Appendix B

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Wireless AP/CPE/Access Point/Bridge

Test Model: DIP9526K-H

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Wang Chuang
Supervised by:	Tom Liu

B.1 Duty Cycle

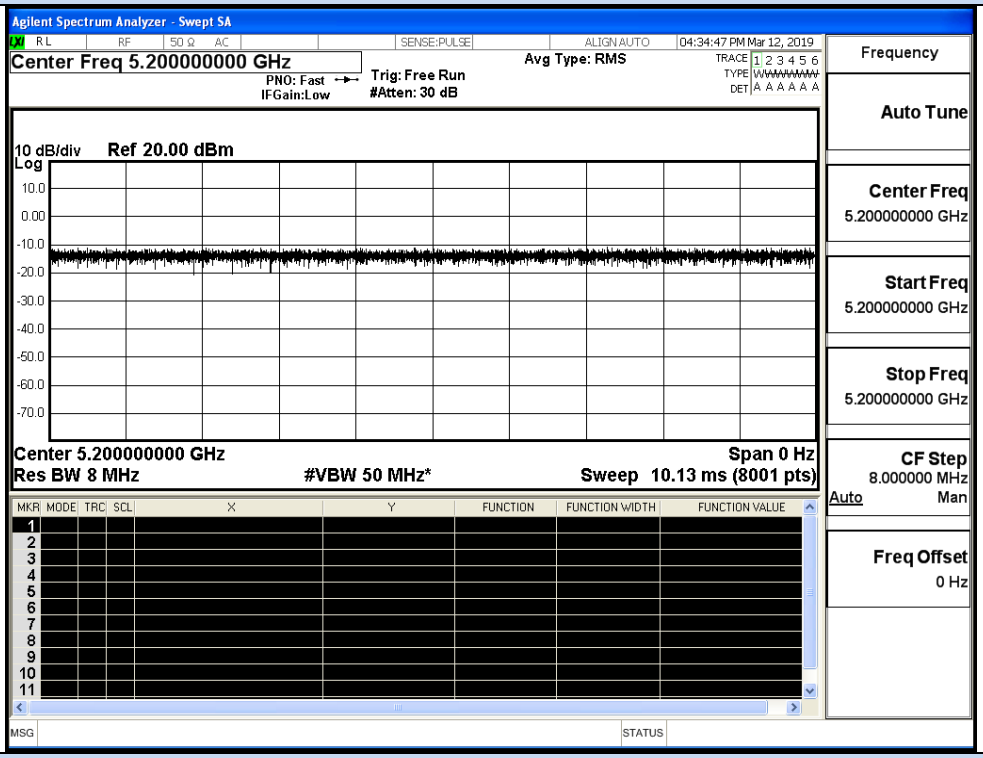
Ant0

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	5200	100	0.00	0.01
11N40	5190	100	0.00	0.01
11AC20	5200	100	0.00	0.01
11AC40	5190	100	0.00	0.01
11AC80	5210	100	0.00	0.01

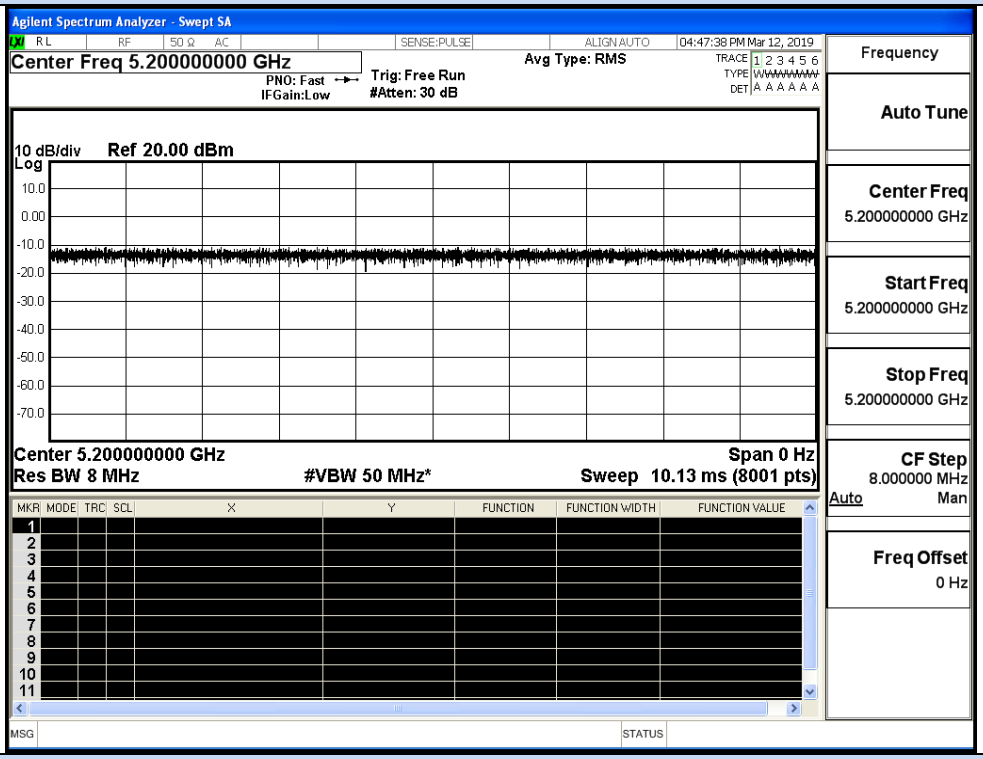
Ant1

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	5200	100	0.00	0.01
11N40	5190	100	0.00	0.01
11AC20	5200	100	0.00	0.01
11AC40	5190	100	0.00	0.01
11AC80	5210	100	0.00	0.01

