

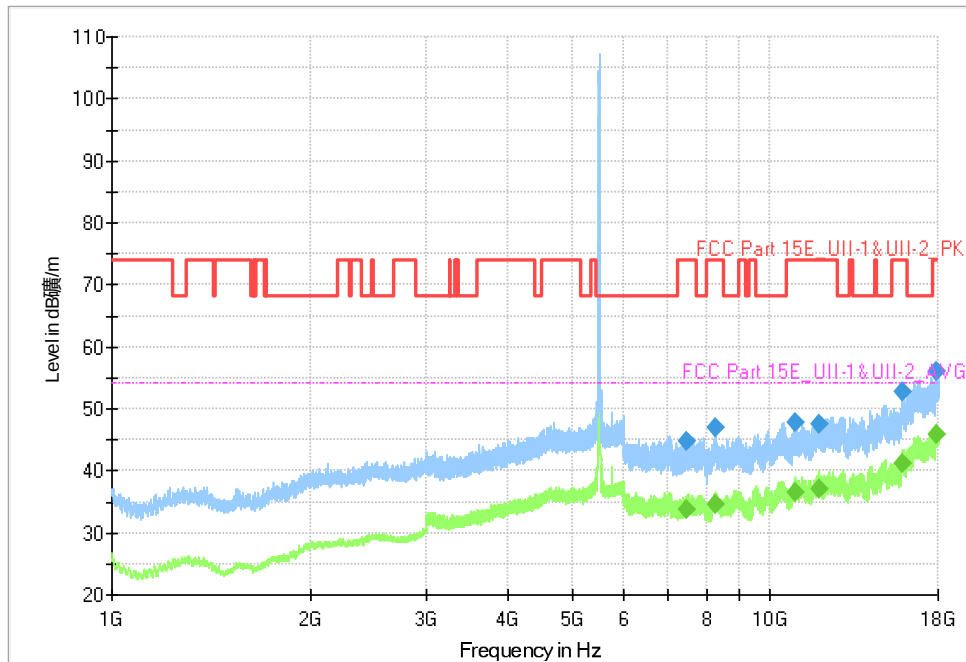


Fig. 77 Transmitter Spurious Emission (802.11a, CH100 5500MHz)

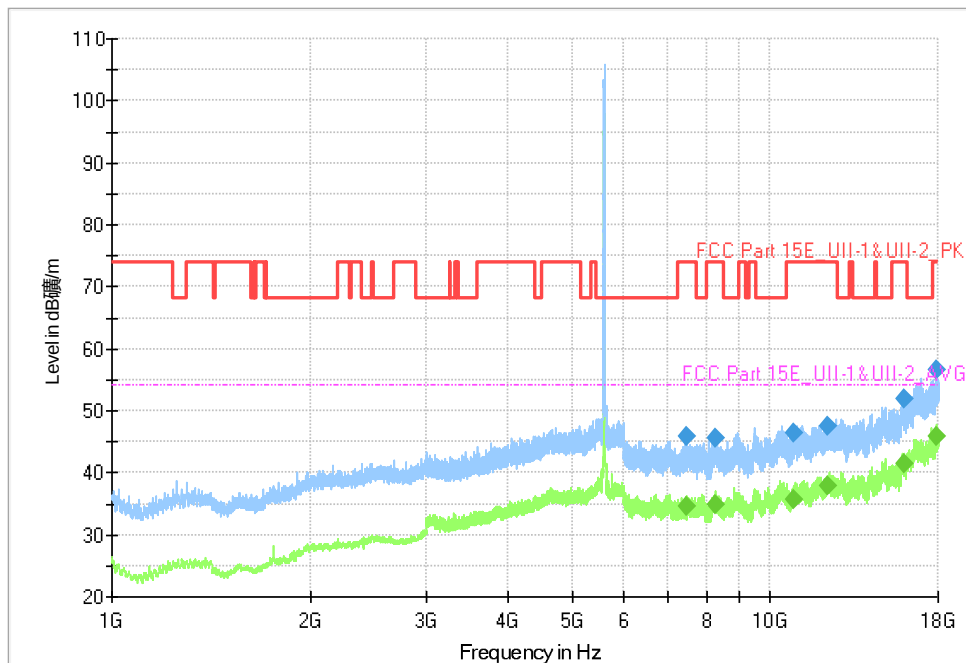


Fig. 78 Transmitter Spurious Emission (802.11a, CH116 5580MHz)

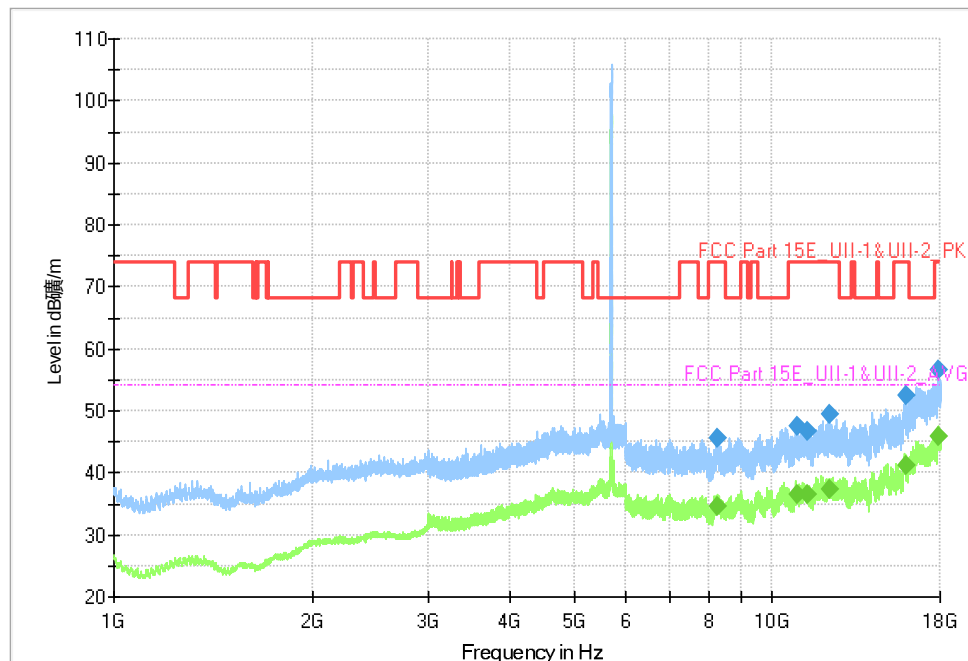


Fig. 79 Transmitter Spurious Emission (802.11a, CH140 5700MHz)

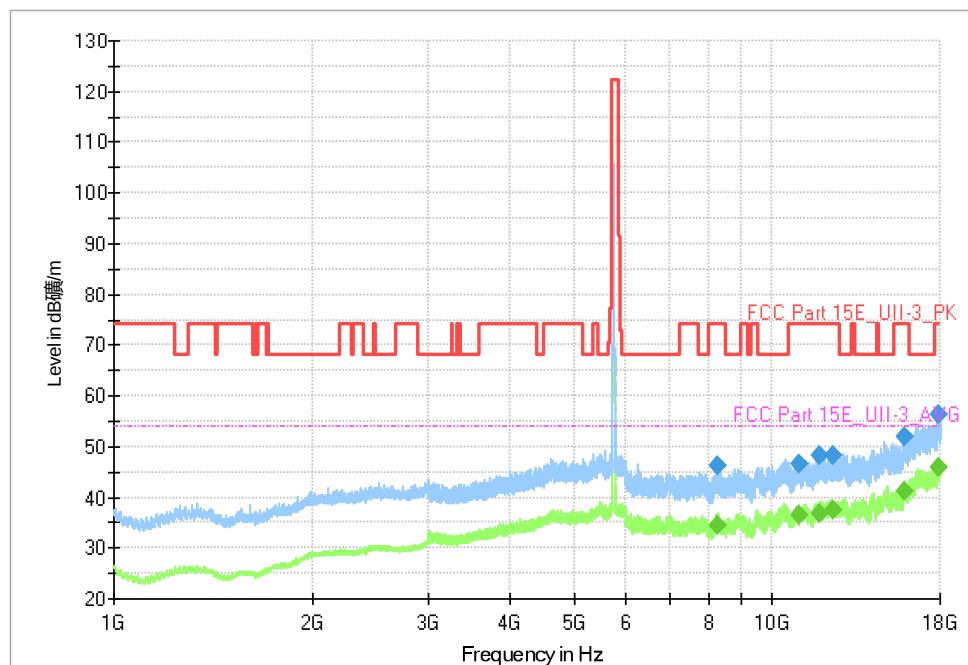


Fig. 80 Transmitter Spurious Emission (802. 11a, CH149 5745MHz)

