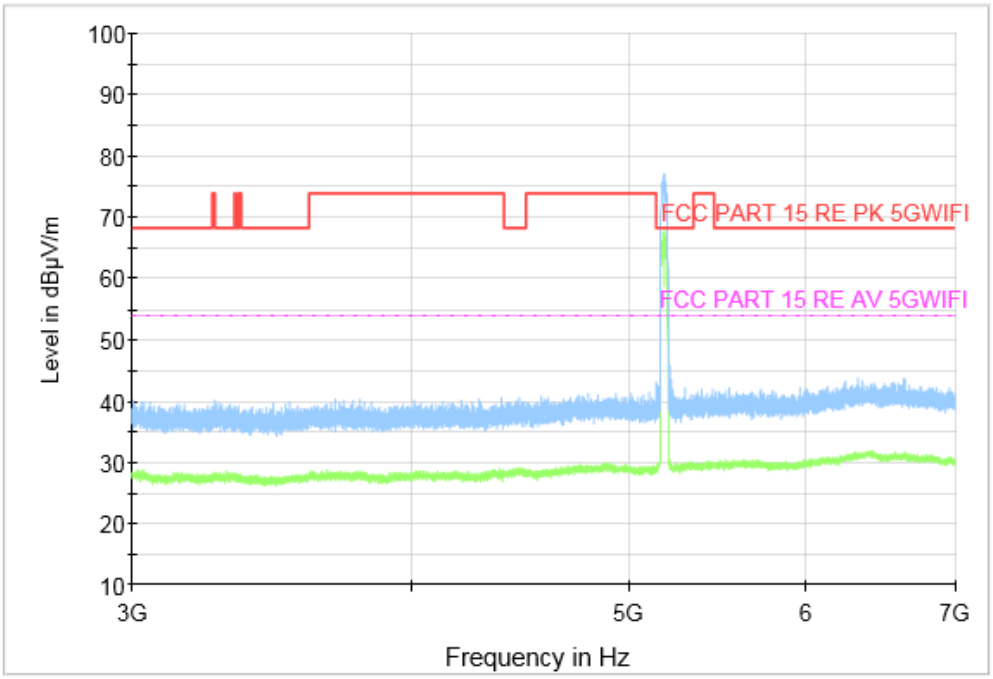

Fig. 87 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz, 3 GHz-7 GHz)

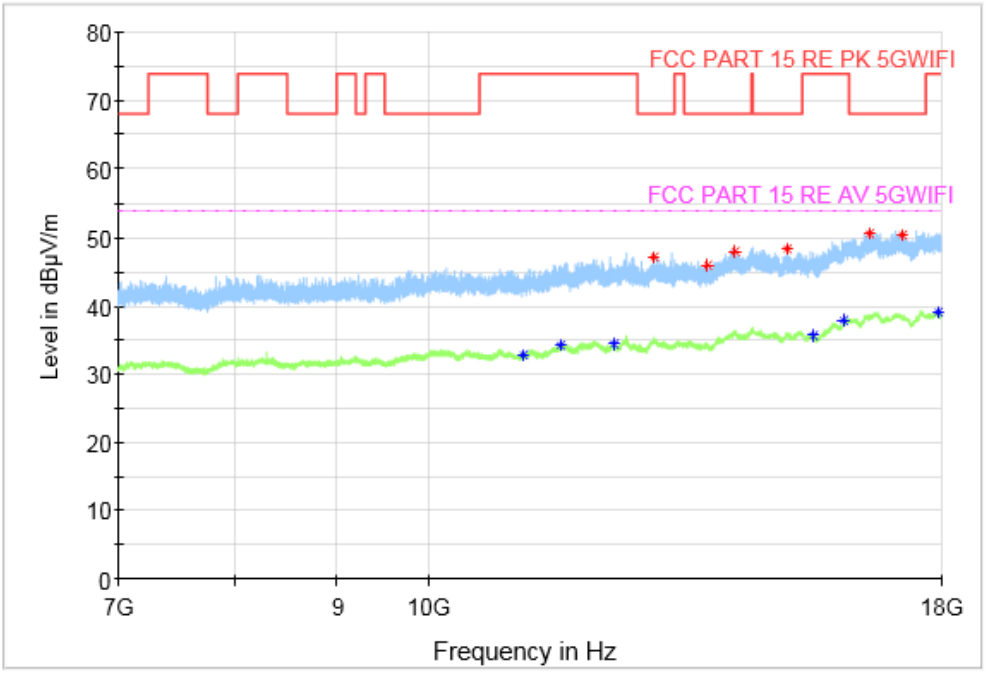

Fig. 88 Transmitter Spurious Emission (802.11n-HT40, CH38 5190MHz, 7 GHz-18 GHz)

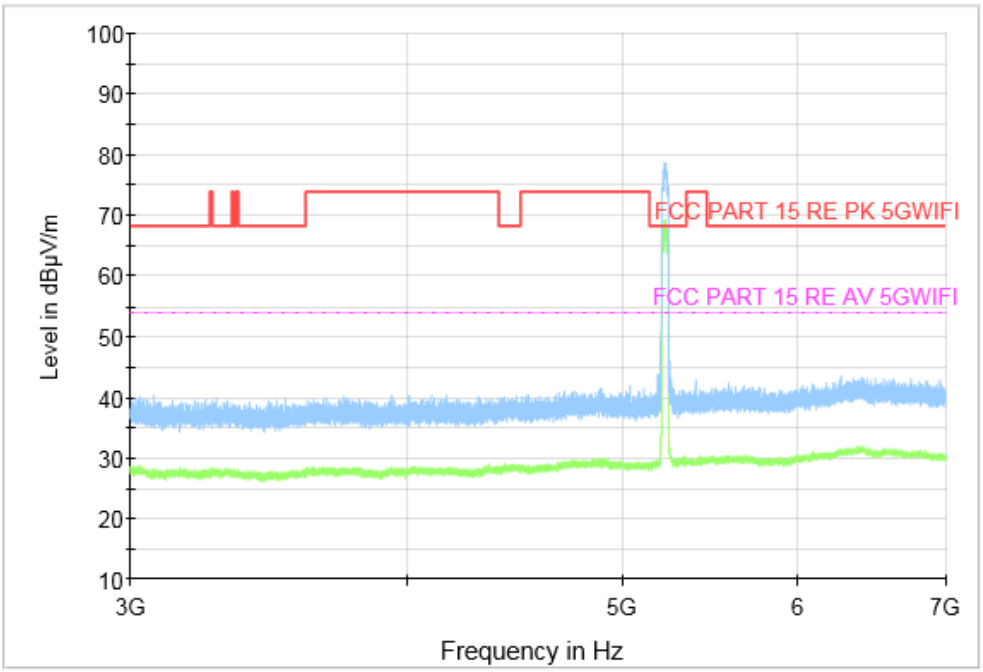

Fig. 89 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz, 3 GHz-7 GHz)

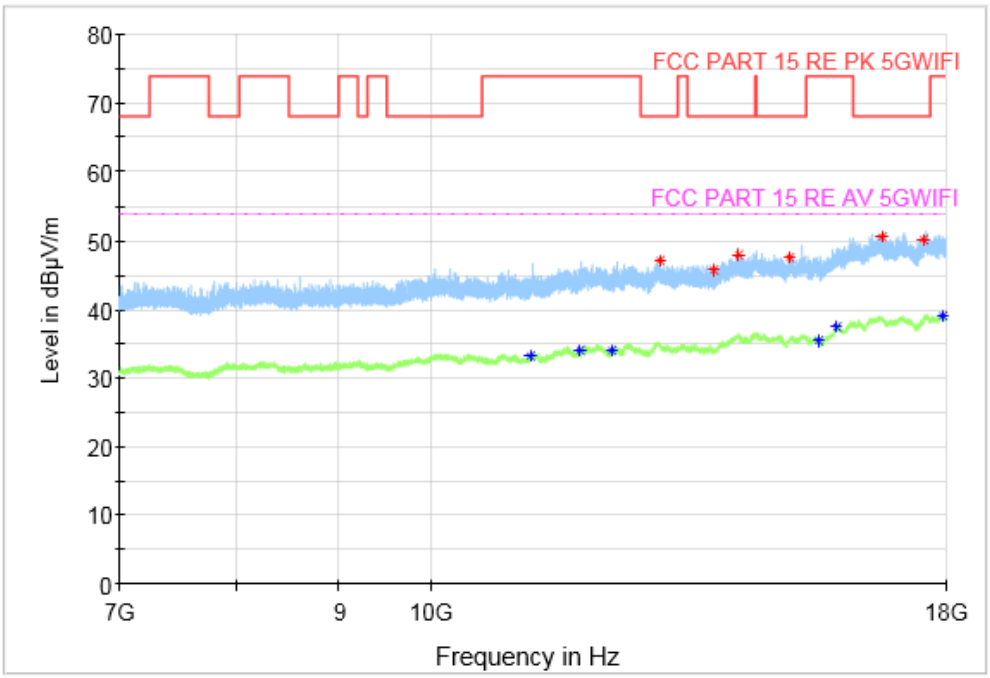

Fig. 90 Transmitter Spurious Emission (802.11n-HT40, CH46 5230MHz, 7 GHz-18 GHz)