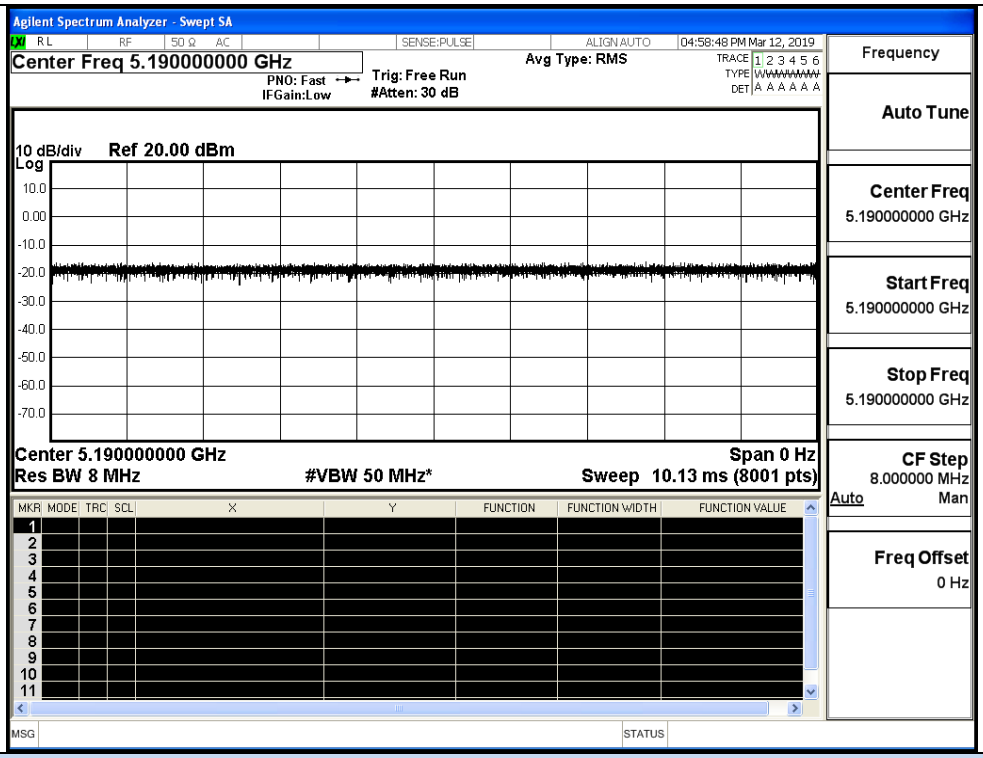
On Time and Duty Cycle_Ant0



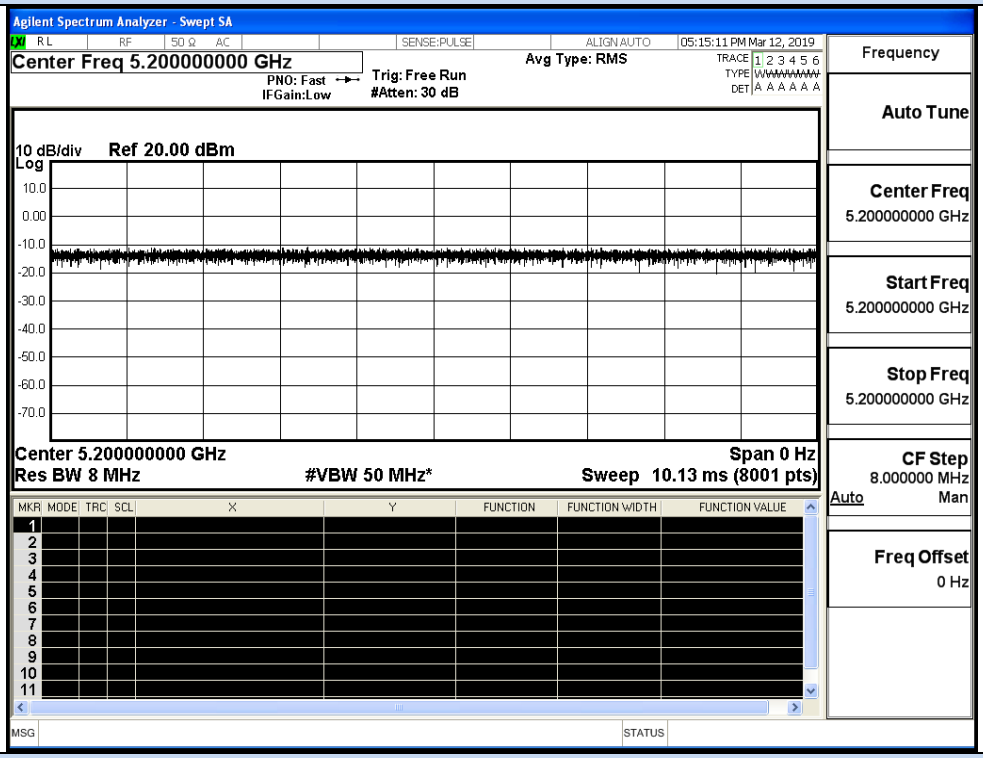
IEEE 802.11a_Ant0



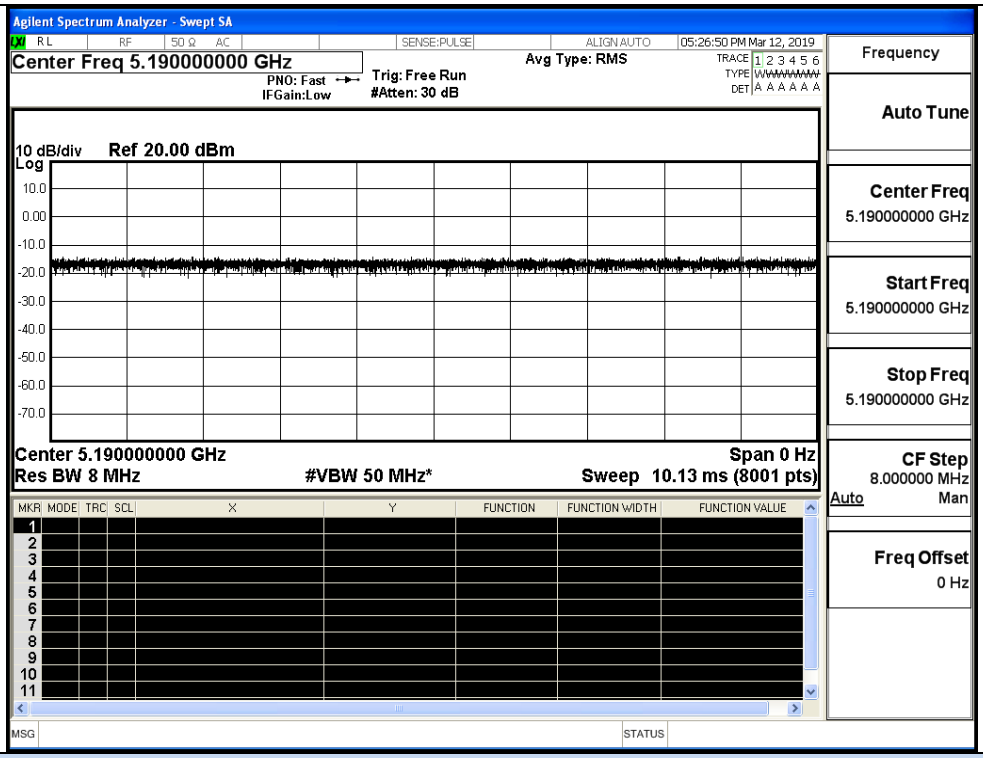
IEEE 802.11n HT20_Ant0



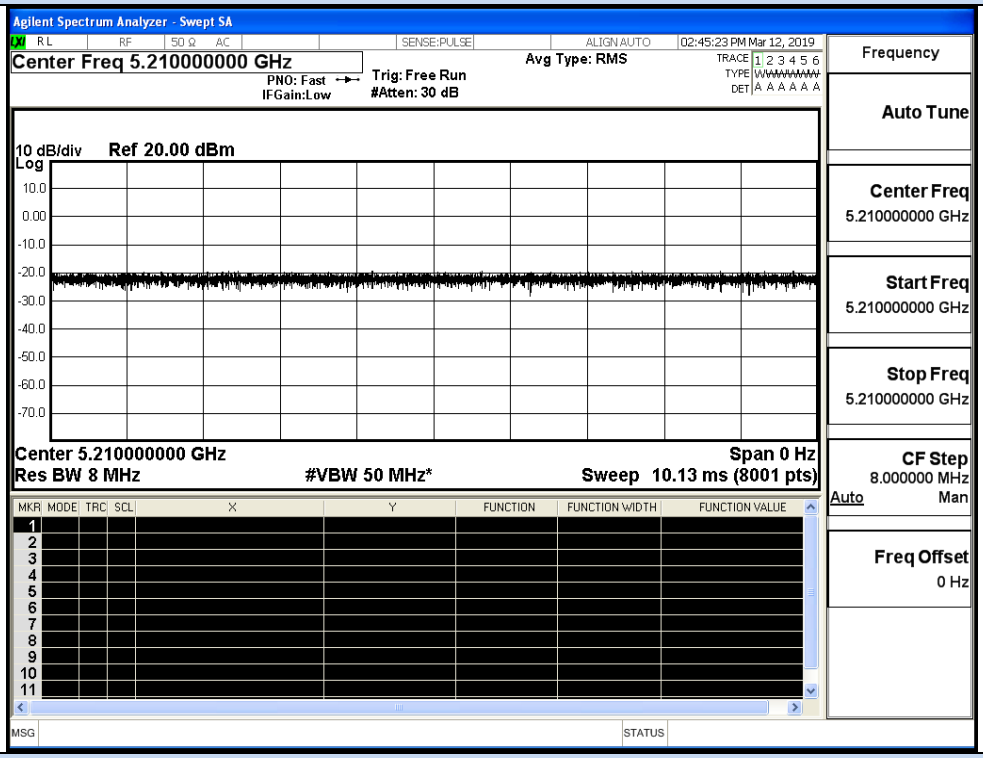
IEEE 802.11n HT40_Ant0



IEEE 802.11AC20_Ant0

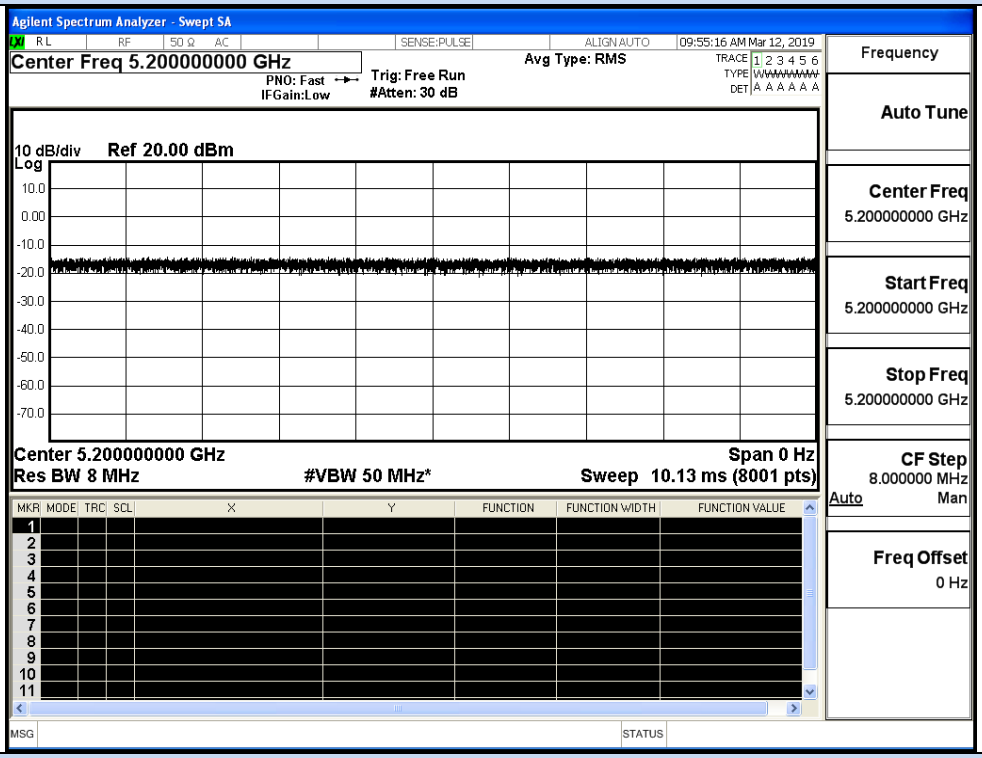


IEEE 802.11 AC40_Ant0

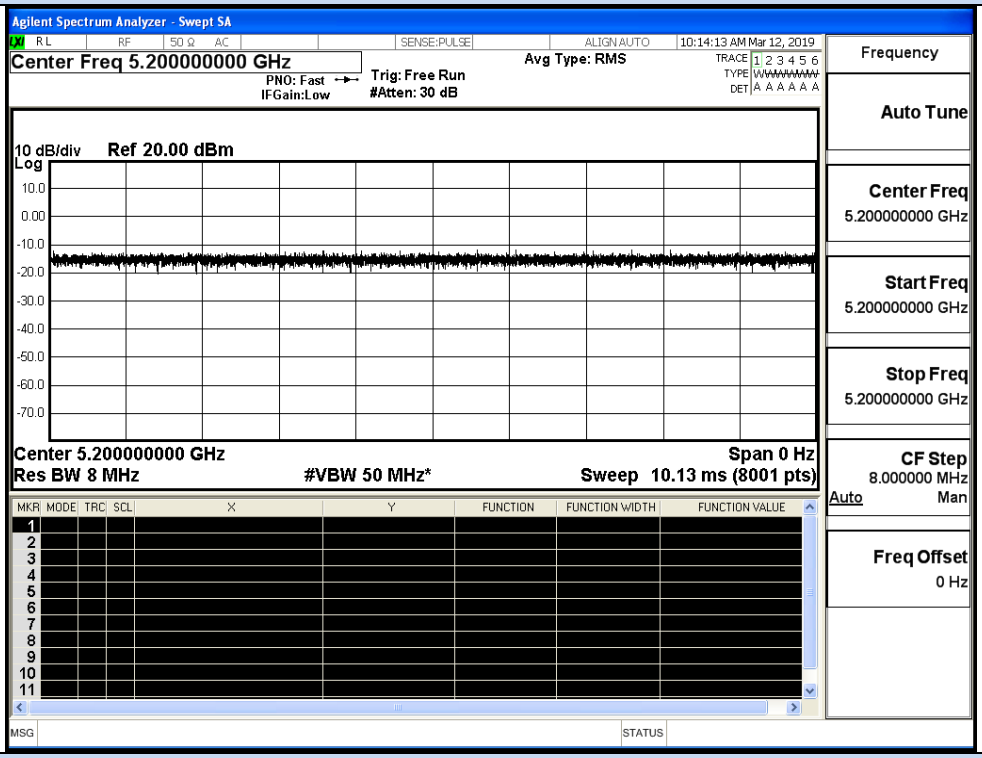


IEEE 802.11AC80_Ant0

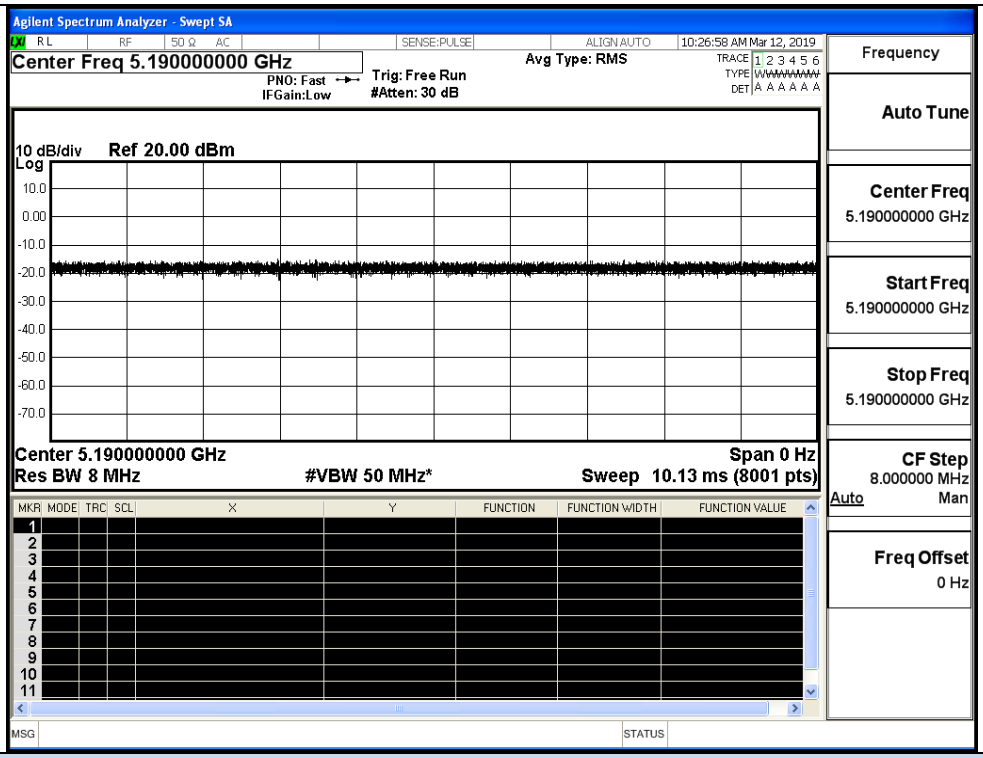
On Time and Duty Cycle_Ant1



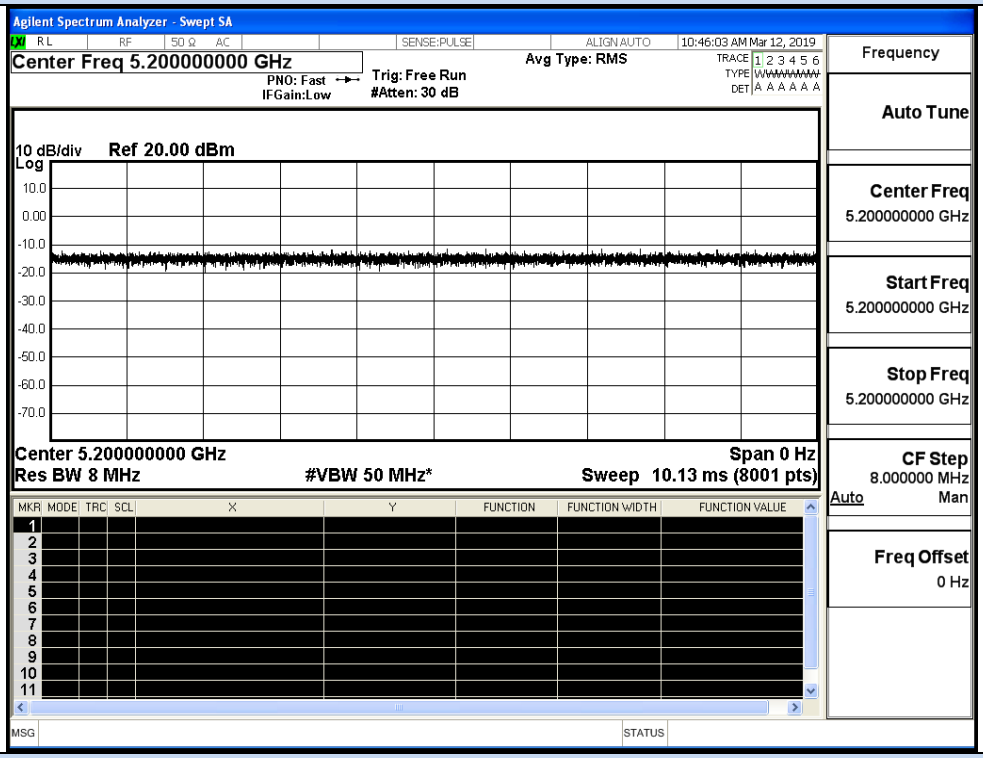
IEEE 802.11a_Ant1



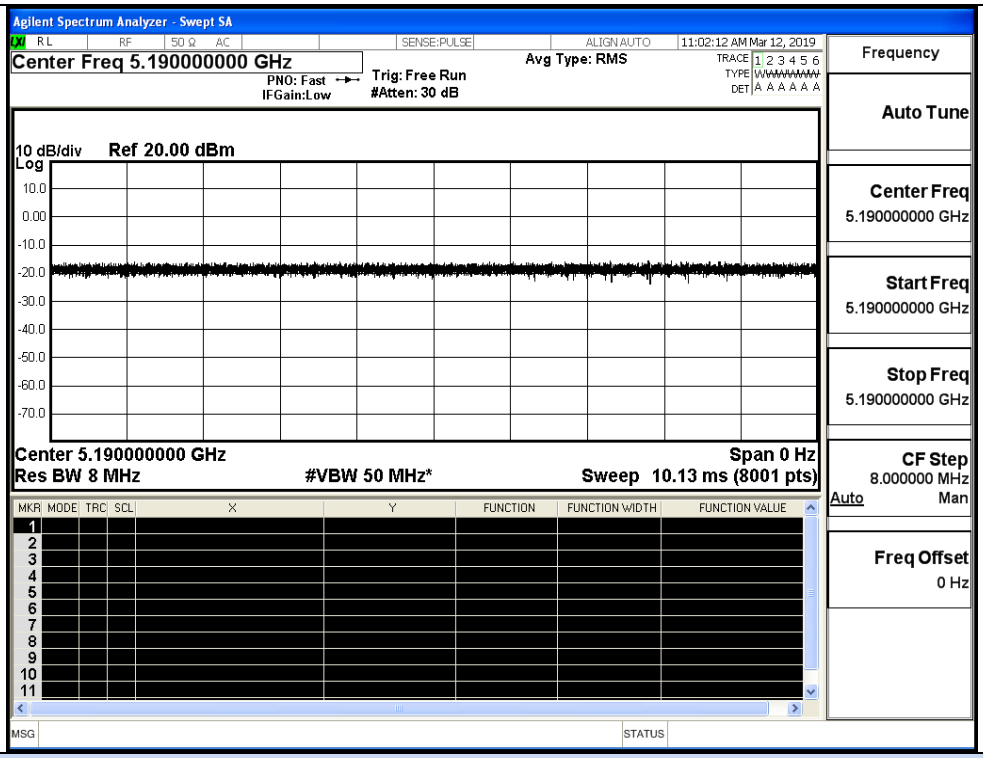
IEEE 802.11n HT20_Ant1



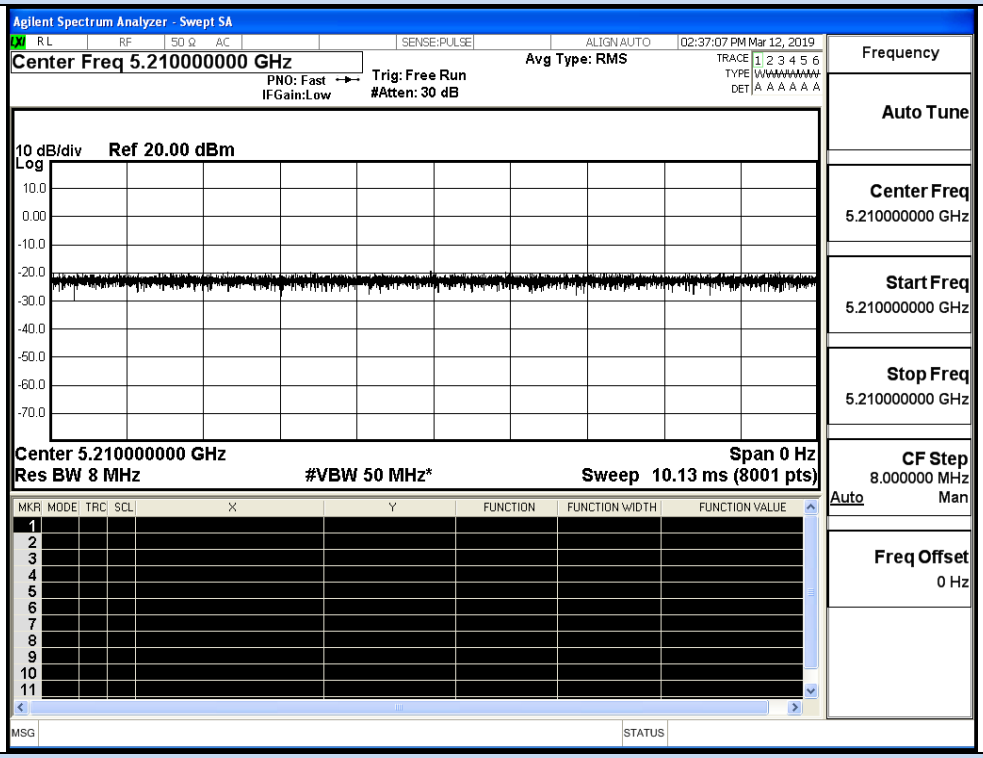
IEEE 802.11n HT40_Ant1



IEEE 802.11AC20_Ant1



IEEE 802.11 AC40_Ant1



IEEE 802.11AC80_Ant1

B.2 Maximum Conduct Output Power

Ant0

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	2.84	0	2.84	24	Pass
	40	5200	2.73	0	2.73		Pass
	48	5240	2.59	0	2.59		Pass
11N20	36	5180	2.15	0	2.15	24	Pass
	40	5200	2.01	0	2.01		Pass
	48	5240	2.33	0	2.33		Pass
11N40	38	5190	1.79	0	1.79	24	Pass
	46	5230	1.71	0	1.71		Pass
11AC20	36	5180	2.45	0	2.45	24	Pass
	40	5200	2.44	0	2.44		Pass
	48	5240	1.94	0	1.94		Pass
11AC40	38	5190	2.98	0	2.98	24	Pass
	46	5230	2.77	0	2.77		Pass
11AC80	42	5210	0.44	0	0.44	24	Pass

Ant_1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	2.75	0	2.75	24	Pass
	40	5200	2.67	0	2.67		Pass
	48	5240	2.23	0	2.23		Pass
11N20	36	5180	2.03	0	2.03	24	Pass
	40	5200	1.96	0	1.96		Pass
	48	5240	2.19	0	2.19		Pass
11N40	38	5190	1.69	0	1.69	24	Pass
	46	5230	1.75	0	1.75		Pass
11AC20	36	5180	2.39	0	2.39	24	Pass
	40	5200	2.28	0	2.28		Pass
	48	5240	1.83	0	1.83		Pass
11AC40	38	5190	2.81	0	2.81	24	Pass
	46	5230	2.67	0	2.67		Pass
11AC80	42	5210	0.31	0	0.31	24	Pass

Combined Ant0 and Ant1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)			Duty Cycle Factor (dB)	Report Conducted Power (dBm)			Limit (dBm)
			Ant0	Ant1	Sum		Ant0	Ant1	Sum	
11N20	36	5180	2.15	2.03	5.10	0	2.15	2.03	5.10	20.99
	40	5200	2.01	1.96	5.00	0	2.01	1.96	5.00	
	48	5240	2.33	2.19	5.27	0	2.33	2.19	5.27	
11N40	38	5190	1.79	1.69	4.75	0	1.79	1.69	4.75	20.99
	46	5230	1.71	1.75	4.74	0	1.71	1.75	4.74	
11AC20	36	5180	2.45	2.39	5.43	0	2.45	2.39	5.43	20.99
	40	5200	2.44	2.28	5.37	0	2.44	2.28	5.37	
	48	5240	1.94	1.83	4.90	0	1.94	1.83	4.90	
11AC40	38	5190	2.98	2.81	5.91	0	2.98	2.81	5.91	20.99
	46	5230	2.77	2.67	5.73	0	2.77	2.67	5.73	
11AC80	42	5210	0.44	0.31	3.39	0	0.44	0.31	3.39	20.99

B.3 Power Spectral Density

Ant0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	-6.50	0	-6.50	11	Pass
	40	5200	-8.31	0	-8.31		Pass
	48	5240	-10.93	0	-10.93		Pass
11N20	36	5180	-8.50	0	-8.50	11	Pass
	40	5200	-8.57	0	-8.57		Pass
	48	5240	-9.33	0	-9.33		Pass
11N40	38	5190	-12.96	0	-12.96	11	Pass
	46	5230	-11.52	0	-11.52		Pass
11AC20	36	5180	-8.38	0	-8.38	11	Pass
	40	5200	-8.24	0	-8.24		Pass
	48	5240	-9.32	0	-9.32		Pass
11AC40	38	5190	-10.59	0	-10.59	11	Pass
	46	5230	-11.95	0	-11.95		Pass
11AC80	42	5210	-16.71	0	-16.71	11	Pass

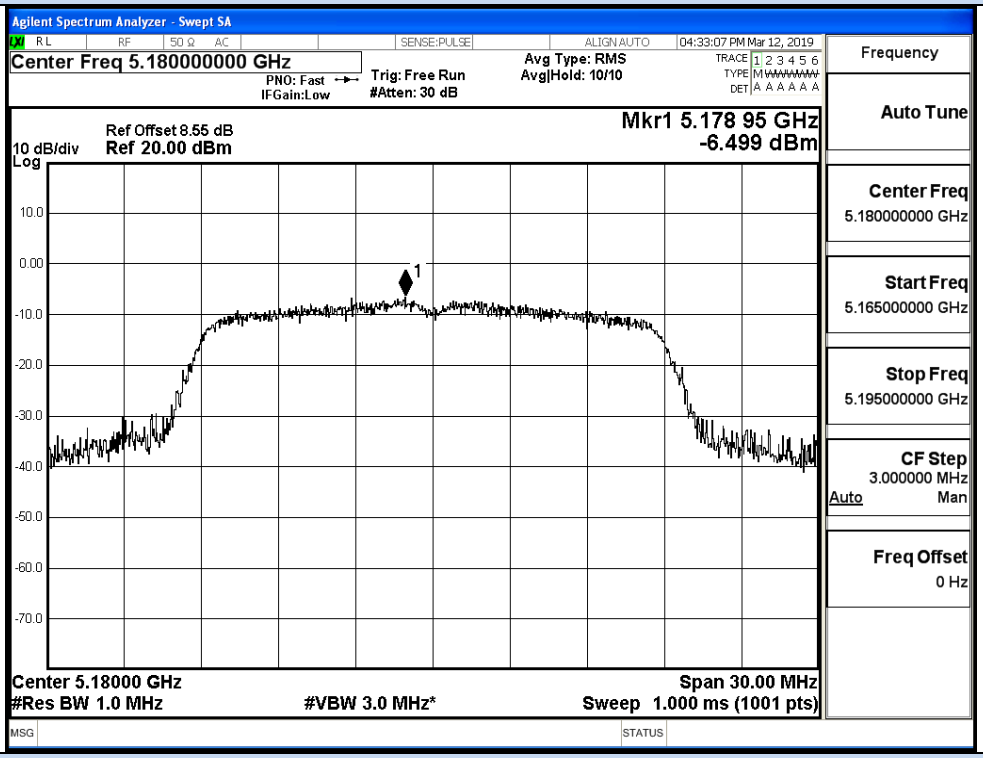
Ant1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	-9.56	0	-9.56	11	Pass
	40	5200	-10.64	0	-10.64		Pass
	48	5240	-9.92	0	-9.92		Pass
11N20	36	5180	-8.05	0	-8.05	11	Pass
	40	5200	-8.50	0	-8.50		Pass
	48	5240	-9.05	0	-9.05		Pass
11N40	38	5190	-11.68	0	-11.68	11	Pass
	46	5230	-11.77	0	-11.77		Pass
11AC20	36	5180	-8.45	0	-8.45	11	Pass
	40	5200	-8.26	0	-8.26		Pass
	48	5240	-8.24	0	-8.24		Pass
11AC40	38	5190	-10.65	0	-10.65	11	Pass
	46	5230	-11.86	0	-11.86		Pass
11AC80	42	5210	-16.64	0	-16.64	11	Pass

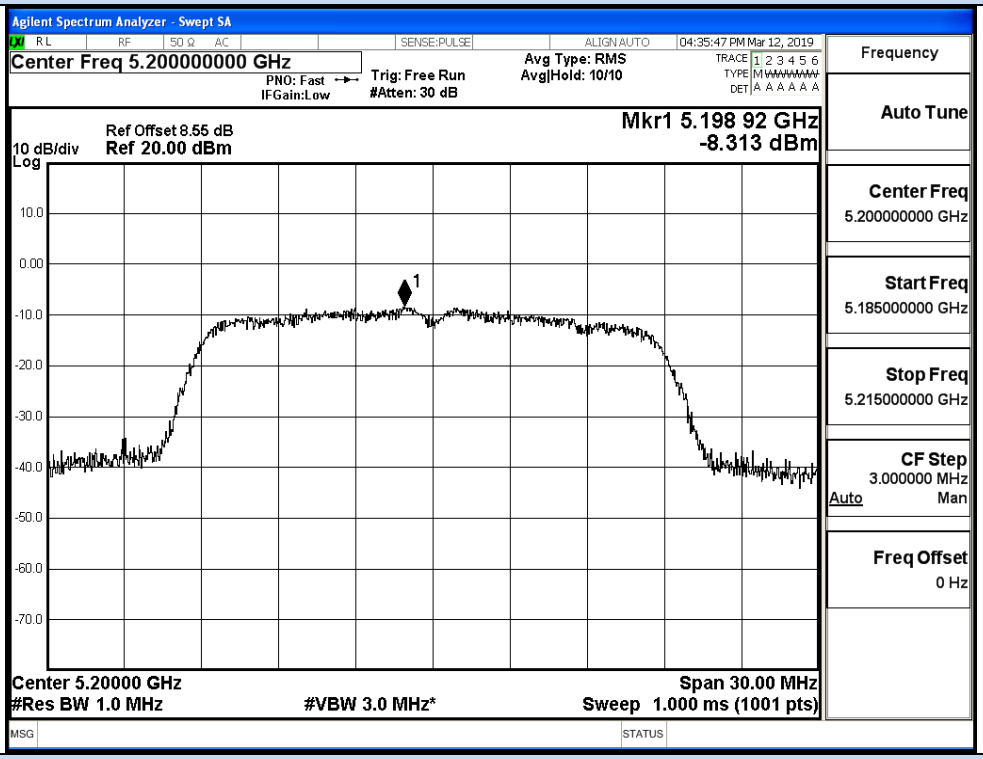
Combined Ant0 and Ant1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)			Duty Cycle Factor (dB)	Report Power Density (dBm/MHz)			Limit (dBm/MHz)
			Ant0	Ant1	Sum		Ant0	Ant1	Sum	
11N20	36	5180	-8.50	-8.05	-5.26	0	-8.50	-8.05	-5.26	7.99
	40	5200	-8.57	-8.50	-5.52	0	-8.57	-8.50	-5.52	
	48	5240	-9.33	-9.05	-6.18	0	-9.33	-9.05	-6.18	
11N40	38	5190	-12.96	-11.68	-9.26	0	-12.96	-11.68	-9.26	7.99
	46	5230	-11.52	-11.77	-8.63	0	-11.52	-11.77	-8.63	
11AC20	36	5180	-8.38	-8.45	-5.40	0	-8.38	-8.45	-5.40	7.99
	40	5200	-8.24	-8.26	-5.24	0	-8.24	-8.26	-5.24	
	48	5240	-9.32	-8.24	-5.74	0	-9.32	-8.24	-5.74	
11AC40	38	5190	-10.59	-10.65	-7.61	0	-10.59	-10.65	-7.61	7.99
	46	5230	-11.95	-11.86	-8.89	0	-11.95	-11.86	-8.89	
11AC80	42	5210	-16.71	-16.64	-13.66	0	-16.71	-16.64	-13.66	7.99

