

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

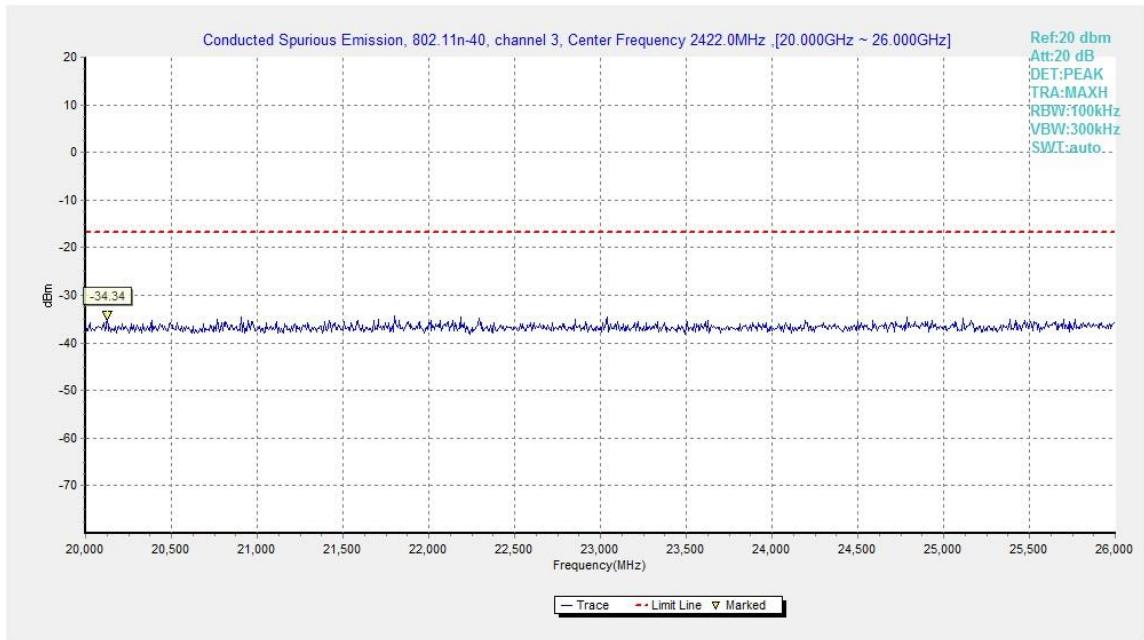


Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

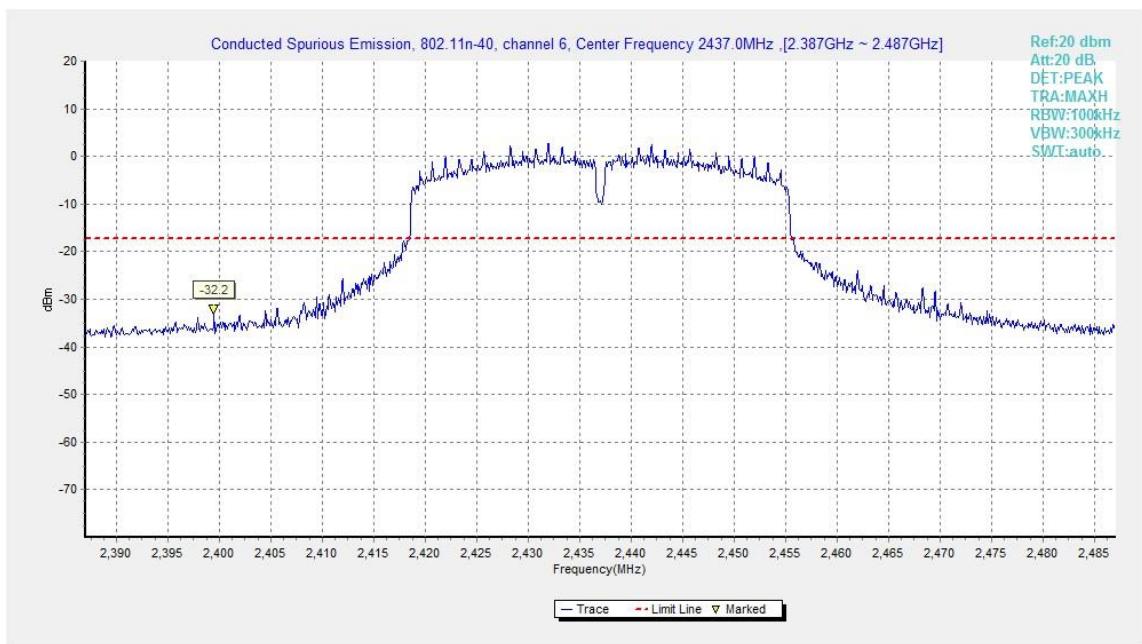


Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

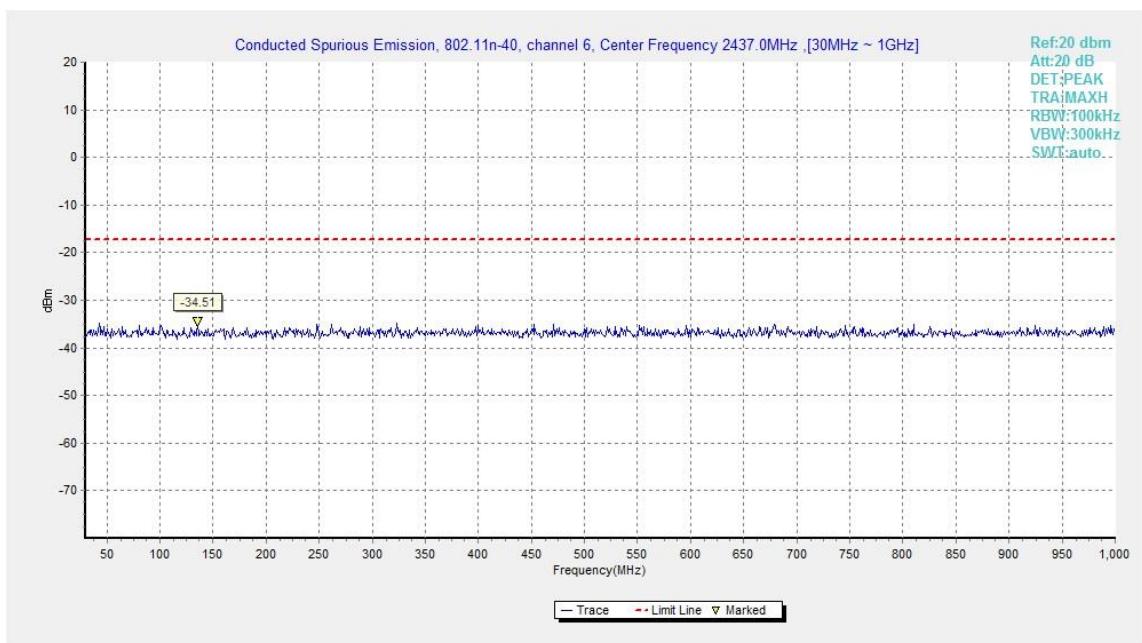


Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

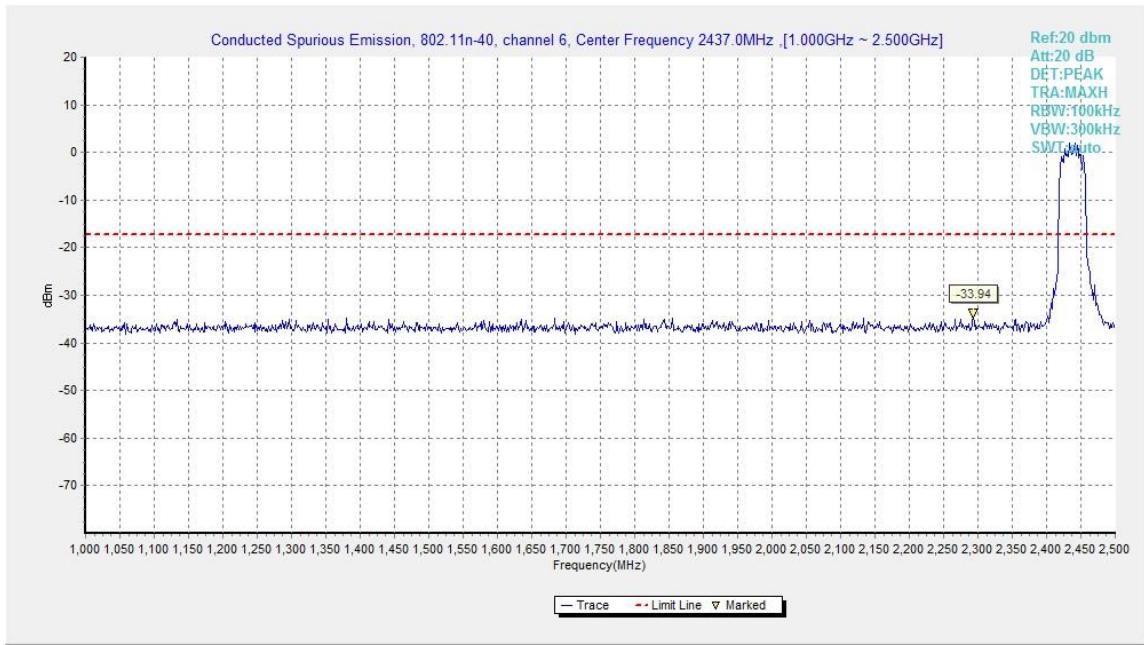


Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

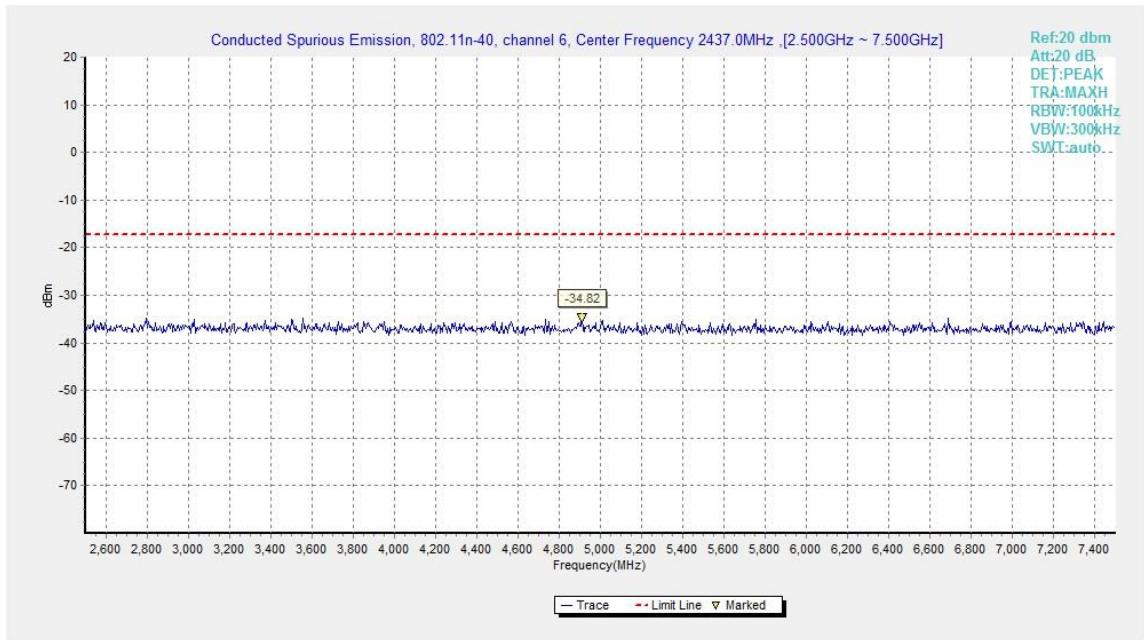


Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

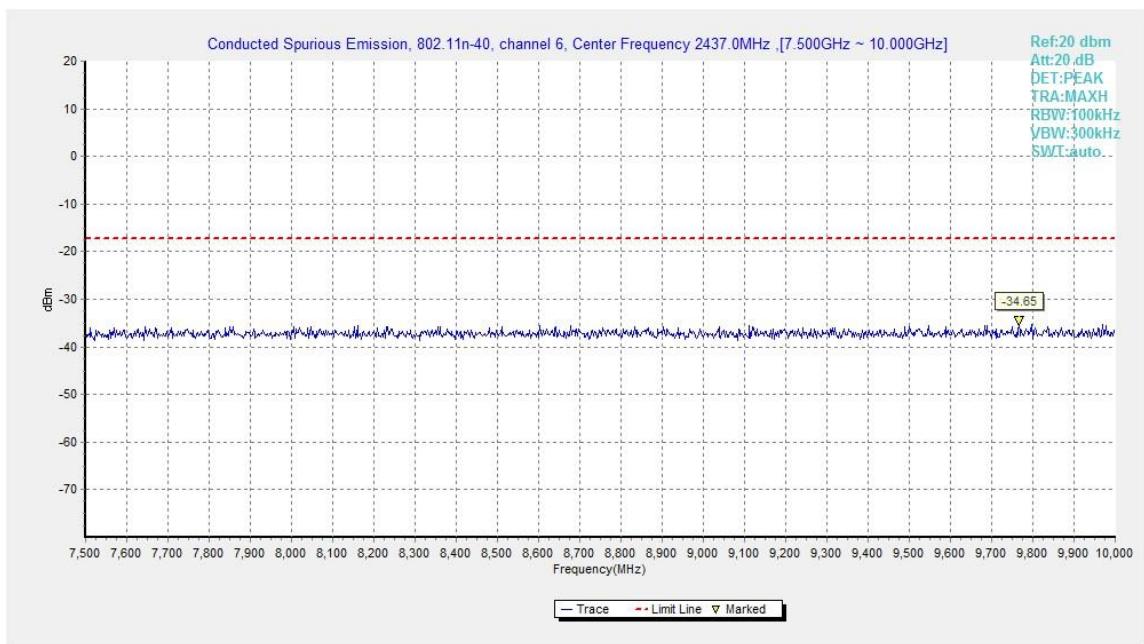


Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

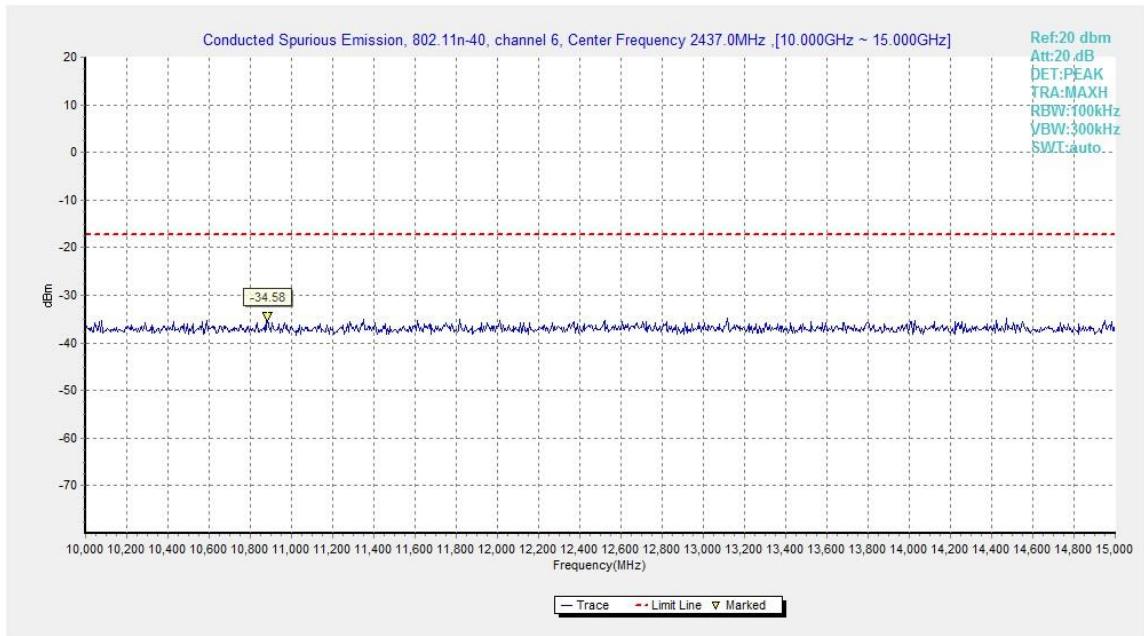


Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

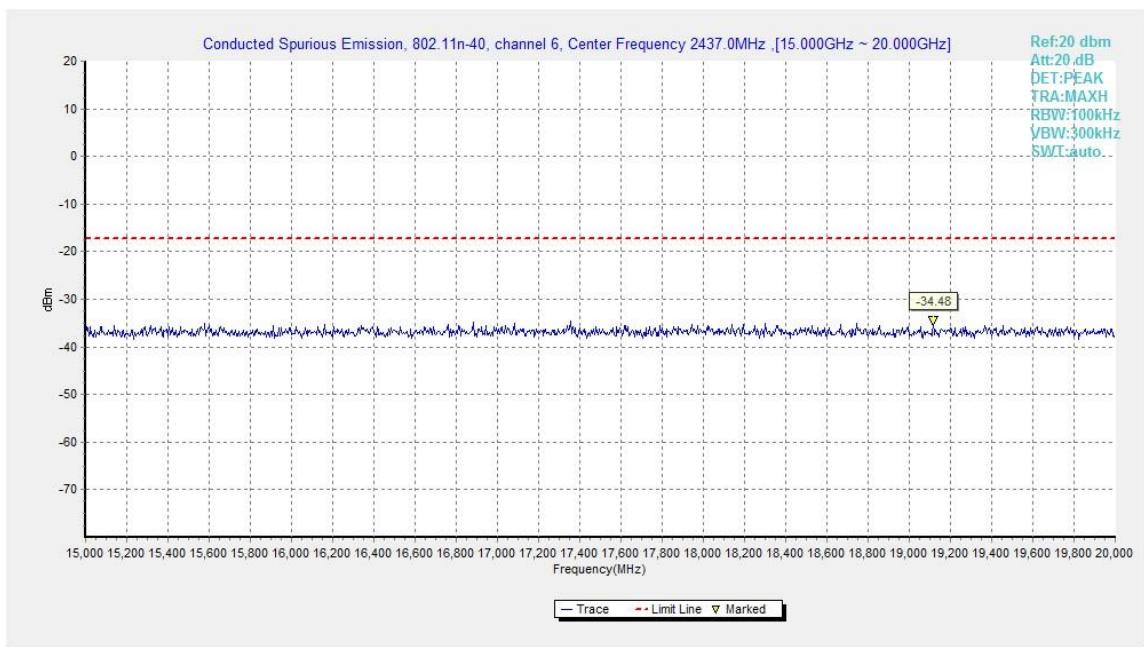


Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

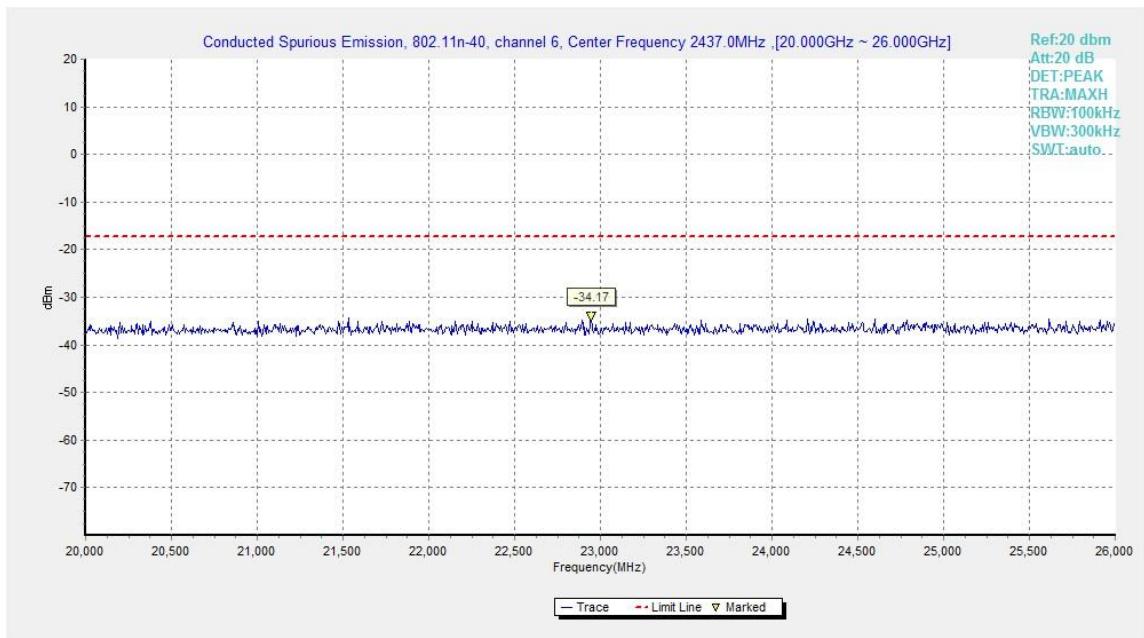


Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

