

Appendix B

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Panda Wireless AC600 Dual Band Wireless AC USB Adapter With 5dBi Antenna

Trade Mark: Panda Wireless

Test Model: PAU0B

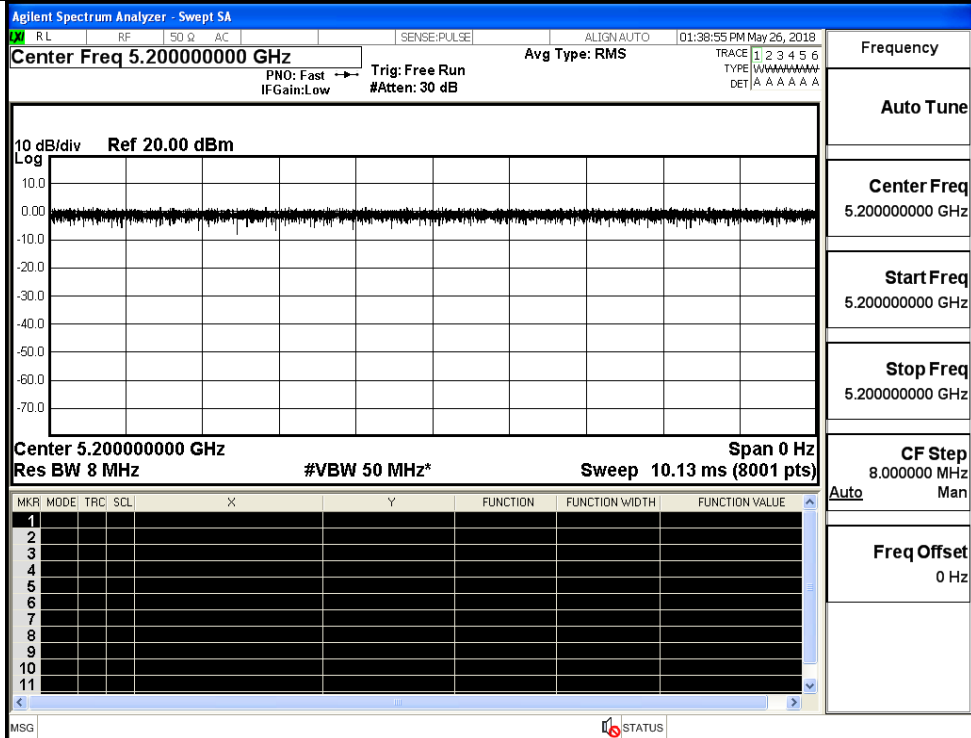
Environmental Conditions

Temperature:	24.6 ° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom Liu
Supervised by:	Jayden Zhuo

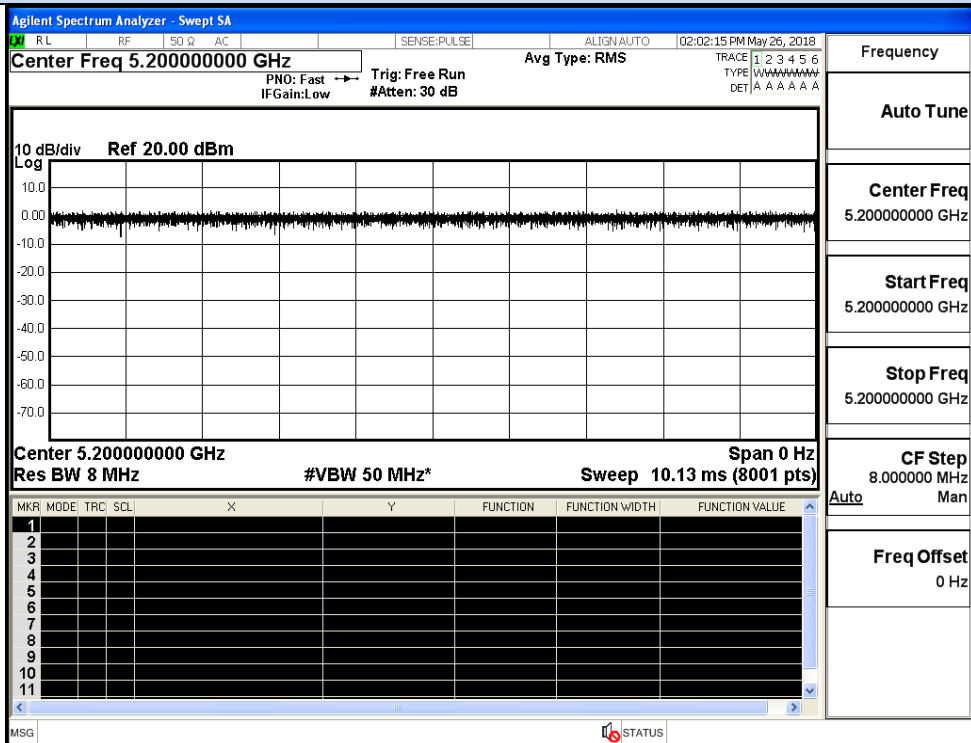
B.1 Duty Cycle

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5200	100	0.00	0.01
11N20 SISO	5200	100	0.00	0.01
11N40 SISO	5190	100	0.00	0.01
11AC20 SISO	5200	100	0.00	0.01
11AC40 SISO	5190	100	0.00	0.01
11AC80 SISO	5210	100	0.00	0.01

