

802.11n HT20 CH6 (1-18GHz)

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12822.857143	48.40	74.00	25.60	V	11.1
13398.000000	46.68	74.00	27.32	V	11.4
14203.714286	48.43	74.00	25.57	V	11.1
14878.714286	48.89	74.00	25.11	V	13.0
15907.285714	50.34	74.00	23.66	V	14.1
16962.428571	54.23	74.00	19.77	V	18.3

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12822.857143	35.80	54.00	18.20	V	11.1
13398.000000	35.81	54.00	18.19	V	11.4
14203.714286	35.98	54.00	18.02	V	11.1
14878.714286	38.53	54.00	15.47	V	13.0
15907.285714	39.73	54.00	14.27	V	14.1
16962.428571	42.32	54.00	11.68	V	18.3

802.11n HT40 CH3 (1-18GHz)

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
3921.300000	46.04	74.00	27.96	V	2.4
5919.600000	47.68	74.00	26.32	V	4.6
8874.857143	45.61	74.00	28.39	V	6.5
12508.714286	47.94	74.00	26.06	V	11.3
16866.000000	54.49	74.00	19.51	V	18.0
17911.285714	54.68	74.00	19.32	V	18.9

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
3921.300000	33.24	54.00	20.76	V	2.4
5919.600000	35.60	54.00	18.40	V	4.6
8874.857143	32.70	54.00	21.30	V	6.5
12508.714286	35.67	54.00	18.33	V	11.3
16866.000000	41.78	54.00	12.22	V	18.0
17911.285714	42.59	54.00	11.41	V	18.9

802.11ax HE20 CH6 (1-18GHz)

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
4994.400000	47.27	74.00	26.73	H	5.1
7503.428572	45.97	74.00	28.03	H	7.1
8833.285714	46.28	74.00	27.72	H	7.2
12222.000000	49.21	74.00	24.79	H	12.7
14908.285714	52.07	74.00	21.93	H	15.3
17877.428571	56.91	74.00	17.09	H	21.9

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
4994.400000	35.18	54.00	18.82	H	5.1
7503.428572	33.45	54.00	20.55	H	7.1
8833.285714	33.72	54.00	20.28	H	7.2
12222.000000	36.74	54.00	17.26	H	12.7
14908.285714	40.14	54.00	13.86	H	15.3
17877.428571	44.71	54.00	9.29	H	21.9

802.11ax HE40 CH3 (1-18GHz)

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
14202.857143	50.42	74.00	23.58	V	14.2
14881.714286	52.44	74.00	21.56	V	15.3
15943.714286	52.98	74.00	21.02	V	16.0
16576.285714	55.86	74.00	18.14	H	18.7
17626.285714	56.17	74.00	17.83	V	20.6
17900.142857	57.55	74.00	16.45	H	21.8

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
14202.857143	38.37	54.00	15.63	V	14.2
14881.714286	39.99	54.00	14.01	V	15.3
15943.714286	40.75	54.00	13.25	V	16.0
16576.285714	43.22	54.00	10.78	H	18.7
17626.285714	43.97	54.00	10.03	V	20.6
17900.142857	45.05	54.00	8.95	H	21.8

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and Antenna Factor, 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} + Cable Loss + Antenna Factor - Gain of the preamplifier

See below for test graphs.

Conclusion: PASS

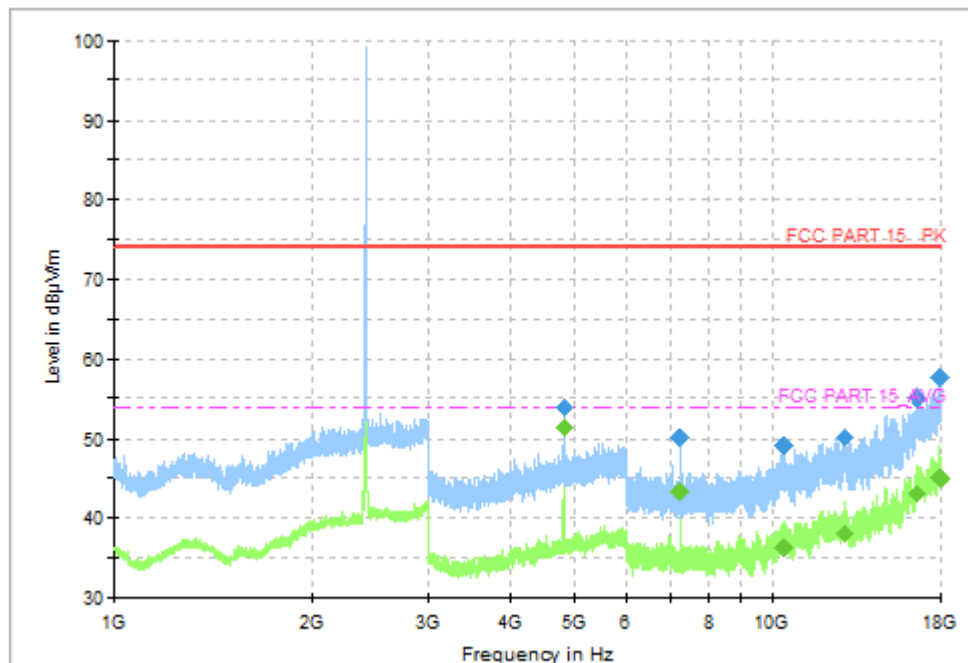


Fig.67 Radiated Spurious Emission (802.11b, CH1, 1GHz-18GHz)

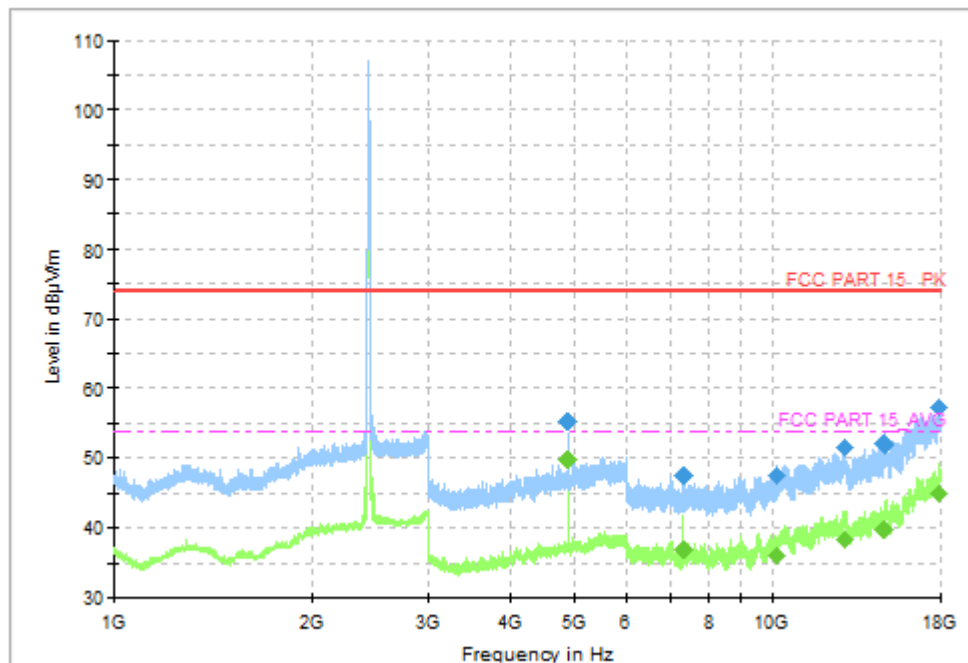


Fig.68 Radiated Spurious Emission (802.11b, CH6, 1GHz-18GHz)

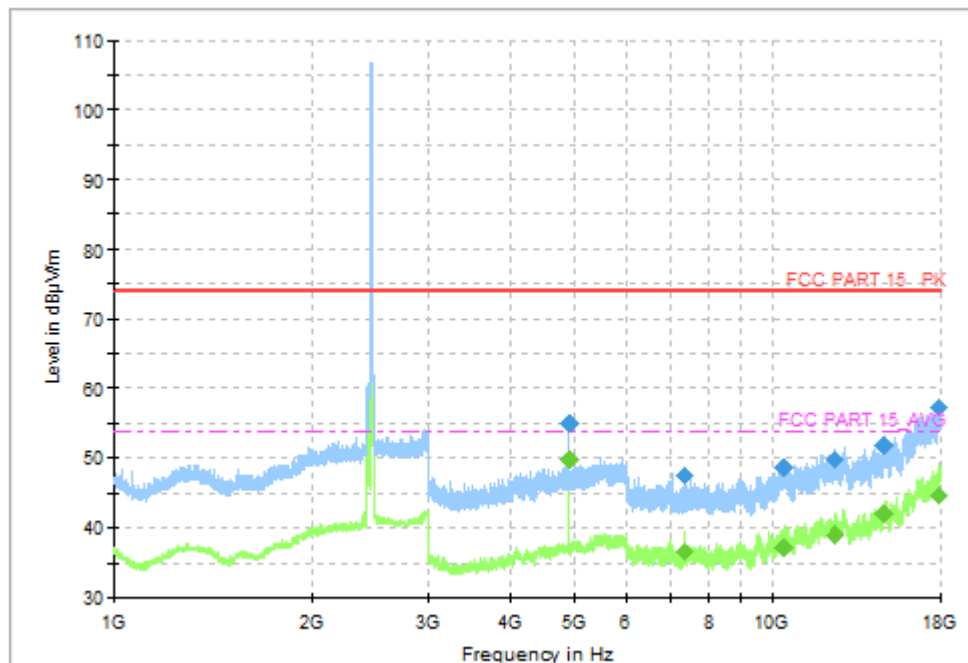


Fig.69 Radiated Spurious Emission (802.11b, CH11, 1GHz-18GHz)

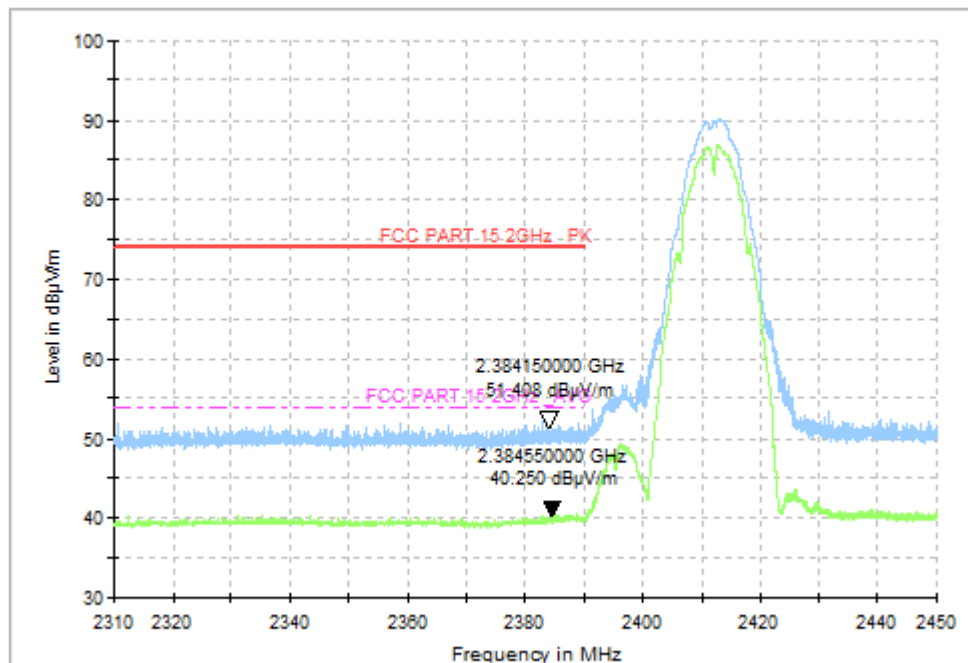


Fig.70 Radiated Restricted Band (802.11b, CH1, 2.38GHz~2.45GHz)

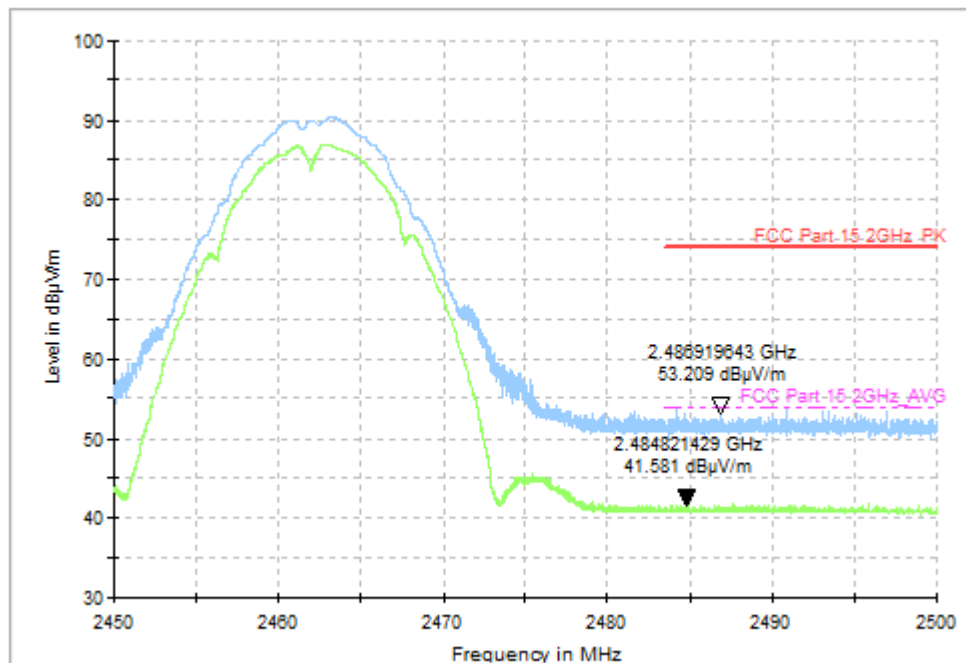


Fig.71 Radiated Restricted Band (802.11b, CH11, 2.45GHz~2.5GHz)

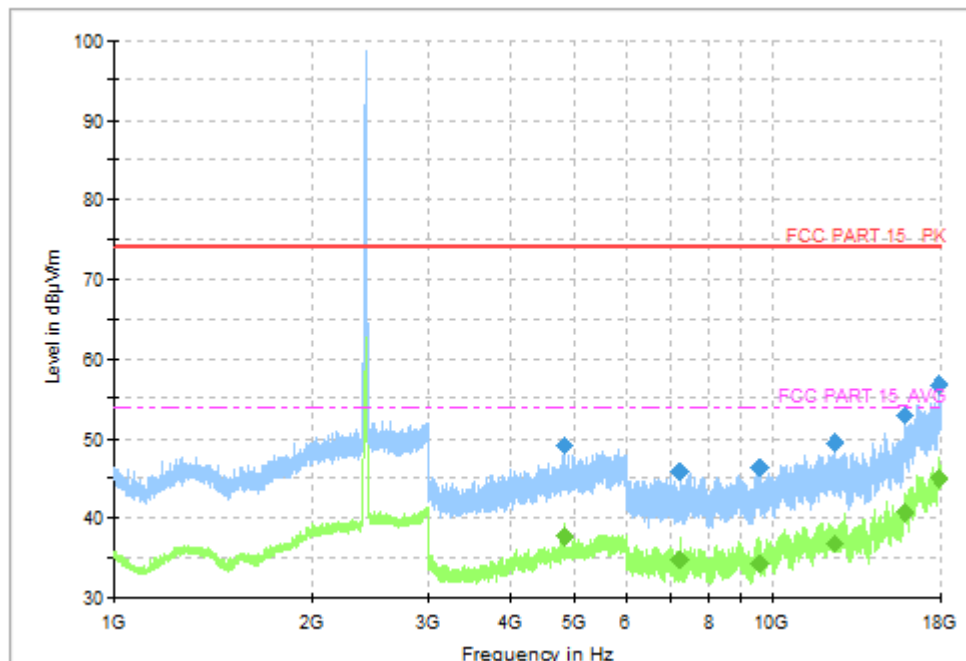


Fig.72 Radiated Spurious Emission (802.11g, CH1, 1GHz~18GHz)

