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)	Power	2.38GHz ~2.45GHz	Fig.A.6.2.32	**P**
	3	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**
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.39	**P**
	9	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:

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

802.11b

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2383.035	57.8	-38.8	27.7	68.900	H
17996.500	63.2	-17.7	45.6	35.300	H
17774.500	63.2	-18.5	45.6	36.100	V
17900.500	63.0	-18.5	45.6	35.900	H
17838.000	62.9	-18.5	45.6	35.800	H
17959.000	62.7	-17.7	45.6	34.800	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17915.500	62.2	-17.7	45.6	34.300	H
17867.000	62.1	-18.5	45.6	35.000	H
17935.000	61.9	-17.7	45.6	34.000	V
17799.500	61.9	-18.5	45.6	34.800	H
17952.000	61.8	-17.7	45.6	33.900	H
17951.000	61.8	-17.7	45.6	33.900	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2490.270	59.0	-38.9	27.7	70.200	H
17979.000	62.1	-17.7	45.6	34.200	H
17871.500	62.0	-18.5	45.6	34.900	V
17818.000	61.9	-18.5	45.6	34.800	H
17946.500	61.8	-17.7	45.6	33.900	H
17975.000	61.5	-17.7	45.6	33.600	H

802.11g

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2385.375	62.7	-38.8	27.7	73.800	H
17951.500	62.4	-17.7	45.6	34.500	H
17903.000	62.2	-18.5	45.6	35.100	V
17851.000	62.1	-18.5	45.6	35.000	H
17979.000	62.1	-17.7	45.6	34.200	H
17738.500	62.1	-18.5	45.6	35.000	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17953.500	62.3	-17.7	45.6	34.400	H
17887.000	62.1	-18.5	45.6	35.000	H
17695.000	62.1	-18.9	45.6	35.400	V
17876.500	61.8	-18.5	45.6	34.700	H
17966.000	61.8	-17.7	45.6	33.900	H
17968.000	61.7	-17.7	45.6	33.800	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2483.705	61.6	-38.9	27.7	72.800	H
17431.000	61.9	-19.2	41.5	39.600	H
17786.000	61.8	-18.5	45.6	34.700	V
17973.000	61.7	-17.7	45.6	33.800	H
17717.500	61.7	-18.9	45.6	35.000	H
17735.500	61.6	-18.9	45.6	34.900	H

802.11n-HT20

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2389.780	65.7	-38.8	27.7	76.800	H
17846.000	62.4	-18.5	45.6	35.300	H
17944.000	62.2	-17.7	45.6	34.300	V
17999.000	62.1	-17.7	45.6	34.200	H
17985.500	62.0	-17.7	45.6	34.100	H
17933.500	61.6	-17.7	45.6	33.700	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17983.000	62.5	-17.7	45.6	34.600	H
17880.500	62.3	-18.5	45.6	35.200	H
17984.500	62.0	-17.7	45.6	34.100	V
17846.000	61.9	-18.5	45.6	34.800	H
17964.500	61.8	-17.7	45.6	33.900	H
17965.500	61.8	-17.7	45.6	33.900	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2484.185	60.9	-38.9	27.7	72.100	H
17740.000	62.0	-18.5	45.6	34.900	H
17962.500	61.9	-17.7	45.6	34.000	V
17753.500	61.7	-18.5	45.6	34.600	H
17882.000	61.6	-18.5	45.6	34.500	H
17877.000	61.6	-18.5	45.6	34.500	H

802.11n-HT40

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2389.210	60.5	-38.8	27.7	71.600	H
17972.500	62.3	-17.7	45.6	34.400	H
17750.500	62.2	-18.5	45.6	35.100	V
17905.500	61.8	-18.5	45.6	34.700	H
17901.000	61.8	-18.5	45.6	34.700	H
17970.500	61.7	-17.7	45.6	33.800	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17944.000	61.8	-17.7	45.6	33.900	H
17853.000	61.5	-18.5	45.6	34.400	H
17949.000	61.4	-17.7	45.6	33.500	V
17973.000	61.4	-17.7	45.6	33.500	H
17758.000	61.3	-18.5	45.6	34.200	H
17938.500	61.3	-17.7	45.6	33.400	H

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
2492.235	61.7	-38.9	27.7	72.900	H
17995.000	62.6	-17.7	45.6	34.700	H
17977.000	62.4	-17.7	45.6	34.500	V
17845.500	61.7	-18.5	45.6	34.600	H
17867.000	61.7	-18.5	45.6	34.600	H
17891.500	61.7	-18.5	45.6	34.600	H

Test graphs as below:

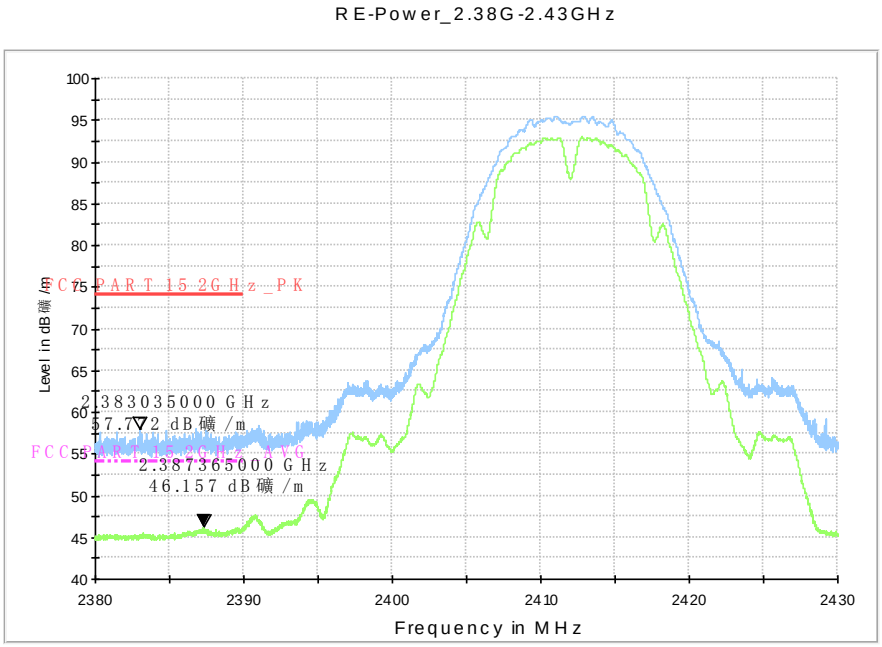

Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz

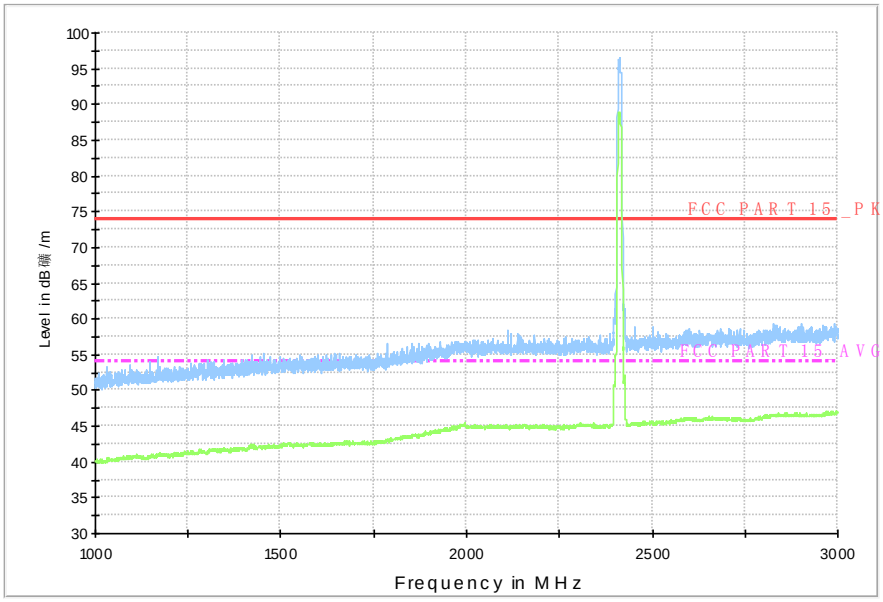

Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (802.11b, Ch1, 1 GHz-3 GHz)

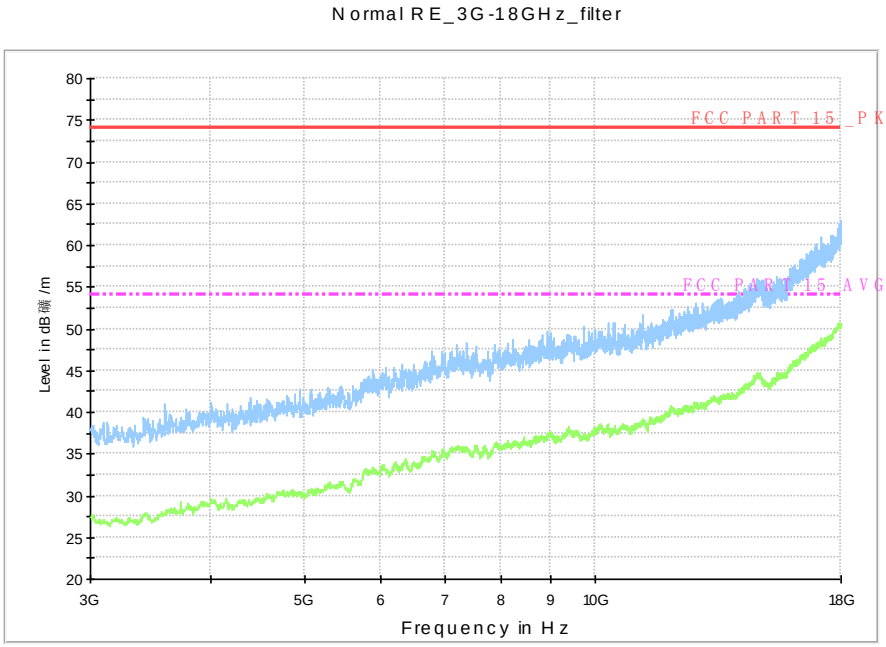

Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (802.11b, Ch1, 3 GHz-18 GHz)

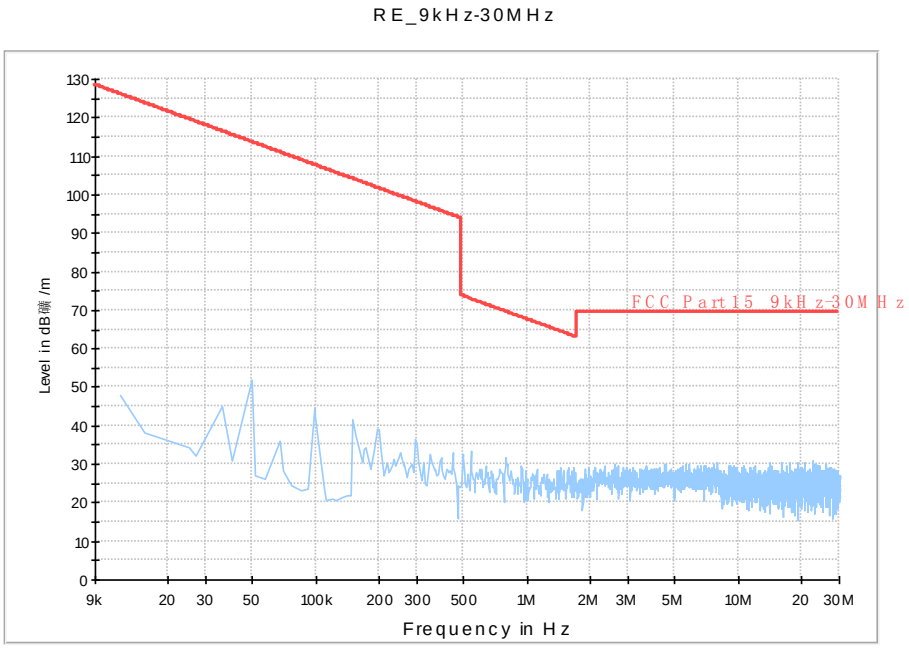

Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 9kHz-30 MHz)

