

A.6. 99% Occupied Bandwidth(conducted)

Measurement Limit:

Standard	Limit (MHz)
FCC 47 CFR Part 15.403	/

The measurement is made according to KDB 789033

Measurement Result:

Mode	Channel	99% Occupied Bandwidth(MHz)		Conclusion
802.11a	5180MHz(Ch36)	Fig.39	17.10	/
	5200MHz(Ch40)	Fig.40	17.18	/
	5240MHz(Ch48)	Fig.41	17.18	/
	5260MHz(Ch52)	Fig.42	17.14	/
	5280MHz(Ch56)	Fig.43	17.14	/
	5320MHz(Ch64)	Fig.44	17.10	/
	5500MHz(Ch100)	Fig.45	17.14	/
	5580MHz(Ch116)	Fig.46	17.06	/
	5700MHz(Ch140)	Fig.47	17.18	/
802.11n-HT20	5180MHz(Ch36)	Fig.48	18.38	/
	5200MHz(Ch40)	Fig.49	18.34	/
	5240MHz(Ch48)	Fig.50	18.34	/
	5260MHz(Ch52)	Fig.51	18.34	/
	5280MHz(Ch56)	Fig.52	18.30	/
	5320MHz(Ch64)	Fig.53	18.38	/
	5500MHz(Ch100)	Fig.54	18.42	/
	5580MHz(Ch116)	Fig.55	18.34	/
	5700MHz(Ch140)	Fig.56	18.38	/
802.11n-HT40	5190MHz(Ch38)	Fig.57	36.36	/
	5230MHz(Ch46)	Fig.58	36.36	/
	5270MHz(Ch54)	Fig.59	36.20	/
	5310MHz(Ch62)	Fig.60	36.28	/
	5510MHz(Ch102)	Fig.61	36.36	/
	5550MHz(Ch110)	Fig.62	36.44	/
	5670MHz(Ch134)	Fig.63	36.20	/
802.11 ac-VHT80	5210MHz(Ch42)	Fig.64	75.76	/
	5290MHz(Ch58)	Fig.65	75.76	/
	5530MHz(Ch106)	Fig.66	75.60	/
	5610MHz(Ch122)	Fig.67	75.92	/

Conclusion: PASS

Test graphs as below:



Fig. 39 99% Occupied Bandwidth (802.11a, 5180MHz)

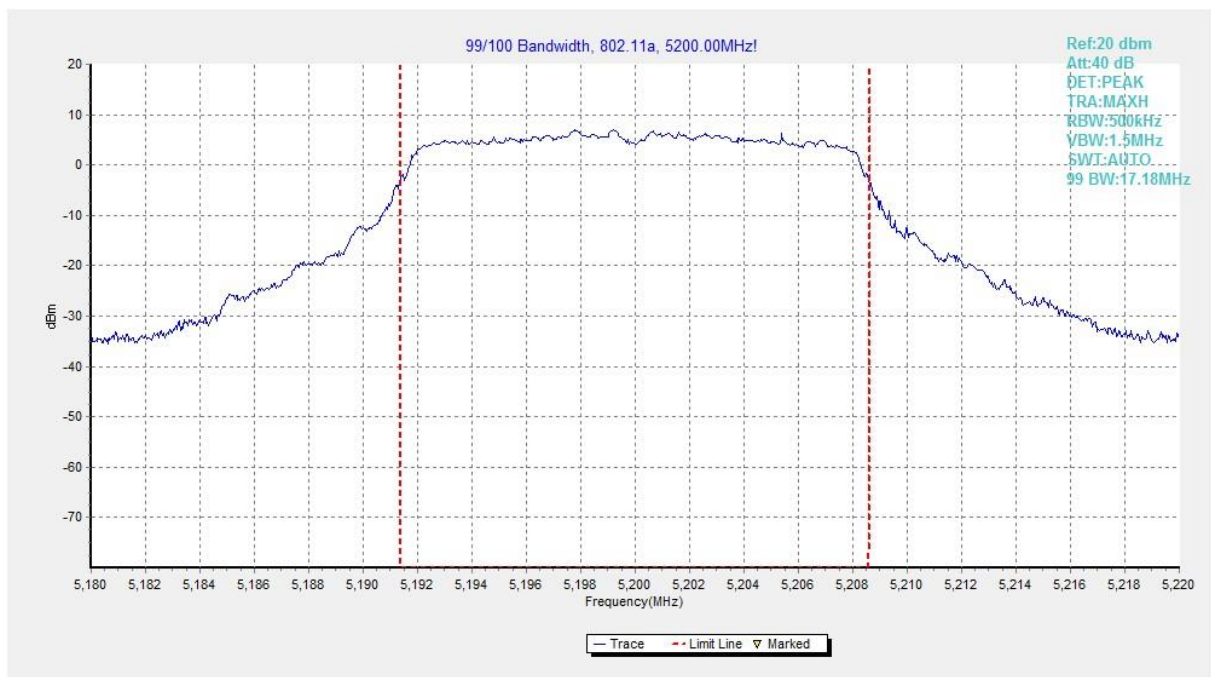


Fig. 40 99% Occupied Bandwidth (802.11a, 5200MHz)

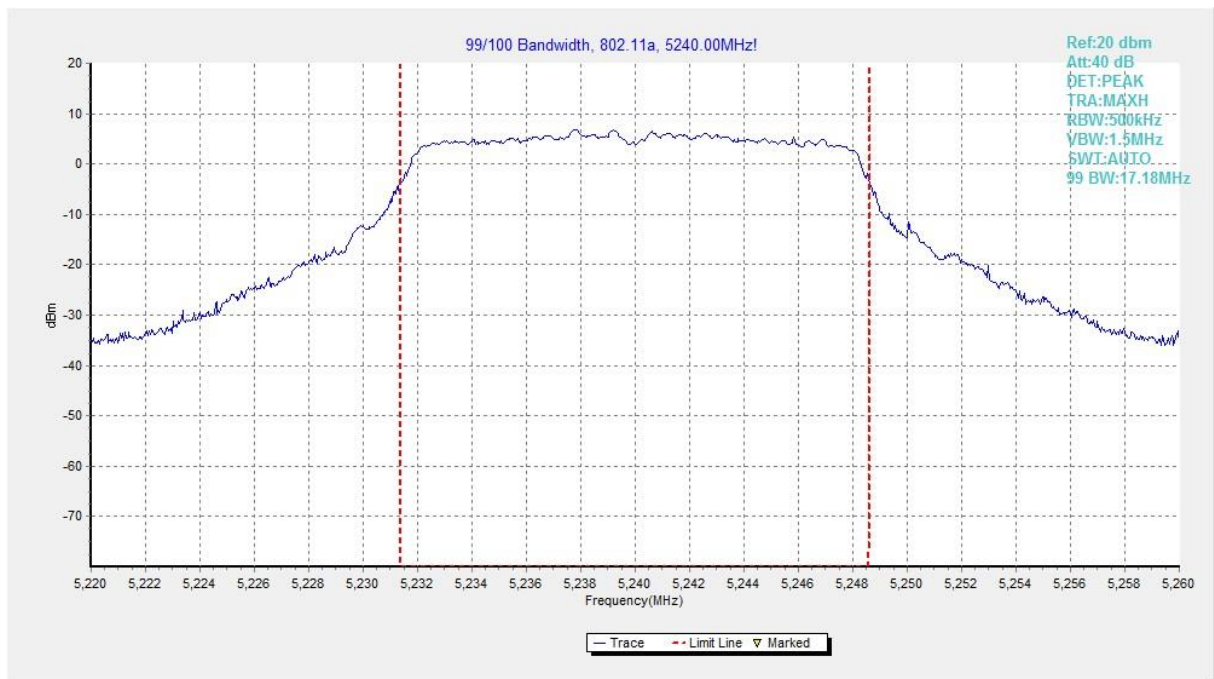


Fig. 41 99% Occupied Bandwidth (802.11a, 5240MHz)

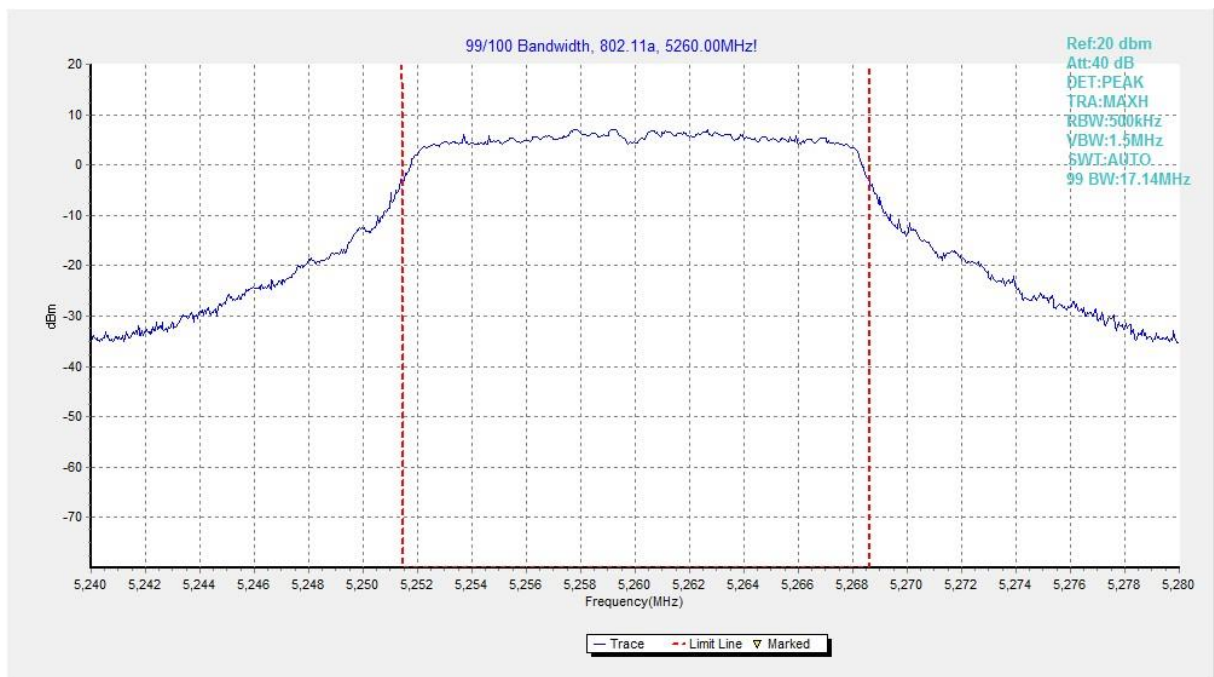


Fig. 42 99% Occupied Bandwidth (802.11a, 5260MHz)

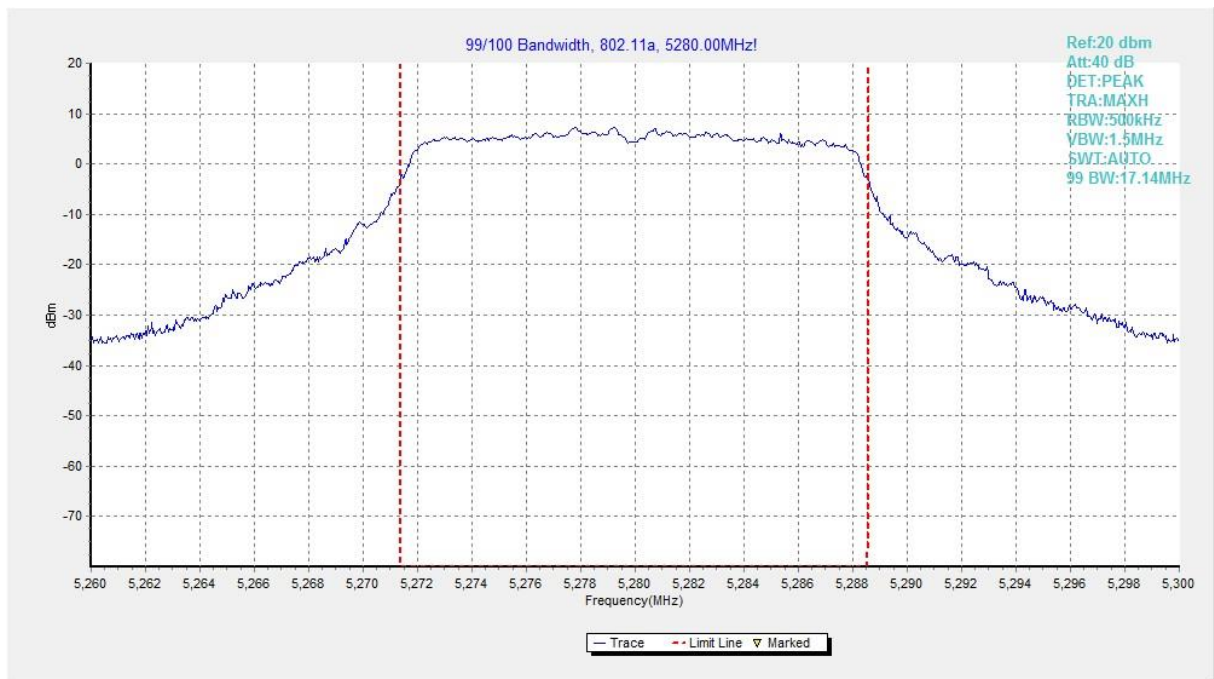


Fig. 43 99% Occupied Bandwidth (802.11a, 5280MHz)

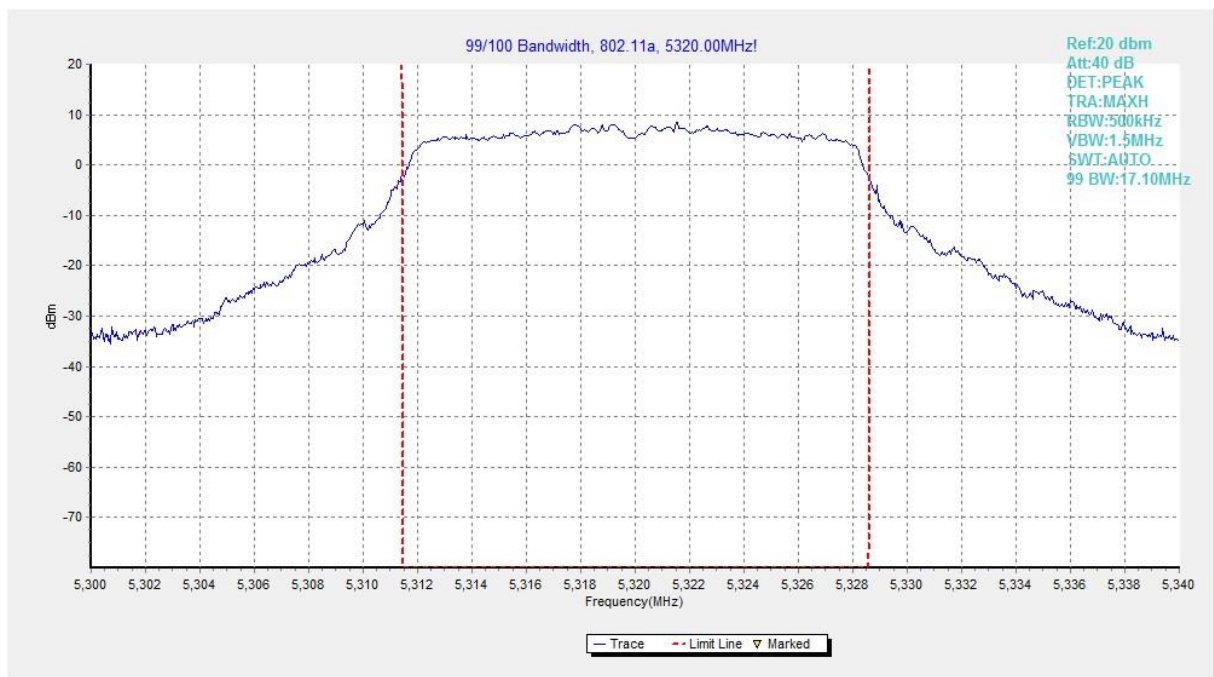


Fig. 44 99% Occupied Bandwidth (802.11a, 5320MHz)

