Appendix D

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: 6-Inch Rugged Windows Handheld tablet

Trade Mark: N/A

Test Model: DP10

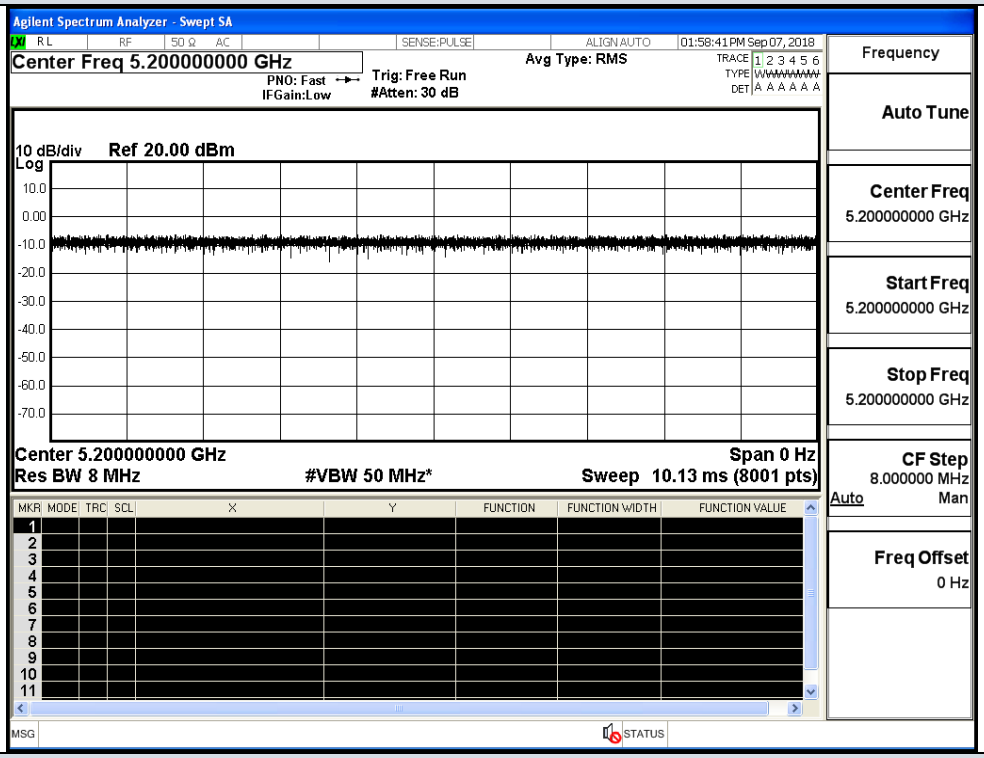
Environmental Conditions

Temperature:	24.6 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

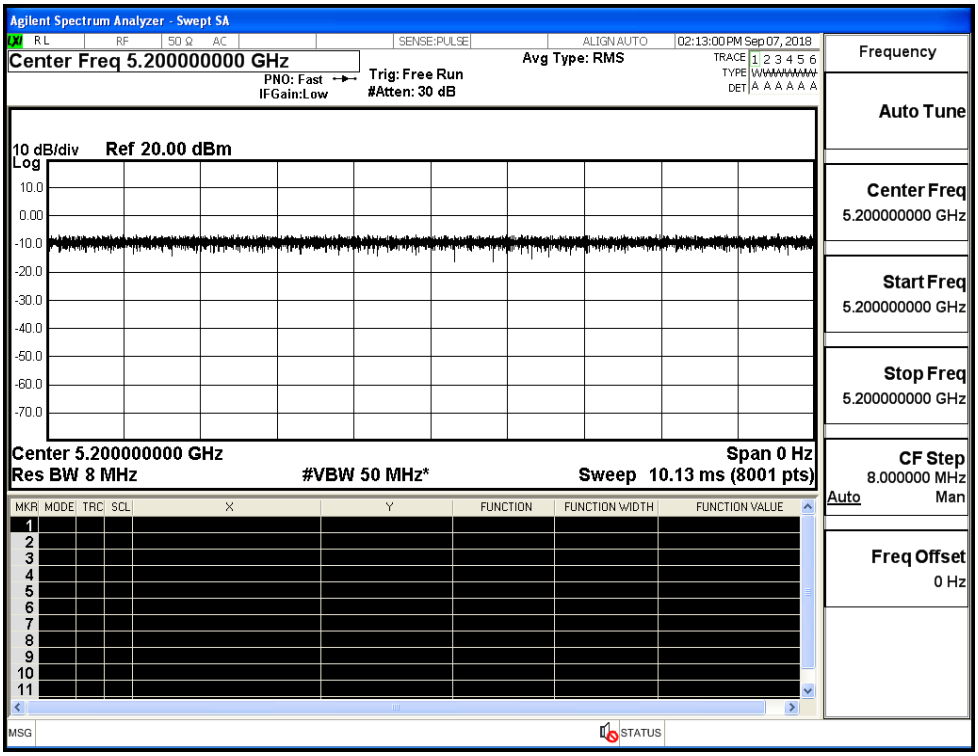
D.1 Duty Cycle

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

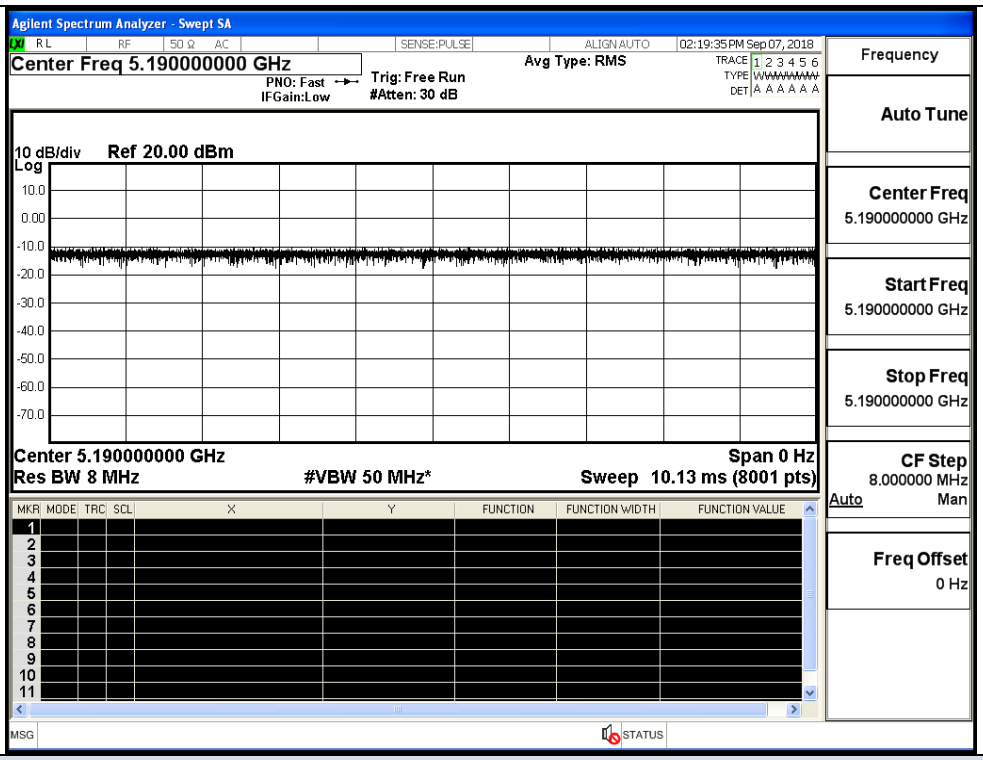
On Time and Duty Cycle



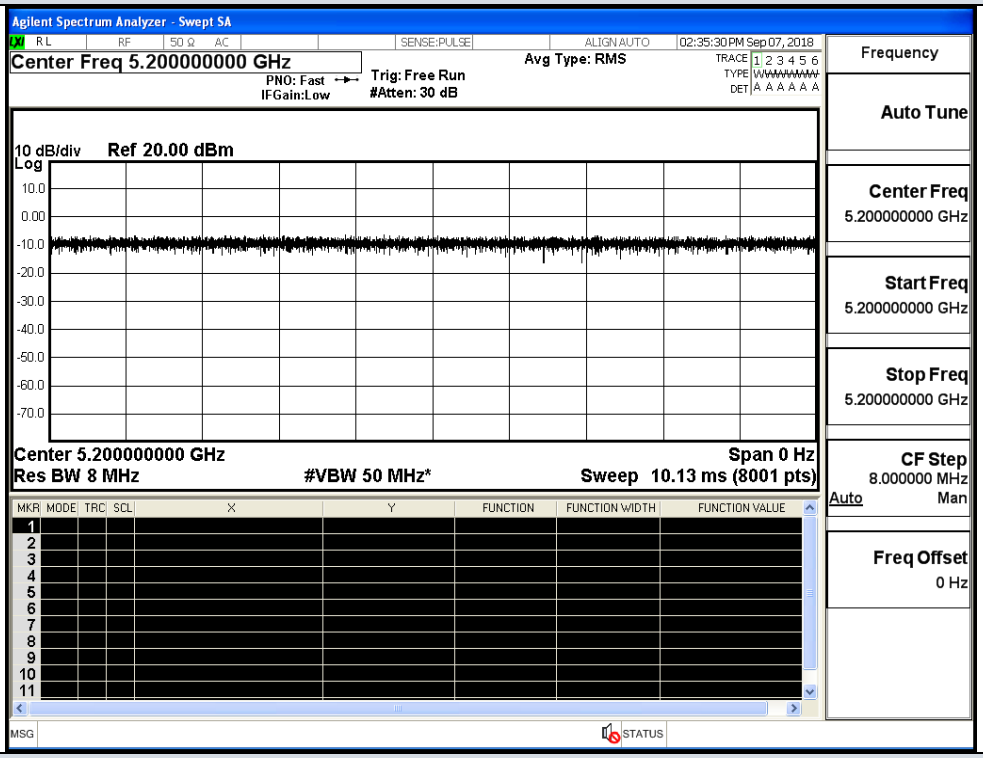
IEEE 802.11a



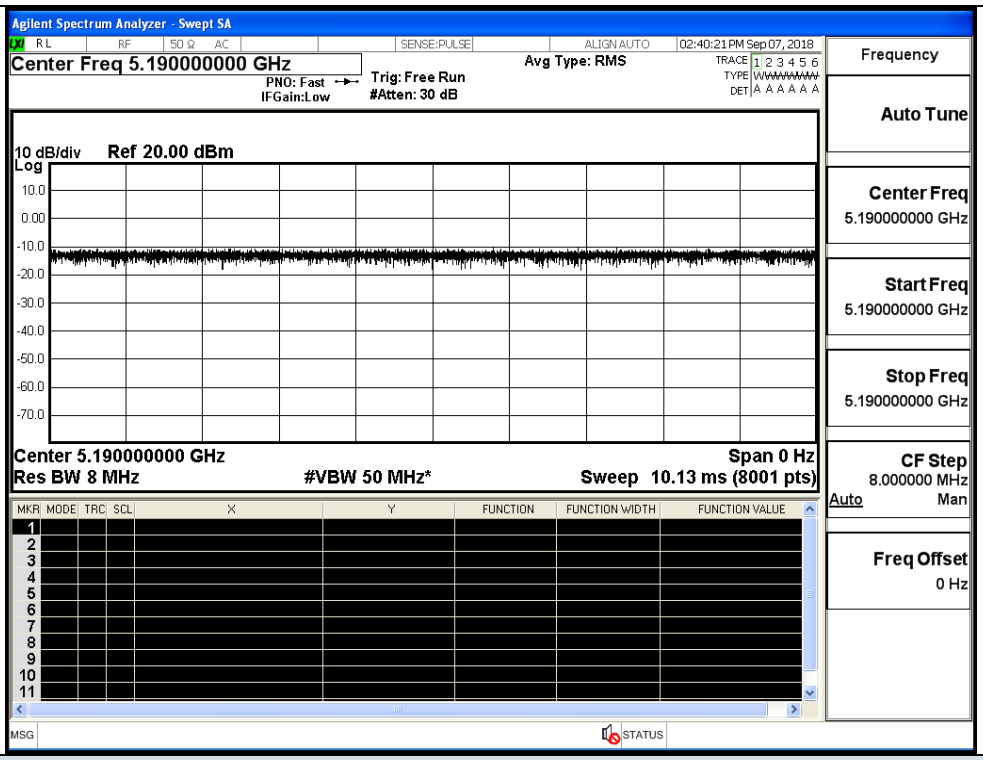
IEEE 802.11n HT20



IEEE 802.11n HT40



IEEE 802.11ac VHT20



IEEE 802.11ac VHT40

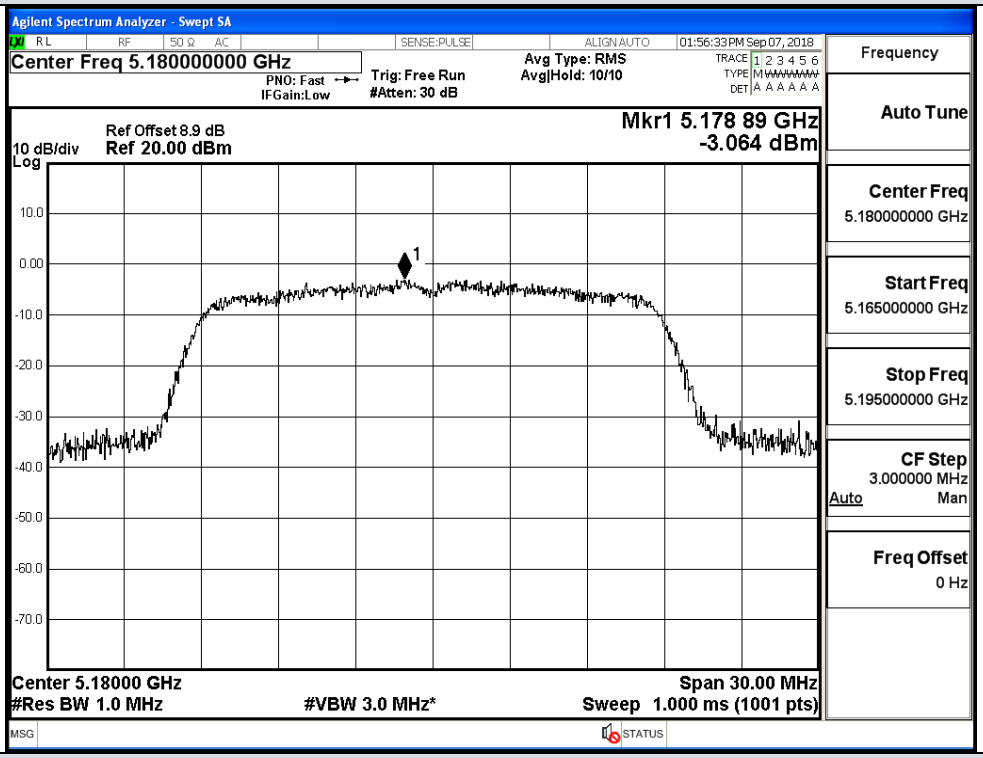
D.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)
11A	36	5180	11.32	0	11.32	24
	40	5200	11.22	0	11.22	
	48	5240	11.22	0	11.22	
11N20 SISO	36	5180	11.37	0	11.37	24
	40	5200	11.88	0	11.88	
	48	5240	11.14	0	11.14	
11N40 SISO	38	5190	12.36	0	12.36	24
	46	5230	12.19	0	12.19	
11AC20 SISO	36	5180	12.35	0	12.35	24
	40	5200	11.79	0	11.79	
	48	5240	12.02	0	12.02	
11AC40 SISO	38	5190	11.71	0	11.71	24
	46	5230	12.25	0	12.25	

