

Appendix E

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: DUNE HD Pro Vision 4K Solo

Trade Mark: DUNE HD

Test Model: Pro Vision 4K Solo

Environmental Conditions

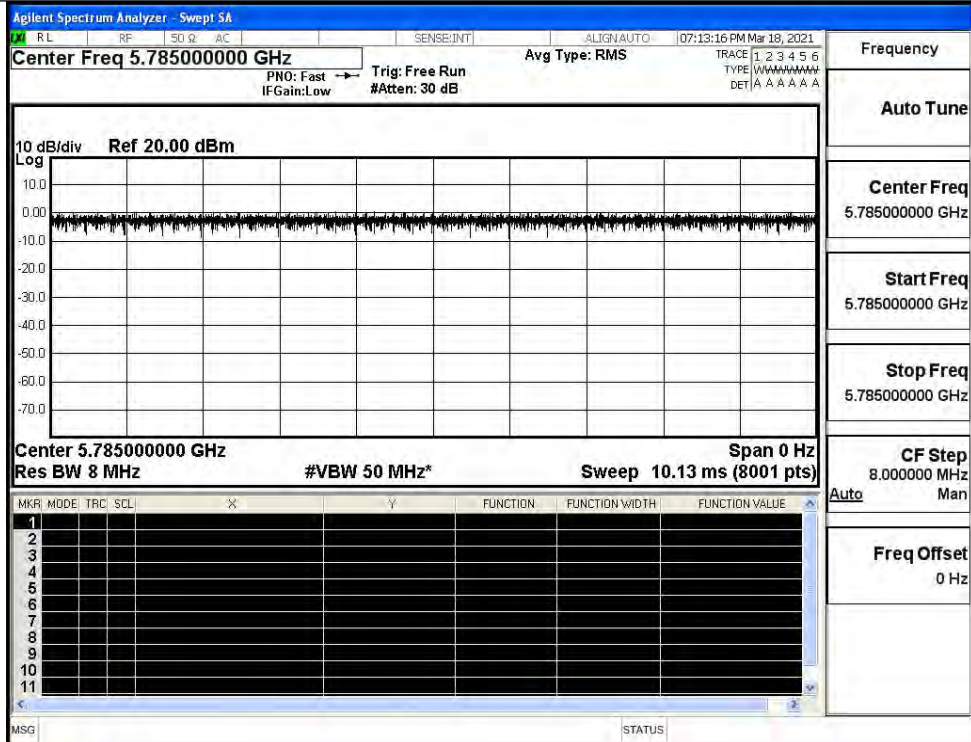
Temperature:	22.6 ° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

E.1 Duty Cycle

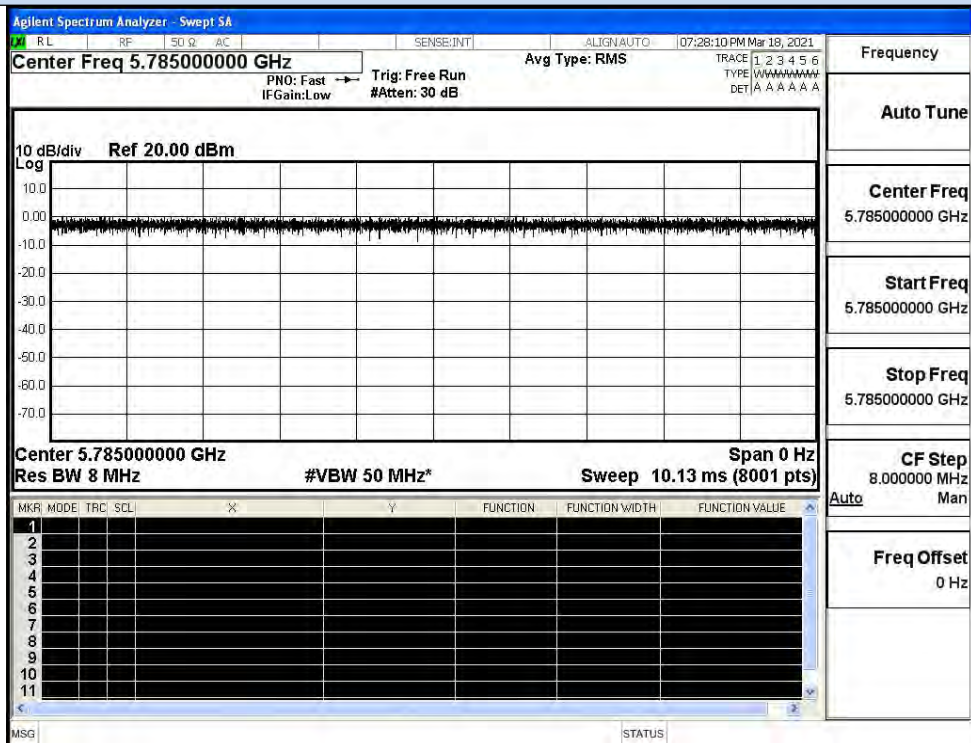
Ant0

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

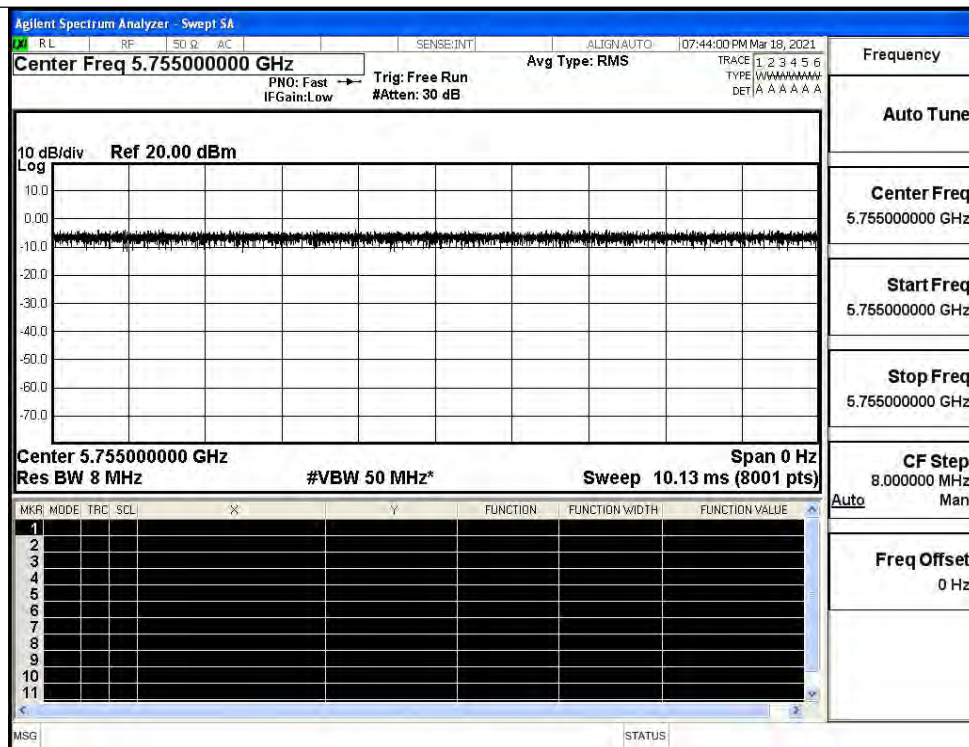
On Time and Duty Cycle



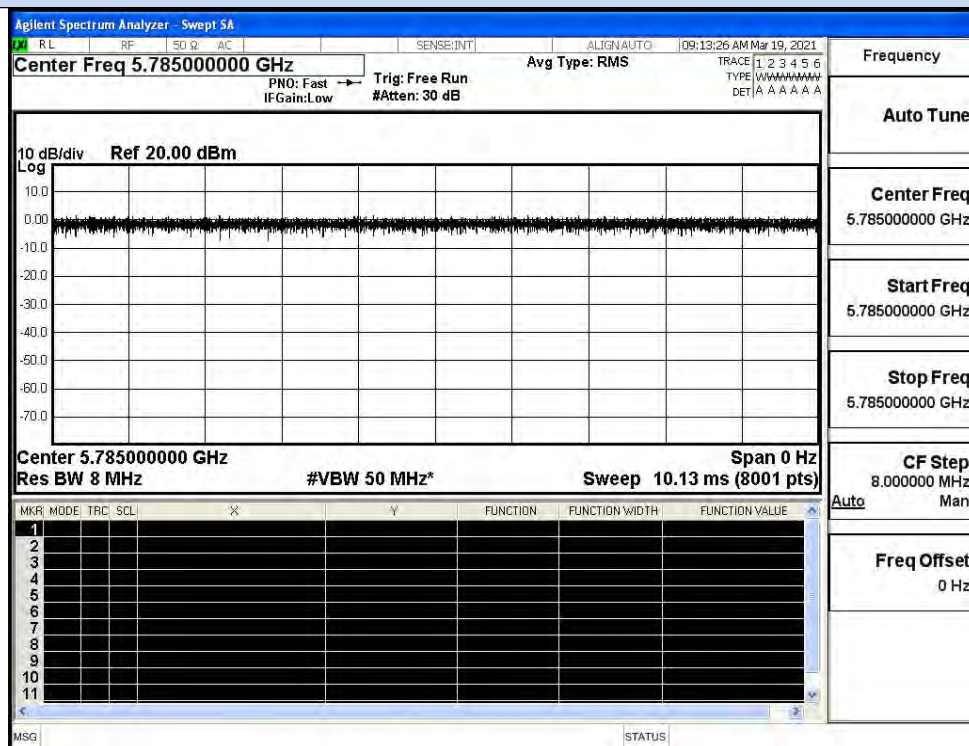
IEEE 802.11a



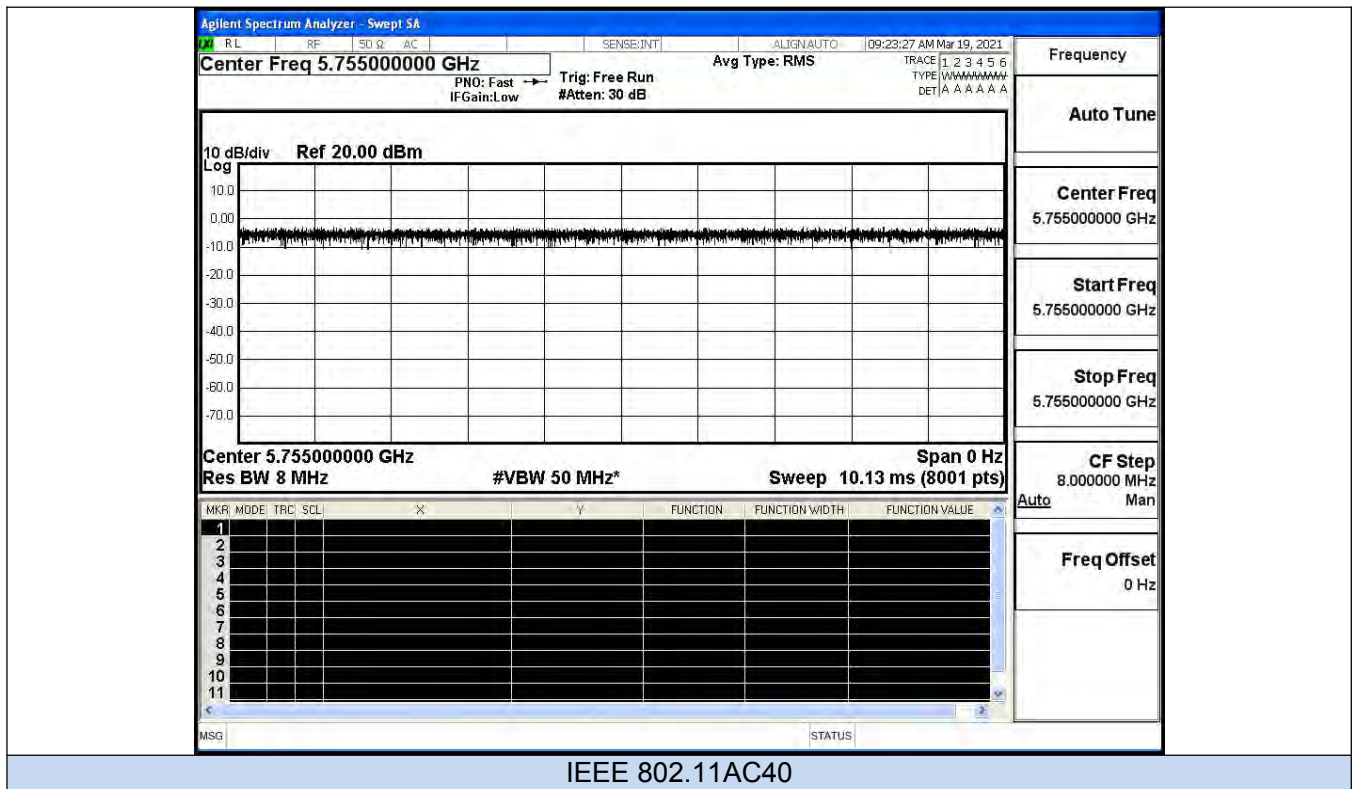
IEEE 802.11n HT20



IEEE 802.11n HT40



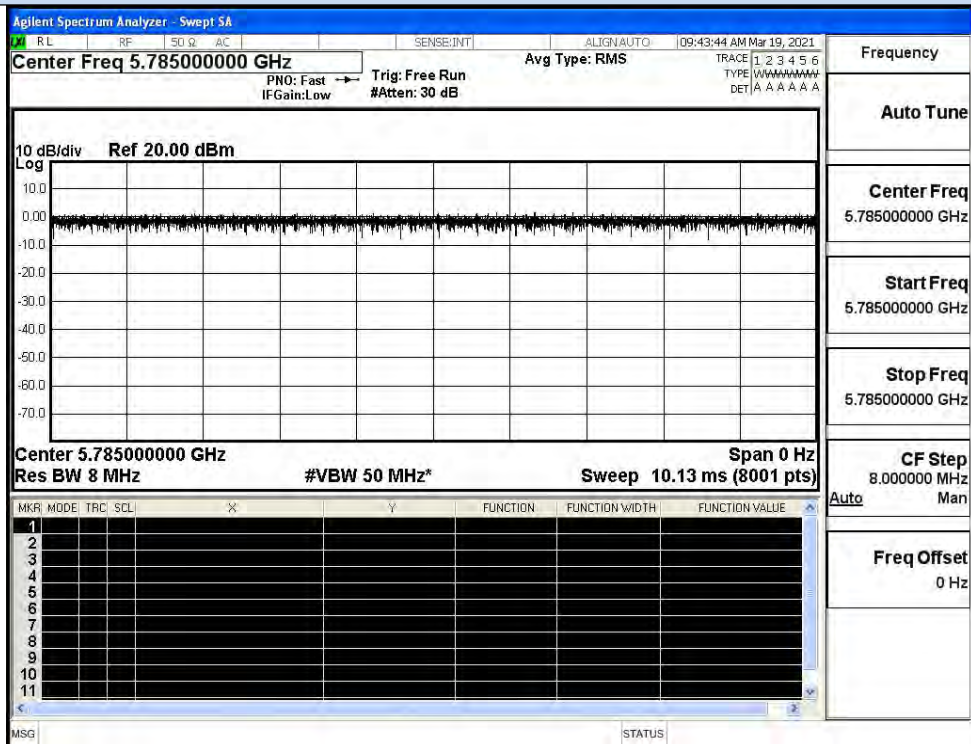
IEEE 802.11AC20



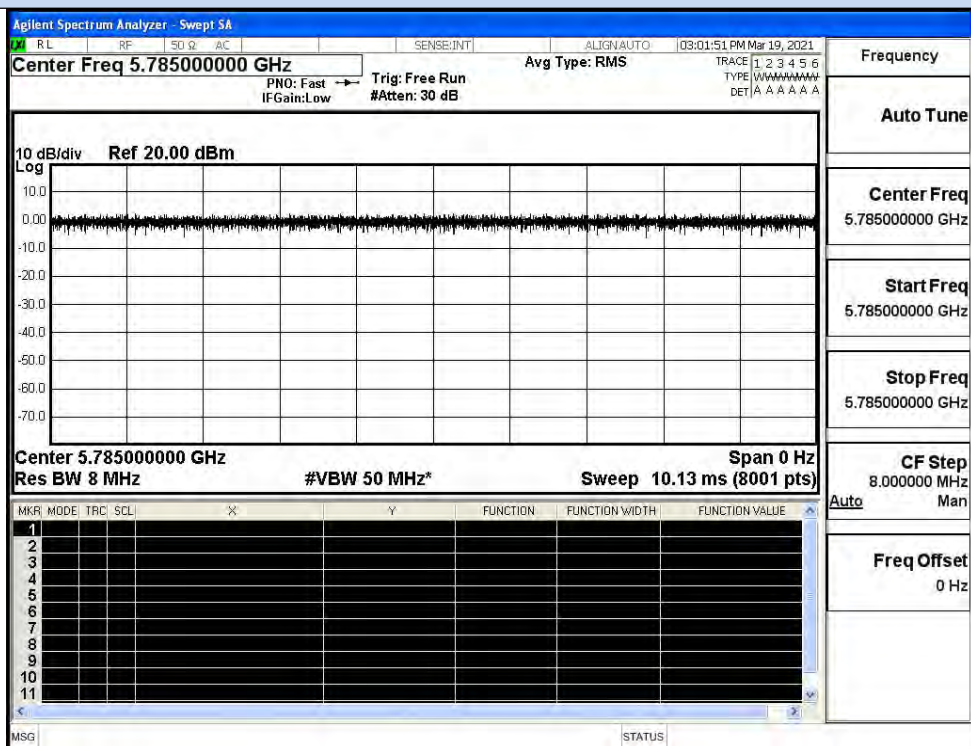
Ant1

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

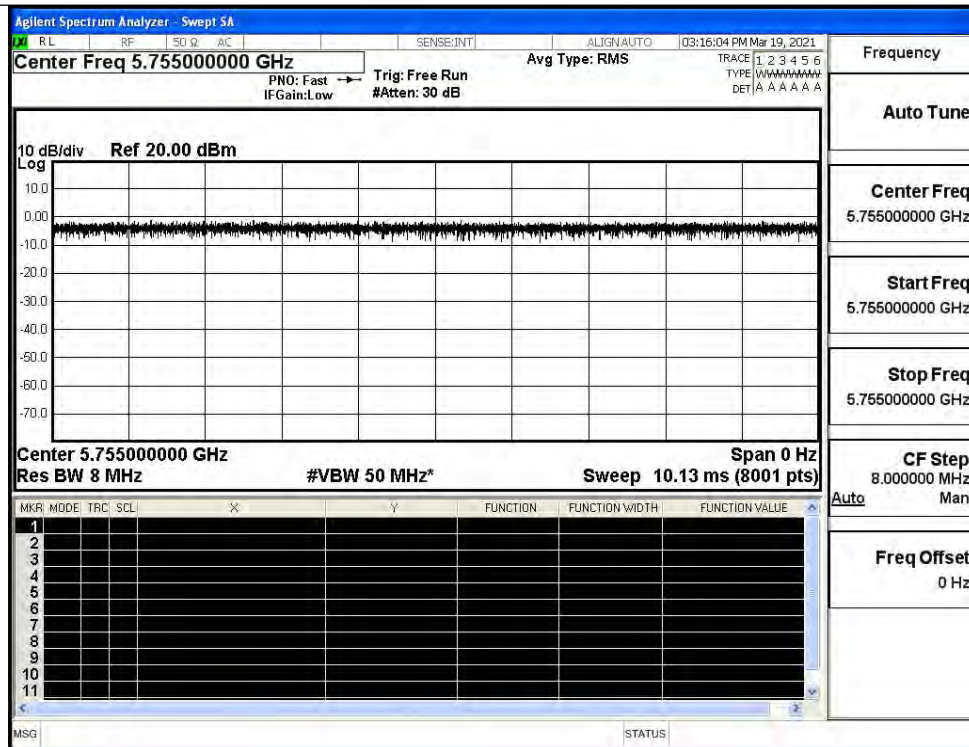
On Time and Duty Cycle



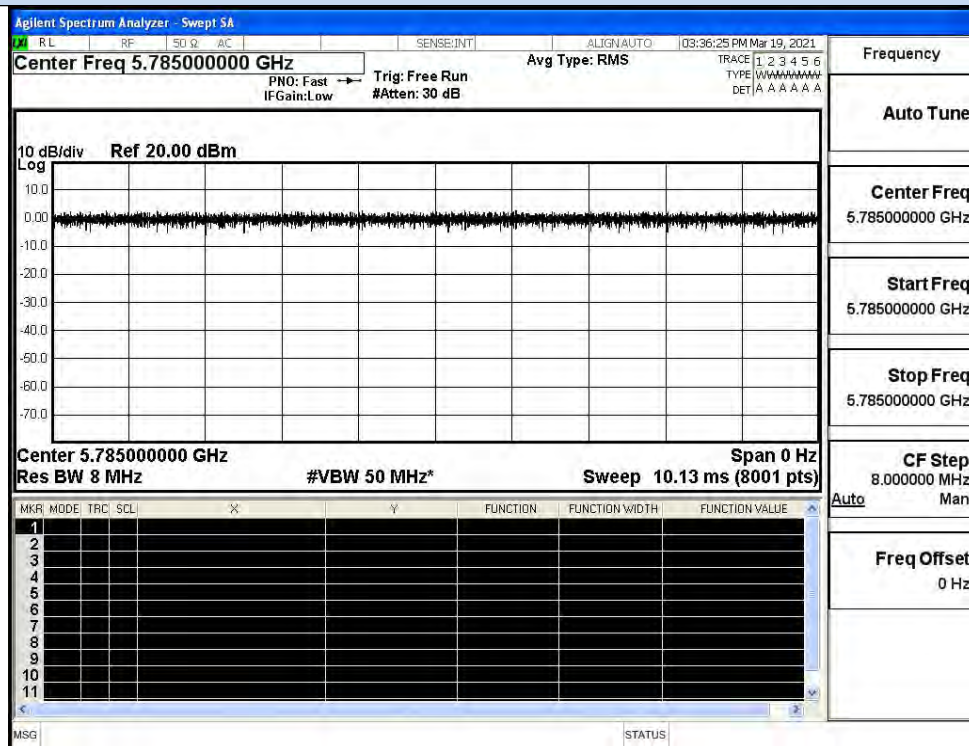
IEEE 802.11a



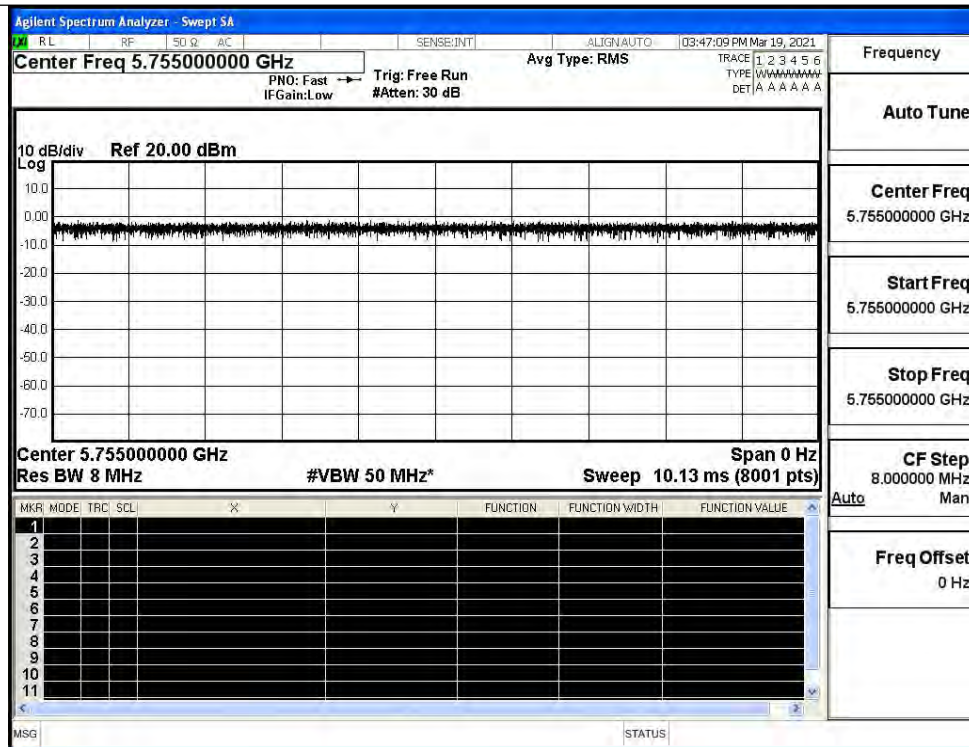
IEEE 802.11n HT20



IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40

E.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	149	5745	13.60	0	13.60	30	Pass
	157	5785	14.04	0	14.04		Pass
	165	5825	14.59	0	14.59		Pass
11N20 SISO	149	5745	13.75	0	13.75	30	Pass
	157	5785	14.33	0	14.33		Pass
	165	5825	14.87	0	14.87		Pass
11N40 SISO	151	5755	13.56	0	13.56	30	Pass
	159	5795	14.29	0	14.29		Pass
11AC20 SISO	149	5745	14.99	0	14.99	30	Pass
	157	5785	14.71	0	14.71		Pass
	165	5825	14.32	0	14.32		Pass
11AC40 SISO	151	5755	15.30	0	15.30	30	Pass
	159	5795	14.97	0	14.97		Pass

Ant1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	149	5745	14.38	0	14.38	30	Pass
	157	5785	15.18	0	15.18		Pass
	165	5825	15.83	0	15.83		Pass
11N20 SISO	149	5745	16.30	0	16.30	30	Pass
	157	5785	16.52	0	16.52		Pass
	165	5825	16.88	0	16.88		Pass
11N40 SISO	151	5755	16.24	0	16.24	30	Pass
	159	5795	16.79	0	16.79		Pass
11AC20 SISO	149	5745	16.24	0	16.24	30	Pass
	157	5785	16.11	0	16.11		Pass
	165	5825	15.77	0	15.77		Pass
11AC40 SISO	151	5755	15.81	0	15.81	30	Pass
	159	5795	15.53	0	15.53		Pass

ANT0+ANT1:

Test Mode	Channel	Frequency (MHz)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)			Limit (dBm)	Verdict
				Ant0	Ant1	Sum		
11N20 MIMO	149	5745	0	13.75	16.30	18.22	30	Pass
	157	5785	0	14.33	16.52	18.57		Pass
	165	5825	0	14.87	16.88	19.00		Pass
11N40 MIMO	151	5755	0	13.56	16.24	18.11	30	Pass
	159	5795	0	14.29	16.79	18.73		Pass
11AC20 MIMO	149	5745	0	14.99	16.24	18.67	30	Pass
	157	5785	0	14.71	16.11	18.48		Pass
	165	5825	0	14.32	15.77	18.12		Pass
11AC40 MIMO	151	5755	0	15.30	15.81	18.57	30	Pass
	159	5795	0	14.97	15.53	18.27		Pass

E.3 Power Spectral Density

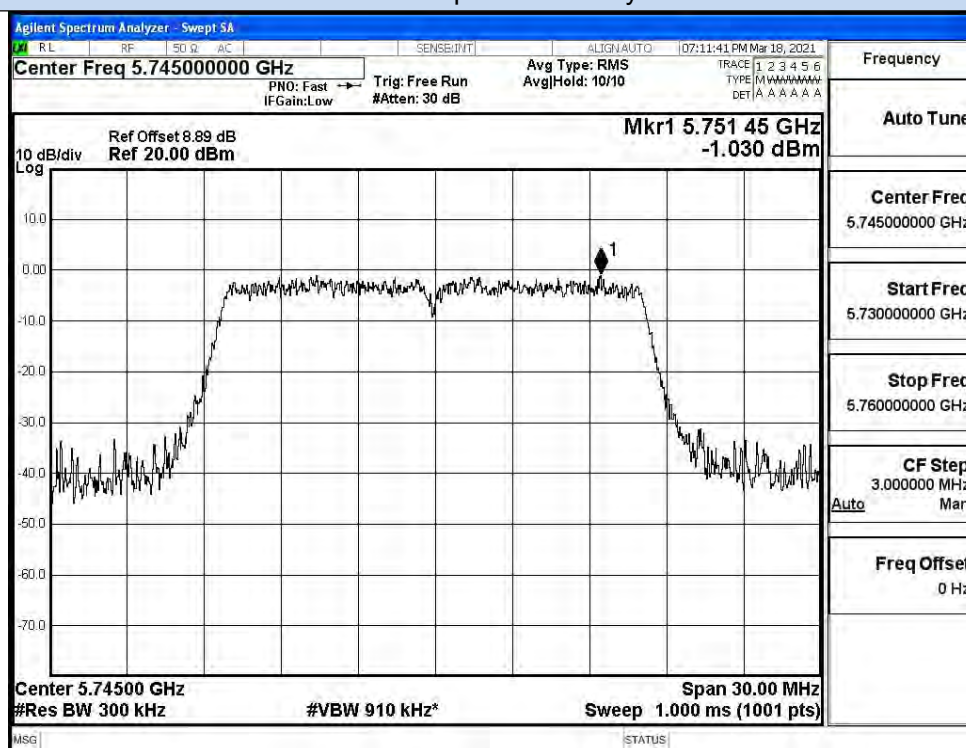
Ant0

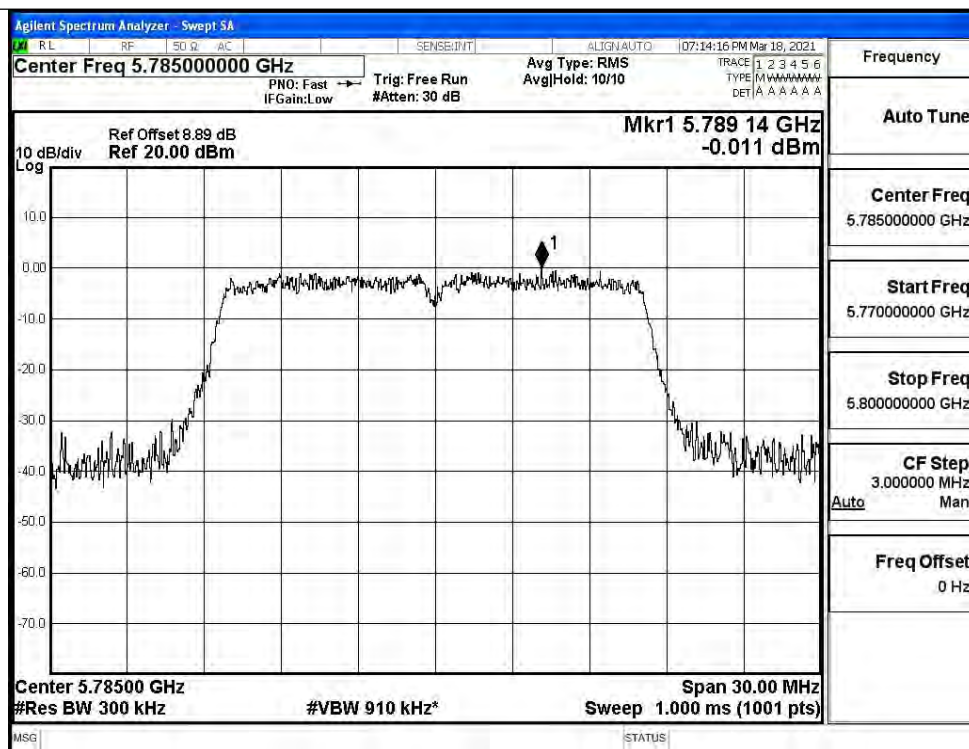
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
11A	149	5745	-1.03	0	2.218	1.19	30	Pass
	157	5785	-0.01	0	2.218	2.21		Pass
	165	5825	0.70	0	2.218	2.91		Pass
11N20 SISO	149	5745	-1.11	0	2.218	1.11	30	Pass
	157	5785	-0.52	0	2.218	1.70		Pass
	165	5825	0.14	0	2.218	2.35		Pass
11N40 SISO	151	5755	-3.56	0	2.218	-1.34	30	Pass
	159	5795	-3.84	0	2.218	-1.62		Pass
11AC20 SISO	149	5745	0.52	0	2.218	2.73	30	Pass
	157	5785	0.54	0	2.218	2.75		Pass
	165	5825	1.59	0	2.218	3.81		Pass
11AC40 SISO	151	5755	-2.80	0	2.218	-0.58	30	Pass
	159	5795	-1.98	0	2.218	0.24		Pass

Note: RBW factor = $10 \log (500 \text{ KHz} / 300 \text{ KHz}) = 2.218 \text{ dB}$;

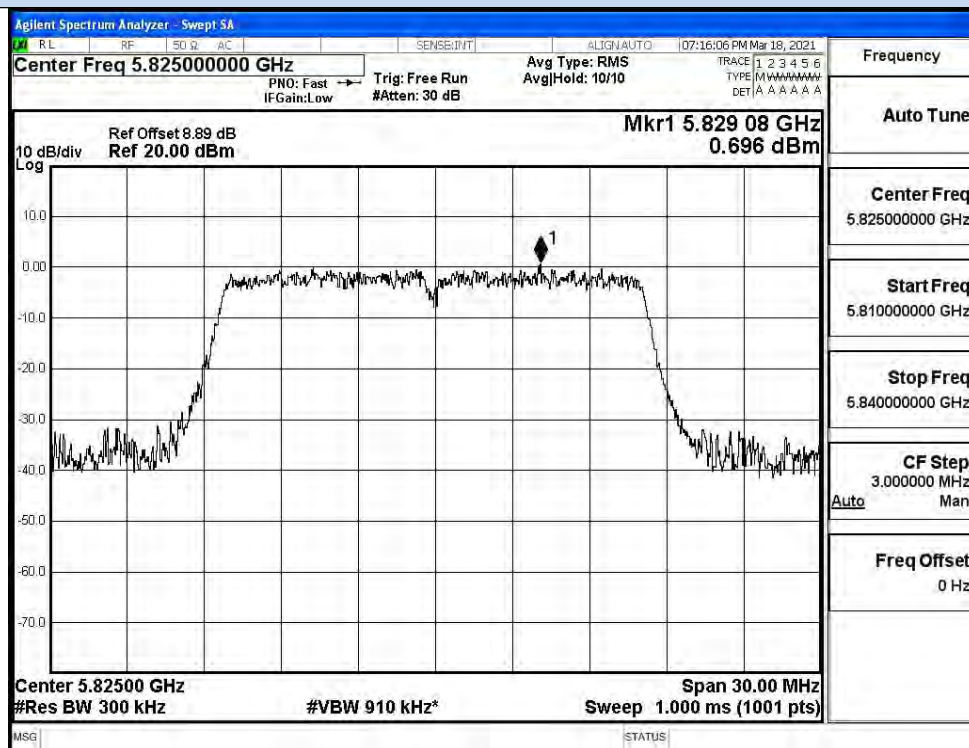
Report conducted PSD = measured conducted PSD + Duty Cycle factor + RBW factor.