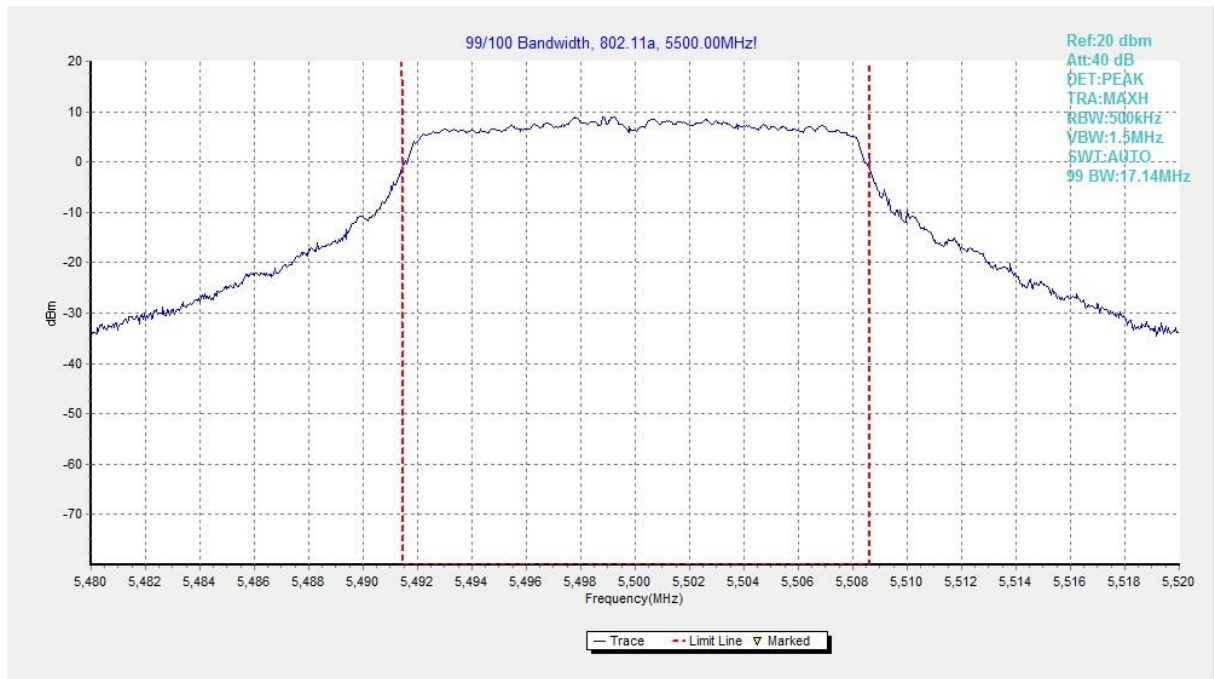


Fig. 45 99% Occupied Bandwidth (802. 11a, 5500MHz)

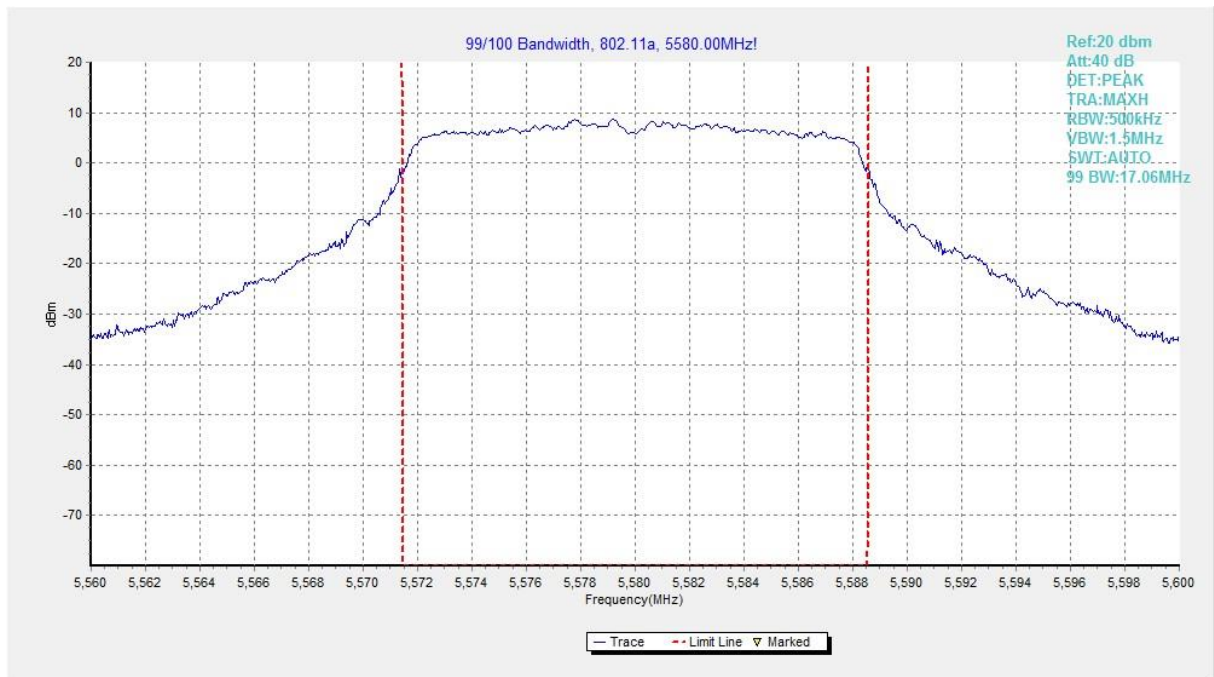


Fig. 46 99% Occupied Bandwidth (802. 11a, 5580MHz)

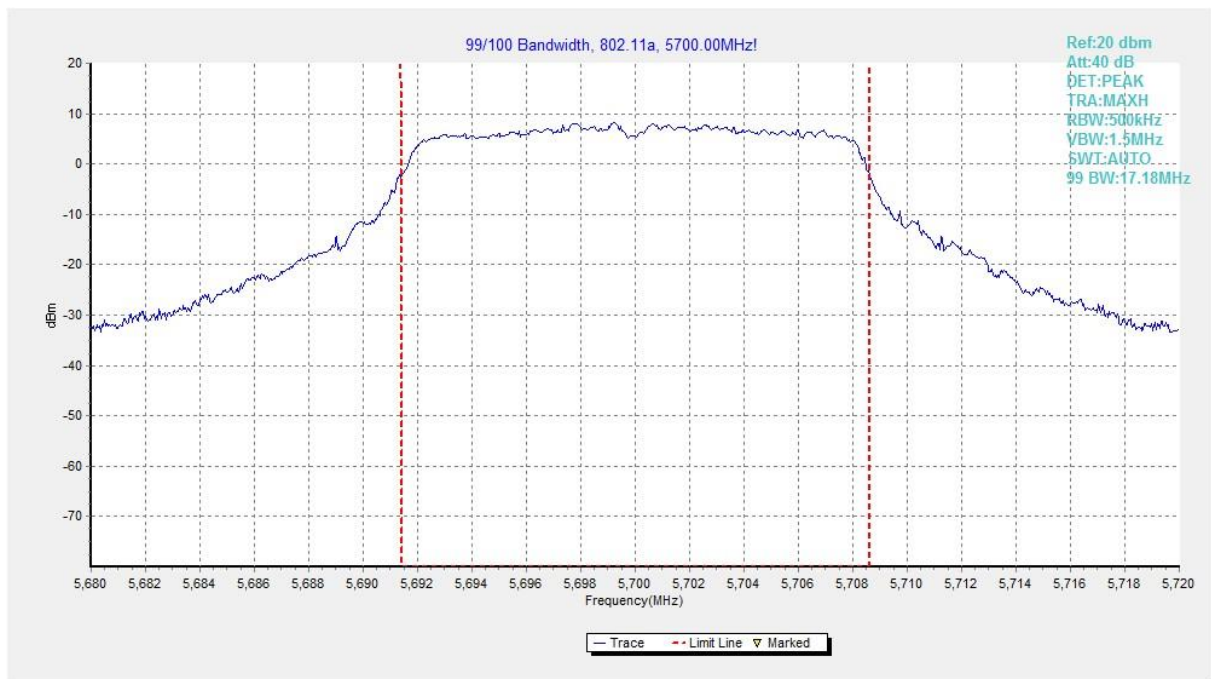


Fig. 47 99% Occupied Bandwidth (802. 11a, 5700MHz)

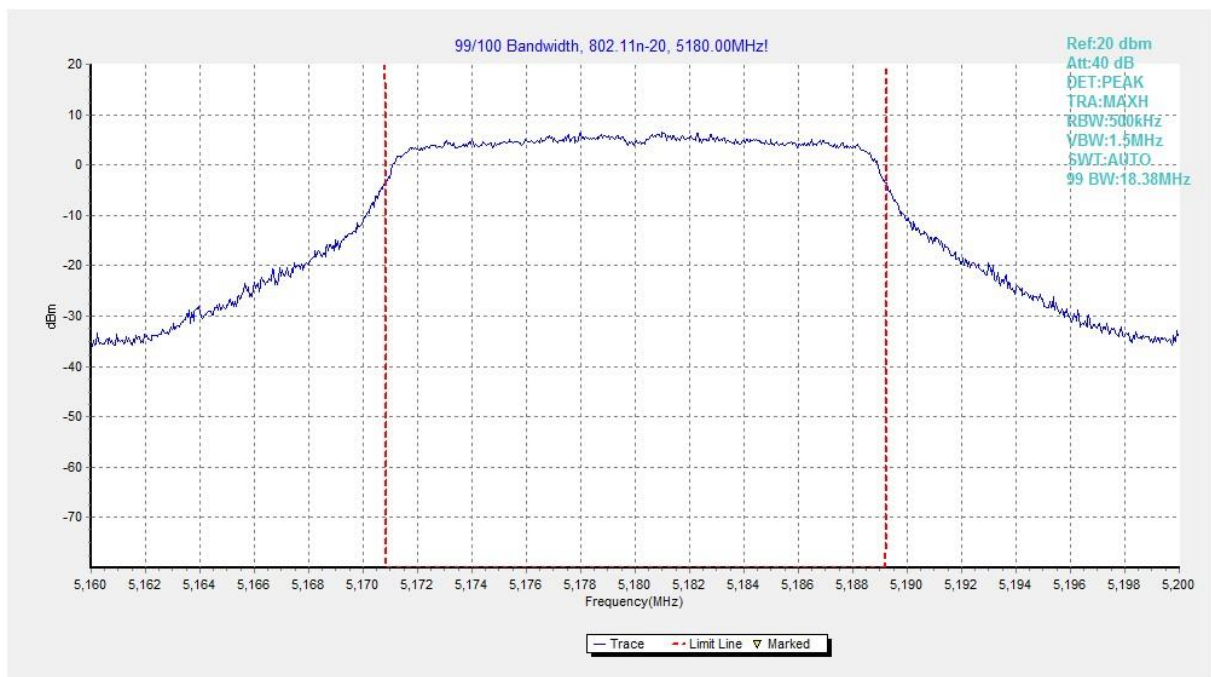


Fig. 48 99% Occupied Bandwidth (802.11n-HT20, 5180MHz)

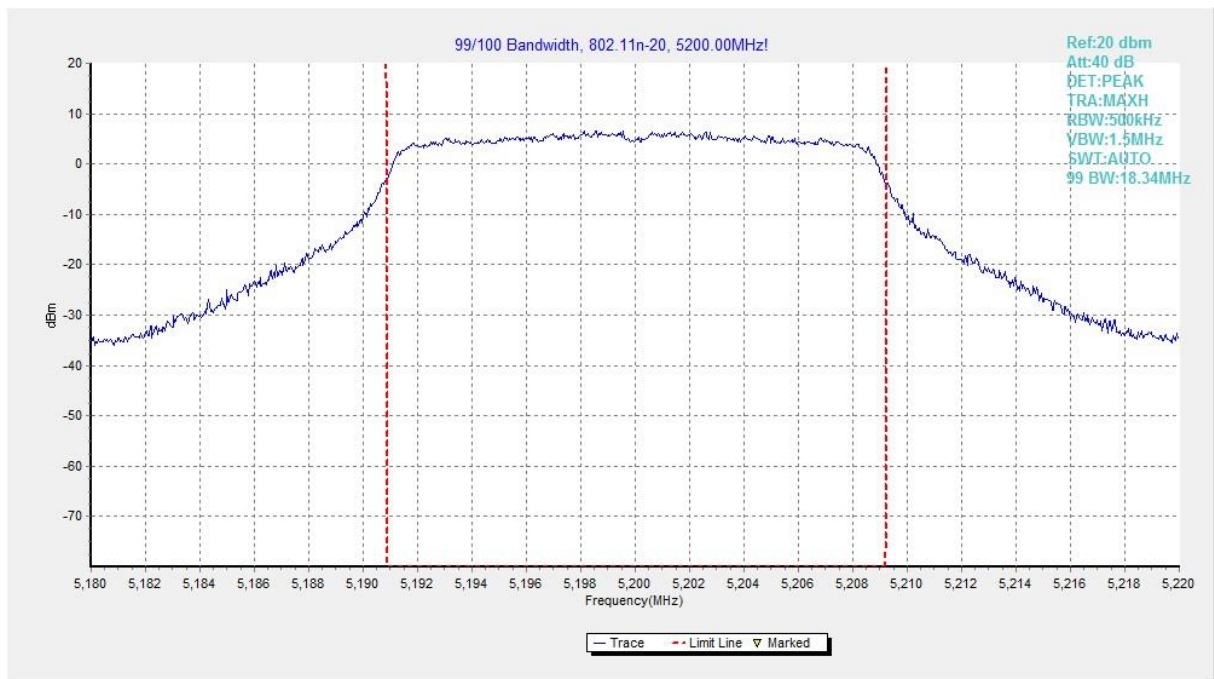


Fig. 49 99% Occupied Bandwidth (802.11n-HT20, 5200MHz)

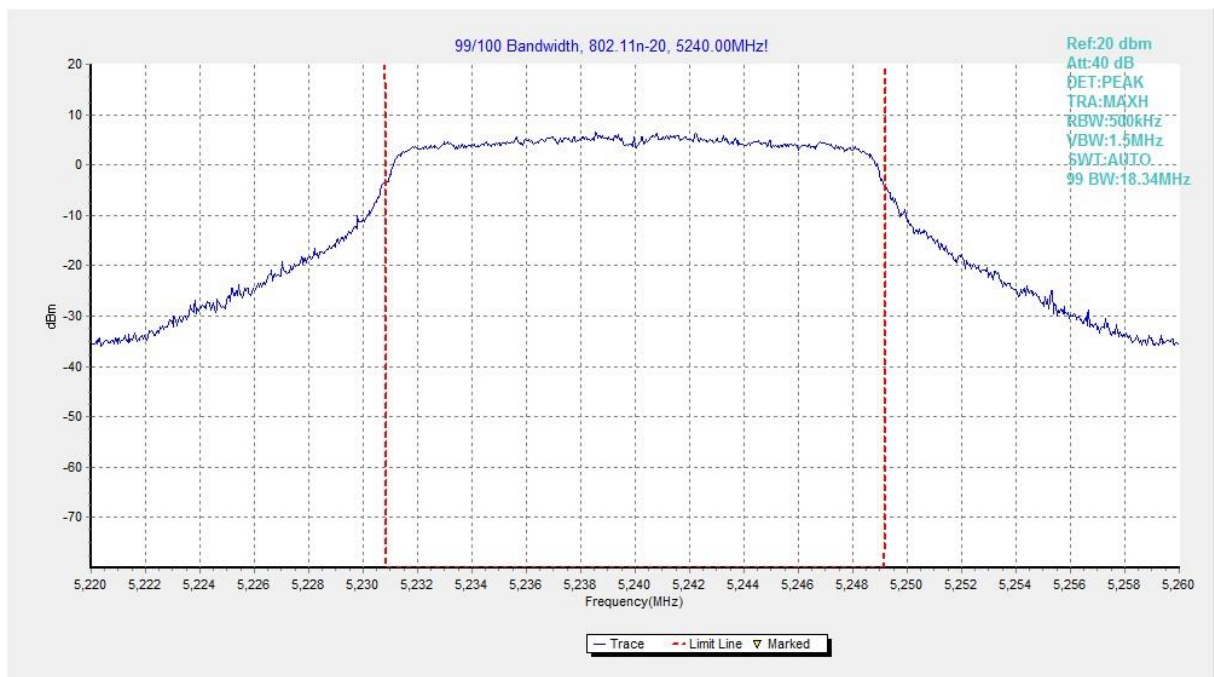


Fig. 50 99% Occupied Bandwidth (802.11n-HT20, 5240MHz)