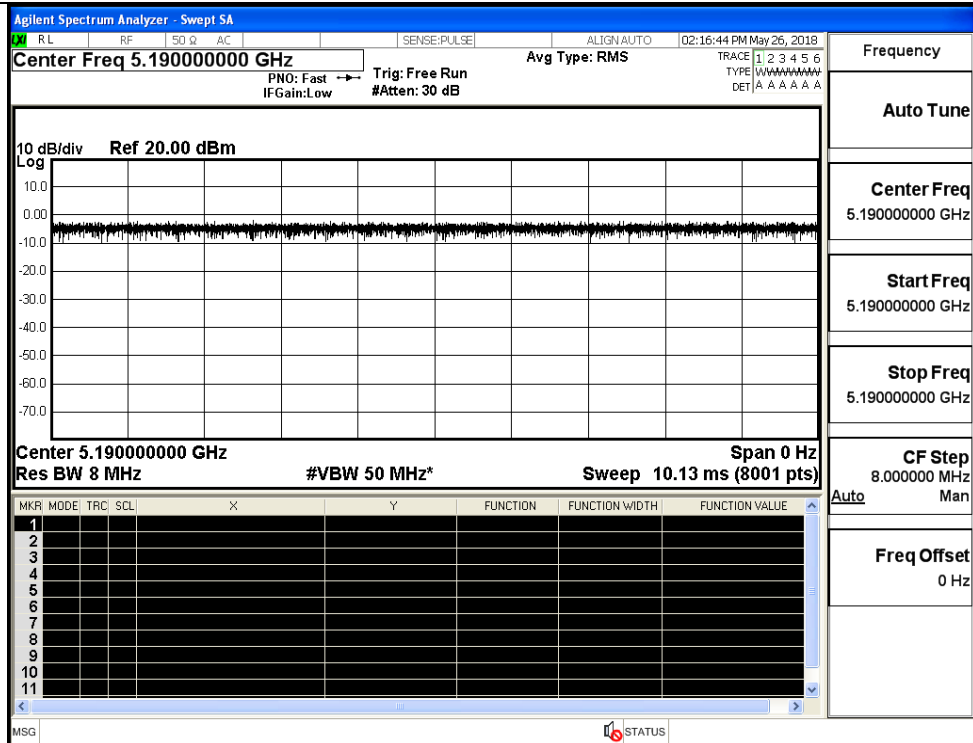
On Time and Duty Cycle



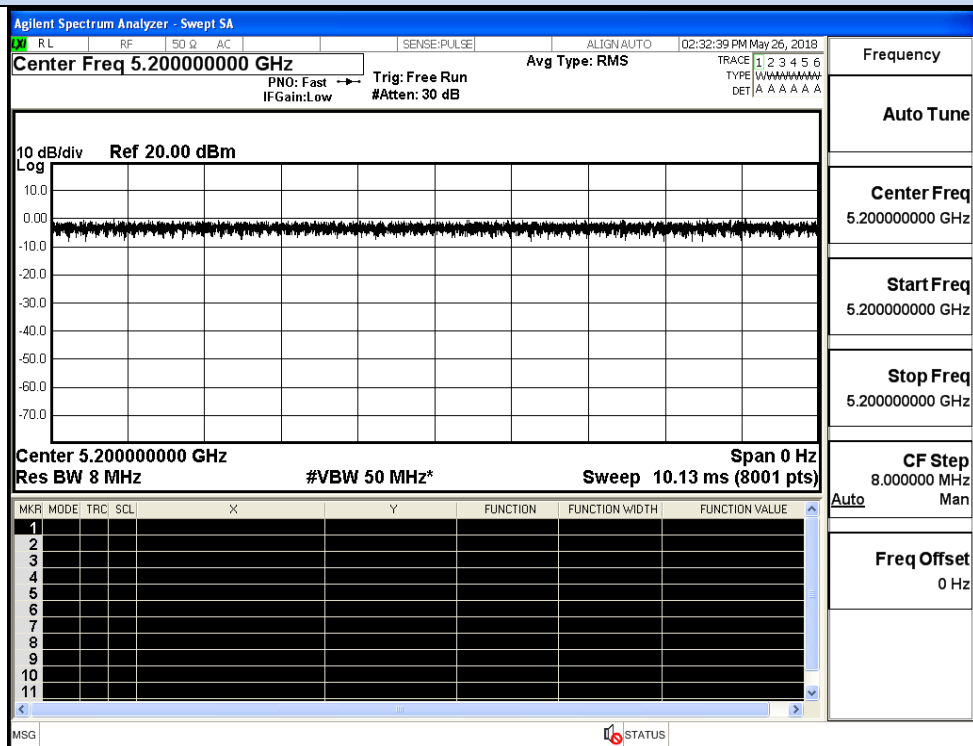
IEEE 802.11a



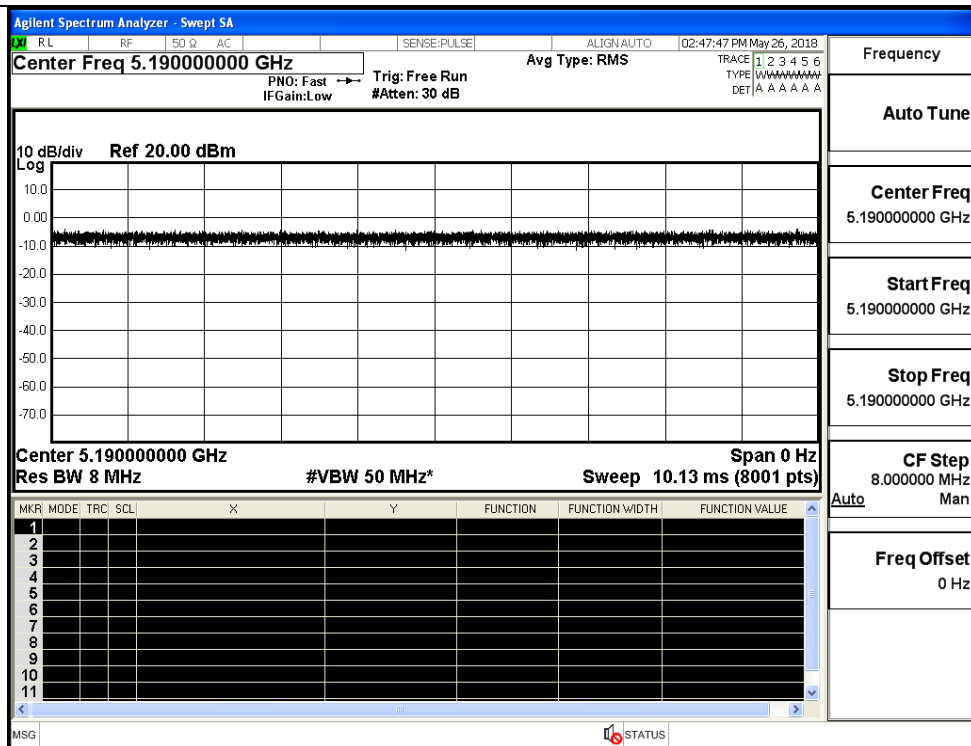
IEEE 802.11n HT20



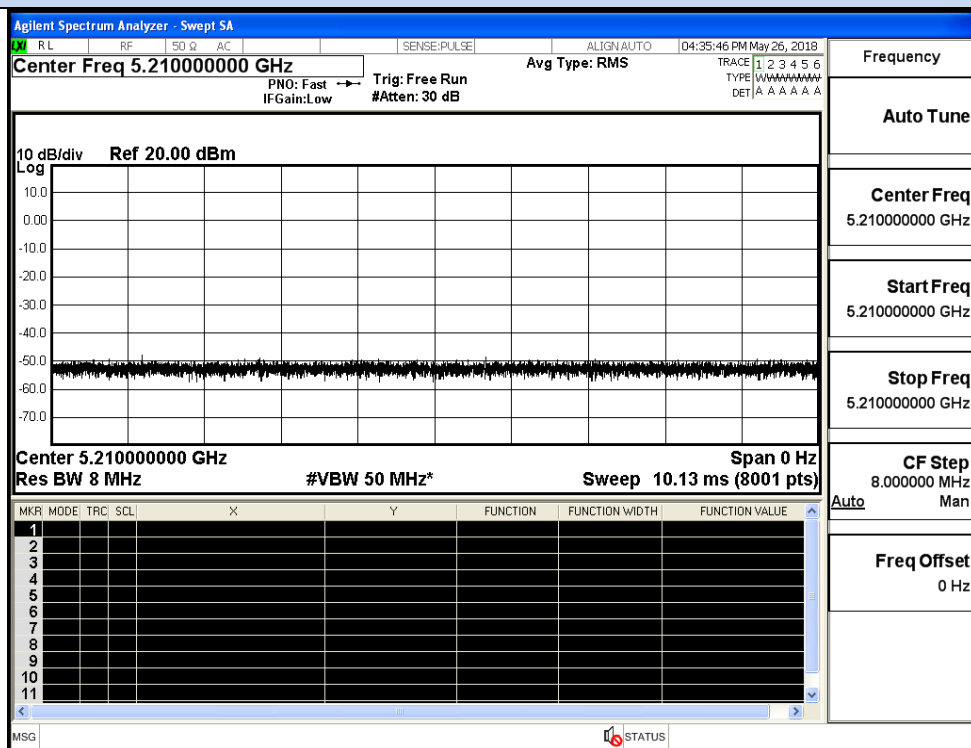
IEEE 802.11n HT40



IEEE 802.11ac VHT20



IEEE 802.11ac VHT40



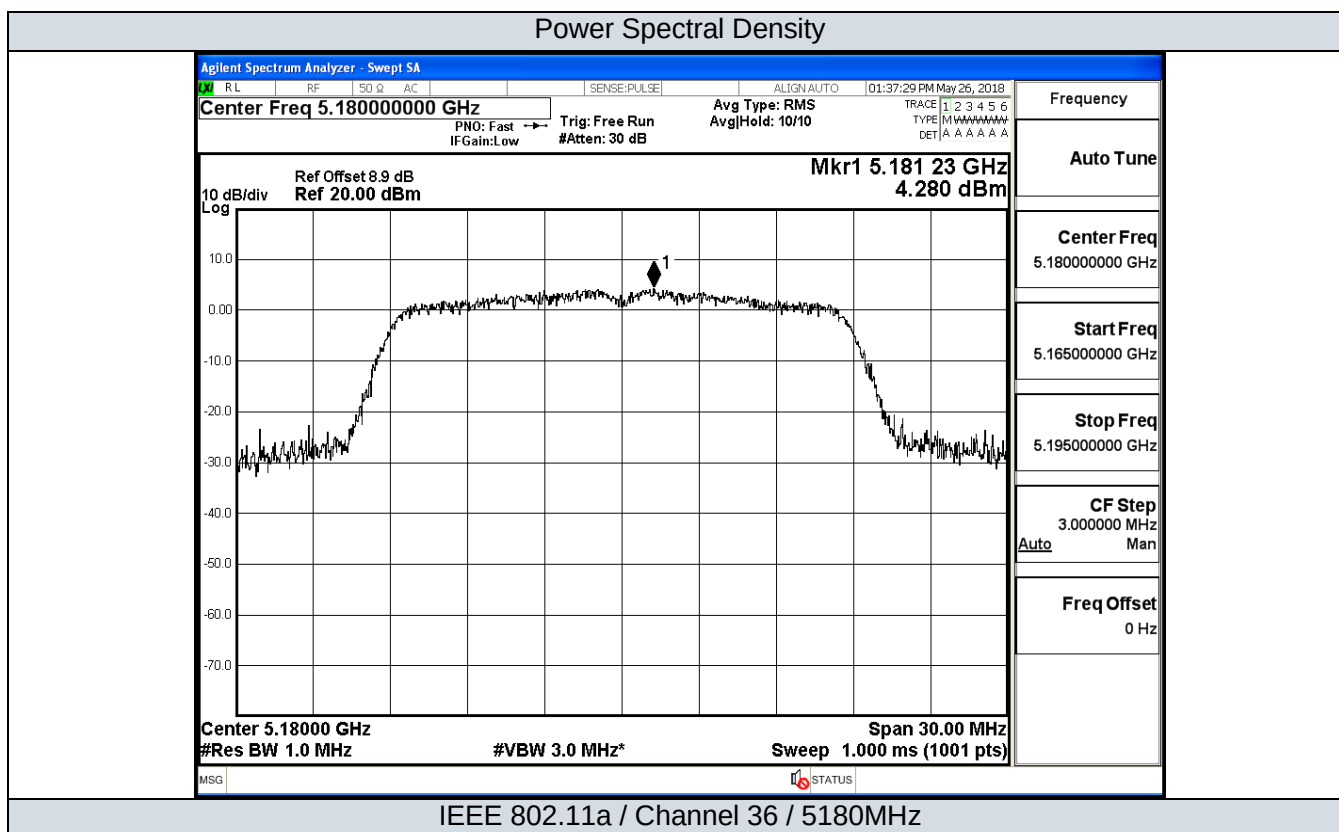
IEEE 802.11ac VHT80

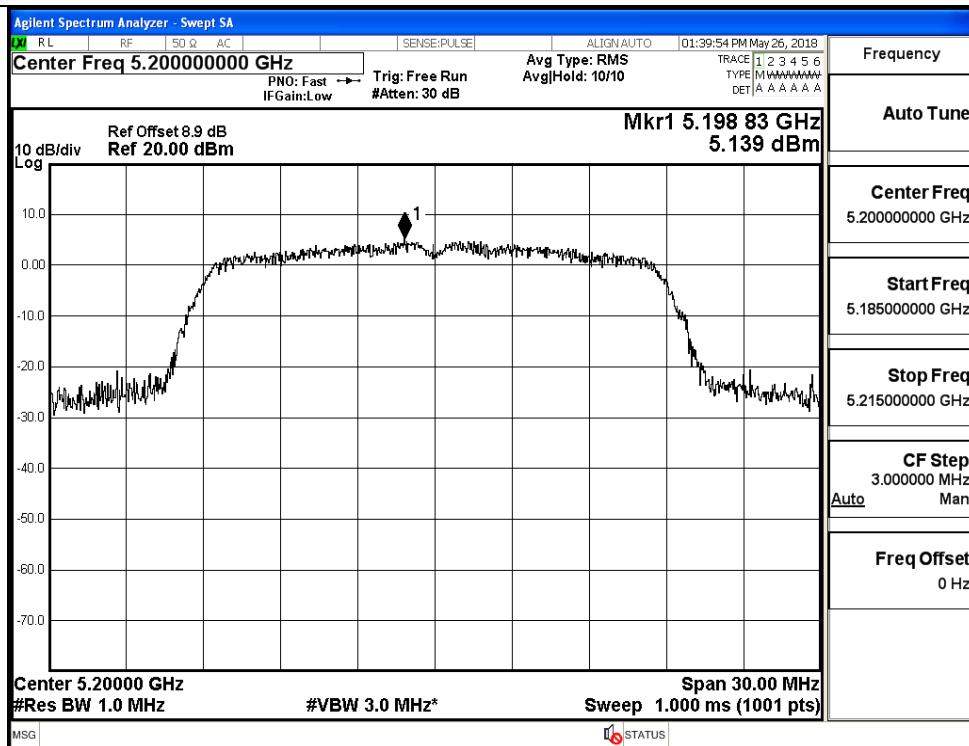
B.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)
IEEE 802.11a	36	5180	14.33	0	14.33	24
	40	5200	14.85	0	14.85	
	48	5240	15.69	0	15.69	
IEEE 802.11n HT20	36	5180	14.93	0	14.93	24
	40	5200	15.27	0	15.27	
	48	5240	15.62	0	15.62	
IEEE 802.11n HT40	38	5190	15.10	0	15.10	24
	46	5230	15.73	0	15.73	
IEEE 802.11ac VHT20	36	5180	12.81	0	12.81	24
	40	5200	13.26	0	13.26	
	48	5240	13.71	0	13.71	
IEEE 802.11ac VHT40	38	5190	13.51	0	13.51	24
	46	5230	14.17	0	14.17	
IEEE 802.11ac VHT80	42	5210	11.52	0	11.52	24

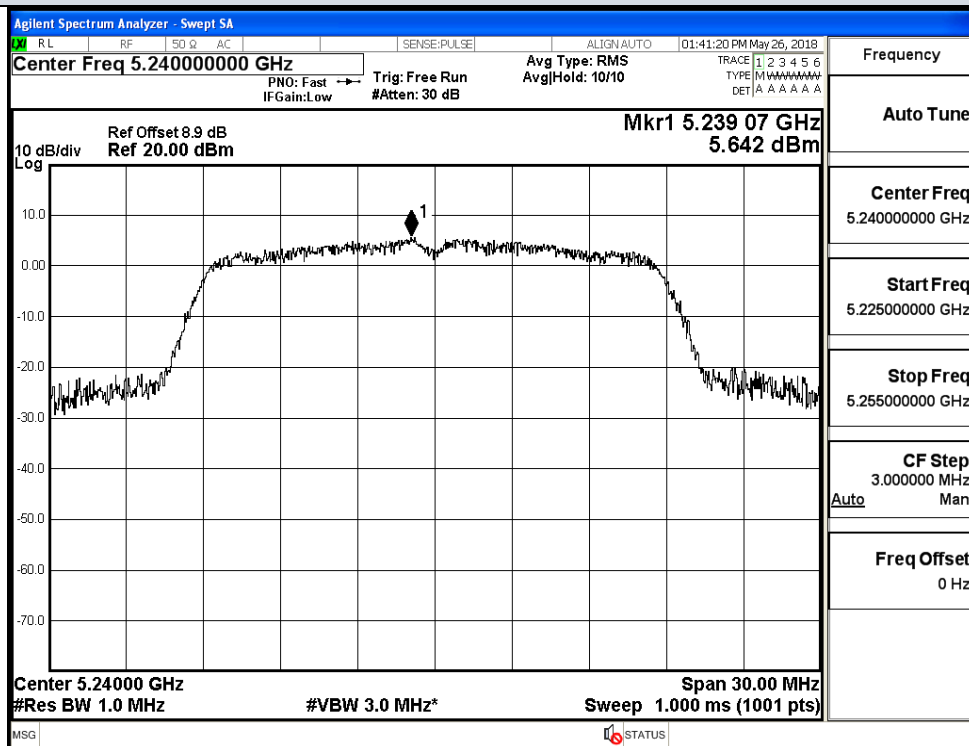
B.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)
IEEE 802.11a	36	5180	4.280	0	4.28	11
	40	5200	5.139	0	5.14	
	48	5240	5.642	0	5.64	
IEEE 802.11n HT20	36	5180	4.773	0	4.77	11
	40	5200	5.081	0	5.08	
	48	5240	5.439	0	5.44	
IEEE 802.11n HT40	38	5190	1.700	0	1.70	11
	46	5230	2.708	0	2.71	
IEEE 802.11ac VHT20	36	5180	3.484	0	3.48	11
	40	5200	3.684	0	3.68	
	48	5240	4.858	0	4.86	
IEEE 802.11ac VHT40	38	5190	-0.020	0	-0.02	11
	46	5230	0.749	0	0.75	
IEEE 802.11ac VHT80	42	5210	-4.283	0	-4.28	11