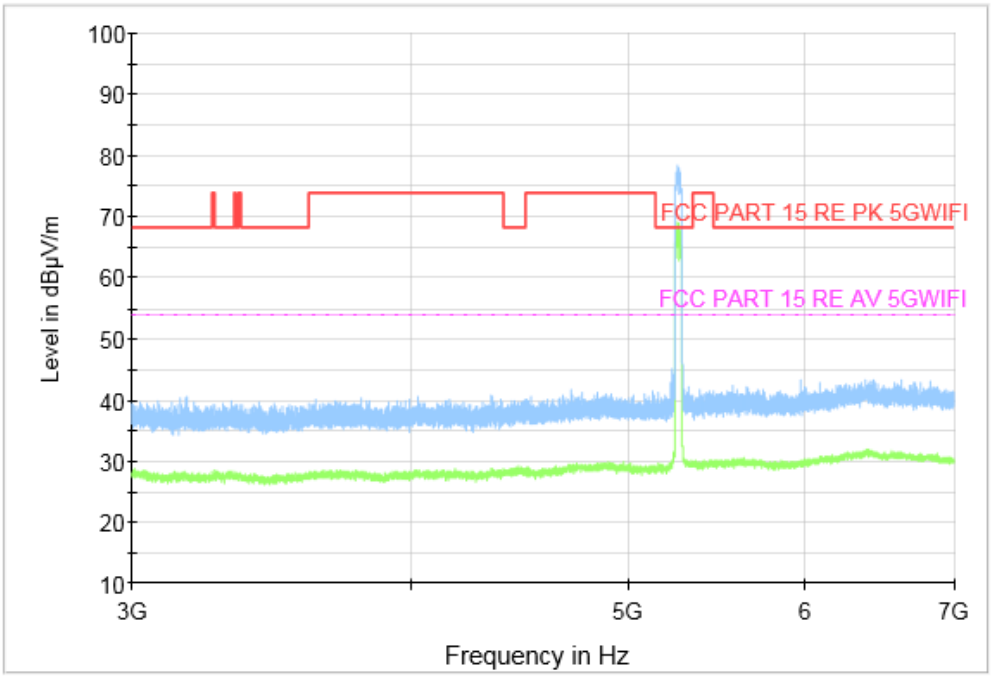

Fig. 91 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz, 3 GHz-7 GHz)

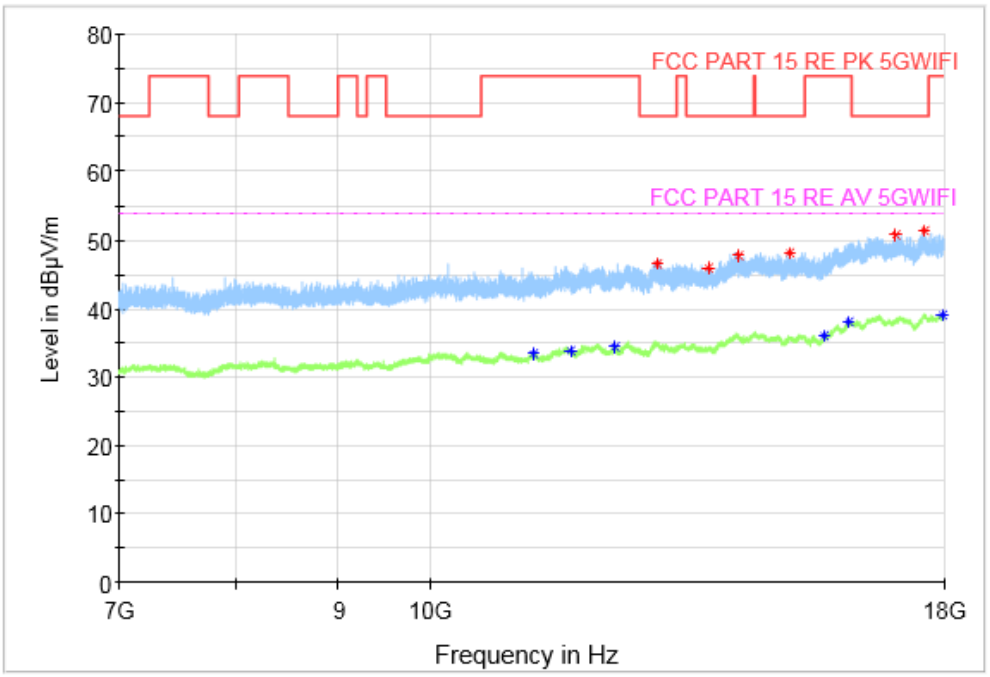

Fig. 92 Transmitter Spurious Emission (802.11n-HT40, CH54 5270MHz, 7 GHz-18 GHz)

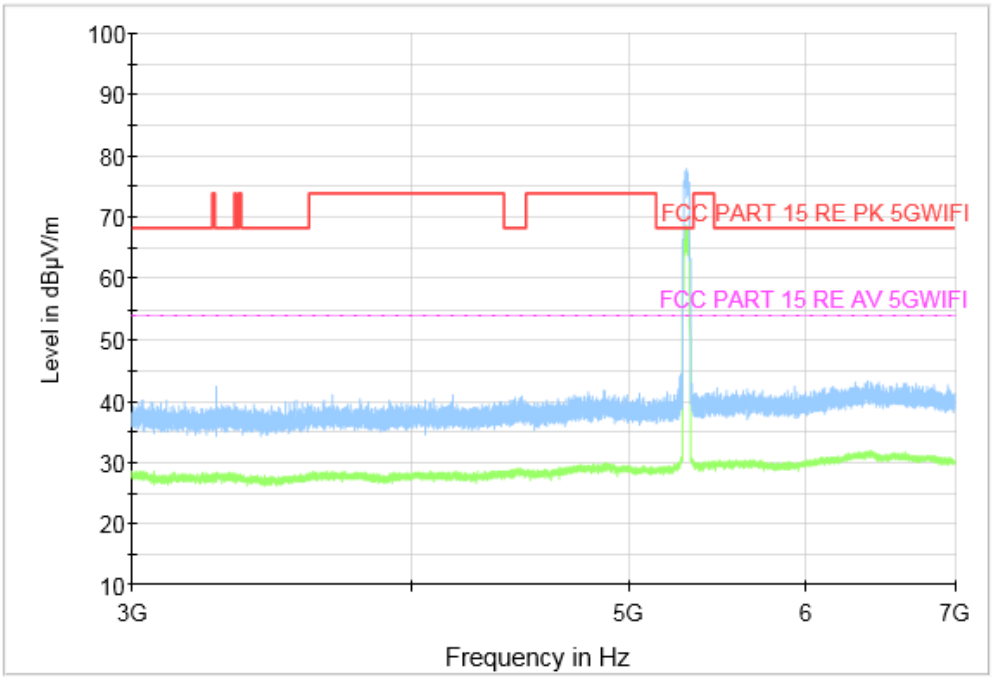

Fig. 93 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz, 3 GHz-7 GHz)

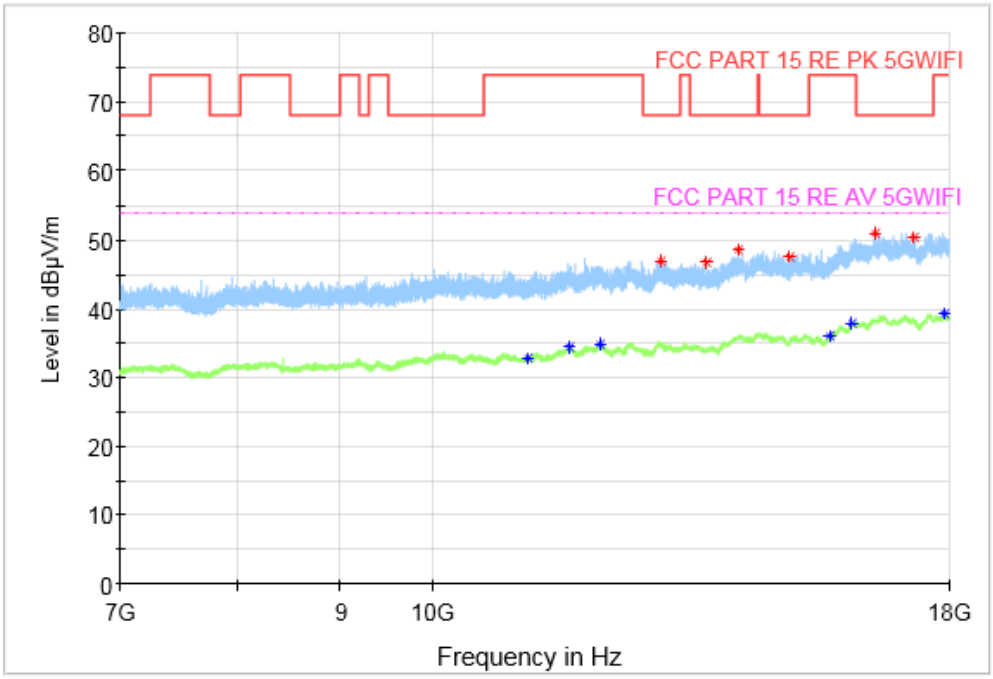

Fig. 94 Transmitter Spurious Emission (802.11n-HT40, CH62 5310MHz, 7 GHz-18 GHz)

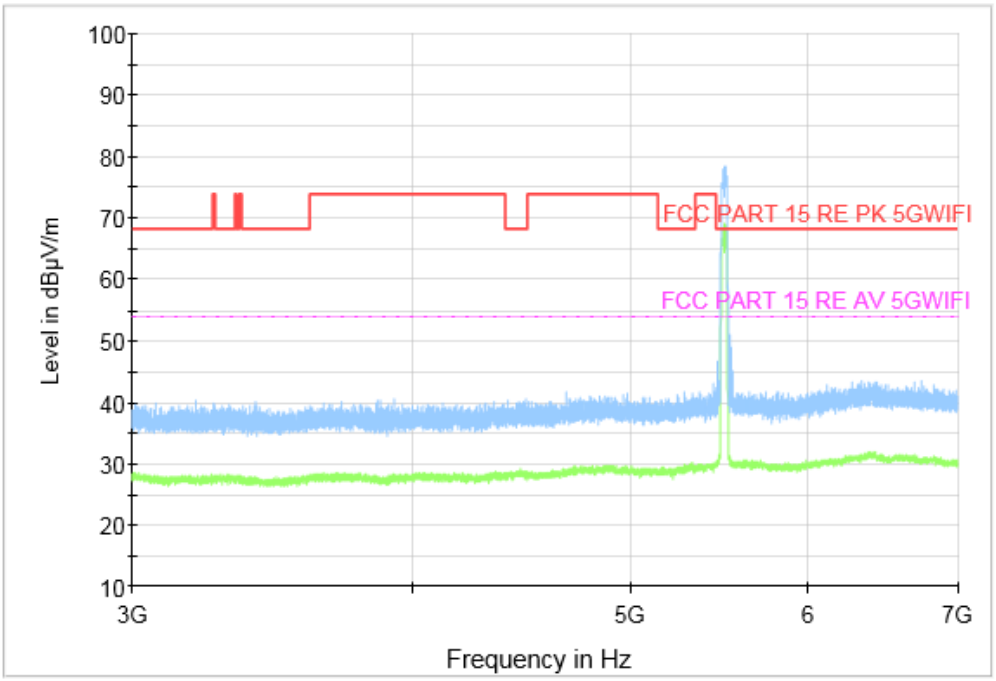

Fig. 95 Transmitter Spurious Emission (802. 11n-HT40, CH102 5510MHz, 3 GHz-7 GHz)

