

Appendix E

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: IPTV

Trade Mark: Formuler

Test Model: GTV

Environmental Conditions

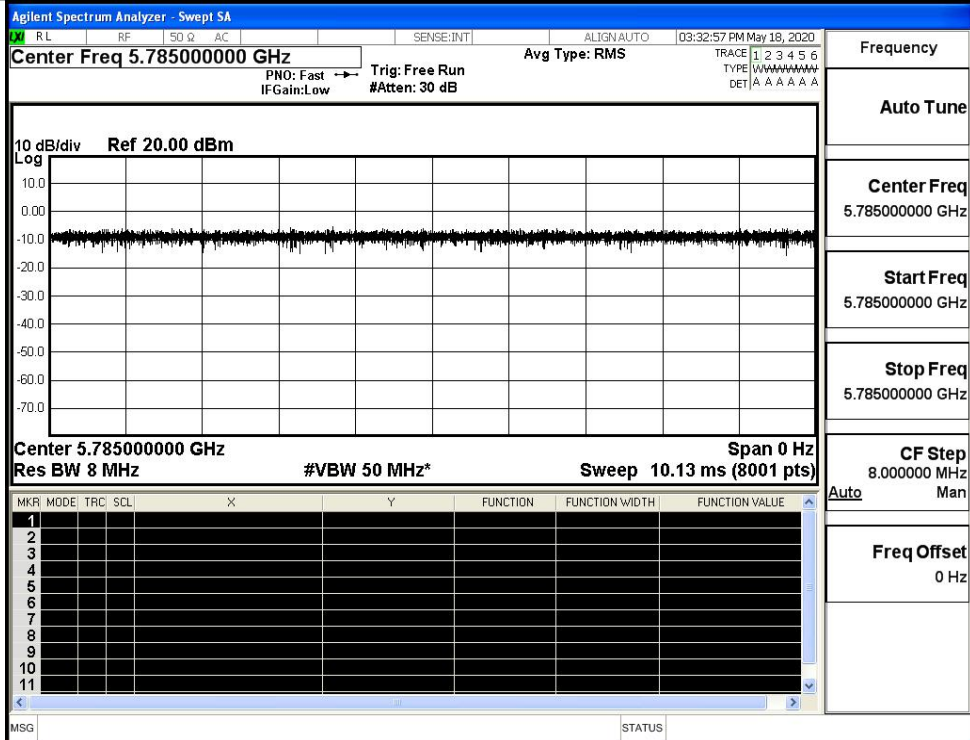
Temperature:	25.1 ° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	David.Luo
Supervised by:	Tom.Liu

E.1 Duty Cycle

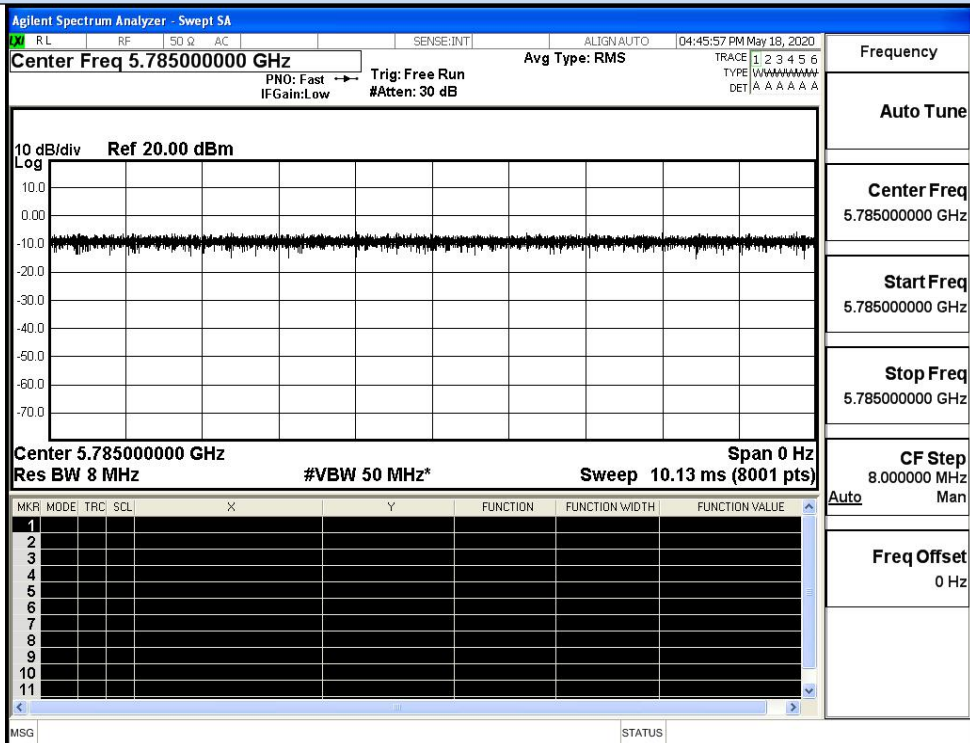
ANT 0

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5785	100	0.00	0.01
11N20 SISO	5785	100	0.00	0.01
11N40 SISO	5755	100	0.00	0.01
11AC20 SISO	5785	100	0.00	0.01
11AC40 SISO	5755	100	0.00	0.01
11AC80 SISO	5775	100	0.00	0.01

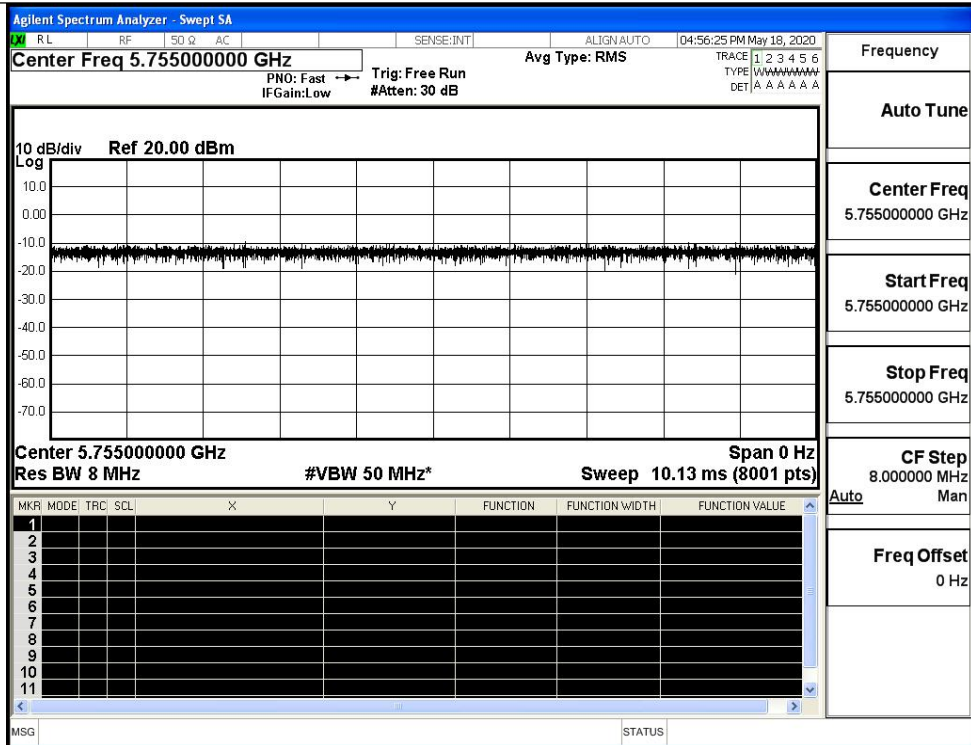
On Time and Duty Cycle



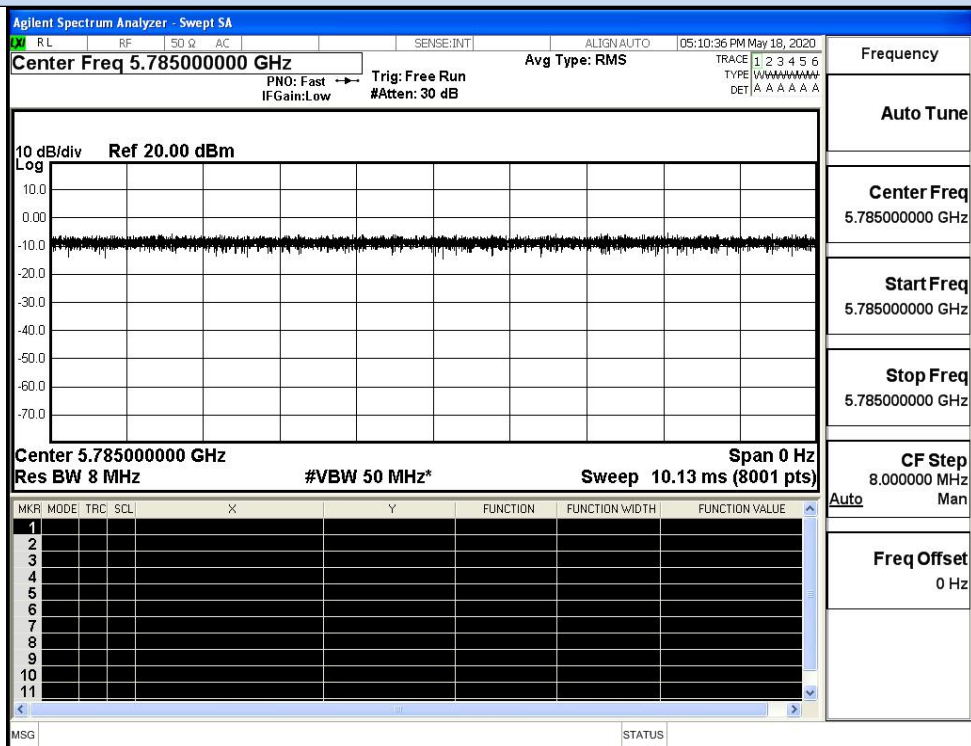
IEEE 802.11a



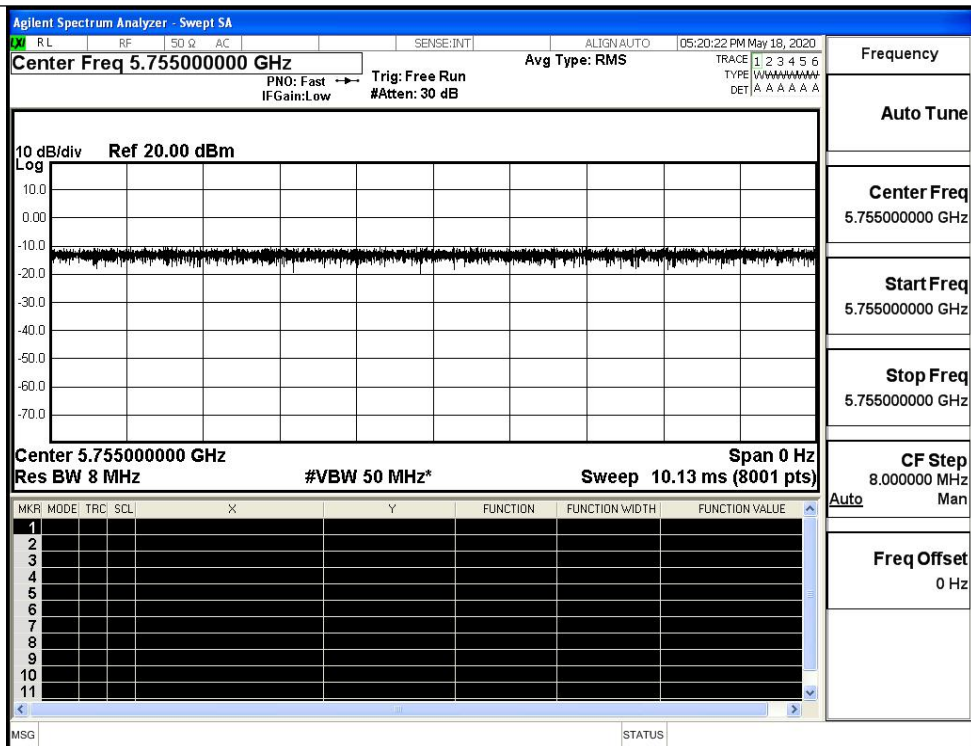
IEEE 802.11n HT20



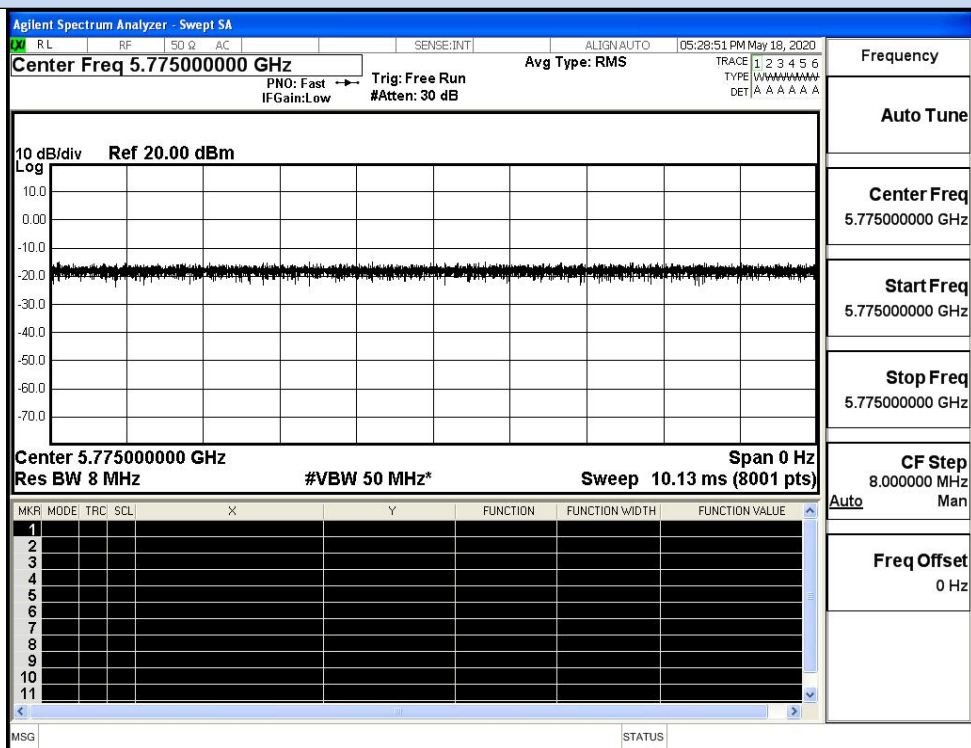
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40

