

Appendix G
RF Test Data for 5.5G WLAN (Conducted Measurement)
Product Name: Communicator
Trade Mark: N/A
Test Model: Communicator 3

Environmental Conditions

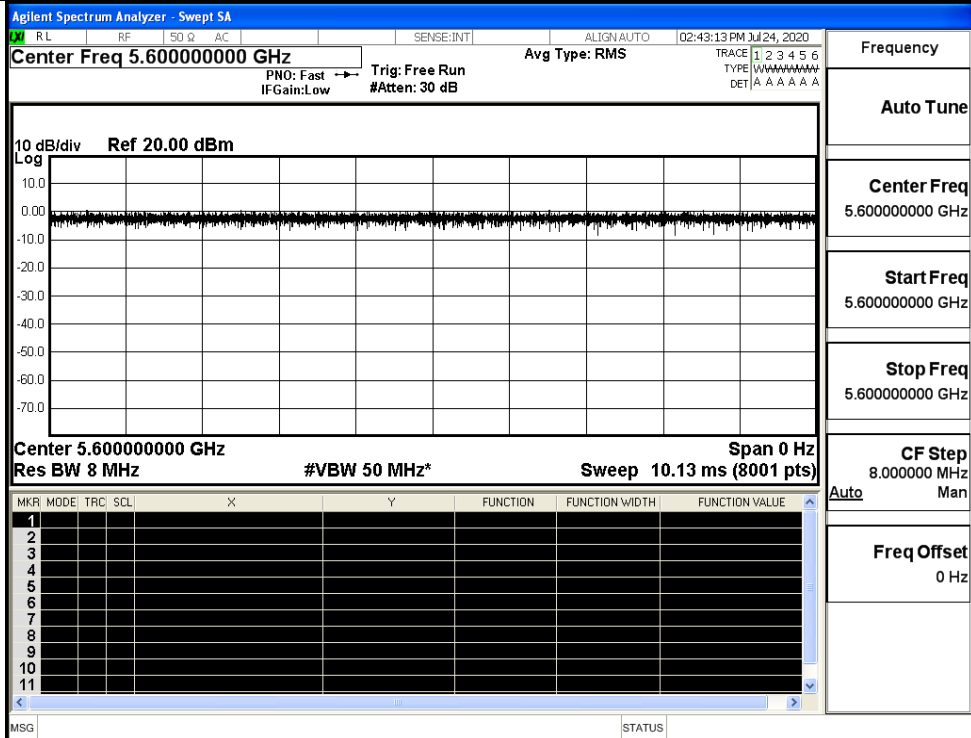
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan

G.1 Duty Cycle

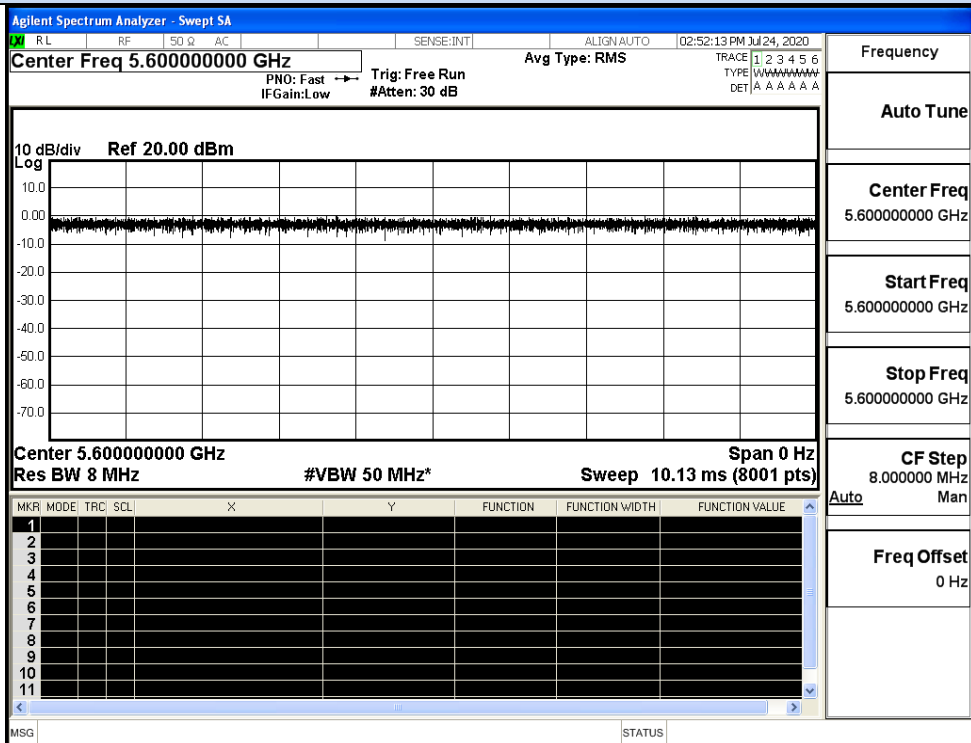
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5600	100	0.00	0.01
11N20 SISO	5600	100	0.00	0.01
11N40 SISO	5590	100	0.00	0.01
11AC20 SISO	5600	100	0.00	0.01
11AC40 SISO	5590	100	0.00	0.01
11AC80 SISO	5610	100	0.00	0.01

Note: The frequency 5600&5590&5610MHz data is only applicable to FCC, not applicable to ISED.

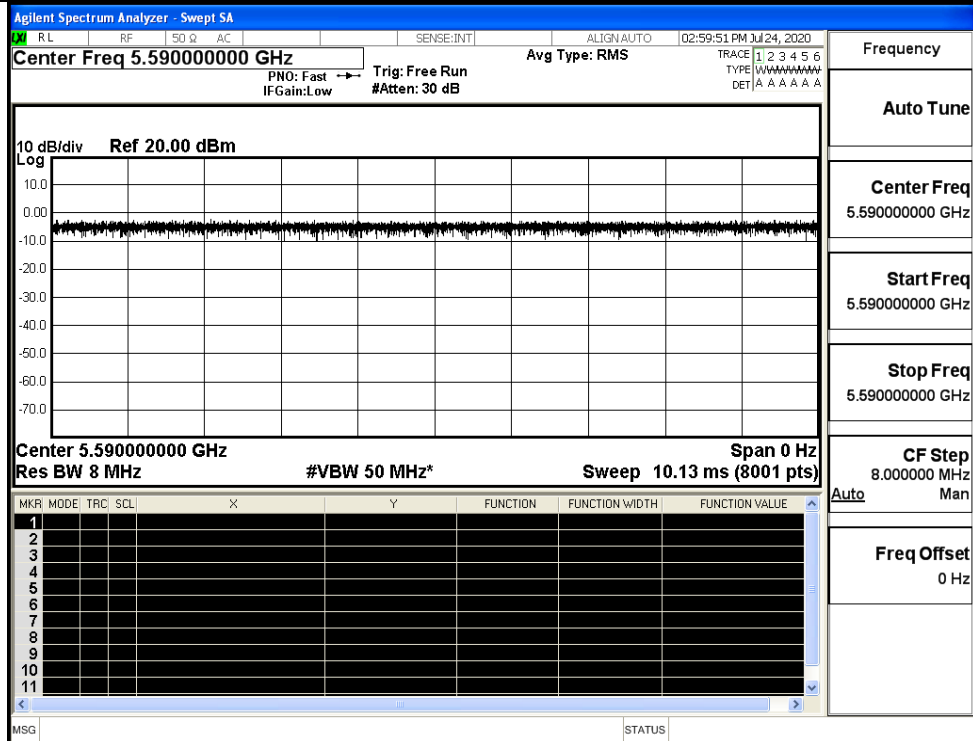
On Time and Duty Cycle



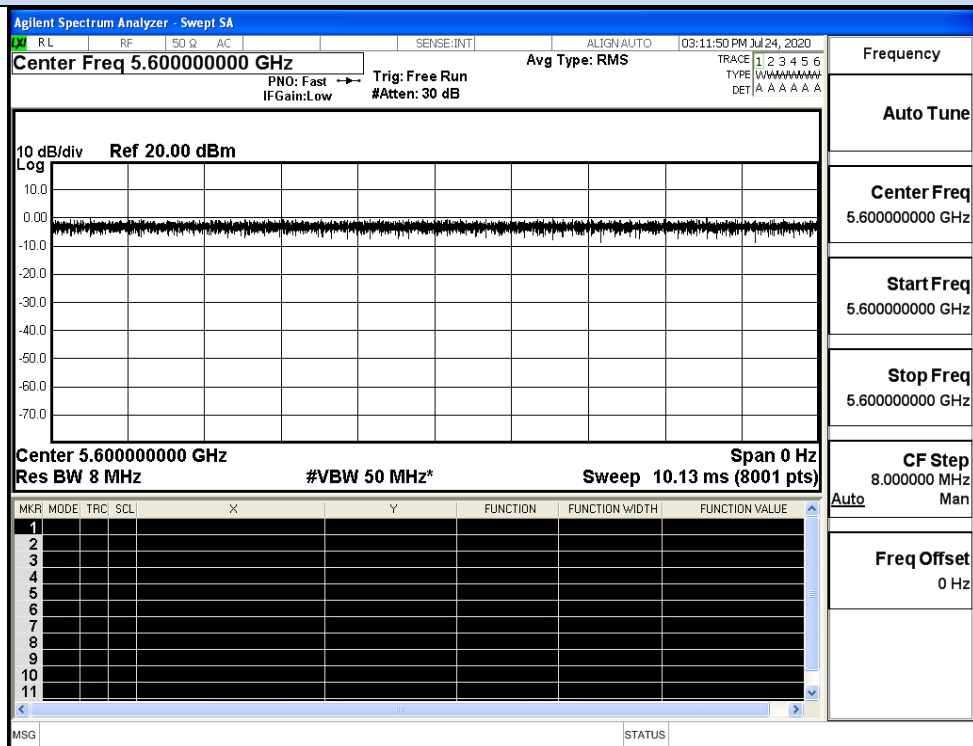
IEEE 802.11a



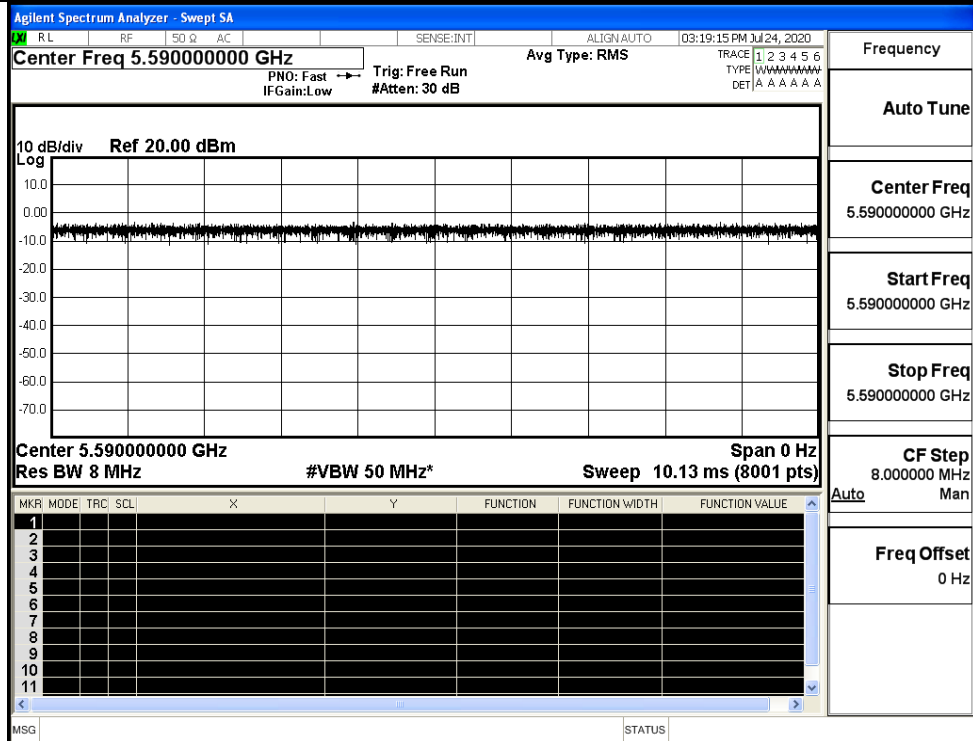
IEEE 802.11n HT20



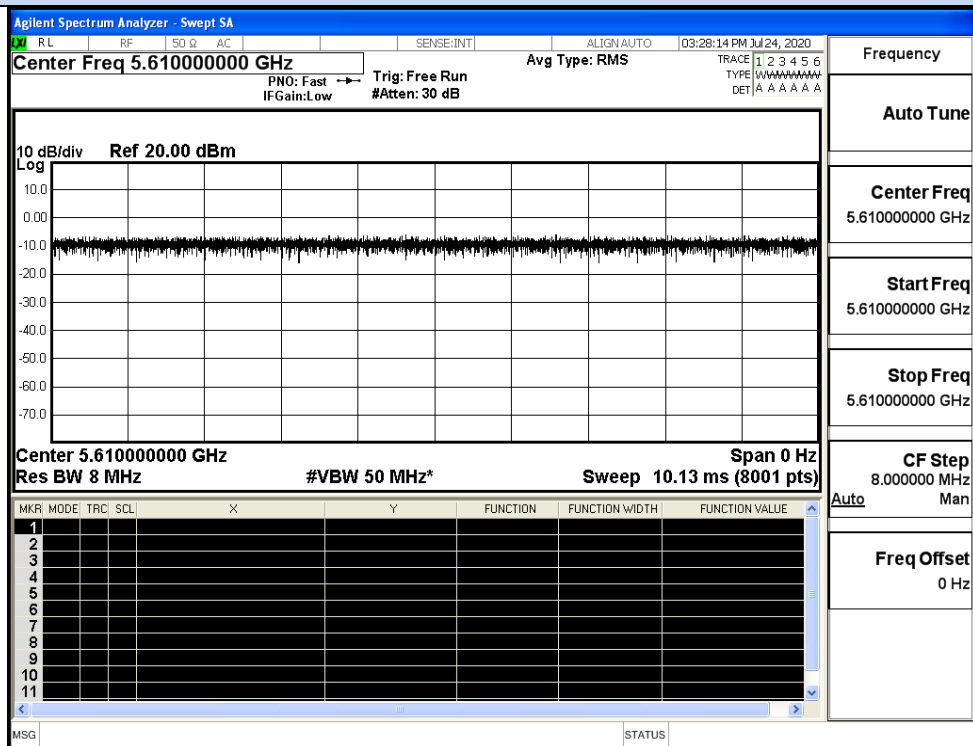
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40



IEEE 802.11AC80

G.2 Maximum Conduct Output Power

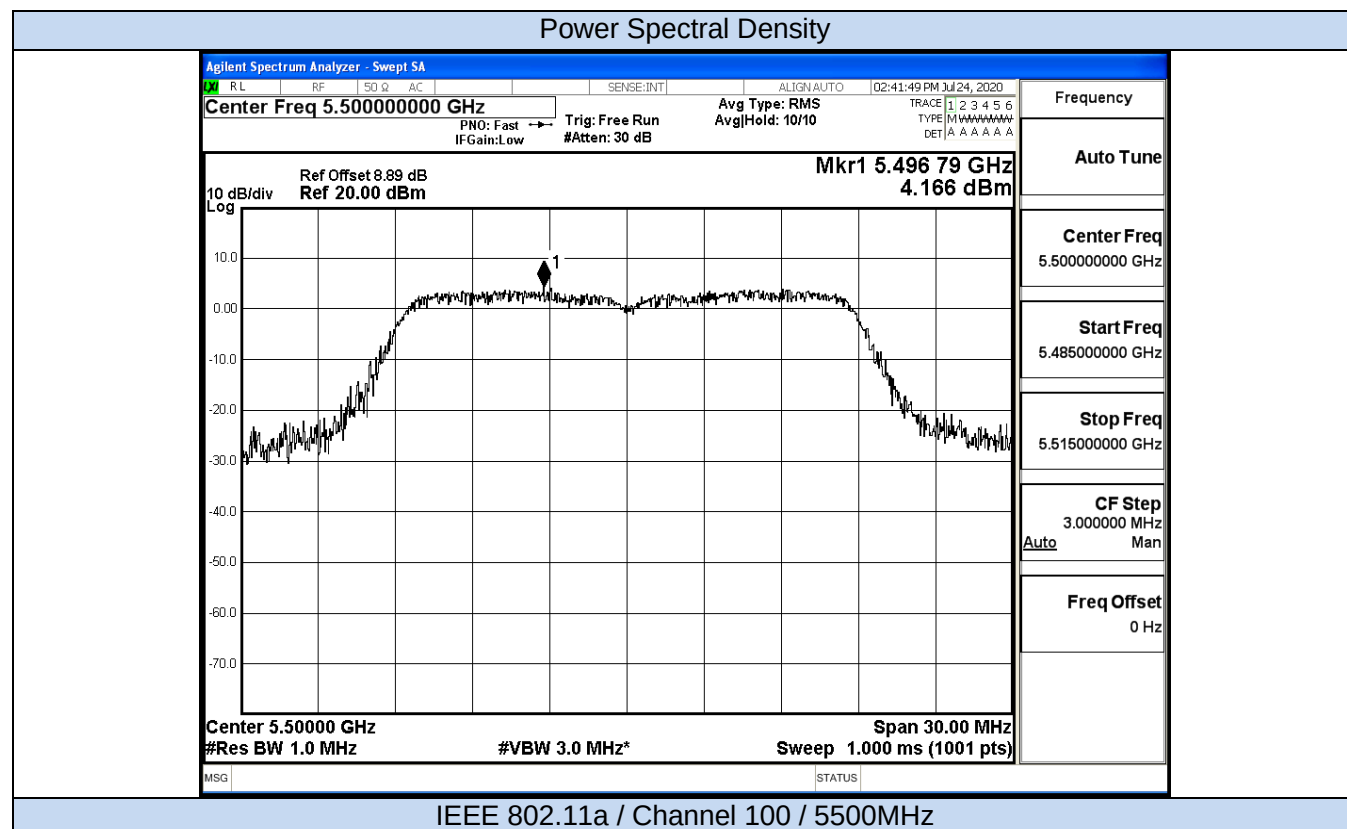
Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	100	5500	14.89	0	14.89	24	Pass
	120	5600	14.86	0	14.86		Pass
	140	5700	14.86	0	14.86		Pass
11N20 SISO	100	5500	13.82	0	13.82	24	Pass
	120	5600	14.26	0	14.26		Pass
	140	5700	14.51	0	14.51		Pass
11N40 SISO	149	5510	14.59	0	14.09	24	Pass
	157	5590	15.18	0	15.18		Pass
	165	5670	14.53	0	14.3		Pass
11ac20 SISO	100	5500	14.37	0	14.37	24	Pass
	120	5600	14.21	0	14.21		Pass
	140	5700	14.62	0	14.62		Pass
11ac40 SISO	149	5510	13.61	0	13.61	24	Pass
	157	5590	14.18	0	14.18		Pass
	165	5670	14.55	0	14.55		Pass
11ac80 SISO	106	5530	14.18	0	14.18	24	Pass
	122	5610	14.6	0	14.6		Pass

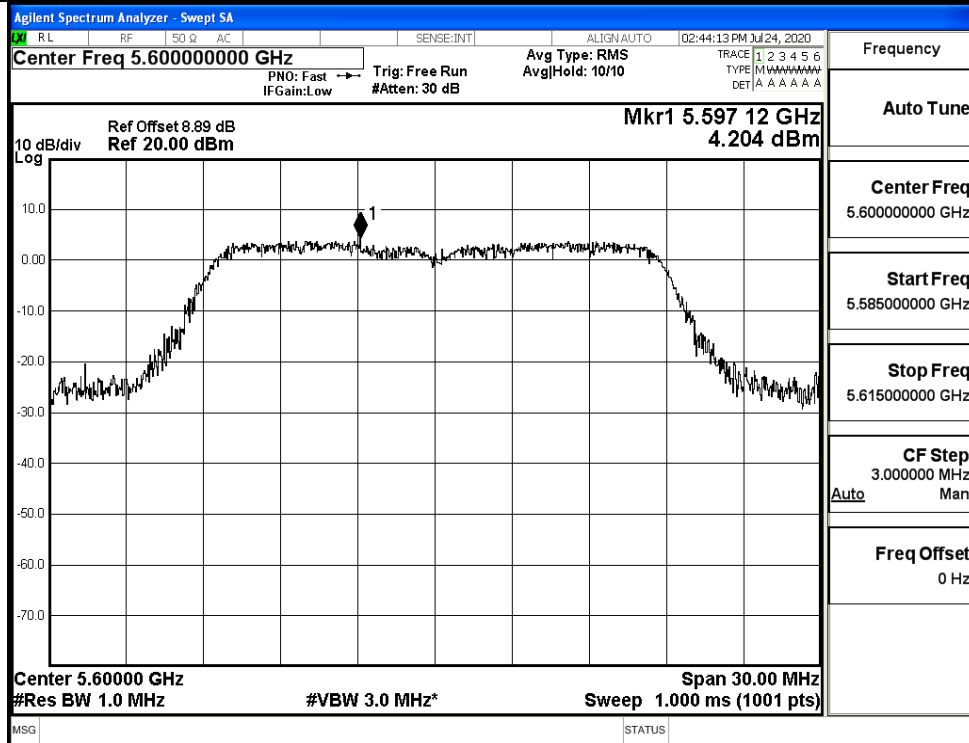
Note: The frequency 5600&5590&5610MHz data is only applicable to FCC, not applicable to ISSED.

G.3 Power Spectral Density

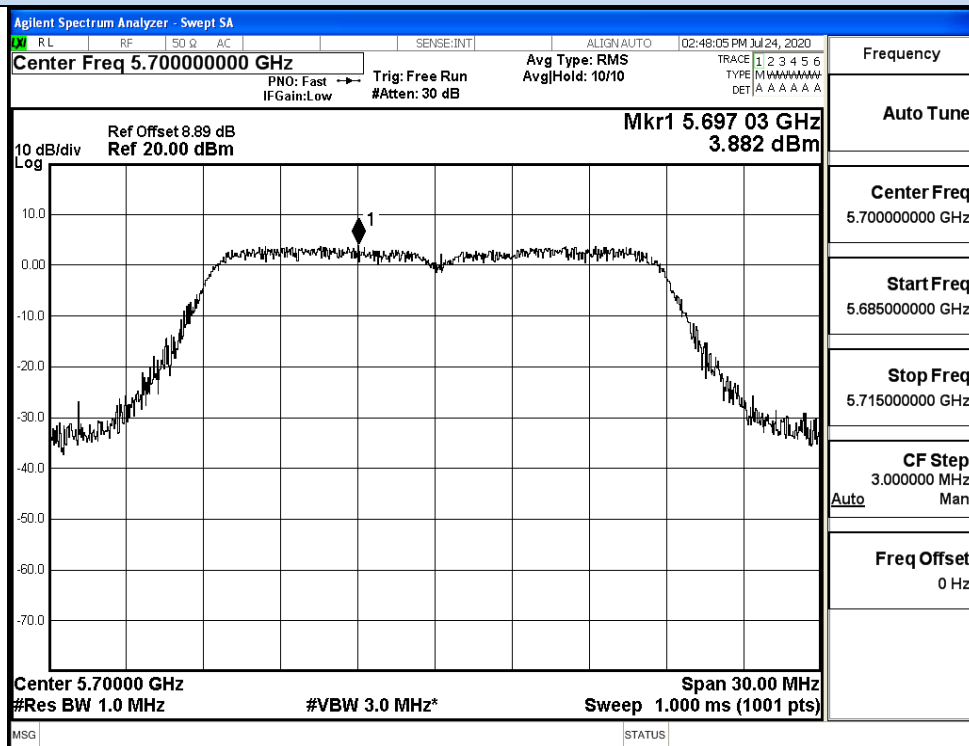
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor (dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	100	5500	4.17	0	4.17	11	Pass
	120	5600	4.20	0	4.20		Pass
	140	5700	3.88	0	3.88		Pass
11N20 SISO	100	5500	2.84	0	2.84	11	Pass
	120	5600	3.25	0	3.25		Pass
	140	5700	3.63	0	3.63		Pass
11N40 SISO	102	5510	0.16	0	0.16	11	Pass
	118	5590	1.27	0	1.27		Pass
	134	5670	0.50	0	0.50		Pass
11AC20 SISO	100	5500	3.51	0	3.51	11	Pass
	120	5600	3.22	0	3.22		Pass
	140	5700	3.74	0	3.74		Pass
11AC40 SISO	102	5510	-0.44	0	-0.44	11	Pass
	118	5590	0.22	0	0.22		Pass
	134	5670	0.77	0	0.77		Pass
11AC80 SISO	106	5530	-1.94	0	-1.94	11	Pass
	122	5610	-1.41	0	-1.41		Pass

Note: The frequency 5600&5590&5610MHz data is only applicable to FCC, not applicable to ISED.



