

Appendix D

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: IPTV

Trade Mark: Formuler

Test Model: GTV

Environmental Conditions

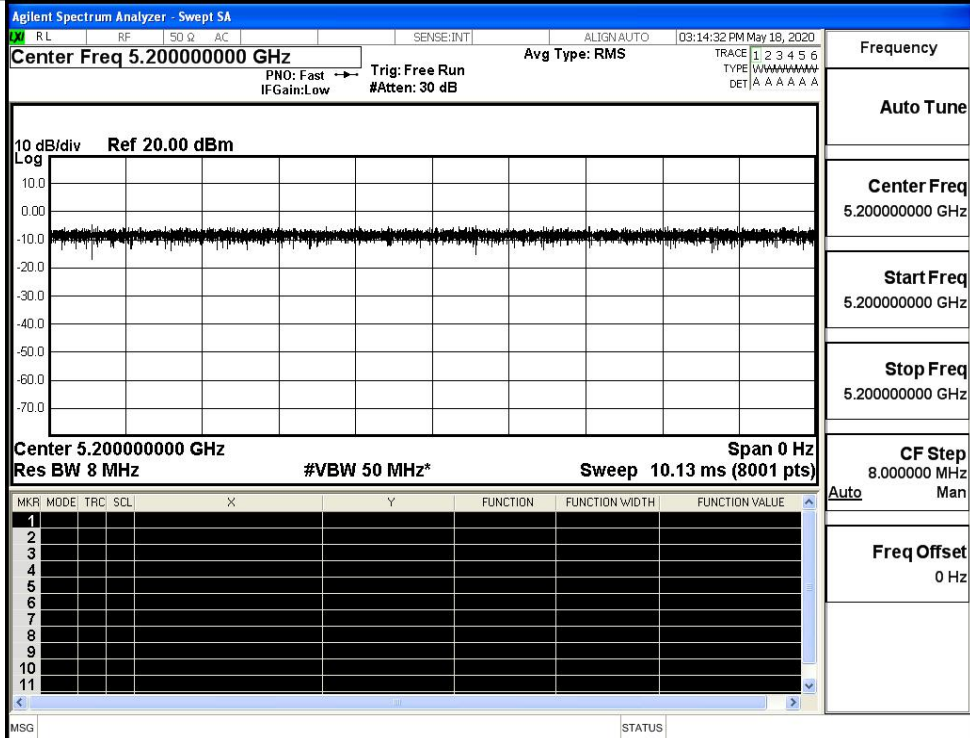
Temperature:	25.1 ° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	David.Luo
Supervised by:	Li Huan

D.1 Duty Cycle

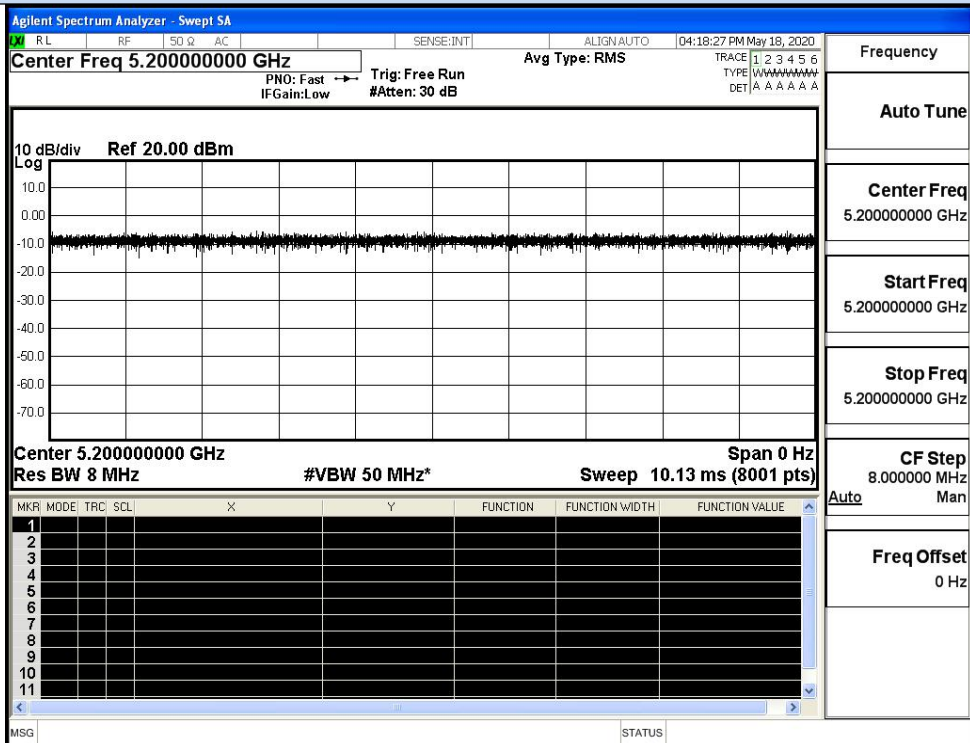
ANT 0

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

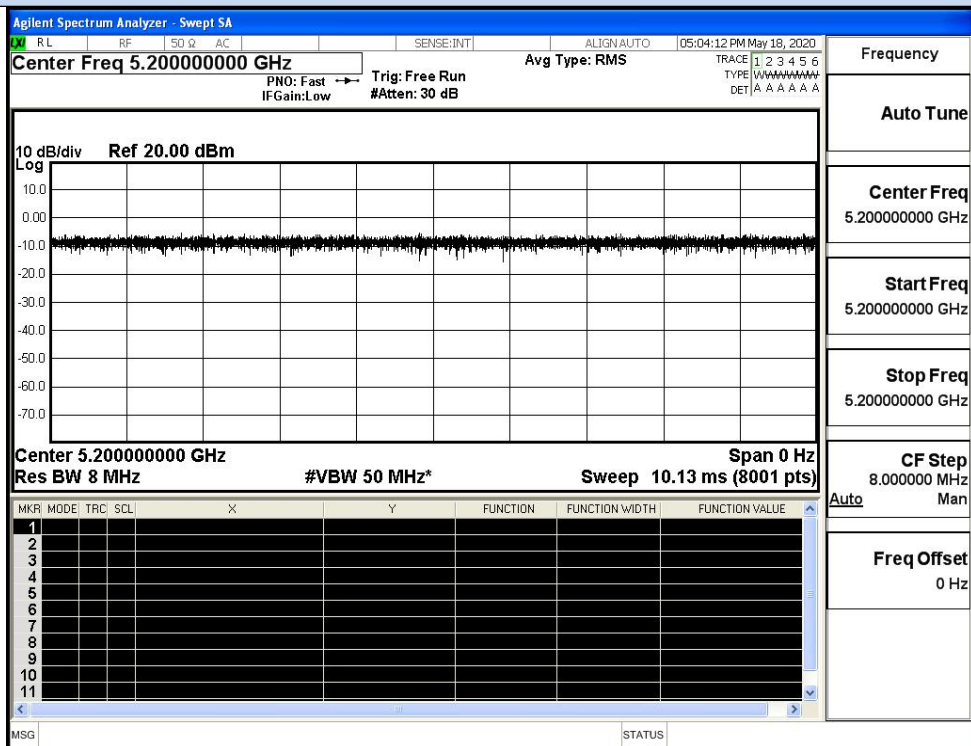
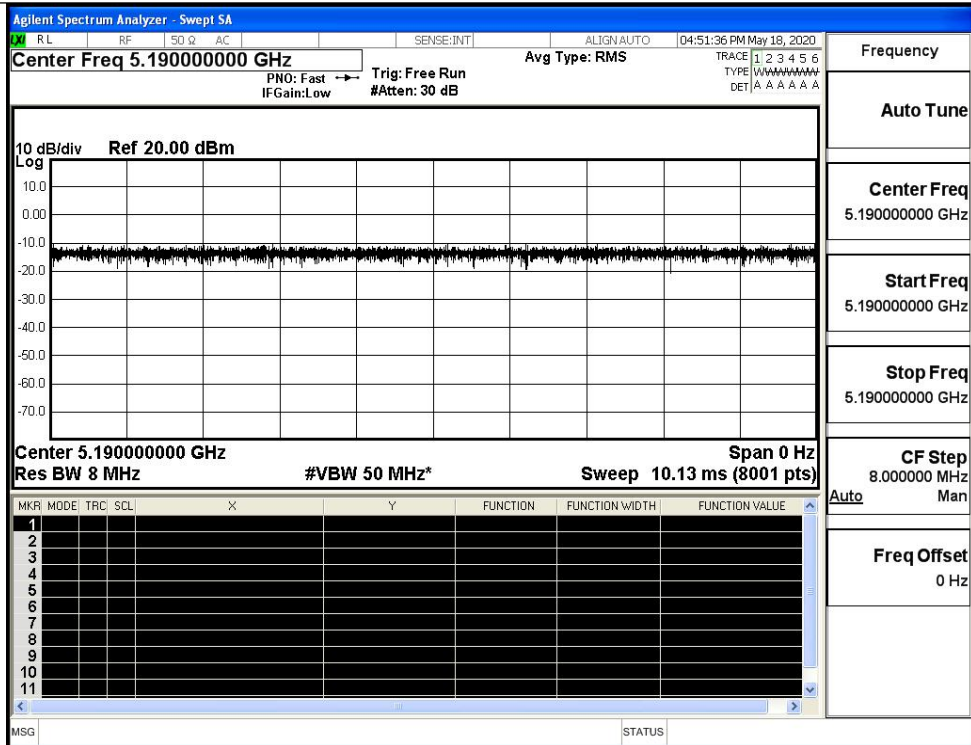
On Time and Duty Cycle