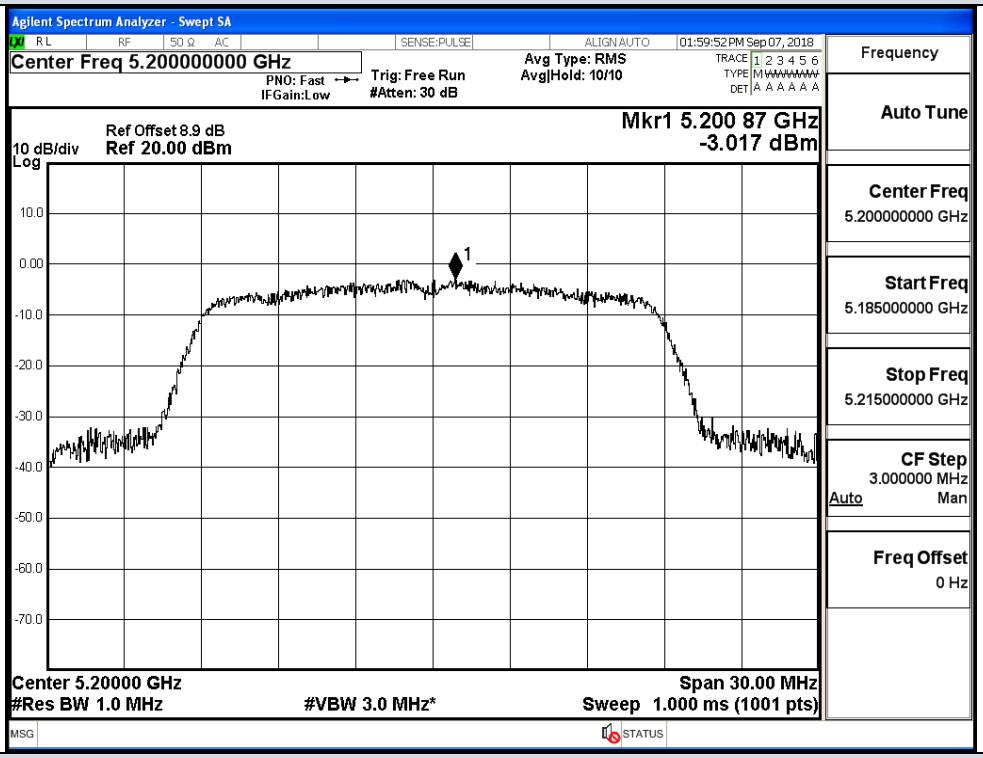
D.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)
11A	36	5180	-3.064	0	-3.064	11
	40	5200	-3.017	0	-3.017	
	48	5240	-2.918	0	-2.918	
11N20 SISO	36	5180	-3.897	0	-3.897	11
	40	5200	-3.177	0	-3.177	
	48	5240	-3.227	0	-3.227	
11N40 SISO	38	5190	-6.500	0	-6.500	11
	46	5230	-7.468	0	-7.468	
11AC20 SISO	36	5180	-3.885	0	-3.885	11
	40	5200	-3.438	0	-3.438	
	48	5240	-3.136	0	-3.136	
11AC40 SISO	38	5190	-6.720	0	-6.720	11
	46	5230	-6.201	0	-6.201	

