

Appendix D

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Wireless network card

Trade Mark: DIEWU TXIC

Test Model: TXA083

Additional Model No.: TXA076

Environmental Conditions

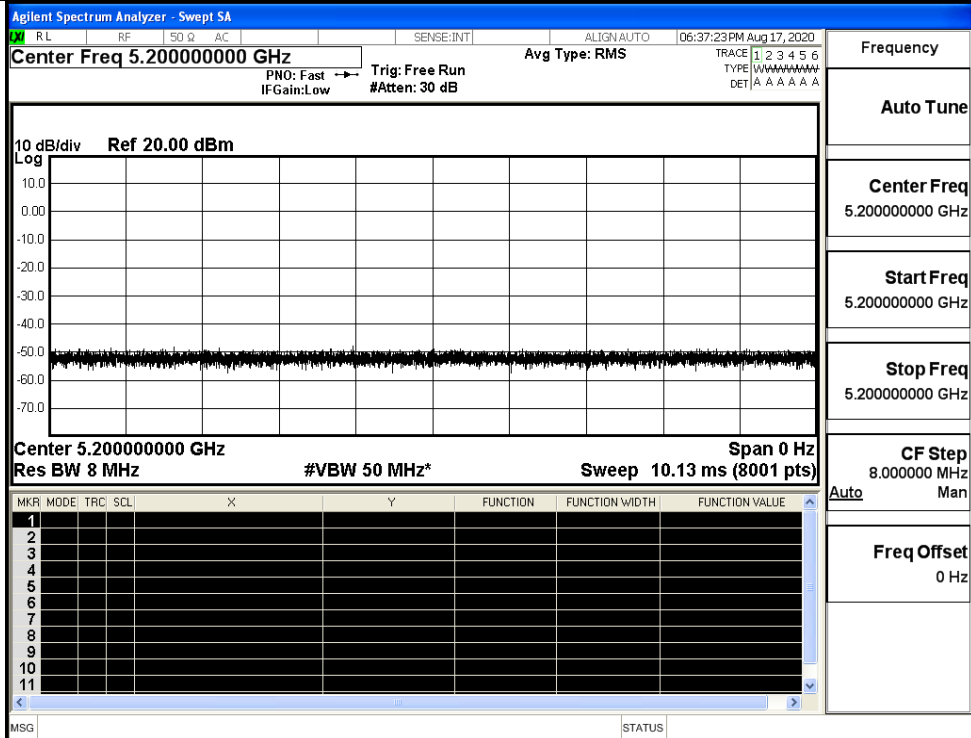
Temperature:	23.1 ° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

D.1 Duty Cycle

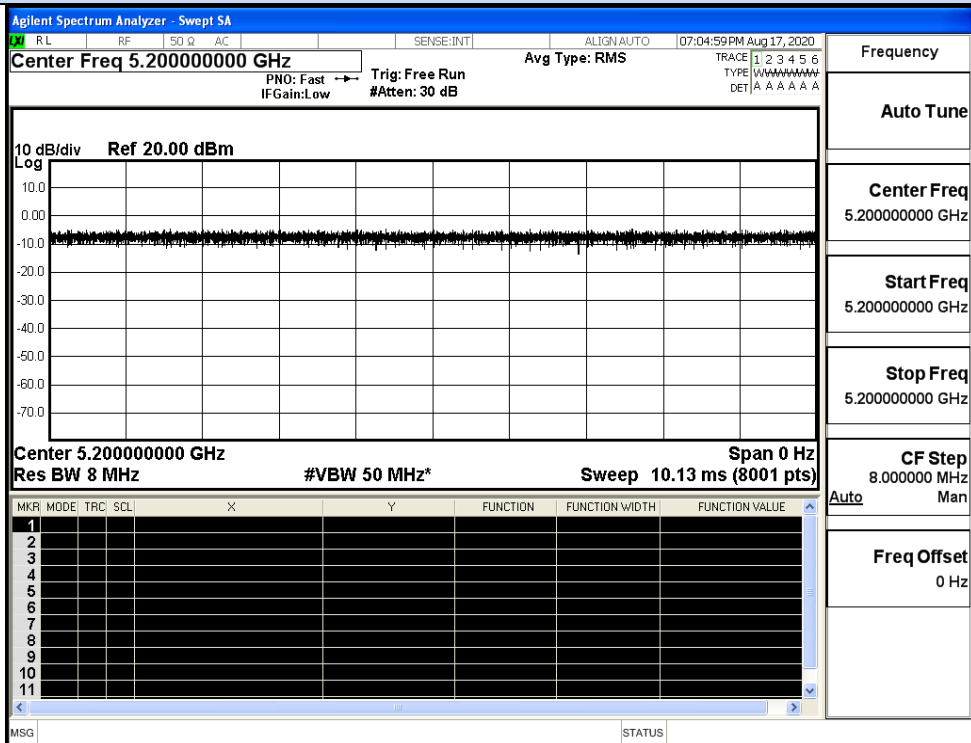
Ant0

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 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
11AX20 SISO	5200	98.77	0.05	0.01
11AX40 SISO	5190	98.8	0.05	0.01
11AX80 SISO	5210	98.8	0.05	0.01

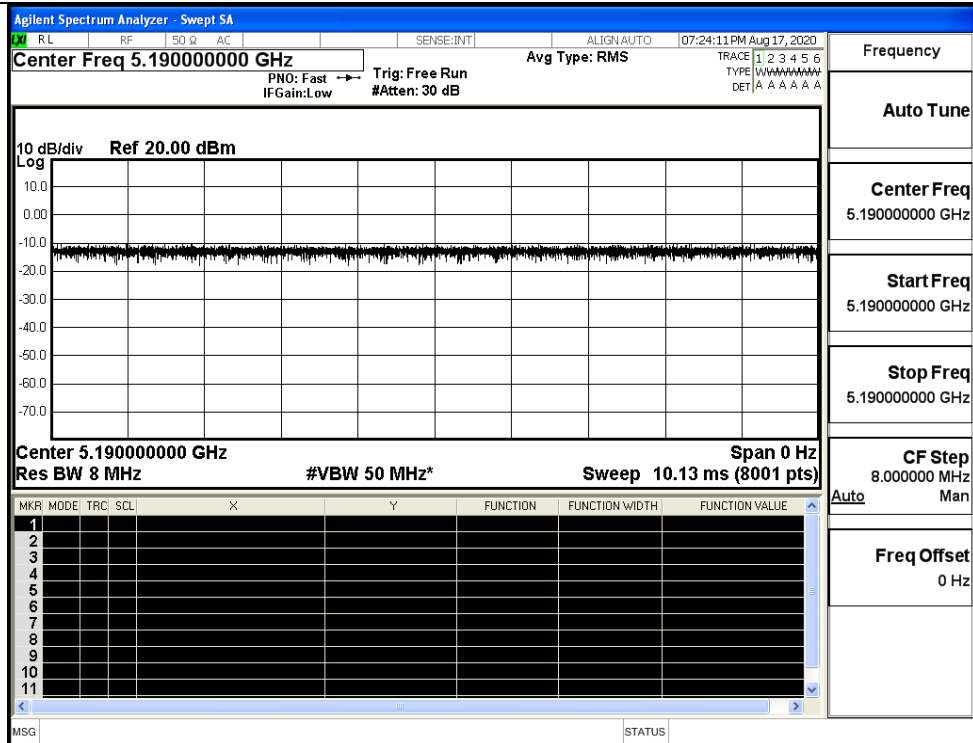
On Time and Duty Cycle



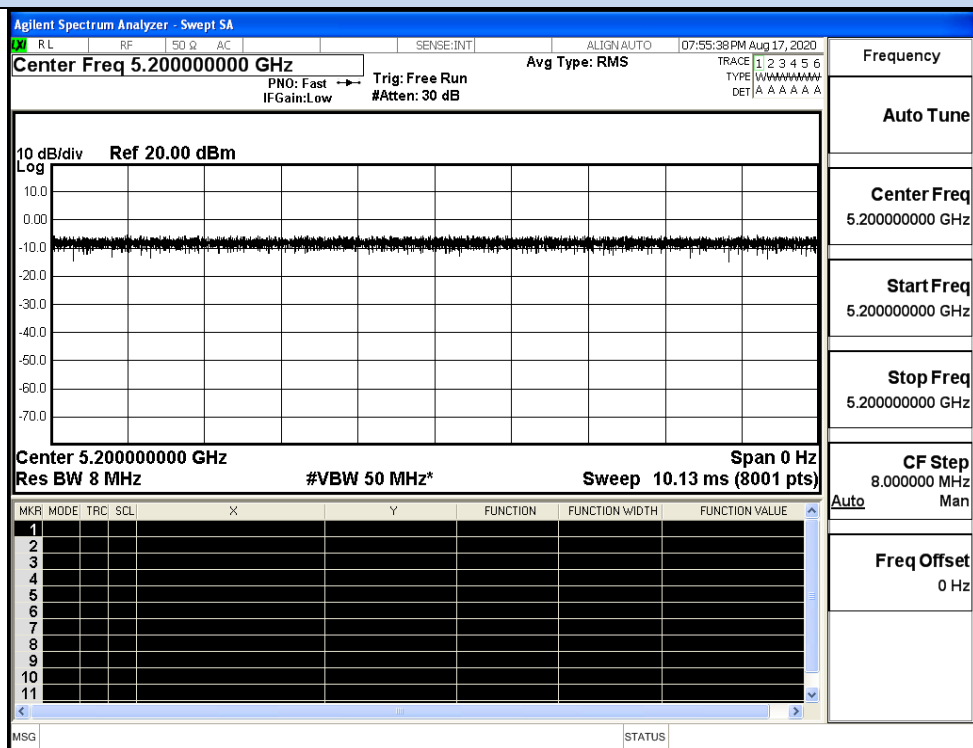
IEEE 802.11a



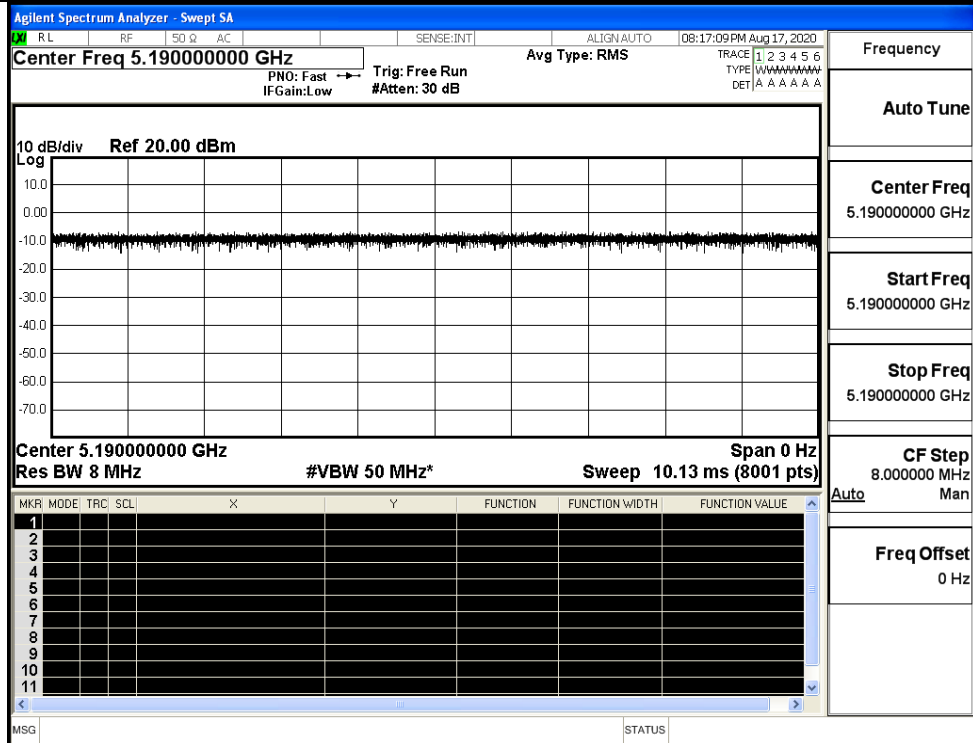
IEEE 802.11n HT20



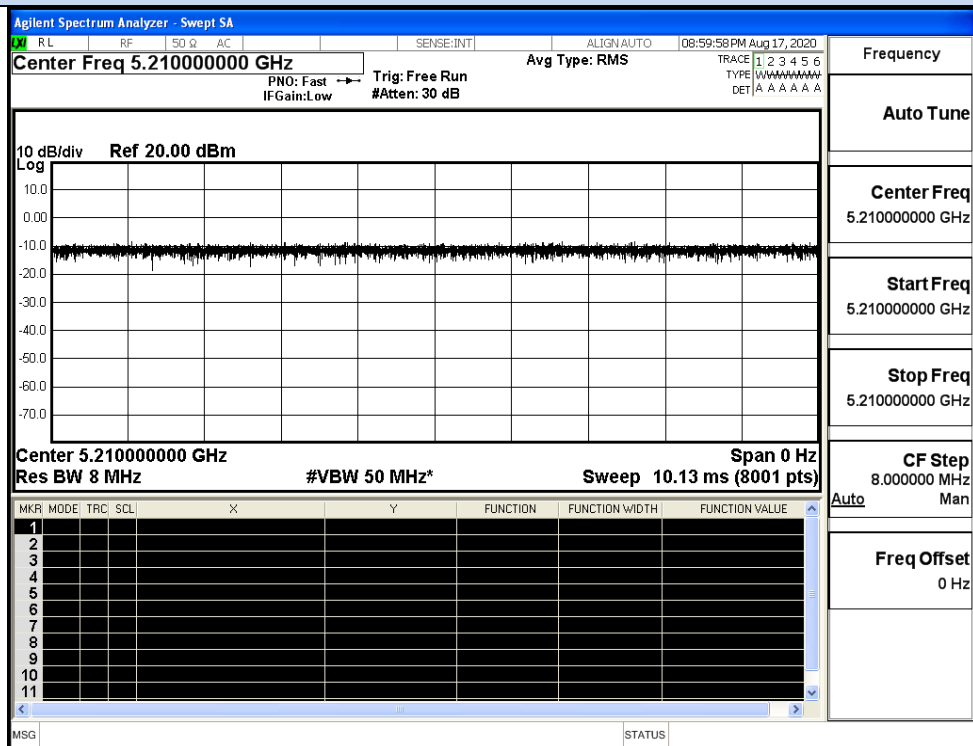
IEEE 802.11n HT40



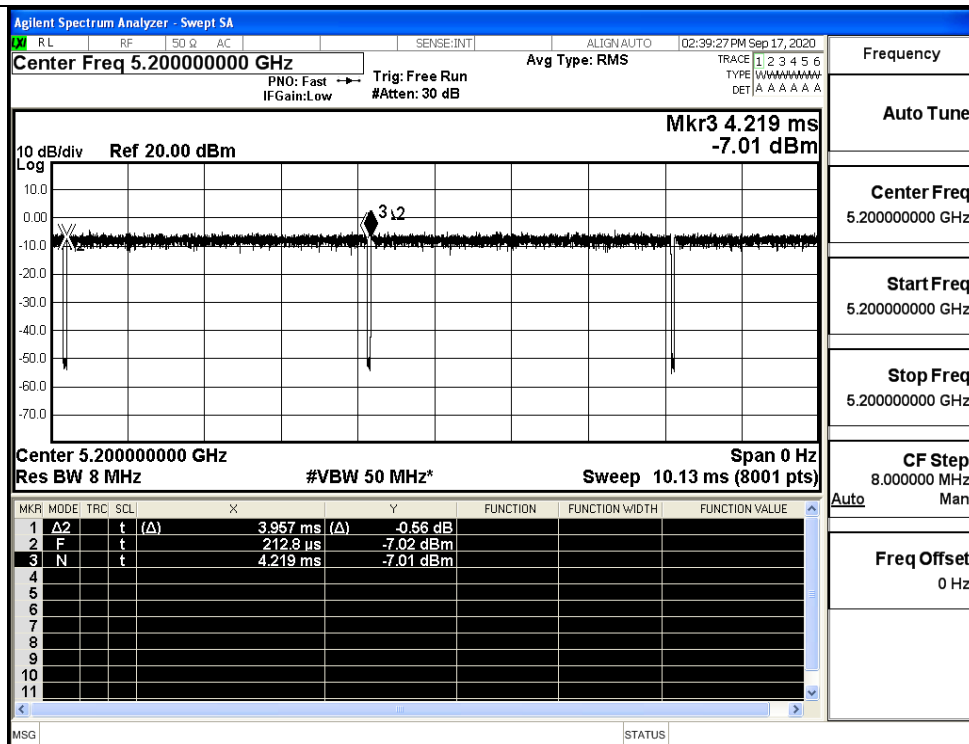
IEEE 802.11AC20



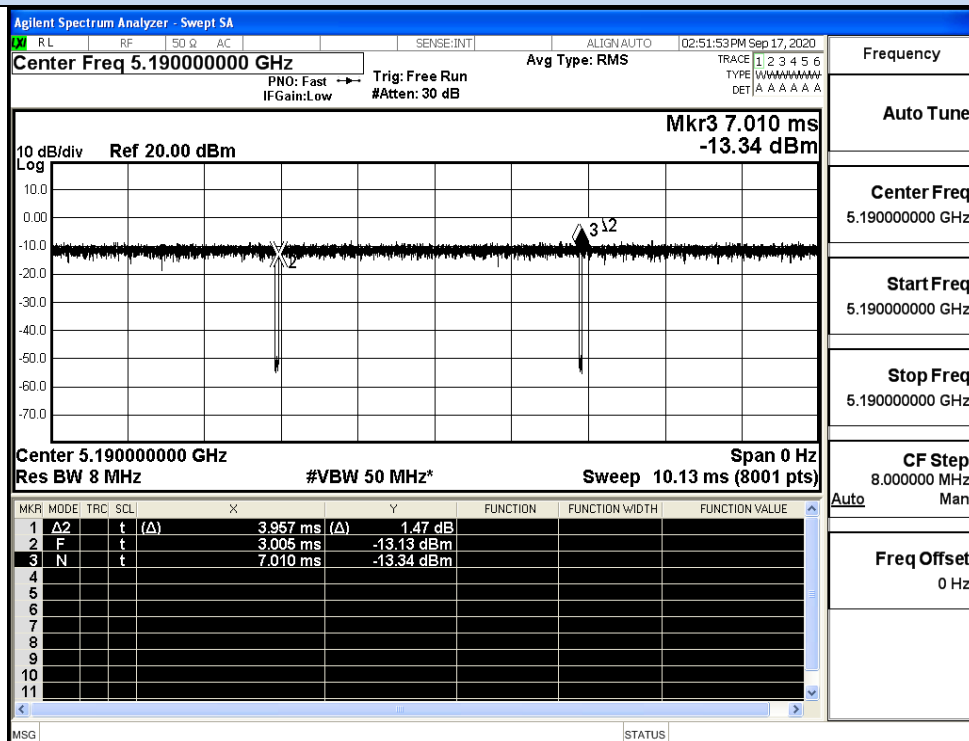
IEEE 802.11 AC40



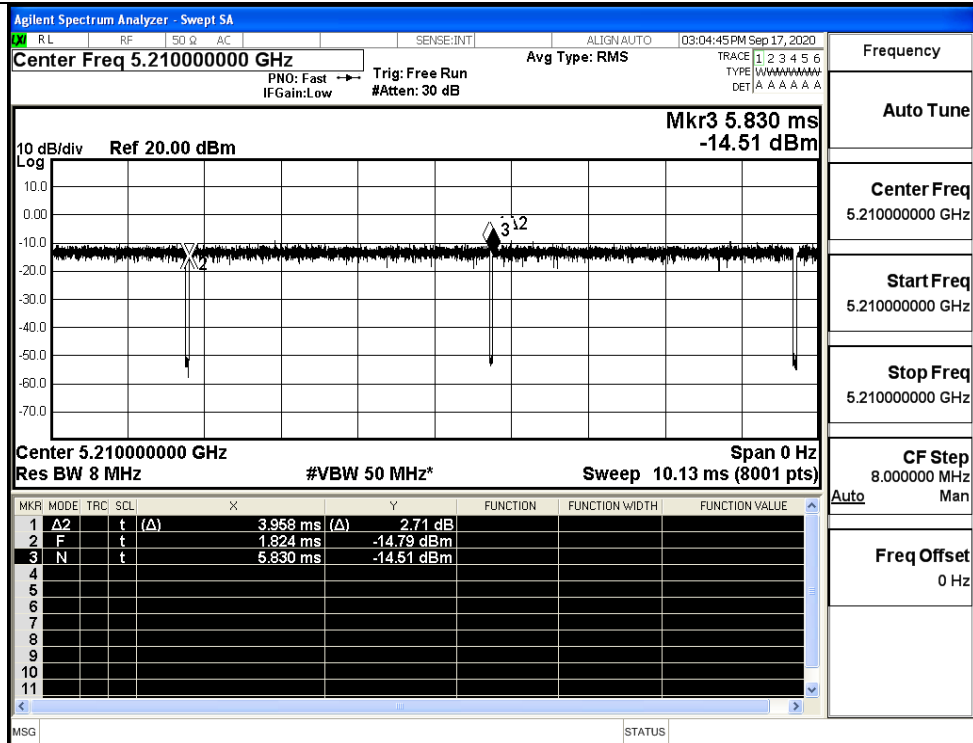
IEEE 802.11AC80



IEEE 802.11AX20



IEEE 802.11 AX40

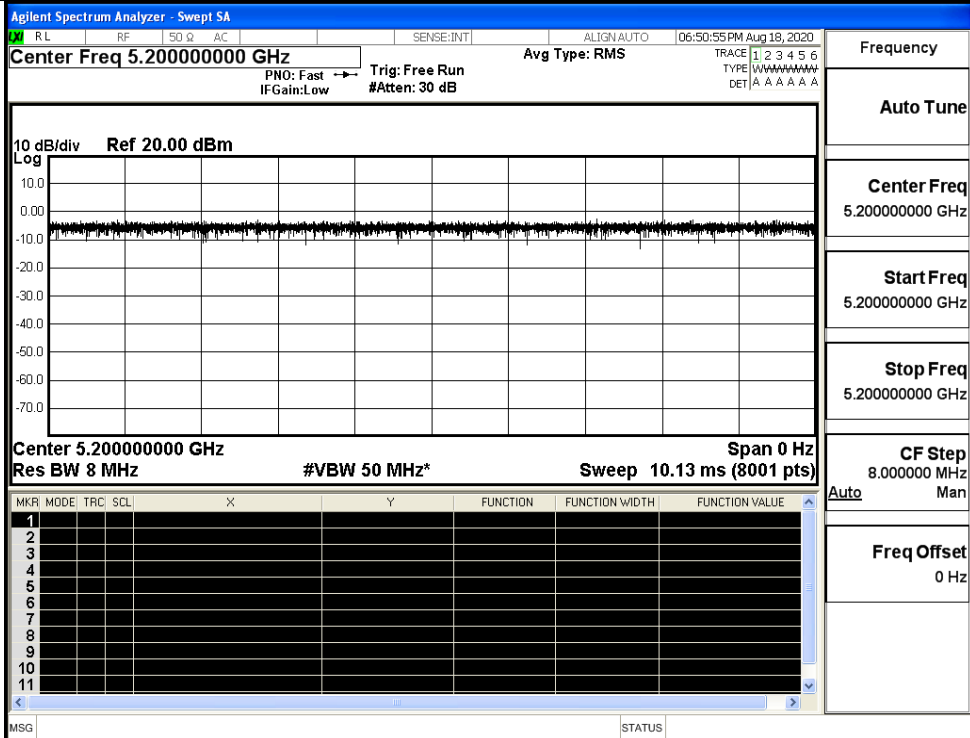


IEEE 802.11AX80

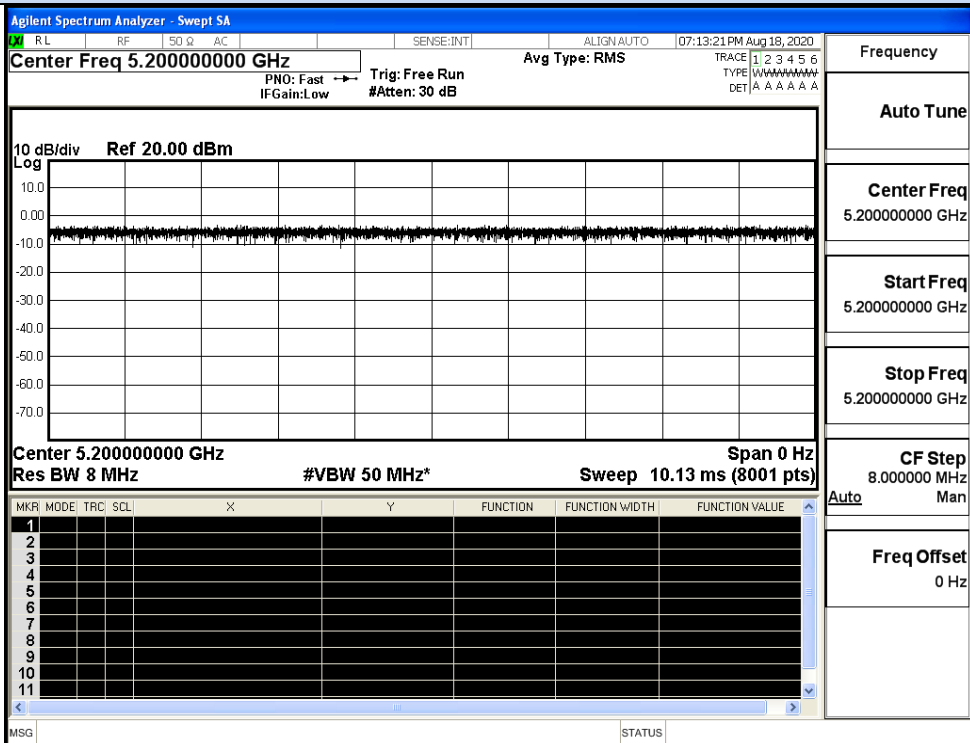
Ant1

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 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
11AX20 SISO	5200	98.8	0.05	0.01
11AX40 SISO	5190	98.8	0.05	0.01
11AX80 SISO	5210	98.8	0.05	0.01