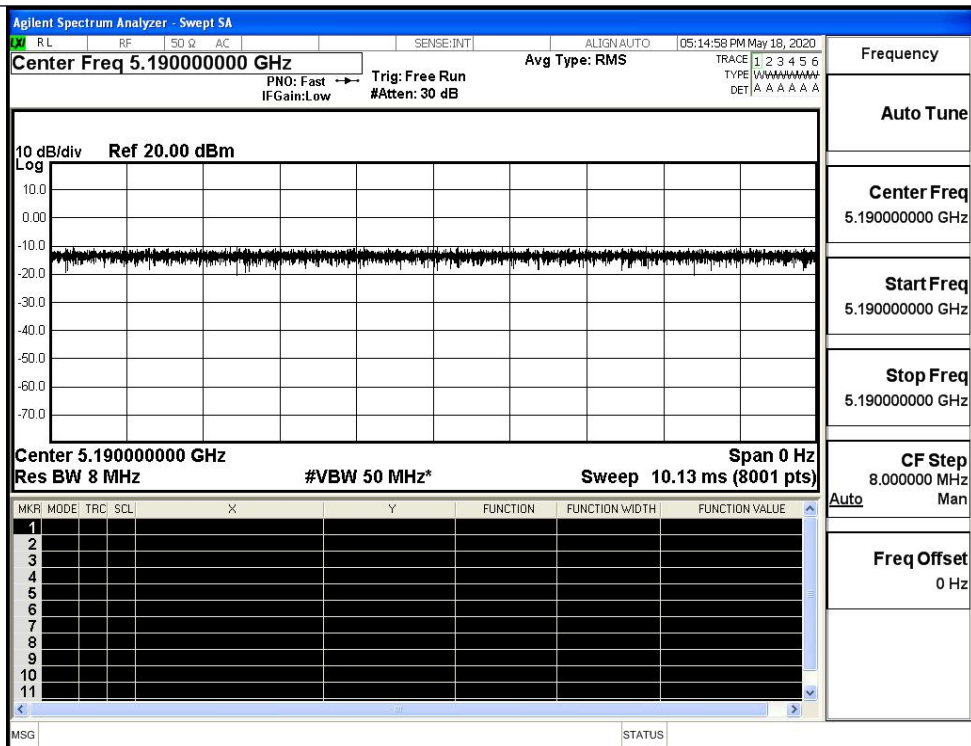


IEEE 802.11a

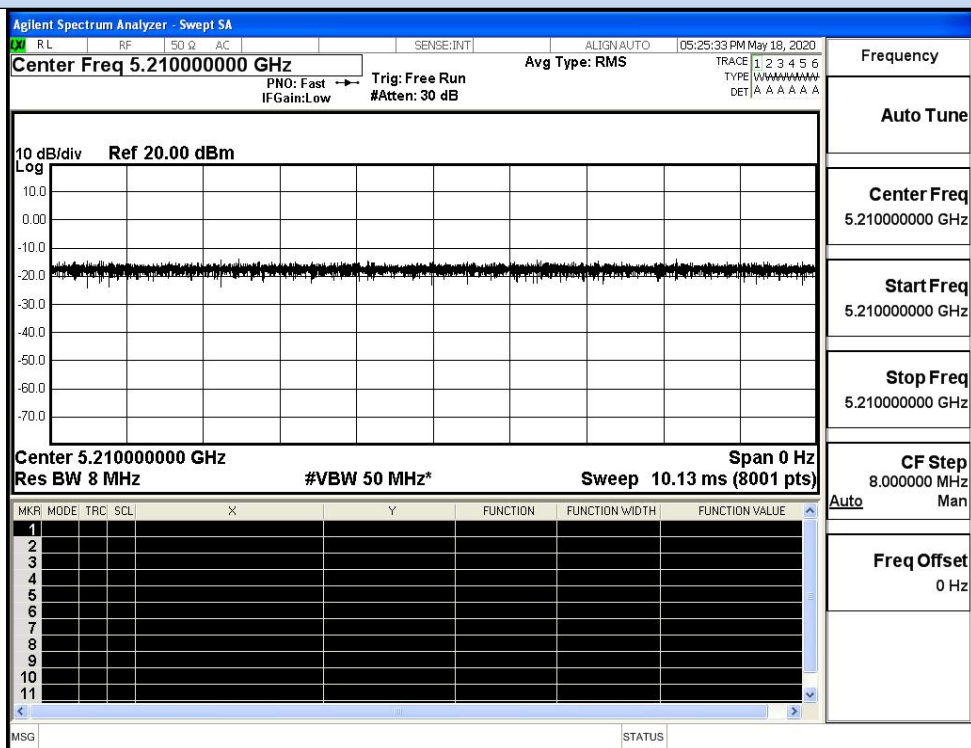


IEEE 802.11n HT20





IEEE 802.11 AC40

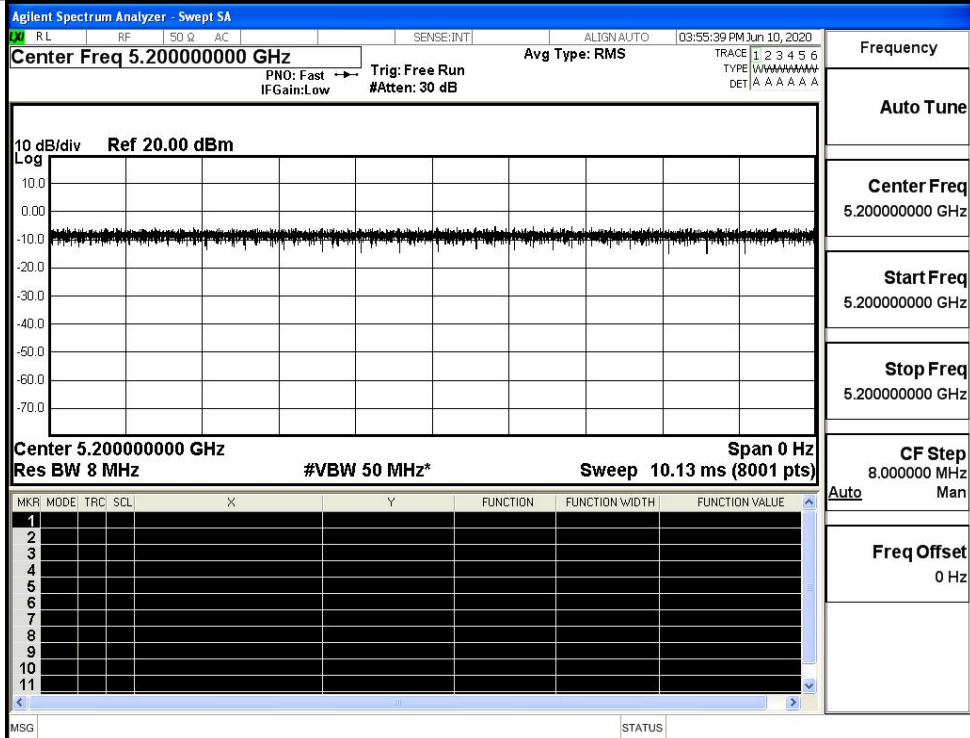


IEEE 802.11AC80

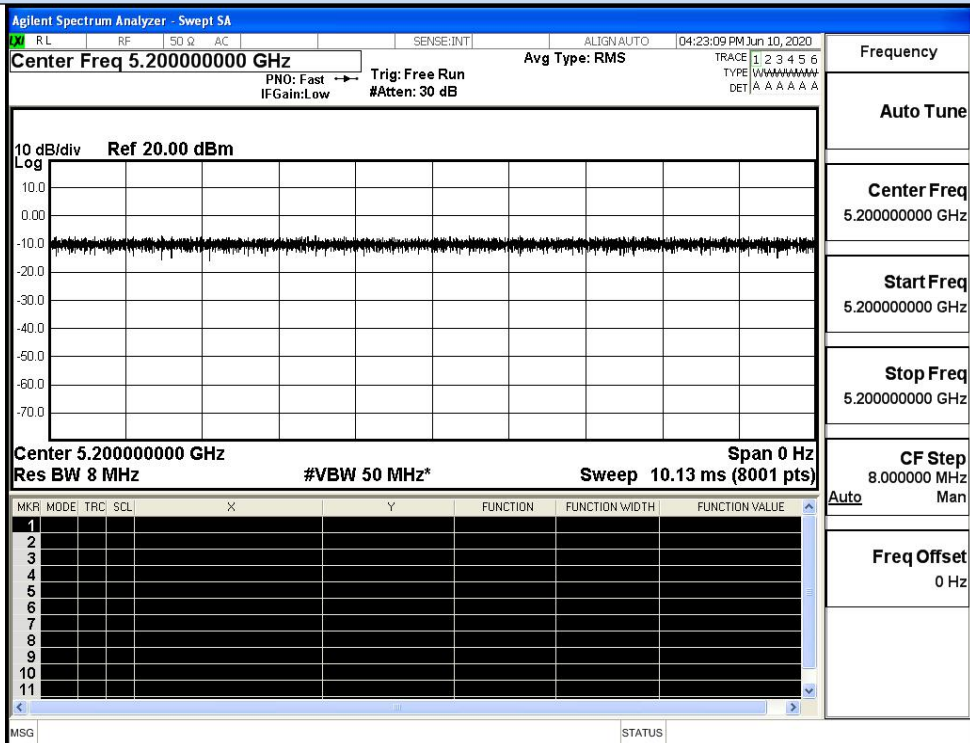
ANT 1

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

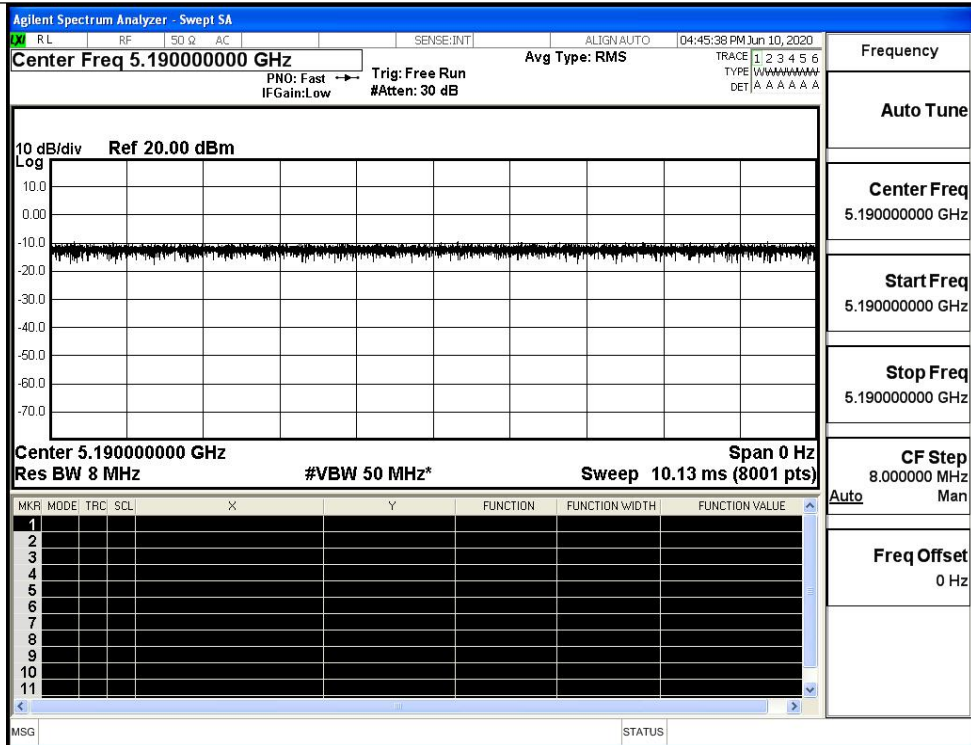
On Time and Duty Cycle



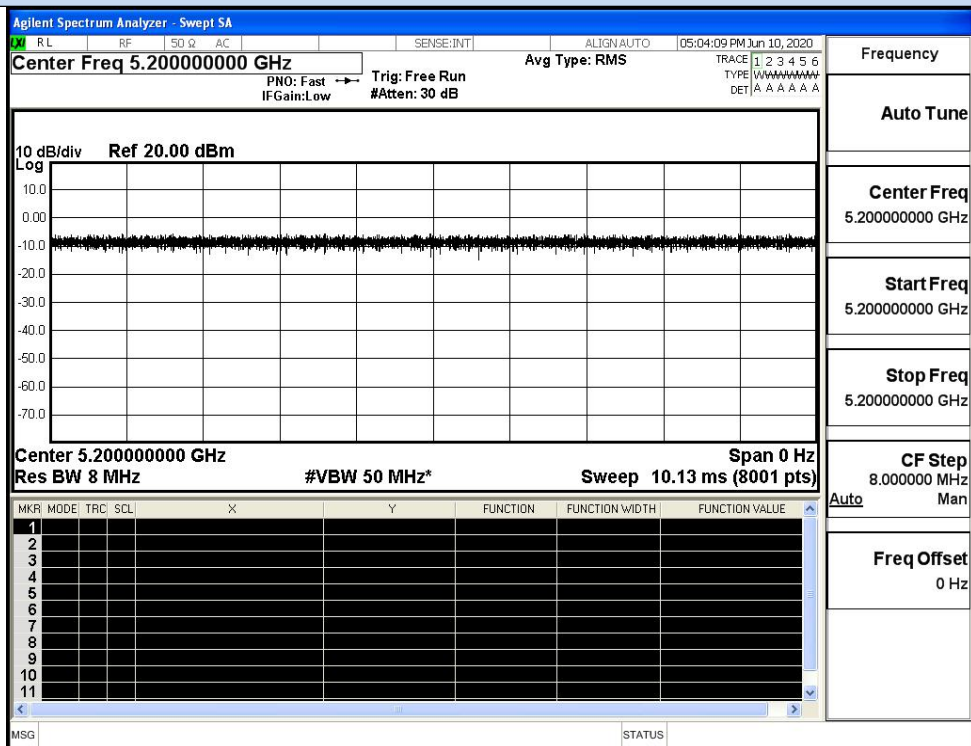
IEEE 802.11a



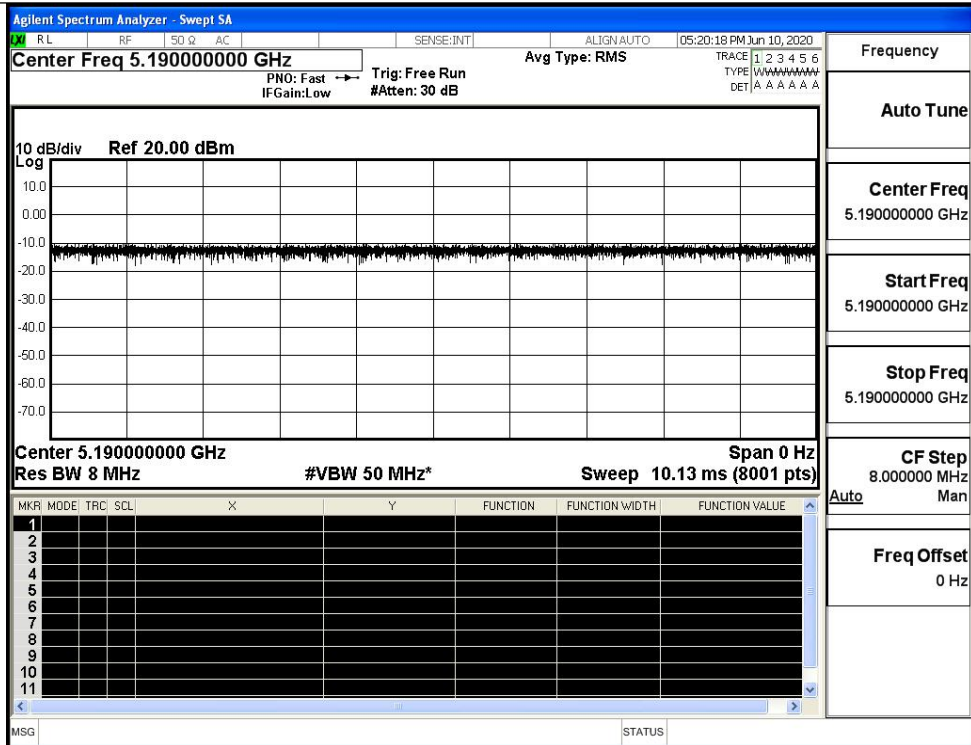
IEEE 802.11n HT20



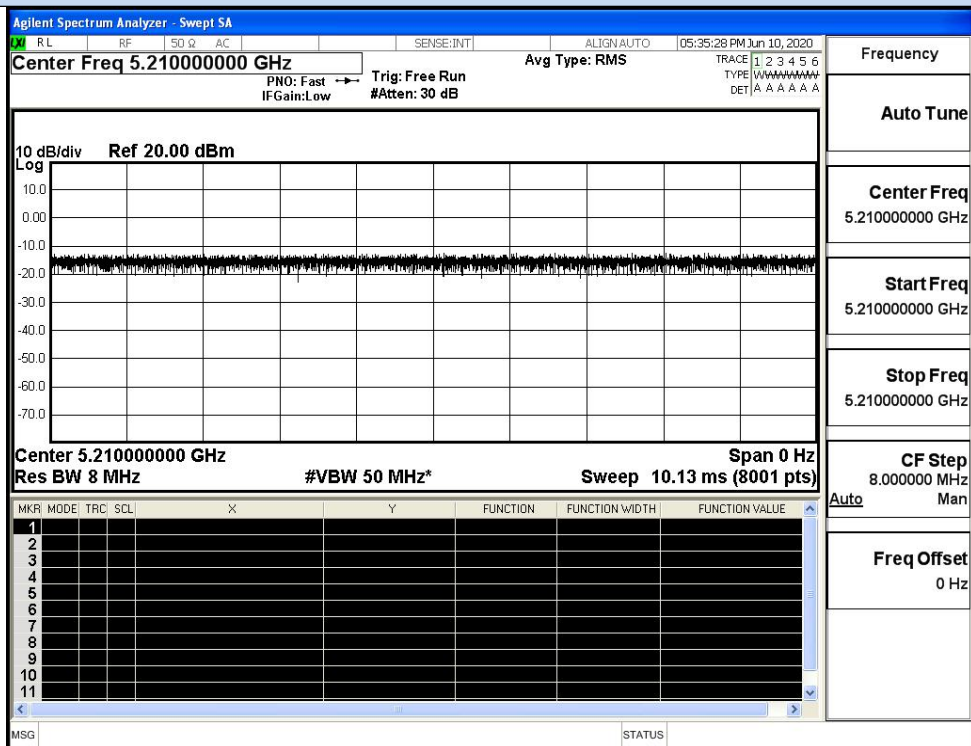
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11 AC40