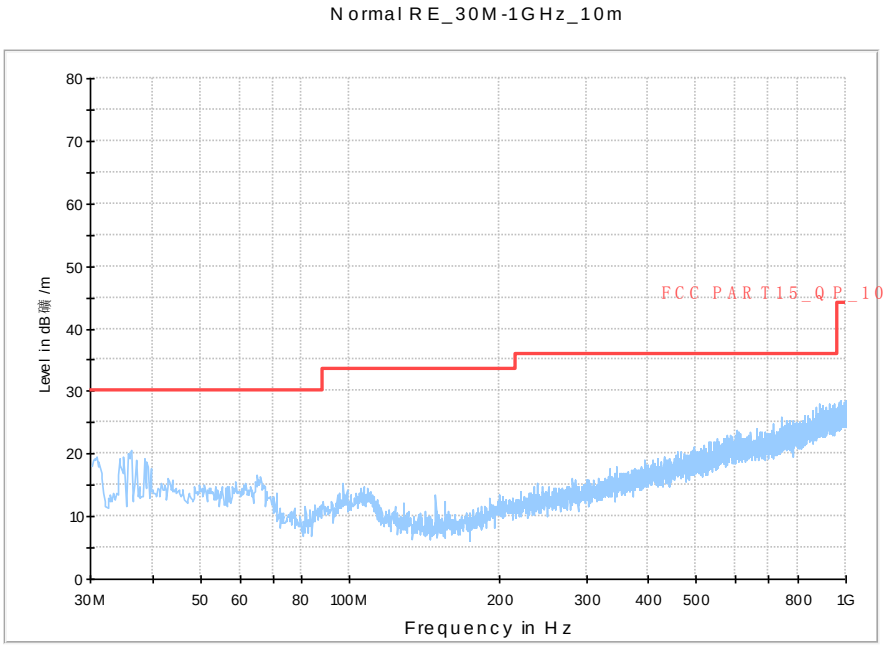

Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 30 MHz-1 GHz)

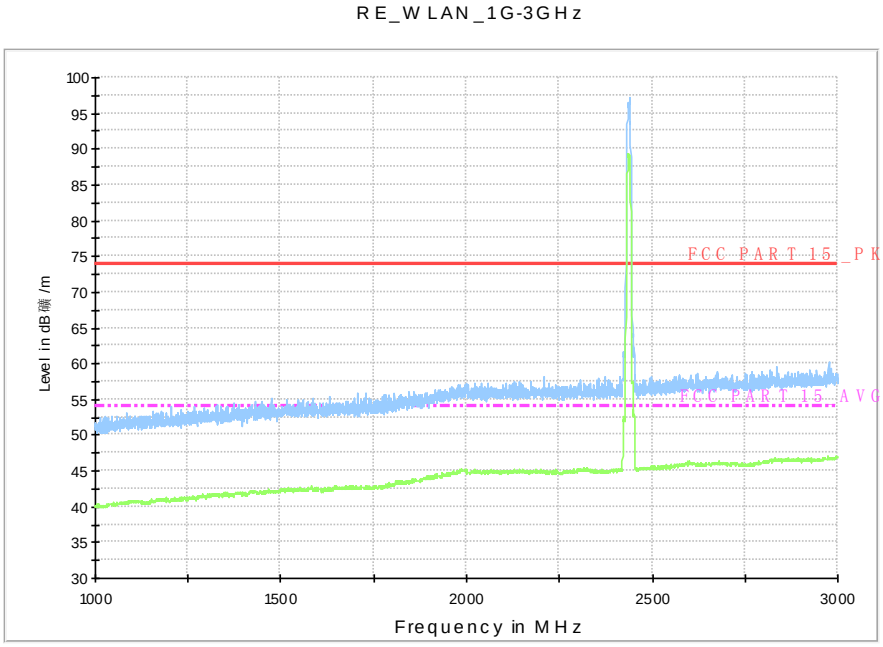

Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 1 GHz-3 GHz)

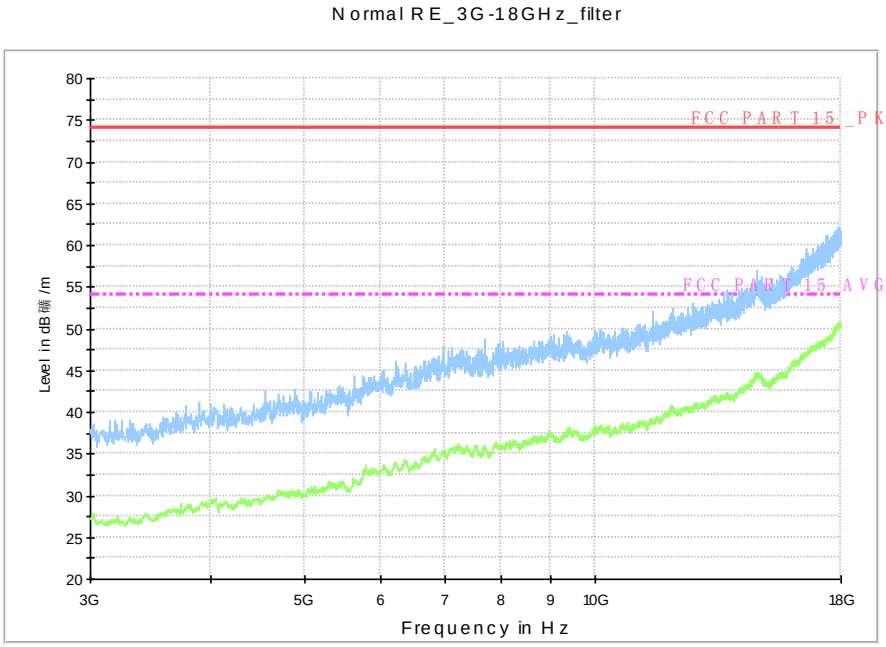

Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 3 GHz-18 GHz)

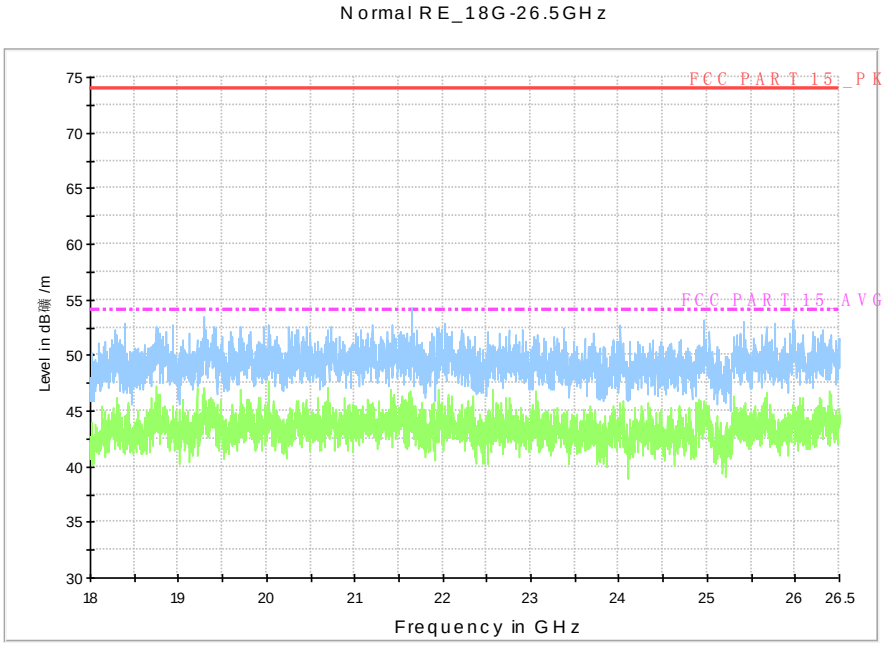

Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (802.11b, Ch6, 18GHz – 26.5GHz)

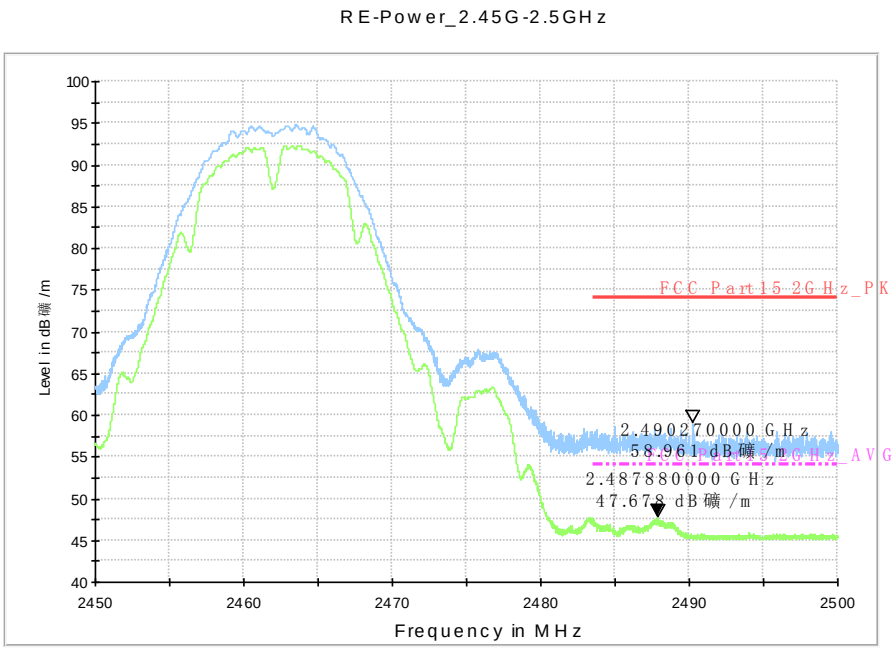

Fig.A.6.2.9 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

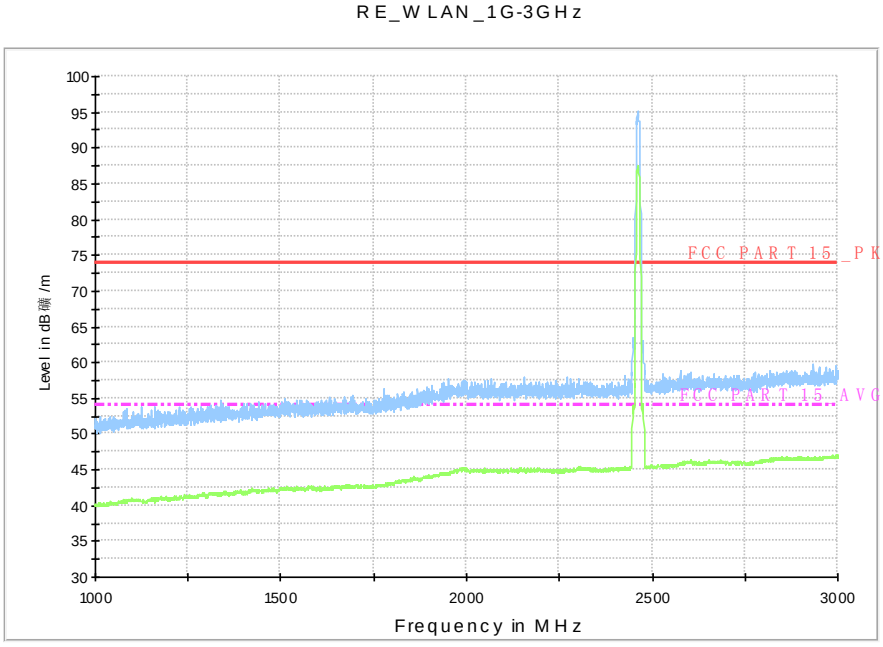

Fig.A.6.2.10 Transmitter Spurious Emission - Radiated (802.11b, Ch11, 1 GHz-3 GHz)

