

Fig. 43 99% Occupied Bandwidth (802. 11ac-VHT80, 5210MHz)

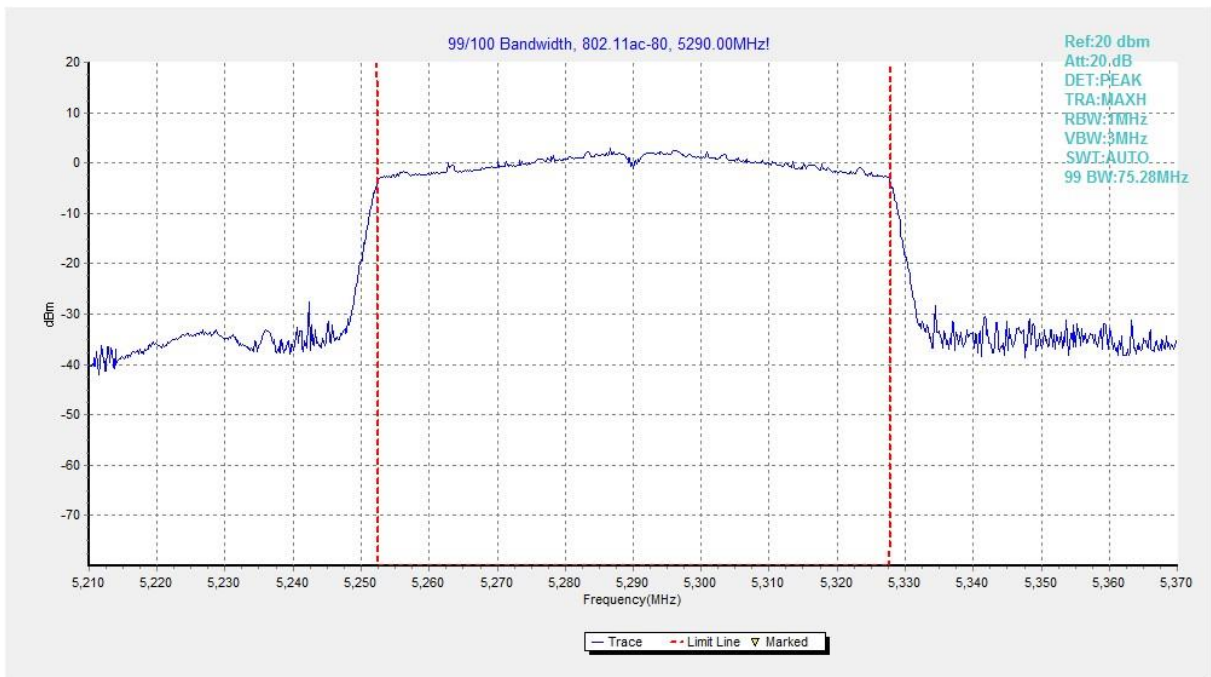


Fig. 44 99% Occupied Bandwidth (802. 11ac-VHT80, 5290MHz)

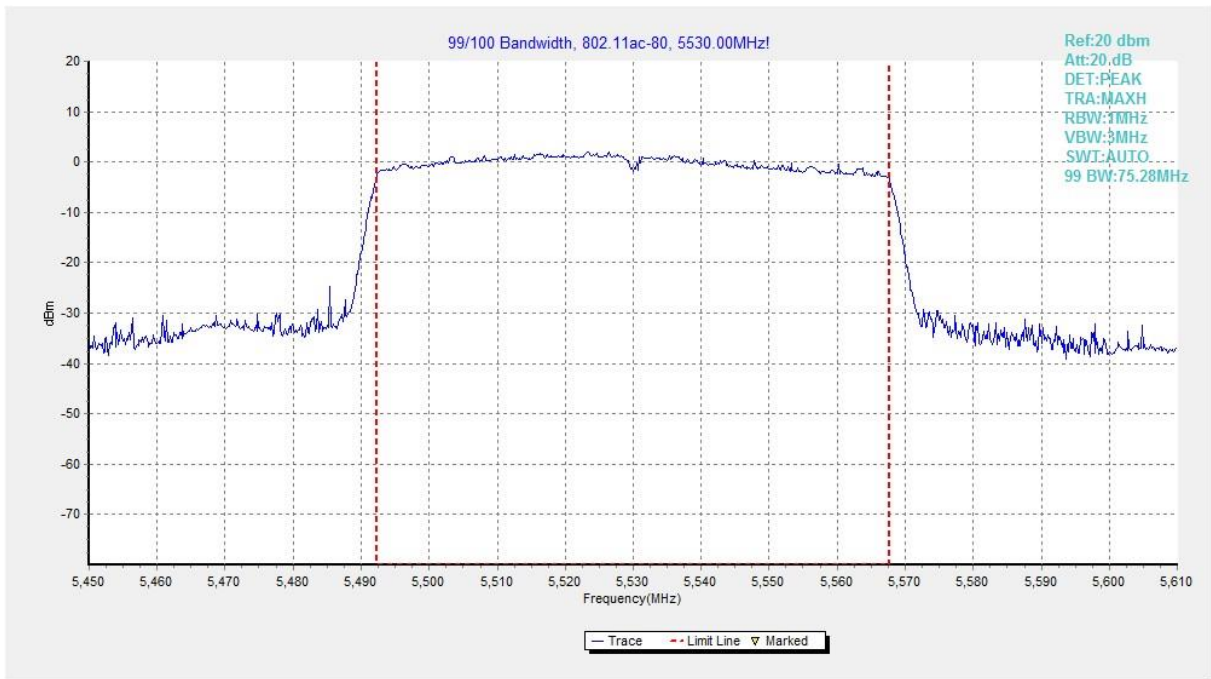


Fig. 45 99% Occupied Bandwidth (802. 11ac-VHT80, 5530MHz)

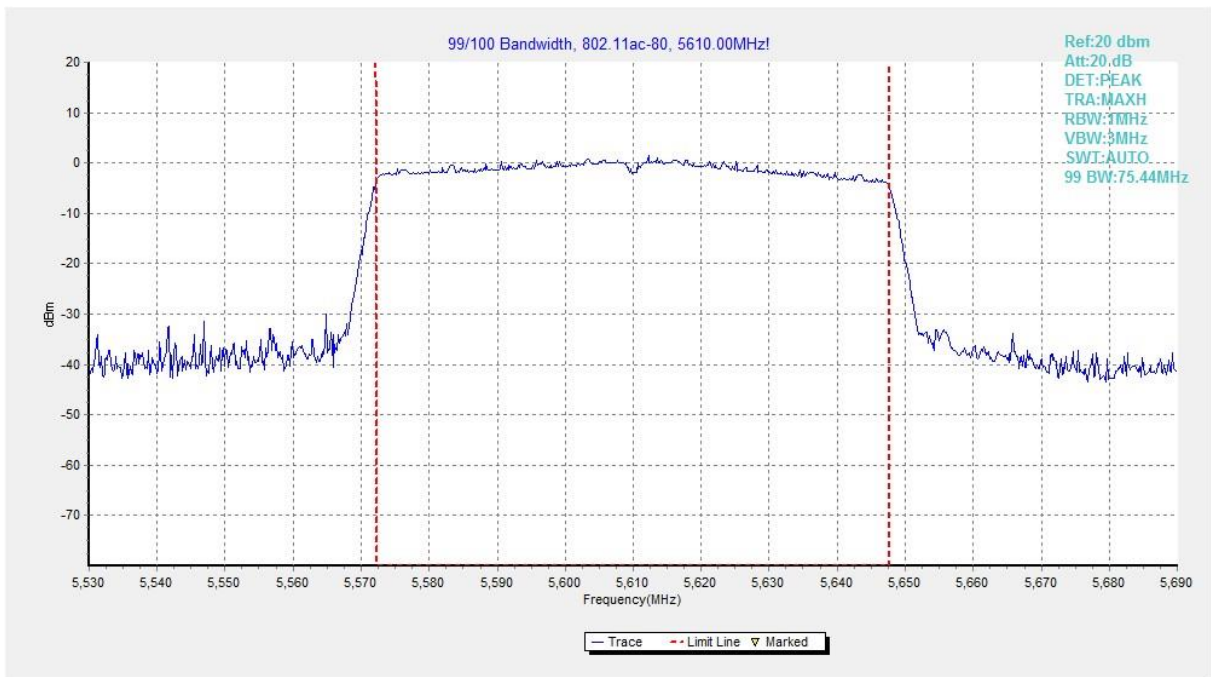


Fig. 46 99% Occupied Bandwidth (802. 11ac-VHT80, 5610MHz)

A.7. Band Edges Compliance

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC 47 CFR Part 15.407	5150MHz~5250MHz; 5250MHz~5350MHz; 5470MHz~5725MHz	< -27

Standard	Frequency (MHz)	Limit (dBuV/m)	
FCC 47 CFR Part 15.209	5725MHz~5850MHz	Peak	74
		Average	54

The measurement is made according to KDB 789033

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz(CH36)	Fig.47	P
	5320 MHz(CH64)	Fig.48	P
	5500 MHz(CH100)	Fig.49	P
	5700 MHz(CH140)	Fig.50	P
	5745 MHz(CH149)	Fig.51	P
	5825 MHz(CH165)	Fig.52	P
802.11n-HT40	5190 MHz(CH38)	Fig.53	P
	5310 MHz(CH62)	Fig.54	P
	5510 MHz(CH102)	Fig.55	P
	5670 MHz(CH134)	Fig.56	P
	5755 MHz(CH151)	Fig.57	P
	5795 MHz(CH159)	Fig.58	P
802.11ac-VHT80	5210 MHz(CH42)	Fig.59	P
	5290 MHz(CH58)	Fig.60	P
	5530 MHz(CH106)	Fig.61	P
	5775 MHz(CH155)	Fig.62	P

Conclusion: PASS

Test graphs as below:

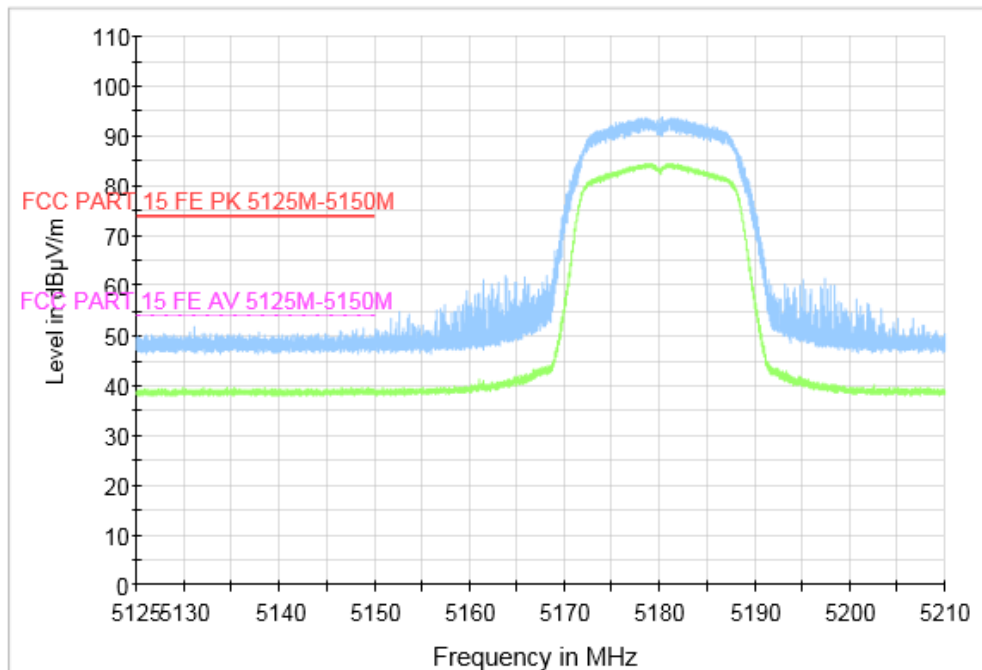


Fig. 47 Band Edges (802.11a, CH36 5180MHz)

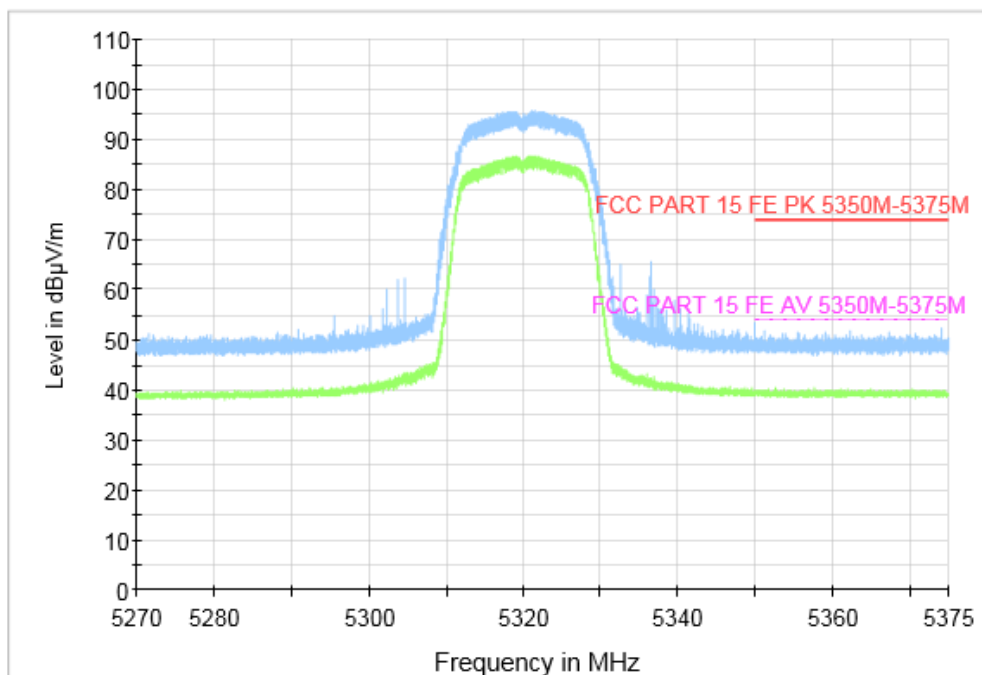


Fig. 48 Band Edges (802.11a, CH64 5320MHz)

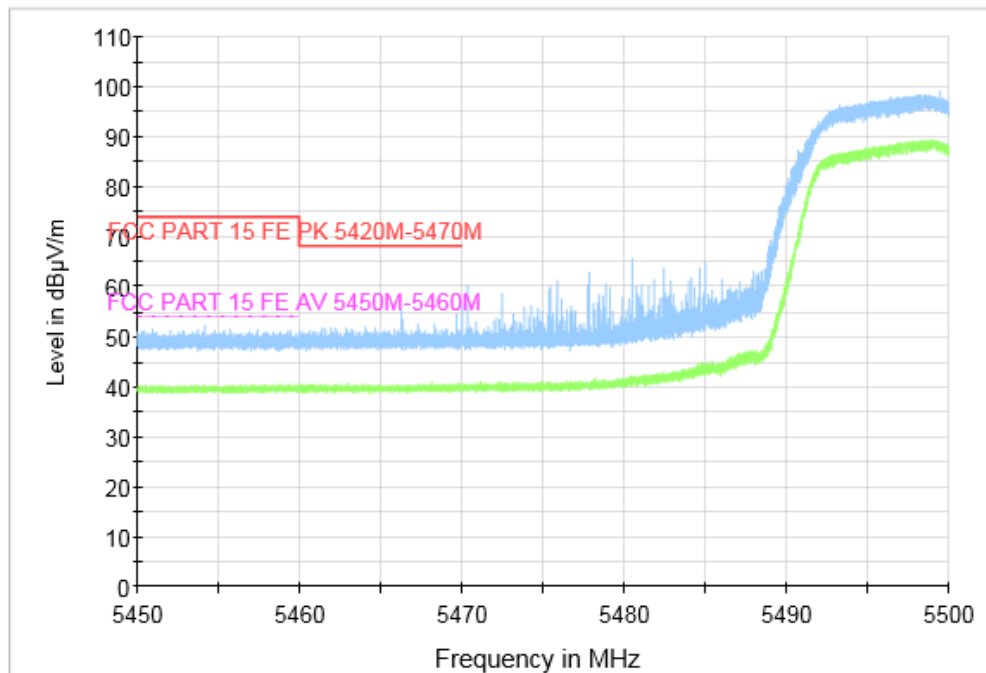


Fig. 49 Band Edges (802.11a, CH100 5500MHz)

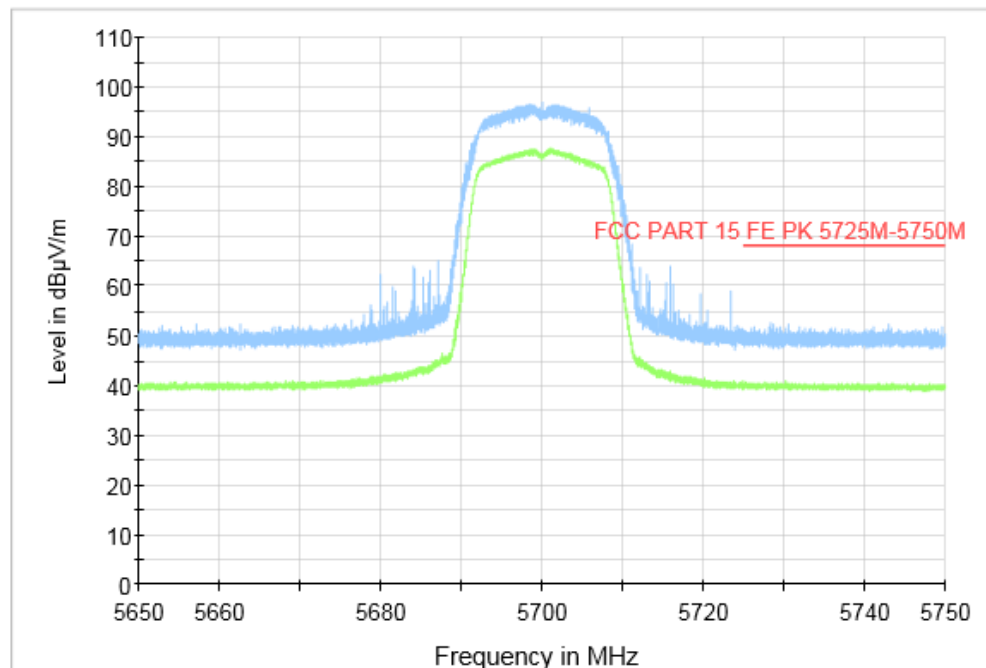


Fig. 50 Band Edges (802.11a, CH140 5700MHz)

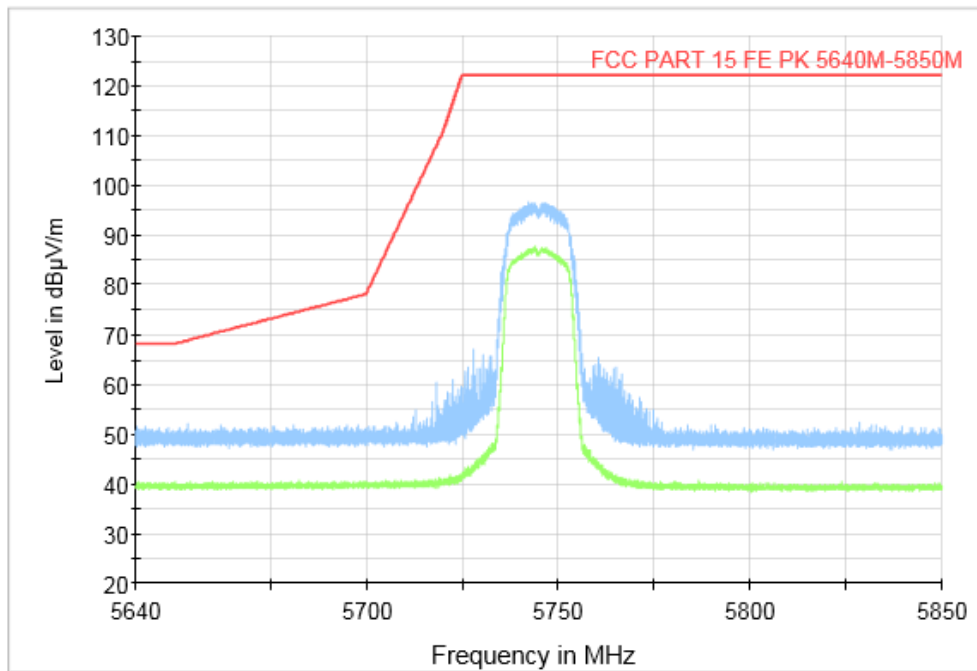


Fig. 51 Band Edges (802.11a, CH149 5745MHz)

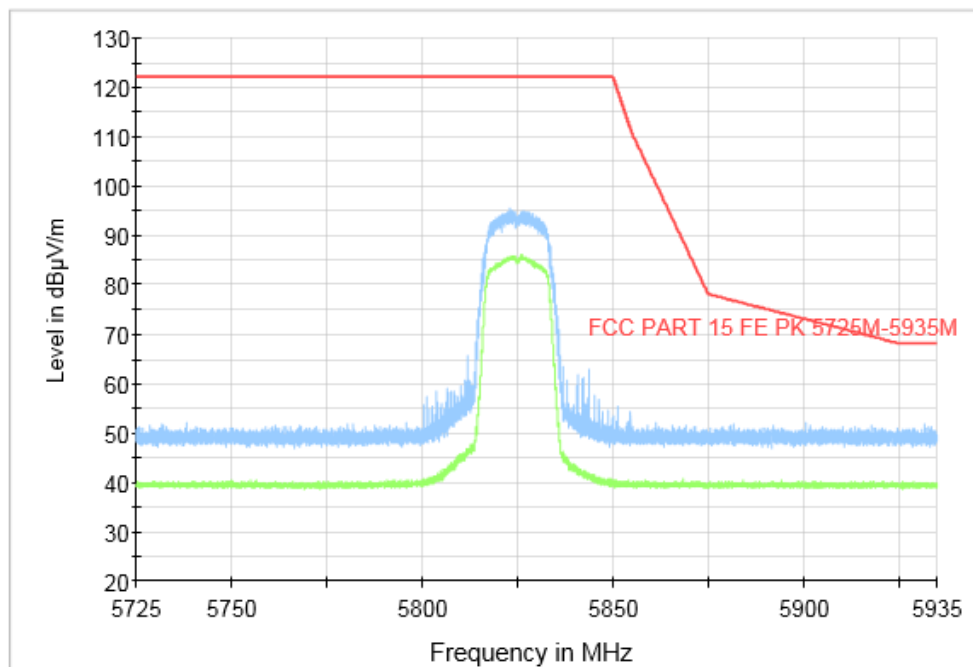


Fig. 52 Band Edges (802.11a, CH165 5825MHz)