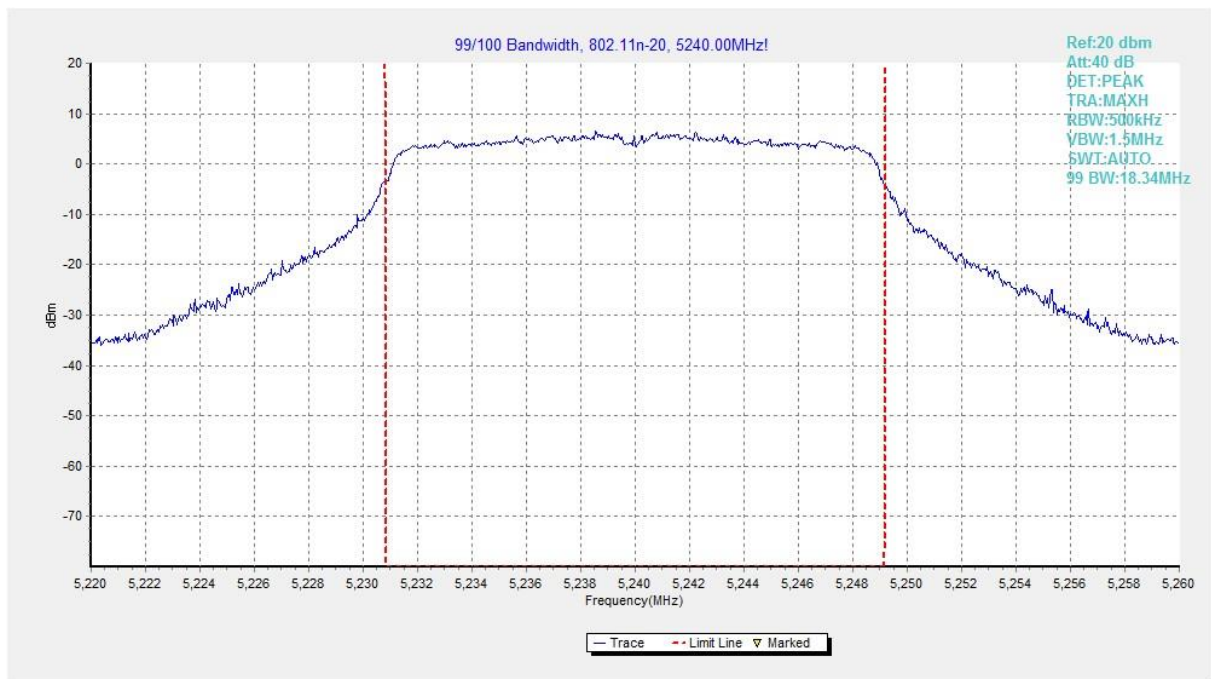


Fig. 51 99% Occupied Bandwidth (802.11n-HT20, 5260MHz)

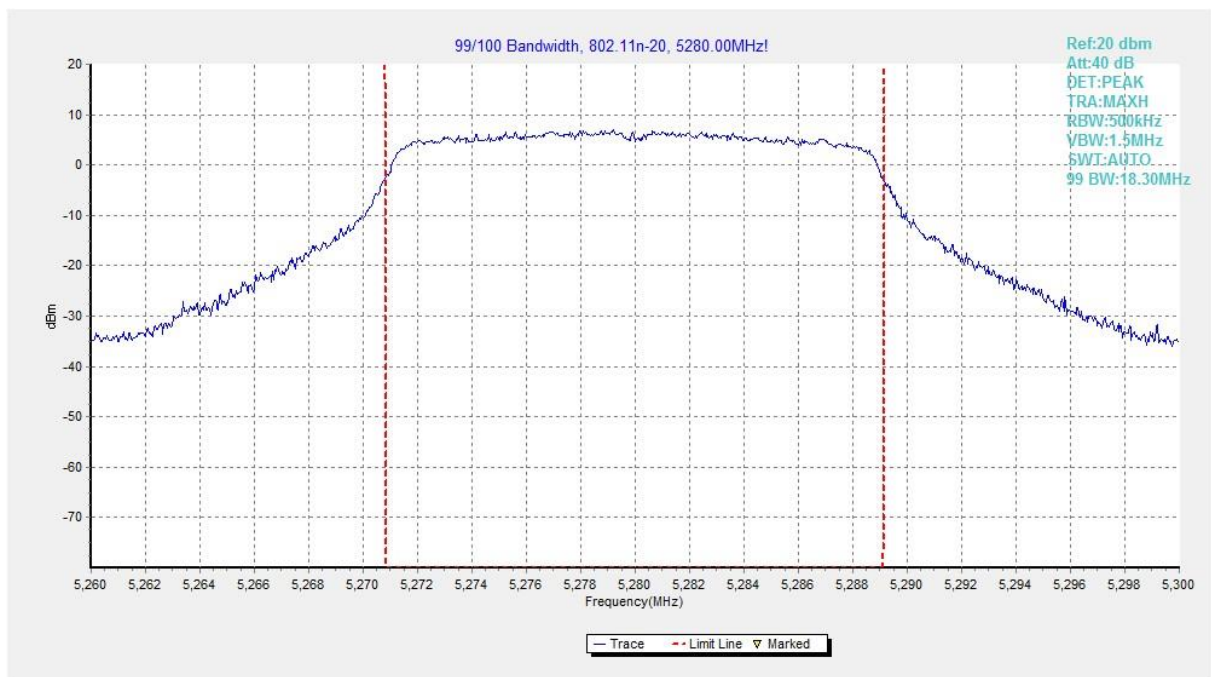


Fig. 52 99% Occupied Bandwidth (802.11n-HT20, 5280MHz)

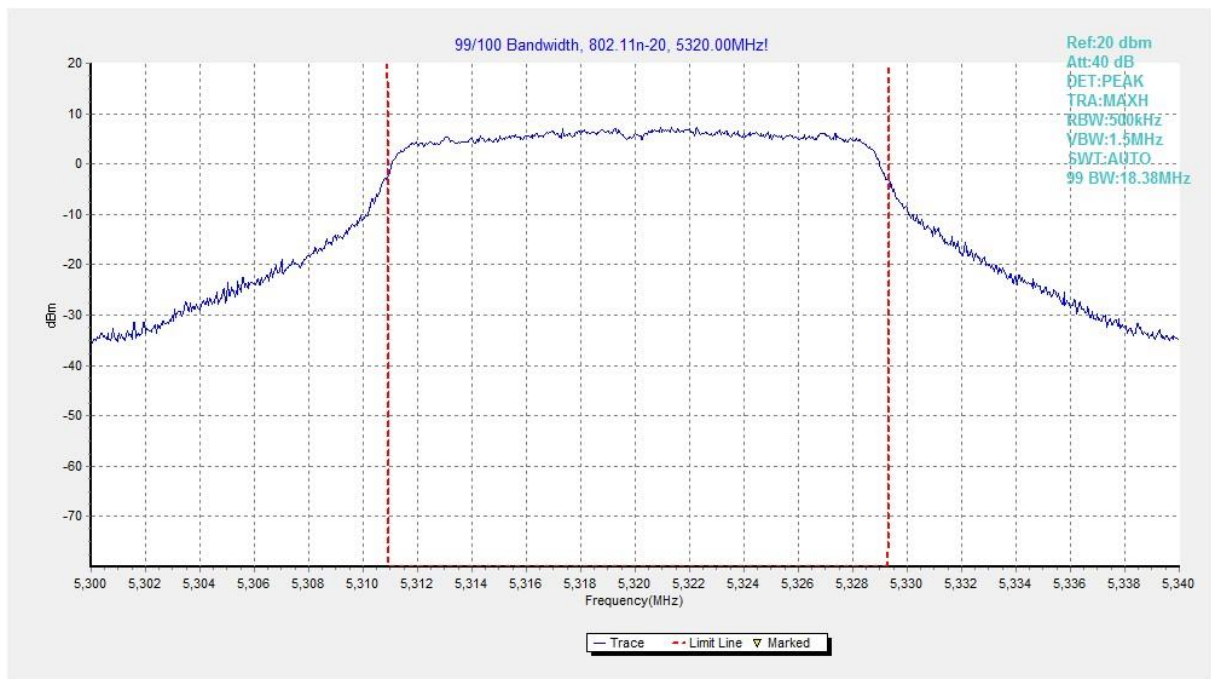


Fig. 53 99% Occupied Bandwidth (802.11n-HT20, 5320MHz)

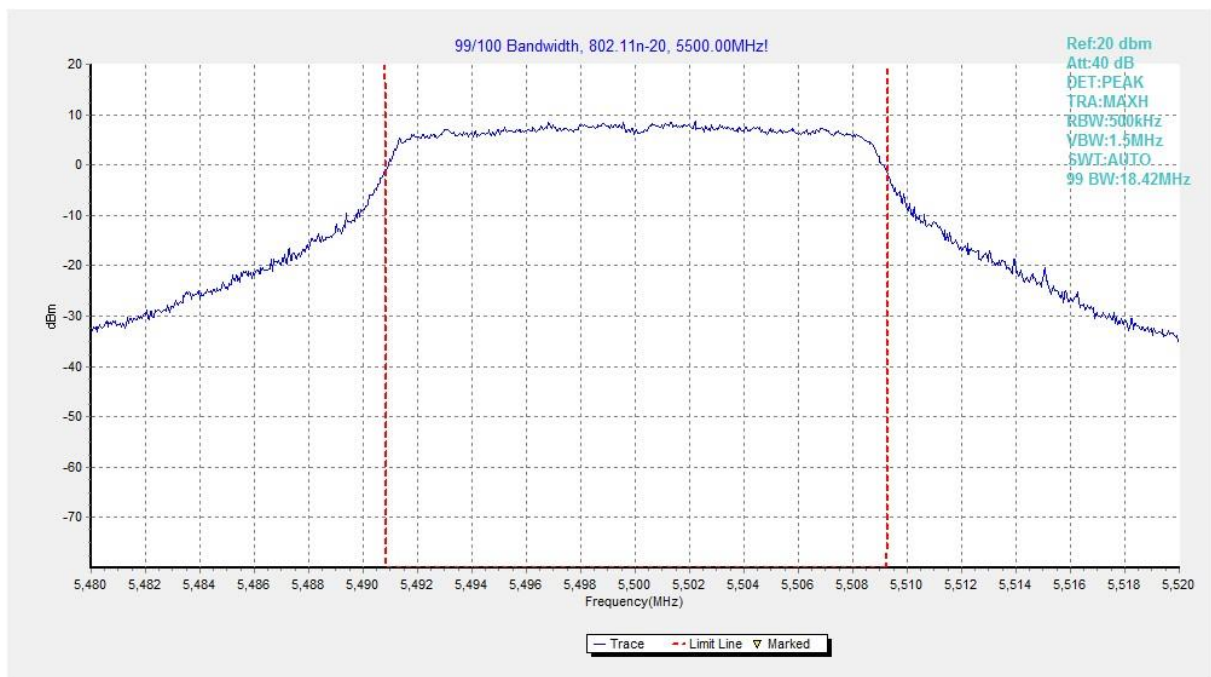


Fig. 54 99% Occupied Bandwidth (802.11n-HT20, 5500MHz)

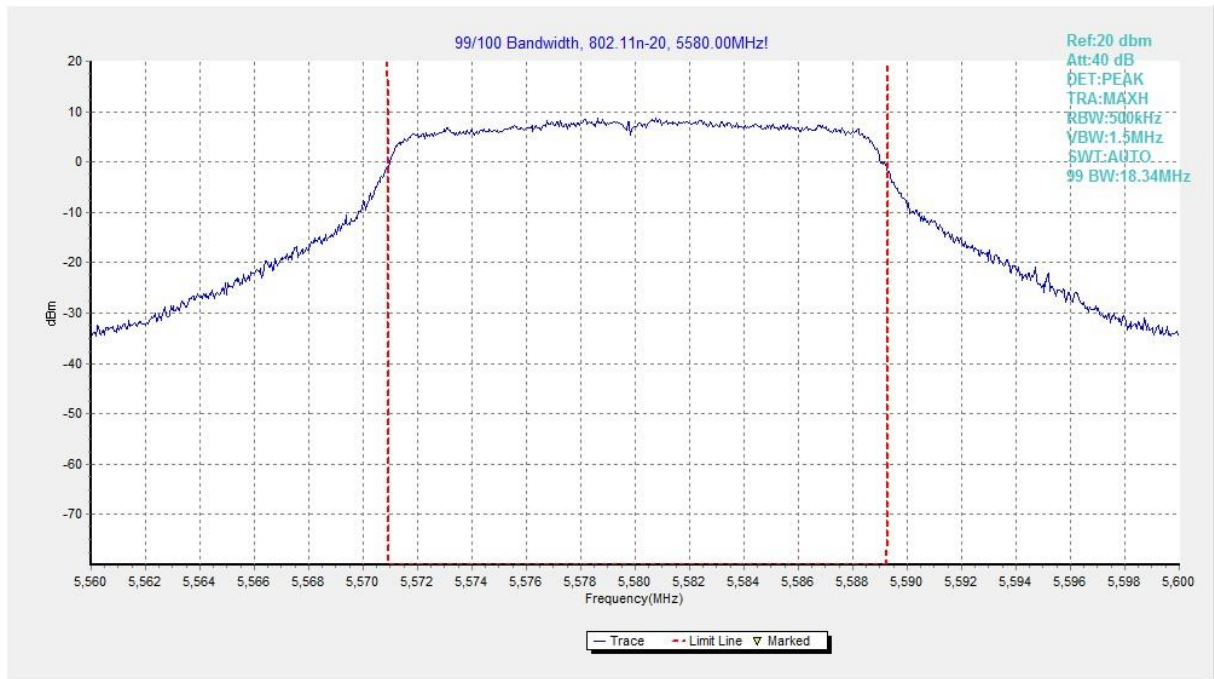


Fig. 55 99% Occupied Bandwidth (802.11n-HT20, 5580MHz)



Fig. 56 99% Occupied Bandwidth (802.11n-HT20, 5700MHz)