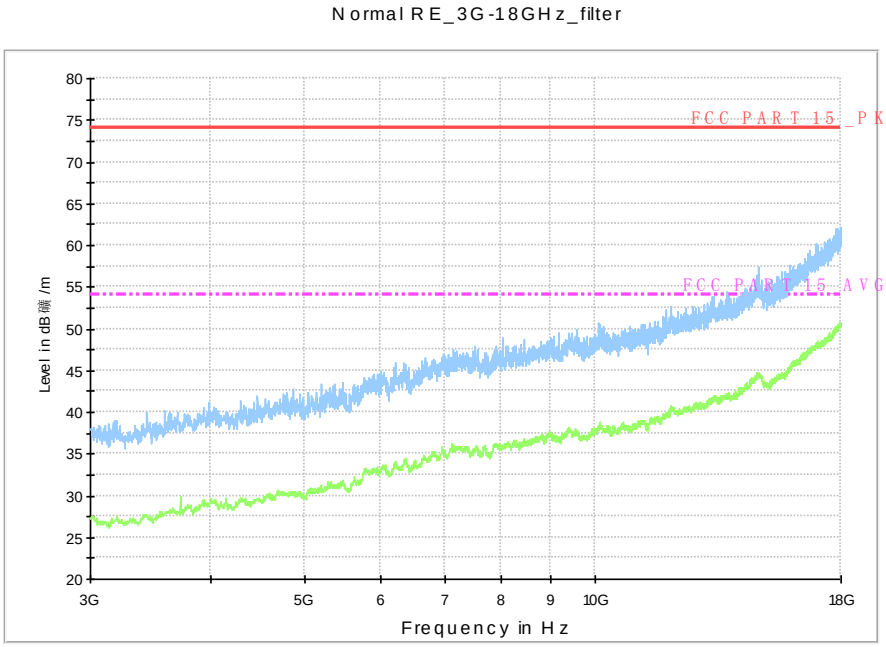

Fig.A.6.2.11 Transmitter Spurious Emission - Radiated (802.11b, Ch11, 3 GHz-18 GHz)

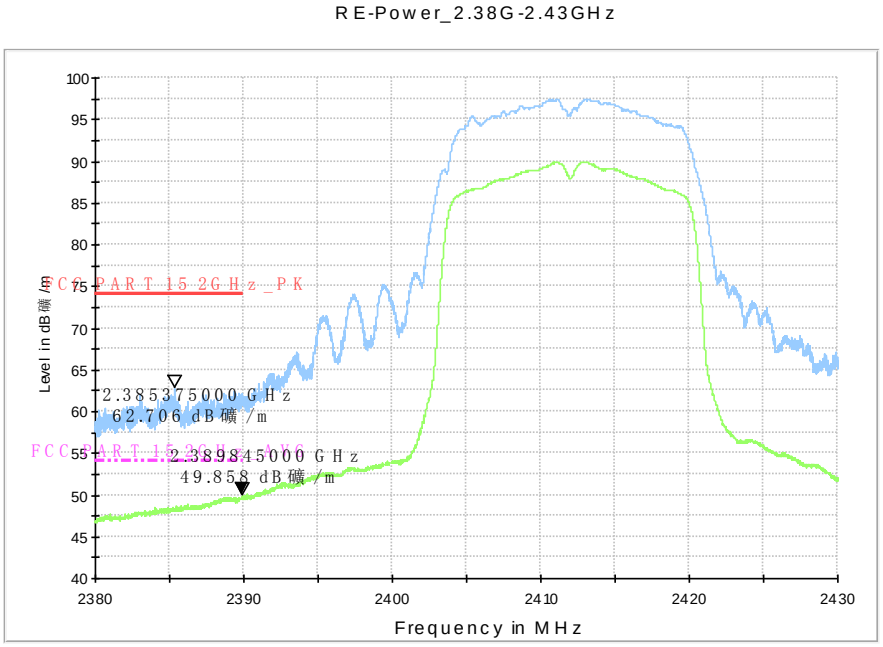

Fig.A.6.2.12 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

RE_WLAN_1G-3GHz

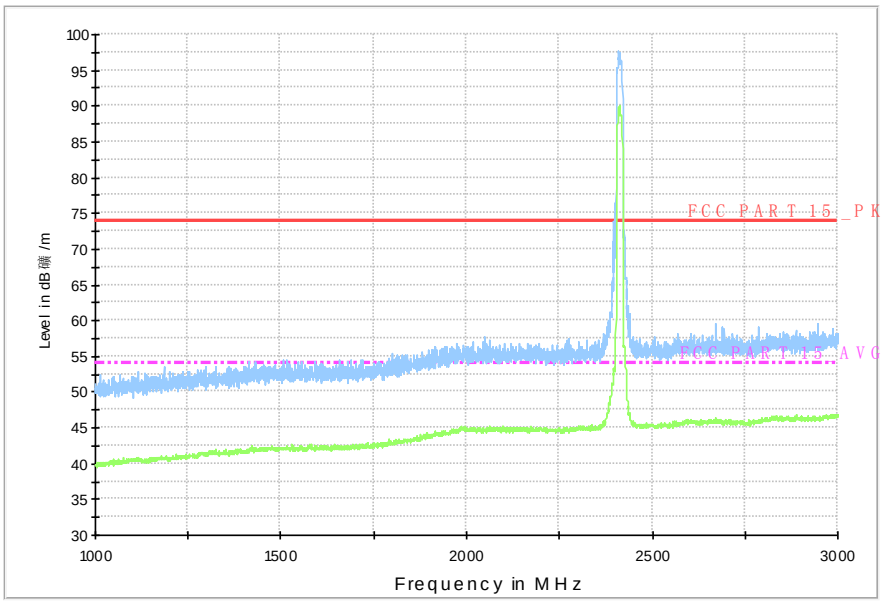

Fig.A.6.2.13 Transmitter Spurious Emission - Radiated (802.11g, Ch1, 1 GHz-3 GHz)

Normal RE_3G-18GHz_filter

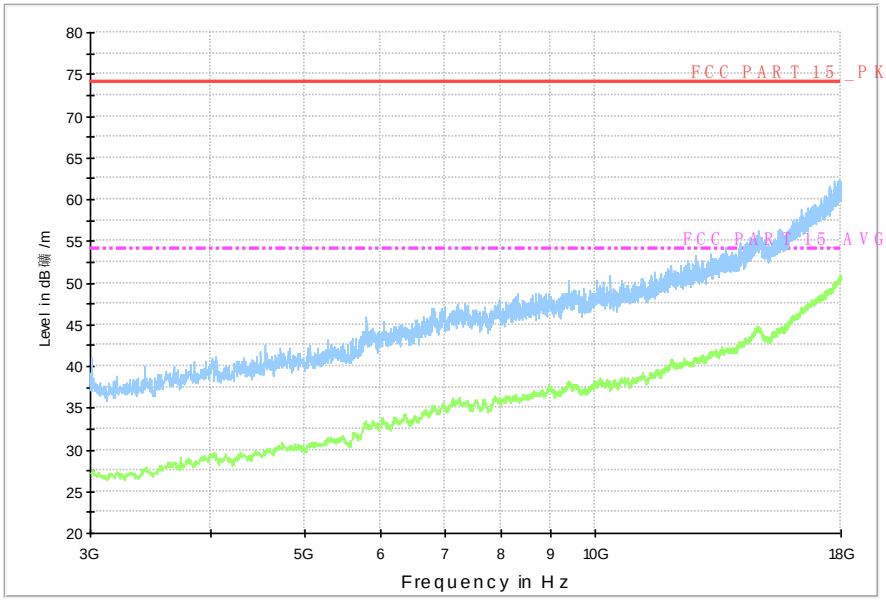

Fig.A.6.2.14 Transmitter Spurious Emission - Radiated (802.11g, Ch1, 3 GHz-18 GHz)

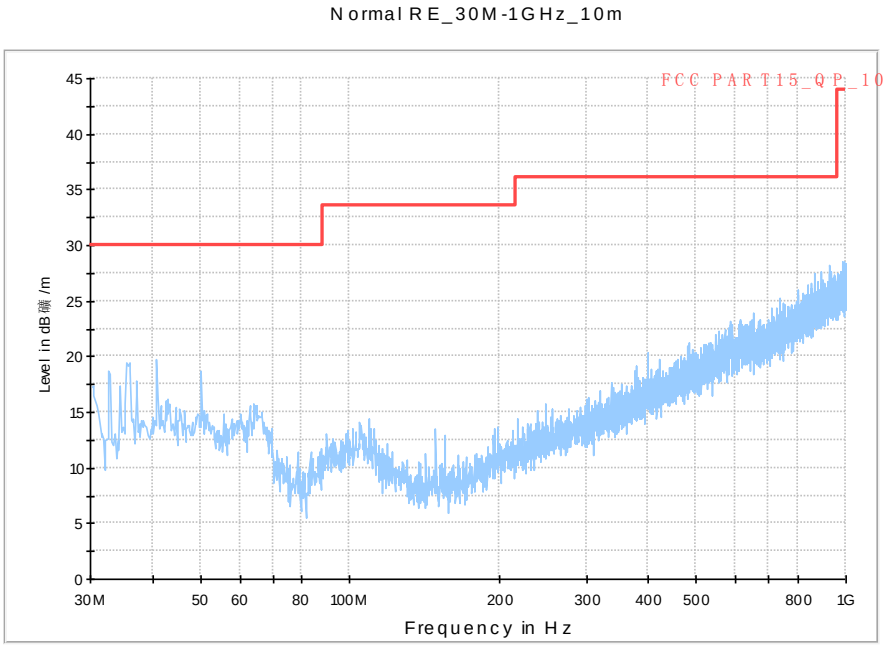

Fig.A.6.2.15 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 30 MHz-1 GHz)