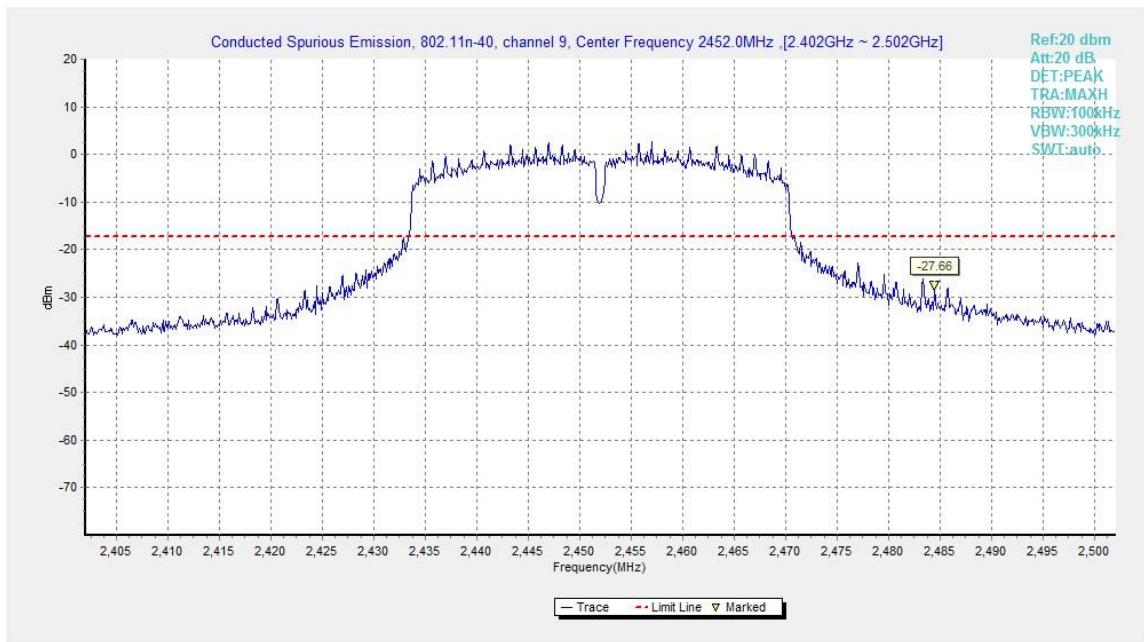


Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

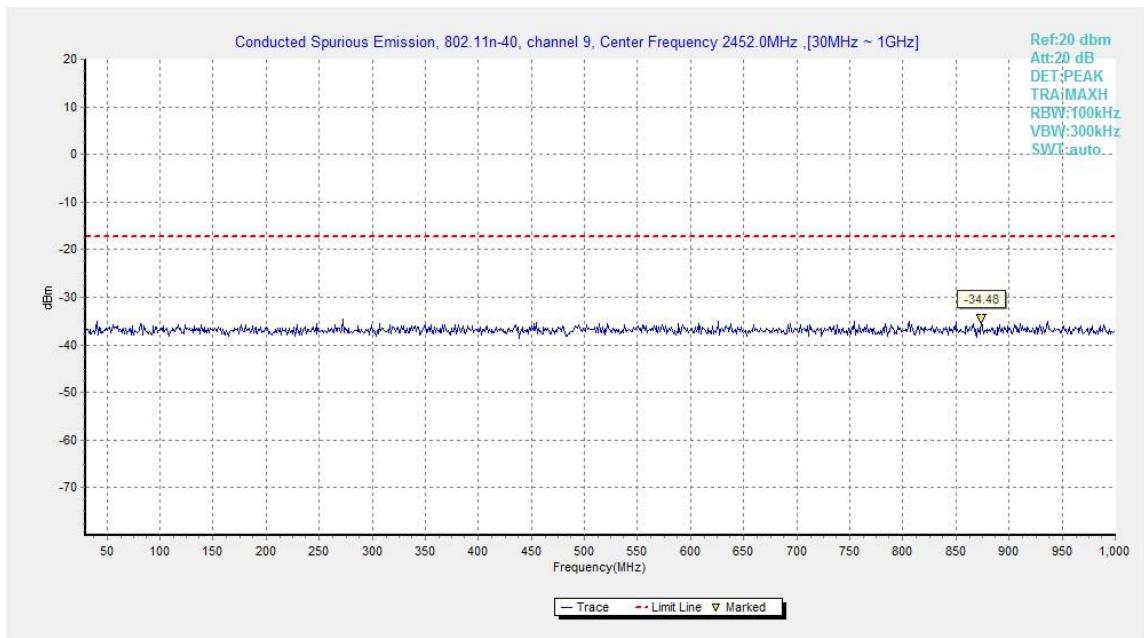


Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

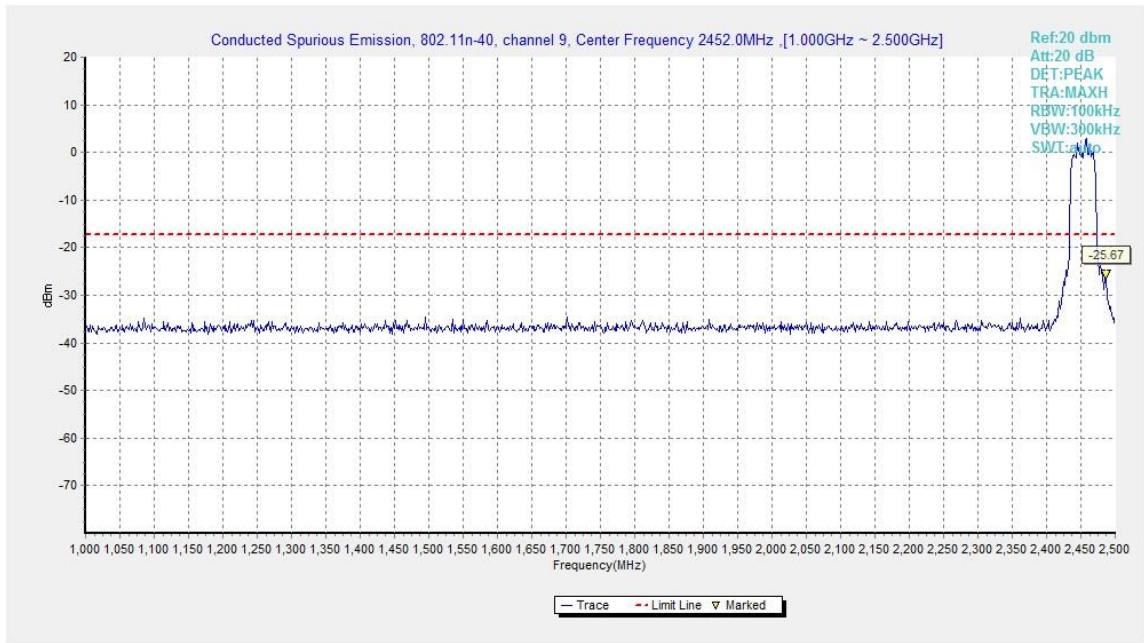


Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

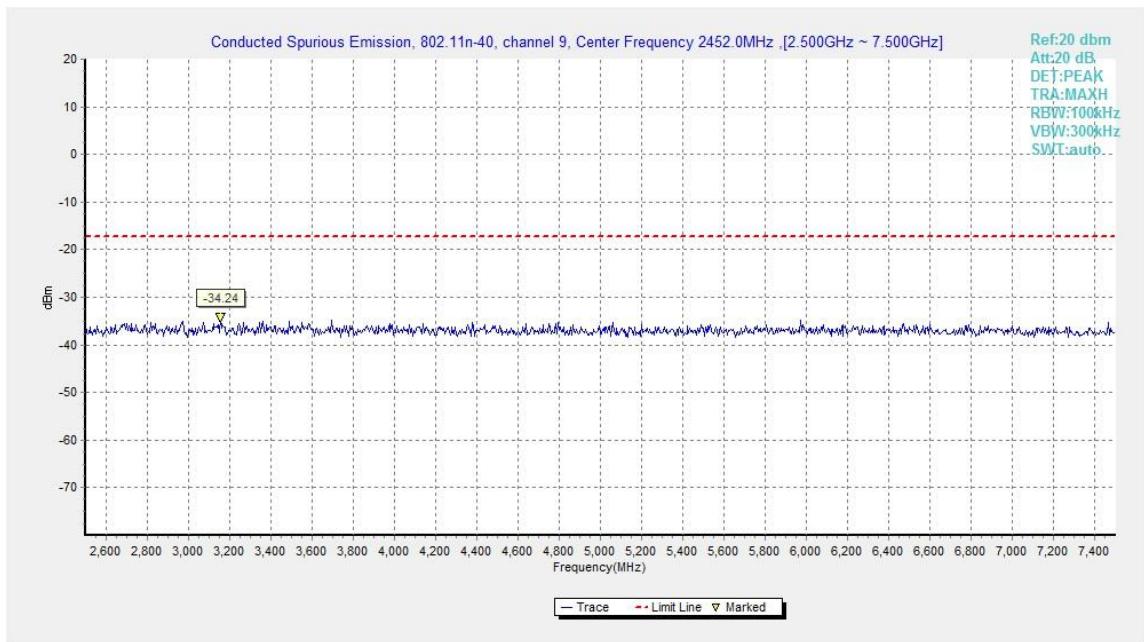


Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

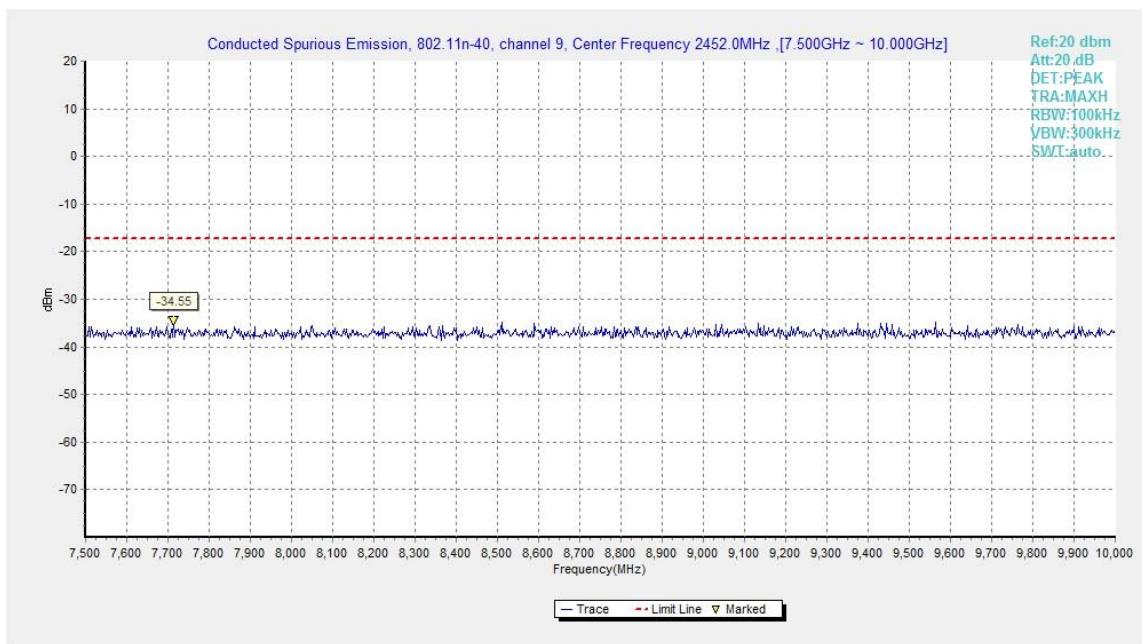


Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

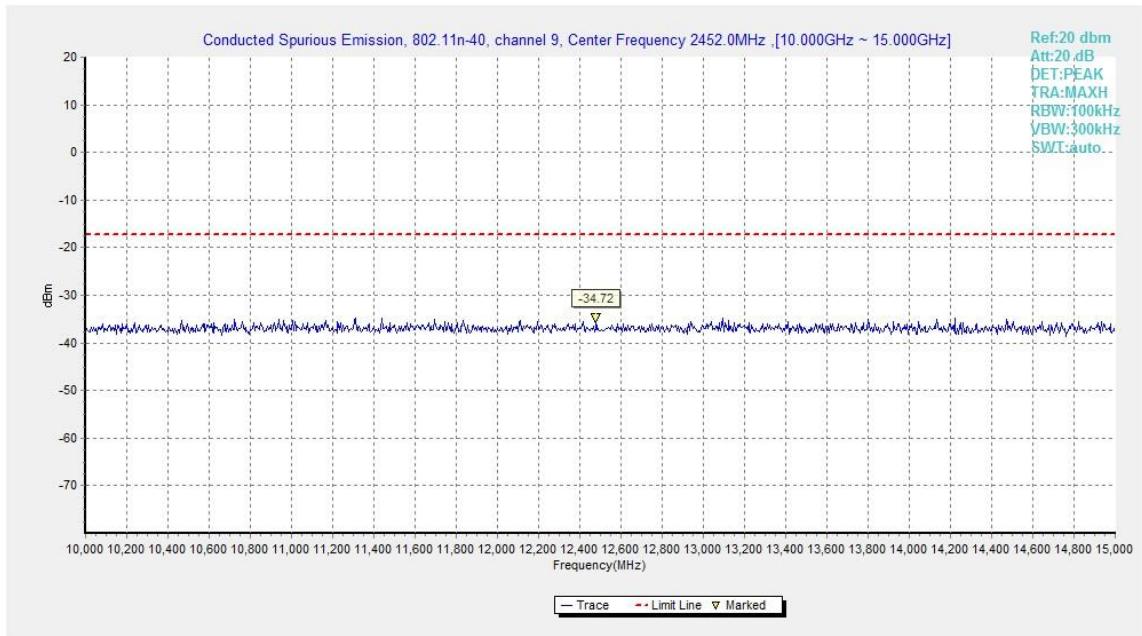


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

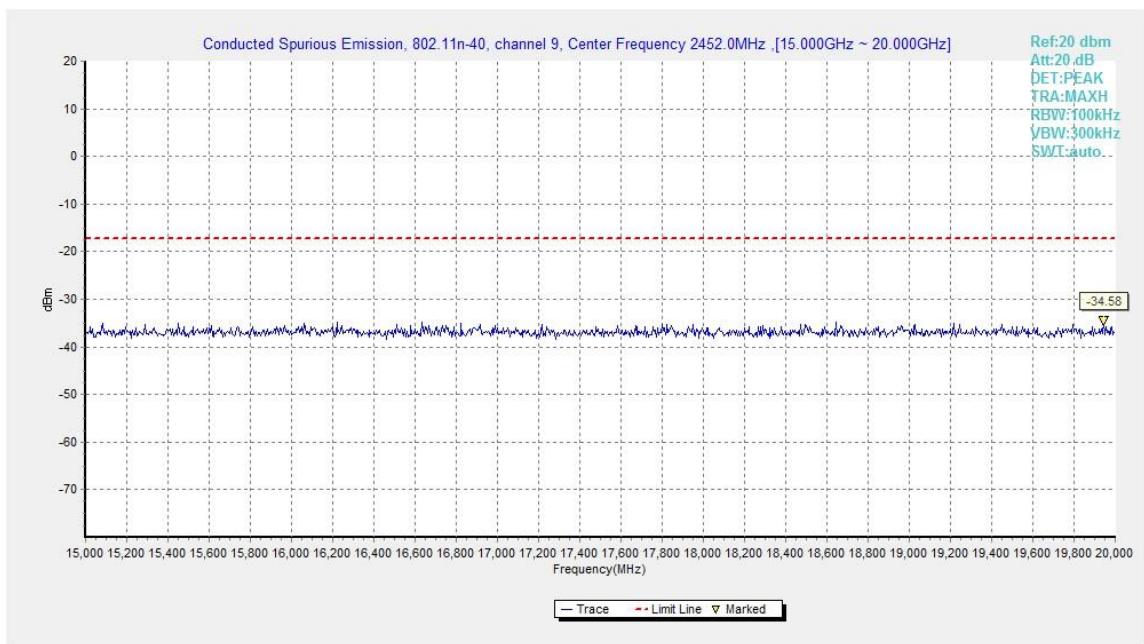


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

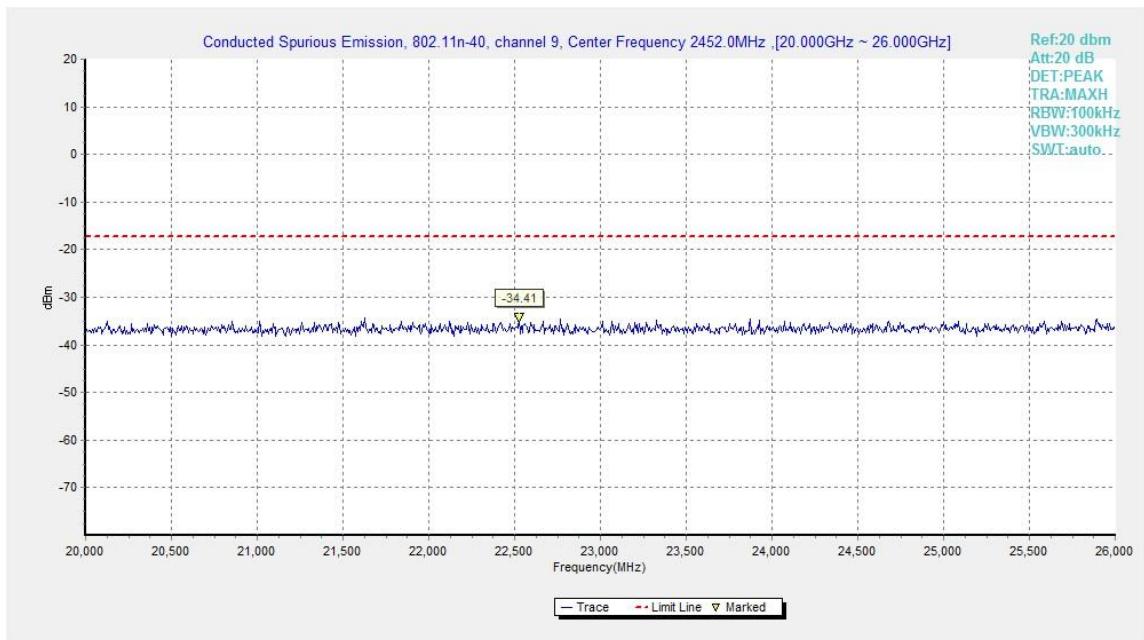


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

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(μ V/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