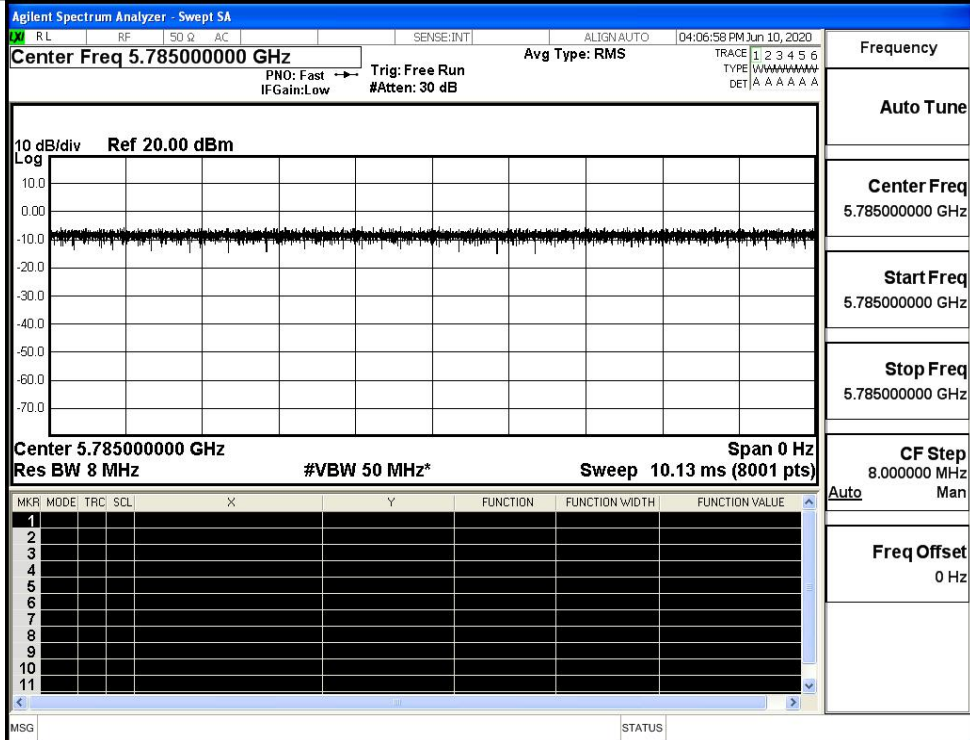


IEEE 802.11AC80

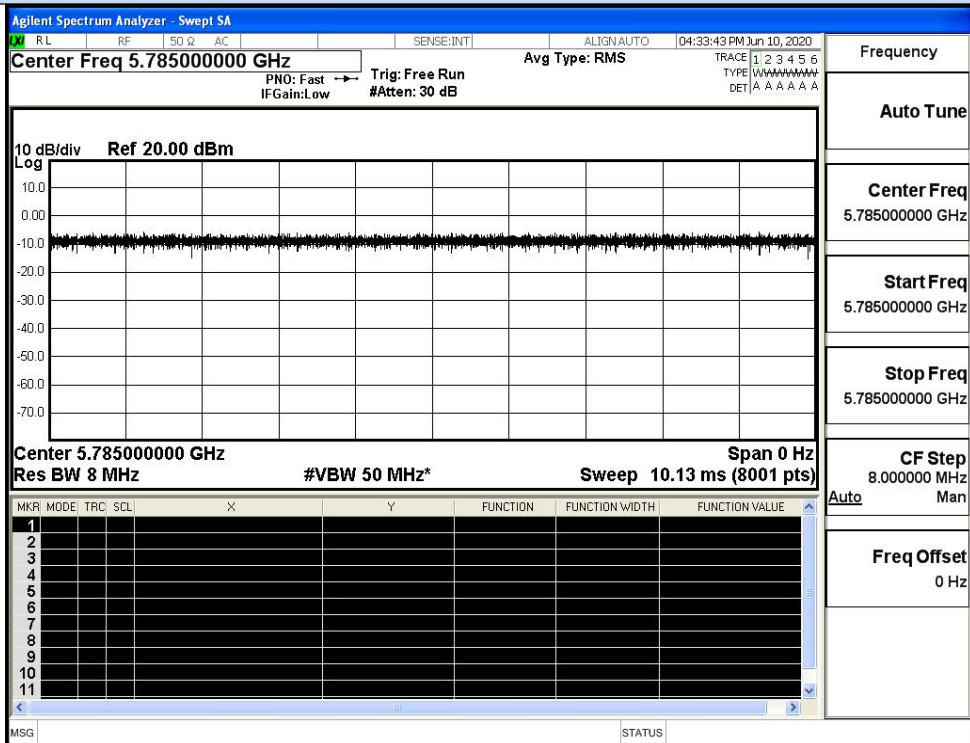
ANT 1

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5785	100	0.00	0.01
11N20 SISO	5785	100	0.00	0.01
11N40 SISO	5755	100	0.00	0.01
11AC20 SISO	5785	100	0.00	0.01
11AC40 SISO	5755	100	0.00	0.01
11AC80 SISO	5775	100	0.00	0.01

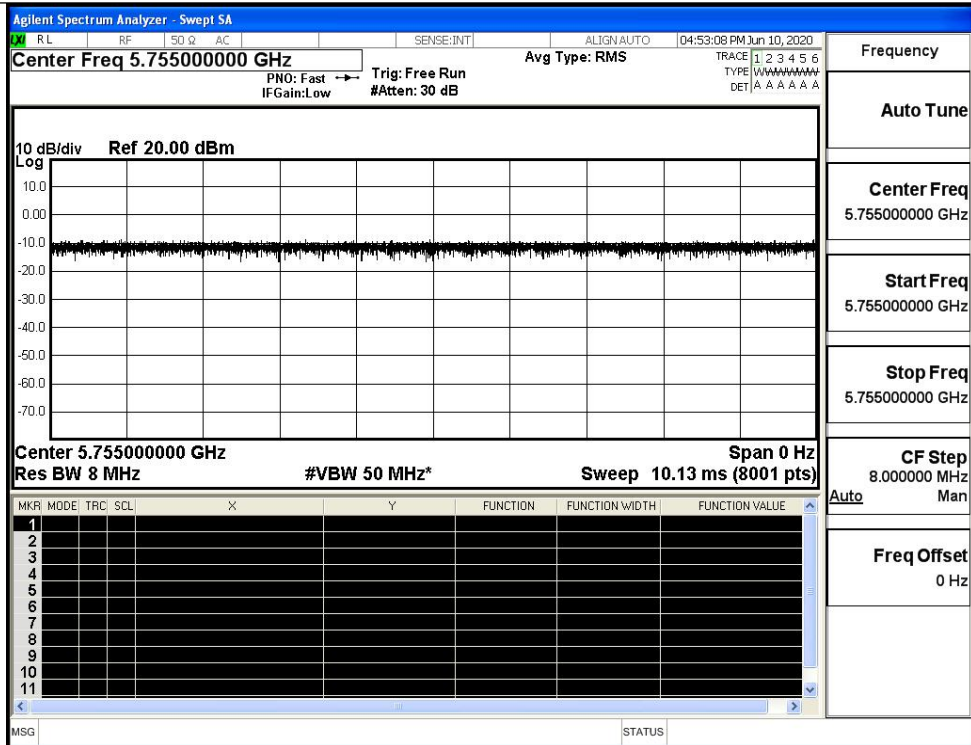
On Time and Duty Cycle



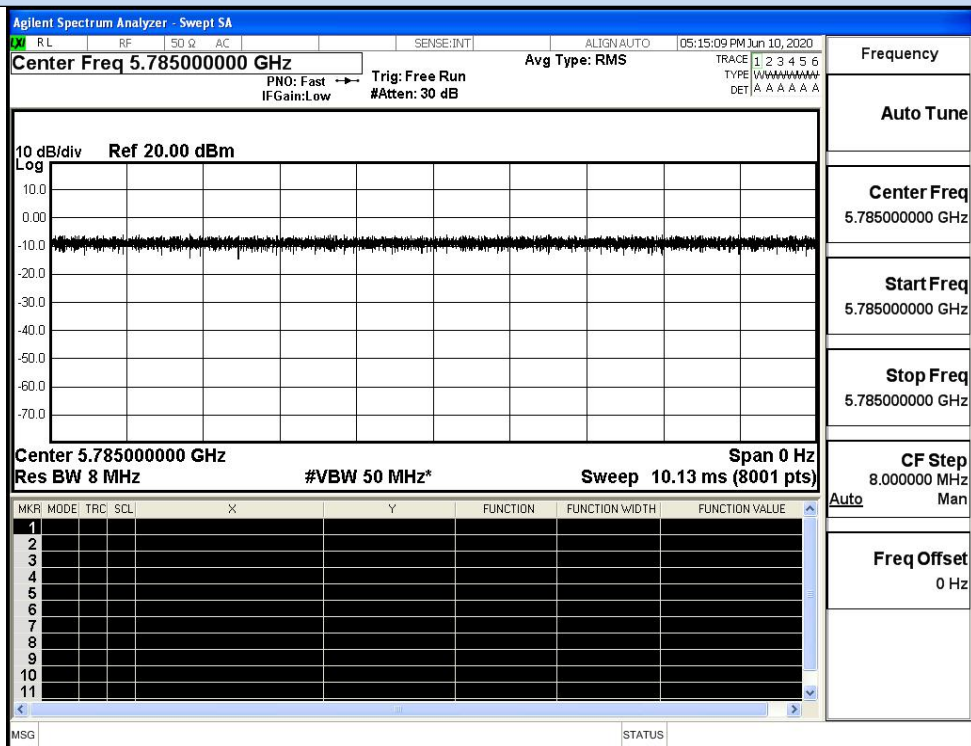
IEEE 802.11a



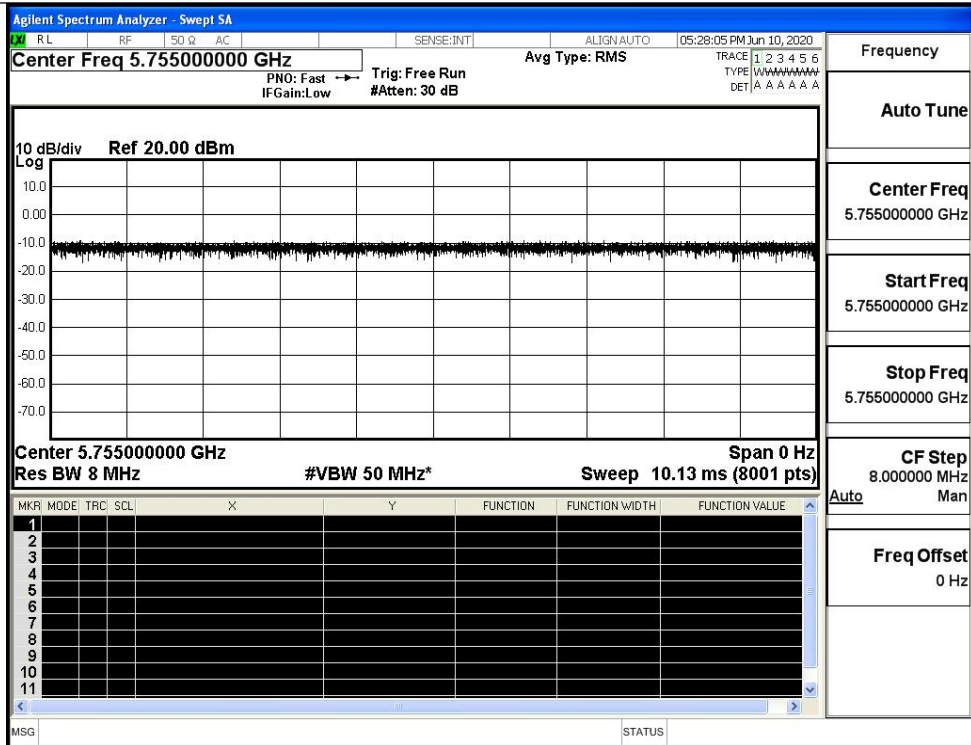
IEEE 802.11n HT20



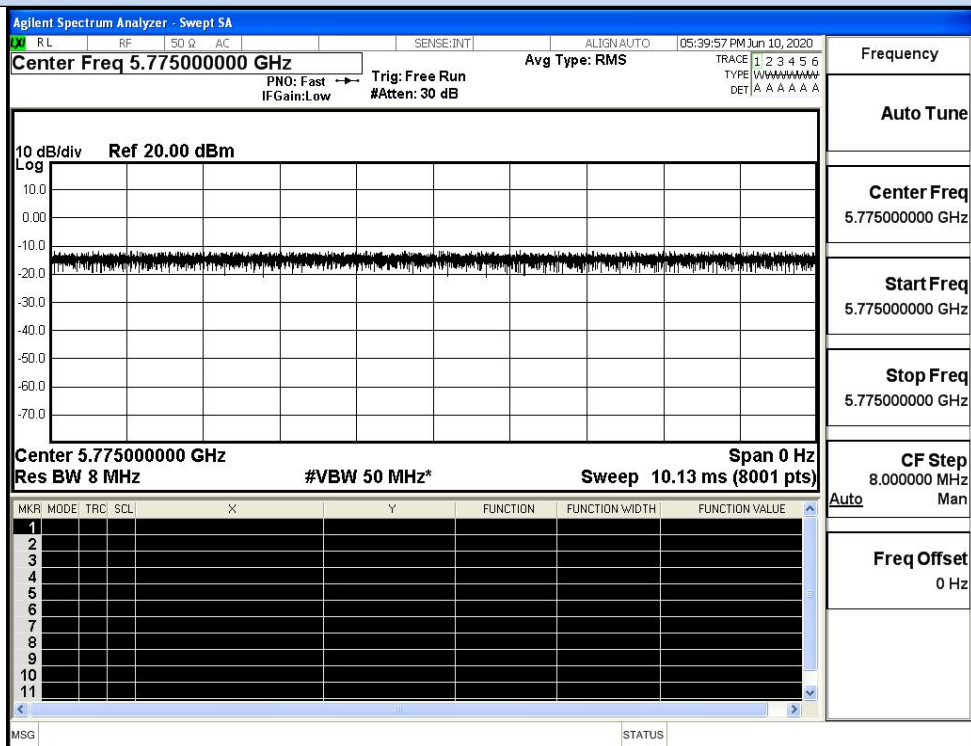
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40