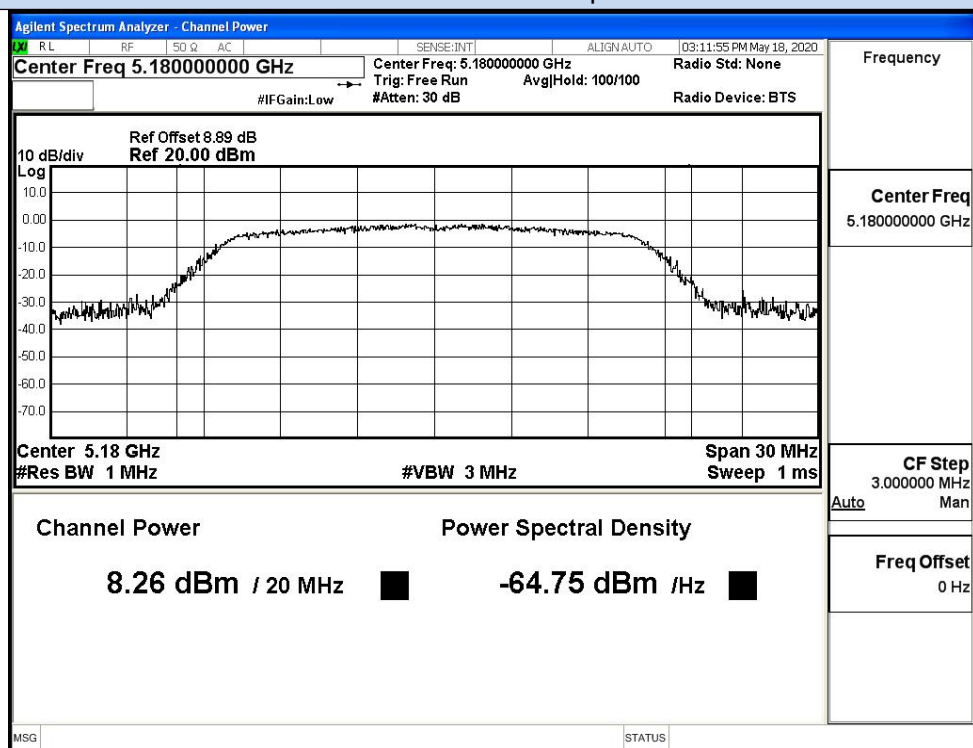
IEEE 802.11AC80

D.2 Maximum Conduct Output Power

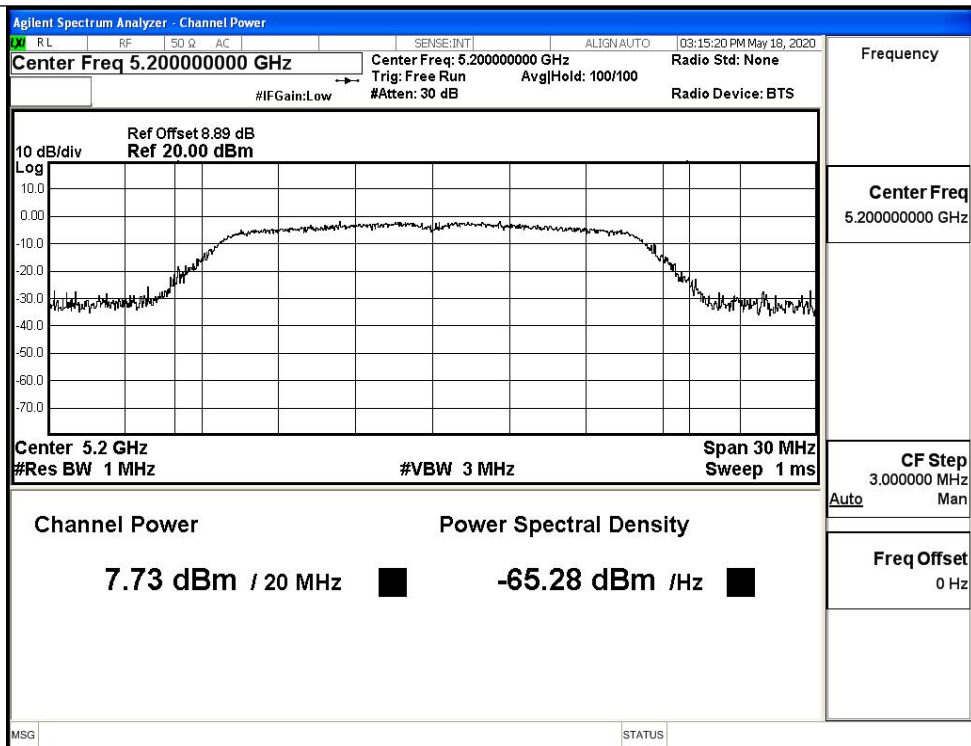
ANT 0

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)	Verdict
11A	36	5180	8.26	0	8.26	24	Pass
	40	5200	7.73	0	7.73		Pass
	48	5240	7.84	0	7.84		Pass
11N20 SISO	36	5180	6.64	0	6.64	24	Pass
	40	5200	7.5	0	7.5		Pass
	48	5240	7.66	0	7.66		Pass
11N40 SISO	38	5190	5.71	0	5.71	24	Pass
	46	5230	6.15	0	6.15		Pass
11AC20 SISO	36	5180	7.3	0	7.3	24	Pass
	40	5200	7.62	0	7.62		Pass
	48	5240	7.72	0	7.72		Pass
11AC40 SISO	38	5190	5.74	0	5.74	24	Pass
	46	5230	6.23	0	6.23		Pass
11AC80 SISO	42	5210	5.08	0	5.08	24	Pass