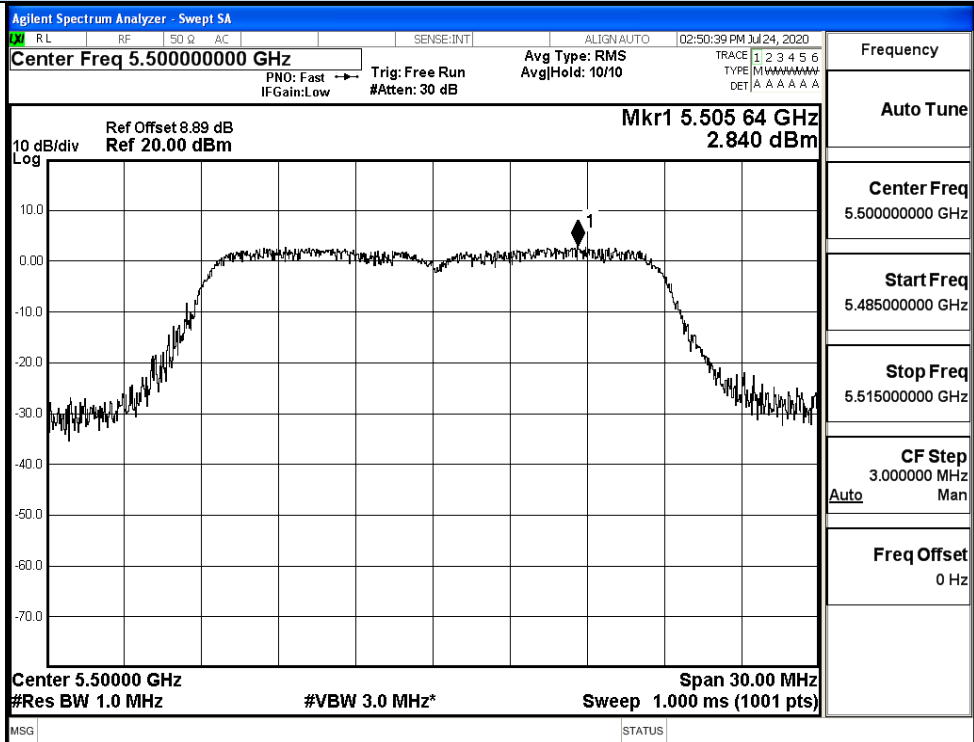


IEEE 802.11a / Channel 120 / 5600MHz

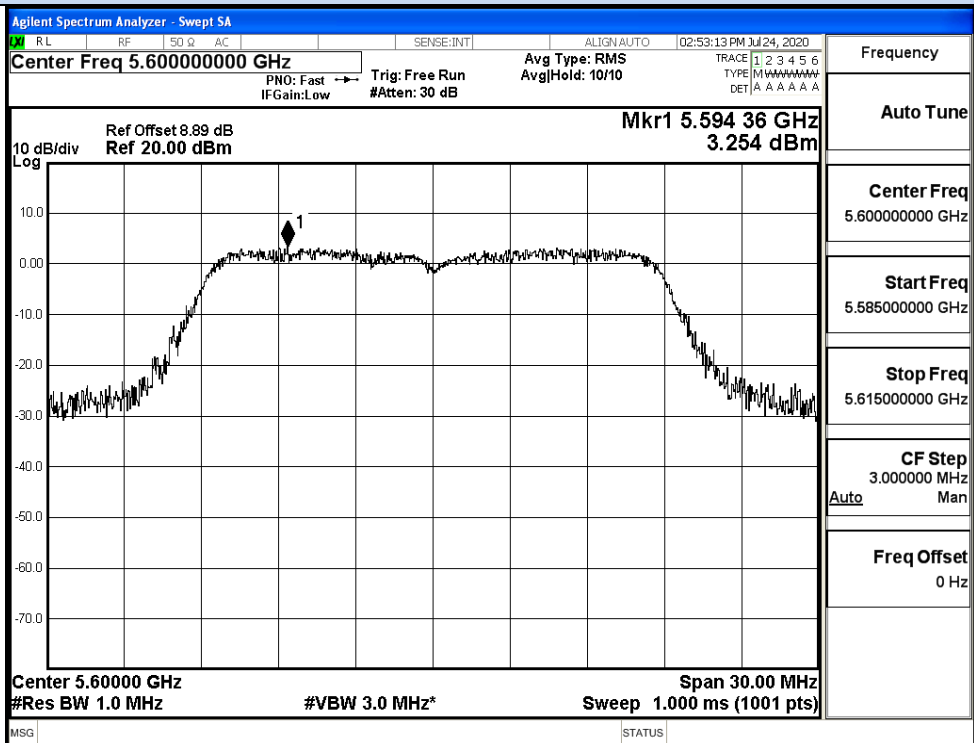


IEEE 802.11a / Channel 140 / 5700MHz

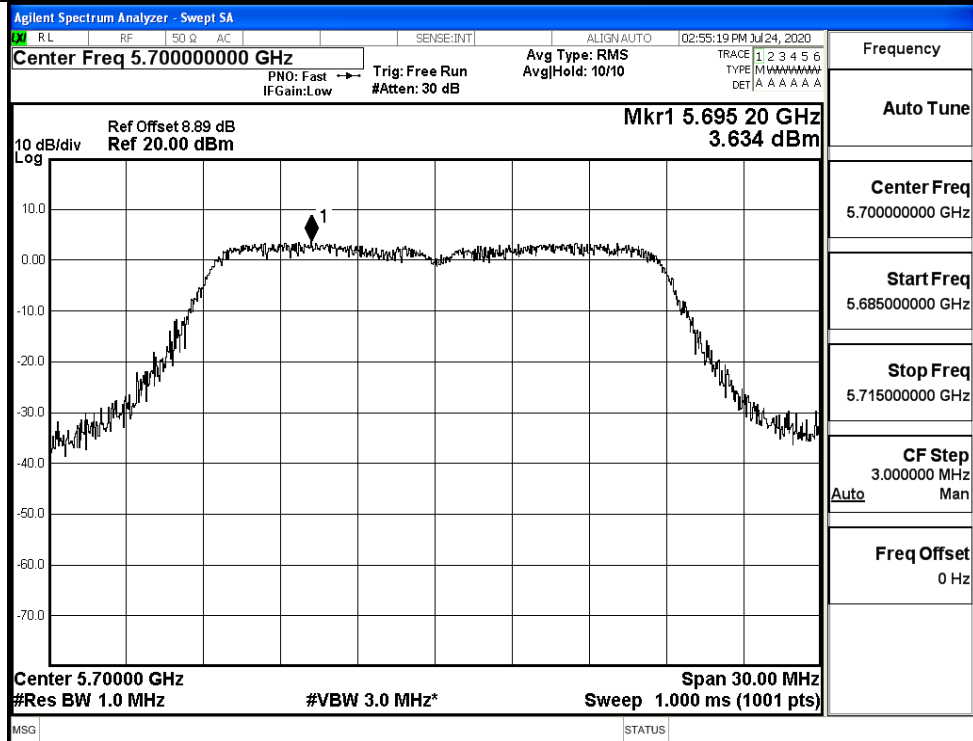
Power Spectral Density



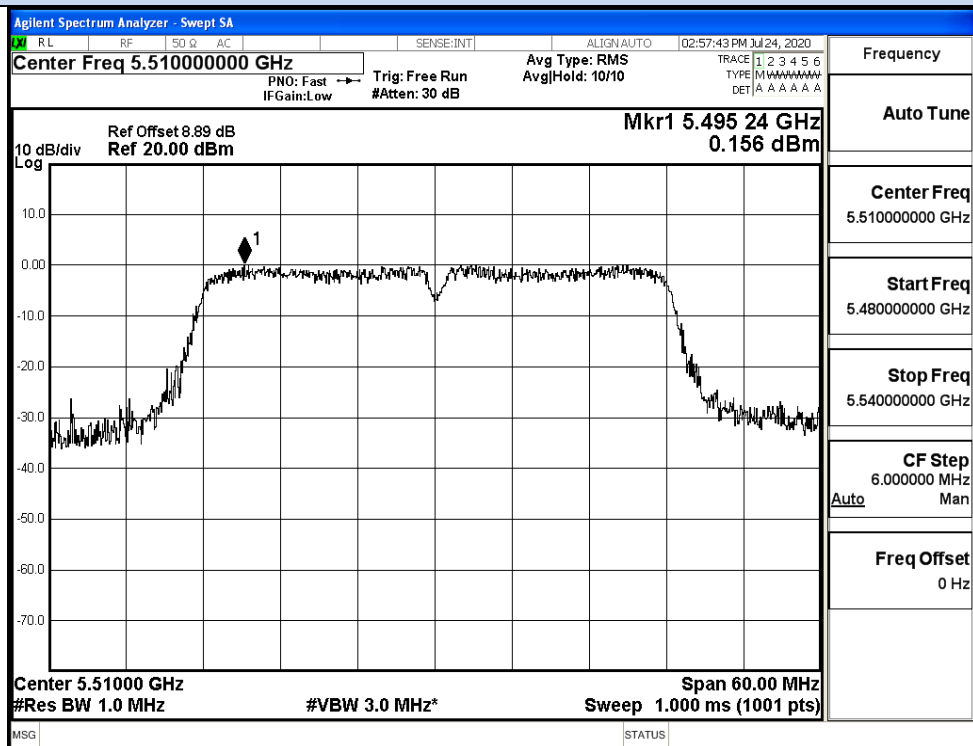
IEEE 802.11n20 / Channel 100 / 5500MHz



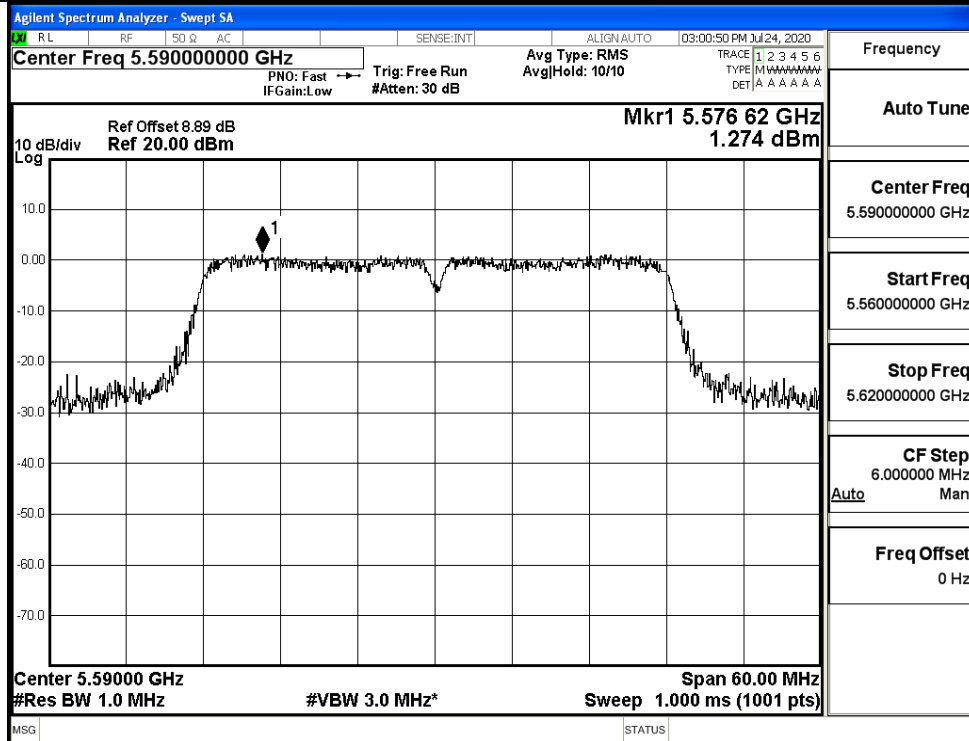
IEEE 802.11n20 / Channel 120 / 5600MHz



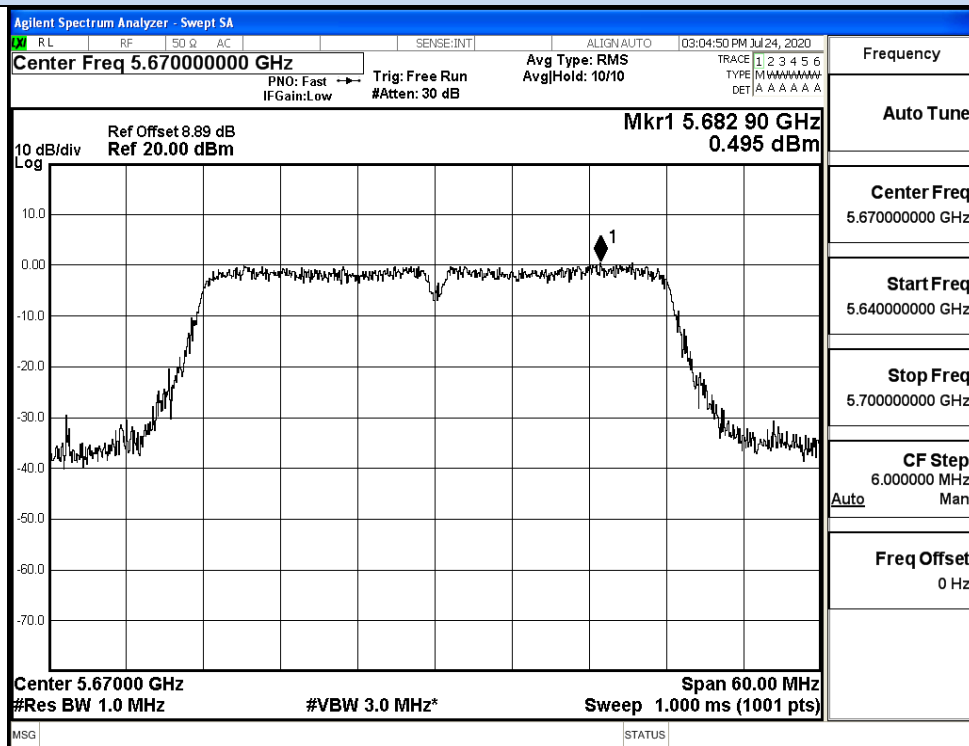
IEEE 802.11n20 / Channel 140 / 5700MHz



IEEE 802.11n40 / Channel 102 / 5510MHz

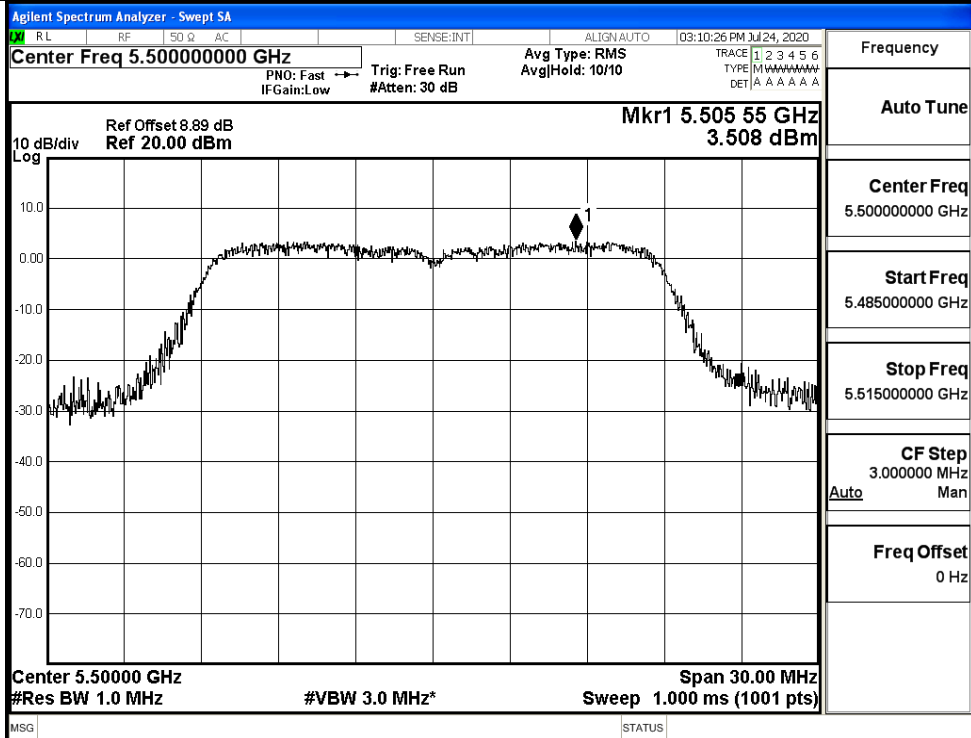


IEEE 802.11n40 / Channel 118 / 5590MHz

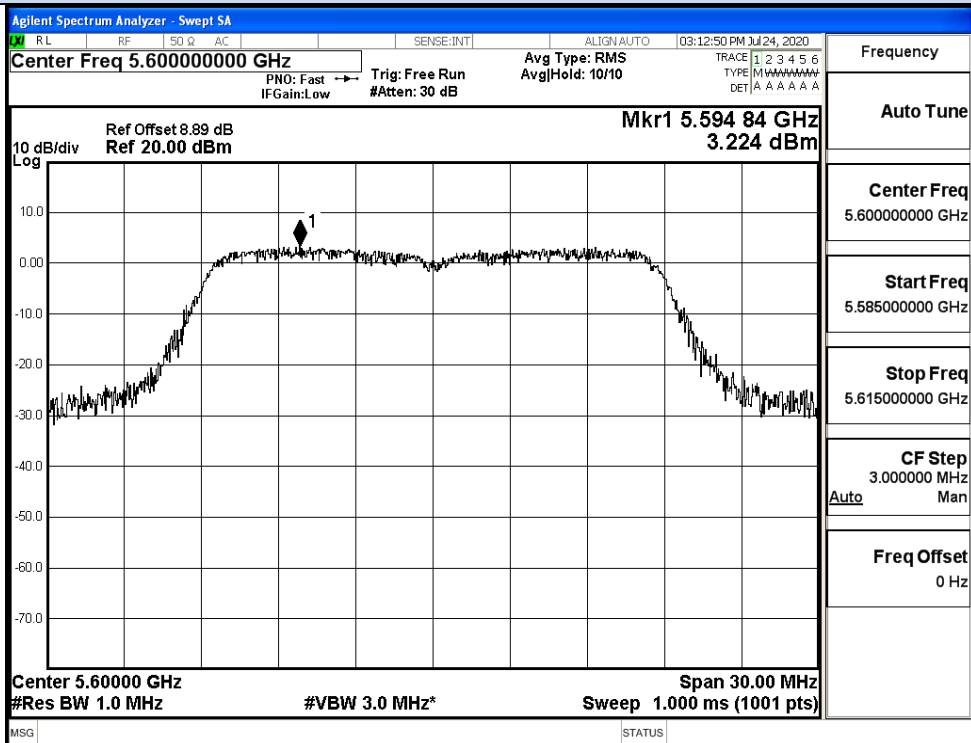


IEEE 802.11n40 / Channel 134 / 5670MHz

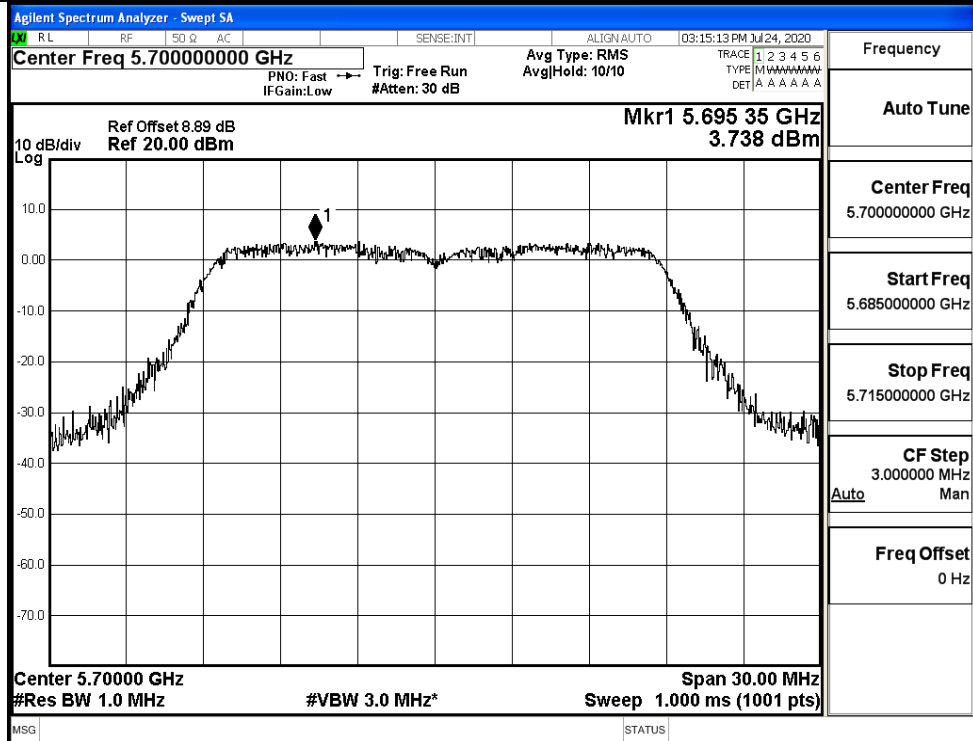
Power Spectral Density



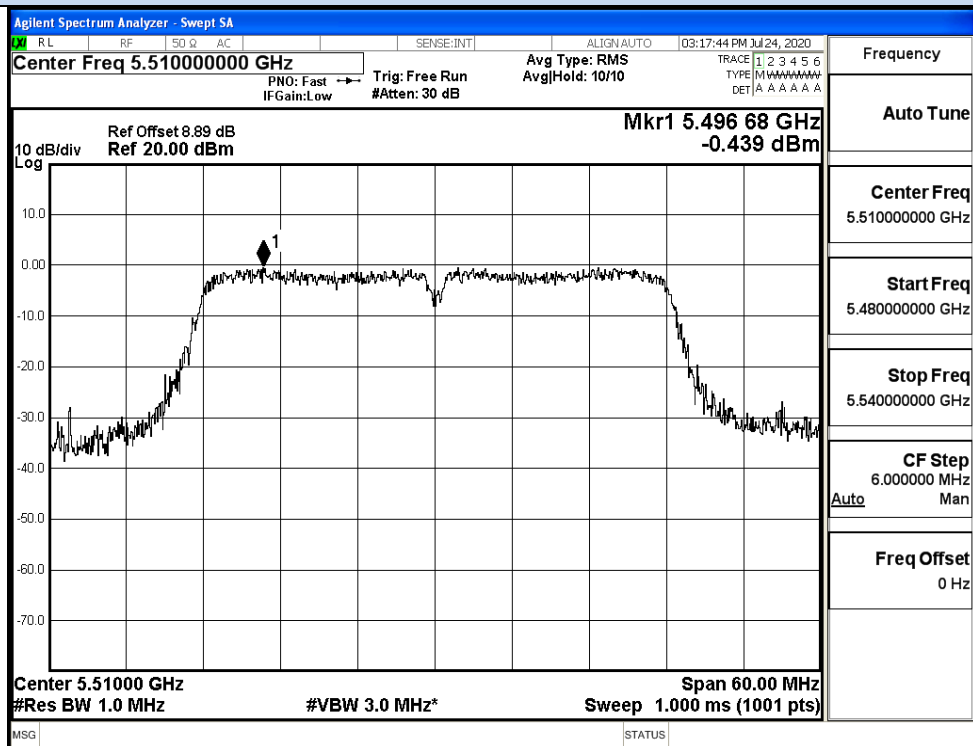
IEEE 802.11ac20 / Channel 100 / 5500MHz



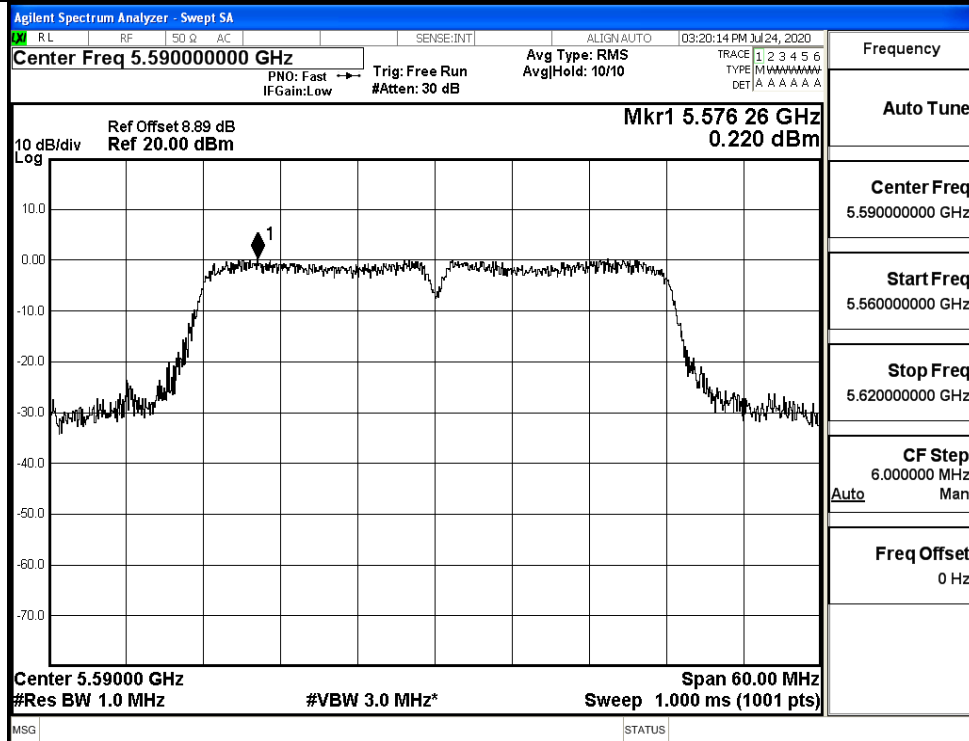
IEEE 802.11ac20 / Channel 120 / 5600MHz



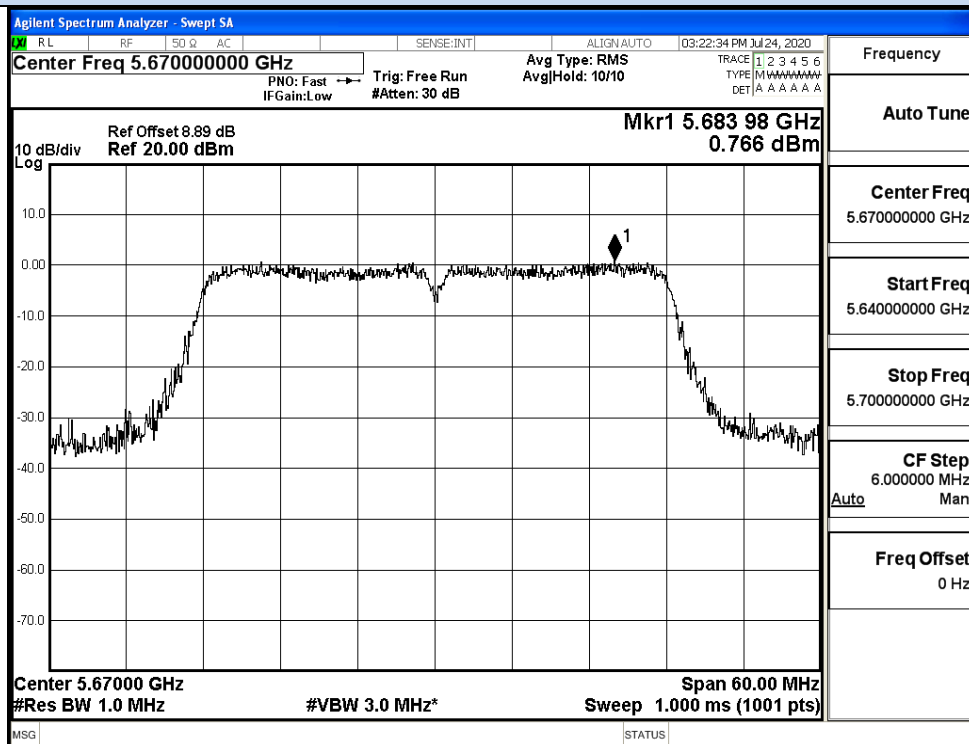
IEEE 802.11ac20 / Channel 140 / 5700MHz



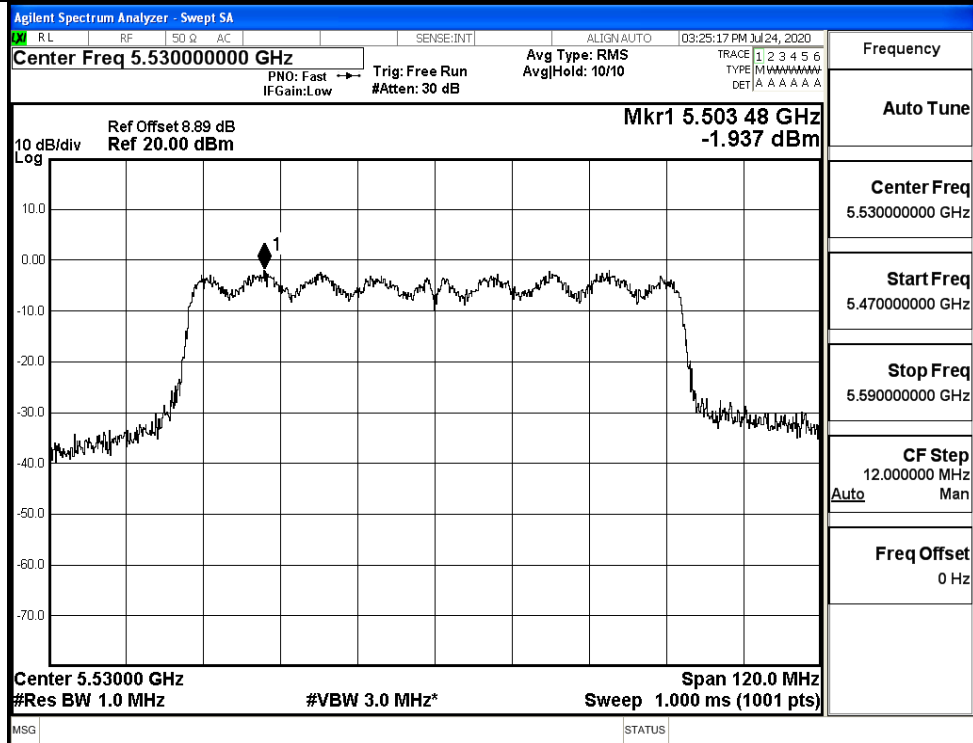
IEEE 802.11ac40 / Channel 102 / 5510MHz