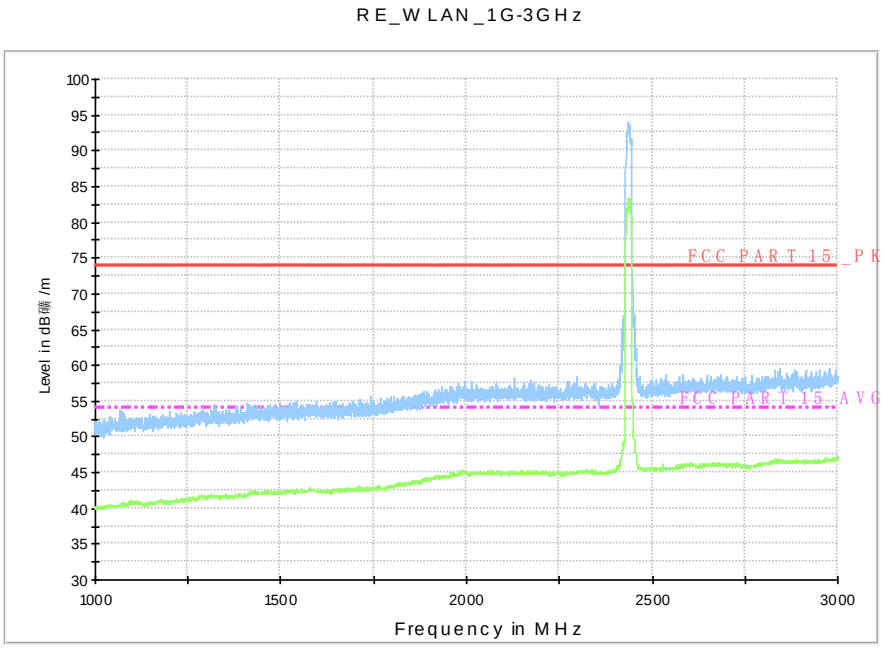

Fig.A.6.2.16 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 1 GHz-3 GHz)

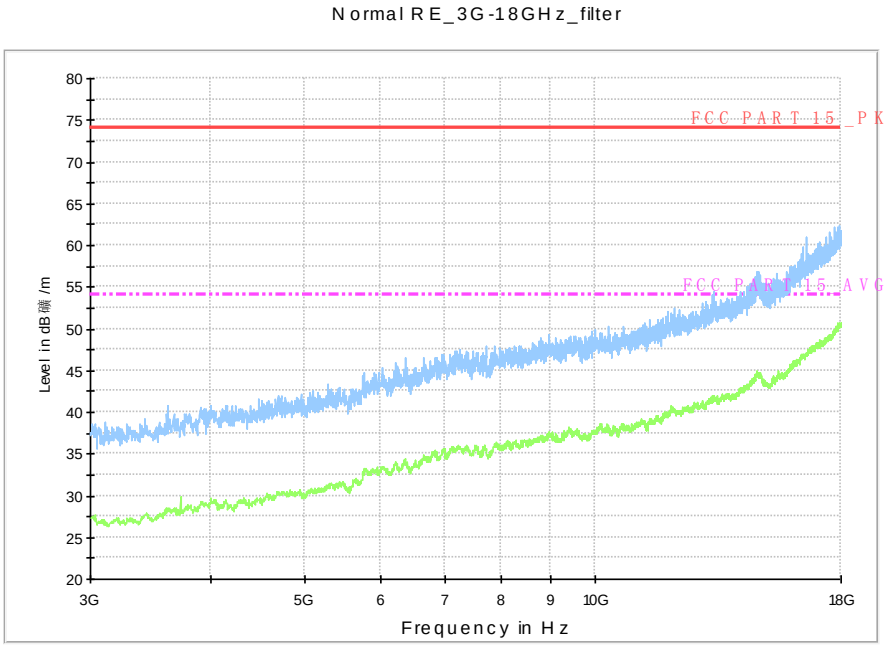

Fig.A.6.2.17 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 3 GHz-18 GHz)

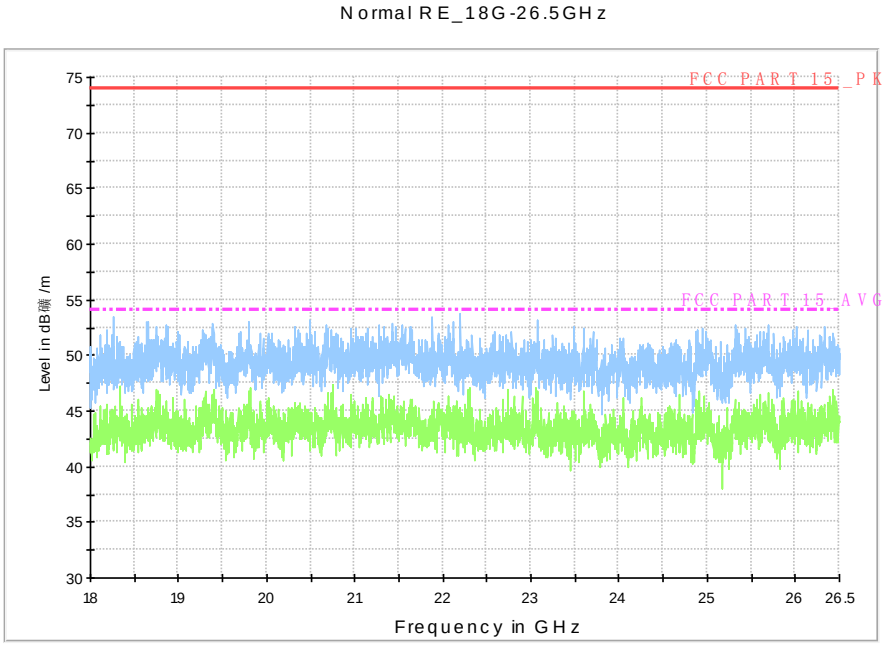

Fig.A.6.2.18 Transmitter Spurious Emission - Radiated (802.11g, Ch6, 18GHz – 26.5GHz)

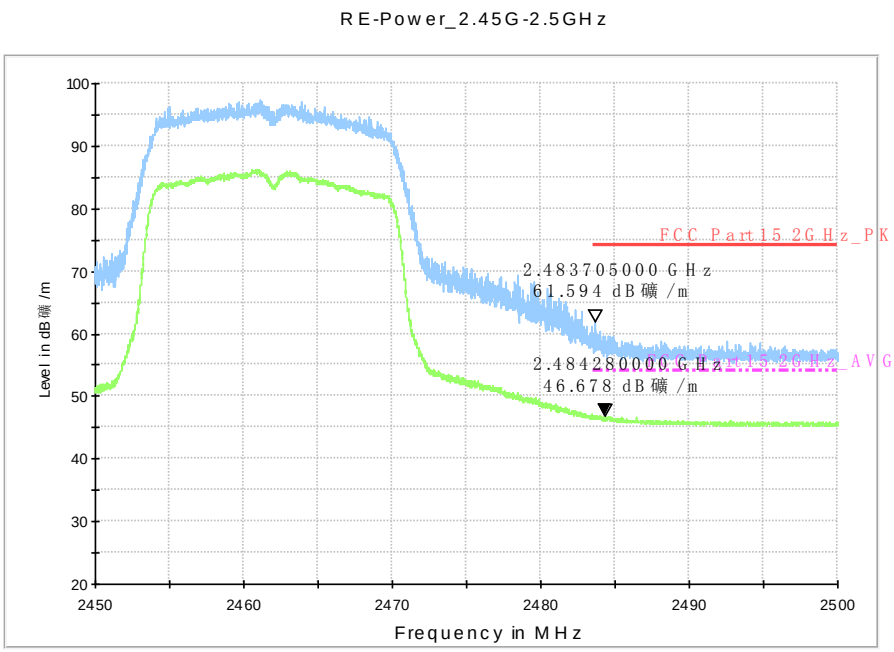

Fig.A.6.2.19 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

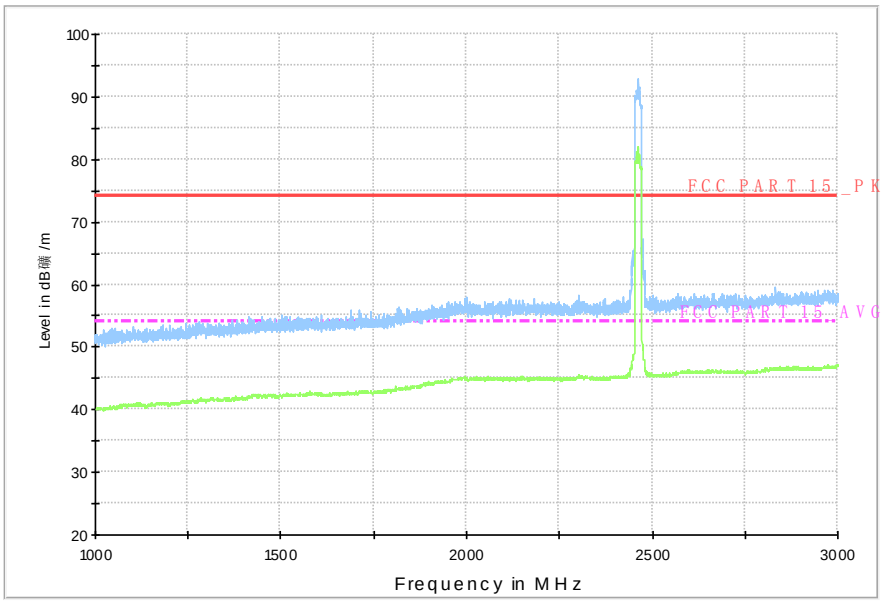

Fig.A.6.2.20 Transmitter Spurious Emission - Radiated (802.11g, Ch11, 1 GHz-3 GHz)

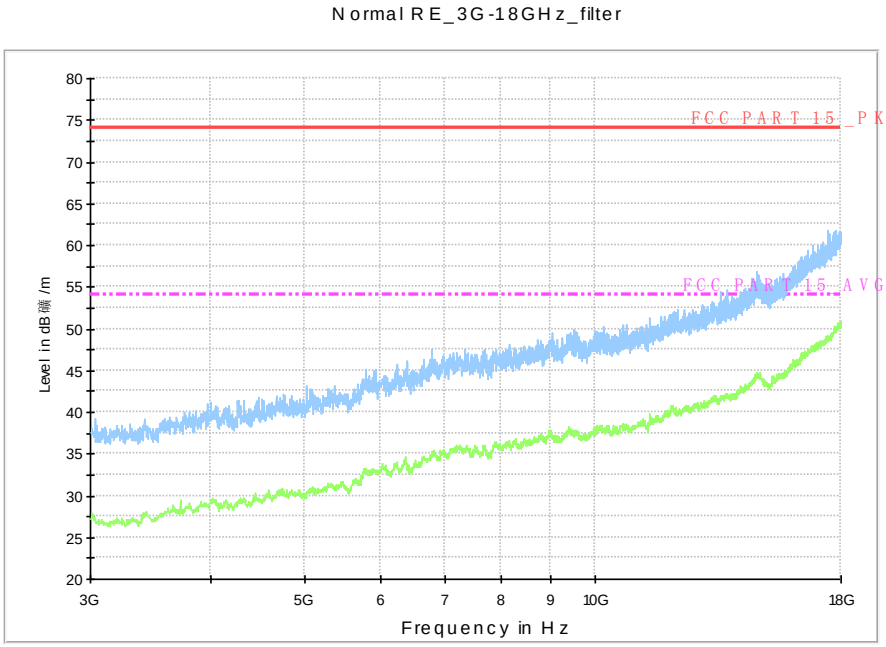

Fig.A.6.2.21 Transmitter Spurious Emission - Radiated (802.11g, Ch11, 3 GHz-18 GHz)