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:**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	9 kHz ~30 MHz	Fig.A.6.2.4	P
		30 MHz ~1 GHz	Fig.A.6.2.5	P
		1 GHz ~ 3 GHz	Fig.A.6.2.6	P
		3 GHz ~ 18 GHz	Fig.A.6.2.7	P
		18 GHz~ 26.5 GHz	Fig.A.6.2.8	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.9	P
	11	1 GHz ~ 3 GHz	Fig.A.6.2.10	P
		3 GHz ~ 18 GHz	Fig.A.6.2.11	P

802.11g mode

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

802.11n-HT20 mode

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

802.11n-HT40 mode

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

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:

$$\text{Result} = P_{Mea} + A_{RPL} = P_{Mea} + \text{Cable Loss} + \text{Antenna Factor}$$

Average Result:
802.11b
Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2389.280	35.5	-38.8	27.7	46.600	V
18000.000	47.7	-45.6	44.5	48.766	H
17992.500	47.4	-17.7	45.6	19.500	V
17999.000	47.4	-17.7	45.6	19.500	H
17997.000	47.3	-17.7	45.6	19.400	V
17998.500	47.2	-17.7	45.6	19.300	V

Ch7

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17994.000	47.5	-17.7	45.6	19.600	V
17999.000	47.4	-17.7	45.6	19.500	V
17993.500	47.4	-17.7	45.6	19.500	H
17997.000	47.2	-17.7	45.6	19.300	H
17998.000	47.2	-17.7	45.6	19.300	H
17996.000	47.2	-17.7	45.6	19.300	V

Ch13

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2483.540	47.7	-38.9	27.7	58.900	V
17972.000	50.9	-17.7	45.6	23.000	H
17856.500	50.7	-18.5	45.6	23.600	H
17976.000	50.7	-17.7	45.6	22.800	V
17910.000	50.6	-18.5	45.6	23.500	H
17921.000	50.6	-17.7	45.6	22.700	V

802.11g

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2483.513	31.1	-38.9	27.7	42.300	V
17986.500	47.4	-17.7	45.6	19.500	V
17996.500	47.3	-17.7	45.6	19.400	H
17991.000	47.3	-17.7	45.6	19.400	V
17987.500	47.3	-17.7	45.6	19.400	H
17998.500	47.3	-17.7	45.6	19.400	V

Ch7

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17995	47.6	-17.7	45.6	19.7	H
18000	47.6	-45.6	44.5	48.7	H
17993	47.3	-17.7	45.6	19.4	V
17998.5	47.3	-17.7	45.6	19.4	V
17999	47.3	-17.7	45.6	19.4	H
17995.5	47.2	-17.7	45.6	19.3	V

Ch13

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2483.700	44.1	-38.9	27.7	55.300	V
17999.500	47.6	-17.7	45.6	19.700	H
17995.000	47.4	-17.7	45.6	19.500	V
17996.500	47.3	-17.7	45.6	19.400	H
17988.500	47.2	-17.7	45.6	19.300	V
17999.000	47.2	-17.7	45.6	19.300	V

802.11n-HT20

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2389.765	33.4	-38.8	27.7	44.500	H
17995.000	47.4	-17.7	45.6	19.500	H
17997.000	47.4	-17.7	45.6	19.500	V
17996.500	47.4	-17.7	45.6	19.500	H
17999.000	47.3	-17.7	45.6	19.400	V
17994.500	47.3	-17.7	45.6	19.400	H

Ch7

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17994.500	47.5	-17.7	45.6	19.600	H
17990.000	47.3	-17.7	45.6	19.400	H
17999.000	47.2	-17.7	45.6	19.300	V
17978.500	47.2	-17.7	45.6	19.300	V
17985.500	47.2	-17.7	45.6	19.300	H
17967.000	47.2	-17.7	45.6	19.300	H

Ch13

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2486.440	33.6	-38.9	27.7	44.800	V
17997.500	47.4	-17.7	45.6	19.500	H
17996.500	47.4	-17.7	45.6	19.500	V
17991.500	47.3	-17.7	45.6	19.400	H
17996.000	47.2	-17.7	45.6	19.300	V
17994.000	47.2	-17.7	45.6	19.300	V

802.11n-HT40

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2389.510	34.3	-38.8	27.7	45.400	V
17989.000	47.6	-17.7	45.6	19.700	H
17998.000	47.4	-17.7	45.6	19.500	V
17999.000	47.4	-17.7	45.6	19.500	H
18000.000	47.3	-45.6	44.5	48.366	H
17990.500	47.3	-17.7	45.6	19.400	V

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
18000.000	47.4	-45.6	44.5	48.466	H
17994.500	47.4	-17.7	45.6	19.500	V
17992.500	47.4	-17.7	45.6	19.500	H
17996.000	47.4	-17.7	45.6	19.500	H
17987.500	47.3	-17.7	45.6	19.400	V
17969.000	47.3	-17.7	45.6	19.400	H

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2483.545	50.6	-38.9	27.7	61.800	H
17985.000	47.6	-17.7	45.6	19.700	V
17995.000	47.4	-17.7	45.6	19.500	V
17993.000	47.3	-17.7	45.6	19.400	H
17998.500	47.2	-17.7	45.6	19.300	V
17992.500	47.2	-17.7	45.6	19.300	H

Peak Result:**802.11b**

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2389.925	48.5	-38.8	27.7	59.600	V
17968.500	59.2	-17.7	45.6	31.300	H
17992.000	58.8	-17.7	45.6	30.900	V
17996.500	58.6	-17.7	45.6	30.700	H
17997.500	58.5	-17.7	45.6	30.600	H
17988.500	58.5	-17.7	45.6	30.600	H

Ch7

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17956.000	59.1	-17.7	45.6	31.200	H
17993.000	58.6	-17.7	45.6	30.700	V
17999.500	58.5	-17.7	45.6	30.600	V
17964.000	58.5	-17.7	45.6	30.600	V
17993.500	58.4	-17.7	45.6	30.500	H
17935.500	58.4	-17.7	45.6	30.500	H

Ch13

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2485.465	58.6	-38.9	27.7	69.800	V
17957.500	58.8	-17.7	45.6	30.900	H
17966.000	58.8	-17.7	45.6	30.900	H
17992.500	58.8	-17.7	45.6	30.900	H
17980.500	58.5	-17.7	45.6	30.600	V
18000.000	58.3	-45.6	44.5	59.366	V

802.11g

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2389.045	46.4	-38.8	27.7	57.500	V
17999.000	59.0	-17.7	45.6	31.100	H
17994.500	58.8	-17.7	45.6	30.900	V
17998.500	58.7	-17.7	45.6	30.800	H
17978.500	58.6	-17.7	45.6	30.700	H
17993.000	58.5	-17.7	45.6	30.600	V

Ch7

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17993.500	58.7	-17.7	45.6	30.800	H
17987.500	58.6	-17.7	45.6	30.700	H
17941.000	58.4	-17.7	45.6	30.500	V
17999.500	58.2	-17.7	45.6	30.300	V
17942.000	58.2	-17.7	45.6	30.300	V
17998.000	58.1	-17.7	45.6	30.200	V

Ch13

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2486.205	52.4	-38.9	27.7	63.600	H
17987.000	59.1	-17.7	45.6	31.200	H
17966.500	58.7	-17.7	45.6	30.800	V
17982.500	58.5	-17.7	45.6	30.600	H
17972.000	58.5	-17.7	45.6	30.600	V
17964.000	58.3	-17.7	45.6	30.400	H

802.11n-HT20

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2388.975	46.3	-38.8	27.7	57.400	V
17992.000	59.4	-17.7	45.6	31.500	H
17961.500	59.1	-17.7	45.6	31.200	H
17998.500	58.9	-17.7	45.6	31.000	V
17996.000	58.9	-17.7	45.6	31.000	V
18000.000	58.7	-45.6	44.5	59.766	H

Ch7

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17996.500	58.8	-17.7	45.6	30.900	H
17945.500	58.4	-17.7	45.6	30.500	H
17995.500	58.3	-17.7	45.6	30.400	V
18000.000	58.2	-45.6	44.5	59.266	V
17977.000	58.2	-17.7	45.6	30.300	H
17987.500	58.2	-17.7	45.6	30.300	H

Ch13

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2487.515	46.2	-38.9	27.7	57.400	H
17998.500	58.7	-17.7	45.6	30.800	V
17977.500	58.7	-17.7	45.6	30.800	V
17997.500	58.6	-17.7	45.6	30.700	H
17985.500	58.1	-17.7	45.6	30.200	H
17987.500	58.1	-17.7	45.6	30.200	H

802.11n-HT40

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2389.035	47.1	-38.8	27.7	58.200	V
18000.000	58.8	-45.6	44.5	59.866	H
17952.000	58.7	-17.7	45.6	30.800	H
17999.500	58.5	-17.7	45.6	30.600	V
17995.000	58.5	-17.7	45.6	30.600	V
17993.500	58.0	-17.7	45.6	30.100	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17999.000	58.9	-17.7	45.6	31.000	H
17975.500	58.8	-17.7	45.6	30.900	H
17993.000	58.7	-17.7	45.6	30.800	V
17974.000	58.5	-17.7	45.6	30.600	V
17952.000	58.4	-17.7	45.6	30.500	H
17978.000	58.2	-17.7	45.6	30.300	H

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
2483.975	63.4	-38.9	27.7	74.600	H
17999.000	58.7	-17.7	45.6	30.800	V
17998.500	58.7	-17.7	45.6	30.800	V
17983.500	58.6	-17.7	45.6	30.700	H
17994.000	58.6	-17.7	45.6	30.700	H
17966.500	58.4	-17.7	45.6	30.500	H

Test graphs as below:

R E -Power_2.38G-2.43GHz

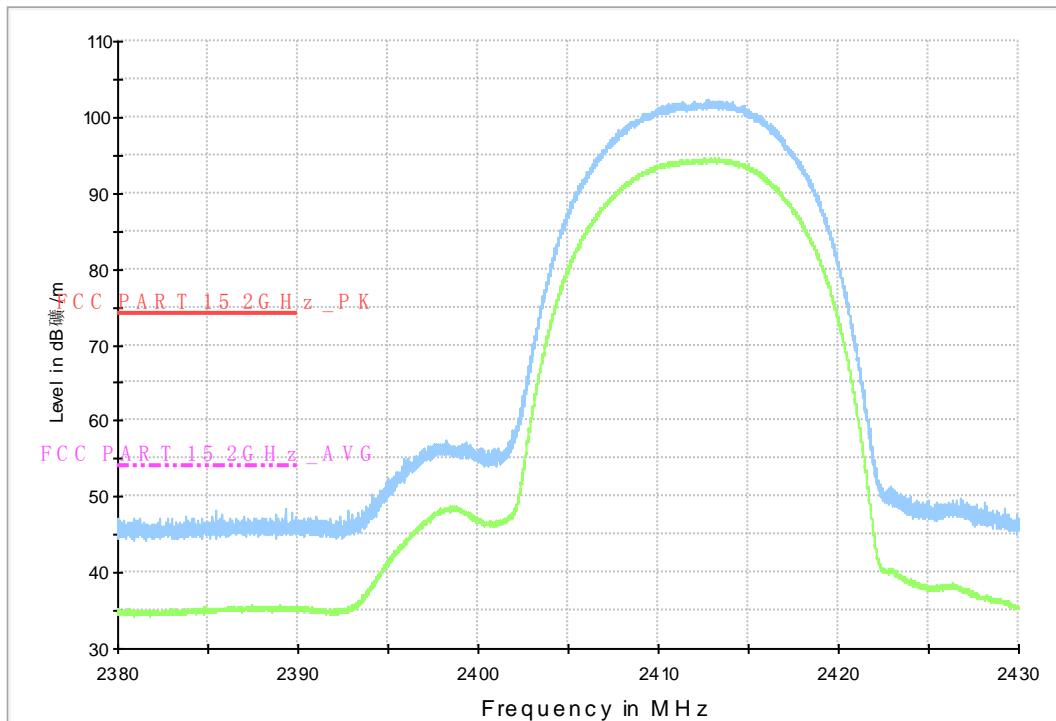


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz

R E _BT _1G-3GHz

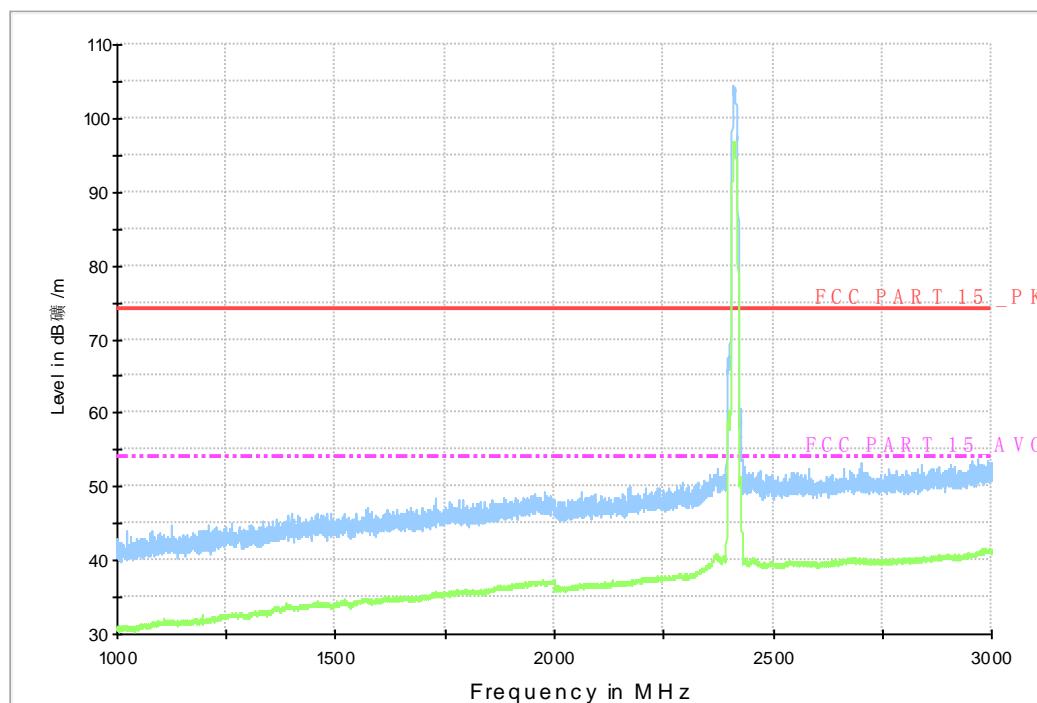


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (802.11b, Ch1, 1 GHz-3 GHz)

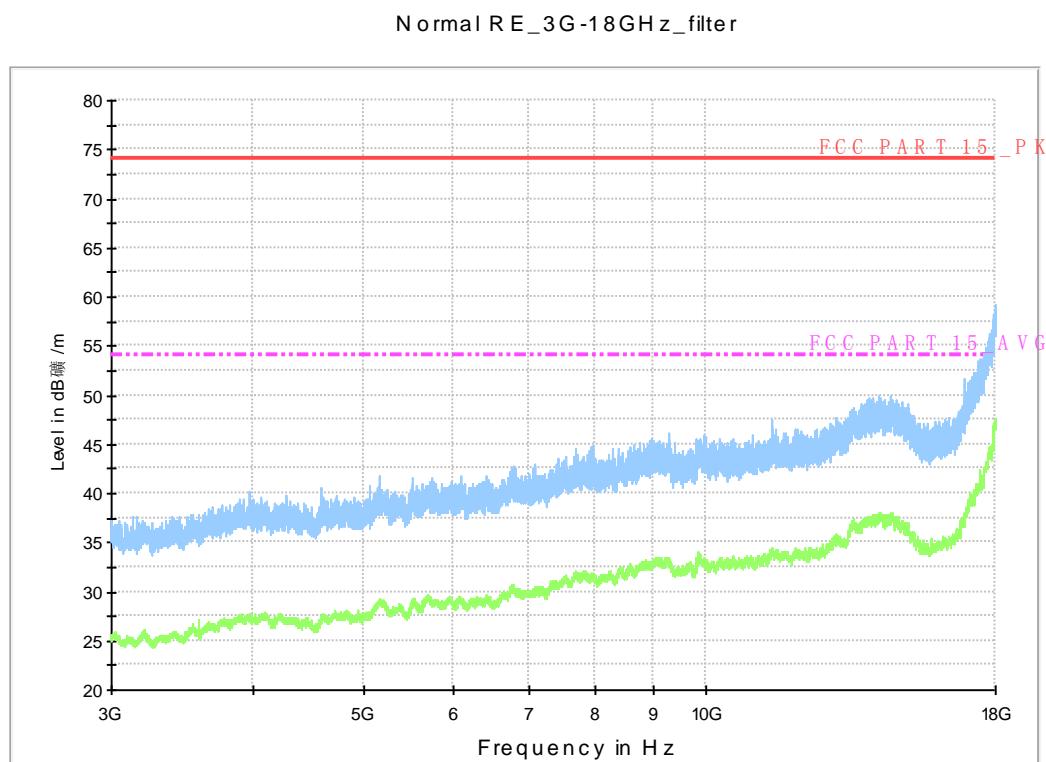


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (802.11b, Ch1, 3 GHz-18 GHz)

