

Appendix B

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: 1080P IOT CAMERA

Trade Mark: Momentum

Test Model: MOCAM-1080-01

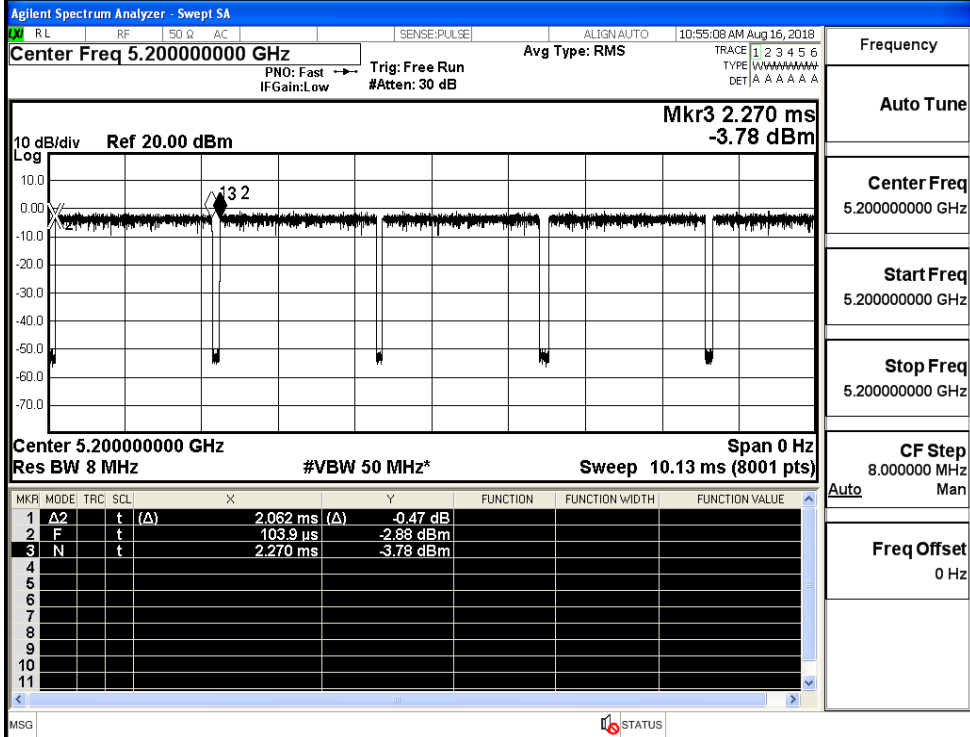
Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

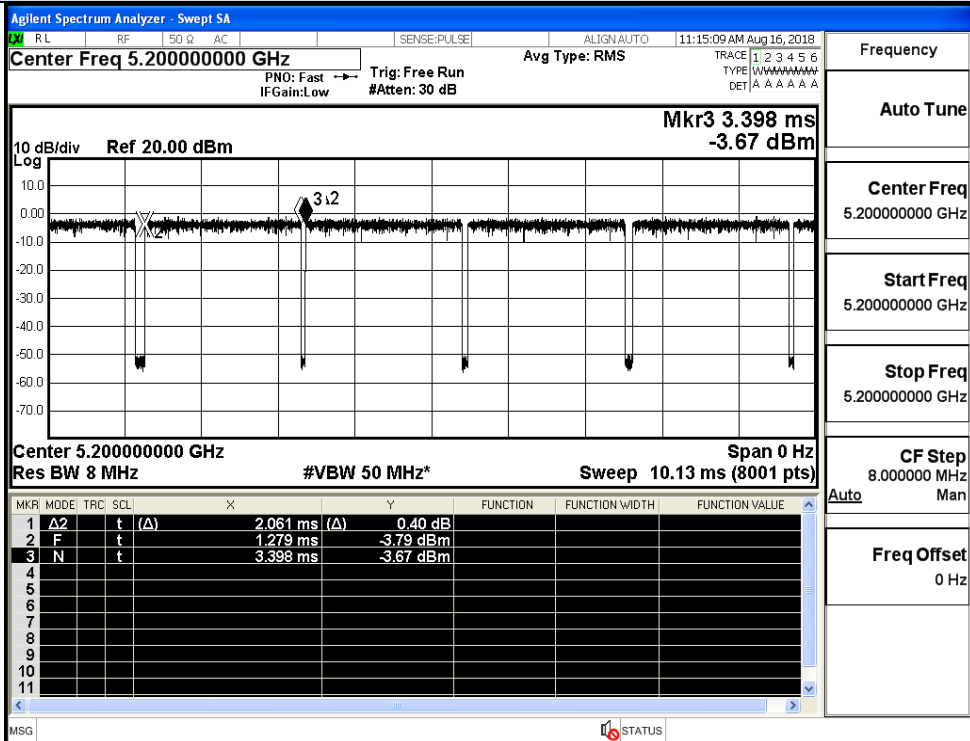
B.1 Duty Cycle

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5200	95.20	0.21	0.01
11N20 SISO	5200	97.25	0.12	0.01
11N40 SISO	5190	92.55	0.34	0.01
11AC20 SISO	5200	95.59	0.20	0.01
11AC40 SISO	5190	93.30	0.30	0.01
11AC80 SISO	5210	95.60	0.20	0.01

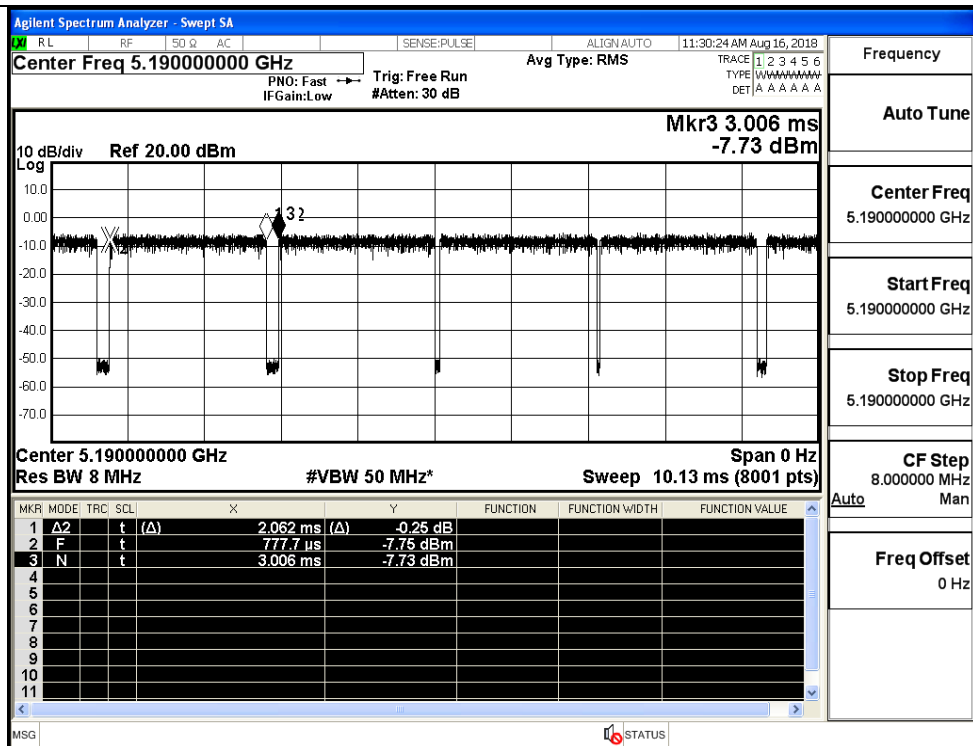
On Time and Duty Cycle



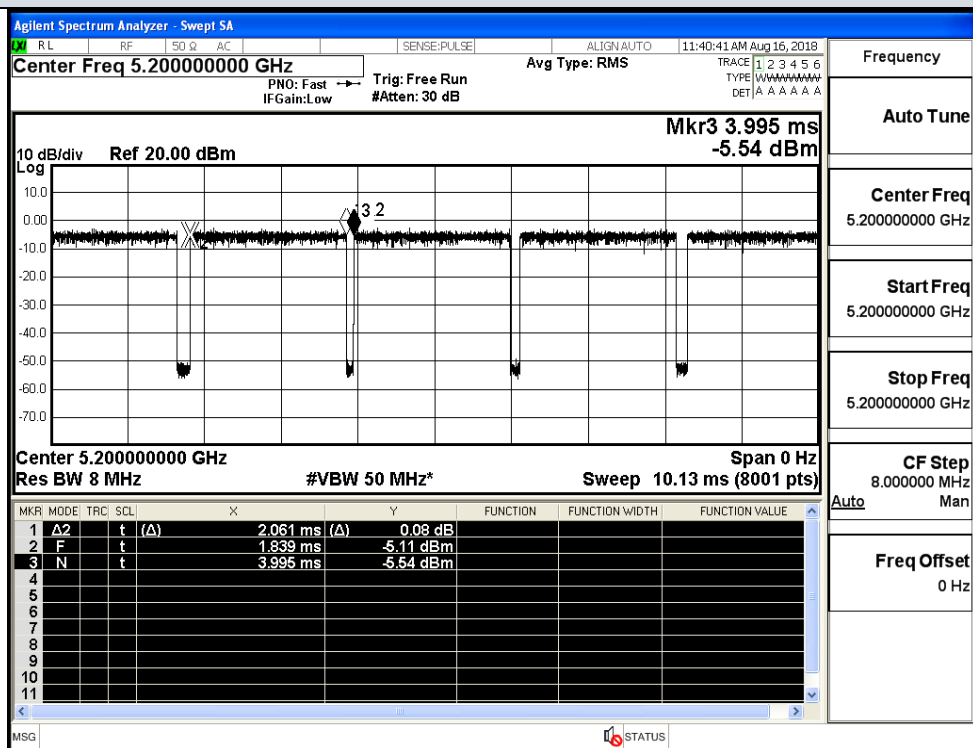
IEEE 802.11a



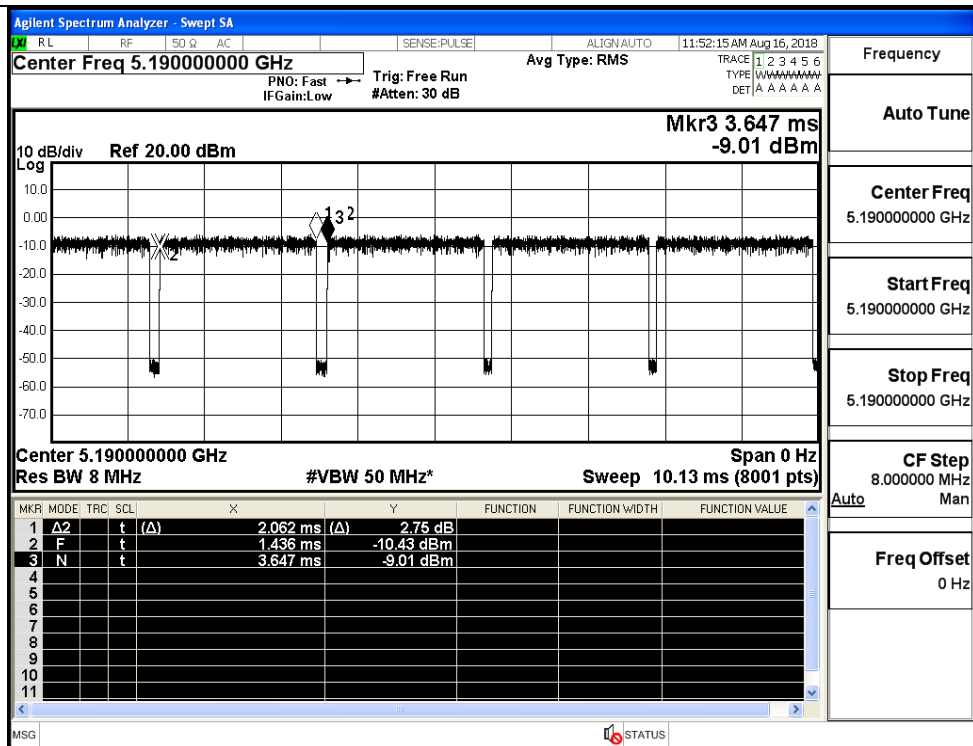
IEEE 802.11n HT20



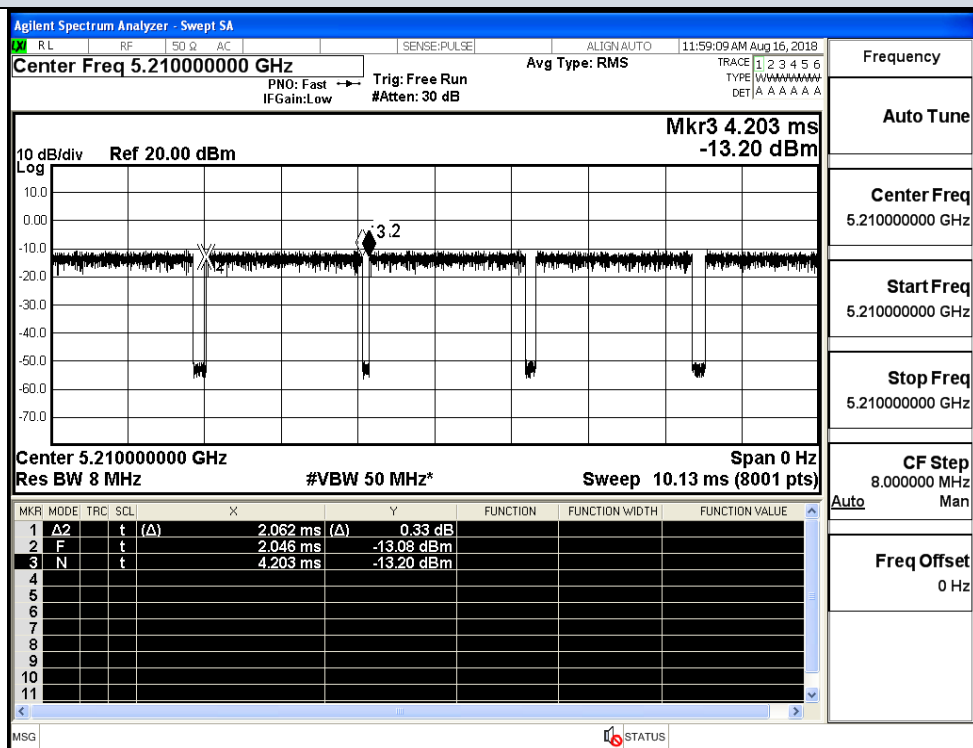
IEEE 802.11n HT40



IEEE 802.11ac VHT20



IEEE 802.11ac VHT40



IEEE 802.11ac VHT80

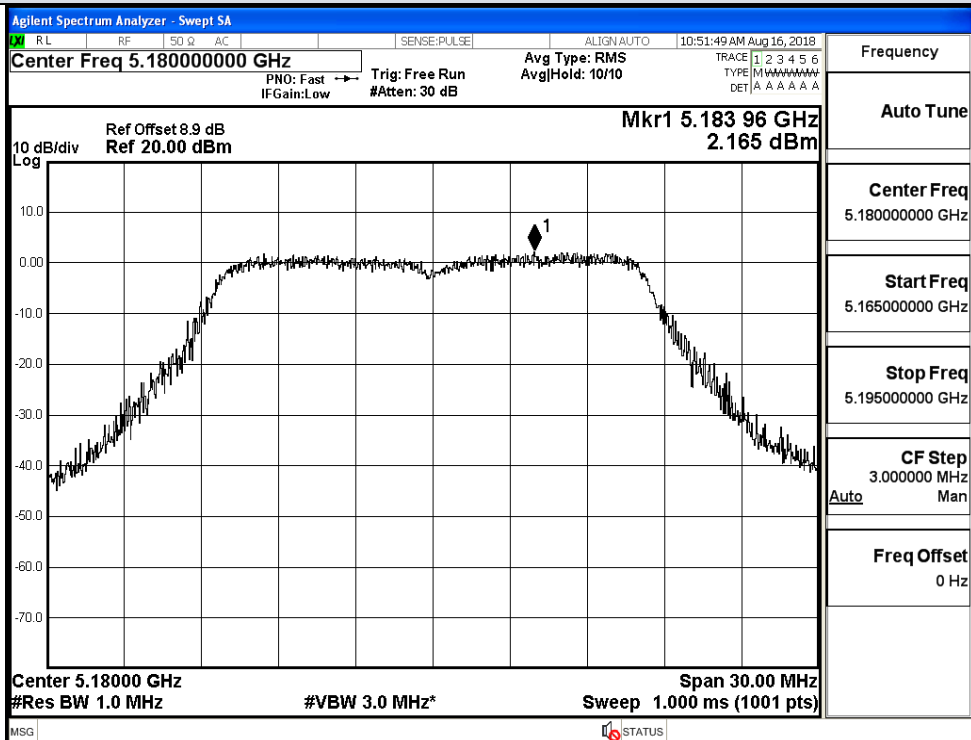
B.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)
11A	36	5180	9.73	0.21	9.94	24
	40	5200	9.56	0.21	9.77	
	48	5240	9.40	0.21	9.61	
11N20 SISO	36	5180	9.05	0.12	9.17	24
	40	5200	9.54	0.12	9.66	
	48	5240	9.44	0.12	9.56	
11N40 SISO	38	5190	9.31	0.34	9.65	24
	46	5230	9.21	0.34	9.55	
11AC20 SISO	36	5180	9.02	0.20	9.22	24
	40	5200	9.47	0.20	9.67	
	48	5240	9.39	0.20	9.59	
11AC40 SISO	38	5190	8.22	0.30	8.52	24
	46	5230	9.53	0.30	9.83	
11AC80 SISO	42	5210	9.81	0.20	10.01	24