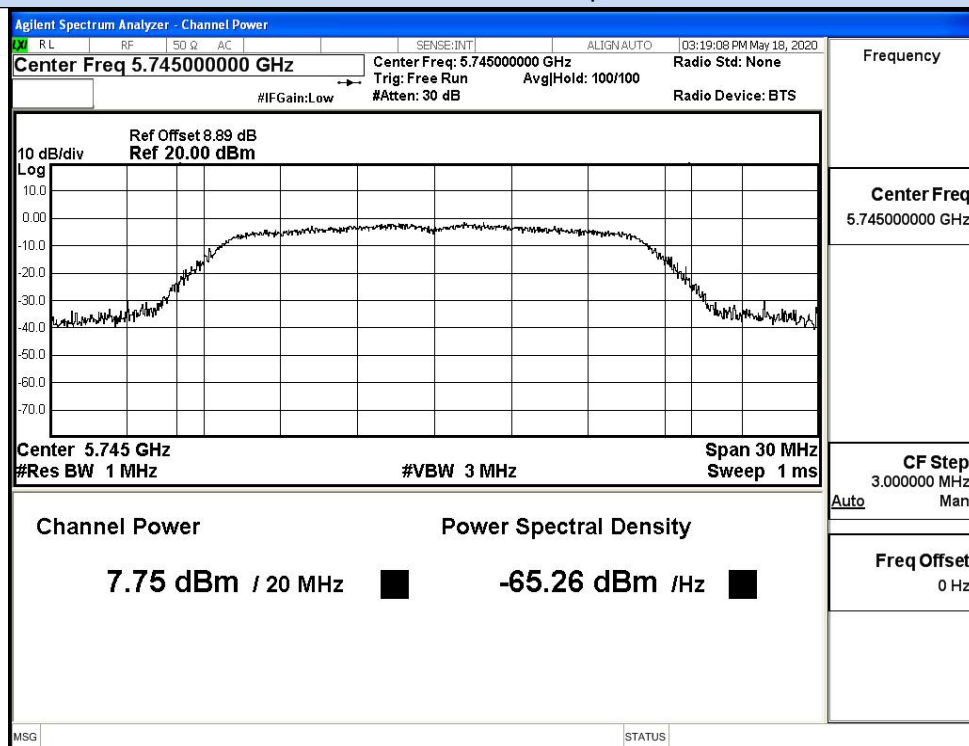
IEEE 802.11AC80

E.2 Maximum Conduct Output Power

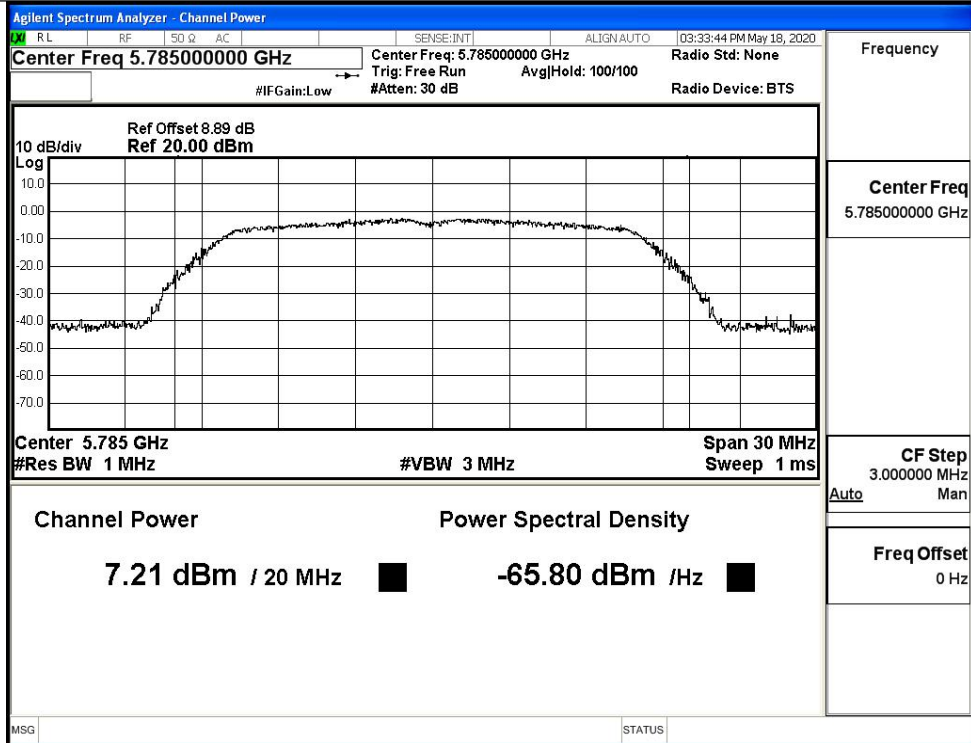
ANT 0

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	149	5745	7.75	0	7.75	30	Pass
	157	5785	7.21	0	7.21		Pass
	165	5825	7.72	0	7.72		Pass
11N20 SISO	149	5745	7.37	0	7.37	30	Pass
	157	5785	7.34	0	7.34		Pass
	165	5825	7.47	0	7.47		Pass
11N40 SISO	151	5755	6.17	0	6.17	30	Pass
	159	5795	6.02	0	6.02		Pass
11AC20 SISO	149	5745	7.3	0	7.3	30	Pass
	157	5785	7.62	0	7.62		Pass
	165	5825	7.72	0	7.72		Pass
11AC40 SISO	151	5755	5.74	0	5.74	30	Pass
	159	5795	6.23	0	6.23		Pass
11AC80 SISO	155	5775	4.82	0	4.82	30	Pass

