Appendix F

RF Test Data for 5.5G WLAN (Conducted Measurement)

Product Name: Laptop
Trade Mark: N/A
Test Model: ACL1

Environmental Conditions

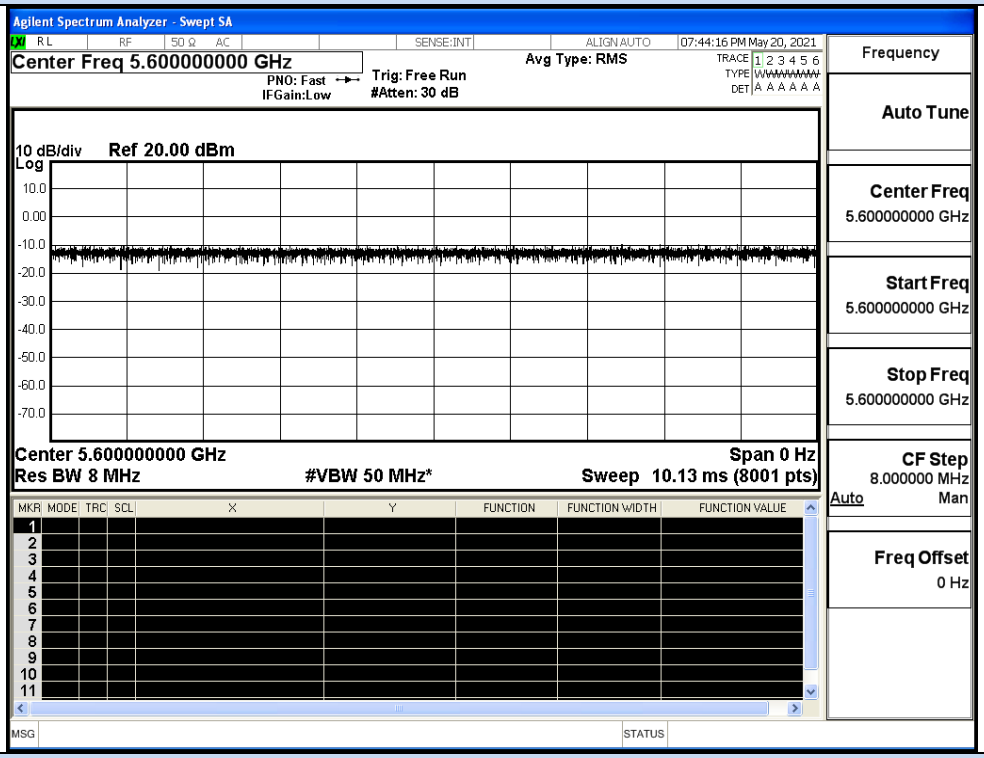
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

F.1 Duty Cycle

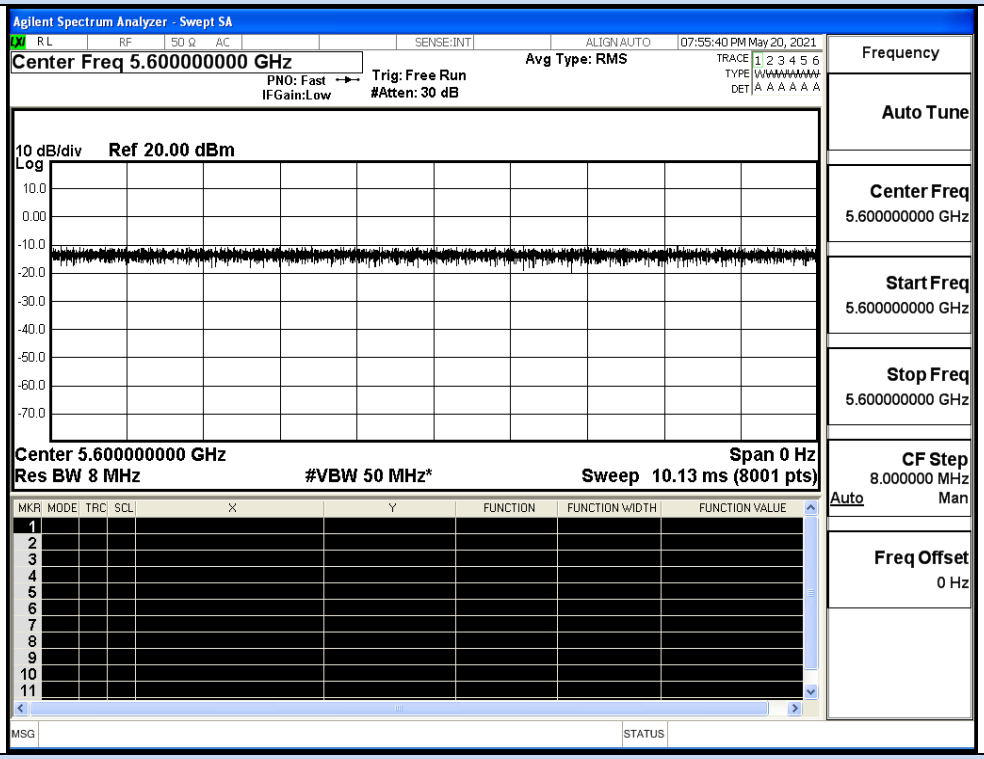
ANT0

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5600	100	0.00	0.01
11N20 SISO	5600	100	0.00	0.01
11N40 SISO	5590	100	0.00	0.01
11AC20 SISO	5600	100	0.00	0.01
11AC40 SISO	5590	100	0.00	0.01
11AC80 SISO	5610	100	0.00	0.01

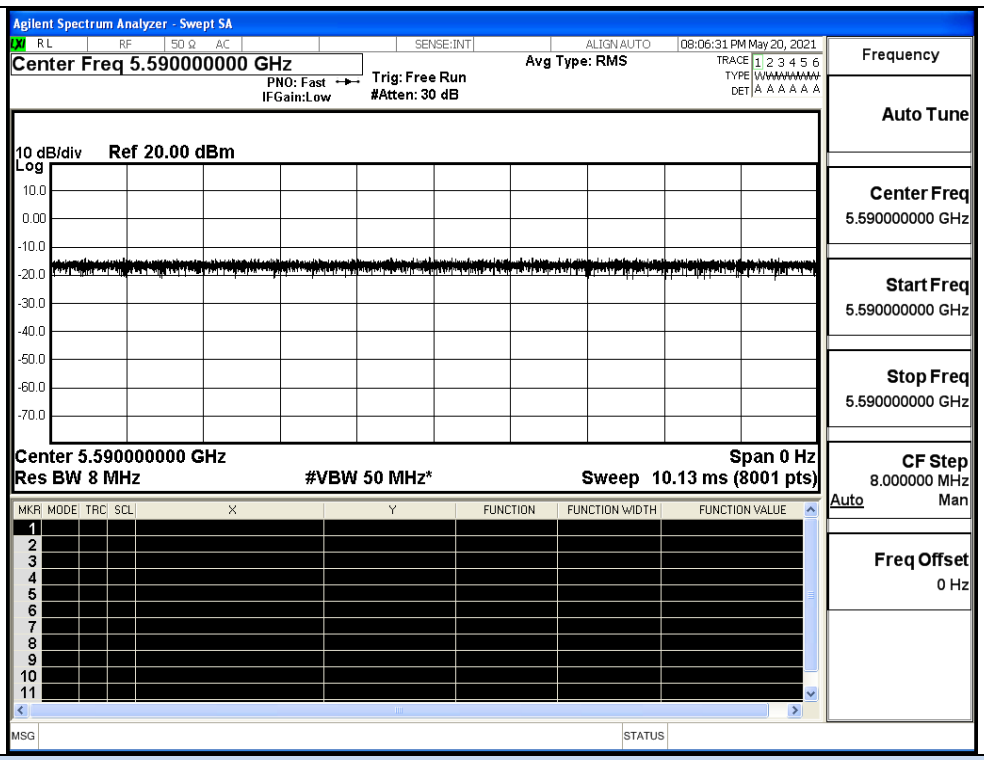
On Time and Duty Cycle



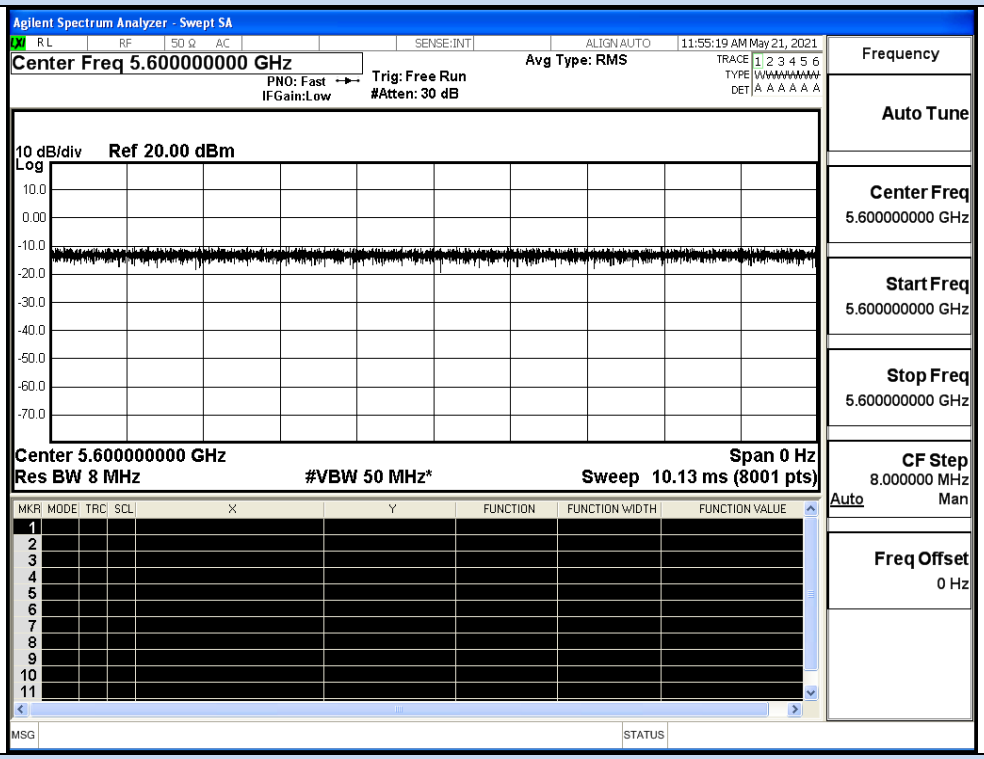
IEEE 802.11a



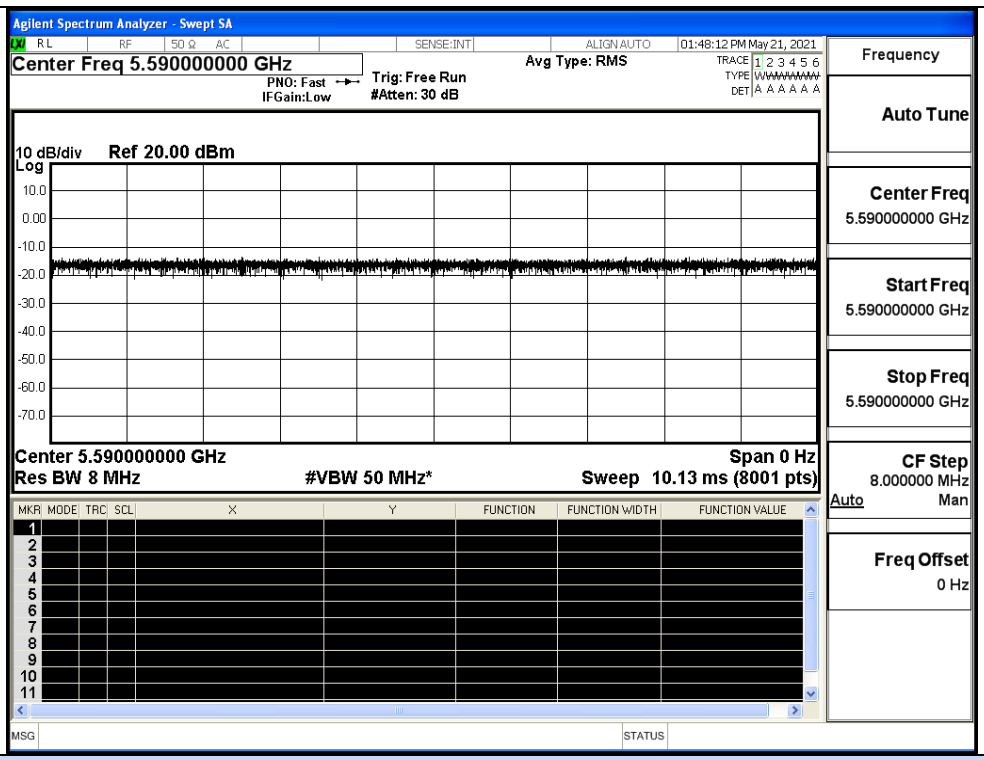
IEEE 802.11n HT20



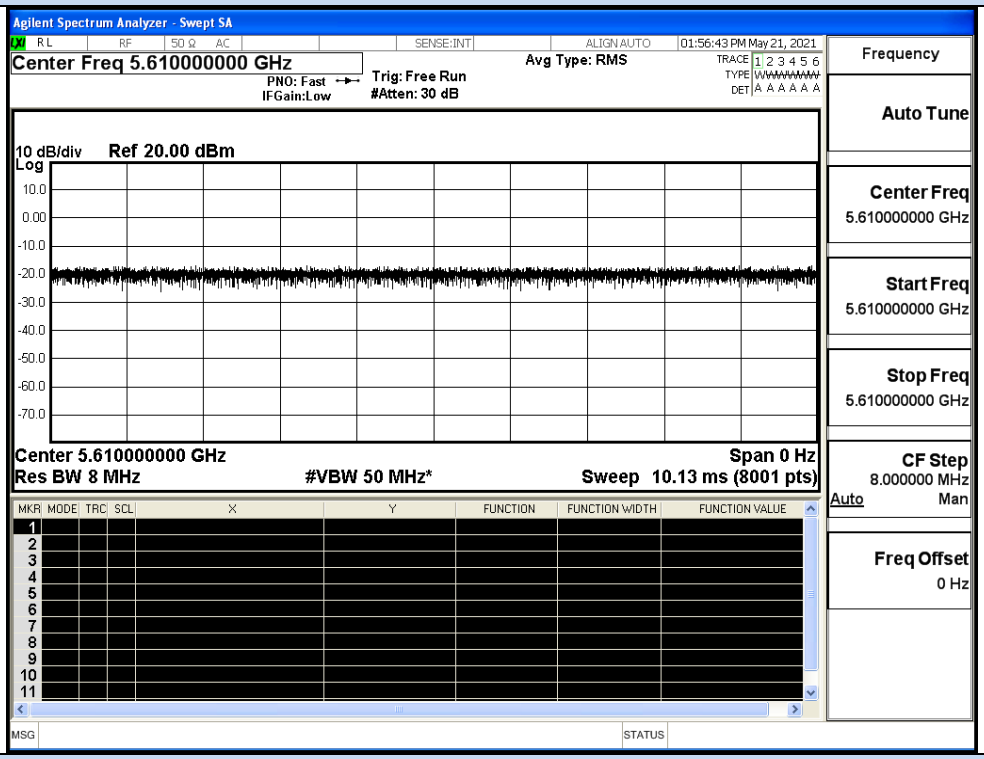
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40

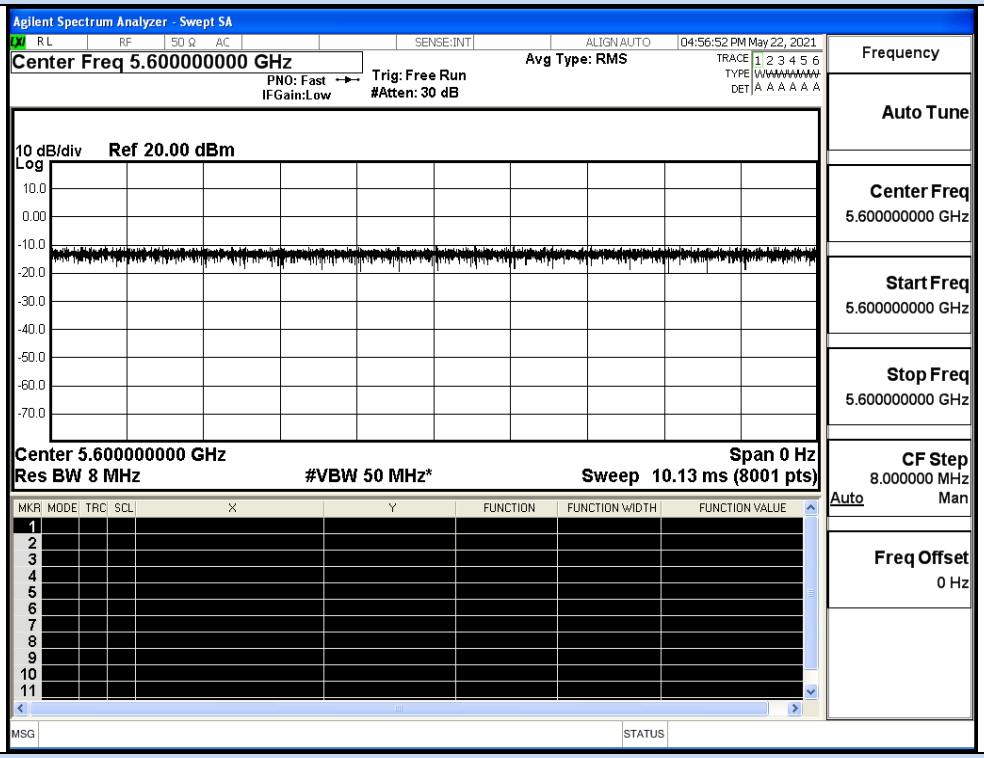


IEEE 802.11AC80

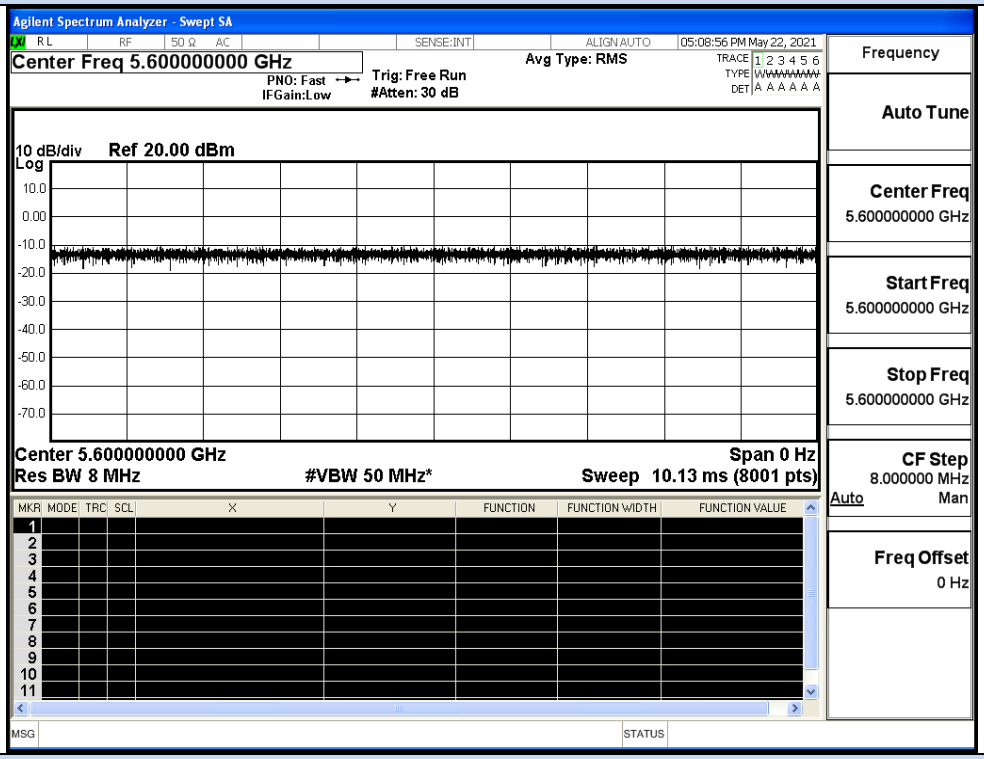
ANT1

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5600	100	0.00	0.01
11N20 SISO	5600	100	0.00	0.01
11N40 SISO	5590	100	0.00	0.01
11AC20 SISO	5600	100	0.00	0.01
11AC40 SISO	5590	100	0.00	0.01
11AC80 SISO	5610	100	0.00	0.01