Power Spectral Density



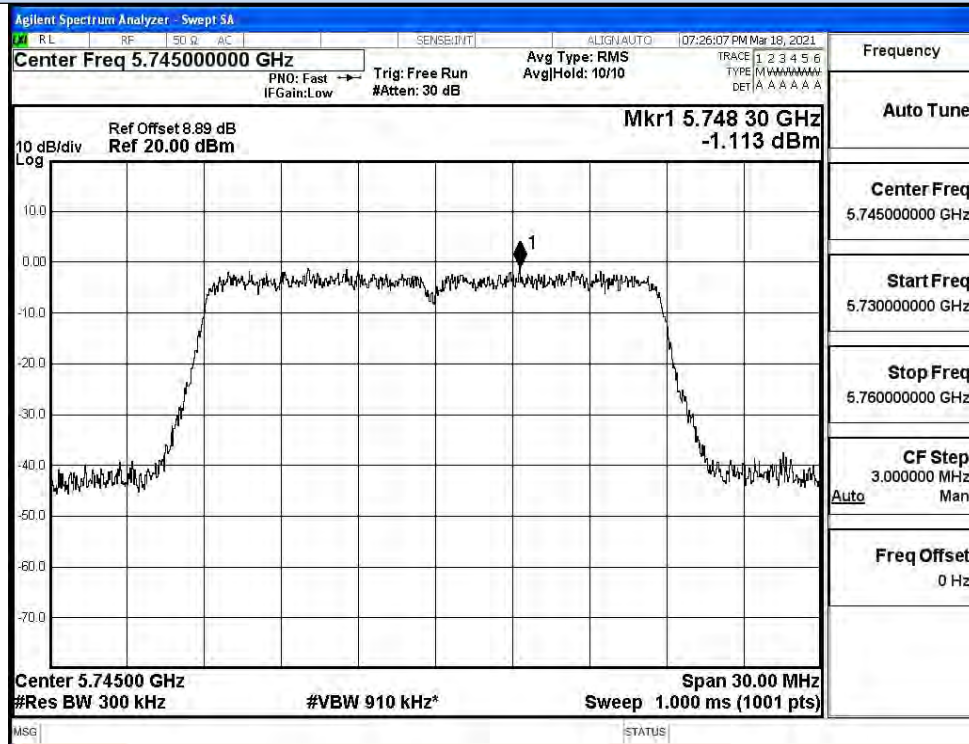


IEEE 802.11na / Channel 157 / 5785MHz

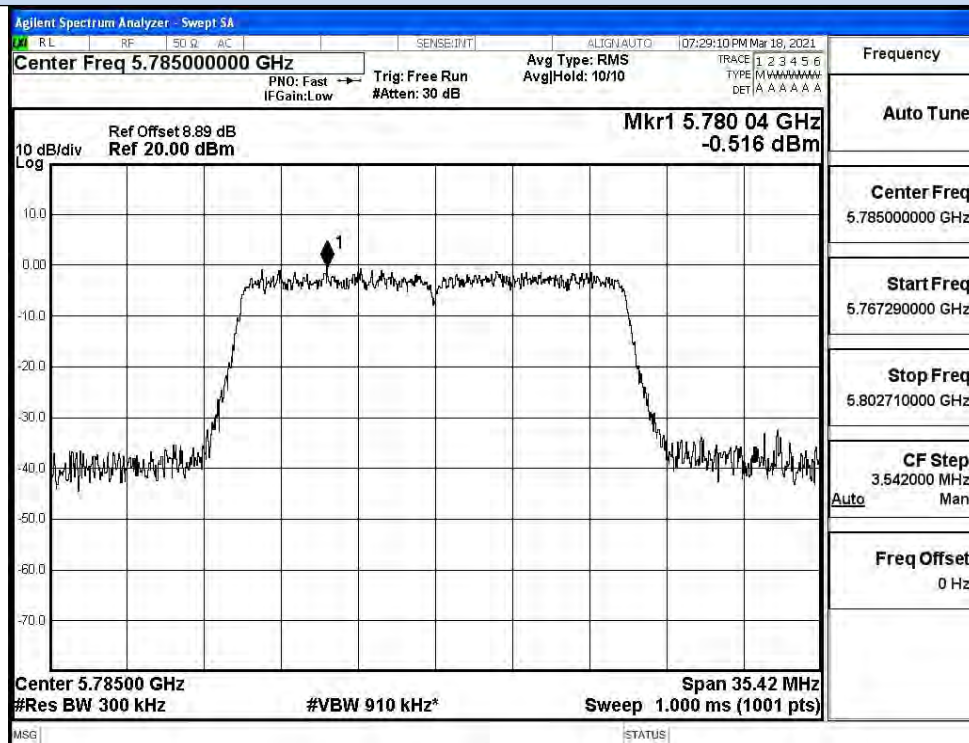


IEEE 802.11na / Channel 165 / 5825MHz

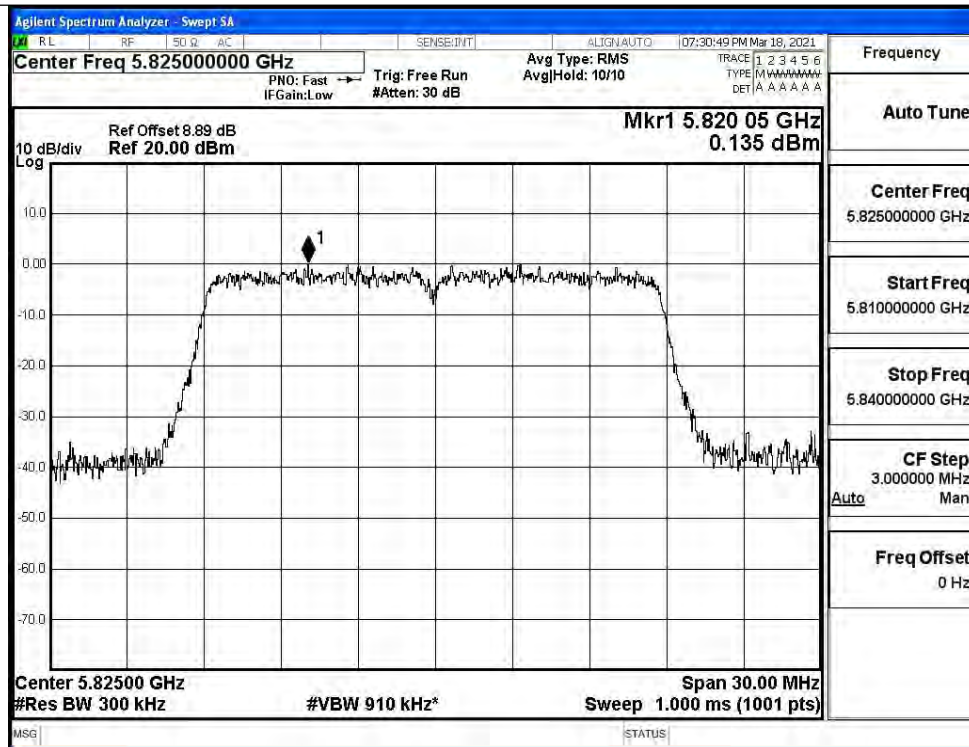
Power Spectral Density



IEEE 802.11n20 / Channel 149 / 5745MHz

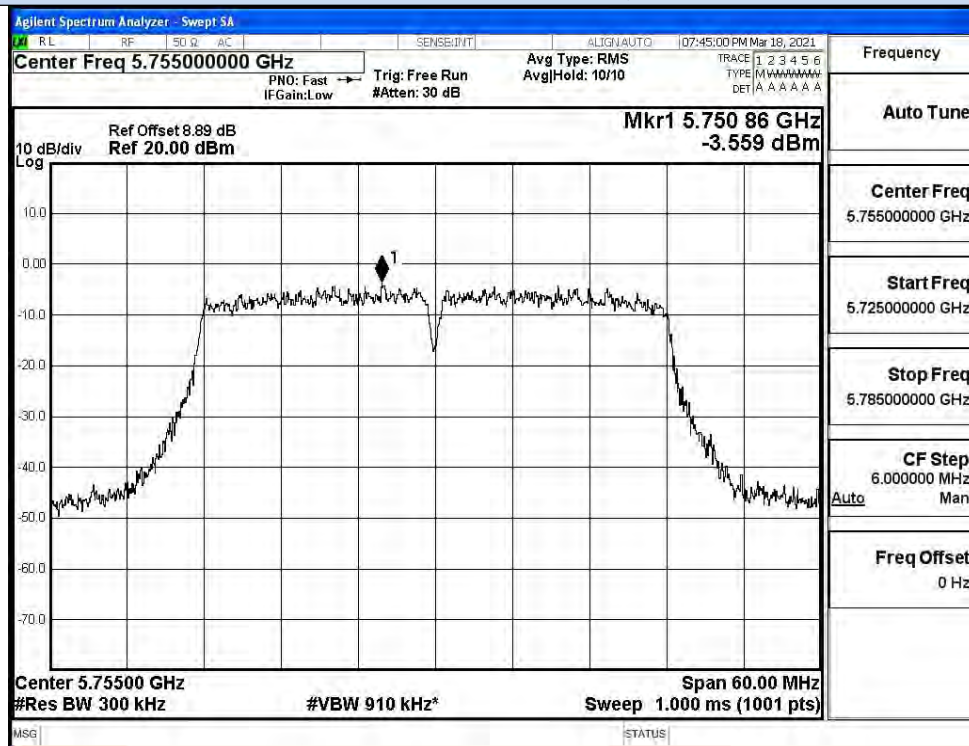


IEEE 802.11n20 / Channel 157 / 5785MHz

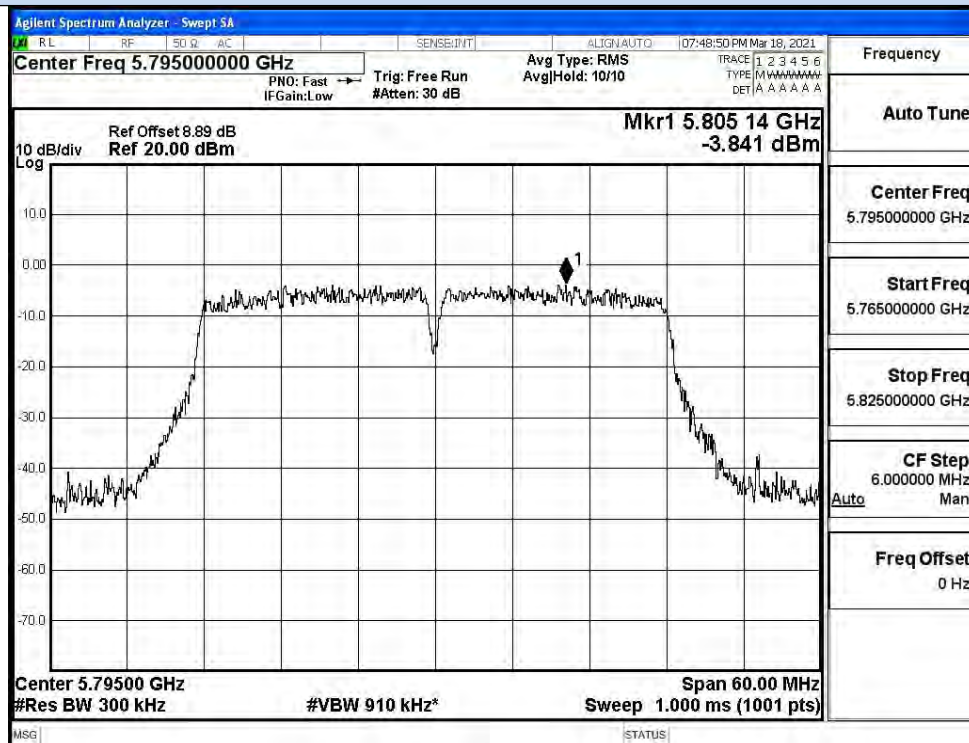


IEEE 802.11n20 / Channel 165 / 5825MHz

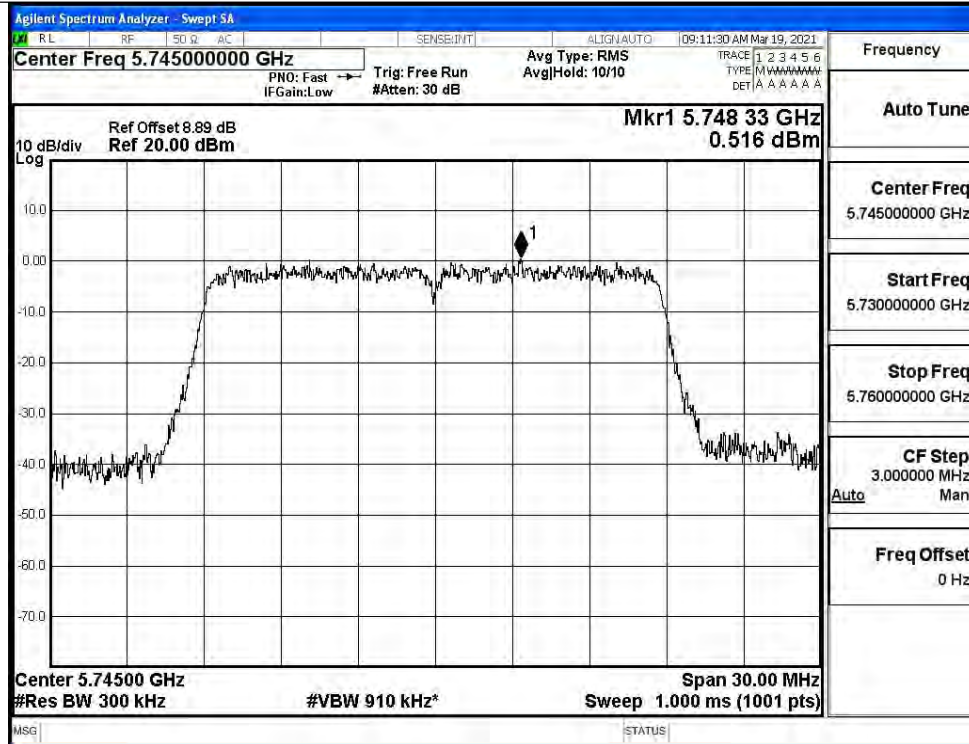
Power Spectral Density



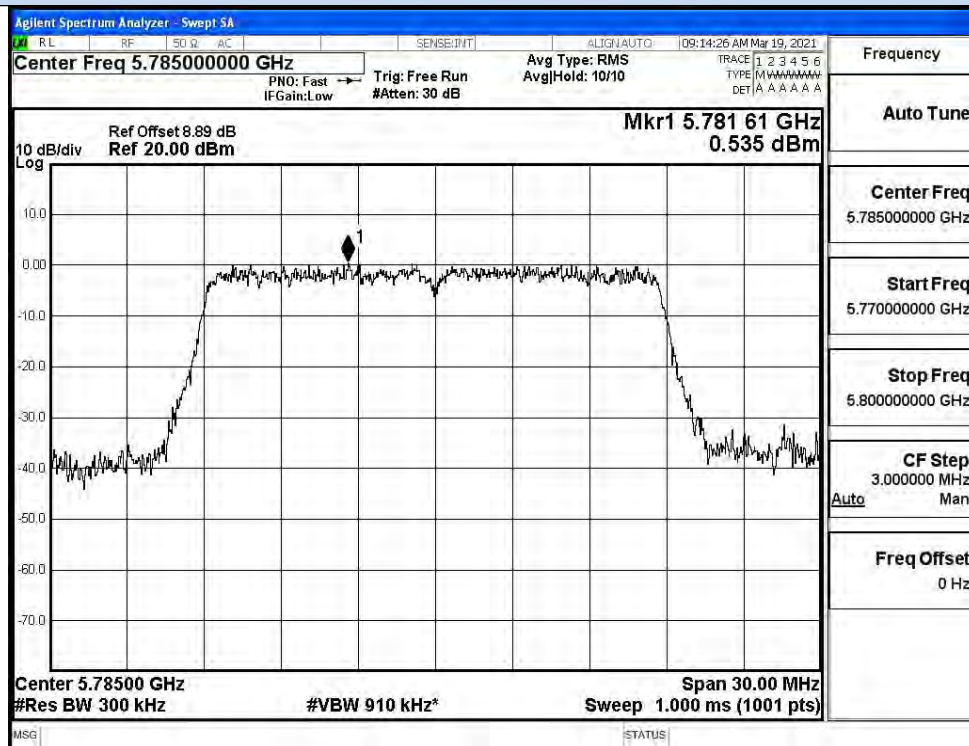
IEEE 802.11n40 / Channel 151 / 5755MHz



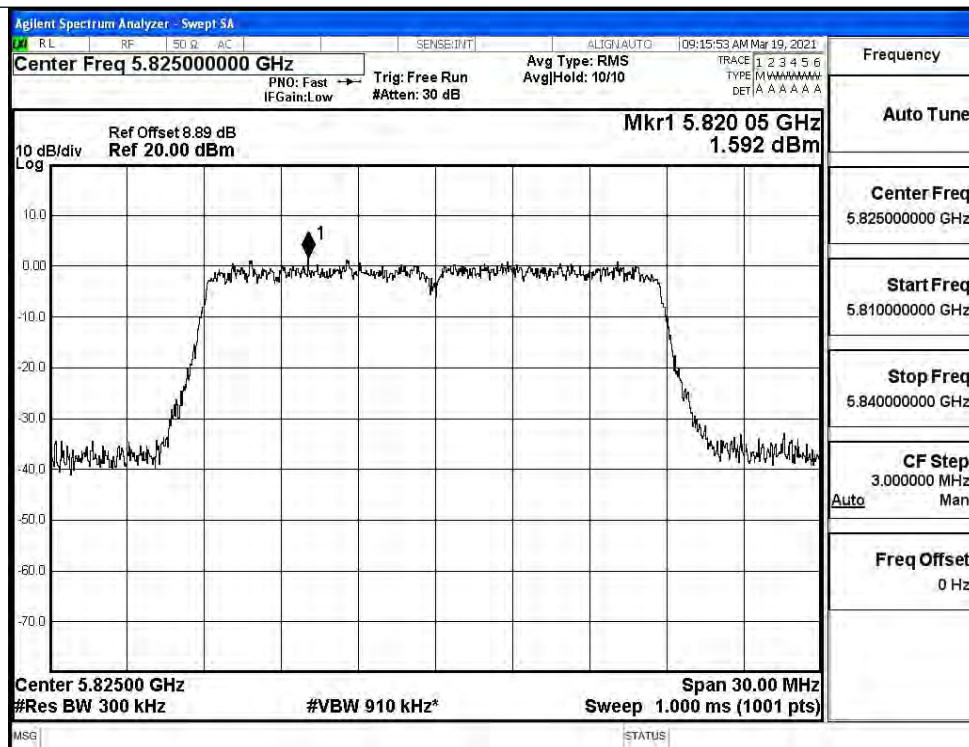
IEEE 802.11n40 / Channel 159 / 5795MHz



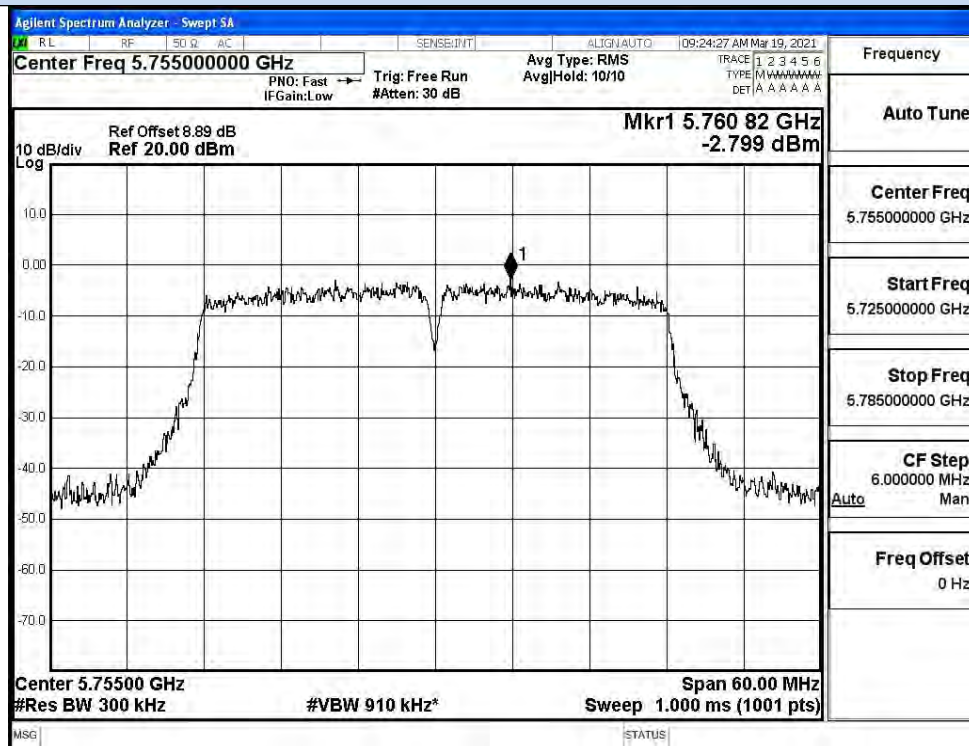
IEEE 802.11ac20 / Channel 149 / 5745MHz



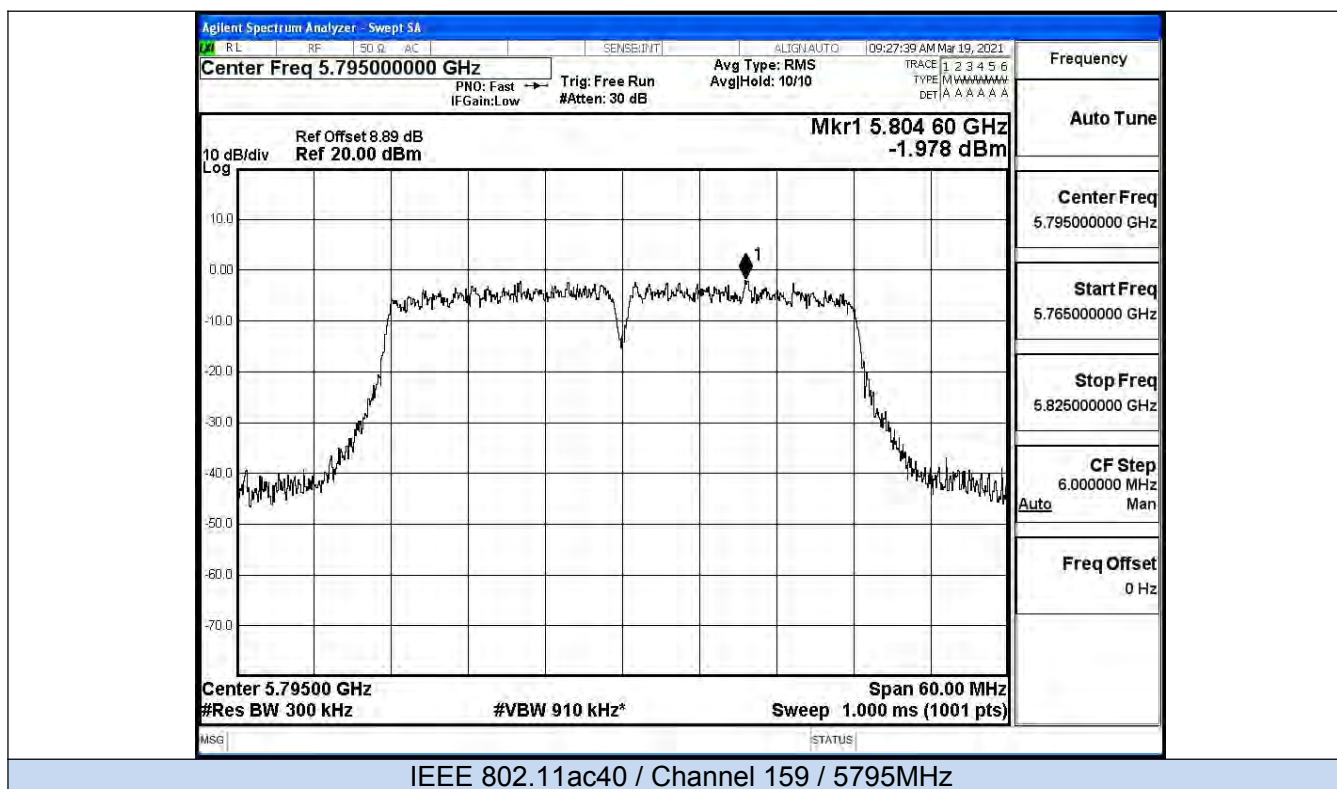
IEEE 802.11ac20 / Channel 157 / 5785MHz



IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



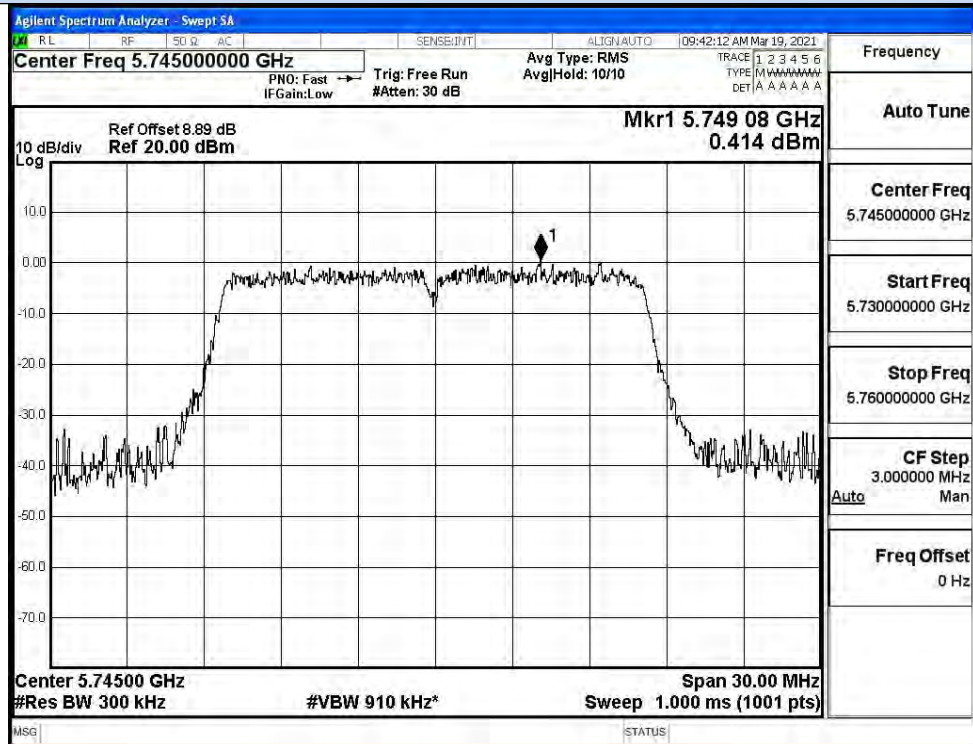
Ant1

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	0.41	0	2.218	2.63	30	Pass
	157	5785	0.84	0	2.218	3.06		Pass
	165	5825	1.30	0	2.218	3.52		Pass
11N20 SISO	149	5745	1.26	0	2.218	3.48	30	Pass
	157	5785	1.50	0	2.218	3.72		Pass
	165	5825	1.83	0	2.218	4.05		Pass
11N40 SISO	151	5755	-1.59	0	2.218	0.63	30	Pass
	159	5795	-0.53	0	2.218	1.69		Pass
11AC20 SISO	149	5745	1.54	0	2.218	3.76	30	Pass
	157	5785	1.82	0	2.218	4.04		Pass
	165	5825	2.20	0	2.218	4.42		Pass
11AC40 SISO	151	5755	-1.61	0	2.218	0.61	30	Pass
	159	5795	-0.47	0	2.218	1.75		Pass

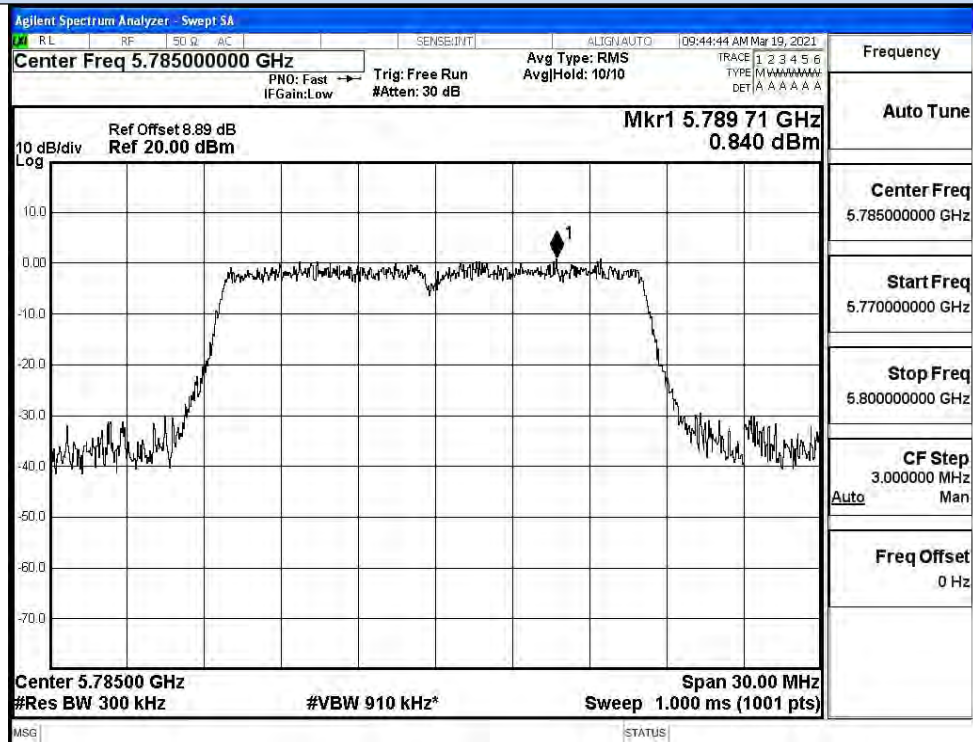
Note: RBW factor = $10 \log (500 \text{ KHz} / 300 \text{ KHz}) = 2.218 \text{ dB}$;

Report conducted PSD = measured conducted PSD + Duty Cycle factor + RBW factor.

