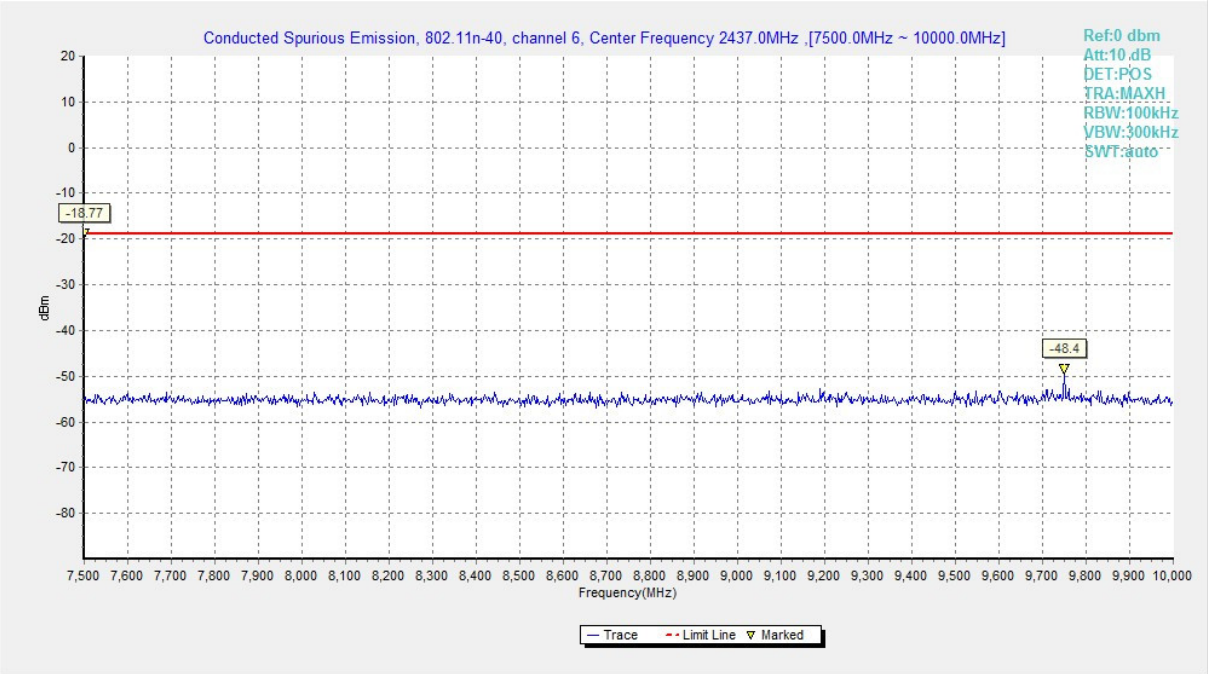

Fig.A.6.1.85 Conducted Spurious Emission (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

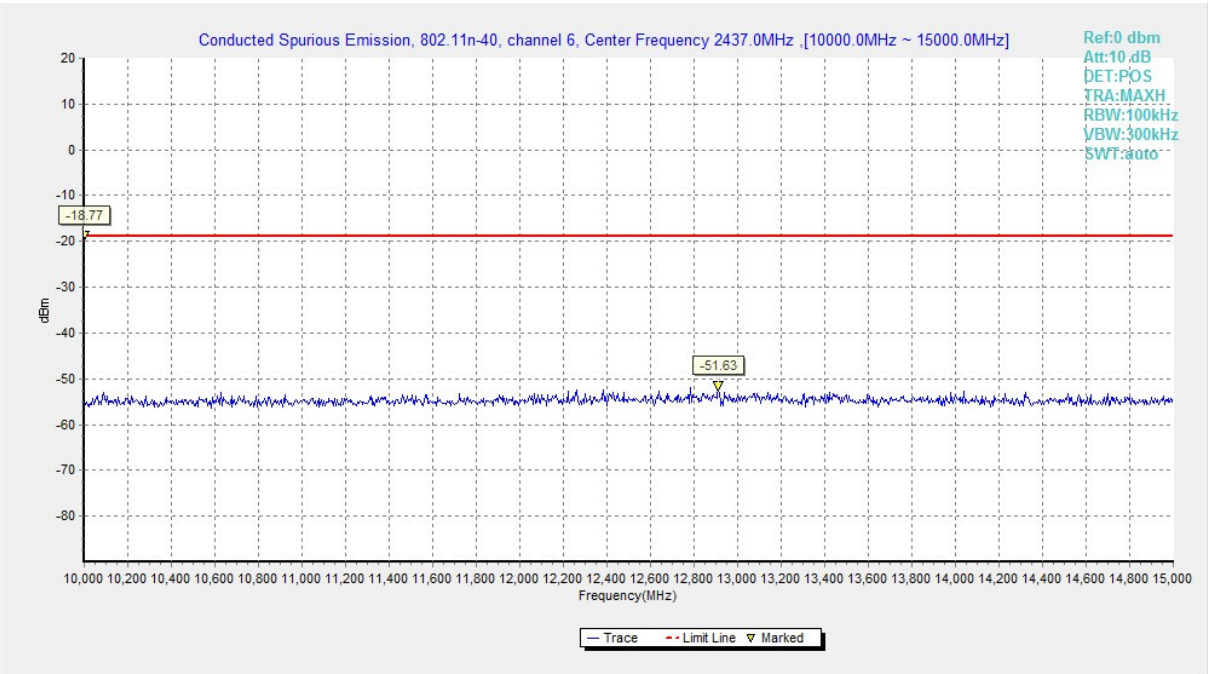

Fig.A.6.1.86 Conducted Spurious Emission (802.11n-HT40, Ch6, 10 GHz-15 GHz)

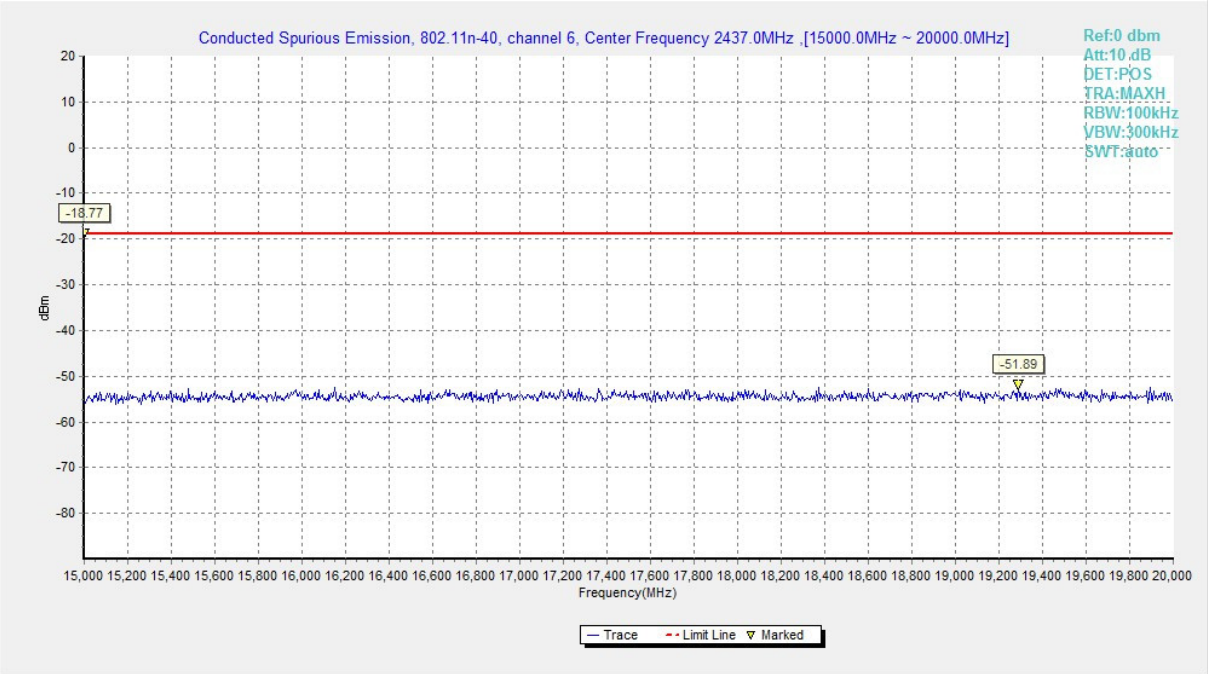

Fig.A.6.1.87 Conducted Spurious Emission (802.11n-HT40, Ch6, 15 GHz-20 GHz)

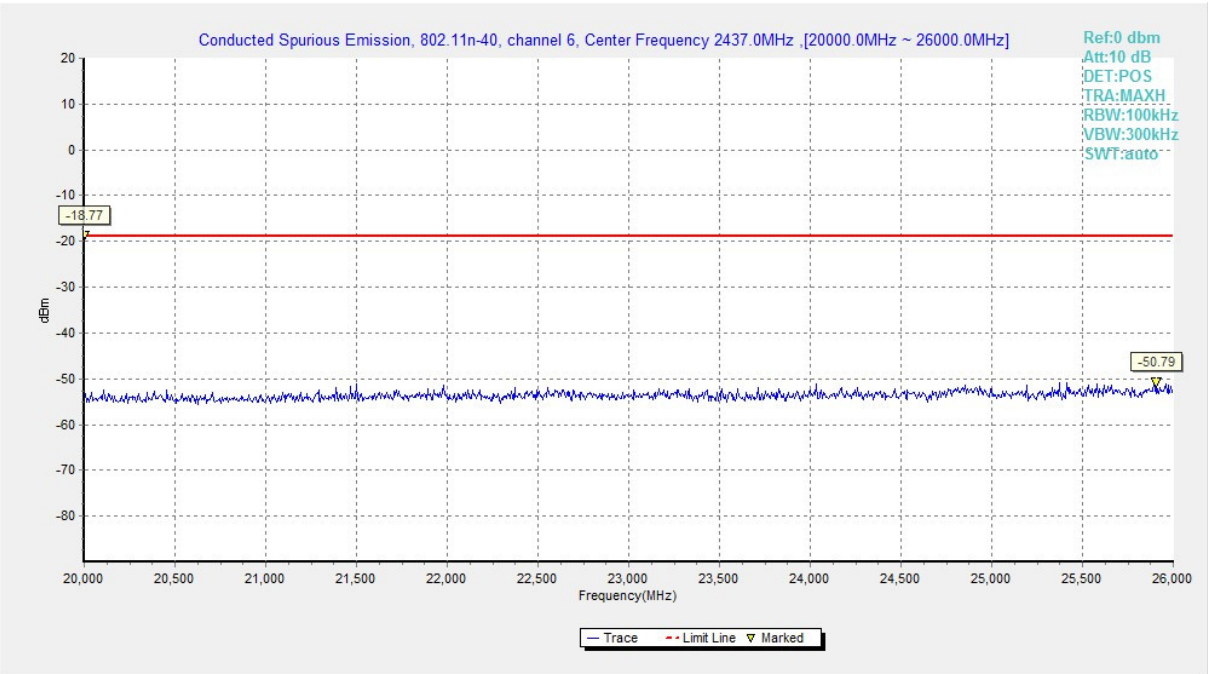

Fig.A.6.1.88 Conducted Spurious Emission (802.11n-HT40, Ch6, 20 GHz-26 GHz)

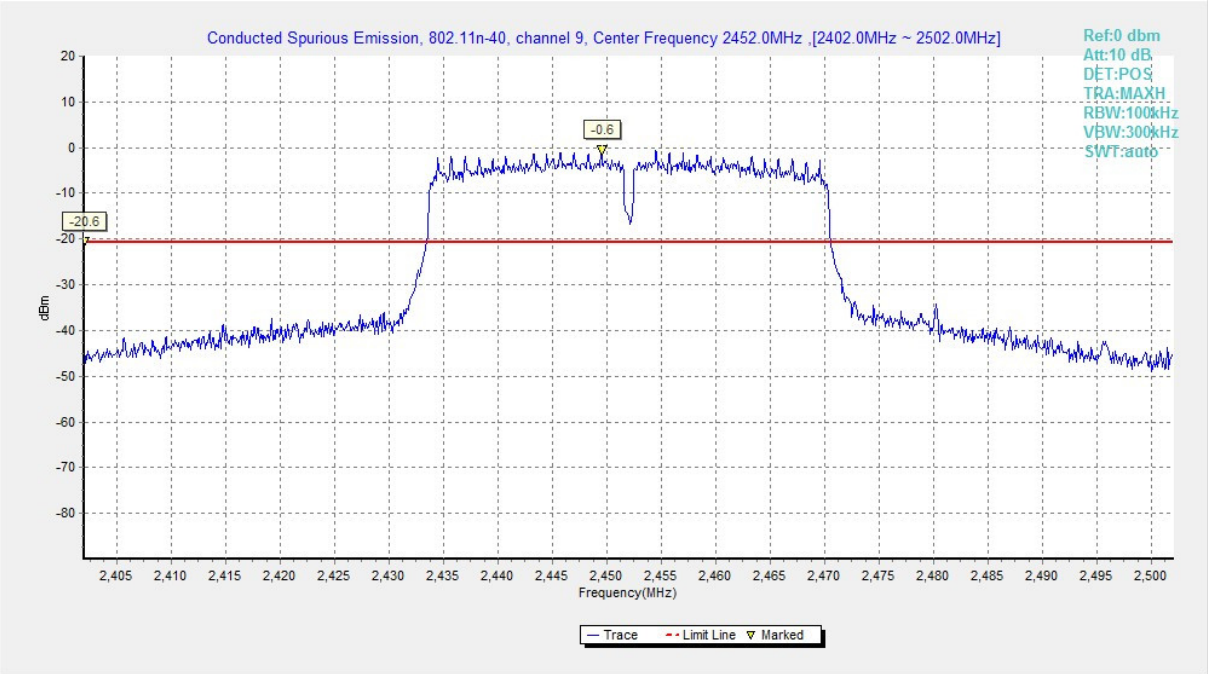

Fig.A.6.1.89 Conducted Spurious Emission (802.11n-HT40, Ch9, Center Frequency)

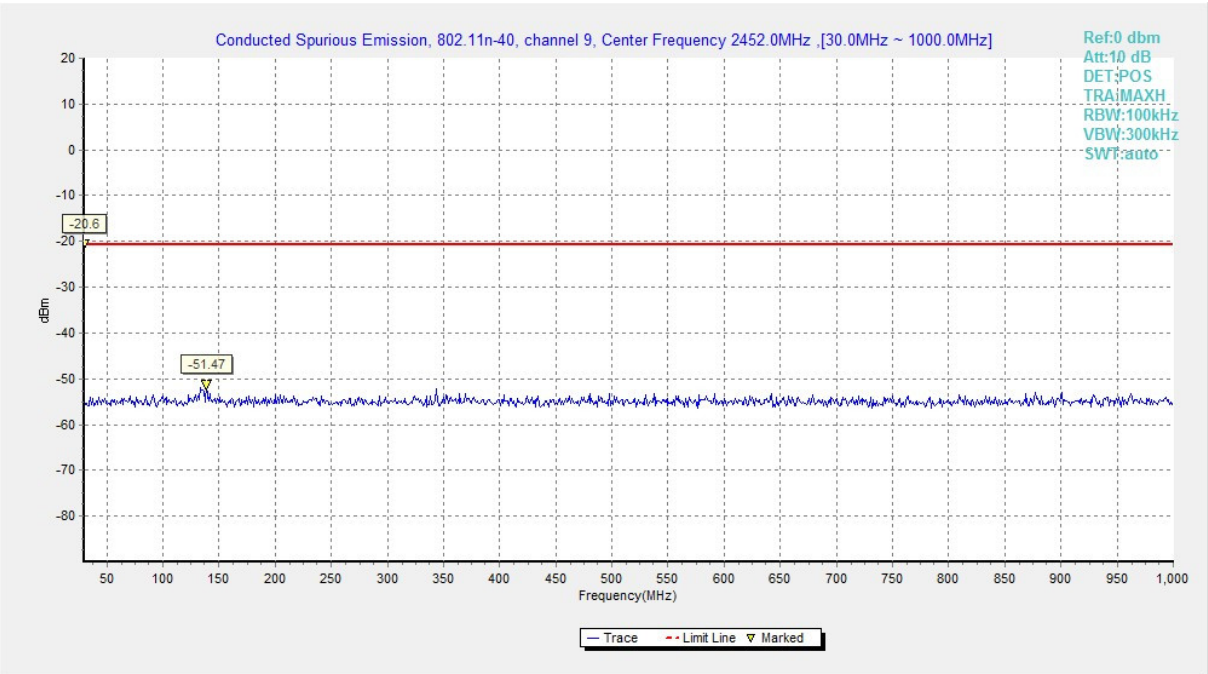

Fig.A.6.1.90 Conducted Spurious Emission (802.11n-HT40, Ch9, 30 MHz-1 GHz)