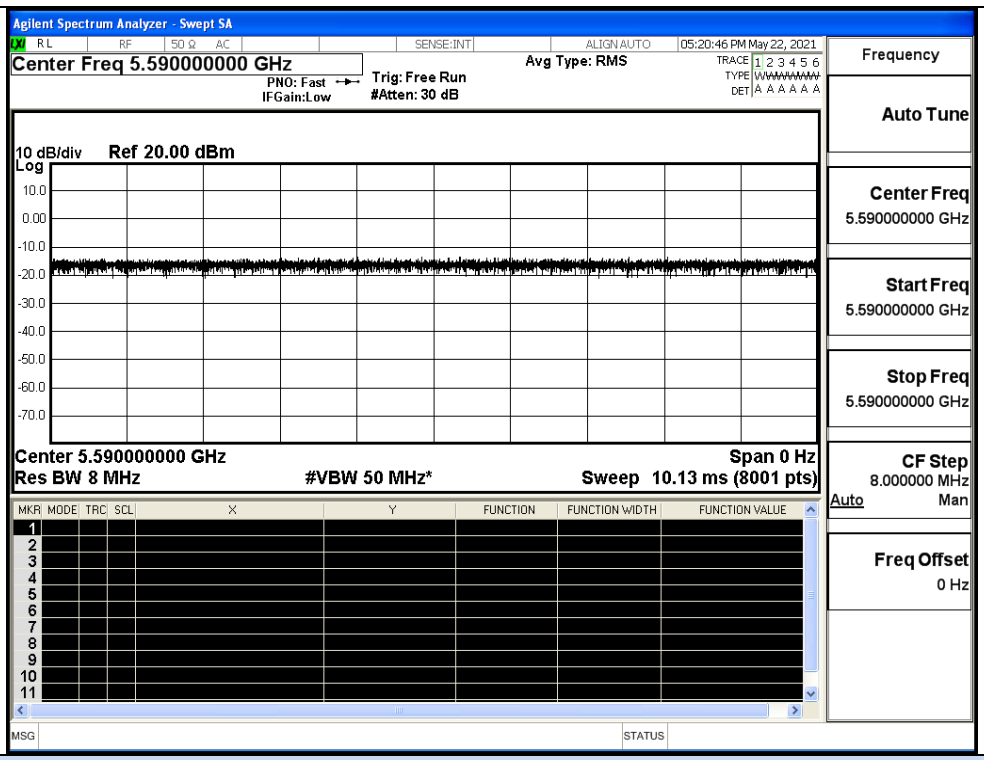
On Time and Duty Cycle



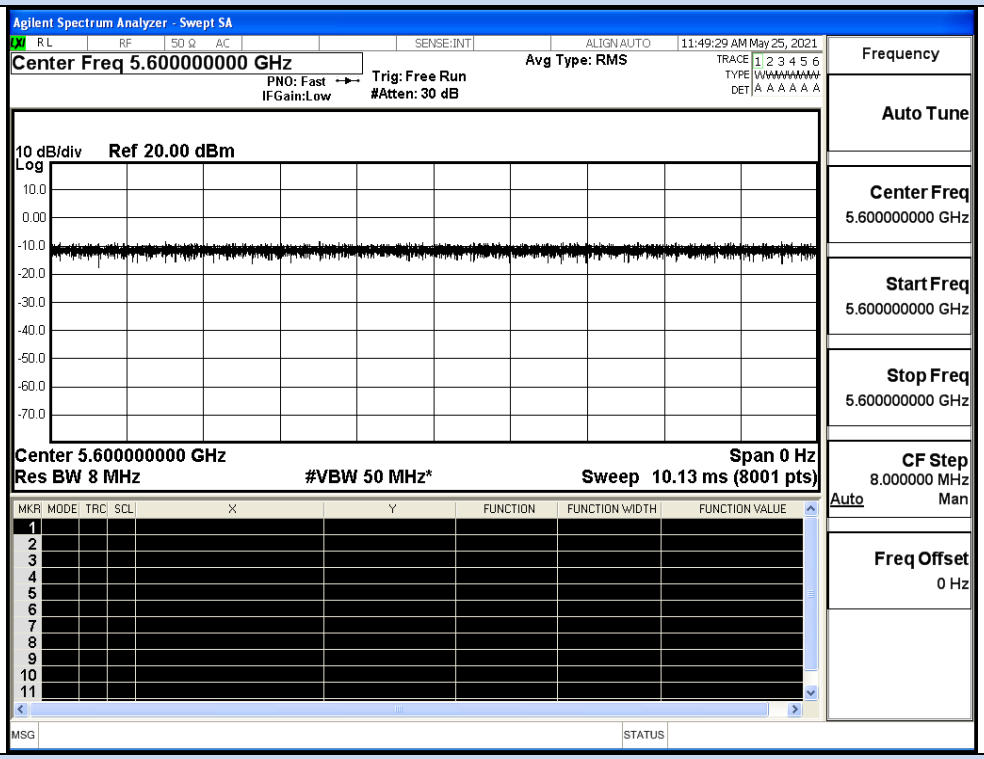
IEEE 802.11a



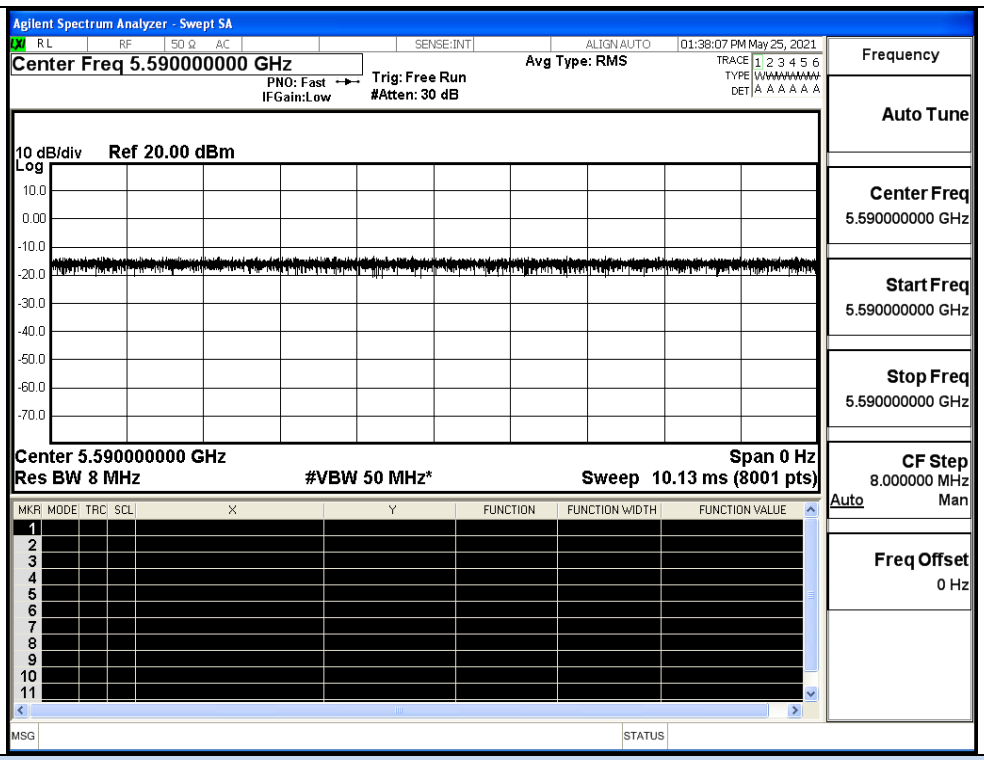
IEEE 802.11n HT20



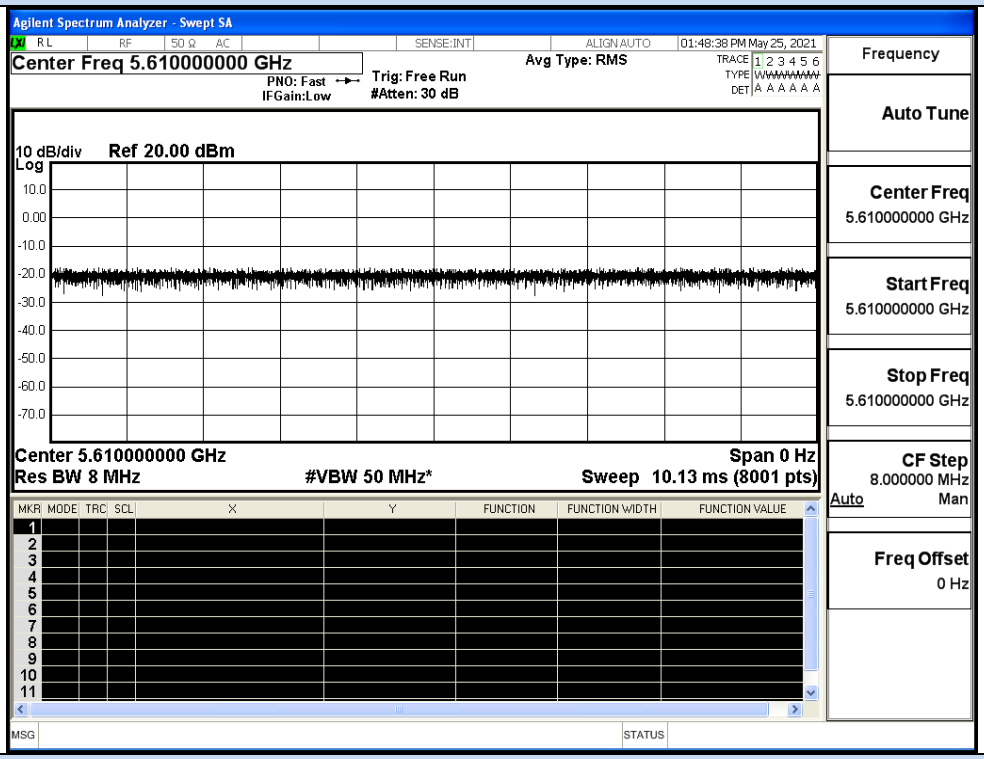
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40



IEEE 802.11AC80

F.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	100	5500	4.13	0	4.13	24	Pass
	120	5600	4.49	0	4.49		Pass
	140	5700	3.97	0	3.97		Pass
11N20 SISO	100	5500	4.27	0	4.27	24	Pass
	120	5600	4.12	0	4.12		Pass
	140	5700	4.14	0	4.14		Pass
11N40 SISO	149	5510	4.07	0	4.07	24	Pass
	157	5590	4.08	0	4.08		Pass
	165	5670	4.07	0	4.07		Pass
11ac20 SISO	100	5500	4.08	0	4.08	24	Pass
	120	5600	4.39	0	4.39		Pass
	140	5700	3.95	0	3.95		Pass
11ac40 SISO	149	5510	4.05	0	4.05	24	Pass
	157	5590	4.27	0	4.27		Pass
	165	5670	4.24	0	4.24		Pass
11ac80 SISO	106	5530	4.02	0	4.02	24	Pass
	122	5610	4.37	0	4.37		Pass
	138	5690	3.98	0	3.98		Pass

ANT1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	100	5500	4.09	0	4.09	24	Pass
	120	5600	4.13	0	4.13		Pass
	140	5700	4.15	0	4.15		Pass
11N20 SISO	100	5500	4.29	0	4.29	24	Pass
	120	5600	4.26	0	4.26		Pass
	140	5700	4.24	0	4.24		Pass
11N40 SISO	149	5510	4.33	0	4.33	24	Pass
	157	5590	4.23	0	4.23		Pass
	165	5670	4.15	0	4.15		Pass
11ac20 SISO	100	5500	4.18	0	4.18	24	Pass
	120	5600	5.97	0	5.97		Pass
	140	5700	4.98	0	4.98		Pass
11ac40 SISO	149	5510	4.46	0	4.46	24	Pass
	157	5590	4.5	0	4.5		Pass
	165	5670	4.42	0	4.42		Pass
11ac80 SISO	106	5530	4.02	0	4.02	24	Pass
	122	5610	3.91	0	3.91		Pass
	138	5690	3.43	0	3.43		Pass

Combined Ant0 and Ant1

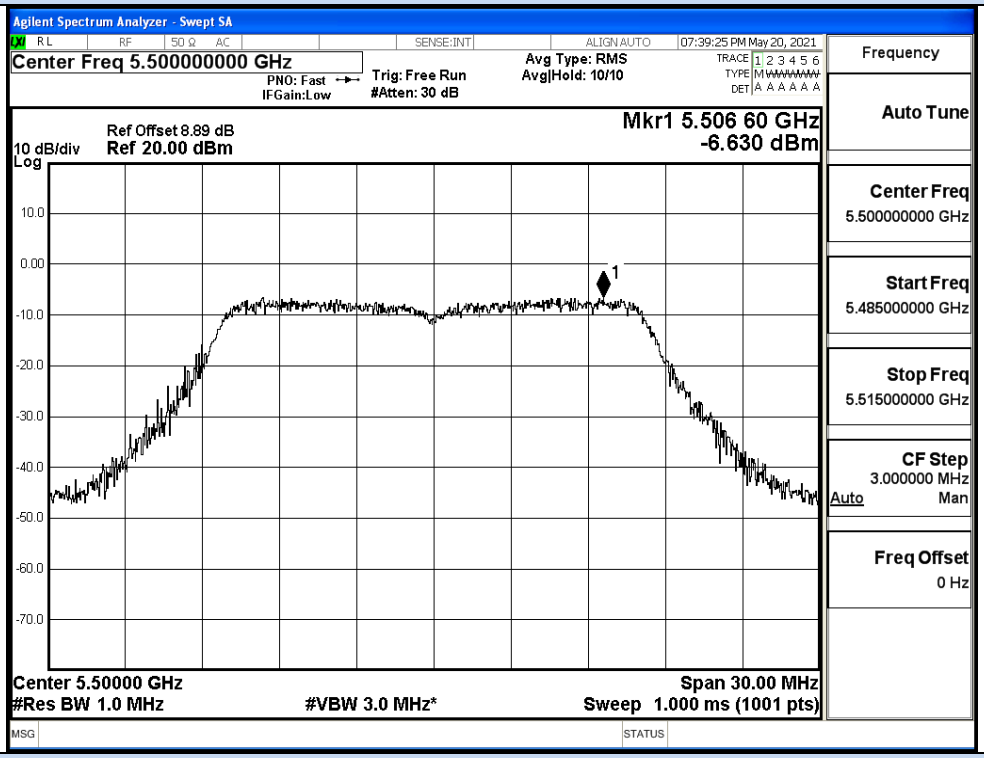
Test Mode	Channel	Frequency (MHz)	Report Conducted Power (dBm)			Limit (dBm)
			Ant_0	Ant_1	Sum	
11N20	100	5500	4.27	4.29	7.29	24
	120	5600	4.12	4.26	7.20	
	140	5700	4.14	4.24	7.20	
11N40	149	5510	4.07	4.33	7.21	24
	157	5590	4.08	4.23	7.17	
	165	5670	4.07	4.15	7.12	
11AC20	100	5500	4.08	4.18	7.14	24
	120	5600	4.39	5.97	8.26	
	140	5700	3.95	4.98	7.51	
11AC40	149	5510	4.05	4.46	7.27	24
	157	5590	4.27	4.5	7.40	
	165	5670	4.24	4.42	7.34	
11AC80	106	5530	4.02	4.02	7.03	24
	122	5610	4.37	3.91	7.16	
	138	5690	3.98	3.43	6.72	

F.3 Power Spectral Density

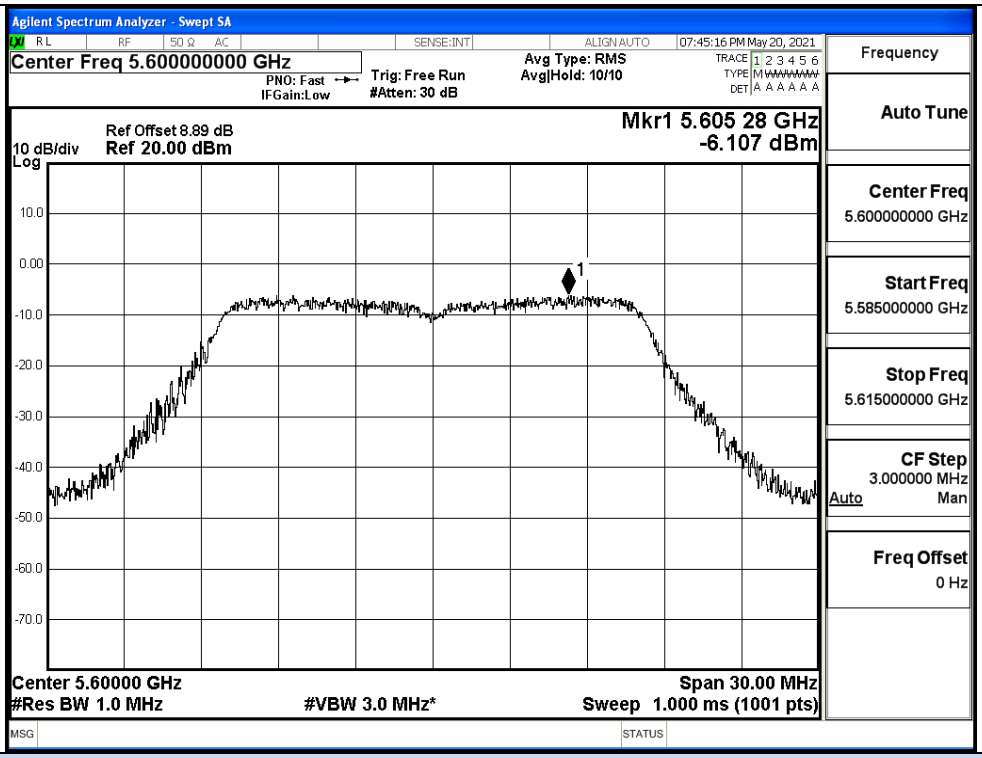
ANT0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	100	5500	-6.63	0	-6.63	11	Pass
	120	5600	-6.11	0	-6.11		Pass
	140	5700	-6.63	0	-6.63		Pass
11N20 SISO	100	5500	-6.78	0	-6.78	11	Pass
	120	5600	-6.86	0	-6.86		Pass
	140	5700	-6.91	0	-6.91		Pass
11N40 SISO	102	5510	-9.45	0	-9.45	11	Pass
	118	5590	-9.67	0	-9.67		Pass
	134	5670	-9.65	0	-9.65		Pass
11AC20 SISO	100	5500	-7.01	0	-7.01	11	Pass
	120	5600	-6.63	0	-6.63		Pass
	140	5700	-7.33	0	-7.33		Pass
11AC40 SISO	102	5510	-9.48	0	-9.48	11	Pass
	118	5590	-9.75	0	-9.75		Pass
	134	5670	-9.76	0	-9.76		Pass
11AC80 SISO	106	5530	-11.30	0	-11.30	11	Pass
	122	5610	-11.62	0	-11.62		Pass
	138	5690	-11.87	0	-11.87		Pass