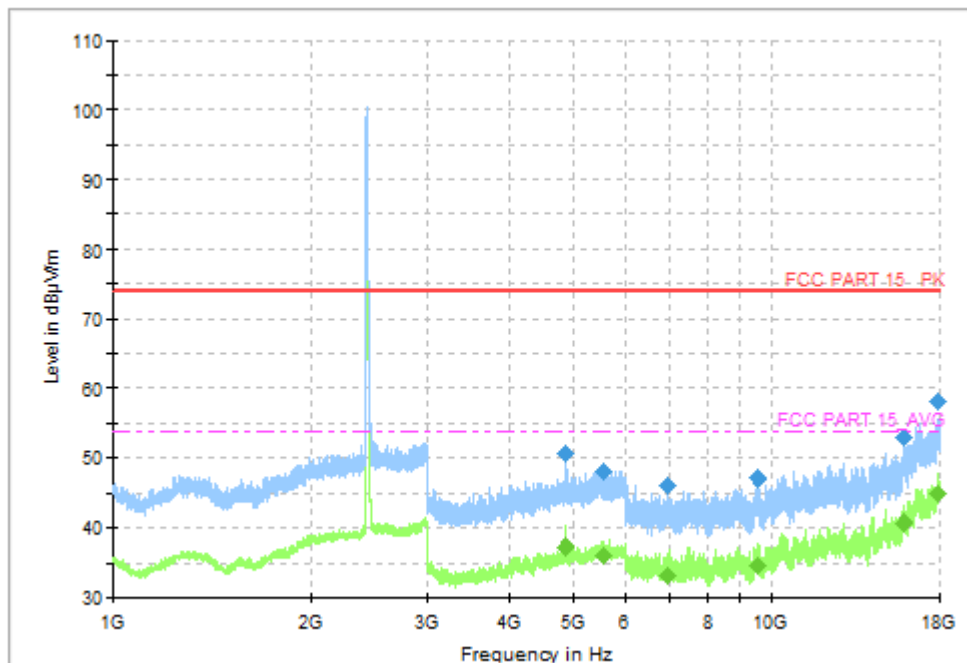


Fig.73 Radiated Spurious Emission (802.11g, CH6, 1GHz-18GHz)

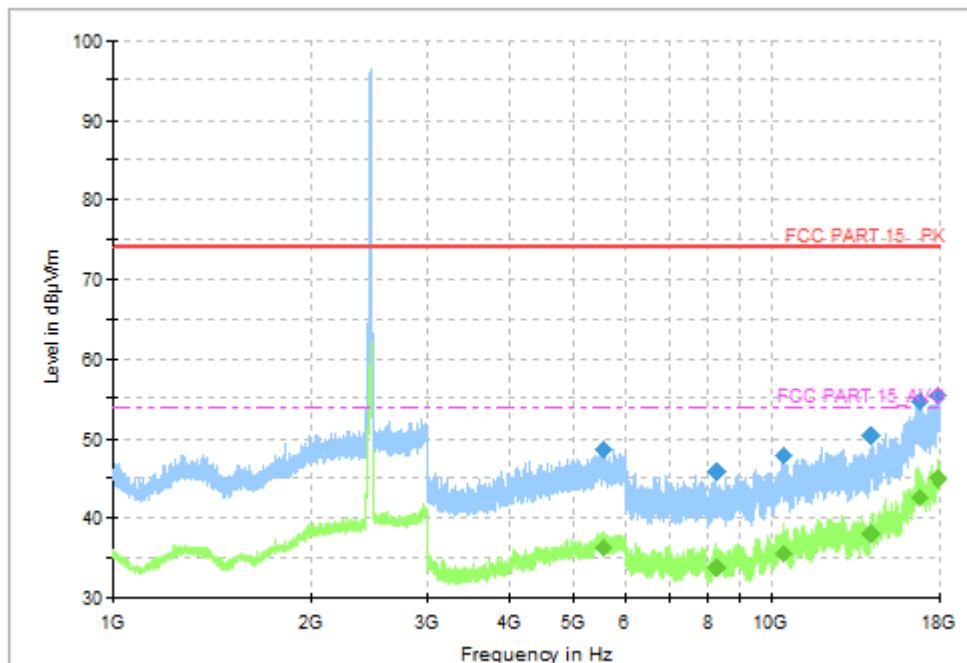


Fig.74 Radiated Spurious Emission (802.11g, CH11, 1GHz-18GHz)

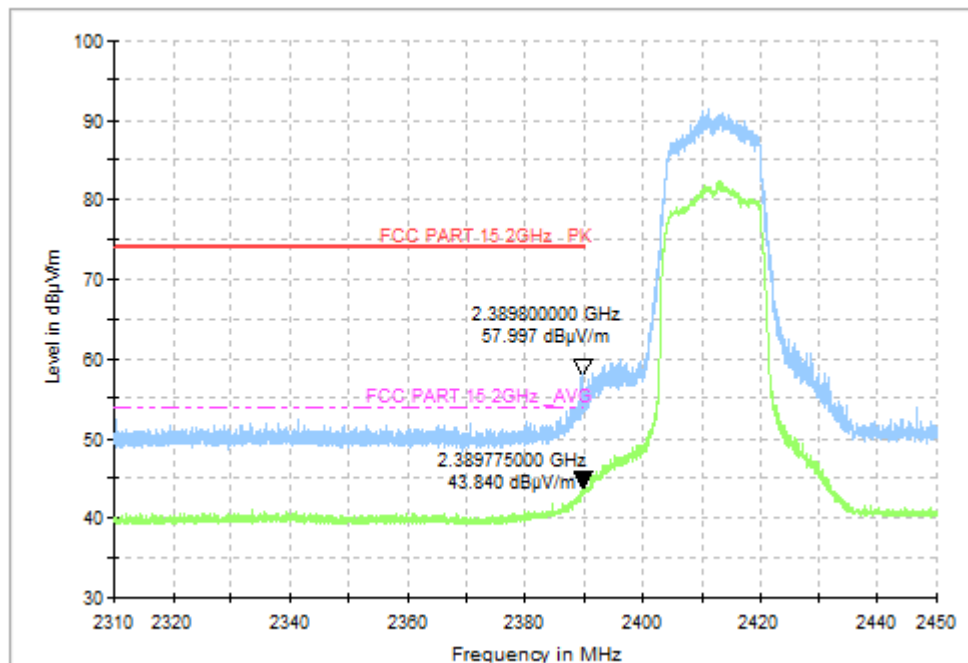


Fig.75 Radiated Restricted Band (802.11g, CH1, 2.38GHz~2.45GHz)

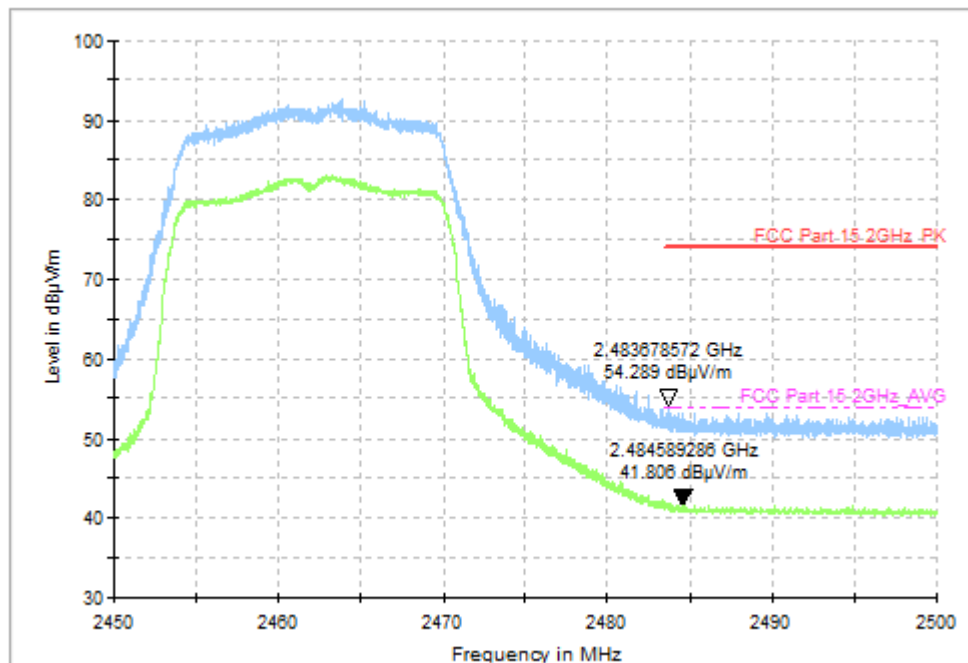


Fig.76 Radiated Restricted Band (802.11g, CH11, 2.45GHz~2.5GHz)

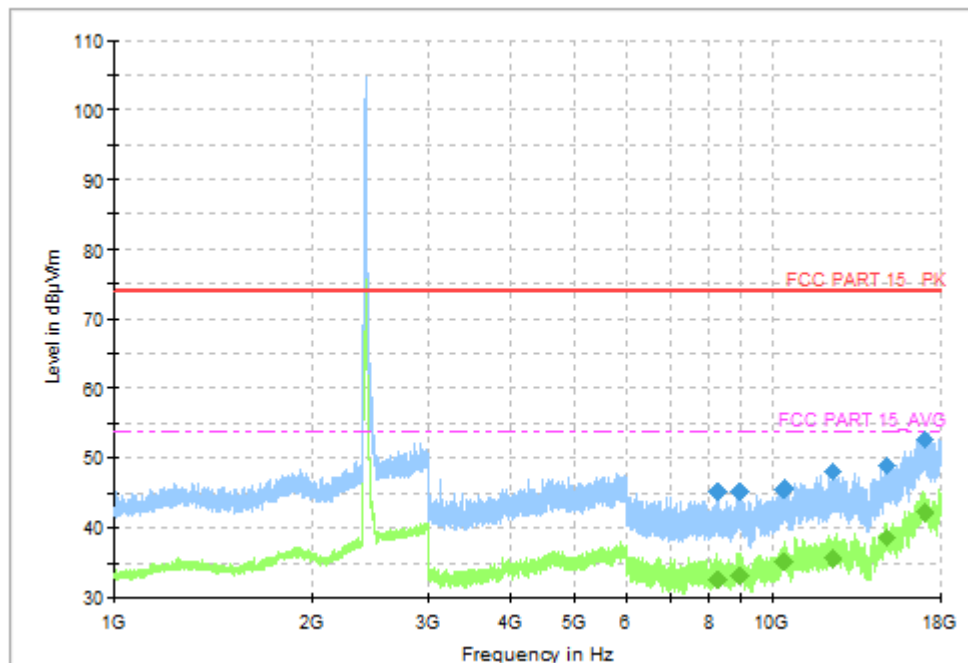


Fig.77 Radiated Spurious Emission (802.11n HT20, CH1, 1GHz-18GHz)

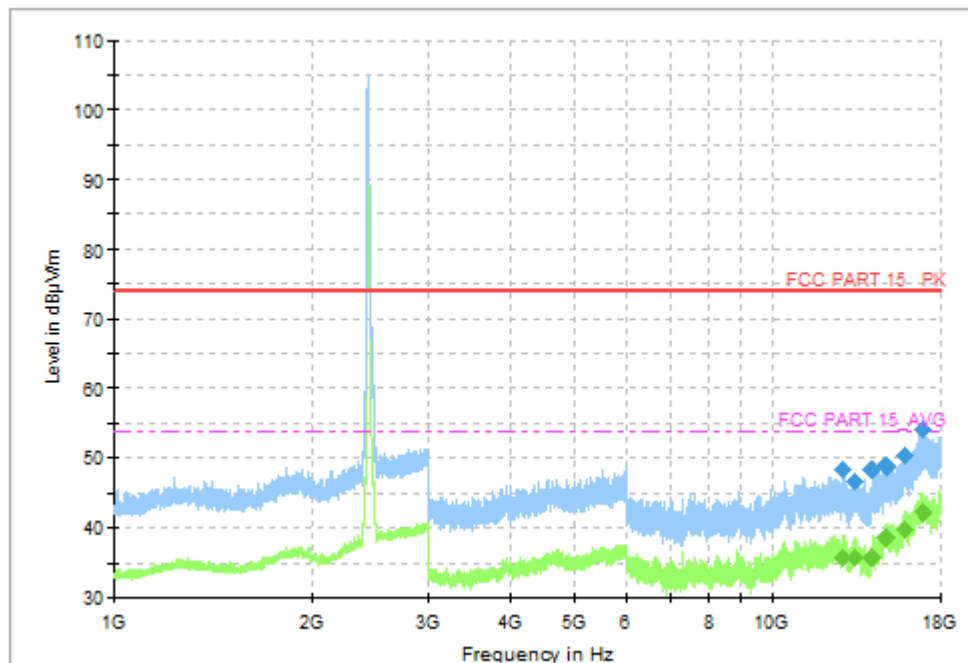


Fig.78 Radiated Spurious Emission (802.11n HT20, CH6, 1GHz-18GHz)

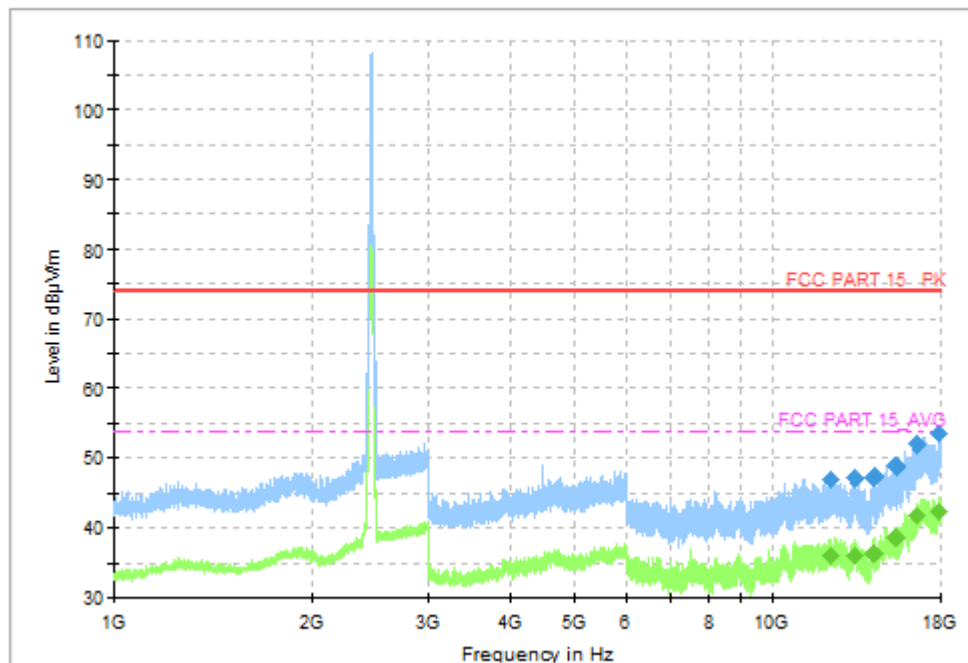


Fig.79 Radiated Spurious Emission (802.11n HT20, CH11, 1GHz-18GHz)