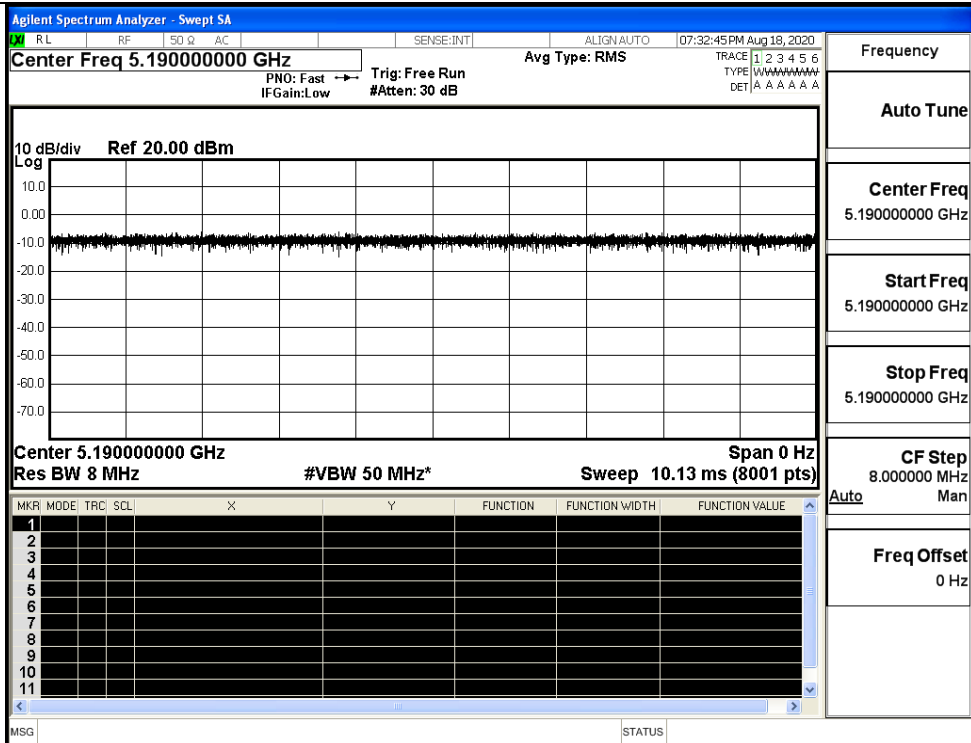
On Time and Duty Cycle



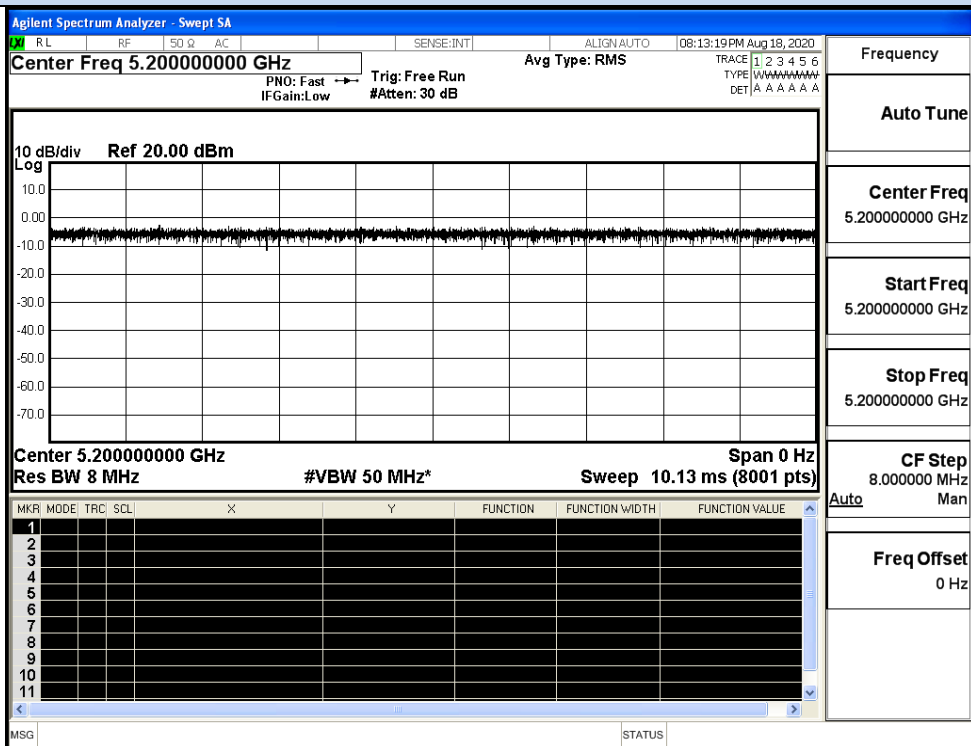
IEEE 802.11a



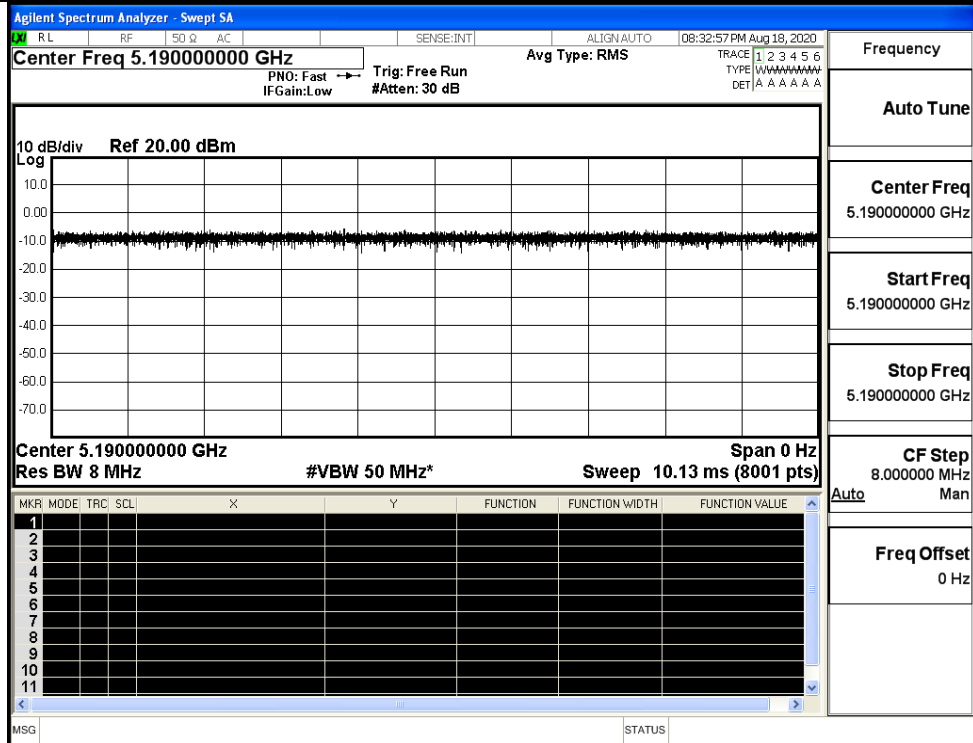
IEEE 802.11n HT20



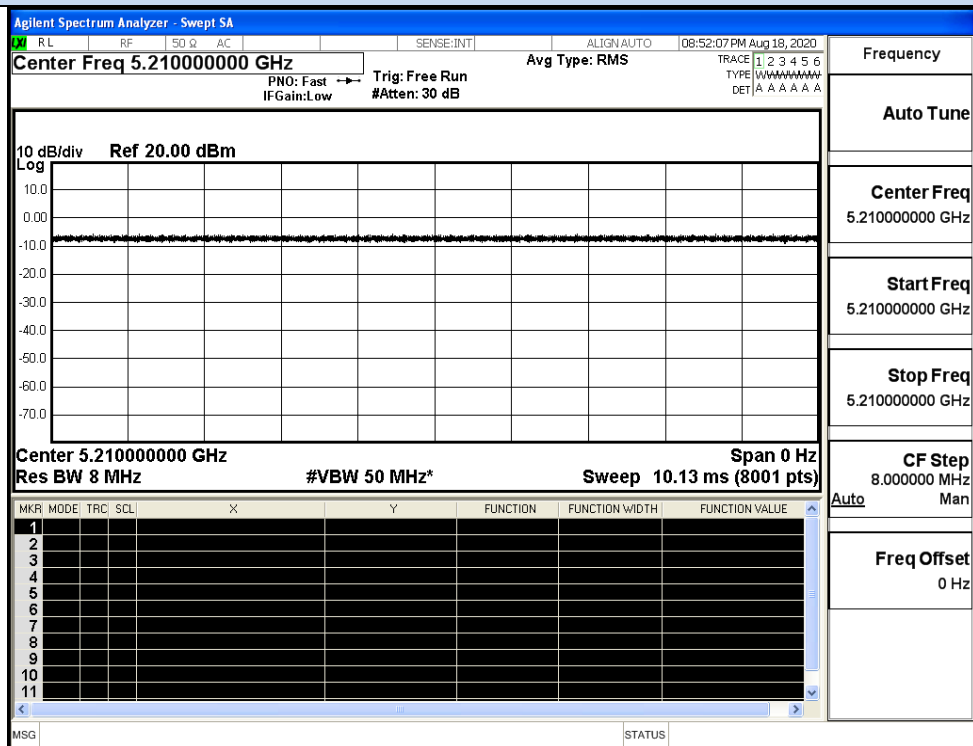
IEEE 802.11n HT40



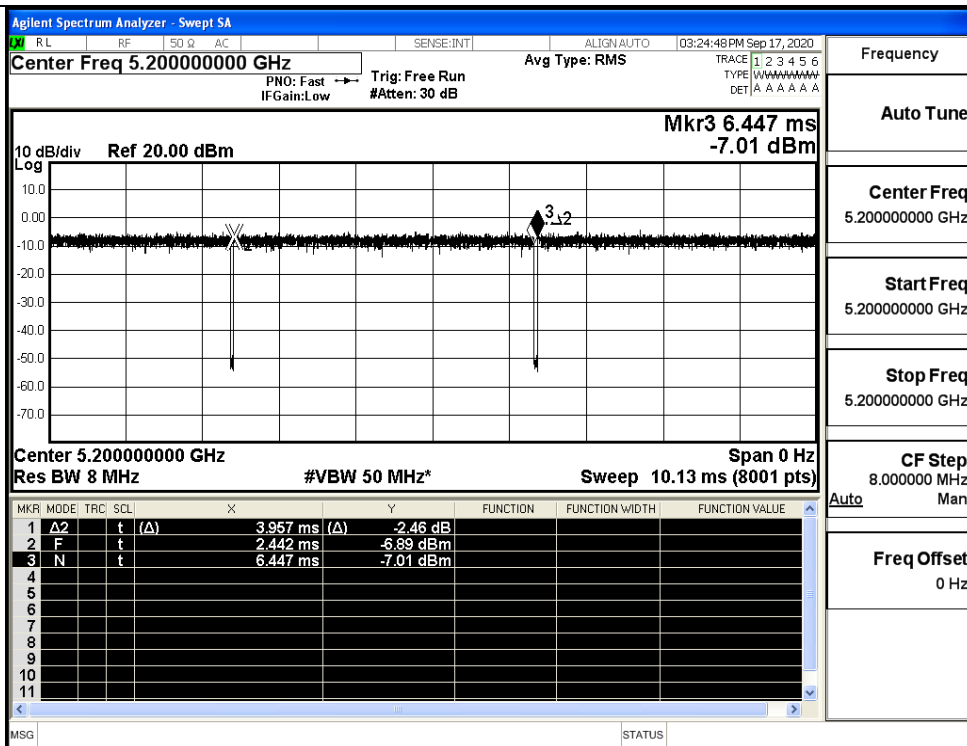
IEEE 802.11AC20



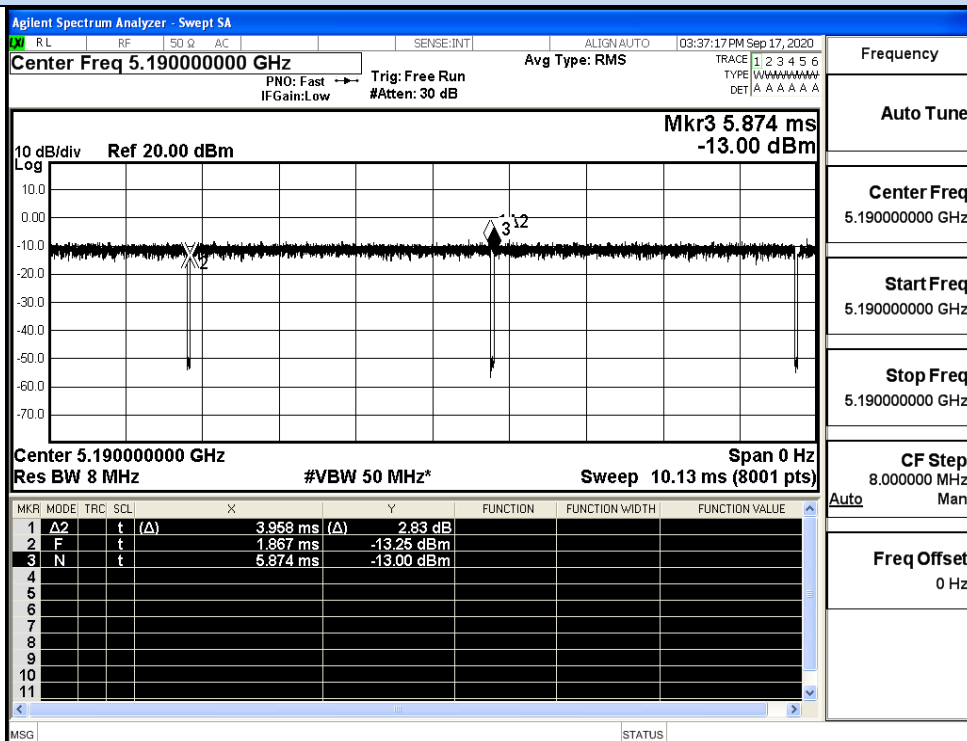
IEEE 802.11 AC40



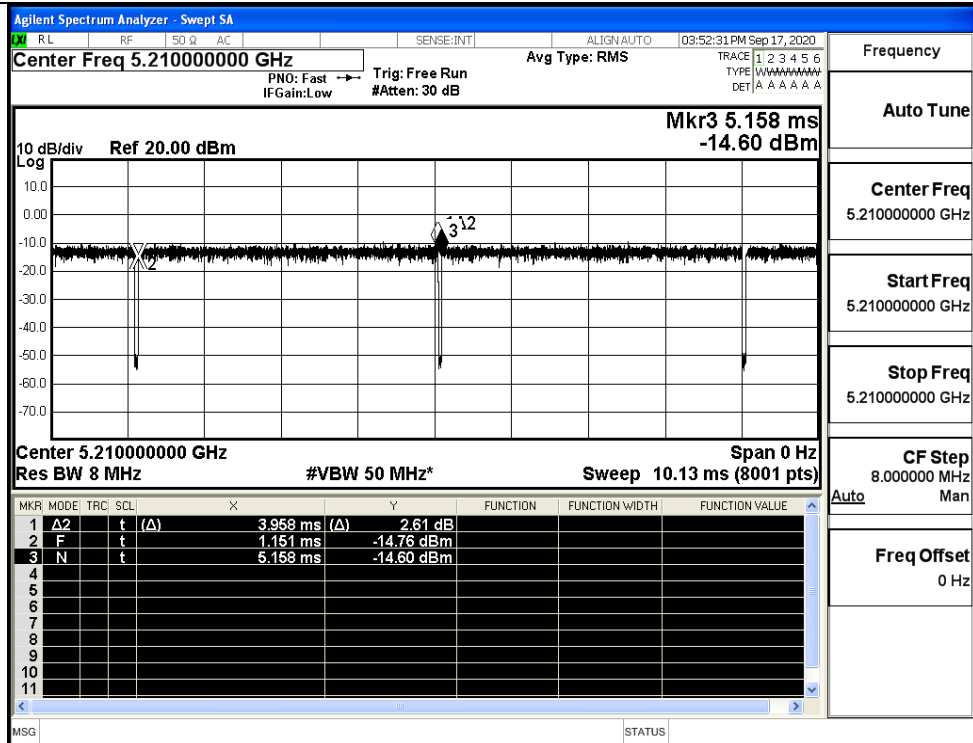
IEEE 802.11AC80



IEEE 802.11AX20



IEEE 802.11 AX40



IEEE 802.11AX80

D.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	12.21	0	12.21	24	Pass
	40	5200	12.06	0	12.06		Pass
	48	5240	11.67	0	11.67		Pass
11N20 SISO	36	5180	11.66	0	11.66	24	Pass
	40	5200	11.78	0	11.78		Pass
	48	5240	11.88	0	11.88		Pass
11N40 SISO	38	5190	10.97	0	10.97	24	Pass
	46	5230	11.19	0	11.19		Pass
11AC20 SISO	36	5180	10.05	0	10.05	24	Pass
	40	5200	10.21	0	10.21		Pass
	48	5240	10.64	0	10.64		Pass
11AC40 SISO	38	5190	10.8	0	10.80	24	Pass
	46	5230	10.97	0	10.97		Pass
11AC80 SISO	42	5210	10.84	0	10.84	24	Pass
11AX20 SISO	36	5180	10.41	0.05	10.46	24	Pass
	40	5200	10.74	0.05	10.79		Pass
	48	5240	10.64	0.05	10.69		Pass
11AX40 SISO	38	5190	10.23	0.05	10.28	24	Pass
	46	5230	10.38	0.05	10.43		Pass
11AX80 SISO	42	5210	10.64	0.05	10.69	24	Pass

Ant1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	10.74	0	10.74	24	Pass
	40	5200	11.22	0	11.22		Pass
	48	5240	10.85	0	10.85		Pass
11N20 SISO	36	5180	11.19	0	11.19	24	Pass
	40	5200	11.15	0	11.15		Pass
	48	5240	11.15	0	11.15		Pass
11N40 SISO	38	5190	10.83	0	10.83	24	Pass
	46	5230	11.04	0	11.04		Pass
11AC20 SISO	36	5180	10.37	0	10.37	24	Pass
	40	5200	10.81	0	10.81		Pass
	48	5240	11.11	0	11.11		Pass
11AC40 SISO	38	5190	11.04	0	11.04	24	Pass
	46	5230	11.7	0	11.70		Pass
11AC80 SISO	42	5210	11.90	0	11.90	24	Pass
11AX20 SISO	36	5180	10.30	0.05	10.35	24	Pass
	40	5200	10.44	0.05	10.49		Pass
	48	5240	10.64	0.05	10.69		Pass
11AX40 SISO	38	5190	10.69	0.05	10.74	24	Pass
	46	5230	11.11	0.05	11.16		Pass
11AX80 SISO	42	5210	10.66	0.05	10.71	24	Pass

Combined Ant0 and Ant1

Test Mode	Channel	Frequency (MHz)	Report Conducted Power (dBm)			Limit (dBm)
			Ant_0	Ant_1	Sum	
11N20	36	5180	11.66	11.19	14.44	24
	40	5200	11.78	11.15	14.49	
	48	5240	11.88	11.15	14.54	
11N40	38	5190	10.97	10.83	13.91	24
	46	5230	11.19	11.04	14.13	
11AC20	36	5180	10.05	10.37	13.22	24
	40	5200	10.21	10.81	13.53	
	48	5240	10.64	11.11	13.89	
11AC40	38	5190	10.8	11.04	13.93	24
	46	5230	10.97	11.7	14.36	
11AC80	42	5210	10.84	11.9	14.41	24
11AX20	36	5180	10.46	10.35	13.42	24
	40	5200	10.79	10.49	13.65	
	48	5240	10.69	10.69	13.70	
11AX40	38	5190	10.28	10.74	13.53	24
	46	5230	10.43	11.16	13.82	
11AX80	42	5210	10.69	10.71	13.71	24

D.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	1.57	0	1.57	11	Pass
	40	5200	1.56	0	1.56		Pass
	48	5240	1.74	0	1.74		Pass
11N20 SISO	36	5180	2.00	0	2.00	11	Pass
	40	5200	1.65	0	1.65		Pass
	48	5240	2.75	0	2.75		Pass
11N40 SISO	38	5190	-1.59	0	-1.59	11	Pass
	46	5230	-1.60	0	-1.60		Pass
11AC20 SISO	36	5180	-0.48	0	-0.48	11	Pass
	40	5200	-0.54	0	-0.54		Pass
	48	5240	-0.04	0	-0.04		Pass
11AC40 SISO	38	5190	-2.78	0	-2.78	11	Pass
	46	5230	-2.77	0	-2.77		Pass
11AC80 SISO	42	5210	-5.32	0	-5.32	11	Pass
11AX20 SISO	36	5180	1.39	0.05	1.44	11	Pass
	40	5200	0.13	0.05	0.18		Pass
	48	5240	0.63	0.05	0.68		Pass
11AX40 SISO	38	5190	-2.12	0.05	-2.07	11	Pass
	46	5230	-2.53	0.05	-2.48		Pass
11AX80 SISO	42	5210	-4.56	0.05	-4.51	11	Pass

Ant1

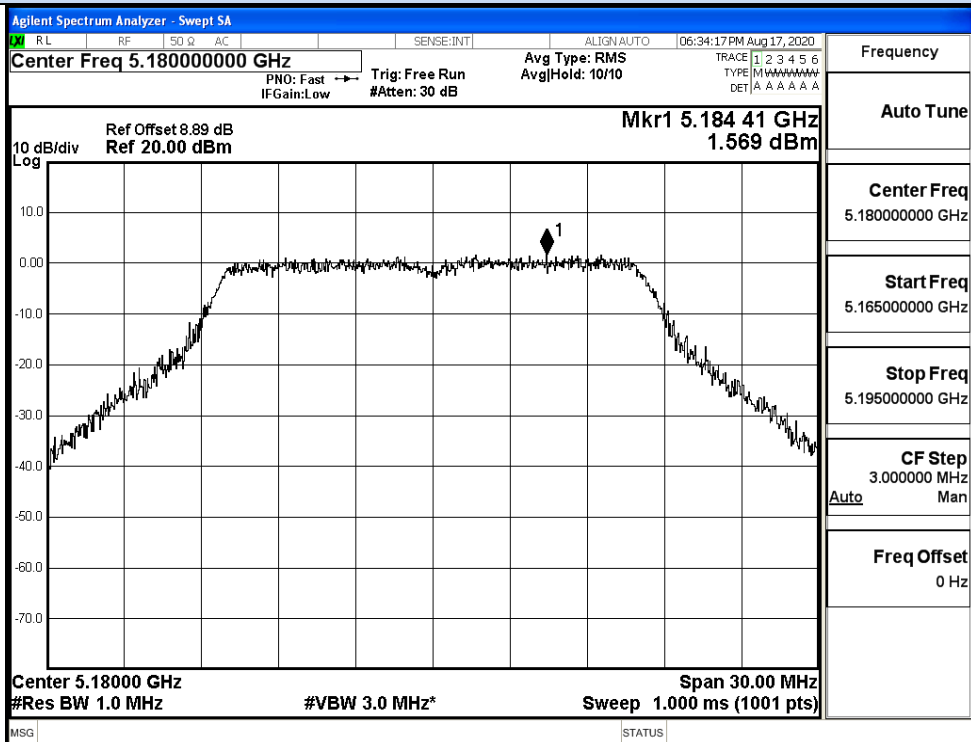
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	0.75	0	0.75	11	Pass
	40	5200	1.12	0	1.12		Pass
	48	5240	0.72	0	0.72		Pass
11N20 SISO	36	5180	1.34	0	1.34	11	Pass
	40	5200	1.00	0	1.00		Pass
	48	5240	1.60	0	1.60		Pass
11N40 SISO	38	5190	-2.13	0	-2.13	11	Pass
	46	5230	-2.56	0	-2.56		Pass
11AC20 SISO	36	5180	-0.35	0	-0.35	11	Pass
	40	5200	0.19	0	0.19		Pass
	48	5240	0.84	0	0.84		Pass
11AC40 SISO	38	5190	-2.93	0	-2.93	11	Pass
	46	5230	-2.05	0	-2.05		Pass
11AC80 SISO	42	5210	-4.10	0	-4.10	11	Pass
11AX20 SISO	36	5180	1.72	0.05	1.77	11	Pass
	40	5200	0.37	0.05	0.42		Pass
	48	5240	0.88	0.05	0.93		Pass
11AX40 SISO	38	5190	-0.70	0.05	-0.65	11	Pass
	46	5230	-1.92	0.05	-1.87		Pass
11AX80 SISO	42	5210	-5.02	0.05	-4.97	11	Pass

Combined Ant0 and Ant1

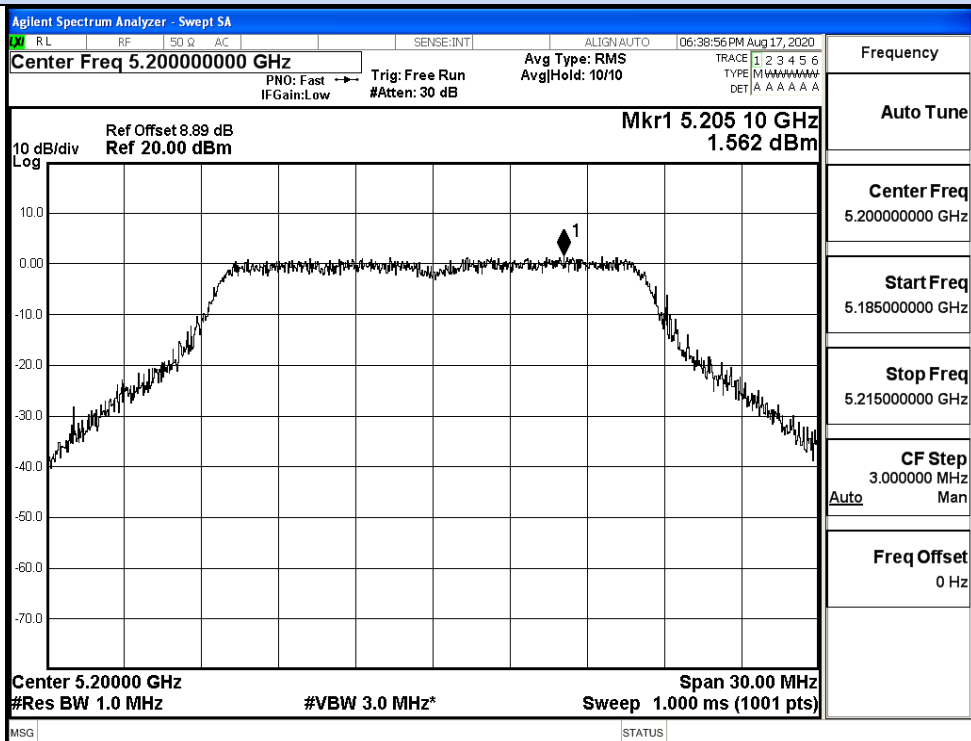
Test Mode	Channel	Frequency (MHz)	Report Power Density (dBm/MHz)			Limit (dBm/MHz)
			Ant_0	Ant_1	Sum	
11N20	36	5180	2.00	1.34	4.69	8.99
	40	5200	1.65	1.00	4.35	
	48	5240	2.75	1.60	5.22	
11N40	38	5190	-1.59	-2.13	1.16	8.99
	46	5230	-1.60	-2.56	0.96	
11AC20	36	5180	-0.48	-0.35	2.60	8.99
	40	5200	-0.54	0.19	2.85	
	48	5240	-0.04	0.84	3.43	
11AC40	38	5190	-2.78	-2.93	0.16	8.99
	46	5230	-2.77	-2.05	0.62	
11AC80	42	5210	-5.32	-4.10	-1.66	8.99
11AX20	36	5180	1.44	1.77	4.62	8.99
	40	5200	0.18	0.42	3.31	
	48	5240	0.68	0.93	3.82	
11AX40	38	5190	-2.07	-0.65	1.71	8.99
	46	5230	-2.48	-1.87	0.85	
11AX80	42	5210	-4.51	-4.97	-1.72	8.99