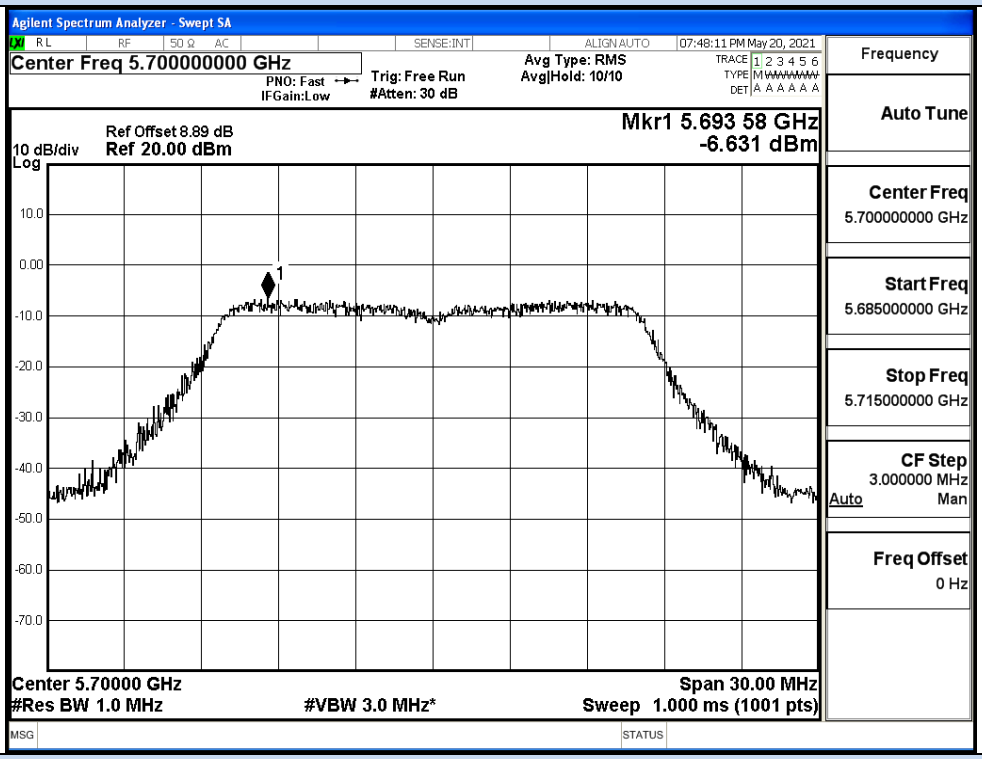
Power Spectral Density



IEEE 802.11a / Channel 100 / 5500MHz

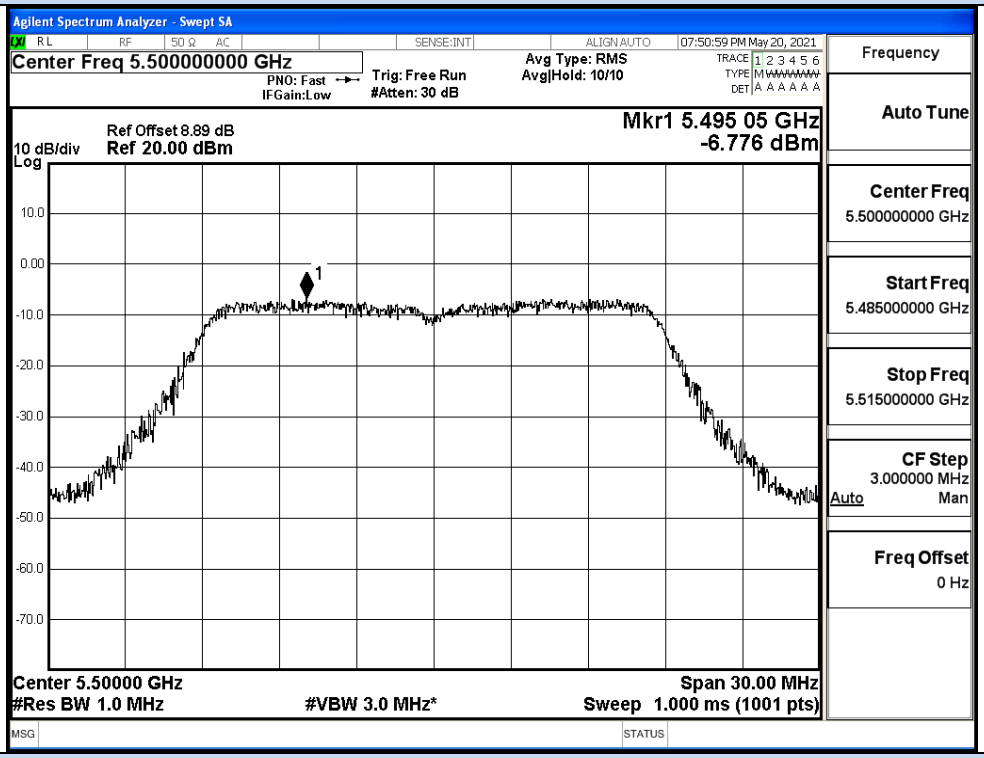


IEEE 802.11a / Channel 120 / 5600MHz

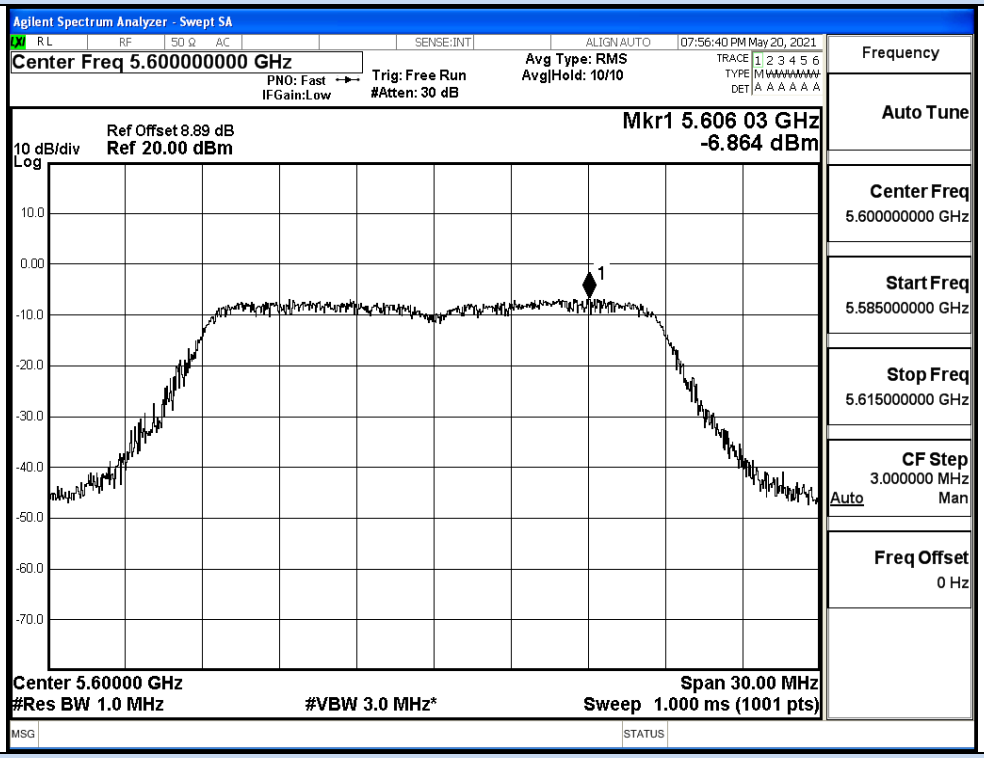


IEEE 802.11a / Channel 140 / 5700MHz

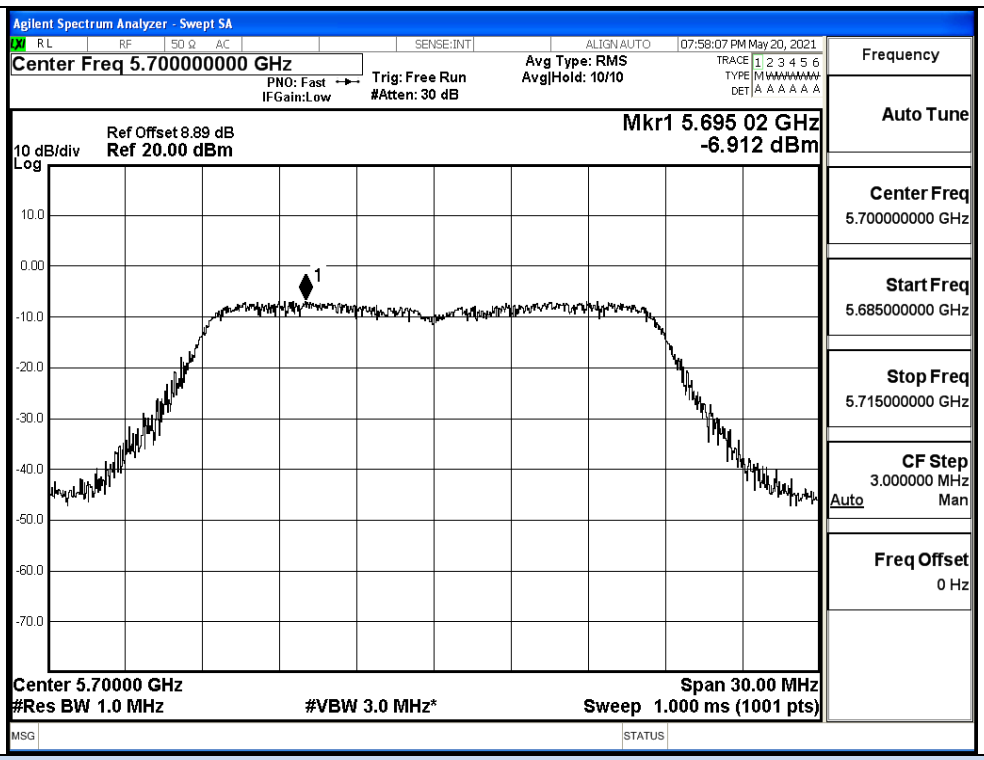
Power Spectral Density



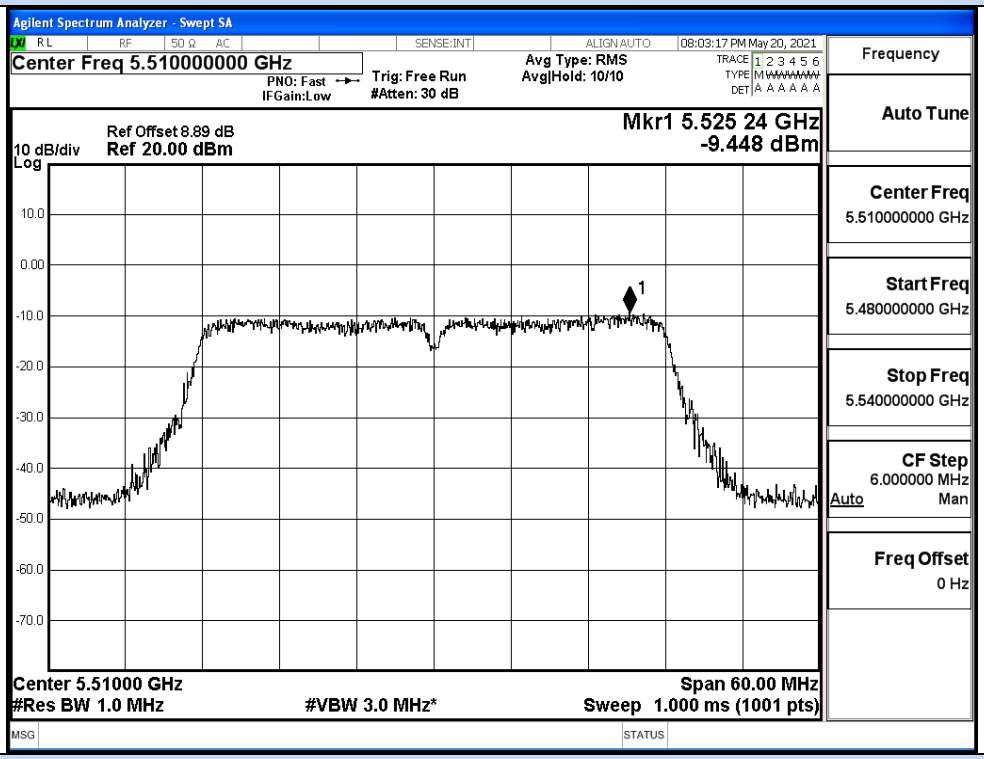
IEEE 802.11n20 / Channel 100 / 5500MHz



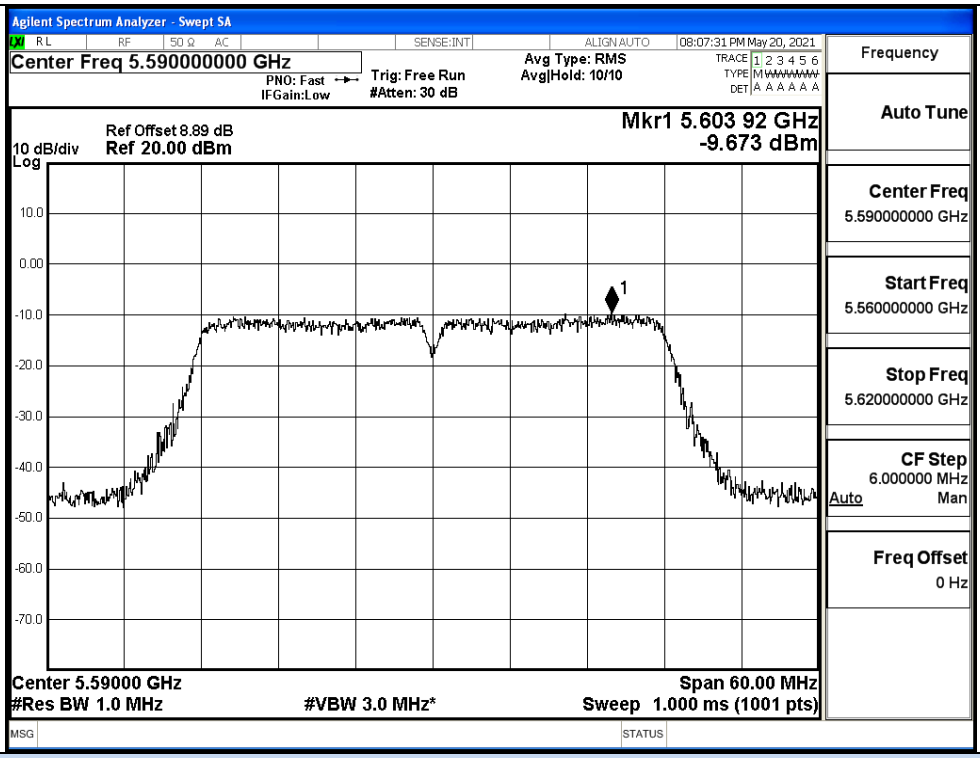
IEEE 802.11n20 / Channel 120 / 5600MHz



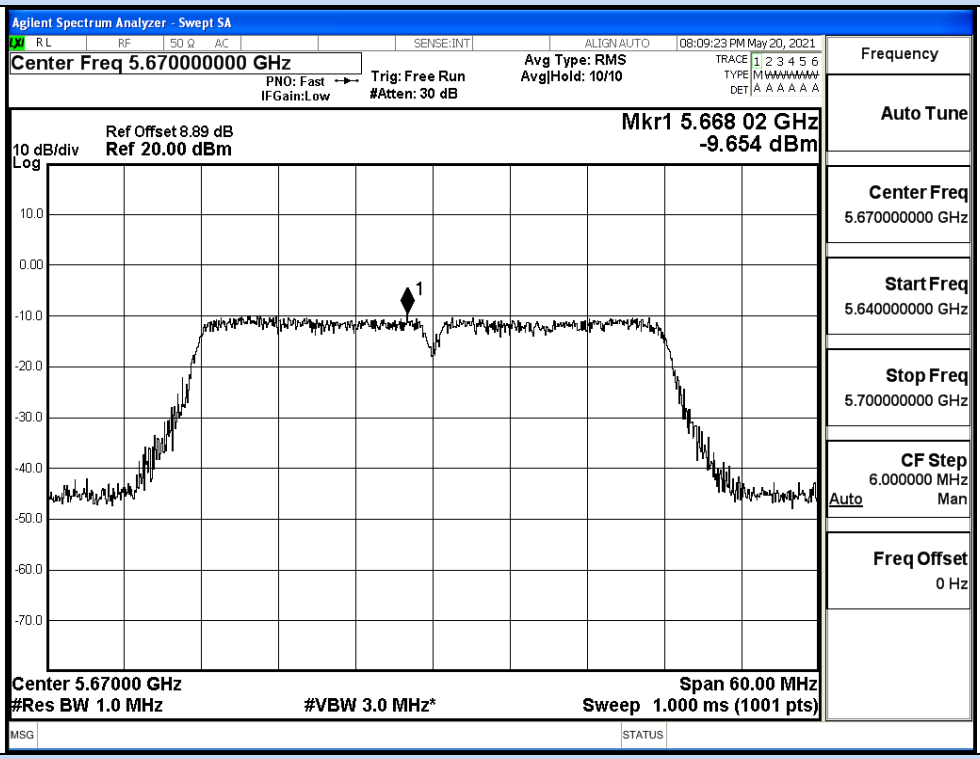
IEEE 802.11n20 / Channel 140 / 5700MHz



IEEE 802.11n40 / Channel 102 / 5510MHz

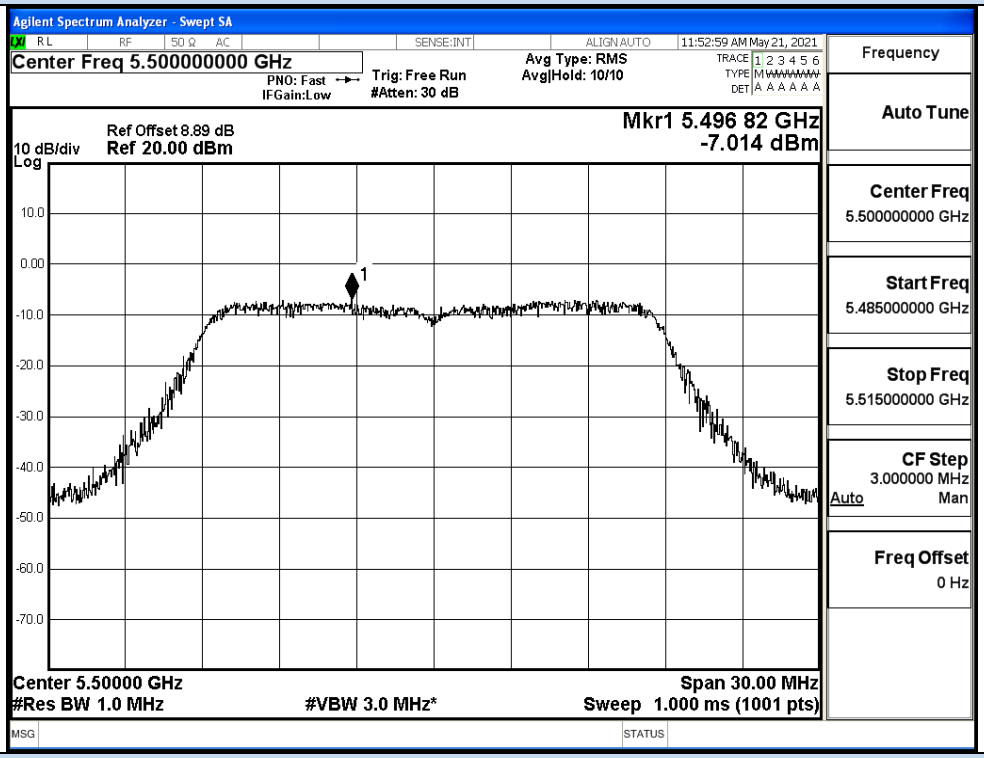


IEEE 802.11n40 / Channel 118 / 5590MHz

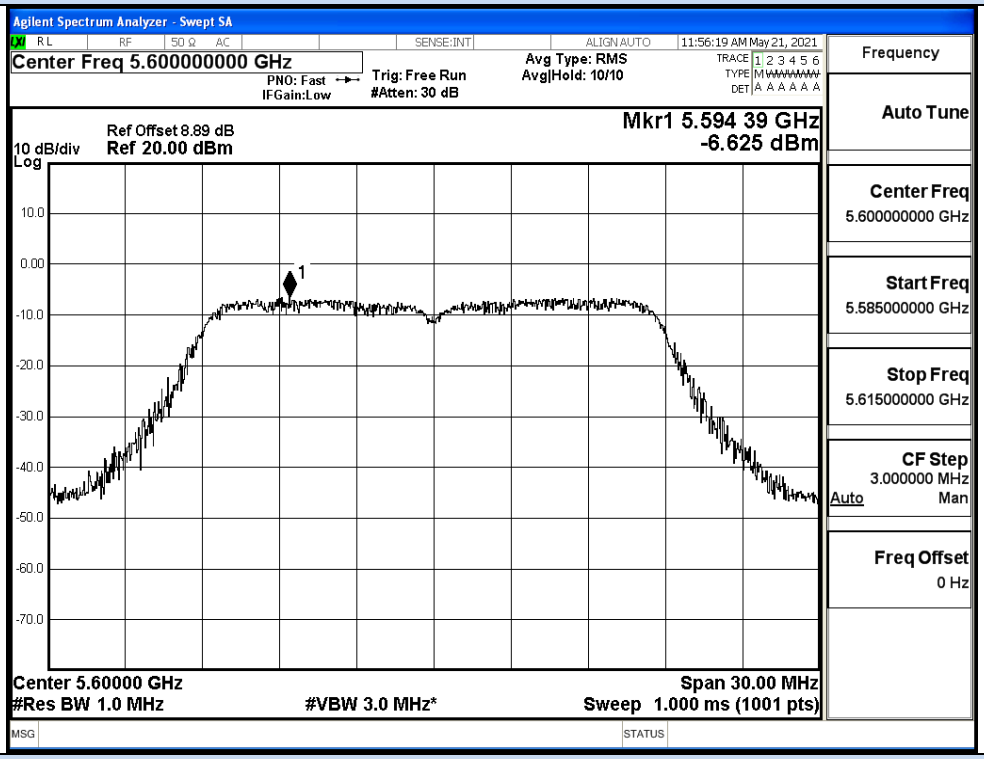


IEEE 802.11n40 / Channel 134 / 5670MHz

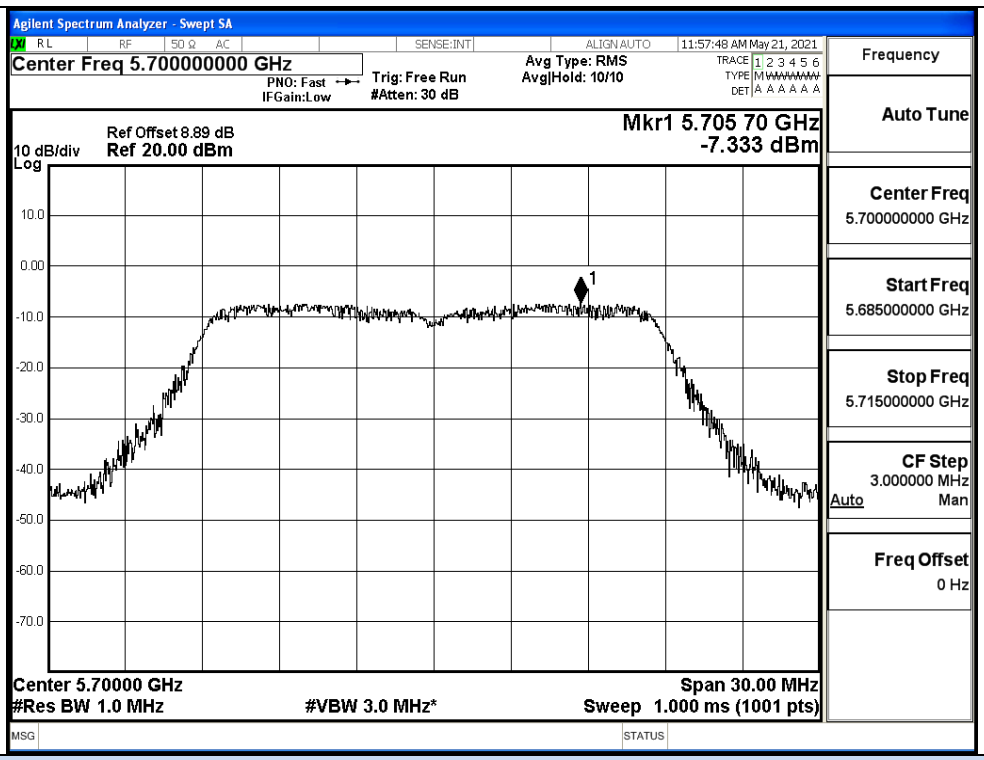
Power Spectral Density



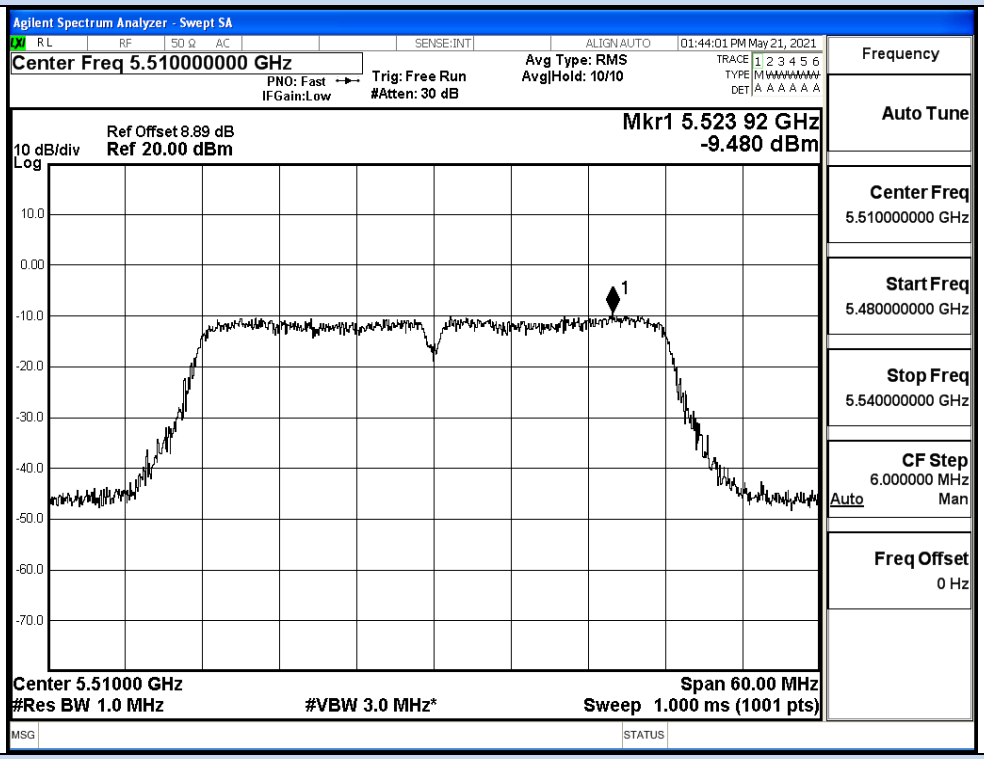
IEEE 802.11ac20 / Channel 100 / 5500MHz



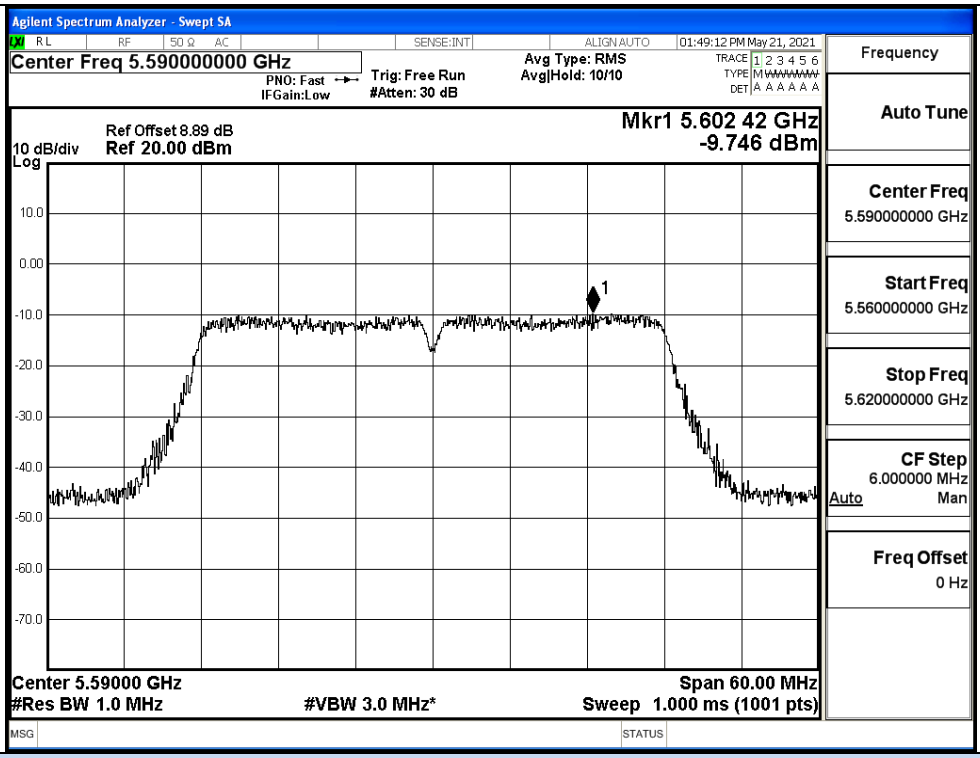
IEEE 802.11ac20 / Channel 120 / 5600MHz



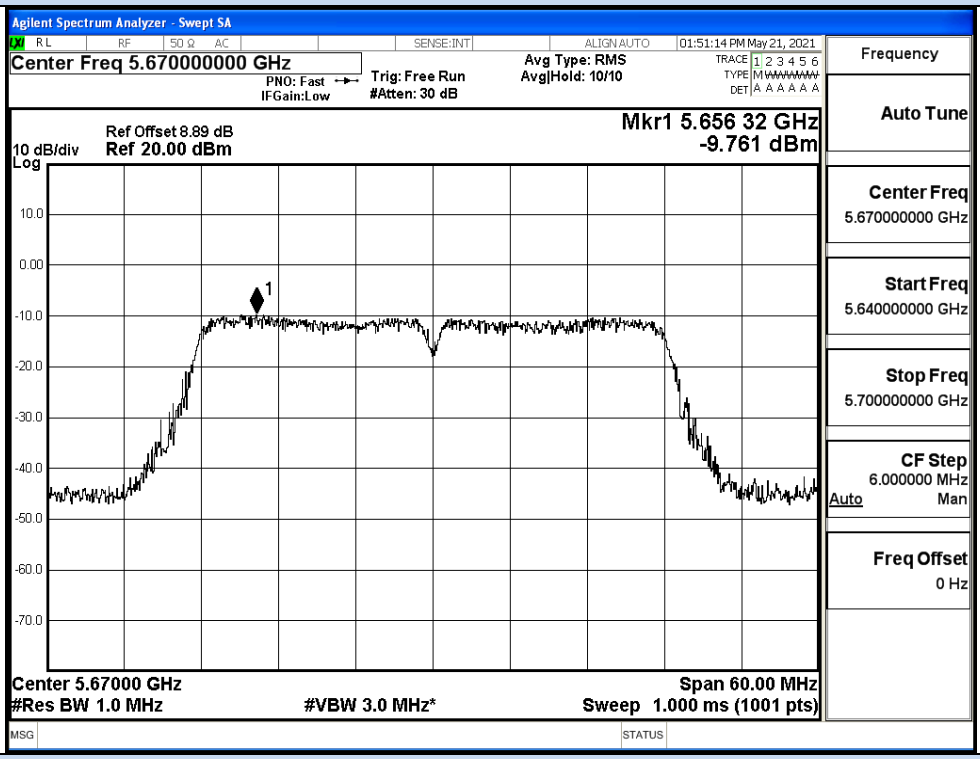
IEEE 802.11ac20 / Channel 140 / 5700MHz



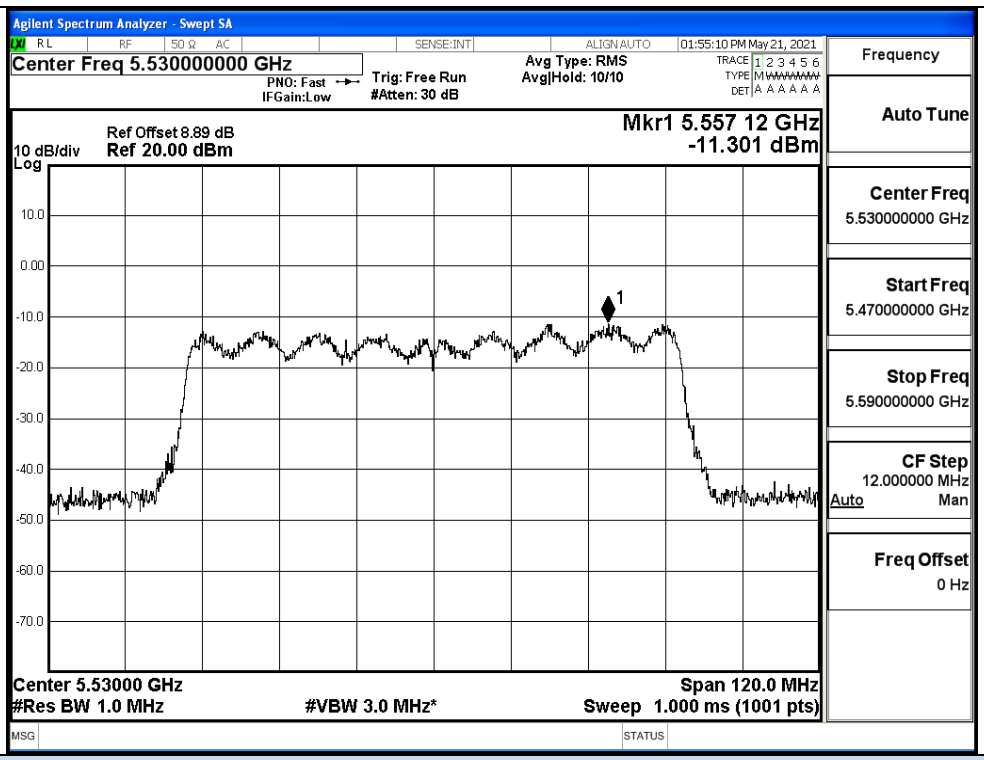
IEEE 802.11ac40 / Channel 102 / 5510MHz



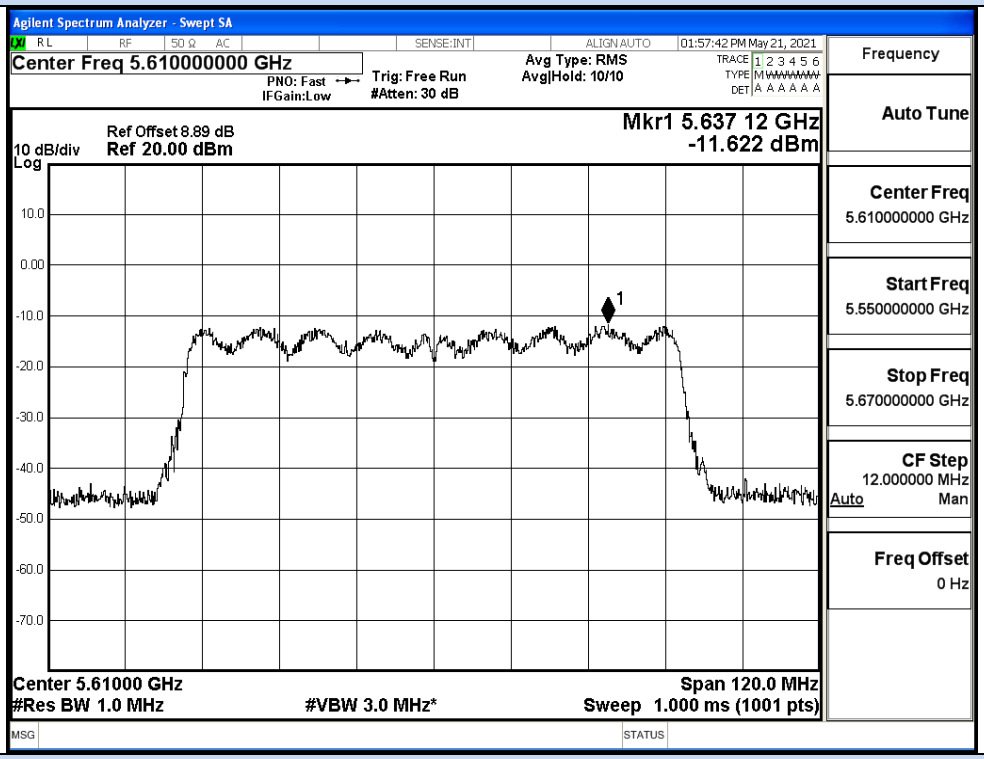
IEEE 802.11ac40 / Channel 118 / 5590MHz



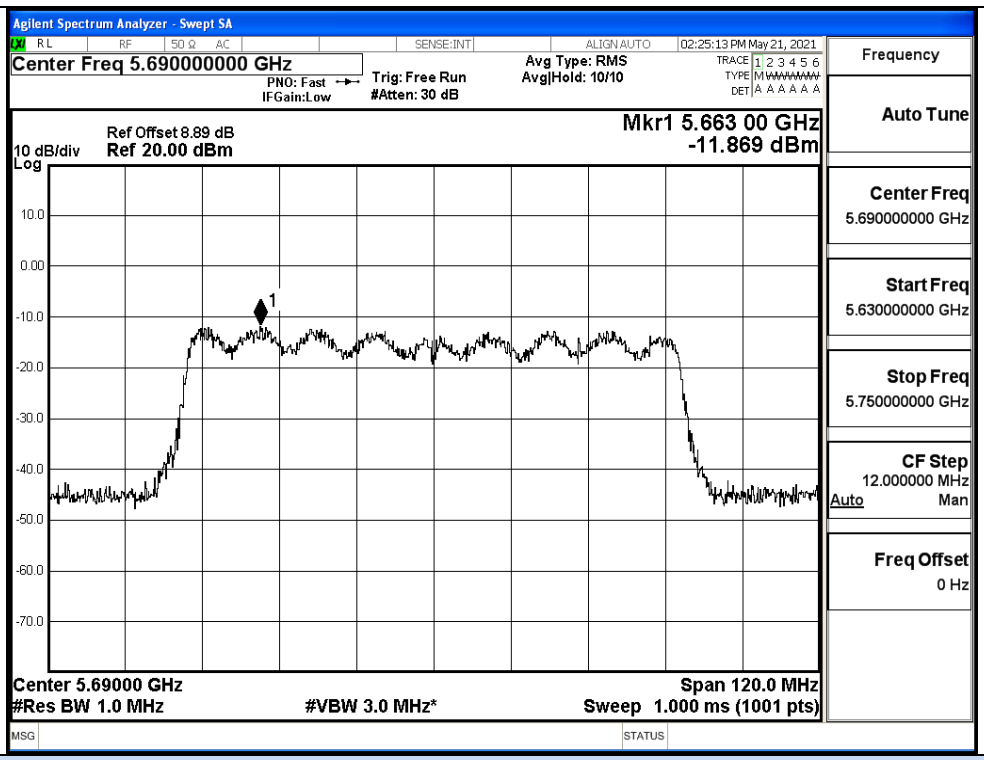
IEEE 802.11ac40 / Channel 134 / 5670MHz



IEEE 802.11ac80 / Channel 106 / 5530MHz