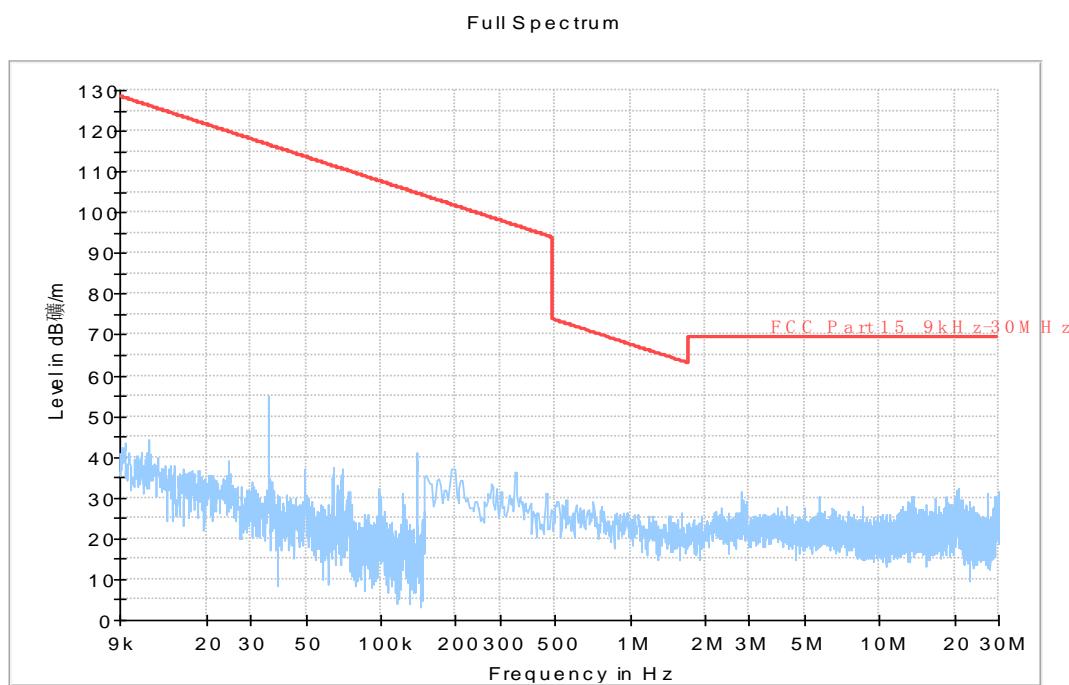
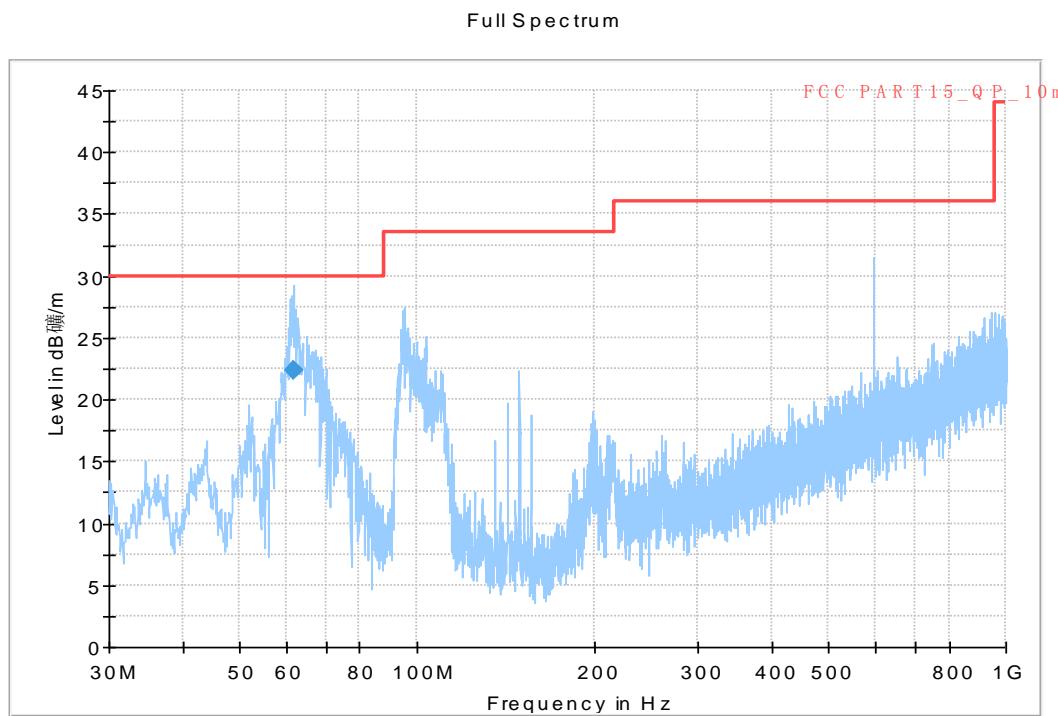


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (802.11b, Ch7, 9kHz-30 MHz)



**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (802.11b, Ch7, 30 MHz-1 GHz)
Final Result 1**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
61.696000	22.42	116.0	V	174.0	-11.3	7.58	30.0

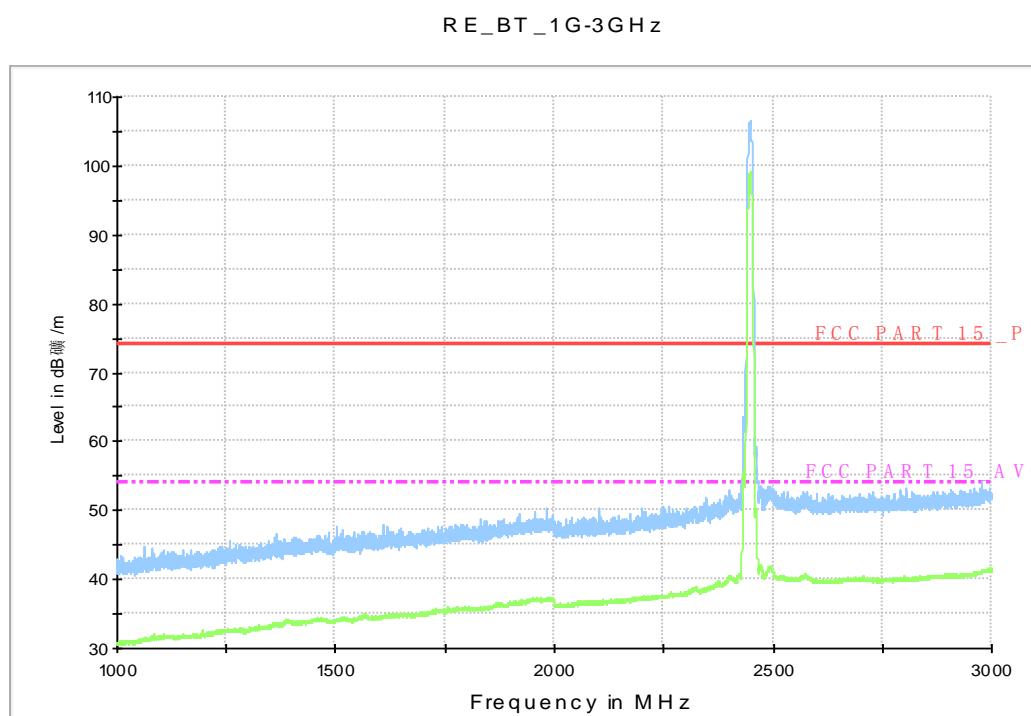


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (802.11b, Ch7, 1 GHz-3 GHz)

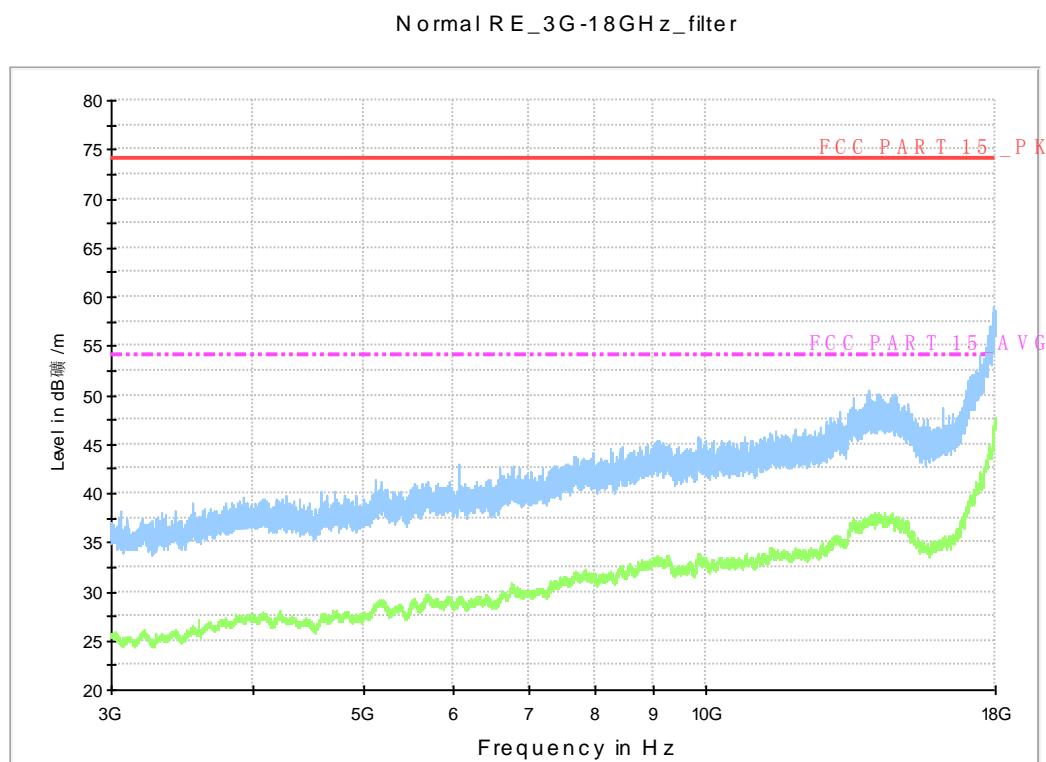


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (802.11b, Ch7, 3 GHz-18 GHz)

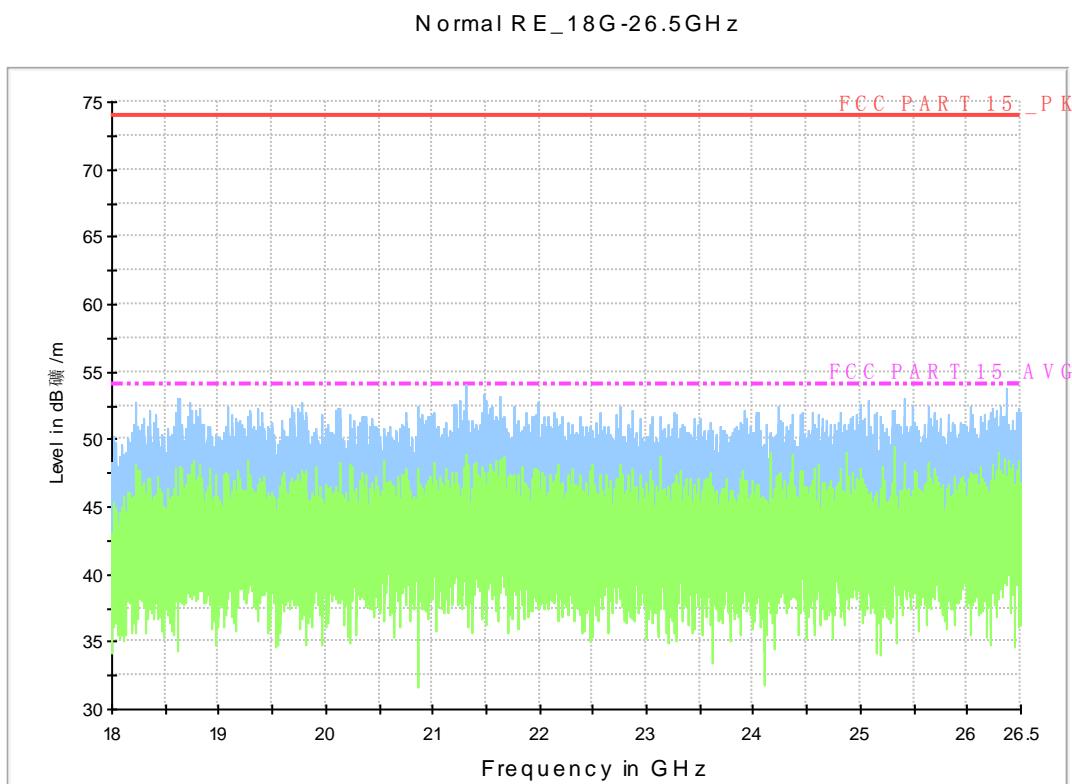


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (802.11b, Ch7, 18GHz – 26.5GHz)

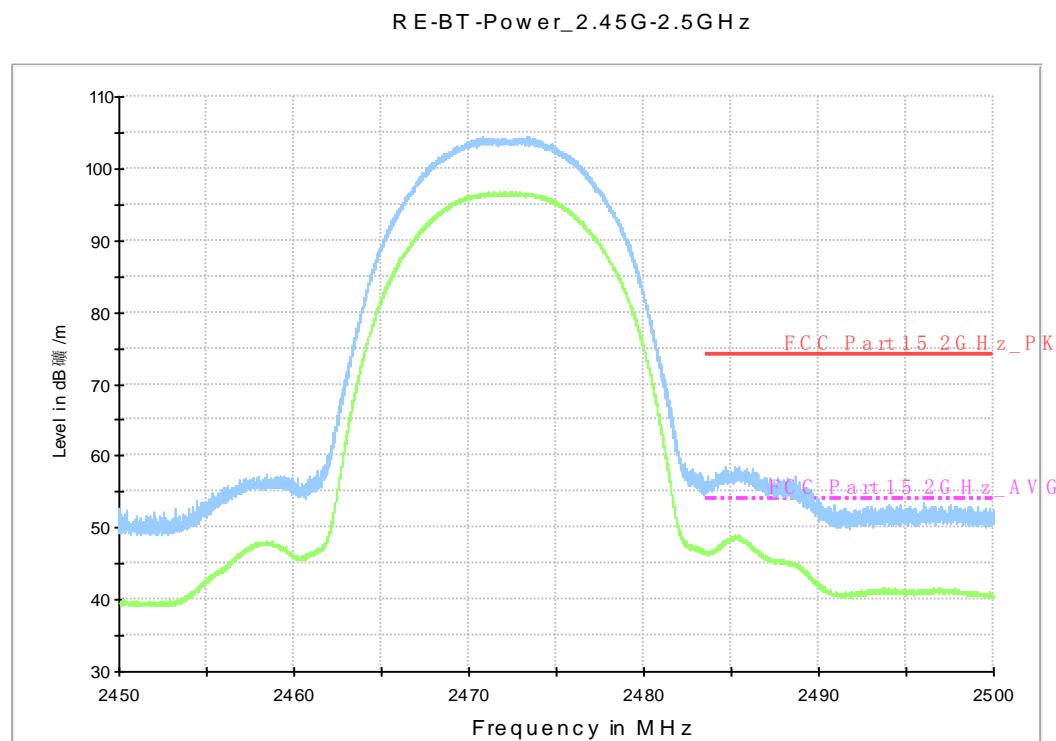


Fig.A.6.2.9 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch13, 2.45 GHz - 2.50GHz

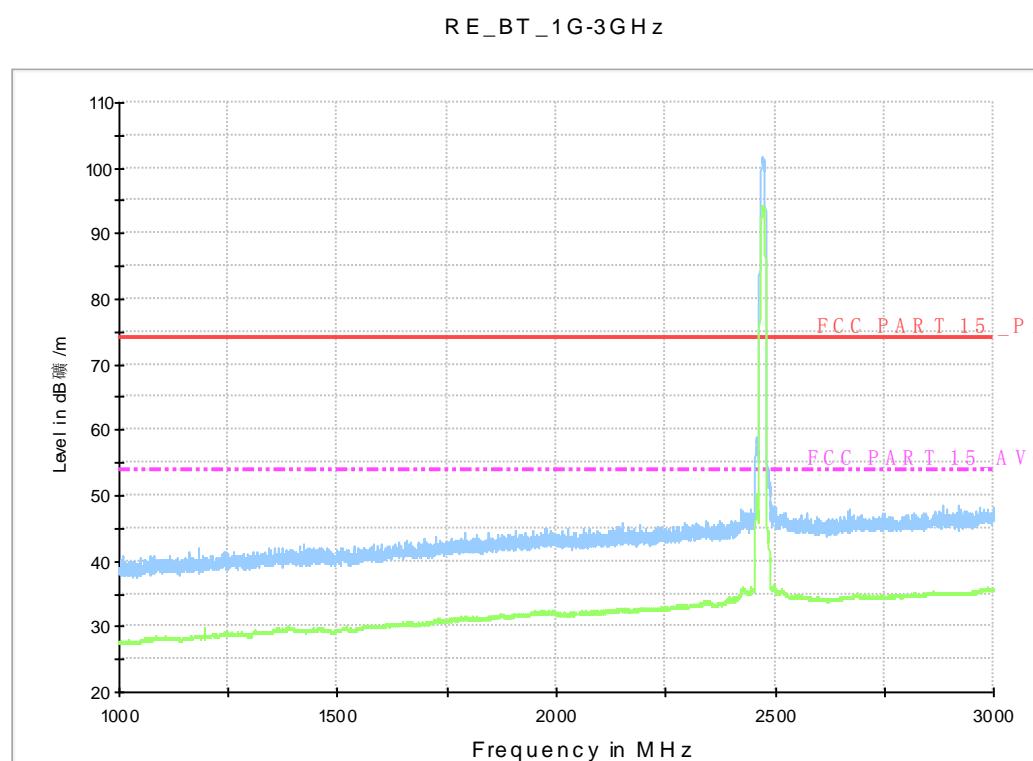


Fig.A.6.2.10 Transmitter Spurious Emission - Radiated (802.11b, Ch13, 1 GHz-3 GHz)

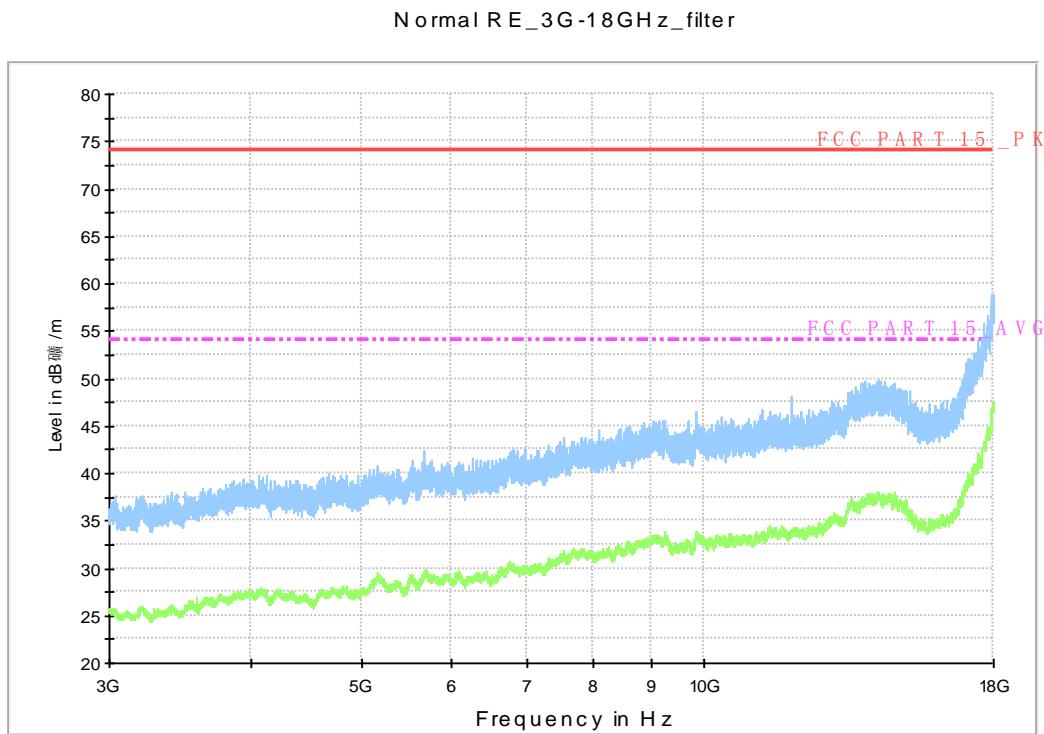


Fig.A.6.2.11 Transmitter Spurious Emission - Radiated (802.11b, Ch13, 3 GHz-18 GHz)

