No.	Freq. (MHz)	Reading (dBμV)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Antenna Polaxis
4	15570	43.83	8.56	52.39	74.00	-21.61	Peak	Horizontal
5	10380	34.49	4.80	39.29	68.2	-28.91	Average	Vertical
6	10380	46.28	4.80	51.08	68.2	-17.12	Peak	Vertical
7	15570	31.89	8.56	40.45	54.00	-13.55	Average	Vertical
8	15570	44.37	8.56	52.93	74.00	-21.07	Peak	Vertical
802.11AX40_Chain 0+1_5230 MHz								
1	10460	34.85	4.92	39.77	68.2	-28.43	Average	Horizontal
2	10460	46.99	4.92	51.91	68.2	-16.29	Peak	Horizontal
3	15690	32.69	8.32	41.01	54.00	-12.99	Average	Horizontal
4	15690	46.60	8.32	54.92	74.00	-19.08	Peak	Horizontal
5	10460	34.91	4.92	39.83	68.2	-28.37	Average	Vertical
6	10460	46.97	4.92	51.89	68.2	-16.31	Peak	Vertical
7	15690	32.66	8.32	40.98	54.00	-13.02	Average	Vertical
8	15690	45.03	8.32	53.35	74.00	-20.65	Peak	Vertical
802.11AX40_Chain 0+1_5270 MHz								
1	10540	34.50	4.93	39.43	68.2	-28.77	Average	Horizontal
2	10540	46.60	4.93	51.53	68.2	-16.67	Peak	Horizontal
3	15810	32.28	8.09	40.37	54.00	-13.63	Average	Horizontal
4	15810	44.66	8.09	52.75	74.00	-21.25	Peak	Horizontal
5	10540	34.44	4.93	39.37	68.2	-28.83	Average	Vertical
6	10540	46.16	4.93	51.09	68.2	-17.11	Peak	Vertical
7	15810	32.24	8.09	40.33	54.00	-13.67	Average	Vertical
8	15810	44.33	8.09	52.42	74.00	-21.58	Peak	Vertical
802.11AX40_Chain 0+1_5310 MHz								
1	10620	34.12	4.87	38.99	54.00	-15.01	Average	Horizontal
2	10620	46.96	4.87	51.83	74.00	-22.17	Peak	Horizontal
3	15930	31.49	7.85	39.34	54.00	-14.66	Average	Horizontal
4	15930	45.04	7.85	52.89	74.00	-21.11	Peak	Horizontal
5	10620	34.15	4.87	39.02	54.00	-14.98	Average	Vertical
6	10620	46.25	4.87	51.12	74.00	-22.88	Peak	Vertical
7	15930	31.41	7.85	39.26	54.00	-14.74	Average	Vertical
8	15930	44.12	7.85	51.97	74.00	-22.03	Peak	Vertical
802.11AX40_Chain 0+1_5510 MHz								
1	11020	34.07	4.59	38.66	54.00	-15.34	Average	Horizontal
2	11020	47.56	4.59	52.15	74.00	-21.85	Peak	Horizontal
3	16530	32.56	7.92	40.48	54.00	-13.52	Average	Horizontal
4	16530	45.09	7.92	53.01	74.00	-20.99	Peak	Horizontal
5	11020	34.07	4.59	38.66	54.00	-15.34	Average	Vertical
6	11020	46.22	4.59	50.81	74.00	-23.19	Peak	Vertical
7	16530	32.59	7.92	40.51	54.00	-13.49	Average	Vertical
8	16530	45.33	7.92	53.25	74.00	-20.75	Peak	Vertical
802.11AX40_Chain 0+1_5590 MHz								
1	11180	33.04	4.69	37.73	54.00	-16.27	Average	Horizontal
2	11180	45.34	4.69	50.03	74.00	-23.97	Peak	Horizontal
3	16770	31.90	7.97	39.87	54.00	-14.13	Average	Horizontal
4	16770	43.98	7.97	51.95	74.00	-22.05	Peak	Horizontal
5	11180	32.98	4.69	37.67	54.00	-16.33	Average	Vertical
6	11180	45.48	4.69	50.17	74.00	-23.83	Peak	Vertical
7	16770	31.97	7.97	39.94	54.00	-14.06	Average	Vertical
8	16770	44.12	7.97	52.09	74.00	-21.91	Peak	Vertical
802.11AX40_Chain 0+1_5670 MHz								
1	11340	33.24	4.81	38.05	54.00	-15.95	Average	Horizontal
2	11340	45.47	4.81	50.28	74.00	-23.72	Peak	Horizontal

No.	Freq. (MHz)	Reading (dBμV)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Antenna Polaxis
3	17010	31.83	8.04	39.87	54.00	-14.13	Average	Horizontal
4	17010	45.32	8.04	53.36	74.00	-20.64	Peak	Horizontal
5	11340	33.21	4.81	38.02	54.00	-15.98	Average	Vertical
6	11340	45.03	4.81	49.84	74.00	-24.16	Peak	Vertical
7	17010	31.87	8.04	39.91	54.00	-14.09	Average	Vertical
8	17010	44.76	8.04	52.80	74.00	-21.20	Peak	Vertical
802.11AX40_Chain 0+1_5755 MHz								
1	11510	32.92	4.93	37.85	54.00	-16.15	Average	Horizontal
2	11510	46.63	4.93	51.56	74.00	-22.44	Peak	Horizontal
3	17265	32.12	8.54	40.66	54.00	-13.34	Average	Horizontal
4	17265	44.32	8.54	52.86	74.00	-21.14	Peak	Horizontal
5	11510	33.05	4.93	37.98	54.00	-16.02	Average	Vertical
6	11510	45.40	4.93	50.33	74.00	-23.67	Peak	Vertical
7	17265	32.12	8.54	40.66	54.00	-13.34	Average	Vertical
8	17265	44.68	8.54	53.22	74.00	-20.78	Peak	Vertical
802.11AX40_Chain 0+1_5795 MHz								
1	11590	32.46	5.05	37.51	54.00	-16.49	Average	Vertical
2	11590	44.69	5.05	49.74	74.00	-24.26	Peak	Horizontal
3	17385	31.62	8.79	40.41	54.00	-13.59	Average	Vertical
4	17385	44.52	8.79	53.31	74.00	-20.69	Peak	Horizontal
5	11590	32.50	5.05	37.55	54.00	-16.45	Average	Vertical
6	11590	45.28	5.05	50.33	74.00	-23.67	Peak	Vertical
7	17385	31.62	8.79	40.41	54.00	-13.59	Average	Vertical
8	17385	43.84	8.79	52.63	74.00	-21.37	Peak	Vertical
802.11AX80_Chain 0+1_5210 MHz								
1	10420	34.86	4.86	39.72	68.2	-28.48	Average	Horizontal
2	10420	46.99	4.86	51.85	68.2	-16.35	Peak	Horizontal
3	15630	32.56	8.45	41.01	54.00	-12.99	Average	Horizontal
4	15630	44.84	8.45	53.29	74.00	-20.71	Peak	Horizontal
5	10420	34.89	4.86	39.75	68.2	-28.45	Average	Vertical
6	10420	46.87	4.86	51.73	68.2	-16.47	Peak	Vertical
7	15630	32.56	8.45	41.01	54.00	-12.99	Average	Vertical
8	15630	44.56	8.45	53.01	74.00	-20.99	Peak	Vertical
802.11AX80_Chain 0+1_5290 MHz								
1	10580	34.52	4.91	39.43	68.2	-28.77	Average	Horizontal
2	10580	47.00	4.91	51.91	68.2	-16.29	Peak	Horizontal
3	15870	32.34	7.96	40.30	54.00	-13.70	Average	Horizontal
4	15870	44.83	7.96	52.79	74.00	-21.21	Peak	Horizontal
5	10580	34.49	4.91	39.40	68.2	-28.80	Average	Vertical
6	10580	47.00	4.91	51.91	68.2	-16.29	Peak	Vertical
7	15870	32.41	7.96	40.37	54.00	-13.63	Average	Vertical
8	15870	44.90	7.96	52.86	74.00	-21.14	Peak	Vertical
802.11AX80_Chain 0+1_5530 MHz								
1	11060	34.55	4.60	39.15	54.00	-14.85	Average	Horizontal
2	11060	46.43	4.60	51.03	74.00	-22.97	Peak	Horizontal
3	16590	31.45	7.92	39.37	54.00	-14.63	Average	Horizontal
4	16590	43.90	7.92	51.82	74.00	-22.18	Peak	Horizontal
5	11060	34.61	4.60	39.21	54.00	-14.79	Average	Vertical
6	11060	46.89	4.60	51.49	74.00	-22.51	Peak	Vertical
7	16590	31.45	7.92	39.37	54.00	-14.63	Average	Vertical
8	16590	45.20	7.92	53.12	74.00	-20.88	Peak	Vertical
802.11AX80_Chain 0+1_5610 MHz								
1	11220	33.00	4.73	37.73	54.00	-16.27	Average	Horizontal

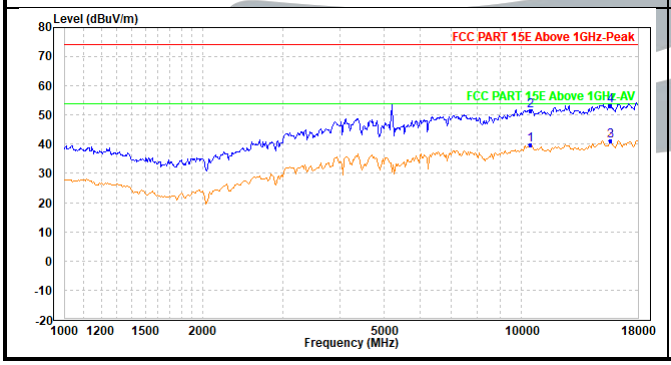
No.	Freq. (MHz)	Reading (dBμV)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Antenna Polaxis
2	11220	46.51	4.73	51.24	74.00	-22.76	Peak	Horizontal
3	16830	31.91	7.99	39.90	54.00	-14.10	Average	Horizontal
4	16830	44.70	7.99	52.69	74.00	-21.31	Peak	Horizontal
5	11220	32.94	4.73	37.67	54.00	-16.33	Average	Vertical
6	11220	45.98	4.73	50.71	74.00	-23.29	Peak	Vertical
7	16830	31.91	7.99	39.90	54.00	-14.10	Average	Vertical
8	16830	44.12	7.99	52.11	74.00	-21.89	Peak	Vertical
802.11AX80_Chain 0+1_5775 MHz								
1	11550	32.86	4.99	37.85	54.00	-16.15	Average	Horizontal
2	11550	46.01	4.99	51.00	74.00	-23.00	Peak	Horizontal
3	17325	32.03	8.66	40.69	54.00	-13.31	Average	Horizontal
4	17325	44.38	8.66	53.04	74.00	-20.96	Peak	Horizontal
5	11550	32.99	4.99	37.98	54.00	-16.02	Average	Vertical
6	11550	45.29	4.99	50.28	74.00	-23.72	Peak	Vertical
7	17325	32.03	8.66	40.69	54.00	-13.31	Average	Vertical
8	17325	44.82	8.66	53.48	74.00	-20.52	Peak	Vertical
802.11AX160_Chain 0+1_5250 MHz								
1	10500	34.17	4.97	39.14	68.2	-29.06	Average	Horizontal
2	10500	46.00	4.97	50.97	68.2	-17.23	Peak	Horizontal
3	15750	32.80	8.20	41.00	54.00	-13.00	Average	Horizontal
4	15750	45.61	8.20	53.81	74.00	-20.19	Peak	Horizontal
5	10500	34.09	4.97	39.06	68.2	-29.14	Average	Vertical
6	10500	46.58	4.97	51.55	68.2	-16.65	Peak	Vertical
7	15750	32.83	8.20	41.03	54.00	-12.97	Average	Vertical
8	15750	44.75	8.20	52.95	74.00	-21.05	Peak	Vertical
802.11AX160_Chain 0+1_5570 MHz								
1	11140	33.37	4.67	38.04	54.00	-15.96	Average	Horizontal
2	11140	46.85	4.67	51.52	74.00	-22.48	Peak	Horizontal
3	16710	31.74	7.96	39.70	54.00	-14.30	Average	Horizontal
4	16710	44.08	7.96	52.04	74.00	-21.96	Peak	Horizontal
5	11140	33.30	4.67	37.97	54.00	-16.03	Average	Vertical
6	16710	31.77	7.96	39.73	54.00	-14.27	Average	Vertical

Remark:

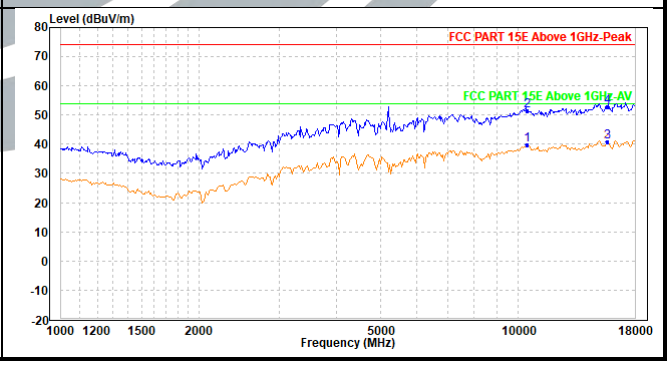
1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Radiated Emission (1-18 GHz)_Worst test mode test diagram_802.11N20_Chain 0+1_5220 MHz

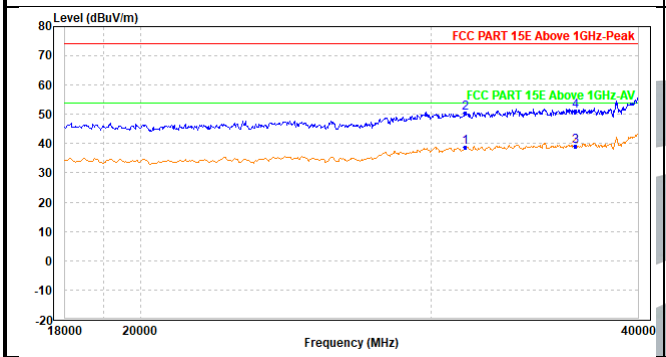
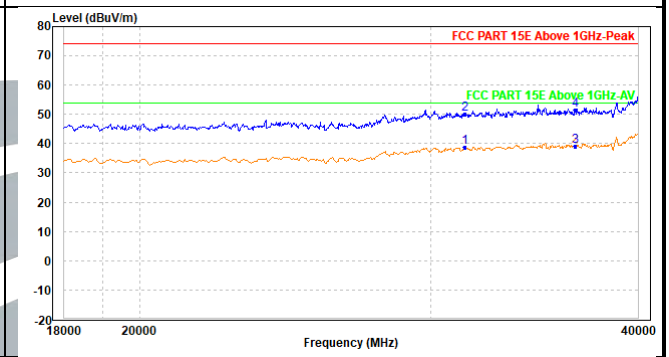
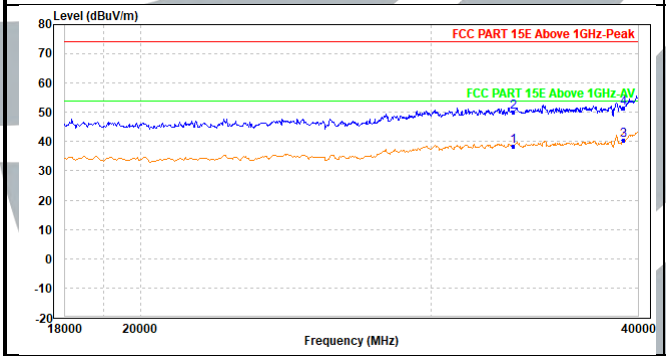
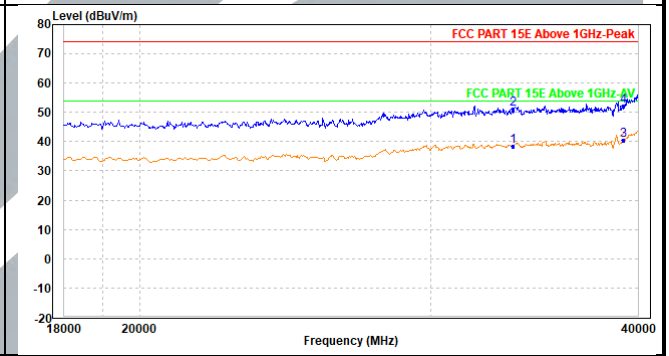
Horizontal



Vertical



Radiated Emission Worst Test Data (Above 18GHz):

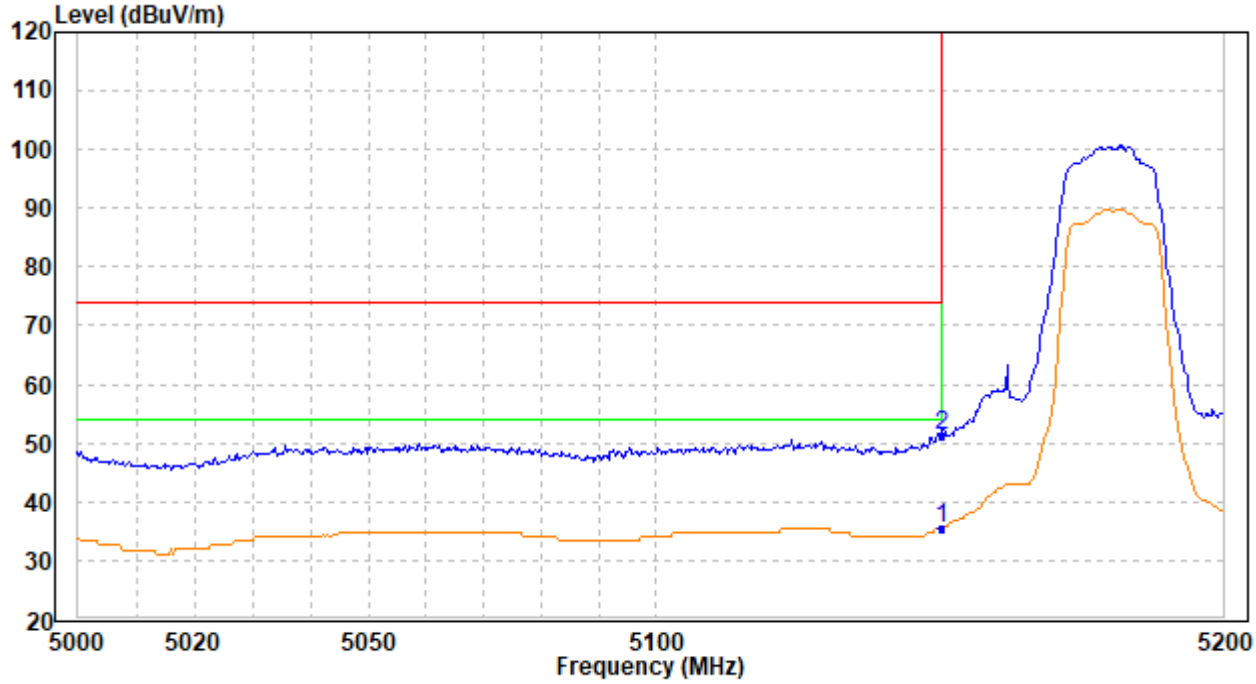
No.	Freq. (MHz)	Reading (dBμV)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Antenna Polaxis
802.11a_ Chain 0_5240 MHz								
Horizontal								
								
Vertical								
								
1	31440	31.41	7.42	38.83	54.00	-15.17	Average	Horizontal
2	31440	43.05	7.42	50.47	74.00	-23.53	Peak	Horizontal
3	36680	31.83	7.30	39.13	54.00	-14.87	Average	Horizontal
4	36680	43.68	7.30	50.98	74.00	-23.02	Peak	Horizontal
5	31440	31.33	7.36	38.69	54.00	-15.31	Average	Vertical
6	31440	42.70	7.36	50.06	74.00	-23.94	Peak	Vertical
7	36680	31.93	7.31	39.24	54.00	-14.76	Average	Vertical
8	36680	44.06	7.31	51.37	74.00	-22.63	Peak	Vertical
802.11a_ Chain 1_5600 MHz								
Horizontal								
								
Vertical								
								
1	33600	31.18	7.28	38.46	54.00	-15.54	Average	Horizontal
2	33600	42.78	7.28	50.06	74.00	-23.94	Peak	Horizontal
3	39200	32.14	8.20	40.34	54.00	-13.66	Average	Horizontal
4	39200	43.26	8.20	51.46	74.00	-22.54	Peak	Horizontal
5	33600	31.22	7.18	38.40	54.00	-15.60	Average	Vertical
6	33600	43.87	7.18	51.05	74.00	-22.95	Peak	Vertical
7	39200	32.21	8.30	40.51	54.00	-13.49	Average	Vertical
8	39200	43.77	8.30	52.07	74.00	-21.93	Peak	Vertical

Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

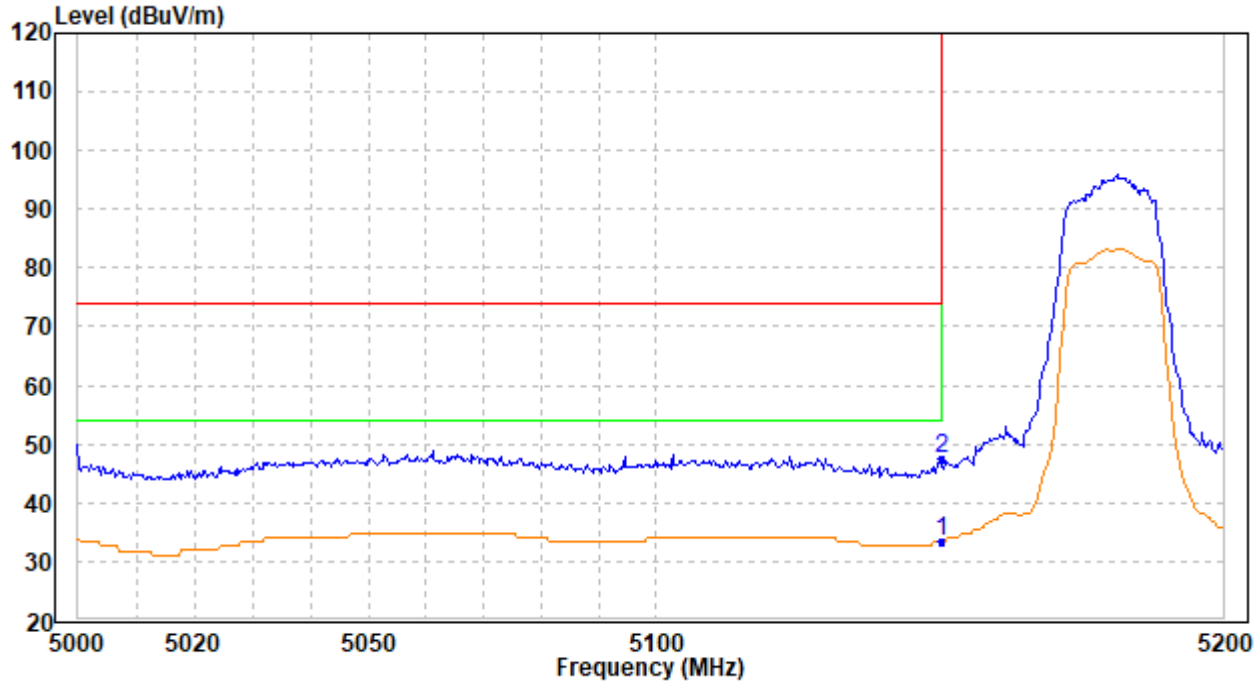
Band Edge Measurements (Radiated): Worst-Case Configuration

Test Channel:	802.11a_Chain 0_5180 MHz	Ant Polar:	Horizontal



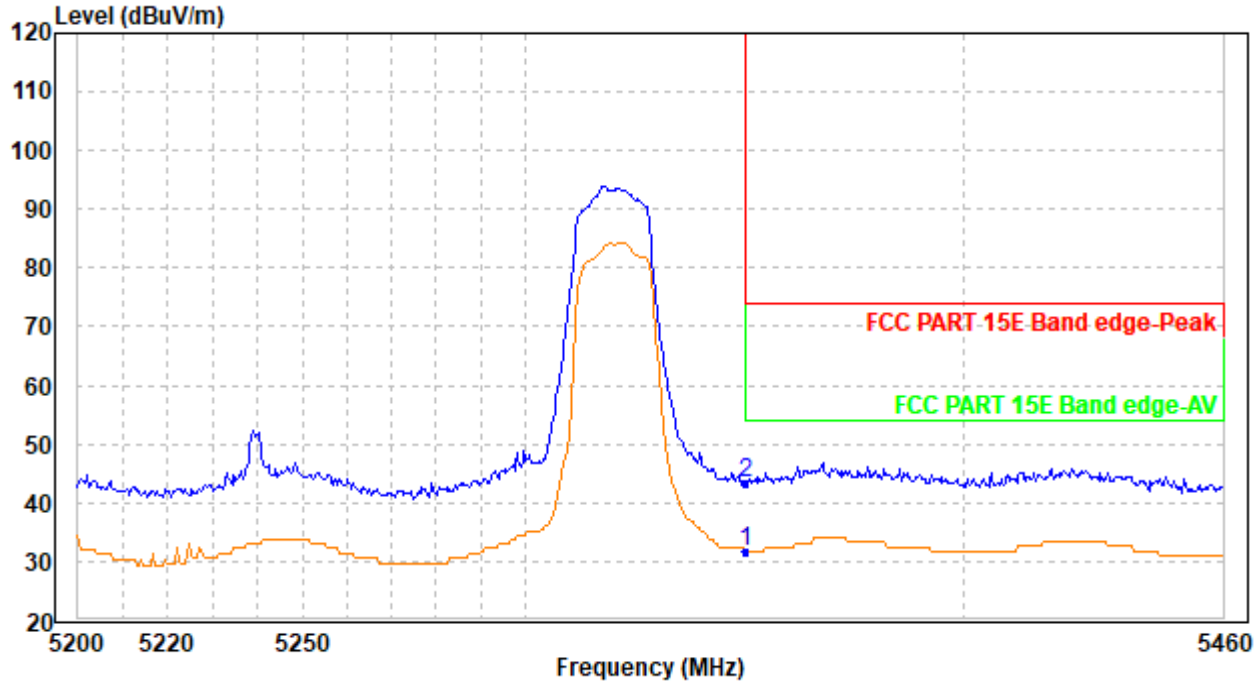
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	51.14	74.00	35.35	54.00	PASS

Test Channel:	802.11a_Chain 0_5180 MHz	Ant Polar:	Vertical



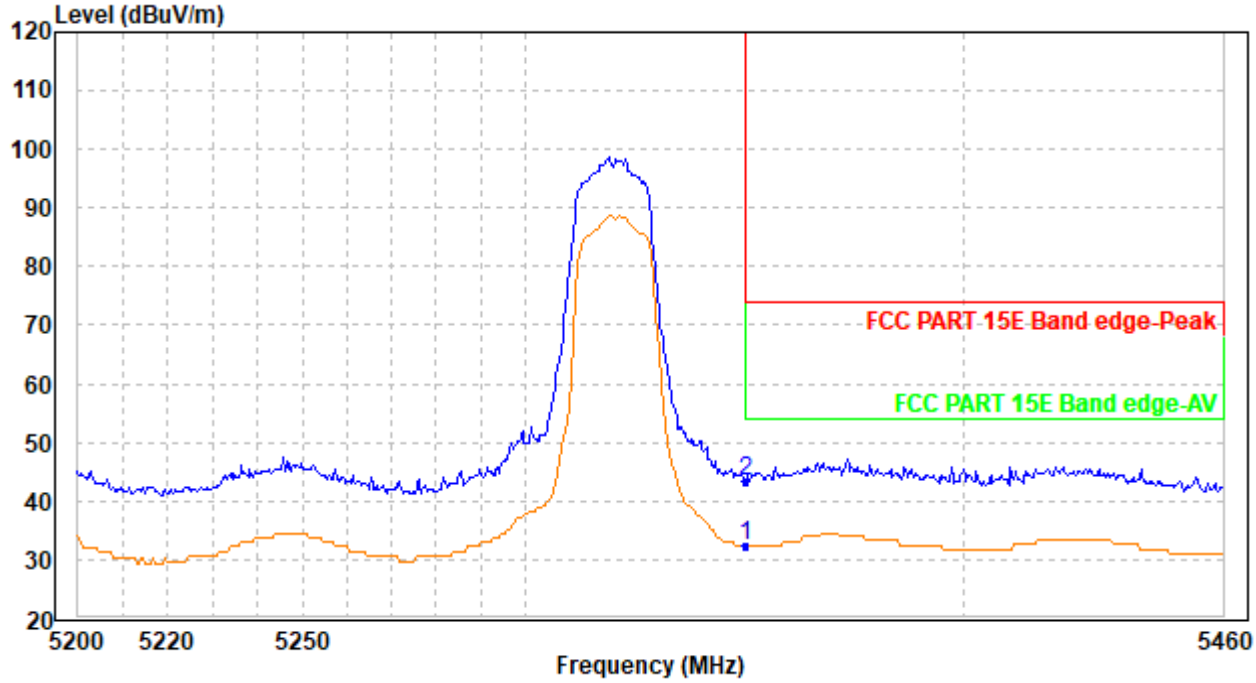
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	47.40	74.00	33.55	54.00	PASS

Test Channel:	802.11a_Chain 0_5320 MHz	Ant Polar:	Horizontal



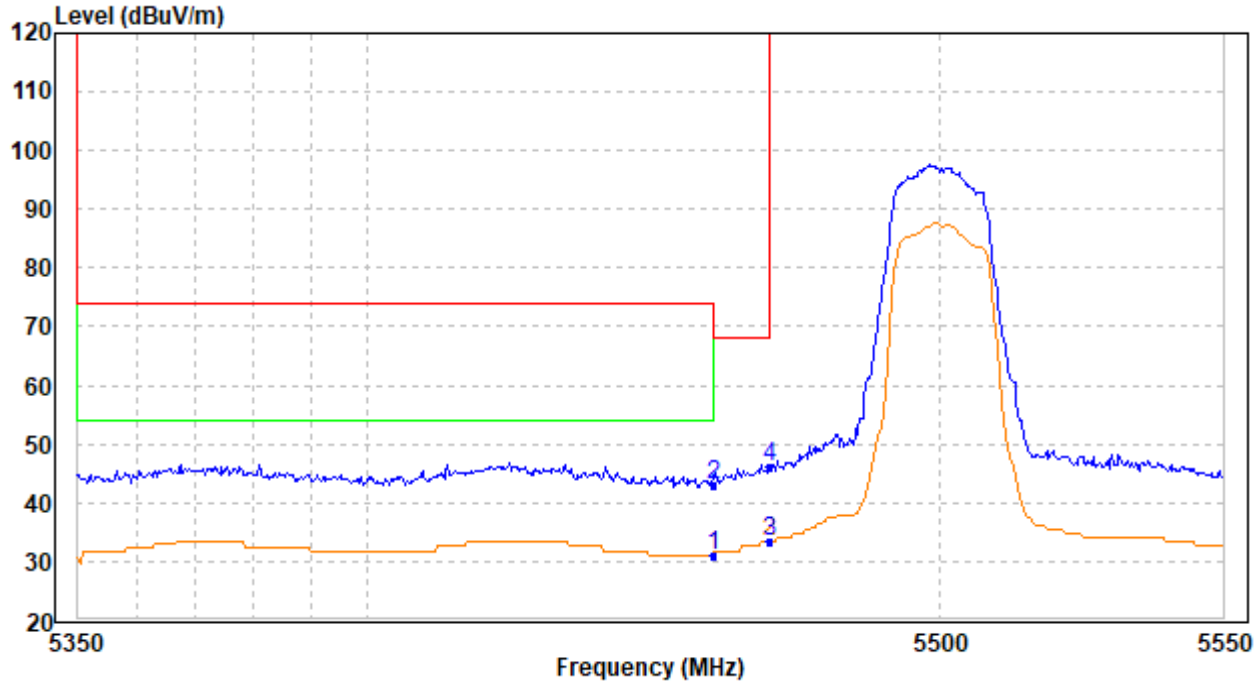
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	43.31	74.00	31.62	54.00	PASS

