

Fig. 43 99% Occupied Bandwidth (802.11ac-VHT80, 5210MHz)

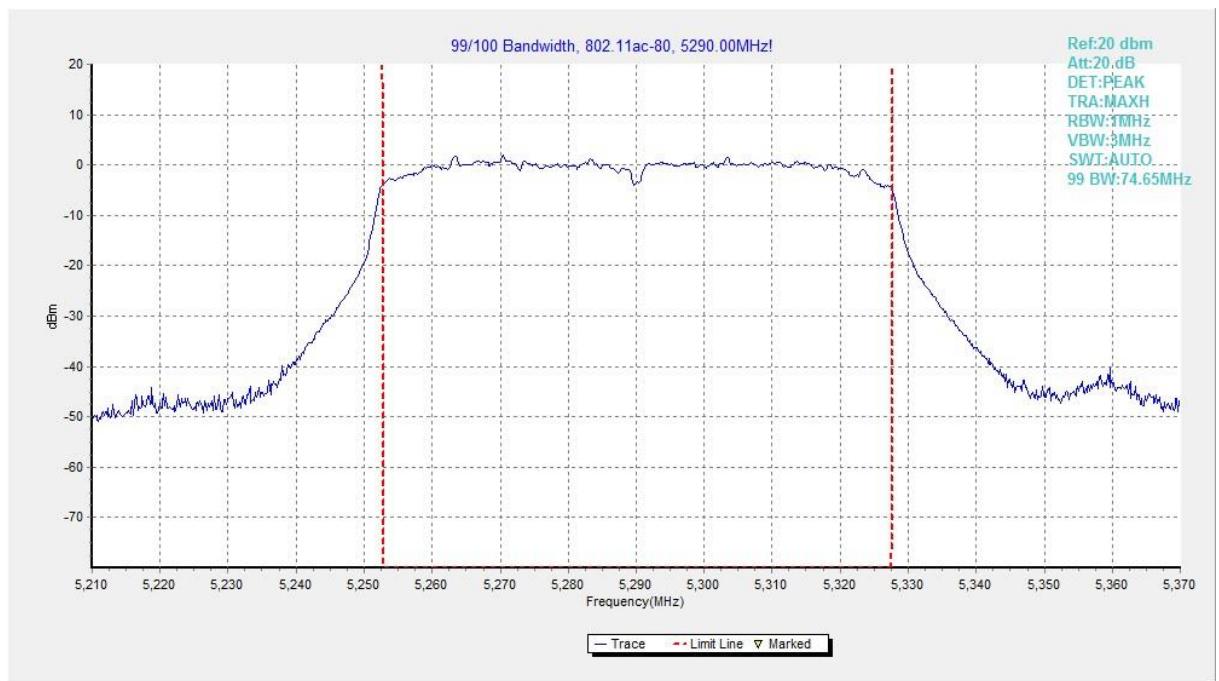


Fig. 44 99% Occupied Bandwidth (802.11ac-VHT80, 5290MHz)

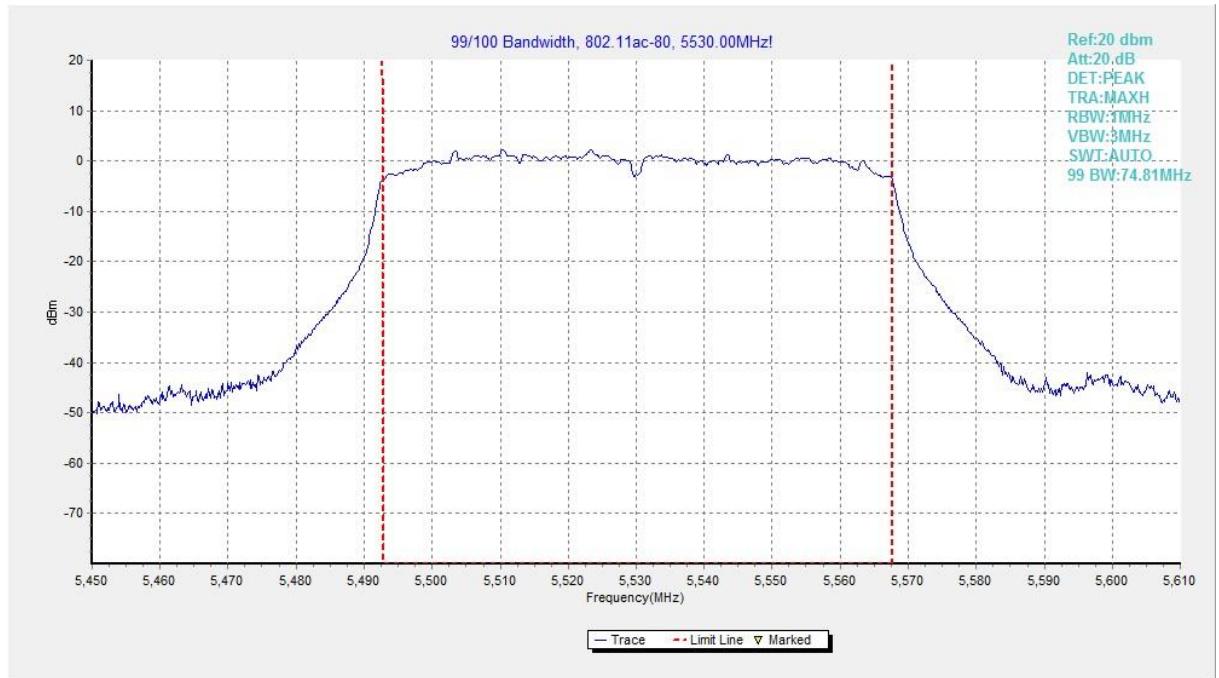


Fig. 45 99% Occupied Bandwidth (802. 11ac-VHT80, 5530MHz)

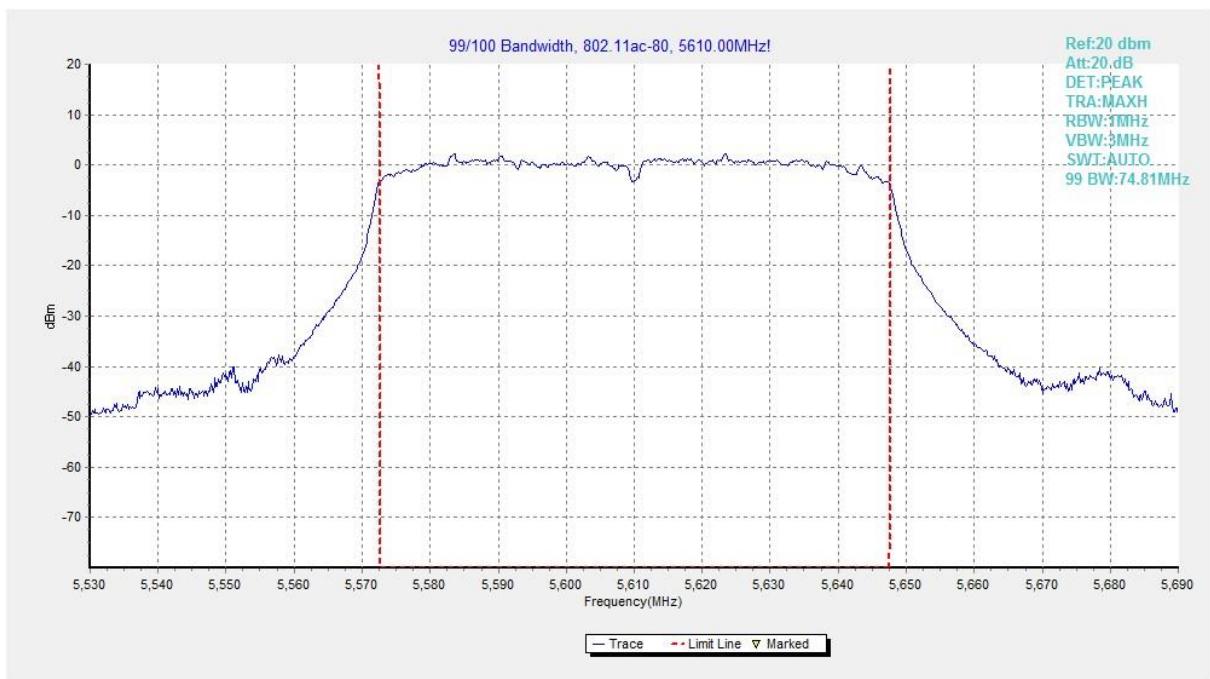


Fig. 46 99% Occupied Bandwidth (802. 11ac-VHT80, 5610MHz)

A.7. Band Edges Compliance

Measurement Limit:

Standard	Limit (dBuV/m)	
FCC 47 CFR Part 15.209	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:

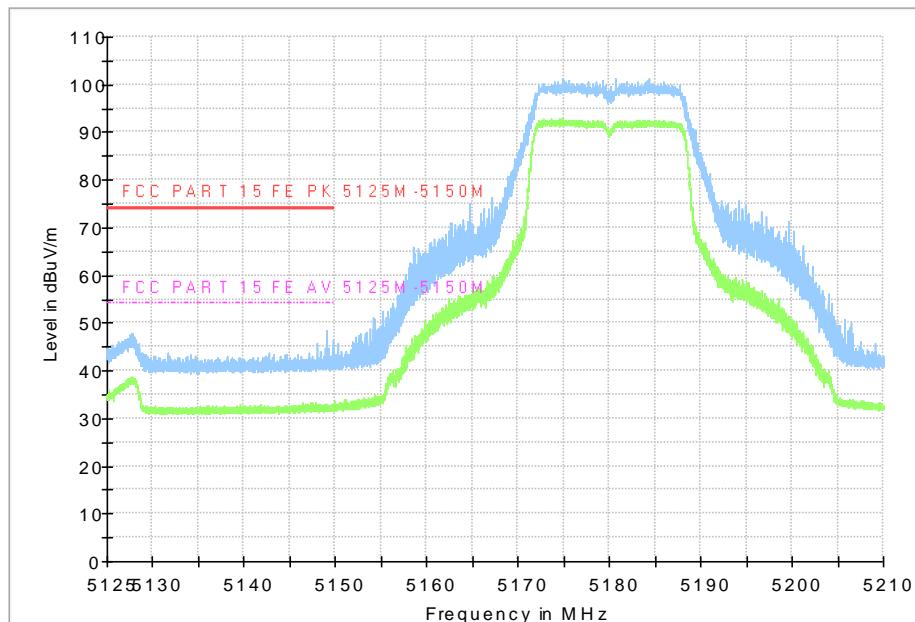


Fig. 47 Band Edges (802.11a, CH36 5180MHz)

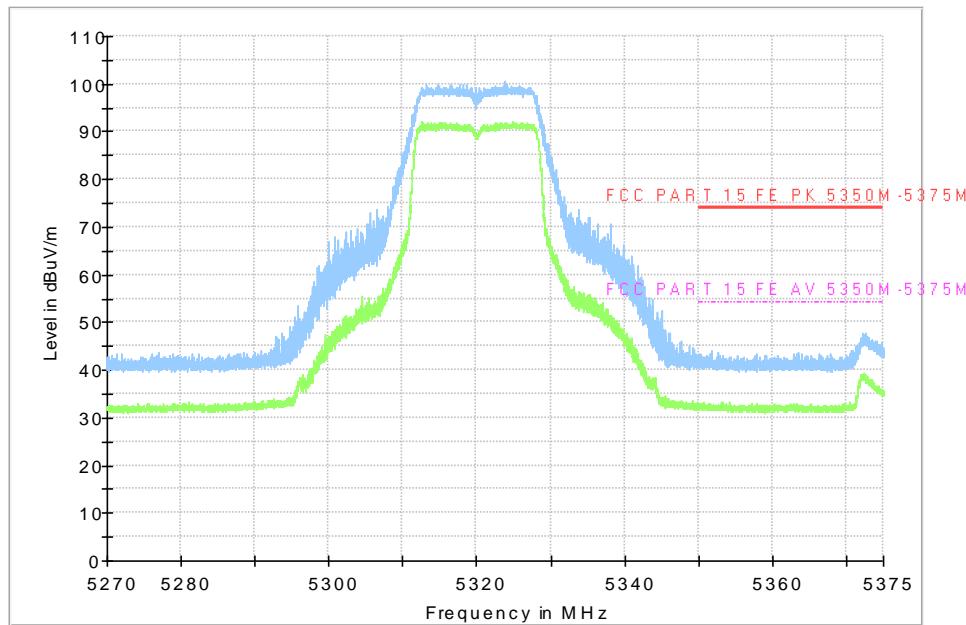


Fig. 48 Band Edges (802.11a, CH64 5320MHz)

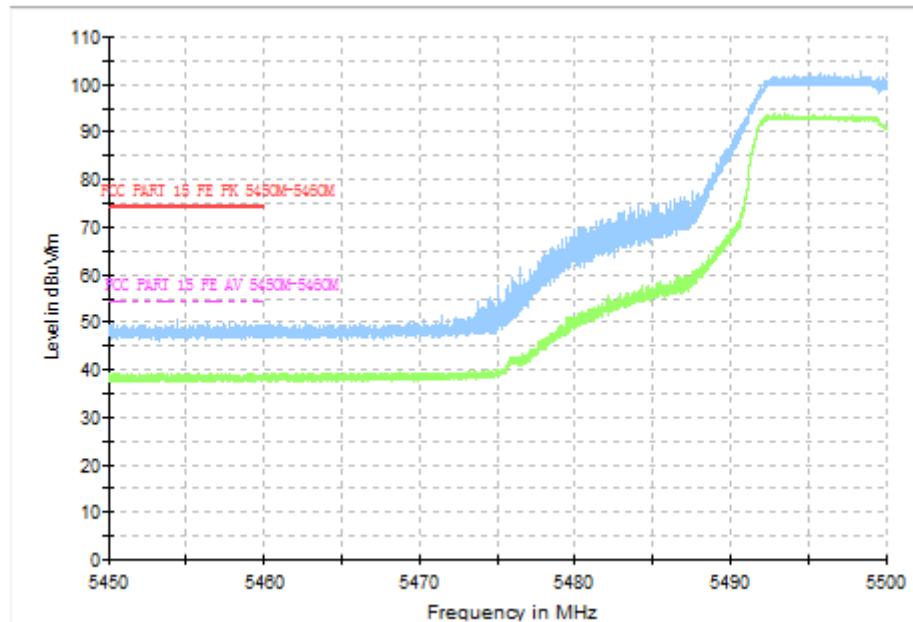


Fig. 49 Band Edges (802.11a, CH100 5500MHz)

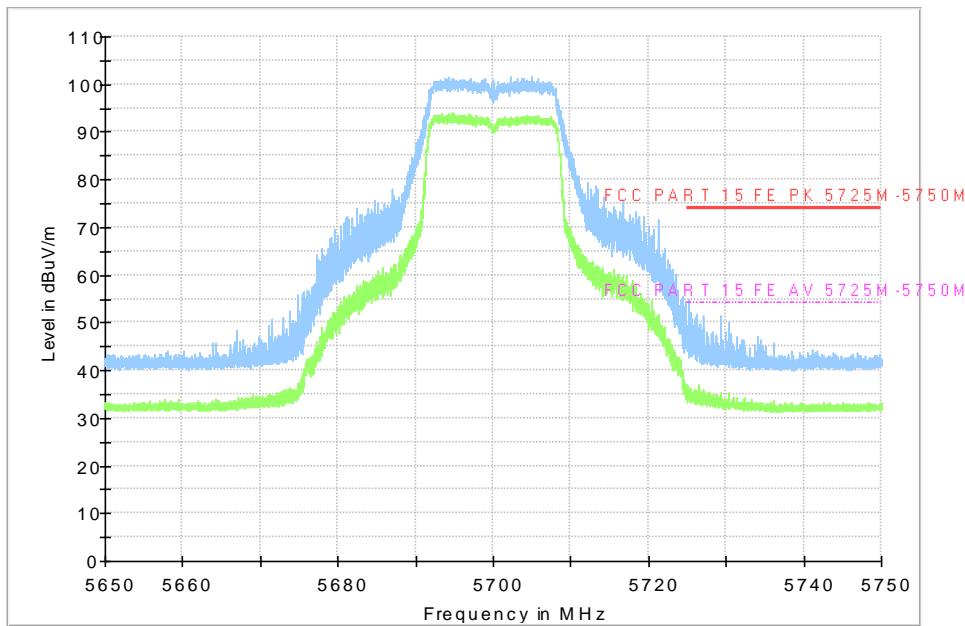


Fig. 50 Band Edges (802.11a, CH140 5700MHz)

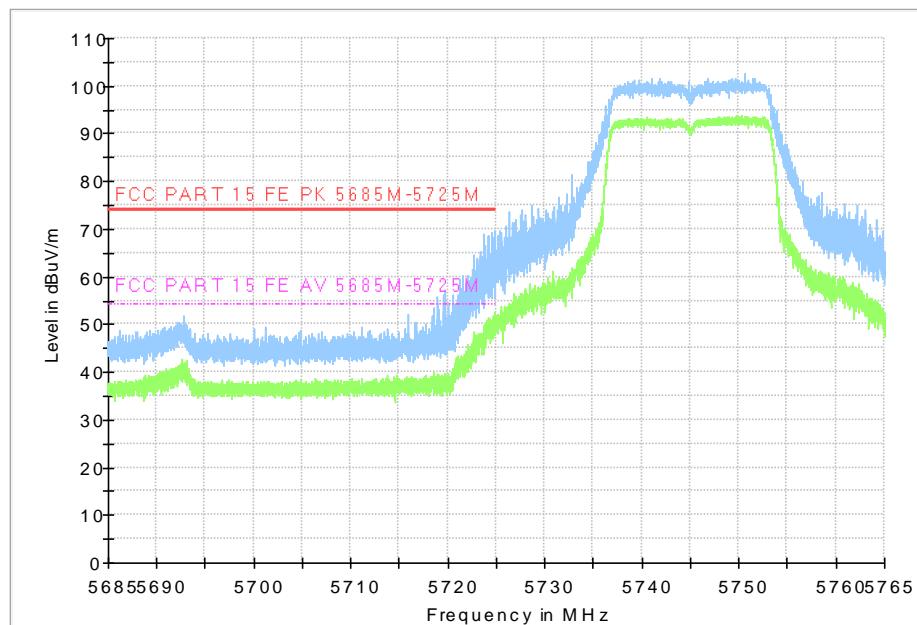


Fig. 51 Band Edges (802.11a, CH149 5745MHz)

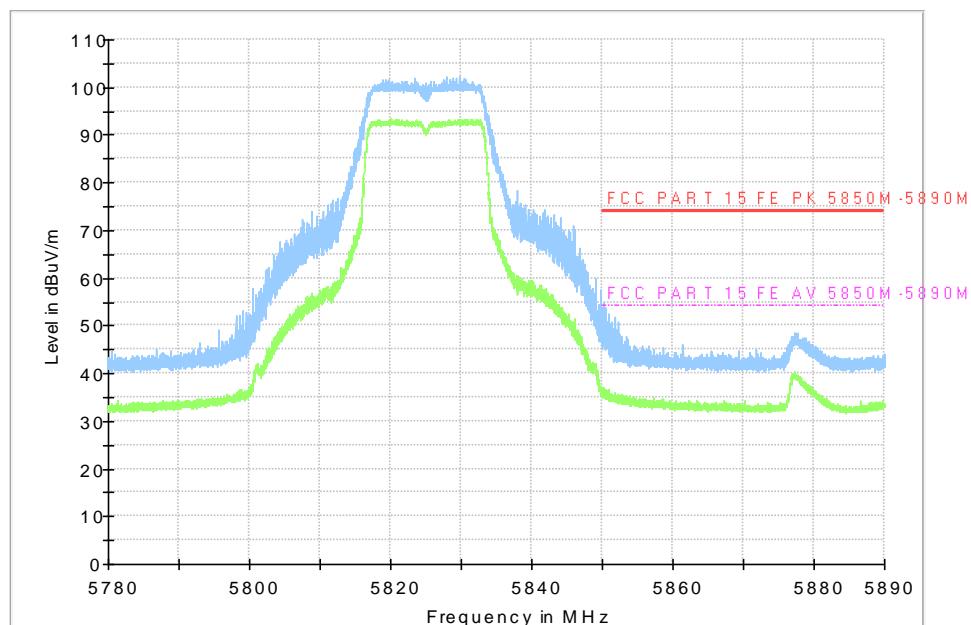


Fig. 52 Band Edges (802.11a, CH165 5825MHz)