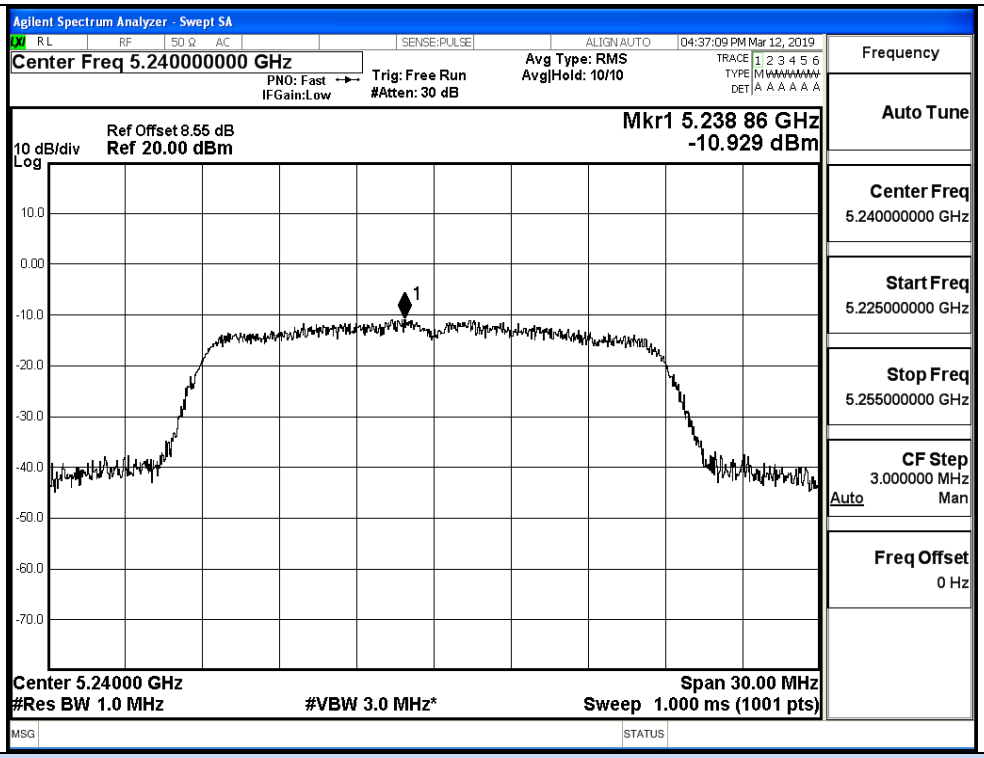
Power Spectral Density_Ant0



IEEE 802.11a / Channel 36 / 5180MHz_Ant0

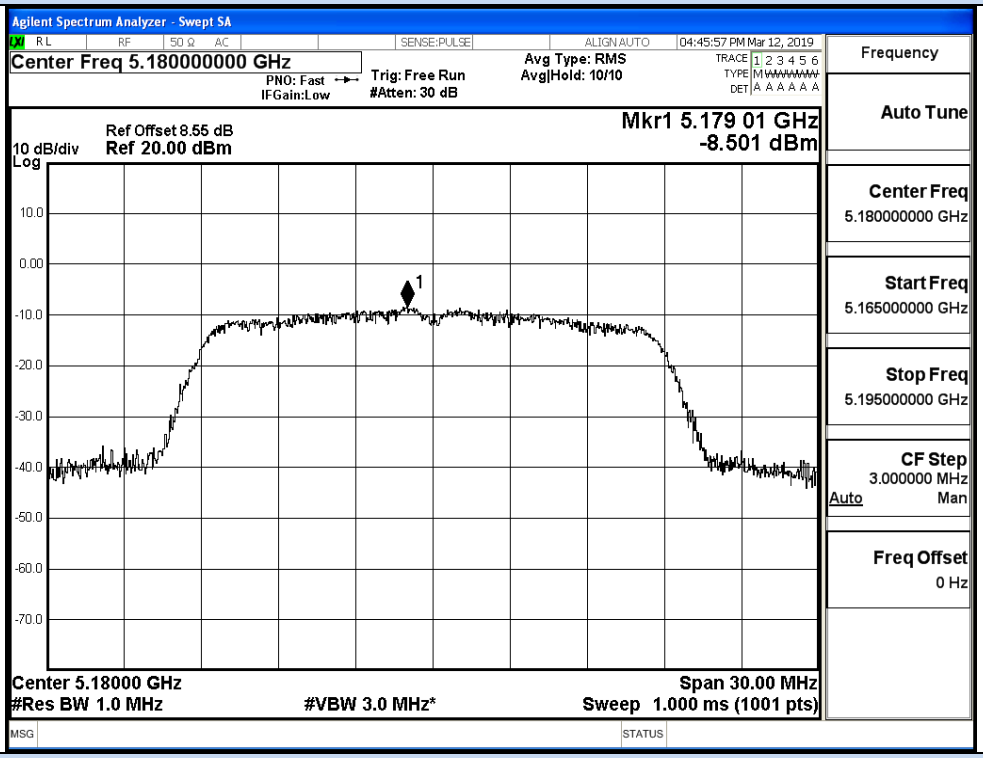


IEEE 802.11a / Channel 40 / 5200MHz_Ant0

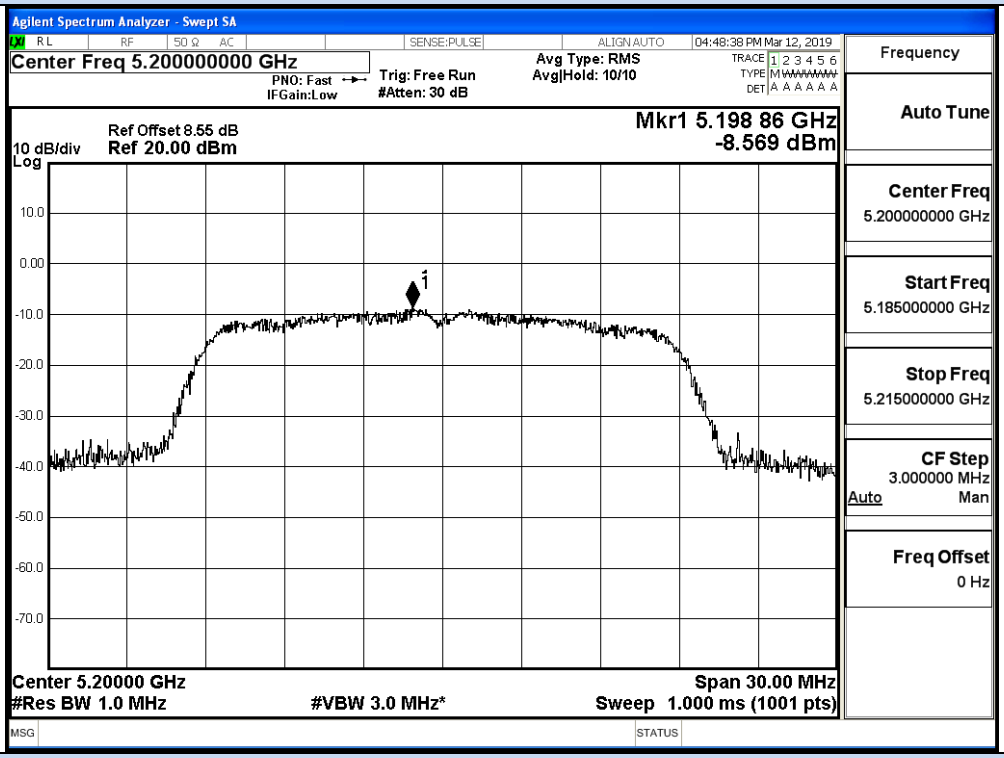


IEEE 802.11a / Channel 48 / 5240MHz_Ant0

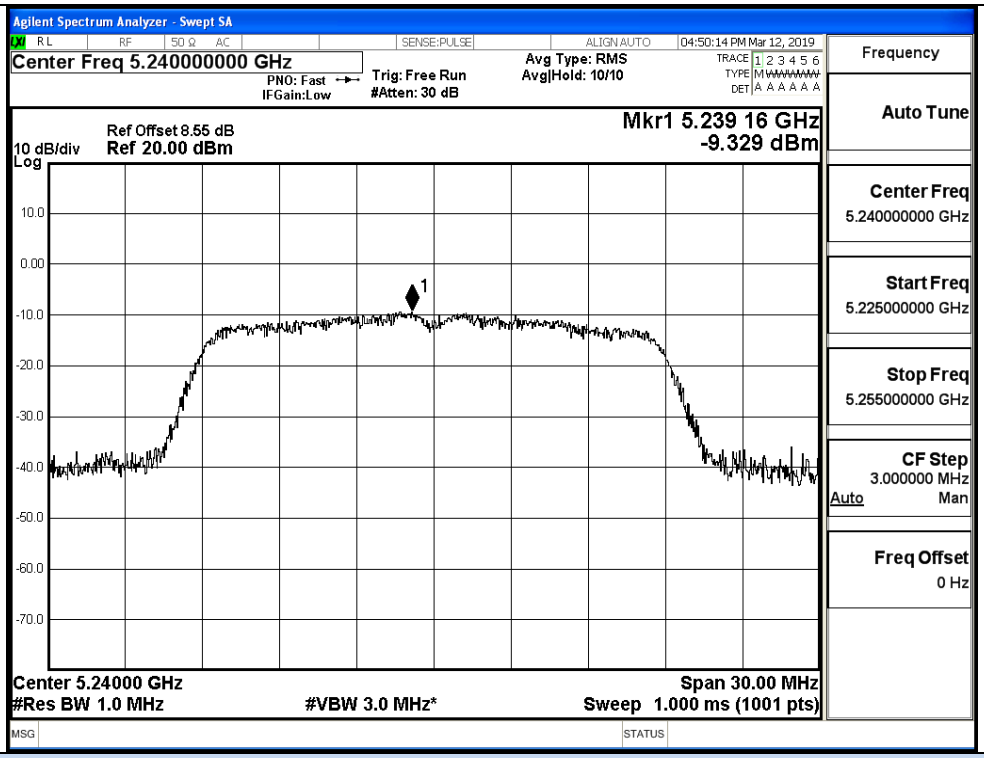
Power Spectral Density_Ant0



IEEE 802.11n20 / Channel 36 / 5180MHz_Ant0

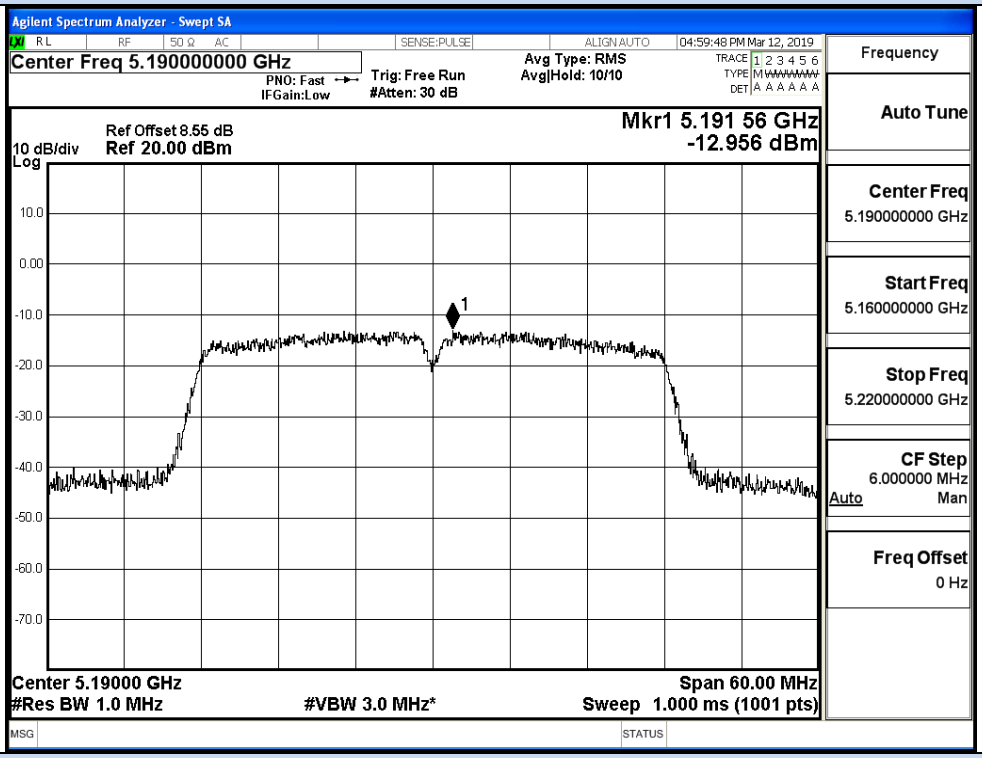


IEEE 802.11n20 / Channel 40 / 5200MHz_Ant0

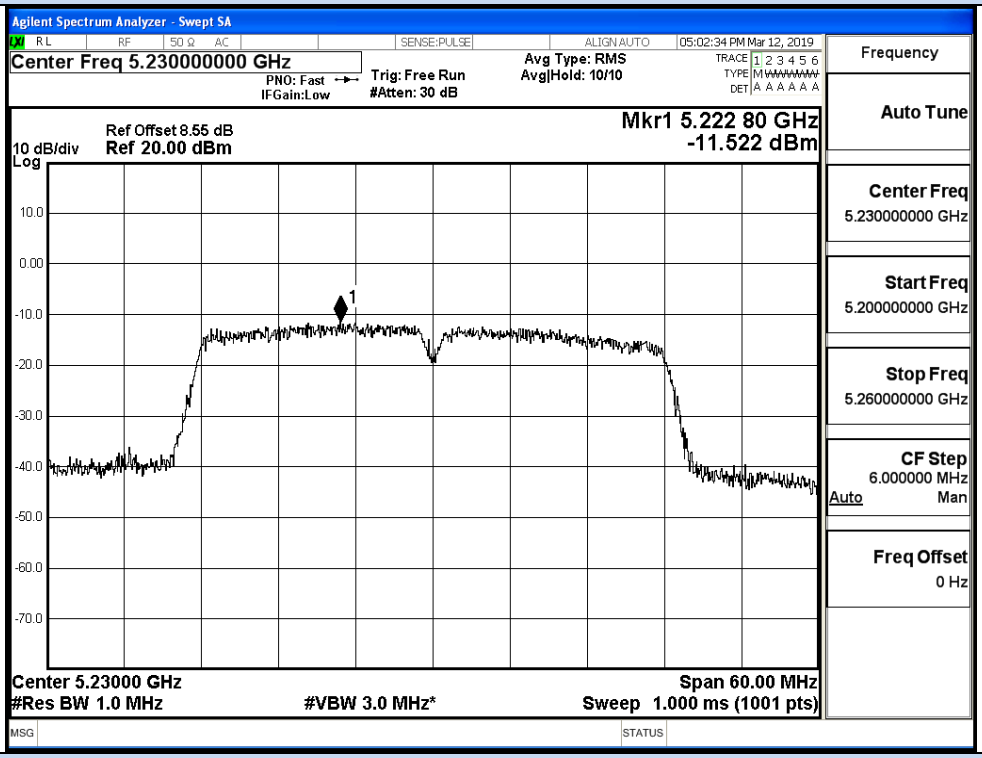


IEEE 802.11n20 / Channel 48 / 5240MHz_Ant0

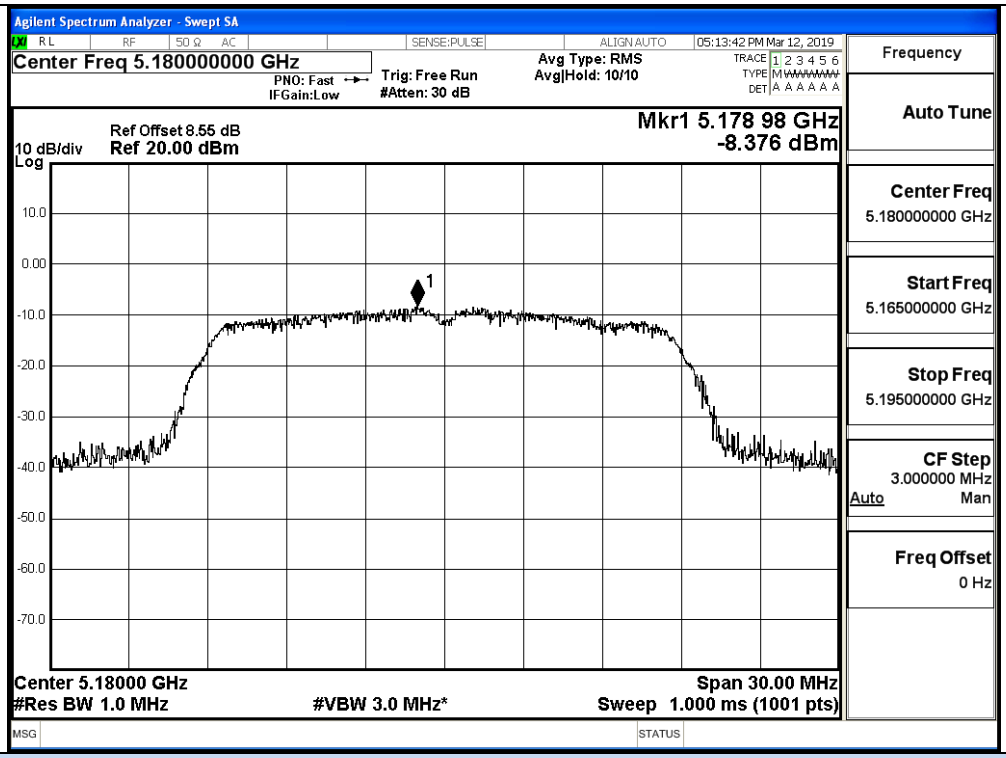
Power Spectral Density_Ant0



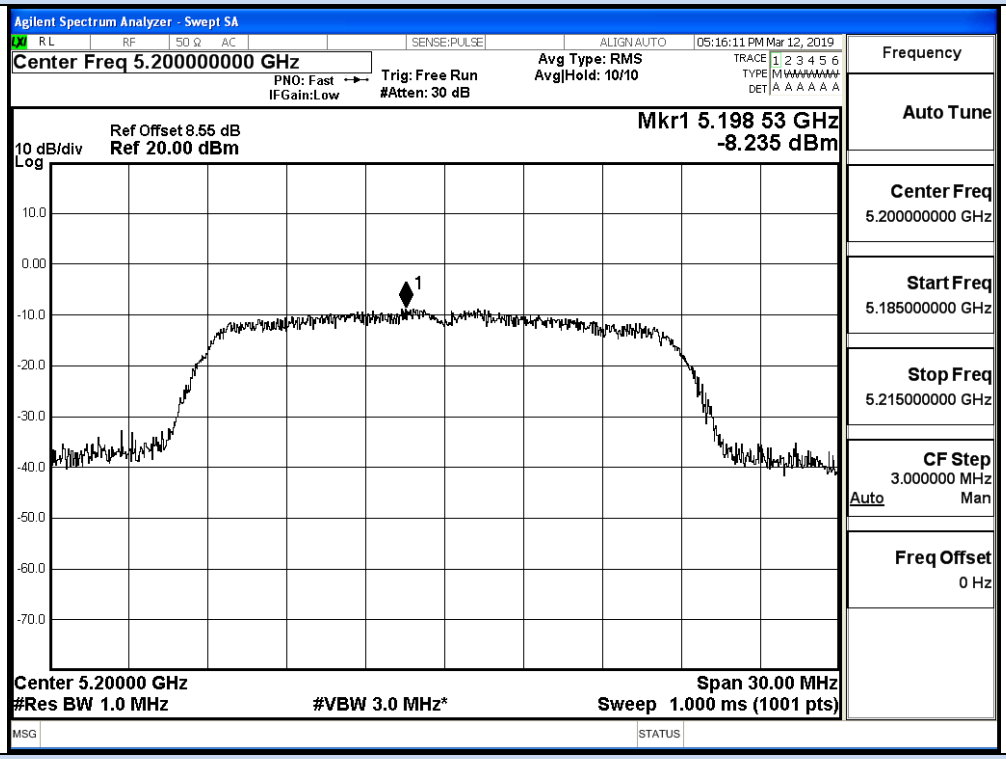
IEEE 802.11n40 / Channel 38 / 5190MHz_Ant0



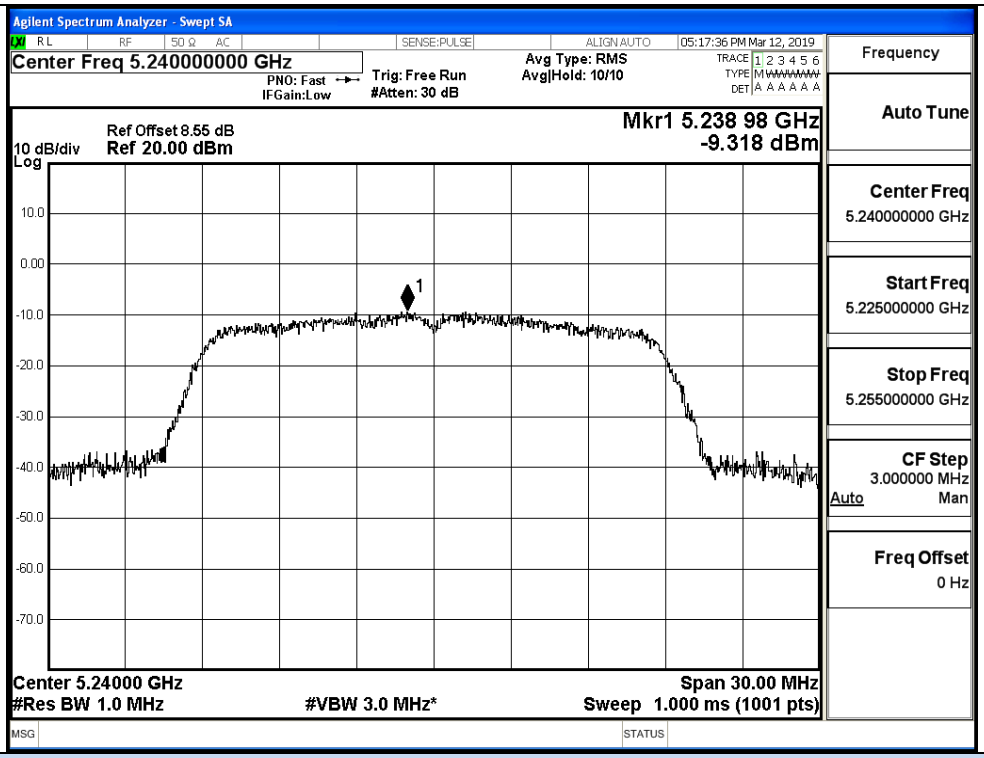
IEEE 802.11n40 / Channel 46 / 5230MHz_Ant0



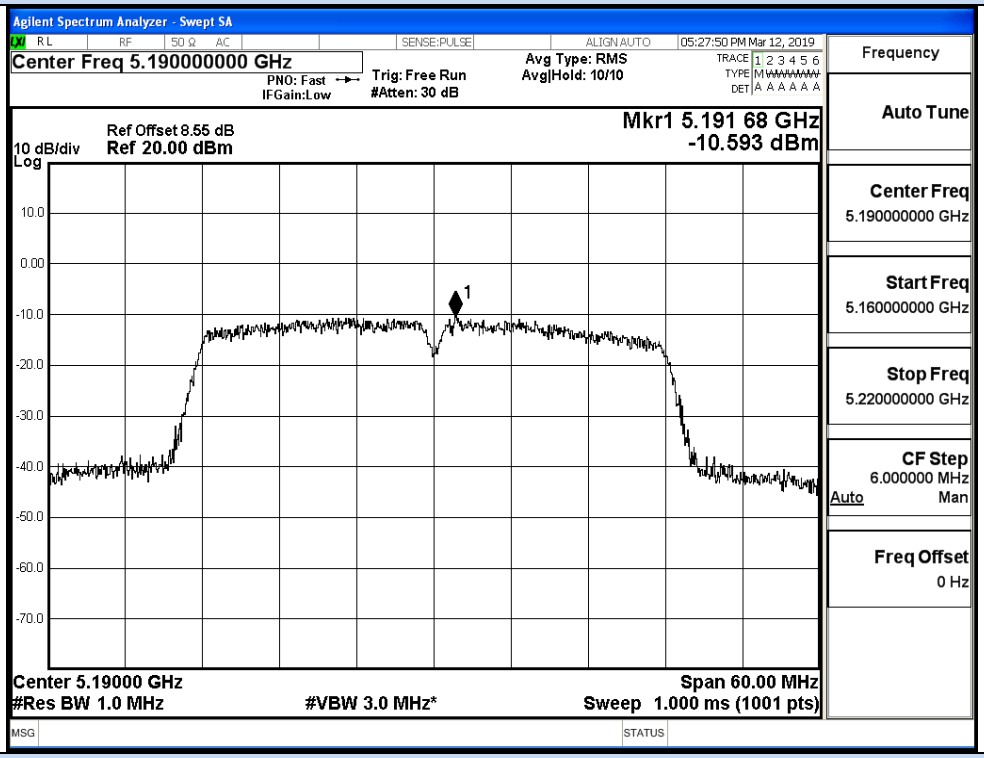
IEEE 802.11ac20 / Channel 36 / 5180MHz_Ant0



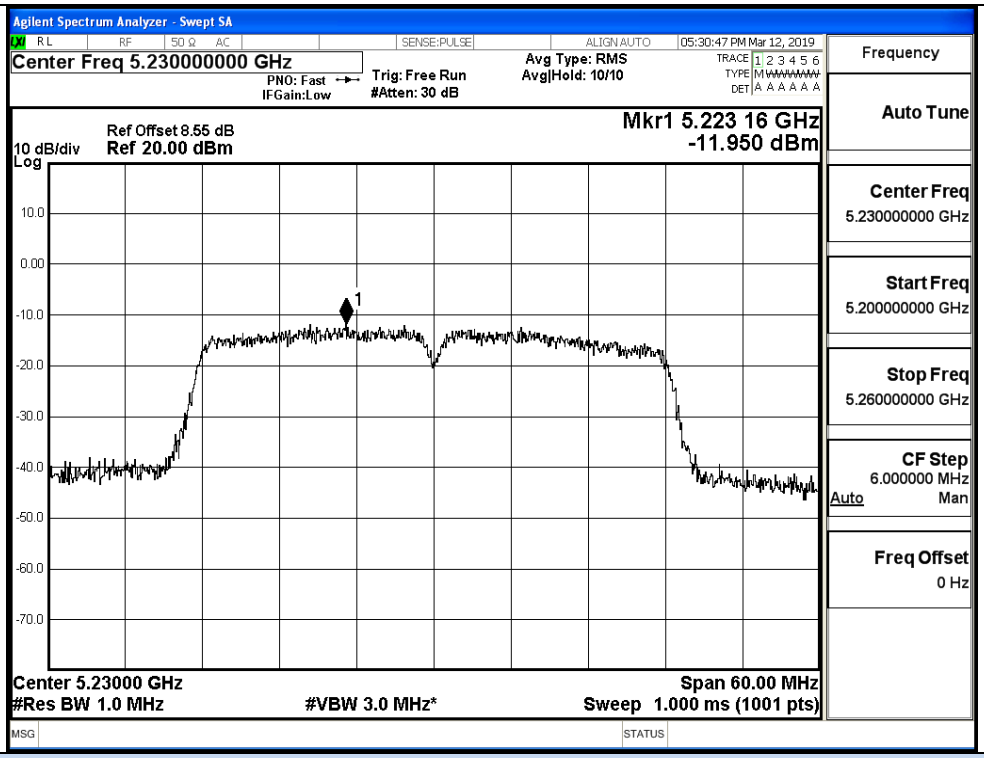
IEEE 802.11ac20 / Channel 40 / 5200MHz_Ant0