Test Channel:	802.11a_Chain 0_5320 MHz	Ant Polar:	Vertical



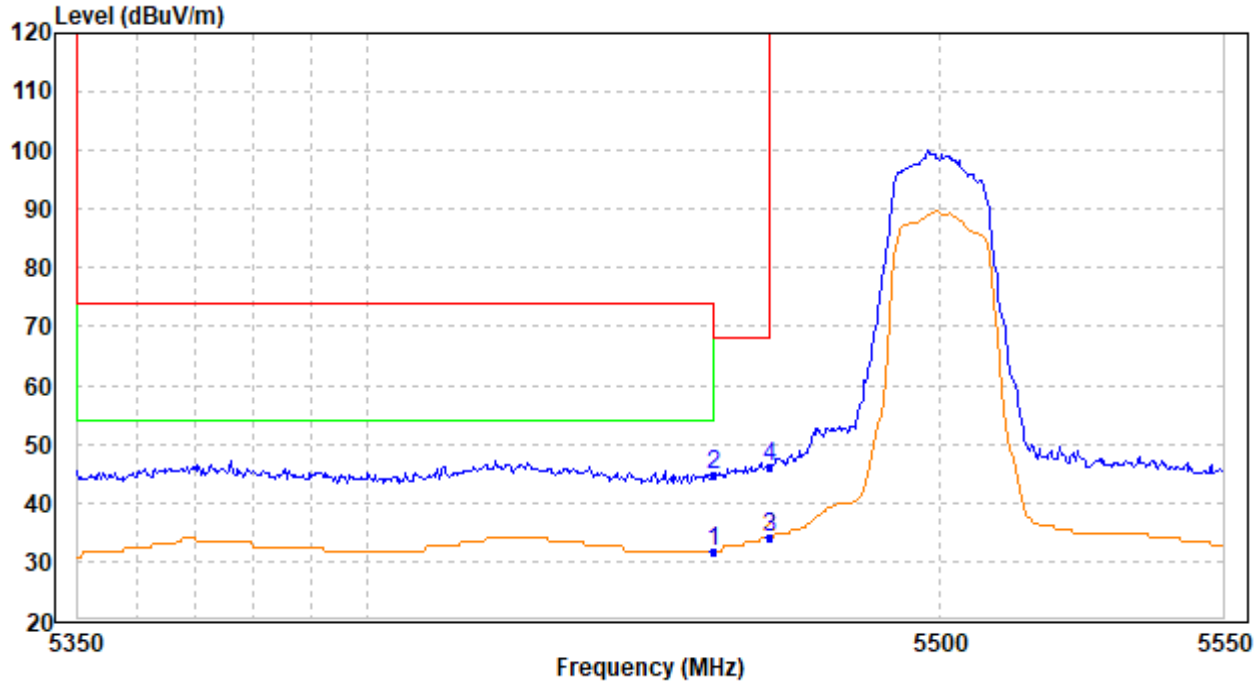
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	43.46	74.00	32.45	54.00	PASS

Test Channel:	802.11a_Chain 0_5500 MHz	Ant Polar:	Horizontal



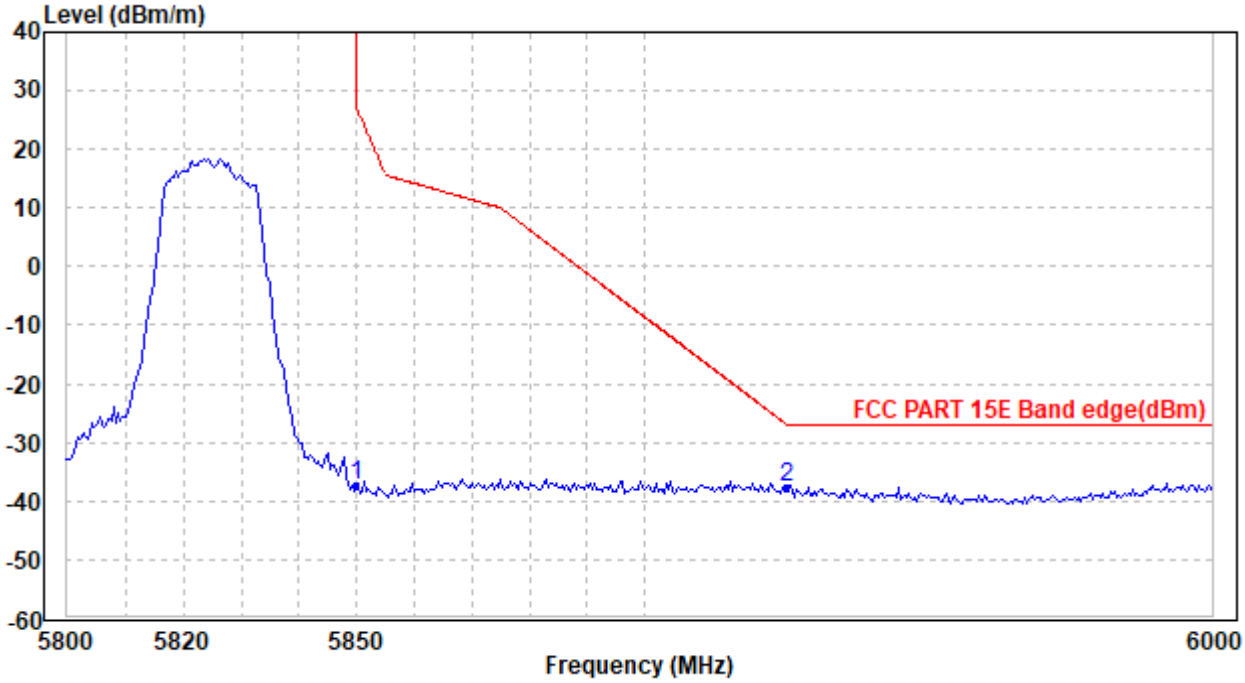
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	43.13	68.20	30.89	54.00	PASS
5470.000	46.14	68.20	33.41	68.20	PASS

Test Channel:	802.11a_Chain 0_5500 MHz	Ant Polar:	Vertical



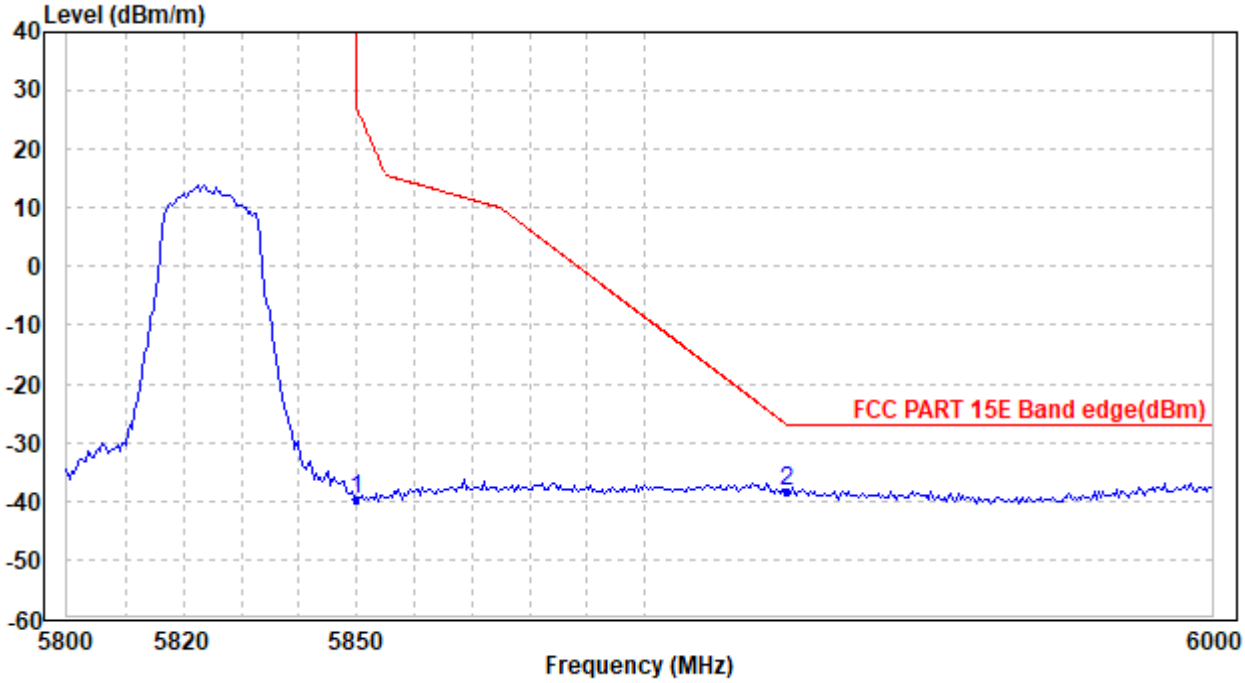
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	44.67	68.20	31.81	54.00	PASS
5470.000	46.06	68.20	34.11	68.20	PASS

Test Channel:	802.11a_Chain 0_5825 MHz	Ant Polar:	Horizontal



Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-37.30	27.00	PASS
5925.000	-37.64	-27.00	PASS

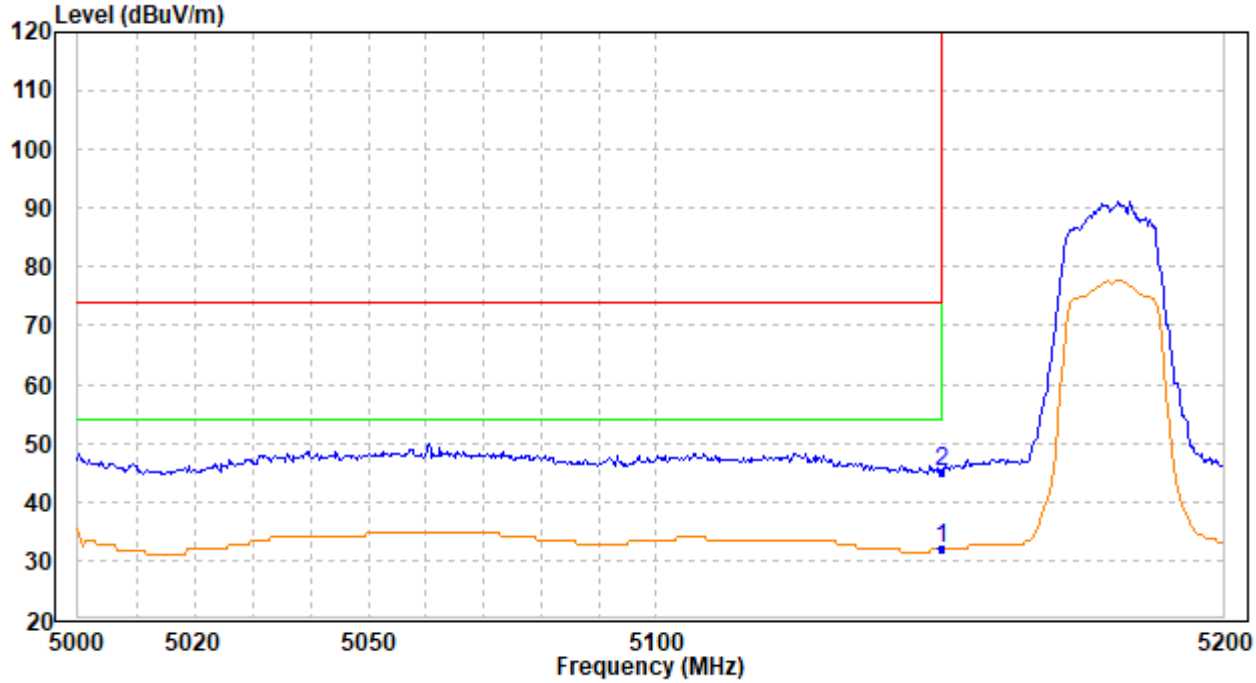
Test Channel:	802.11a_Chain 0_5825 MHz	Ant Polar:	Vertical



Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-39.71	27.00	PASS

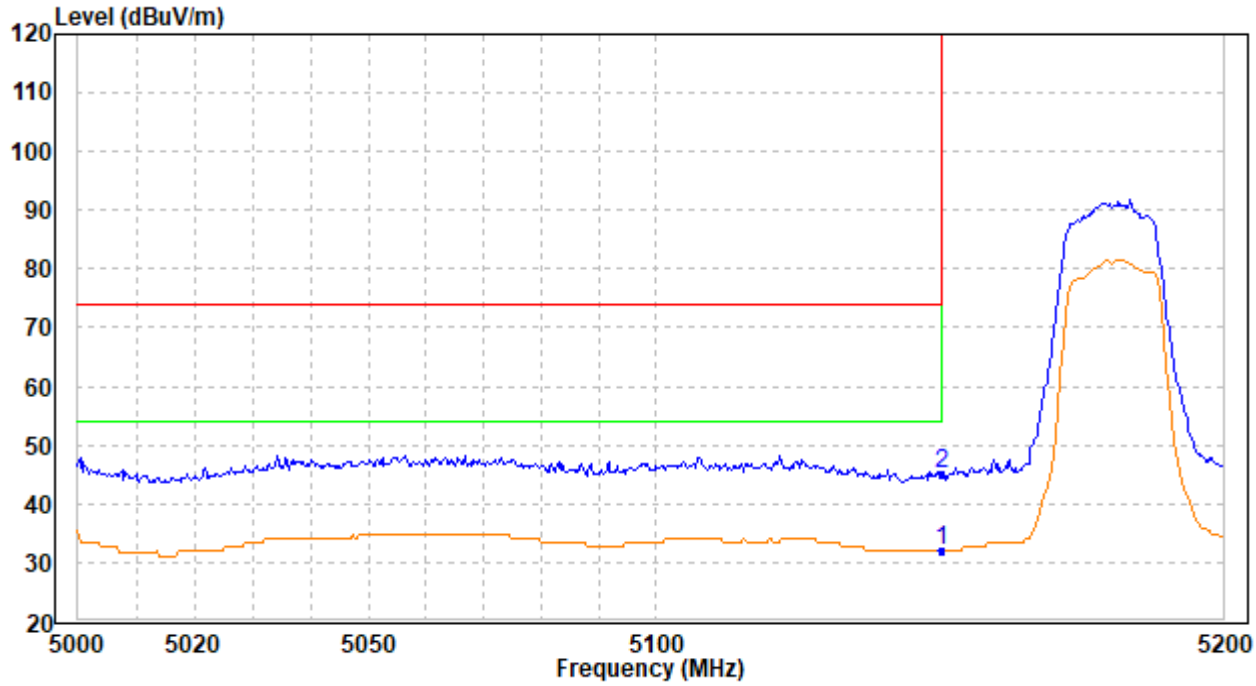
5925.000	-38.40	-27.00	PASS

Test Channel:	802.11a_Chain 1_5180 MHz	Ant Polar:	Horizontal



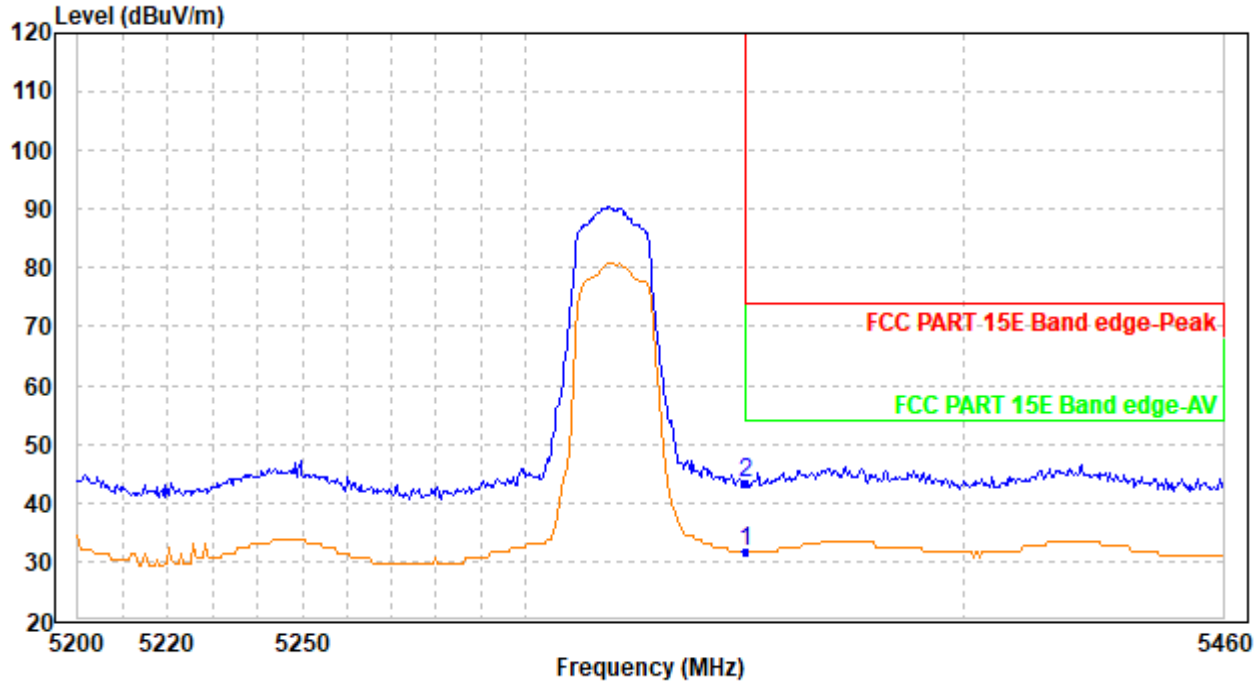
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	45.15	74.00	32.09	54.00	PASS

Test Channel:	802.11a_Chain 1_5180 MHz	Ant Polar:	Vertical



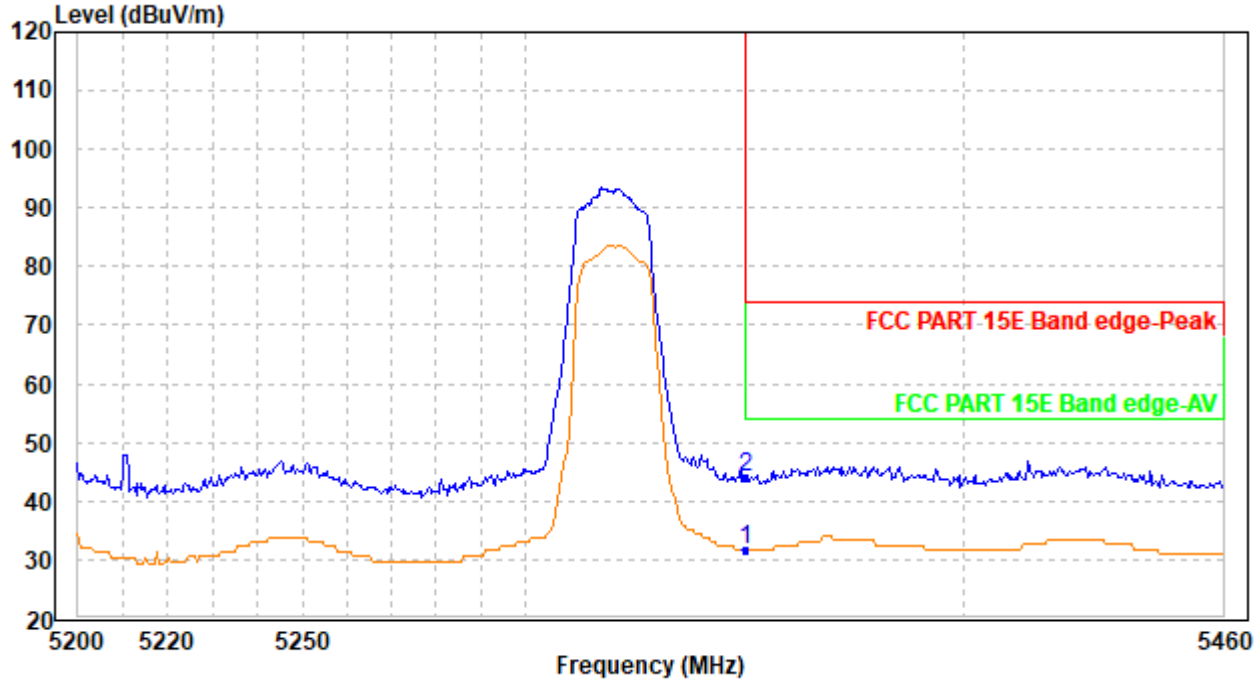
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	44.99	74.00	32.09	54.00	PASS

Test Channel:	802.11a_Chain 1_5320 MHz	Ant Polar:	Horizontal



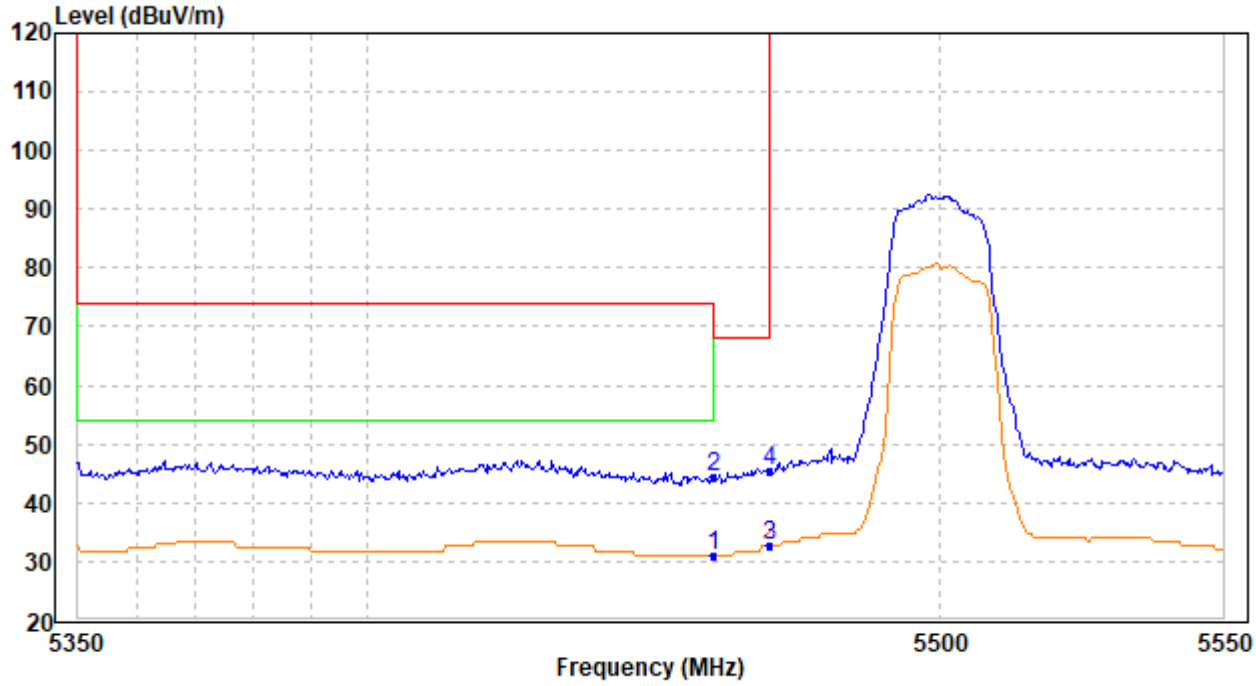
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	43.30	74.00	31.62	54.00	PASS

Test Channel:	802.11a_Chain 1_5320 MHz	Ant Polar:	Vertical



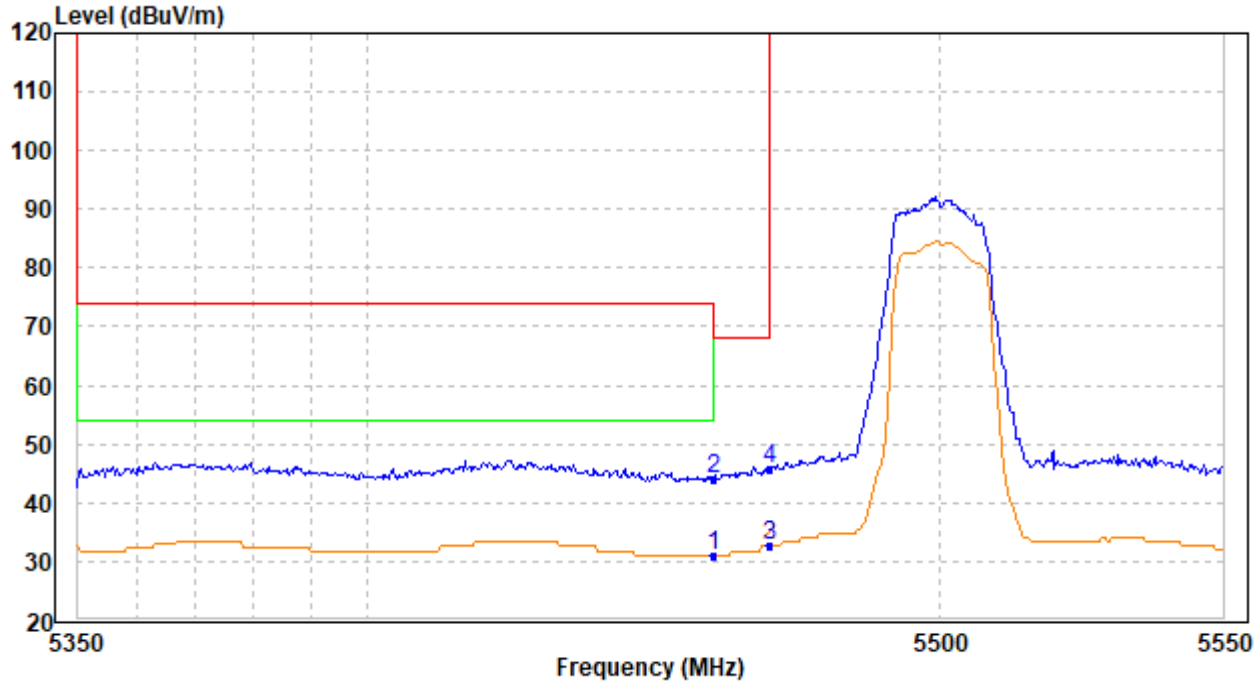
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	43.90	74.00	31.62	54.00	PASS

Test Channel:	802.11a_Chain 1_5500 MHz	Ant Polar:	Horizontal



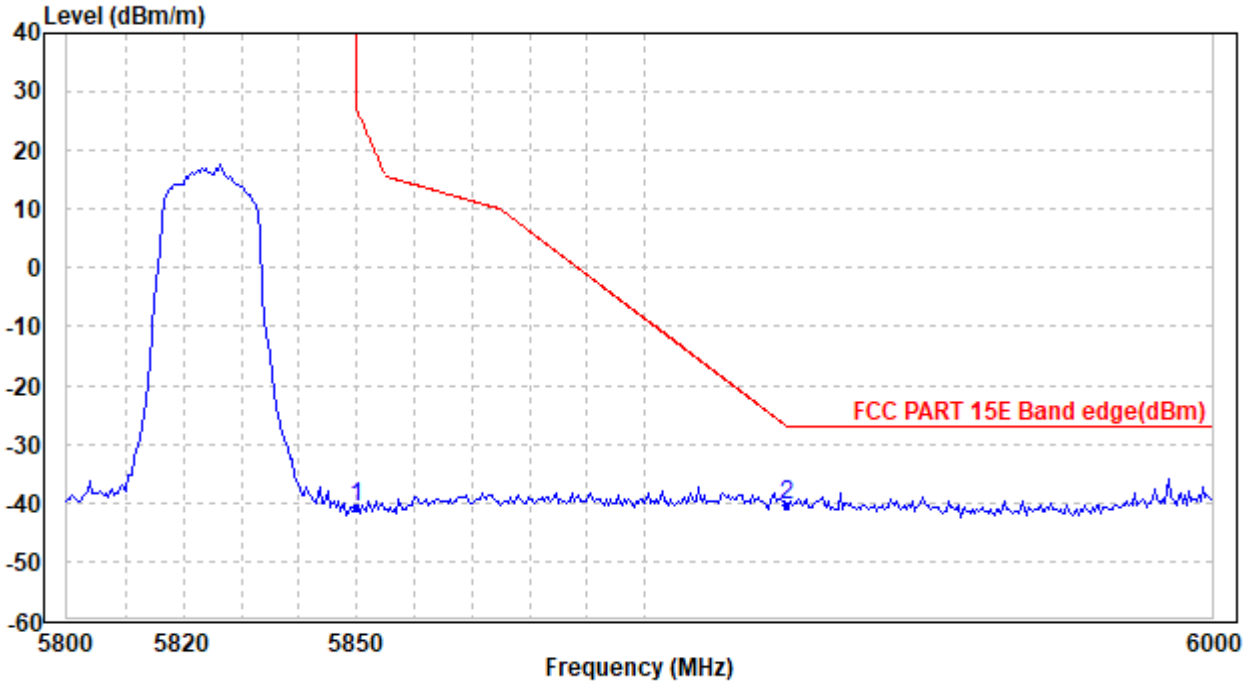
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	44.51	68.20	30.89	54.00	PASS
5470.000	45.36	68.20	32.65	68.20	PASS

Test Channel:	802.11a_Chain 1_5500 MHz	Ant Polar:	Vertical



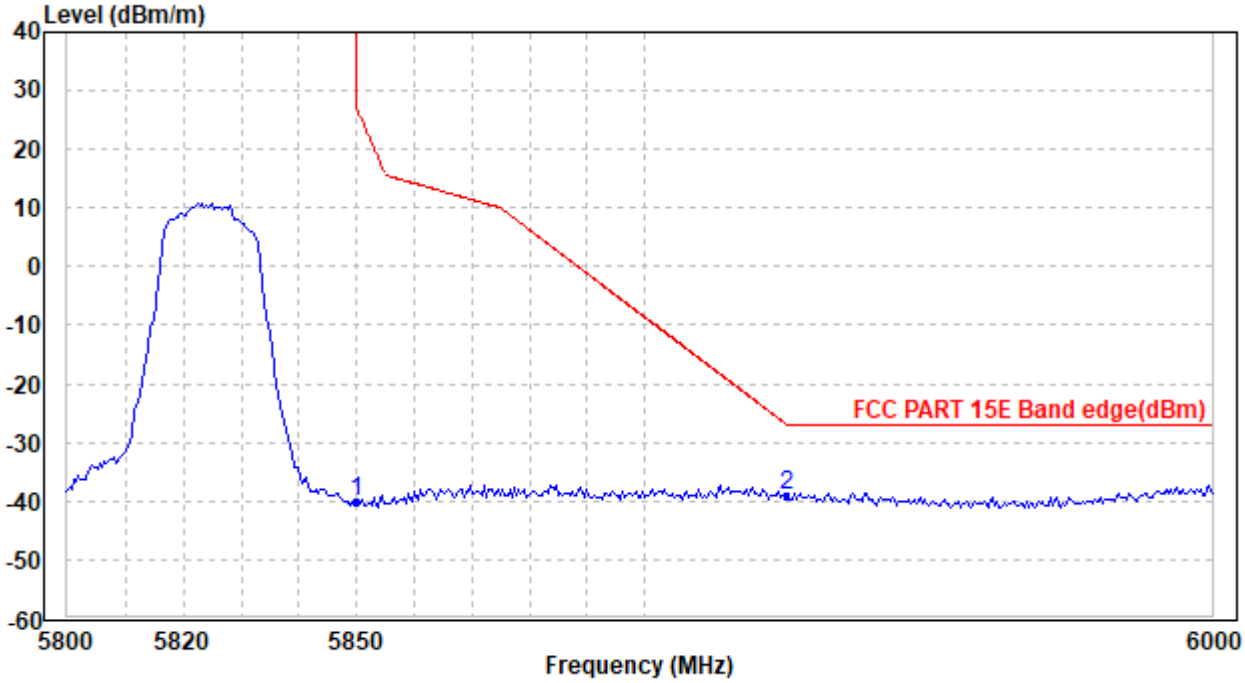
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	43.99	68.20	30.89	54.00	PASS
5470.000	45.85	68.20	32.65	68.20	PASS

