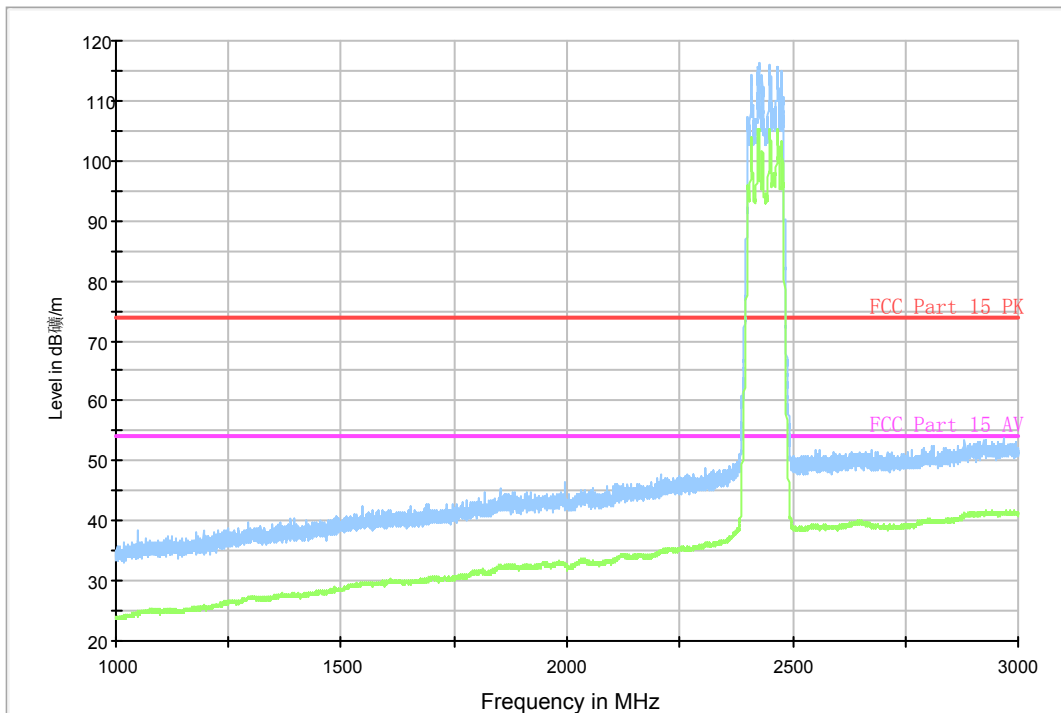
**Fig.A.6.2.18 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 18GHz – 26.5GHz)**

RE - Power-2.45GHz-2.5GHz



**Fig.A.6.2.19 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**

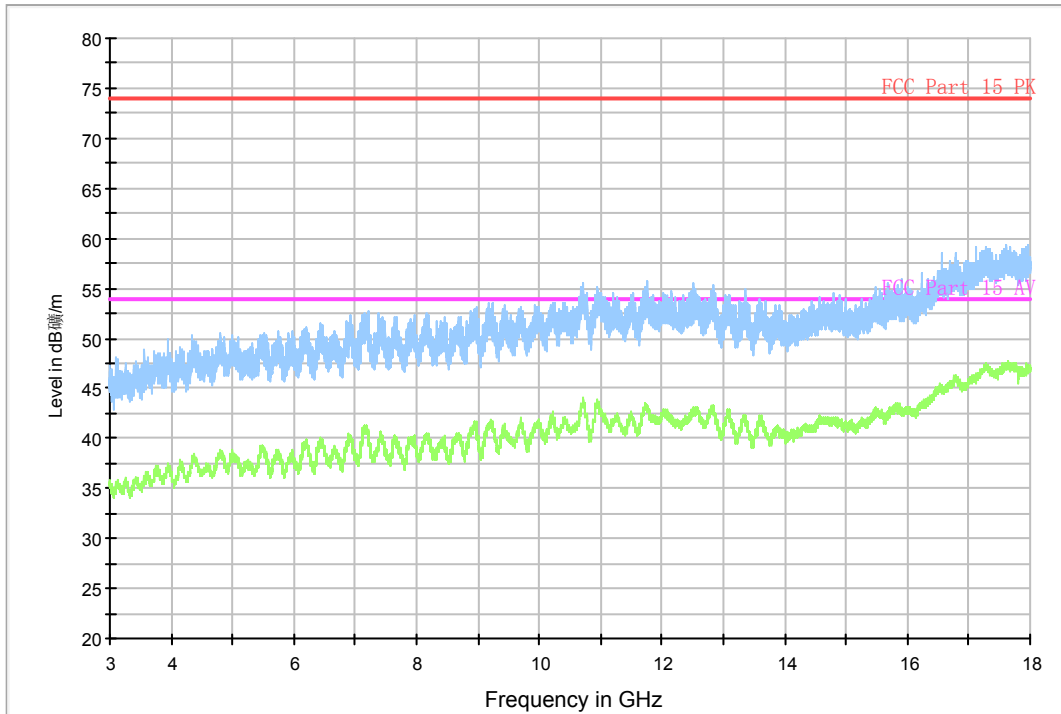
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

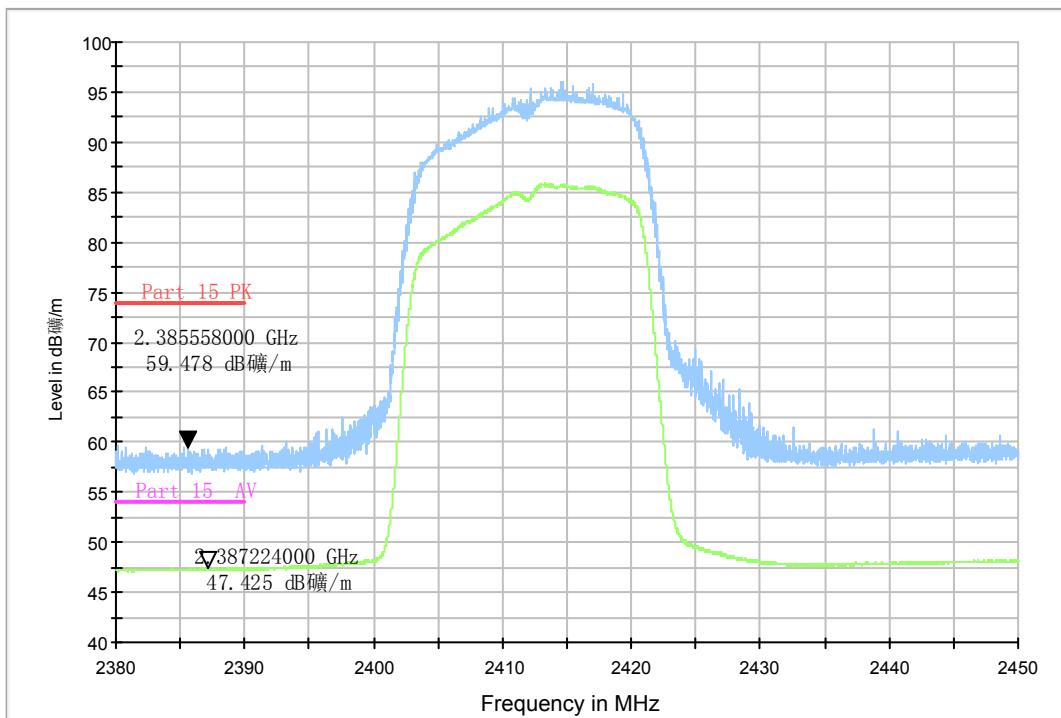
**Fig.A.6.2.20 Transmitter Spurious Emission - Radiated (802.11g, Ch11, 1 GHz-3 GHz)**