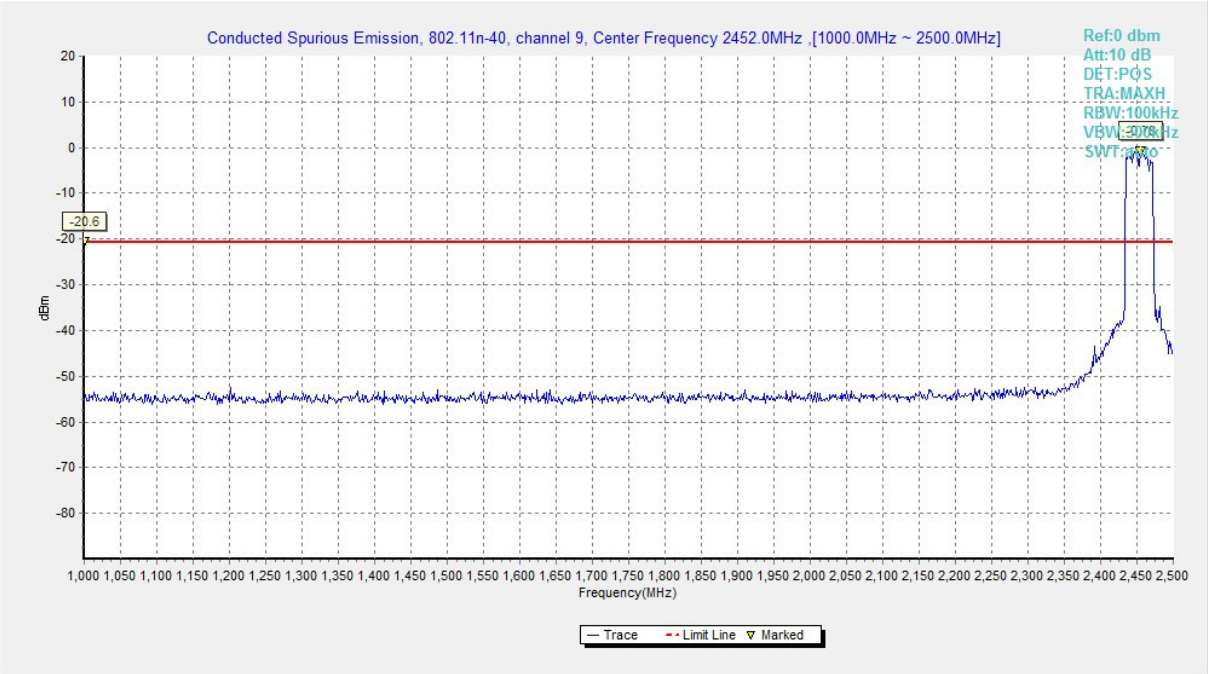

Fig.A.6.1.91 Conducted Spurious Emission (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

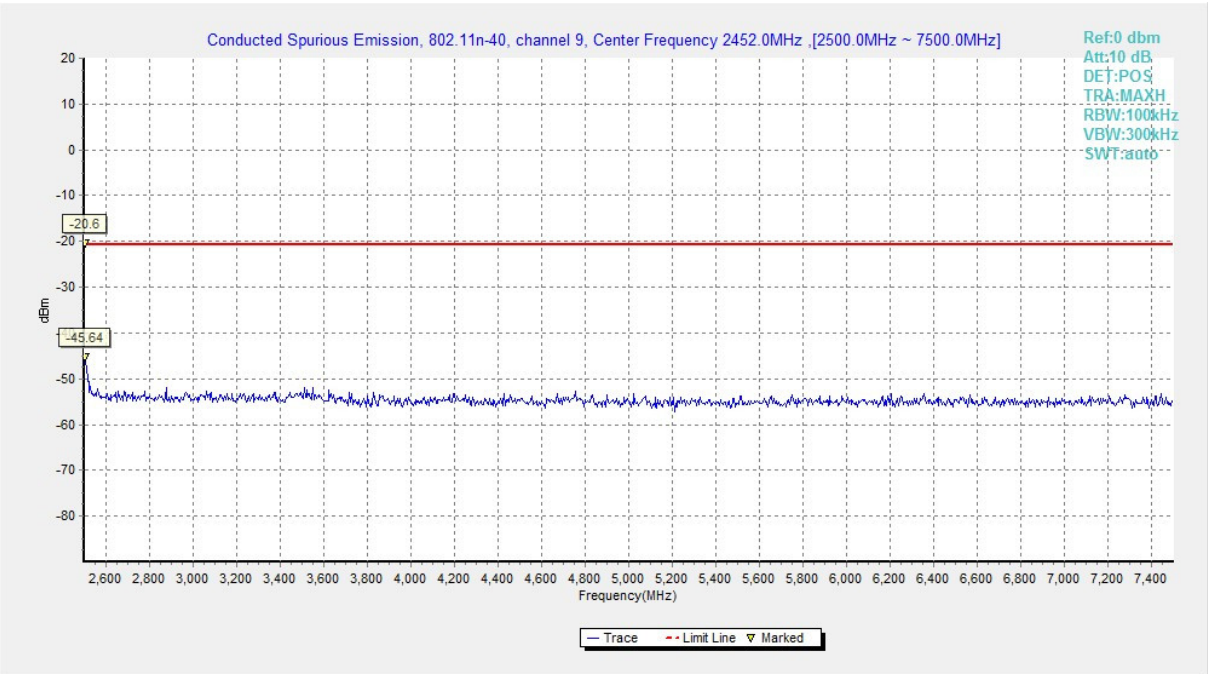

Fig.A.6.1.92 Conducted Spurious Emission (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

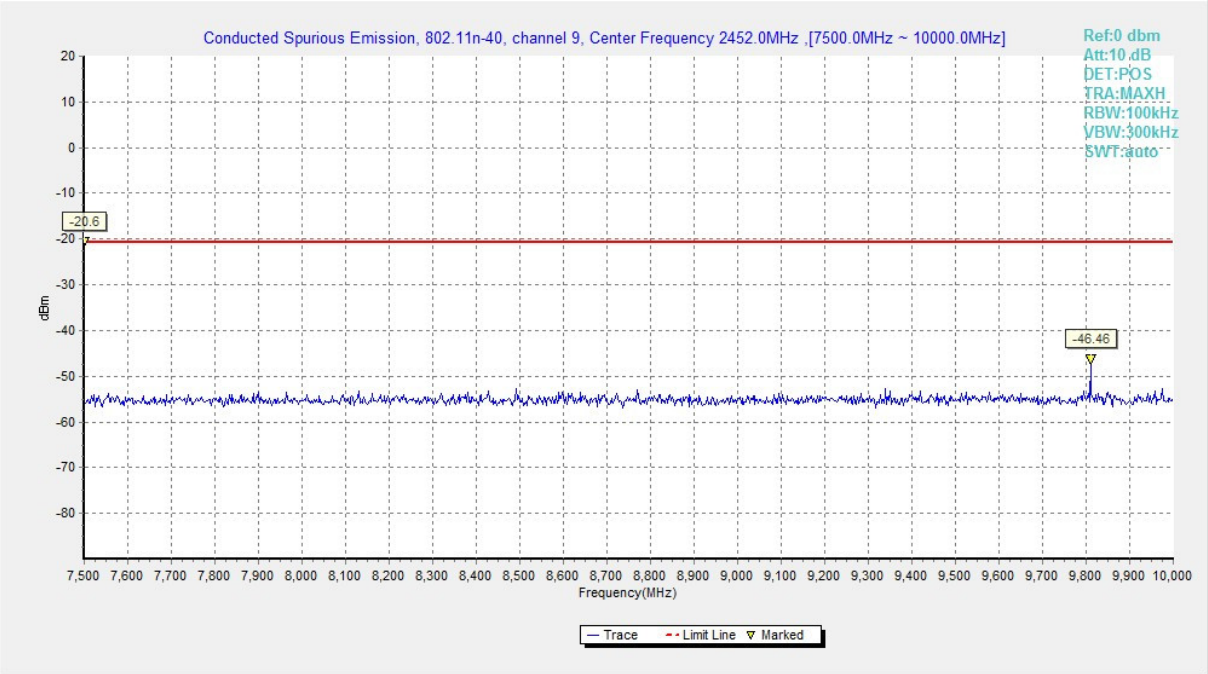

Fig.A.6.1.93 Conducted Spurious Emission (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

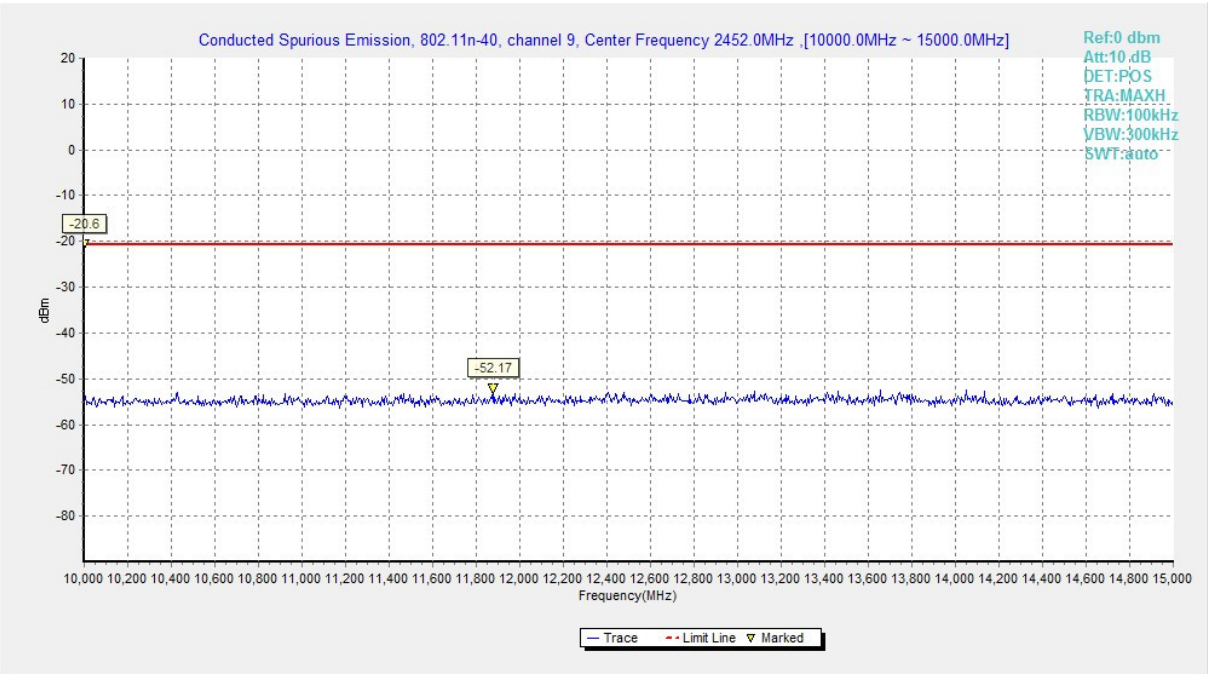

Fig.A.6.1.94 Conducted Spurious Emission (802.11n-HT40, Ch9, 10 GHz-15 GHz)

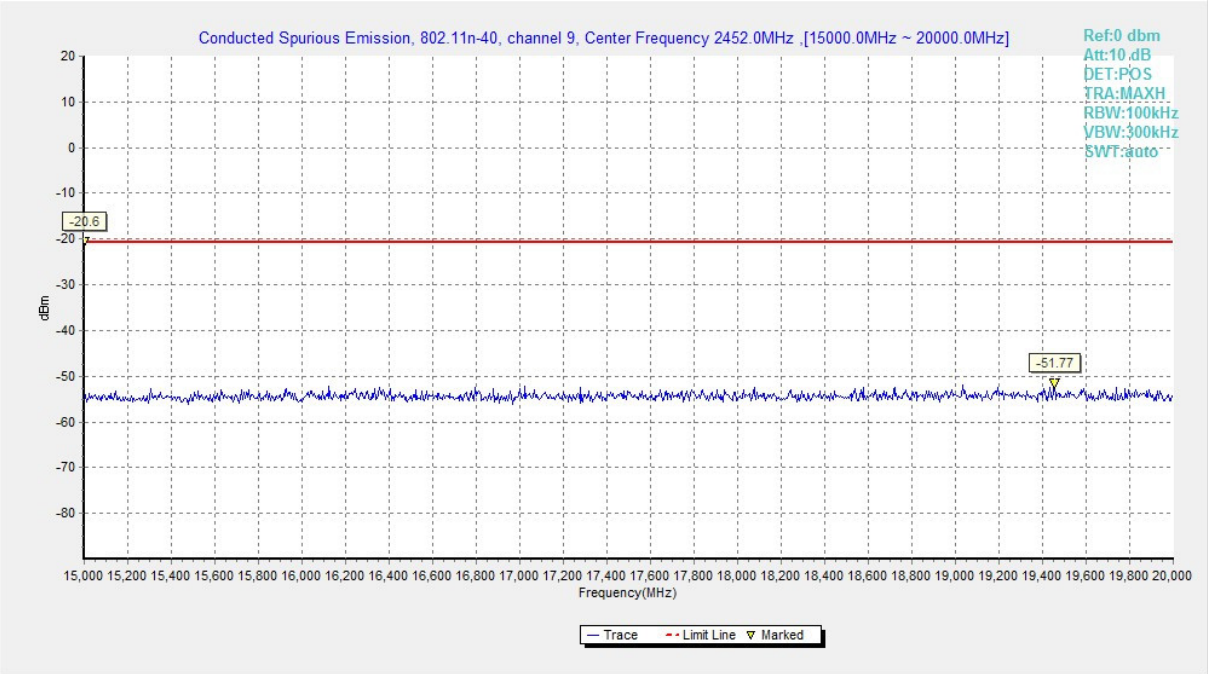

Fig.A.6.1.95 Conducted Spurious Emission (802.11n-HT40, Ch9, 15 GHz-20 GHz)

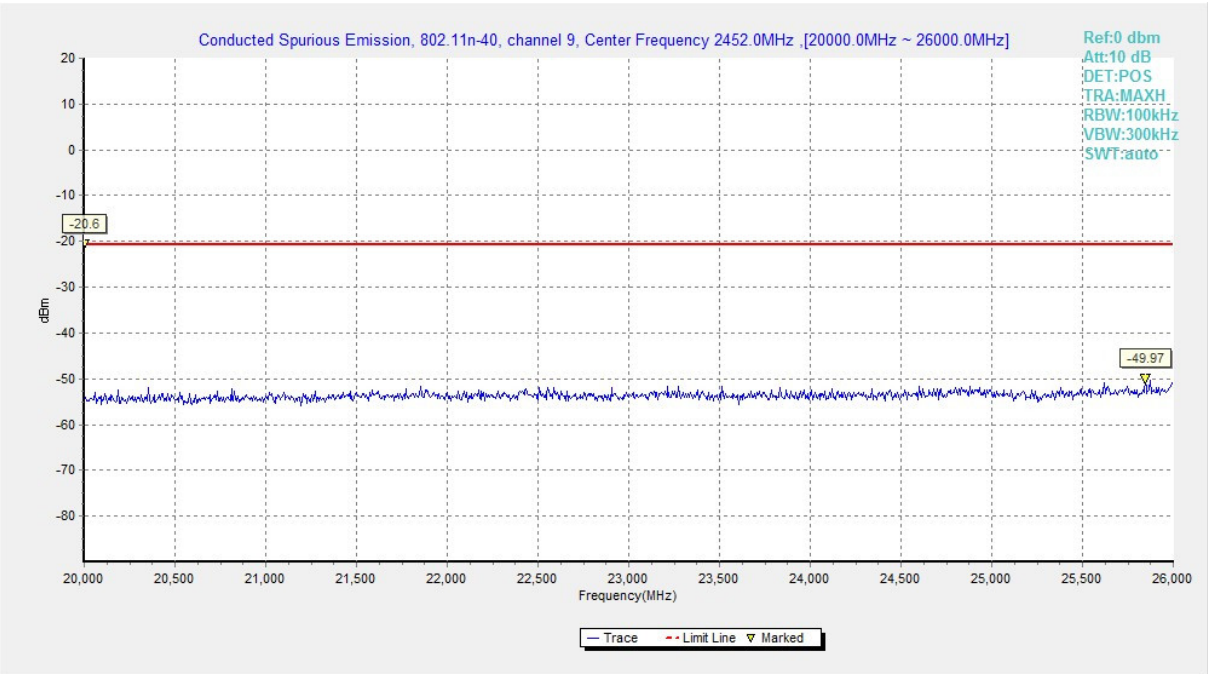

Fig.A.6.1.96 Conducted Spurious Emission (802.11n-HT40, Ch9, 20 GHz-26 GHz)

A.6.2 Transmitter Spurious Emission - Radiated

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)).
The measurement is made according to KDB558074.