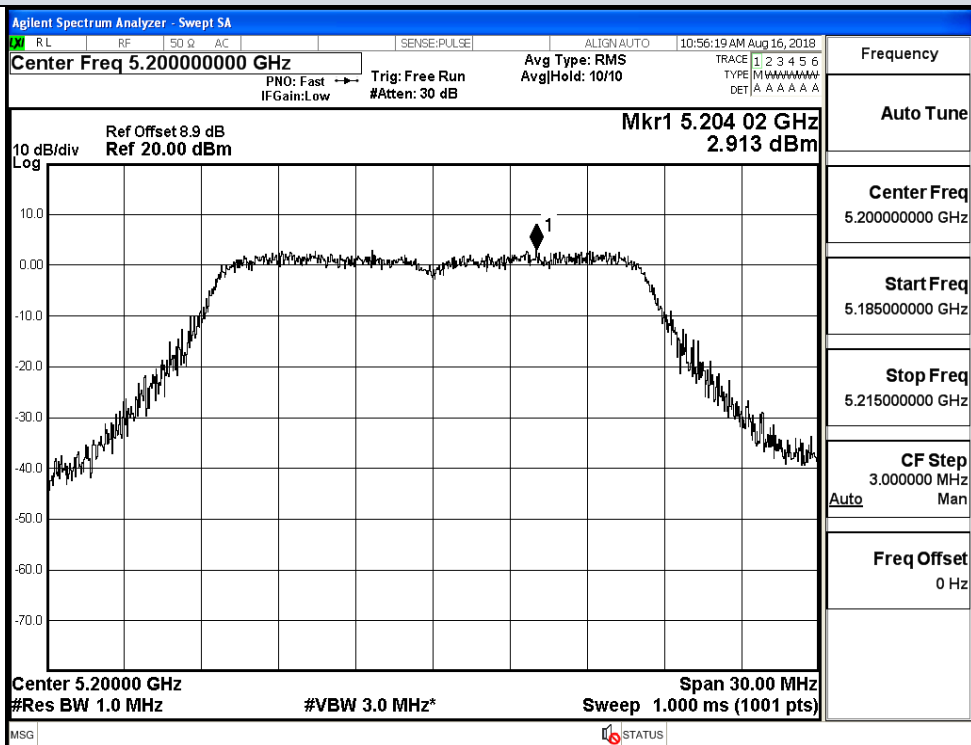
B.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)
11A	36	5180	2.17	0.21	2.35	11
	40	5200	2.91	0.21	3.12	
	48	5240	3.42	0.21	3.90	
11N20 SISO	36	5180	2.15	0.12	2.23	11
	40	5200	3.10	0.12	3.22	
	48	5240	3.65	0.12	3.97	
11N40 SISO	38	5190	0.10	0.34	0.44	11
	46	5230	-0.08	0.34	0.06	
11AC20 SISO	36	5180	2.01	0.20	2.21	11
	40	5200	1.67	0.20	1.87	
	48	5240	2.13	0.20	2.22	
11AC40 SISO	38	5190	-0.12	0.30	0.18	11
	46	5230	-0.83	0.30	-0.62	
11AC80 SISO	42	5210	-4.00	0.20	-3.80	11