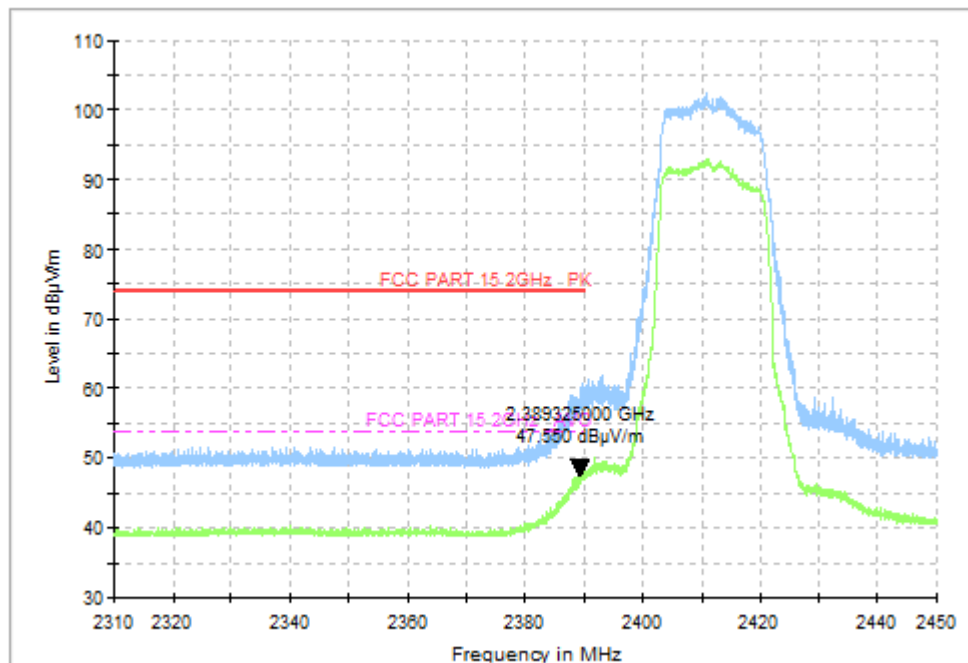


Fig.80 Radiated Restricted Band (802.11n HT20, CH1, 2.38GHz~2.45GHz)

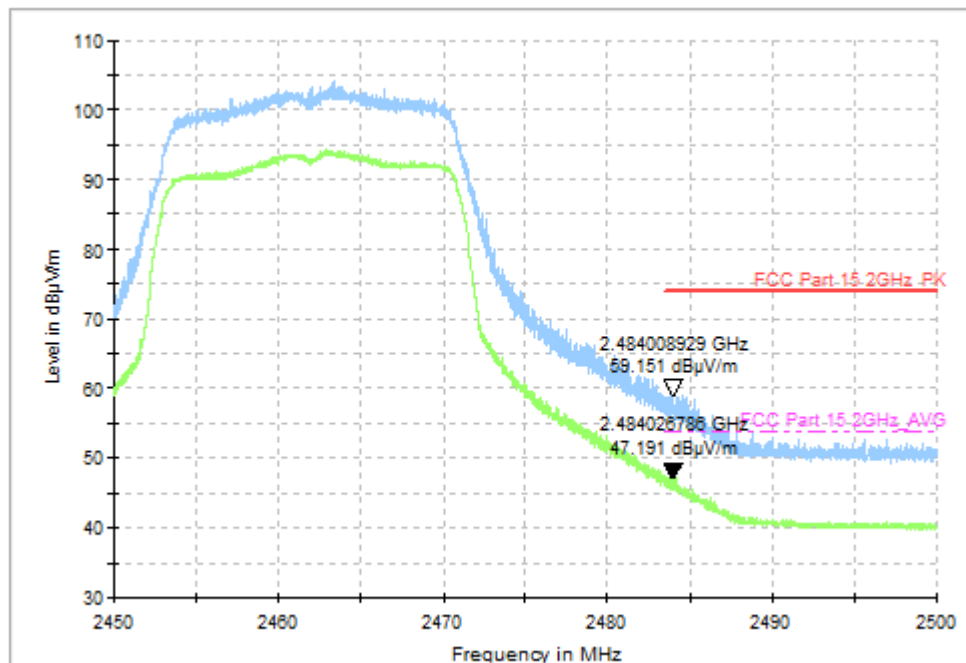


Fig.81 Radiated Restricted Band (802.11n HT20, CH11, 2.45GHz~2.5GHz)

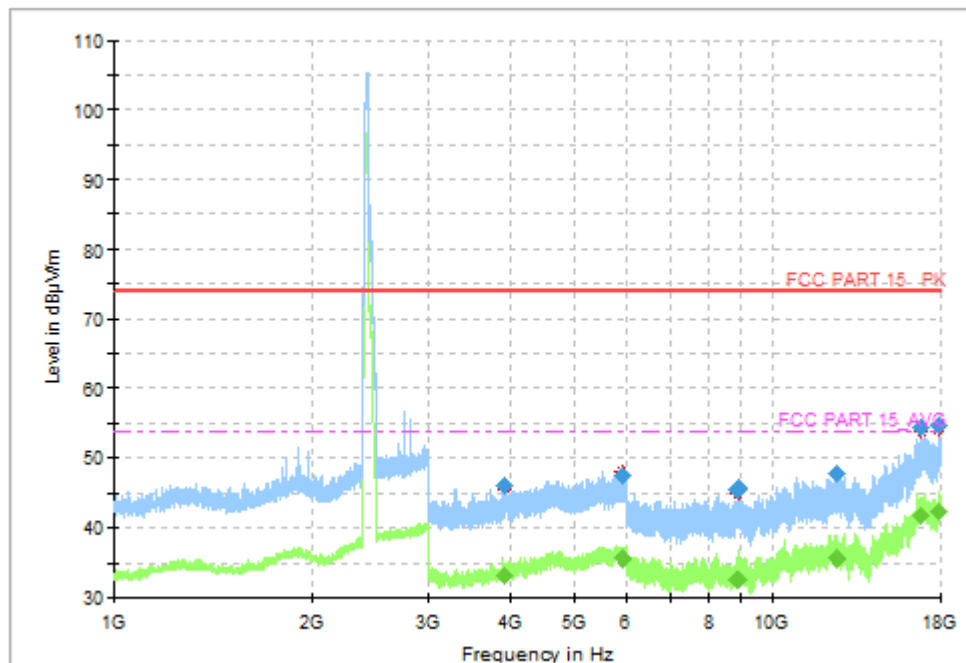


Fig.82 Radiated Spurious Emission (802.11n HT40, CH3, 1GHz~18GHz)

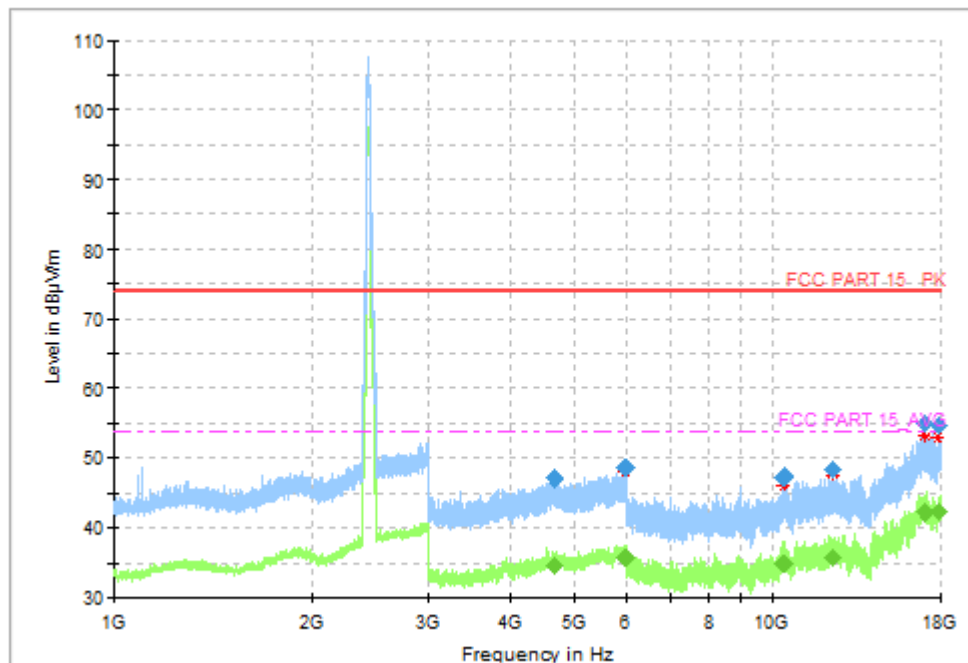


Fig.83 Radiated Spurious Emission (802.11n HT40, CH6, 1GHz-18GHz)

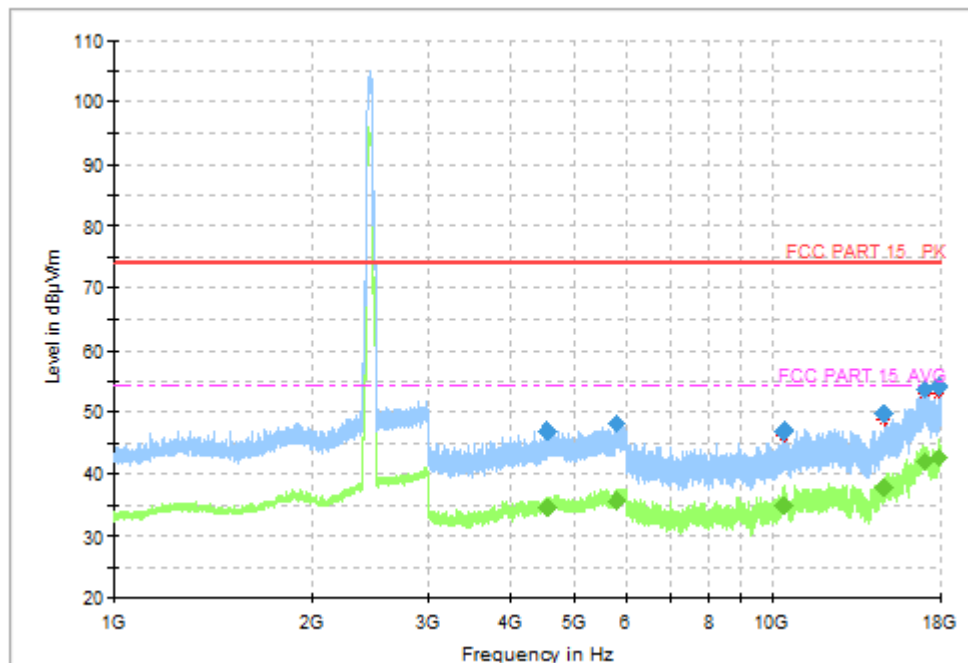


Fig.84 Radiated Spurious Emission (802.11n HT40, CH9, 1GHz-18GHz)

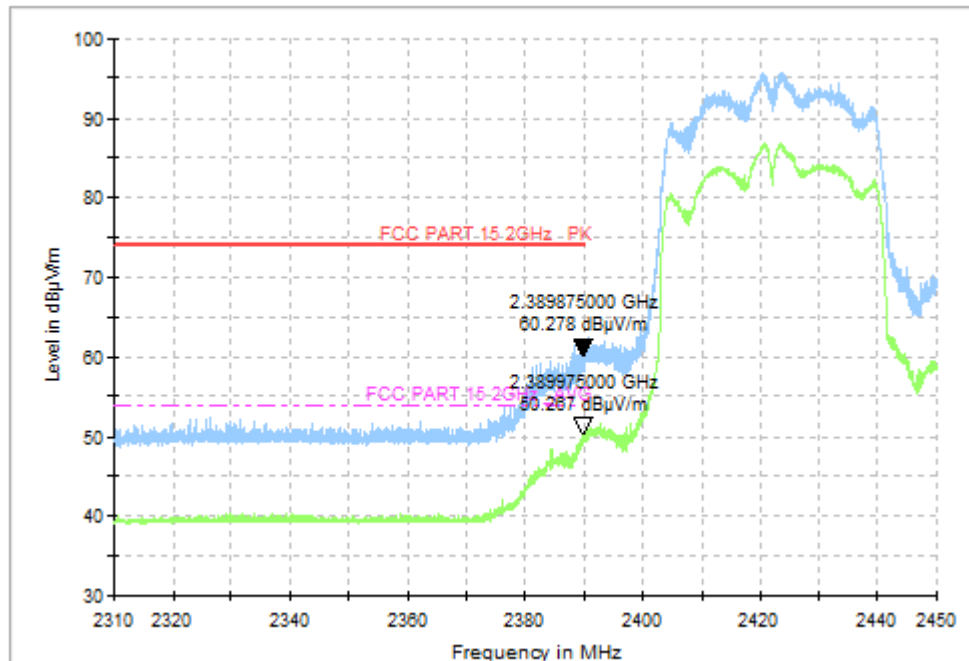


Fig.85 Radiated Restricted Band (802.11n HT40, CH3, 2.38GHz~2.45GHz)

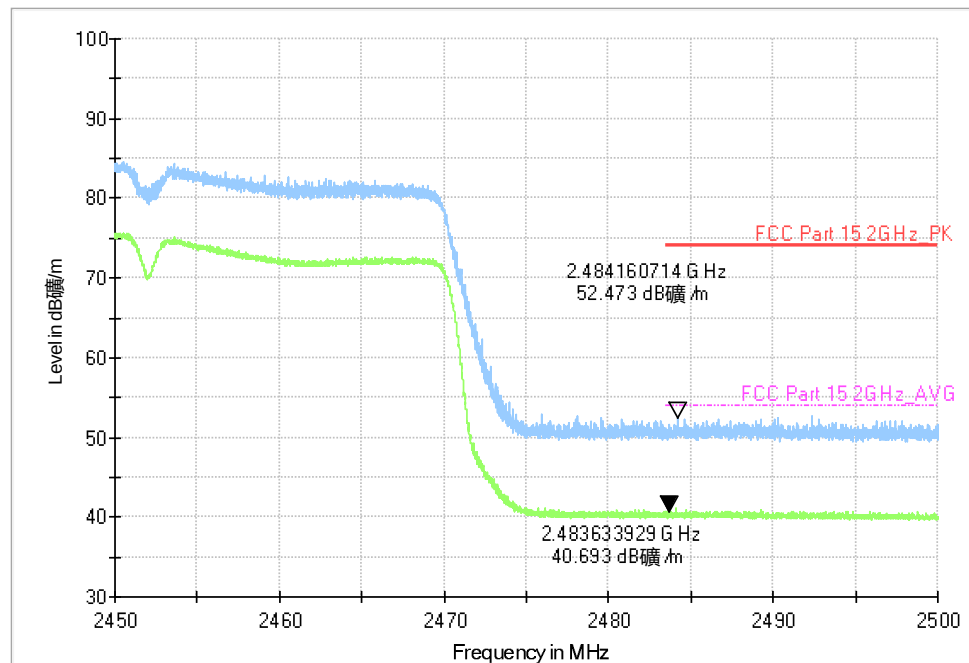


Fig.86 Radiated Restricted Band (802.11n HT40, CH9, 2.45GHz~2.5GHz)