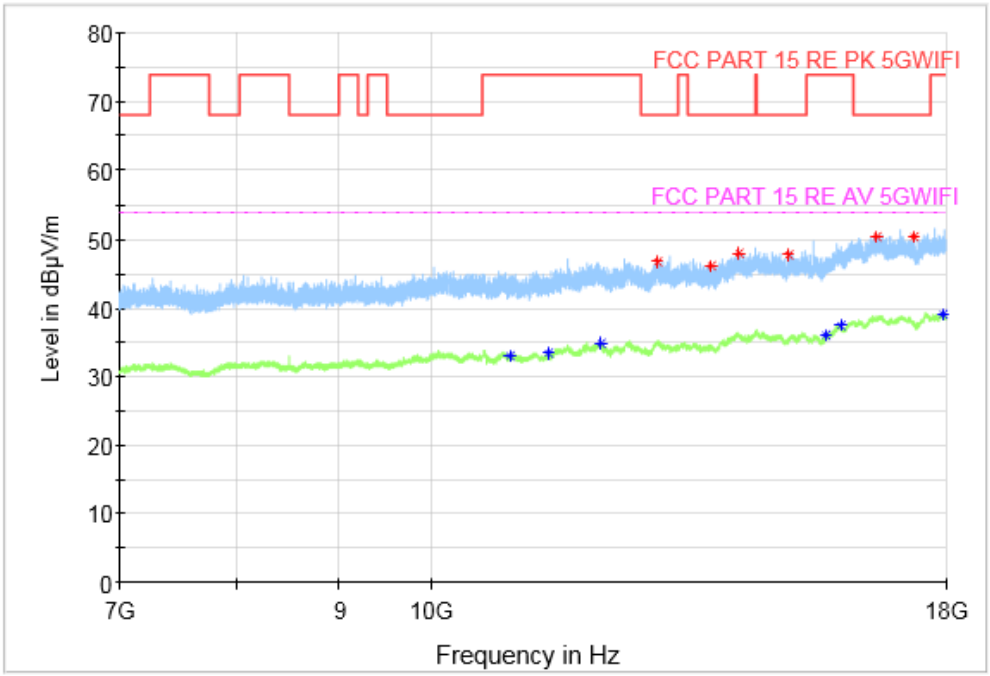

Fig. 96 Transmitter Spurious Emission (802. 11n-HT40, CH102 5510MHz, 7 GHz-18 GHz)

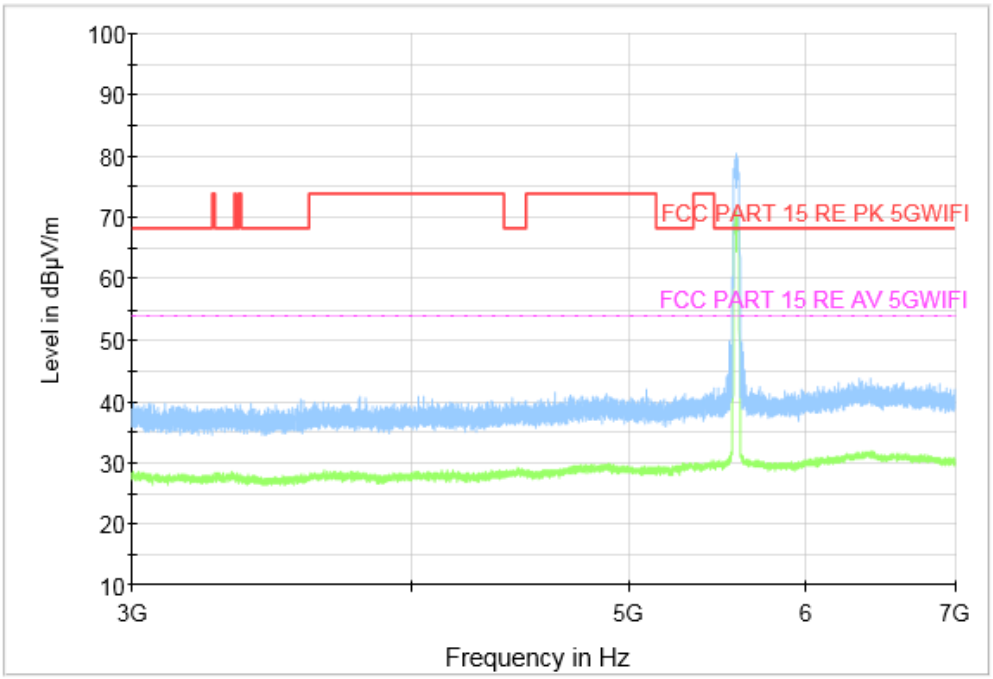

Fig. 97 Transmitter Spurious Emission (802. 11n-HT40, CH118 5580MHz, 3 GHz-7 GHz)

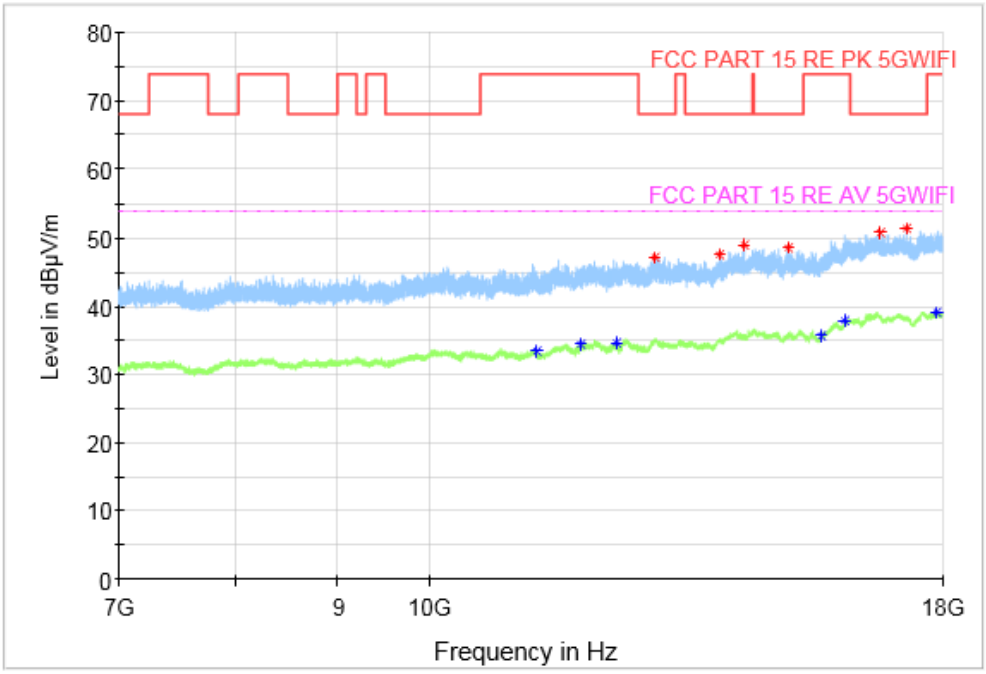

Fig. 98 Transmitter Spurious Emission (802. 11n-HT40, CH118 5580MHz, 7 GHz-18 GHz)

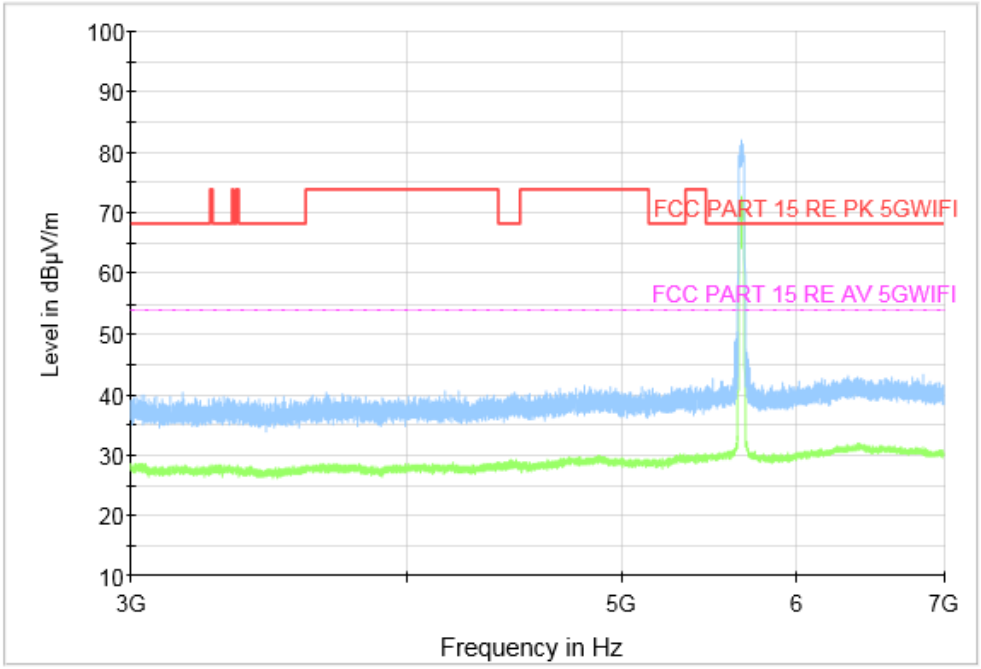

Fig. 99 Transmitter Spurious Emission (802. 11n-HT40, CH134 5670MHz, 3 GHz-7 GHz)