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

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

Modulation type and data rate tested:

802.11b	802.11g	802.11n-HT20	802.11n-HT40
11Mbps(CCK)	24Mbps(OFDM)	MCS3(OFDM)	MCS3(OFDM)

Measurement Results:

802.11b mode

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

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.A.6.2.11	**P**
	1	1 GHz ~ 3 GHz	Fig.A.6.2.12	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.13	**P**
	6	30 MHz ~1 GHz	Fig.A.6.2.14	**P**
		1 GHz ~ 3 GHz	Fig.A.6.2.15	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.16	**P**
		18 GHz~ 26.5 GHz	Fig.A.6.2.17	**P**
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.18	**P**
	11	1 GHz ~ 3 GHz	Fig.A.6.2.19	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.20	**P**

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power	2.38GHz ~2.45GHz	Fig.A.6.2.21	**P**
	1	1 GHz ~ 3 GHz	Fig.A.6.2.22	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.23	**P**
	6	30 MHz ~1 GHz	Fig.A.6.2.24	**P**
		1 GHz ~ 3 GHz	Fig.A.6.2.25	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.26	**P**
		18 GHz~ 26.5 GHz	Fig.A.6.2.27	**P**
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.28	**P**
	11	1 GHz ~ 3 GHz	Fig.A.6.2.29	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.30	**P**

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	Power	2.38GHz ~2.45GHz	Fig.A.6.2.31	**P**
	3	1 GHz ~ 3 GHz	Fig.A.6.2.32	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.33	**P**
	6	30 MHz ~1 GHz	Fig.A.6.2.34	**P**
		1 GHz ~ 3 GHz	Fig.A.6.2.35	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.36	**P**
		18 GHz~ 26.5 GHz	Fig.A.6.2.37	**P**
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.38	**P**
	9	1 GHz ~ 3 GHz	Fig.A.6.2.39	**P**
		3 GHz ~ 18 GHz	Fig.A.6.2.40	**P**

Conclusion: Pass

Measurement Uncertainty:

Frequency Range	Uncertainty(dB)
f ≤ 1GHz	3.9
f>1GHz	4.3

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

Ch1-Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2389.230	47.5	-38.8	27.7	58.600	V
17998.500	56.1	-17.7	45.6	28.200	V
17874.000	55.5	-18.5	45.6	28.400	V
17986.500	55.5	-17.7	45.6	27.600	V
17992.500	55.4	-17.7	45.6	27.500	V
17994.000	55.4	-17.7	45.6	27.500	V

Ch6 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17992.500	56.2	-17.7	45.6	28.300	V
17866.500	56.1	-18.5	45.6	29.000	V
17767.500	56.0	-18.5	45.6	28.900	V
17959.500	55.8	-17.7	45.6	27.900	V
17835.000	55.5	-18.5	45.6	28.400	V
17815.500	55.3	-18.5	45.6	28.200	V

Ch11 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.625	49.8	-38.9	27.7	61.000	V
17980.500	55.9	-17.7	45.6	28.000	V
17955.000	55.3	-17.7	45.6	27.400	V
17989.500	55.2	-17.7	45.6	27.300	V
17811.000	55.2	-18.5	45.6	28.100	H
17992.500	55.1	-17.7	45.6	27.200	V

802.11g

Ch1 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2389.156	57.8	-38.8	27.7	68.900	V
17979.000	56.8	-17.7	45.6	28.900	V
17571.000	56.6	-18.9	45.6	29.900	V
17976.000	56.5	-17.7	45.6	28.600	V
17991.000	56.0	-17.7	45.6	28.100	V
17728.500	55.9	-18.9	45.6	29.200	V

Ch6 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17970.000	55.6	-17.7	45.6	27.700	V
17991.000	55.5	-17.7	45.6	27.600	V
17992.500	55.3	-17.7	45.6	27.400	V
17938.500	55.2	-17.7	45.6	27.300	H
17985.000	55.1	-17.7	45.6	27.200	V
17986.500	54.9	-17.7	45.6	27.000	V

Ch11 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.525	65.1	-38.9	27.7	76.300	V
17988.000	55.3	-17.7	45.6	27.400	V
17995.500	55.0	-17.7	45.6	27.100	V
17956.500	54.8	-17.7	45.6	26.900	H
18000.000	54.8	-17.7	44.5	28.000	V
17998.500	54.6	-17.7	45.6	26.700	V

802.11n-HT20

Ch1 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2389.580	66.9	-38.8	27.7	78.000	V
17991.000	55.0	-17.7	45.6	27.100	H
17937.000	54.7	-17.7	45.6	26.800	V
17994.000	54.6	-17.7	45.6	26.700	V
17967.000	54.5	-17.7	45.6	26.600	H
17985.000	54.5	-17.7	45.6	26.600	V

Ch6 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17994.000	55.3	-17.7	45.6	27.400	V
17991.000	55.3	-17.7	45.6	27.400	V
18000.000	55.1	-17.7	44.5	28.300	V
17626.500	54.9	-18.9	45.6	28.200	V
17643.000	54.8	-18.9	45.6	28.100	V
17944.500	54.8	-17.7	45.6	26.900	V

Ch11 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.500	69.3	-38.9	27.7	80.500	V
17985.000	55.2	-17.7	45.6	27.300	V
17983.500	55.0	-17.7	45.6	27.100	H
17980.500	54.9	-17.7	45.6	27.000	V
17803.500	54.9	-18.5	45.6	27.800	V
17934.000	54.9	-17.7	45.6	27.000	H

802.11n-HT40

Ch3 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2388.356	66.7	-38.8	27.7	77.800	V
17991.000	55.9	-17.7	45.6	28.000	V
17953.500	55.8	-17.7	45.6	27.900	H
17982.000	55.2	-17.7	45.6	27.300	V
17998.500	55.1	-17.7	45.6	27.200	V
17989.500	54.9	-17.7	45.6	27.000	V

Ch6 -Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17988.000	55.6	-17.7	45.6	27.700	V
17949.000	55.5	-17.7	45.6	27.600	V
17998.500	55.5	-17.7	45.6	27.600	V
18000.000	55.3	-17.7	44.5	28.500	H
17997.000	55.2	-17.7	45.6	27.300	H
17980.500	55.2	-17.7	45.6	27.300	V

Ch9 –Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.731	64.4	-38.9	27.7	75.600	V
17997.000	56.5	-17.7	45.6	28.600	V
17994.000	54.8	-17.7	45.6	26.900	V
17970.000	54.7	-17.7	45.6	26.800	V
17995.500	54.7	-17.7	45.6	26.800	H
17967.000	54.7	-17.7	45.6	26.800	V

802.11b

Ch1-Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2390.000	35.3	-38.8	27.7	46.400	V
17994.000	44.5	-17.7	45.6	16.600	V
17997.000	44.4	-17.7	45.6	16.500	V
17998.500	44.4	-17.7	45.6	16.500	V
17991.000	44.3	-17.7	45.6	16.400	V
17988.000	44.3	-17.7	45.6	16.400	H

Ch6 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17991.000	44.8	-17.7	45.6	16.900	V
17997.000	44.5	-17.7	45.6	16.600	H
17995.500	44.5	-17.7	45.6	16.600	V
17994.000	44.4	-17.7	45.6	16.500	V
17992.500	44.4	-17.7	45.6	16.500	H
17998.500	44.3	-17.7	45.6	16.400	V

Ch11 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2485.910	38.2	-38.9	27.7	49.400	V
17992.500	44.6	-17.7	45.6	16.700	V
17983.500	44.5	-17.7	45.6	16.600	V
17998.500	44.4	-17.7	45.6	16.500	V
17995.500	44.4	-17.7	45.6	16.500	H
17988.000	44.4	-17.7	45.6	16.500	V

802.11g

Ch1 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2390.000	39.8	-38.8	27.7	50.900	V
17988.000	45.2	-17.7	45.6	17.300	H
17995.500	45.0	-17.7	45.6	17.100	V
18000.000	45.0	-17.7	44.5	18.200	V
17998.500	44.9	-17.7	45.6	17.000	V
17991.000	44.9	-17.7	45.6	17.000	H

Ch6 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17997.000	43.9	-17.7	45.6	16.000	V
17983.500	43.9	-17.7	45.6	16.000	V
17998.500	43.8	-17.7	45.6	15.900	V
17982.000	43.7	-17.7	45.6	15.800	V
17988.000	43.7	-17.7	45.6	15.800	V
17979.000	43.7	-17.7	45.6	15.800	V

Ch11-Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.500	44.2	-38.9	27.7	55.400	V
17985.000	43.8	-17.7	45.6	15.900	V
17988.000	43.8	-17.7	45.6	15.900	V
17994.000	43.7	-17.7	45.6	15.800	V
17995.500	43.7	-17.7	45.6	15.800	V
17991.000	43.7	-17.7	45.6	15.800	V

802.11n-HT20

Ch1 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2390.000	44.9	-38.8	27.7	56.000	V
17994.000	44.0	-17.7	45.6	16.100	V
17988.000	43.8	-17.7	45.6	15.900	H
17995.500	43.7	-17.7	45.6	15.800	V
17991.000	43.7	-17.7	45.6	15.800	V
17992.500	43.6	-17.7	45.6	15.700	V

Ch6-Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17994.000	44.0	-17.7	45.6	16.100	V
17985.000	44.0	-17.7	45.6	16.100	V
17991.000	43.8	-17.7	45.6	15.900	V
18000.000	43.8	-17.7	44.5	17.000	V
17997.000	43.7	-17.7	45.6	15.800	H
17988.000	43.7	-17.7	45.6	15.800	V

Ch11-Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.500	46.3	-38.9	27.7	57.500	V
17988.000	43.9	-17.7	45.6	16.000	H
17997.000	43.9	-17.7	45.6	16.000	V
17985.000	43.9	-17.7	45.6	16.000	H
17994.000	43.8	-17.7	45.6	15.900	V
17991.000	43.7	-17.7	45.6	15.800	V

802.11n-HT40

Ch3 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2390.000	42.6	-38.8	27.7	53.700	V
17994.000	44.2	-17.7	45.6	16.300	V
17988.000	44.0	-17.7	45.6	16.100	V
17991.000	44.0	-17.7	45.6	16.100	V
17997.000	43.9	-17.7	45.6	16.000	H
17986.500	43.8	-17.7	45.6	15.900	V

Ch6-Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17994.000	44.2	-17.7	45.6	16.300	H
17989.500	44.0	-17.7	45.6	16.100	V
17988.000	44.0	-17.7	45.6	16.100	V
17985.000	44.0	-17.7	45.6	16.100	V
17991.000	43.9	-17.7	45.6	16.000	V
17995.500	43.9	-17.7	45.6	16.000	V

Ch9 -Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.500	40.5	-38.9	27.7	51.700	V
17994.000	44.1	-17.7	45.6	16.200	H
18000.000	44.1	-17.7	44.5	17.300	V
17991.000	44.0	-17.7	45.6	16.100	V
17983.500	44.0	-17.7	45.6	16.100	V
17995.500	44.0	-17.7	45.6	16.100	H

Test graphs as below:

RE-Power_2.38G-2.43GHz

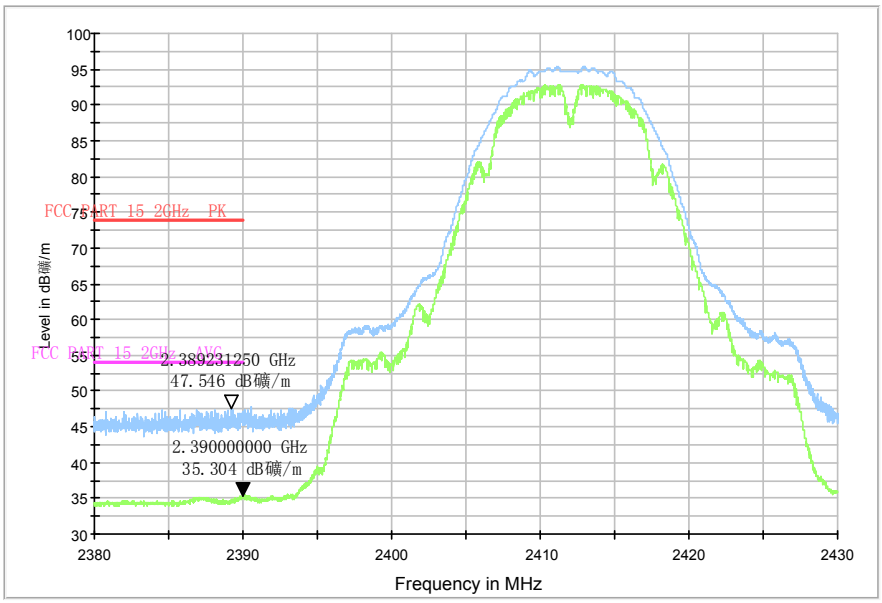

Fig.A.6.2.1 Radiated Spurious Emission (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz

RE_WLAN_1G-3GHz

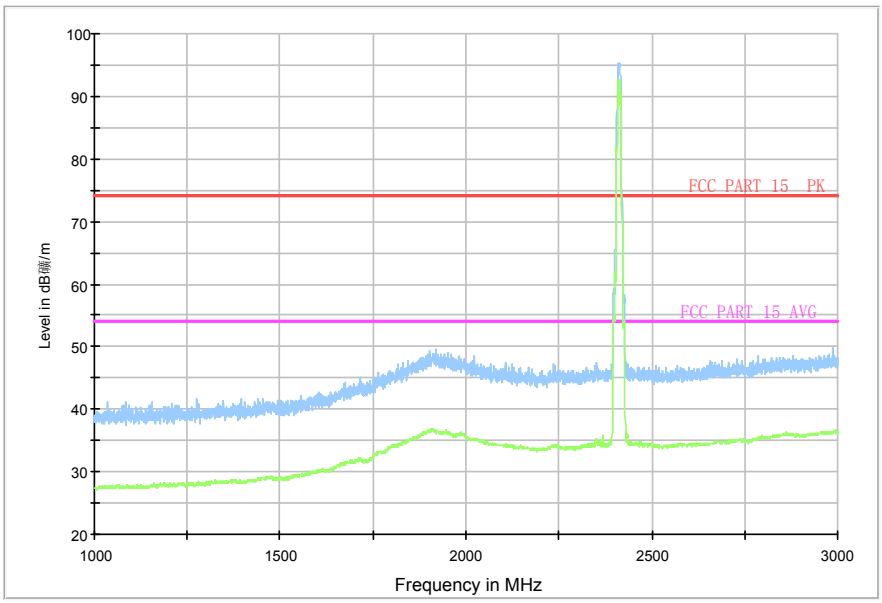

Fig.A.6.2.2 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-3 GHz)

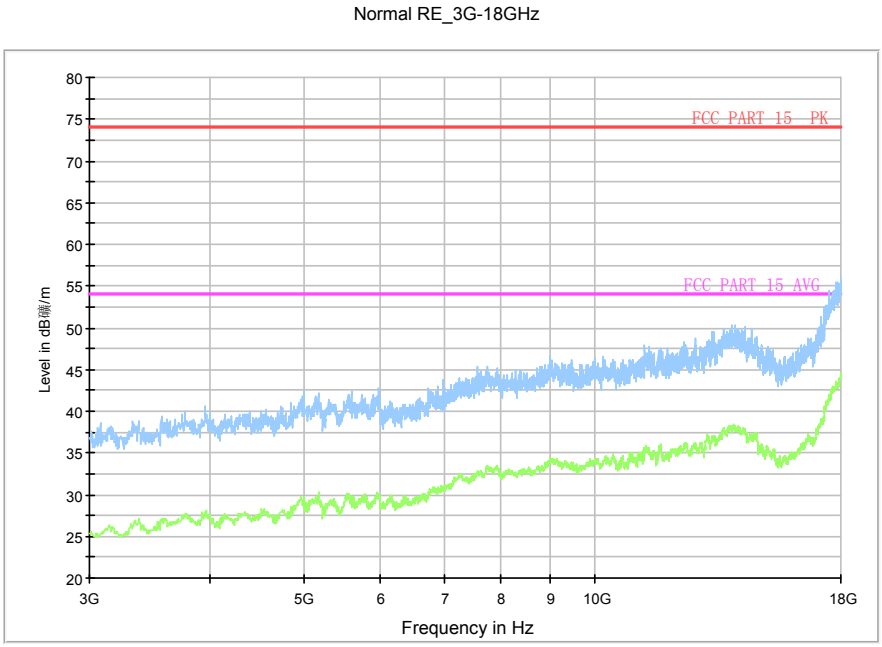

Fig.A.6.2.3 Radiated Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)