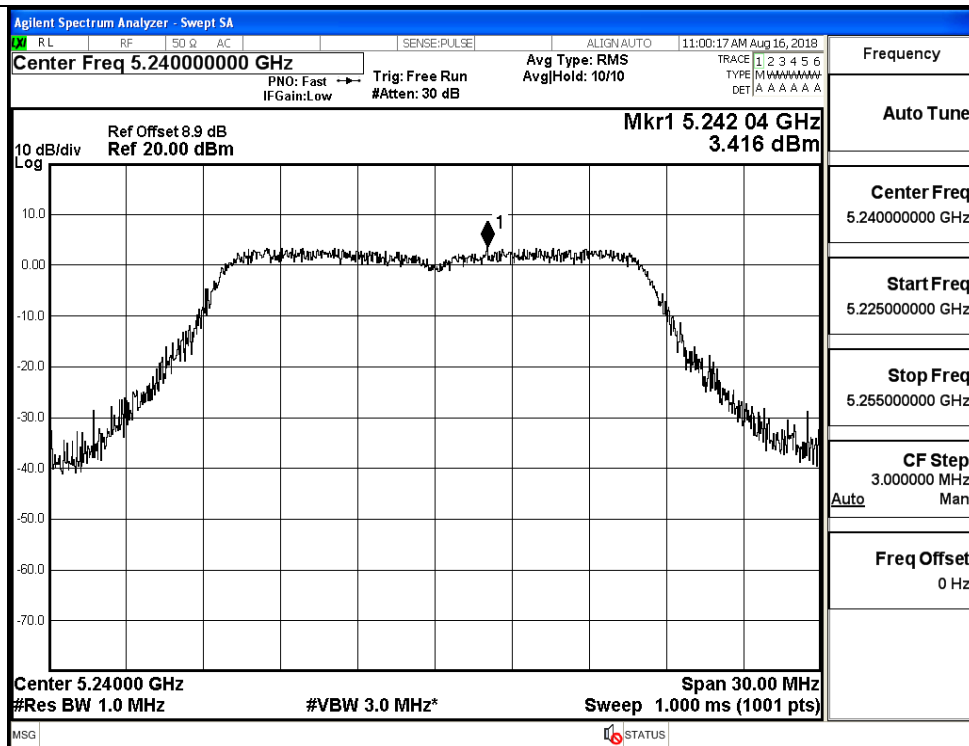
Power Spectral Density



IEEE 802.11a / Channel 36 / 5180 MHz

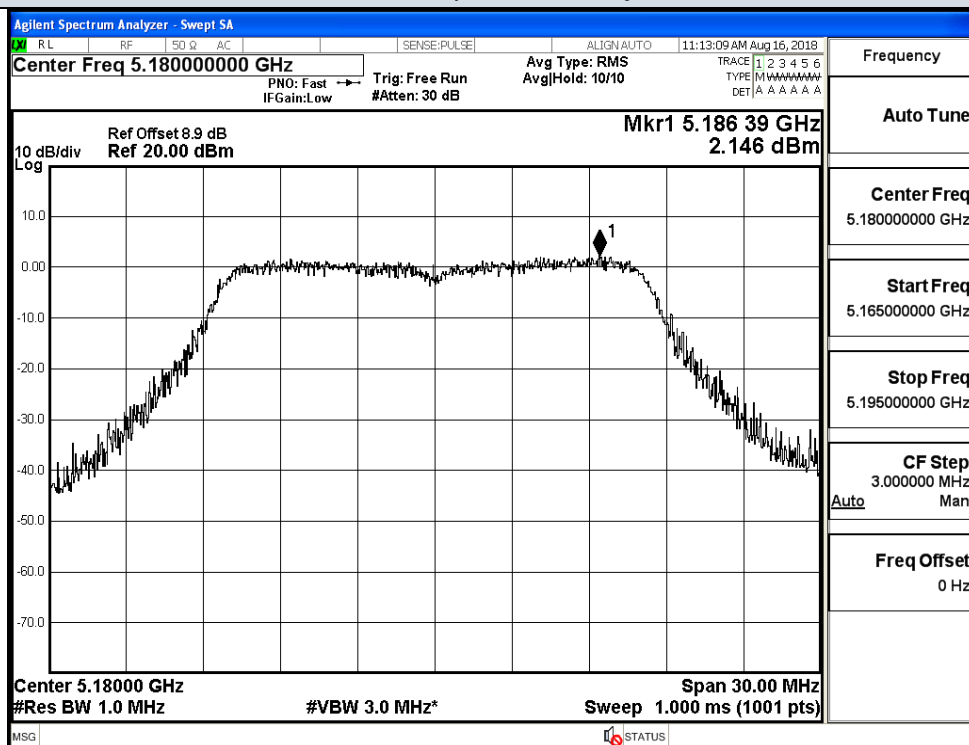


IEEE 802.11a / Channel 40 / 5200 MHz

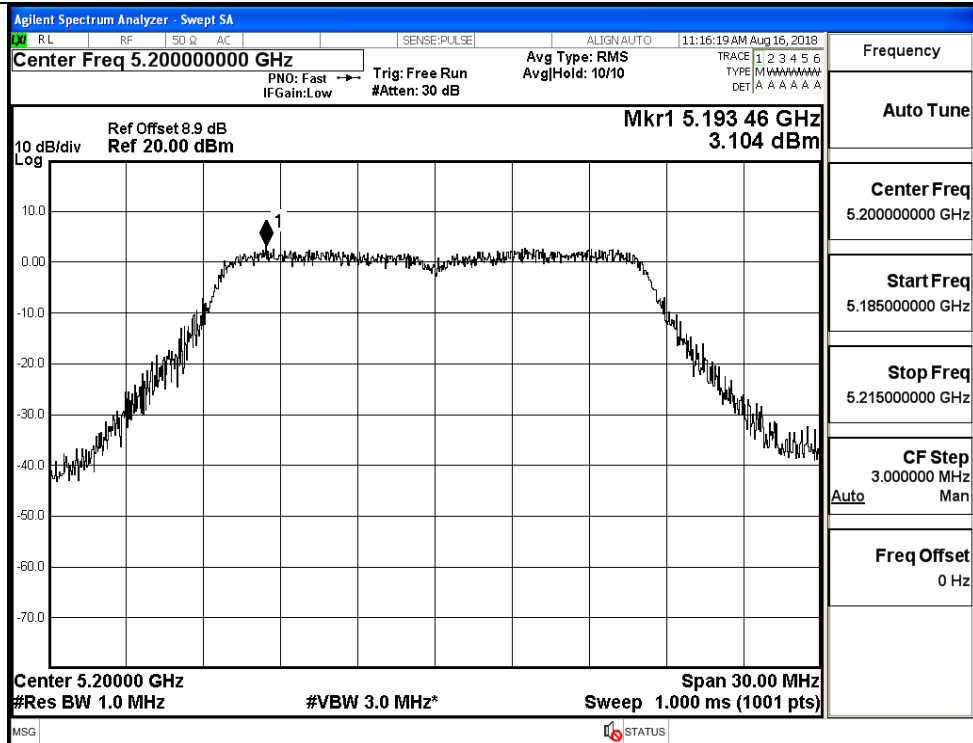


IEEE 802.11a / Channel 48 / 5240 MHz

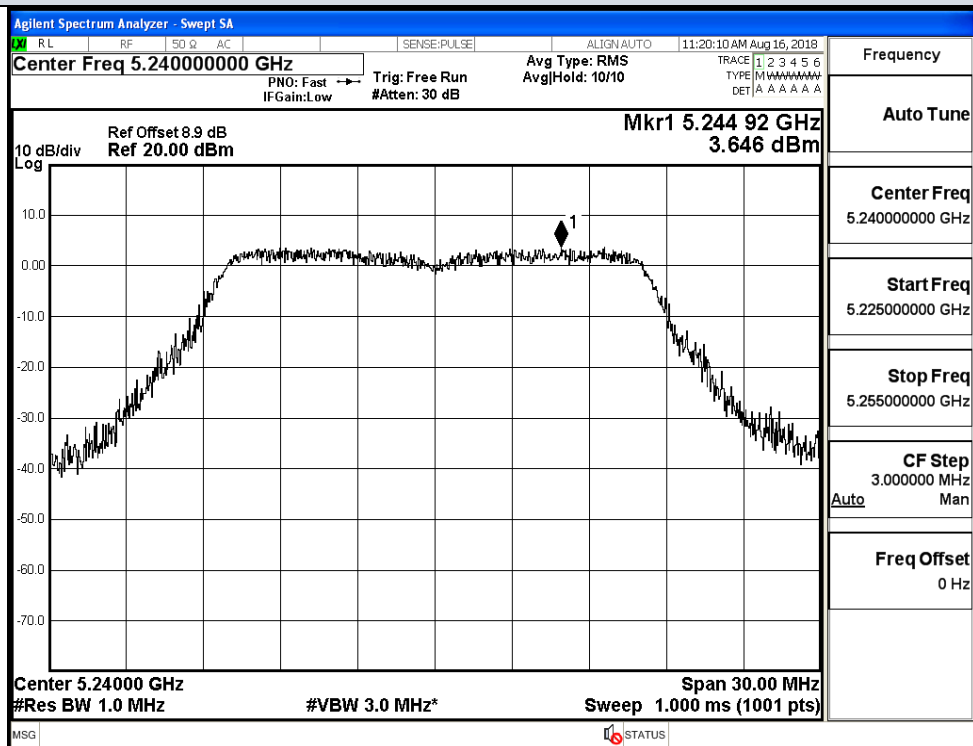
Power Spectral Density



IEEE 802.11n HT20 / Channel 36 / 5180 MHz

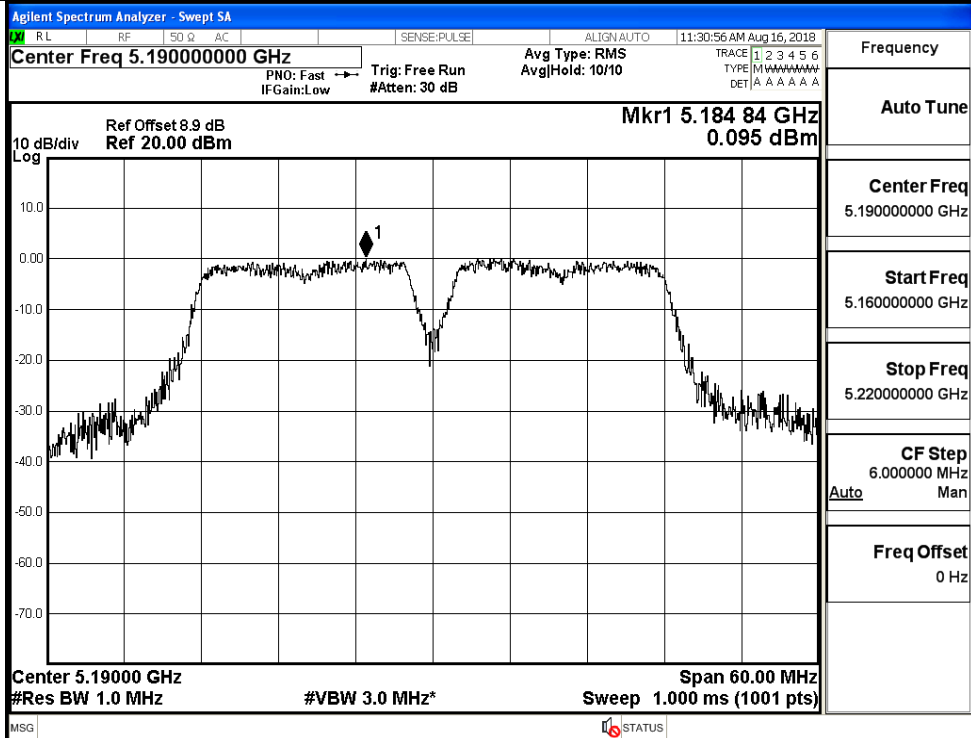


IEEE 802.11n HT20 / Channel 40 / 5200 MHz

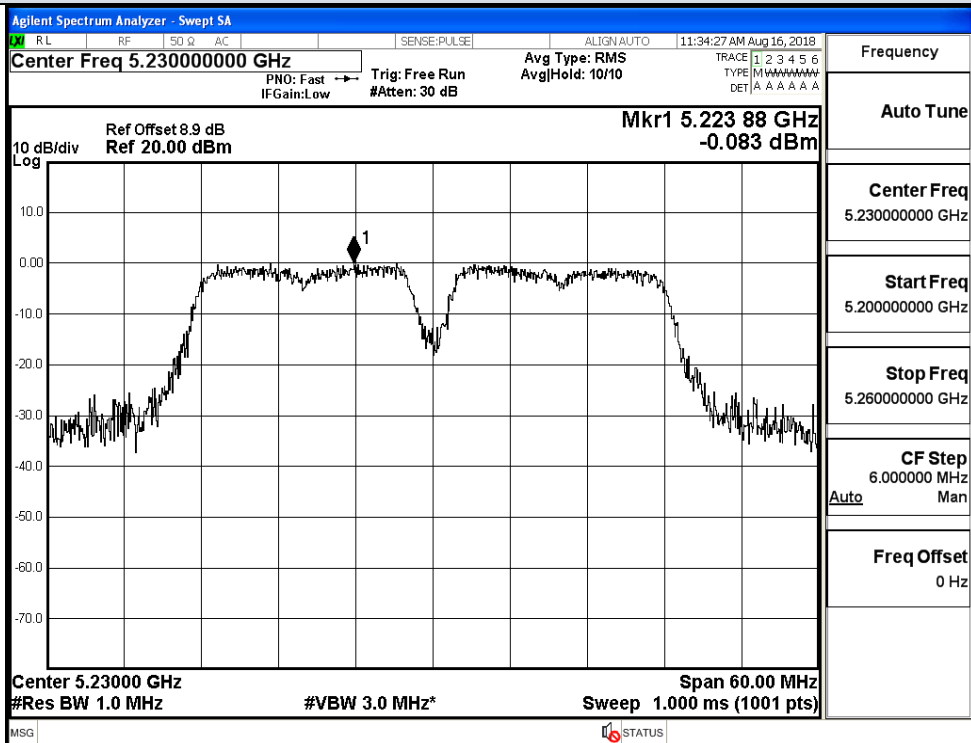


IEEE 802.11n HT20 / Channel 48 / 5240 MHz

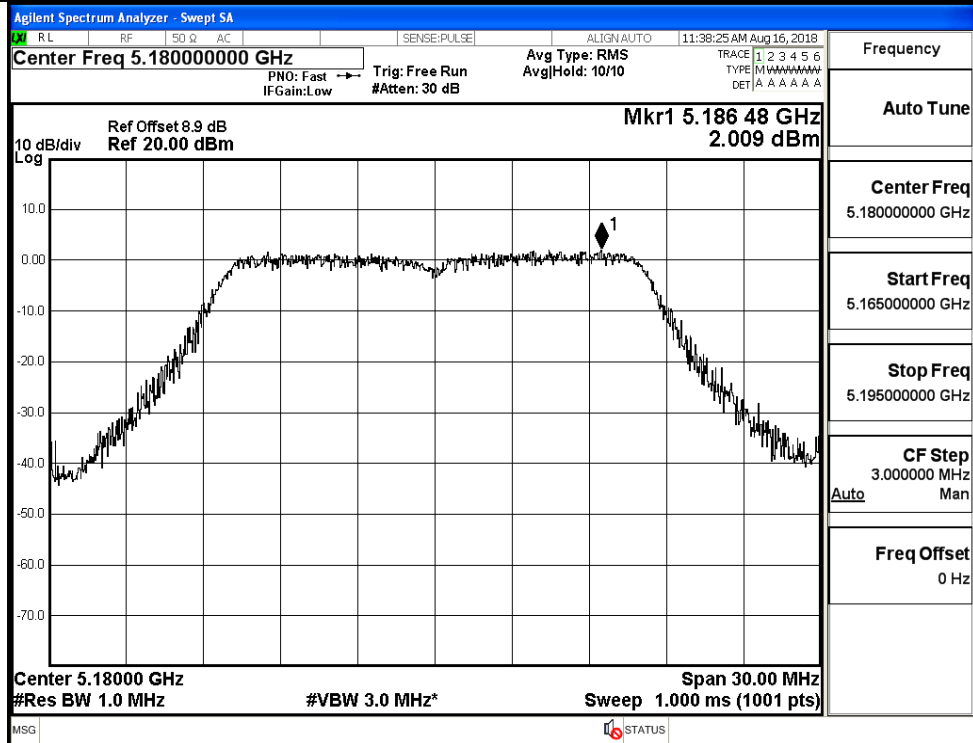
Power Spectral Density



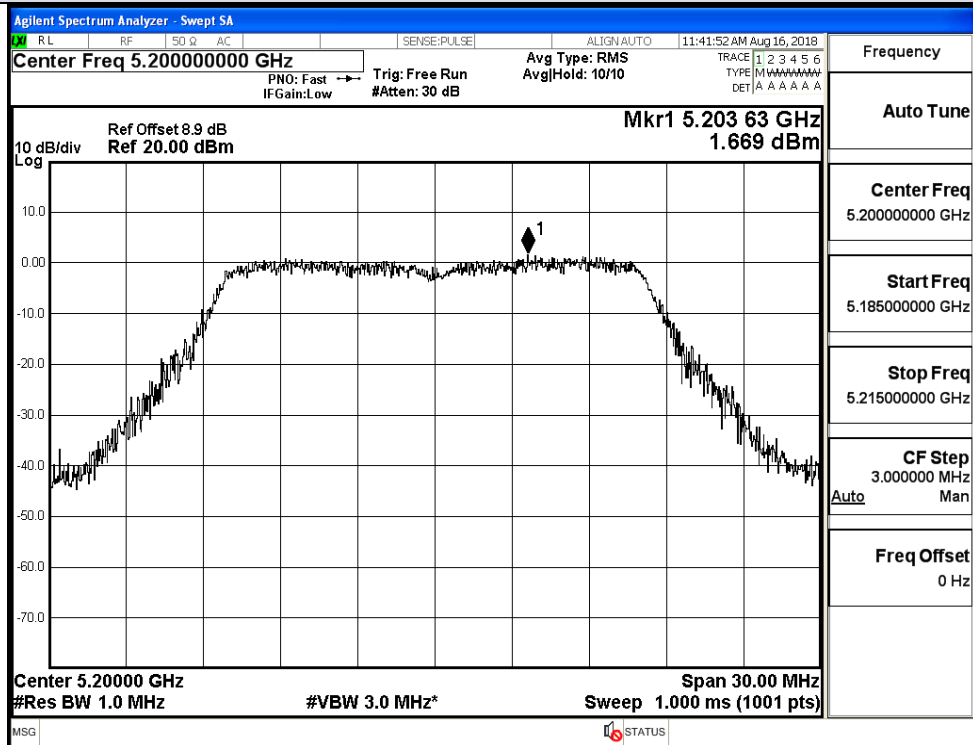
IEEE 802.11n HT40 / Channel 38 / 5190 MHz



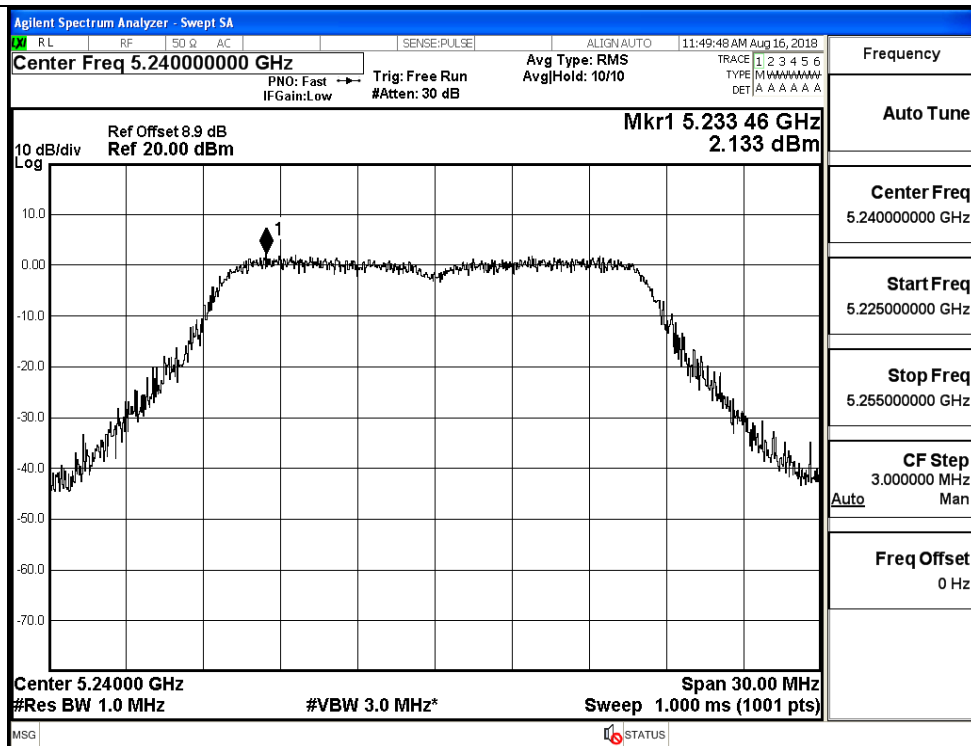
IEEE 802.11n HT40 / Channel 46 / 5230 MHz



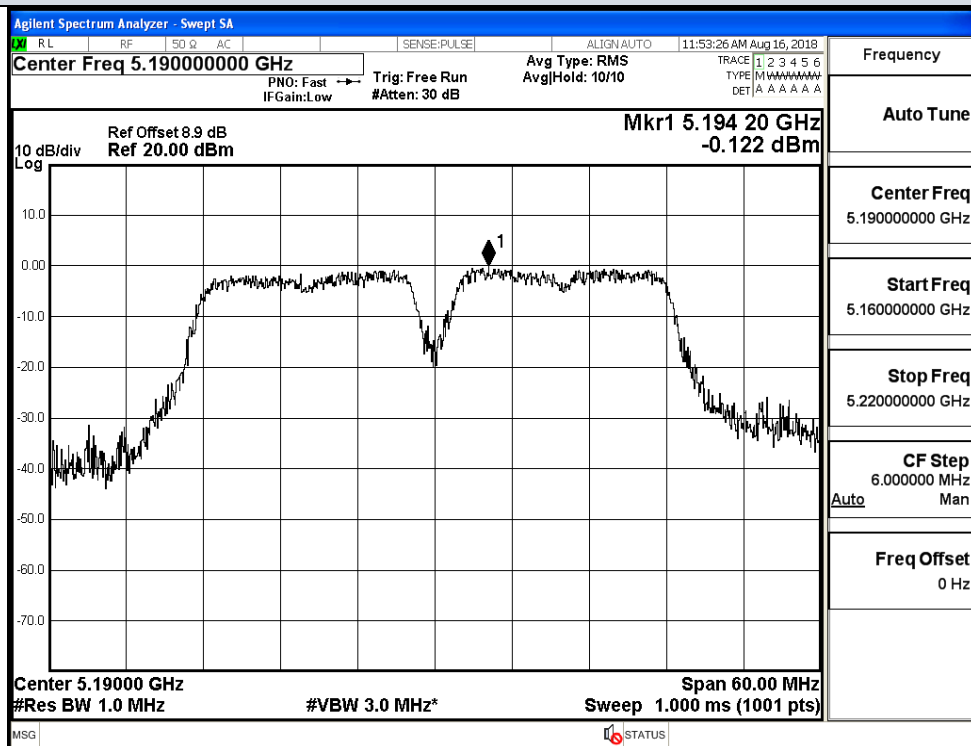
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz



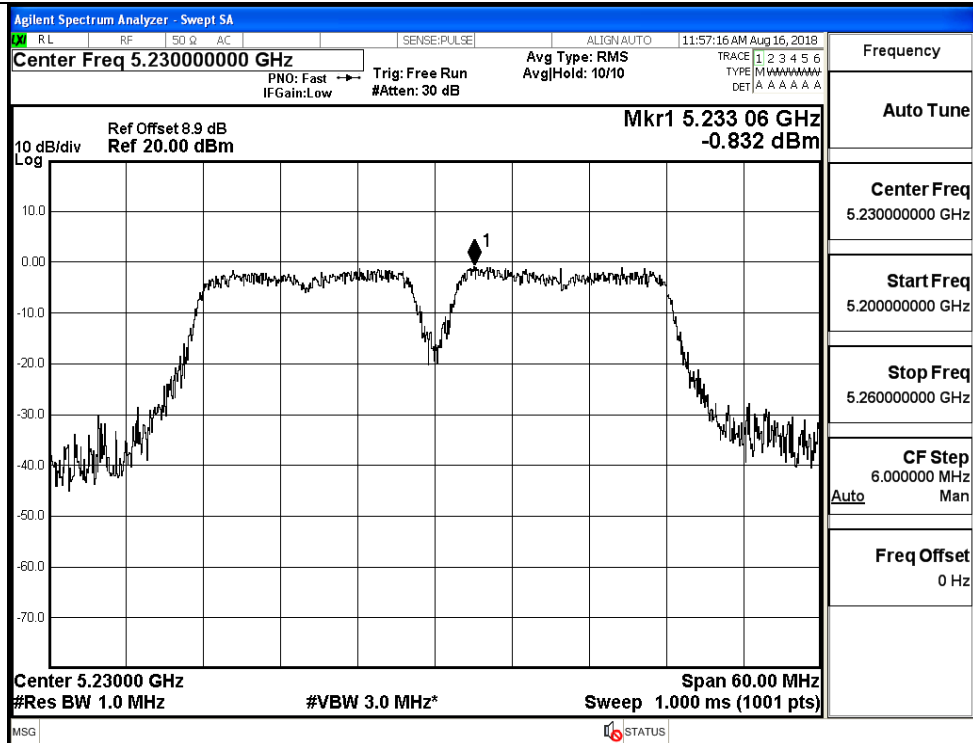
IEEE 802.11ac VHT20 / Channel 40 / 5200 MHz



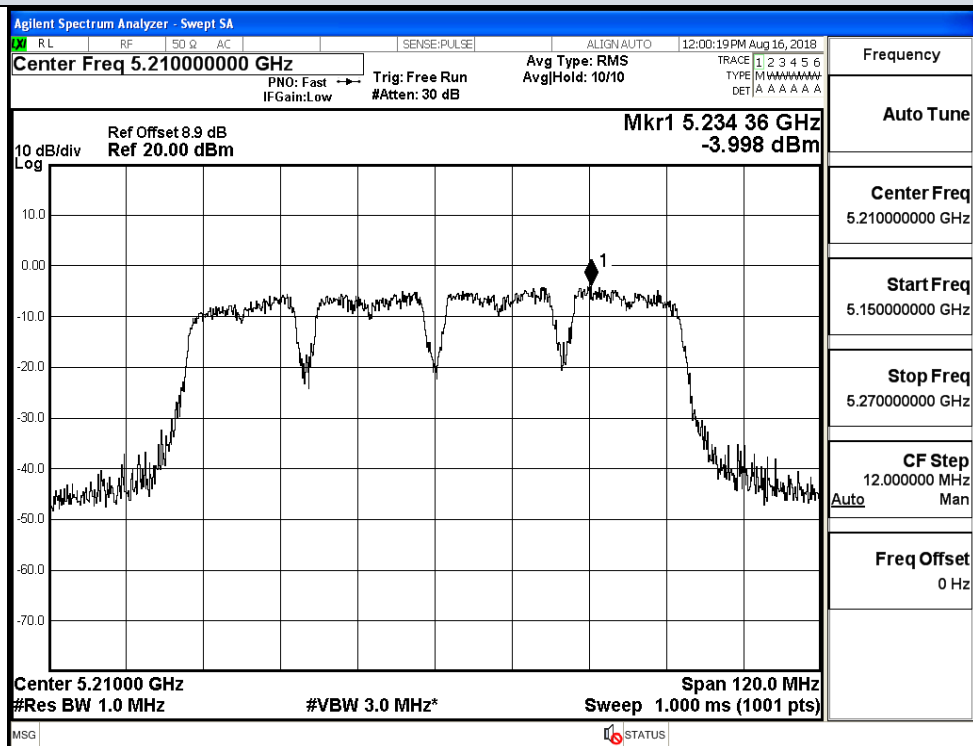
IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz



IEEE 802.11ac VHT40 / Channel 38 / 5190 MHz



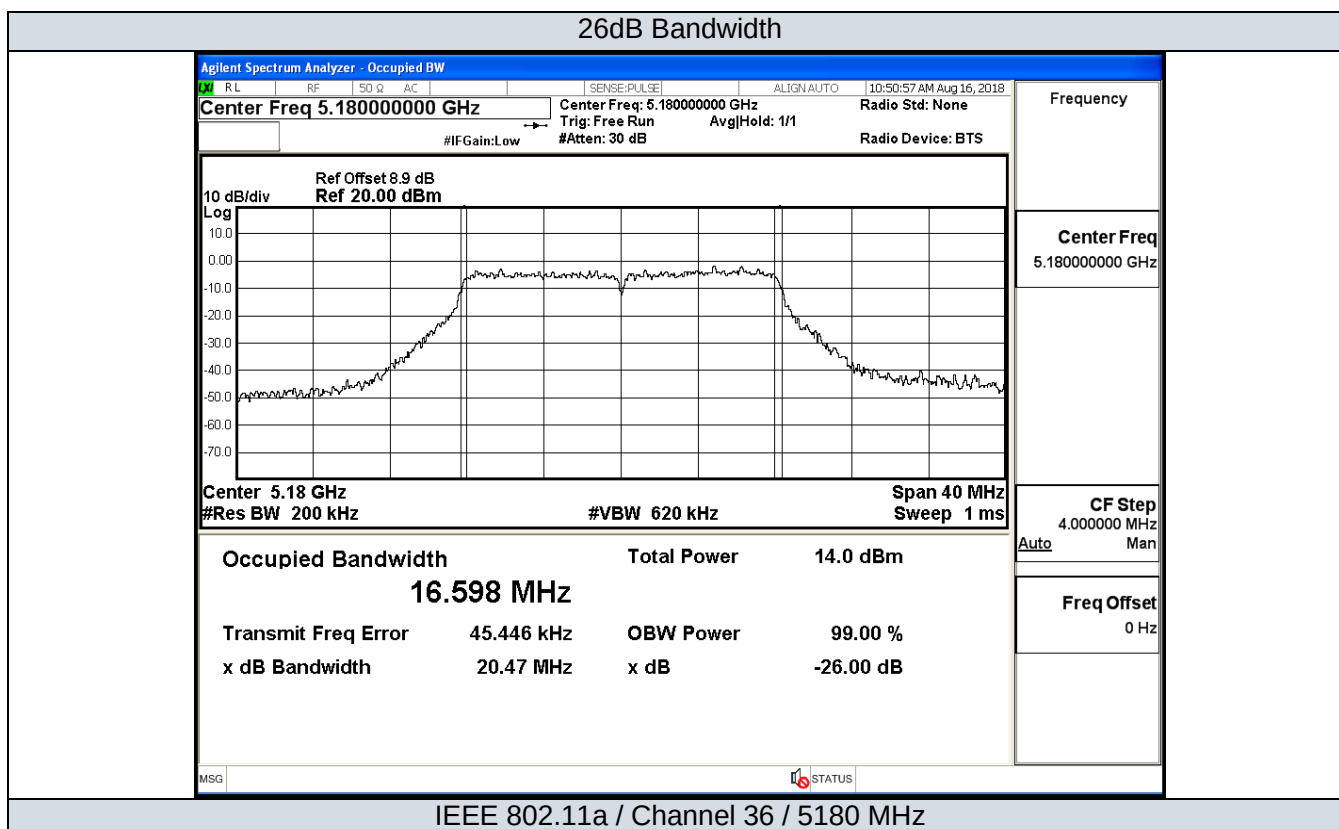
IEEE 802.11ac VHT40 / Channel 46 / 5230 MHz