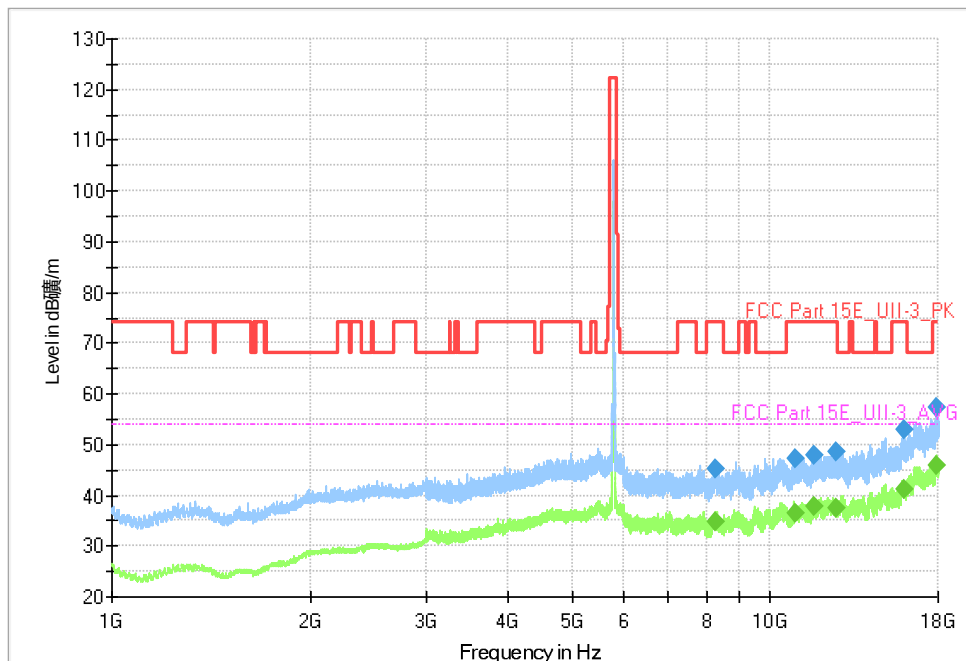


Fig. 81 Transmitter Spurious Emission (802. 11a, CH157 5785MHz)

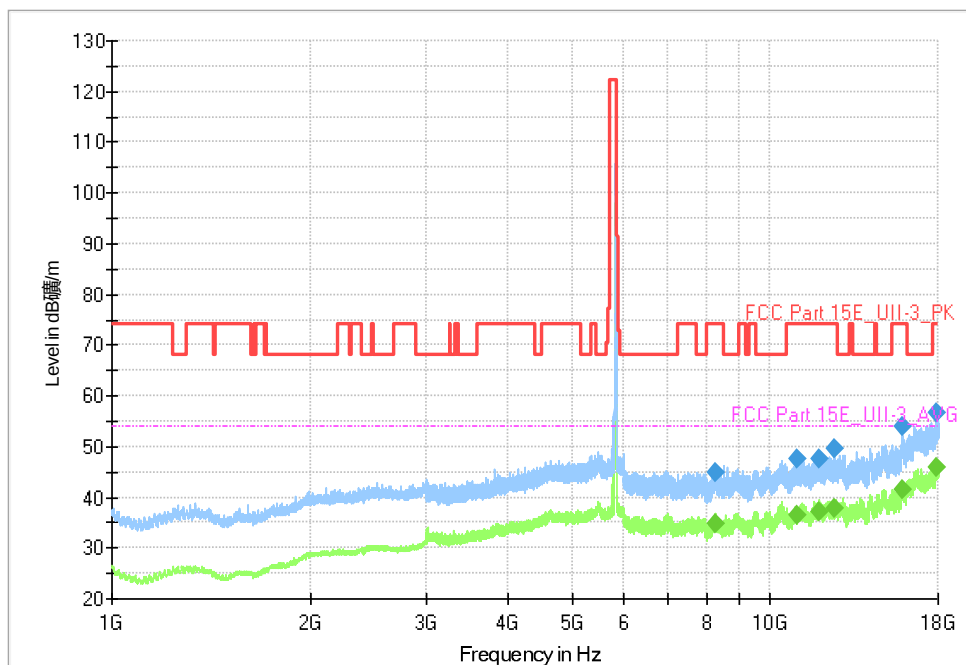


Fig. 82 Transmitter Spurious Emission (802. 11a, CH165 5825MHz)

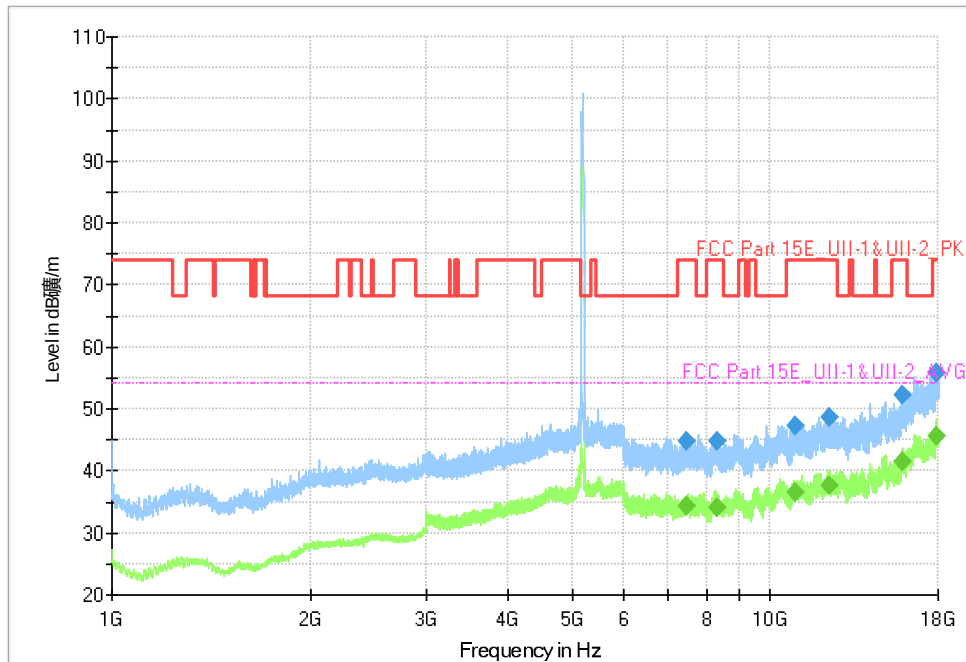


Fig. 83 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz)