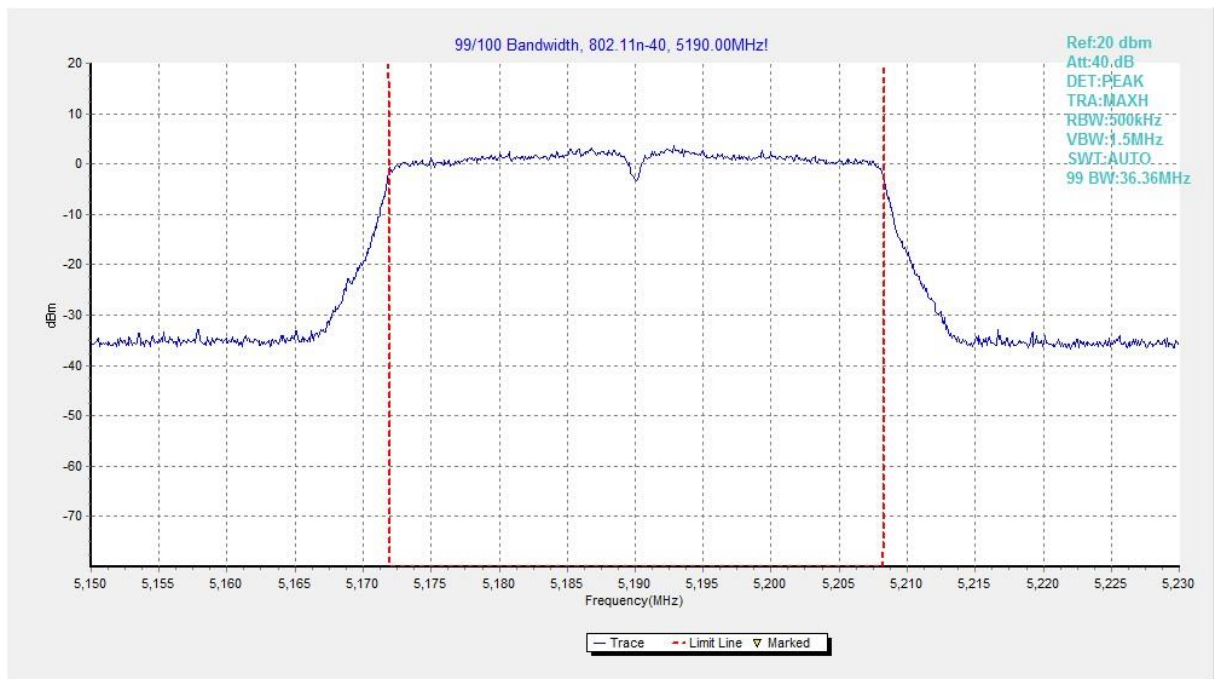


Fig. 57 99% Occupied Bandwidth (802.11n-HT40, 5190MHz)

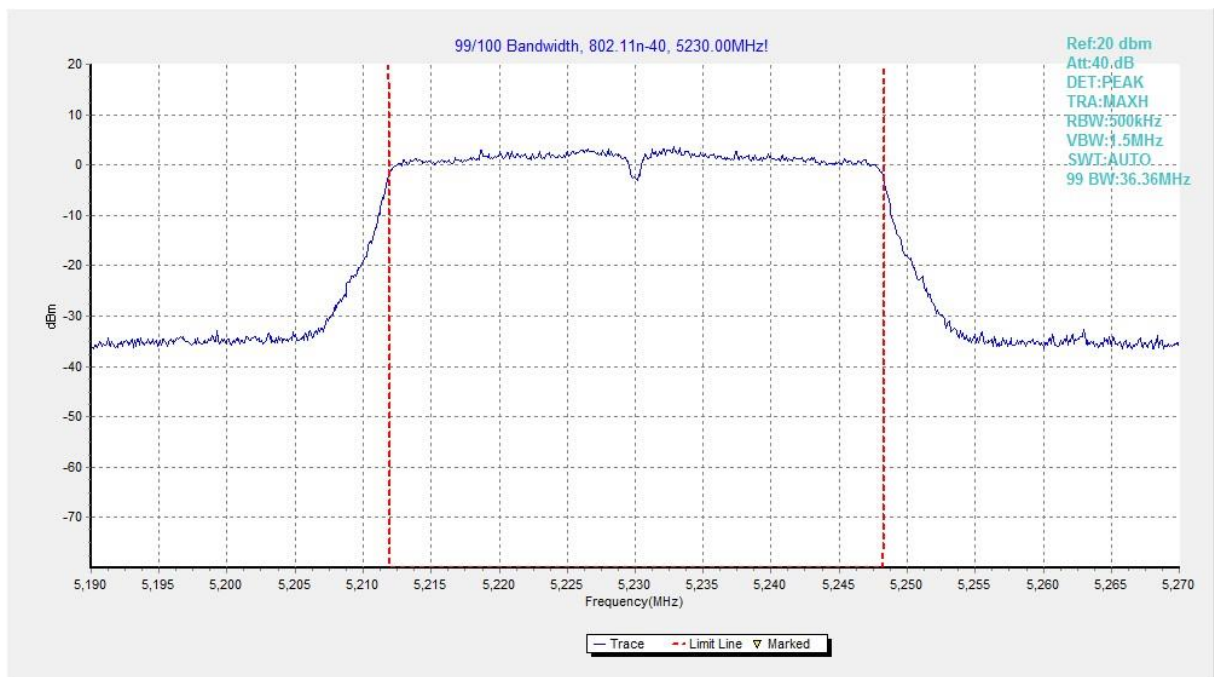


Fig. 58 99% Occupied Bandwidth (802.11n-HT40, 5230MHz)

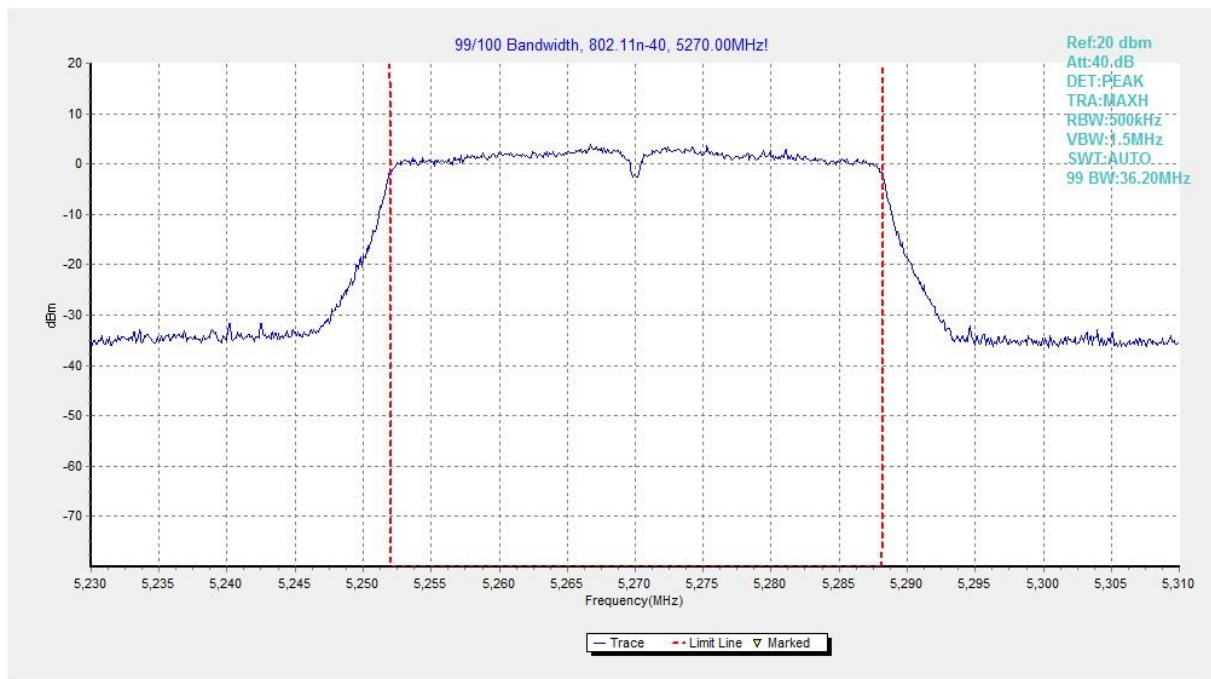


Fig. 59 99% Occupied Bandwidth (802.11n-HT40, 5270MHz)

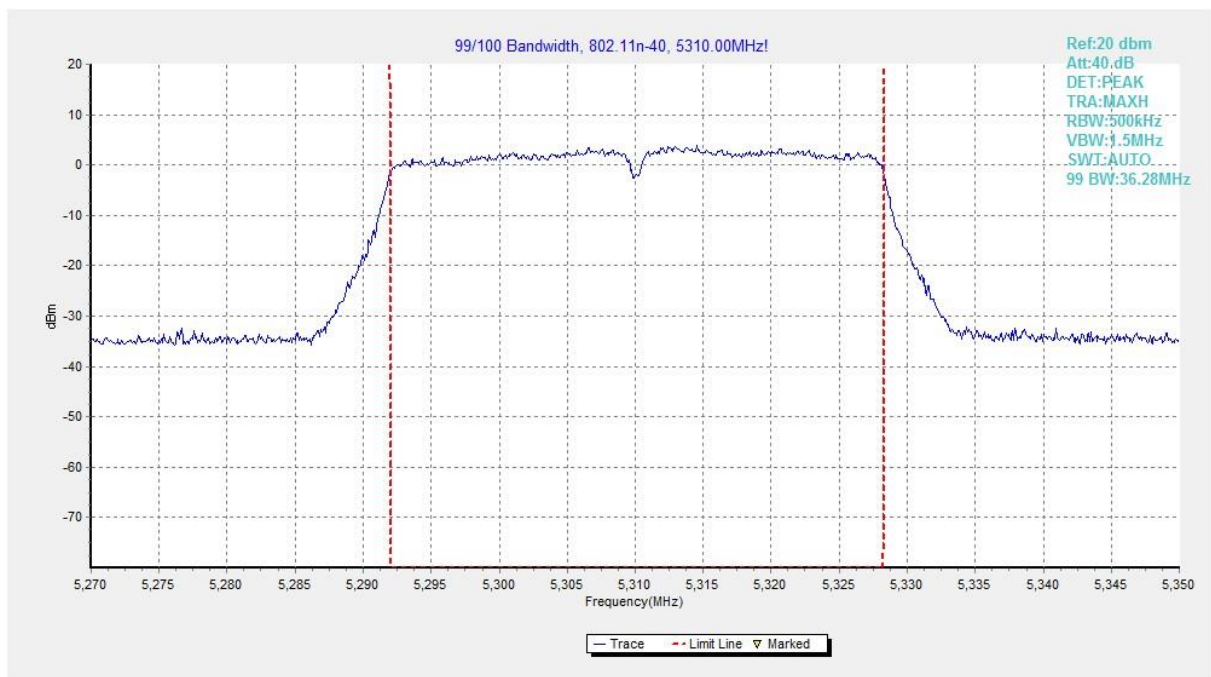


Fig. 60 99% Occupied Bandwidth (802.11n-HT40, 5310MHz)

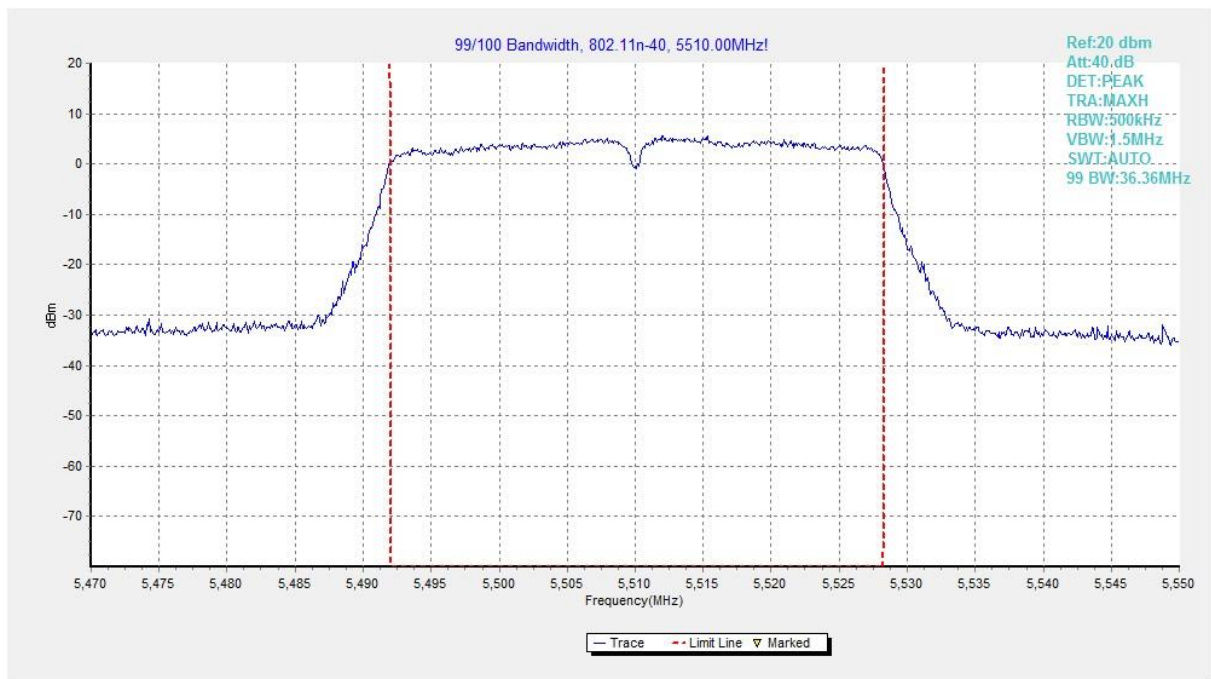


Fig. 61 99% Occupied Bandwidth (802. 11n-HT40, 5510MHz)

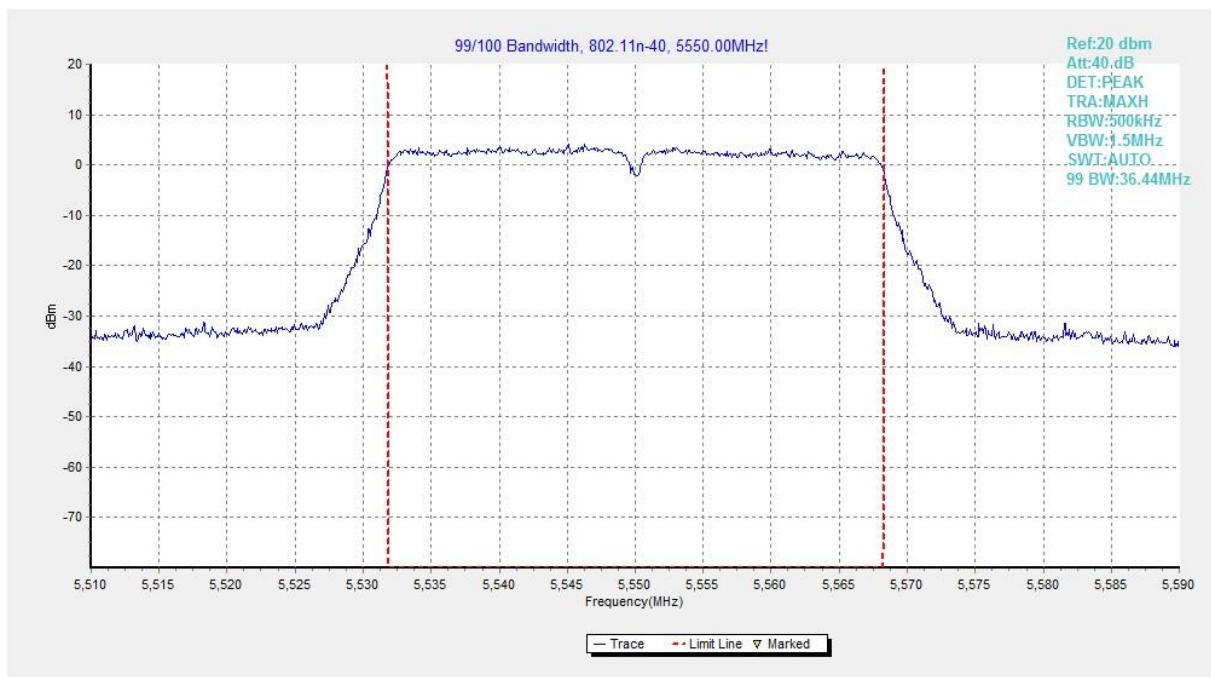


Fig. 62 99% Occupied Bandwidth (802. 11n-HT40, 5550MHz)

