Appendix D

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Smart TV Box

Trade Mark: N/A

Test Model: T95

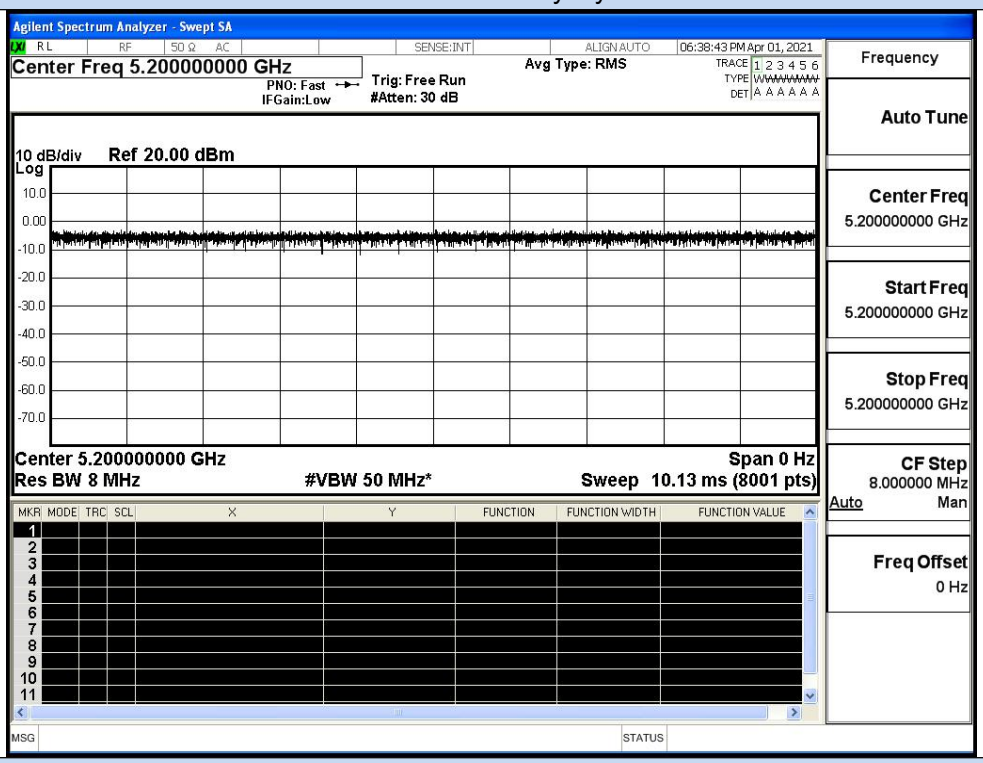
Environmental Conditions

Temperature:	24.6 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

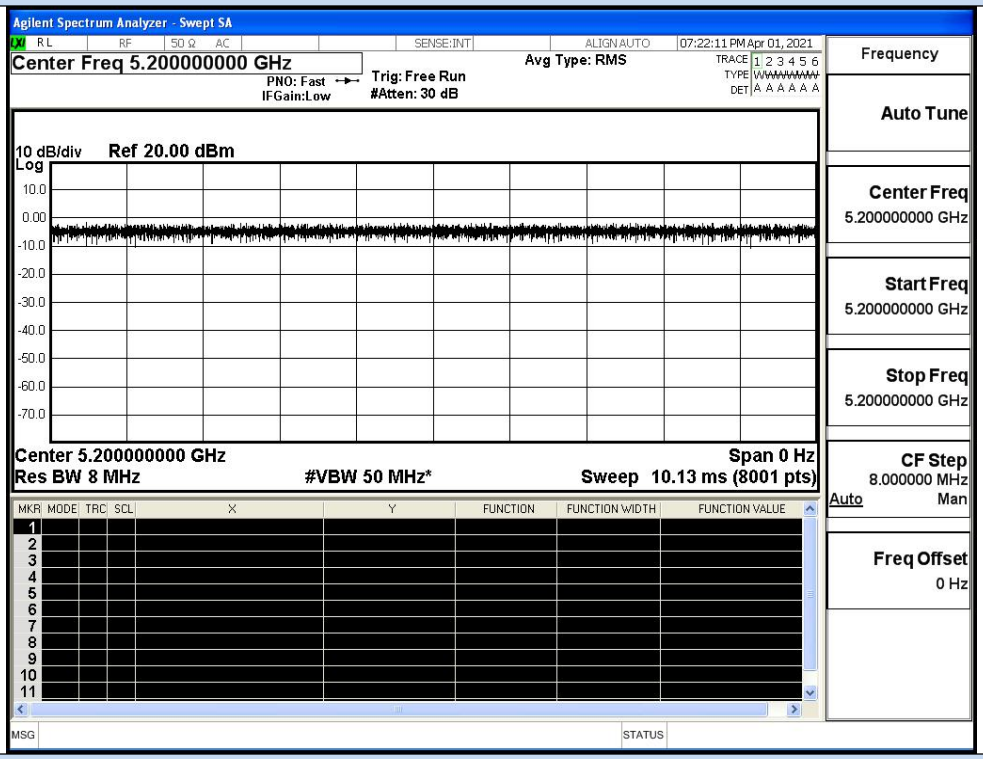
D.1 Duty Cycle

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
11AC80 SISO	5210	100	0.00	0.01