RE - 3GHz-18GHz



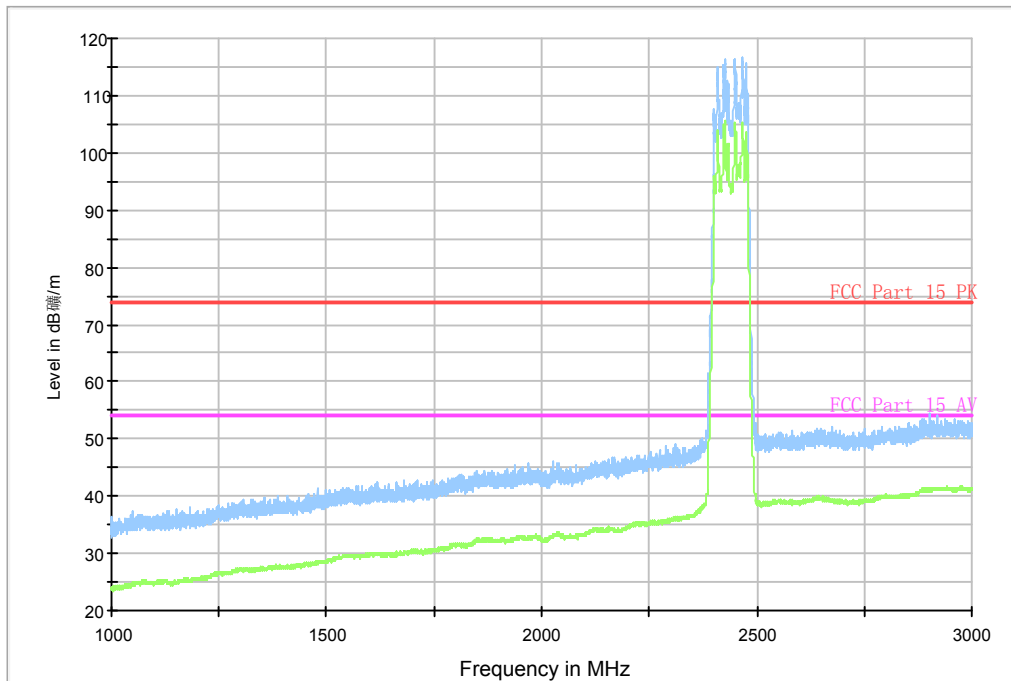
**Fig.A.6.2.21 Transmitter Spurious Emission - Radiated (802.11g, Ch11, 3 GHz-18 GHz)**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.22 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**

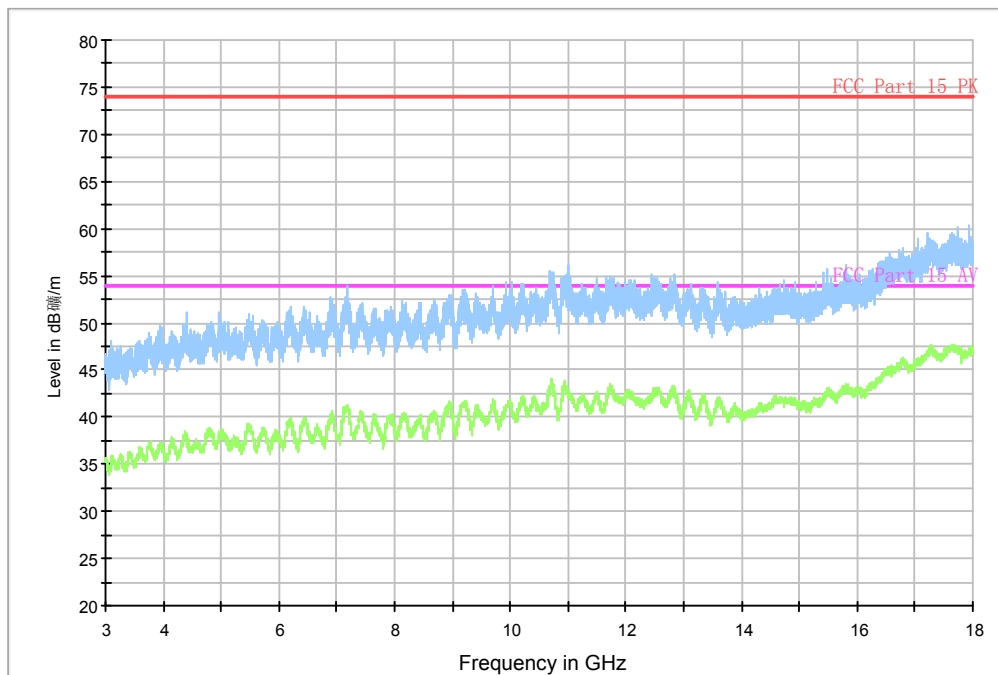
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

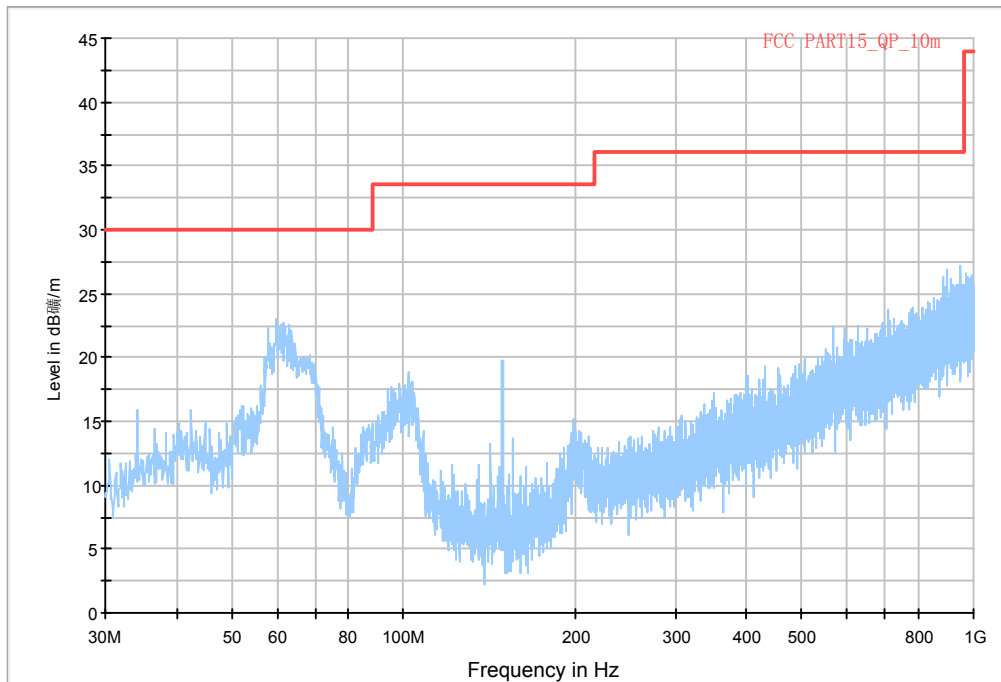
**Fig.A.6.2.23 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch1, 1 GHz-3 GHz)**