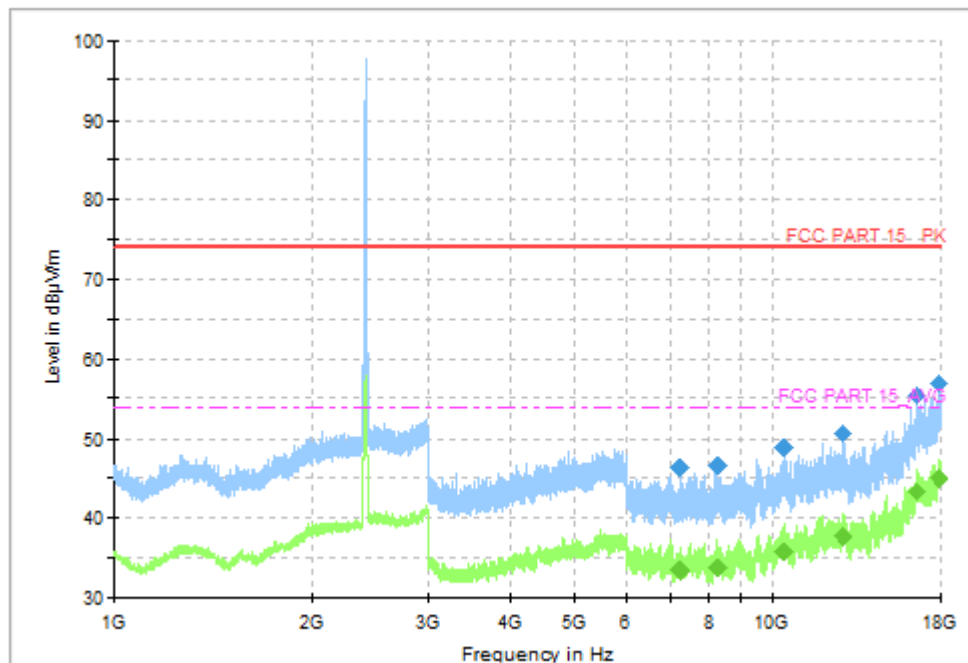


Fig.87 Radiated Spurious Emission (802.11ax HE20, CH1, 1GHz-18GHz)

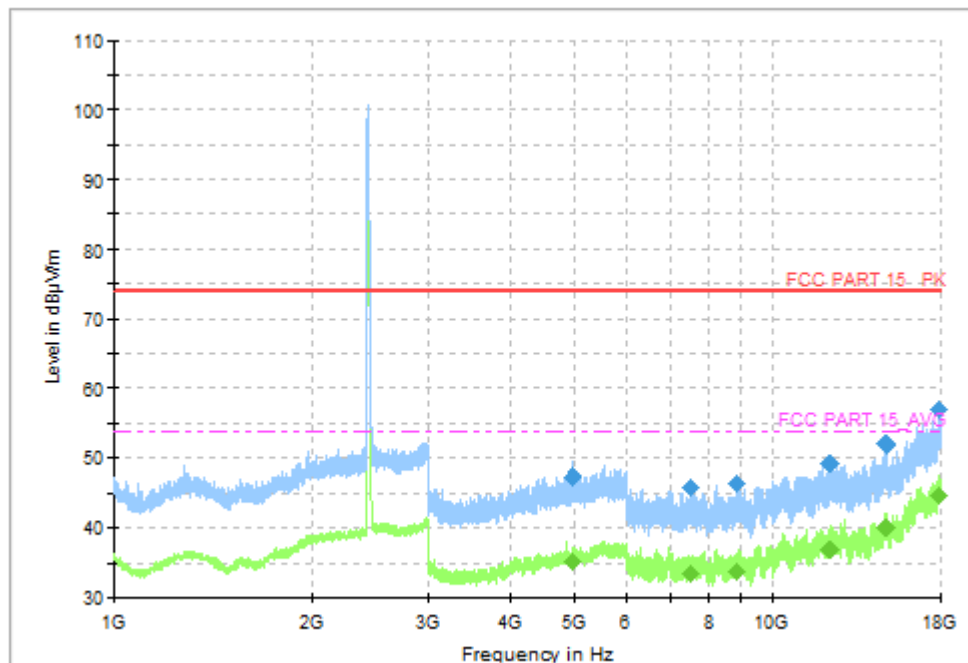


Fig.88 Radiated Spurious Emission (802.11ax HE20, CH6, 1GHz-18GHz)

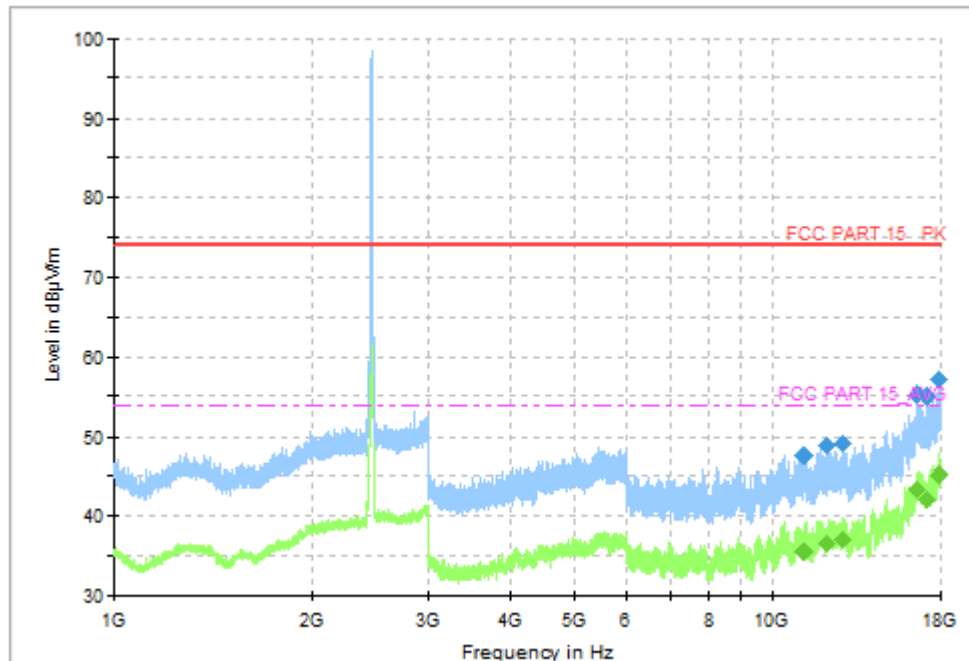


Fig.89 Radiated Spurious Emission (802.11ax HE20, CH11, 1GHz-18GHz)

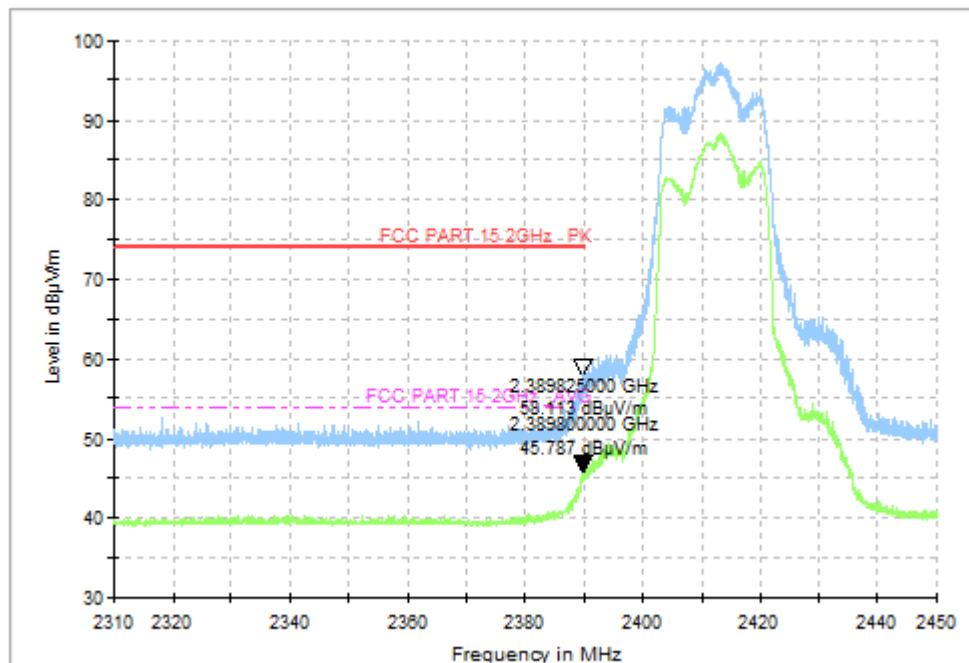


Fig.90 Radiated Restricted Band (802.11ax HE20, CH1, 2.38GHz~2.45GHz)

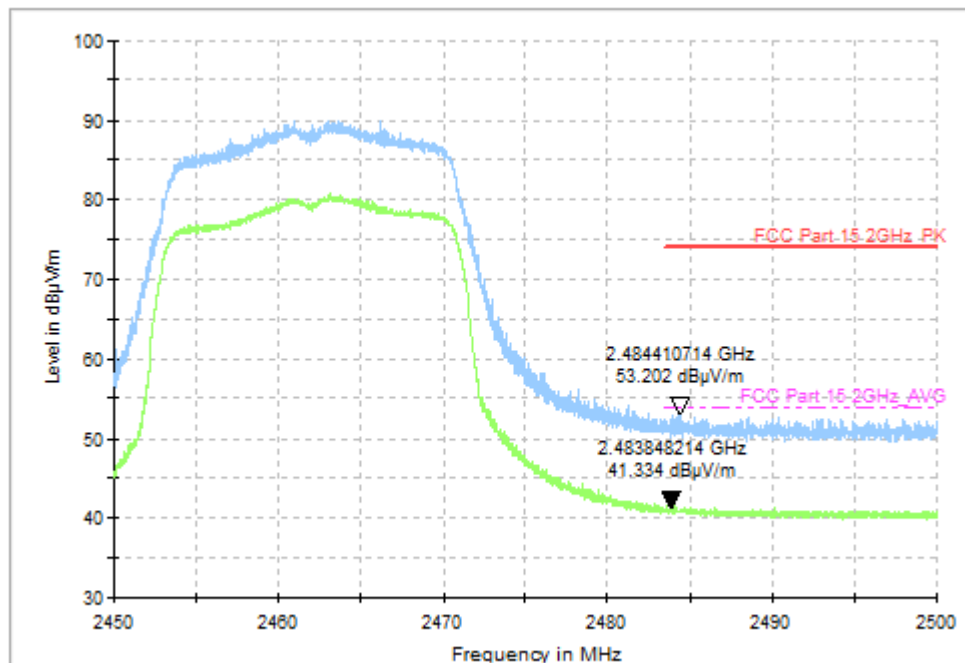


Fig.91 Radiated Restricted Band (802.11ax HE20, CH11, 2.45GHz~2.5GHz)

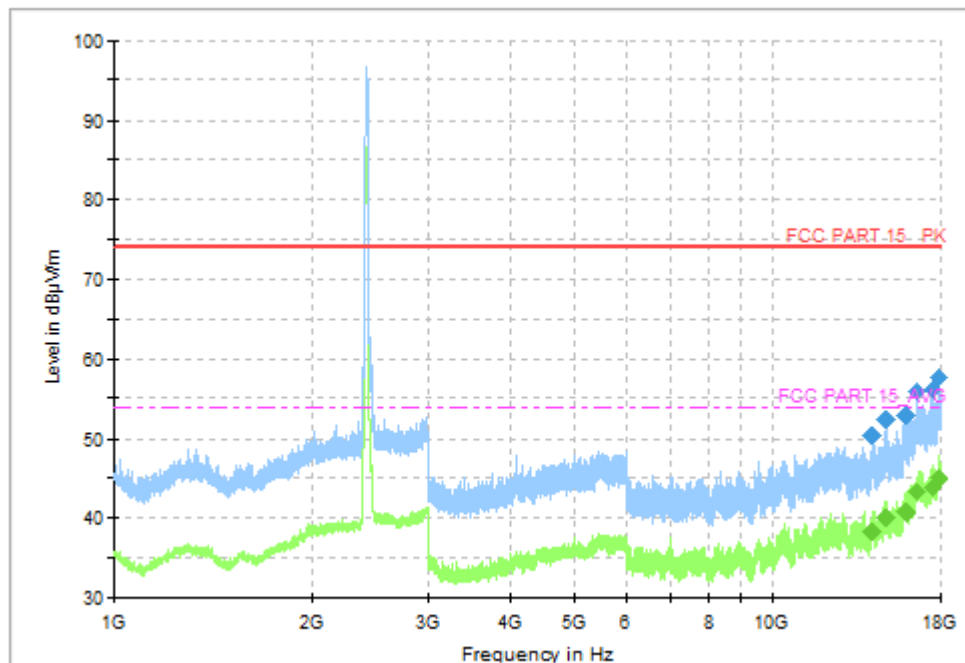


Fig.92 Radiated Spurious Emission (802.11ax HE40, CH3, 1GHz-18GHz)

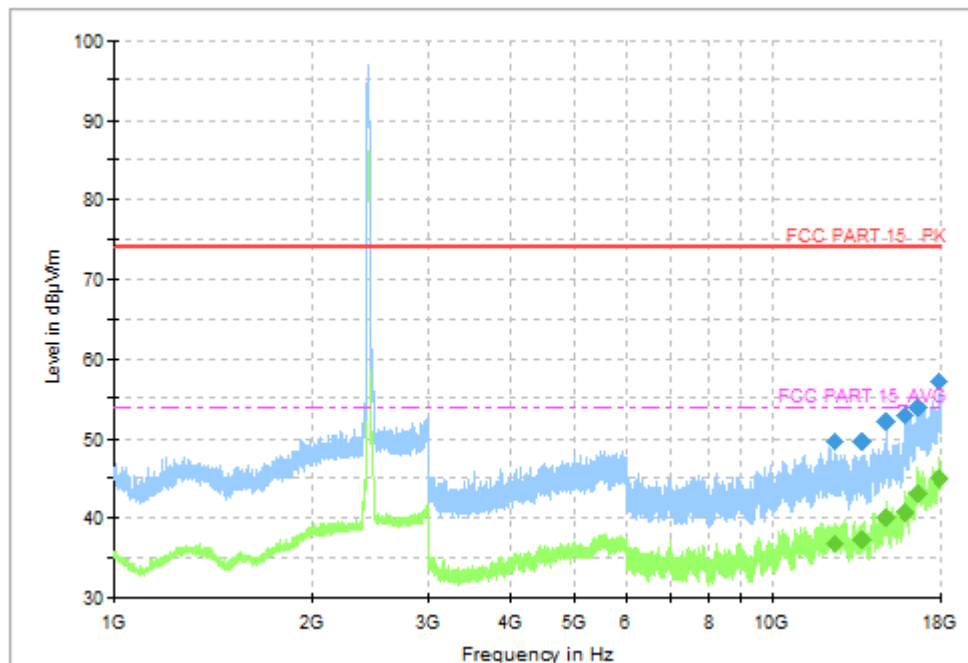


Fig.93 Radiated Spurious Emission (802.11ax HE40, CH6, 1GHz-18GHz)