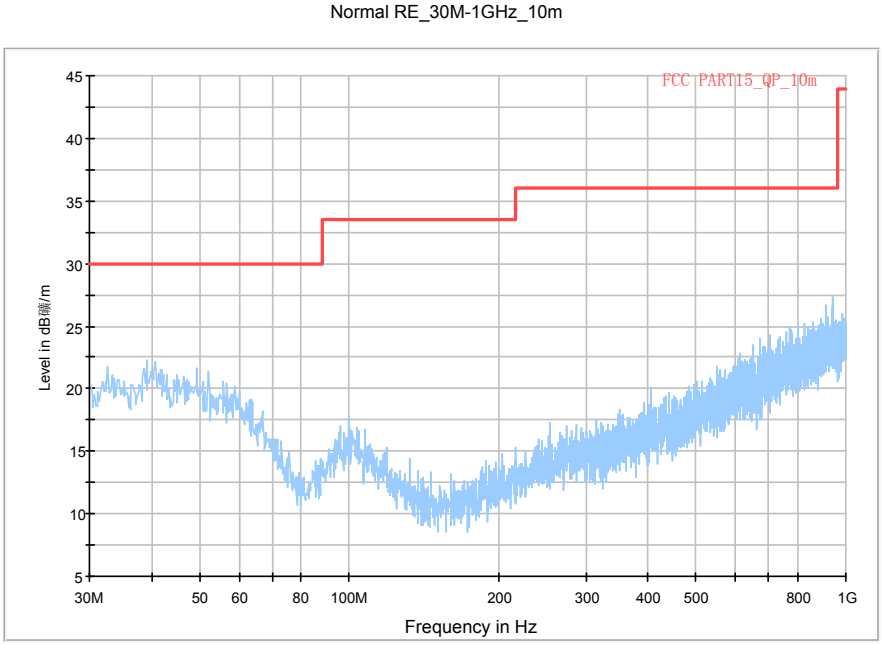

Fig.A.6.2.4 Radiated Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

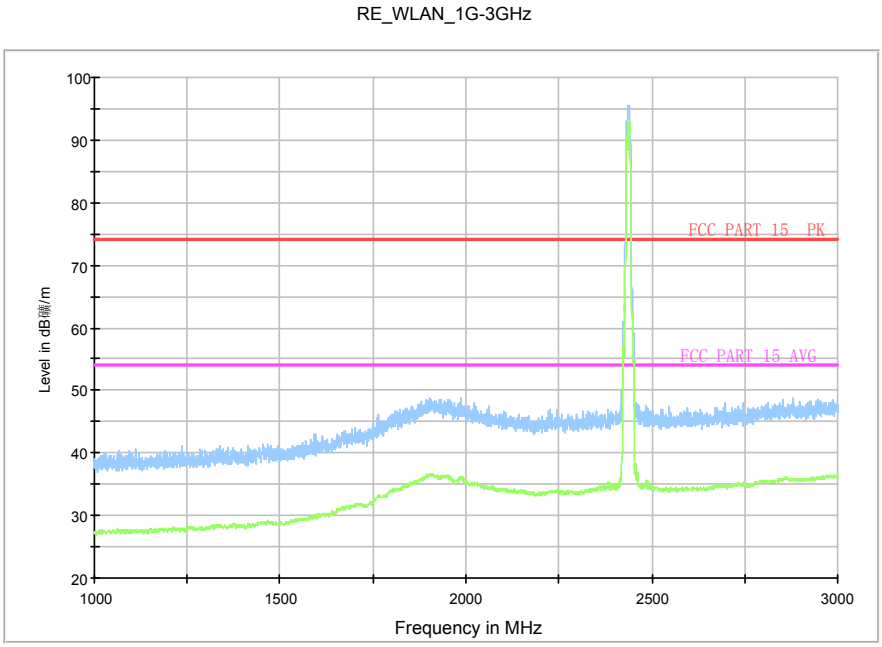

Fig.A.6.2.5 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-3 GHz)

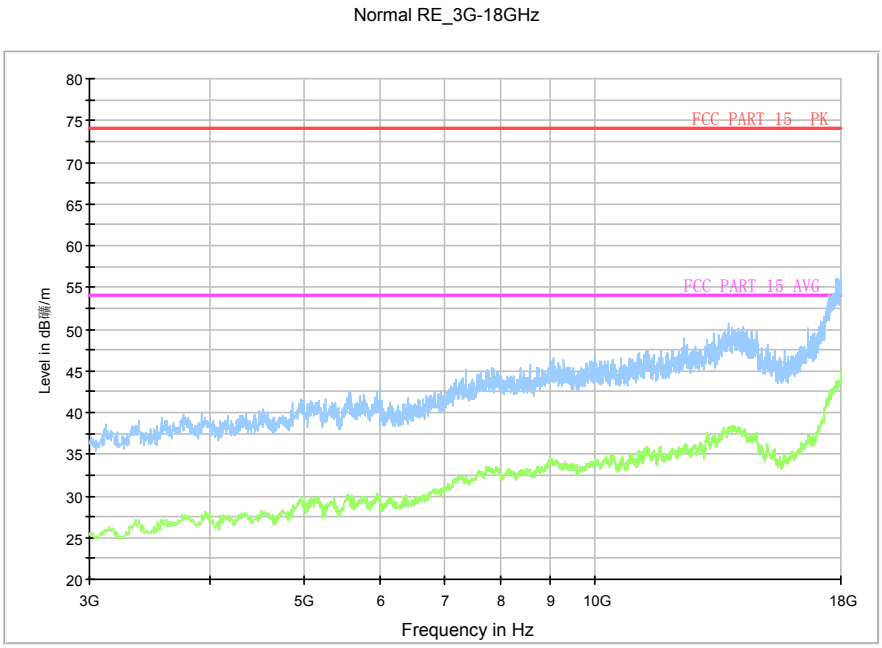

Fig.A.6.2.6 Radiated Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)

Normal RE_18G-26.5GHz

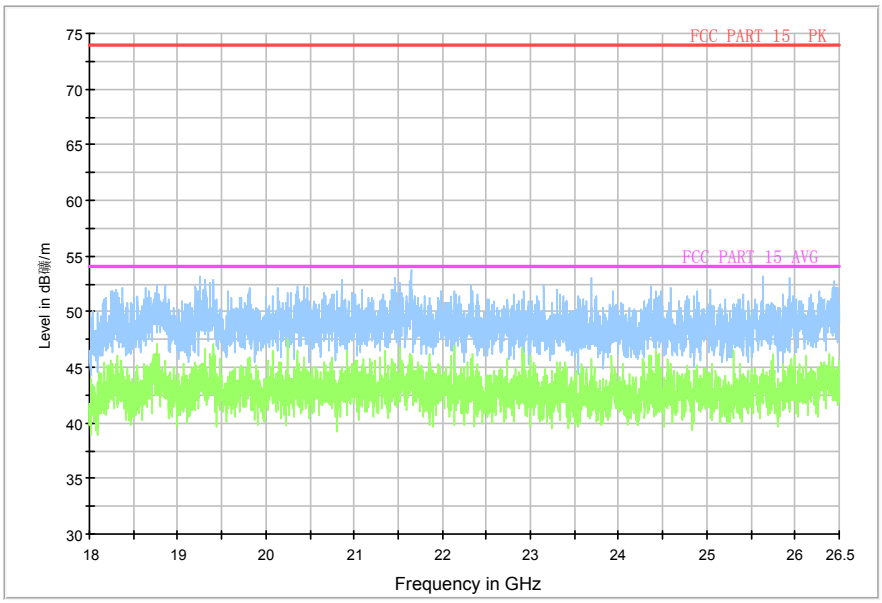

Fig.A.6.2.7 Radiated Spurious Emission (802.11b, Ch6, 18GHz – 26.5GHz)

RE-Power_2.45G-2.5GHz

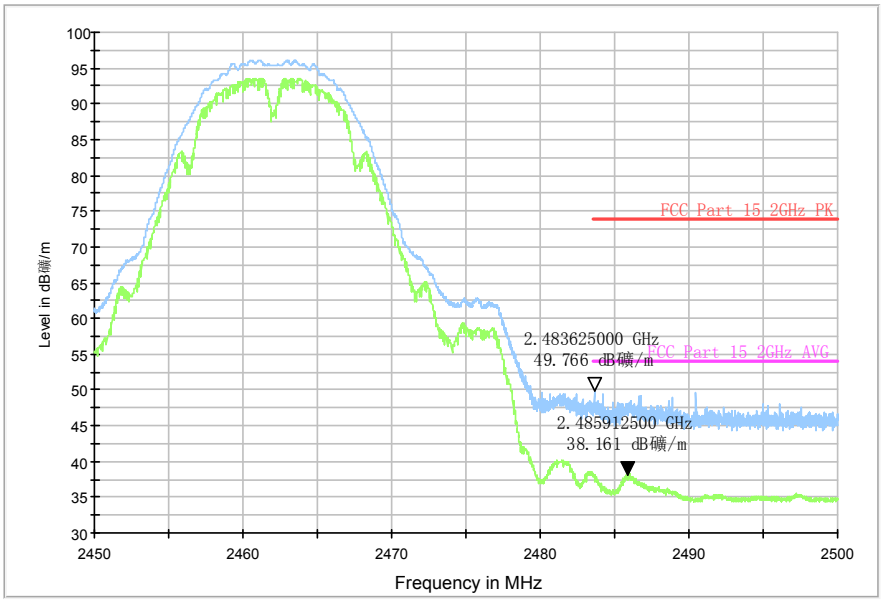

Fig.A.6.2.8 Radiated Spurious Emission (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

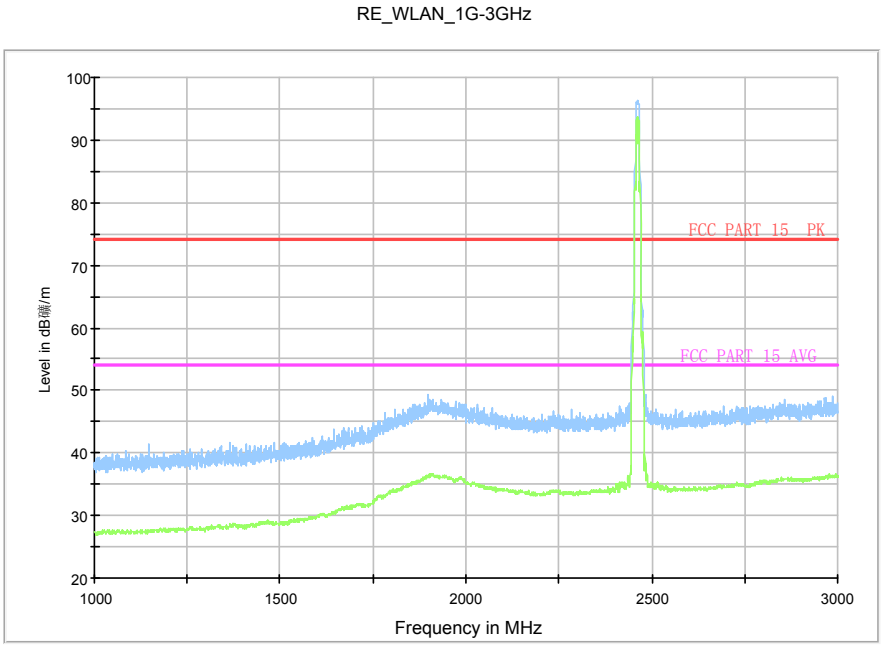

Fig.A.6.2.9 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-3 GHz)

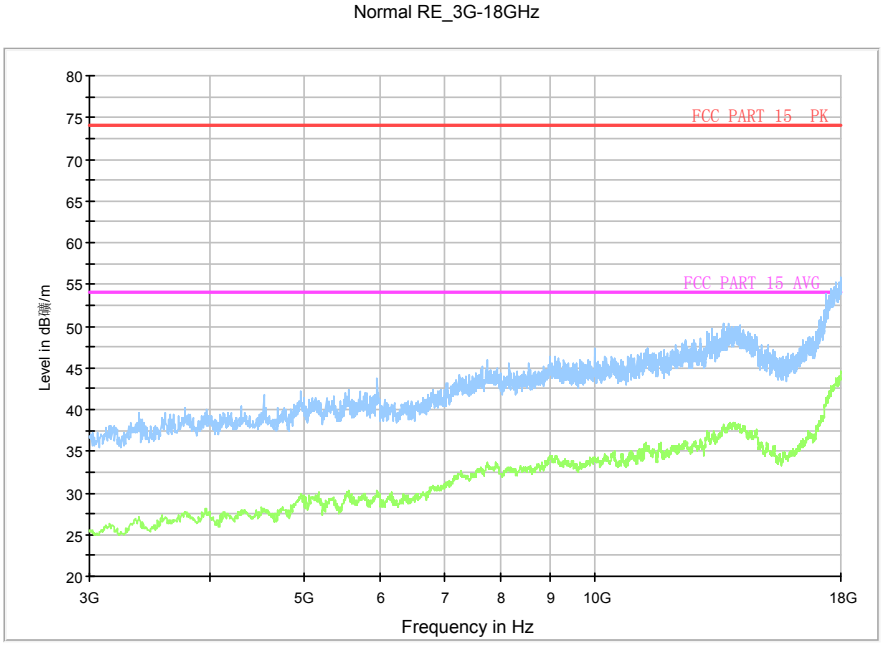

Fig.A.6.2.10 Radiated Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)

RE-Power_2.38G-2.43GHz

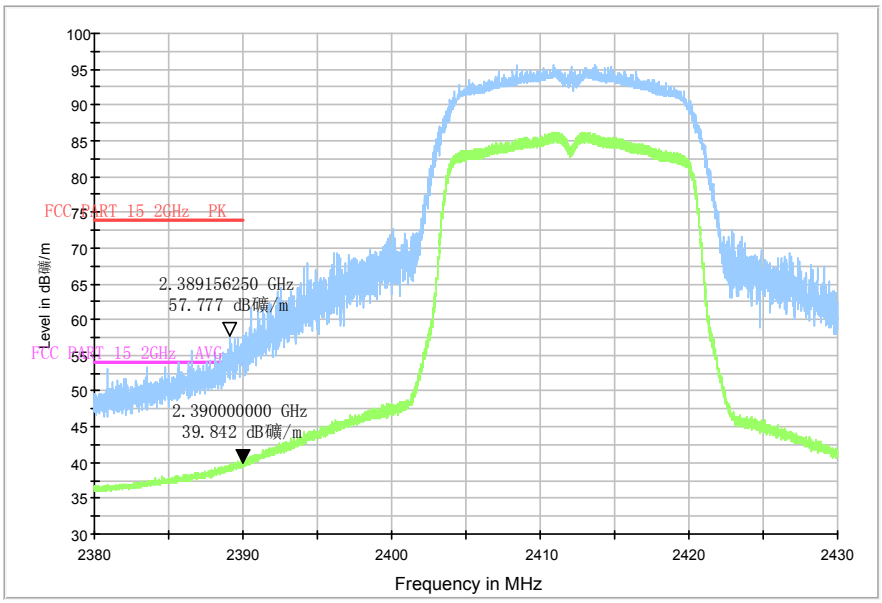

Fig.A.6.2.11 Radiated Spurious Emission (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