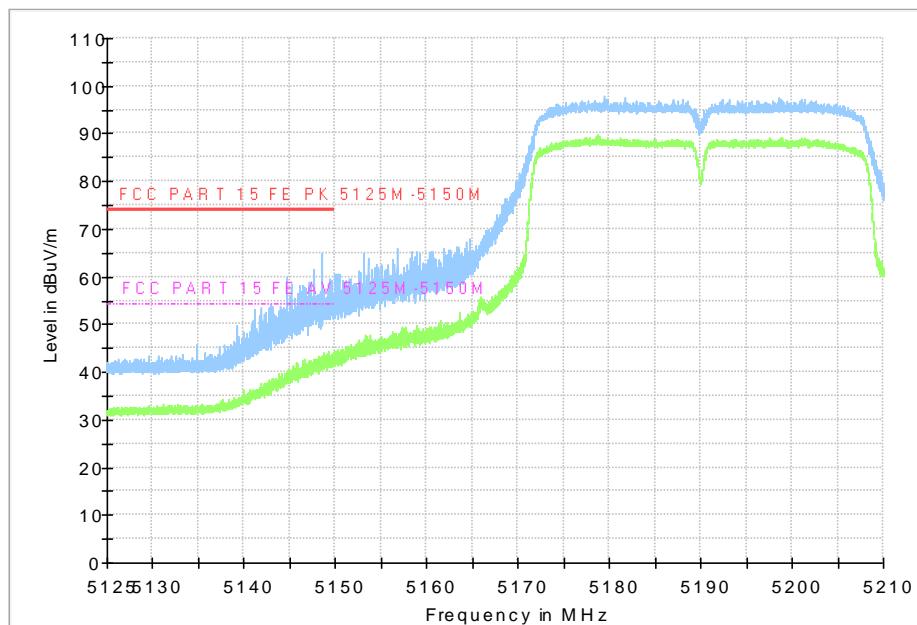


Fig. 53 Band Edges (802.11n-HT40, CH38 5190MHz)

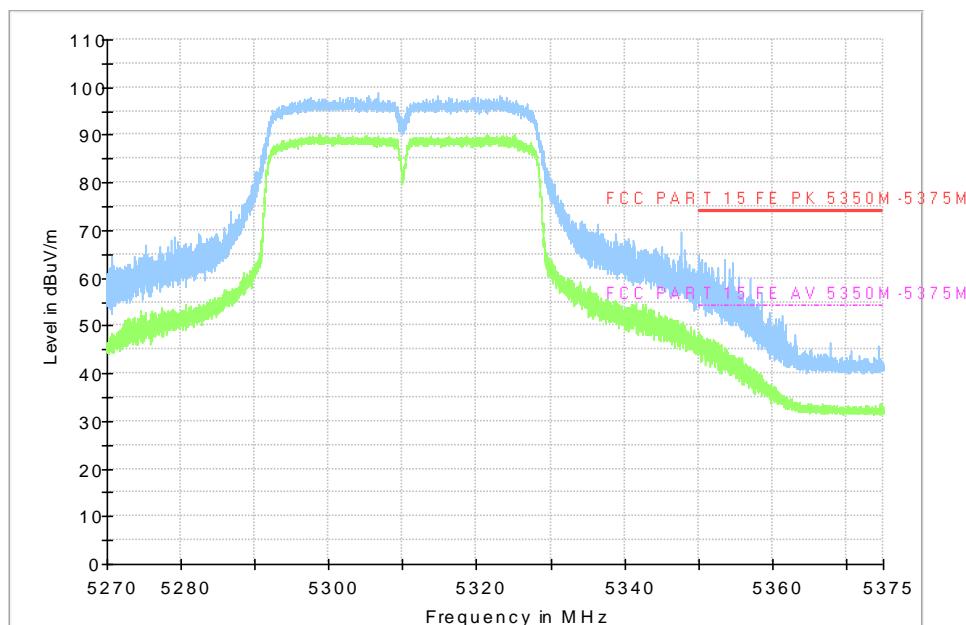


Fig. 54 Band Edges (802.11n-HT40, CH62 5310MHz)

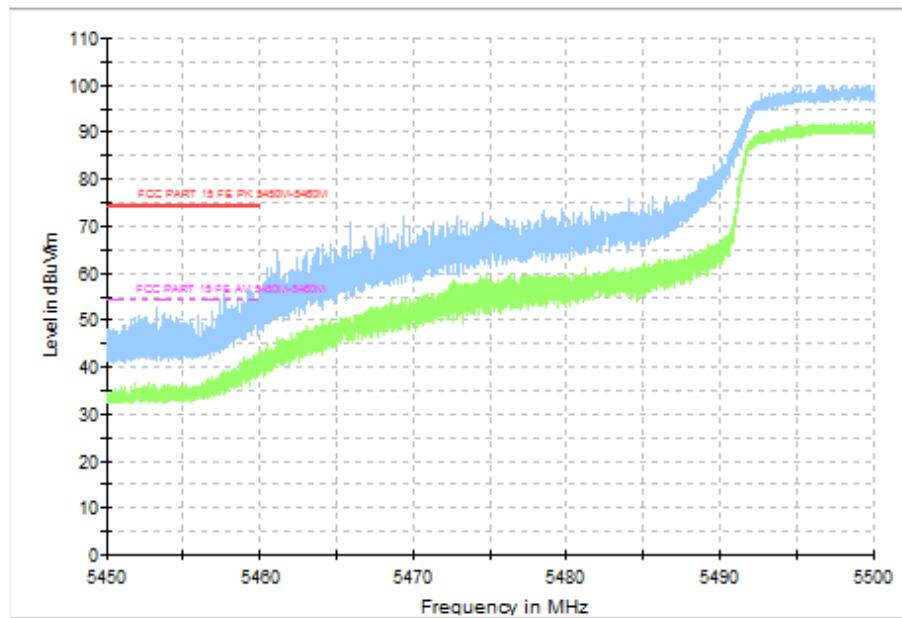


Fig. 55 Band Edges (802.11n-HT40, CH102 5510MHz)

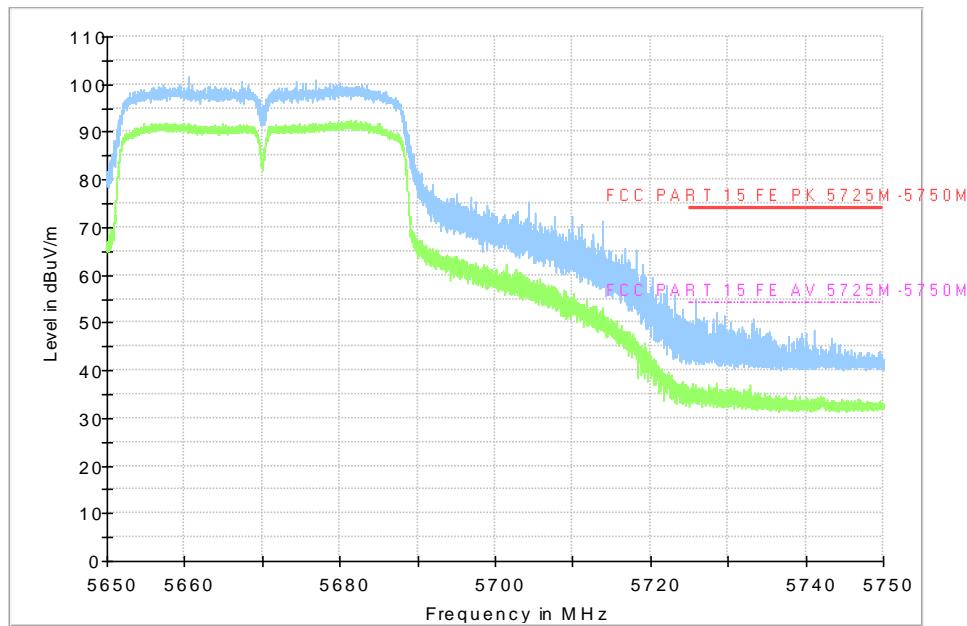


Fig. 56 Band Edges (802.11n-HT40, CH134 5670MHz)

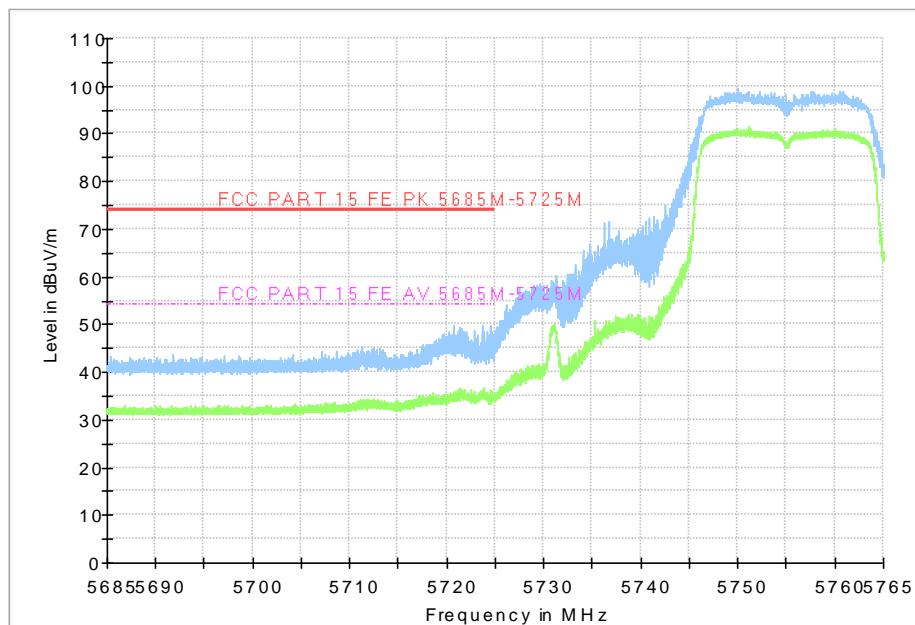


Fig. 57 Band Edges (802.11n-HT40, CH151 5755MHz)

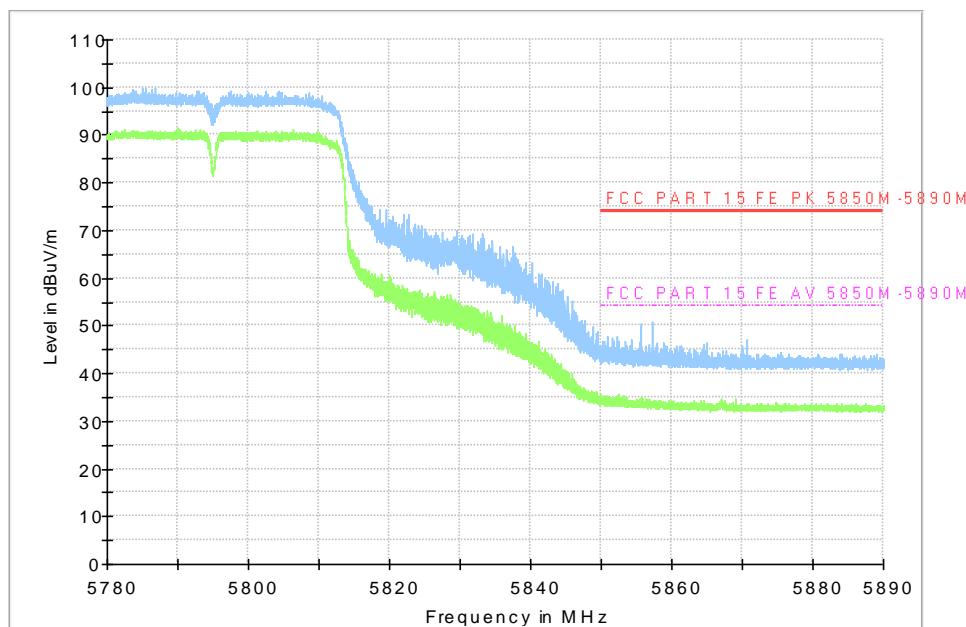


Fig. 58 Band Edges (802.11n-HT40, CH159 5795MHz)

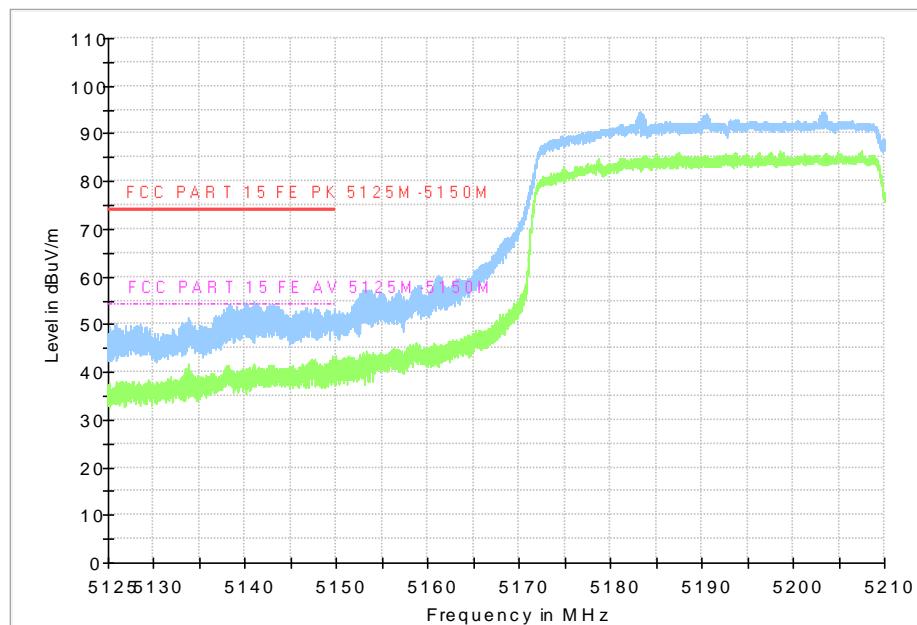


Fig. 59 Band Edges (802.11ac-VHT80, CH42 5210MHz)

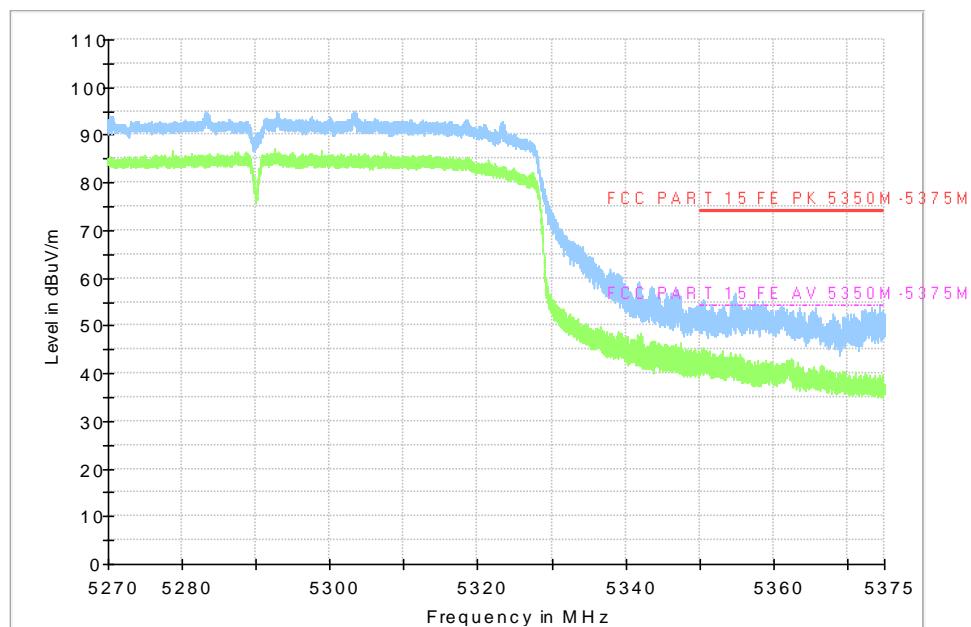


Fig. 60 Band Edges (802.11ac-VHT80, CH58 5290MHz)

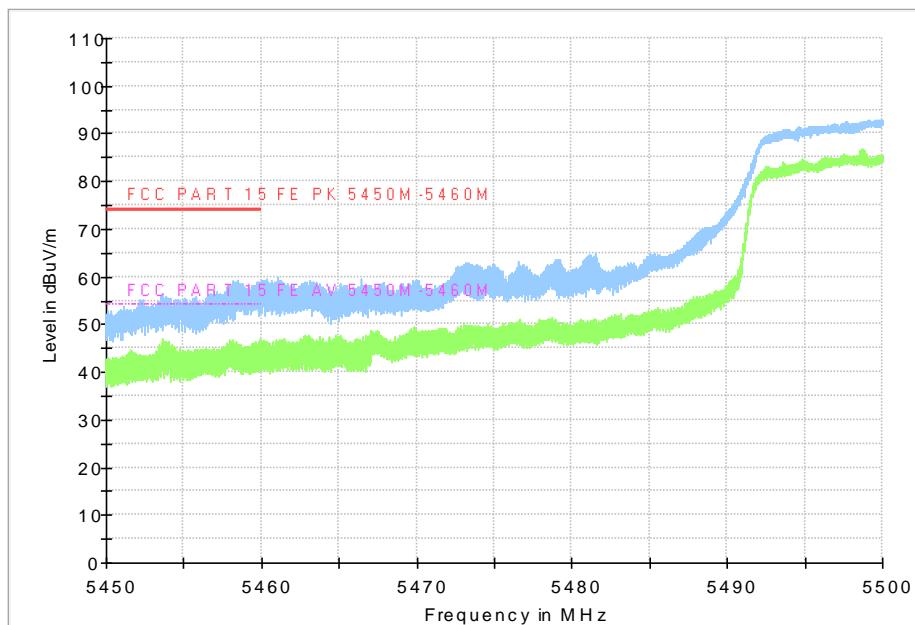


Fig. 61 Band Edges (802.11ac-VHT80, CH106 5530MHz)

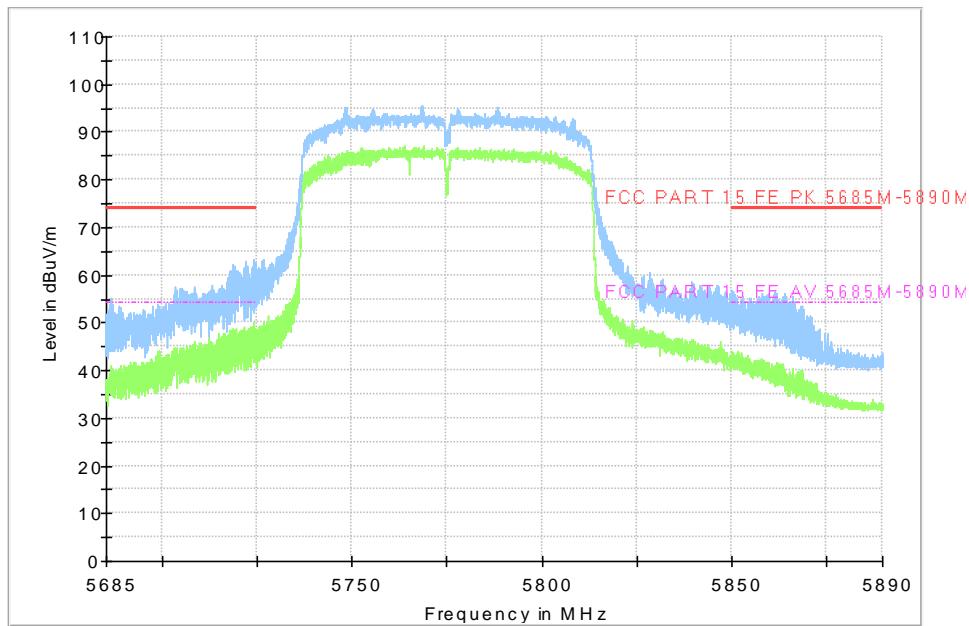


Fig. 62 Band Edges (802.11ac-VHT80, CH155 5775MHz)

A.8. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit (dBm/MHz)
FCC 47 CFR Part 15.407	< -27

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)	1 GHz ~3 GHz	Fig.63	P
		3 GHz ~18 GHz	Fig.64	P
	5200MHz(Ch40)	1 GHz ~3 GHz	Fig.65	P
		3 GHz ~18 GHz	Fig.66	P
	5240MHz(Ch48)	1 GHz ~3 GHz	Fig.67	P
		3 GHz ~18 GHz	Fig.68	P
	5260MHz(Ch52)	1 GHz ~3 GHz	Fig.69	P
		3 GHz ~18 GHz	Fig.70	P
	5280MHz(Ch56)	1 GHz ~3 GHz	Fig.71	P
		3 GHz ~18 GHz	Fig.72	P
	5320MHz(Ch64)	1 GHz ~3 GHz	Fig.73	P
		3 GHz ~18 GHz	Fig.74	P
	5500MHz(Ch100)	1 GHz ~3 GHz	Fig.75	P
		3 GHz ~18 GHz	Fig.76	P
	5600MHz(Ch120)	1 GHz ~3 GHz	Fig.77	P
		3 GHz ~18 GHz	Fig.78	P
	5700MHz(Ch140)	1 GHz ~3 GHz	Fig.79	P
		3 GHz ~18 GHz	Fig.80	P
	5745MHz(Ch149)	1 GHz ~3 GHz	Fig.81	P
		3 GHz ~18 GHz	Fig.82	P
	5785MHz(Ch157)	1 GHz ~3 GHz	Fig.83	P
		3 GHz ~18 GHz	Fig.84	P

