

	6	30 MHz ~1 GHz	Fig.A.6.2.38	P
		1 GHz ~ 3 GHz	Fig.A.6.2.39	P
		3 GHz ~ 18 GHz	Fig.A.6.2.40	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.41	P
	9	30 MHz ~1 GHz	Fig.A.6.2.42	P
		1 GHz ~ 3 GHz	Fig.A.6.2.43	P
3 GHz ~ 18 GHz		Fig.A.6.2.44	P	
/	All channels	18 GHz~ 26.5 GHz	Fig.A.6.2.45	P

Conclusion: Pass

Measurement Uncertainty:

Frequency Range	Uncertainty(dB)
$f \leq 1\text{GHz}$	3.9
$f > 1\text{GHz}$	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:

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

802.11b

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17494.500	58.7	-22.8	43.0	38.445	HORIZONTAL
17500.500	58.1	-22.8	42.8	38.115	HORIZONTAL
17496.000	58.0	-22.8	43.0	37.745	VERTICAL
17985.000	57.7	-22.9	42.3	38.323	VERTICAL
17482.500	57.5	-22.8	43.0	37.245	VERTICAL
17782.500	57.4	-22.8	42.0	38.291	VERTICAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17772.750	59.0	-22.8	42.2	39.671	VERTICAL
17496.000	57.5	-22.8	43.0	37.245	HORIZONTAL
17503.500	57.5	-22.8	42.8	37.515	VERTICAL
17096.250	57.3	-23.9	42.8	38.400	VERTICAL
17952.000	57.3	-22.9	42.7	37.483	HORIZONTAL
17912.250	57.2	-22.9	42.7	37.433	HORIZONTAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17511.750	57.9	-22.8	42.8	37.915	VERTICAL
17682.000	57.6	-22.8	42.3	38.101	HORIZONTAL
17822.250	57.5	-22.9	42.9	37.443	VERTICAL
17899.500	57.2	-22.9	42.5	37.593	VERTICAL
17532.750	57.1	-22.8	42.9	36.955	HORIZONTAL
17482.500	57.1	-22.9	42.4	37.593	VERTICAL

802.11g

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17547.000	58.3	-22.8	42.9	38.155	HORIZONTAL
17511.750	58.2	-22.8	42.8	38.215	VERTICAL
17441.250	58.2	-23.7	42.7	39.183	VERTICAL
17985.750	57.2	-22.9	42.3	37.823	VERTICAL
17439.750	57.2	-23.7	42.7	38.183	HORIZONTAL
17533.500	57.1	-22.8	42.9	36.955	HORIZONTAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17847.000	58.1	-22.9	42.3	38.673	HORIZONTAL
17548.500	57.6	-22.8	42.9	37.455	VERTICAL
17466.000	57.3	-22.8	42.6	37.485	VERTICAL
17766.750	57.2	-22.8	42.2	37.871	VERTICAL
17673.750	57.2	-22.8	42.7	37.371	HORIZONTAL
17303.250	57.2	-23.7	43.1	37.873	HORIZONTAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17508.750	58.8	-22.8	42.8	38.815	VERTICAL
17748.000	57.7	-22.8	42.1	38.461	VERTICAL
17332.500	57.7	-23.7	42.6	38.793	VERTICAL
17436.750	57.7	-23.7	42.7	38.683	HORIZONTAL
17913.750	57.6	-22.9	42.7	37.833	VERTICAL
17439.000	57.4	-23.7	42.7	38.383	VERTICAL

802.11n-HT20

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17409.750	57.6	-23.7	42.7	38.613	HORIZONTAL
17434.500	57.6	-23.7	42.7	38.583	VERTICAL
17919.750	57.5	-22.9	42.7	37.733	VERTICAL
17517.000	57.5	-22.8	42.8	37.515	VERTICAL
17537.250	57.4	-22.8	42.9	37.255	HORIZONTAL
17573.250	57.3	-22.8	42.3	37.825	HORIZONTAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17118.000	57.8	-23.7	42.6	38.873	HORIZONTAL
17646.750	57.6	-22.8	42.7	37.771	HORIZONTAL
17620.500	57.5	-22.8	42.8	37.525	HORIZONTAL
17514.000	57.3	-22.8	42.8	37.315	HORIZONTAL
17477.250	57.3	-22.8	43.0	37.045	HORIZONTAL
17480.250	57.2	-22.8	43.0	36.945	HORIZONTAL

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17760.000	57.8	-22.8	42.2	38.471	VERTICAL
17919.750	57.7	-22.9	42.7	37.933	HORIZONTAL
17034.000	57.6	-23.9	43.6	37.830	VERTICAL
17901.750	57.5	-22.9	42.7	37.733	HORIZONTAL
17643.750	57.4	-22.8	42.7	37.571	HORIZONTAL
17536.500	57.4	-22.8	42.9	37.255	VERTICAL

802.11n-HT40

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17462.250	58.1	-22.8	42.6	38.285	HORIZONTAL
17600.250	57.7	-22.8	42.8	37.725	VERTICAL
17451.750	57.6	-23.7	42.6	38.723	HORIZONTAL
17467.500	57.4	-22.8	42.6	37.585	HORIZONTAL
17790.750	57.4	-22.8	42.0	38.291	VERTICAL
17476.500	57.4	-22.8	43.0	37.145	VERTICAL

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
17660.250	57.7	-22.8	42.7	37.871	HORIZONTAL
17639.250	57.6	-22.8	42.7	37.771	VERTICAL
17913.000	57.5	-22.9	42.7	37.733	HORIZONTAL
17507.250	57.4	-22.8	42.8	37.415	HORIZONTAL
17917.500	57.4	-22.9	42.7	37.633	HORIZONTAL
17771.250	57.4	-22.8	42.2	38.071	VERTICAL

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
16851.000	57.6	-24.0	43.4	38.279	HORIZONTAL
17517.750	57.5	-22.8	42.8	37.515	VERTICAL
17505.000	57.5	-22.8	42.8	37.515	VERTICAL
17751.000	57.4	-22.8	42.2	38.071	HORIZONTAL
17571.000	57.3	-22.8	42.3	37.825	VERTICAL
17493.750	57.2	-22.8	43.0	36.945	HORIZONTAL

Test graphs as below:

RE - Power-2.38GHz-2.45GHz

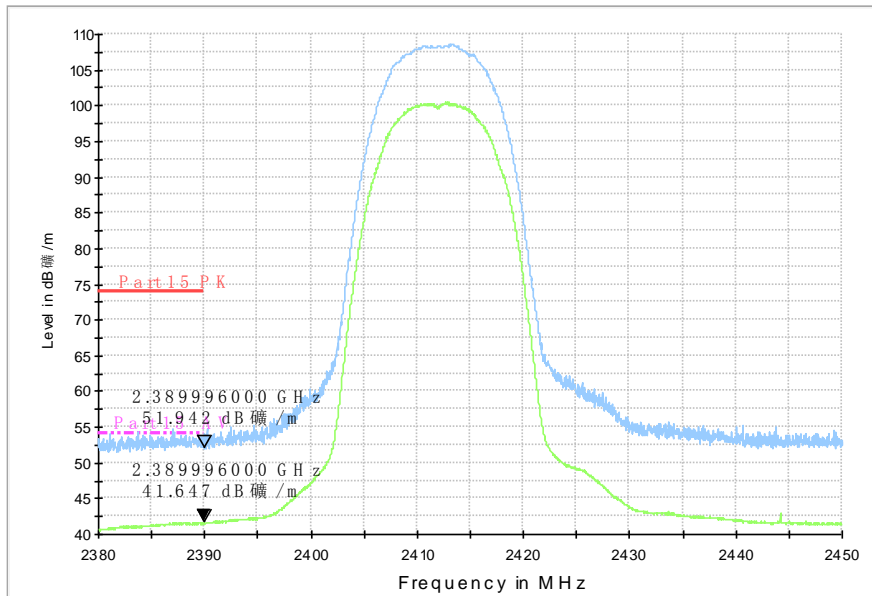


Fig.A.6.2.1 Radiated Spurious Emission (Power): 802.11b, Ch1, 2.38 GHz – 2.45GHz

RE 30MHz-1GHz

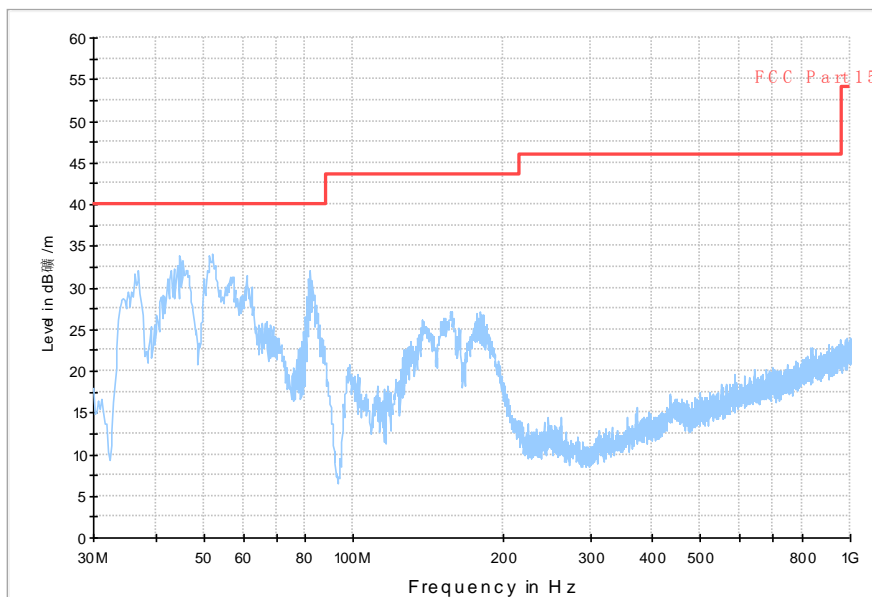


Fig.A.6.2.2 Radiated Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)

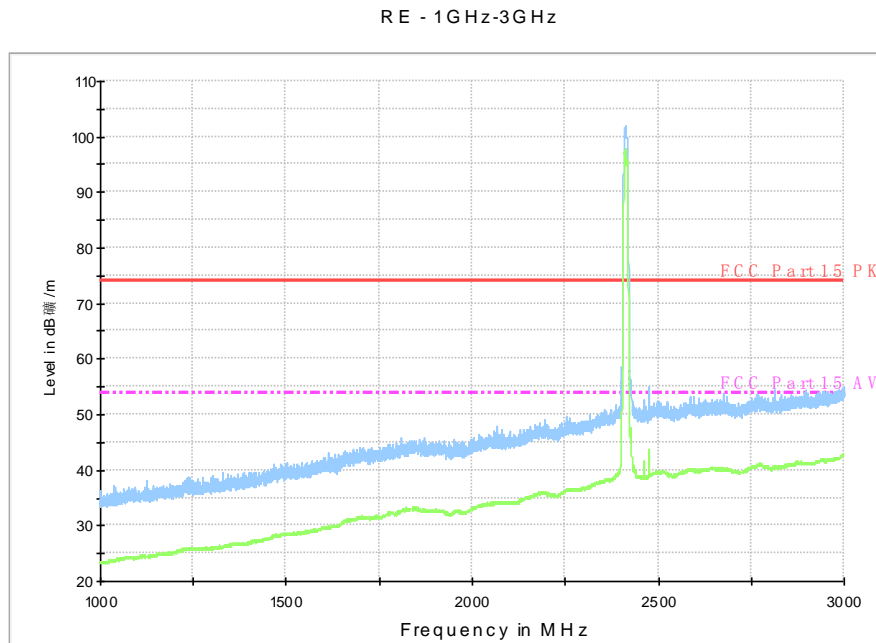


Fig.A.6.2.3 Radiated Spurious Emission (802.11b, Ch1, 1 GHz-3 GHz)