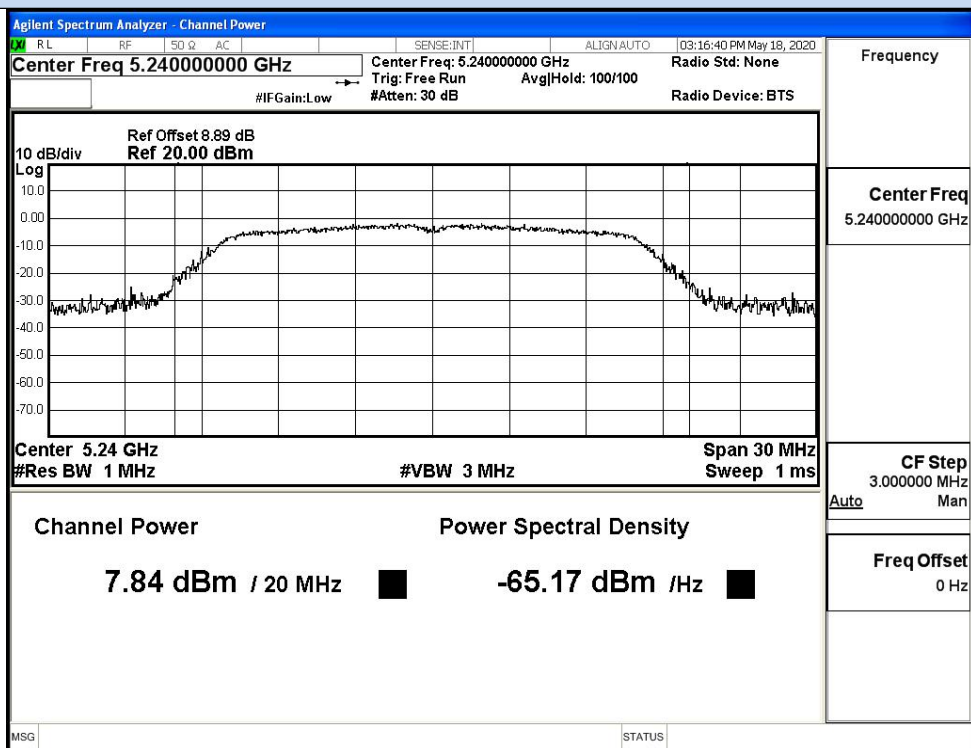
Maximum Conducted Output Power



IEEE 802.11a / Channel 36 / 5180MHz

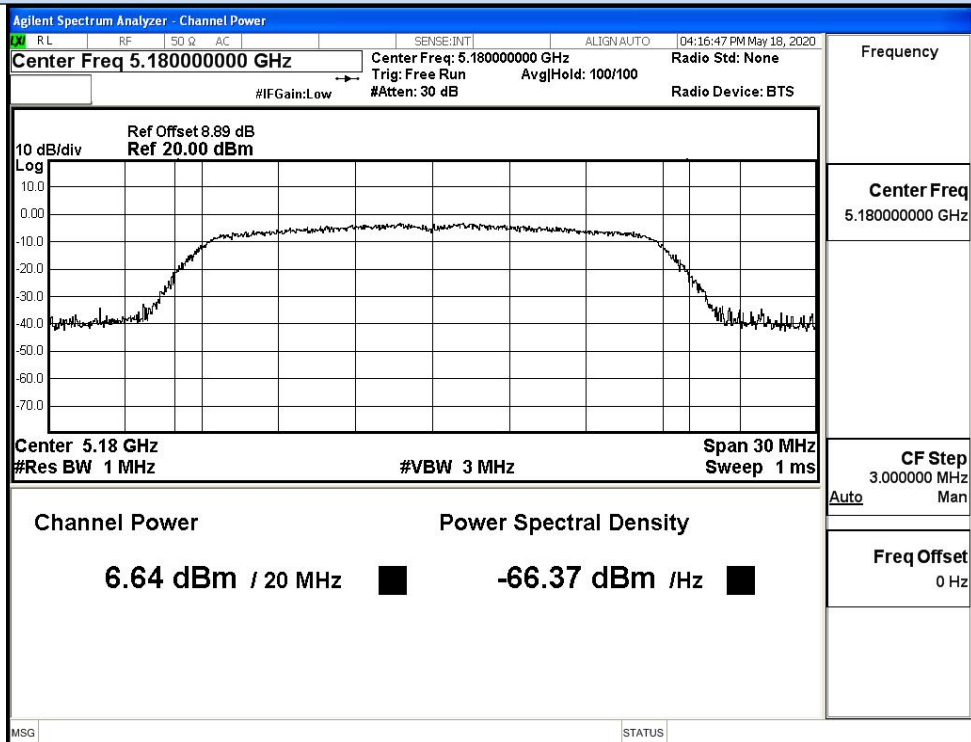


IEEE 802.11a / Channel 40 / 5200MHz

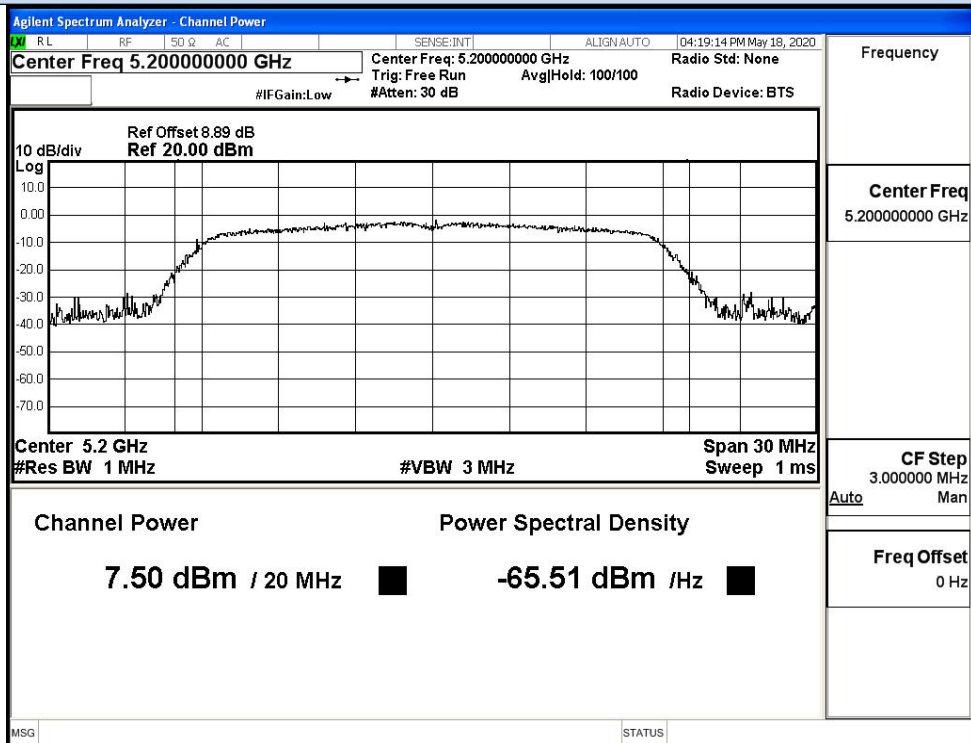


IEEE 802.11a / Channel 48 / 5240MHz

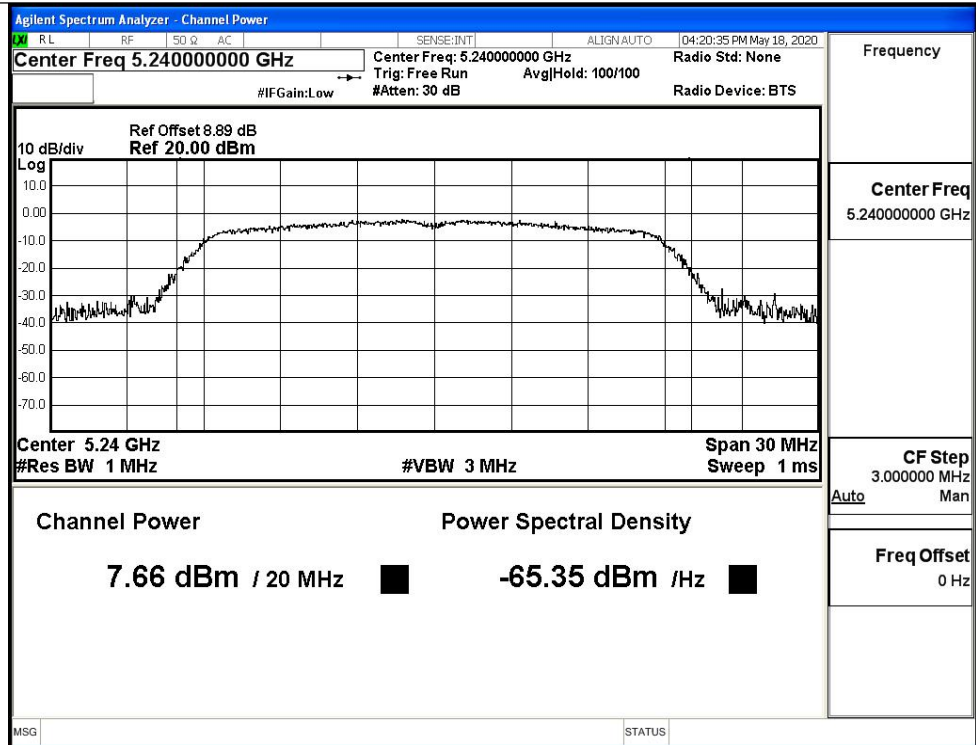
Maximum Conducted Output Power



IEEE 802.11n20 / Channel 36 / 5180MHz

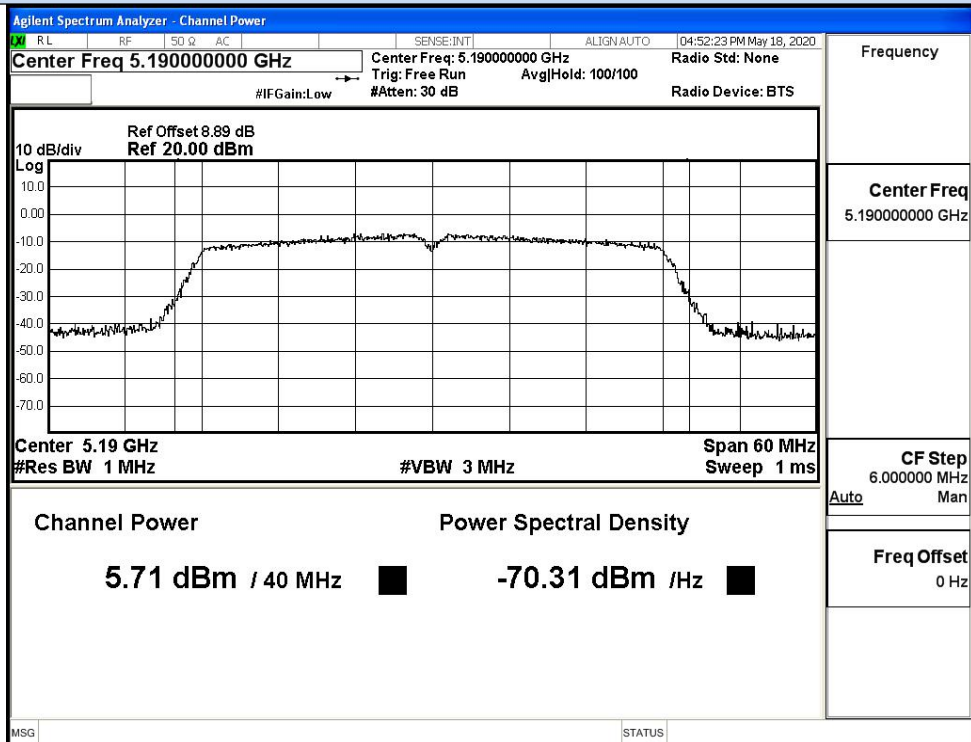


IEEE 802.11n20 / Channel 40 / 5200MHz

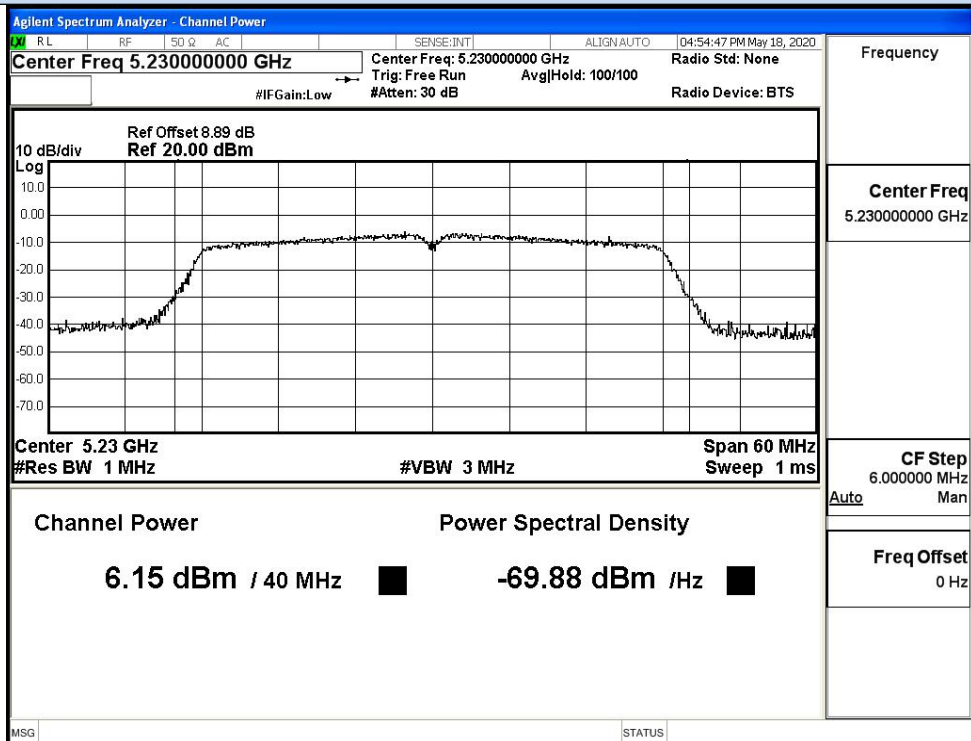


IEEE 802.11n20 / Channel 48 / 5240MHz

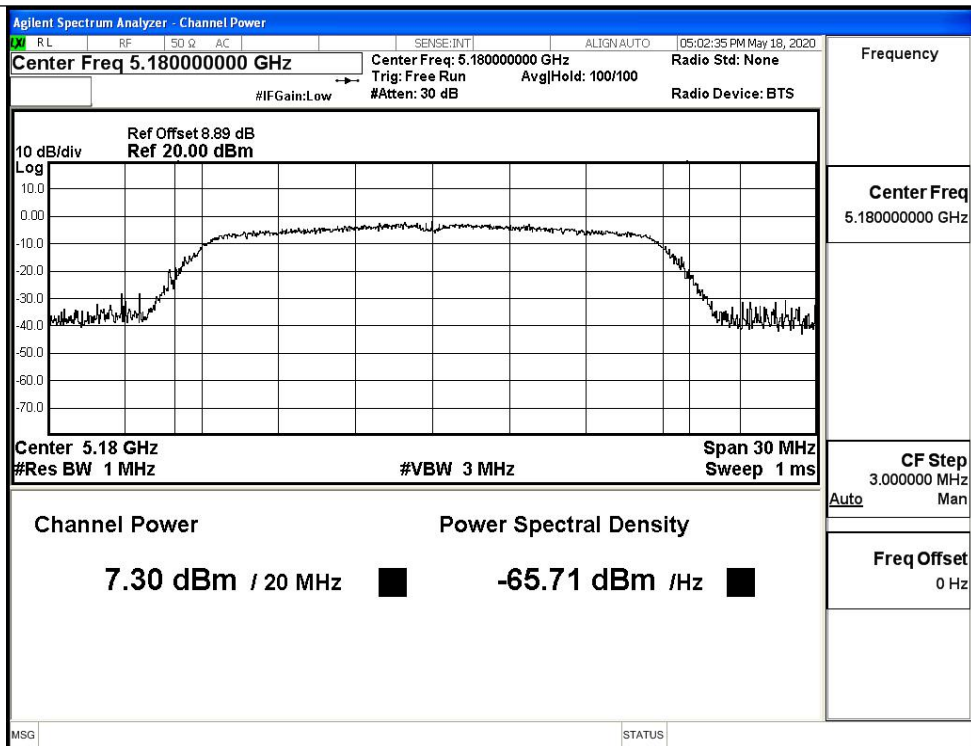