RE_WLAN_1G-3GHz

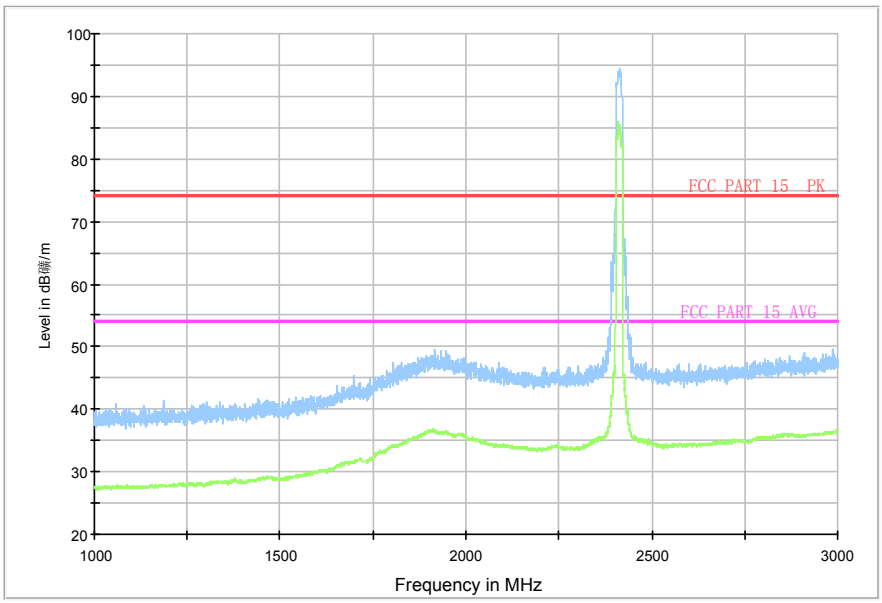

Fig.A.6.2.12 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-3 GHz)

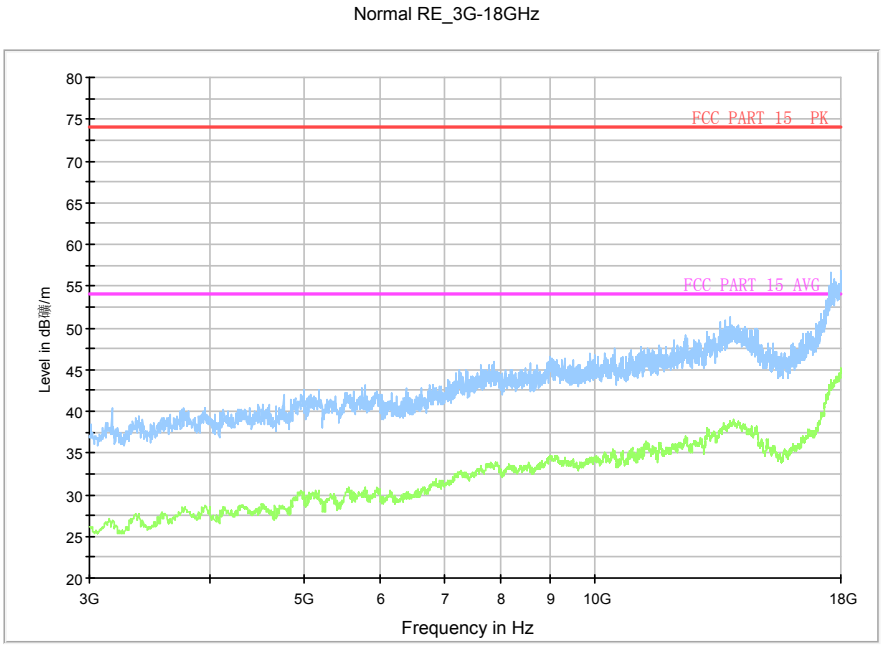

Fig.A.6.2.13 Radiated Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)

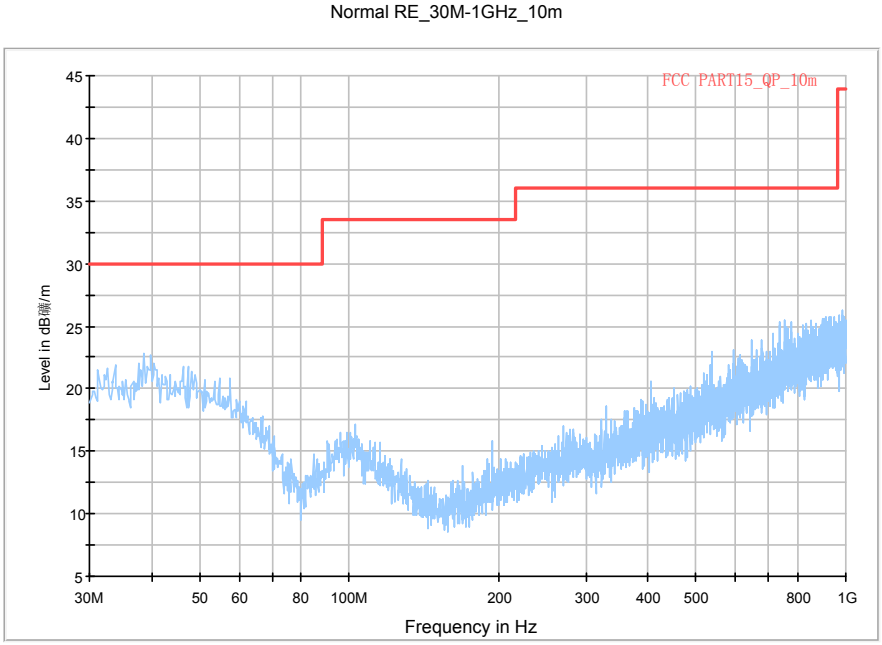

Fig.A.6.2.14 Radiated Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

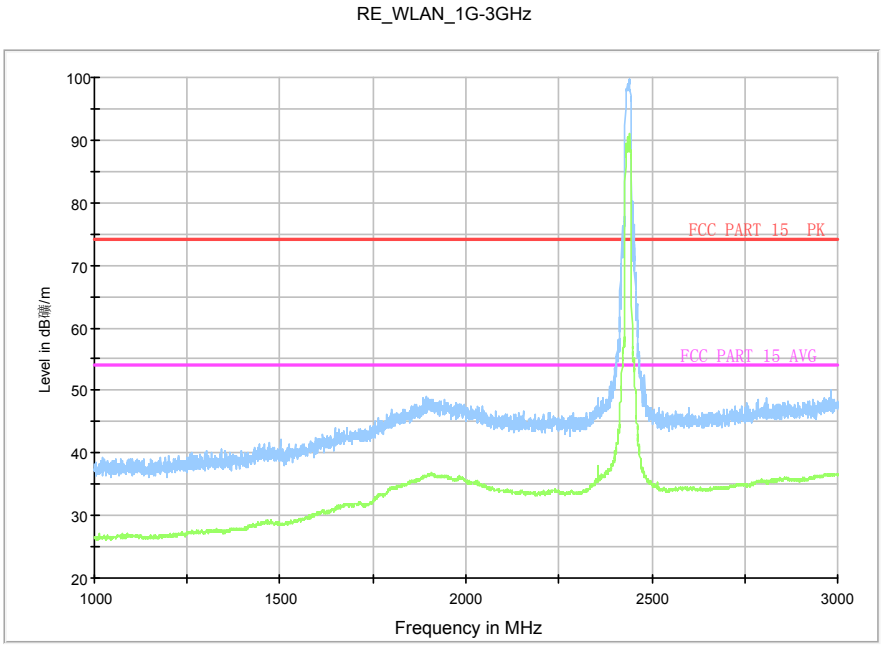

Fig.A.6.2.15 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-3 GHz)

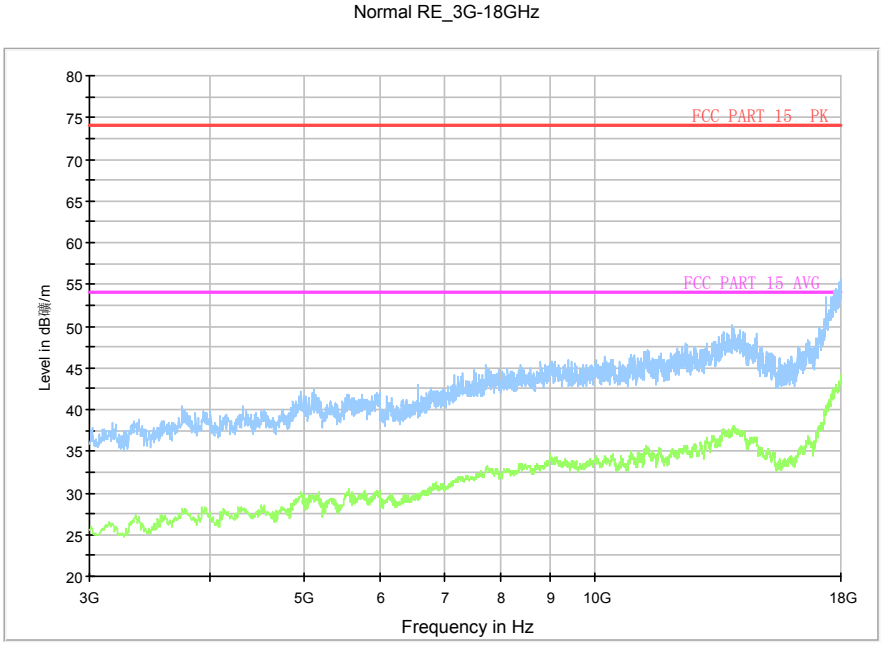

Fig.A.6.2.16 Radiated Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)

Normal RE_18G-26.5GHz

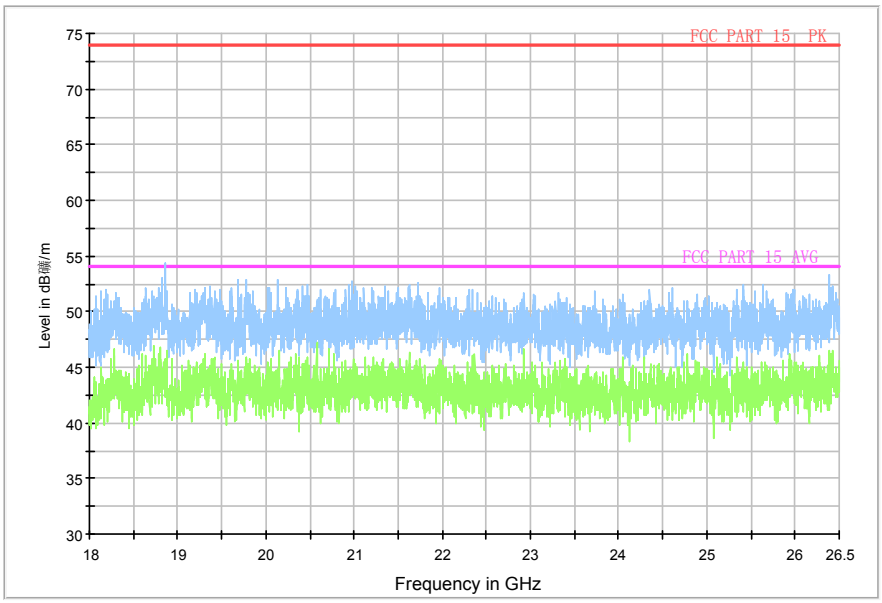

Fig.A.6.2.17 Radiated Spurious Emission (802.11g, Ch6, 18GHz – 26.5GHz)

RE-Power_2.45G-2.5GHz

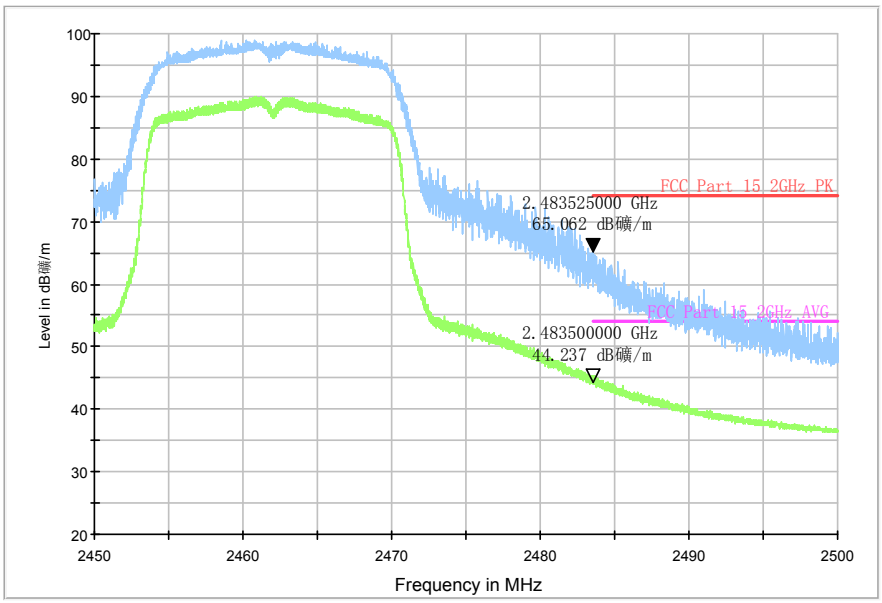

Fig.A.6.2.18 Radiated Spurious Emission (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

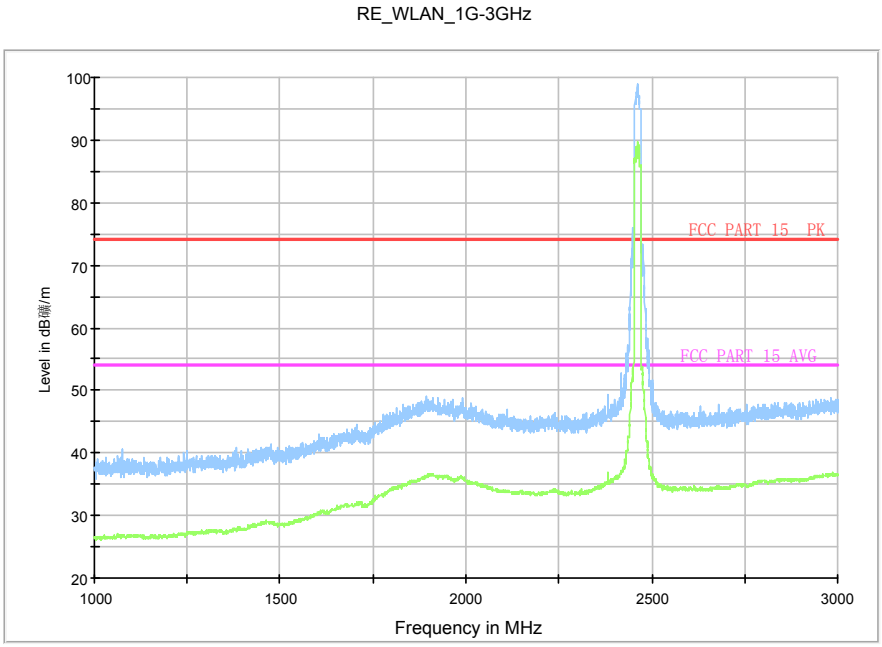

Fig.A.6.2.19 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-3 GHz)

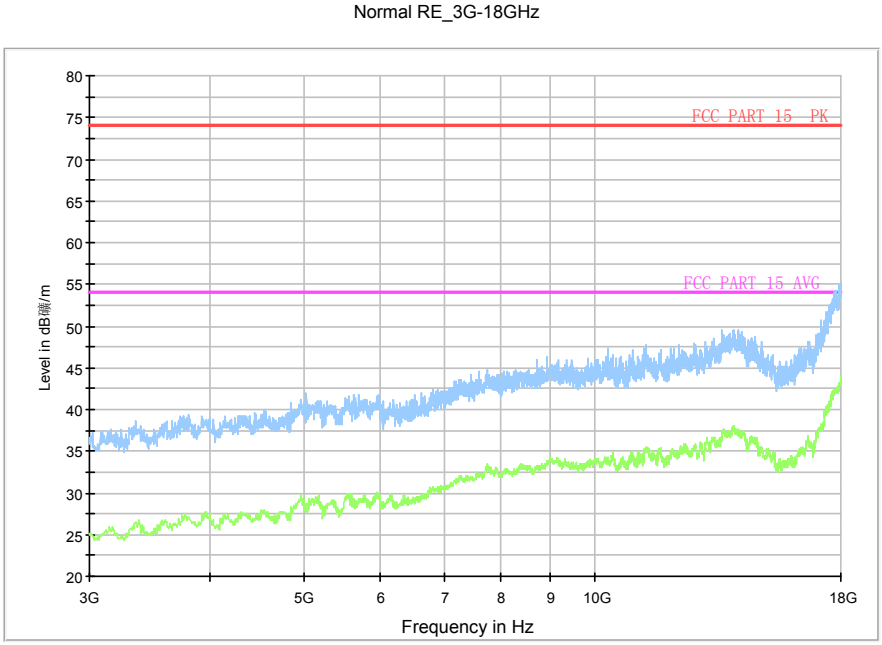

Fig.A.6.2.20 Radiated Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)