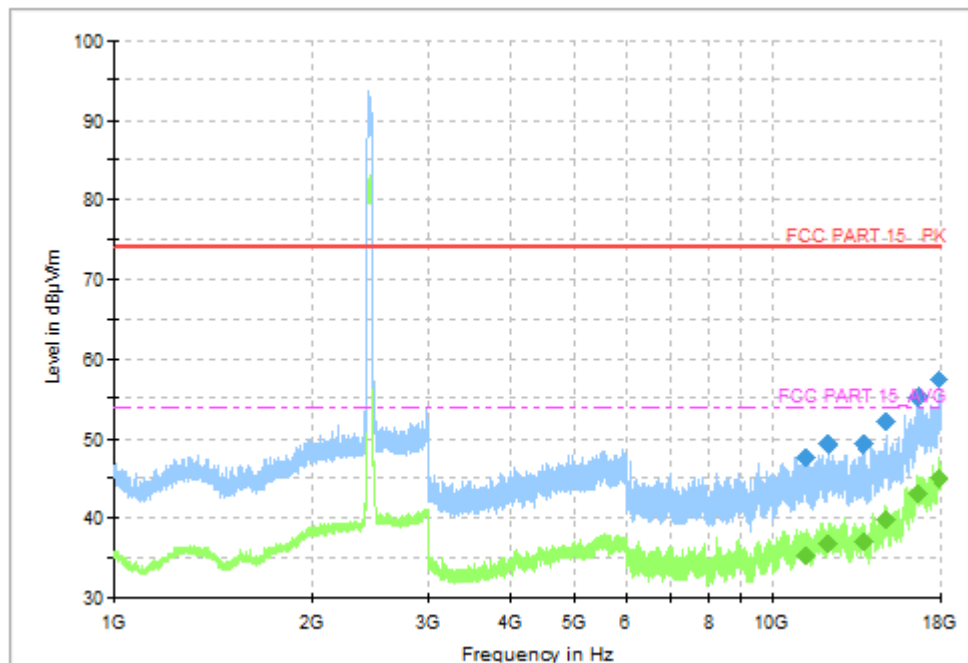


Fig.94 Radiated Spurious Emission (802.11ax HE40, CH9, 1GHz-18GHz)

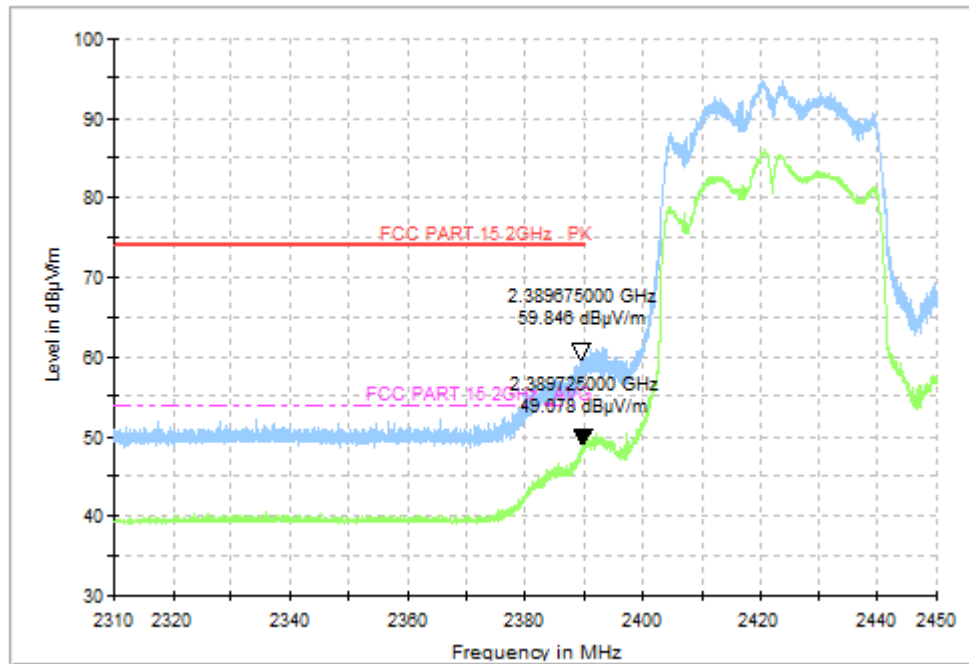


Fig.95 Radiated Restricted Band (802.11ax HE40, CH3, 2.38GHz~2.45GHz)

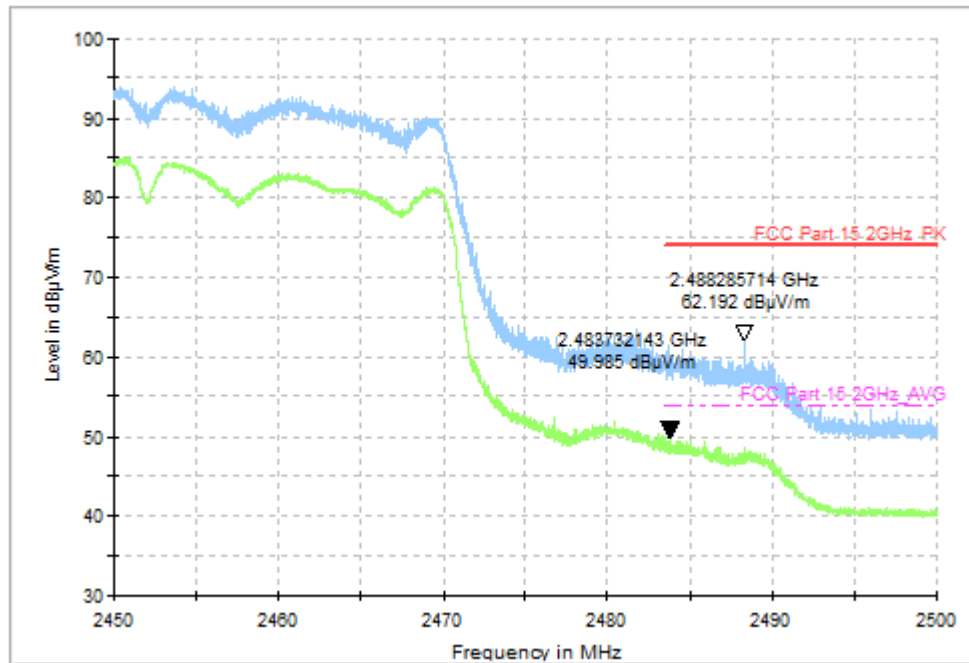


Fig.96 Radiated Restricted Band (802.11ax HE40, CH9, 2.45GHz~2.5GHz)

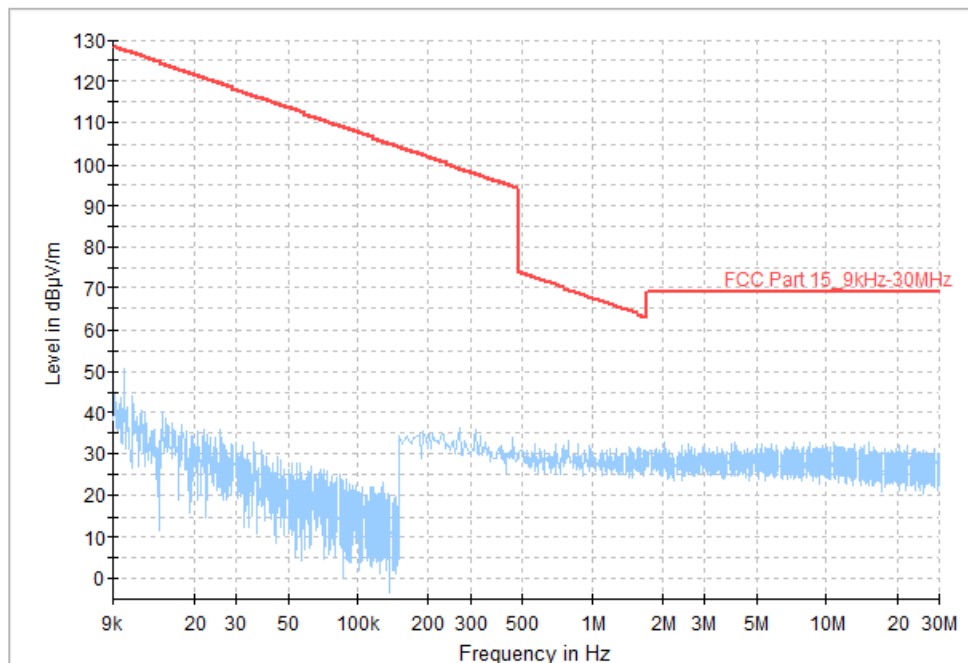


Fig.97 Radiated Spurious Emission (All Channels, 9KHz-30MHz)

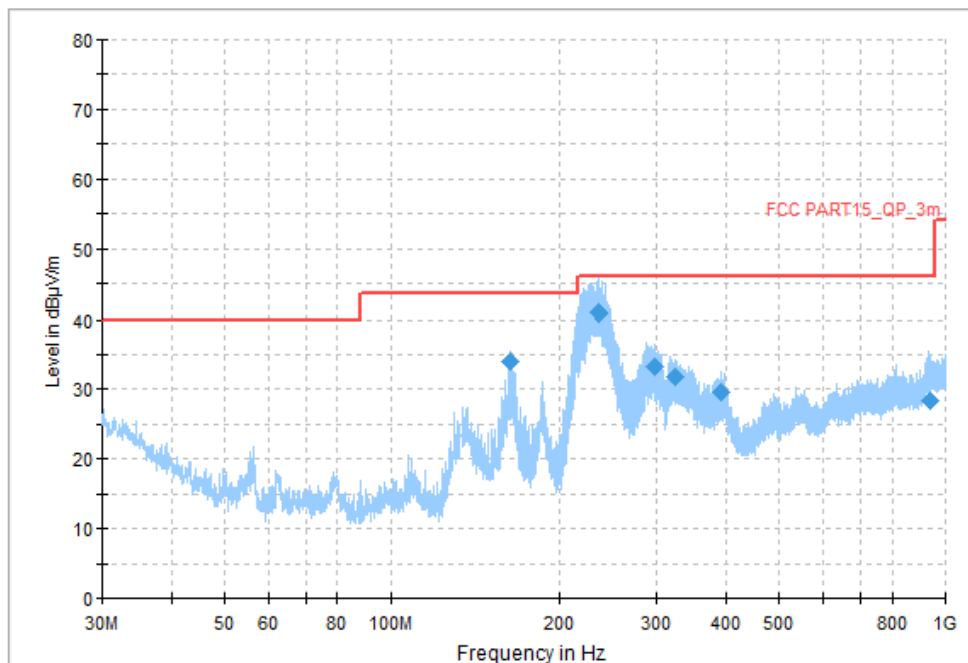


Fig.98 Radiated Spurious Emission (All Channels, 30MHz-1GHz)

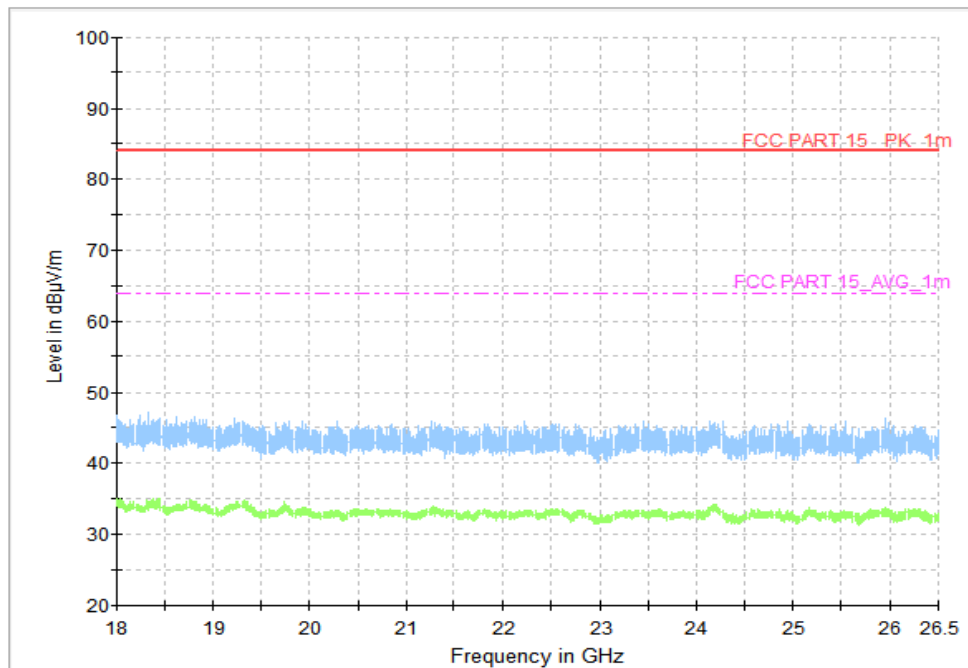


Fig.99 Radiated Spurious Emission (All Channels, 18GHz-26.5GHz)

A.7 AC Power line Conducted Emission

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

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

WLAN (Quasi-peak Limit) - AE2

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.100	Fig.101	P
0.5 to 5	56			
5 to 30	60			

Note: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit) - AE2

Frequency range (MHz)	Average-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig.100	Fig.101	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.

See below for test graphs.