R E-BT-Power_2.38G-2.43GHz

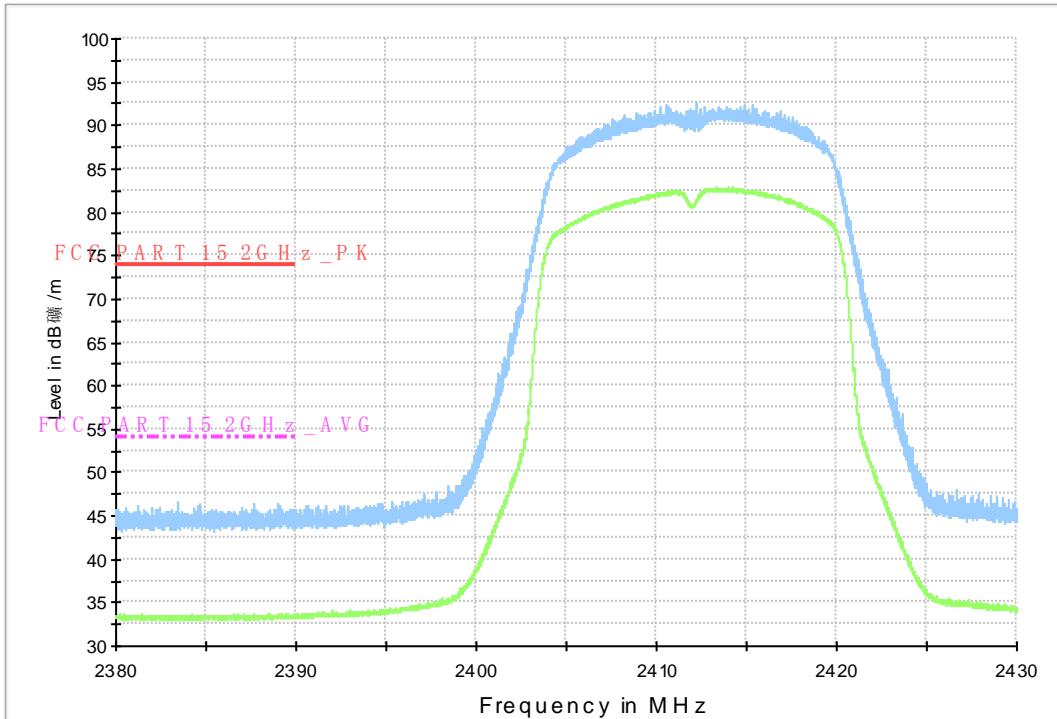


Fig.A.6.2.12 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz

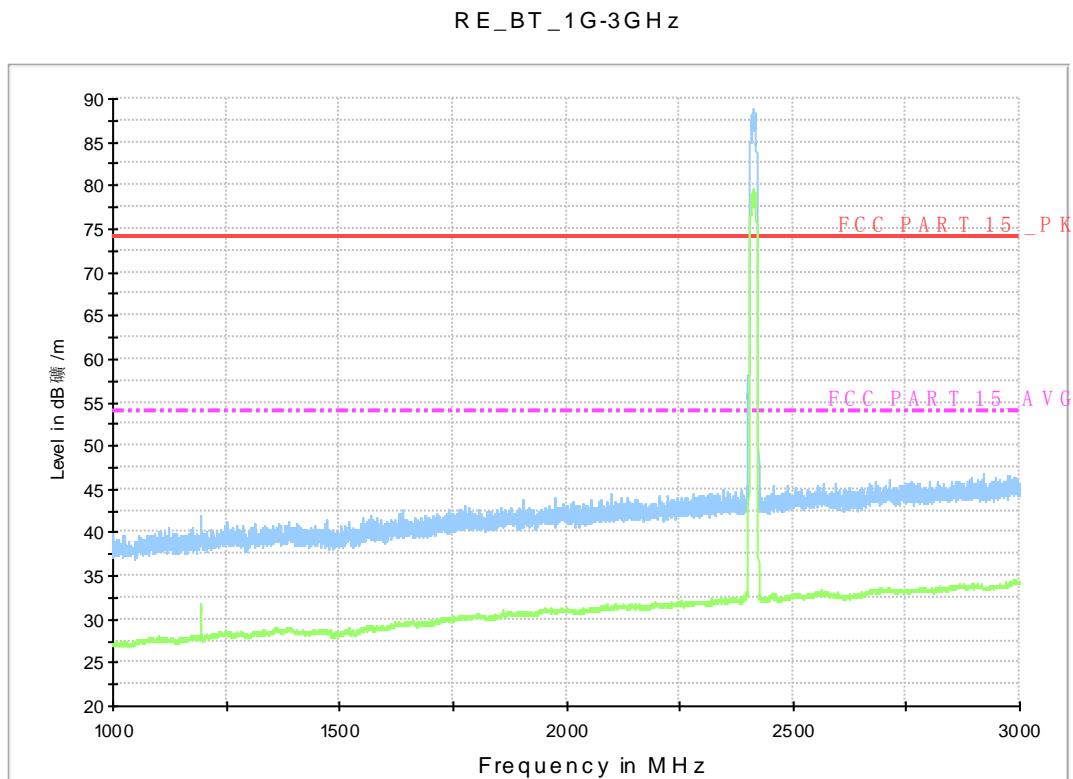


Fig.A.6.2.13 Transmitter Spurious Emission - Radiated (802.11g, Ch1, 1 GHz-3 GHz)

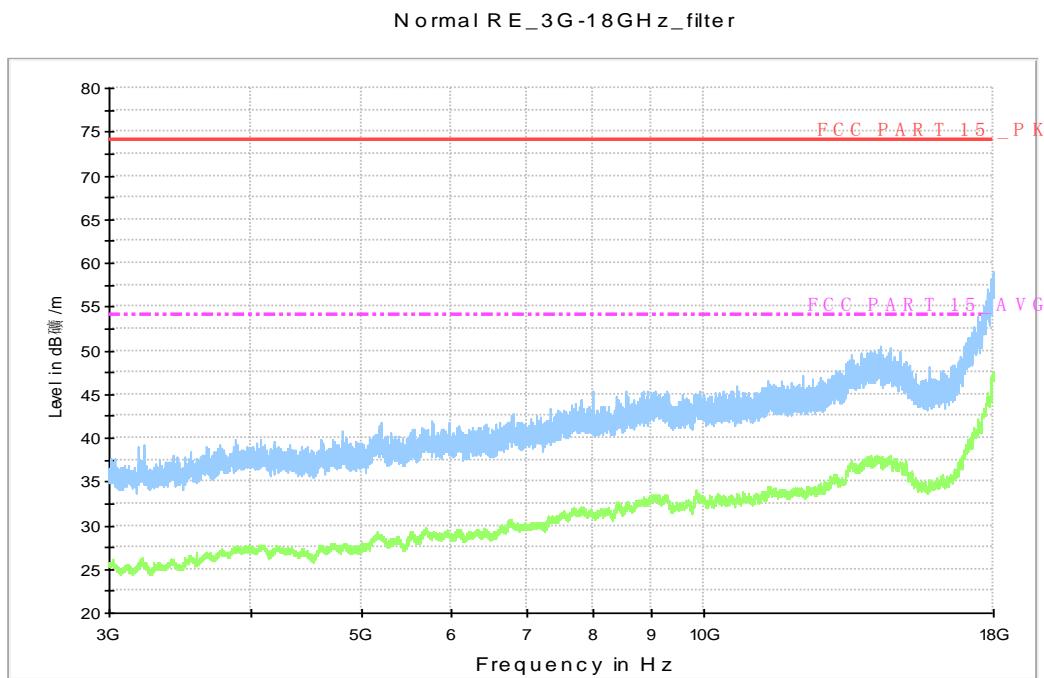


Fig.A.6.2.14 Transmitter Spurious Emission - Radiated (802.11g, Ch1, 3 GHz-18 GHz)

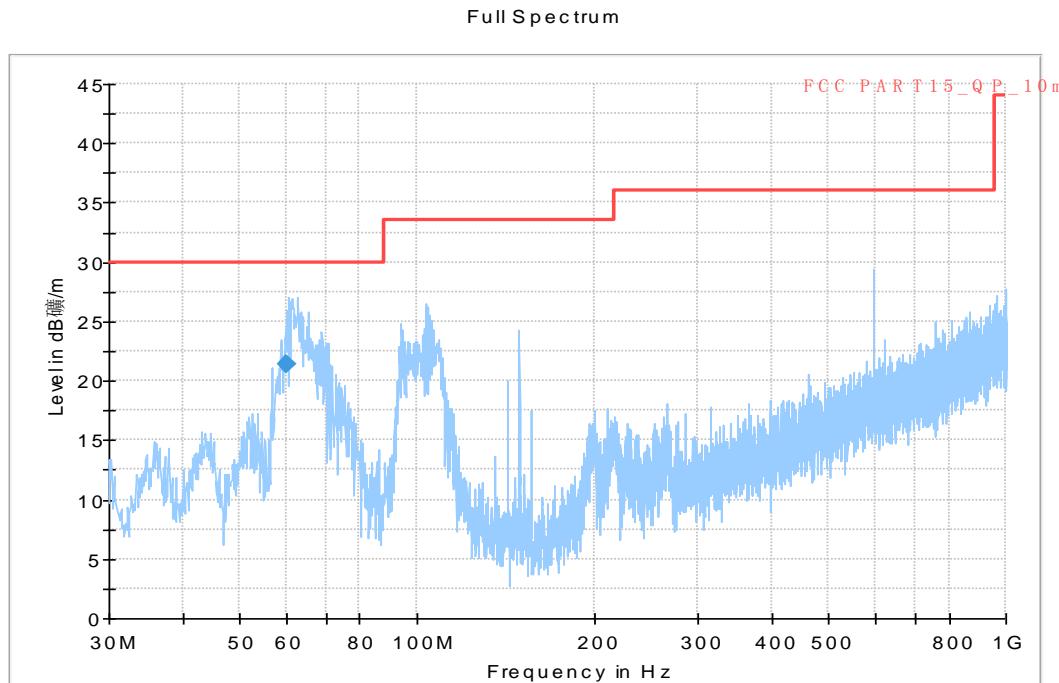


Fig.A.6.2.15 Transmitter Spurious Emission - Radiated (802.11g, Ch7, 30 MHz-1 GHz)
Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
60.195000	21.35	210.0	V	150.0	-10.6	8.65	30.0

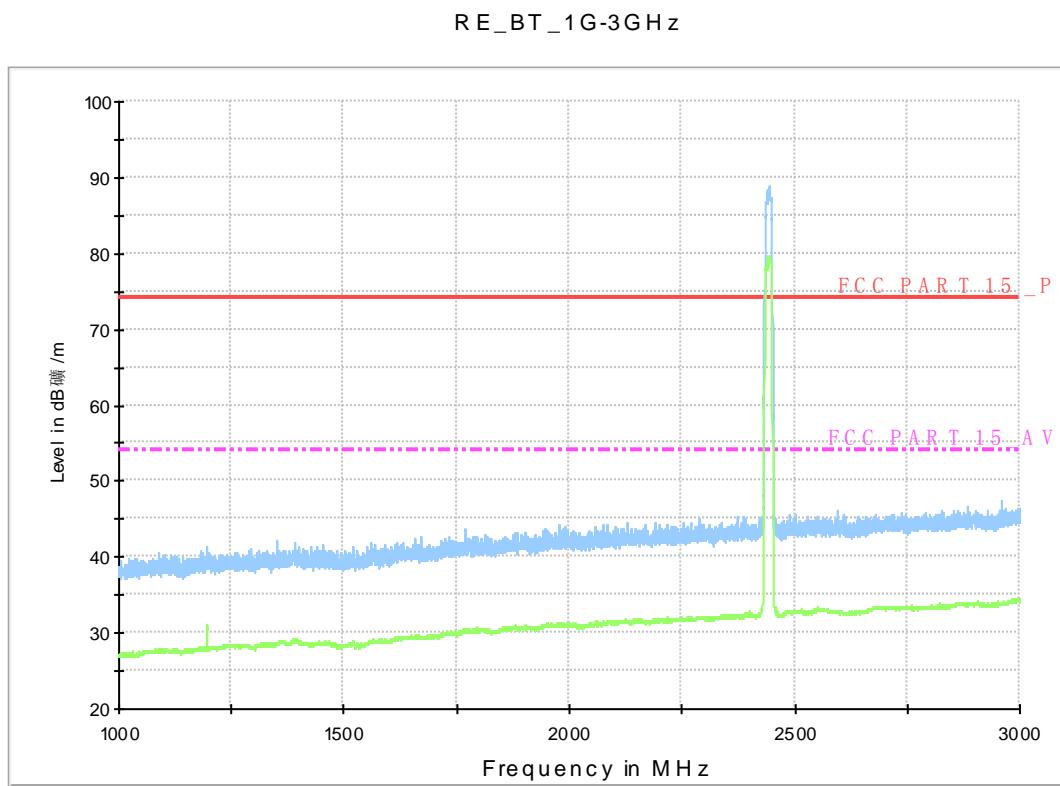


Fig.A.6.2.16 Transmitter Spurious Emission - Radiated (802.11g, Ch7, 1 GHz-3 GHz)

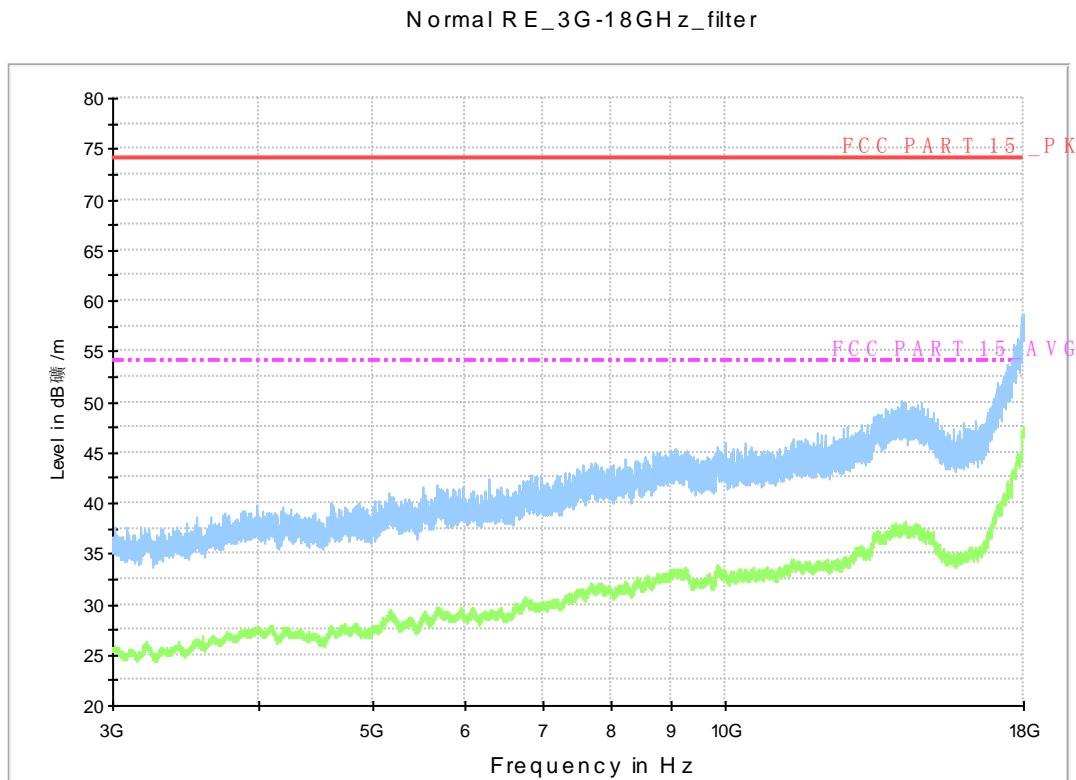


Fig.A.6.2.17 Transmitter Spurious Emission - Radiated (802.11g, Ch7, 3 GHz-18 GHz)

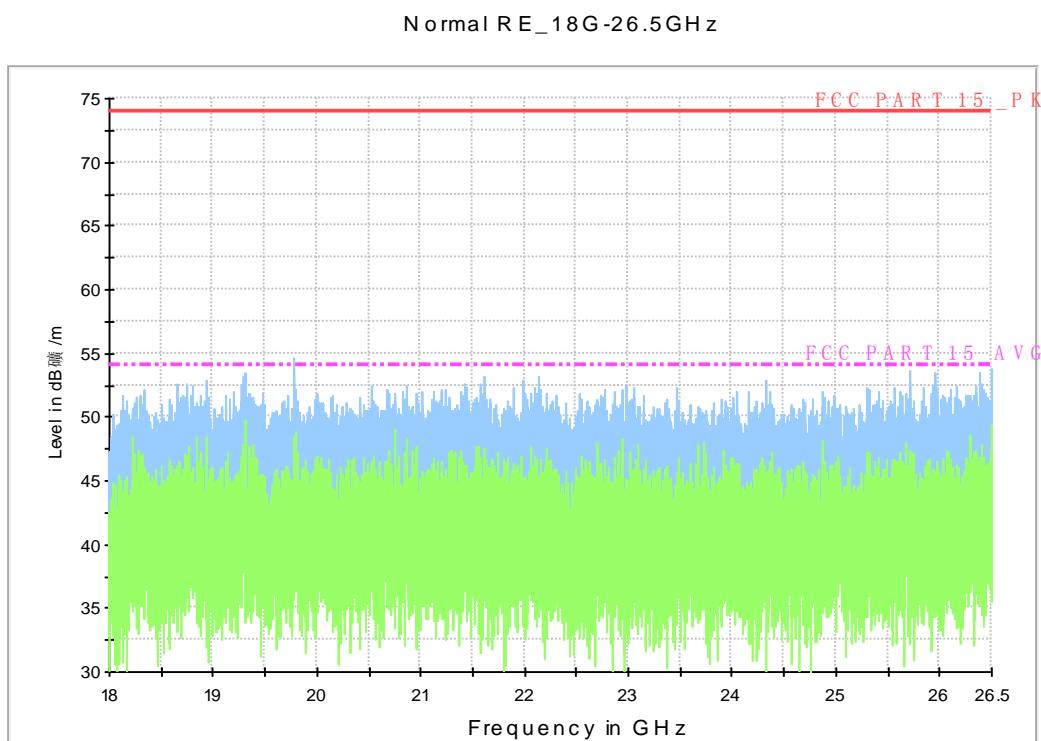


Fig.A.6.2.18 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 18GHz –

26.5GHz)