IEEE 802.11ac80 / Channel 122 / 5610MHz



IEEE 802.11ac80 / Channel 138 / 5690MHz

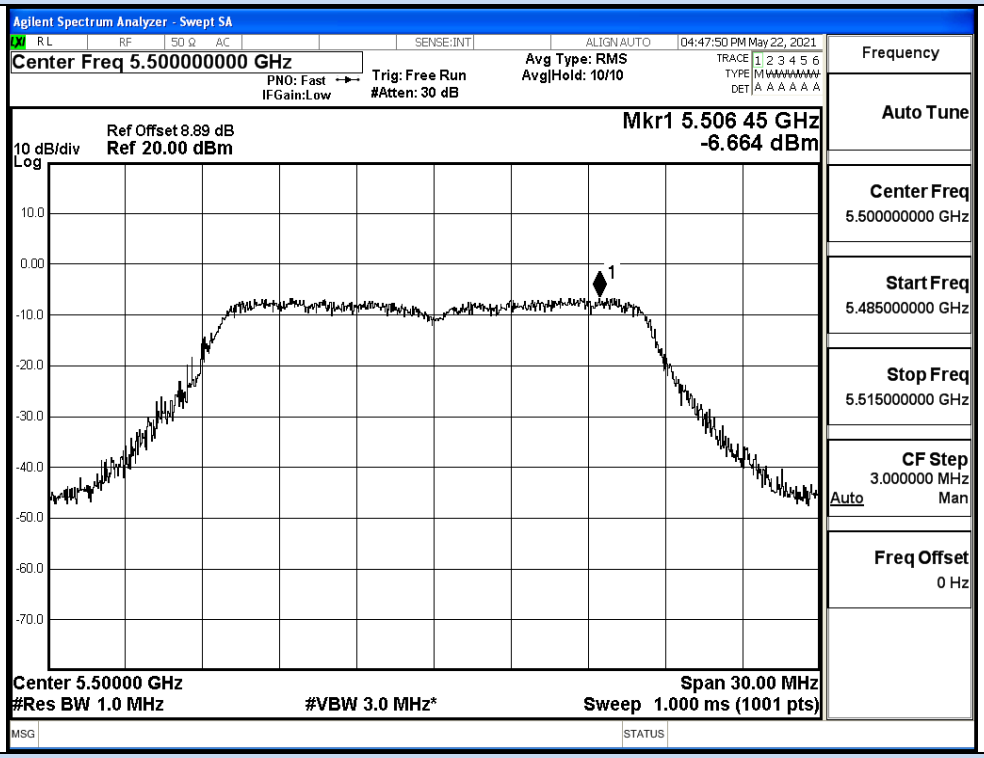
ANT1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	100	5500	-6.66	0	-6.66	11	Pass
	120	5600	-6.39	0	-6.39		Pass
	140	5700	-6.57	0	-6.57		Pass
11N20 SISO	100	5500	-6.46	0	-6.46	11	Pass
	120	5600	-6.45	0	-6.45		Pass
	140	5700	-6.82	0	-6.82		Pass
11N40 SISO	102	5510	-9.71	0	-9.71	11	Pass
	118	5590	-9.71	0	-9.71		Pass
	134	5670	-9.89	0	-9.89		Pass
11AC20 SISO	100	5500	-6.74	0	-6.74	11	Pass
	120	5600	-4.98	0	-4.98		Pass
	140	5700	-6.00	0	-6.00		Pass
11AC40 SISO	102	5510	-9.34	0	-9.34	11	Pass
	118	5590	-9.18	0	-9.18		Pass
	134	5670	-9.58	0	-9.58		Pass
11AC80 SISO	106	5530	-11.44	0	-11.44	11	Pass
	122	5610	-11.89	0	-11.89		Pass
	138	5690	-12.07	0	-12.07		Pass

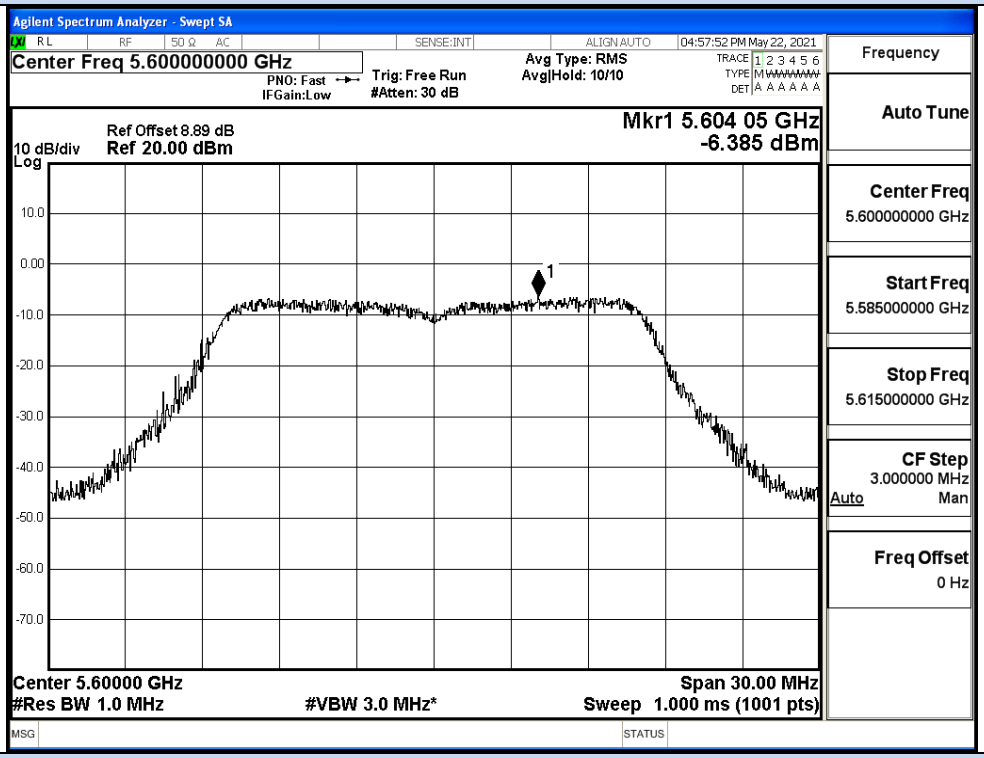
Combined Ant0 and Ant1

Test Mode	Channel	Frequency (MHz)	Report Power Density (dBm/MHz)			Limit (dBm/MHz)
			Ant_0	Ant_1	Sum	
11N20	100	5500	-6.78	-6.46	-3.61	11
	120	5600	-6.86	-6.45	-3.64	
	140	5700	-6.91	-6.82	-3.85	
11N40	102	5510	-9.45	-9.71	-6.57	11
	118	5590	-9.67	-9.71	-6.68	
	134	5670	-9.65	-9.89	-6.76	
11AC20	100	5500	-7.01	-6.74	-3.86	11
	120	5600	-6.63	-4.98	-2.72	
	140	5700	-7.33	-6.00	-3.60	
11AC40	102	5510	-9.48	-9.34	-6.40	11
	118	5590	-9.75	-9.18	-6.45	
	134	5670	-9.76	-9.58	-6.66	
11AC80	106	5530	-11.30	-11.44	-8.36	11
	122	5610	-11.62	-11.89	-8.74	
	138	5690	-11.87	-12.07	-8.96	