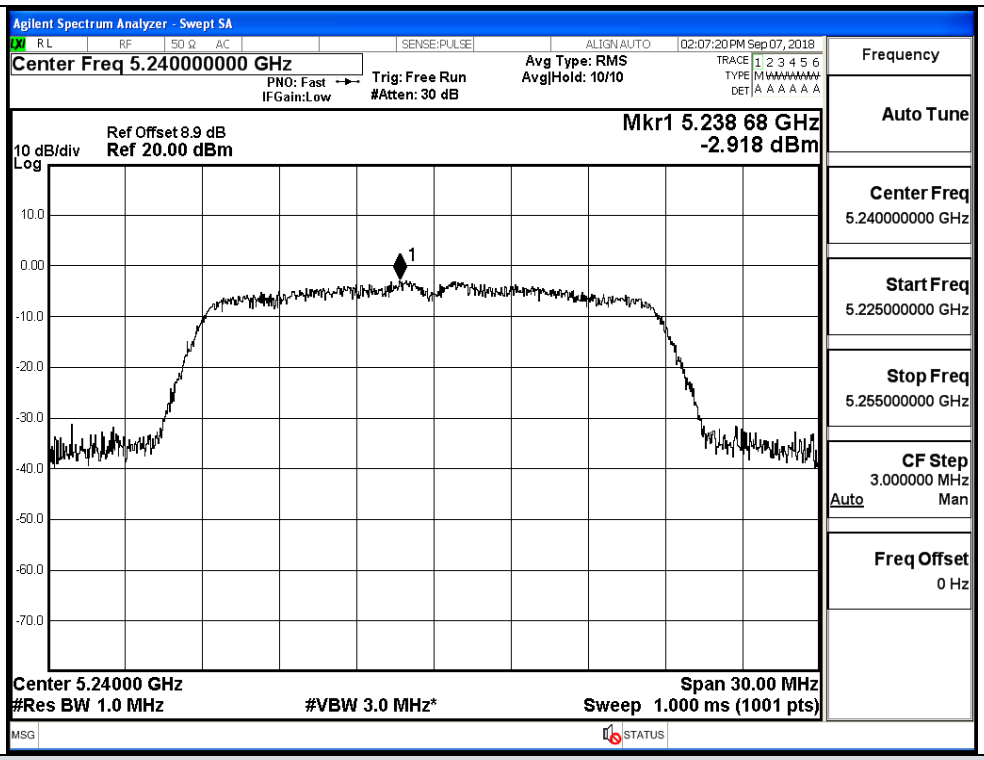
Power Spectral Density



IEEE 802.11a / Channel 36 / 5180 MHz

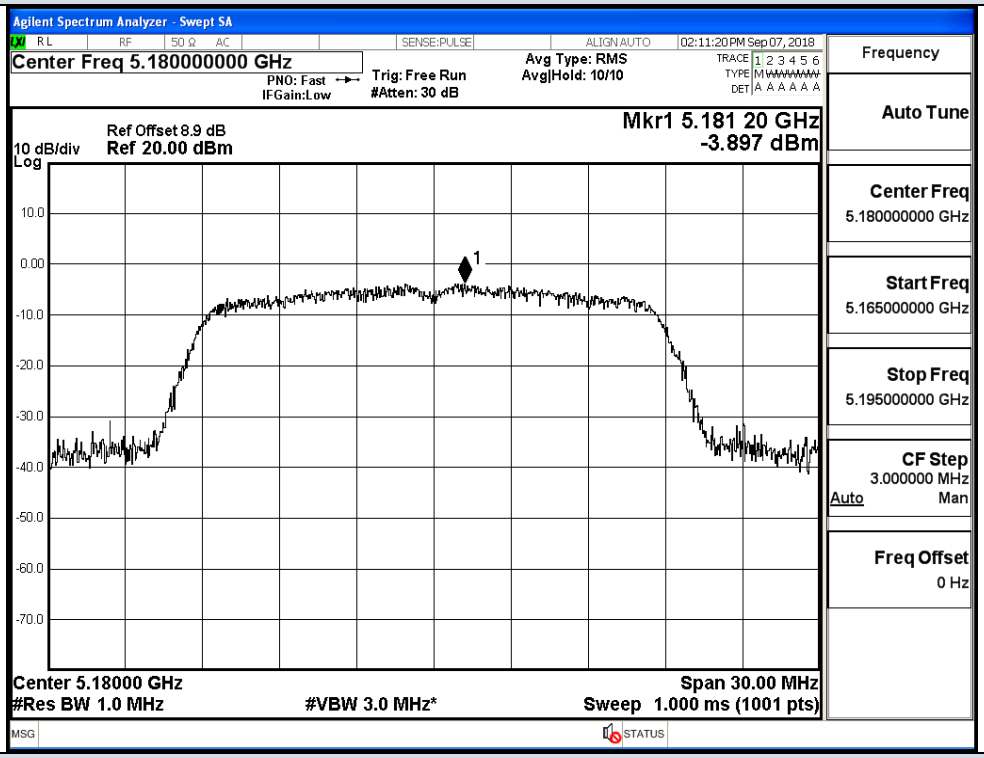


IEEE 802.11a / Channel 40 / 5200 MHz

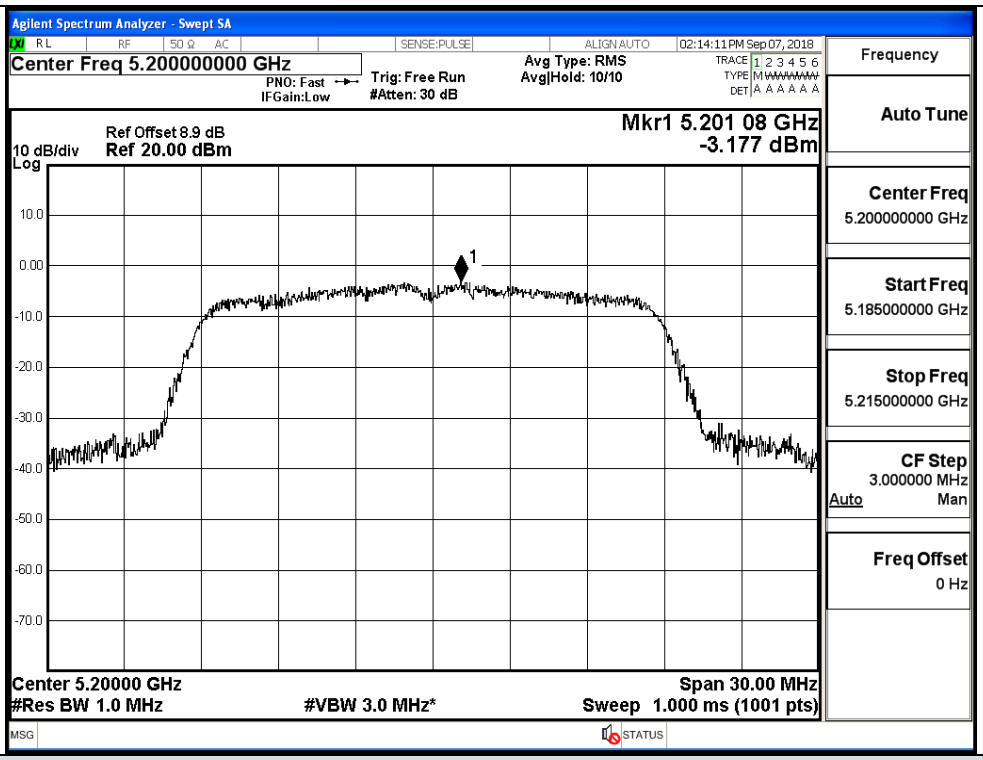


IEEE 802.11a / Channel 48 / 5240 MHz

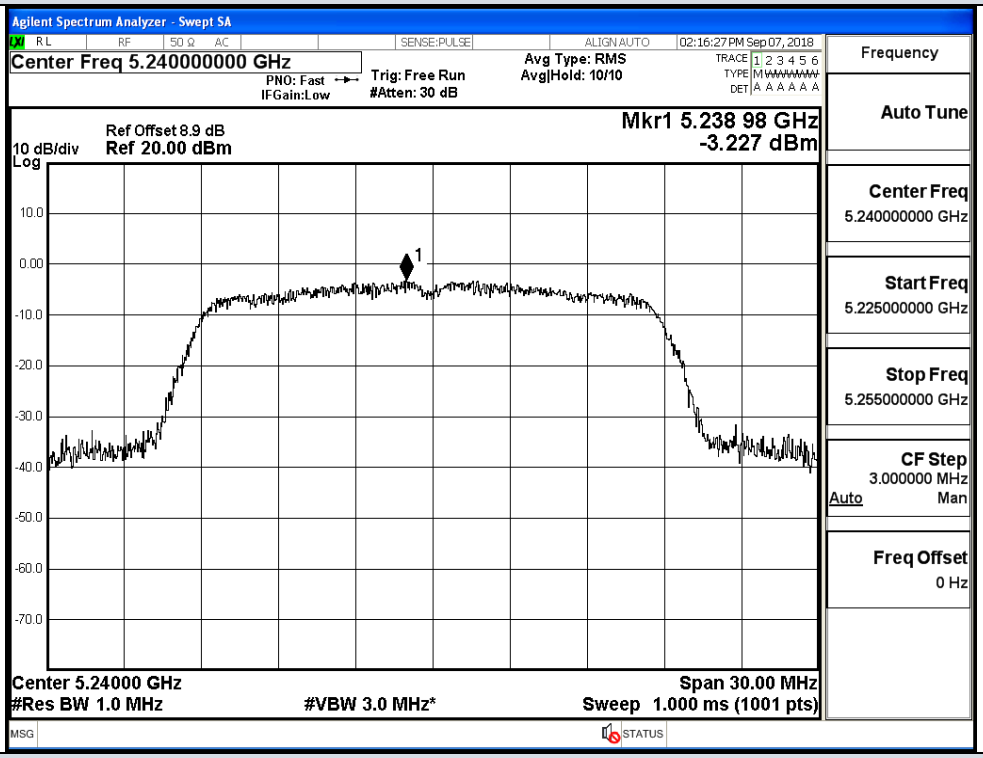
Power Spectral Density



IEEE 802.11n HT20 / Channel 36 / 5180 MHz

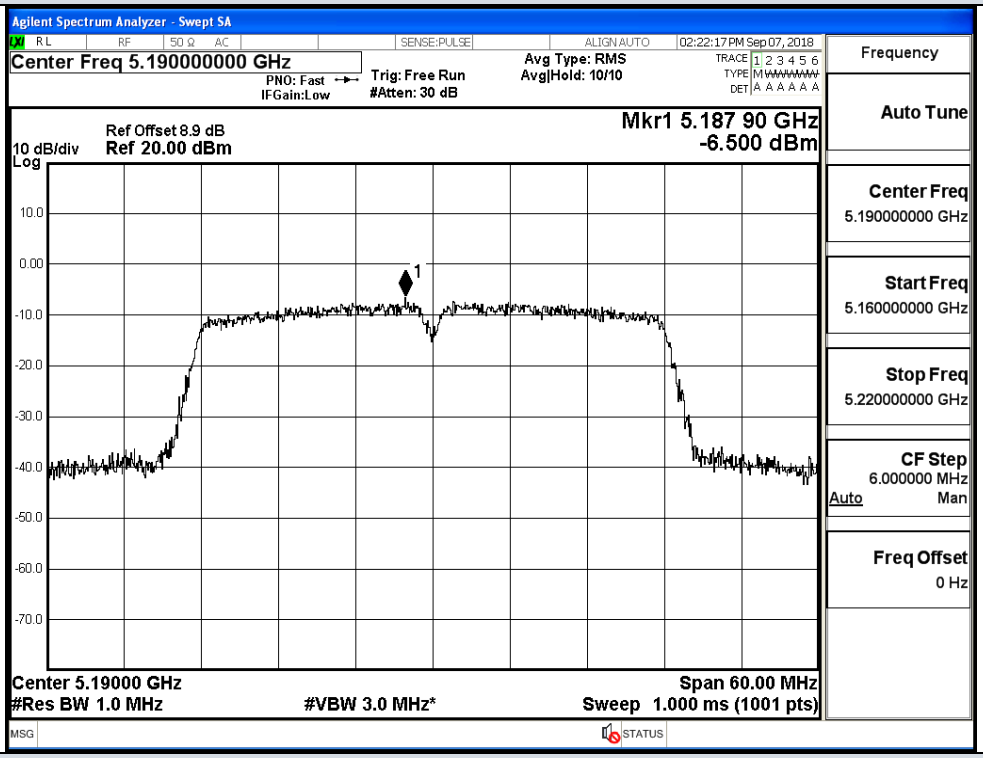


IEEE 802.11n HT20 / Channel 40 / 5200 MHz

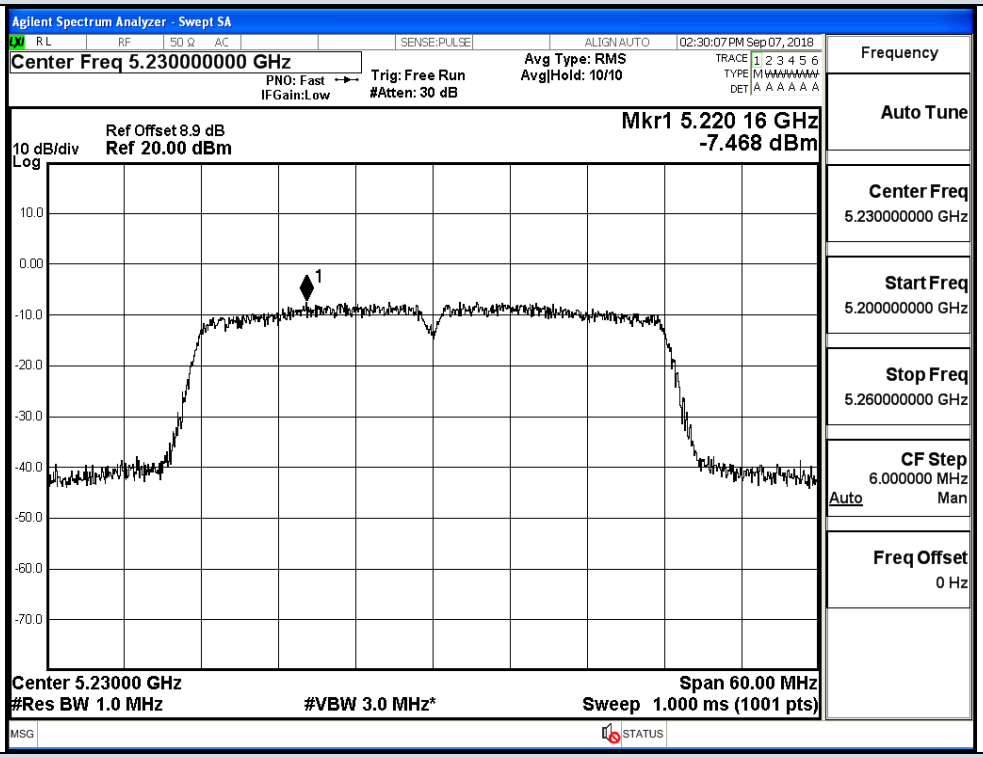


IEEE 802.11n HT20 / Channel 48 / 5240 MHz

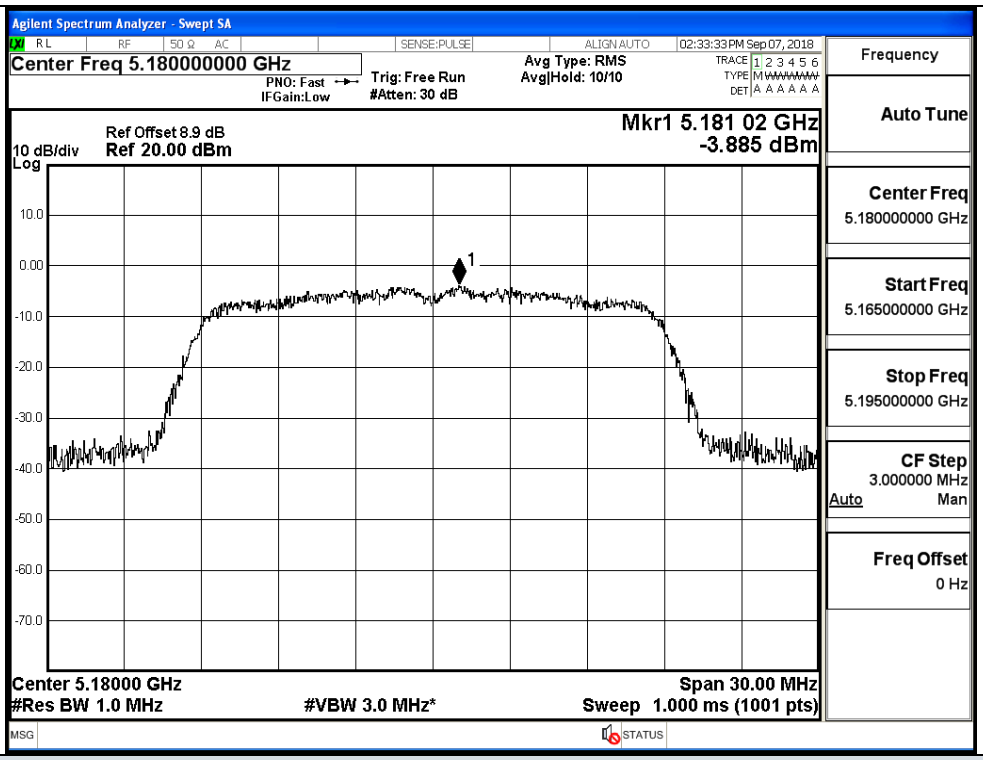
Power Spectral Density



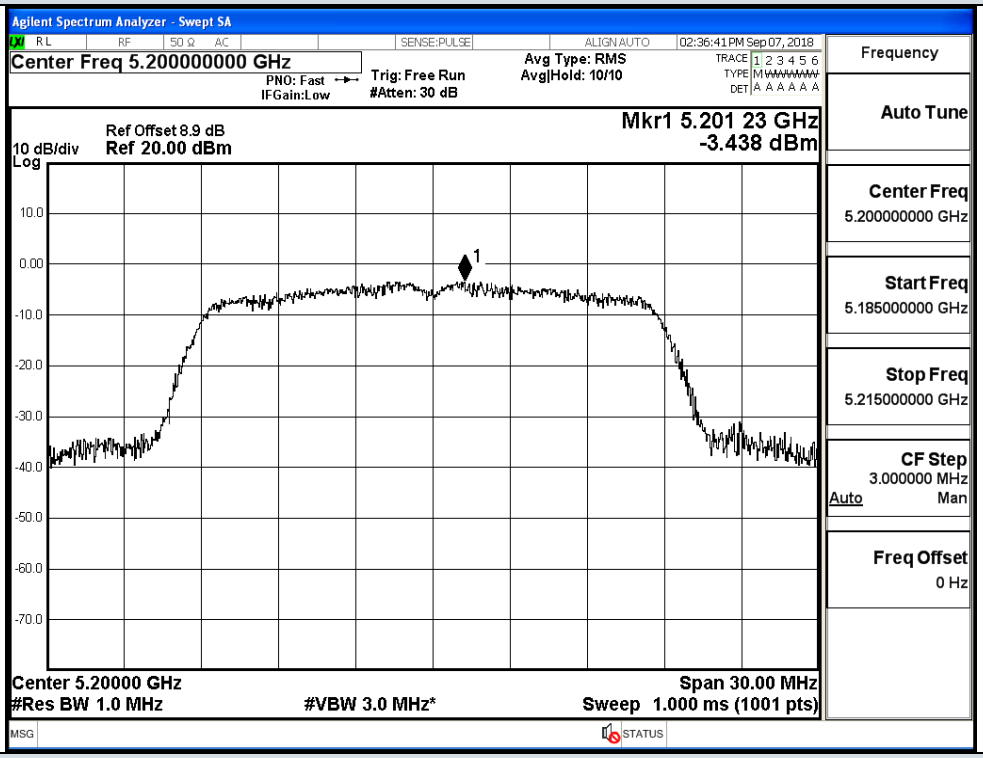
IEEE 802.11n HT40 / Channel 38 / 5190 MHz



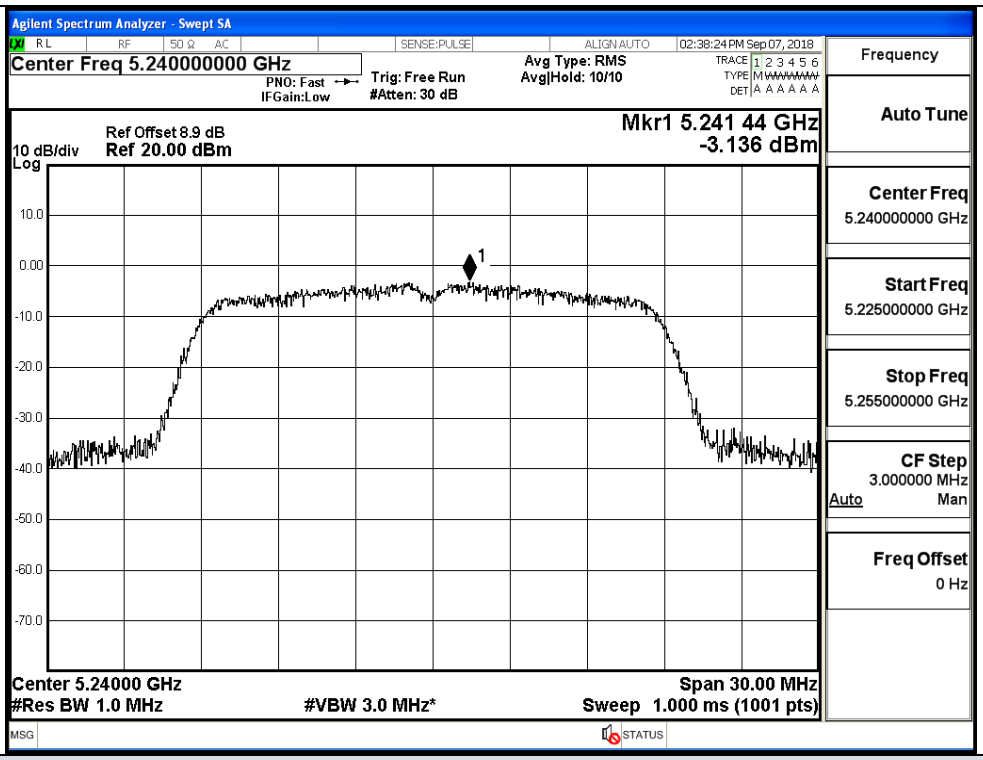
IEEE 802.11n HT40 / Channel 46 / 5230 MHz