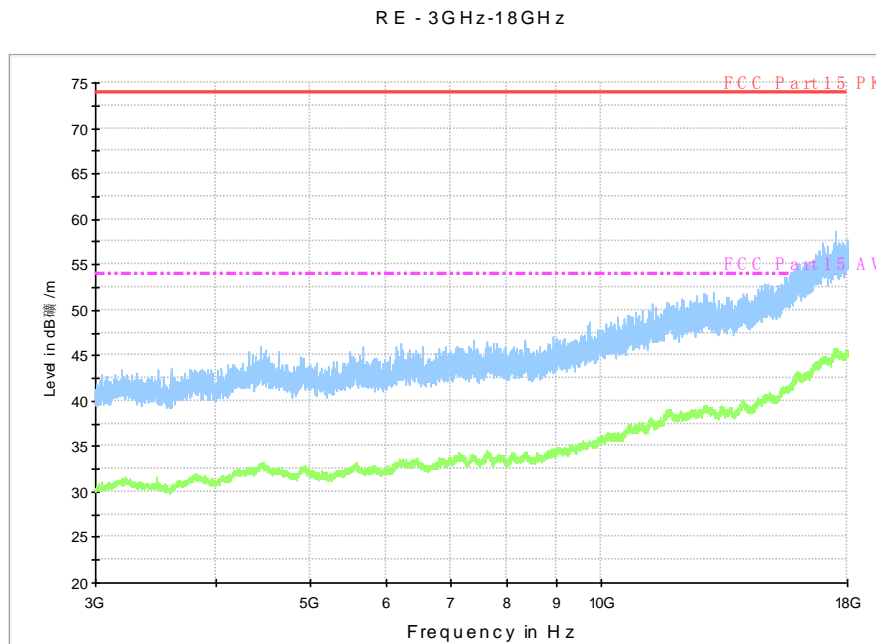


Fig.A.6.2.4 Radiated Spurious Emission (802.11b, Ch1, 3 GHz-18 GHz)

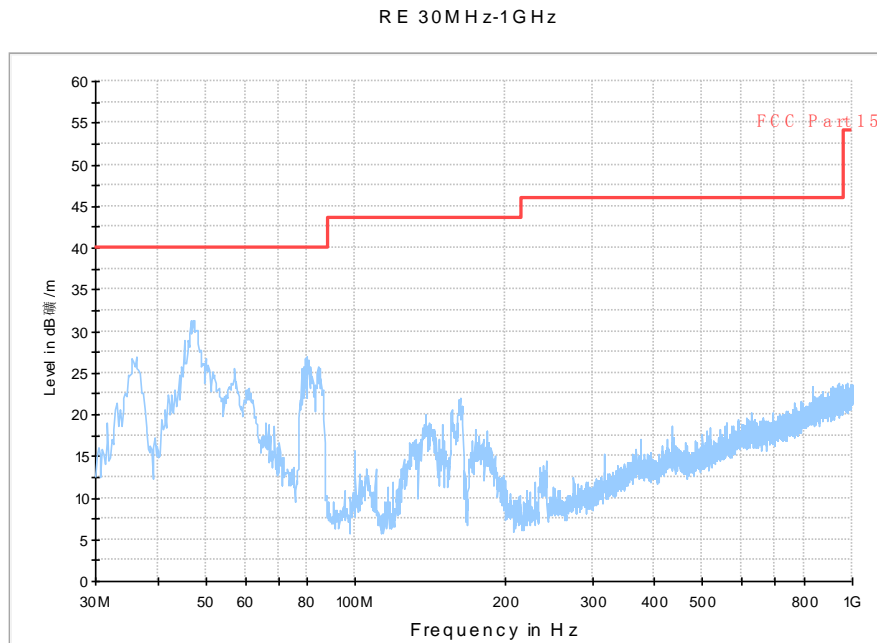


Fig.A.6.2.5 Radiated Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

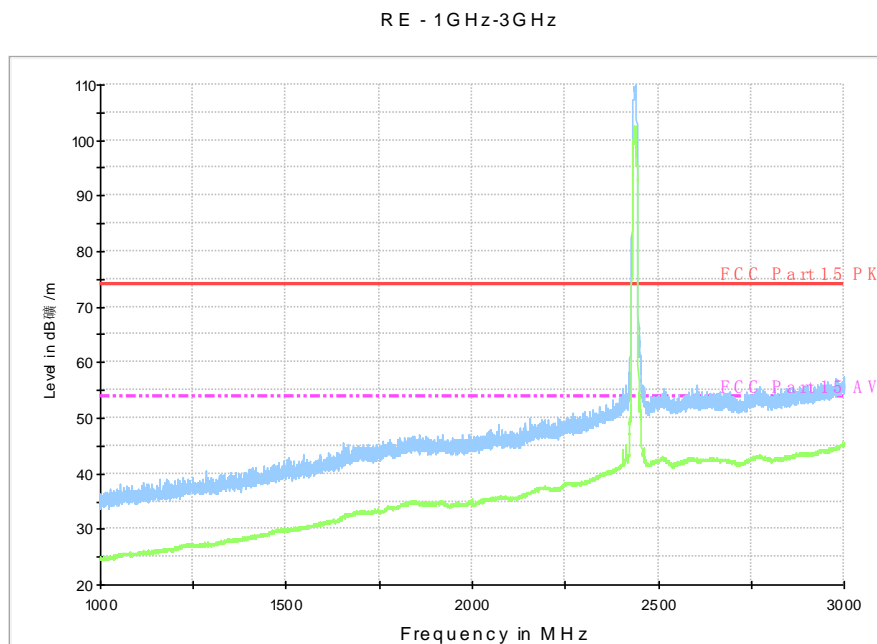


Fig.A.6.2.6 Radiated Spurious Emission (802.11b, Ch6, 1 GHz-3 GHz)

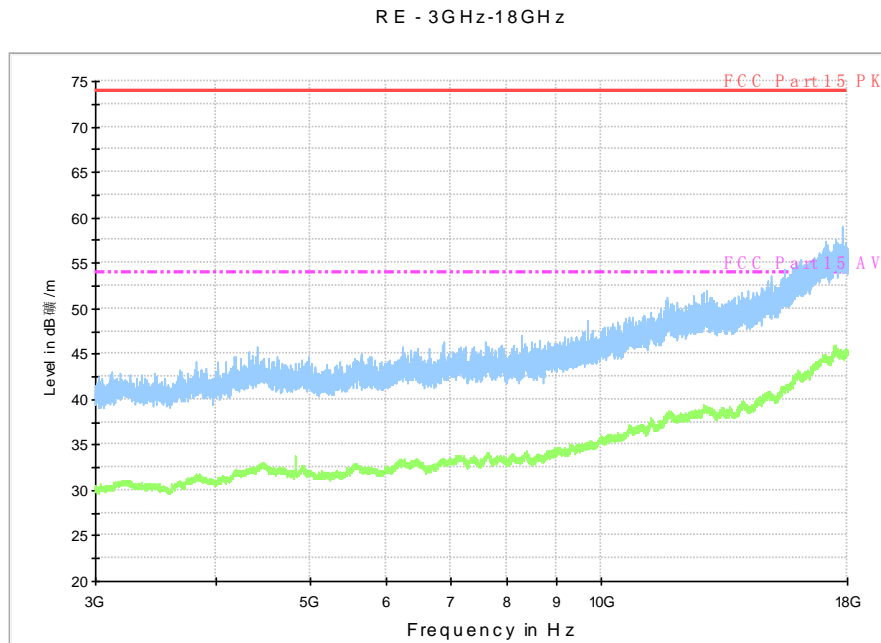


Fig.A.6.2.7 Radiated Spurious Emission (802.11b, Ch6, 3 GHz-18 GHz)

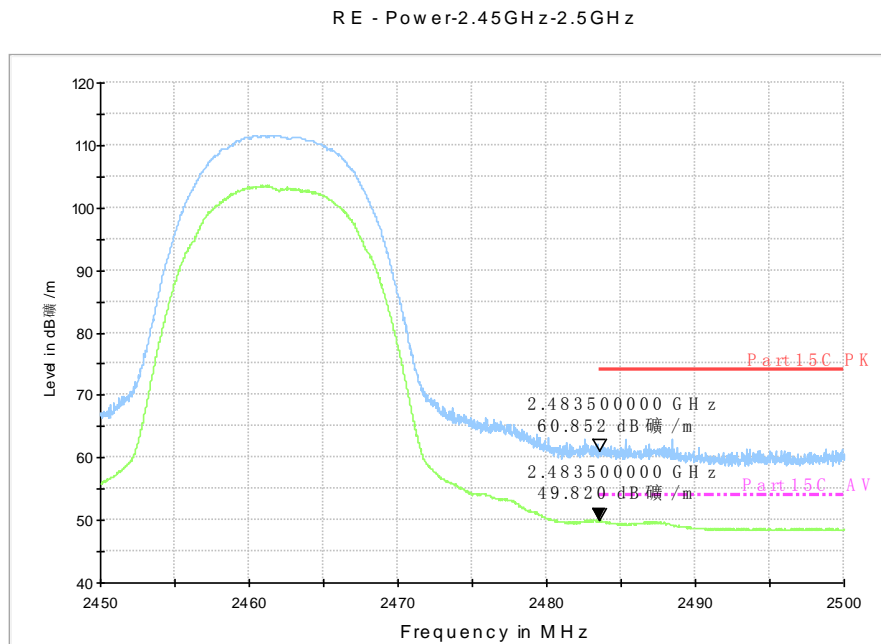


Fig.A.6.2.8 Radiated Spurious Emission (Power): 802.11b, Ch11, 2.45 GHz - 2.50GHz

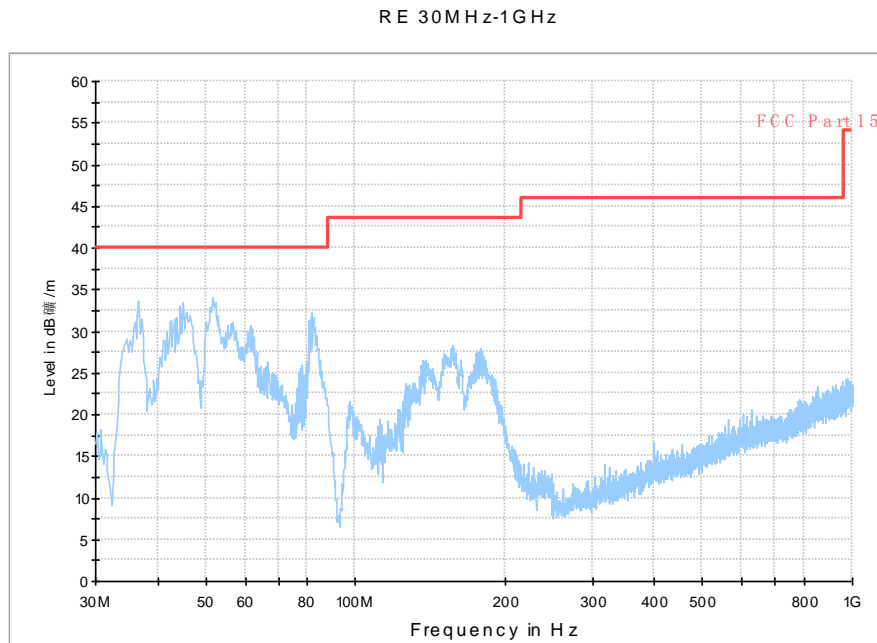


Fig.A.6.2.9 Radiated Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)