R E-BT -Power_2.45G-2.5GHz

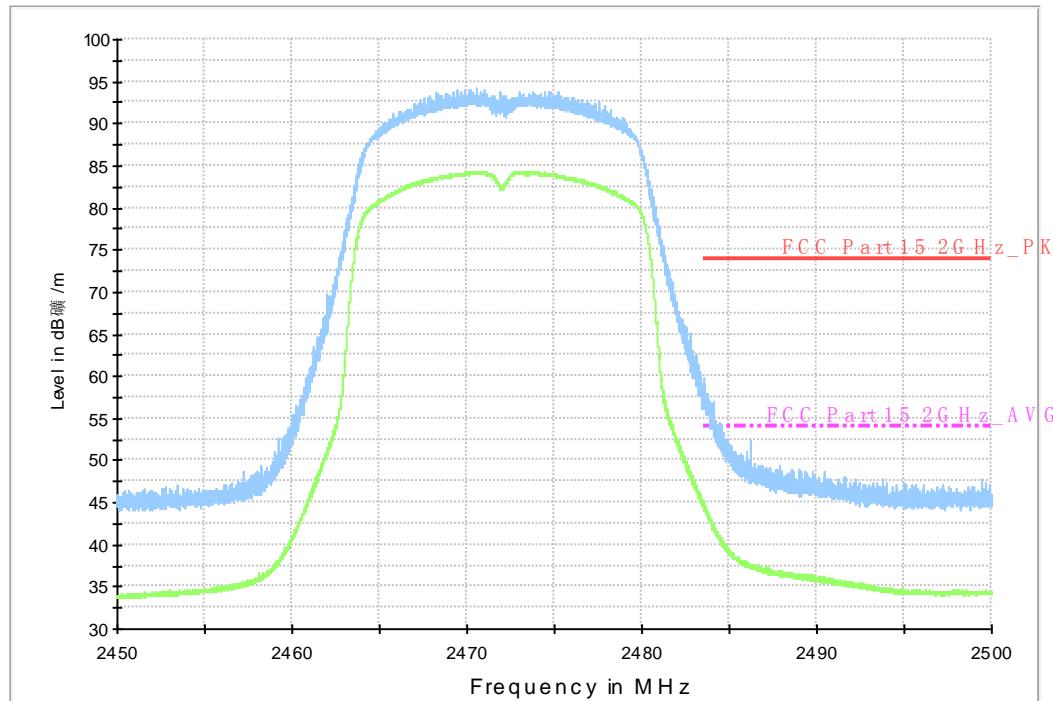


Fig.A.6.2.19 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch13, 2.45 GHz - 2.50GHz

R E_BT _1G-3GHz

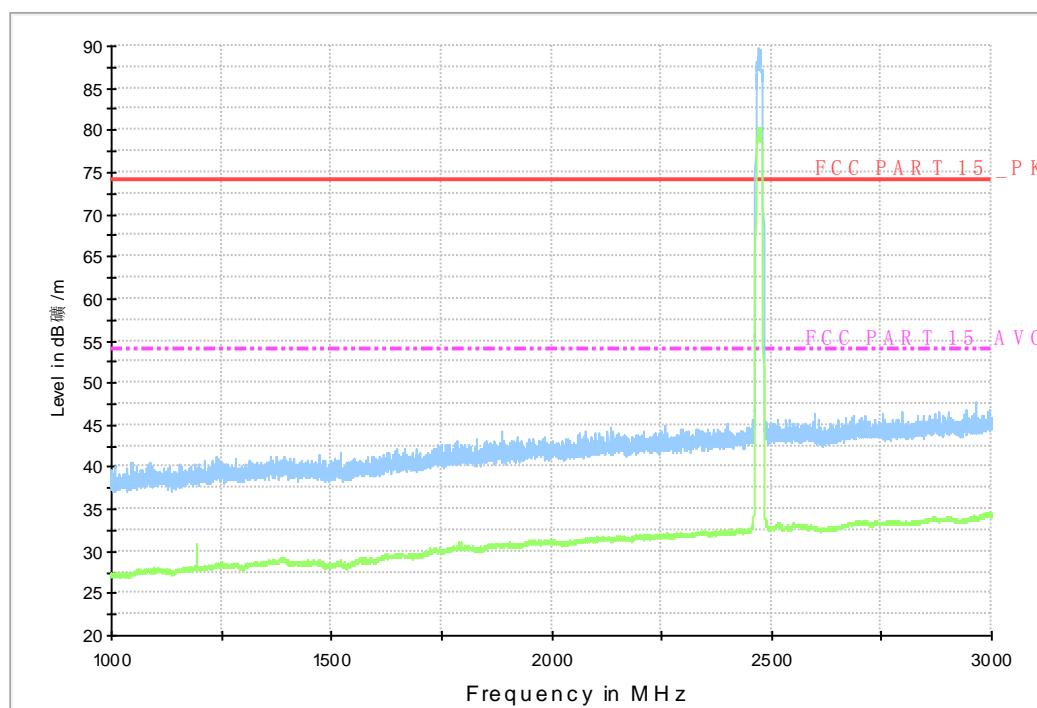


Fig.A.6.2.20 Transmitter Spurious Emission - Radiated (802.11g, Ch13, 1 GHz-3 GHz)

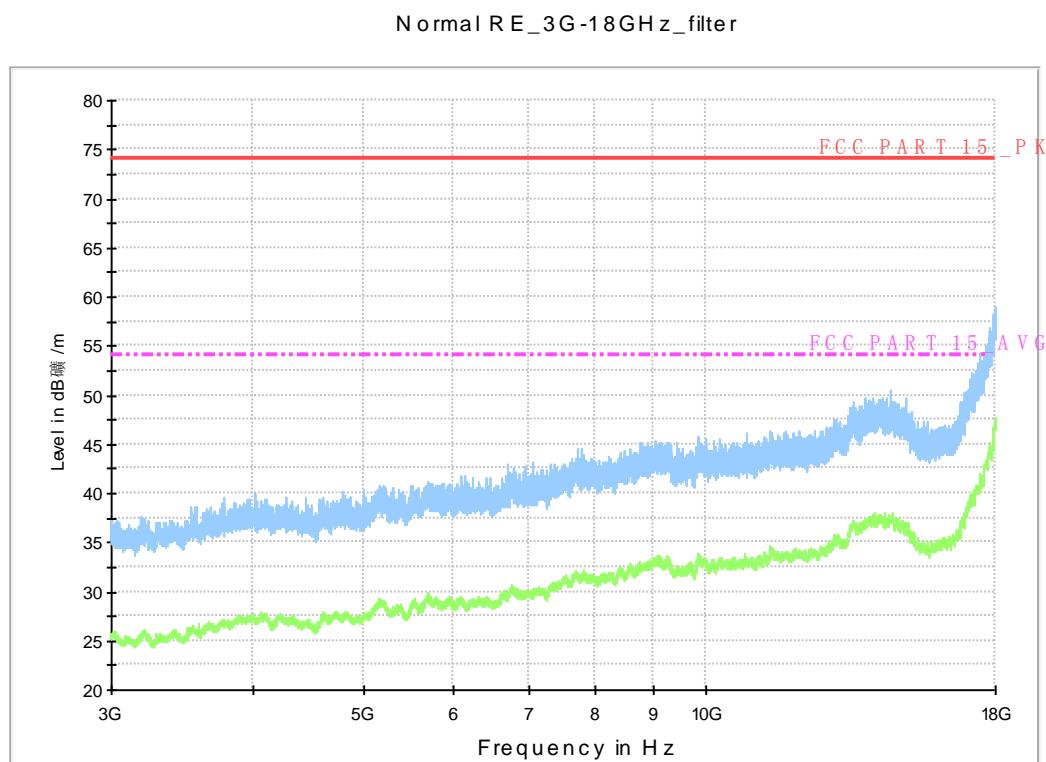


Fig.A.6.2.21 Transmitter Spurious Emission - Radiated (802.11g, Ch13, 3 GHz-18 GHz)

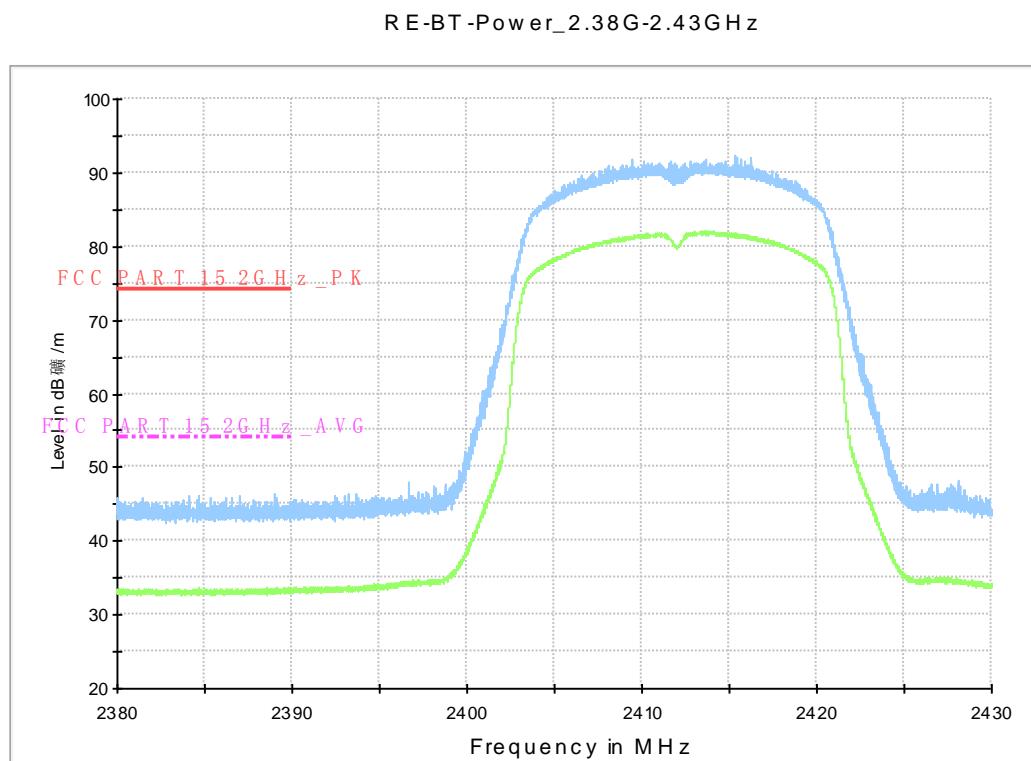


Fig.A.6.2.22 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.43GHz

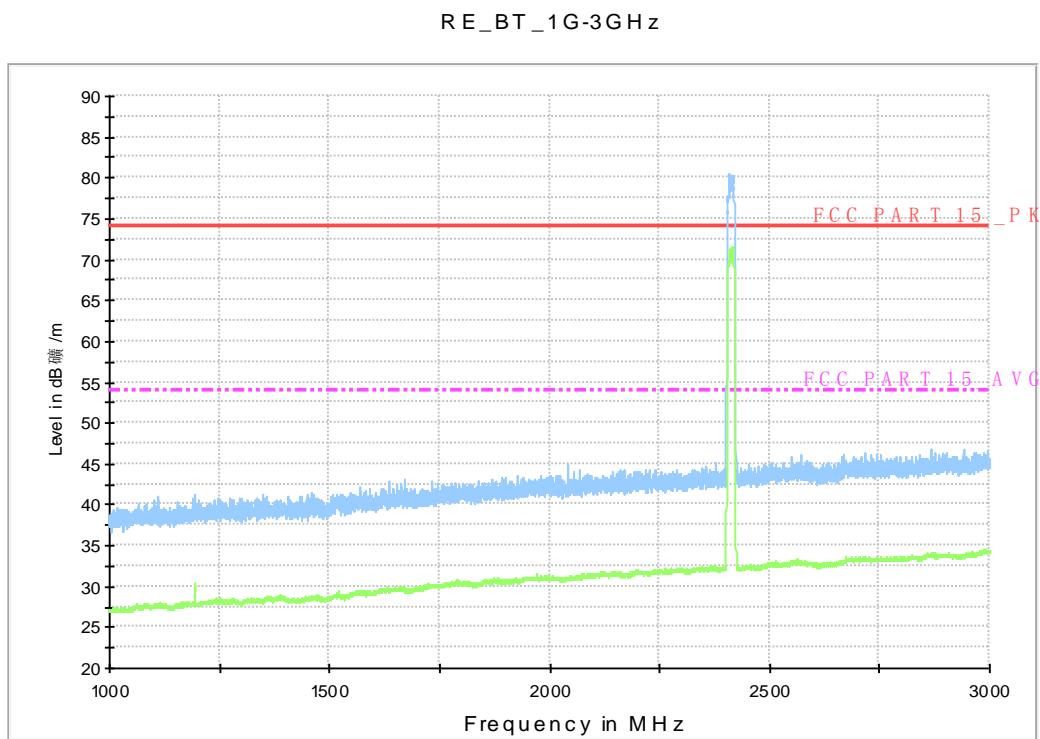


Fig.A.6.2.23 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch1, 1 GHz-3 GHz)

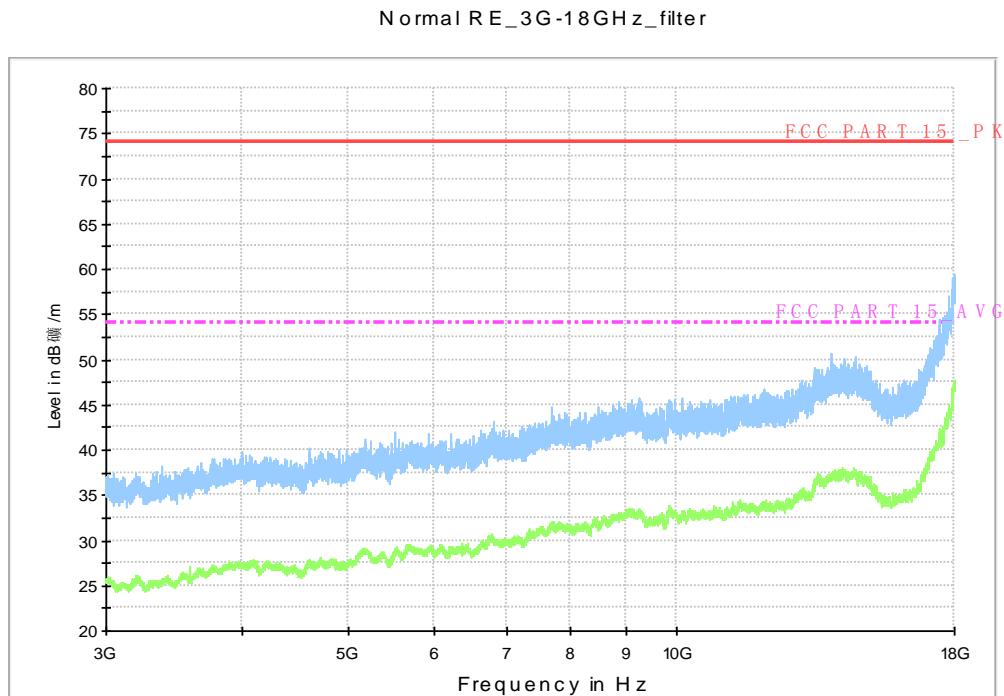


Fig.A.6.2.24 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch1, 3 GHz-18 GHz)

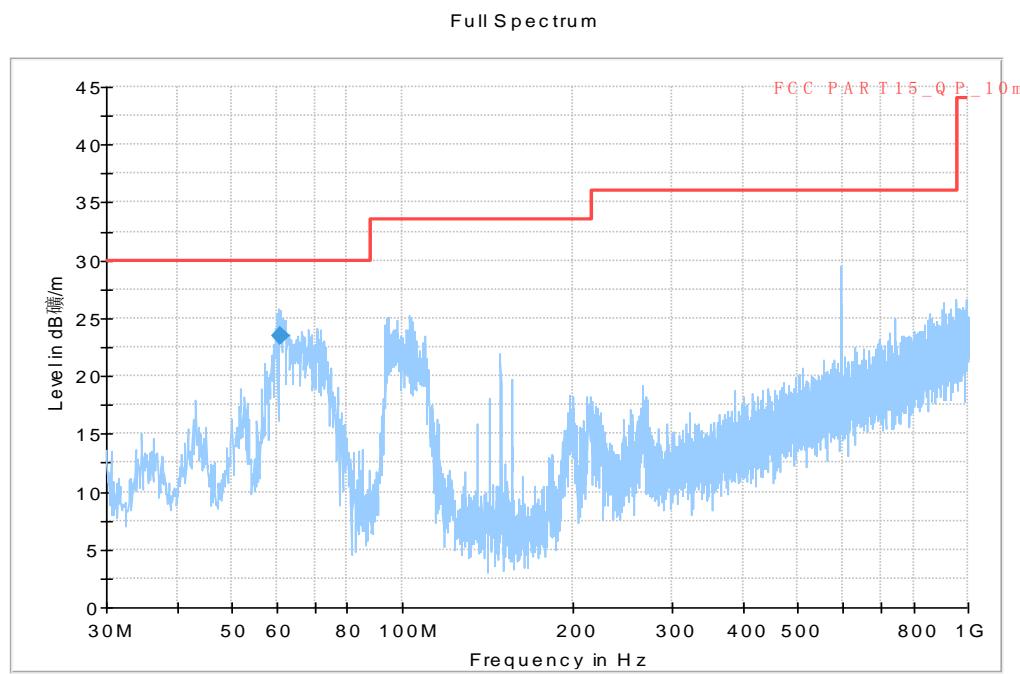


Fig.A.6.2.25 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch7, 30 MHz-1 GHz)

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
61.035000	23.40	125.0	V	153.0	-11.0	6.60	30.0

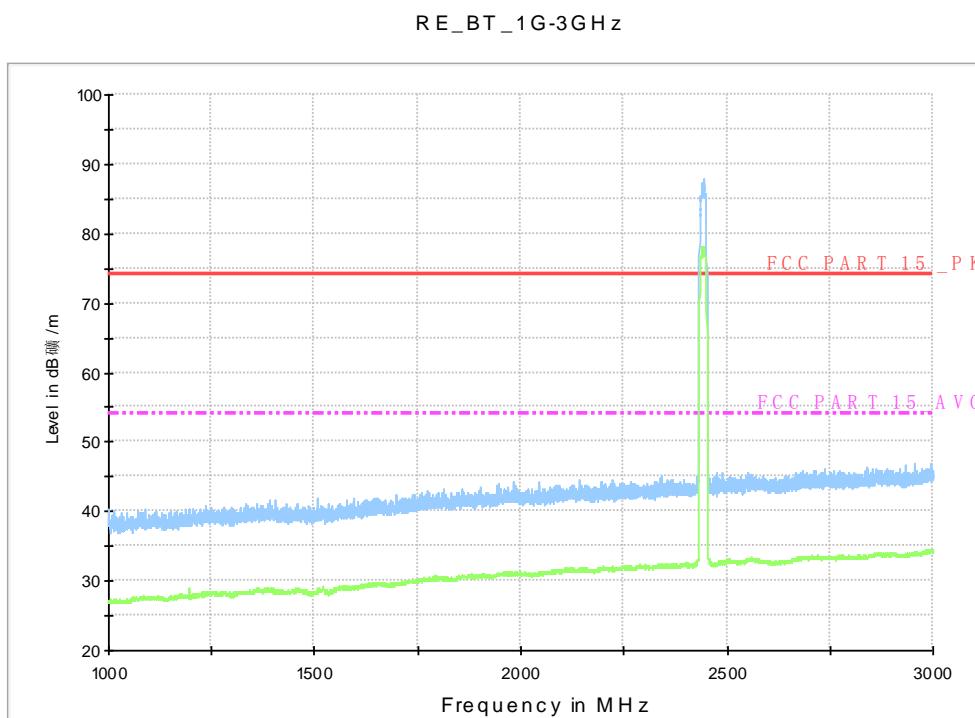


Fig.A.6.2.26 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch7, 1 GHz-3 GHz)