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

Conclusion: PASS

Test graphs as below:

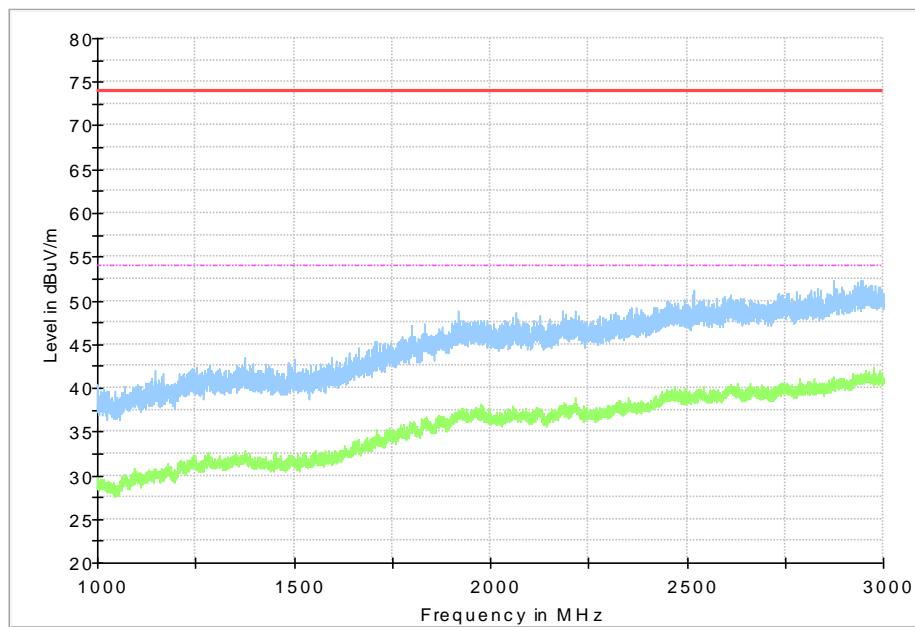


Fig. 63 Transmitter Spurious Emission (802.11a, CH36 5180MHz, 1 GHz-3 GHz)

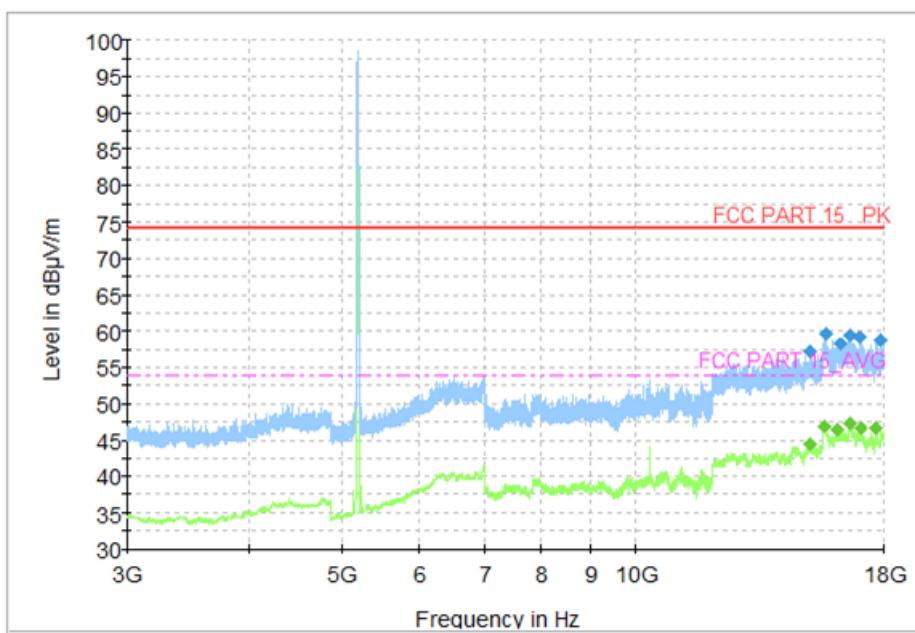


Fig. 64 Transmitter Spurious Emission (802.11a, CH36 5180MHz, 3 GHz-18 GHz)

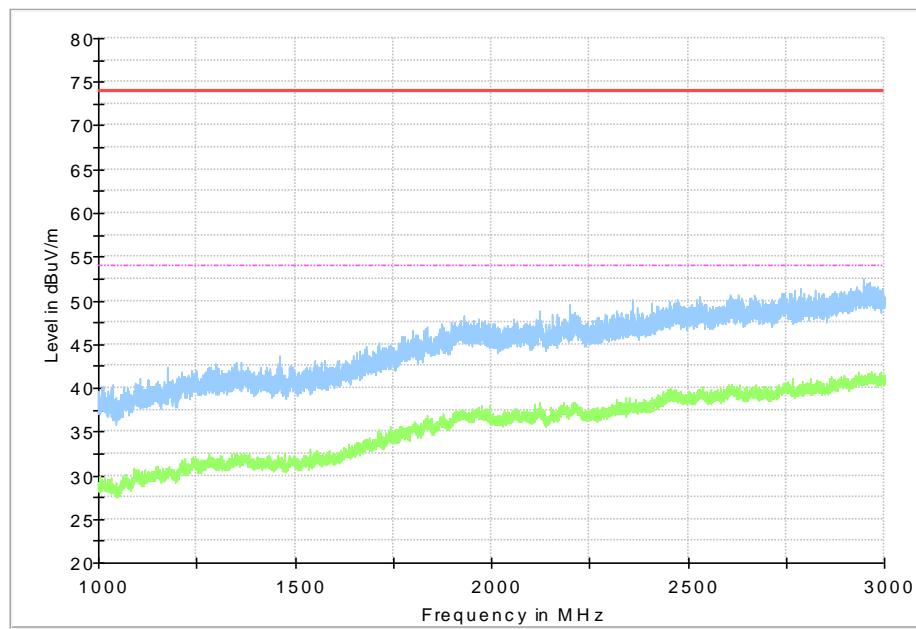


Fig. 65 Transmitter Spurious Emission (802.11a, CH40 5200MHz, 1 GHz-3 GHz)

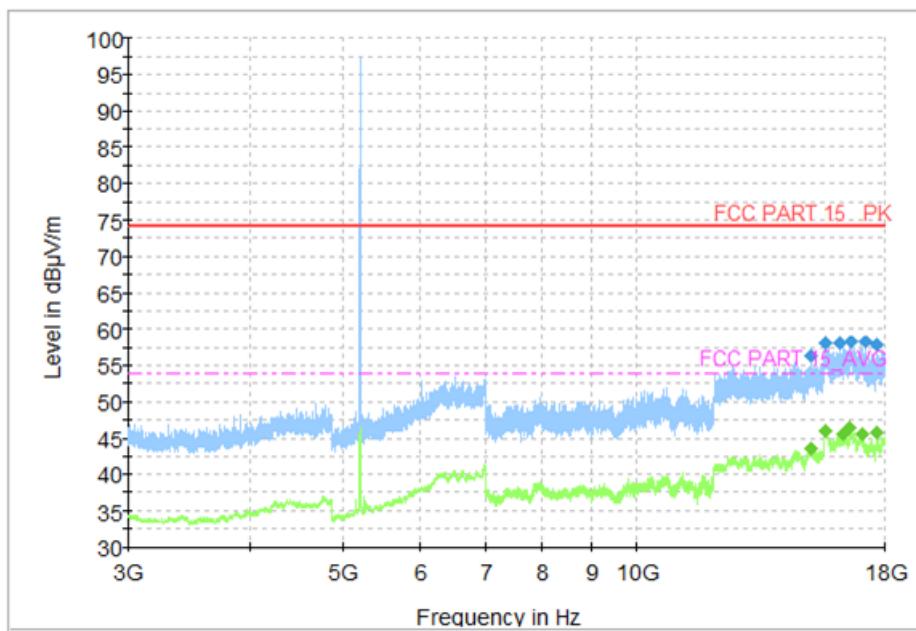


Fig. 66 Transmitter Spurious Emission (802.11a, CH40 5200MHz, 3 GHz-18 GHz)

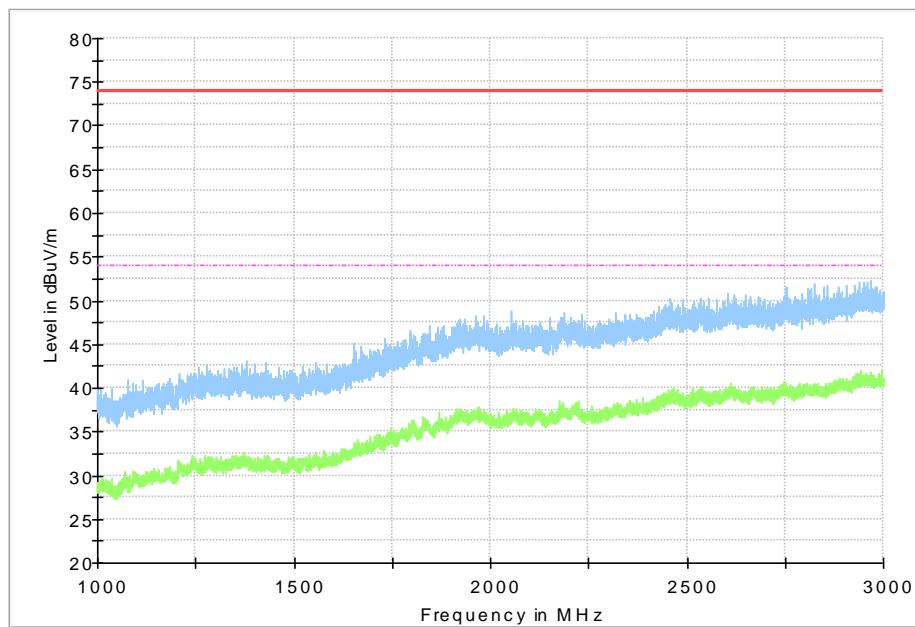


Fig. 67 Transmitter Spurious Emission (802.11a, CH48 5240MHz, 1 GHz-3 GHz)

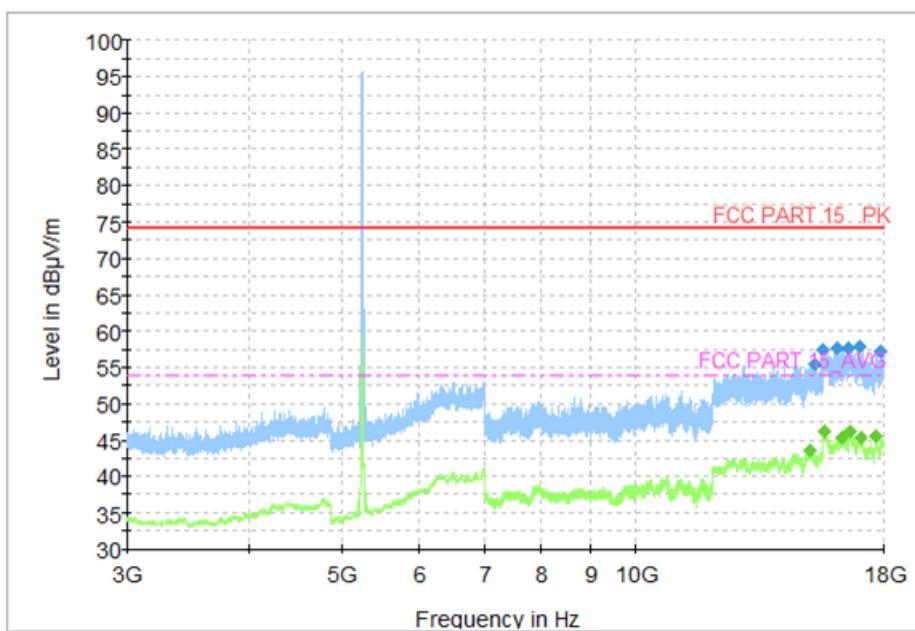


Fig. 68 Transmitter Spurious Emission (802.11a, CH48 5240MHz, 3 GHz-18 GHz)

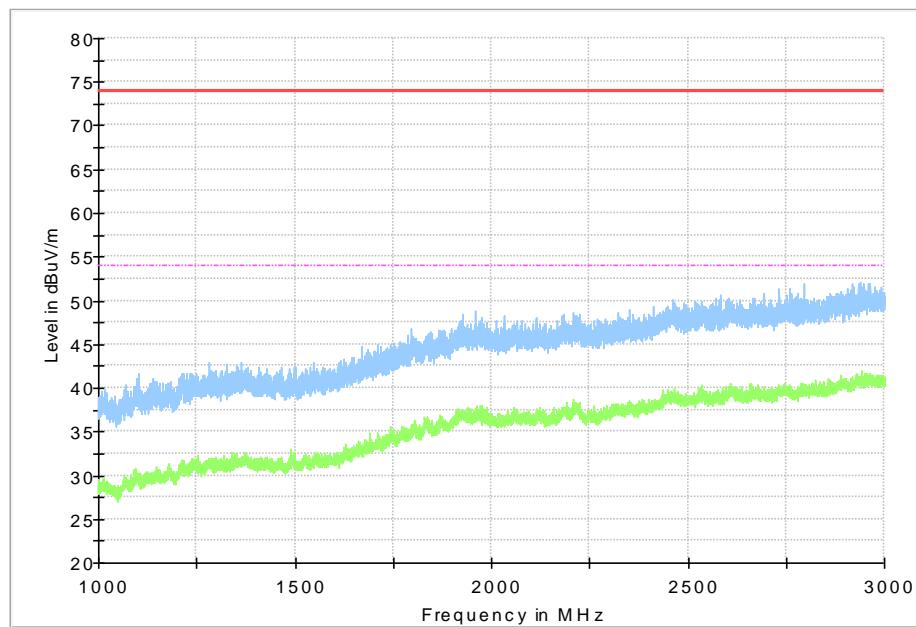


Fig. 69 Transmitter Spurious Emission (802.11a, CH52 5260MHz, 1 GHz-3 GHz)

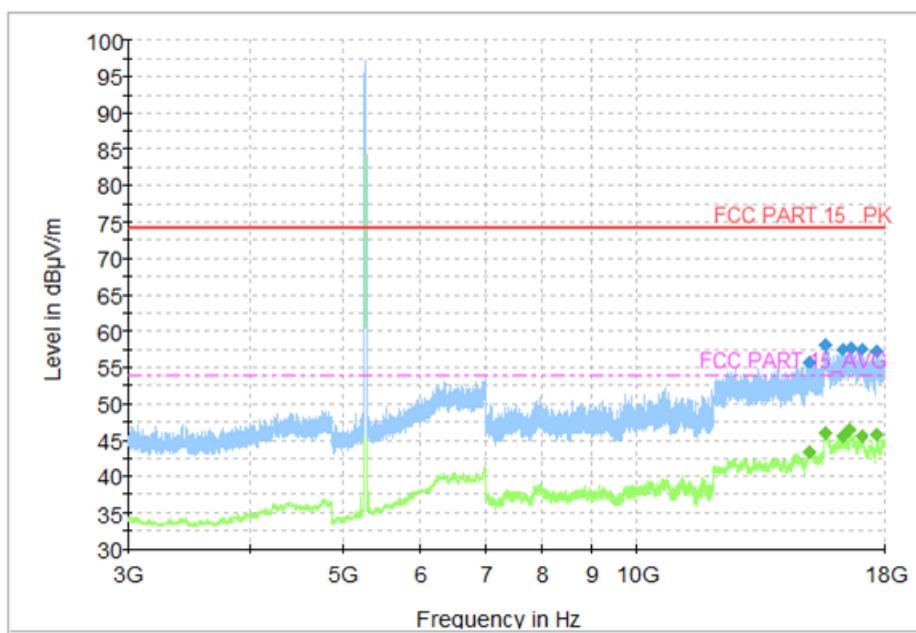


Fig. 70 Transmitter Spurious Emission (802.11a, CH52 5260MHz, 3GHz-18 GHz)

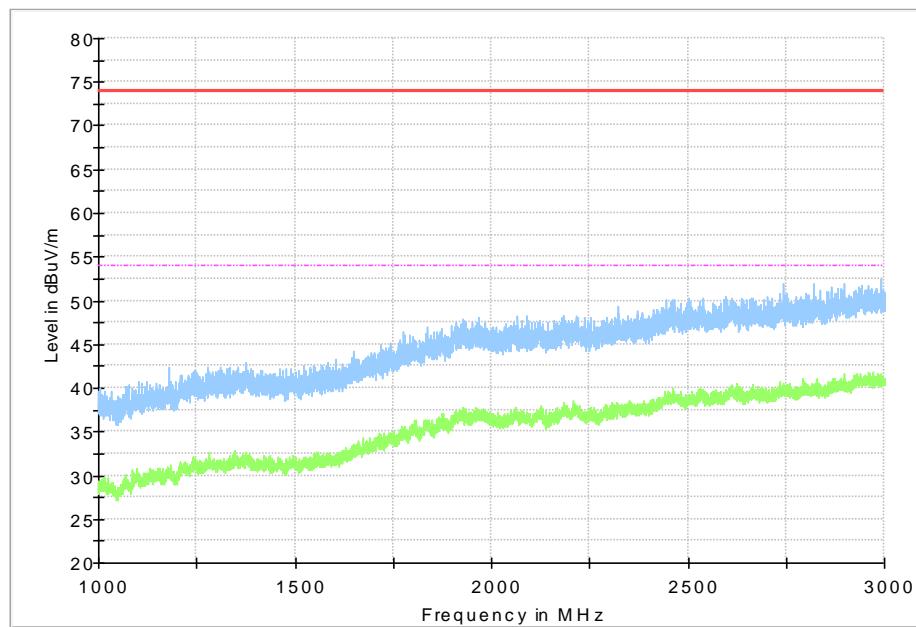


Fig. 71 Transmitter Spurious Emission (802.11a, CH56 5280MHz, 1 GHz-3 GHz)

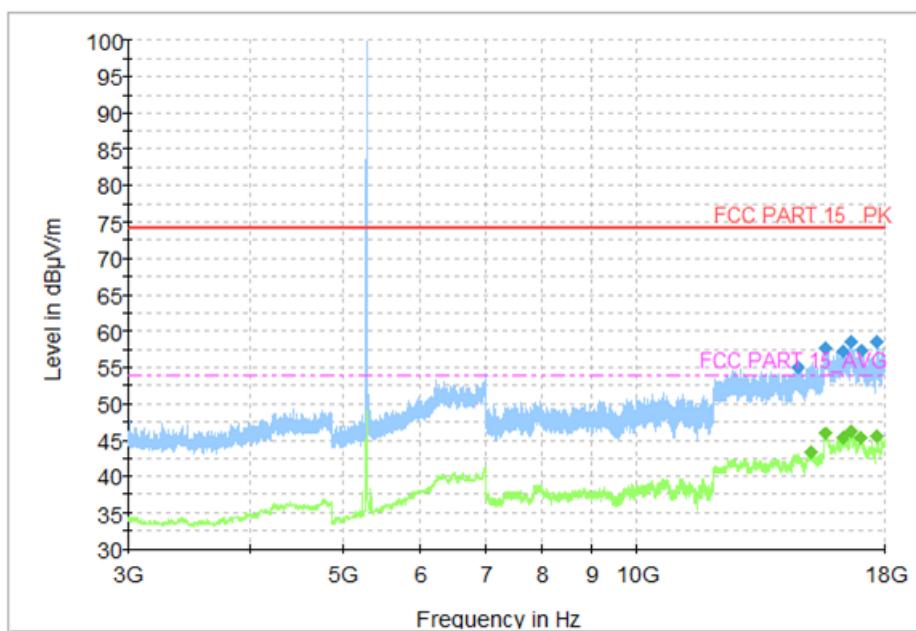


Fig. 72 Transmitter Spurious Emission (802.11a, CH56 5280MHz, 3 GHz-18 GHz)