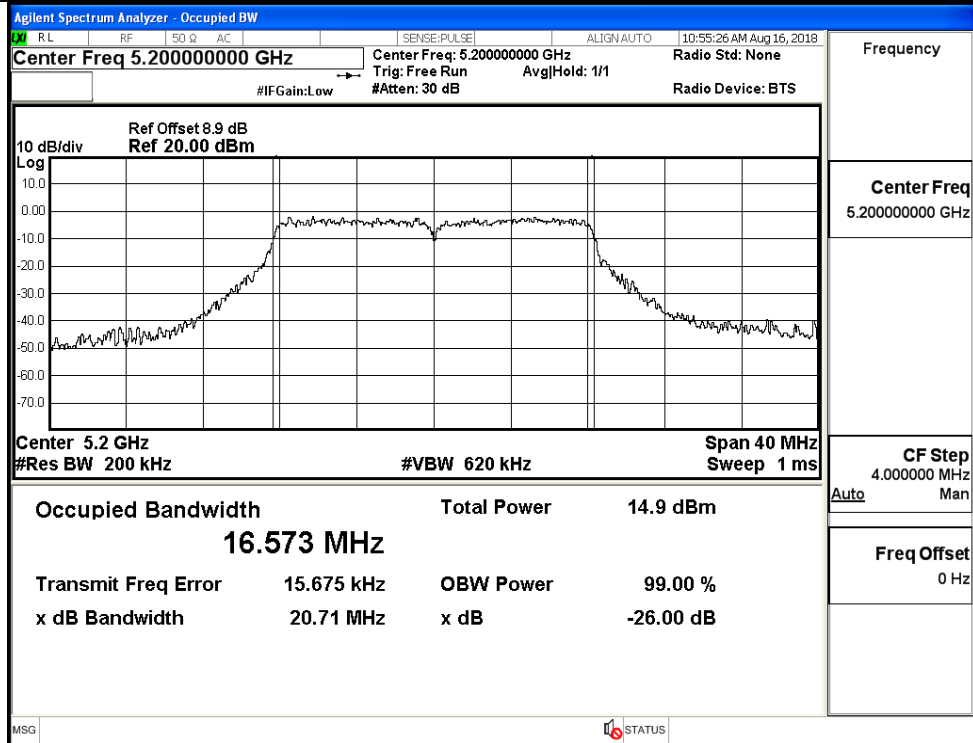


IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz

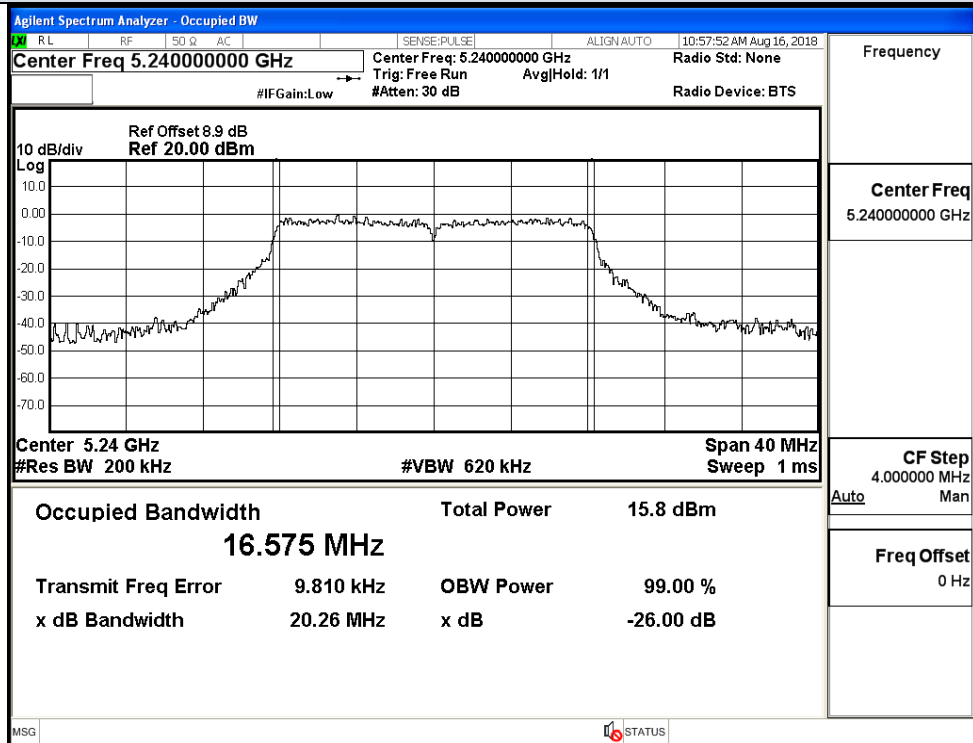
B.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
11A	36	5180	20.47	No Limit
	40	5200	20.71	
	48	5240	20.26	
11N20 SISO	36	5180	20.64	No Limit
	40	5200	20.54	
	48	5240	20.74	
11N40 SISO	38	5190	41.55	No Limit
	46	5230	42.28	
11AC20 SISO	36	5180	20.55	No Limit
	40	5200	20.47	
	48	5240	20.50	
11AC40 SISO	38	5190	41.57	No Limit
	46	5230	41.59	
11AC80 SISO	42	5210	81.94	No Limit



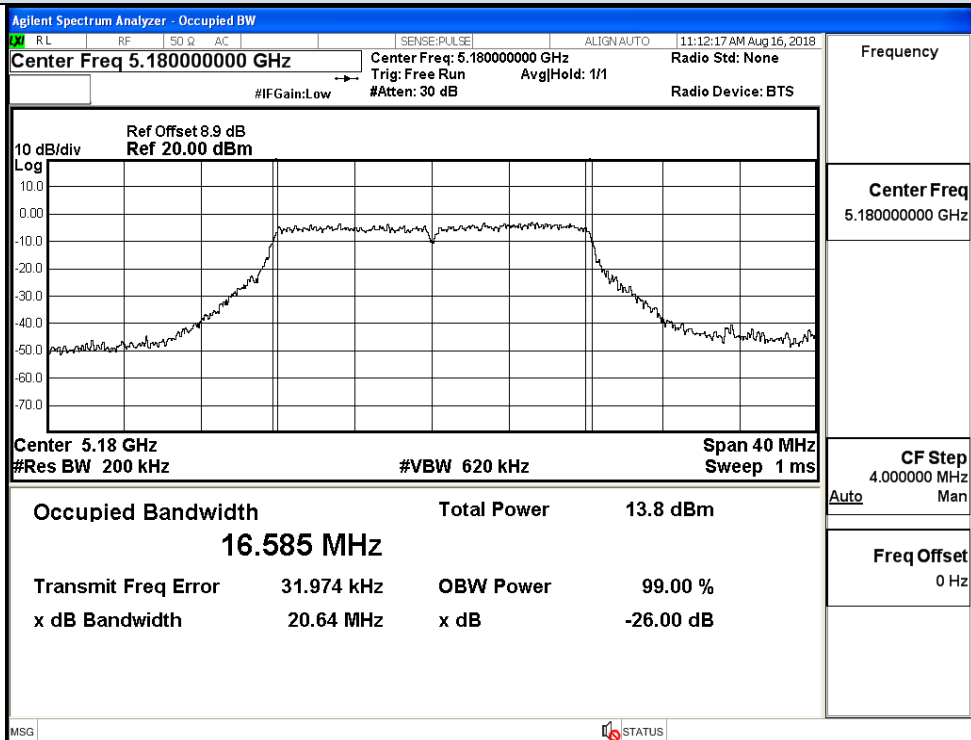


IEEE 802.11a / Channel 40 / 5200 MHz

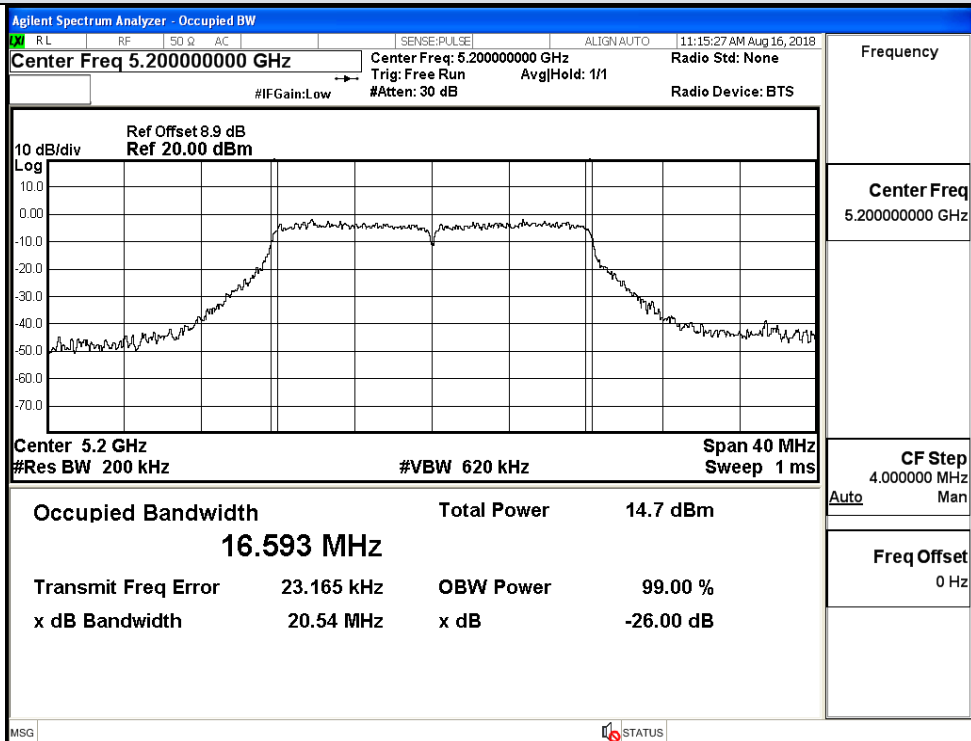


IEEE 802.11a / Channel 48 / 5240 MHz

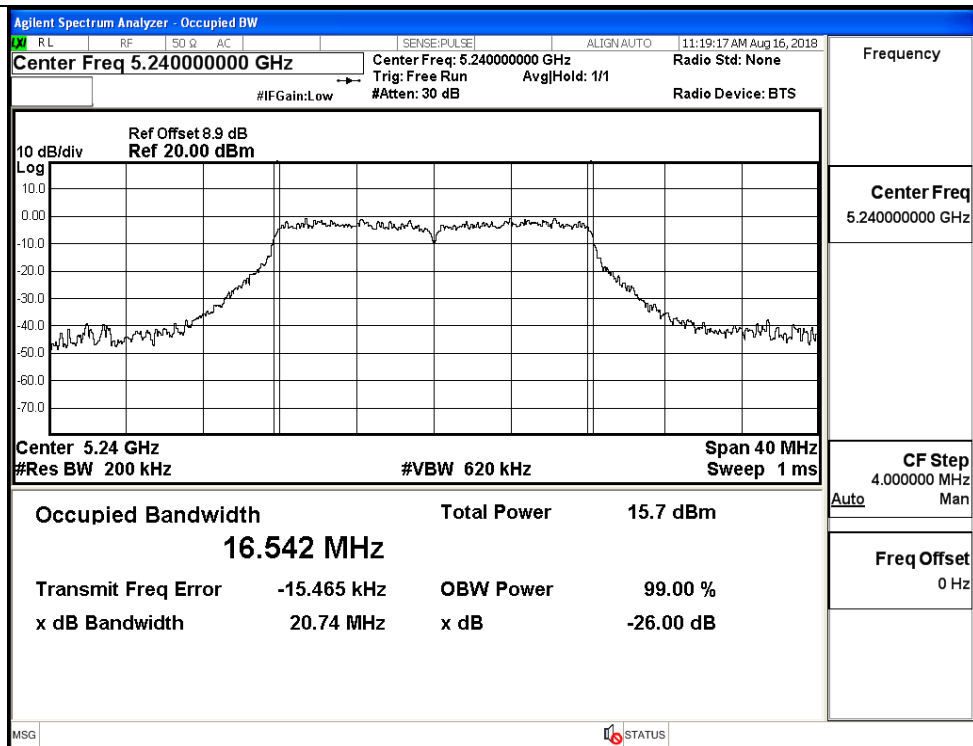
26dB Bandwidth



IEEE 802.11n HT20 / Channel 36 / 5180 MHz

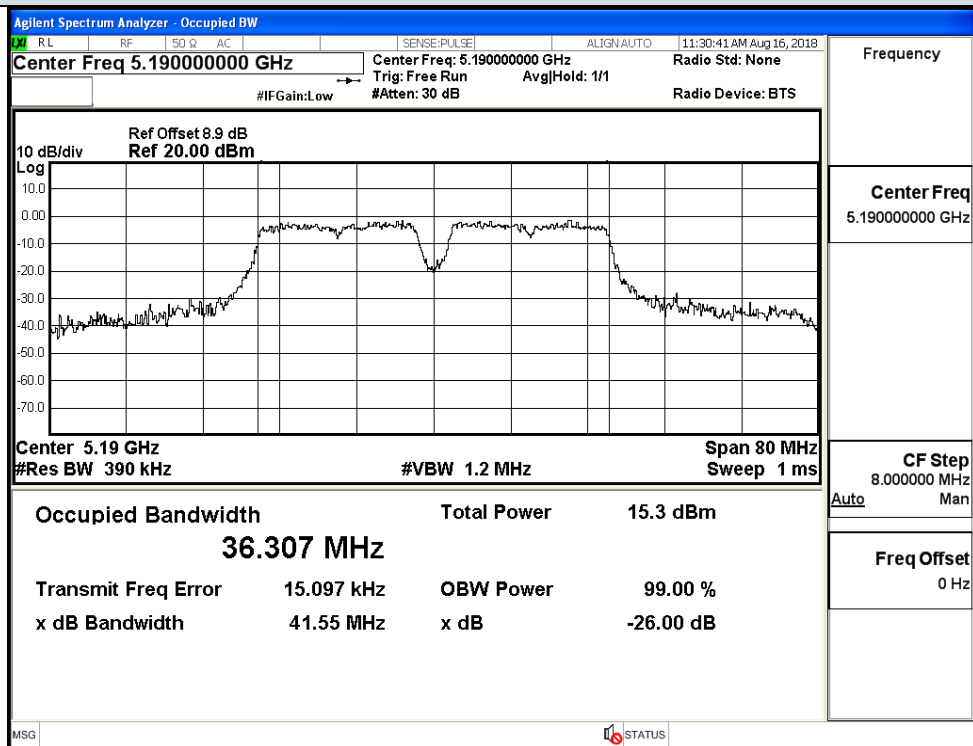


IEEE 802.11n HT20 / Channel 40 / 5200 MHz

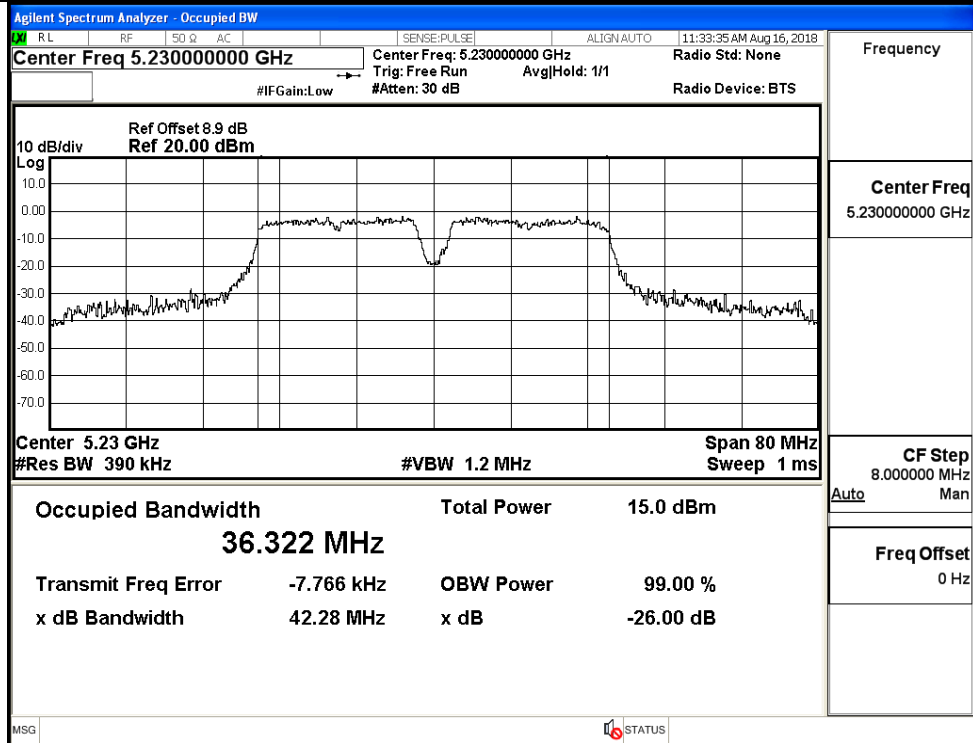


IEEE 802.11n HT20 / Channel 48 / 5240 MHz

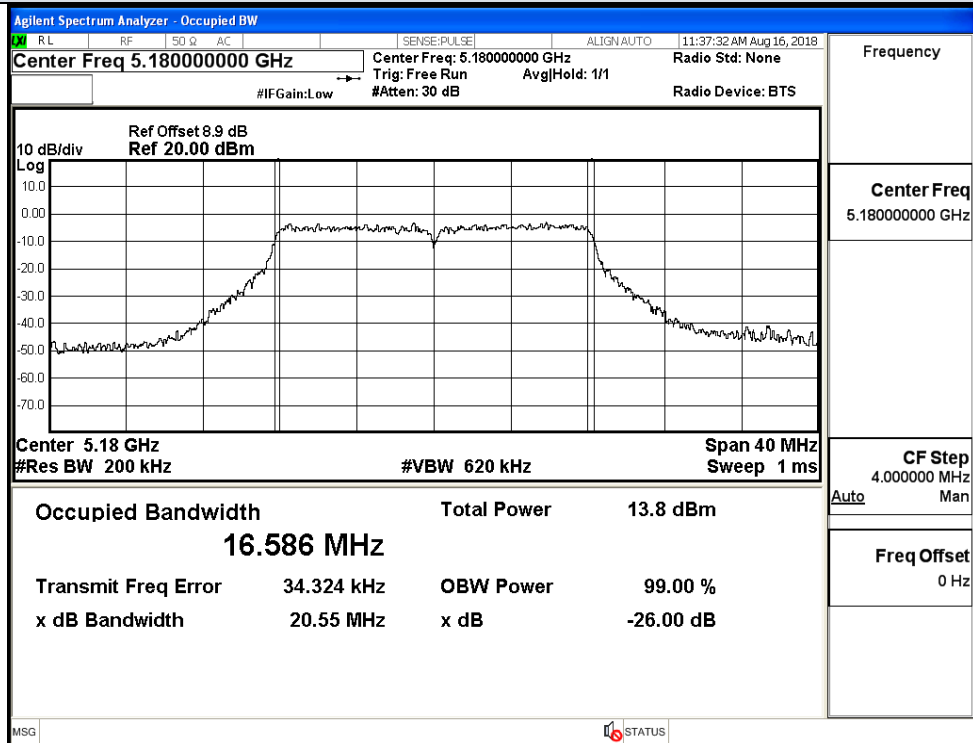
26dB Bandwidth



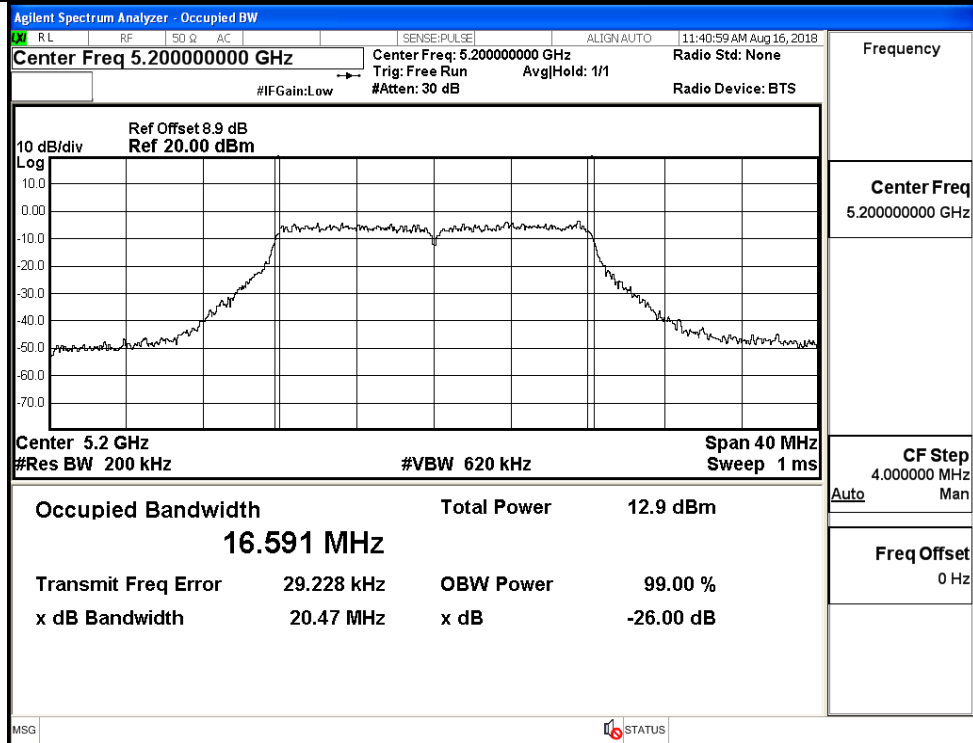
IEEE 802.11n HT40 / Channel 38 / 5190 MHz