Test Channel:	802.11a_Chain 1_5825 MHz	Ant Polar:	Horizontal



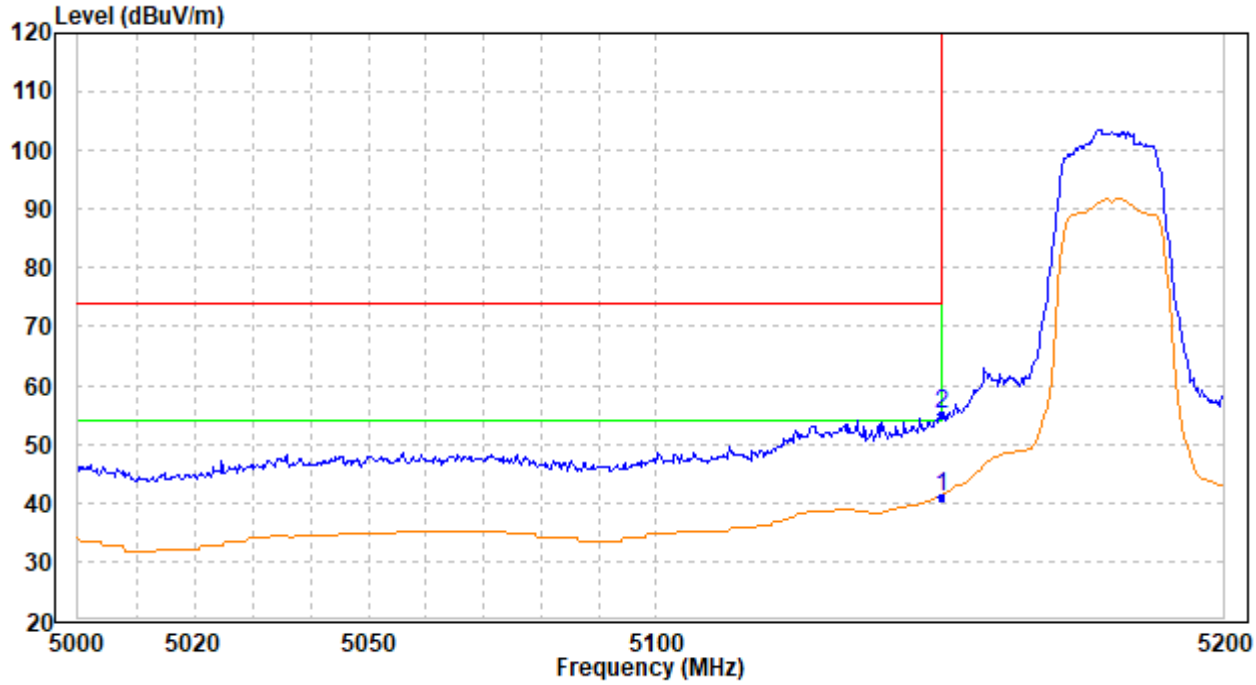
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-40.80	27.00	PASS
5925.000	-40.38	-27.00	PASS

Test Channel:	802.11a_Chain 1_5825 MHz	Ant Polar:	Vertical



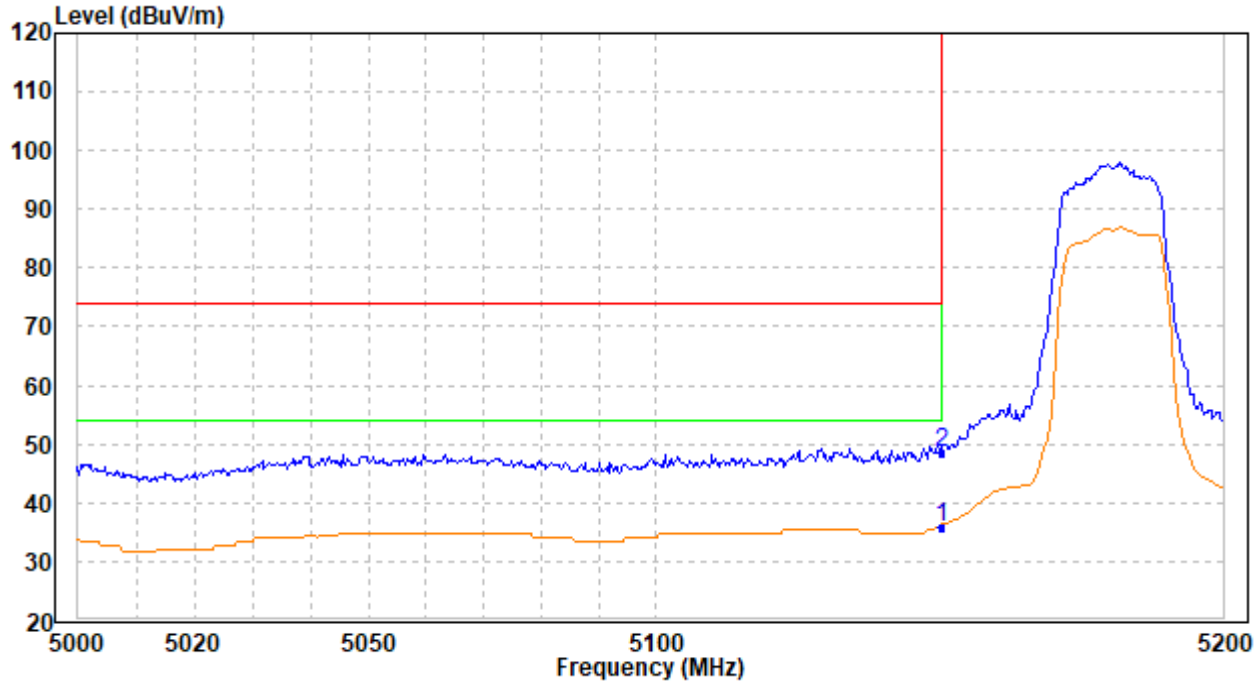
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-40.05	27.00	PASS
5925.000	-39.18	-27.00	PASS

Test Channel:	802.11n20_Chain 0+1_5180 MHz	Ant Polar:	Horizontal



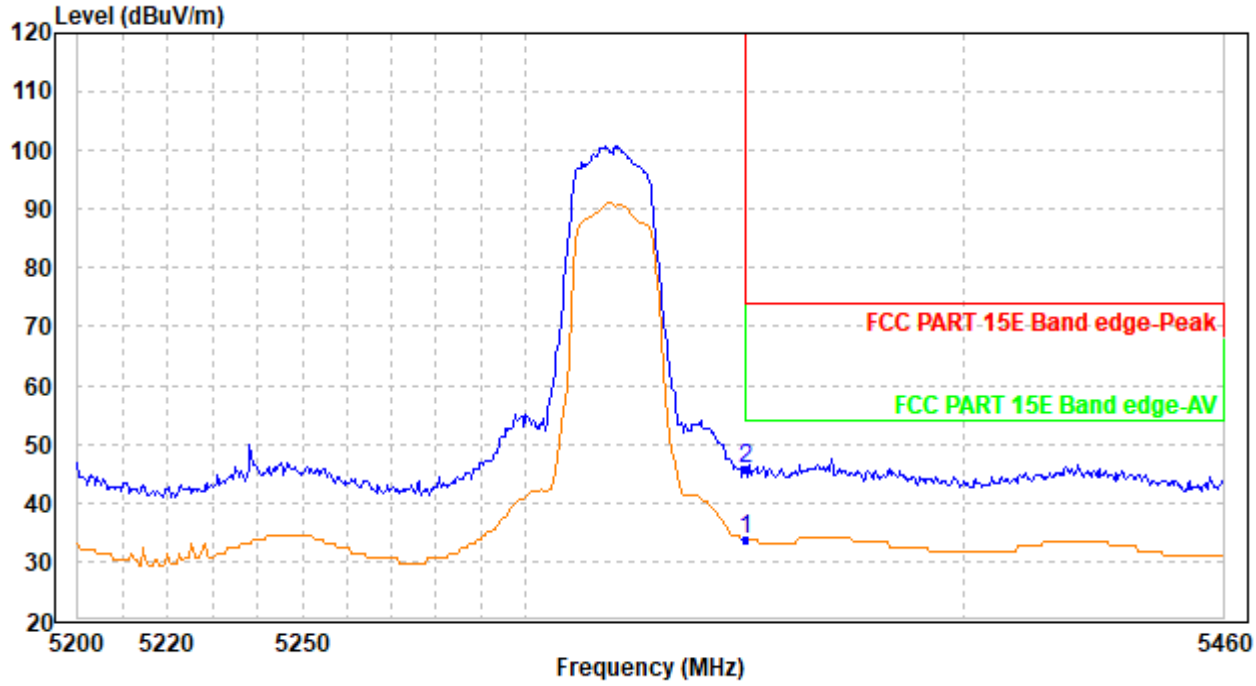
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	54.98	74.00	41.09	54.00	PASS

Test Channel:	802.11n20_Chain 0+1_5180 MHz	Ant Polar:	Vertical



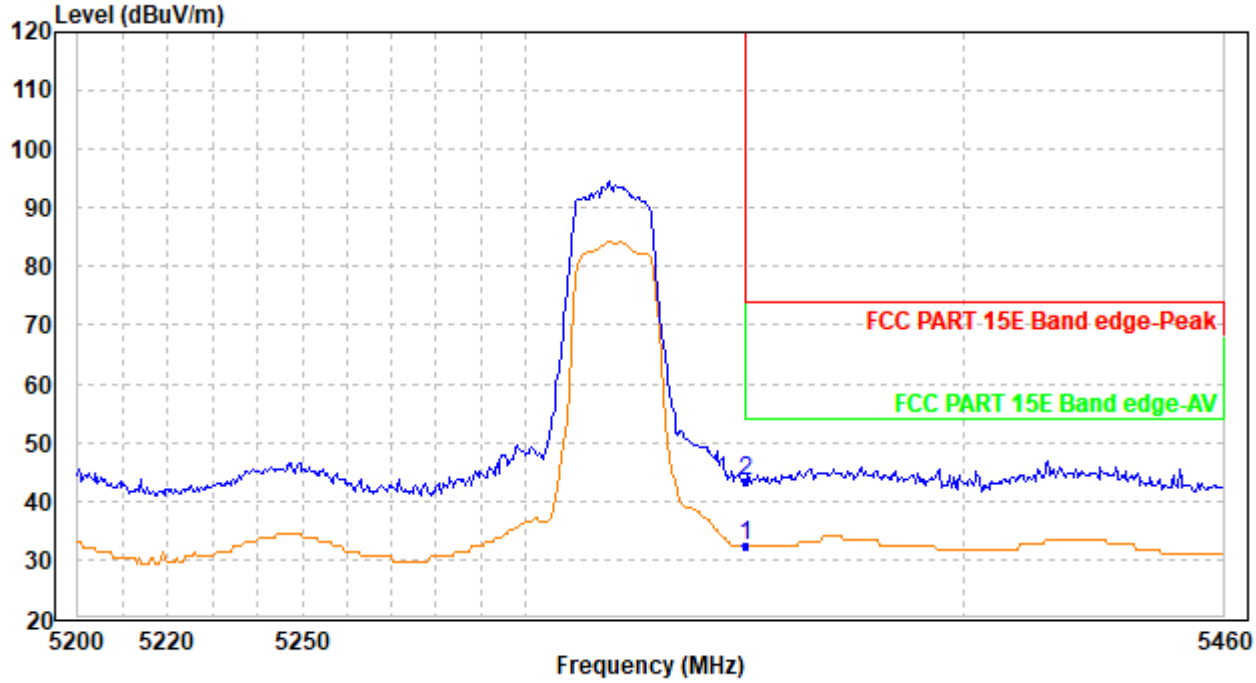
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	48.59	74.00	35.88	54.00	PASS

Test Channel:	802.11n20_Chain 0+1_5320 MHz	Ant Polar:	Horizontal



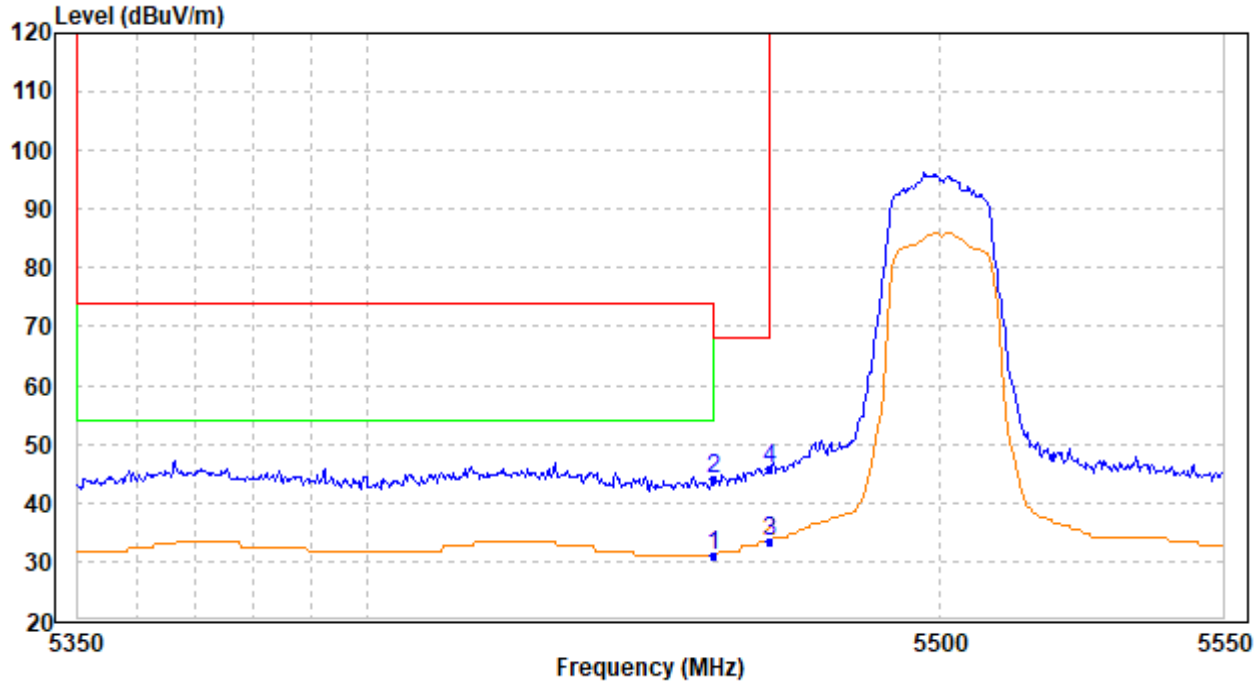
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	45.65	74.00	33.90	54.00	PASS

Test Channel:	802.11n20_Chain 0+1_5320 MHz	Ant Polar:	Vertical



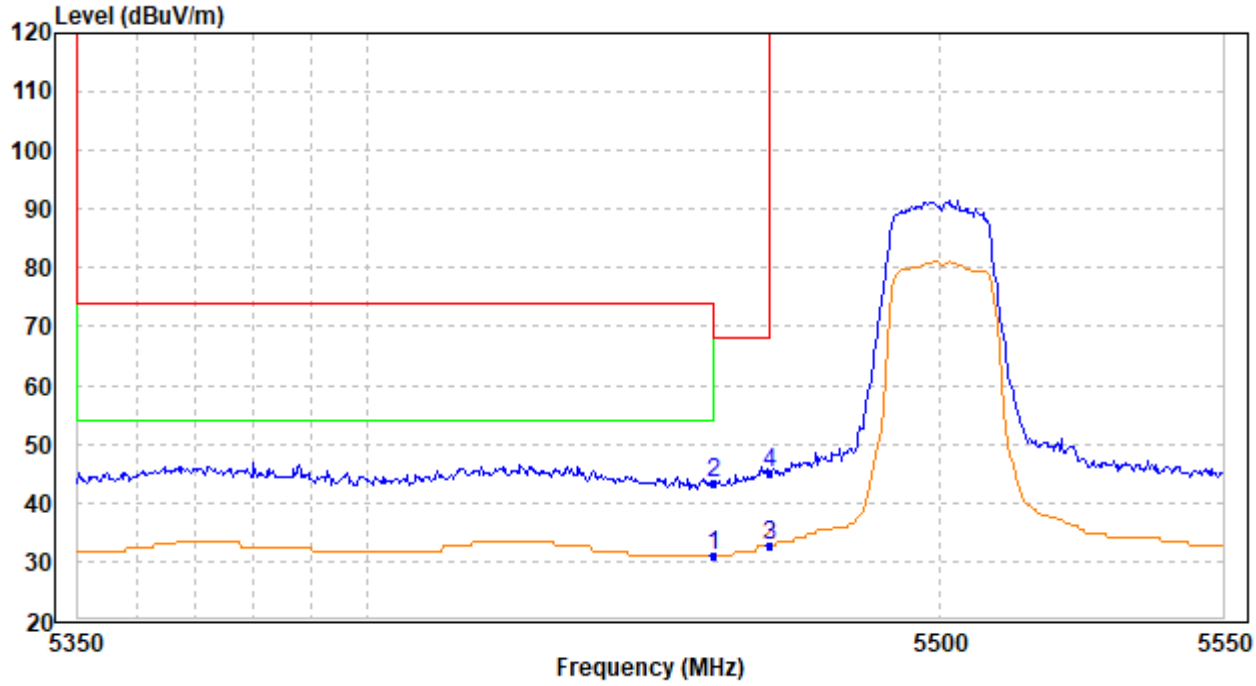
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	43.40	74.00	32.45	54.00	PASS

Test Channel:	802.11n20_Chain 0+1_5500 MHz	Ant Polar:	Horizontal



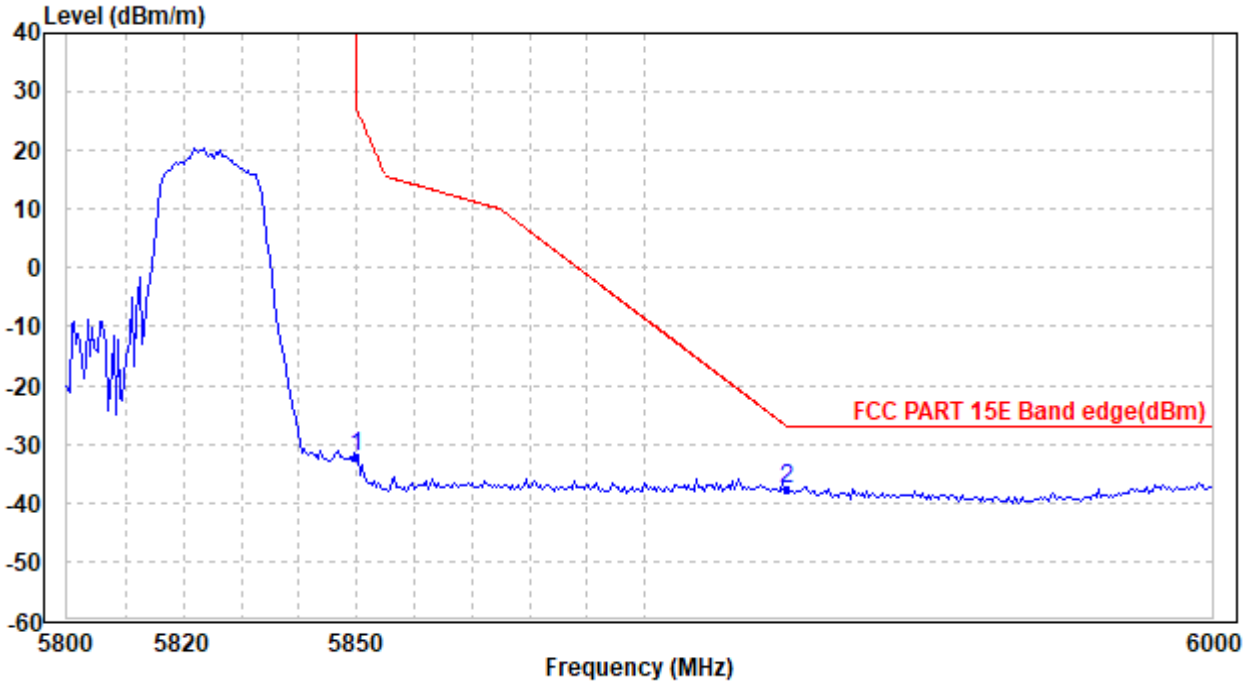
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	43.89	68.20	30.89	54.00	PASS
5470.000	45.94	68.20	33.41	68.20	PASS

Test Channel:	802.11n20_Chain 0+1_5500 MHz	Ant Polar:	Vertical



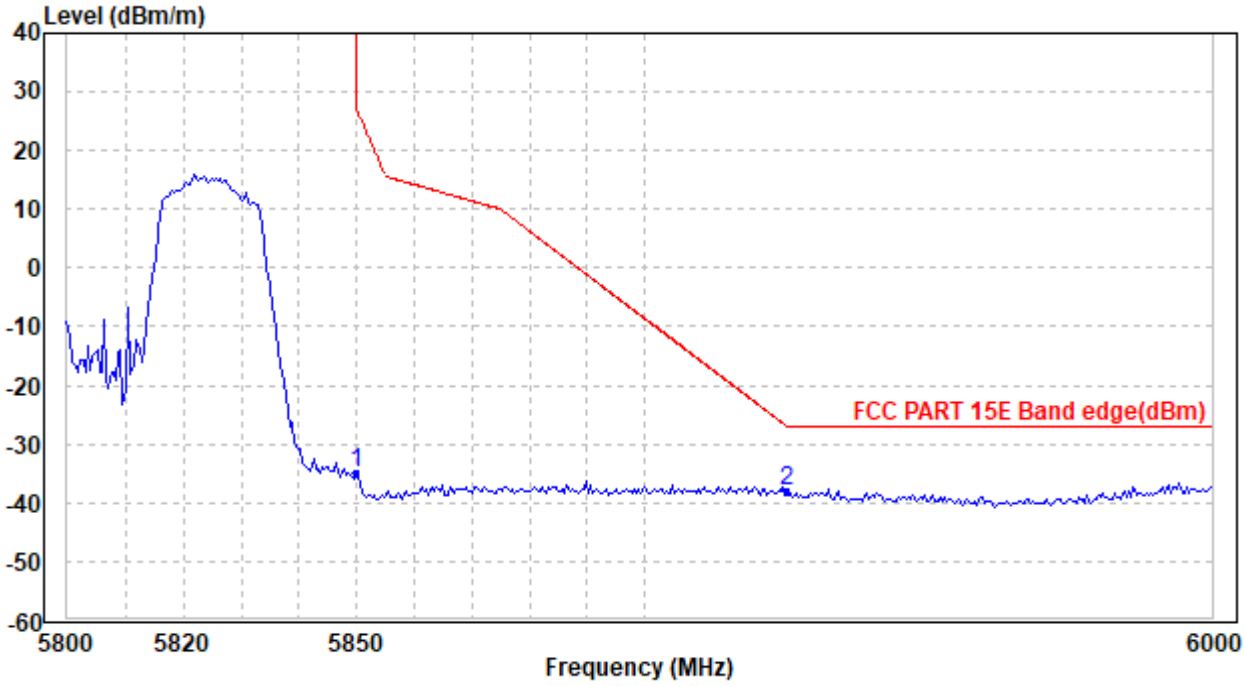
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	43.45	68.20	30.89	54.00	PASS
5470.000	44.93	68.20	32.65	68.20	PASS

Test Channel:	802.11N20_Chain 0+1_5825 MHz	Ant Polar:	Horizontal



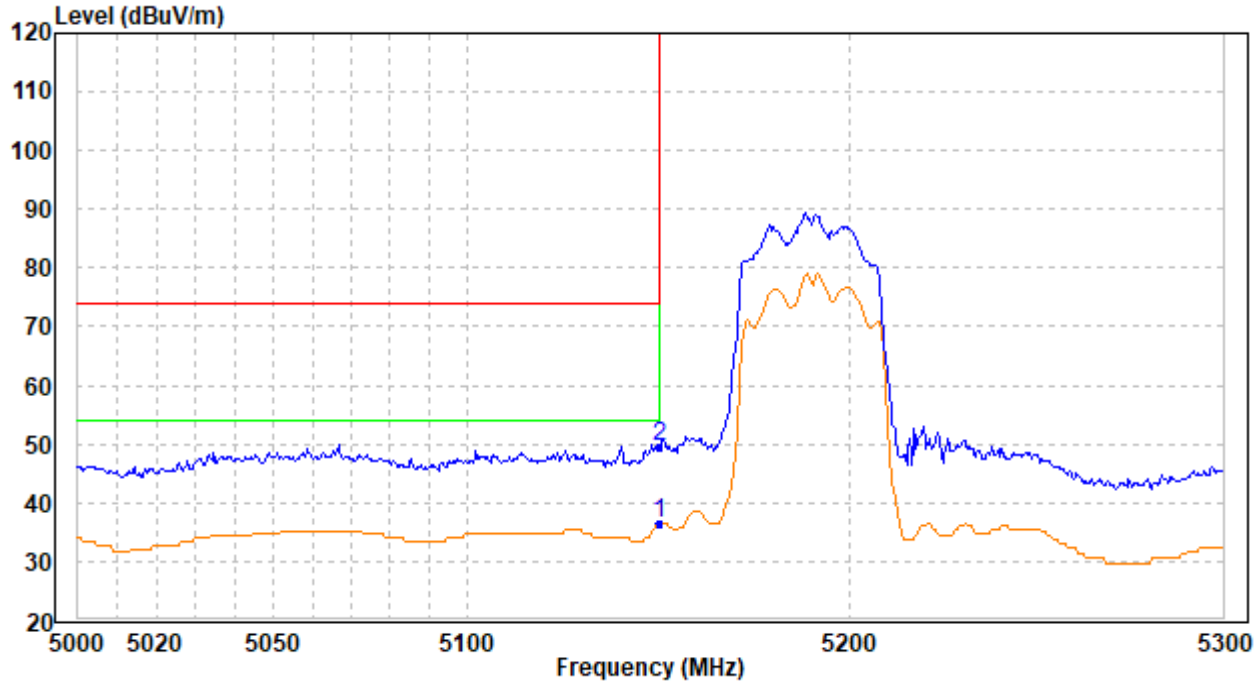
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-32.12	27.00	PASS
5925.000	-37.62	-27.00	PASS

Test Channel:	802.11N40_Chain 0+1_5825 MHz	Ant Polar:	Vertical



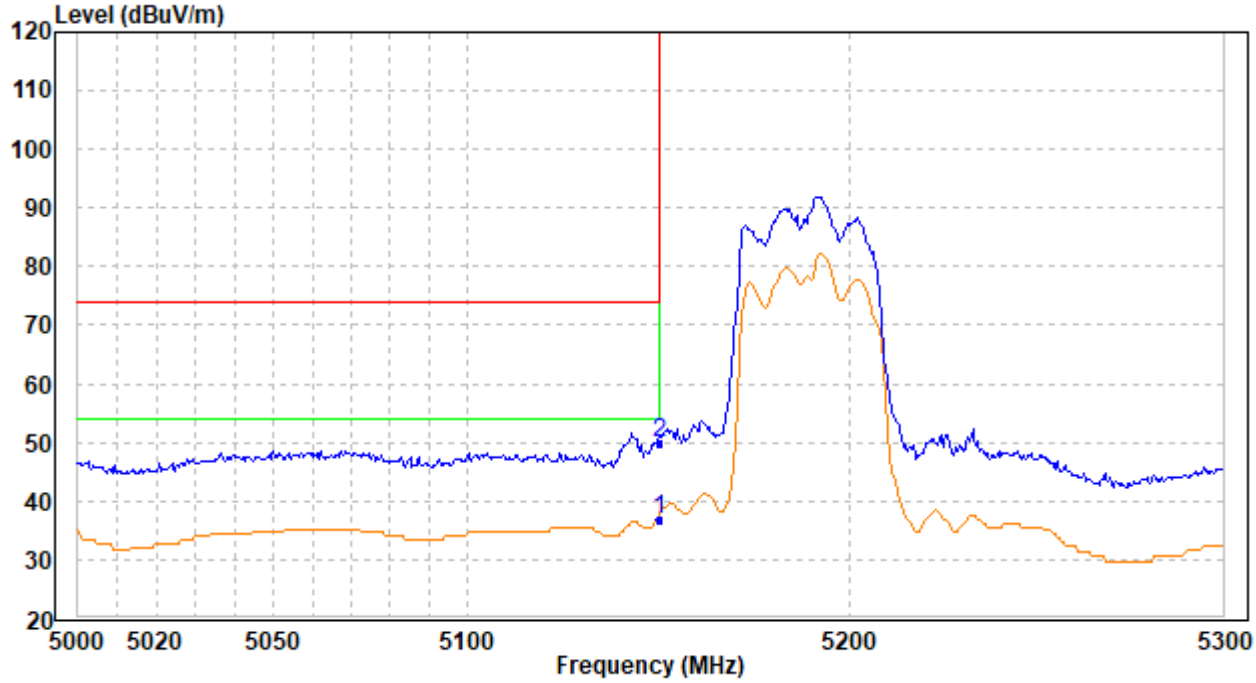
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-34.77	27.00	PASS
5925.000	-38.15	-27.00	PASS

Test Channel:	802.11N40_Chain 0+1_5190 MHz	Ant Polar:	Horizontal



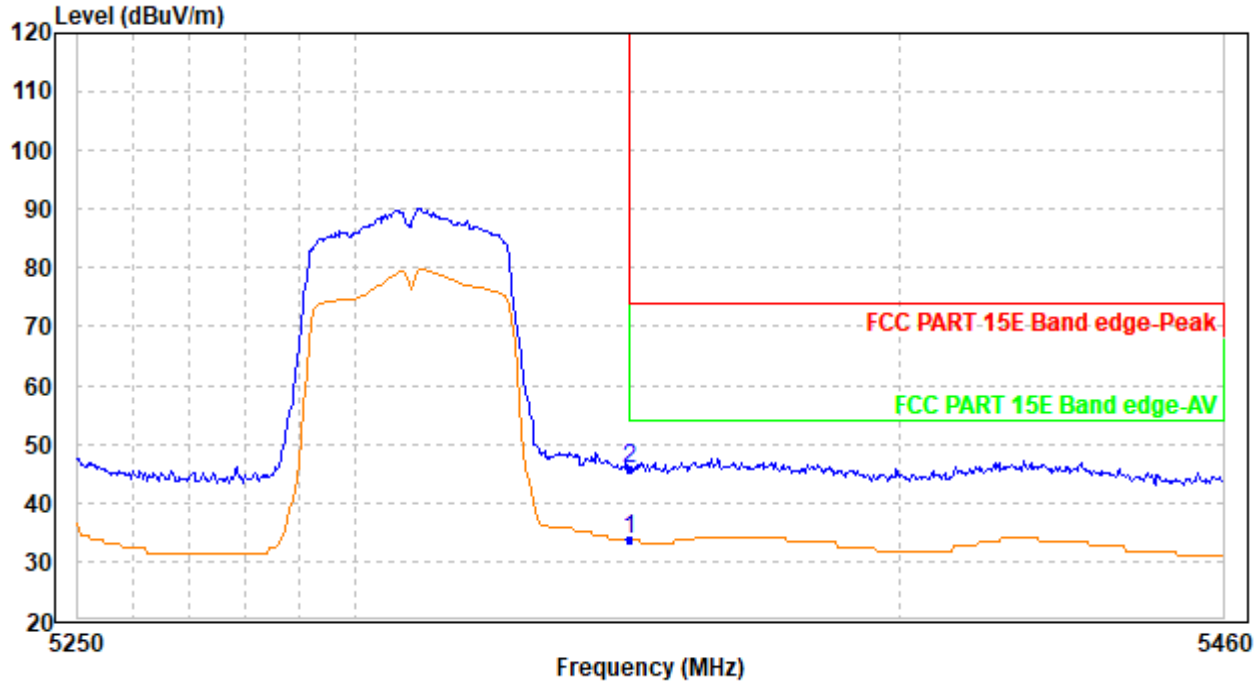
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	49.44	74.00	36.37	54.00	PASS