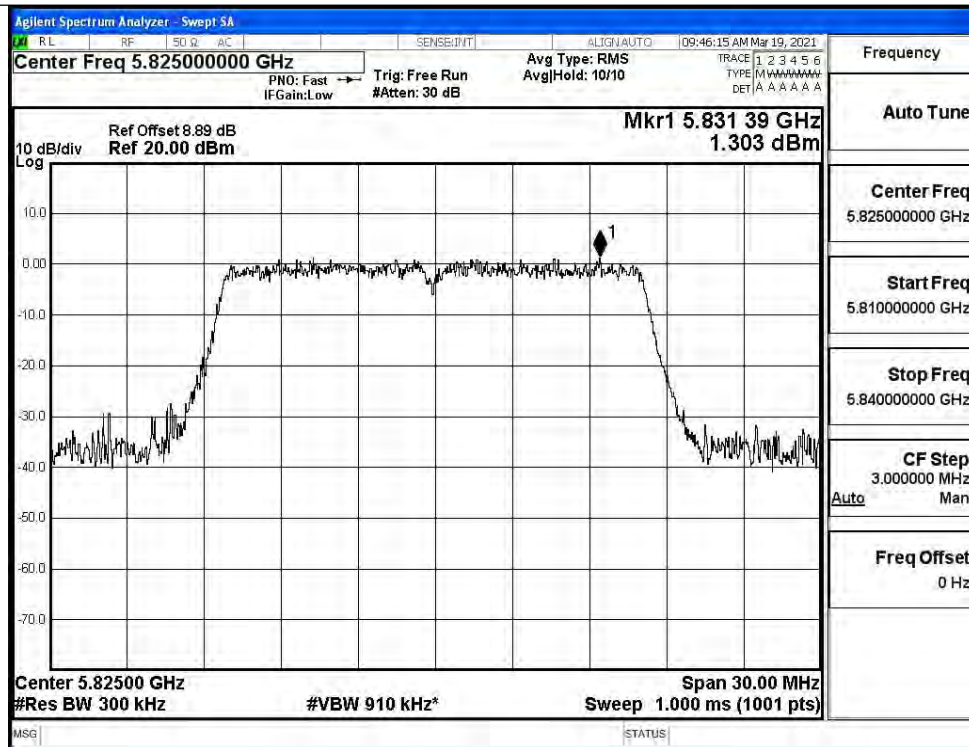
Power Spectral Density



IEEE 802.11a / Channel 149 / 5745MHz

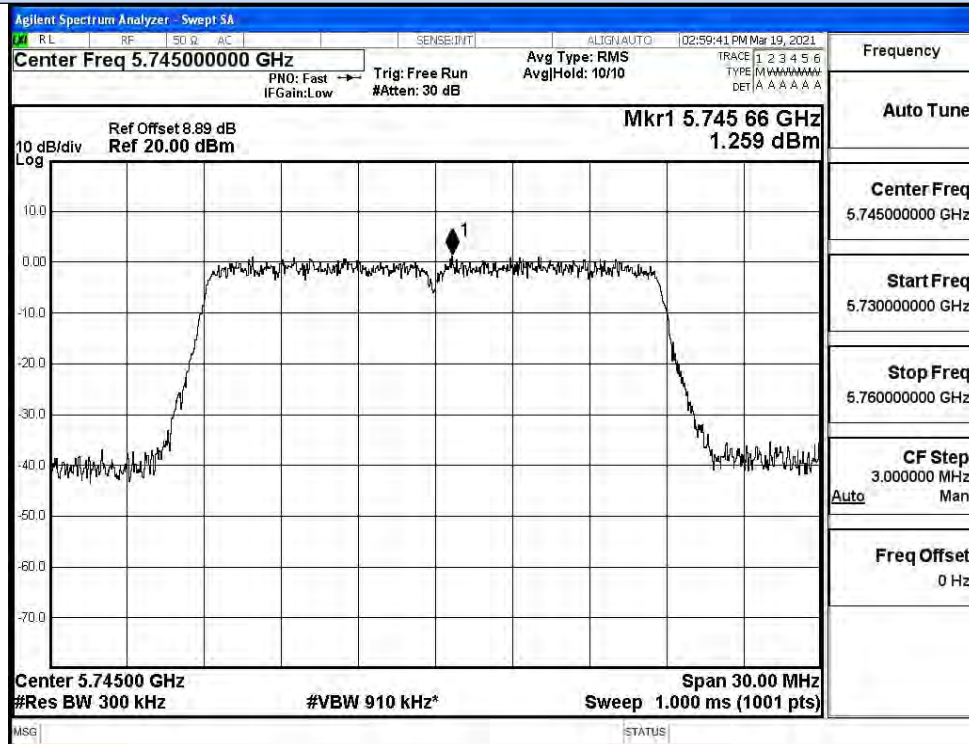


IEEE 802.11a / Channel 157 / 5785MHz

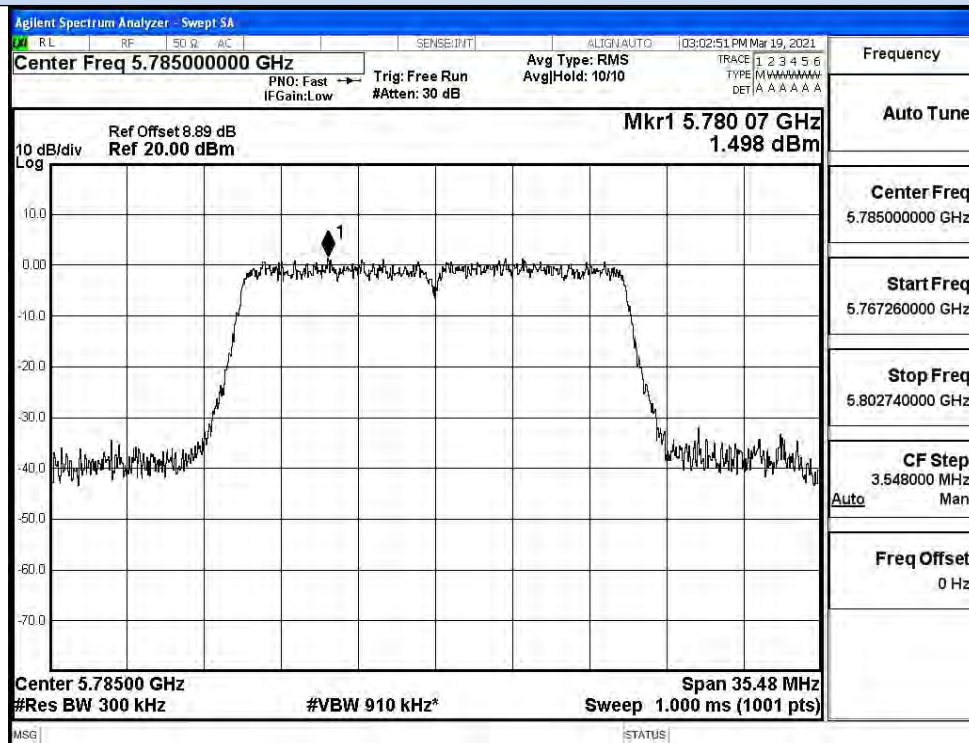


IEEE 802.11na / Channel 165 / 5825MHz

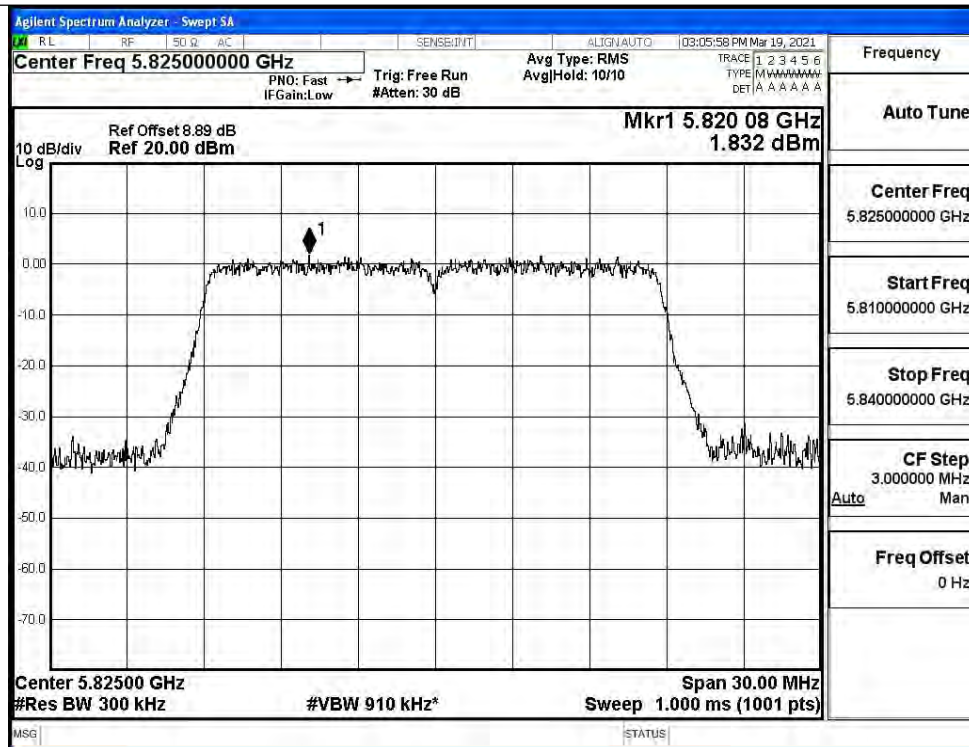
Power Spectral Density



IEEE 802.11n20 / Channel 149 / 5745MHz

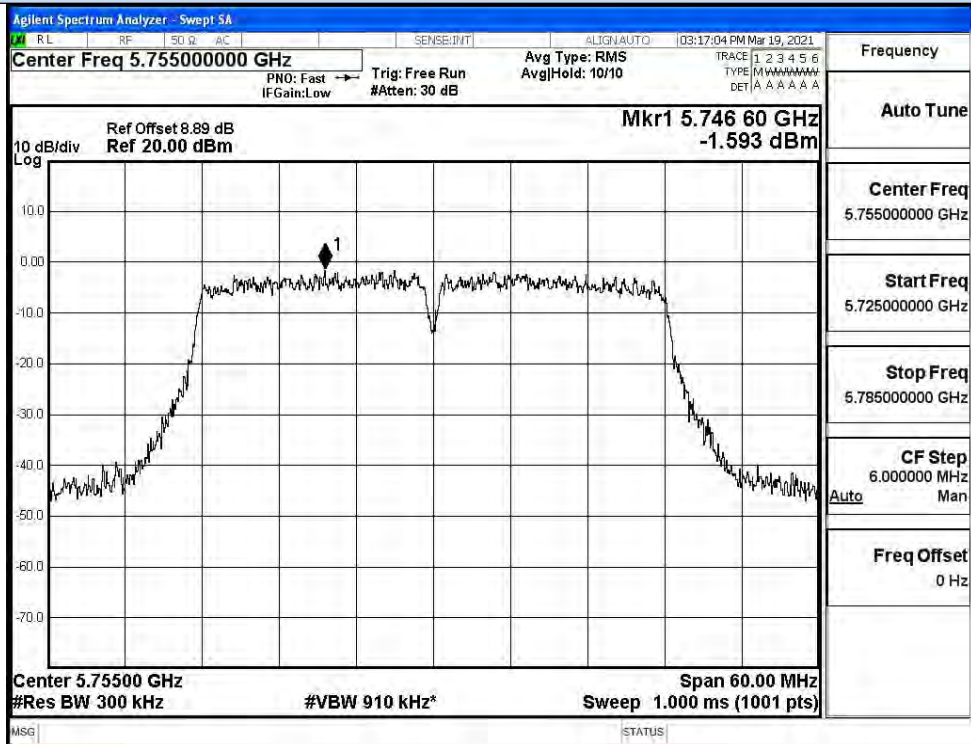


IEEE 802.11n20 / Channel 157 / 5785MHz

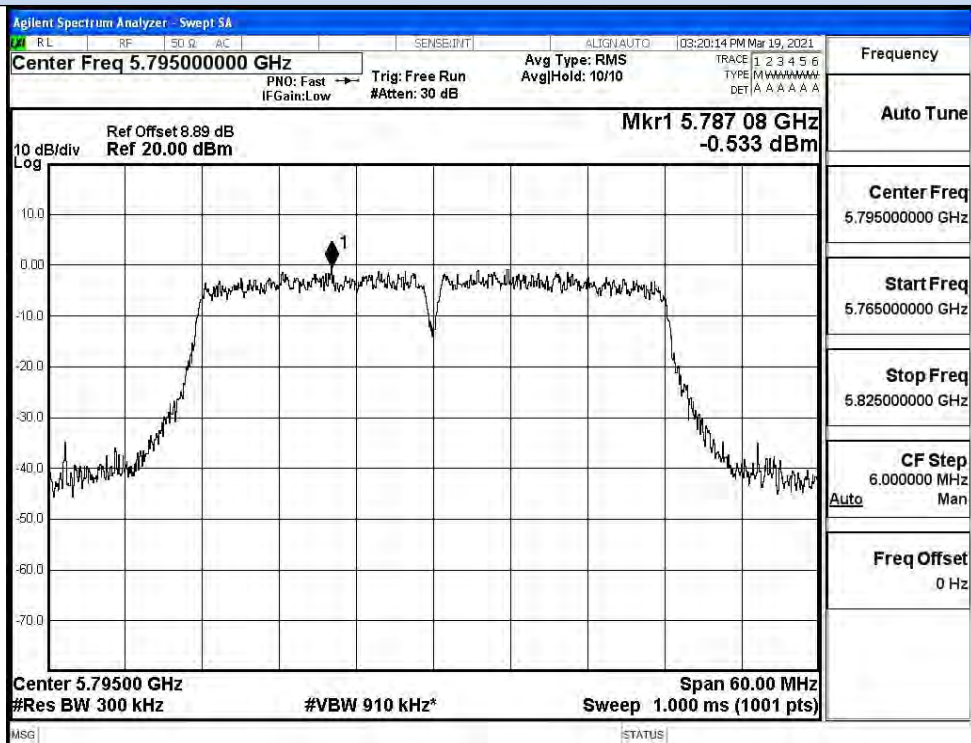


IEEE 802.11n20 / Channel 165 / 5825MHz

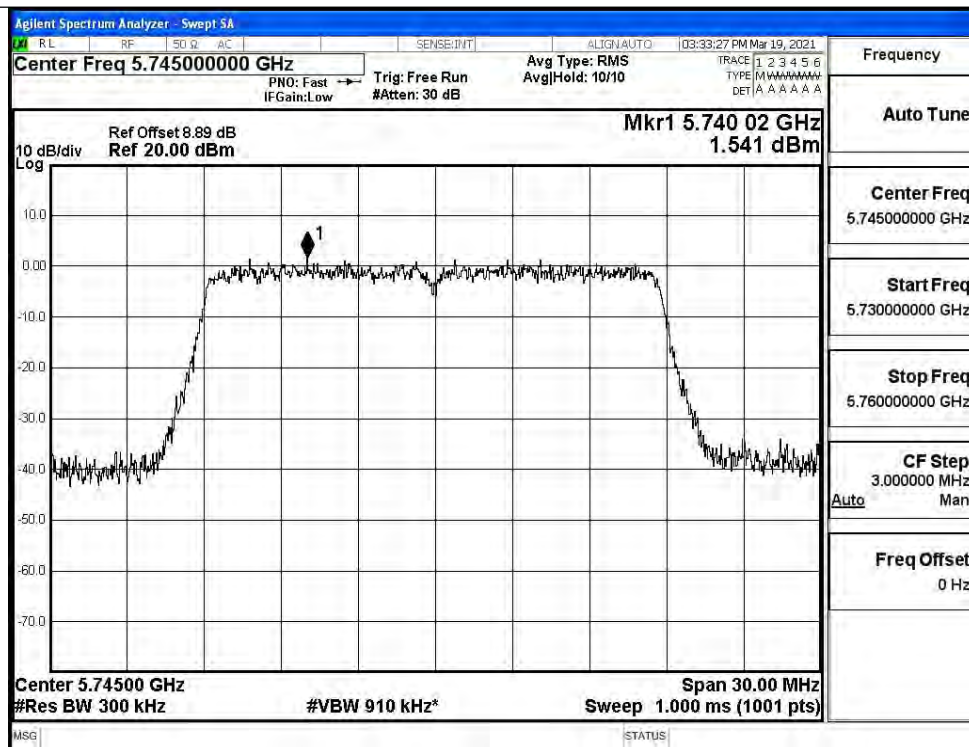
Power Spectral Density



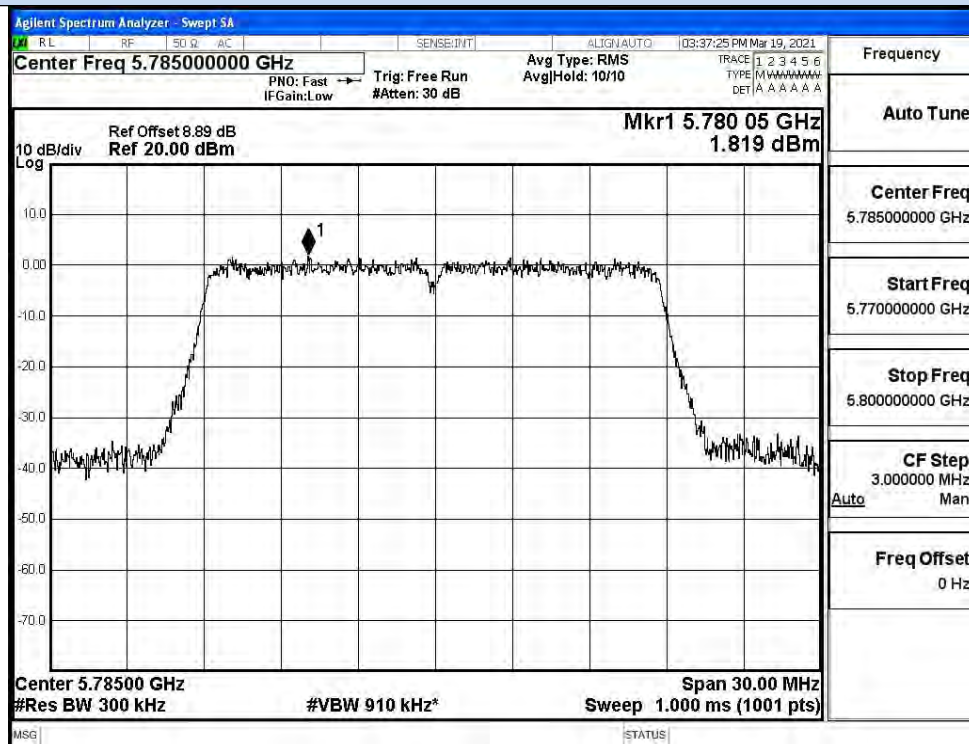
IEEE 802.11n40 / Channel 151 / 5755MHz



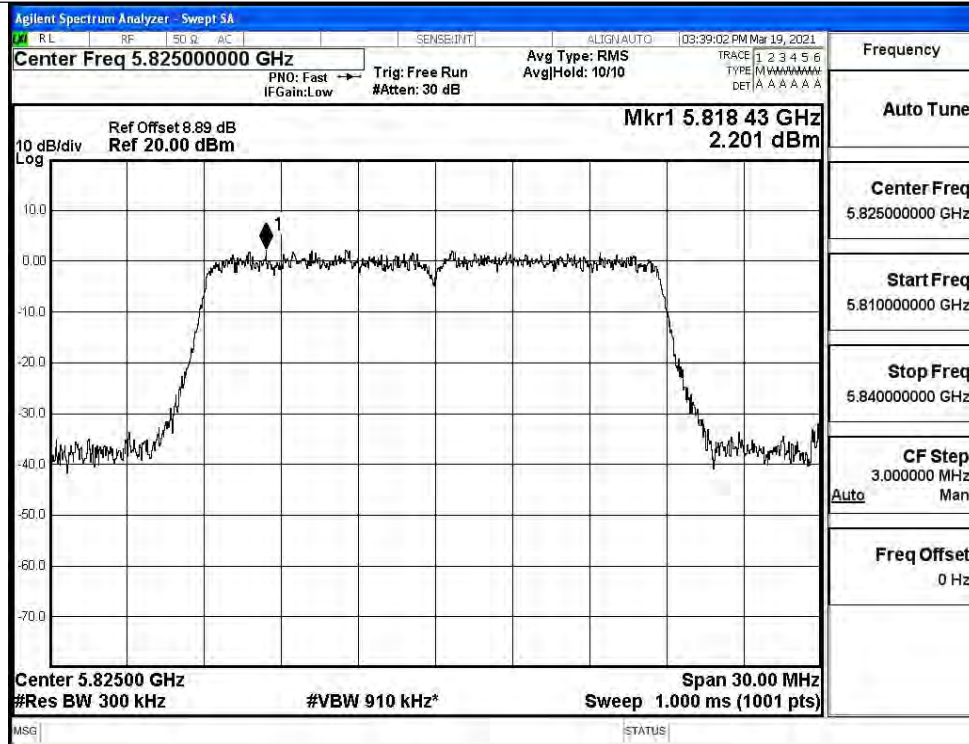
IEEE 802.11n40 / Channel 159 / 5795MHz



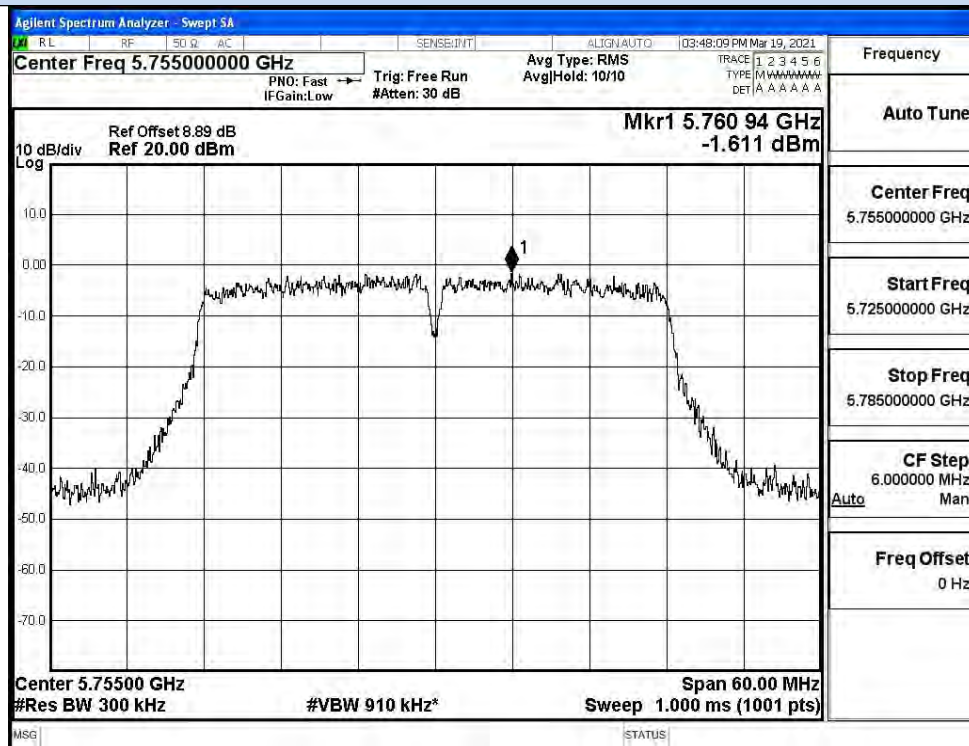
IEEE 802.11ac20 / Channel 149 / 5745MHz



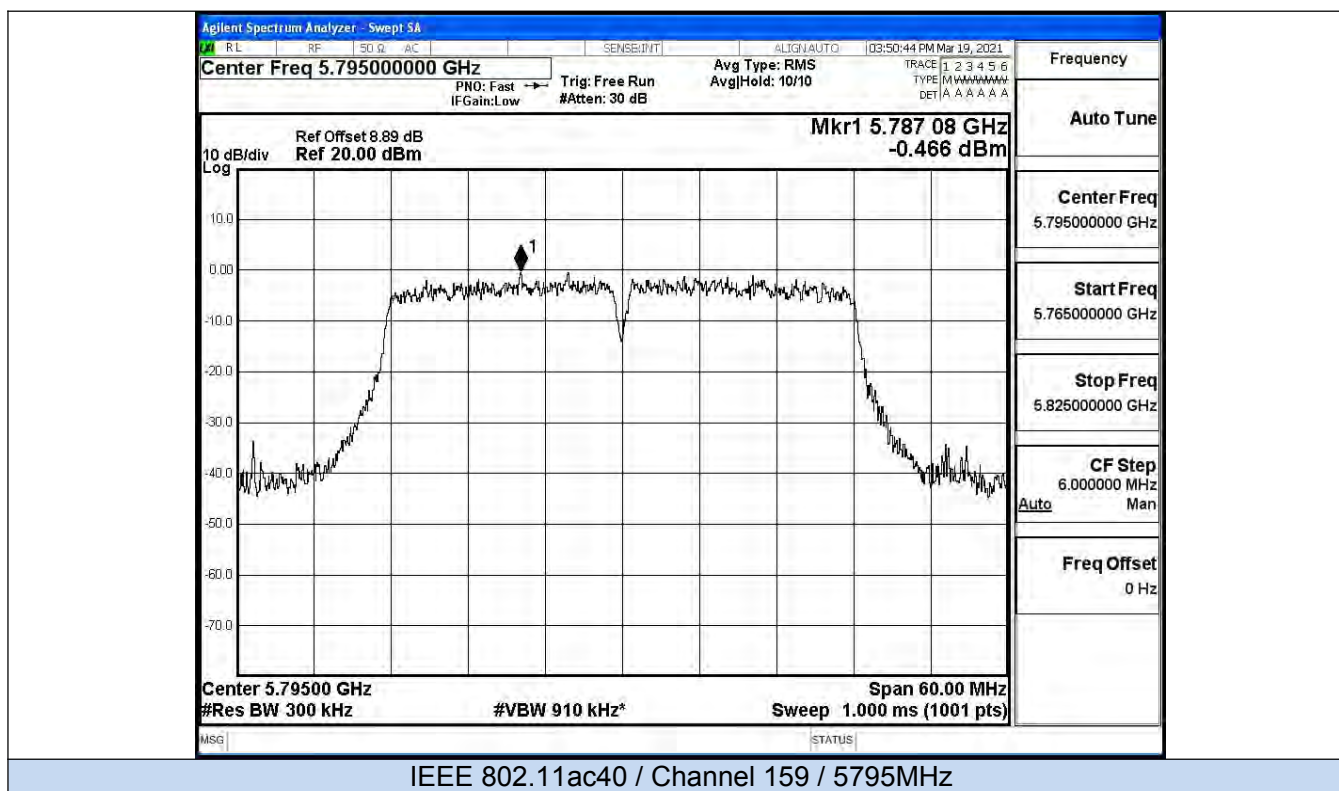
IEEE 802.11ac20 / Channel 157 / 5785MHz



IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



ANT0+ANT1:

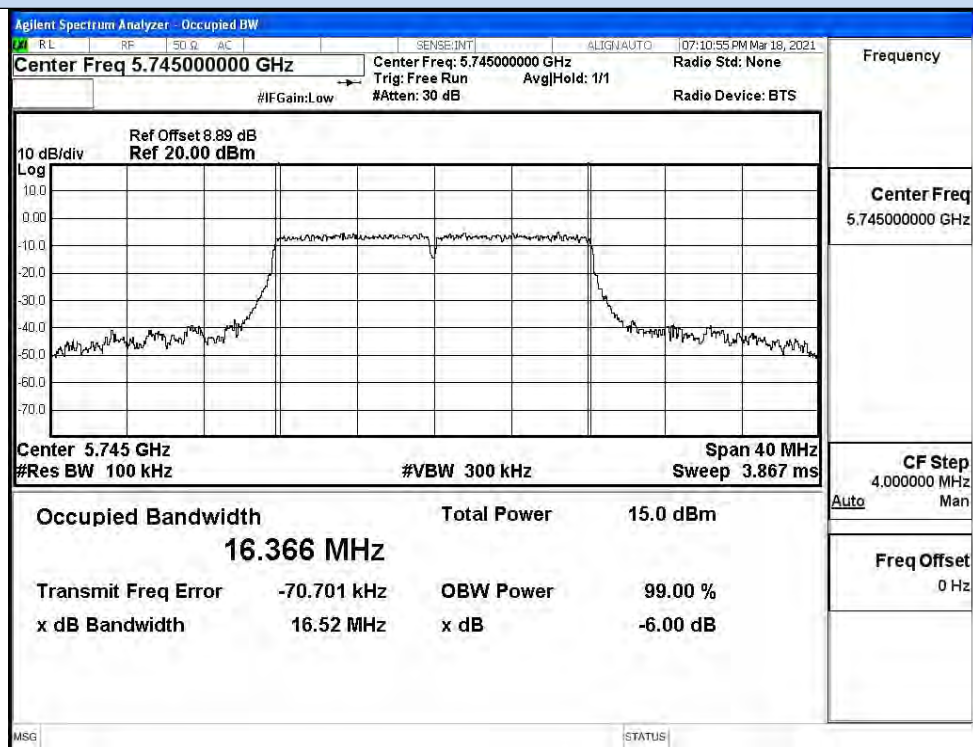
Test Mode	Channel	Frequency (MHz)	Duty Cycle Factor (dB)	Report Power Density (dBm/500KHz)			Limit (dBm)	Verdict
				Ant0	Ant1	Sum		
11N20 MIMO	149	5745	0	1.11	3.48	5.47	30	Pass
	157	5785	0	1.70	3.72	5.84		Pass
	165	5825	0	2.35	4.05	6.29		Pass
11N40 MIMO	151	5755	0	-1.34	0.63	2.77	30	Pass
	159	5795	0	-1.62	1.69	3.35		Pass
11AC20 MIMO	149	5745	0	2.73	3.76	6.29	30	Pass
	157	5785	0	2.75	4.04	6.45		Pass
	165	5825	0	3.81	4.42	7.14		Pass
11AC40 MIMO	151	5755	0	-0.58	0.61	3.07	30	Pass
	159	5795	0	0.24	1.75	4.07		Pass

D.4 Emission Bandwidth

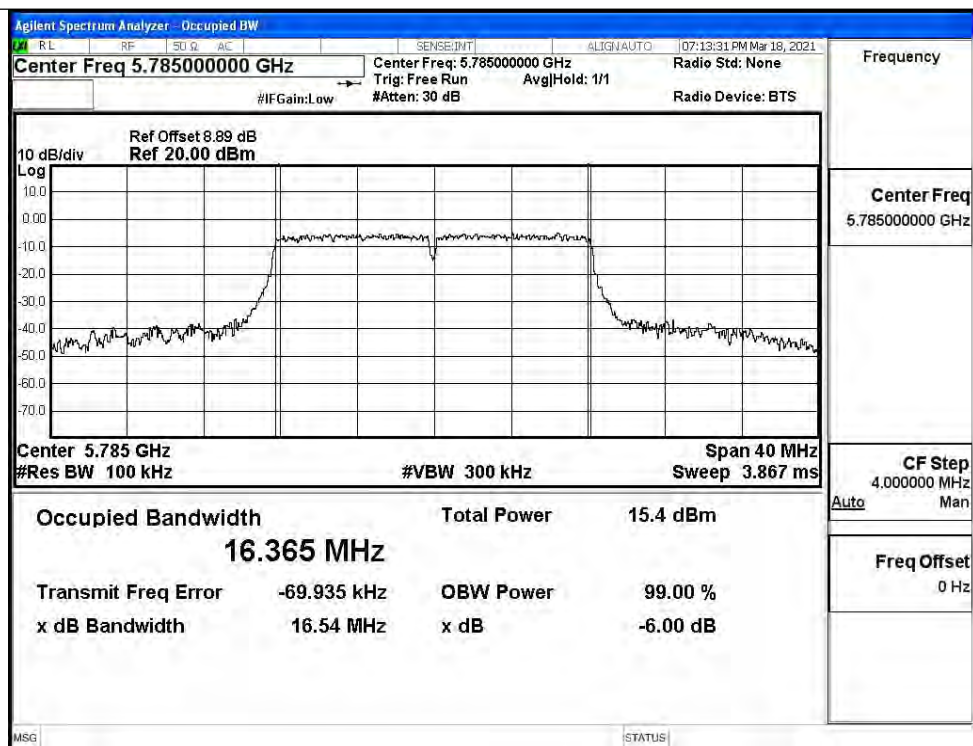
Ant0

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.52	>=0.5	Pass
	157	5785	16.54		Pass
	165	5825	16.54		Pass
11N20 SISO	149	5745	17.74	>=0.5	Pass
	157	5785	17.71		Pass
	165	5825	17.71		Pass
11N40 SISO	151	5755	36.46	>=0.5	Pass
	159	5795	36.48		Pass
11AC20S ISO	149	5745	17.75	>=0.5	Pass
	157	5785	17.74		Pass
	165	5825	17.76		Pass
11AC40S ISO	151	5755	36.47	>=0.5	Pass
	159	5795	36.46		Pass

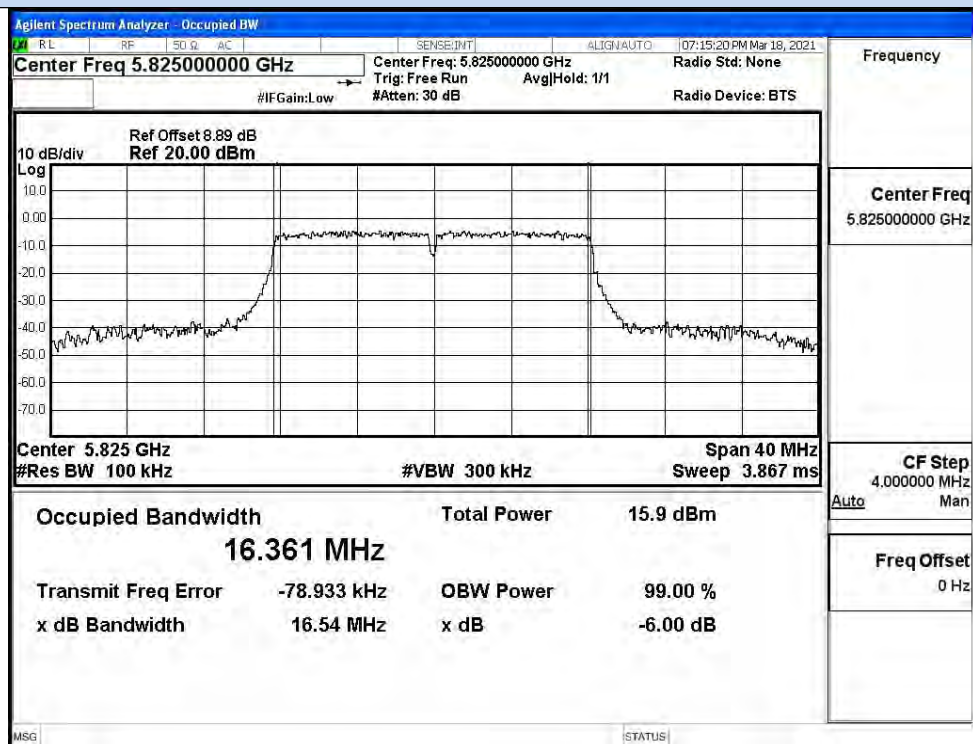
6dB Bandwidth



IEEE 802.11a / Channel 149 / 5745MHz

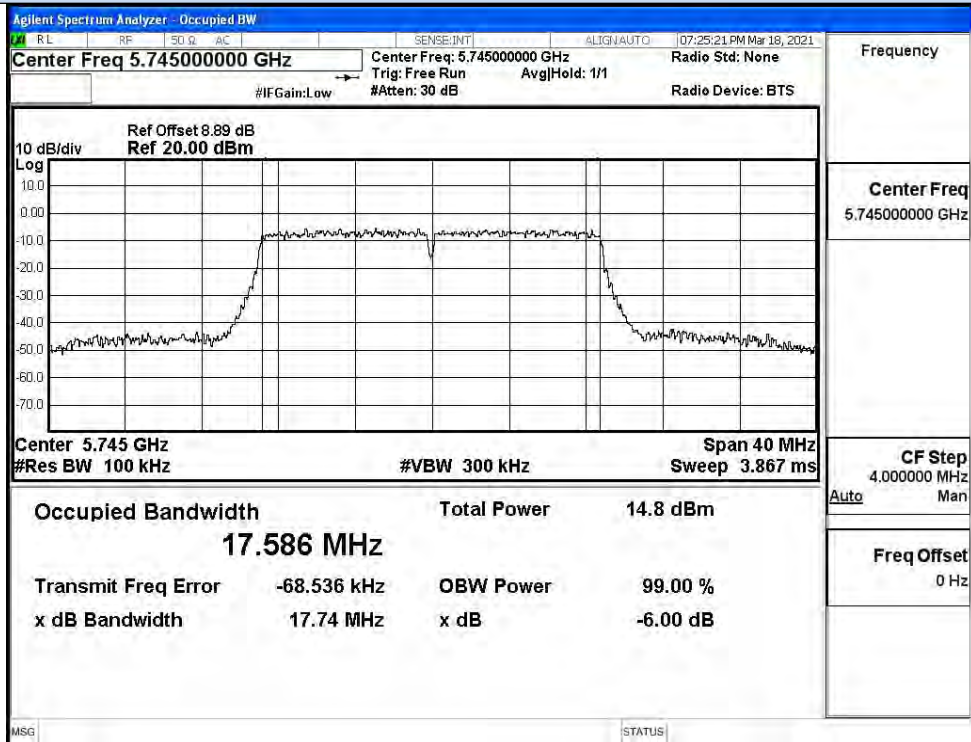


IEEE 802.11a / Channel 157 / 5785MHz

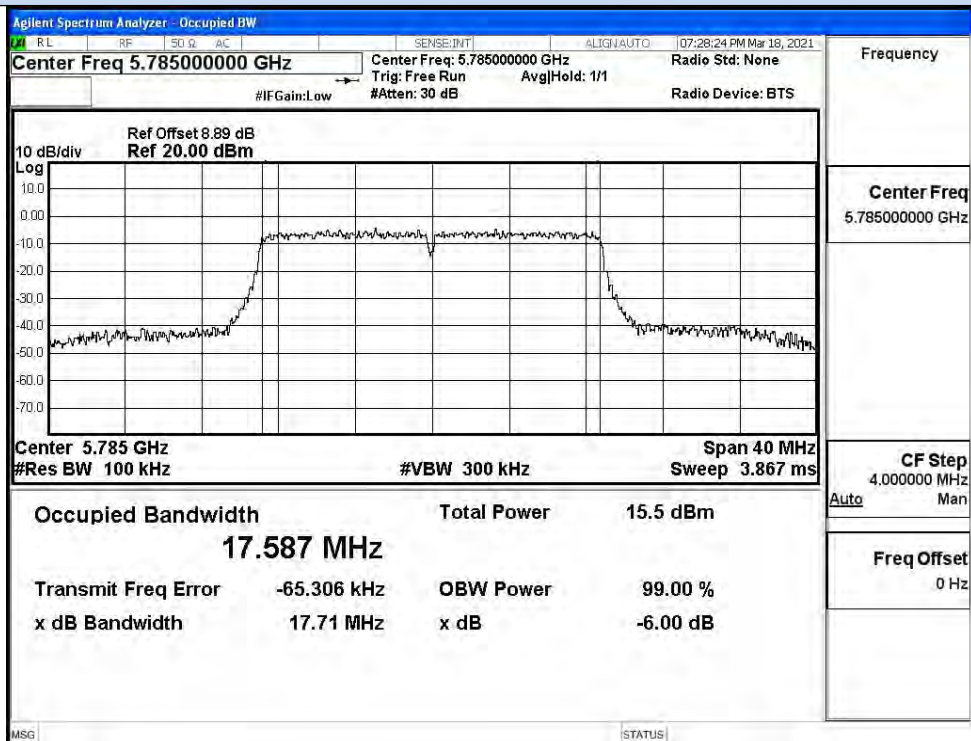


IEEE 802.11a / Channel 165 / 5825MHz

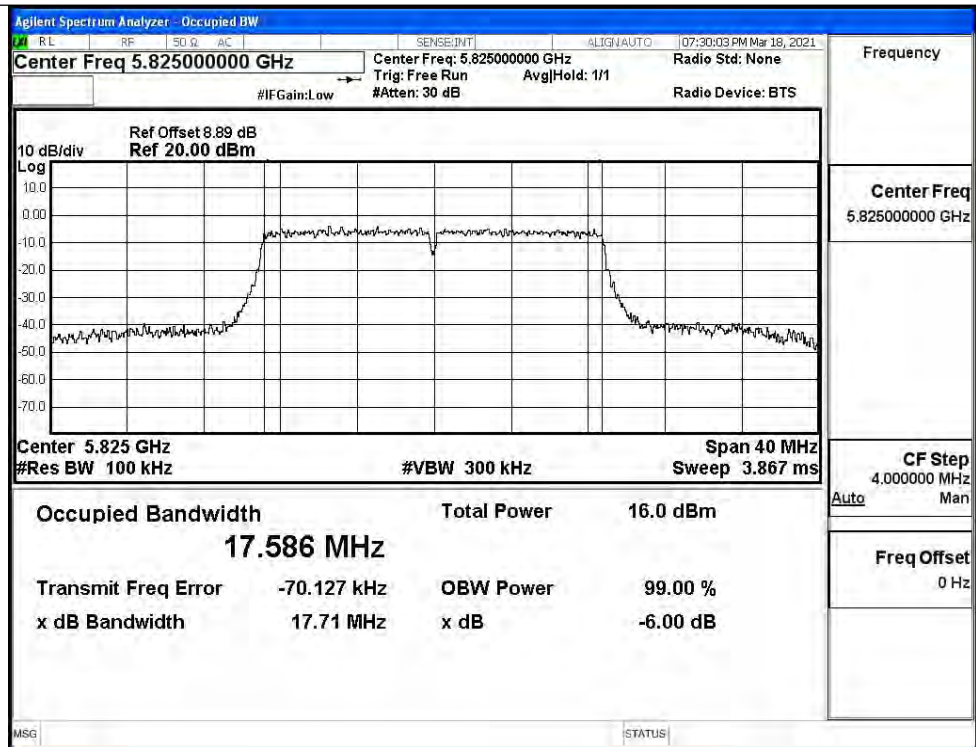
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