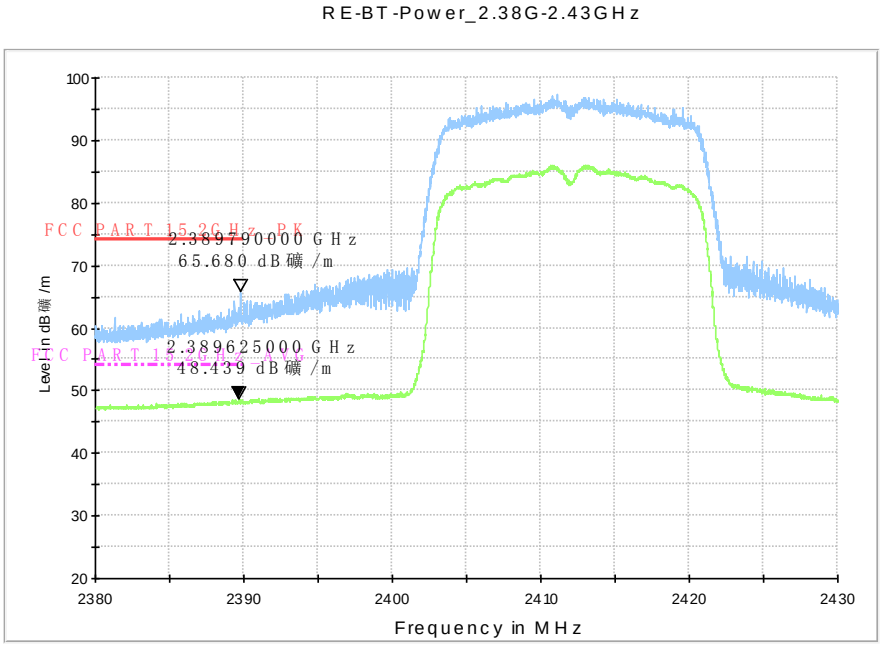

Fig.A.6.2.22 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

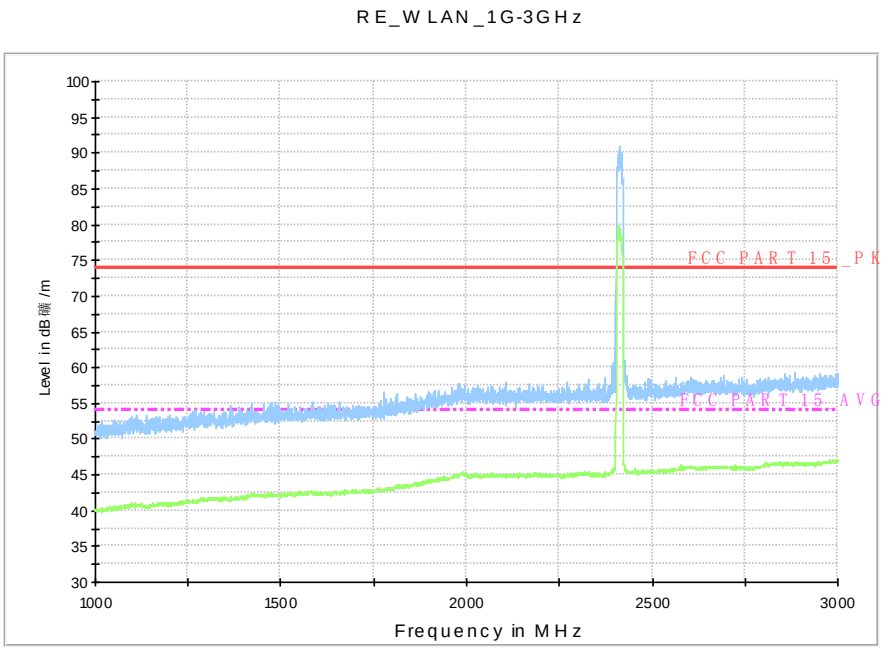

Fig.A.6.2.23 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch1, 1 GHz-3 GHz)

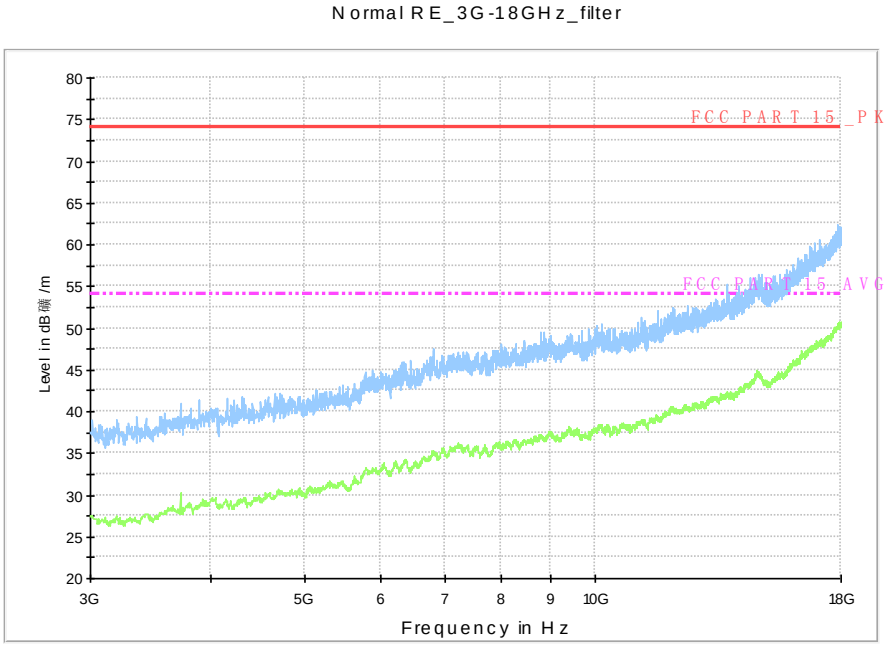

Fig.A.6.2.24 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch1, 3 GHz-18 GHz)

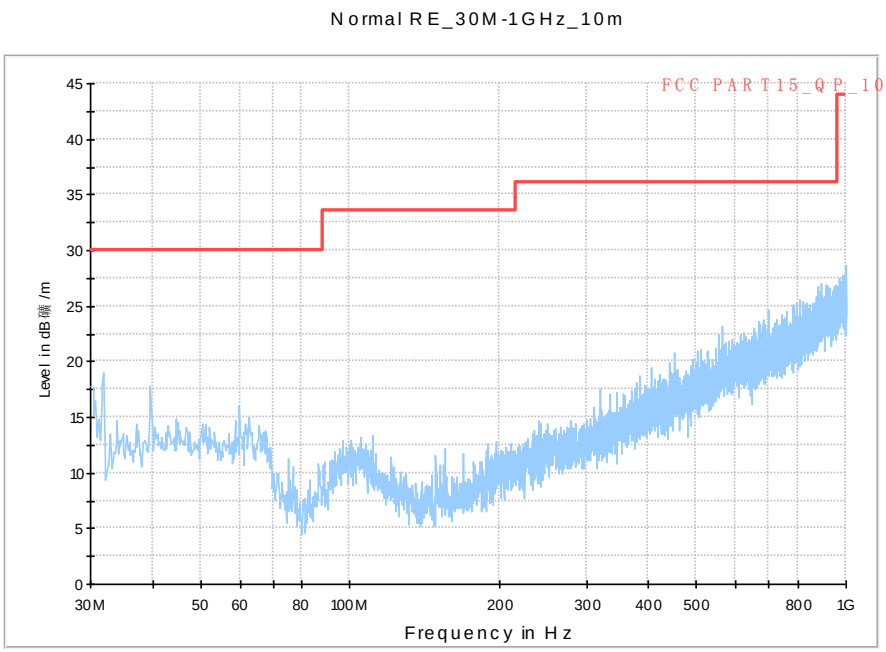

Fig.A.6.2.25 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 30 MHz-1 GHz)

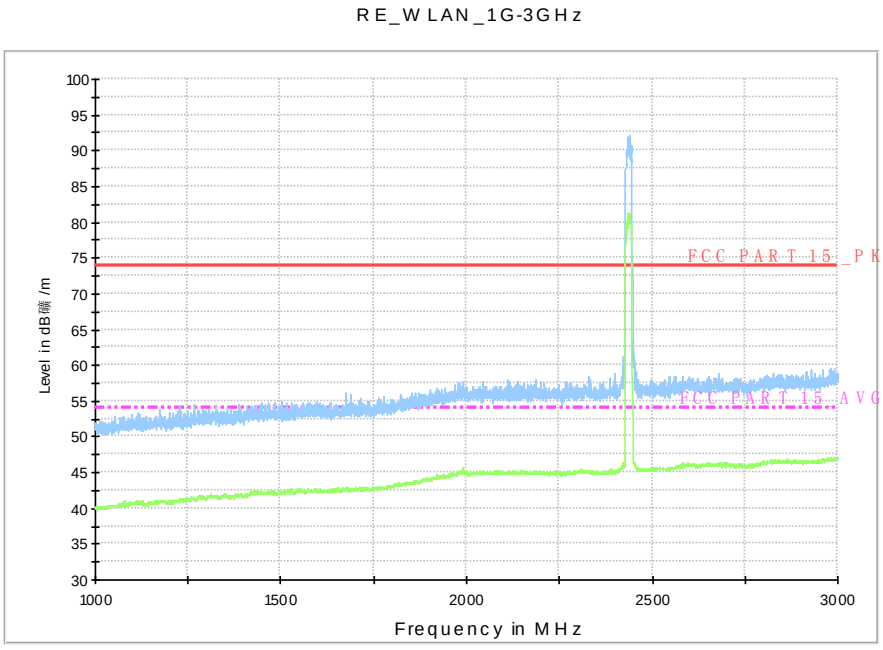

Fig.A.6.2.26 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 1 GHz-3 GHz)