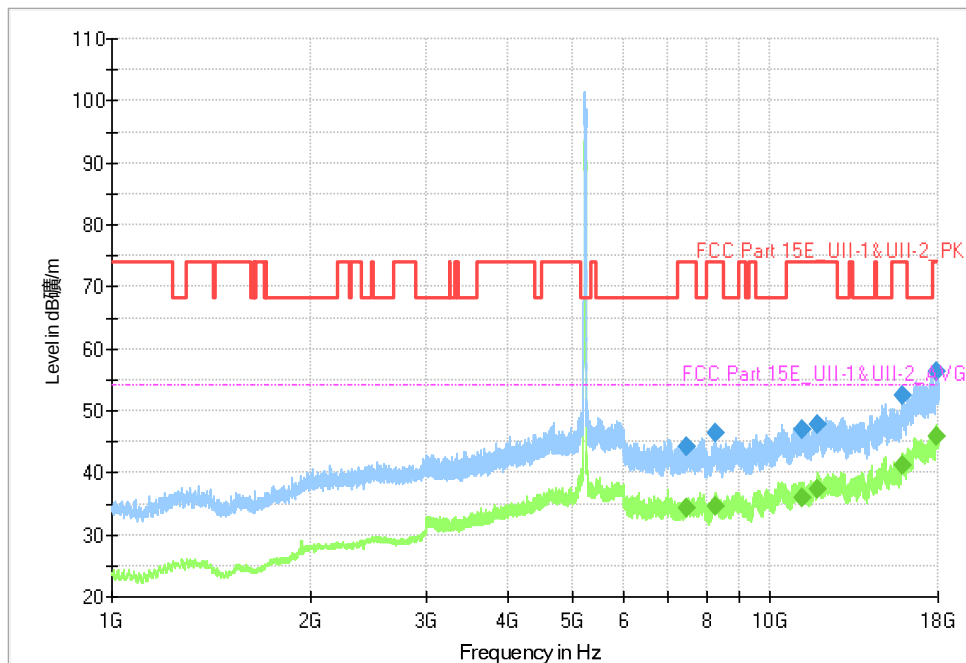


Fig. 84 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz)

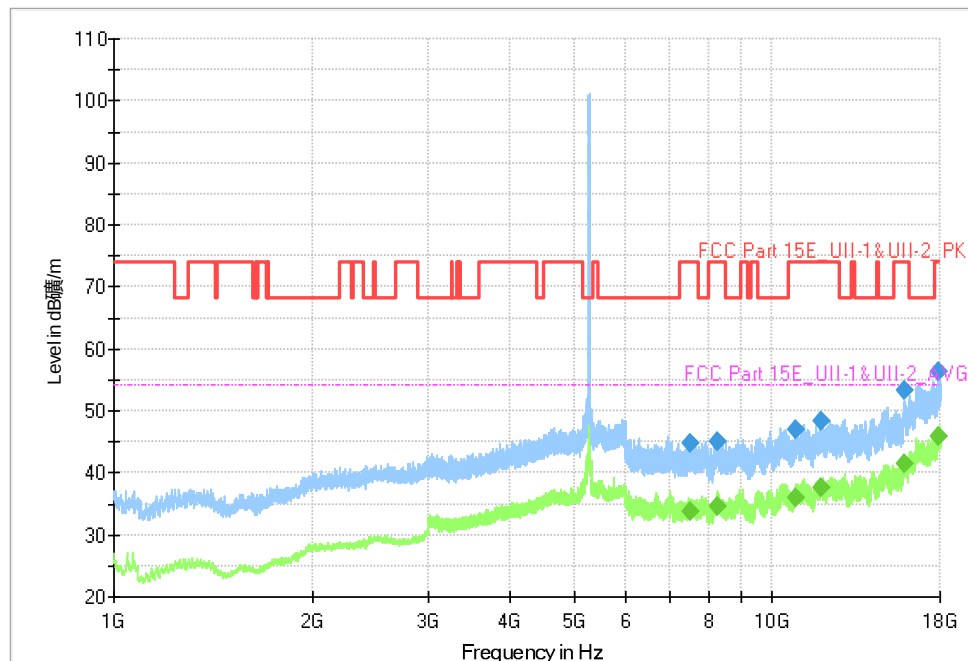


Fig. 85 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz)

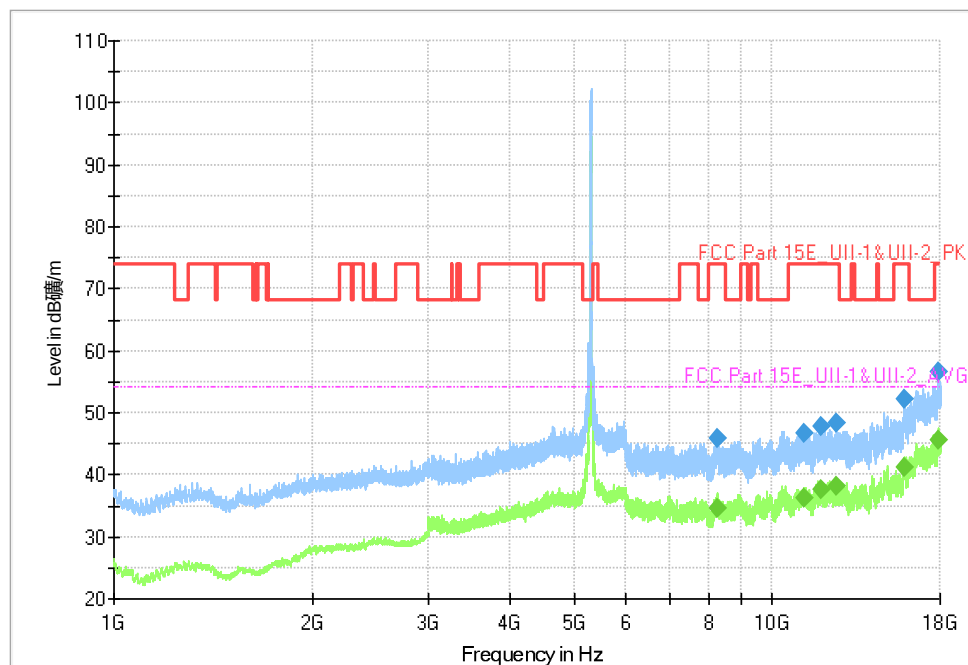


Fig. 86 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz)

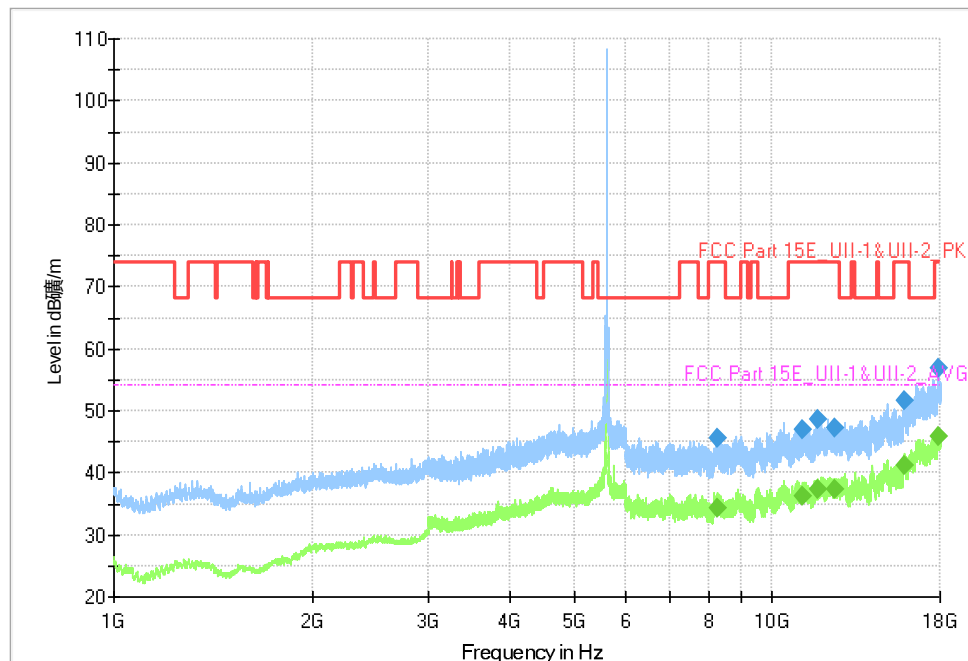


Fig. 87 Transmitter Spurious Emission (802.11n-HT40, CH102 5510MHz)