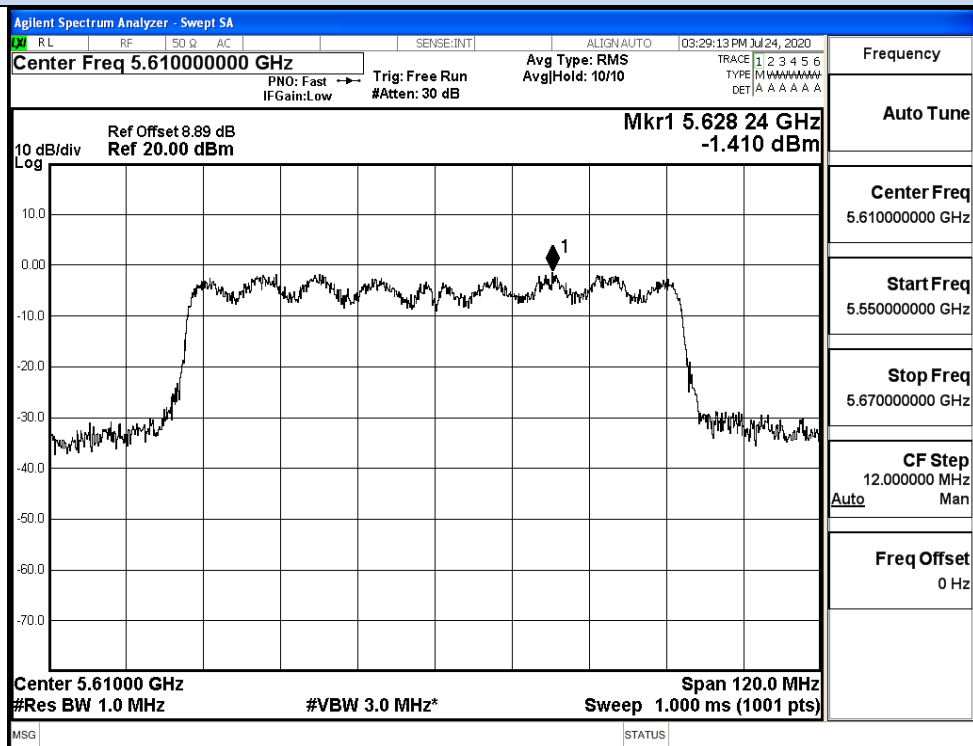
IEEE 802.11ac40 / Channel 118 / 5590MHz



IEEE 802.11ac40 / Channel 134 / 5670MHz



IEEE 802.11ac80 / Channel 106 / 5530MHz

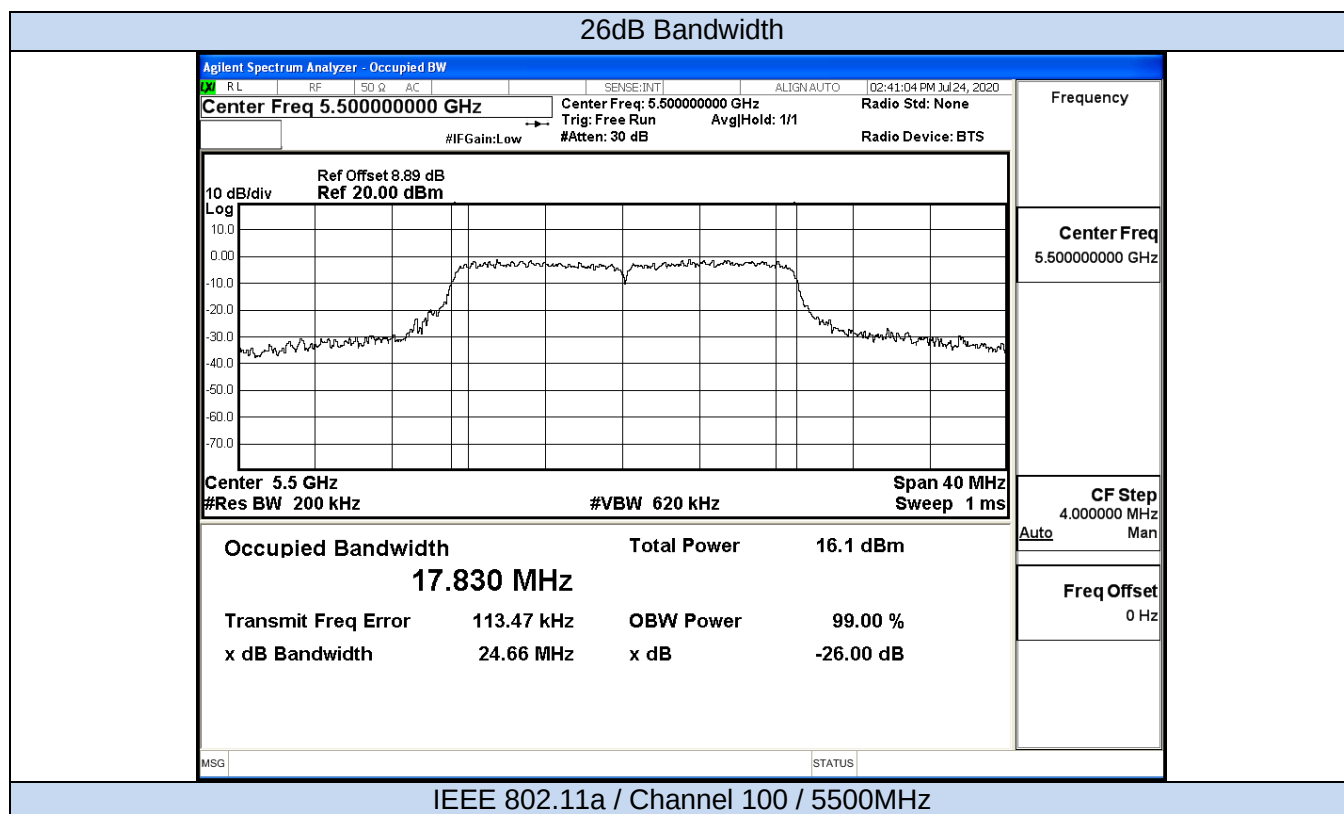


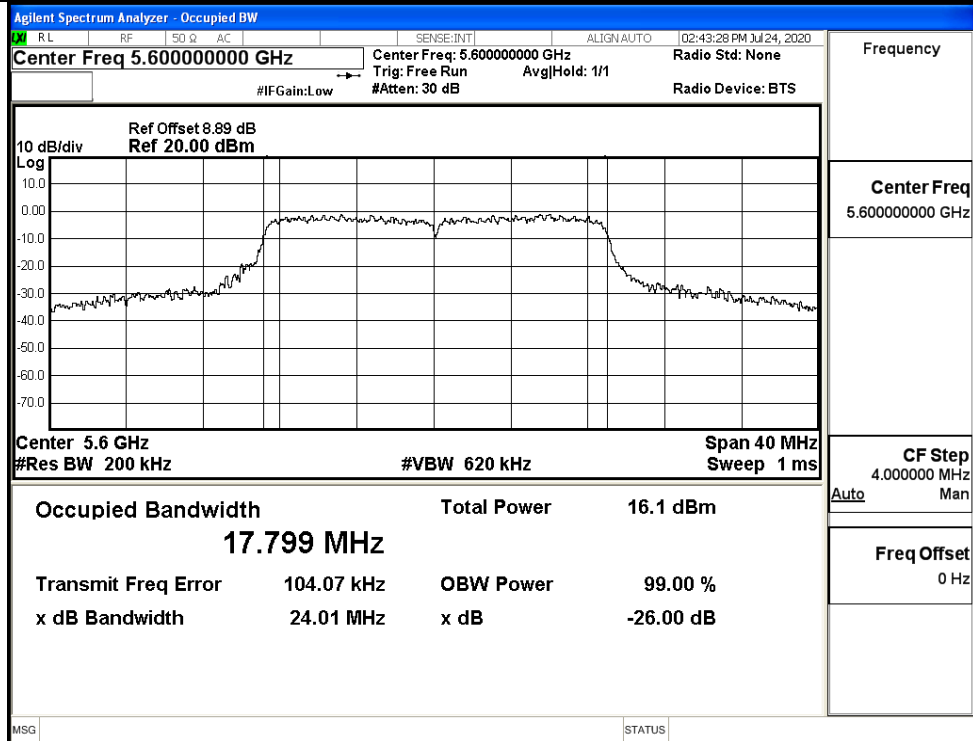
IEEE 802.11ac80 / Channel 122 / 5610MHz

G.4 Emission Bandwidth

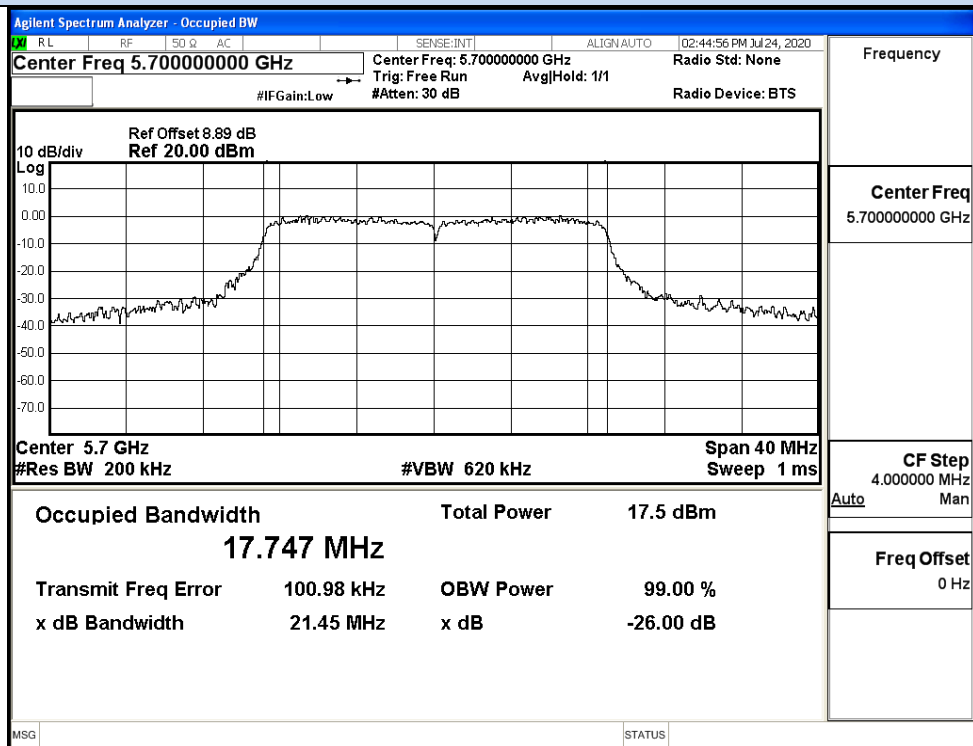
Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Verdict
11A	100	5500	24.66	17.830	No Limit	Pass
	120	5600	24.01	17.799		Pass
	140	5700	21.45	17.747		Pass
11N20 SISO	100	5500	21.59	17.752	No Limit	Pass
	120	5600	21.66	17.767		Pass
	140	5700	21.55	17.713		Pass
11N40 SISO	102	5510	43.51	36.256	No Limit	Pass
	118	5590	59.69	36.368		Pass
	134	5670	41.73	36.207		Pass
11AC20 SISO	100	5500	23.01	17.782	No Limit	Pass
	120	5600	21.63	17.749		Pass
	140	5700	21.60	17.718		Pass
11AC40 SISO	102	5510	42.19	36.245	No Limit	Pass
	118	5590	50.69	36.286		Pass
	134	5670	41.25	36.179		Pass
11AC80 SISO	106	5530	103.8	75.744	No Limit	Pass
	122	5610	106.9	75.795		Pass

Note: The frequency 5600&5590&5610MHz data is only applicable to FCC, not applicable to ISDE.