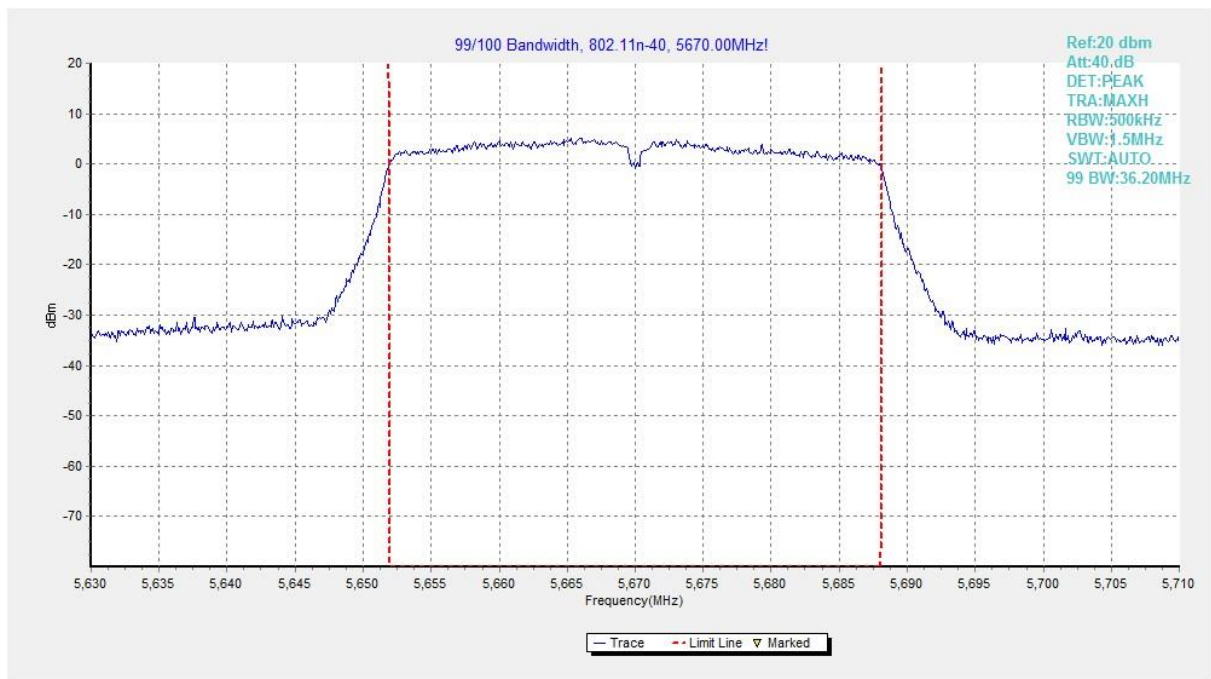


Fig. 63 99% Occupied Bandwidth (802.11n-HT40, 5670MHz)

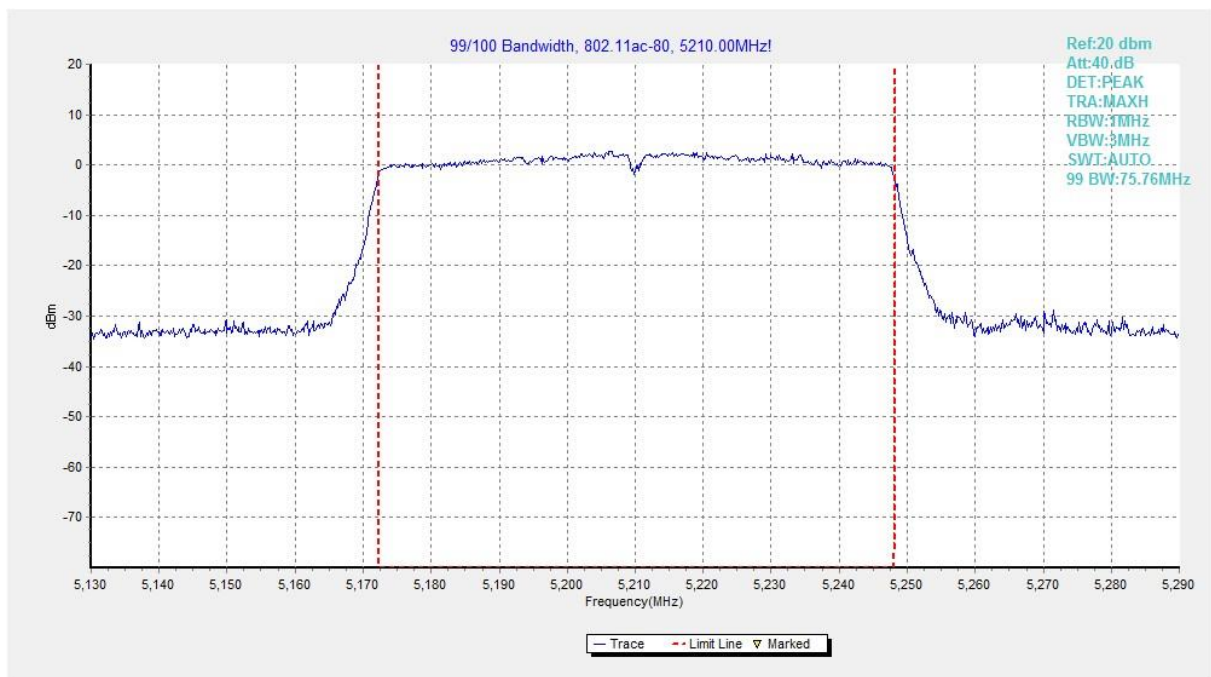


Fig. 64 99% Occupied Bandwidth (802.11ac-VHT80, 5210MHz)

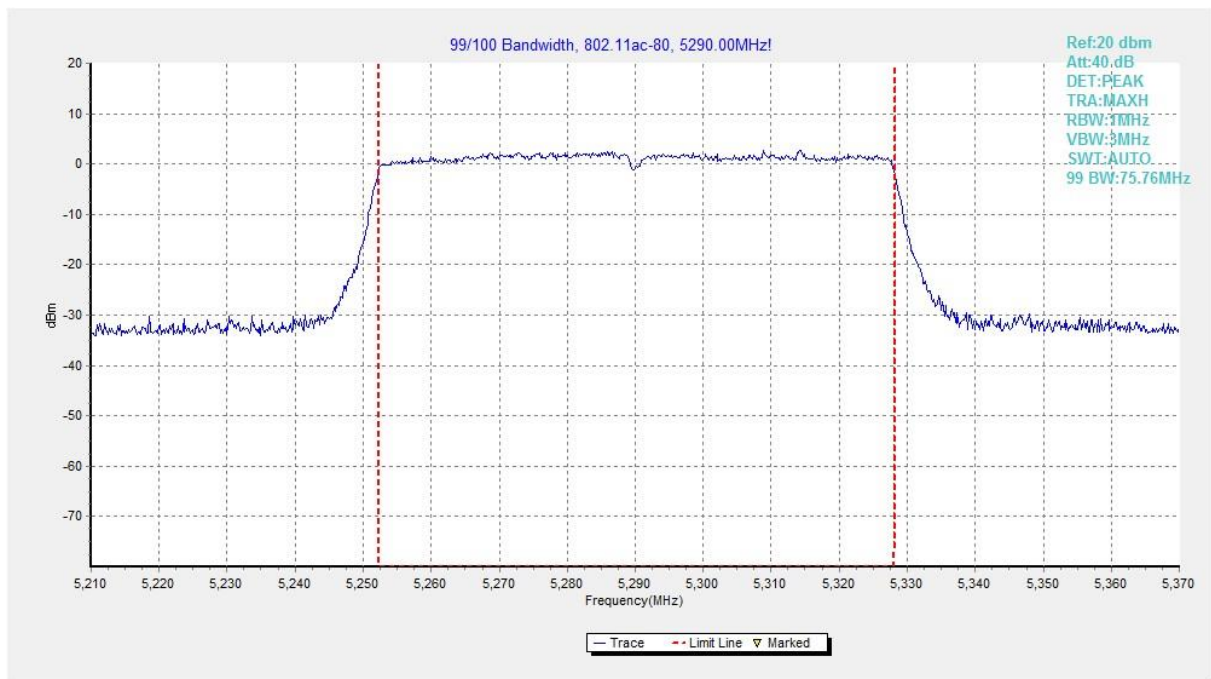


Fig. 65 99% Occupied Bandwidth (802.11ac-VHT80, 5290MHz)

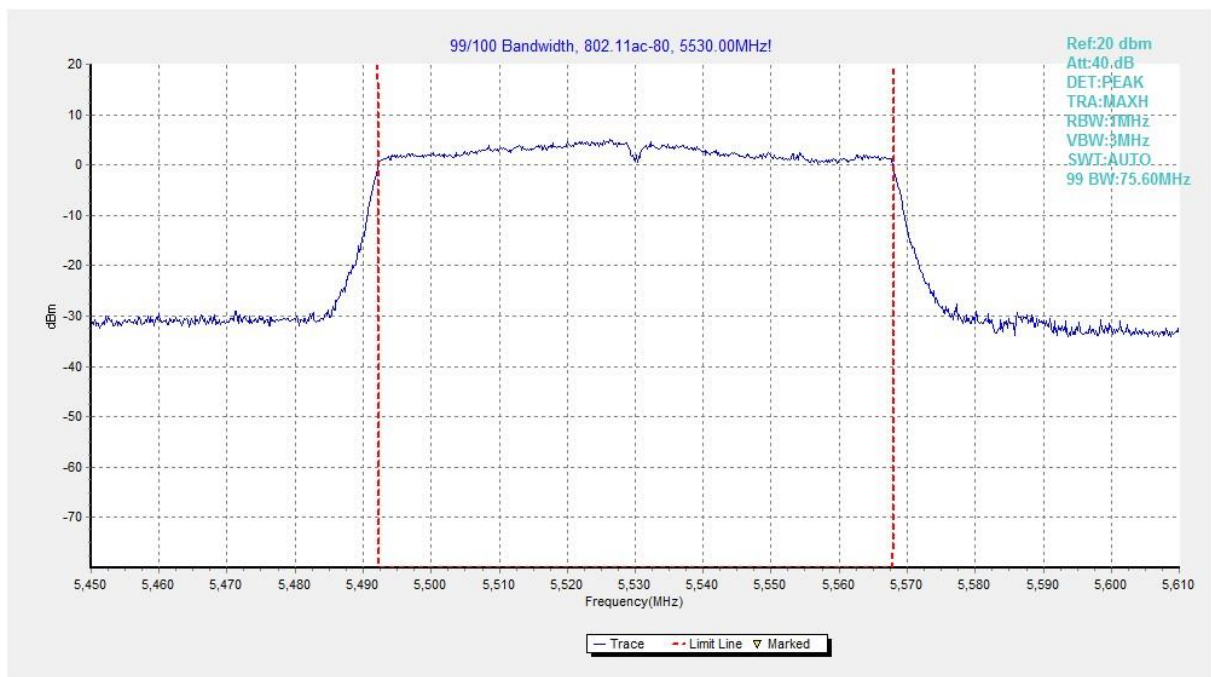


Fig. 66 99% Occupied Bandwidth (802.11ac-VHT80, 5530MHz)

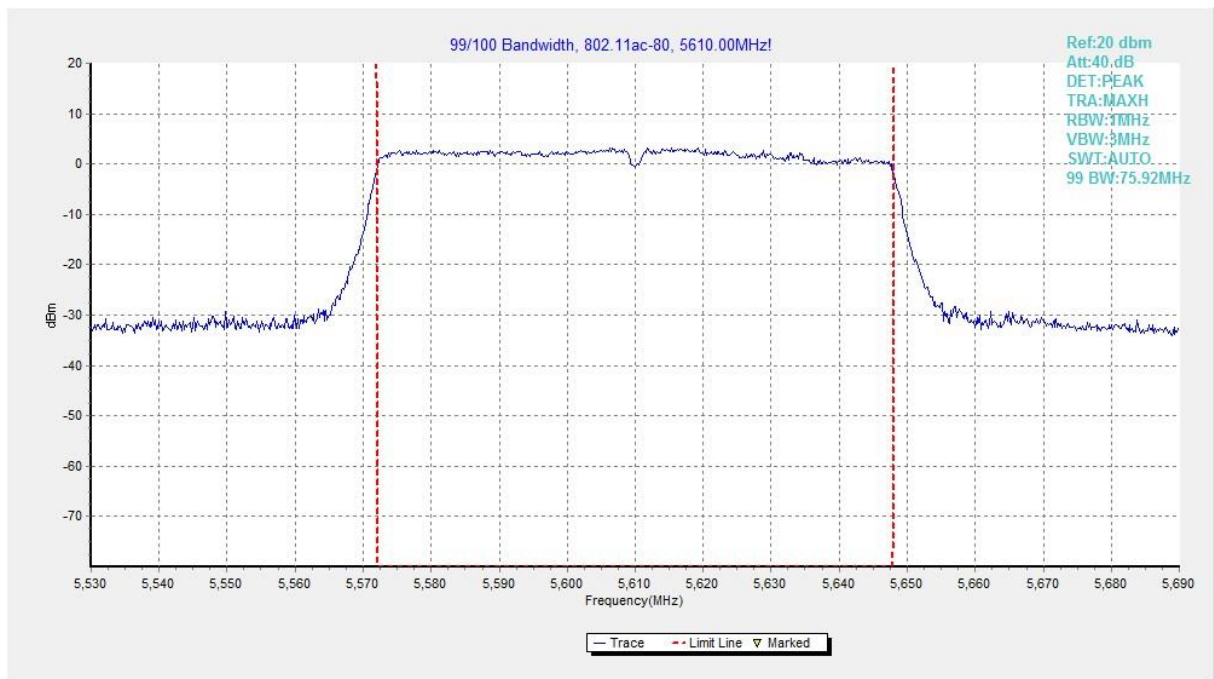


Fig. 67 99% Occupied Bandwidth (802.11ac-VHT80, 5610MHz)

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.68	P
	5320 MHz(CH64)	Fig.69	P
	5500 MHz(CH100)	Fig.70	P
	5700 MHz(CH140)	Fig.71	P
	5745 MHz(CH149)	Fig.72	P
	5825 MHz(CH165)	Fig.73	P
802.11n-HT20	5180 MHz(CH36)	Fig.74	P
	5320 MHz(CH64)	Fig.75	P
	5500 MHz(CH100)	Fig.76	P
	5700 MHz(CH140)	Fig.77	P
	5745 MHz(CH149)	Fig.78	P
	5825 MHz(CH165)	Fig.79	P
802.11n-HT40	5190 MHz(CH38)	Fig.80	P
	5310 MHz(CH62)	Fig.81	P
	5510 MHz(CH102)	Fig.82	P
	5670 MHz(CH134)	Fig.83	P
	5755 MHz(CH151)	Fig.84	P
	5795 MHz(CH159)	Fig.85	P
802.11ac-VHT80	5210 MHz(CH42)	Fig.86	P
	5290 MHz(CH58)	Fig.87	P
	5530 MHz(CH106)	Fig.88	P
	5775 MHz(CH155)	Fig.89	P

Conclusion: PASS

Test graphs as below:

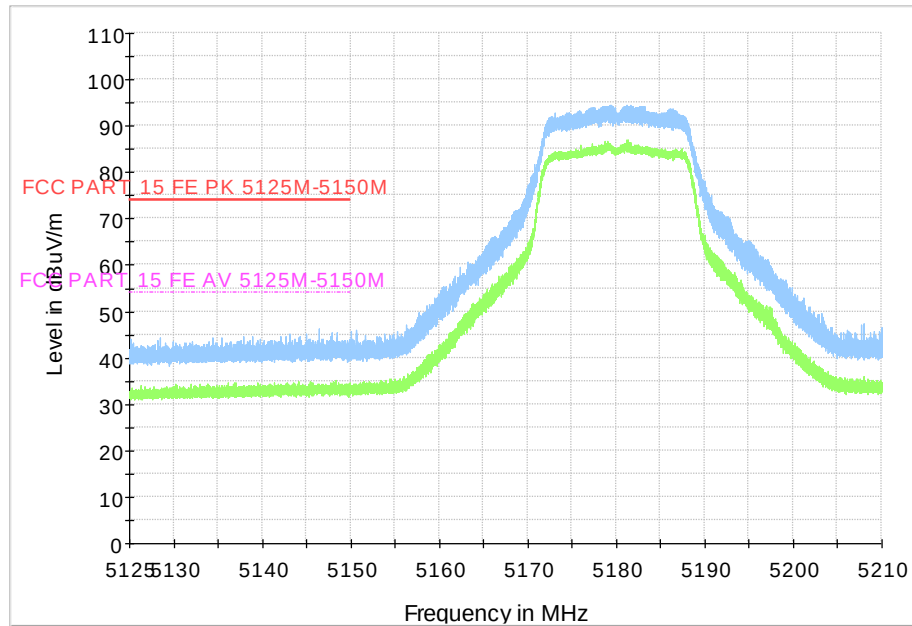


Fig. 68 Band Edges (802.11a, CH36 5180MHz)