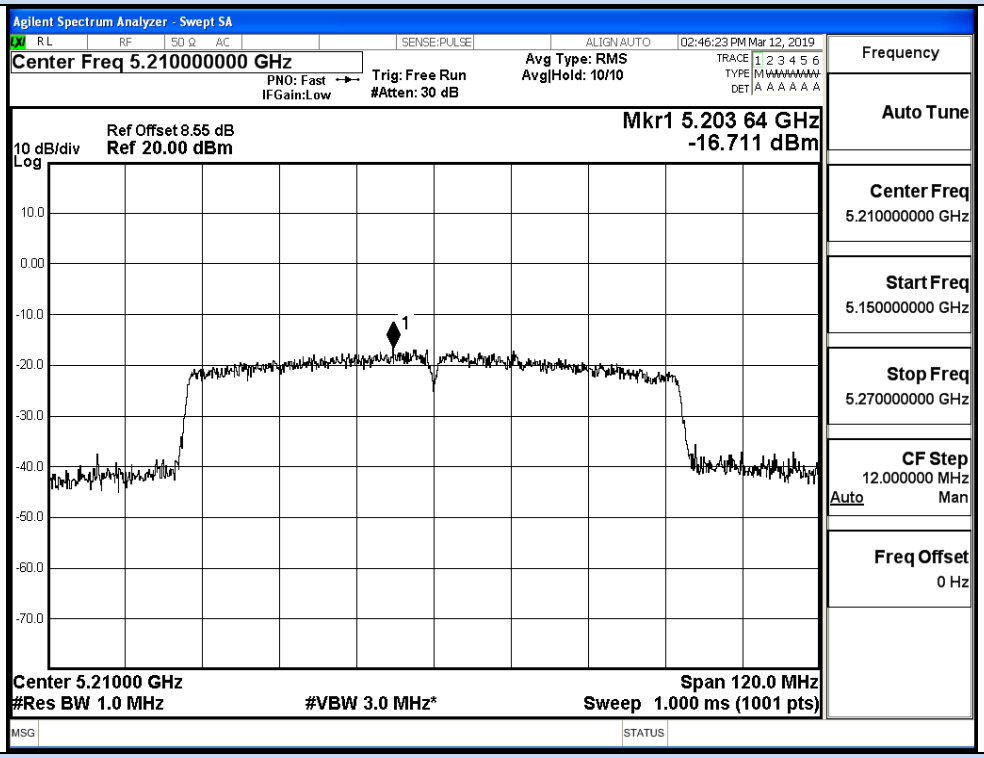
IEEE 802.11ac20 / Channel 48 / 5240MHz_Ant0



IEEE 802.11ac40 / Channel 38 / 5190MHz_Ant0

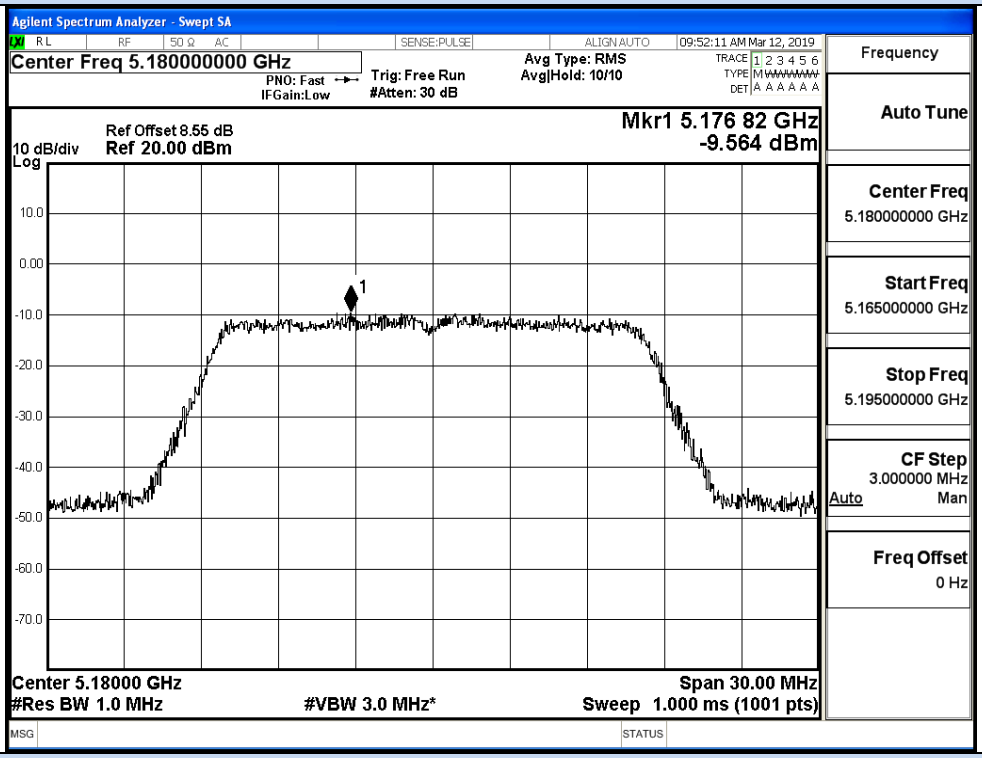


IEEE 802.11ac40 / Channel 46 / 5230MHz_Ant0

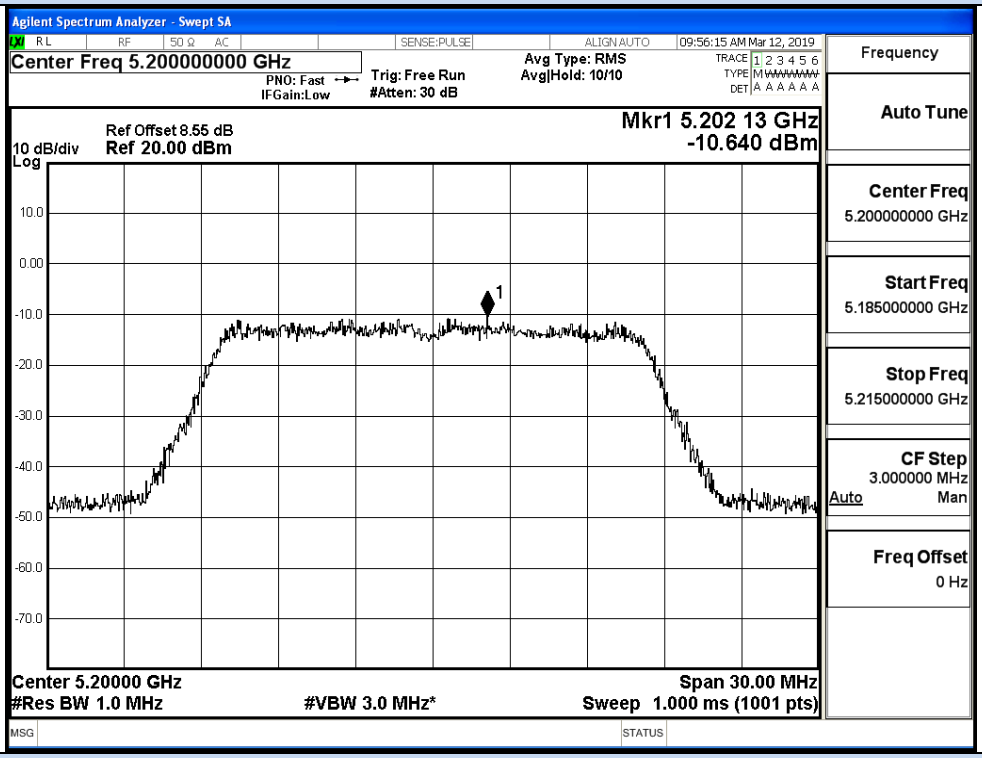


IEEE 802.11ac80 / Channel 42 / 5210MHz_Ant0

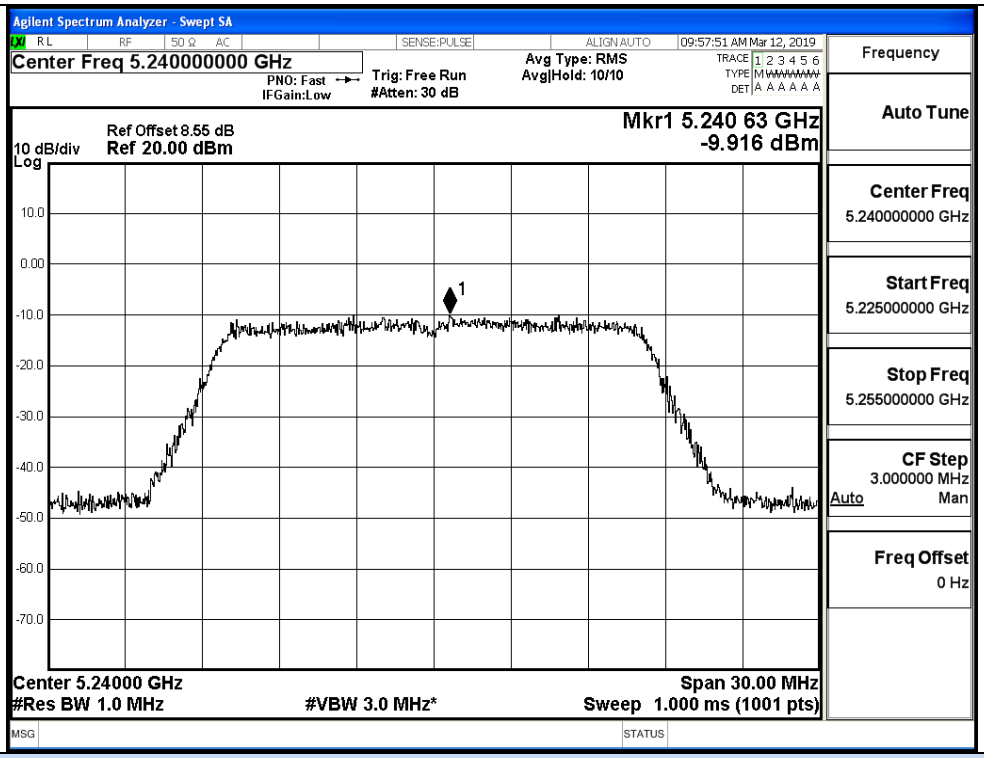
Power Spectral Density_Ant1



IEEE 802.11a / Channel 36 / 5180MHz_Ant1

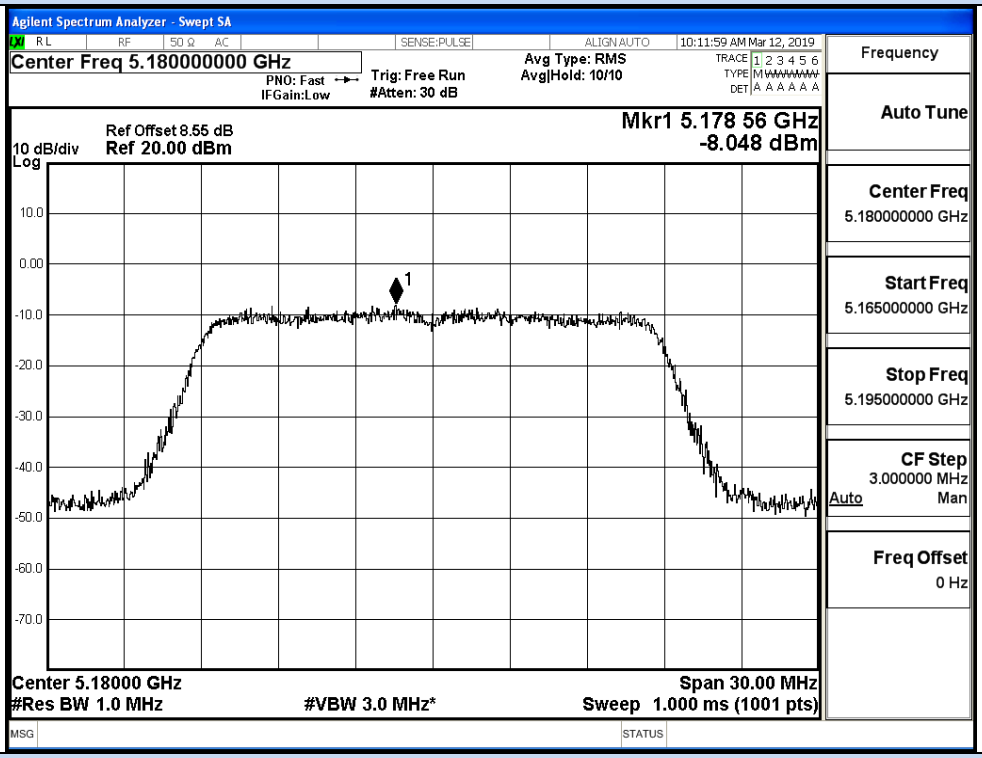


IEEE 802.11a / Channel 40 / 5200MHz_Ant1

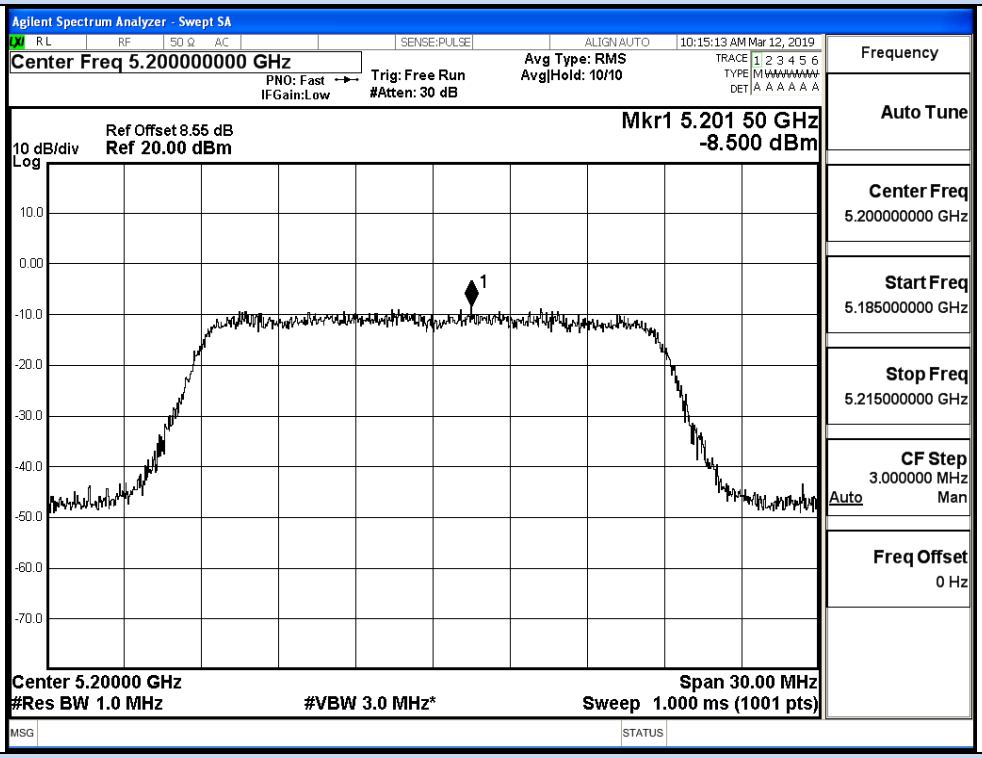


IEEE 802.11a / Channel 48 / 5240MHz_Ant1

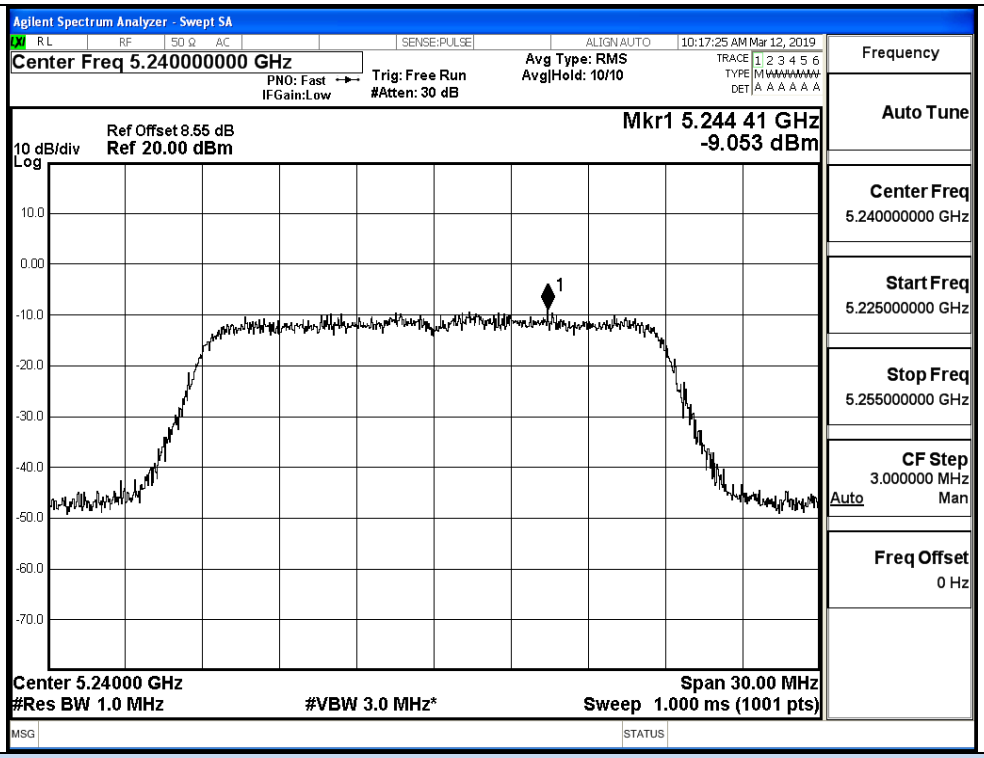
Power Spectral Density_Ant1



IEEE 802.11n20 / Channel 36 / 5180MHz_Ant1

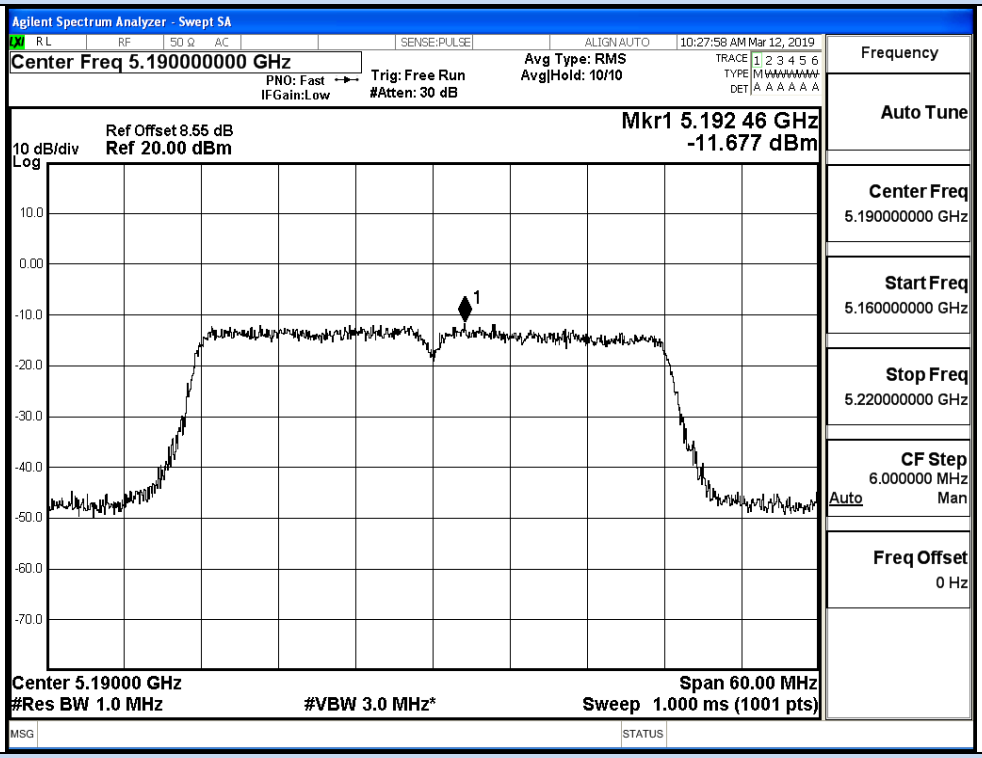


IEEE 802.11n20 / Channel 40 / 5200MHz_Ant1

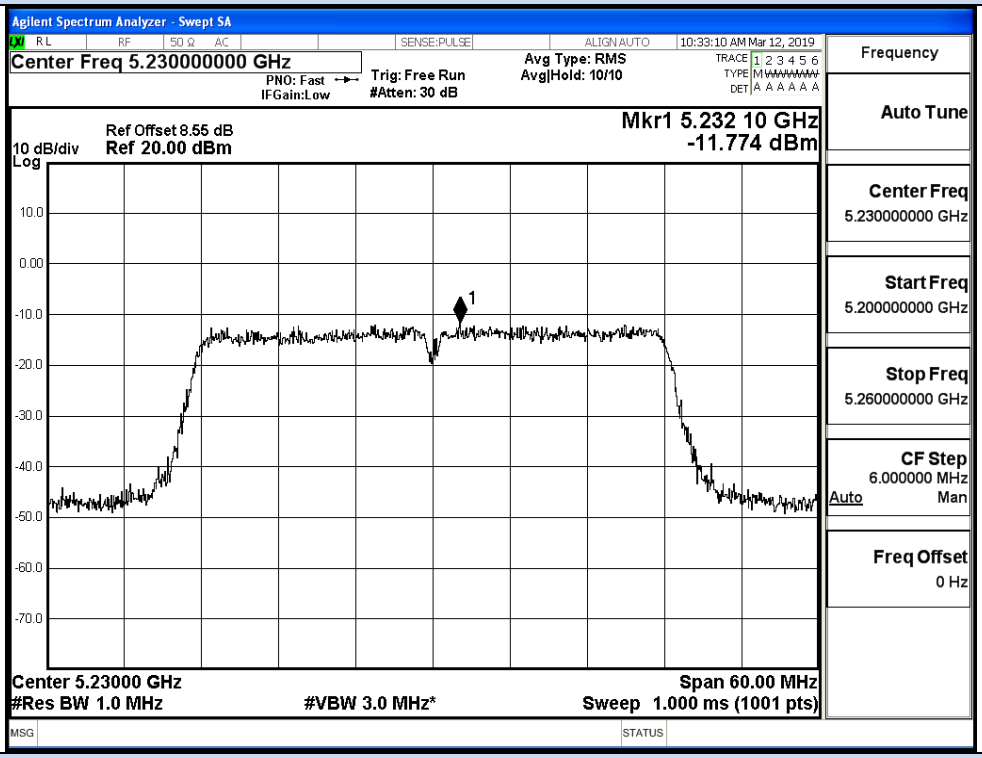


IEEE 802.11n20 / Channel 48 / 5240MHz_Ant1

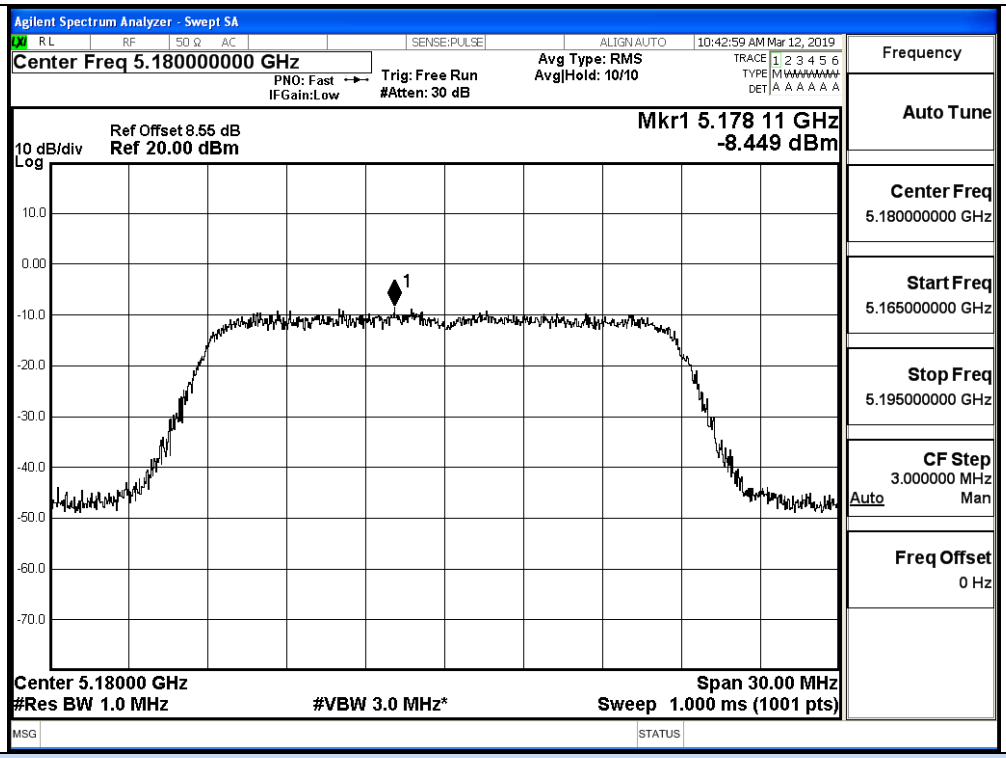
Power Spectral Density_Ant1



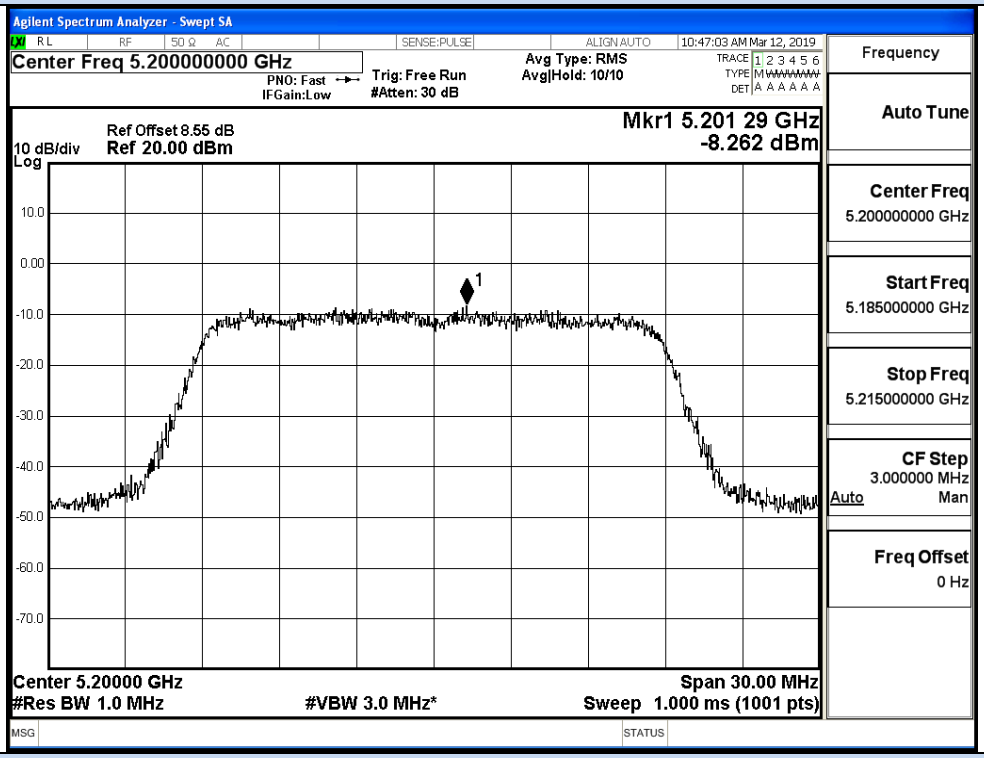
IEEE 802.11n40 / Channel 38 / 5190MHz_Ant1