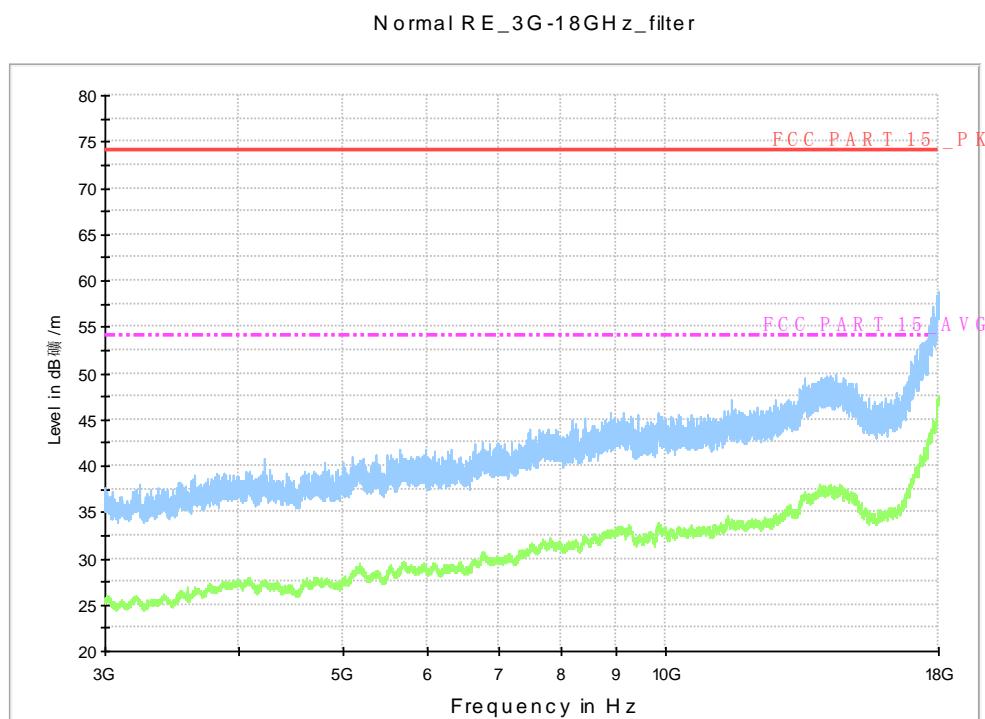


Fig.A.6.2.27 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch7, 3 GHz-18 GHz)

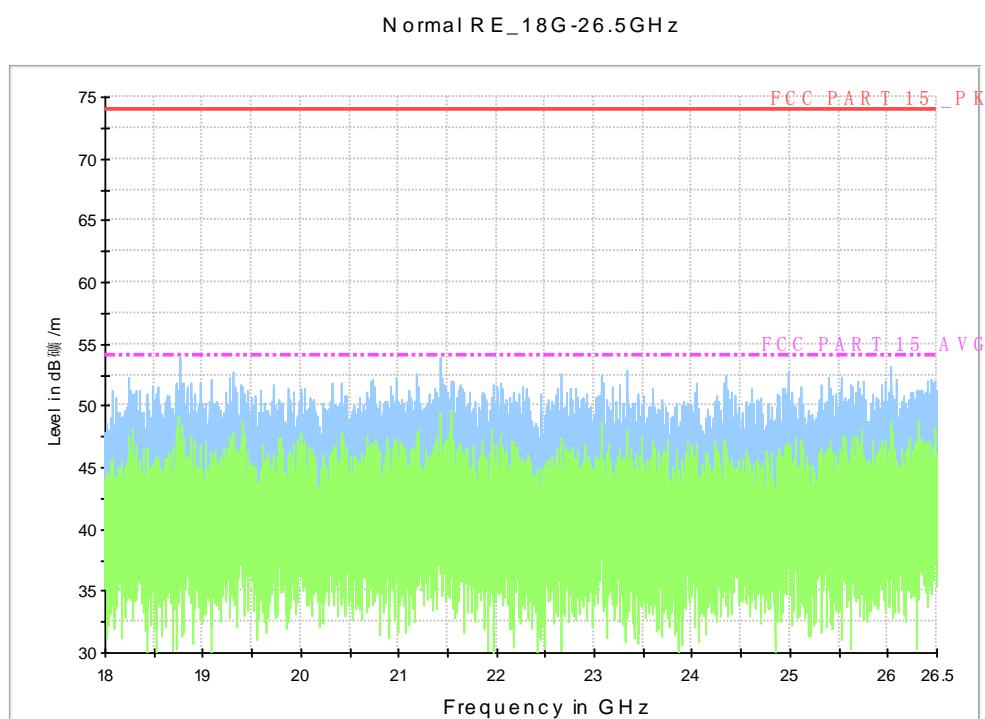


Fig.A.6.2.28 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch7, 18GHz – 26.5GHz)

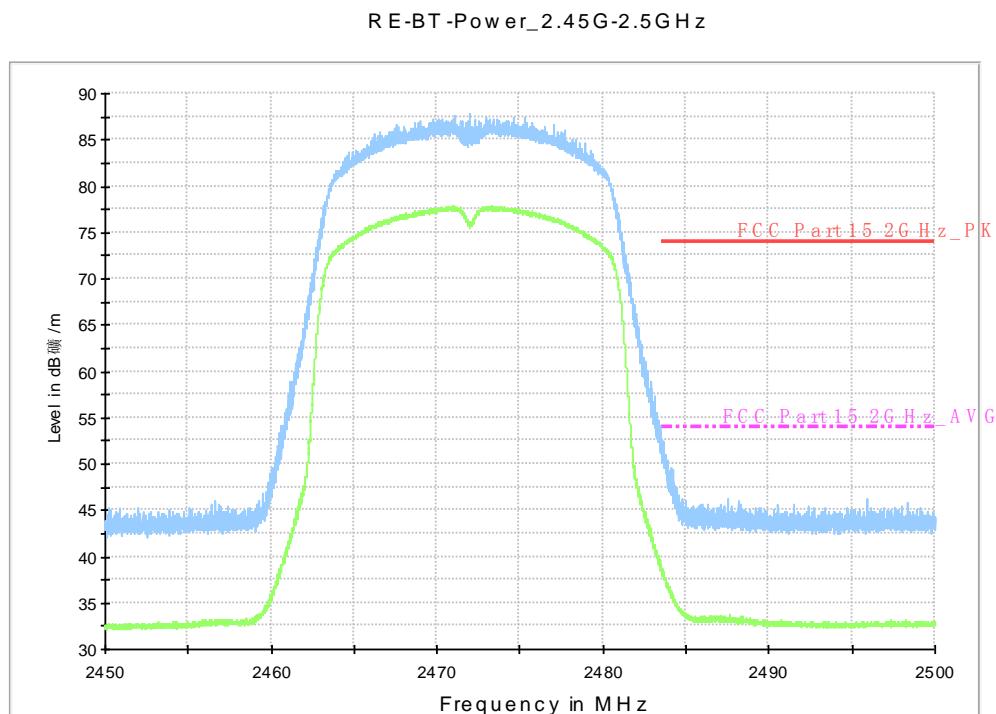


Fig.A.6.2.29 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch13, 2.45 GHz - 2.50GHz

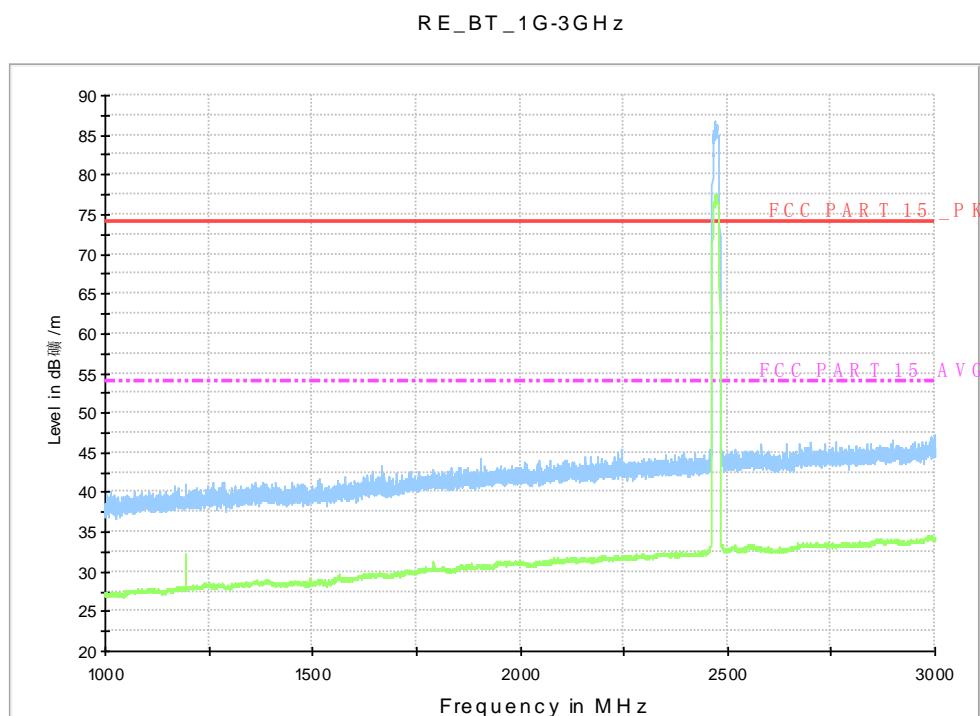


Fig.A.6.2.30 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch13, 1 GHz-3

GHz)

Normal RE_3G-18GHz_filter

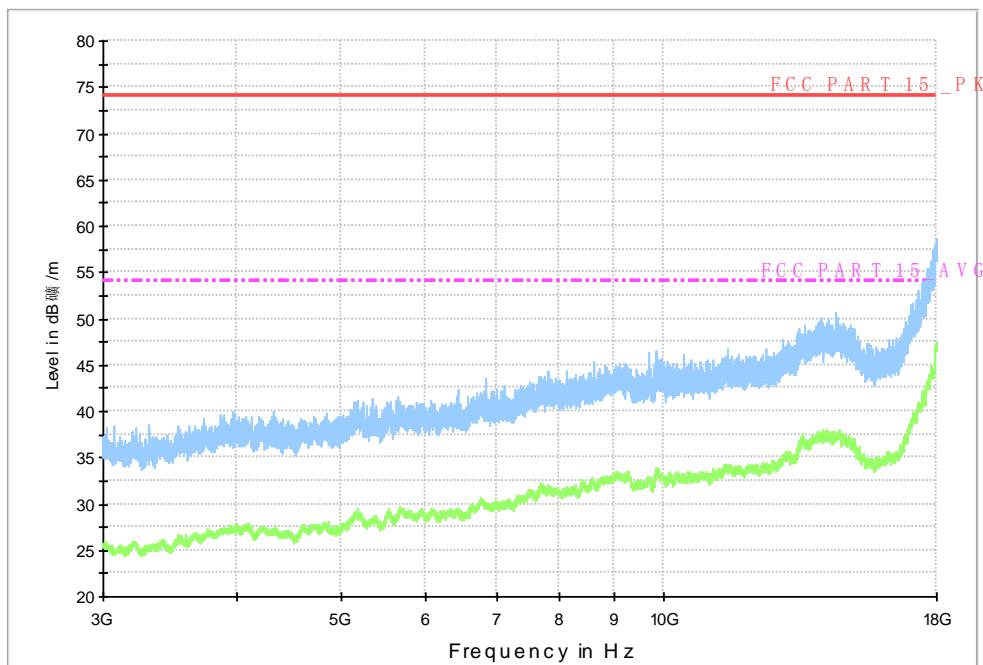


Fig.A.6.2.31 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch13, 3 GHz-18 GHz)

RE-BT-Power_2.38G-2.43GHz

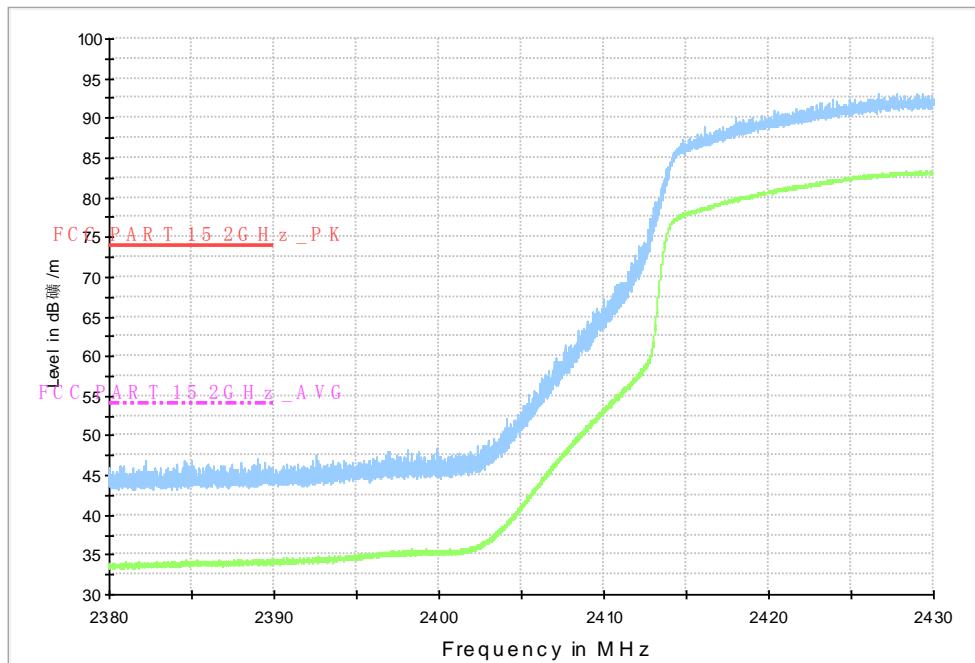


Fig.A.6.2.32 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz

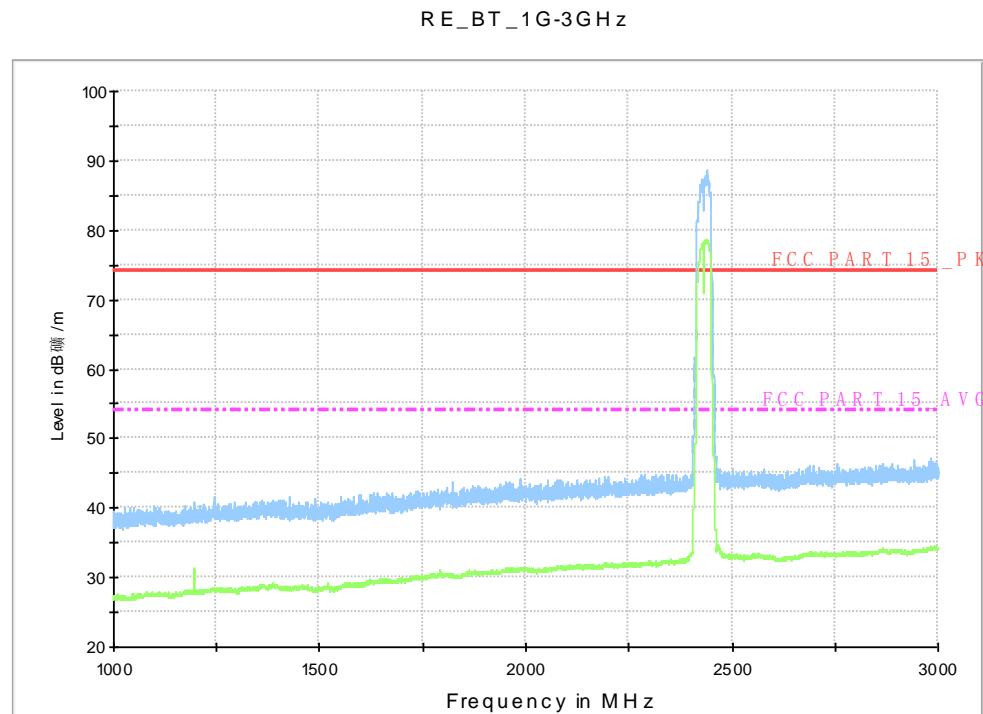


Fig.A.6.2.33 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch1, 1 GHz-3 GHz)

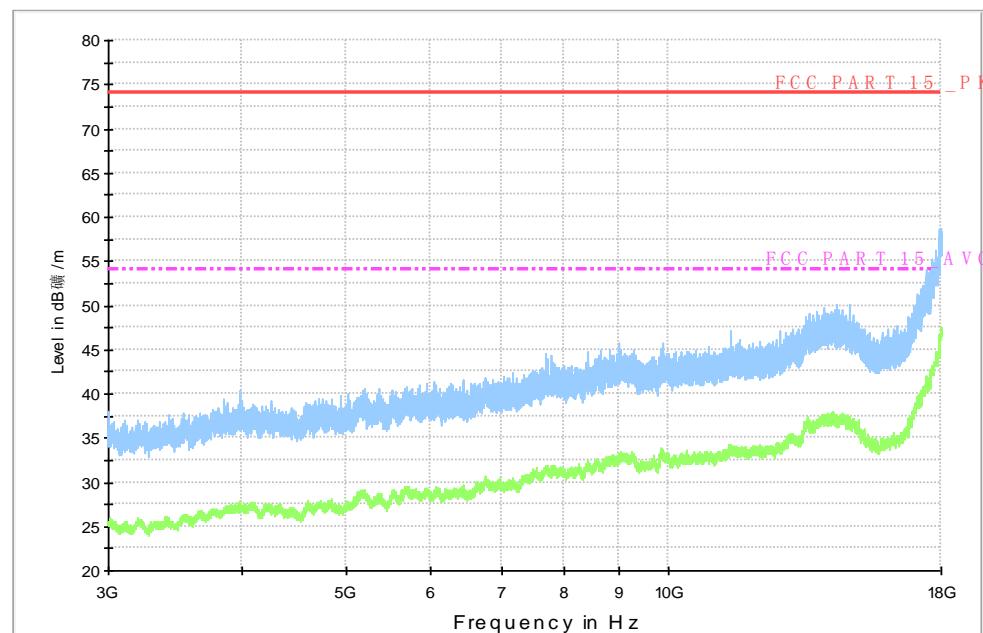


Fig.A.6.2.34 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch3, 3 GHz-18 GHz)

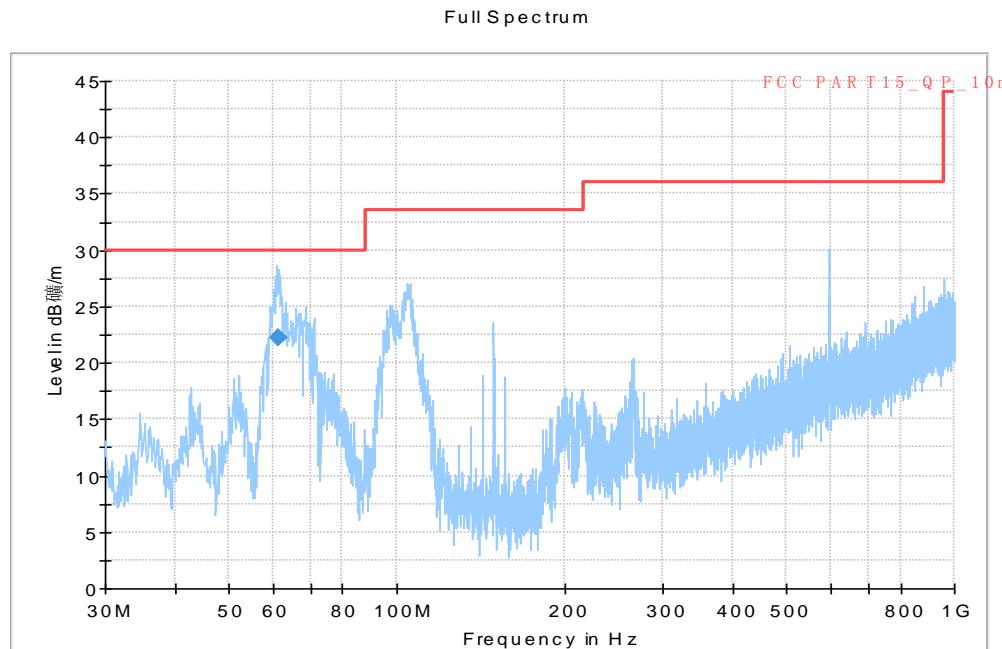


Fig.A.6.2.35 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 30 MHz-1 GHz)