RE-Power_2.38G-2.43GHz

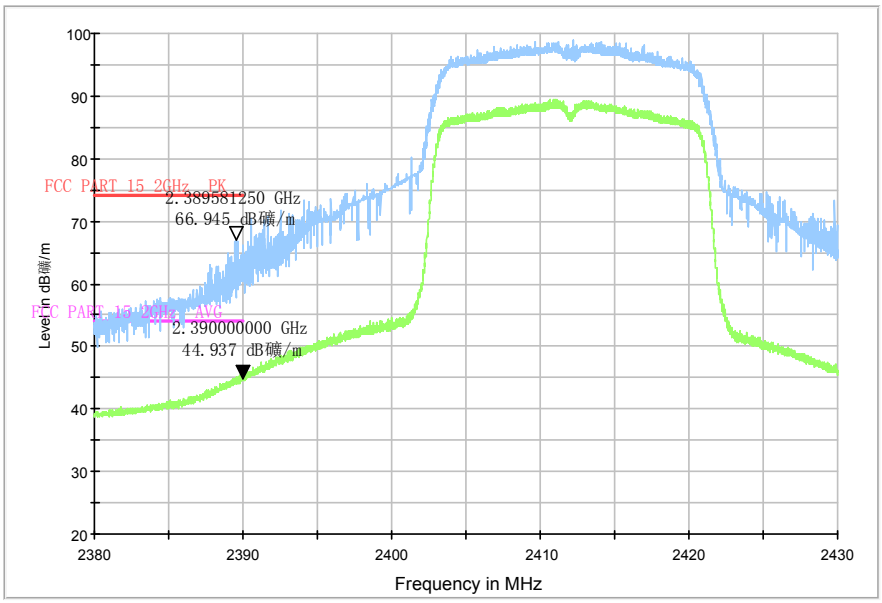

Fig.A.6.2.21 Radiated Spurious Emission (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

RE_WLAN_1G-3GHz

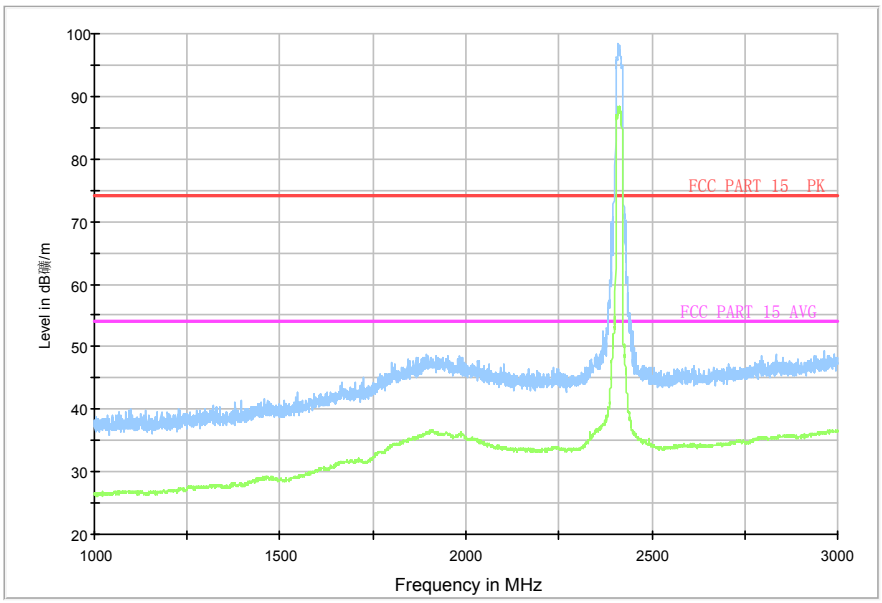

Fig.A.6.2.22 Radiated Spurious Emission (802.11n-HT20, Ch1, 1 GHz-3 GHz)

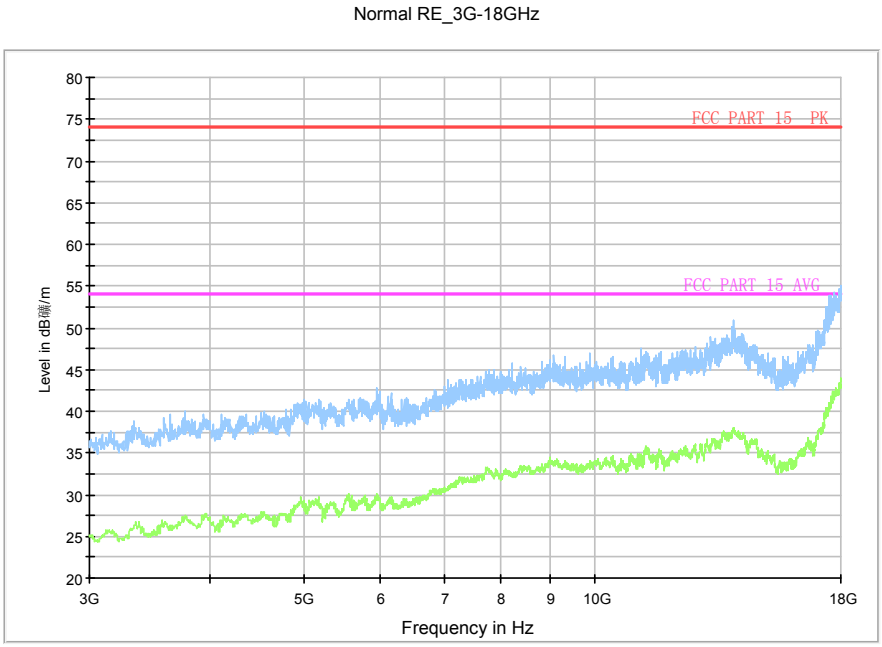

Fig.A.6.2.23 Radiated Spurious Emission (802.11n-HT20, Ch1, 3 GHz-18 GHz)

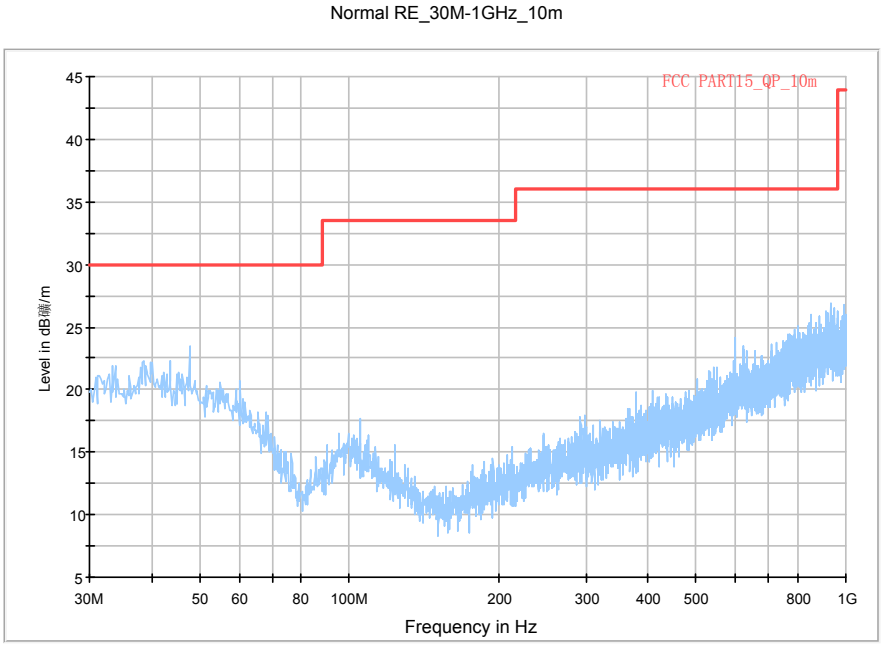

Fig.A.6.2.24 Radiated Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)

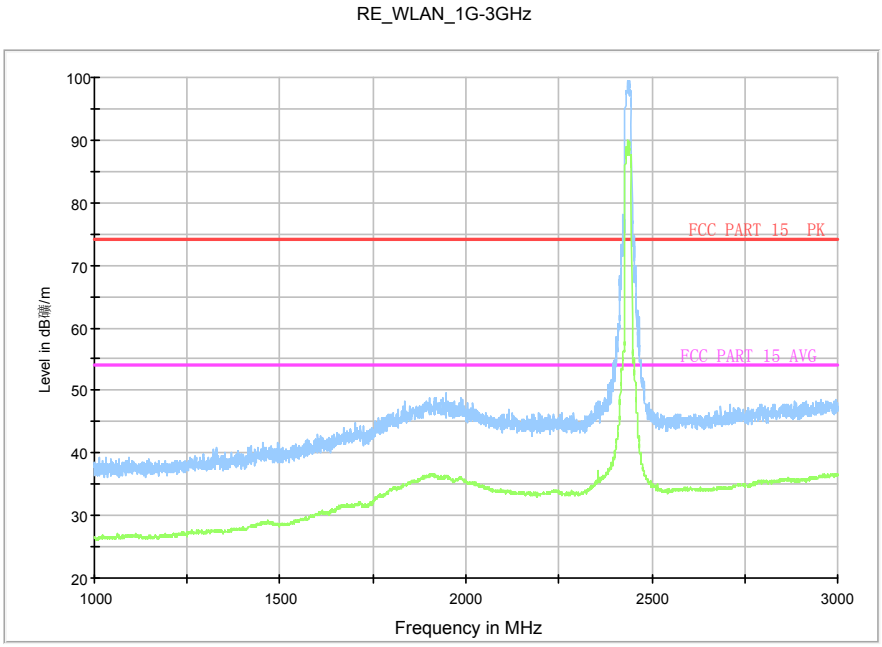

Fig.A.6.2.25 Radiated Spurious Emission (802.11n-HT20, Ch6, 1 GHz-3 GHz)

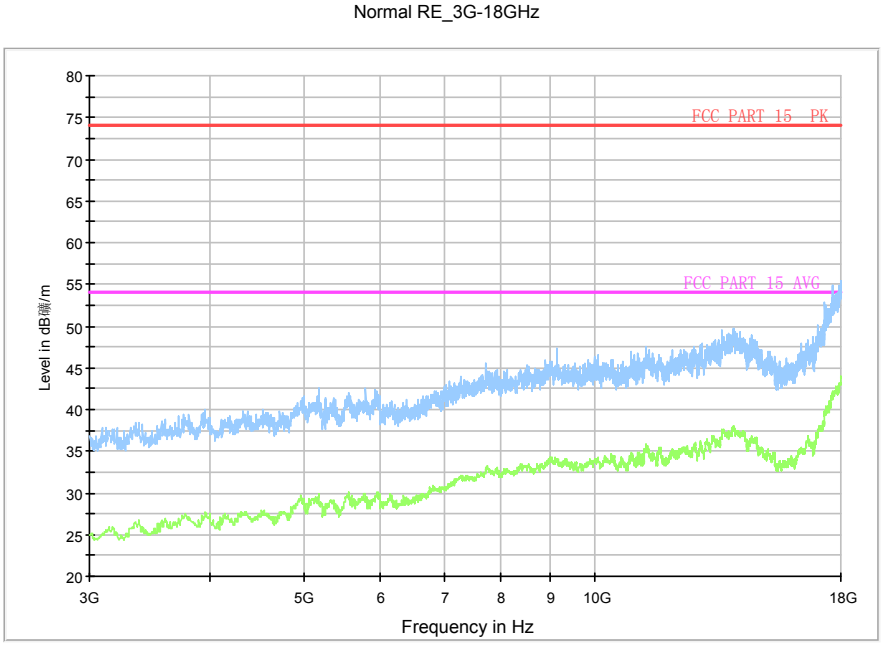

Fig.A.6.2.26 Radiated Spurious Emission (802.11n-HT20, Ch6, 3 GHz-18 GHz)

Normal RE_18G-26.5GHz

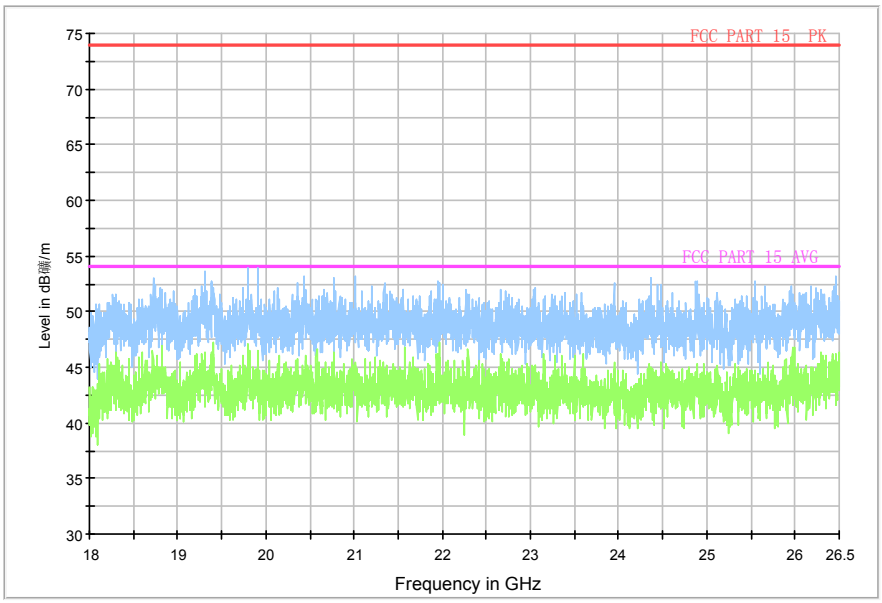

Fig.A.6.2.27 Radiated Spurious Emission (802.11n-HT20, Ch6, 18GHz – 26.5GHz)

RE-Power_2.45G-2.5GHz

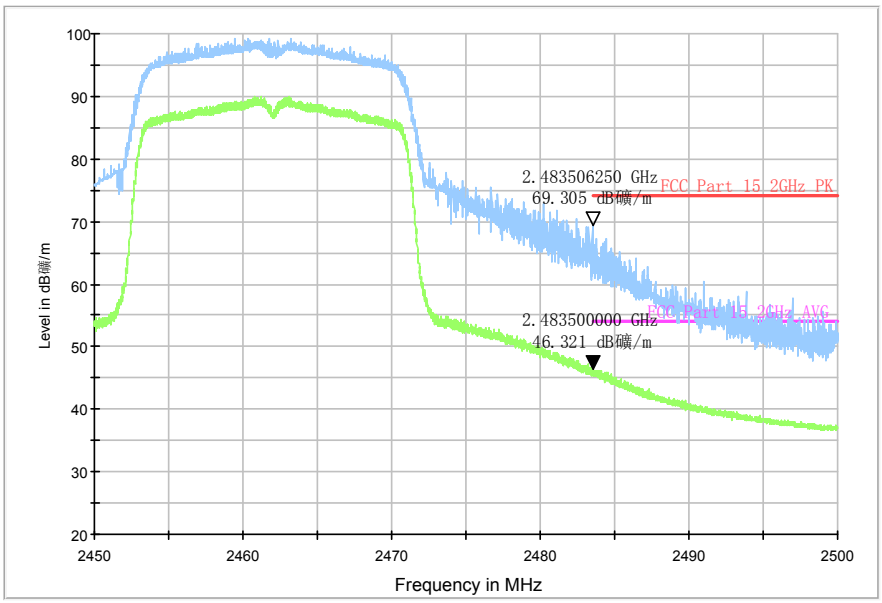

Fig.A.6.2.28 Radiated Spurious Emission (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