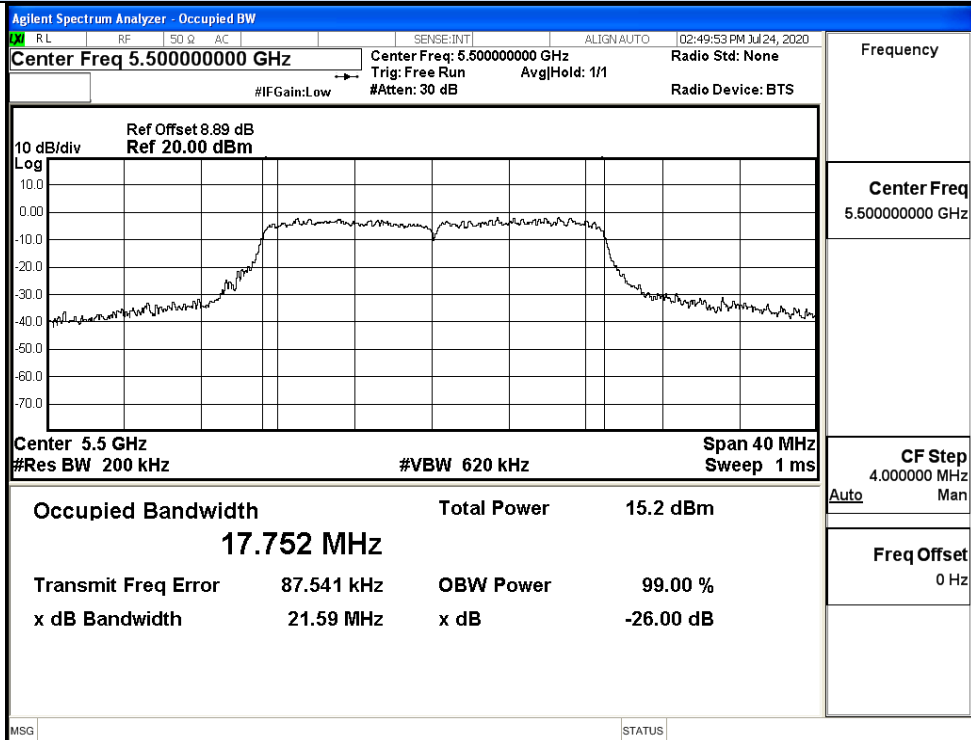


IEEE 802.11a / Channel 120 / 5600MHz

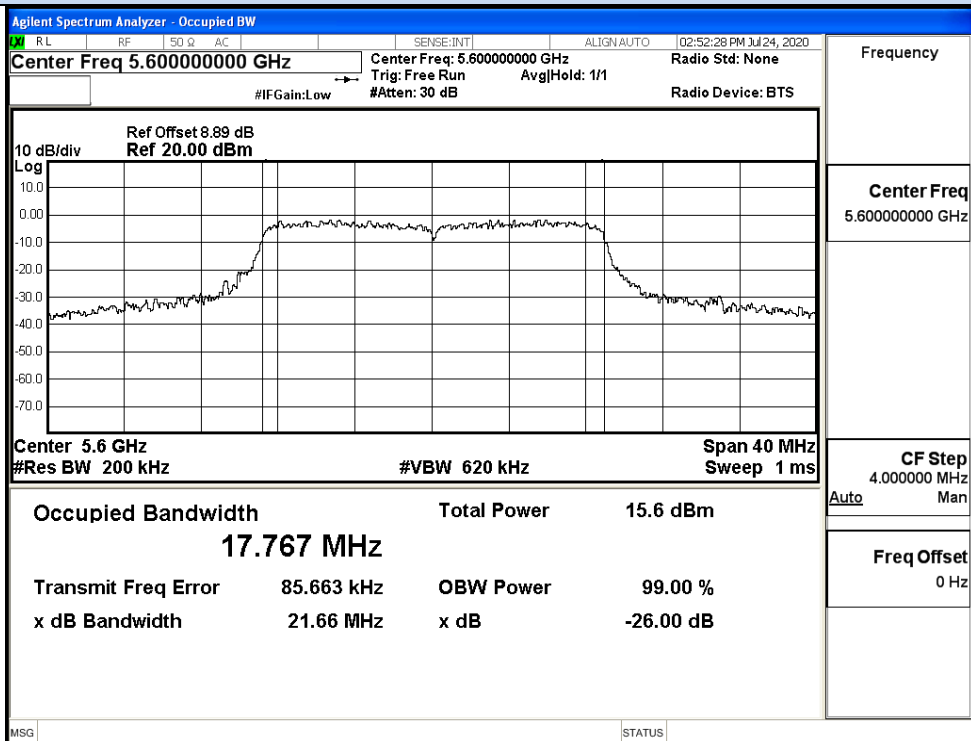


IEEE 802.11a / Channel 140 / 5700MHz

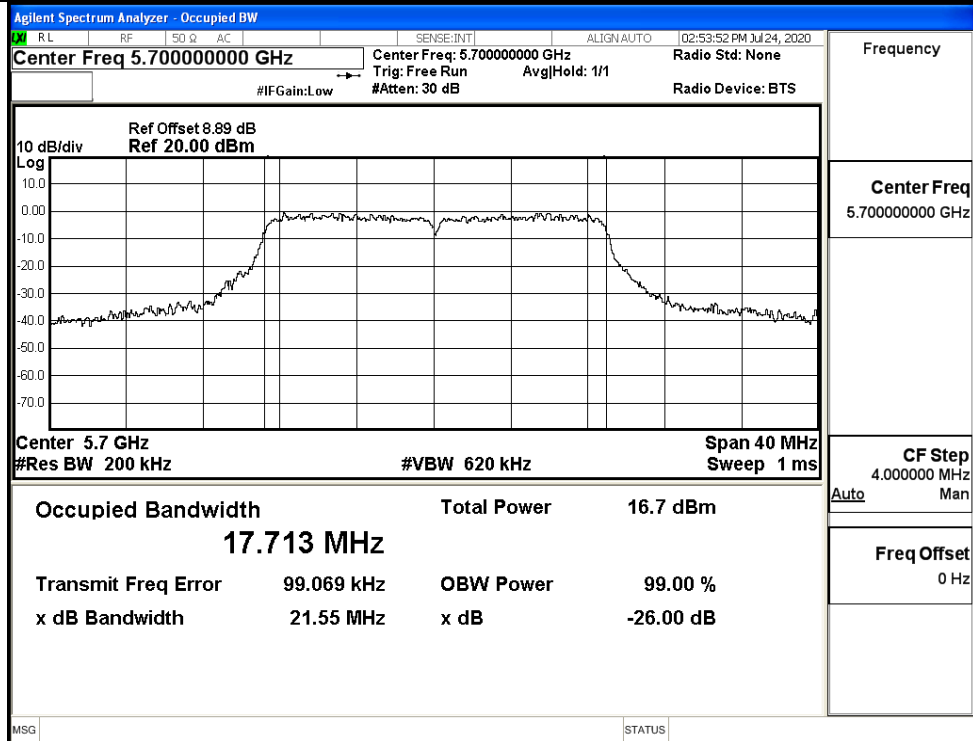
26dB Bandwidth



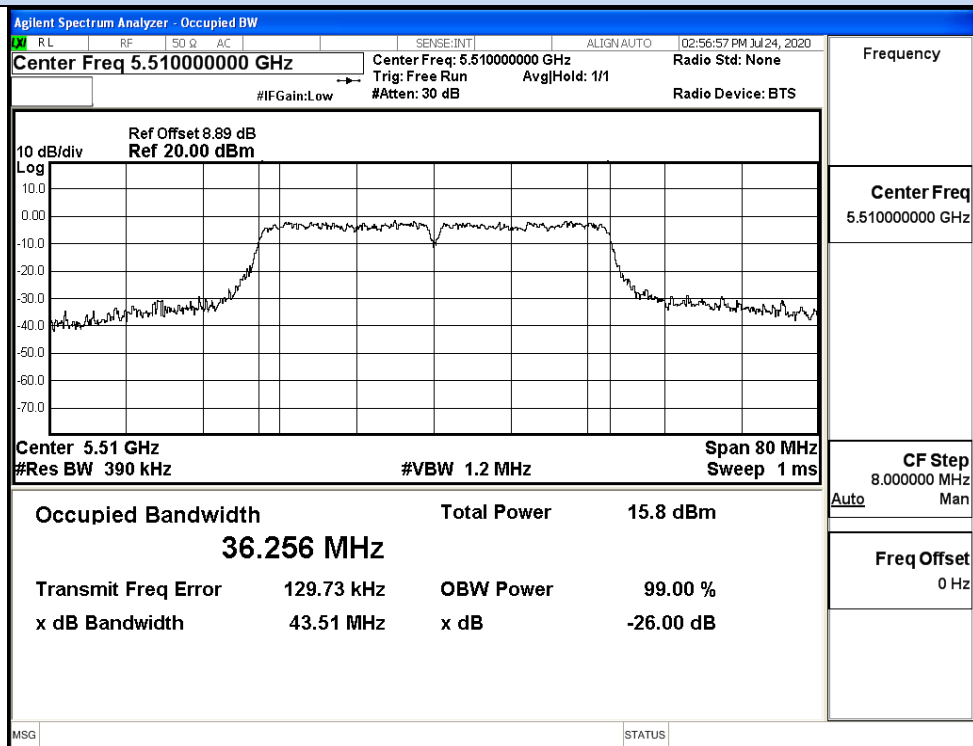
IEEE 802.11n20 / Channel 100 / 5500MHz



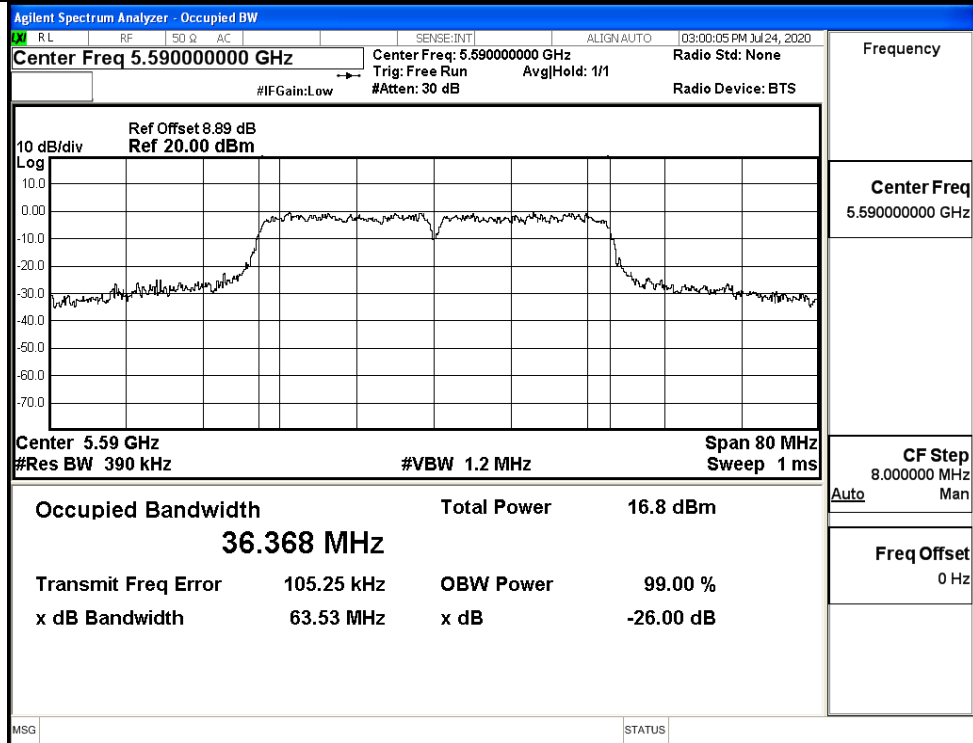
IEEE 802.11n20 / Channel 120 / 5600MHz



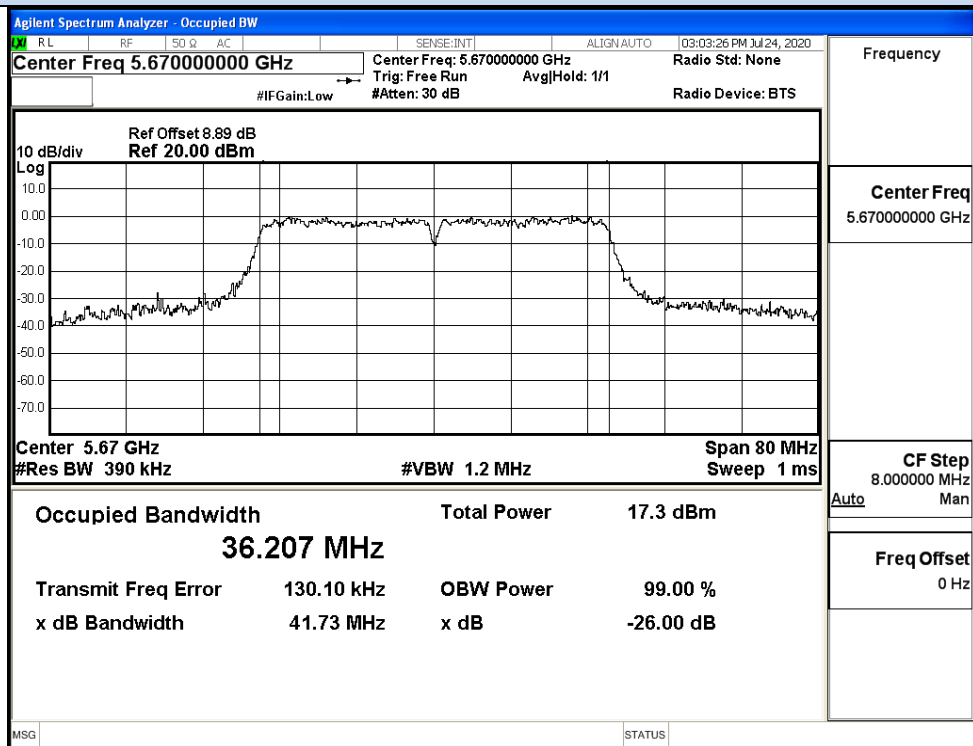
IEEE 802.11n20 / Channel 140 / 5700MHz



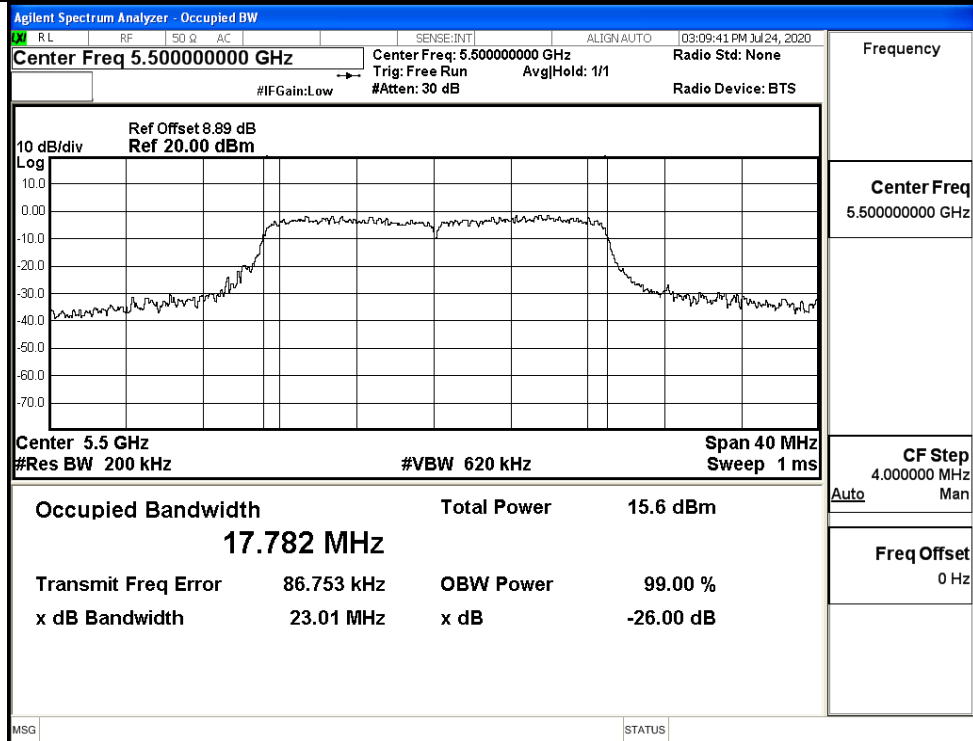
IEEE 802.11n40 / Channel 102 / 5510MHz



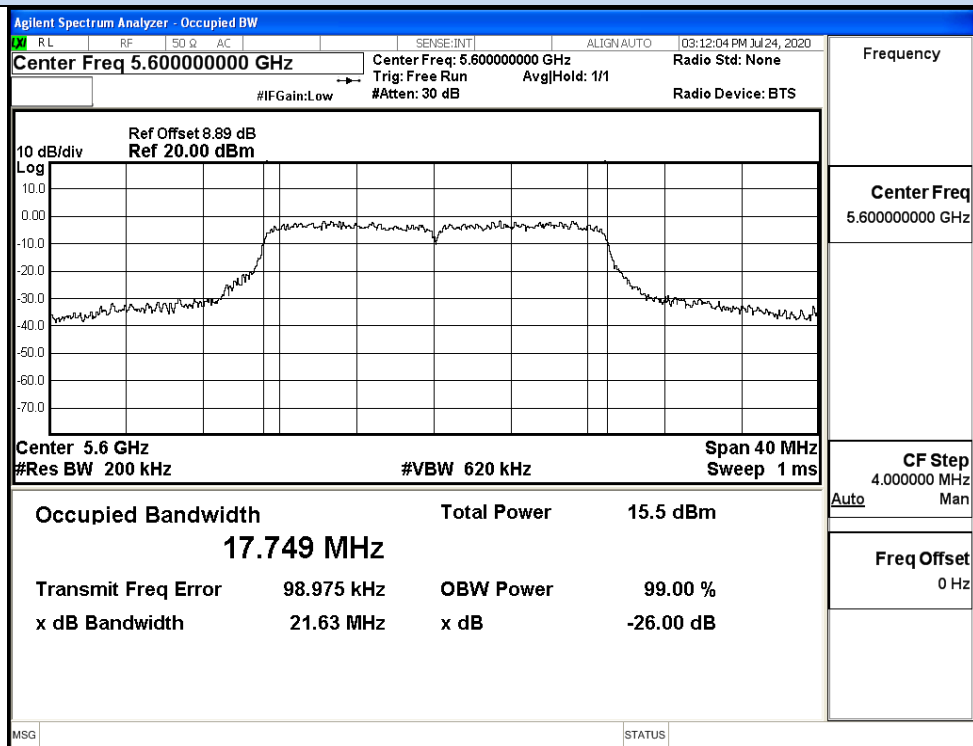
IEEE 802.11n40 / Channel 118 / 5590MHz



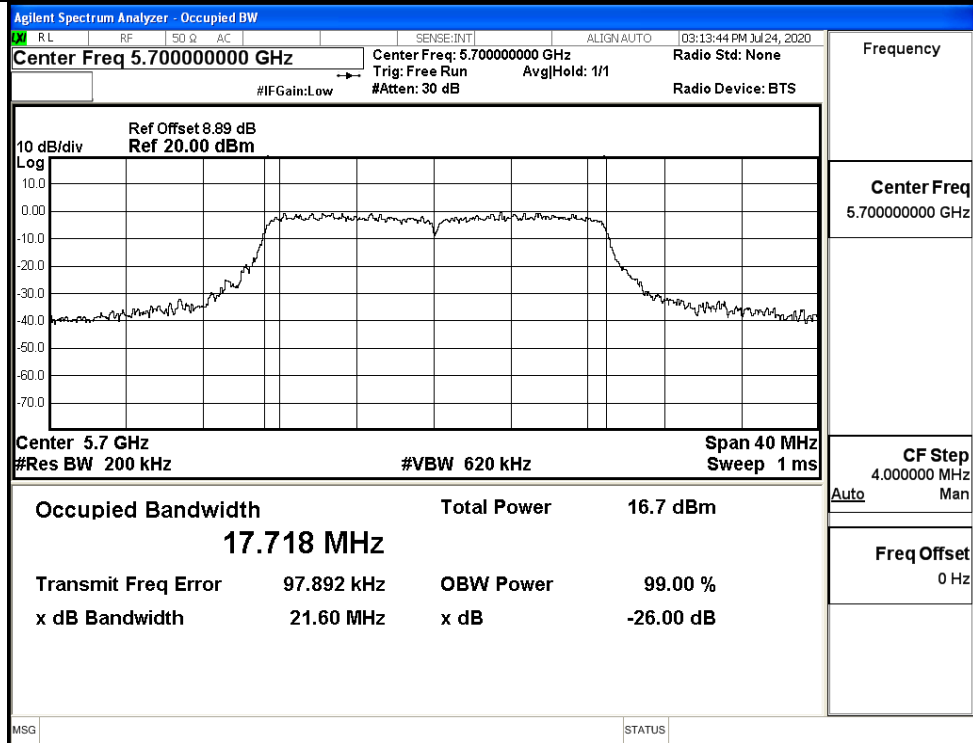
IEEE 802.11n40 / Channel 134 / 5670MHz



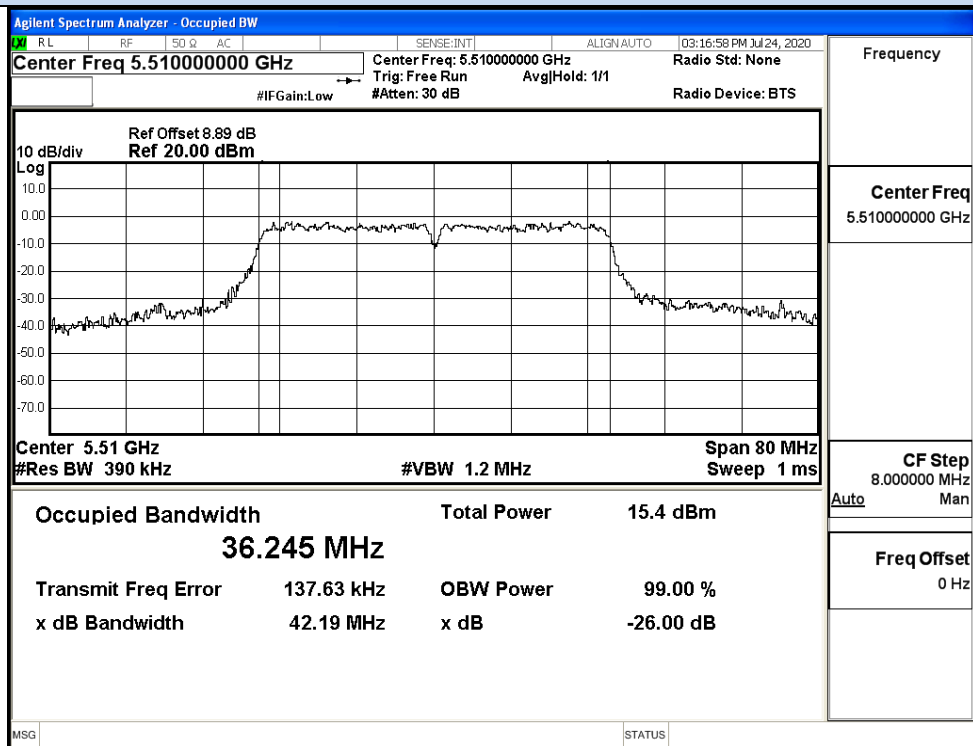
IEEE 802.11ac20 / Channel 100 / 5500MHz



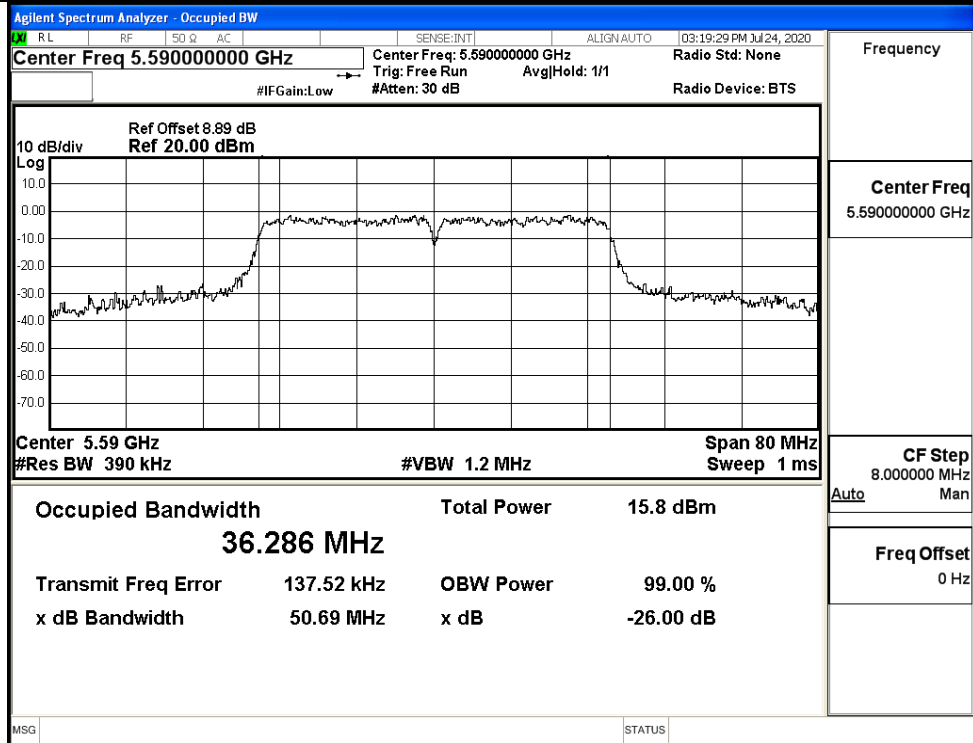
IEEE 802.11ac20 / Channel 120 / 5600MHz



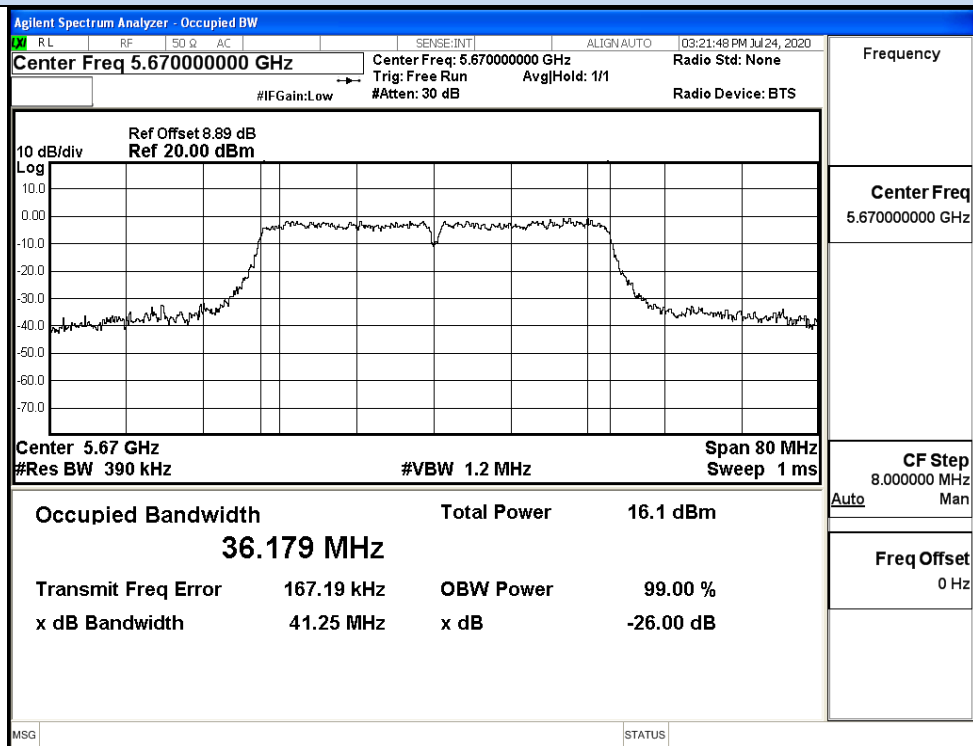
IEEE 802.11ac20 / Channel 140 / 5700MHz



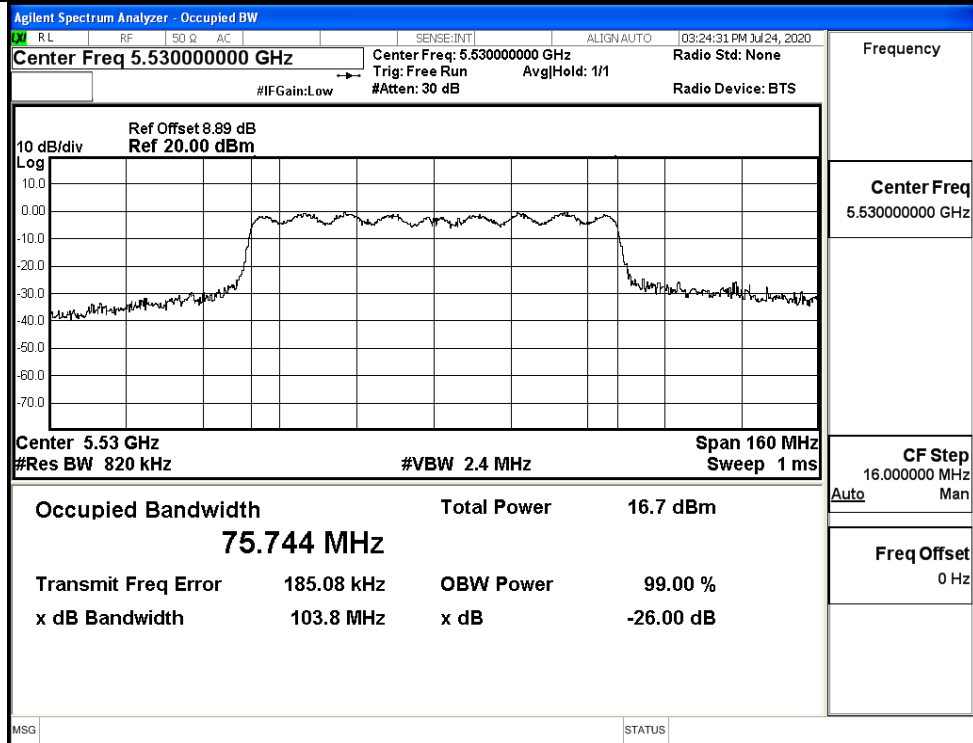
IEEE 802.11ac40 / Channel 102 / 5510MHz



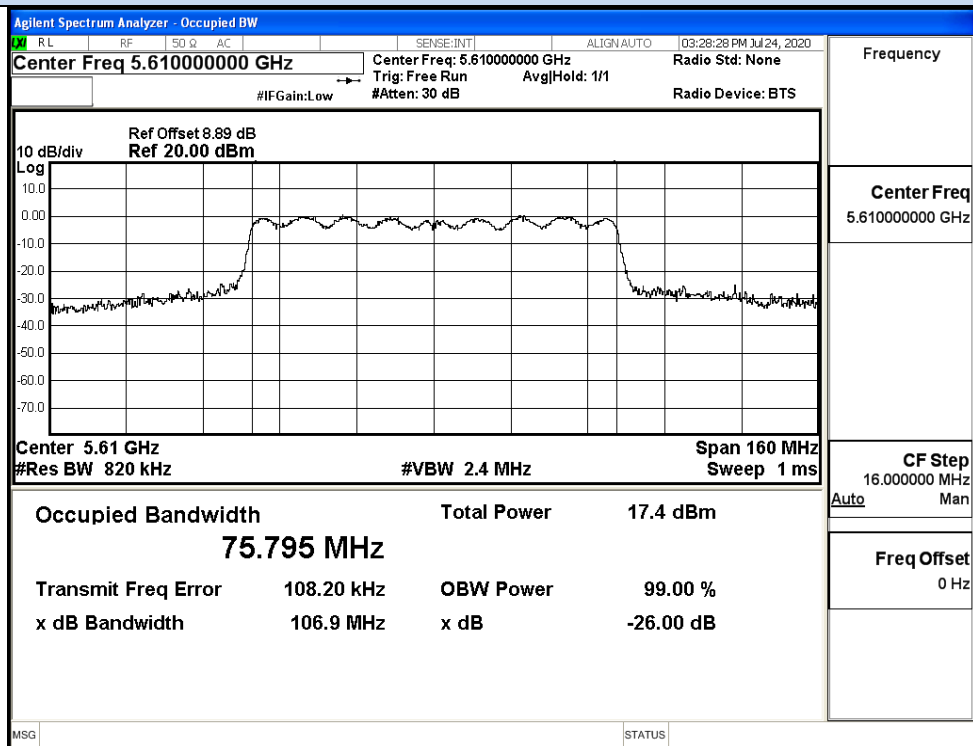
IEEE 802.11ac40 / Channel 118 / 5590MHz



IEEE 802.11ac40 / Channel 134 / 5670MHz

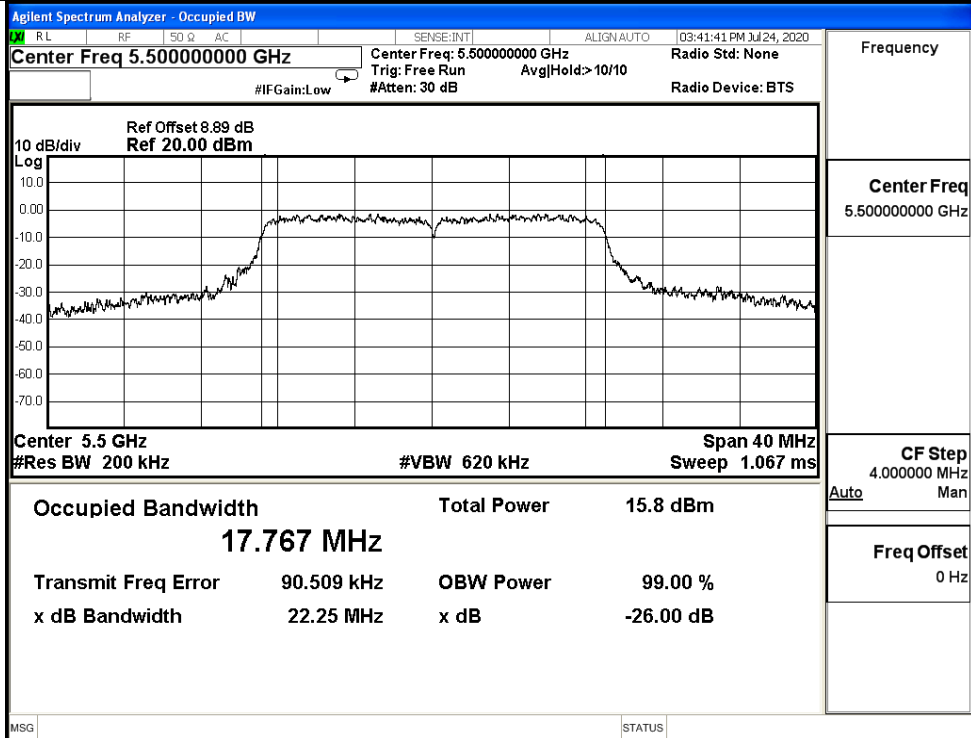


IEEE 802.11ac80 / Channel 106 / 5530MHz

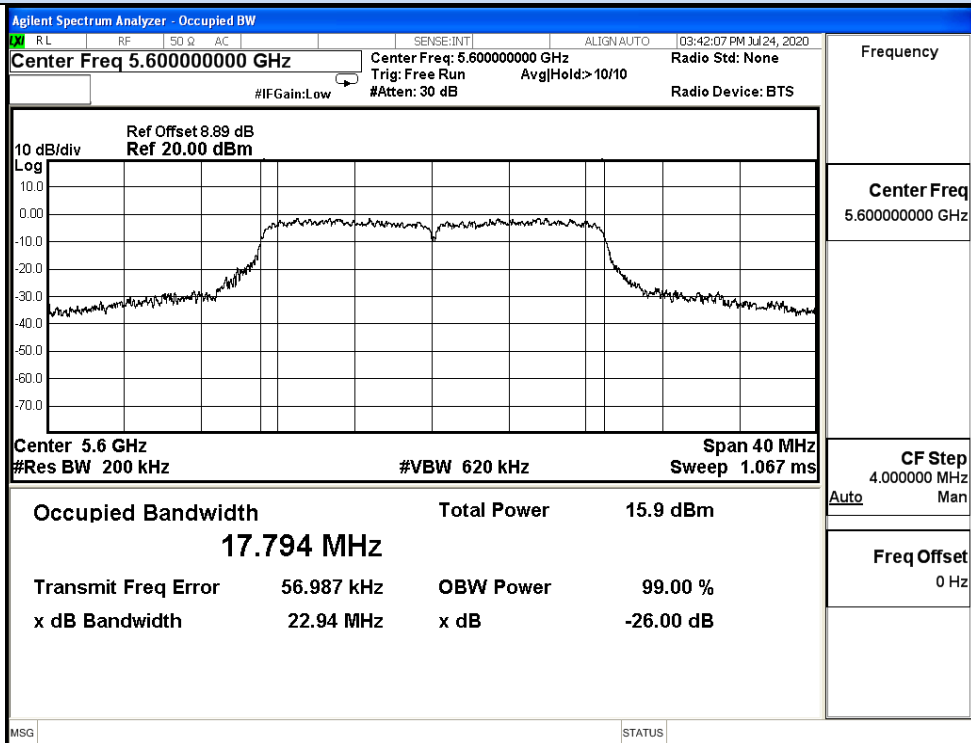


IEEE 802.11ac80 / Channel 122 / 5610MHz

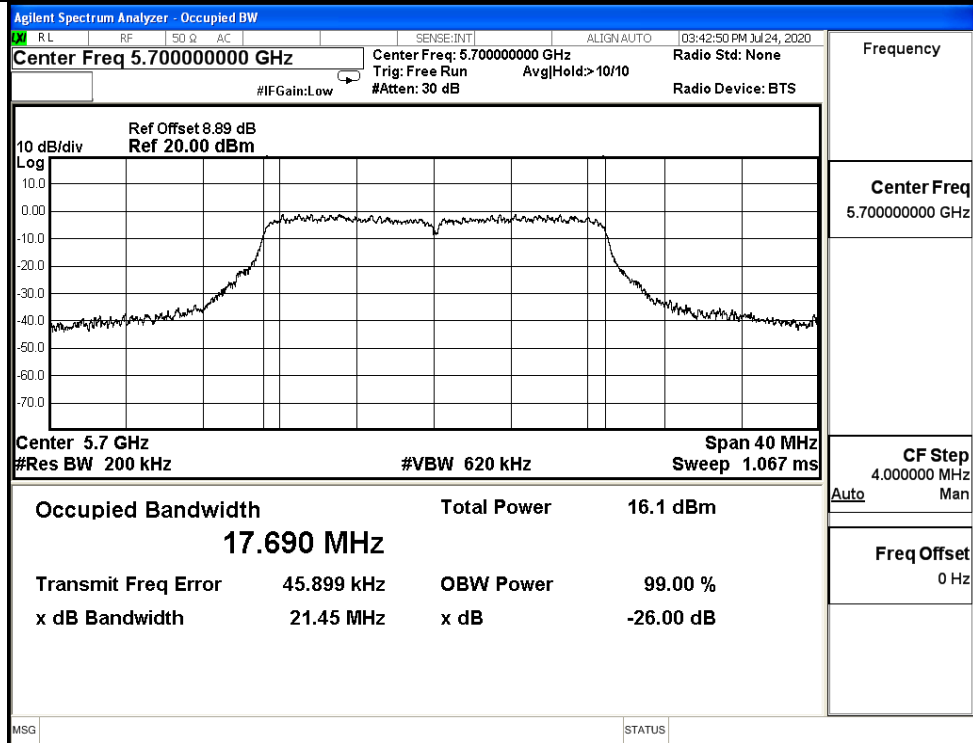
99% Occupied Bandwidth



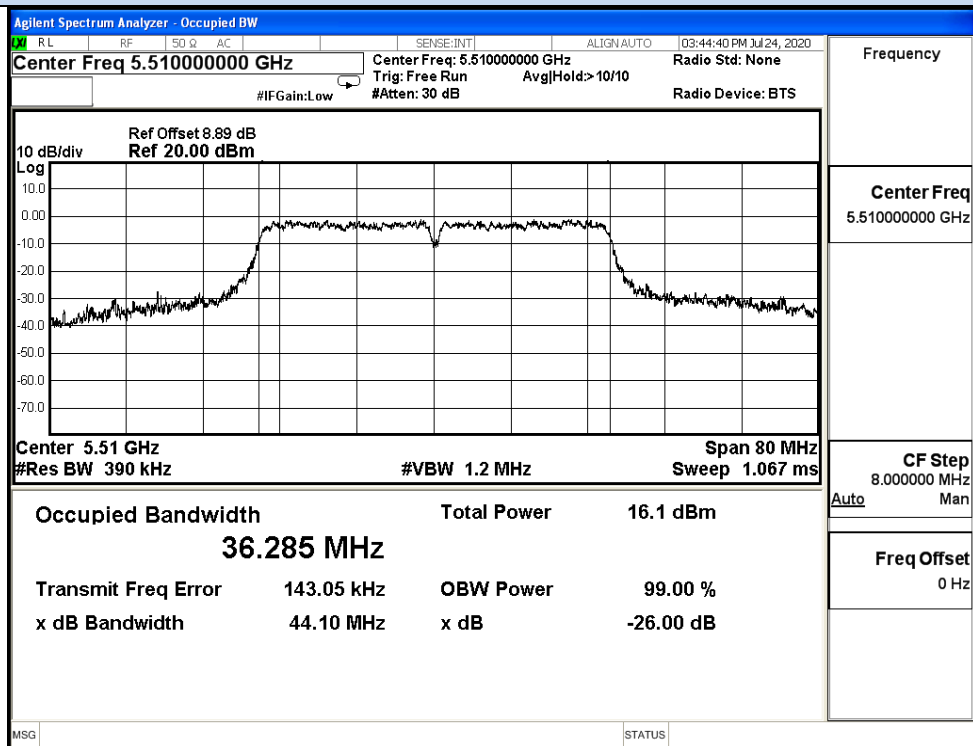
IEEE 802.11n20 / Channel 100 / 5500MHz



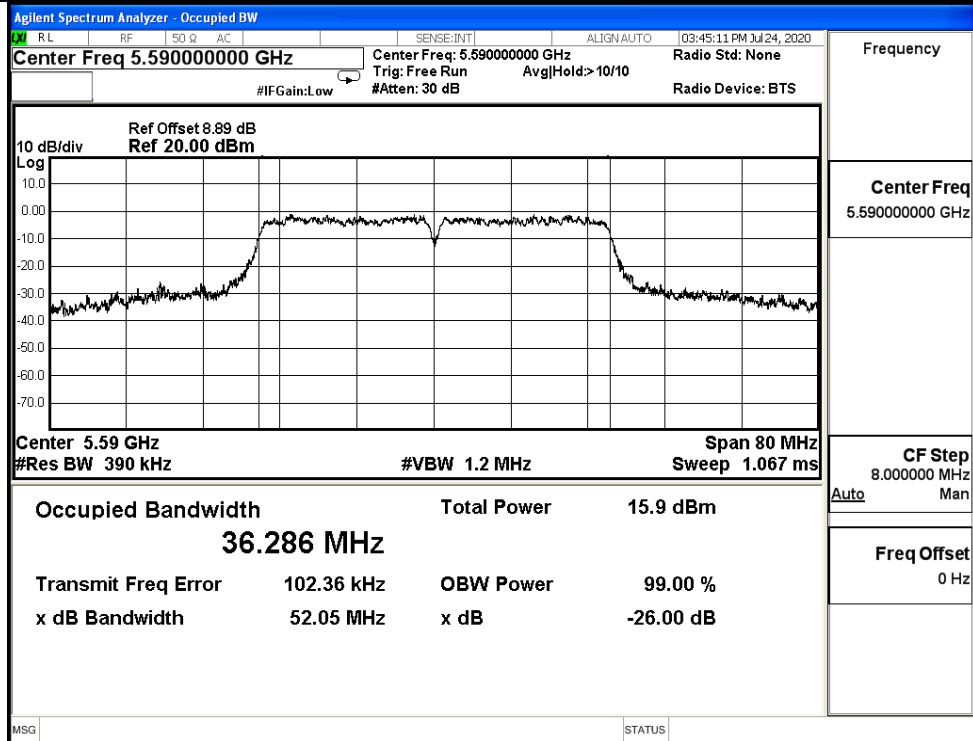
IEEE 802.11n20 / Channel 120 / 5600MHz



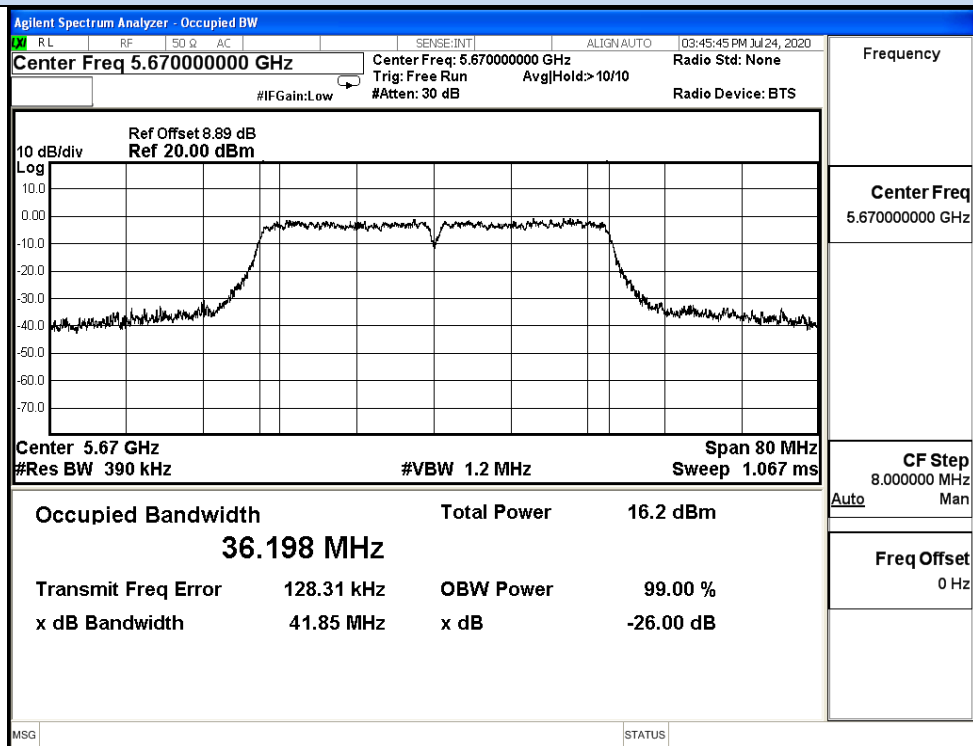
IEEE 802.11n20 / Channel 140 / 5700MHz