Maximum Conducted Output Power



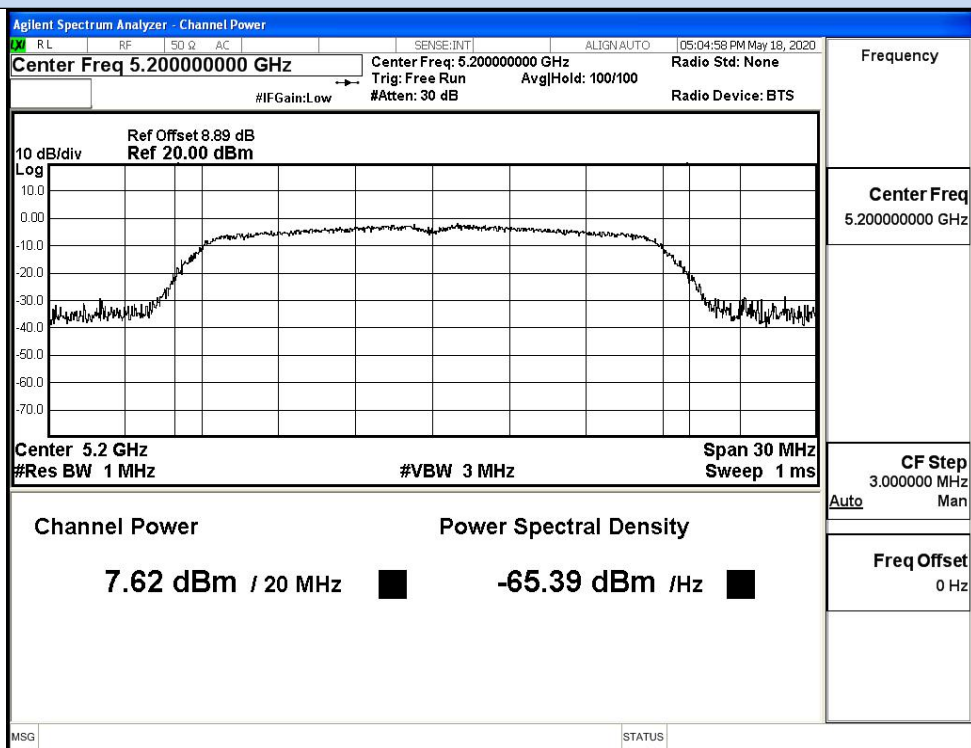
IEEE 802.11n40 / Channel 38 / 5190MHz



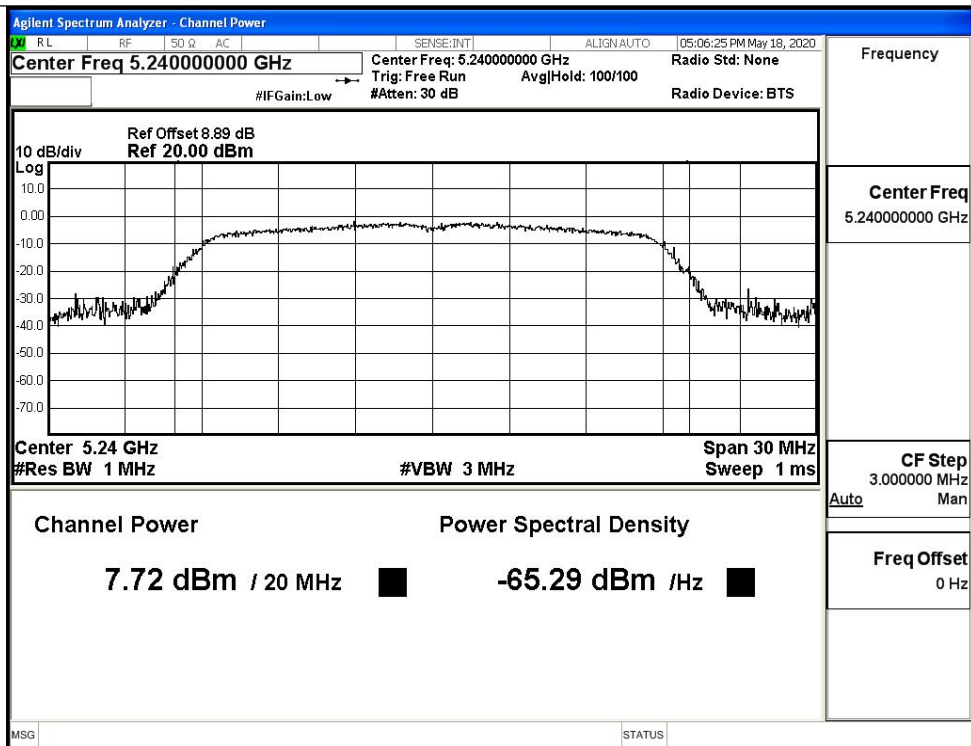
IEEE 802.11n40 / Channel 46 / 5230MHz



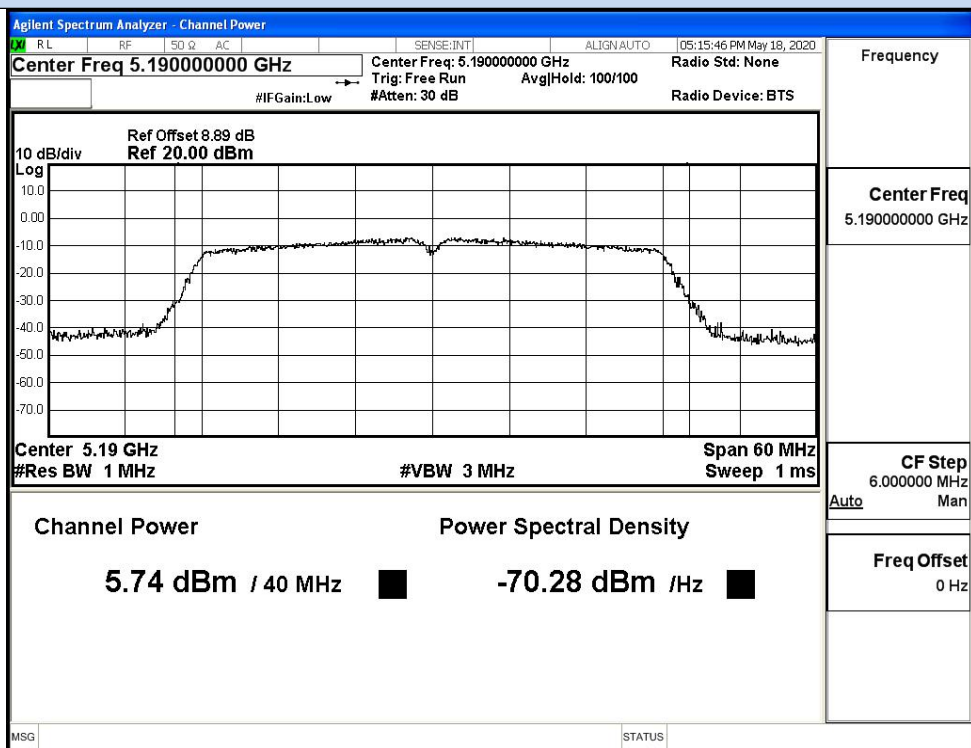
IEEE 802.11ac20 / Channel 36 / 5180MHz



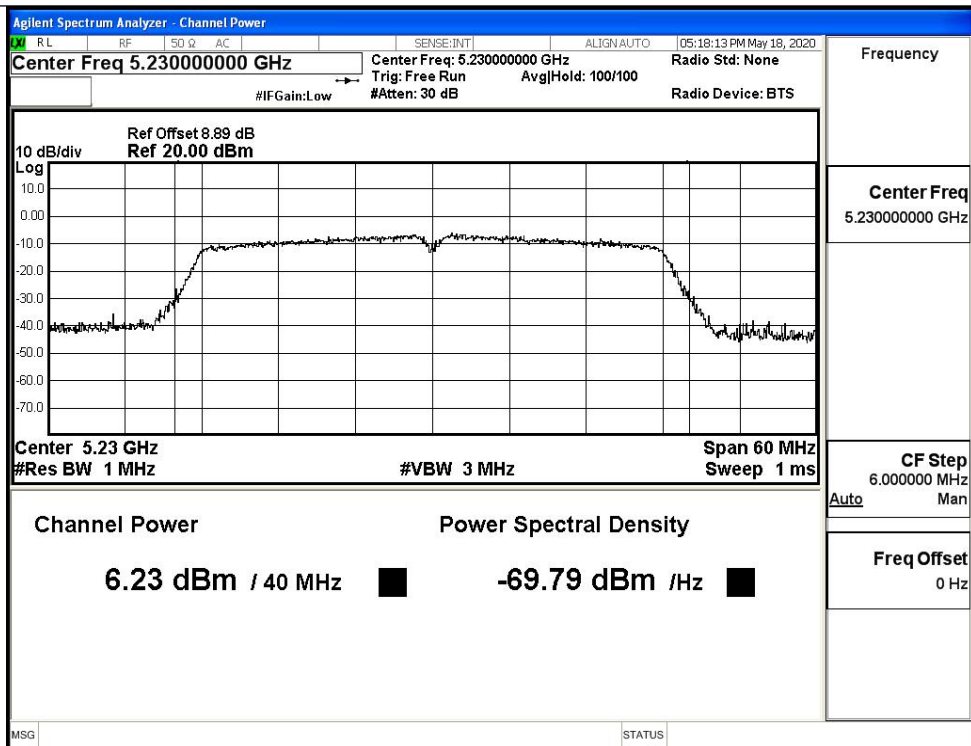
IEEE 802.11ac20 / Channel 40 / 5200MHz



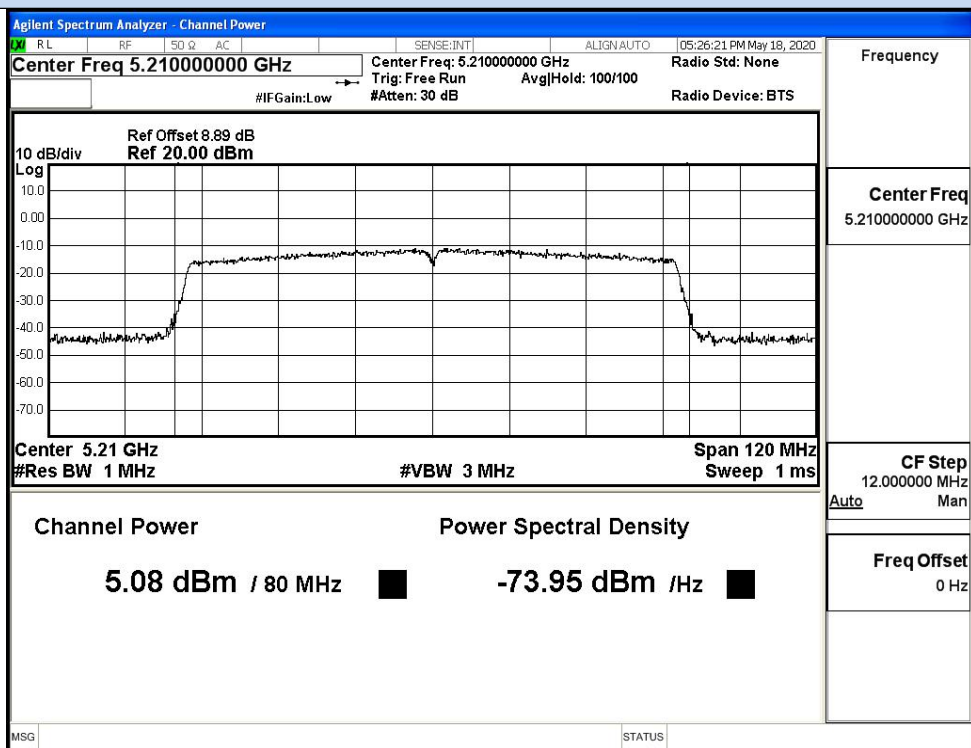
IEEE 802.11ac20 / Channel 48 / 5240MHz



IEEE 802.11ac40 / Channel 38 / 5190MHz



IEEE 802.11ac40 / Channel 46 / 5230MHz

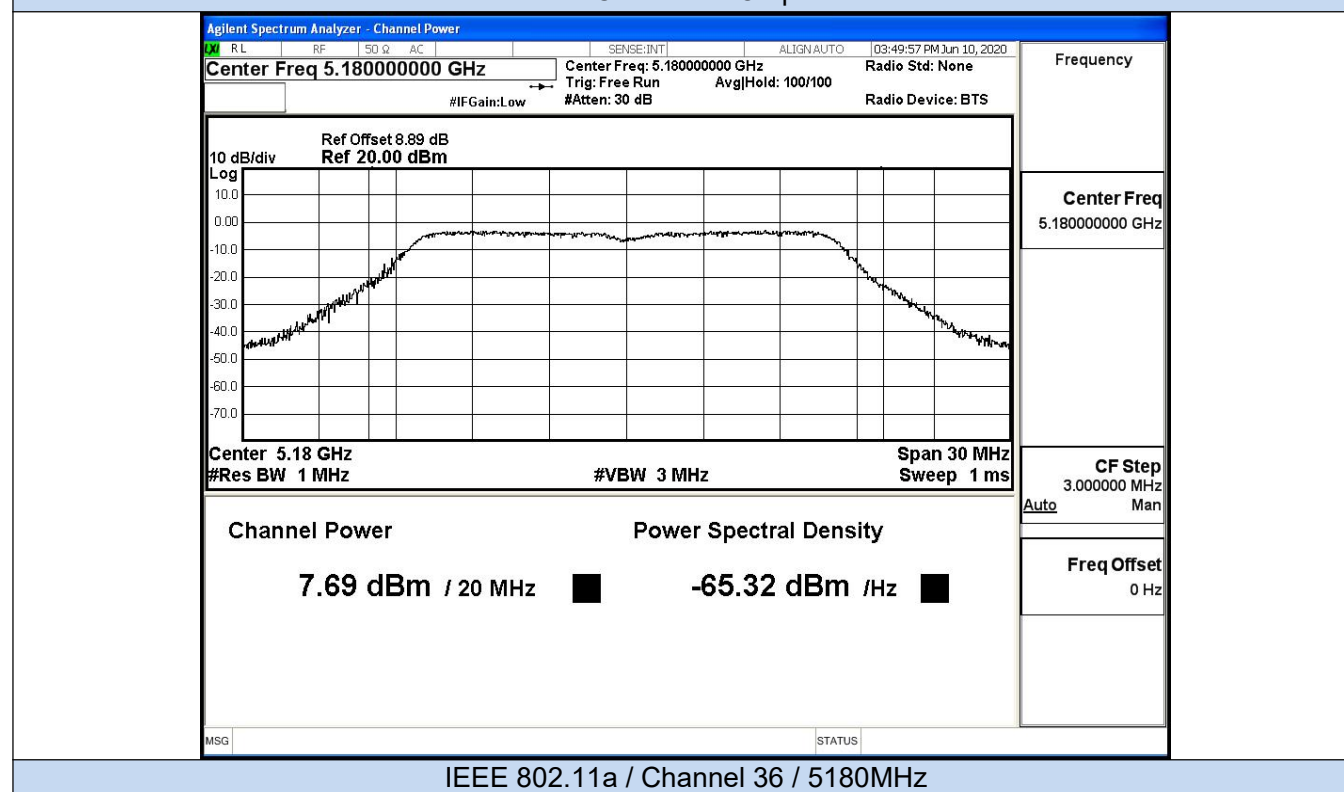


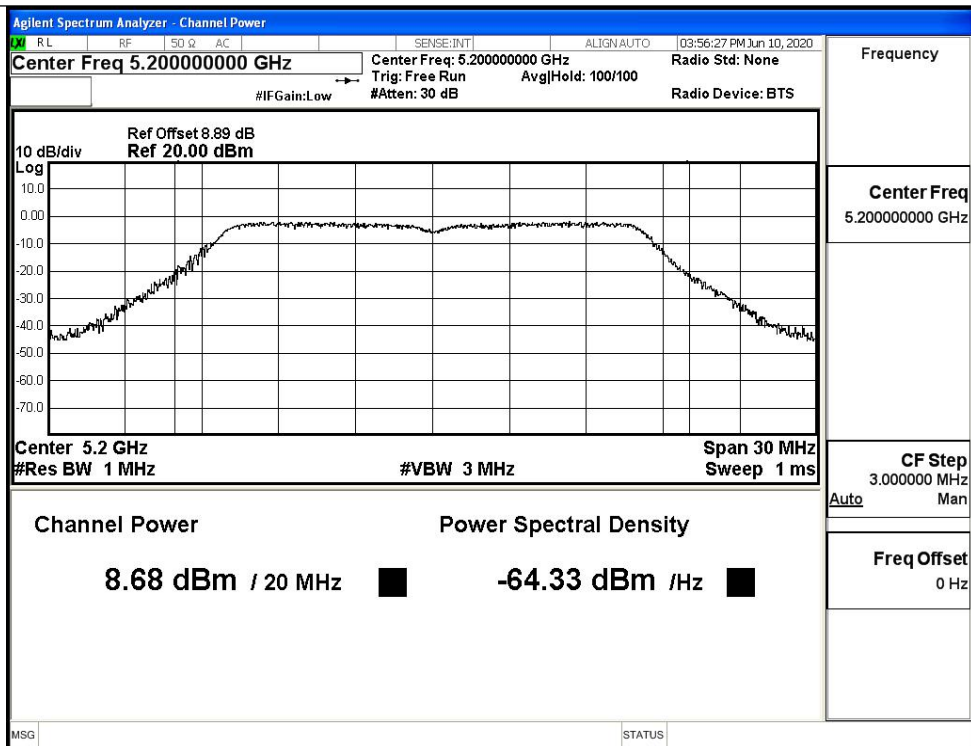