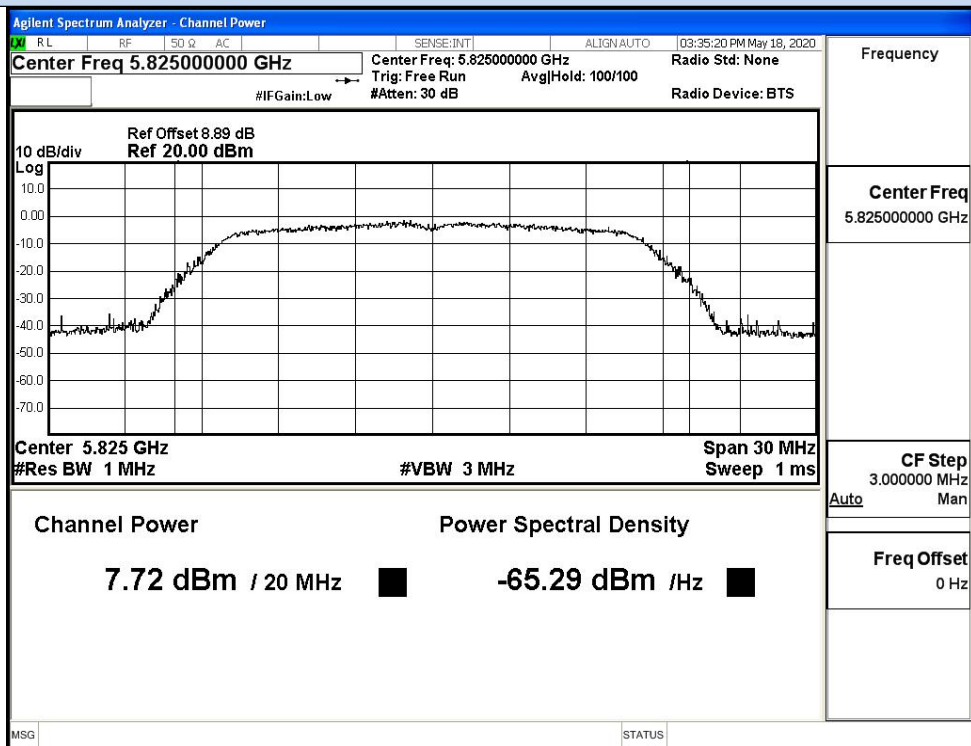
Maximum Conducted Output Power



IEEE 802.11a / Channel 149 / 5745MHz

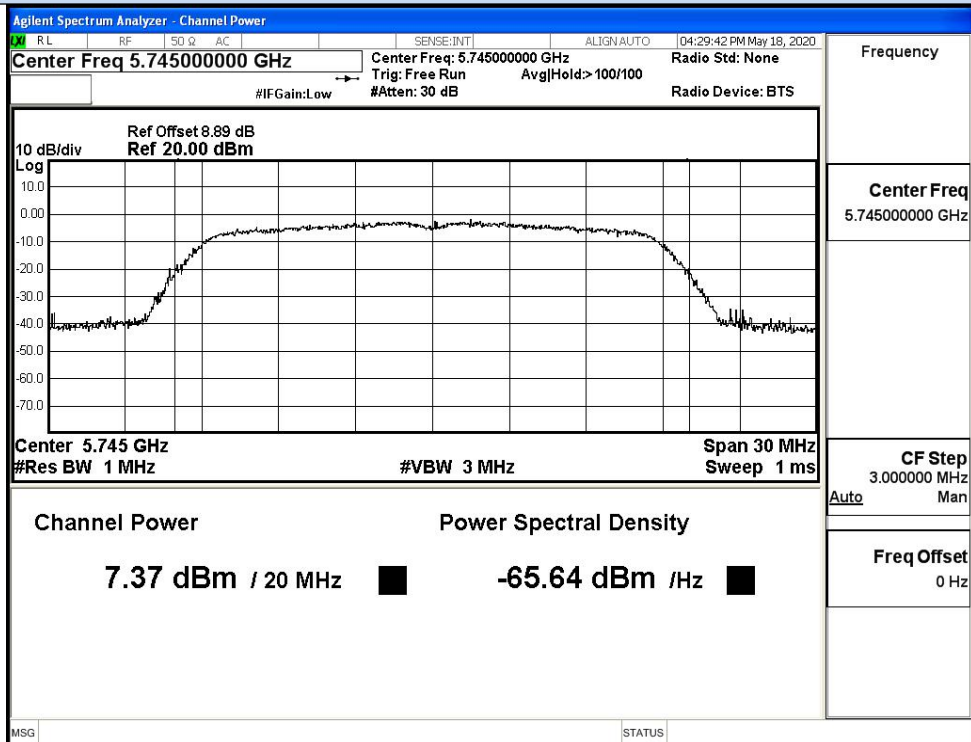


IEEE 802.11a / Channel 157 / 5785MHz

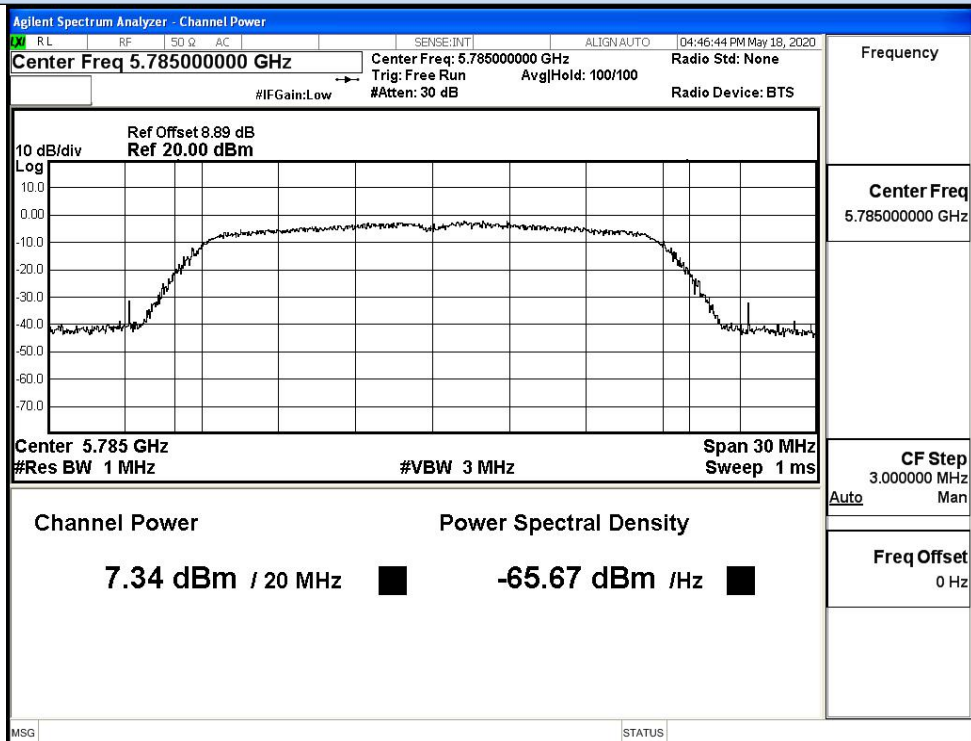


IEEE 802.11a / Channel 165 / 5825MHz

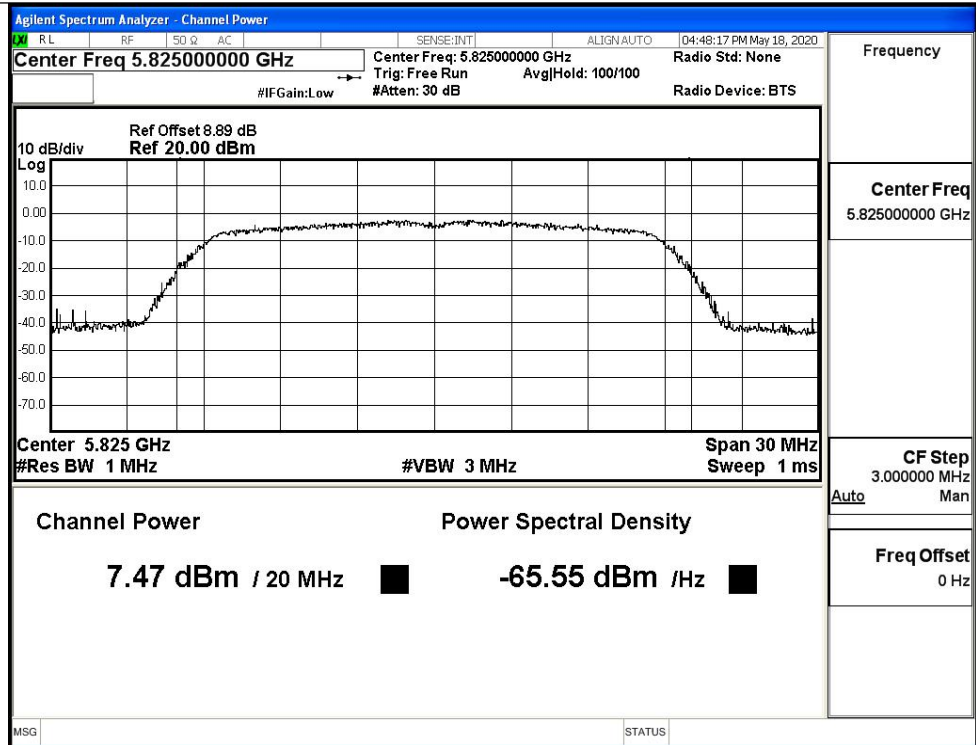
Maximum Conducted Output Power



IEEE 802.11n20 / Channel 149 / 5745MHz

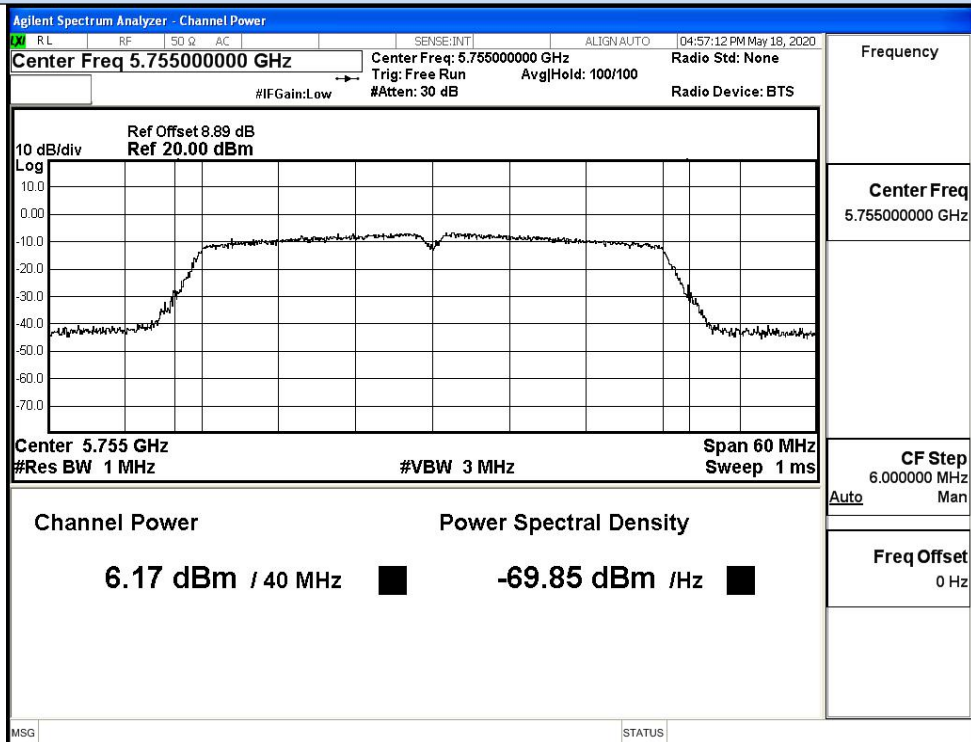


IEEE 802.11n20 / Channel 157 / 5785MHz

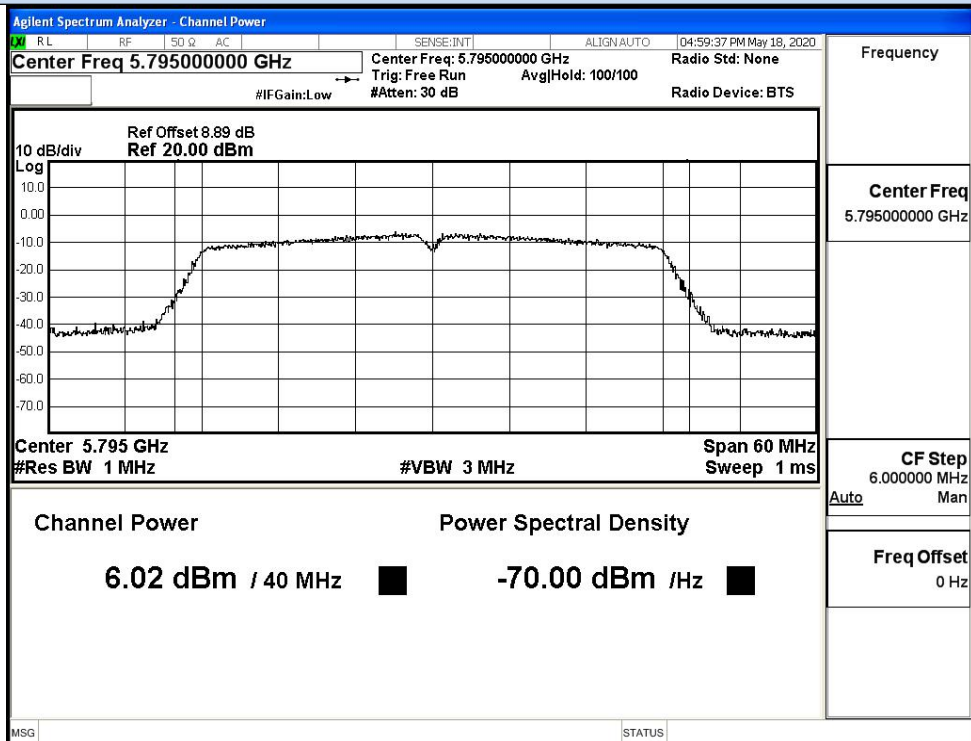


IEEE 802.11n20 / Channel 165 / 5825MHz