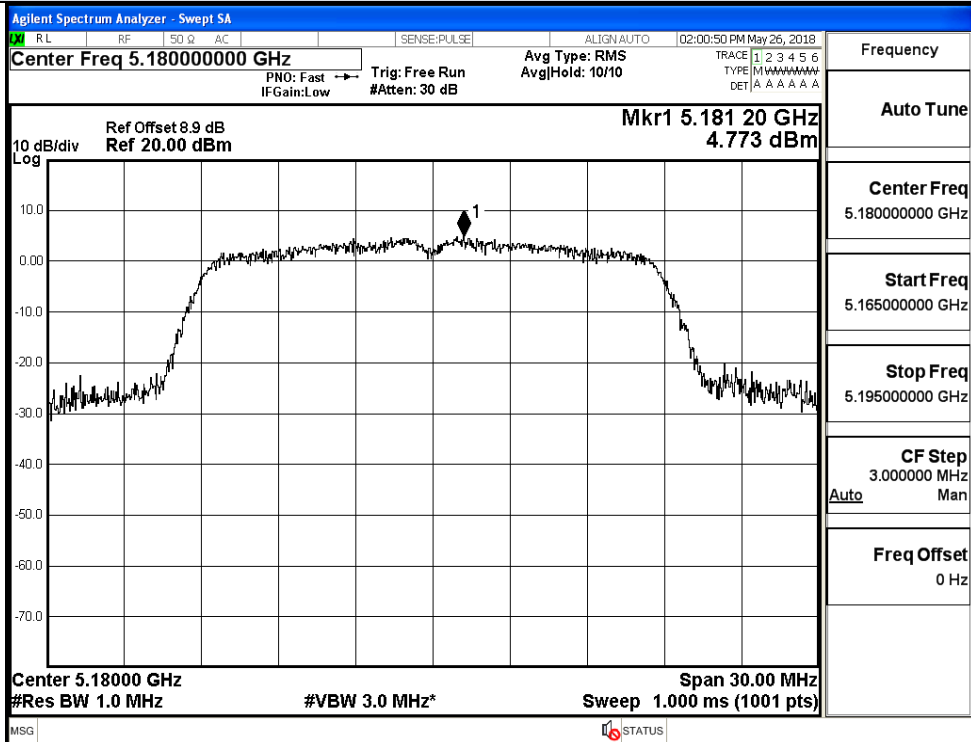


IEEE 802.11a / Channel 40 / 5200MHz

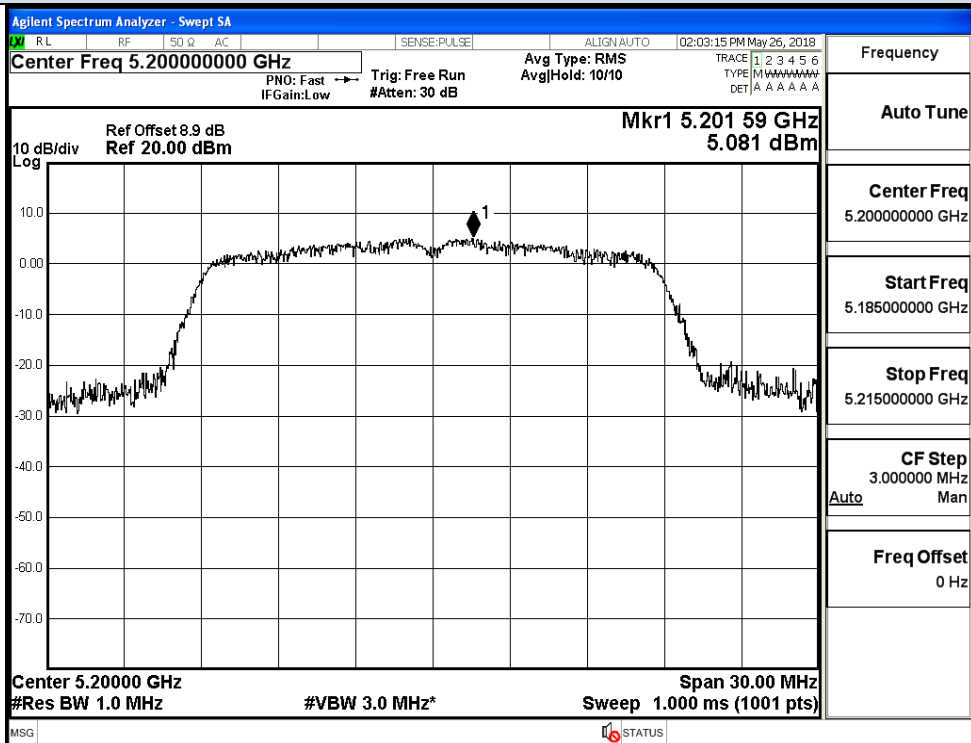


IEEE 802.11 HTa / Channel 48 / 5240MHz

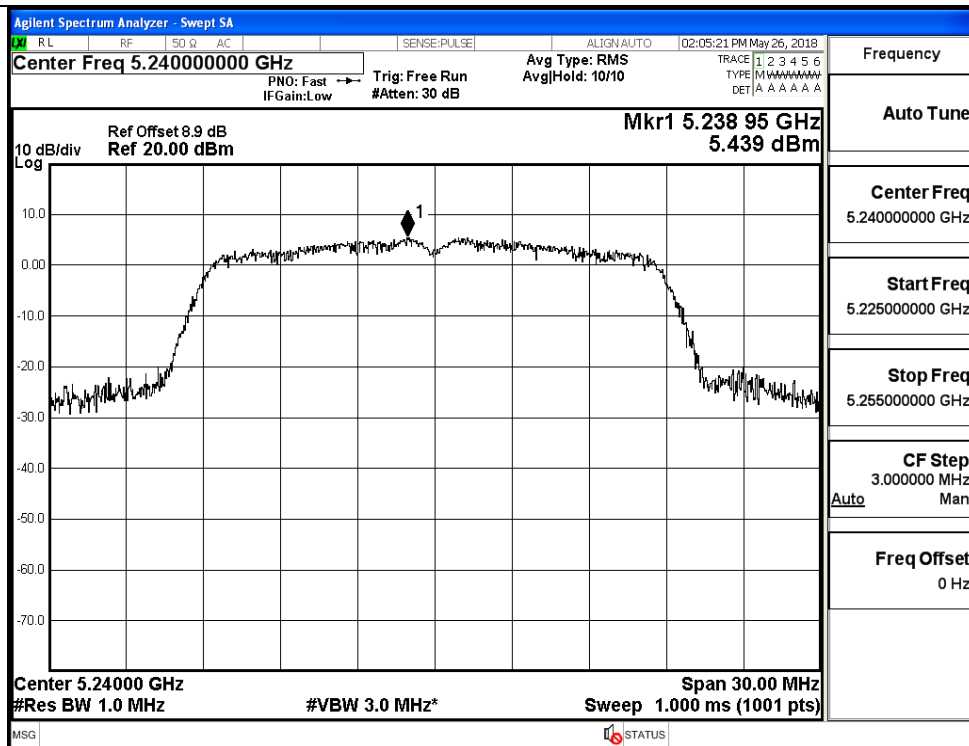
Power Spectral Density



IEEE 802.11n HT20 / Channel 36 / 5180MHz

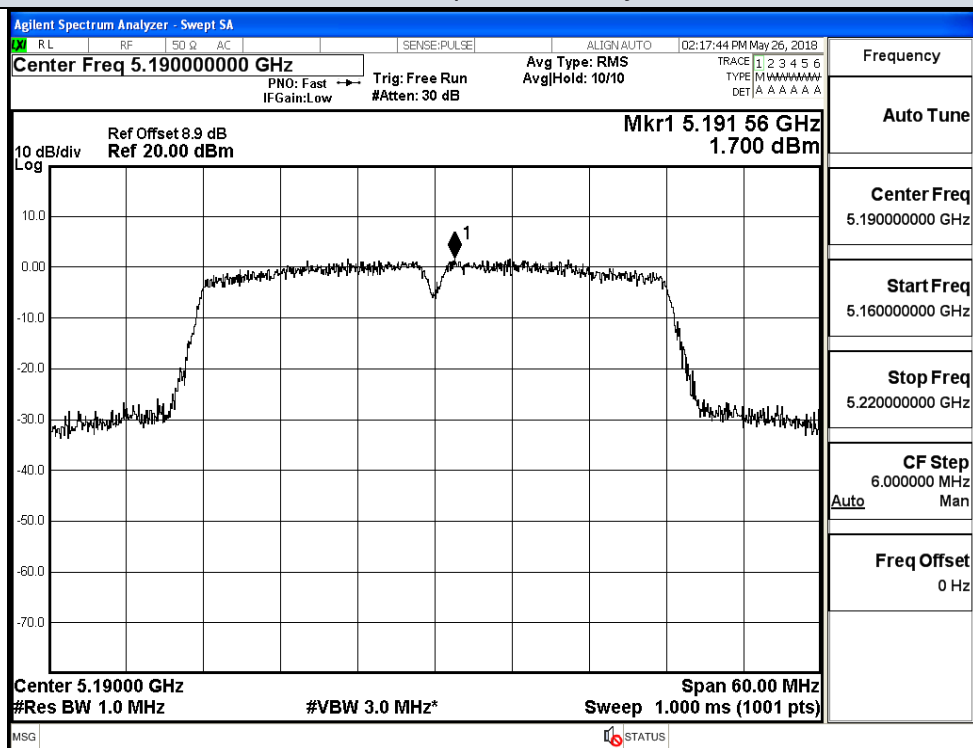


IEEE 802.11n HT20 / Channel 40 / 5200MHz

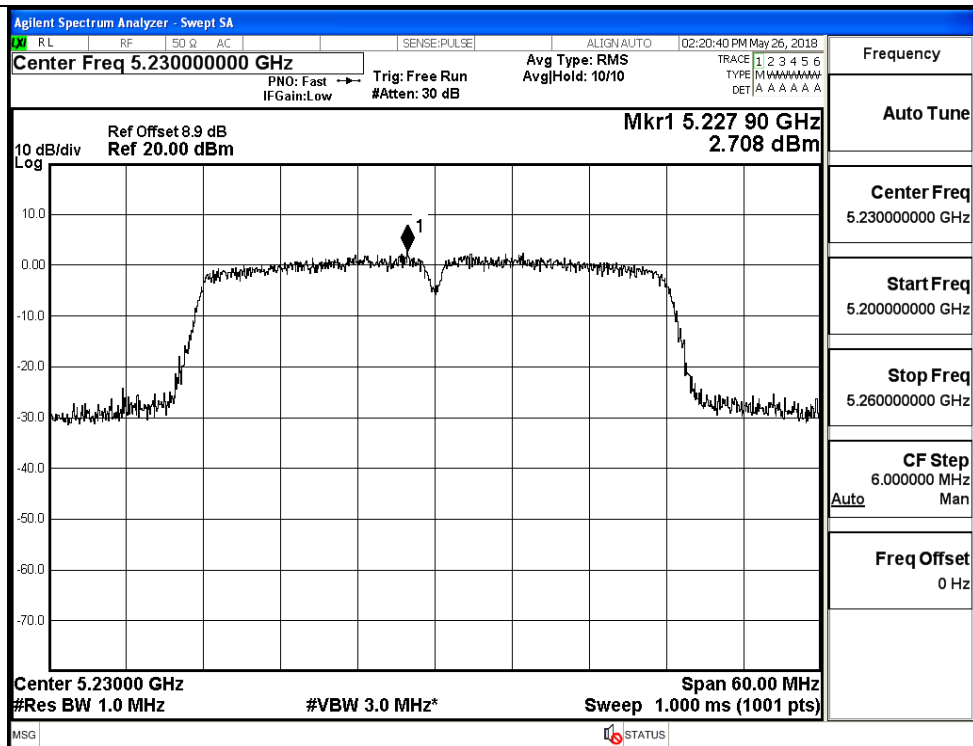


IEEE 802.11n HT20 / Channel 48 / 5240MHz

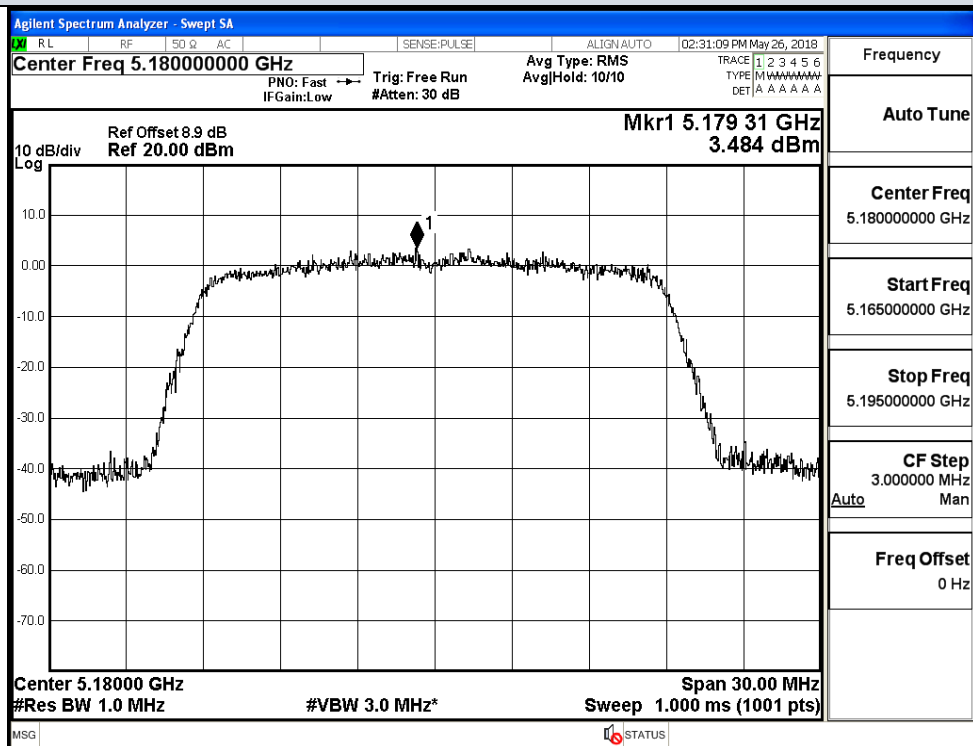
Power Spectral Density



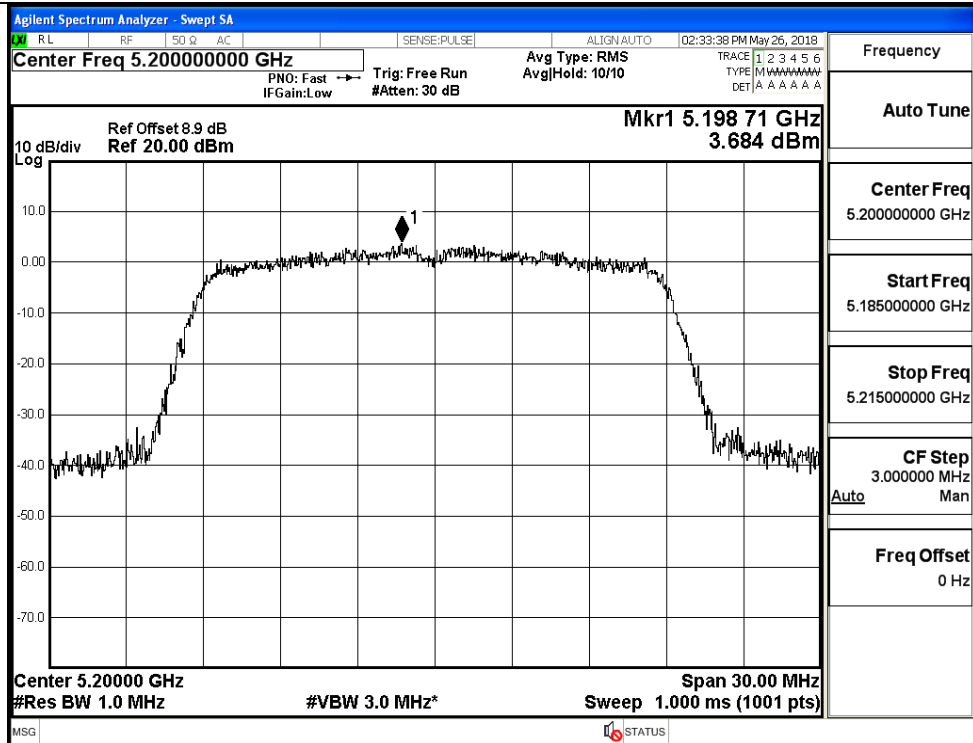
IEEE 802.11n HT40 / Channel 38 / 5190MHz



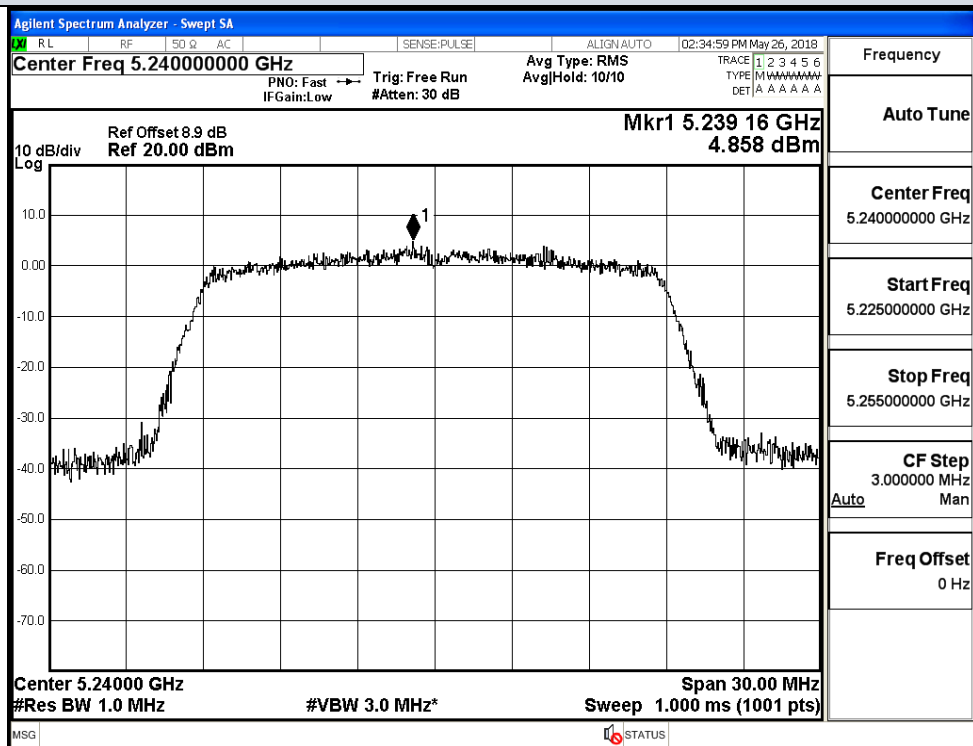
IEEE 802.11n HT40 / Channel 46 / 5230MHz



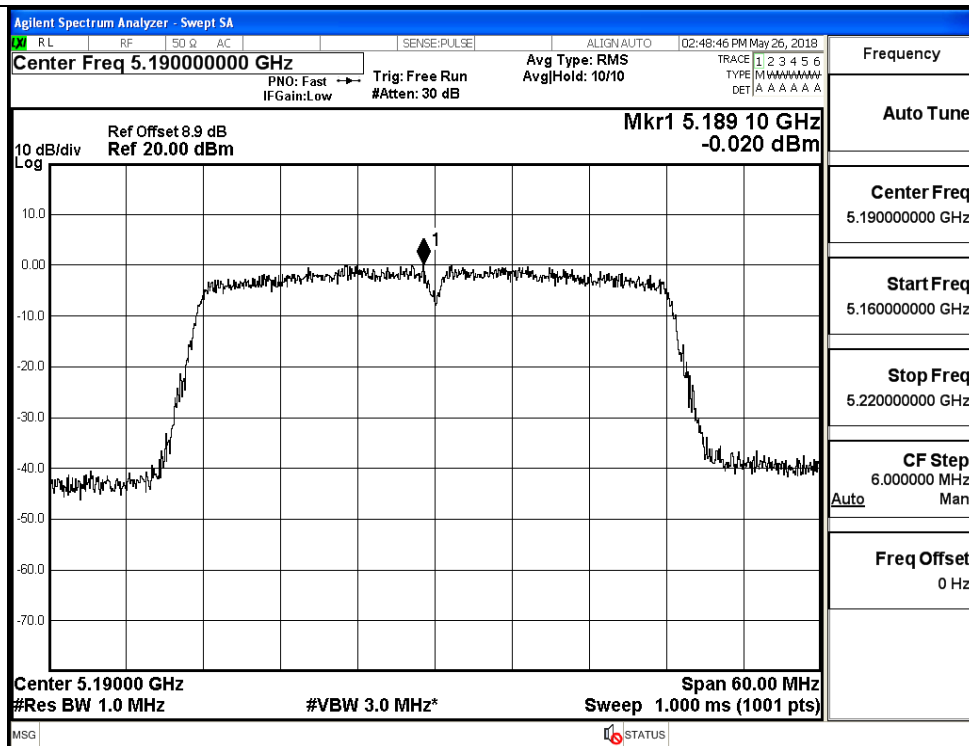
IEEE 802.11ac VHT20 / Channel 36 / 5180MHz



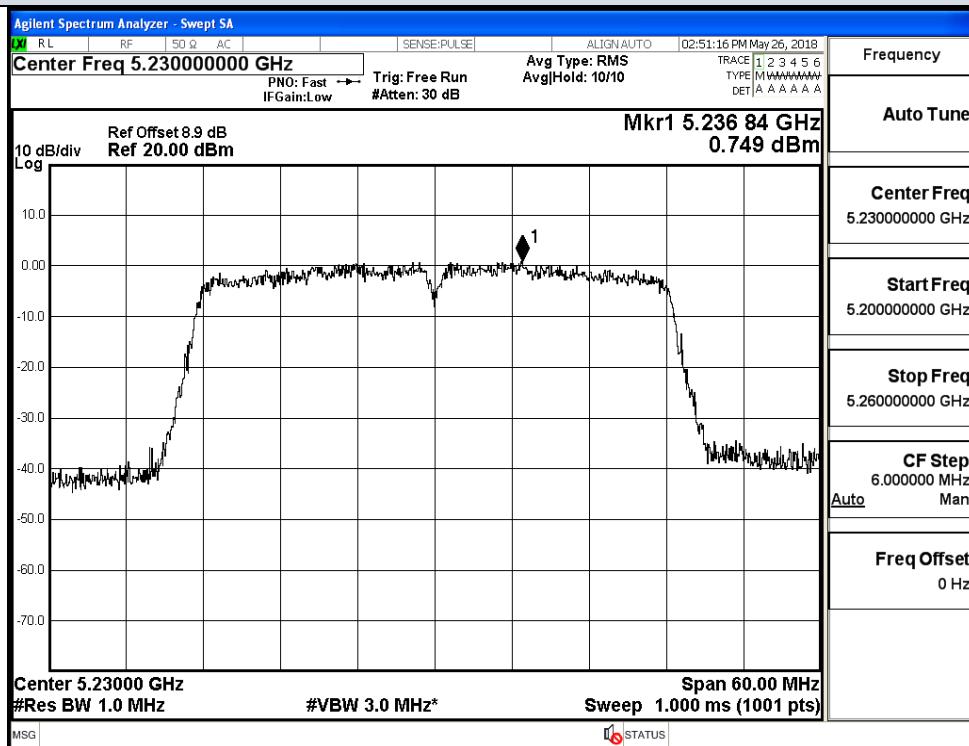
IEEE 802.11ac VHT20 / Channel 40 / 5200MHz



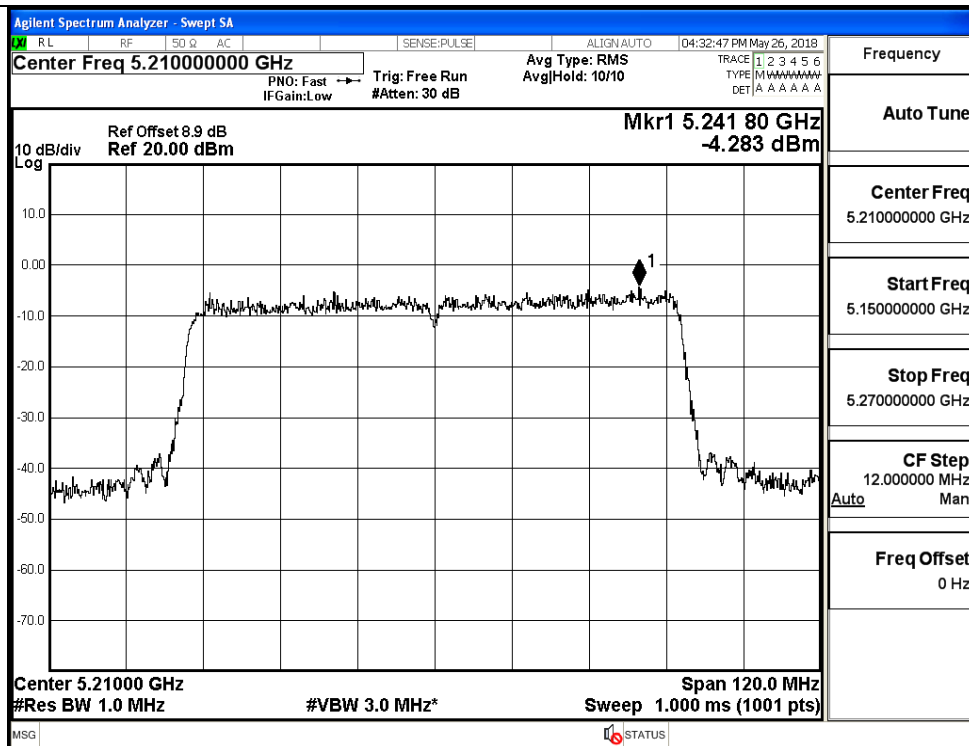
IEEE 802.11ac VHT20 / Channel 48 / 5240MHz



IEEE 802.11ac VHT40 / Channel 38 / 5190MHz



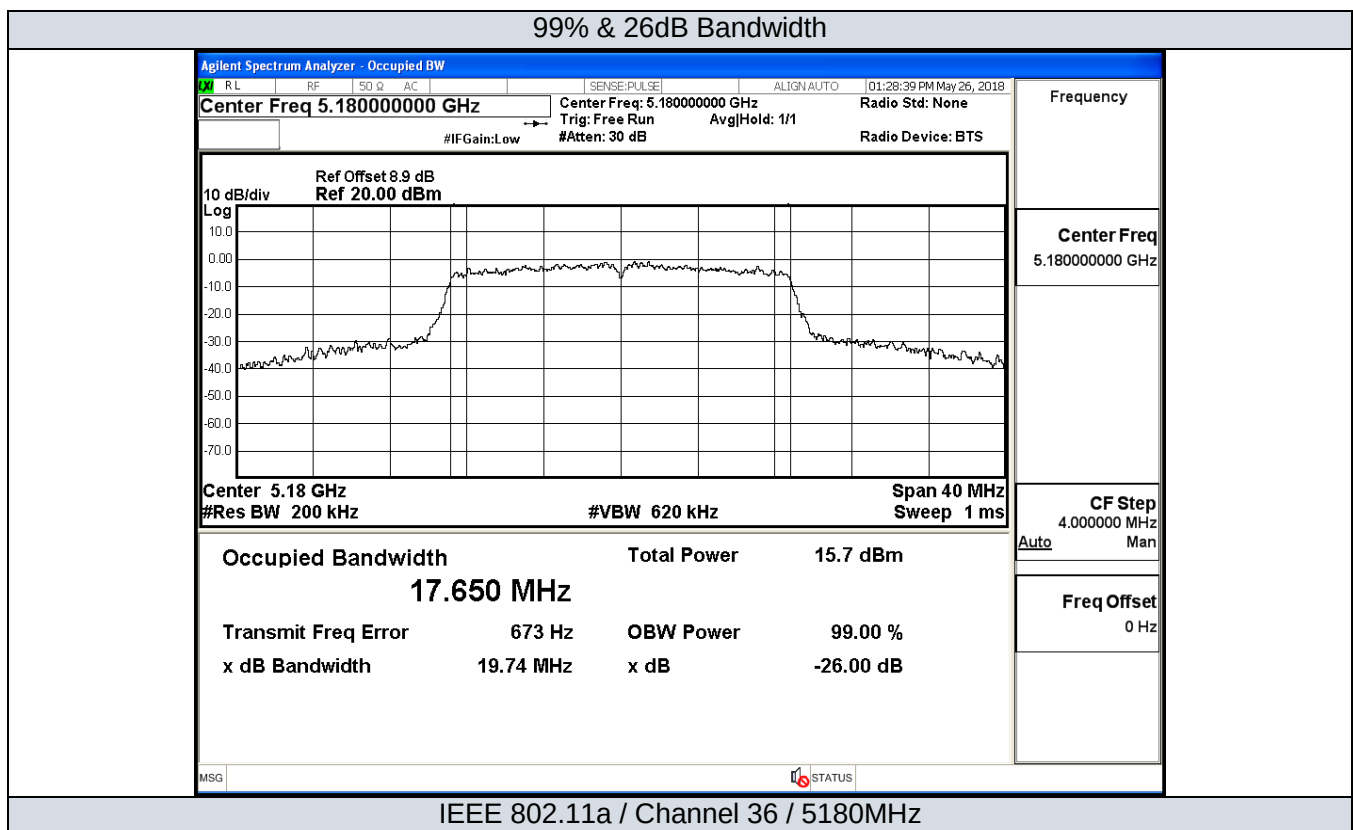
IEEE 802.11ac VHT40 / Channel 46 / 5230MHz