IEEE 802.11ac80 / Channel 42 / 5210MHz

ANT 1

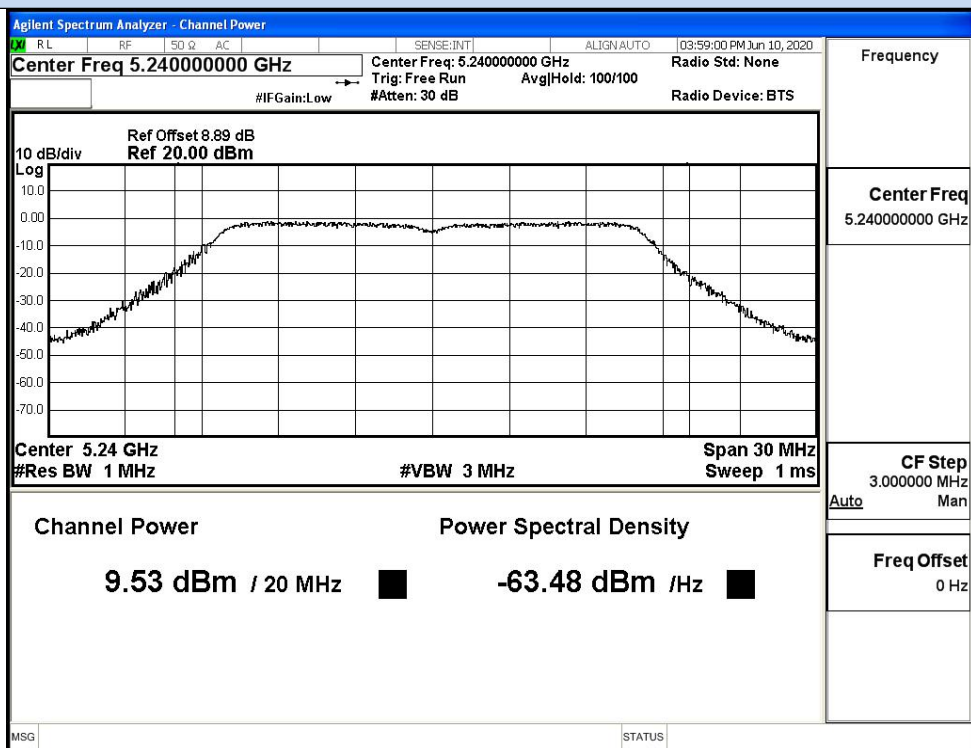
Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	7.69	0	7.69	24	Pass
	40	5200	8.68	0	8.68		Pass
	48	5240	9.53	0	9.53		Pass
11N20 SISO	36	5180	8.76	0	8.76	24	Pass
	40	5200	7.82	0	7.82		Pass
	48	5240	8.88	0	8.88		Pass
11N40 SISO	38	5190	7.82	0	7.82	24	Pass
	46	5230	8.4	0	8.4		Pass
11AC20 SISO	36	5180	8.29	0	8.29	24	Pass
	40	5200	8.74	0	8.74		Pass
	48	5240	8.29	0	8.29		Pass
11AC40 SISO	38	5190	7.33	0	7.33	24	Pass
	46	5230	7.32	0	7.32		Pass
11AC80 SISO	42	5210	8.07	0	8.07	24	Pass