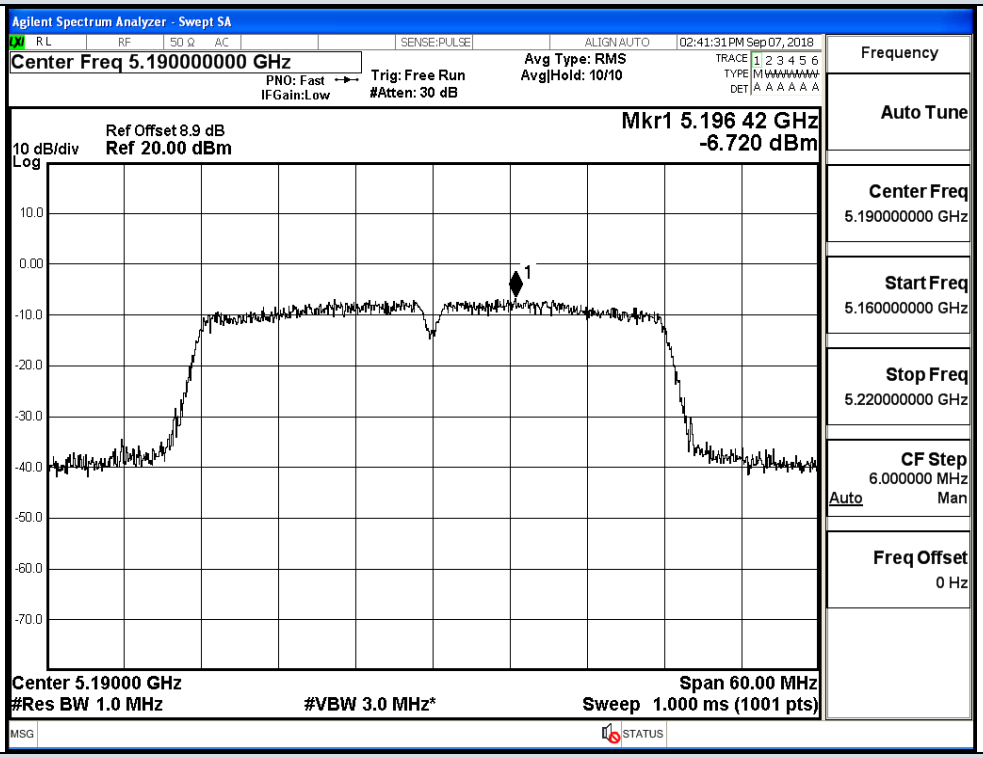
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz



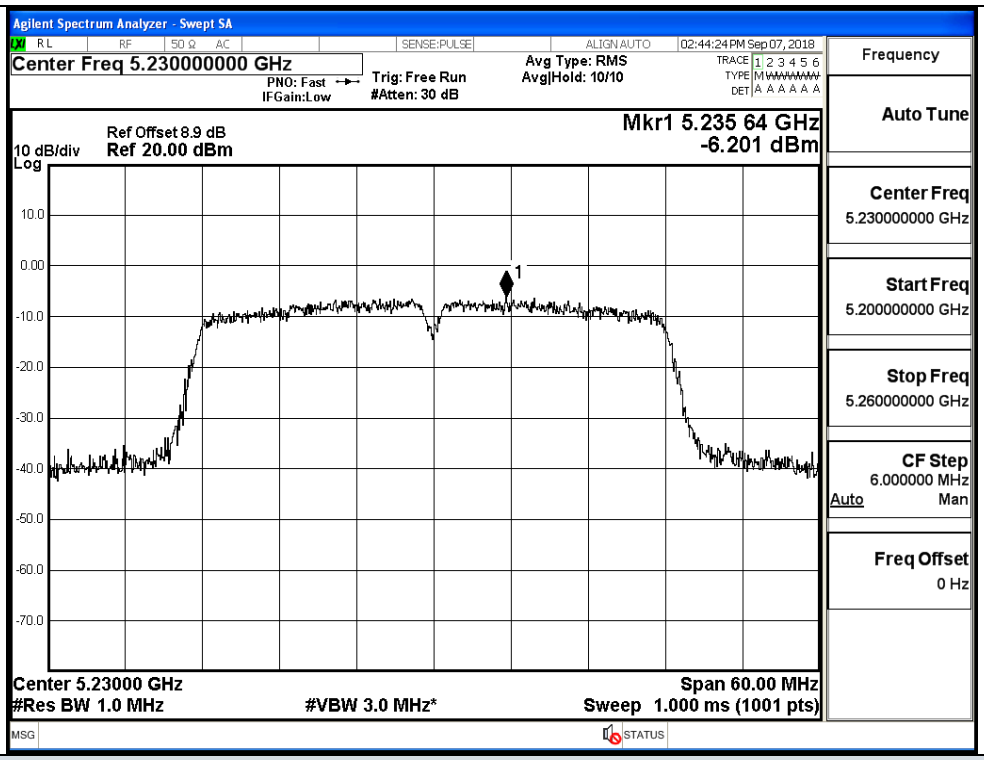
IEEE 802.11ac VHT20 / Channel 40 / 5200 MHz



IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz



IEEE 802.11ac VHT40 / Channel 38 / 5190 MHz

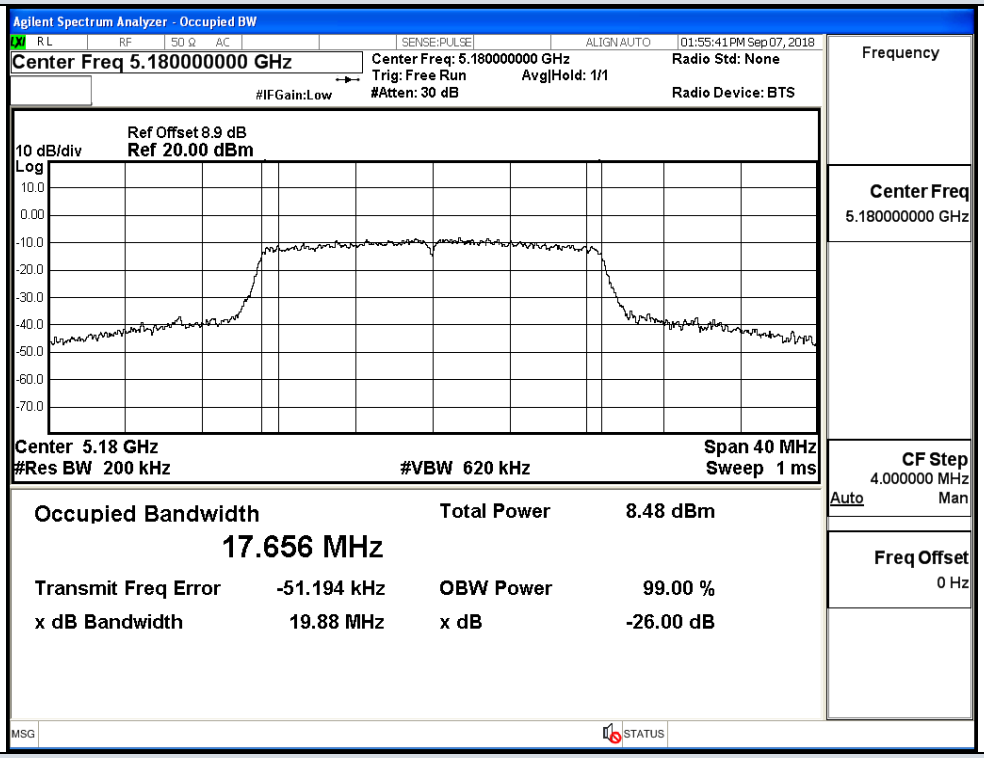


IEEE 802.11ac VHT40 / Channel 46 / 5230 MHz

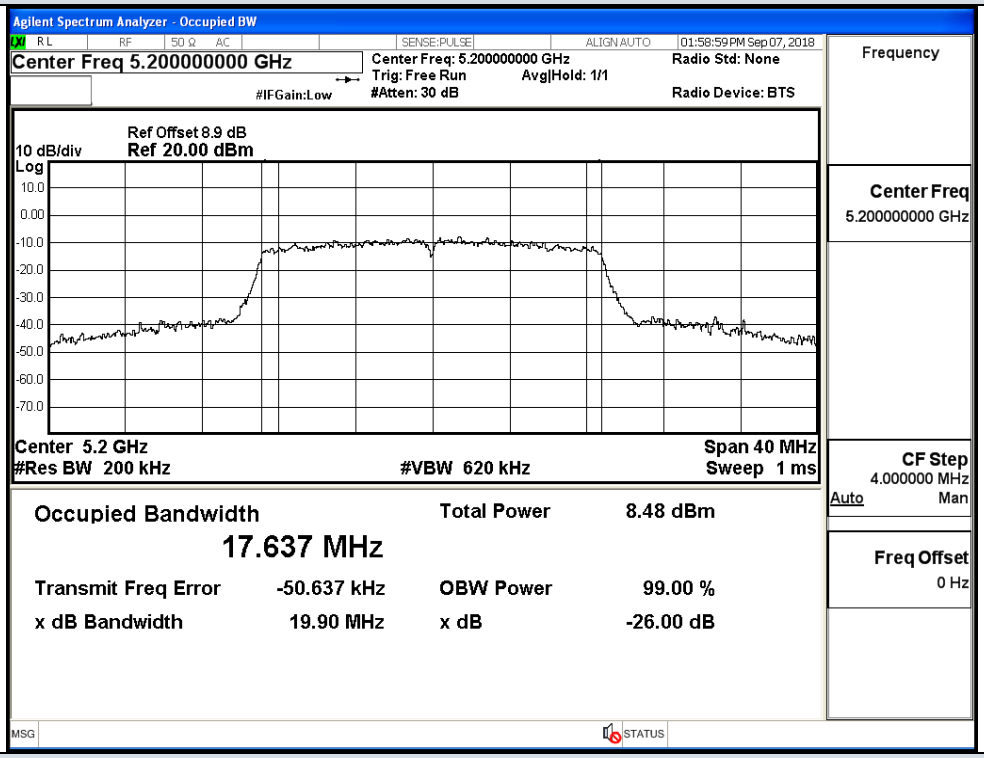
D.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
11A	36	5180	19.88	No Limit
	40	5200	19.90	
	48	5240	19.78	
11N20 SISO	36	5180	19.86	No Limit
	40	5200	19.84	
	48	5240	19.84	
11N40 SISO	38	5190	39.80	No Limit
	46	5230	39.47	
11AC20 SISO	36	5180	19.81	No Limit
	40	5200	19.70	
	48	5240	19.65	
11AC40 SISO	38	5190	39.36	No Limit
	46	5230	39.67	