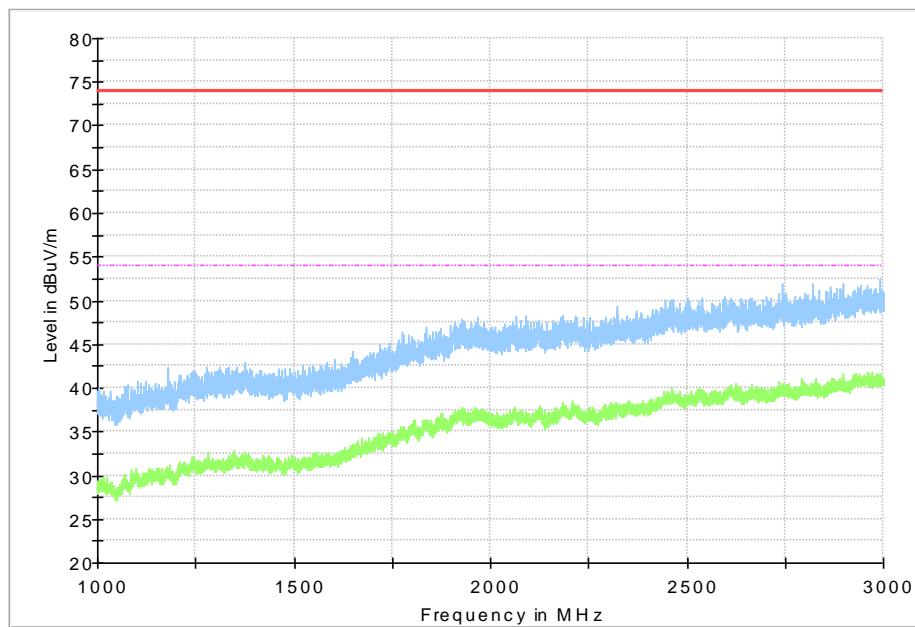


Fig. 73 Transmitter Spurious Emission (802.11a, CH64 5320MHz, 1 GHz-3 GHz)

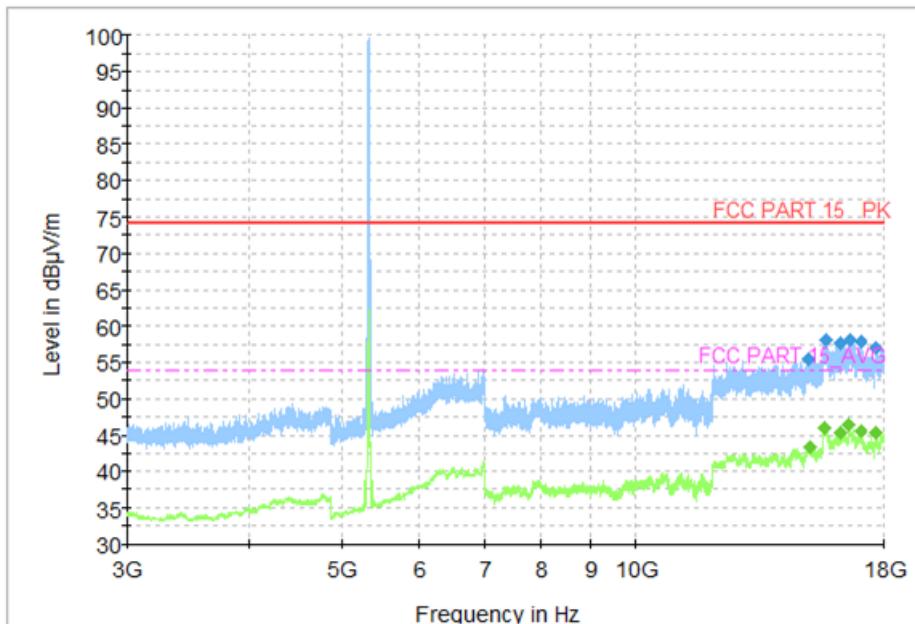


Fig. 74 Transmitter Spurious Emission (802.11a, CH64 5320MHz, 3 GHz-18 GHz)

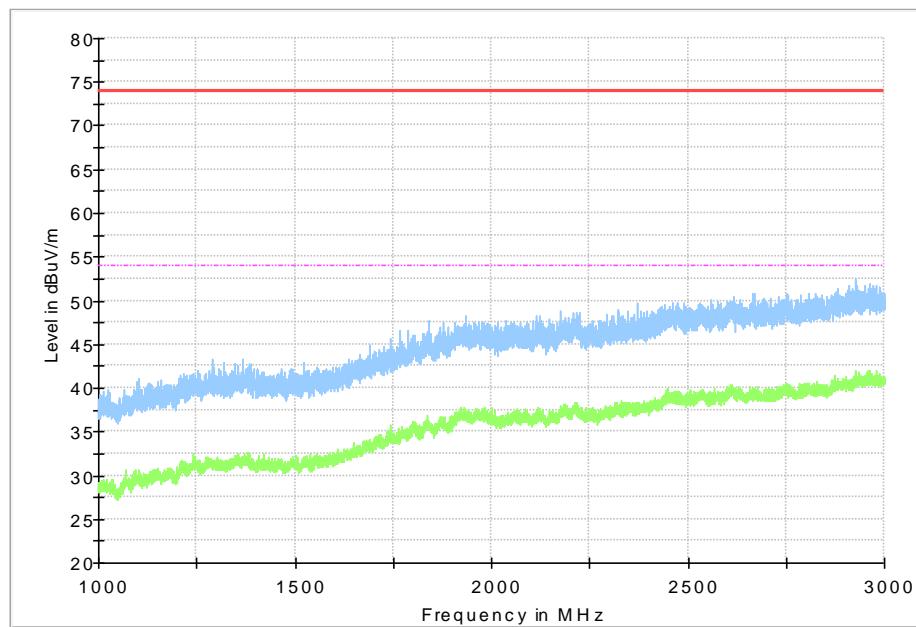


Fig. 75 Transmitter Spurious Emission (802.11a, CH100 5500MHz, 1 GHz-3 GHz)

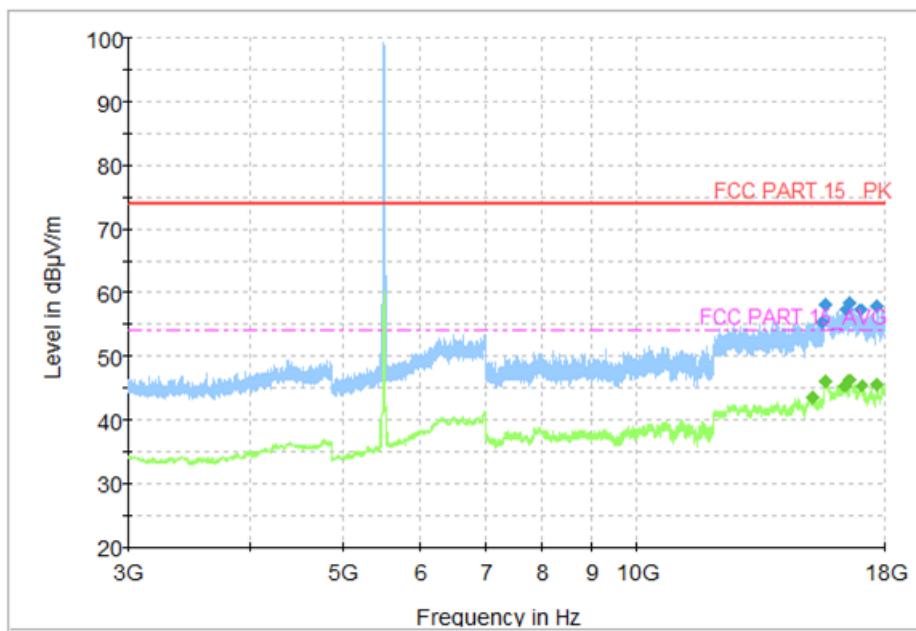


Fig. 76 Transmitter Spurious Emission (802.11a, CH100 5500MHz, 3 GHz-18 GHz)

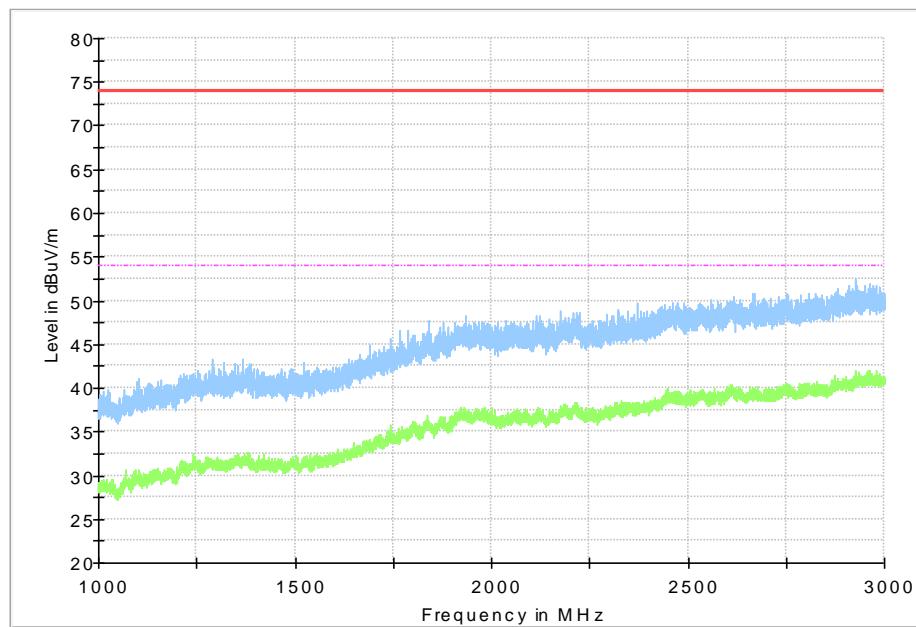


Fig. 77 Transmitter Spurious Emission (802.11a, CH120 5600MHz, 1 GHz-3 GHz)

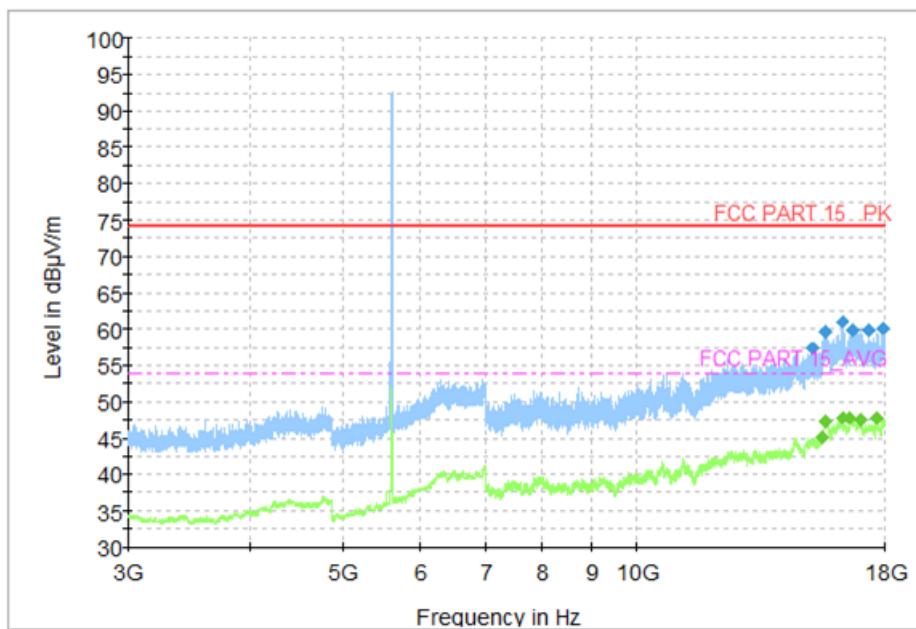


Fig. 78 Transmitter Spurious Emission (802.11a, CH120 5600MHz, 3 GHz-18 GHz)

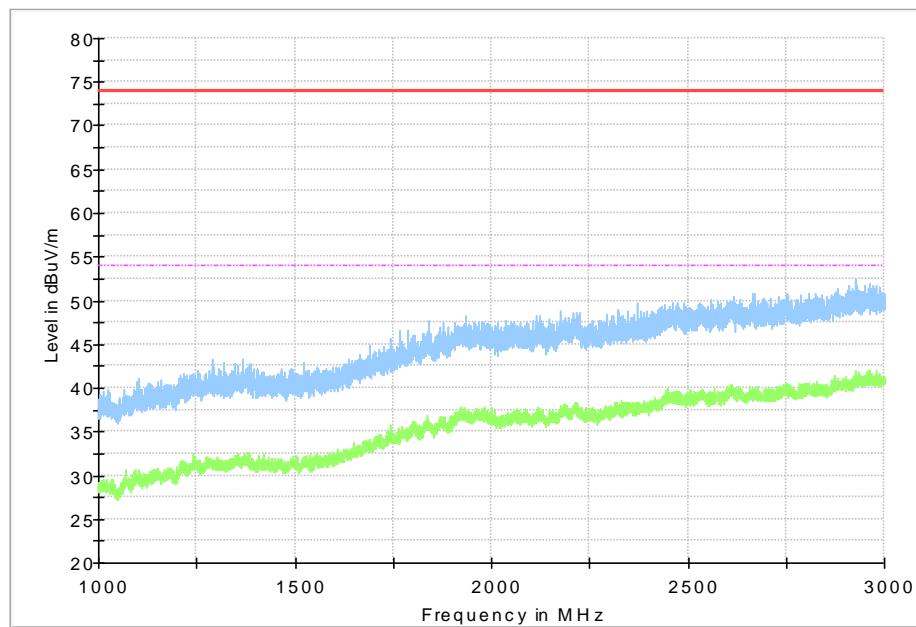


Fig. 79 Transmitter Spurious Emission (802.11a, CH140 5700MHz, 1 GHz-3 GHz)

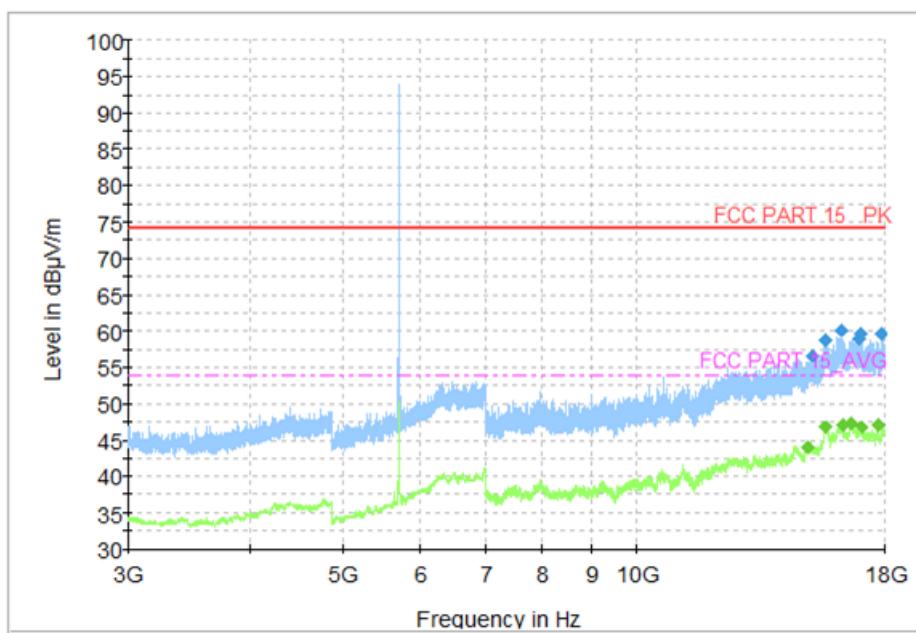


Fig. 80 Transmitter Spurious Emission (802.11a, CH140 5700MHz, 3 GHz-18 GHz)

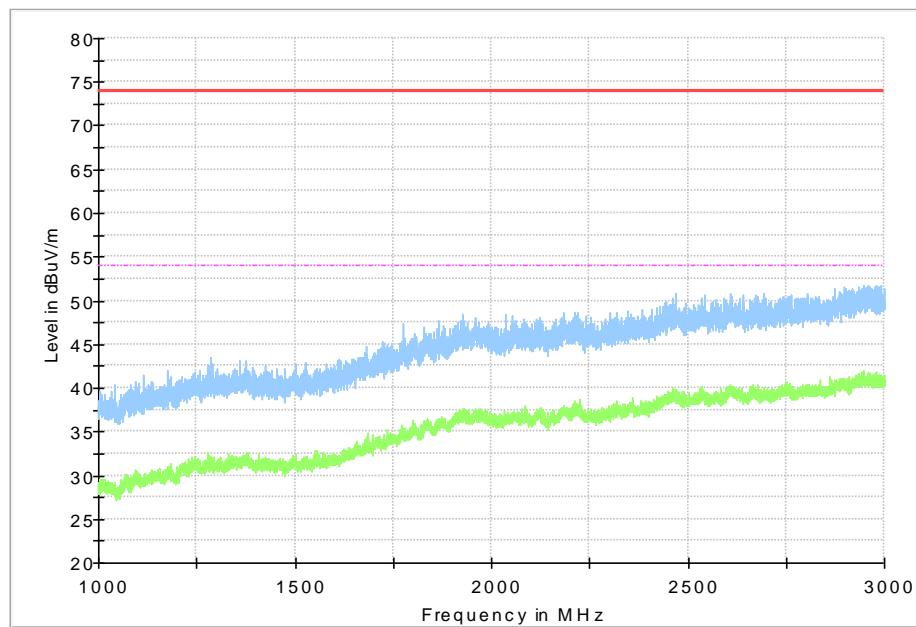


Fig. 81 Transmitter Spurious Emission (802.11a, CH149 5745MHz, 1 GHz-3 GHz)

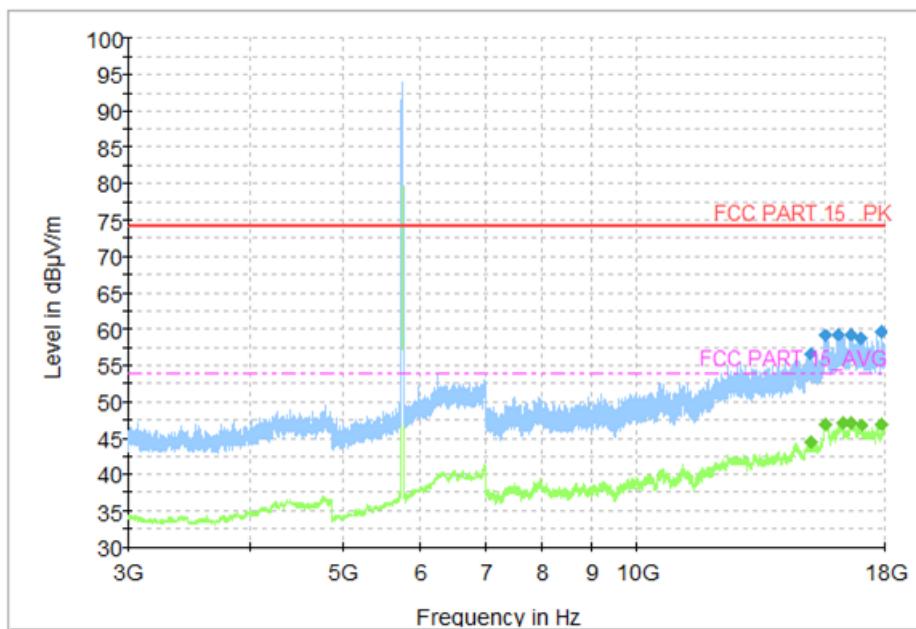


Fig. 82 Transmitter Spurious Emission (802.11a, CH149 5745MHz, 3 GHz-18 GHz)

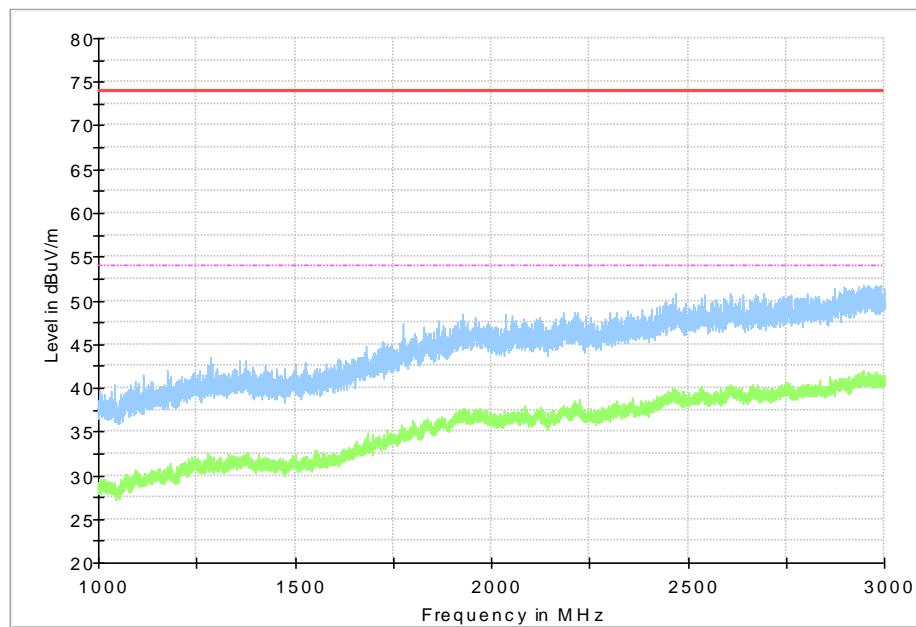


Fig. 83 Transmitter Spurious Emission (802.11a, CH157 5785MHz, 1 GHz-3 GHz)