Ant0

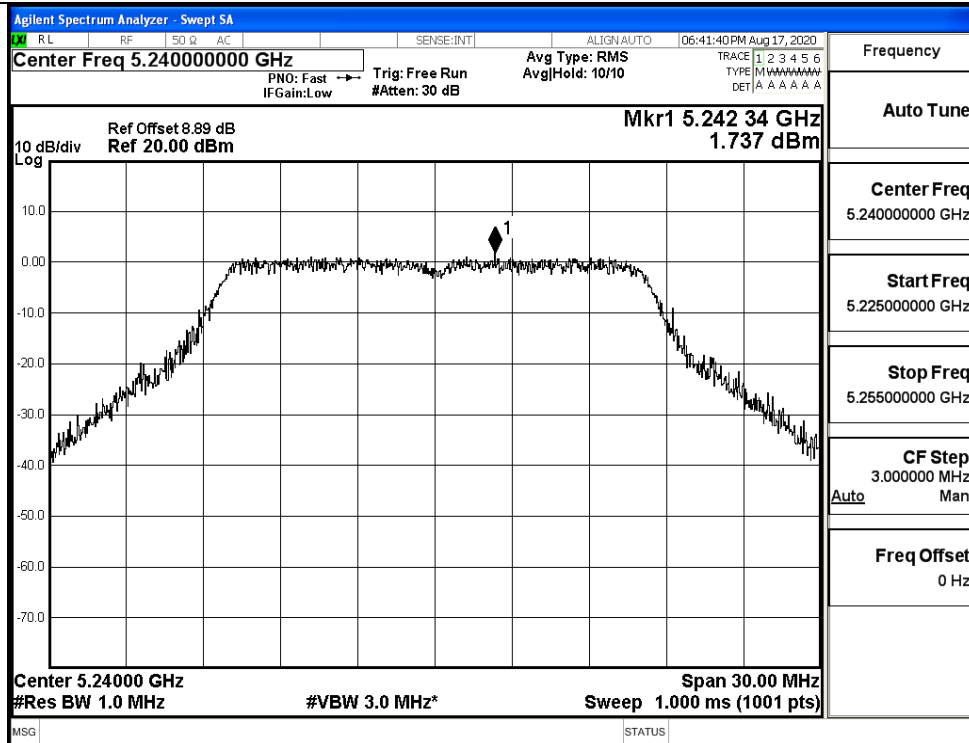
Power Spectral Density



IEEE 802.11a / Channel 36 / 5180MHz

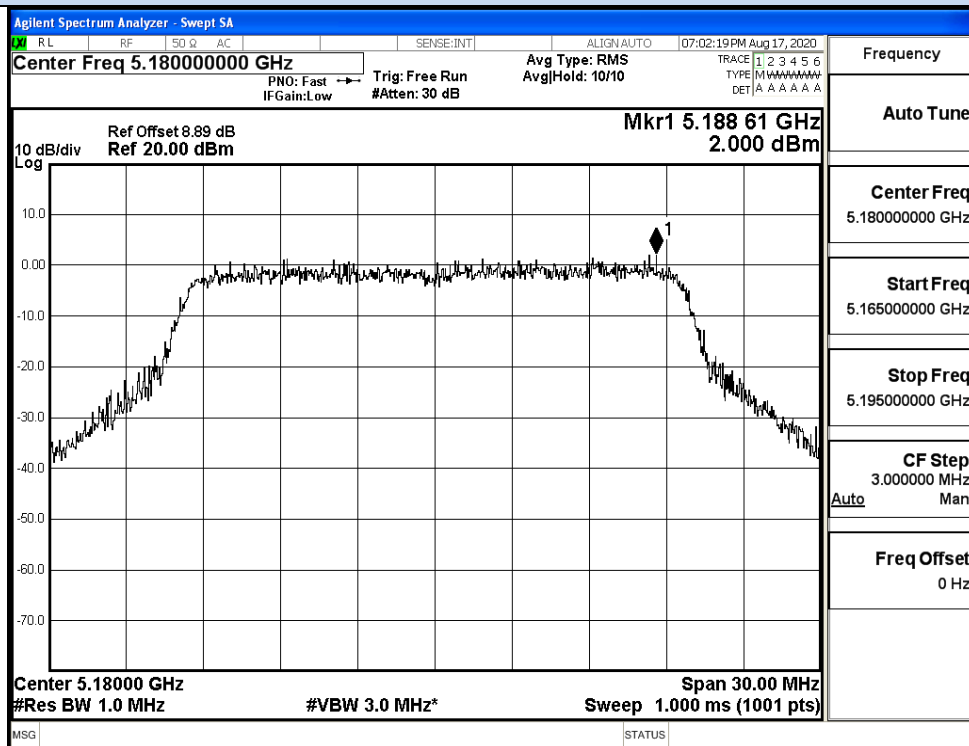


IEEE 802.11a / Channel 40 / 5200MHz

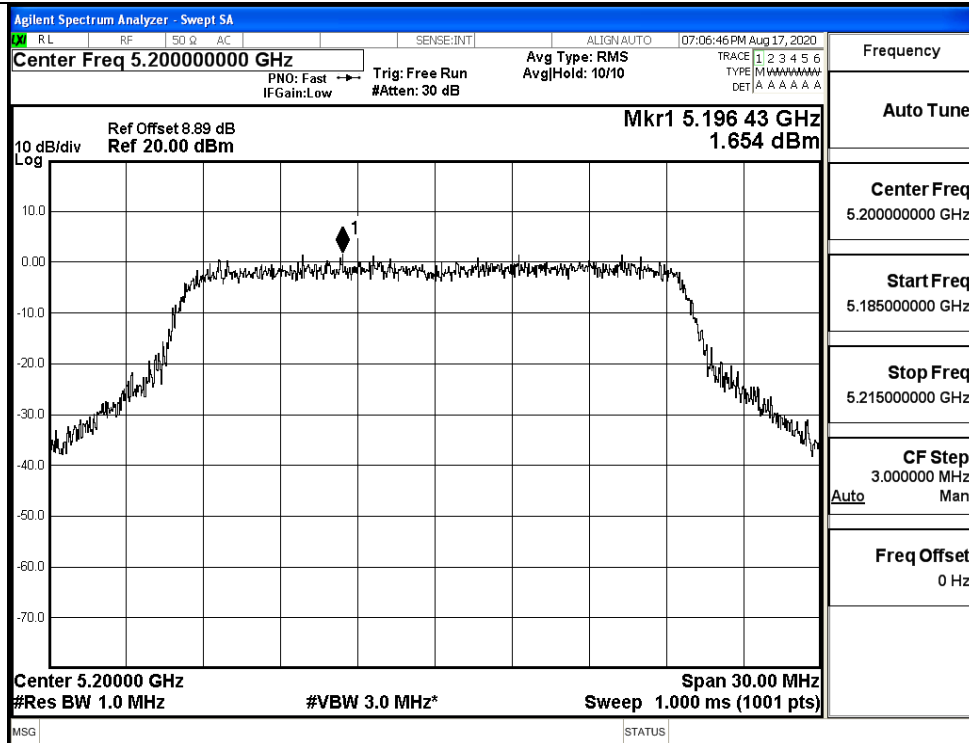


IEEE 802.11a / Channel 48 / 5240MHz

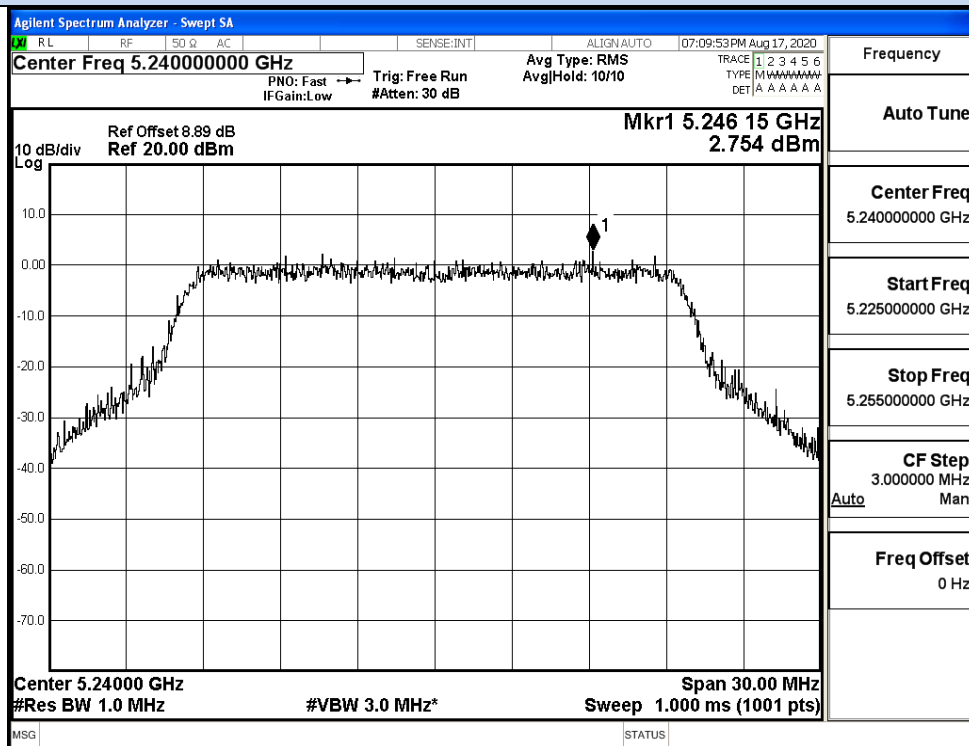
Power Spectral Density



IEEE 802.11n20 / Channel 36 / 5180MHz

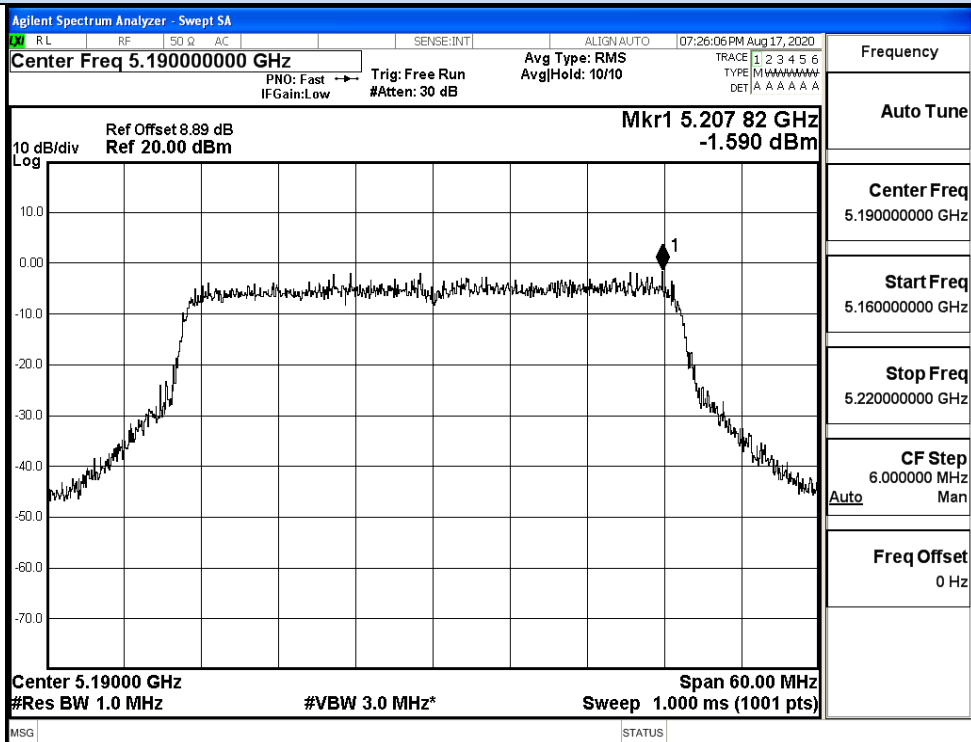


IEEE 802.11n20 / Channel 40 / 5200MHz

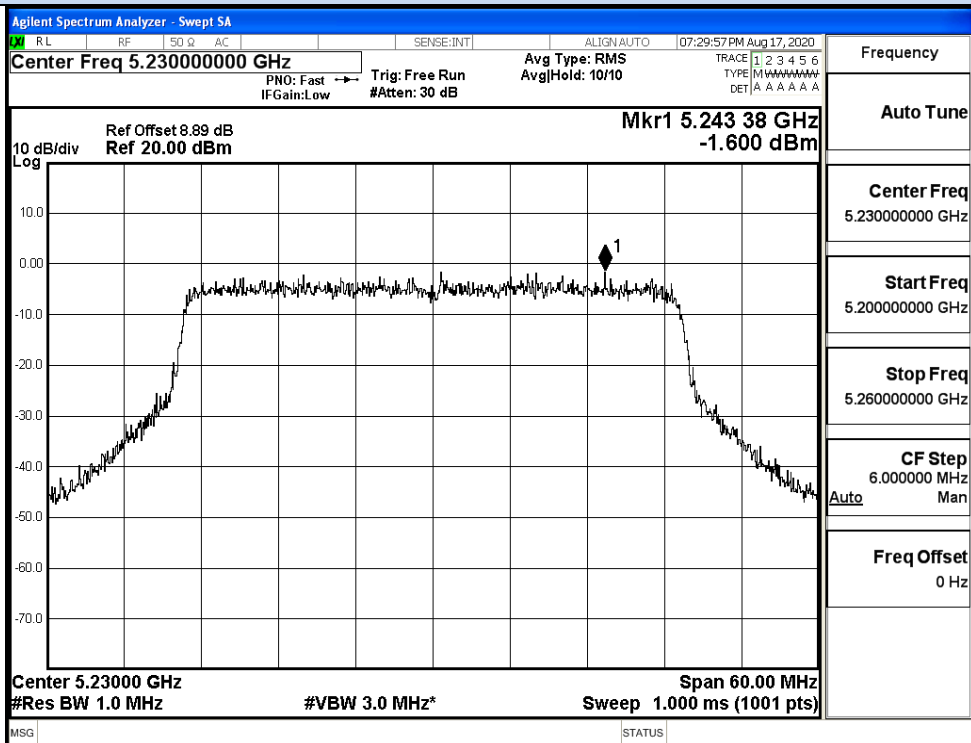


IEEE 802.11n20 / Channel 48 / 5240MHz

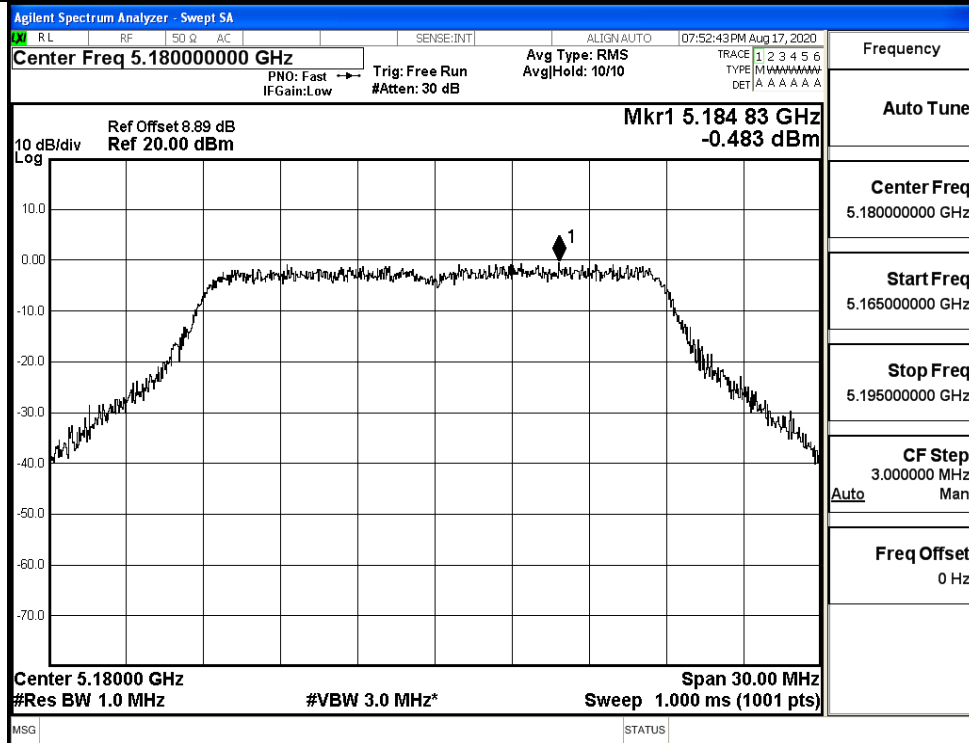
Power Spectral Density



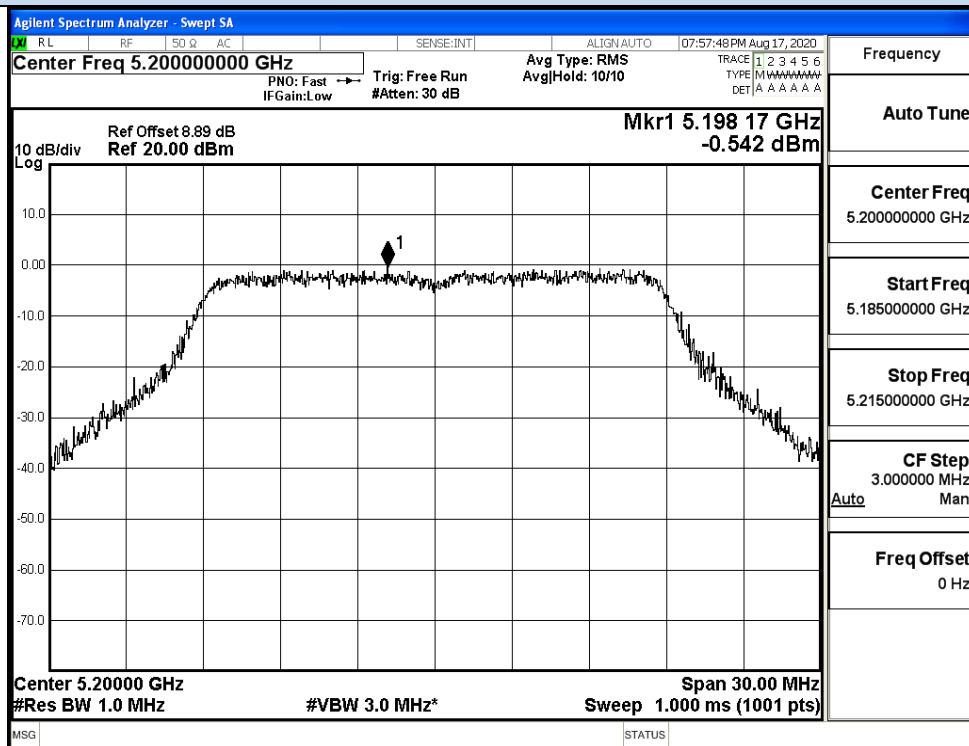
IEEE 802.11n40 / Channel 38 / 5190MHz



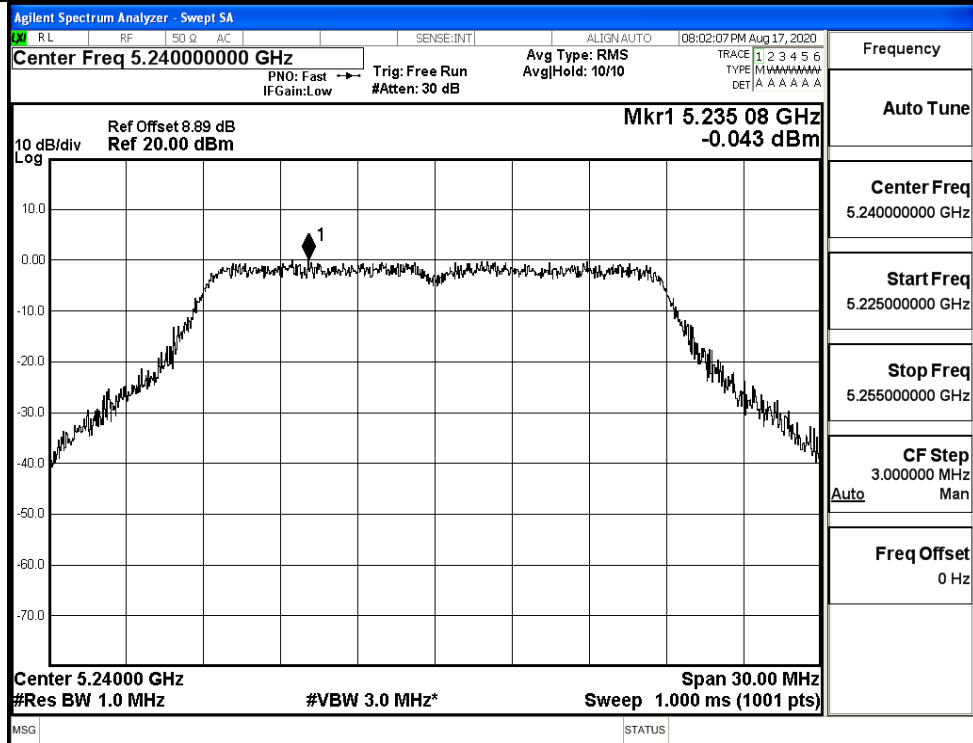
IEEE 802.11n40 / Channel 46 / 5230MHz



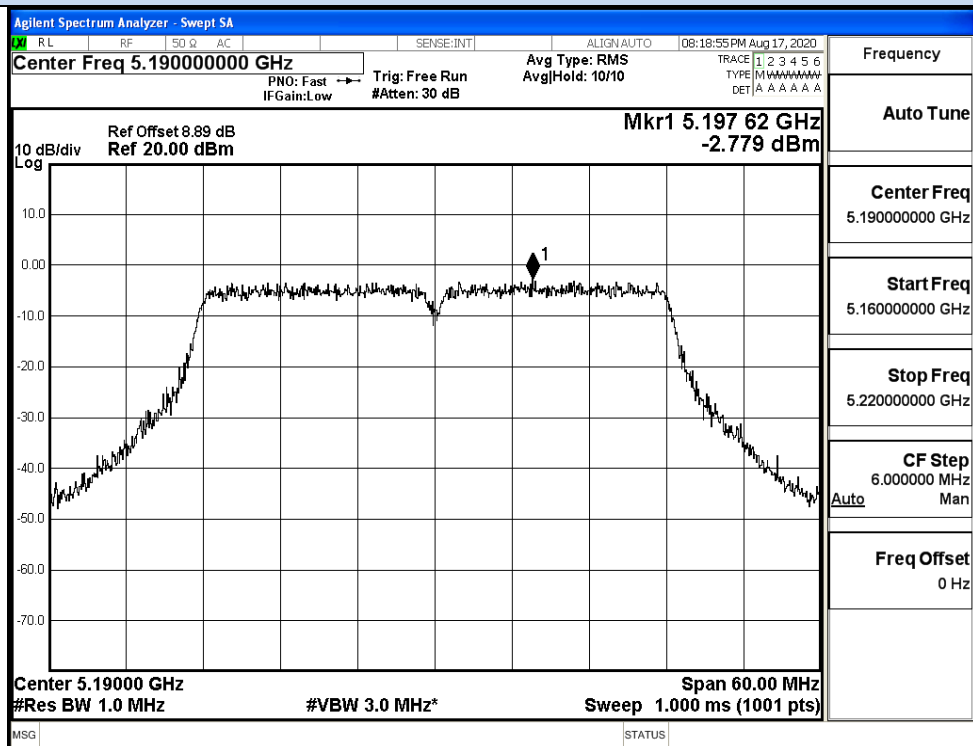
IEEE 802.11AC20 / Channel 36 / 5180MHz



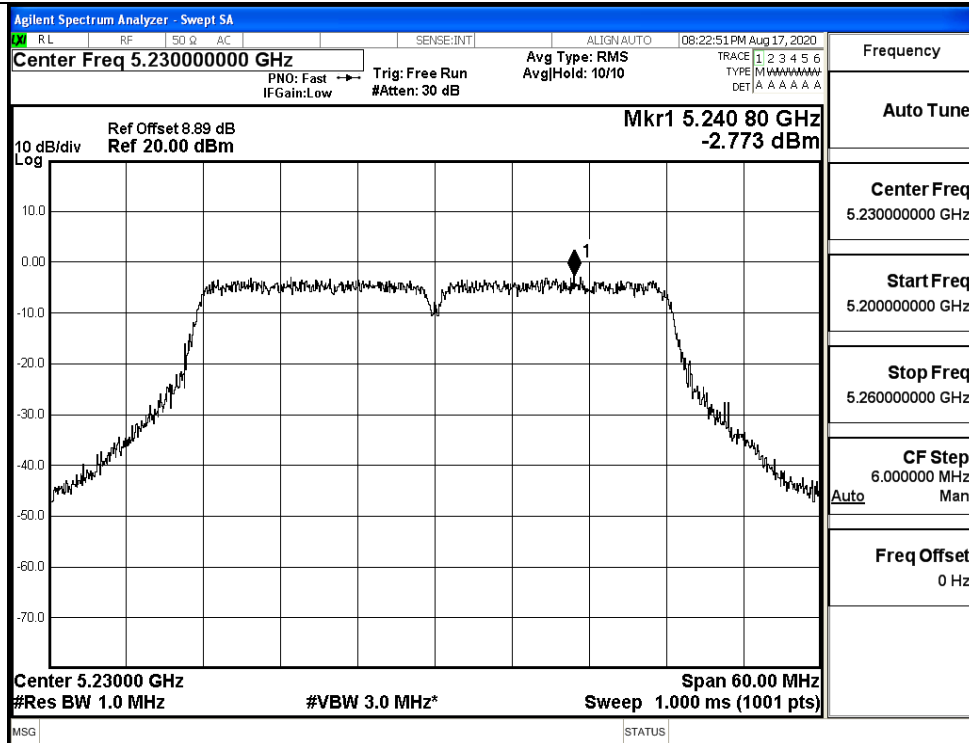
IEEE 802.11AC20 / Channel 40 / 5200MHz



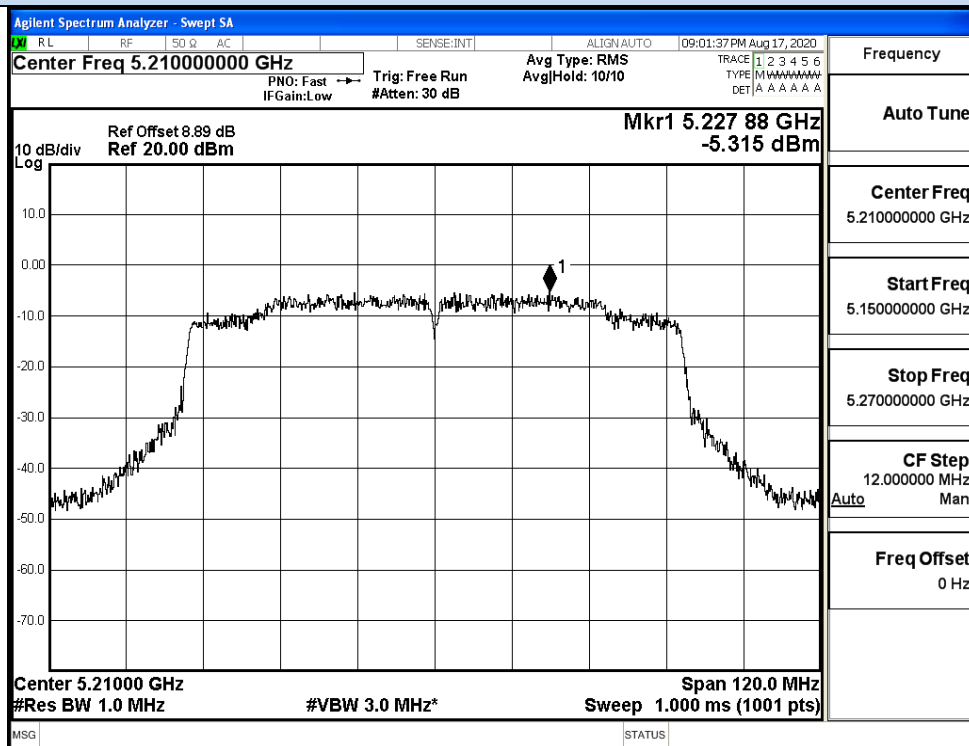
IEEE 802.11AC20 / Channel 48 / 5240MHz



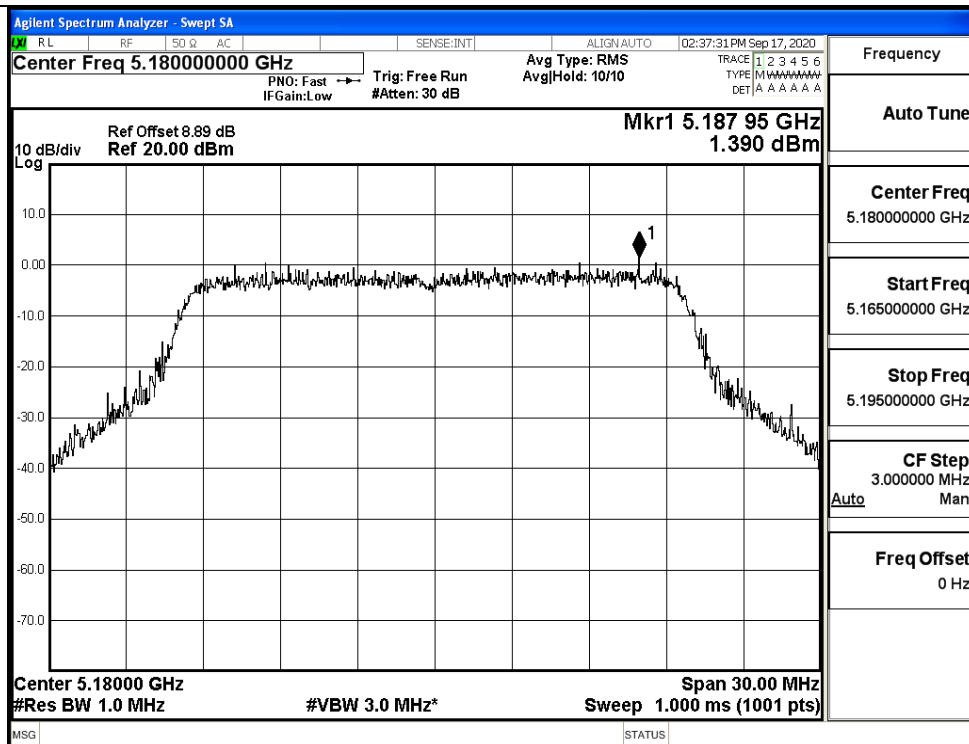
IEEE 802.11AC40 / Channel 38 / 5190MHz



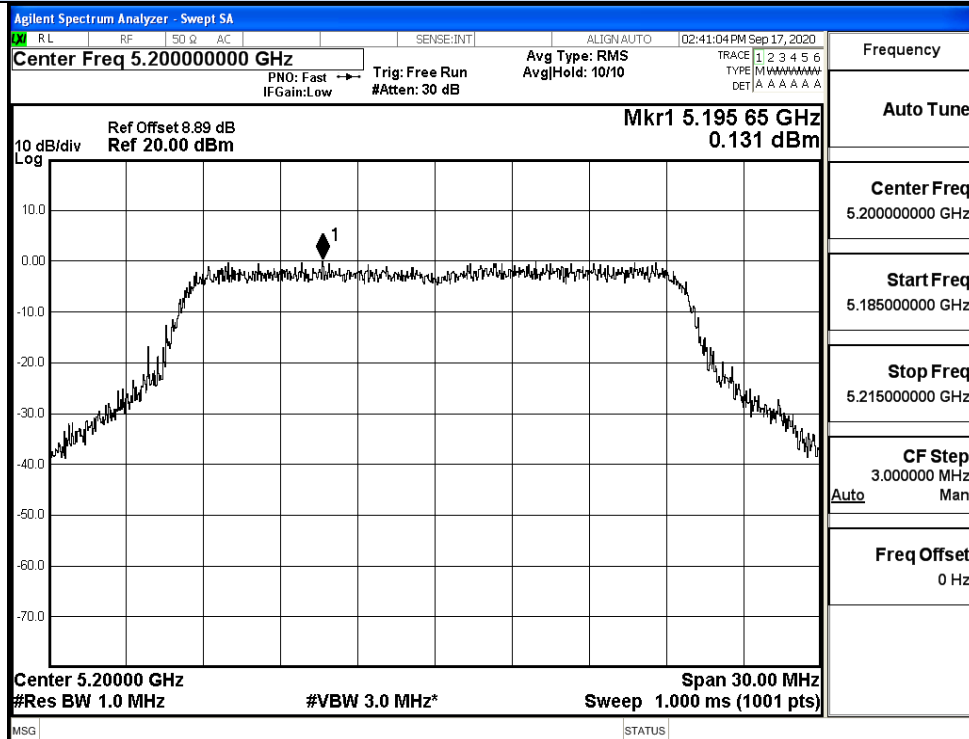
IEEE 802.11AC40 / Channel 46 / 5230MHz



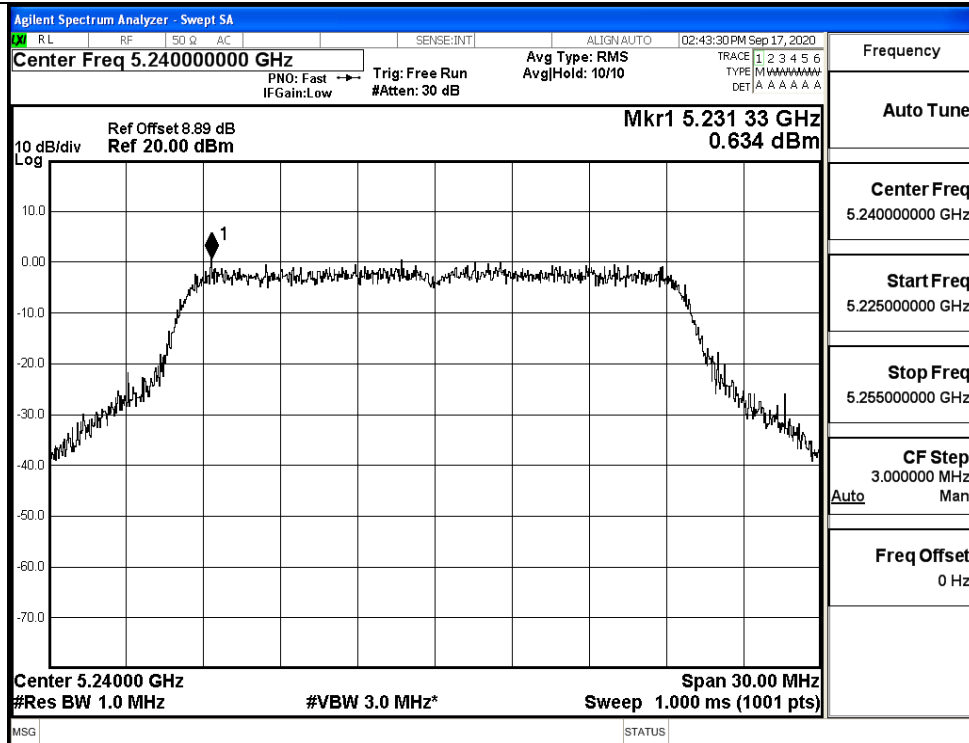
IEEE 802.11AC80 / Channel 42 / 5210MHz



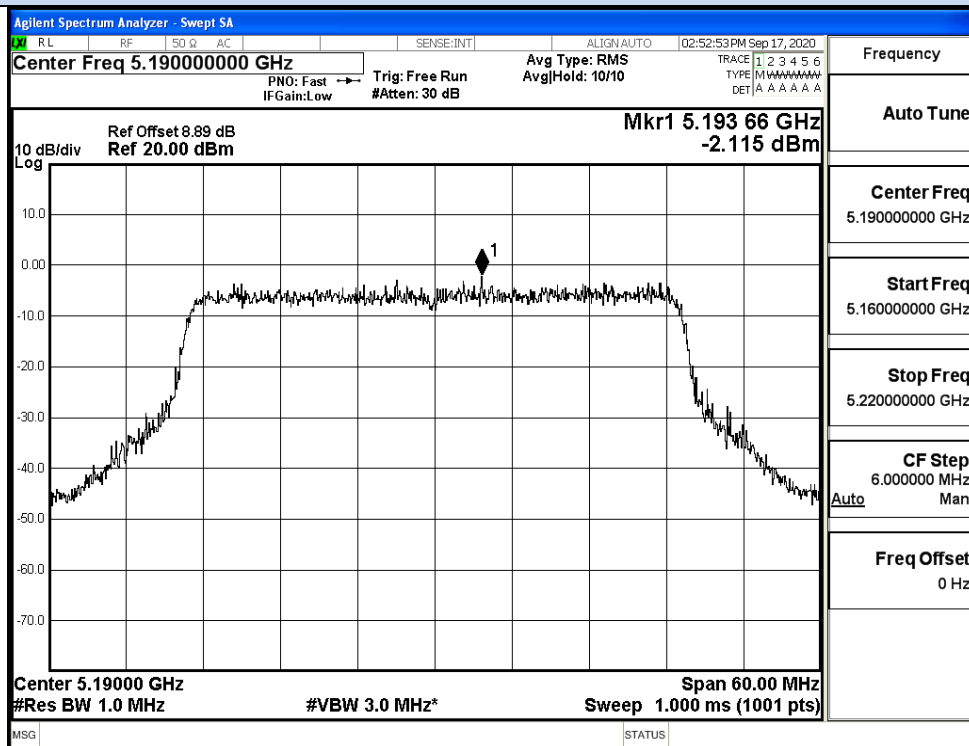
IEEE 802.11AX20 / Channel 36 / 5180MHz



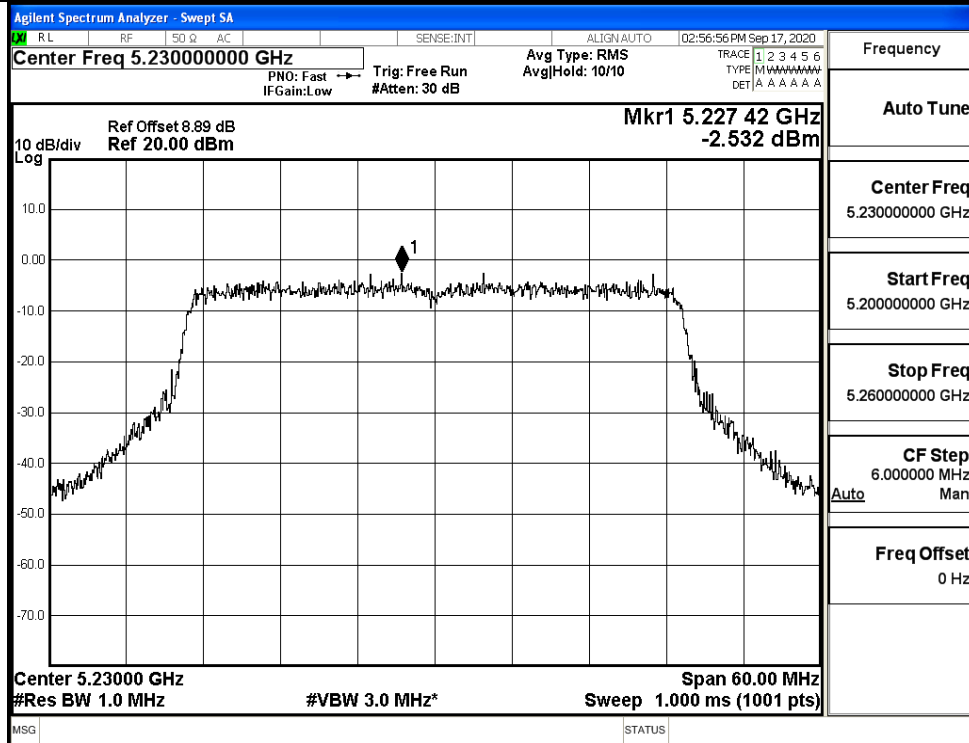