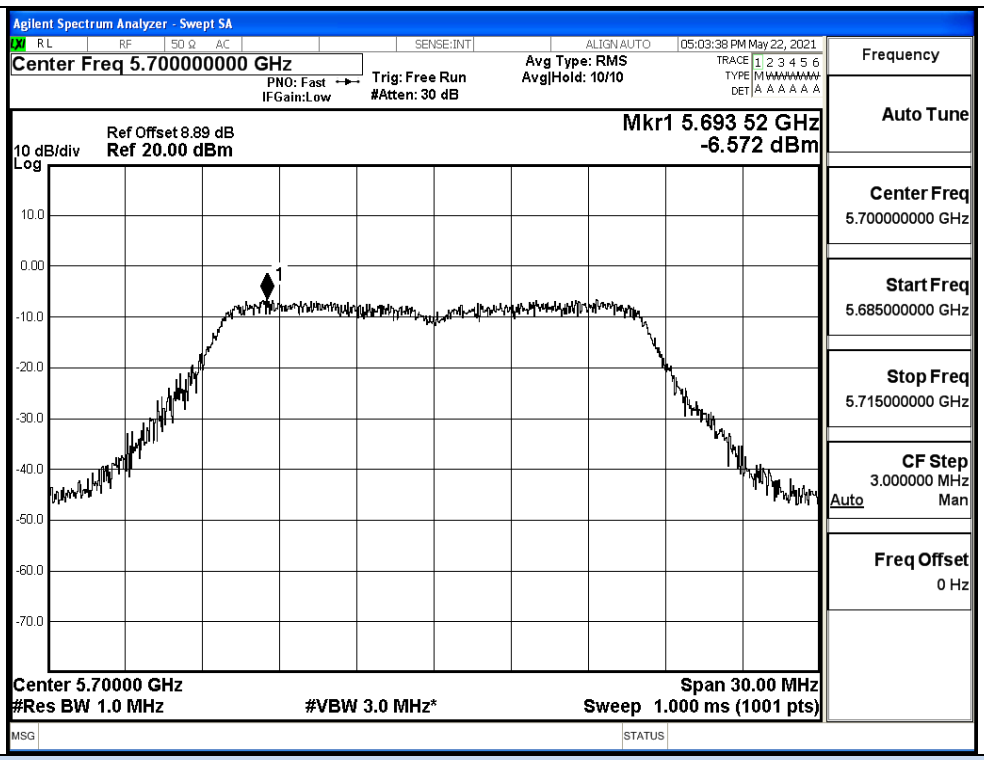
Power Spectral Density



IEEE 802.11a / Channel 100 / 5500MHz

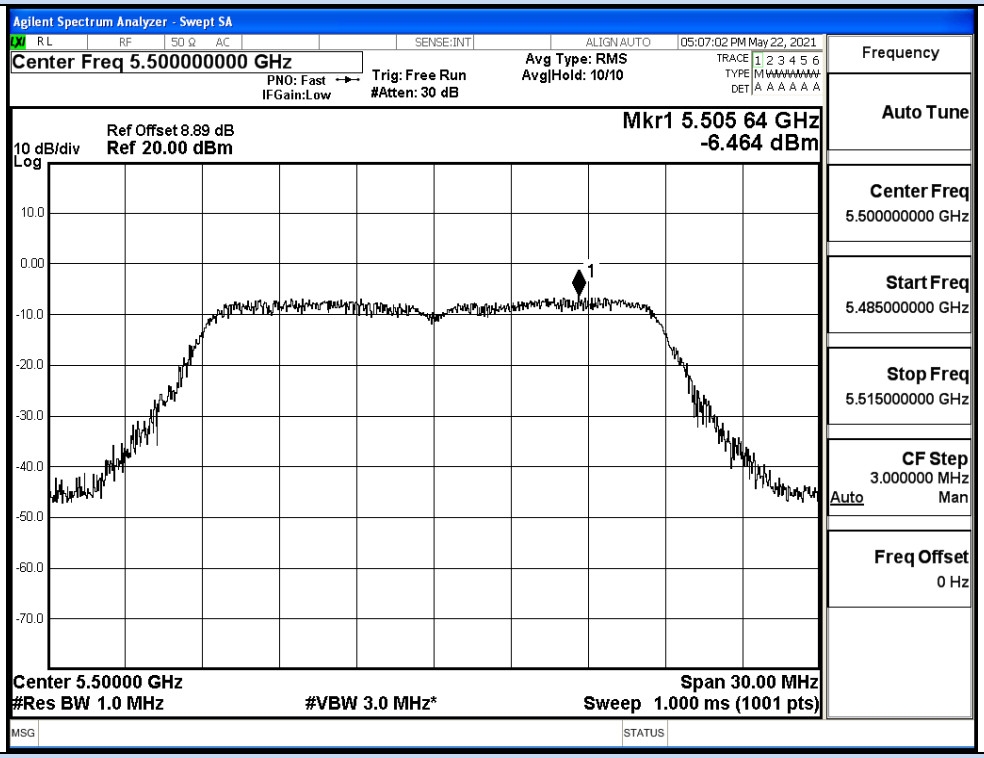


IEEE 802.11a / Channel 120 / 5600MHz

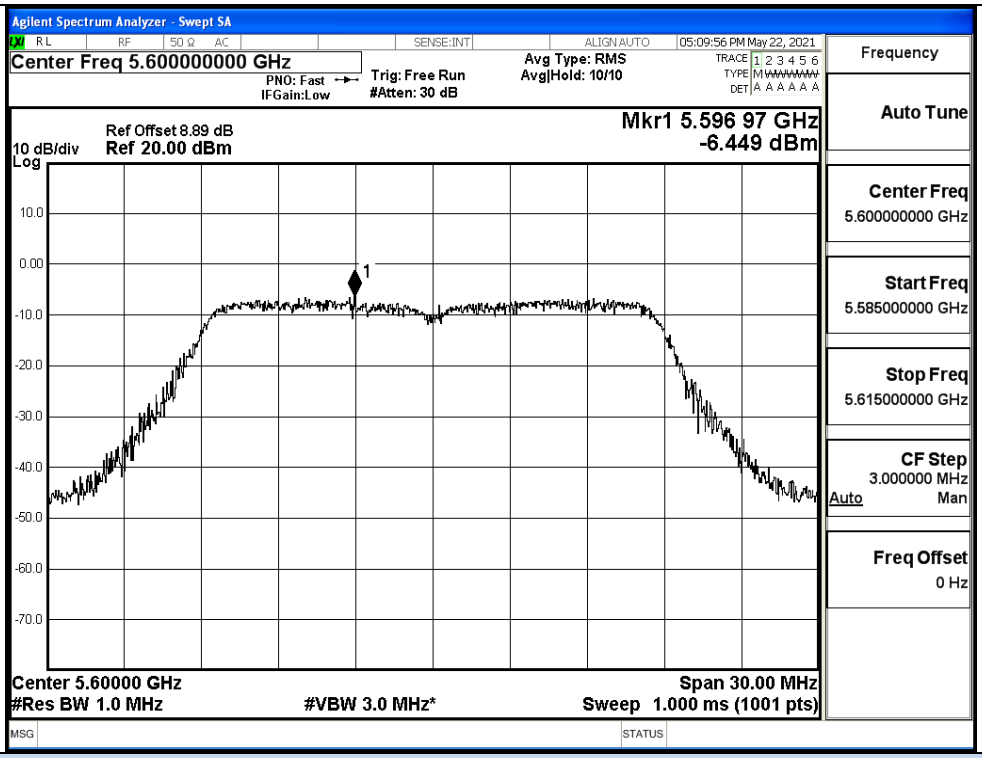


IEEE 802.11a / Channel 140 / 5700MHz

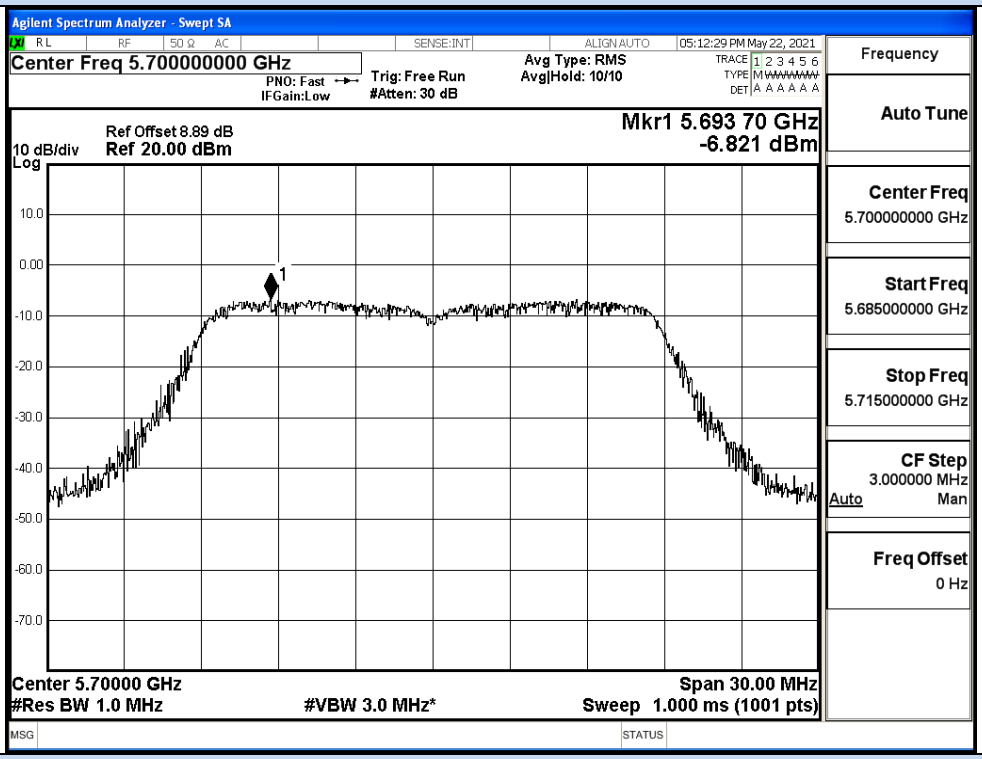
Power Spectral Density



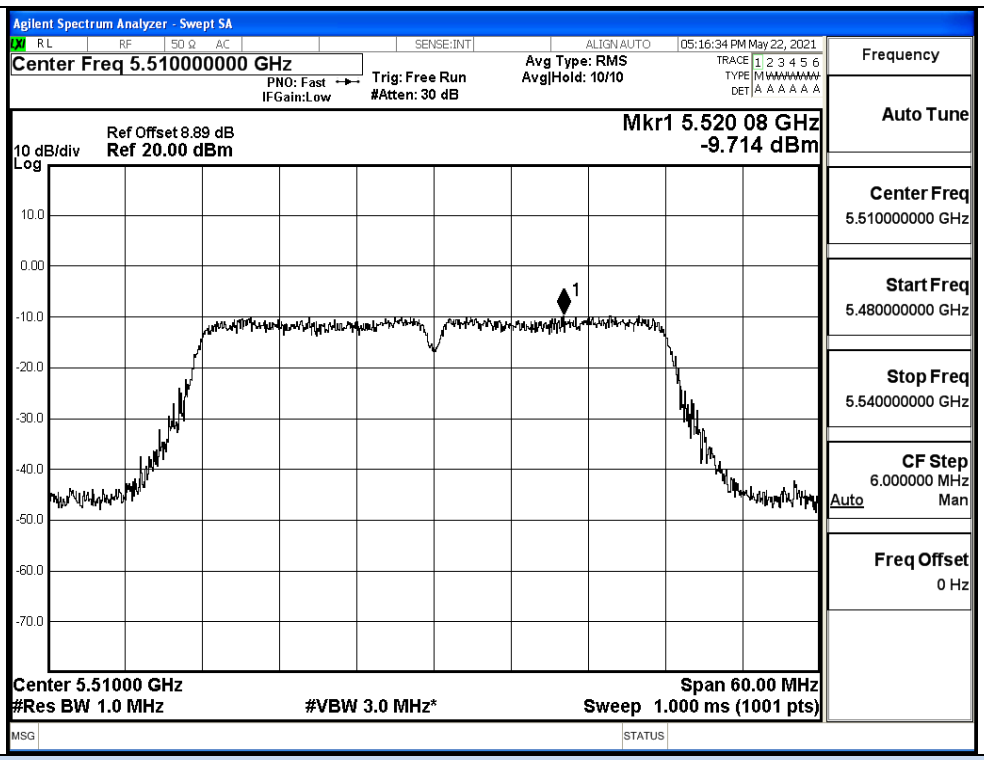
IEEE 802.11n20 / Channel 100 / 5500MHz



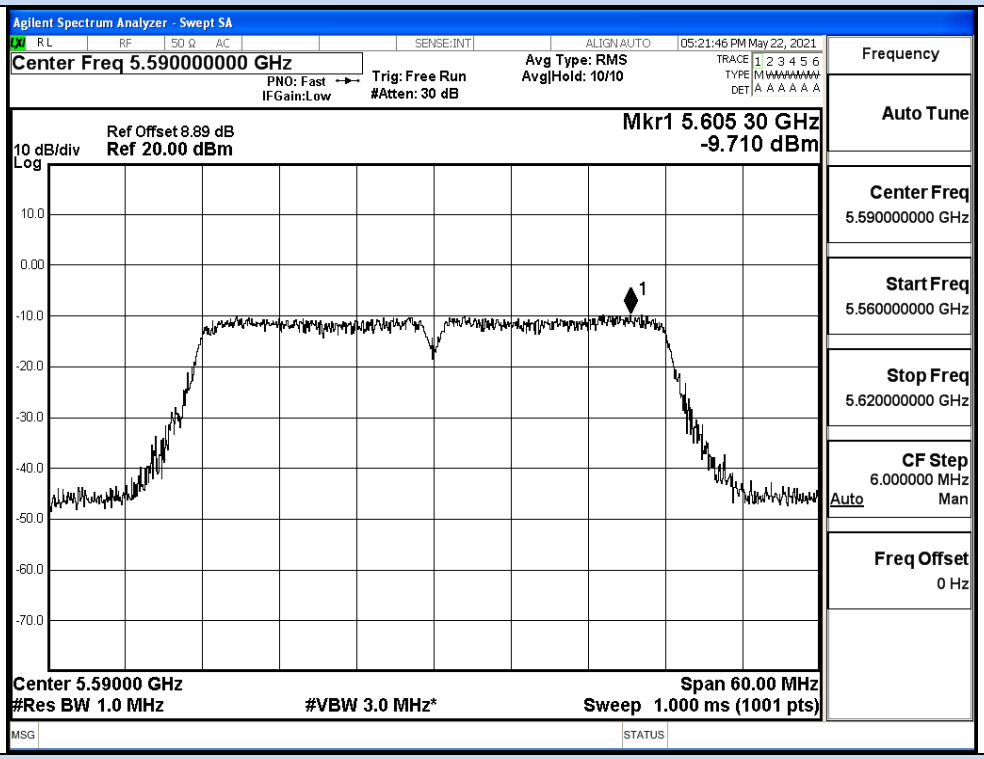
IEEE 802.11n20 / Channel 120 / 5600MHz



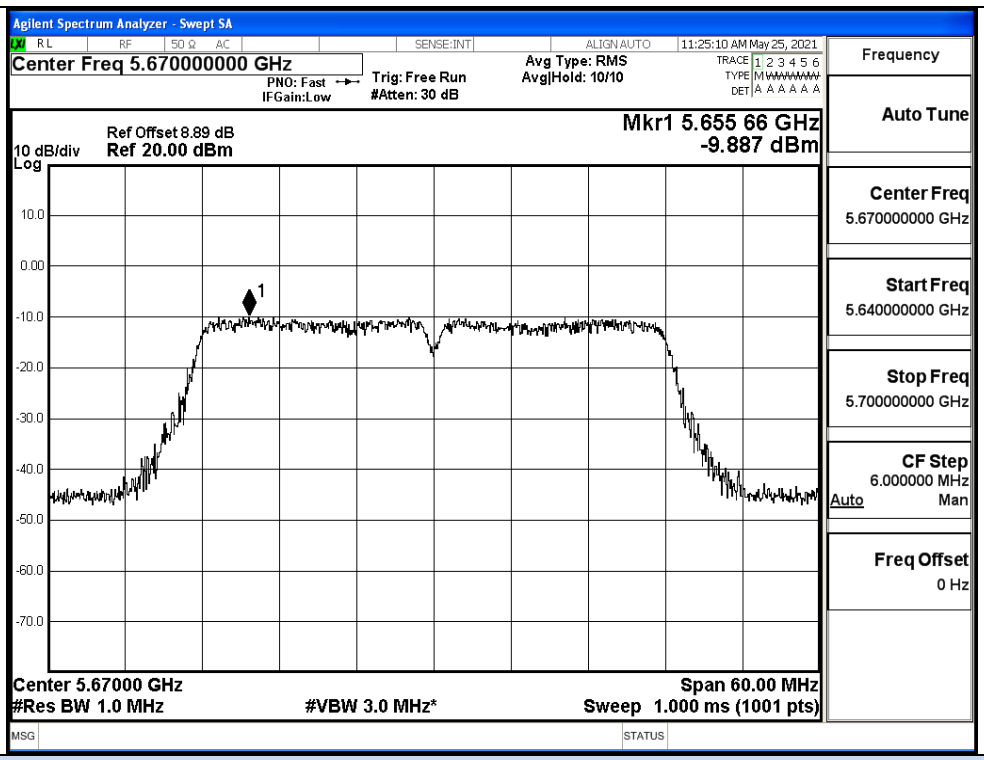
IEEE 802.11n20 / Channel 140 / 5700MHz



IEEE 802.11n40 / Channel 102 / 5510MHz

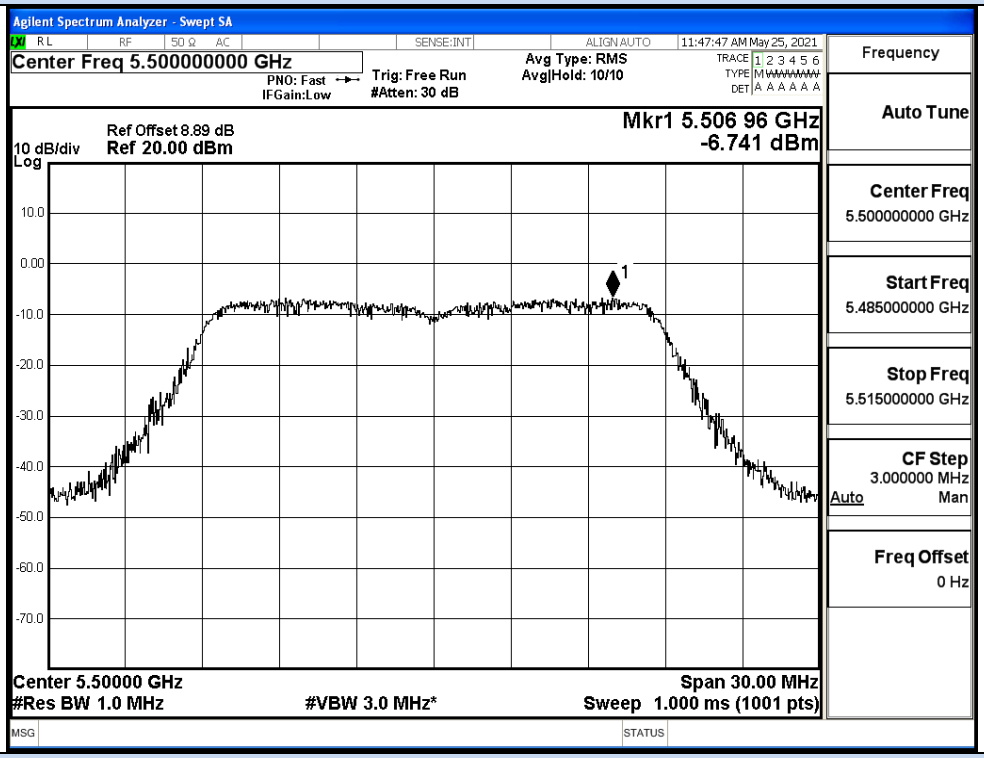


IEEE 802.11n40 / Channel 118 / 5590MHz

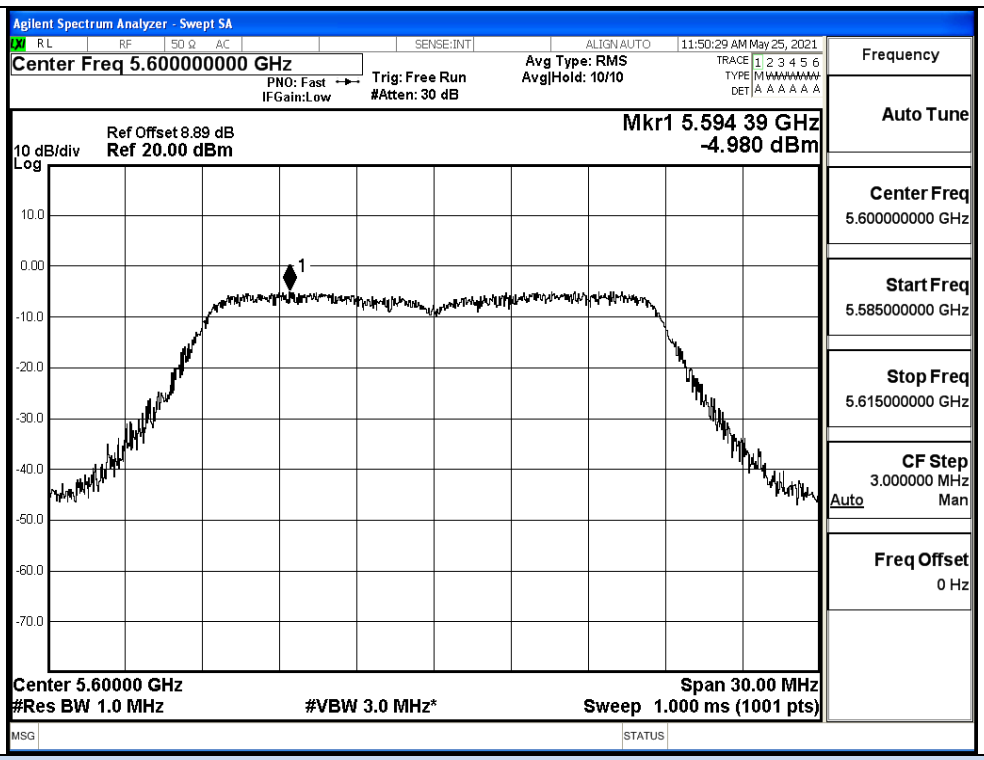


IEEE 802.11n40 / Channel 134 / 5670MHz

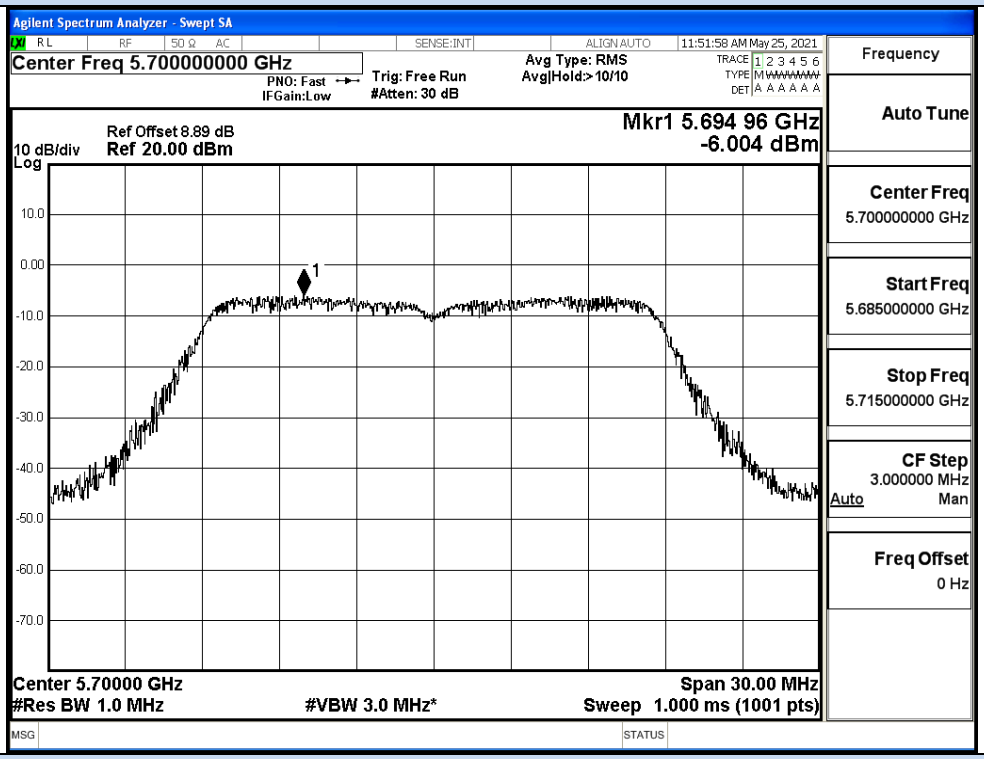
Power Spectral Density



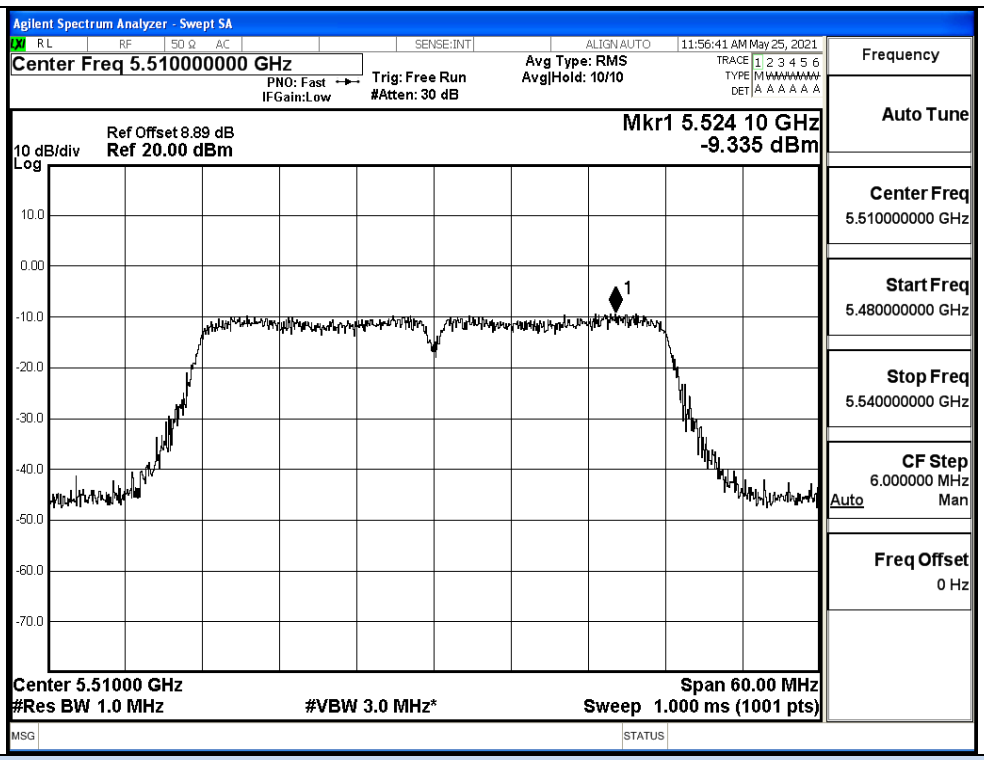
IEEE 802.11ac20 / Channel 100 / 5500MHz



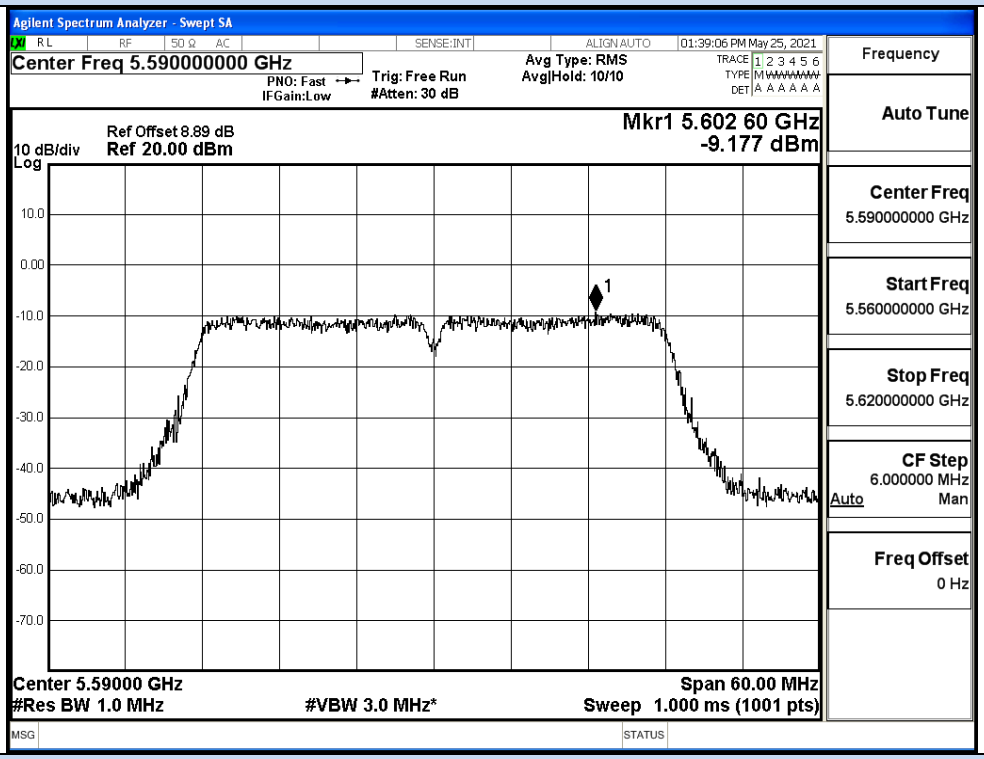
IEEE 802.11ac20 / Channel 120 / 5600MHz



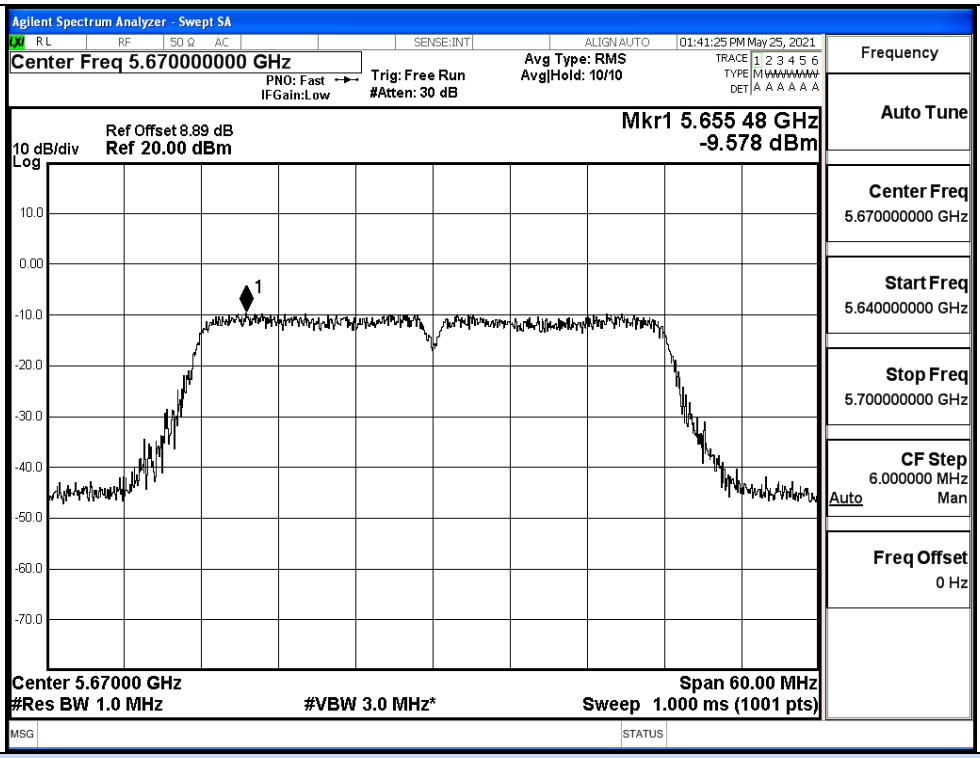
IEEE 802.11ac20 / Channel 140 / 5700MHz



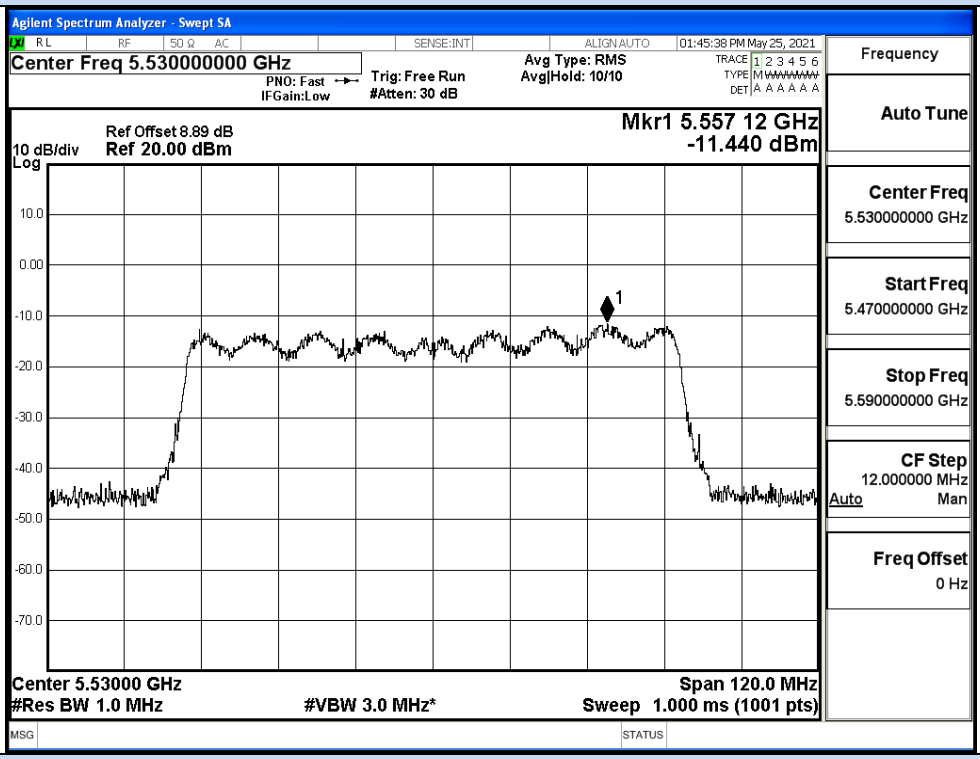
IEEE 802.11ac40 / Channel 102 / 5510MHz



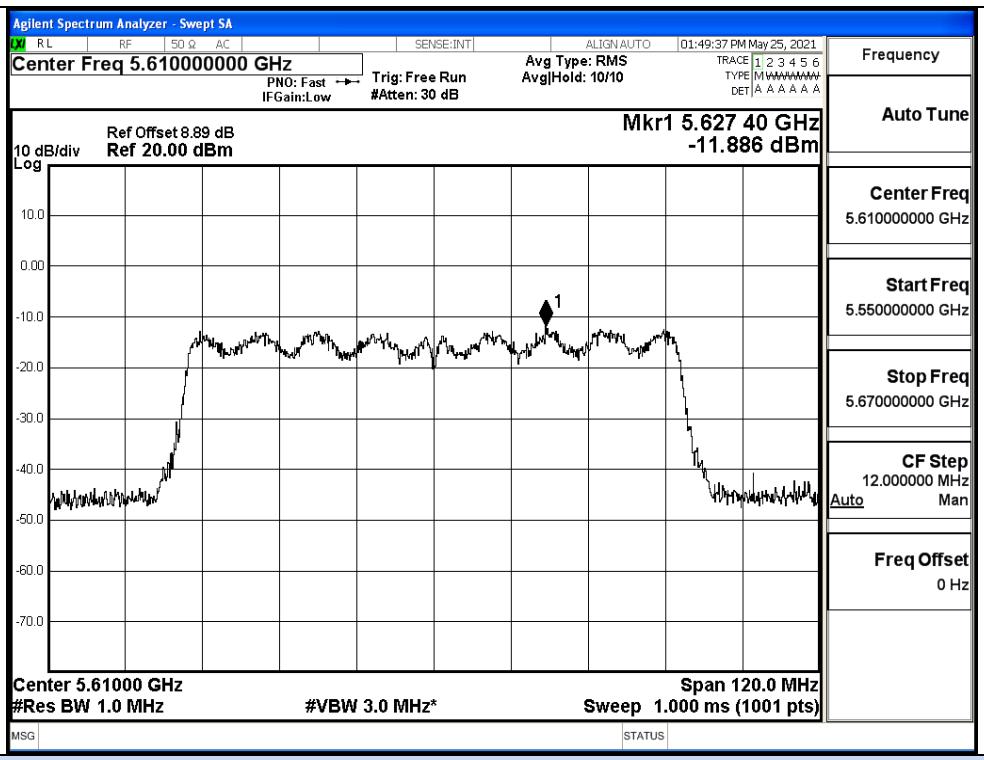
IEEE 802.11ac40 / Channel 118 / 5590MHz



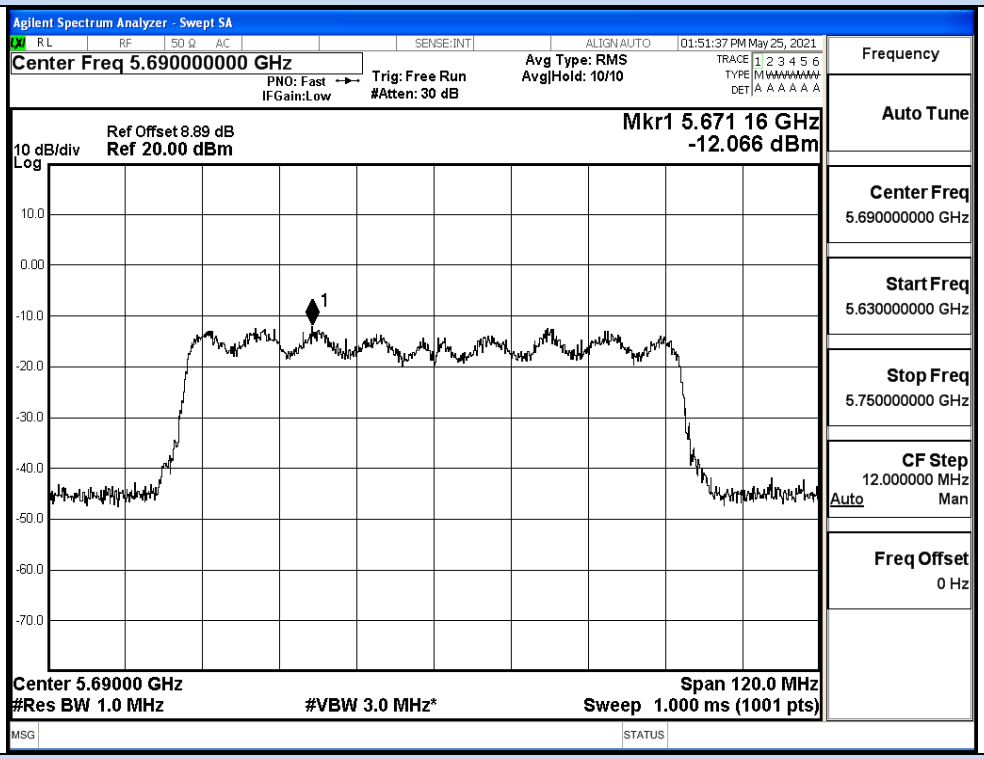
IEEE 802.11ac40 / Channel 134 / 5670MHz



IEEE 802.11ac80 / Channel 106 / 5530MHz



IEEE 802.11ac80 / Channel 122 / 5610MHz



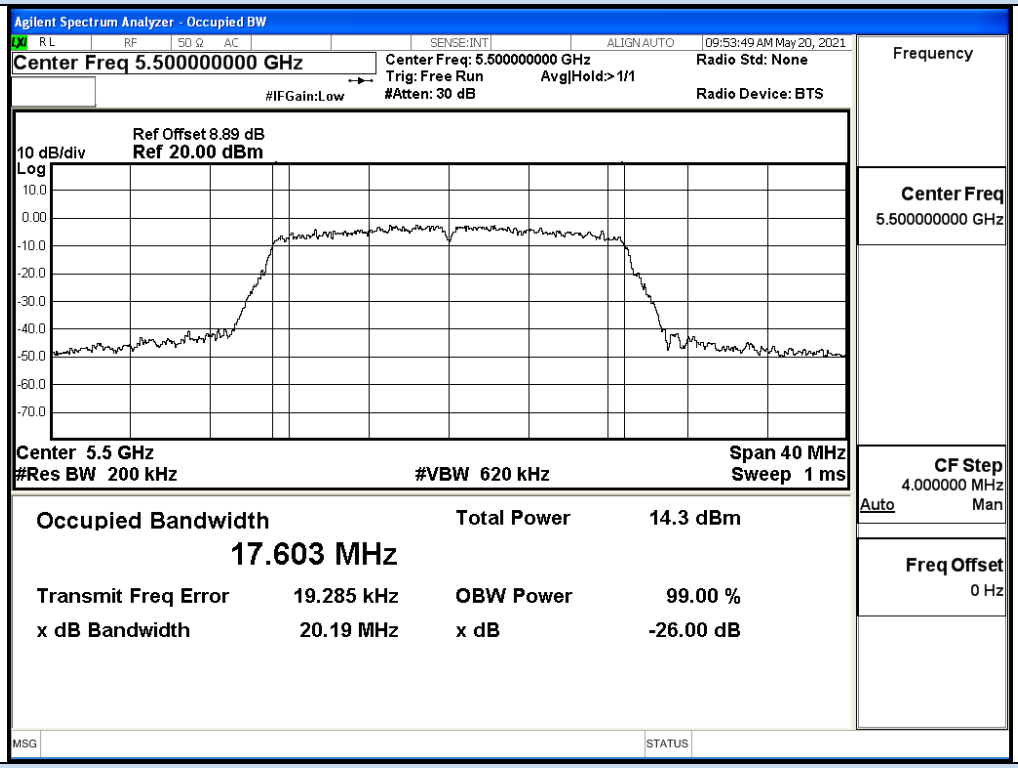
IEEE 802.11ac80 / Channel 138 / 5690MHz

F.4 Emission Bandwidth

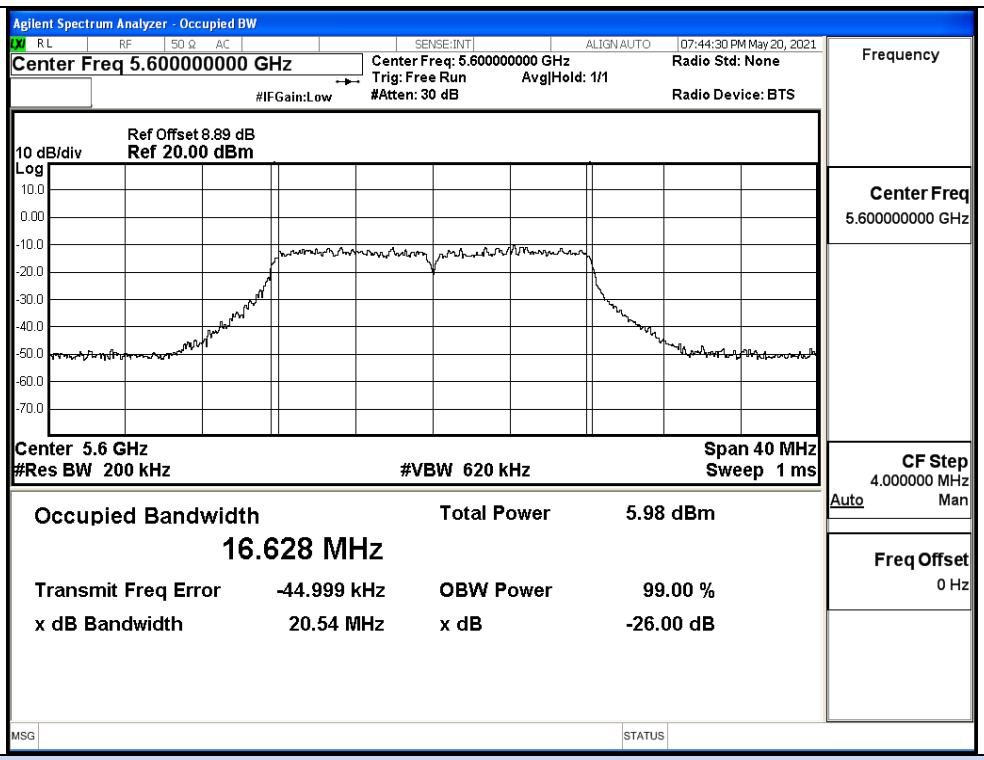
ANT0

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	100	5500	20.19	No Limit	Pass
	120	5600	20.54		Pass
	140	5700	20.76		Pass
11N20 SISO	100	5500	21.52	No Limit	Pass
	120	5600	21.35		Pass
	140	5700	21.23		Pass
11N40 SISO	102	5510	41.71	No Limit	Pass
	118	5590	41.76		Pass
	134	5670	41.59		Pass
11AC20 SISO	100	5500	21.27	No Limit	Pass
	120	5600	21.19		Pass
	140	5700	21.65		Pass
11AC40 SISO	102	5510	42.81	No Limit	Pass
	118	5590	42.35		Pass
	134	5670	42.29		Pass
11AC80 SISO	106	5530	82.92	No Limit	Pass
	122	5610	83.08		Pass
	138	5690	83.02		Pass