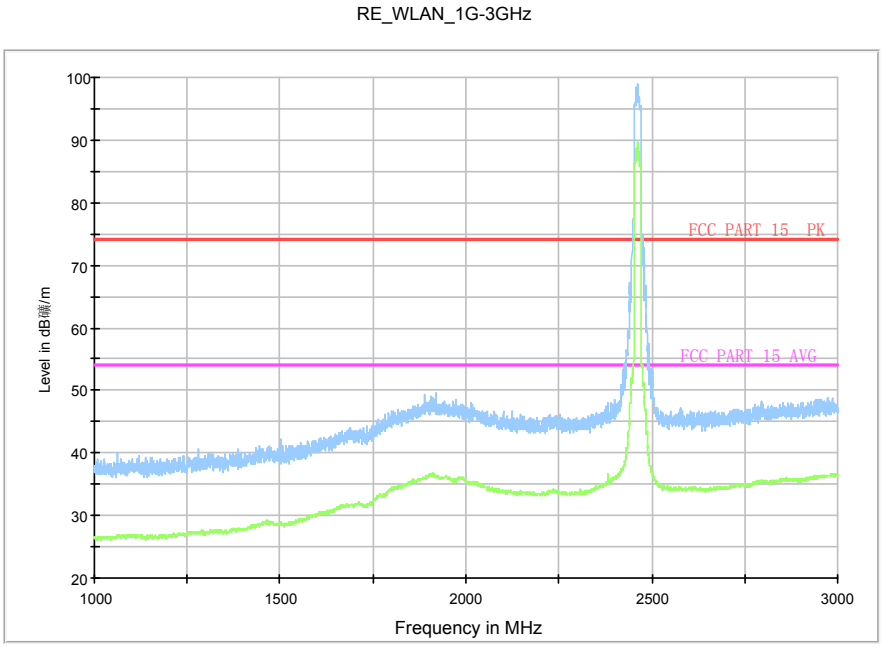

Fig.A.6.2.29 Radiated Spurious Emission (802.11n-HT20, Ch11, 1 GHz-3 GHz)

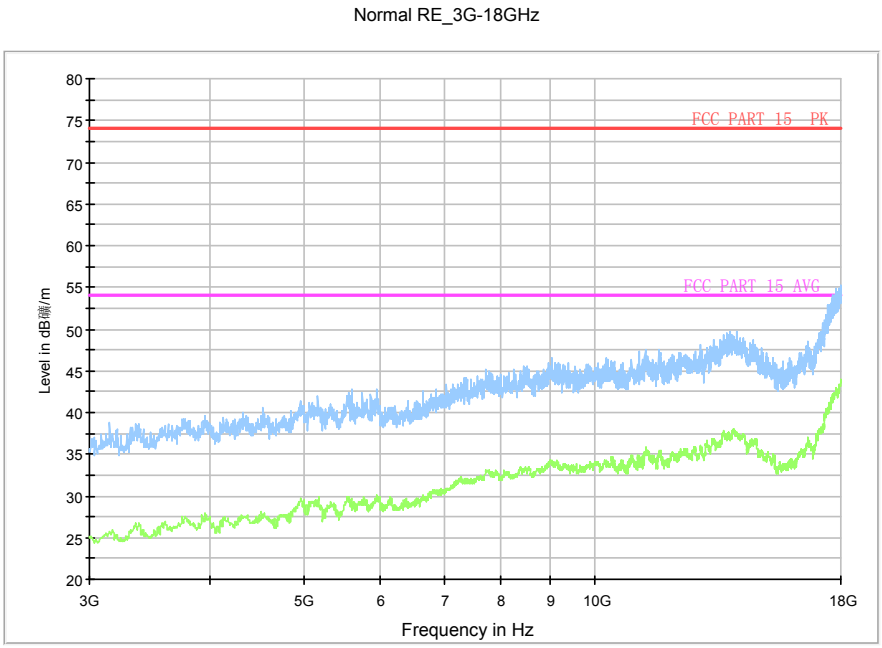

Fig.A.6.2.30 Radiated Spurious Emission (802.11n-HT20, Ch11, 3 GHz-18 GHz)

RE-Power_2.38G-2.43GHz

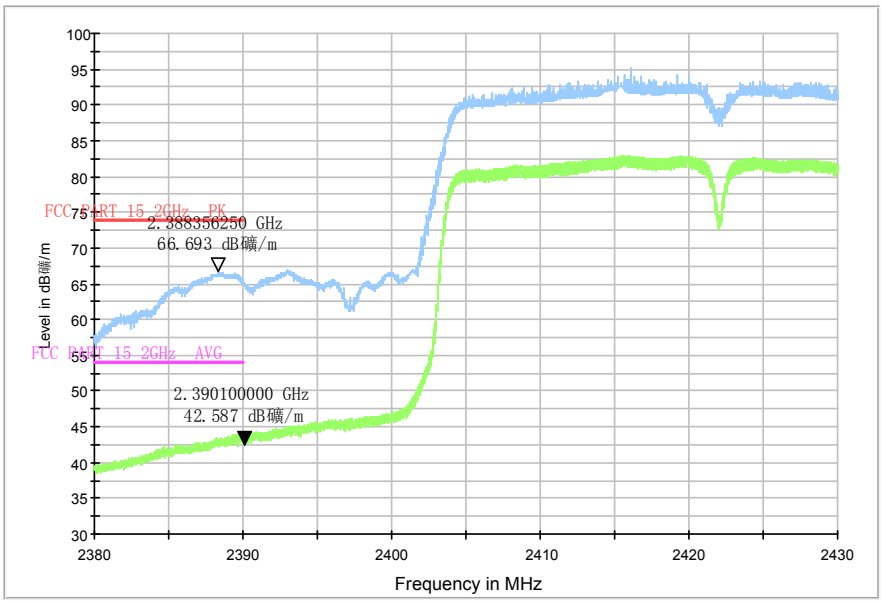

Fig.A.6.2.31 Radiated Spurious Emission (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.45GHz

RE_WLAN_1G-3GHz

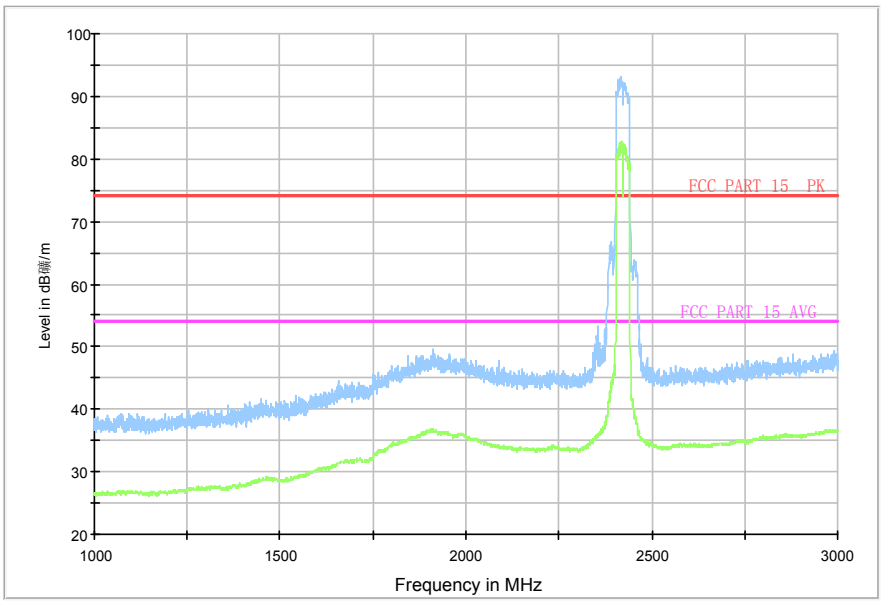

Fig.A.6.2.32 Radiated Spurious Emission (802.11n-HT40, ch3, 1 GHz-3 GHz)

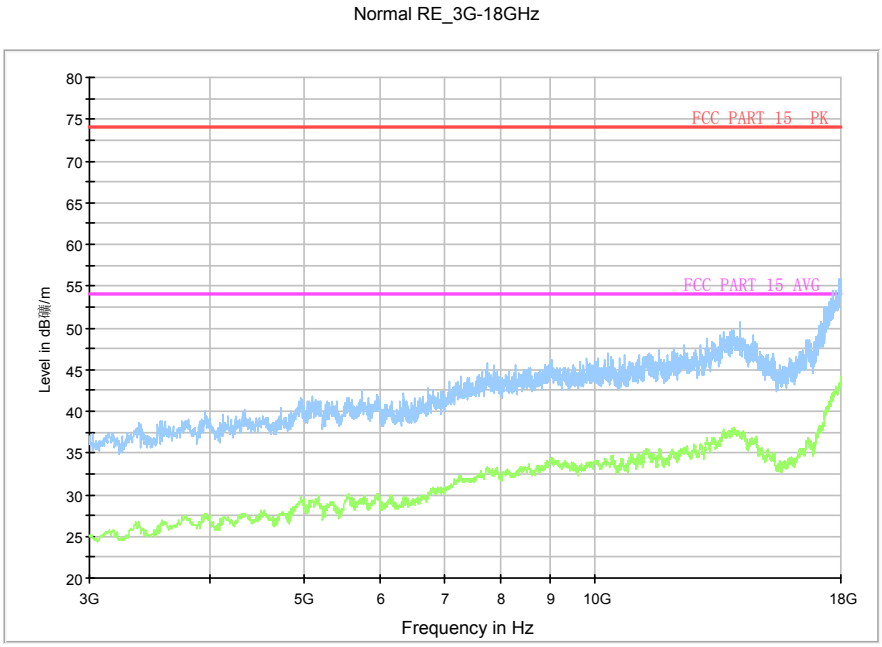

Fig.A.6.2.33 Radiated Spurious Emission (802.11n-HT40, ch3, 3 GHz-18 GHz)

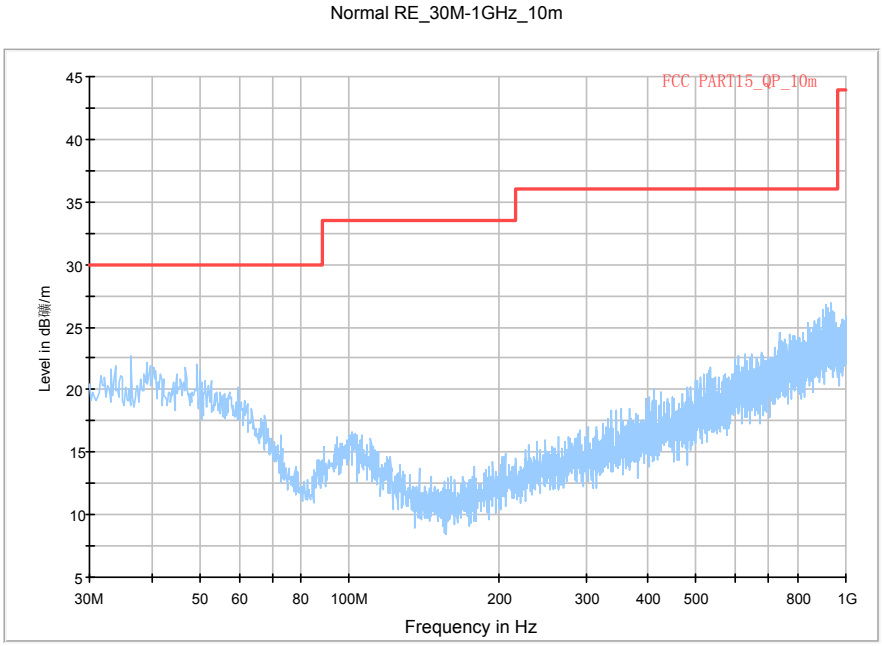

Fig.A.6.2.34 Radiated Spurious Emission (802.11n-HT40, Ch6, 30 MHz-1 GHz)

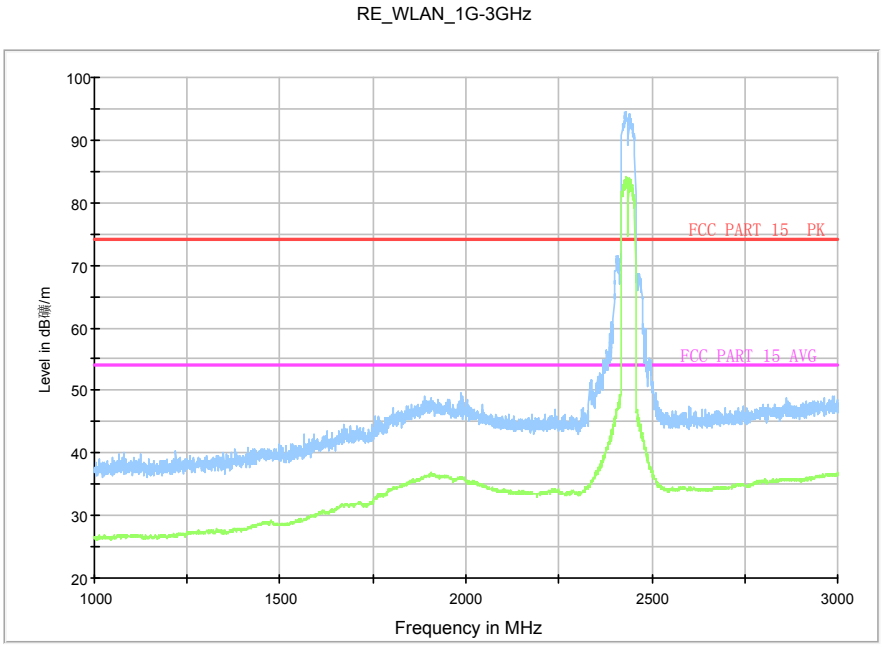

Fig.A.6.2.35 Radiated Spurious Emission (802.11n-HT40, Ch6, 1 GHz-3 GHz)

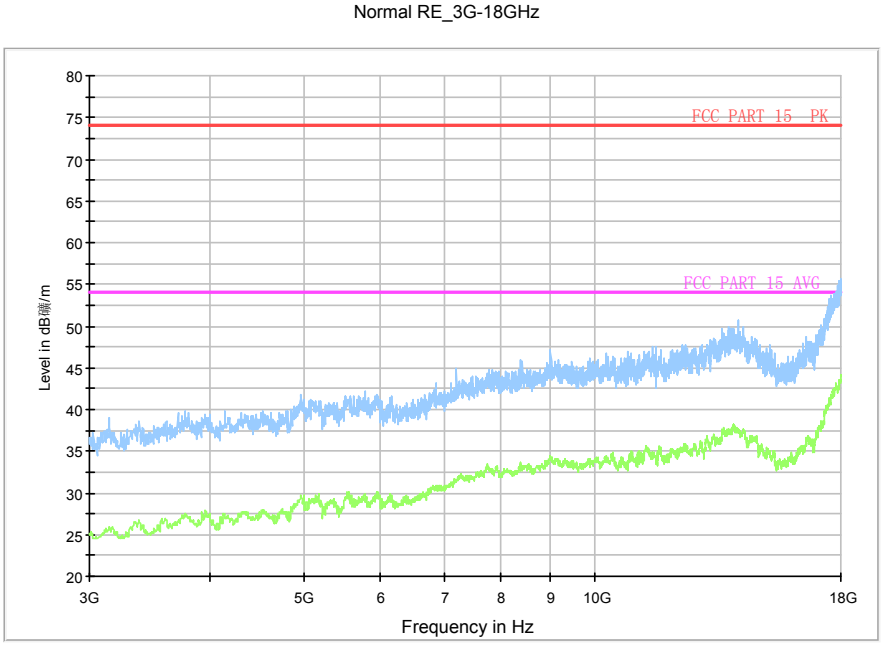

Fig.A.6.2.36 Radiated Spurious Emission (802.11n-HT40, Ch6, 3 GHz-18 GHz)

Normal RE_18G-26.5GHz

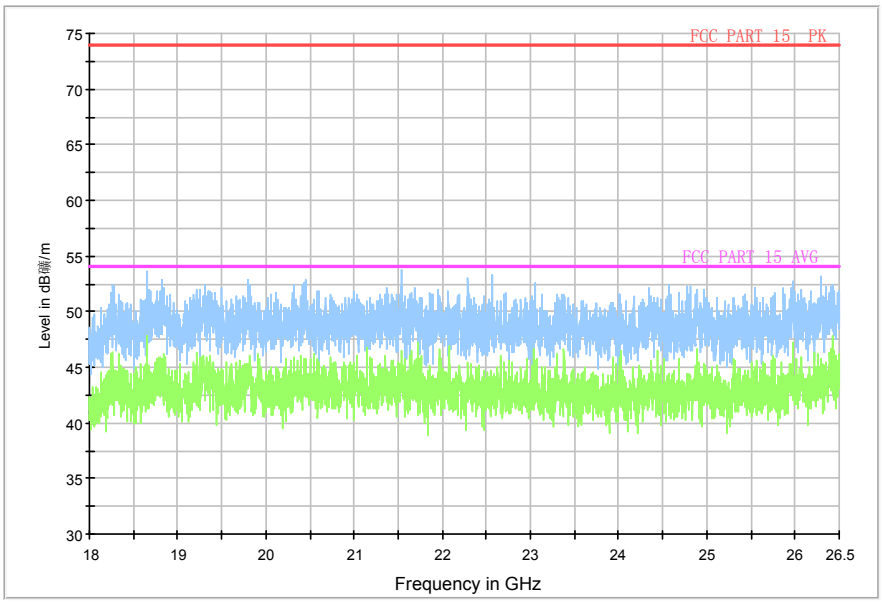

Fig.A.6.2.37 Radiated Spurious Emission (802.11n-HT40, Ch6, 18GHz – 26.5GHz)