IEEE 802.11AX20 / Channel 40 / 5200MHz



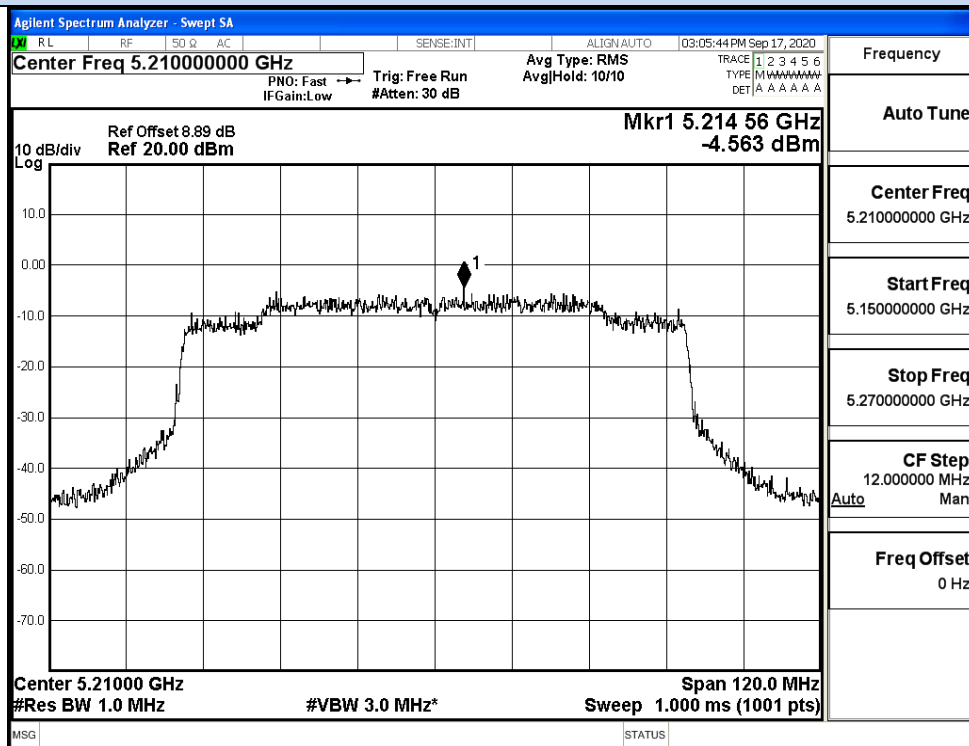
IEEE 802.11AX20 / Channel 48 / 5240MHz



IEEE 802.11AX40 / Channel 38 / 5190MHz



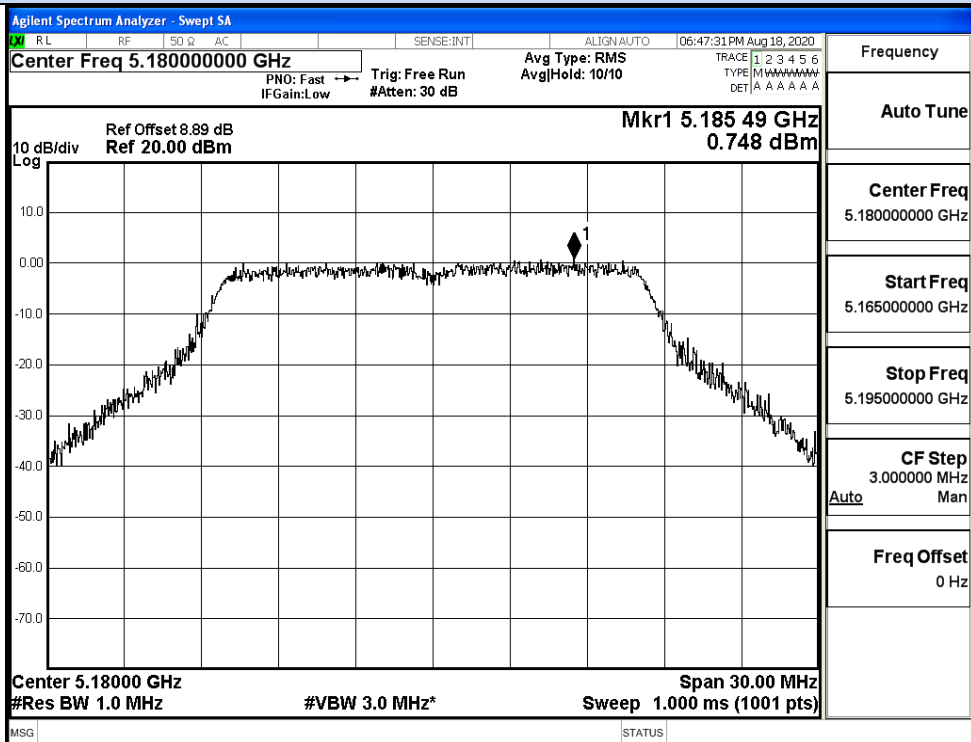
IEEE 802.11AX40 / Channel 46 / 5230MHz



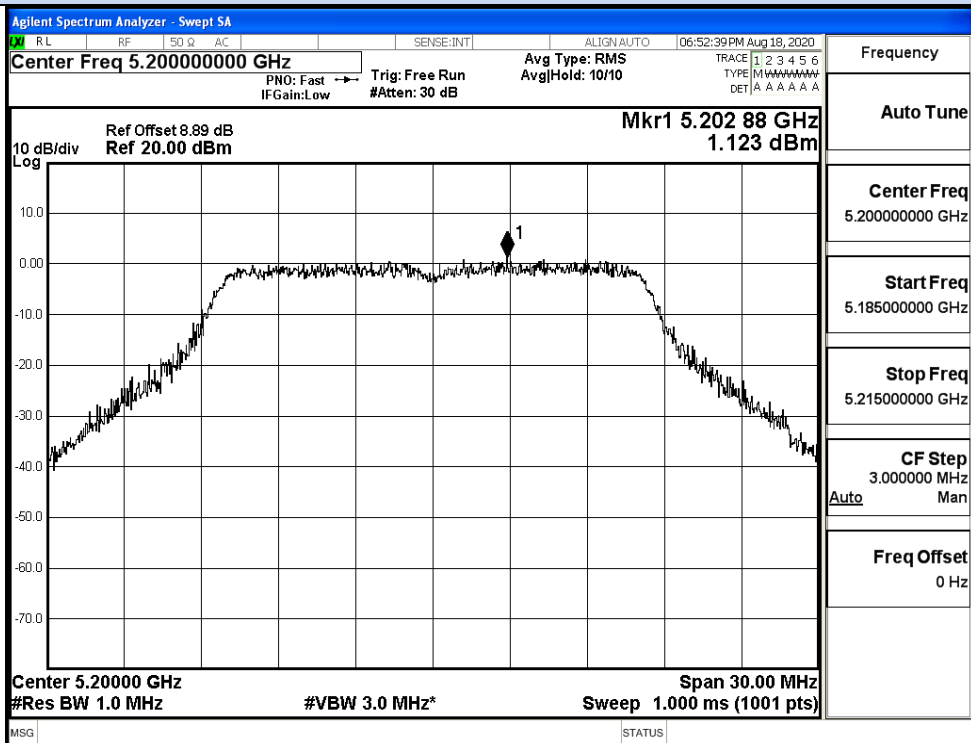
IEEE 802.11AX80 / Channel 42 / 5210MHz

Ant1

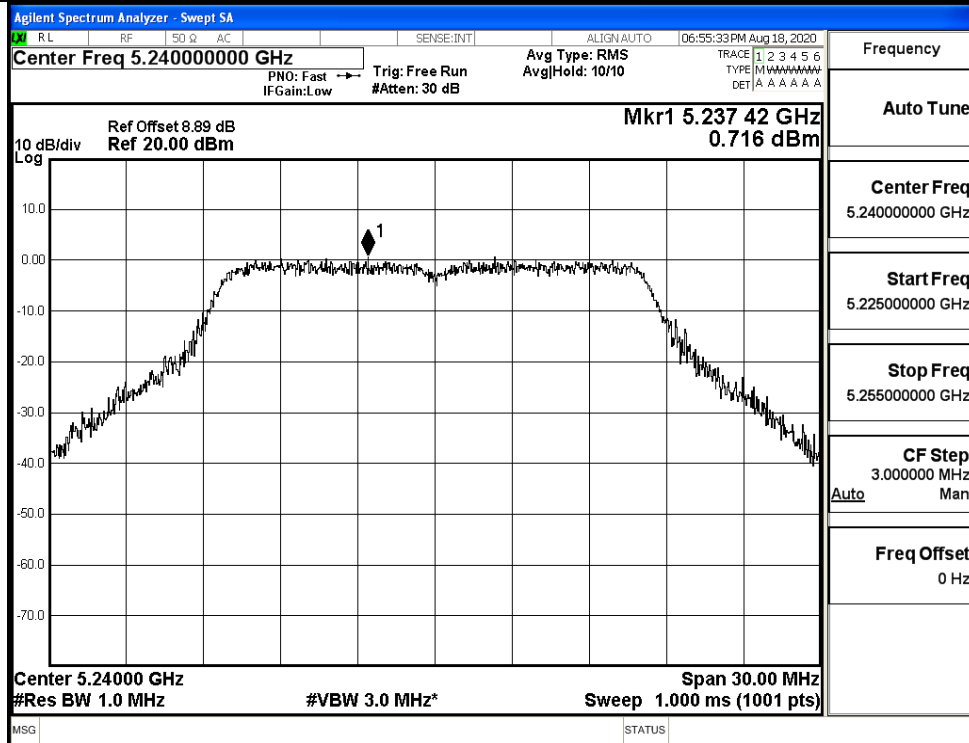
Power Spectral Density



IEEE 802.11a / Channel 36 / 5180MHz

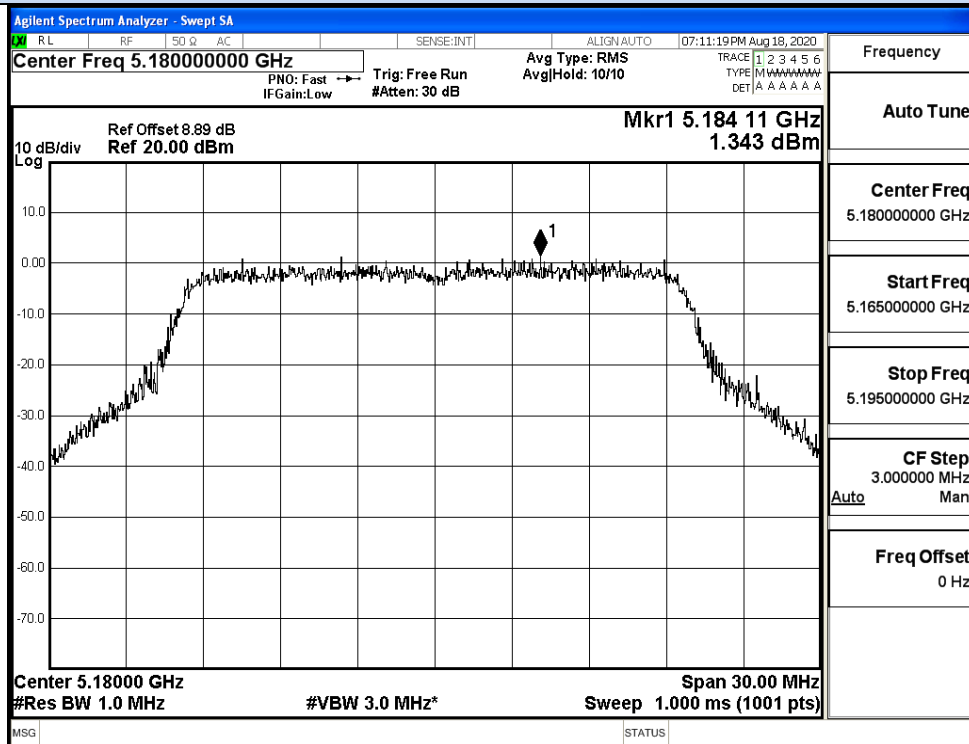


IEEE 802.11na / Channel 40 / 5200MHz

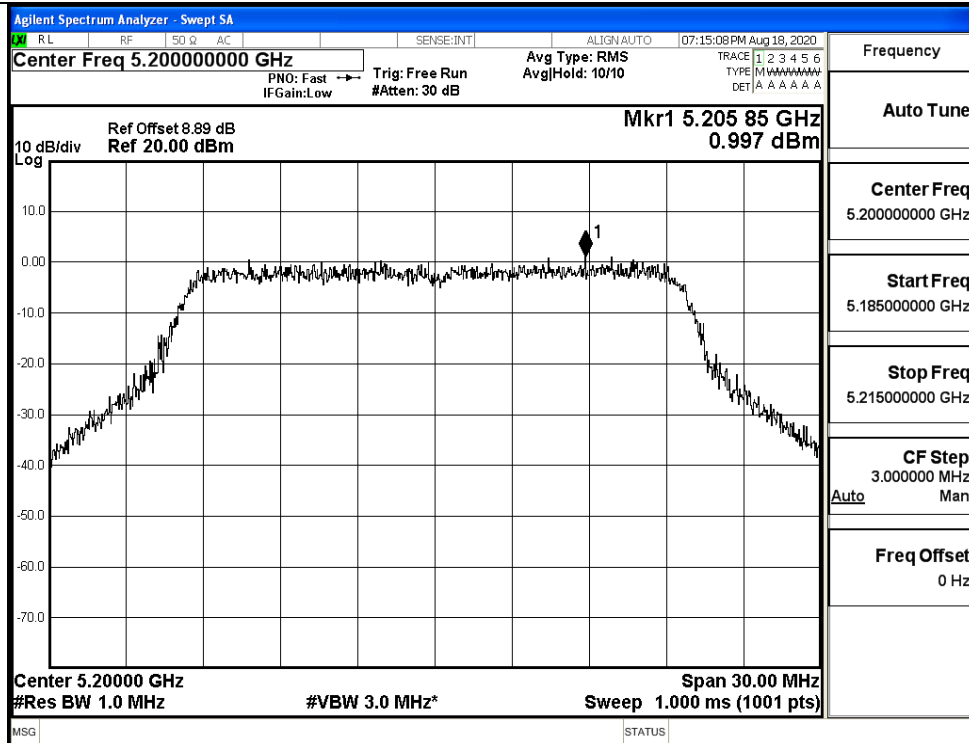


IEEE 802.11na / Channel 48 / 5240MHz

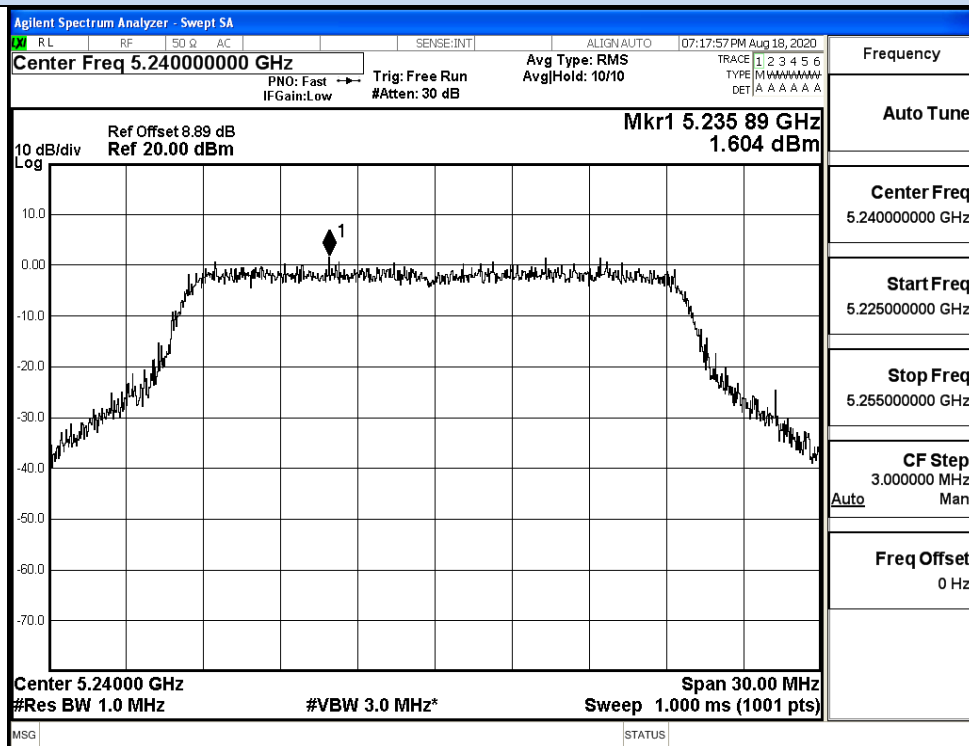
Power Spectral Density



IEEE 802.11n20 / Channel 36 / 5180MHz

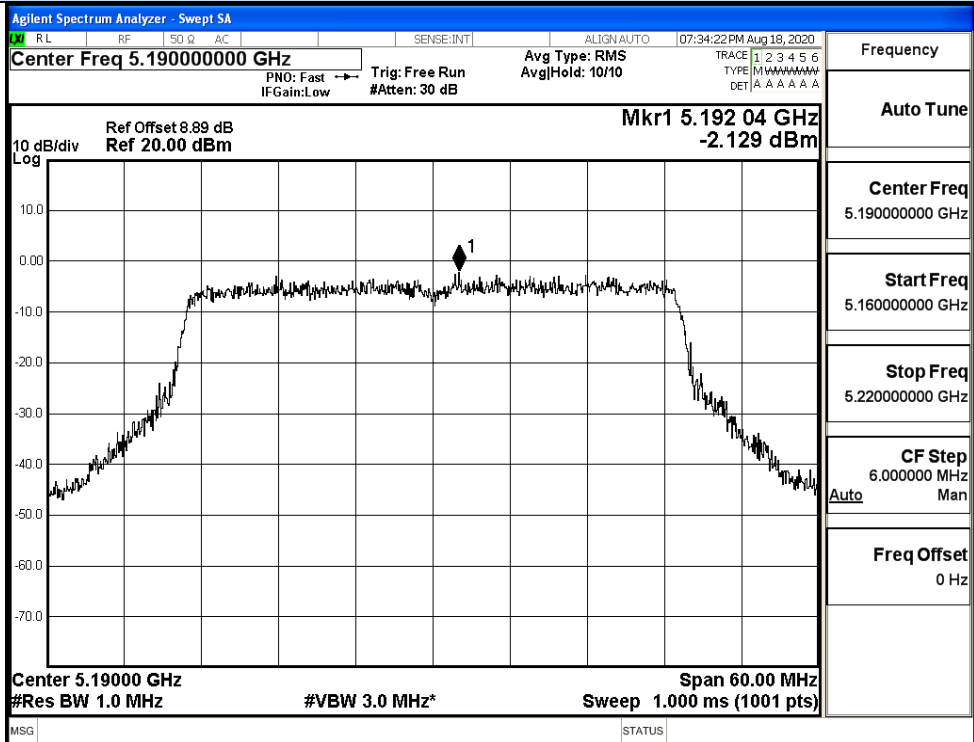


IEEE 802.11n20 / Channel 40 / 5200MHz

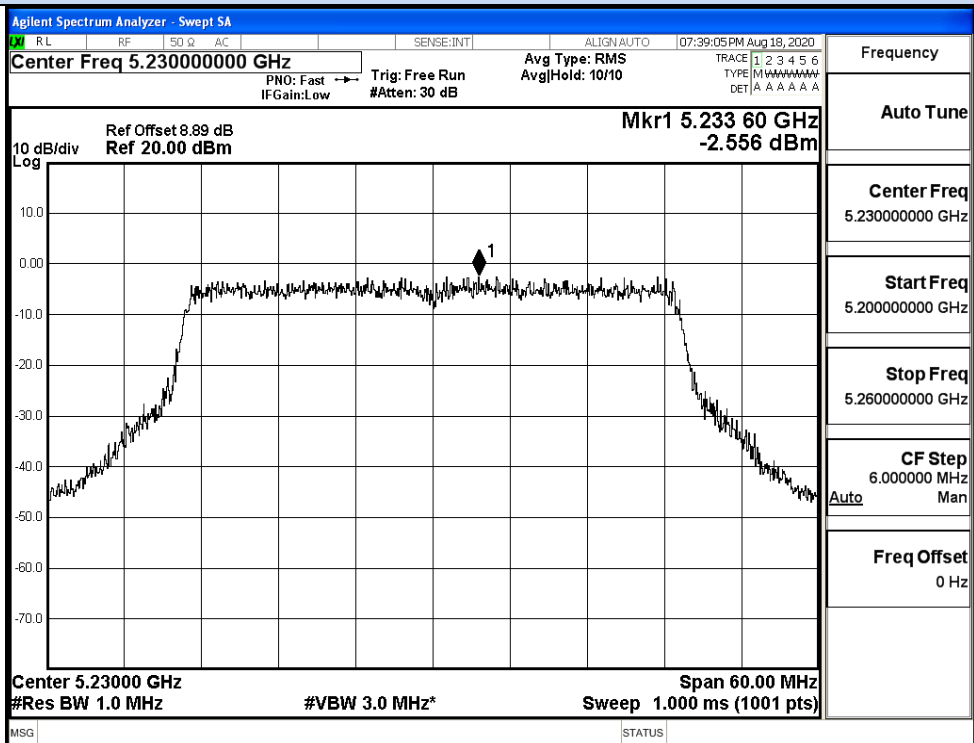


IEEE 802.11n20 / Channel 48 / 5240MHz

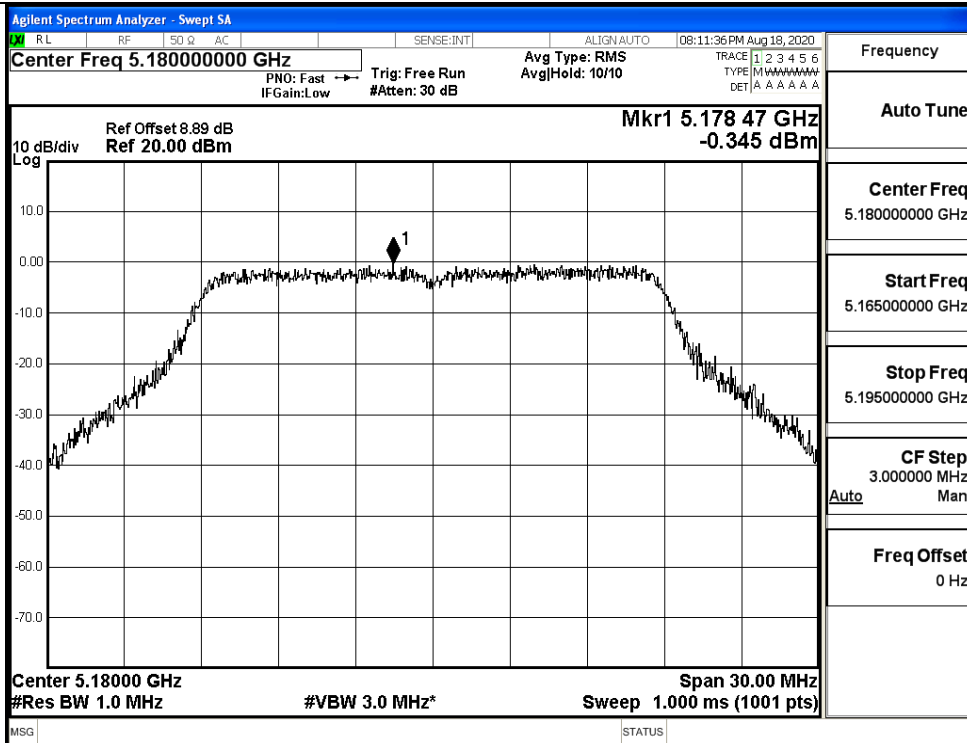
Power Spectral Density



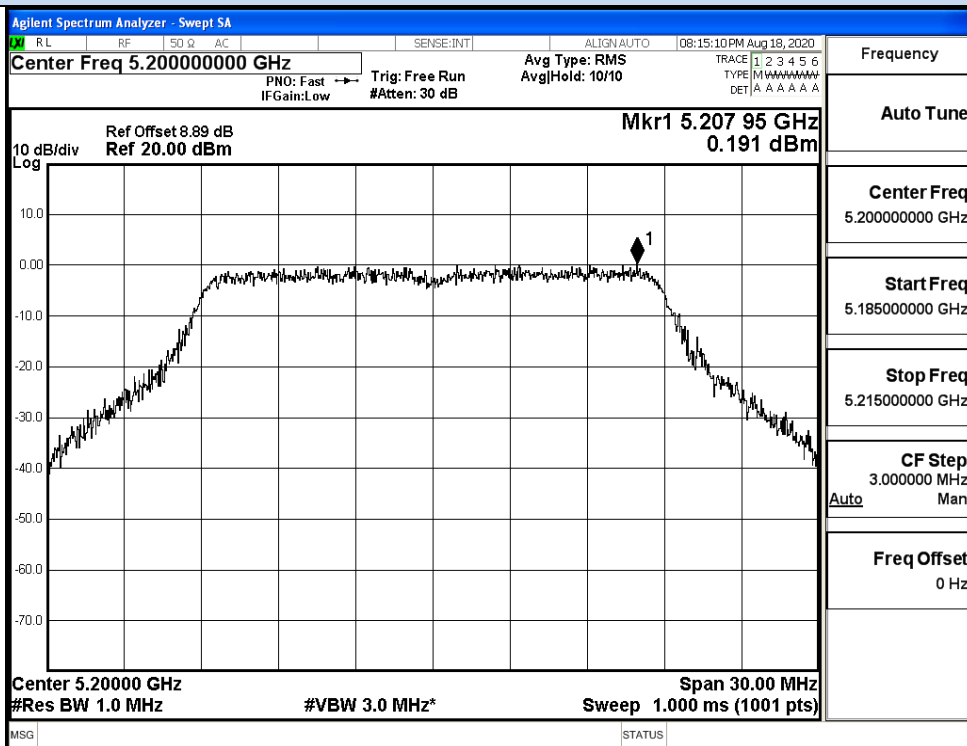
IEEE 802.11n40 / Channel 38 / 5190MHz



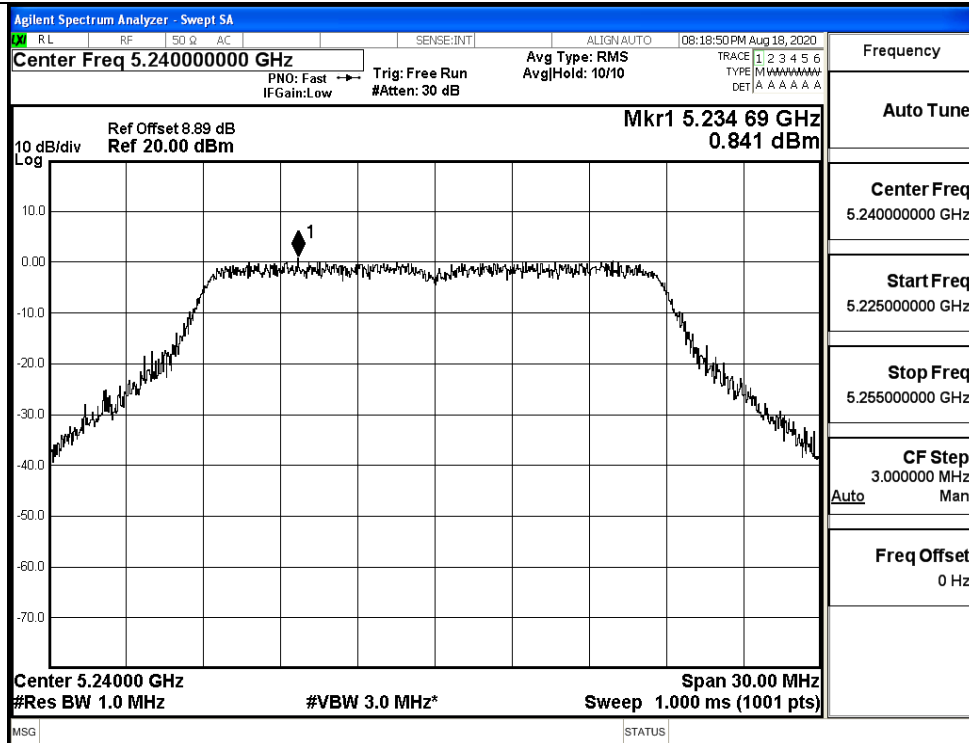
IEEE 802.11n40 / Channel 46 / 5230MHz



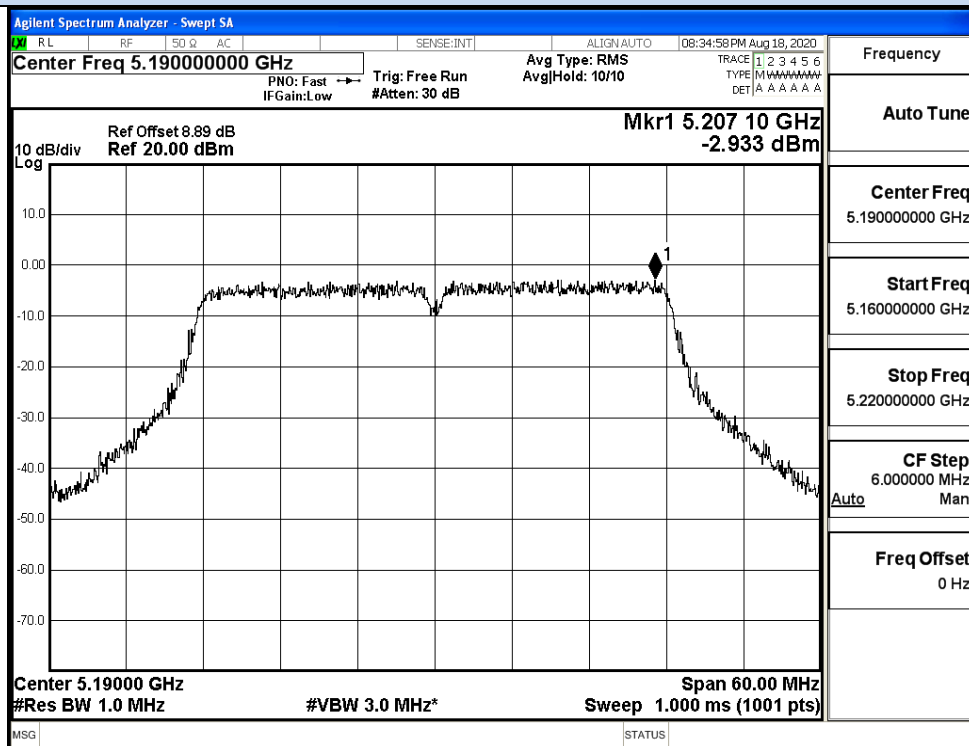
IEEE 802.11AC20 / Channel 36 / 5180MHz



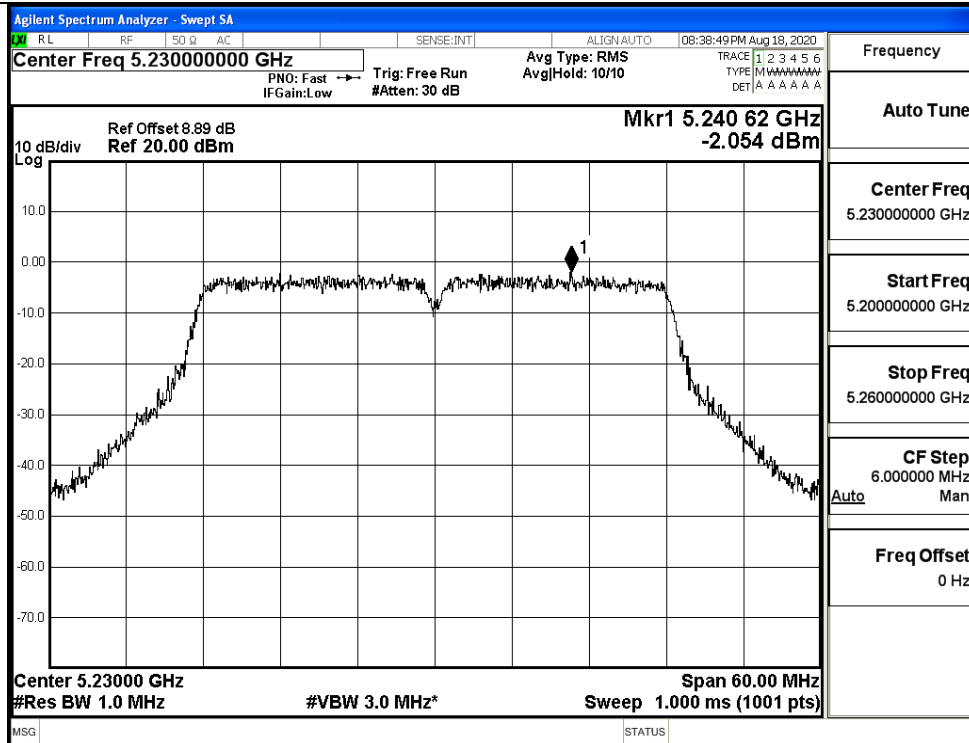
IEEE 802.11AC20 / Channel 40 / 5200MHz



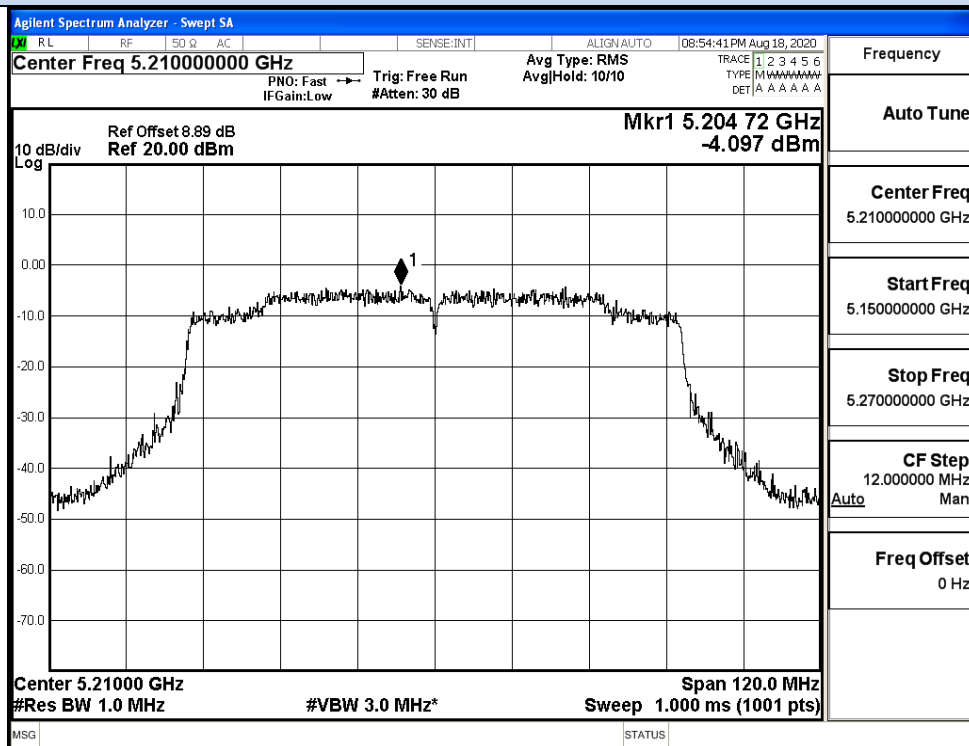
IEEE 802.11AC20 / Channel 48 / 5240MHz