Conclusion: **PASS**

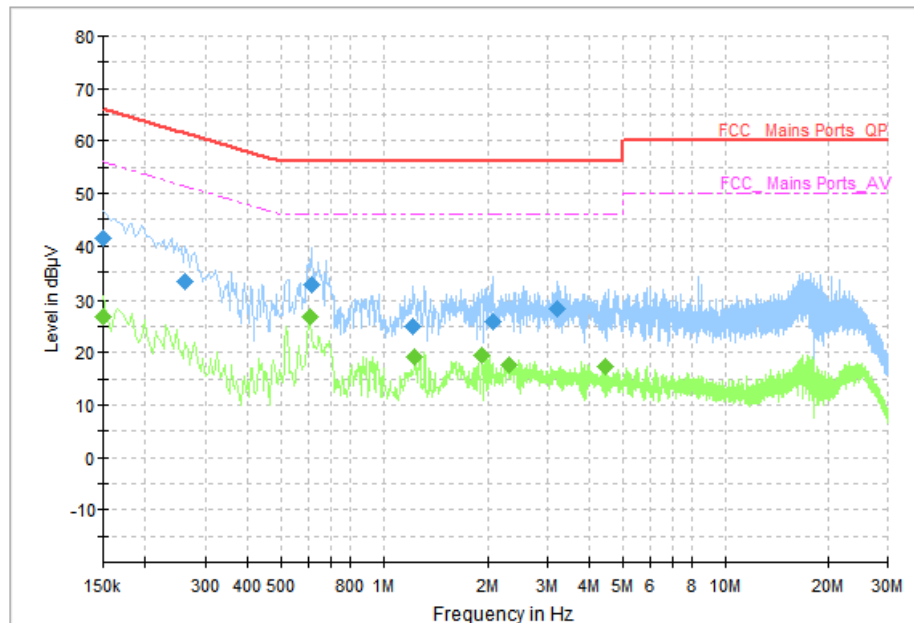


Fig.100 AC Power line Conducted Emission (Traffic, 120V)

Measurement Results: Quasi Peak

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	41.36	66.00	24.64	N	ON	10
0.262000	33.36	61.37	28.01	L1	ON	10
0.618000	32.71	56.00	23.29	N	ON	10
1.222000	24.91	56.00	31.09	N	ON	10
2.066000	25.89	56.00	30.11	N	ON	10
3.222000	28.22	56.00	27.78	N	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	26.92	56.00	29.08	N	ON	10
0.606000	26.76	46.00	19.24	L1	ON	10
1.238000	19.11	46.00	26.89	L1	ON	10
1.926000	19.48	46.00	26.52	L1	ON	10
2.326000	17.73	46.00	28.27	L1	ON	10
4.462000	17.21	46.00	28.79	L1	ON	10

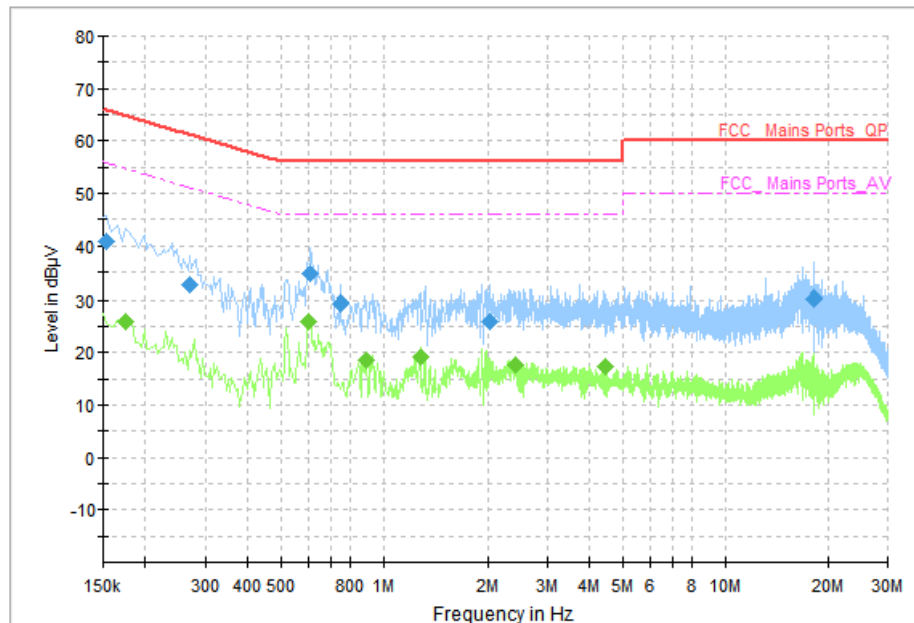


Fig.101 AC Power line Conducted Emission (Idle, 120V)

Measurement Results: Quasi Peak

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000	40.97	65.78	24.81	L1	ON	10
0.270000	32.68	61.12	28.44	L1	ON	10
0.610000	34.73	56.00	21.27	N	ON	10
0.746000	29.32	56.00	26.68	N	ON	10
2.034000	25.73	56.00	30.27	L1	ON	10
18.274000	30.13	60.00	29.87	N	ON	11

Measurement Results: Average

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174000	25.88	54.77	28.89	N	ON	10
0.602000	25.75	46.00	20.25	L1	ON	10
0.890000	18.68	46.00	27.32	L1	ON	10
1.282000	19.26	46.00	26.74	L1	ON	10
2.410000	17.48	46.00	28.52	L1	ON	10
4.462000	17.24	46.00	28.76	L1	ON	10

A.8 99% Occupied Bandwidth

Method of Measurement: See RSS-Gen- section 6.7.

Measurement Limit:

Standard	Limit
RSS-Gen section 6.7	/

Measurement Result:

Mode	Channel	Frequency (MHz)	Test Results (MHz)		Conclusion
802.11b	CH 1	2412	Fig.102	13.12	P
	CH 6	2437	Fig.103	13.36	P
	CH 11	2462	Fig.104	13.28	P
802.11g	CH 1	2412	Fig.105	16.32	P
	CH 6	2437	Fig.106	16.32	P
	CH 11	2462	Fig.107	16.36	P
802.11n HT20	CH 1	2412	Fig.108	17.52	P
	CH 6	2437	Fig.109	17.48	P
	CH 11	2462	Fig.110	17.56	P
802.11n HT40	CH 3	2422	Fig.111	36.16	P
	CH 6	2437	Fig.112	35.76	P
	CH 9	2452	Fig.113	35.84	P
802.11ax HE20	CH 1	2412	Fig.114	18.88	P
	CH 6	2437	Fig.115	18.84	P
	CH 11	2462	Fig.116	18.92	P
802.11ax HE40	CH 3	2422	Fig.117	37.76	P
	CH 6	2437	Fig.118	37.44	P
	CH 9	2452	Fig.119	37.52	P

See below for test graphs.

Conclusion: PASS

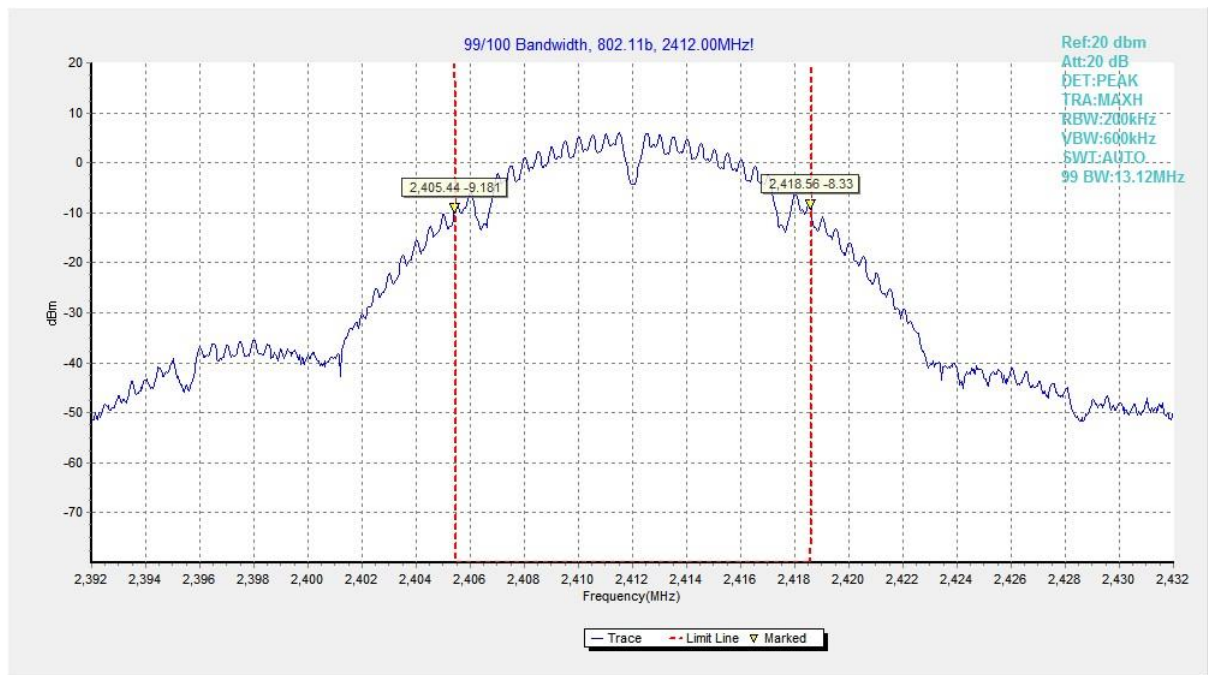


Fig.102 99% Occupied Bandwidth (802.11b, CH 1)

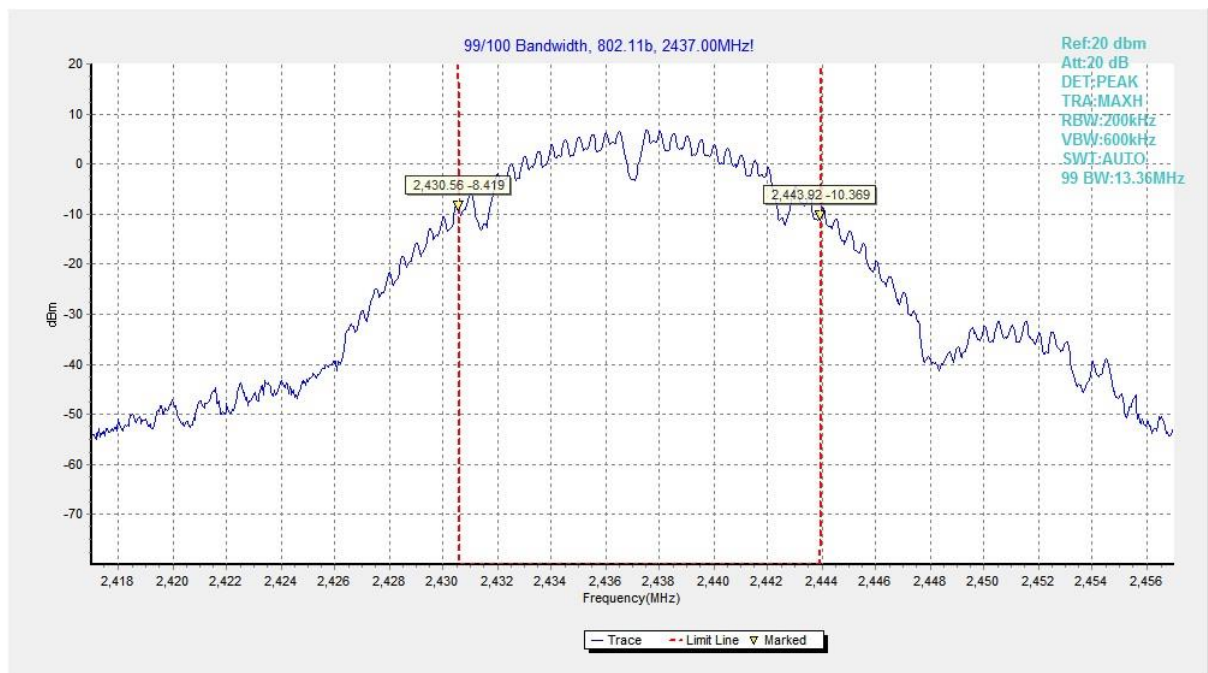


Fig.103 99% Occupied Bandwidth (802.11b, CH 6)

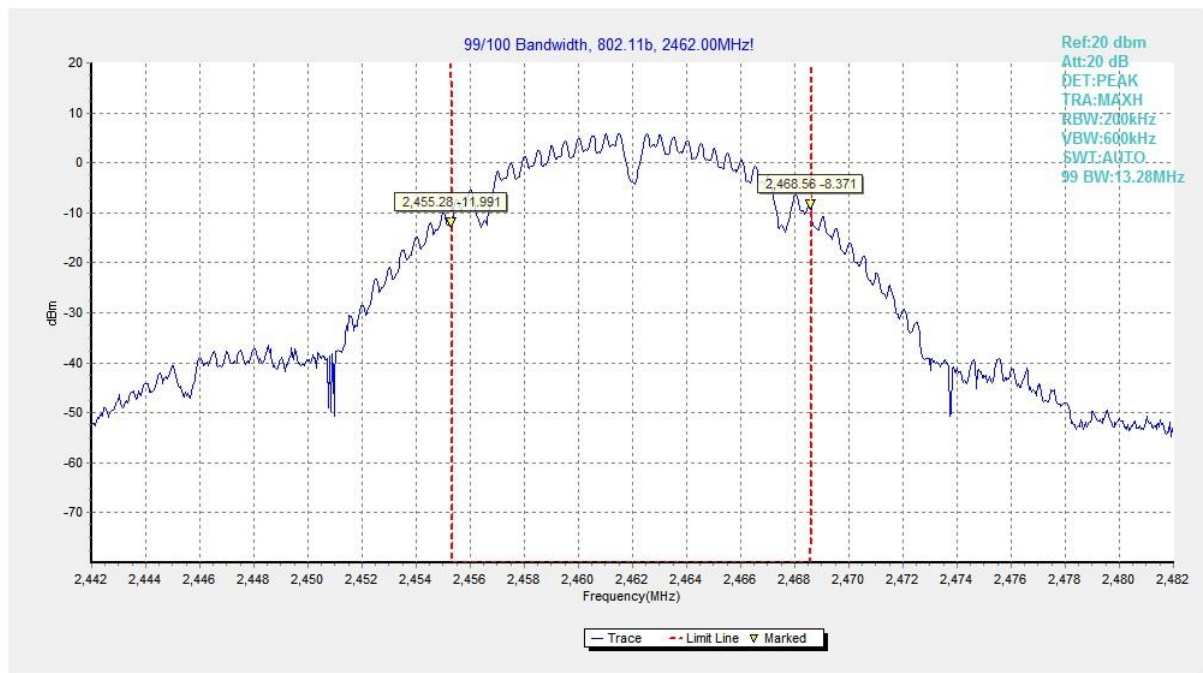


Fig.104 99% Occupied Bandwidth (802.11b, CH 11)

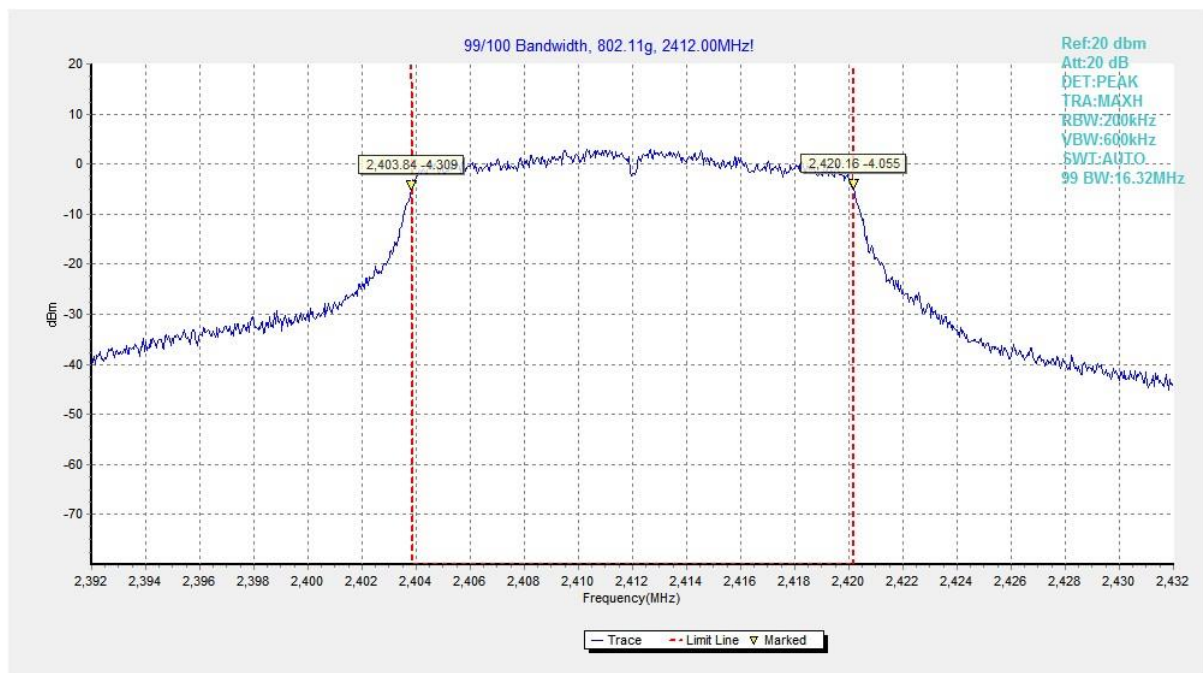


Fig.105 99% Occupied Bandwidth (802.11g, CH 1)