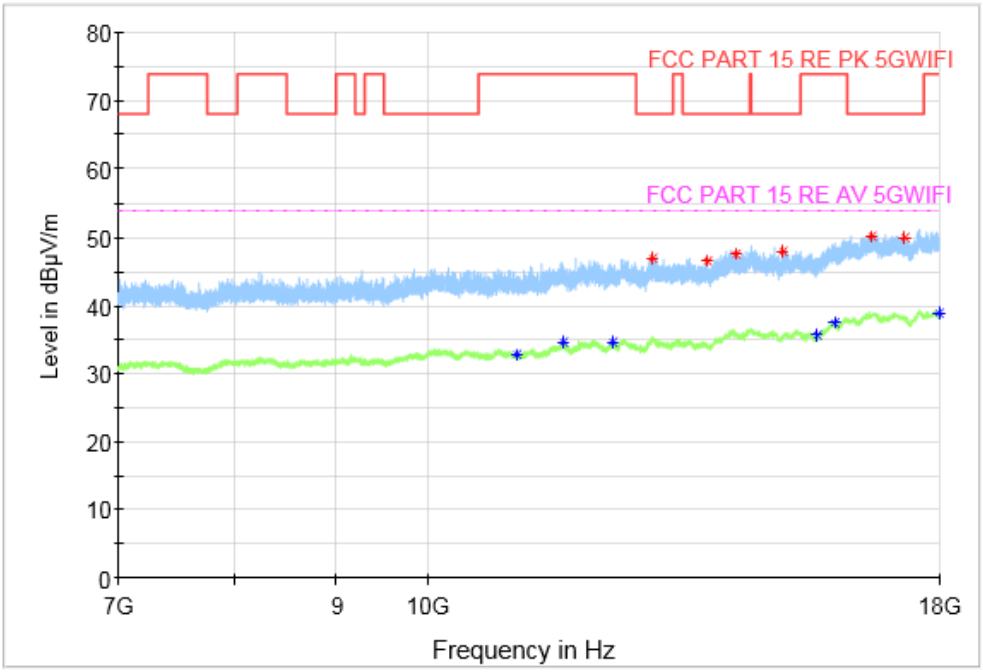

Fig. 100 Transmitter Spurious Emission (802. 11n-HT40, CH134 5670MHz, 7 GHz-18 GHz)

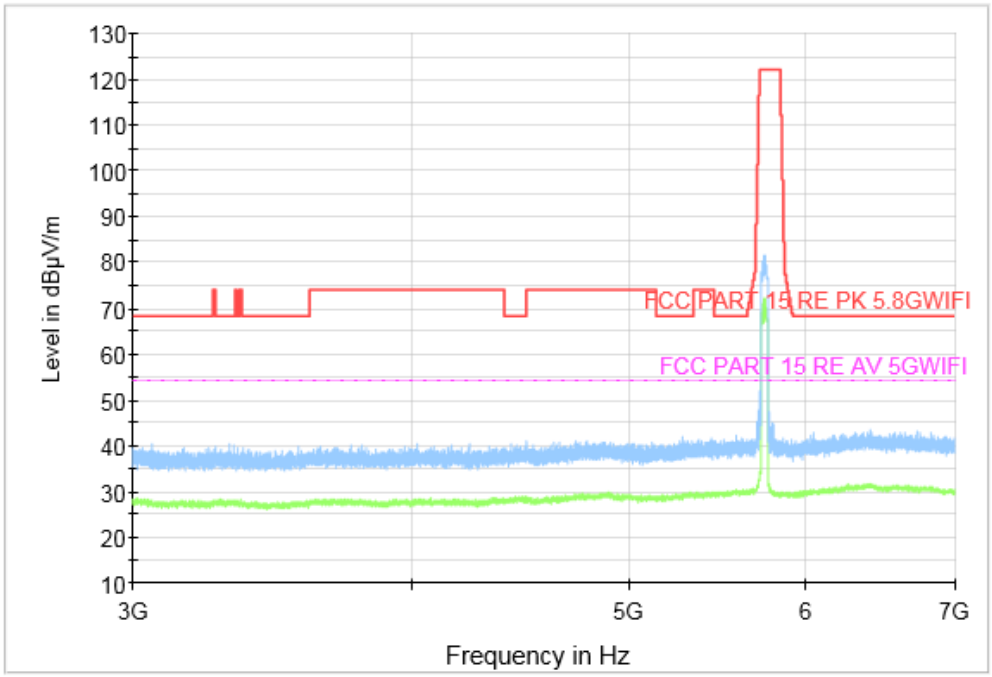

Fig. 101 Transmitter Spurious Emission (802. 11n-HT40, CH151 5755MHz, 3 GHz-7 GHz)

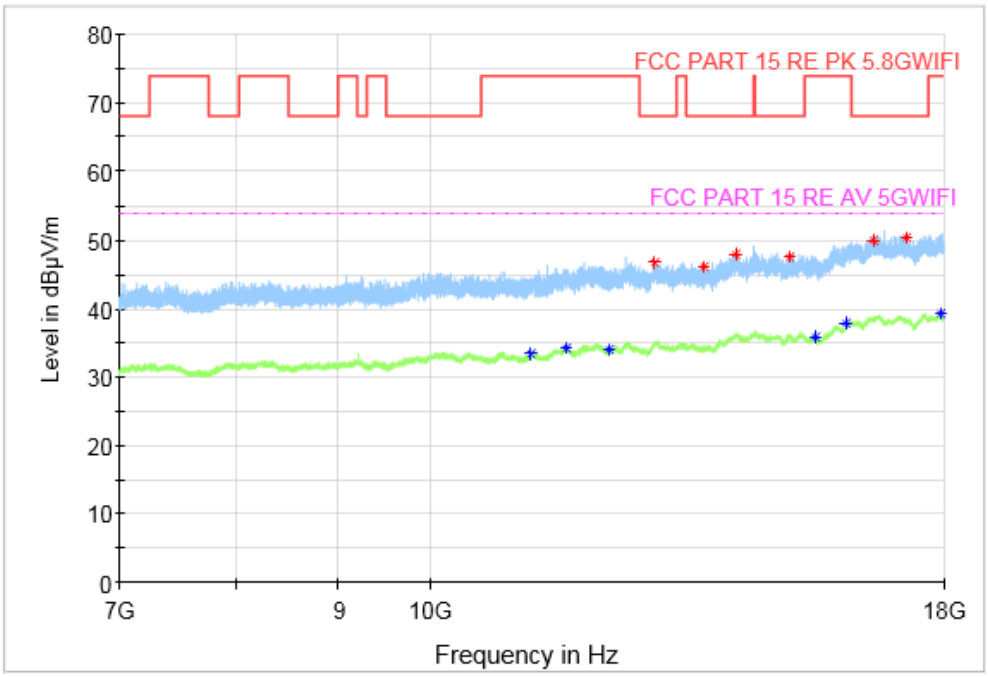

Fig. 102 Transmitter Spurious Emission (802. 11n-HT40, CH151 5755MHz, 7 GHz-18 GHz)

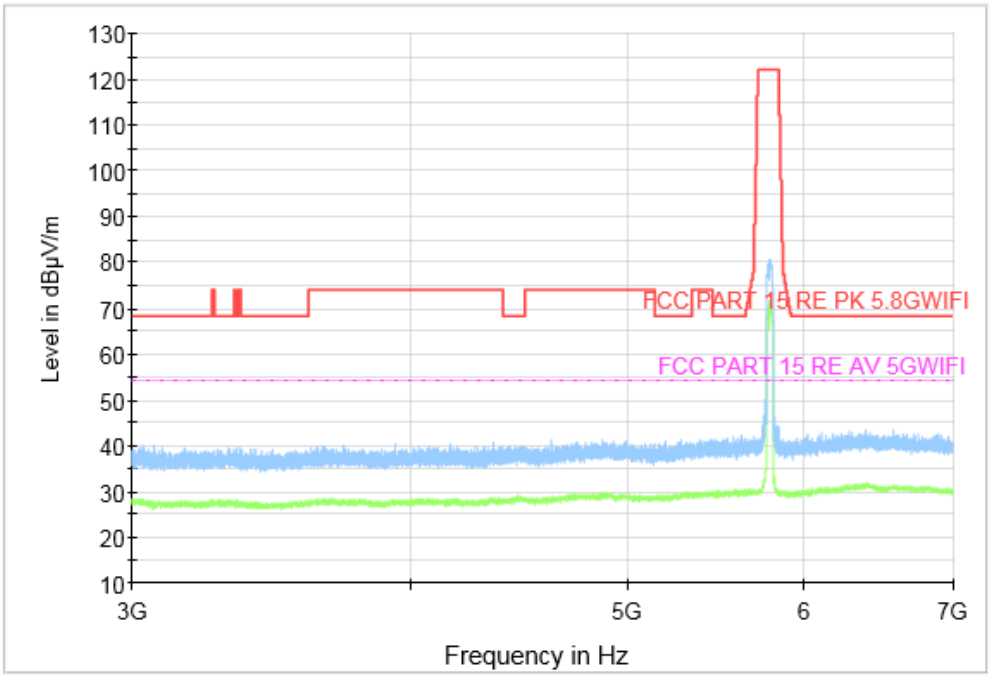

Fig. 103 Transmitter Spurious Emission (802. 11n-HT40, CH159 5795MHz, 3 GHz-7 GHz)

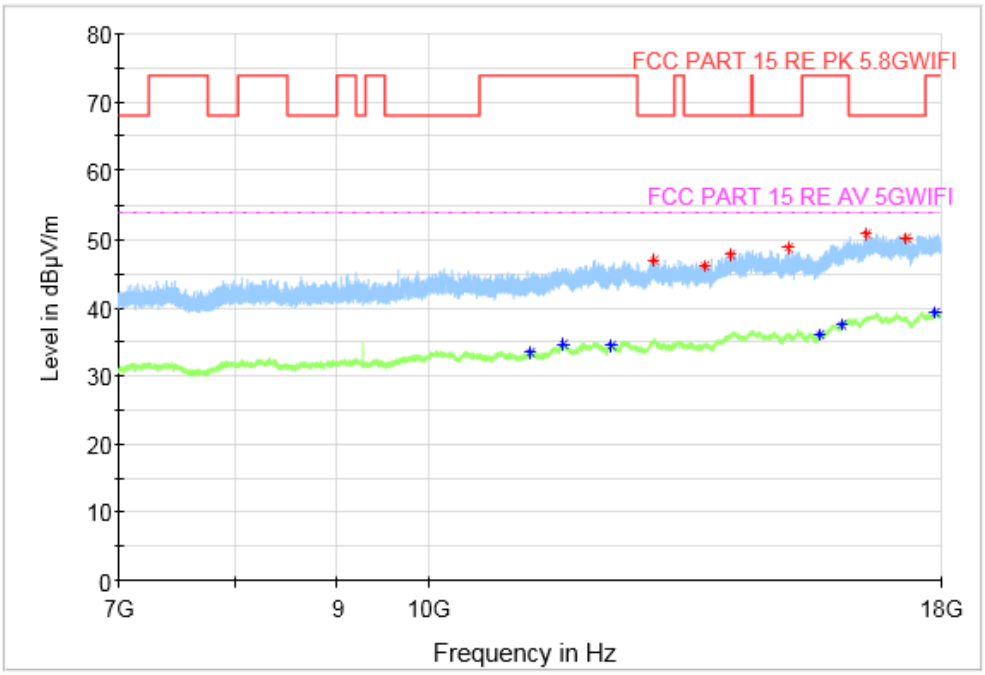

Fig. 104 Transmitter Spurious Emission (802. 11n-HT40, CH159 5795MHz, 7 GHz-18 GHz)