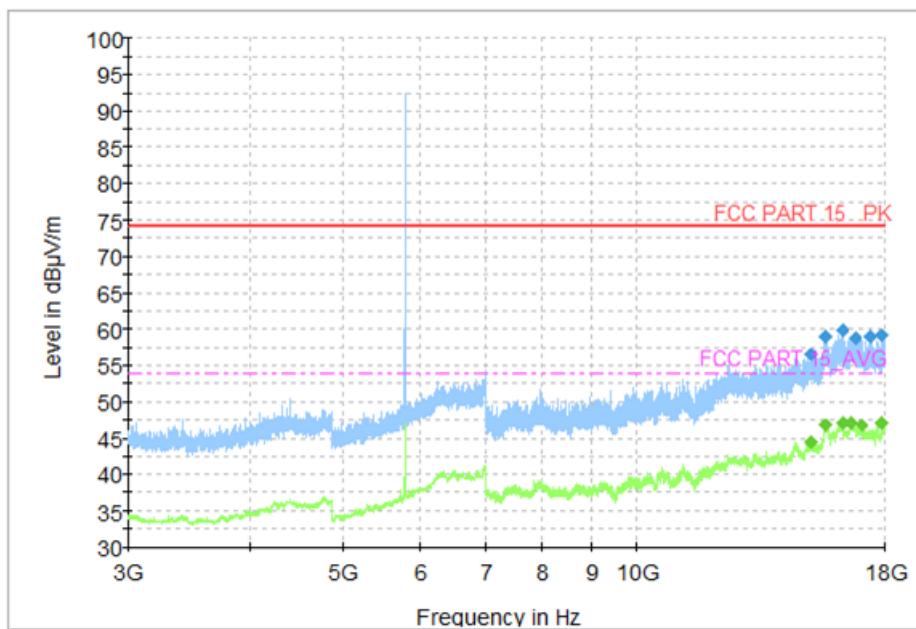


Fig. 84 Transmitter Spurious Emission (802.11a, CH157 5785MHz, 3 GHz-18 GHz)

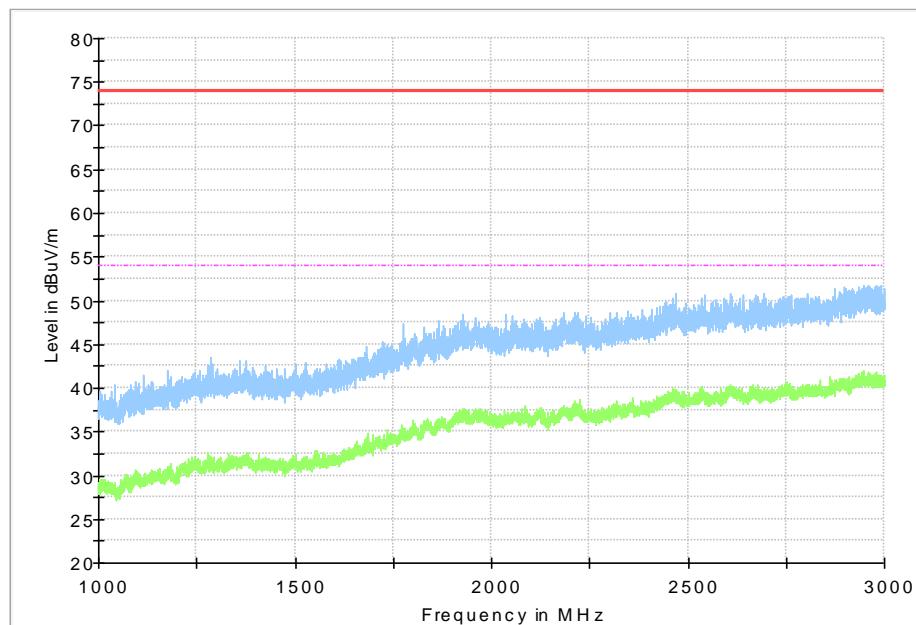


Fig. 85 Transmitter Spurious Emission (802.11a, CH165 5825MHz, 1 GHz-3 GHz)

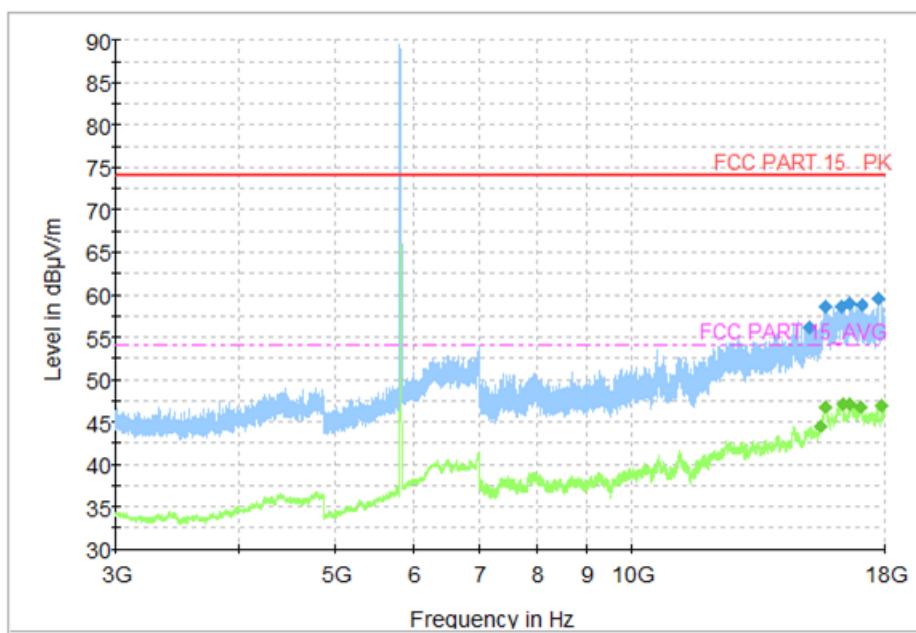


Fig. 86 Transmitter Spurious Emission (802.11a, CH165 5825MHz, 3 GHz-18 GHz)

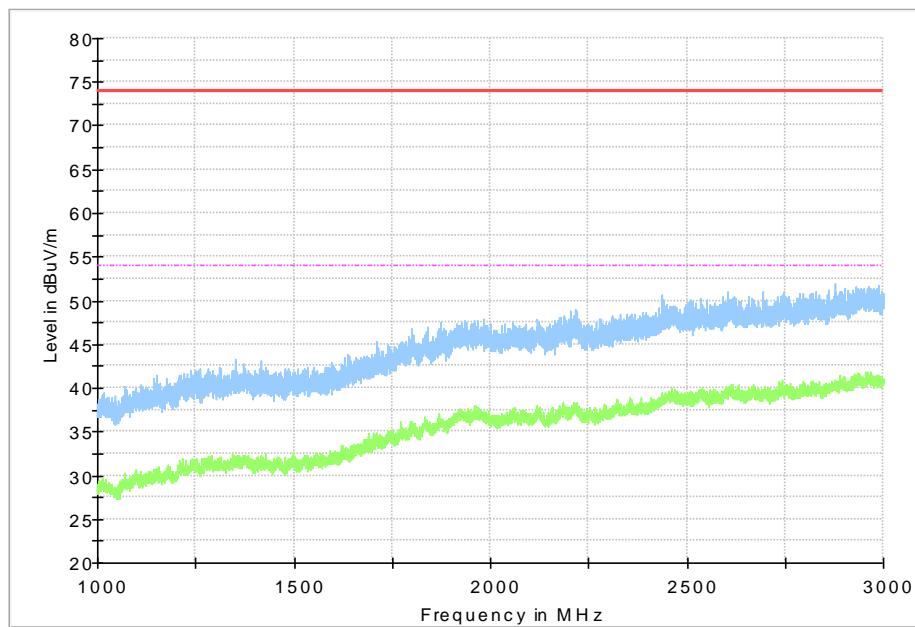


Fig. 87 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz, 1 GHz-3 GHz)

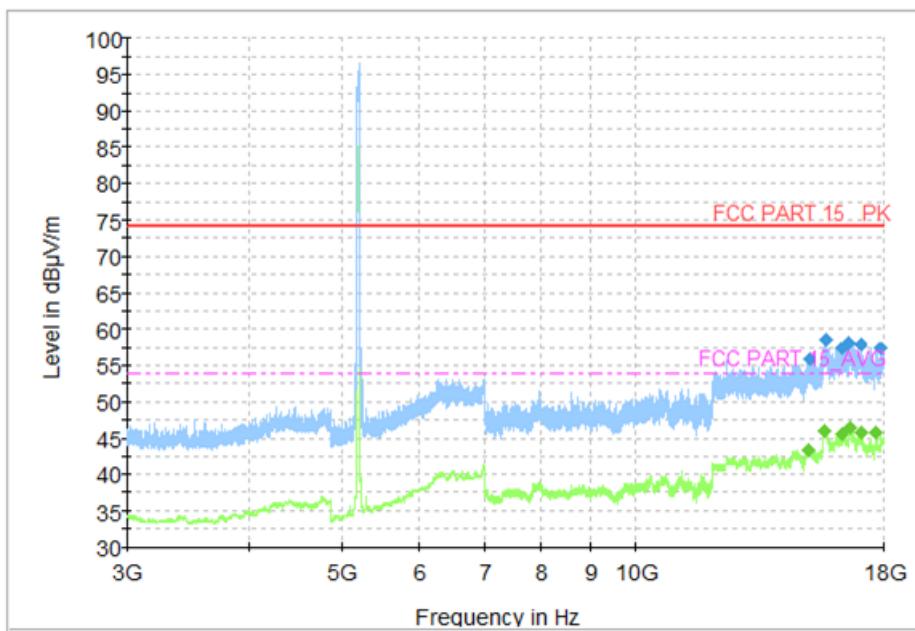


Fig. 88 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz, 3 GHz-18 GHz)

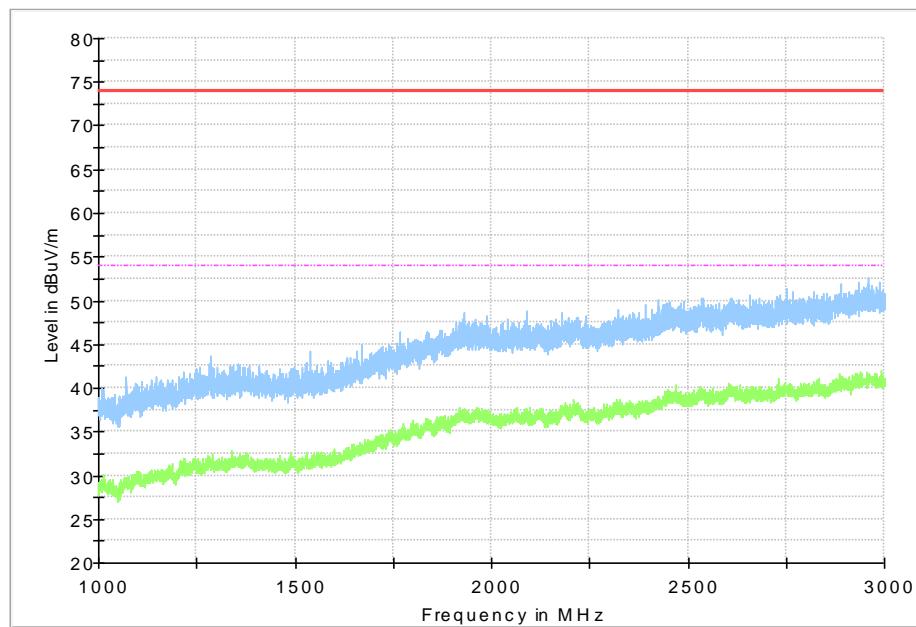


Fig. 89 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz, 1 GHz-3 GHz)

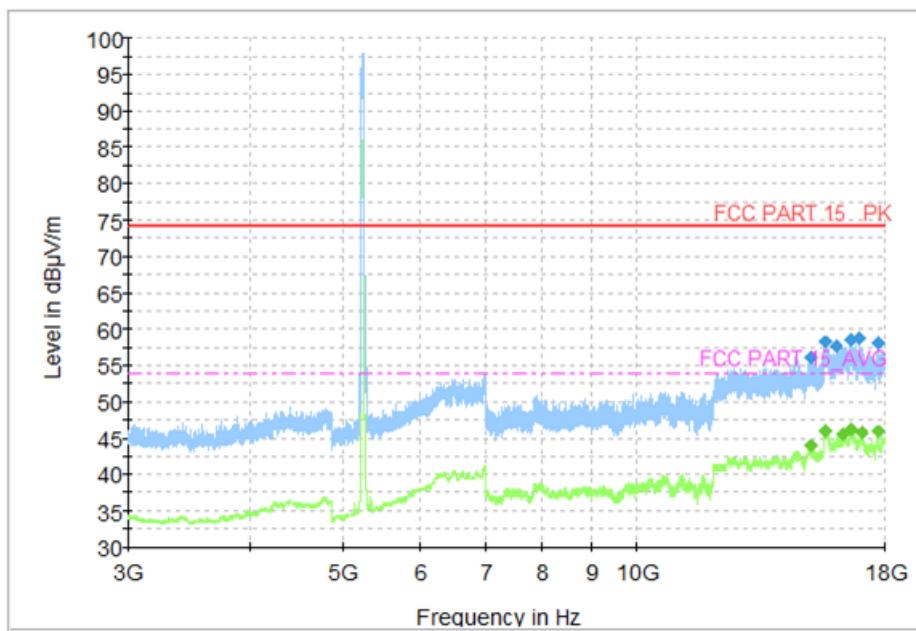


Fig. 90 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz, 3 GHz-18 GHz)

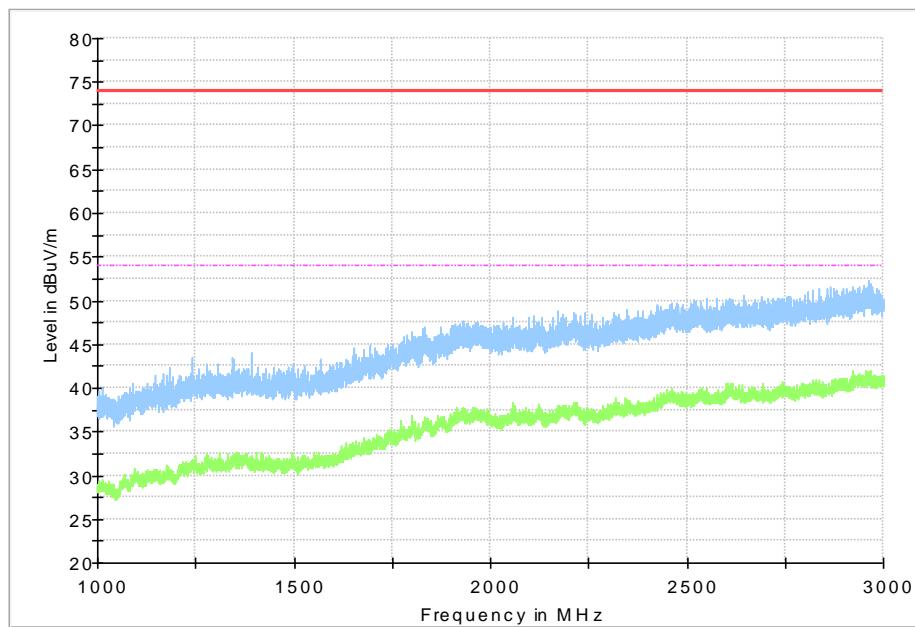


Fig. 91 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz, 1 GHz-3 GHz)

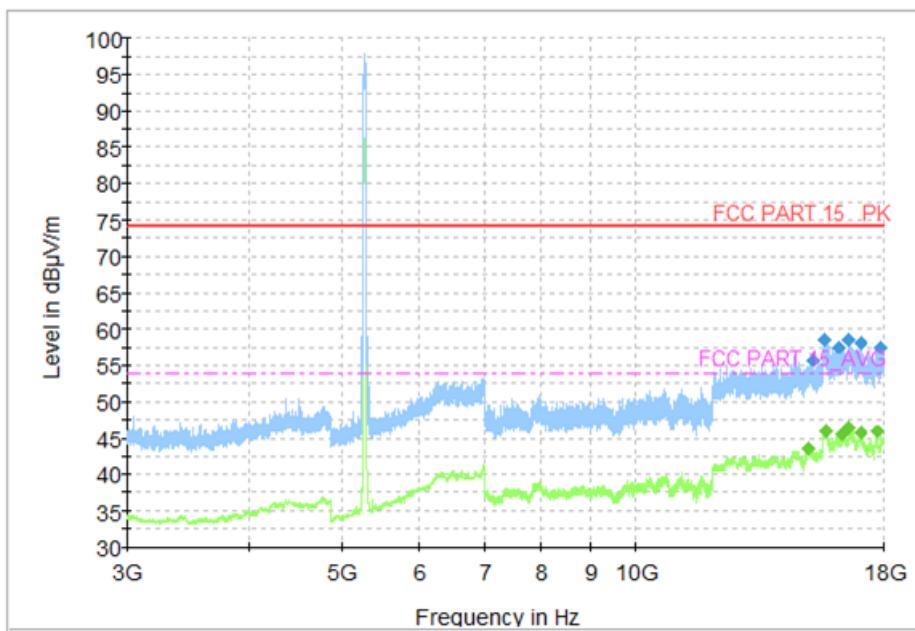


Fig. 92 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz, 3 GHz-18 GHz)

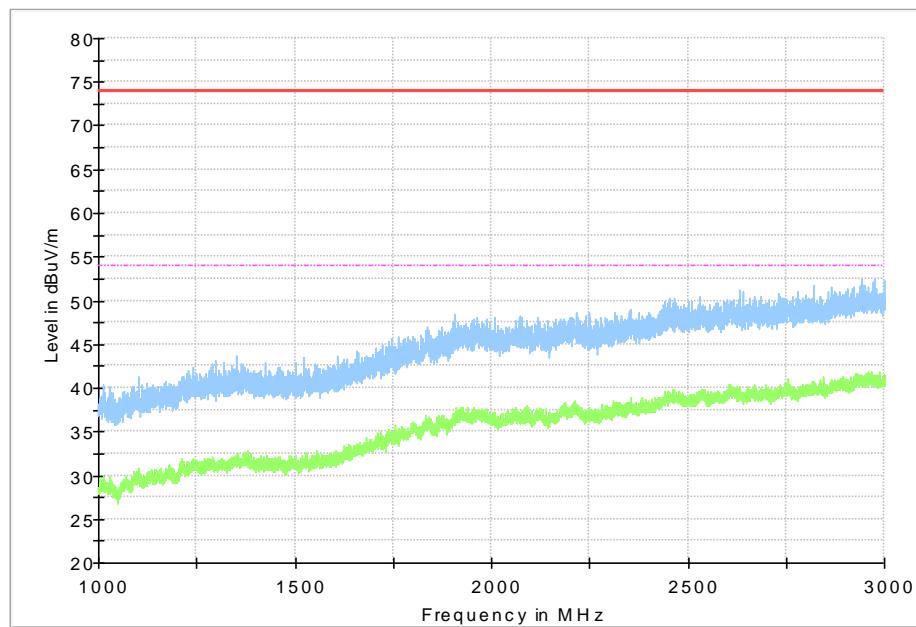


Fig. 93 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz, 1 GHz-3 GHz)

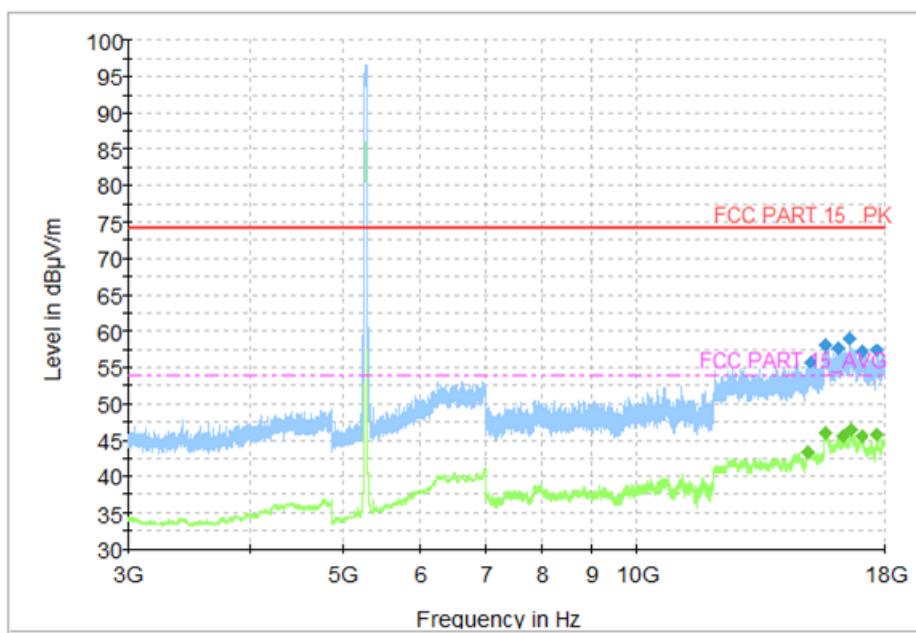


Fig. 94 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz, 3 GHz-18 GHz)