Test Channel:	802.11N40_Chain 0+1_5190 MHz	Ant Polar:	Vertical



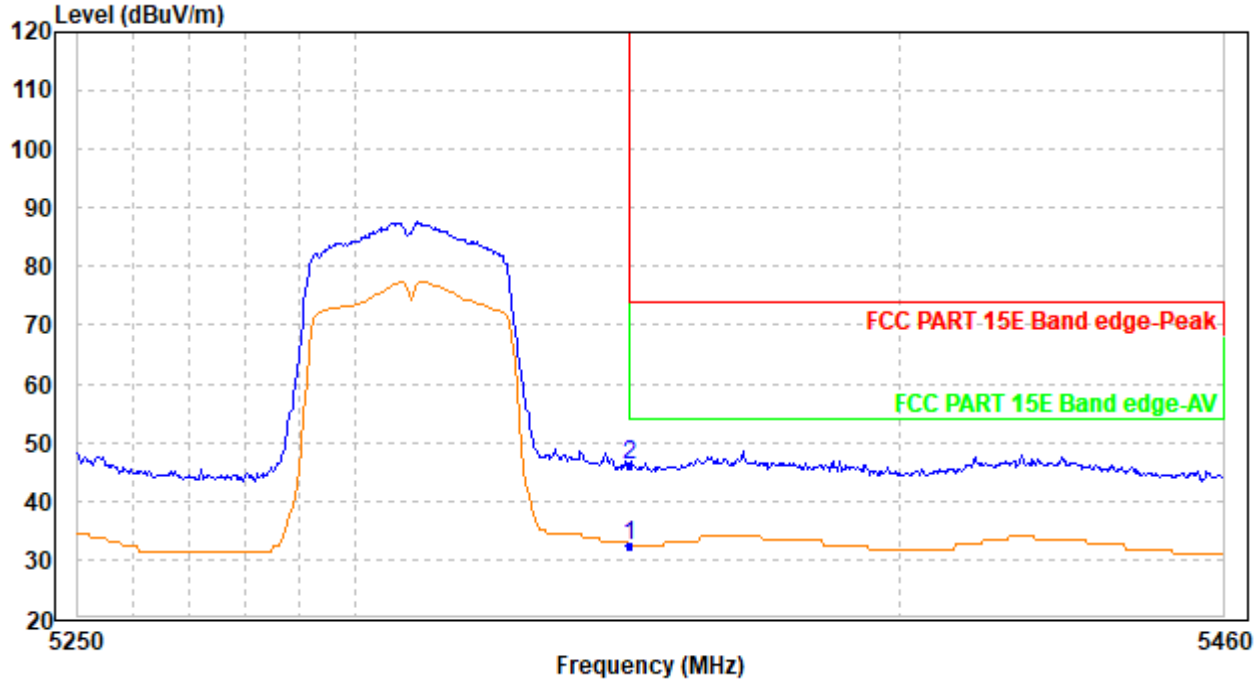
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	50.00	74.00	36.84	54.00	PASS

Test Channel:	802.11N40_Chain 0+1_5310 MHz	Ant Polar:	Horizontal



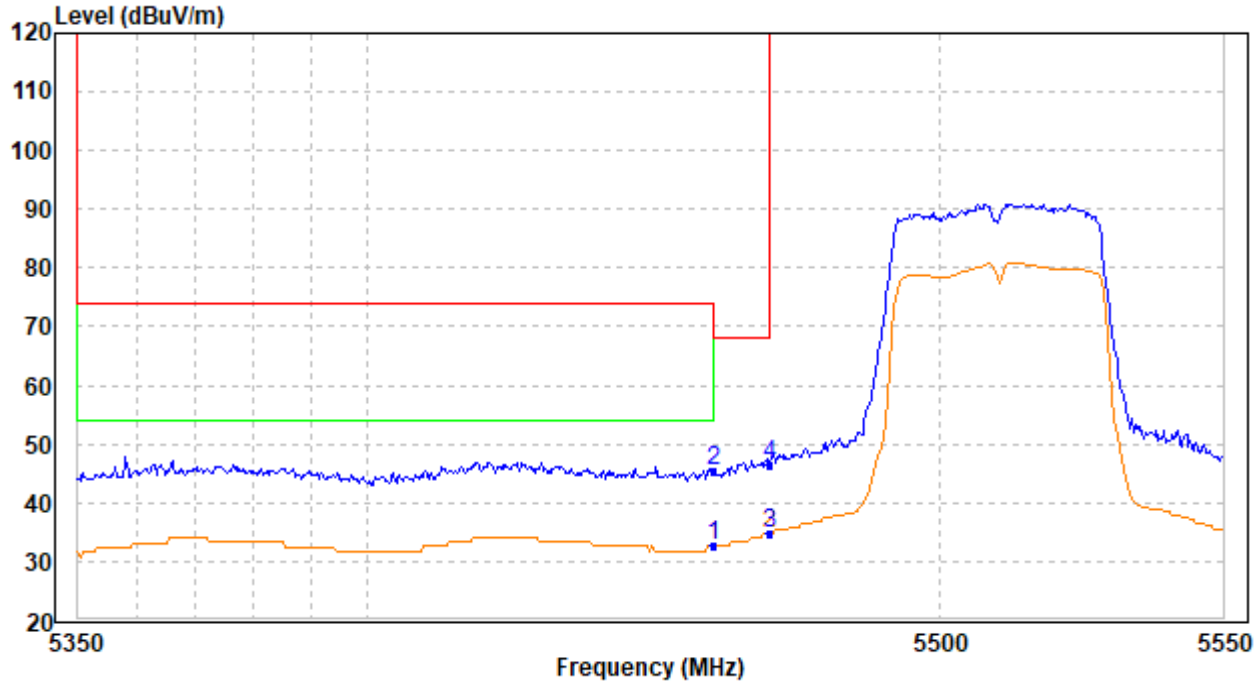
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	45.73	74.00	33.90	54.00	PASS

Test Channel:	802.11N40_Chain 0+1_5310 MHz	Ant Polar:	Vertical



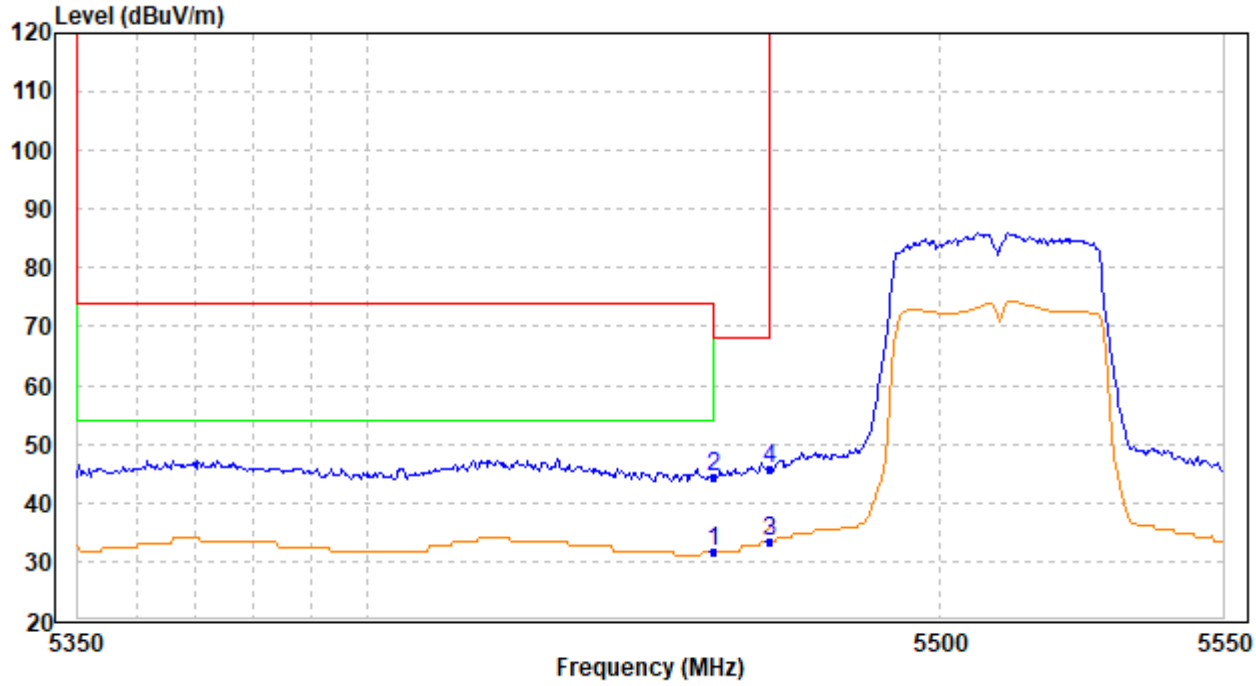
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	45.95	74.00	32.45	54.00	PASS

Test Channel:	802.11N40_Chain 0+1_5510 MHz	Ant Polar:	Horizontal



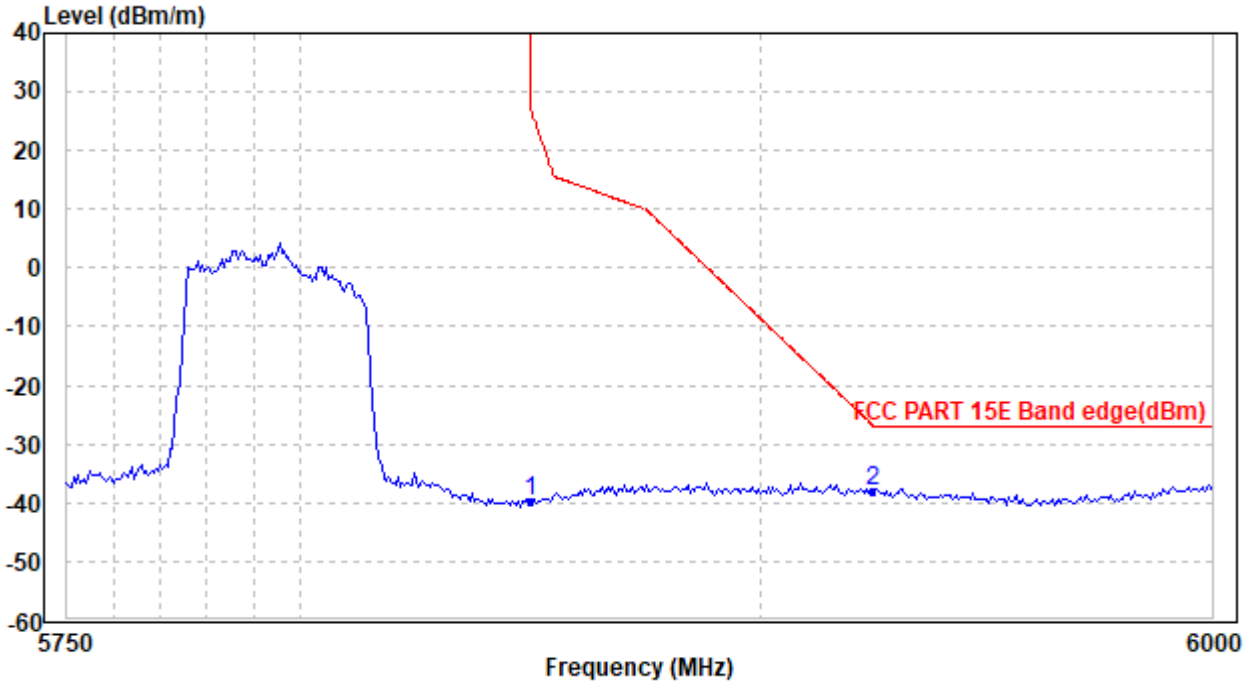
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	45.26	68.20	32.64	54.00	PASS
5470.000	46.50	68.20	34.75	68.20	PASS

Test Channel:	802.11N40_Chain 0+1_5510 MHz	Ant Polar:	Vertical



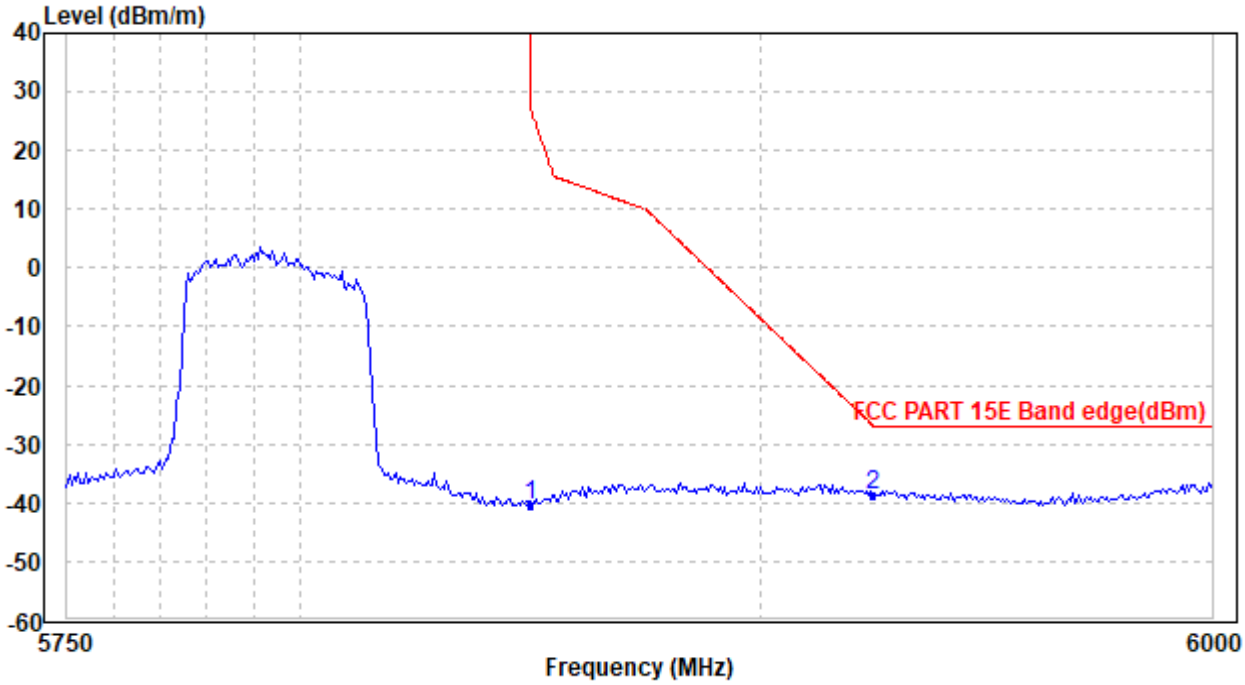
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	44.35	68.20	31.81	54.00	PASS
5470.000	45.77	68.20	33.41	68.20	PASS

Test Channel:	802.11N40_Chain 0+1_5795 MHz	Ant Polar:	Horizontal



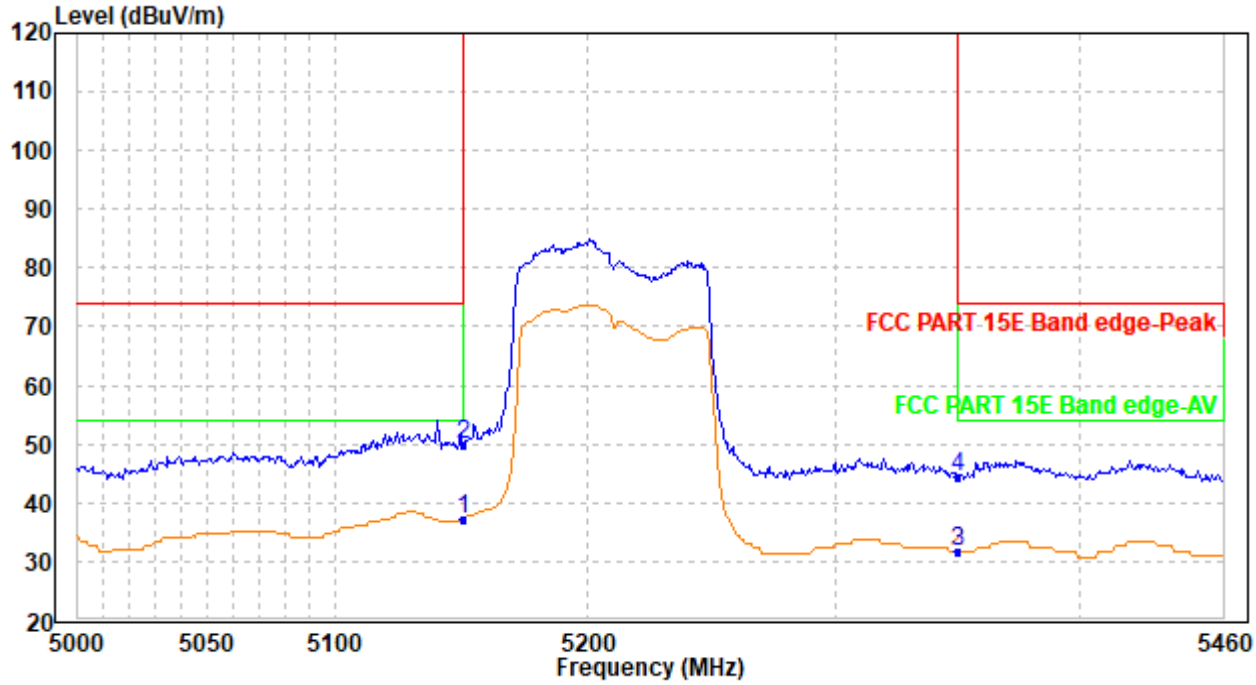
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-39.67	27.00	PASS
5925.000	-38.01	-27.00	PASS

Test Channel:	802.11N40_Chain 0+1_5795 MHz	Ant Polar:	Vertical



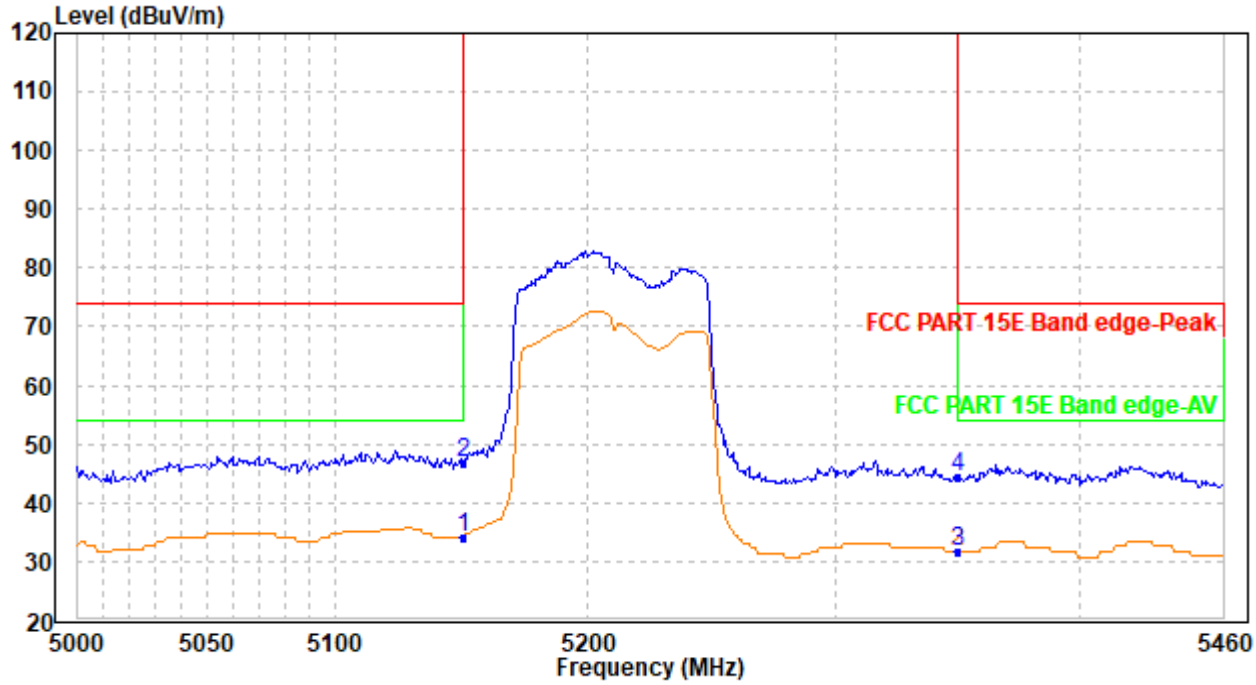
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-40.25	27.00	PASS
5925.000	-38.63	-27.00	PASS

Test Channel:	802.11AC80_Chain 0+1_5210 MHz	Ant Polar:	Horizontal



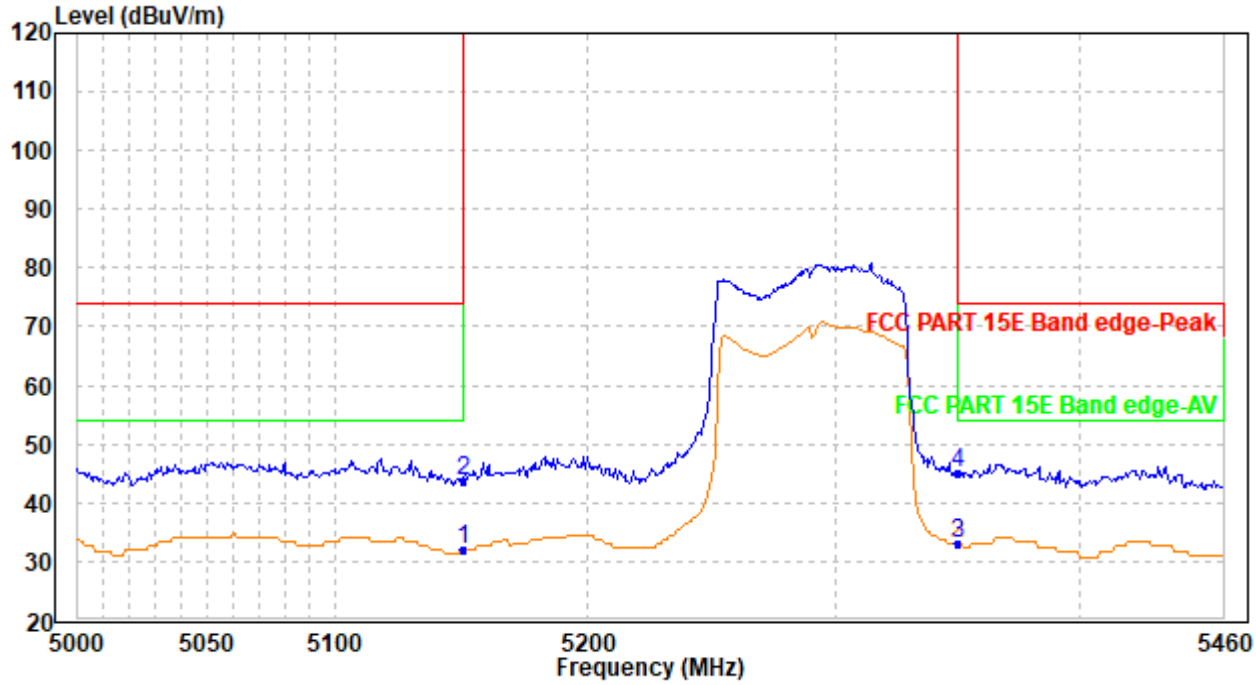
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	49.95	74.00	37.29	54.00	PASS
5350.000	44.29	74.00	31.62	54.00	PASS

Test Channel:	802.11AC80_Chain 0+1_5210 MHz	Ant Polar:	Vertical



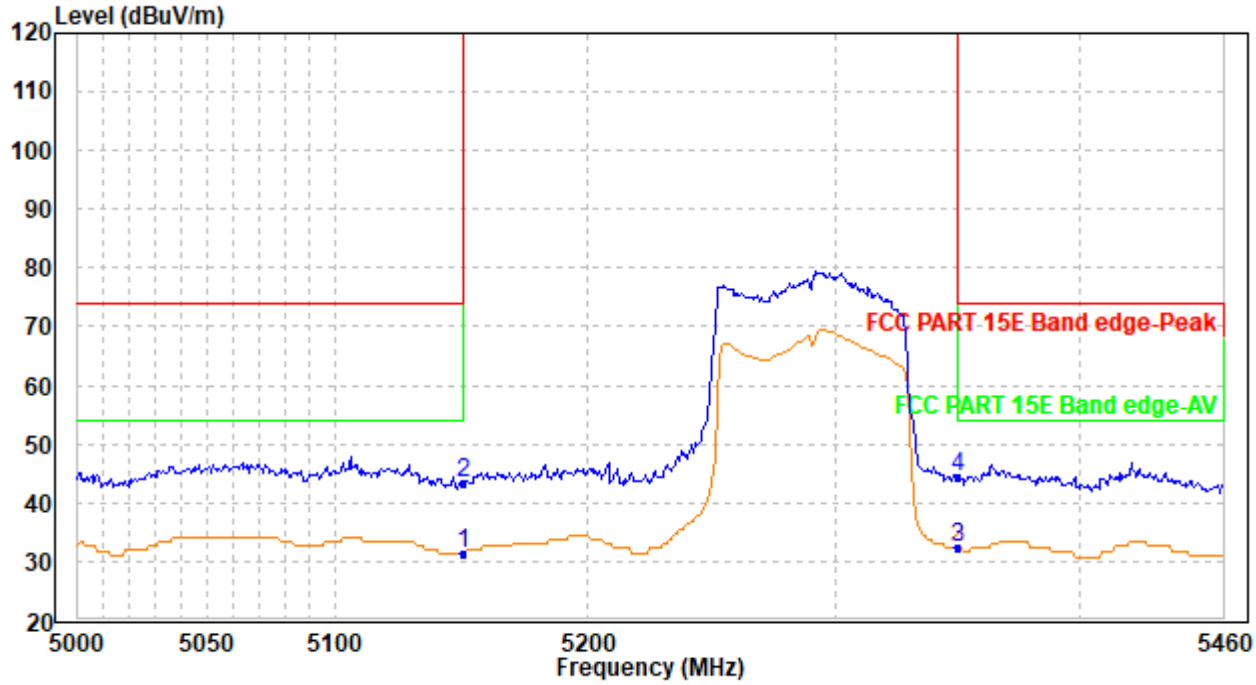
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	46.83	74.00	34.19	54.00	PASS
5350.000	44.43	74.00	31.62	54.00	PASS

Test Channel:	802.11AC80_Chain 0+1_5290 MHz	Ant Polar:	Horizontal



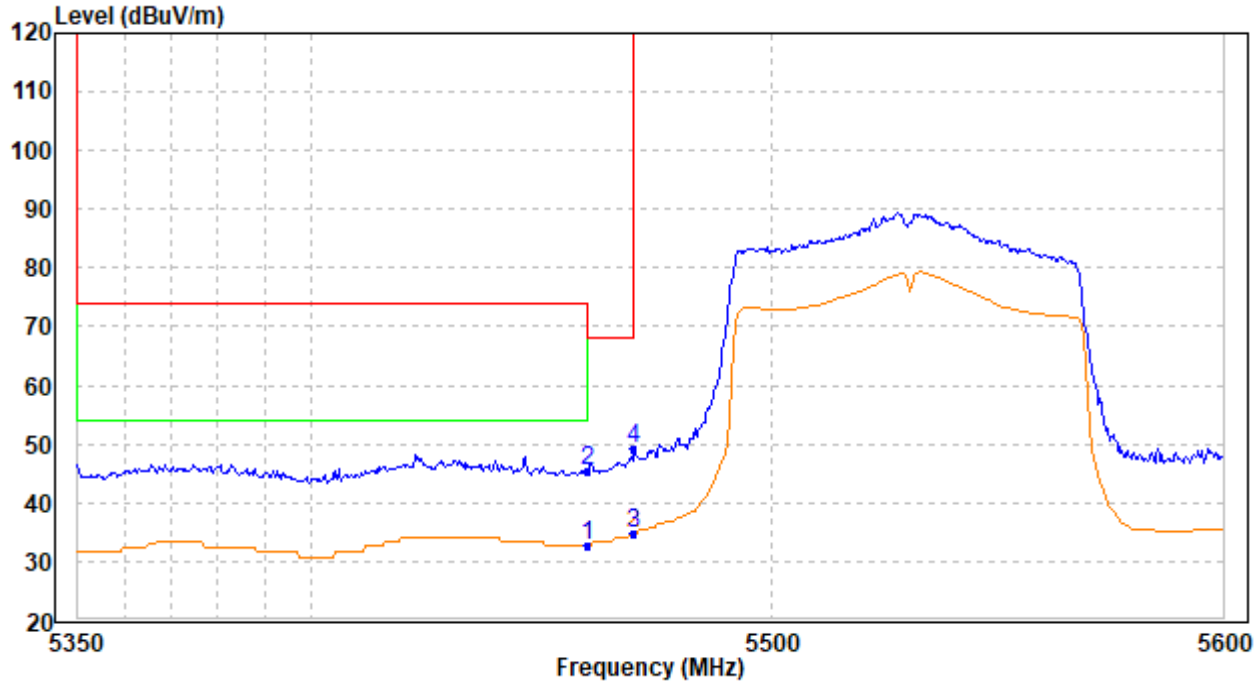
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	43.69	74.00	32.10	54.00	PASS
5350.000	45.10	74.00	33.20	54.00	PASS

Test Channel:	802.11AC80_Chain 0+1_5290 MHz	Ant Polar:	Vertical



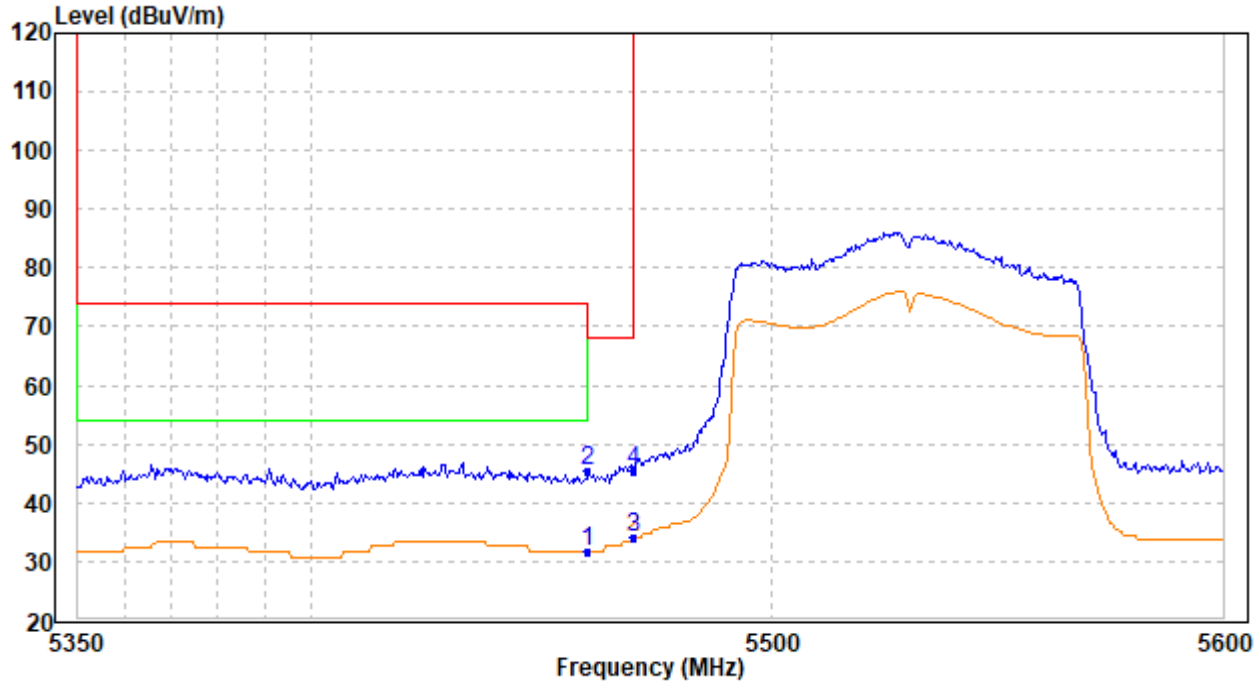
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	43.35	74.00	31.27	54.00	PASS
5350.000	44.56	74.00	32.45	54.00	PASS