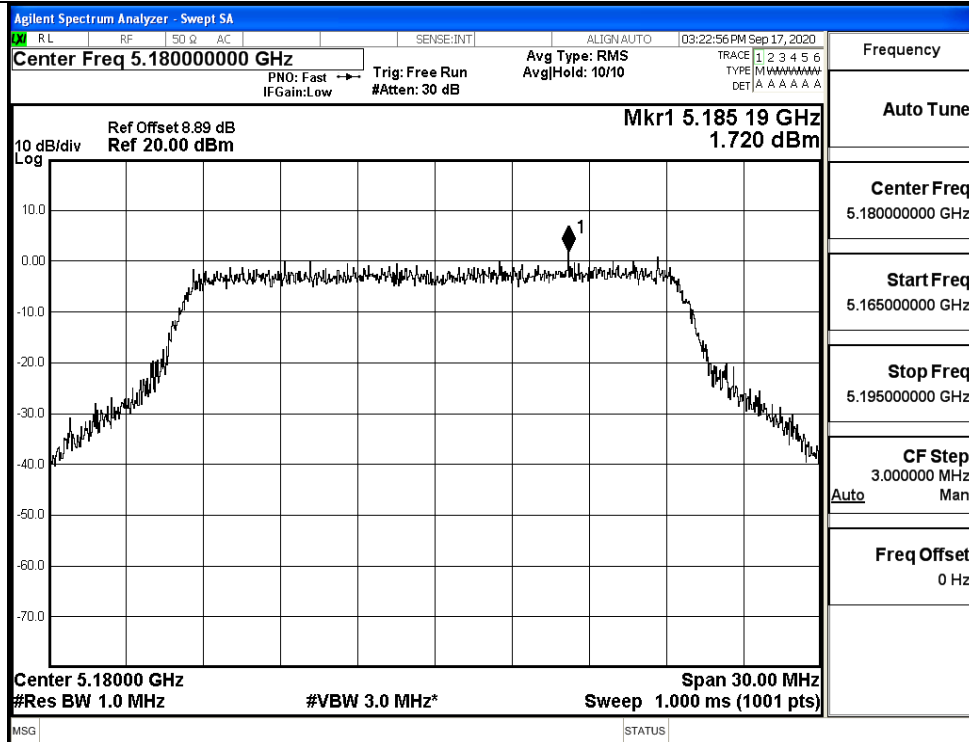
IEEE 802.11AC40 / Channel 38 / 5190MHz



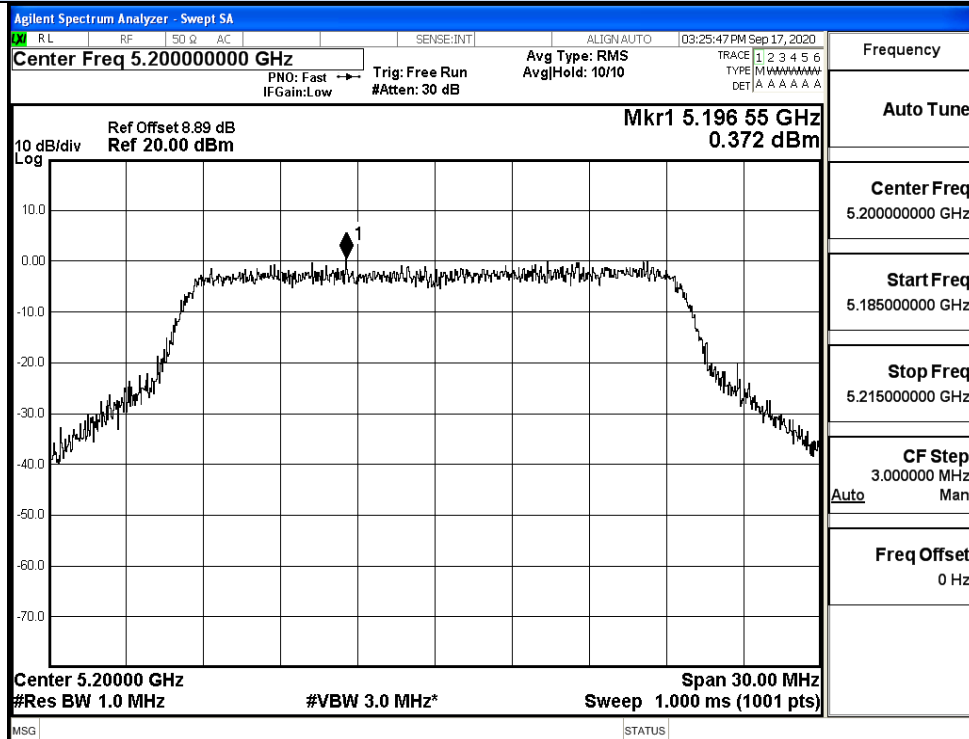
IEEE 802.11AC40 / Channel 46 / 5230MHz



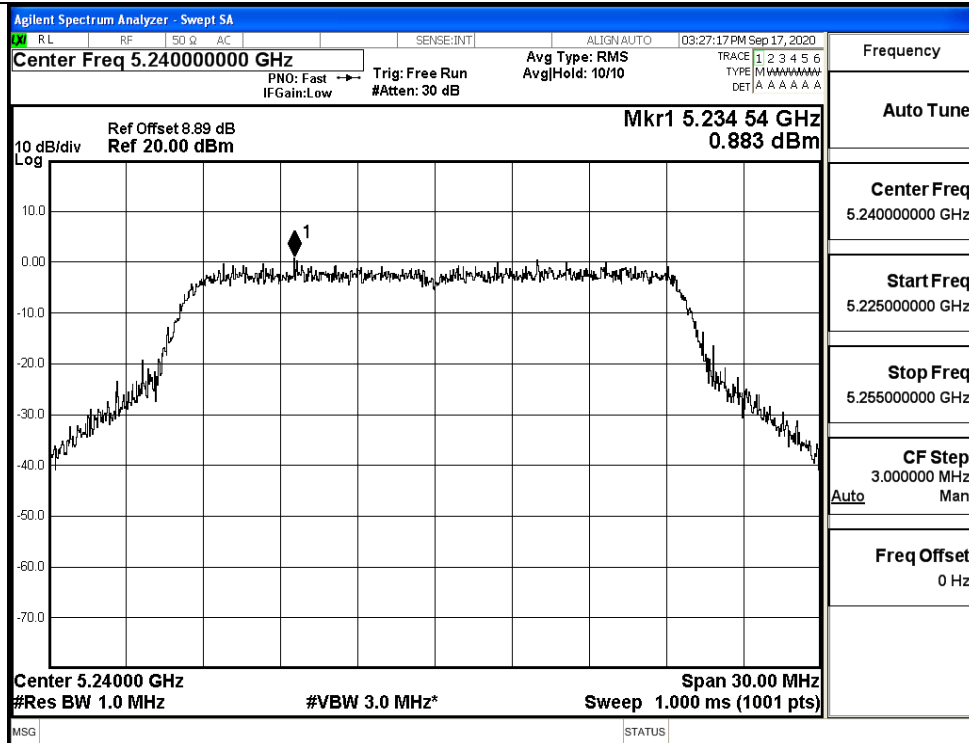
IEEE 802.11AC80 / Channel 42 / 5210MHz



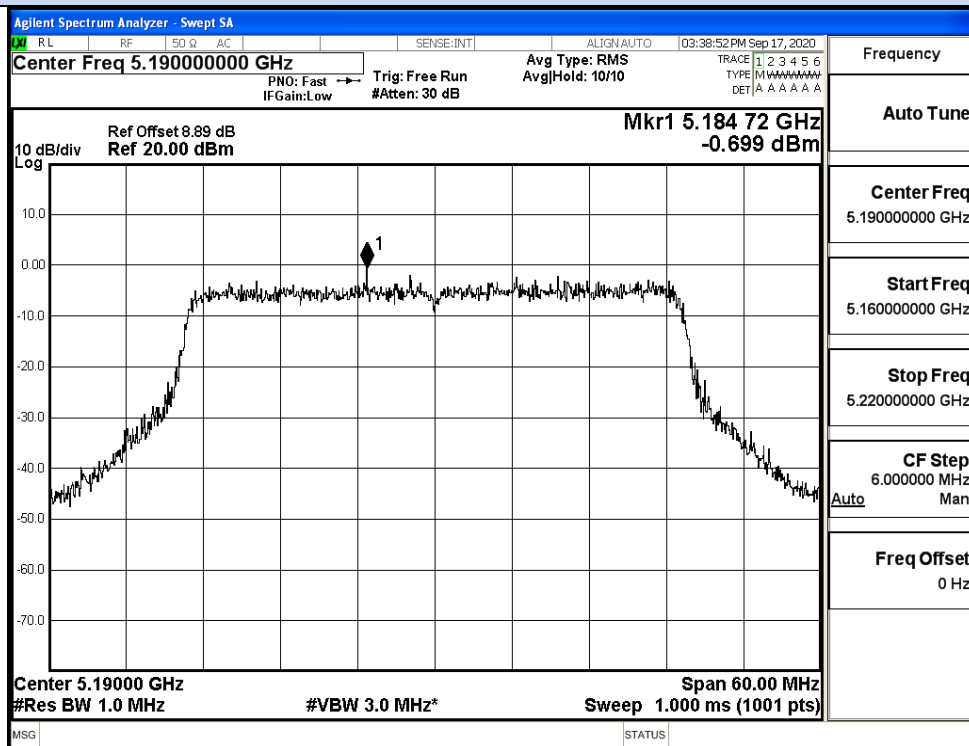
IEEE 802.11AX20 / Channel 36 / 5180MHz



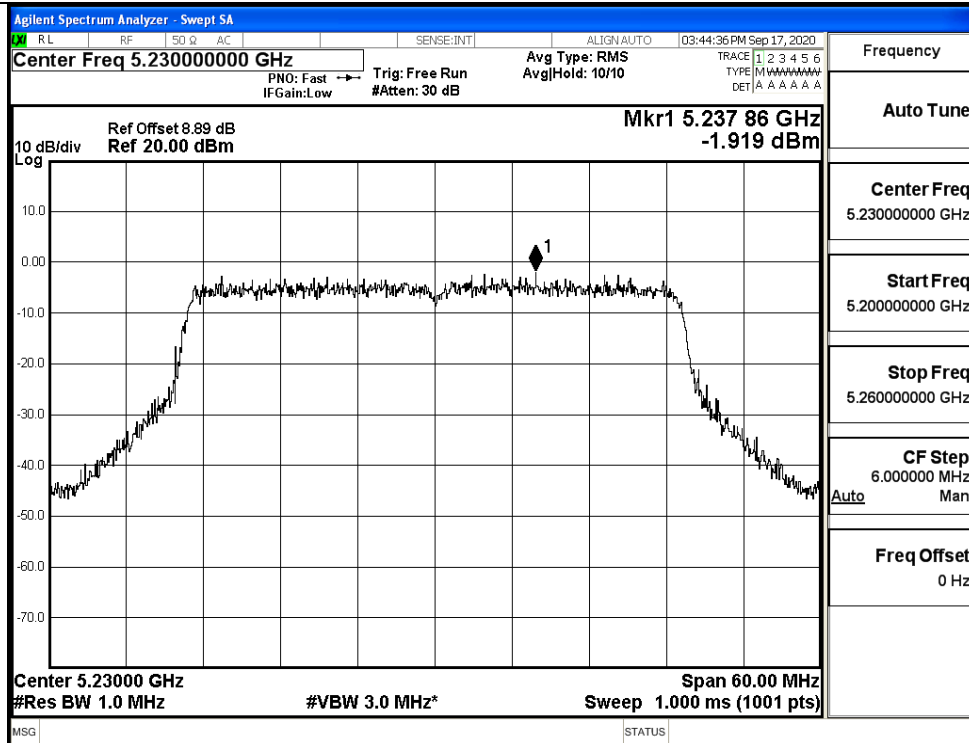
IEEE 802.11AX20 / Channel 40 / 5200MHz



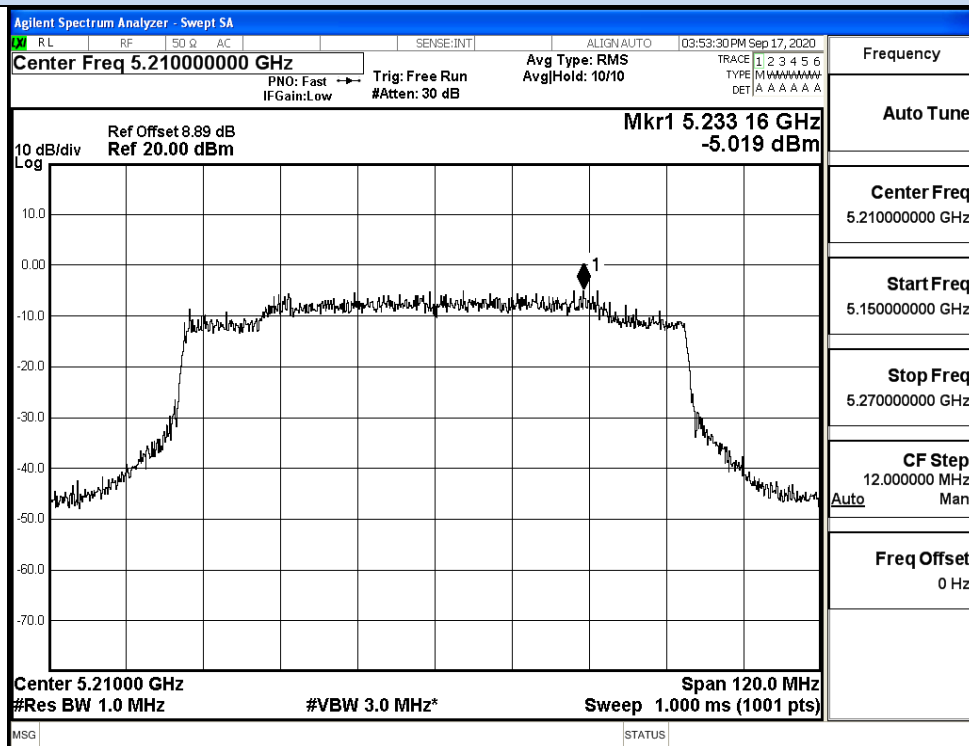
IEEE 802.11AX20 / Channel 48 / 5240MHz



IEEE 802.11AX40 / Channel 38 / 5190MHz



IEEE 802.11AX40 / Channel 46 / 5230MHz

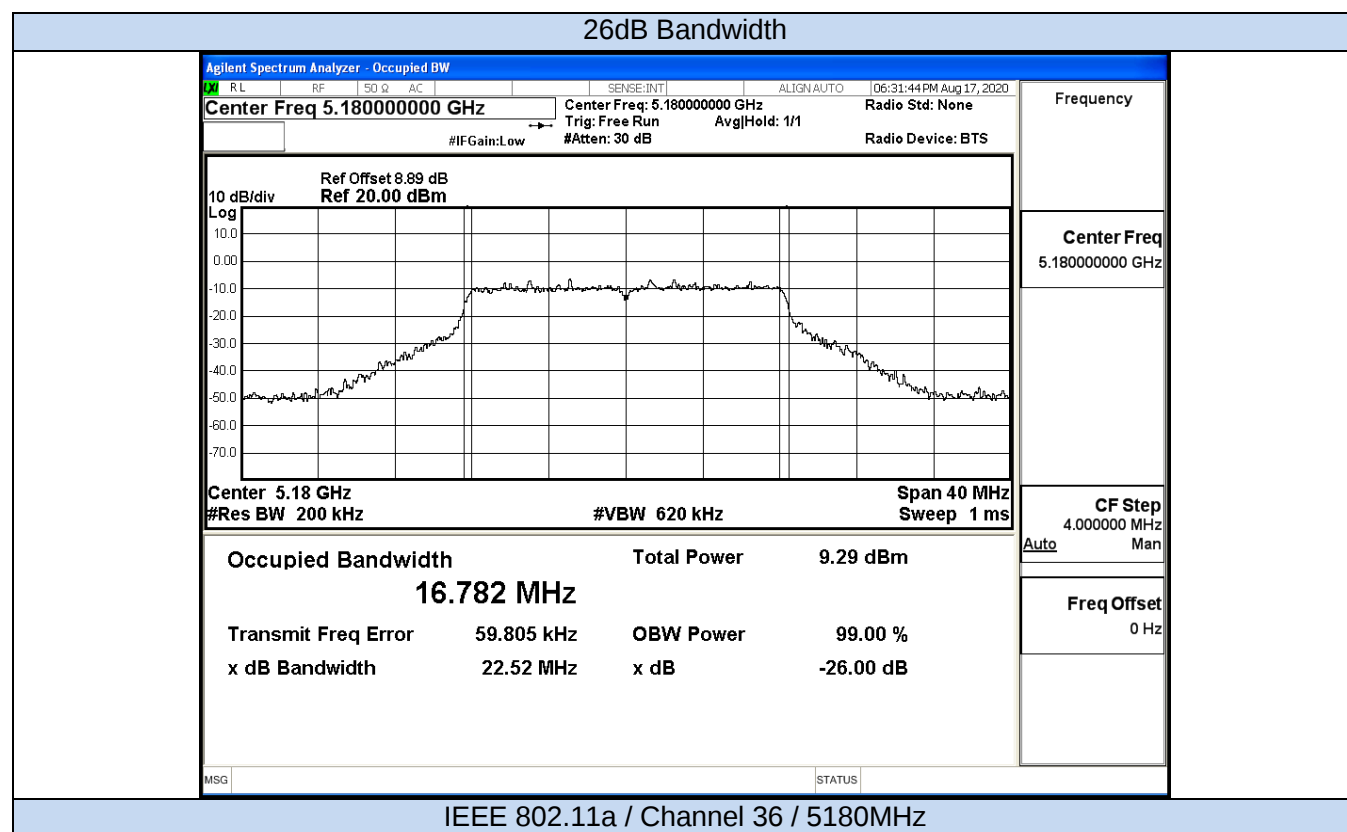


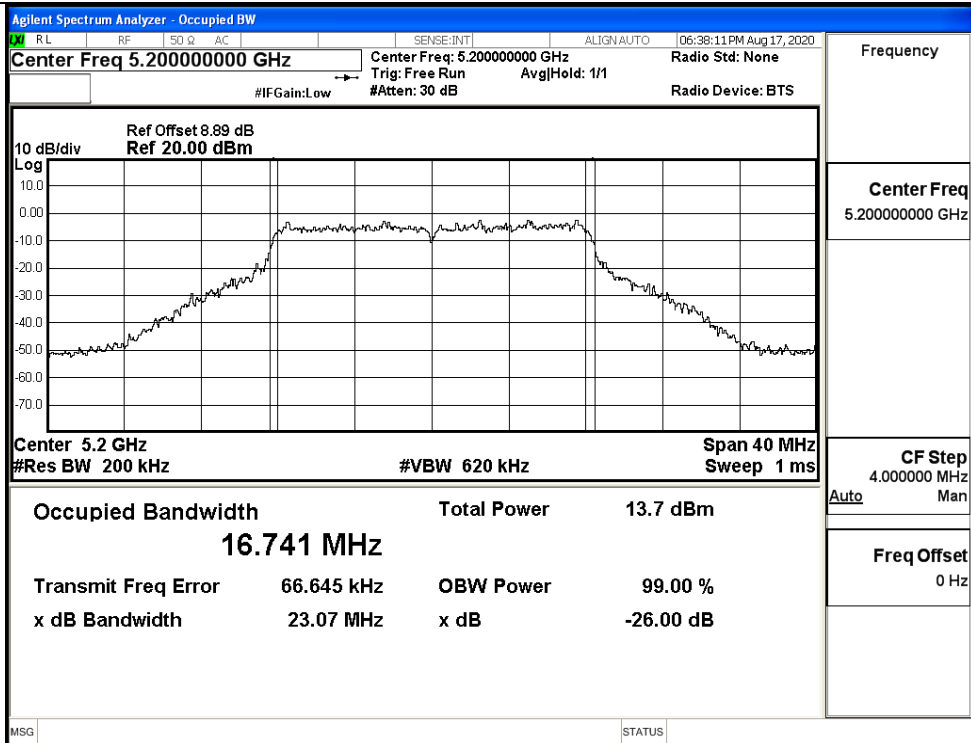
IEEE 802.11AX80 / Channel 42 / 5210MHz

D.4 Emission Bandwidth

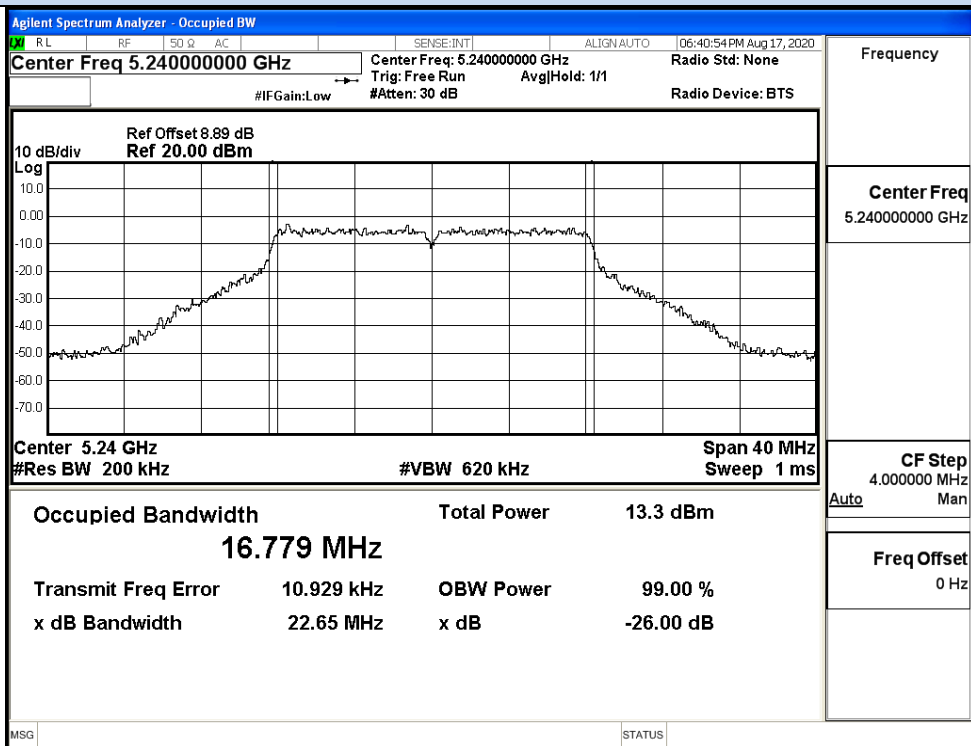
Ant0

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	36	5180	22.52	No Limit	Pass
	40	5200	23.07		Pass
	48	5240	22.65		Pass
11N20 SISO	36	5180	22.91	No Limit	Pass
	40	5200	23.75		Pass
	48	5240	23.63		Pass
11N40 SISO	38	5190	42.67	No Limit	Pass
	46	5230	42.86		Pass
11AC20 SISO	36	5180	23.84	No Limi	Pass
	40	5200	24.00		Pass
	48	5240	23.41		Pass
11AC40 SISO	38	5190	43.90	No Limi	Pass
	46	5230	43.33		Pass
11AC80 SISO	42	5210	84.89	No Limi	Pass
11AX20 SISO	36	5180	25.26	No Limi	Pass
	40	5200	23.80		Pass
	48	5240	23.75		Pass
11AX40 SISO	38	5190	43.17	No Limi	Pass
	46	5230	41.75		Pass
11AX80 SISO	42	5210	82.17	No Limi	Pass