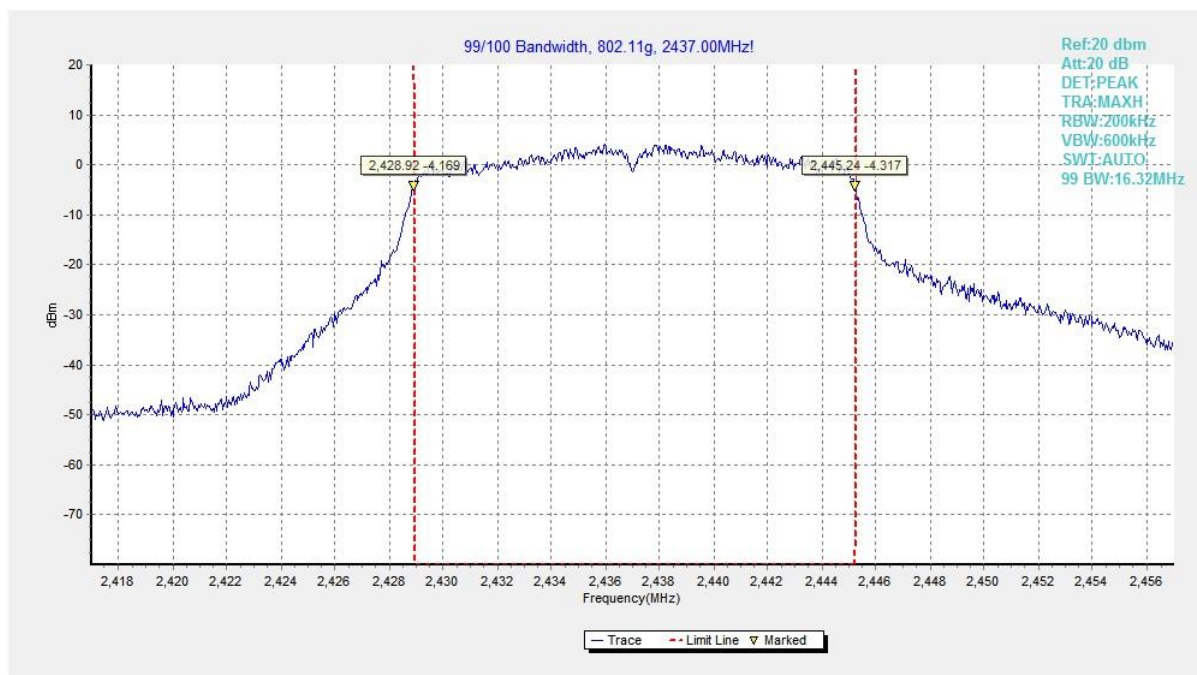


Fig.106 99% Occupied Bandwidth (802.11g, CH 6)

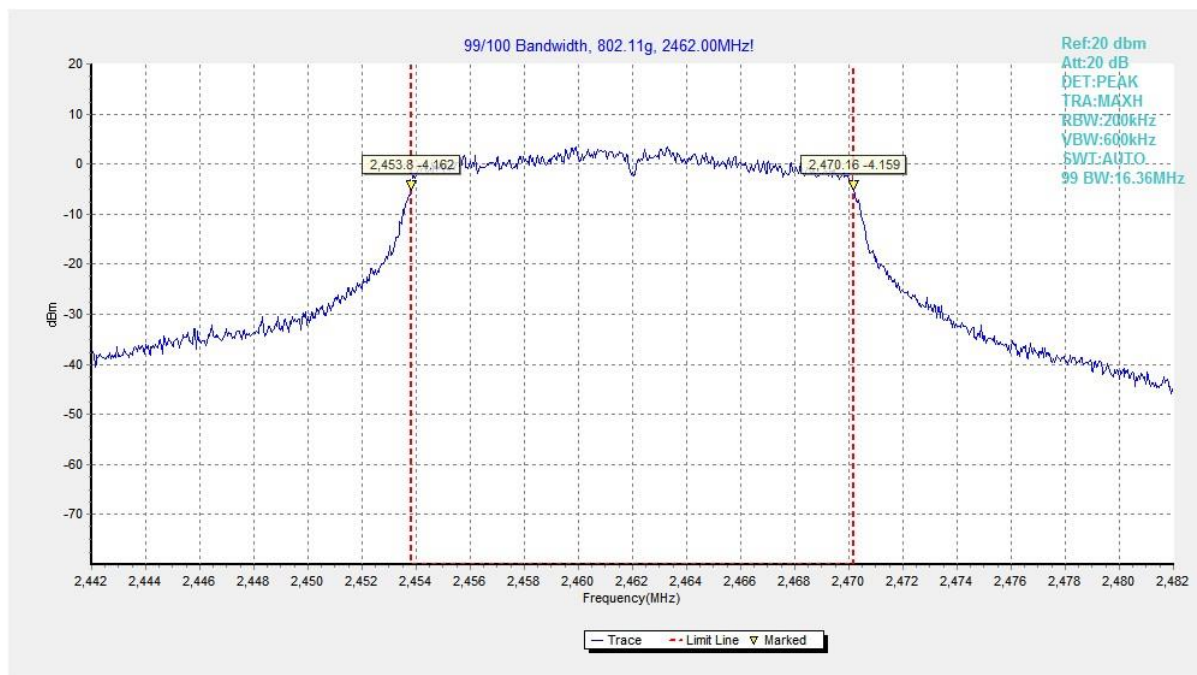


Fig.107 99% Occupied Bandwidth (802.11g, CH 11)

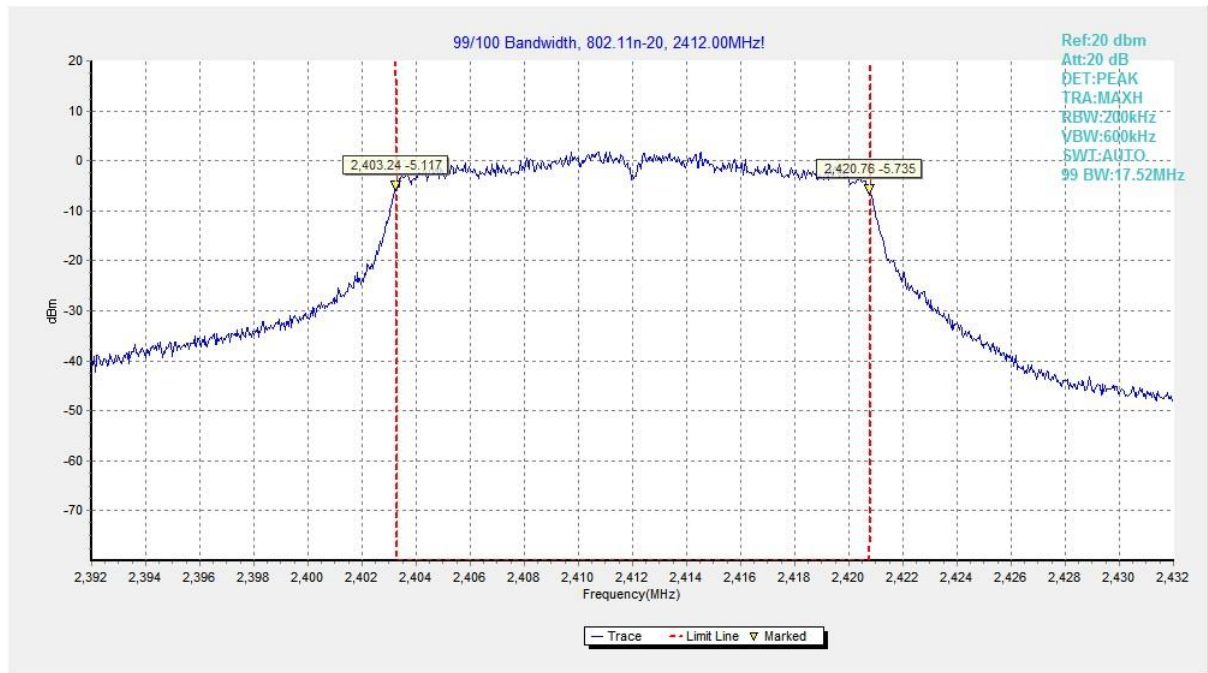


Fig.108 99% Occupied Bandwidth (802.11n HT20, CH 1)

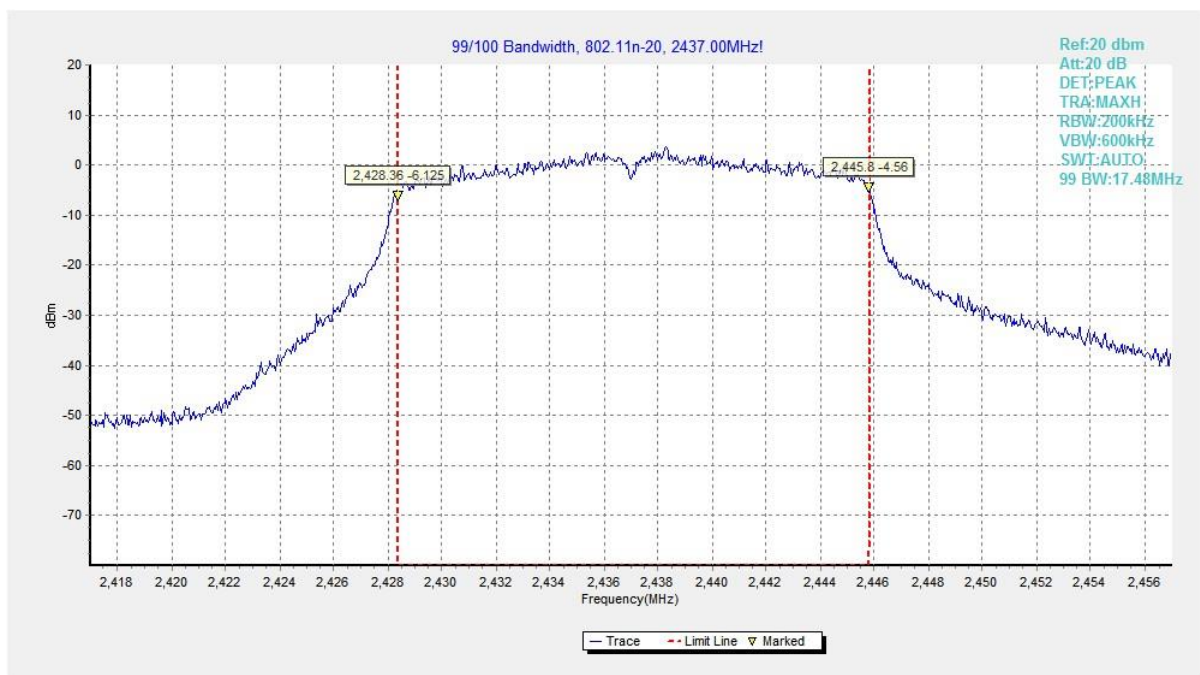


Fig.109 99% Occupied Bandwidth (802.11n HT20, CH 6)

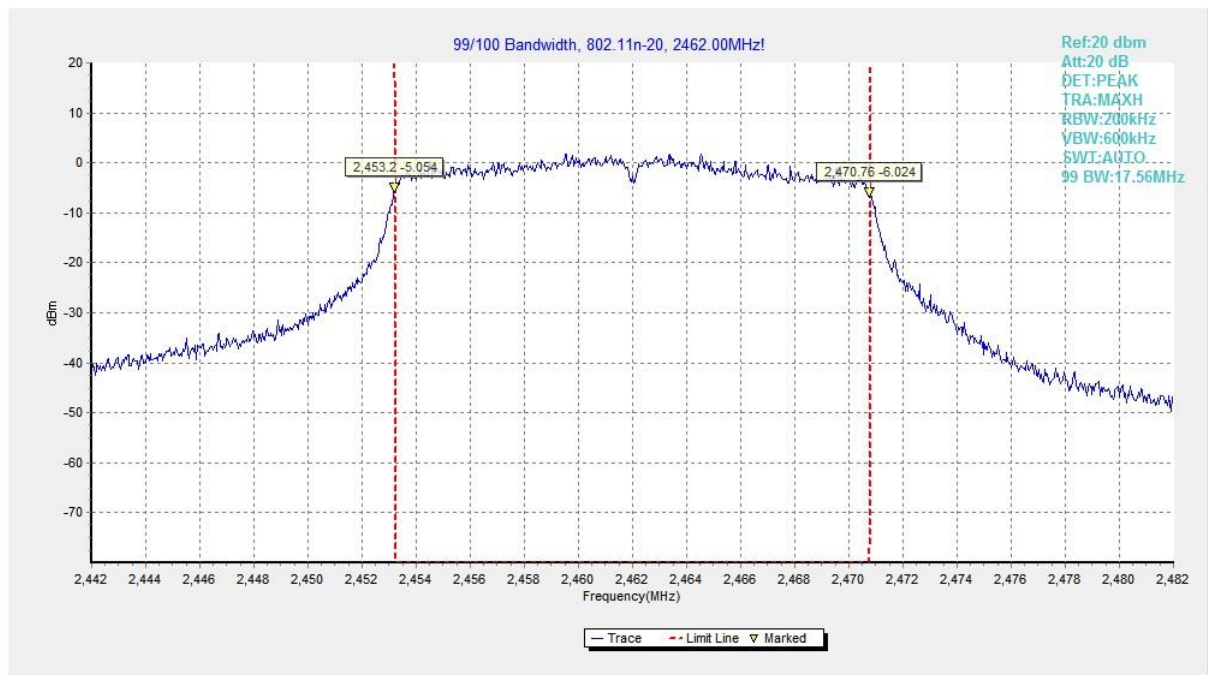


Fig.110 99% Occupied Bandwidth (802.11n HT20, CH 11)



Fig.111 99% Occupied Bandwidth (802.11n HT40, CH 3)



Fig.112 99% Occupied Bandwidth (802.11n HT40, CH 6)



Fig.113 99% Occupied Bandwidth (802.11n HT40, CH 9)