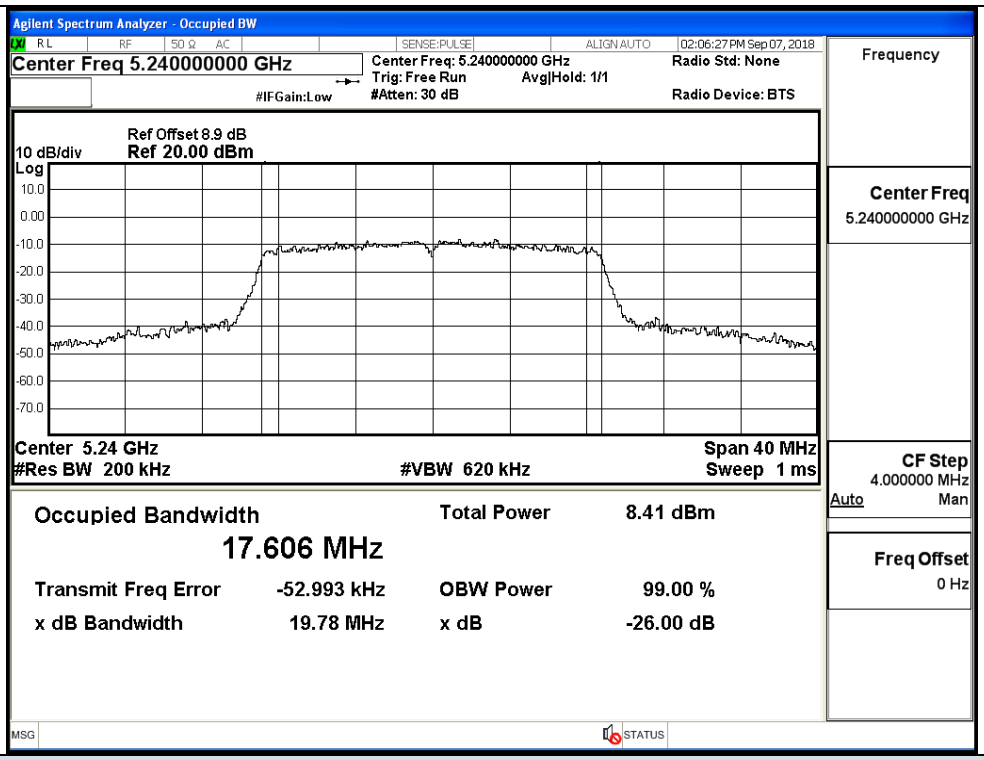
26dB Bandwidth



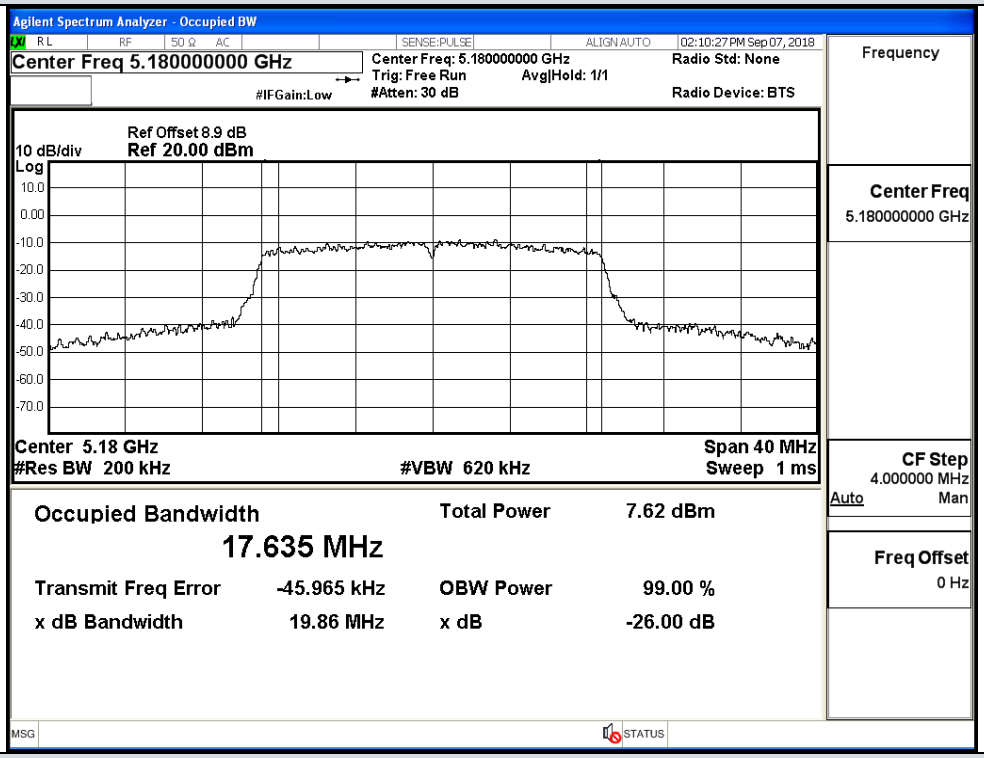
IEEE 802.11a / Channel 36 / 5180 MHz



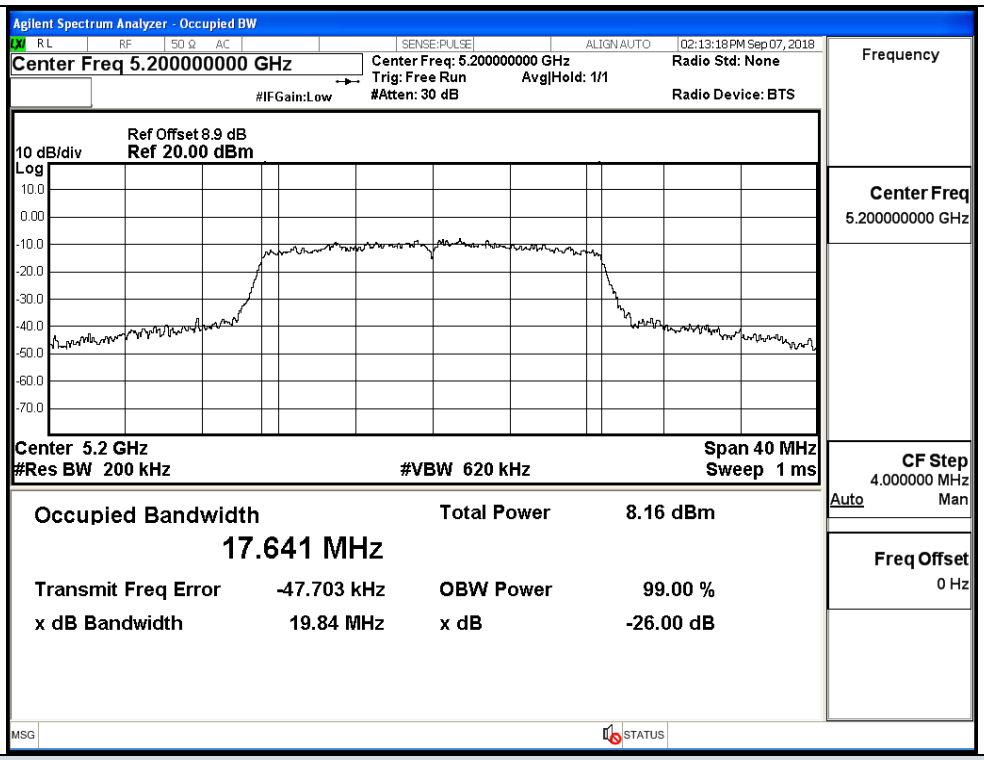
IEEE 802.11a / Channel 40 / 5200 MHz



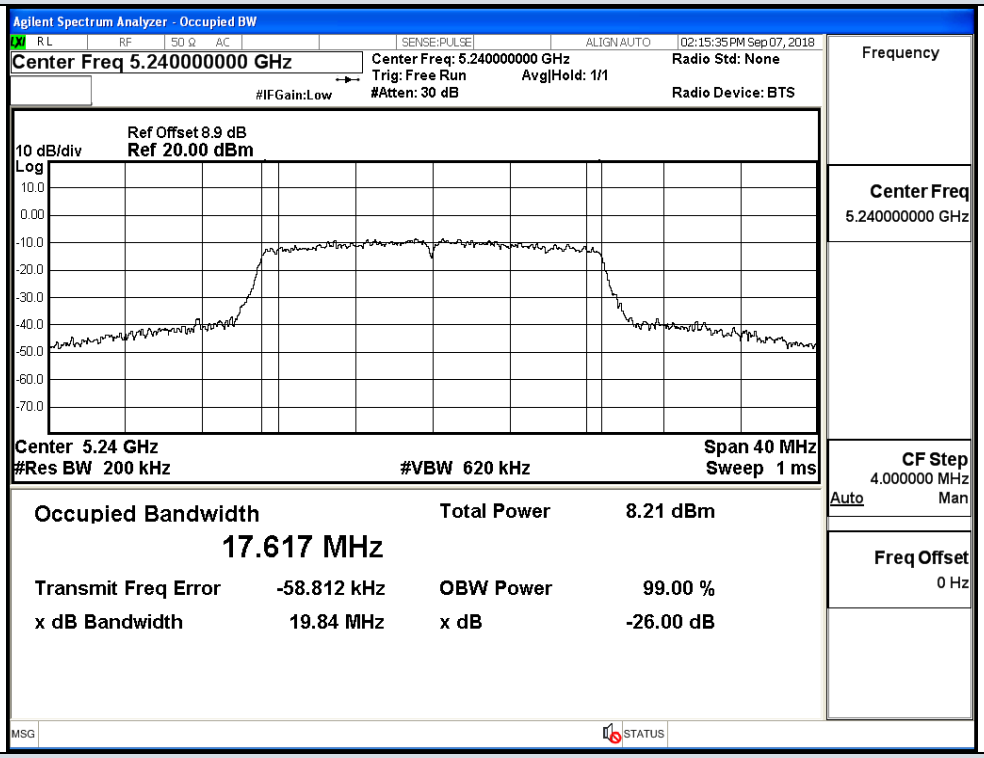
IEEE 802.11a / Channel 48 / 5240 MHz



IEEE 802.11n HT20 / Channel 36 / 5180 MHz

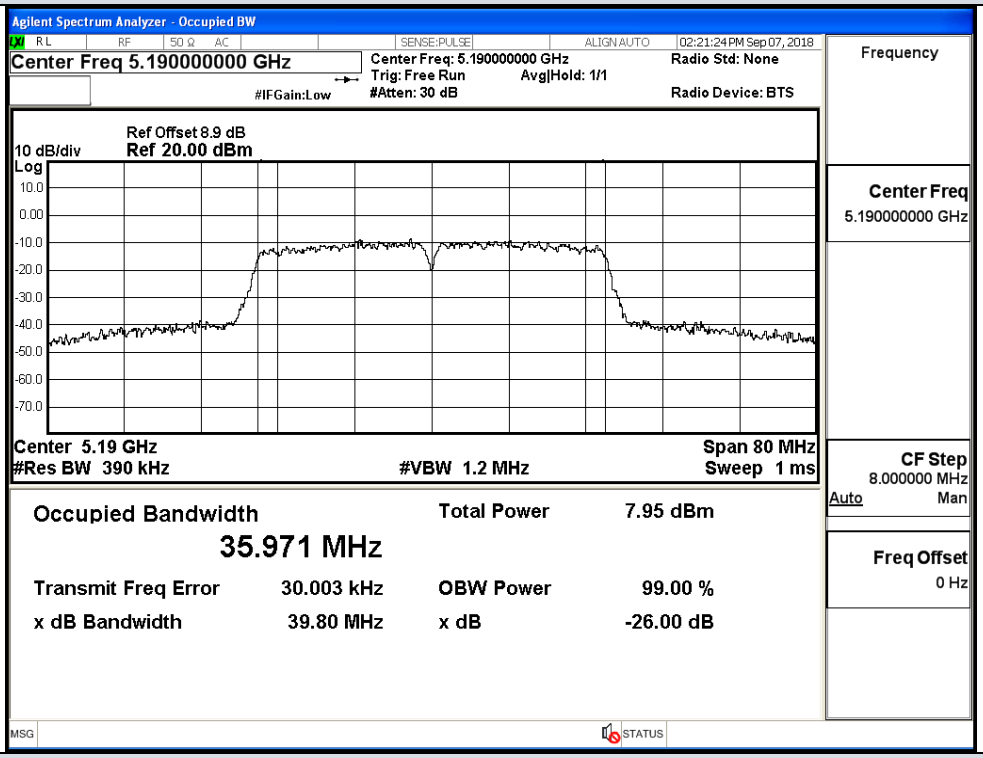


IEEE 802.11n HT20 / Channel 40 / 5200 MHz

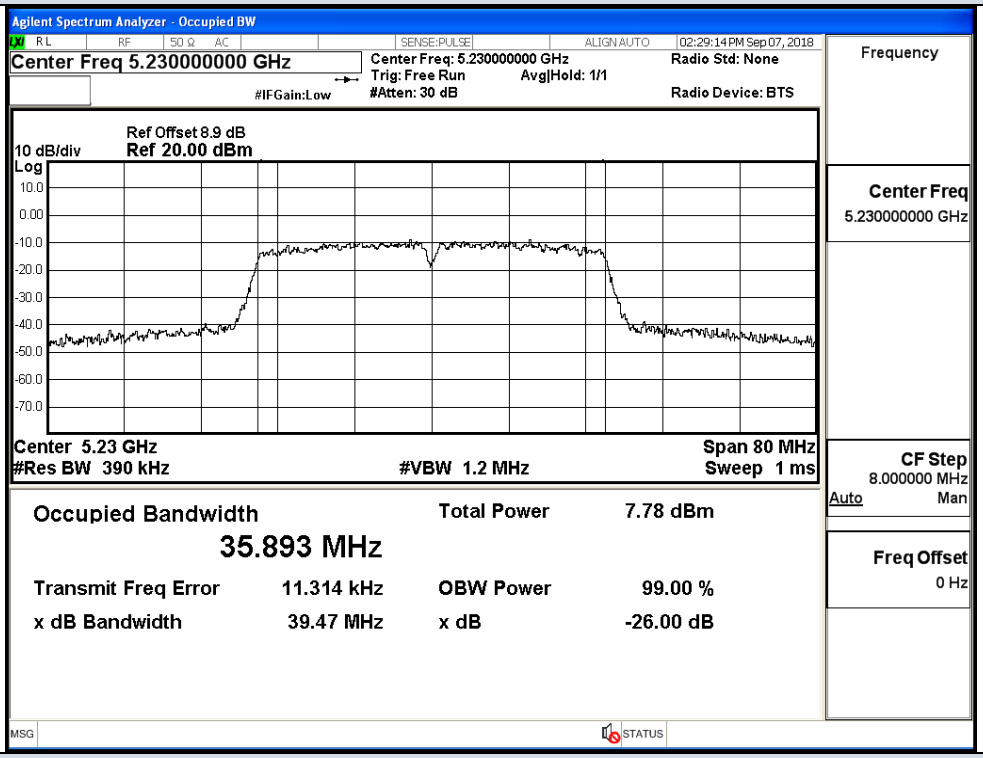


IEEE 802.11n HT20 / Channel 48 / 5240 MHz

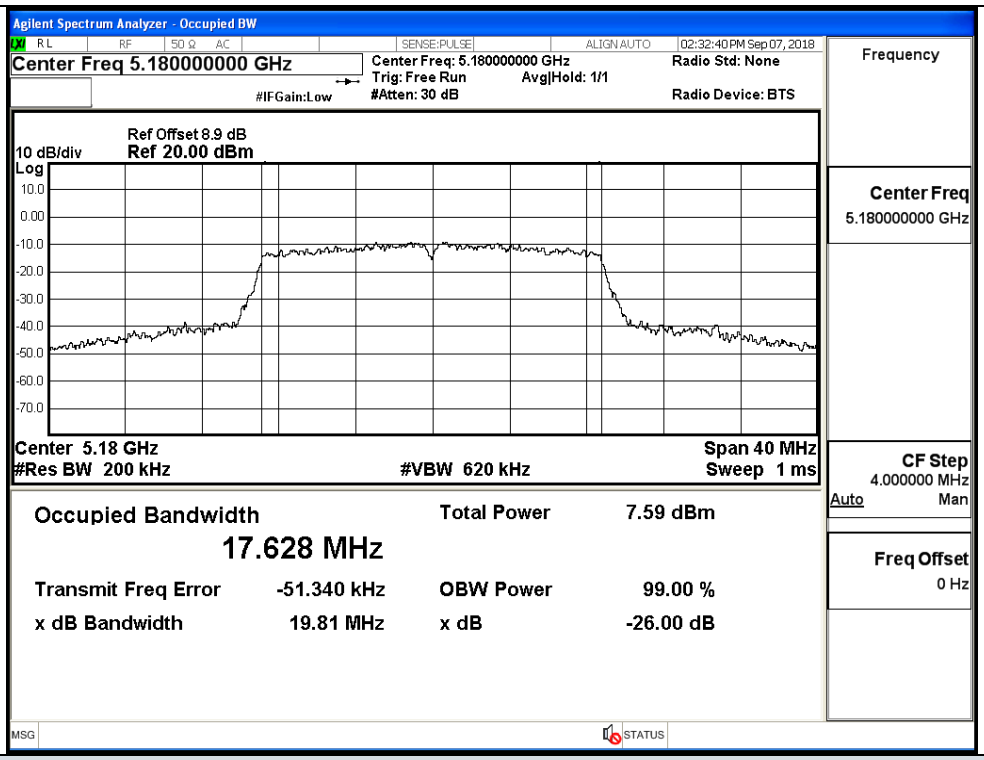
26dB Bandwidth



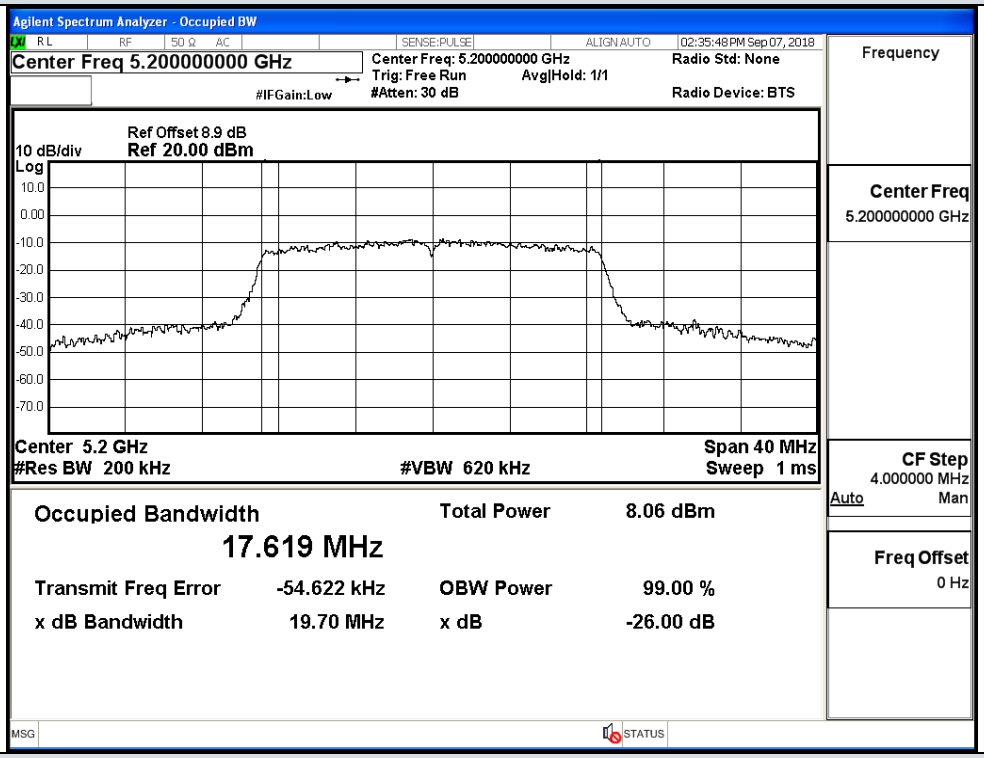
IEEE 802.11n HT40 / Channel 38 / 5190 MHz



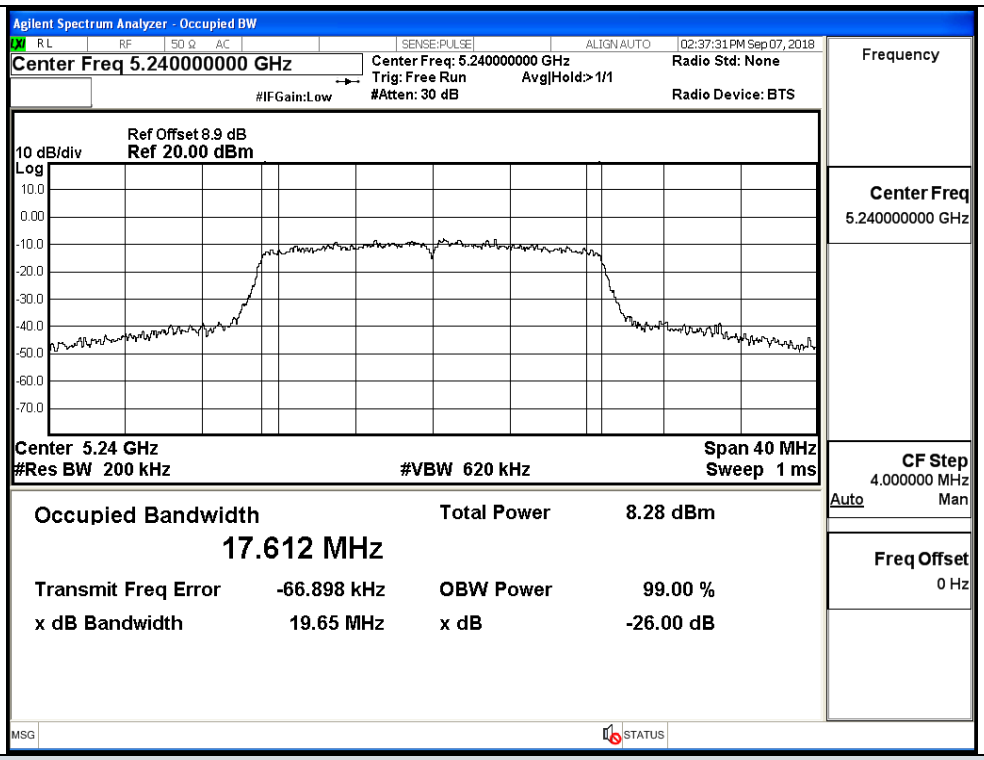
IEEE 802.11n HT40 / Channel 46 / 5230 MHz



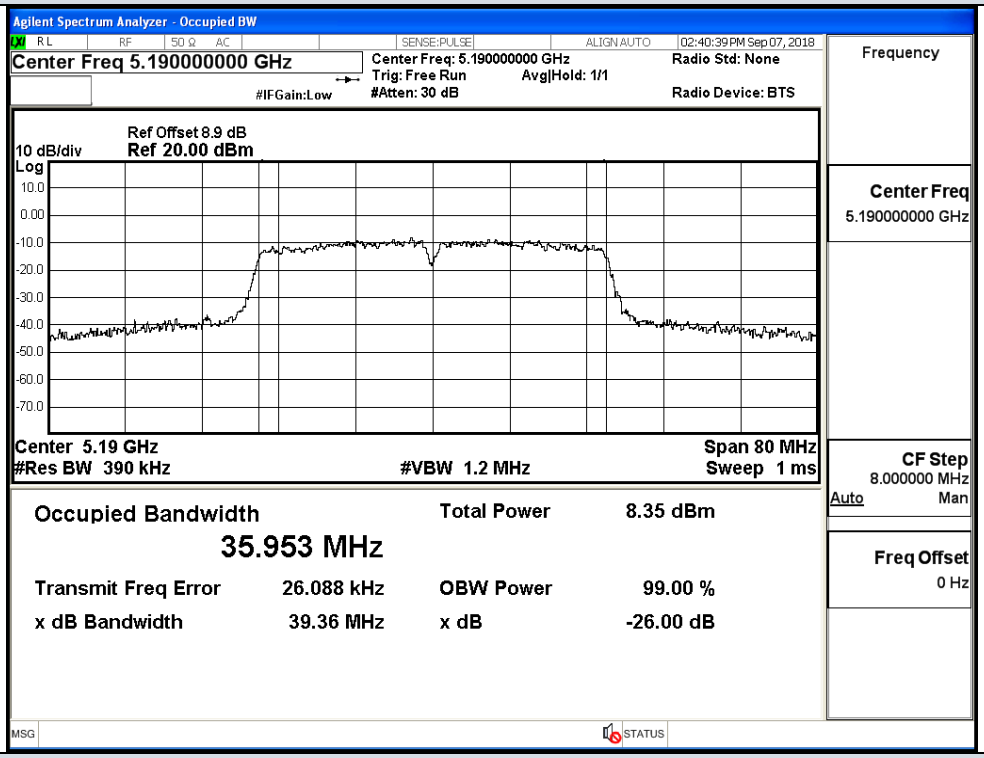
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz



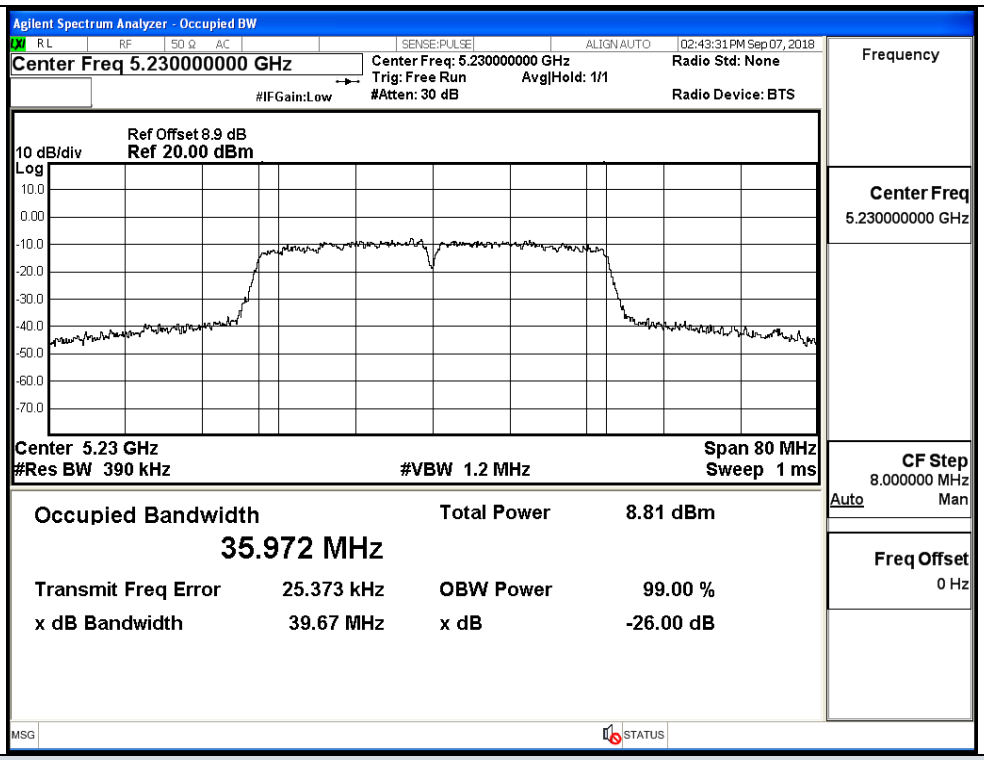
IEEE 802.11ac VHT20 / Channel 40 / 5200 MHz



IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz



IEEE 802.11ac VHT40 / Channel 38 / 5190 MHz

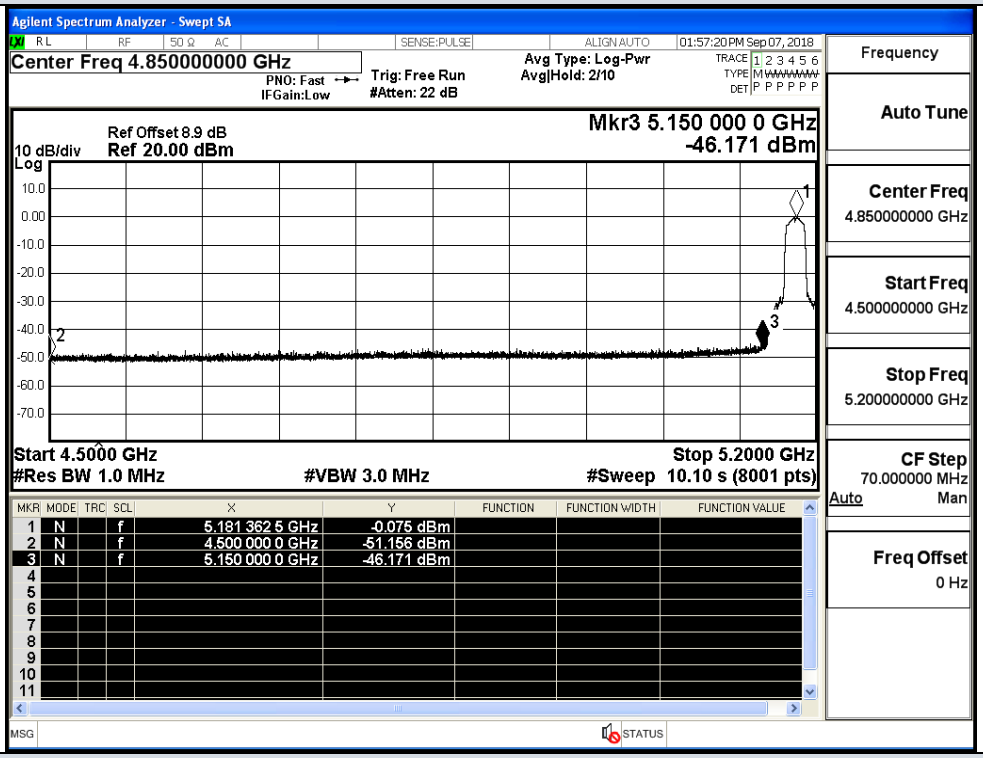


IEEE 802.11ac VHT40 / Channel 46 / 5230 MHz

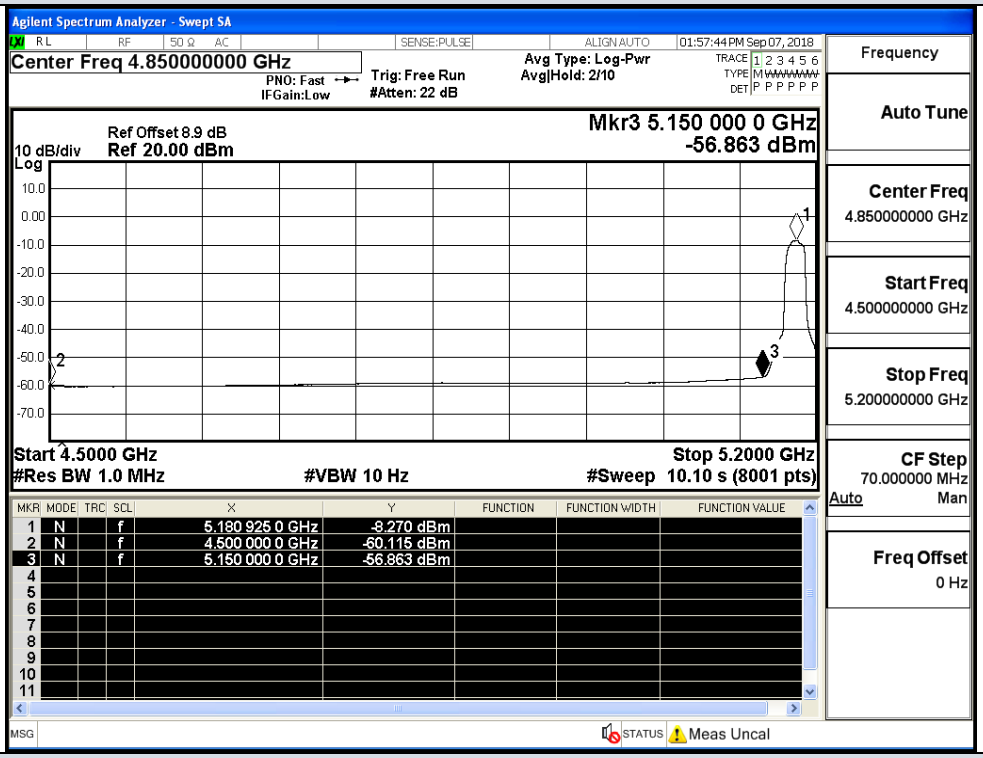
D.5 Undesirable Emissions Measurement

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)
11A	36	4500.0	-51.156	2.50	0	46.572	Peak	68.20
		4500.0	-60.115	2.50	0	37.613	Average	54.00
		5150.0	-46.171	2.50	0	51.557	Peak	68.20
		5150.0	-56.863	2.50	0	40.865	Average	54.00
	48	5350.0	-59.585	2.50	0	38.143	Peak	68.20
		5350.0	-60.101	2.50	0	37.627	Average	54.00
		5460.0	-50.848	2.50	0	46.880	Peak	68.20
		5460.0	-60.452	2.50	0	37.276	Average	54.00
11N20 SISO	36	4500.0	-50.226	2.50	0	47.502	Peak	68.20
		4500.0	-60.098	2.50	0	37.630	Average	54.00
		5150.0	-47.324	2.50	0	50.404	Peak	68.20
		5150.0	-57.448	2.50	0	40.280	Average	54.00
	48	5350.0	-49.625	2.50	0	48.103	Peak	68.20
		5350.0	-60.100	2.50	0	37.628	Average	54.00
		5460.0	-50.373	2.50	0	47.355	Peak	68.20
		5460.0	-60.420	2.50	0	37.308	Average	54.00
11N40 SISO	38	4500.0	-50.013	2.50	0	47.715	Peak	68.20
		4500.0	-60.106	2.50	0	37.622	Average	54.00
		5150.0	-39.650	2.50	0	58.078	Peak	68.20
		5150.0	-52.197	2.50	0	45.531	Average	54.00
	46	5350.0	-48.729	2.50	0	48.999	Peak	68.20
		5350.0	-59.866	2.50	0	37.862	Average	54.00
		5460.0	-50.562	2.50	0	47.166	Peak	68.20
		5460.0	-60.110	2.50	0	37.618	Average	54.00
11AC20 SISO	36	4500.0	-50.426	2.50	0	47.302	Peak	68.20
		4500.0	-60.140	2.50	0	37.588	Average	54.00
		5150.0	-47.786	2.50	0	49.942	Peak	68.20
		5150.0	-57.446	2.50	0	40.282	Average	54.00
	48	4500.0	-48.627	2.50	0	49.101	Peak	68.20
		4500.0	-60.070	2.50	0	37.658	Average	54.00
		5150.0	-49.667	2.50	0	48.061	Peak	68.20
		5150.0	-60.403	2.50	0	37.325	Average	54.00
11AC40 SISO	38	4500.0	-50.335	2.50	0	47.393	Peak	68.20
		4500.0	-60.138	2.50	0	37.590	Average	54.00
		5150.0	-38.793	2.50	0	58.935	Peak	68.20
		5150.0	-51.524	2.50	0	46.204	Average	54.00
	46	5350.0	-48.904	2.50	0	48.824	Peak	68.20
		5350.0	-59.817	2.50	0	37.911	Average	54.00
		5460.0	-48.997	2.50	0	48.731	Peak	68.20
		5460.0	-60.160	2.50	0	37.568	Average	54.00