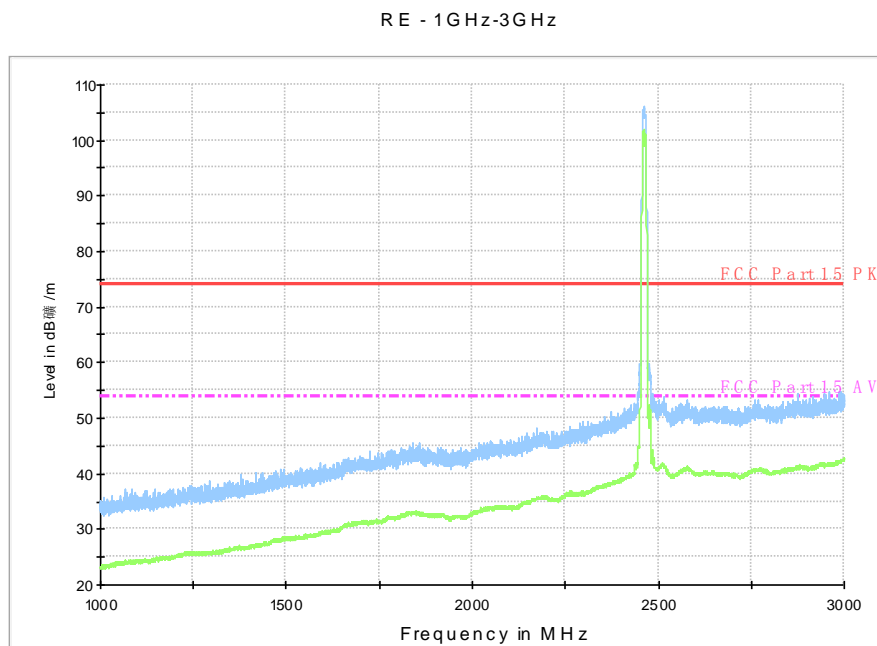


Fig.A.6.2.10 Radiated Spurious Emission (802.11b, Ch11, 1 GHz-3 GHz)

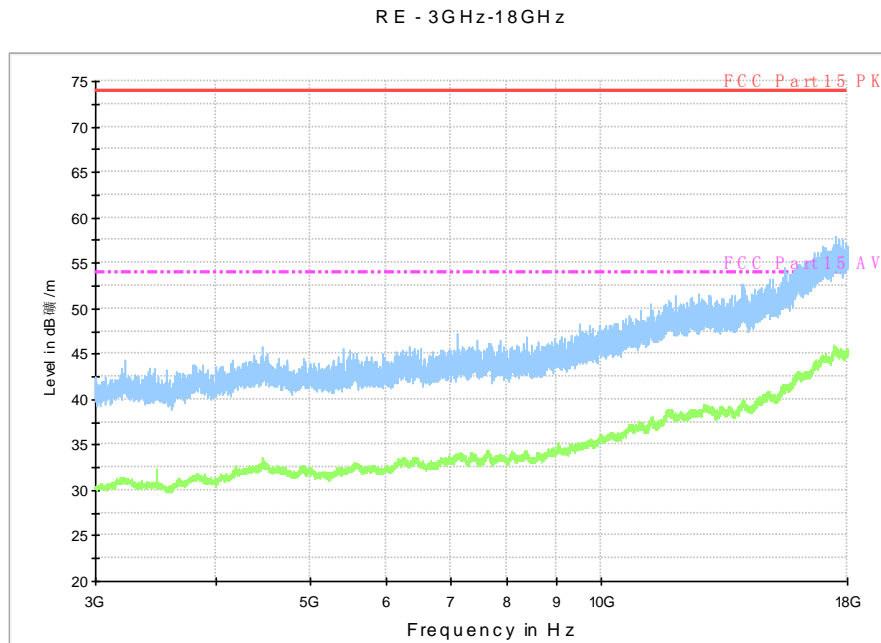


Fig.A.6.2.11 Radiated Spurious Emission (802.11b, Ch11, 3 GHz-18 GHz)

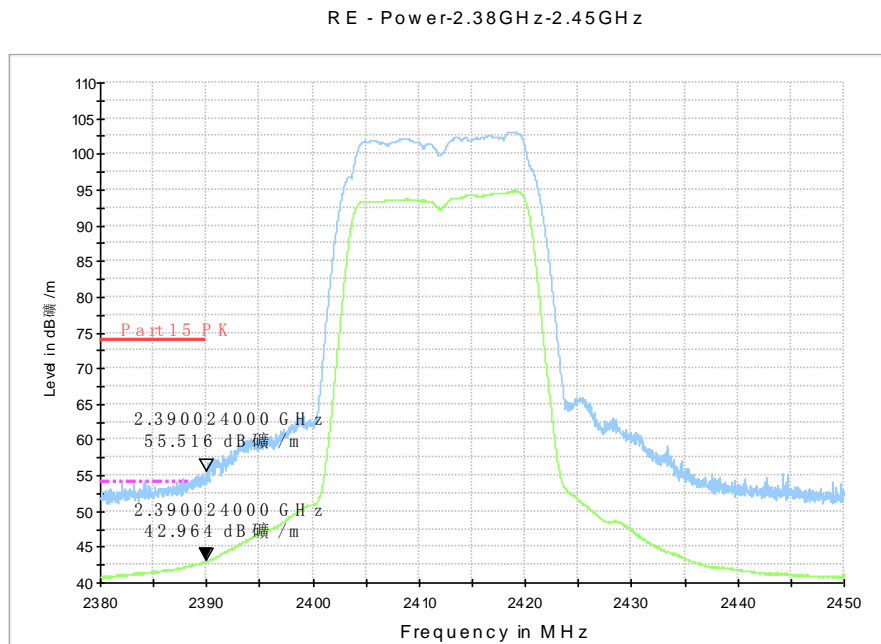


Fig.A.6.2.12 Radiated Spurious Emission (Power): 802.11g, Ch1, 2.38 GHz - 2.45GHz

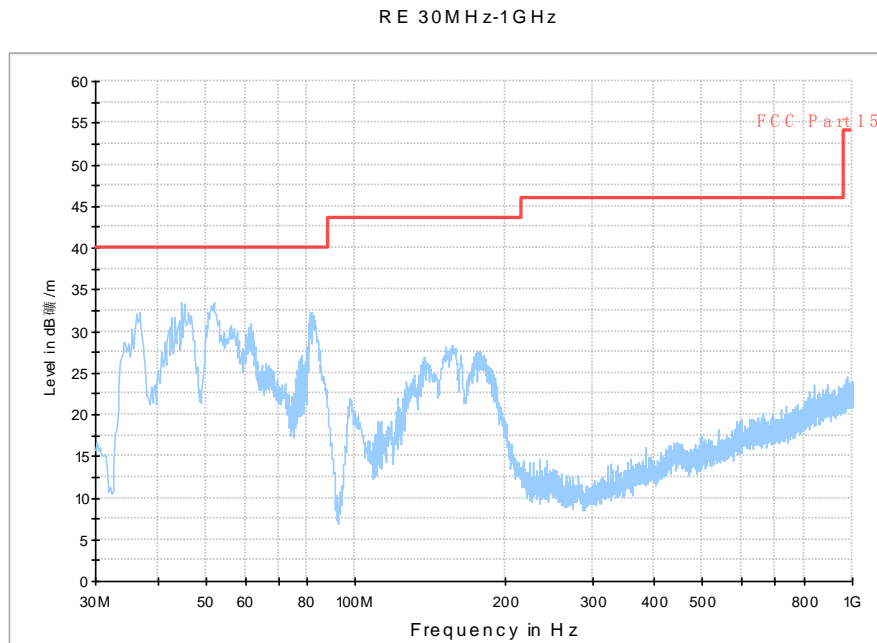


Fig.A.6.2.13 Radiated Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)

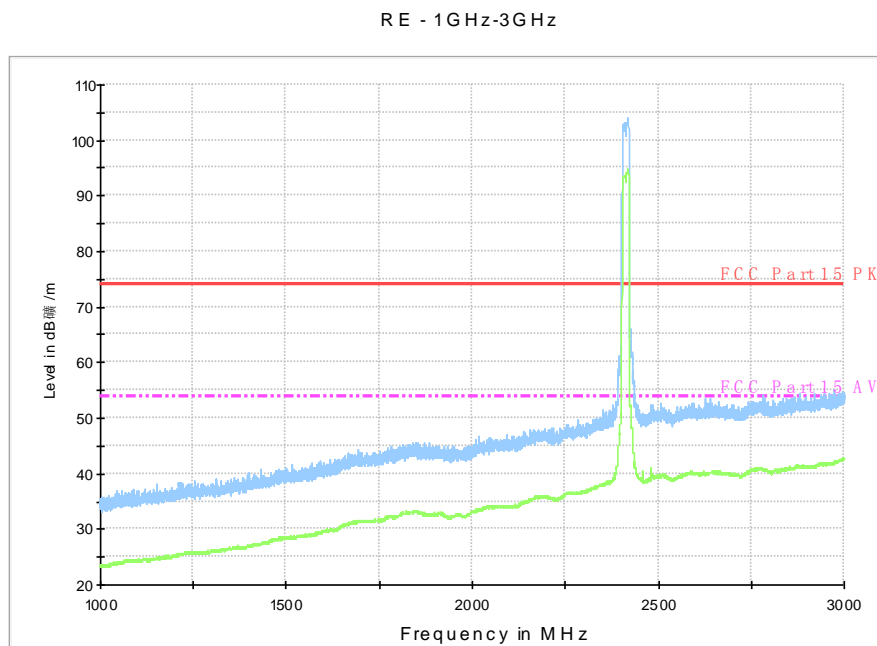


Fig.A.6.2.14 Radiated Spurious Emission (802.11g, Ch1, 1 GHz-3 GHz)

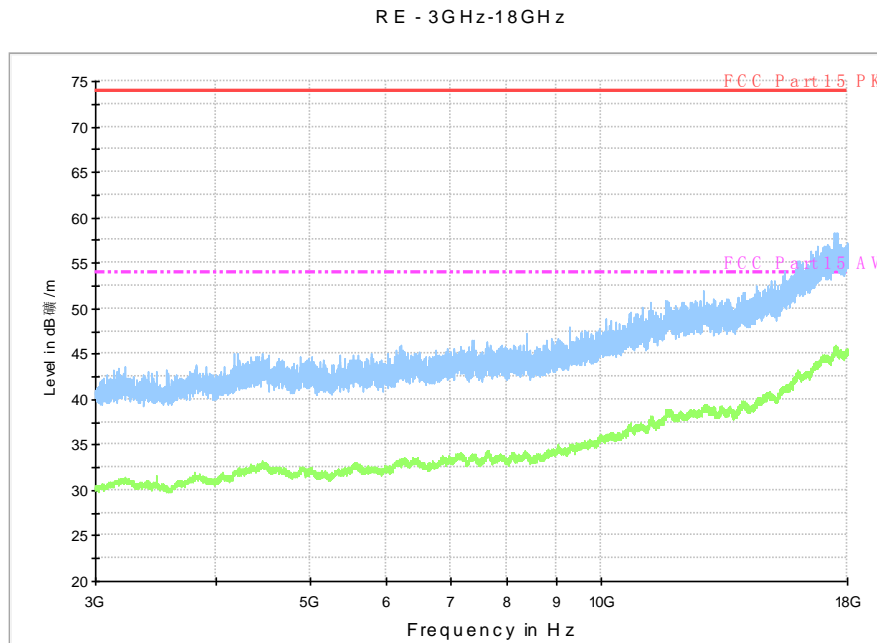


Fig.A.6.2.15 Radiated Spurious Emission (802.11g, Ch1, 3 GHz-18 GHz)