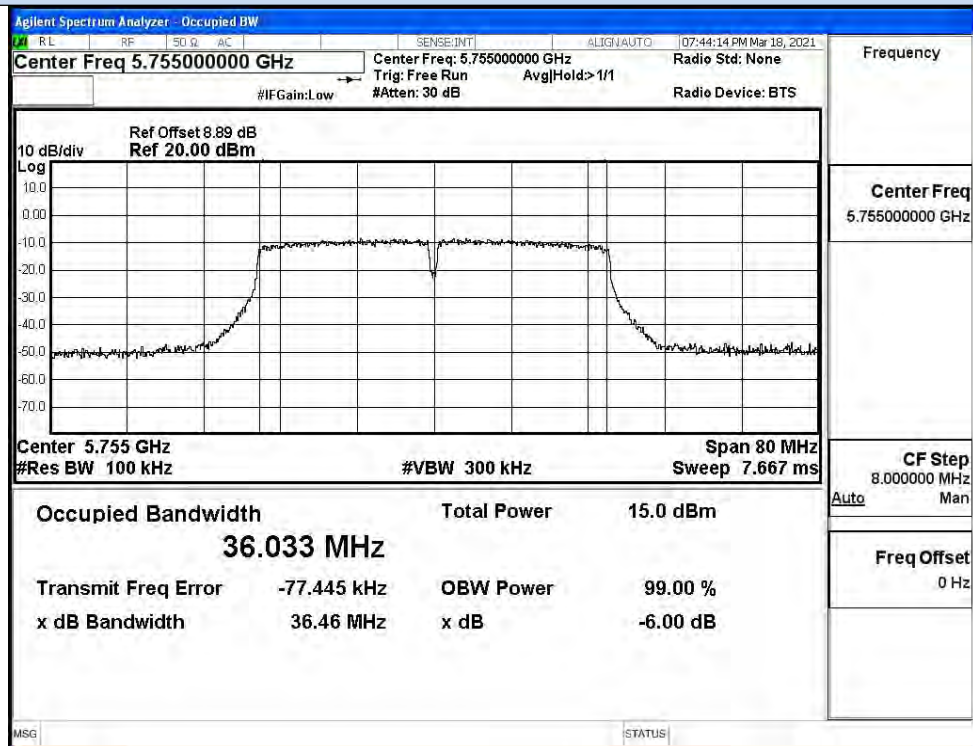


IEEE 802.11n20 / Channel 157 / 5785MHz

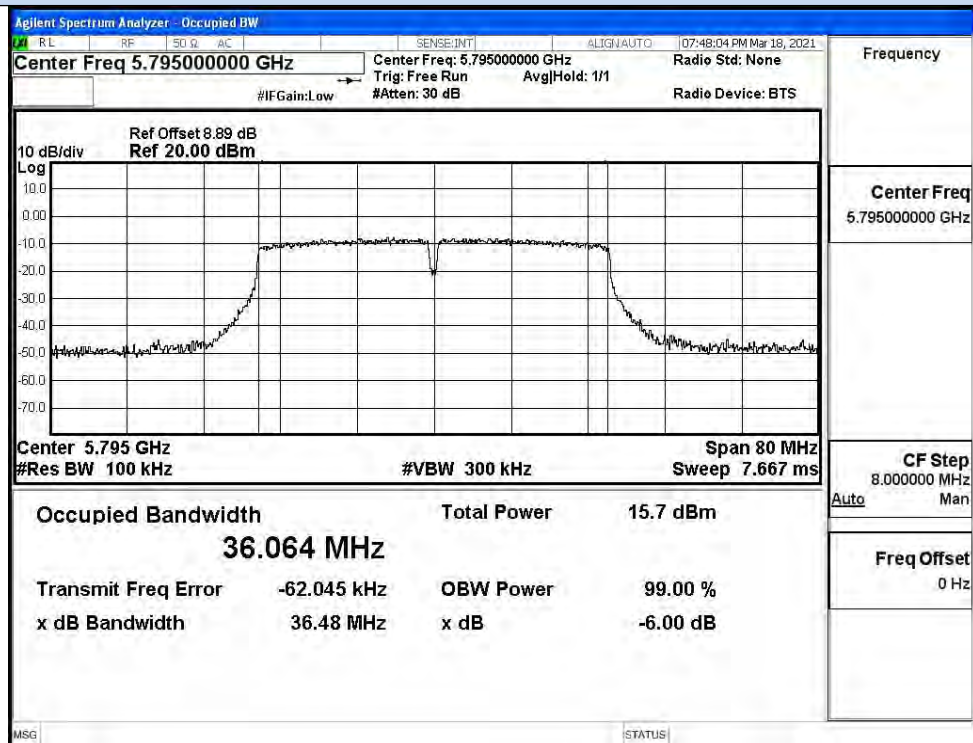


IEEE 802.11n20 / Channel 165 / 5825MHz

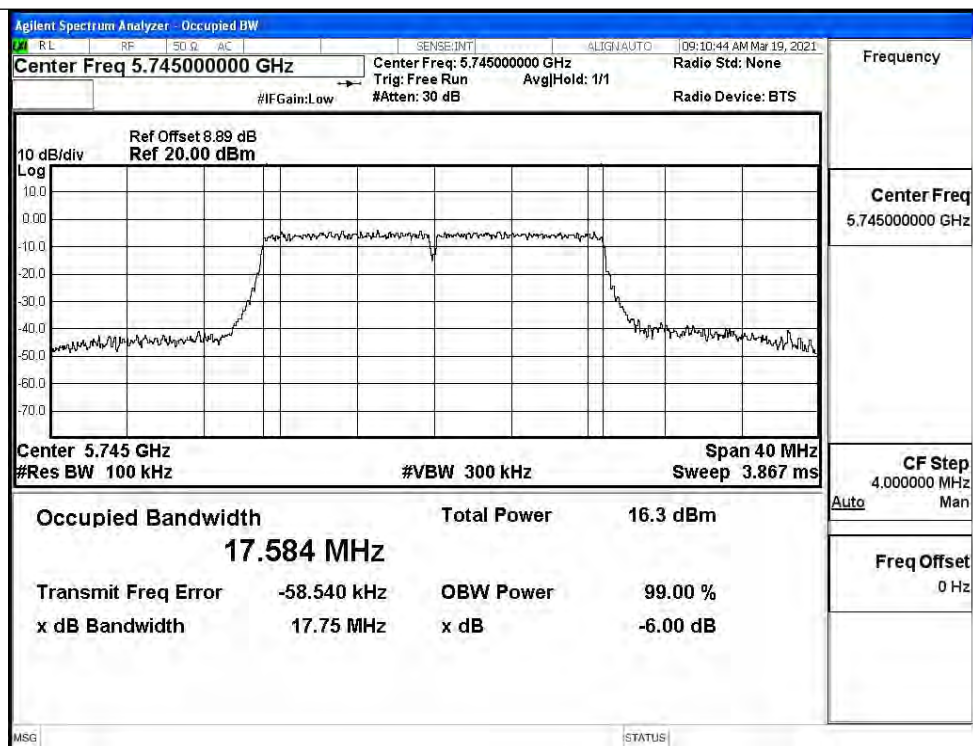
26dB Bandwidth



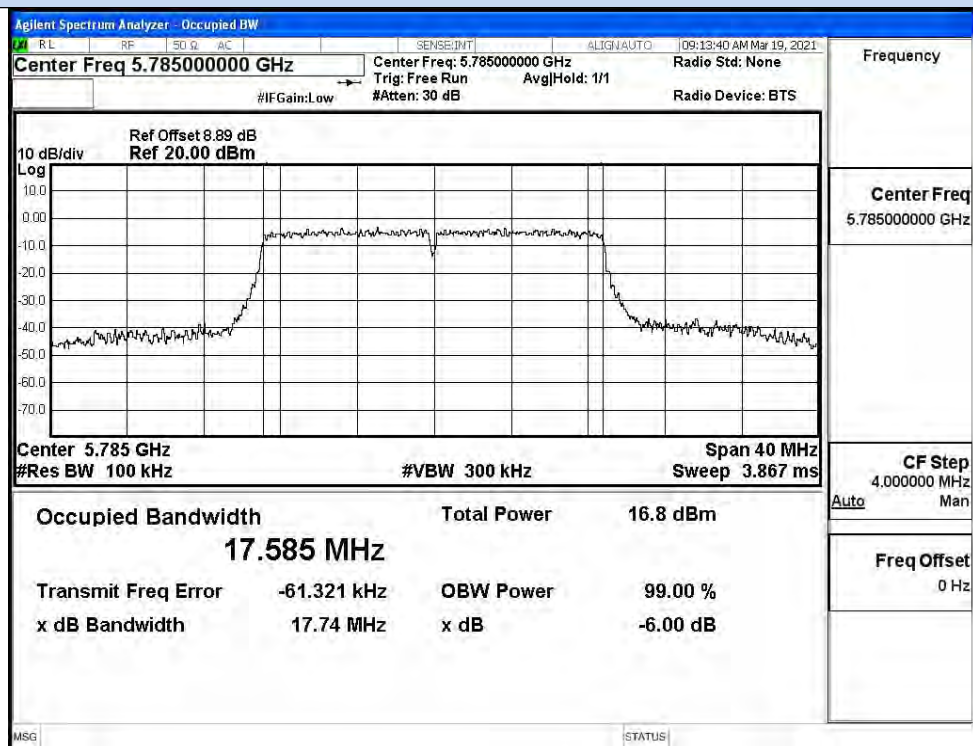
IEEE 802.11n40 / Channel 151 / 5755MHz



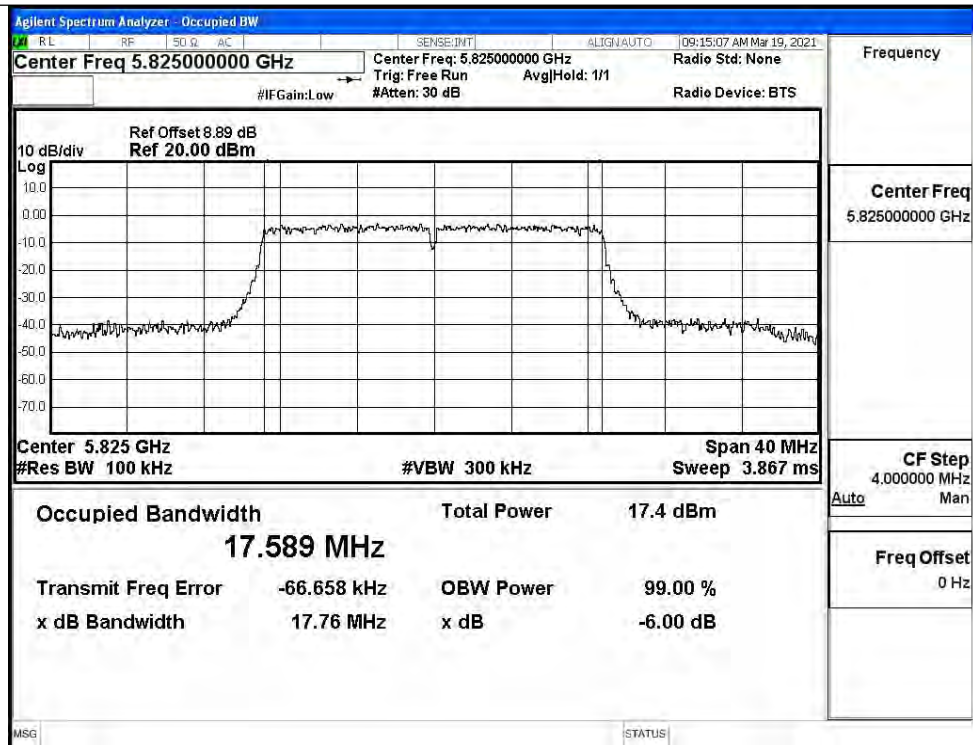
IEEE 802.11n40 / Channel 159 / 5795MHz



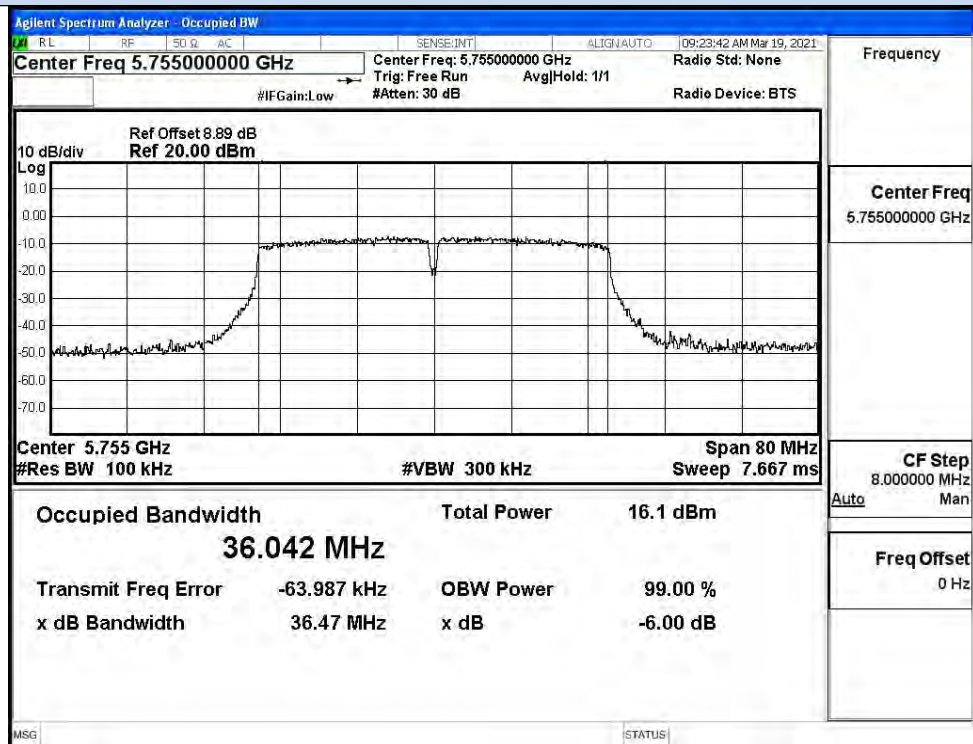
IEEE 802.11ac20 / Channel 149 / 5745MHz



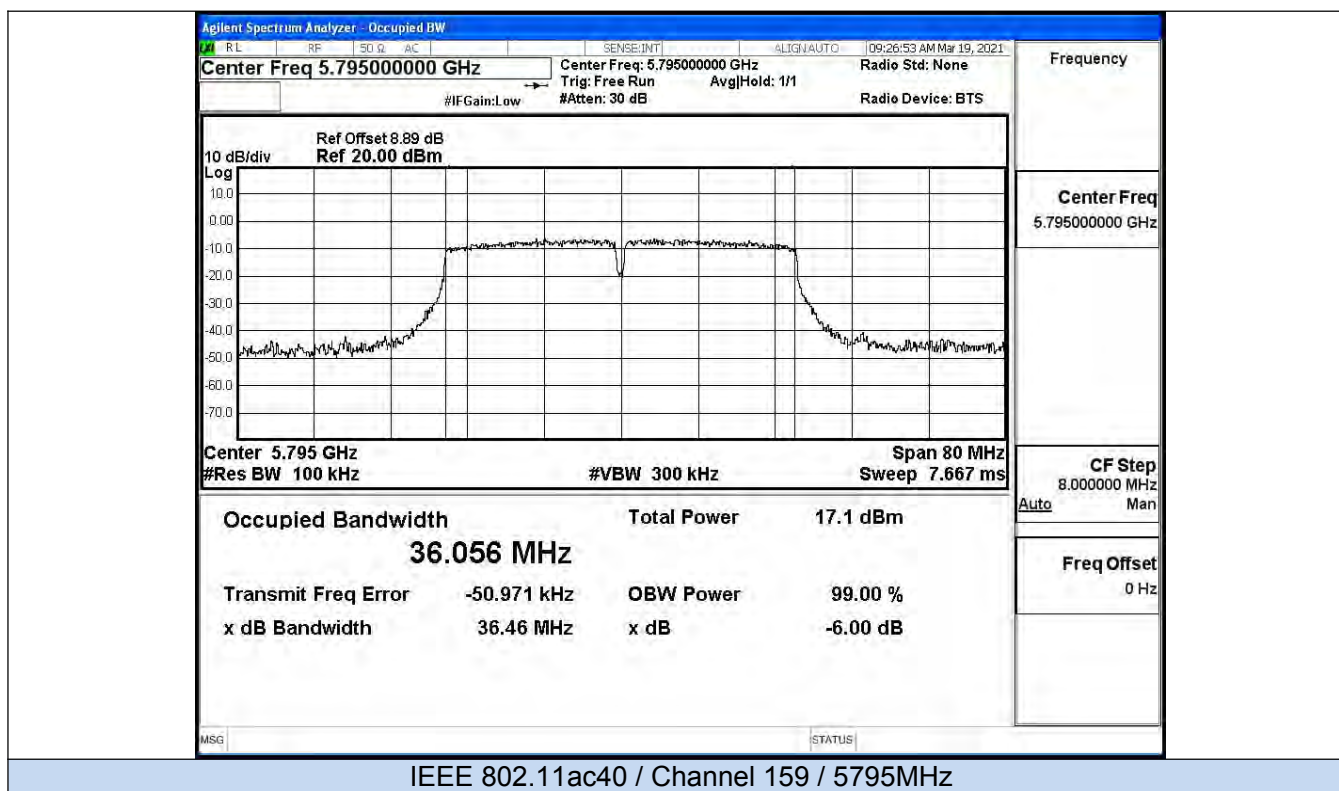
IEEE 802.11ac20 / Channel 157/ 5785MHz



IEEE 802.11ac20 / Channel 165 / 5825MHz



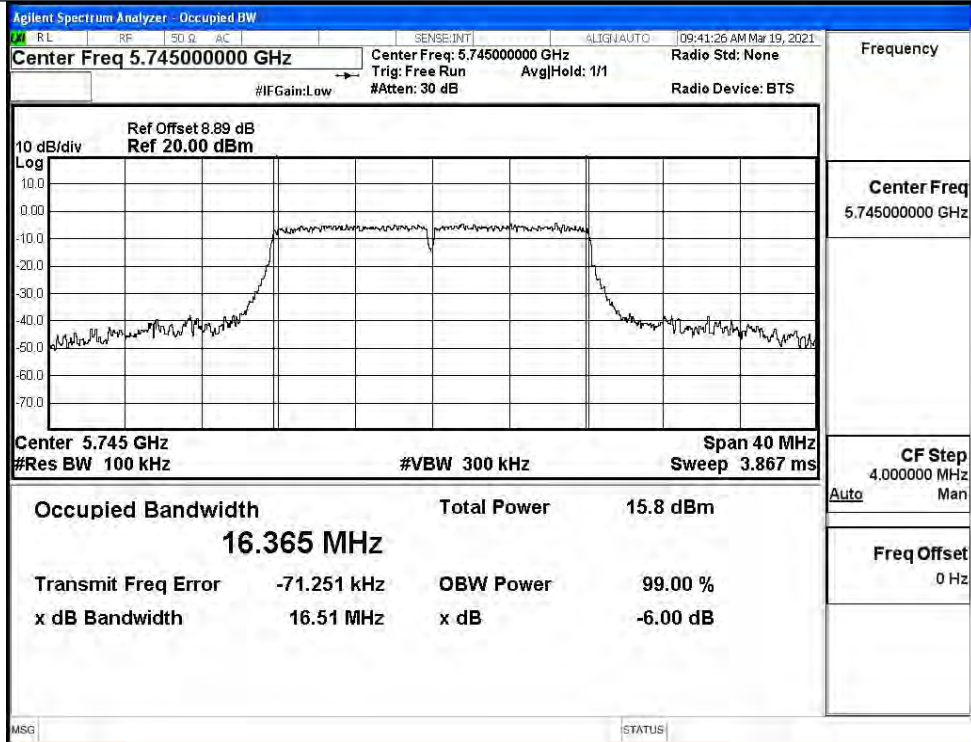
IEEE 802.11ac40 / Channel 151 / 5755MHz



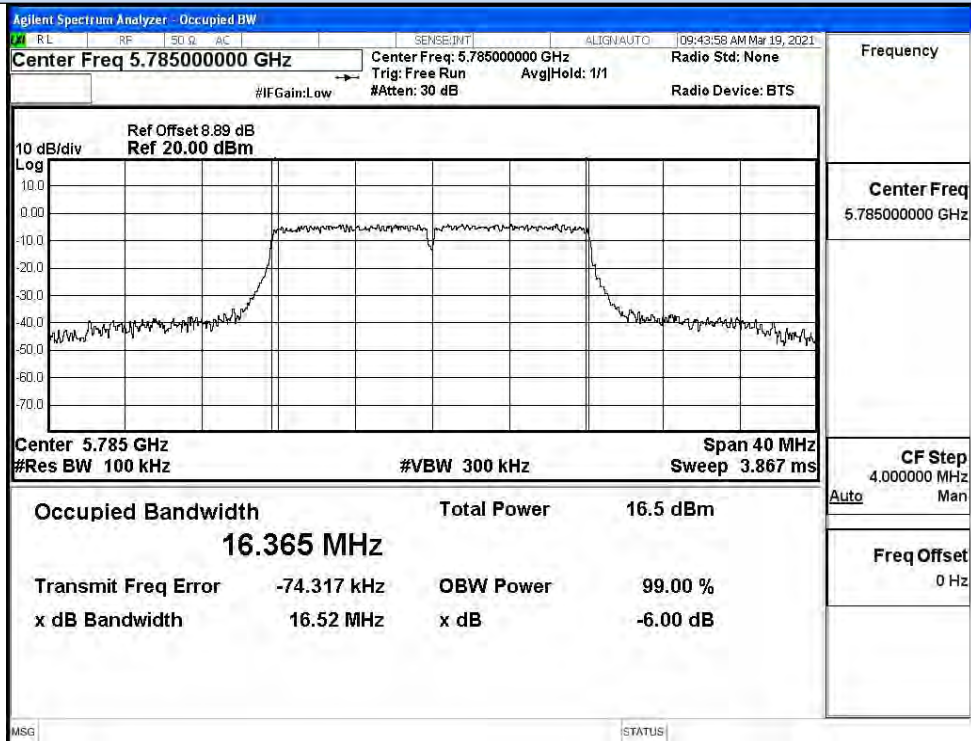
Ant1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.51	>=0.5	Pass
	157	5785	16.52		Pass
	165	5825	16.53		Pass
11N20 SISO	149	5745	17.77	>=0.5	Pass
	157	5785	17.74		Pass
	165	5825	17.73		Pass
11N40 SISO	151	5755	36.47	>=0.5	Pass
	159	5795	36.49		Pass
11AC20S ISO	149	5745	17.70	>=0.5	Pass
	157	5785	17.71		Pass
	165	5825	17.74		Pass
11AC40S ISO	151	5755	36.49	>=0.5	Pass
	159	5795	36.47		Pass

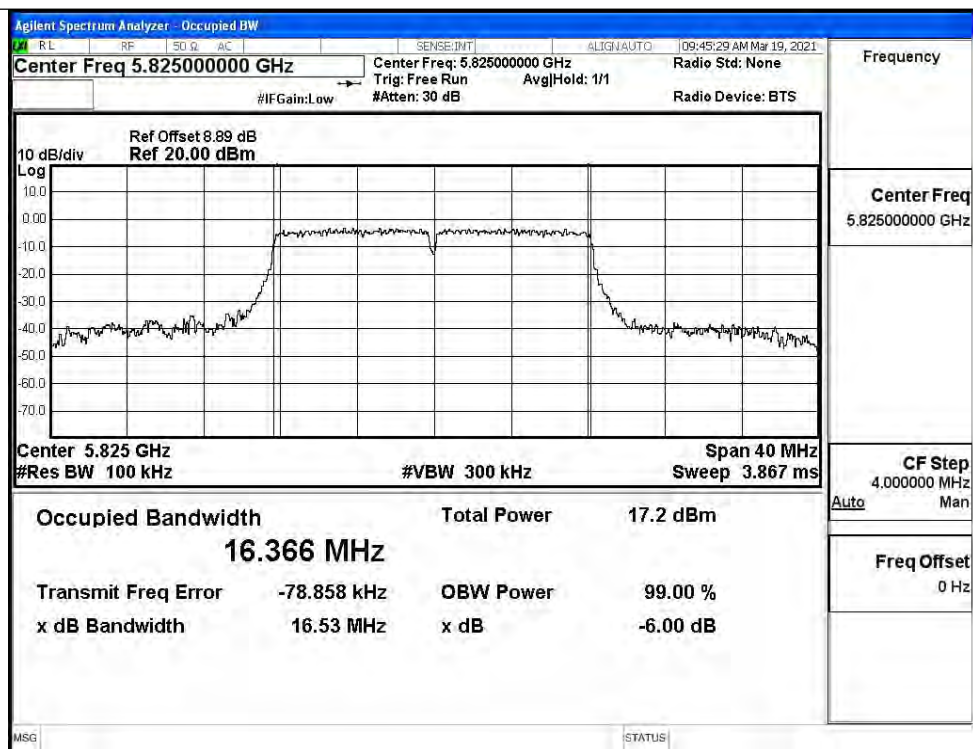
6dB Bandwidth



IEEE 802.11a / Channel 149 / 5745MHz

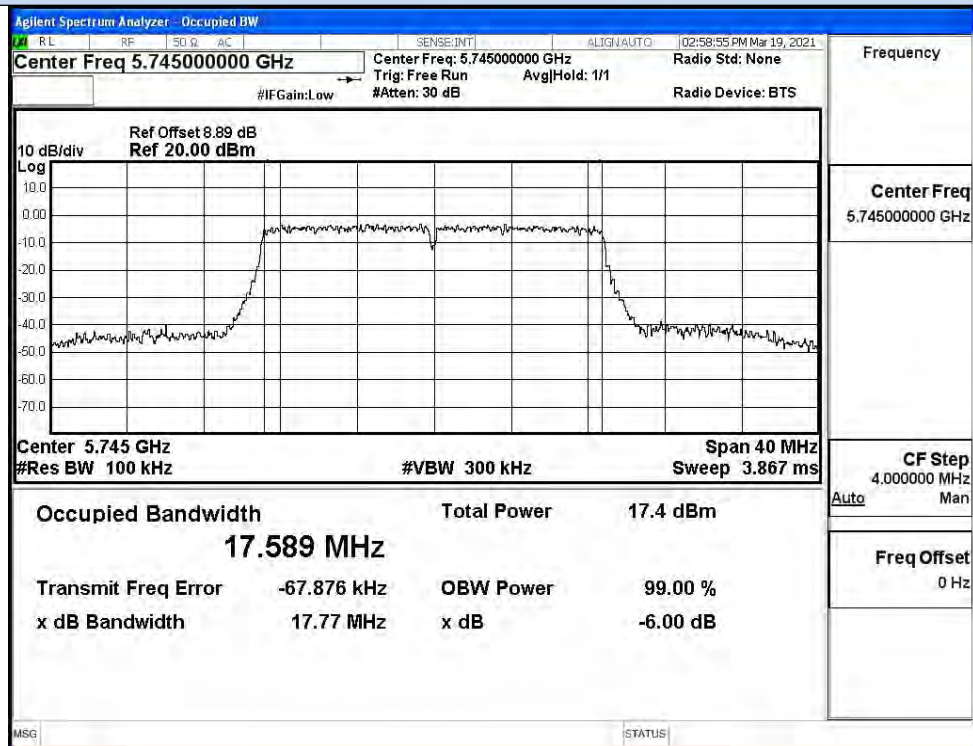


IEEE 802.11a / Channel 157 / 5785MHz

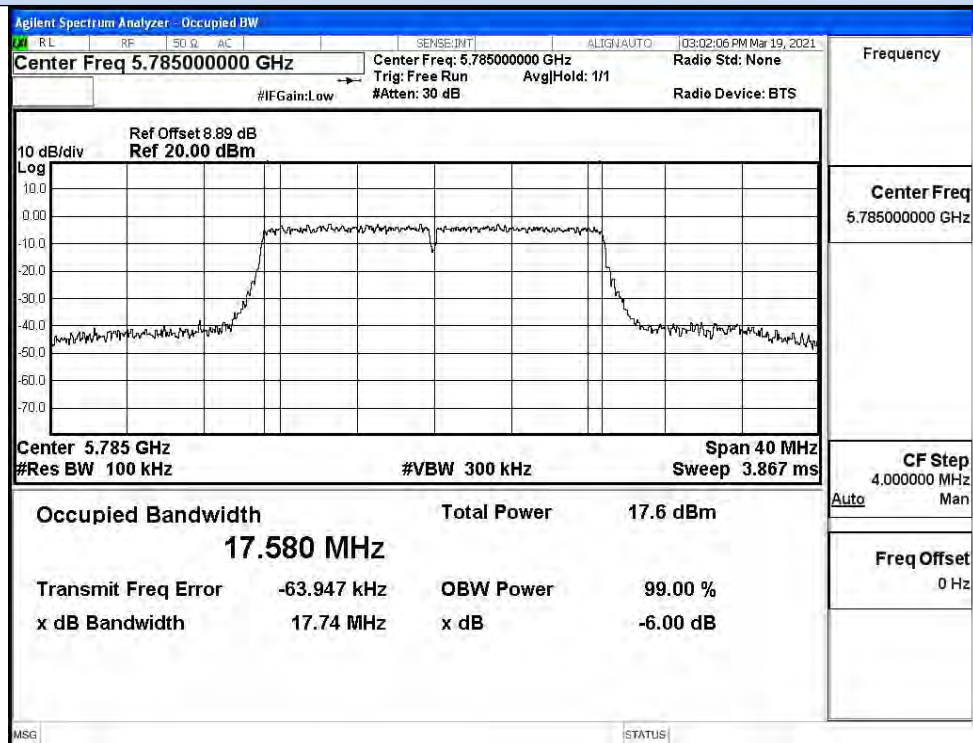


IEEE 802.11a / Channel 165 / 5825MHz

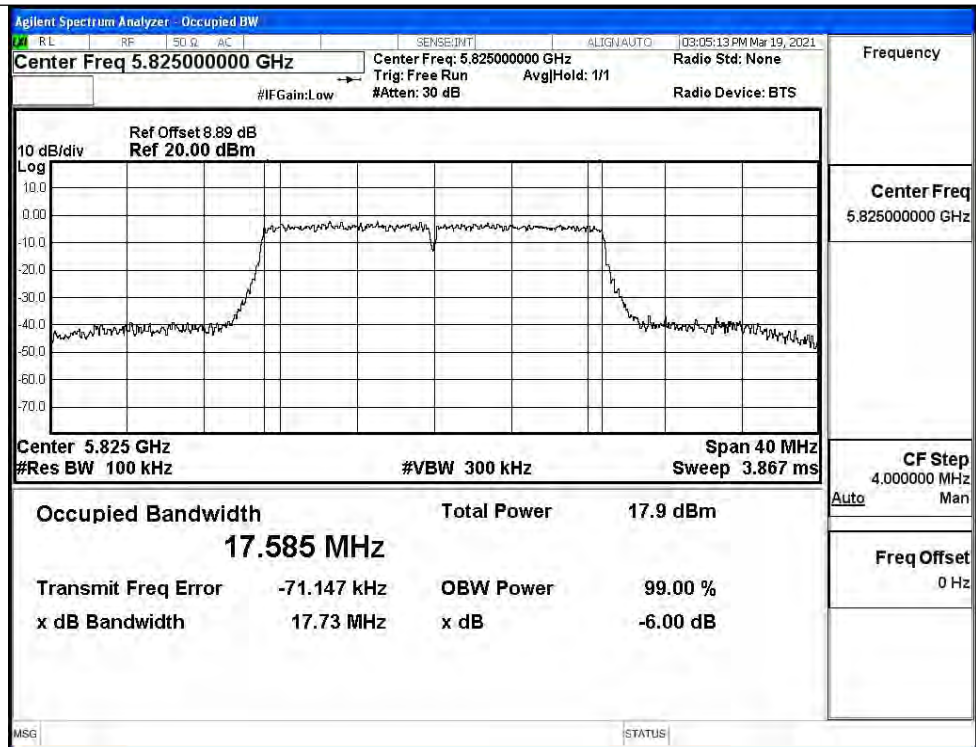
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