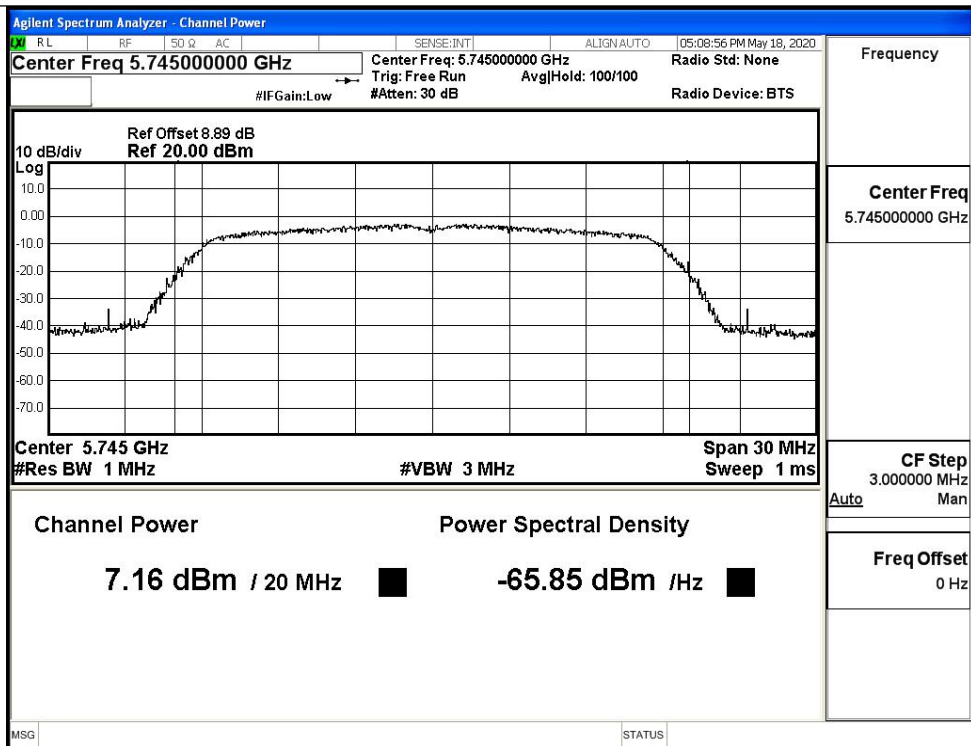
Maximum Conducted Output Power



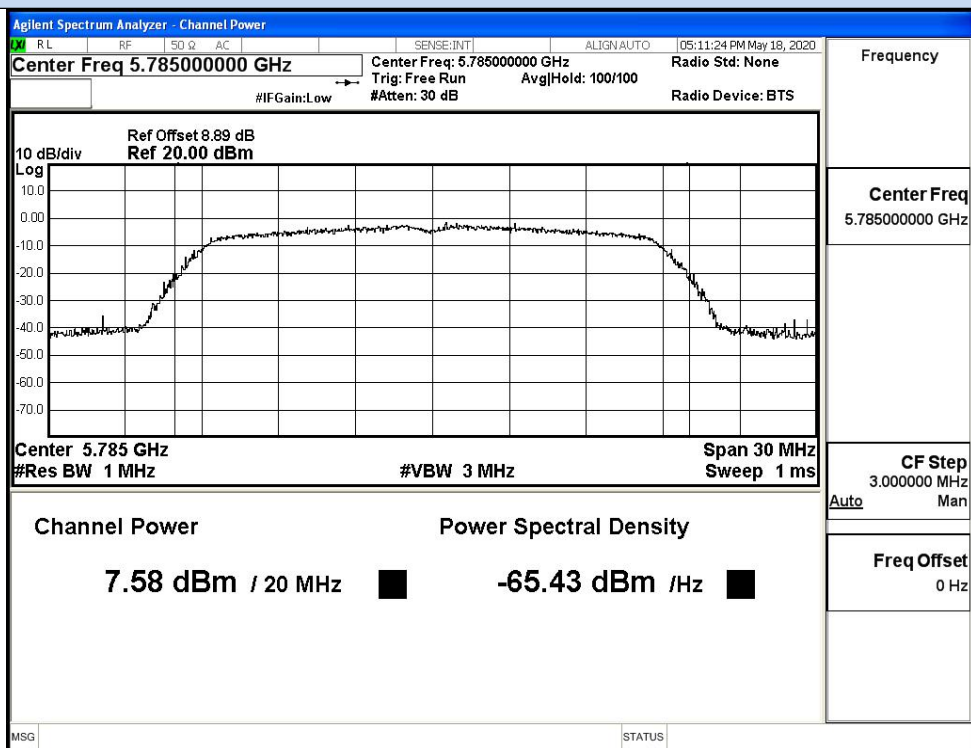
IEEE 802.11n40 / Channel 151 / 5755MHz



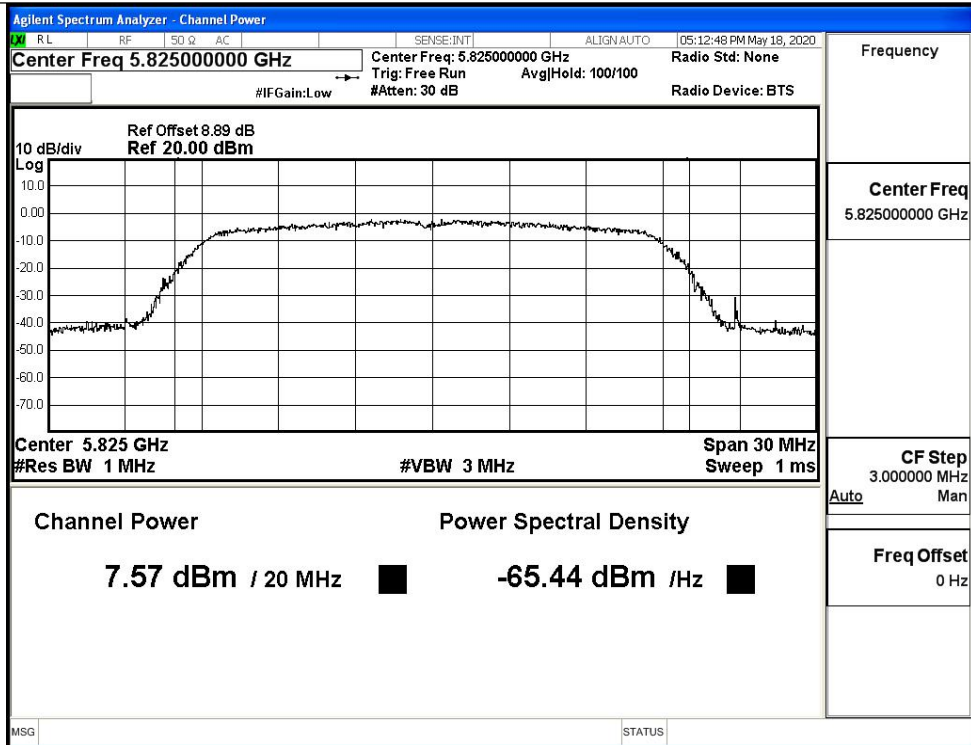
IEEE 802.11n40 / Channel 159 / 5795MHz



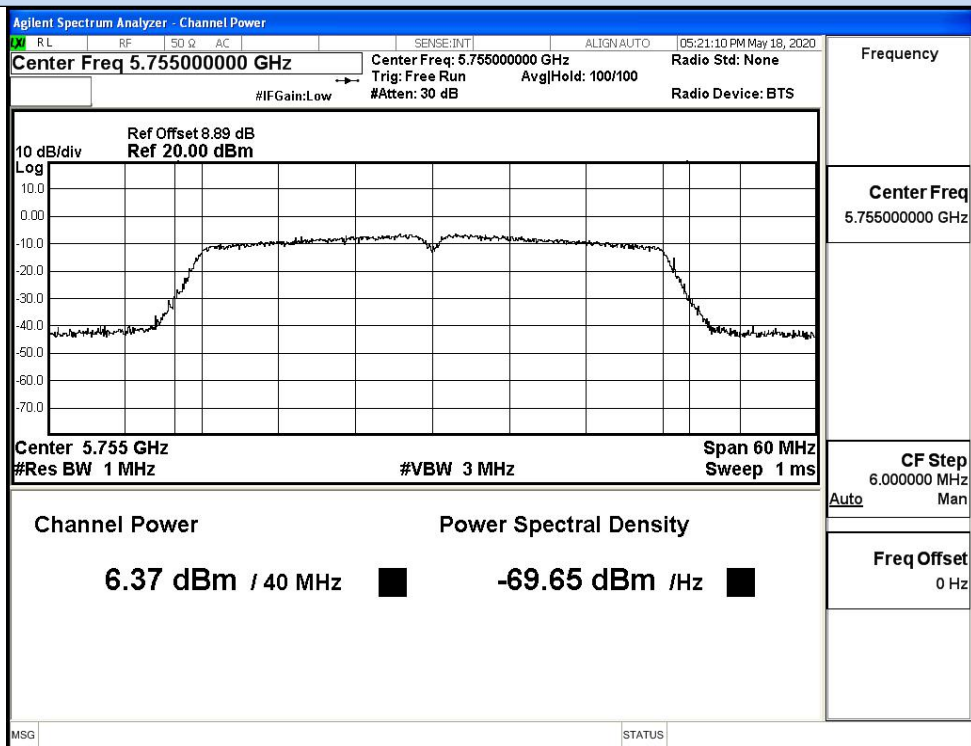
IEEE 802.11ac20 / Channel 149 / 5745MHz



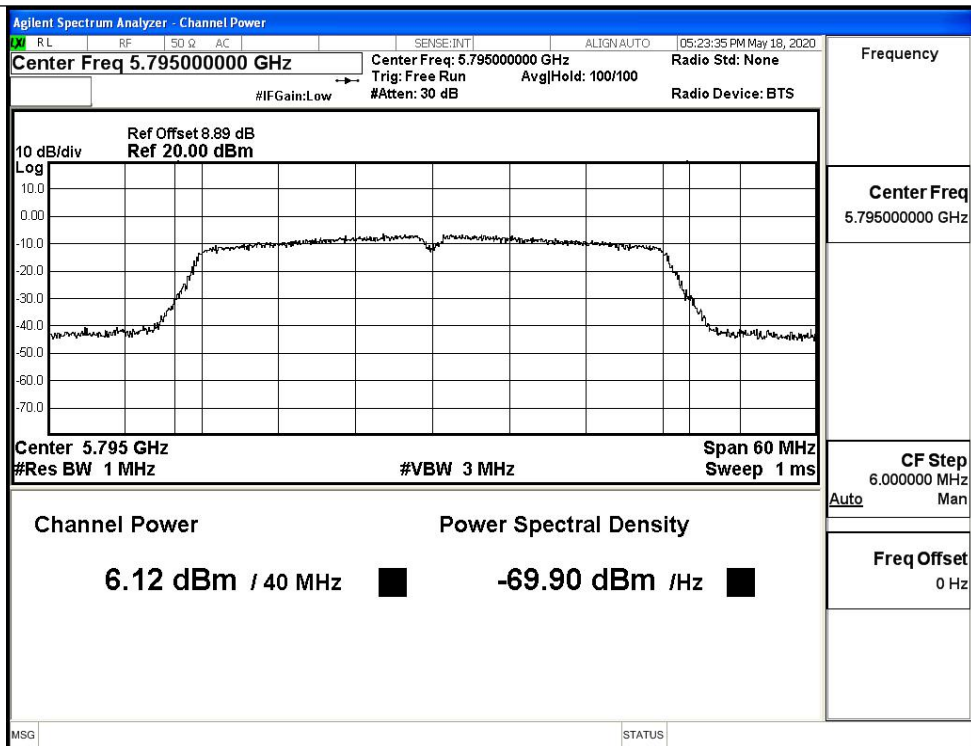
IEEE 802.11ac20 / Channel 157 / 5785MHz



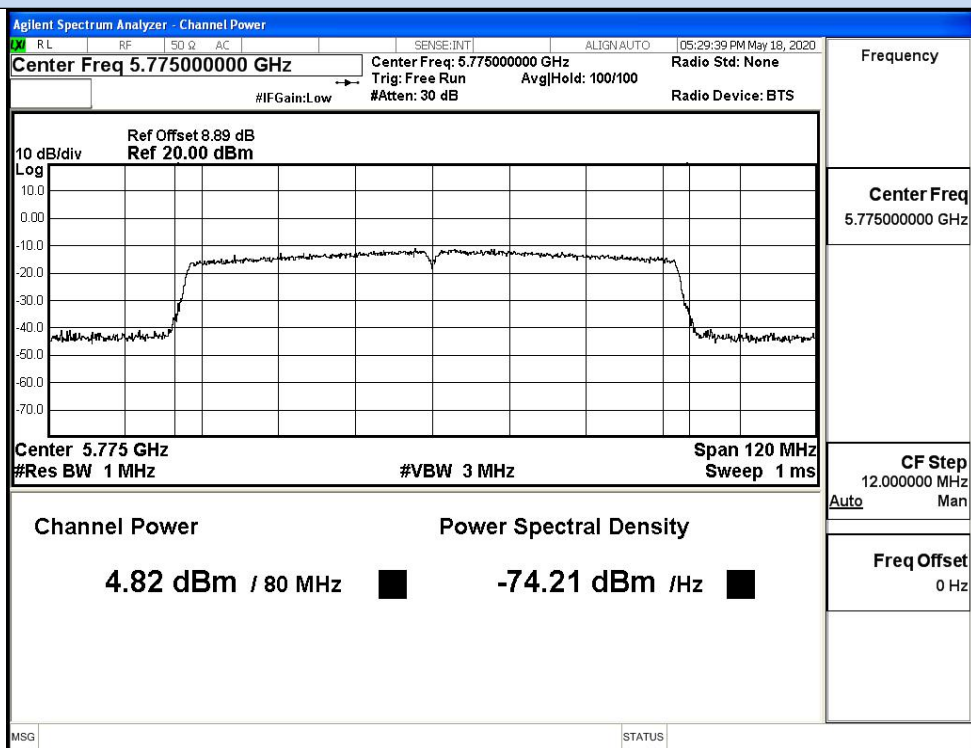
IEEE 802.11ac20 / Channel 165/ 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz