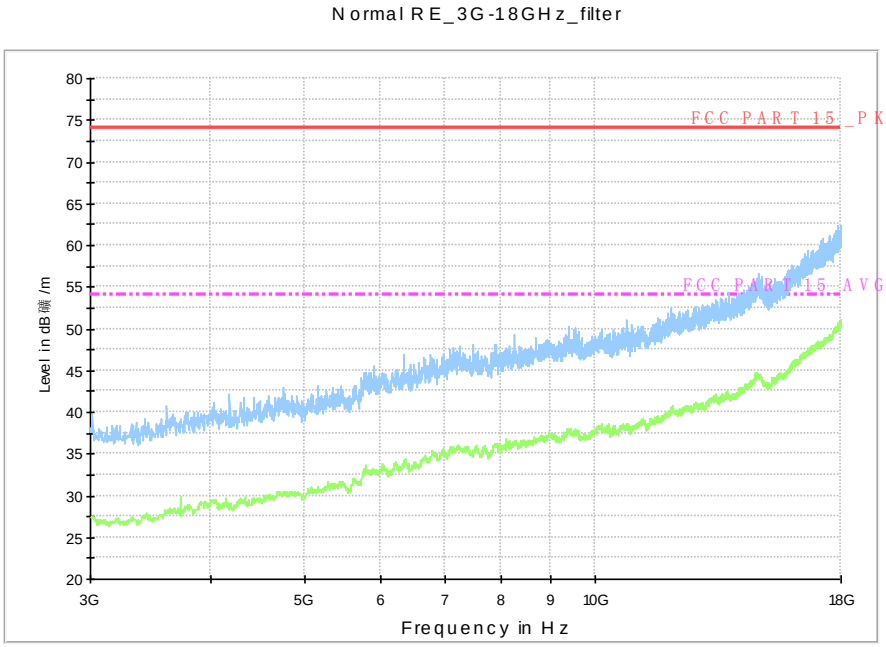

Fig.A.6.2.27 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 3 GHz-18 GHz)

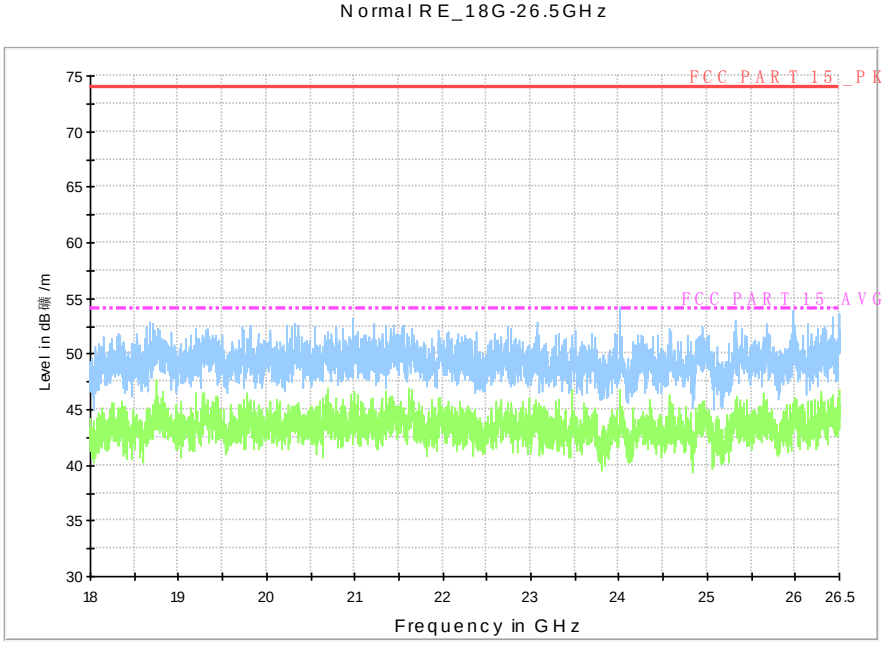

Fig.A.6.2.28 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch6, 18GHz – 26.5GHz)

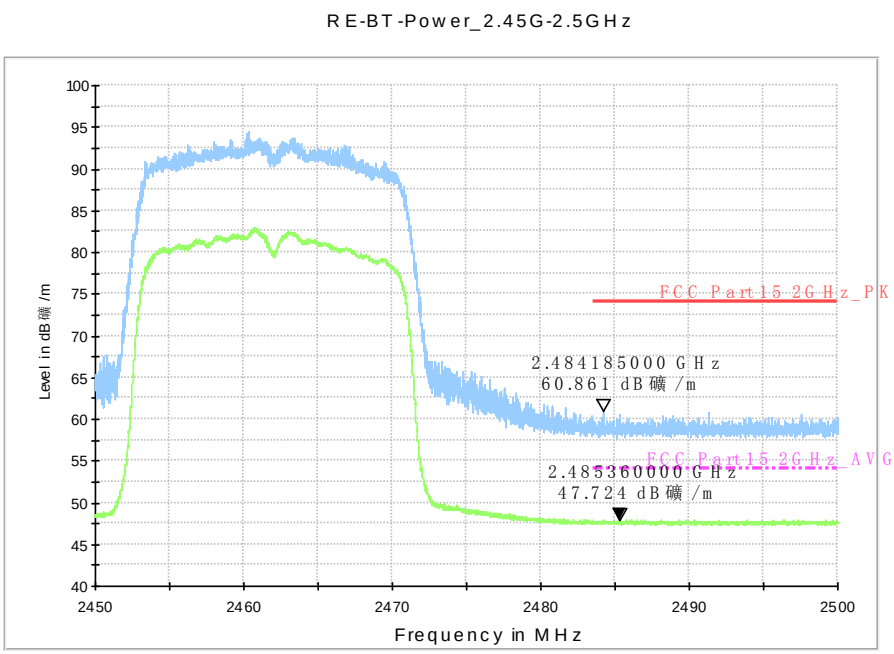

Fig.A.6.2.29 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

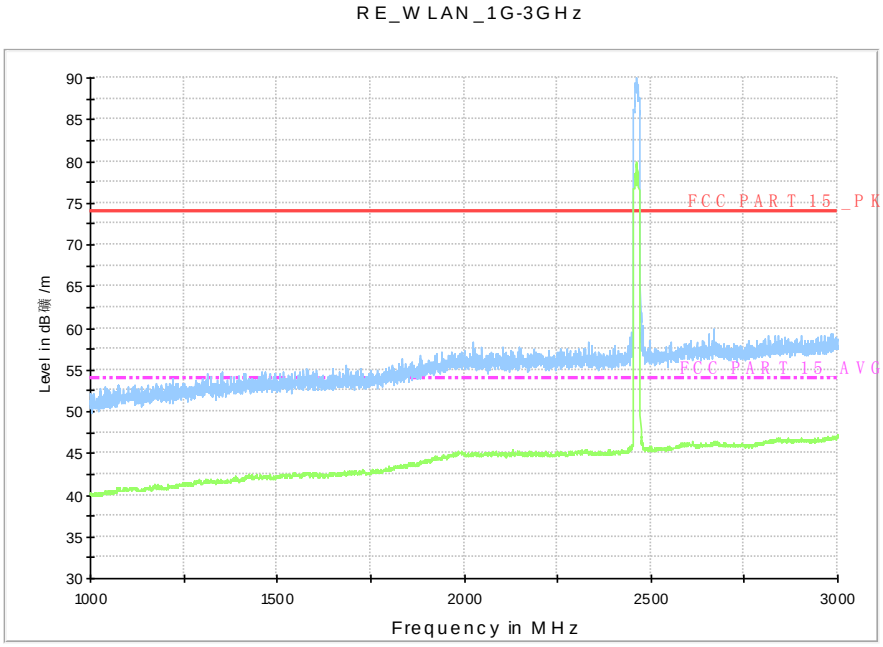

Fig.A.6.2.30 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch11, 1 GHz-3 GHz)

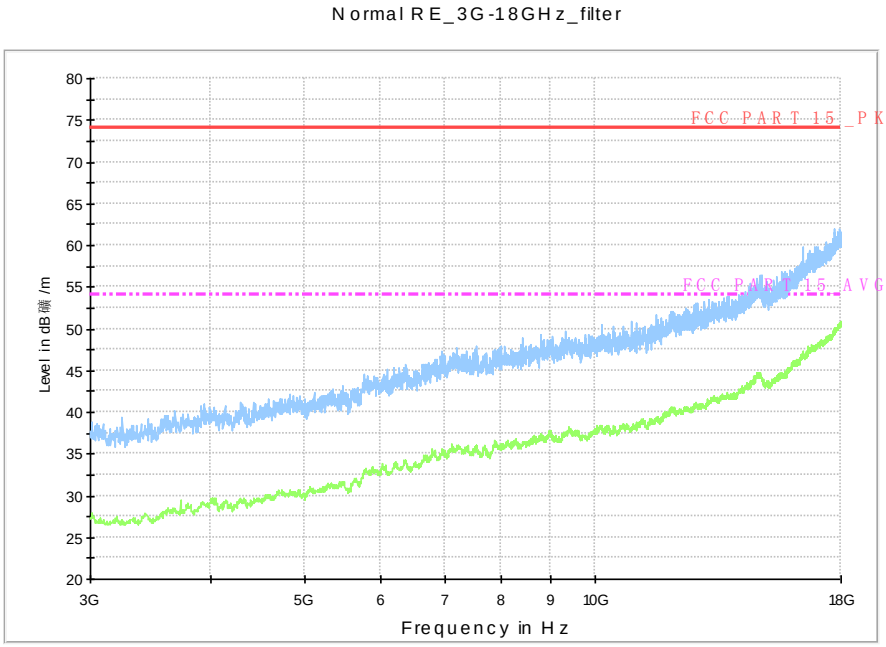

Fig.A.6.2.31 Transmitter Spurious Emission - Radiated (802.11n-HT20, Ch11, 3 GHz-18 GHz)

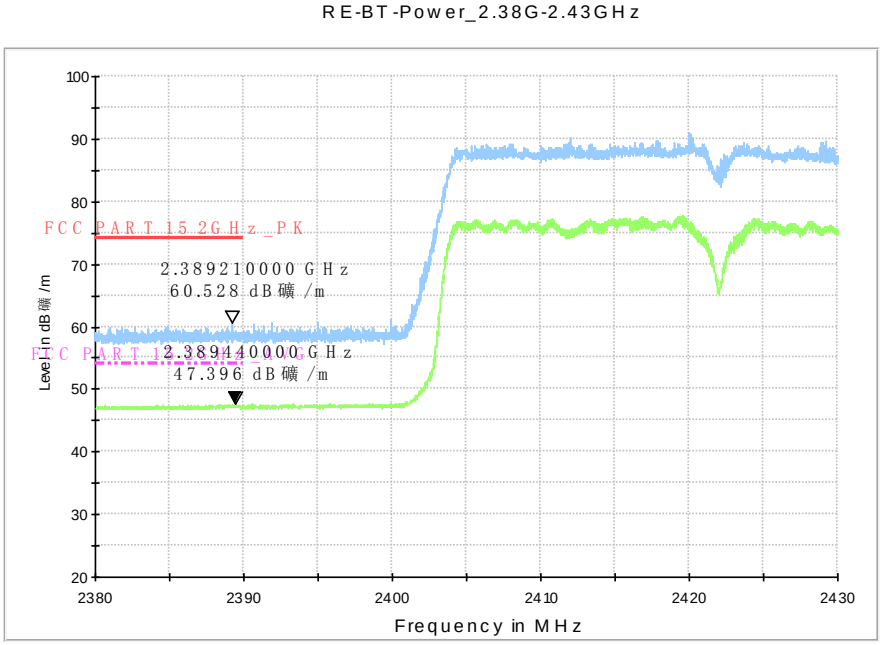

Fig.A.6.2.32 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.45GHz

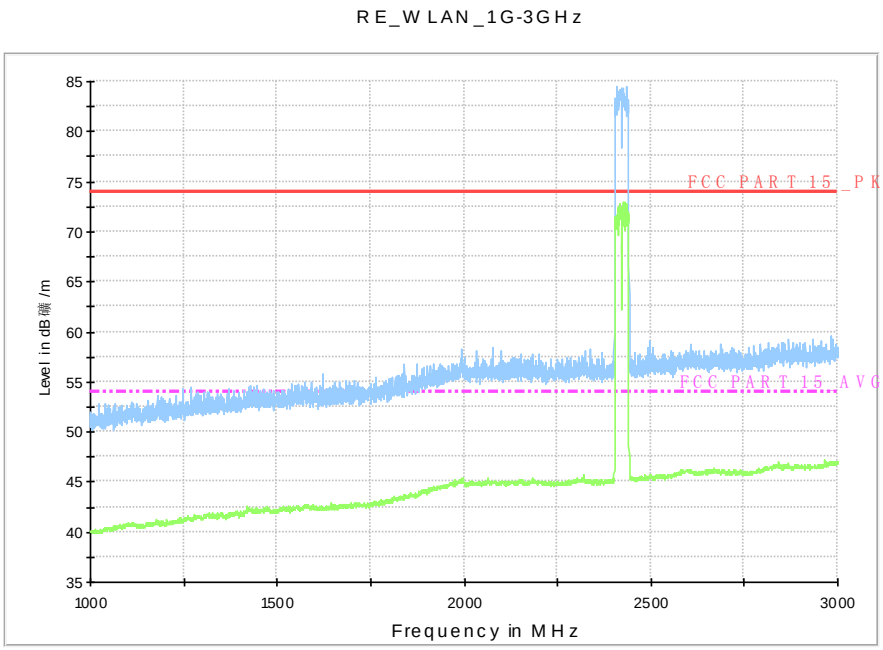

Fig.A.6.2.33 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch3, 1 GHz-3 GHz)