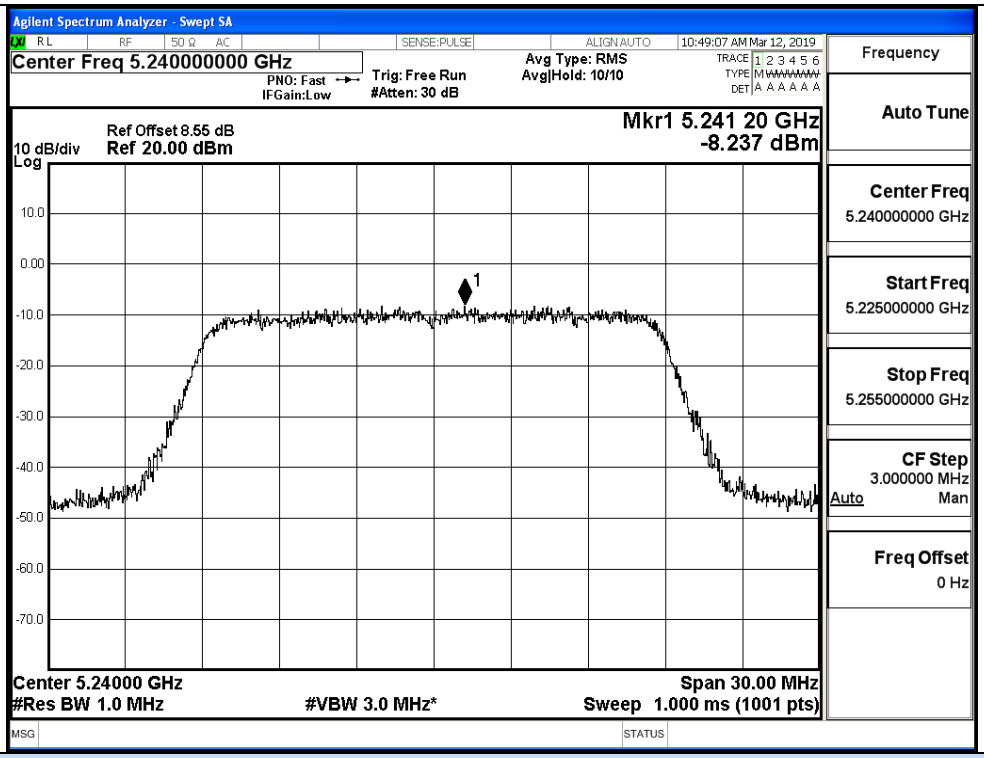
IEEE 802.11n40 / Channel 46 / 5230MHz_Ant1



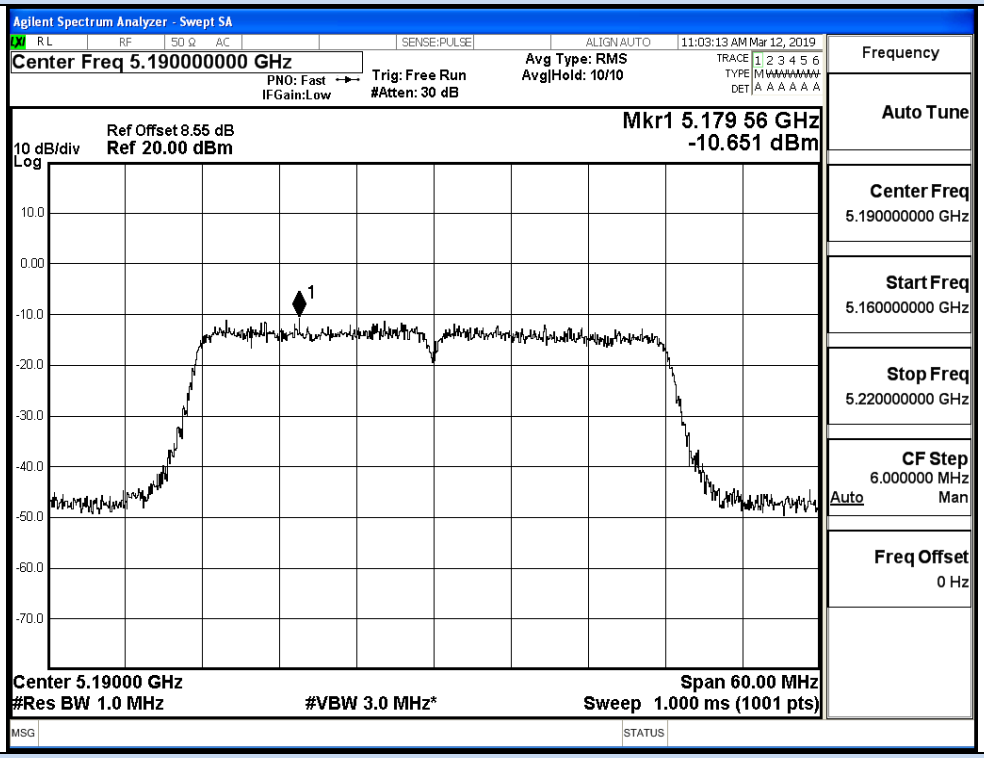
IEEE 802.11ac20 / Channel 36 / 5180MHz_Ant1



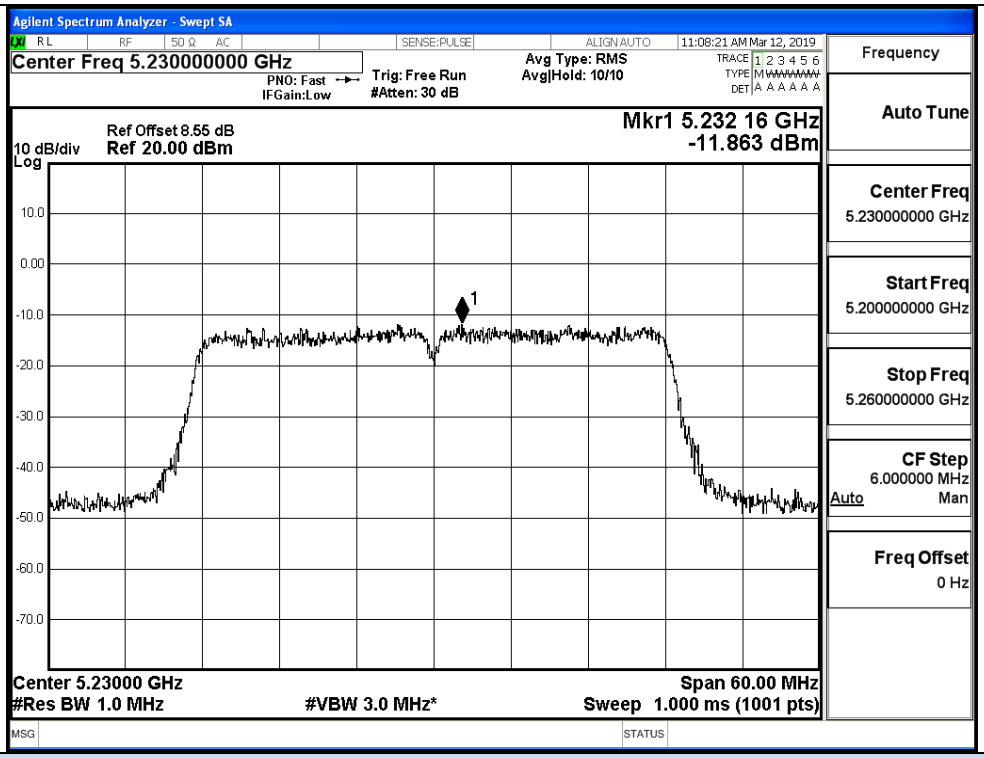
IEEE 802.11ac20 / Channel 40 / 5200MHz_Ant1



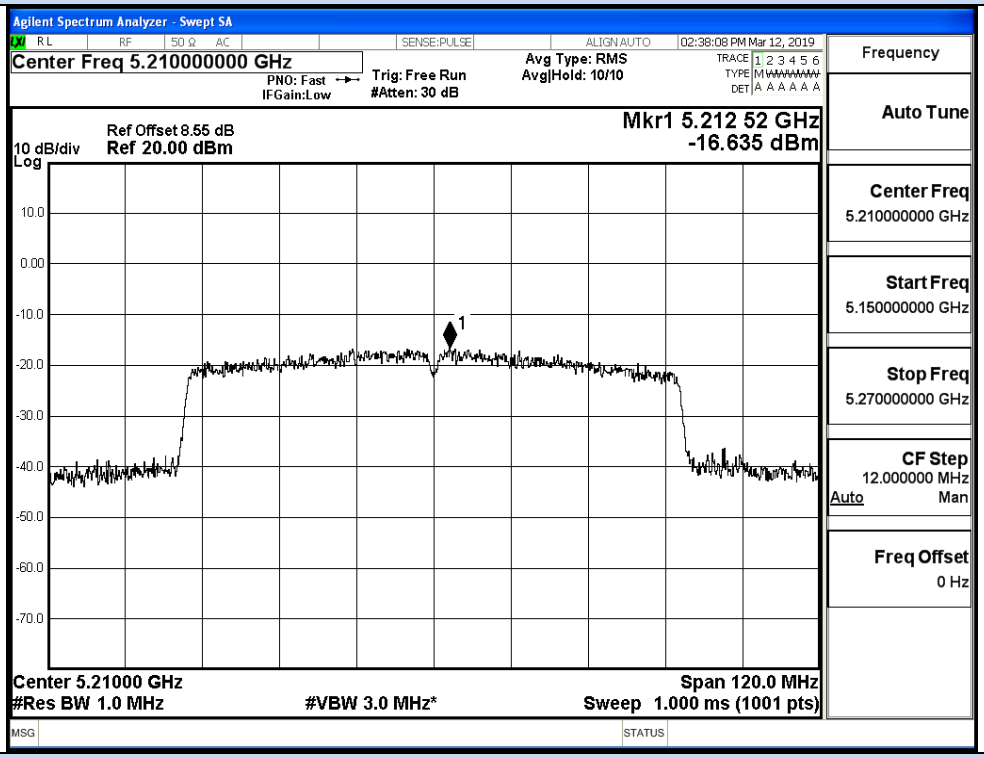
IEEE 802.11ac20 / Channel 48 / 5240MHz_Ant1



IEEE 802.11ac40 / Channel 38 / 5190MHz_Ant1



IEEE 802.11ac40 / Channel 46 / 5230MHz_Ant1

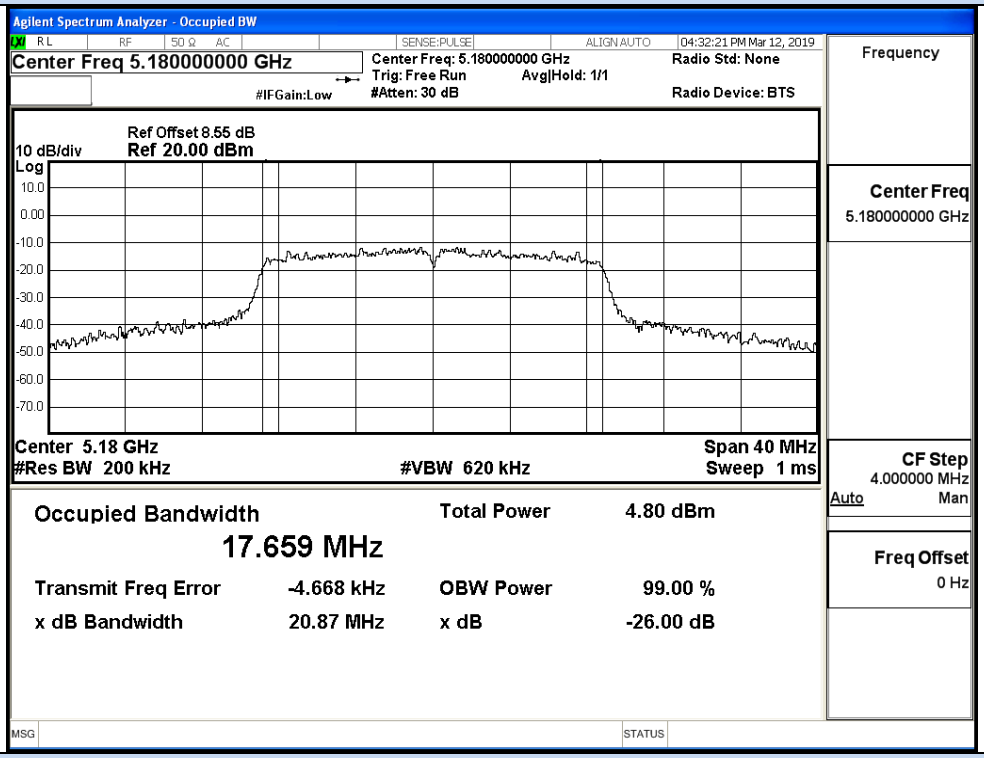


IEEE 802.11ac80 / Channel 42 / 5210MHz_Ant1

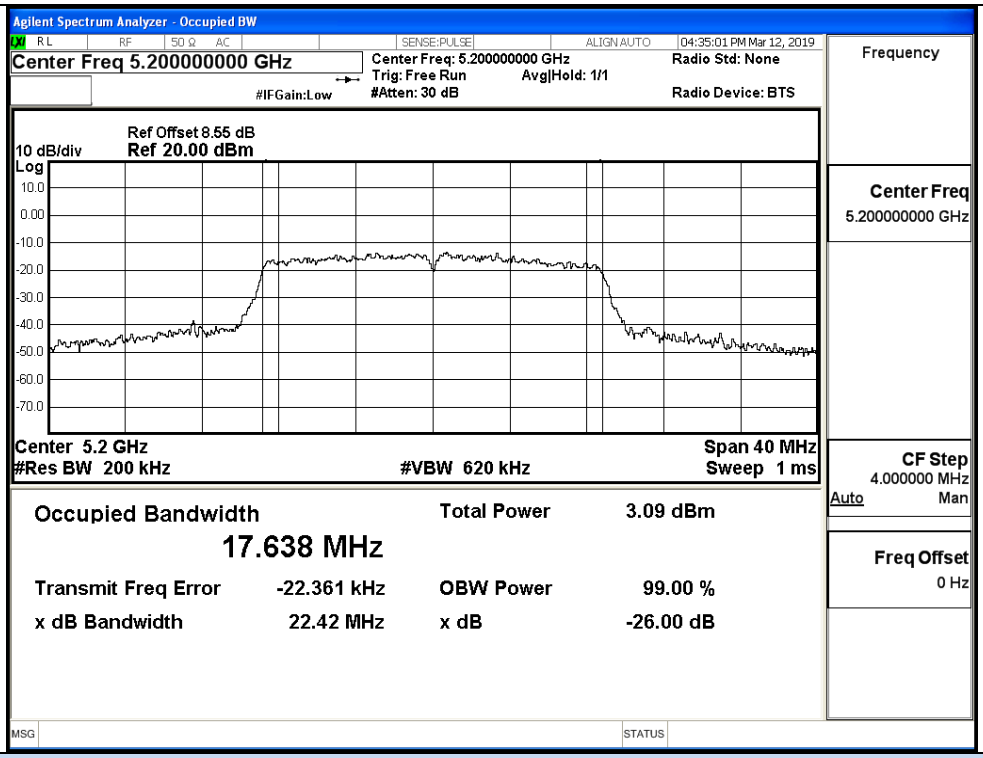
B.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)		99% Bandwidth (MHz)		Limit (MHz)	Verdict
			Ant0	Ant1	Ant0	Ant1		
11A	36	5180	20.87	19.09	17.631	17.638	No Limit	Pass
	40	5200	22.42	19.44	17.650	17.672		Pass
	48	5240	20.21	19.59	17.650	17.644		Pass
11N20	36	5180	19.84	19.86	17.640	17.648	No Limit	Pass
	40	5200	20.40	19.97	17.619	17.649		Pass
	48	5240	22.71	19.89	17.635	17.652		Pass
11N40	38	5190	40.17	40.16	36.057	36.062	No Limit	Pass
	46	5230	48.74	39.99	36.057	36.070		Pass
11AC20	36	5180	20.29	19.80	17.638	17.651	No Limit	Pass
	40	5200	22.06	19.88	17.659	17.653		Pass
	48	5240	19.90	19.92	17.651	17.659		Pass
11AC40	38	5190	44.54	39.98	36.019	36.053	No Limit	Pass
	46	5230	47.96	40.12	36.063	36.087		Pass
11AC80	42	5210	158.4	159.1	76.811	76.588	No Limit	Pass