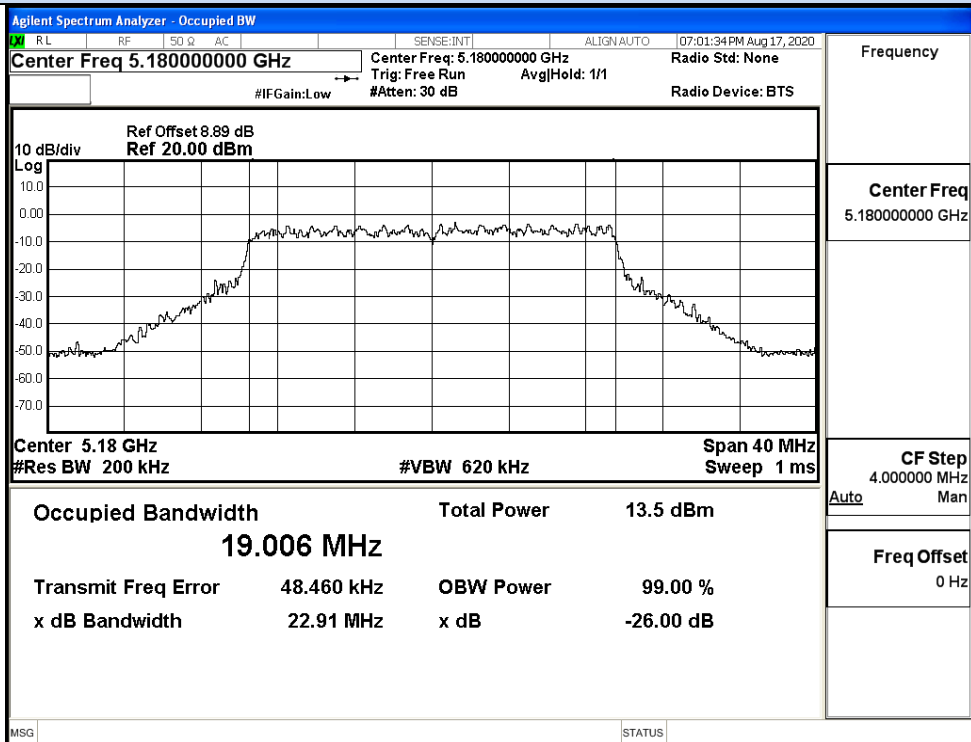


IEEE 802.11a / Channel 40 / 5200MHz

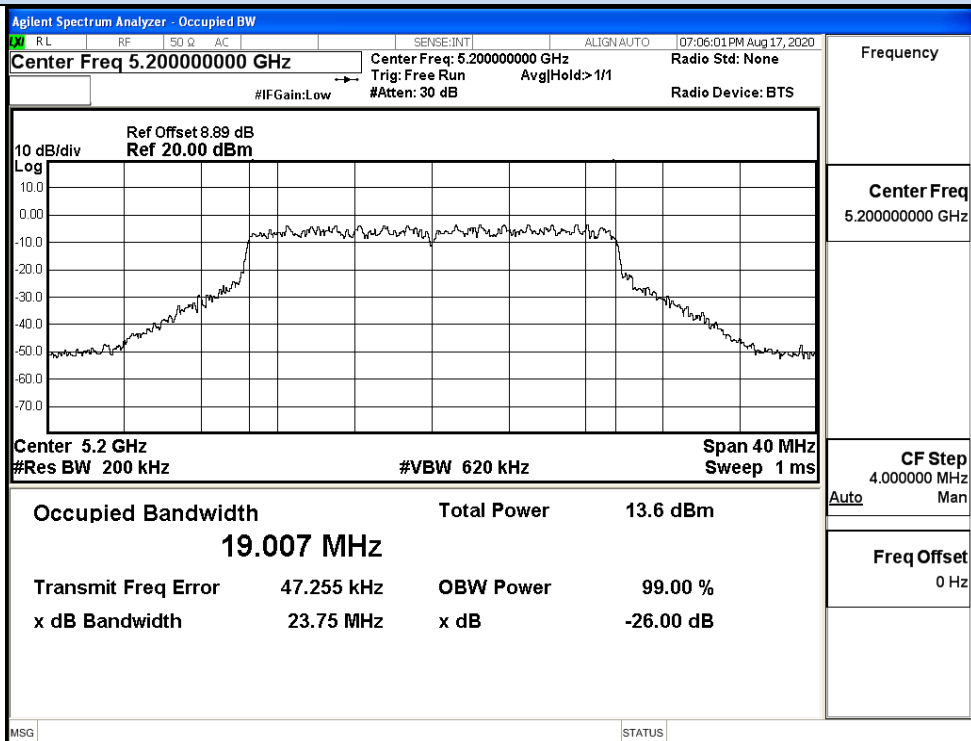


IEEE 802.11a / Channel 48 / 5240MHz

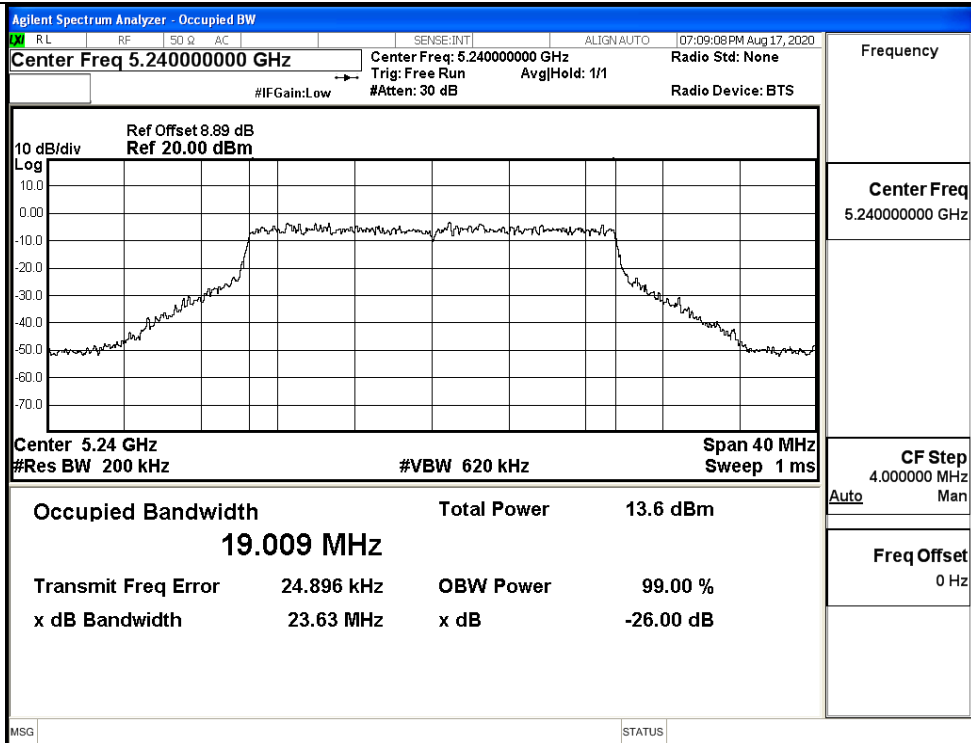
26dB Bandwidth



IEEE 802.11n20 / Channel 36 / 5180MHz

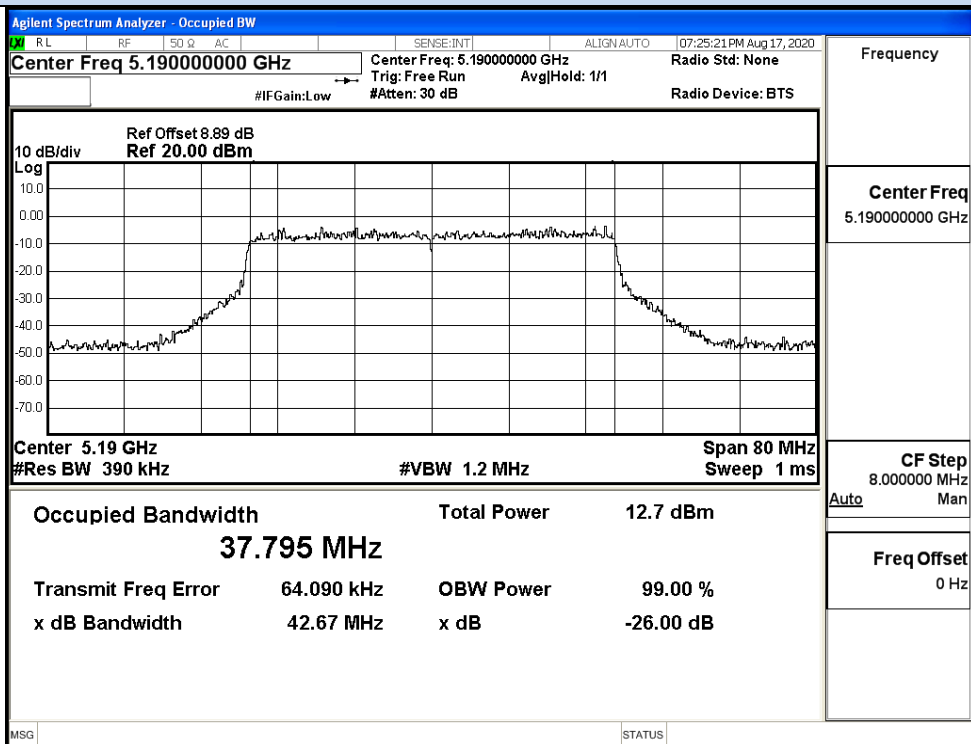


IEEE 802.11n20 / Channel 40 / 5200MHz

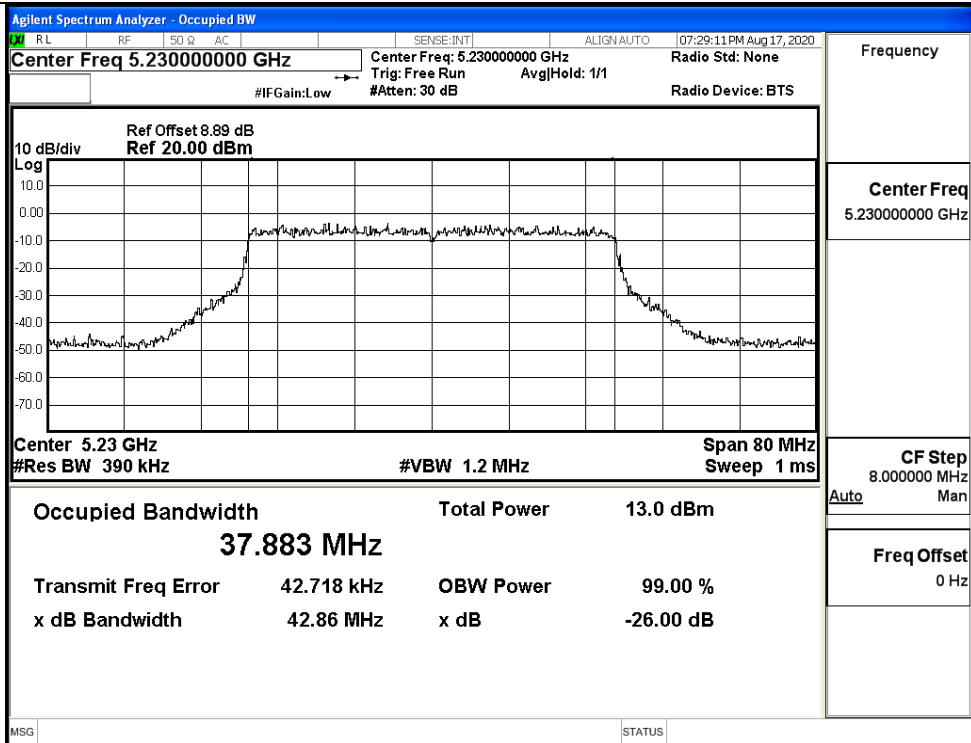


IEEE 802.11n20 / Channel 48 / 5240MHz

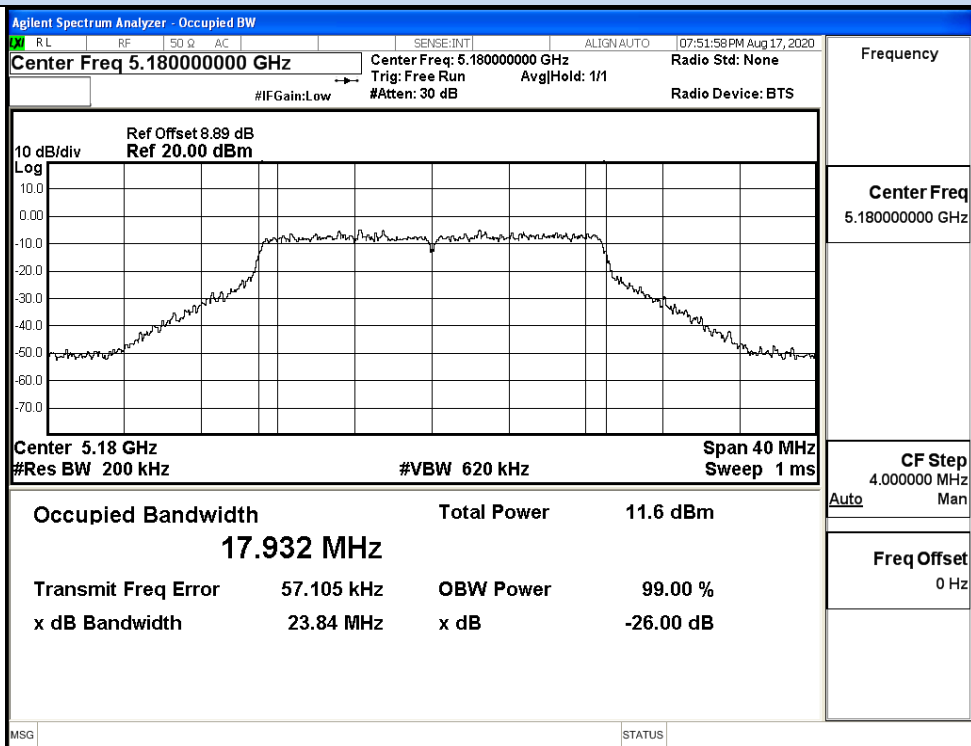
26dB Bandwidth



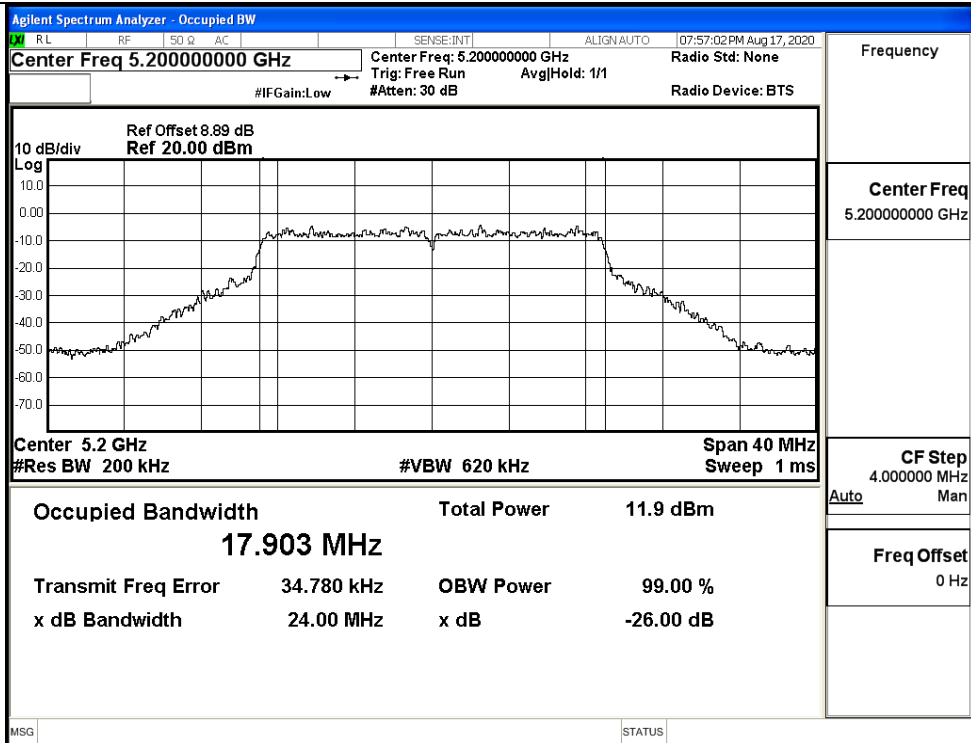
IEEE 802.11n40 / Channel 38 / 5190MHz



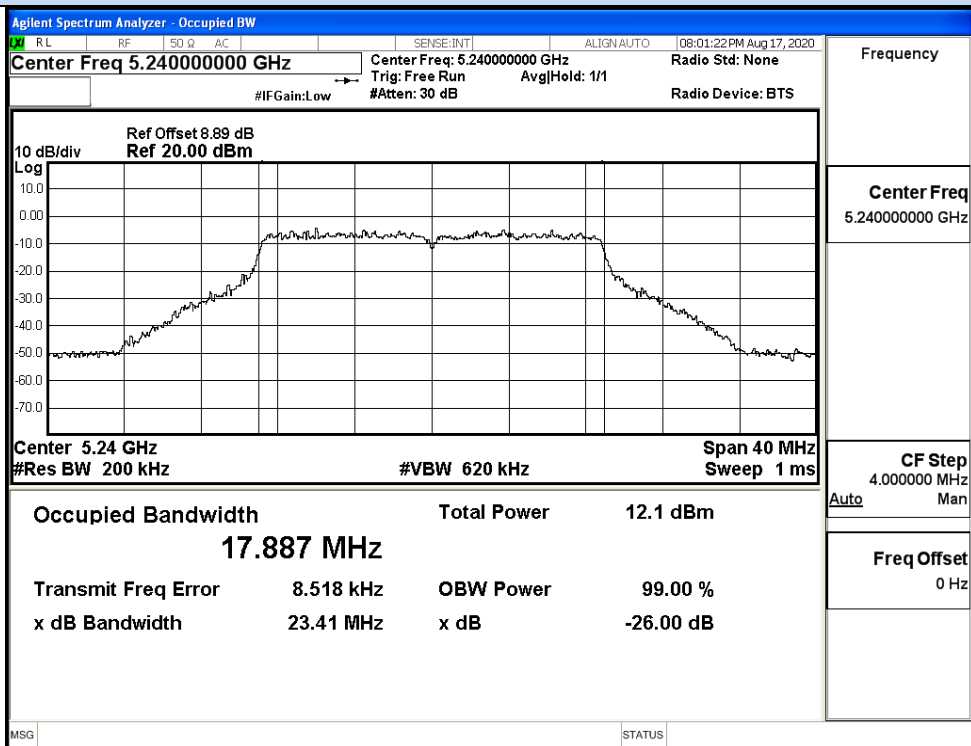
IEEE 802.11n40 / Channel 46 / 5230MHz



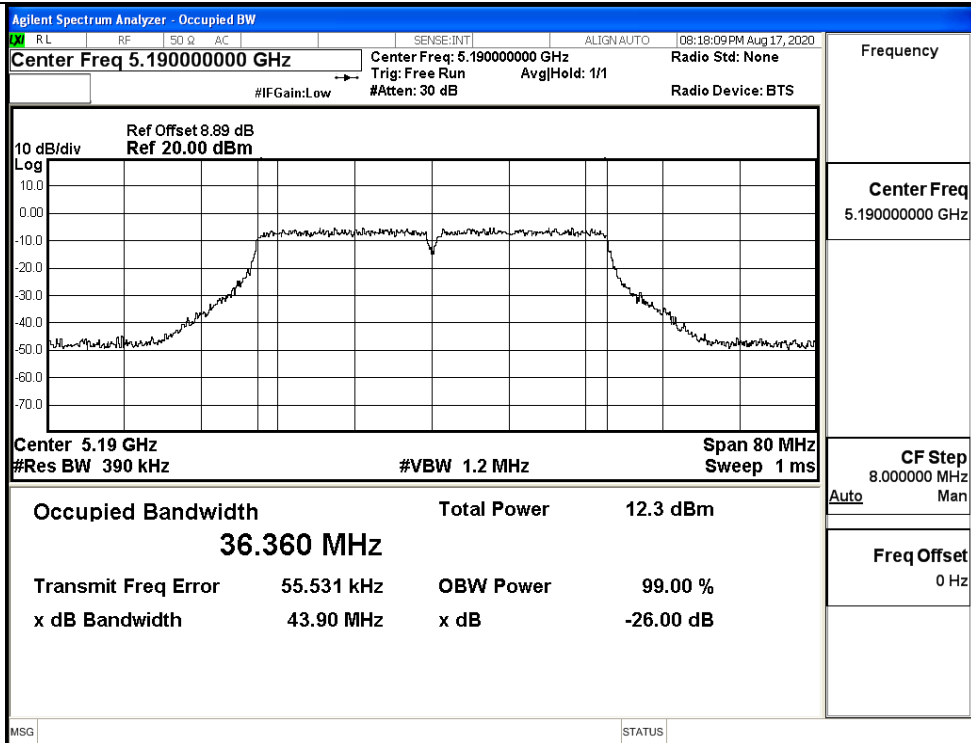
IEEE 802.11AC20 / Channel 36 / 5180MHz



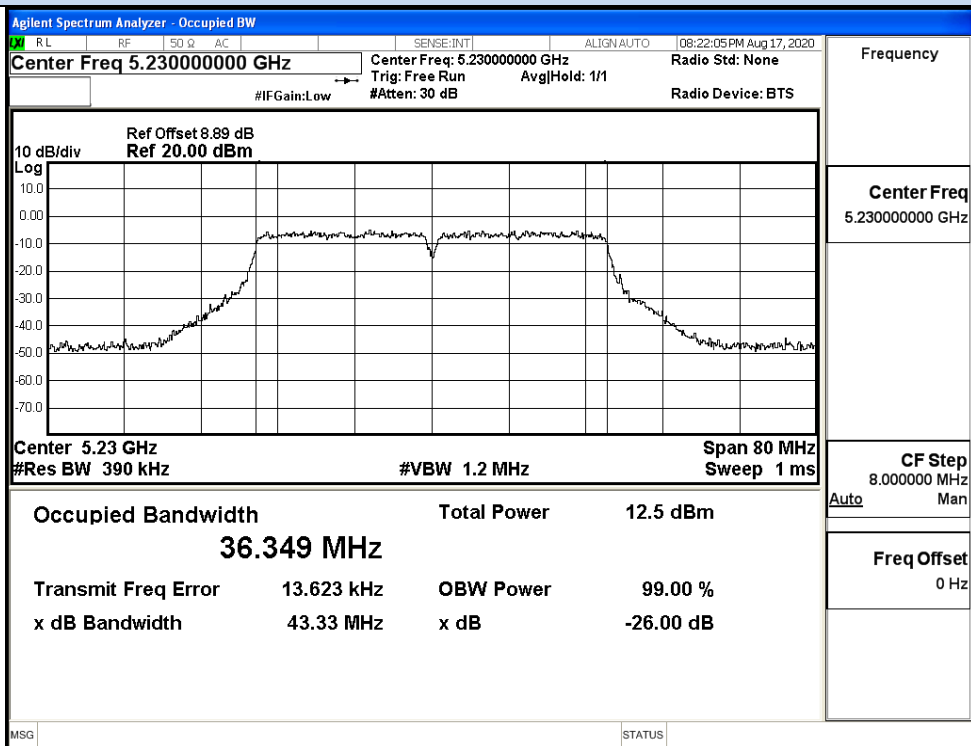
IEEE 802.11AC20 / Channel 40 / 5200MHz



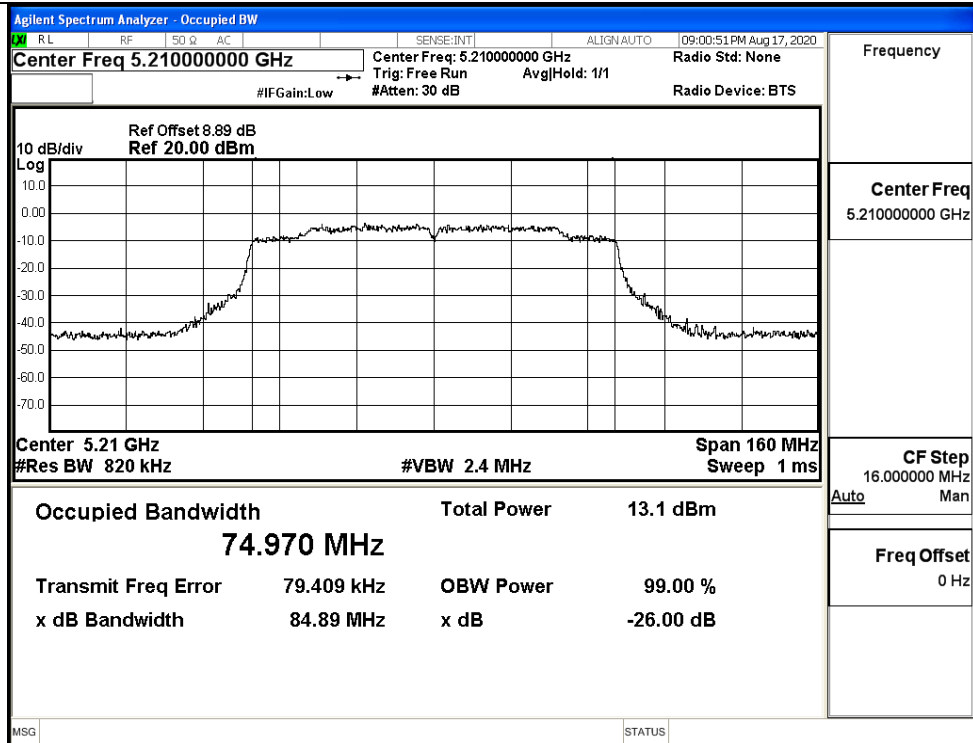
IEEE 802.11AC20 / Channel 48 / 5240MHz



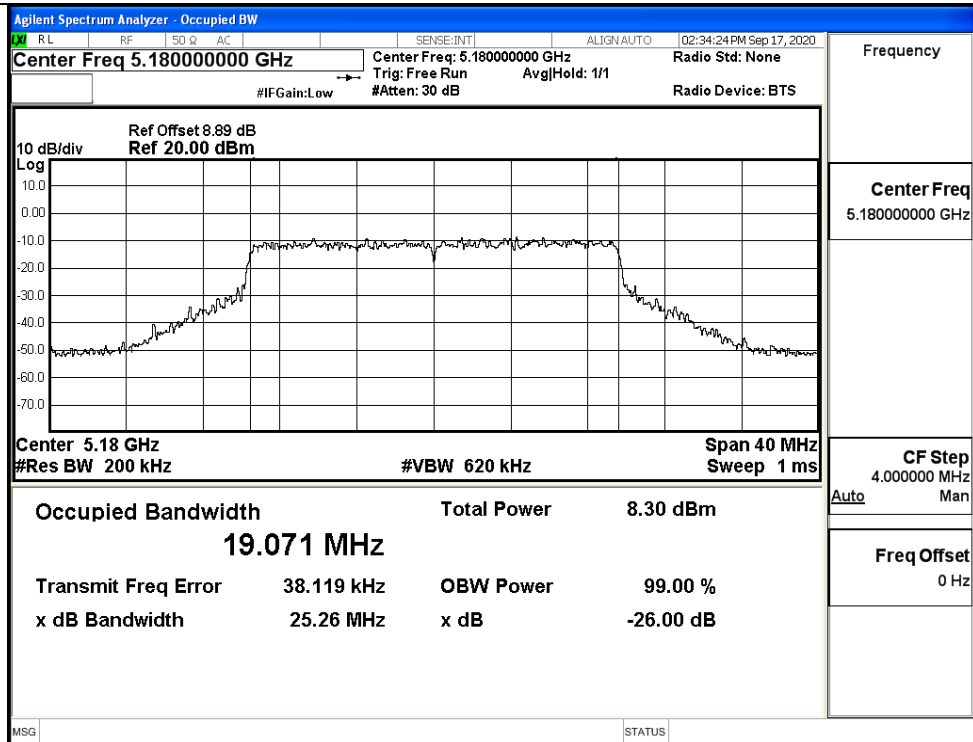
IEEE 802.11AC40 / Channel 38 / 5190MHz



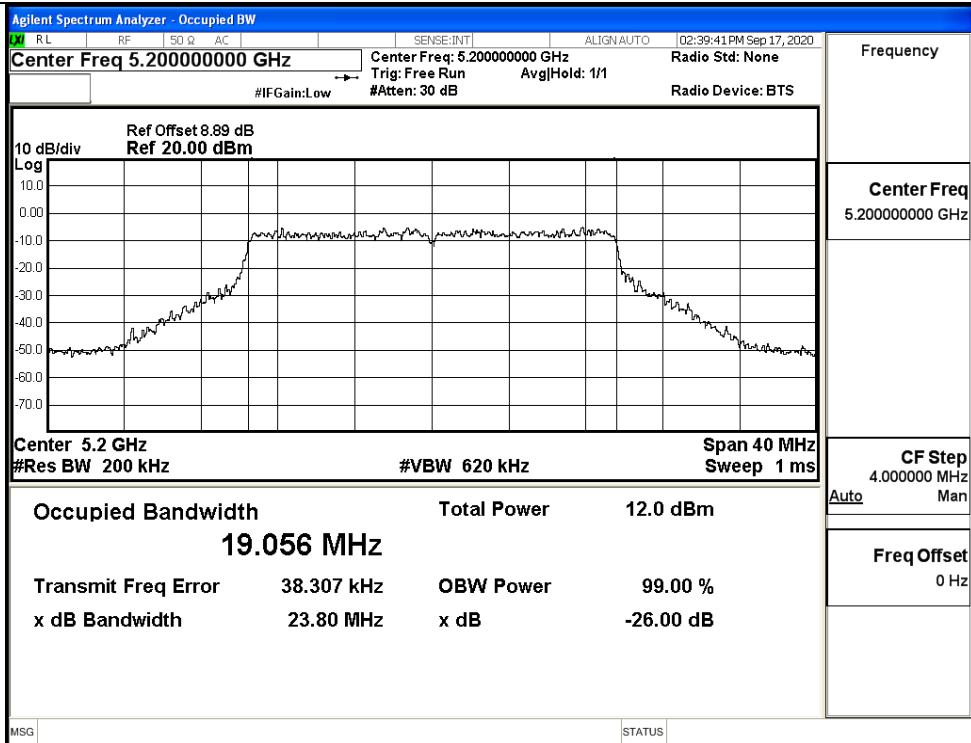
IEEE 802.11AC40 / Channel 46 / 5230MHz



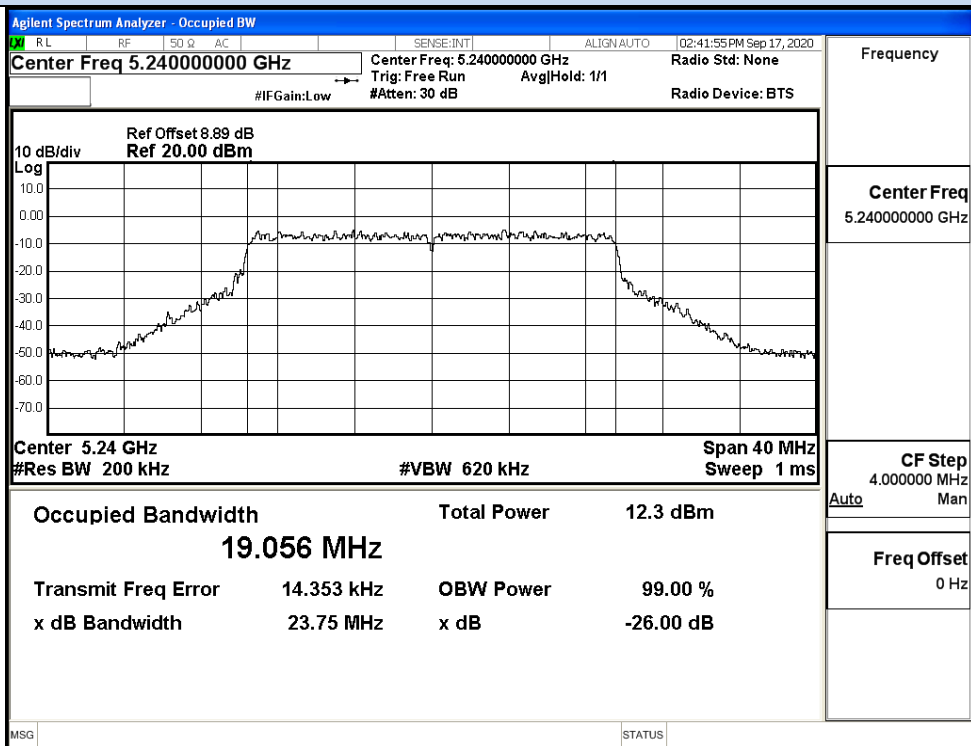
IEEE 802.11AC80 / Channel 42 / 5210MHz