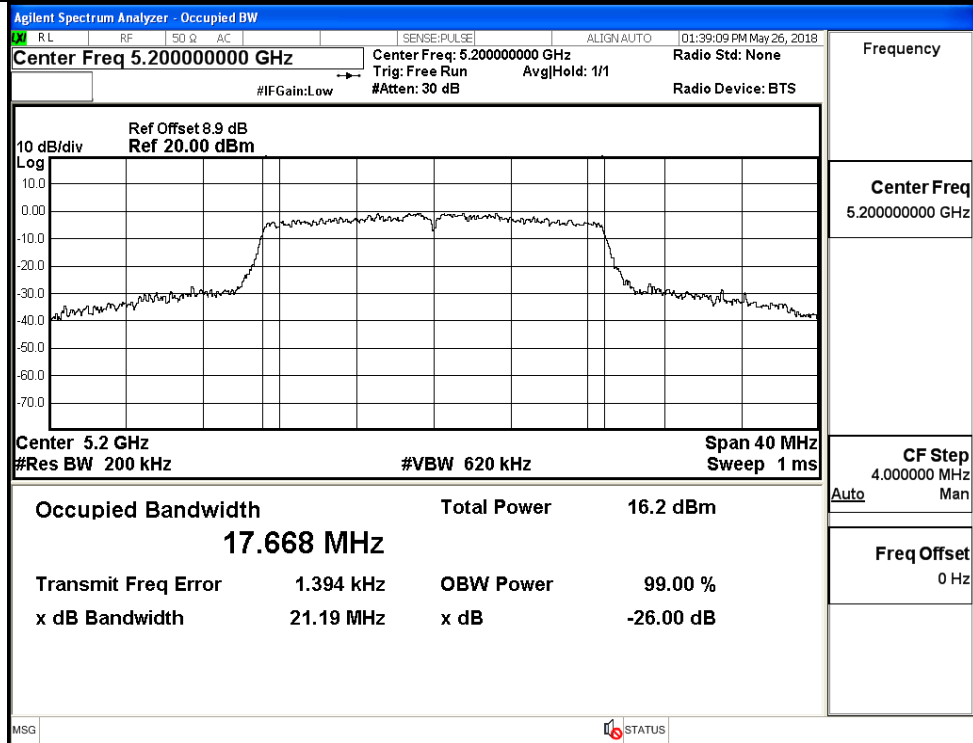


IEEE 802.11ac VHT80 / Channel 42 / 5210MHz

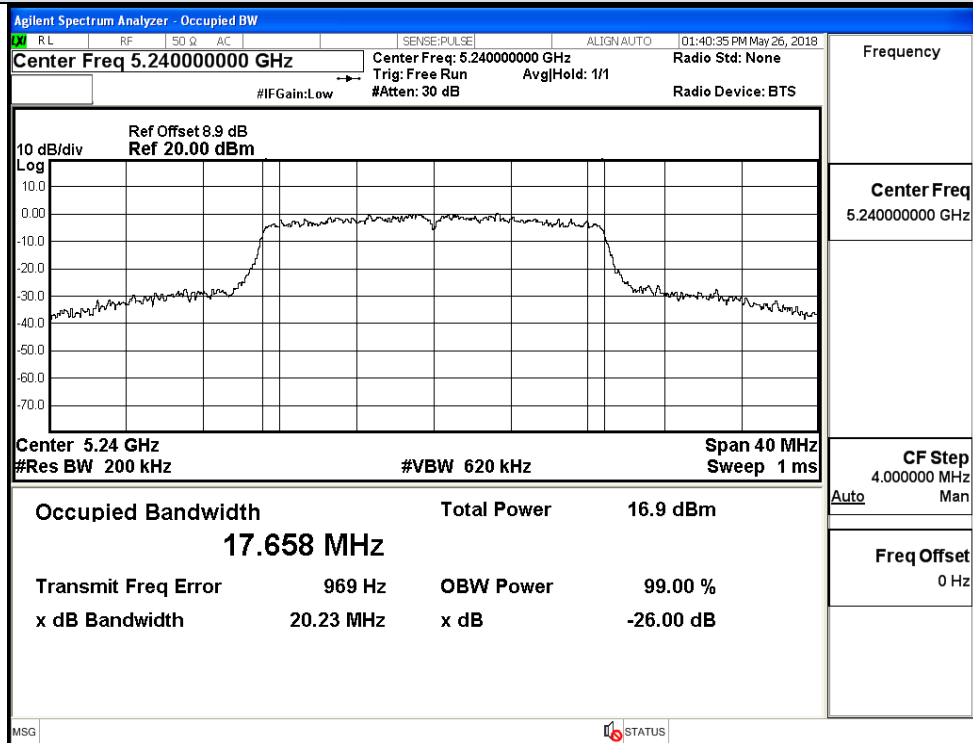
B.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
IEEE 802.11a	36	5180	17.650	19.740	No Limit
	40	5200	17.668	21.190	
	48	5240	17.658	20.230	
IEEE 802.11n HT20	36	5180	17.659	19.850	No Limit
	40	5200	17.687	19.870	
	48	5240	17.653	20.120	
IEEE 802.11n HT40	38	5190	35.989	39.910	No Limit
	46	5230	35.980	39.430	
IEEE 802.11ac VHT20	36	5180	17.594	19.580	No Limit
	40	5200	17.541	19.620	
	48	5240	17.603	19.500	
IEEE 802.11ac VHT40	38	5190	35.894	39.260	No Limit
	46	5230	35.975	39.090	
IEEE 802.11ac VHT80	42	5210	75.365	80.910	No Limit



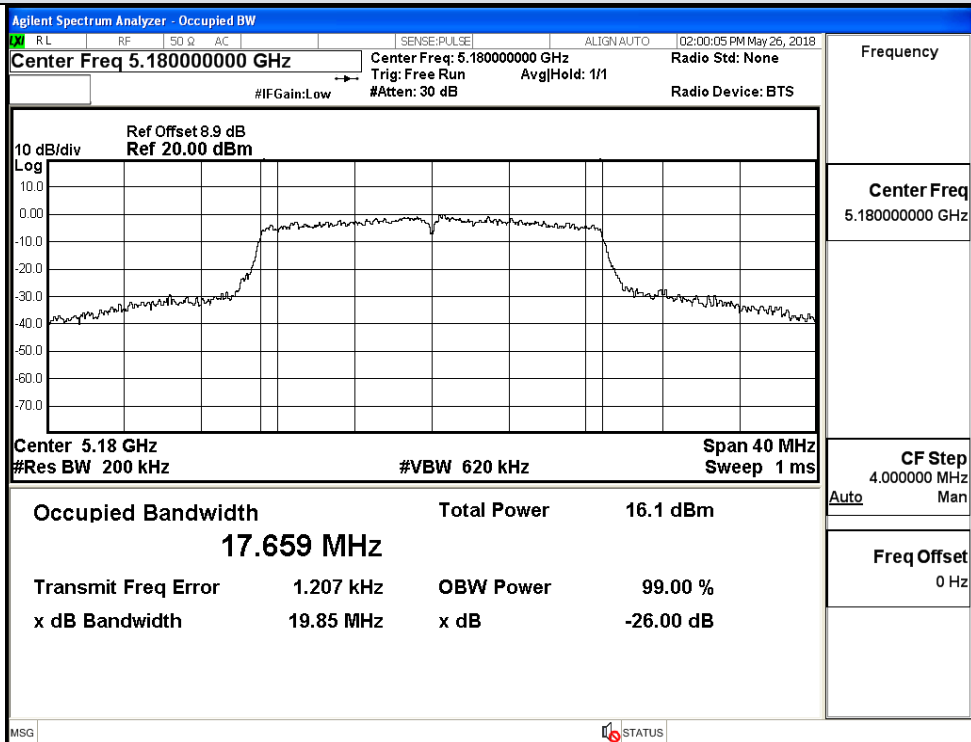


IEEE 802.11a / Channel 40 / 5200MHz

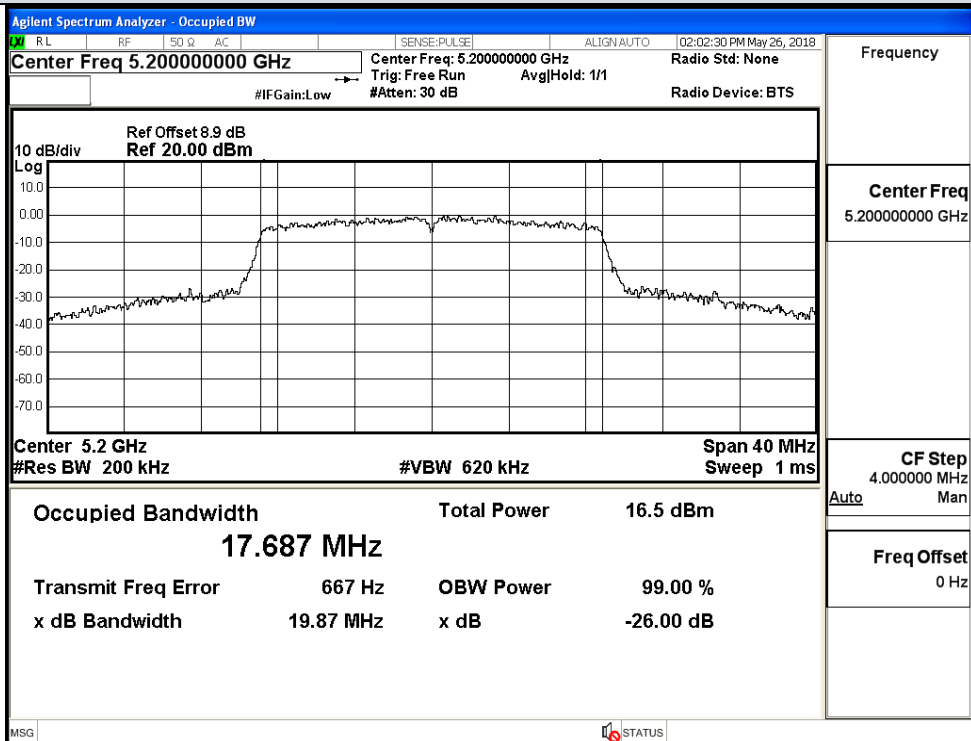


IEEE 802.11a / Channel 48 / 5240MHz

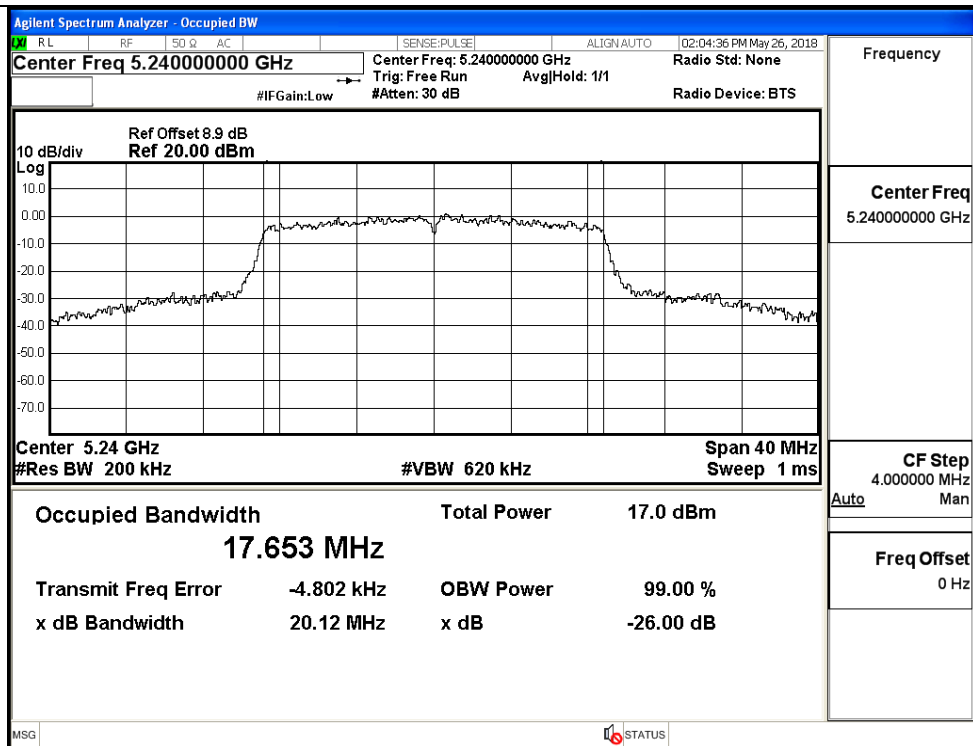
99% & 26dB Bandwidth



IEEE 802.11n HT20 / Channel 36 / 5180MHz

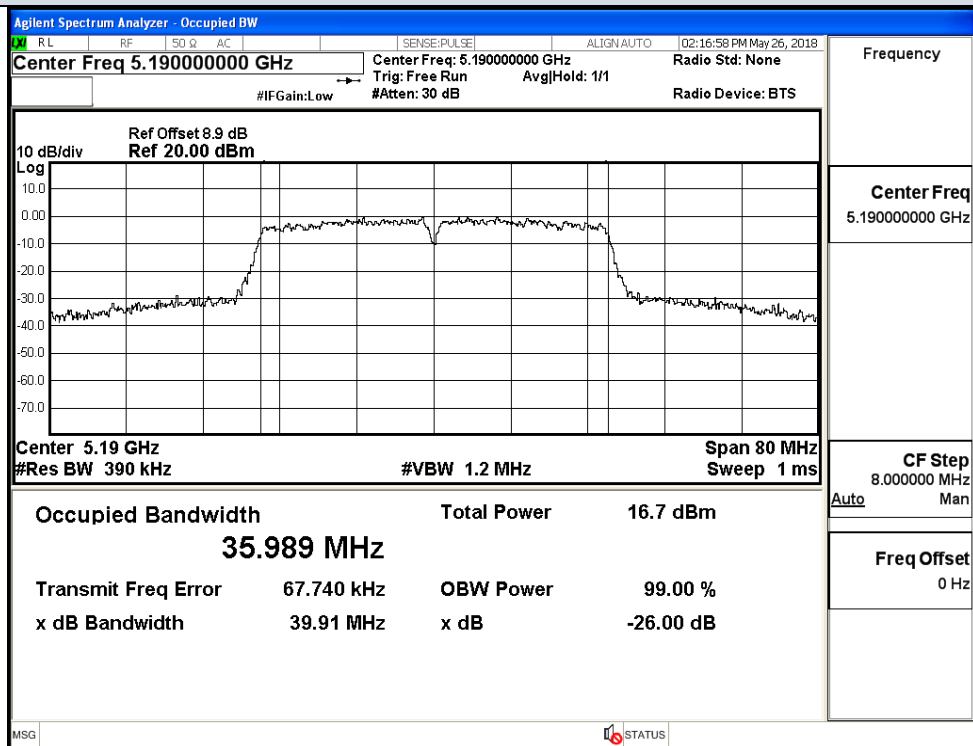


IEEE 802.11n HT20 / Channel 40 / 5200MHz

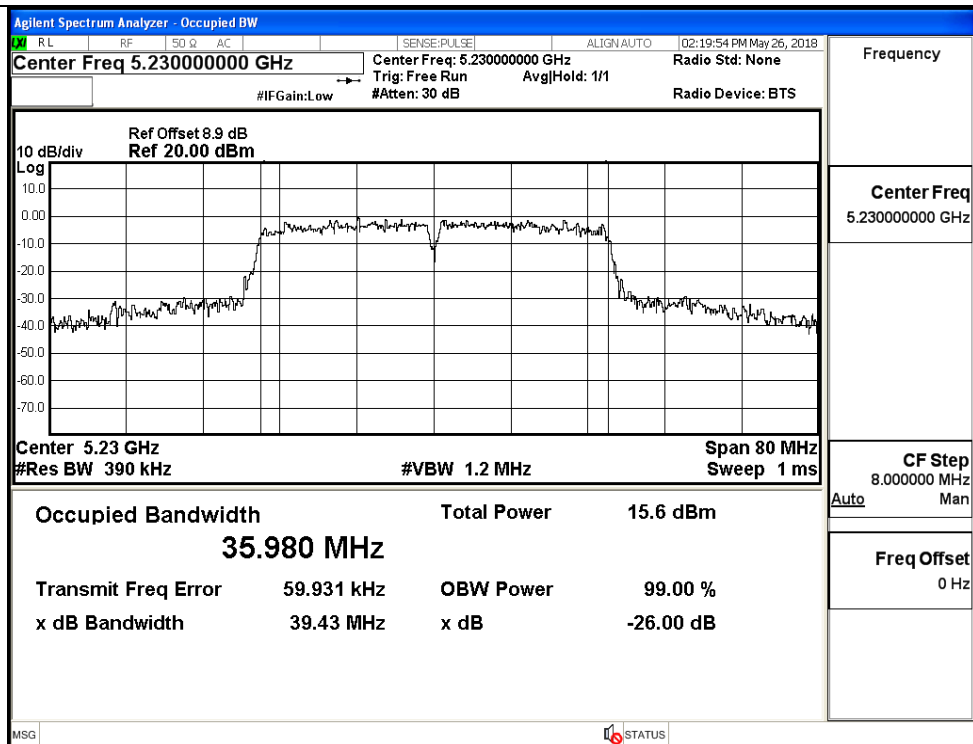


IEEE 802.11n HT20 / Channel 48 / 5240MHz

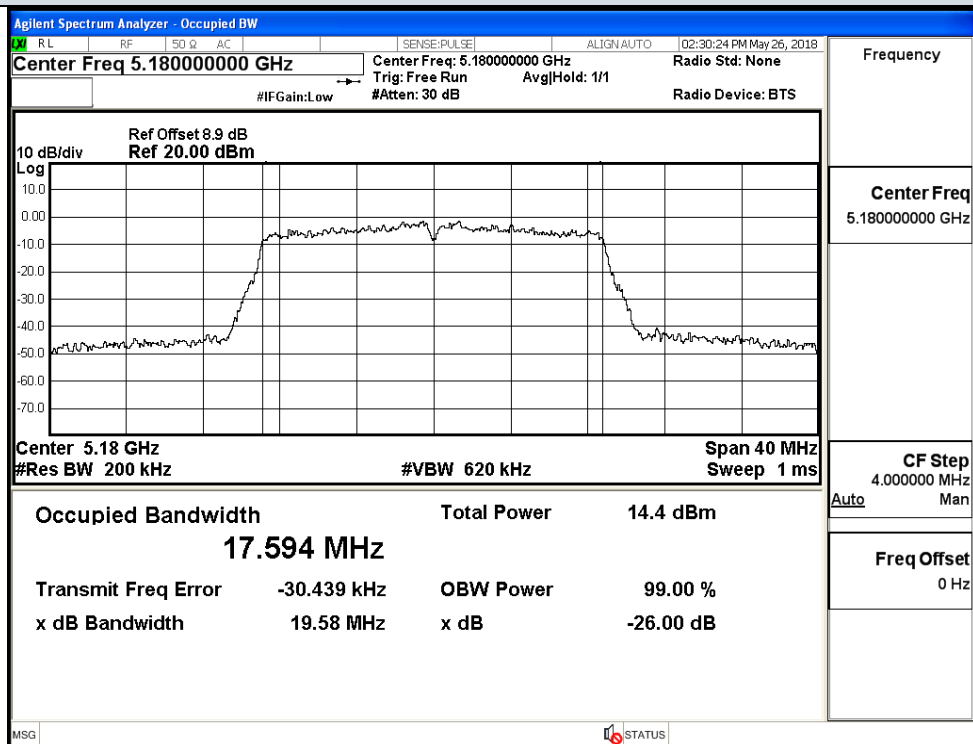
99% & 26dB Bandwidth



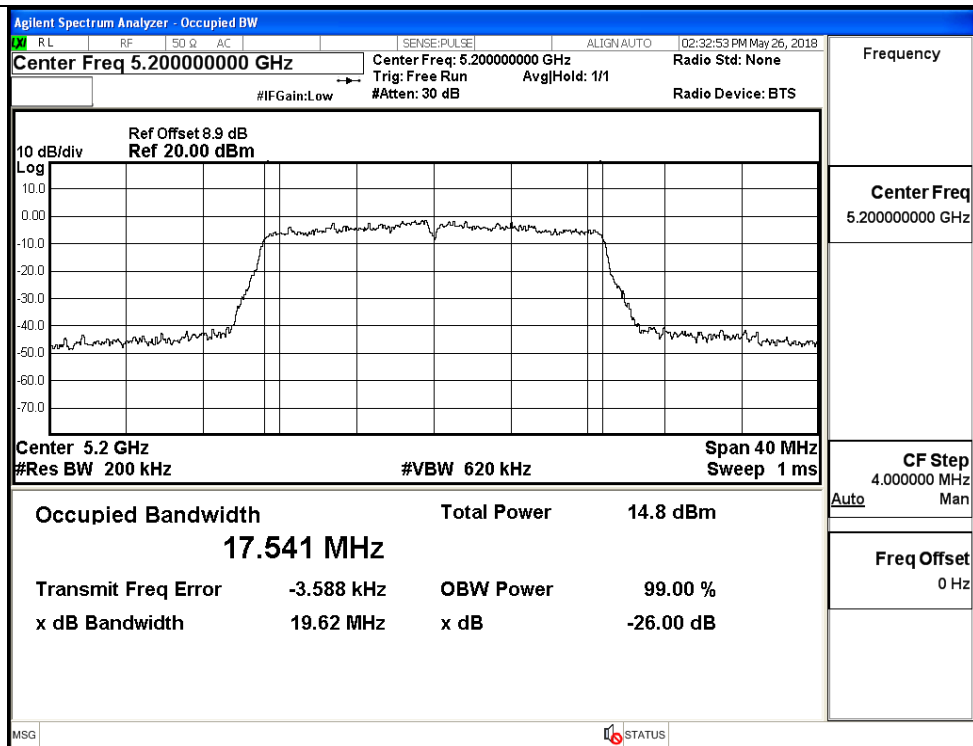
IEEE 802.11n HT40 / Channel 38 / 5190MHz