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
61.197000	22.19	213.0	V	173.0	-11.1	7.81	30.0

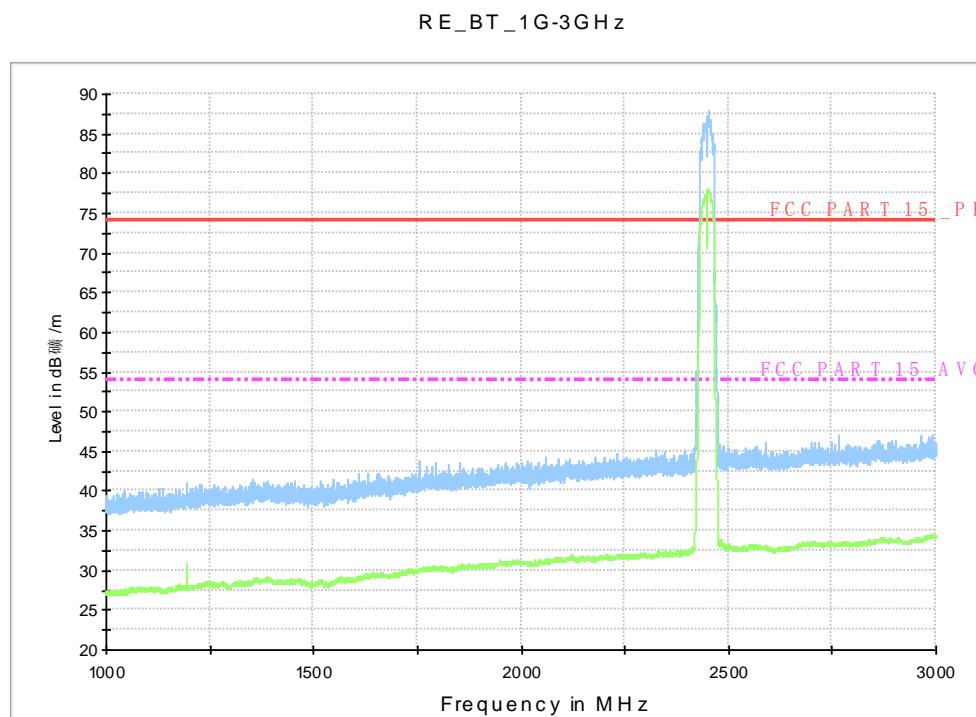


Fig.A.6.2.36 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 1 GHz-3

GHz)

Normal RE_3G-18GHz_filter

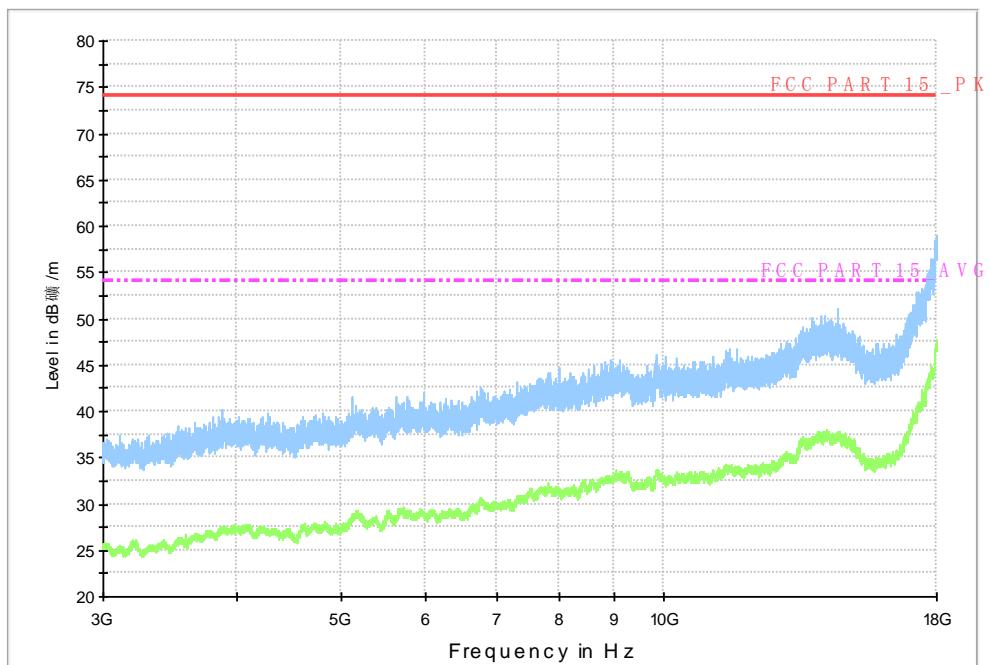


Fig.A.6.2.37 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 3 GHz-18 GHz)

Normal RE_18G-26.5GHz

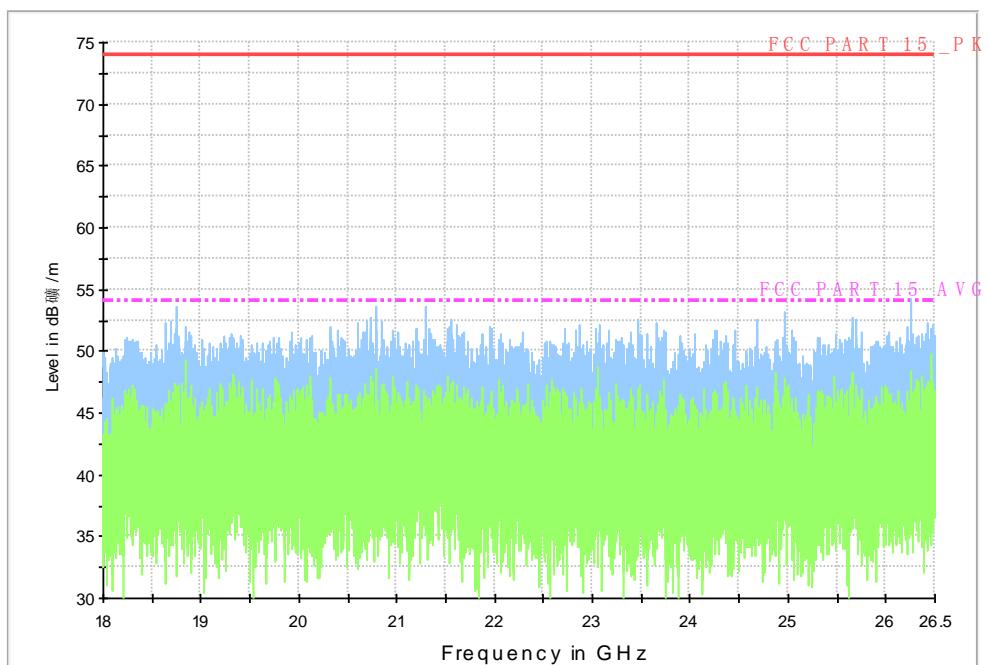


Fig.A.6.2.38 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 18GHz -

26.5GHz)

R E-BT -Power_2.45G-2.5GHz

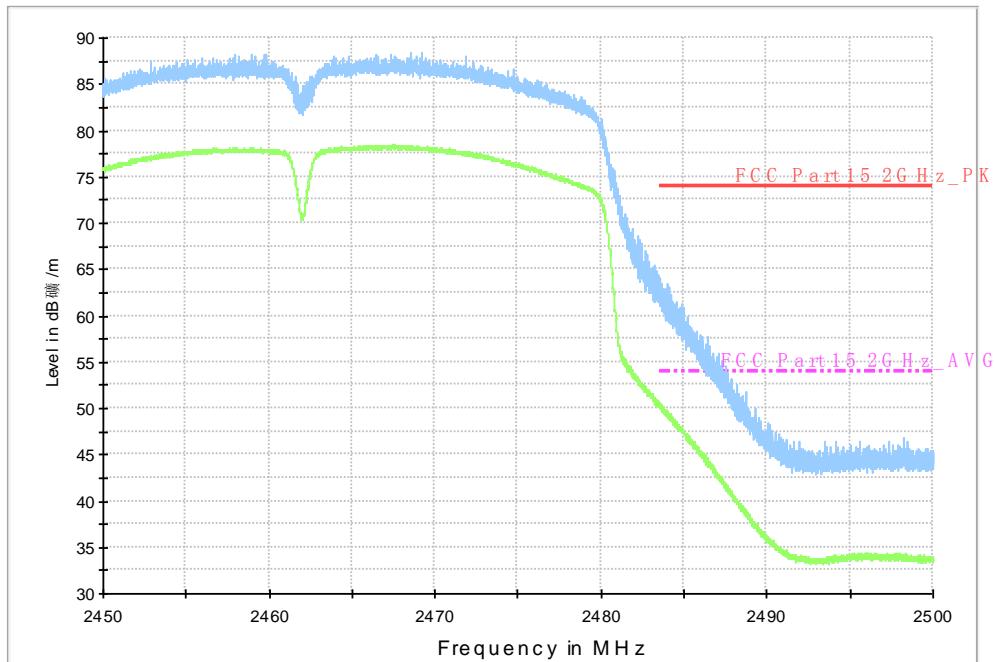


Fig.A.6.2.39 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

R E_BT_1G-3GHz

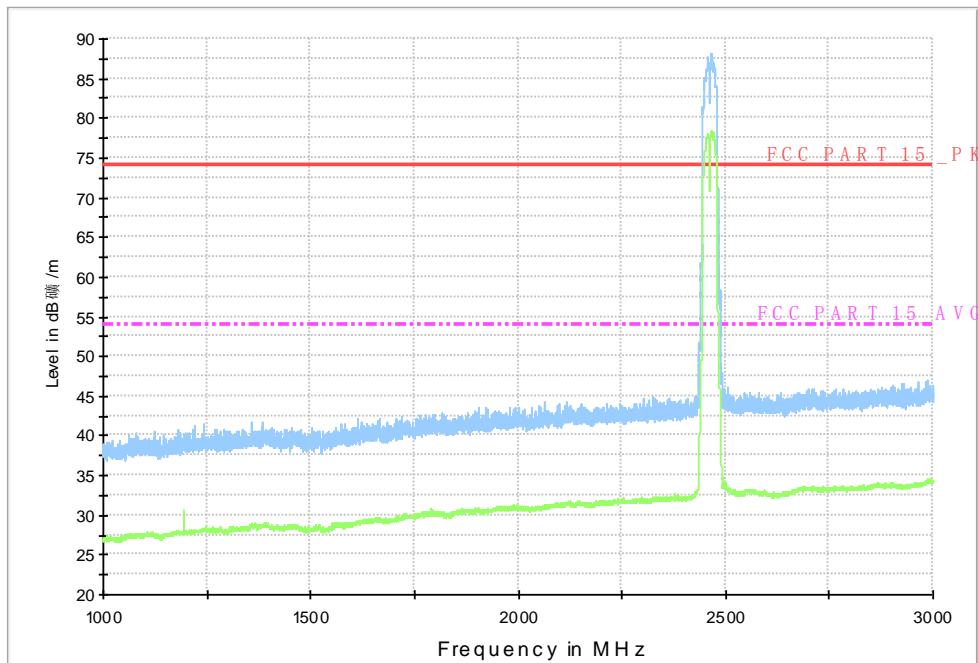


Fig.A.6.2.40 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch13, 1 GHz-3 GHz)

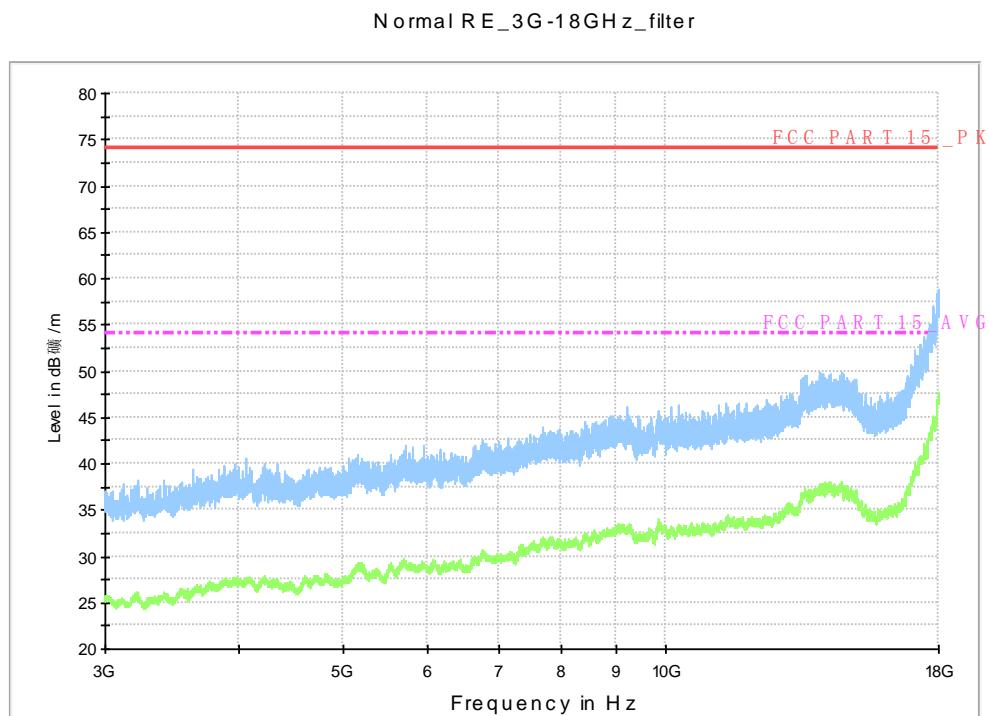


Fig.A.6.2.41 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch9, 3 GHz-18 GHz)

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.³⁶ 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:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		802.11b	Idle		
0.15 to 0.5	66 to 56	Fig.A.7.1	Fig.A.7.2	P	
0.5 to 5	56				
5 to 30	60				

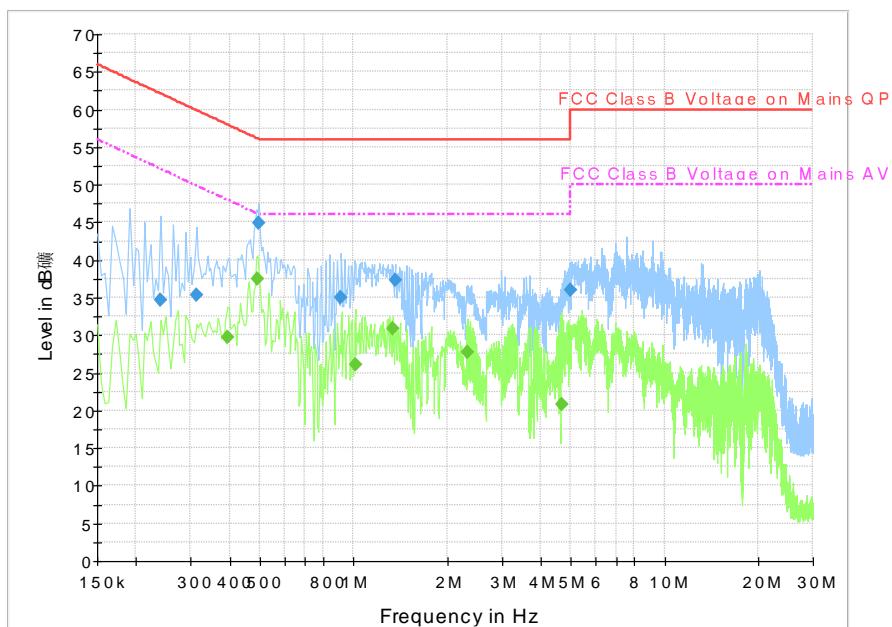
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		802.11b	Idle		
0.15 to 0.5	56 to 46	Fig.A.7.1	Fig.A.7.2	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
Test graphs as below:


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

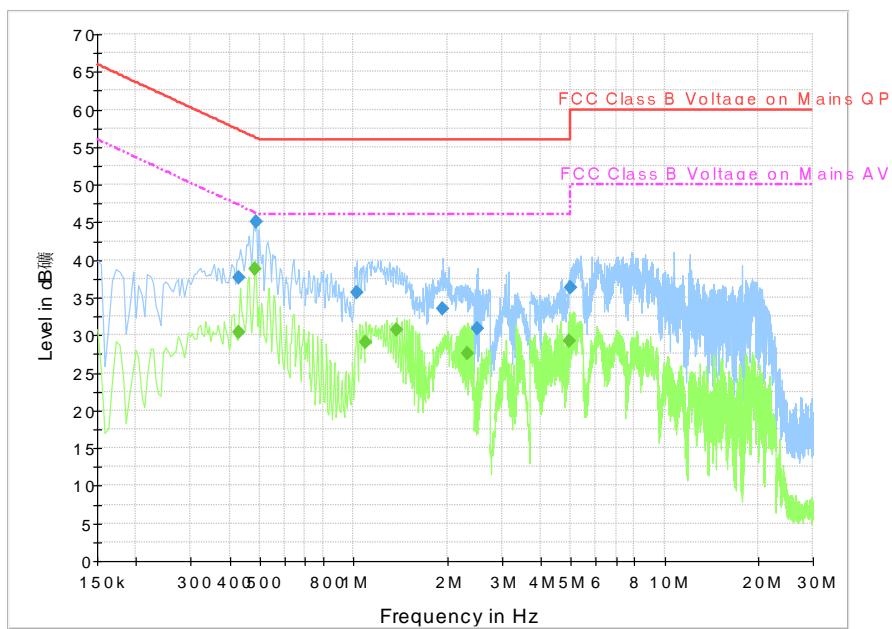
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.240000	34.7	GND	L1	19.8	27.4	62.1
0.312000	35.3	GND	L1	19.8	24.7	59.9
0.496500	45.0	GND	N	19.9	11.1	56.1
0.910500	35.0	GND	L1	19.8	21.0	56.0
1.360500	37.3	GND	N	19.7	18.7	56.0
4.974000	36.0	GND	L1	19.6	20.0	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.393000	29.6	GND	L1	19.9	18.4	48.0
0.492000	37.4	GND	N	19.9	8.7	46.1
1.014000	26.2	GND	L1	19.7	19.8	46.0
1.333500	30.9	GND	N	19.7	15.1	46.0
2.328000	27.7	GND	N	19.3	18.3	46.0
4.668000	20.8	GND	L1	19.6	25.2	46.0


Fig.A.7.1 AC Powerline Conducted Emission-802.11b 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 (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.429000	37.7	GND	N	19.9	19.6	57.3
0.487500	45.1	GND	N	19.9	11.1	56.2
1.023000	35.6	GND	N	19.7	20.4	56.0
1.941000	33.5	GND	L1	19.7	22.5	56.0
2.503500	30.9	GND	N	19.0	25.1	56.0
4.992000	36.3	GND	N	19.6	19.7	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.429000	30.4	GND	L1	19.9	16.8	47.3
0.483000	38.9	GND	N	19.9	7.4	46.3
1.095000	29.1	GND	N	19.7	16.9	46.0
1.378500	30.7	GND	N	19.7	15.3	46.0
2.319000	27.5	GND	N	19.3	18.5	46.0
4.965000	29.1	GND	N	19.6	16.9	46.0

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