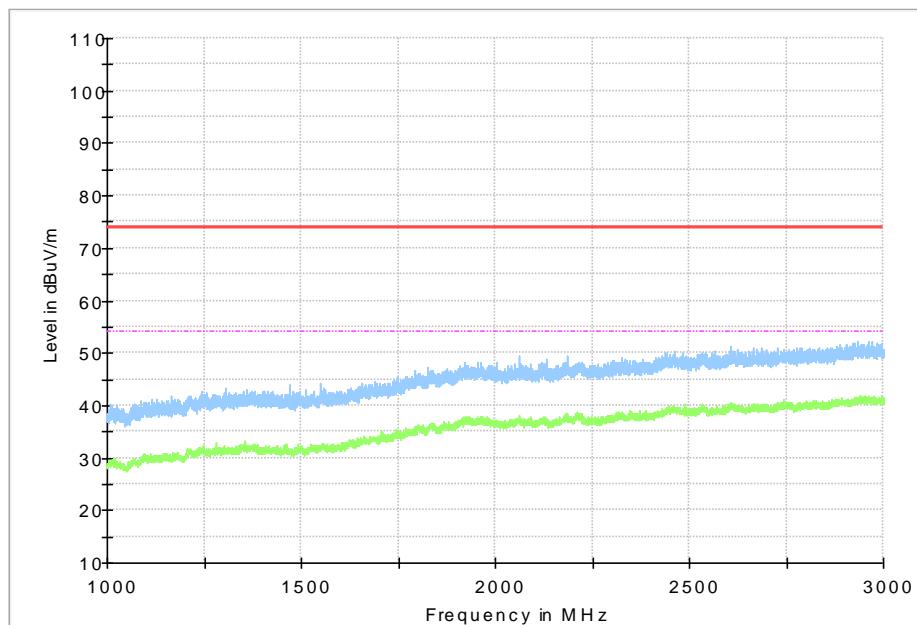


Fig. 95 Transmitter Spurious Emission (802. 11n-HT40, CH102 5510MHz, 1 GHz-3 GHz)

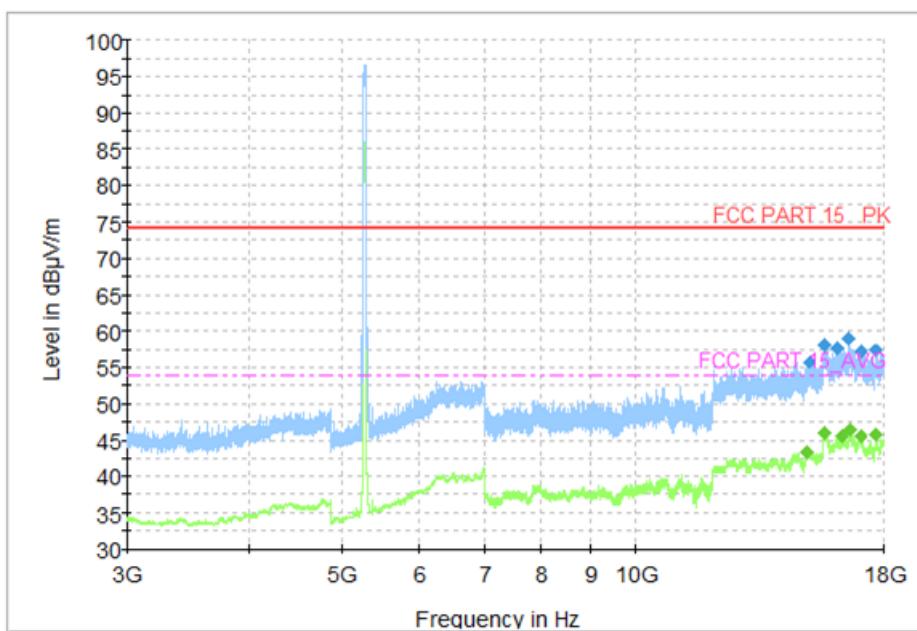


Fig. 96 Transmitter Spurious Emission (802. 11n-HT40, CH102 5510MHz, 3 GHz-18 GHz)

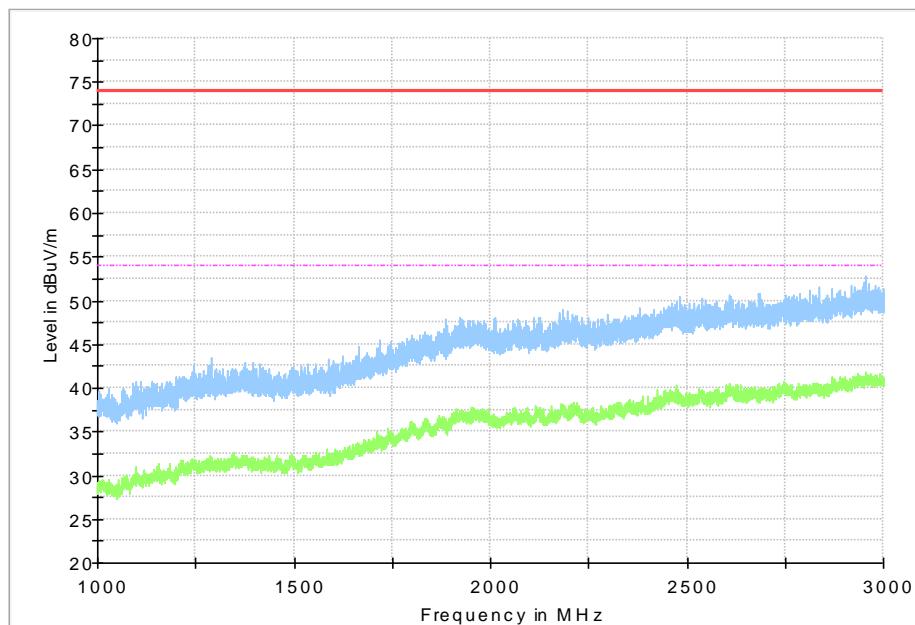


Fig. 97 Transmitter Spurious Emission (802.11n-HT40, CH118 5580MHz, 1 GHz-3 GHz)

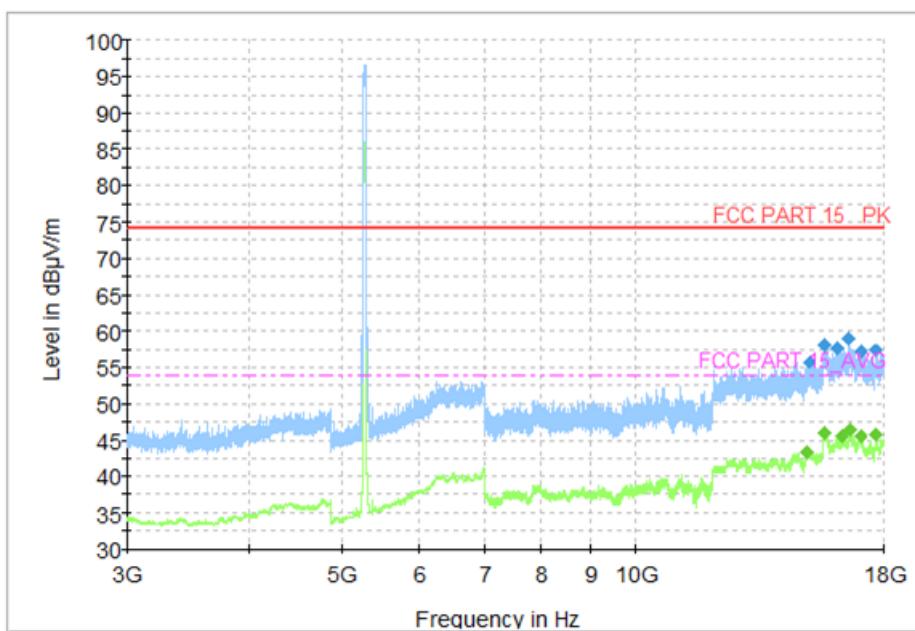


Fig. 98 Transmitter Spurious Emission (802.11n-HT40, CH118 5580MHz, 3 GHz-18 GHz)

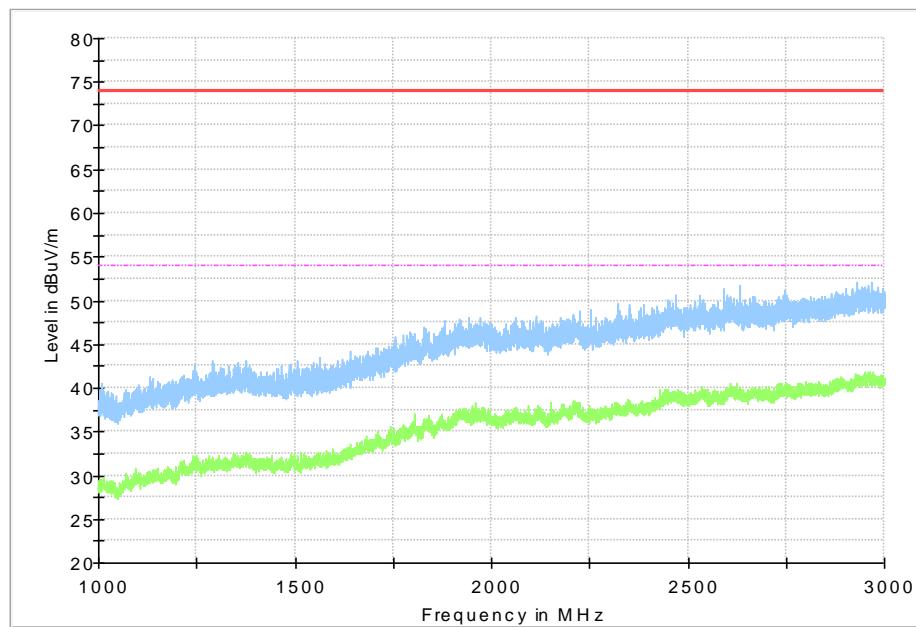


Fig. 99 Transmitter Spurious Emission (802.11n-HT40, CH134 5670MHz, 1 GHz-3 GHz)

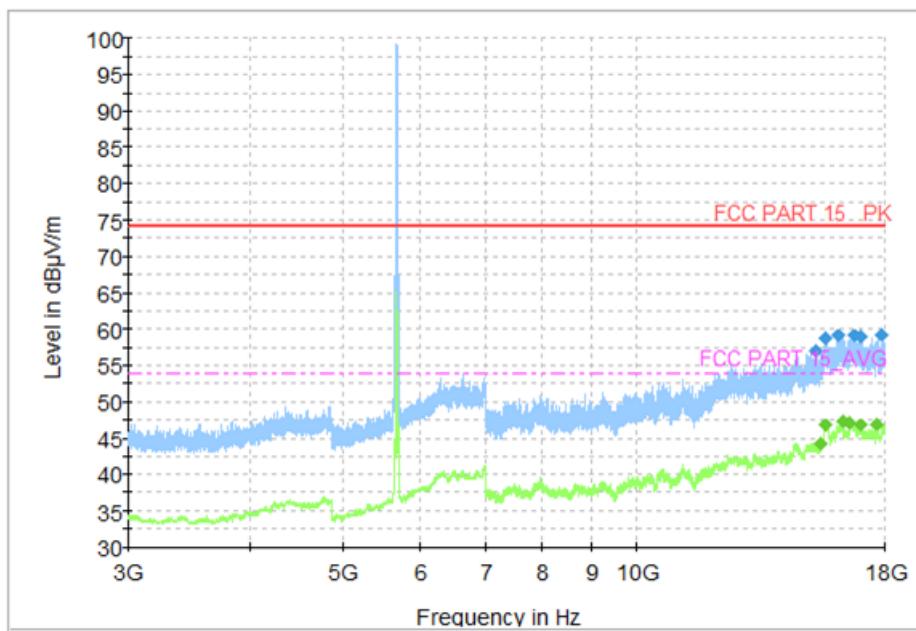


Fig. 100 Transmitter Spurious Emission (802.11n-HT40, CH134 5670MHz, 3 GHz-18 GHz)

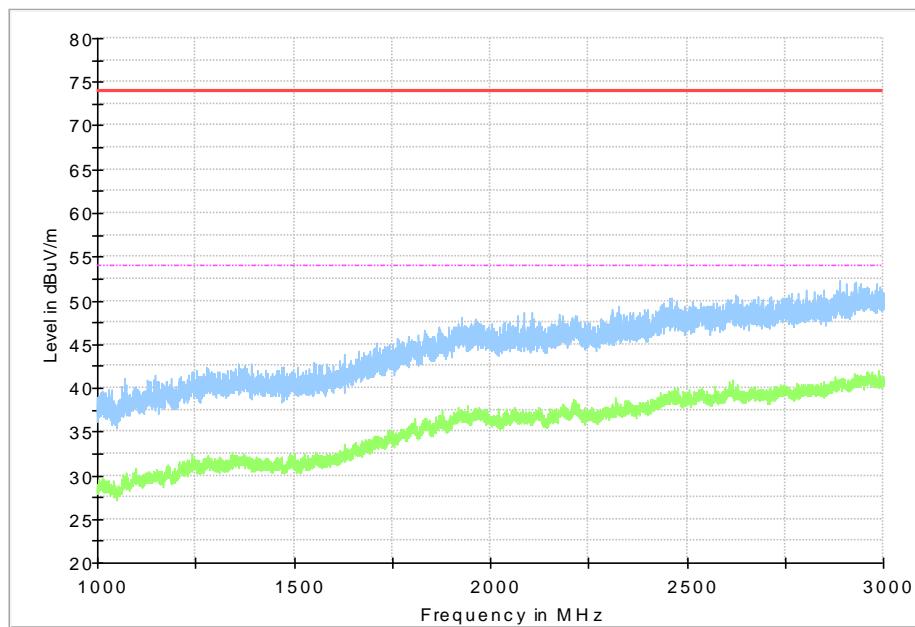


Fig. 101 Transmitter Spurious Emission (802.11n-HT40, CH151 5755MHz, 1 GHz-3 GHz)

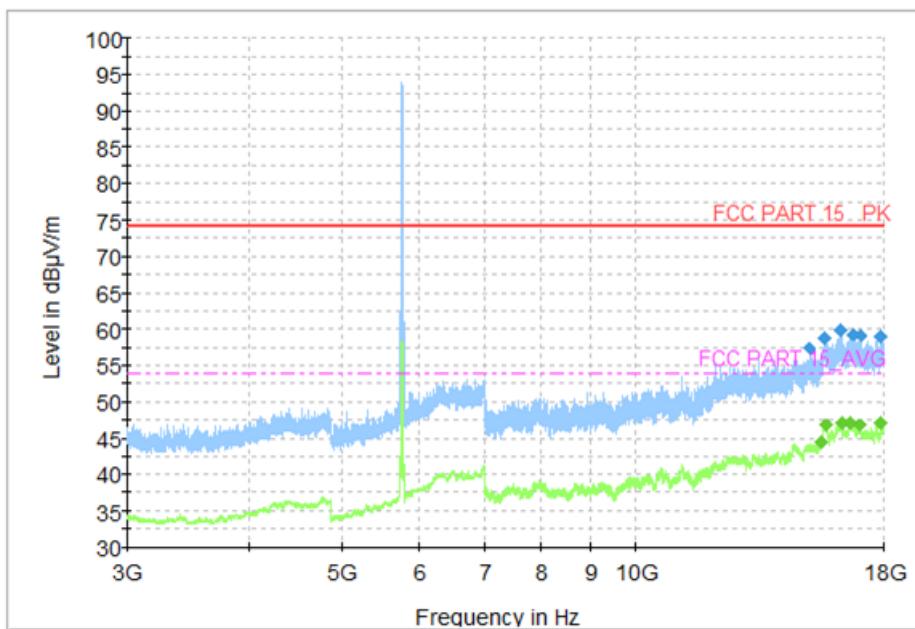


Fig. 102 Transmitter Spurious Emission (802.11n-HT40, CH151 5755MHz, 3 GHz-18 GHz)

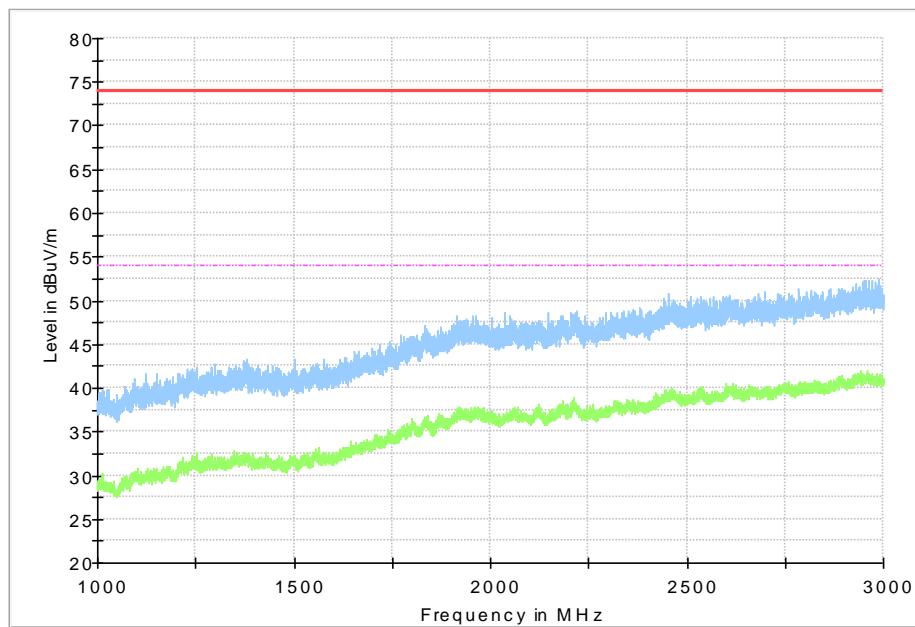


Fig. 103 Transmitter Spurious Emission (802.11n-HT40, CH159 5795MHz, 1 GHz-3 GHz)

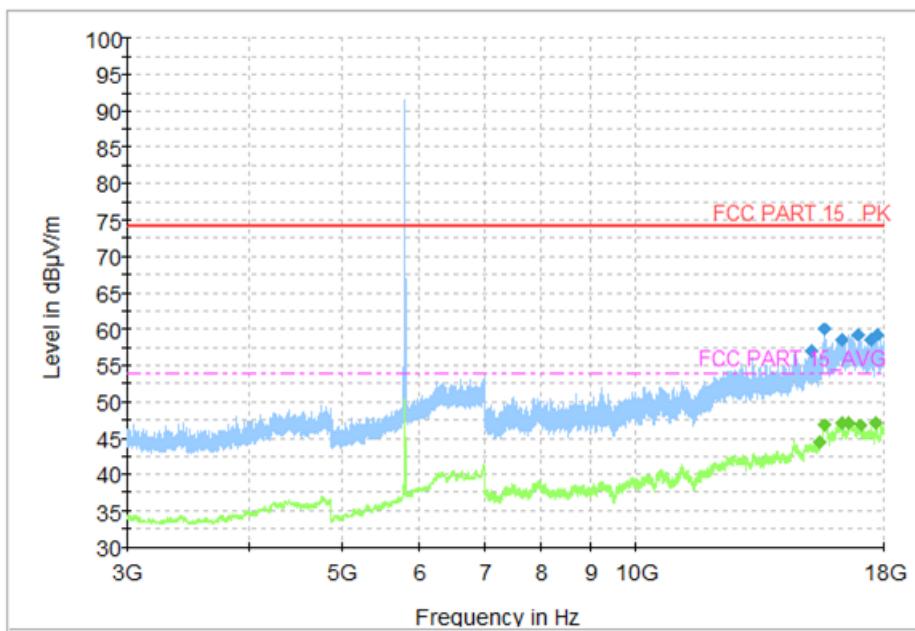


Fig. 104 Transmitter Spurious Emission (802.11n-HT40, CH159 5795MHz, 3 GHz-18 GHz)