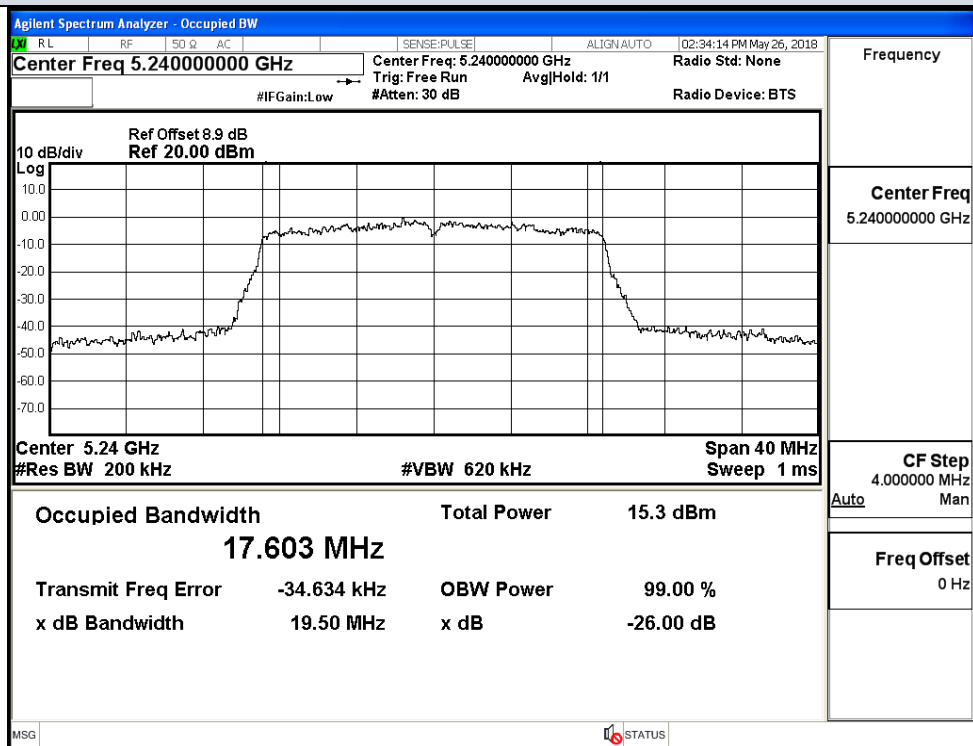
IEEE 802.11n HT40 / Channel 46 / 5230MHz



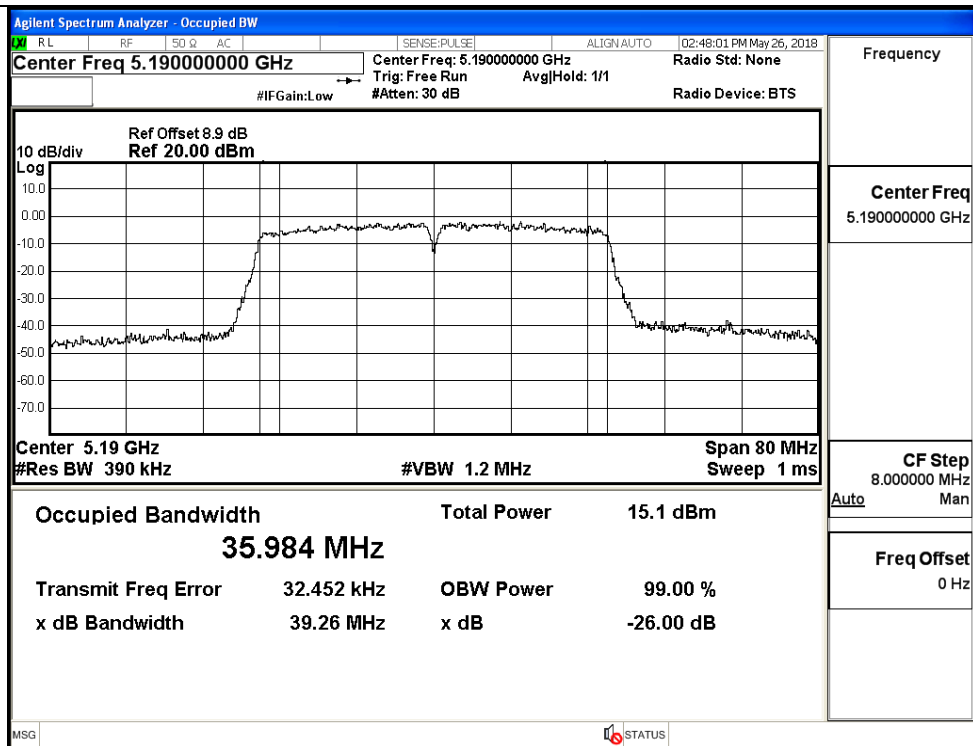
IEEE 802.11ac VHT20 / Channel 36 / 5180MHz



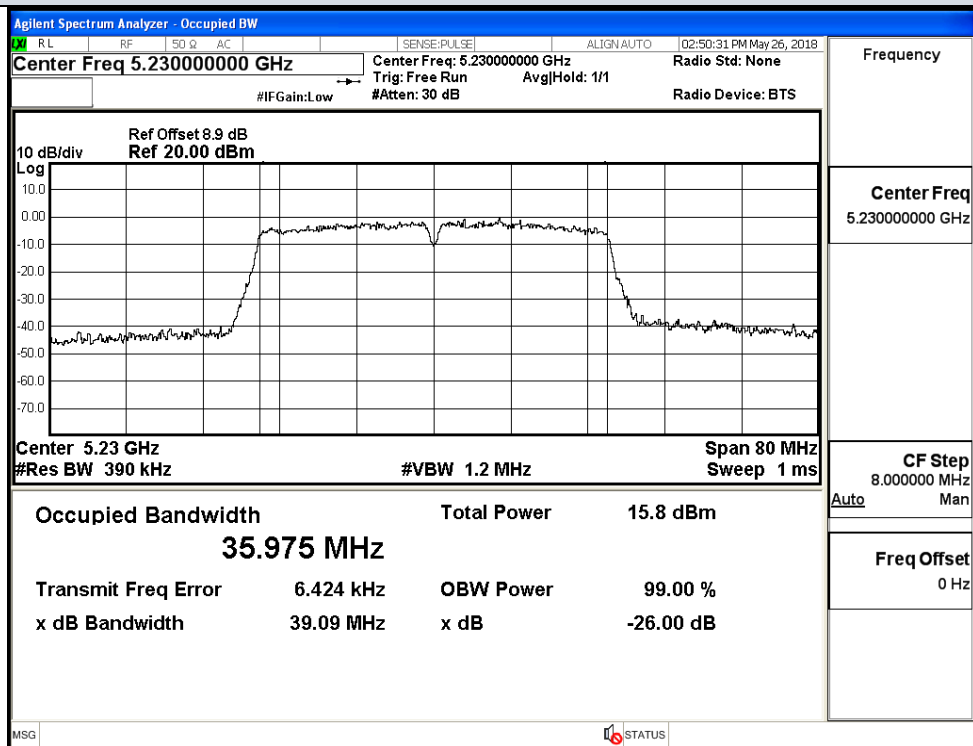
IEEE 802.11ac VHT20 / Channel 40 / 5200MHz



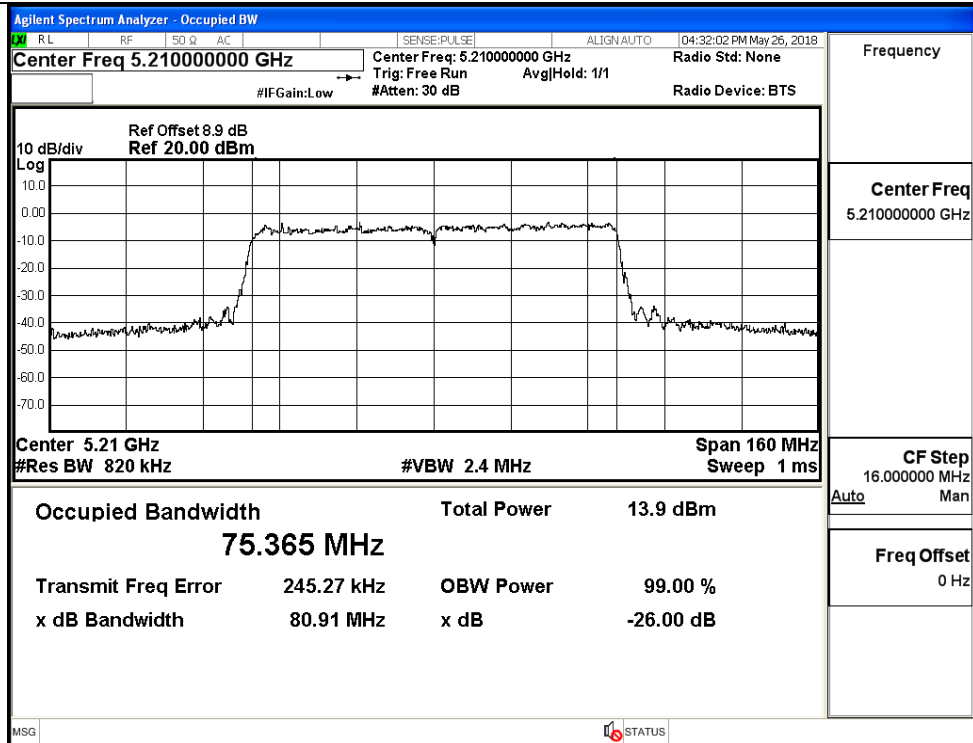
IEEE 802.11ac VHT20 / Channel 48 / 5240MHz



IEEE 802.11ac VHT40 / Channel 38 / 5190MHz



IEEE 802.11ac VHT40 / Channel 46 / 5230MHz

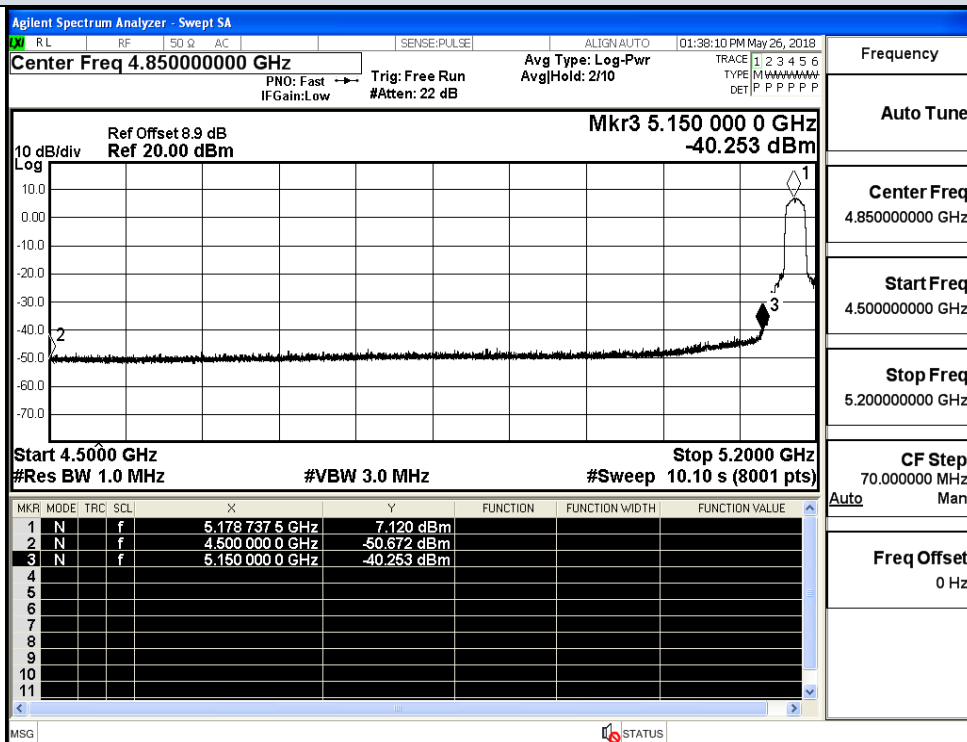


IEEE 802.11ac VHT80 / Channel 42 / 5210MHz

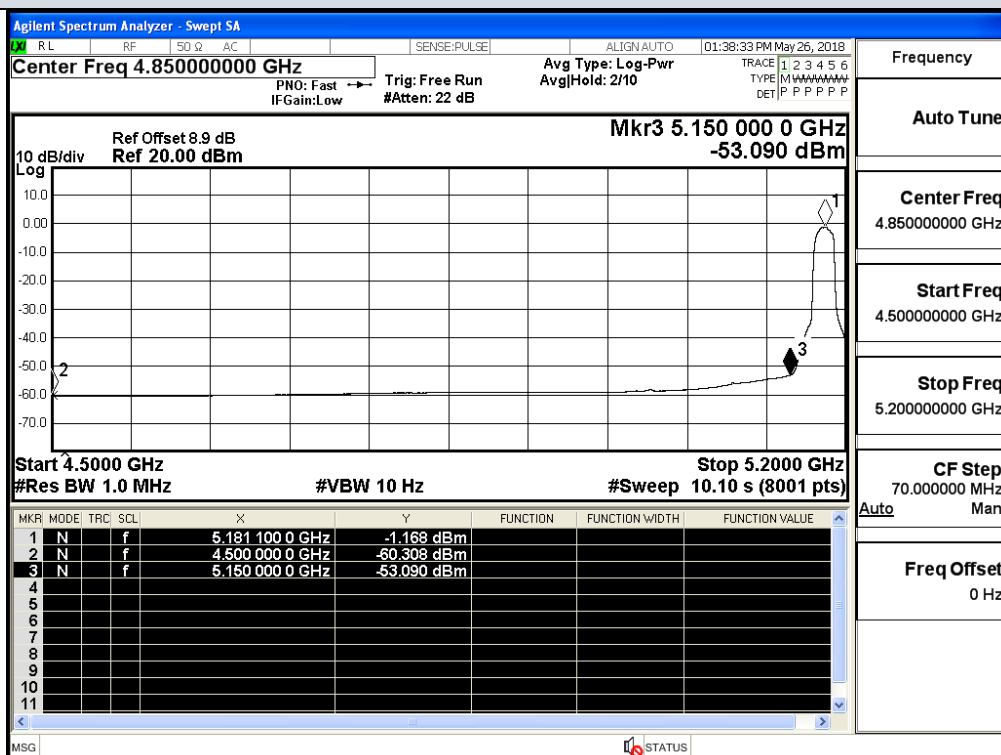
B.5 Undesirable Emissions Measurement

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)
IEEE 802.111a	36	4500.0	-50.672	5.000	0	49.556	Peak	68.20
		4500.0	-60.308	5.000	0	39.920	Average	54.00
		5150.0	-40.253	5.000	0	59.975	Peak	68.20
		5150.0	-53.090	5.000	0	47.138	Average	54.00
	48	5350.0	-47.945	5.000	0	52.283	Peak	68.20
		5350.0	-58.132	5.000	0	42.096	Average	54.00
		5460.0	-49.752	5.000	0	50.476	Peak	68.20
		5460.0	-60.055	5.000	0	40.173	Average	54.00
IEEE 802.111n HT20	36	4500.0	-50.781	5.000	0	49.447	Peak	68.20
		4500.0	-60.245	5.000	0	39.983	Average	54.00
		5150.0	-40.709	5.000	0	59.519	Peak	68.20
		5150.0	-52.992	5.000	0	47.236	Average	54.00
	48	5350.0	-47.454	5.000	0	52.774	Peak	68.20
		5350.0	-58.030	5.000	0	42.198	Average	54.00
		5460.0	-50.331	5.000	0	49.897	Peak	68.20
		5460.0	-59.938	5.000	0	40.290	Average	54.00
IEEE 802.111n HT40	38	4500.0	-50.207	5.000	0	50.021	Peak	68.20
		4500.0	-60.264	5.000	0	39.964	Average	54.00
		5150.0	-36.655	5.000	0	63.573	Peak	68.20
		5150.0	-47.222	5.000	0	53.006	Average	54.00
	46	5350.0	-47.924	5.000	0	52.304	Peak	68.20
		5350.0	-57.956	5.000	0	42.272	Average	54.00
		5460.0	-50.006	5.000	0	50.222	Peak	68.20
		5460.0	-59.679	5.000	0	40.549	Average	54.00
IEEE 802.111ac VHT20	36	4500.0	-50.272	5.000	0	49.956	Peak	68.20
		4500.0	-60.250	5.000	0	39.978	Average	54.00
		5150.0	-43.746	5.000	0	56.482	Peak	68.20
		5150.0	-54.617	5.000	0	45.611	Average	54.00
	48	4500.0	-48.676	5.000	0	51.552	Peak	68.20
		4500.0	-58.759	5.000	0	41.469	Average	54.00
		5150.0	-49.659	5.000	0	50.569	Peak	68.20
		5150.0	-60.110	5.000	0	40.118	Average	54.00
IEEE 802.111ac VHT40	38	4500.0	-50.085	5.000	0	50.143	Peak	68.20
		4500.0	-60.231	5.000	0	39.997	Average	54.00
		5150.0	-41.332	5.000	0	58.896	Peak	68.20
		5150.0	-52.558	5.000	0	47.670	Average	54.00
	46	5350.0	-48.690	5.000	0	51.538	Peak	68.20
		5350.0	-58.690	5.000	0	41.538	Average	54.00
		5460.0	-49.440	5.000	0	50.788	Peak	68.20
		5460.0	-59.794	5.000	0	40.434	Average	54.00
IEEE 802.111ac VHT80	42	4500.0	-47.554	5.000	0	52.674	Peak	68.20
		4500.0	-57.025	5.000	0	43.203	Average	54.00
		5150.0	-48.823	5.000	0	51.405	Peak	68.20
		5150.0	-58.007	5.000	0	42.221	Average	54.00
		5350.0	-50.196	5.000	0	50.032	Peak	68.20
		5350.0	-60.158	5.000	0	40.070	Average	54.00
		5460.0	-42.620	5.000	0	57.608	Peak	68.20
		5460.0	-51.623	5.000	0	48.605	Average	54.00