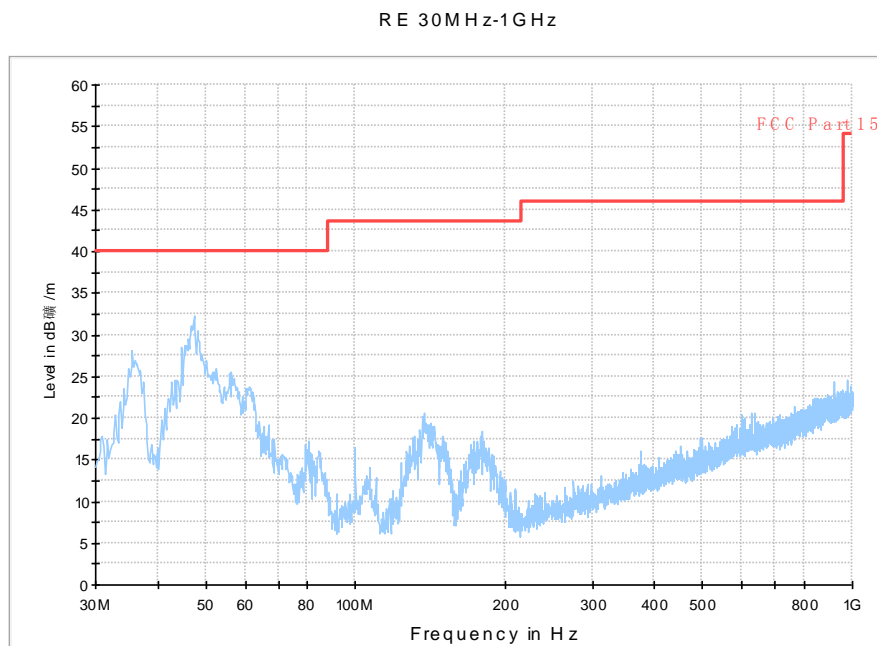


Fig.A.6.2.16 Radiated Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

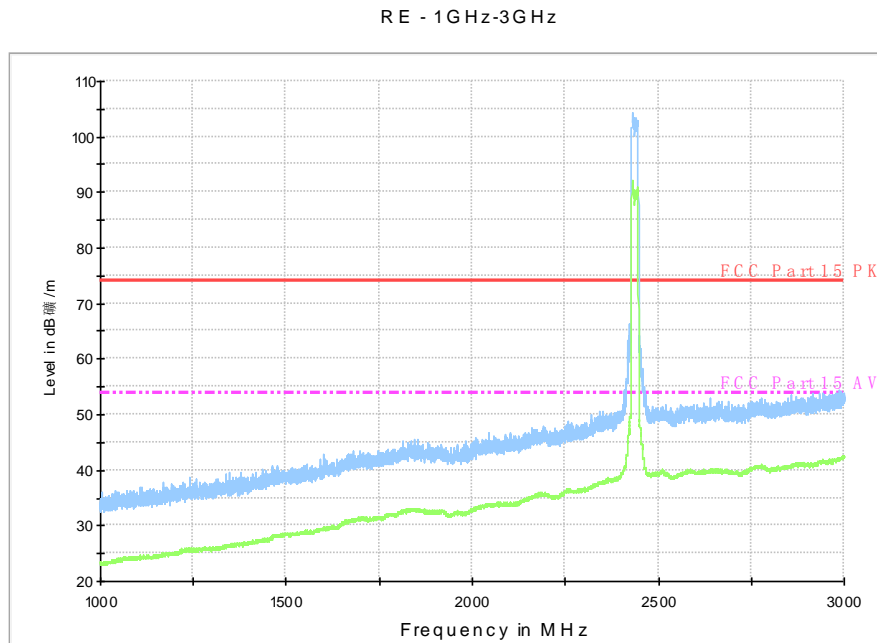


Fig.A.6.2.17 Radiated Spurious Emission (802.11g, Ch6, 1 GHz-3 GHz)

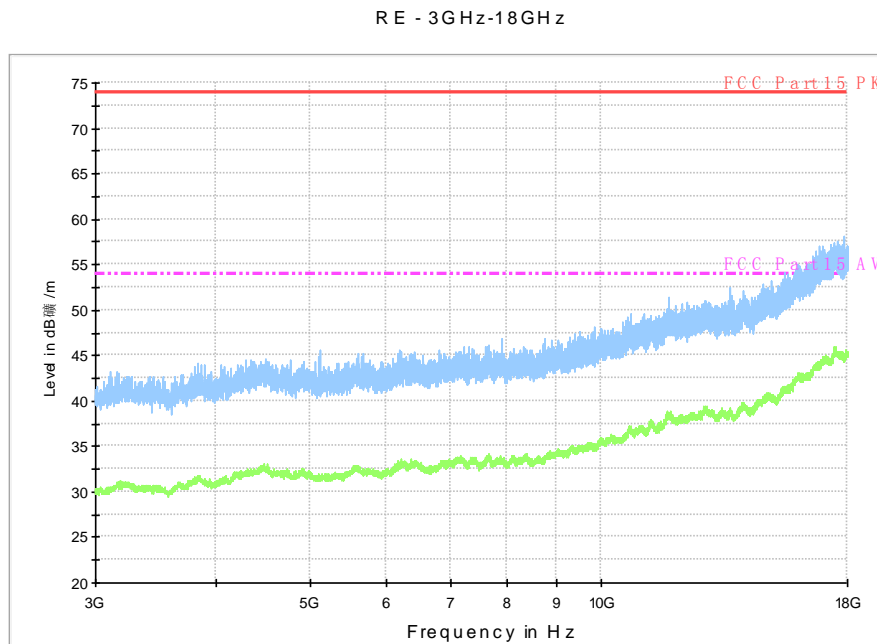


Fig.A.6.2.18 Radiated Spurious Emission (802.11g, Ch6, 3 GHz-18 GHz)

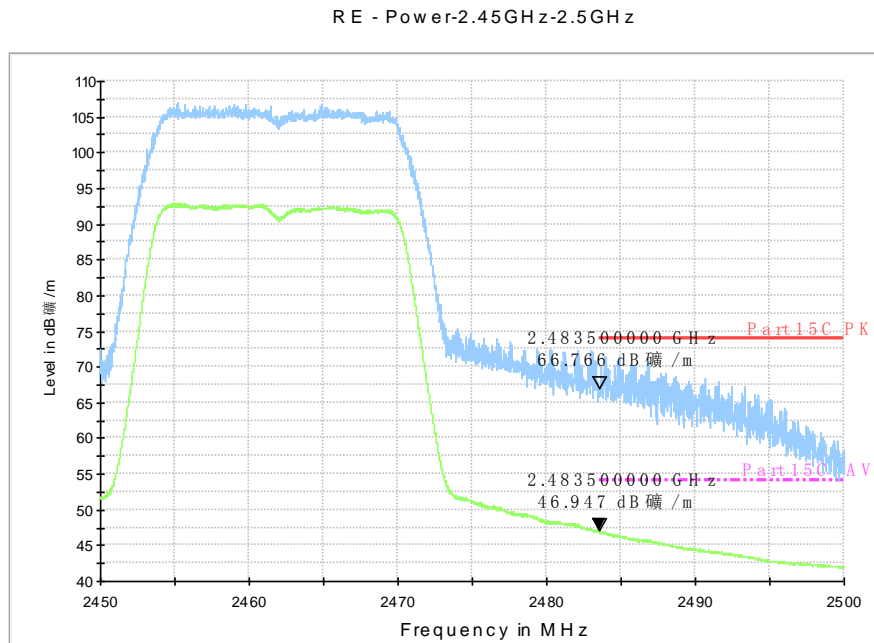


Fig.A.6.2.19 Radiated Spurious Emission (Power): 802.11g, Ch11, 2.45 GHz - 2.50GHz

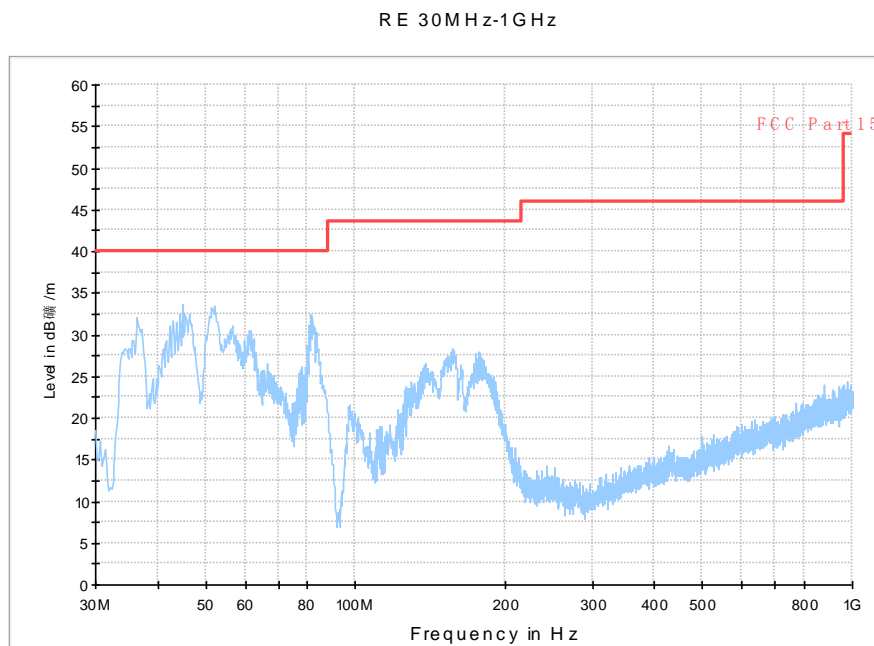


Fig.A.6.2.20 Radiated Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)

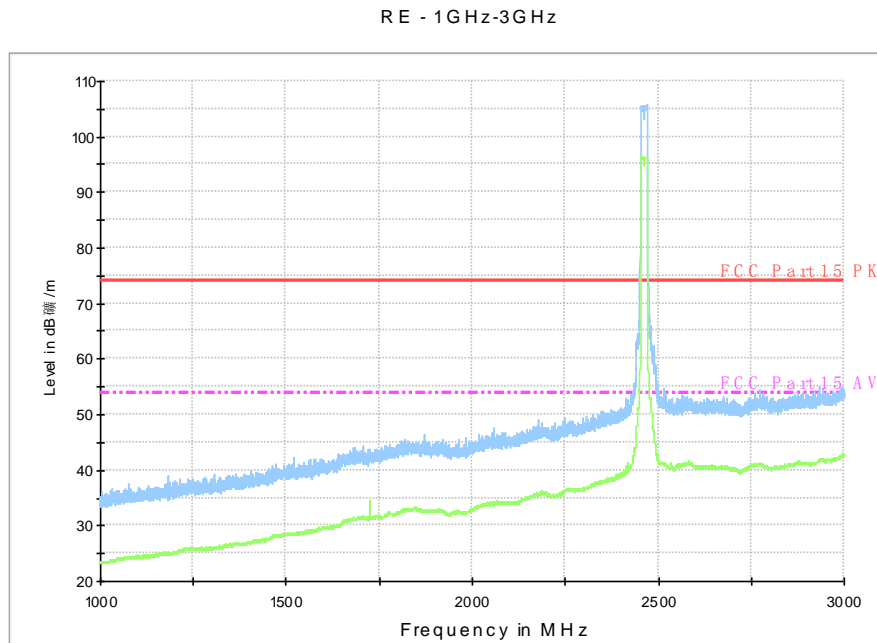


Fig.A.6.2.21 Radiated Spurious Emission (802.11g, Ch11, 1 GHz-3 GHz)