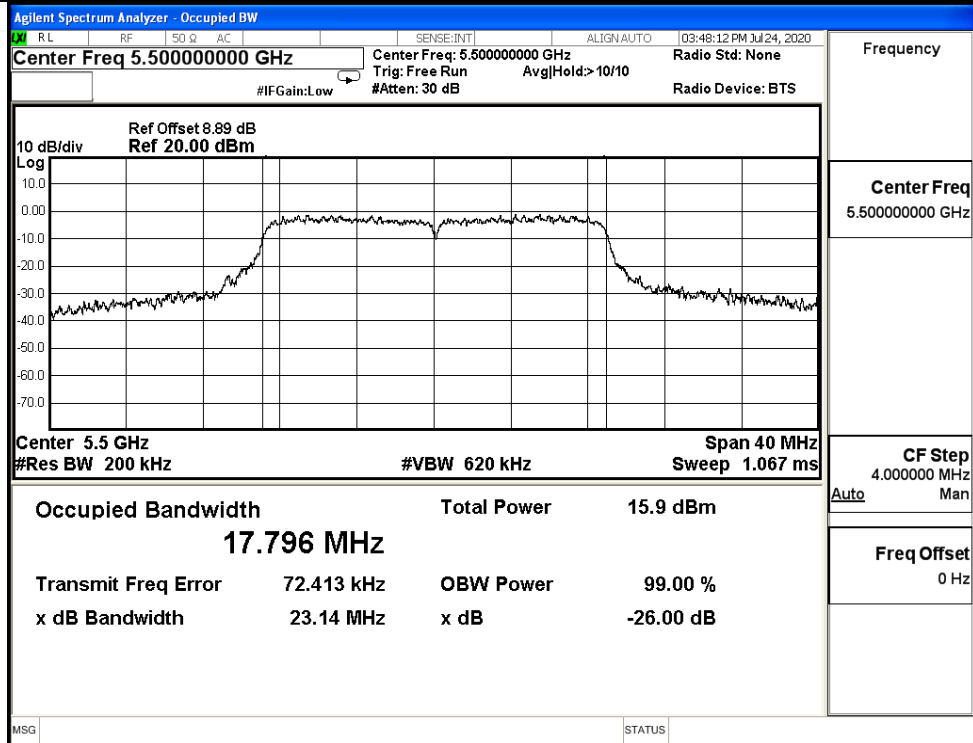
IEEE 802.11n40 / Channel 102 / 5510MHz



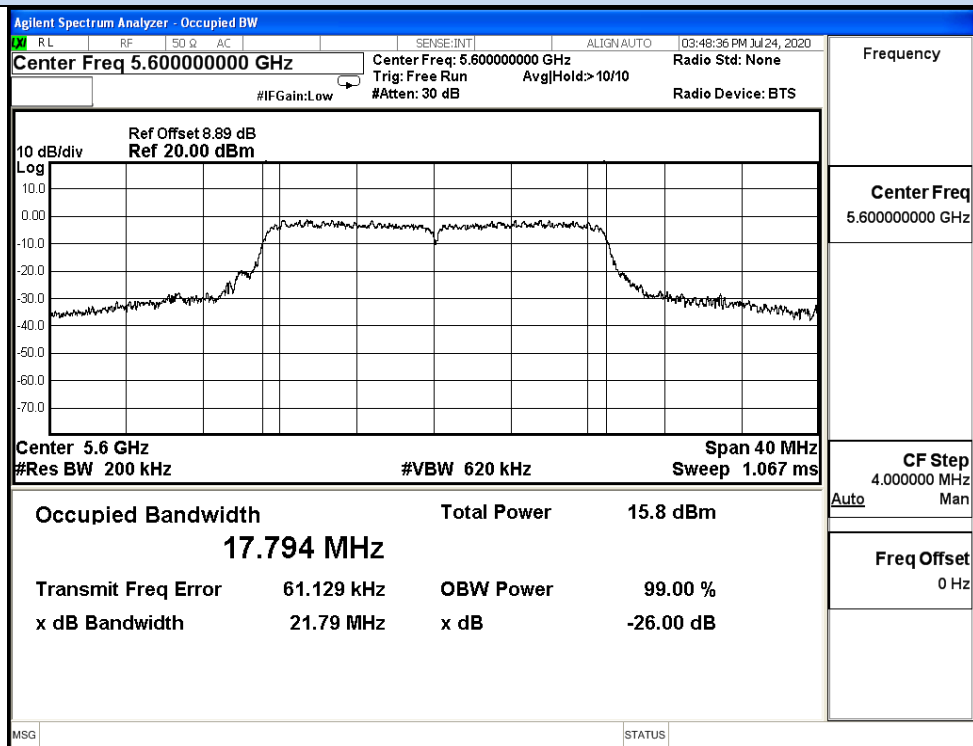
IEEE 802.11n40 / Channel 118 / 5590MHz



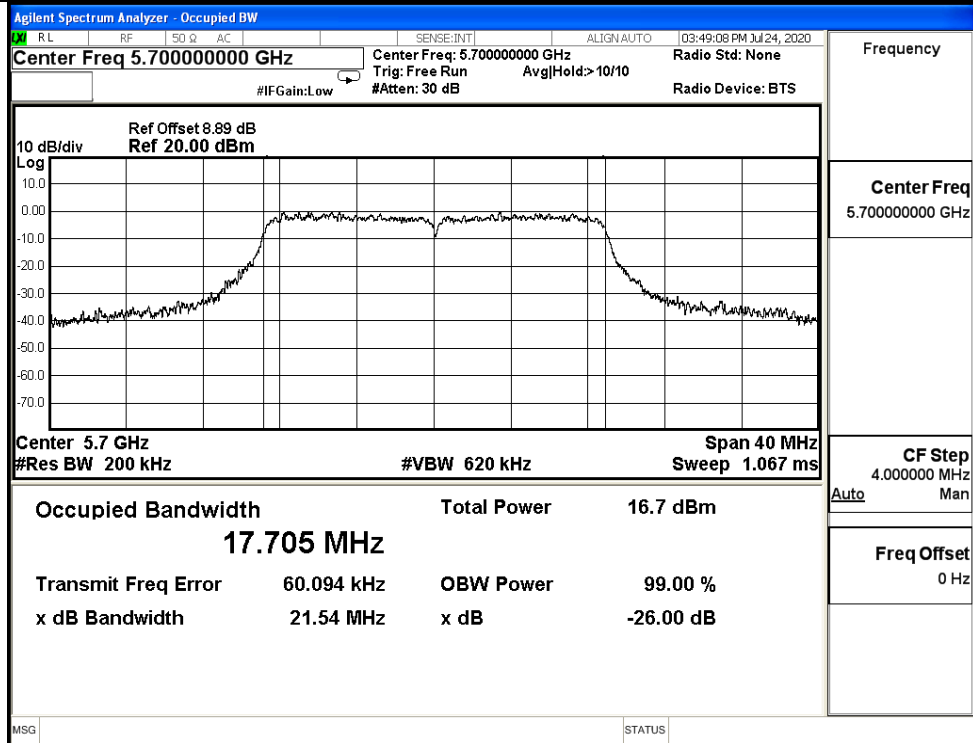
IEEE 802.11n40 / Channel 134 / 5670MHz



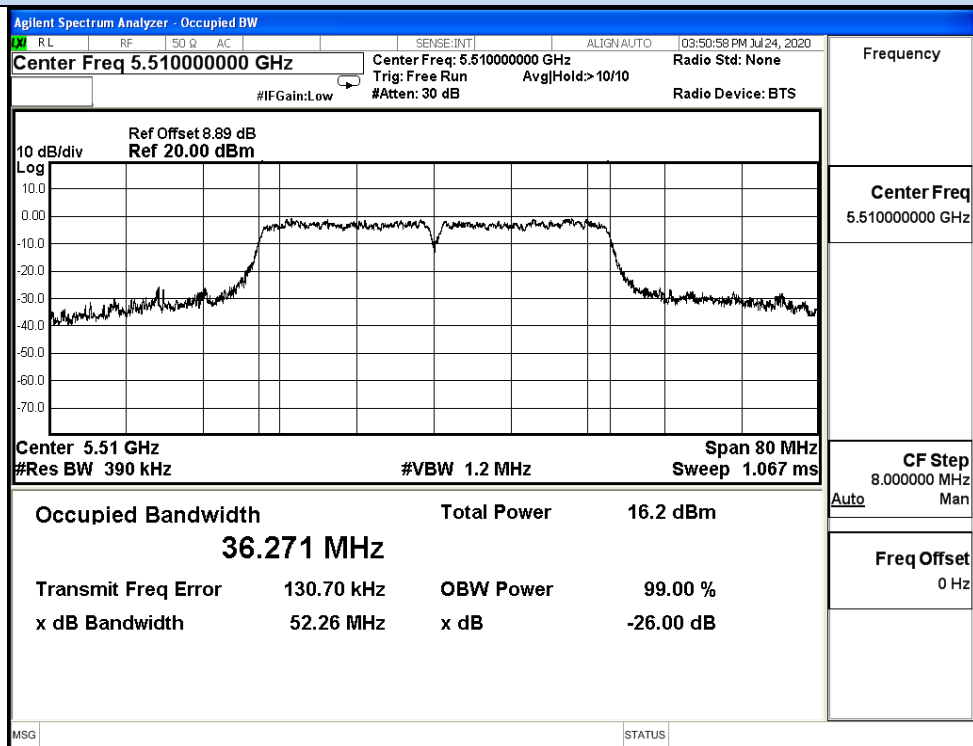
IEEE 802.11ac20 / Channel 100 / 5500MHz



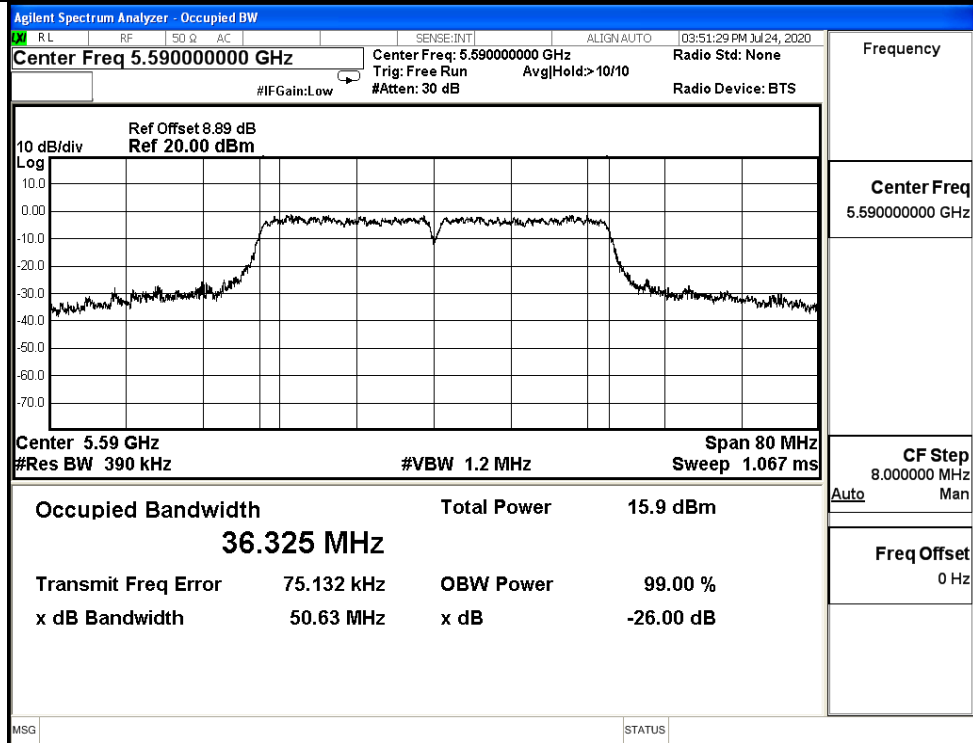
IEEE 802.11ac20 / Channel 120 / 5600MHz



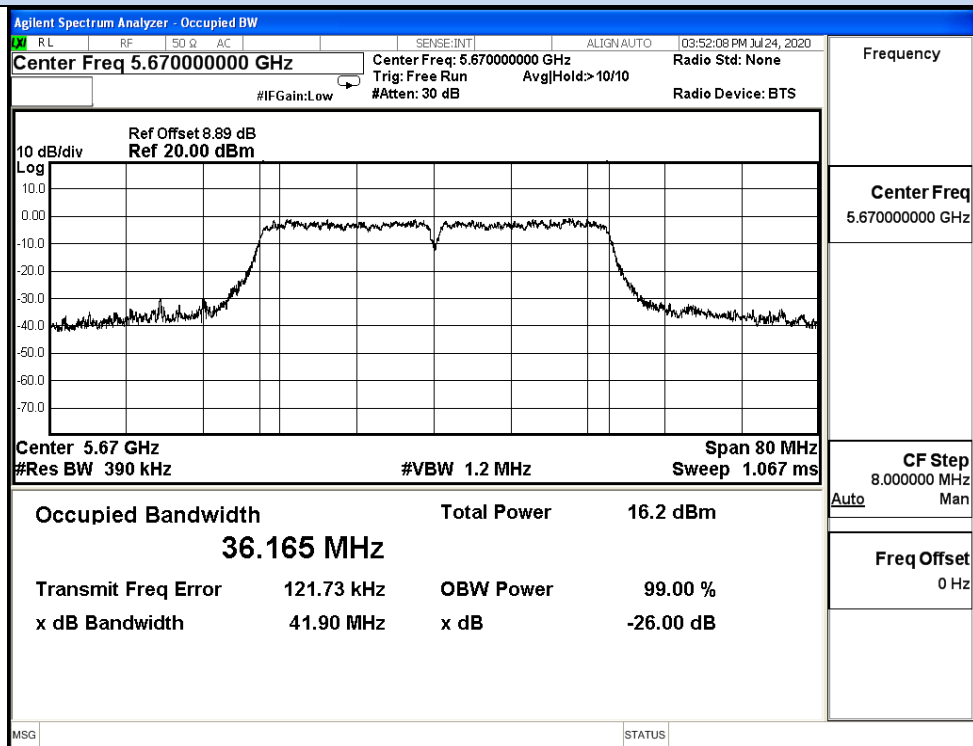
IEEE 802.11ac20 / Channel 140 / 5700MHz



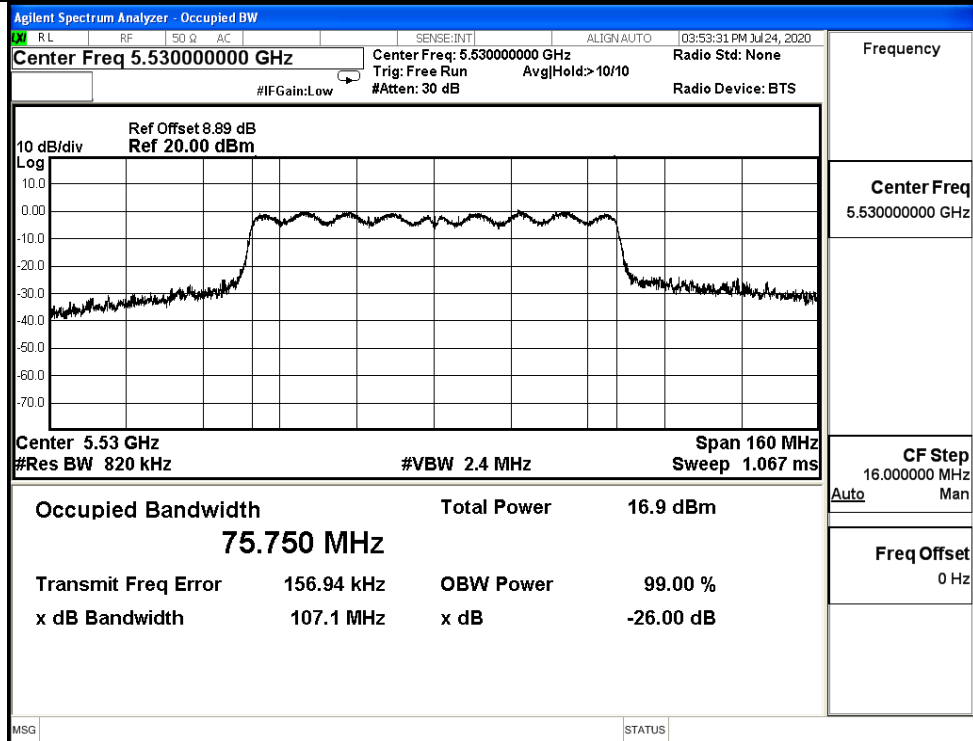
IEEE 802.11ac40 / Channel 102 / 5510MHz



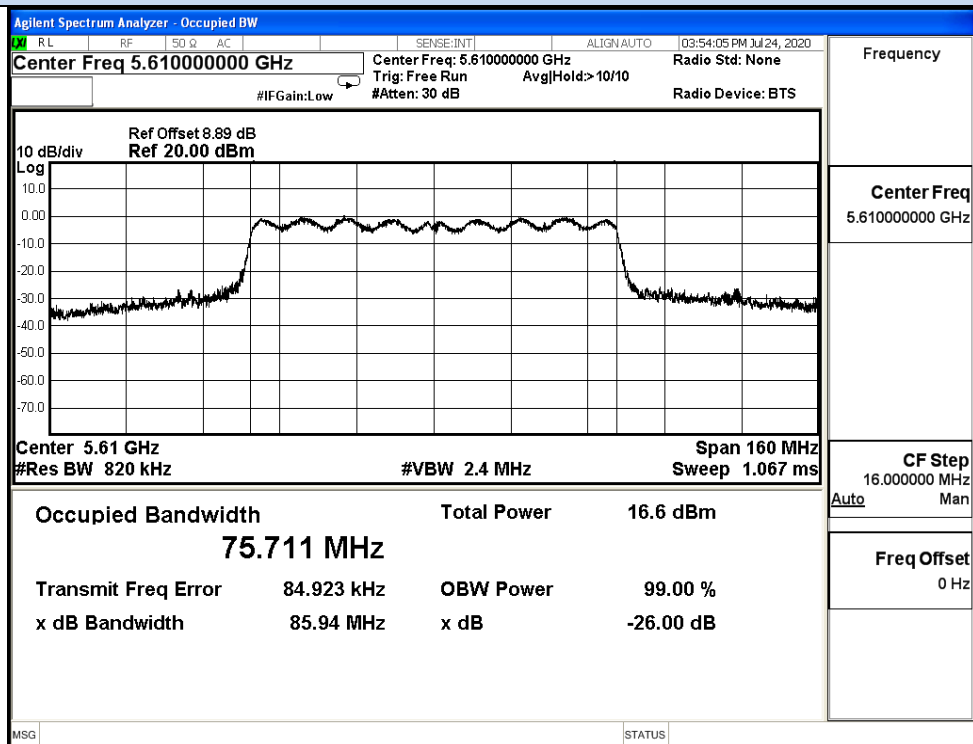
IEEE 802.11ac40 / Channel 118 / 5590MHz



IEEE 802.11ac40 / Channel 134 / 5670MHz



IEEE 802.11ac80 / Channel 106 / 5530MHz



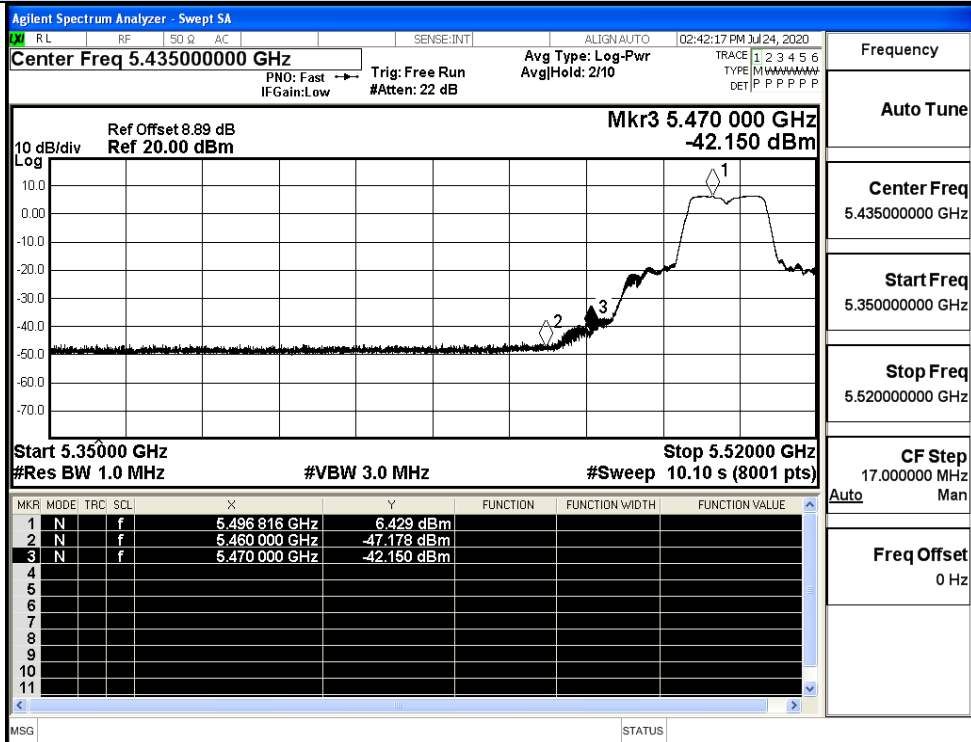
IEEE 802.11ac80 / Channel 122 / 5610MHz

G.5 Undesirable Emissions Measurement

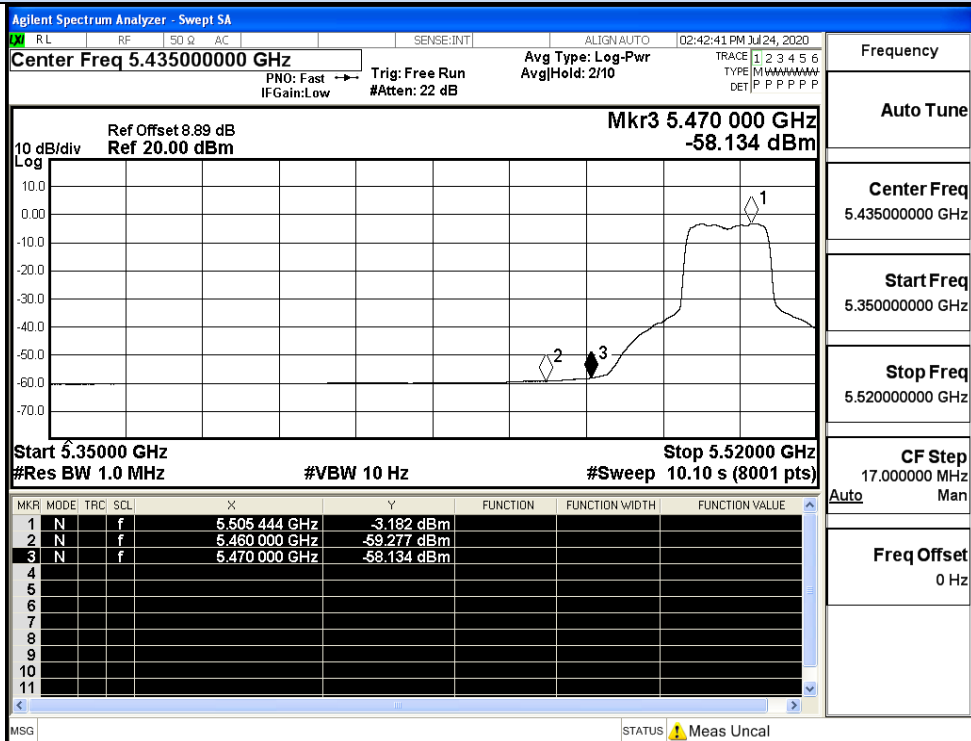
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
11A	100	5460.0	-47.18	4.2	0	52.25	Peak	68.20	Pass
		5460.0	-59.28	4.2	0	40.15	Average	54.00	Pass
		5470.0	-42.15	4.2	0	57.28	Peak	68.20	Pass
		5470.0	-58.13	4.2	0	41.30	Average	54.00	Pass
	140	5725.0	-40.01	4.2	0	59.42	Peak	68.20	Pass
		5725.0	-55.11	4.2	0	44.32	Average	54.00	Pass
		5735.0	-47.23	4.2	0	52.20	Peak	68.20	Pass
		5735.0	-57.66	4.2	0	41.77	Average	54.00	Pass
11N2 0 SISO	100	5460.0	-48.21	4.2	0	51.22	Peak	68.20	Pass
		5460.0	-59.47	4.2	0	39.96	Average	54.00	Pass
		5470.0	-45.79	4.2	0	53.64	Peak	68.20	Pass
		5470.0	-59.09	4.2	0	40.34	Average	54.00	Pass
	140	5725.0	-40.22	4.2	0	59.21	Peak	68.20	Pass
		5725.0	-55.55	4.2	0	43.88	Average	54.00	Pass
		5735.0	-45.88	4.2	0	53.55	Peak	68.20	Pass