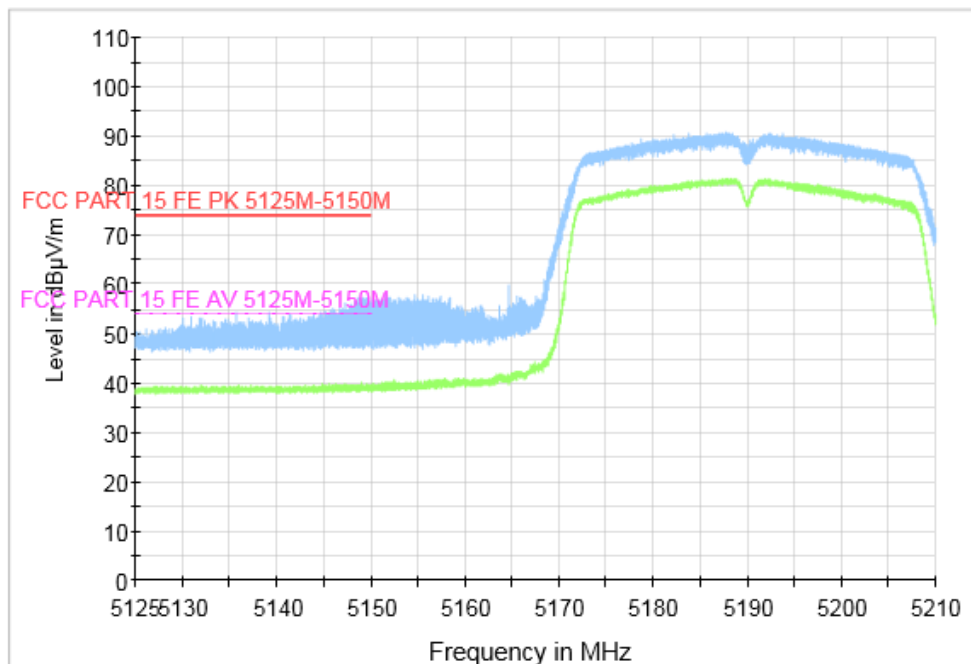


Fig. 53 Band Edges (802.11n-HT40, CH38 5190MHz)

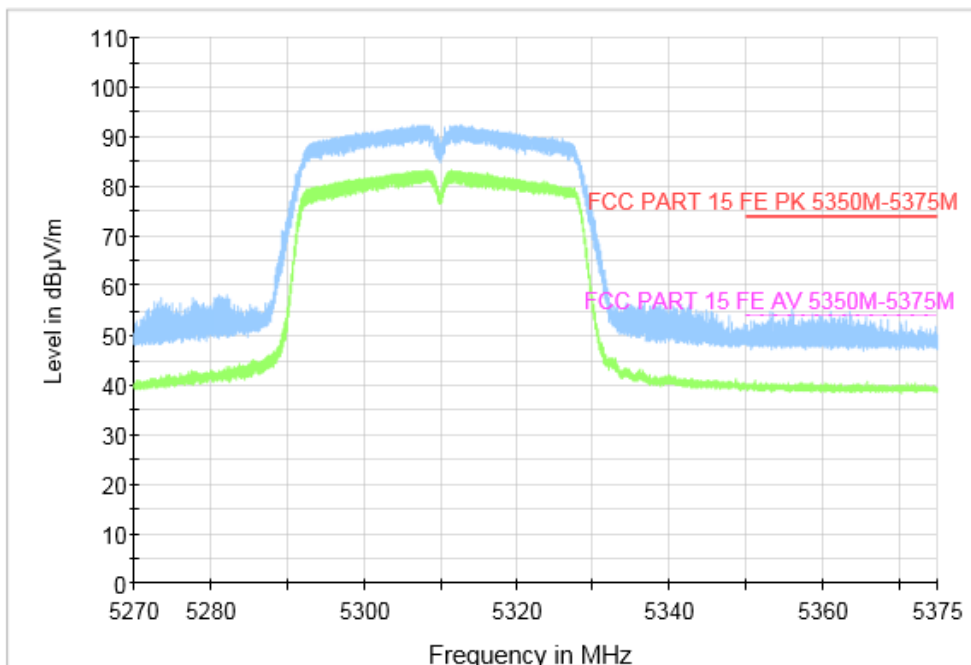


Fig. 54 Band Edges (802.11n-HT40, CH62 5310MHz)

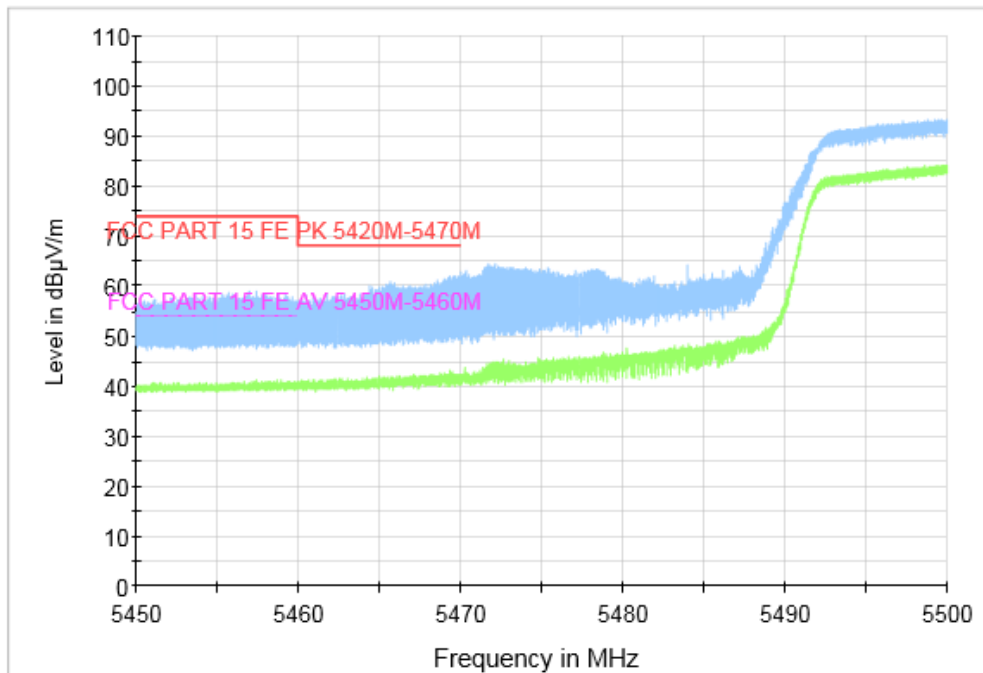


Fig. 55 Band Edges (802.11n-HT40, CH102 5510MHz)

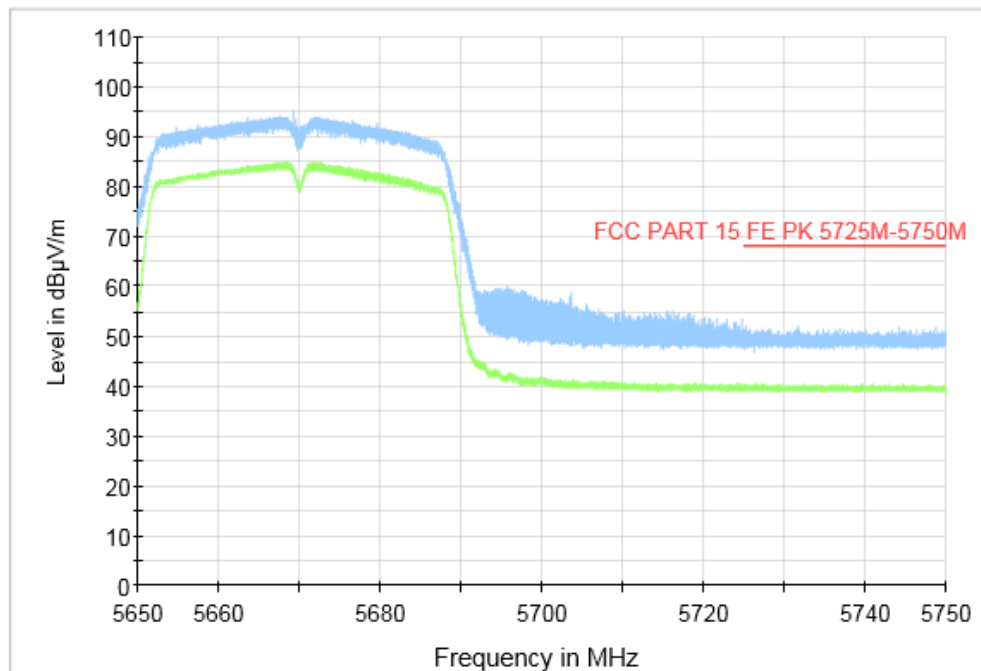


Fig. 56 Band Edges (802.11n-HT40, CH134 5670MHz)

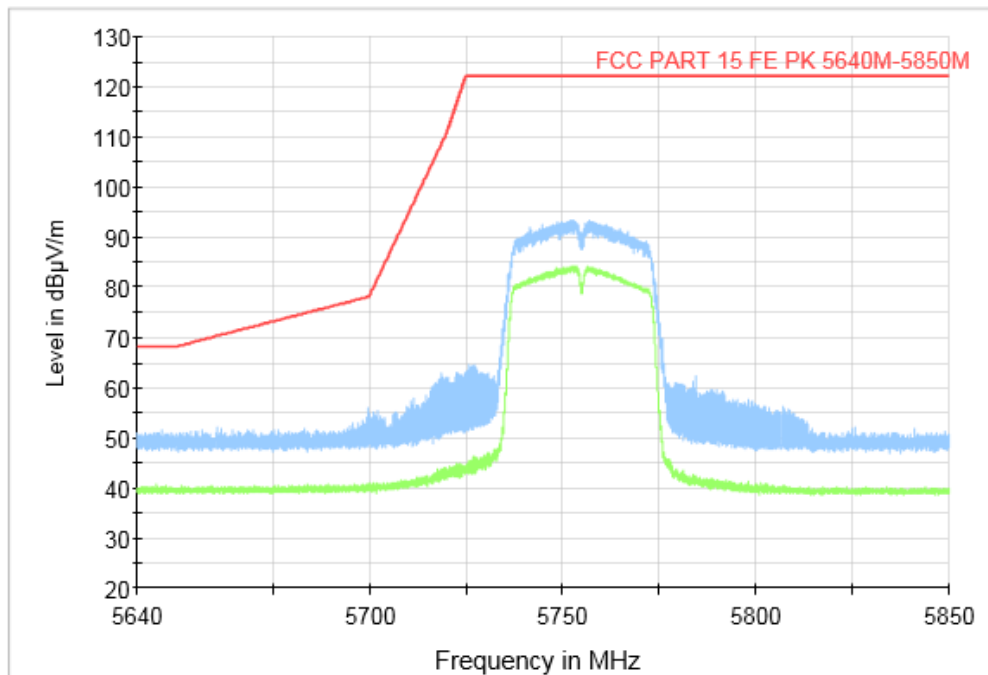


Fig. 57 Band Edges (802.11n-HT40, CH151 5755MHz)

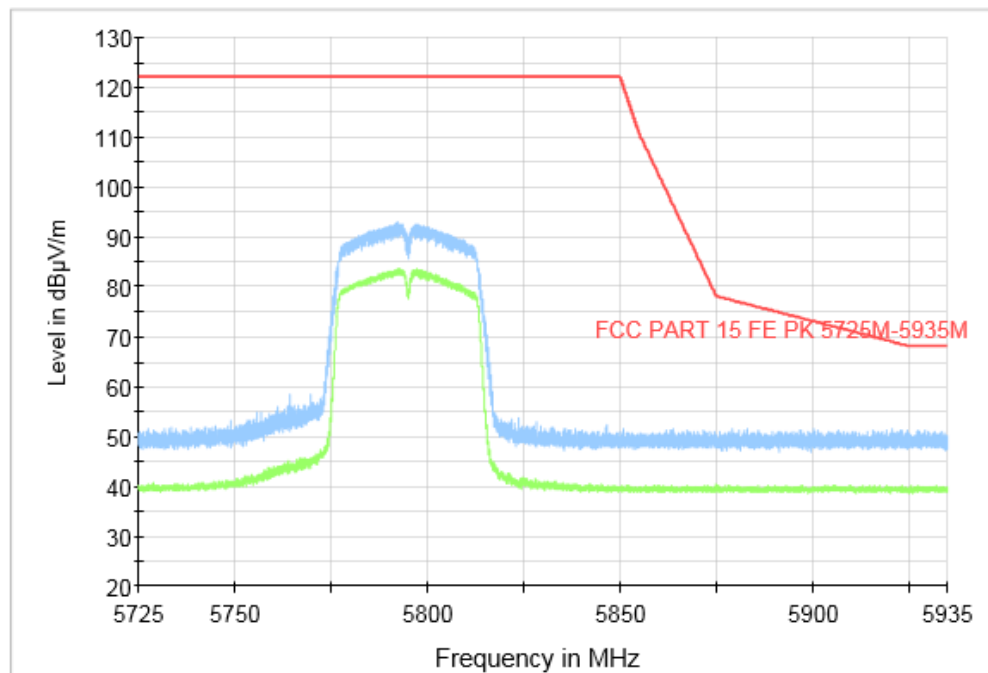


Fig. 58 Band Edges (802.11n-HT40, CH159 5795MHz)

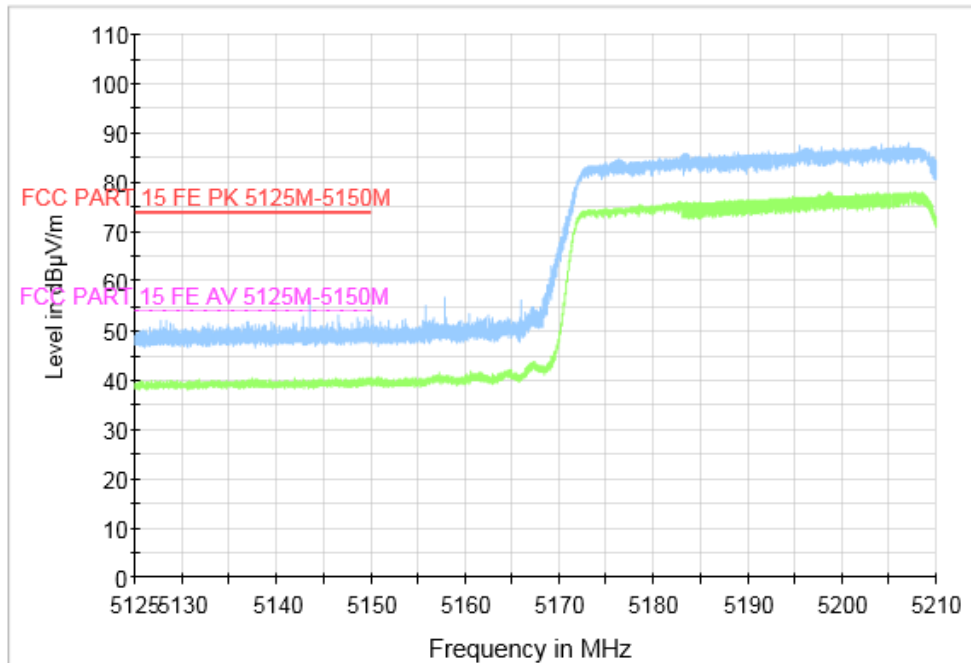


Fig. 59 Band Edges (802.11ac-VHT80, CH42 5210MHz)

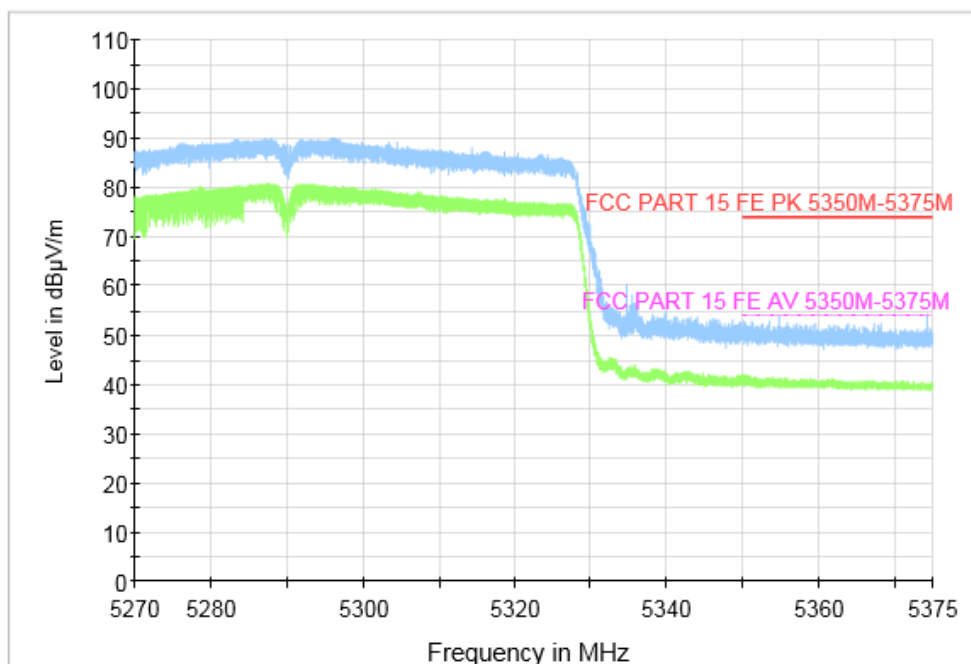


Fig. 60 Band Edges (802.11ac-VHT80, CH58 5290MHz)

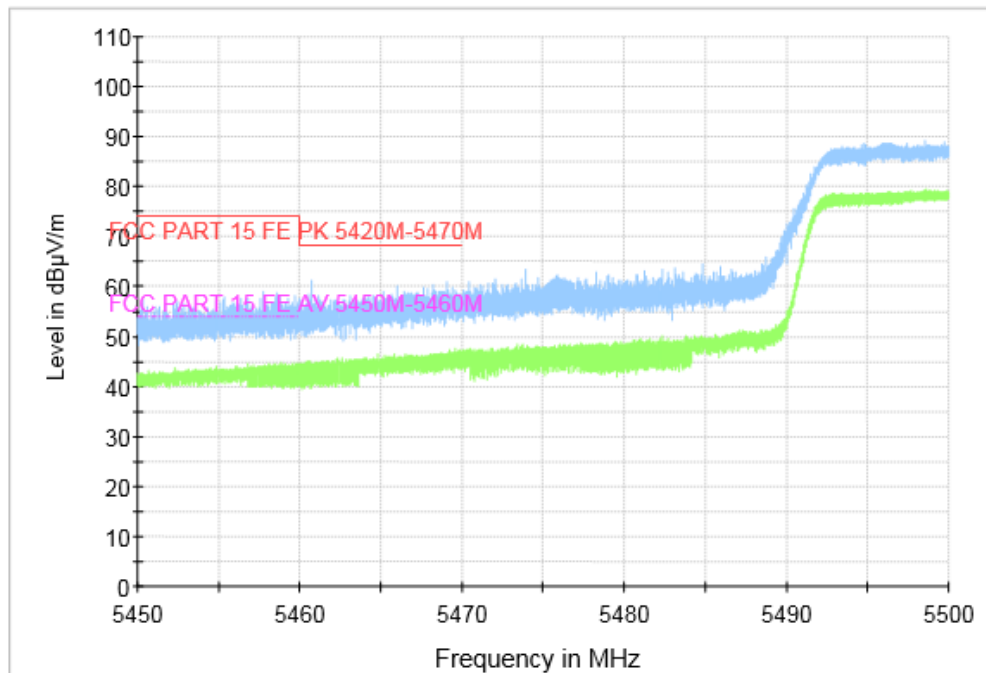


Fig. 61 Band Edges (802.11ac-VHT80, CH106 5530MHz)

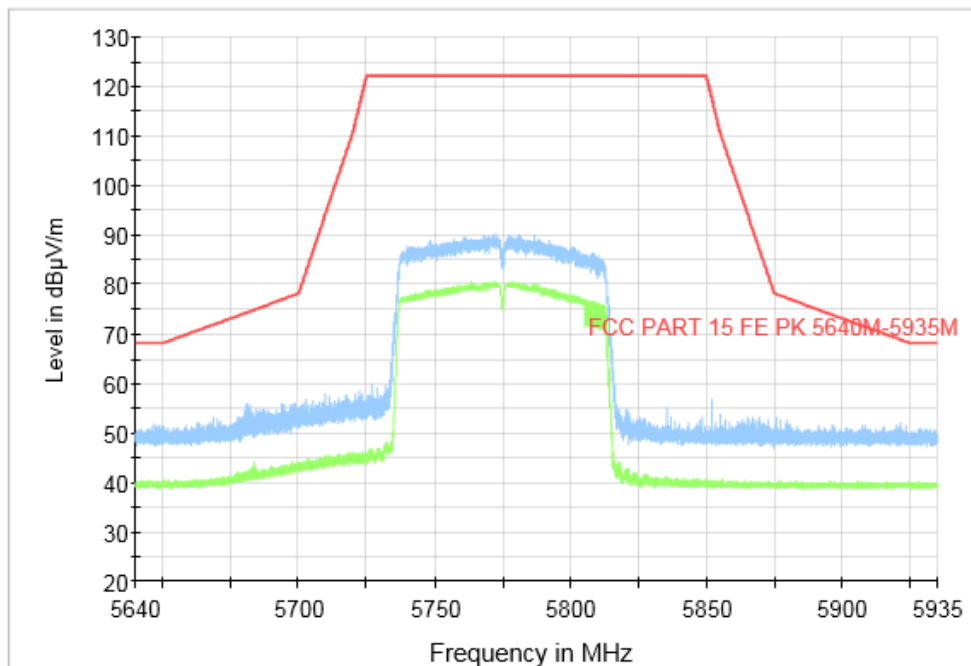


Fig. 62 Band Edges (802.11ac-VHT80, CH155 5775MHz)

A.8. Transmitter Spurious Emission

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC 47 CFR Part 15.407	5150MHz~5250MHz; 5250MHz~5350MHz; 5470MHz~5725MHz	< -27

Standard	Frequency (MHz)	Limit (dBuV/m)	
FCC 47 CFR Part 15.209	5725MHz~5850MHz	Peak	74
		Average	54

The measurement is made according to KDB 789033.

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 (dB μ V/m)	Measurement distance (m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

Note: For frequency range below 960MHz, the limit in 15.209 is defined in 10m test distance. The limit used above is calculated from 10m to 3m.