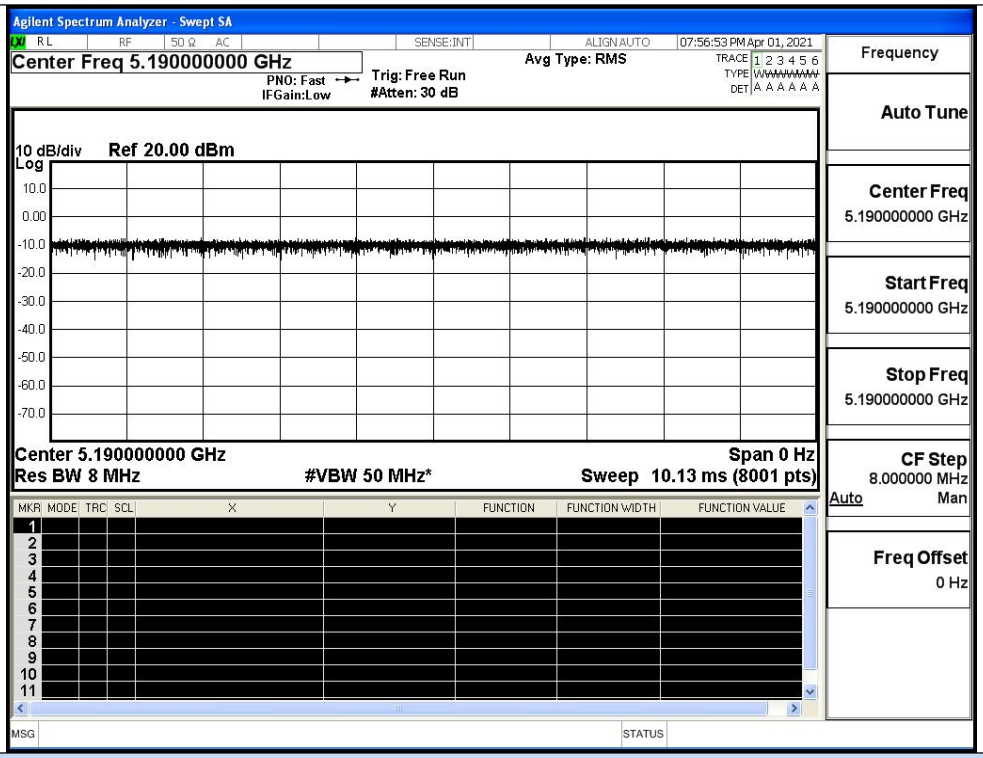
On Time and Duty Cycle



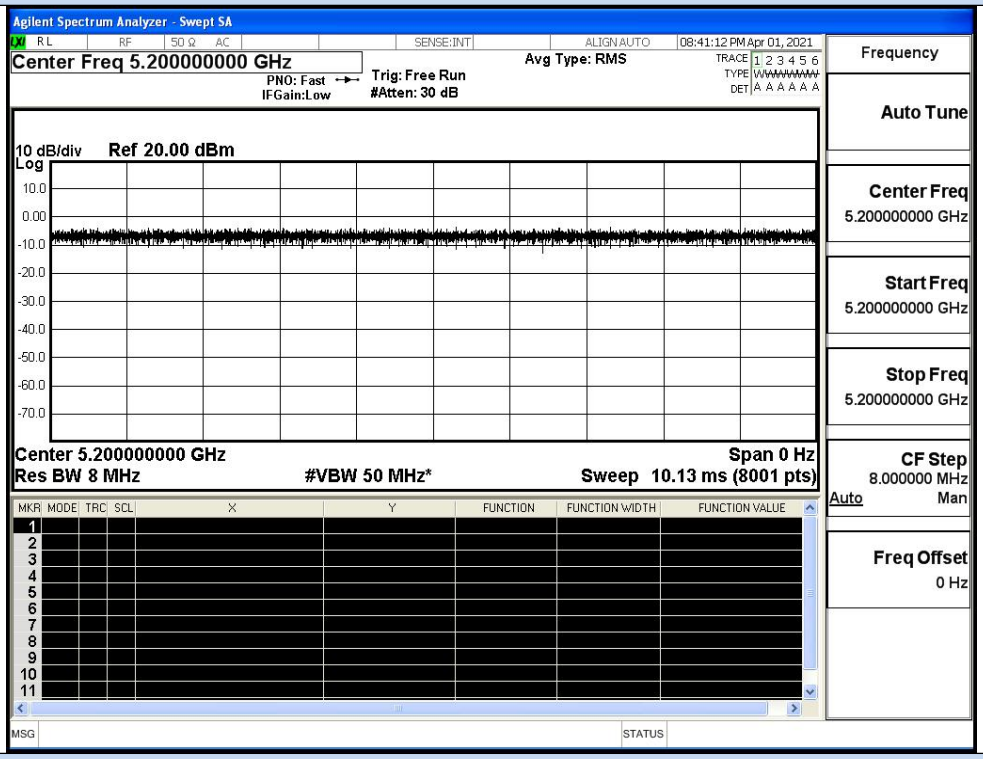
IEEE 802.11a



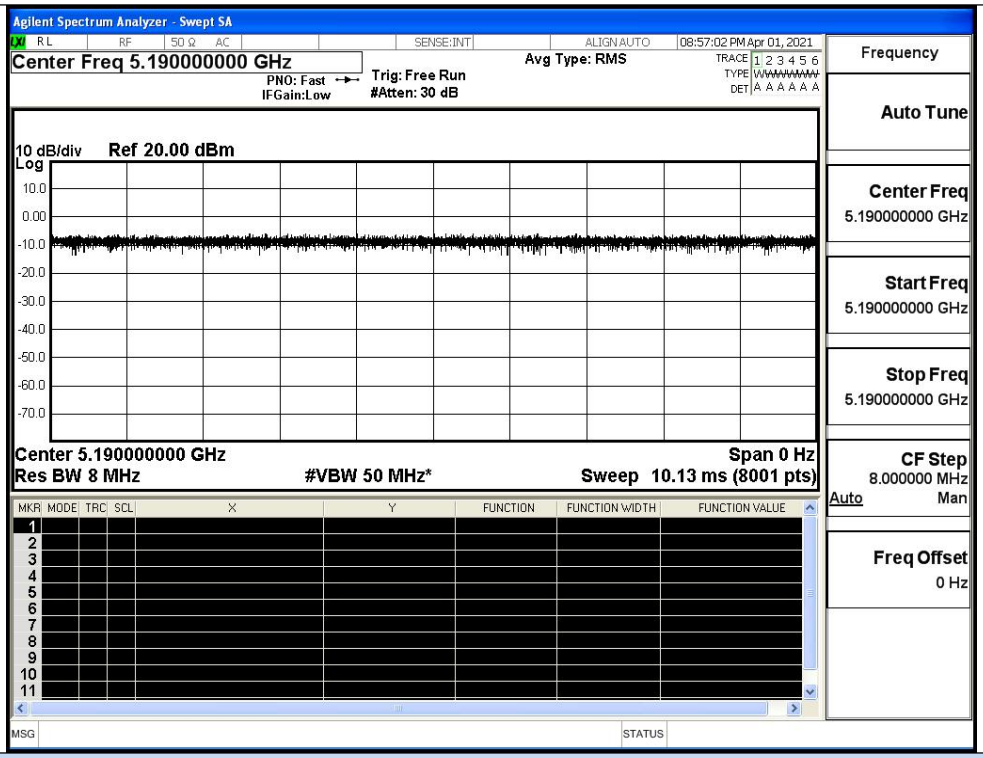
IEEE 802.11n HT20



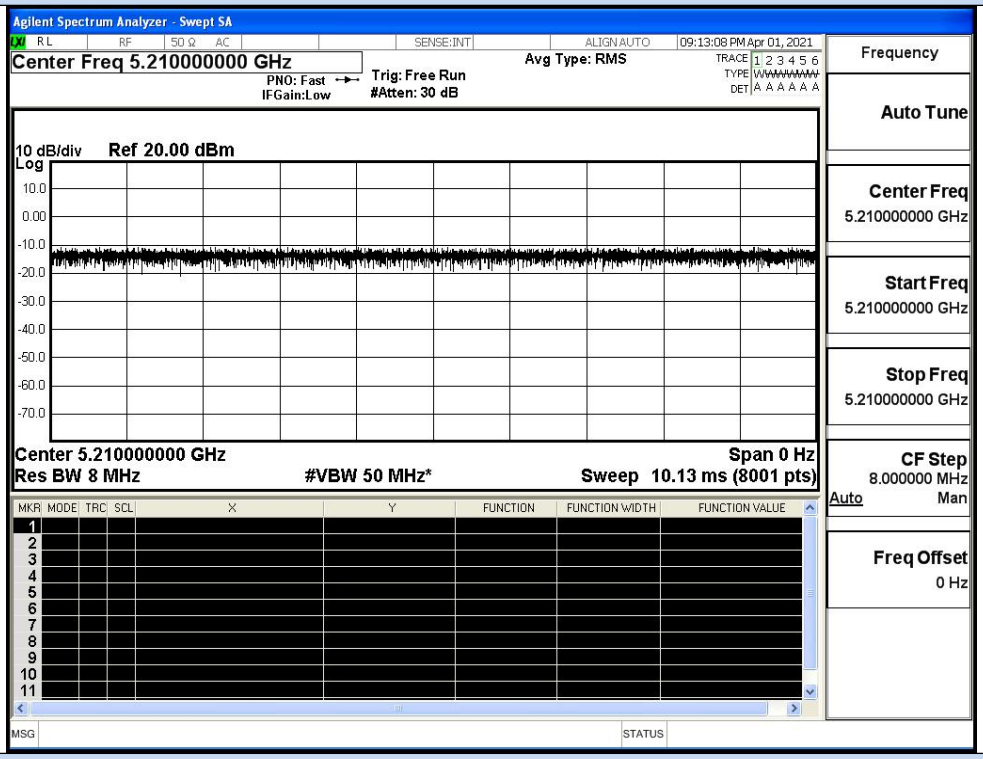
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11 AC40



IEEE 802.11AC80

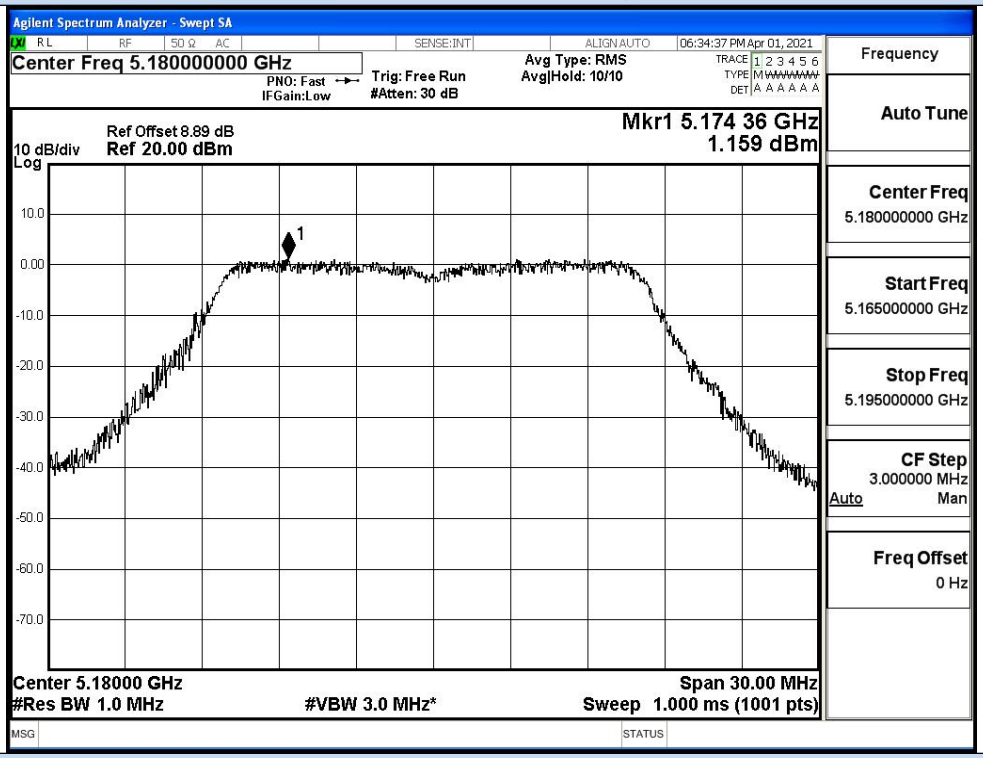
D.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	11.92	0	11.92	24	Pass
	40	5200	11.56	0	11.56		Pass
	48	5240	10.72	0	10.72		Pass
11N20 SISO	36	5180	11.97	0	11.97	24	Pass
	40	5200	12.75	0	12.75		Pass
	48	5240	10.98	0	10.98		Pass
11N40 SISO	38	5190	10.17	0	10.17	24	Pass
	46	5230	10.36	0	10.36		Pass
11AC20 SISO	36	5180	11.03	0	11.03	24	Pass
	40	5200	10.66	0	10.66		Pass
	48	5240	10.82	0	10.82		Pass
11AC40 SISO	38	5190	11.75	0	11.75	24	Pass
	46	5230	10.64	0	10.64		Pass
11AC80 SISO	42	5210	10.51	0	10.51	24	Pass