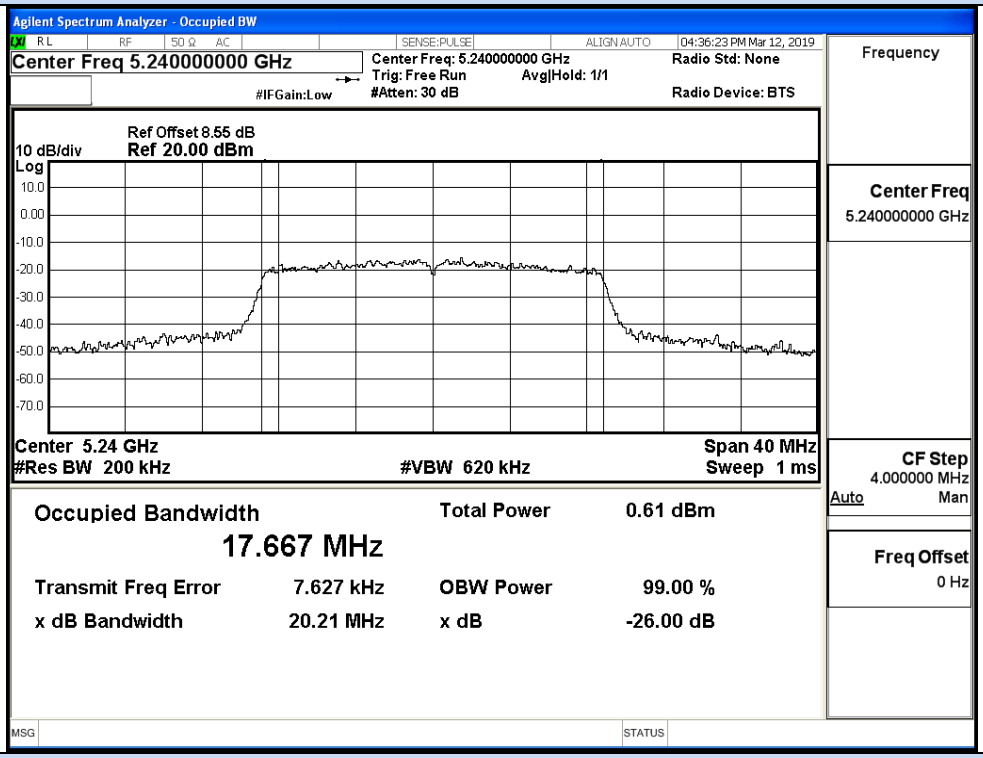
26dB Bandwidth_Ant0



IEEE 802.11a / Channel 36 / 5180MHz_Ant0

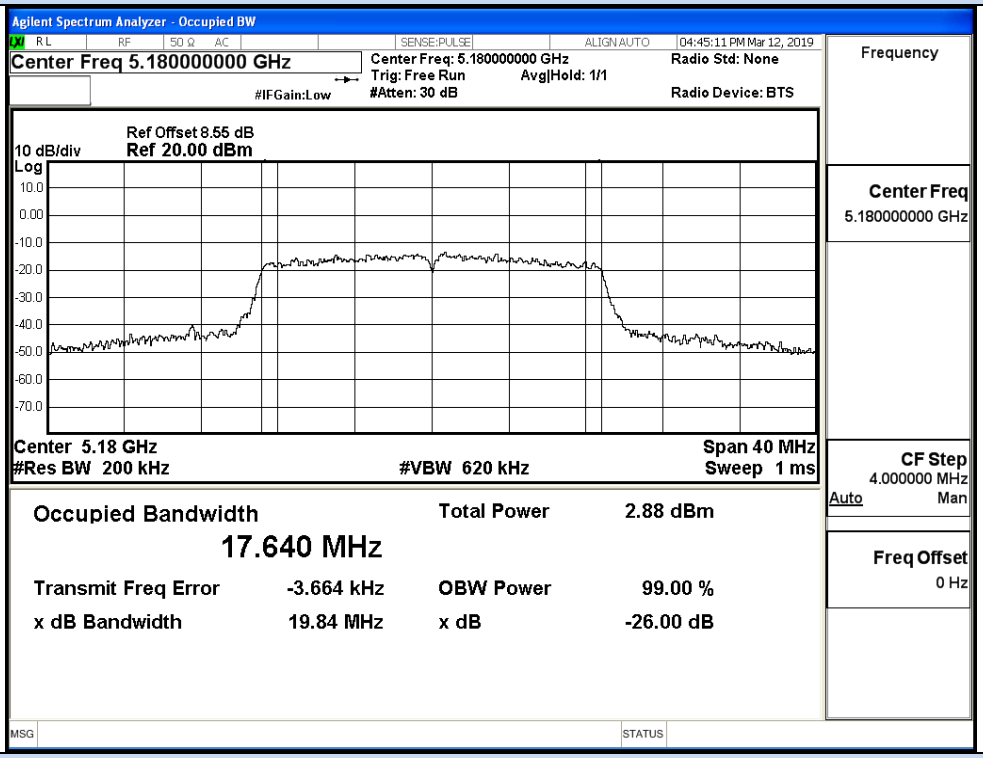


IEEE 802.11a / Channel 40 / 5200MHz_Ant0

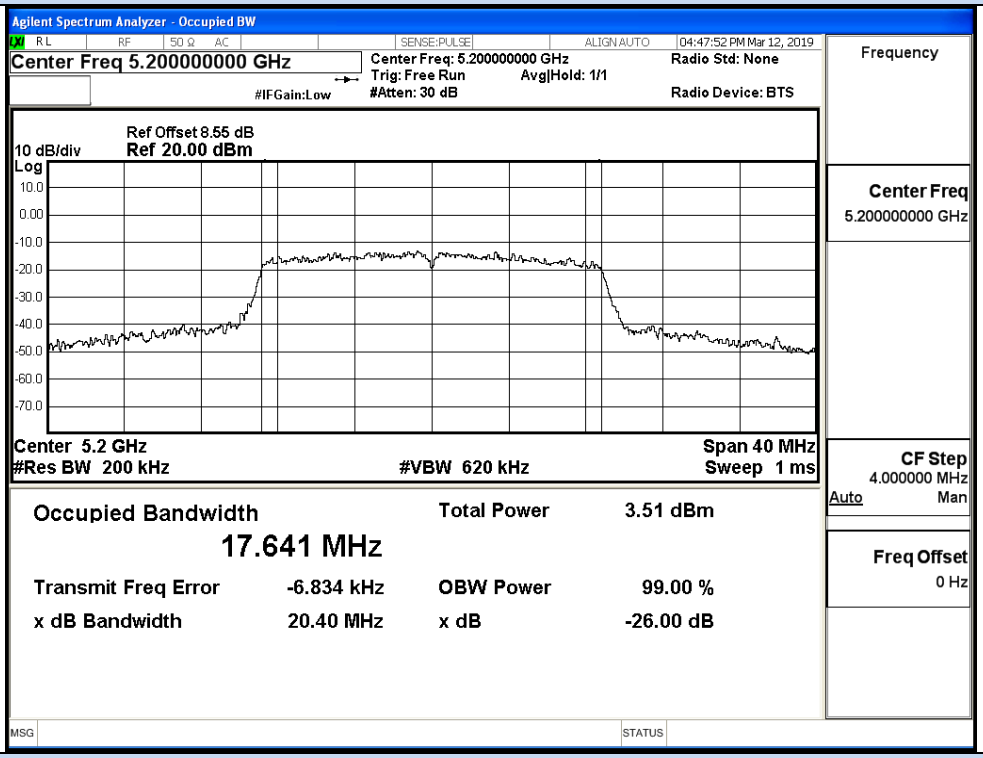


IEEE 802.11a / Channel 48 / 5240MHz_Ant0

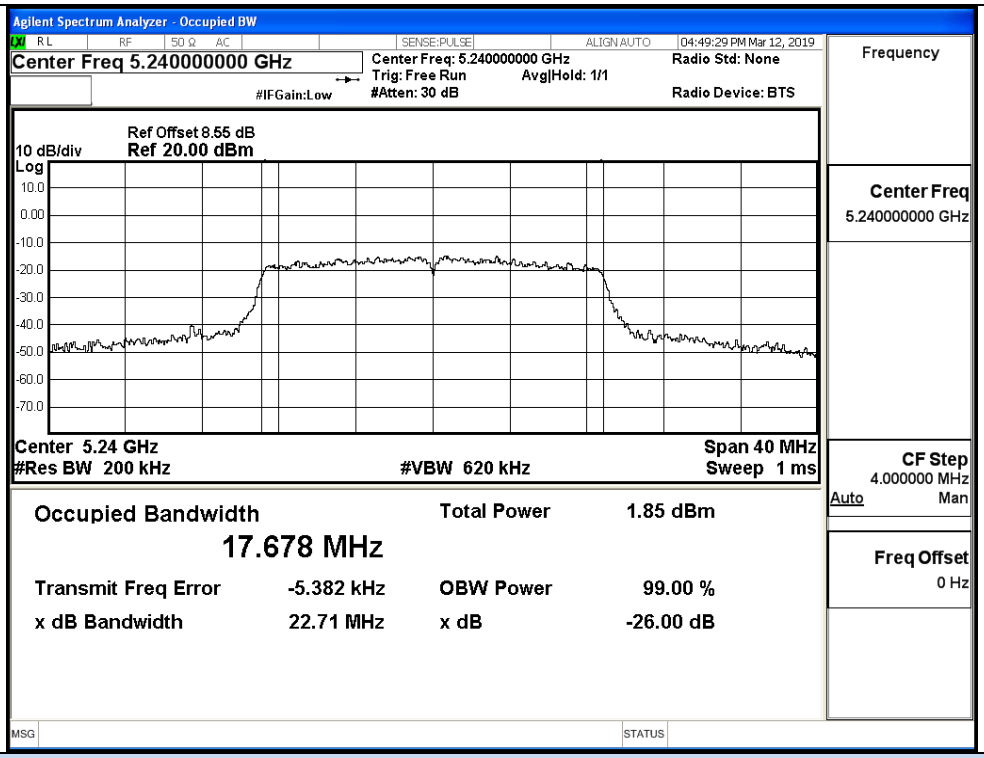
26dB Bandwidth_Ant0



IEEE 802.11n20 / Channel 36 / 5180MHz_Ant0

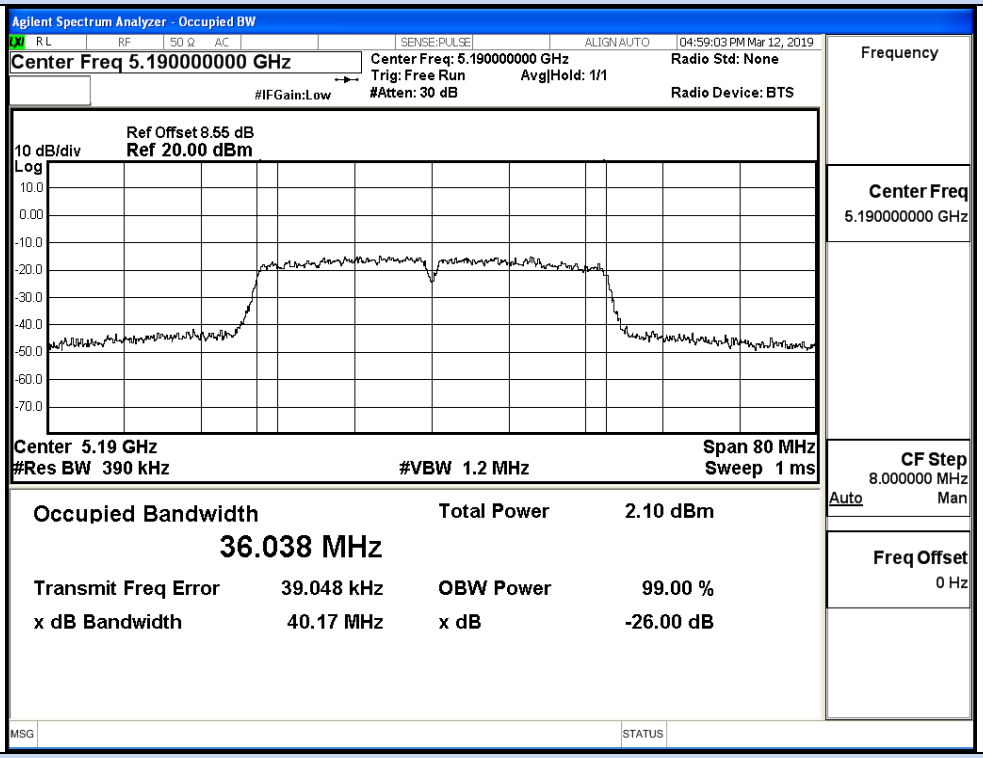


IEEE 802.11n20 / Channel 40 / 5200MHz_Ant0

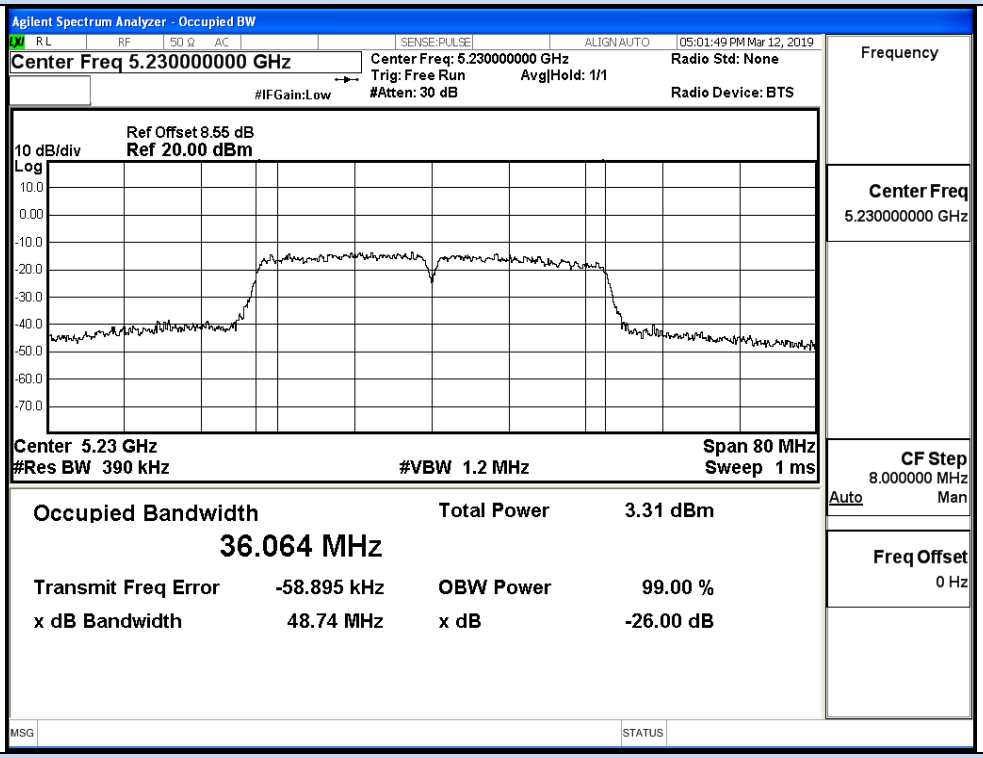


IEEE 802.11n20 / Channel 48 / 5240MHz_Ant0

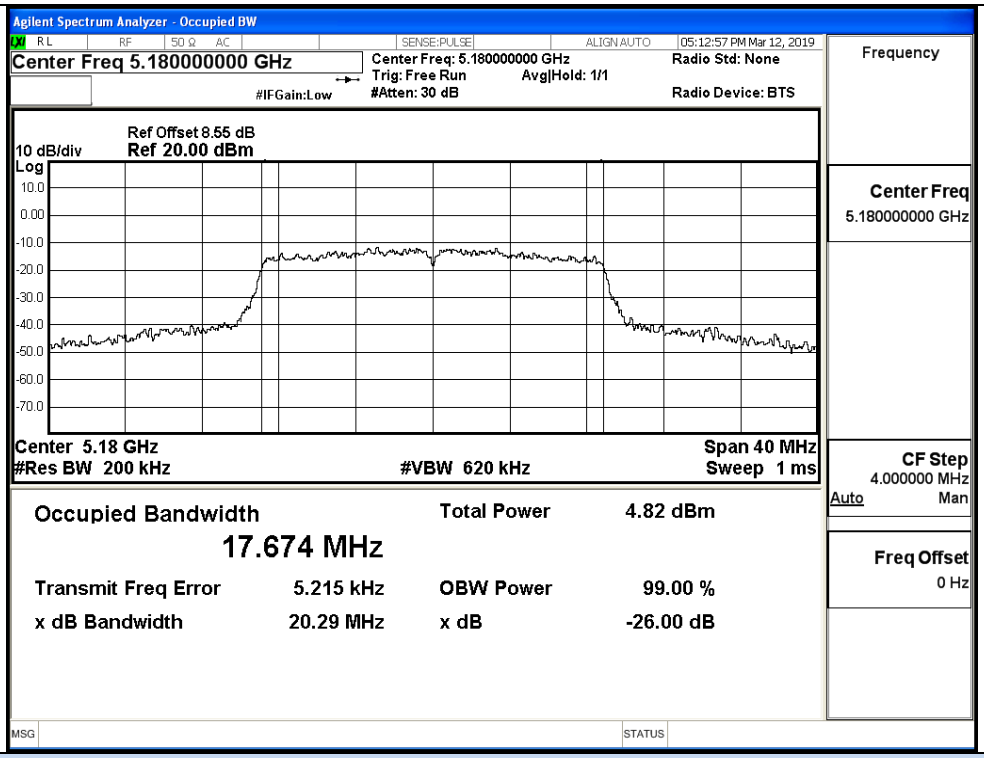
26dB Bandwidth_Ant0



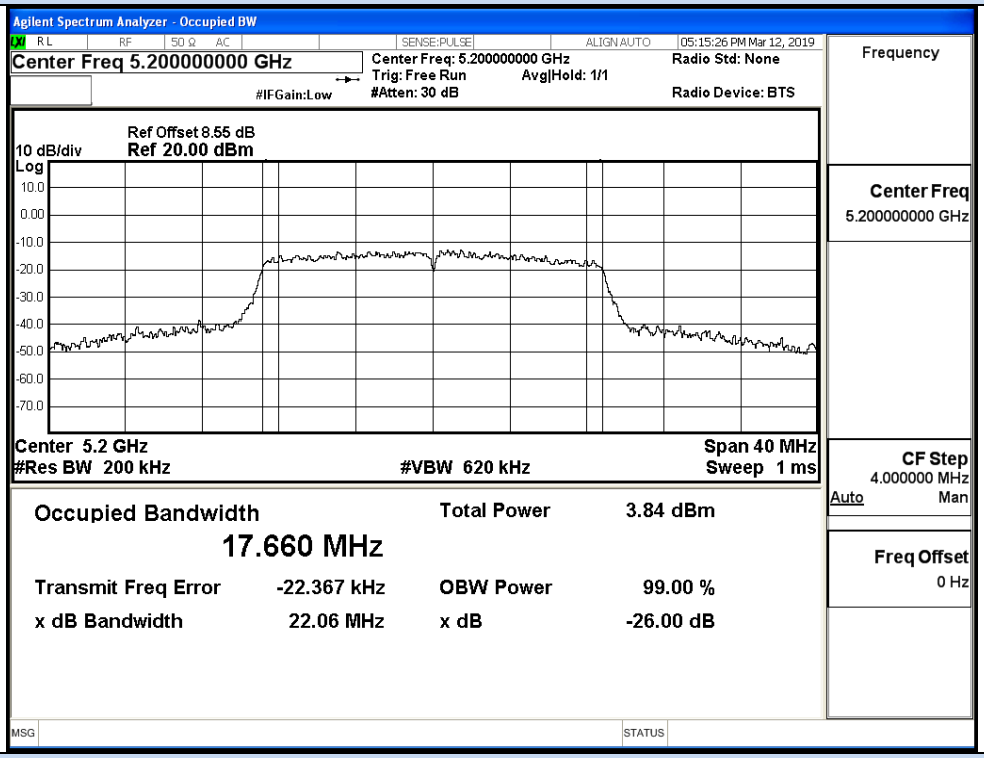
IEEE 802.11n40 / Channel 38 / 5190MHz_Ant0



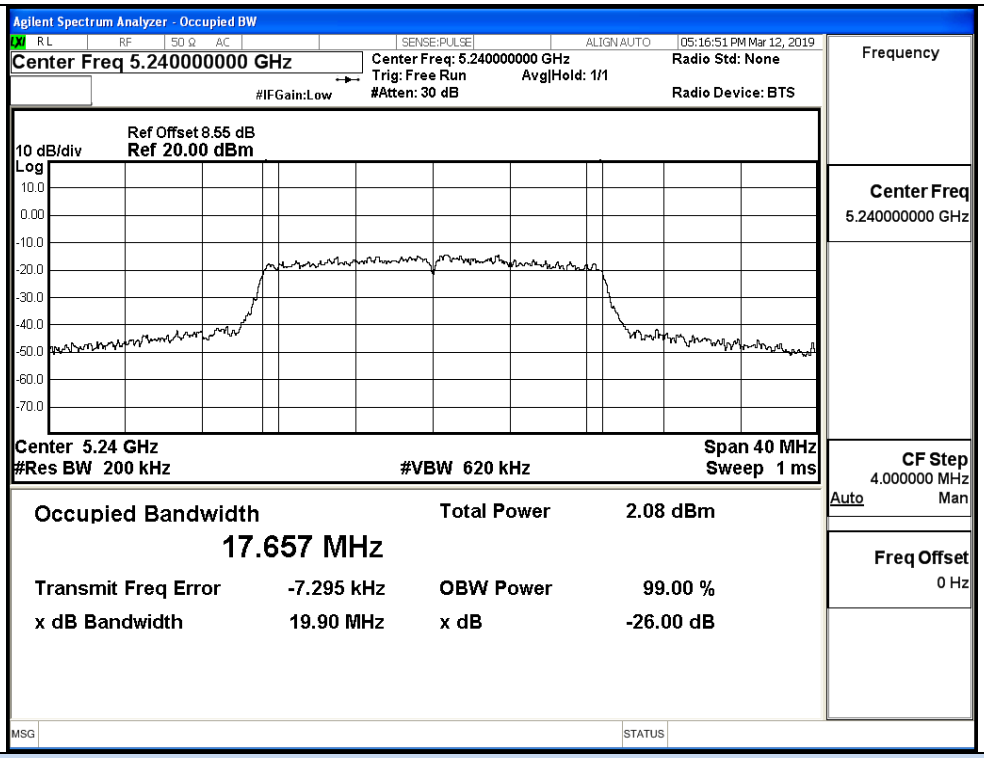
IEEE 802.11n40 / Channel 46 / 5230MHz_Ant0



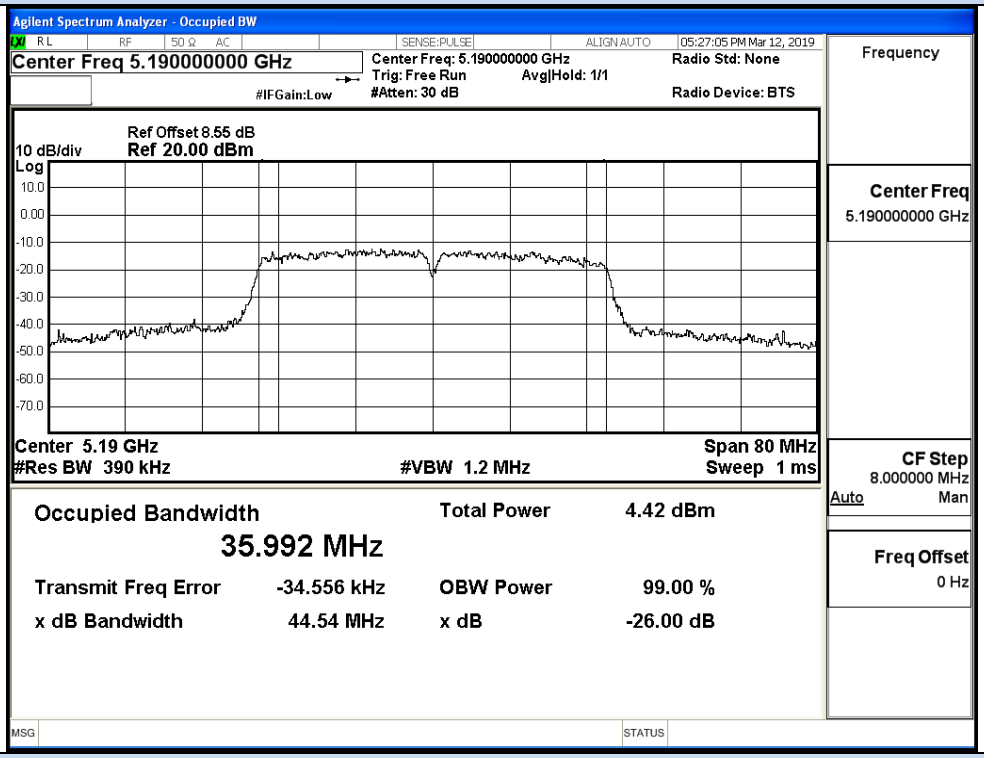
IEEE 802.11ac20 / Channel 36 / 5180MHz_Ant0



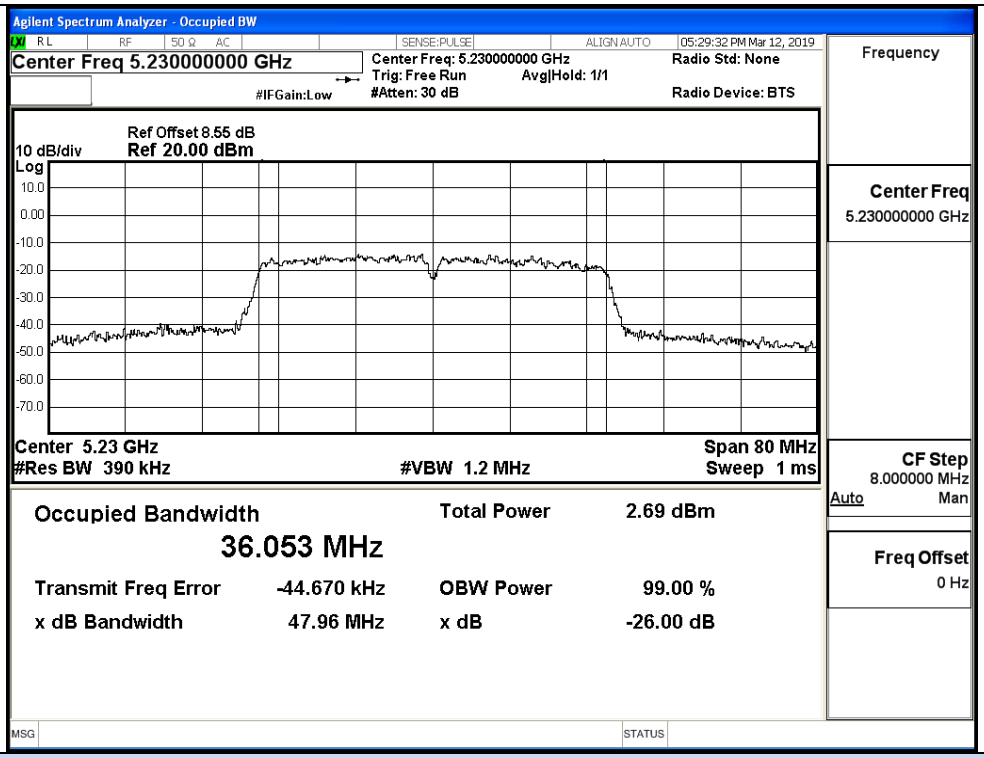
IEEE 802.11ac20 / Channel 40 / 5200MHz_Ant0