Maximum Conducted Output Power



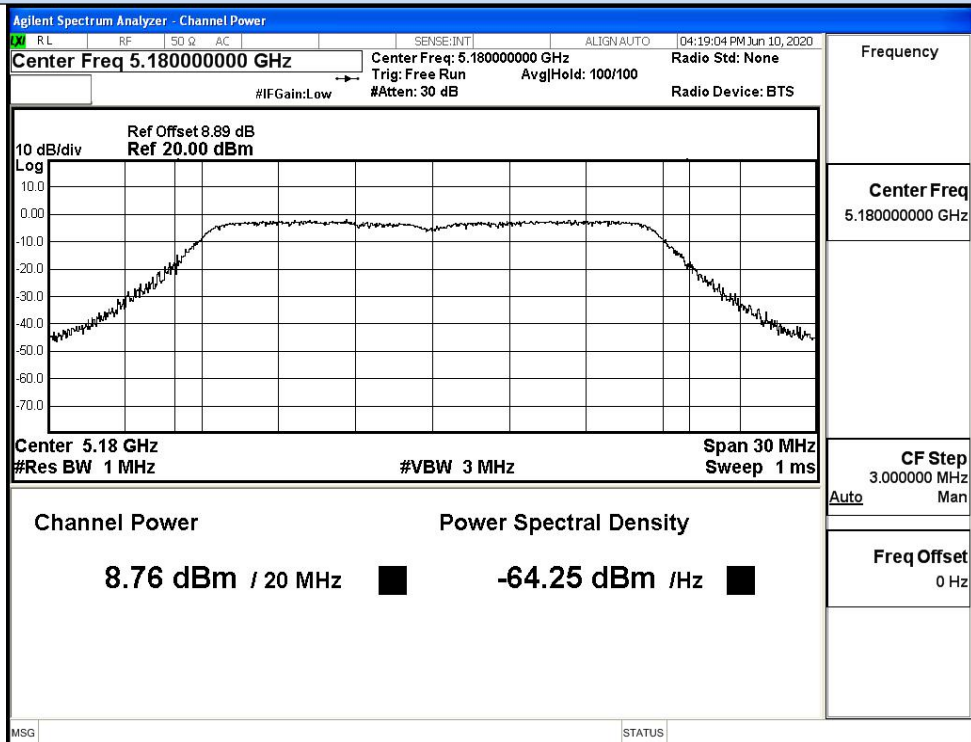


IEEE 802.11a / Channel 40 / 5200MHz

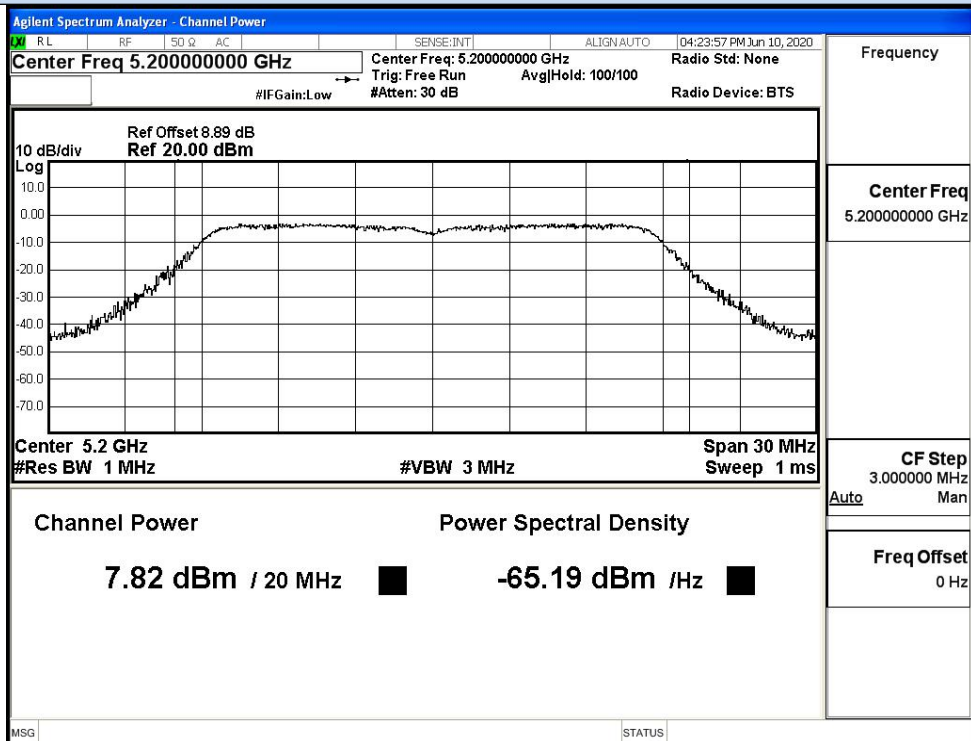


IEEE 802.11a / Channel 48 / 5240MHz

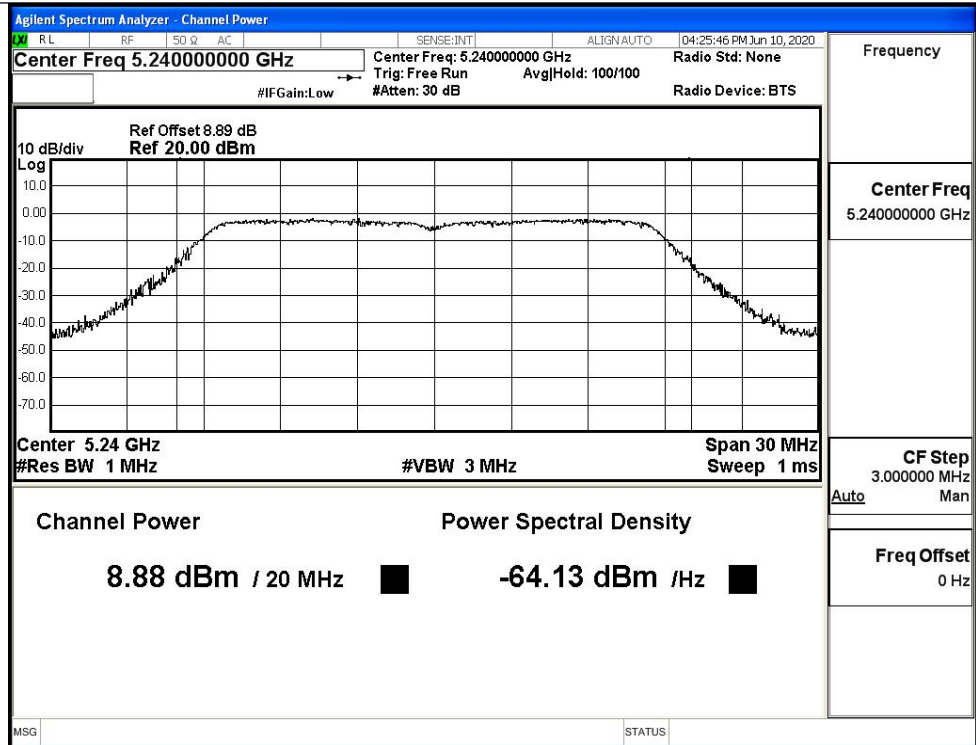
Maximum Conducted Output Power



IEEE 802.11n20 / Channel 36 / 5180MHz

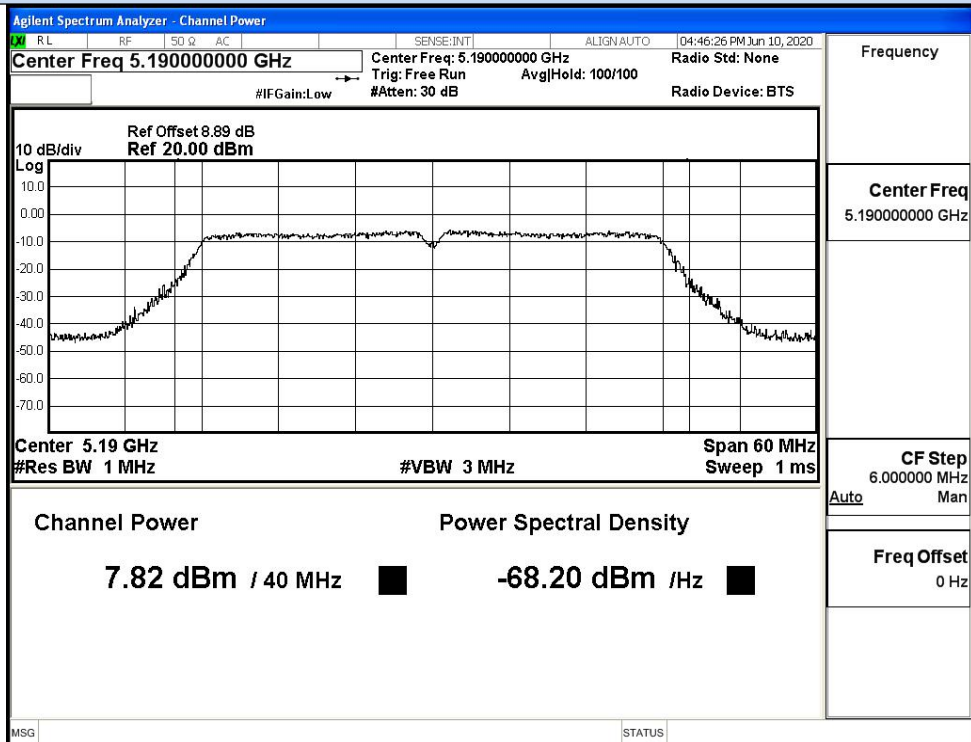


IEEE 802.11n20 / Channel 40 / 5200MHz

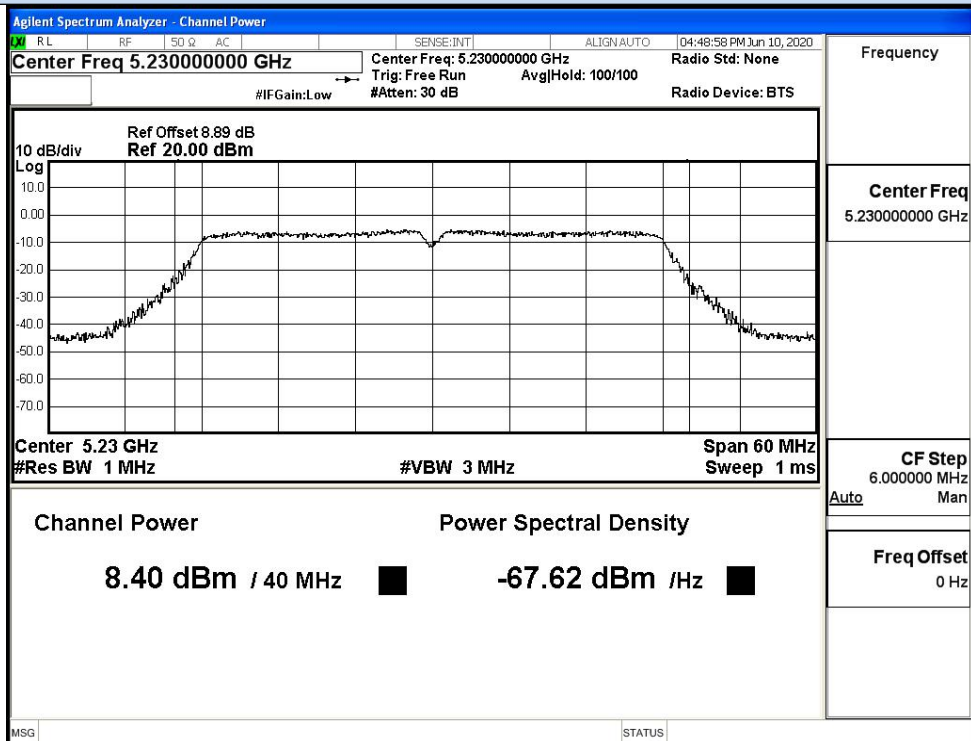


IEEE 802.11n20 / Channel 48 / 5240MHz

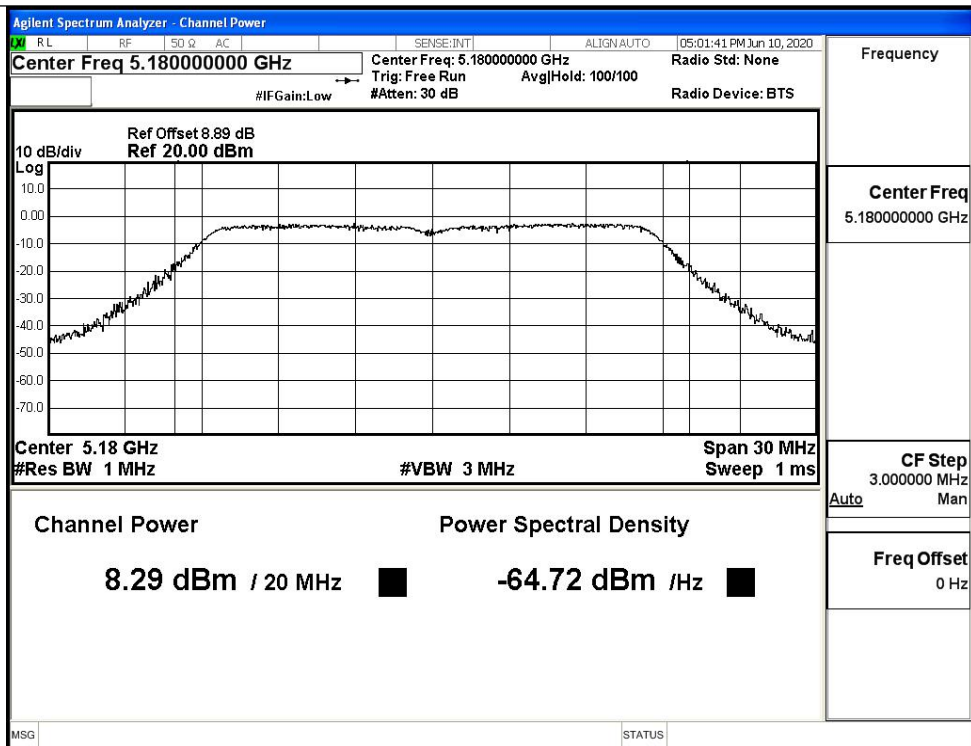
Maximum Conducted Output Power



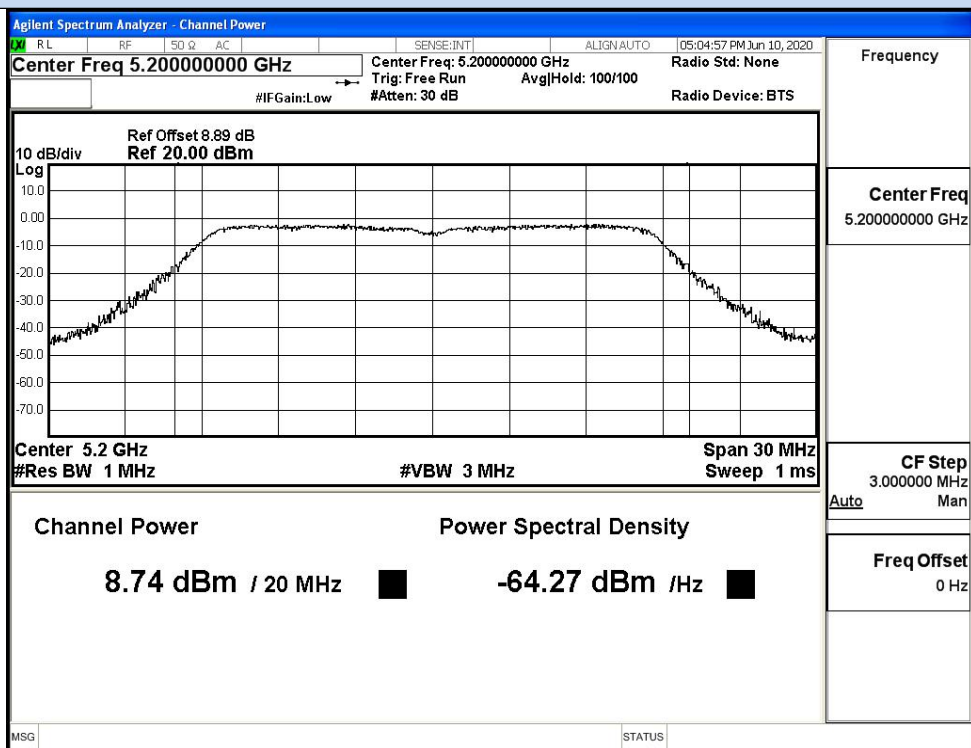
IEEE 802.11n40 / Channel 38 / 5190MHz



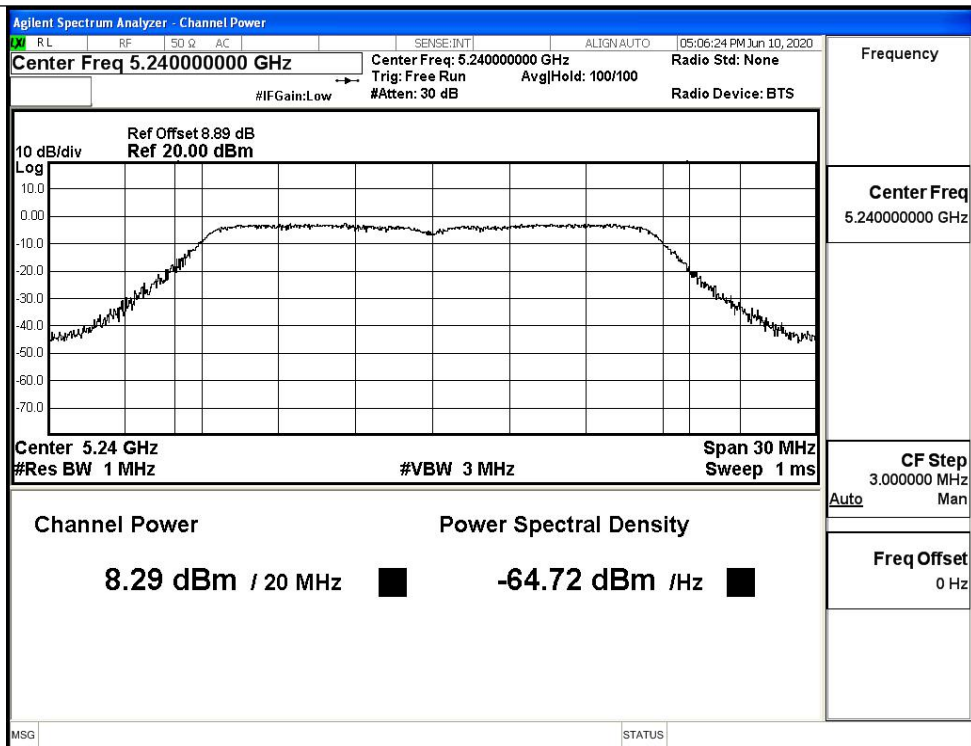
IEEE 802.11n40 / Channel 46 / 5230MHz



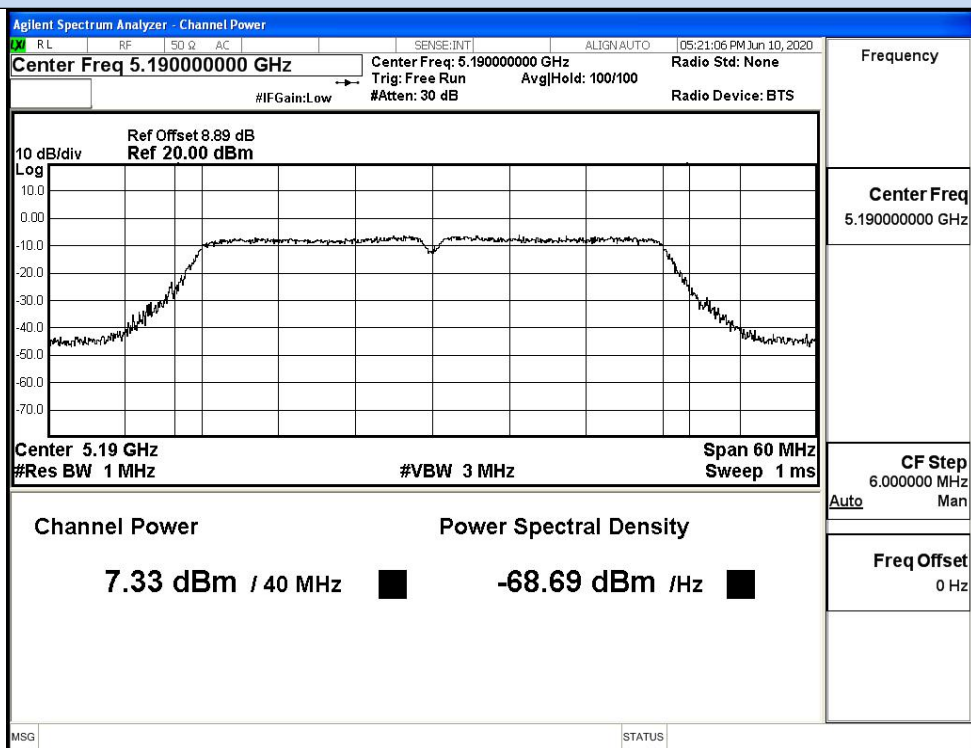
IEEE 802.11ac20 / Channel 36 / 5180MHz



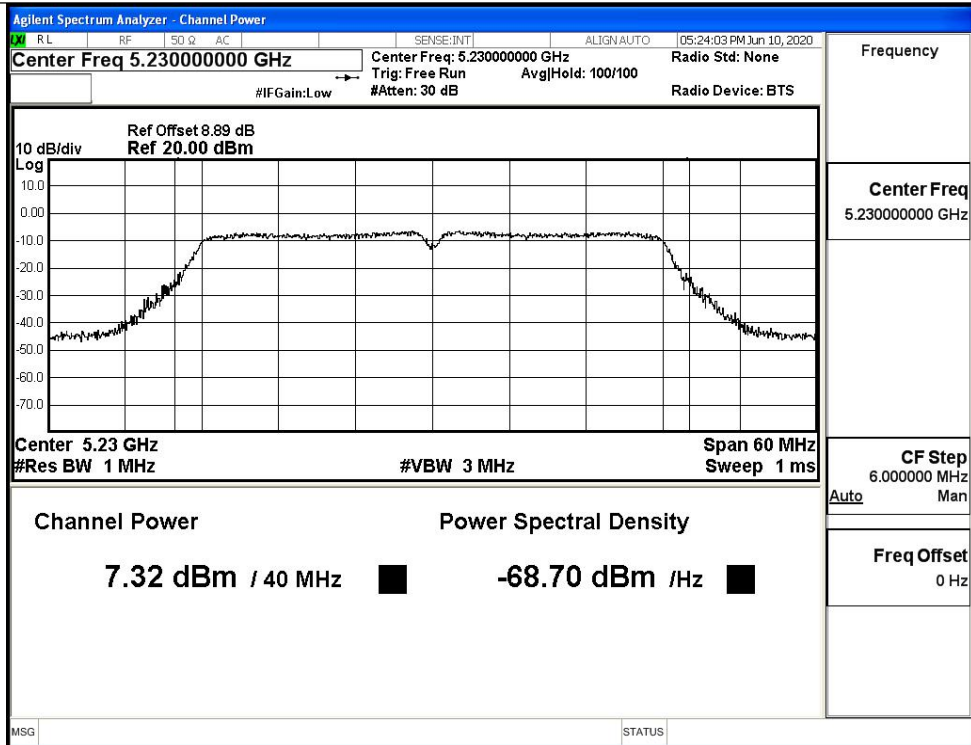
IEEE 802.11ac20 / Channel 40 / 5200MHz



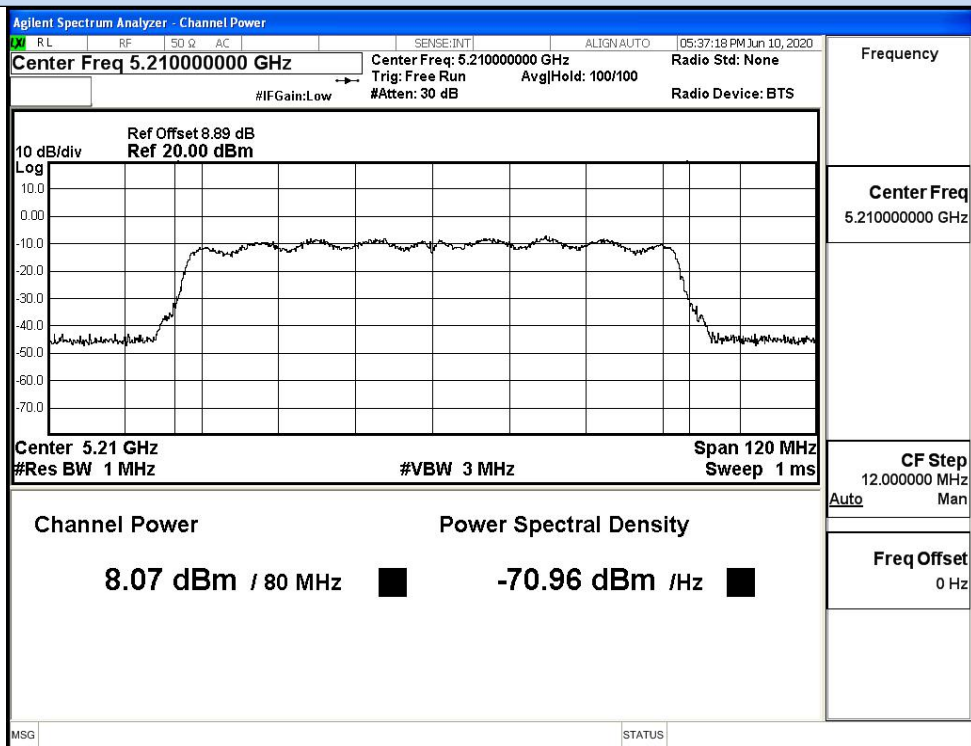
IEEE 802.11ac20 / Channel 48 / 5240MHz



IEEE 802.11ac40 / Channel 38 / 5190MHz



IEEE 802.11ac40 / Channel 46 / 5230MHz



IEEE 802.11ac80 / Channel 42 / 5210MHz

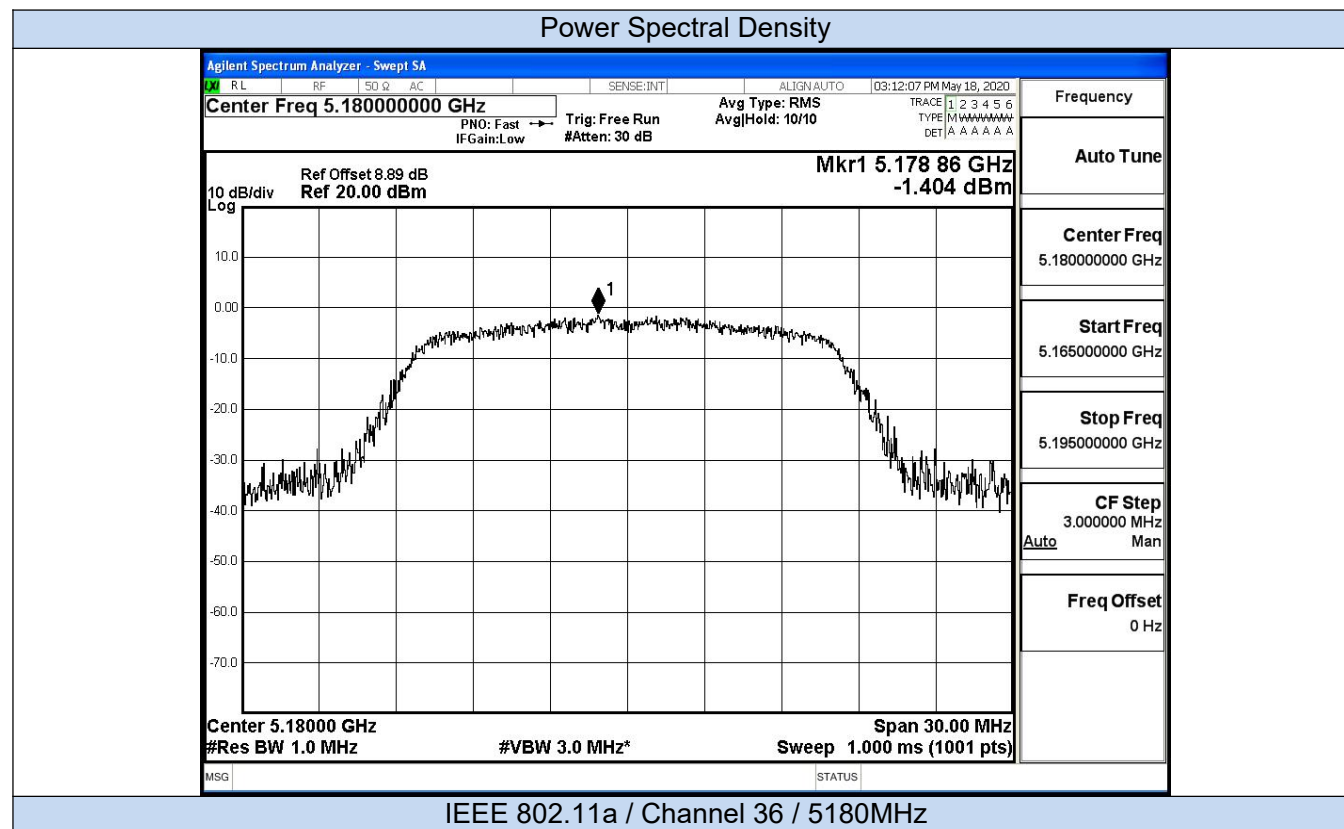
Ant0+1

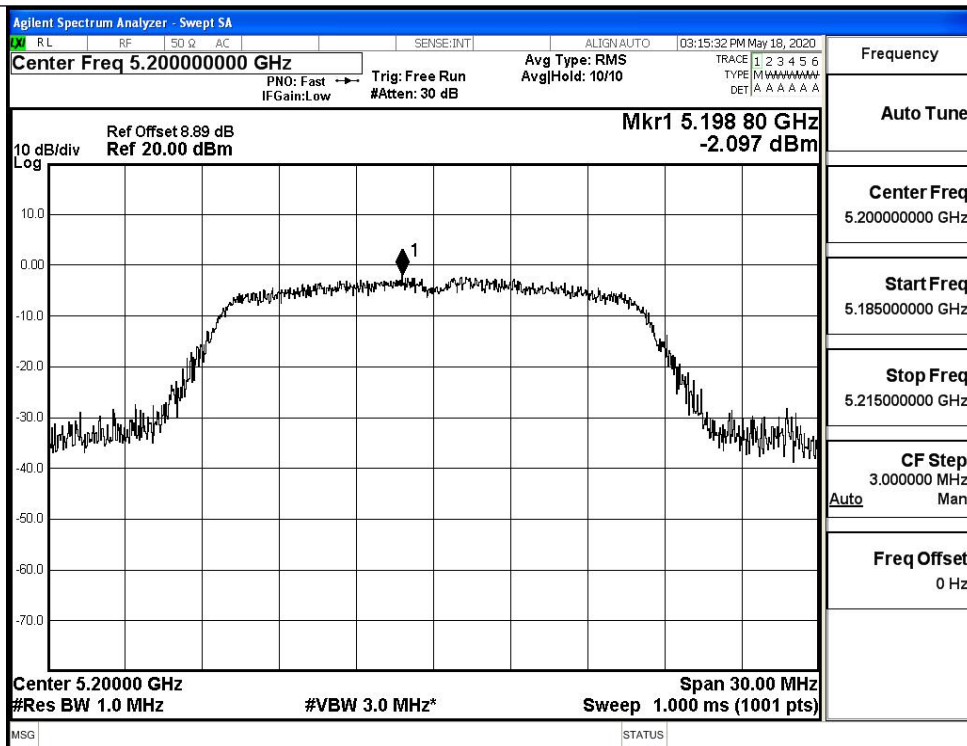