Test Channel:	802.11AC80_Chain 0+1_5530 MHz	Ant Polar:	Horizontal



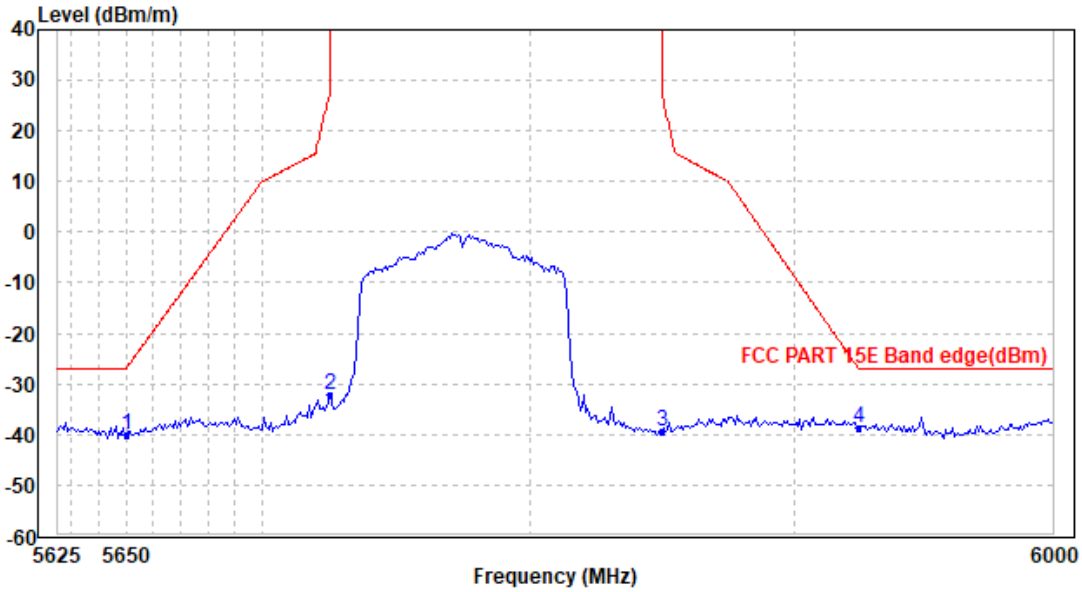
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	45.31	68.20	32.64	54.00	PASS
5470.000	49.11	68.20	34.75	68.20	PASS

Test Channel:	802.11AC80_Chain 0+1_5530 MHz	Ant Polar:	Vertical



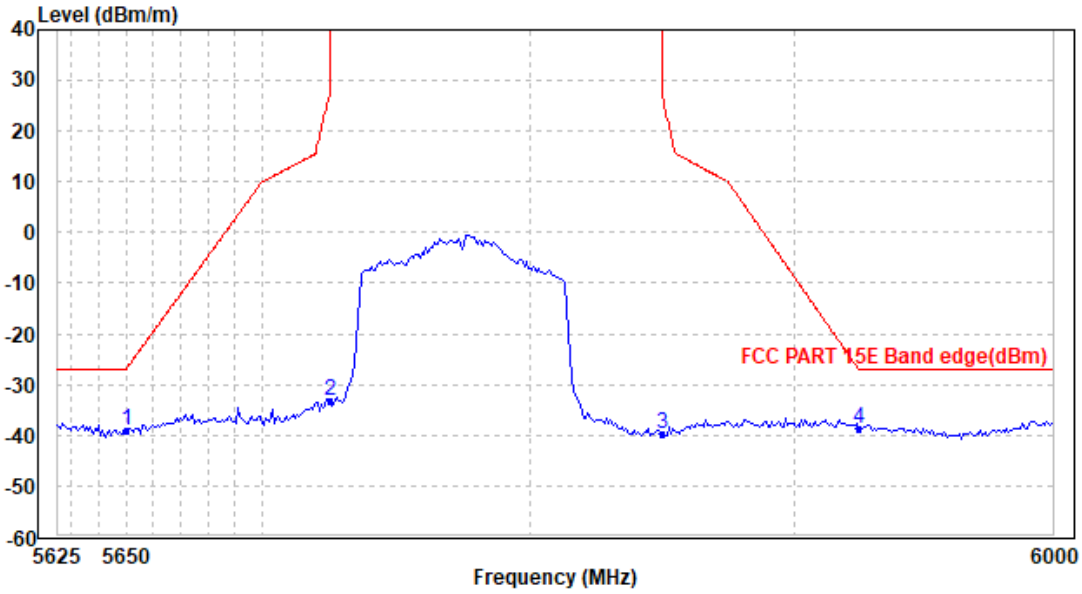
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	45.43	68.20	31.81	54.00	PASS
5470.000	45.29	68.20	34.11	68.20	PASS

Test Channel:	802.11AC80_Chain 0+1_5775 MHz	Ant Polar:	Horizontal



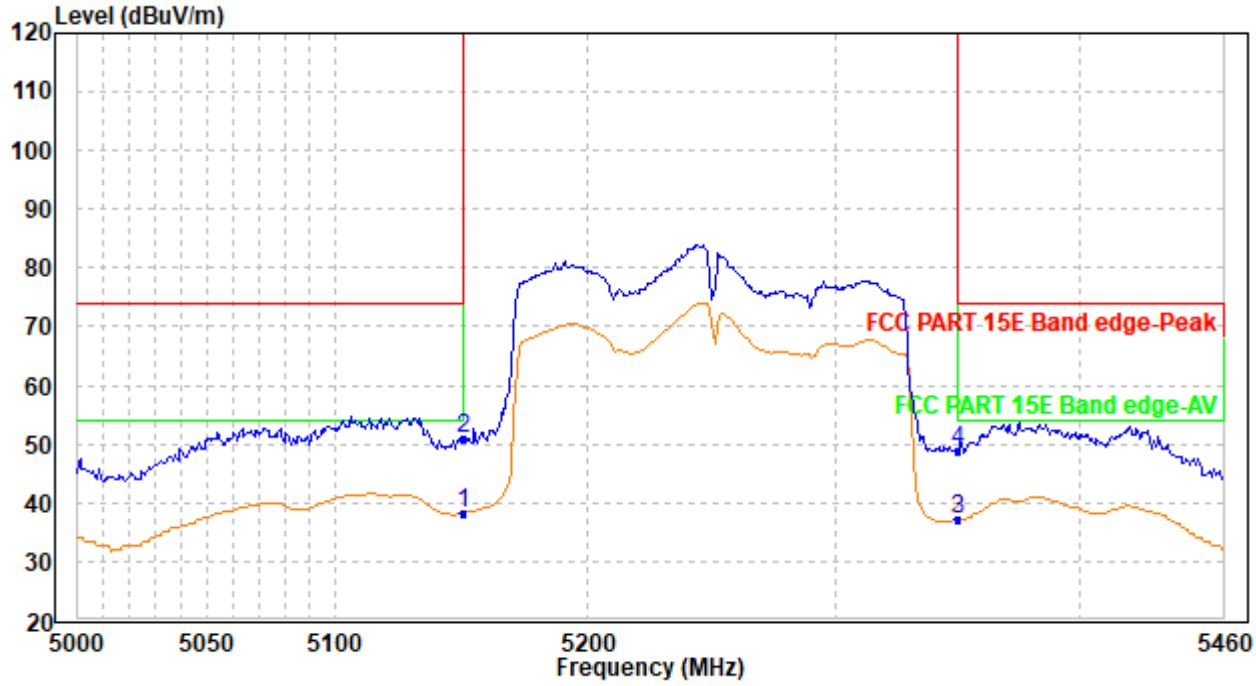
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5650.000	-39.96	-27.00	PASS
5725.000	-32.02	27.00	PASS
5850.000	-39.33	27.00	PASS
5925.000	-38.57	-27.00	PASS

Test Channel:	802.11AC80_Chain 0+1_5775 MHz	Ant Polar:	Vertical



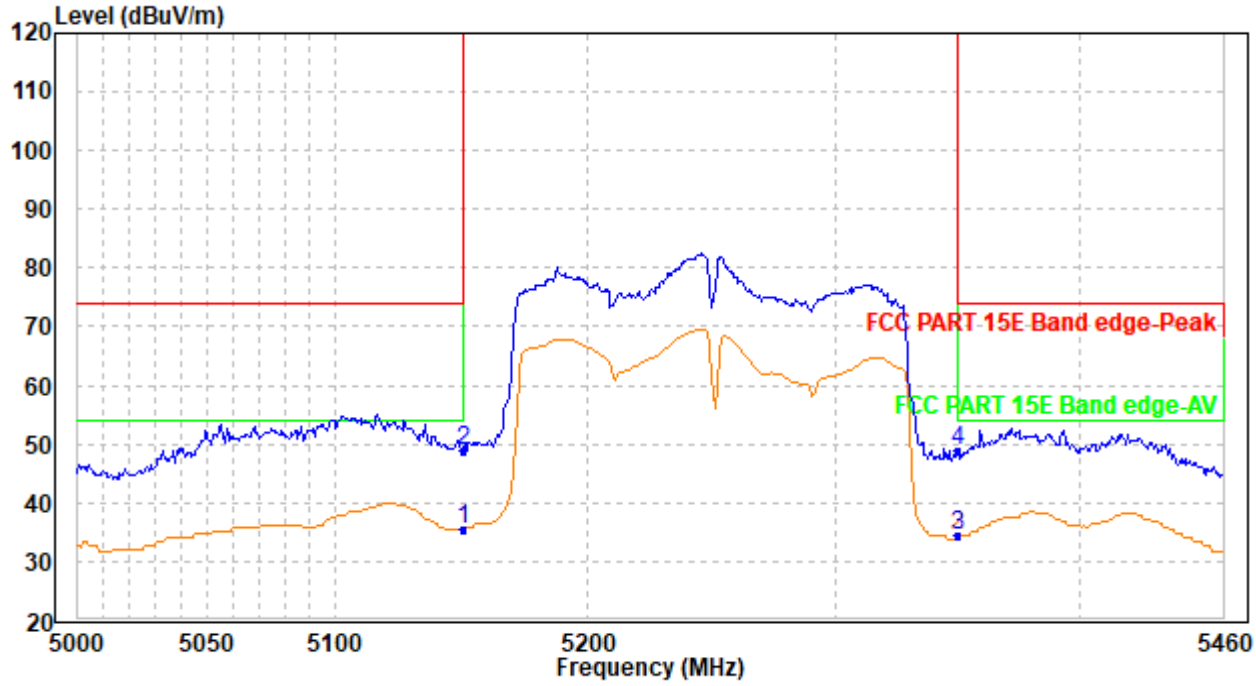
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5650.000	-39.10	-27.00	PASS
5725.000	-33.14	27.00	PASS
5850.000	-39.89	27.00	PASS
5925.000	-38.60	-27.00	PASS

Test Channel:	802.11AC160_Chain 0+1_5250	Ant Polar:	Horizontal



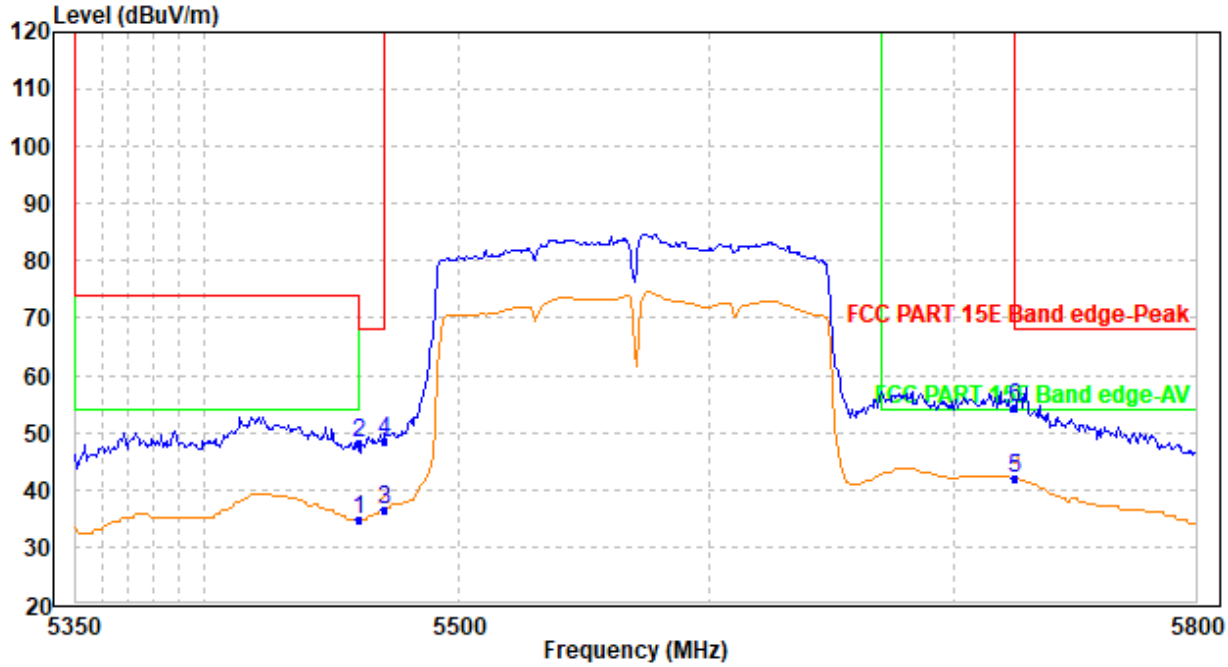
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	50.81	74.00	38.12	54.00	PASS
5350.000	48.86	74.00	37.19	54.00	PASS

Test Channel:	802.11AC160_Chain 0+1_5250	Ant Polar:	Vertical



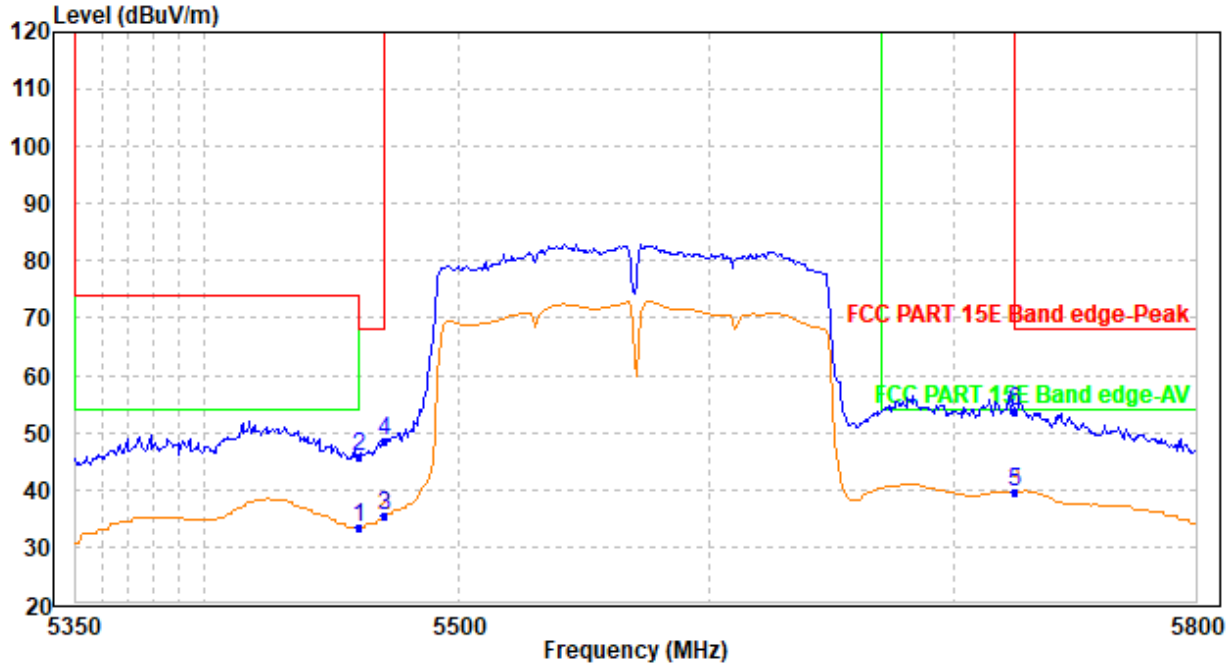
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	48.99	74.00	35.35	54.00	PASS
5350.000	48.99	74.00	34.54	54.00	PASS

Test Channel:	802.11AC160_Chain 0+1_5570 MHz	Ant Polar:	Horizontal



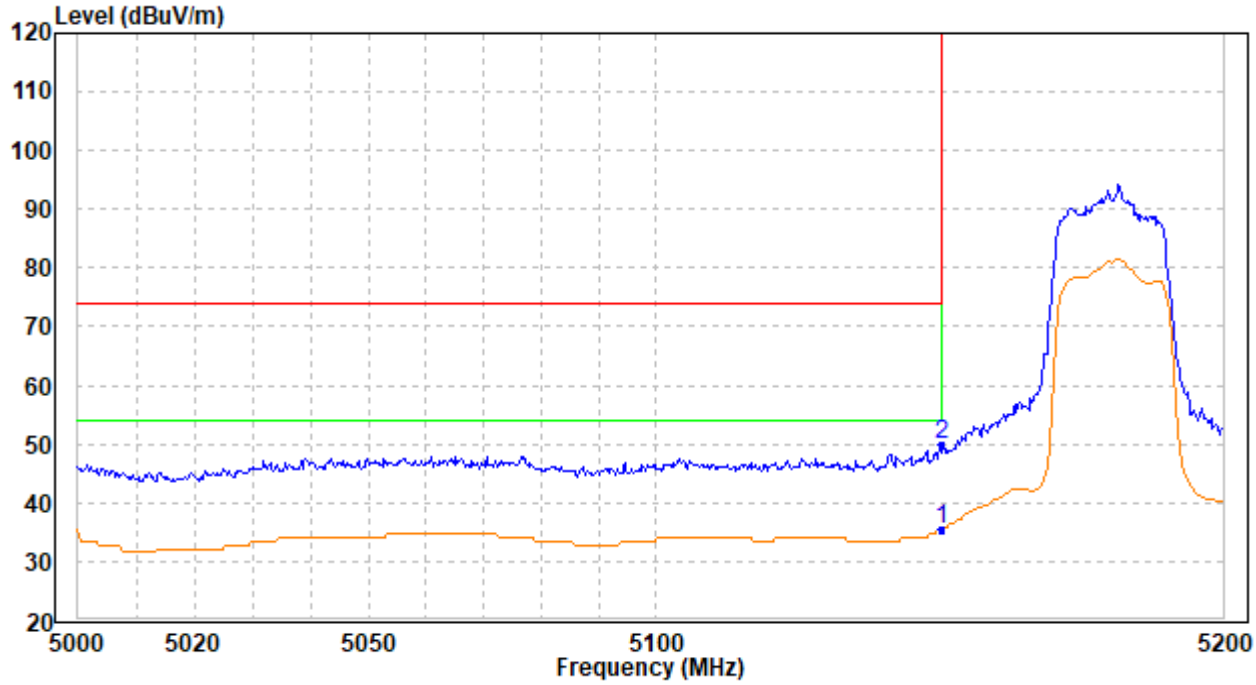
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5460.000	48.09	68.20	34.73	54.00	PASS
5470.000	48.40	68.20	36.44	68.20	PASS
5725.000	54.51	68.20	41.91	54.00	PASS

Test Channel:	802.11AC160_Chain 0+1_5570 MHz	Ant Polar:	Vertical



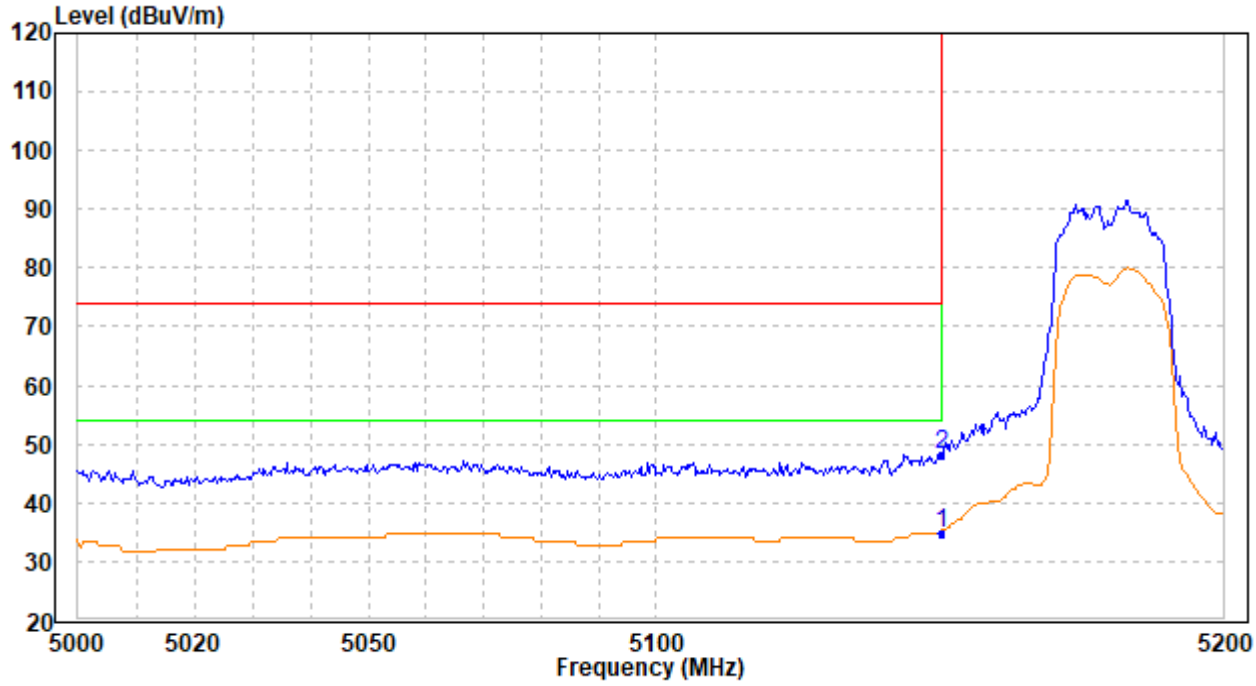
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5460.000	45.74	68.20	33.39	54.00	PASS
5470.000	48.60	68.20	35.35	68.20	PASS
5725.000	53.59	68.20	39.60	54.00	PASS

Test Channel:	802.11AX20_SU_Chain 0+1_5180 MHz	Ant Polar:	Horizontal



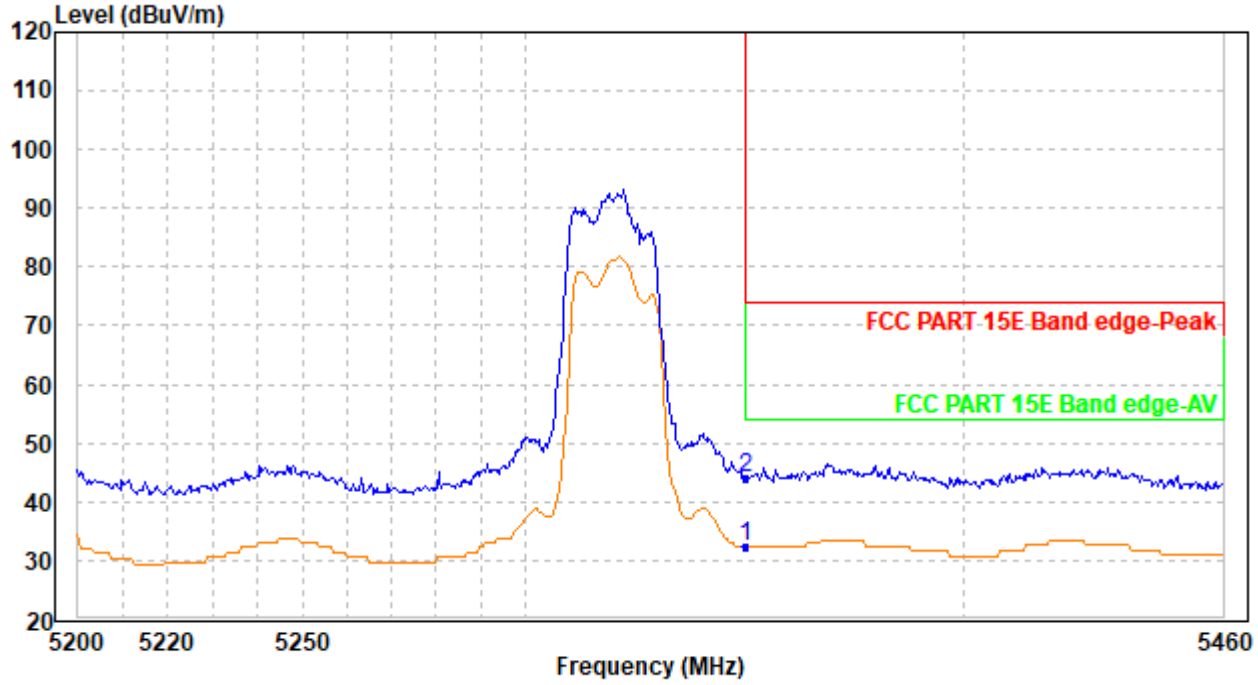
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	49.81	74.00	35.35	54.00	PASS

Test Channel:	802.11AX20_SU_Chain 0+1_5180 MHz	Ant Polar:	Vertical



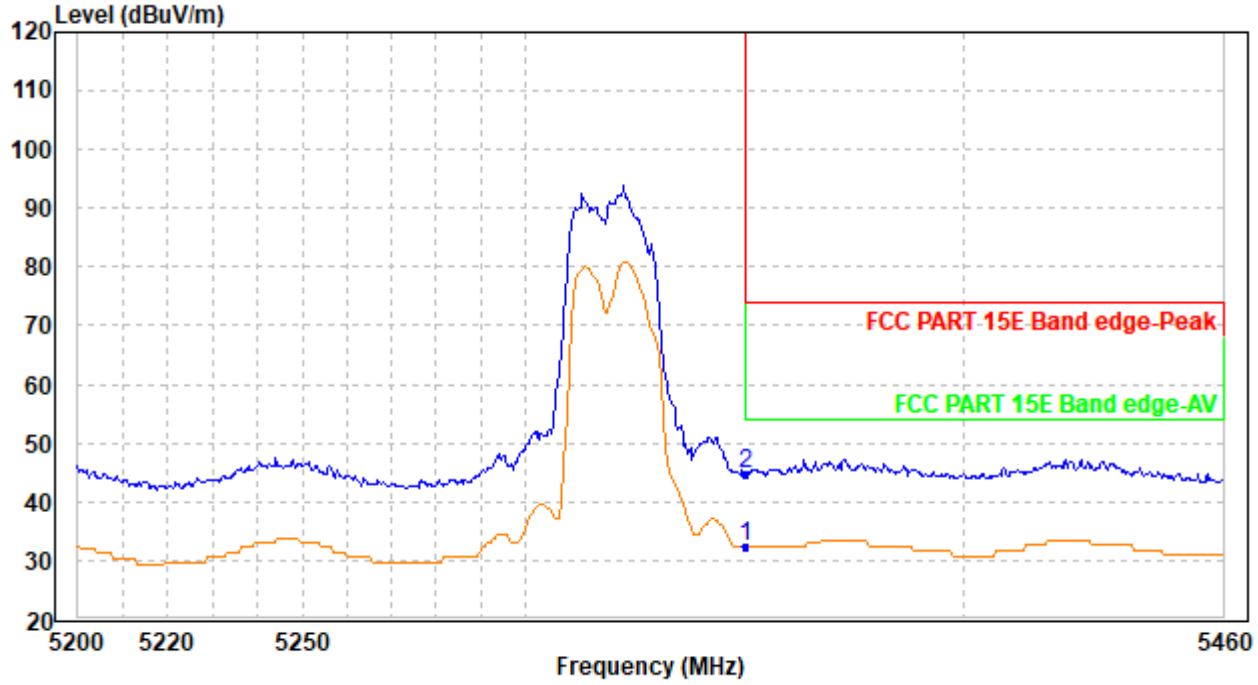
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	48.03	74.00	34.79	54.00	PASS

Test Channel:	802.11AX20_SU_Chain 0+1_5320 MHz	Ant Polar:	Horizontal



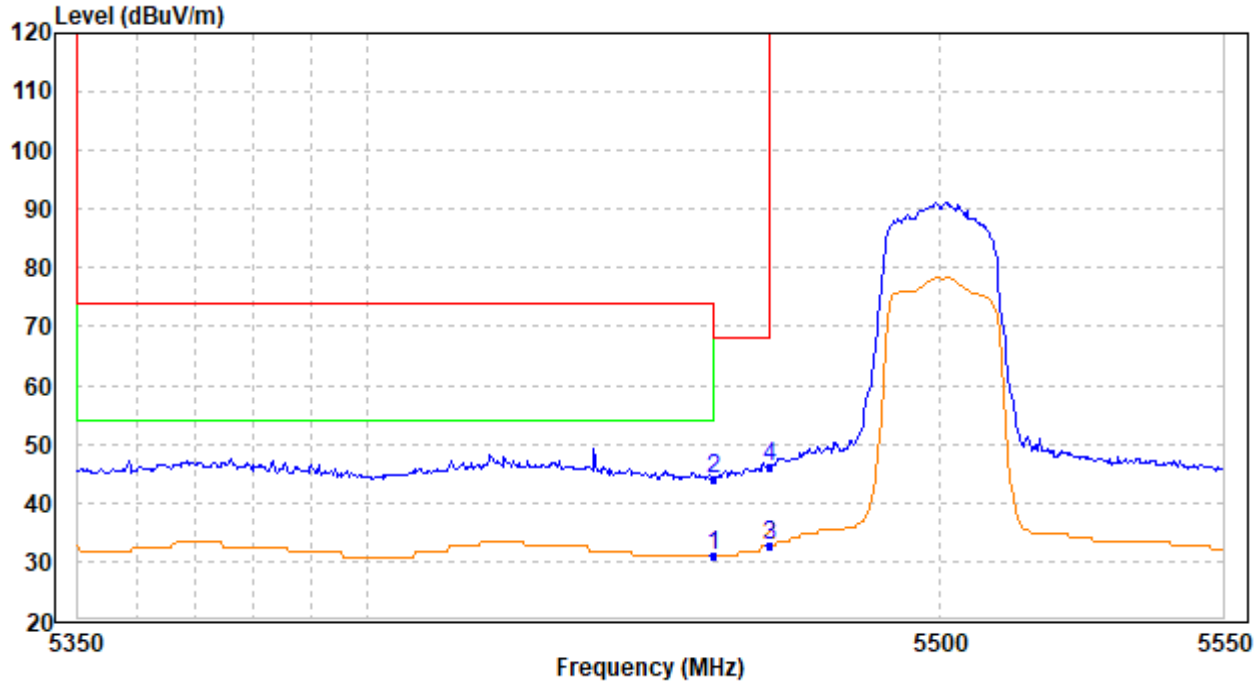
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5350.000	44.19	74.00	32.45	54.00	PASS