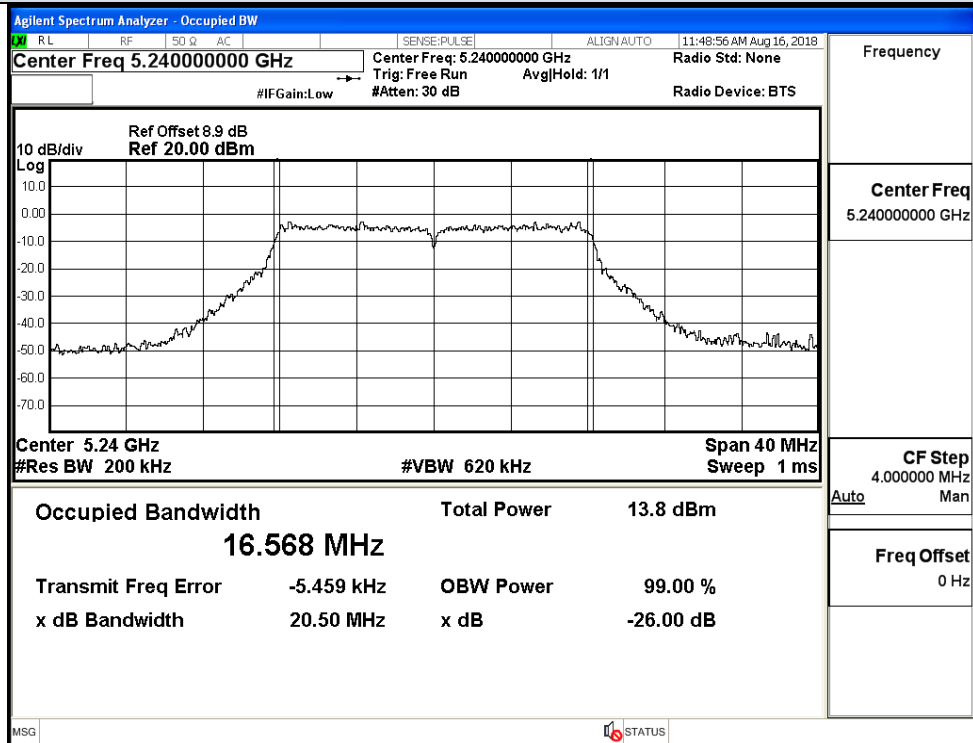
IEEE 802.11n HT40 / Channel 46 / 5230 MHz



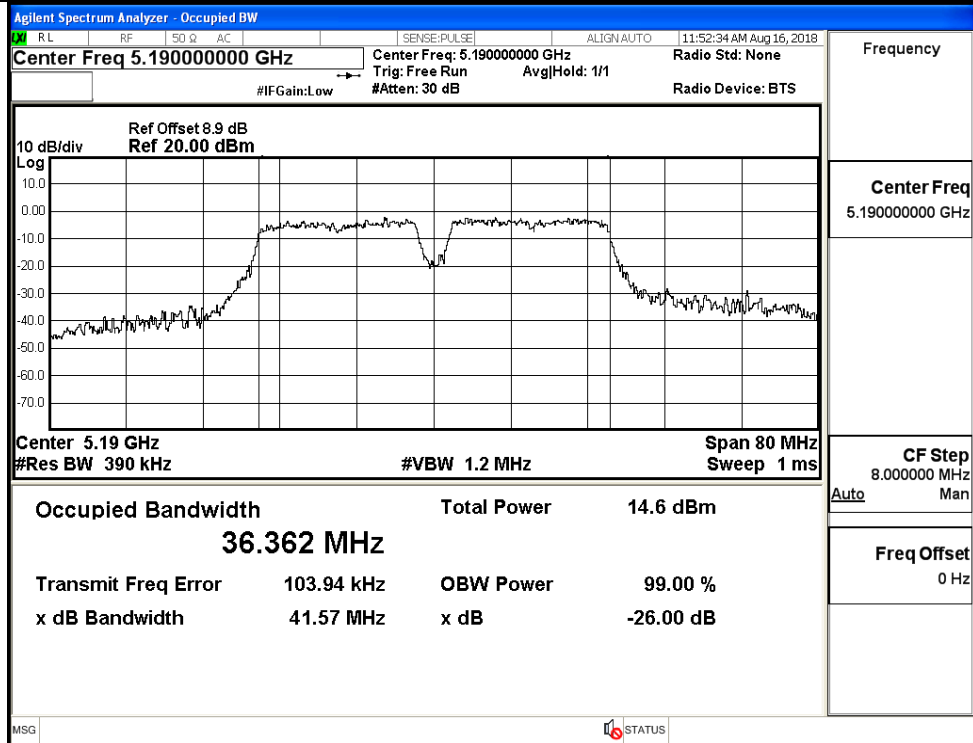
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz



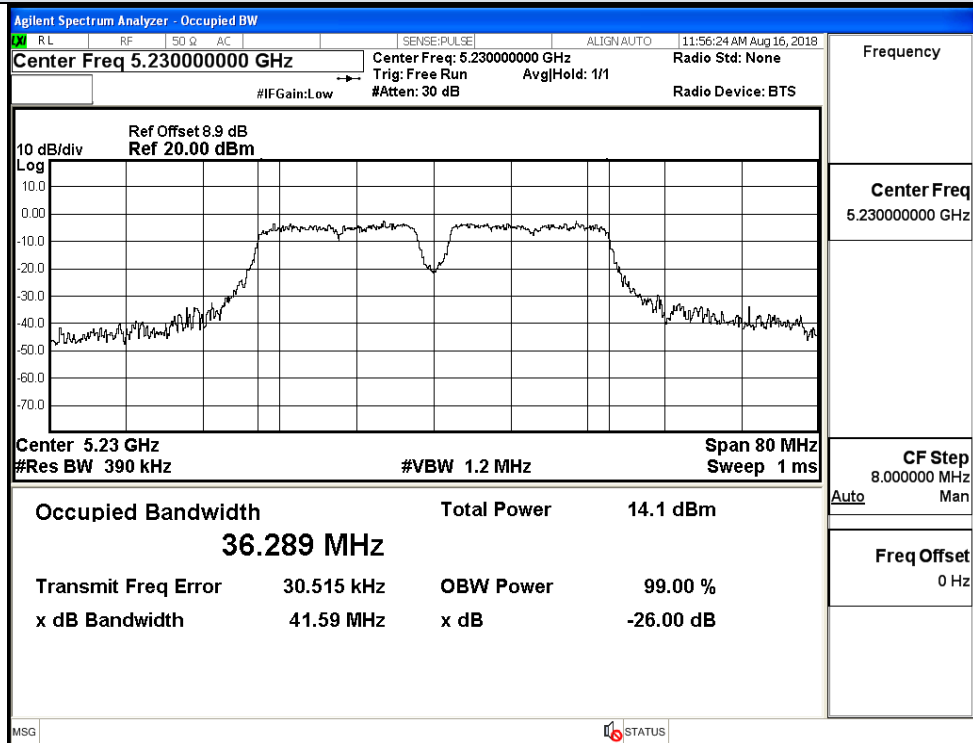
IEEE 802.11ac VHT20 / Channel 40 / 5200 MHz



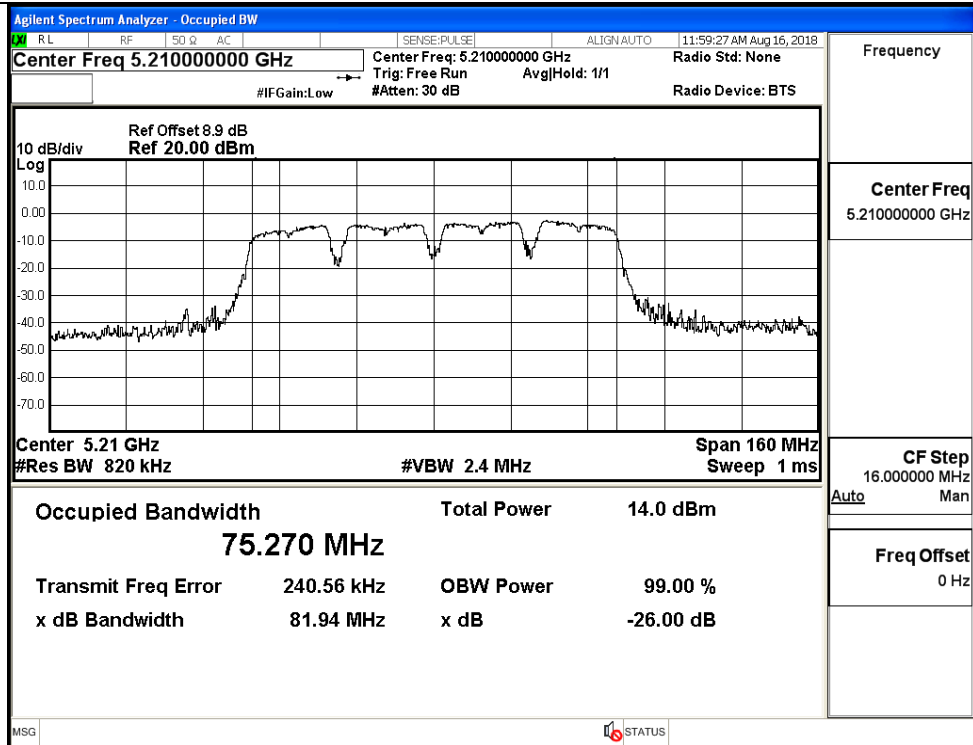
IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz



IEEE 802.11ac VHT40 / Channel 38 / 5190 MHz



IEEE 802.11ac VHT40 / Channel 46 / 5230 MHz



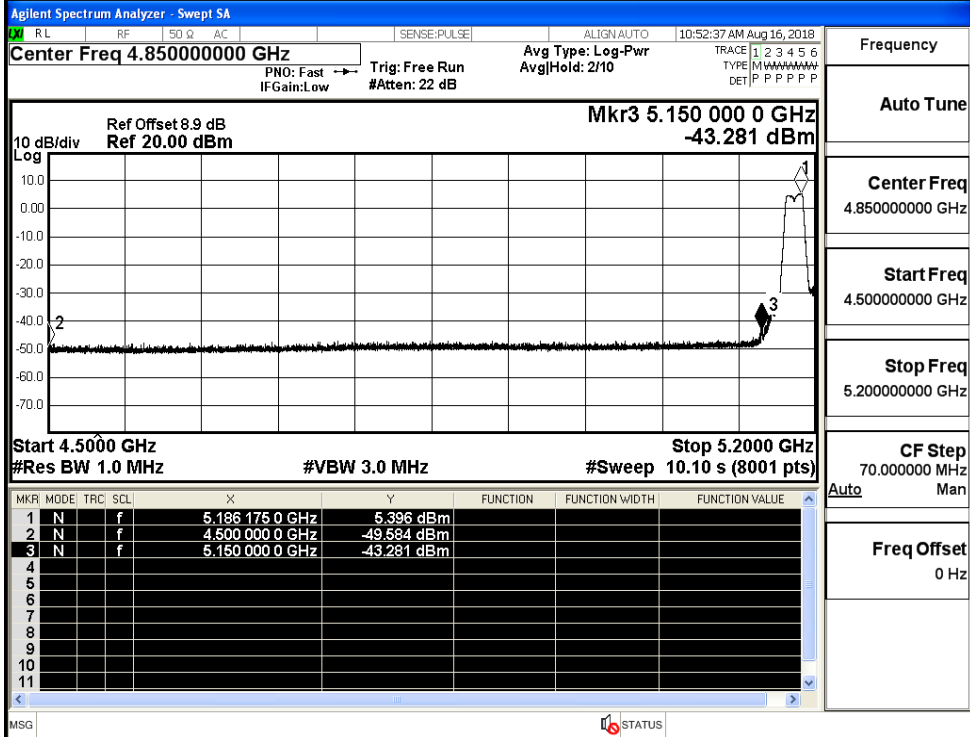
IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz

B.5 Undesirable Emissions Measurement

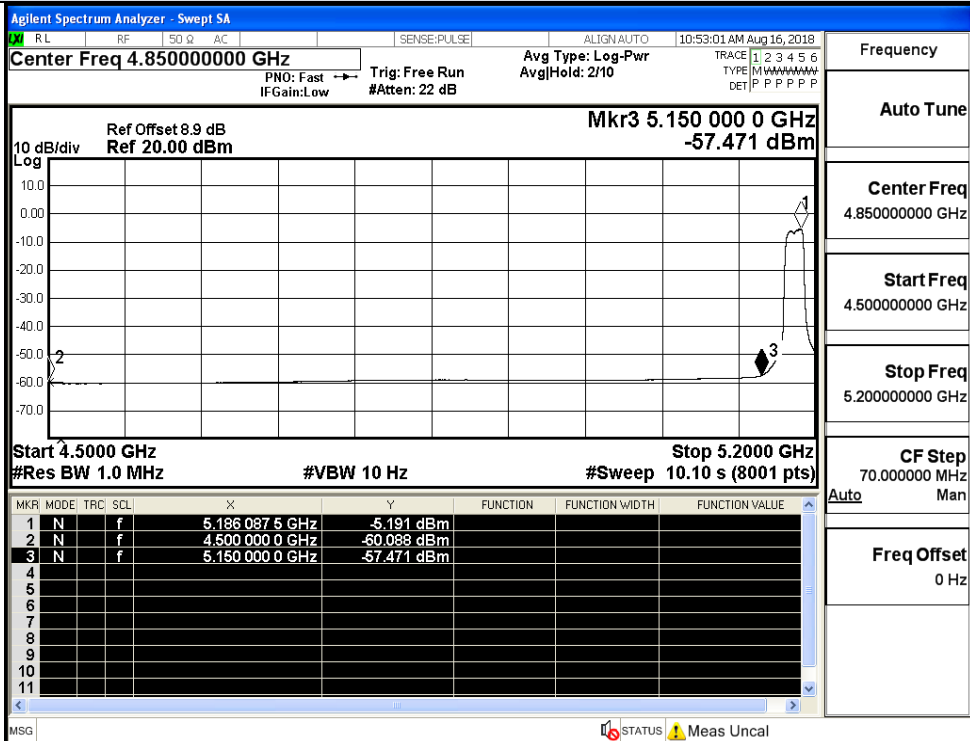
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)
11A	36	4500.0	-49.594	3.00	0	48.634	Peak	68.20
		4500.0	-60.088	3.00	0	38.140	Average	54.00
		5150.0	-43.281	3.00	0	54.947	Peak	68.20
		5150.0	-57.471	3.00	0	40.757	Average	54.00
	48	5350.0	-49.344	3.00	0	48.884	Peak	68.20
		5350.0	-59.175	3.00	0	39.053	Average	54.00
		5460.0	-48.315	3.00	0	49.913	Peak	68.20
		5460.0	-60.195	3.00	0	38.033	Average	54.00
11N20 SISO	36	4500.0	-50.839	3.00	0	47.389	Peak	68.20
		4500.0	-60.085	3.00	0	38.143	Average	54.00
		5150.0	-44.207	3.00	0	54.021	Peak	68.20
		5150.0	-57.530	3.00	0	40.698	Average	54.00
	48	5350.0	-49.886	3.00	0	48.342	Peak	68.20
		5350.0	-59.721	3.00	0	38.507	Average	54.00
		5460.0	-49.519	3.00	0	48.709	Peak	68.20
		5460.0	-60.179	3.00	0	38.049	Average	54.00
11N40 SISO	38	4500.0	-49.912	3.00	0	48.316	Peak	68.20
		4500.0	-60.134	3.00	0	38.094	Average	54.00
		5150.0	-34.446	3.00	0	63.782	Peak	68.20
		5150.0	-50.620	3.00	0	47.608	Average	54.00
	46	5350.0	-47.849	3.00	0	50.379	Peak	68.20
		5350.0	-59.435	3.00	0	38.793	Average	54.00
		5460.0	-49.463	3.00	0	48.765	Peak	68.20
		5460.0	-59.930	3.00	0	38.298	Average	54.00
11AC20 SISO	36	4500.0	-49.332	3.00	0	48.896	Peak	68.20
		4500.0	-60.107	3.00	0	38.121	Average	54.00
		5150.0	-44.649	3.00	0	53.579	Peak	68.20
		5150.0	-57.573	3.00	0	40.655	Average	54.00
	48	4500.0	-49.709	3.00	0	48.519	Peak	68.20
		4500.0	-59.732	3.00	0	38.496	Average	54.00
		5150.0	-50.276	3.00	0	47.952	Peak	68.20
		5150.0	-60.214	3.00	0	38.014	Average	54.00
11AC40 SISO	38	4500.0	-50.723	3.00	0	47.505	Peak	68.20
		4500.0	-60.117	3.00	0	38.111	Average	54.00
		5150.0	-37.456	3.00	0	60.772	Peak	68.20