Measurement Result:

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	5180MHz(Ch36)	3 GHz ~7 GHz	Fig.63	P
		7 GHz ~18 GHz	Fig.64	P
	5200MHz(Ch40)	3 GHz ~7 GHz	Fig.65	P
		7 GHz ~18 GHz	Fig.66	P
	5240MHz(Ch48)	3 GHz ~7 GHz	Fig.67	P
		7 GHz ~18 GHz	Fig.68	P
	5260MHz(Ch52)	3 GHz ~7 GHz	Fig.69	P
		7 GHz ~18 GHz	Fig.70	P
	5280MHz(Ch56)	3 GHz ~7 GHz	Fig.71	P
		7 GHz ~18 GHz	Fig.72	P
	5320MHz(Ch64)	3 GHz ~7 GHz	Fig.73	P
		7 GHz ~18 GHz	Fig.74	P
	5500MHz(Ch100)	3 GHz ~7 GHz	Fig.75	P
		7 GHz ~18 GHz	Fig.76	P
	5600MHz(Ch120)	3 GHz ~7 GHz	Fig.77	P

		7 GHz ~18 GHz	Fig.78	P
	5700MHz(Ch140)	3 GHz ~7 GHz	Fig.79	P
		7 GHz ~18 GHz	Fig.80	P
	5745MHz(Ch149)	3 GHz ~7 GHz	Fig.81	P
		7 GHz ~18 GHz	Fig.82	P
	5785MHz(Ch157)	3 GHz ~7 GHz	Fig.83	P
		7 GHz ~18 GHz	Fig.84	P
	5825MHz(Ch165)	3 GHz ~7 GHz	Fig.85	P
		7 GHz ~18 GHz	Fig.86	P
802.11n- HT40	5190MHz(Ch38)	3 GHz ~7 GHz	Fig.87	P
		7 GHz ~18 GHz	Fig.88	P
	5230MHz(Ch46)	3 GHz ~7 GHz	Fig.89	P
		7 GHz ~18 GHz	Fig.90	P
	5270MHz(Ch54)	3 GHz ~7 GHz	Fig.91	P
		7 GHz ~18 GHz	Fig.92	P
	5310MHz(Ch62)	3 GHz ~7 GHz	Fig.93	P
		7 GHz ~18 GHz	Fig.94	P
	5510MHz(Ch102)	3 GHz ~7 GHz	Fig.95	P
		7 GHz ~18 GHz	Fig.96	P
	5580MHz(Ch118)	3 GHz ~7 GHz	Fig.97	P
		7 GHz ~18 GHz	Fig.98	P
	5670MHz(Ch134)	3 GHz ~7 GHz	Fig.99	P
		7 GHz ~18 GHz	Fig.100	P
	5755MHz(Ch151)	3 GHz ~7 GHz	Fig.101	P
		7 GHz ~18 GHz	Fig.102	P
5795MHz(Ch159)	3 GHz ~7 GHz	Fig.103	P	
	7 GHz ~18 GHz	Fig.104	P	
802.11a- VHT80	5210MHz(Ch42)	3 GHz ~7 GHz	Fig.105	P
		7 GHz ~18 GHz	Fig.106	P
	5290MHz(Ch58)	3 GHz ~7 GHz	Fig.107	P
		7 GHz ~18 GHz	Fig.108	P
	5530MHz(Ch106)	3 GHz ~7 GHz	Fig.109	P
		7 GHz ~18 GHz	Fig.110	P
	5610MHz(Ch122)	3 GHz ~7 GHz	Fig.111	P
		7 GHz ~18 GHz	Fig.112	P
5775MHz(Ch155)	3 GHz ~7 GHz	Fig.113	P	
	7 GHz ~18 GHz	Fig.114	P	
All channels		30 MHz ~1 GHz	Fig.115	P
		1 GHz ~3 GHz	Fig.116	P
		18 GHz ~26.5 GHz	Fig.117	P
		26.5GHz~40GHz	Fig.118	P

Worst Case Result
802.11a CH36

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12982.533333	47.53	68.20	20.67	H	8.3
13574.700000	47.73	68.20	20.47	H	8.6
14165.033333	48.65	68.20	19.55	V	10.7
14862.066667	48.76	68.20	19.44	H	10.9
16719.233333	52.26	68.20	15.94	V	14.9
17612.433333	51.40	68.20	16.80	H	15.6

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
10848.166667	34.14	54.00	19.86	H	5.3
11676.100000	35.09	54.00	18.91	H	7.0
12523.466667	35.76	54.00	18.24	V	8.0
15501.900000	37.10	54.00	16.90	H	11.9
15947.033333	38.07	54.00	15.93	H	13.3
17961.866667	39.77	54.00	14.23	H	16.1

802.11a CH52

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12966.033333	46.91	68.20	21.29	H	8.5
13917.900000	48.01	68.20	20.19	H	9.4
14276.133333	48.19	68.20	20.01	H	10.9
15060.433333	48.39	68.20	19.81	H	11.1
16705.300000	51.21	68.20	16.99	H	14.9
17350.633333	50.81	68.20	17.39	V	14.7

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
10921.133333	33.75	54.00	20.25	H	5.2
11418.333333	33.74	54.00	20.26	H	5.6
11941.566667	34.97	54.00	19.03	H	7.0
12472.500000	35.00	54.00	19.00	H	7.9
15900.833333	37.84	54.00	16.16	H	13.2
17953.066667	39.50	54.00	14.50	H	16.1

802.11a CH100

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12942.933333	47.70	68.20	20.50	H	8.6
13707.433333	45.97	68.20	22.23	H	8.6
14107.100000	47.77	68.20	20.43	H	10.3
14926.966667	47.46	68.20	20.74	H	11.2
16577.333333	50.28	68.20	17.92	V	14.8
17228.900000	50.11	68.20	18.09	H	14.8

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
10995.933333	33.07	54.00	20.93	V	5.1
11431.166667	33.08	54.00	20.92	H	5.7
11941.566667	34.42	54.00	19.58	V	7.0
12486.066667	34.57	54.00	19.43	V	8.0
15903.766667	37.13	54.00	16.87	H	13.2
17961.866667	38.57	54.00	15.43	H	16.1

802.11a CH149

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12965.300000	46.82	68.20	21.38	V	8.5
13658.666667	46.46	68.20	21.74	V	8.5
14137.533333	48.03	68.20	20.17	V	10.5
15064.466667	47.68	68.20	20.52	V	11.1
16621.333333	49.91	68.20	18.29	H	14.9
17131.366667	50.65	68.20	17.55	V	15.0

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
11260.300000	33.24	54.00	20.76	V	5.5
11729.266667	33.91	54.00	20.09	H	6.8
12360.666667	34.26	54.00	19.74	H	7.5
15524.266667	35.67	54.00	18.33	H	12.0
15914.400000	37.23	54.00	16.77	H	13.3
17986.433333	38.40	54.00	15.60	V	15.9

802.11n HT40 CH38

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12941.100000	47.11	68.20	21.09	V	8.6
13774.533333	45.99	68.20	22.21	V	8.6
14205.733333	47.92	68.20	20.28	V	10.9
15089.400000	48.37	68.20	19.83	V	11.2
16571.833333	50.61	68.20	17.59	H	14.8
17209.100000	50.38	68.20	17.82	V	14.8

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
11147.366667	32.86	54.00	21.14	V	5.1
11626.233333	34.18	54.00	19.82	V	6.9
12363.600000	34.37	54.00	19.63	H	7.4
15552.866667	35.74	54.00	18.26	H	11.8
16101.033333	37.79	54.00	16.21	H	14.0
17932.166667	39.06	54.00	14.94	V	16.1

802.11n HT40 CH54

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12966.400000	46.63	68.20	21.57	H	8.5
13751.433333	45.89	68.20	22.31	V	8.7
14227.000000	47.86	68.20	20.34	H	11.0
15082.800000	48.18	68.20	20.02	V	11.2
17040.433333	50.78	68.20	17.42	V	15.0
17602.533333	51.43	68.20	16.77	H	15.5

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
11258.833333	33.50	54.00	20.50	H	5.5
11745.033333	33.93	54.00	20.07	H	6.9
12341.966667	34.39	54.00	19.61	H	7.3
15694.033333	36.13	54.00	17.87	H	12.3
16135.500000	38.02	54.00	15.98	H	14.2
17960.033333	39.00	54.00	15.00	V	16.1

802.11n HT40 CH102

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12947.700000	46.69	68.20	21.51	V	8.6
13778.566667	46.14	68.20	22.06	H	8.7
14200.966667	47.98	68.20	20.22	V	10.9
15030.733333	47.76	68.20	20.44	H	10.9
16628.300000	50.47	68.20	17.73	H	14.9
17372.266667	50.42	68.20	17.78	H	14.6

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
10929.566667	33.05	54.00	20.95	H	5.1
11428.966667	33.53	54.00	20.47	V	5.7
12139.566667	34.83	54.00	19.17	V	7.3
15696.233333	35.99	54.00	18.01	V	12.3
15975.633333	37.46	54.00	16.54	V	13.4
17935.100000	39.04	54.00	14.96	H	16.1

802.11n HT40 CH151

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
12921.300000	46.66	68.20	21.54	H	8.6
13677.000000	46.23	68.20	21.97	V	8.5
14186.666667	47.89	68.20	20.31	V	10.9
15081.333333	47.46	68.20	20.74	H	11.2
16605.933333	49.88	68.20	18.32	H	14.8
17251.633333	50.34	68.20	17.86	H	14.8

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
11211.900000	33.43	54.00	20.57	V	5.4
11687.100000	34.29	54.00	19.71	V	7.1
12278.533333	34.13	54.00	19.87	H	7.1
15552.133333	35.84	54.00	18.16	H	11.8
16106.166667	37.82	54.00	16.18	H	14.0
17954.533333	39.26	54.00	14.74	H	16.1

802.11ac VHT80 CH42

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12989.500000	46.93	68.20	21.27	V	8.3
13763.900000	46.71	68.20	21.49	V	8.6
14177.866667	48.91	68.20	19.29	H	10.8
14939.800000	46.97	68.20	21.23	H	11.1
16656.166667	49.98	68.20	18.22	H	14.9
17371.533333	50.25	68.20	17.95	V	14.6

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
8336.133333	34.19	54.00	19.81	H	3.1
11691.133333	34.69	54.00	19.31	H	7.1
12301.266667	34.24	54.00	19.76	H	7.1
15577.433333	35.41	54.00	18.59	H	11.8
15933.833333	37.49	54.00	16.51	H	13.4
17935.100000	39.72	54.00	14.28	V	16.1

802.11ac VHT80 CH106

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12968.233333	46.86	68.20	21.34	H	8.5
13653.533333	45.99	68.20	22.21	H	8.6
14058.333333	48.71	68.20	19.49	V	9.8
14819.533333	48.46	68.20	19.74	V	10.7
16508.766667	52.16	68.20	16.04	V	14.7
17370.433333	50.59	68.20	17.61	H	14.6

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
10923.333333	33.43	54.00	20.57	V	5.2
11556.200000	34.43	54.00	19.57	V	6.5
12146.533333	34.96	54.00	19.04	H	7.3
15619.233333	35.71	54.00	18.29	H	11.8
16001.666667	37.36	54.00	16.64	H	13.4
17917.500000	39.27	54.00	14.73	V	16.2

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:

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

Conclusion: PASS
Test graphs as below:

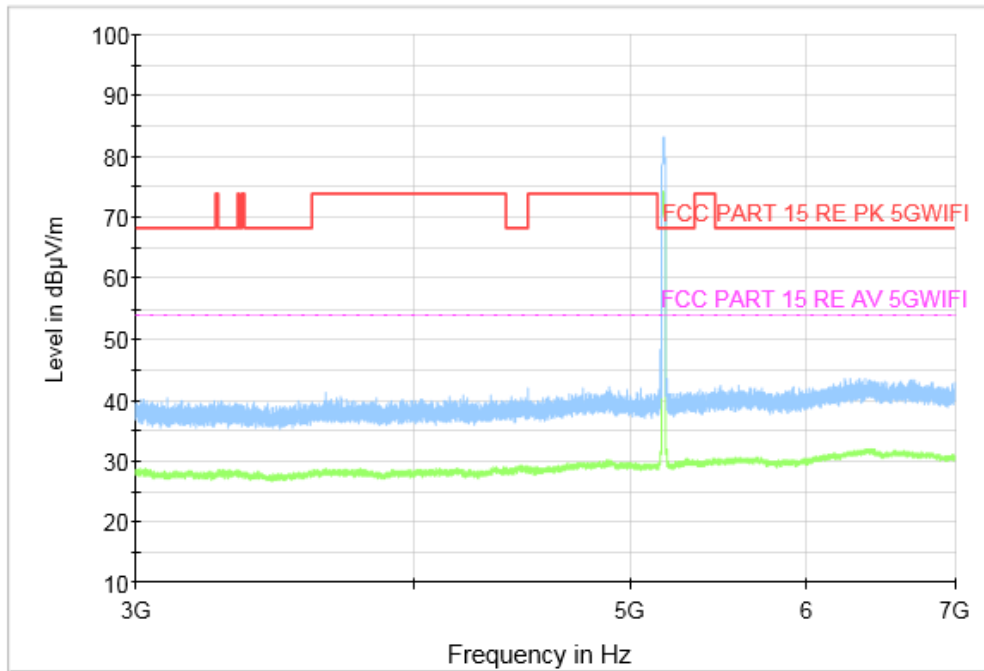


Fig. 63 Transmitter Spurious Emission (802.11a, CH36 5180MHz, 3 GHz-7 GHz)

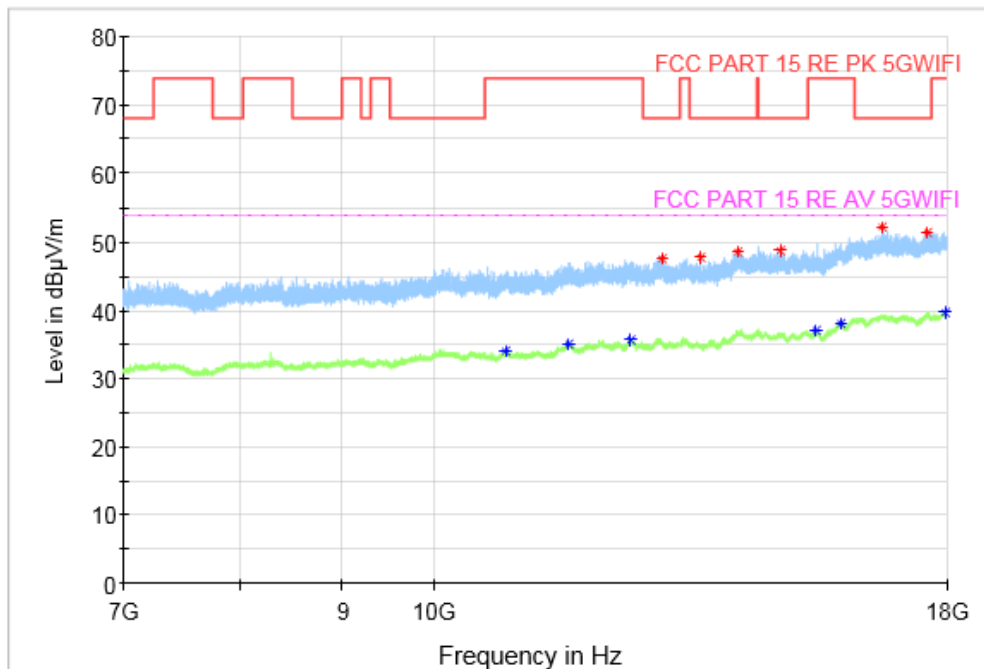


Fig. 64 Transmitter Spurious Emission (802.11a, CH36 5180MHz, 7 GHz-18 GHz)

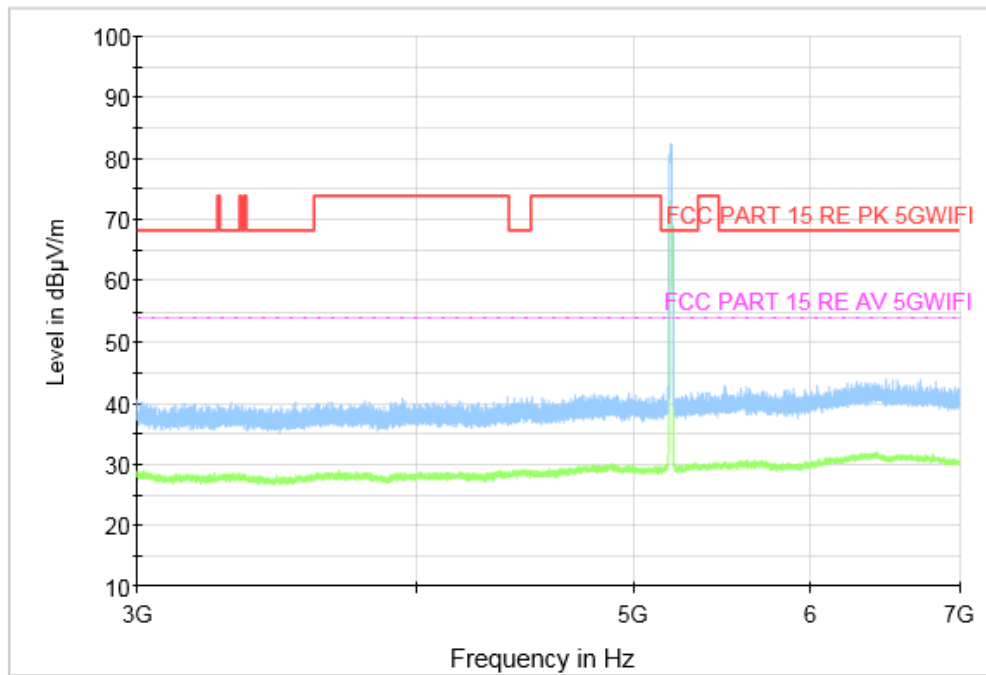


Fig. 65 Transmitter Spurious Emission (802.11a, CH40 5200MHz, 3 GHz-7 GHz)

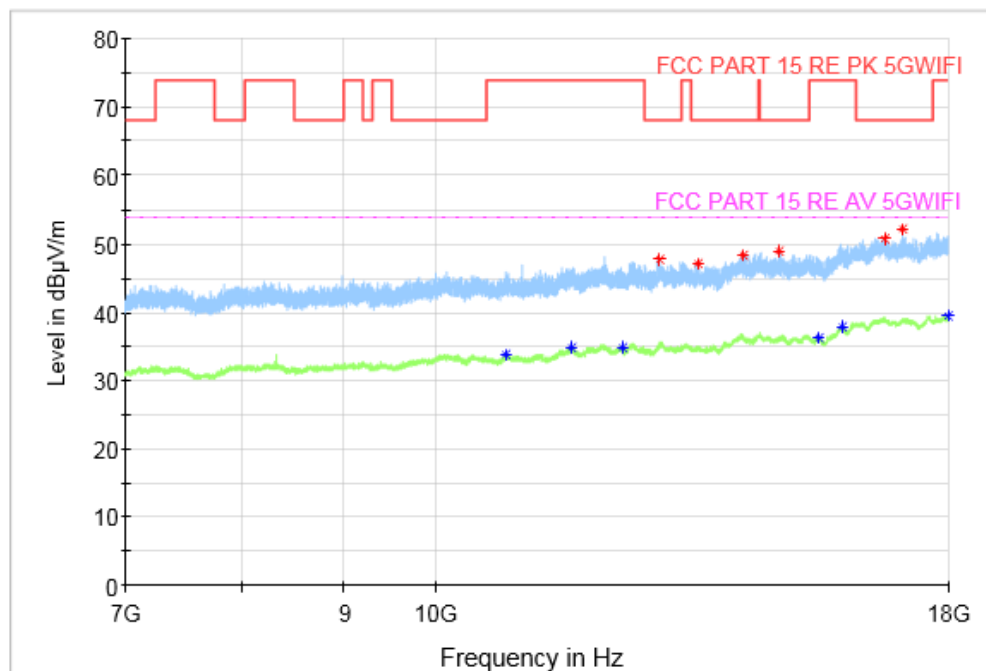


Fig. 66 Transmitter Spurious Emission (802.11a, CH40 5200MHz, 7 GHz-18 GHz)

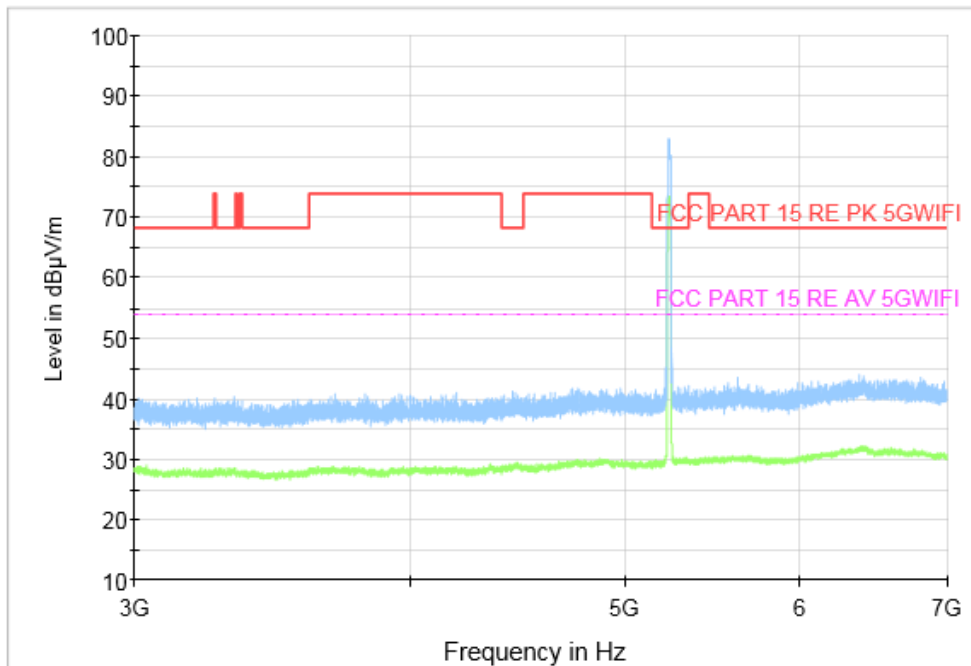


Fig. 67 Transmitter Spurious Emission (802.11a, CH48 5240MHz, 3 GHz-7 GHz)

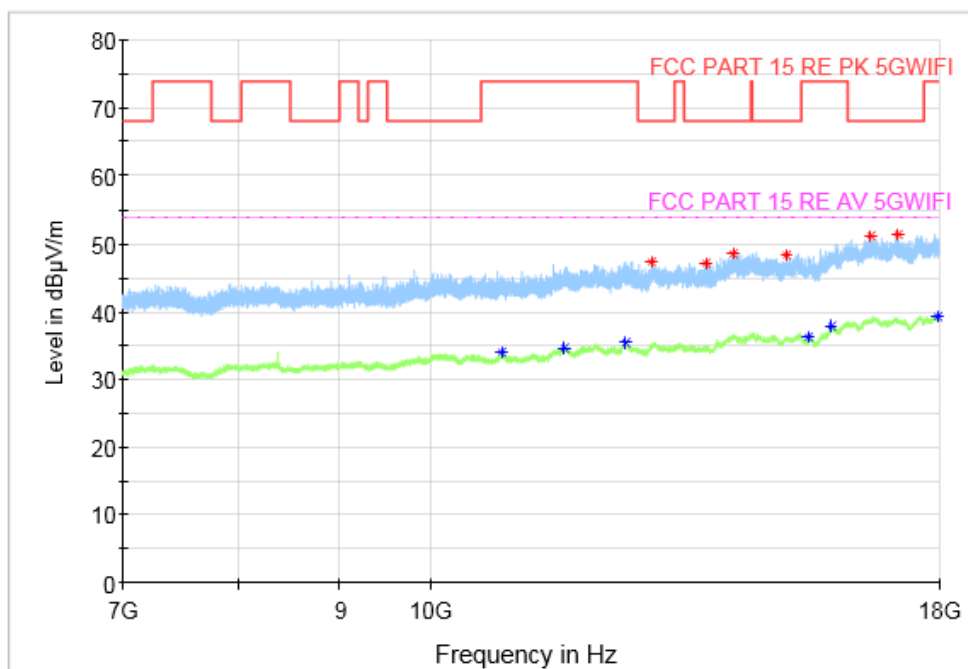


Fig. 68 Transmitter Spurious Emission (802.11a, CH48 5240MHz, 7 GHz-18 GHz)

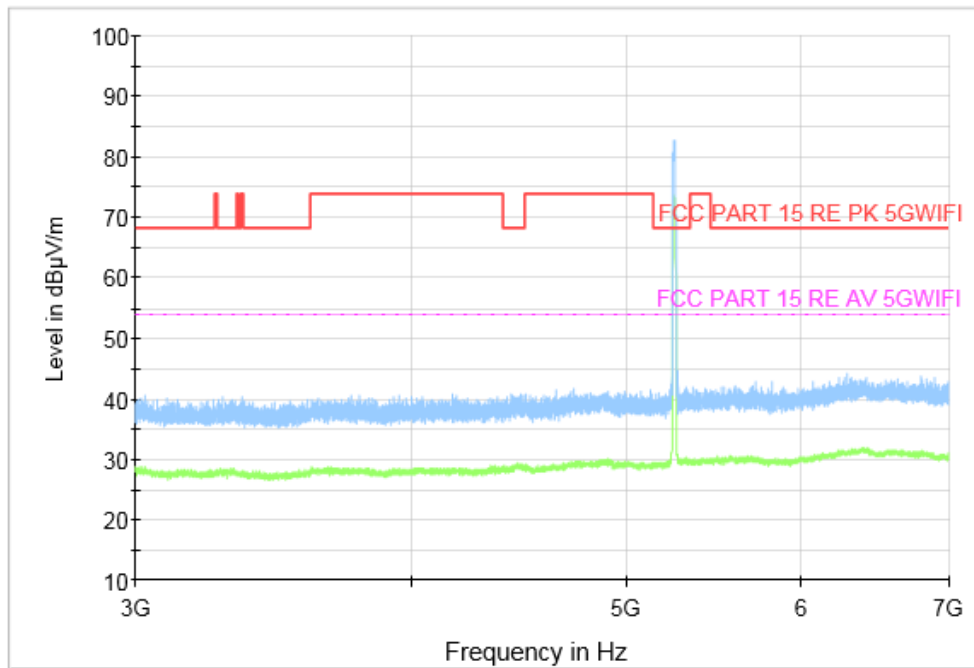


Fig. 69 Transmitter Spurious Emission (802.11a, CH52 5260MHz, 3 GHz-7 GHz)