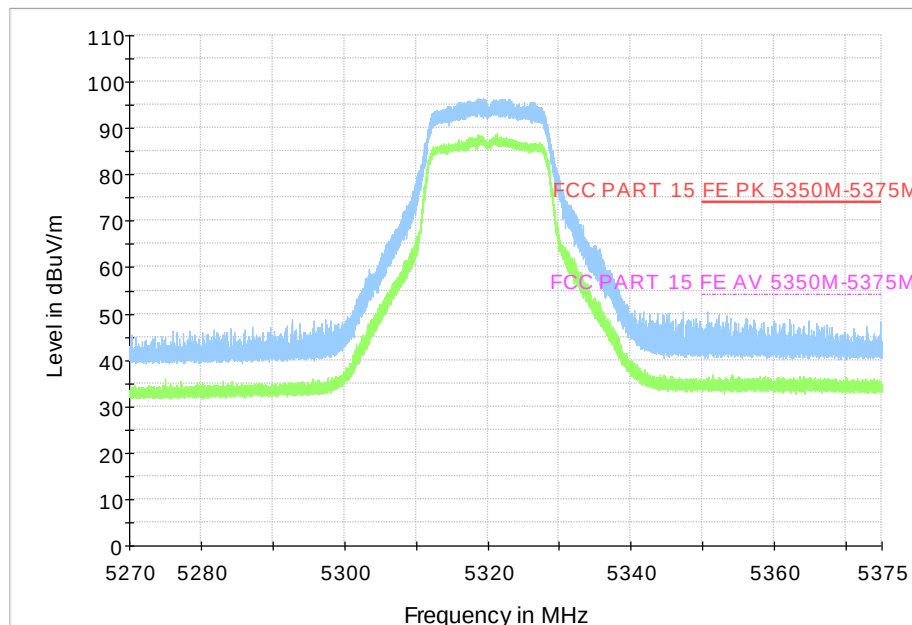


Fig. 69 Band Edges (802.11a, CH64 5320MHz)

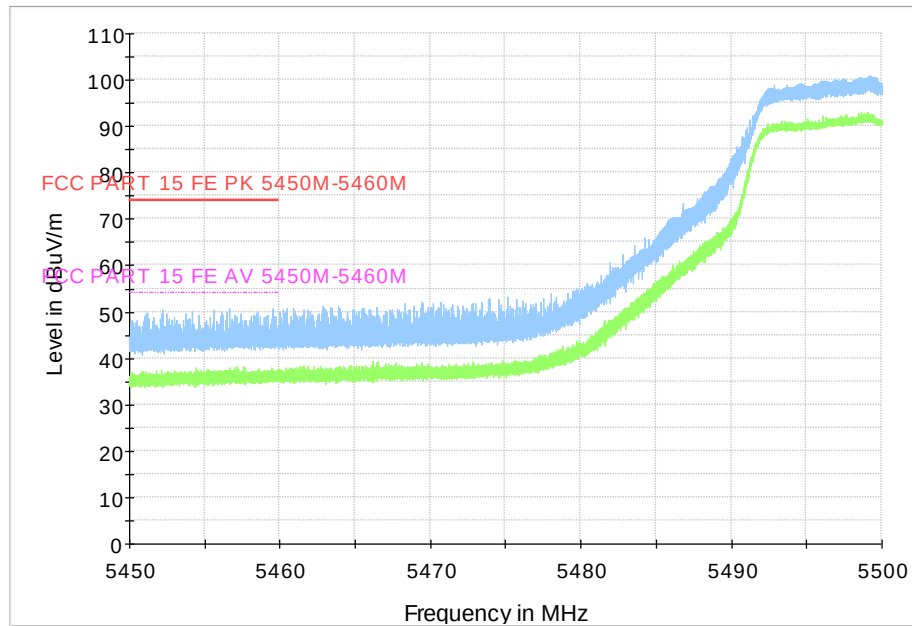


Fig. 70 Band Edges (802.11a, CH100 5500MHz)

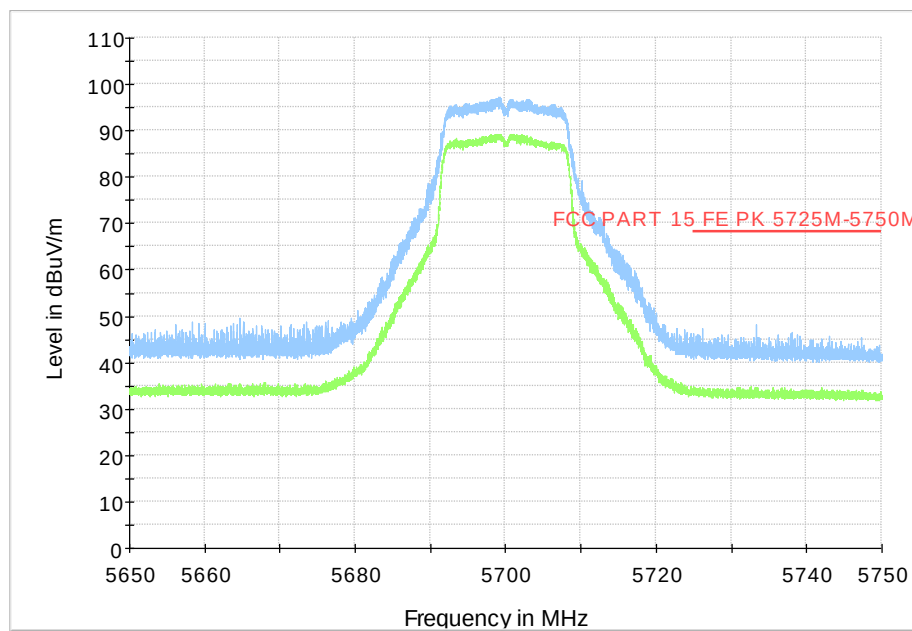


Fig. 71 Band Edges (802.11a, CH140 5700MHz)

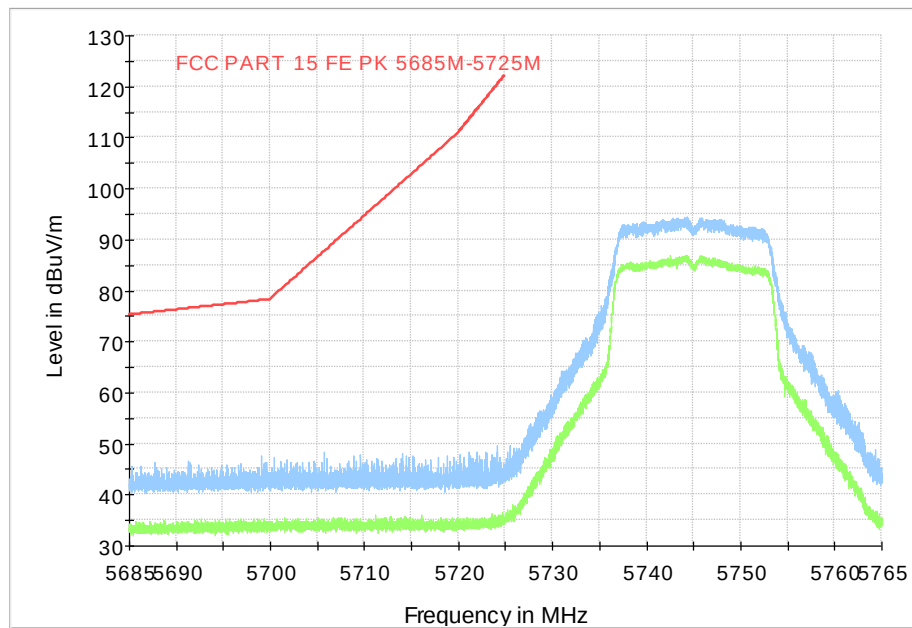


Fig. 72 Band Edges (802.11a, CH149 5745MHz)

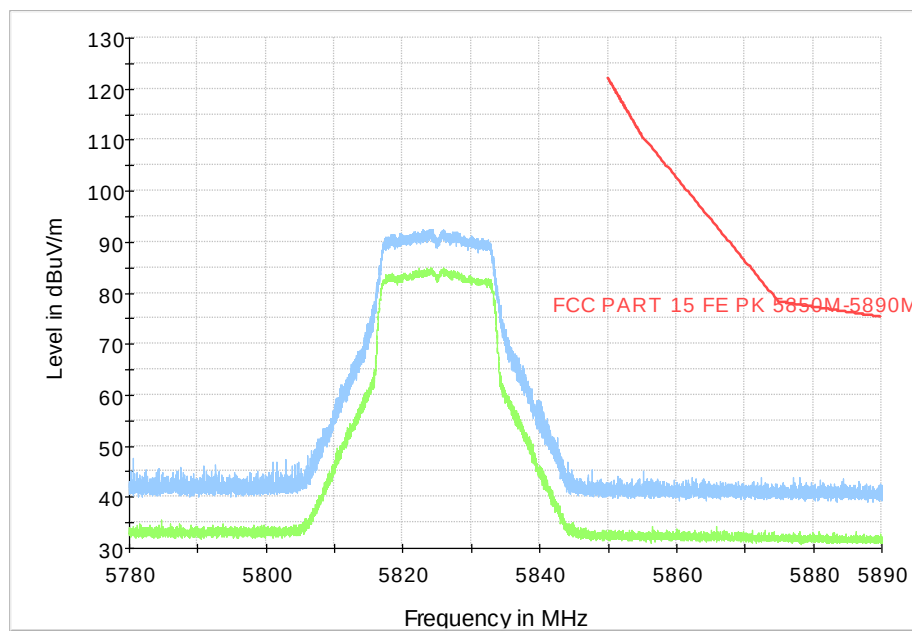


Fig. 73 Band Edges (802.11a, CH165 5825MHz)

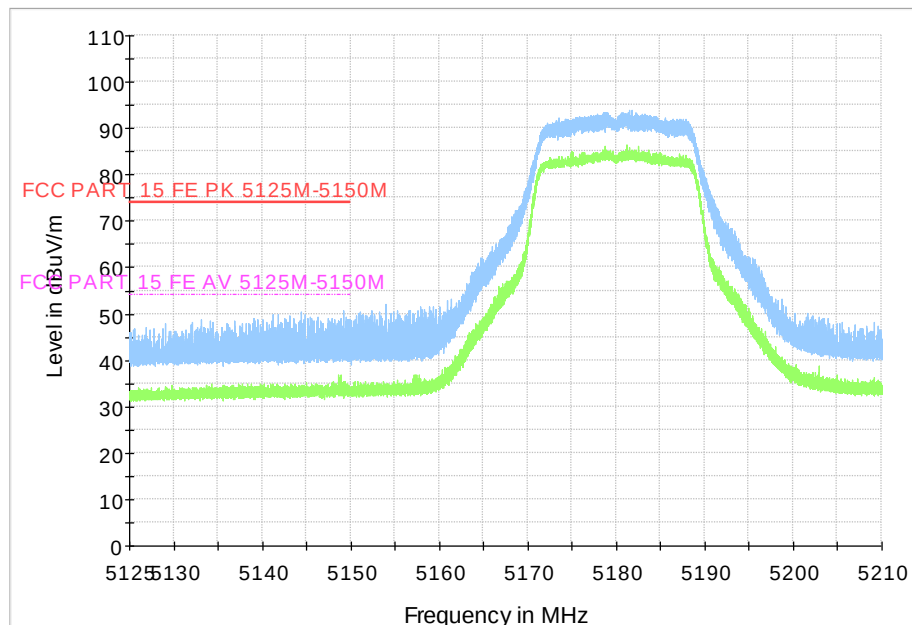


Fig. 74 Band Edges (802.11n-HT20, CH36 5180MHz)

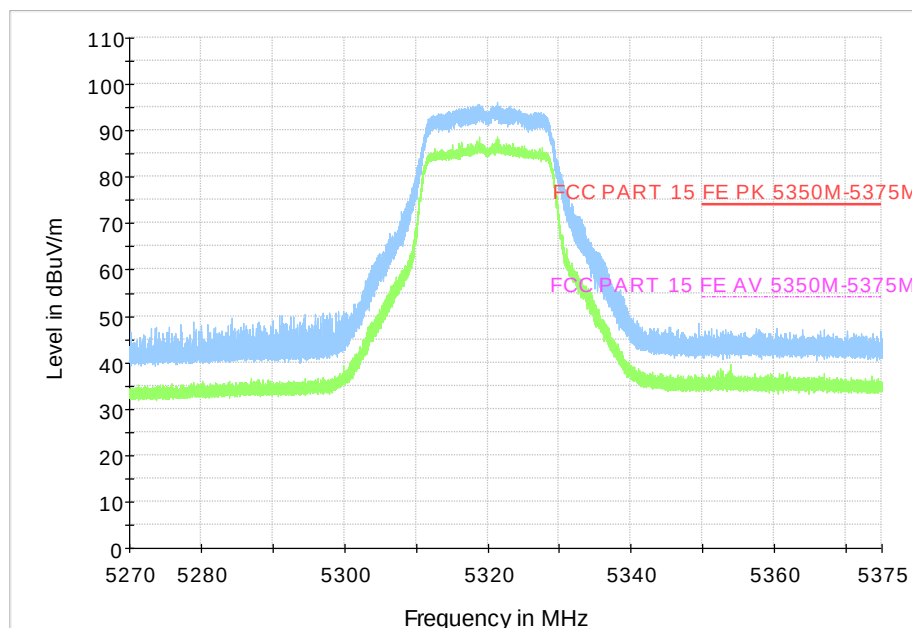


Fig. 75 Band Edges (802.11n-HT20, CH64 5320MHz)

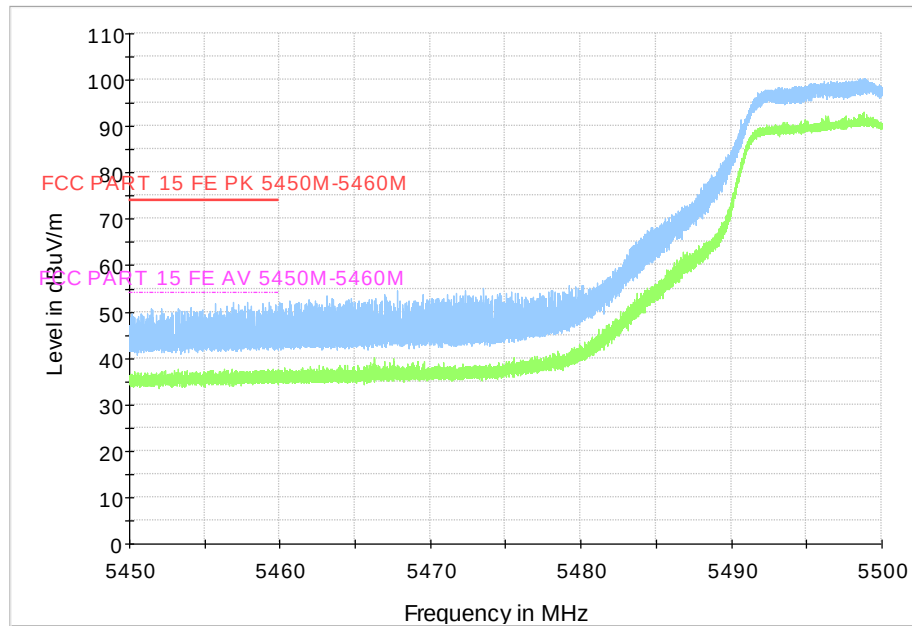


Fig. 76 Band Edges (802.11n-HT20, CH100 5500MHz)