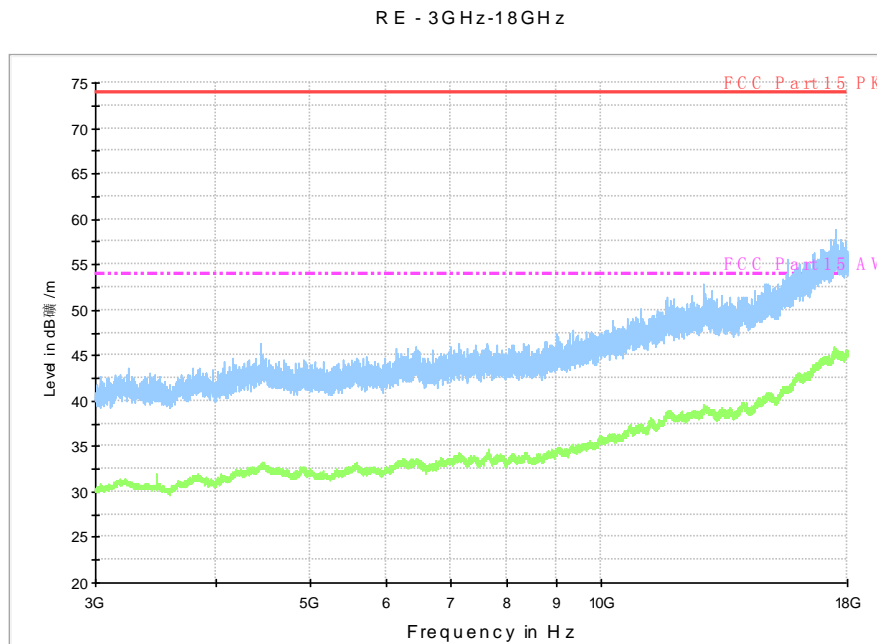


Fig.A.6.2.22 Radiated Spurious Emission (802.11g, Ch11, 3 GHz-18 GHz)

RE - Power-2.38GHz-2.45GHz

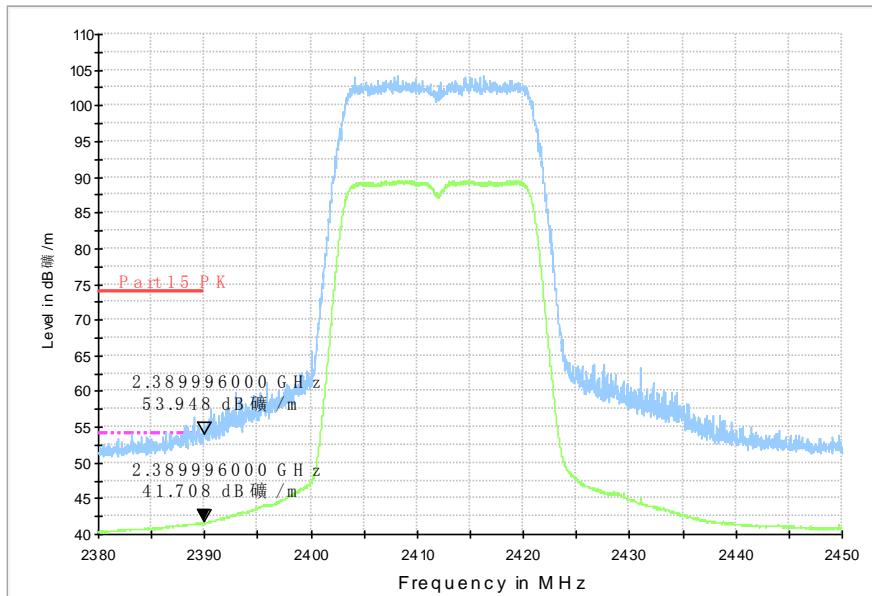


Fig.A.6.2.23 Radiated Spurious Emission (Power): 802.11n-HT20, Ch1, 2.38 GHz - 2.45GHz

RE 30MHz-1GHz

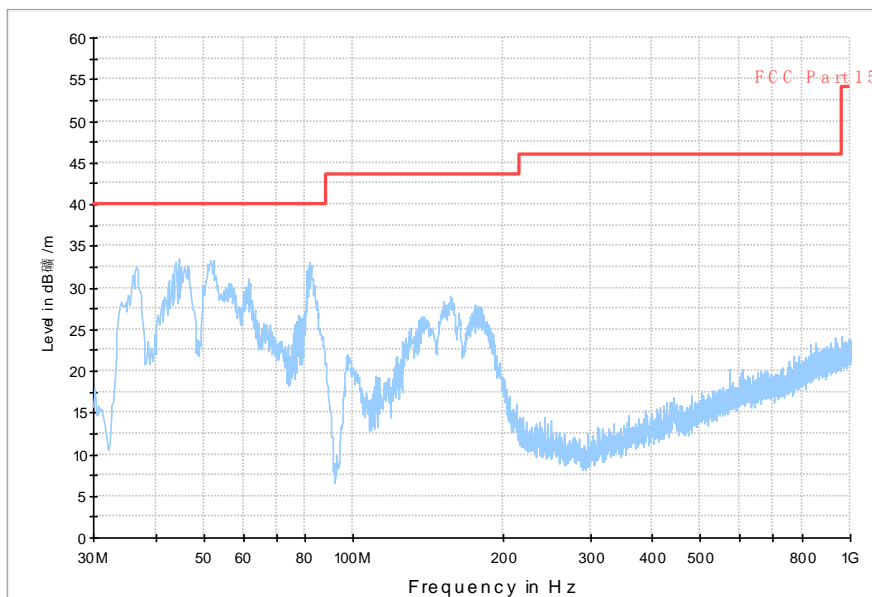


Fig.A.6.2.24 Radiated Spurious Emission (802.11n-HT20, Ch1, 30 MHz-1 GHz)

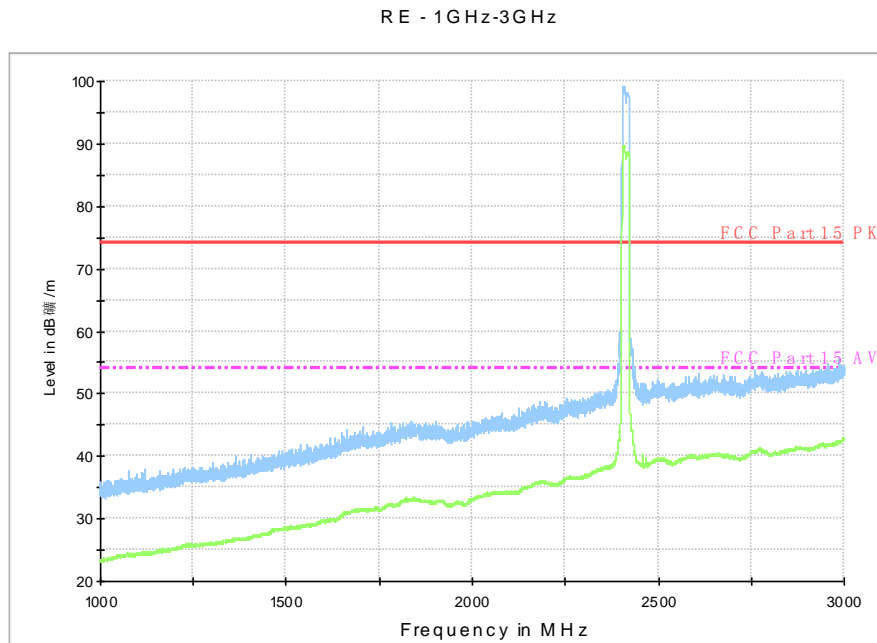


Fig.A.6.2.25 Radiated Spurious Emission (802.11n-HT20, Ch1, 1 GHz-3 GHz)

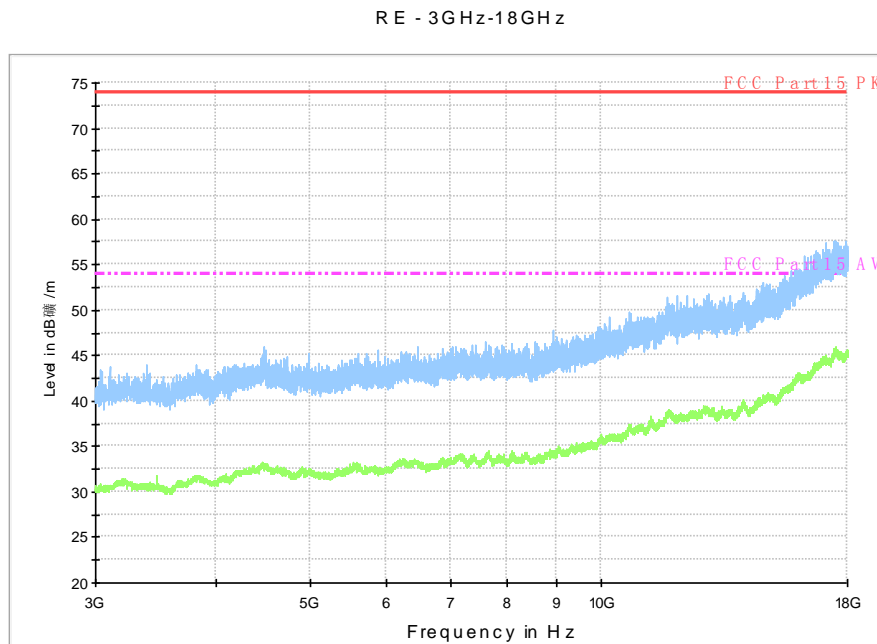


Fig.A.6.2.26 Radiated Spurious Emission (802.11n-HT20, Ch1, 3 GHz-18 GHz)

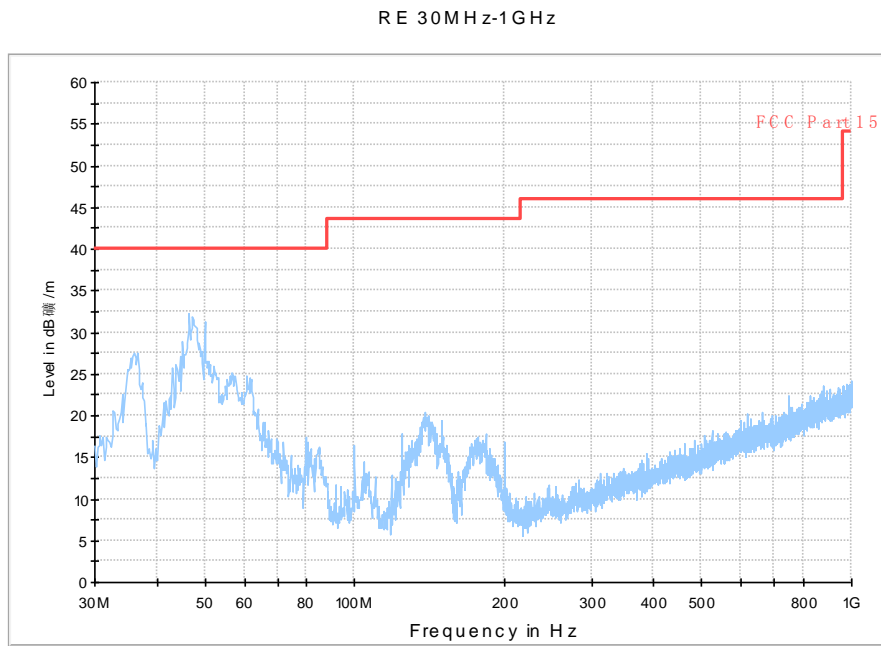


Fig.A.6.2.27 Radiated Spurious Emission (802.11n-HT20, Ch6, 30 MHz-1 GHz)