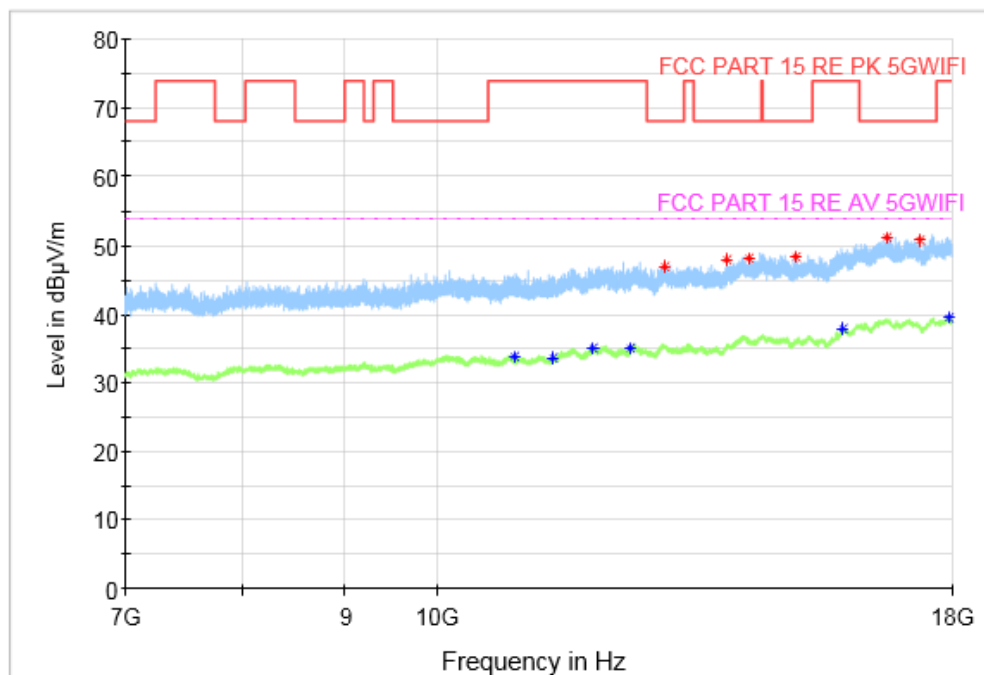


Fig. 70 Transmitter Spurious Emission (802.11a, CH52 5260MHz, 7 GHz-18 GHz)

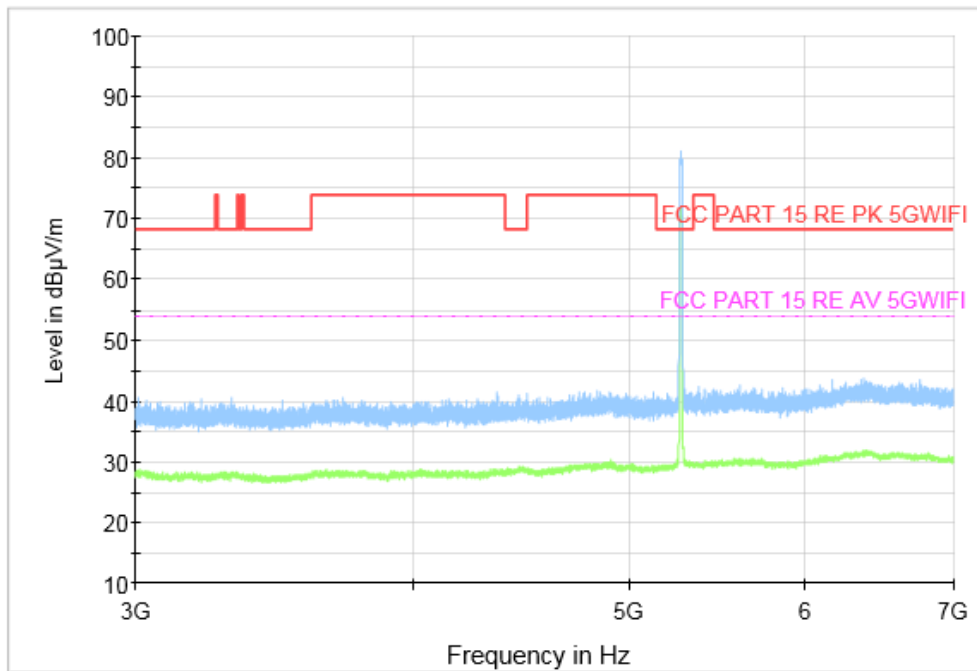


Fig. 71 Transmitter Spurious Emission (802.11a, CH56 5280MHz, 3 GHz-7 GHz)

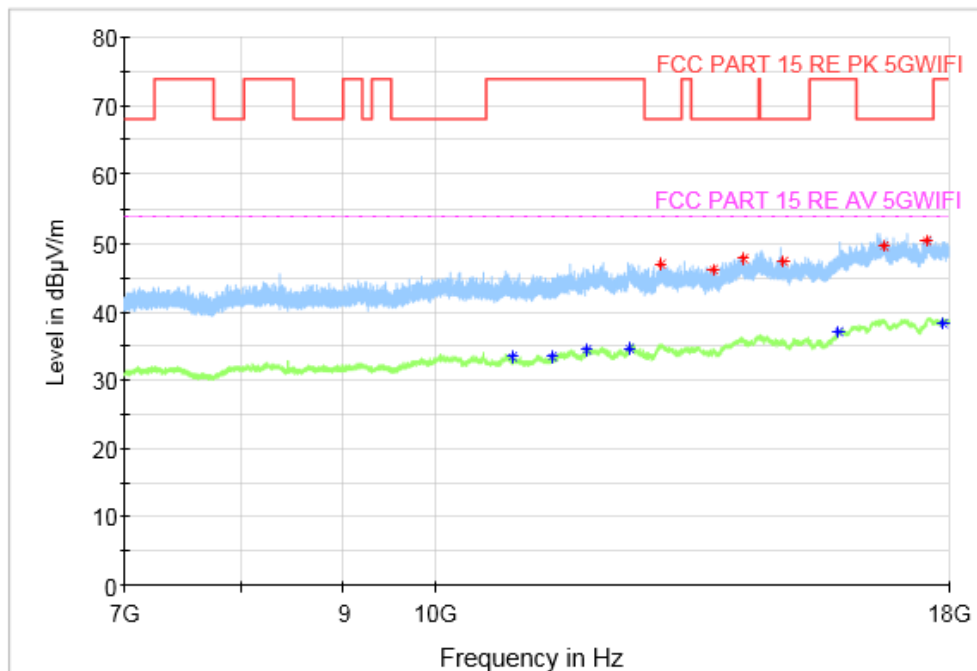


Fig. 72 Transmitter Spurious Emission (802.11a, CH56 5280MHz, 7 GHz-18 GHz)

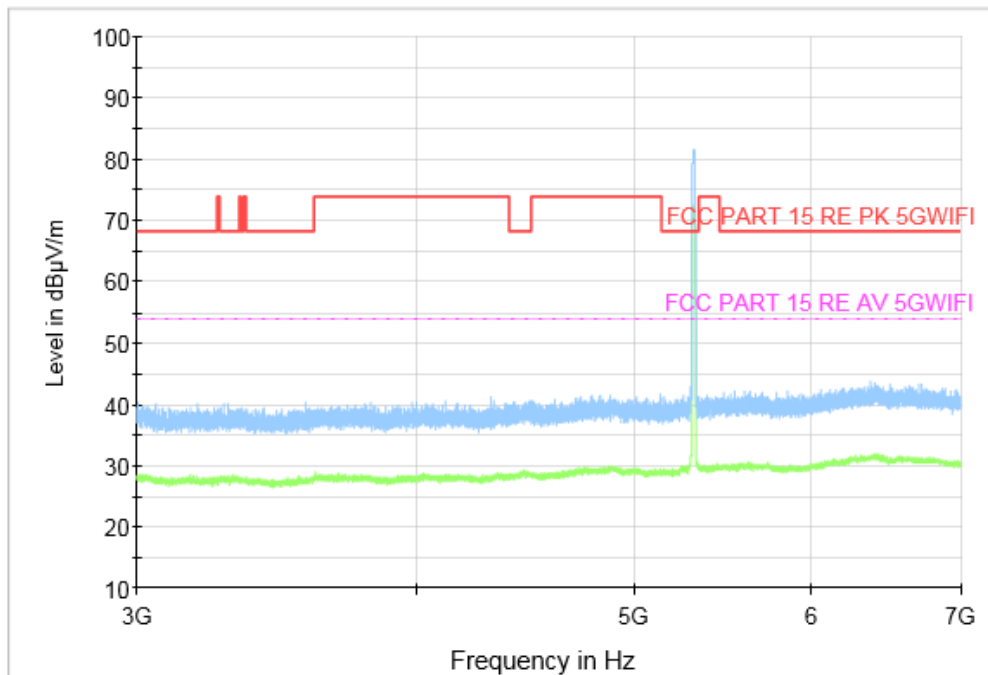


Fig. 73 Transmitter Spurious Emission (802.11a, CH64 5320MHz, 3 GHz-7 GHz)

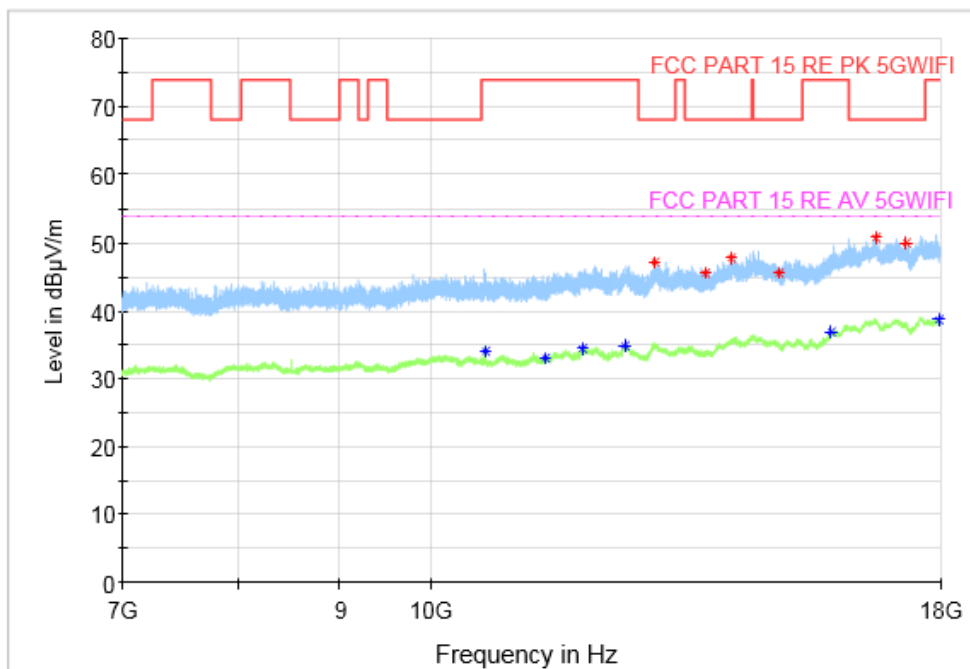


Fig. 74 Transmitter Spurious Emission (802.11a, CH64 5320MHz, 7 GHz-18 GHz)

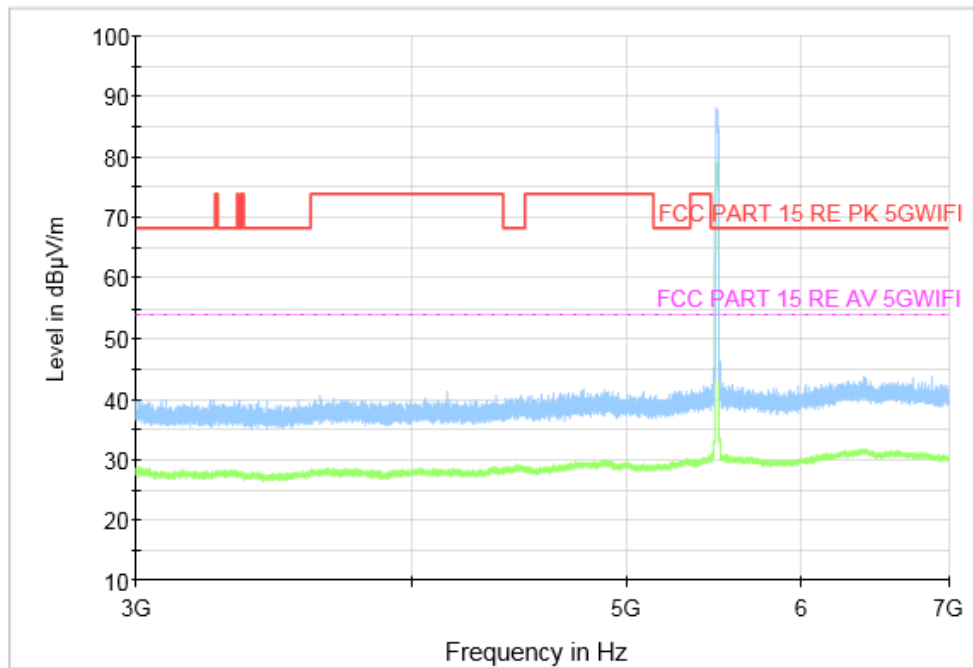


Fig. 75 Transmitter Spurious Emission (802. 11a, CH100 5500MHz, 3 GHz-7 GHz)

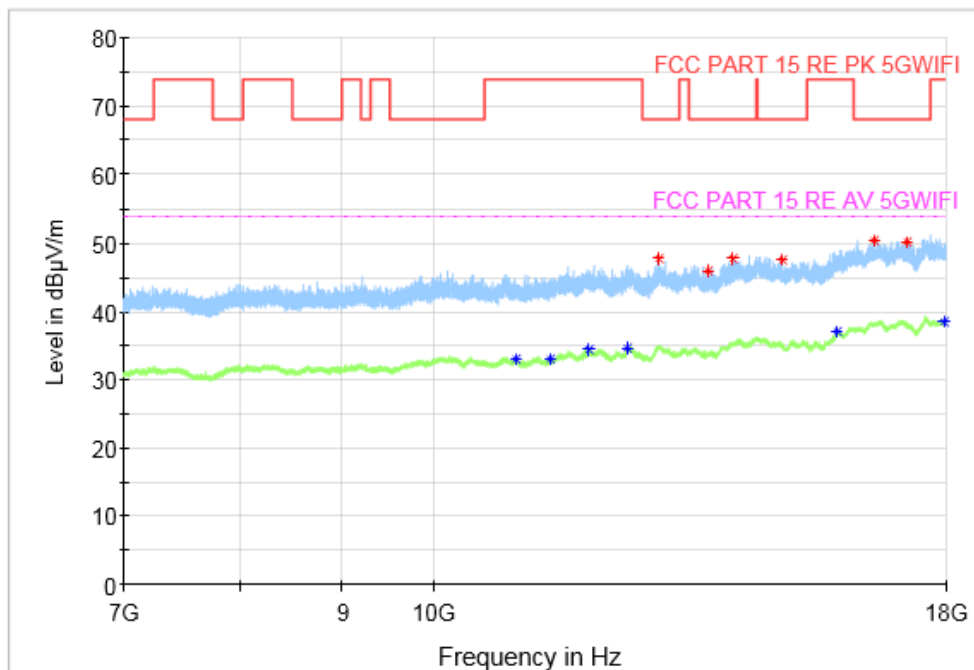


Fig. 76 Transmitter Spurious Emission (802. 11a, CH100 5500MHz, 7 GHz-18 GHz)

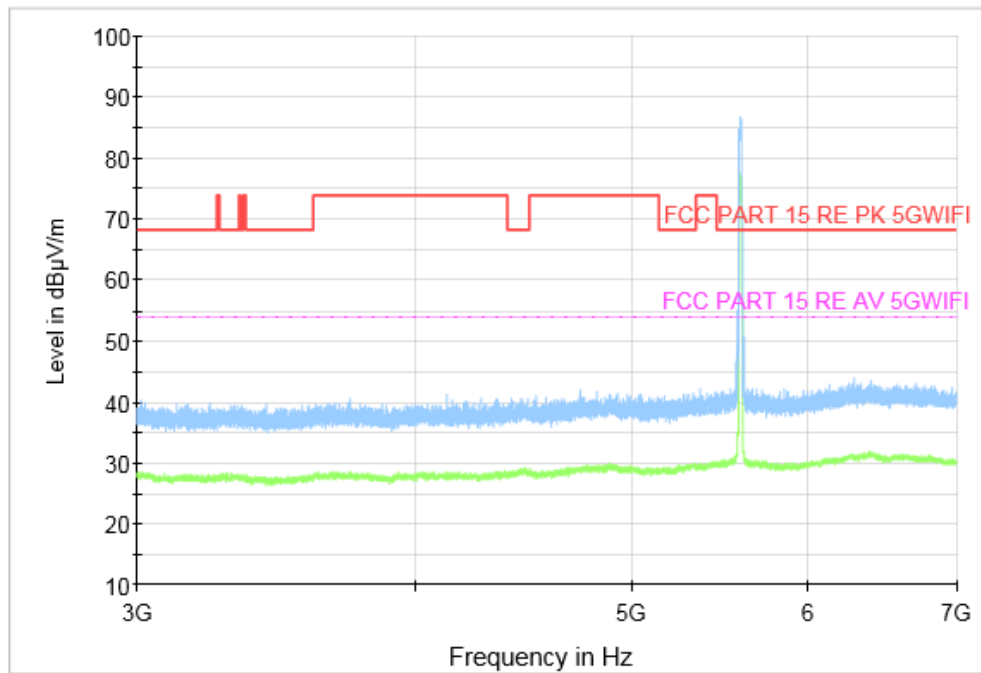


Fig. 77 Transmitter Spurious Emission (802. 11a, CH120 5600MHz, 3 GHz-7 GHz)

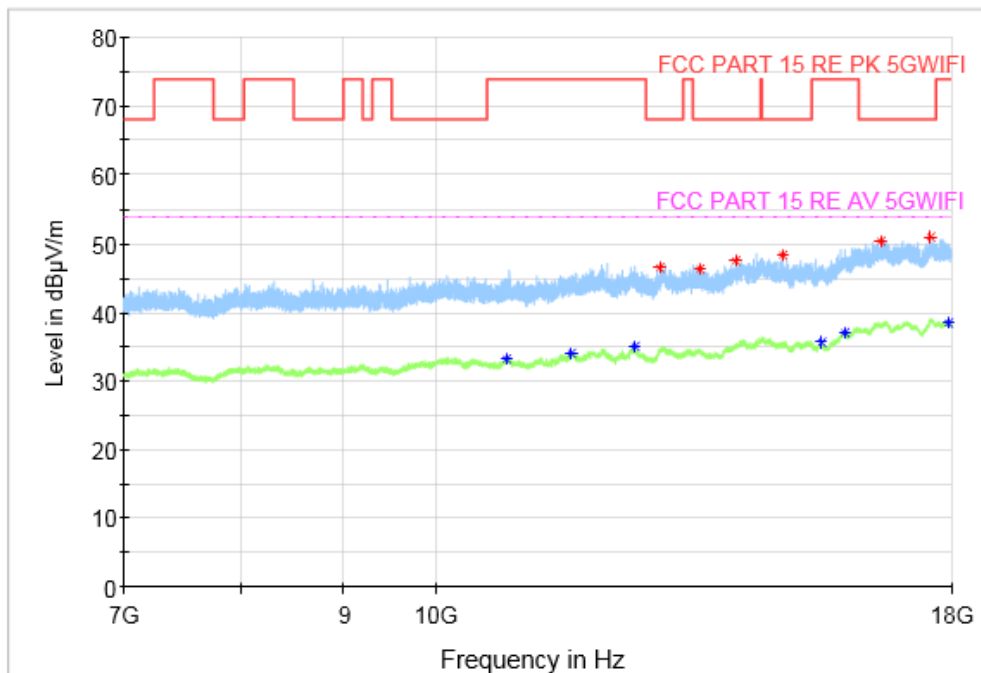


Fig. 78 Transmitter Spurious Emission (802. 11a, CH120 5600MHz, 7 GHz-18 GHz)

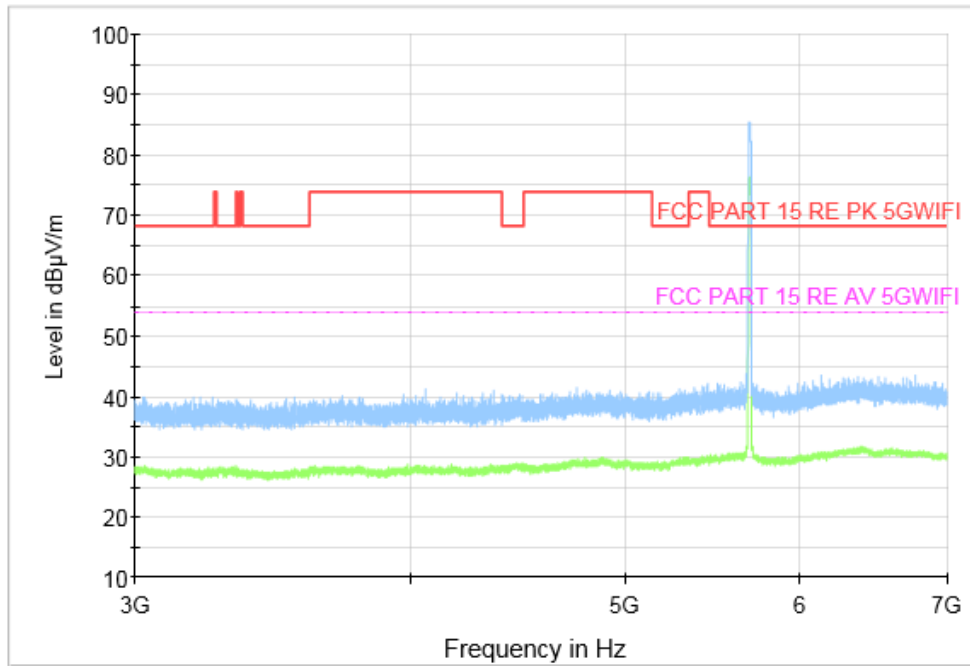


Fig. 79 Transmitter Spurious Emission (802. 11a, CH140 5700MHz, 3 GHz-7 GHz)