	46	5150.0	-53.079	3.00	0	45.149	Average	54.00
		5350.0	-48.729	3.00	0	49.499	Peak	68.20
		5350.0	-59.441	3.00	0	38.787	Average	54.00
		5460.0	-50.732	3.00	0	47.496	Peak	68.20
		5460.0	-59.923	3.00	0	38.305	Average	54.00
11AC80 SISO	42	4500.0	-50.557	3.00	0	47.671	Peak	68.20
		5150.0	-60.113	3.00	0	38.115	Average	54.00
		4500.0	-41.019	3.00	0	57.209	Peak	68.20
		5150.0	-56.188	3.00	0	42.040	Average	54.00
		5350.0	-47.102	3.00	0	51.126	Peak	68.20
		5460.0	-58.890	3.00	0	39.338	Average	54.00
		5350.0	-49.897	3.00	0	48.331	Peak	68.20
		5460.0	-59.417	3.00	0	38.811	Average	54.00

Undesirable Emissions Measurement

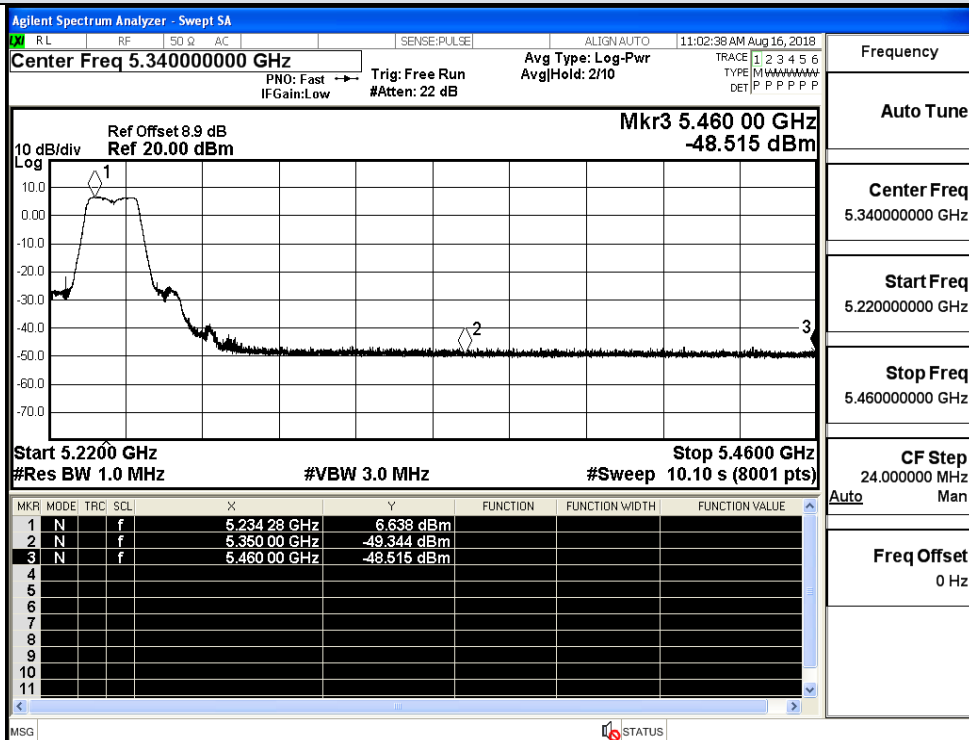


IEEE 802.11a / Channel 36 / 5180 MHz / Peak

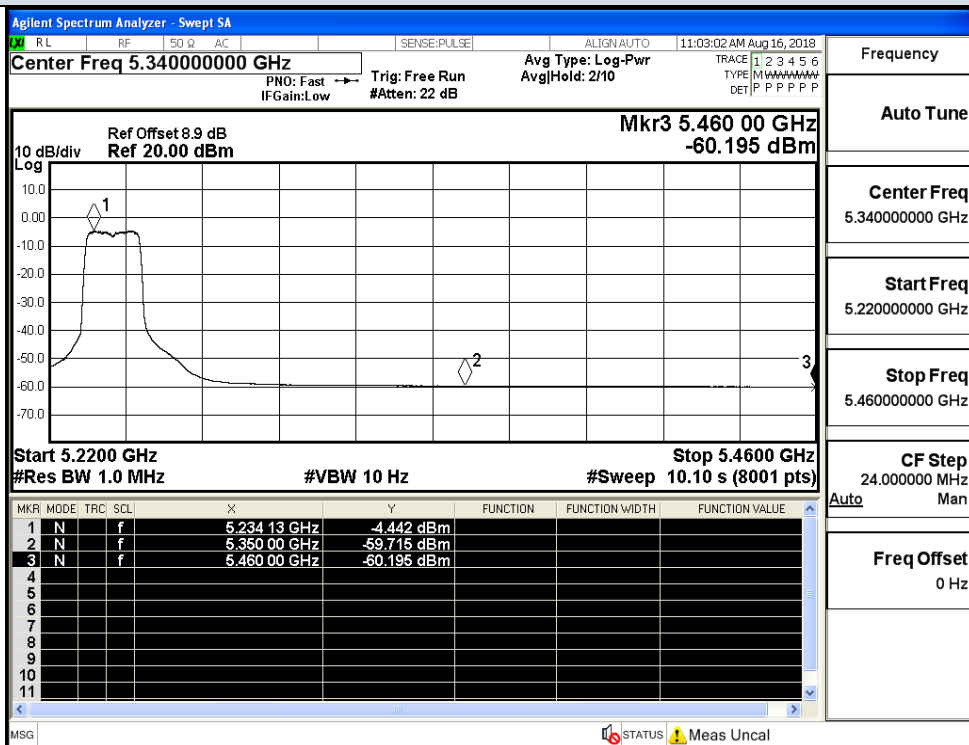


IEEE 802.11a / Channel 36 / 5180 MHz / Average

Undesirable Emissions Measurement

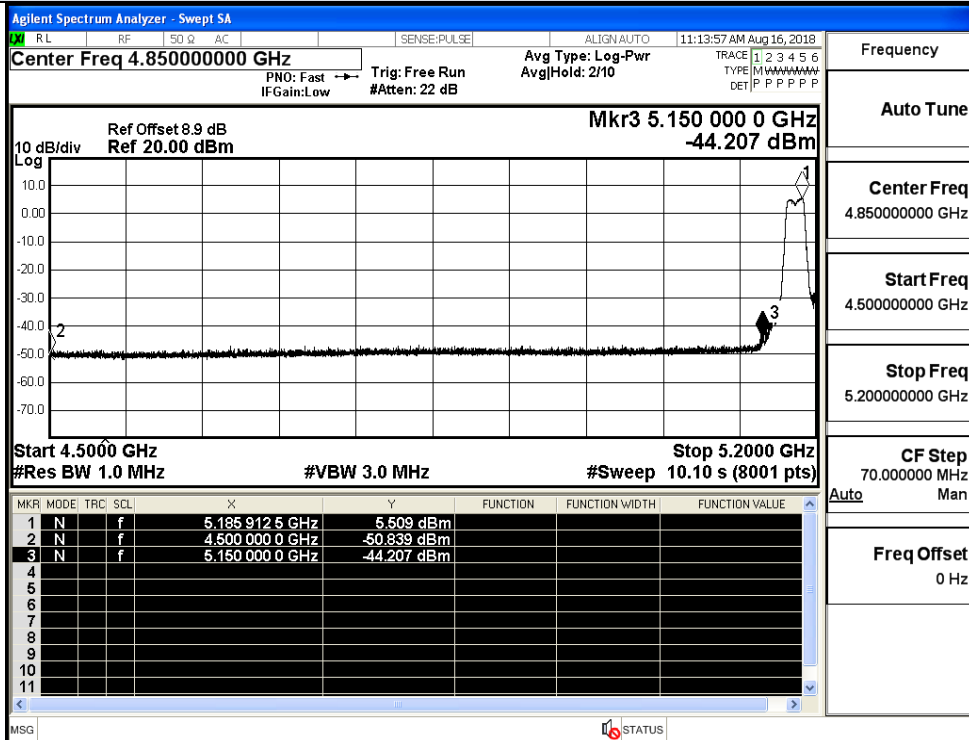


IEEE 802.11a / Channel 48 / 5240 MHz / Peak

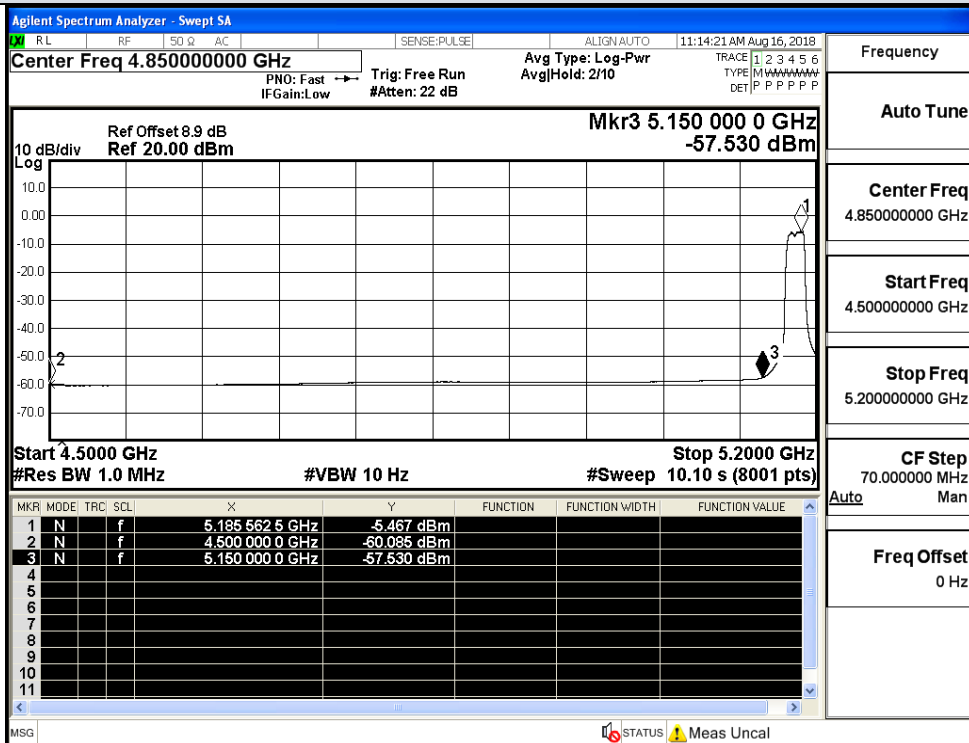


IEEE 802.11a / Channel 48 / 5240 MHz / Average