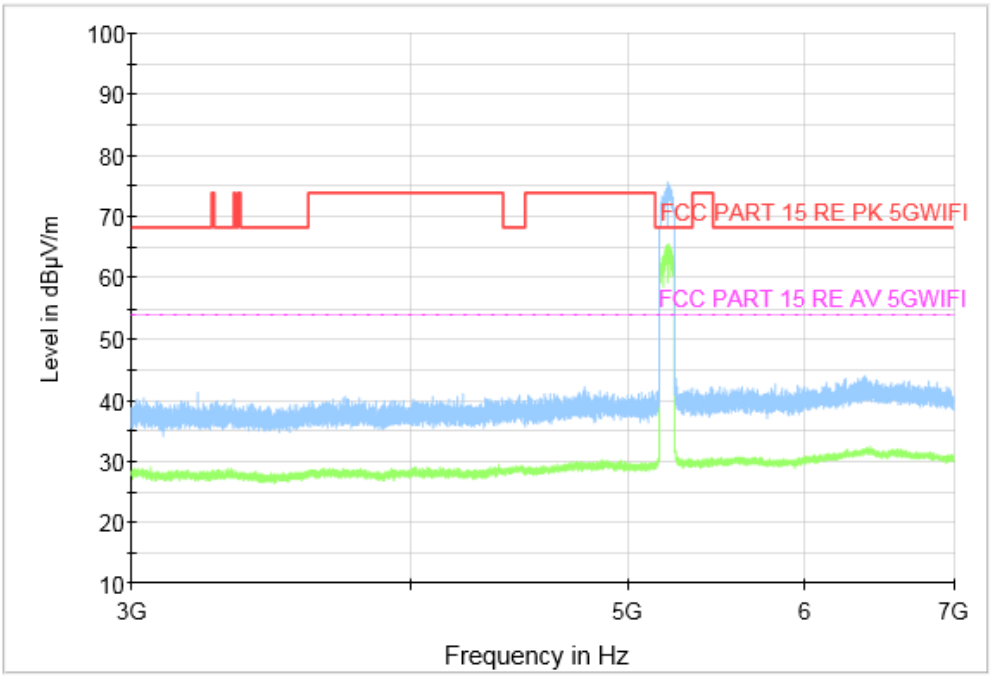

Fig. 105 Transmitter Spurious Emission (802. 11ac-VHT80, CH42 5210MHz, 3 GHz-7 GHz)

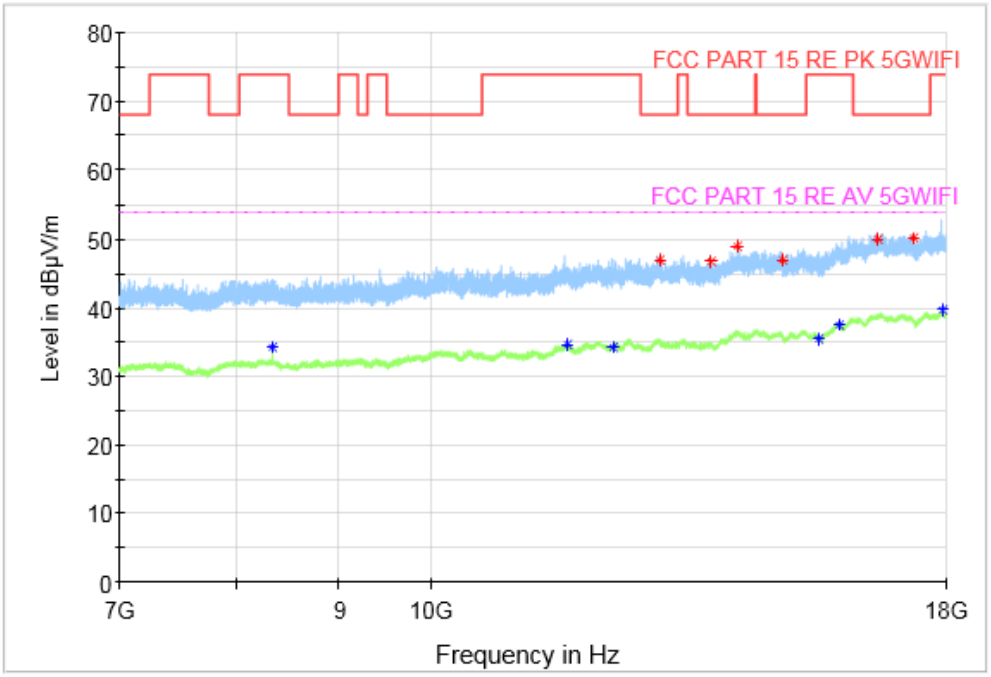

Fig. 106 Transmitter Spurious Emission (802. 11ac-VHT80, CH42 5210MHz, 7 GHz-18 GHz)

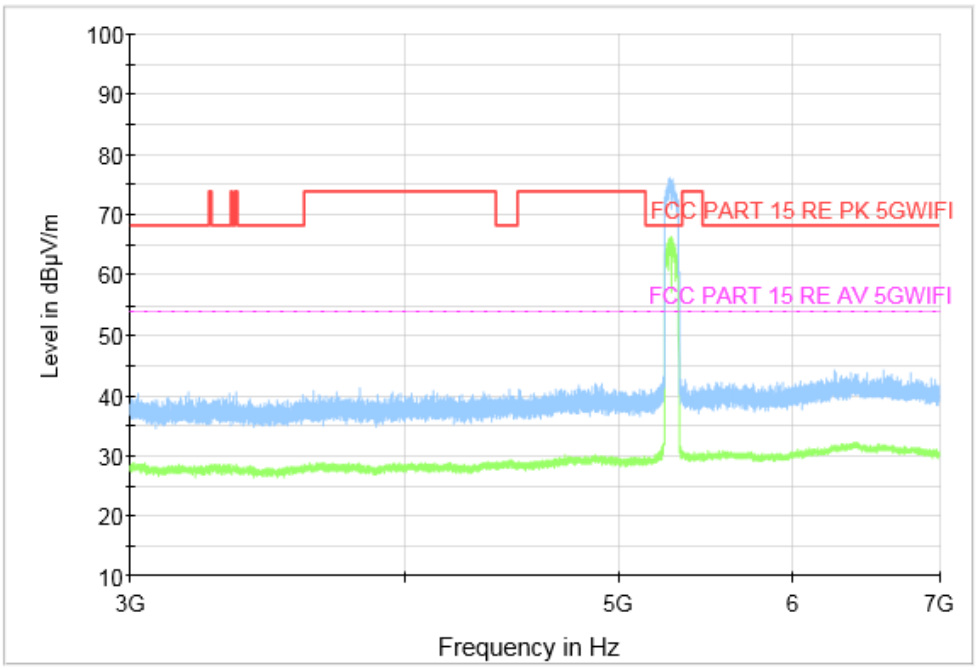

Fig. 107 Transmitter Spurious Emission (802. 11ac-VHT80, CH58 5290MHz, 3 GHz-7 GHz)

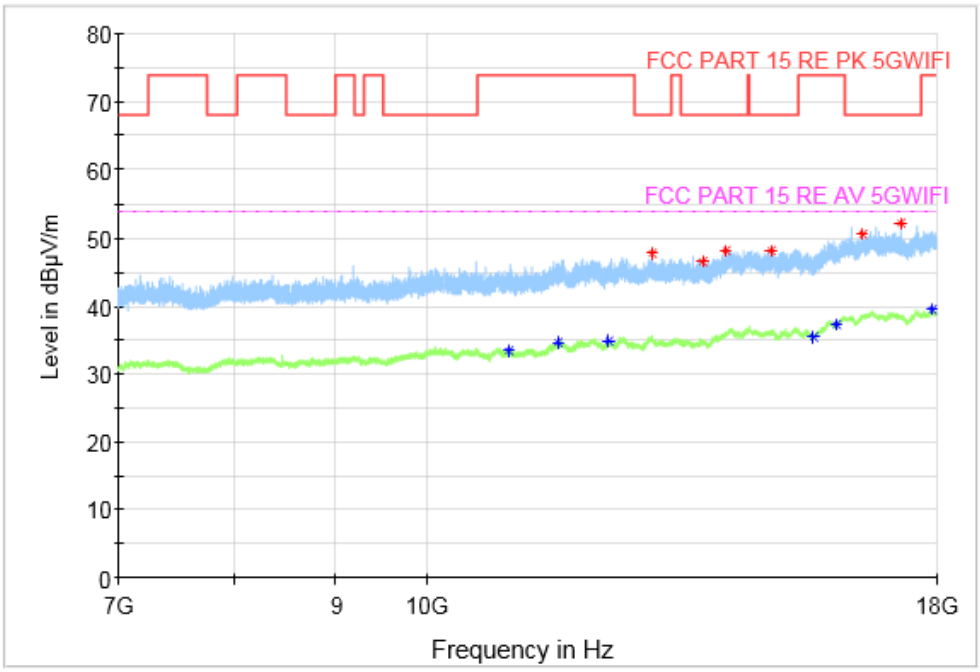

Fig. 108 Transmitter Spurious Emission (802. 11ac-VHT80, CH58 5290MHz, 7 GHz-18 GHz)