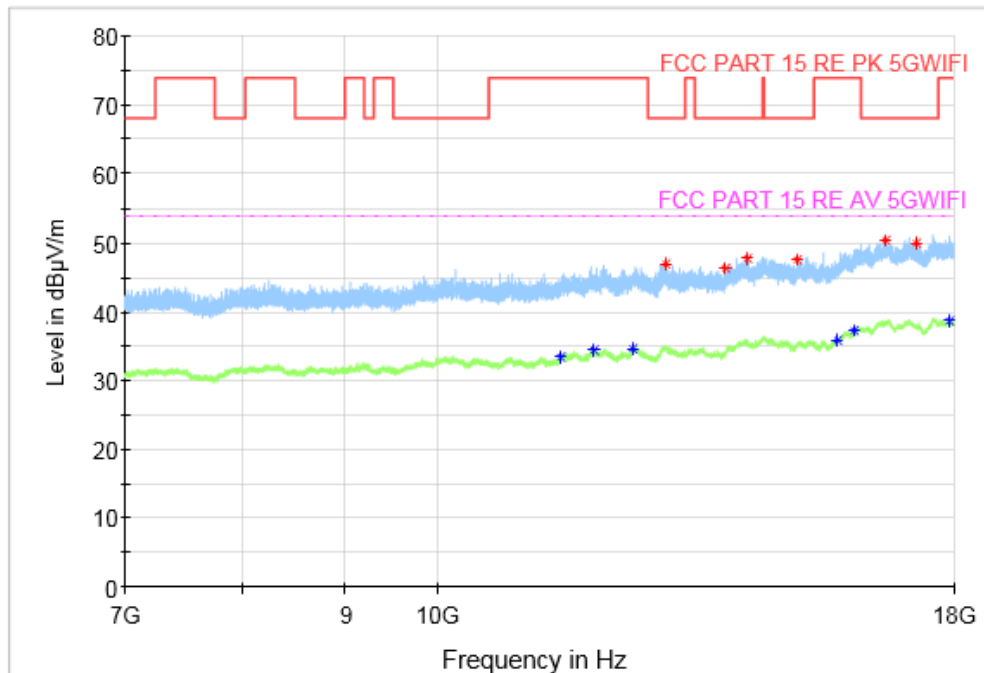


Fig. 80 Transmitter Spurious Emission (802. 11a, CH140 5700MHz, 7 GHz-18 GHz)

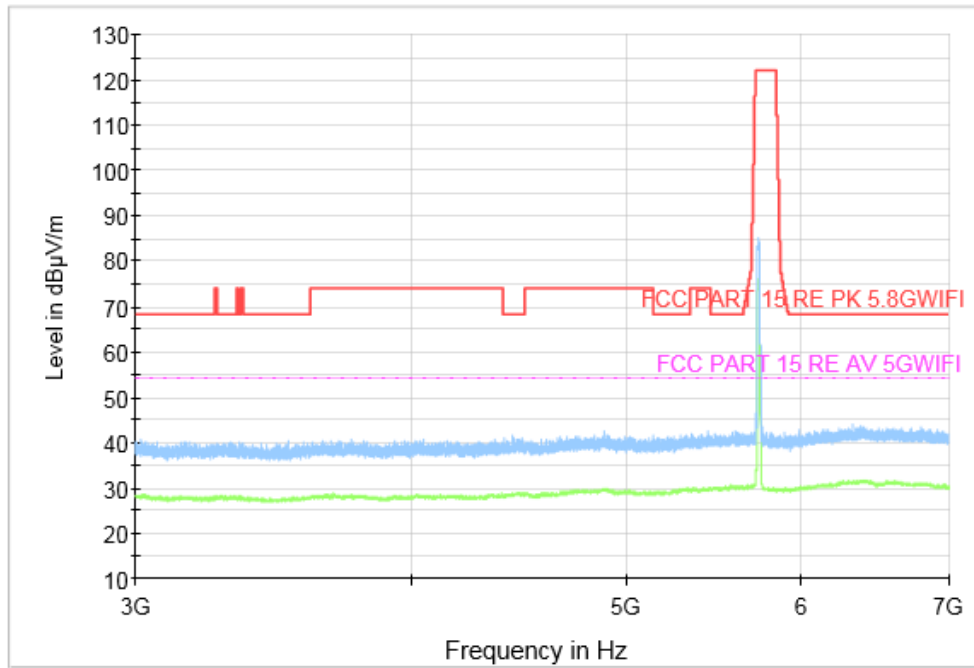


Fig. 81 Transmitter Spurious Emission (802. 11a, CH149 5745MHz, 3 GHz-7 GHz)

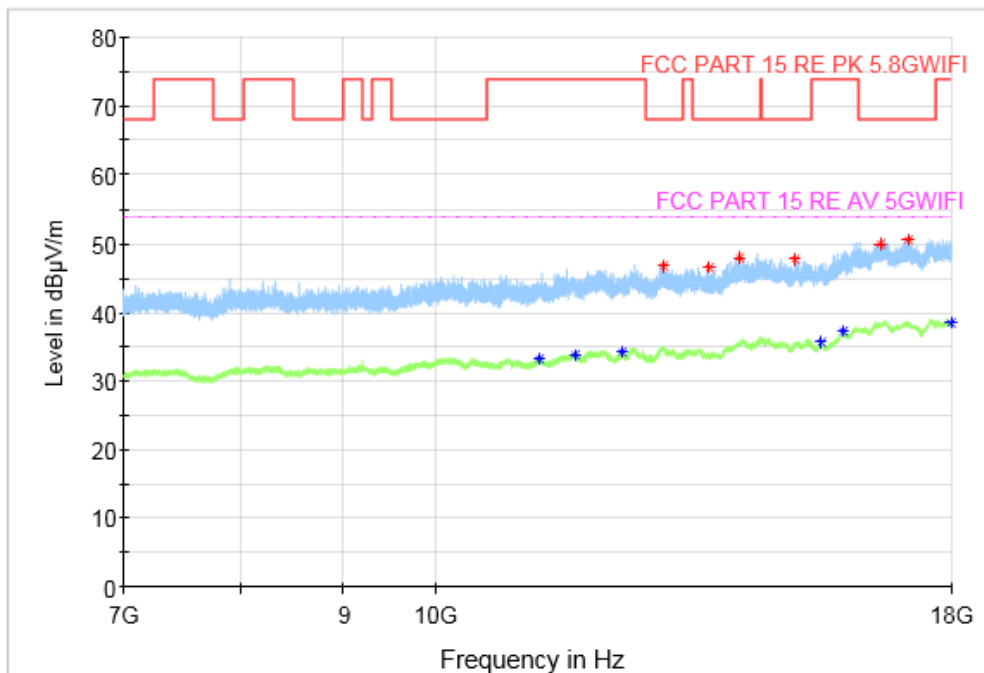


Fig. 82 Transmitter Spurious Emission (802. 11a, CH149 5745MHz, 7 GHz-18 GHz)

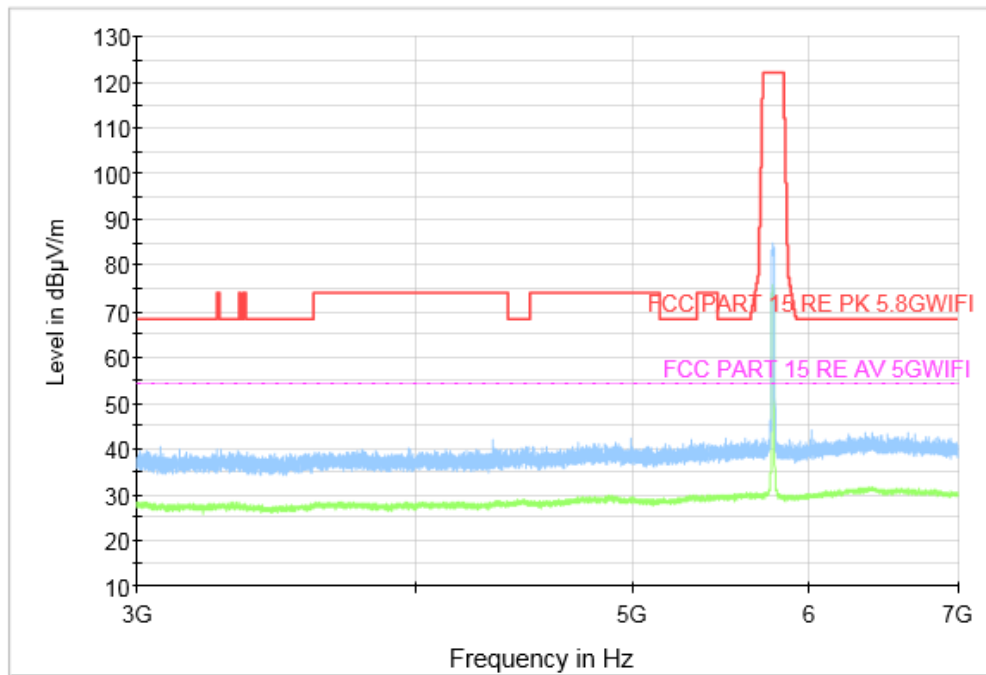


Fig. 83 Transmitter Spurious Emission (802. 11a, CH157 5785MHz, 3 GHz-7 GHz)

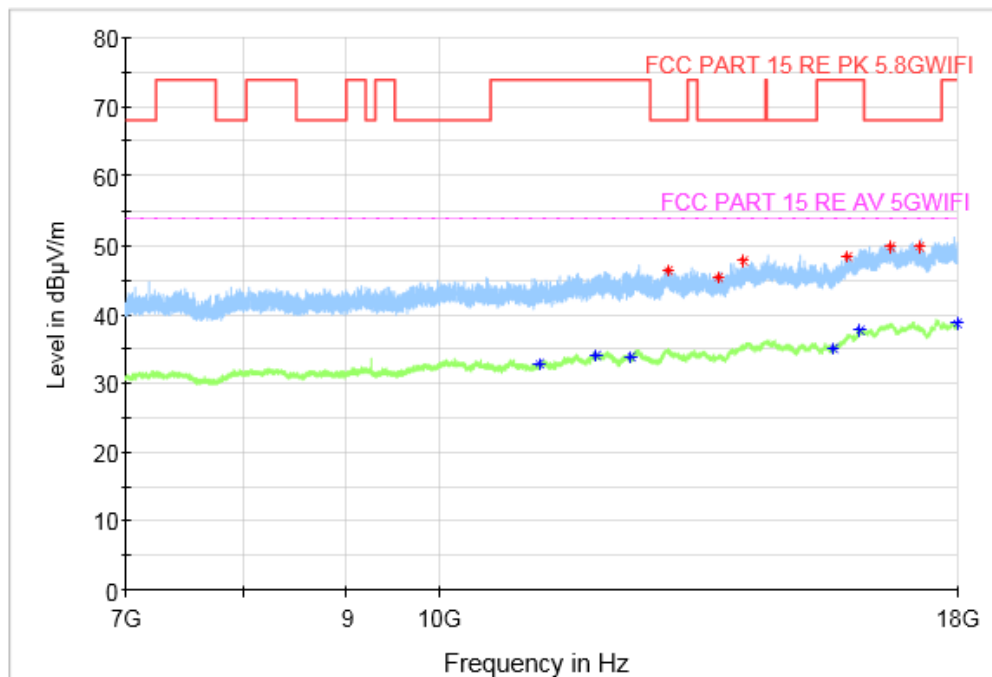


Fig. 84 Transmitter Spurious Emission (802. 11a, CH157 5785MHz, 7 GHz-18 GHz)

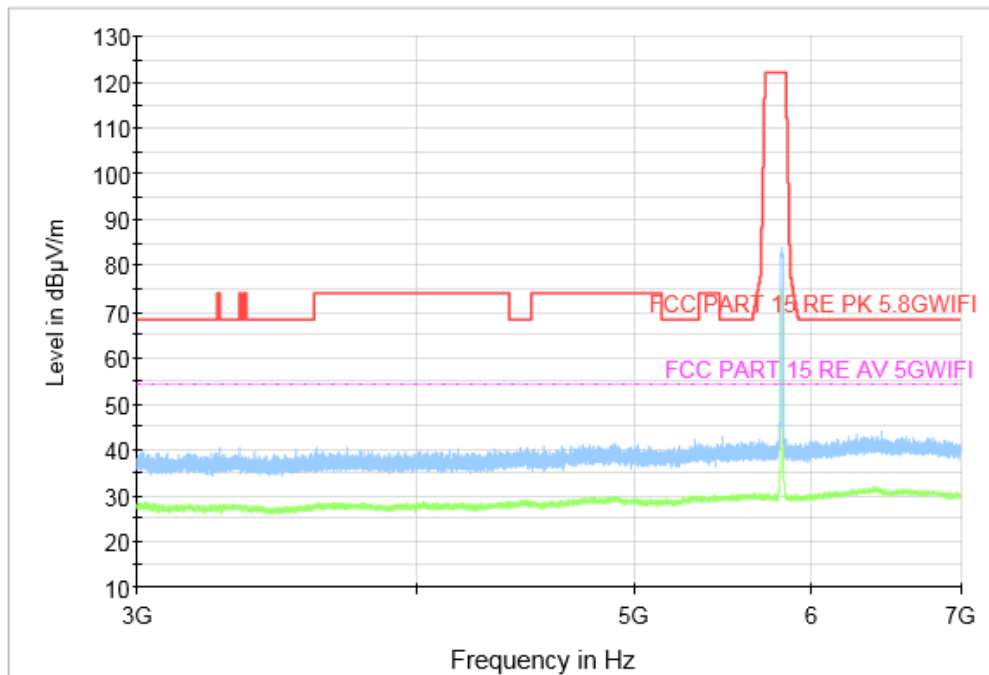


Fig. 85 Transmitter Spurious Emission (802. 11a, CH165 5825MHz, 3 GHz-7 GHz)

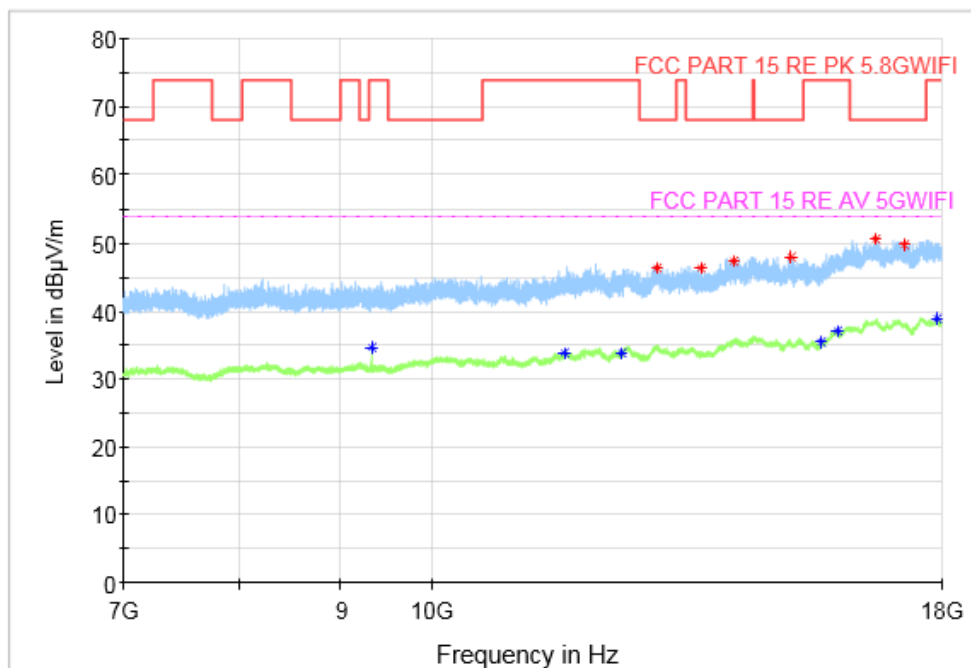


Fig. 86 Transmitter Spurious Emission (802. 11a, CH165 5825MHz, 7 GHz-18 GHz)

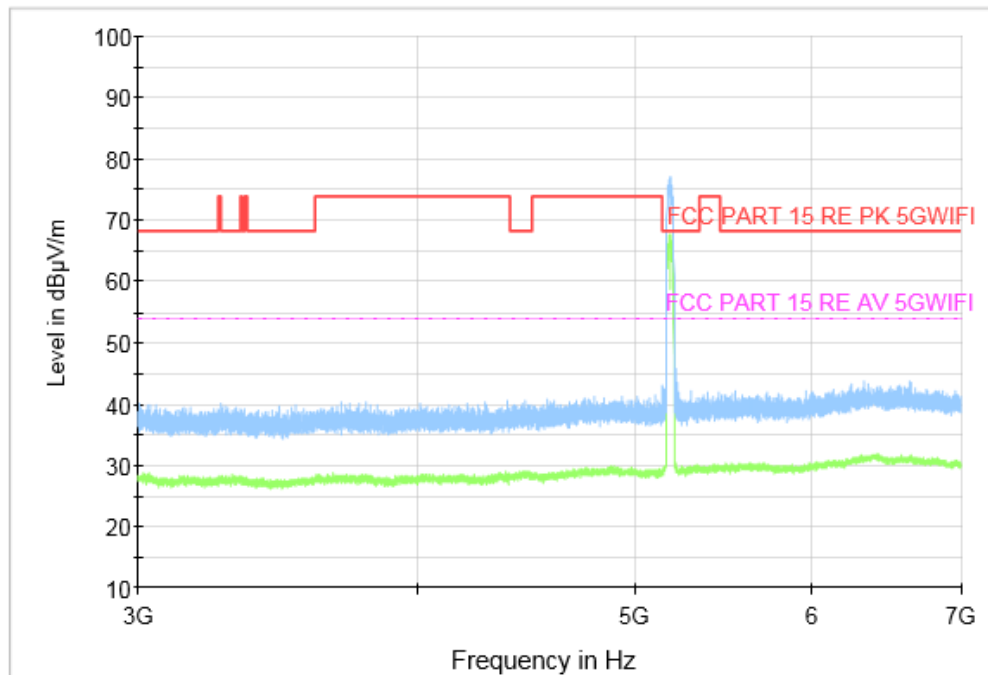


Fig. 87 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz, 3 GHz-7 GHz)

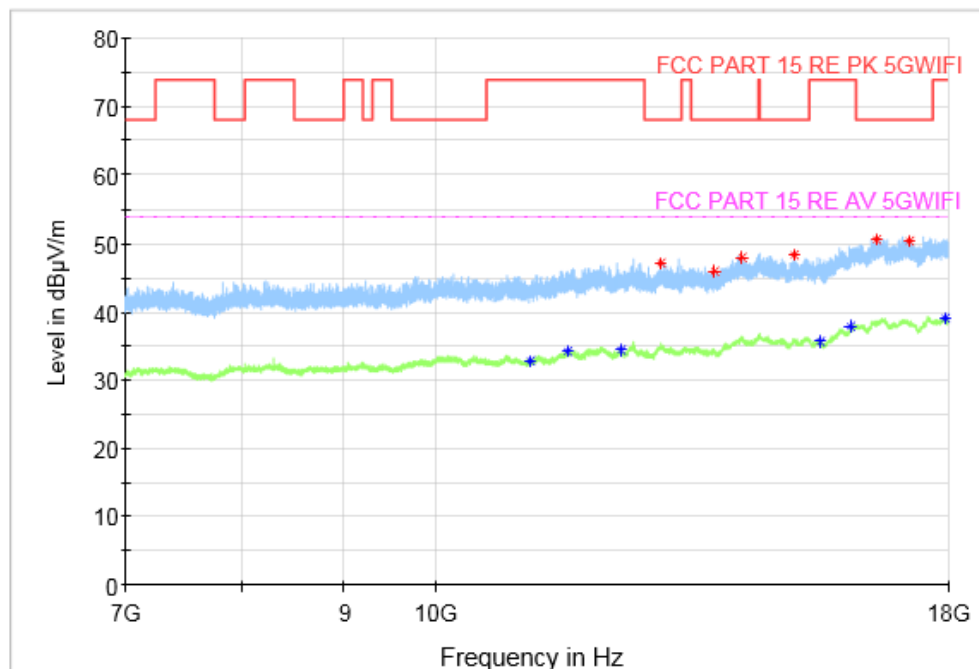


Fig. 88 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz, 7 GHz-18 GHz)

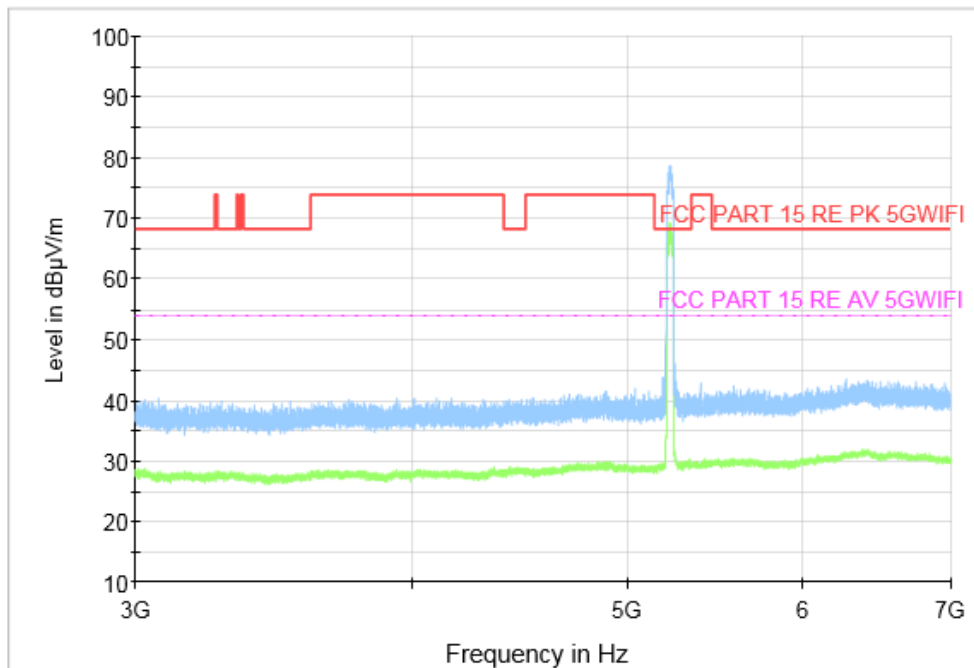


Fig. 89 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz, 3 GHz-7 GHz)

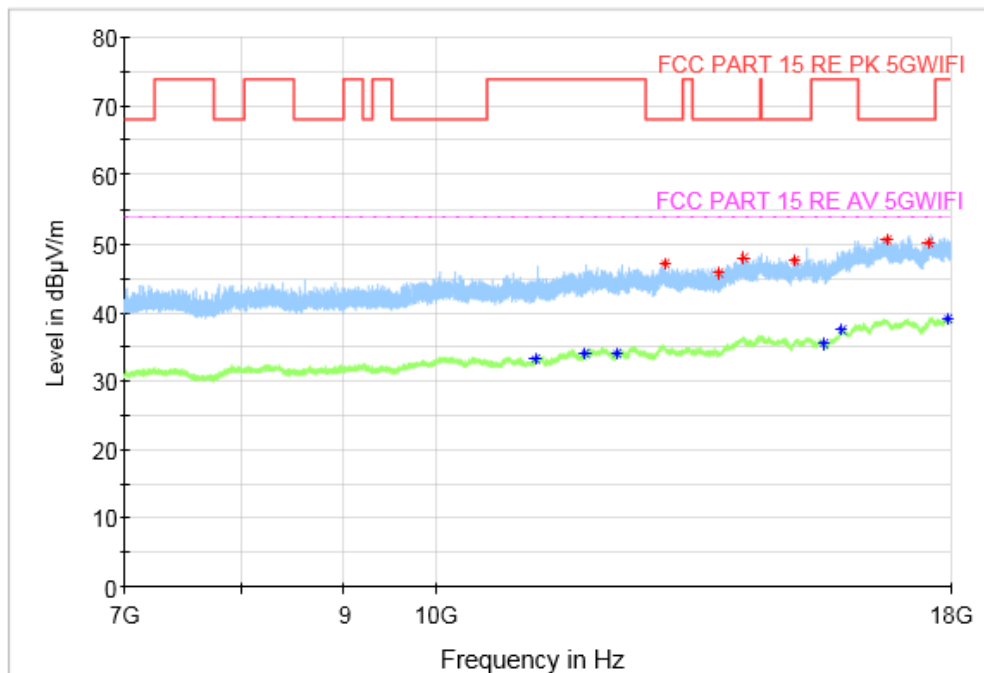


Fig. 90 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz, 7 GHz-18 GHz)