Test Mode	Channel	Frequency (MHz)	ANT 0 AVG Conducted Power (dBm)	ANT 1 AVG Conducted Power (dBm)	ANT 0+1 AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)	Verdict
11N20 SISO	36	5180	6.64	8.76	10.84	0	10.84	24	Pass
	40	5200	7.5	7.82	10.67	0	10.67		Pass
	48	5240	7.66	8.88	11.32	0	11.32		Pass
11N40 SISO	38	5190	5.71	7.82	9.90	0	9.90	24	Pass
	46	5230	6.15	8.4	10.43	0	10.43		Pass
11AC20 SISO	36	5180	7.3	8.29	10.83	0	10.83	24	Pass
	40	5200	7.62	8.74	11.23	0	11.23		Pass
	48	5240	7.72	8.29	11.02	0	11.02		Pass
11AC40 SISO	38	5190	5.74	7.33	9.62	0	9.62	24	Pass
	46	5230	6.23	7.32	9.82	0	9.82		Pass
11AC80 SISO	42	5210	5.08	8.07	9.84	0	9.84	24	Pass

D.3 Power Spectral Density

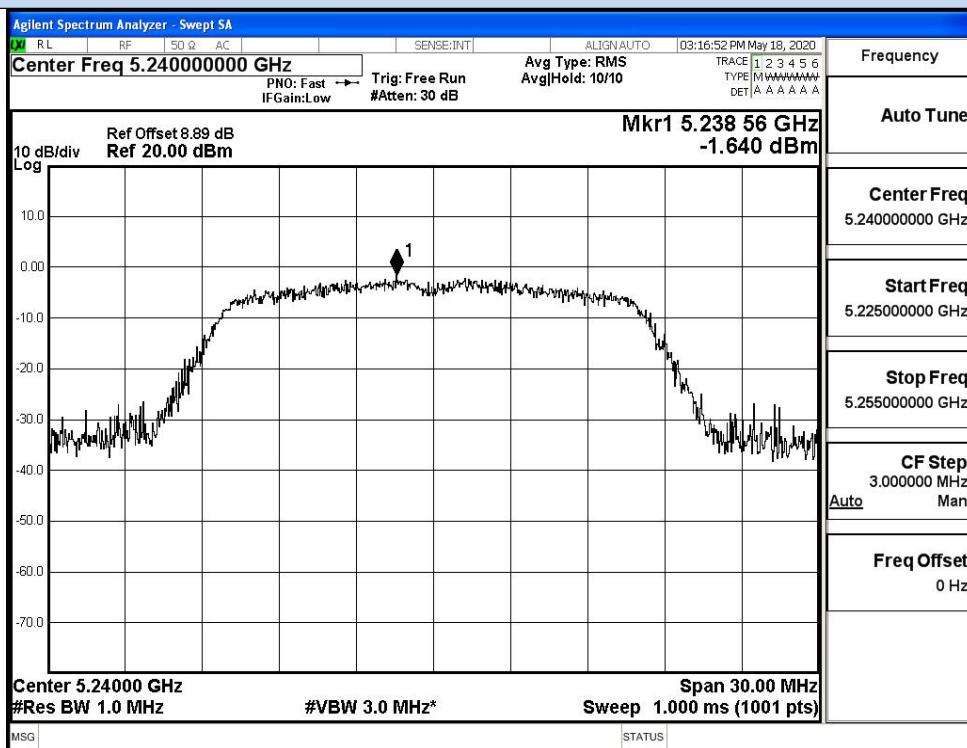
ANT 0

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	-1.40	0	-1.40	11	Pass
	40	5200	-2.10	0	-2.10		Pass
	48	5240	-1.64	0	-1.64		Pass
11N20 SISO	36	5180	-2.92	0	-2.92	11	Pass
	40	5200	-2.37	0	-2.37		Pass
	48	5240	-2.58	0	-2.58		Pass
11N40 SISO	38	5190	-7.23	0	-7.23	11	Pass
	46	5230	-6.01	0	-6.01		Pass
11AC20 SISO	36	5180	-2.54	0	-2.54	11	Pass
	40	5200	-2.49	0	-2.49		Pass
	48	5240	-2.34	0	-2.34		Pass
11AC40 SISO	38	5190	-6.90	0	-6.90	11	Pass
	46	5230	-6.41	0	-6.41		Pass
11AC80 SISO	42	5210	-10.53	0	-10.53	11	Pass





IEEE 802.11na / Channel 40 / 5200MHz



IEEE 802.11na / Channel 48 / 5240MHz