RE - 3GHz-18GHz



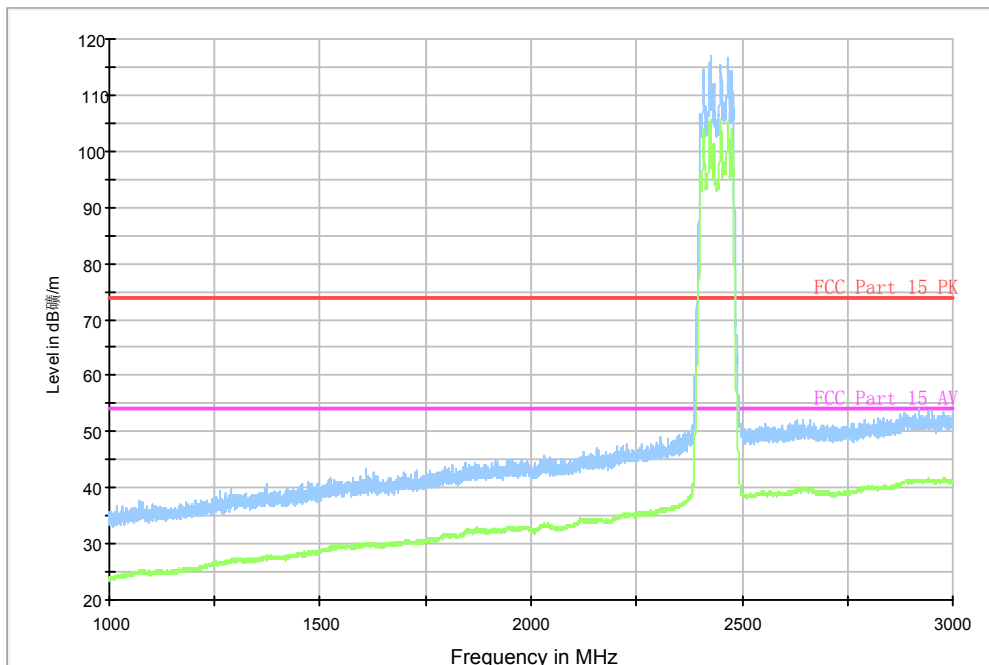
**Fig.A.6.2.24 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch1, 3 GHz-18 GHz)**

Normal RE\_30M-1GHz\_10m



**Fig.A.6.2.25 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 30 MHz-1 GHz)**

RE - TX - WLAN BT +AV+PK\_1GHz-3GHz

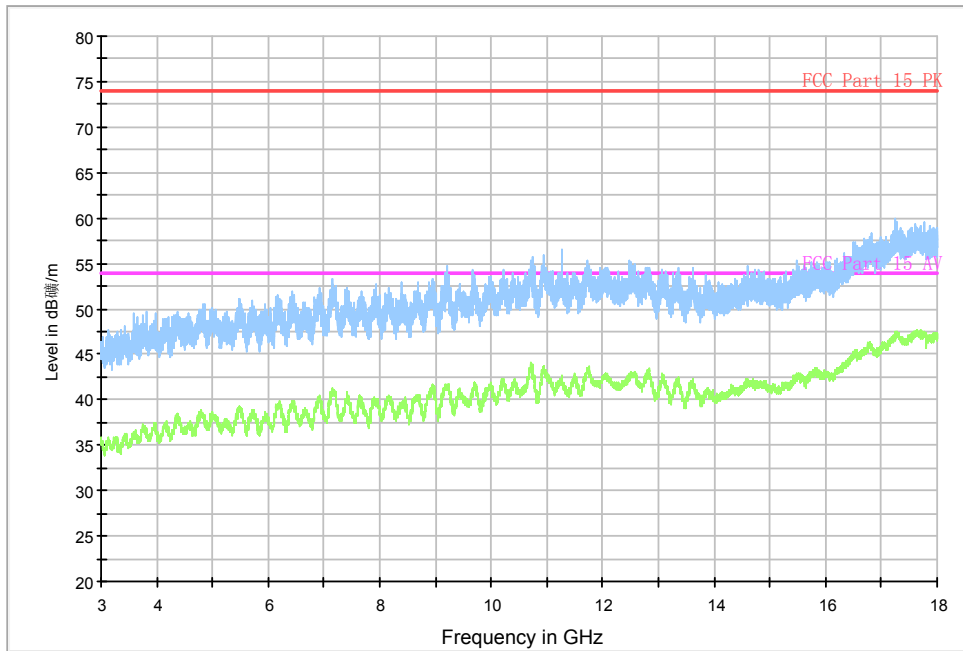


Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

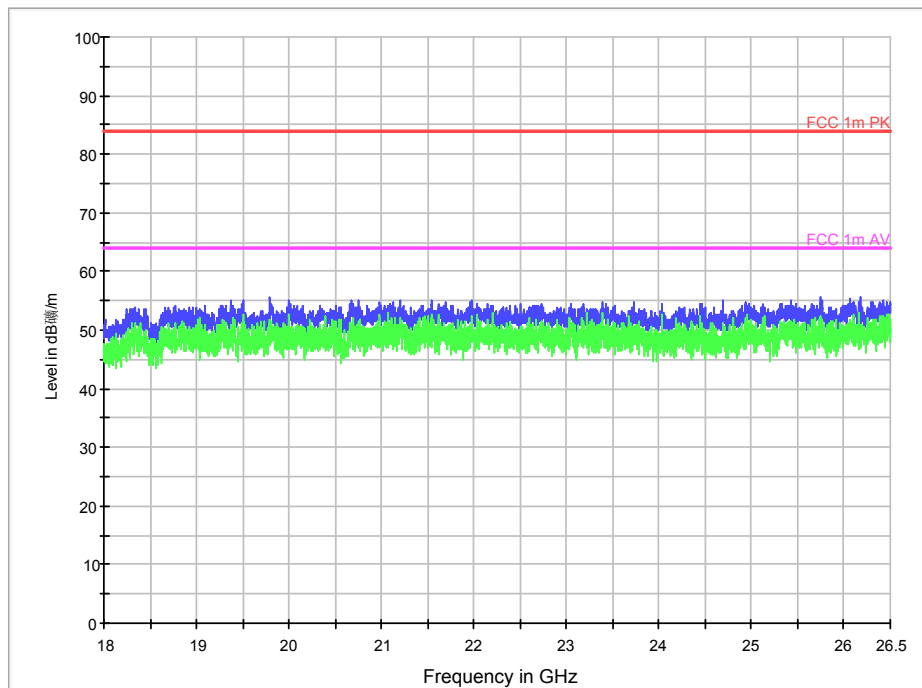
**Fig.A.6.2.26 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 1 GHz-3 GHz)**