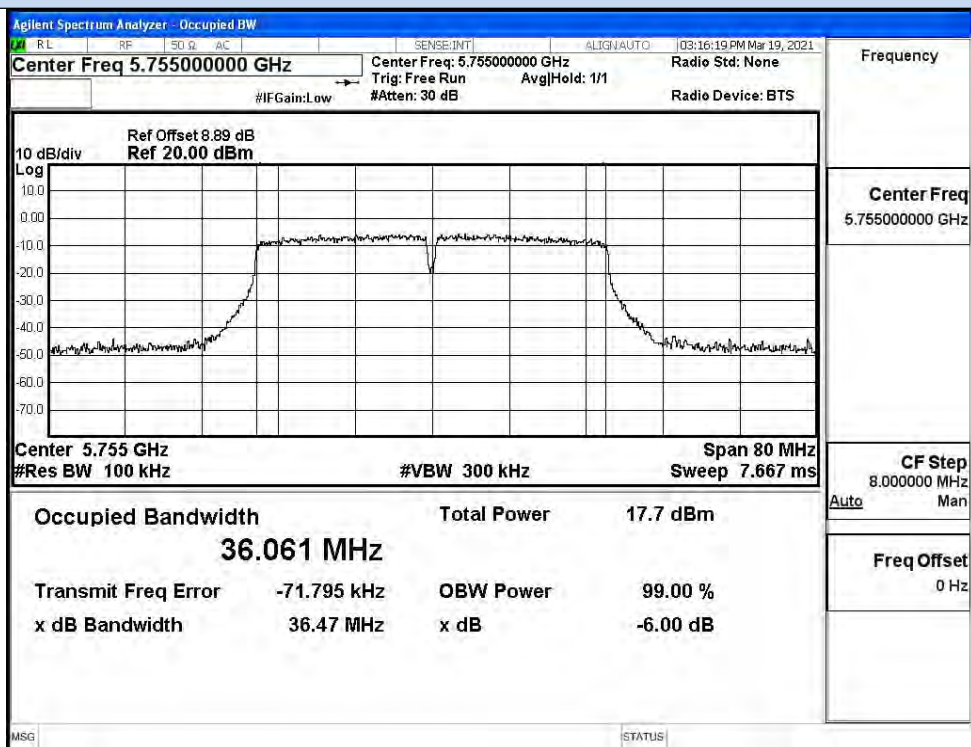


IEEE 802.11n20 / Channel 157 / 5785MHz

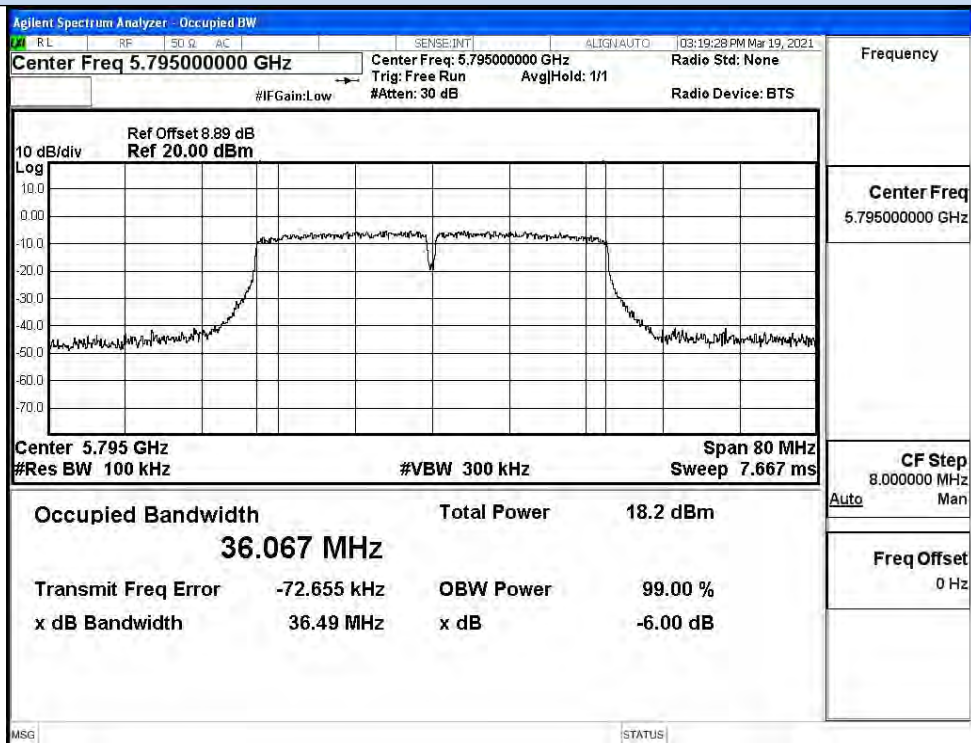


IEEE 802.11n20 / Channel 165 / 5825MHz

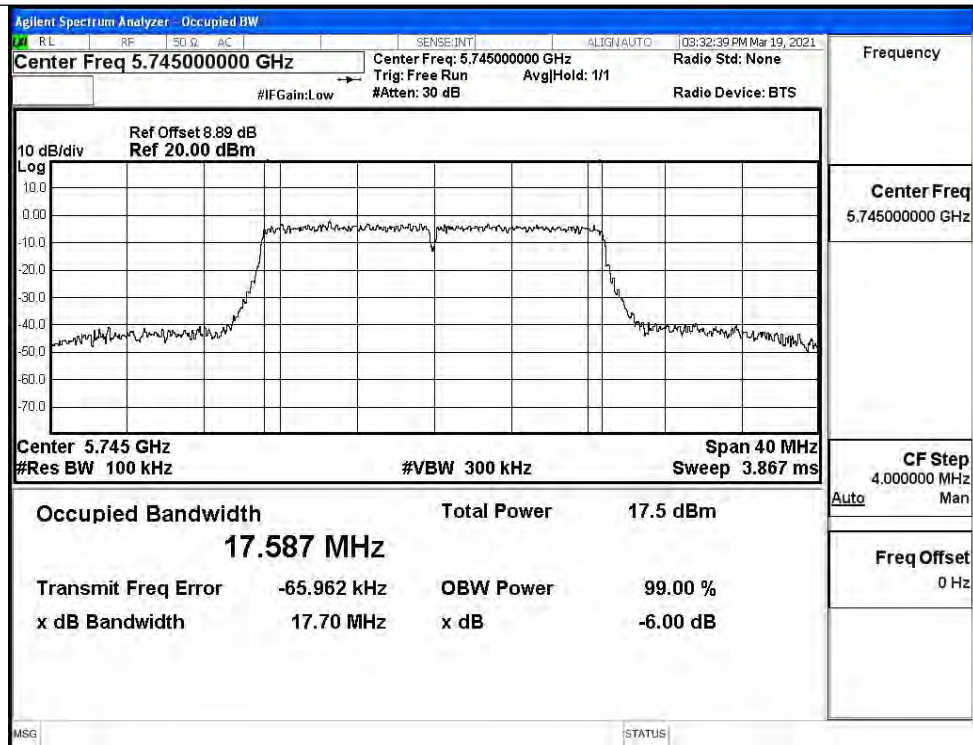
26dB Bandwidth



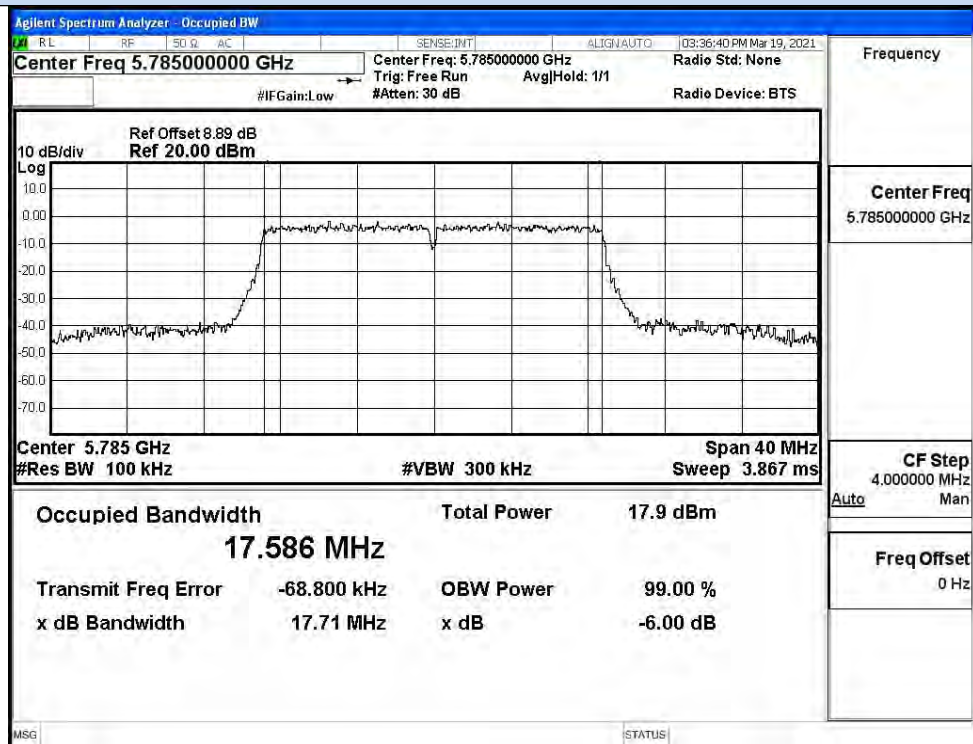
IEEE 802.11n40 / Channel 151 / 5755MHz



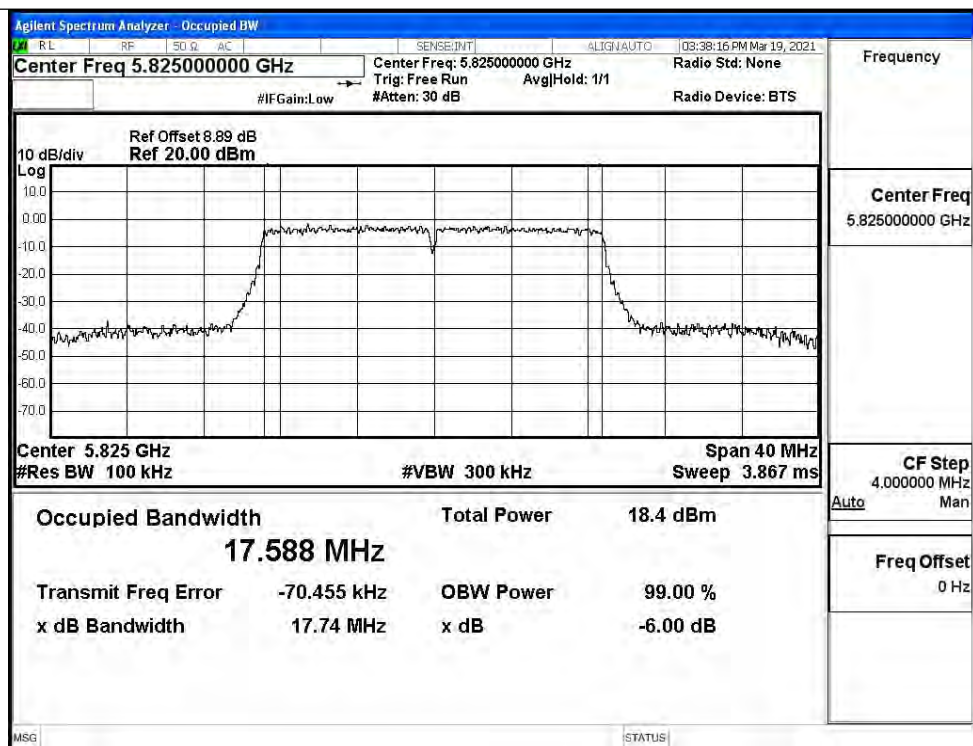
IEEE 802.11n40 / Channel 159 / 5795MHz



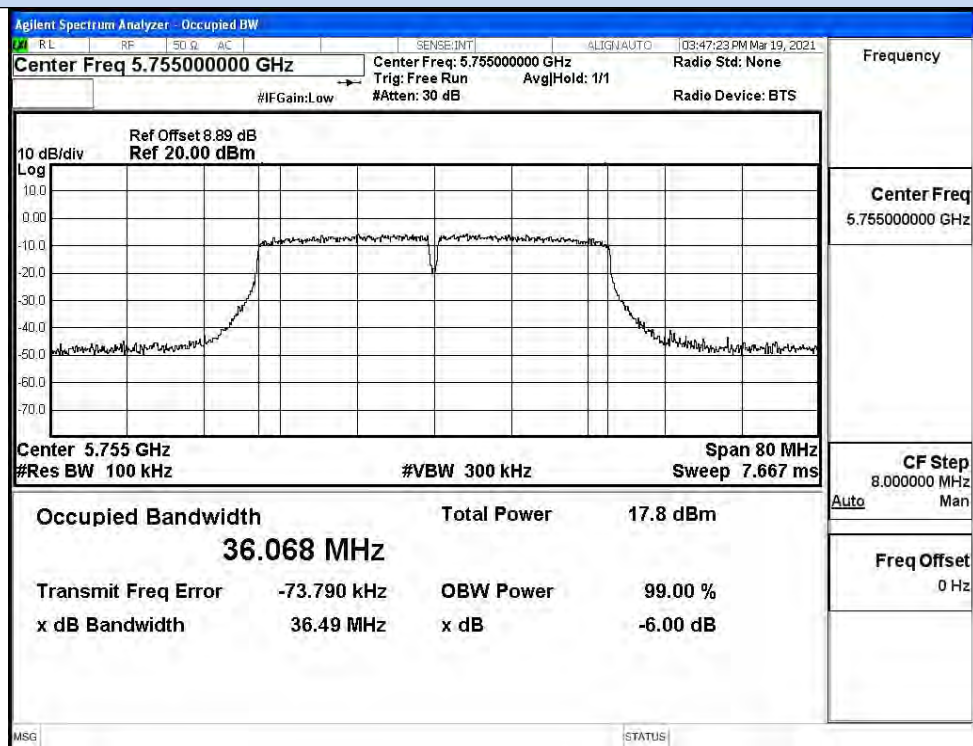
IEEE 802.11ac20 / Channel 149 / 5745MHz



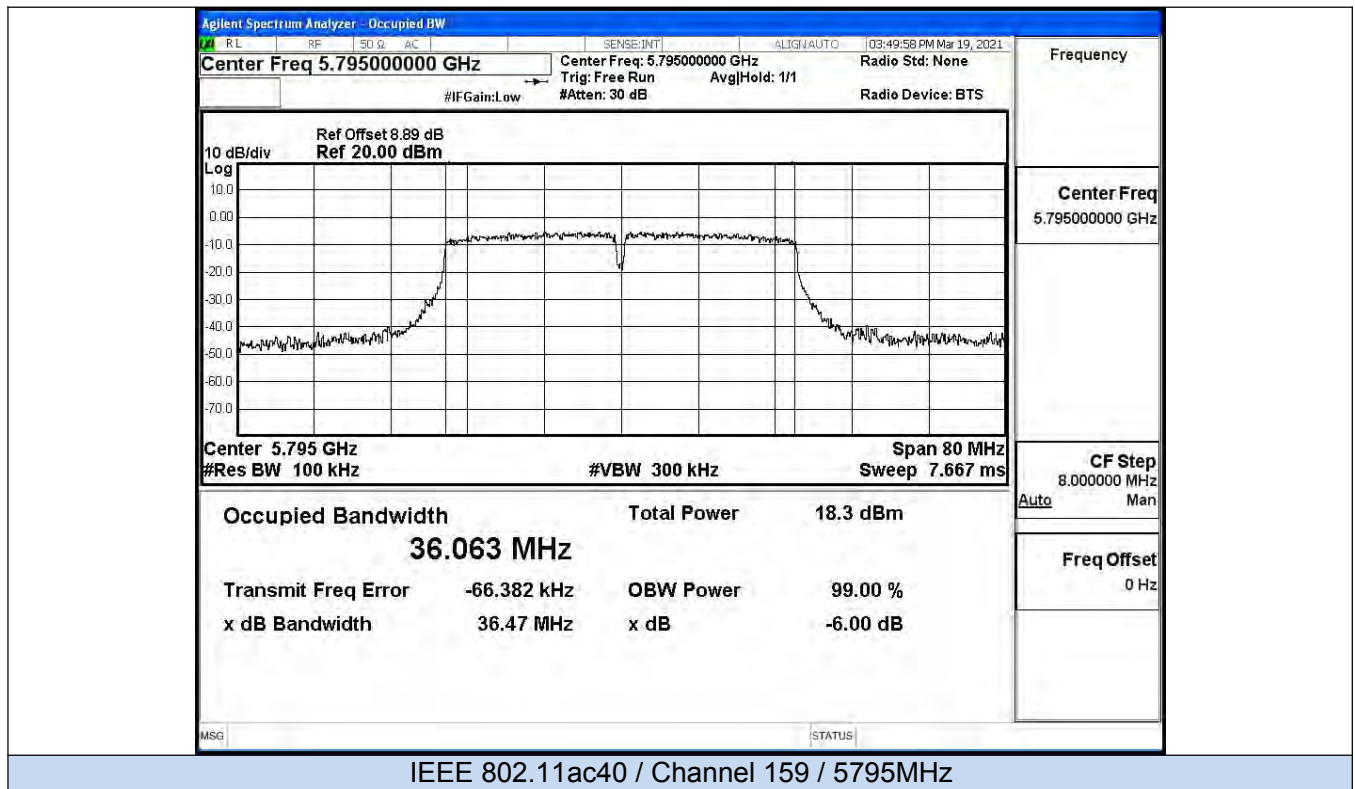
IEEE 802.11ac20 / Channel 157/ 5785MHz



IEEE 802.11ac20 / Channel 165 / 5825MHz



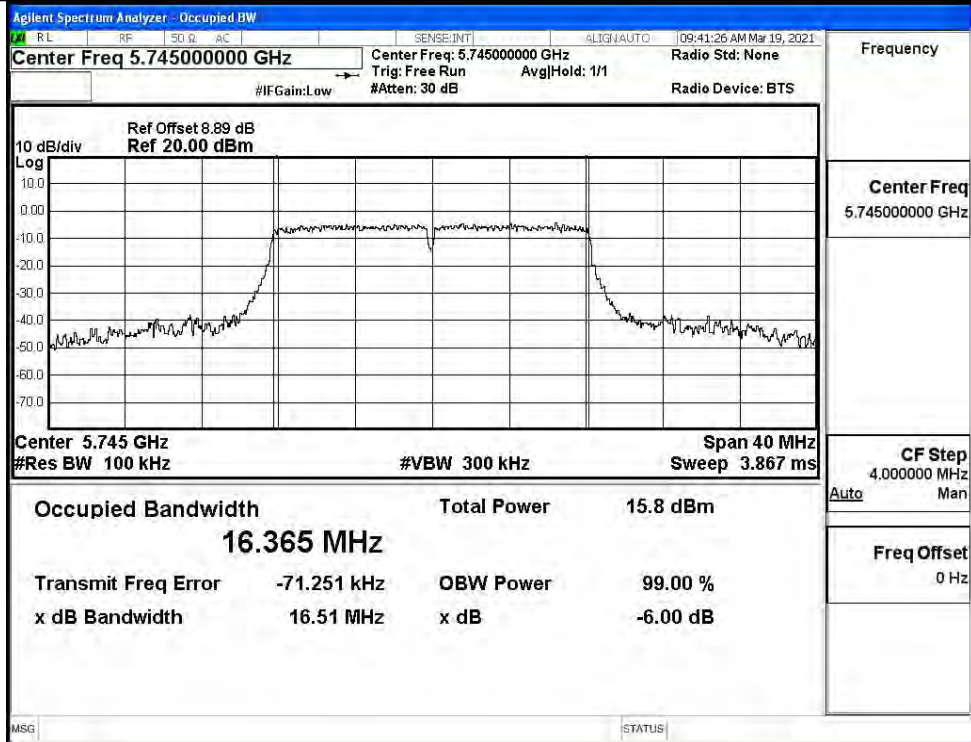
IEEE 802.11ac40 / Channel 151 / 5755MHz



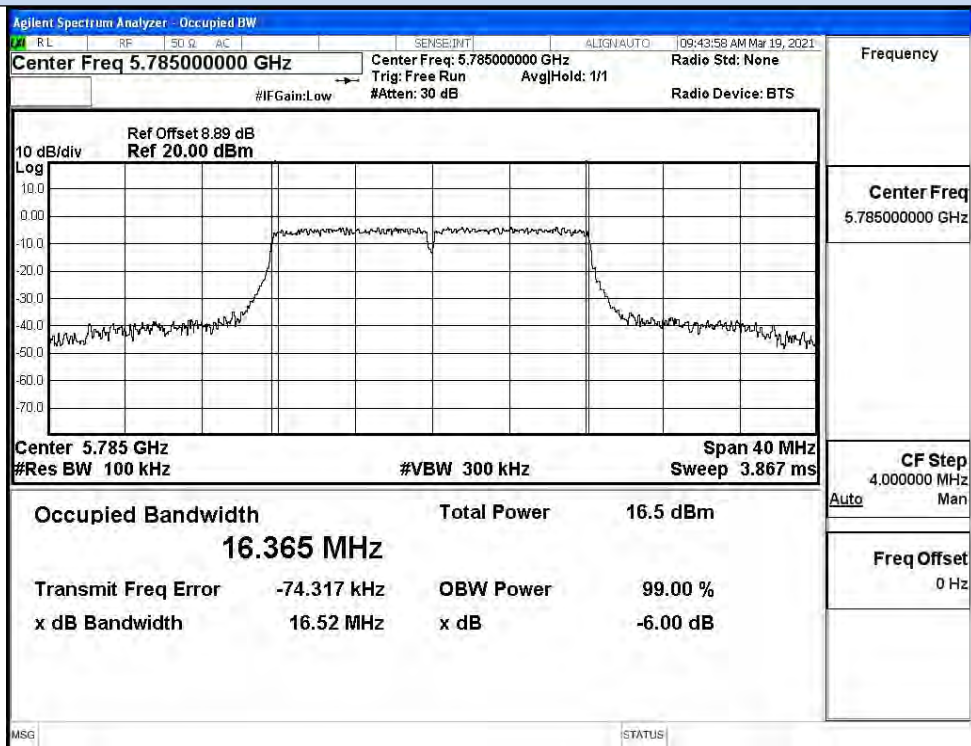
Ant1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.51	>=0.5	Pass
	157	5785	16.52		Pass
	165	5825	16.53		Pass
11N20 SISO	149	5745	17.77	>=0.5	Pass
	157	5785	17.74		Pass
	165	5825	17.73		Pass
11N40 SISO	151	5755	36.47	>=0.5	Pass
	159	5795	36.49		Pass
11AC20S ISO	149	5745	17.70	>=0.5	Pass
	157	5785	17.71		Pass
	165	5825	17.74		Pass
11AC40S ISO	151	5755	36.49	>=0.5	Pass
	159	5795	36.47		Pass

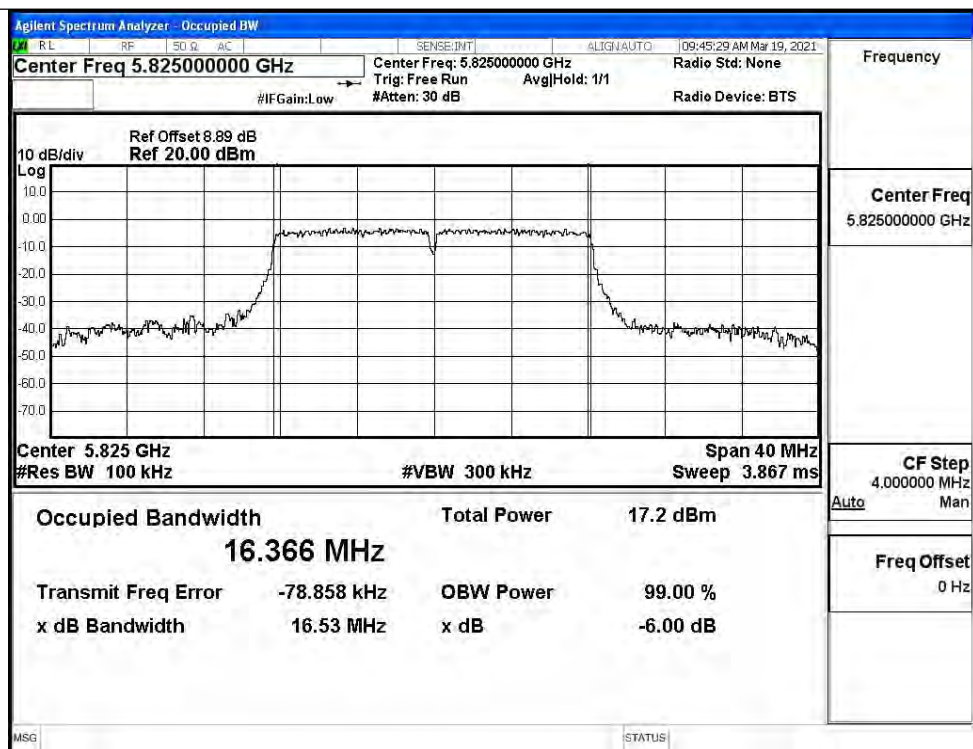
6dB Bandwidth



IEEE 802.11a / Channel 149 / 5745MHz

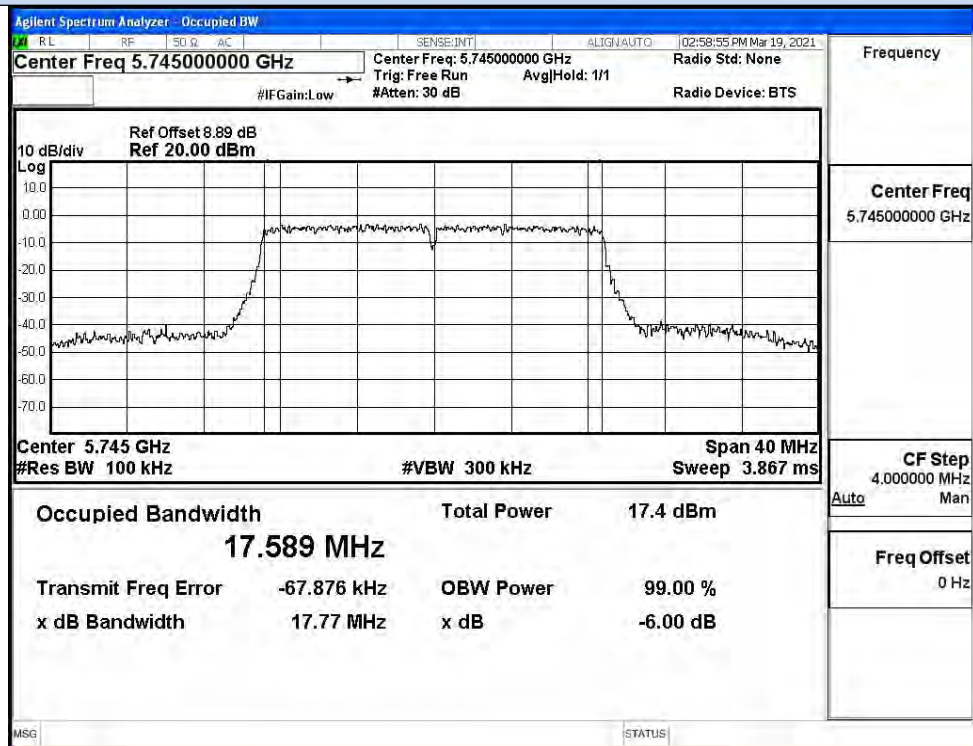


IEEE 802.11a / Channel 157 / 5785MHz

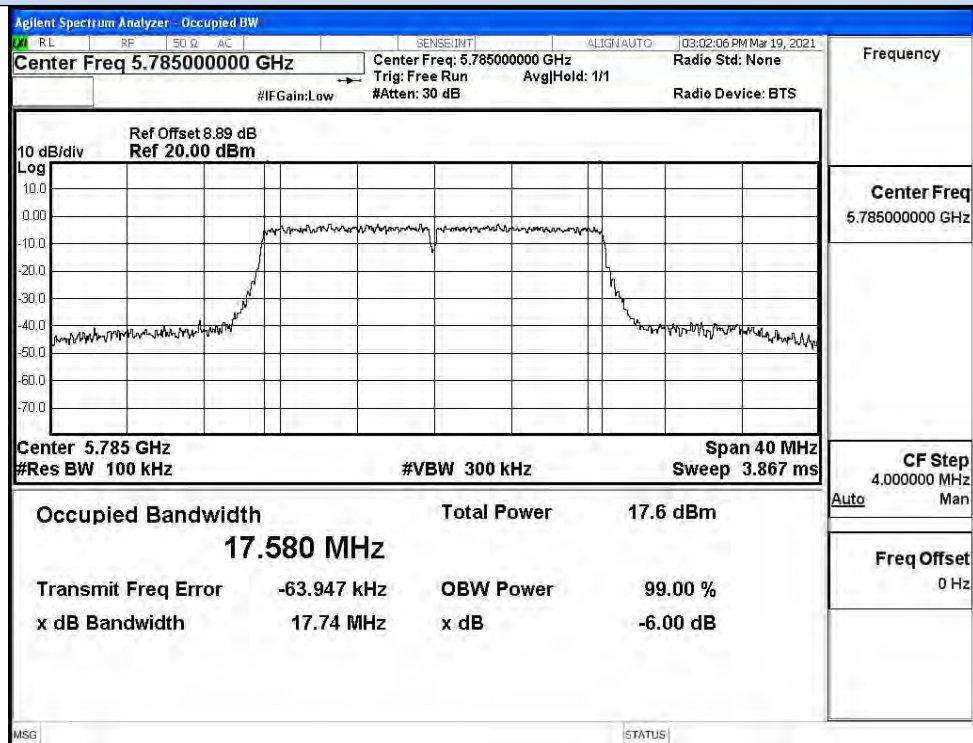


IEEE 802.11a / Channel 165 / 5825MHz

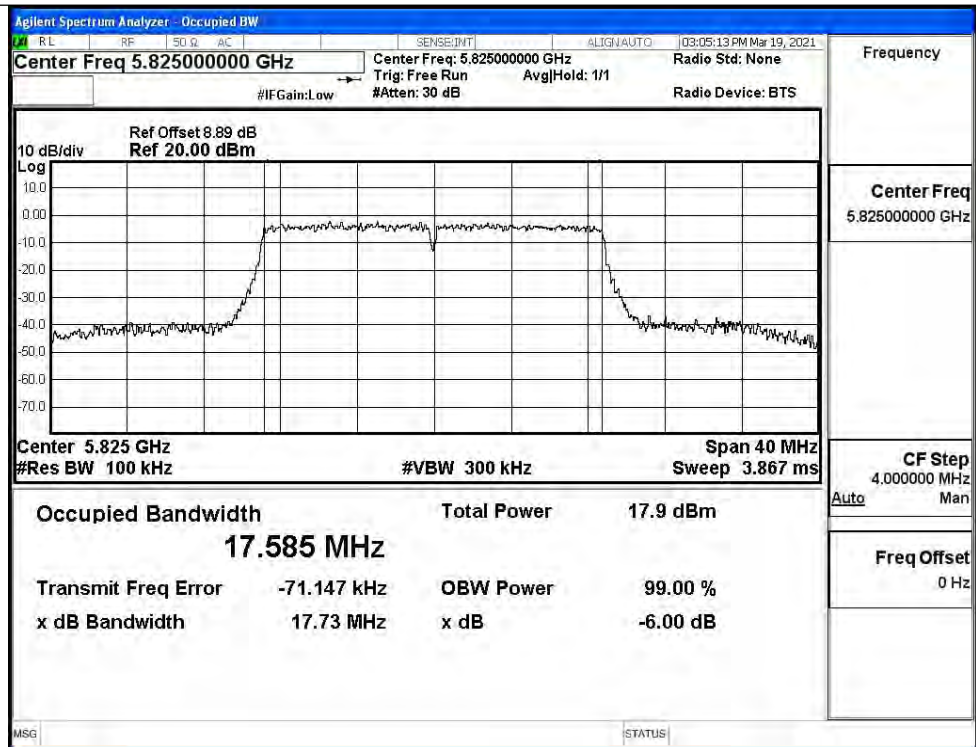
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