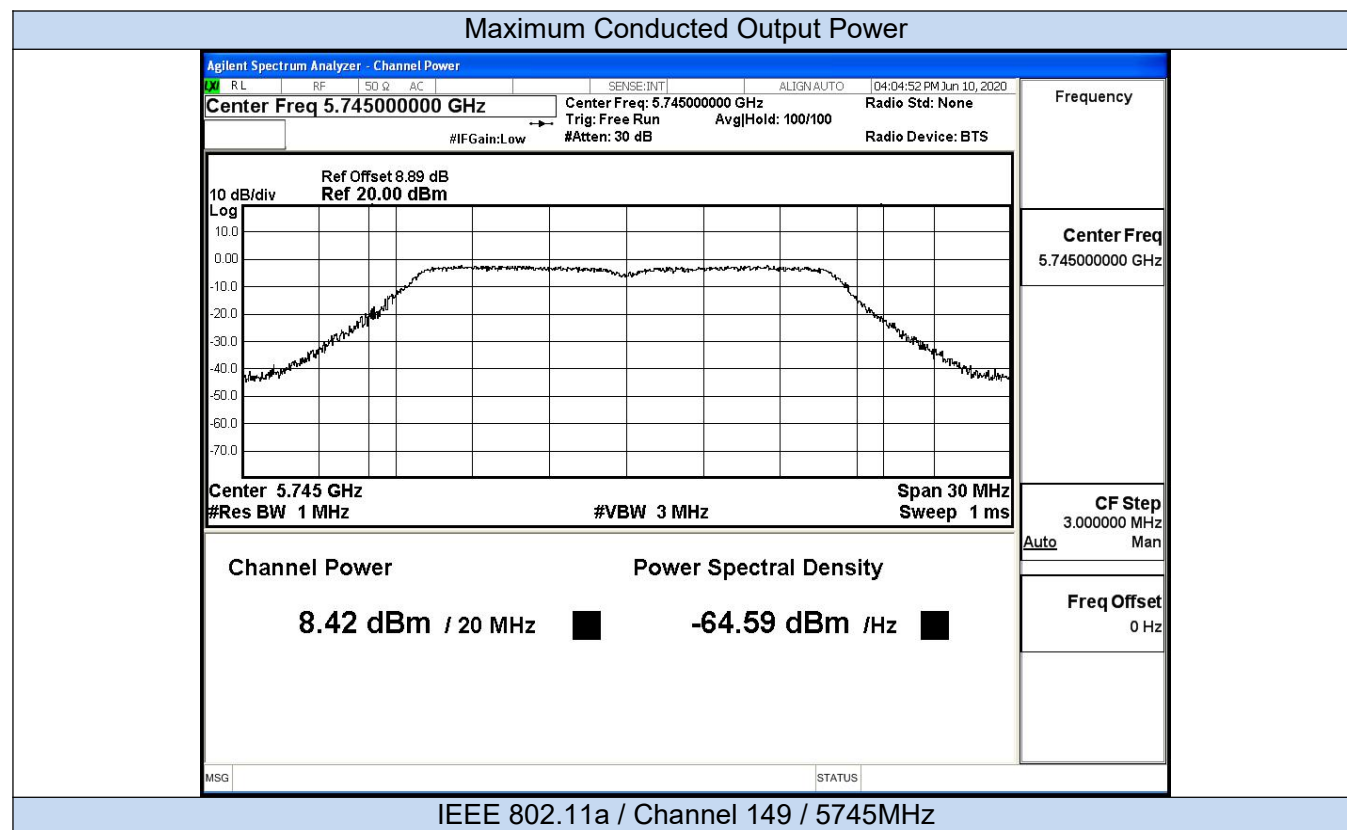


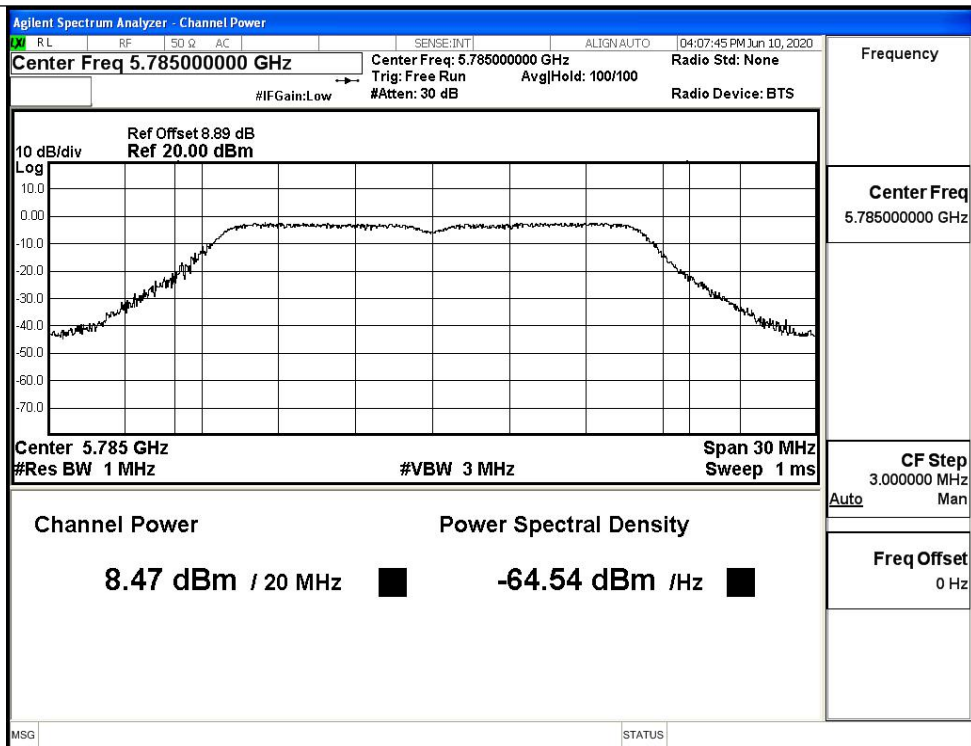
IEEE 802.11ac80 / Channel 155 / 5775MHz

ANT 1

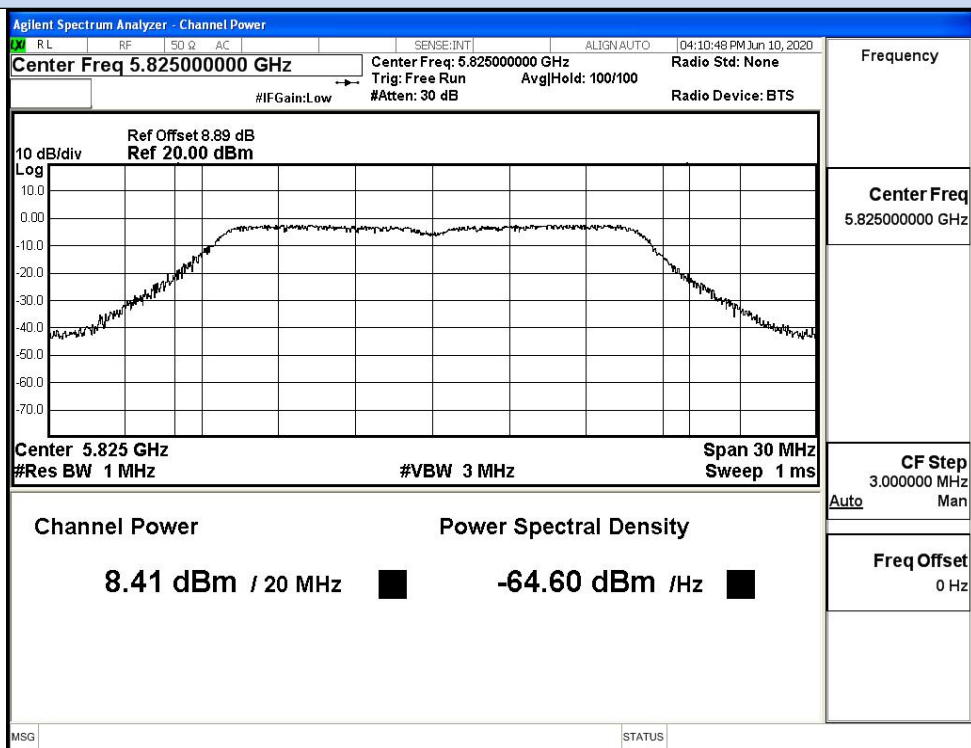
Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	149	5745	8.42	0	8.42	30	Pass
	157	5785	8.47	0	8.47		Pass
	165	5825	8.41	0	8.41		Pass
11N20 SISO	149	5745	8.79	0	8.79	30	Pass
	157	5785	8.76	0	8.76		Pass
	165	5825	8.76	0	8.76		Pass
11N40 SISO	151	5755	8.79	0	8.79	30	Pass
	159	5795	8.56	0	8.56		Pass
11AC20 SISO	149	5745	8.29	0	8.29	30	Pass
	157	5785	8.74	0	8.74		Pass
	165	5825	8.29	0	8.29		Pass
11AC40 SISO	151	5755	7.33	0	7.33	30	Pass
	159	5795	7.32	0	7.32		Pass
11AC80 SISO	155	5775	8.89	0	8.89	30	Pass