RE - 3GHz-18GHz

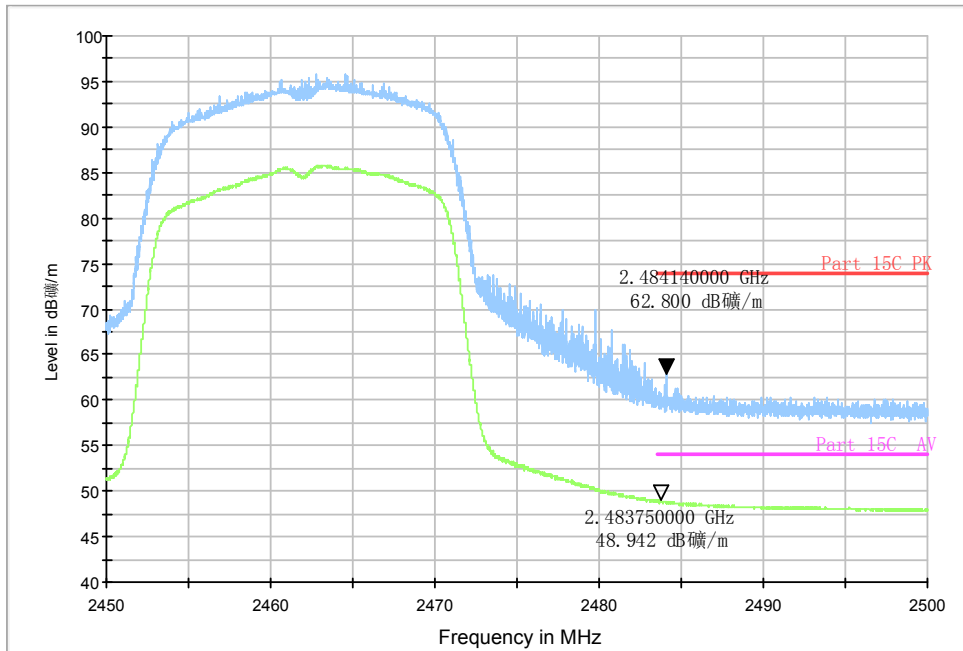


**Fig.A.6.2.27 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 3 GHz-18 GHz)**



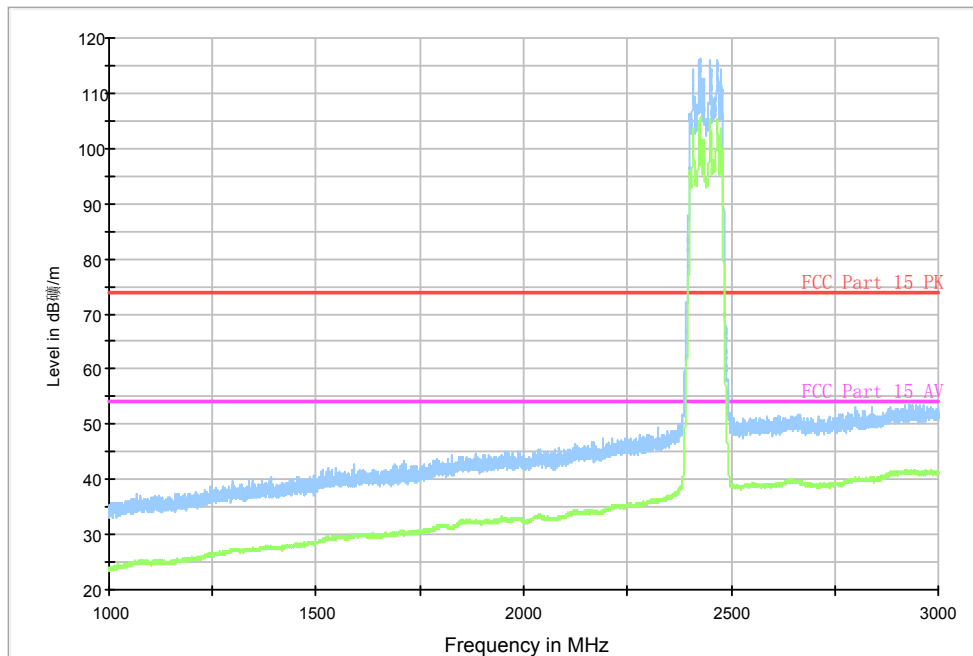
**Fig.A.6.2.28 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 18GHz – 26.5GHz)**

RE - Power-2.45GHz-2.5GHz



**Fig.A.6.2.29 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz**

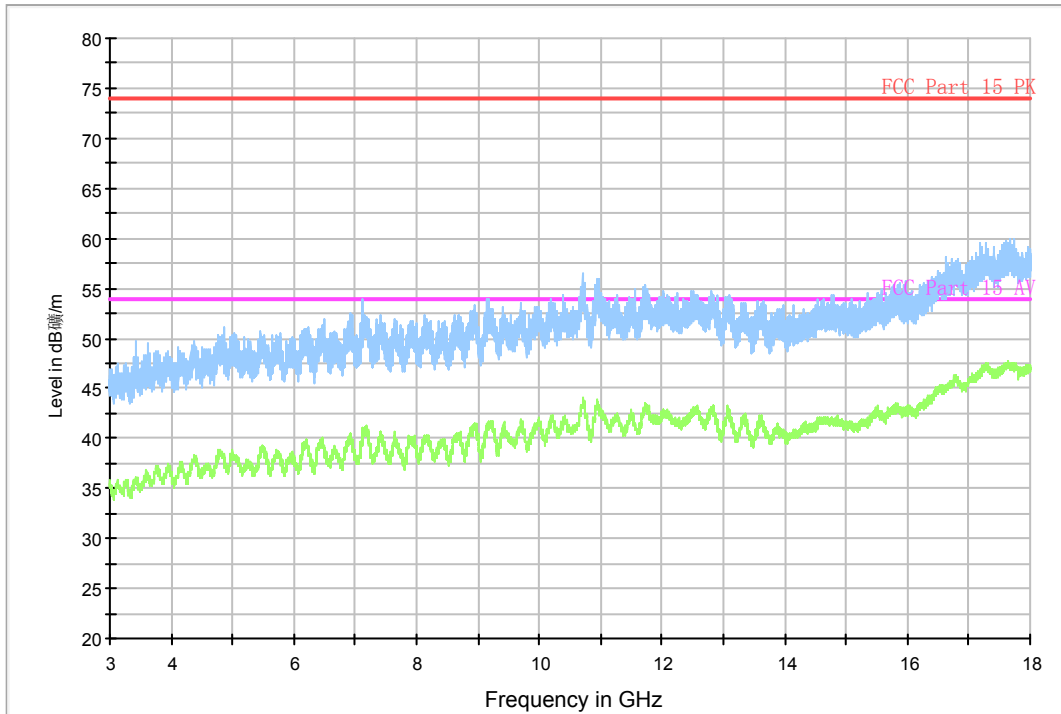
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

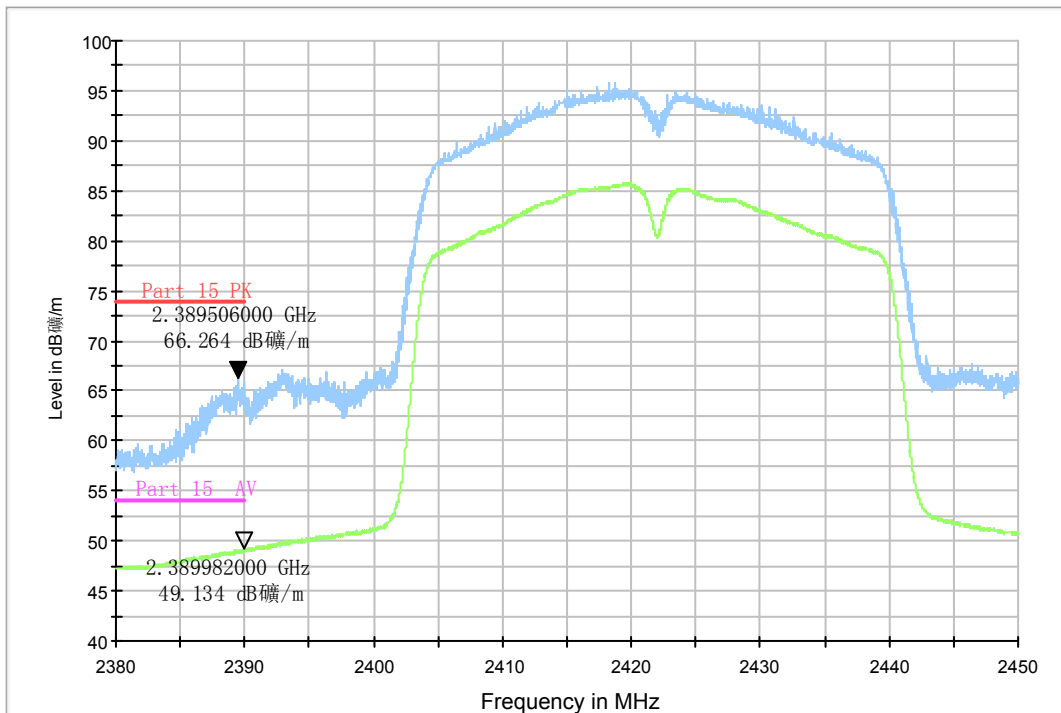
**Fig.A.6.2.30 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch11, 1 GHz-3 GHz)**