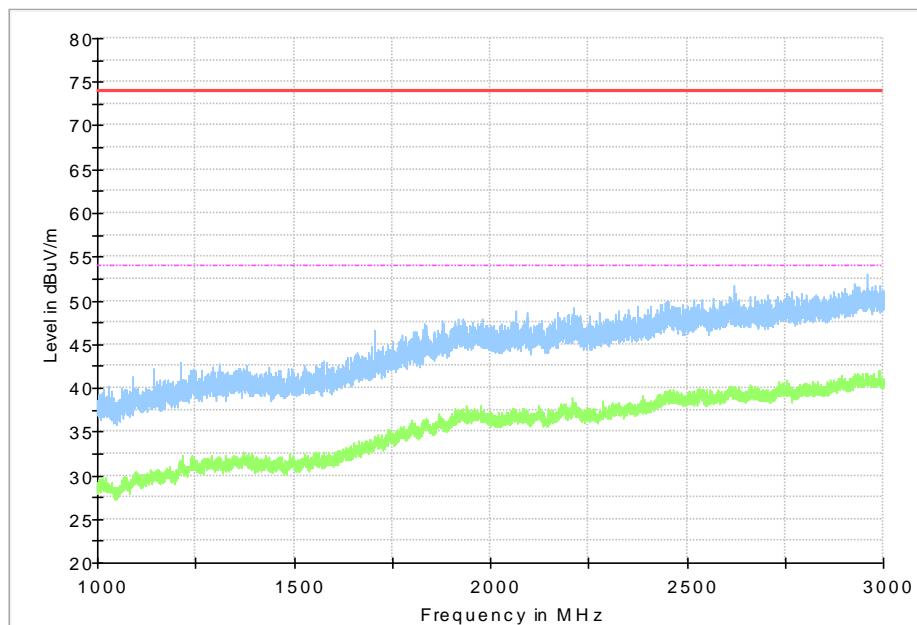


Fig. 105 Transmitter Spurious Emission (802.11ac-VHT80, CH42 5210MHz, 1 GHz-3 GHz)

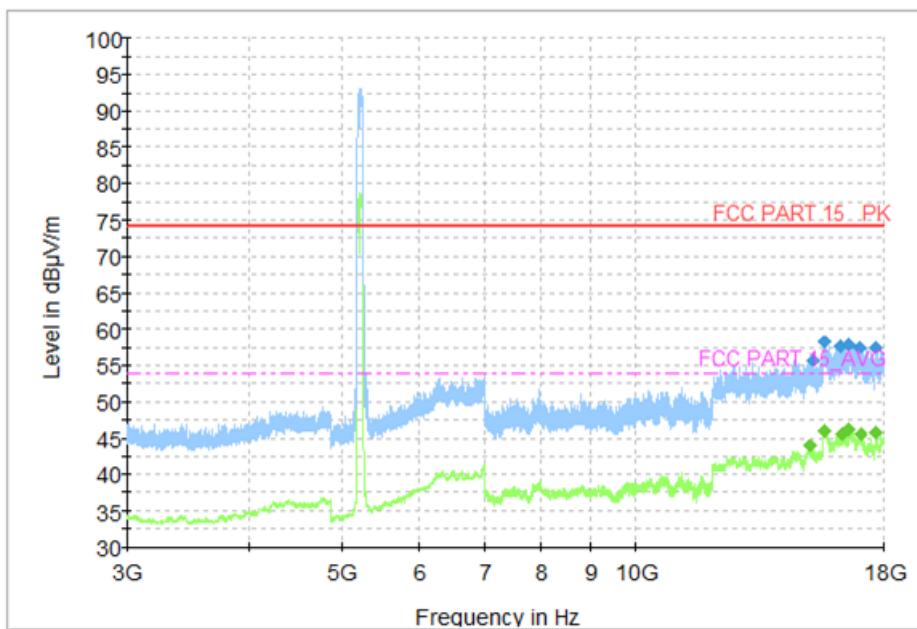


Fig. 106 Transmitter Spurious Emission (802.11ac-VHT80, CH42 5210MHz, 3 GHz-18 GHz)

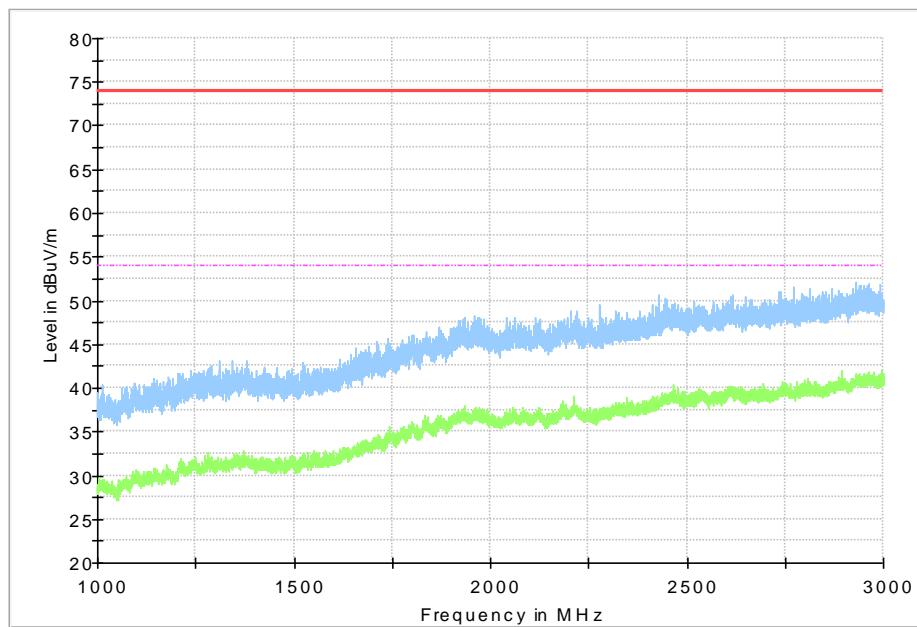


Fig. 107 Transmitter Spurious Emission (802.11ac-VHT80, CH58 5290MHz, 1 GHz-3 GHz)

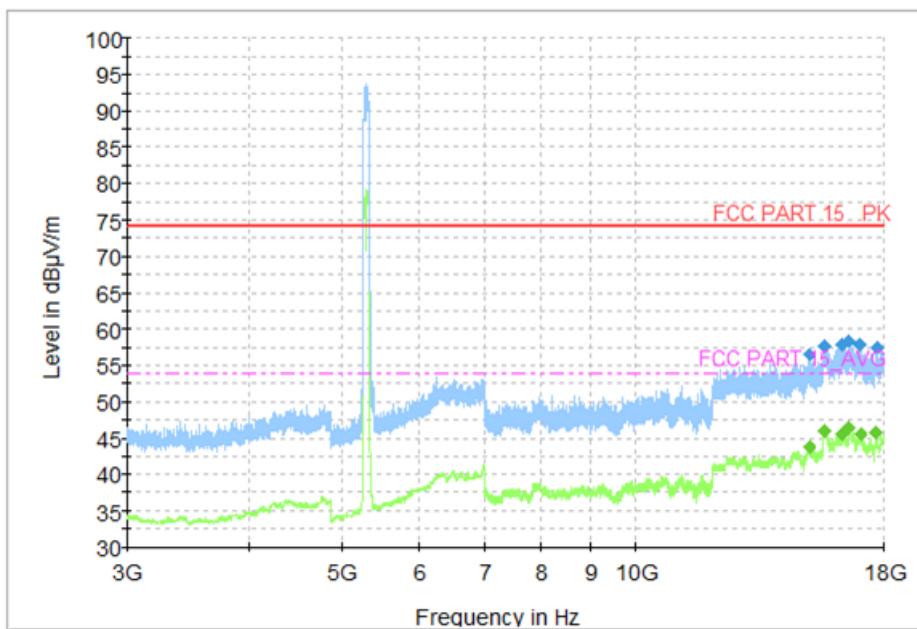


Fig. 108 Transmitter Spurious Emission (802.11ac-VHT80, CH58 5290MHz, 3 GHz-18 GHz)

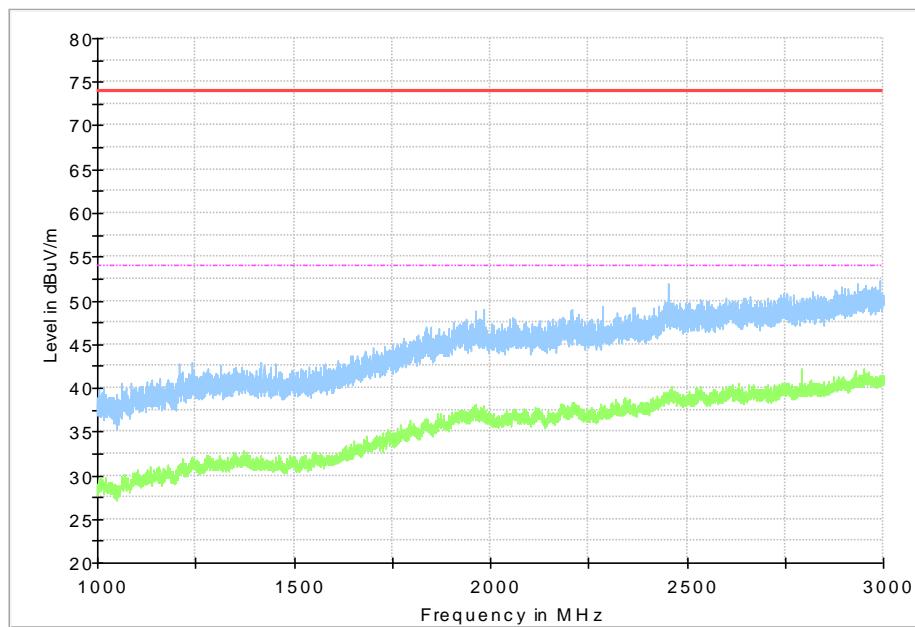


Fig. 109 Transmitter Spurious Emission (802.11ac-VHT80, CH106 5530MHz, 1 GHz-3 GHz)

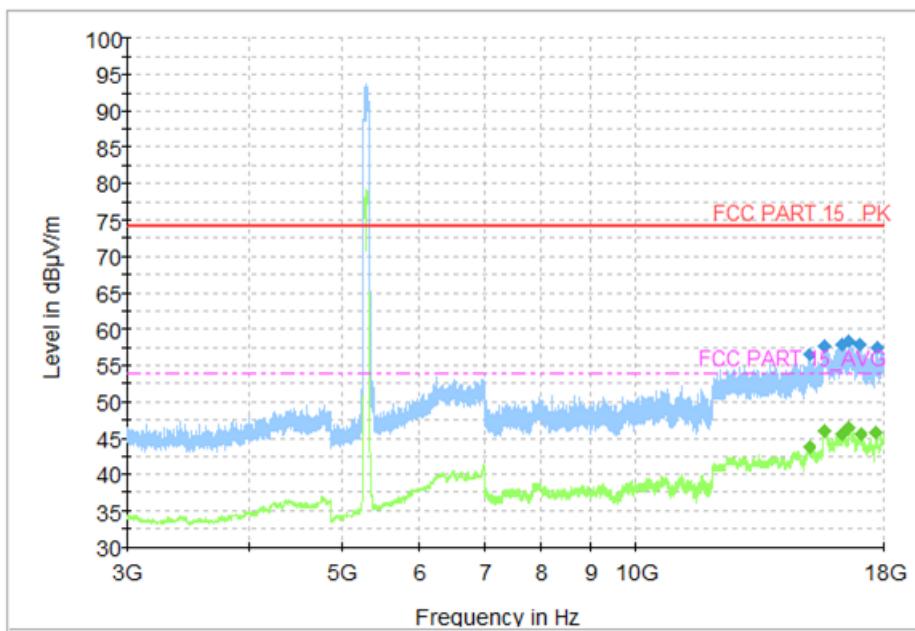


Fig. 110 Transmitter Spurious Emission (802.11ac-VHT80, CH106 5530MHz, 3 GHz-18 GHz)

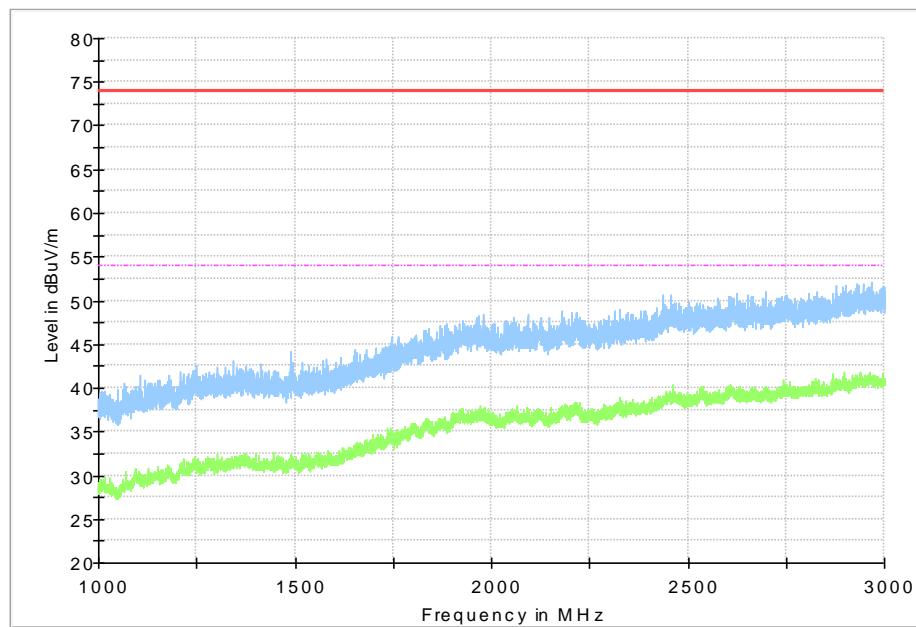


Fig. 111 Transmitter Spurious Emission (802.11ac-VHT80, CH122 5610MHz, 1 GHz-3 GHz)

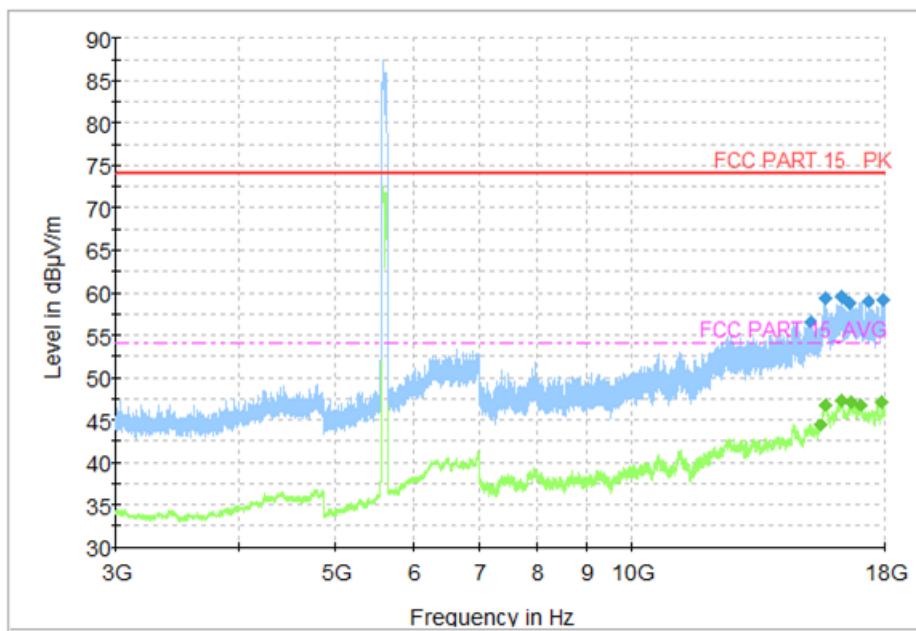


Fig. 112 Transmitter Spurious Emission (802.11ac-VHT80, CH122 5610MHz, 3 GHz-18 GHz)

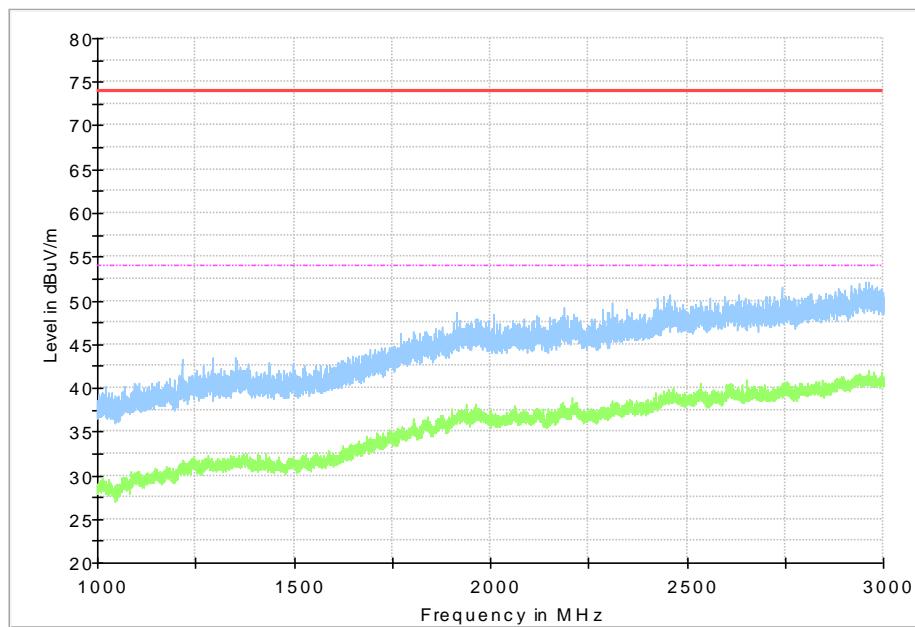


Fig. 113 Transmitter Spurious Emission (802.11ac-VHT80, CH155 5775MHz, 1 GHz-3 GHz)

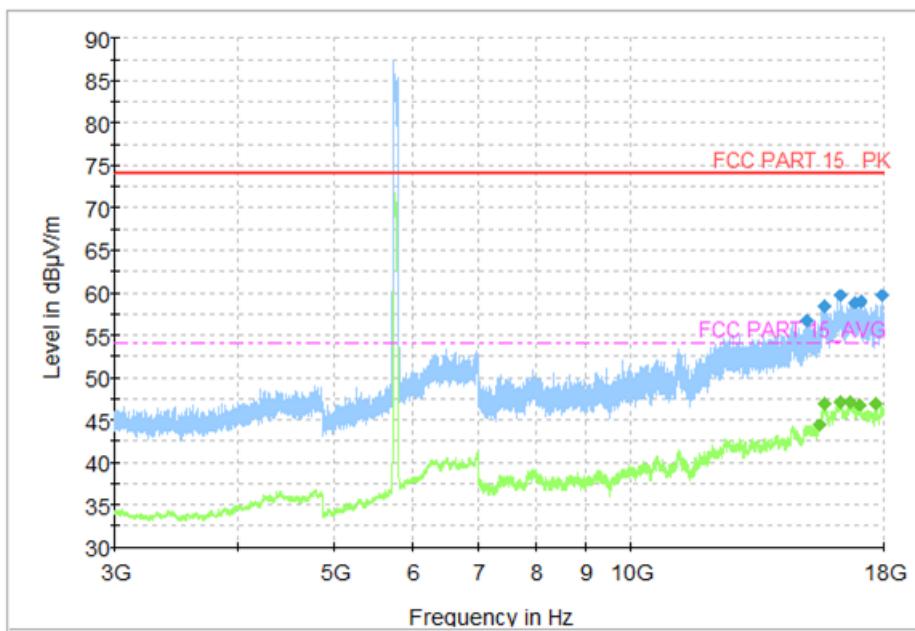


Fig. 114 Transmitter Spurious Emission (802.11ac-VHT80, CH155 5775MHz, 3 GHz-18 GHz)

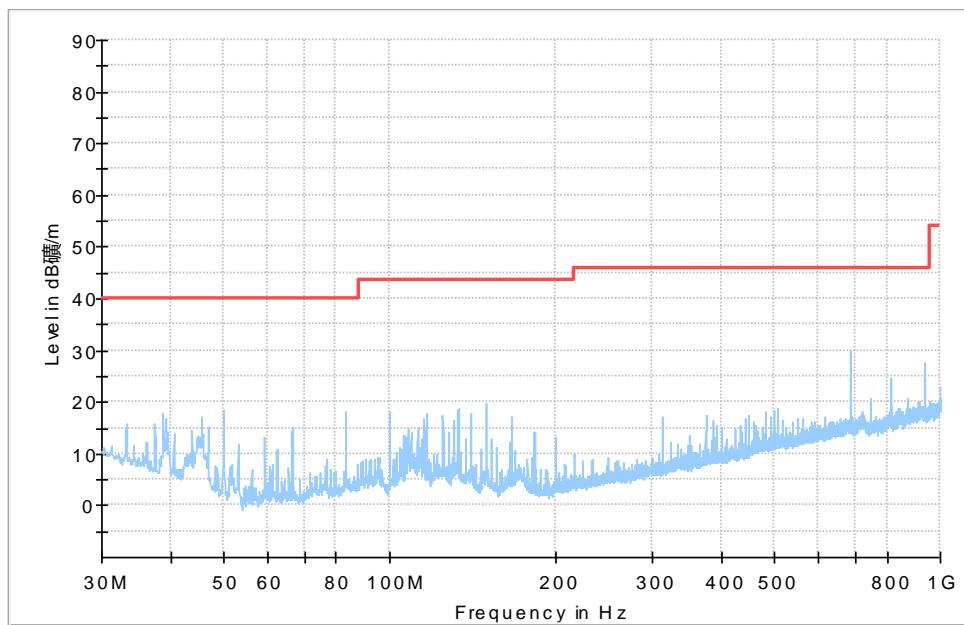


Fig. 115 Transmitter Spurious Emission (All channel, 30MHz~1GHz)