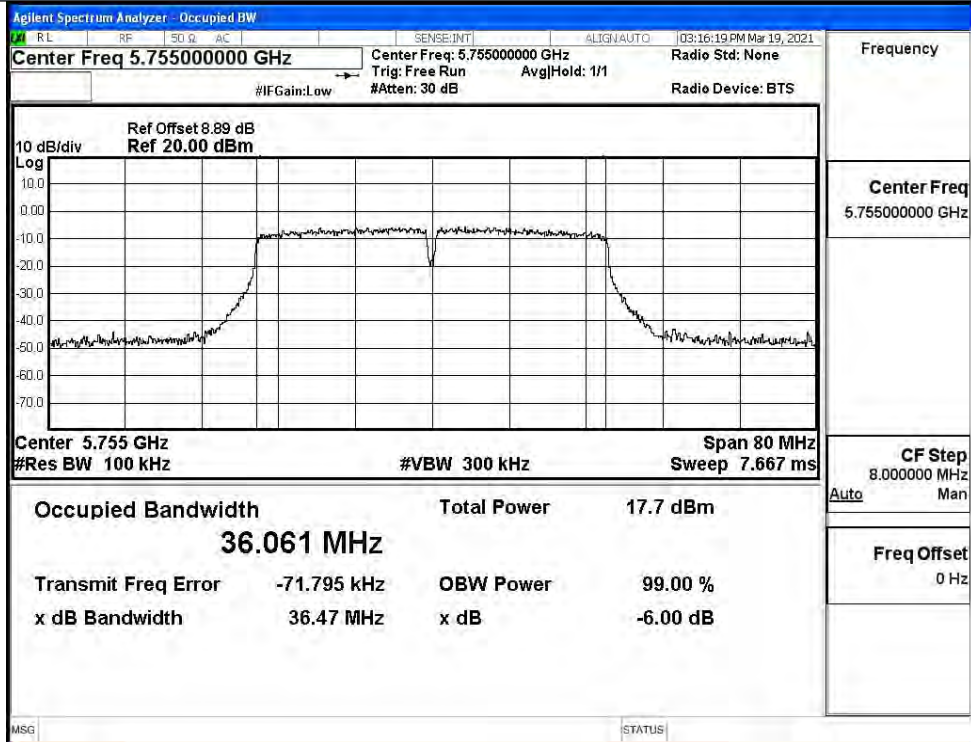


IEEE 802.11n20 / Channel 157 / 5785MHz

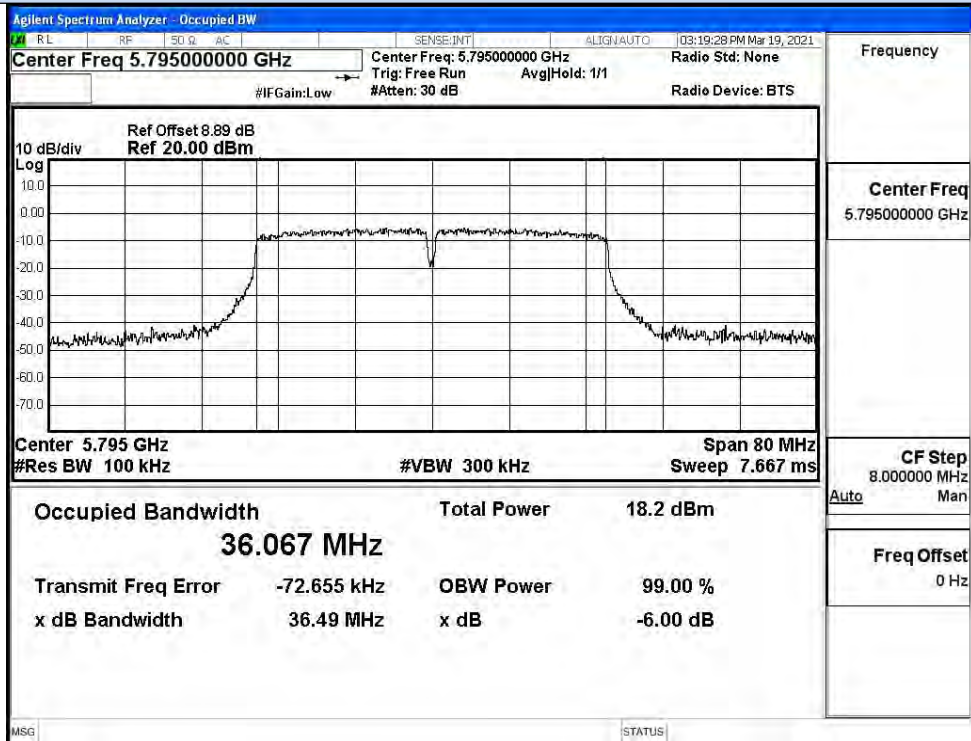


IEEE 802.11n20 / Channel 165 / 5825MHz

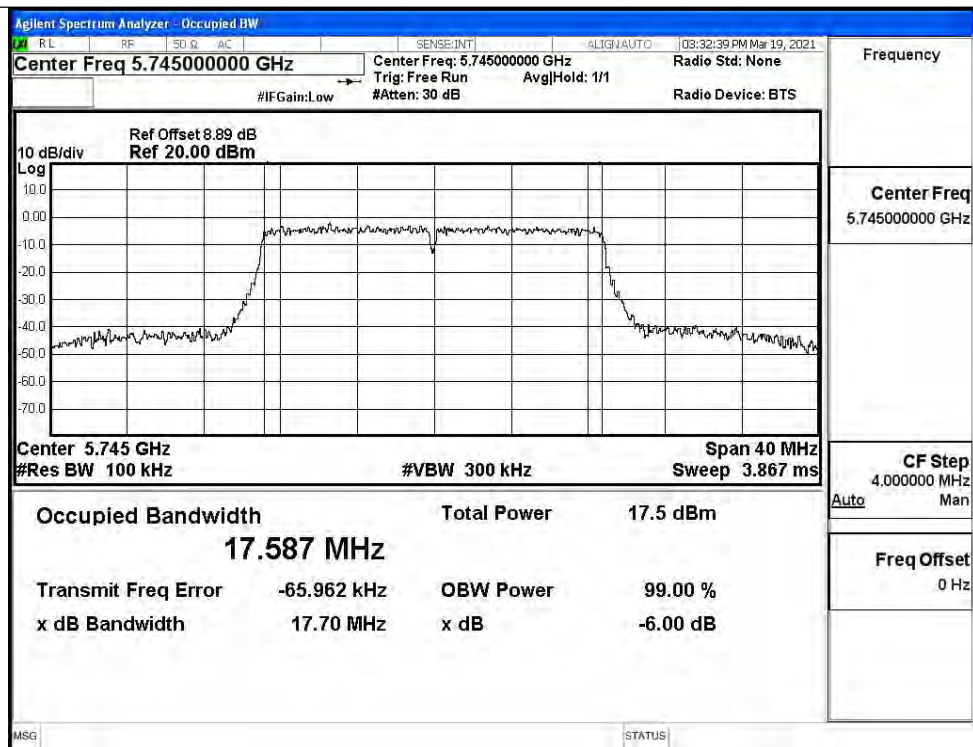
26dB Bandwidth



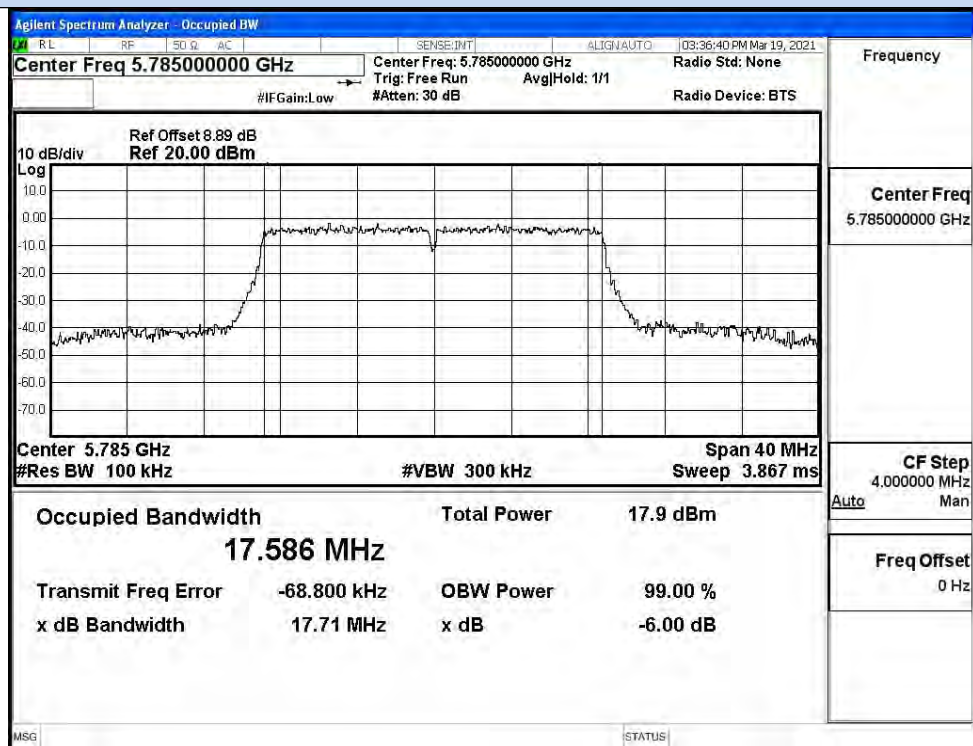
IEEE 802.11n40 / Channel 151 / 5755MHz



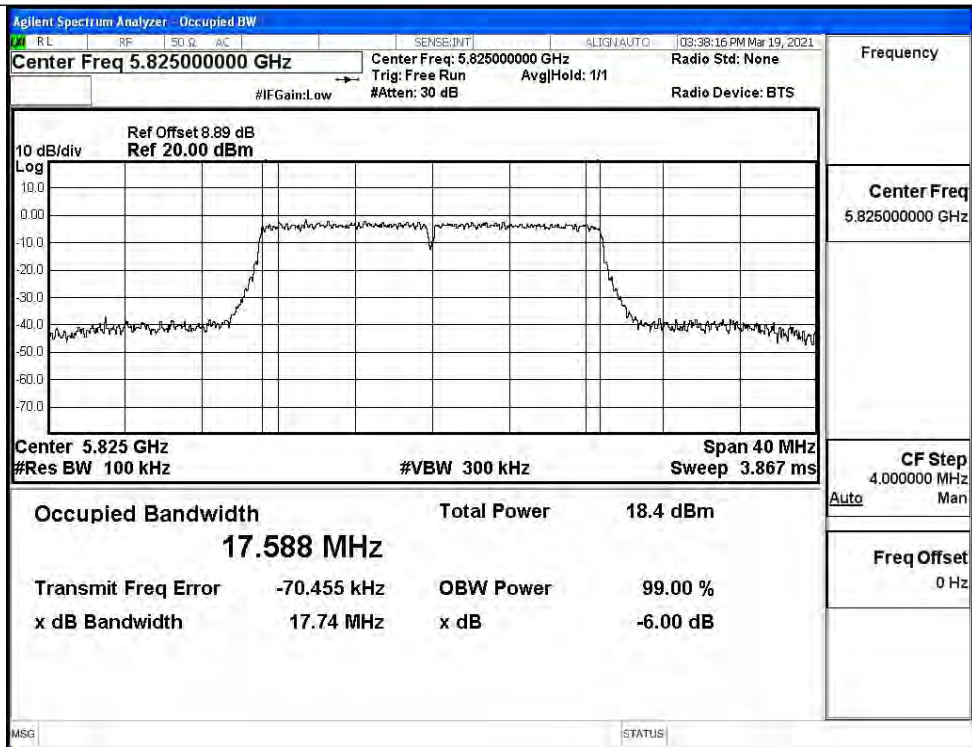
IEEE 802.11n40 / Channel 159 / 5795MHz



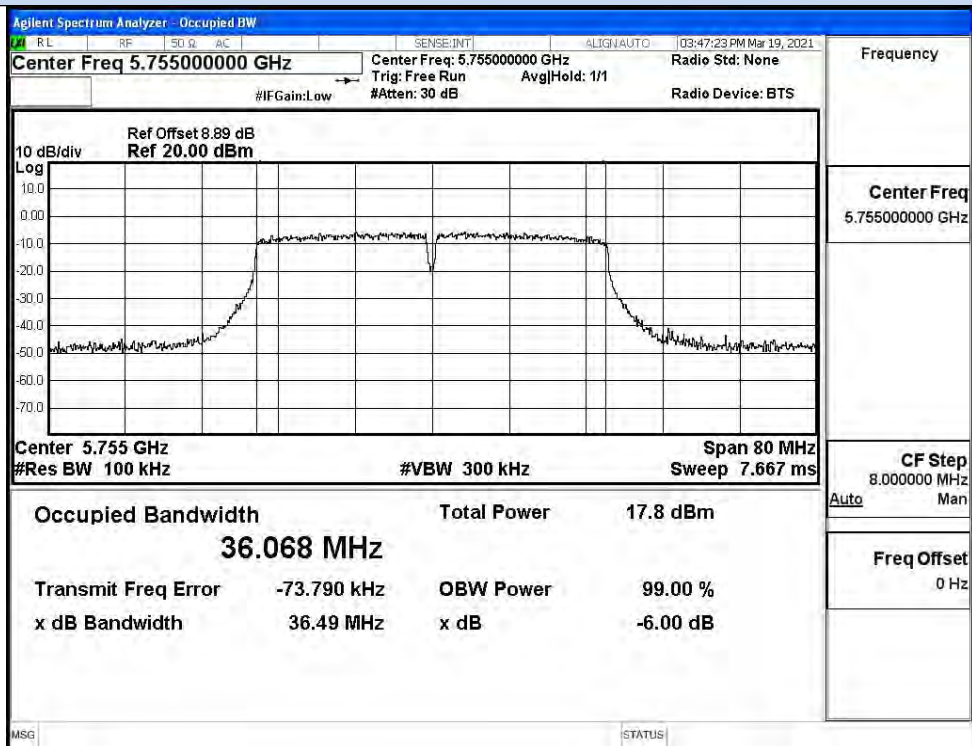
IEEE 802.11ac20 / Channel 149 / 5745MHz



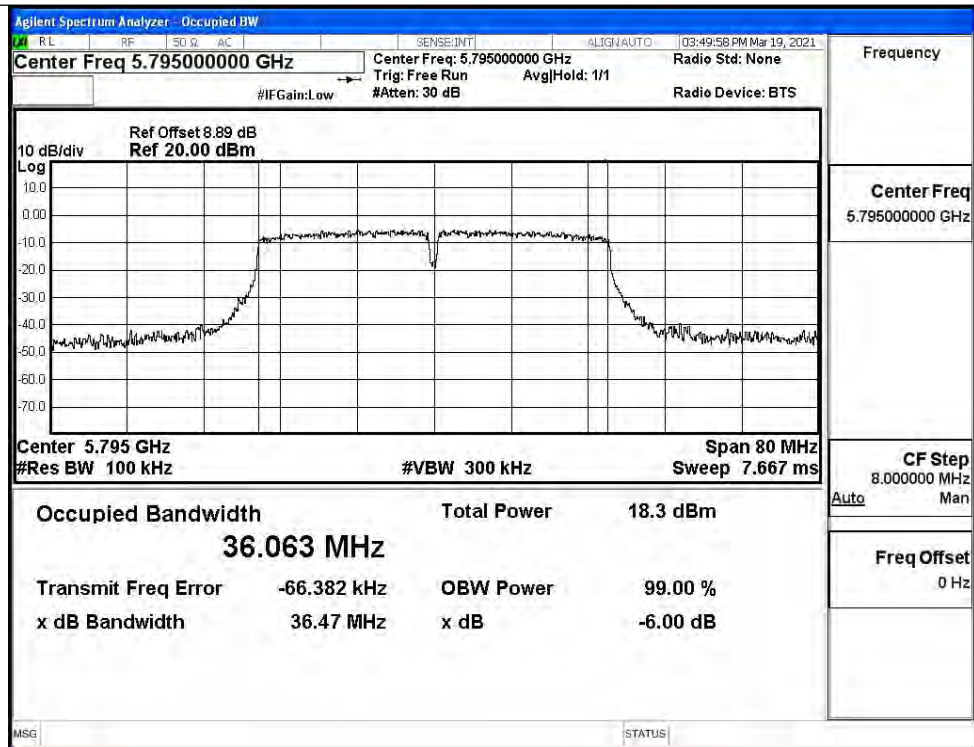
IEEE 802.11ac20 / Channel 157/ 5785MHz



IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz

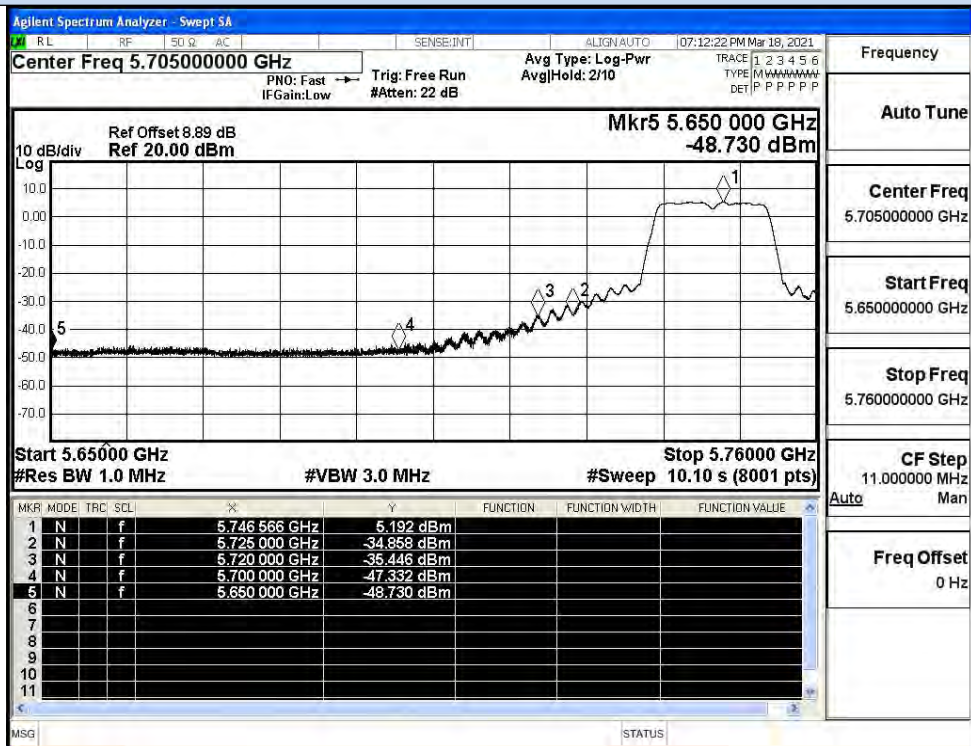
E.5 Undesirable Emissions Measurement

Ant0

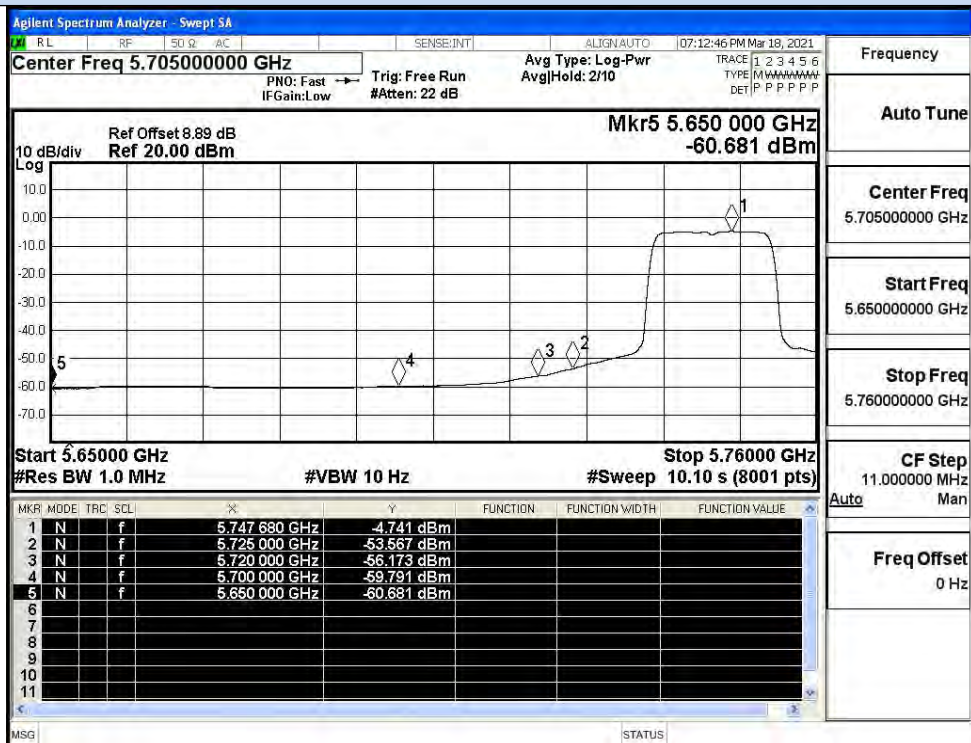
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11A	149	5650.0	-48.73	5.00	-43.73	Peak	-27.0	Pass
		5650.0	-60.68	5.00	-55.68	Average	-27.0	Pass
		5700.0	-47.33	5.00	-42.33	Peak	10	Pass
		5700.0	-59.79	5.00	-54.79	Average	10	Pass
		5720.0	-35.45	5.00	-30.45	Peak	15.6	Pass
		5720.0	-56.17	5.00	-51.17	Average	15.6	Pass
		5725.0	-34.86	5.00	-29.86	Peak	27.0	Pass
		5725.0	-53.57	5.00	-48.57	Average	27.0	Pass
	165	5850.0	-34.16	5.00	-29.16	Peak	27.0	Pass
		5850.0	-54.32	5.00	-49.32	Average	27.0	Pass
		5855.0	-36.24	5.00	-31.24	Peak	15.6	Pass
		5855.0	-56.60	5.00	-51.60	Average	15.6	Pass
		5875.0	-44.03	5.00	-39.03	Peak	10	Pass
		5875.0	-59.75	5.00	-54.75	Average	10	Pass
		5925.0	-49.15	5.00	-44.15	Peak	-27.0	Pass
		5925.0	-60.36	5.00	-55.36	Average	-27.0	Pass
11N20 SISO	149	5650.0	-49.48	5.00	-44.48	Peak	-27.0	Pass
		5650.0	-60.65	5.00	-55.65	Average	-27.0	Pass
		5700.0	-47.04	5.00	-42.04	Peak	10	Pass
		5700.0	-56.61	5.00	-51.61	Average	10	Pass
		5720.0	-39.14	5.00	-34.14	Peak	15.6	Pass
		5720.0	-59.77	5.00	-54.77	Average	15.6	Pass
		5725.0	-34.81	5.00	-29.81	Peak	27.0	Pass
		5725.0	-53.28	5.00	-48.28	Average	27.0	Pass
	165	5850.0	-32.46	5.00	-27.46	Peak	27.0	Pass
		5850.0	-54.40	5.00	-49.40	Average	27.0	Pass
		5855.0	-36.54	5.00	-31.54	Peak	15.6	Pass
		5855.0	-56.14	5.00	-51.14	Average	15.6	Pass
		5875.0	-46.90	5.00	-41.90	Peak	10	Pass
		5875.0	-59.76	5.00	-54.76	Average	10	Pass
		5925.0	-49.16	5.00	-44.16	Peak	-27.0	Pass
		5925.0	-60.35	5.00	-55.35	Average	-27.0	Pass

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N40 SISO	151	5650.0	-47.06	5.00	-42.06	Peak	-27.0	Pass
		5650.0	-60.38	5.00	-55.38	Average	-27.0	Pass
		5700.0	-40.47	5.00	-35.47	Peak	10	Pass
		5700.0	-57.76	5.00	-52.76	Average	10	Pass
		5720.0	-36.82	5.00	-31.82	Peak	15.6	Pass
		5720.0	-54.65	5.00	-49.65	Average	15.6	Pass
		5725.0	-37.17	5.00	-32.17	Peak	27.0	Pass
		5725.0	-53.61	5.00	-48.61	Average	27.0	Pass
	159	5850.0	-37.90	5.00	-32.90	Peak	27.0	Pass
		5850.0	-55.48	5.00	-50.48	Average	27.0	Pass
		5855.0	-41.18	5.00	-36.18	Peak	15.6	Pass
		5855.0	-56.69	5.00	-51.69	Average	15.6	Pass
		5875.0	-47.11	5.00	-42.11	Peak	10	Pass
		5875.0	-58.97	5.00	-53.97	Average	10	Pass
		5925.0	-47.38	5.00	-42.38	Peak	-27.0	Pass
		5925.0	-59.82	5.00	-54.82	Average	-27.0	Pass
11AC20 SISO	149	5650.0	-47.94	5.00	-42.94	Peak	-27.0	Pass
		5650.0	-59.63	5.00	-54.63	Average	-27.0	Pass
		5700.0	-45.95	5.00	-40.95	Peak	10	Pass
		5700.0	-54.47	5.00	-49.47	Average	10	Pass
		5720.0	-35.69	5.00	-30.69	Peak	15.6	Pass
		5720.0	-58.79	5.00	-53.79	Average	15.6	Pass
		5725.0	-31.31	5.00	-26.31	Peak	27.0	Pass
		5725.0	-51.55	5.00	-46.55	Average	27.0	Pass
	165	5850.0	-30.90	5.00	-25.90	Peak	27.0	Pass
		5850.0	-52.49	5.00	-47.49	Average	27.0	Pass
		5855.0	-34.10	5.00	-29.10	Peak	15.6	Pass
		5855.0	-54.26	5.00	-49.26	Average	15.6	Pass
		5875.0	-45.32	5.00	-40.32	Peak	10	Pass
		5875.0	-58.50	5.00	-53.50	Average	10	Pass
		5925.0	-47.06	5.00	-42.06	Peak	-27.0	Pass
		5925.0	-59.14	5.00	-54.14	Average	-27.0	Pass
11AC40 SISO	151	5650.0	-47.87	5.00	-42.87	Peak	-27.0	Pass
		5650.0	-59.39	5.00	-54.39	Average	-27.0	Pass
		5700.0	-40.10	5.00	-35.10	Peak	10	Pass
		5700.0	-56.64	5.00	-51.64	Average	10	Pass
		5720.0	-34.97	5.00	-29.97	Peak	15.6	Pass
		5720.0	-53.49	5.00	-48.49	Average	15.6	Pass
		5725.0	-33.38	5.00	-28.38	Peak	27.0	Pass
		5725.0	-53.02	5.00	-48.02	Average	27.0	Pass
	159	5850.0	-34.97	5.00	-29.97	Peak	27.0	Pass
		5850.0	-53.19	5.00	-48.19	Average	27.0	Pass
		5855.0	-38.60	5.00	-33.60	Peak	15.6	Pass
		5855.0	-54.60	5.00	-49.60	Average	15.6	Pass
		5875.0	-44.82	5.00	-39.82	Peak	10	Pass
		5875.0	-57.60	5.00	-52.60	Average	10	Pass
		5925.0	-46.82	5.00	-41.82	Peak	-27.0	Pass
		5925.0	-58.50	5.00	-53.50	Average	-27.0	Pass

Undesirable Emissions Measurement

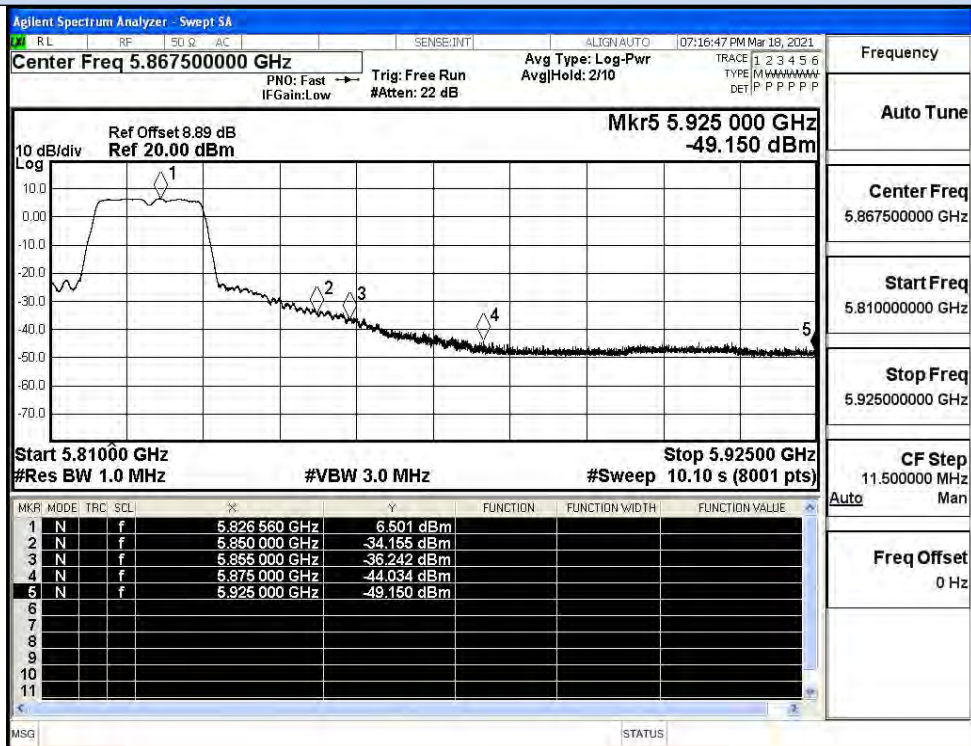


IEEE 802.11a / Channel 149 / 5745MHz / Peak

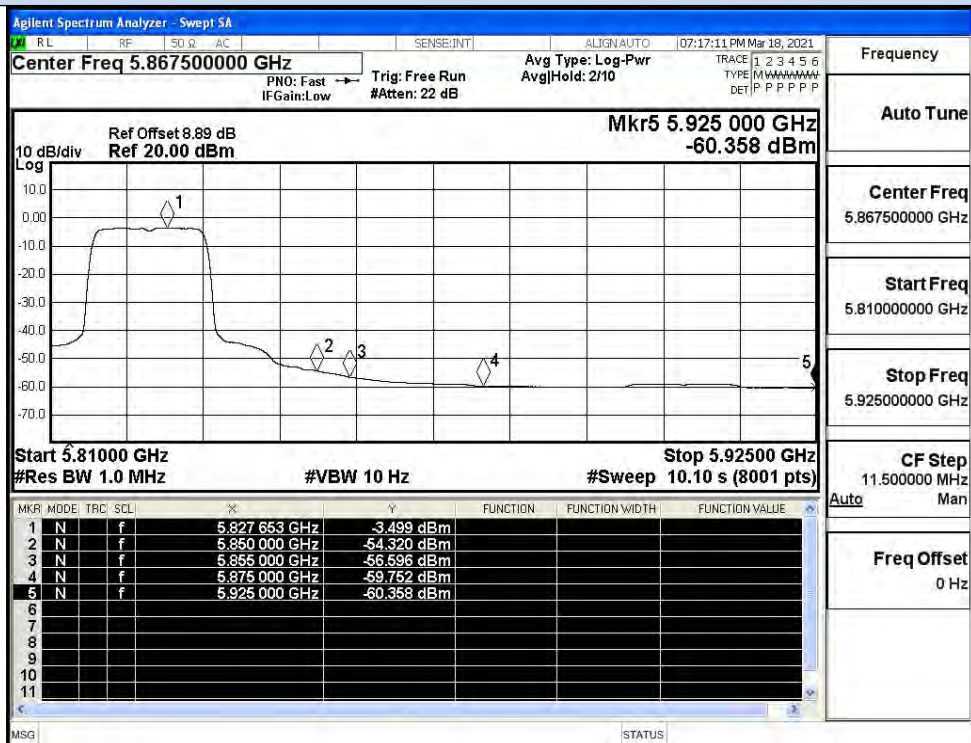


IEEE 802.11a / Channel 148 / 5745MHz / Average

Undesirable Emissions Measurement

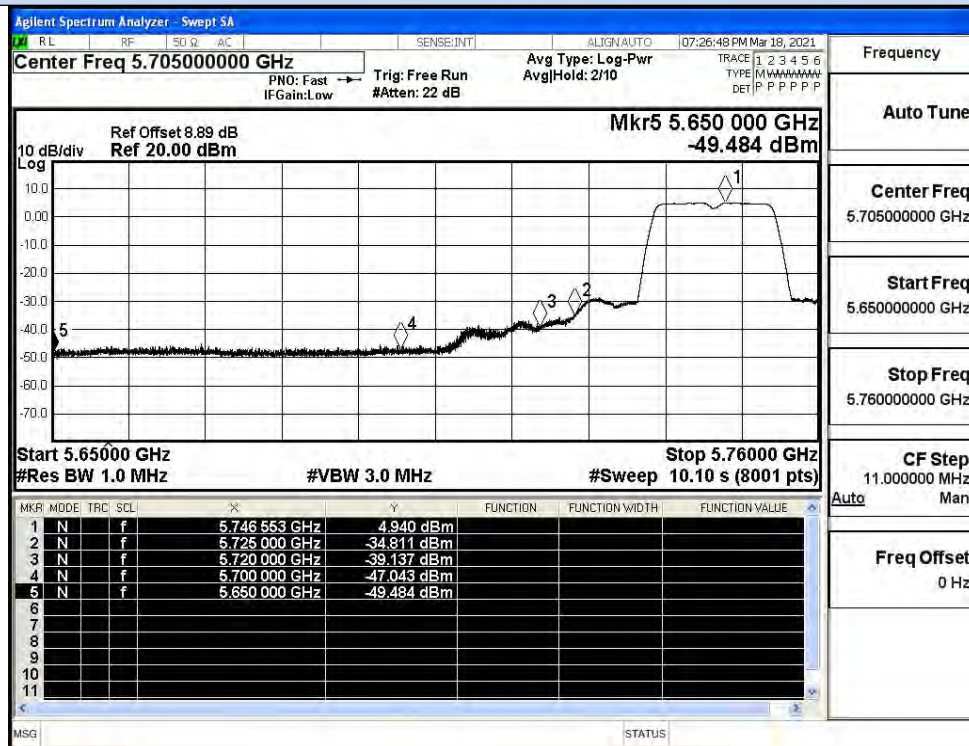


IEEE 802.11a / Channel 165 / 5825MHz / Peak

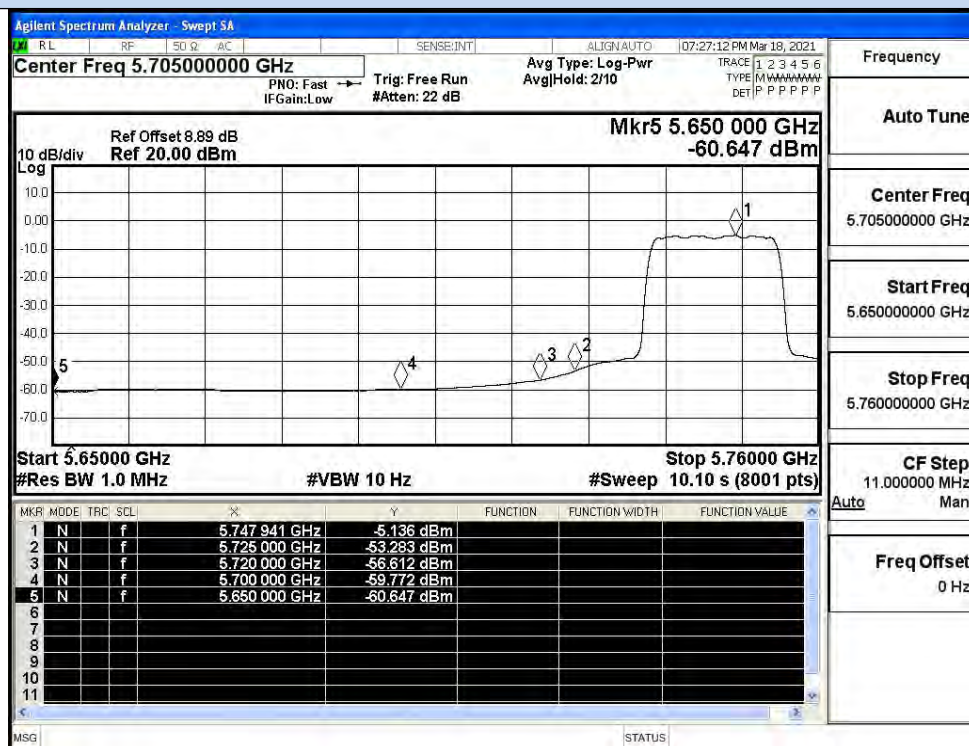


IEEE 802.11a / Channel 165 / 5825MHz / Average

Undesirable Emissions Measurement

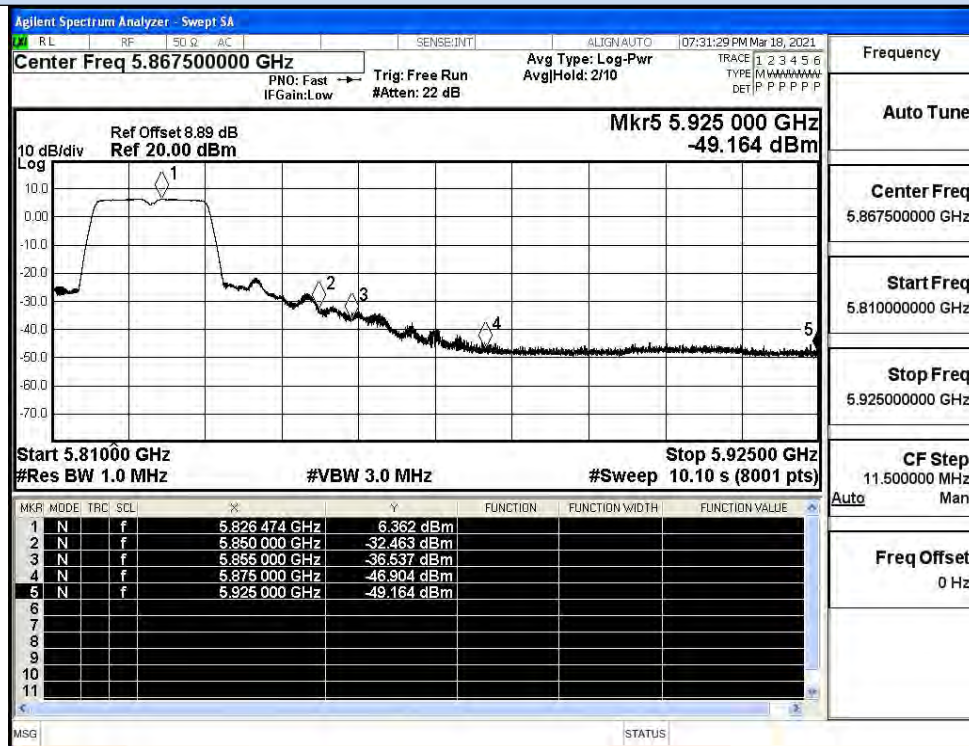


IEEE 802.11n20 / Channel 149 / 5745MHz / Peak

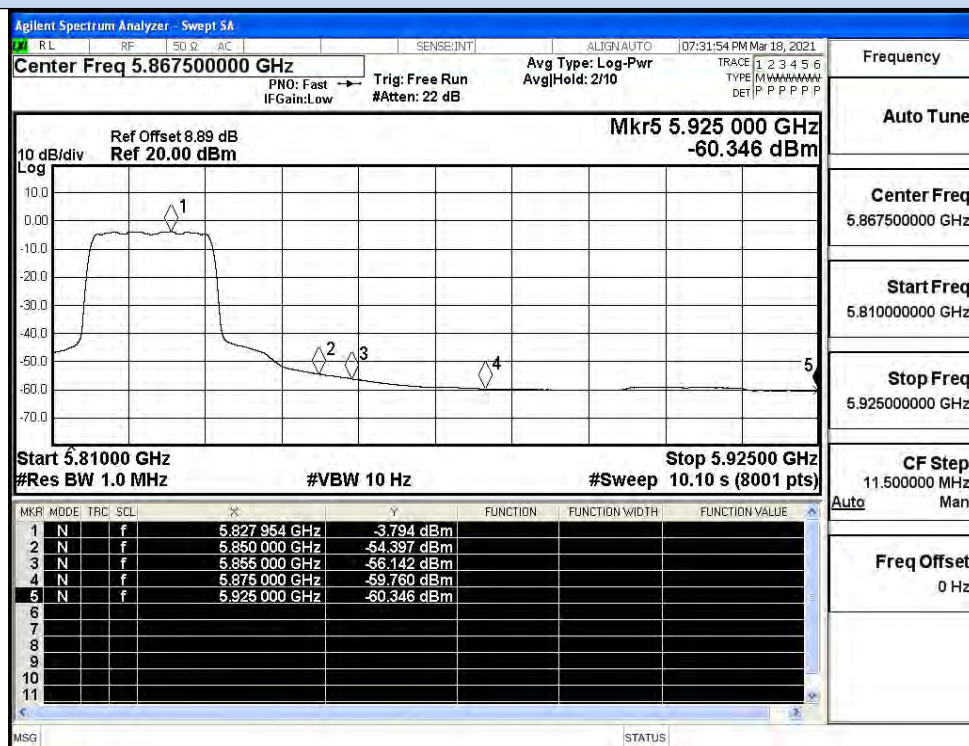


IEEE 802.11n20 / Channel 149 / 5745MHz / Average

Undesirable Emissions Measurement

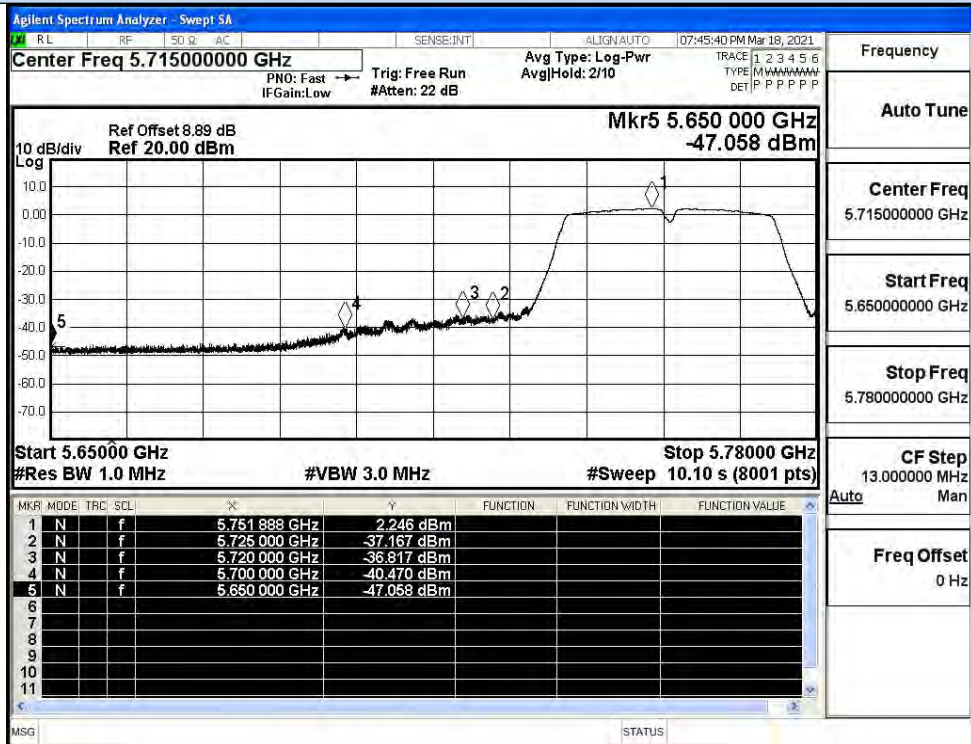


IEEE 802.11n20 / Channel 165 / 5825MHz / Peak

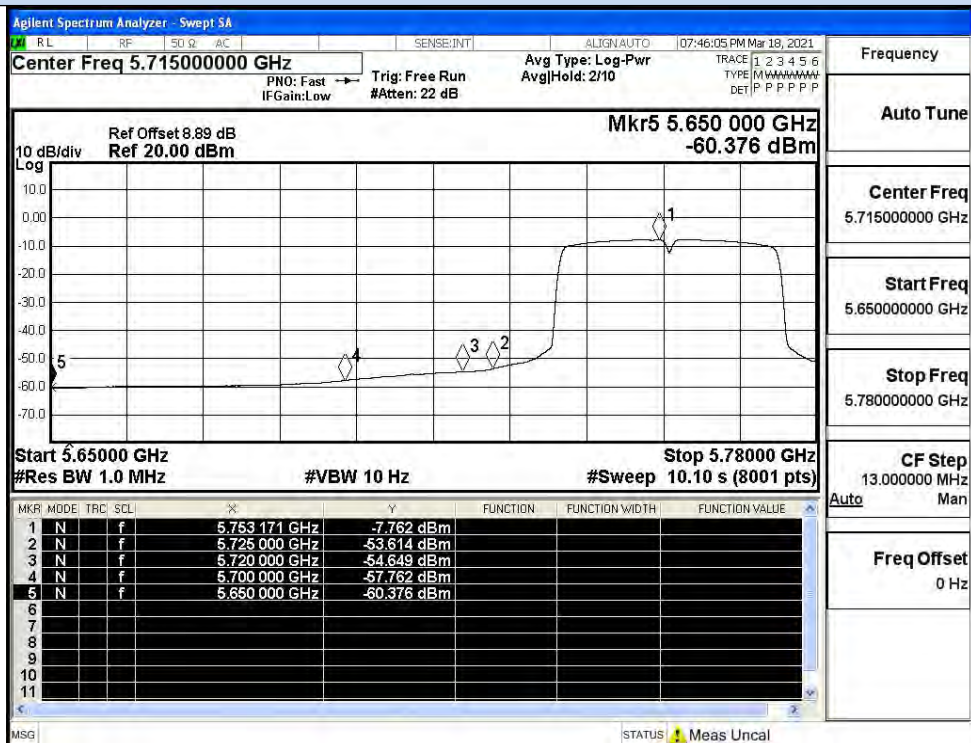


IEEE 802.11n20 / Channel 165 / 5825MHz / Average

Undesirable Emissions Measurement

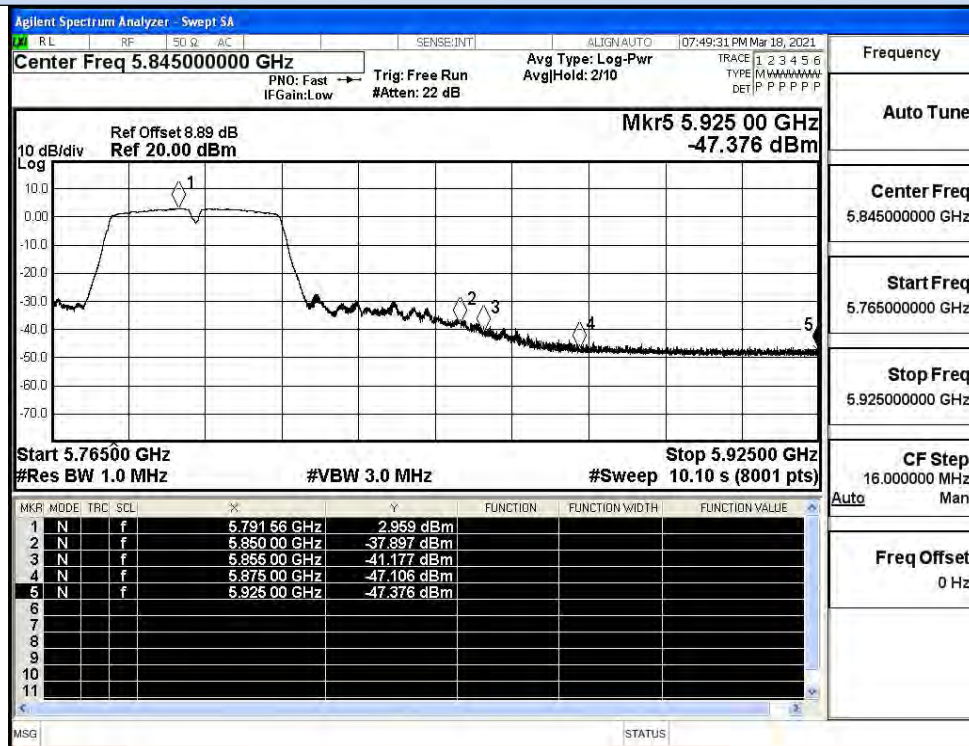


IEEE 802.11n40 / Channel 151 / 5755MHz / Peak

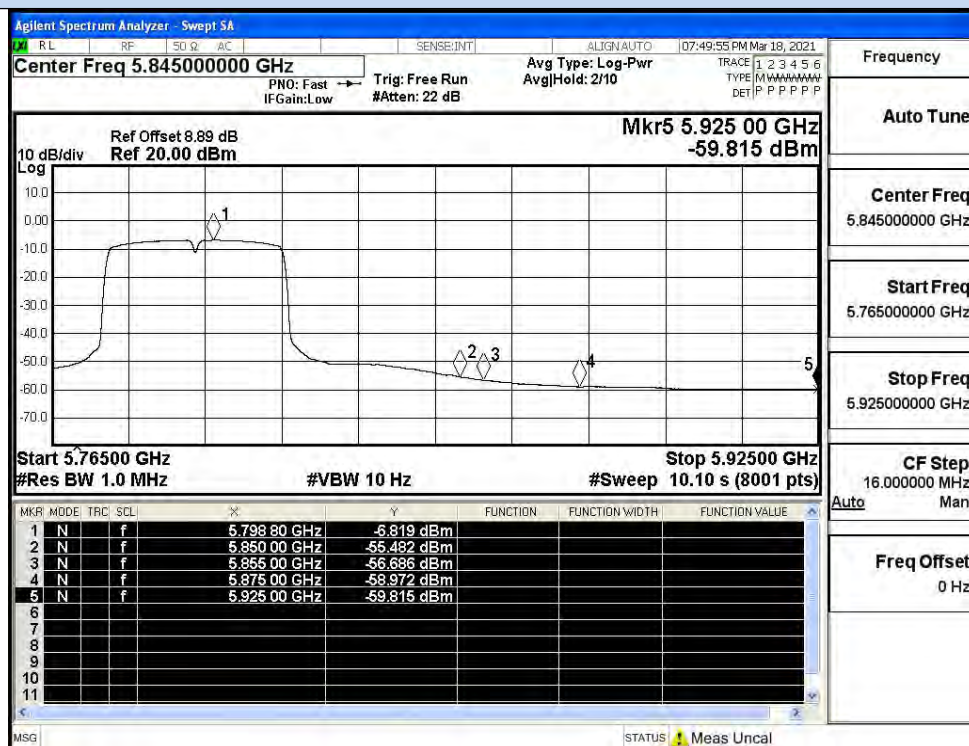


IEEE 802.11n40 / Channel 151 / 5755MHz / Average

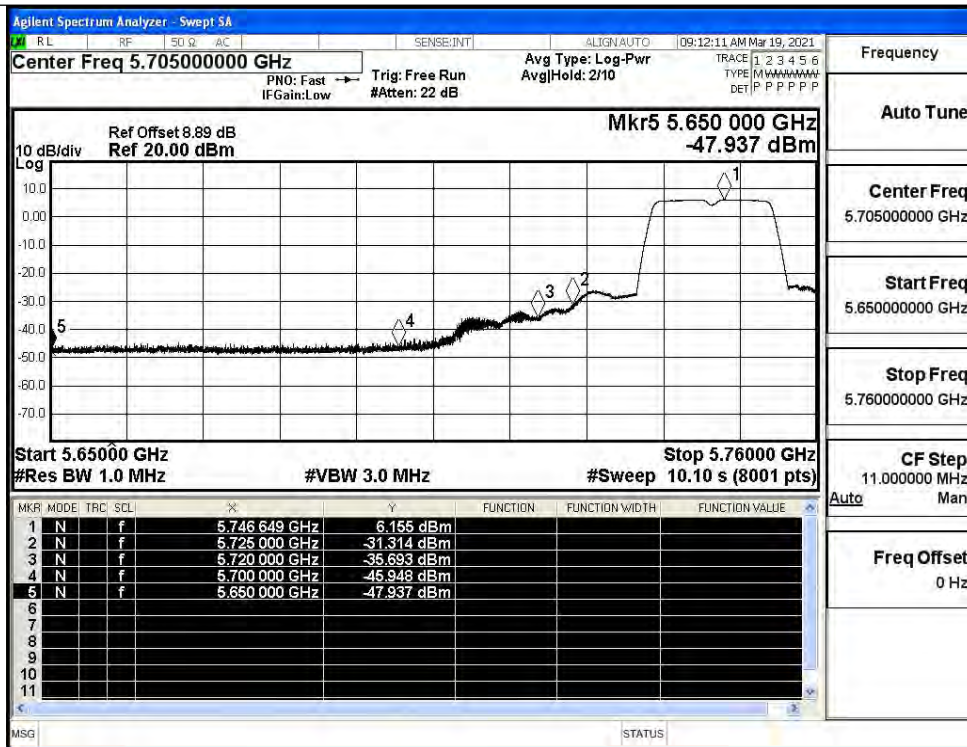
Undesirable Emissions Measurement



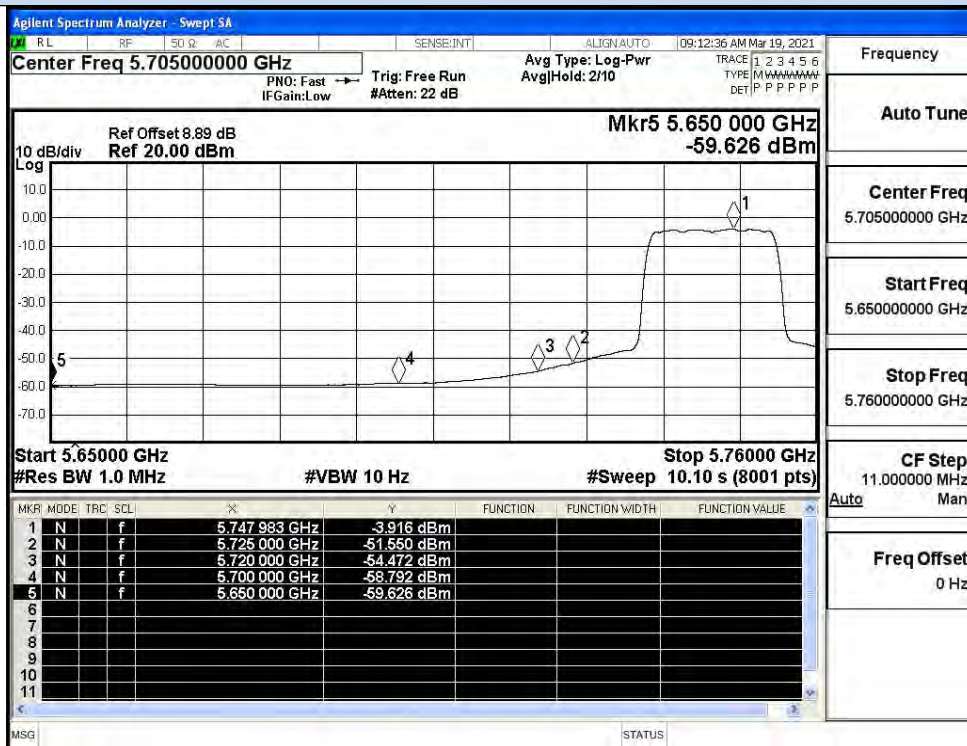
IEEE 802.11n40 / Channel 159 / 5795MHz / Peak