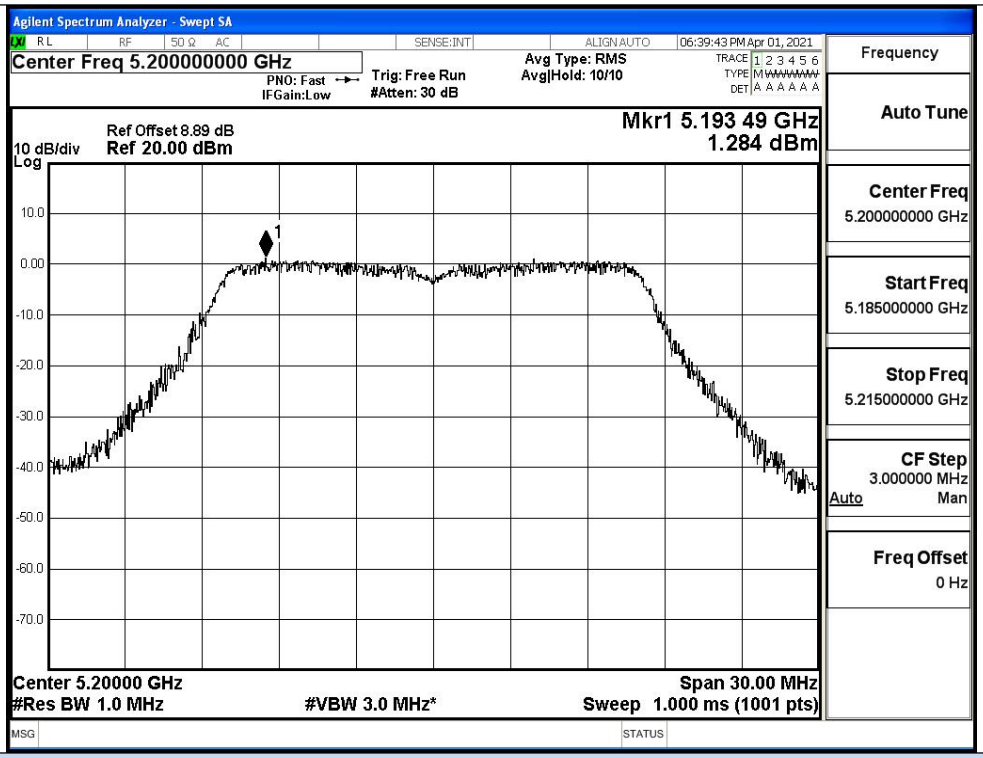
D.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	1.16	0	1.16	11	Pass
	40	5200	1.28	0	1.28		Pass
	48	5240	0.52	0	0.52		Pass
11N20 SISO	36	5180	1.07	0	1.07	11	Pass
	40	5200	1.88	0	1.88		Pass
	48	5240	0.21	0	0.21		Pass
11N40 SISO	38	5190	-3.41	0	-3.41	11	Pass
	46	5230	-3.13	0	-3.13		Pass
11AC20 SISO	36	5180	0.00	0	0.00	11	Pass
	40	5200	0.00	0	0.00		Pass
	48	5240	0.08	0	0.08		Pass
11AC40 SISO	38	5190	-2.25	0	-2.25	11	Pass
	46	5230	-2.86	0	-2.86		Pass
11AC80 SISO	42	5210	-5.63	0	-5.63	11	Pass