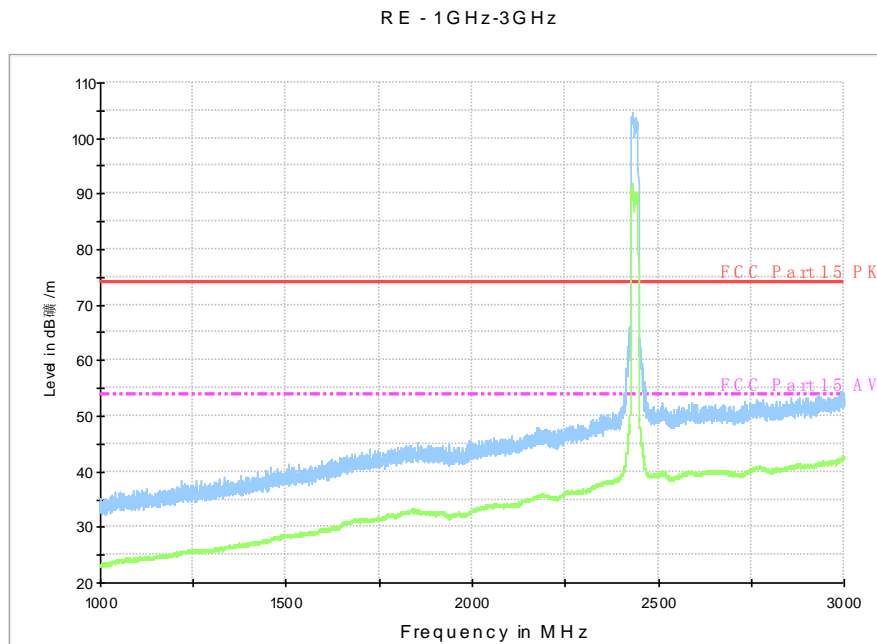


Fig.A.6.2.28 Radiated Spurious Emission (802.11n-HT20, Ch6, 1 GHz-3 GHz)

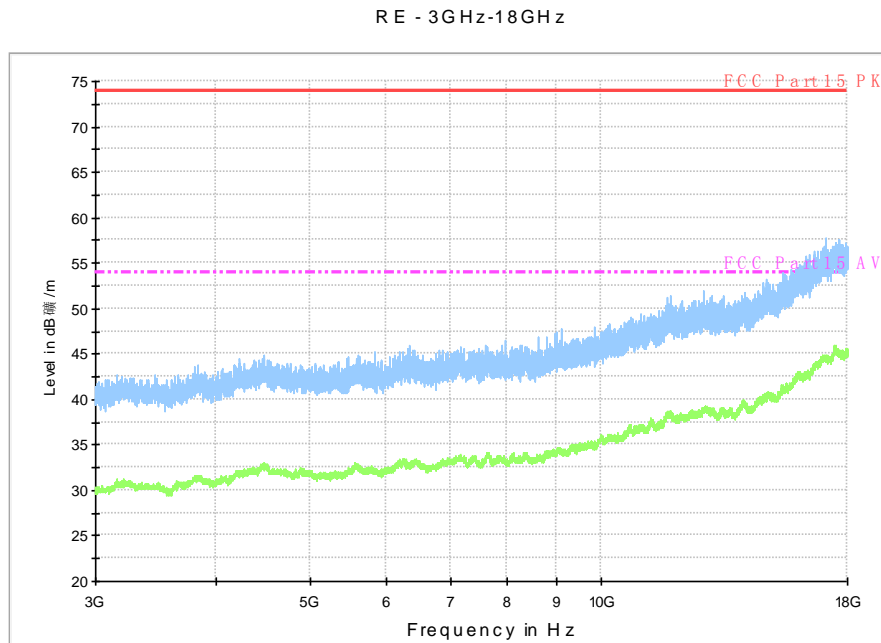


Fig.A.6.2.29 Radiated Spurious Emission (802.11n-HT20, Ch6, 3 GHz-18 GHz)

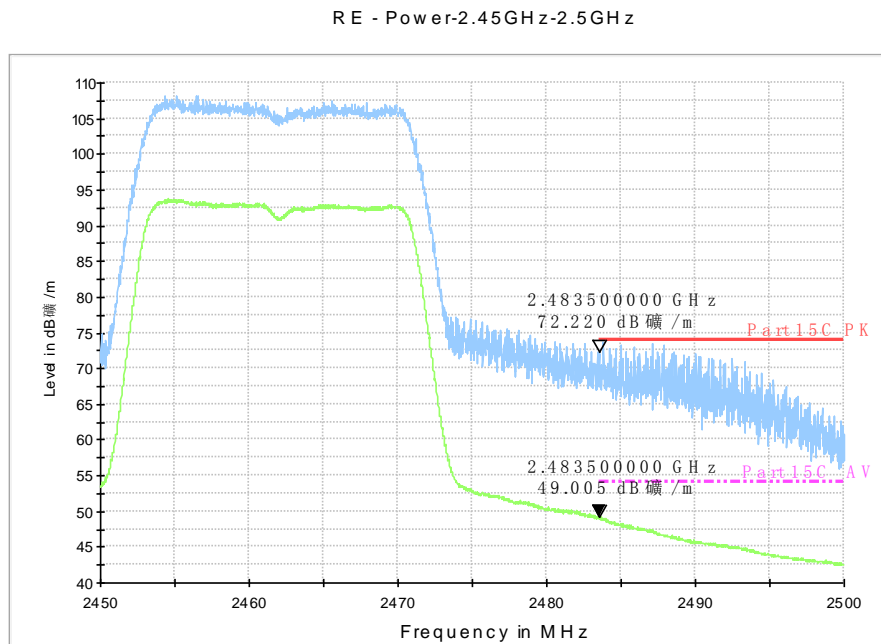


Fig.A.6.2.30 Radiated Spurious Emission (Power): 802.11n-HT20, Ch11, 2.45 GHz - 2.50GHz

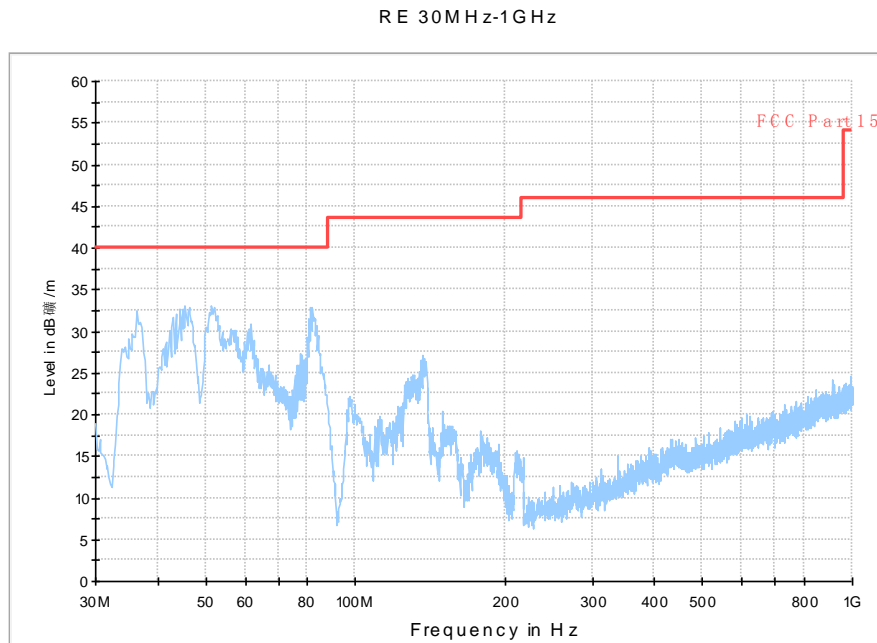


Fig.A.6.2.31 Radiated Spurious Emission (802.11n-HT20, Ch11, 30 MHz-1 GHz)

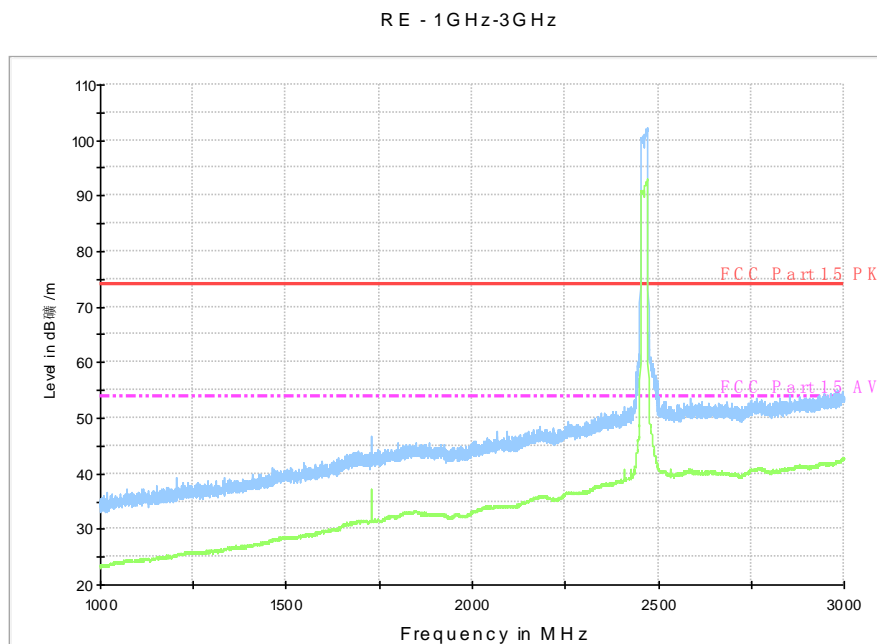


Fig.A.6.2.32 Radiated Spurious Emission (802.11n-HT20, Ch11, 1 GHz-3 GHz)

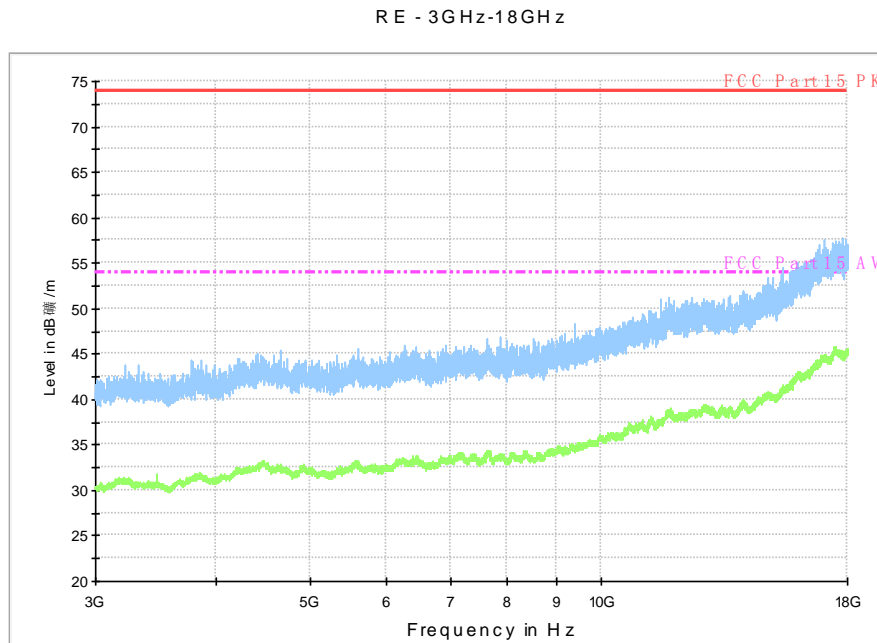


Fig.A.6.2.33 Radiated Spurious Emission (802.11n-HT20, Ch11, 3 GHz-18 GHz)