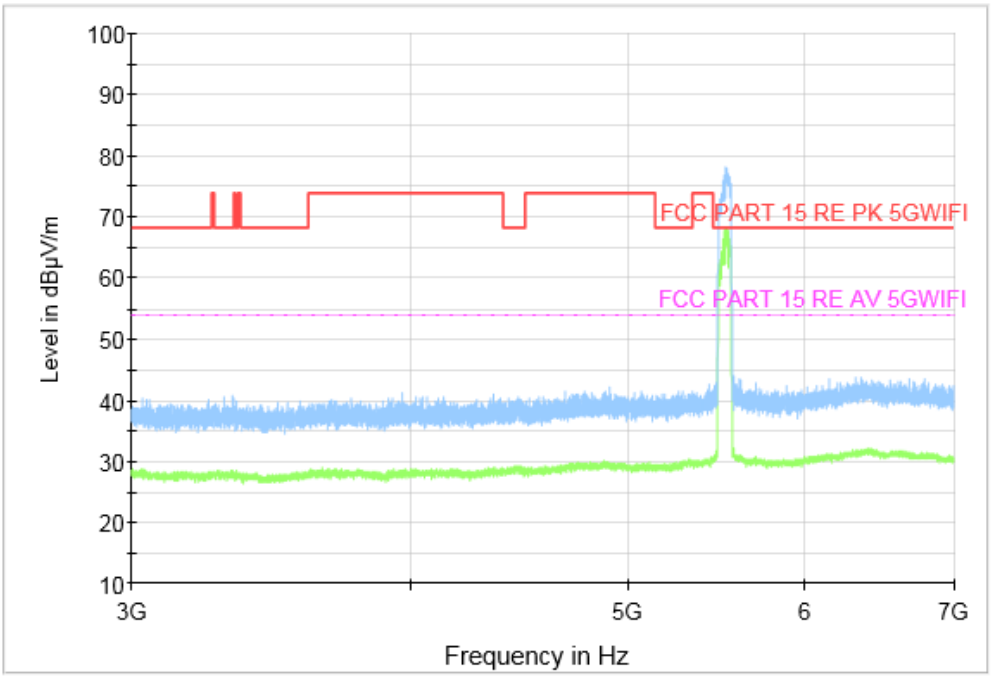

Fig. 109 Transmitter Spurious Emission (802. 11ac-VHT80, CH106 5530MHz, 3 GHz-7 GHz)

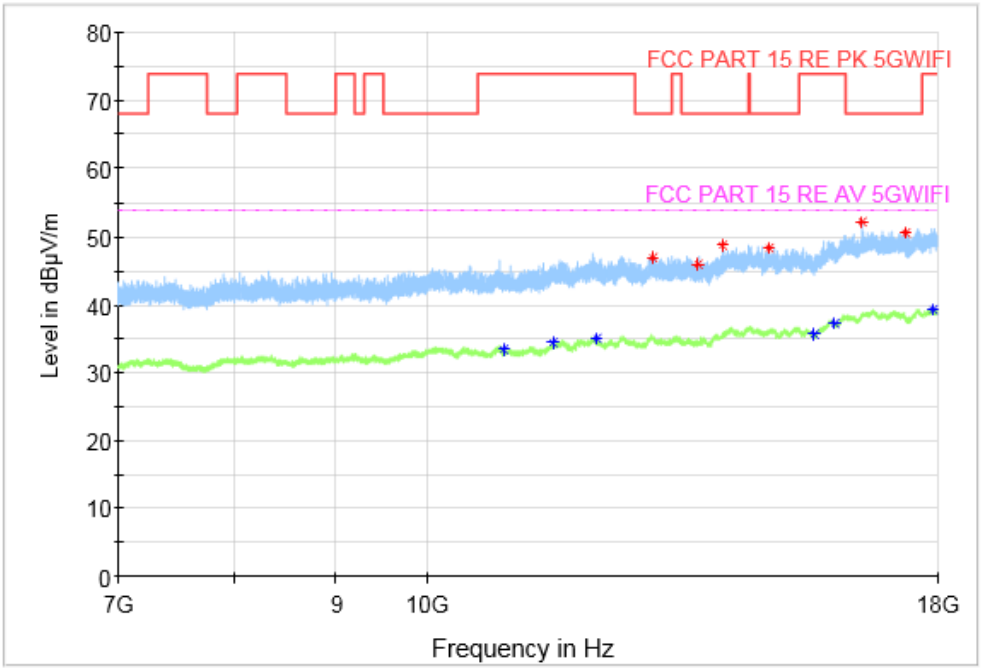

Fig. 110 Transmitter Spurious Emission (802. 11ac-VHT80, CH106 5530MHz, 7 GHz-18 GHz)

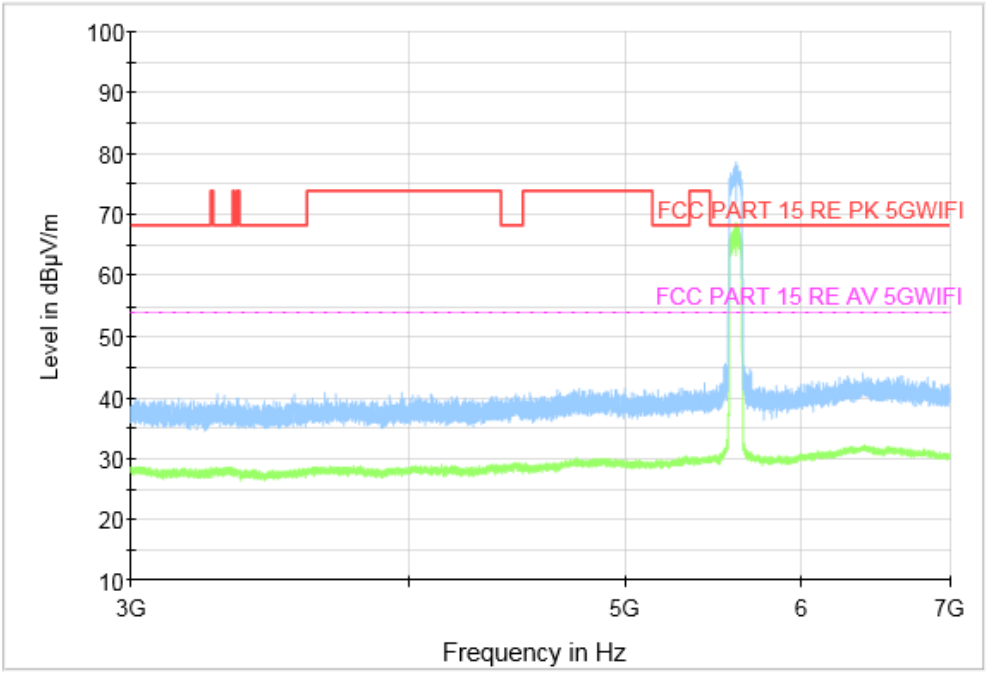

Fig. 111 Transmitter Spurious Emission (802. 11ac-VHT80, CH122 5610MHz, 3 GHz-7 GHz)

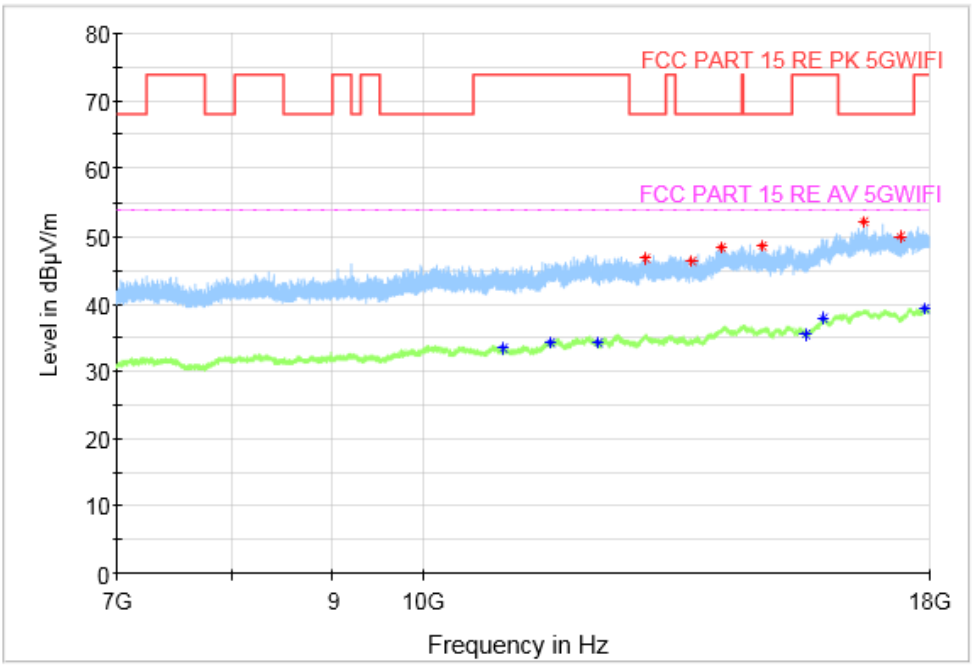

Fig. 112 Transmitter Spurious Emission (802. 11ac-VHT80, CH122 5610MHz, 7 GHz-18 GHz)