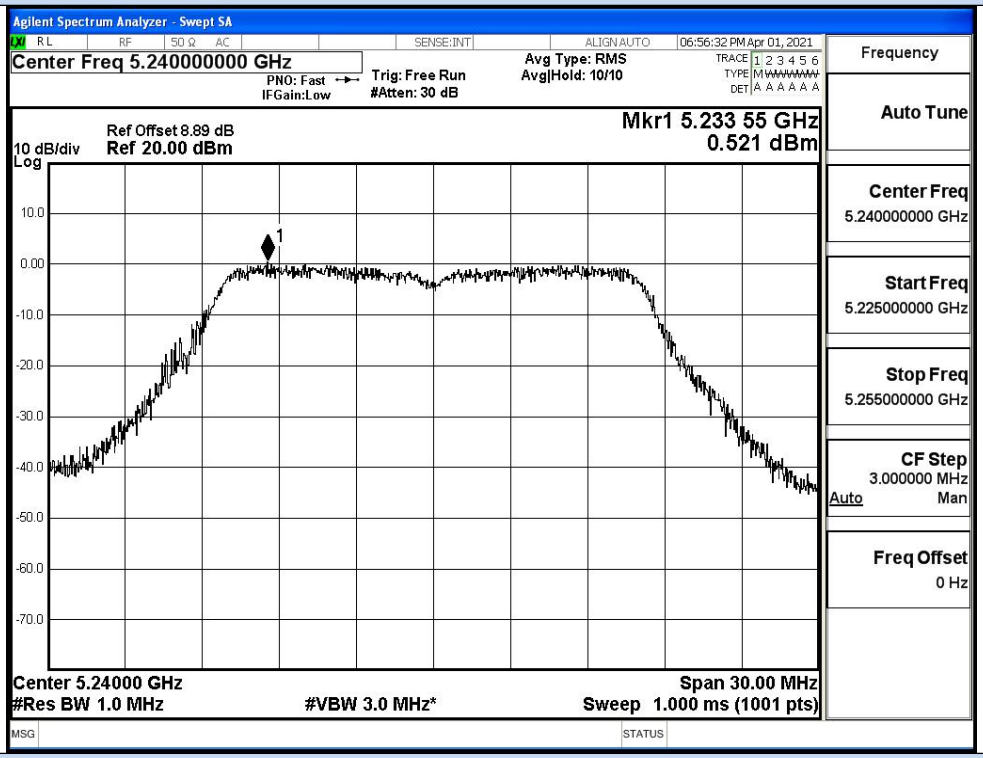
Power Spectral Density



IEEE 802.11a / Channel 36 / 5180MHz

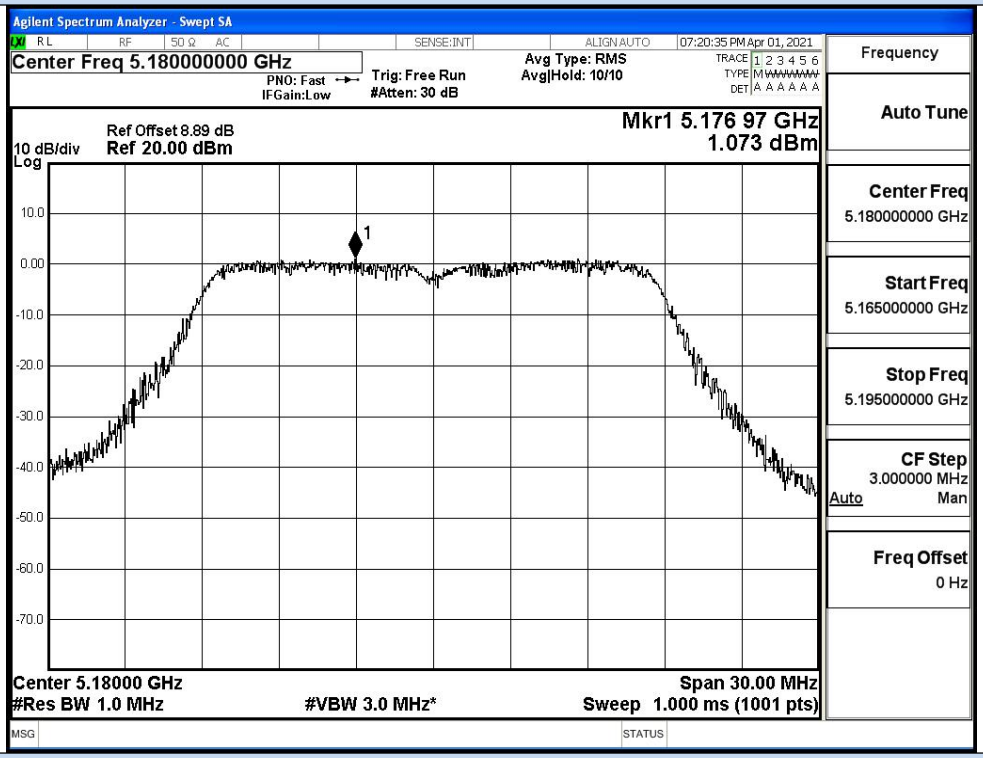


IEEE 802.11na / Channel 40 / 5200MHz

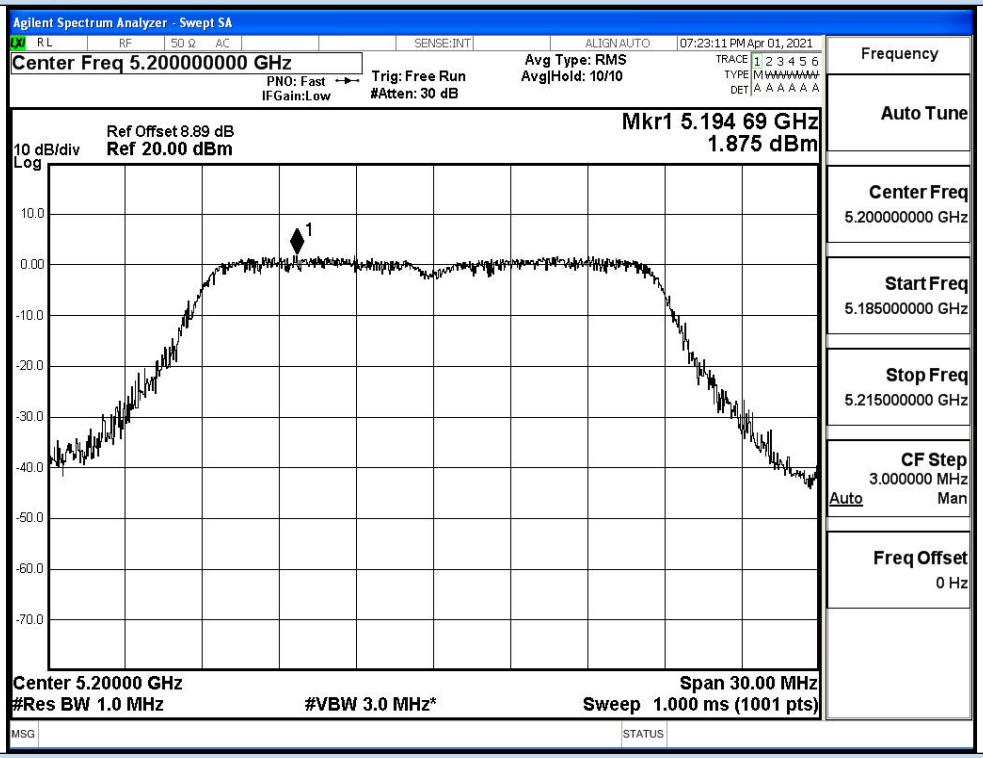


IEEE 802.11na / Channel 48 / 5240MHz

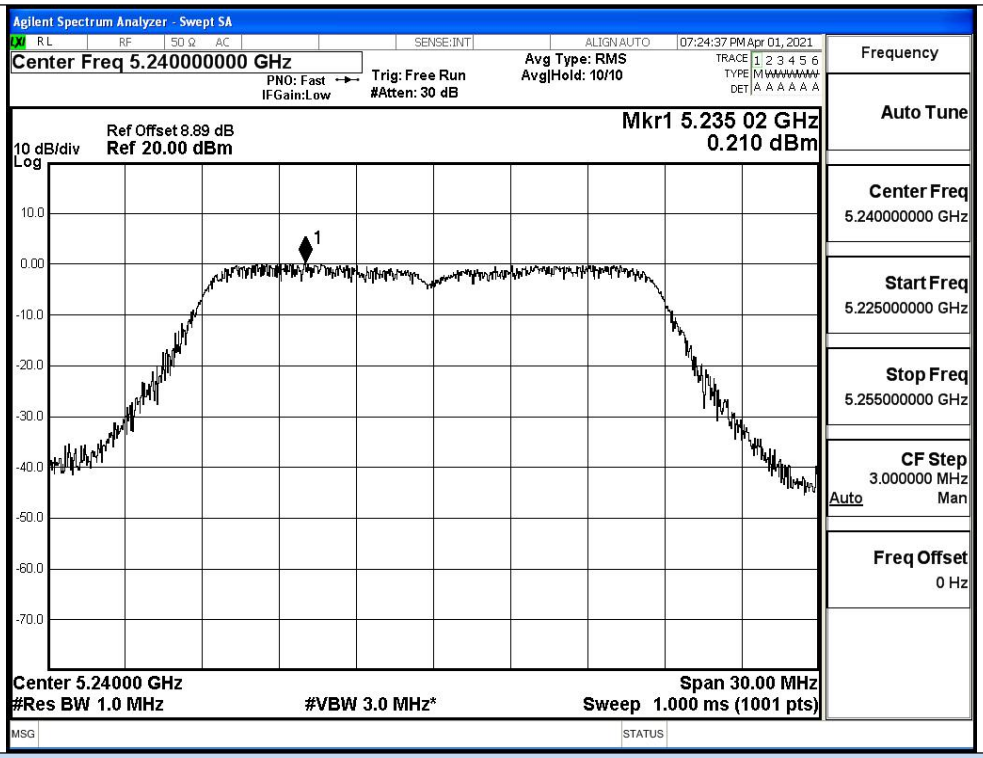
Power Spectral Density



IEEE 802.11n20 / Channel 36 / 5180MHz

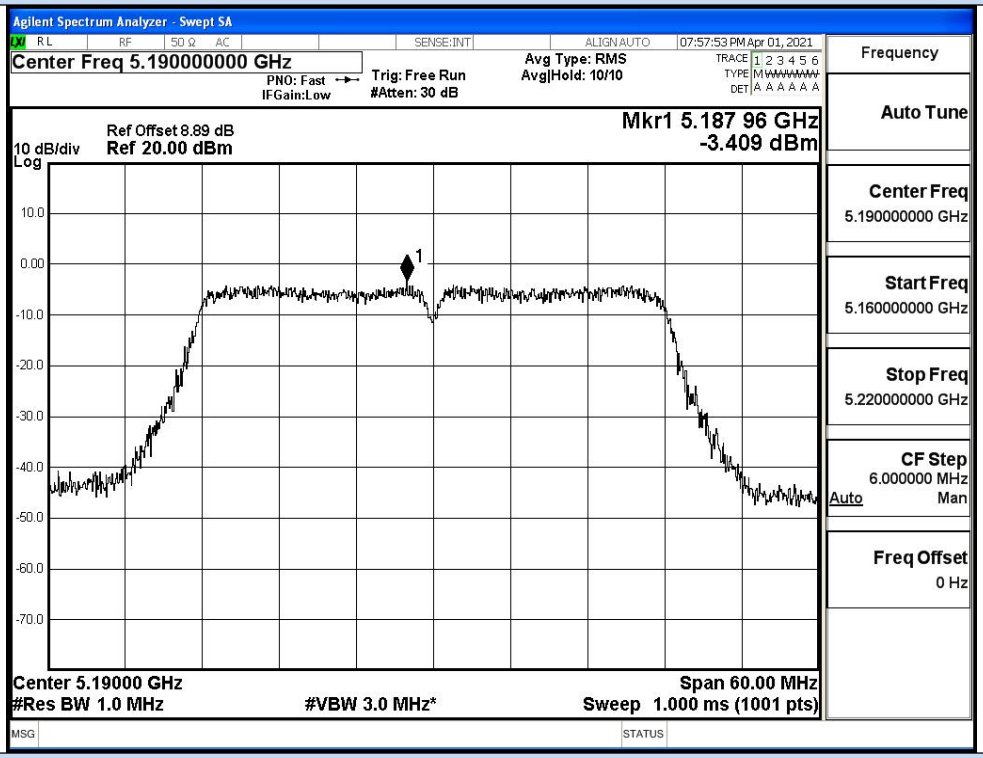


IEEE 802.11n20 / Channel 40 / 5200MHz

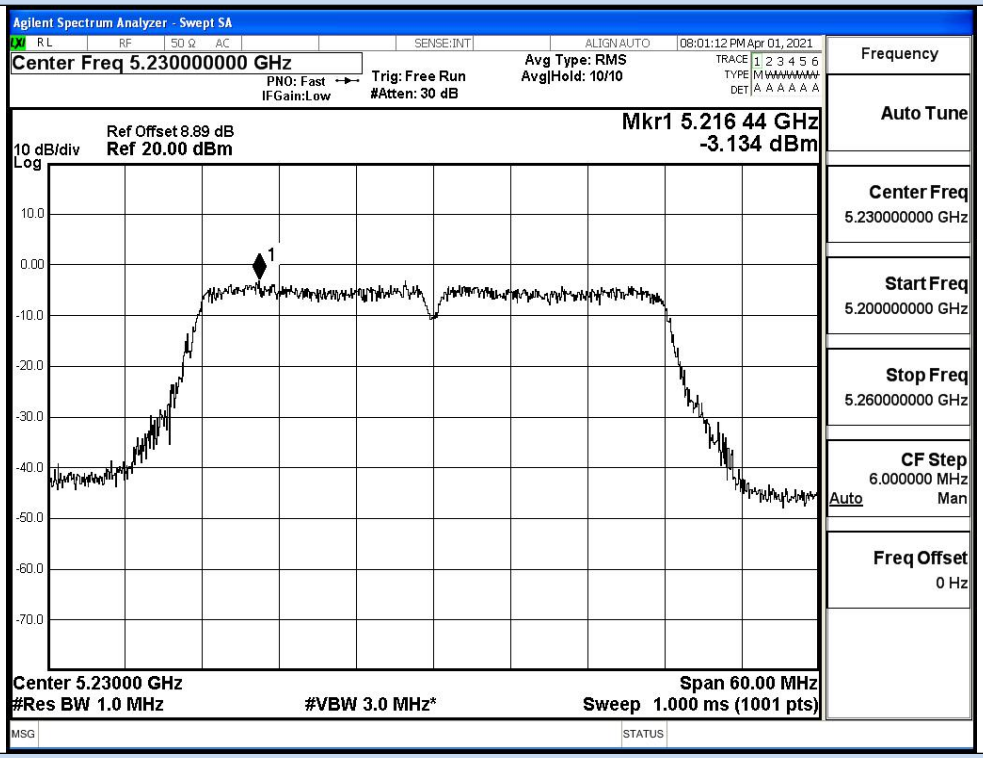


IEEE 802.11n20 / Channel 48 / 5240MHz

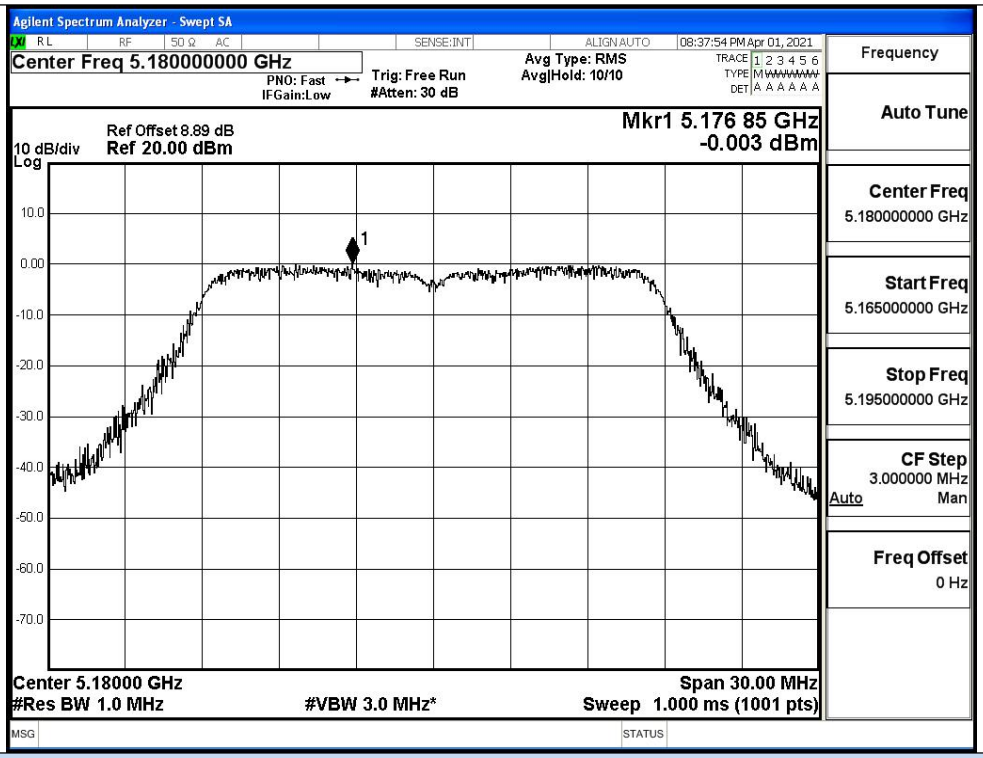