RE - 3GHz-18GHz



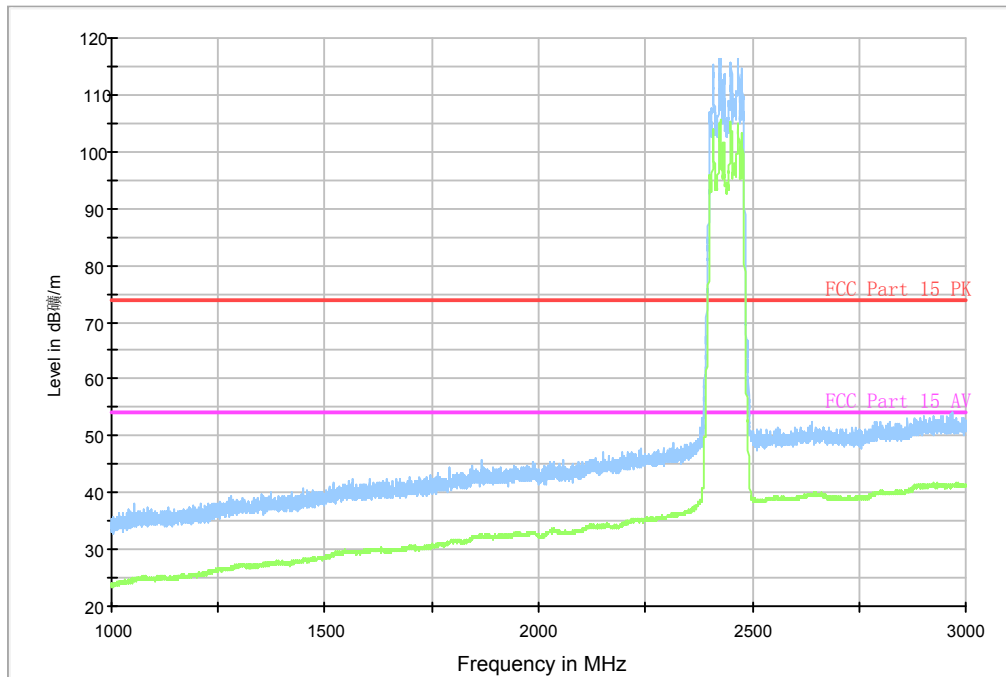
**Fig.A.6.2.31 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch11, 3 GHz-18 GHz)**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.32 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz**

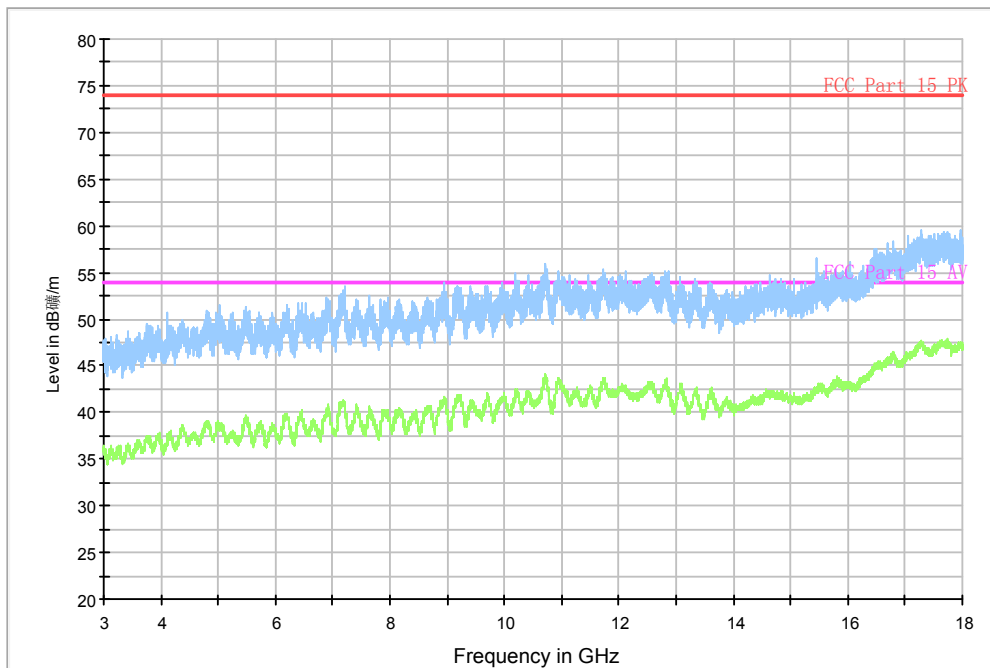
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



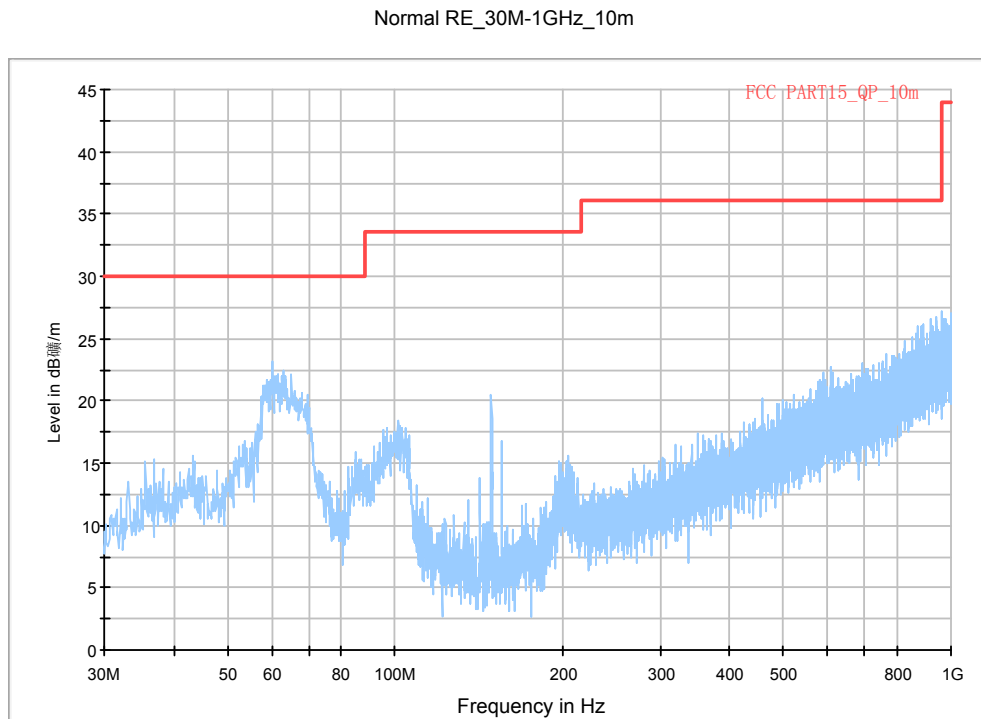
Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