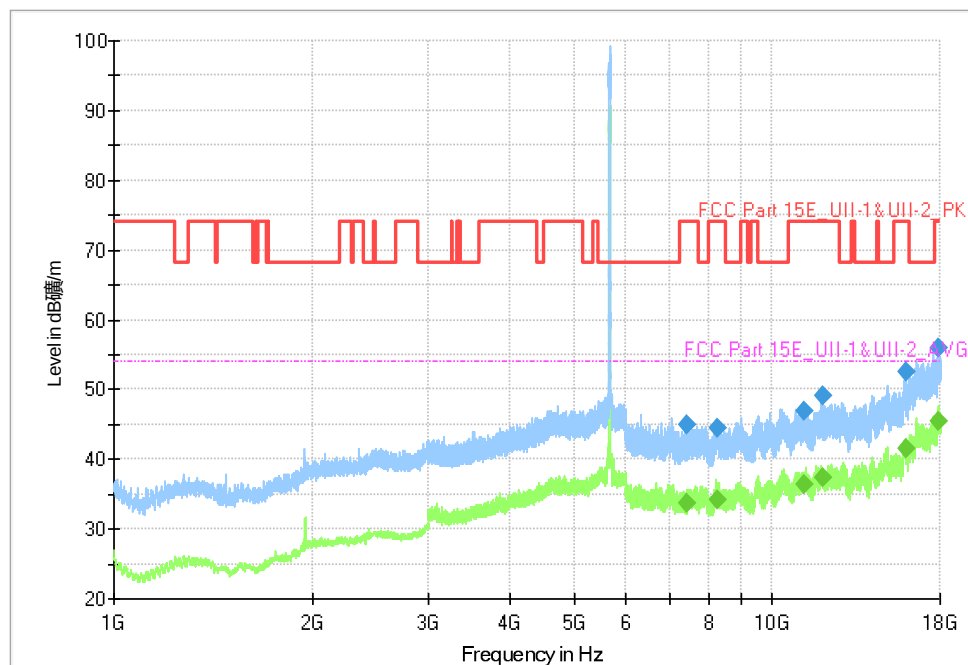


Fig. 88 Transmitter Spurious Emission (802.11n-HT40, CH134 5670MHz)

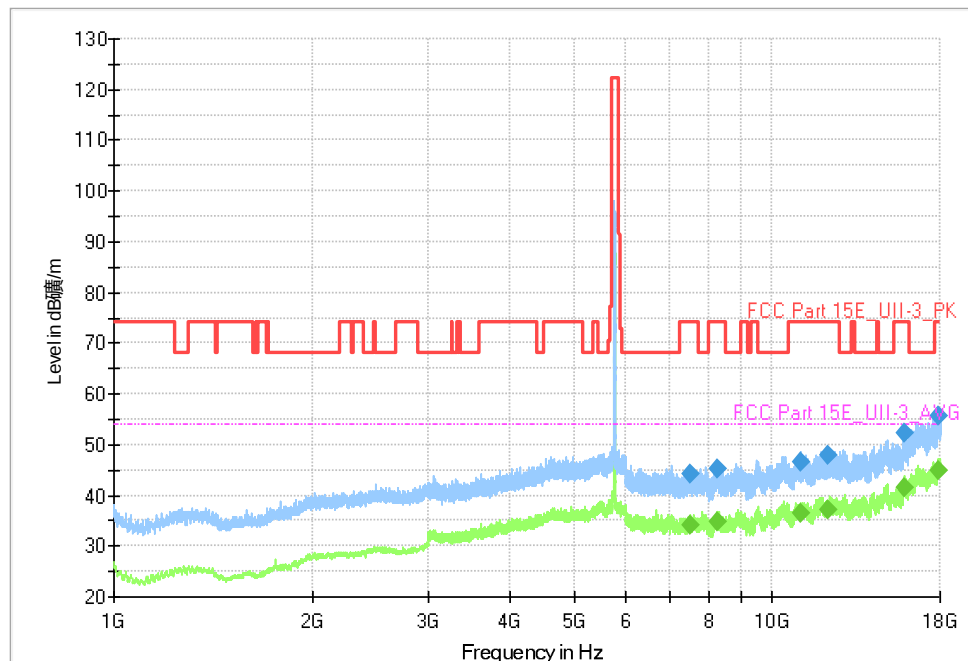


Fig. 89 Transmitter Spurious Emission (802. 11n-HT40, CH151 5755MHz)

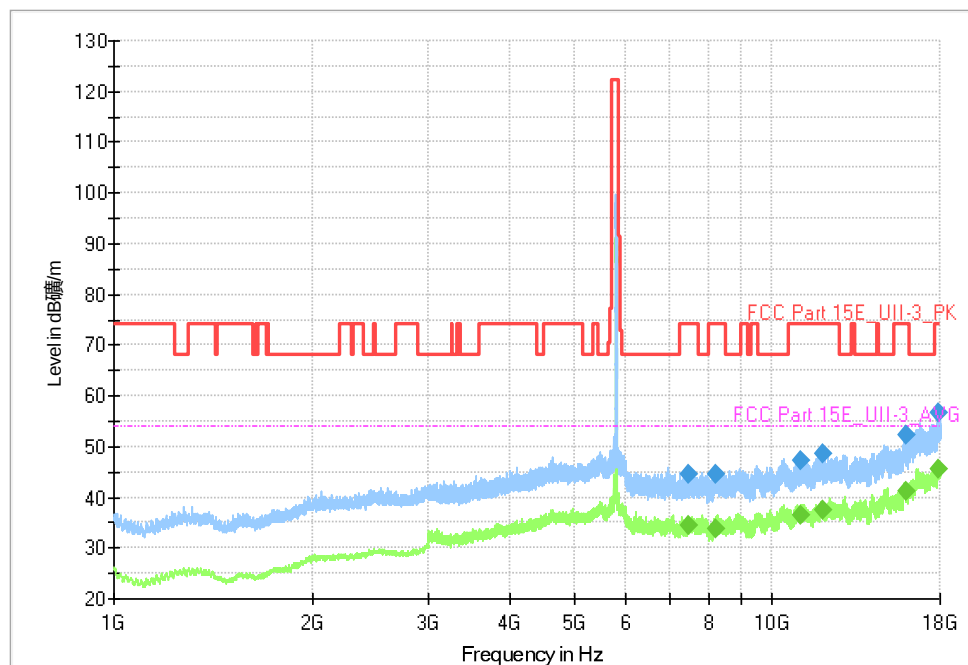


Fig. 90 Transmitter Spurious Emission (802. 11n-HT40, CH159 5795MHz)