Power Spectral Density



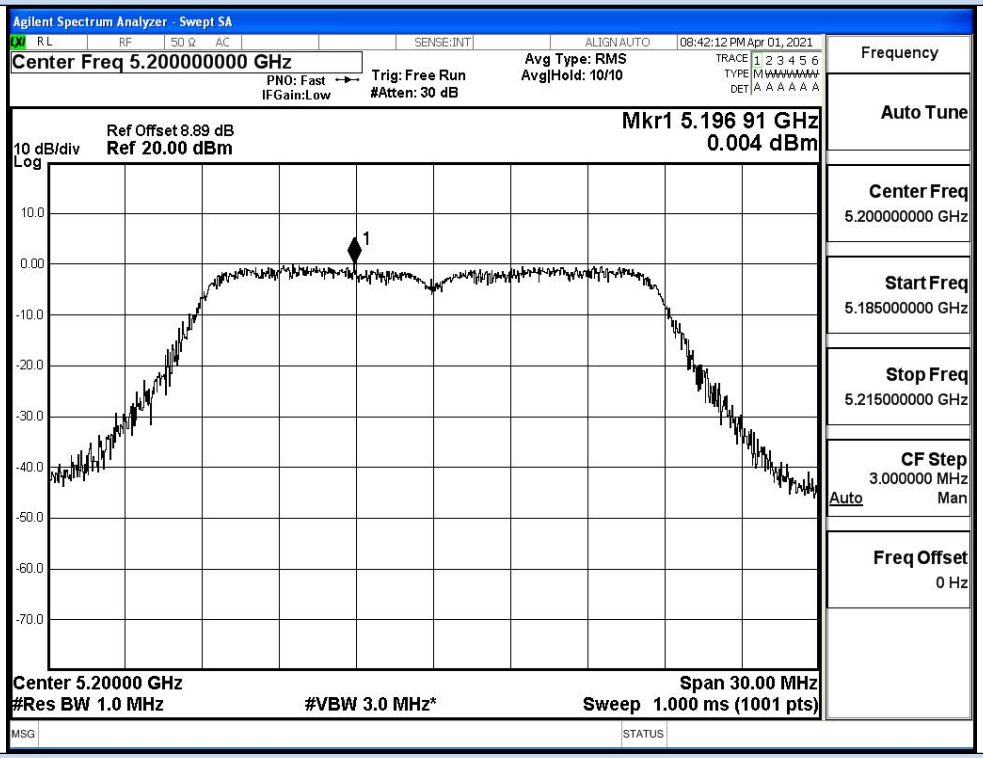
IEEE 802.11n40 / Channel 38 / 5190MHz



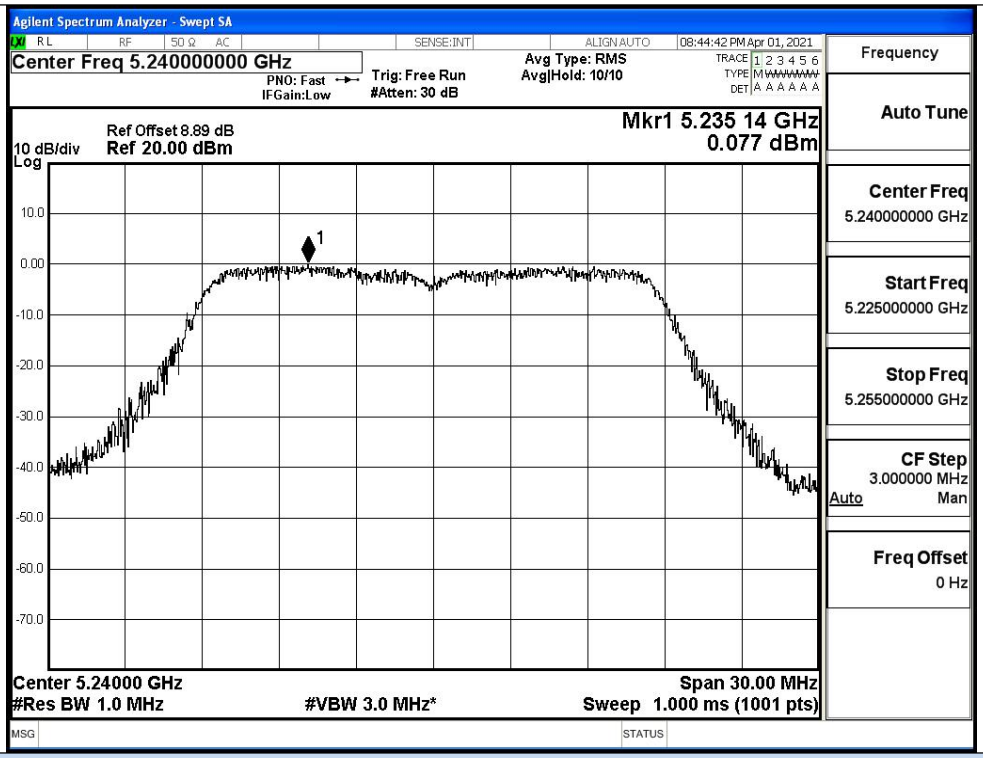
IEEE 802.11n40 / Channel 46 / 5230MHz



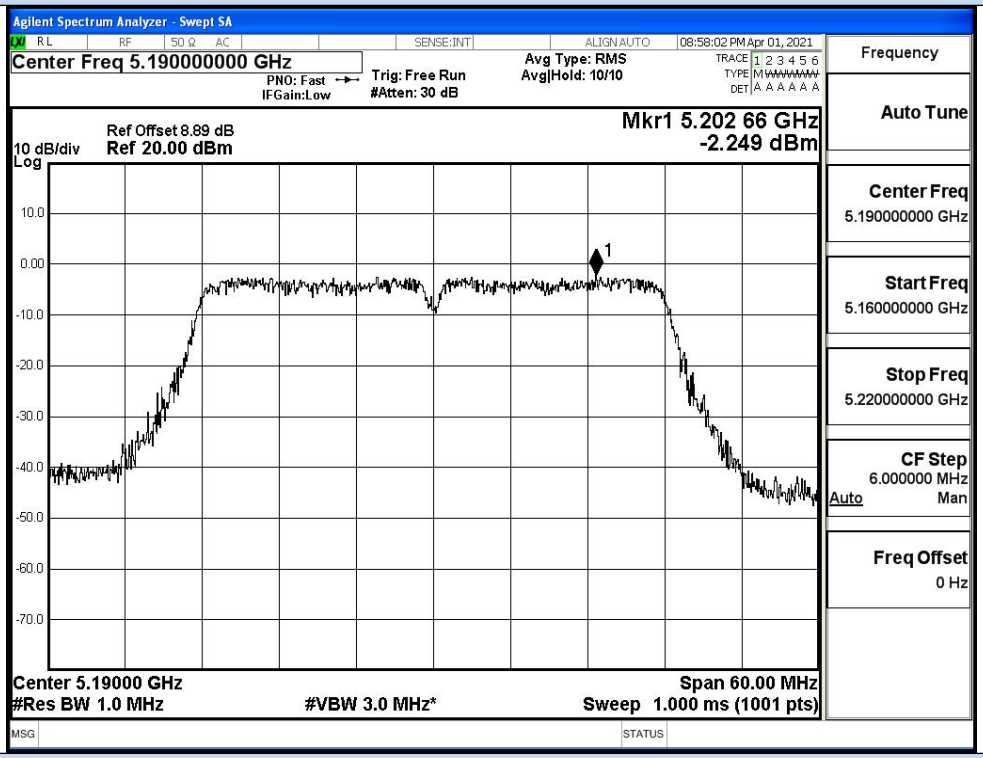
IEEE 802.11ac20 / Channel 36 / 5180MHz



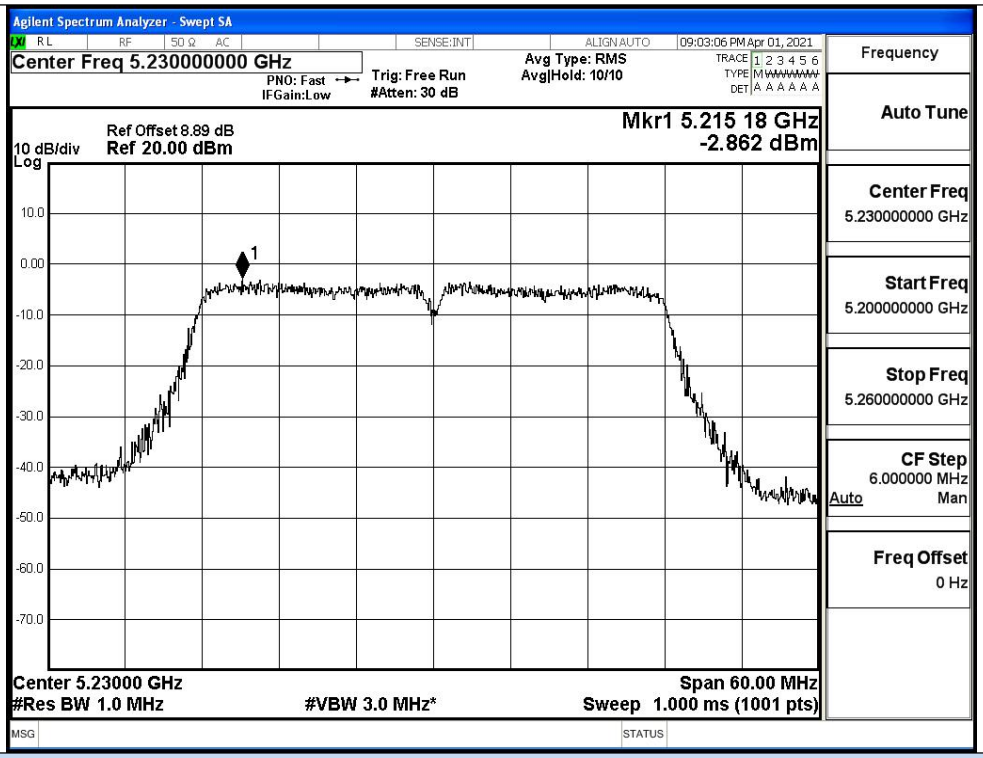
IEEE 802.11ac20 / Channel 40 / 5200MHz



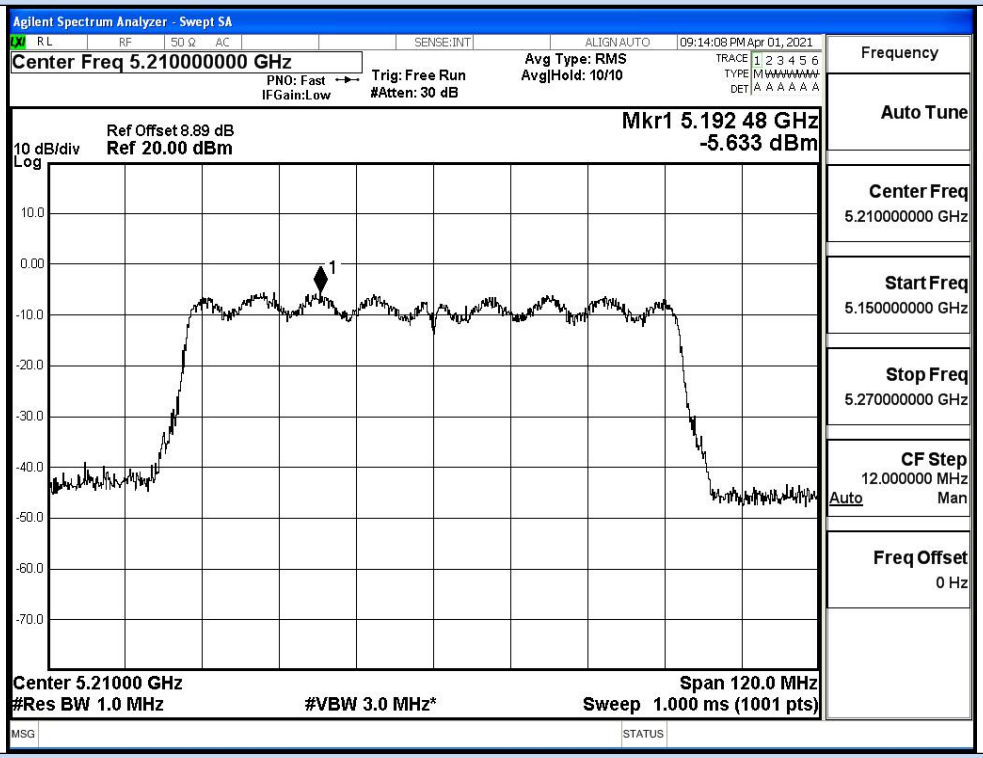
IEEE 802.11ac20 / Channel 48 / 5240MHz



IEEE 802.11ac40 / Channel 38 / 5190MHz



IEEE 802.11ac40 / Channel 46 / 5230MHz