**Fig.A.6.2.33 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch3, 1 GHz-3 GHz)**

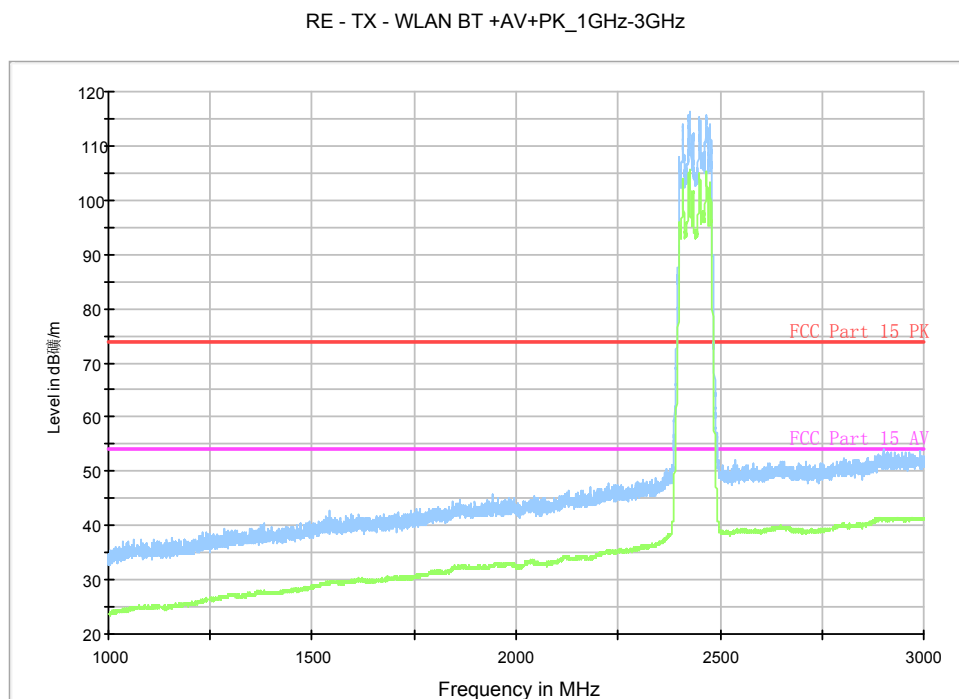
RE - 3GHz-18GHz



**Fig.A.6.2.34 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch3, 3 GHz-18 GHz)**



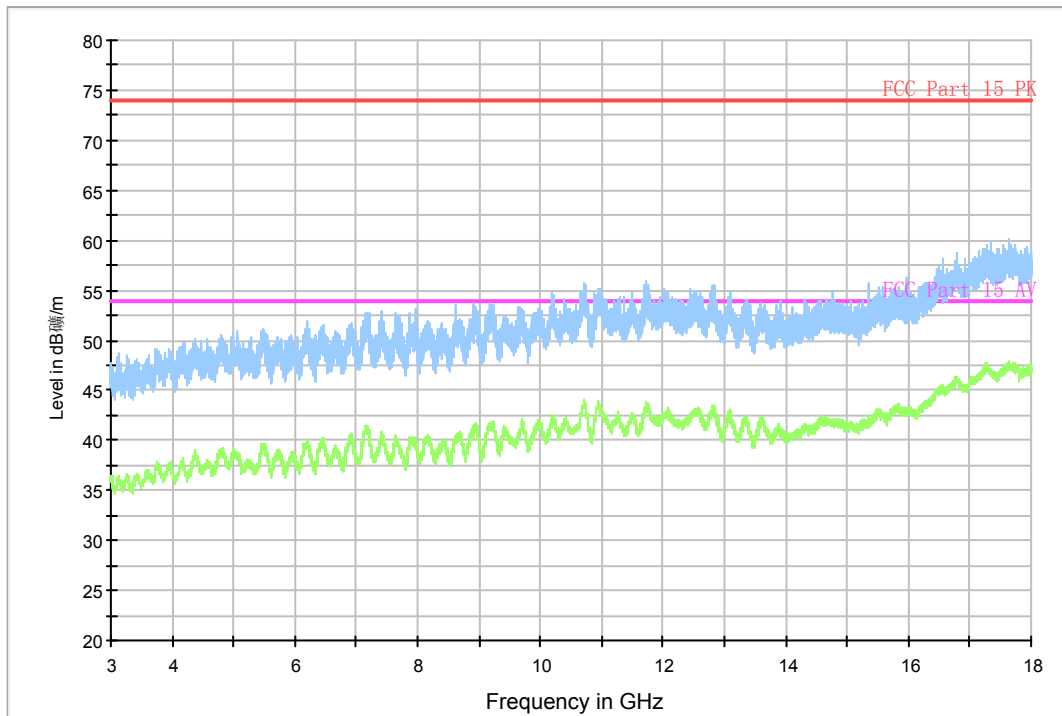
**Fig.A.6.2.35 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 30 MHz-1 GHz)**



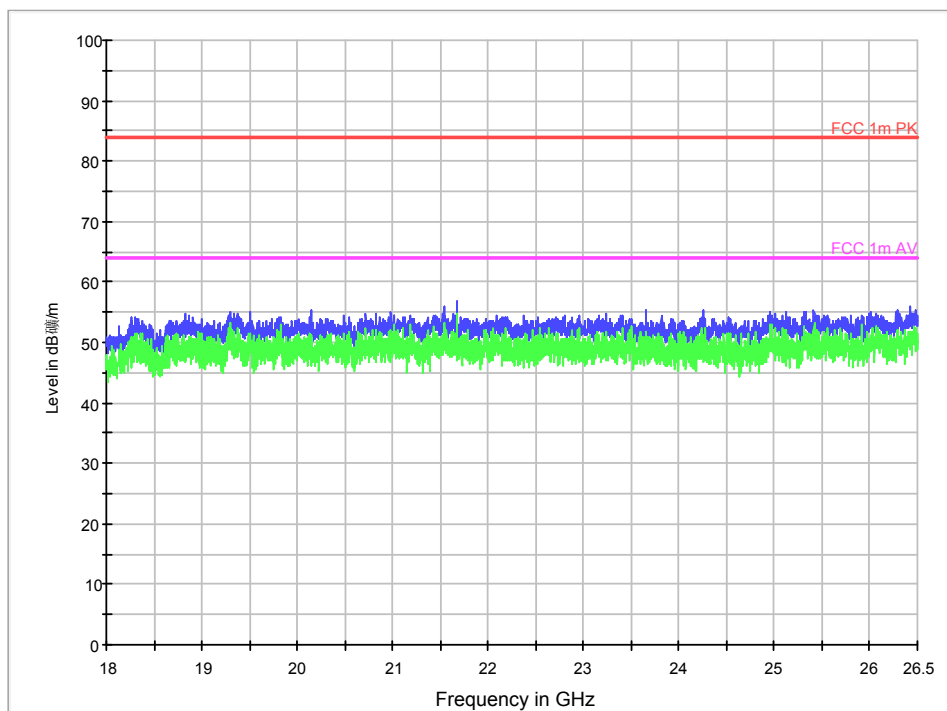
Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