Undesirable Emissions Measurement

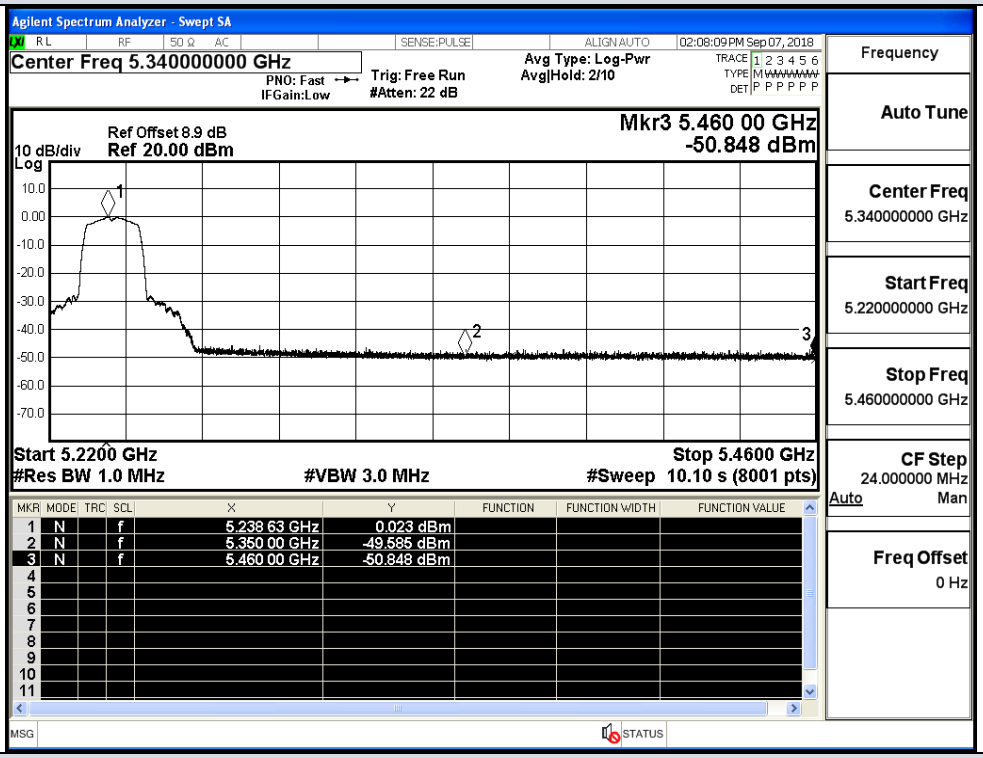


IEEE 802.11a / Channel 36 / 5180 MHz / Peak

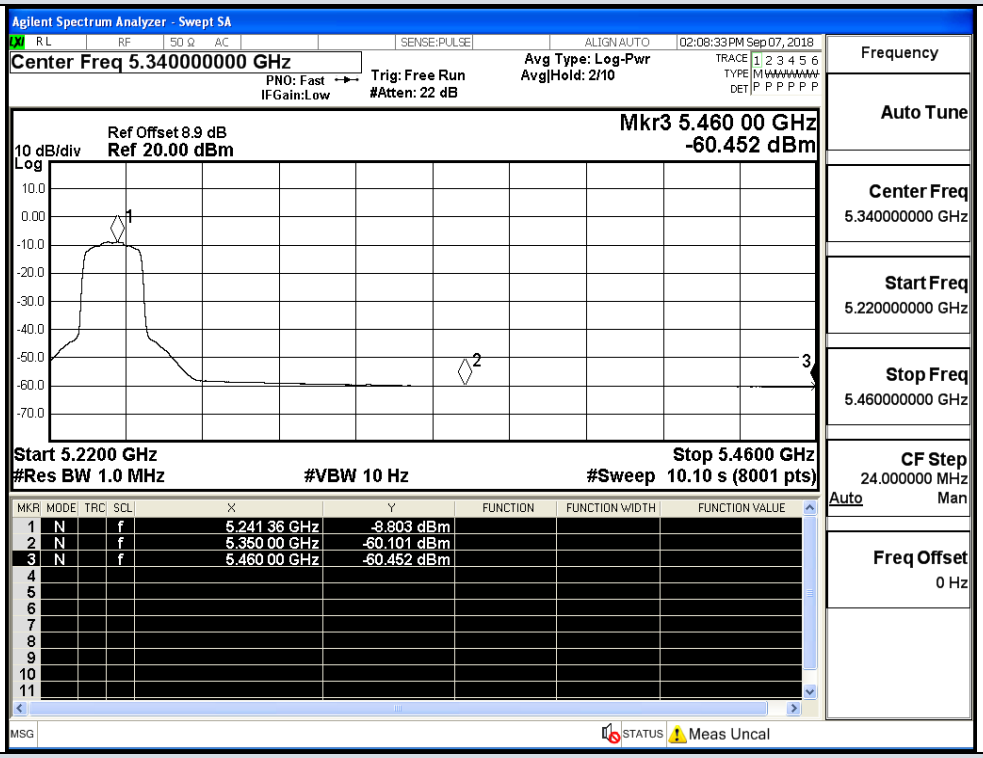


IEEE 802.11a / Channel 36 / 5180 MHz / Average

Undesirable Emissions Measurement

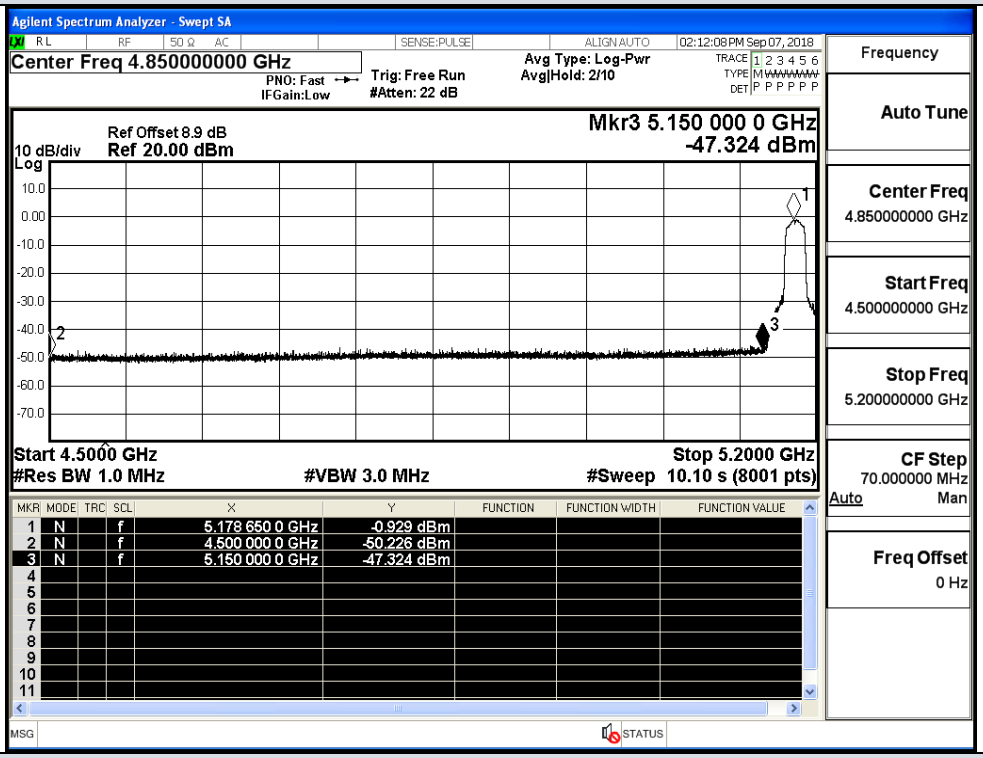


IEEE 802.11a / Channel 48 / 5240 MHz / Peak

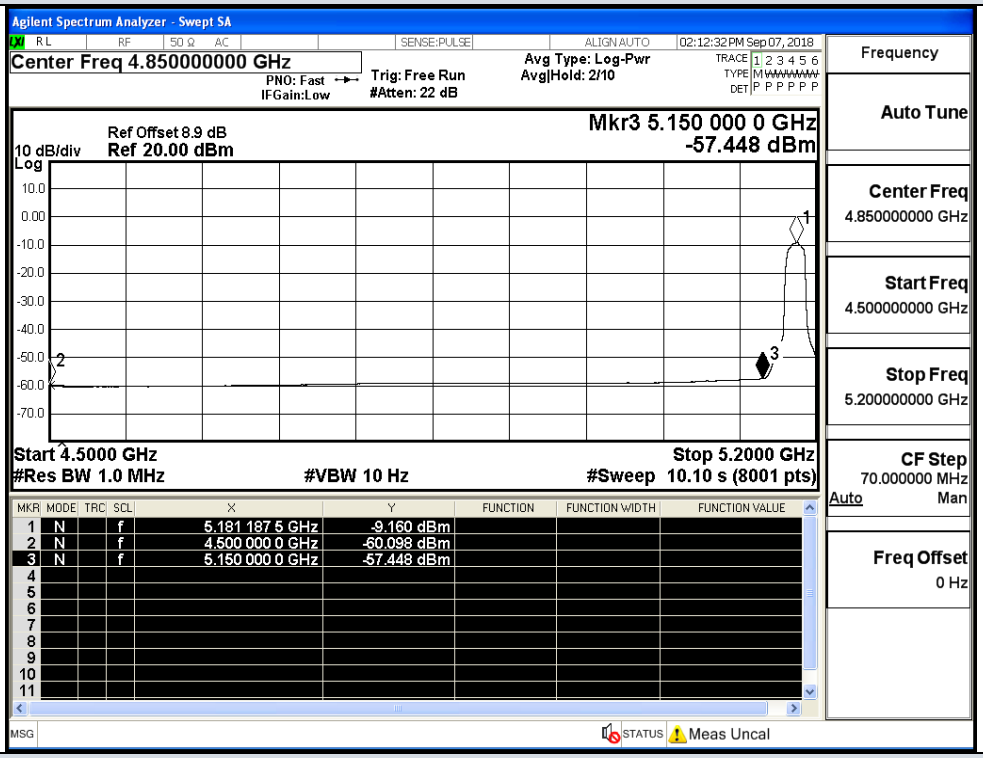


IEEE 802.11a / Channel 48 / 5240 MHz / Average

Undesirable Emissions Measurement

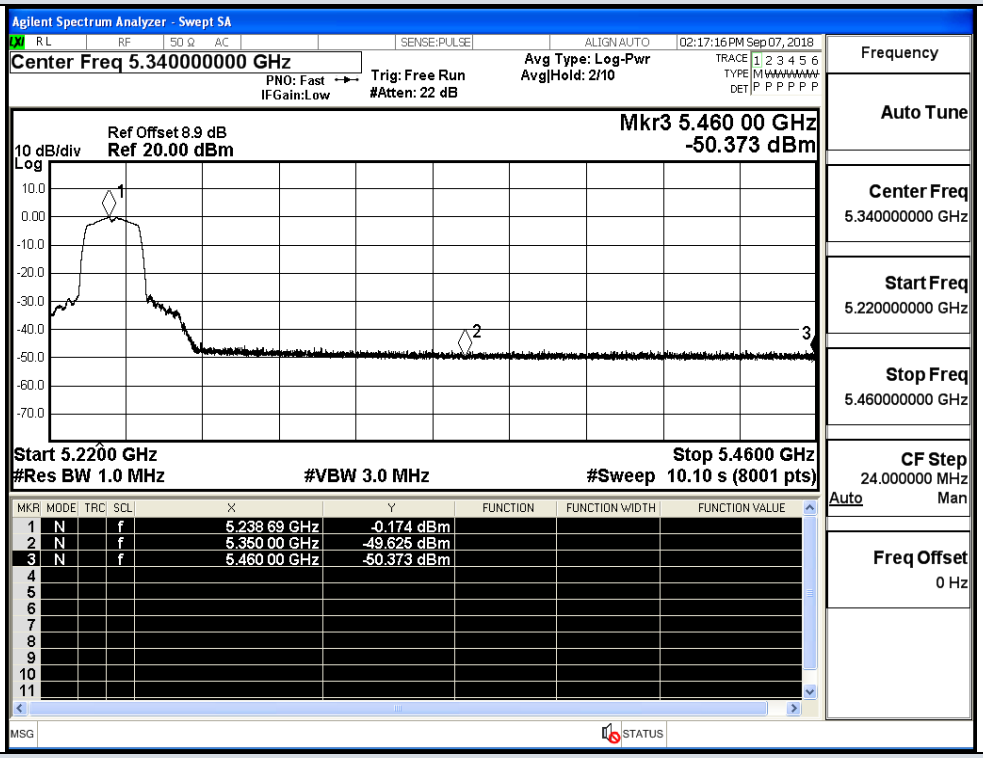


IEEE 802.11n HT20 / Channel 36 / 5180 MHz / Peak

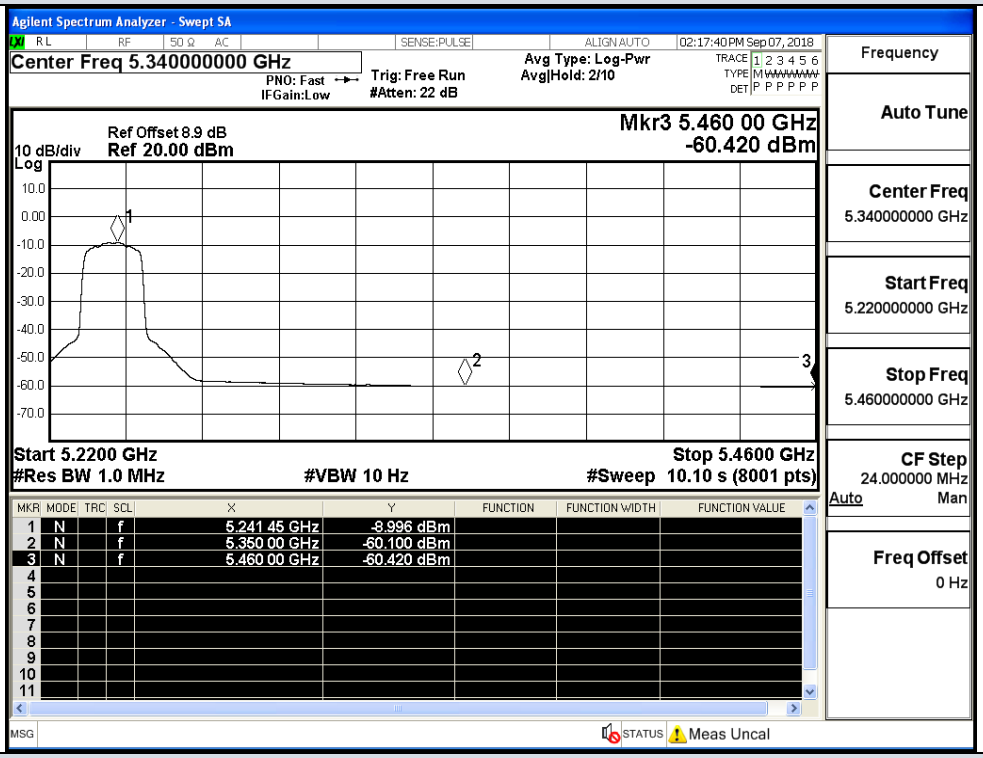


IEEE 802.11n HT20 / Channel 36 / 5180 MHz / Average

Undesirable Emissions Measurement

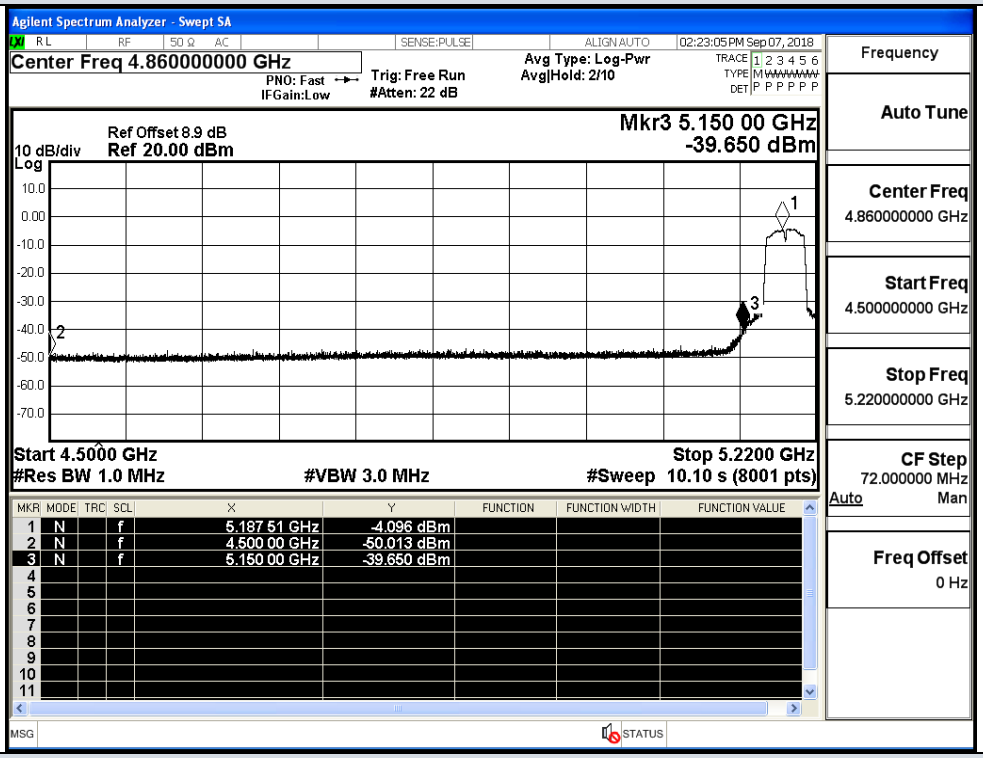


IEEE 802.11n HT20 / Channel 48 / 5240 MHz / Peak

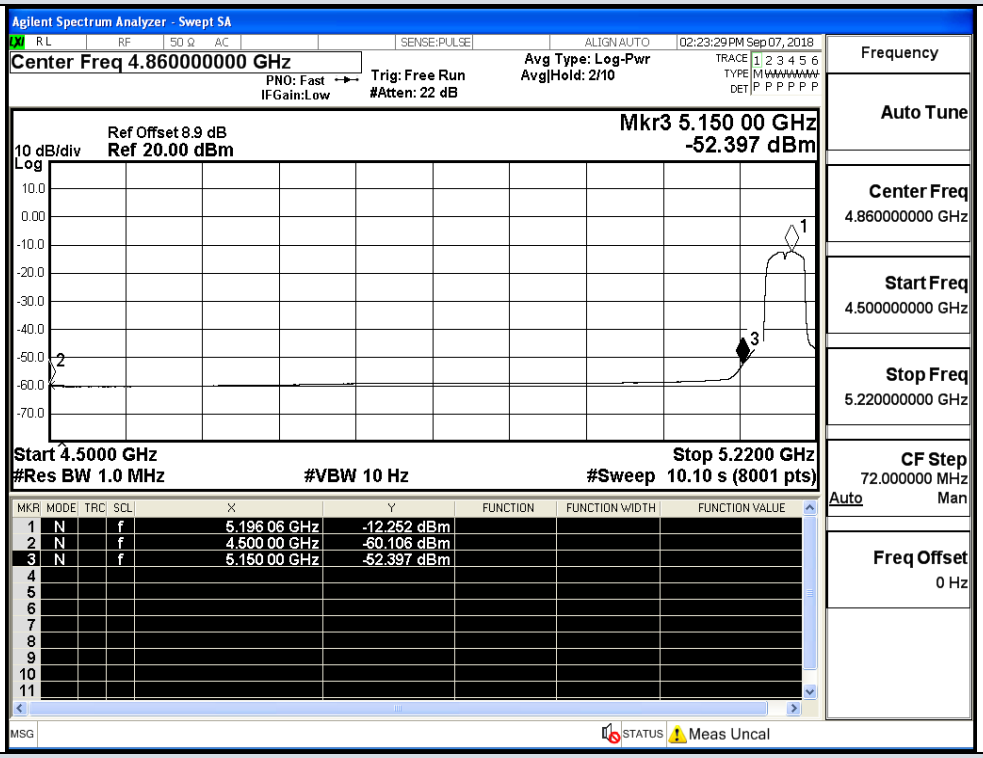


IEEE 802.11n HT20 / Channel 48 / 5240 MHz / Average

Undesirable Emissions Measurement

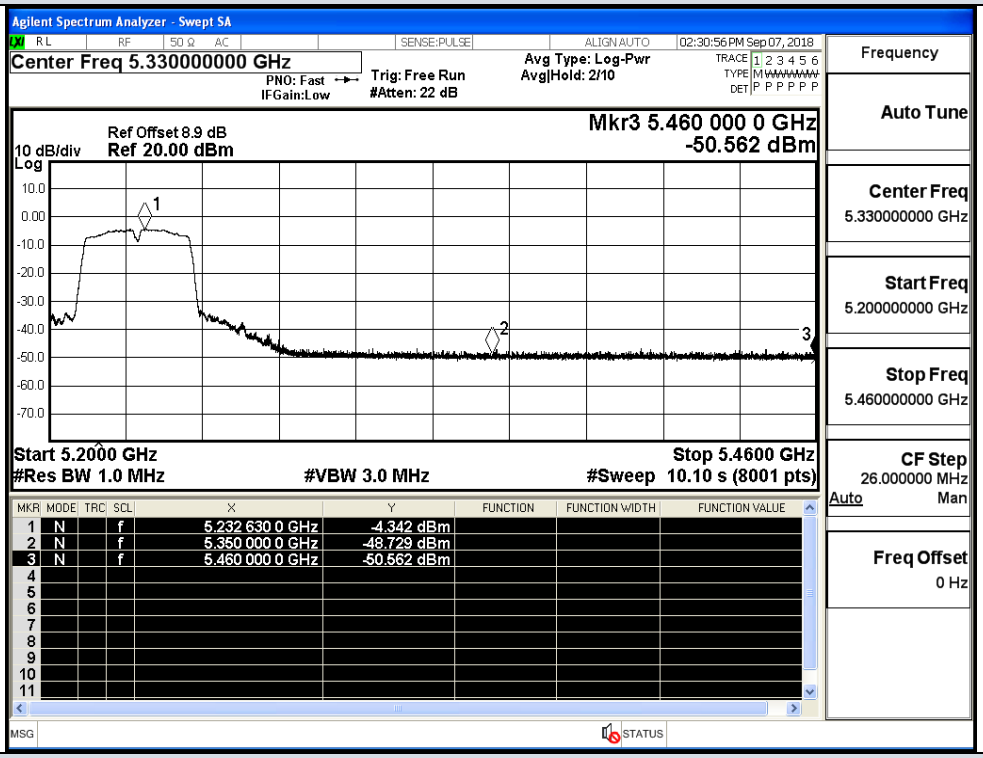


IEEE 802.11n HT40 / Channel 36 / 5180 MHz / Peak

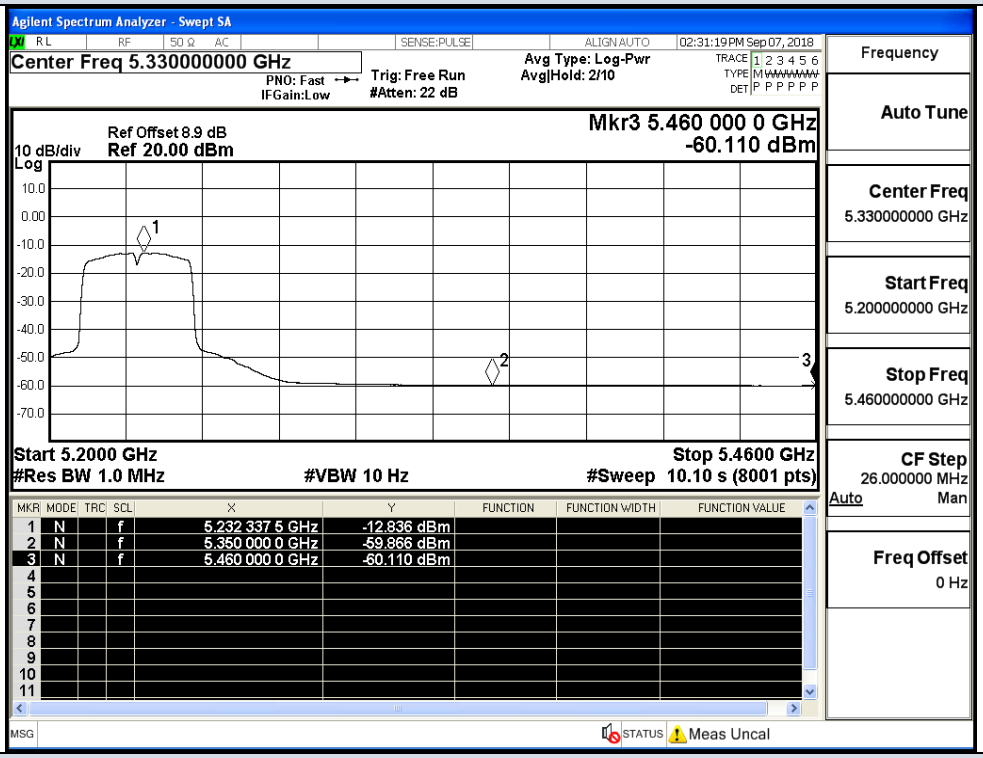


IEEE 802.11n HT40 / Channel 36 / 5180 MHz / Average

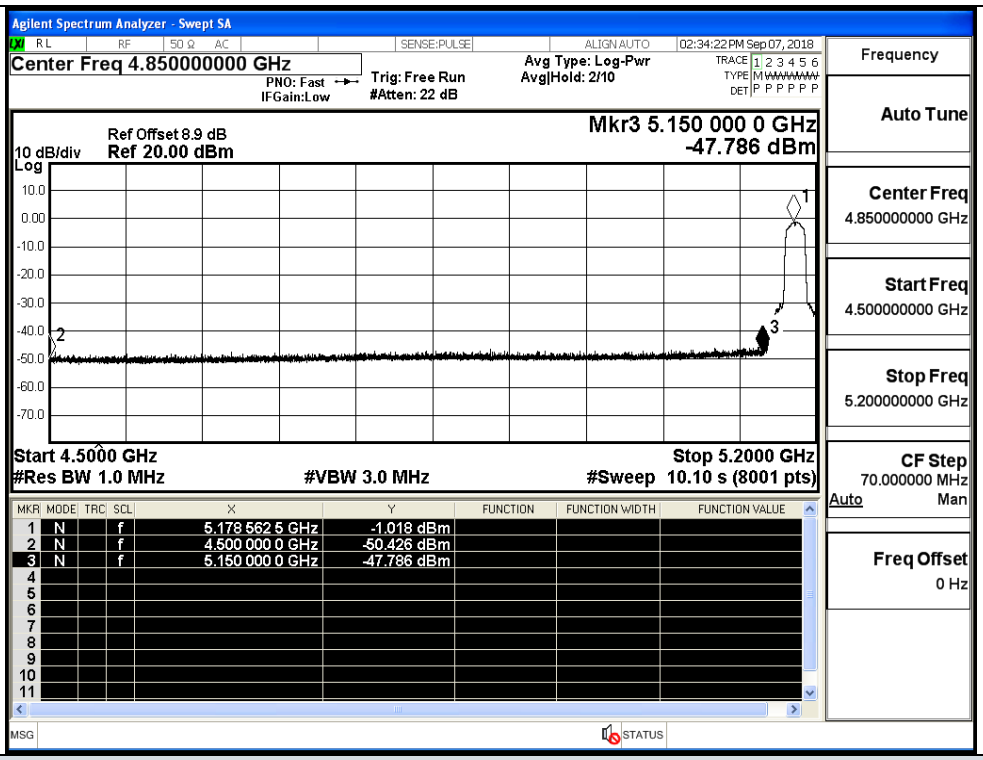
Undesirable Emissions Measurement



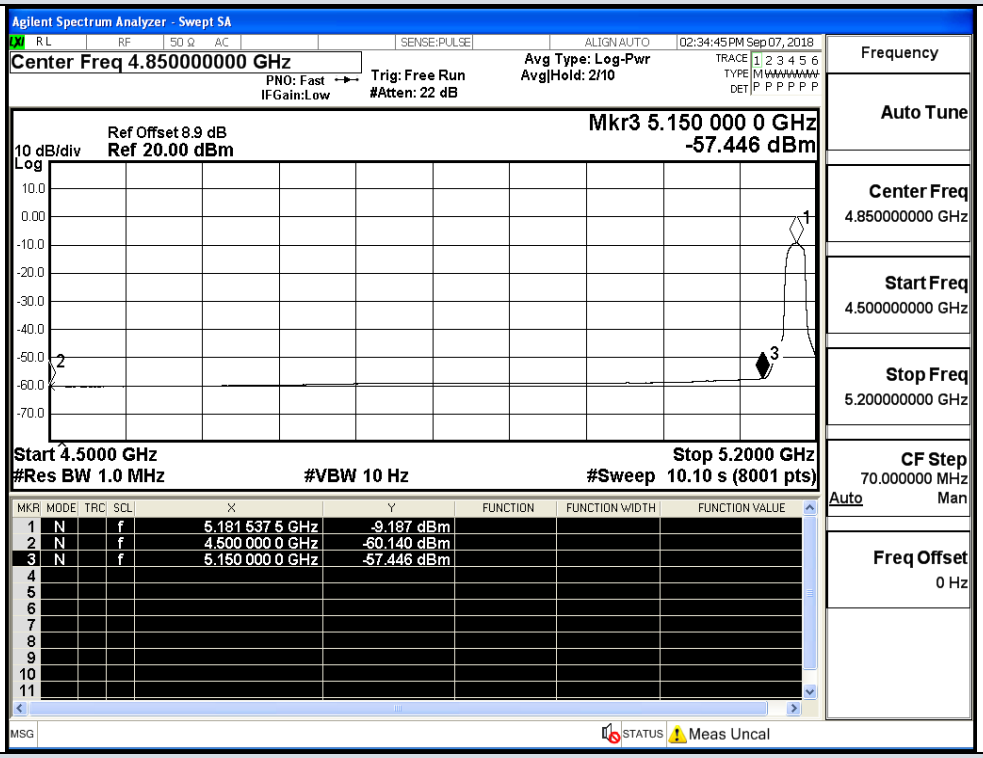
IEEE 802.11n HT40 / Channel 48 / 5230 MHz / Peak