RE-Power_2.45G-2.5GHz

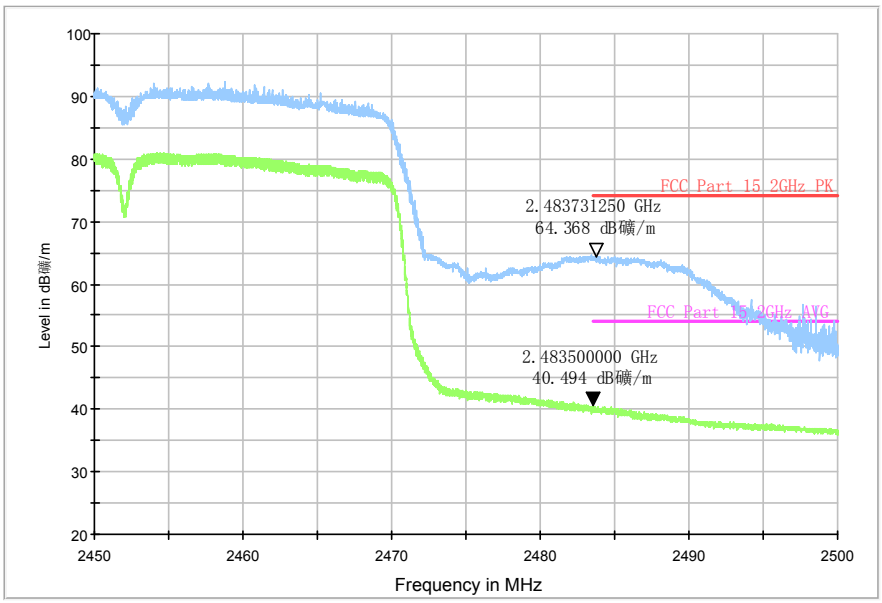

Fig.A.6.2.38 Radiated Spurious Emission (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

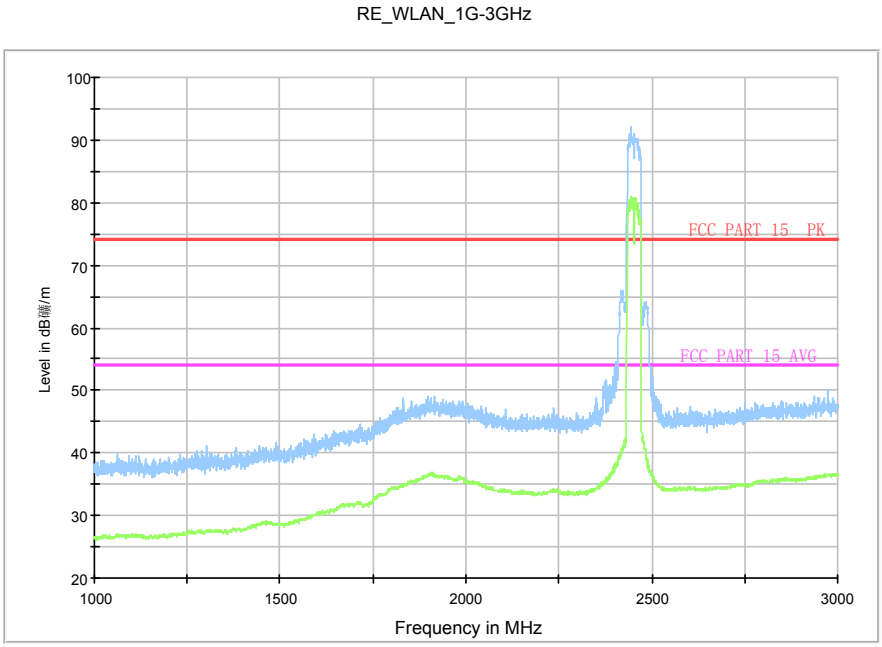

Fig.A.6.2.39 Radiated Spurious Emission (802.11n-HT40, ch9, 1 GHz-3 GHz)

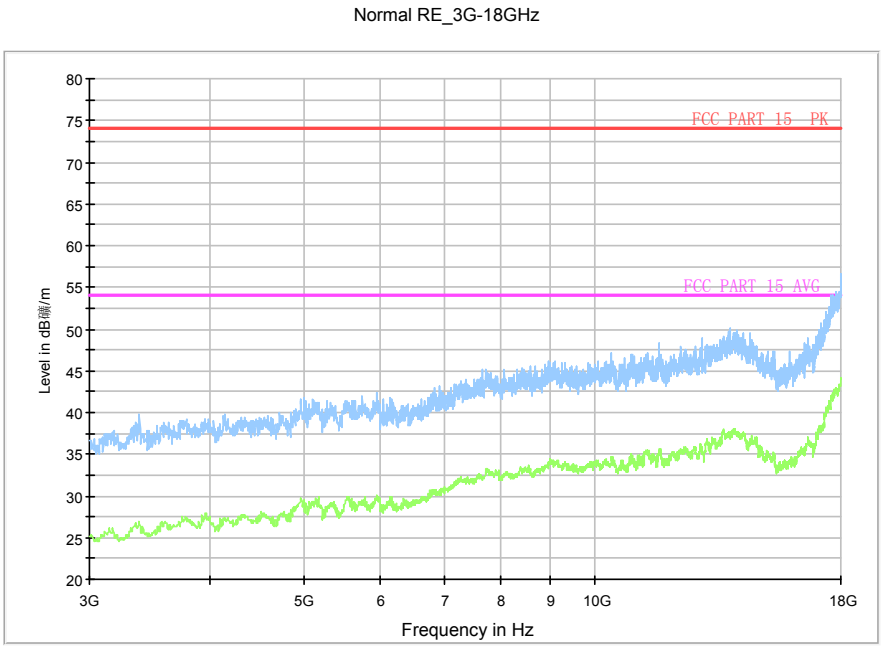

Fig.A.6.2.40 Radiated Spurious Emission (802.11n-HT40, ch9, 3 GHz-18 GHz)

A.7. Spurious Emissions Radiated < 30MHz

Measurement Limit:

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

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)).

Measurement Results:

Mode	Frequency Range	Test Results	Conclusion
802.11b	9 kHz ~30 MHz	Fig.A.7.1	P

Conclusion: PASS

Test graphs as below:

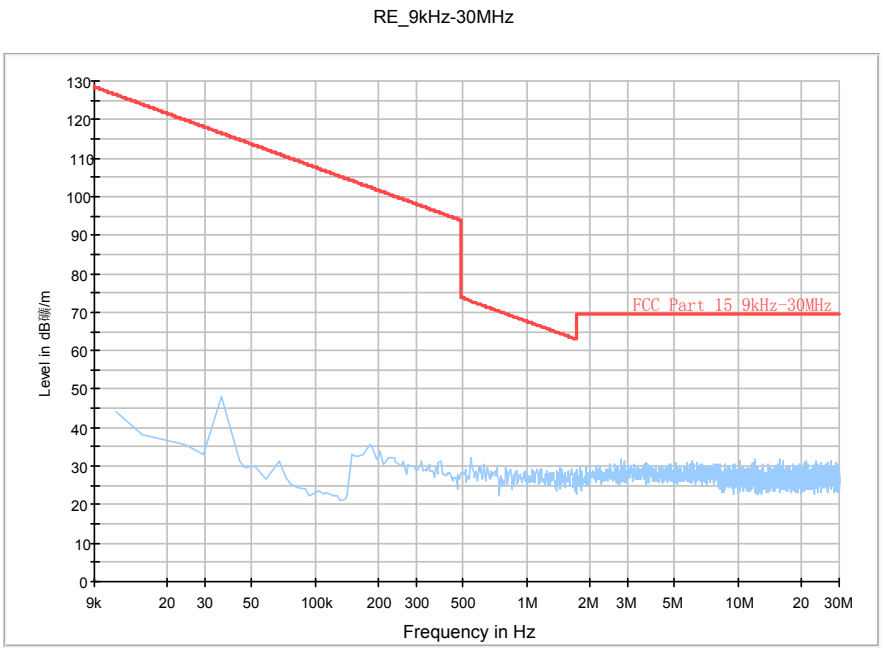

Fig.A.7.1 Radiated Spurious Emission (802.11b, 9 kHz ~30 MHz)

A.8. AC Powerline Conducted Emission

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV) With charger		Conclusion
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.8.1	Fig.A.8.2	P
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) With charger		Conclusion
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.8.1	Fig.A.8.2	P
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

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.2dB, k=2.

Test graphs as below:

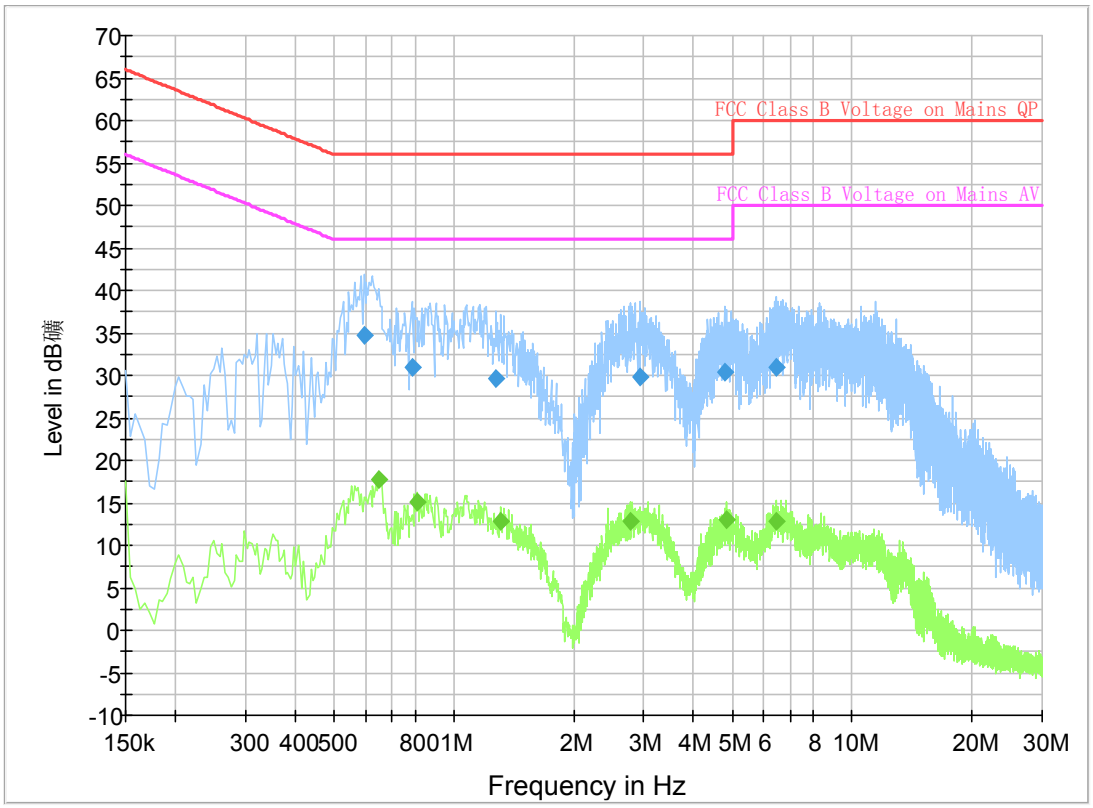

Fig.A.8.1 AC Powerline Conducted Emission-802.11b

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)
0.595500	34.8	GND	L1	9.8	21.2	56.0
0.784500	30.9	GND	L1	9.8	25.1	56.0
1.275000	29.6	GND	L1	9.7	26.4	56.0
2.940000	29.8	GND	L1	9.7	26.2	56.0
4.780500	30.4	GND	L1	9.8	25.6	56.0
6.445500	30.9	GND	L1	9.7	29.1	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.649500	17.8	GND	L1	9.8	28.2	46.0
0.807000	15.1	GND	L1	9.8	30.9	46.0

1.315500	12.8	GND	L1	9.7	33.2	46.0
2.778000	12.8	GND	L1	9.7	33.2	46.0
4.830000	13.0	GND	L1	9.8	33.0	46.0
6.445500	12.8	GND	L1	9.7	37.2	50.0

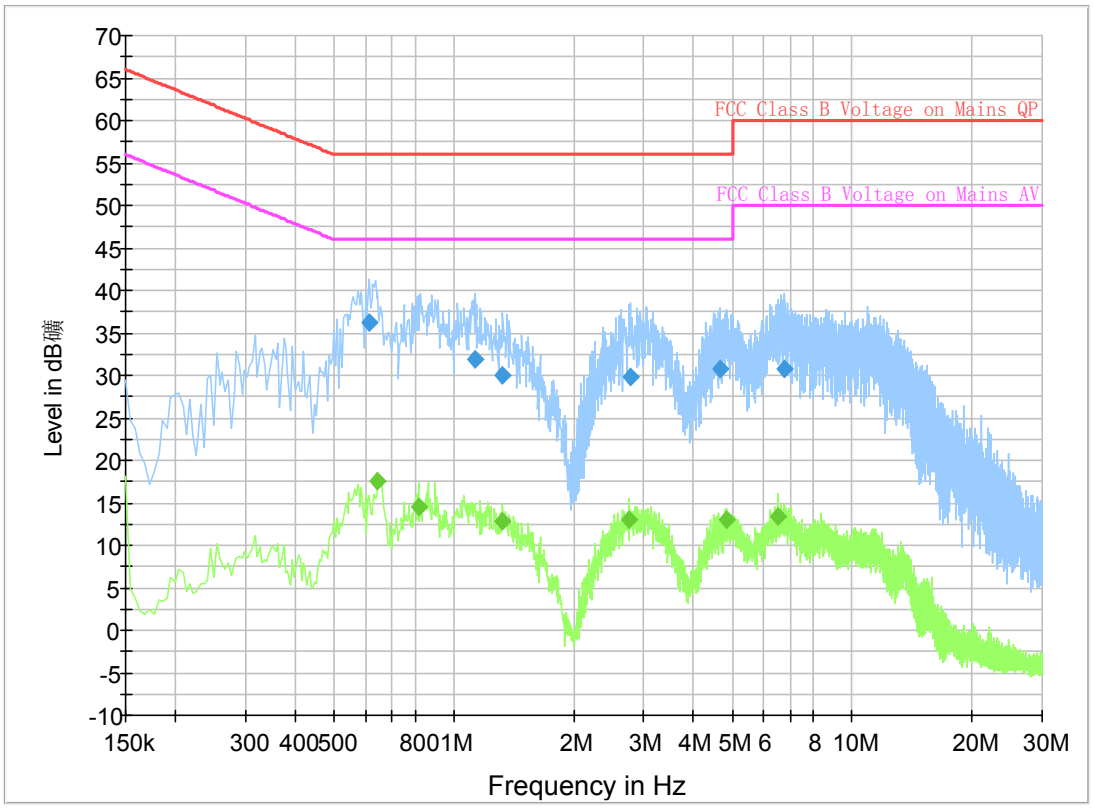

Fig.A.8.2 AC Powerline Conducted Emission-Idle

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)
0.613500	36.3	GND	L1	9.8	19.7	56.0
1.131000	31.8	GND	L1	9.7	24.2	56.0
1.324500	30.0	GND	L1	9.7	26.0	56.0
2.769000	29.7	GND	L1	9.7	26.3	56.0
4.677000	30.7	GND	L1	9.8	25.3	56.0
6.783000	30.8	GND	L1	9.7	29.2	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.645000	17.5	GND	L1	9.8	28.5	46.0
0.816000	14.5	GND	L1	9.8	31.5	46.0

1.324500	12.9	GND	L1	9.7	33.1	46.0
2.751000	13.0	GND	L1	9.7	33.0	46.0
4.830000	12.9	GND	L1	9.8	33.1	46.0
6.517500	13.5	GND	L1	9.7	36.5	50.0

***** END OF REPORT BODY *****