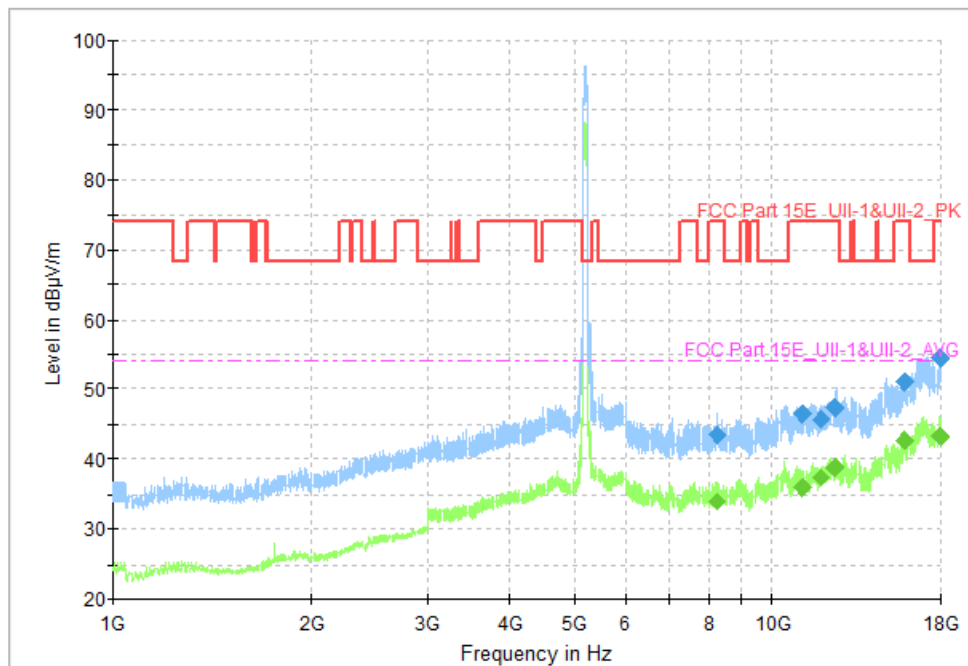


Fig. 91 Transmitter Spurious Emission (802. 11ac-VHT80, CH42 5210MHz)

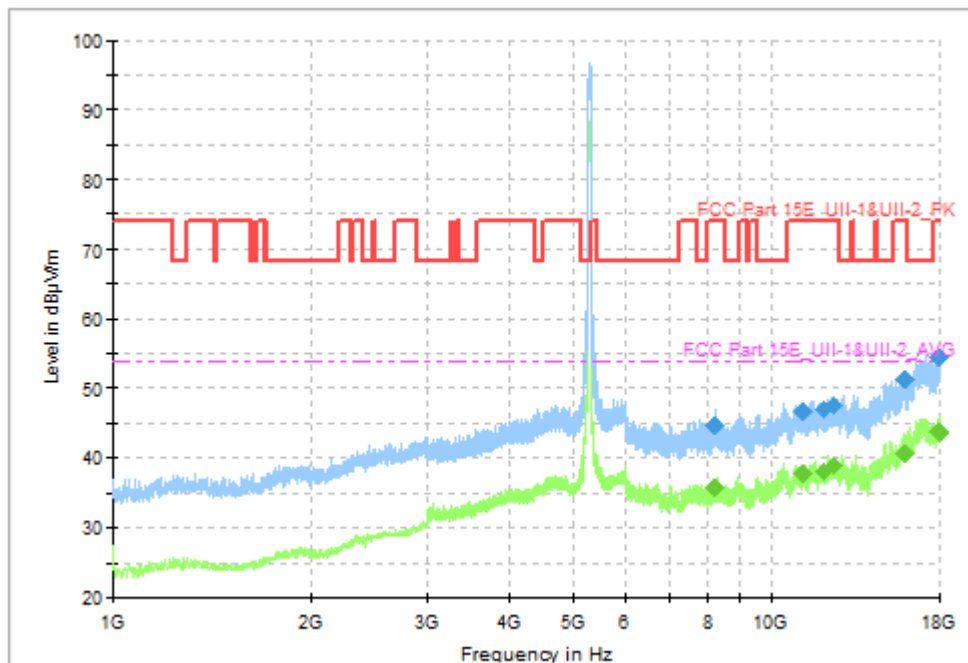


Fig. 92 Transmitter Spurious Emission (802. 11ac-VHT80, CH58 5290MHz)

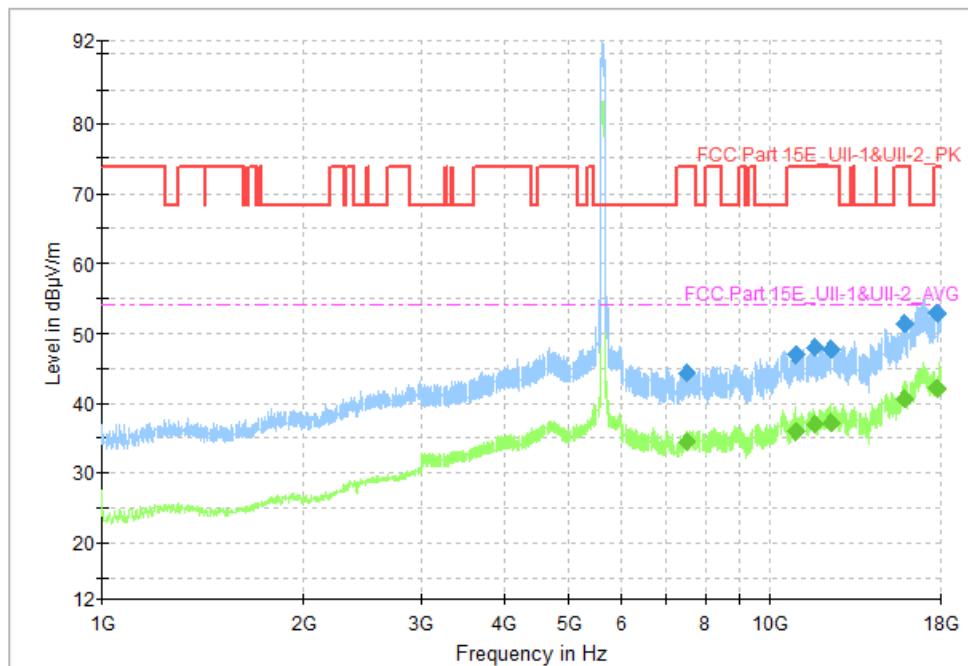


Fig. 93 Transmitter Spurious Emission (802.11ac-VHT80, CH122 5610MHz)

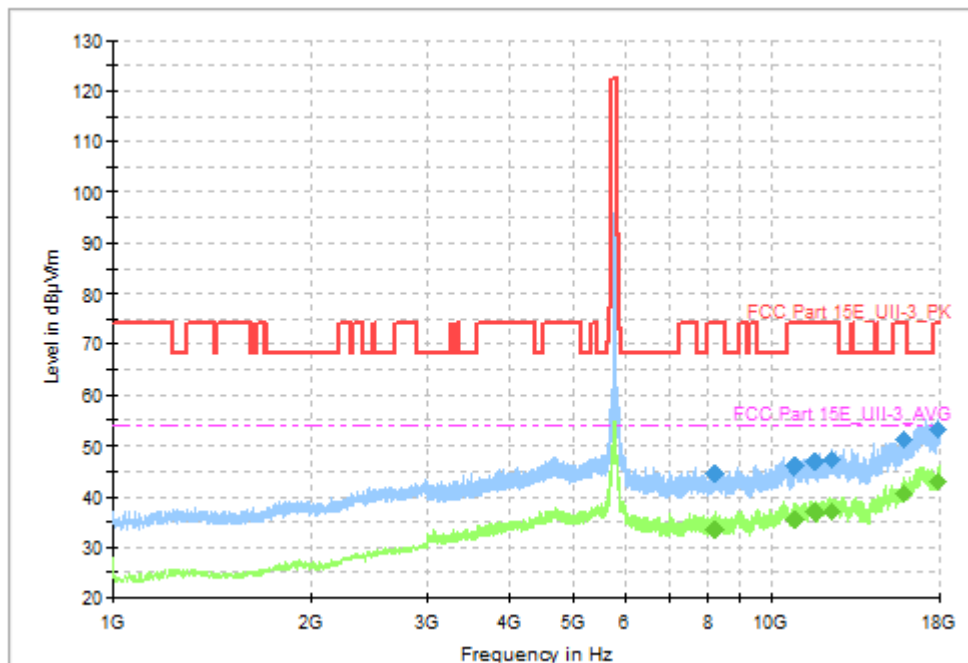


Fig. 94 Transmitter Spurious Emission (802.11ac-VHT80, CH155 5775MHz)