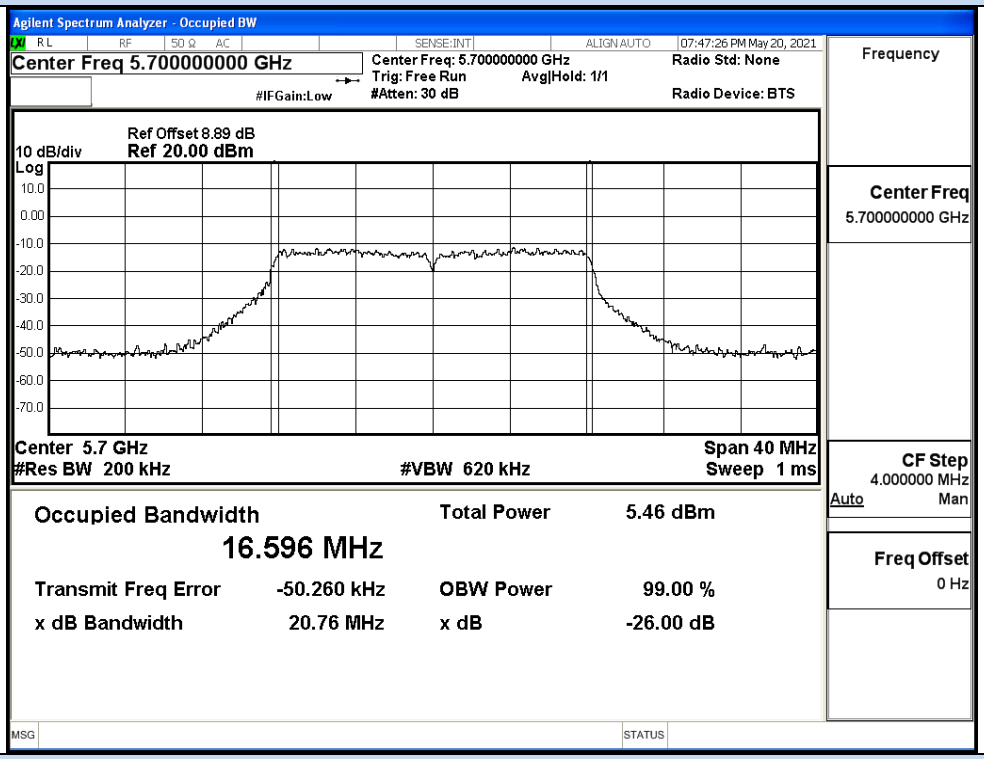
26dB Bandwidth



IEEE 802.11a / Channel 100 / 5500MHz

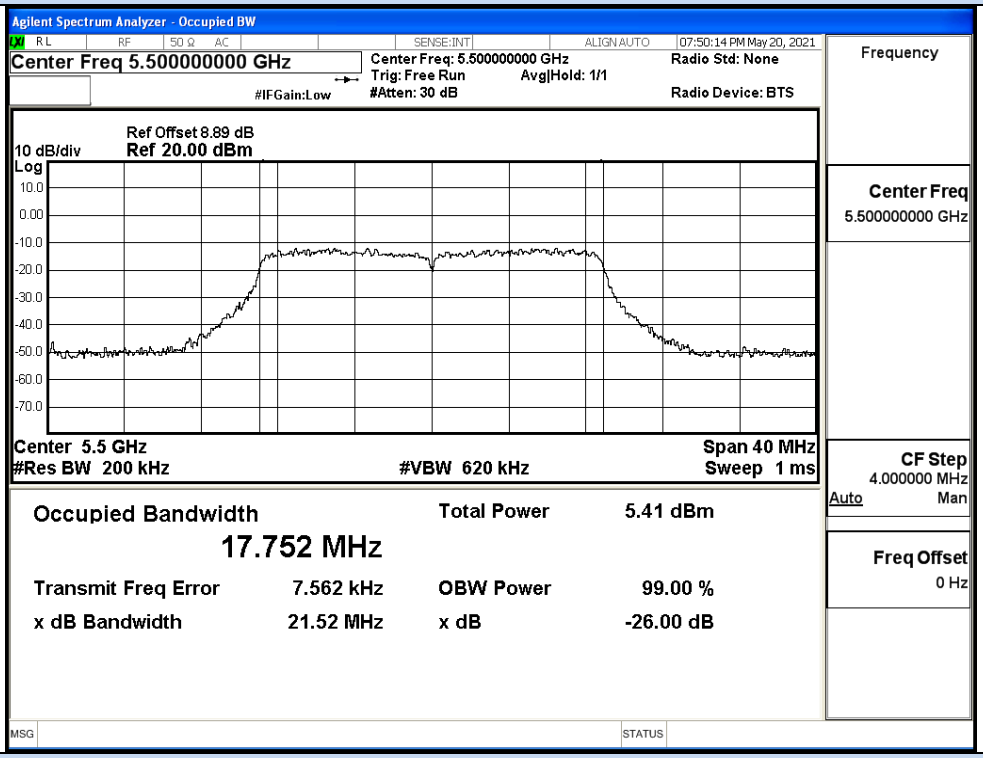


IEEE 802.11a / Channel 120 / 5600MHz

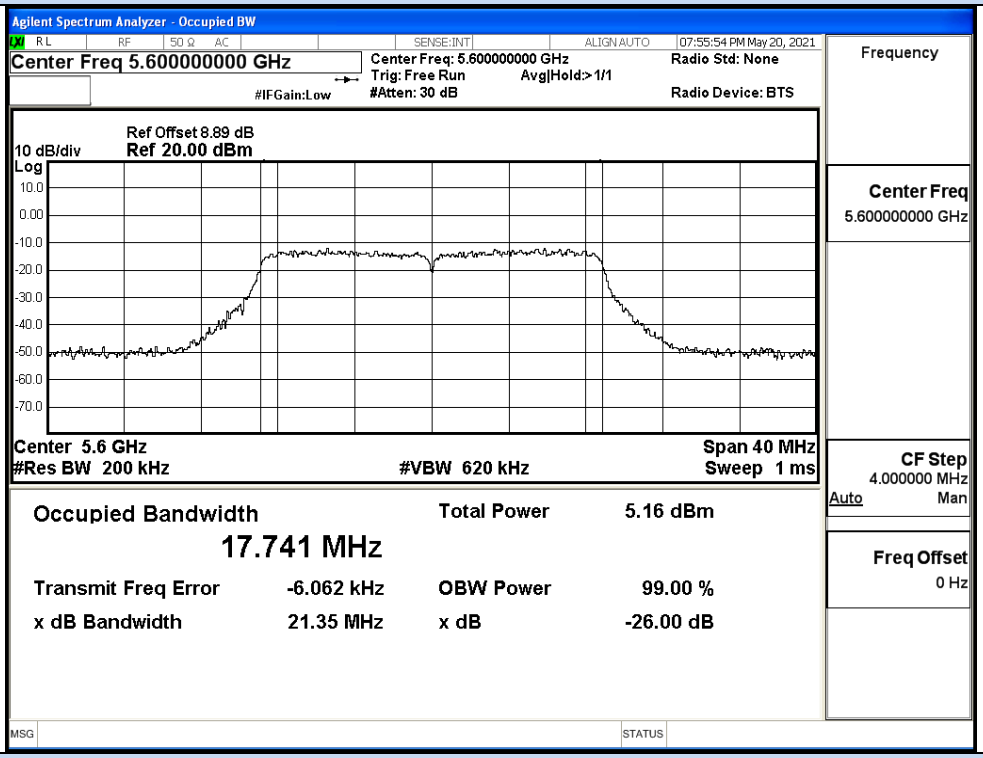


IEEE 802.11a / Channel 140 / 5700MHz

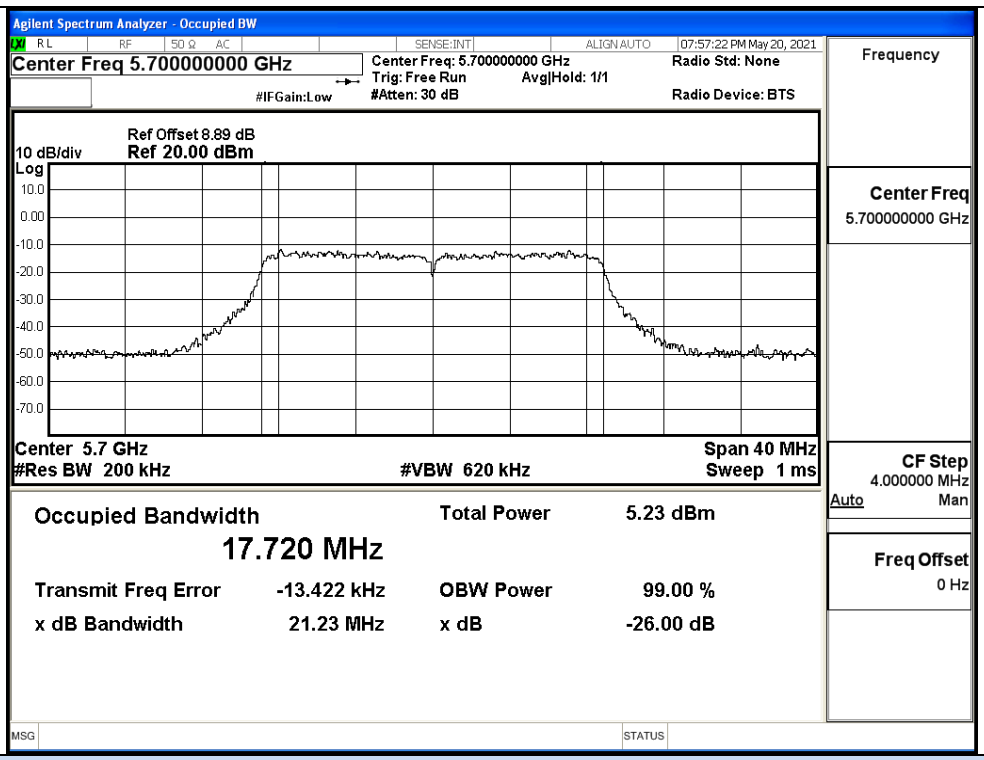
26dB Bandwidth



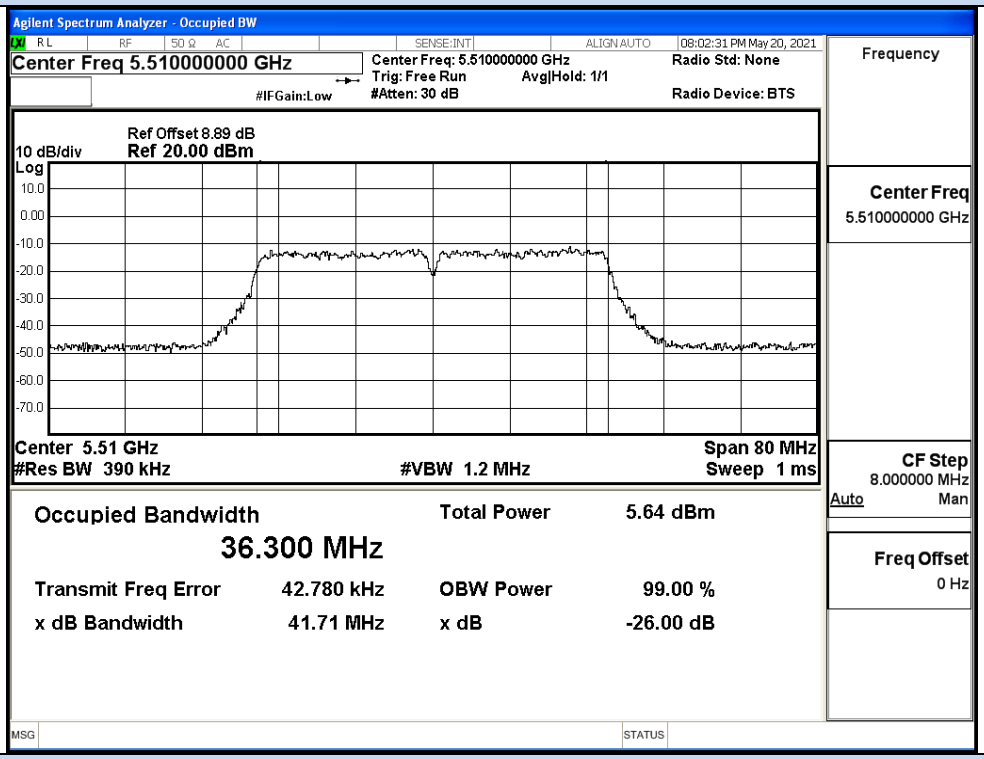
IEEE 802.11n20 / Channel 100 / 5500MHz



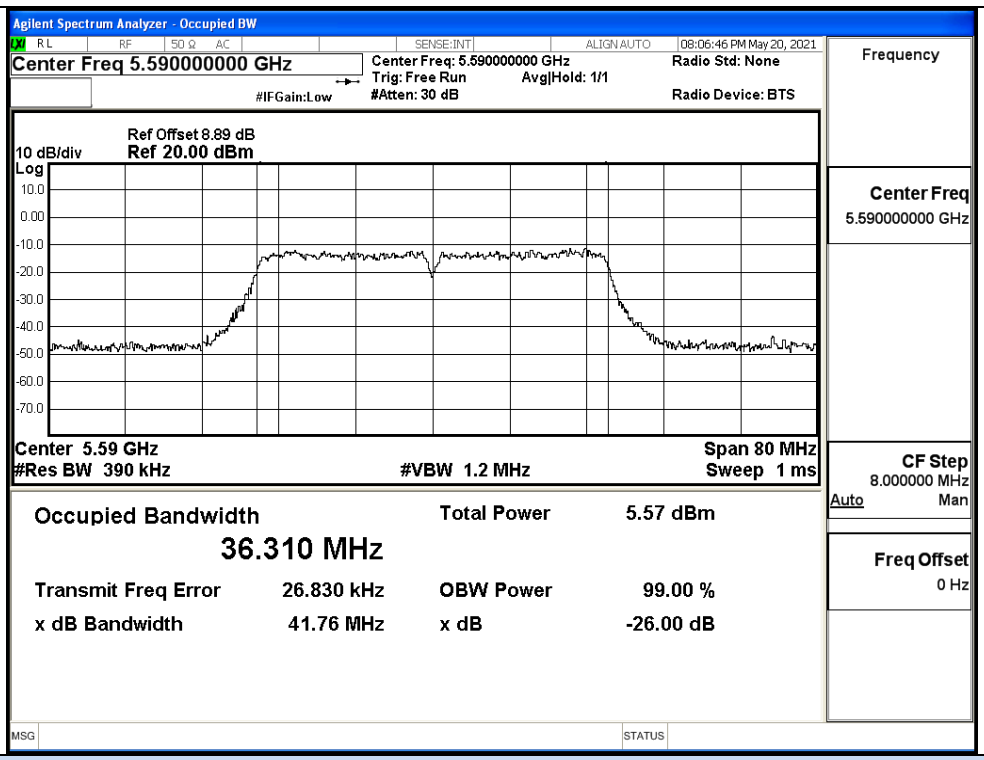
IEEE 802.11n20 / Channel 120 / 5600MHz



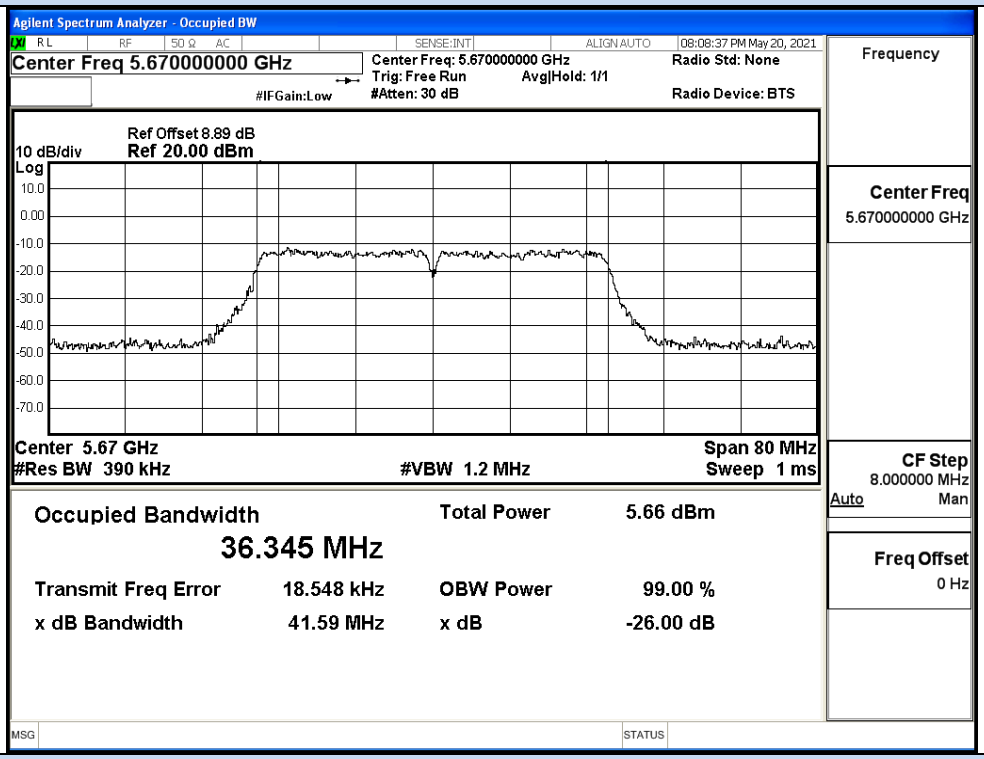
IEEE 802.11n20 / Channel 140 / 5700MHz



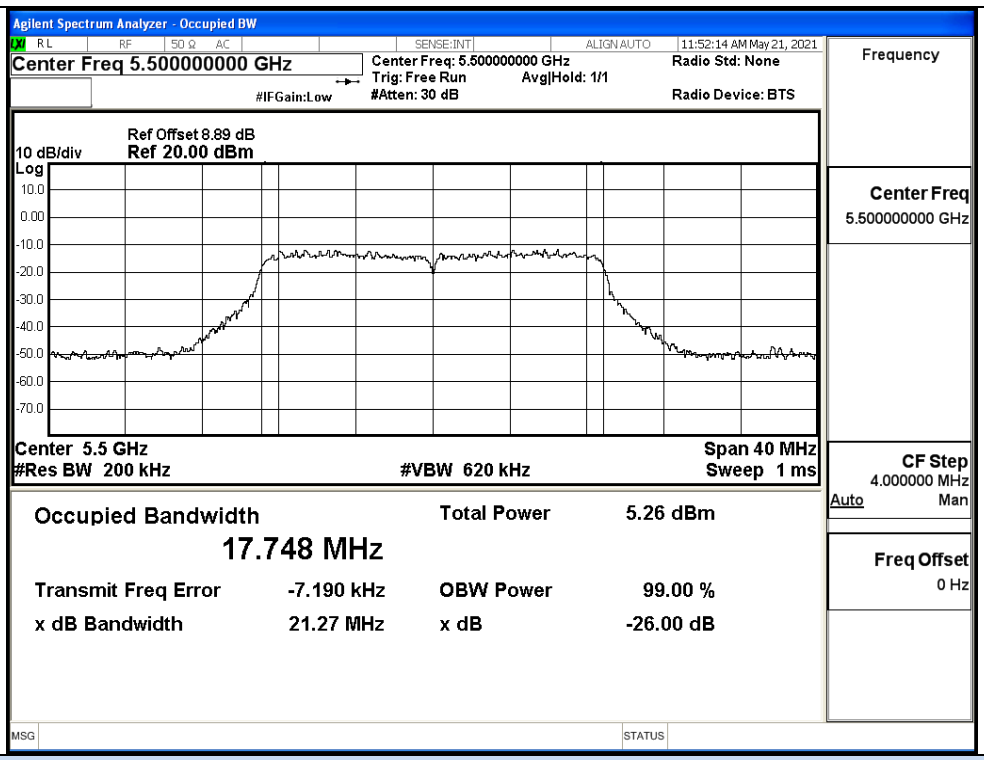
IEEE 802.11n40 / Channel 102 / 5510MHz



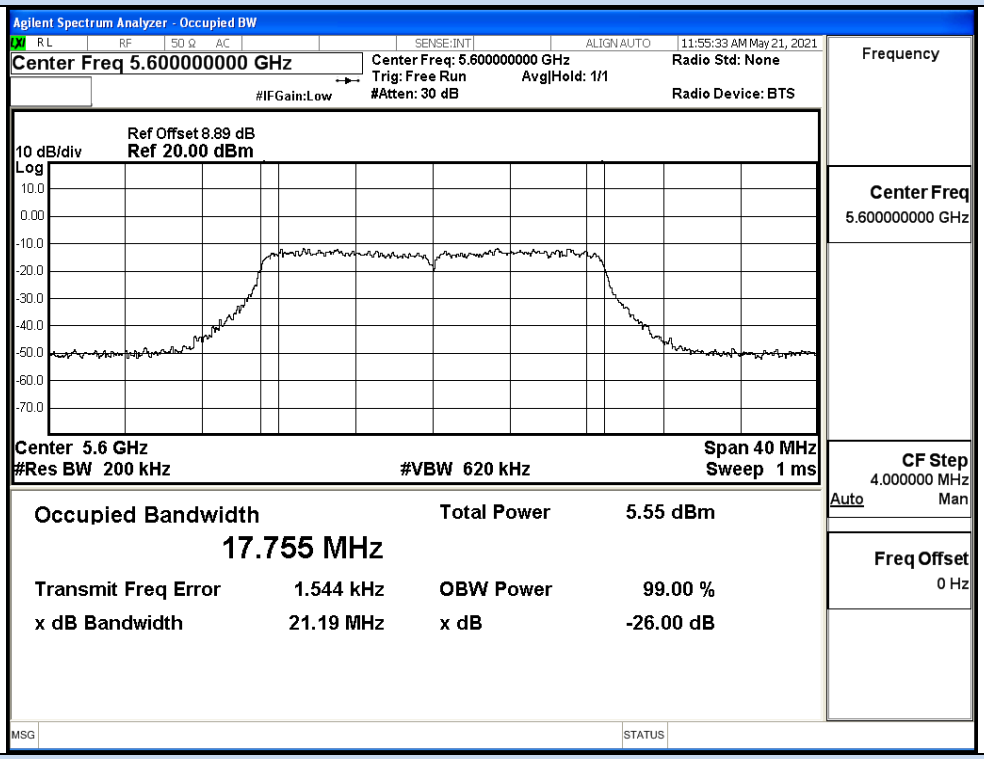
IEEE 802.11n40 / Channel 118 / 5590MHz



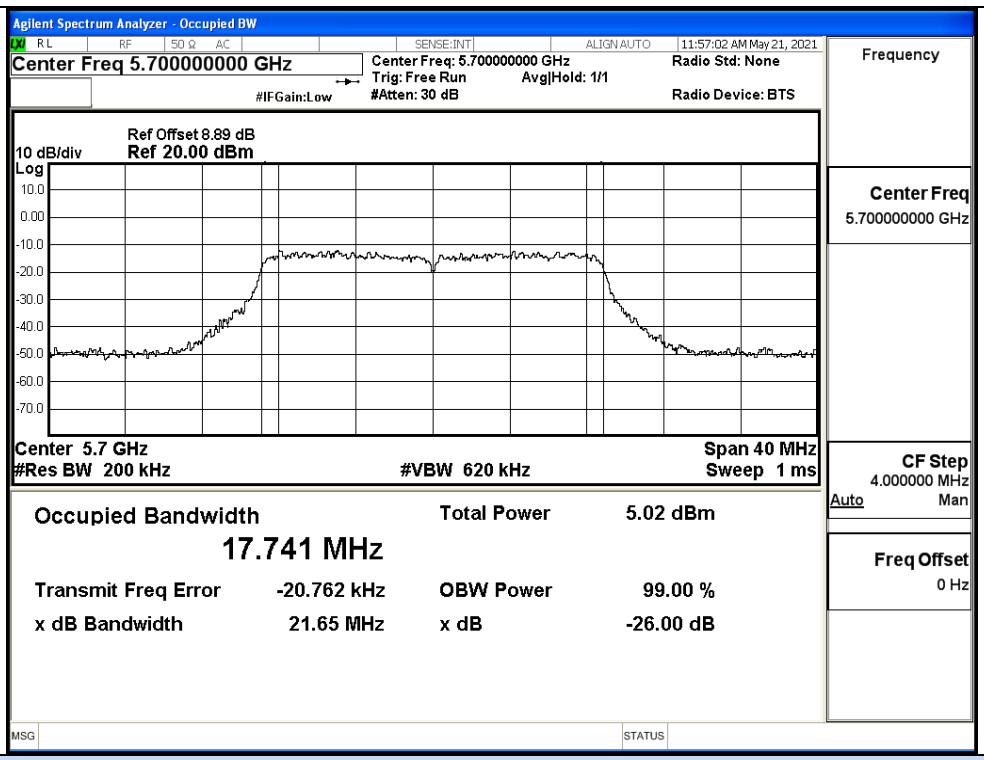
IEEE 802.11n40 / Channel 134 / 5670MHz



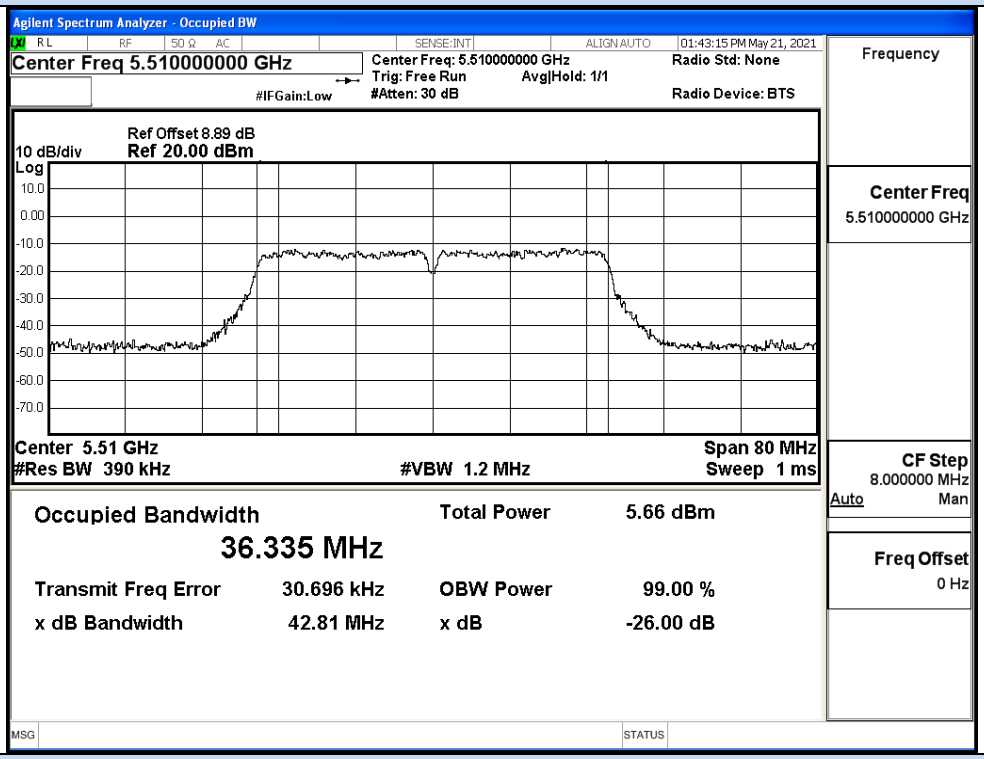