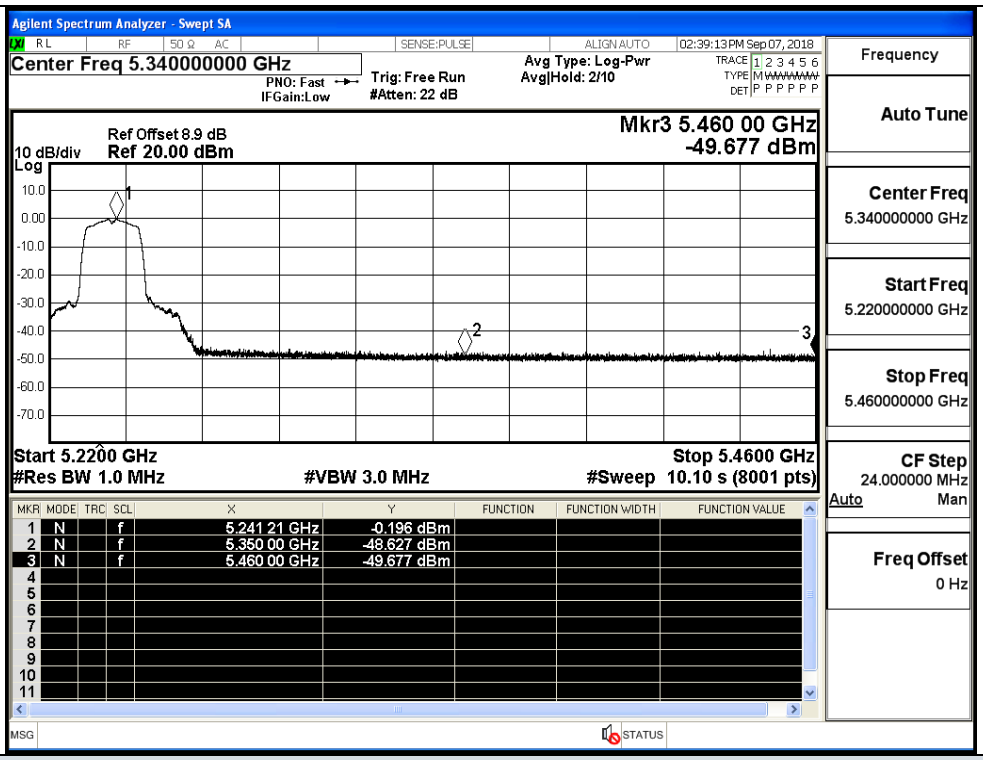
IEEE 802.11n HT40 / Channel 48 / 5230 MHz / Average



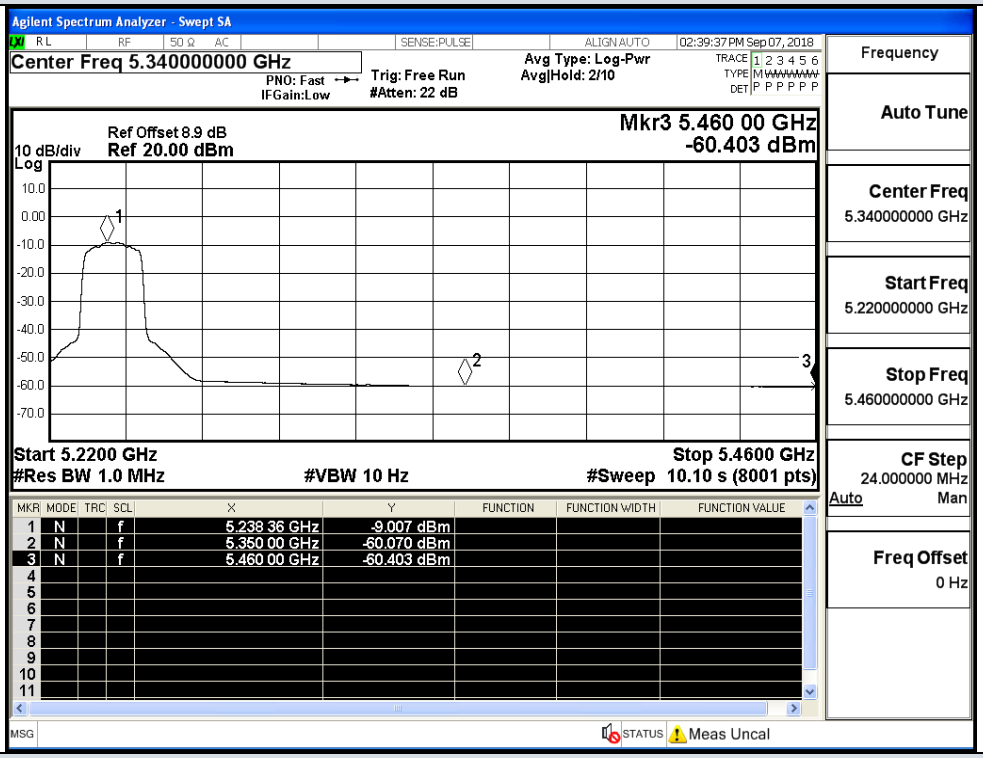
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz / Peak



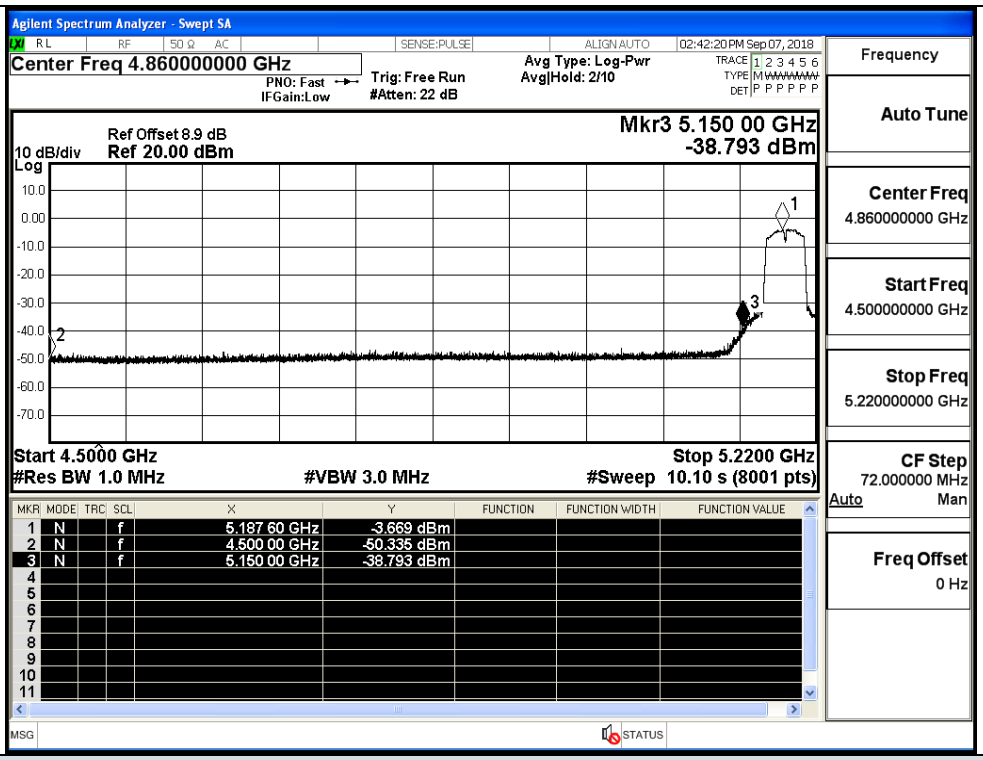
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz / Average



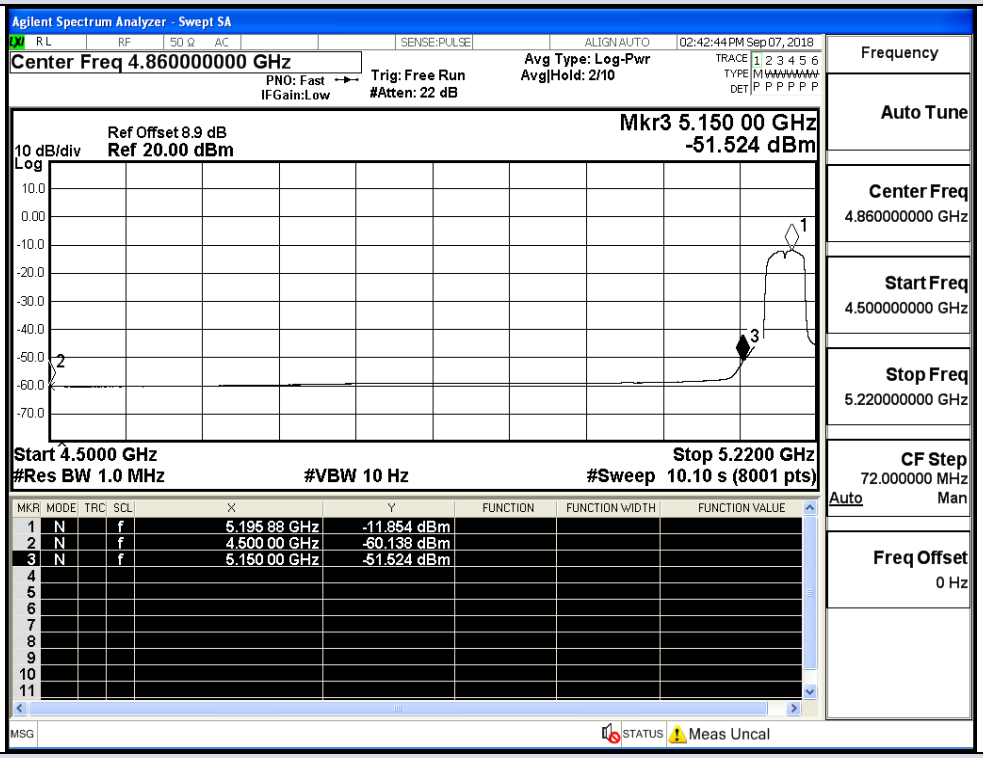
IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz / Peak



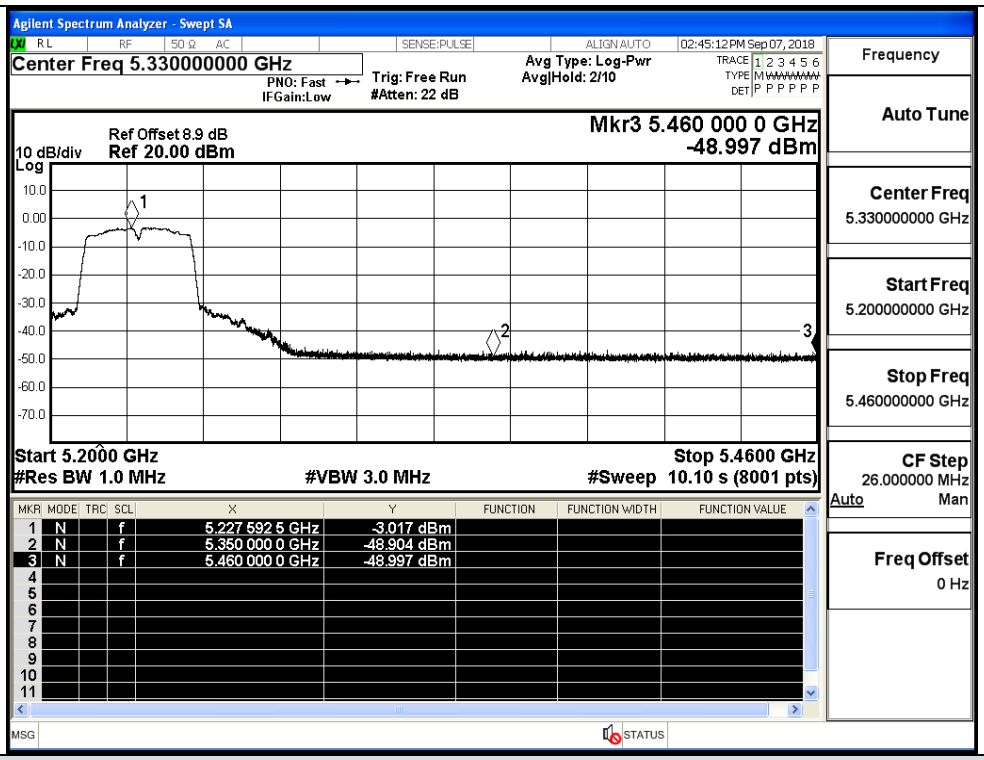
IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz / Average



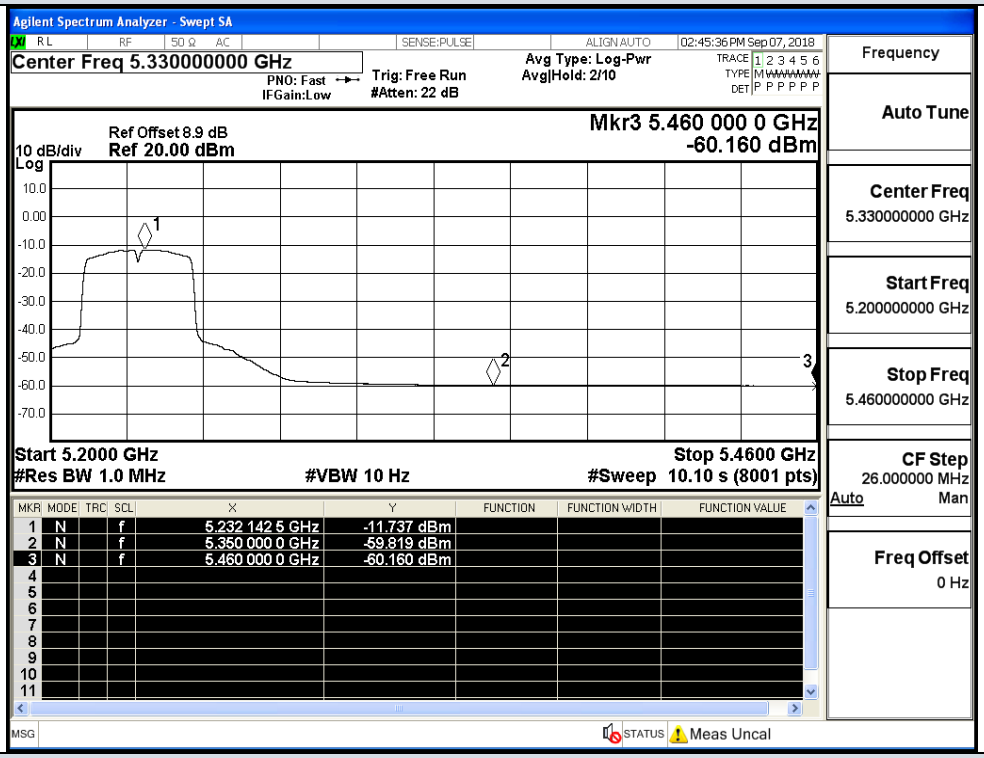
IEEE 802.11ac VHT40 / Channel 36 / 5180 MHz / Peak



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



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



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