		5735.0	-57.68	4.2	0	41.75	Average	54.00	Pass
11N4 0 SISO	102	5460.0	-42.43	4.2	0	57.00	Peak	68.20	Pass
		5460.0	-56.84	4.2	0	42.59	Average	54.00	Pass
		5470.0	-33.15	4.2	0	66.28	Peak	68.20	Pass
		5470.0	-49.20	4.2	0	50.23	Average	54.00	Pass
	134	5725.0	-46.24	4.2	0	53.19	Peak	68.20	Pass
		5725.0	-57.14	4.2	0	42.29	Average	54.00	Pass
		5735.0	-48.25	4.2	0	51.18	Peak	68.20	Pass
		5735.0	-57.44	4.2	0	41.99	Average	54.00	Pass
11A C20 SIS O	100	5460.0	-47.53	4.2	0	51.90	Peak	68.20	Pass
		5460.0	-59.38	4.2	0	40.05	Average	54.00	Pass
		5470.0	-42.76	4.2	0	56.67	Peak	68.20	Pass
		5470.0	-58.78	4.2	0	40.65	Average	54.00	Pass
	140	5725.0	-40.77	4.2	0	58.66	Peak	68.20	Pass
		5725.0	-55.53	4.2	0	43.90	Average	54.00	Pass
		5735.0	-46.15	4.2	0	53.28	Peak	68.20	Pass
		5735.0	-57.70	4.2	0	41.73	Average	54.00	Pass
11A C40 SIS O	102	5460.0	-41.27	4.2	0	58.16	Peak	68.20	Pass
		5460.0	-57.49	4.2	0	41.94	Average	54.00	Pass
		5470.0	-34.62	4.2	0	64.81	Peak	68.20	Pass
		5470.0	-50.52	4.2	0	48.91	Average	54.00	Pass
	134	5725.0	-46.73	4.2	0	52.70	Peak	68.20	Pass
		5725.0	-56.95	4.2	0	42.48	Average	54.00	Pass
		5735.0	-48.13	4.2	0	51.30	Peak	68.20	Pass
		5735.0	-57.37	4.2	0	42.06	Average	54.00	Pass
11A C80 SIS O	106	5460.0	-46.82	4.2	0	52.61	Peak	68.20	Pass
		5460.0	-57.21	4.2	0	42.22	Average	54.00	Pass
		5470.0	-42.79	4.2	0	56.64	Peak	68.20	Pass
		5470.0	-56.09	4.2	0	43.34	Average	54.00	Pass
	122	5725.0	-46.21	4.2	0	53.22	Peak	68.20	Pass
		5725.0	-59.59	4.2	0	39.84	Average	54.00	Pass
		5735.0	-48.29	4.2	0	51.14	Peak	68.20	Pass
		5735.0	-59.73	4.2	0	39.70	Average	54.00	Pass

Note: The frequency 5610MHz data is only applicable to FCC, not applicable to ISSED.