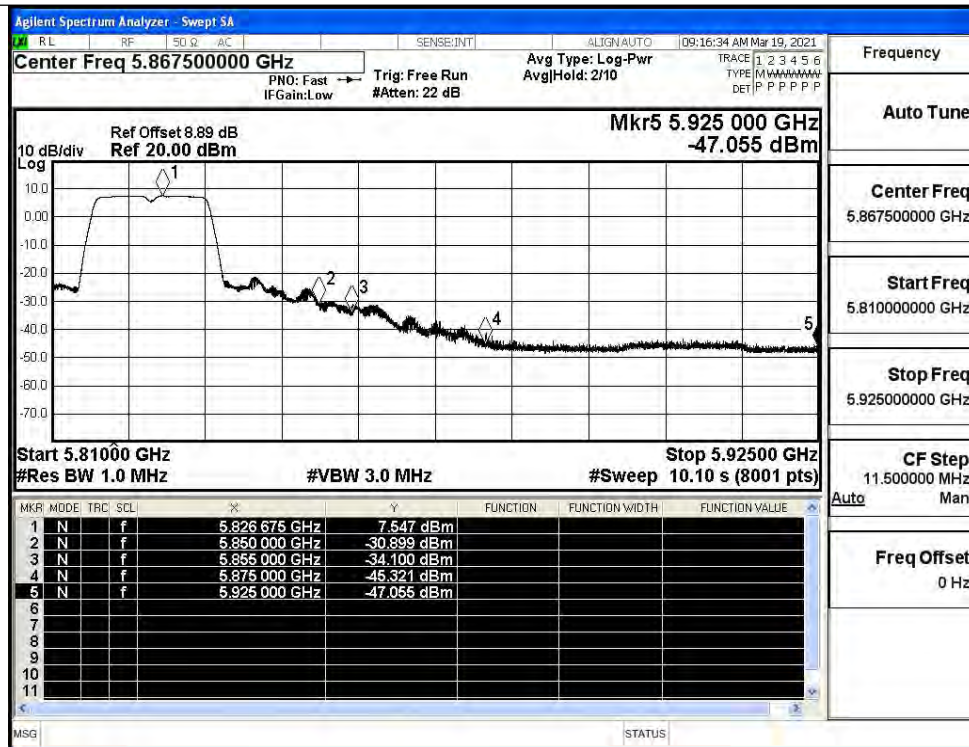
IEEE 802.11n40 / Channel 159 / 5795MHz / Average



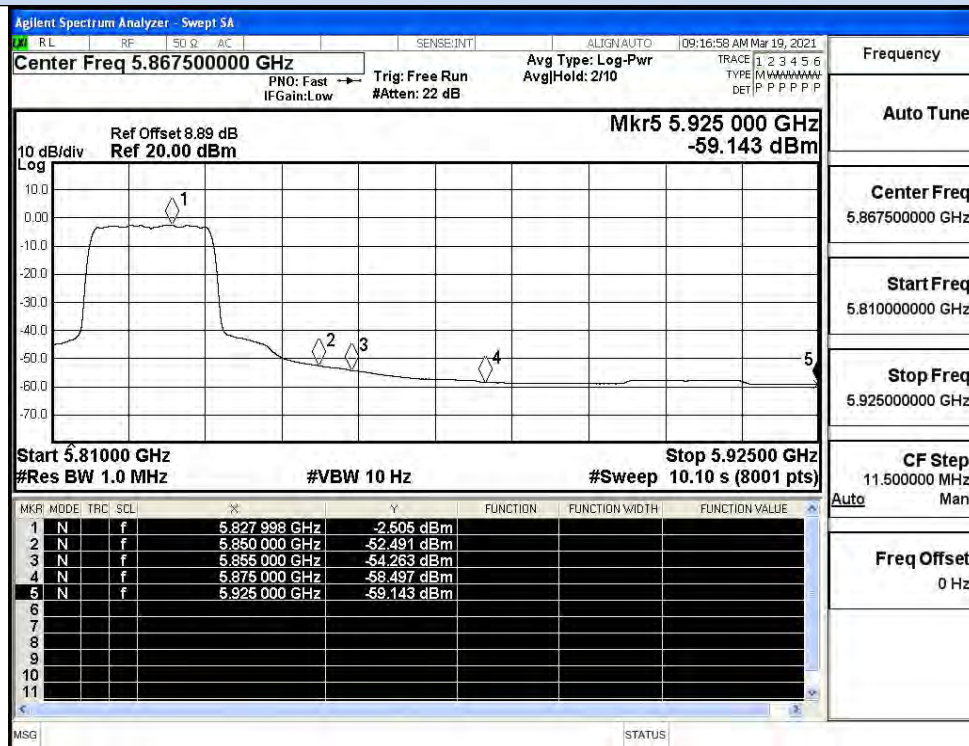
IEEE 802.11ac20 / Channel 149 / 5745MHz / Peak



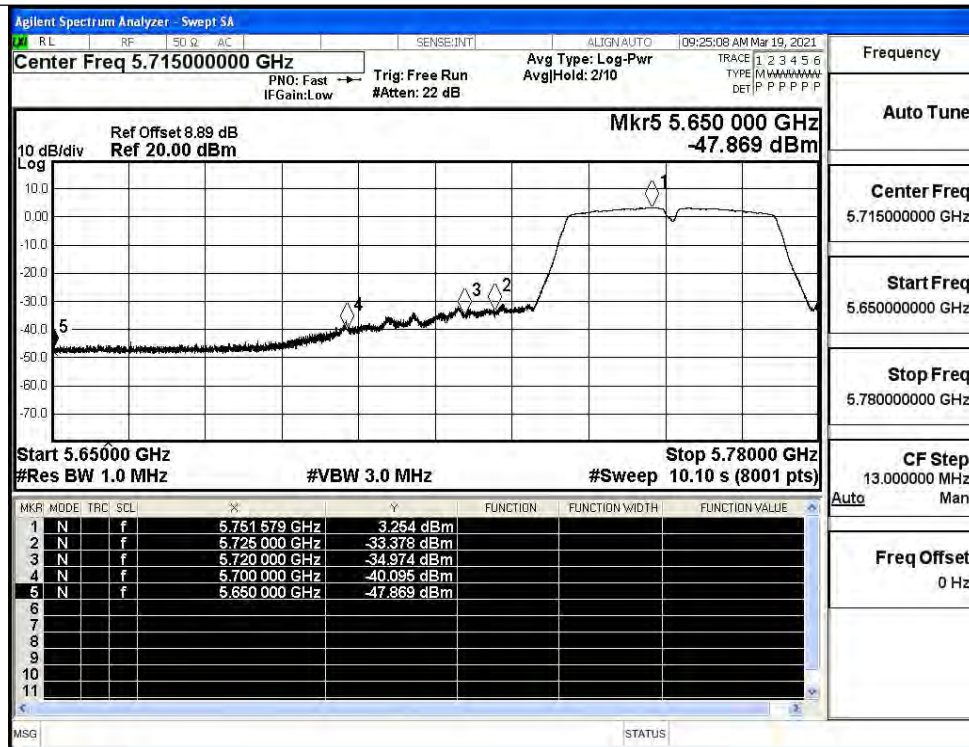
IEEE 802.11ac20 / Channel 149 / 5745MHz / Average



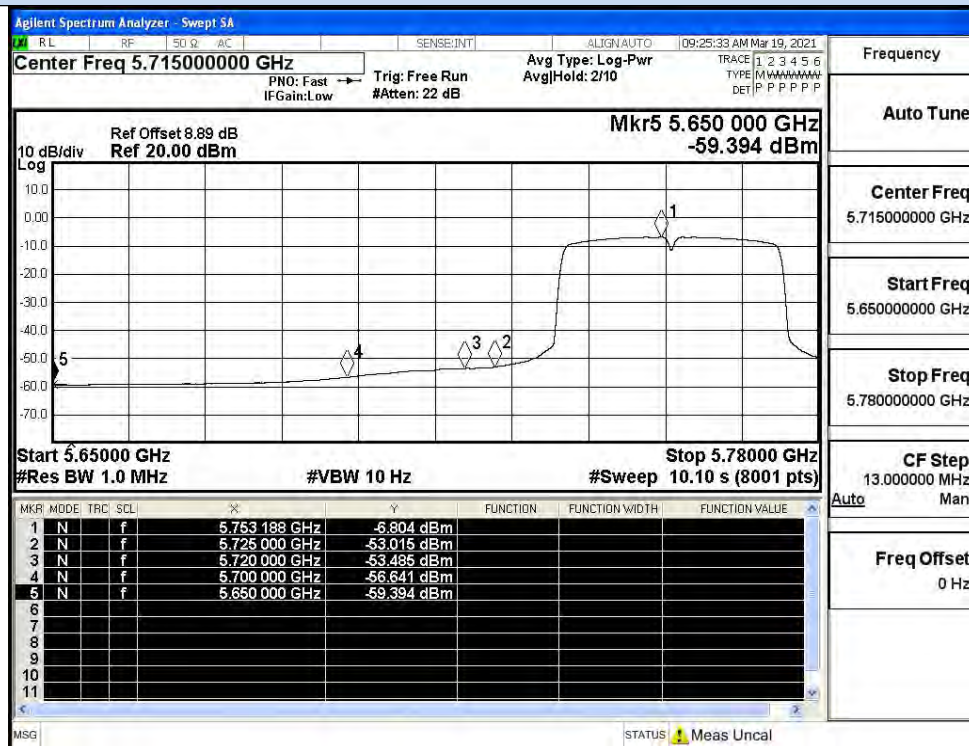
IEEE 802.11ac20 / Channel 165 / 5825MHz / Peak



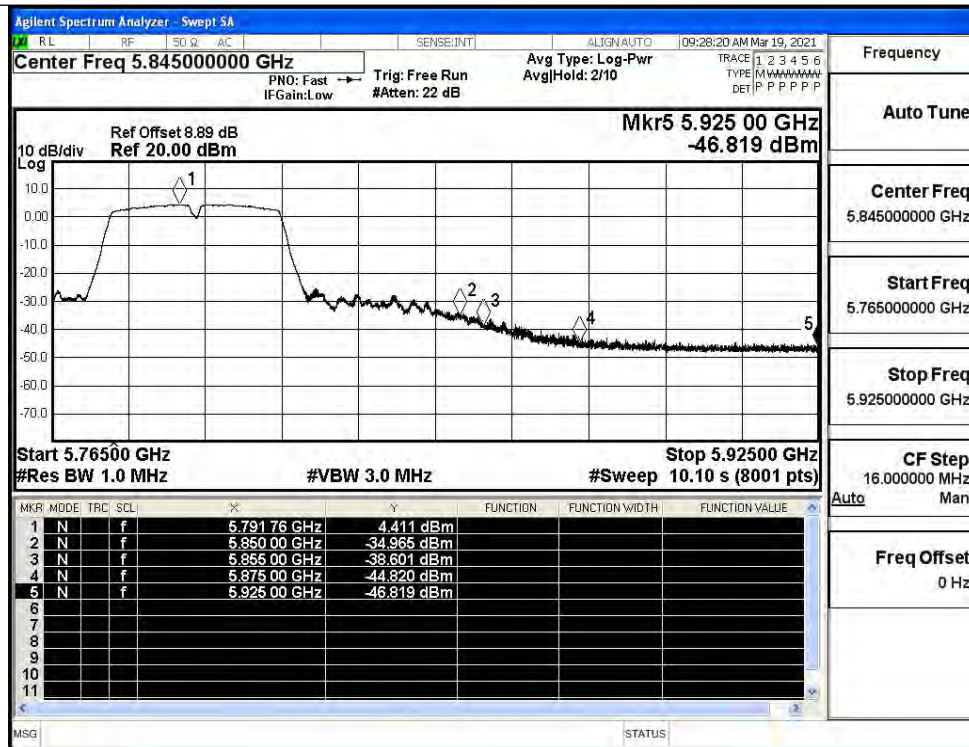
IEEE 802.11ac20 / Channel 165 / 5825MHz / Average



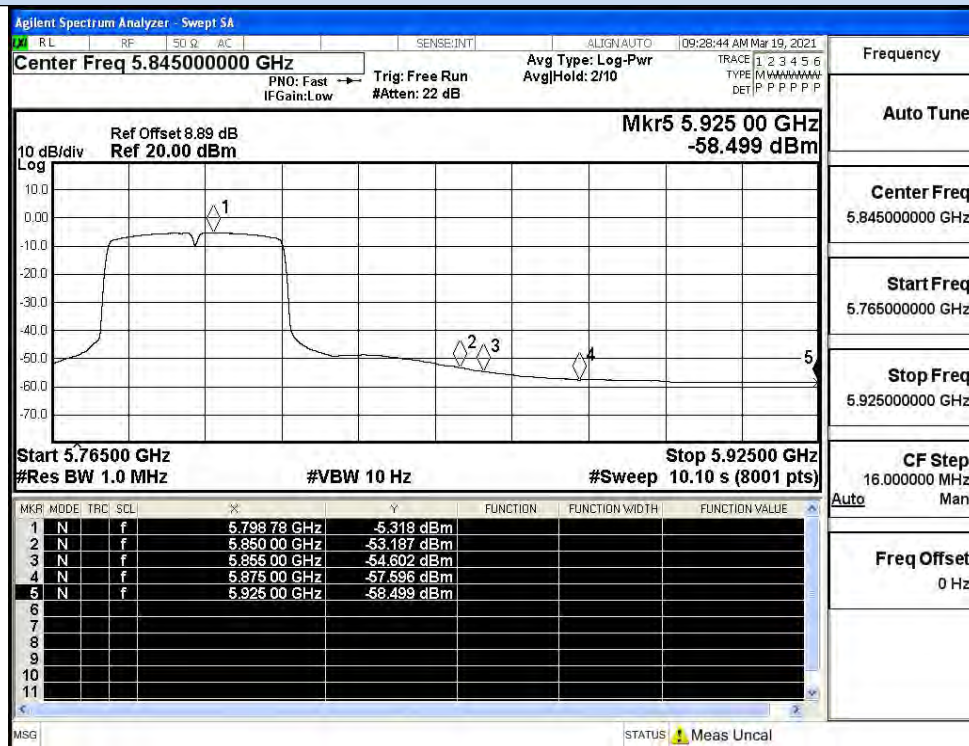
IEEE 802.11ac40 / Channel 151 / 5755MHz / Peak



IEEE 802.11ac40 / Channel 151 / 5755MHz / Average



IEEE 802.11ac40 / Channel 159 / 5795MHz / Peak



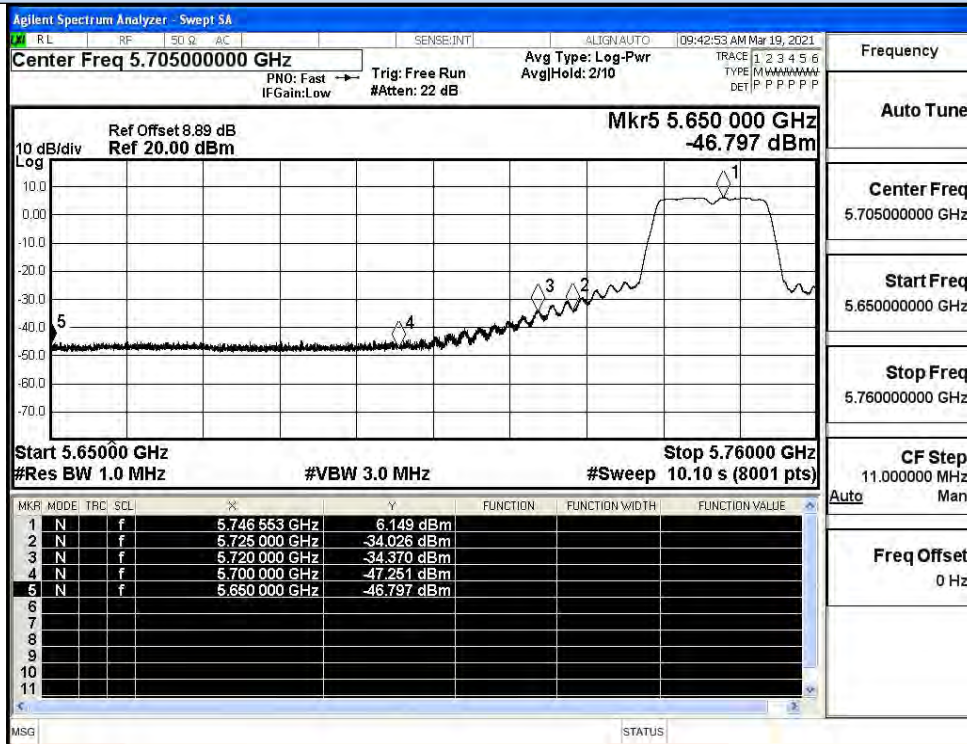
IEEE 802.11ac40 / Channel 159 / 5795MHz / Average

Ant1

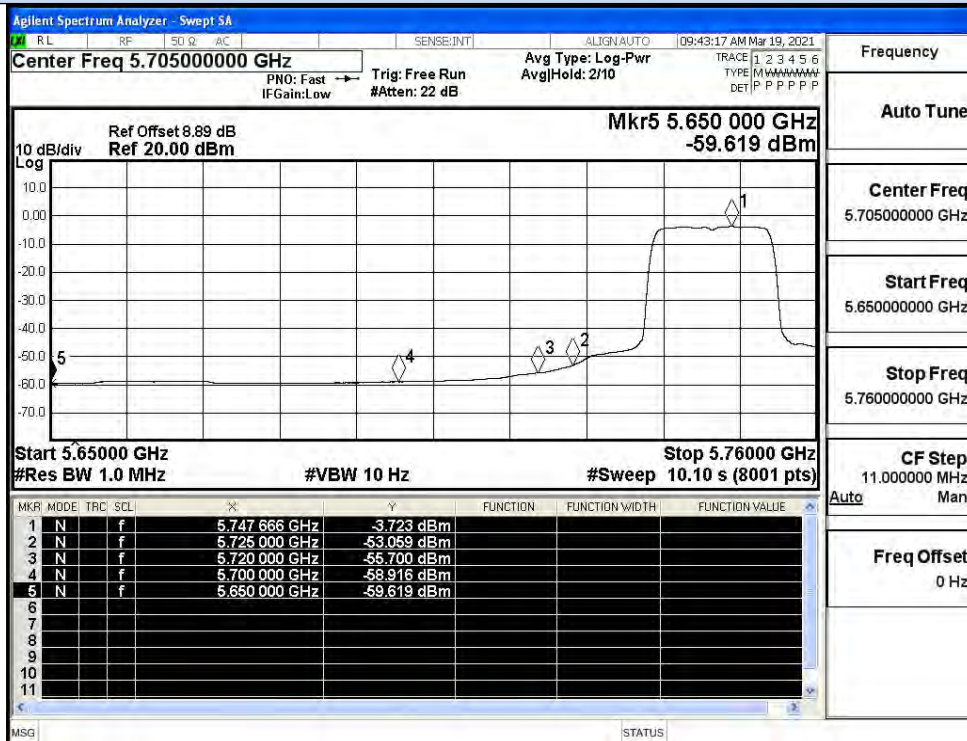
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11A	149	5650.0	-46.80	5.00	-41.80	Peak	-27.0	Pass
		5650.0	-59.62	5.00	-54.62	Average	-27.0	Pass
		5700.0	-47.25	5.00	-42.25	Peak	10	Pass
		5700.0	-58.92	5.00	-53.92	Average	10	Pass
		5720.0	-34.37	5.00	-29.37	Peak	15.6	Pass
		5720.0	-55.70	5.00	-50.70	Average	15.6	Pass
		5725.0	-34.03	5.00	-29.03	Peak	27.0	Pass
		5725.0	-53.06	5.00	-48.06	Average	27.0	Pass
	165	5850.0	-31.99	5.00	-26.99	Peak	27.0	Pass
		5850.0	-52.81	5.00	-47.81	Average	27.0	Pass
		5855.0	-34.18	5.00	-29.18	Peak	15.6	Pass
		5855.0	-54.92	5.00	-49.92	Average	15.6	Pass
		5875.0	-46.19	5.00	-41.19	Peak	10	Pass
		5875.0	-58.47	5.00	-53.47	Average	10	Pass
		5925.0	-47.99	5.00	-42.99	Peak	-27.0	Pass
		5925.0	-59.09	5.00	-54.09	Average	-27.0	Pass
11N20 SISO	149	5650.0	-46.34	5.00	-41.34	Peak	-27.0	Pass
		5650.0	-59.41	5.00	-54.41	Average	-27.0	Pass
		5700.0	-44.91	5.00	-39.91	Peak	10	Pass
		5700.0	-53.93	5.00	-48.93	Average	10	Pass
		5720.0	-35.40	5.00	-30.40	Peak	15.6	Pass
		5720.0	-58.44	5.00	-53.44	Average	15.6	Pass
		5725.0	-31.33	5.00	-26.33	Peak	27.0	Pass
		5725.0	-50.66	5.00	-45.66	Average	27.0	Pass
	165	5850.0	-31.98	5.00	-26.98	Peak	27.0	Pass
		5850.0	-53.01	5.00	-48.01	Average	27.0	Pass
		5855.0	-35.23	5.00	-30.23	Peak	15.6	Pass
		5855.0	-54.84	5.00	-49.84	Average	15.6	Pass
		5875.0	-46.70	5.00	-41.70	Peak	10	Pass
		5875.0	-58.44	5.00	-53.44	Average	10	Pass
		5925.0	-47.33	5.00	-42.33	Peak	-27.0	Pass
		5925.0	-59.10	5.00	-54.10	Average	-27.0	Pass

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N40 SISO	151	5650.0	-46.38	5.00	-41.38	Peak	-27.0	Pass
		5650.0	-58.93	5.00	-53.93	Average	-27.0	Pass
		5700.0	-35.98	5.00	-30.98	Peak	10	Pass
		5700.0	-55.23	5.00	-50.23	Average	10	Pass
		5720.0	-32.81	5.00	-27.81	Peak	15.6	Pass
		5720.0	-49.92	5.00	-44.92	Average	15.6	Pass
		5725.0	-33.35	5.00	-28.35	Peak	27.0	Pass
		5725.0	-49.41	5.00	-44.41	Average	27.0	Pass
	159	5850.0	-34.28	5.00	-29.28	Peak	27.0	Pass
		5850.0	-52.47	5.00	-47.47	Average	27.0	Pass
		5855.0	-37.46	5.00	-32.46	Peak	15.6	Pass
		5855.0	-54.01	5.00	-49.01	Average	15.6	Pass
		5875.0	-44.01	5.00	-39.01	Peak	10	Pass
		5875.0	-57.21	5.00	-52.21	Average	10	Pass
		5925.0	-46.73	5.00	-41.73	Peak	-27.0	Pass
		5925.0	-58.18	5.00	-53.18	Average	-27.0	Pass
11AC20 SISO	149	5650.0	-47.31	5.00	-42.31	Peak	-27.0	Pass
		5650.0	-59.43	5.00	-54.43	Average	-27.0	Pass
		5700.0	-46.81	5.00	-41.81	Peak	10	Pass
		5700.0	-53.90	5.00	-48.90	Average	10	Pass
		5720.0	-34.90	5.00	-29.90	Peak	15.6	Pass
		5720.0	-58.48	5.00	-53.48	Average	15.6	Pass
		5725.0	-31.22	5.00	-26.22	Peak	27.0	Pass
		5725.0	-50.51	5.00	-45.51	Average	27.0	Pass
	165	5850.0	-30.35	5.00	-25.35	Peak	27.0	Pass
		5850.0	-51.86	5.00	-46.86	Average	27.0	Pass
		5855.0	-31.55	5.00	-26.55	Peak	15.6	Pass
		5855.0	-53.74	5.00	-48.74	Average	15.6	Pass
		5875.0	-45.22	5.00	-40.22	Peak	10	Pass
		5875.0	-58.16	5.00	-53.16	Average	10	Pass
		5925.0	-47.21	5.00	-42.21	Peak	-27.0	Pass
		5925.0	-58.88	5.00	-53.88	Average	-27.0	Pass
11AC40 SISO	151	5650.0	-46.51	5.00	-41.51	Peak	-27.0	Pass
		5650.0	-58.95	5.00	-53.95	Average	-27.0	Pass
		5700.0	-37.99	5.00	-32.99	Peak	10	Pass
		5700.0	-55.19	5.00	-50.19	Average	10	Pass
		5720.0	-32.78	5.00	-27.78	Peak	15.6	Pass
		5720.0	-50.04	5.00	-45.04	Average	15.6	Pass
		5725.0	-33.32	5.00	-28.32	Peak	27.0	Pass
		5725.0	-49.49	5.00	-44.49	Average	27.0	Pass
	159	5850.0	-34.33	5.00	-29.33	Peak	27.0	Pass
		5850.0	-52.44	5.00	-47.44	Average	27.0	Pass
		5855.0	-37.94	5.00	-32.94	Peak	15.6	Pass
		5855.0	-53.92	5.00	-48.92	Average	15.6	Pass
		5875.0	-44.13	5.00	-39.13	Peak	10	Pass
		5875.0	-57.17	5.00	-52.17	Average	10	Pass
		5925.0	-46.89	5.00	-41.89	Peak	-27.0	Pass
		5925.0	-58.23	5.00	-53.23	Average	-27.0	Pass