**Fig.A.6.2.36 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 1 GHz-3 GHz)**

RE - 3GHz-18GHz

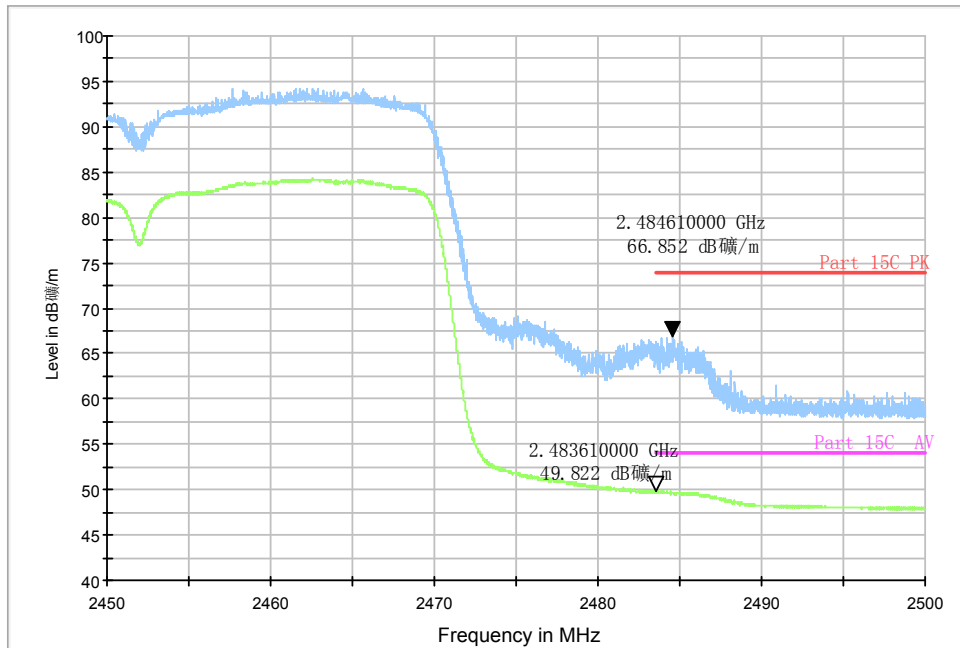


**Fig.A.6.2.37 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 3 GHz-18 GHz)**



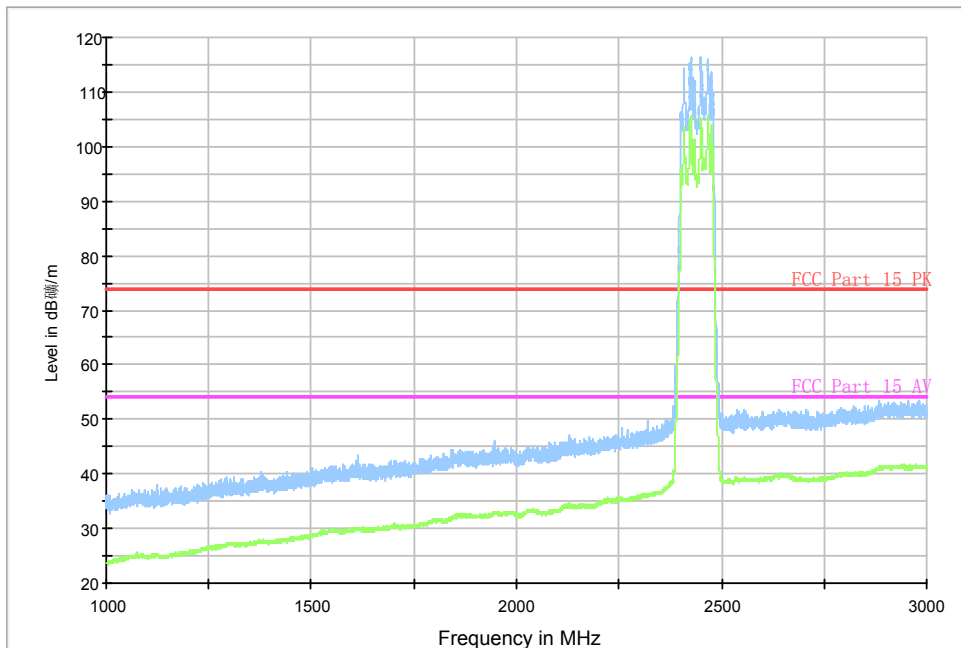
**Fig.A.6.2.38 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 18GHz - 26.5GHz)**

RE - Power-2.45GHz-2.5GHz



**Fig.A.6.2.39 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz**

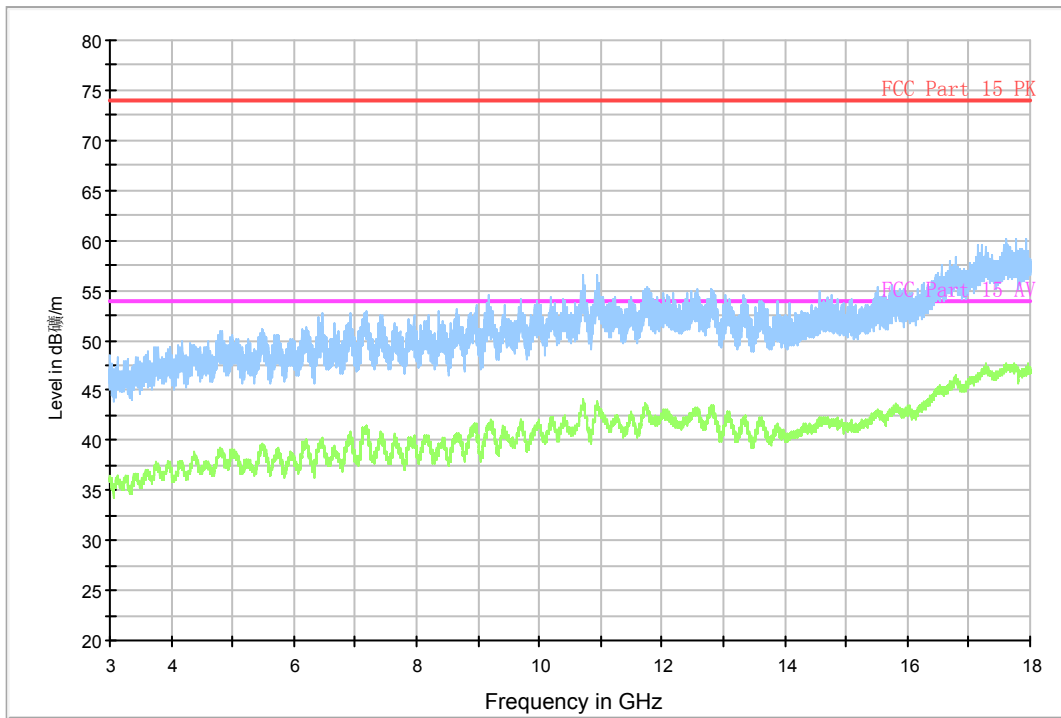
RE - TX - WLAN BT +AV+PK\_1GHz-3GHz



Note: the spike over the limit is the WLAN carrier frequency and coming from the radio equipment.

**Fig.A.6.2.40 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch9, 1 GHz-3 GHz)**

RE - 3GHz-18GHz



**Fig.A.6.2.41 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch9, 3 GHz-18 GHz)**



## **A.7. AC Power-line Conducted Emission**

### **Method of Measurement: See ANSI C63.10-2013-clause 6.2**

- 1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
- 2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
- 3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
- 4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.
- 5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.<sup>36</sup> Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

### **Test Condition:**

<b>Voltage (V)</b>	<b>Frequency (Hz)</b>
120	60

**Measurement Result and limit:**

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	<b>P</b>
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