Test Channel:	802.11AX20_SU_Chain 0+1_5320 MHz	Ant Polar:	Vertical



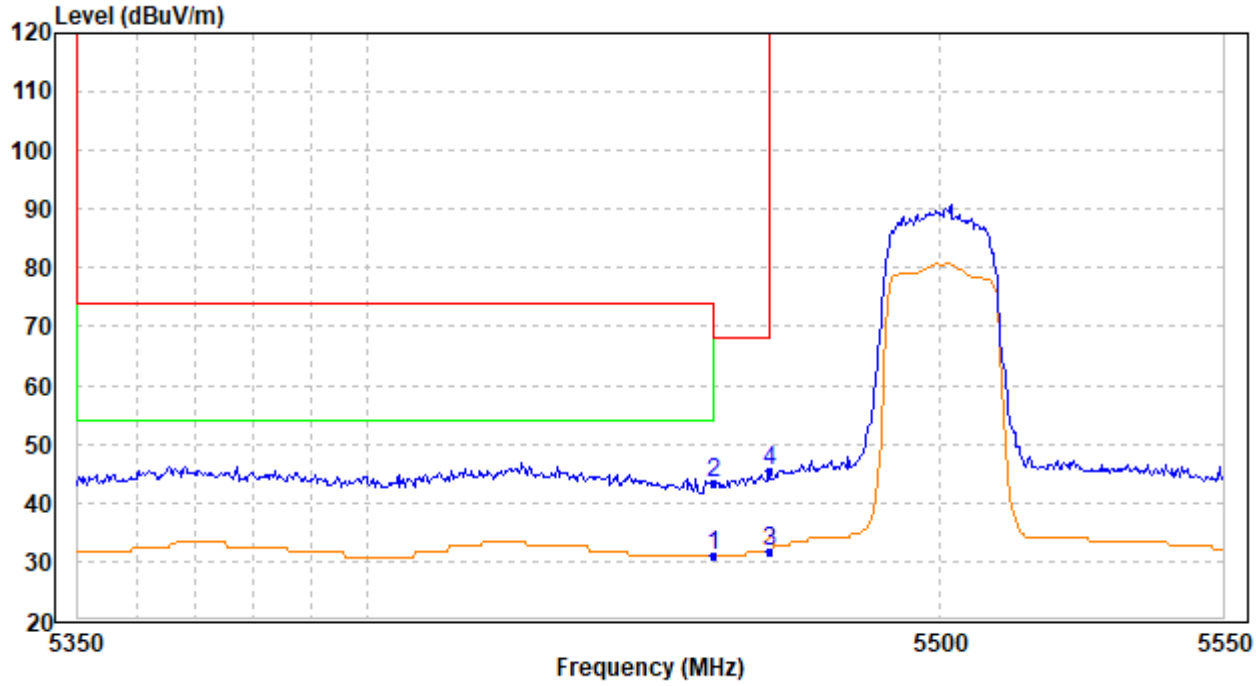
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5350.000	44.79	74.00	32.45	54.00	PASS

Test Channel:	802.11AX20_SU_Chain 0+1_5500 MHz	Ant Polar:	Horizontal



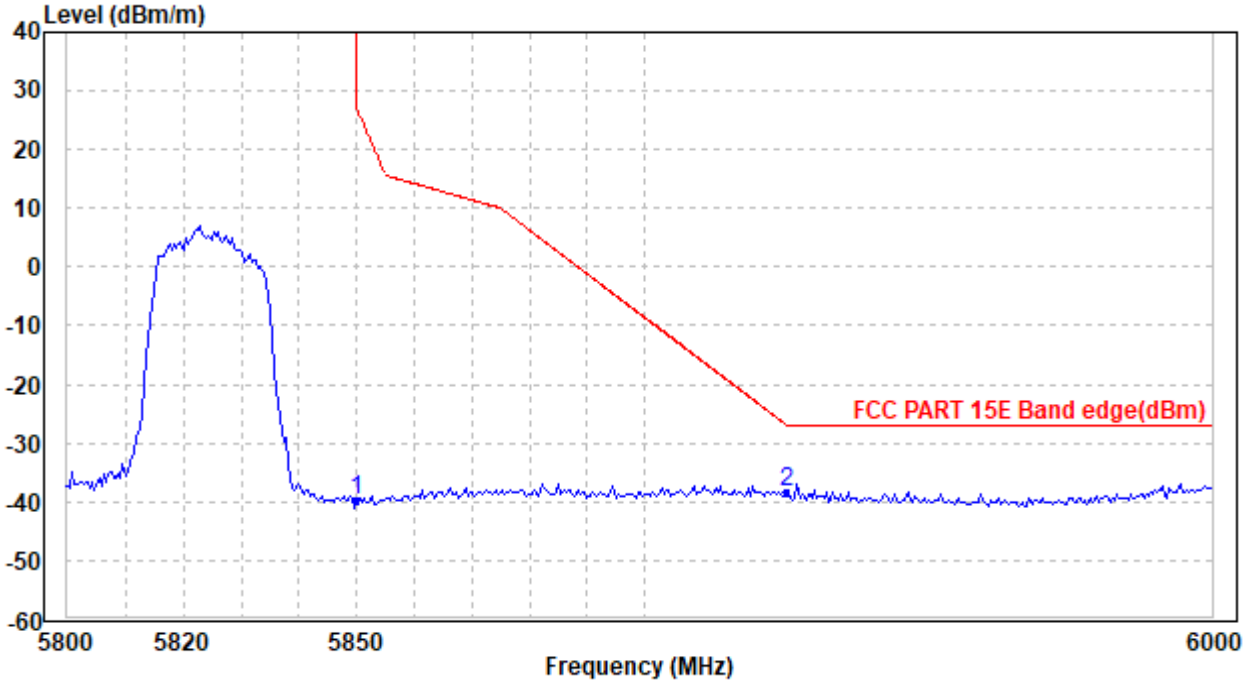
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	43.97	68.20	30.89	54.00	PASS
5470.000	46.18	68.20	32.65	68.20	PASS

Test Channel:	802.11AX20_SU_Chain 0+1_5500 MHz	Ant Polar:	Vertical



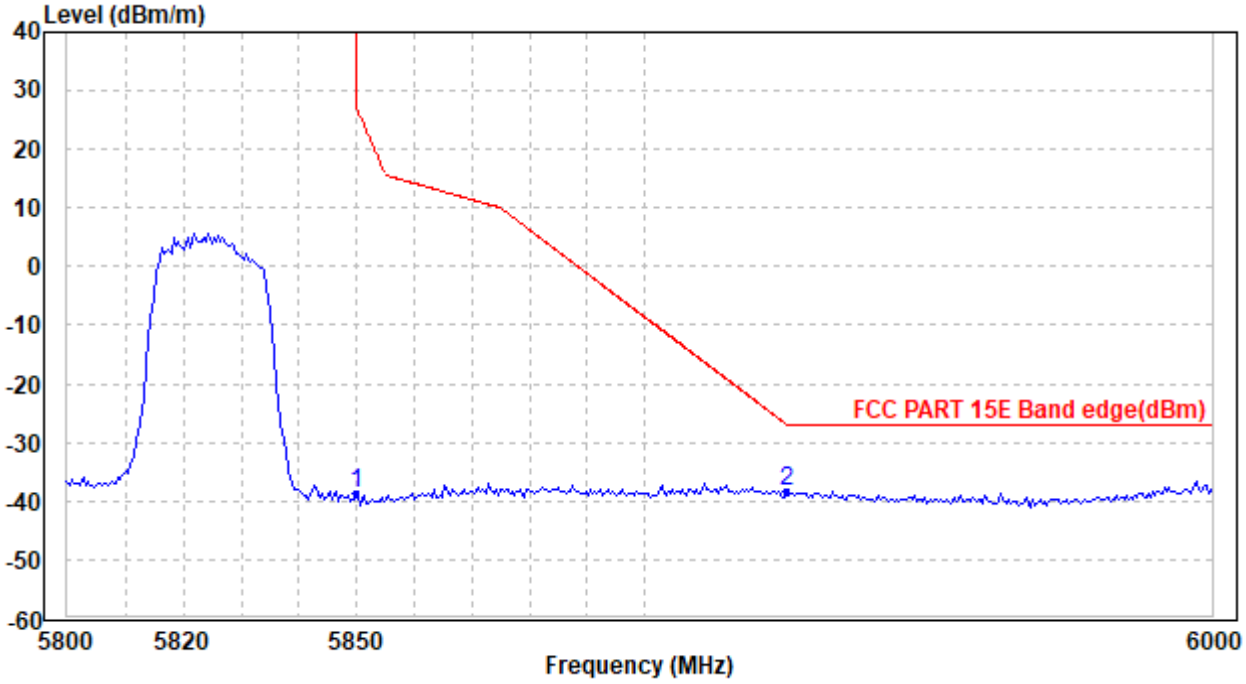
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	43.27	68.20	30.89	54.00	PASS
5470.000	45.53	68.20	31.83	68.20	PASS

Test Channel:	802.11Ax20_SU_Chain 0+1_5825 MHz	Ant Polar:	Horizontal



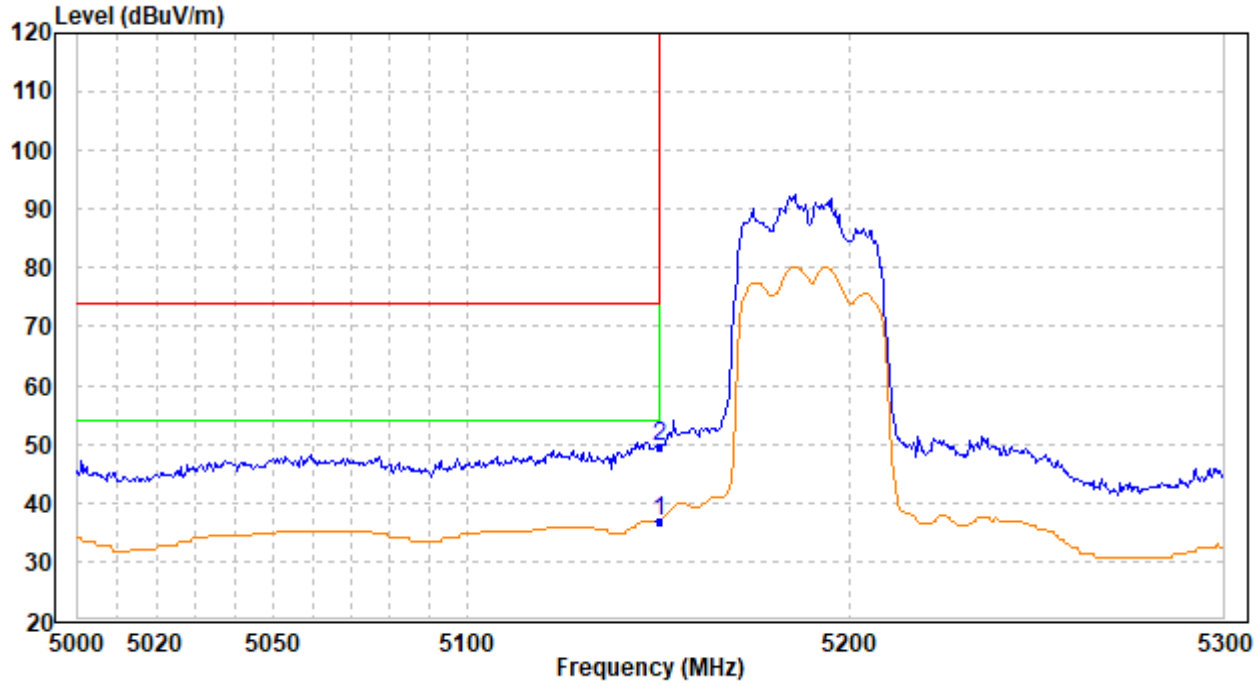
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-39.66	27.00	PASS
5925.000	-38.34	-27.00	PASS

Test Channel:	802.11Ax20_SU_Chain 0+1_5825 MHz	Ant Polar:	Vertical



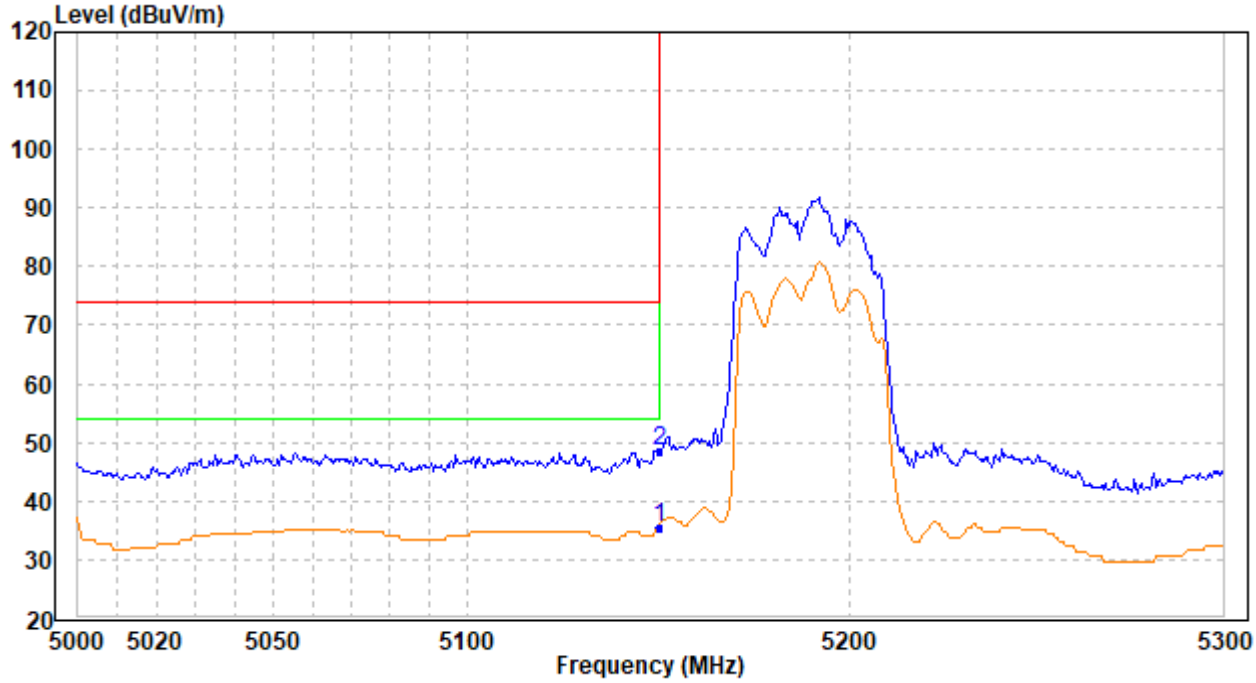
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-38.85	27.00	PASS
5925.000	-38.23	-27.00	PASS

Test Channel:	802.11AX40_Chain 0+1_5190 MHz	Ant Polar:	Horizontal



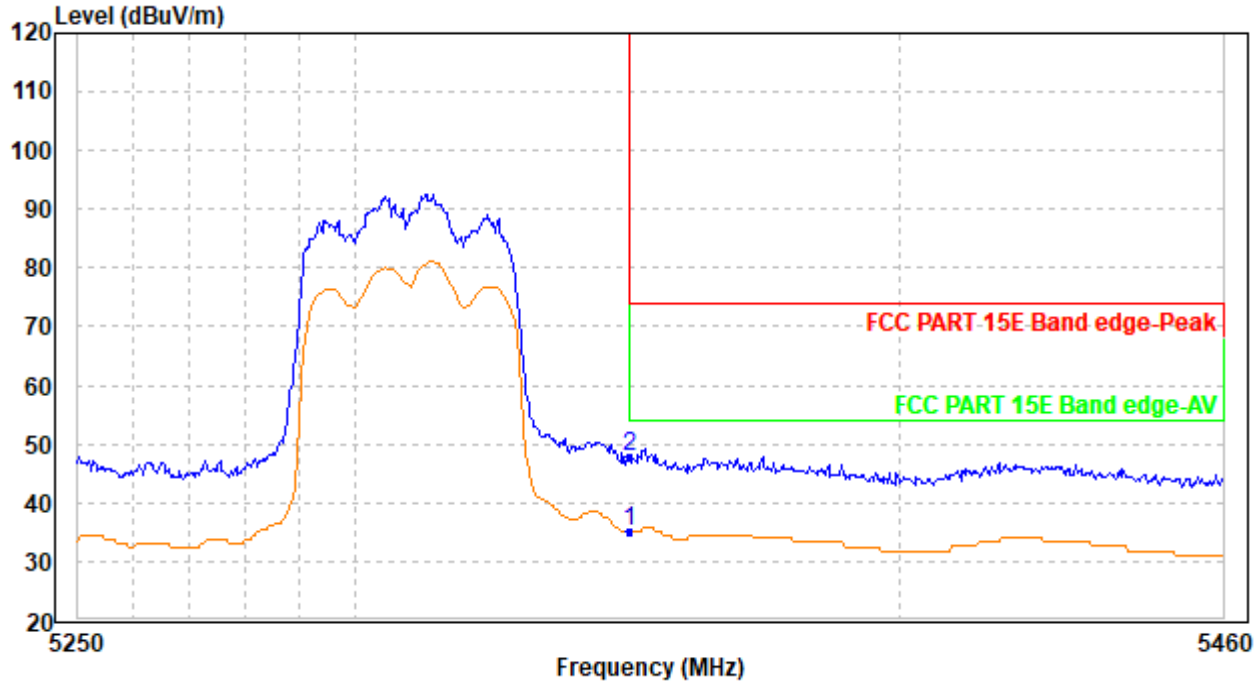
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	49.59	74.00	36.84	54.00	PASS

Test Channel:	802.11AX40_Chain 0+1_5190 MHz	Ant Polar:	Vertical



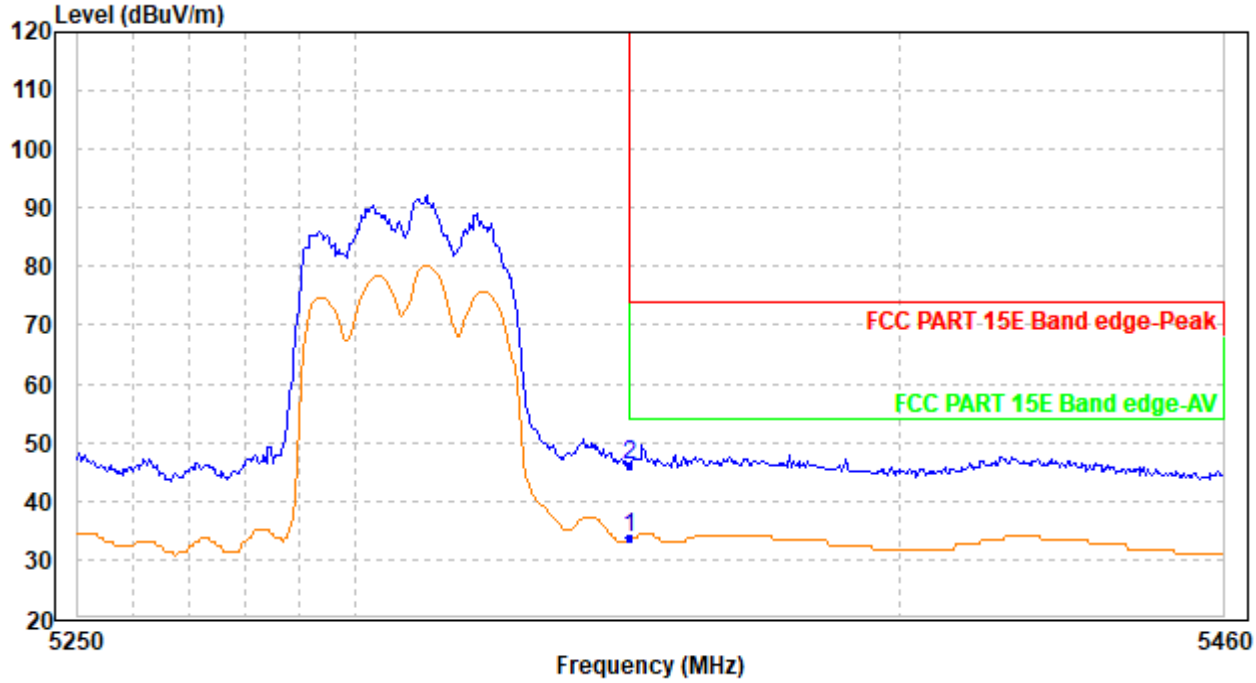
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	48.40	74.00	35.35	54.00	PASS

Test Channel:	802.11AX40_Chain 0+1_5310 MHz	Ant Polar:	Horizontal



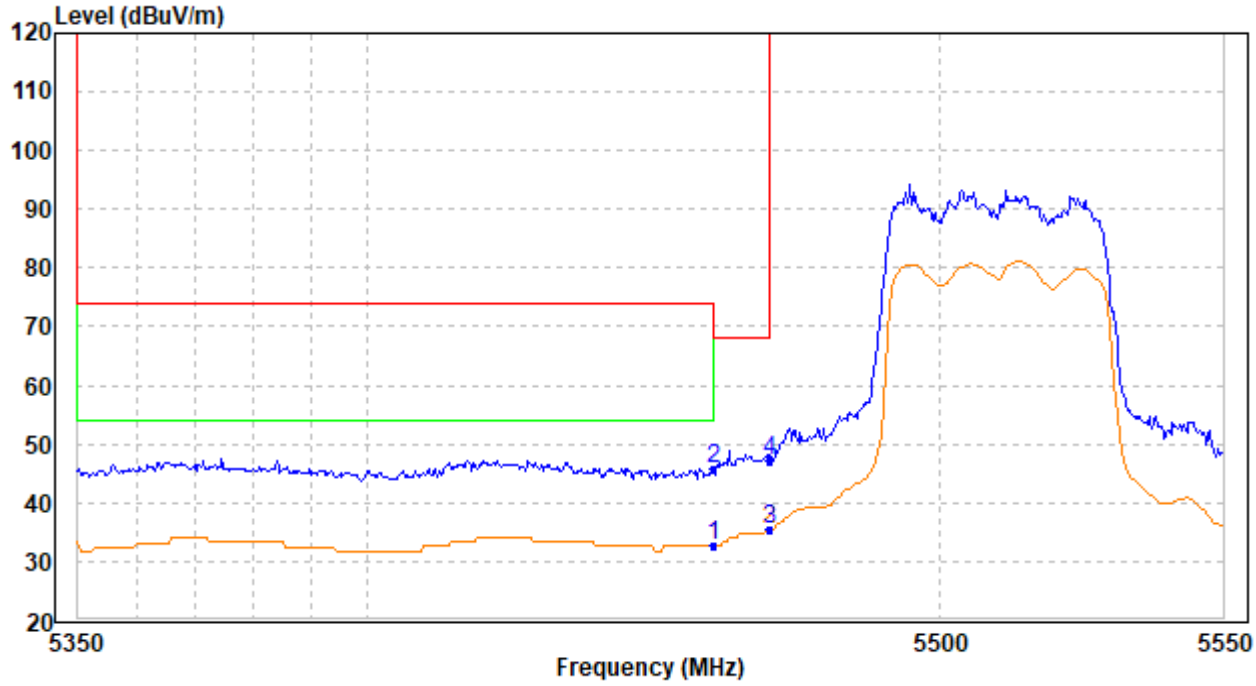
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	47.79	74.00	35.14	54.00	PASS

Test Channel:	802.11AX40_Chain 0+1_5310 MHz	Ant Polar:	Vertical



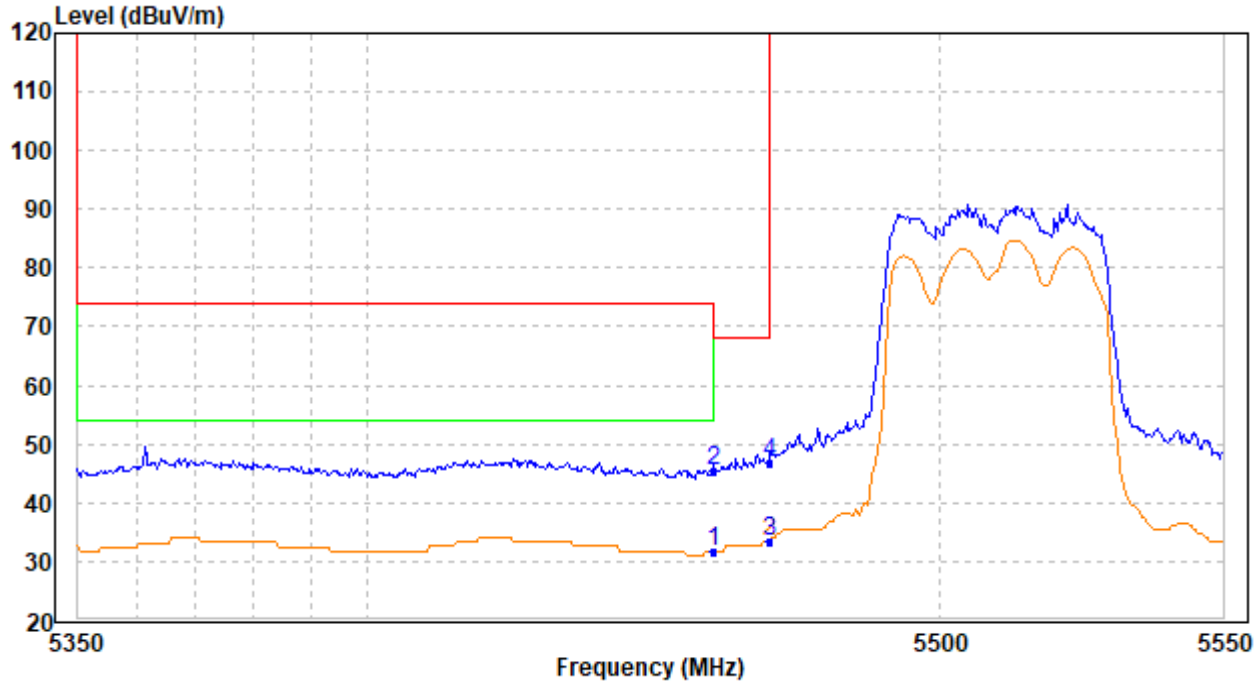
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5350.000	46.24	74.00	33.90	54.00	PASS

Test Channel:	802.11AX40_Chain 0+1_5510 MHz	Ant Polar:	Horizontal



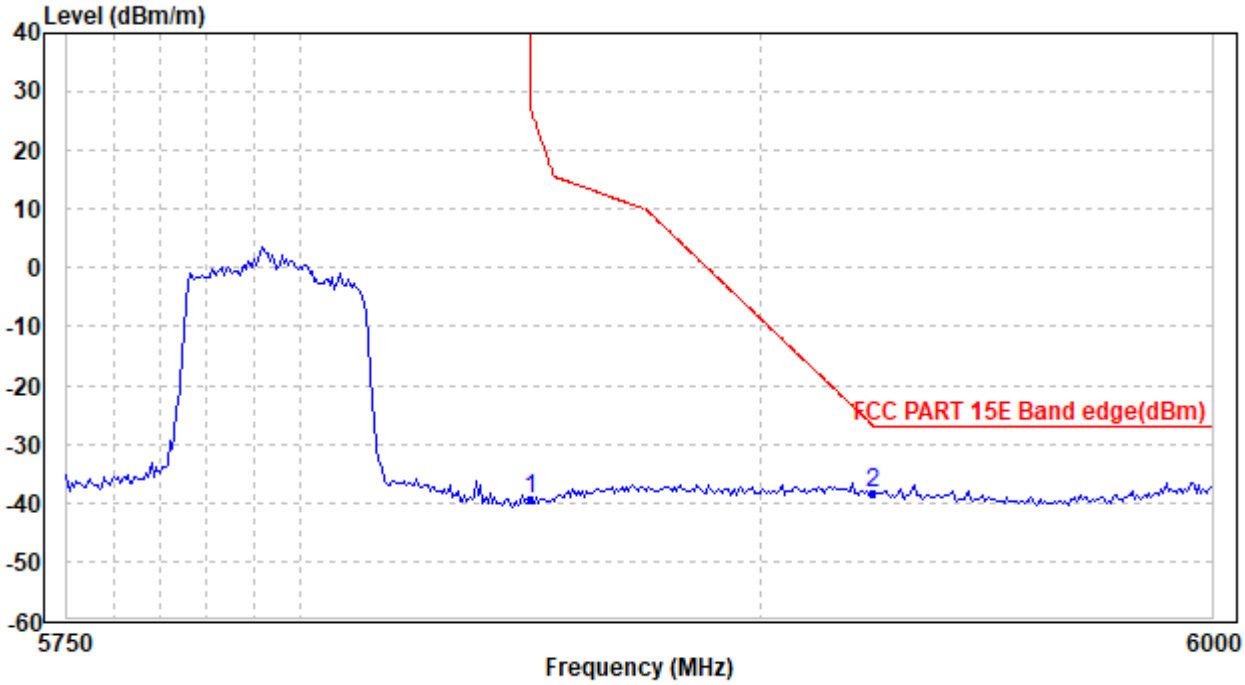
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	45.91	68.20	32.64	54.00	PASS
5470.000	47.21	68.20	35.35	68.20	PASS

Test Channel:	802.11AX40_Chain 0+1_5510 MHz	Ant Polar:	Vertical



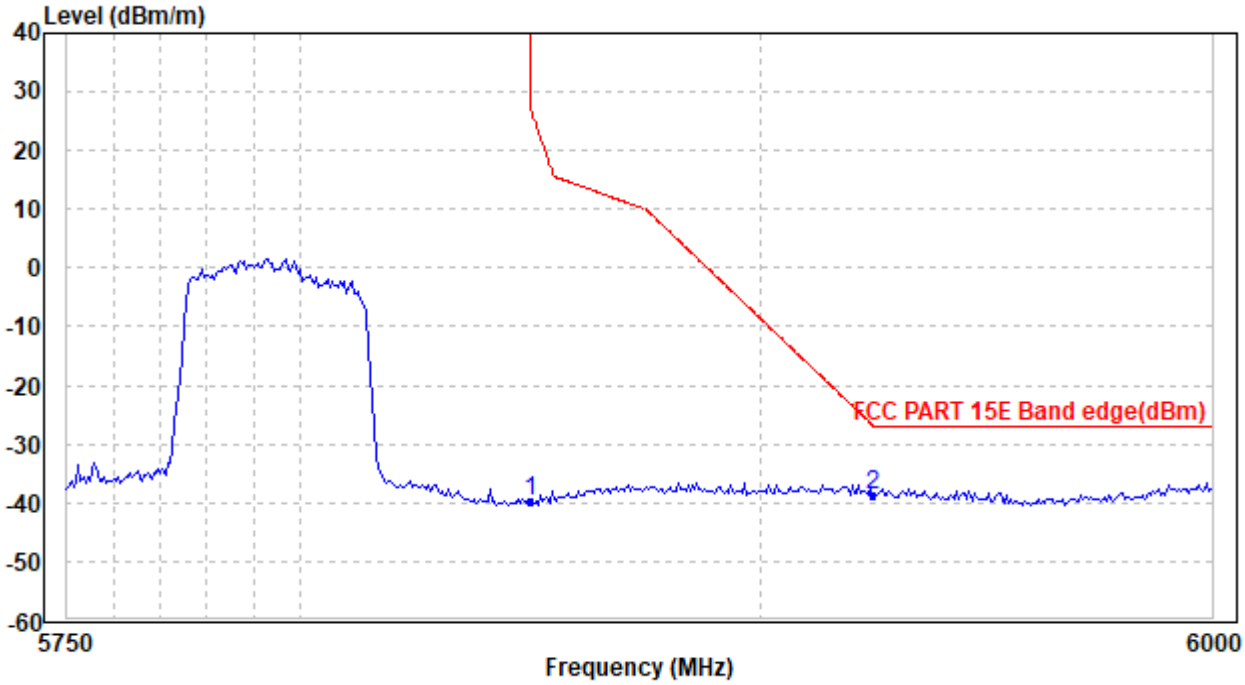
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	45.54	68.20	31.81	54.00	PASS
5470.000	46.96	68.20	33.41	68.20	PASS