IEEE 802.11ac20 / Channel 100 / 5500MHz



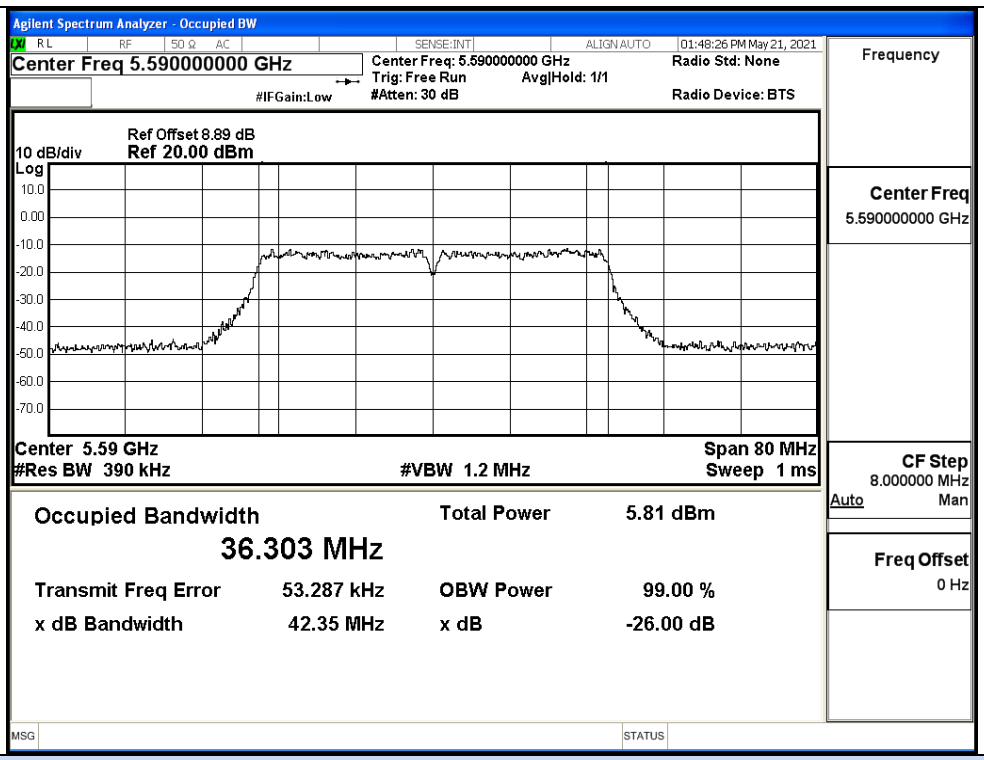
IEEE 802.11ac20 / Channel 120 / 5600MHz



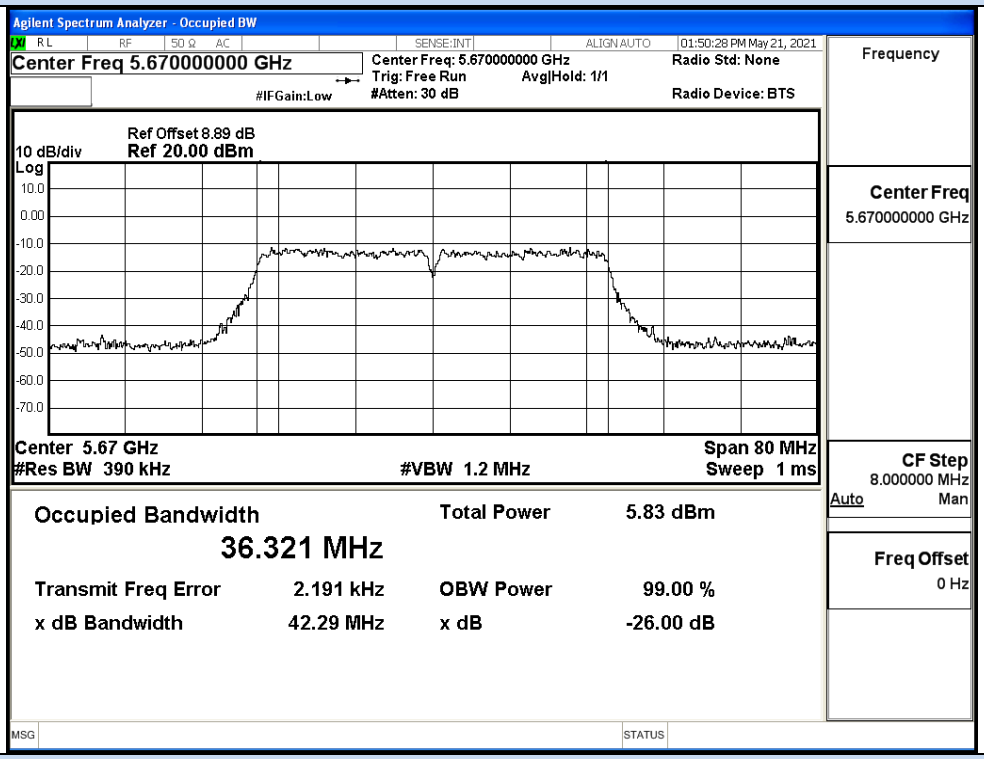
IEEE 802.11ac20 / Channel 140 / 5700MHz



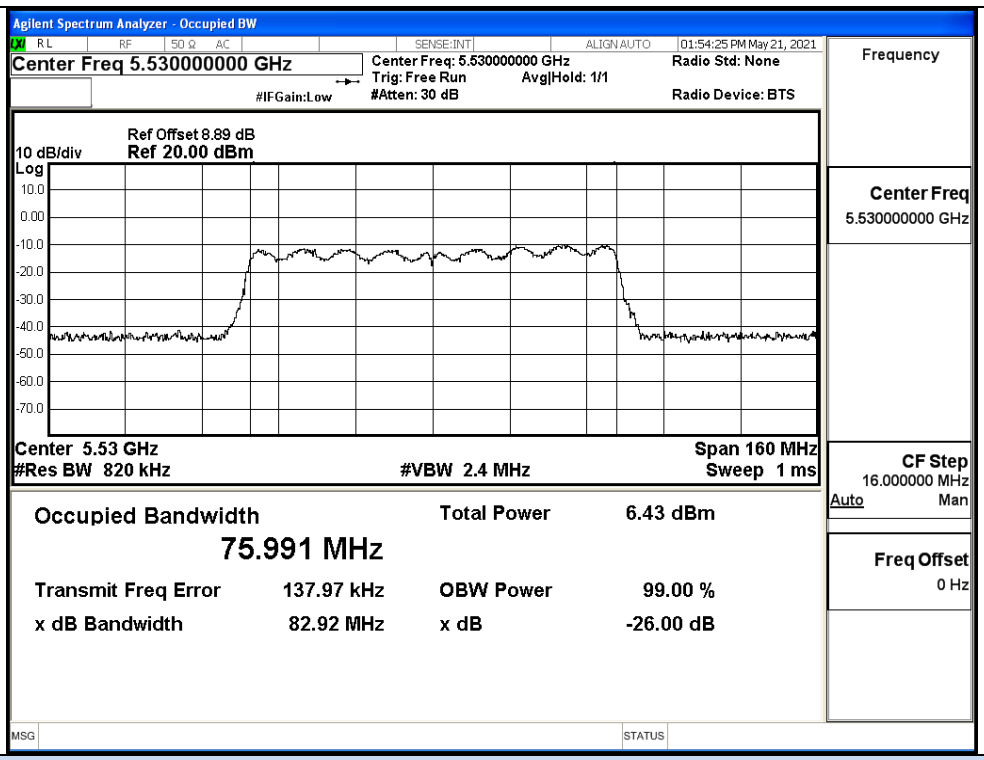
IEEE 802.11ac40 / Channel 102 / 5510MHz



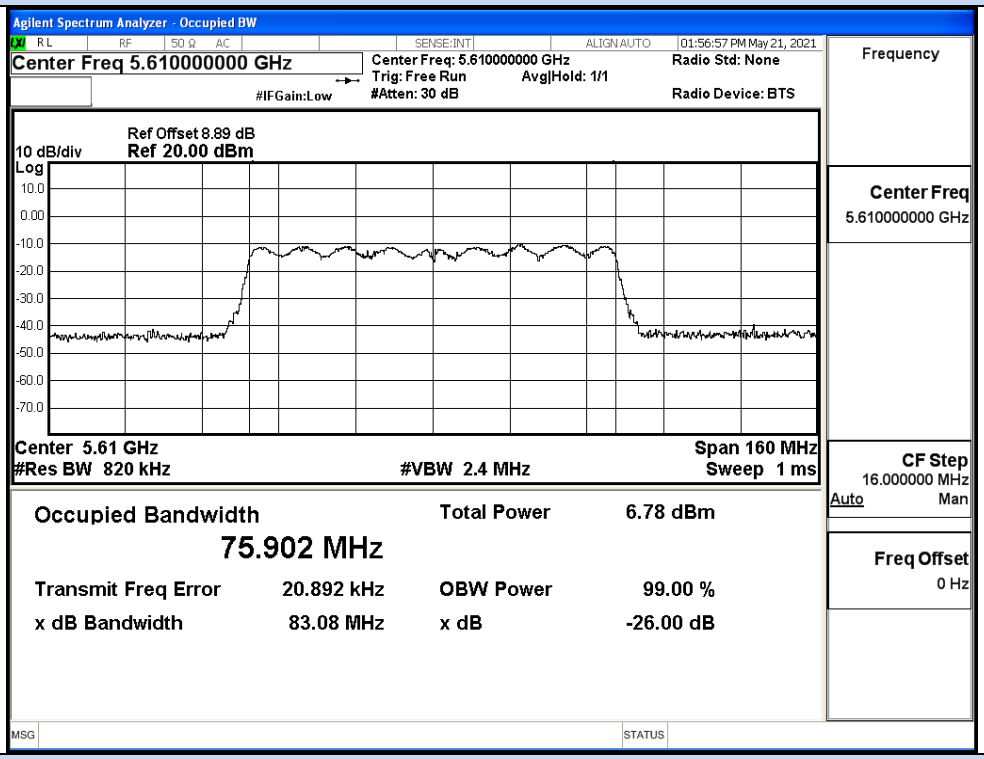
IEEE 802.11ac40 / Channel 118 / 5590MHz



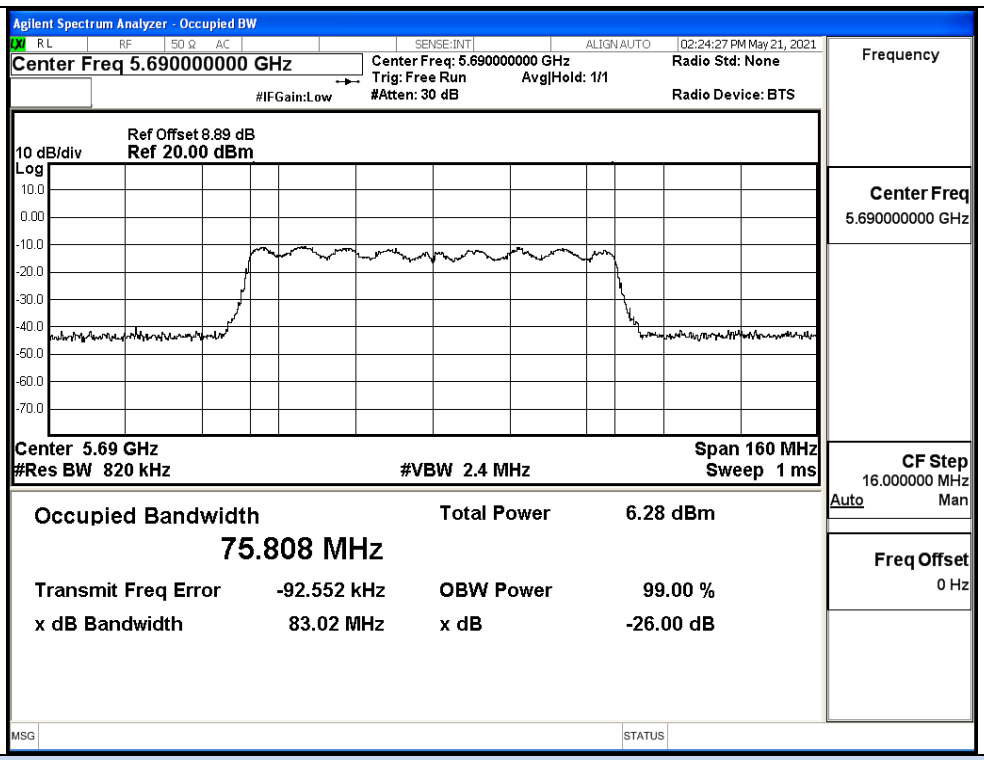
IEEE 802.11ac40 / Channel 134 / 5670MHz



IEEE 802.11ac80 / Channel 106 / 5530MHz

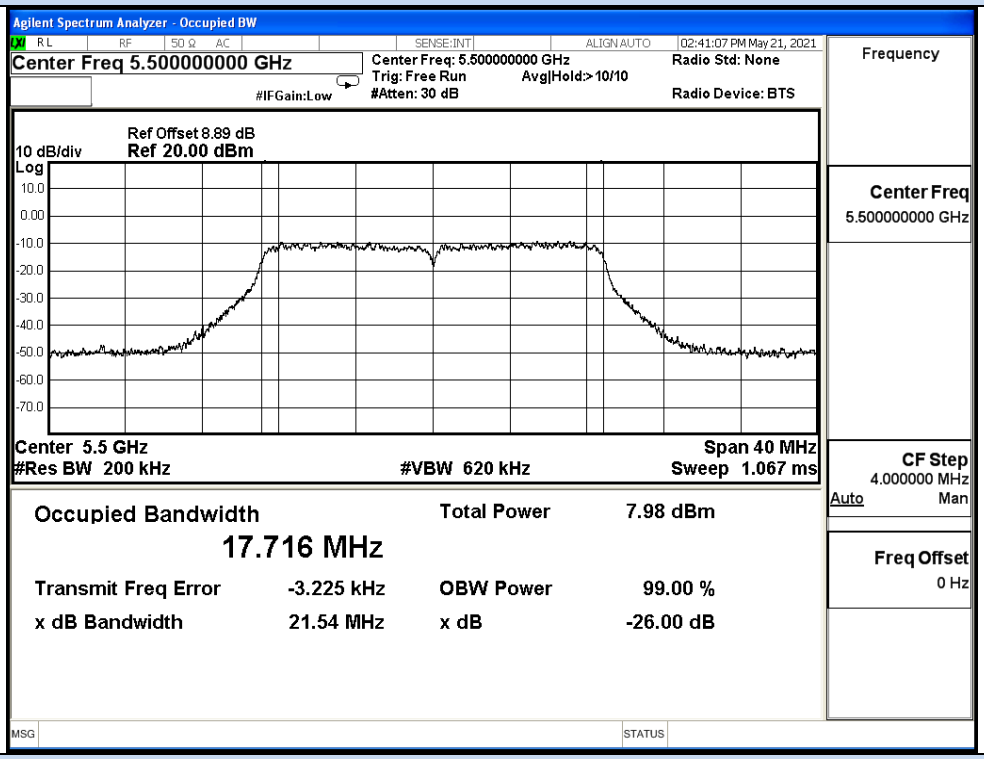


IEEE 802.11ac80 / Channel 122 / 5610MHz

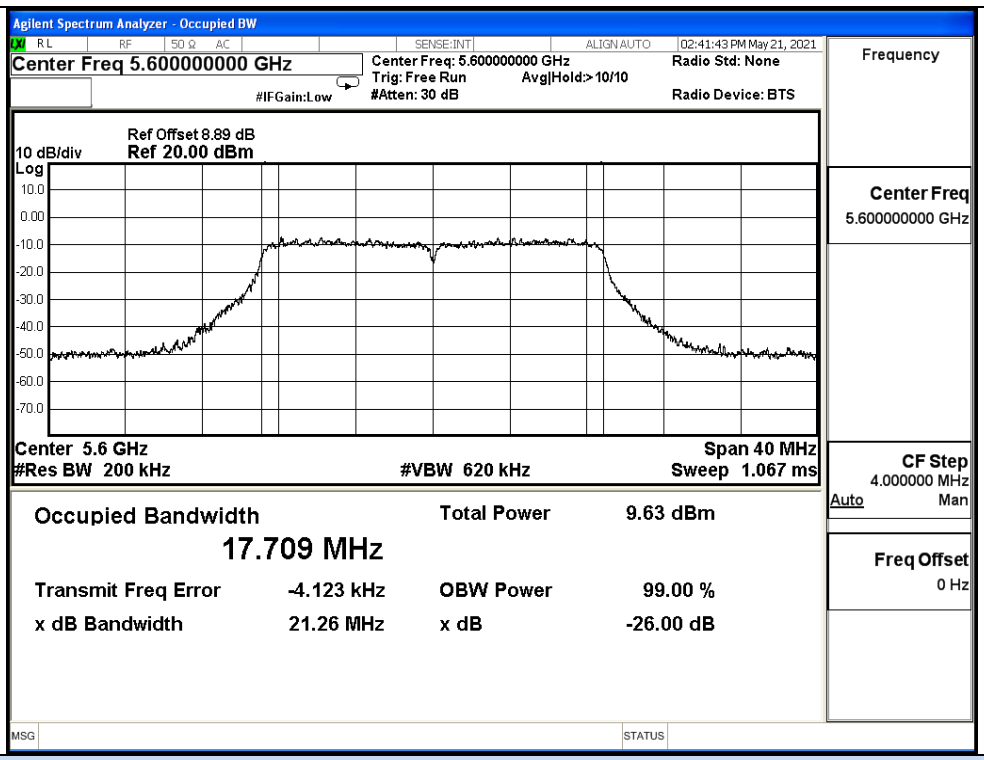


IEEE 802.11ac80 / Channel 138 / 5690MHz

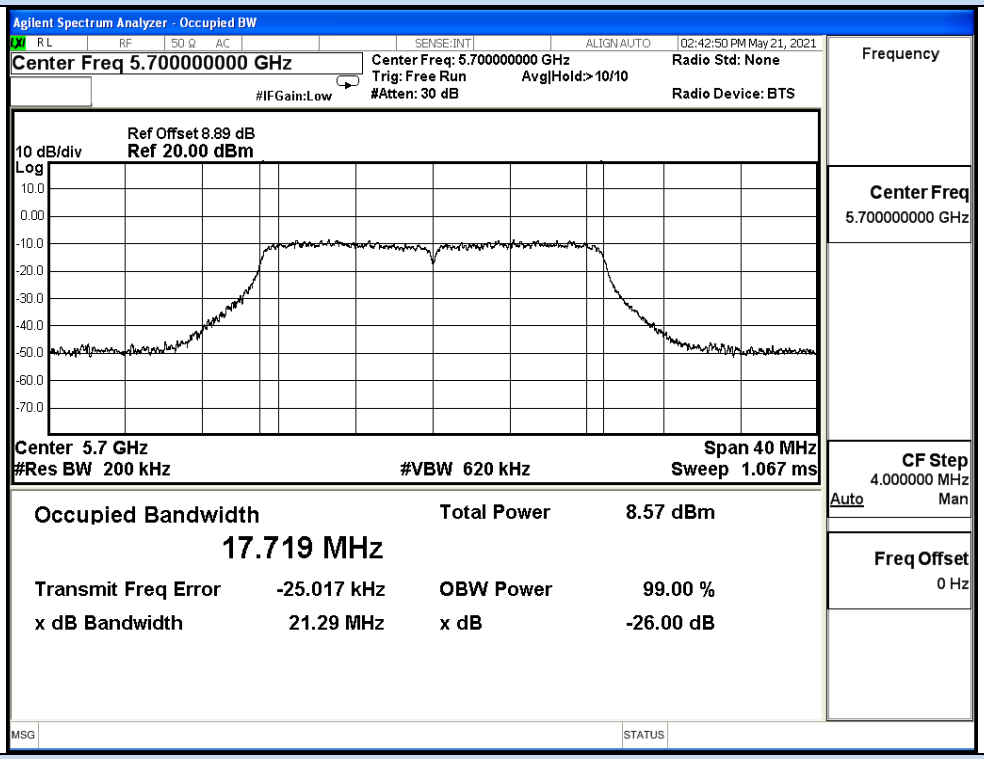
99% Occupied Bandwidth



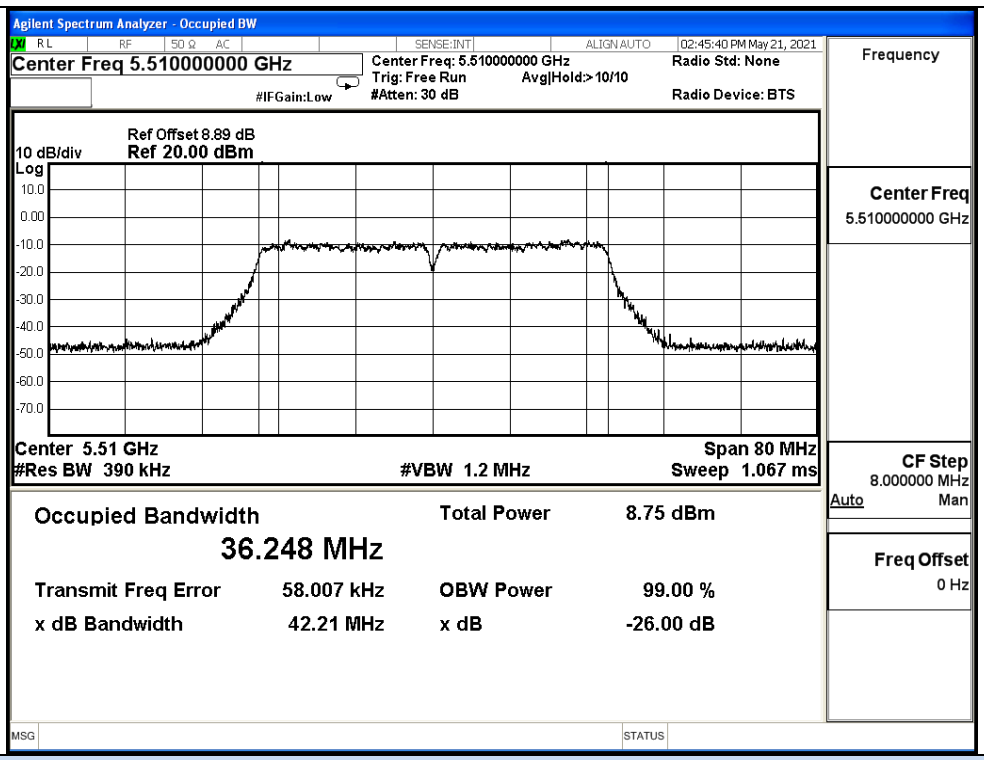
IEEE 802.11n20 / Channel 100 / 5500MHz



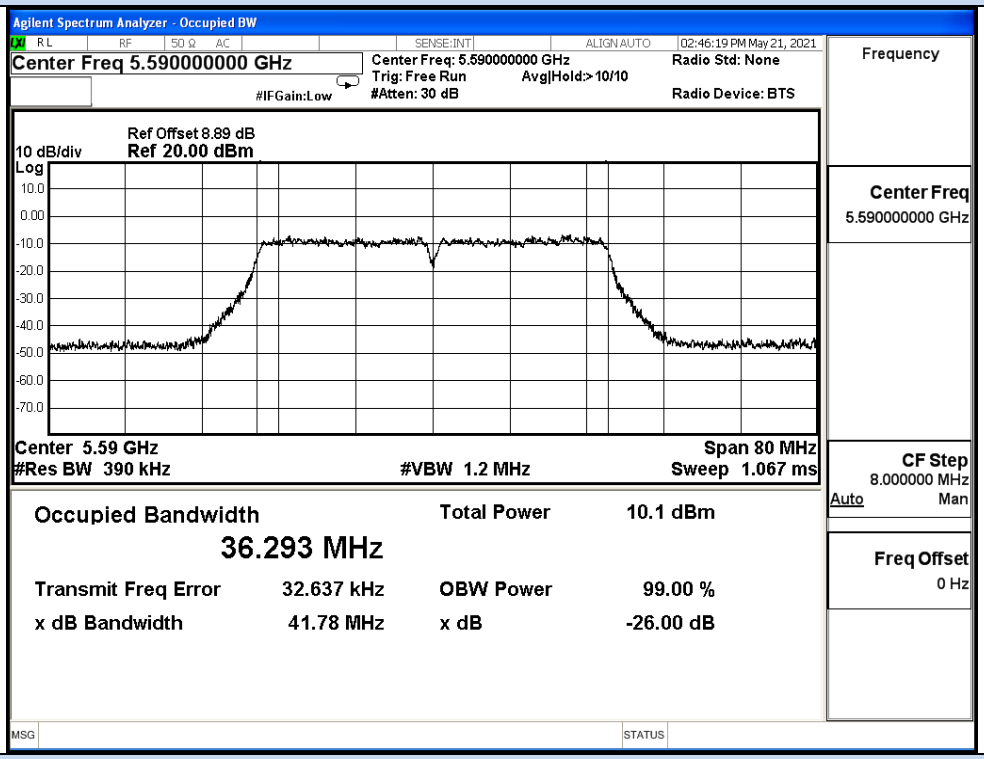