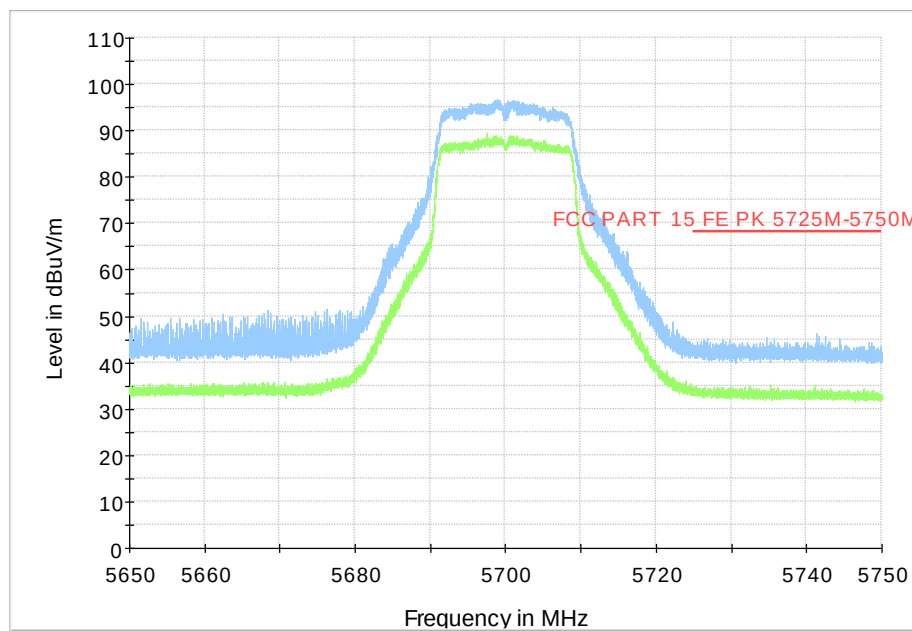


Fig. 77 Band Edges (802.11n-HT20, CH140 5700MHz)

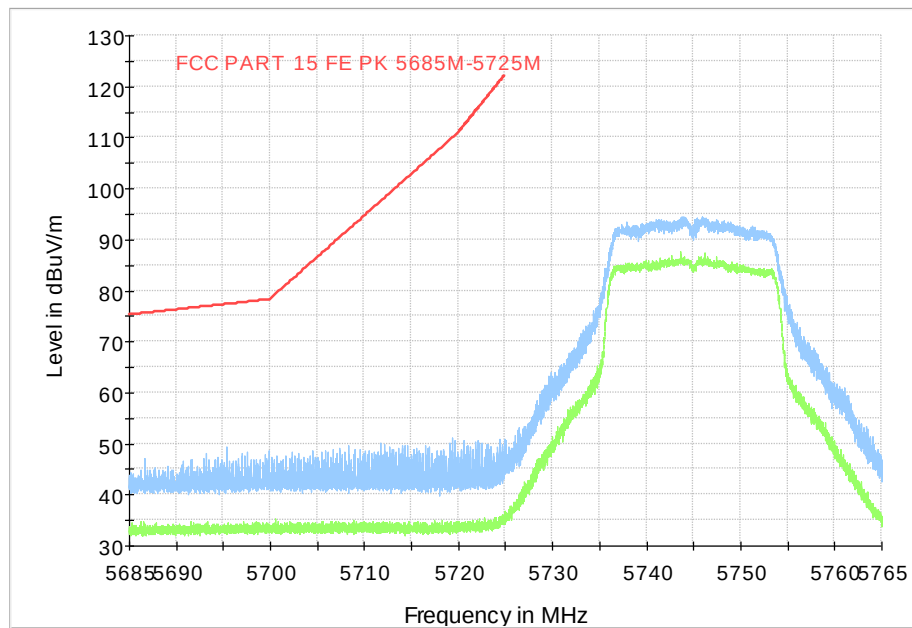


Fig. 78 Band Edges (802.11n-HT20, CH149 5745MHz)

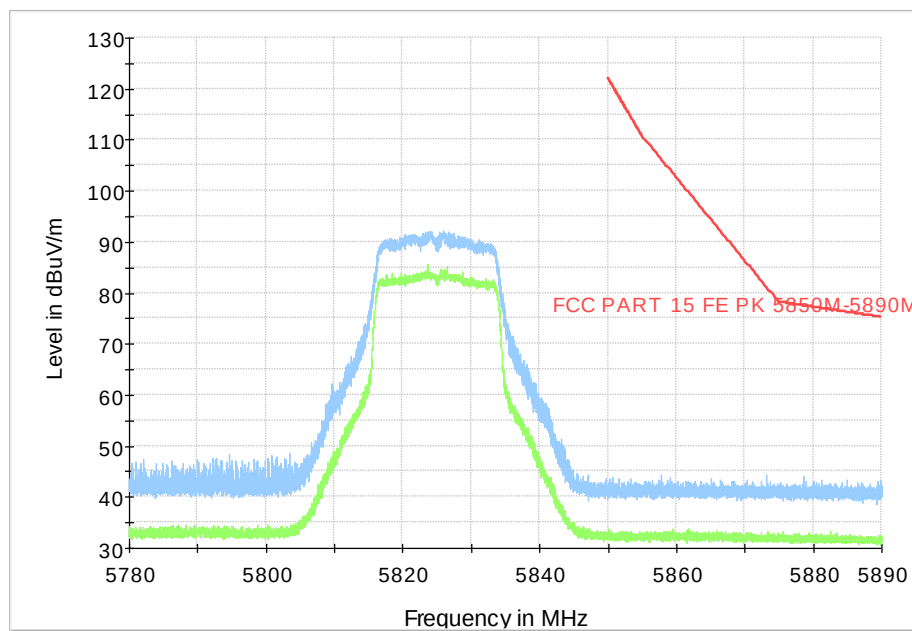


Fig. 79 Band Edges (802.11n-HT20, CH165 5825MHz)

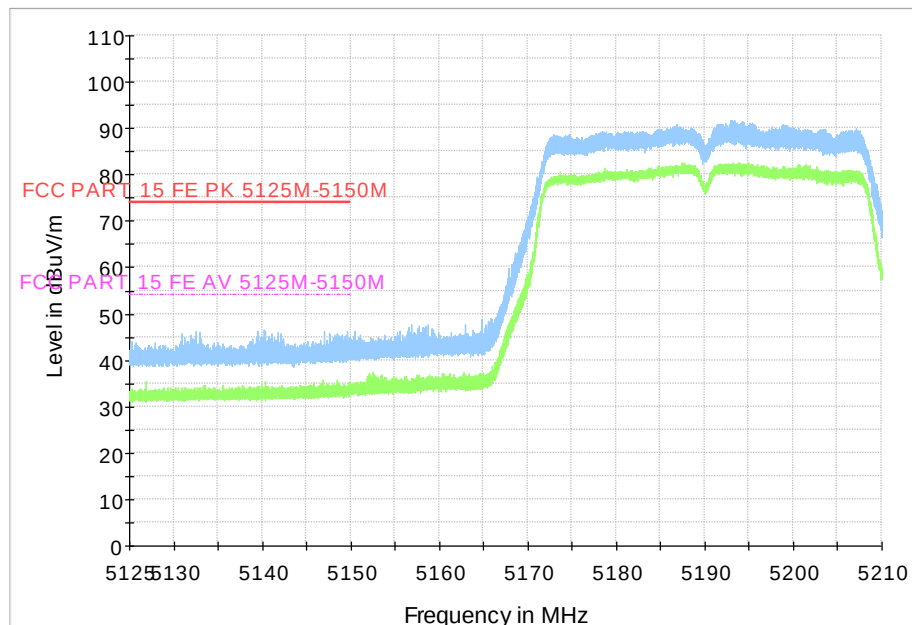


Fig. 80 Band Edges (802.11n-HT40, CH38 5190MHz)

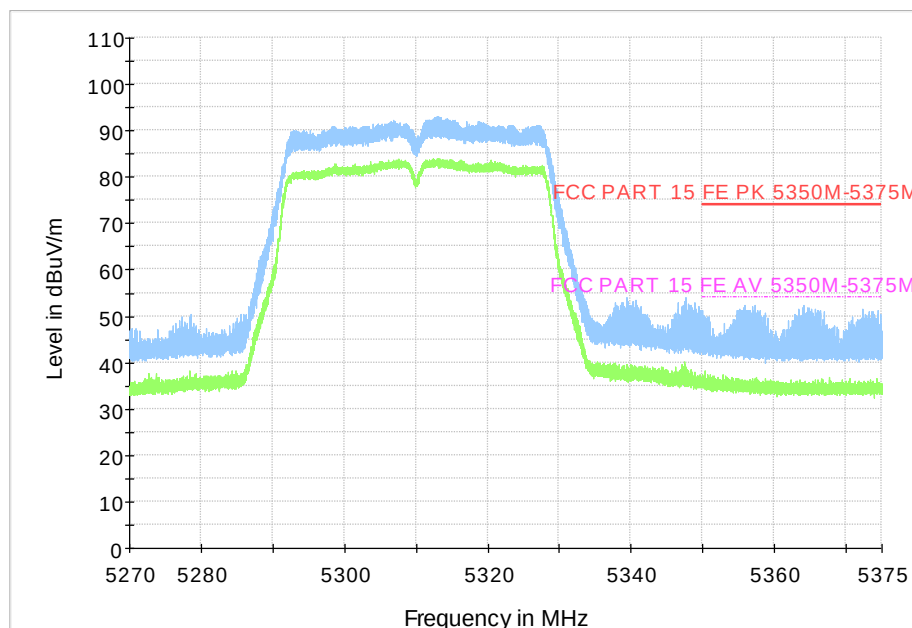


Fig. 81 Band Edges (802.11n-HT40, CH62 5310MHz)

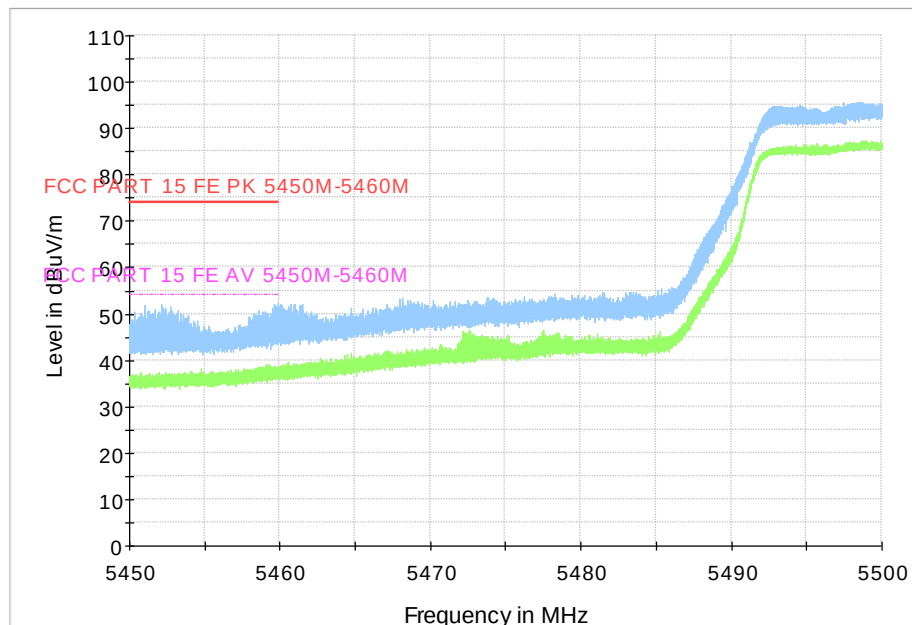


Fig. 82 Band Edges (802.11n-HT40, CH102 5510MHz)

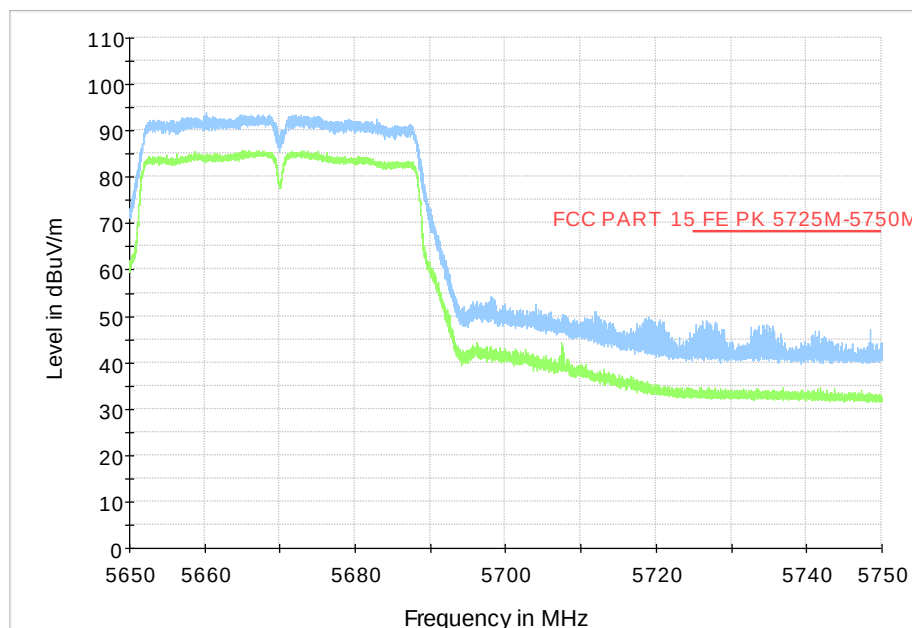


Fig. 83 Band Edges (802.11n-HT40, CH134 5670MHz)

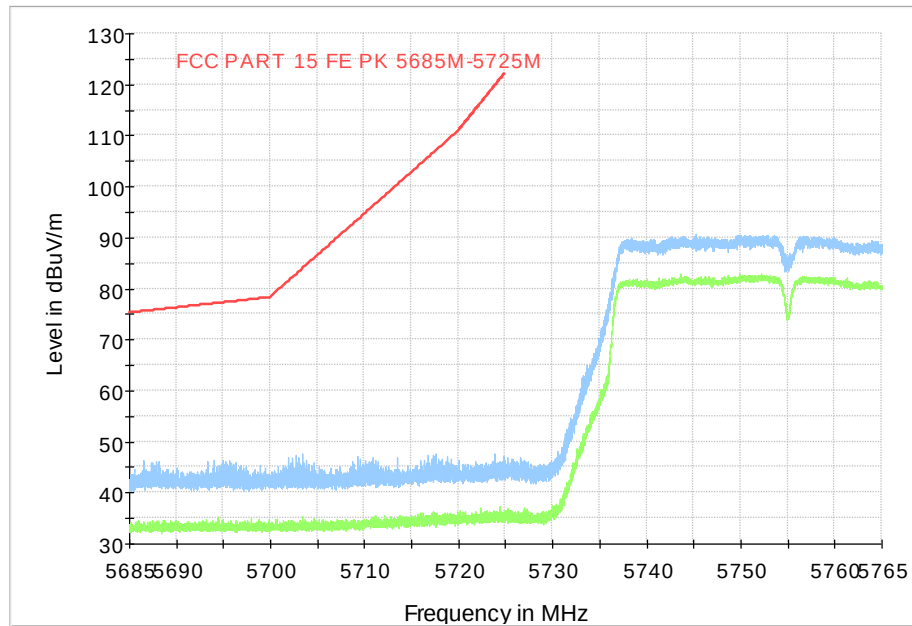


Fig. 84 Band Edges (802.11n-HT40, CH151 5755MHz)