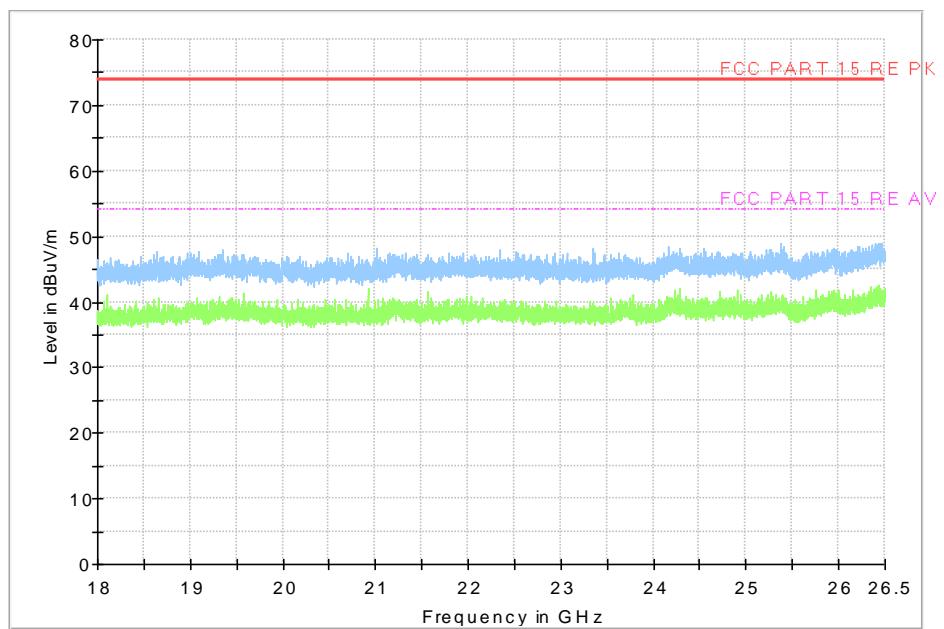


Fig. 116 Transmitter Spurious Emission (All channel, 18GHz~26.5GHz)

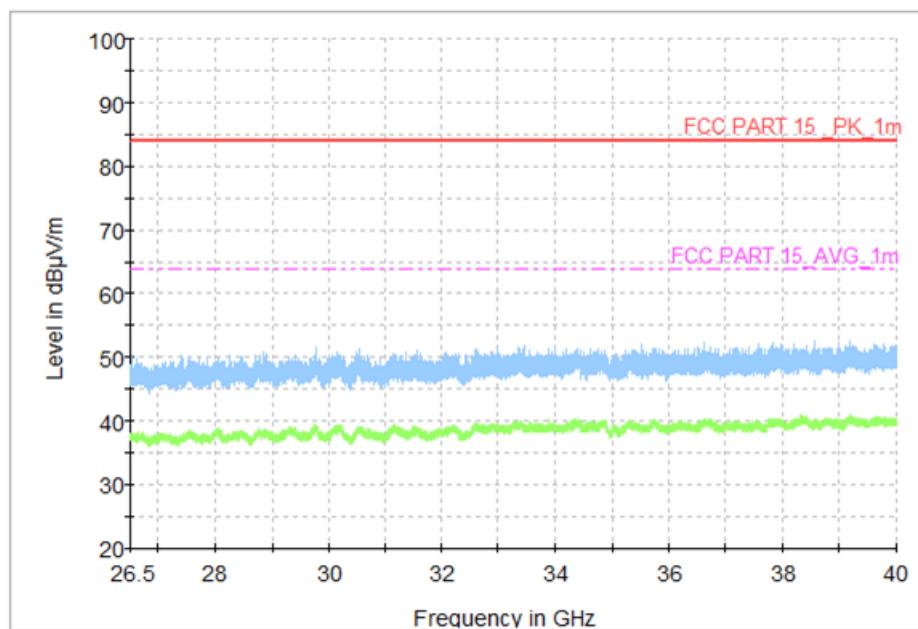


Fig. 117 Transmitter Spurious Emission (All channel, 26.5GHz~40GHz)

Worst Case Result
802.11a CH36

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15140.500000	57.09	74.00	16.91	H	19.6
15720.500000	59.64	74.00	14.36	H	21.3
16227.000000	58.16	74.00	15.84	H	22.5
16611.500000	59.50	74.00	14.50	V	23.1
16996.000000	59.02	74.00	14.98	V	23.3
17893.500000	58.70	74.00	15.30	V	24.9

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15141.000000	44.50	54.00	9.50	V	19.6
15650.500000	46.92	54.00	7.08	V	21.2
16132.500000	46.45	54.00	7.55	V	22.3
16646.000000	47.24	54.00	6.76	V	22.7
17019.000000	46.51	54.00	7.49	V	23.1
17700.500000	46.56	54.00	7.44	V	23.7

802.11a CH52

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15070.000000	55.79	74.00	18.21	V	19.4
15676.000000	57.99	74.00	16.01	H	21.3
16284.000000	57.50	74.00	16.50	V	22.0
16634.500000	57.72	74.00	16.28	V	22.8
17036.000000	57.47	74.00	16.53	V	22.8
17697.000000	57.10	74.00	16.90	H	23.7

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15035.000000	43.46	54.00	10.54	V	19.3
15651.500000	46.12	54.00	7.88	H	21.2
16259.500000	45.52	54.00	8.48	V	22.2
16593.500000	46.44	54.00	7.56	V	23.2
17032.500000	45.50	54.00	8.50	H	22.9
17700.500000	45.65	54.00	8.35	V	23.7

802.11a CH100

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15498.000000	55.30	74.00	18.70	H	19.9
15640.000000	58.09	74.00	15.91	V	21.2
16431.000000	57.57	74.00	16.43	V	22.1
16581.000000	58.39	74.00	15.61	H	23.0
17001.000000	57.24	74.00	16.76	V	23.3
17688.500000	57.94	74.00	16.06	V	23.5

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15200.500000	43.63	54.00	10.37	V	19.8
15667.500000	45.92	54.00	8.08	V	21.3
16372.500000	45.40	54.00	8.60	H	22.0
16590.500000	46.19	54.00	7.81	H	23.1
17036.000000	45.38	54.00	8.62	V	22.8
17699.500000	45.68	54.00	8.32	H	23.7

802.11a CH157

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15142.500000	56.37	74.00	17.63	H	19.6
15676.500000	58.88	74.00	15.12	H	21.3
16261.500000	59.84	74.00	14.16	H	22.2
16790.500000	58.71	74.00	15.29	H	22.3
17403.000000	58.96	74.00	15.04	H	22.8
17882.500000	59.15	74.00	14.85	V	24.7

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15124.000000	44.46	54.00	9.54	H	19.6
15674.000000	46.74	54.00	7.26	H	21.3
16277.000000	47.13	54.00	6.87	V	22.0
16650.000000	47.06	54.00	6.94	V	22.6
17045.000000	46.79	54.00	7.21	V	22.7
17902.500000	47.05	54.00	6.95	V	25.0

802.11n HT40 CH38

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15086.500000	55.90	74.00	18.10	H	19.4
15679.500000	58.49	74.00	15.51	H	21.3
16259.000000	57.32	74.00	16.68	H	22.2
16590.500000	58.09	74.00	15.91	H	23.1
17052.500000	57.92	74.00	16.08	V	22.6
17885.500000	57.26	74.00	16.74	V	24.8

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15032.500000	43.41	54.00	10.59	H	19.3
15667.000000	46.03	54.00	7.97	H	21.3
16260.000000	45.53	54.00	8.47	V	22.2
16630.500000	46.33	54.00	7.67	V	22.9
17075.000000	45.64	54.00	8.36	V	22.2
17699.500000	45.62	54.00	8.38	V	23.7

802.11n HT40 CH62

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15083.000000	55.72	74.00	18.28	H	19.4
15659.000000	57.95	74.00	16.05	H	21.3
16150.500000	57.61	74.00	16.39	H	22.4
16574.000000	58.96	74.00	15.04	H	23.0
17026.000000	57.21	74.00	16.79	H	23.0
17666.000000	57.29	74.00	16.71	V	23.2

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15019.500000	43.44	54.00	10.56	V	19.3
15651.500000	46.10	54.00	7.90	H	21.2
16276.000000	45.46	54.00	8.54	V	22.0
16648.000000	46.31	54.00	7.69	H	22.7
17048.500000	45.59	54.00	8.41	H	22.6
17697.500000	45.63	54.00	8.37	V	23.7

802.11n HT40 CH134

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15278.000000	56.93	74.00	17.07	V	19.8
15670.000000	58.76	74.00	15.24	H	21.3
16145.500000	59.02	74.00	14.98	V	22.4
16756.500000	59.09	74.00	14.91	V	22.2
17004.000000	58.95	74.00	15.05	V	23.3
17916.500000	59.25	74.00	14.75	V	24.8

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15480.000000	44.37	54.00	9.63	V	19.9
15646.500000	46.74	54.00	7.26	H	21.2
16280.500000	47.23	54.00	6.77	H	22.0
16591.000000	47.18	54.00	6.82	V	23.1
17001.000000	46.83	54.00	7.17	V	23.3
17700.000000	46.97	54.00	7.03	H	23.7

802.11n HT40 CH151

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15104.500000	57.31	74.00	16.69	V	19.5
15649.500000	58.80	74.00	15.20	V	21.2
16215.000000	59.72	74.00	14.28	V	22.6
16737.000000	59.29	74.00	14.71	V	22.1
17038.000000	59.11	74.00	14.89	V	22.8
17867.500000	58.87	74.00	15.13	V	24.4

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15497.000000	44.54	54.00	9.46	H	19.9
15702.500000	46.72	54.00	7.28	H	21.4
16266.500000	47.12	54.00	6.88	V	22.1
16646.000000	47.16	54.00	6.84	V	22.7
16999.500000	46.78	54.00	7.22	H	23.3
17899.500000	47.05	54.00	6.95	V	25.0

802.11ac VHT80 CH42

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15211.500000	55.78	74.00	18.22	H	19.8
15652.500000	58.18	74.00	15.82	V	21.2
16253.000000	57.70	74.00	16.30	V	22.2
16571.500000	57.81	74.00	16.19	H	22.9
17016.000000	57.55	74.00	16.45	H	23.1
17654.500000	57.48	74.00	16.52	H	23.1

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15119.500000	43.98	54.00	10.02	H	19.5
15664.000000	46.05	54.00	7.95	H	21.3
16259.000000	45.55	54.00	8.45	V	22.2
16586.500000	46.25	54.00	7.75	V	23.1
17019.500000	45.56	54.00	8.44	V	23.0
17700.000000	45.64	54.00	8.36	V	23.7

802.11ac VHT80 CH122

Frequency (MHz)	Max Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15124.500000	56.65	74.00	17.35	H	19.6
15701.500000	59.30	74.00	14.70	V	21.4
16268.000000	59.40	74.00	14.60	V	22.1
16619.000000	58.66	74.00	15.34	V	23.0
17337.500000	58.98	74.00	15.02	H	22.5
17924.500000	59.17	74.00	14.83	V	24.7

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB)
15494.500000	44.39	54.00	9.61	V	19.9
15670.500000	46.70	54.00	7.30	H	21.3
16259.000000	47.23	54.00	6.77	H	22.2
16645.500000	47.13	54.00	6.87	V	22.7
17001.500000	46.74	54.00	7.26	V	23.3
17896.000000	47.08	54.00	6.92	V	24.9

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

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.118	P

Conclusion: PASS

Test graphs as below:

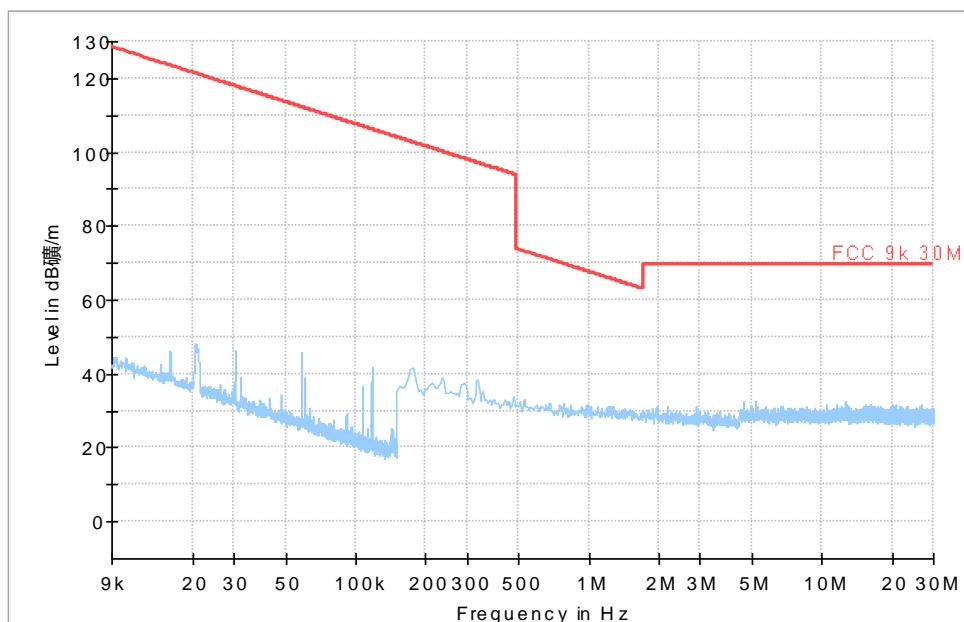


Fig. 118 Radiated Spurious Emission (All Channel, 9 kHz ~30 MHz)

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.119	Fig.120	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 119	Fig 120	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:

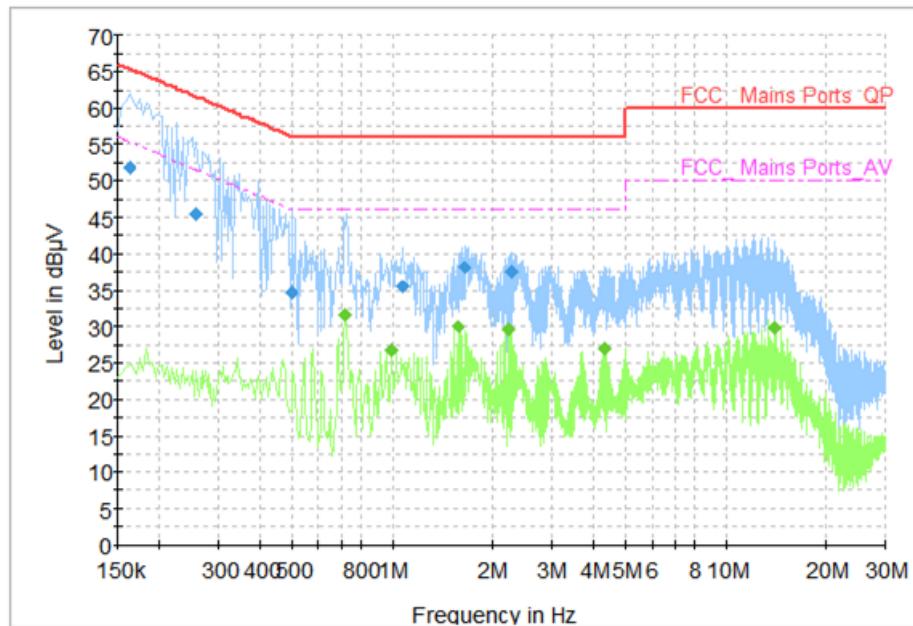


Fig. 119 AC Power line Conducted Emission (802.11n, AE1, 120V)

Measurement Result: Quasi Peak

Frequency (MHz)	QuasiPeak (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.162000	51.90	65.36	13.47	L1	ON	9.7
0.258000	45.41	61.50	16.08	N	ON	9.6
0.494000	34.78	56.10	21.32	L1	ON	9.7
1.070000	35.36	56.00	20.64	N	ON	9.7
1.642000	38.07	56.00	17.93	N	ON	9.7
2.286000	37.64	56.00	18.36	N	ON	9.7

Measurement Result: Average

Frequency (MHz)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.718000	31.54	46.00	14.46	N	ON	9.7
0.990000	26.86	46.00	19.14	N	ON	9.7
1.566000	29.95	46.00	16.05	N	ON	9.7
2.214000	29.68	46.00	16.32	N	ON	9.7
4.322000	26.99	46.00	19.01	N	ON	9.7
14.002000	29.86	50.00	20.14	N	ON	9.9

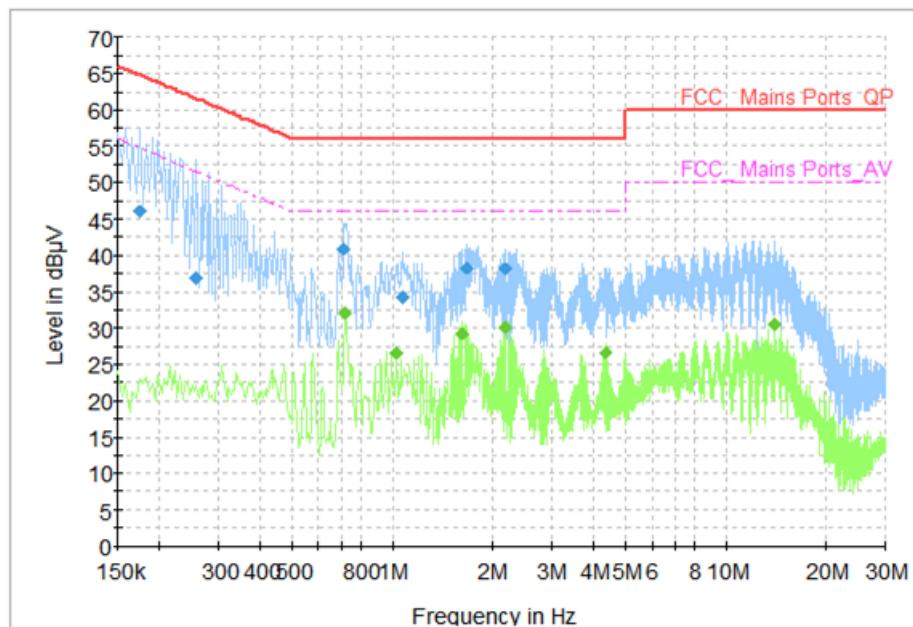


Fig. 120 AC Power line Conducted Emission (Idle, AE1, 120V)

Measurement Result: Quasi Peak

Frequency (MHz)	QuasiPeak (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.174000	46.07	64.77	18.70	L1	ON	9.7
0.258000	36.80	61.50	24.69	L1	ON	9.7
0.714000	40.95	56.00	15.05	N	ON	9.7
1.074000	34.25	56.00	21.75	N	ON	9.7
1.674000	38.18	56.00	17.82	N	ON	9.7
2.182000	38.01	56.00	17.99	N	ON	9.7

Measurement Result: Average

Frequency (MHz)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.722000	32.07	46.00	13.93	N	ON	9.7
1.026000	26.57	46.00	19.43	N	ON	9.7
1.606000	29.22	46.00	16.78	N	ON	9.7
2.182000	30.20	46.00	15.80	N	ON	9.7
4.362000	26.63	46.00	19.37	N	ON	9.7
13.994000	30.43	50.00	19.57	N	ON	9.9

A.11. Frequency Stability

Manufacturers ensured the EUT meet the requirement of frequency stability, such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

Measurement Result:

Mode	Channel	Condition		Frequency	Conclusion
802.11a	5180 MHz (CH36)	T nom	V nom	5179.9841	P
		T max	V nom	5179.9854	P
		T min	V nom	5179.9846	P
		T nom	V max	5179.9830	P
		T nom	V min	5179.9772	P
802.11n HT40	5550 MHz (CH110)	T nom	V nom	5549.9132	P
		T max	V nom	5549.9639	P
		T min	V nom	5549.9682	P
		T nom	V max	5549.9657	P
		T nom	V min	5549.9652	P
802.11ac VHT80	5690 MHz (CH138)	T nom	V nom	5689.9831	P
		T max	V nom	5689.9752	P
		T min	V nom	5689.9754	P
		T nom	V max	5689.9842	P
		T nom	V min	5689.9753	P

A.12. 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 BODY ***