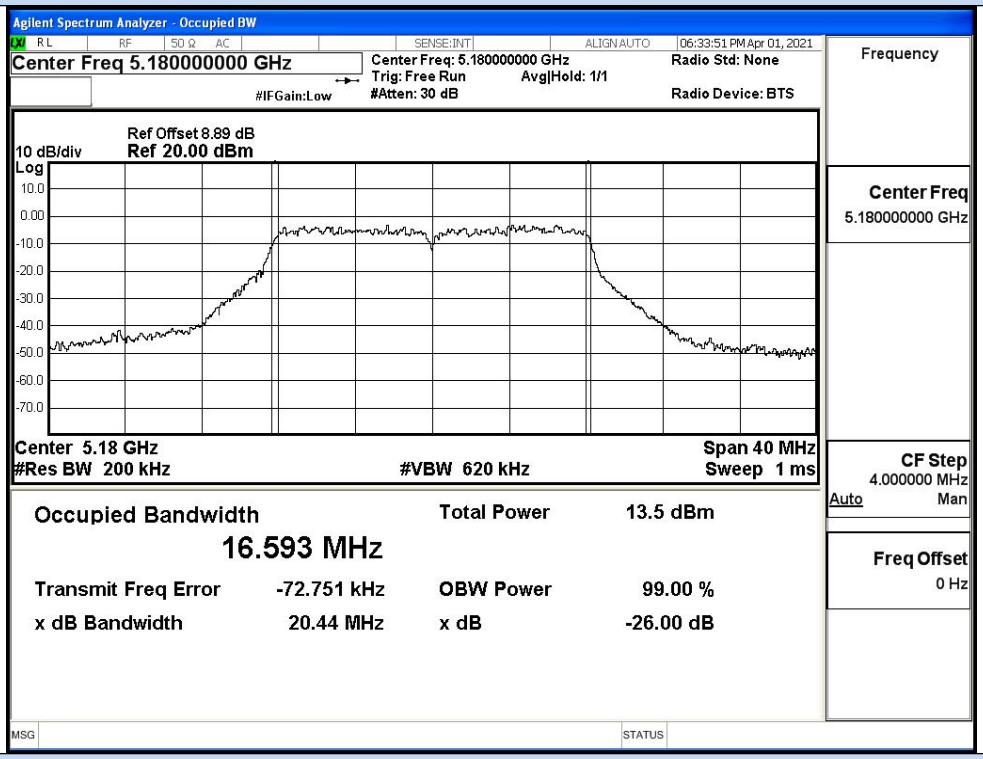


IEEE 802.11ac80 / Channel 42 / 5210MHz

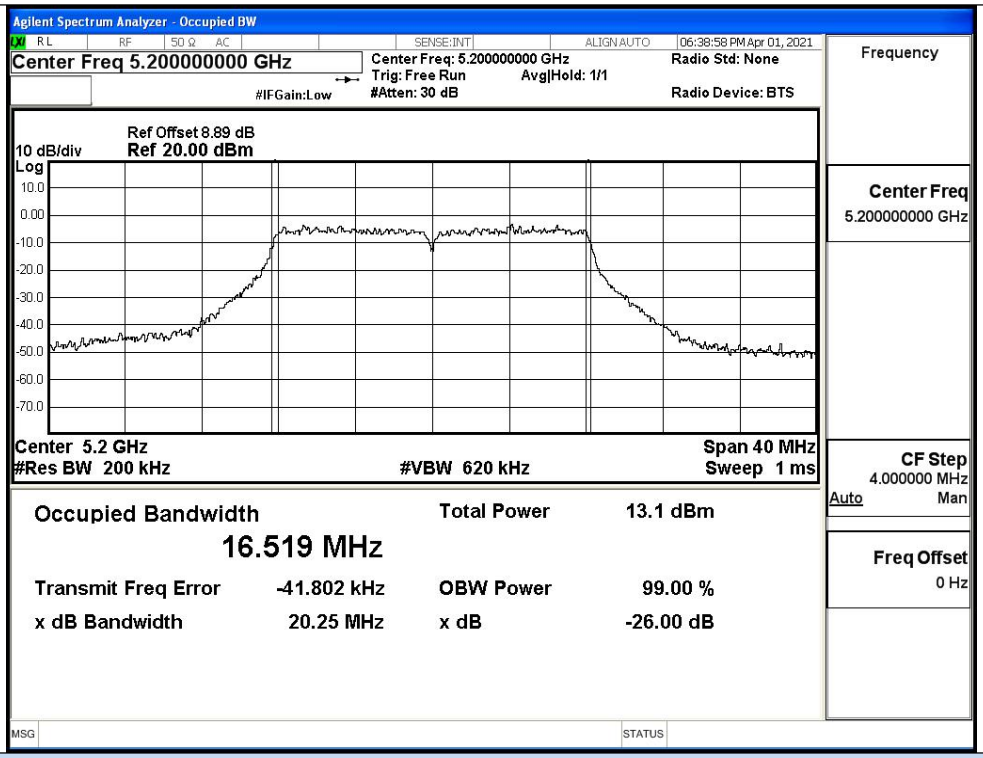
D.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	36	5180	20.44	No Limit	Pass
	40	5200	20.25		Pass
	48	5240	20.48		Pass
11N20 SISO	36	5180	21.16	No Limit	Pass
	40	5200	21.29		Pass
	48	5240	20.85		Pass
11N40 SISO	38	5190	41.89	No Limit	Pass
	46	5230	42.00		Pass
11AC20 SISO	36	5180	21.18	No Limi	Pass
	40	5200	20.94		Pass
	48	5240	21.05		Pass
11AC40 SISO	38	5190	41.44	No Limi	Pass
	46	5230	41.47		Pass
11AC80 SISO	42	5210	82.18	No Limi	Pass