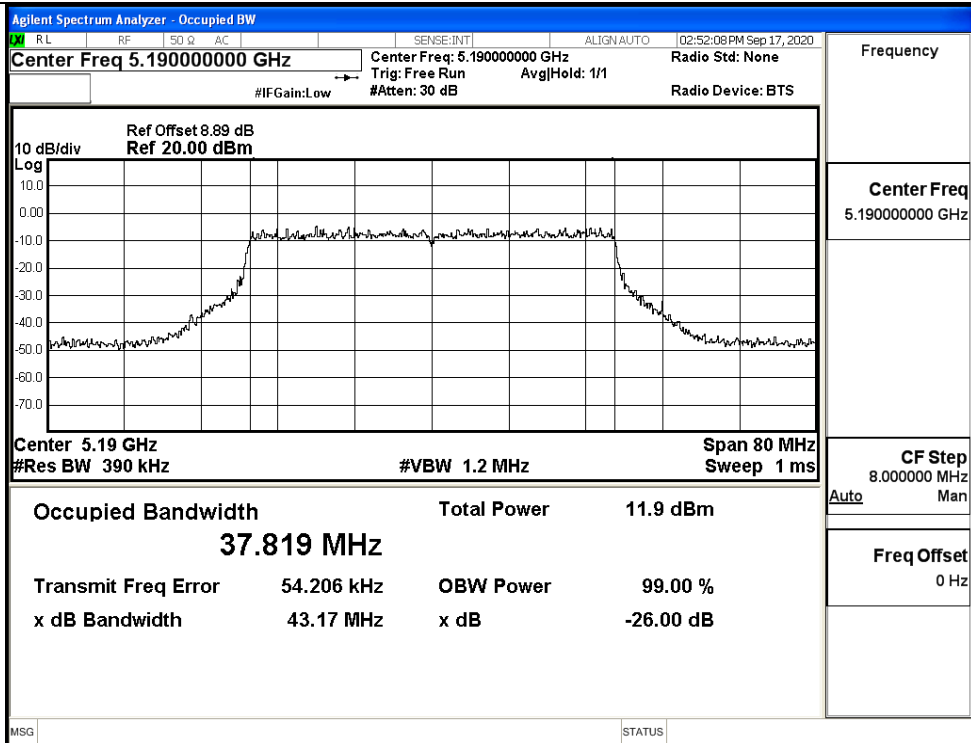
IEEE 802.11AX20 / Channel 36 / 5180MHz



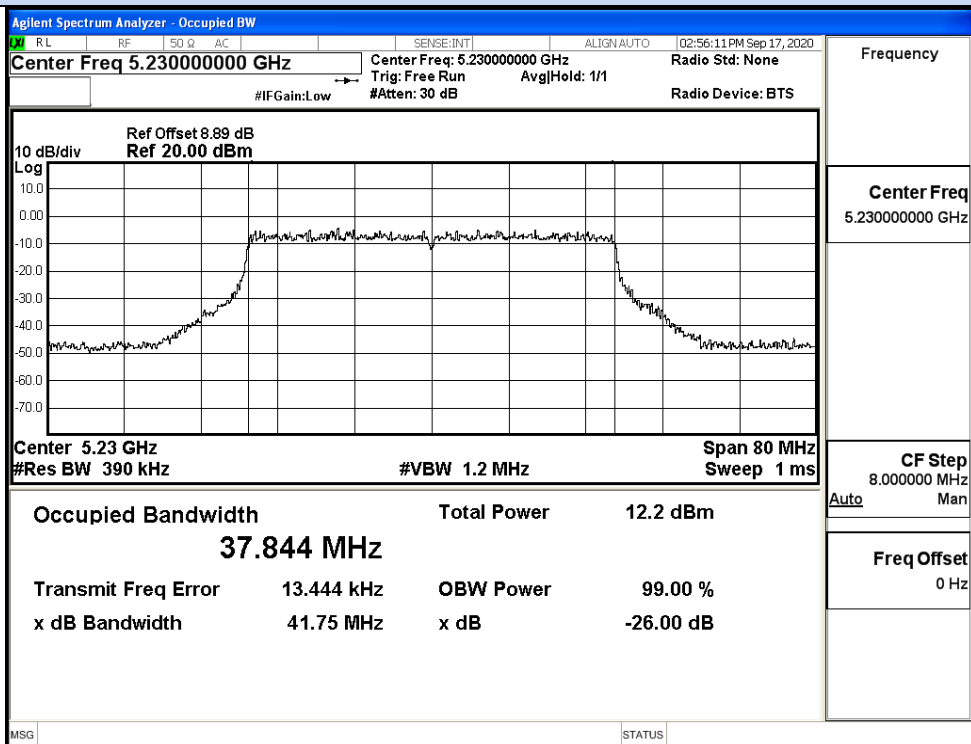
IEEE 802.11AX20 / Channel 40 / 5200MHz



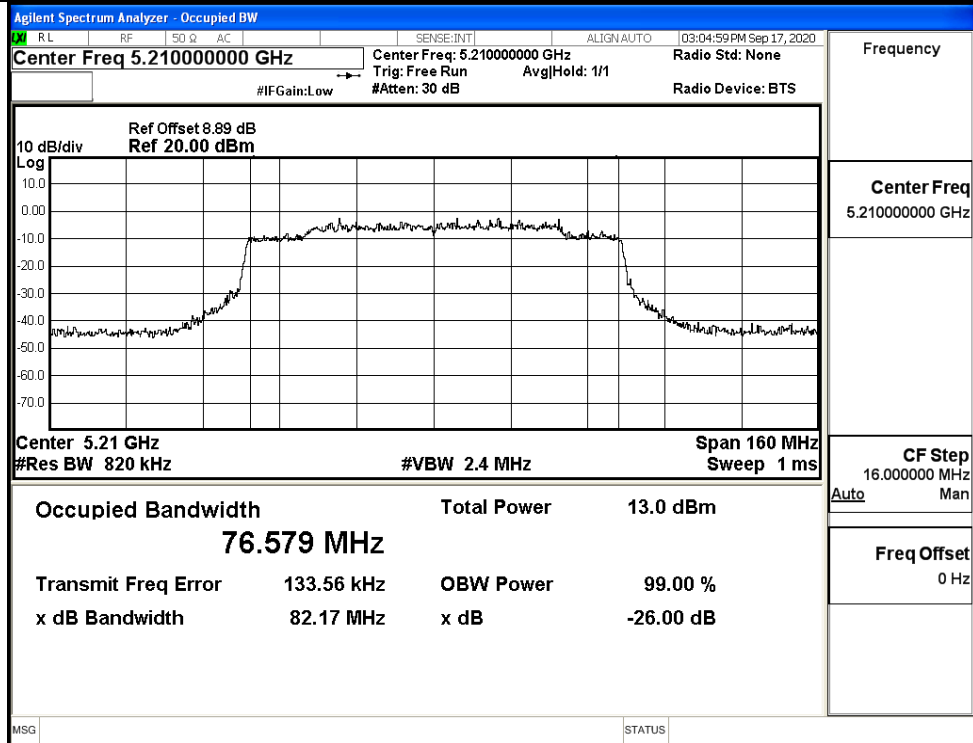
IEEE 802.11AX20 / Channel 48 / 5240MHz



IEEE 802.11AX40 / Channel 38 / 5190MHz



IEEE 802.11AX40 / Channel 46 / 5230MHz

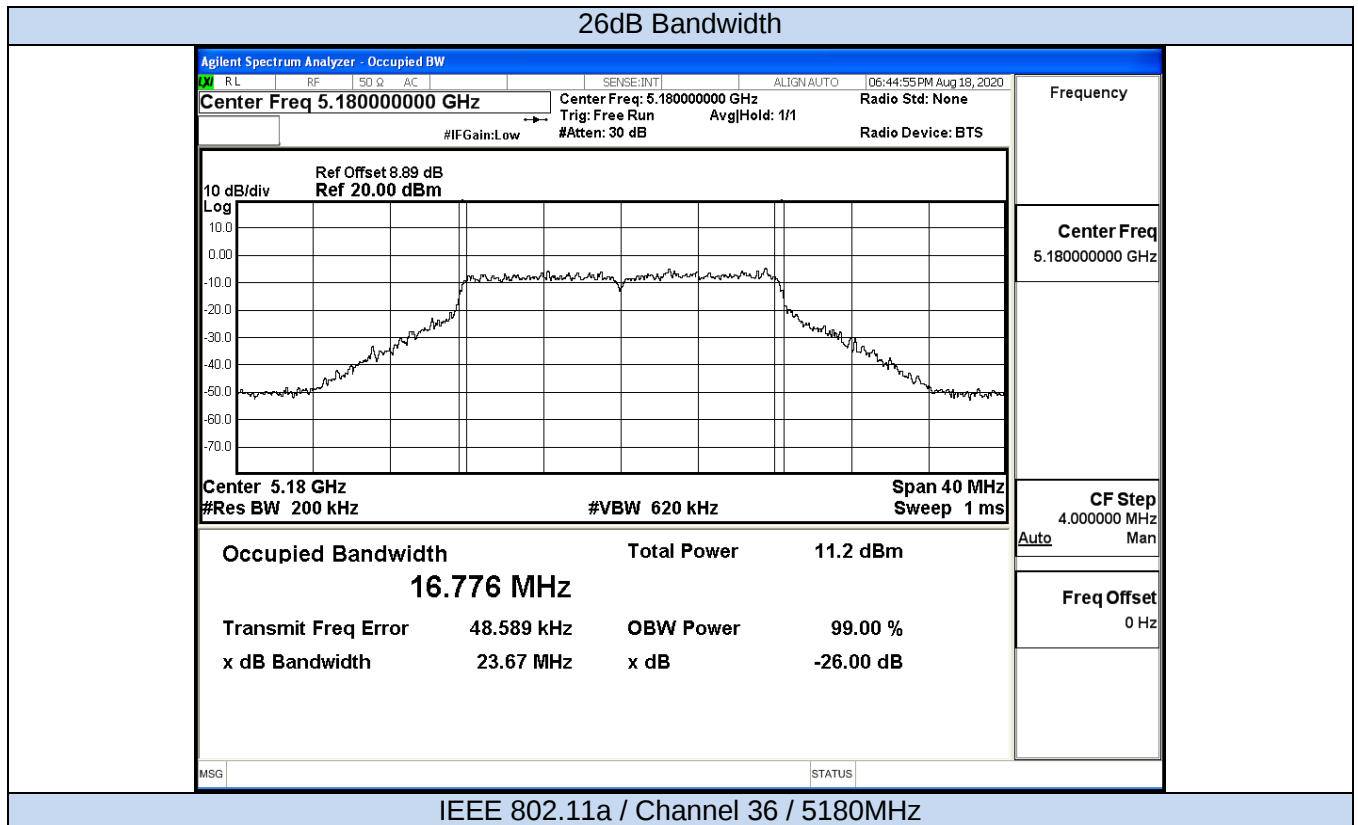


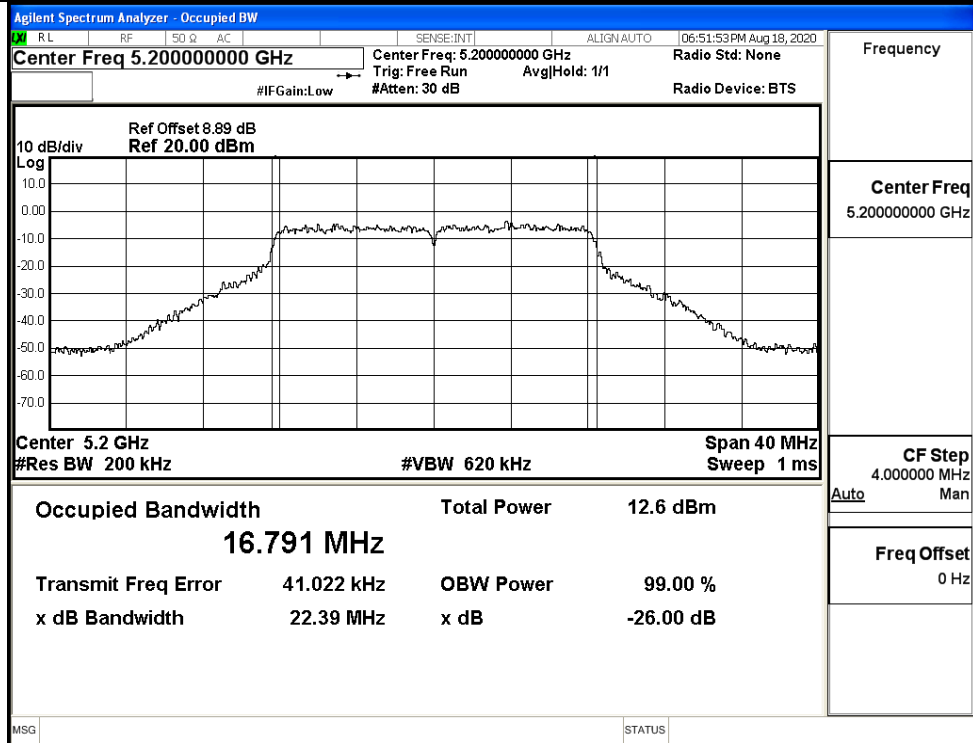
IEEE 802.11AX80 / Channel 42 / 5210MHz

Ant1

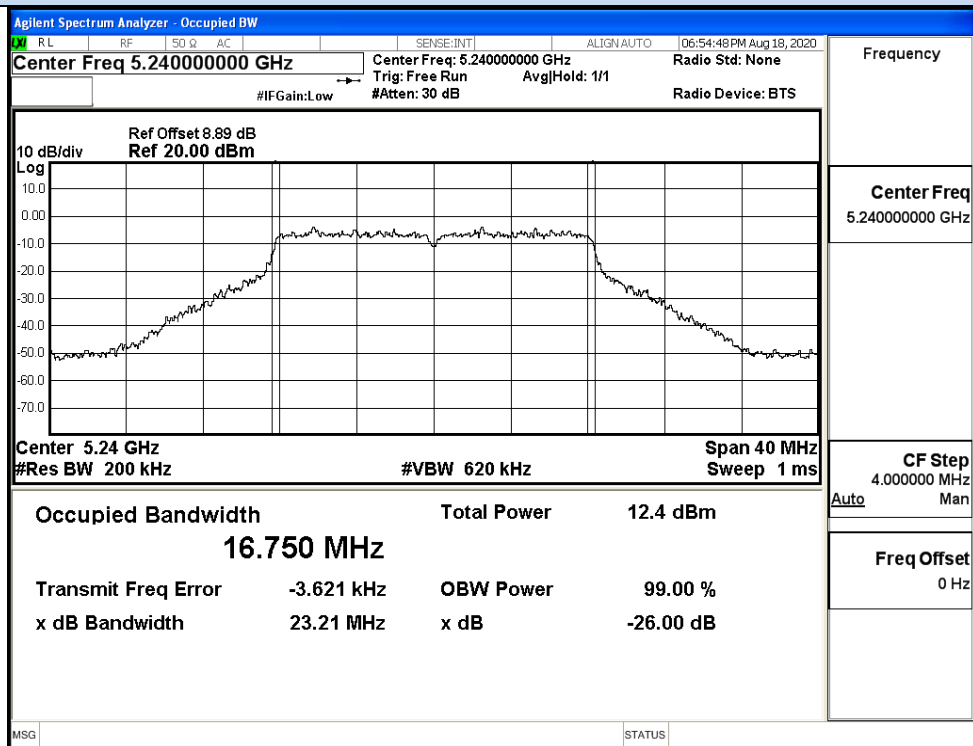
Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	36	5180	23.67	No Limit	Pass
	40	5200	22.39		Pass
	48	5240	23.21		Pass
11N20 SISO	36	5180	24.47	No Limit	Pass
	40	5200	23.94		Pass
	48	5240	23.51		Pass
11N40 SISO	38	5190	42.74	No Limit	Pass
	46	5230	42.88		Pass
11AC20 SISO	36	5180	23.02	No Limi	Pass
	40	5200	23.71		Pass
	48	5240	24.22		Pass
11AC40 SISO	38	5190	43.87	No Limi	Pass
	46	5230	42.80		Pass
11AC80 SISO	42	5210	85.88	No Limi	Pass
11AX20 SISO	36	5180	24.31	No Limi	Pass
	40	5200	23.29		Pass
	48	5240	23.13		Pass
11AX40 SISO	38	5190	42.17	No Limi	Pass
	46	5230	42.68		Pass
11AX80 SISO	42	5210	81.35	No Limi	Pass