Test Channel:	802.11Ax40_Chain 0+1_5795 MHz	Ant Polar:	Horizontal



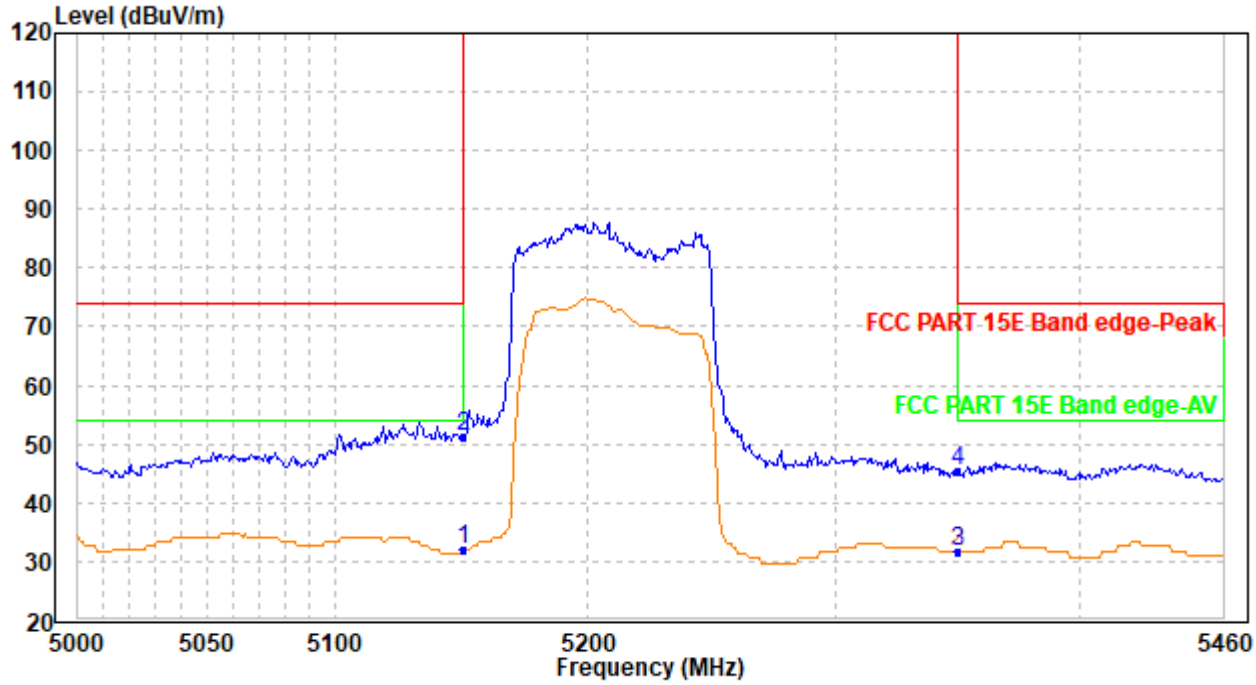
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-39.40	27.00	PASS
5925.000	-38.32	-27.00	PASS

Test Channel:	802.11Ax40_Chain 0+1_5795 MHz	Ant Polar:	Vertical



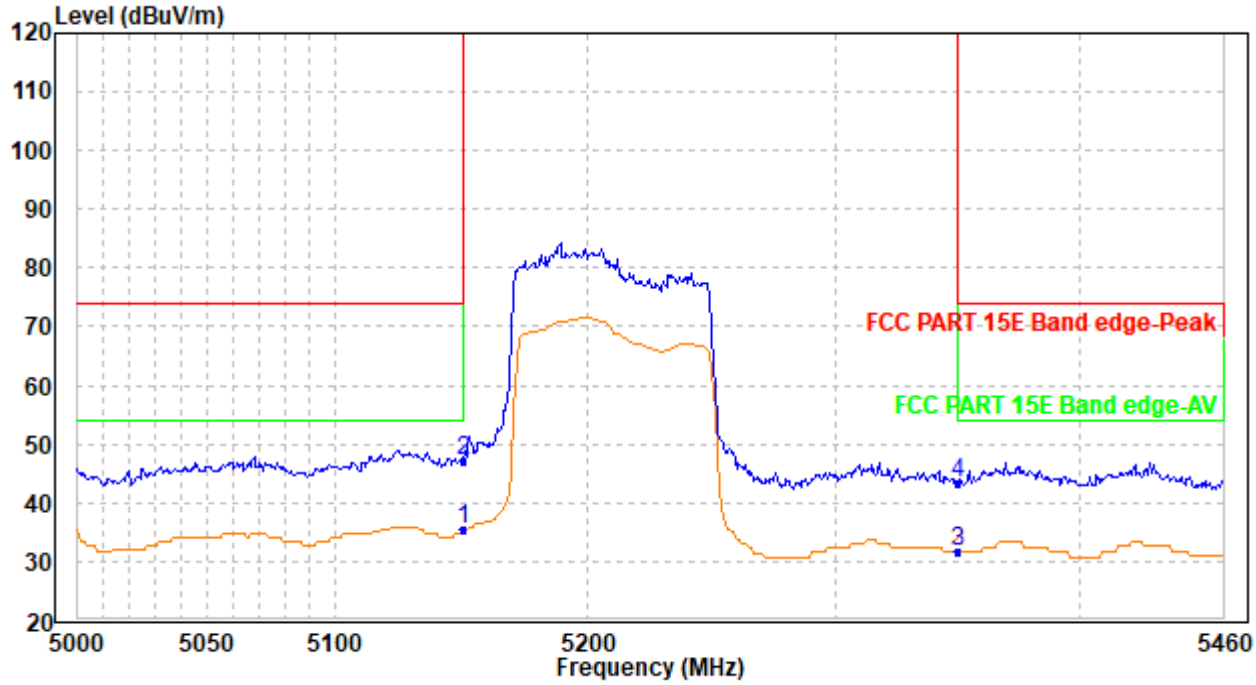
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5850.000	-39.75	27.00	PASS
5925.000	-38.55	-27.00	PASS

Test Channel:	802.11AX80_Chain 0+1_5210 MHz	Ant Polar:	Horizontal



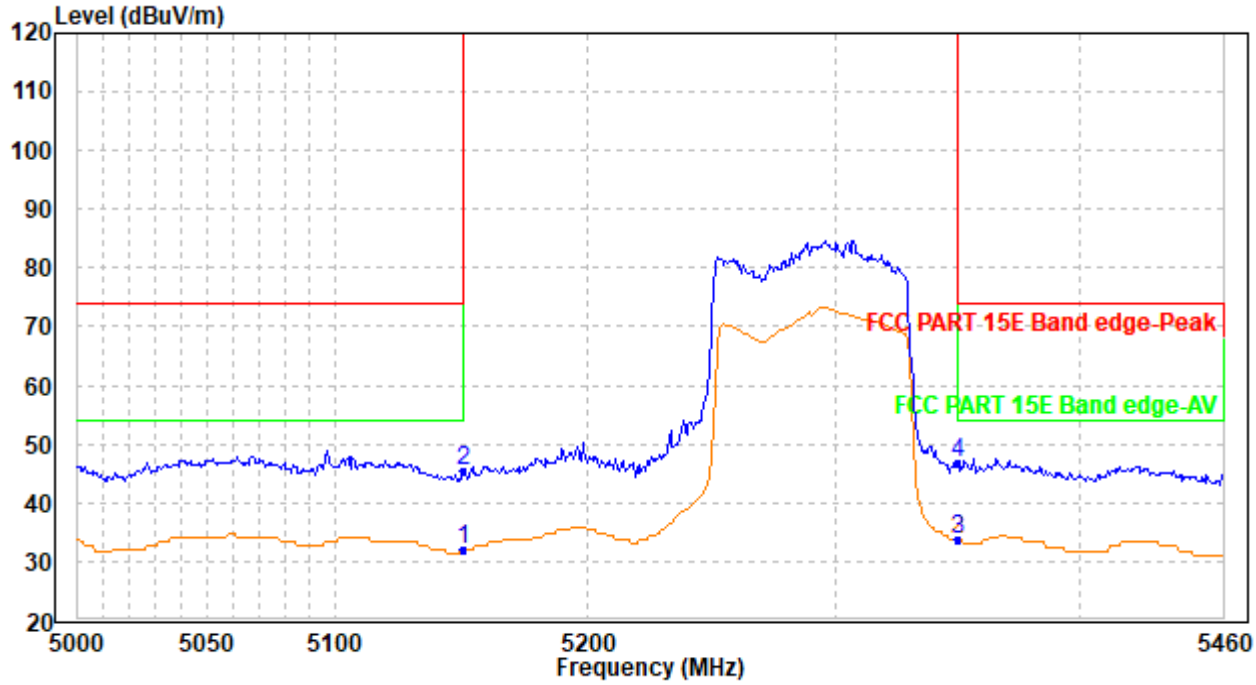
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	51.33	74.00	32.10	54.00	PASS
5350.000	45.50	74.00	31.62	54.00	PASS

Test Channel:	802.11AX80_Chain 0+1_5210 MHz	Ant Polar:	Vertical



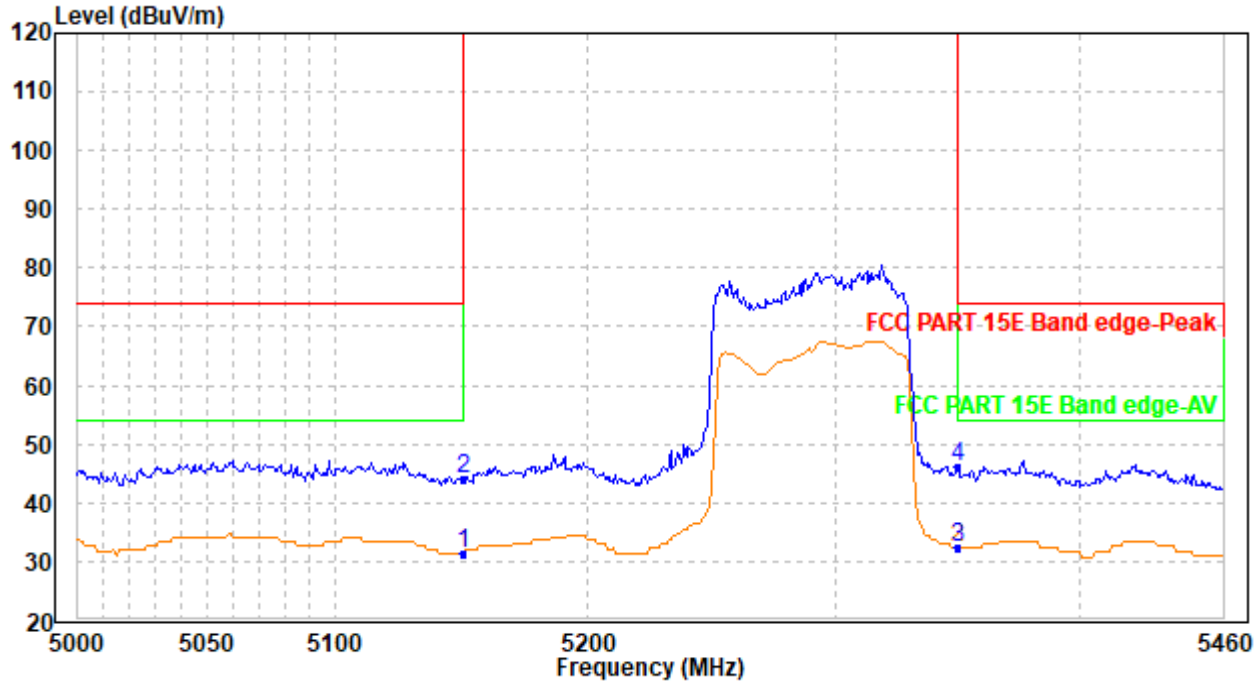
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	47.01	74.00	35.35	54.00	PASS
5350.000	43.37	74.00	31.62	54.00	PASS

Test Channel:	802.11AX80_Chain 0+1_5290 MHz	Ant Polar:	Horizontal



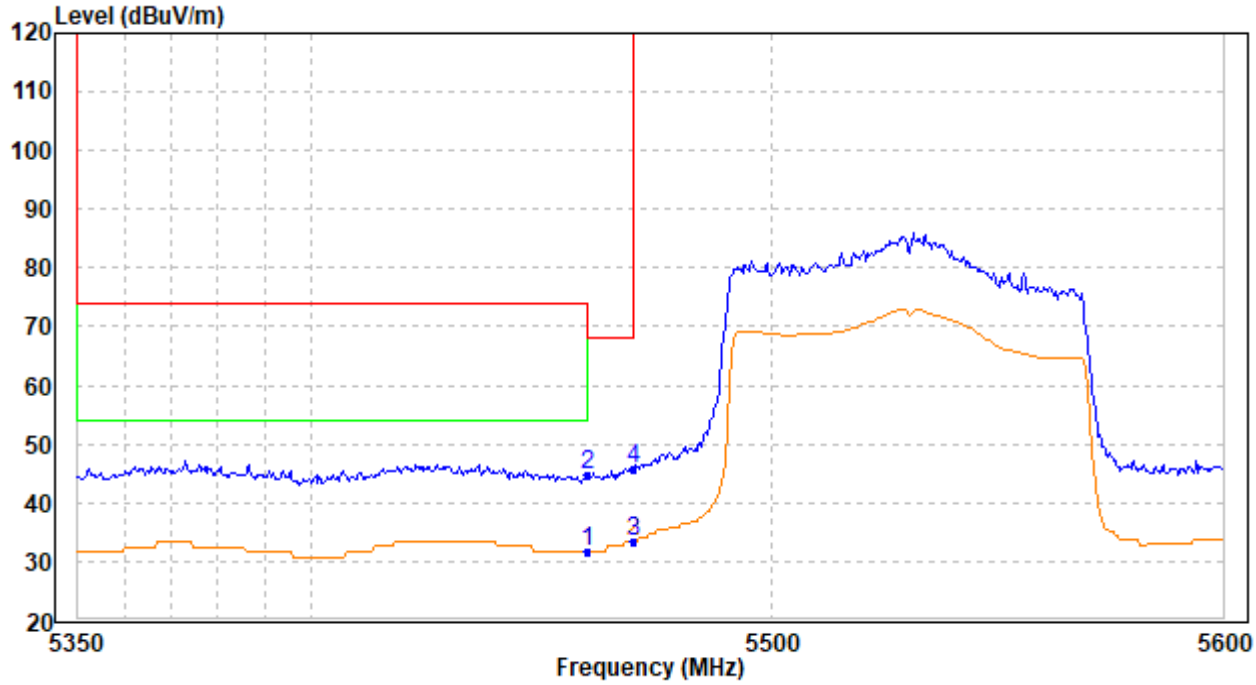
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	45.27	74.00	32.10	54.00	PASS
5350.000	46.66	74.00	33.90	54.00	PASS

Test Channel:	802.11AX80_Chain 0+1_5290 MHz	Ant Polar:	Vertical



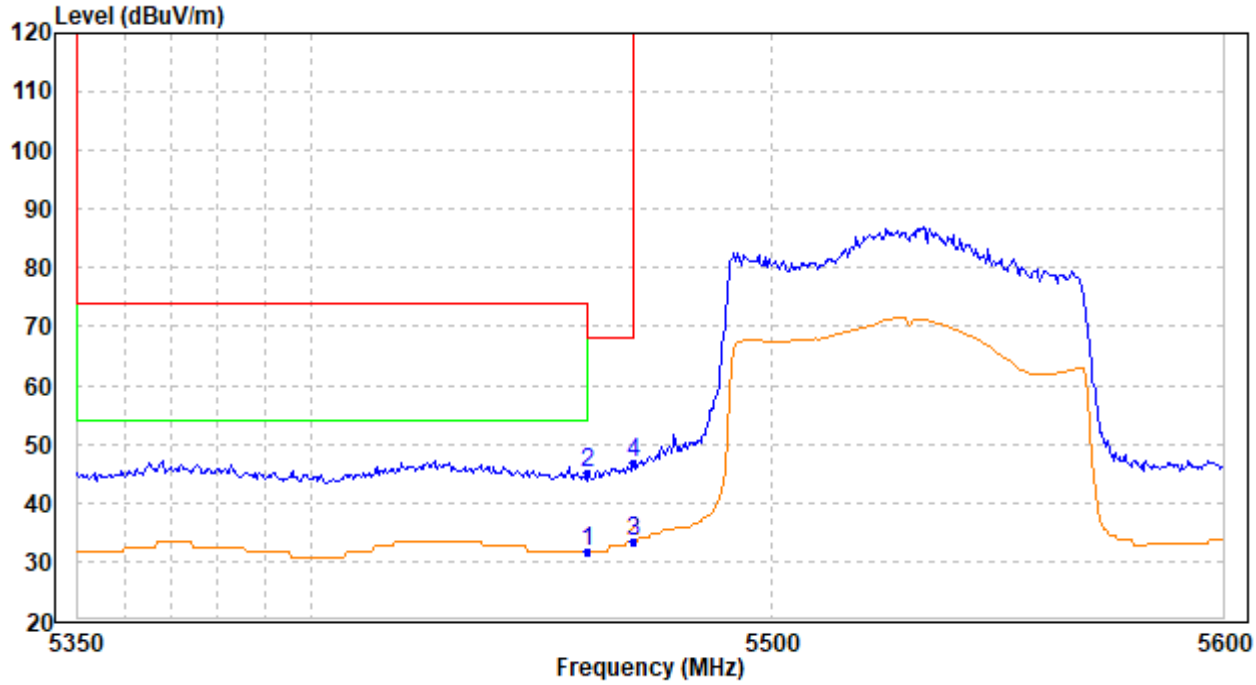
Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5150.000	43.92	74.00	31.27	54.00	PASS
5350.000	46.02	74.00	32.45	54.00	PASS

Test Channel:	802.11AX80_Chain 0+1_5530 MHz	Ant Polar:	Horizontal



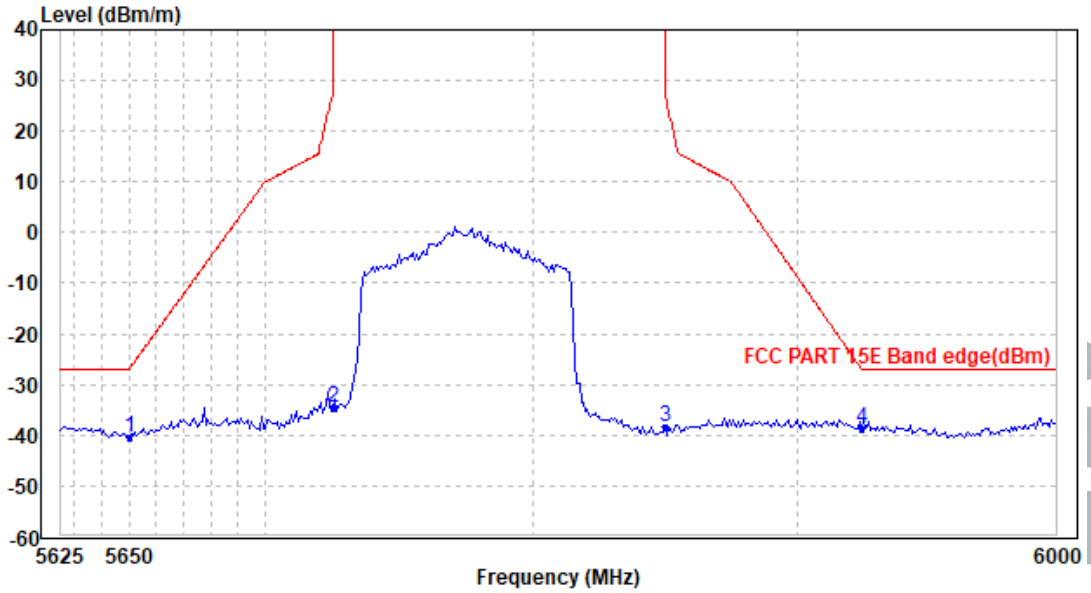
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	44.88	68.20	31.81	54.00	PASS
5470.000	45.73	68.20	33.41	68.20	PASS

Test Channel:	802.11AX80_Chain 0+1_5530 MHz	Ant Polar:	Vertical



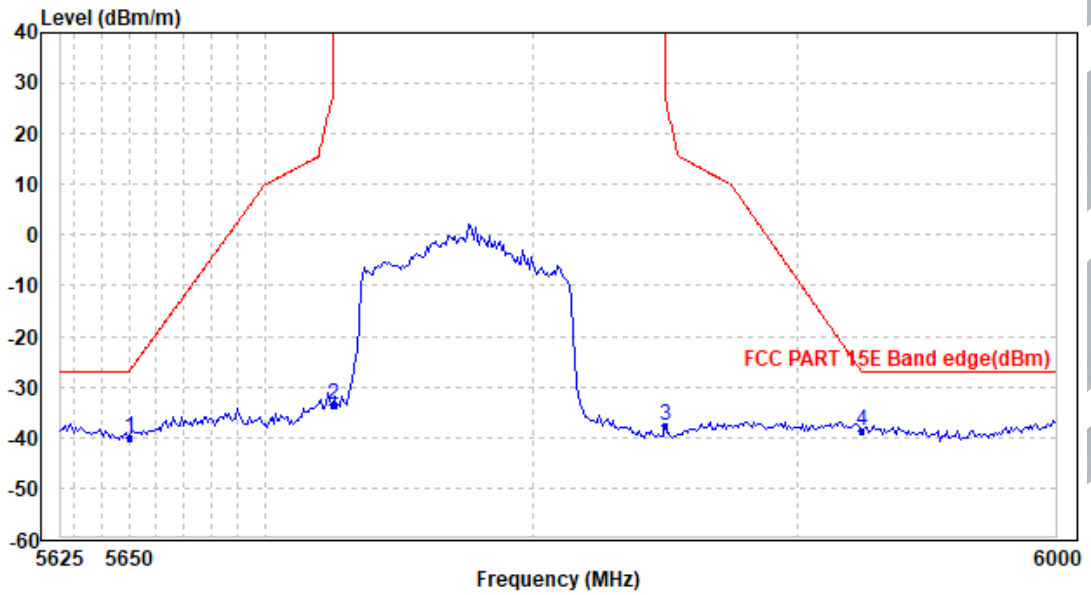
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5460.000	45.06	68.20	31.81	54.00	PASS
5470.000	46.80	68.20	33.41	68.20	PASS

Test Channel:	802.11Ax80_Chain 0+1_5775 MHz	Ant Polar:	Horizontal



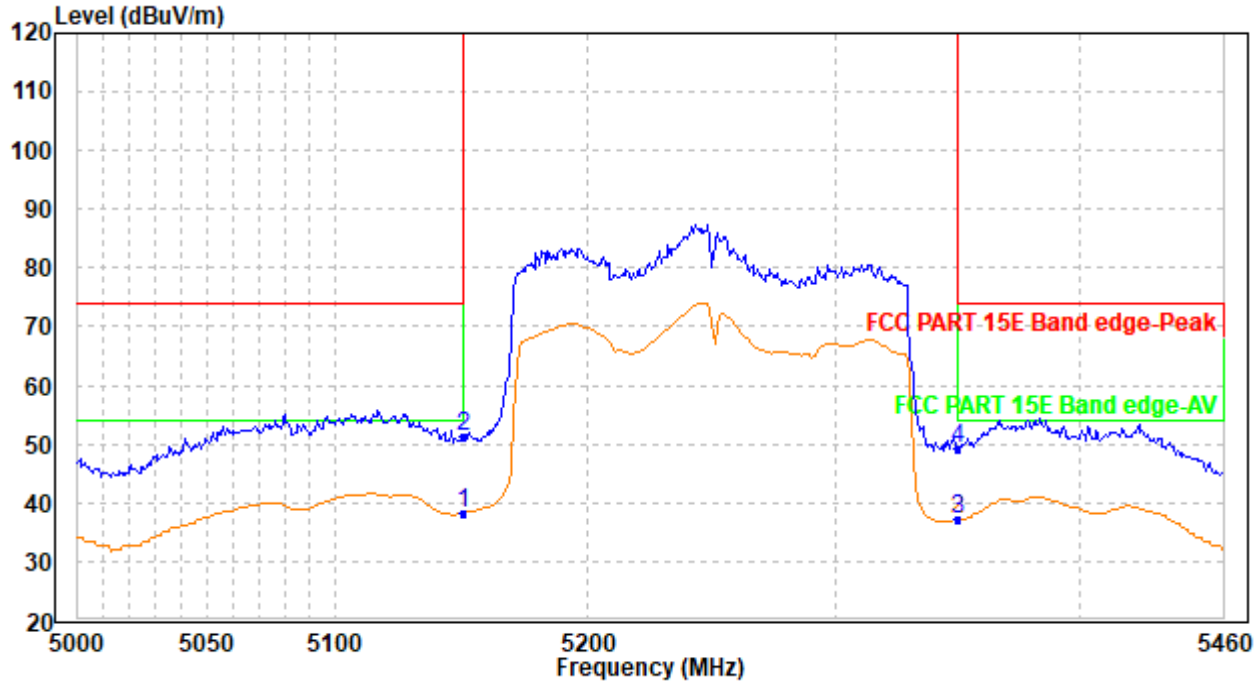
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5650.000	-40.36	-27.00	PASS
5725.000	-34.44	27.00	PASS
5850.000	-38.44	27.00	PASS
5925.000	-38.71	-27.00	PASS

Test Channel:	802.11Ax80_Chain 0+1_5775 MHz	Ant Polar:	Vertical



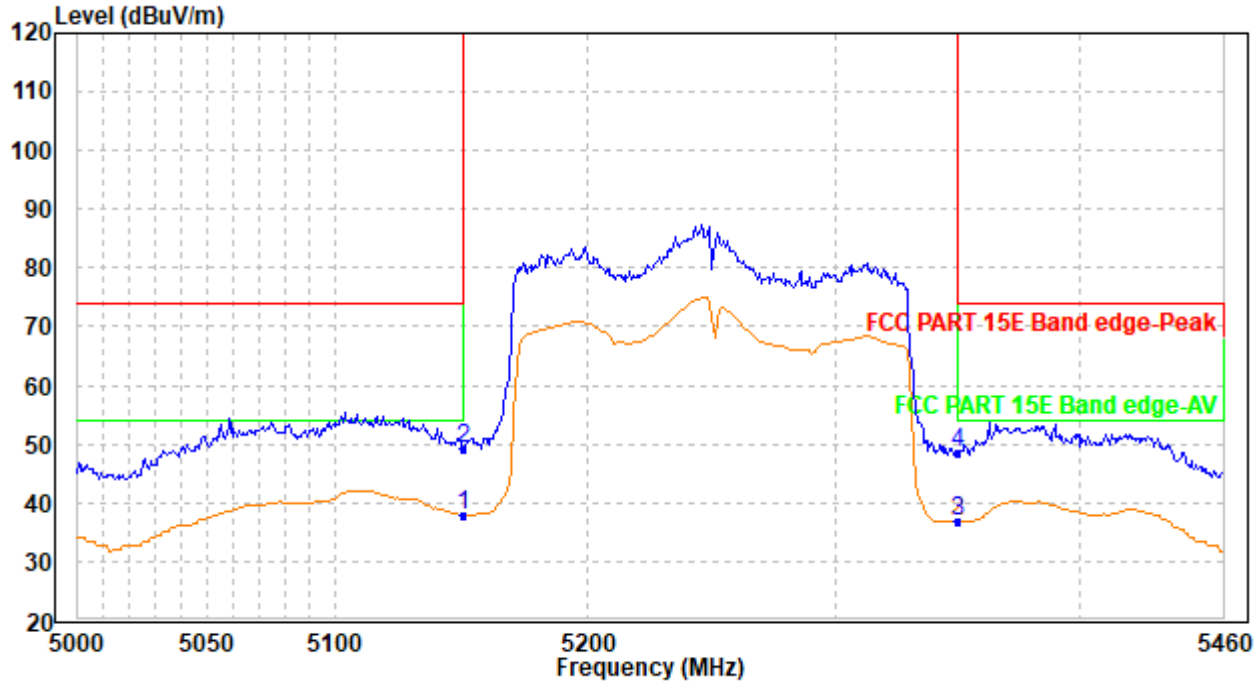
Frequency (MHz)	Peak level (dBm)	Peak Limit (dBm)	Conclusion
5650.000	-39.93	-27.00	PASS
5725.000	-33.68	27.00	PASS
5850.000	-37.82	27.00	PASS
5925.000	-38.71	-27.00	PASS

Test Channel:	802.11AX160_Chain 0+1_5250	Ant Polar:	Horizontal



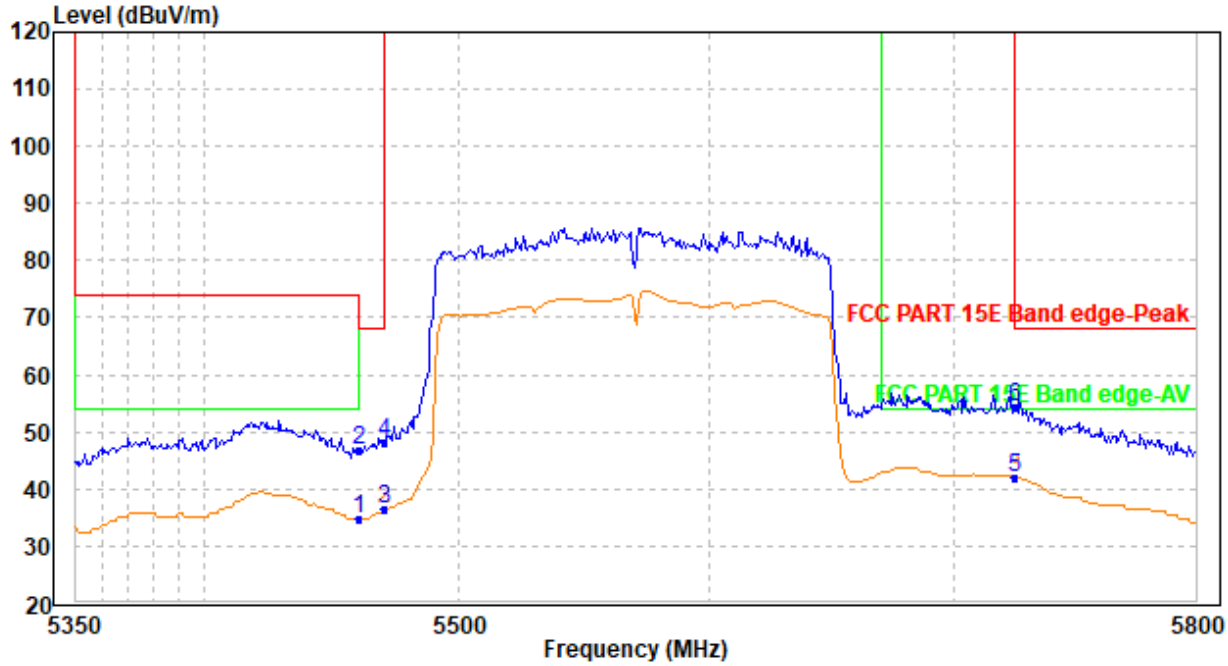
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	51.22	74.00	38.12	54.00	PASS
5350.000	49.14	74.00	37.19	54.00	PASS

Test Channel:	802.11AX160_Chain 0+1_5250	Ant Polar:	Vertical



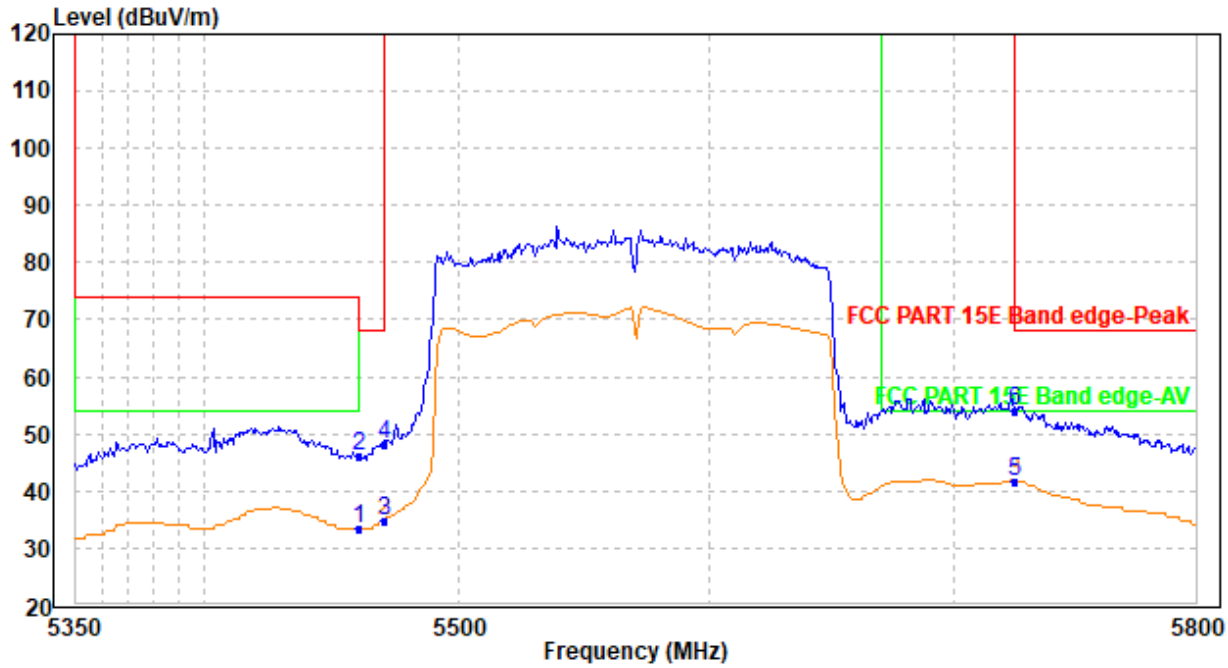
Frequency (MHz)	Peak level (dBµv/m)	Peak Limit (dBµv/m)	AV level (dBµv/m)	AV Limit (dBµv/m)	Conclusion
5150.000	49.31	74.00	37.71	54.00	PASS
5350.000	48.49	74.00	36.72	54.00	PASS

Test Channel:	802.11AX160_Chain 0+1_5570 MHz	Ant Polar:	Horizontal



Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5460.000	46.91	68.20	34.73	54.00	PASS
5470.000	48.26	68.20	36.44	68.20	PASS
5725.000	54.25	68.20	41.91	54.00	PASS

Test Channel:	802.11AX160_Chain 0+1_5570 MHz	Ant Polar:	Vertical



Frequency (MHz)	Peak level (dBμv/m)	Peak Limit (dBμv/m)	AV level (dBμv/m)	AV Limit (dBμv/m)	Conclusion
5460.000	45.97	68.20	33.39	54.00	PASS
5470.000	48.15	68.20	34.75	68.20	PASS
5725.000	54.11	68.20	41.61	54.00	PASS

5.9 DYNAMIC FREQUENCY SELECTION

Test Requirement: FCC 47 CFR Part 15 Subpart E Section 15.407 (h)

Test Method: KDB 905462 D03 Client Without DFS New Rules v01r02

EUT Operating Mode:

DFS Operational mode	Operating Frequency Range	
	5250 MHz to 5350 MHz	5470 MHz to 5725 MHz
Slave without radar Interference detection function	✓	✓

Applicability:

The following table from KDB905462 and the lists of the applicable requirements for the DFS testing.