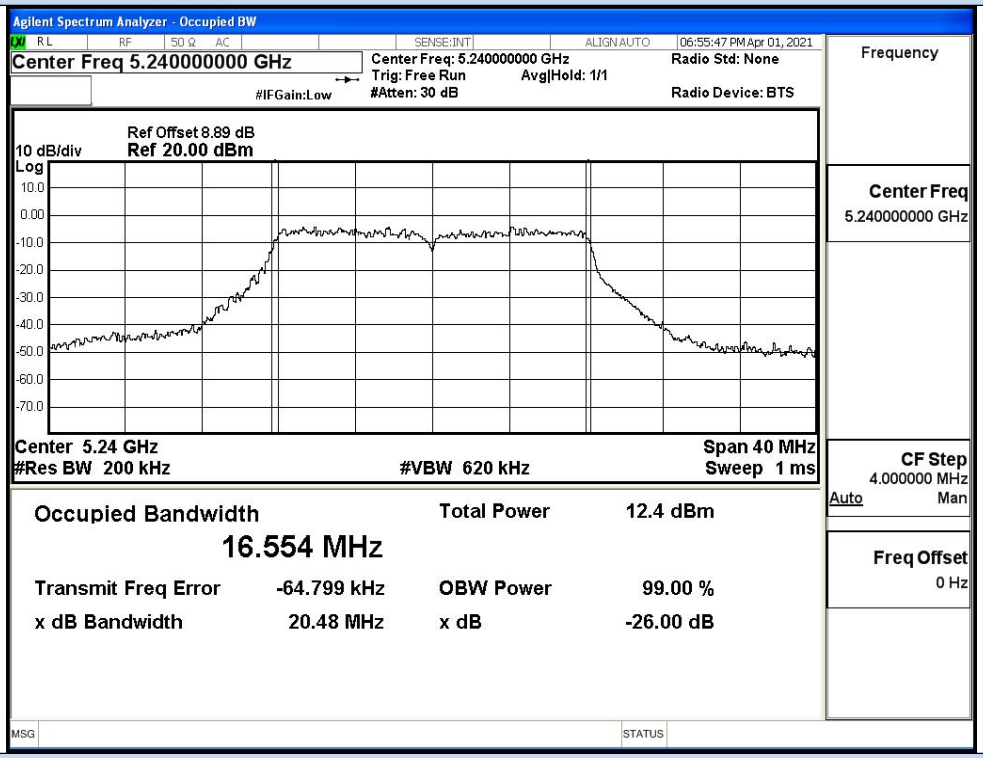
26dB Bandwidth



IEEE 802.11a / Channel 36 / 5180MHz

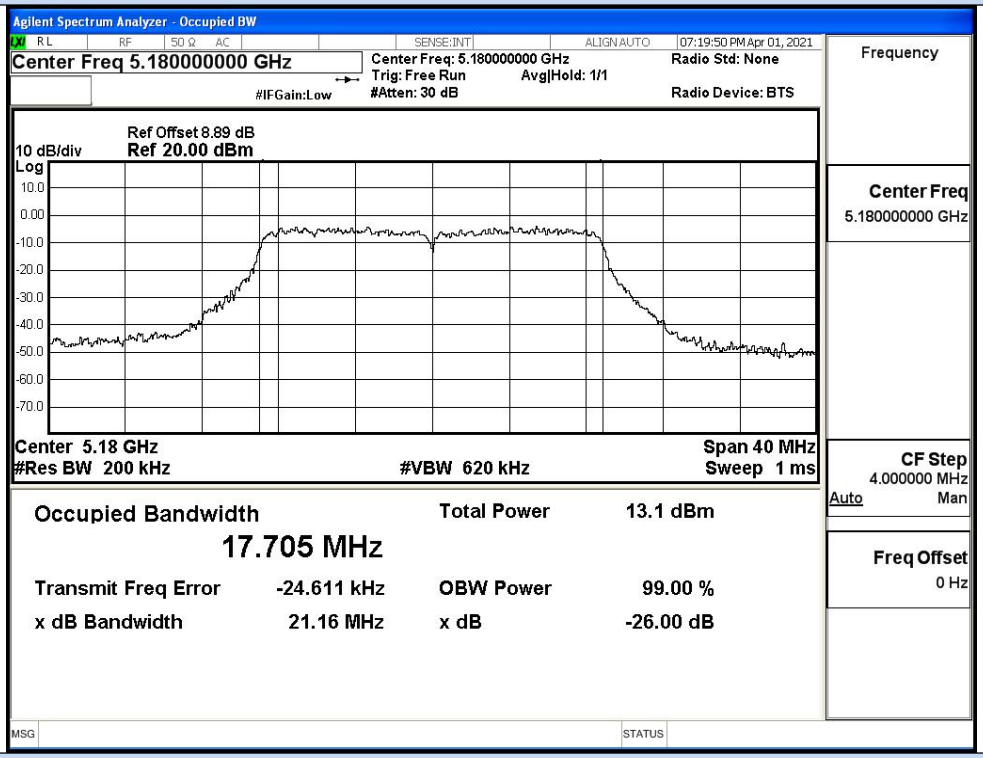


IEEE 802.11a / Channel 40 / 5200MHz

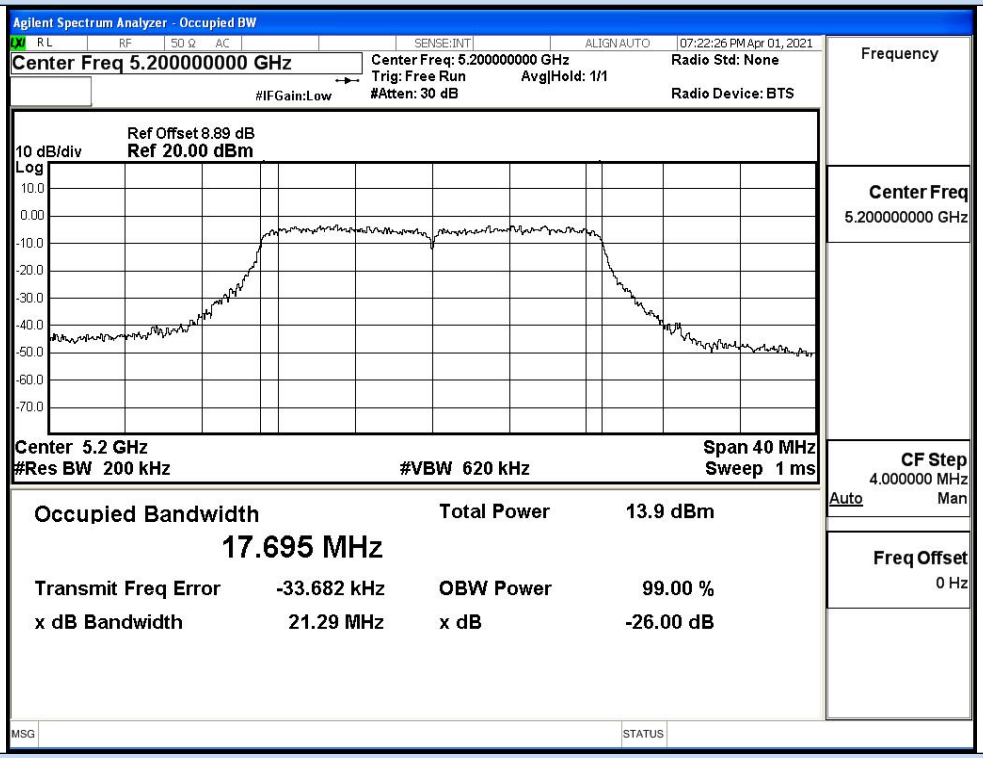


IEEE 802.11a / Channel 48 / 5240MHz

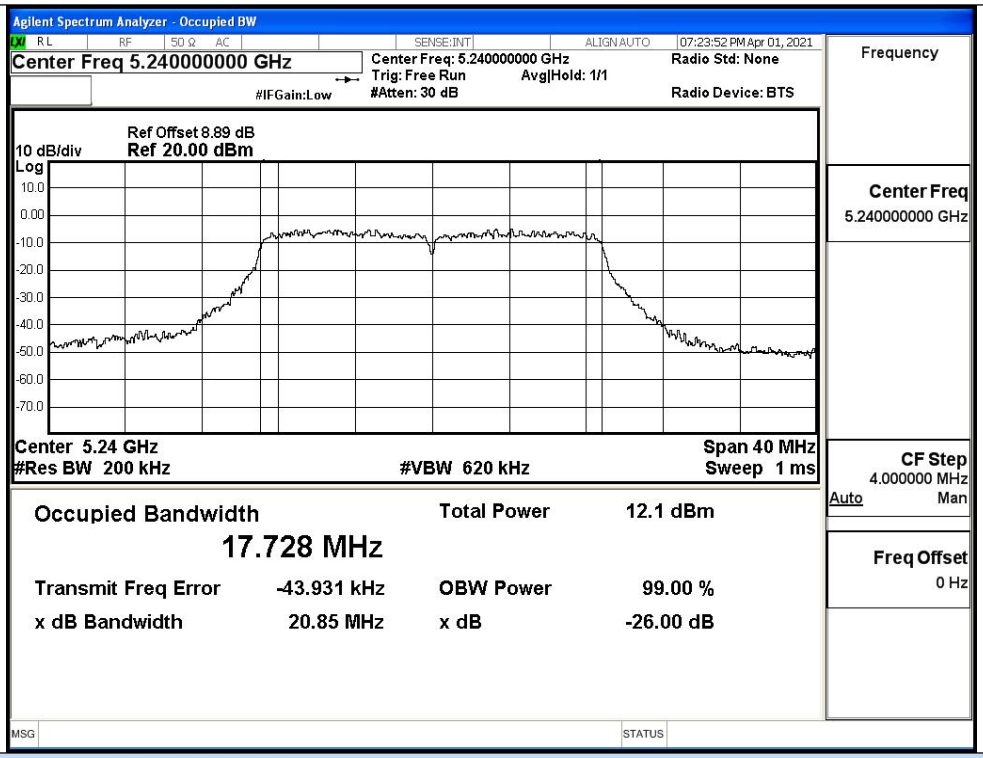
26dB Bandwidth



IEEE 802.11n20 / Channel 36 / 5180MHz

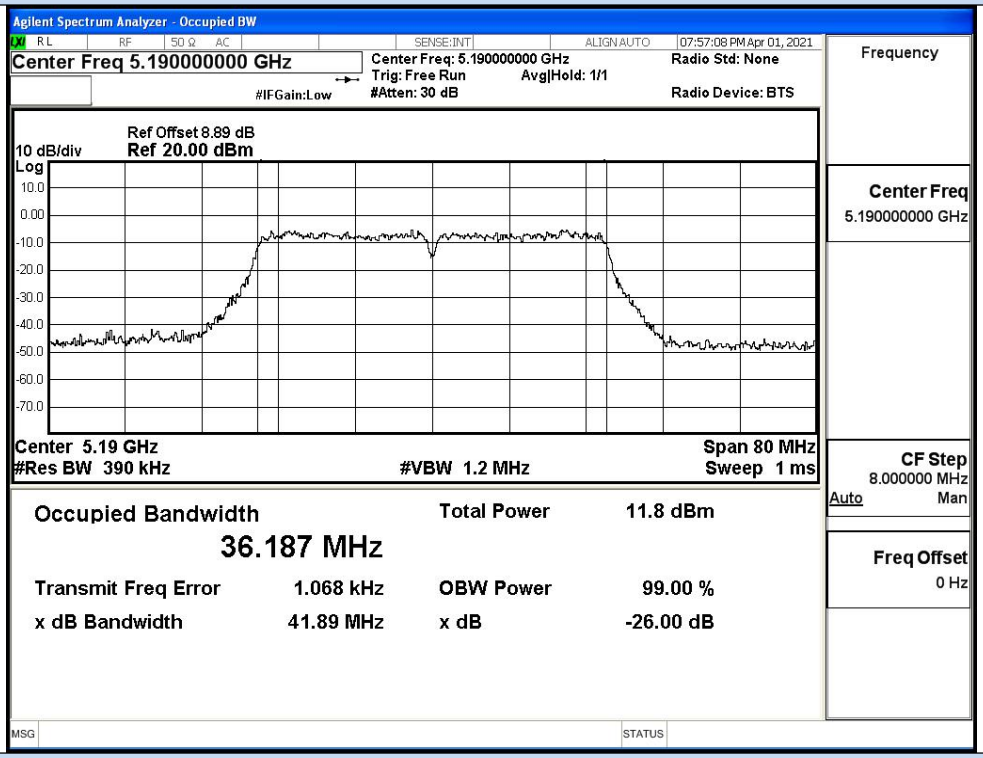