Undesirable Emissions Measurement

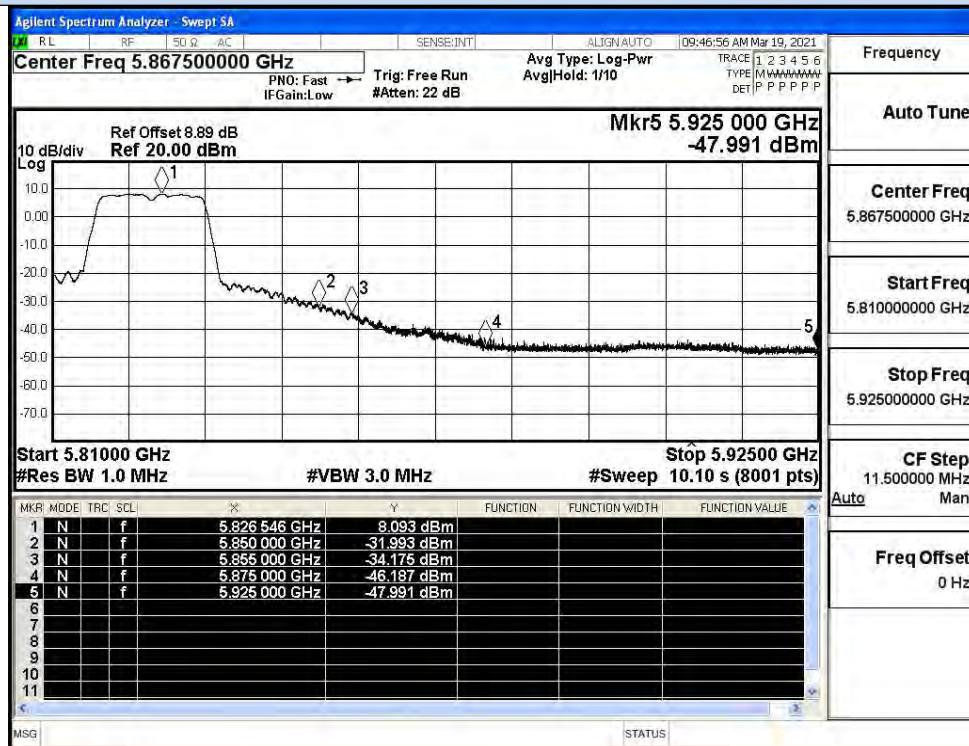


IEEE 802.11a / Channel 149 / 5745MHz / Peak

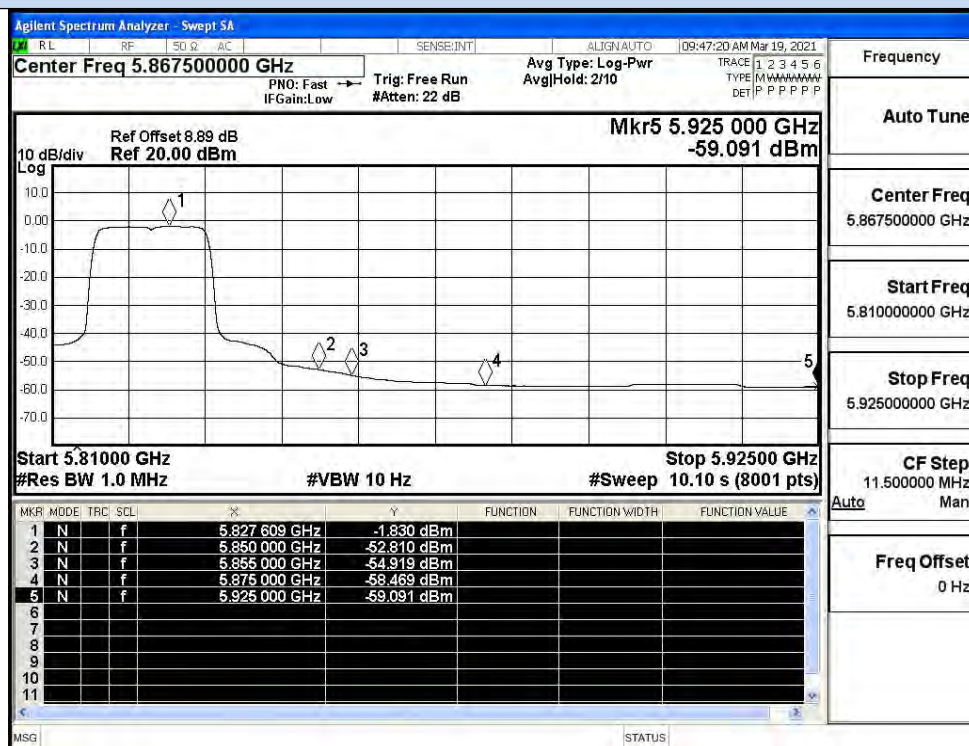


IEEE 802.11a / Channel 148 / 5745MHz / Average

Undesirable Emissions Measurement

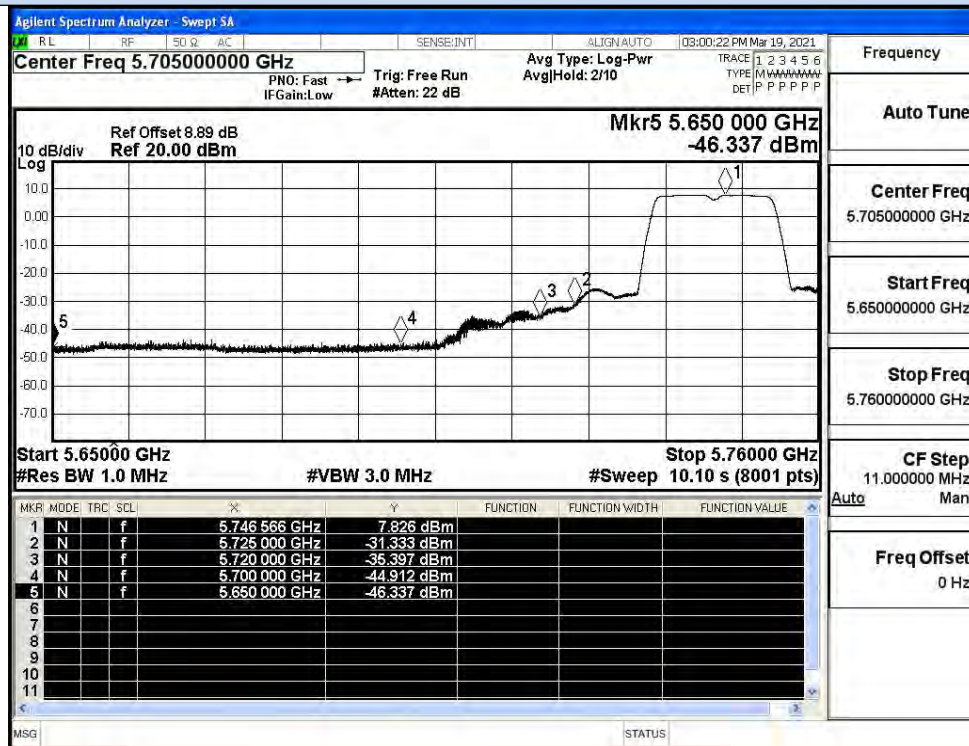


IEEE 802.11a / Channel 165 / 5825MHz / Peak

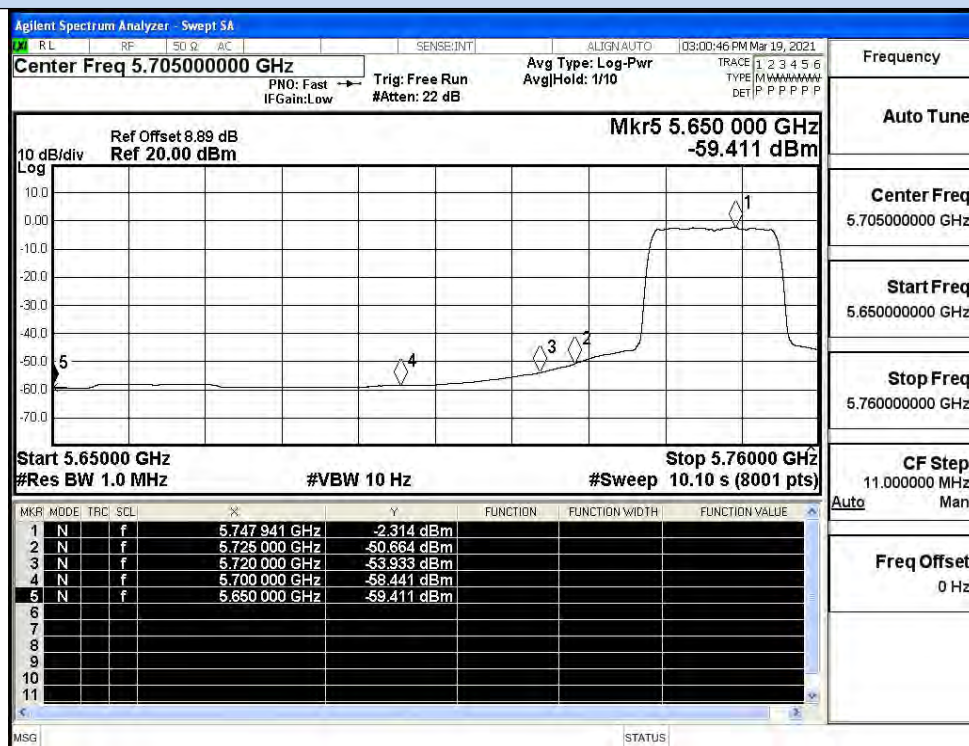


IEEE 802.11a / Channel 165 / 5825MHz / Average

Undesirable Emissions Measurement

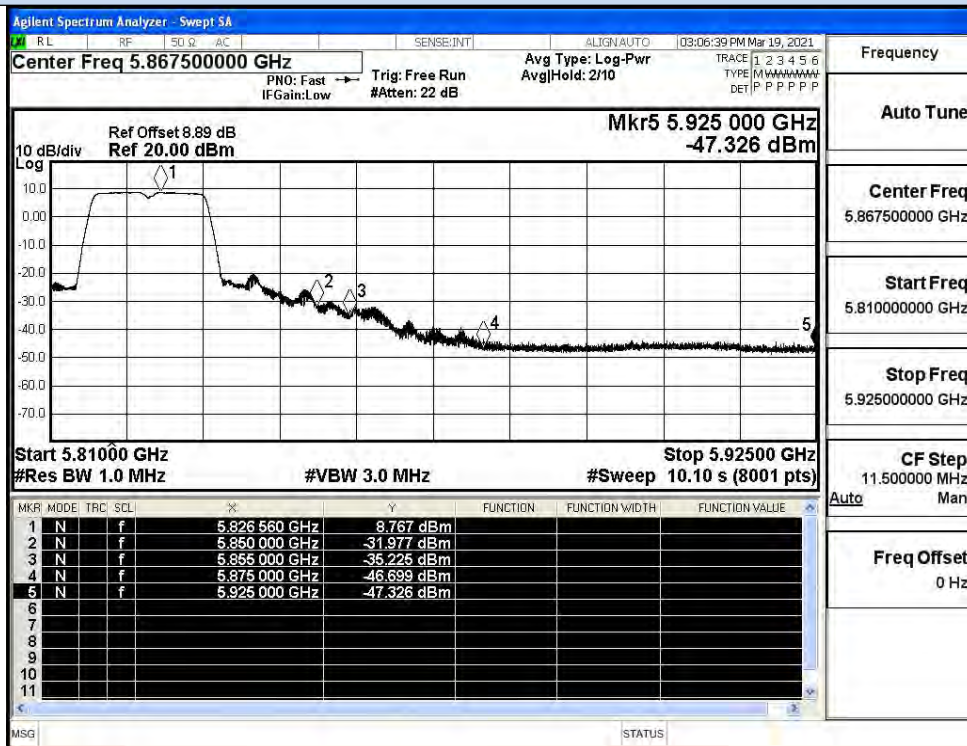


IEEE 802.11n20 / Channel 149 / 5745MHz / Peak

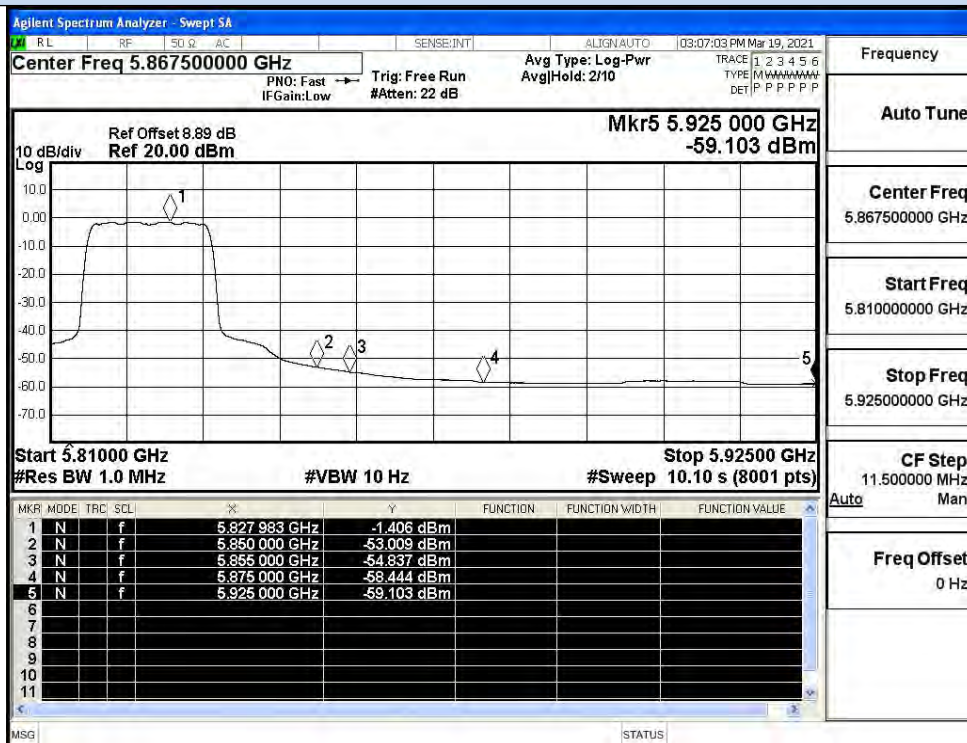


IEEE 802.11n20 / Channel 149 / 5745MHz / Average

Undesirable Emissions Measurement

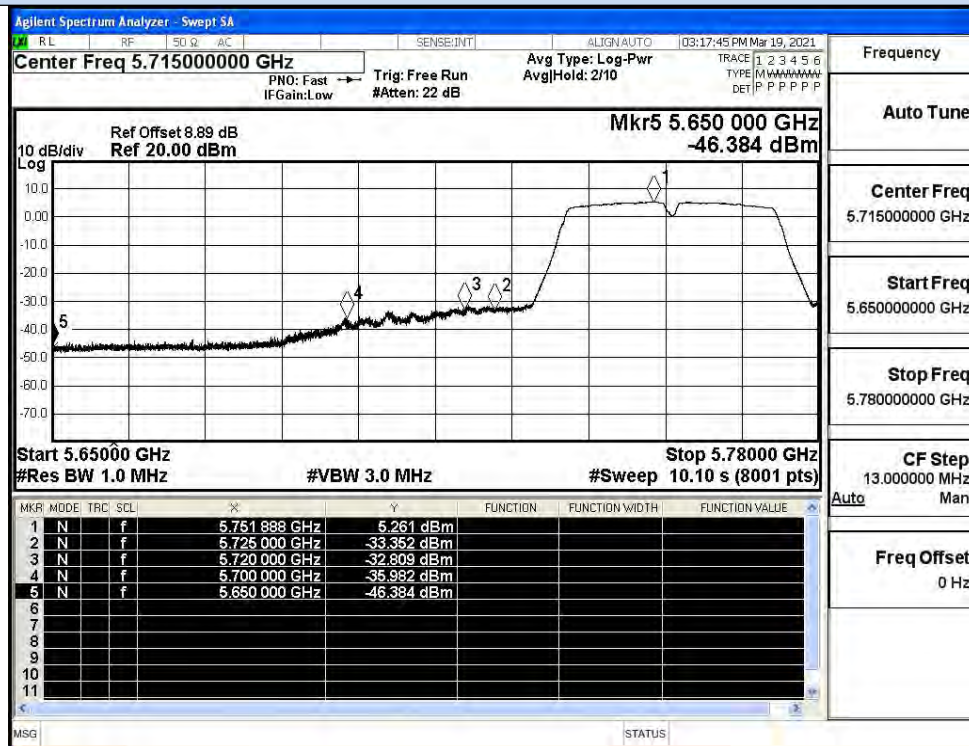


IEEE 802.11n20 / Channel 165 / 5825MHz / Peak

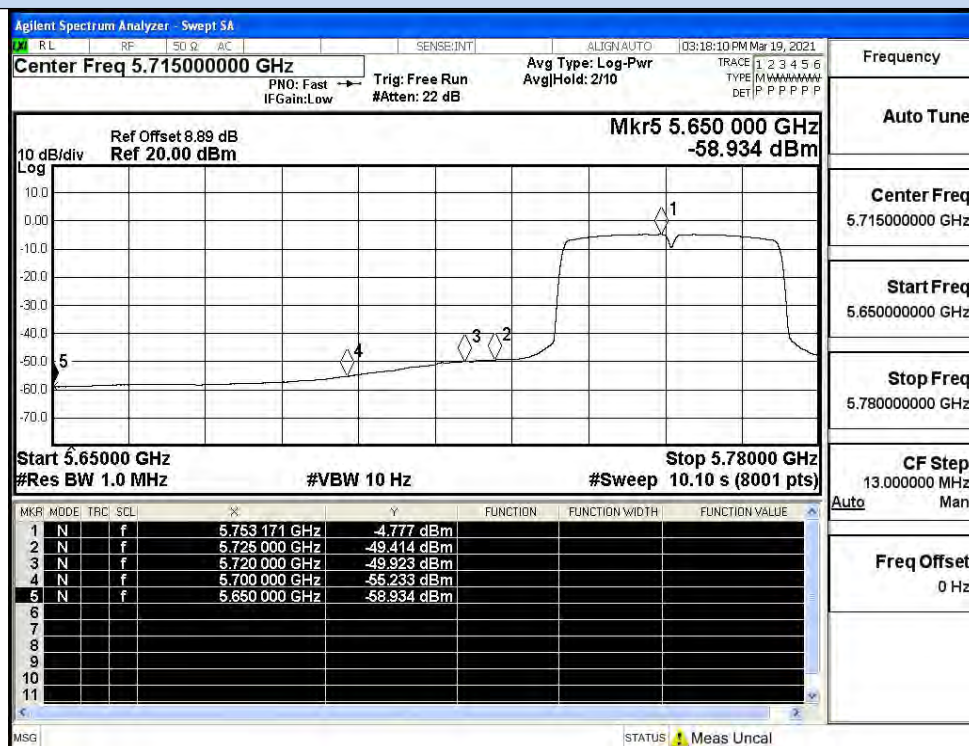


IEEE 802.11n20 / Channel 165 / 5825MHz / Average

Undesirable Emissions Measurement

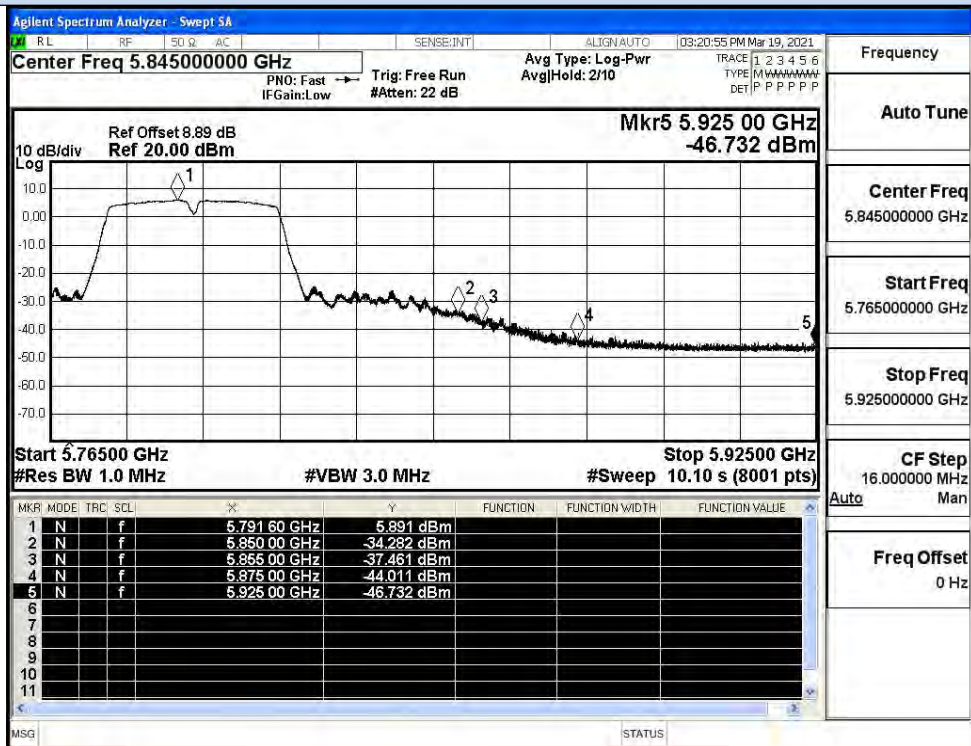


IEEE 802.11n40 / Channel 151 / 5755MHz / Peak

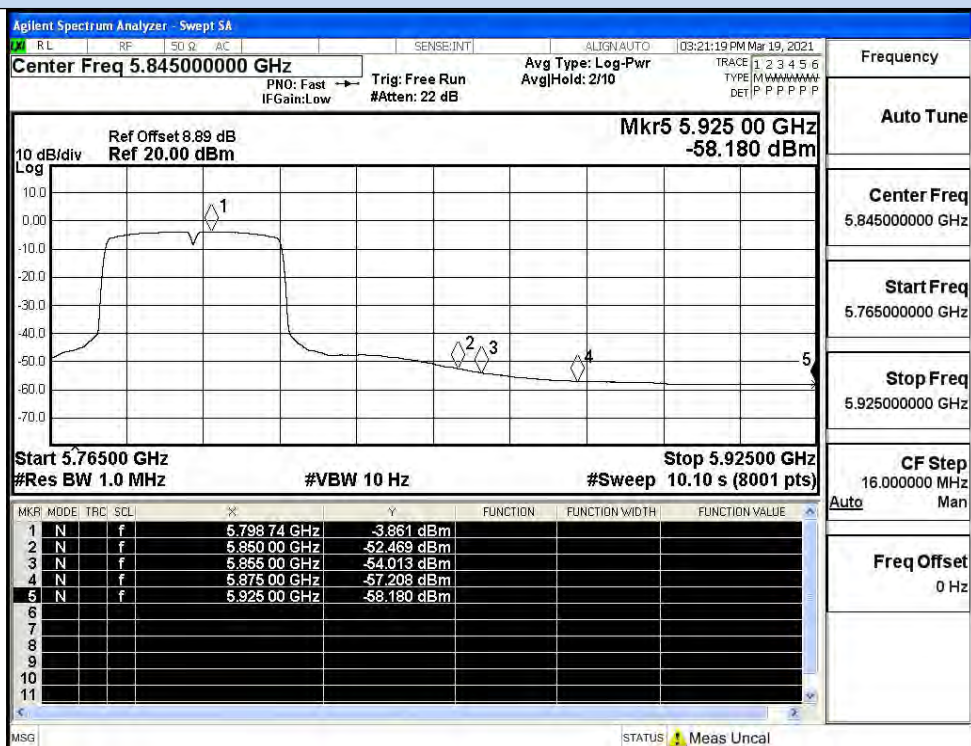


IEEE 802.11n40 / Channel 151 / 5755MHz / Average

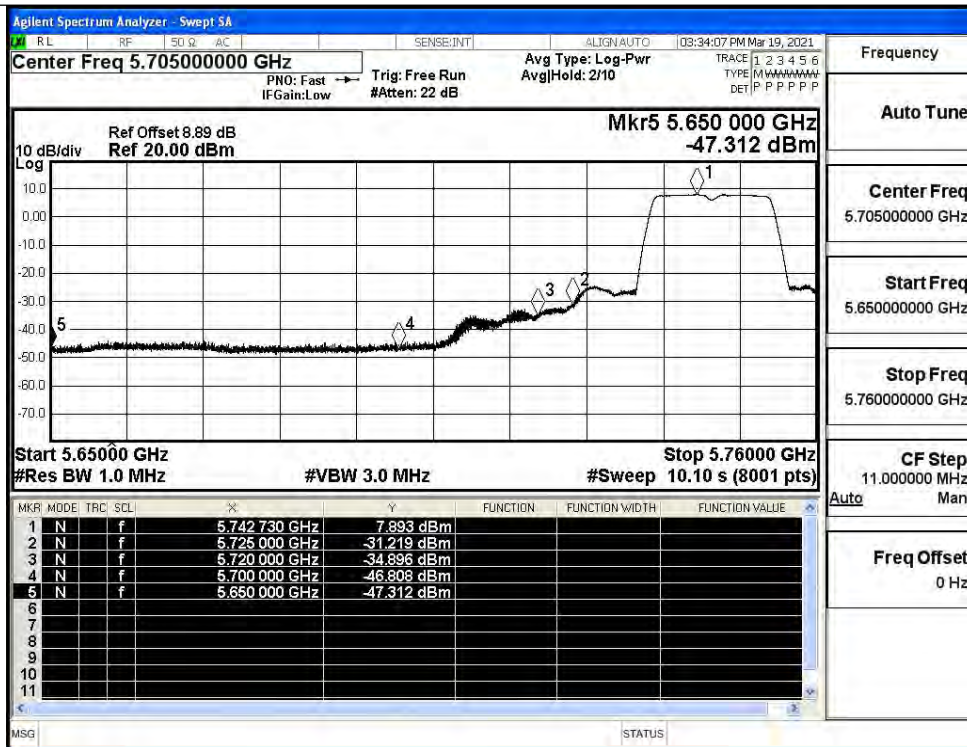
Undesirable Emissions Measurement



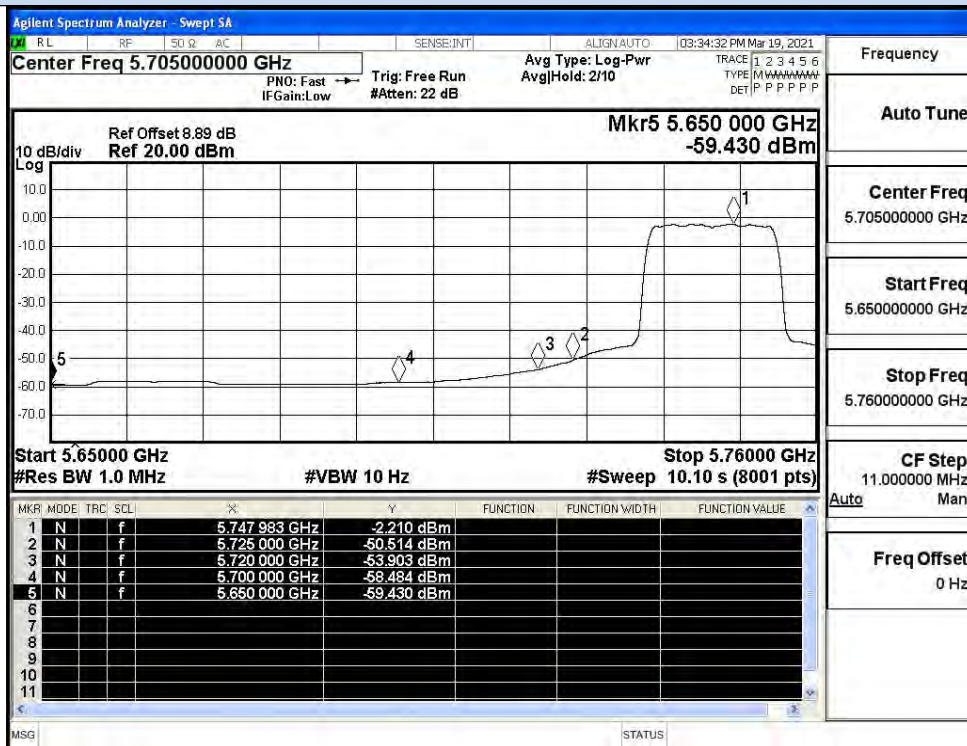
IEEE 802.11n40 / Channel 159 / 5795MHz / Peak



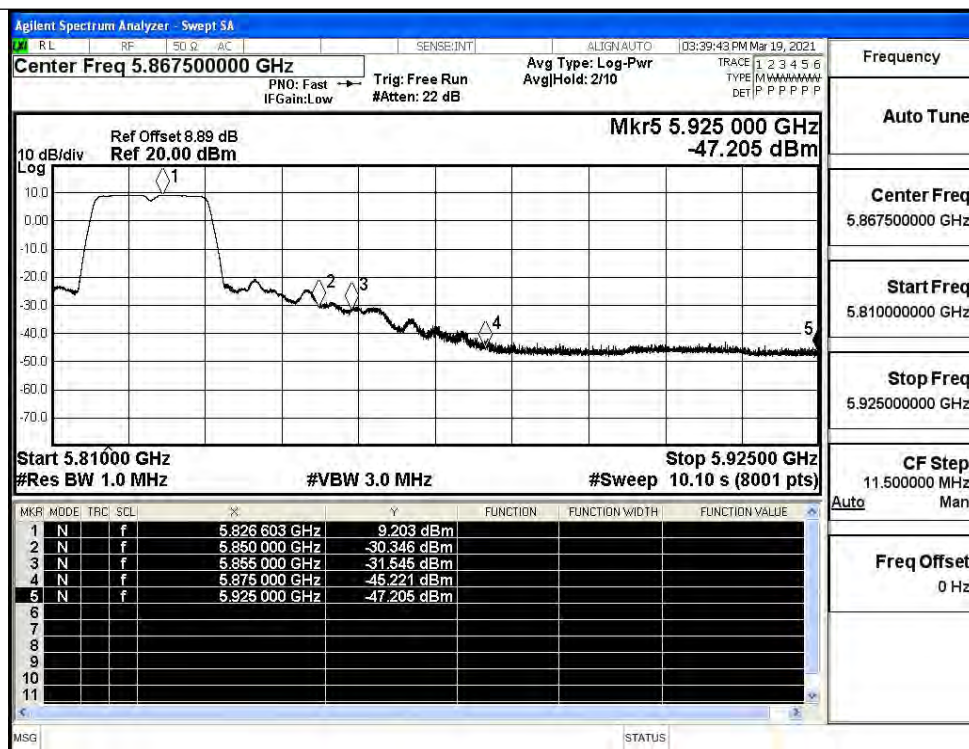
IEEE 802.11n40 / Channel 159 / 5795MHz / Average



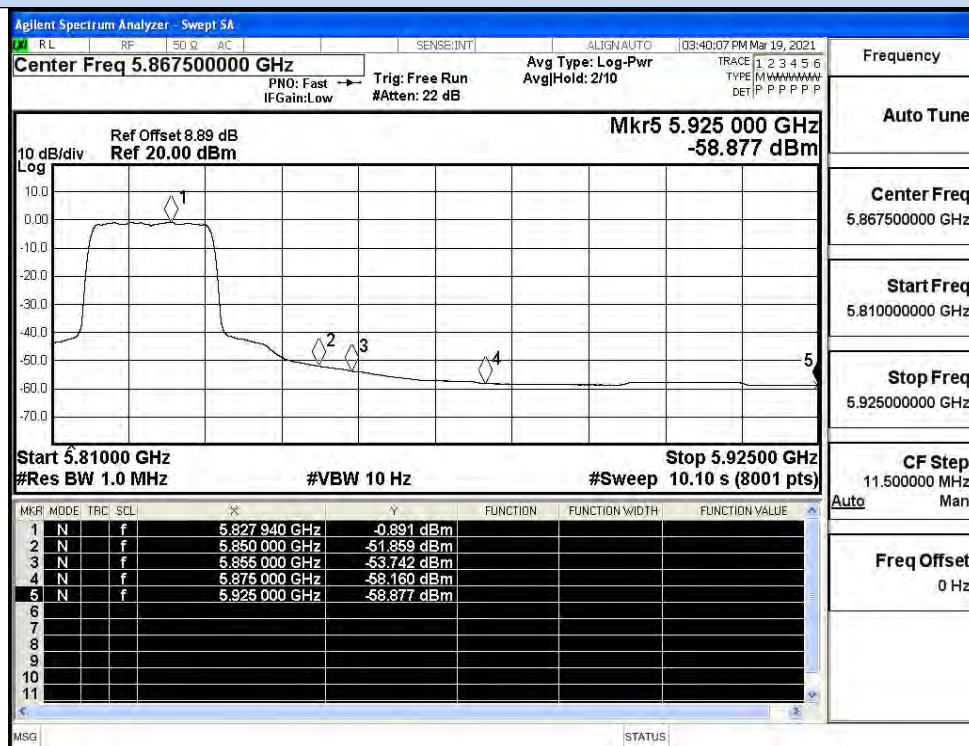
IEEE 802.11ac20 / Channel 149 / 5745MHz / Peak



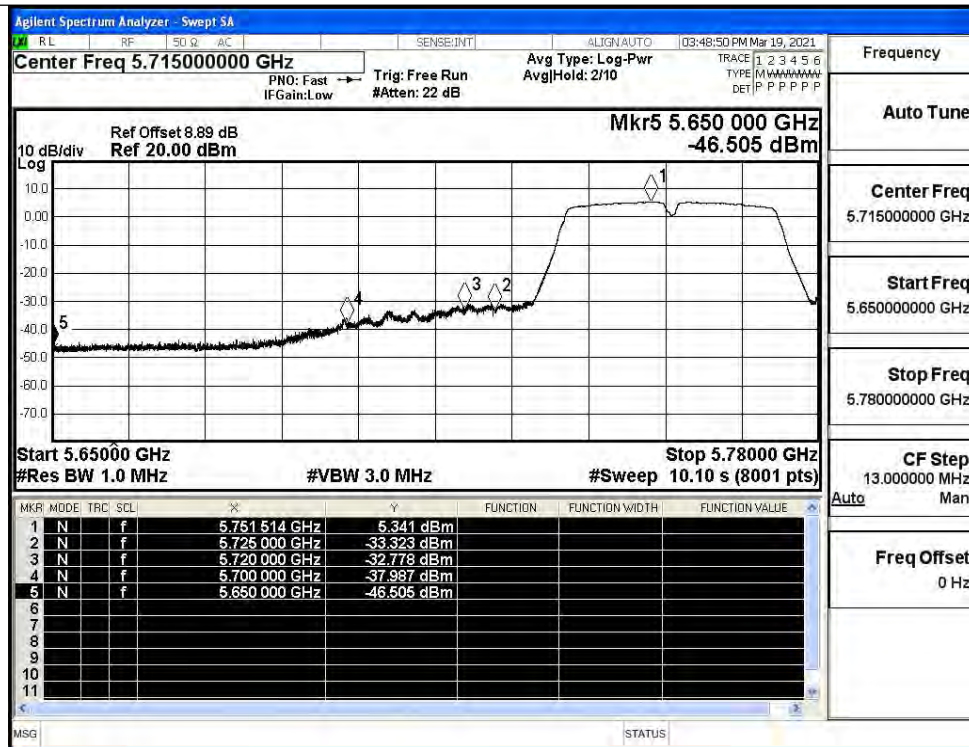
IEEE 802.11ac20 / Channel 149 / 5745MHz / Average



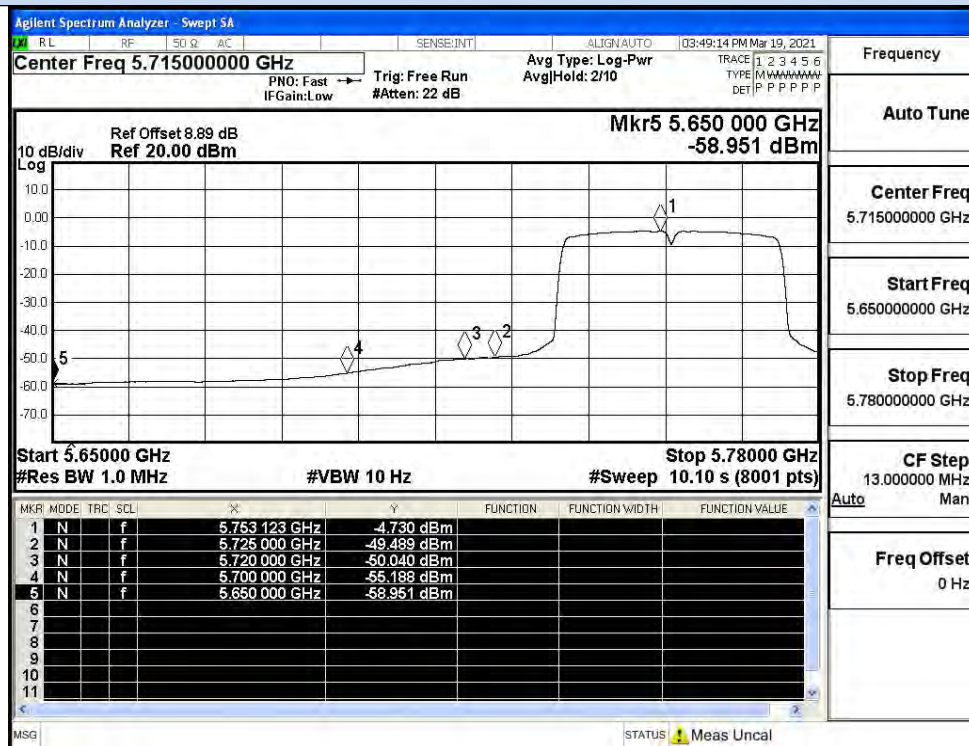
IEEE 802.11ac20 / Channel 165 / 5825MHz / Peak



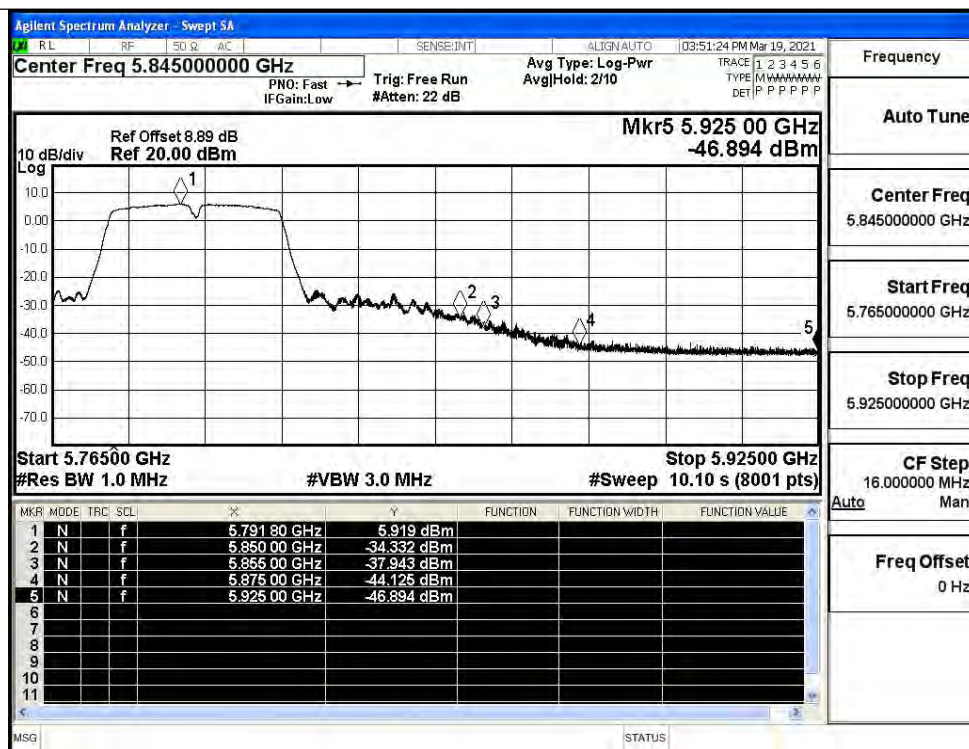
IEEE 802.11ac20 / Channel 165 / 5825MHz / Average



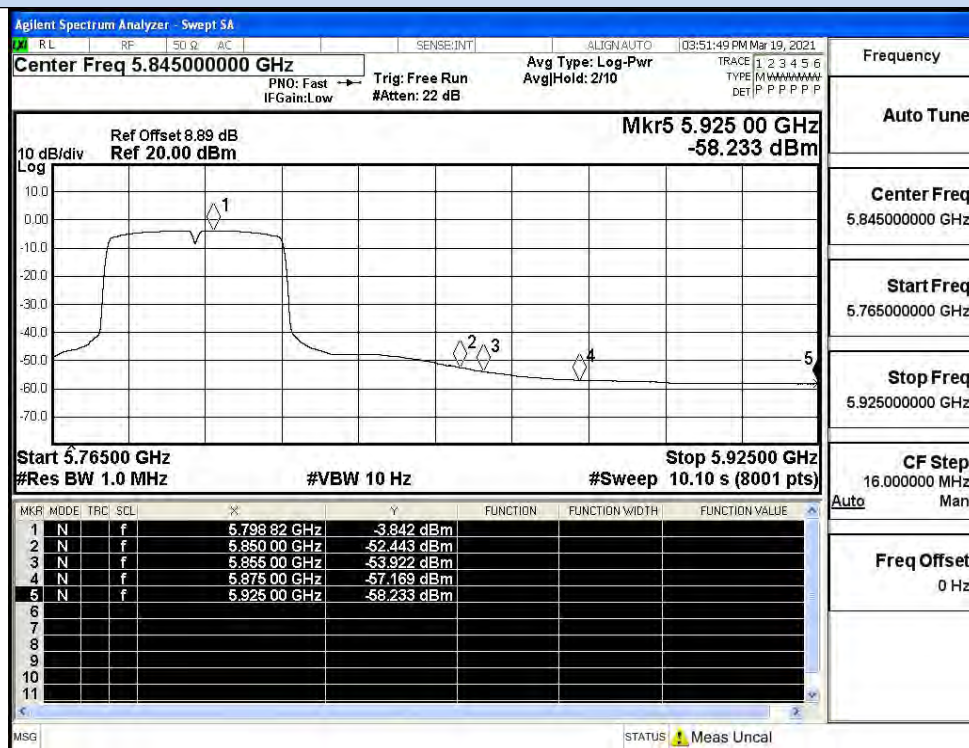
IEEE 802.11ac40 / Channel 151 / 5755MHz / Peak



IEEE 802.11ac40 / Channel 151 / 5755MHz / Average



IEEE 802.11ac40 / Channel 159 / 5795MHz / Peak



IEEE 802.11ac40 / Channel 159 / 5795MHz / Average

ANT0+ANT1:

Test Mode	Channel	Frequency (MHz)	Covert Radiated E Level At 3m (dBuV/m)			Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
			Ant0	Ant1	Sum					
11N20 MIMO	149	5650.0	-49.48	-46.34	-44.62	8.01	-38.37	Peak	-27.0	Pass
		5650.0	-60.65	-59.41	-56.98	8.01	-50.92	Average	-27.0	Pass
		5700.0	-47.04	-44.91	-42.84	8.01	-27.97	Peak	10	Pass
		5700.0	-56.61	-53.93	-52.06	8.01	-47.22	Average	10	Pass
		5720.0	-39.14	-35.40	-33.87	8.01	-24.80	Peak	15.6	Pass
		5720.0	-59.77	-58.44	-56.04	8.01	-41.91	Average	15.6	Pass
		5725.0	-34.81	-31.33	-29.72	8.01	-25.34	Peak	27.0	Pass
		5725.0	-53.28	-50.66	-48.77	8.01	-41.40	Average	27.0	Pass
	165	5850.0	-32.46	-31.98	-29.20	8.01	-26.27	Peak	27.0	Pass
		5850.0	-54.40	-53.01	-50.64	8.01	-44.46	Average	27.0	Pass
		5855.0	-36.54	-35.23	-32.83	8.01	-29.45	Peak	15.6	Pass
		5855.0	-56.14	-54.84	-52.43	8.01	-46.00	Average	15.6	Pass
		5875.0	-46.90	-46.70	-43.79	8.01	-36.00	Peak	10	Pass
		5875.0	-59.76	-58.44	-56.04	8.01	-49.20	Average	10	Pass
		5925.0	-49.16	-47.33	-45.14	8.01	-38.72	Peak	-27.0	Pass
		5925.0	-60.35	-59.10	-56.67	8.01	-50.17	Average	-27.0	Pass
11N40 MIMO	151	5650.0	-47.06	-46.38	-43.70	8.01	-39.30	Peak	-27.0	Pass
		5650.0	-60.38	-58.93	-56.58	8.01	-51.42	Average	-27.0	Pass
		5700.0	-40.47	-35.98	-34.66	8.01	-36.61	Peak	10	Pass
		5700.0	-57.76	-55.23	-53.30	8.01	-48.97	Average	10	Pass
		5720.0	-36.82	-32.81	-31.36	8.01	-34.83	Peak	15.6	Pass
		5720.0	-54.65	-49.92	-48.66	8.01	-44.05	Average	15.6	Pass
		5725.0	-37.17	-33.35	-31.84	8.01	-25.86	Peak	27.0	Pass
		5725.0	-53.61	-49.41	-48.01	8.01	-48.03	Average	27.0	Pass
	159	5850.0	-37.90	-34.28	-32.71	8.01	-21.71	Peak	27.0	Pass
		5850.0	-55.48	-52.47	-50.71	8.01	-40.76	Average	27.0	Pass
		5855.0	-41.18	-37.46	-35.92	8.01	-21.19	Peak	15.6	Pass
		5855.0	-56.69	-54.01	-52.14	8.01	-42.63	Average	15.6	Pass
		5875.0	-47.11	-44.01	-42.28	8.01	-24.82	Peak	10	Pass
		5875.0	-58.97	-57.21	-54.99	8.01	-44.42	Average	10	Pass
		5925.0	-47.38	-46.73	-44.03	8.01	-35.78	Peak	-27.0	Pass
		5925.0	-59.82	-58.18	-55.91	8.01	-48.03	Average	-27.0	Pass
11AC20 MIMO	149	5650.0	-47.94	-47.31	-44.60	8.01	-37.13	Peak	-27.0	Pass
		5650.0	-59.63	-59.43	-56.52	8.01	-48.66	Average	-27.0	Pass
		5700.0	-45.95	-46.81	-43.35	8.01	-35.69	Peak	10	Pass
		5700.0	-54.47	-53.90	-51.17	8.01	-48.57	Average	10	Pass
		5720.0	-35.69	-34.90	-32.27	8.01	-26.65	Peak	15.6	Pass
		5720.0	-58.79	-58.48	-55.62	8.01	-45.29	Average	15.6	Pass
		5725.0	-31.31	-31.22	-28.25	8.01	-23.35	Peak	27.0	Pass
		5725.0	-51.55	-50.51	-47.99	8.01	-40.65	Average	27.0	Pass
	165	5850.0	-30.90	-30.35	-27.61	8.01	-23.83	Peak	27.0	Pass
		5850.0	-52.49	-51.86	-49.15	8.01	-40.00	Average	27.0	Pass
		5855.0	-34.10	-31.55	-29.63	8.01	-24.70	Peak	15.6	Pass
		5855.0	-54.26	-53.74	-50.98	8.01	-42.70	Average	15.6	Pass
		5875.0	-45.32	-45.22	-42.26	8.01	-27.91	Peak	10	Pass
		5875.0	-58.50	-58.16	-55.32	8.01	-44.13	Average	10	Pass
		5925.0	-47.06	-47.21	-44.12	8.01	-34.27	Peak	-27.0	Pass
		5925.0	-59.14	-58.88	-56.00	8.01	-46.98	Average	-27.0	Pass
11AC40 MIMO	151	5650.0	-47.87	-46.51	-44.13	8.01	-36.02	Peak	-27.0	Pass
		5650.0	-59.39	-58.95	-56.15	8.01	-47.90	Average	-27.0	Pass
		5700.0	-40.10	-37.99	-35.91	8.01	-36.59	Peak	10	Pass
		5700.0	-56.64	-55.19	-52.84	8.01	-48.51	Average	10	Pass
		5720.0	-34.97	-32.78	-30.73	8.01	-35.34	Peak	15.6	Pass
		5720.0	-53.49	-50.04	-48.42	8.01	-43.16	Average	15.6	Pass
		5725.0	-33.38	-33.32	-30.34	8.01	-24.26	Peak	27.0	Pass
		5725.0	-53.02	-49.49	-47.90	8.01	-47.61	Average	27.0	Pass
	159	5850.0	-34.97	-34.33	-31.63	8.01	-20.24	Peak	27.0	Pass
		5850.0	-53.19	-52.44	-49.79	8.01	-39.98	Average	27.0	Pass
		5855.0	-38.60	-37.94	-35.25	8.01	-19.60	Peak	15.6	Pass
		5855.0	-54.60	-53.92	-51.24	8.01	-41.14	Average	15.6	Pass
		5875.0	-44.82	-44.13	-41.45	8.01	-21.62	Peak	10	Pass
		5875.0	-57.60	-57.17	-54.37	8.01	-42.97	Average	10	Pass
		5925.0	-46.82	-46.89	-43.84	8.01	-34.25	Peak	-27.0	Pass
		5925.0	-58.50	-58.23	-55.35	8.01	-47.31	Average	-27.0	Pass