Maximum Conducted Output Power



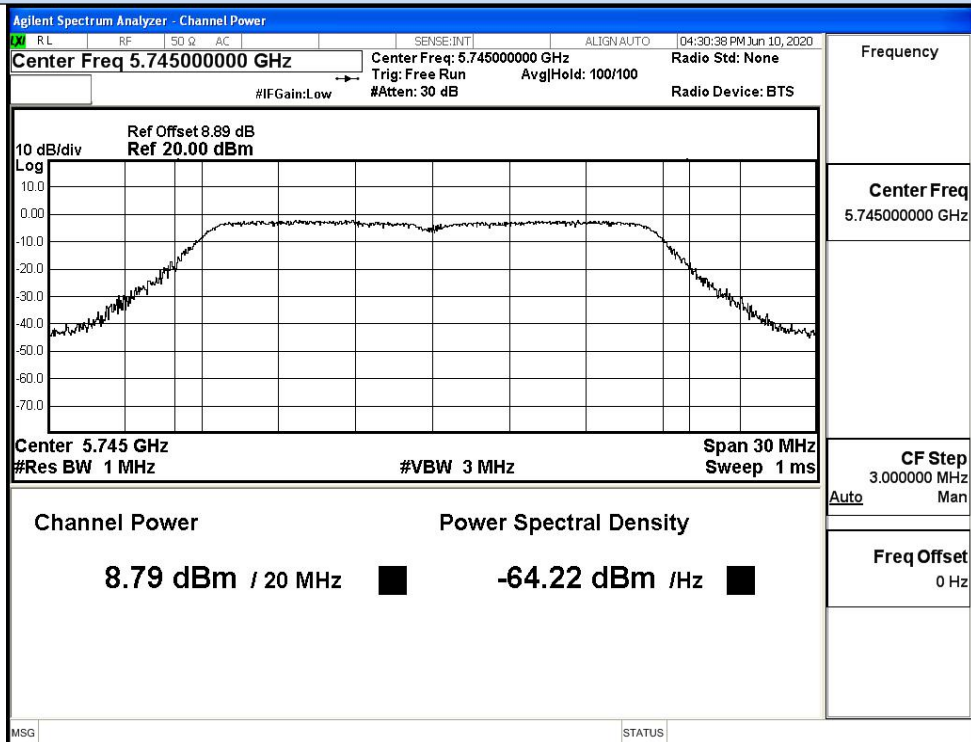


IEEE 802.11a / Channel 157 / 5785MHz

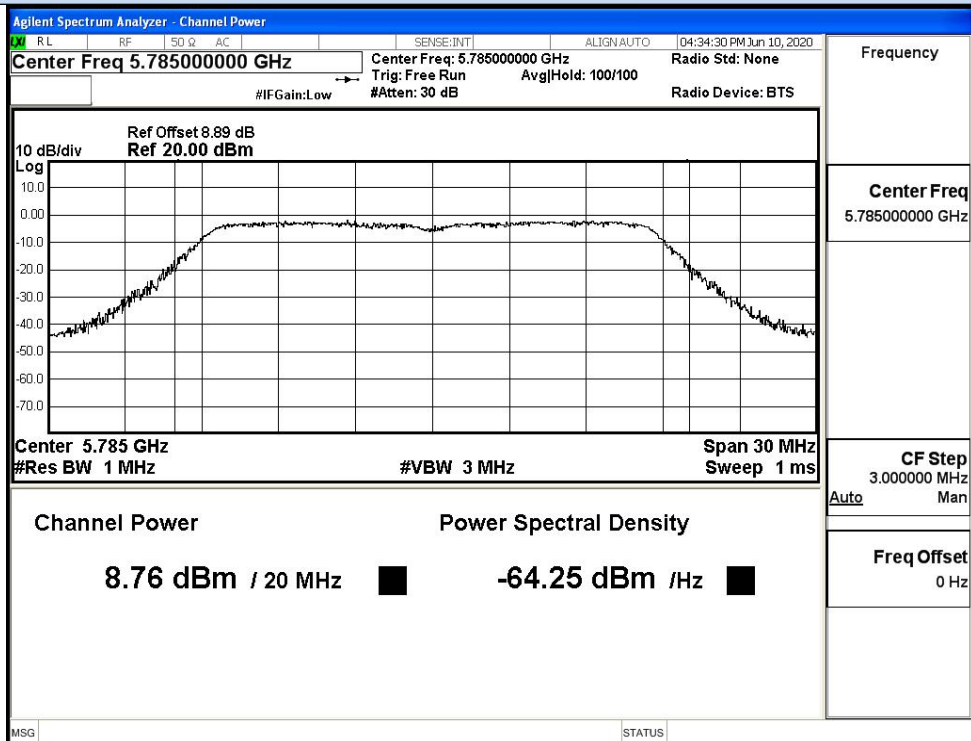


IEEE 802.11a / Channel 165 / 5825MHz

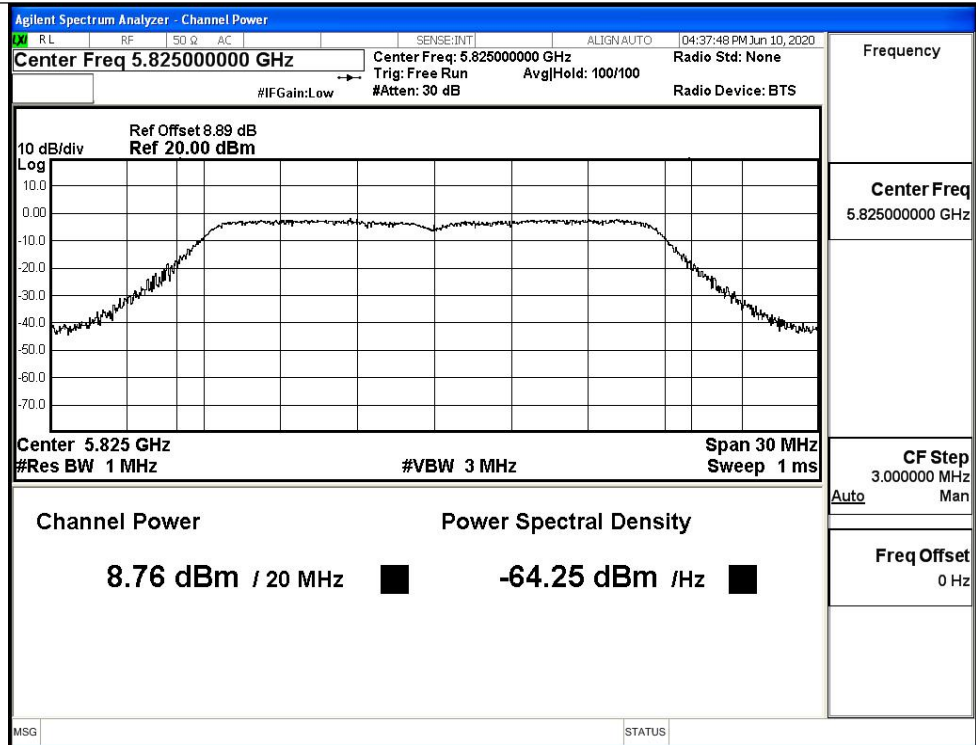
Maximum Conducted Output Power



IEEE 802.11n20 / Channel 149 / 5745MHz

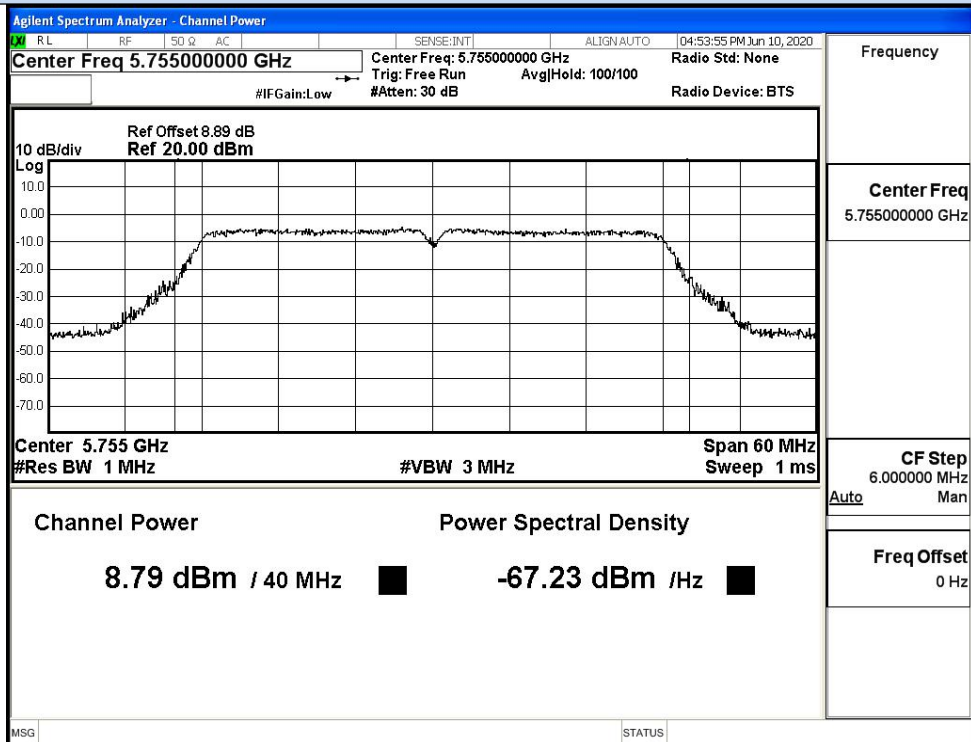


IEEE 802.11n20 / Channel 157 / 5785MHz

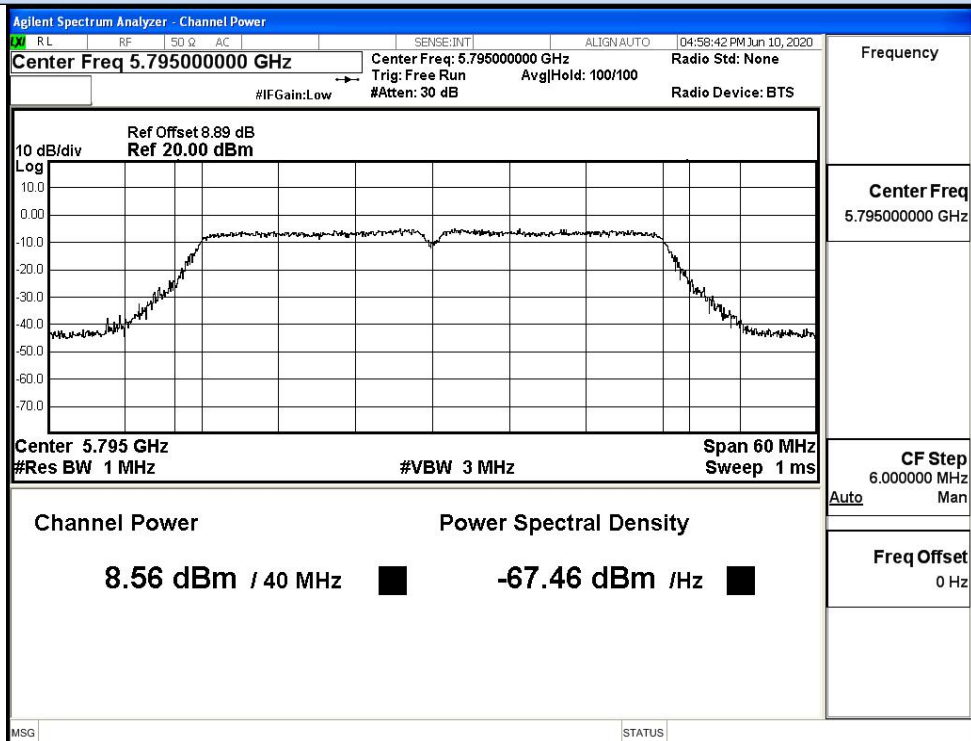


IEEE 802.11n20 / Channel 165 / 5825MHz

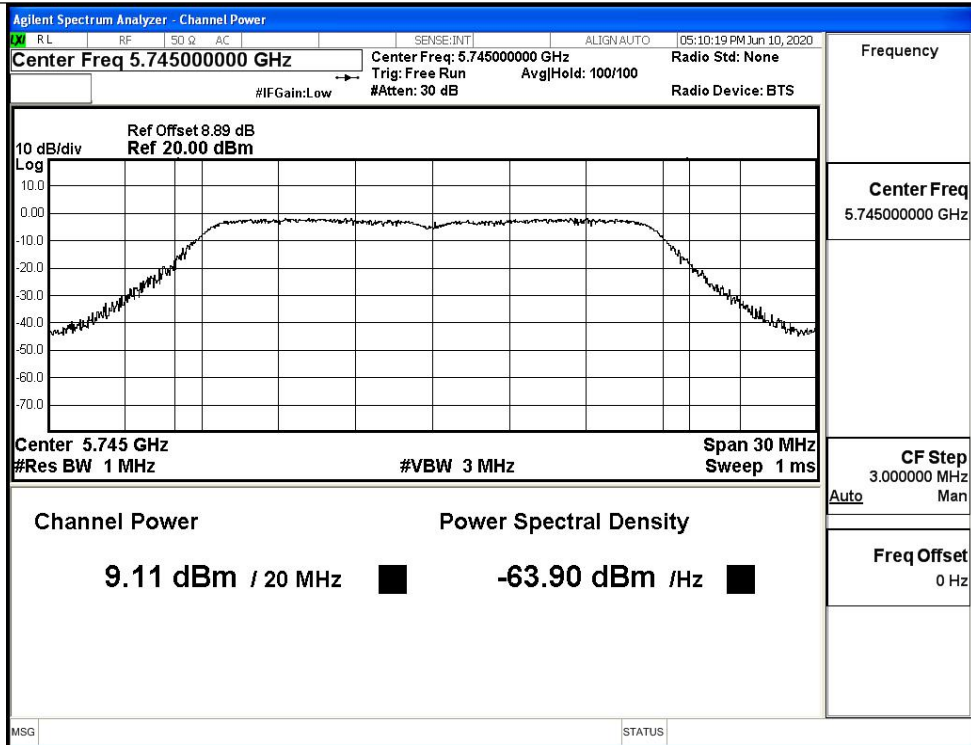
Maximum Conducted Output Power



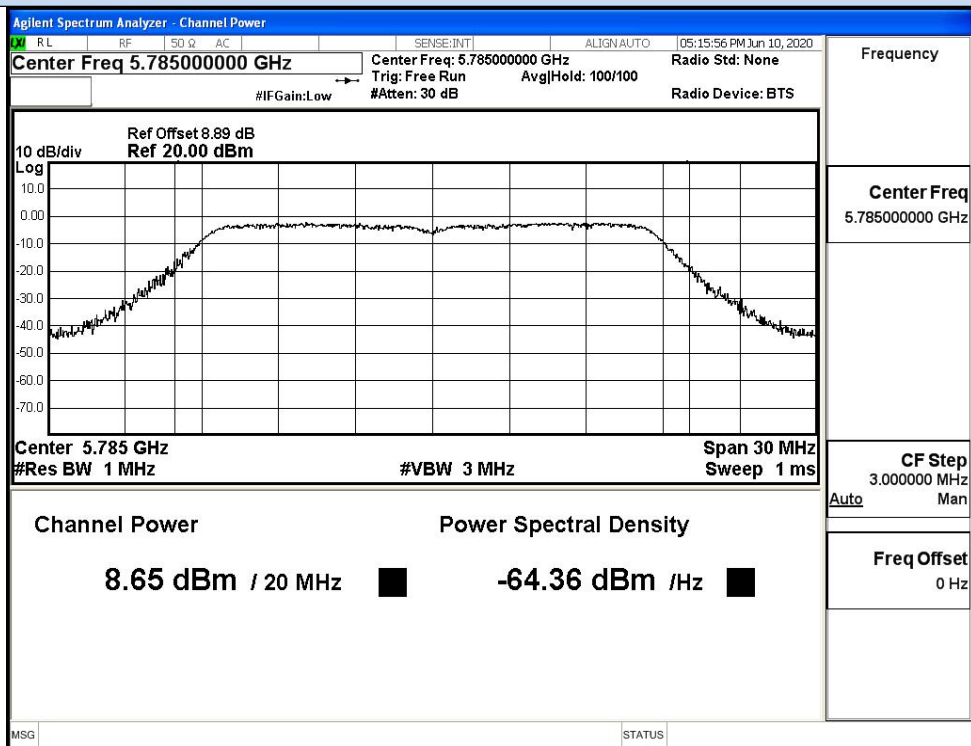
IEEE 802.11n40 / Channel 151 / 5755MHz



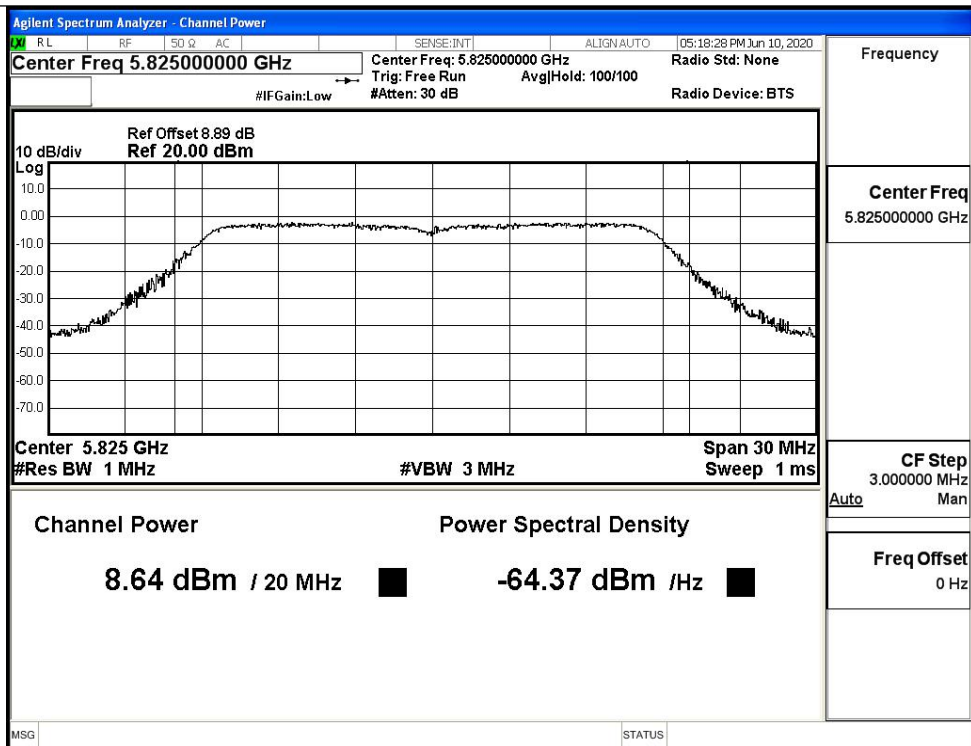
IEEE 802.11n40 / Channel 159 / 5795MHz



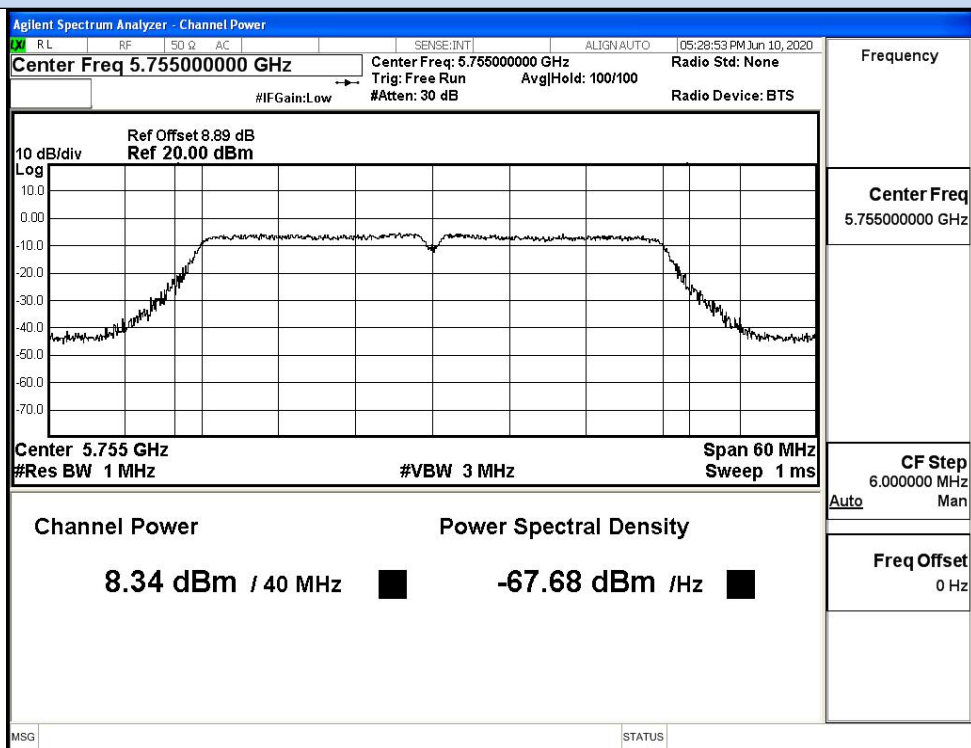
IEEE 802.11ac20 / Channel 149 / 5745MHz



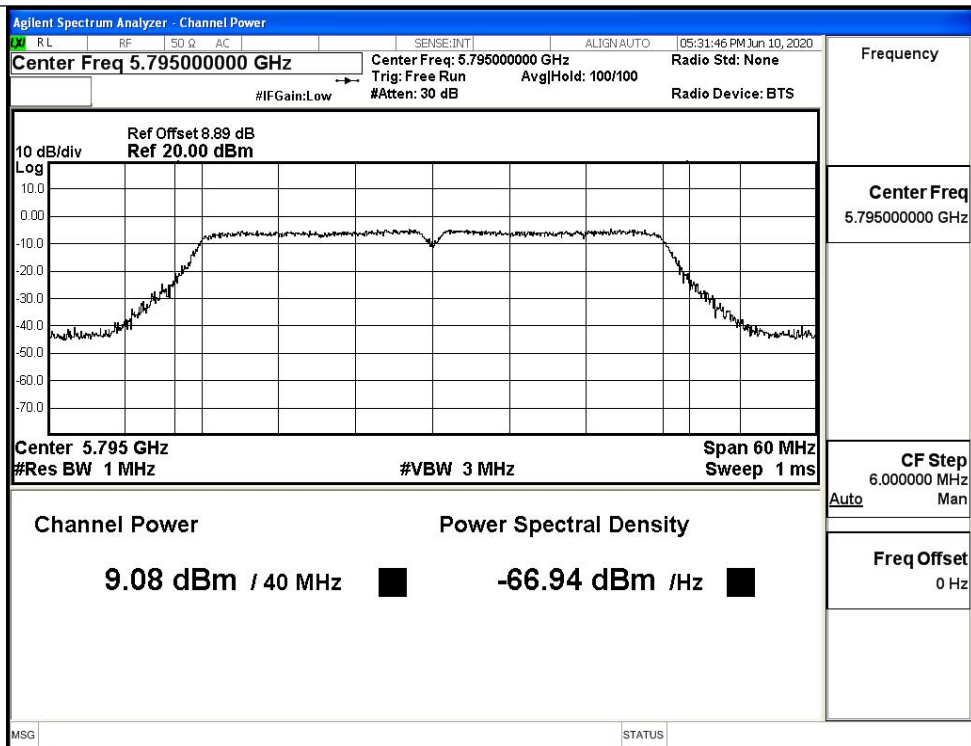
IEEE 802.11ac20 / Channel 157 / 5785MHz



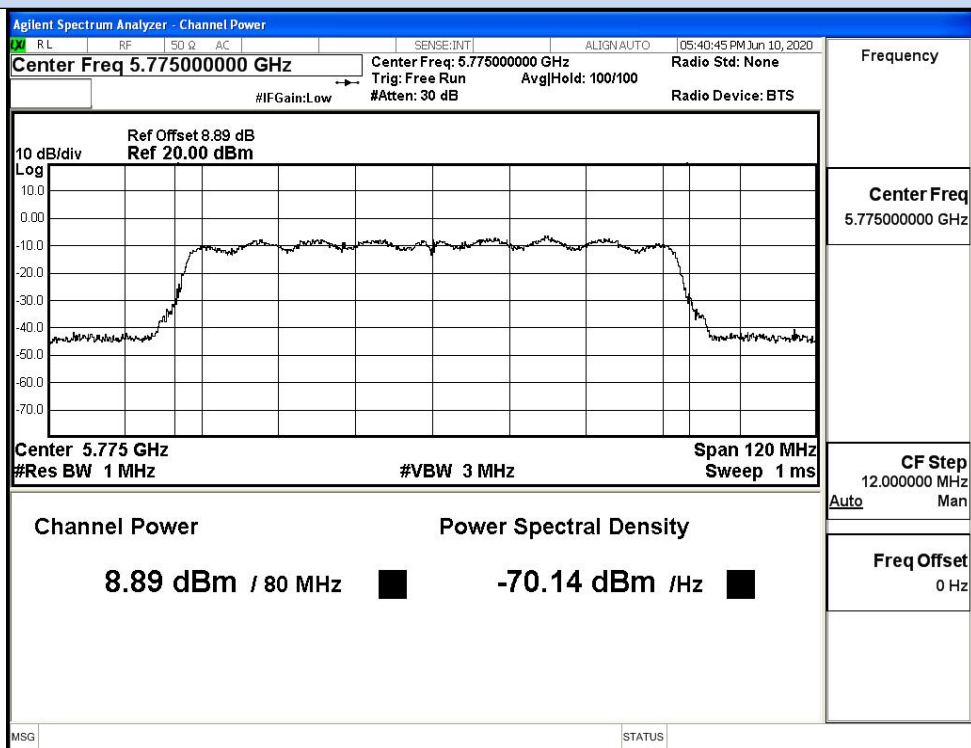
IEEE 802.11ac20 / Channel 165/ 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz



IEEE 802.11ac80 / Channel 155 / 5775MHz

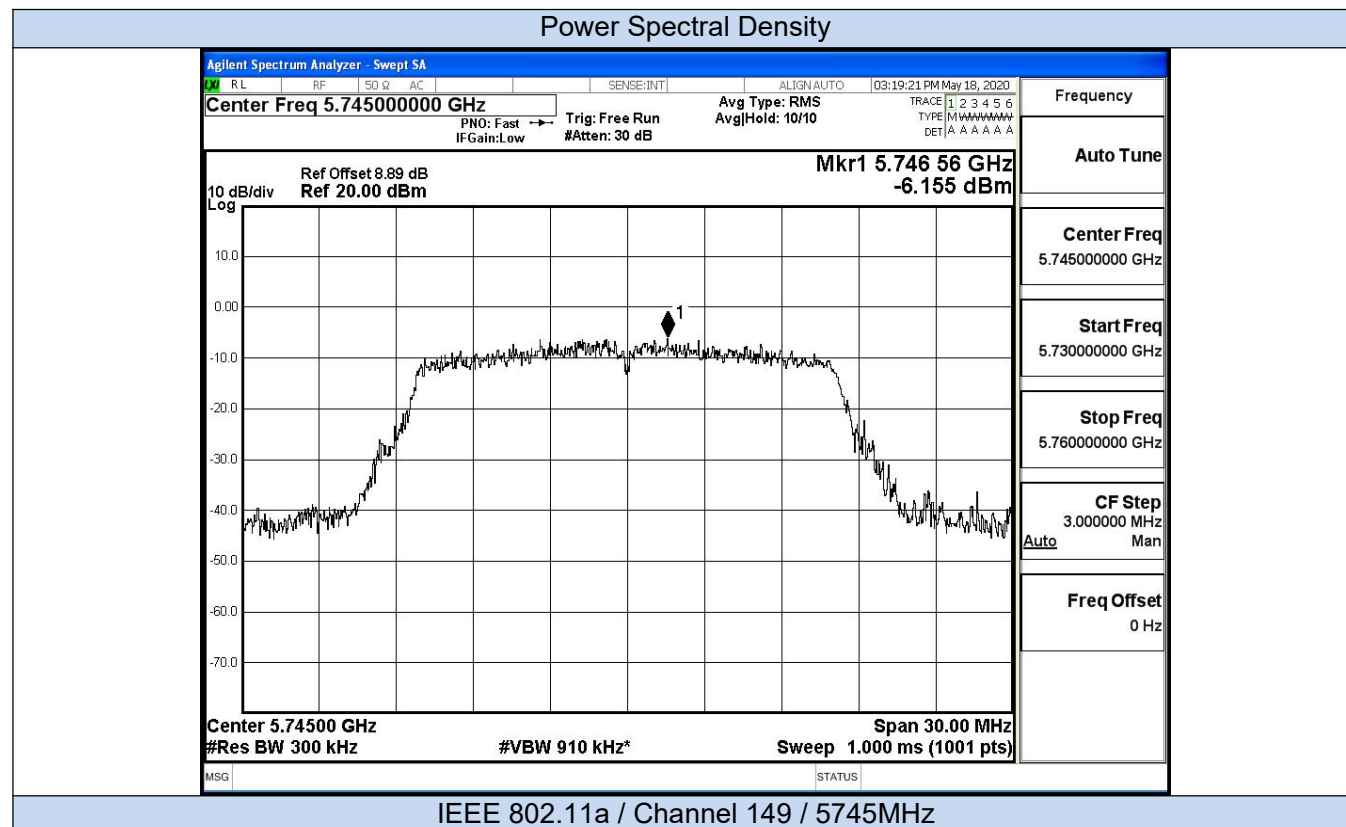
Ant0+1

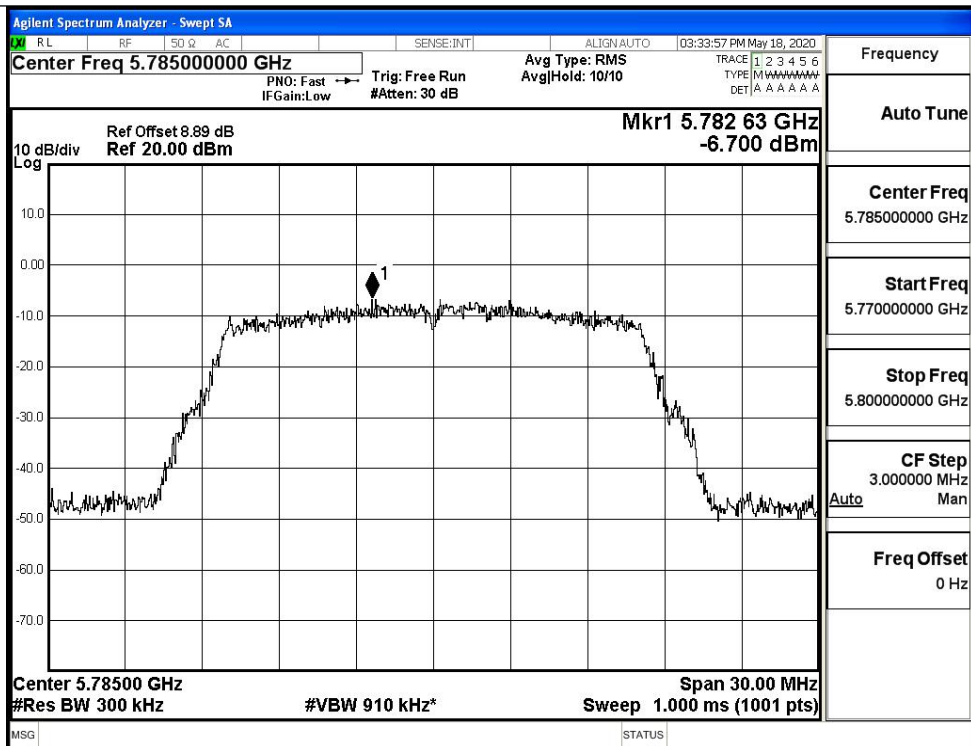
Test Mode	Channel	Frequency (MHz)	ANT 0 AVG Conducted Power (dBm)	ANT 1 AVG Conducted Power (dBm)	ANT 0+1 AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)	Verdict