Undesirable Emissions Measurement

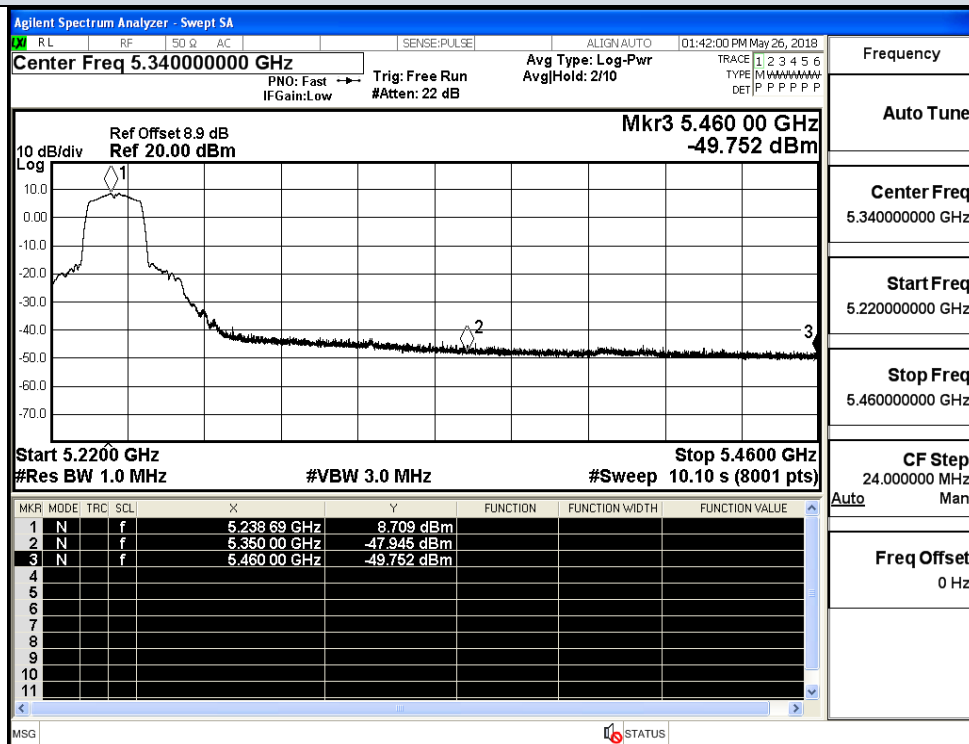


IEEE 802.11a / Channel 36 / 5180MHz / Peak

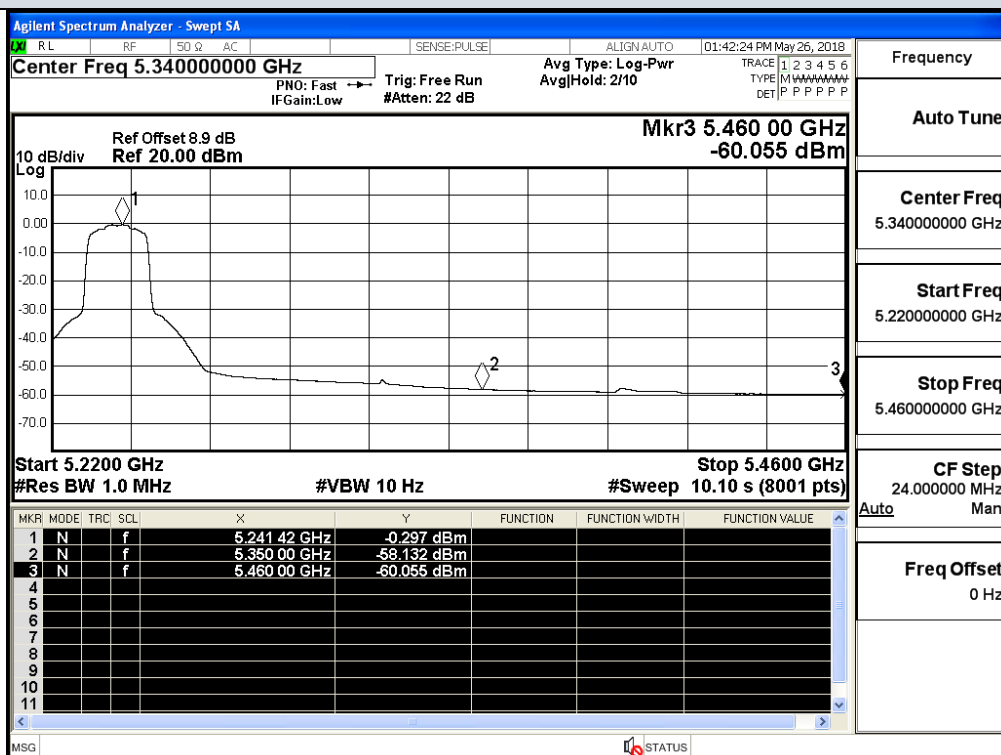


IEEE 802.11a / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement

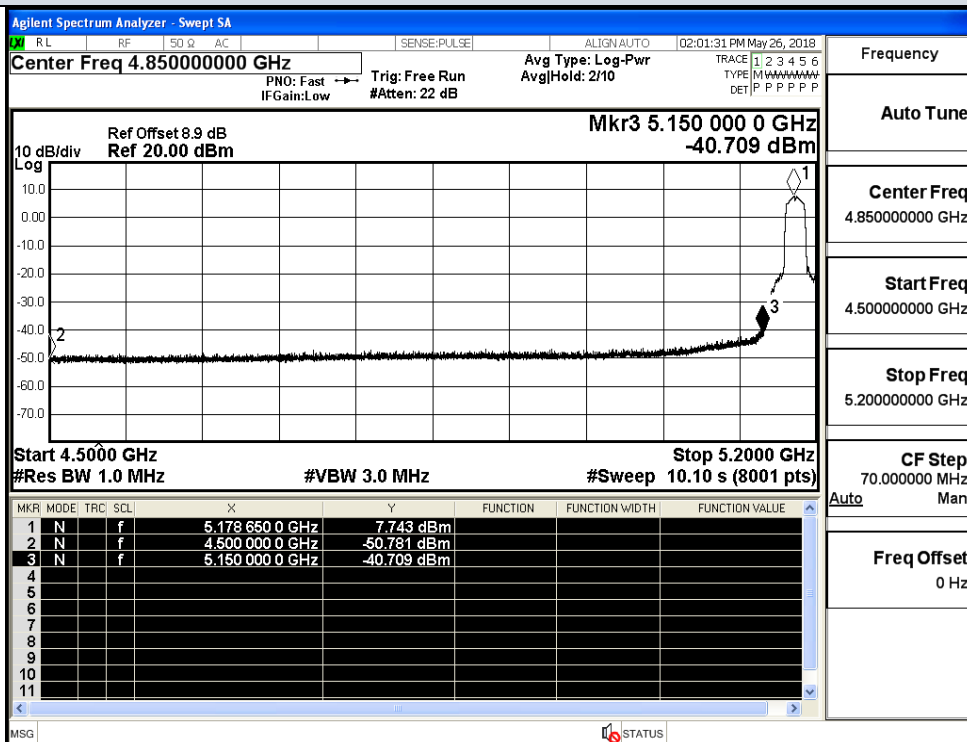


IEEE 802.11a / Channel 48 / 5240MHz / Peak

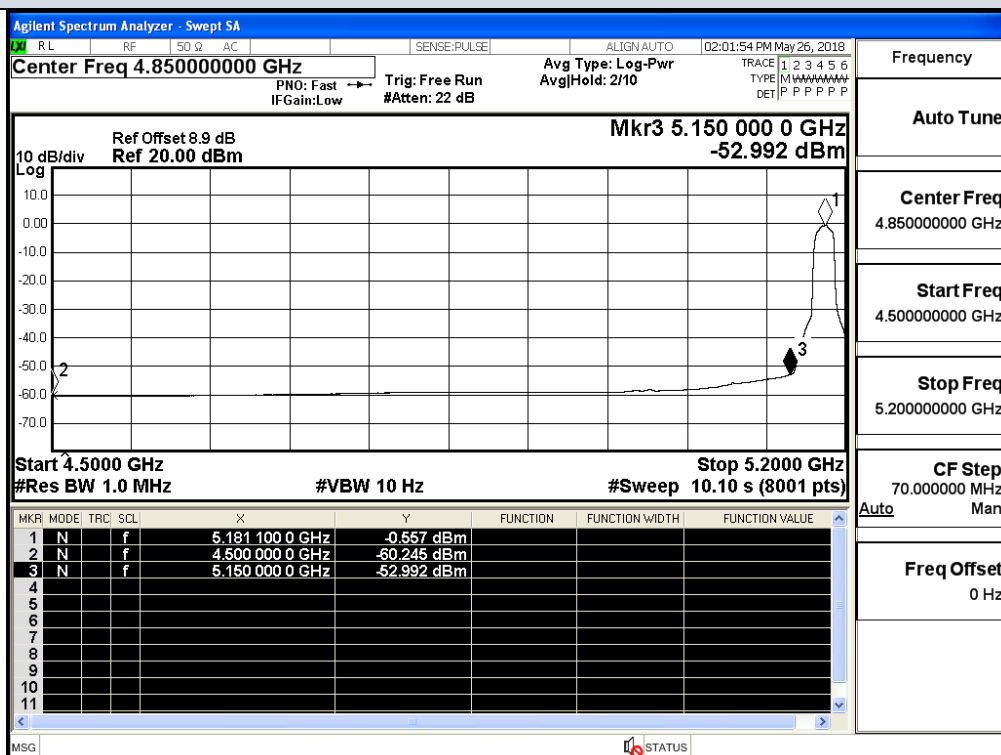


IEEE 802.11a / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement

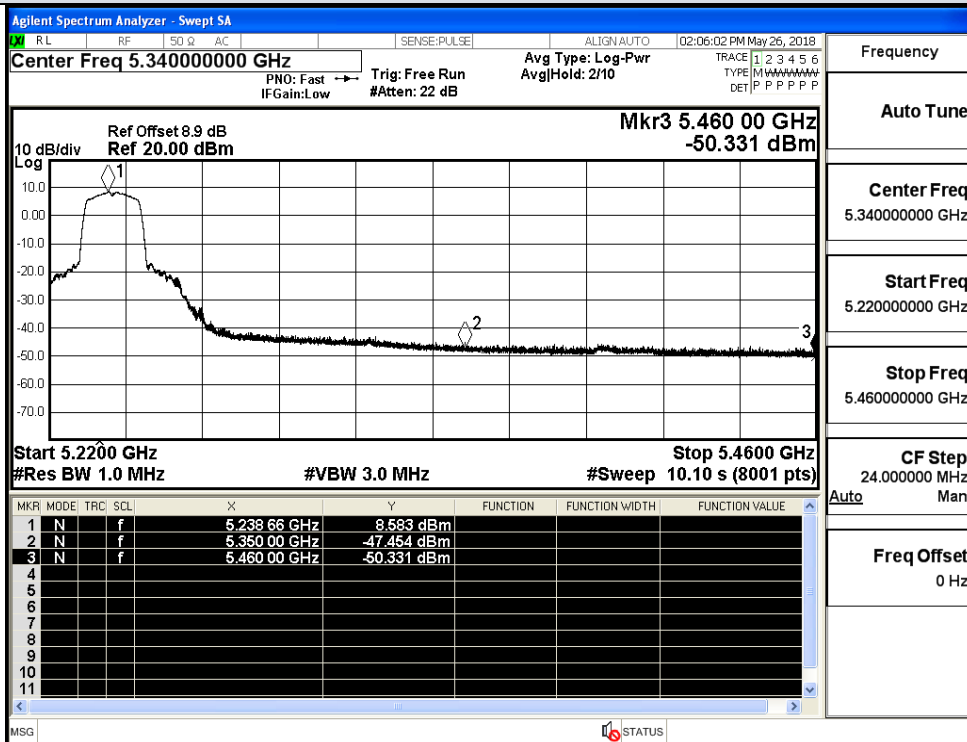


IEEE 802.11n HT20 / Channel 36 / 5180MHz / Peak

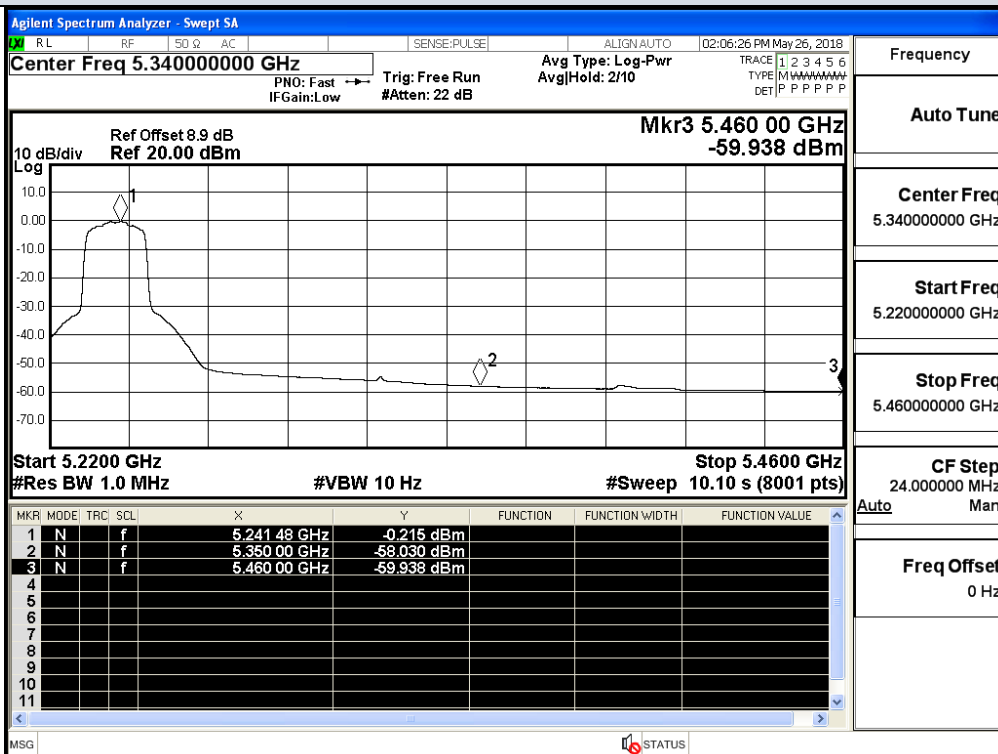


IEEE 802.11n HT20 / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement

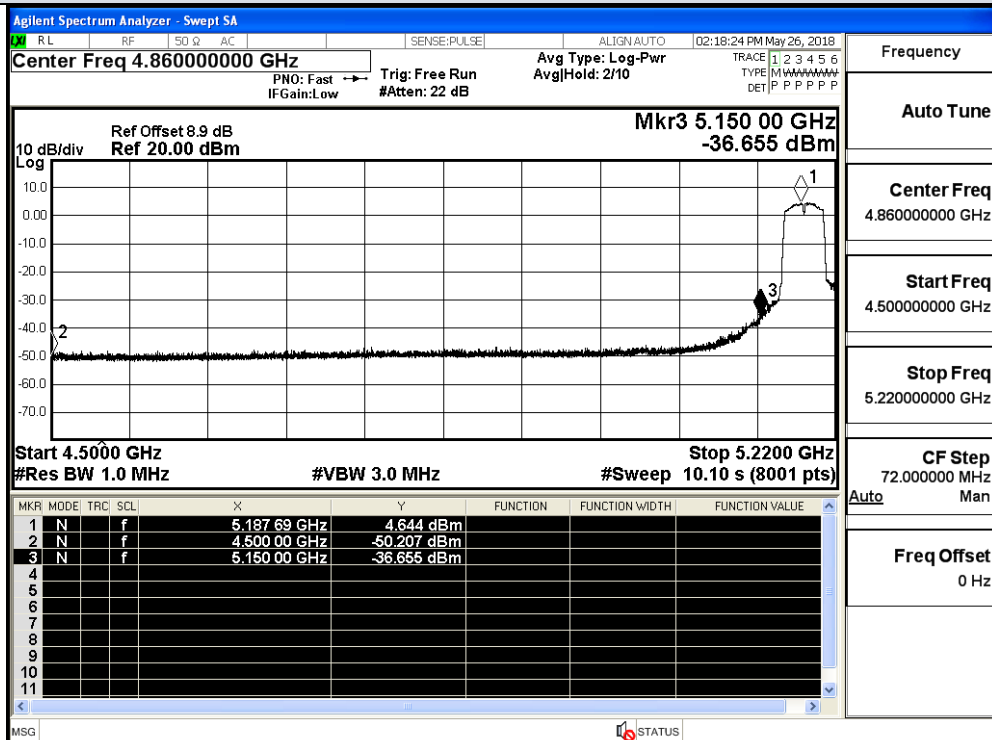