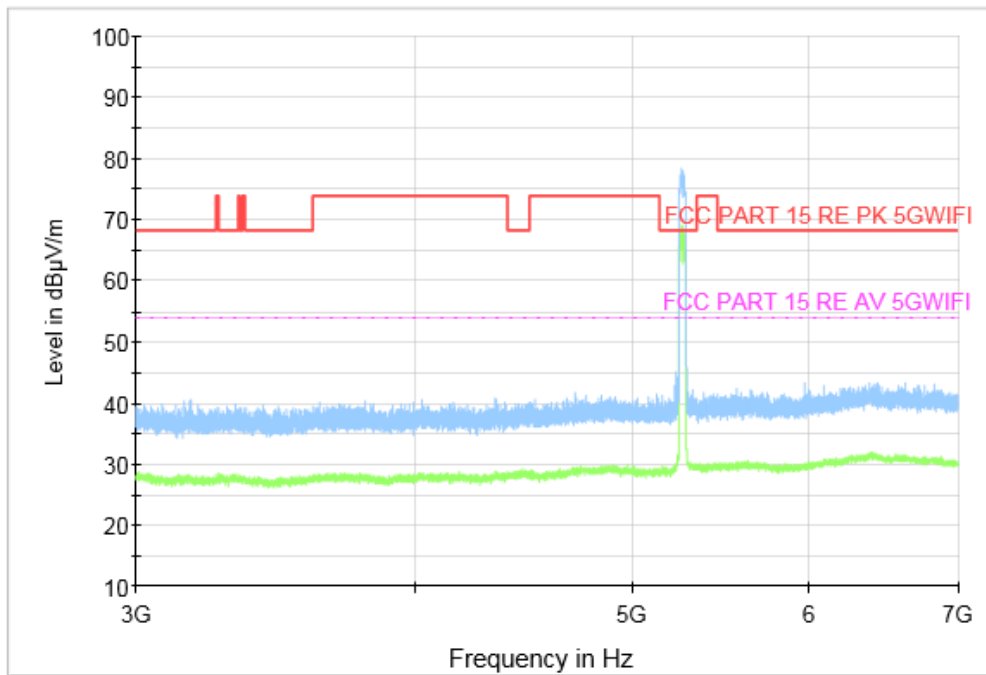


Fig. 91 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz, 3 GHz-7 GHz)

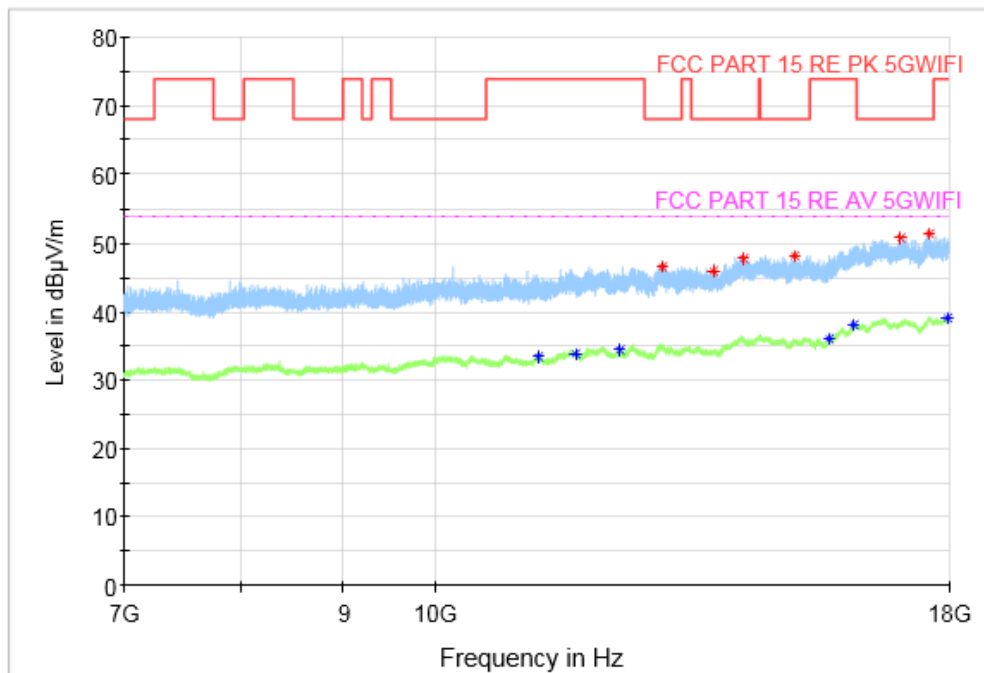


Fig. 92 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz, 7 GHz-18 GHz)

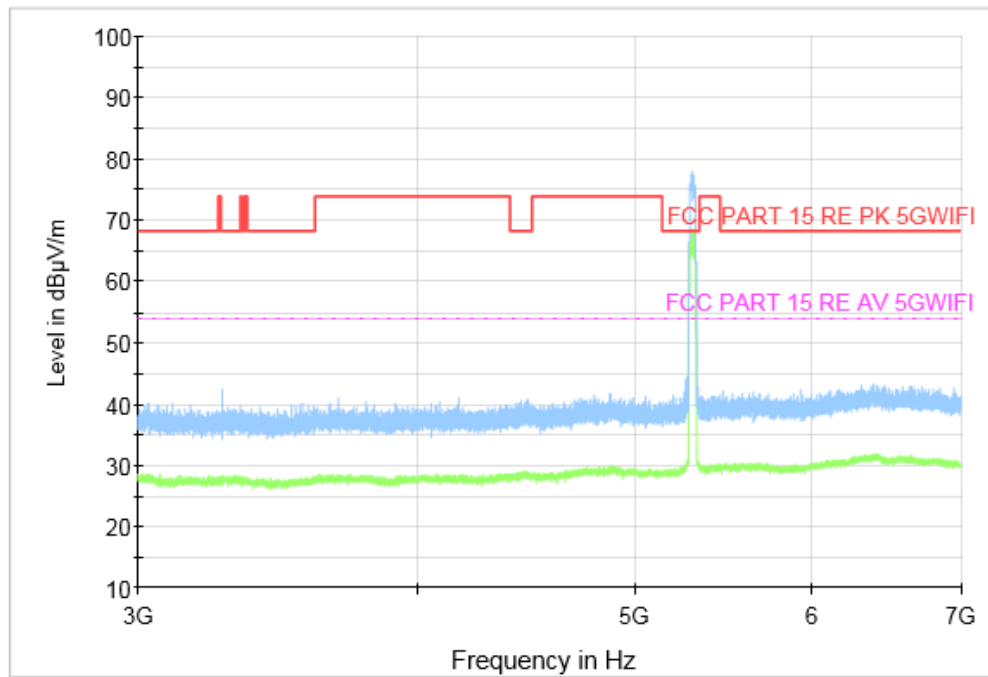


Fig. 93 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz, 3 GHz-7 GHz)

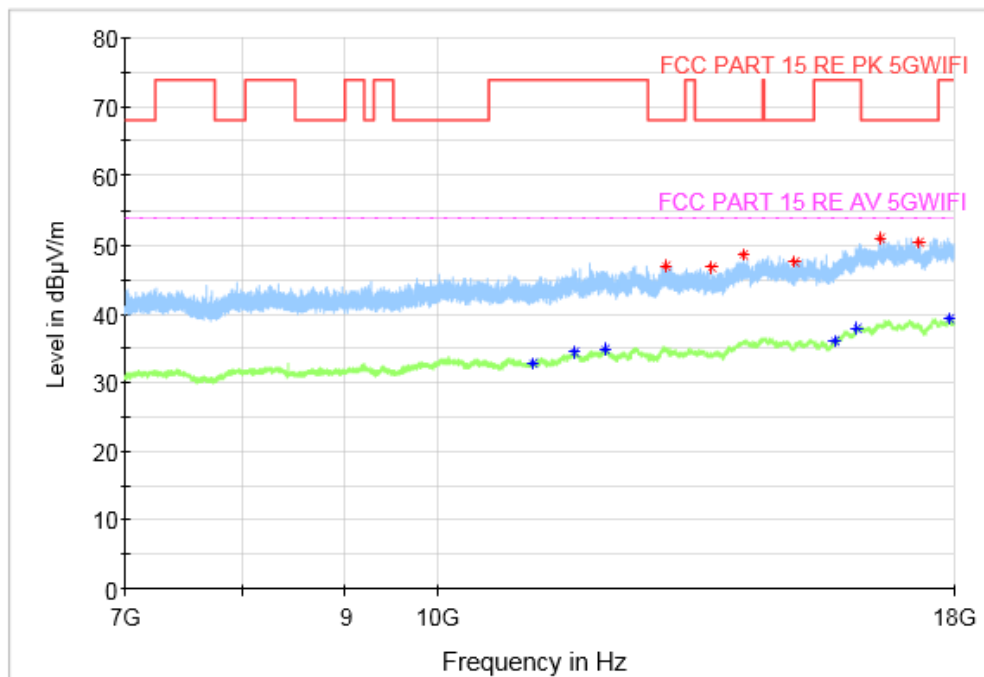


Fig. 94 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz, 7 GHz-18 GHz)

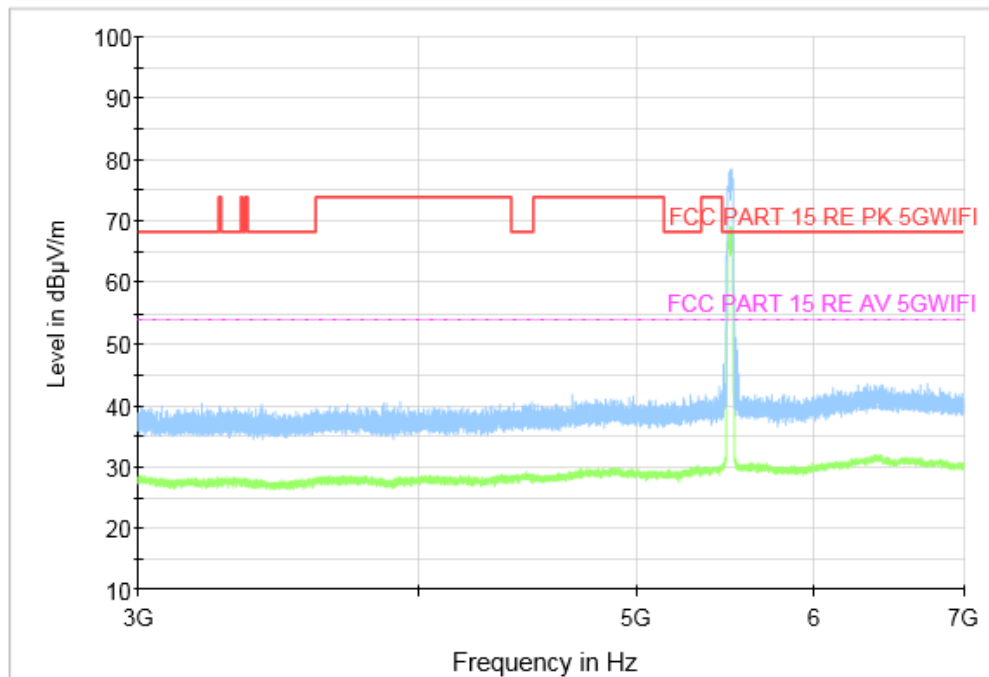


Fig. 95 Transmitter Spurious Emission (802. 11n-HT40, CH102 5510MHz, 3 GHz-7 GHz)

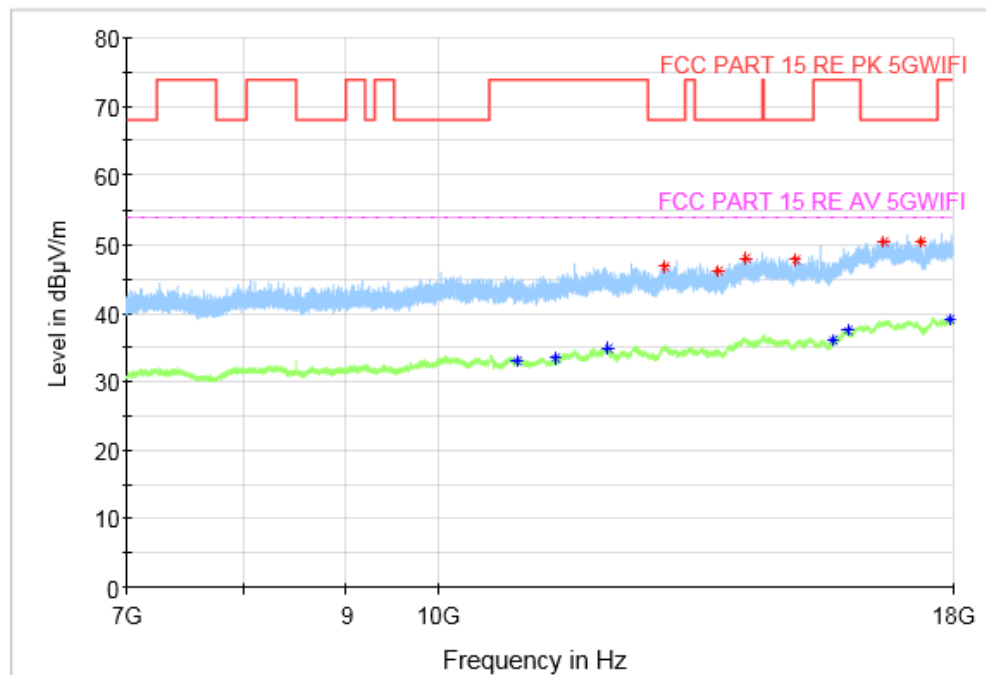


Fig. 96 Transmitter Spurious Emission (802. 11n-HT40, CH102 5510MHz, 7 GHz-18 GHz)

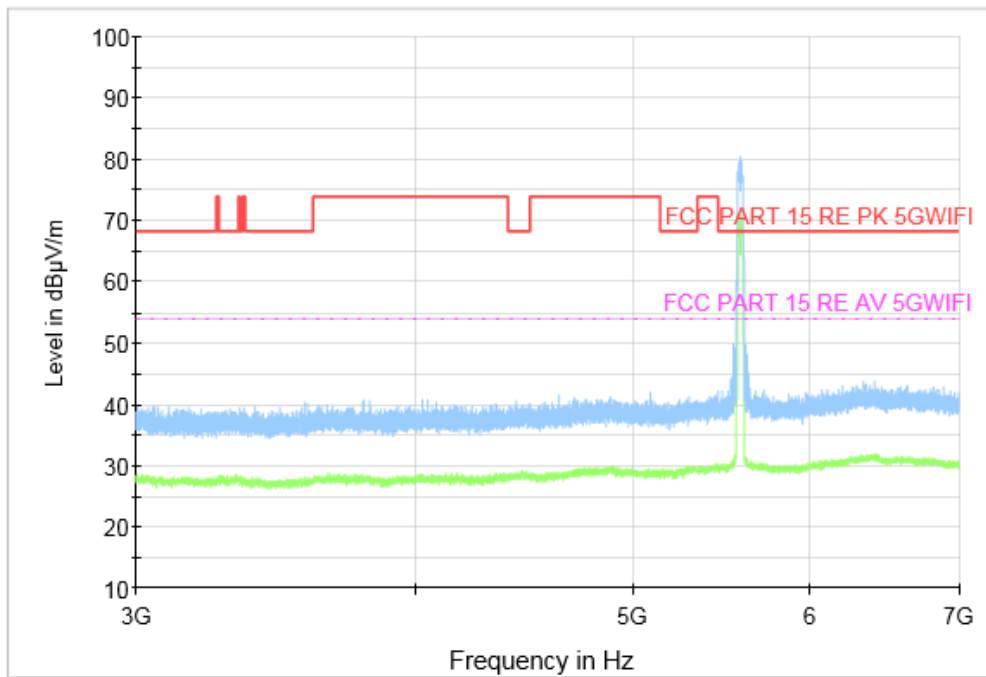


Fig. 97 Transmitter Spurious Emission (802. 11n-HT40, CH118 5580MHz, 3 GHz-7 GHz)

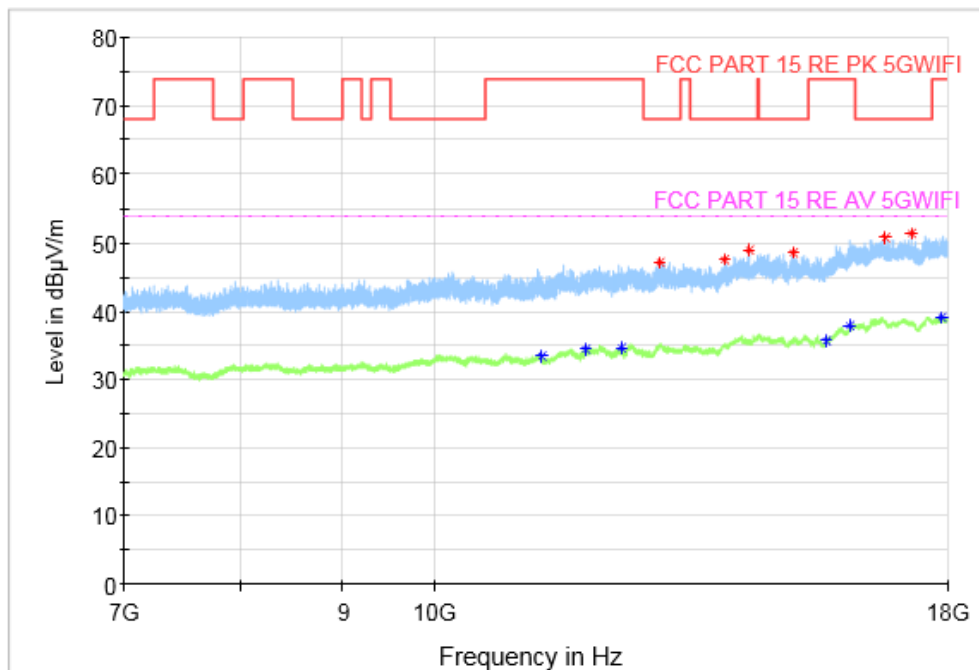


Fig. 98 Transmitter Spurious Emission (802. 11n-HT40, CH118 5580MHz, 7 GHz-18 GHz)

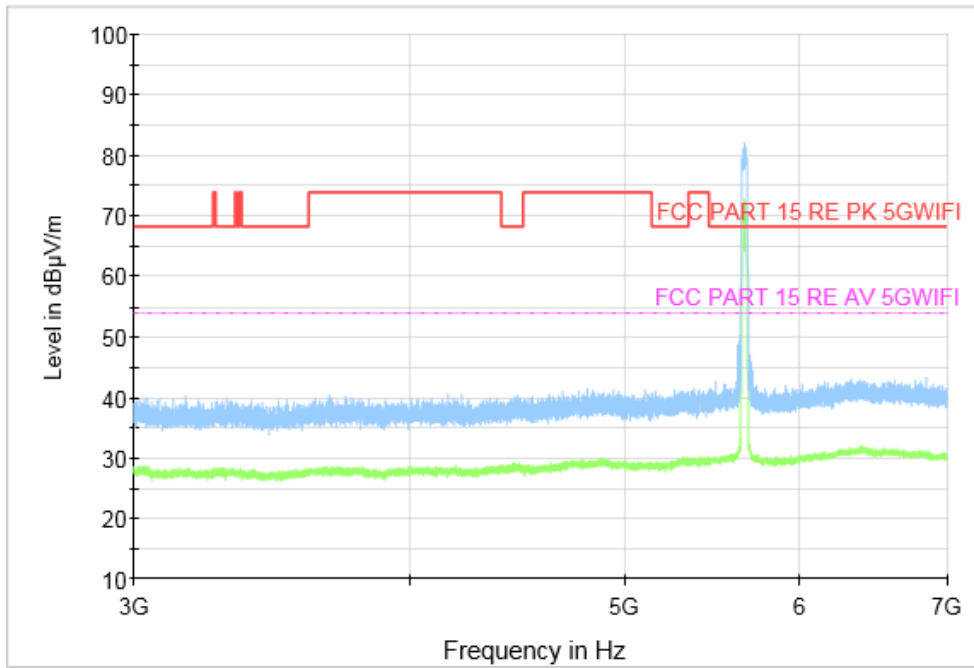


Fig. 99 Transmitter Spurious Emission (802. 11n-HT40, CH134 5670MHz, 3 GHz-7 GHz)

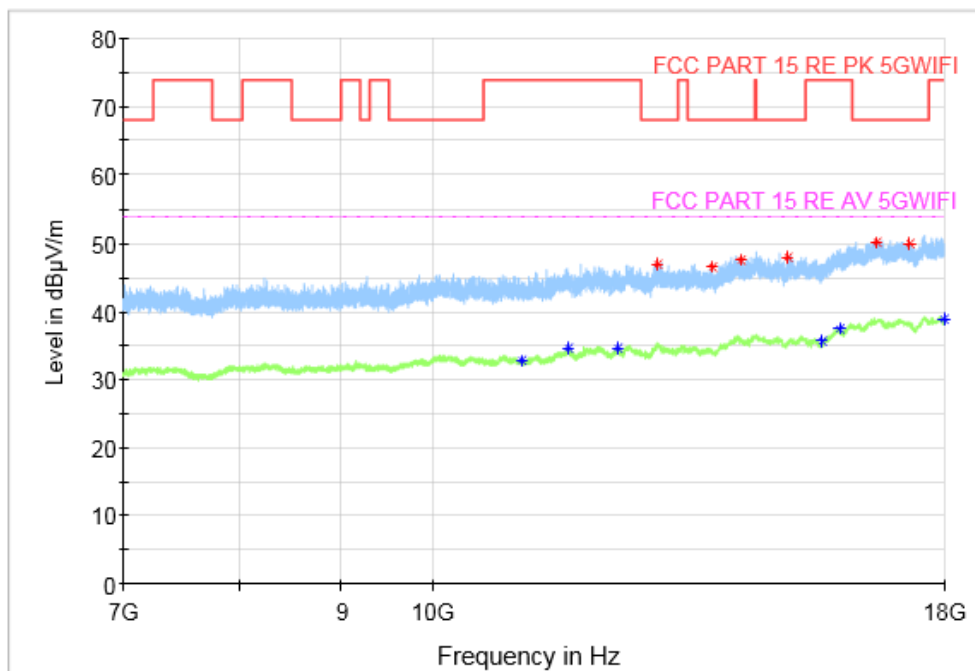


Fig. 100 Transmitter Spurious Emission (802. 11n-HT40, CH134 5670MHz, 7 GHz-18 GHz)

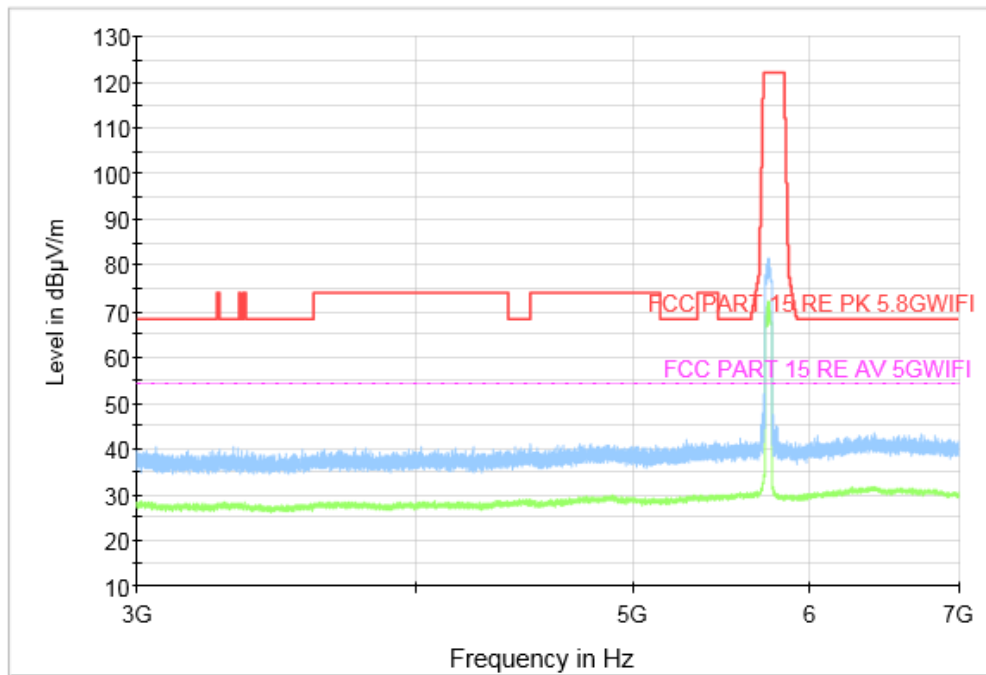


Fig. 101 Transmitter Spurious Emission (802. 11n-HT40, CH151 5755MHz, 3 GHz-7 GHz)