Undesirable Emissions Measurement

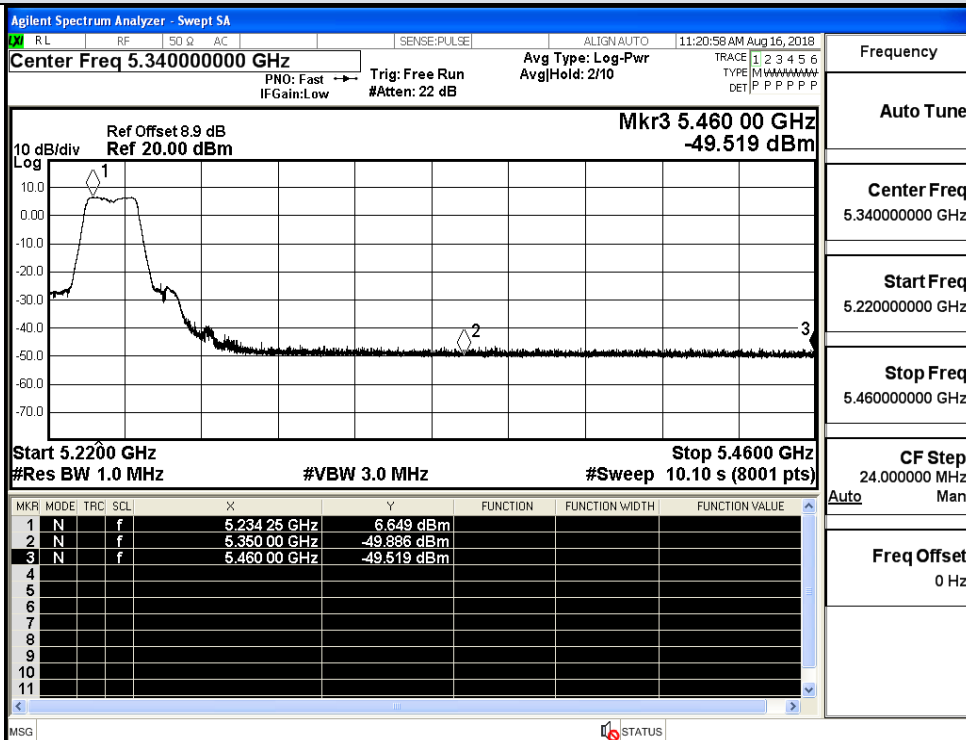


IEEE 802.11n HT20 / Channel 36 / 5180 MHz / Peak

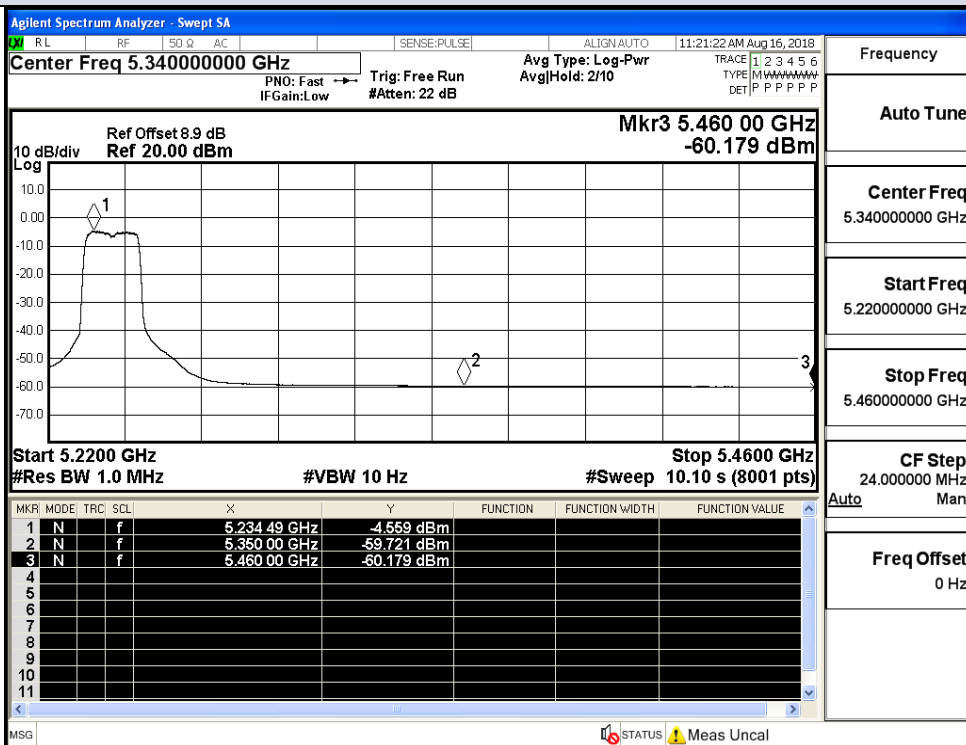


IEEE 802.11n HT20 / Channel 36 / 5180 MHz / Average

Undesirable Emissions Measurement

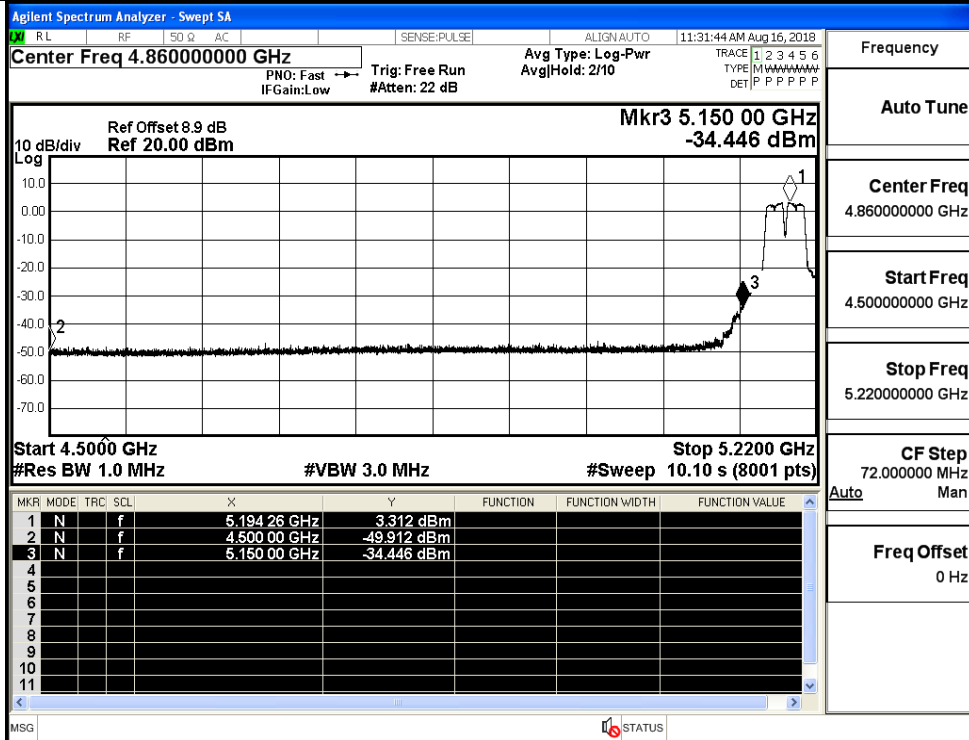


IEEE 802.11n HT20 / Channel 48 / 5240 MHz / Peak

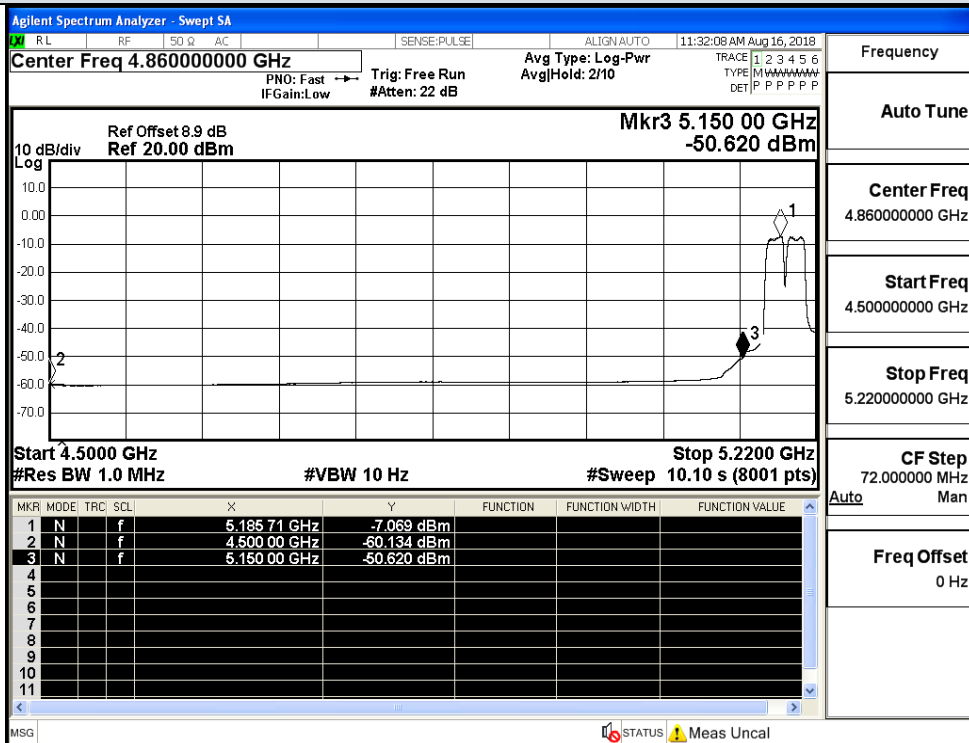


IEEE 802.11n HT20 / Channel 48 / 5240 MHz / Average

Undesirable Emissions Measurement

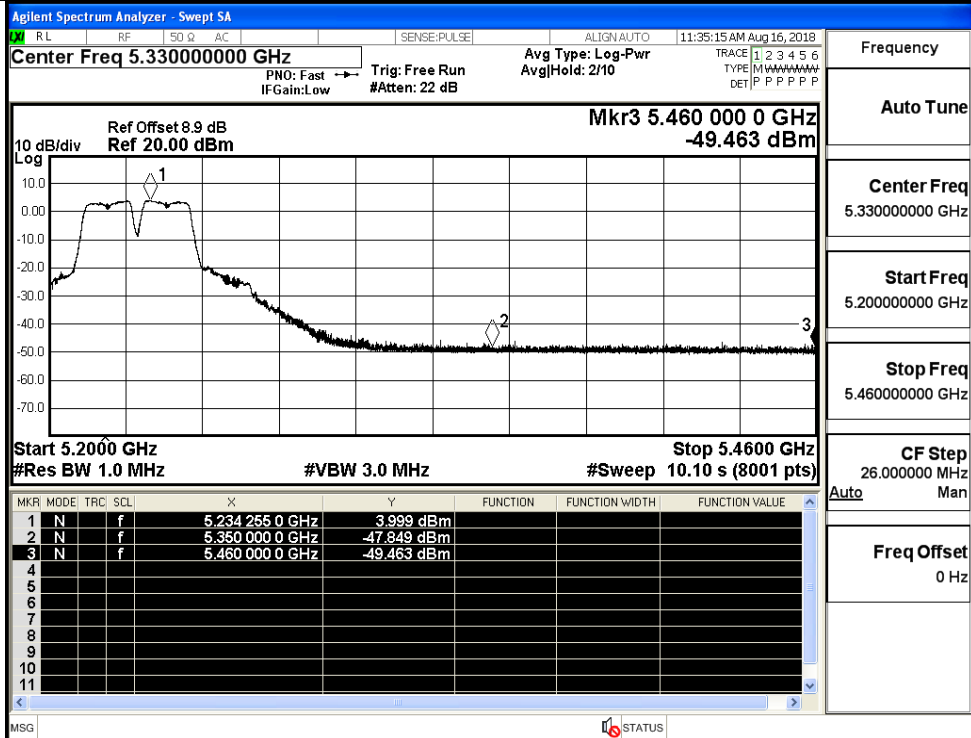


IEEE 802.11n HT40 / Channel 36 / 5180 MHz / Peak

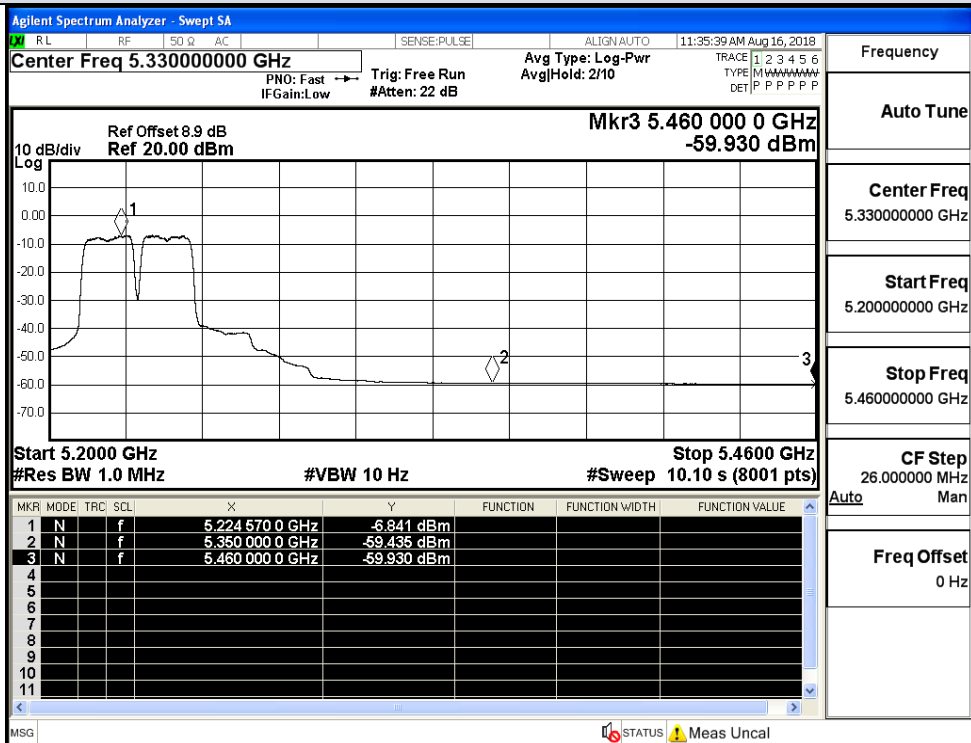


IEEE 802.11n HT40 / Channel 36 / 5180 MHz / Average

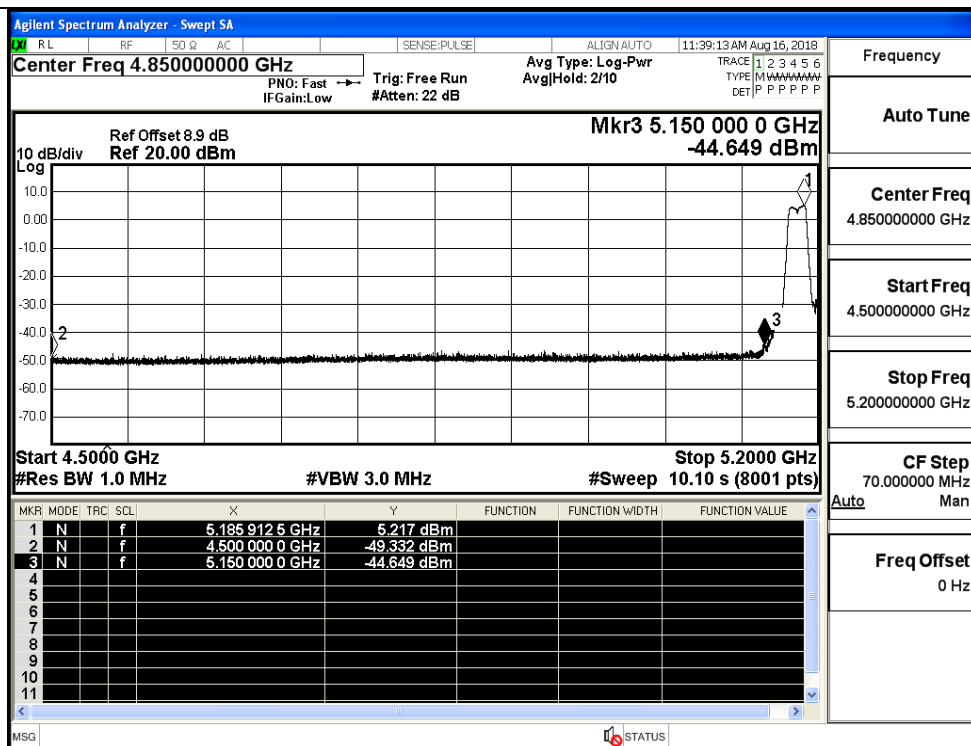
Undesirable Emissions Measurement



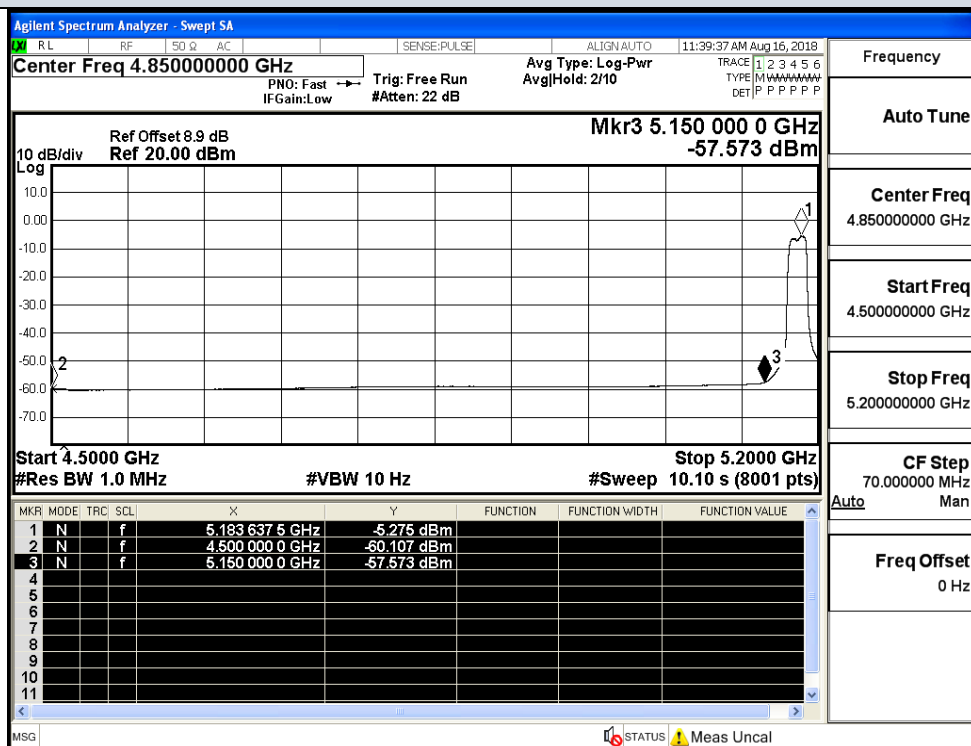
IEEE 802.11n HT40 / Channel 48 / 5230 MHz / Peak



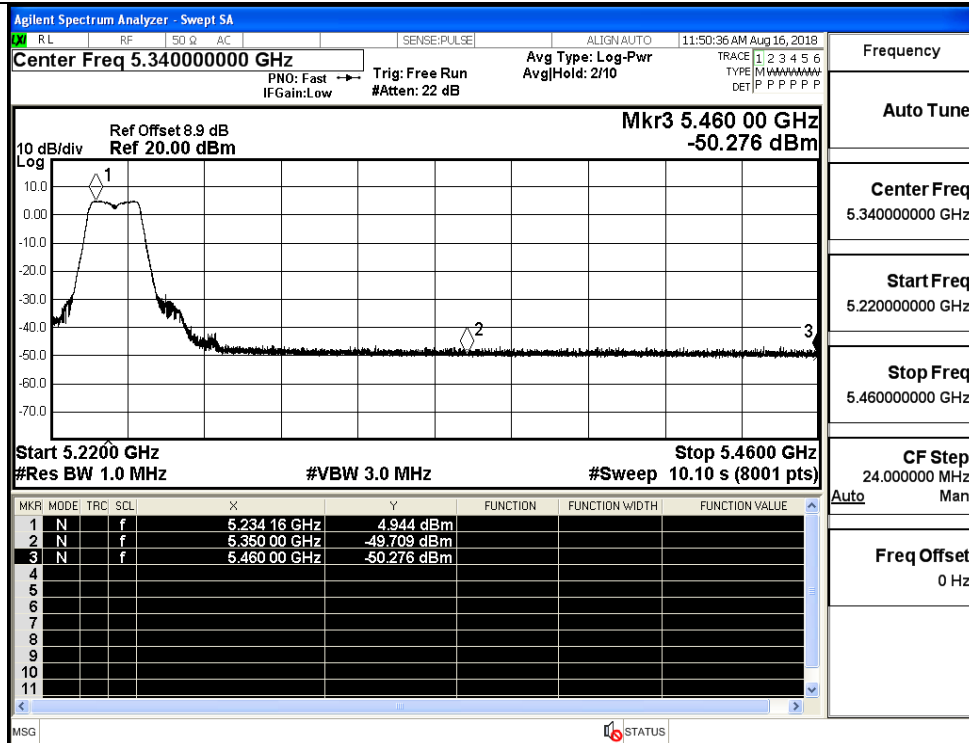
IEEE 802.11n HT40 / Channel 48 / 5230 MHz / Average



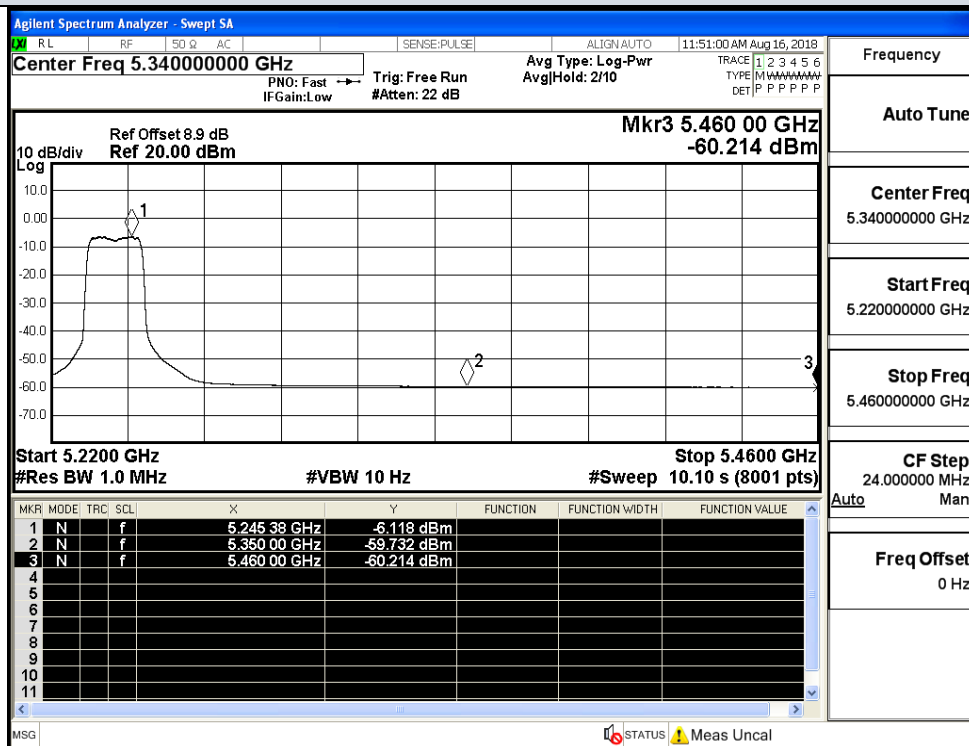
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz / Peak