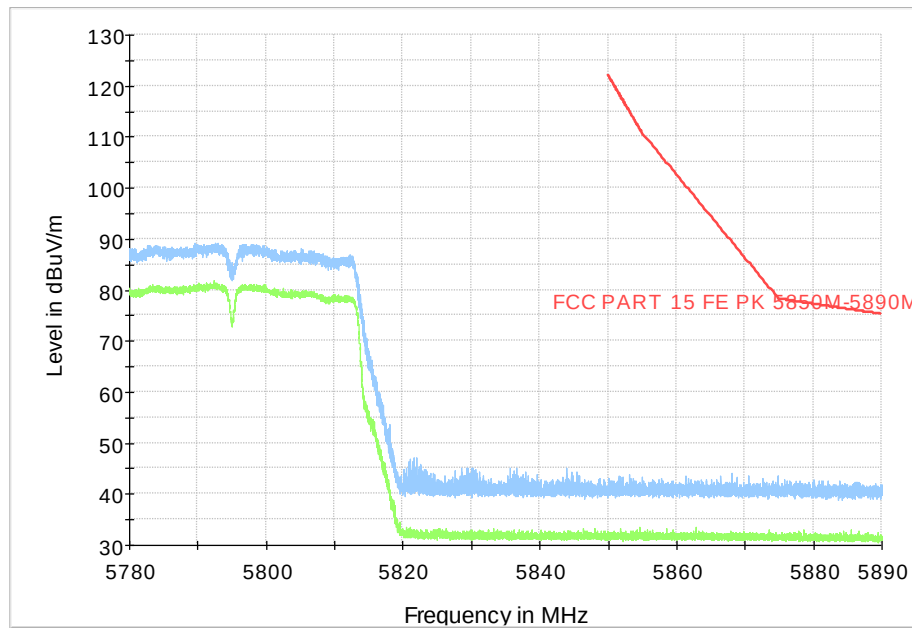


Fig. 85 Band Edges (802.11n-HT40, CH159 5795MHz)

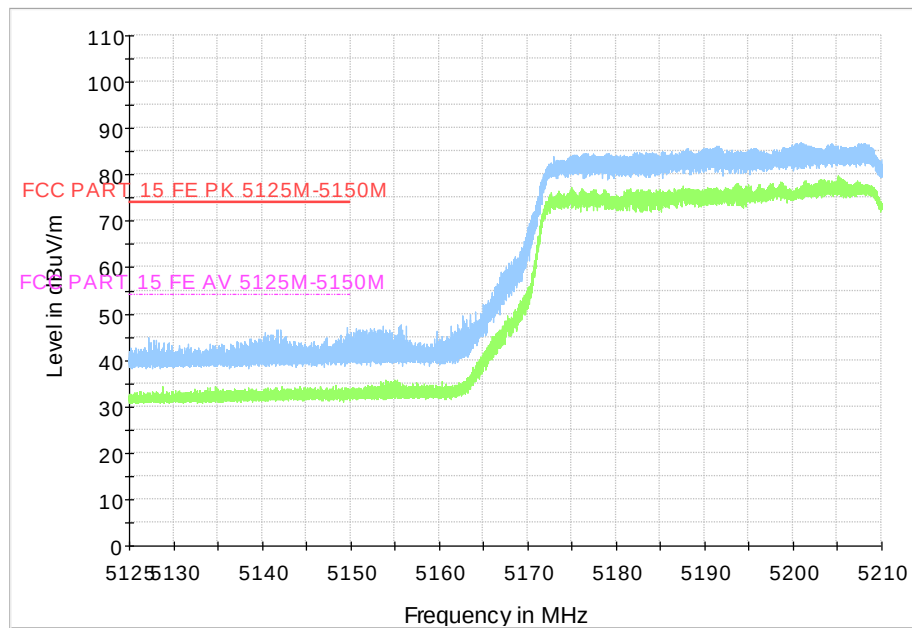


Fig. 86 Band Edges (802.11ac-VHT80, CH42 5210MHz)

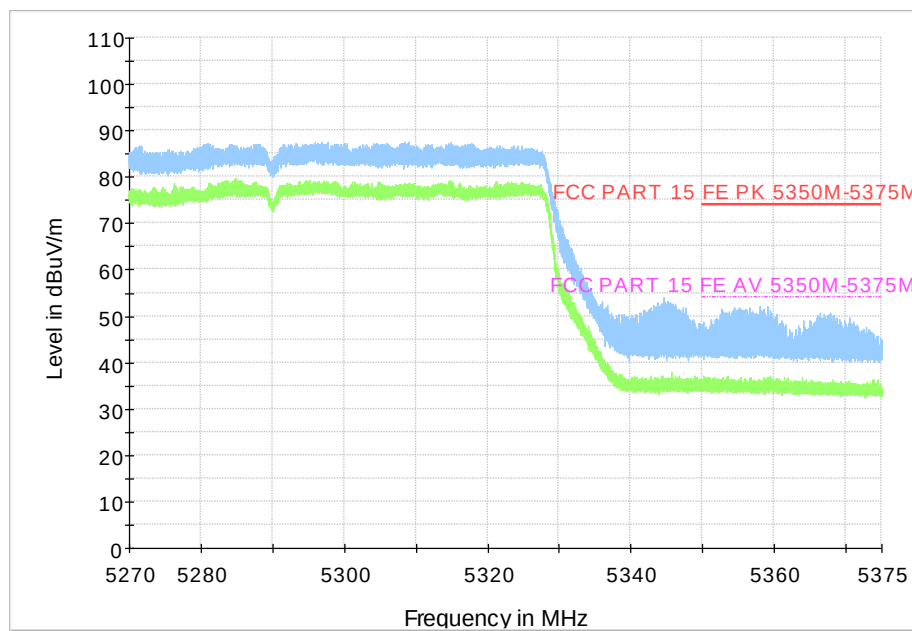


Fig. 87 Band Edges (802.11ac-VHT80, CH58 5290MHz)

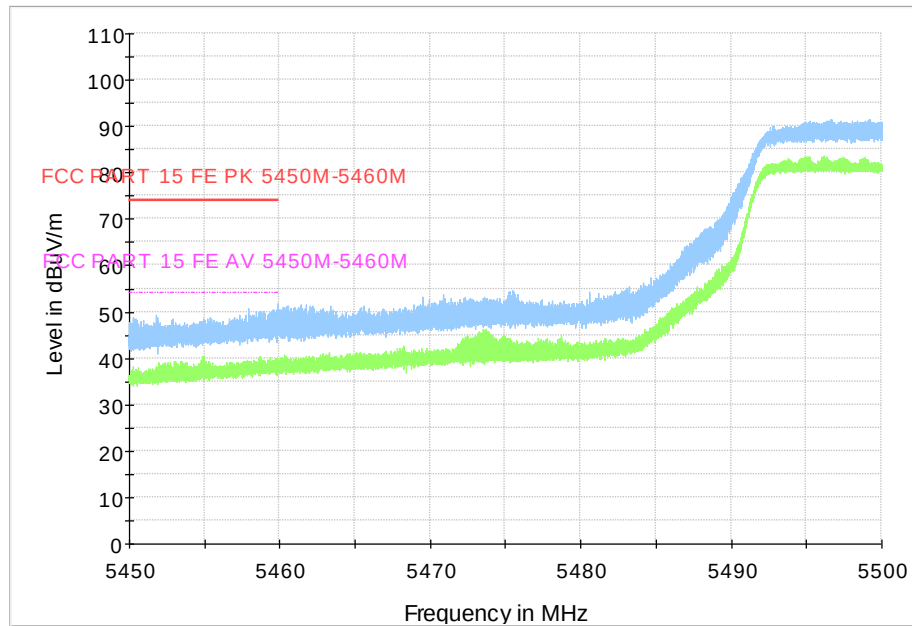


Fig. 88 Band Edges (802.11ac-VHT80, CH106 5530MHz)

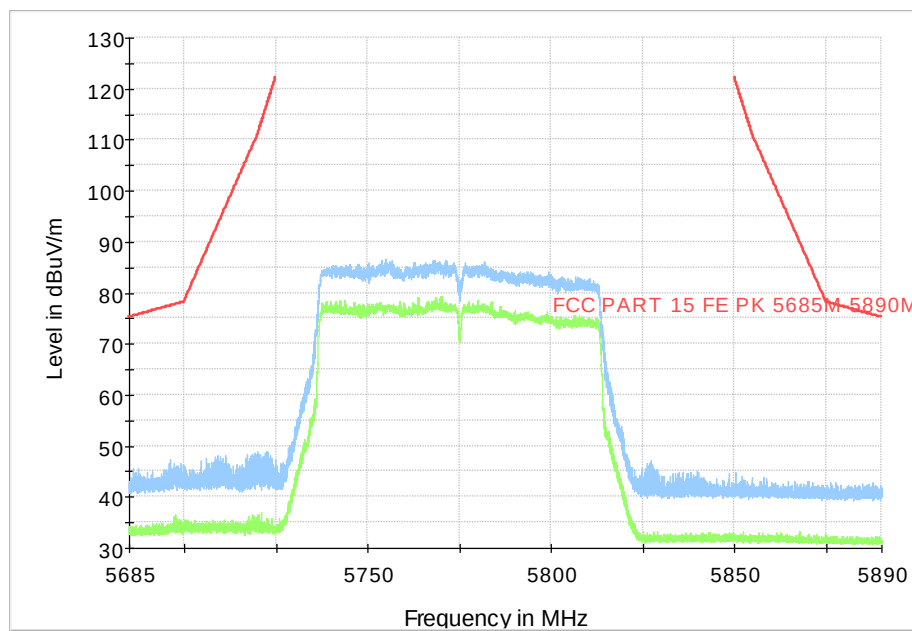


Fig. 89 Band Edges (802.11ac-VHT80, CH155 5775MHz)

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 (dBμV/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.90	P
		3 GHz ~7 GHz	Fig.91	P
		7 GHz ~18 GHz	Fig.92	P
	5200MHz(Ch40)	1 GHz ~3 GHz	Fig.93	P
		3 GHz ~7 GHz	Fig.94	P
		7 GHz ~18 GHz	Fig.95	P
	5240MHz(Ch48)	1 GHz ~3 GHz	Fig.96	P
		3 GHz ~7 GHz	Fig.97	P
		7 GHz ~18 GHz	Fig.98	P
	5260MHz(Ch52)	1 GHz ~3 GHz	Fig.99	P
		3 GHz ~7 GHz	Fig.100	P
		7 GHz ~18 GHz	Fig.101	P
	5280MHz(Ch56)	1 GHz ~3 GHz	Fig.102	P
		3 GHz ~7 GHz	Fig.103	P
		7 GHz ~18 GHz	Fig.104	P

	5320MHz(Ch64)	1 GHz ~3 GHz	Fig.105	P
		3 GHz ~7 GHz	Fig.106	P
		7 GHz ~18 GHz	Fig.107	P
	5500MHz(Ch100)	1 GHz ~3 GHz	Fig.108	P
		3 GHz ~7 GHz	Fig.109	P
		7 GHz ~18 GHz	Fig.110	P
	5600MHz(Ch120)	1 GHz ~3 GHz	Fig.111	P
		3 GHz ~7 GHz	Fig.112	P
		7 GHz ~18 GHz	Fig.113	P
	5700MHz(Ch140)	1 GHz ~3 GHz	Fig.114	P
		3 GHz ~7 GHz	Fig.115	P
		7 GHz ~18 GHz	Fig.116	P
	5745MHz(Ch149)	1 GHz ~3 GHz	Fig.117	P
		3 GHz ~7 GHz	Fig.118	P
		7 GHz ~18 GHz	Fig.119	P
	5785MHz(Ch157)	1 GHz ~3 GHz	Fig.120	P
		3 GHz ~7 GHz	Fig.121	P
		7 GHz ~18 GHz	Fig.122	P
	5825MHz(Ch165)	1 GHz ~3 GHz	Fig.123	P
		3 GHz ~7 GHz	Fig.124	P
		7 GHz ~18 GHz	Fig.125	P
802.11n- HT20	5180MHz(Ch36)	1 GHz ~3 GHz	Fig.126	P
		3 GHz ~7 GHz	Fig.127	P
		7 GHz ~18 GHz	Fig.128	P
	5200MHz(Ch40)	1 GHz ~3 GHz	Fig.129	P
		3 GHz ~7 GHz	Fig.130	P
		7 GHz ~18 GHz	Fig.131	P
	5240MHz(Ch48)	1 GHz ~3 GHz	Fig.132	P
		3 GHz ~7 GHz	Fig.133	P
		7 GHz ~18 GHz	Fig.134	P
	5260MHz(Ch52)	1 GHz ~3 GHz	Fig.135	P
		3 GHz ~7 GHz	Fig.136	P
		7 GHz ~18 GHz	Fig.137	P
	5280MHz(Ch56)	1 GHz ~3 GHz	Fig.138	P
		3 GHz ~7 GHz	Fig.139	P
		7 GHz ~18 GHz	Fig.140	P
	5320MHz(Ch64)	1 GHz ~3 GHz	Fig.141	P
		3 GHz ~7 GHz	Fig.142	P
		7 GHz ~18 GHz	Fig.143	P
	5500MHz(Ch100)	1 GHz ~3 GHz	Fig.144	P
		3 GHz ~7 GHz	Fig.145	P
		7 GHz ~18 GHz	Fig.146	P

	5600MHz(Ch120)	1 GHz ~3 GHz	Fig.147	P
		3 GHz ~7 GHz	Fig.148	P
		7 GHz ~18 GHz	Fig.149	P
	5700MHz(Ch140)	1 GHz ~3 GHz	Fig.150	P
		3 GHz ~7 GHz	Fig.151	P
		7 GHz ~18 GHz	Fig.152	P
	5745MHz(Ch149)	1 GHz ~3 GHz	Fig.153	P
		3 GHz ~7 GHz	Fig.154	P
		7 GHz ~18 GHz	Fig.155	P
	5785MHz(Ch157)	1 GHz ~3 GHz	Fig.156	P
		3 GHz ~7 GHz	Fig.157	P
		7 GHz ~18 GHz	Fig.158	P
5825MHz(Ch165)	1 GHz ~3 GHz	Fig.159	P	
	3 GHz ~7 GHz	Fig.160	P	
	7 GHz ~18 GHz	Fig.161	P	
802.11n- HT40	5190MHz(Ch38)	1 GHz ~3 GHz	Fig.162	P
		3 GHz ~7 GHz	Fig.163	P
		7 GHz ~18 GHz	Fig.164	P
	5230MHz(Ch46)	1 GHz ~3 GHz	Fig.165	P
		3 GHz ~7 GHz	Fig.166	P
		7 GHz ~18 GHz	Fig.167	P
	5270MHz(Ch54)	1 GHz ~3 GHz	Fig.168	P
		3 GHz ~7 GHz	Fig.169	P
		7 GHz ~18 GHz	Fig.170	P
	5310MHz(Ch62)	1 GHz ~3 GHz	Fig.171	P
		3 GHz ~7 GHz	Fig.172	P
		7 GHz ~18 GHz	Fig.173	P
	5510MHz(Ch102)	1 GHz ~3 GHz	Fig.174	P
		3 GHz ~7 GHz	Fig.175	P
		7 GHz ~18 GHz	Fig.176	P
	5580MHz(Ch118)	1 GHz ~3 GHz	Fig.177	P
		3 GHz ~7 GHz	Fig.178	P
		7 GHz ~18 GHz	Fig.179	P
	5670MHz(Ch134)	1 GHz ~3 GHz	Fig.180	P
		3 GHz ~7 GHz	Fig.181	P
		7 GHz ~18 GHz	Fig.182	P
	5755MHz(Ch151)	1 GHz ~3 GHz	Fig.183	P
		3 GHz ~7 GHz	Fig.184	P
		7 GHz ~18 GHz	Fig.185	P
5795MHz(Ch159)	1 GHz ~3 GHz	Fig.186	P	
	3 GHz ~7 GHz	Fig.187	P	
	7 GHz ~18 GHz	Fig.188	P	