Undesirable Emissions Measurement

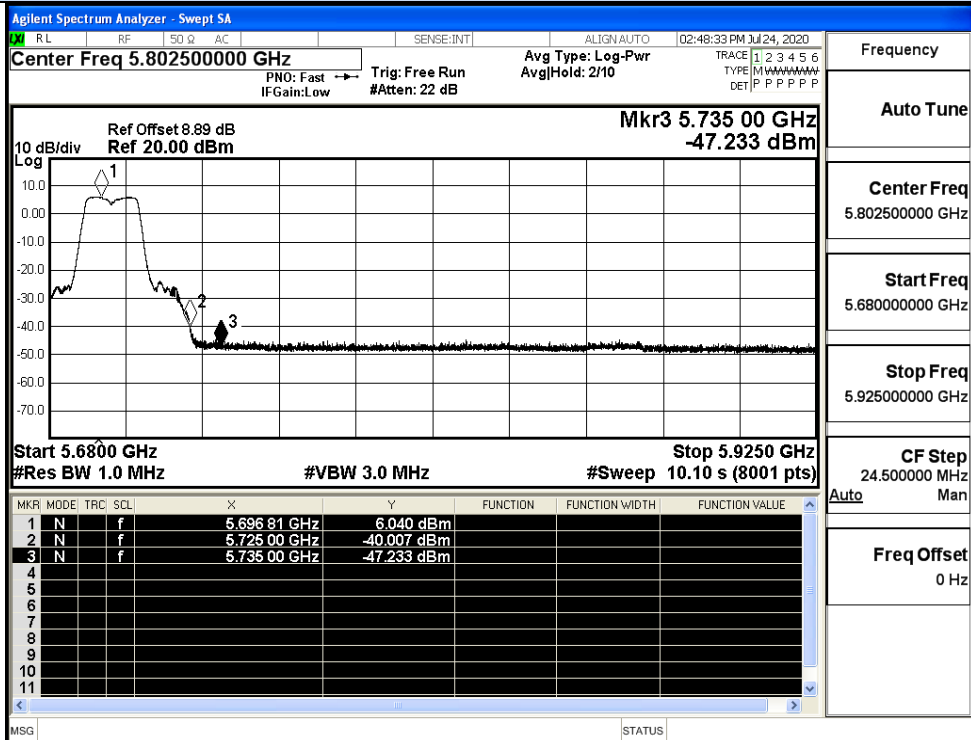


IEEE 802.11a / Channel 100 / 5500MHz / Peak

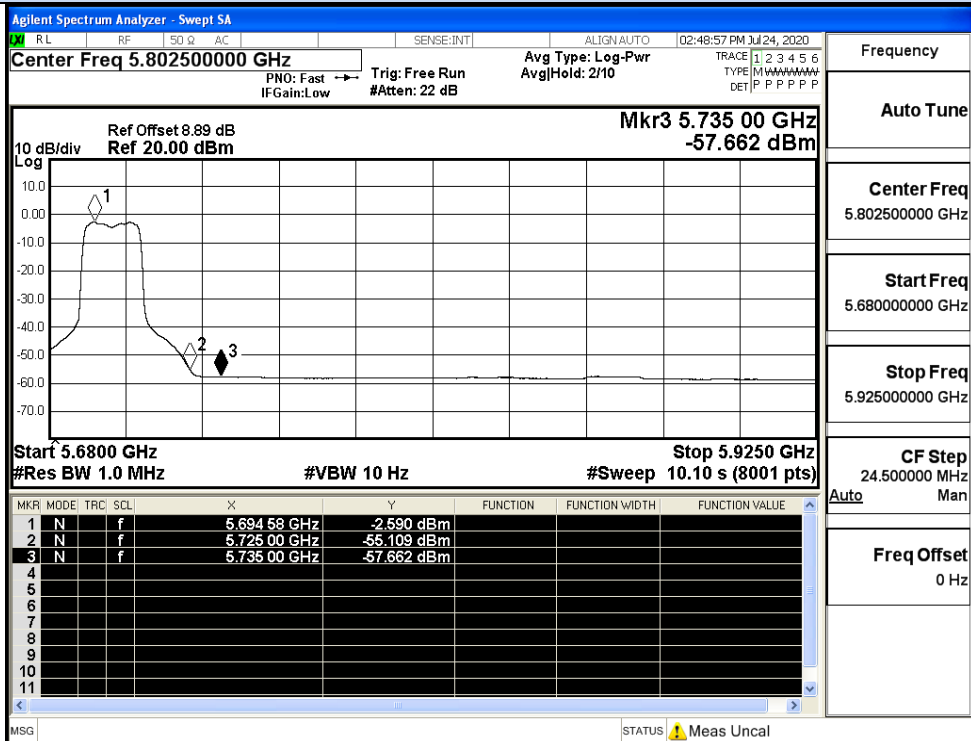


IEEE 802.11a / Channel 100 / 5500MHz / Average

Undesirable Emissions Measurement

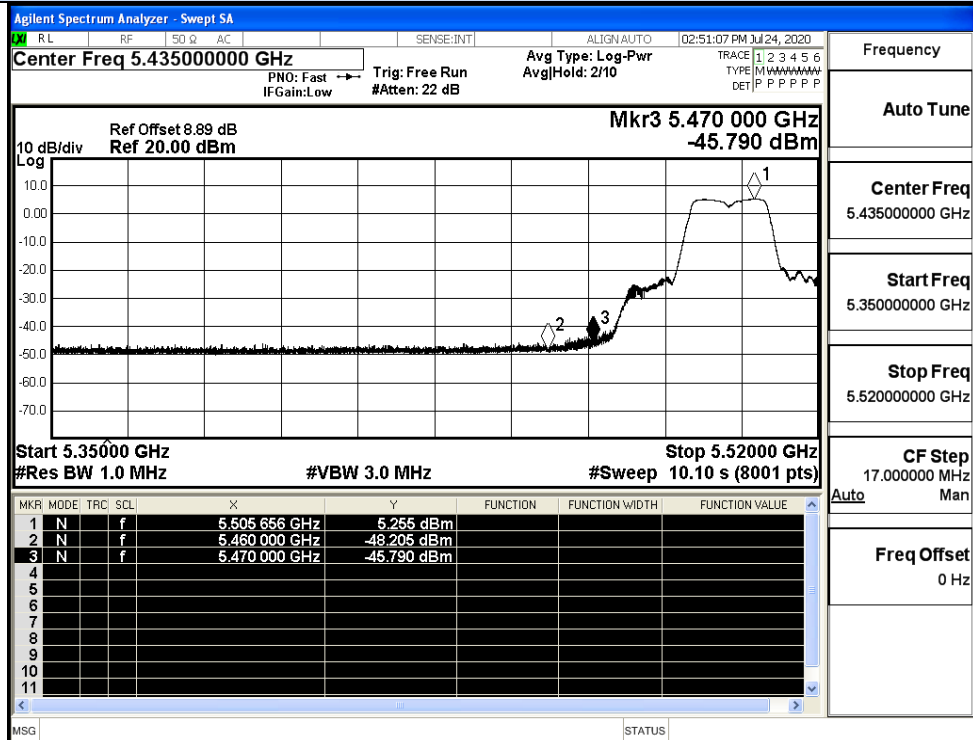


IEEE 802.11a / Channel 140 / 5700MHz / Peak

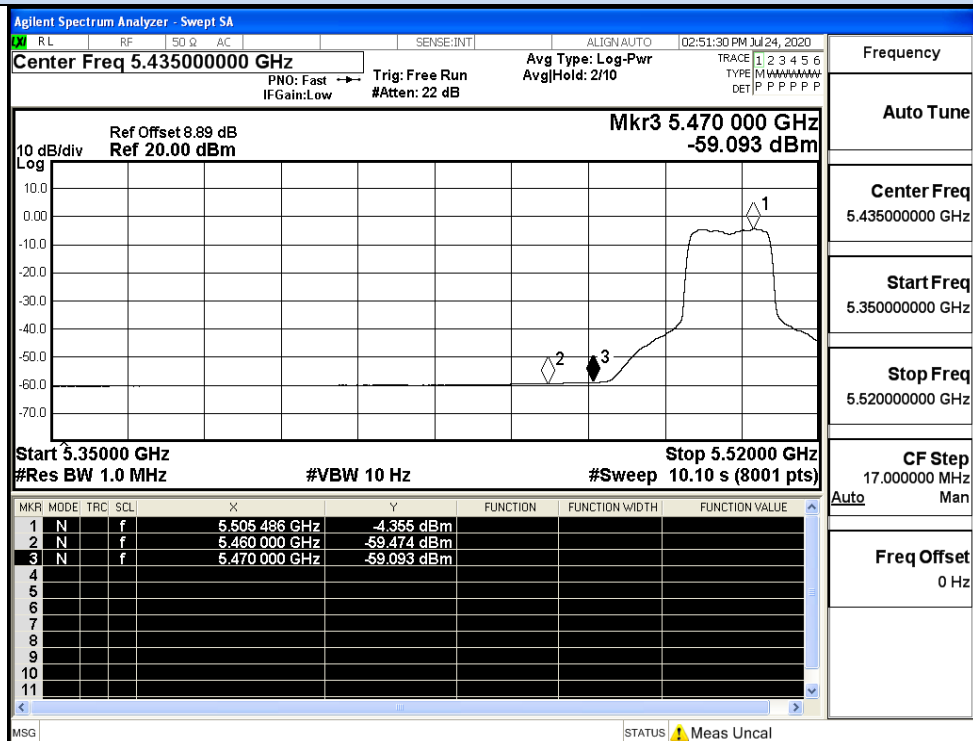


IEEE 802.11a / Channel 140 / 5700MHz / Average

Undesirable Emissions Measurement

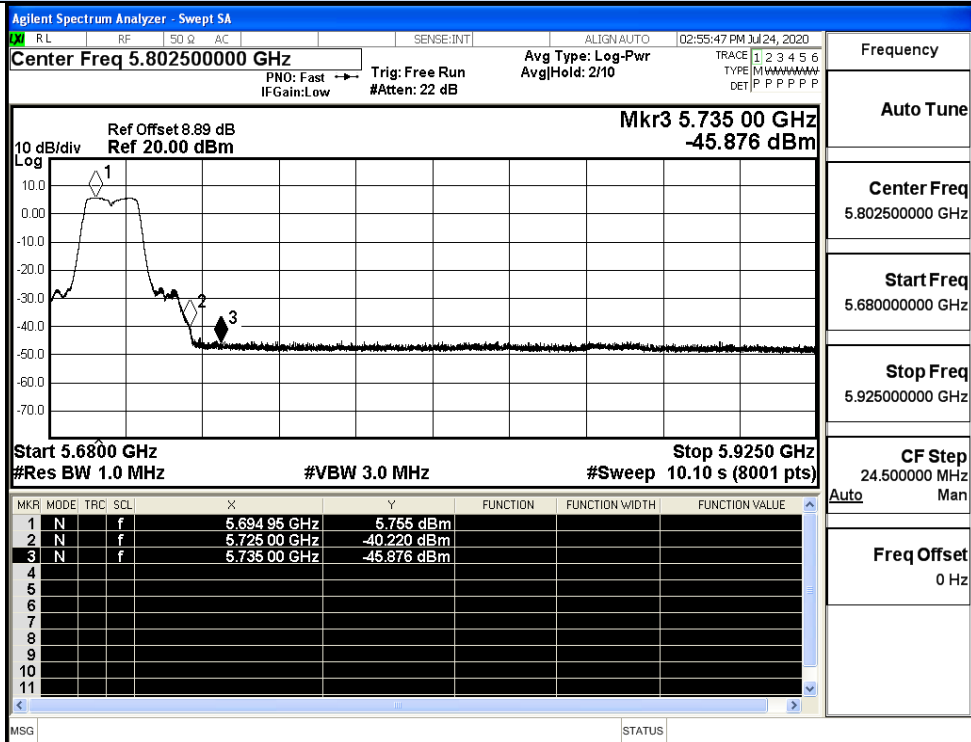


IEEE 802.11n20 / Channel 100 / 5500MHz / Peak

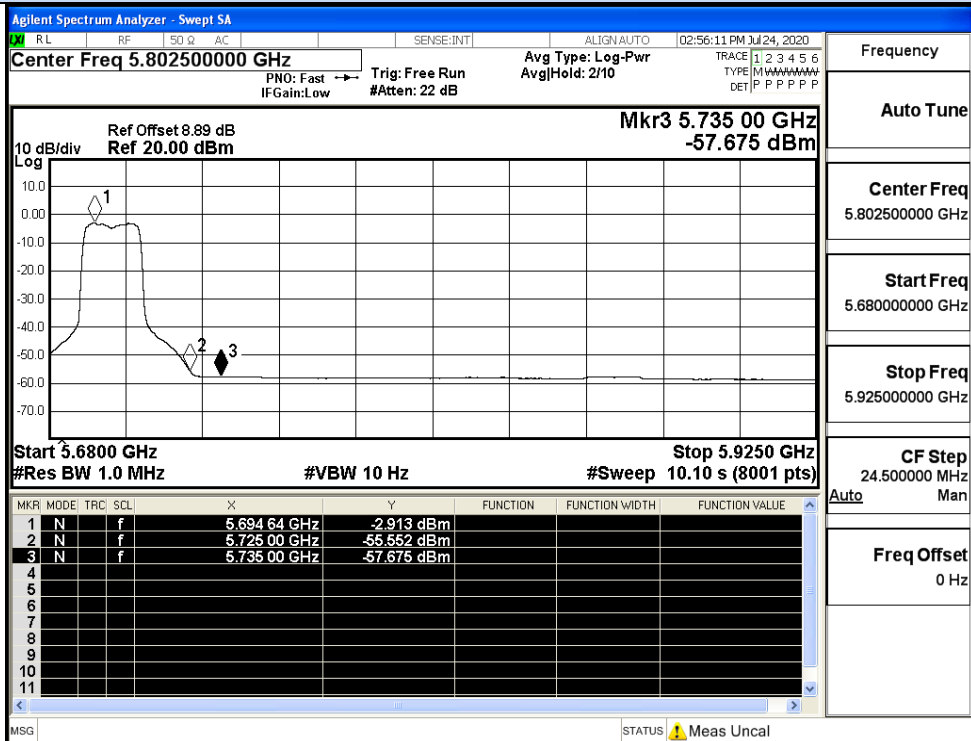


IEEE 802.11n20 / Channel 100 / 5500MHz / Average

Undesirable Emissions Measurement

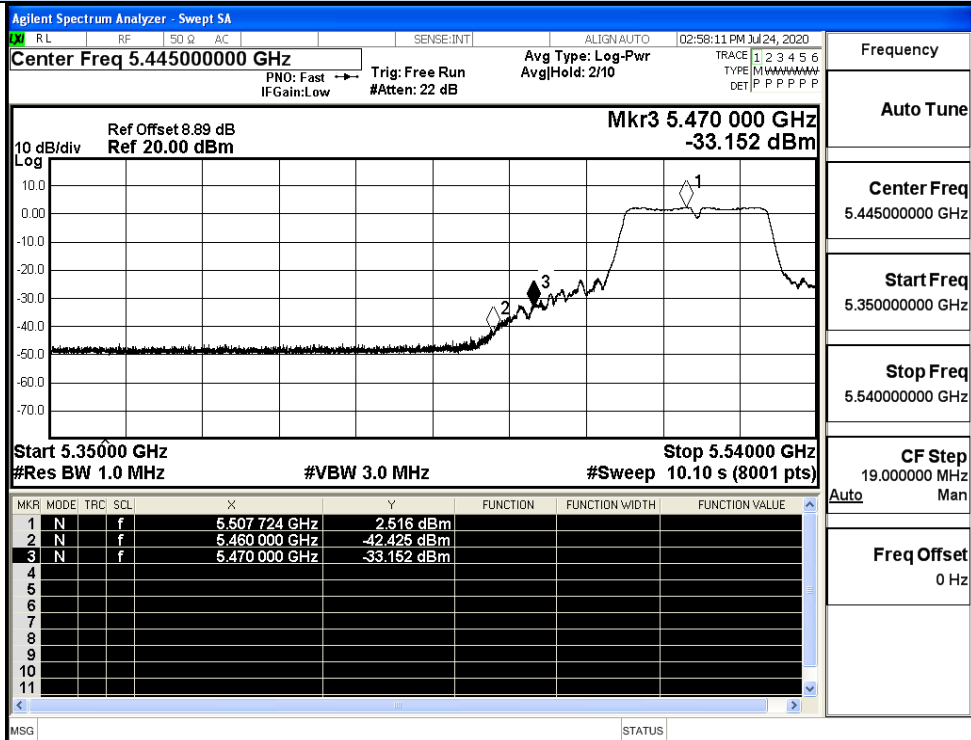


IEEE 802.11n20 / Channel 140 / 5700MHz / Peak

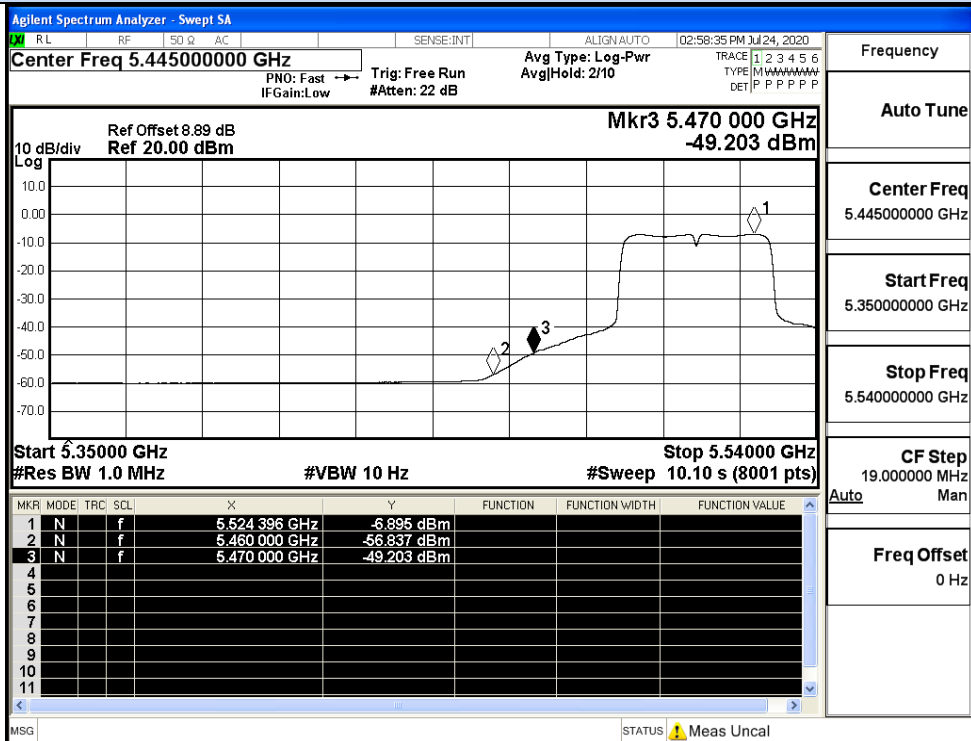


IEEE 802.11n20 / Channel 140 / 5700MHz / Average

Undesirable Emissions Measurement

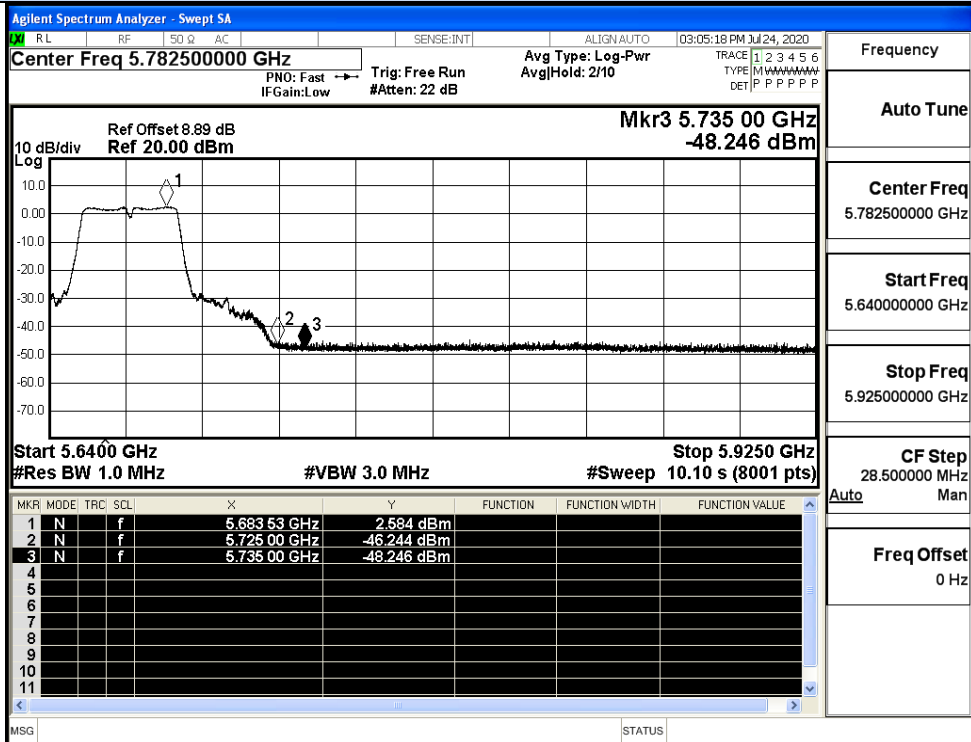


IEEE 802.11n40 / Channel 102 / 5510MHz / Peak

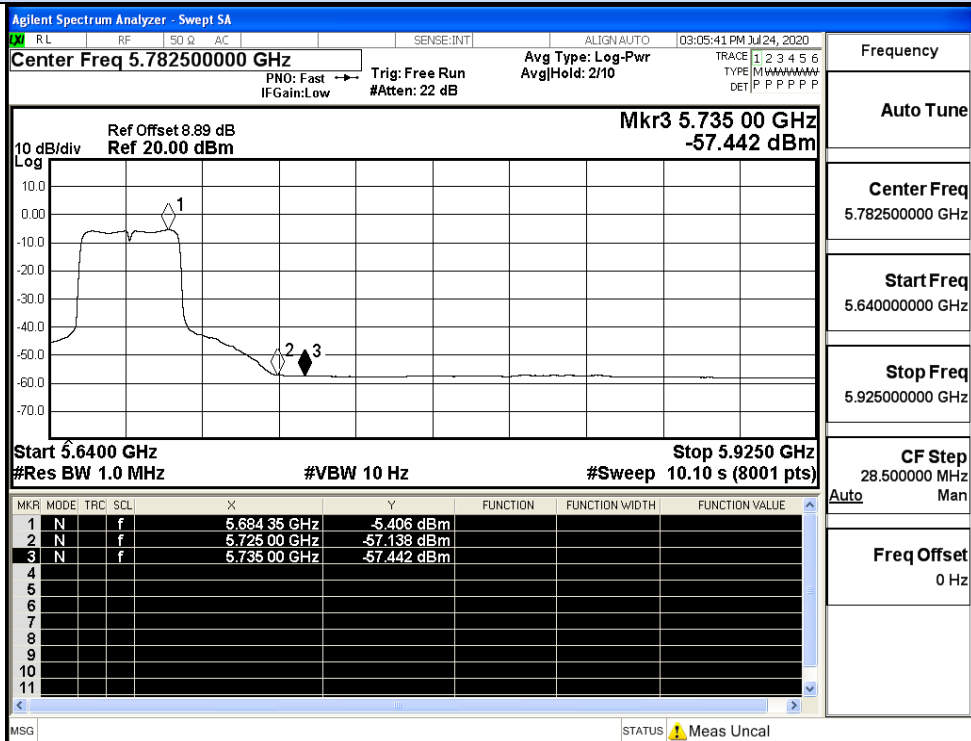


IEEE 802.11n40 / Channel 102 / 5510MHz / Average

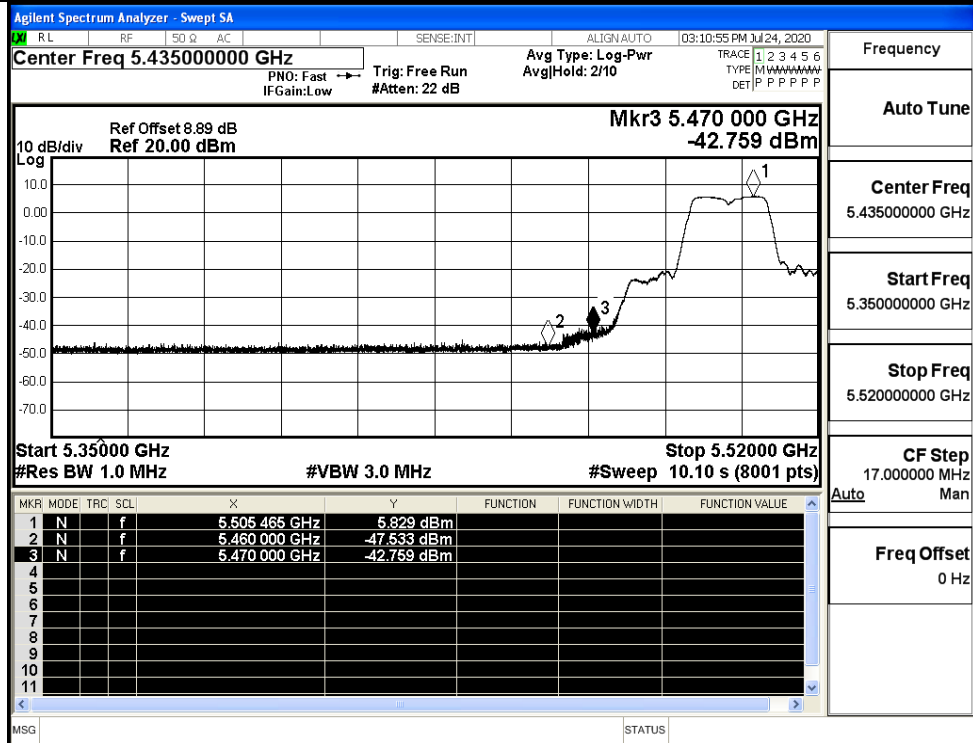
Undesirable Emissions Measurement



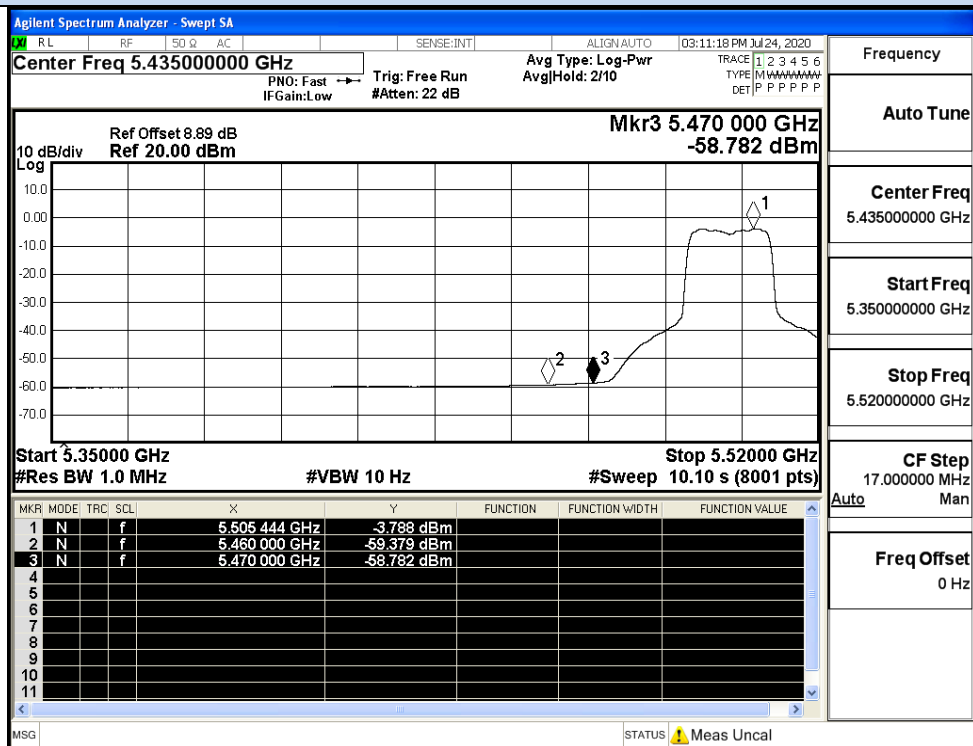
IEEE 802.11n40 / Channel 134 / 5670MHz / Peak