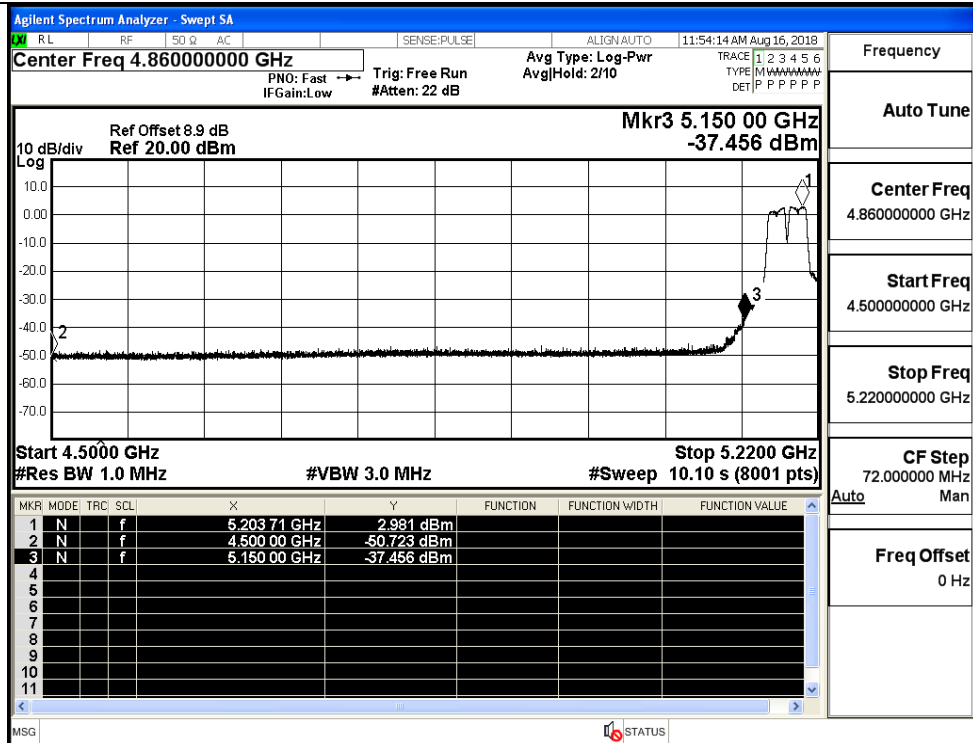
IEEE 802.11ac VHT20 / Channel 36 / 5180 MHz / Average



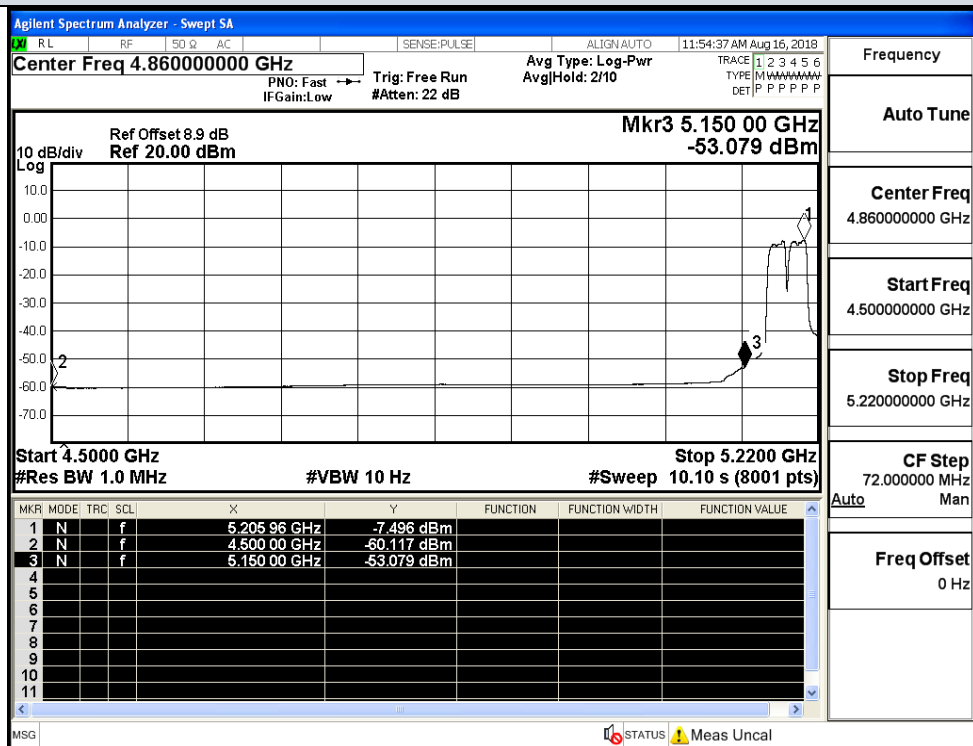
IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz / Peak



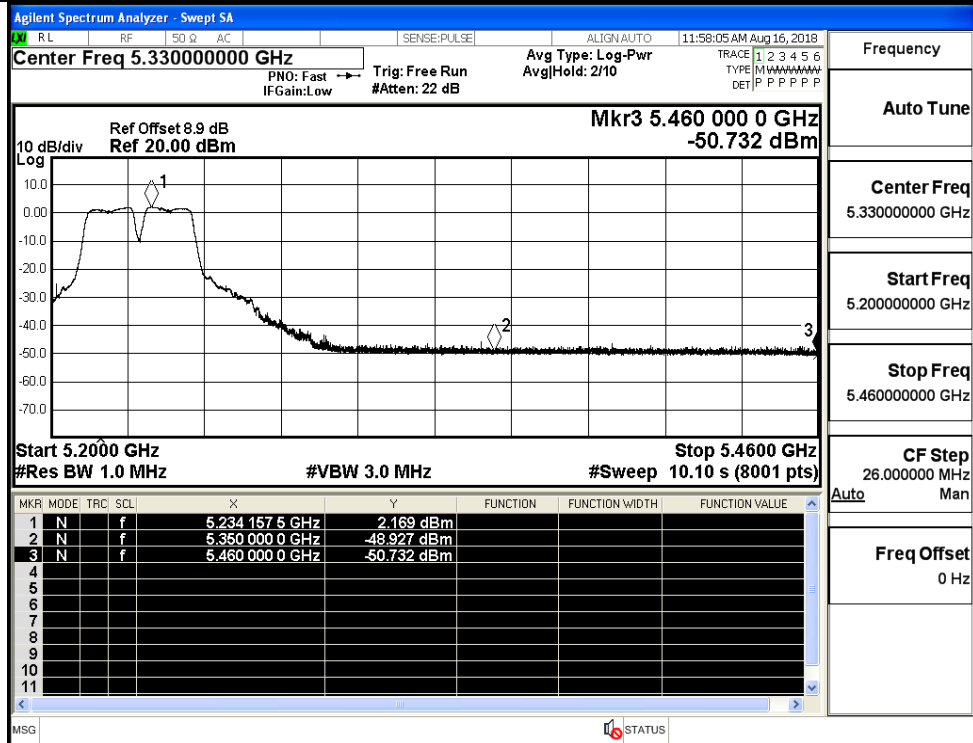
IEEE 802.11ac VHT20 / Channel 48 / 5240 MHz / Average



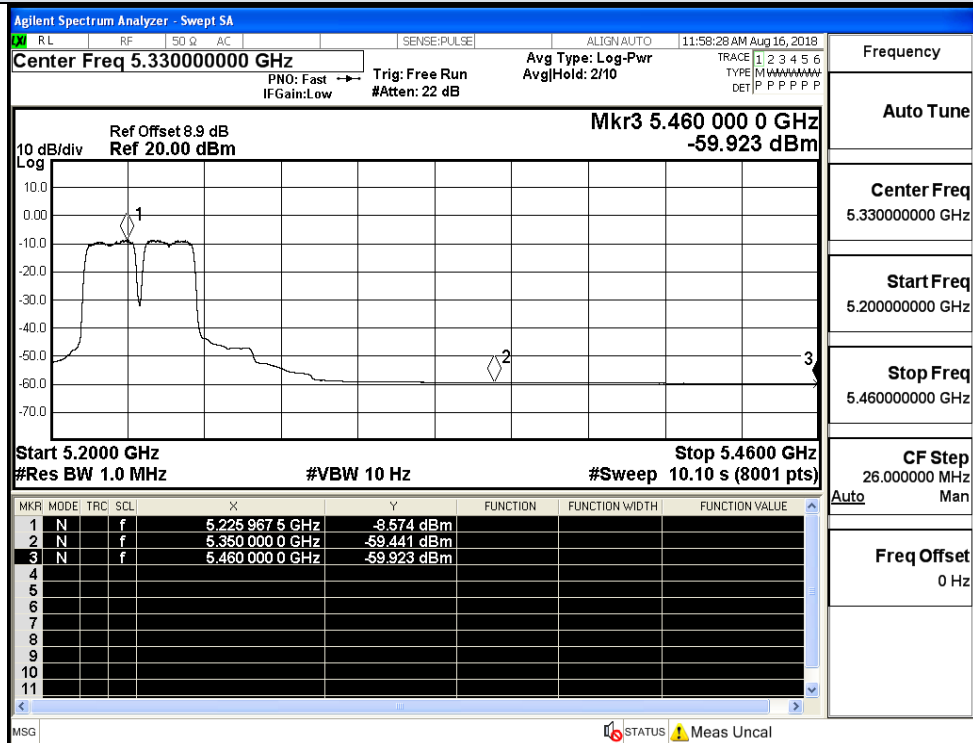
IEEE 802.11ac VHT40 / Channel 36 / 5180 MHz / Peak



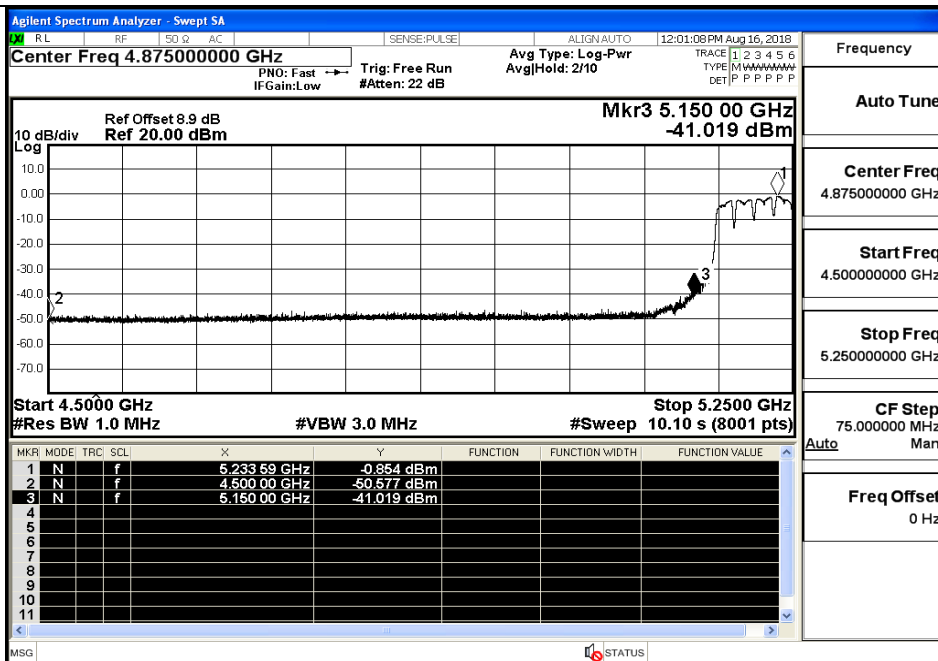
IEEE 802.11ac VHT40 / Channel 36 / 5180 MHz / Average



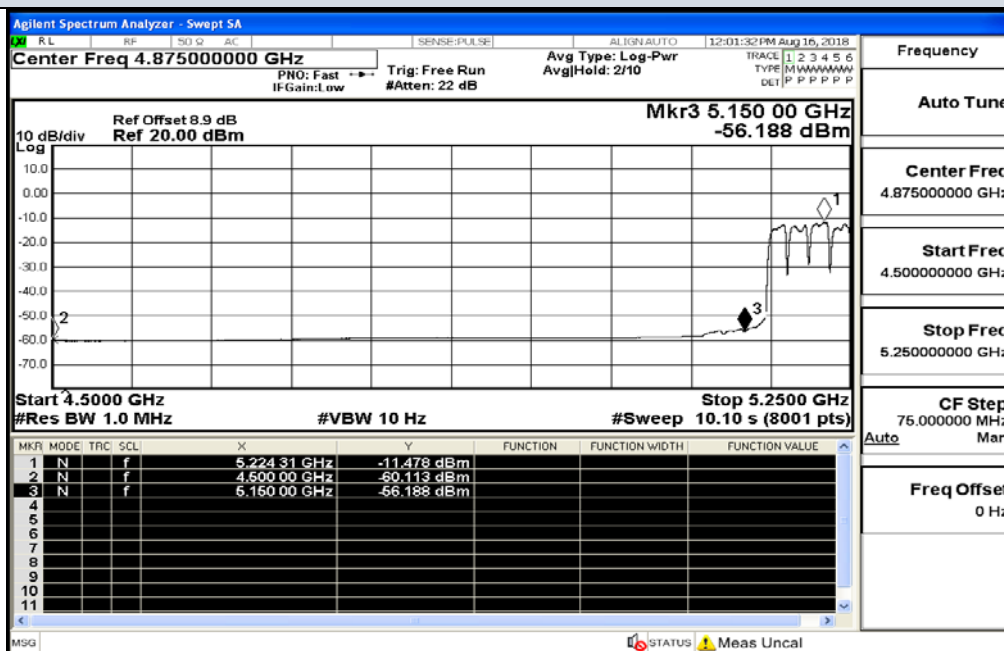
IEEE 802.11ac VHT40 / Channel 48 / 5230 MHz / Peak



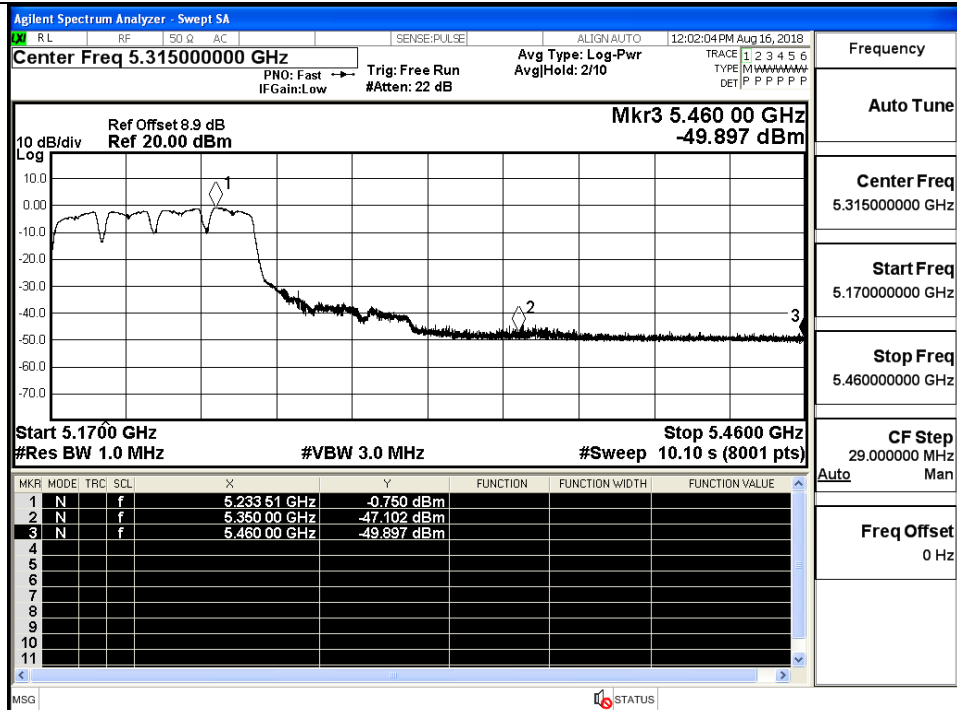
IEEE 802.11ac VHT40 / Channel 48 / 5230 MHz / Average



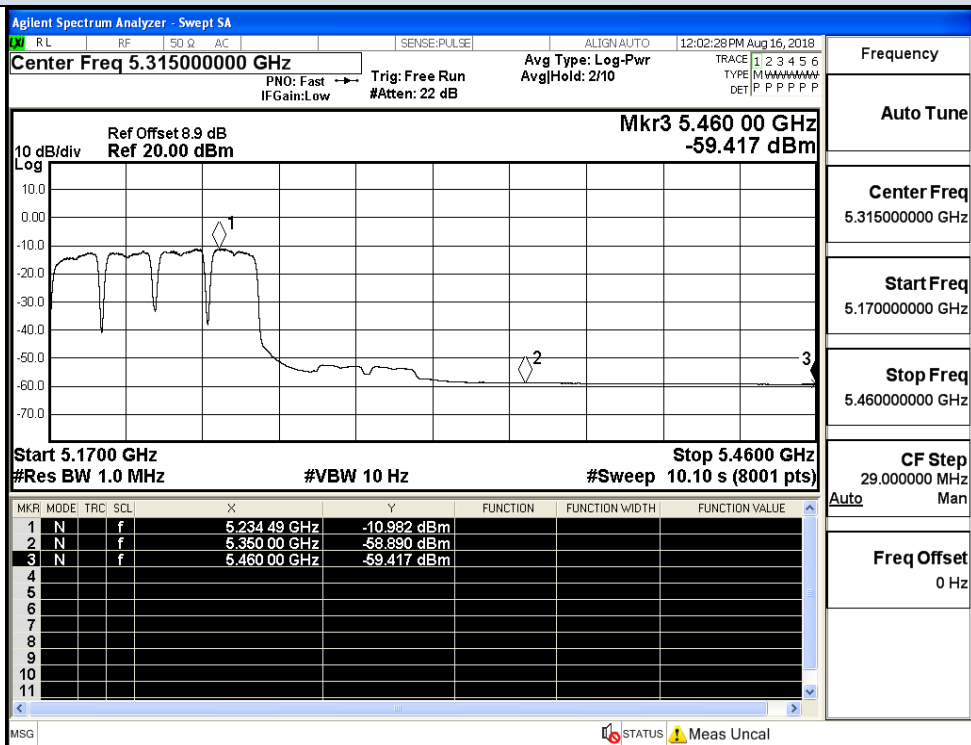
IEEE 802.11ac VHT80 / Channel 42 / 5210 MHz / Peak



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



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



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