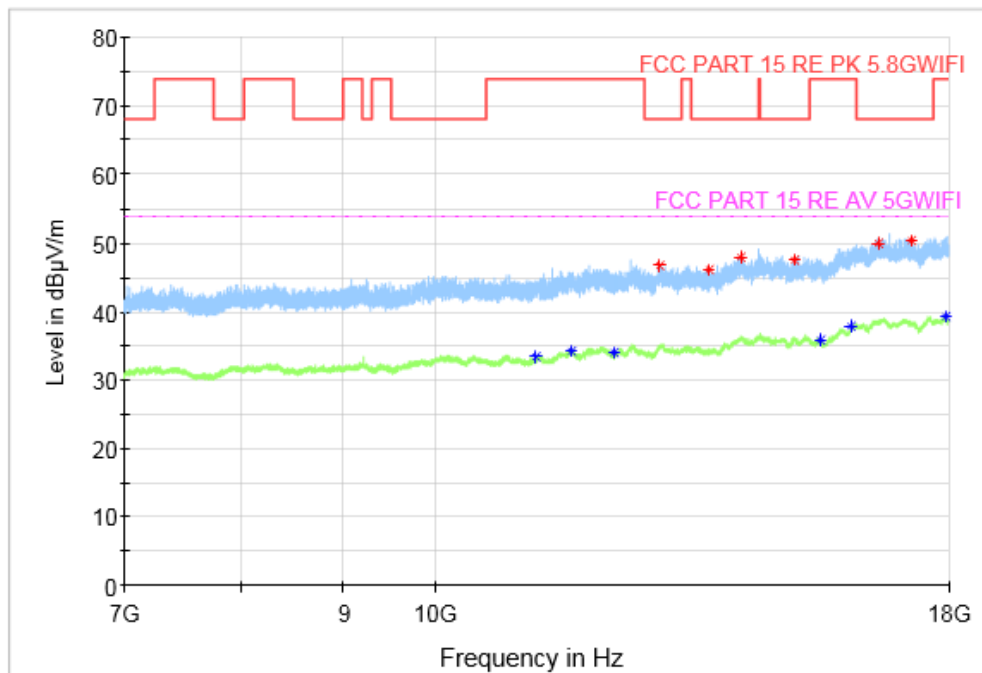


Fig. 102 Transmitter Spurious Emission (802. 11n-HT40, CH151 5755MHz, 7 GHz-18 GHz)

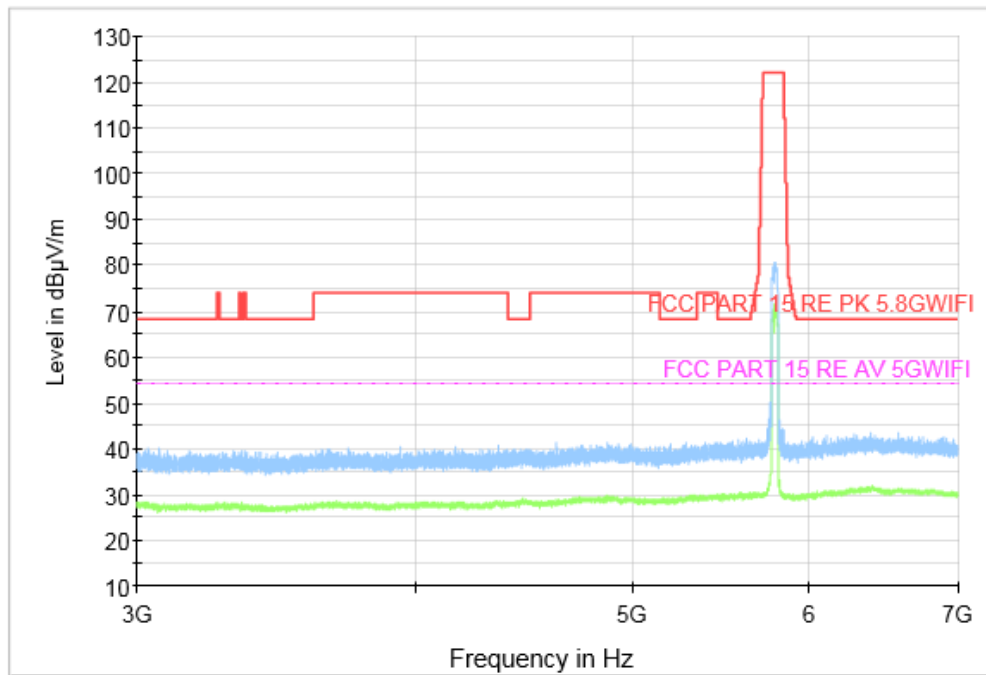


Fig. 103 Transmitter Spurious Emission (802. 11n-HT40, CH159 5795MHz, 3 GHz-7 GHz)

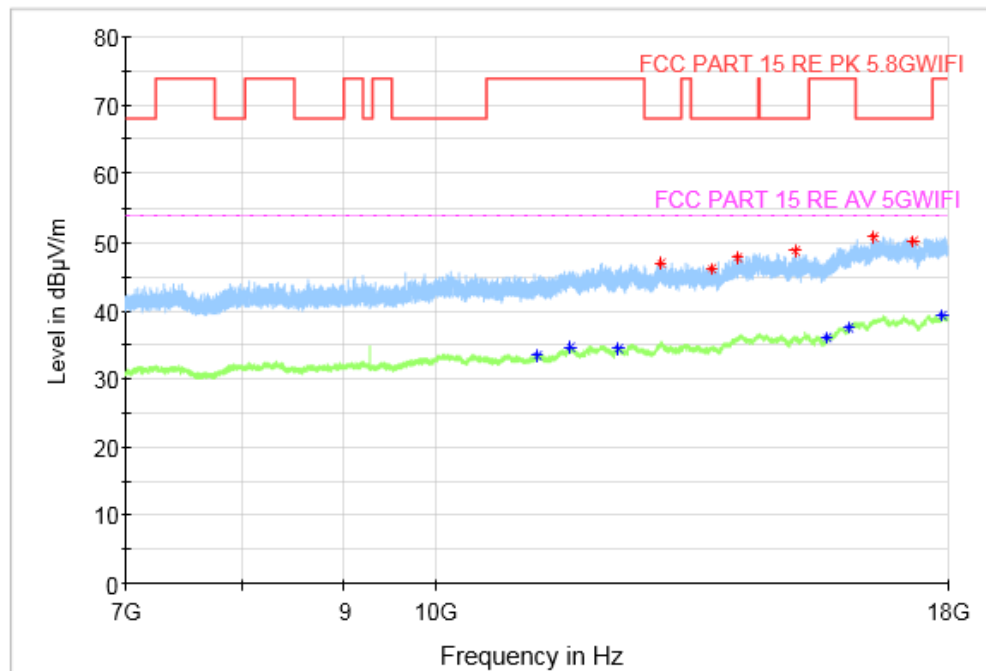


Fig. 104 Transmitter Spurious Emission (802. 11n-HT40, CH159 5795MHz, 7 GHz-18 GHz)

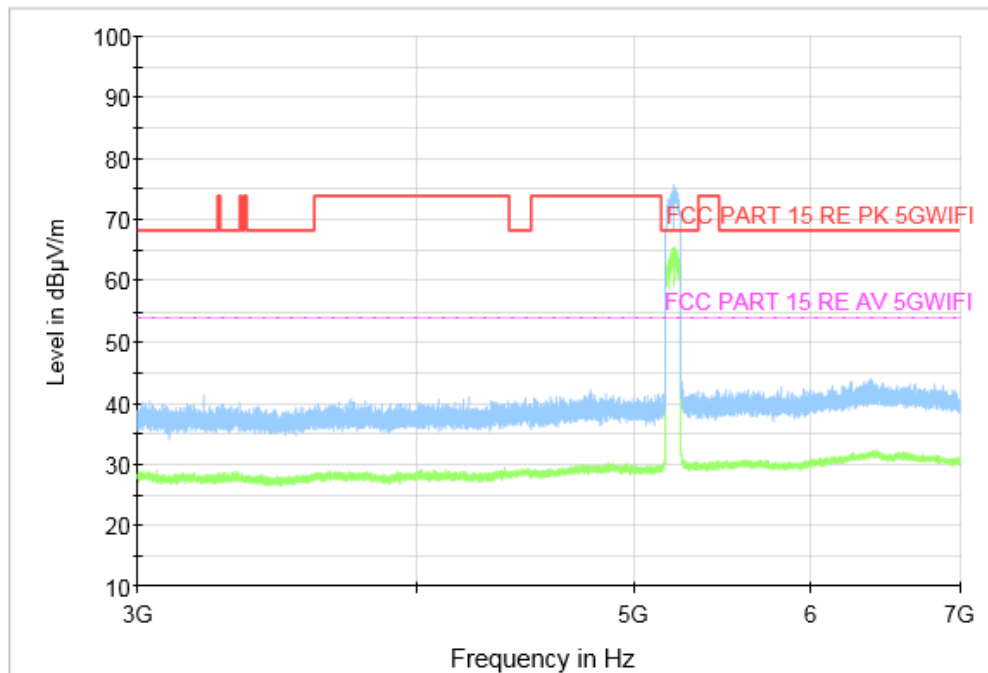


Fig. 105 Transmitter Spurious Emission (802. 11ac-VHT80, CH42 5210MHz, 3 GHz-7 GHz)

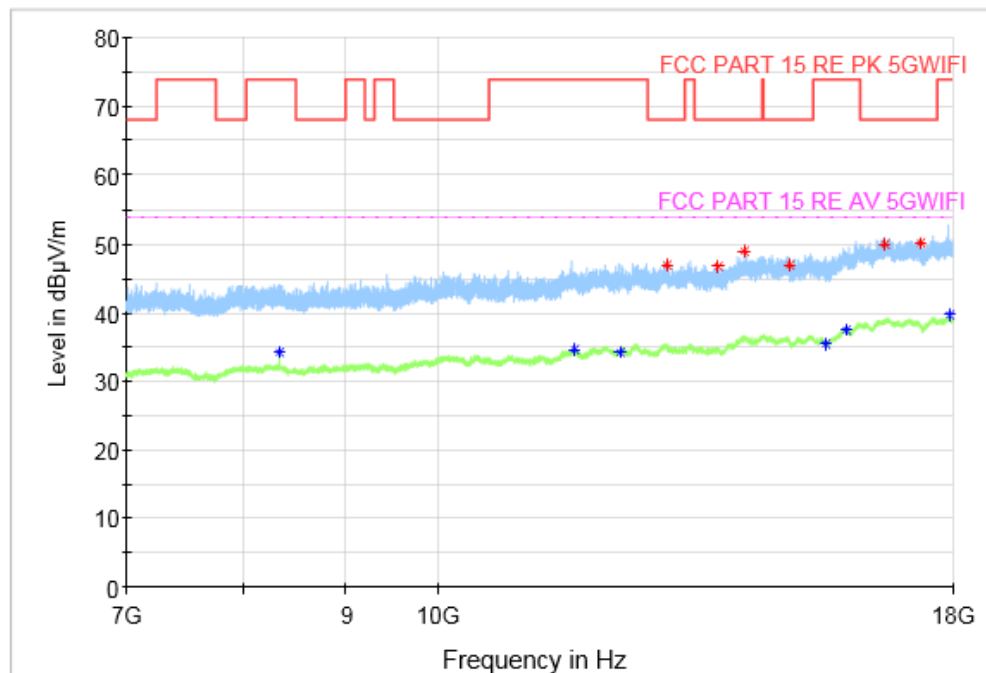


Fig. 106 Transmitter Spurious Emission (802. 11ac-VHT80, CH42 5210MHz, 7 GHz-18 GHz)

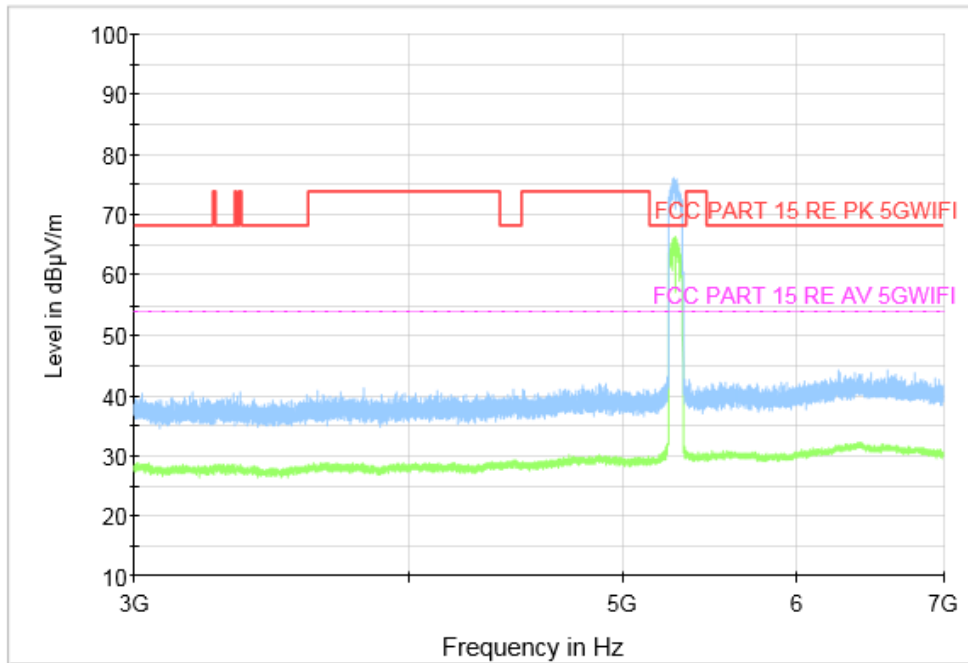


Fig. 107 Transmitter Spurious Emission (802. 11ac-VHT80, CH58 5290MHz, 3 GHz-7 GHz)

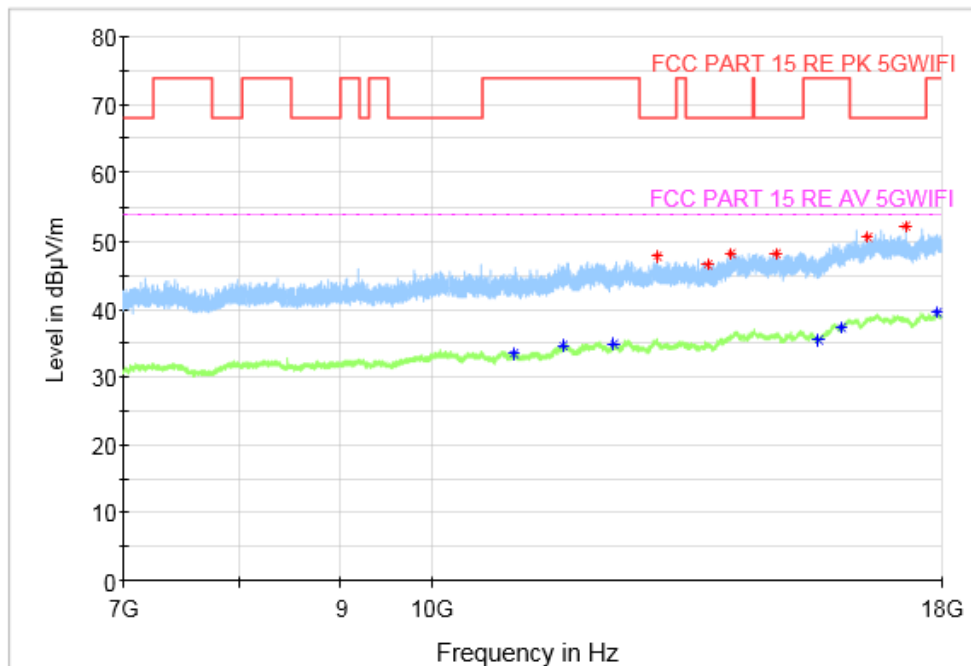


Fig. 108 Transmitter Spurious Emission (802. 11ac-VHT80, CH58 5290MHz, 7 GHz-18 GHz)

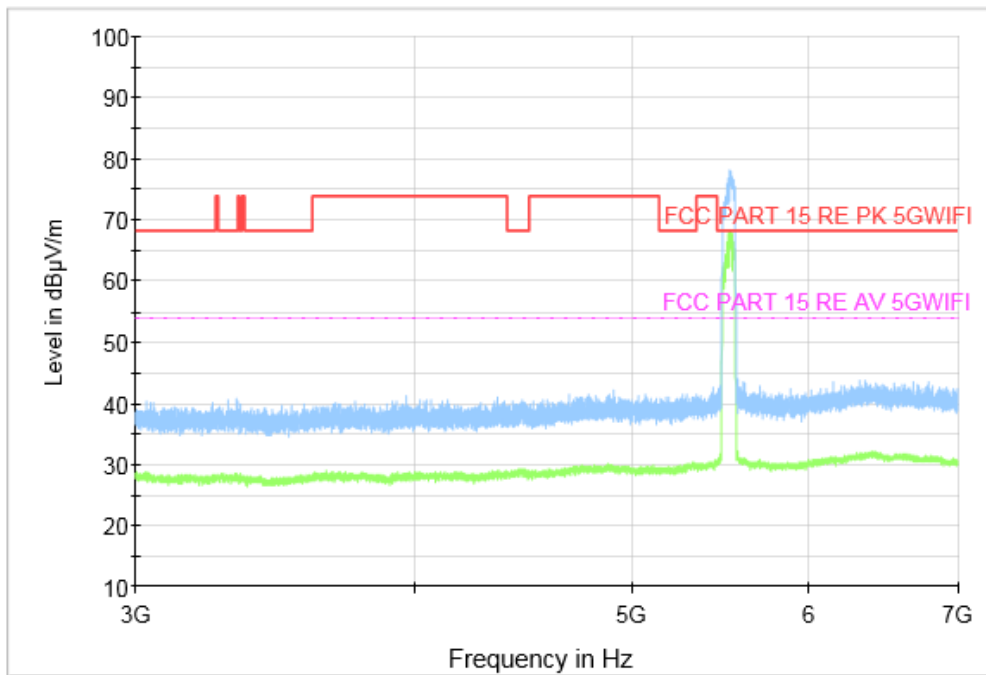


Fig. 109 Transmitter Spurious Emission (802. 11ac-VHT80, CH106 5530MHz, 3 GHz-7 GHz)

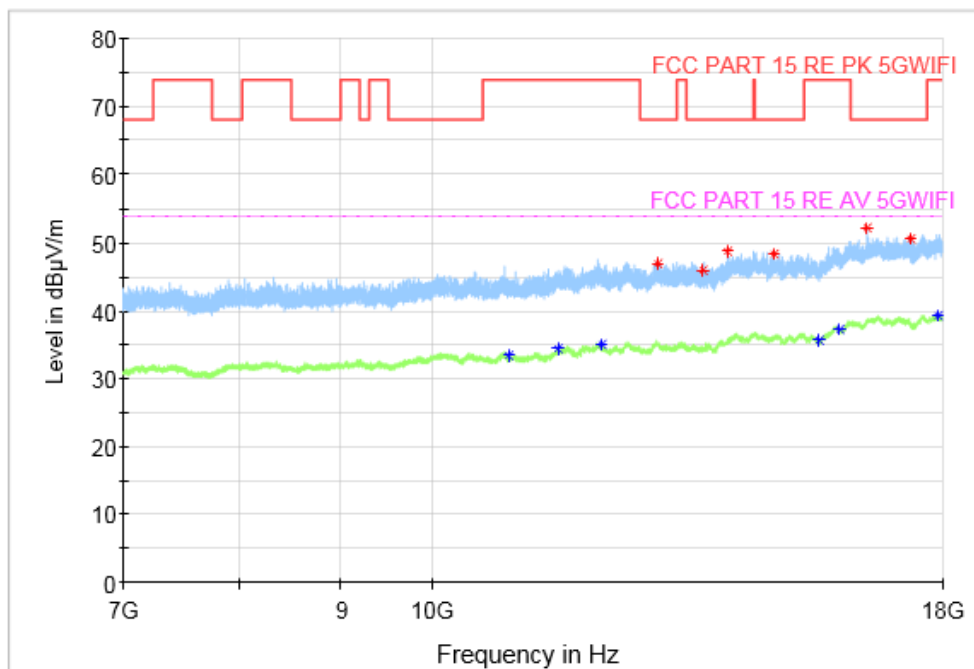


Fig. 110 Transmitter Spurious Emission (802. 11ac-VHT80, CH106 5530MHz, 7 GHz-18 GHz)

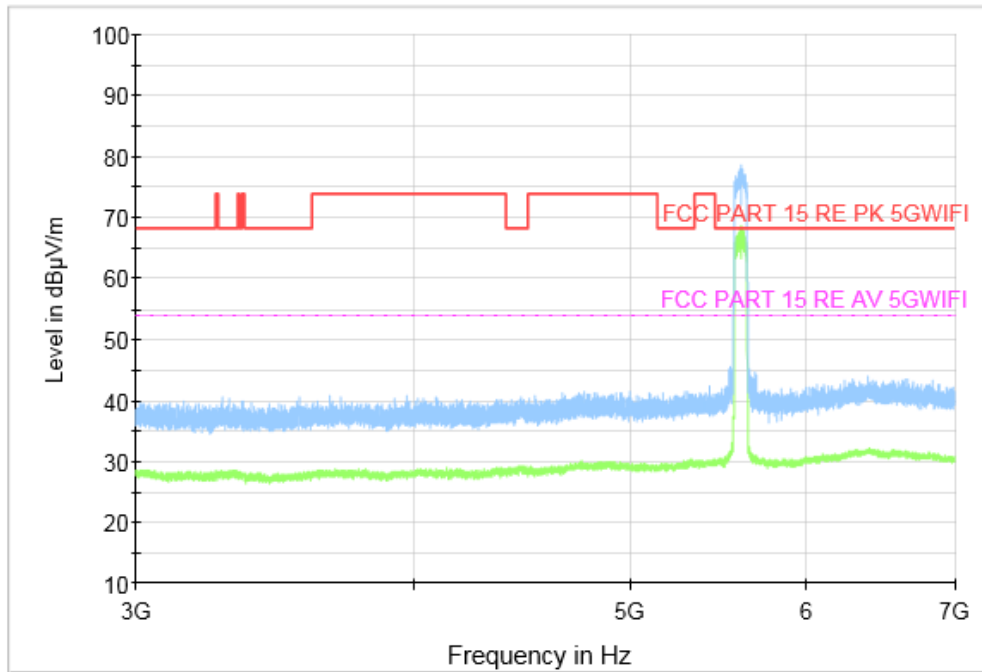


Fig. 111 Transmitter Spurious Emission (802. 11ac-VHT80, CH122 5610MHz, 3 GHz-7 GHz)