IEEE 802.11n HT20 / Channel 48 / 5240MHz / Peak

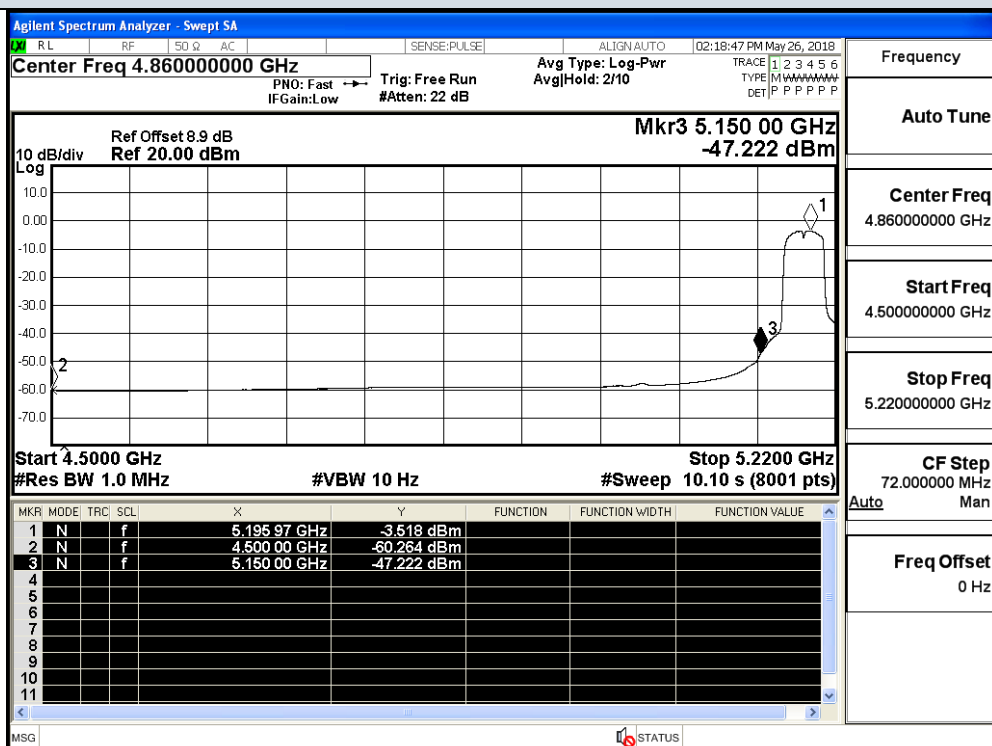


IEEE 802.11n HT20 / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement

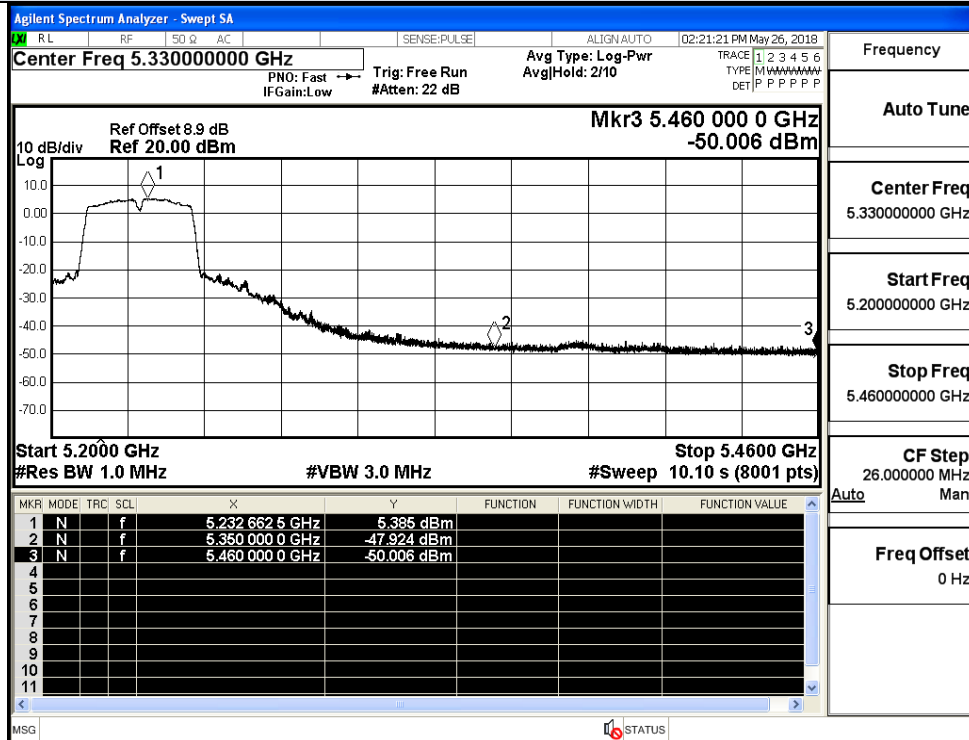


IEEE 802.11n HT40 / Channel 36 / 5180MHz / Peak

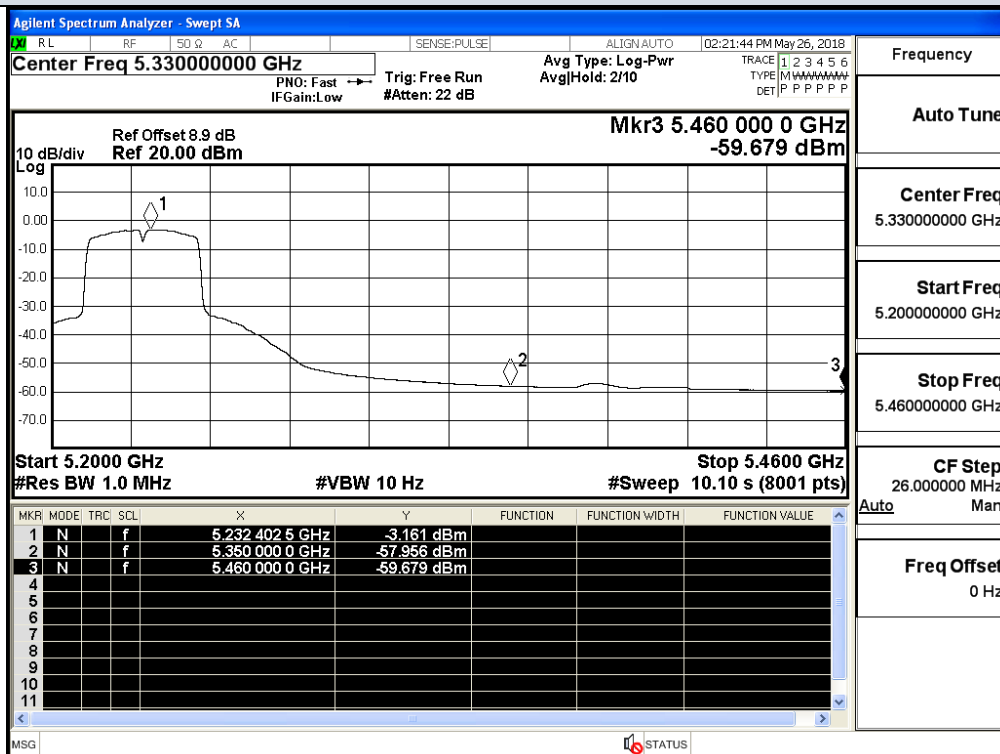


IEEE 802.11n HT40 / Channel 36 / 5180MHz / Average

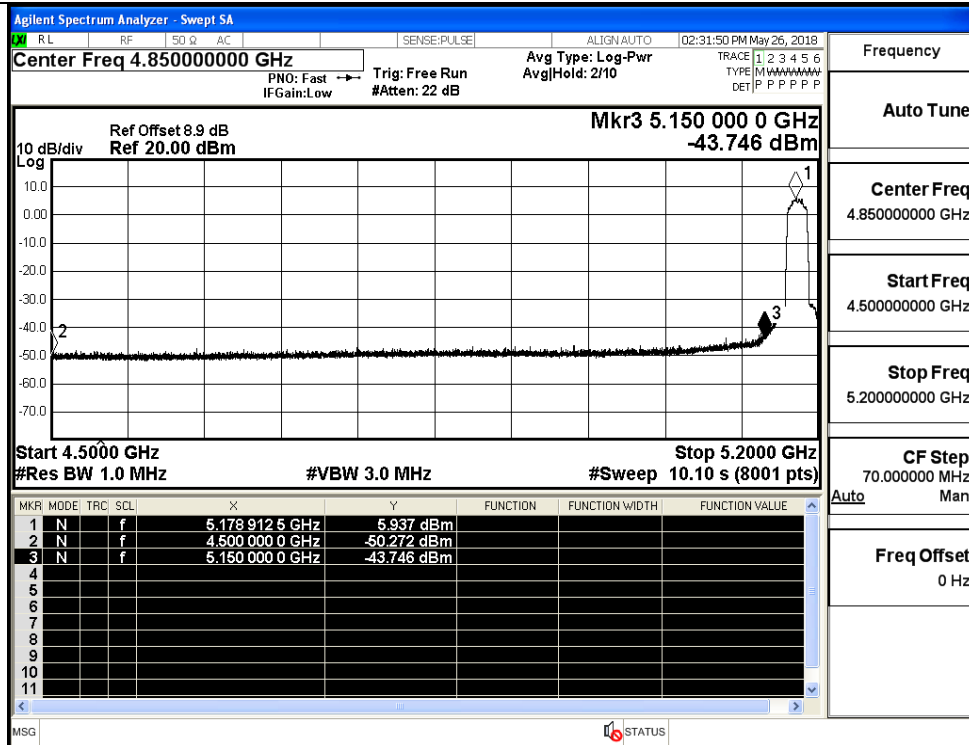
Undesirable Emissions Measurement



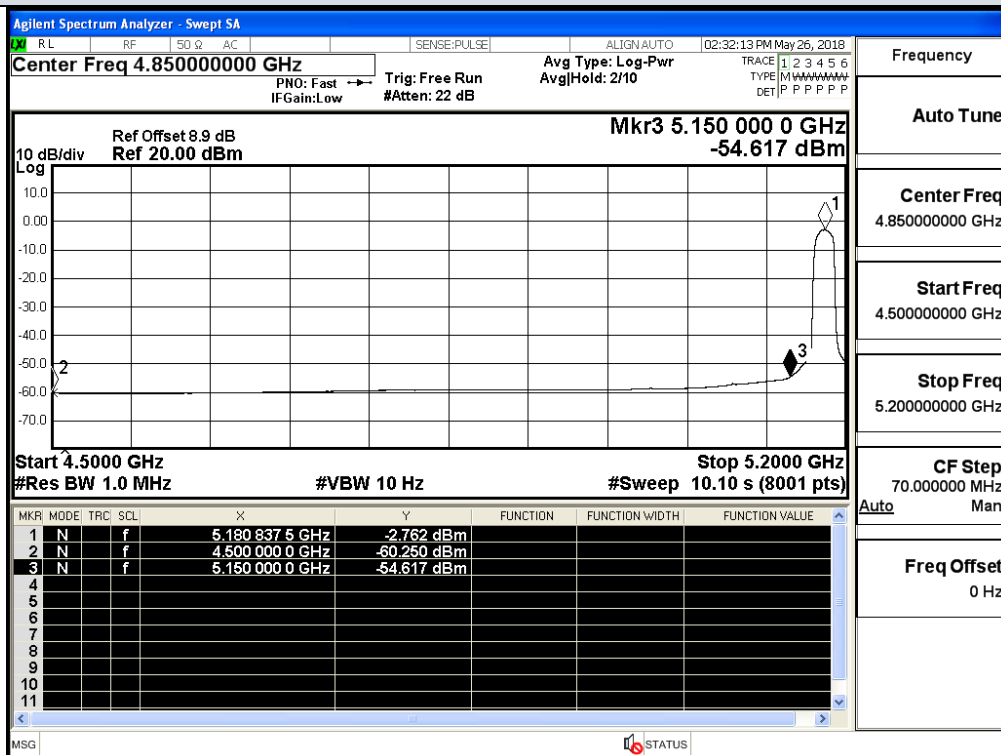
IEEE 802.11n HT40 / Channel 48 / 5230MHz / Peak



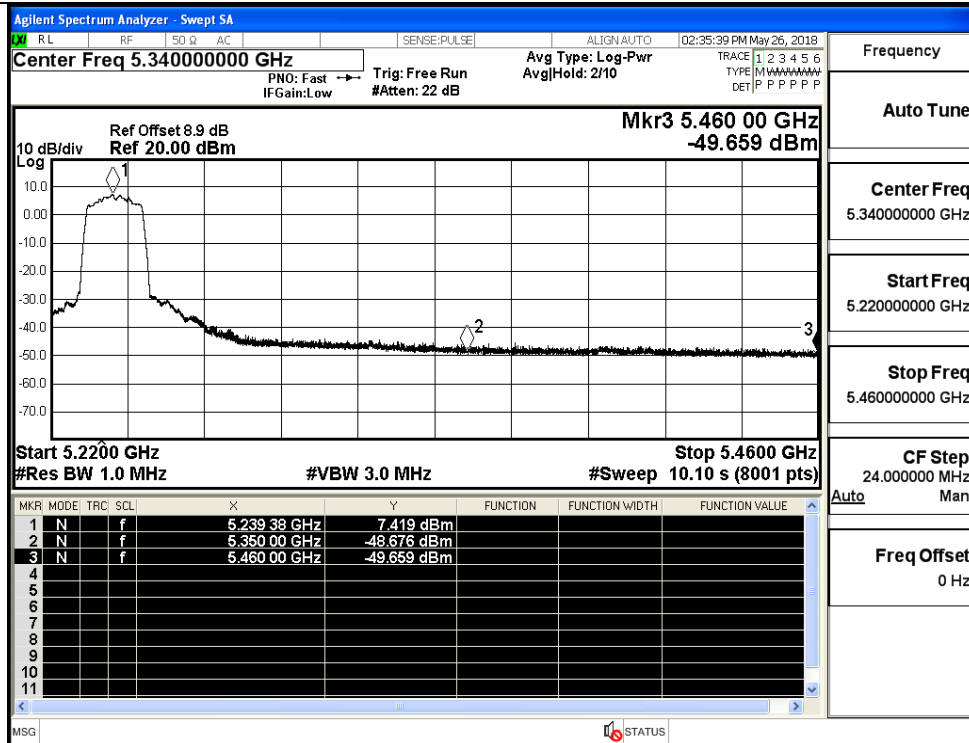
IEEE 802.11n HT40 / Channel 48 / 5230MHz / Average



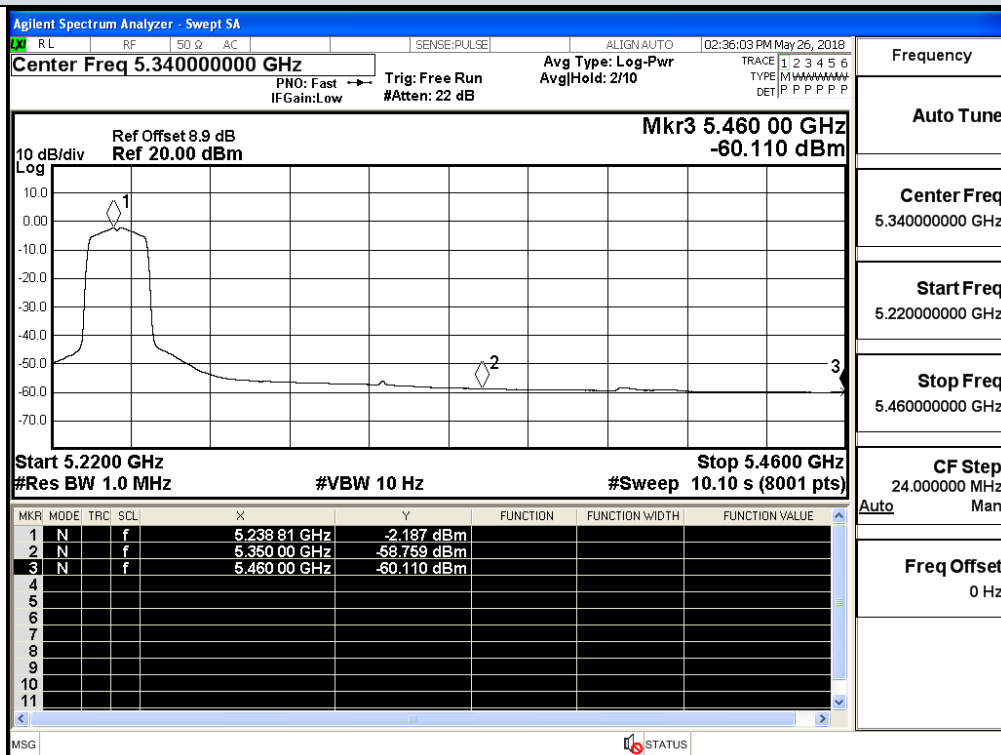
IEEE 802.11ac VHT20 / Channel 36 / 5180MHz / Peak