26dB Bandwidth



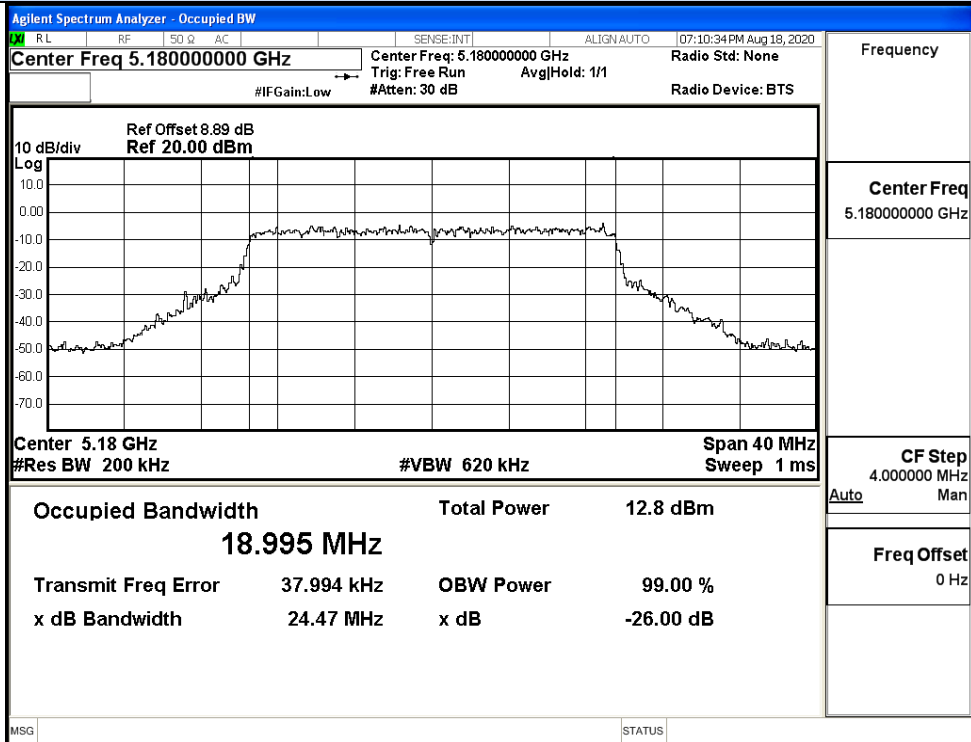


IEEE 802.11a / Channel 40 / 5200MHz

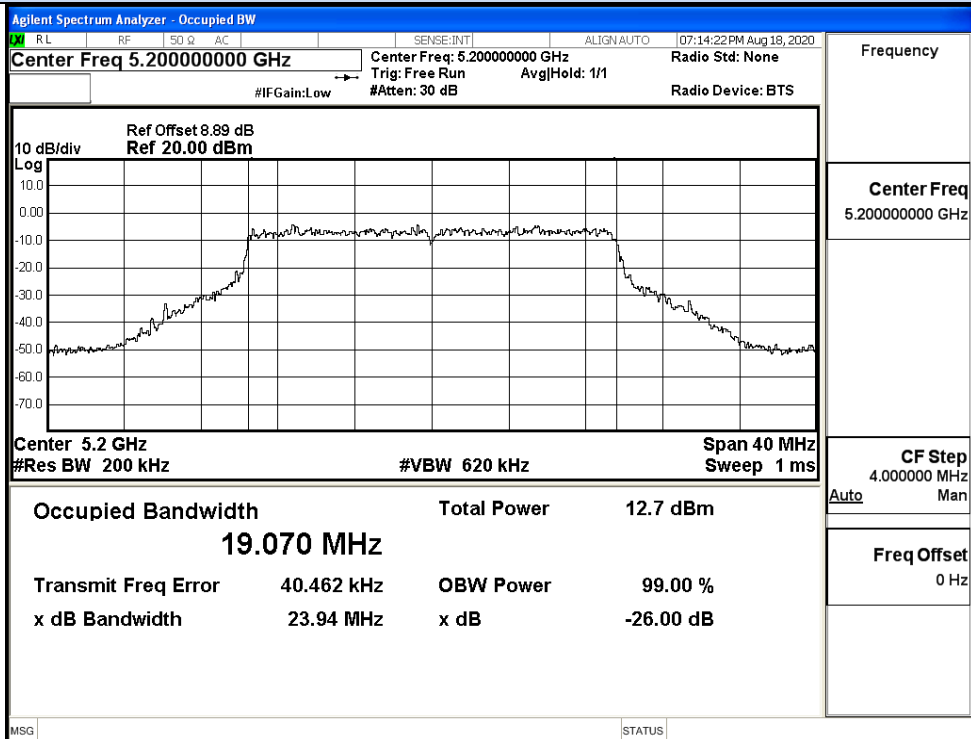


IEEE 802.11a / Channel 48 / 5240MHz

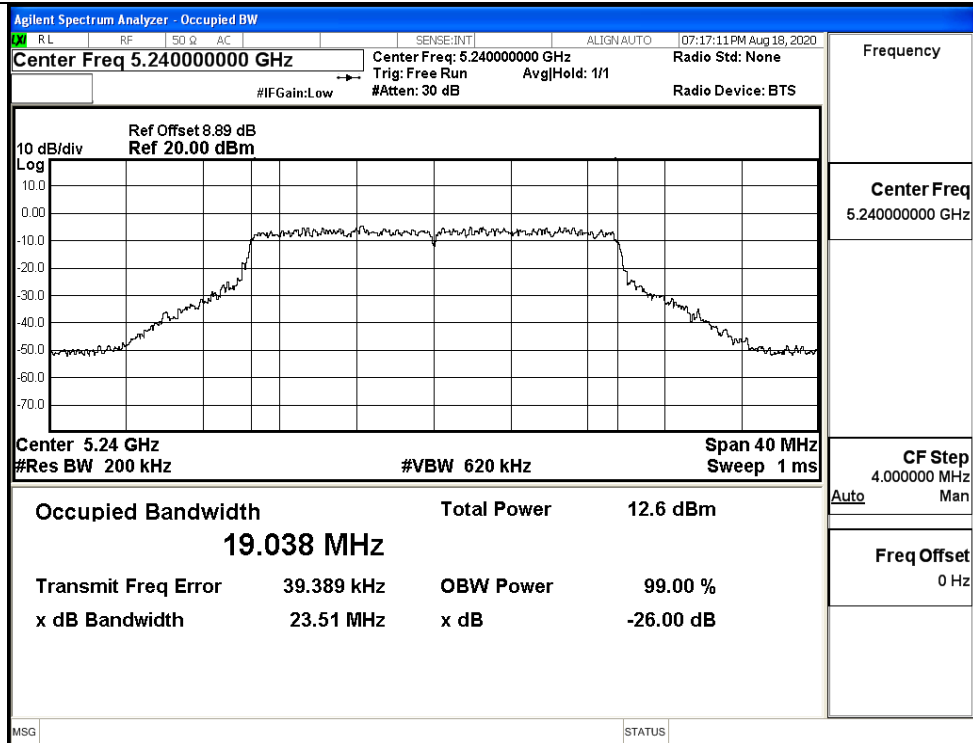
26dB Bandwidth



IEEE 802.11n20 / Channel 36 / 5180MHz

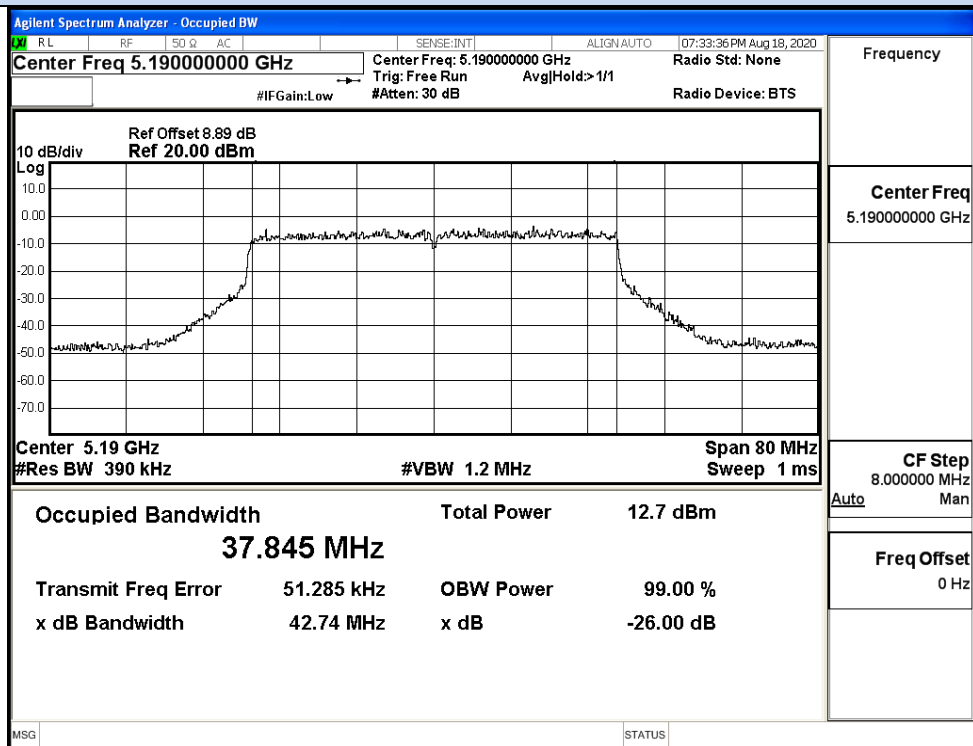


IEEE 802.11n20 / Channel 40 / 5200MHz

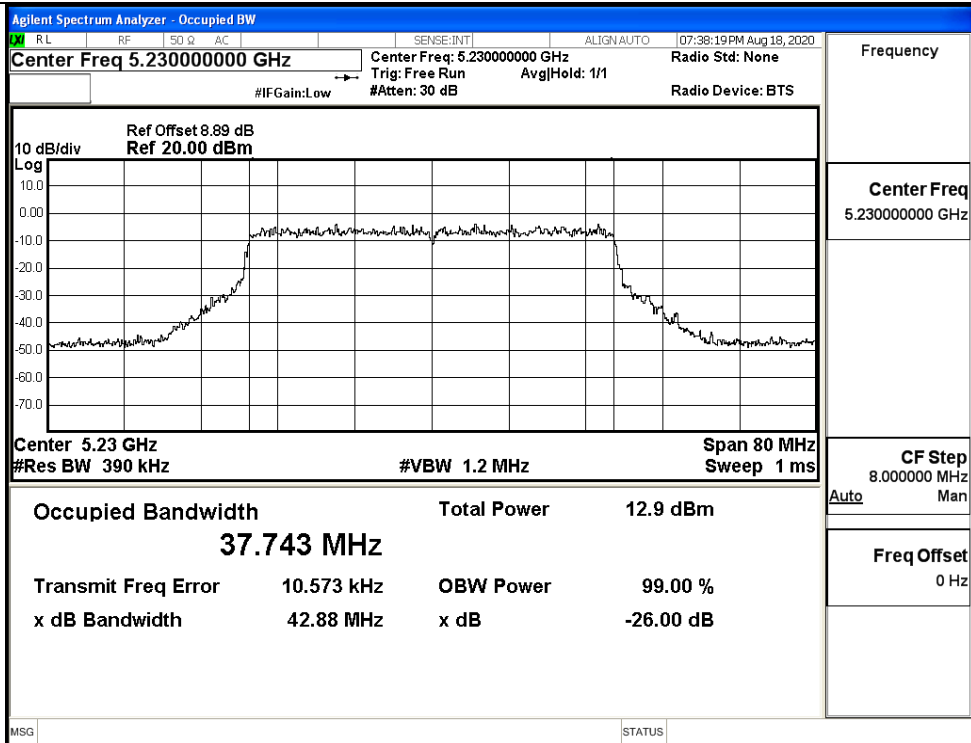


IEEE 802.11n20 / Channel 48 / 5240MHz

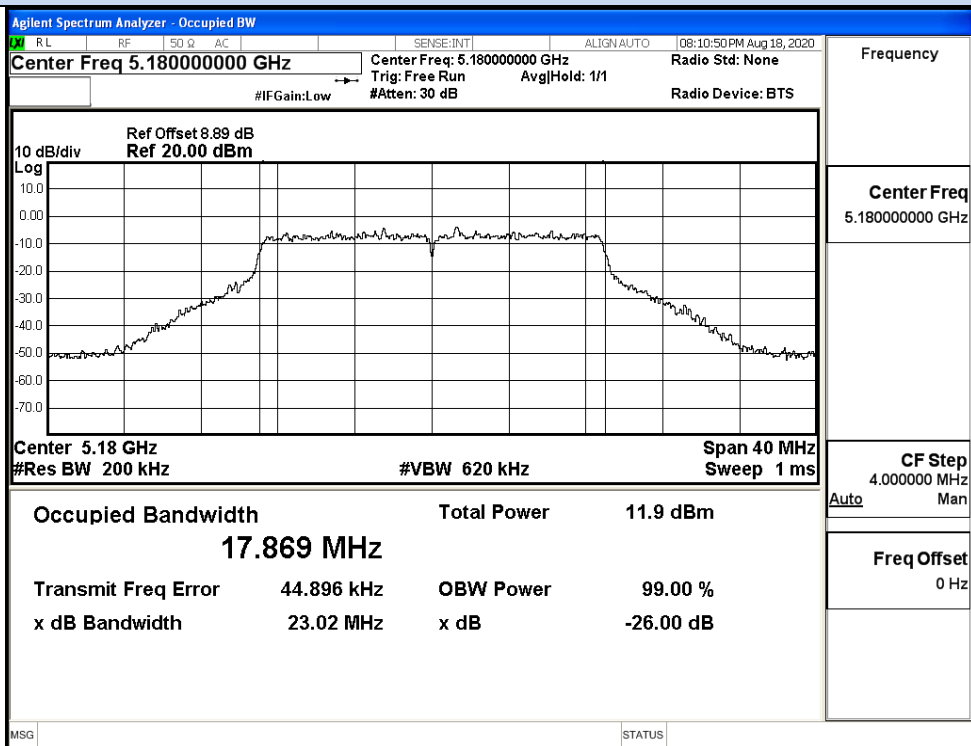
26dB Bandwidth



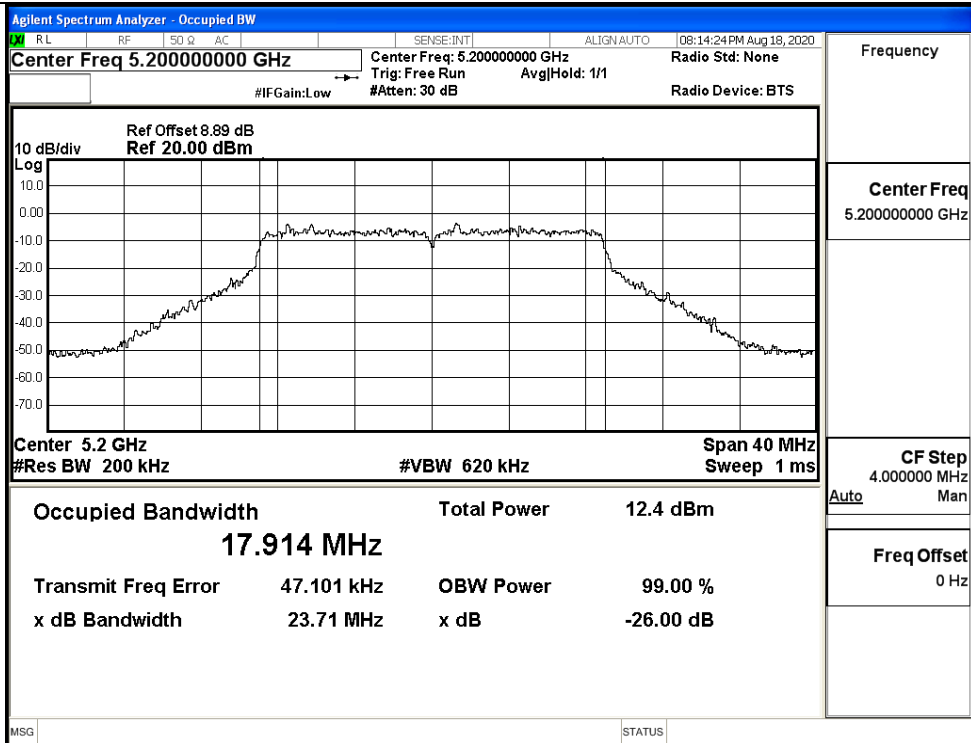
IEEE 802.11n40 / Channel 38 / 5190MHz



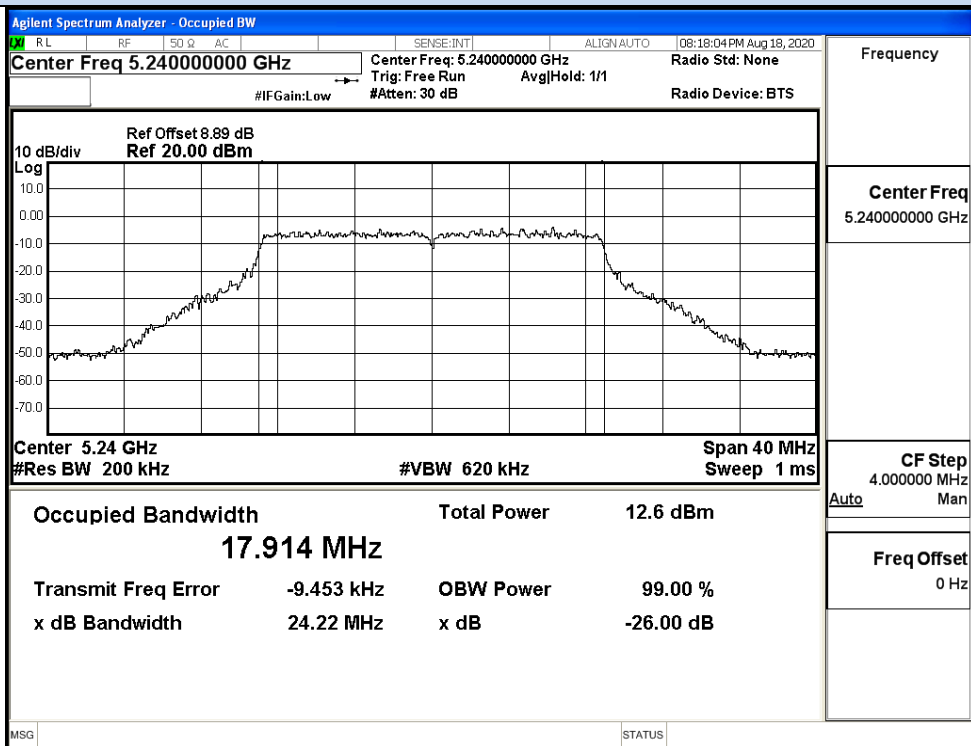
IEEE 802.11n40 / Channel 46 / 5230MHz



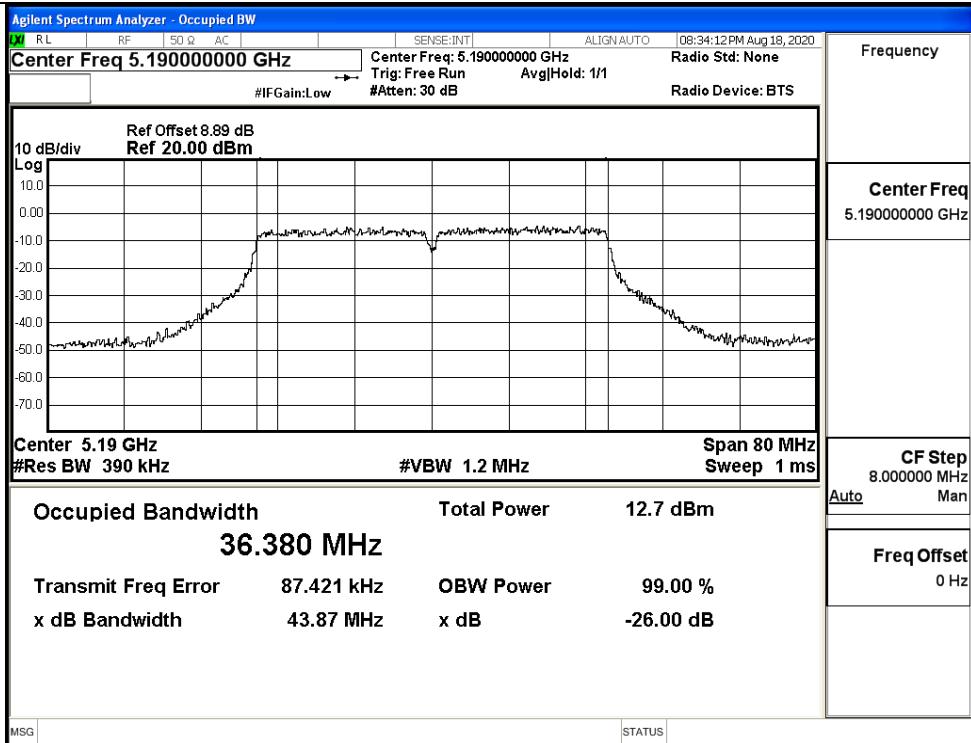
IEEE 802.11AC20 / Channel 36 / 5180MHz



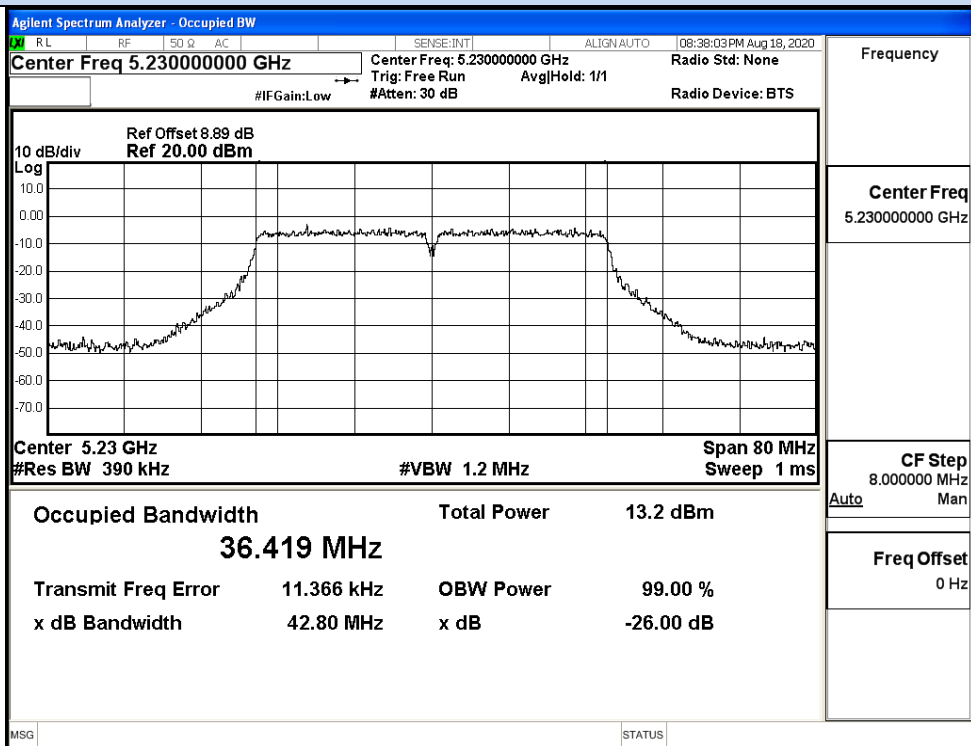
IEEE 802.11AC20 / Channel 40 / 5200MHz



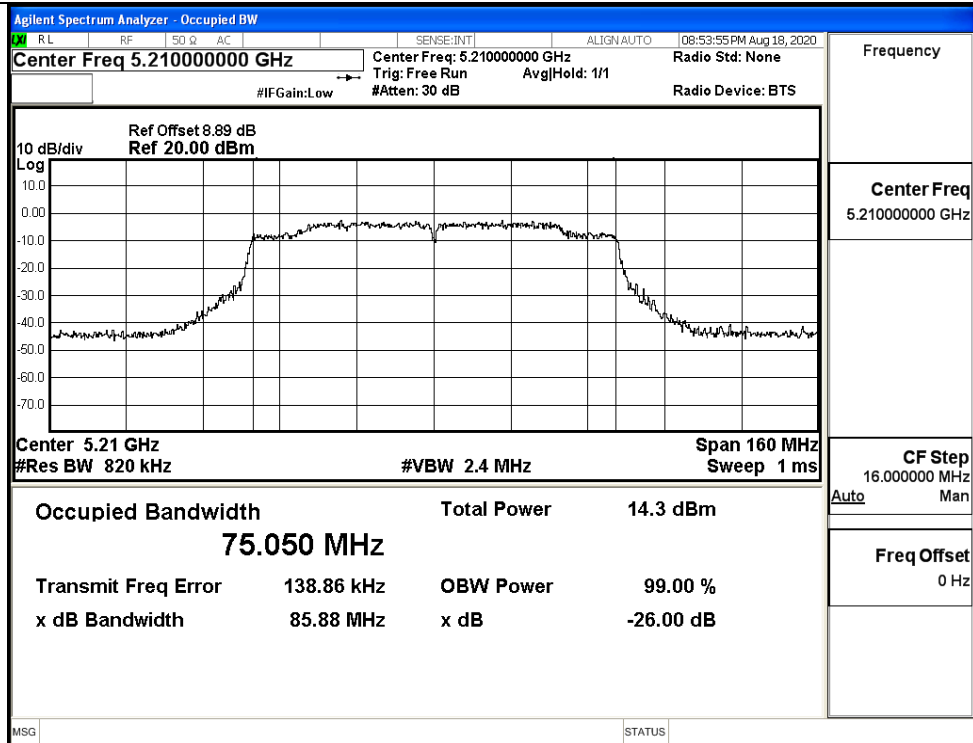
IEEE 802.11AC20 / Channel 48 / 5240MHz



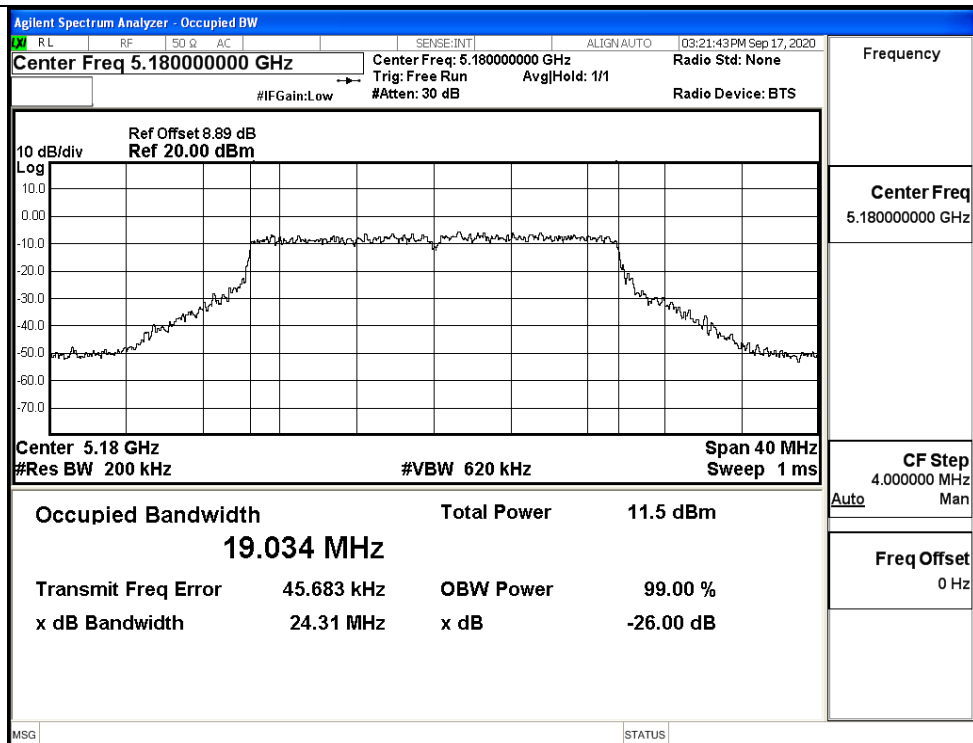
IEEE 802.11AC40 / Channel 38 / 5190MHz



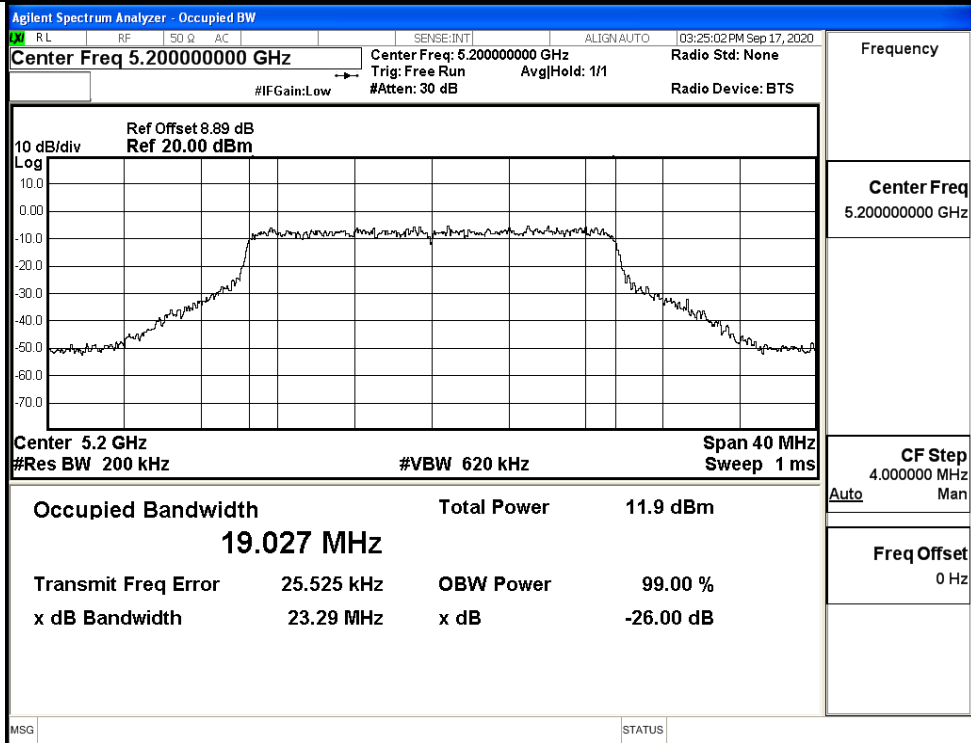
IEEE 802.11AC40 / Channel 46 / 5230MHz



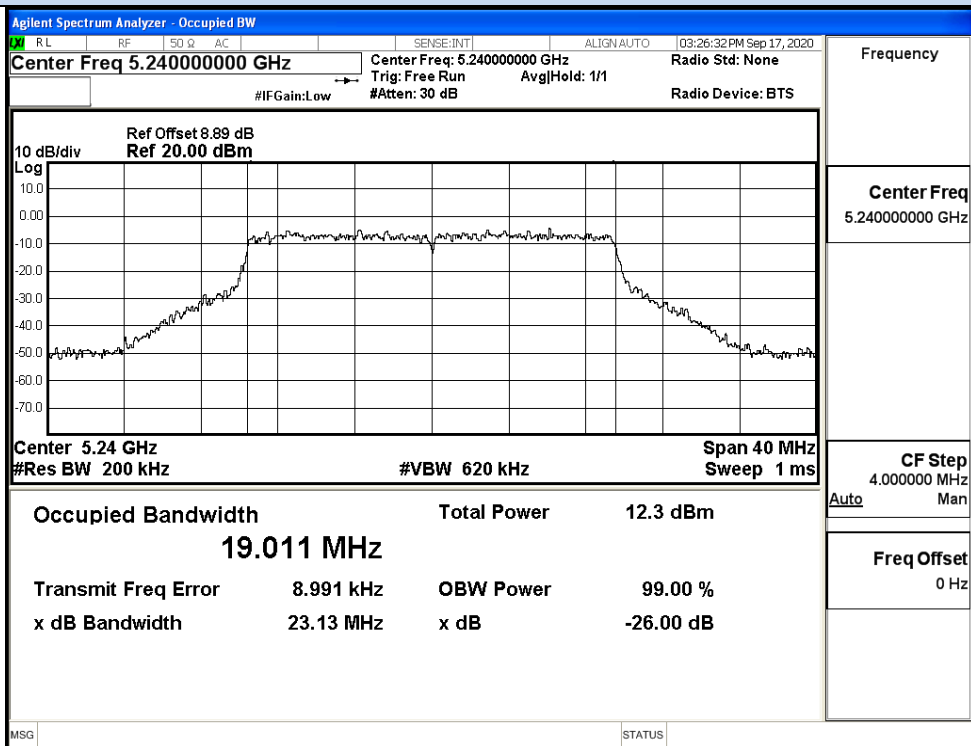
IEEE 802.11AC80 / Channel 42 / 5210MHz



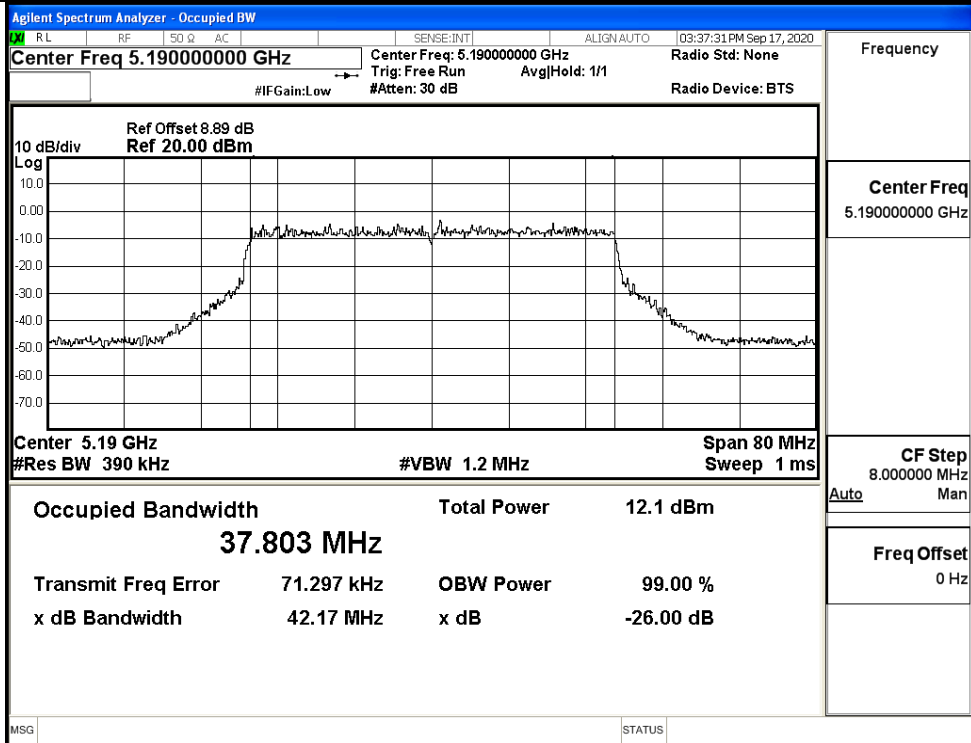
IEEE 802.11AX20 / Channel 36 / 5180MHz



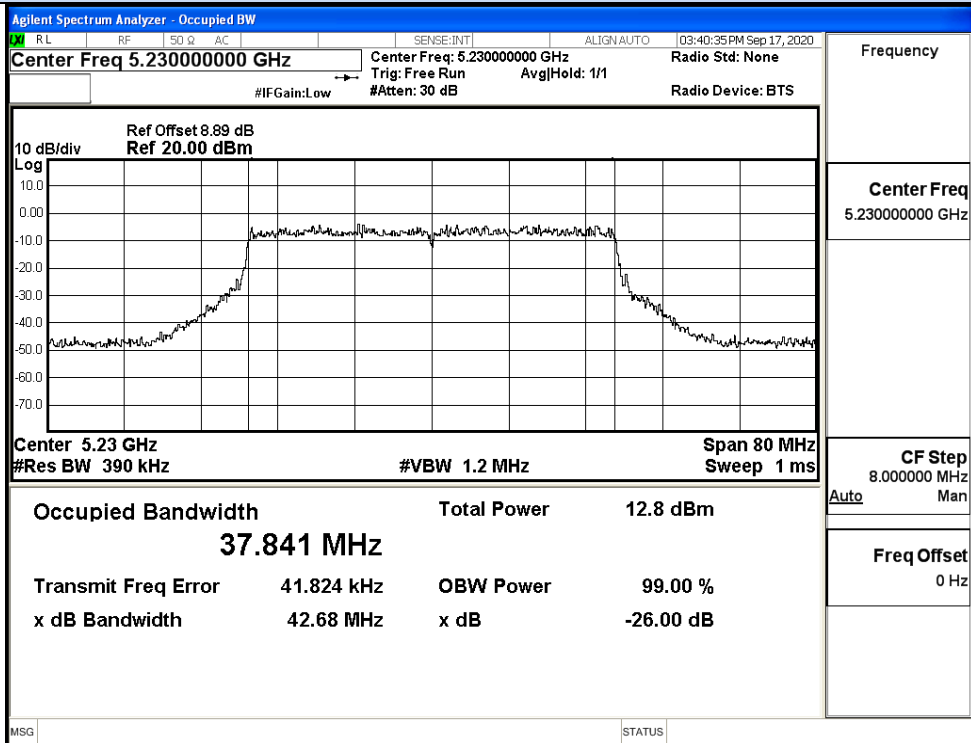
IEEE 802.11AX20 / Channel 40 / 5200MHz



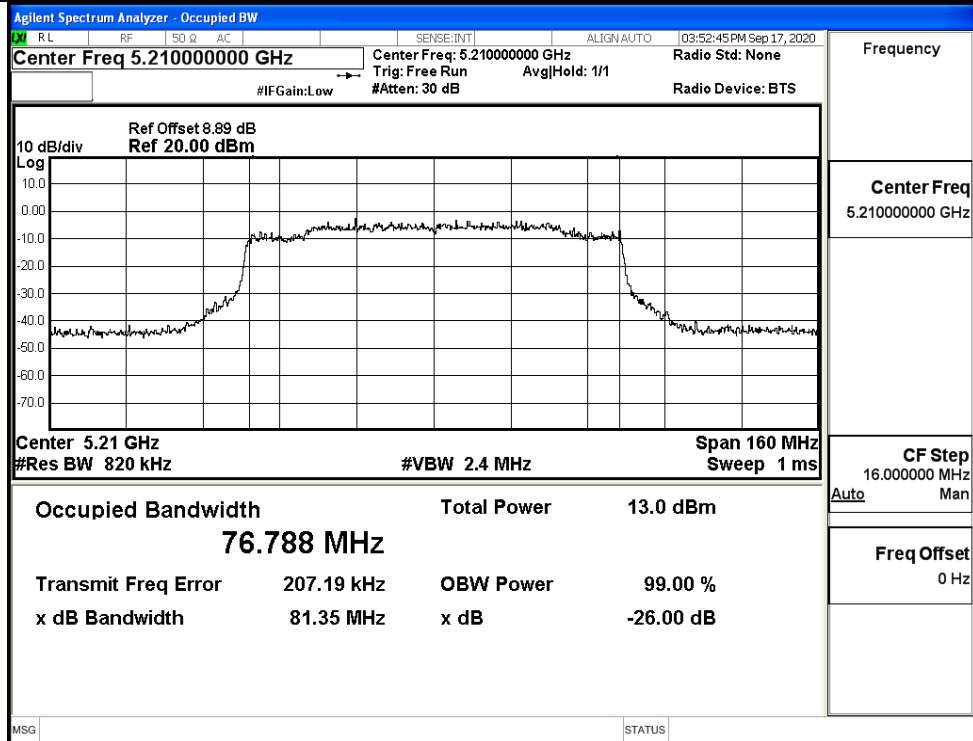
IEEE 802.11AX20 / Channel 48 / 5240MHz



IEEE 802.11AX40 / Channel 38 / 5190MHz



IEEE 802.11AX40 / Channel 46 / 5230MHz



IEEE 802.11AX80 / Channel 42 / 5210MHz