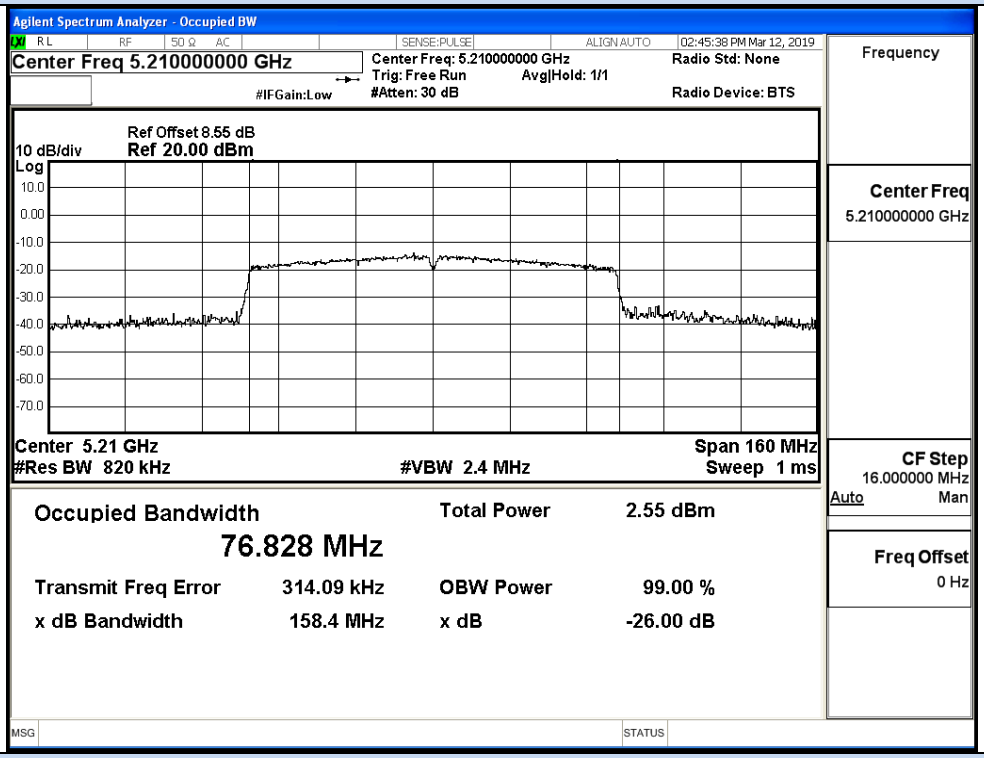
IEEE 802.11ac20 / Channel 48 / 5240MHz_Ant0