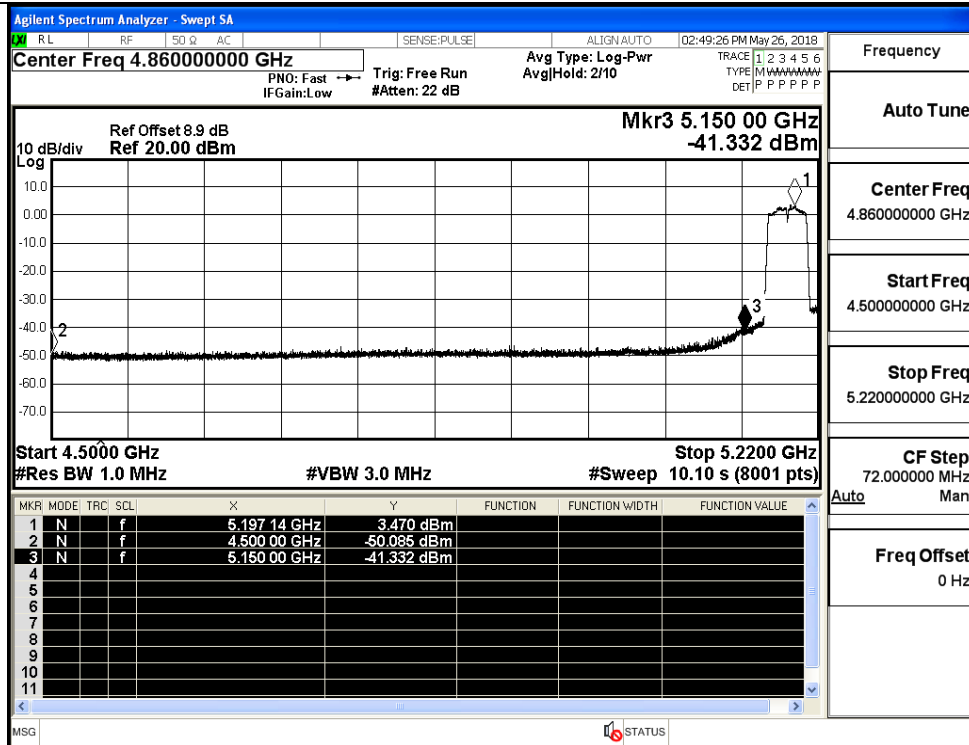
IEEE 802.11ac VHT20 / Channel 36 / 5180MHz / Average



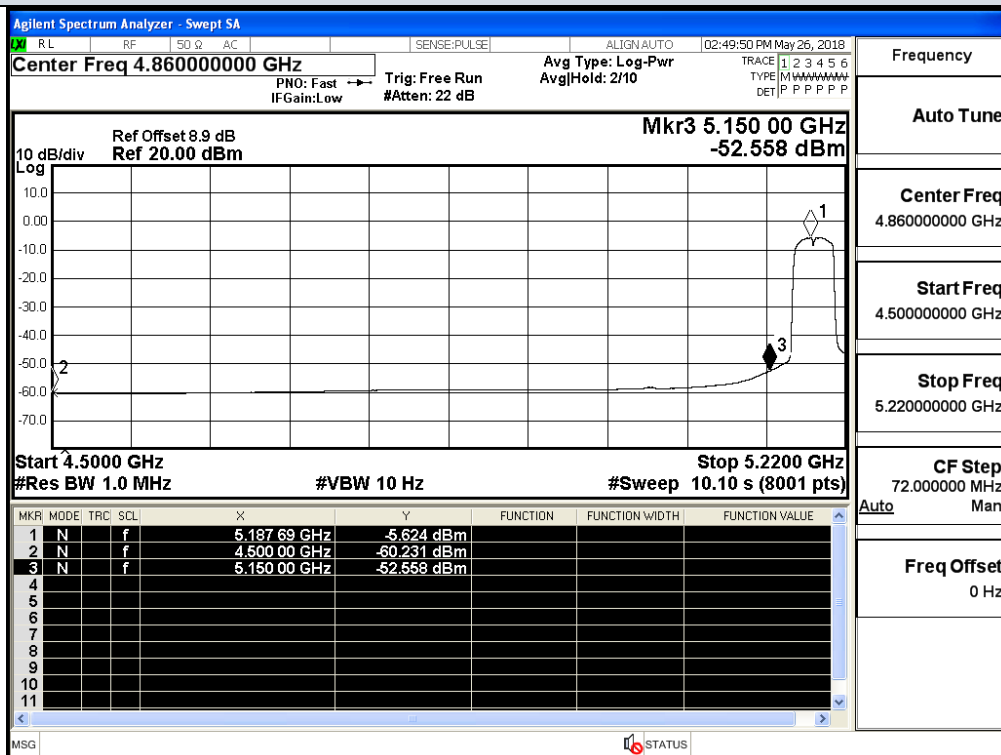
IEEE 802.11ac VHT20 / Channel 48 / 5240MHz / Peak



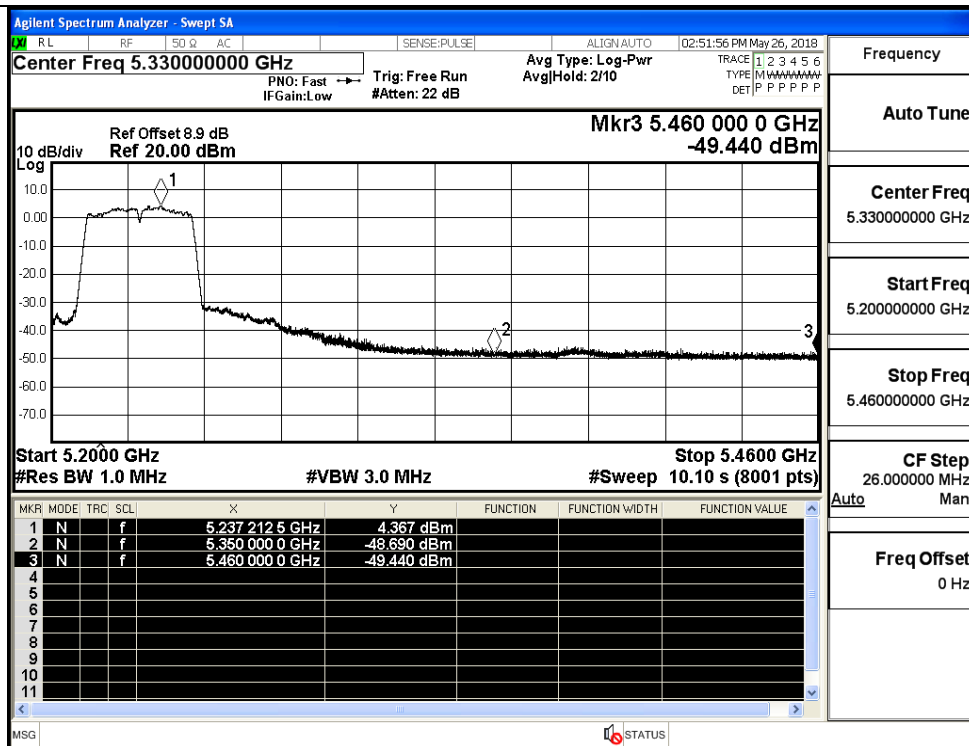
IEEE 802.11ac VHT20 / Channel 48 / 5240MHz / Average



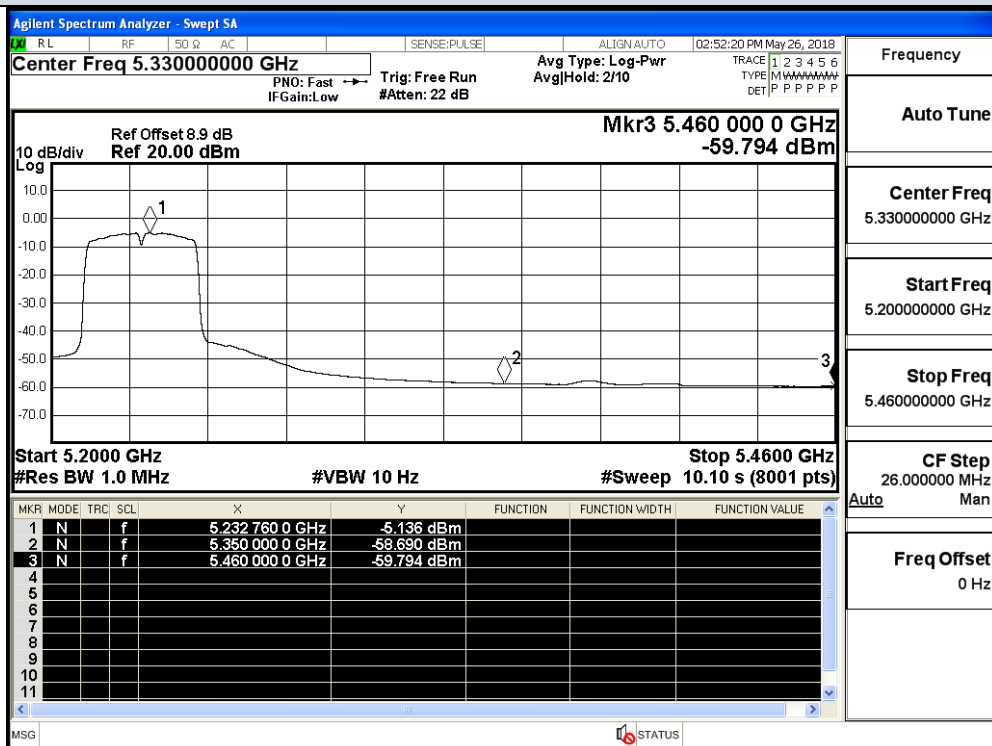
IEEE 802.11ac VHT40 / Channel 36 / 5180MHz / Peak



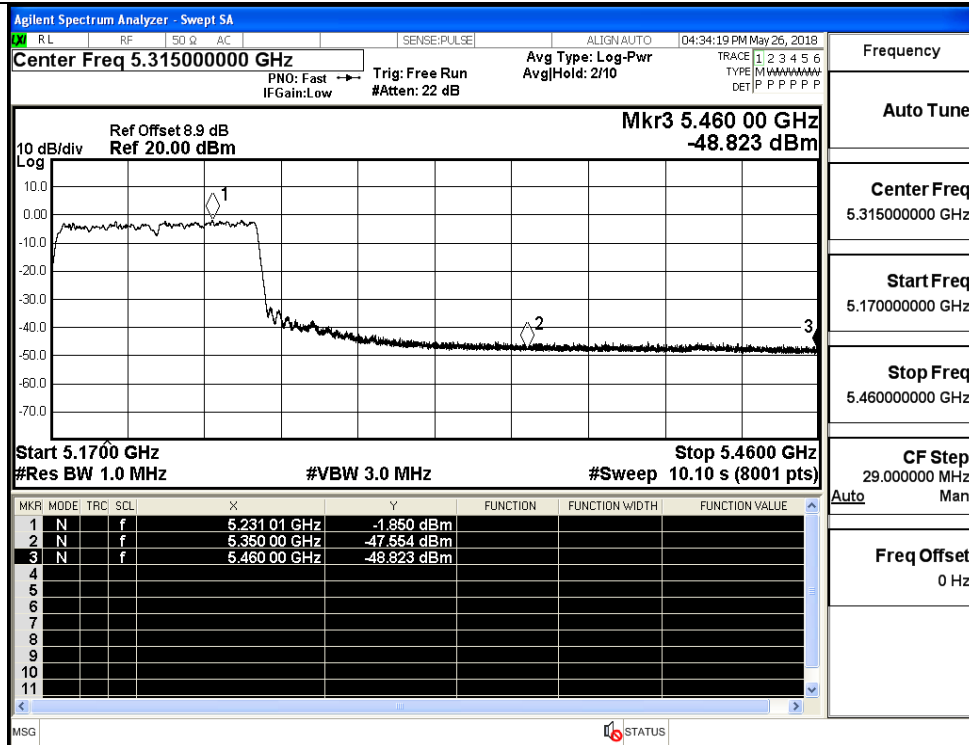
IEEE 802.11ac VHT40 / Channel 36 / 5180MHz / Average



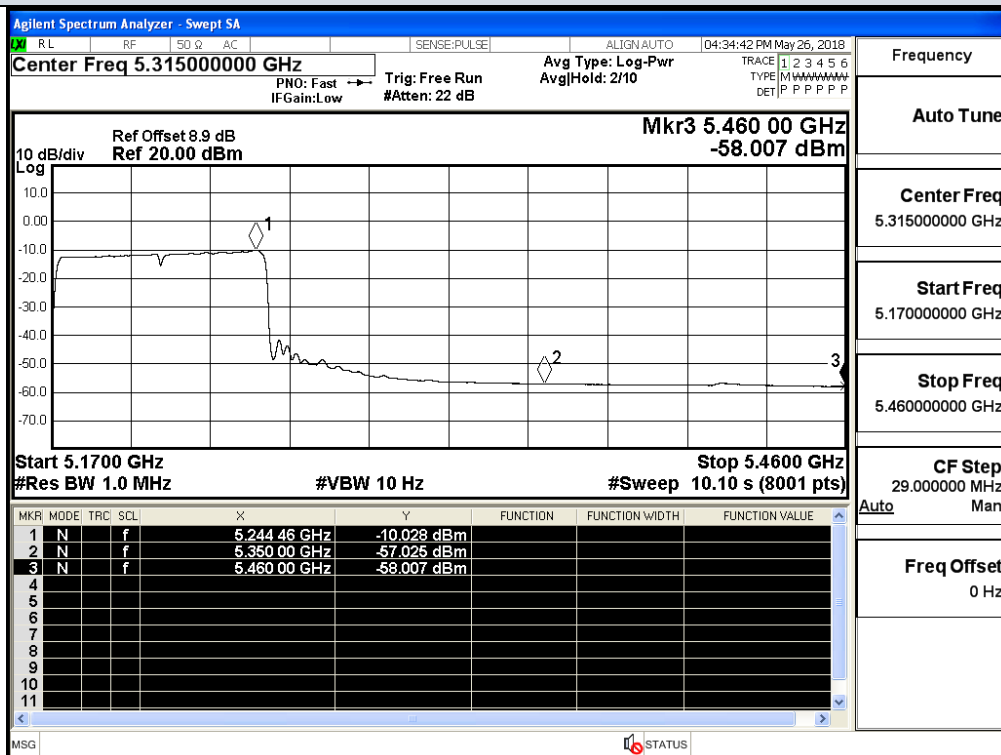
IEEE 802.11ac VHT40 / Channel 48 / 5230MHz / Peak



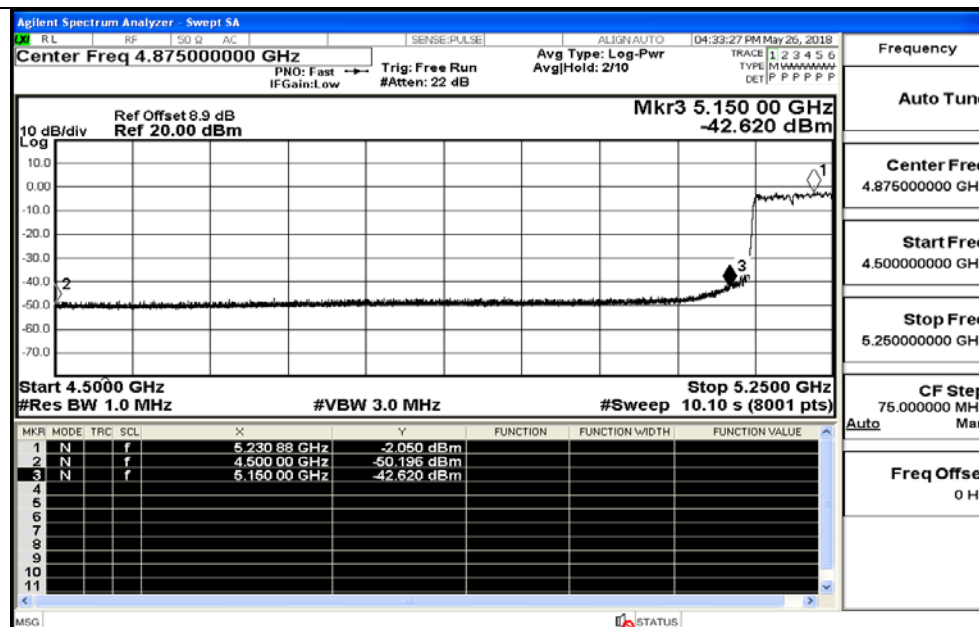
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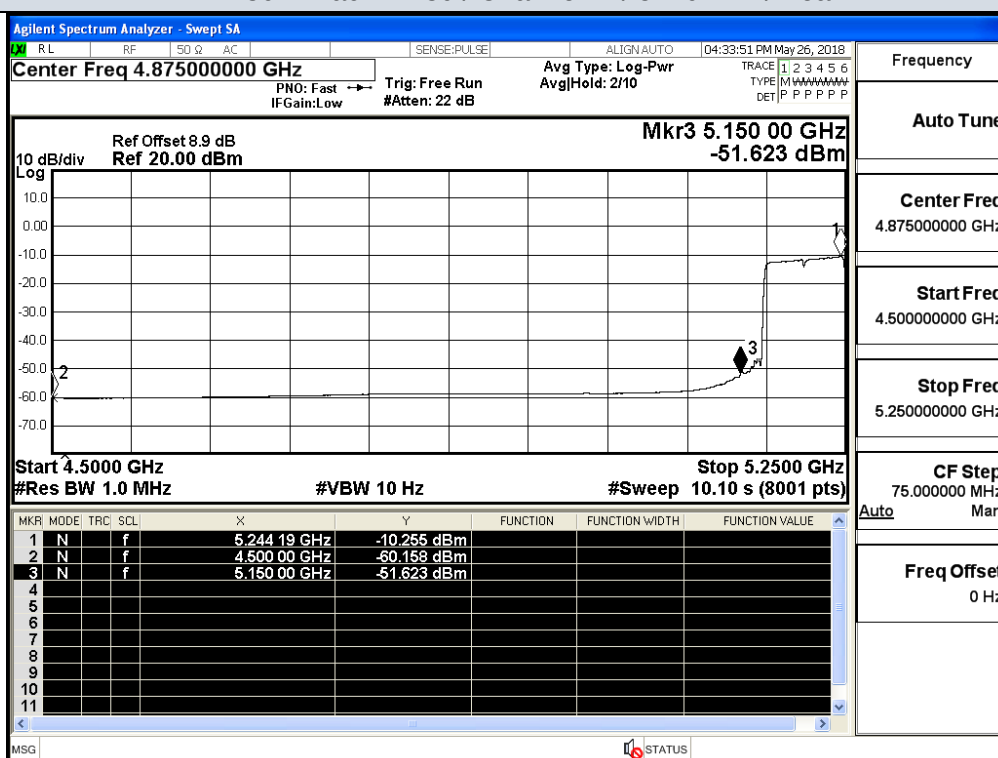
IEEE 802.11ac VHT80 / Channel 42 / 5210MHz / Peak



IEEE 802.11ac VHT80 / Channel 42 / 5210MHz / Average



IEEE 802.11ac VHT80 / Channel 42 / 5210MHz / Peak



IEEE 802.11ac VHT80 / Channel 42 / 5210MHz / Average