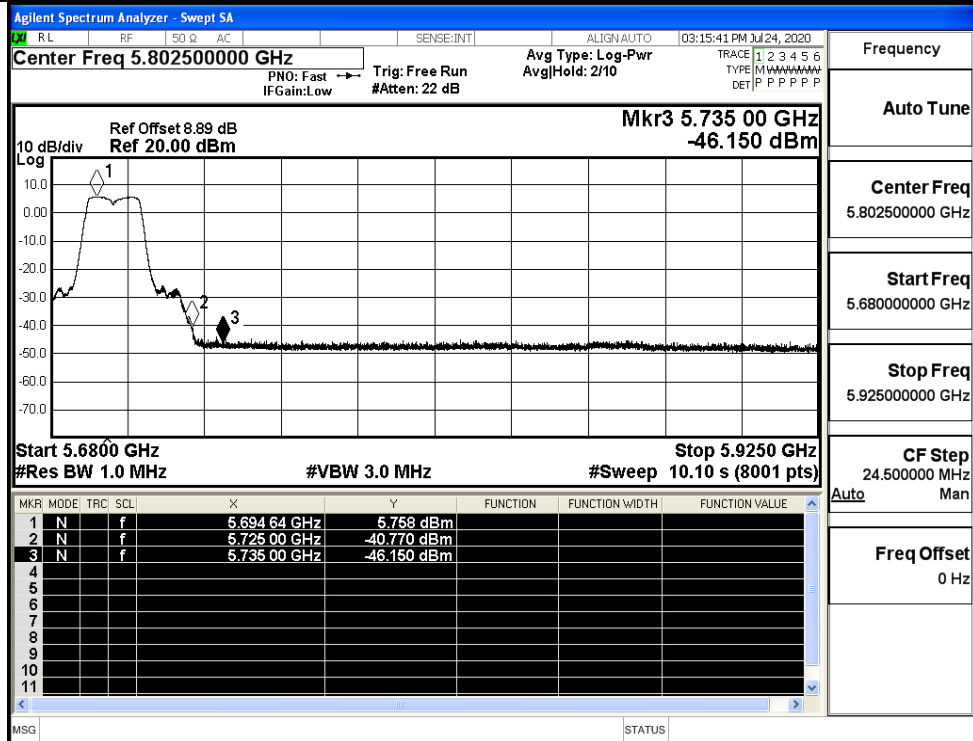
IEEE 802.11n40 / Channel 134 / 5670MHz / Average



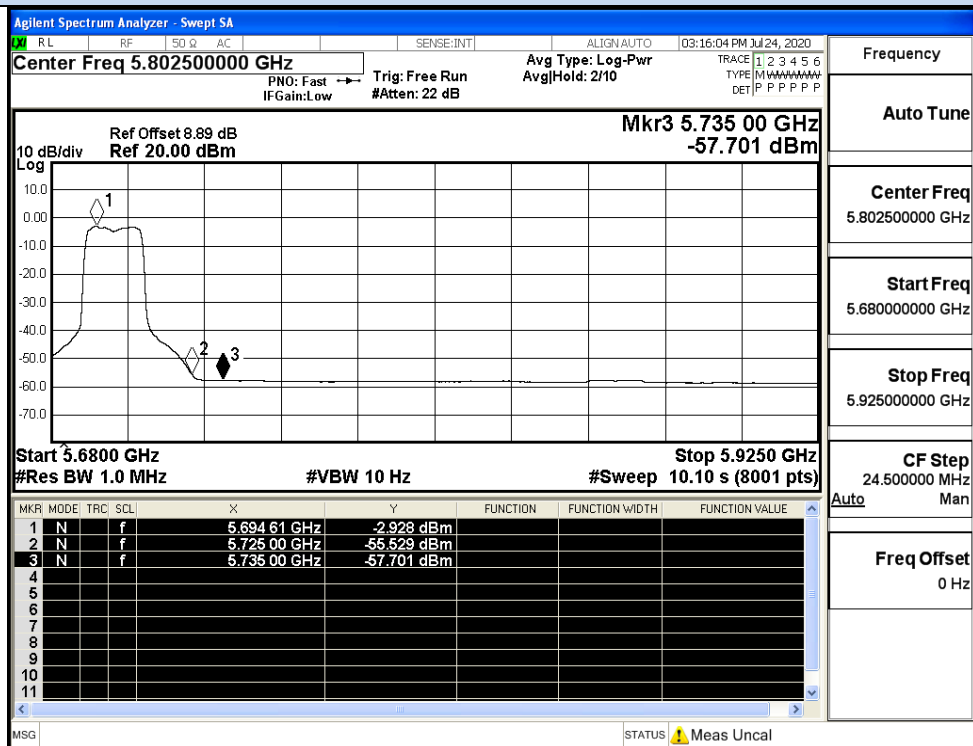
IEEE 802.11ac20 / Channel 100 / 5500MHz / Peak



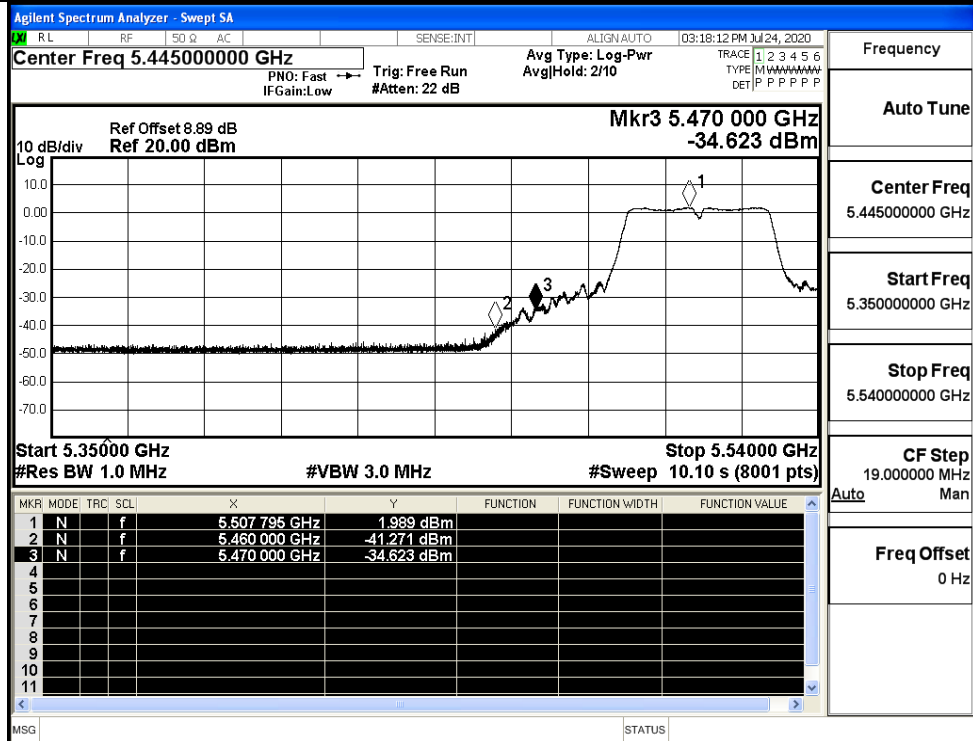
IEEE 802.11ac20 / Channel 100 / 5500MHz / Average



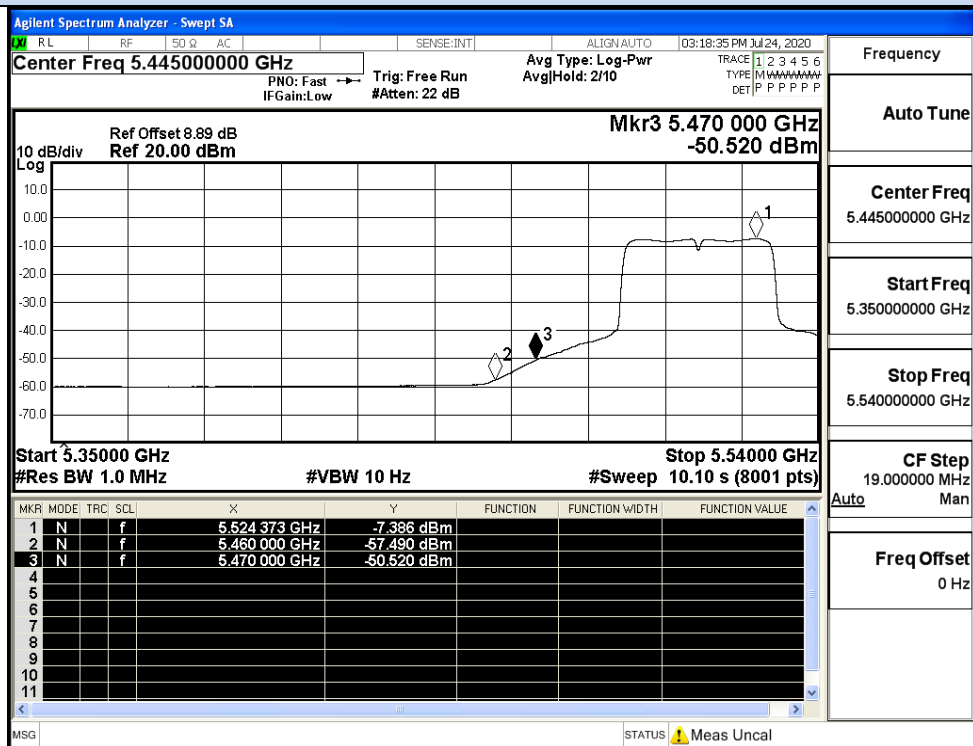
IEEE 802.11ac20 / Channel 140 / 5700MHz / Peak



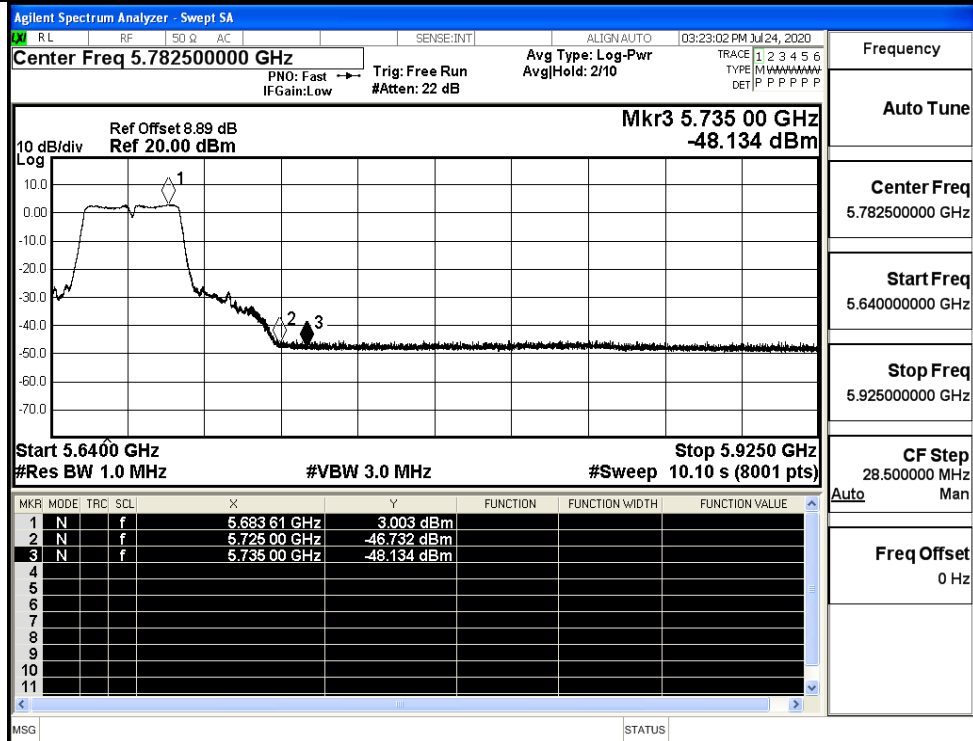
IEEE 802.11ac20 / Channel 140 / 5700MHz / Average



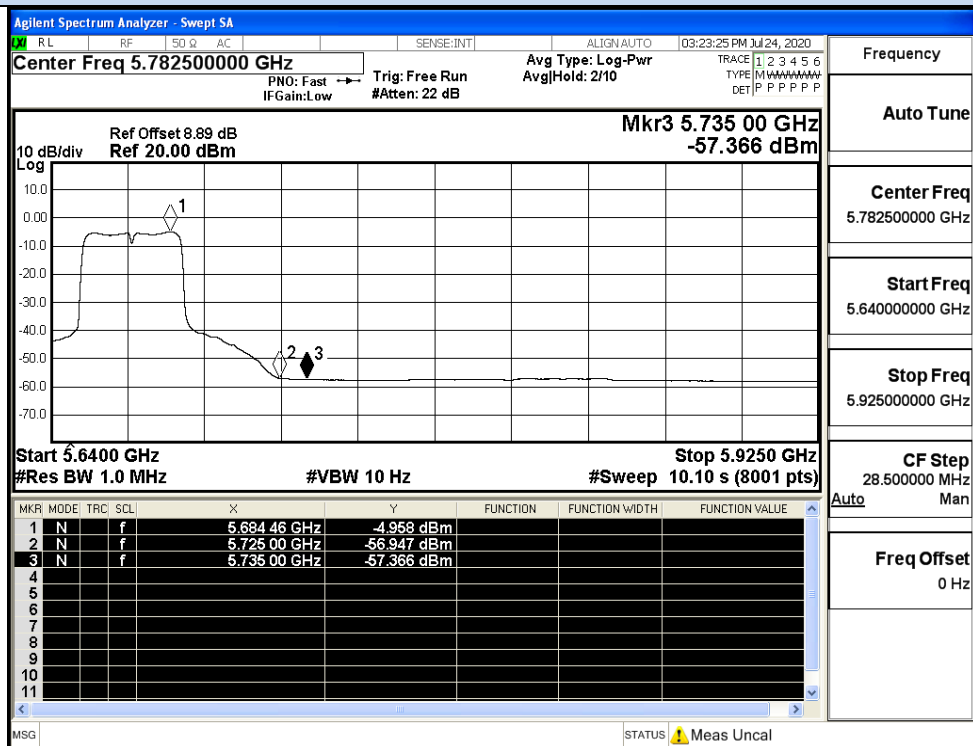
IEEE 802.11ac40 / Channel 102/ 5510MHz / Peak



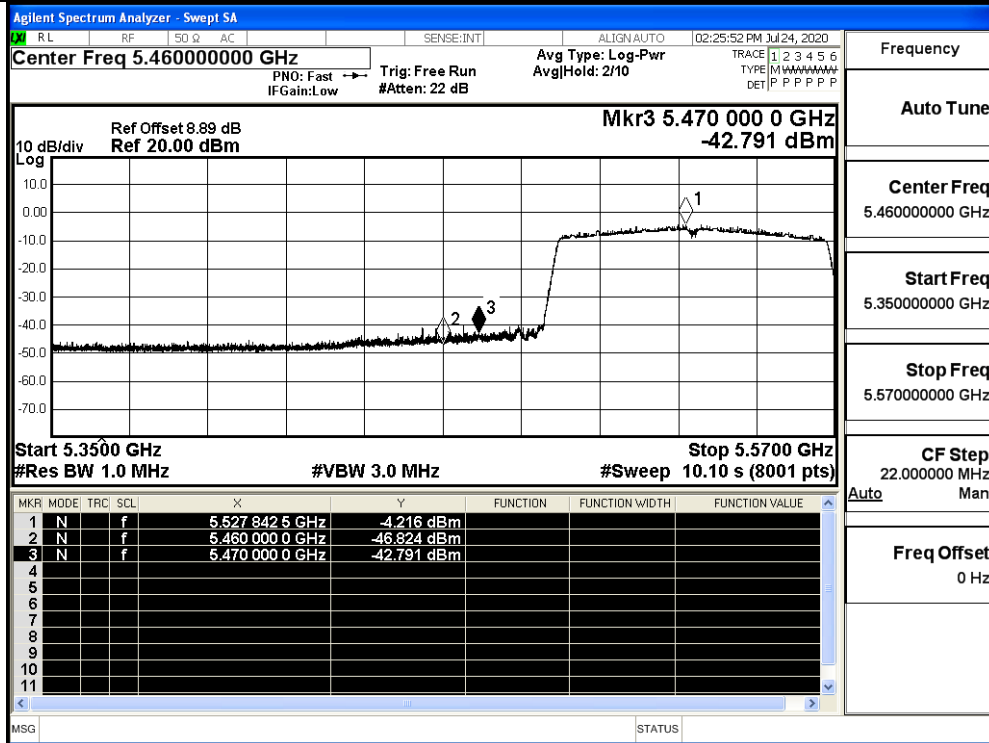
IEEE 802.11ac40 / Channel 102 / 5510MHz / Average



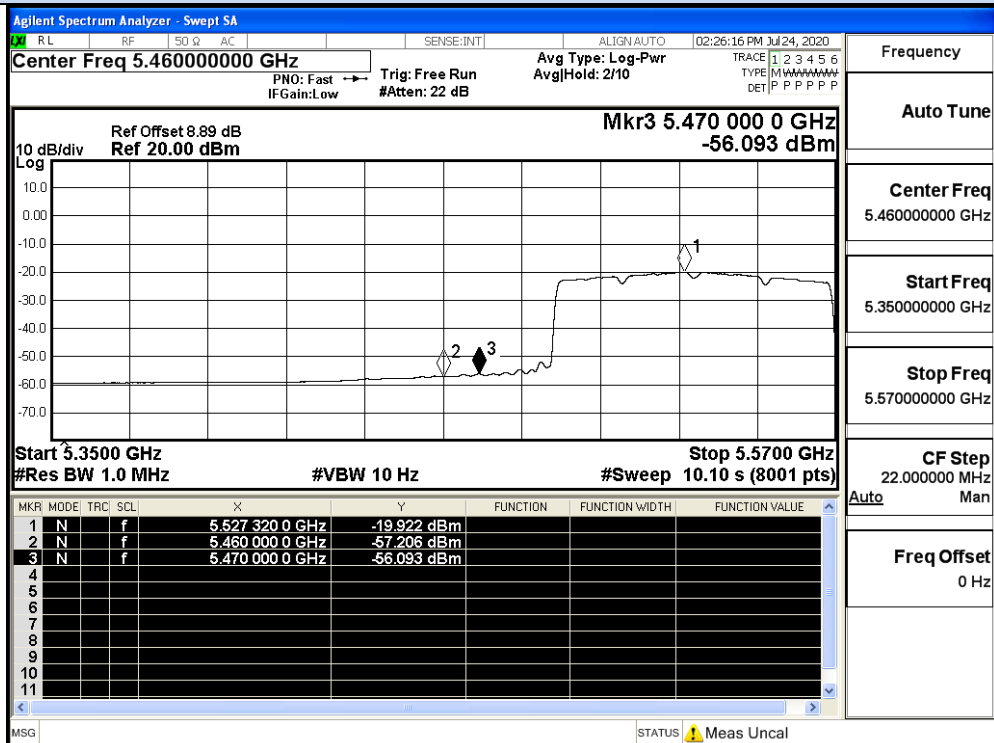
IEEE 802.11ac40 / Channel 134/ 5670MHz / Peak



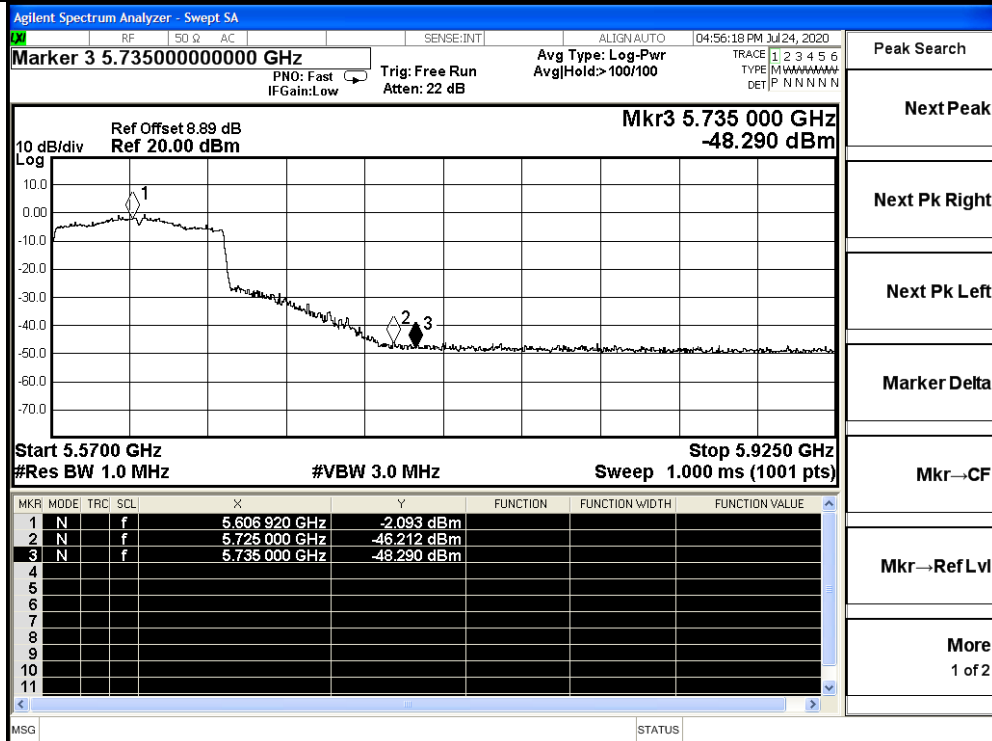
IEEE 802.11ac40 / Channel 134 / 5670MHz / Average



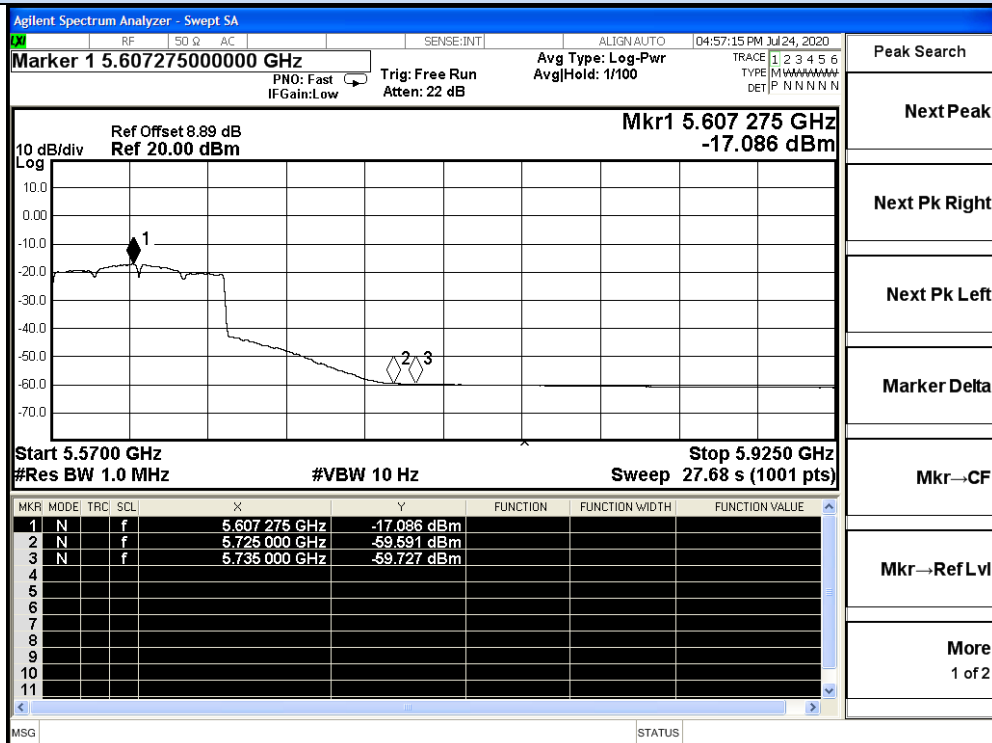
IEEE 802.11ac80 / Channel 106 / 5530MHz / Peak



IEEE 802.11ac80 / Channel 106 / 5530MHz / Average



IEEE 802.11ac80 / Channel 122/ 5610MHz / Peak



IEEE 802.11ac80 / Channel 122 / 5610MHz / Average