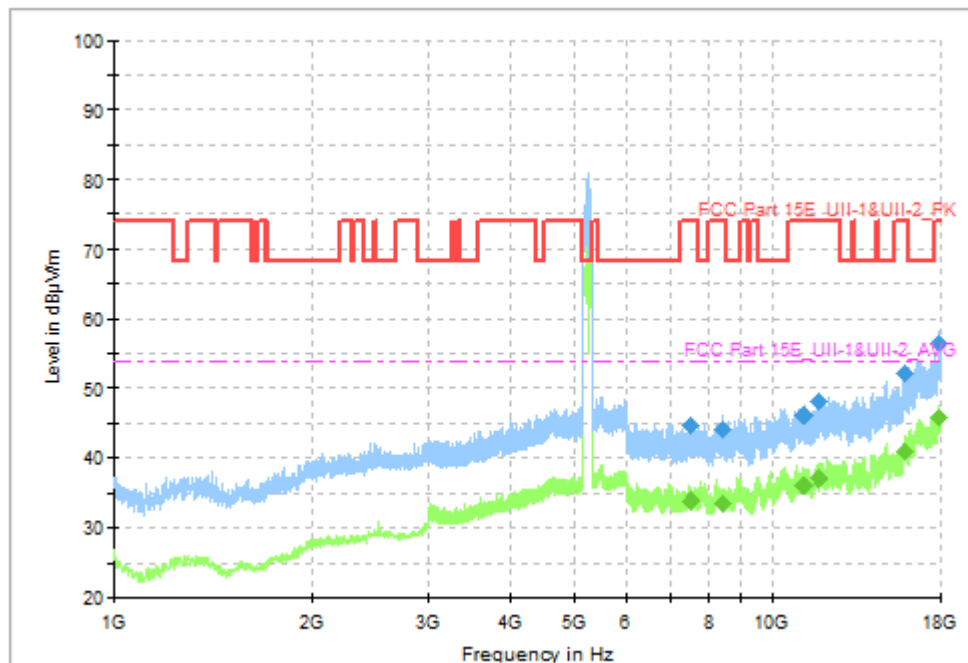


Fig. 95 Transmitter Spurious Emission (802. 11ac-VHT160, CH50 5250MHz)

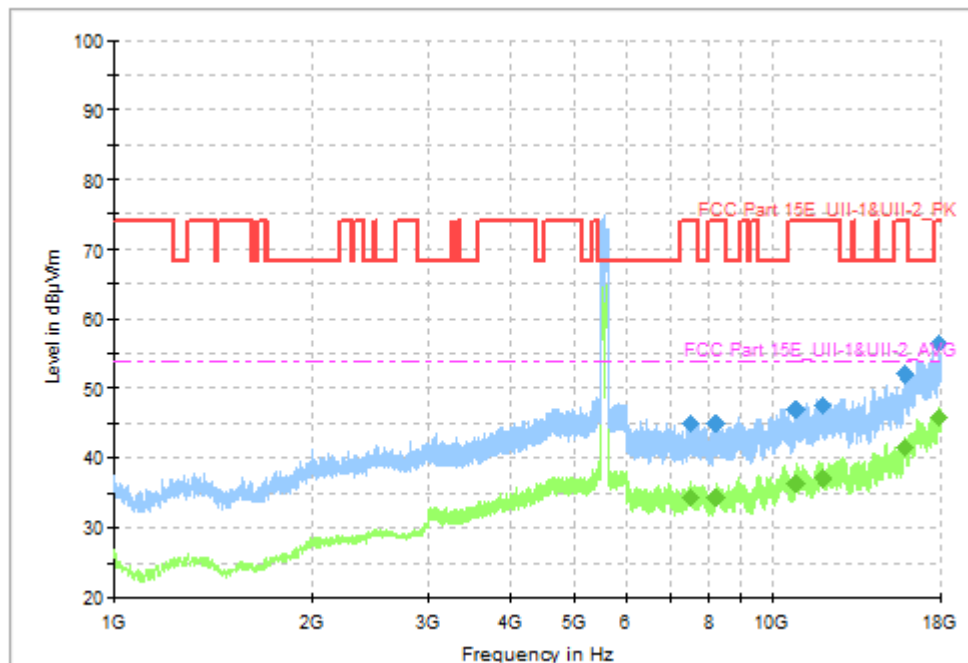


Fig. 96 Transmitter Spurious Emission (802. 11ac-VHT160, CH114 5570MHz)

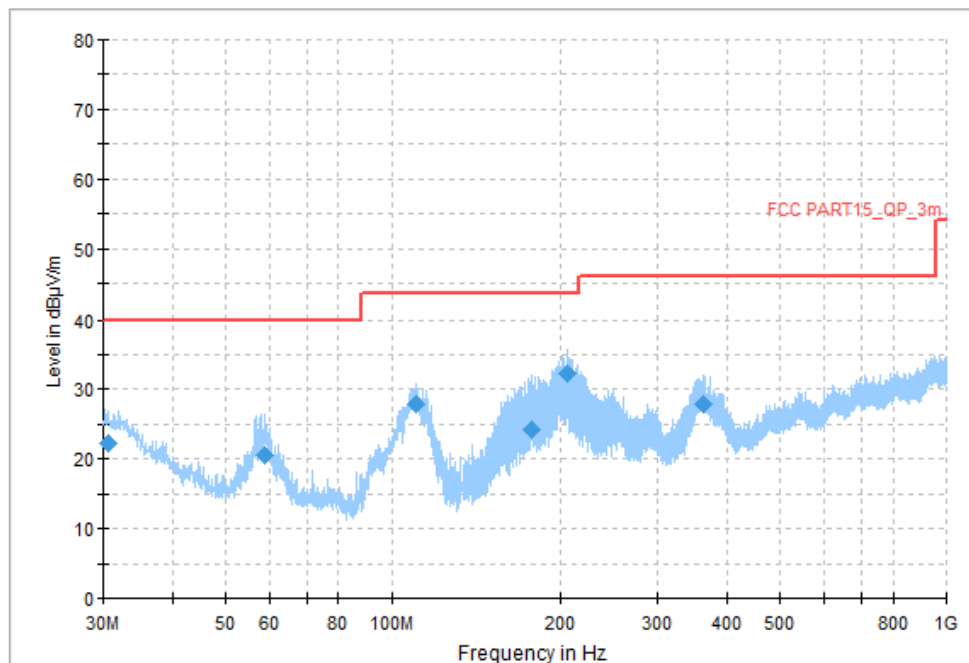


Fig. 97 Transmitter Spurious Emission (All channel, 30MHz~1GHz)