Applicability of DFS Requirements Prior to Use of a Channel:

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	✓	Not required	Yes
DFS Detection Threshold	✓	Not required	Yes
Channel Availability Check Time	✓	Not required	Not required
U-NII Detection Bandwidth	✓	Not required	Yes

Applicability of DFS requirements during normal operation:

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required
Additional requirements for devices with multiple bandwidth modes	**Master Device or Client with Radar Detection**	**Client Without Radar Detection**
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection:

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

DFS Radar Signal Parameter Values:

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (See Note 1.)
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. (See Notes 1 and 2.)
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. (See Note 3.)

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

DFS Radar Signal Parameter:

Radar Type 0 was used in the evaluation of the Client device for the purpose of measuring the Channel Move Time and the Channel Closing Transmission Time

Table 1-Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1.	See Note 1.
1	1	Test A Test B	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu sec}}\right)\right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a
Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A
A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.
If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.
The aggregate is the average of the percentage of successful detections of short pulse radar types

1-4

Table 2-Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 3-Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

In-Service Monitoring: Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

Limit of In-Service Monitoring:

Reference to DFS Radar Signal Parameter Values.

Test Procedures:

a) One frequency will be chosen from the Operating Channels of the EUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

b) In case the EUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the EUT (Master). For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.

c) The TCP protocol unicast data stream was generated by the iperf software command line with at least 17% activity ratio over any 100ms period.

d) Timing plots are reported with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time).

e) At time T0 the Radar Waveform generator sends a Burst of pulses for one of the Short Pulse Radar Types 1-4 at DFS Detection Threshold levels on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.

f) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Measure and record the Channel Move Time and Channel Closing Transmission Time if radar detection occurs.

g) When operating as a Master Device, monitor the EUT for more than 30 minutes following instant T2 to verify that the EUT does not resume any transmissions on this Channel. Perform this test once and record the measurement result.

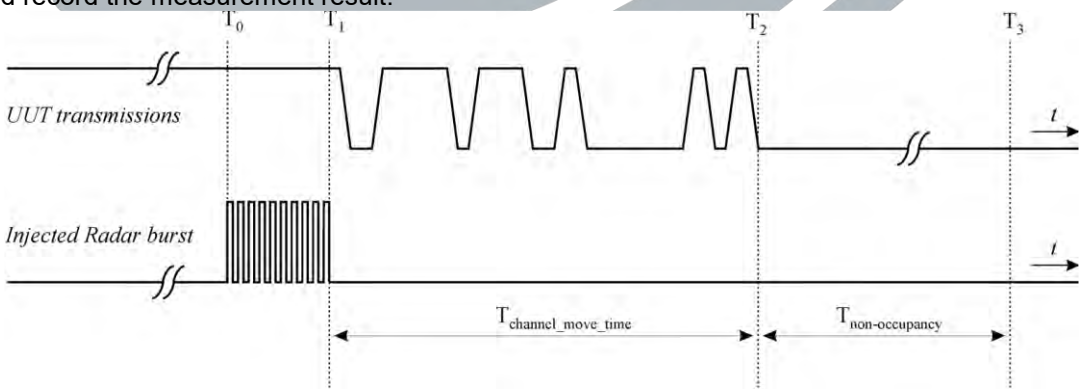
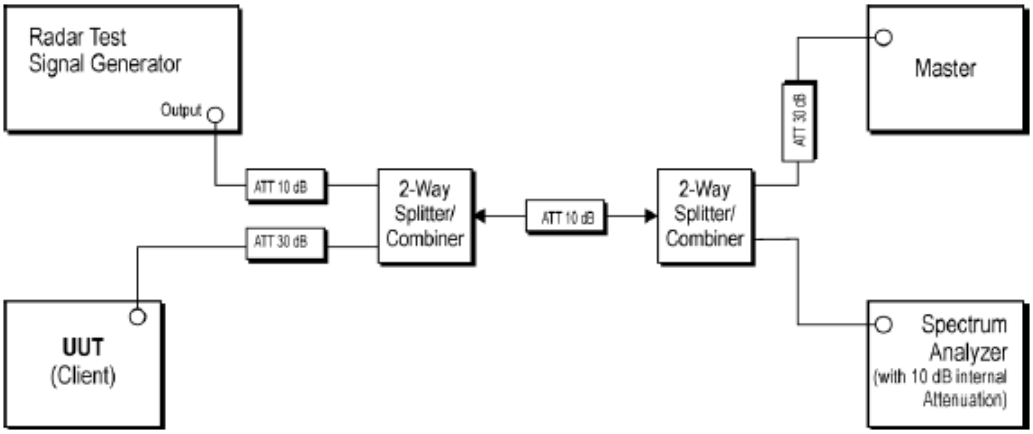


Figure 17: Channel Closing Transmission Time, Channel Move Time and Non-Occupancy Period

Conducted test setup



Setup for Client with injection at the Master

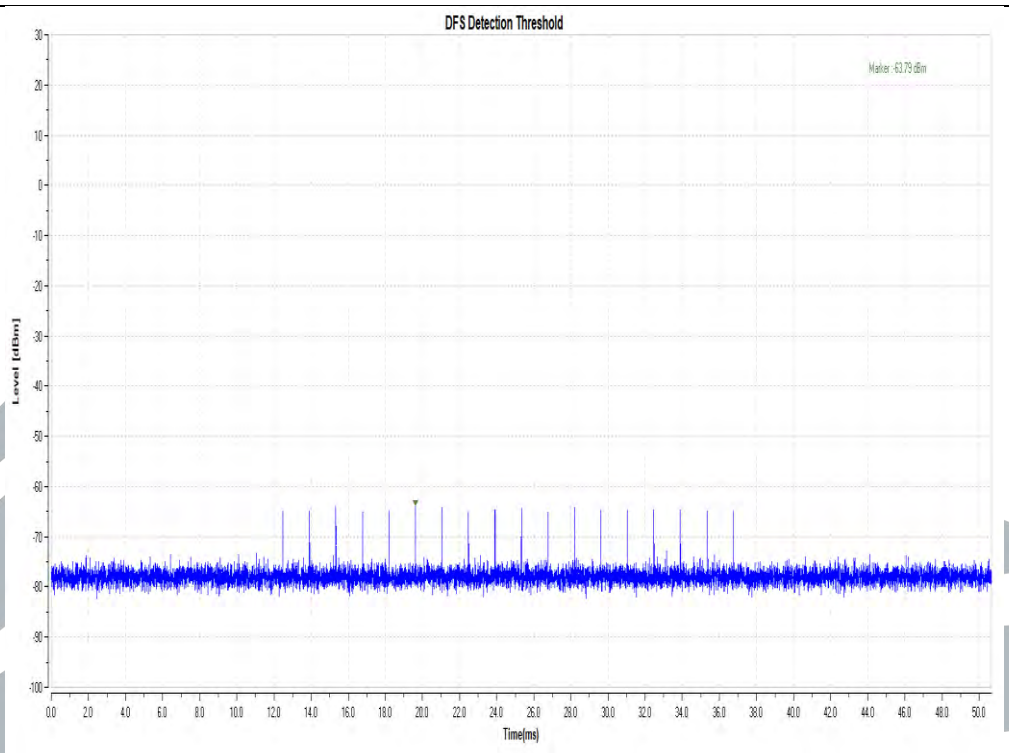
Equipment Used: Refer to section 3 for details.

Test Result: Result of Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Tes

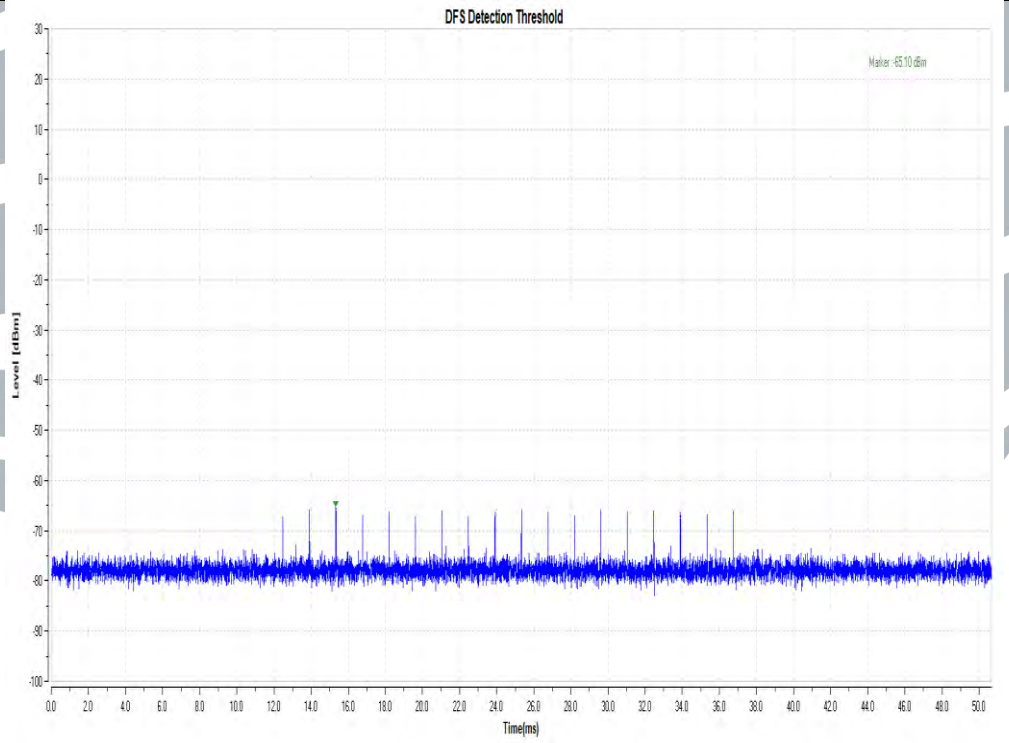
The measurement data as follows:

BW / Channel	Test Item	Test Result	Limit	Pass/Fail
160 MHz / 5250 MHz	Channel Move Time	1.1336 s	< 10s	Pass
	Channel Closing Transmission Time	200+49.4 ms	< 200+60ms	Pass
	Non-Occupancy Period	No transmission	30 minutes	Pass
160 MHz / 5570 MHz	Channel Move Time	1.027 s	< 10s	Pass
	Channel Closing Transmission Time	200+18.2 ms	< 200+60ms	Pass
	Non-Occupancy Period	No transmission	30 minutes	Pass

Radar Waveform calibration Plot

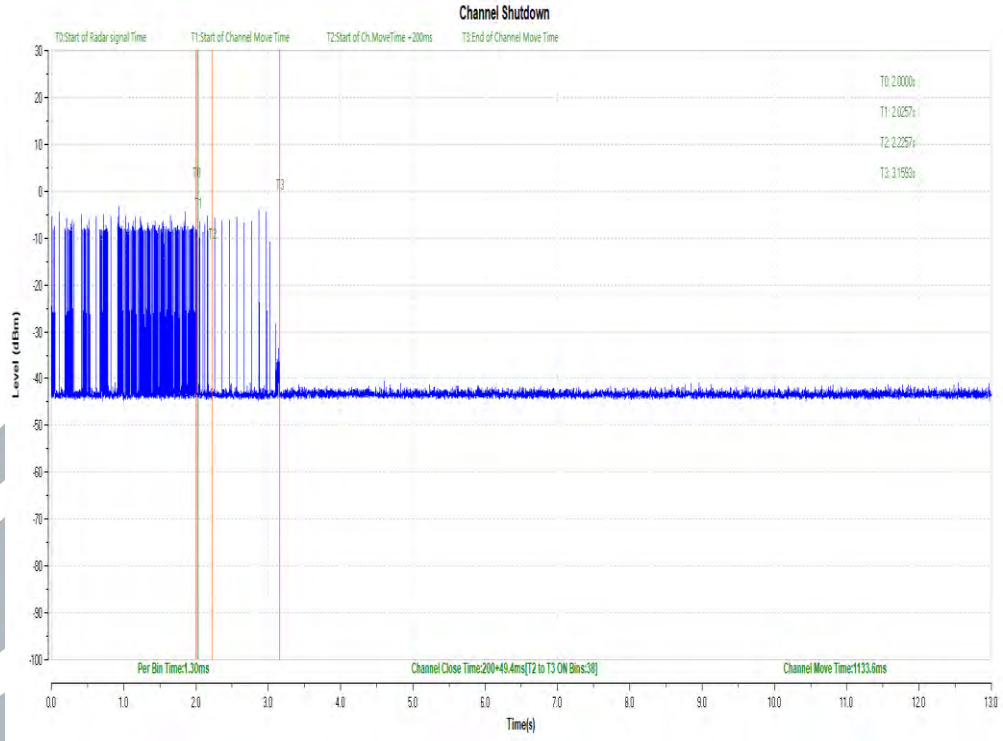


11AC160SISO-5250-Type0-PASS

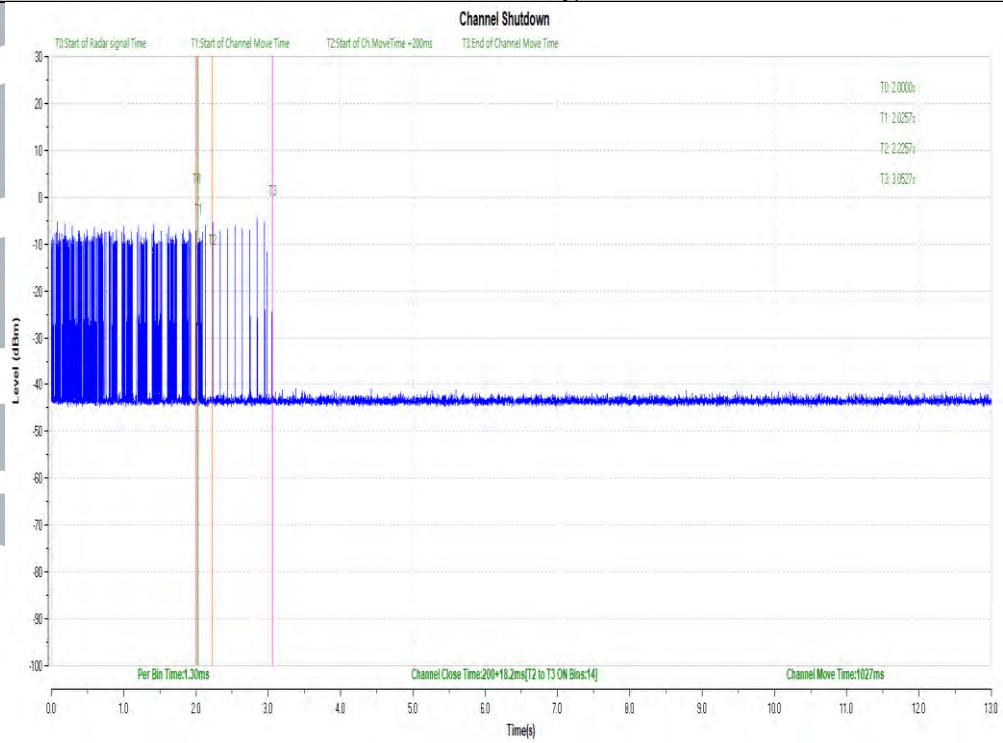


11AC160SISO-5570-Type0-PASS

Channel Move Time

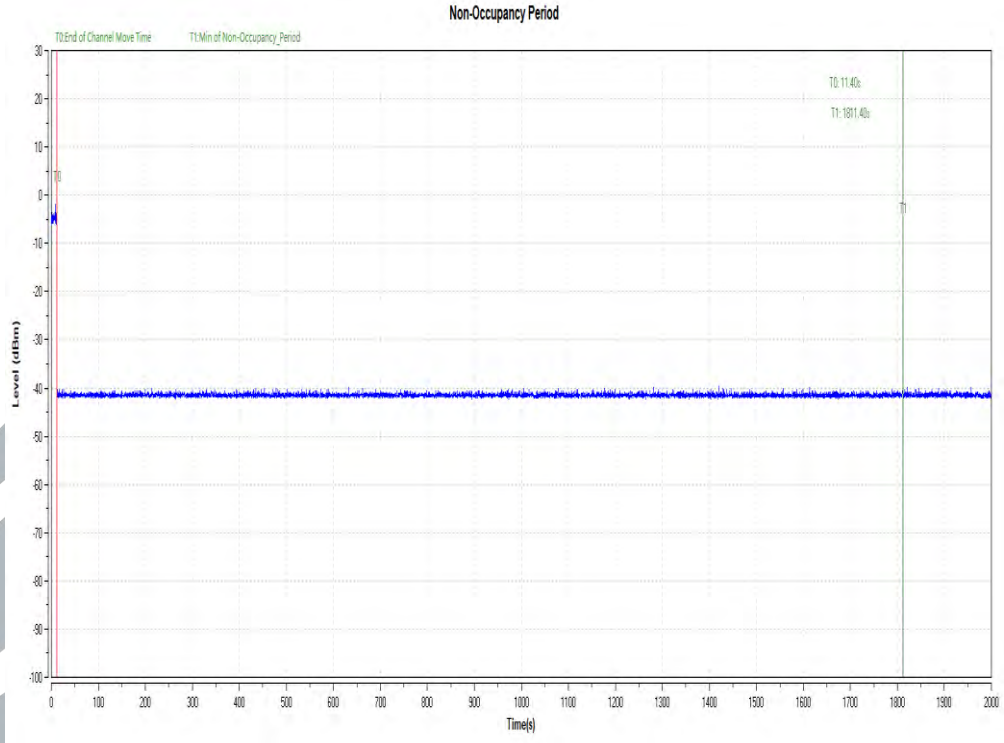


11AC160SISO-5250-Type0-PASS

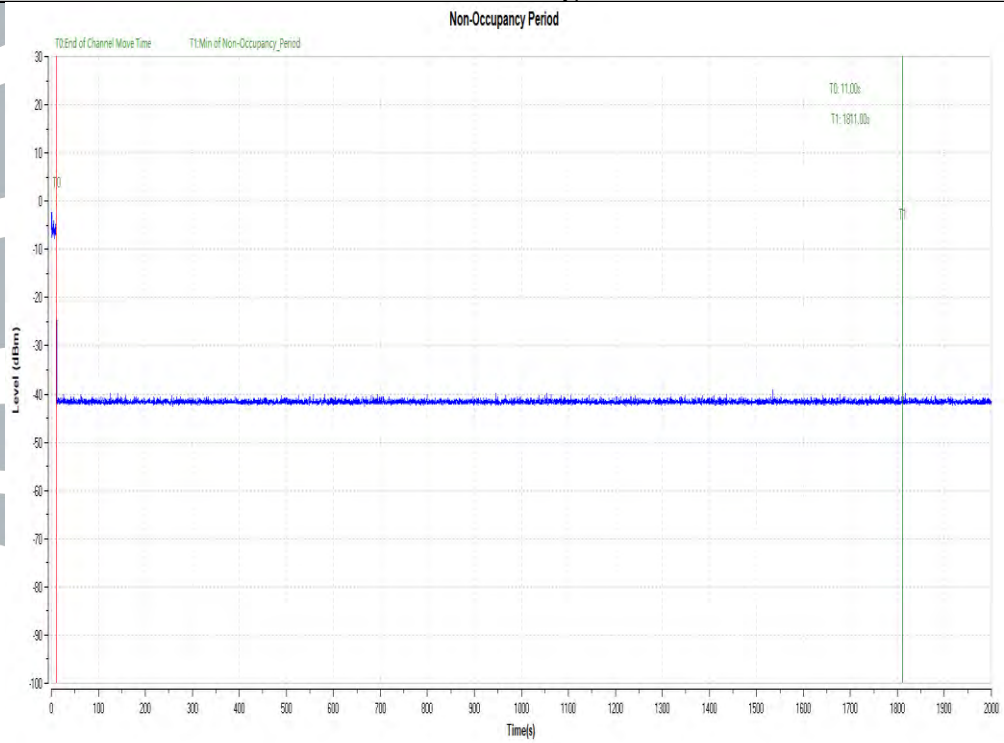


11AC160SISO-5570-Type0-PASS

Channel Closing Transmission Time



11AC160SISO-5250-Type0-PASS



11AC160SISO-5570-Type0-PASS

5.10 AC POWER LINE CONDUCTED EMISSION

Test Requirement: FCC 47 CFR Part 15 Subpart C Section 15.207

Test Method: ANSI C63.10-2013 Section 6.2

Limits:

Frequency range (MHz)	Limits (dB(μV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50

Remark:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

Test Setup: Refer to section 4.4.2 for details.

Test Procedures:

Test frequency range :150KHz-30MHz

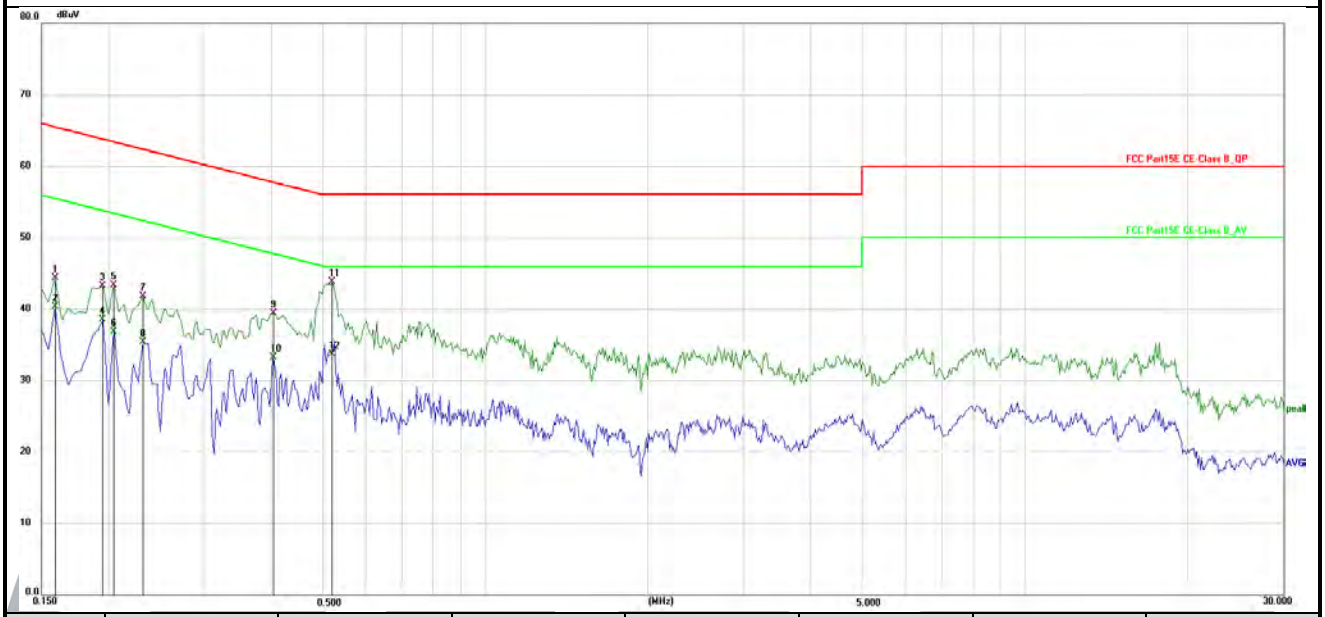
1) The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Equipment Used: Refer to section 3 for details.

Test Result: Pass

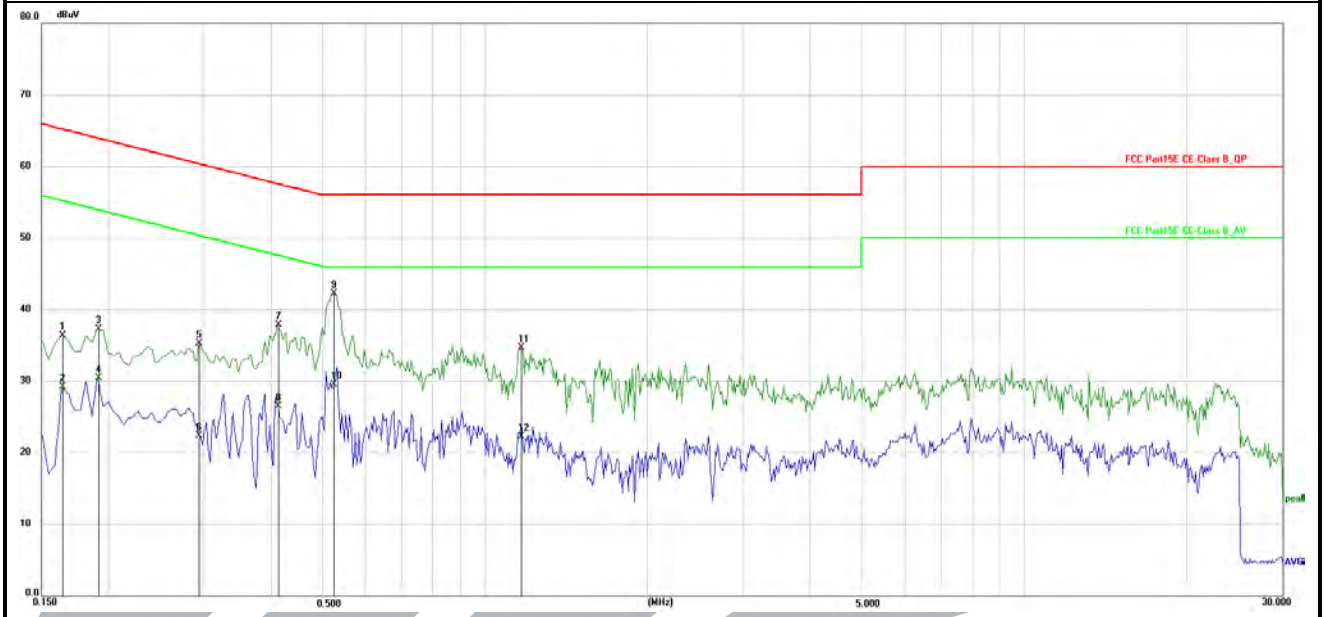
The worst measurement data as follows:
Quasi Peak and Average:
Test Mode: WIFI Link

Live Line



No.	Frequency (MHz)	Reading (dBuV)	Correction factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1590	34.13	10.30	44.43	65.52	-21.09	QP
2	0.1590	30.05	10.30	40.35	55.52	-15.17	AVG
3	0.1949	32.92	10.28	43.20	63.83	-20.63	QP
4	0.1949	28.22	10.28	38.50	53.83	-15.33	AVG
5	0.2040	33.11	10.27	43.38	63.45	-20.07	QP
6	0.2040	26.55	10.27	36.82	53.45	-16.63	AVG
7	0.2310	31.52	10.26	41.78	62.41	-20.63	QP
8	0.2310	25.11	10.26	35.37	52.41	-17.04	AVG
9	0.4020	29.20	10.22	39.42	57.81	-18.39	QP
10	0.4020	23.08	10.22	33.30	47.81	-14.51	AVG
11	0.5190	33.59	10.20	43.79	56.00	-12.21	QP
12	0.5190	23.56	10.20	33.76	46.00	-12.24	AVG

Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Correction factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1635	26.13	10.29	36.42	65.28	-28.86	QP
2	0.1635	18.99	10.29	29.28	55.28	-26.00	AVG
3	0.1905	27.06	10.28	37.34	64.01	-26.67	QP
4	0.1905	20.21	10.28	30.49	54.01	-23.52	AVG
5	0.2940	25.02	10.24	35.26	60.41	-25.15	QP
6	0.2940	12.16	10.24	22.40	50.41	-28.01	AVG
7	0.4110	27.68	10.23	37.91	57.63	-19.72	QP
8	0.4110	16.29	10.23	26.52	47.63	-21.11	AVG
9	0.5233	32.02	10.19	42.21	56.00	-13.79	QP
10	0.5233	19.34	10.19	29.53	46.00	-16.47	AVG
11	1.1713	24.52	10.18	34.70	56.00	-21.30	QP
12	1.1713	12.14	10.18	22.32	46.00	-23.68	AVG

Remark:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result - Limit
4. An initial pre-scan was performed on the Phase and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.
5. All possible modes of operation were investigated, and testing at two nominal voltages of 240V~50Hz and 120V~60Hz, only the worst case emissions reported.

APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

*** End of Report ***

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