IEEE 802.11ac40 / Channel 38 / 5190MHz_Ant0

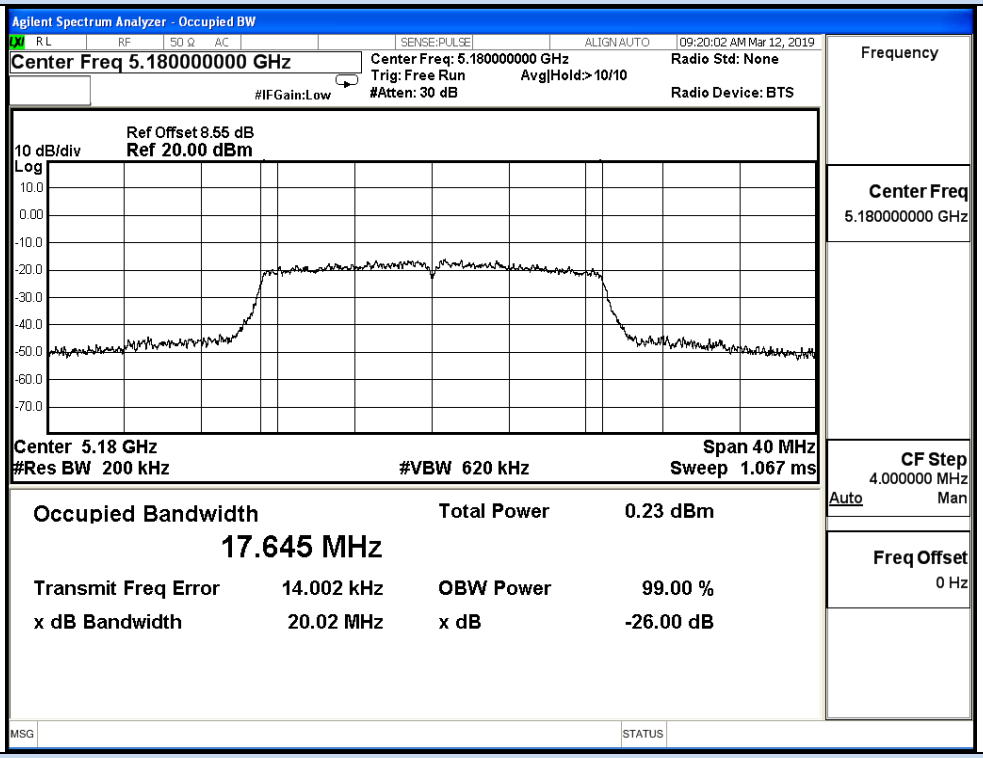


IEEE 802.11ac40 / Channel 46 / 5230MHz_Ant0

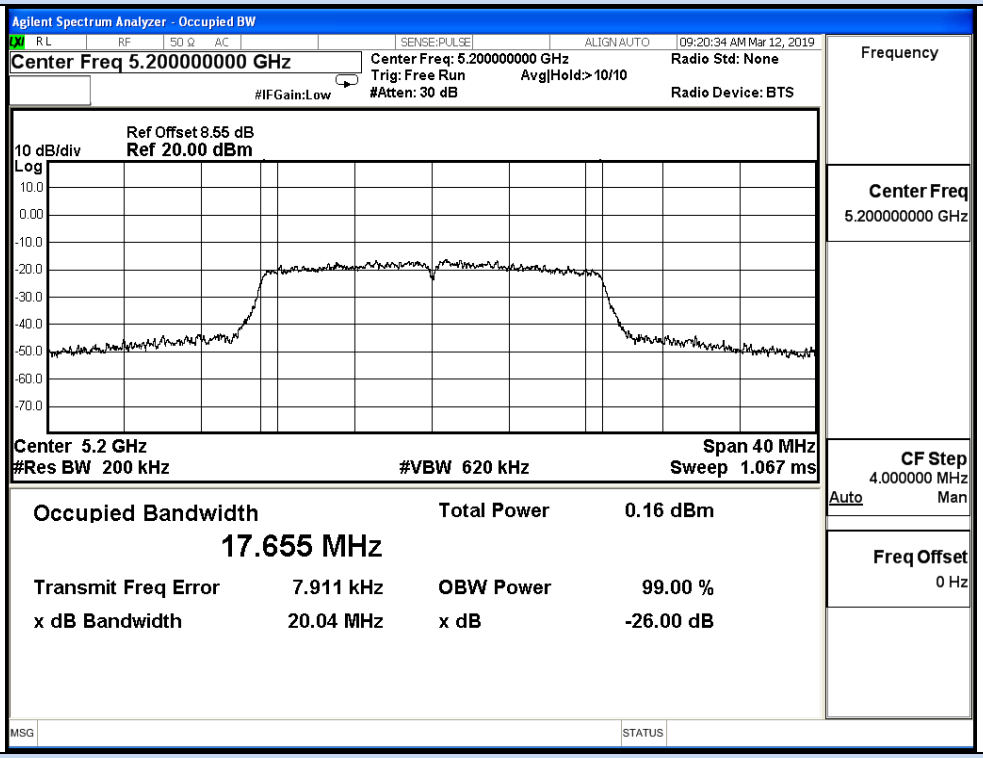


IEEE 802.11ac80 / Channel 42 / 5210MHz_Ant0

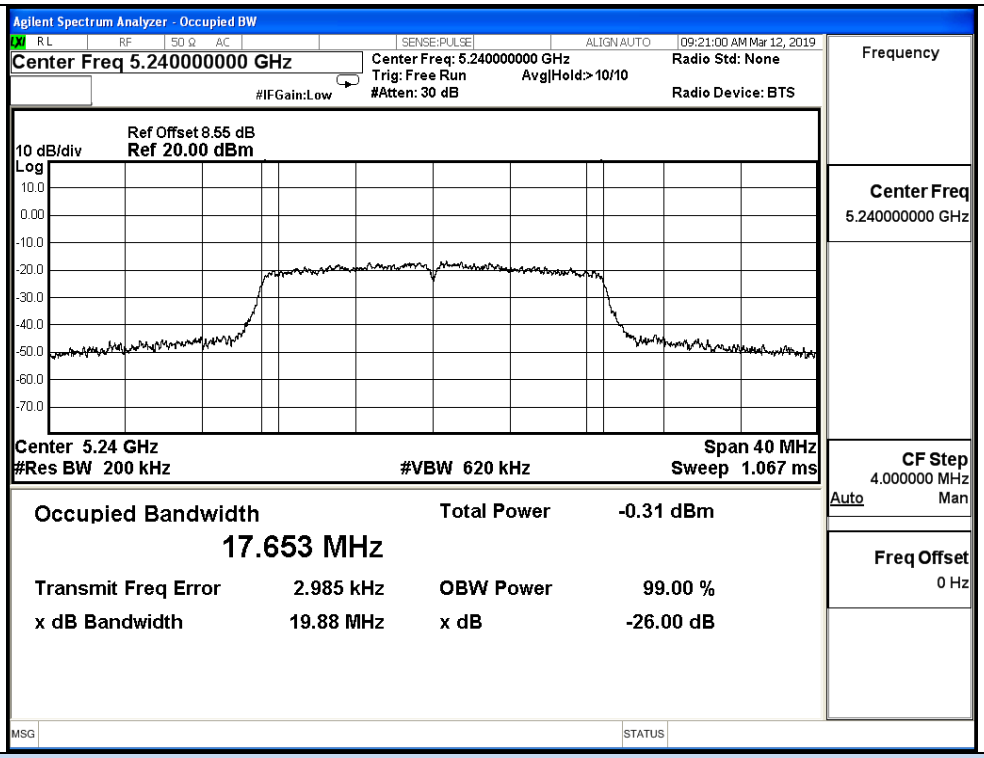
99% Occupied Bandwidth_Ant0



IEEE 802.11a / Channel 36 / 5180MHz_Ant0

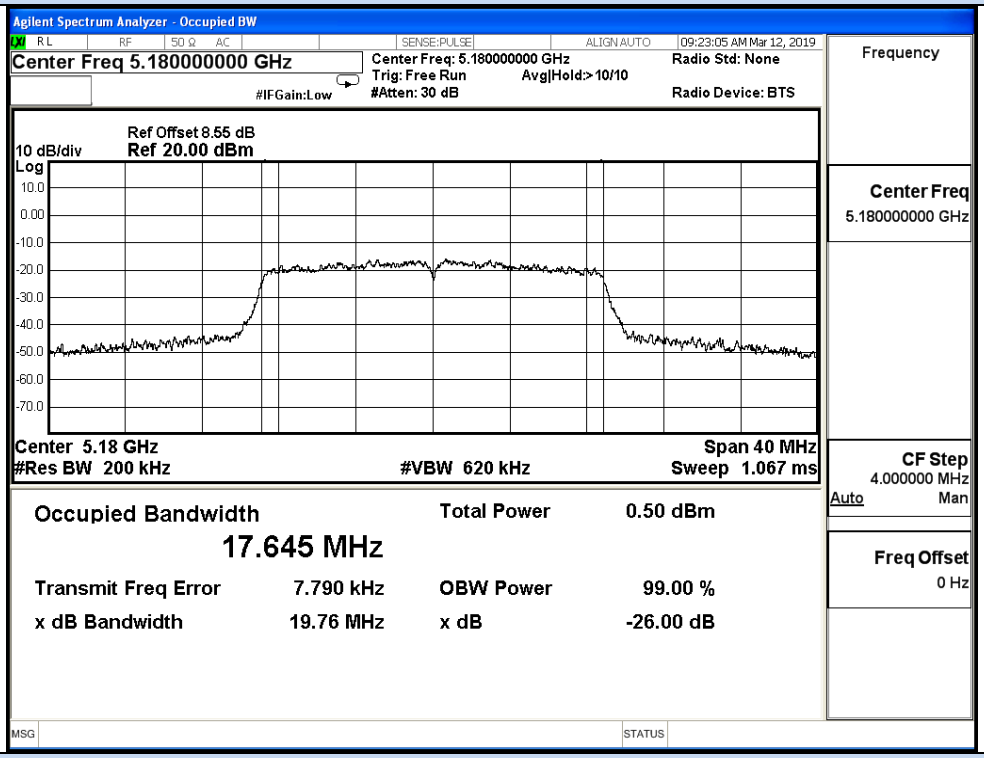


IEEE 802.11a / Channel 40 / 5200MHz_Ant0

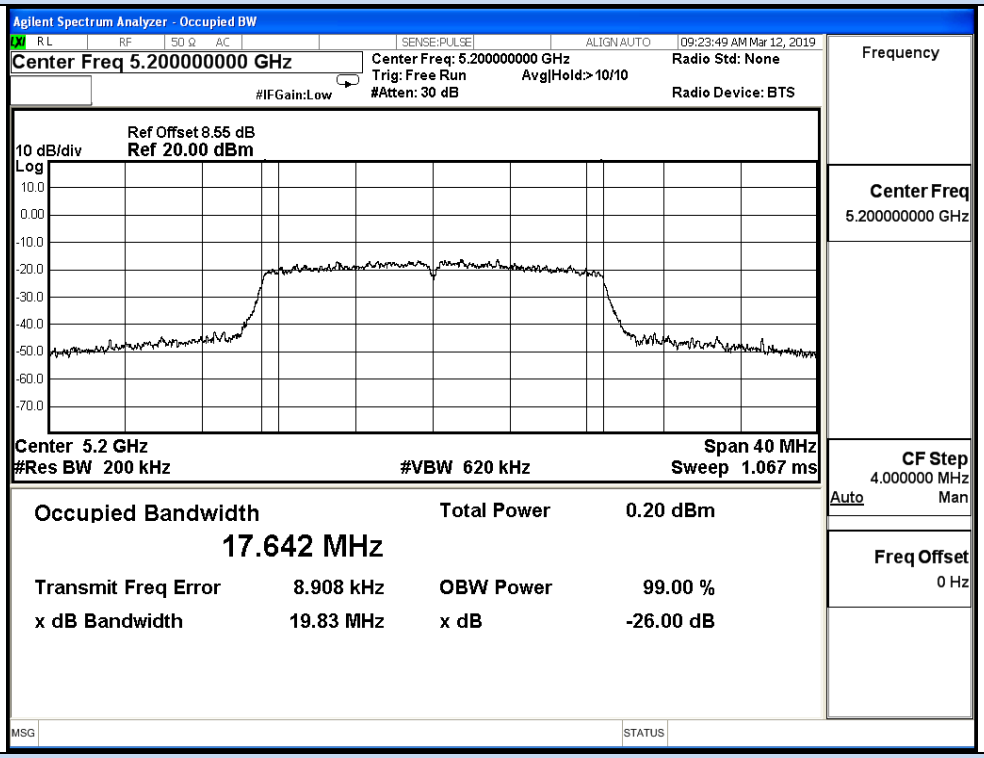


IEEE 802.11a / Channel 48 / 5240MHz_Ant0

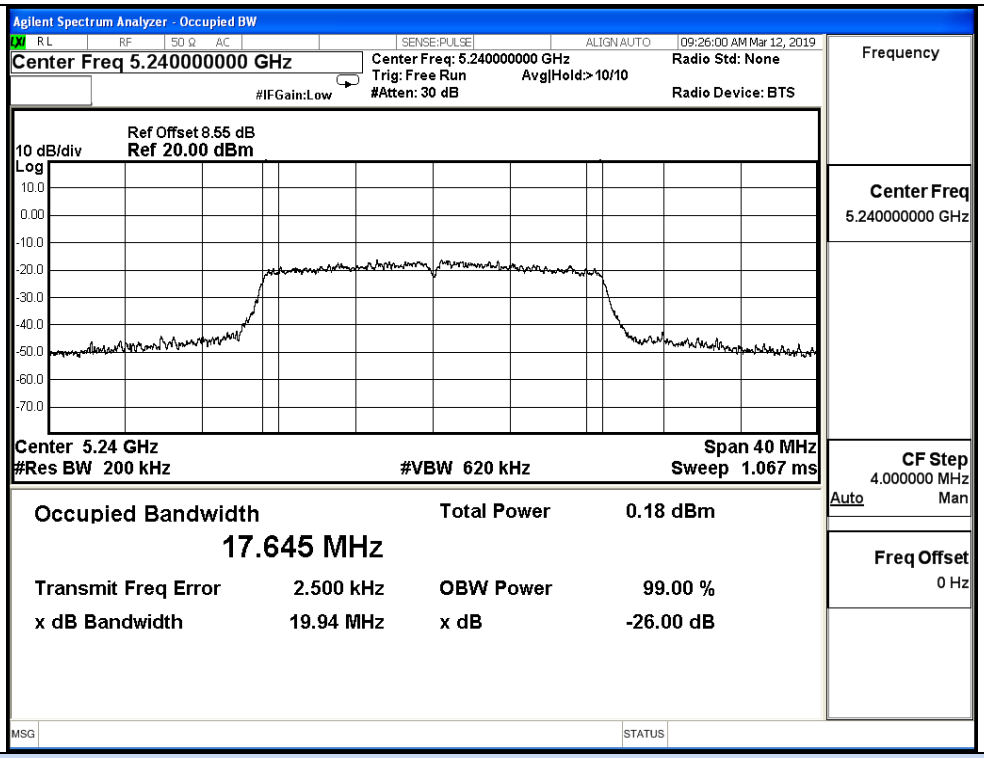
99% Occupied Bandwidth_Ant0



IEEE 802.11n20 / Channel 36 / 5180MHz_Ant0

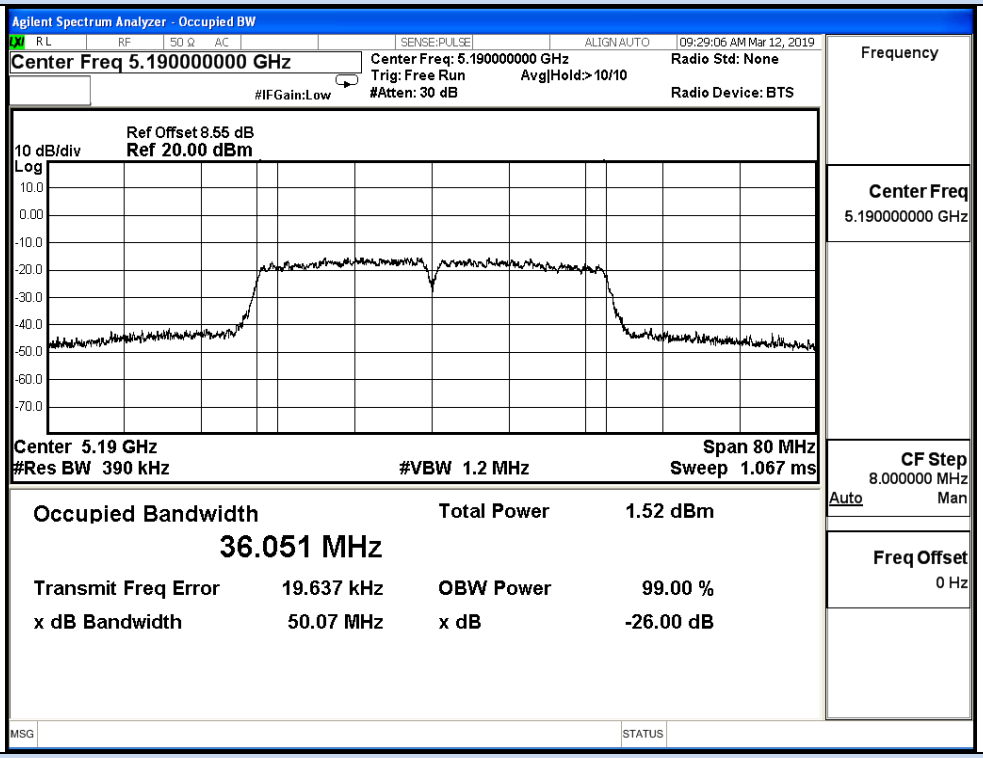


IEEE 802.11n20 / Channel 40 / 5200MHz_Ant0

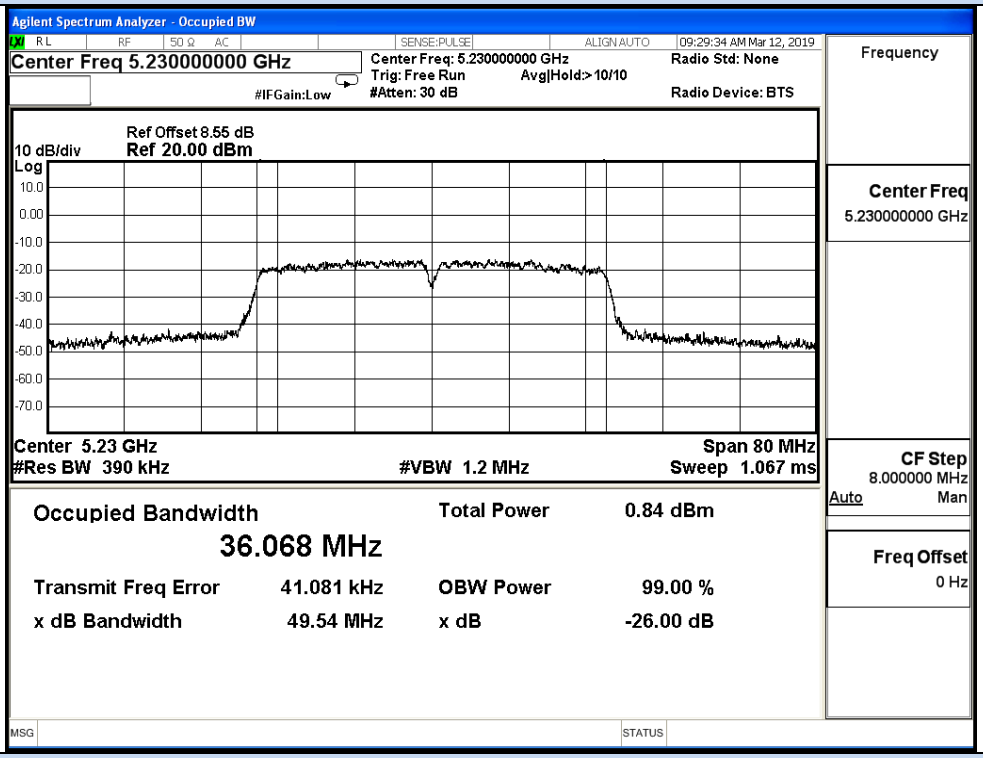


IEEE 802.11n20 / Channel 48 / 5240MHz_Ant0

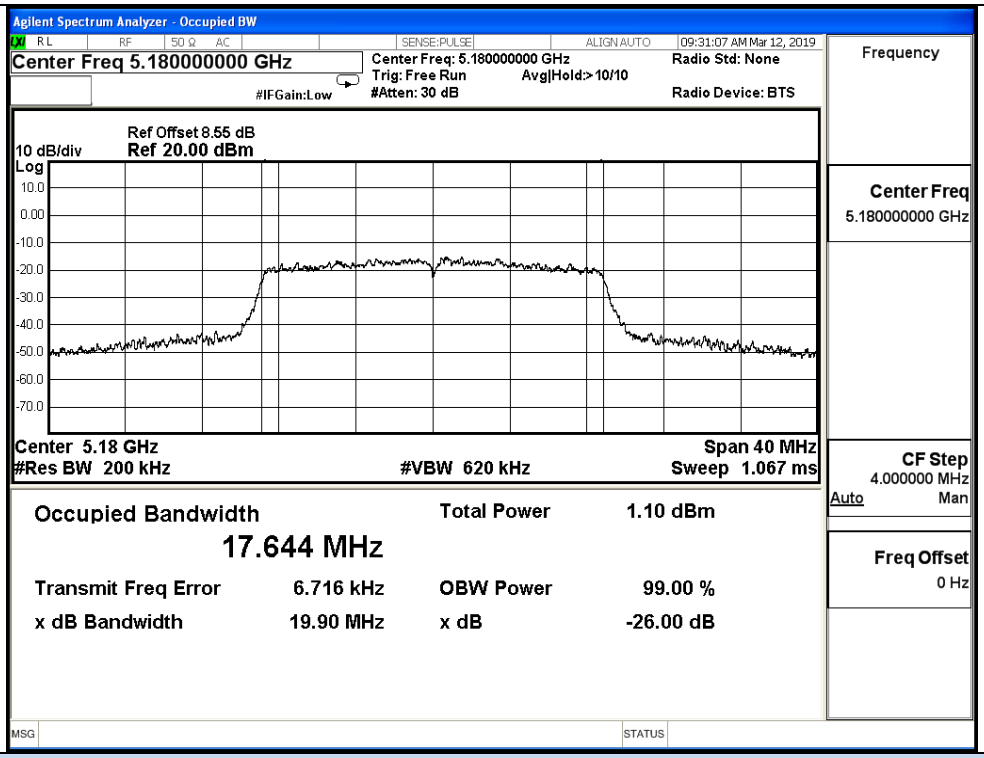
99% Occupied Bandwidth_Ant0



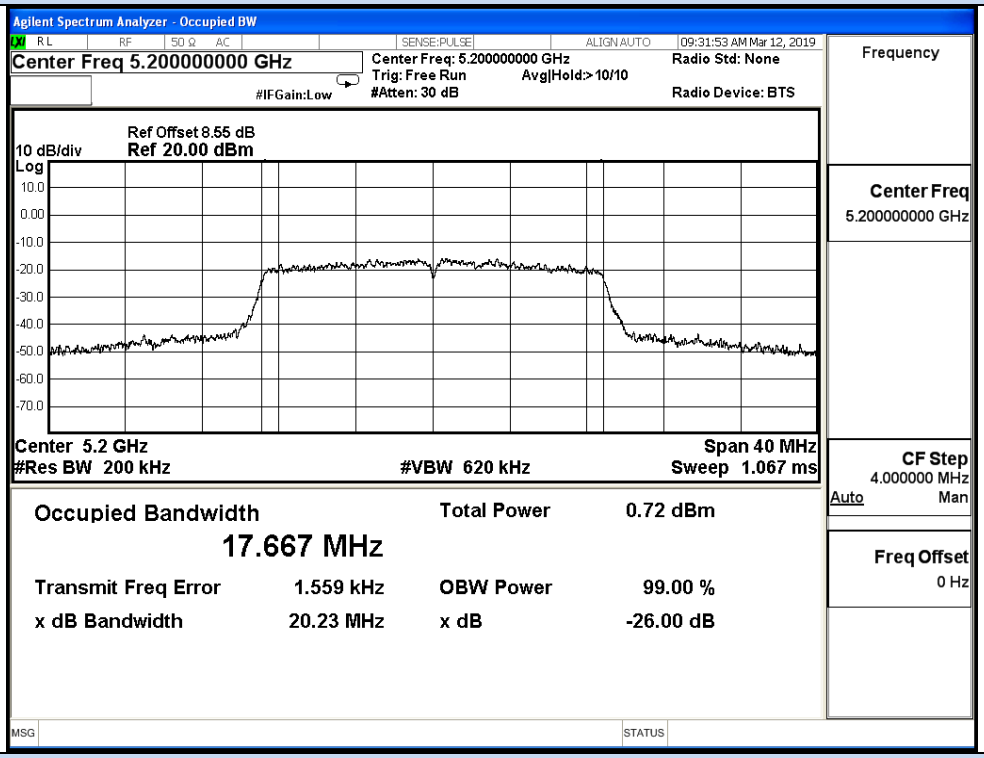
IEEE 802.11n40 / Channel 38 / 5190MHz_Ant0



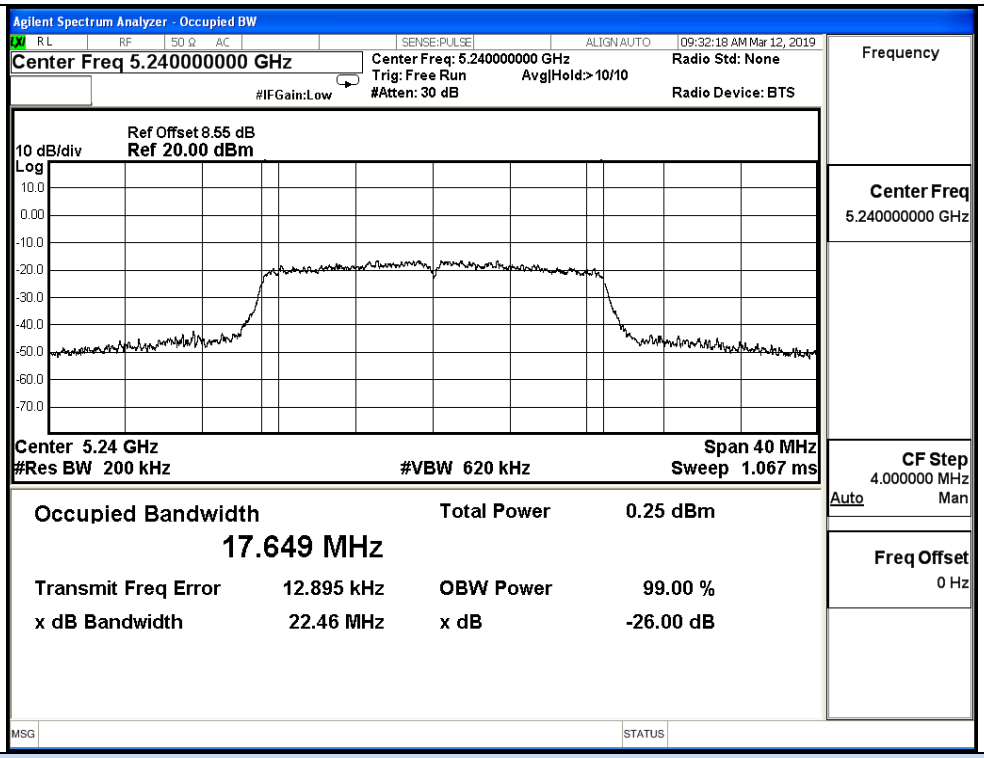
IEEE 802.11n40 / Channel 46 / 5230MHz_Ant0



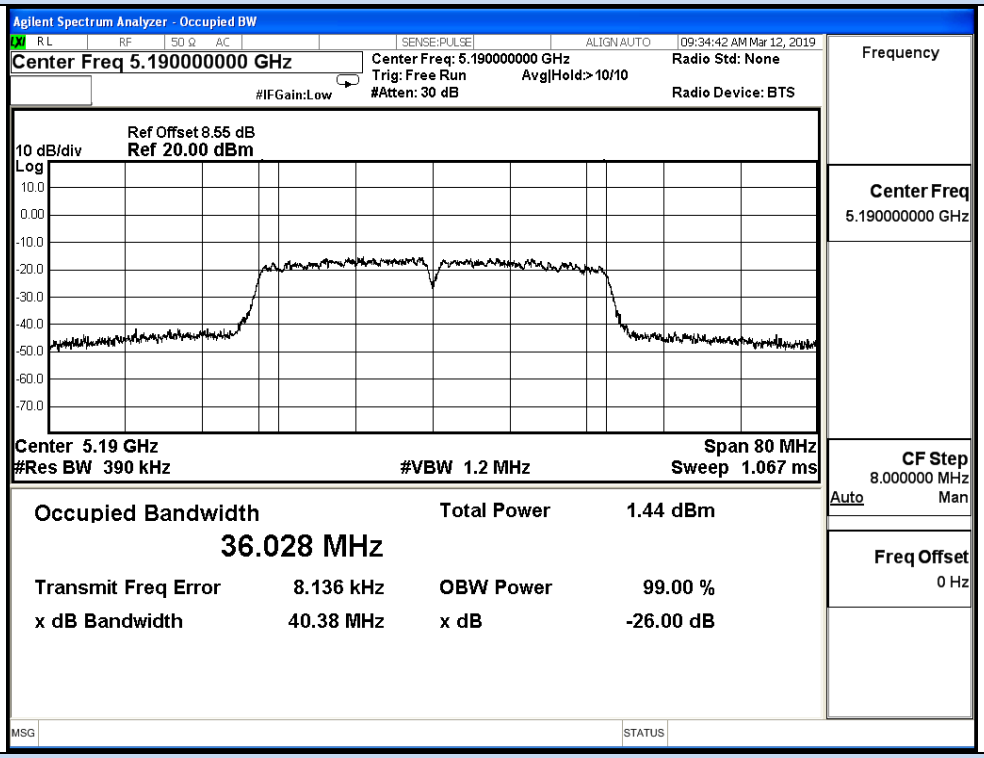
IEEE 802.11ac20 / Channel 36 / 5180MHz_Ant0



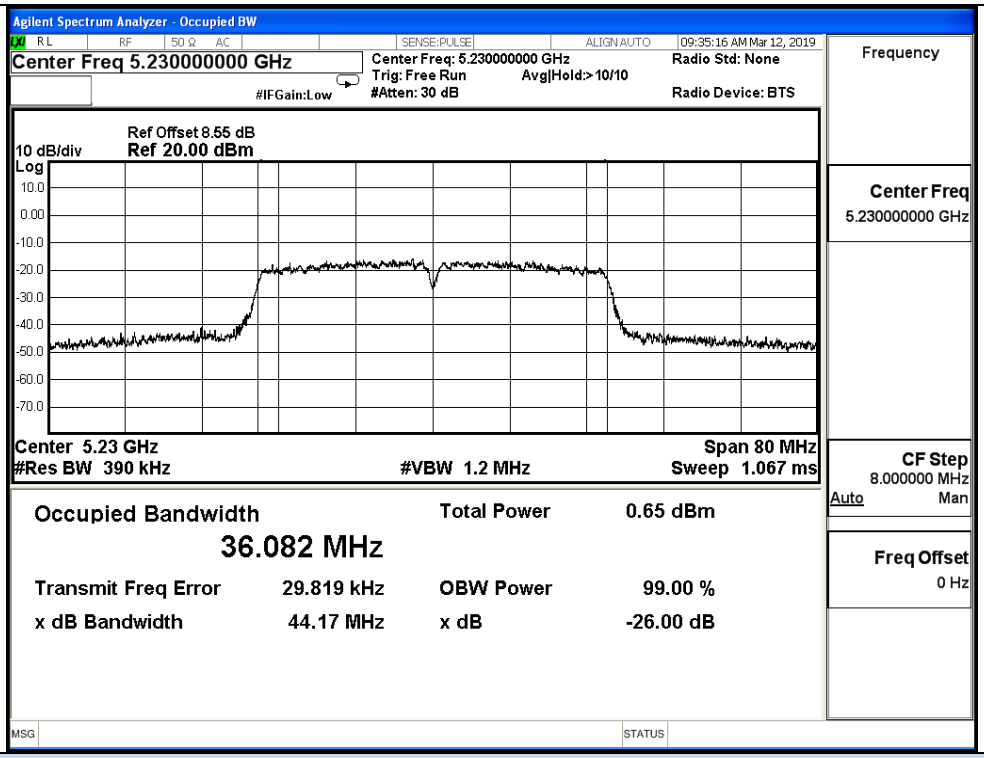
IEEE 802.11ac20 / Channel 40 / 5200MHz_Ant0



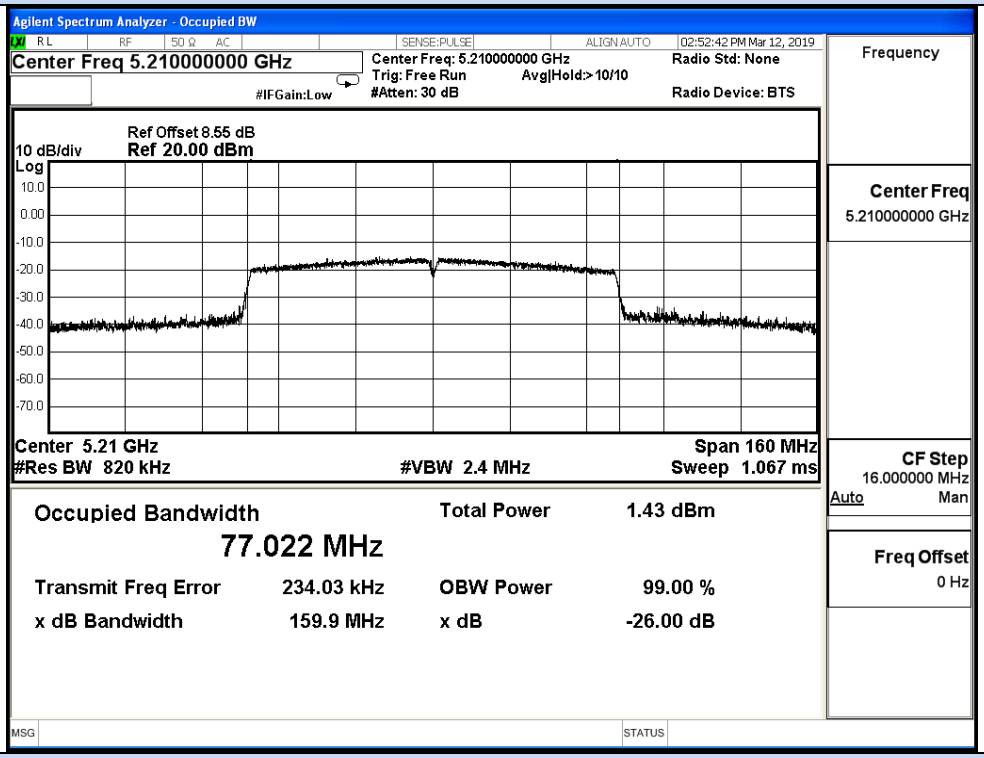
IEEE 802.11ac20 / Channel 48 / 5240MHz_Ant0



IEEE 802.11ac40 / Channel 38 / 5190MHz_Ant0

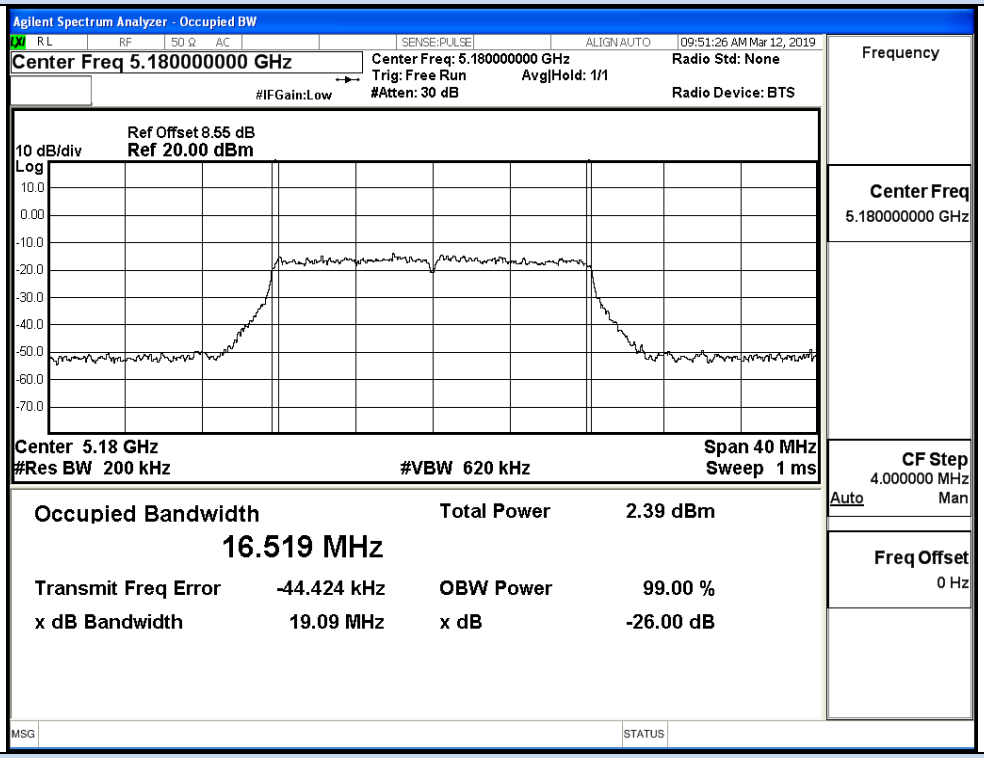


IEEE 802.11ac40 / Channel 46 / 5230MHz_Ant0

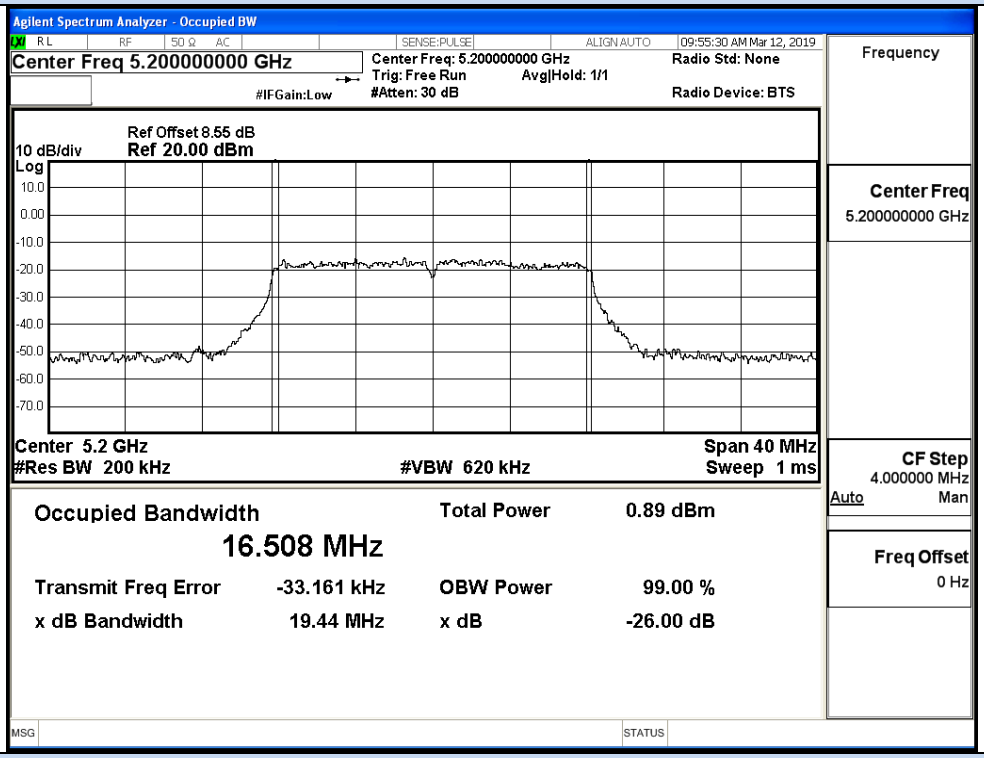


IEEE 802.11ac80 / Channel 42 / 5210MHz_Ant0

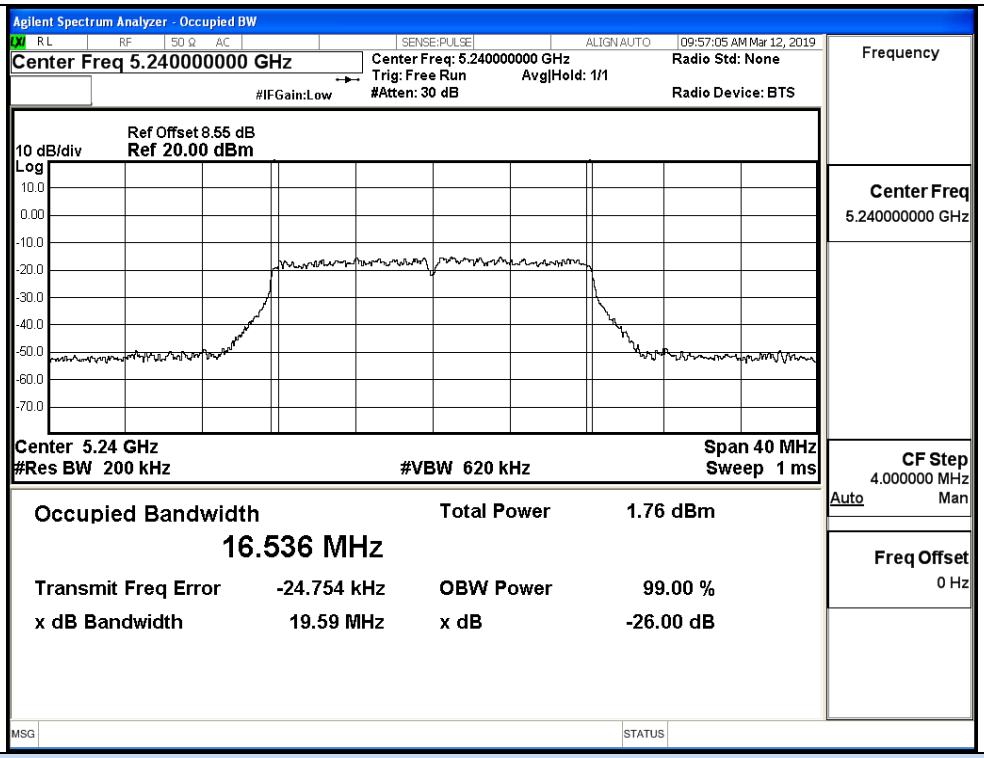
26dB Bandwidth_Ant1



IEEE 802.11a / Channel 36 / 5180MHz_Ant1



IEEE 802.11a / Channel 40 / 5200MHz_Ant1



IEEE 802.11a / Channel 48 / 5240MHz_Ant1