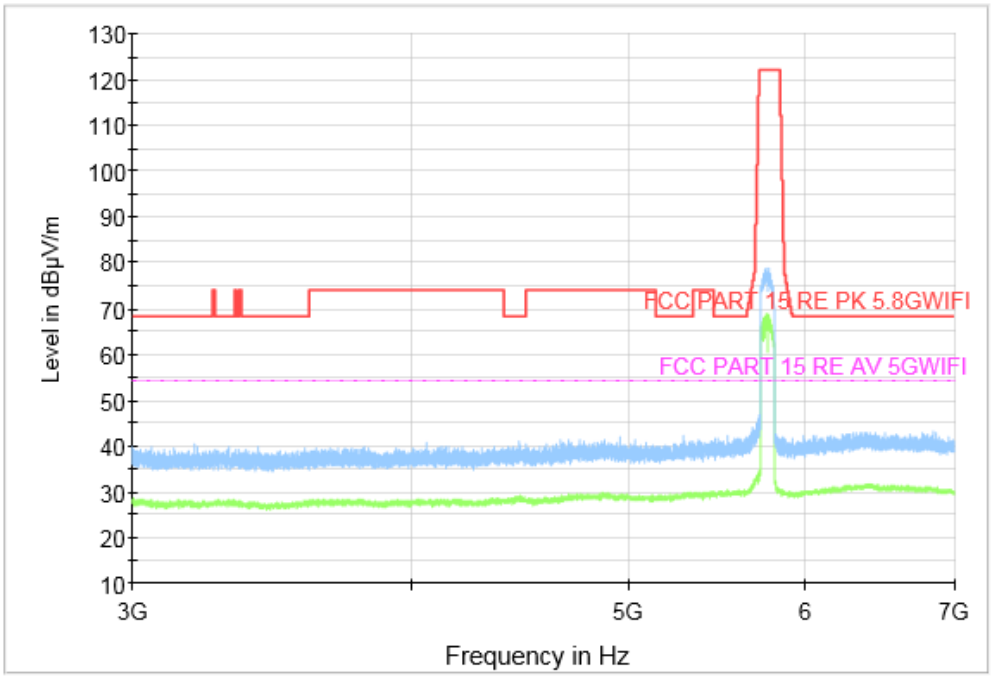

Fig. 113 Transmitter Spurious Emission (802. 11ac-VHT80, CH155 5775MHz, 3 GHz-7 GHz)

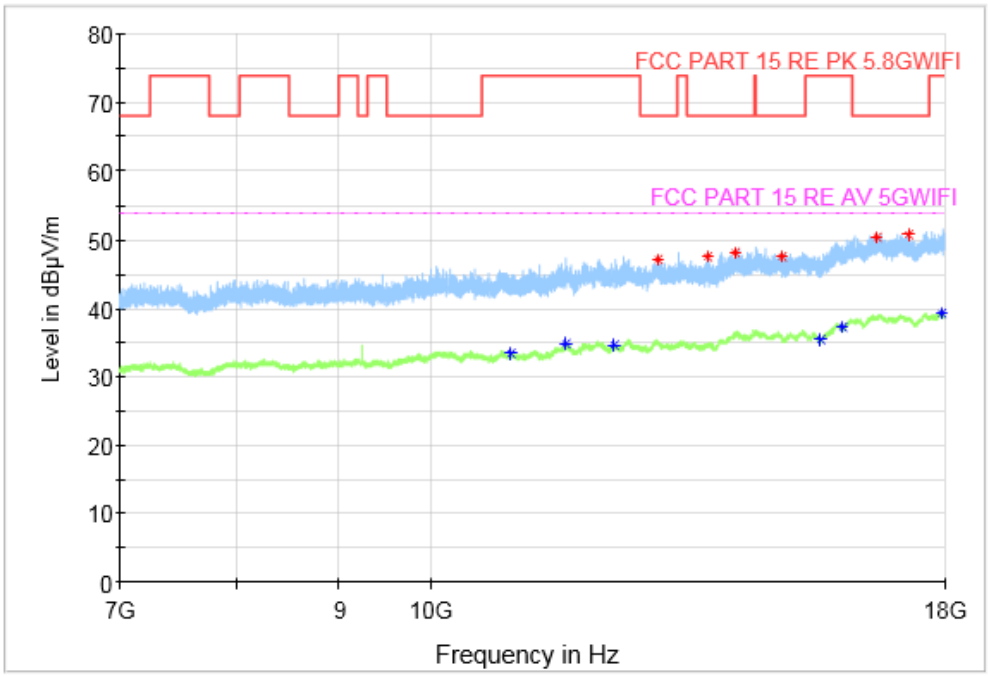

Fig. 114 Transmitter Spurious Emission (802. 11ac-VHT80, CH155 5775MHz, 7 GHz-18 GHz)

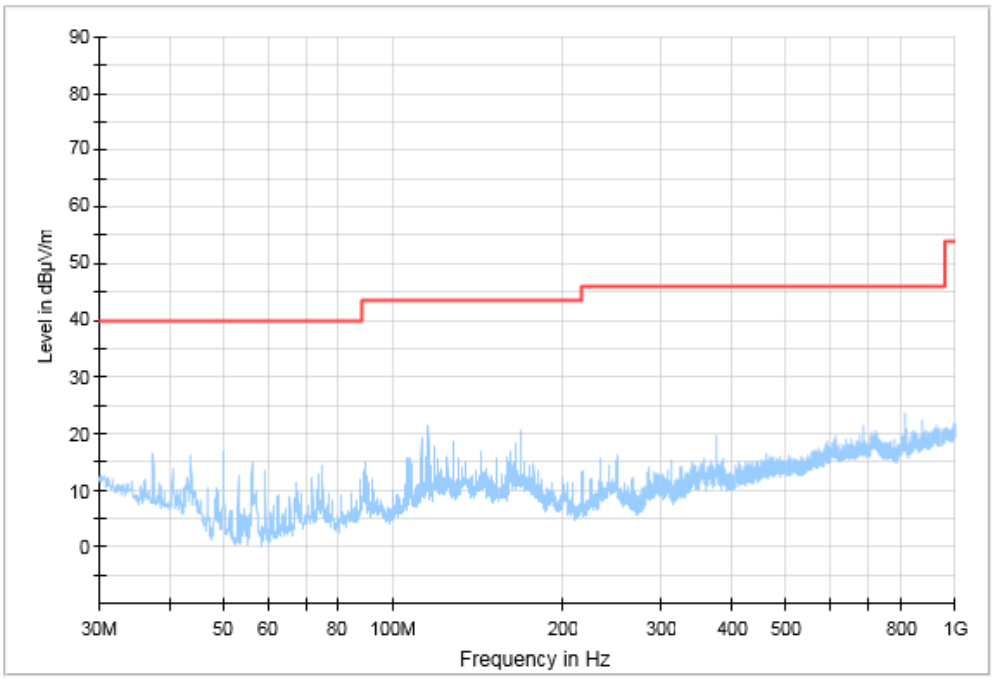

Fig. 115 Transmitter Spurious Emission (All channel, 30MHz~1GHz)

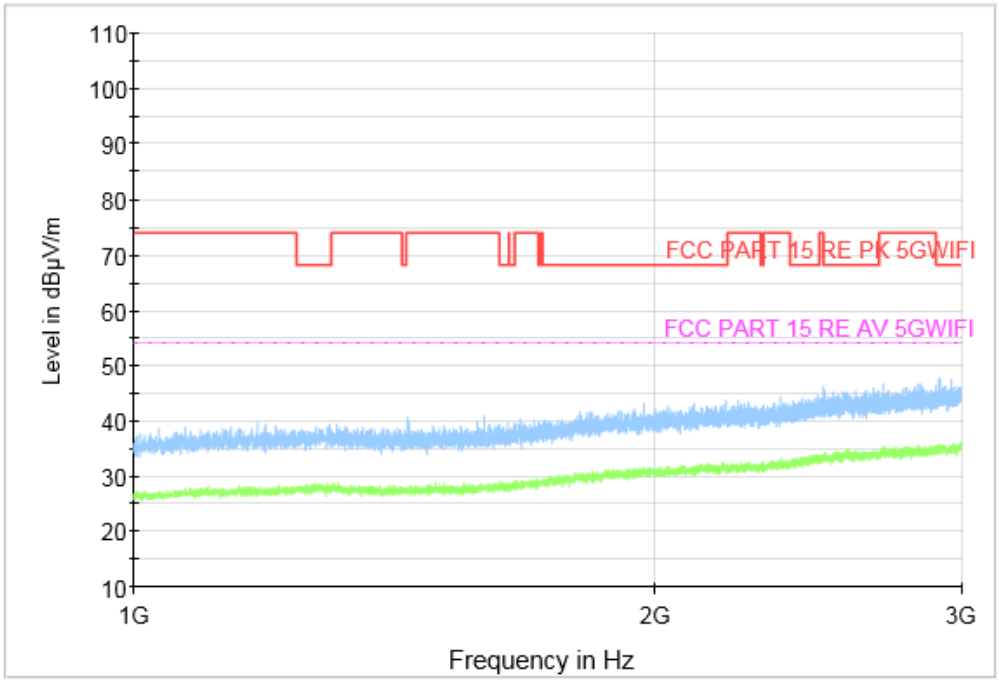

Fig. 116 Transmitter Spurious Emission (All channel, 1GHz~3GHz)

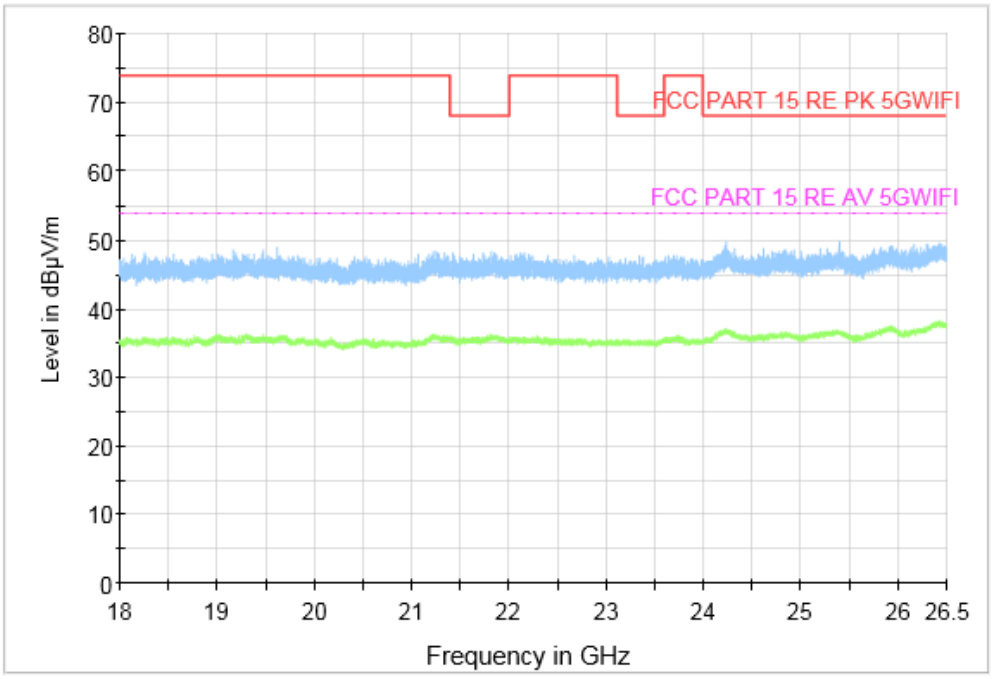

Fig. 117 Transmitter Spurious Emission (All channel, 18GHz~26.5GHz)