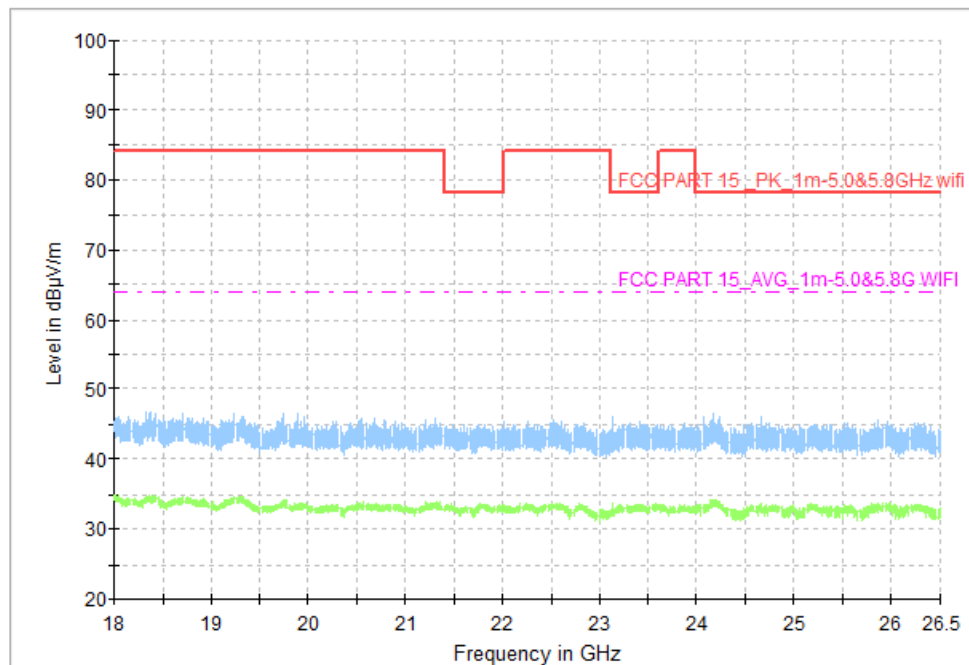


Fig. 98 Transmitter Spurious Emission (All channel, 18GHz~26.5GHz)

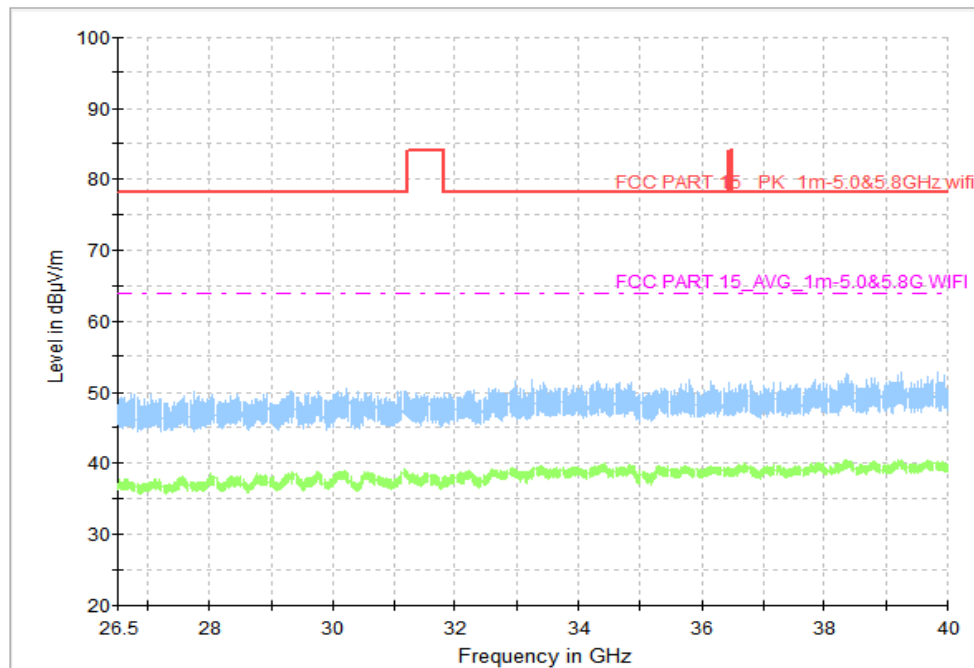


Fig. 99 Transmitter Spurious Emission (All channel, 26.5GHz~40GHz)

Worst Case Result
802.11a CH64

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8250.923077	45.56	74.00	28.44	H	6.8
11009.076923	47.71	74.00	26.29	V	10.9
11745.692308	47.08	74.00	26.92	H	11.9
12227.538462	47.55	74.00	26.45	H	12.7
15912.923077	52.57	74.00	21.43	H	15.8
17871.692308	56.79	74.00	17.21	V	21.9

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8250.923077	34.49	54.00	19.51	H	6.8
11009.076923	36.57	54.00	17.43	V	10.9
11745.692308	36.80	54.00	17.20	H	11.9
12227.538462	37.54	54.00	16.46	H	12.7
15912.923077	41.65	54.00	12.35	H	15.8
17871.692308	45.13	54.00	8.87	V	21.9

802.11n-HT40 CH62

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8237.076923	45.99	74.00	28.01	H	6.8
11169.692308	46.64	74.00	27.36	H	10.7
11879.076923	47.91	74.00	26.09	H	12.6
12515.538462	48.30	74.00	25.70	H	12.8
15900.923077	52.30	74.00	21.70	V	15.7
17907.230769	56.69	74.00	17.31	V	21.8

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8237.076923	34.56	54.00	19.44	H	6.8
11169.692308	36.19	54.00	17.81	H	10.7
11879.076923	37.66	54.00	16.34	H	12.6
12515.538462	38.08	54.00	15.92	H	12.8
15900.923077	41.17	54.00	12.83	V	15.7
17907.230769	45.62	54.00	8.38	V	21.8

802.11ac-VHT80 CH58

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8229.230769	44.82	74.00	29.18	H	5.9
11202.000000	46.64	74.00	27.36	H	9.7
11988.461539	46.93	74.00	27.07	H	10.3
12426.000000	47.74	74.00	26.26	H	11.4
15937.384615	51.30	74.00	22.70	V	14.1
17979.230769	54.49	74.00	19.51	V	19.1

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8229.230769	35.80	54.00	18.20	H	5.9
11202.000000	37.82	54.00	16.18	H	9.7
11988.461539	38.07	54.00	15.93	H	10.3
12426.000000	39.01	54.00	14.99	H	11.4
15937.384615	40.79	54.00	13.21	V	14.1
17979.230769	43.78	54.00	10.22	V	19.1

802.11ac-VHT160 CH50

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
7522.153846	44.75	74.00	29.25	H	7.1
8385.692308	44.16	74.00	29.84	V	7.3
11189.076923	46.22	74.00	27.78	V	10.7
11826.000000	48.20	74.00	25.80	V	12.3
15900.000000	52.35	74.00	21.65	H	15.7
17919.692308	56.52	74.00	17.48	H	21.7

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
7522.153846	33.90	54.00	20.10	H	7.1
8385.692308	33.45	54.00	20.55	V	7.3
11189.076923	36.15	54.00	17.85	V	10.7
11826.000000	37.08	54.00	16.92	V	12.3
15900.000000	41.14	54.00	12.86	H	15.7
17919.692308	45.81	54.00	8.19	H	21.7

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

A.9. Radiated Spurious Emissions < 30MHz

Method of Measurement: See ANSI C63.10-clause 6.4.

Measurement Limit (15.209, 9kHz-30MHz):

Frequency (MHz)	Field strength ($\mu\text{V/m}$)	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

Note: The measurement distance during the test is 3m. The limit used in plots recalculated based on the extrapolation factor of 40 dB/decade.