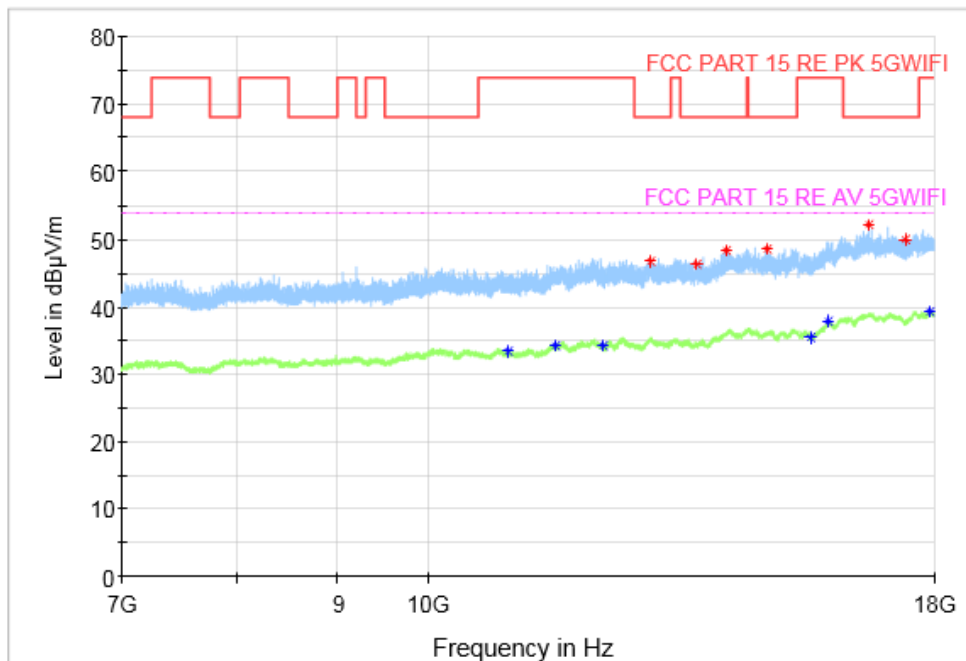


Fig. 112 Transmitter Spurious Emission (802. 11ac-VHT80, CH122 5610MHz, 7 GHz-18 GHz)

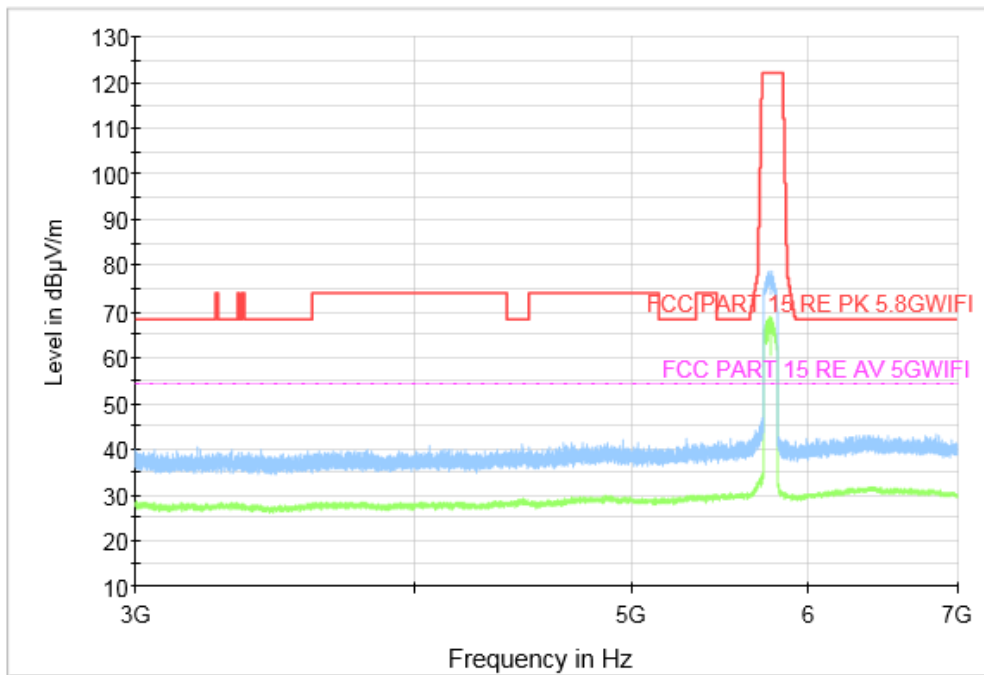


Fig. 113 Transmitter Spurious Emission (802. 11ac-VHT80, CH155 5775MHz, 3 GHz-7 GHz)

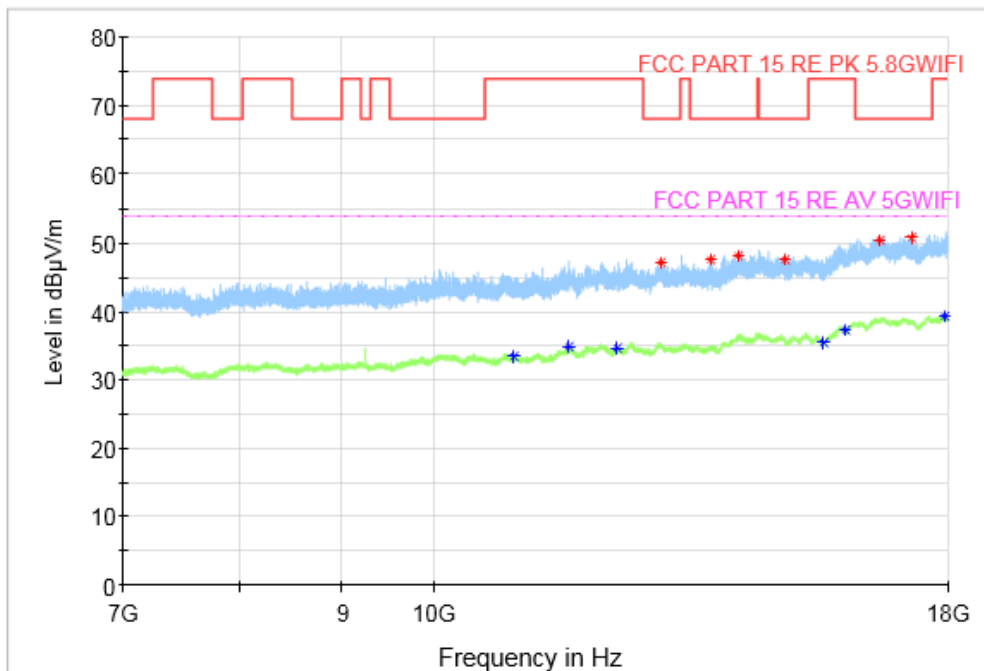


Fig. 114 Transmitter Spurious Emission (802. 11ac-VHT80, CH155 5775MHz, 7 GHz-18 GHz)

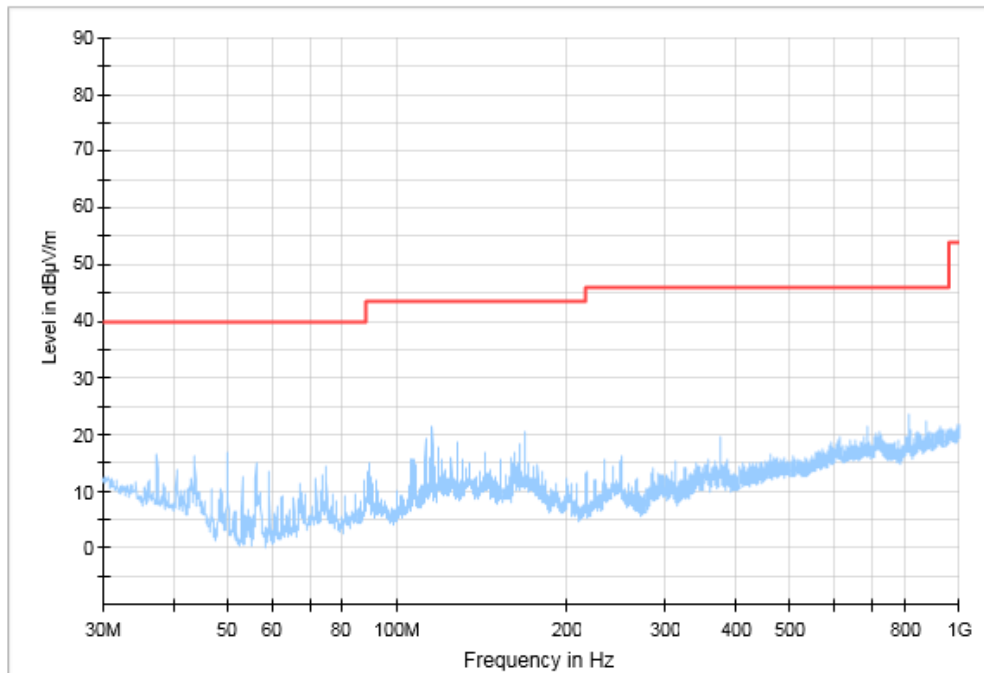


Fig. 115 Transmitter Spurious Emission (All channel, 30MHz~1GHz)

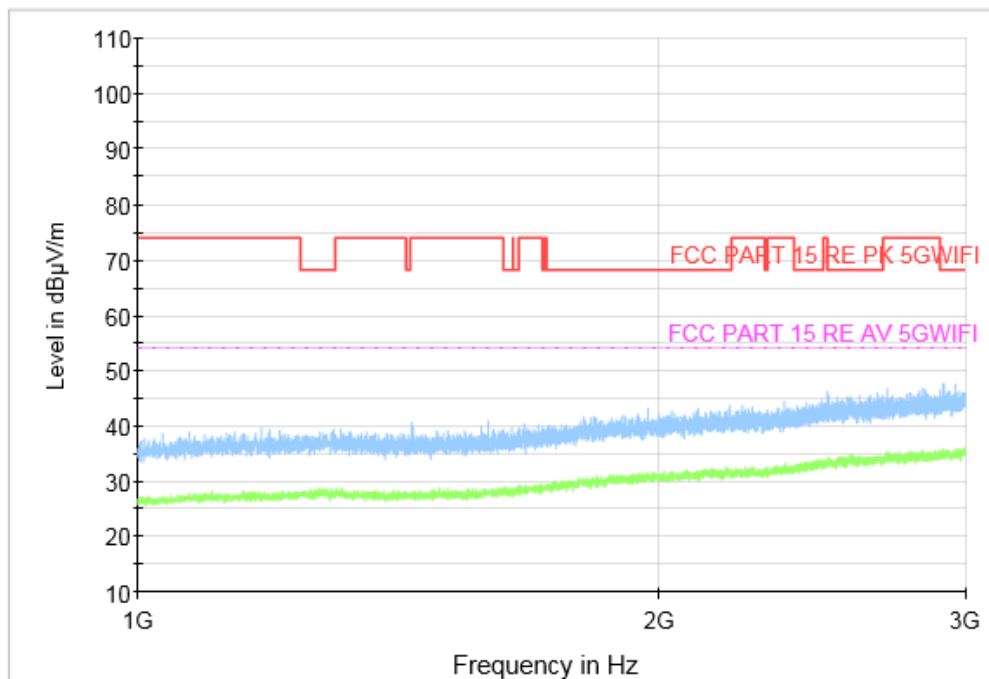


Fig. 116 Transmitter Spurious Emission (All channel, 1GHz~3GHz)

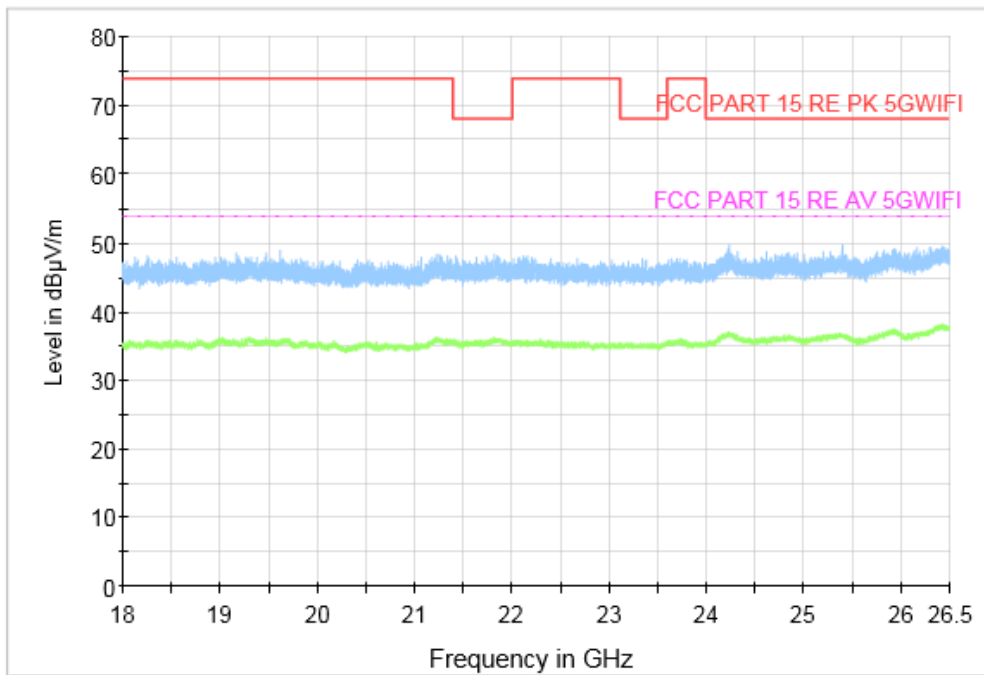


Fig. 117 Transmitter Spurious Emission (All channel, 18GHz~26.5GHz)

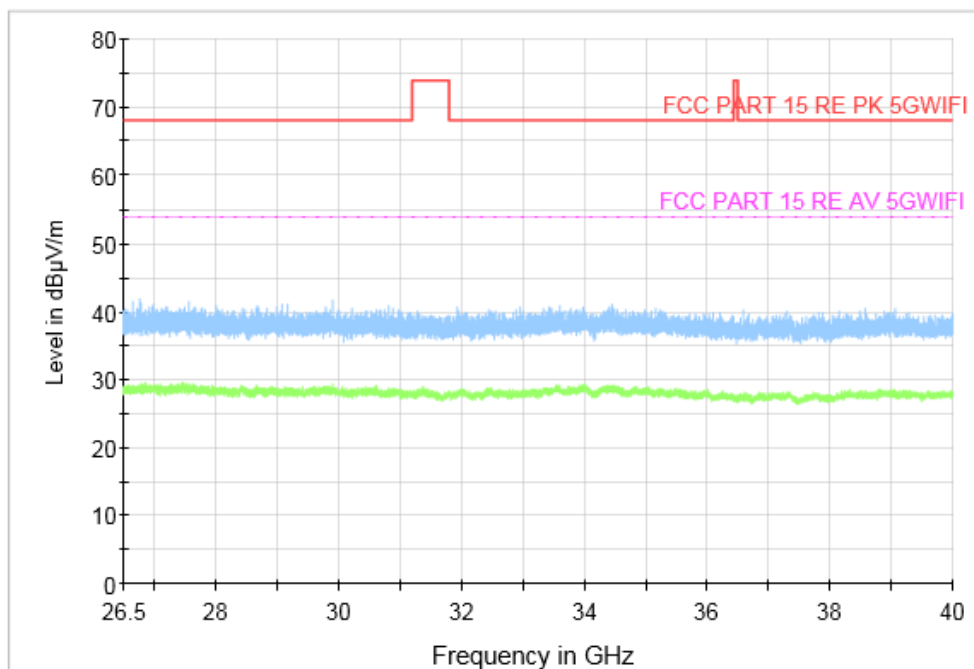


Fig. 118 Transmitter Spurious Emission (All channel, 26.5GHz~40GHz)

A.9. Radiated Spurious Emissions < 30MHz

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

The measurement is made according to KDB 789033.

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(Worst case):

Mode	Frequency Range	Test Results	Conclusion
All Channel	9 kHz ~30 MHz	Fig.119	P

Conclusion: PASS

Test graphs as below:

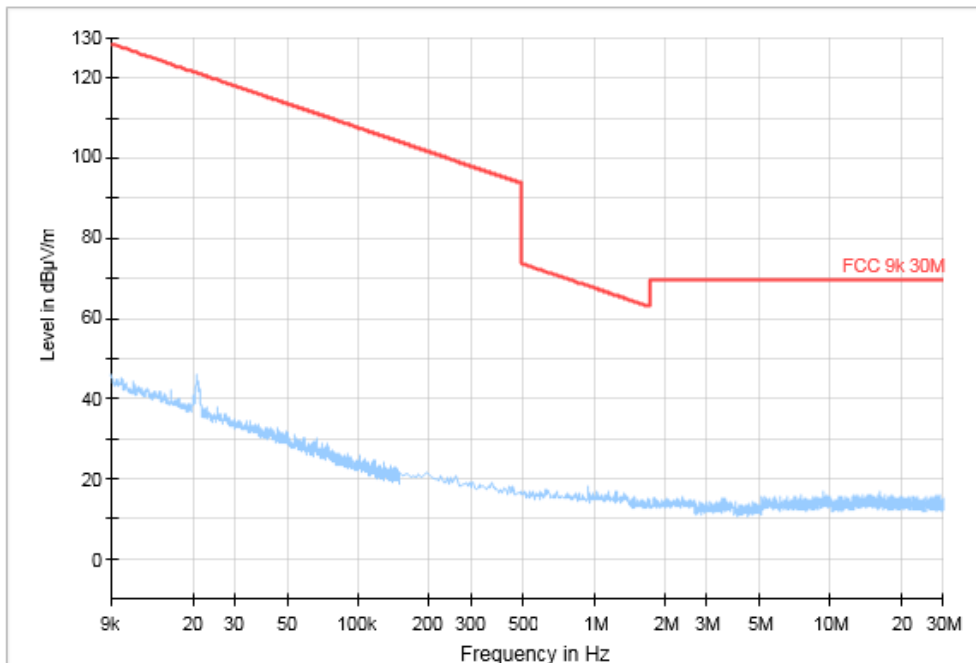


Fig. 119 Radiated Spurious Emission (All Channel, 9 kHz ~30 MHz)

A.10. AC Power Line Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

RLAN (Quasi-peak Limit)-AE1

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.120	Fig.121	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.

RLAN (Average Limit)-AE1

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.120	Fig.121	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:

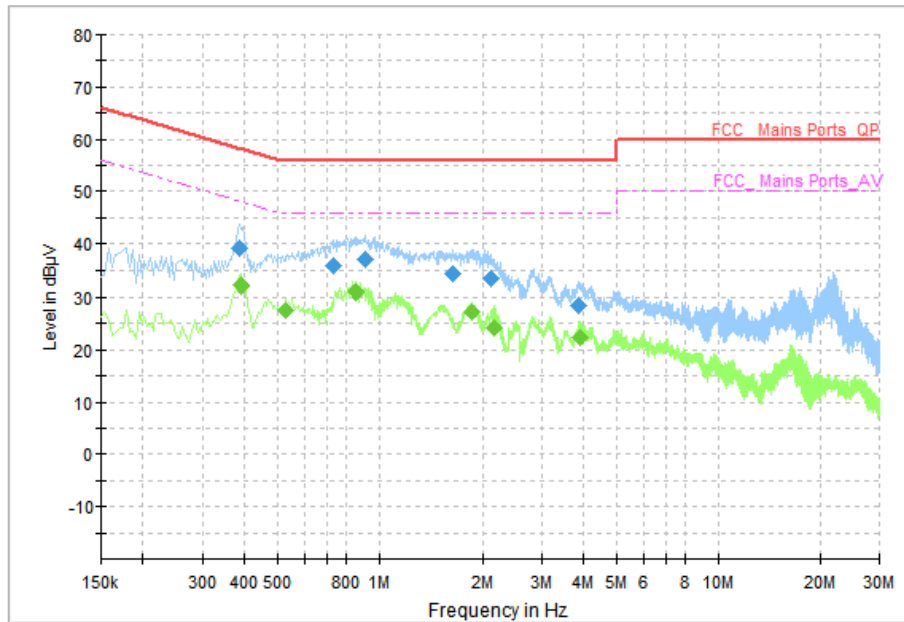


Fig. 120 AC Power line Conducted Emission (802.11n, AE1, 120V)

Measurement Result: Quasi Peak

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.386000	39.07	58.15	19.08	N	ON	9.6
0.730000	35.92	56.00	20.08	N	ON	9.7
0.906000	37.01	56.00	18.99	N	ON	9.7
1.638000	34.39	56.00	21.61	L1	ON	9.7
2.130000	33.33	56.00	22.67	L1	ON	9.7
3.874000	28.48	56.00	27.52	N	ON	9.7

Measurement Result: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.390000	32.22	48.06	15.85	N	ON	9.6
0.530000	27.48	46.00	18.52	N	ON	9.7
0.854000	30.97	46.00	15.03	N	ON	9.7
1.862000	27.37	46.00	18.63	N	ON	9.7
2.162000	24.17	46.00	21.83	N	ON	9.7
3.886000	22.28	46.00	23.72	N	ON	9.7

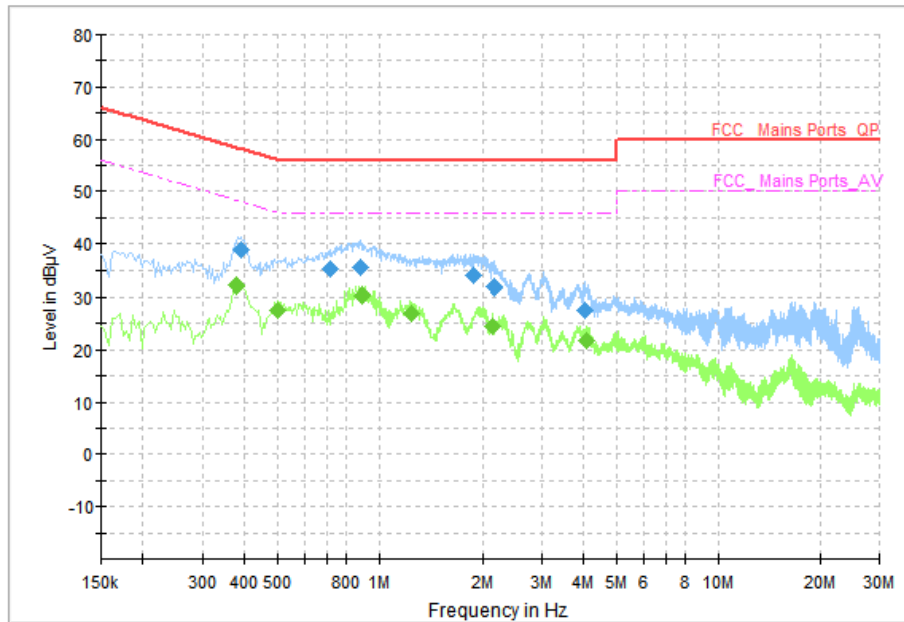


Fig. 121 AC Power line Conducted Emission (Idle, AE1, 120V)

Measurement Result: Quasi Peak

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.390000	38.81	58.06	19.26	N	ON	9.6
0.714000	35.21	56.00	20.79	N	ON	9.7
0.878000	35.59	56.00	20.41	N	ON	9.7
1.882000	34.01	56.00	21.99	L1	ON	9.7
2.170000	31.89	56.00	24.11	L1	ON	9.7
4.006000	27.43	56.00	28.57	N	ON	9.7

Measurement Result: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.378000	32.21	48.32	16.12	N	ON	9.6
0.498000	27.43	46.03	18.61	N	ON	9.7
0.890000	30.26	46.00	15.74	N	ON	9.7
1.250000	27.09	46.00	18.91	N	ON	9.7
2.150000	24.43	46.00	21.57	N	ON	9.7
4.086000	21.66	46.00	24.34	N	ON	9.7



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*****