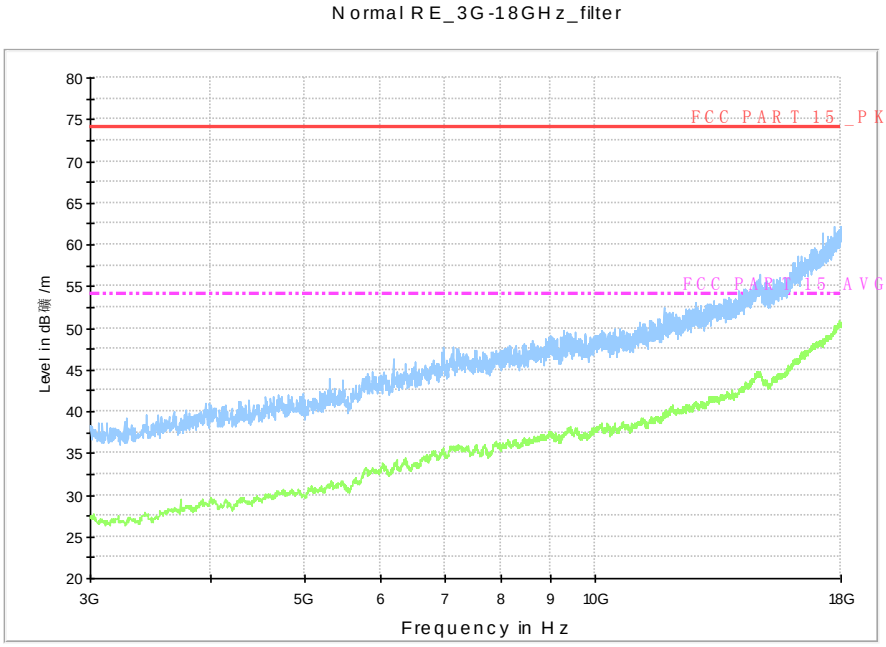

Fig.A.6.2.34 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch3, 3 GHz-18 GHz)

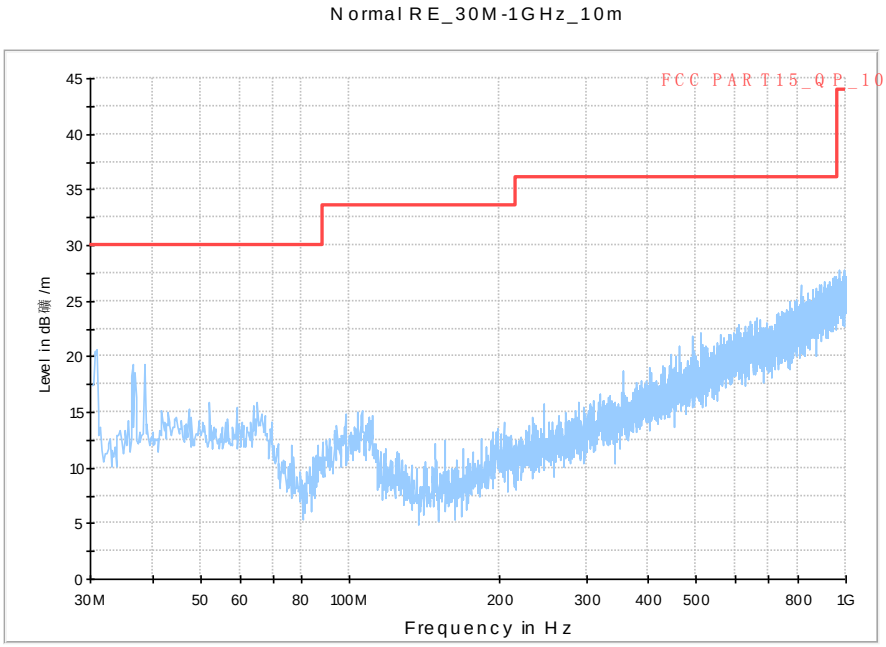

Fig.A.6.2.35 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 30 MHz-1 GHz)

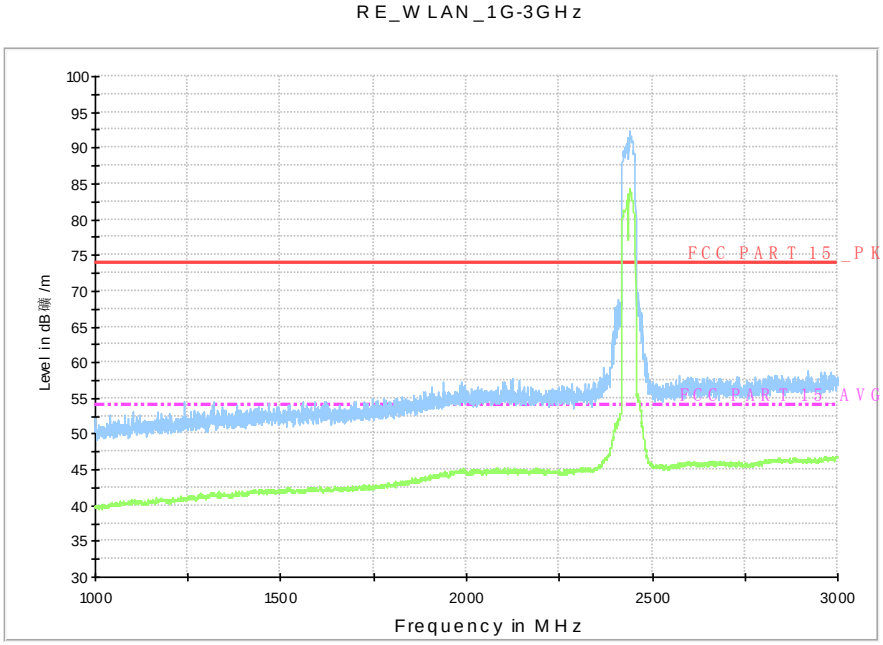

Fig.A.6.2.36 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 1 GHz-3 GHz)

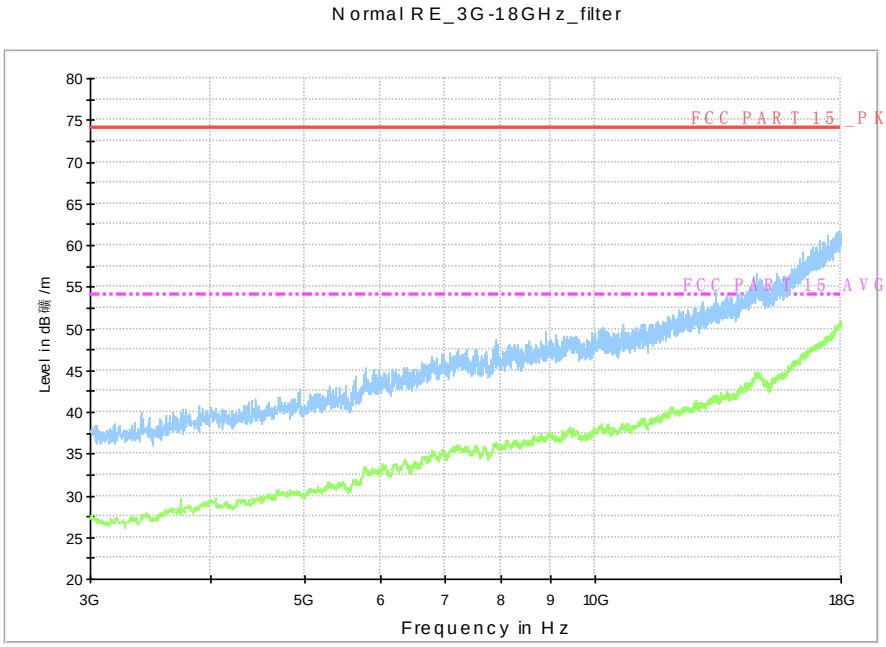

Fig.A.6.2.37 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 3 GHz-18 GHz)

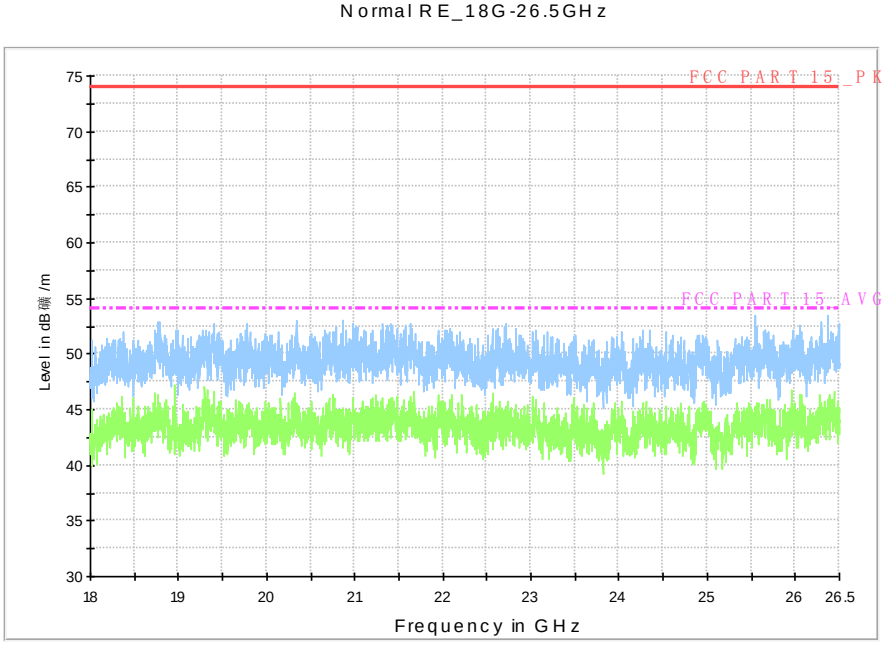

Fig.A.6.2.38 Transmitter Spurious Emission - Radiated (802.11n-HT40, Ch6, 18GHz – 26.5GHz)