Measurement Result:

Channel	Frequency Range	Test Results	Conclusion
All Channel	9kHz ~ 30MHz	Fig.100	P

Conclusion: PASS

Test graphs as below:

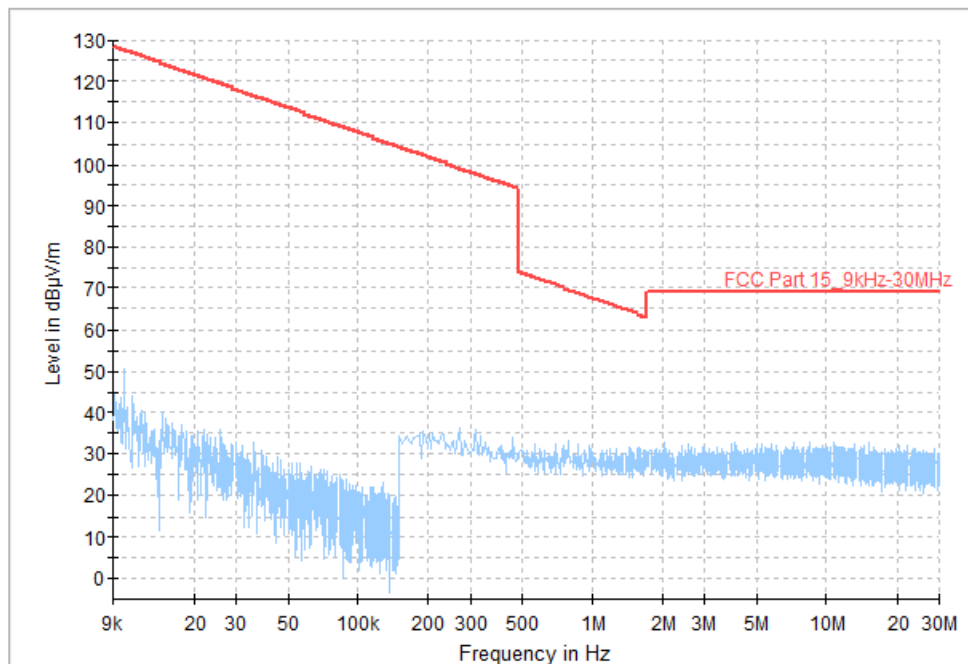


Fig. 100 Radiated Spurious Emission (All Channel, 9kHz ~ 30MHz)

A.10. AC Power Line Conducted Emission

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

Test Condition:

Voltage(V)	Frequency (Hz)
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit) - AE2

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.101	Fig.102	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) - AE2

Frequency range (MHz)	Average-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig.101	Fig.102	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.

Note: The measurement results include the L1 and N measurements.

Conclusion: PASS

Test graphs as below:

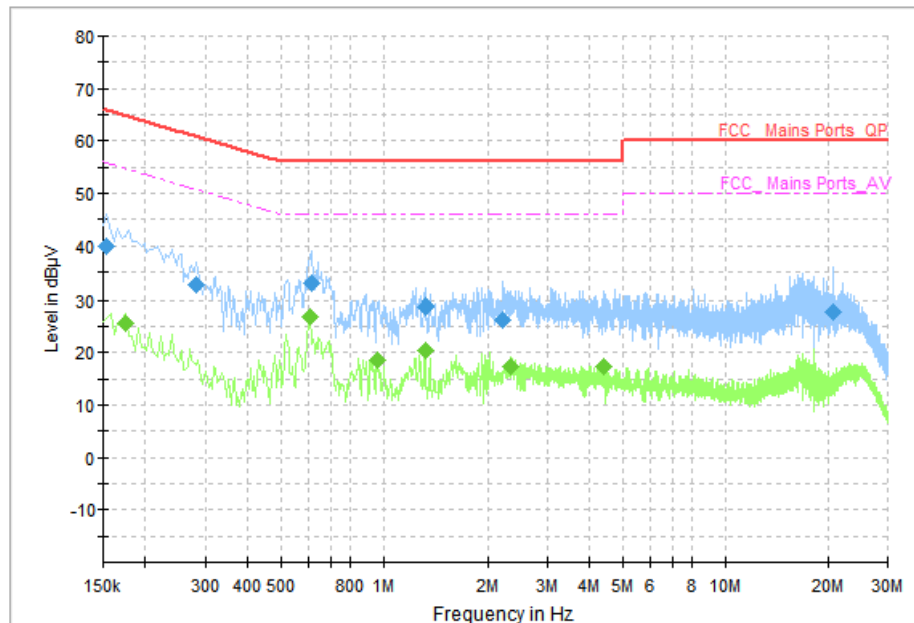


Fig. 101 AC Power line Conducted Emission (Traffic)

Measurement Result: Quasi Peak

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000	40.09	65.78	25.69	N	ON	10
0.282000	32.50	60.76	28.26	L1	ON	10
0.614000	32.98	56.00	23.02	L1	ON	10
1.330000	28.48	56.00	27.52	L1	ON	10
2.226000	26.18	56.00	29.82	N	ON	10
20.762000	27.77	60.00	32.23	N	ON	11

Measurement Result: Average

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174000	25.57	54.77	29.20	N	ON	10
0.606000	26.86	46.00	19.14	L1	ON	10
0.958000	18.46	46.00	27.54	L1	ON	10
1.326000	20.25	46.00	25.75	L1	ON	10
2.330000	17.31	46.00	28.69	L1	ON	10
4.414000	17.37	46.00	28.63	L1	ON	10

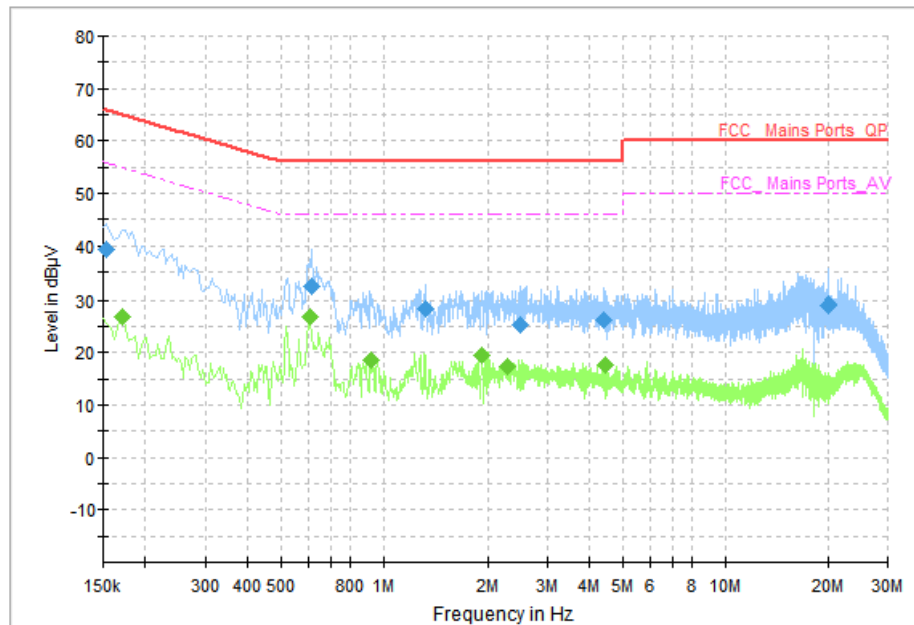


Fig. 102 AC Power line Conducted Emission (Idle)

Measurement Result: Quasi Peak

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000	39.48	65.78	26.30	N	ON	10
0.618000	32.44	56.00	23.56	N	ON	10
1.330000	28.46	56.00	27.54	L1	ON	10
2.506000	25.39	56.00	30.61	L1	ON	10
4.382000	26.09	56.00	29.92	N	ON	10
20.098000	29.07	60.00	30.93	N	ON	11

Measurement Result: Average

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.170000	26.87	54.96	28.09	N	ON	10
0.606000	26.86	46.00	19.14	L1	ON	10
0.918000	18.55	46.00	27.45	L1	ON	10
1.930000	19.42	46.00	26.58	L1	ON	10
2.282000	17.31	46.00	28.69	L1	ON	10
4.458000	17.63	46.00	28.37	L1	ON	10



A.11. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500mW).

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