IEEE 802.11n20 / Channel 120 / 5600MHz



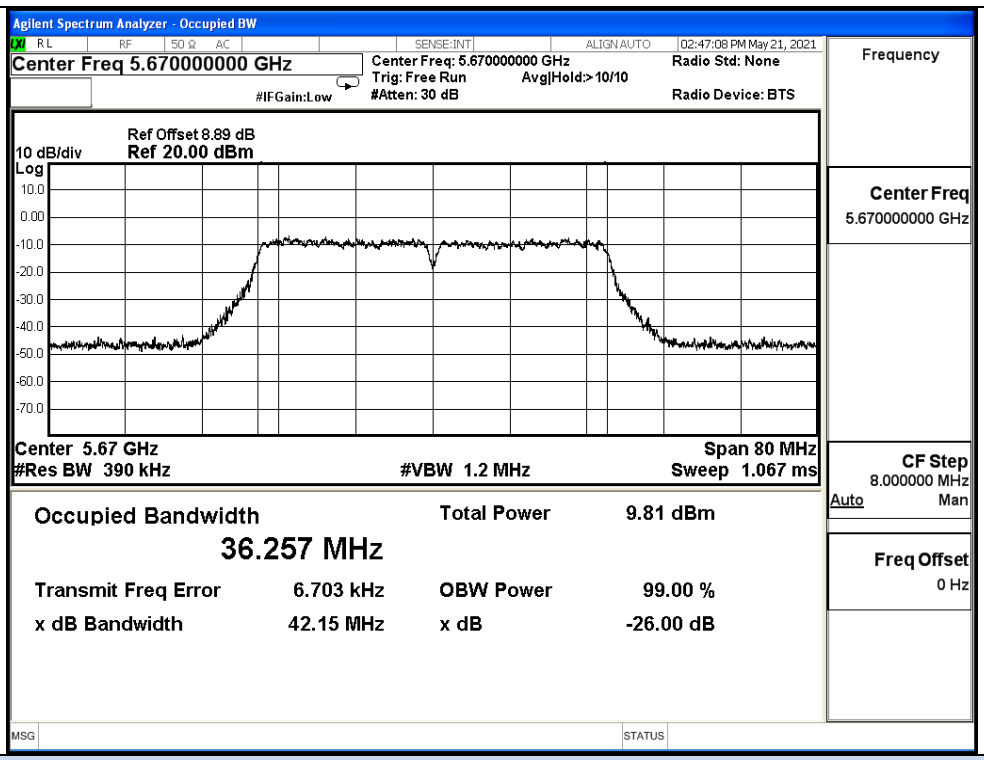
IEEE 802.11n20 / Channel 140 / 5700MHz



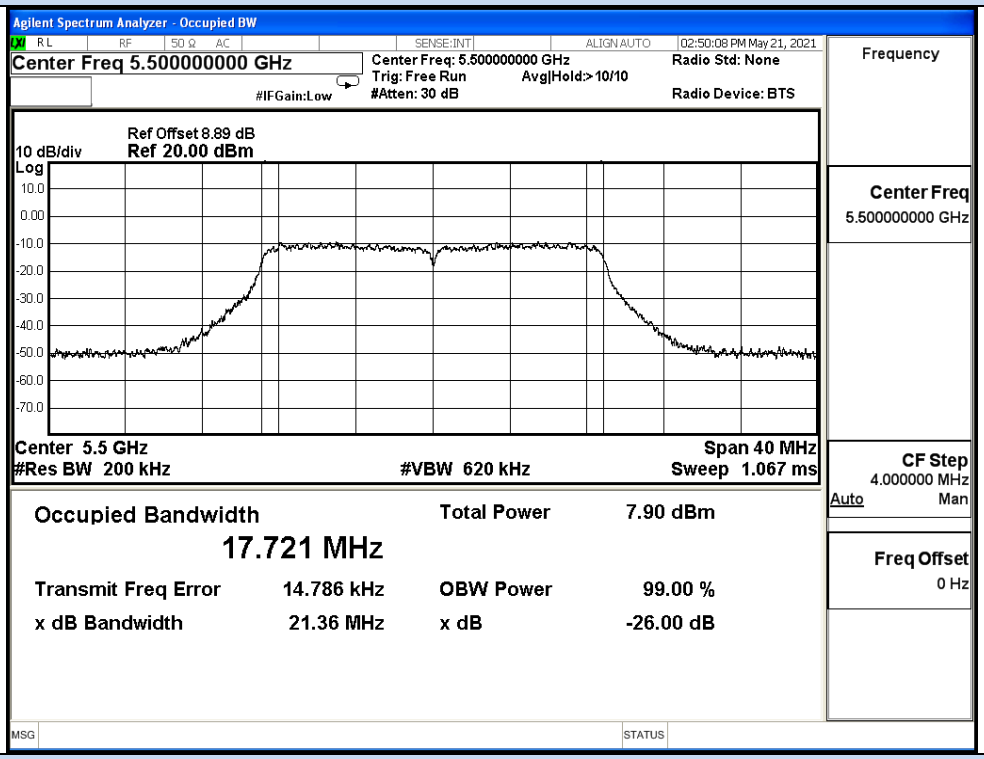
IEEE 802.11n40 / Channel 102 / 5510MHz



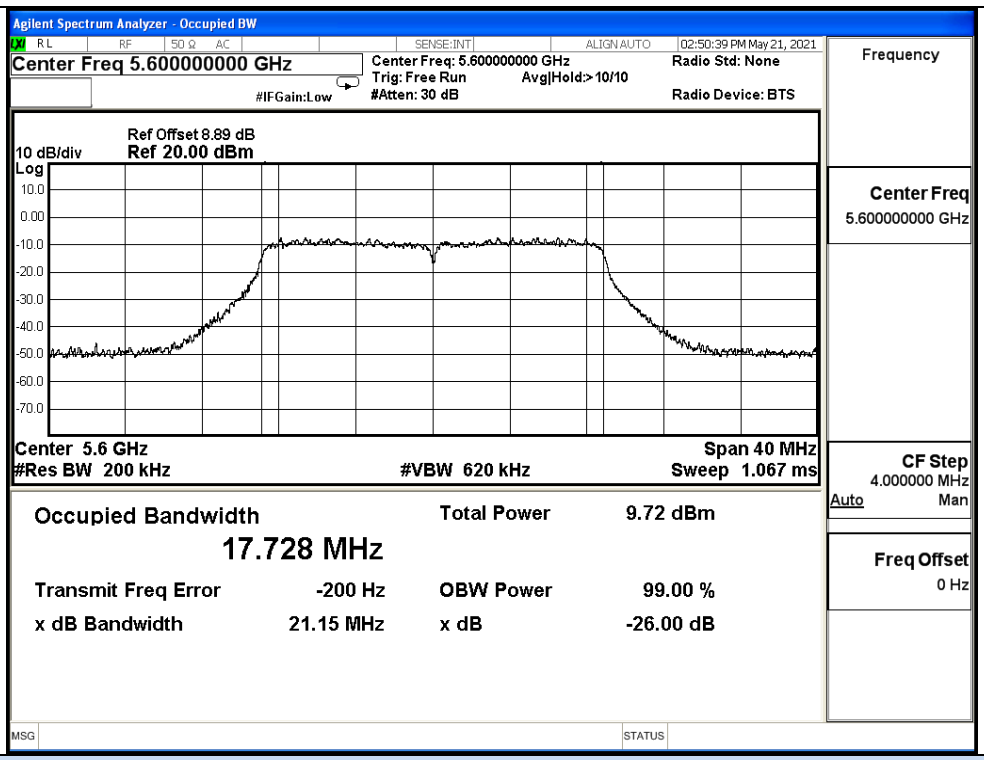
IEEE 802.11n40 / Channel 118 / 5590MHz



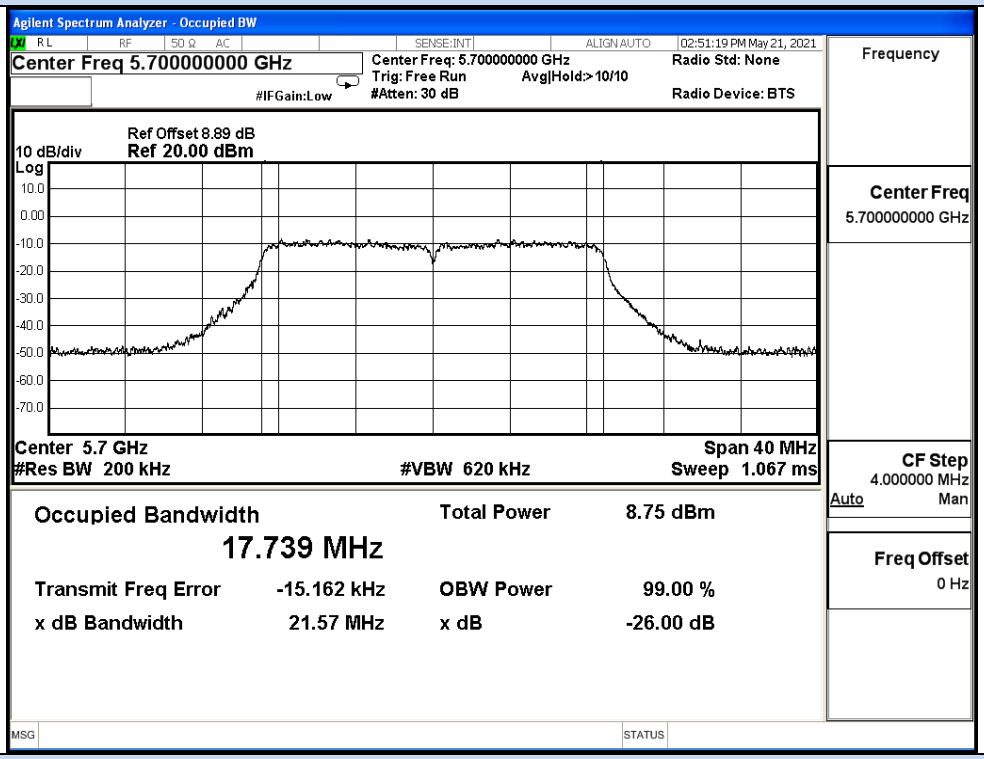
IEEE 802.11n40 / Channel 134 / 5670MHz



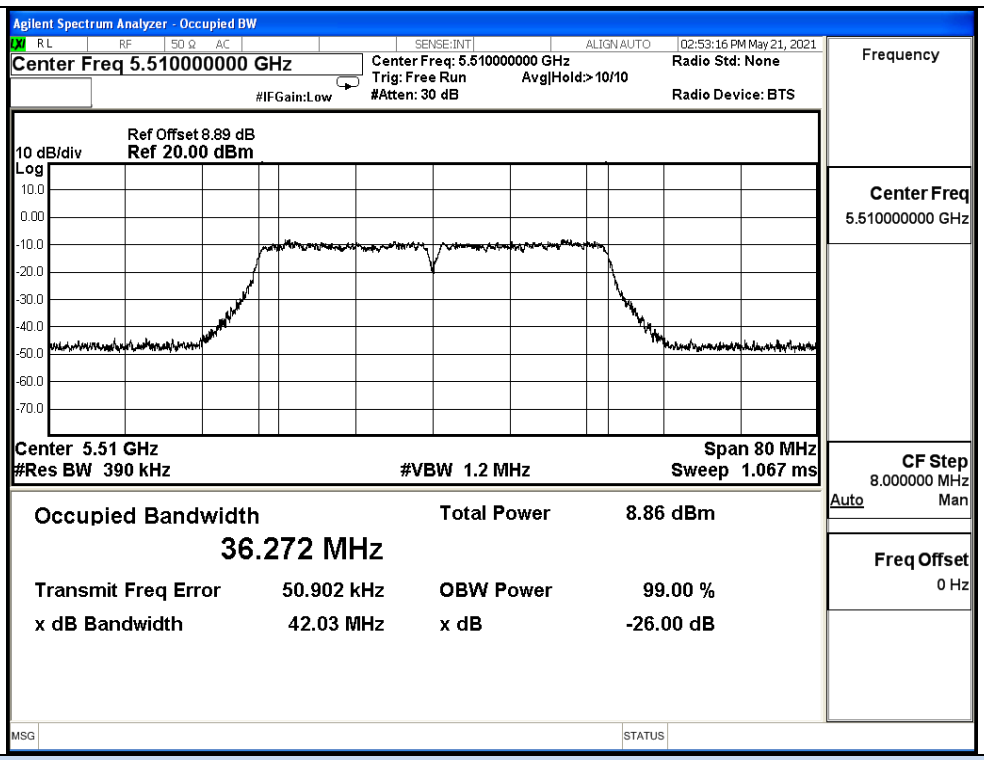
IEEE 802.11ac20 / Channel 100 / 5500MHz



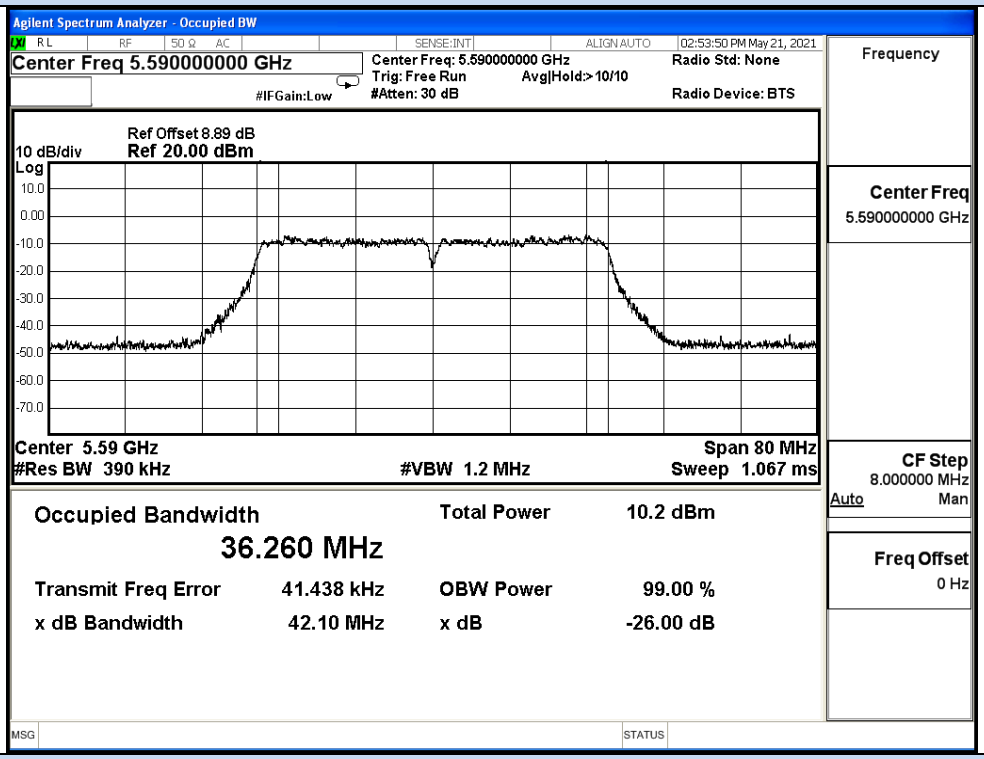
IEEE 802.11ac20 / Channel 120 / 5600MHz



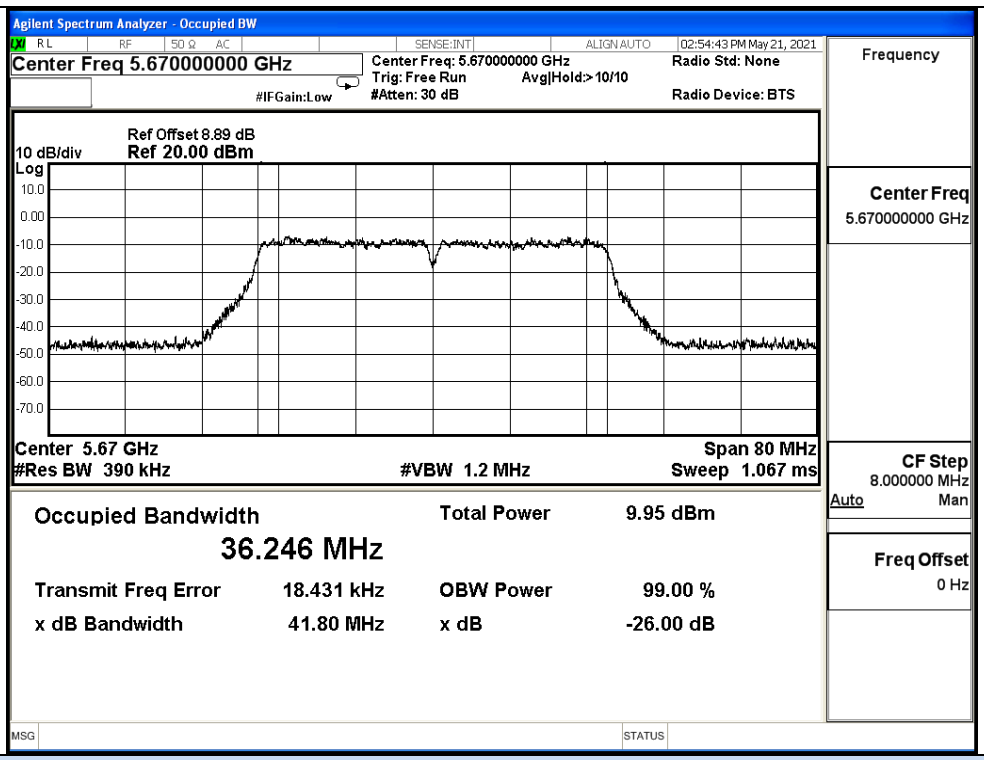
IEEE 802.11ac20 / Channel 140 / 5700MHz



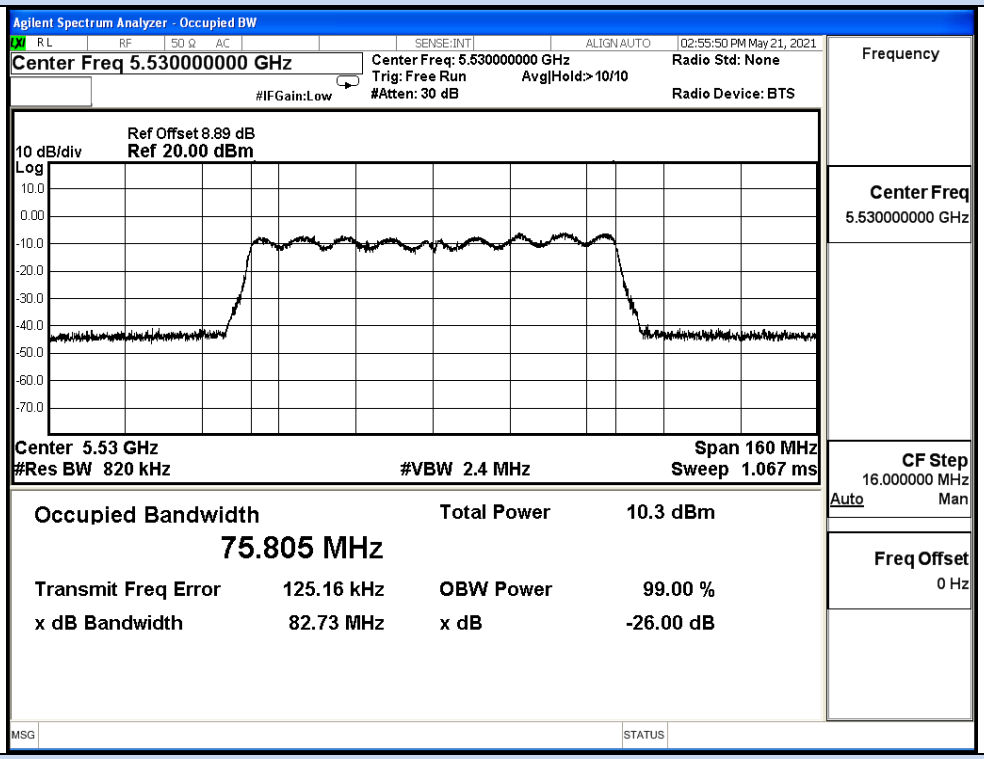
IEEE 802.11ac40 / Channel 102 / 5510MHz



IEEE 802.11ac40 / Channel 118 / 5590MHz



IEEE 802.11ac40 / Channel 134 / 5670MHz



IEEE 802.11ac80 / Channel 106 / 5530MHz