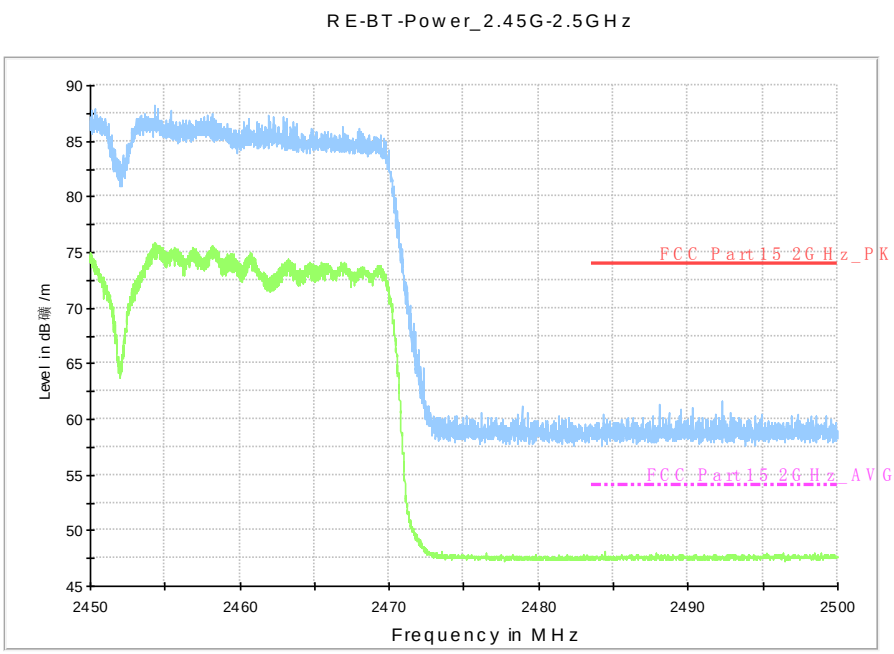

Fig.A.6.2.39 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

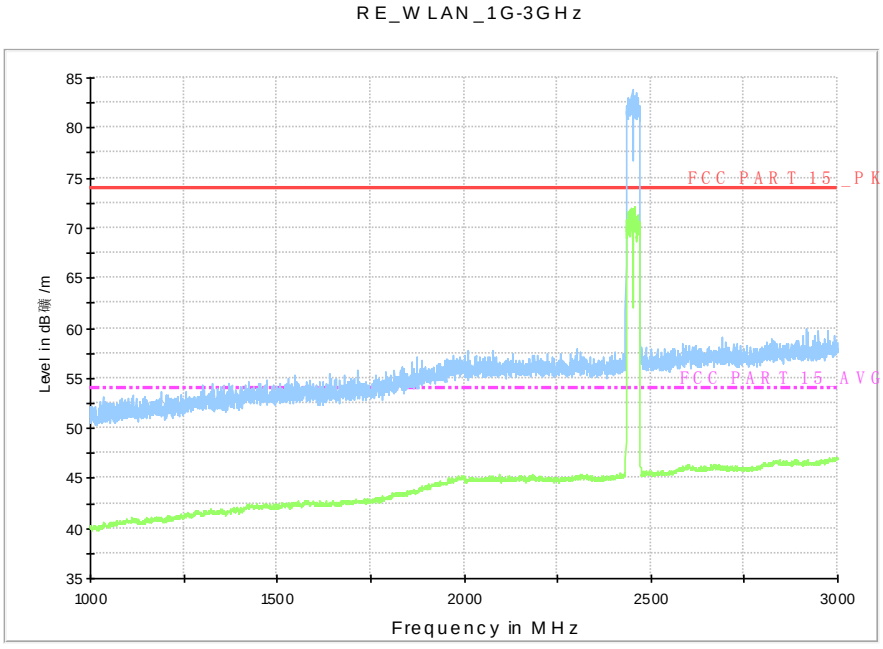

Fig.A.6.2.40 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch9, 1 GHz-3 GHz)

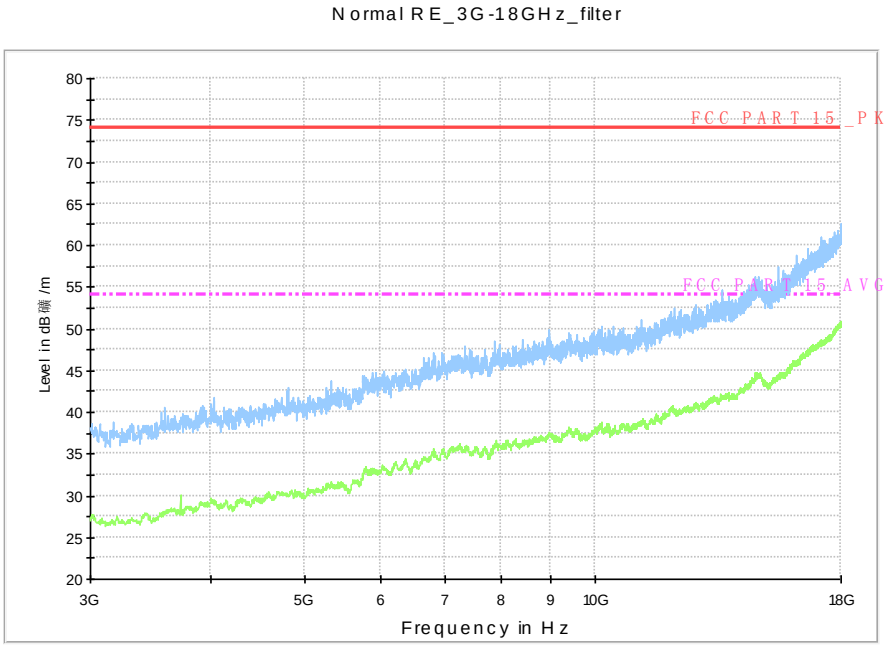

Fig.A.6.2.41 Transmitter Spurious Emission - Radiated (802.11n-HT40, ch9, 3 GHz-18 GHz)

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 within the fundamental emission band of the transmitter, but only for those 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 (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	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)		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:

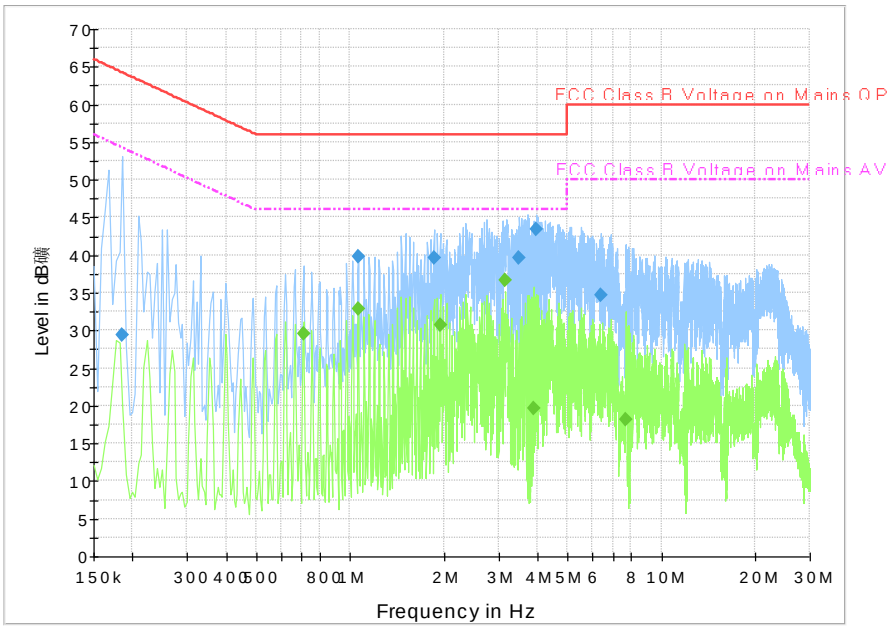

Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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 礦)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB 礦)
0.186000	29.4	2000.0	9.000	On	L1	19.8	34.8	64.2
1.063500	39.8	2000.0	9.000	On	L1	19.7	16.2	56.0
1.860000	39.7	2000.0	9.000	On	L1	19.7	16.3	56.0
3.498000	39.5	2000.0	9.000	On	N	19.5	16.5	56.0
3.948000	43.4	2000.0	9.000	On	L1	19.5	12.6	56.0
6.409500	34.6	2000.0	9.000	On	L1	19.6	25.4	60.0

Final Result 2

Frequency (MHz)	CAverage (dB 礦)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB 礦)
0.708000	29.5	2000.0	9.000	On	L1	19.8	16.5	46.0
1.063500	32.9	2000.0	9.000	On	L1	19.7	13.1	46.0
1.945500	30.8	2000.0	9.000	On	L1	19.7	15.2	46.0
3.151500	36.6	2000.0	9.000	On	L1	19.3	9.4	46.0
3.876000	19.6	2000.0	9.000	On	L1	19.5	26.4	46.0
7.696500	18.2	2000.0	9.000	On	L1	19.6	31.8	50.0

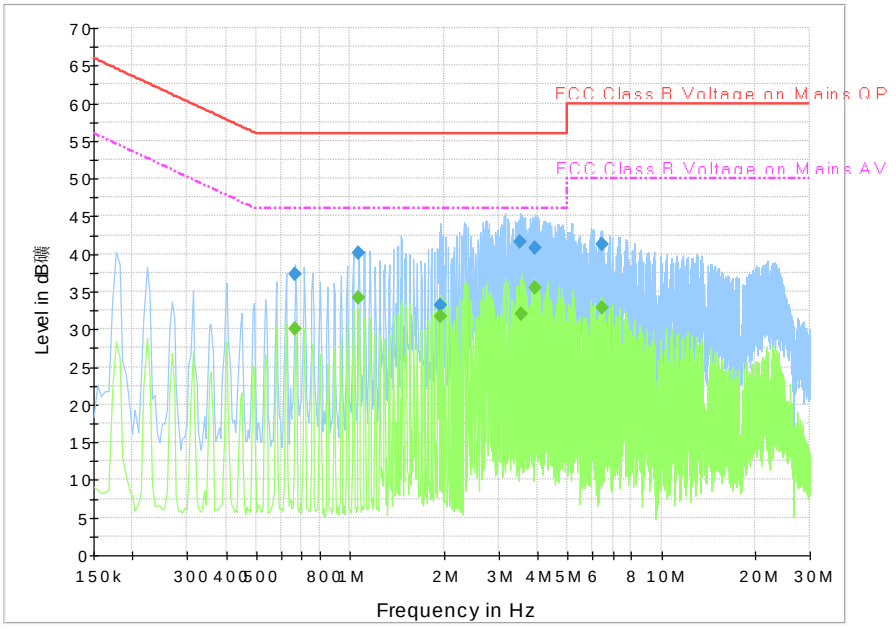

Fig.A.7.2 AC Powerline Conducted Emission-Idle

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