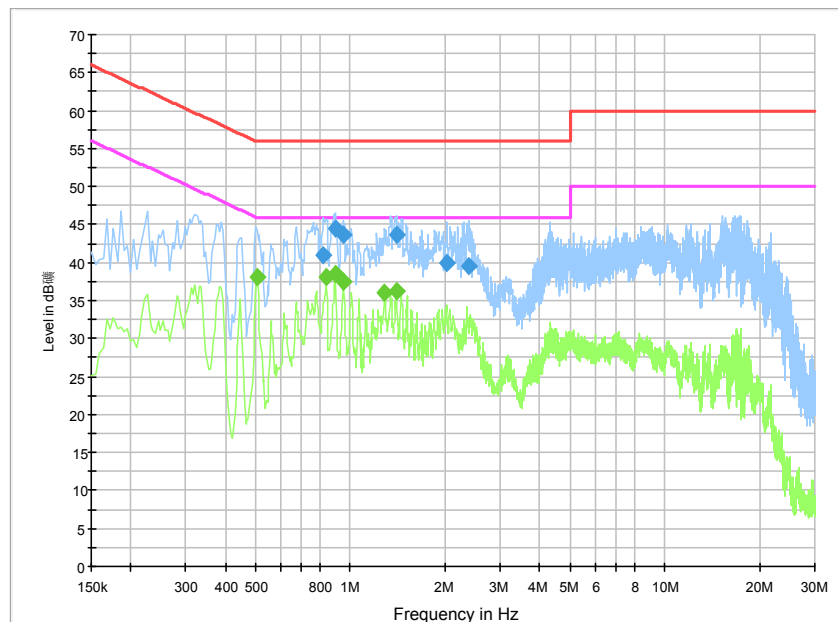
Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	<b>P</b>
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

**Conclusion: Pass**

**Test graphs as below:**

**Traffic: Set.10**



**Fig.A.7.1 AC Powerline Conducted Emission-802.11b**

Note: The graphic result above is the maximum of the measurements for both phase line and

neutral line.

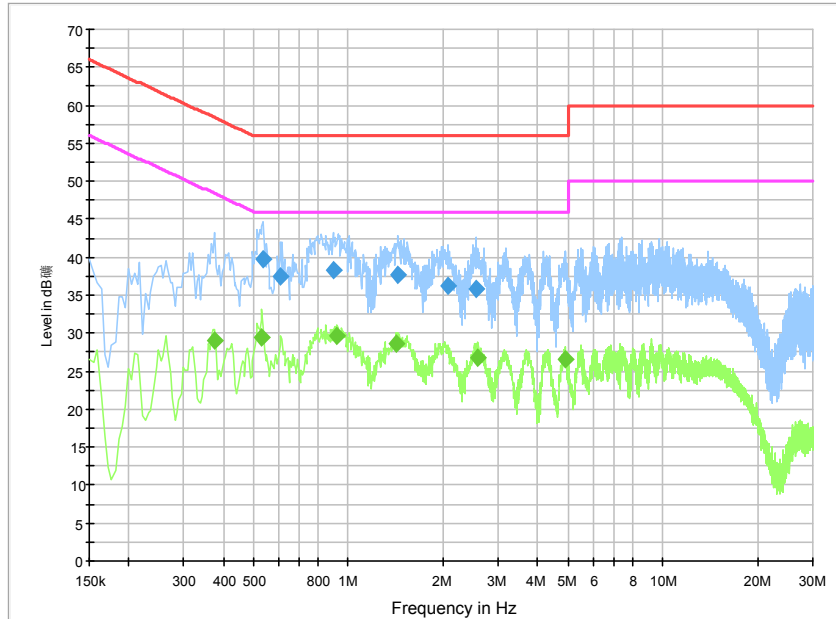
### Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.820500	40.9	GND	L1	10.3	15.1	56.0
0.892500	44.6	GND	L1	10.3	11.4	56.0
0.951000	43.6	GND	L1	10.3	12.4	56.0
1.401000	43.6	GND	L1	10.3	12.4	56.0
2.026500	39.9	GND	L1	10.4	16.1	56.0
2.373000	39.5	GND	L1	10.4	16.5	56.0

### Final Result 2

Frequency (MHz)	Average (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.505500	38.0	GND	L1	10.3	8.0	46.0
0.838500	38.1	GND	L1	10.3	7.9	46.0
0.892500	38.6	GND	L1	10.3	7.4	46.0
0.951000	37.4	GND	L1	10.3	8.6	46.0
1.284000	35.9	GND	L1	10.3	10.1	46.0
1.401000	36.3	GND	L1	10.3	9.7	46.0

**Traffic: Set.11**



**Fig.A.7.2 AC Powerline Conducted Emission-802.11b**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

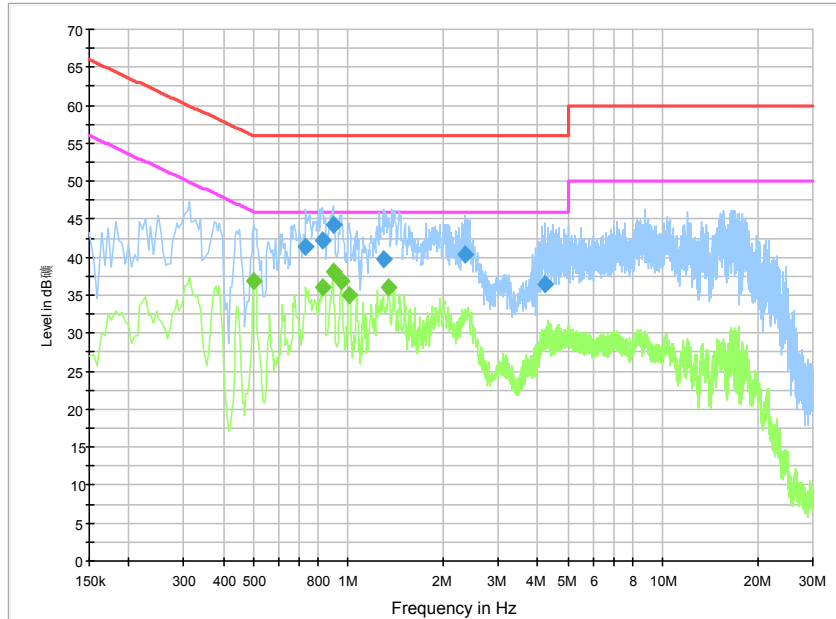
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.537000	39.8	GND	L1	10.3	16.2	56.0
0.609000	37.5	GND	L1	10.3	18.5	56.0
0.892500	38.2	GND	L1	10.3	17.8	56.0
1.437000	37.7	GND	L1	10.3	18.3	56.0
2.071500	36.3	GND	L1	10.4	19.7	56.0
2.544000	35.9	GND	L1	10.4	20.1	56.0

**Final Result 2**

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.375000	29.0	GND	L1	10.3	19.4	48.4
0.532500	29.4	GND	L1	10.3	16.6	46.0
0.919500	29.7	GND	L1	10.3	16.3	46.0
1.419000	28.6	GND	L1	10.3	17.4	46.0
2.589000	26.8	GND	L1	10.4	19.2	46.0
4.911000	26.6	GND	L1	10.5	19.4	46.0

Idle: Set.10



**Fig.A.7.3 AC Powerline Conducted Emission-Idle**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

### Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.730500	41.3	GND	L1	10.3	14.7	56.0
0.825000	42.2	GND	L1	10.3	13.8	56.0
0.892500	44.3	GND	L1	10.3	11.7	56.0
1.302000	39.7	GND	L1	10.3	16.3	56.0
2.355000	40.3	GND	L1	10.4	15.7	56.0
4.209000	36.5	GND	L1	10.5	19.5	56.0

### Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.501000	36.8	GND	L1	10.3	9.2	46.0
0.829500	35.9	GND	L1	10.3	10.1	46.0
0.892500	38.2	GND	L1	10.3	7.8	46.0
0.951000	36.9	GND	L1	10.3	9.1	46.0
1.005000	35.0	GND	L1	10.3	11.0	46.0
1.338000	36.0	GND	L1	10.3	10.0	46.0

\*\*\*END OF REPORT\*\*\*