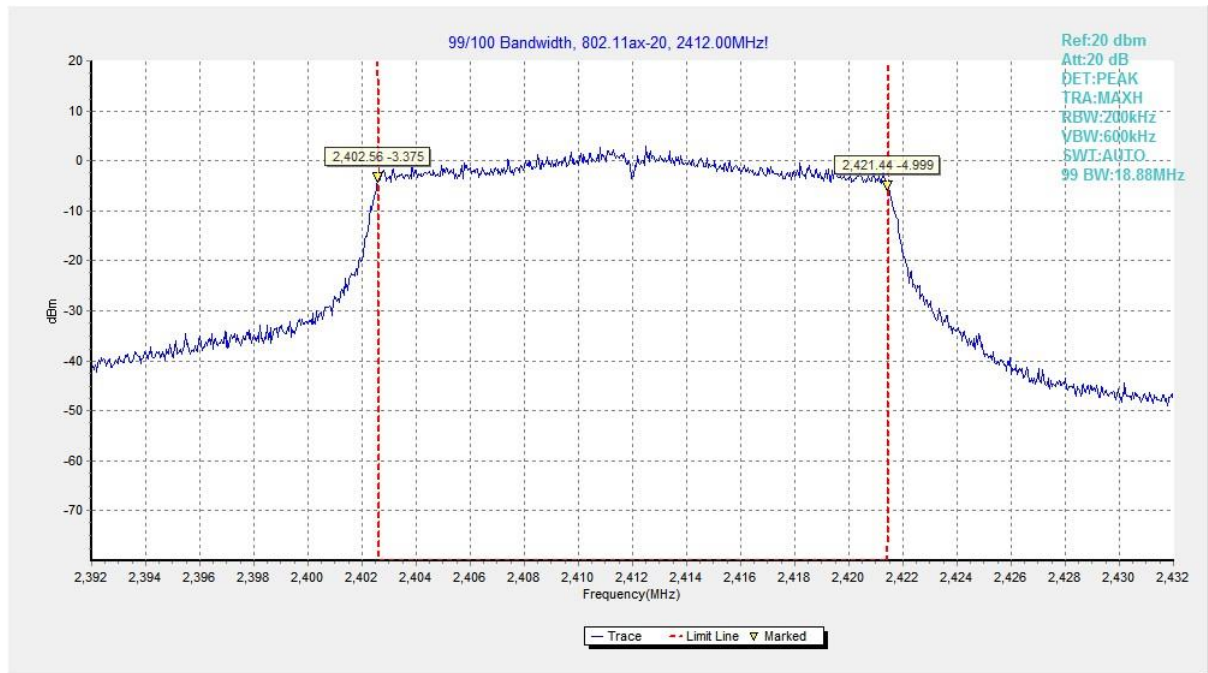


Fig.114 99% Occupied Bandwidth (802.11ax HE20, CH 1)

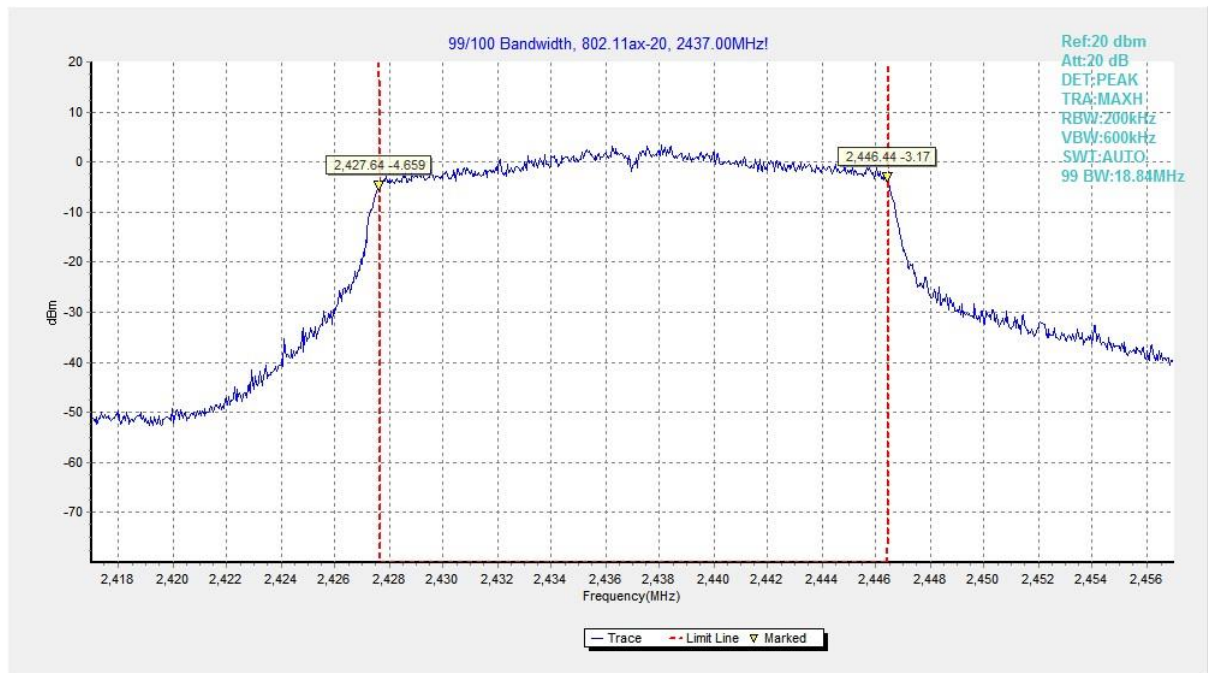


Fig.115 99% Occupied Bandwidth (802.11ax HE20, CH 6)

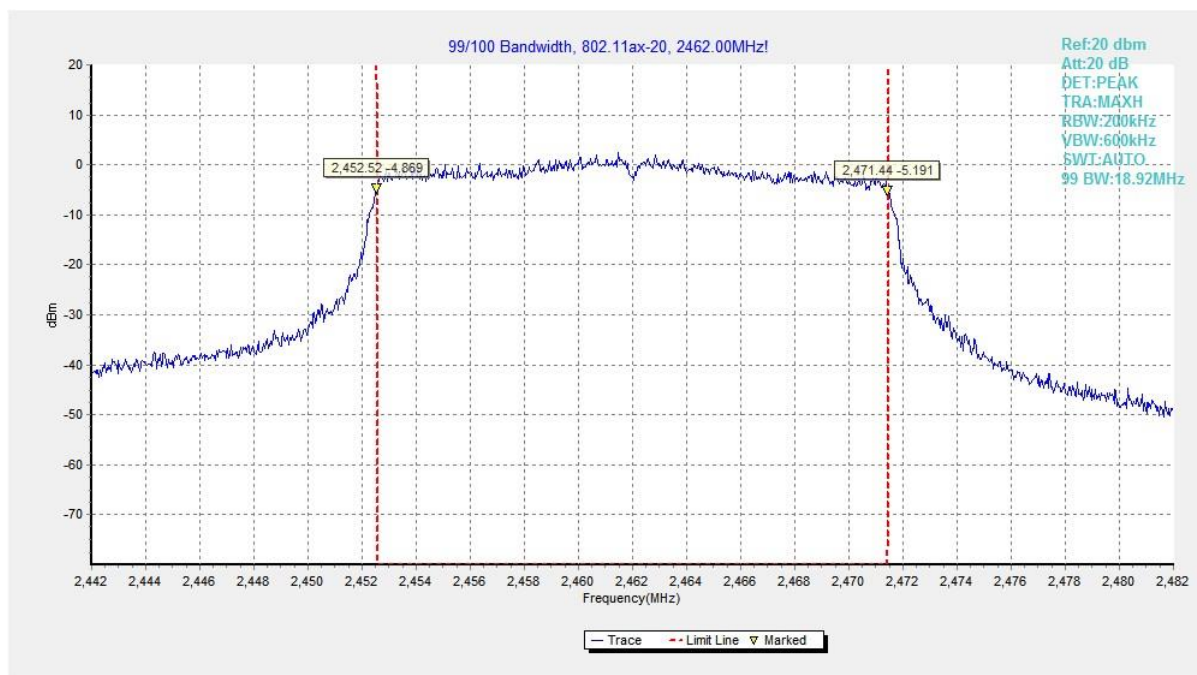


Fig.116 99% Occupied Bandwidth (802.11ax HE20, CH 11)

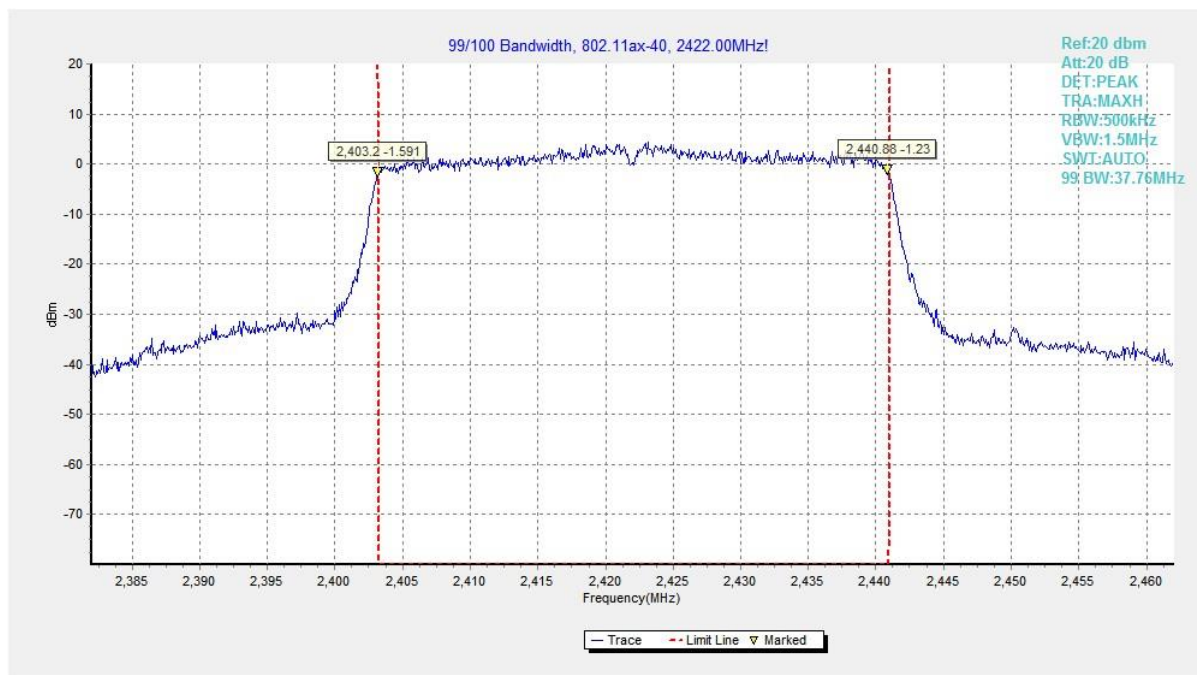


Fig.117 99% Occupied Bandwidth (802.11ax HE40, CH 3)

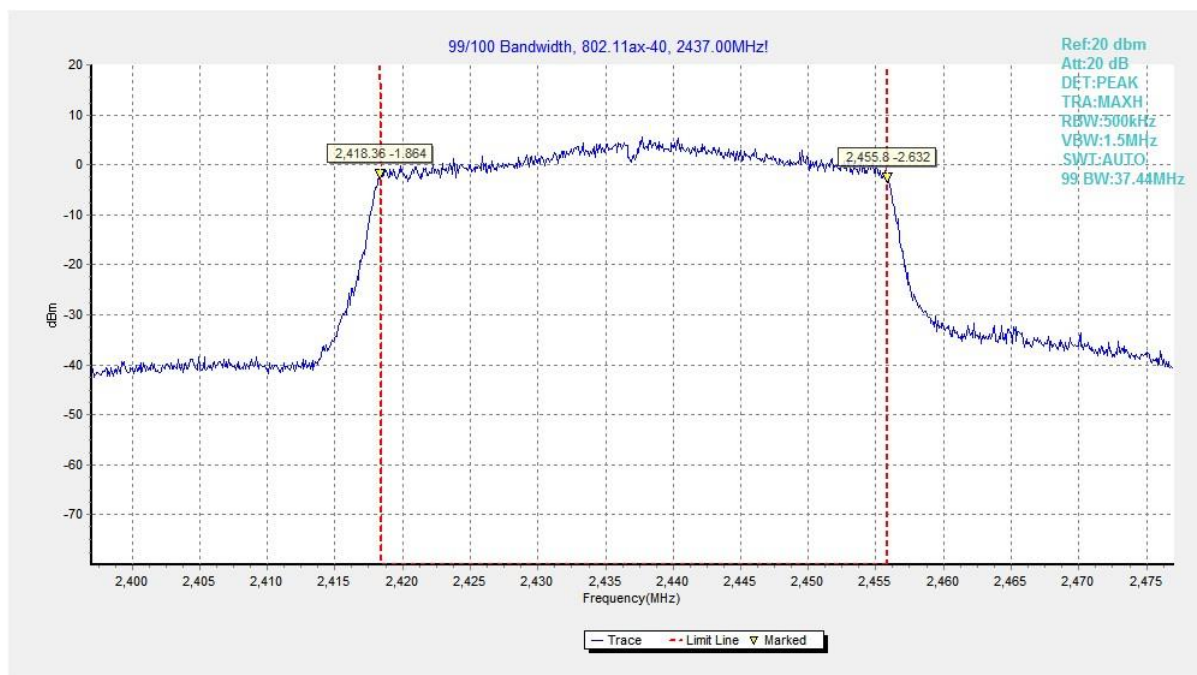


Fig.118 99% Occupied Bandwidth (802.11ax HE40, CH 6)

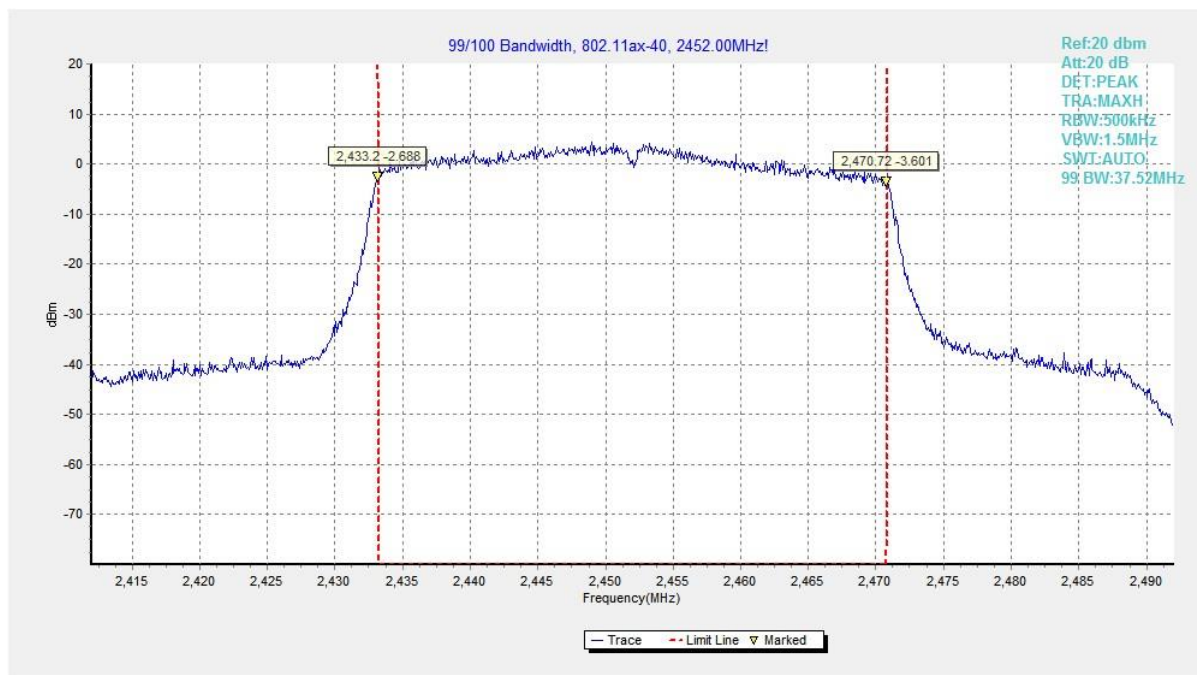


Fig.119 99% Occupied Bandwidth (802.11ax HE40, CH 9)

END OF REPORT