IEEE 802.11n20 / Channel 40 / 5200MHz

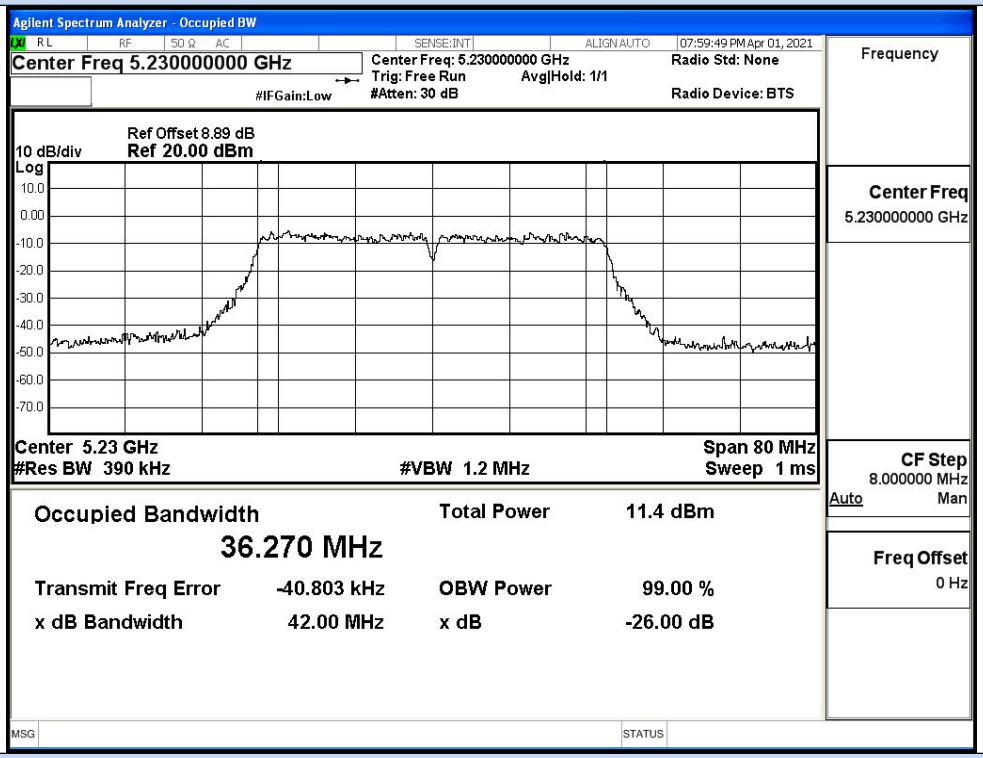


IEEE 802.11n20 / Channel 48 / 5240MHz

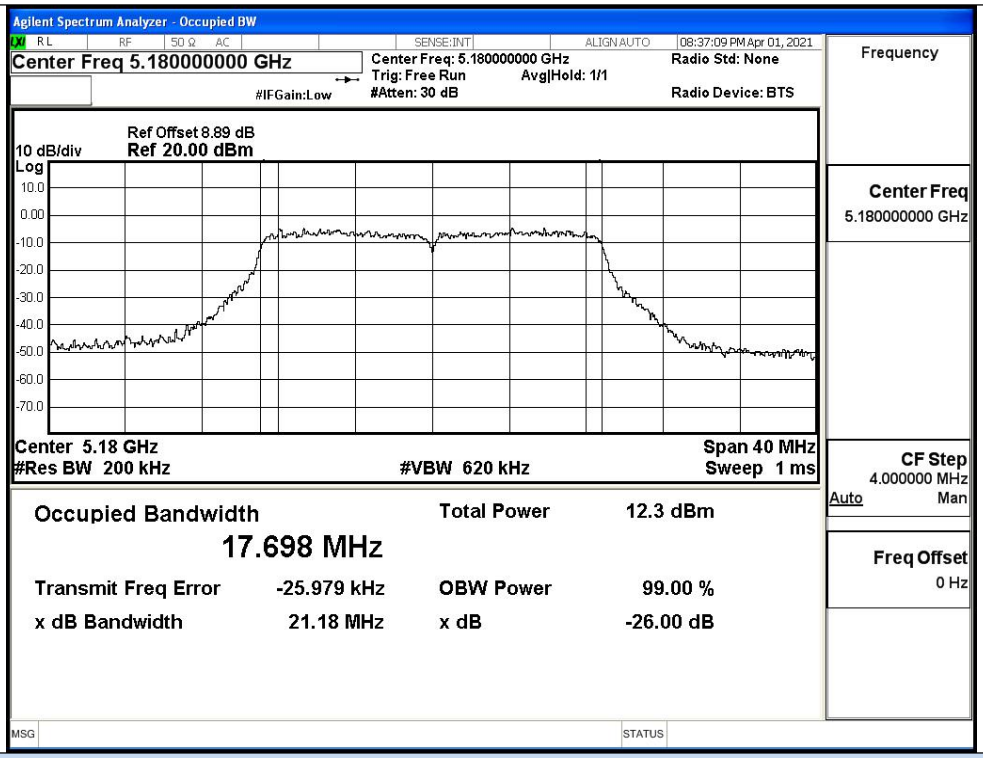
26dB Bandwidth



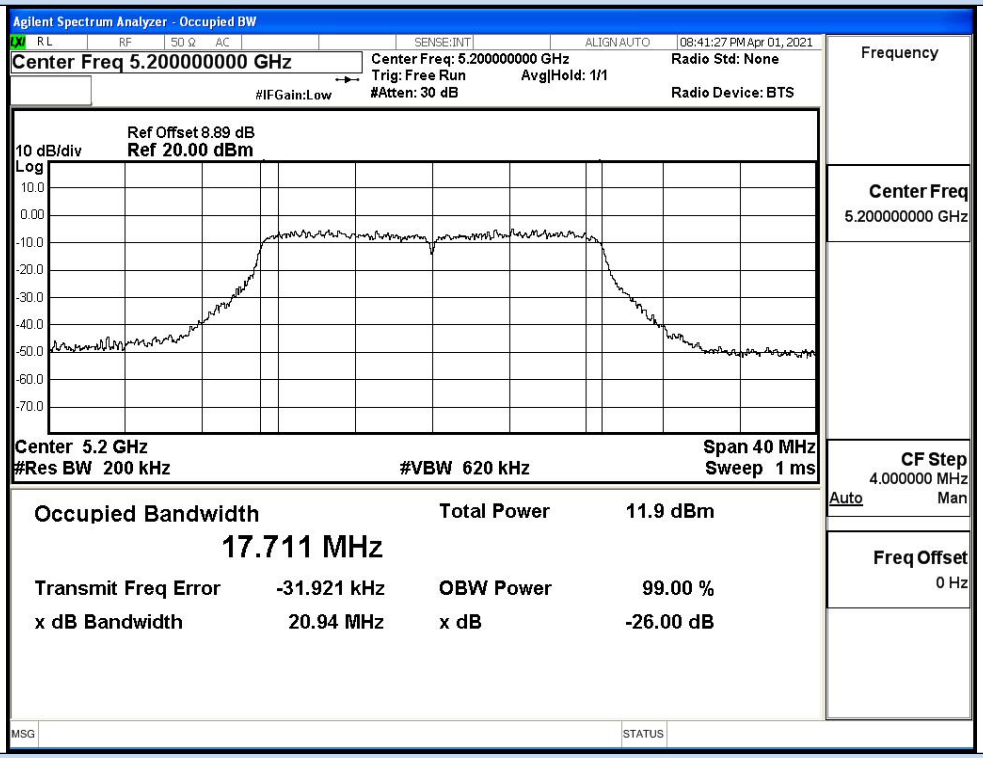
IEEE 802.11n40 / Channel 38 / 5190MHz



IEEE 802.11n40 / Channel 46 / 5230MHz



IEEE 802.11ac20 / Channel 36 / 5180MHz



IEEE 802.11ac20 / Channel 40 / 5200MHz