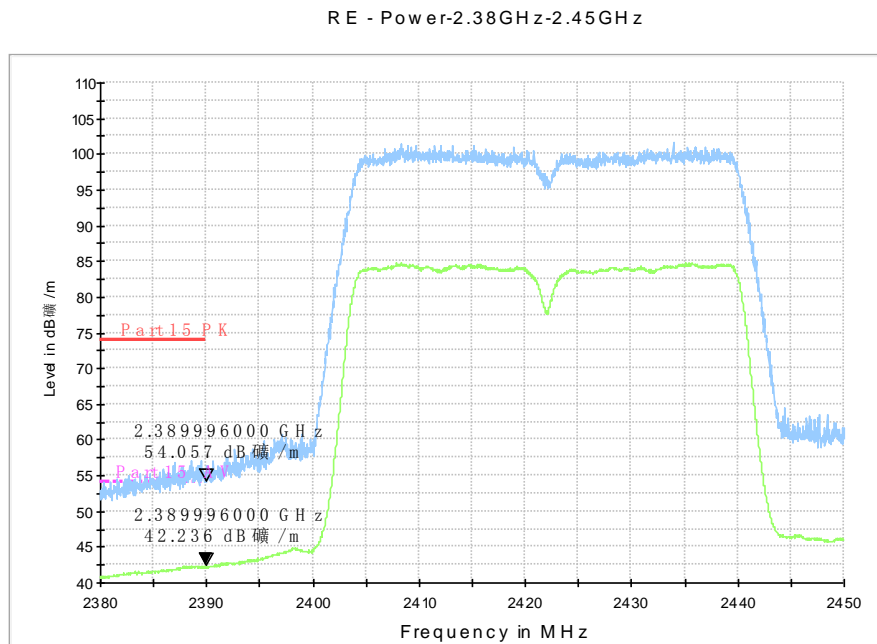


Fig.A.6.2.34 Radiated Spurious Emission (Power): 802.11n-HT40, Ch3, 2.38 GHz - 2.45GHz

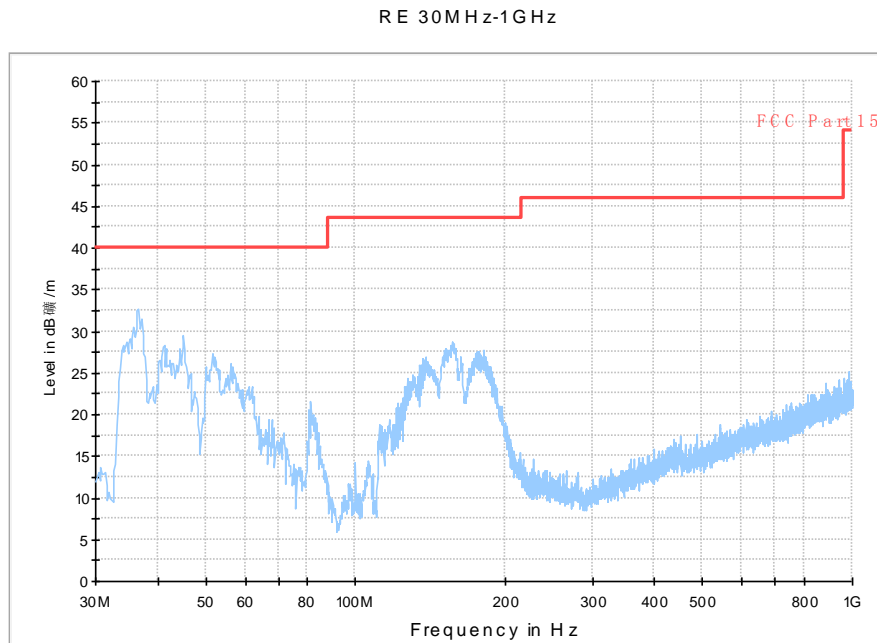


Fig.A.6.2.35 Radiated Spurious Emission (802.11n-HT40, Ch3, 30 MHz-1 GHz)

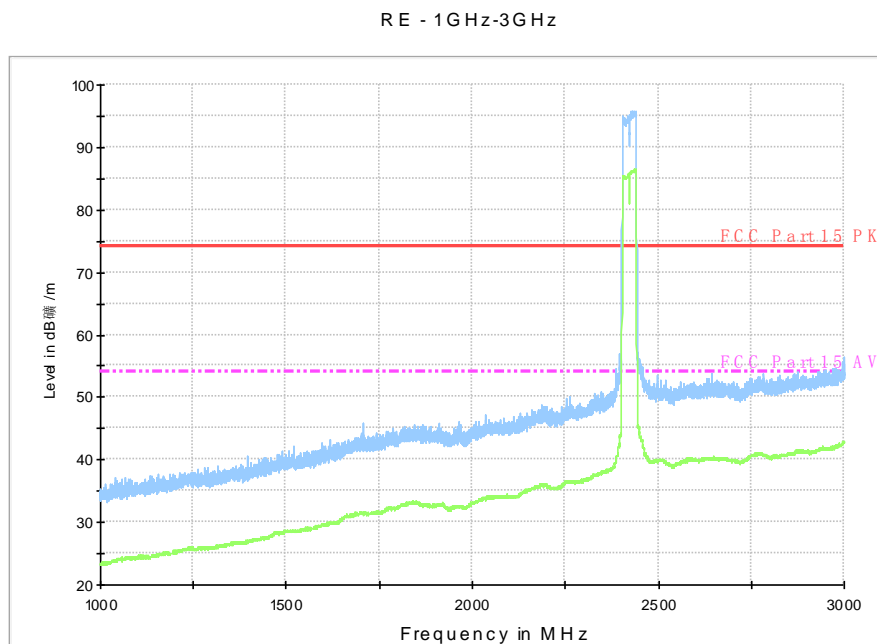


Fig.A.6.2.36 Radiated Spurious Emission (802.11n-HT40, Ch3, 1 GHz-3 GHz)

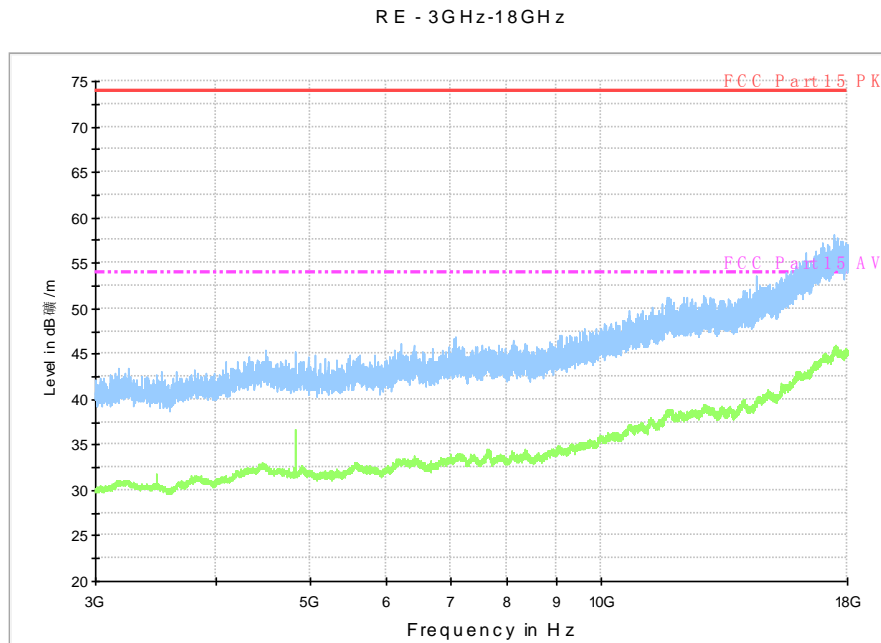


Fig.A.6.2.37 Radiated Spurious Emission (802.11n-HT40, Ch3, 3 GHz-18 GHz)

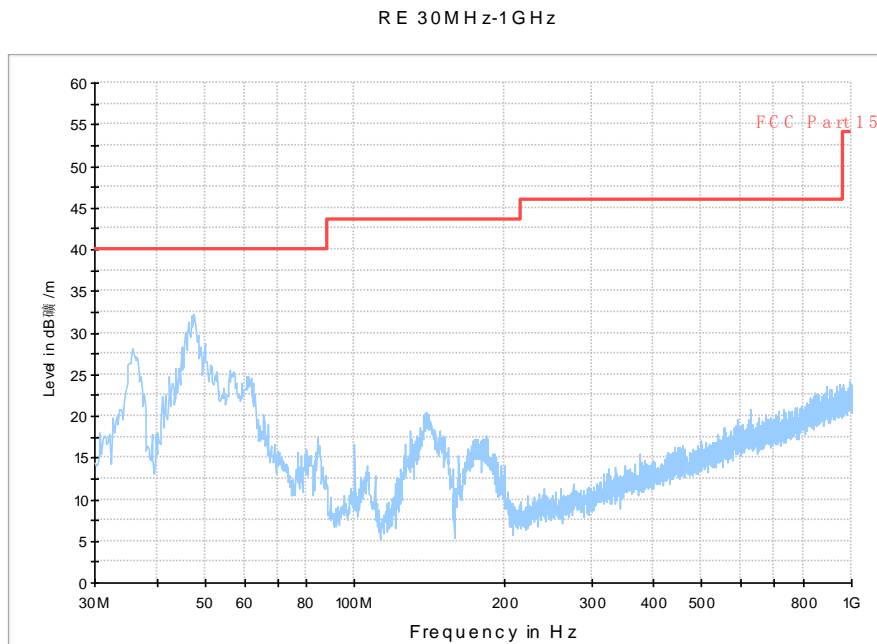


Fig.A.6.2.38 Radiated Spurious Emission (802.11n-HT40, Ch6, 30 MHz-1 GHz)

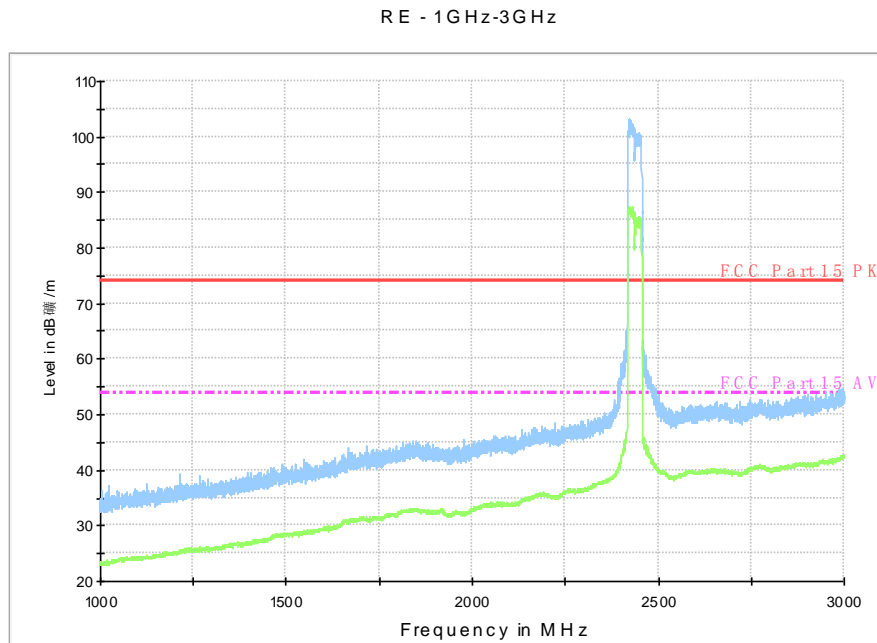


Fig.A.6.2.39 Radiated Spurious Emission (802.11n-HT40, Ch6, 1 GHz-3 GHz)