11N20 SISO	149	5745	7.37	8.79	11.15	0	11.15	30	Pass
	157	5785	7.34	8.76	11.12	0	11.12		Pass
	165	5825	7.47	8.76	11.17	0	11.17		Pass
11N40 SISO	151	5755	6.17	8.79	10.68	0	10.68	30	Pass
	159	5795	6.02	8.56	10.48	0	10.48		Pass
11AC20 SISO	149	5745	7.3	8.29	10.83	0	10.83	30	Pass
	157	5785	7.62	8.74	11.23	0	11.23		Pass
	165	5825	7.72	8.29	11.02	0	11.02		Pass
11AC40 SISO	151	5755	5.74	7.33	9.62	0	9.62	30	Pass
	159	5795	6.23	7.32	9.82	0	9.82		Pass
11AC80 SISO	155	5775	4.82	8.89	10.33	0	10.33	30	Pass

E.3 Power Spectral Density

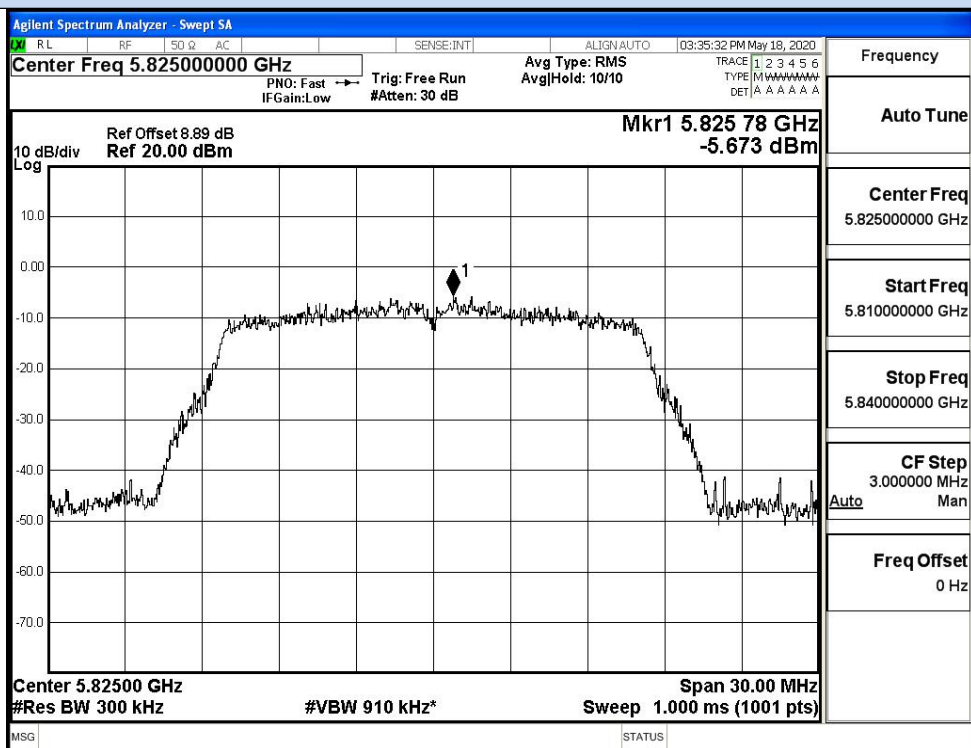
ANT 0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
11A	149	5745	-6.16	0	2.218	-3.94	30	Pass
	157	5785	-6.70	0	2.218	-4.48		Pass
	165	5825	-5.67	0	2.218	-3.46		Pass
11N20 SISO	149	5745	-6.48	0	2.218	-4.27	30	Pass
	157	5785	-6.27	0	2.218	-4.05		Pass
	165	5825	-6.13	0	2.218	-3.91		Pass
11N40 SISO	151	5755	-10.68	0	2.218	-8.46	30	Pass
	159	5795	-11.31	0	2.218	-9.09		Pass
11AC20 SISO	149	5745	-6.77	0	2.218	-4.55	30	Pass
	157	5785	-6.16	0	2.218	-3.94		Pass
	165	5825	-6.18	0	2.218	-3.96		Pass
11AC40 SISO	151	5755	-10.33	0	2.218	-8.11	30	Pass
	159	5795	-10.77	0	2.218	-8.55		Pass
11AC80 SISO	155	5775	-15.55	0	2.218	-13.33	30	Pass





IEEE 802.11na / Channel 157 / 5785MHz



IEEE 802.11na / Channel 165 / 5825MHz