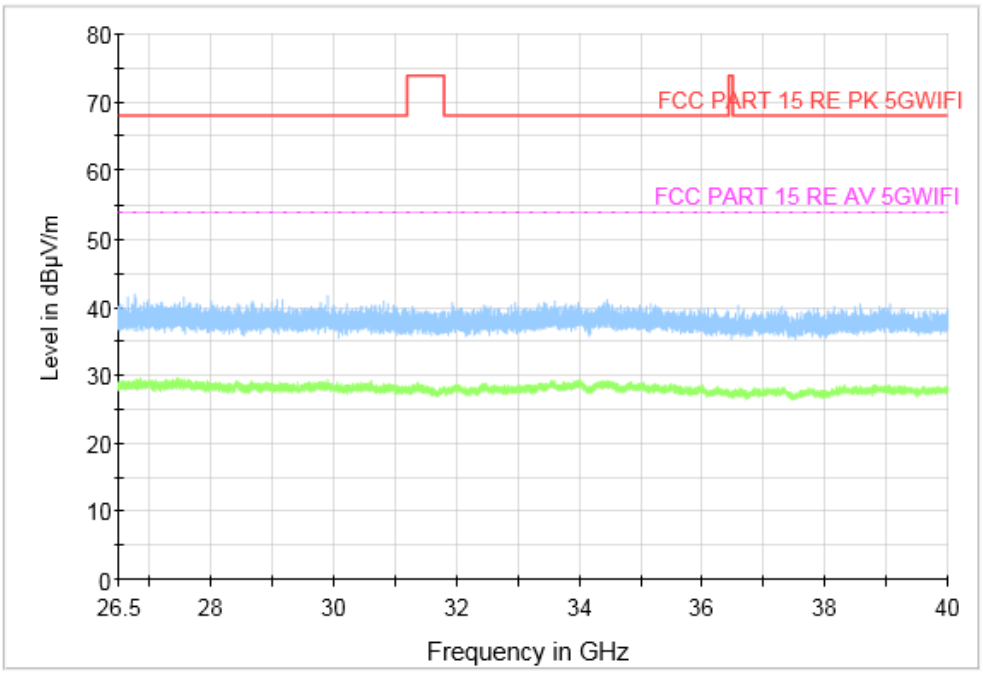

Fig. 118 Transmitter Spurious Emission (All channel, 26.5GHz~40GHz)

A.9. Radiated Spurious Emissions < 30MHz

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

Frequency (MHz)	Field strength (μV/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:

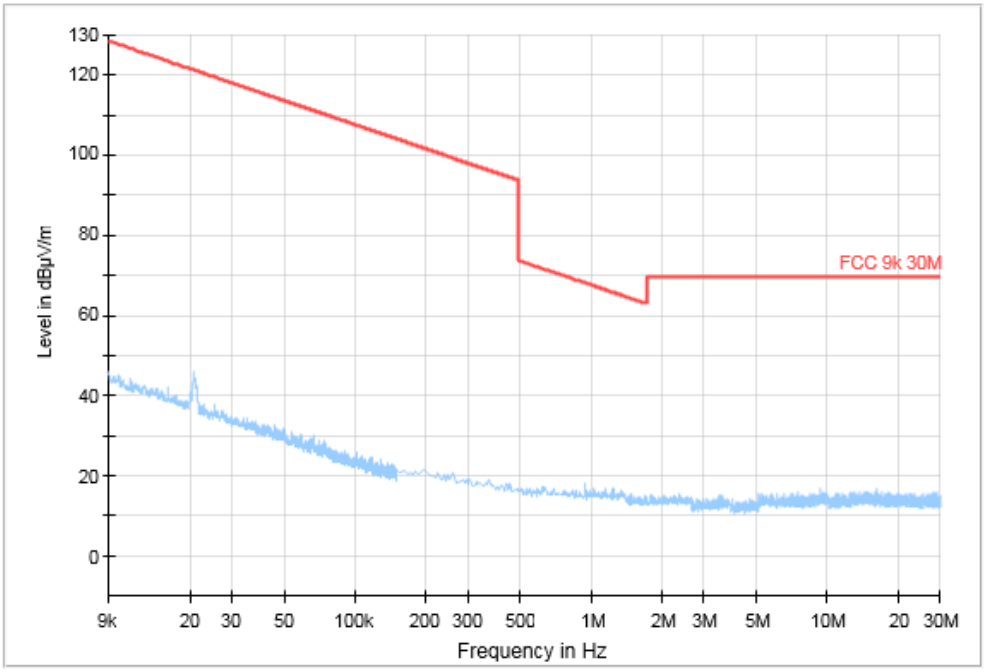

Fig. 119 Radiated Spurious Emission (All Channel, 9 kHz ~30 MHz)

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 (dBμV)	Result (dBμV)		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 (dBμV)	Result (dBμV)		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:

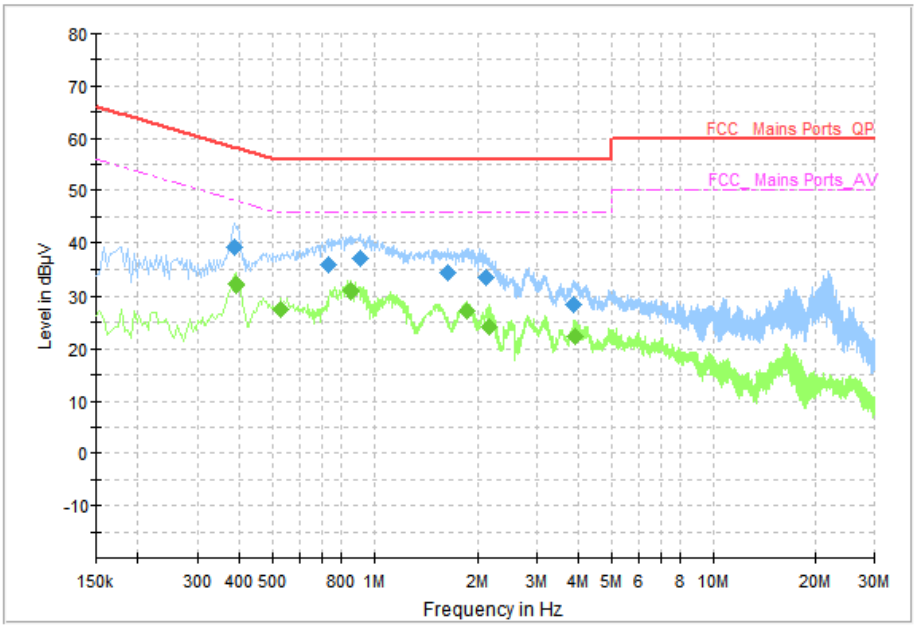

Fig. 120 AC Power line Conducted Emission (802.11n, AE1, 120V)

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

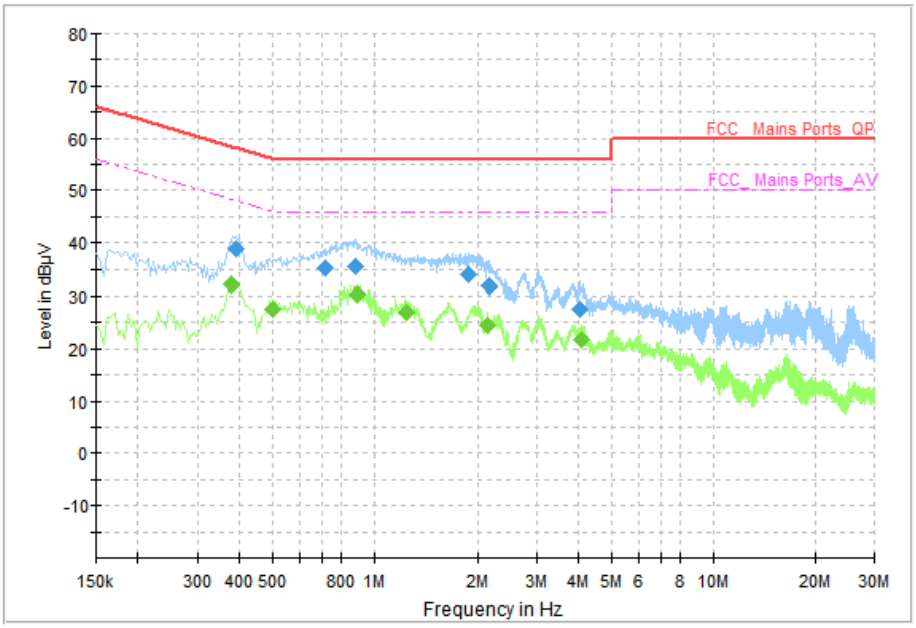

Fig. 121 AC Power line Conducted Emission (Idle, AE1, 120V)

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).

ANNEX B: Spot Check of Output Power

Company Name: IDEMIA Identity and Security France
Product Name: ID Screen US
Model Name: MPH-MB003A/MPH-MB003B (FCC ID: ZBW-MPHMB003), MPH-MB003C (FCC ID: ZBW-MPHMB003C)

Spot Check of Different Mode

Model	Mode	Frequency (MHz)	Conducted Power (dBm)
MPH-MB003A/MPH-MB003B	LE 1M	2440 (CH19)	-2.41
	BR (GFSK)	2441 (CH39)	9.71
	802.11b	2437 (CH6)	16.89
	802.11a	5180 (Ch36)	12.67
		5745 (CH149)	11.63
MPH-MB003C	LE 1M	2440 (CH19)	-2.46
	BR (GFSK)	2441 (CH39)	9.65
	802.11b	2437 (CH6)	16.72
	802.11a	5180 (Ch36)	12.47
		5745 (CH149)	11.51

Note: Spot check test data included for the variants based on worst-case results reported in the original FCC ID filing. From the above data, it can be concluded that the conducted output power of the variant is less than or near to the original. And the variant test data can refer to the original report. This condition applies to the reports I20N00956.

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