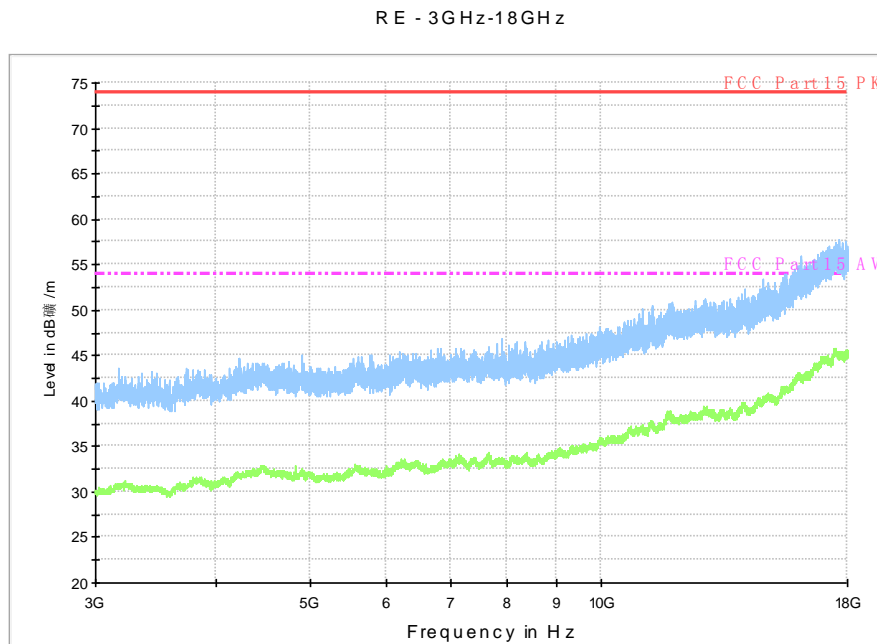


Fig.A.6.2.40 Radiated Spurious Emission (802.11n-HT40, Ch6, 3 GHz-18 GHz)

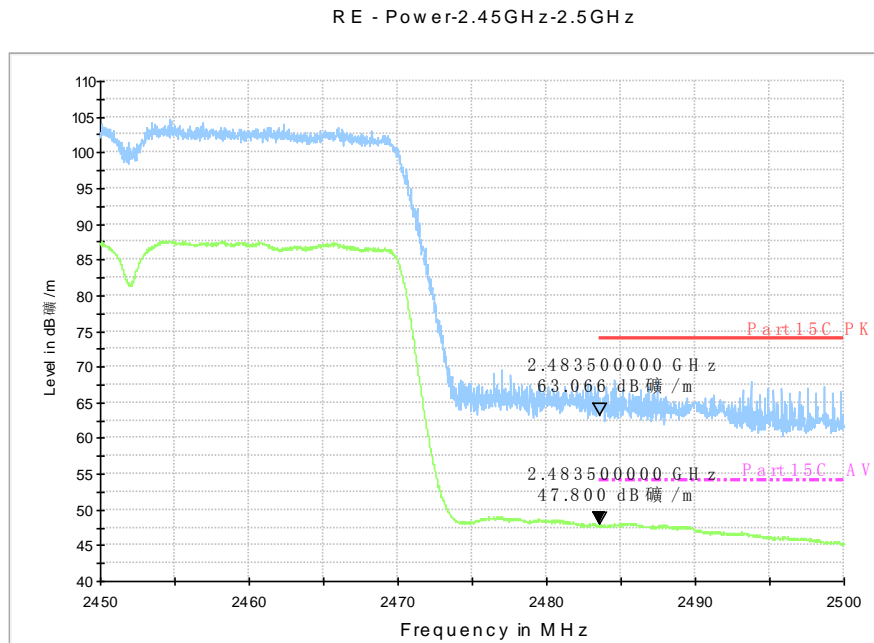


Fig.A.6.2.41 Radiated Spurious Emission (Power): 802.11n-HT40, Ch9, 2.45 GHz - 2.50GHz

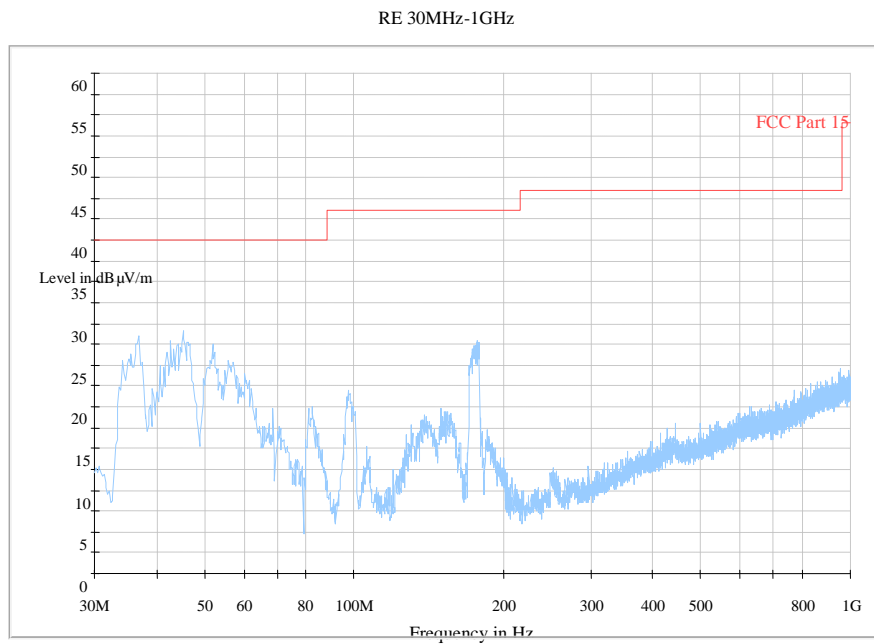


Fig.A.6.2.42 Radiated Spurious Emission (802.11n-HT40, Ch9, 30 MHz-1 GHz)

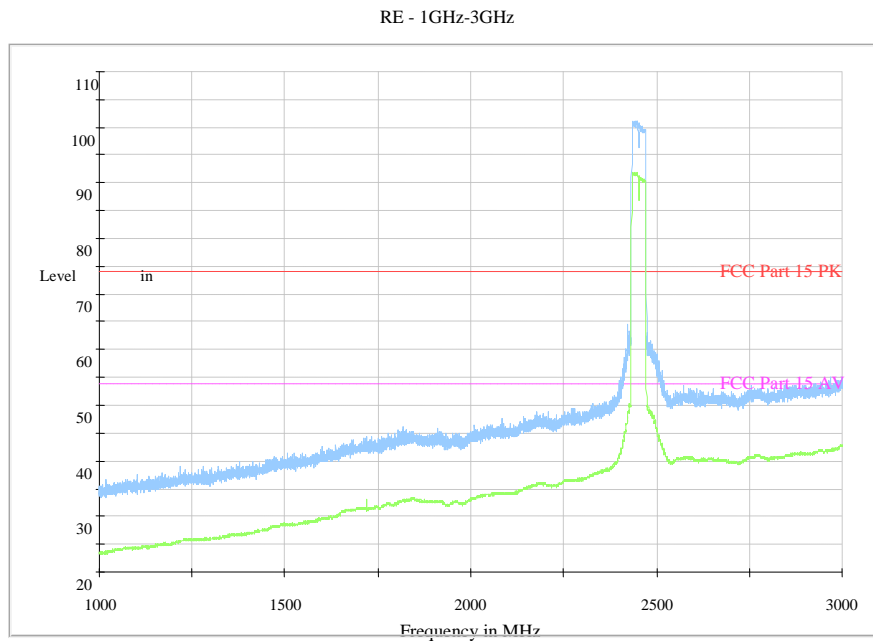


Fig.A.6.2.43 Radiated Spurious Emission (802.11n-HT40, Ch9, 1 GHz-3 GHz)

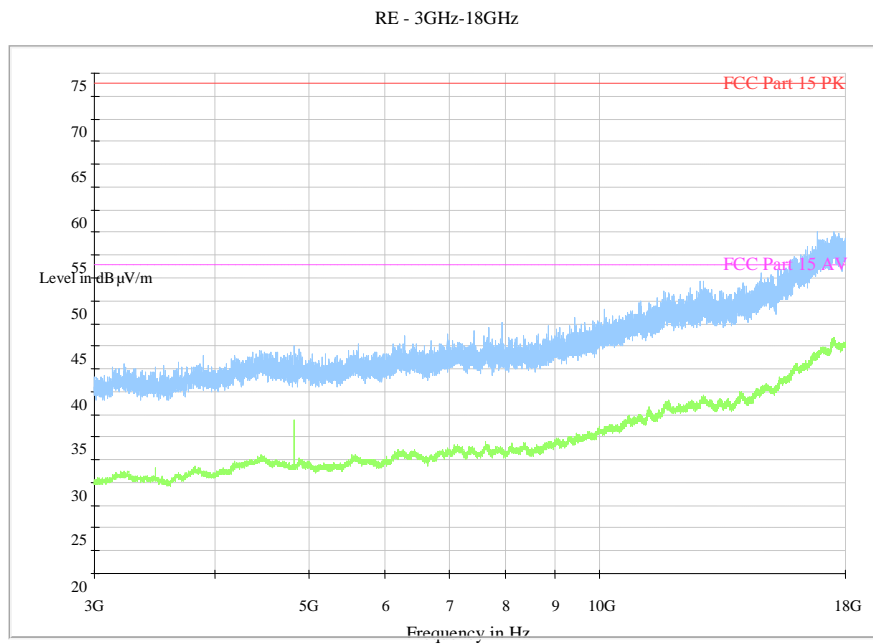


Fig.A.6.2.44 Radiated Spurious Emission (802.11n-HT40, Ch9, 3 GHz-18 GHz)

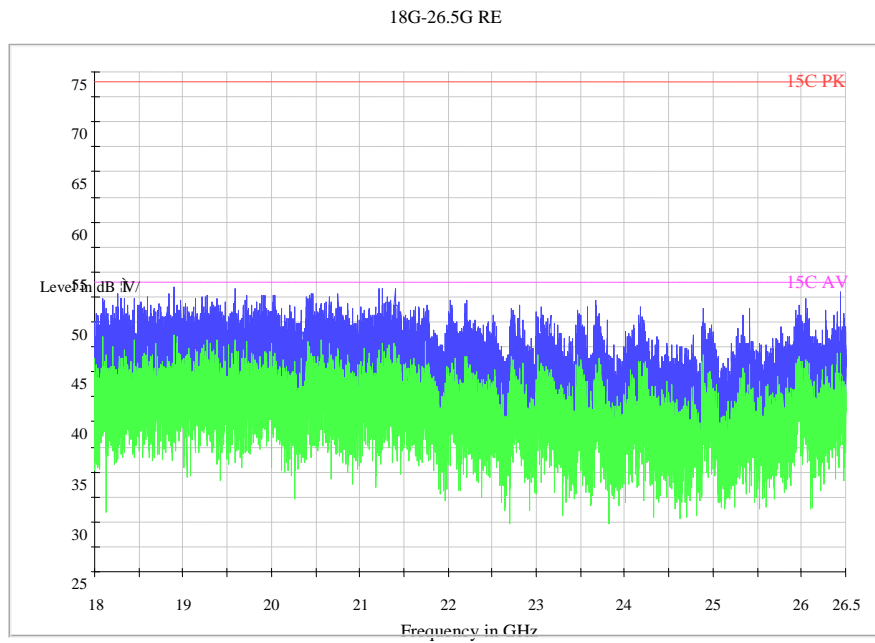


Fig.A.6.2.45 Radiated Spurious Emission (All channels): 18GHz – 26.5GHz

A.7. 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 (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.

The measurement is made according to KDB558074.

Conclusion: Pass

Measurement uncertainty:

Expanded measurement uncertainty for this test item is $U = 3.2\text{dB}$, $k=2$.

Test graphs as below: