



Appendix E

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: Formuler Z10 Pro
Trade Mark: FORMULER
Test Model: Z10 Pro

Environmental Conditions

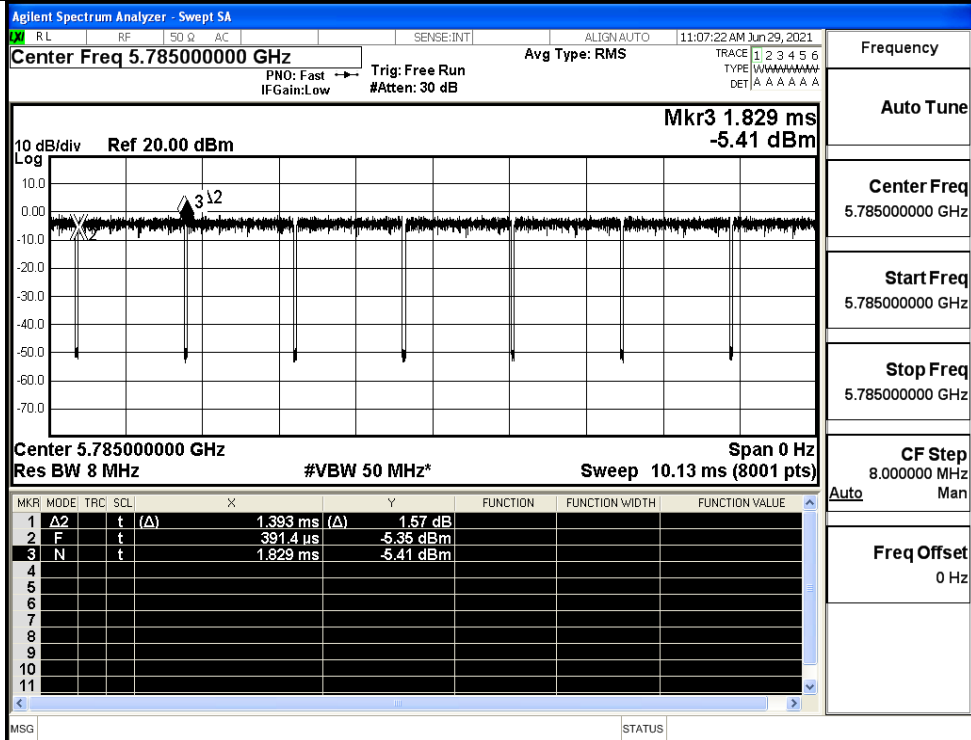
Temperature:	23.7° C
Relative Humidity:	51.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li

E.1 Duty Cycle
ANT0

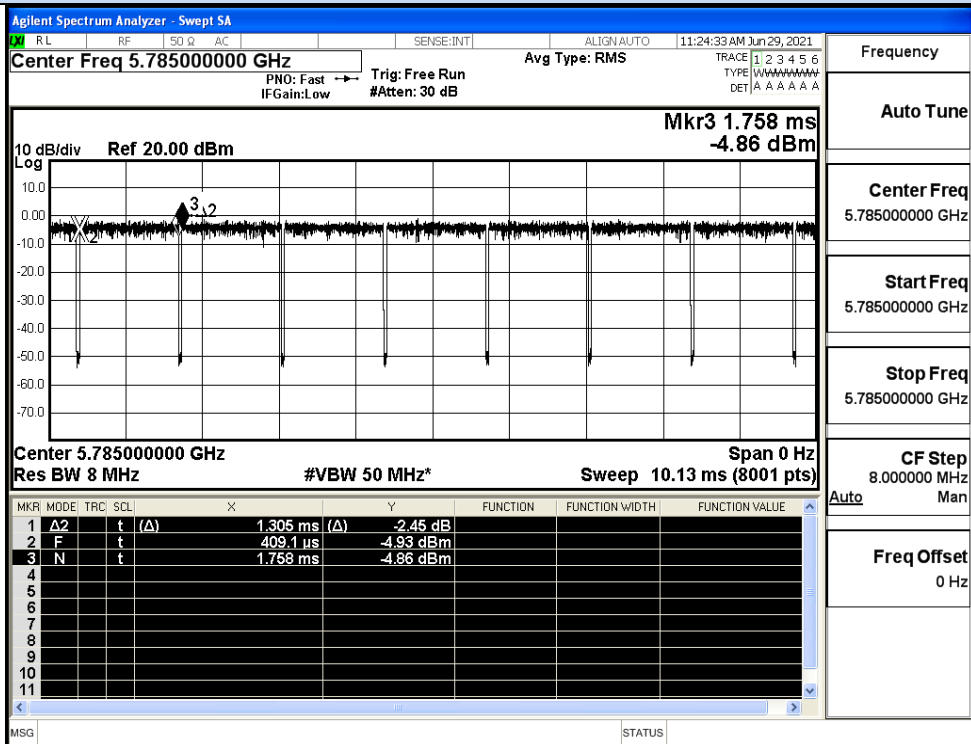
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5785	96.92	0.14	0.01
11N20 SISO	5785	96.71	0.15	0.01
11N40 SISO	5755	93.58	0.29	0.01
11AC20 SISO	5785	96.74	0.14	0.01
11AC40 SISO	5755	93.65	0.28	0.01
11AC80 SISO	5775	87.89	0.56	0.01



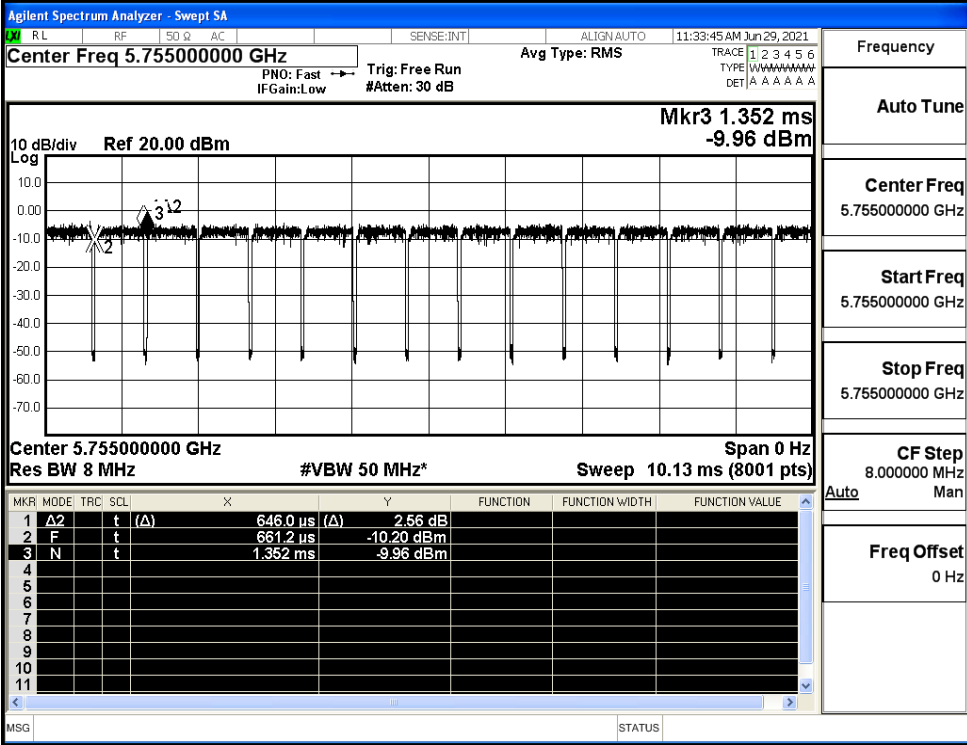
On Time and Duty Cycle



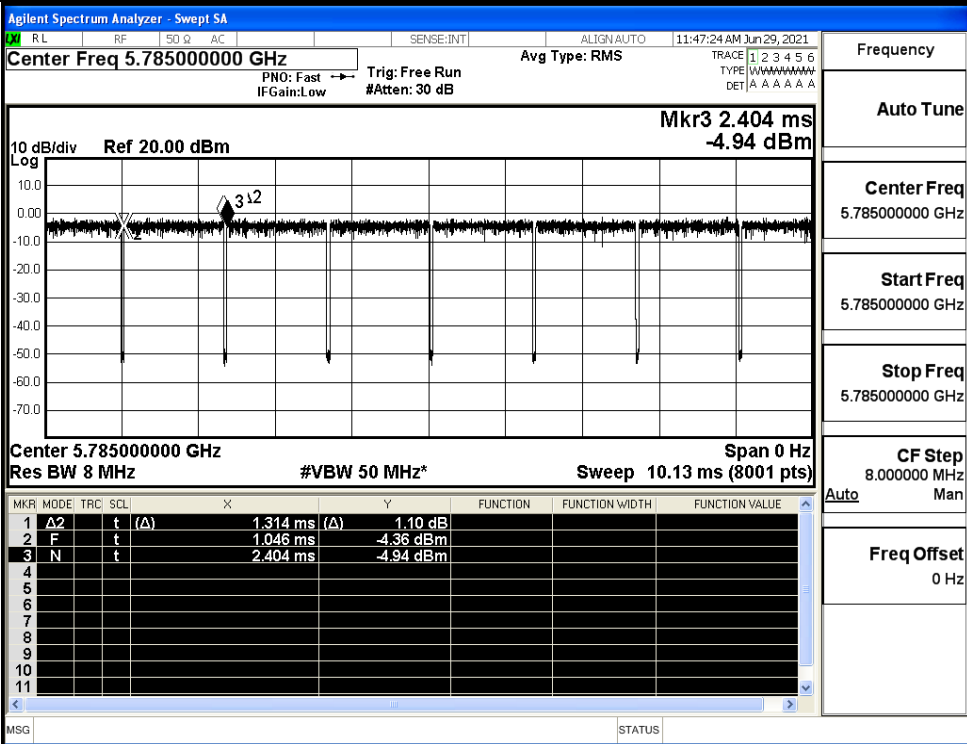
IEEE 802.11a



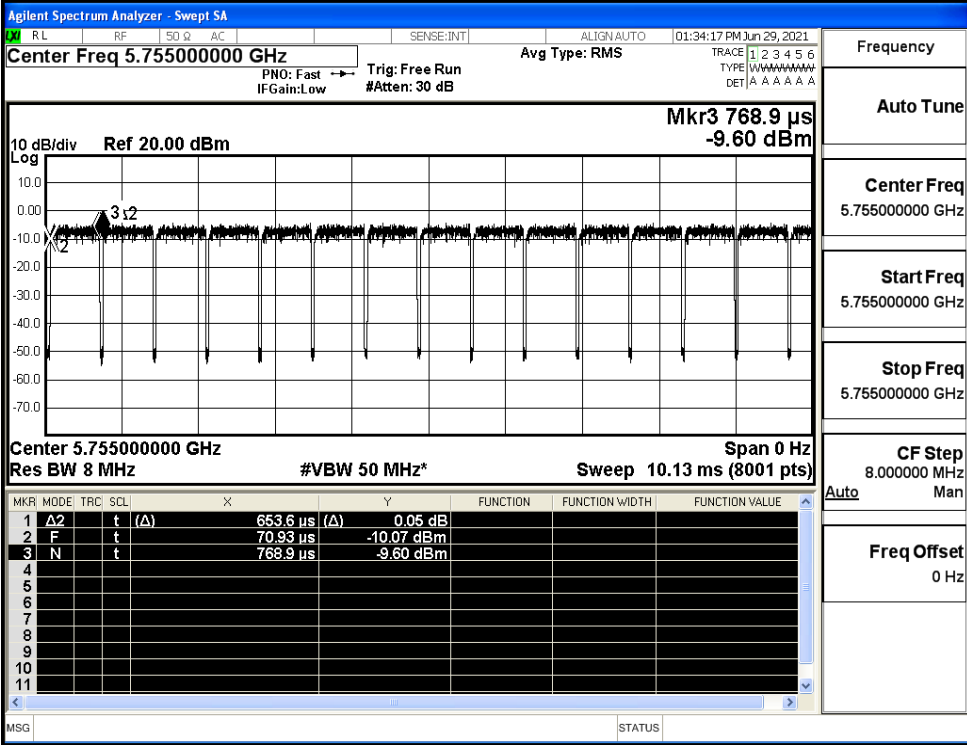
IEEE 802.11n HT20



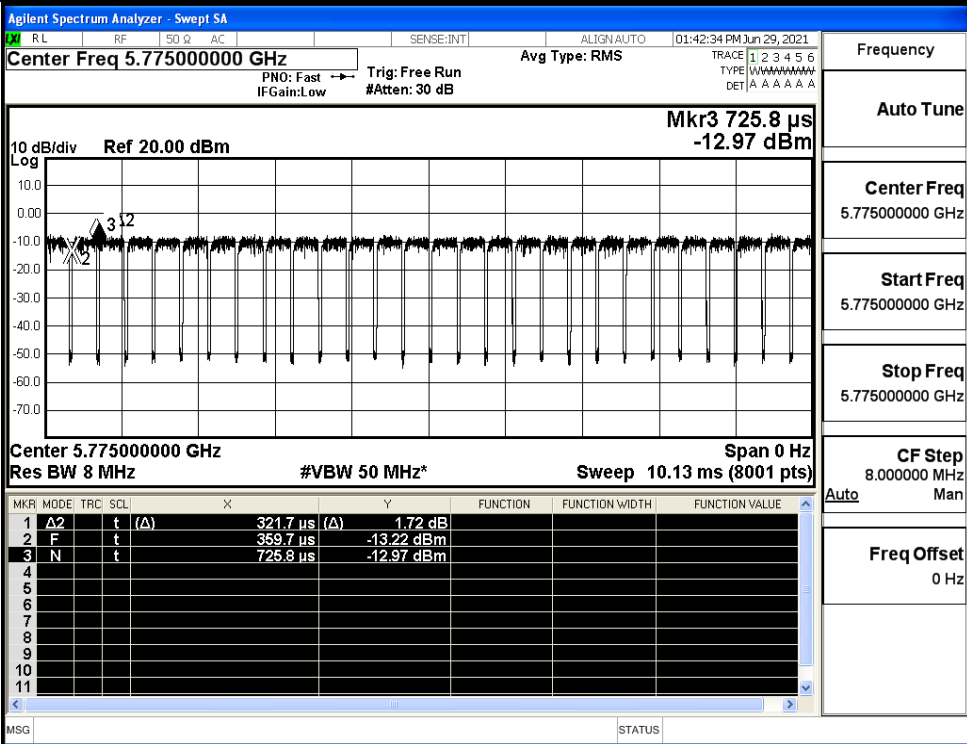
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40



IEEE 802.11AC80

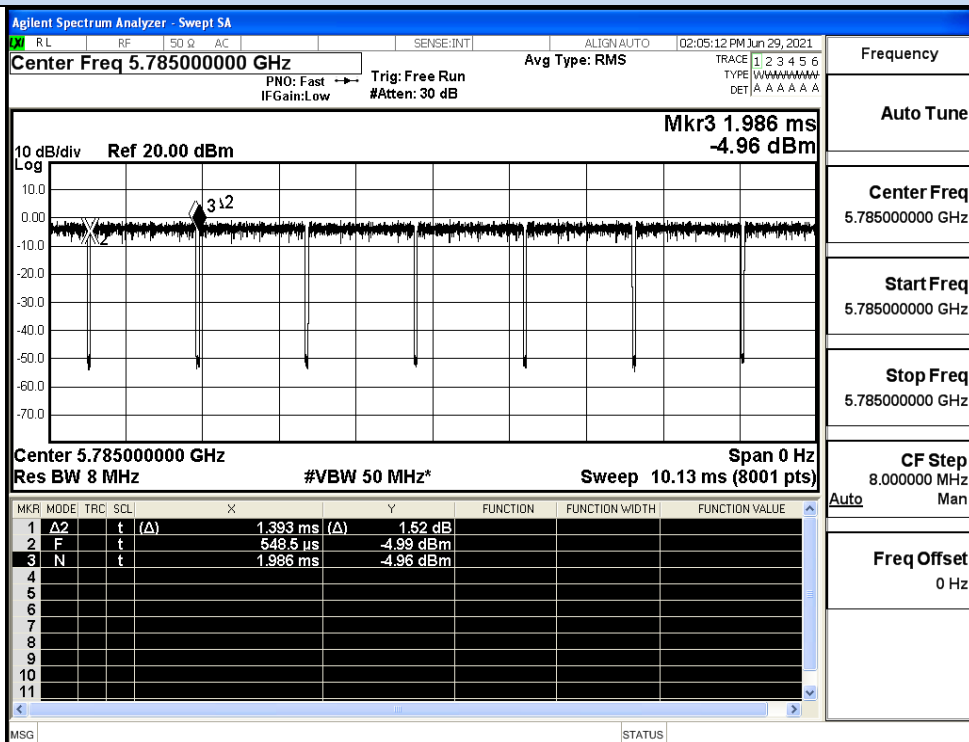


ANT1

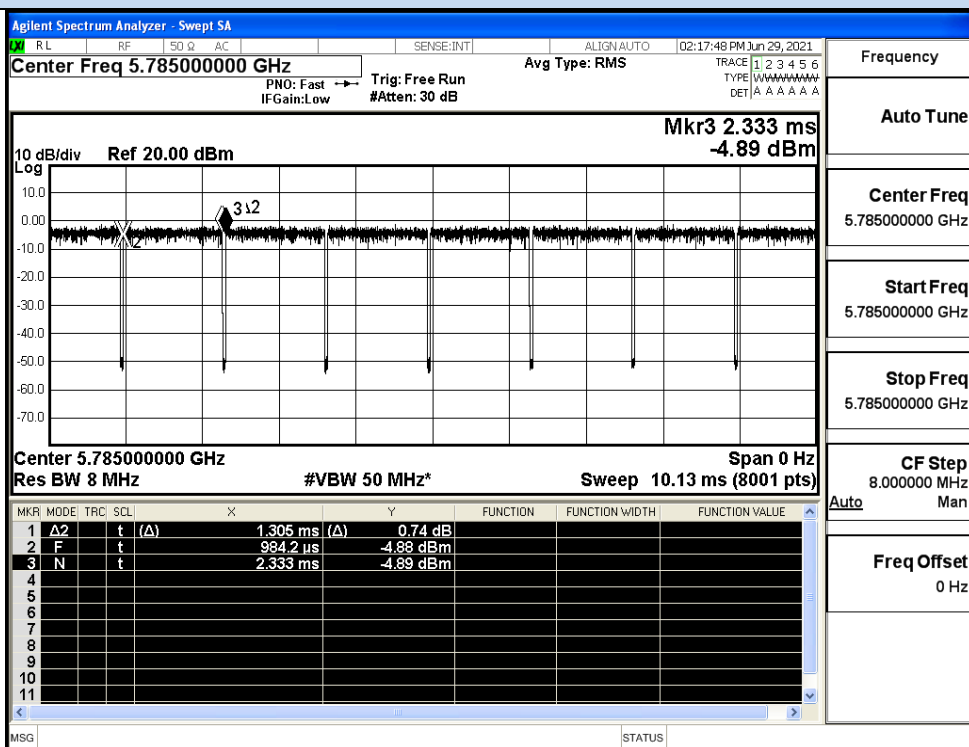
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5785	96.92	0.14	0.01
11N20 SISO	5785	96.71	0.15	0.01
11N40 SISO	5755	93.58	0.29	0.01
11AC20 SISO	5785	96.92	0.14	0.01
11AC40 SISO	5755	93.64	0.29	0.01
11AC80 SISO	5775	87.89	0.56	0.01



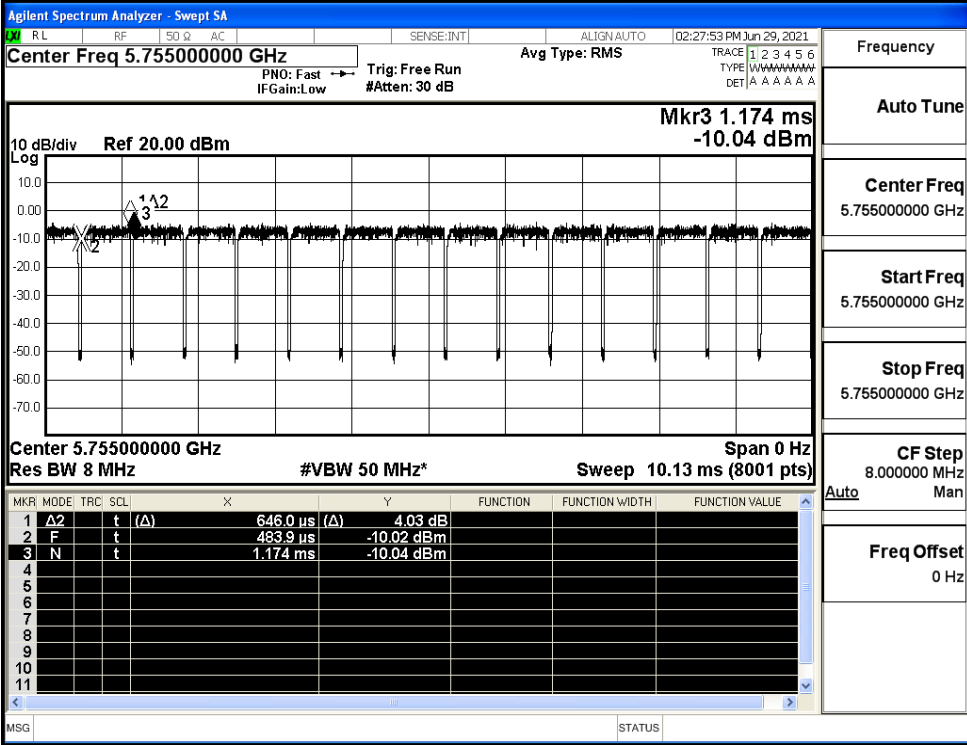
On Time and Duty Cycle



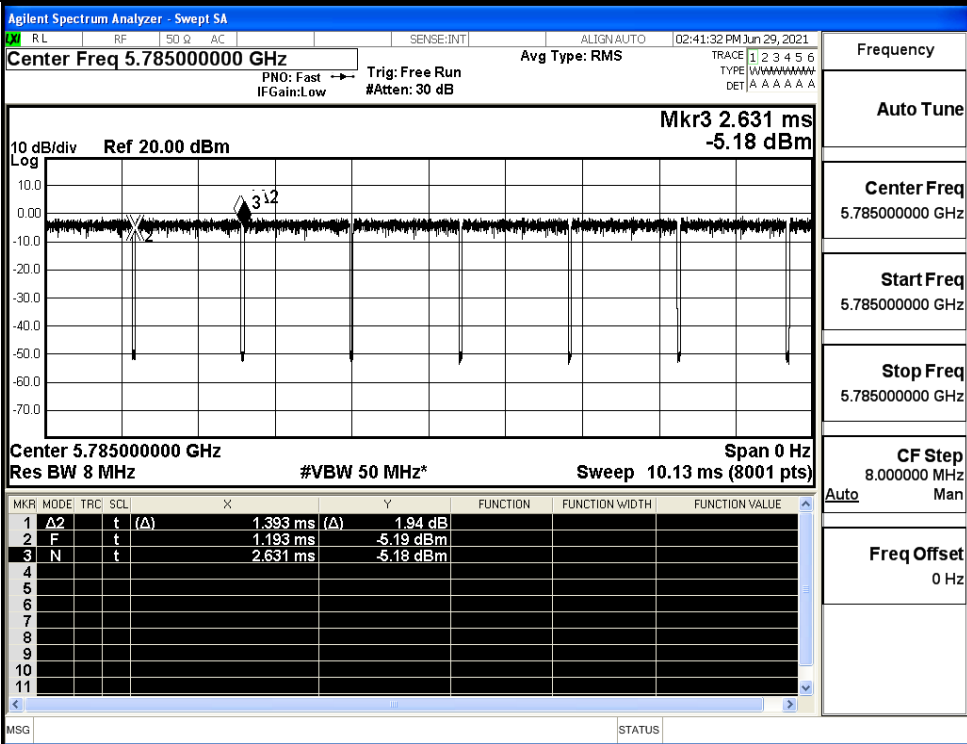
IEEE 802.11a



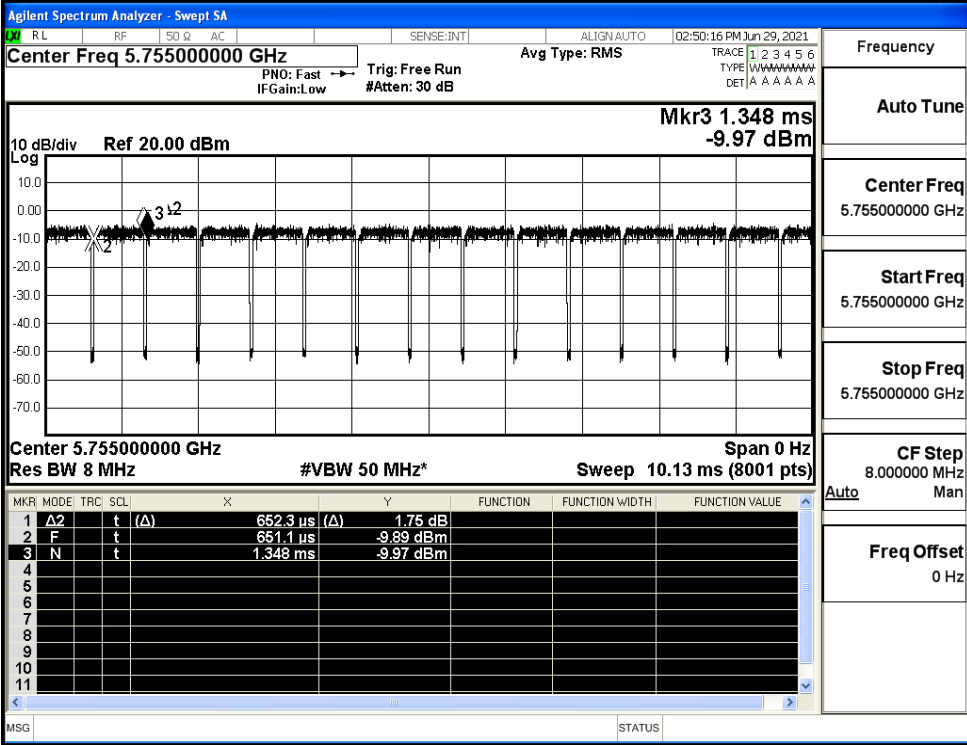
IEEE 802.11n HT20



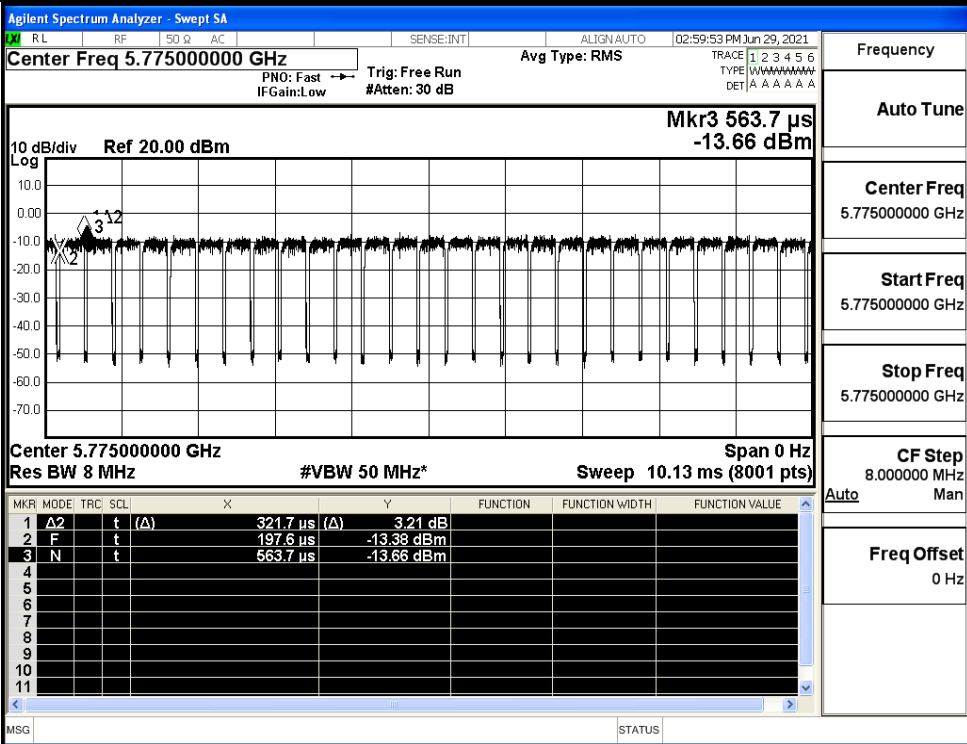
IEEE 802.11n HT40



IEEE 802.11AC20



IEEE 802.11AC40



IEEE 802.11AC80

**E.2 Maximum Conduct Output Power****ANT0**

Test Mode	Channel	Frequency (MHz)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	149	5745	12.18	30	Pass
	157	5785	12.38		Pass
	165	5825	12.36		Pass
11N20 SISO	149	5745	11.92	30	Pass
	157	5785	12.15		Pass
	165	5825	12.15		Pass
11N40 SISO	151	5755	12.39	30	Pass
	159	5795	12.58		Pass
11AC20 SISO	149	5745	12.08	30	Pass
	157	5785	12.44		Pass
	165	5825	12.72		Pass
11AC40 SISO	151	5755	12.64	30	Pass
	159	5795	12.98		Pass
11AC80 SISO	155	5775	12.55	30	Pass

ANT1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Limit (dBm)	Verdict
11A	149	5745	12.17	30	Pass
	157	5785	12.42		Pass
	165	5825	12.43		Pass
11N20 SISO	149	5745	11.83	30	Pass
	157	5785	12		Pass
	165	5825	12.04		Pass
11N40 SISO	151	5755	12.13	30	Pass
	159	5795	12.29		Pass
11AC20 SISO	149	5745	12.4	30	Pass
	157	5785	12.66		Pass
	165	5825	13.07		Pass
11AC40 SISO	151	5755	12.28	30	Pass
	159	5795	12.64		Pass
11AC80 SISO	155	5775	12.01	30	Pass

MIMO

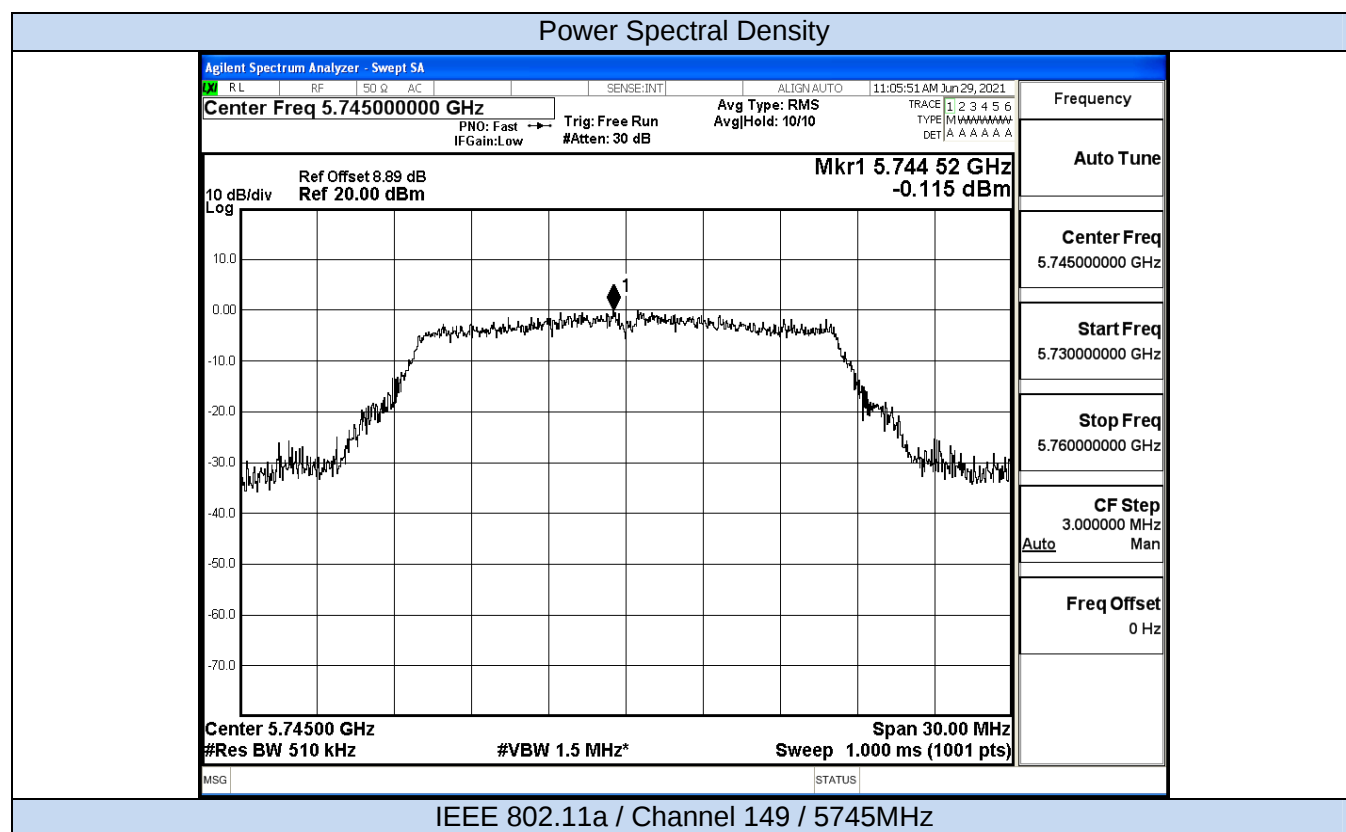
Test Mode	Channel	Frequency (MHz)	ANT 0 AVG Conducted Power (dBm)	ANT 1 AVG Conducted Power (dBm)	MIMO AVG Conducted Power (dBm)	Limit (dBm)	Verdict
11N20	149	5745	11.92	11.83	14.89	30	Pass
	157	5785	12.15	12	15.09		Pass
	165	5825	12.15	12.04	15.11		Pass
11N40	151	5755	12.39	12.13	15.27	30	Pass
	159	5795	12.58	12.29	15.45		Pass
11AC20	149	5745	12.08	12.4	15.25	30	Pass
	157	5785	12.44	12.66	15.56		Pass
	165	5825	12.72	13.07	15.91		Pass
11AC40	151	5755	12.64	12.28	15.47	30	Pass
	159	5795	12.98	12.64	15.82		Pass
11AC80	155	5775	12.55	12.01	15.30	30	Pass

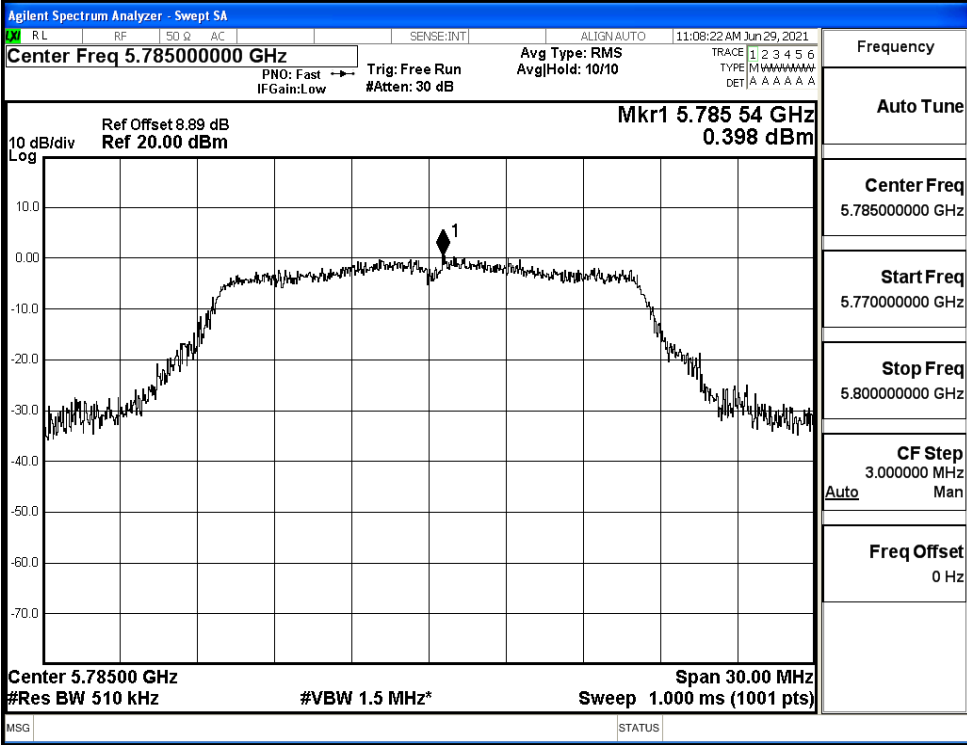


E.3 Power Spectral Density

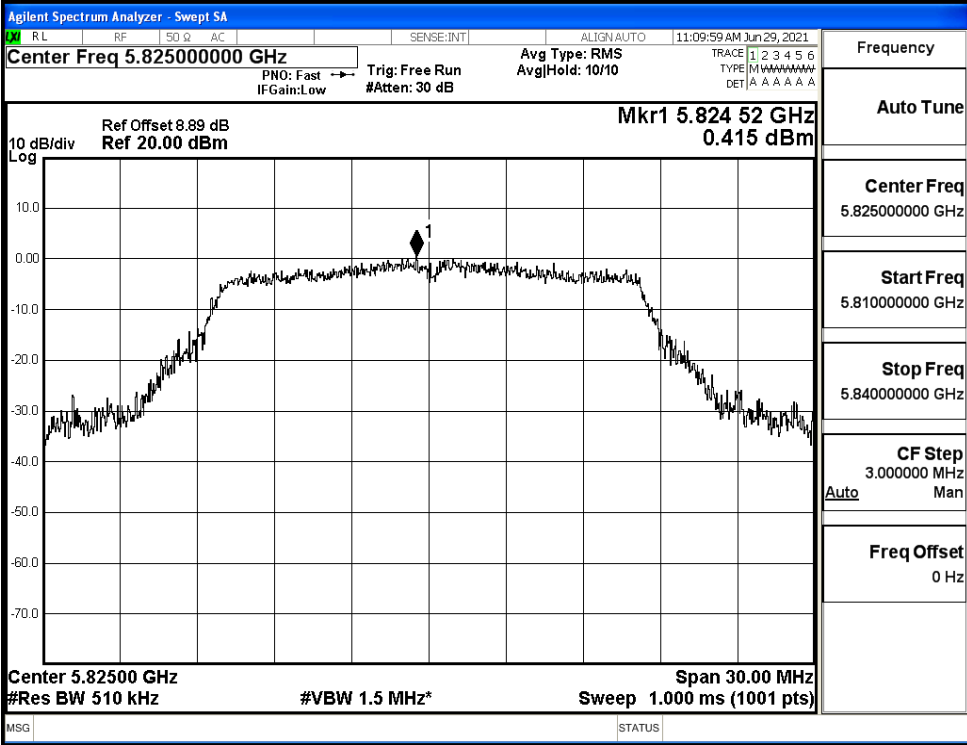
ANT0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/510KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
11A	149	5745	-0.12	0.14	-0.086	-0.066	30	Pass
	157	5785	0.40	0.14	-0.086	0.454		Pass
	165	5825	0.42	0.14	-0.086	0.474		Pass
11N20 SISO	149	5745	-0.16	0.15	-0.086	-0.096	30	Pass
	157	5785	-0.18	0.15	-0.086	-0.116		Pass
	165	5825	-0.28	0.15	-0.086	-0.216		Pass
11N40 SISO	151	5755	-2.84	0.29	-0.086	-2.636	30	Pass
	159	5795	-2.94	0.29	-0.086	-2.736		Pass
11AC20 SISO	149	5745	-0.50	0.14	-0.086	-0.446	30	Pass
	157	5785	0.17	0.14	-0.086	0.224		Pass
	165	5825	0.37	0.14	-0.086	0.424		Pass
11AC40 SISO	151	5755	-2.70	0.28	-0.086	-2.506	30	Pass
	159	5795	-2.71	0.28	-0.086	-2.516		Pass
11AC80 SISO	155	5775	-4.67	0.56	-0.086	-4.196	0	Pass





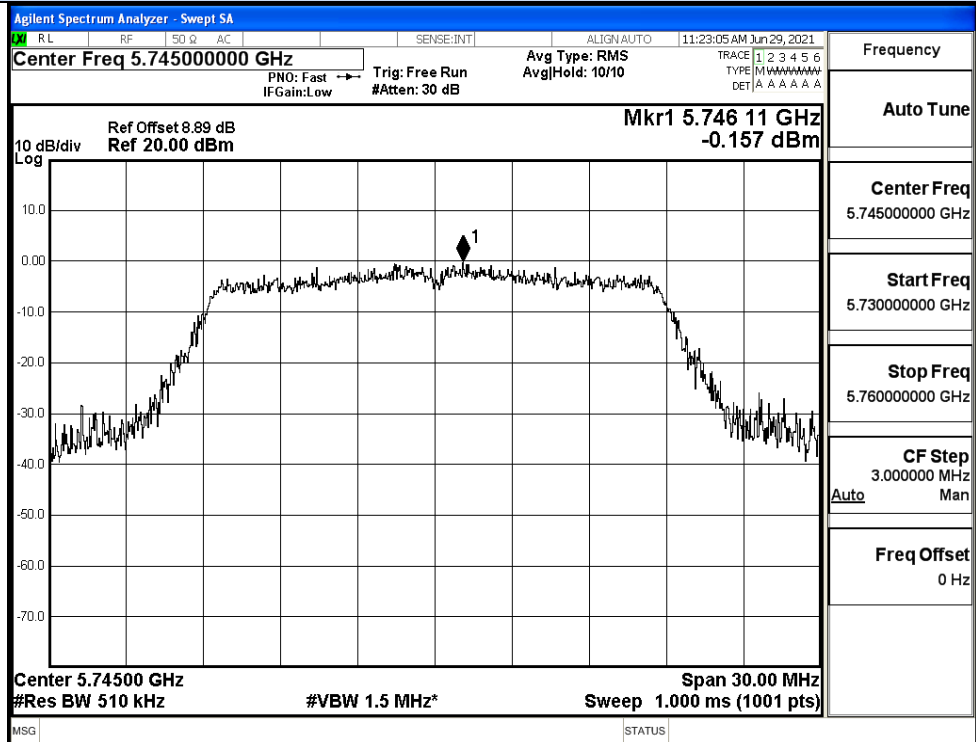
IEEE 802.11na / Channel 157 / 5785MHz



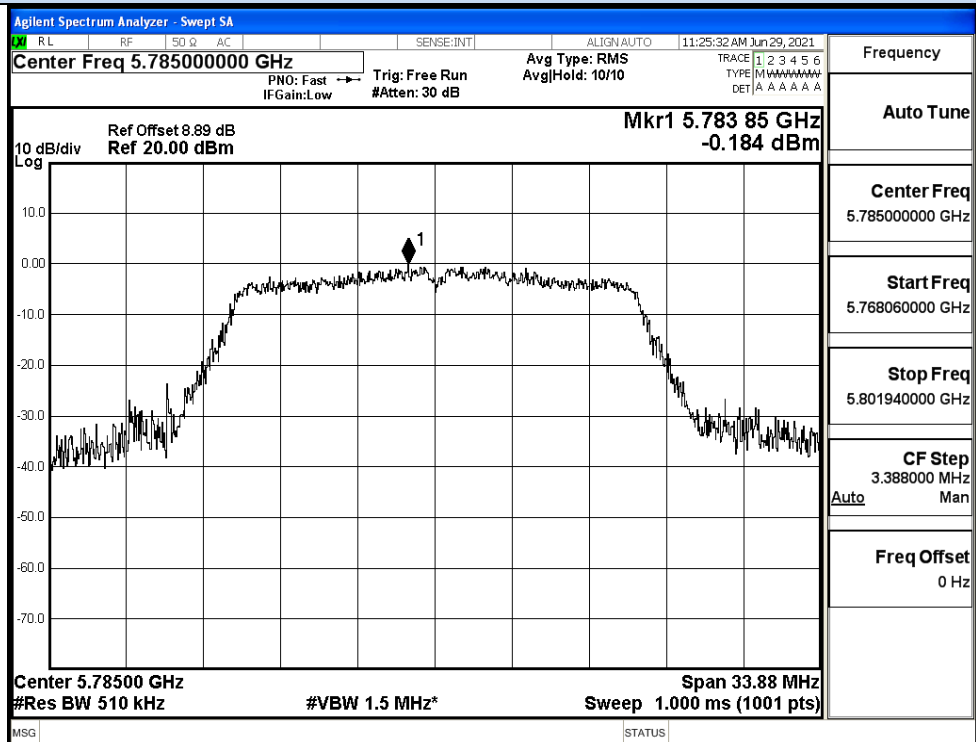
IEEE 802.11na / Channel 165 / 5825MHz



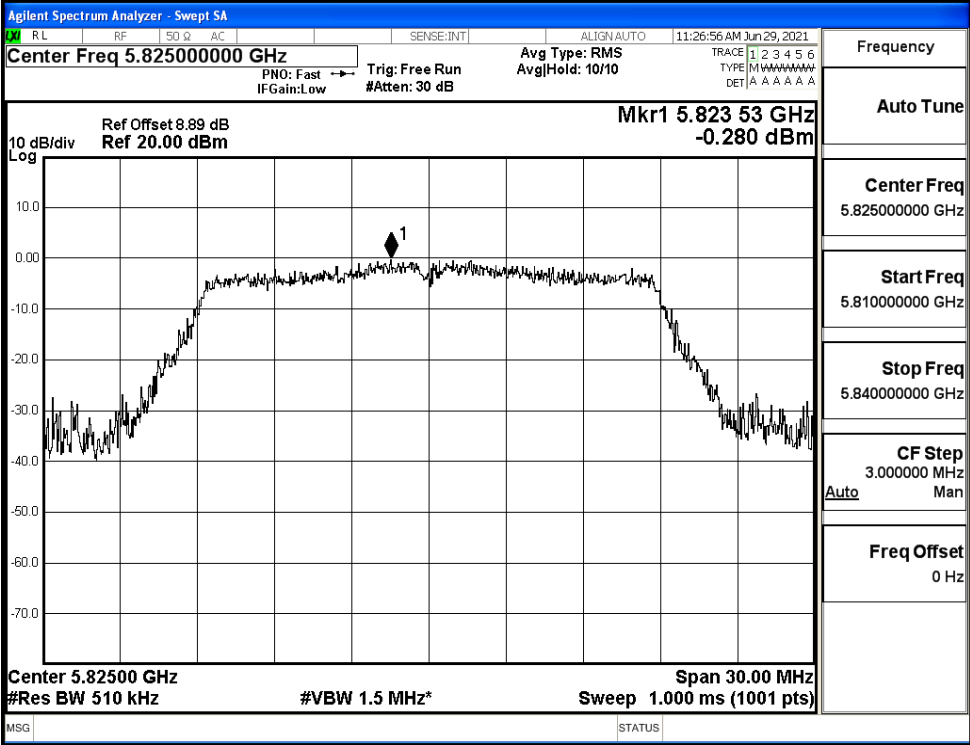
Power Spectral Density



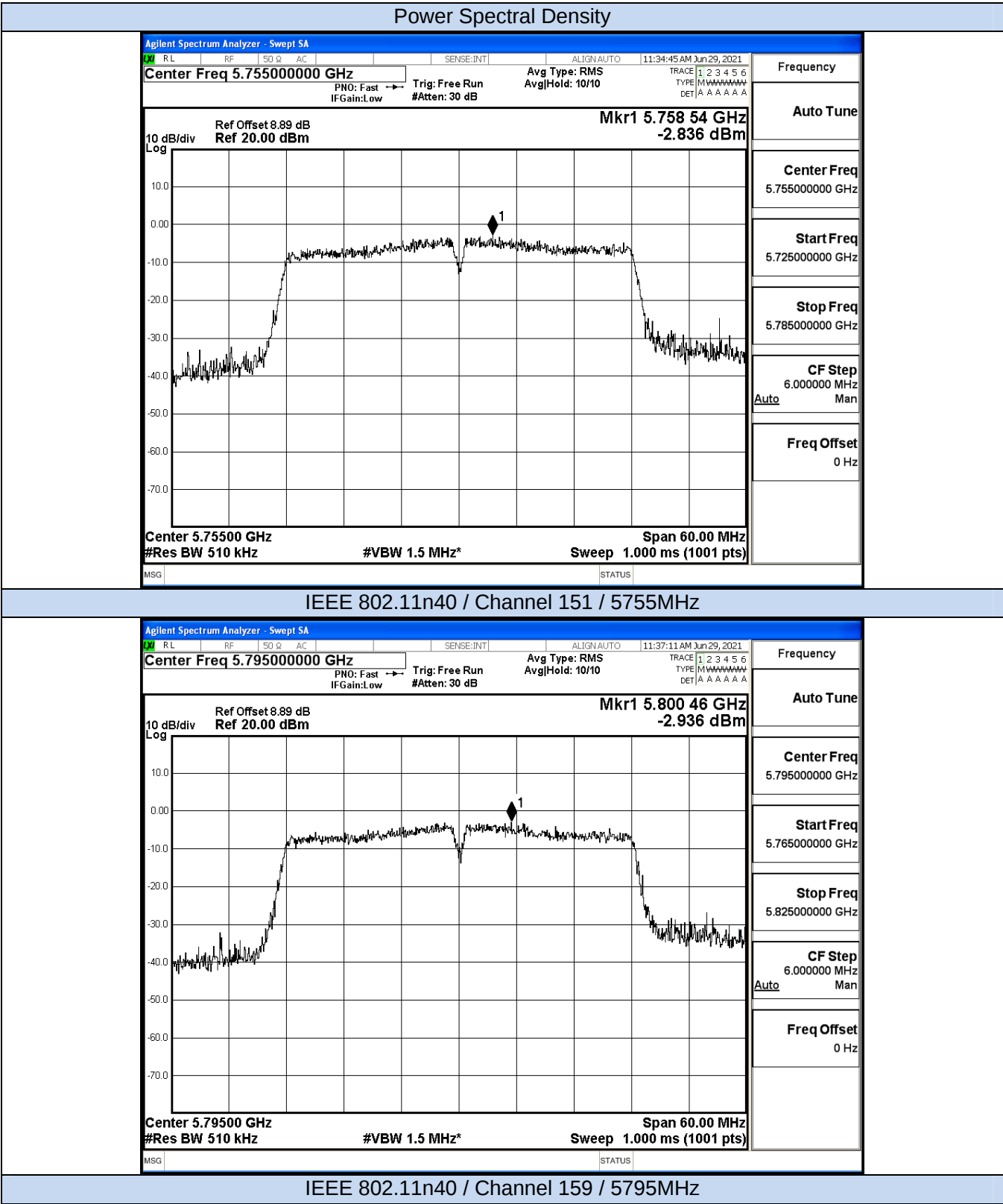
IEEE 802.11n20 / Channel 149 / 5745MHz

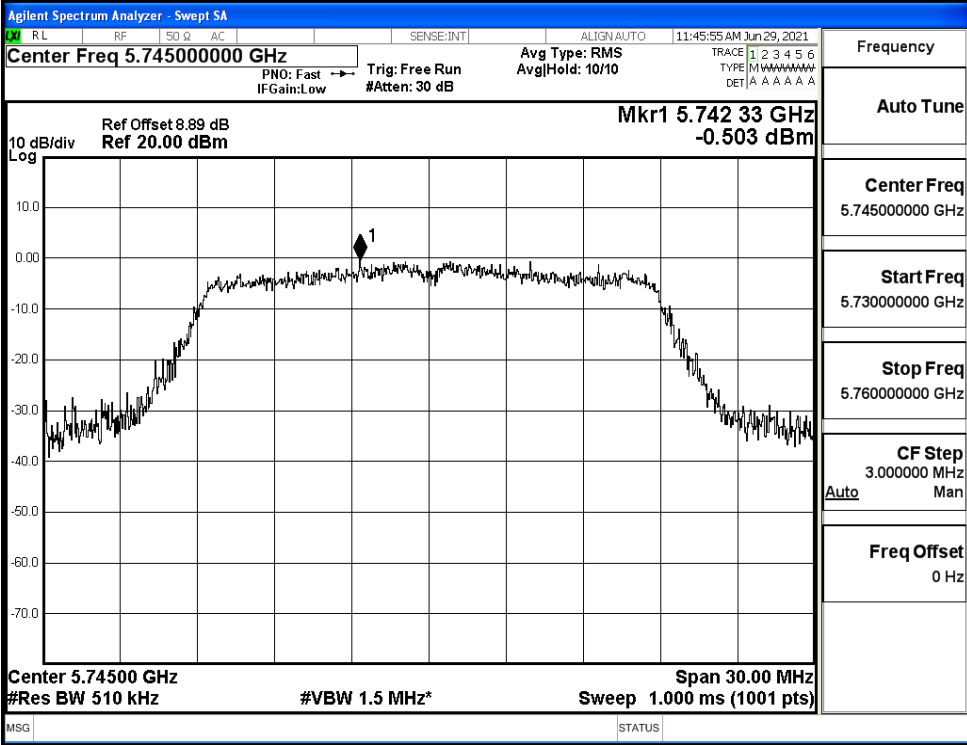


IEEE 802.11n20 / Channel 157 / 5785MHz

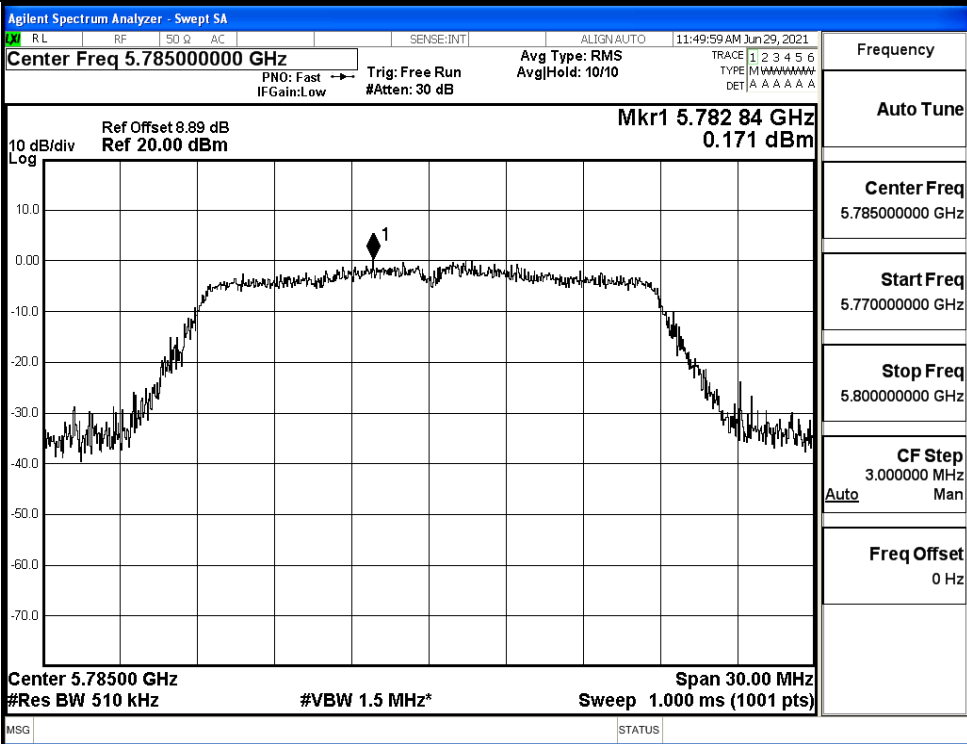


IEEE 802.11n20 / Channel 165 / 5825MHz

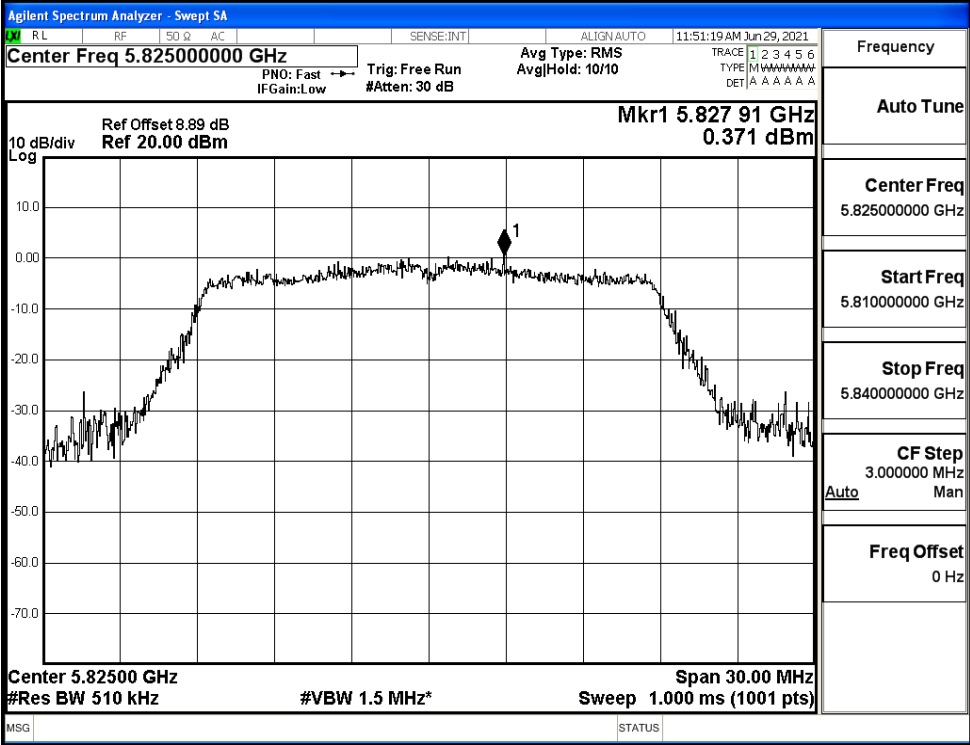




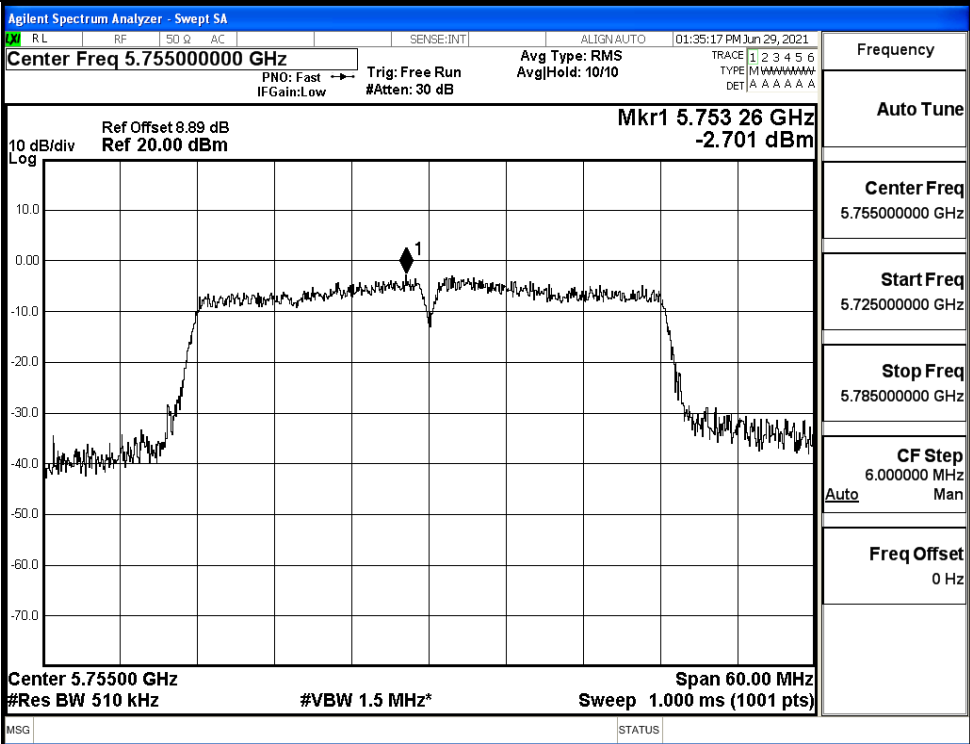
IEEE 802.11ac20 / Channel 149 / 5745MHz



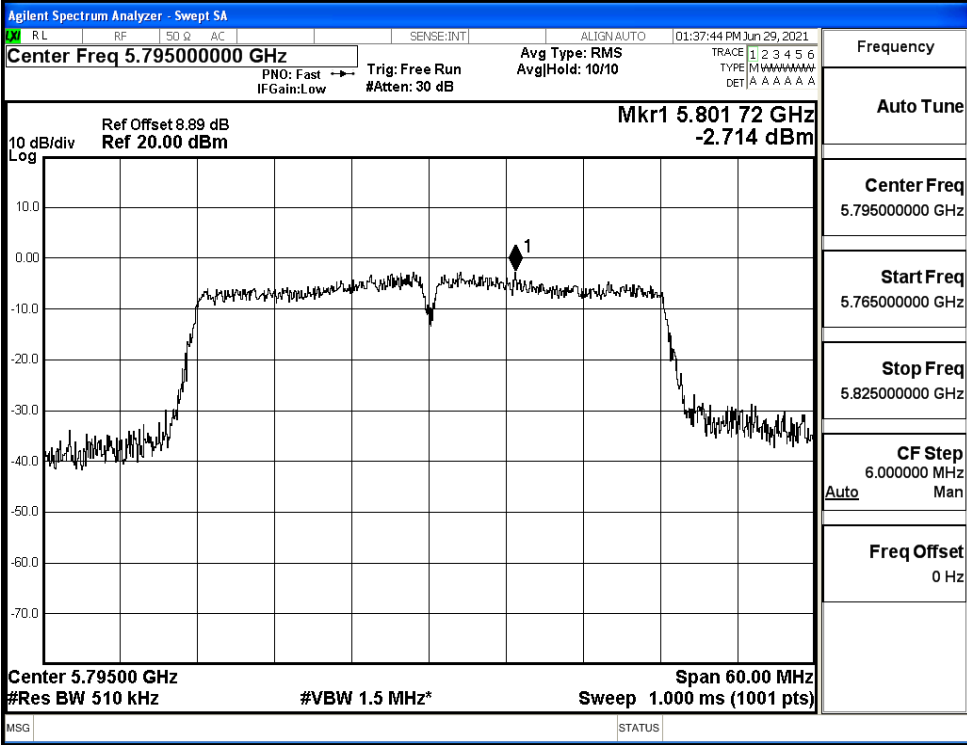
IEEE 802.11ac20 / Channel 157 / 5785MHz



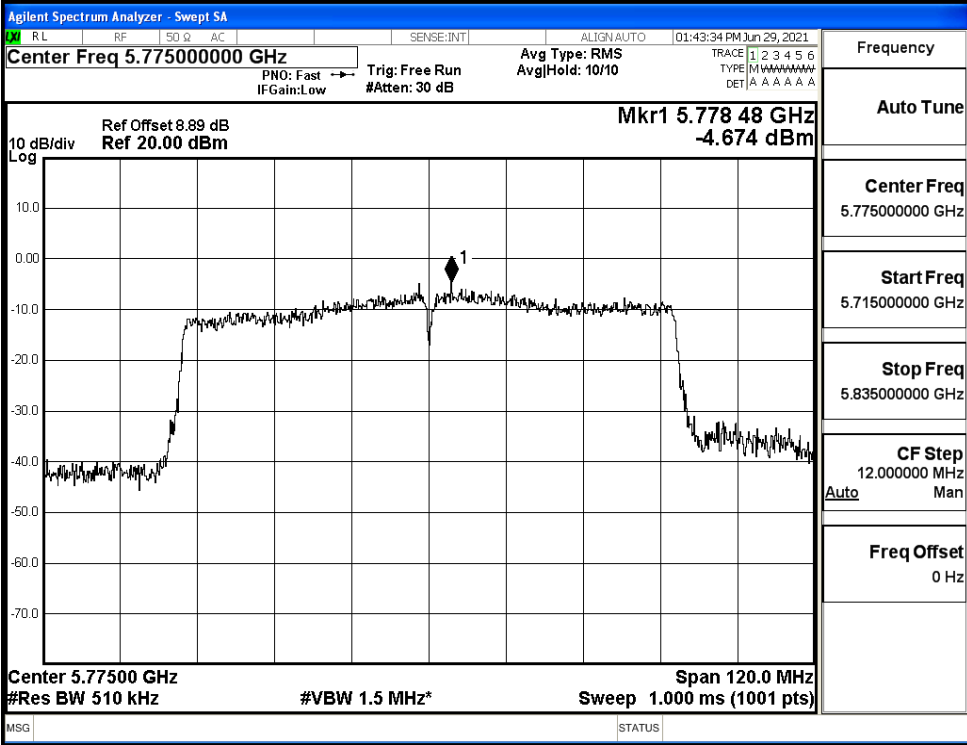
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz

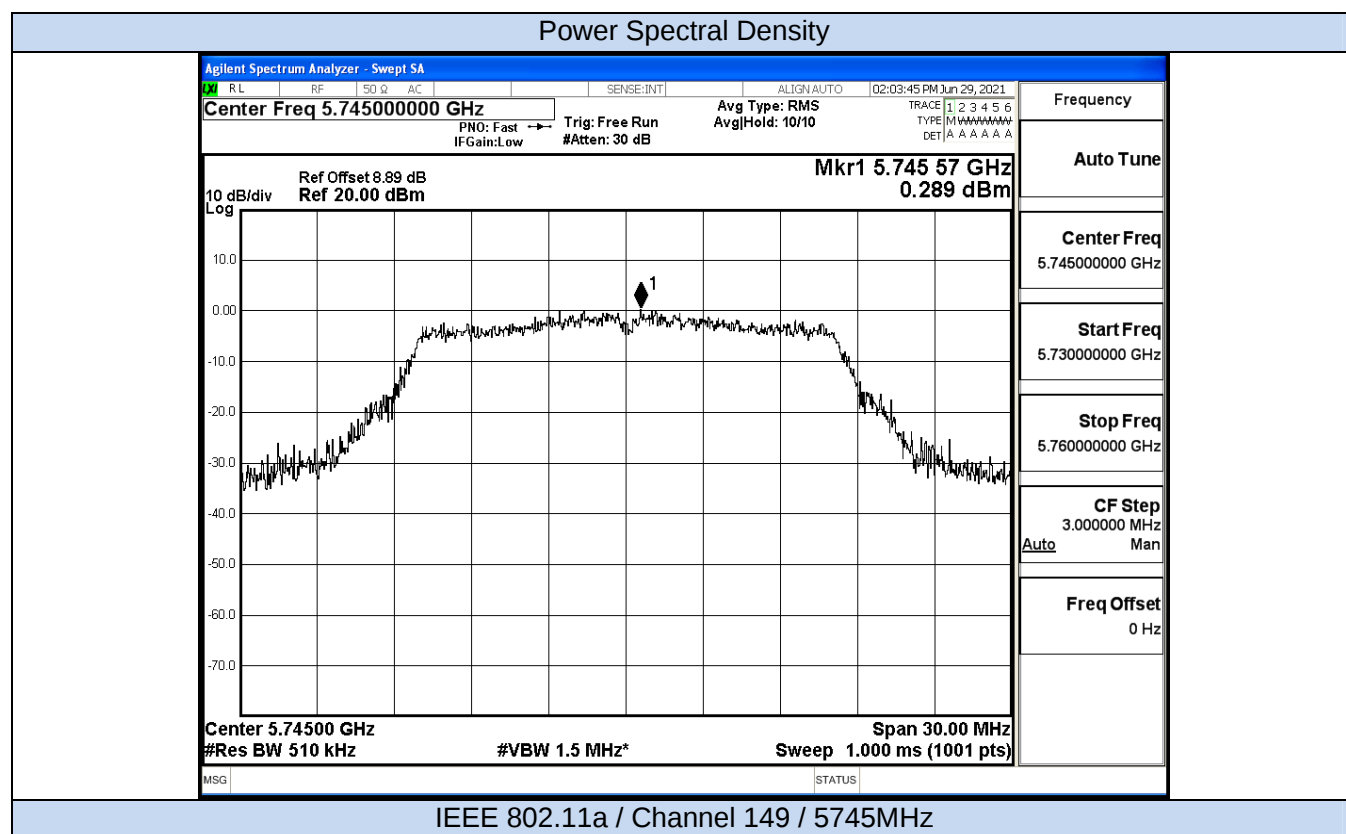


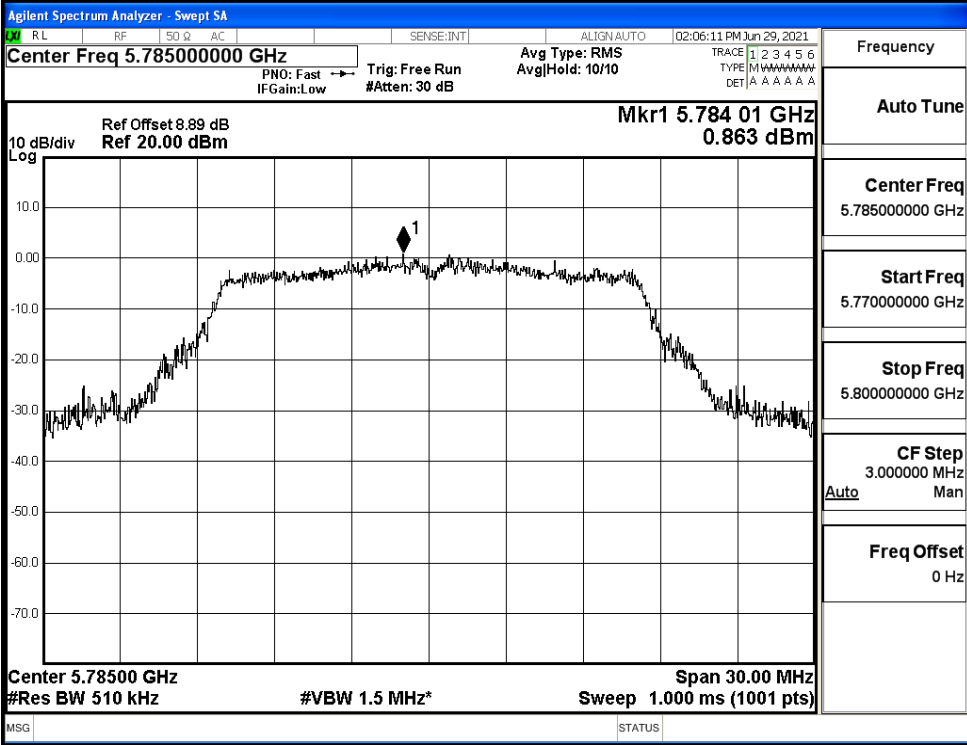
IEEE 802.11ac80 / Channel 155/ 5775MHz



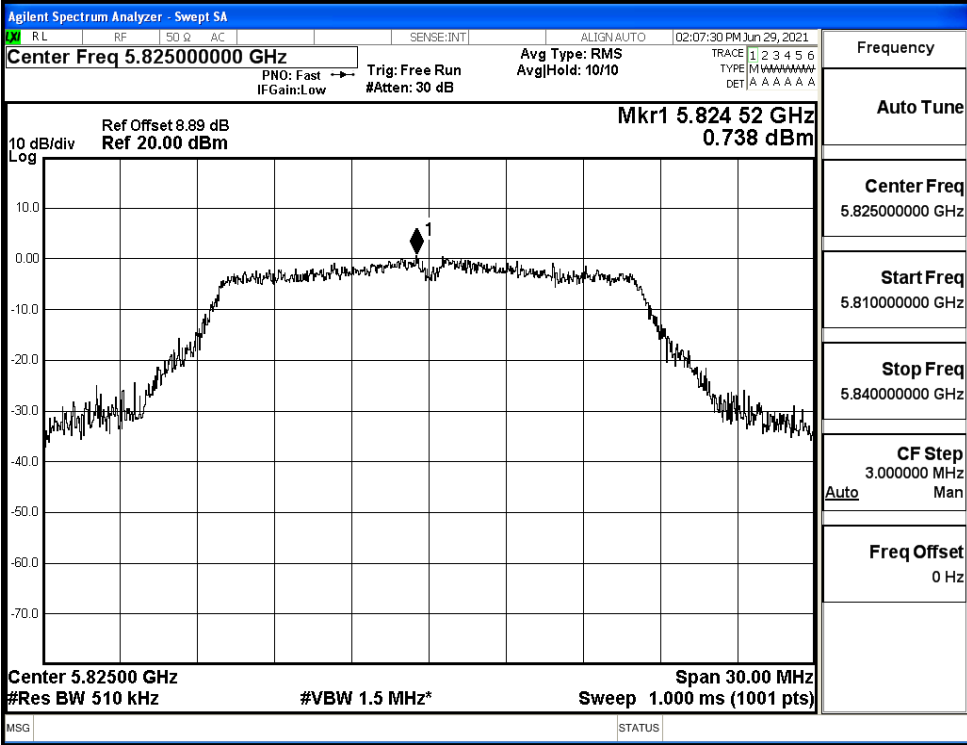
ANT1

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	0.29	0.14	-0.086	0.344	30	Pass
	157	5785	0.86	0.14	-0.086	0.914		Pass
	165	5825	0.74	0.14	-0.086	0.794		Pass
11N20 SISO	149	5745	-0.16	0.15	-0.086	-0.096	30	Pass
	157	5785	0.11	0.15	-0.086	0.174		Pass
	165	5825	0.08	0.15	-0.086	0.144		Pass
11N40 SISO	151	5755	-3.09	0.29	-0.086	-2.886	30	Pass
	159	5795	-2.61	0.29	-0.086	-2.406		Pass
11AC20 SISO	149	5745	-0.10	0.14	-0.086	-0.046	30	Pass
	157	5785	0.68	0.14	-0.086	0.734		Pass
	165	5825	0.22	0.14	-0.086	0.274		Pass
11AC40 SISO	151	5755	-3.02	0.29	-0.086	-2.816	30	Pass
	159	5795	-2.75	0.29	-0.086	-2.546		Pass
11AC80 SISO	155	5775	-6.44	0.56	-0.086	-5.966	30	Pass





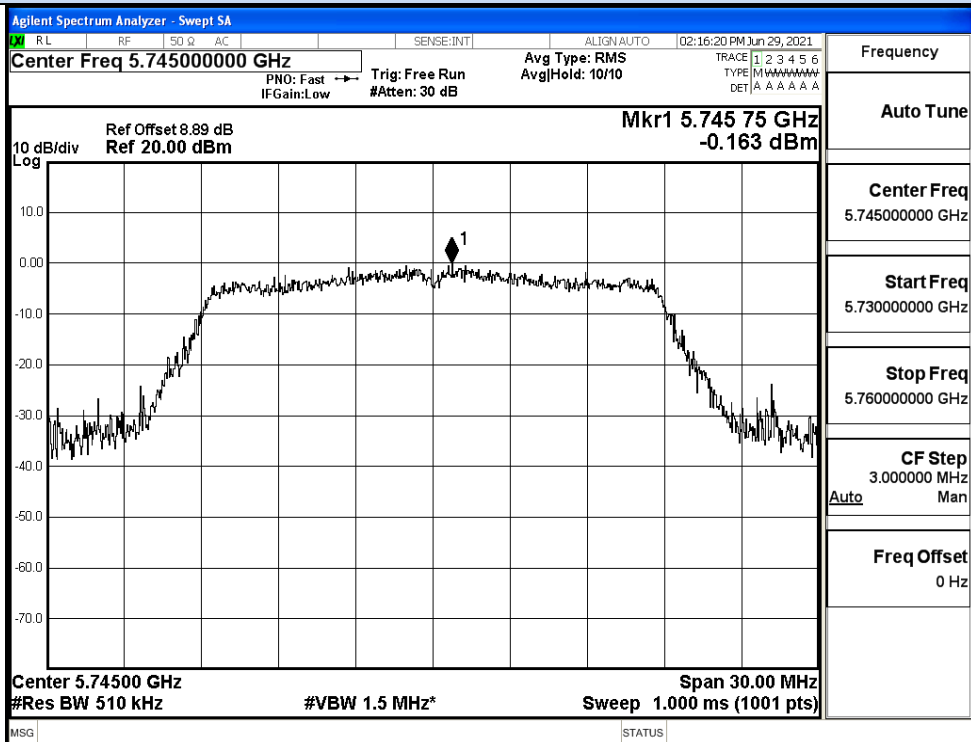
IEEE 802.11na / Channel 157 / 5785MHz



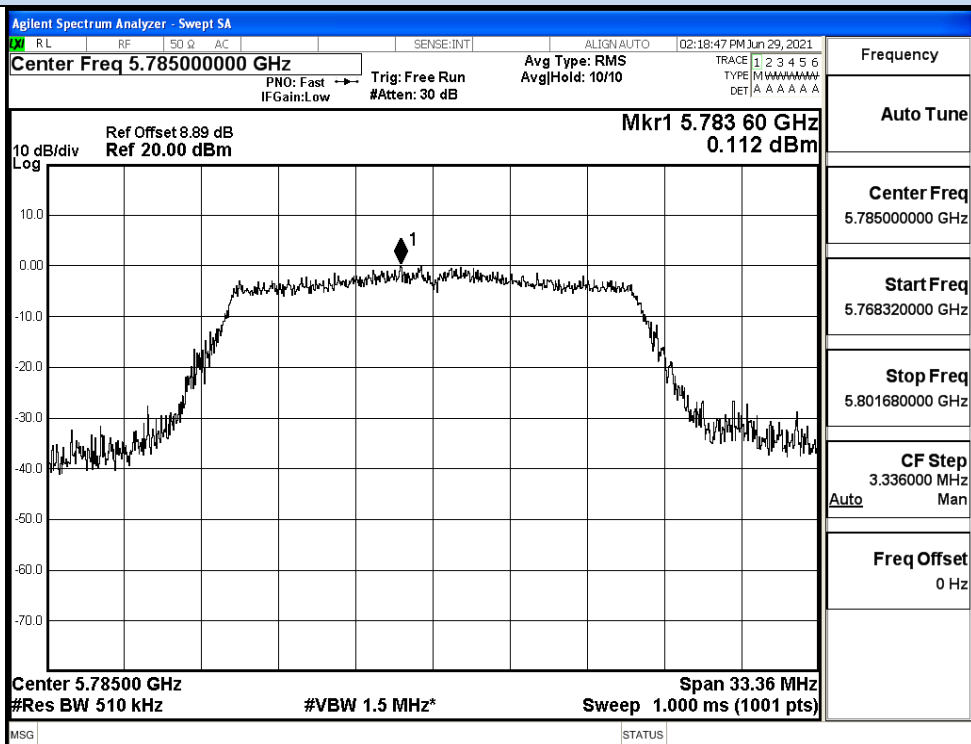
IEEE 802.11na / Channel 165 / 5825MHz



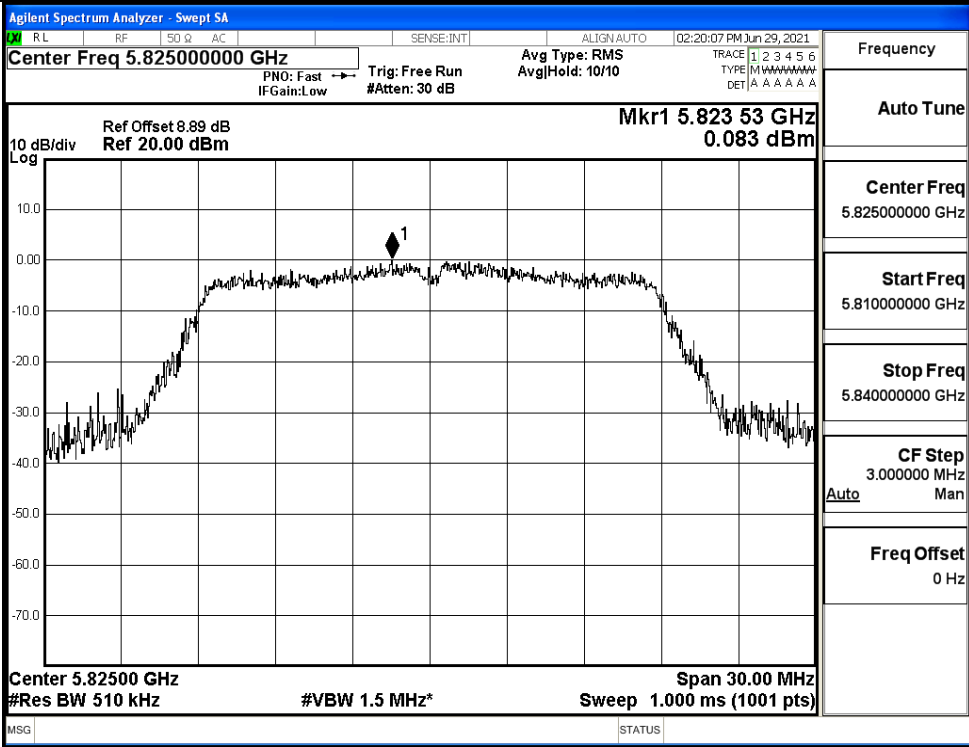
Power Spectral Density



IEEE 802.11n20 / Channel 149 / 5745MHz



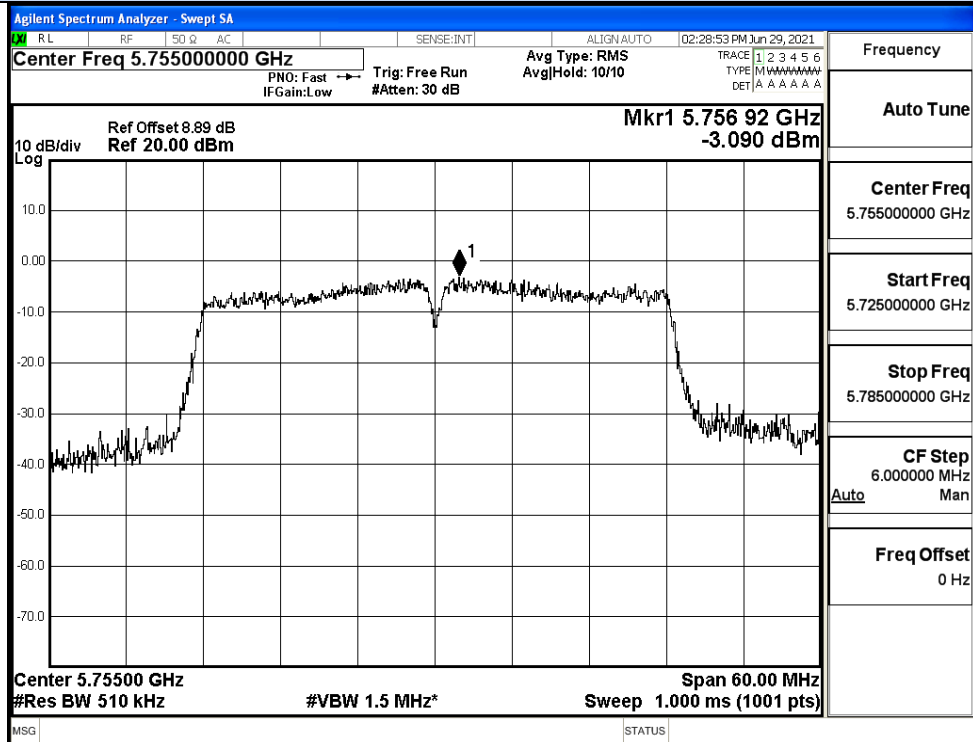
IEEE 802.11n20 / Channel 157 / 5785MHz



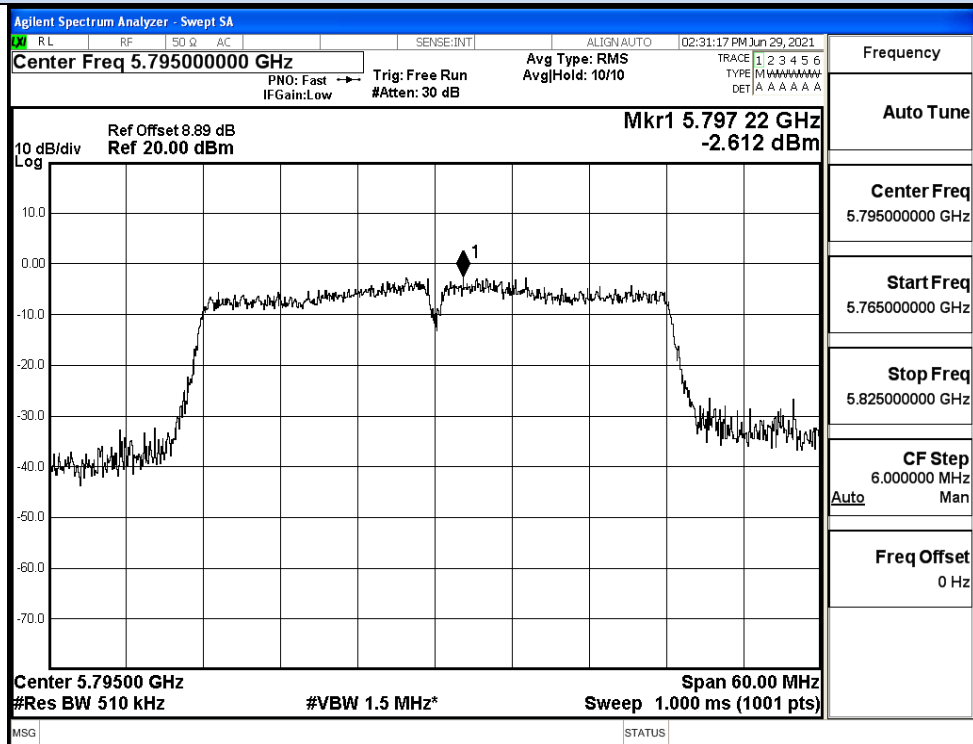
IEEE 802.11n20 / Channel 165 / 5825MHz



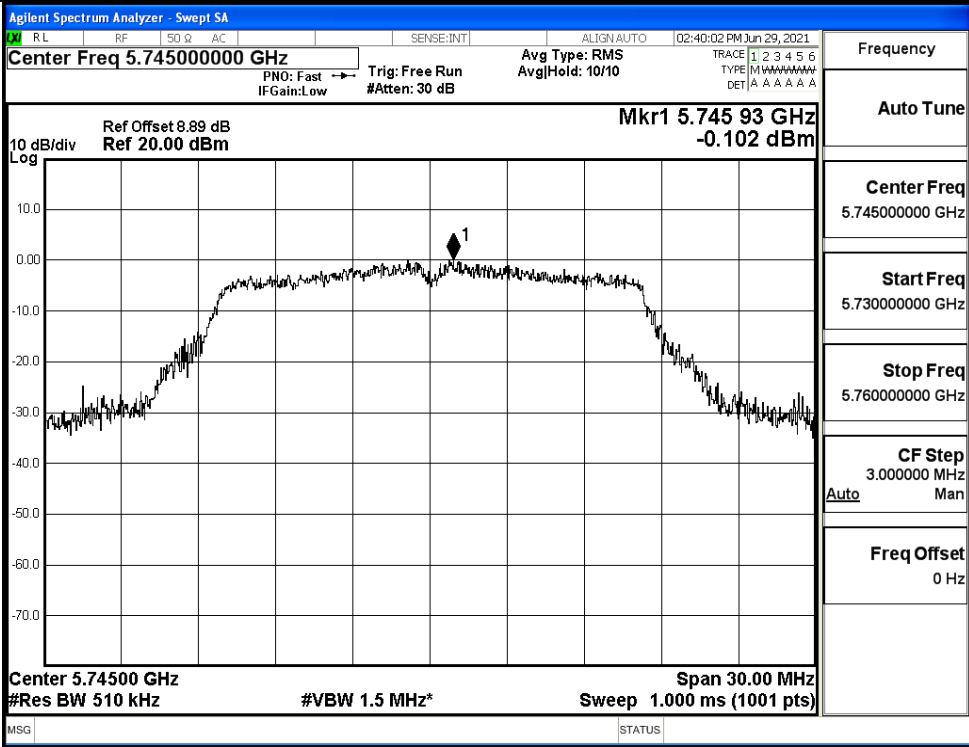
Power Spectral Density



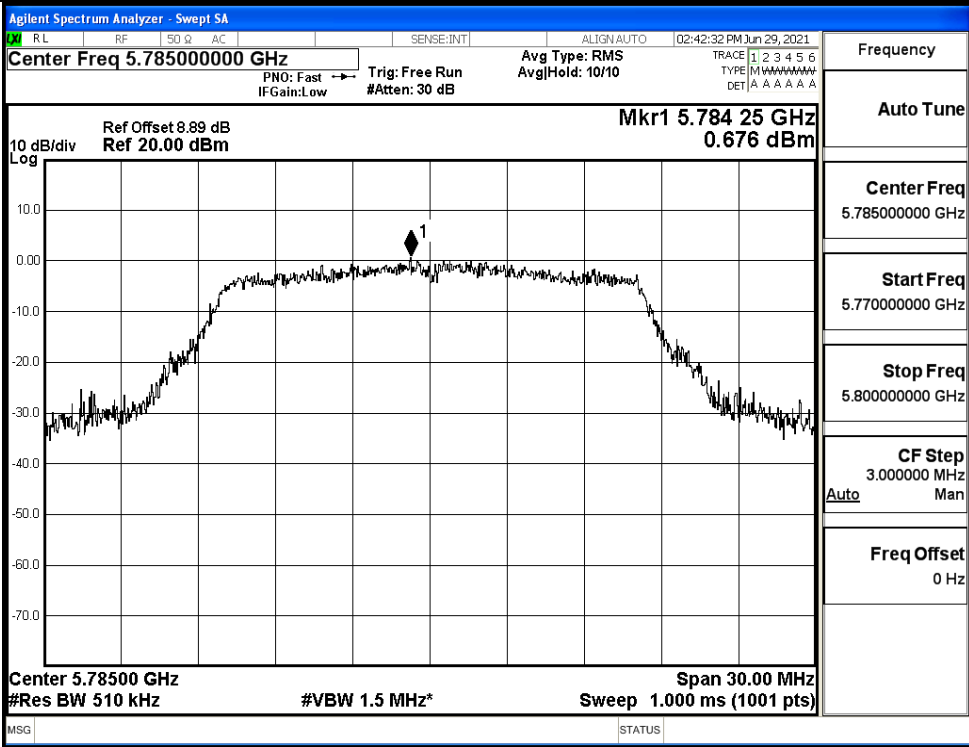
IEEE 802.11n40 / Channel 151 / 5755MHz



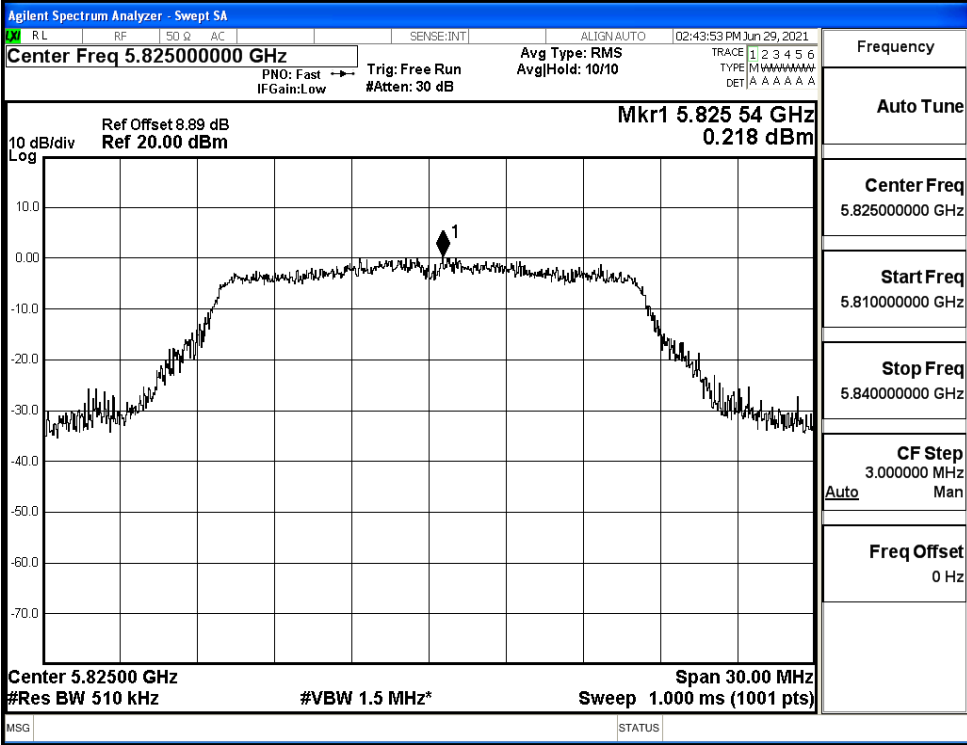
IEEE 802.11n40 / Channel 159 / 5795MHz



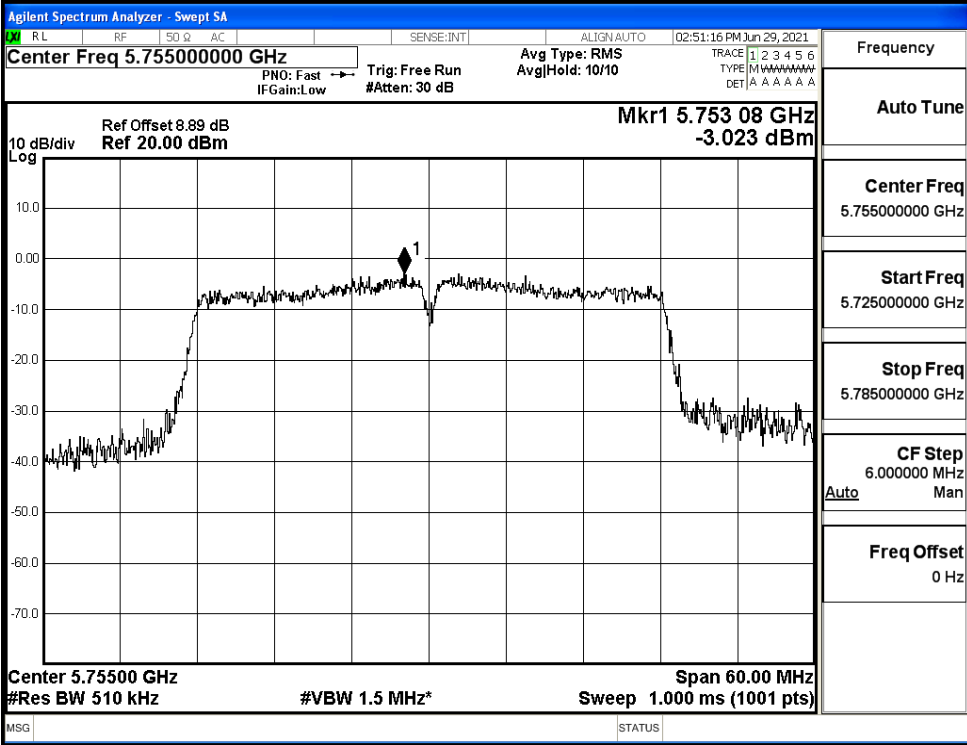
IEEE 802.11ac20 / Channel 149 / 5745MHz



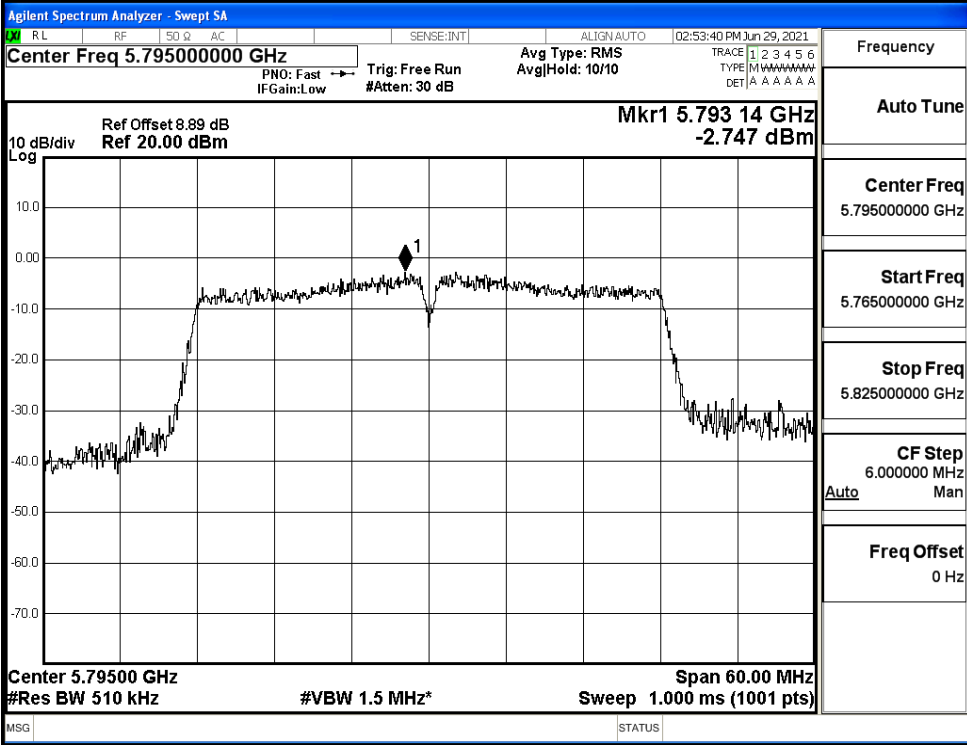
IEEE 802.11ac20 / Channel 157 / 5785MHz



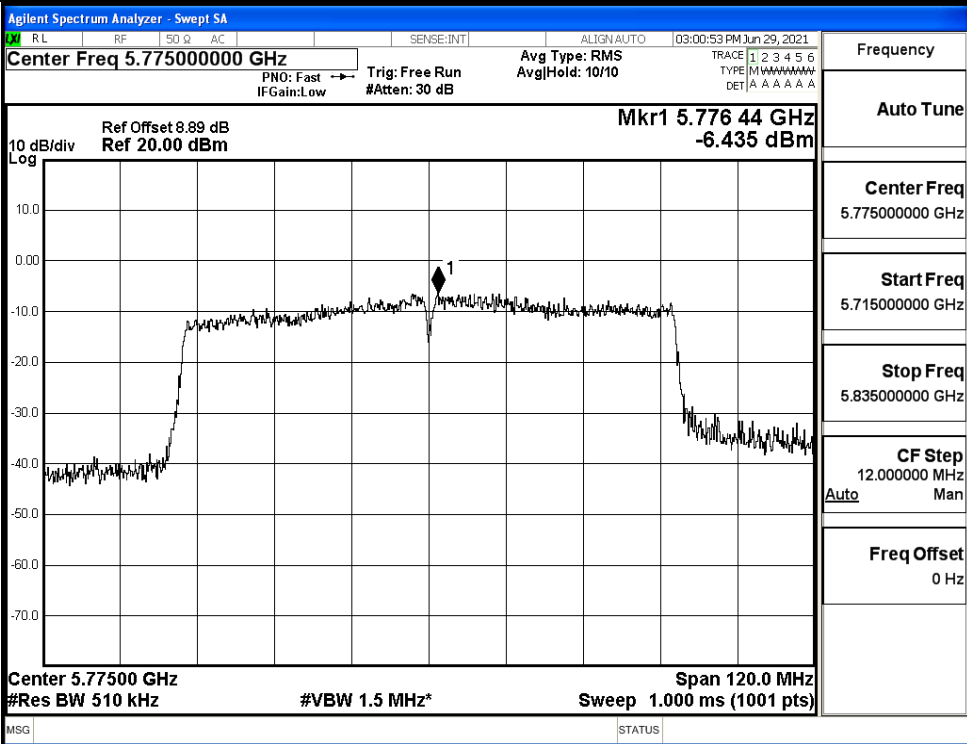
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz



IEEE 802.11ac80 / Channel 155/ 5775MHz



MIMO

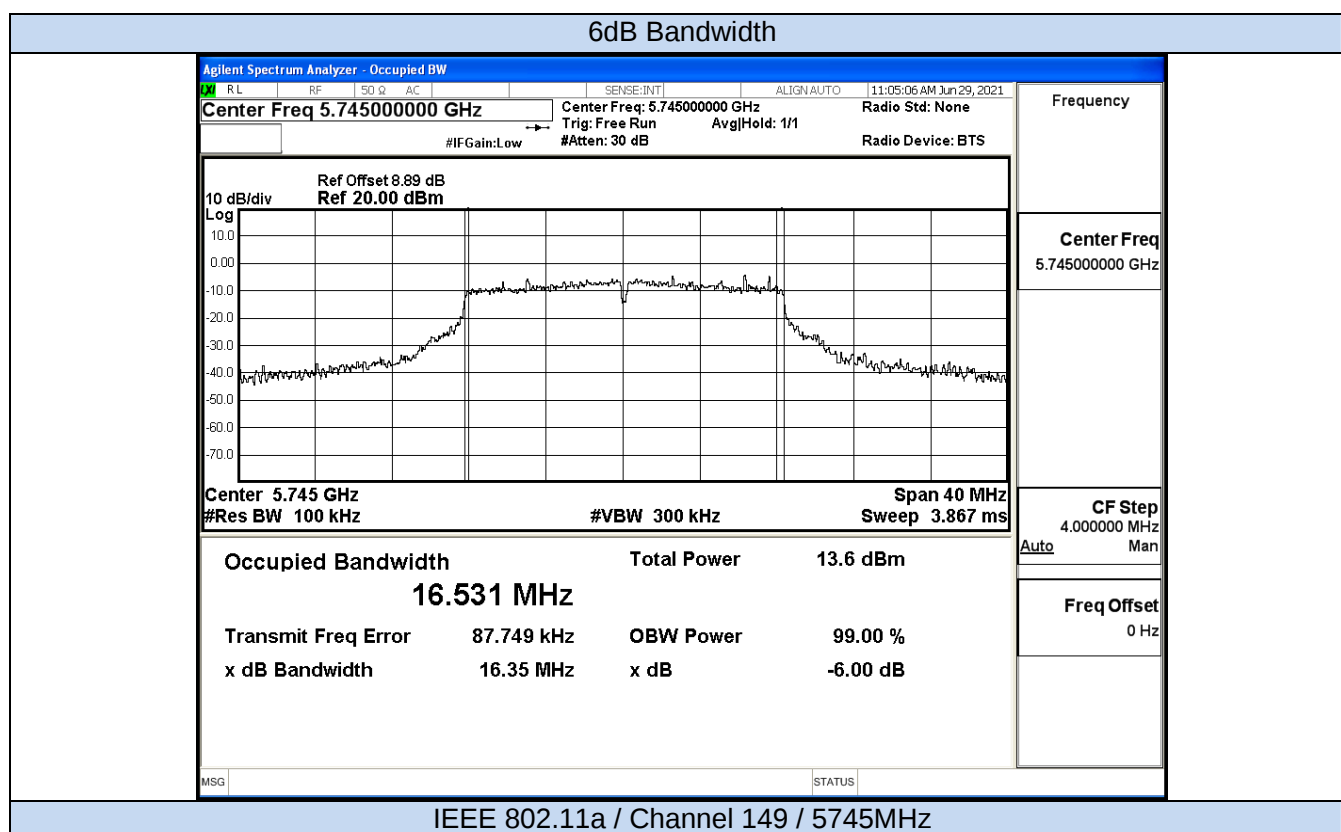
Test Mode	Channel	Frequency (MHz)	ANT 0 Power Density (dBm/500KHz)	ANT 1 Power Density (dBm/500KHz)	MIMO Power Density (dBm/500KHz)	Report Power Density (dBm/500KHz)	Verdict
11N20	149	5745	-0.096	-0.096	2.91	30.0	Pass
	157	5785	-0.116	0.174	3.04		Pass
	165	5825	-0.216	0.144	2.98		Pass
11N40	151	5755	-2.636	-2.886	0.25	30.0	Pass
	159	5795	-2.736	-2.406	0.44		Pass
11AC20	149	5745	-0.446	-0.046	2.77	30.0	Pass
	157	5785	0.224	0.734	3.50		Pass
	165	5825	0.424	0.274	3.36		Pass
11AC40	151	5755	-2.506	-2.816	0.35	30.0	Pass
	159	5795	-2.516	-2.546	0.48		Pass
11AC80	155	5775	-4.196	-5.966	-1.98	30.0	Pass

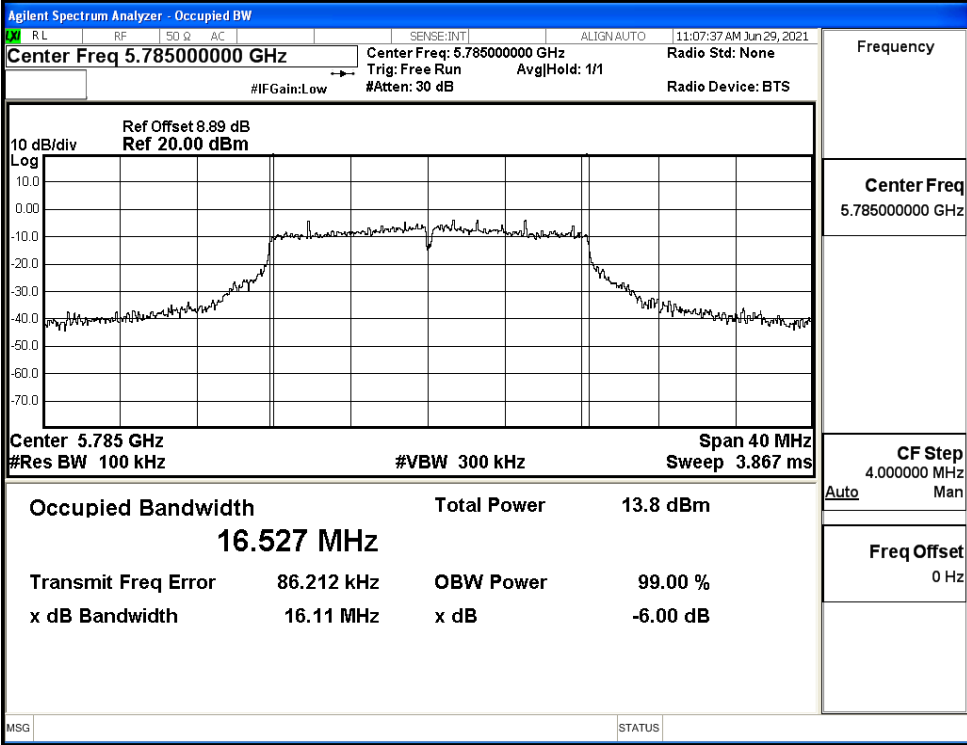


E.4 Emission Bandwidth

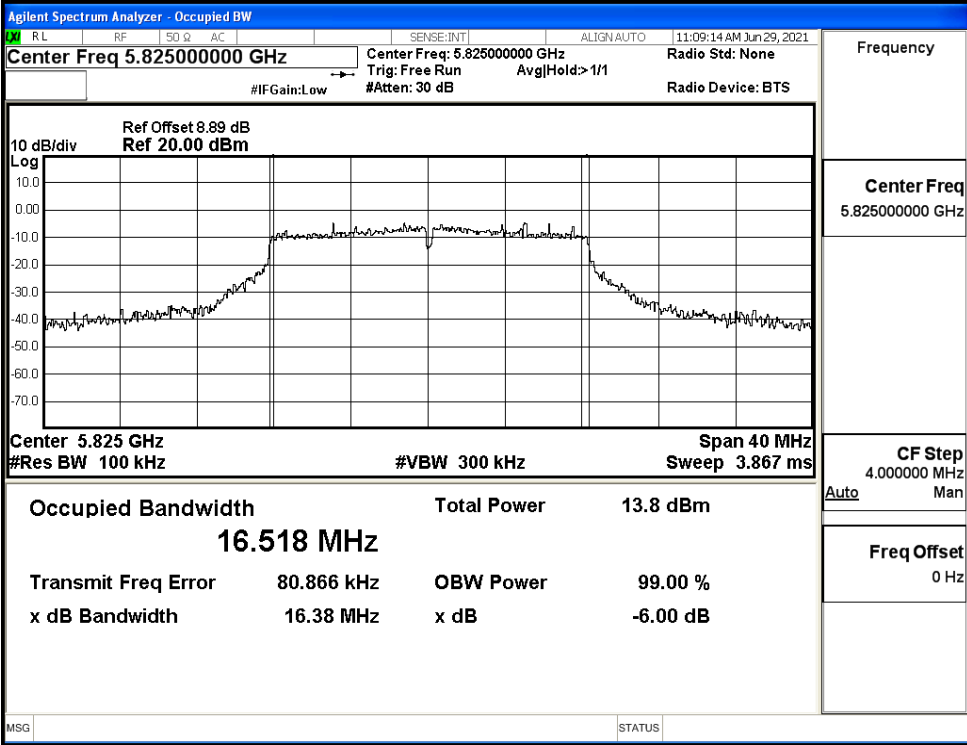
ANT0

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.35	>=0.5	Pass
	157	5785	16.11		Pass
	165	5825	16.38		Pass
11N20 SISO	149	5745	16.96	>=0.5	Pass
	157	5785	16.94		Pass
	165	5825	17.38		Pass
11N40 SISO	151	5755	35.62	>=0.5	Pass
	159	5795	35.27		Pass
11AC20S ISO	149	5745	16.38	>=0.5	Pass
	157	5785	16.36		Pass
	165	5825	17.29		Pass
11AC40S ISO	151	5755	35.74	>=0.5	Pass
	159	5795	35.60		Pass
11AC80S ISO	155	5775	75.49	>=0.5	Pass





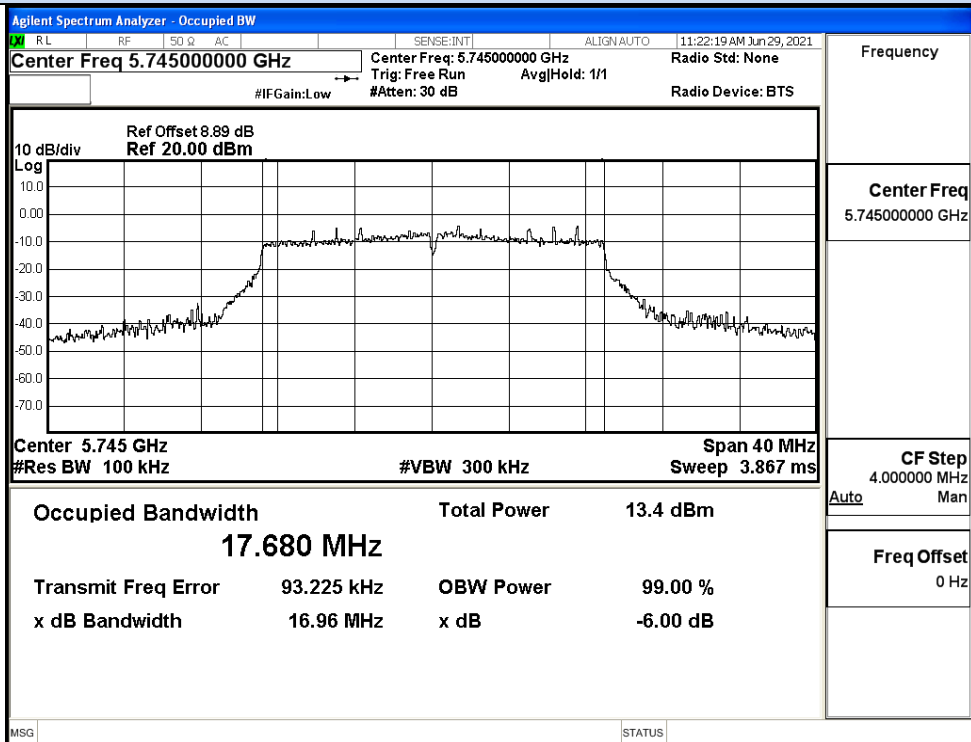
IEEE 802.11a / Channel 157 / 5785MHz



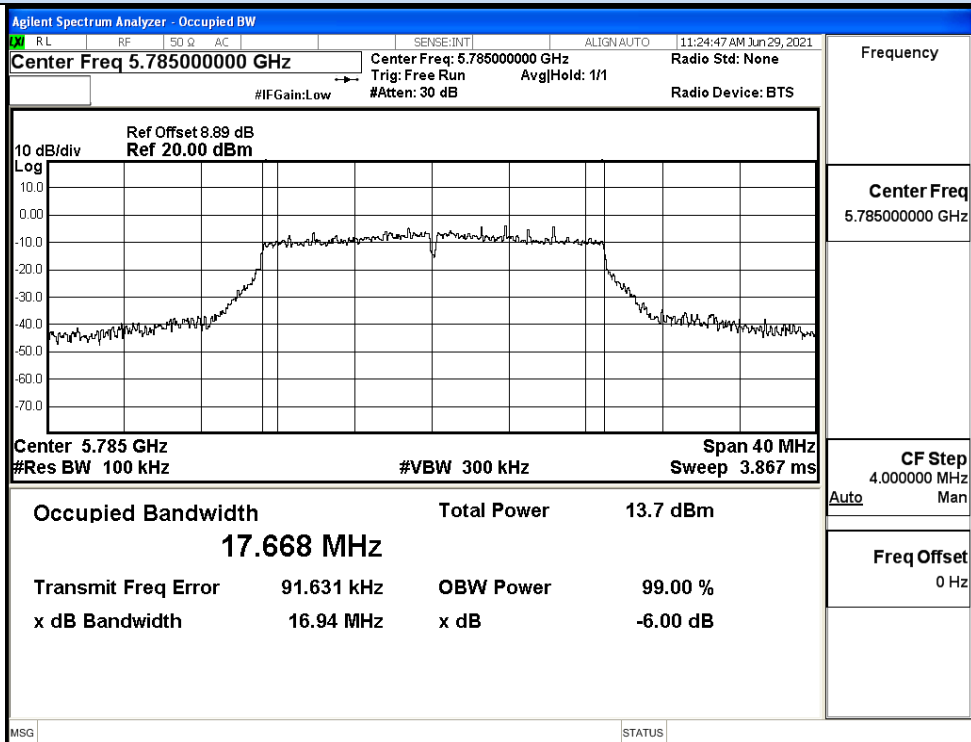
IEEE 802.11a / Channel 165 / 5825MHz



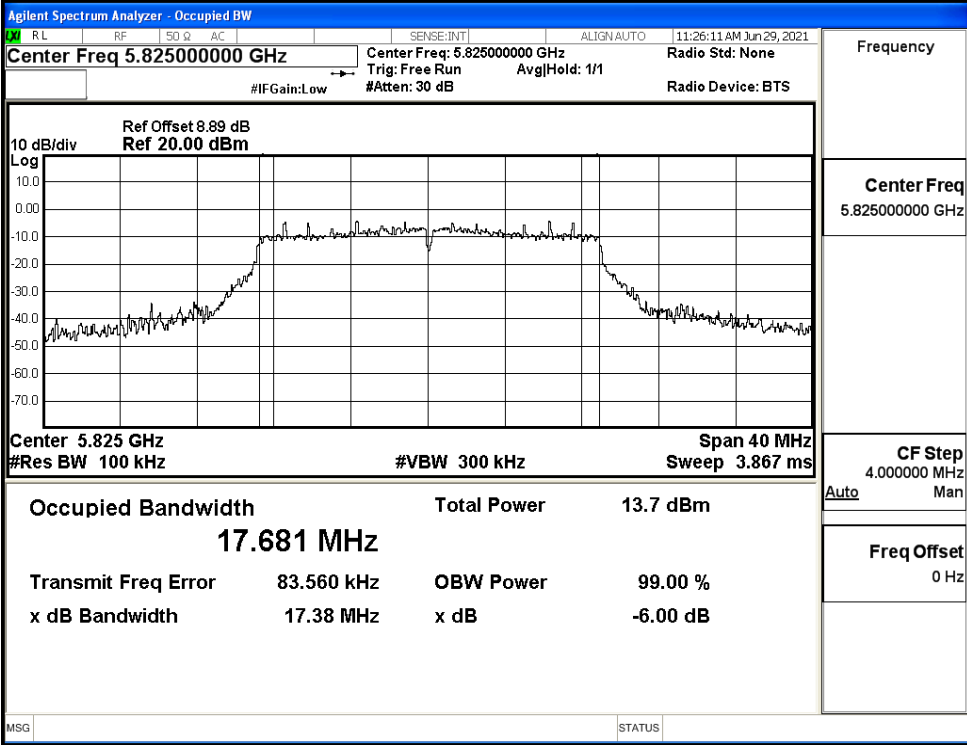
6dB Bandwidth



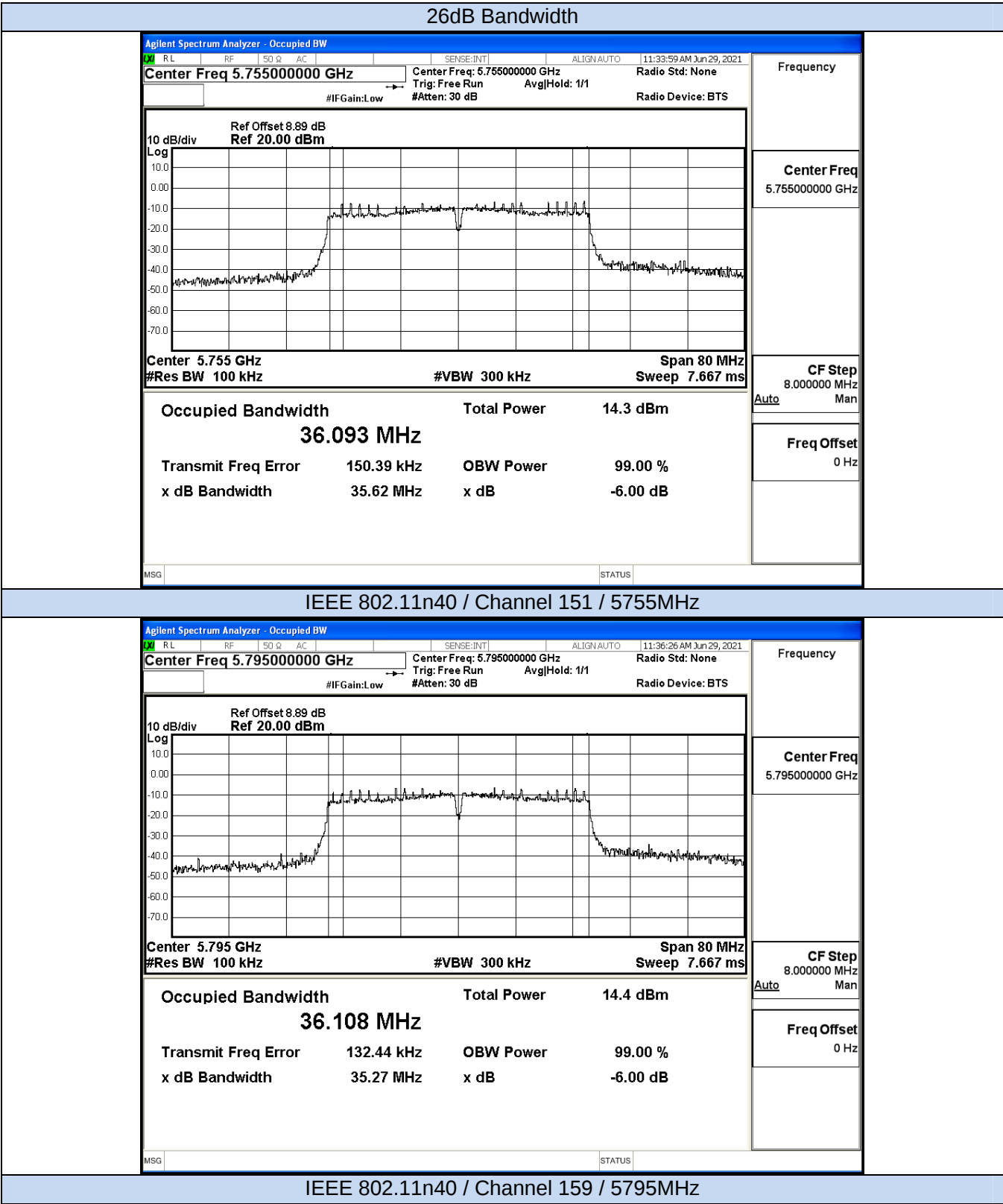
IEEE 802.11n20 / Channel 149 / 5745MHz

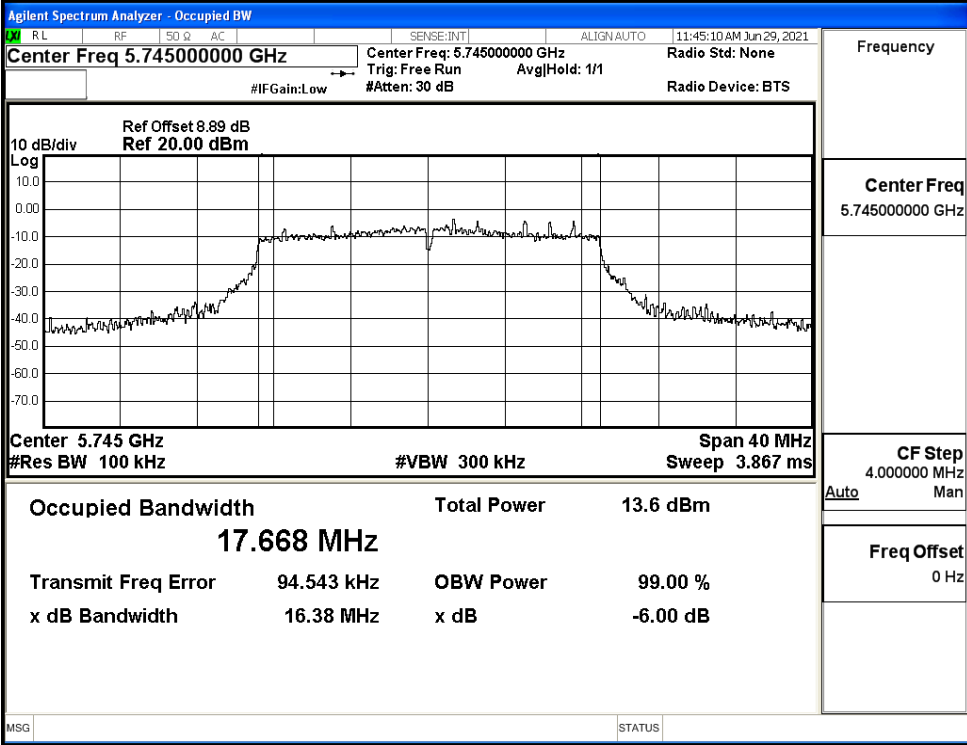


IEEE 802.11n20 / Channel 157 / 5785MHz

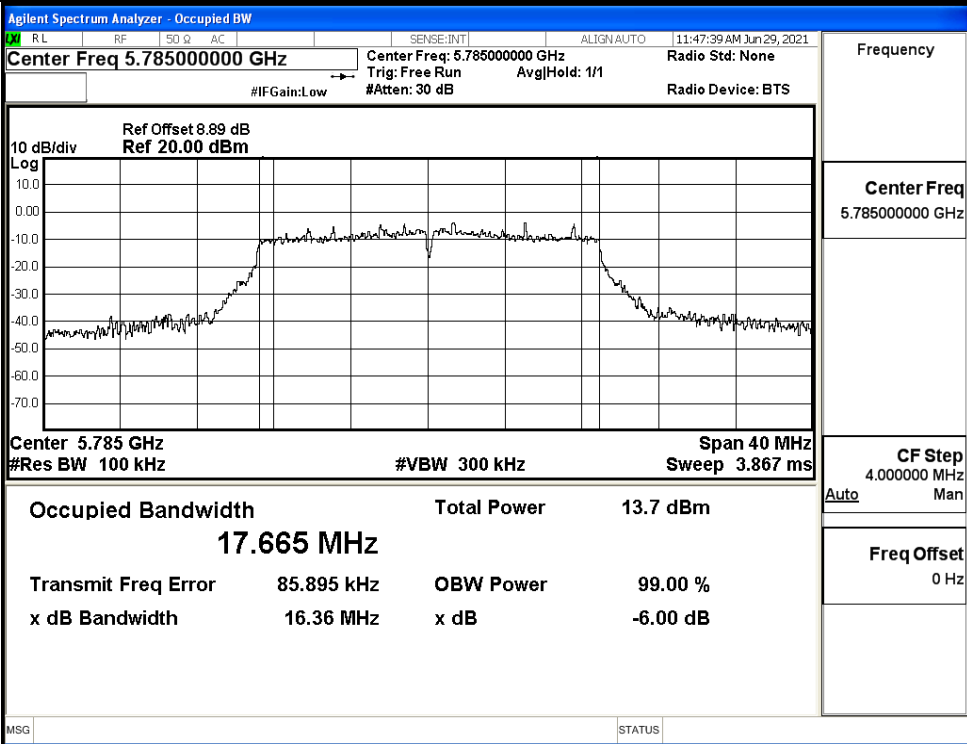


IEEE 802.11n20 / Channel 165 / 5825MHz

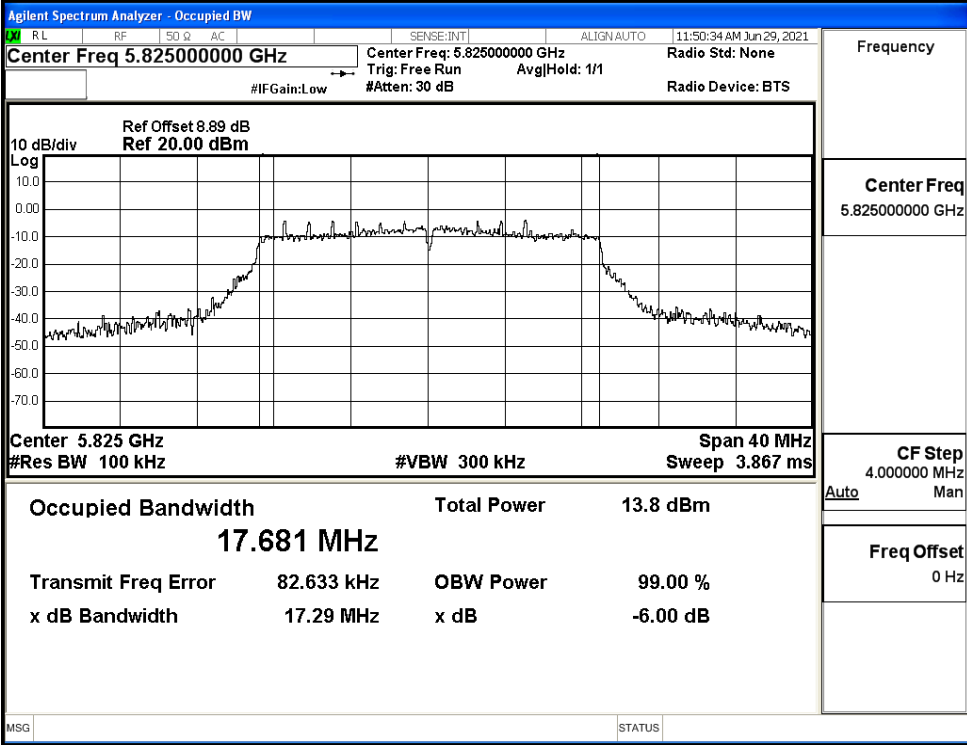




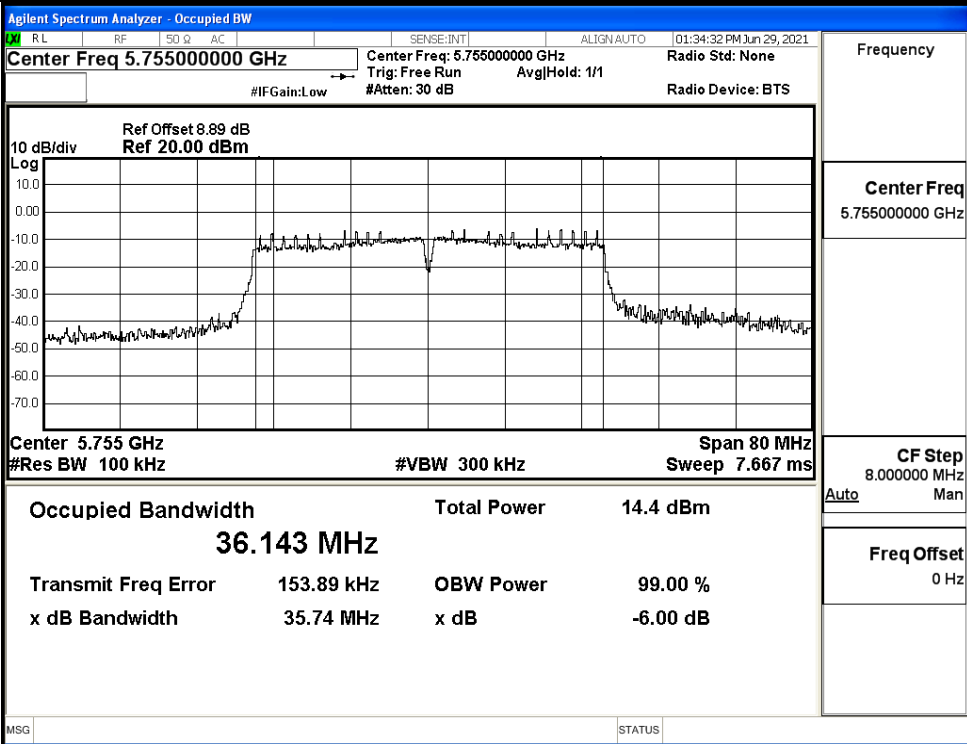
IEEE 802.11ac20 / Channel 149 / 5745MHz



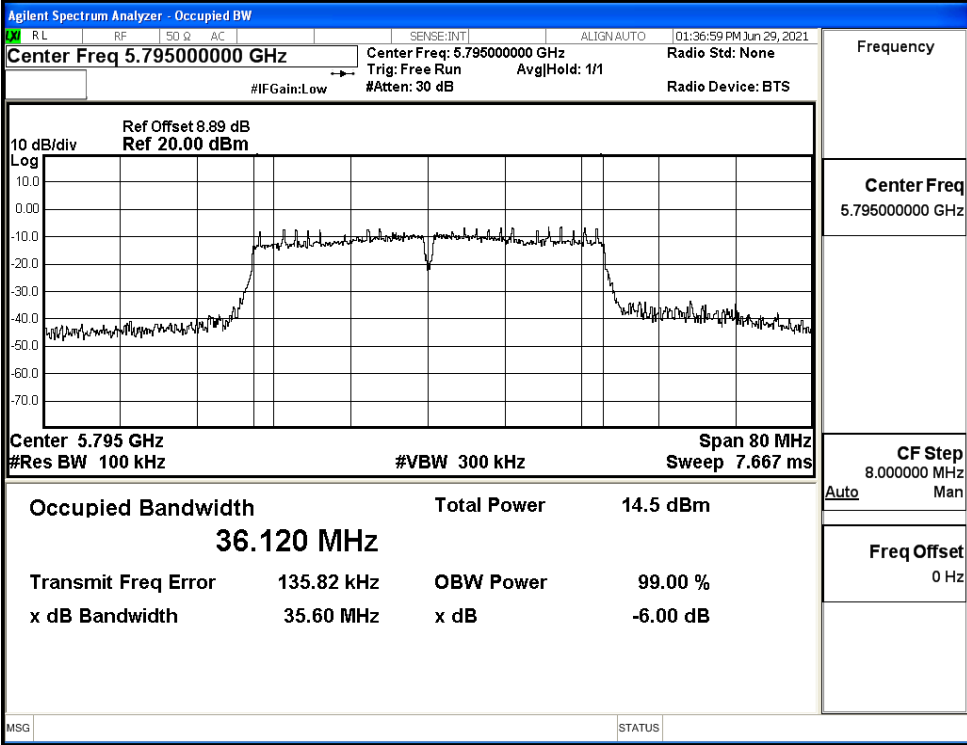
IEEE 802.11ac20 / Channel 157/ 5785MHz



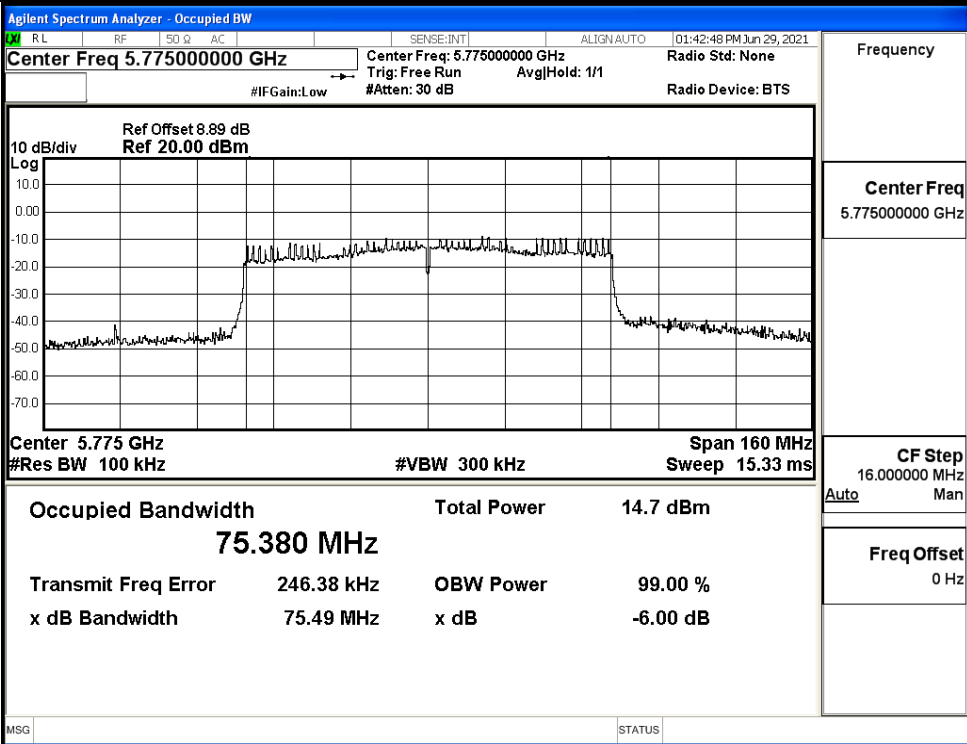
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz

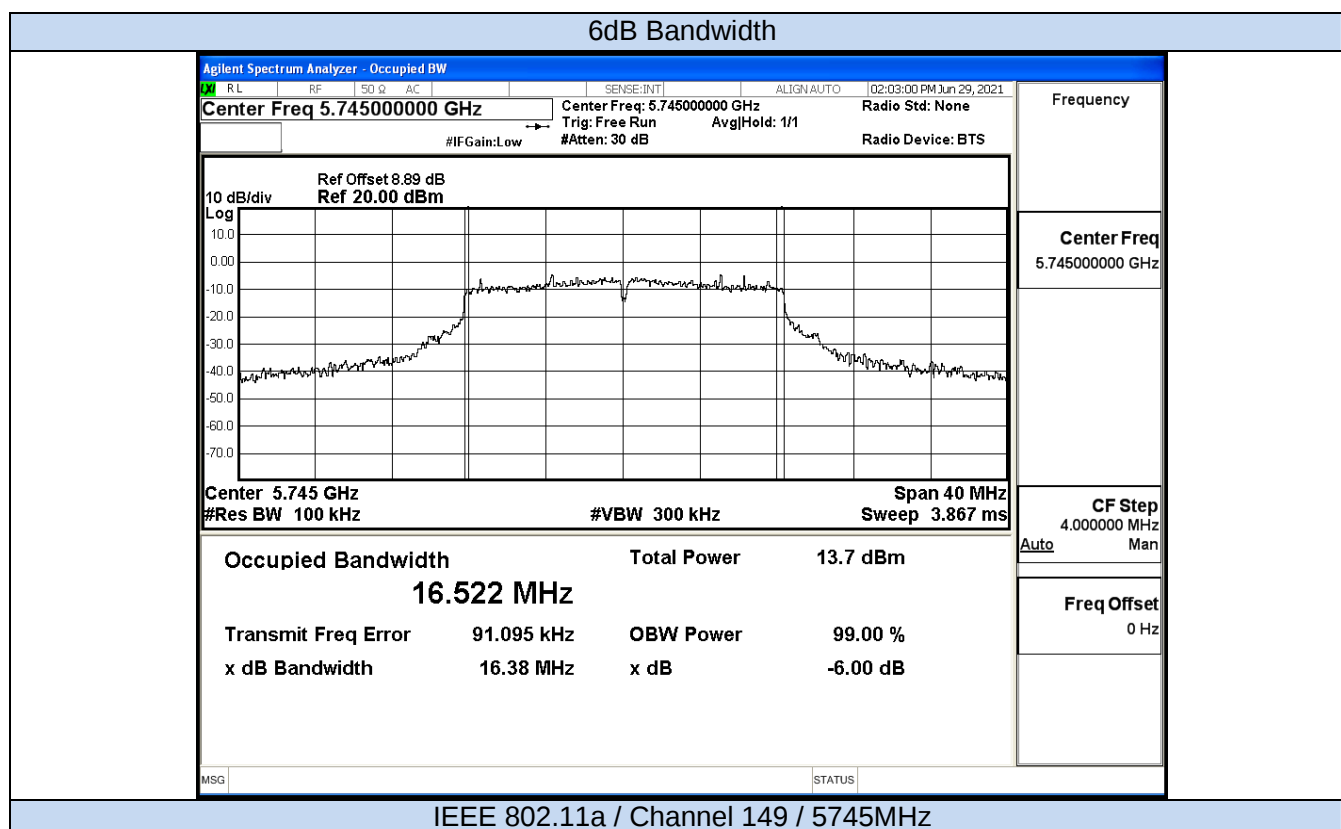


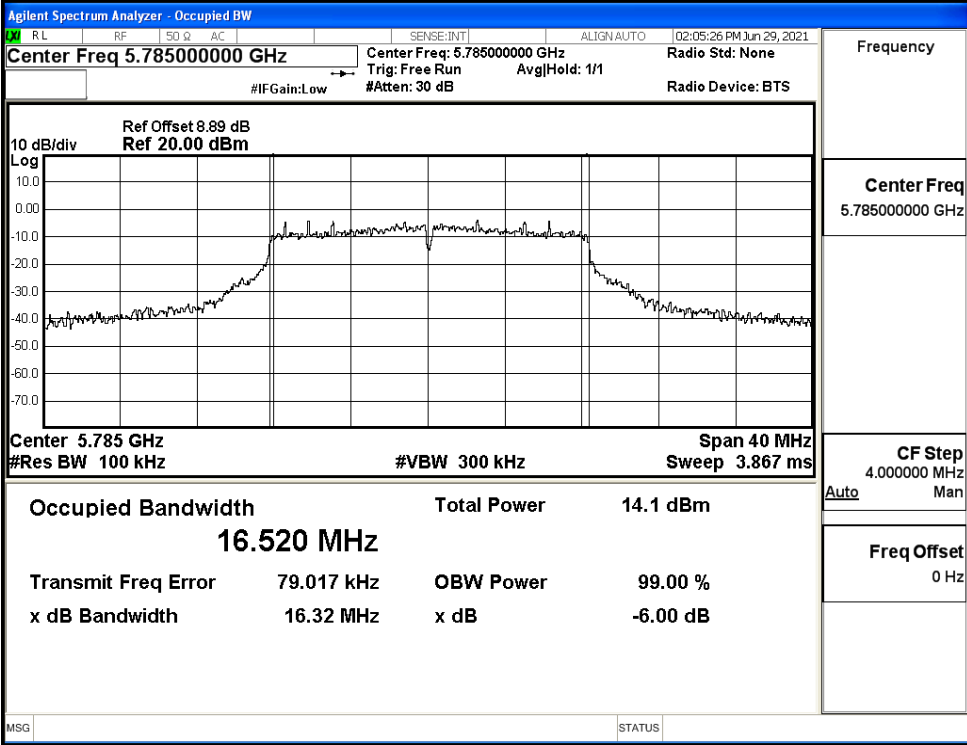
IEEE 802.11ac80 / Channel 155 / 5775MHz



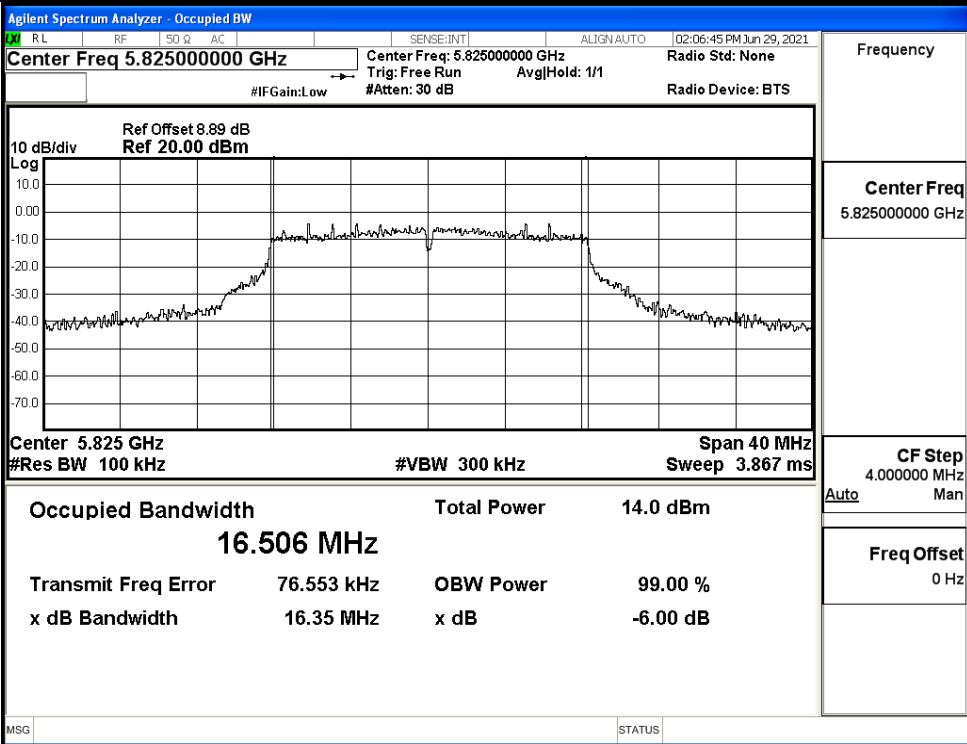
ANT1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.38	>=0.5	Pass
	157	5785	16.32		Pass
	165	5825	16.35		Pass
11N20 SISO	149	5745	16.72	>=0.5	Pass
	157	5785	16.68		Pass
	165	5825	17.55		Pass
11N40 SISO	151	5755	35.67	>=0.5	Pass
	159	5795	35.79		Pass
11AC20S ISO	149	5745	16.34	>=0.5	Pass
	157	5785	16.34		Pass
	165	5825	16.39		Pass
11AC40S ISO	151	5755	35.83	>=0.5	Pass
	159	5795	35.59		Pass
11AC80S ISO	155	5775	75.29	>=0.5	Pass

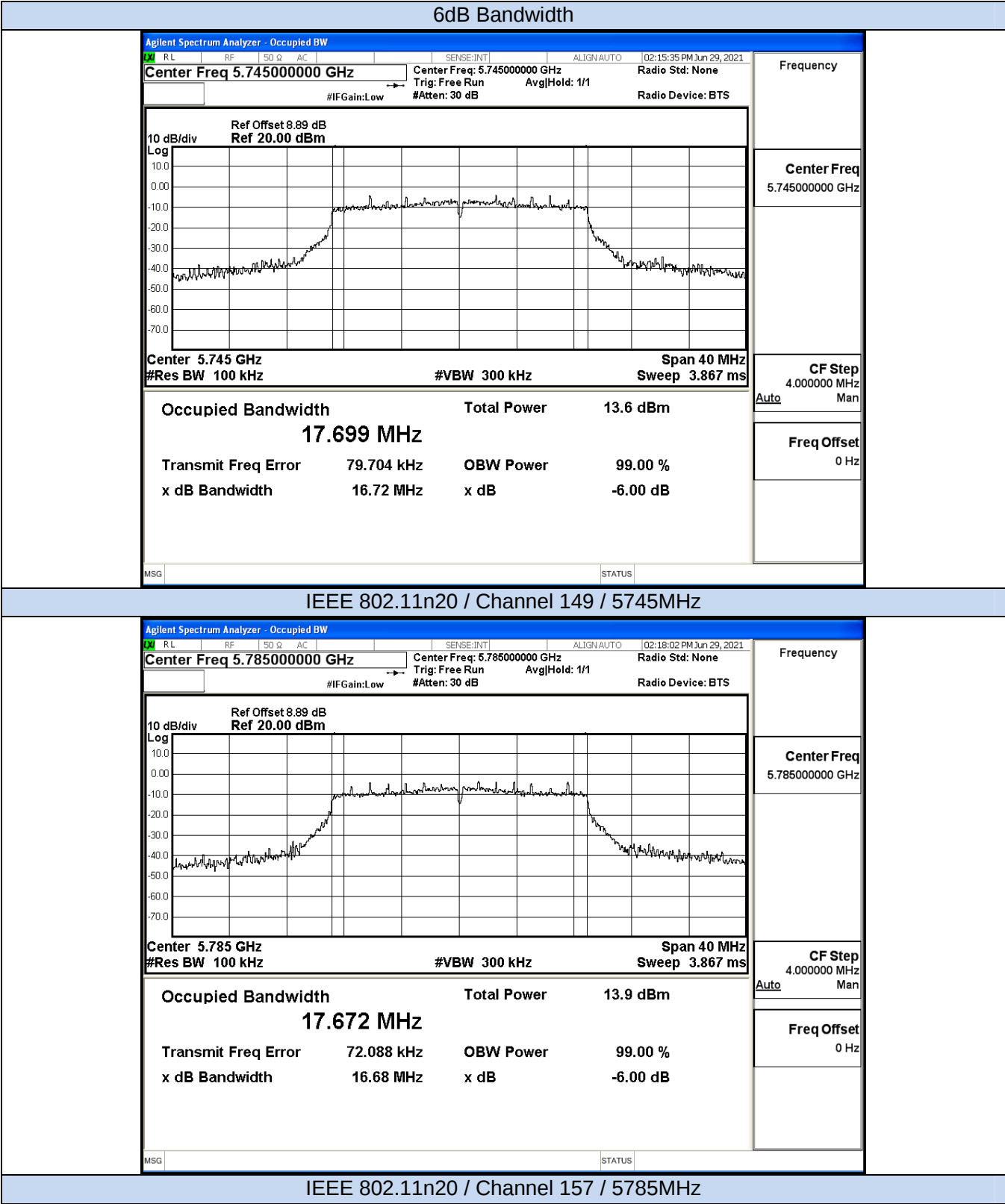


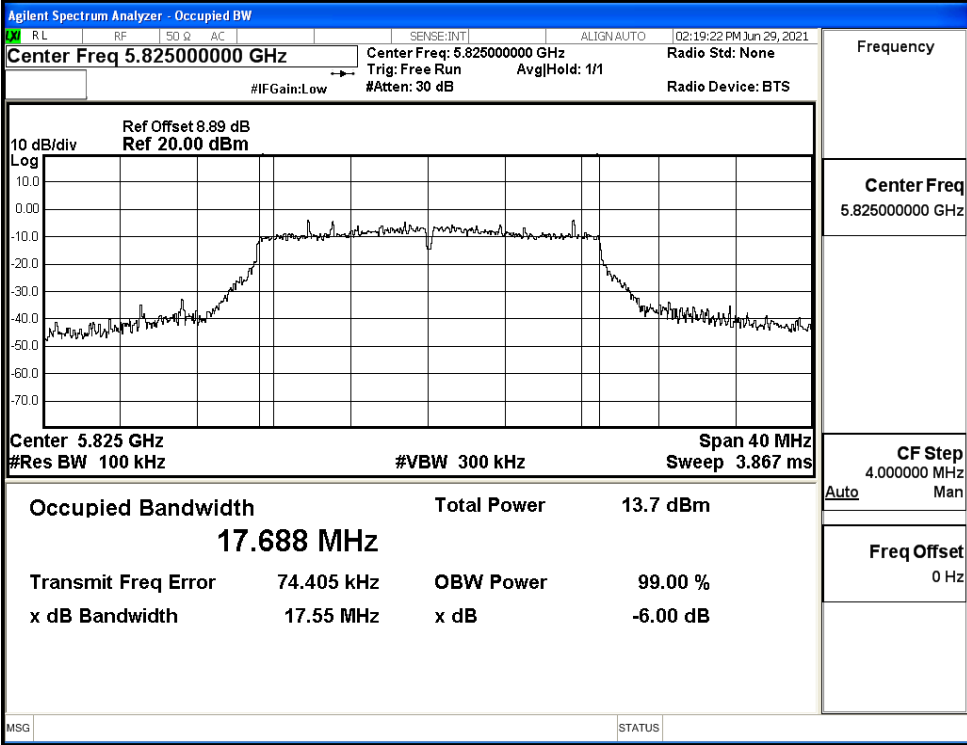


IEEE 802.11a / Channel 157 / 5785MHz



IEEE 802.11a / Channel 165 / 5825MHz

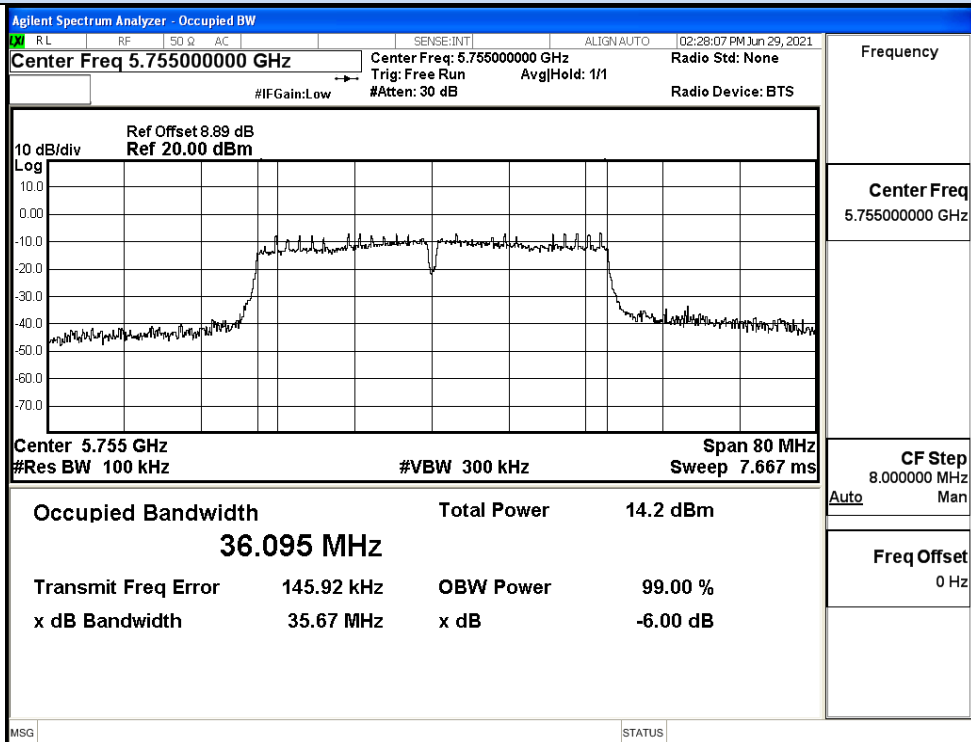




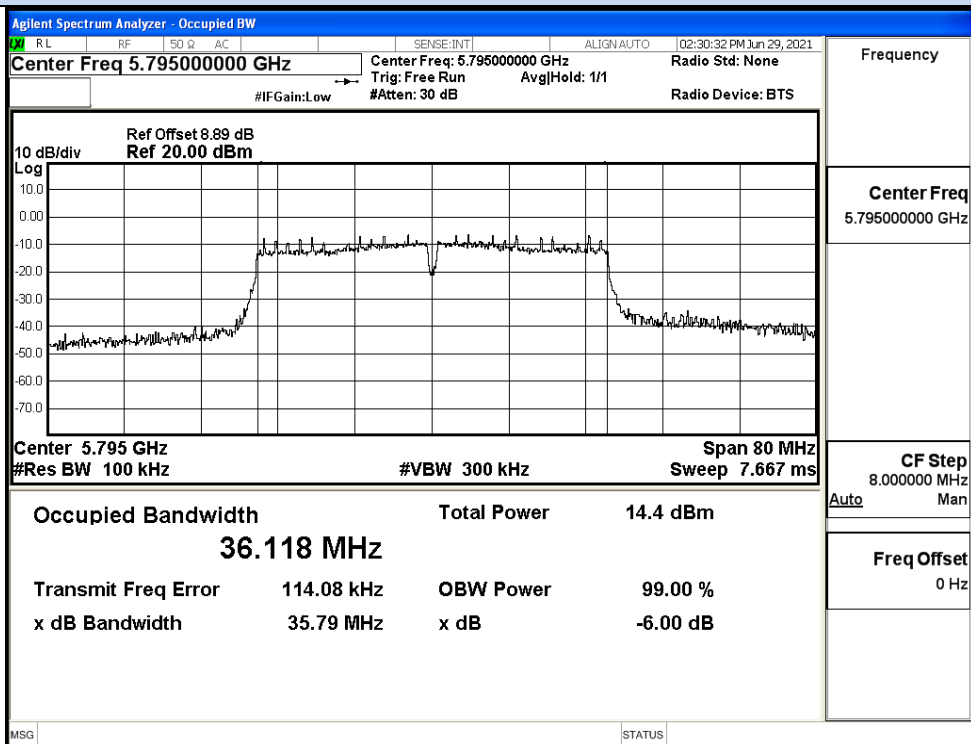
IEEE 802.11n20 / Channel 165 / 5825MHz



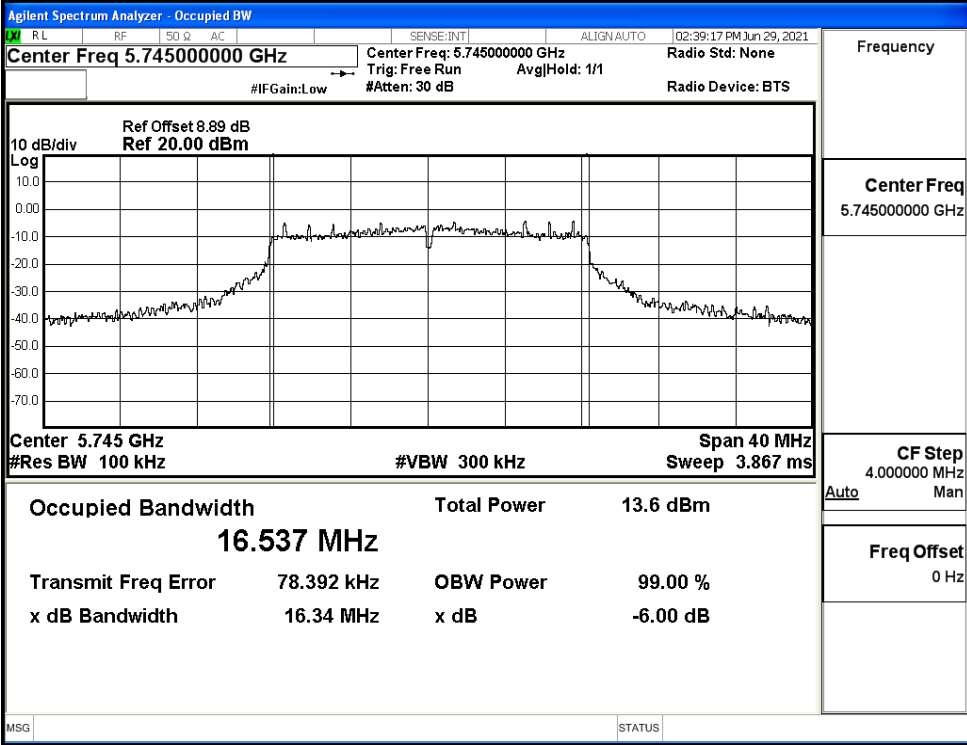
26dB Bandwidth



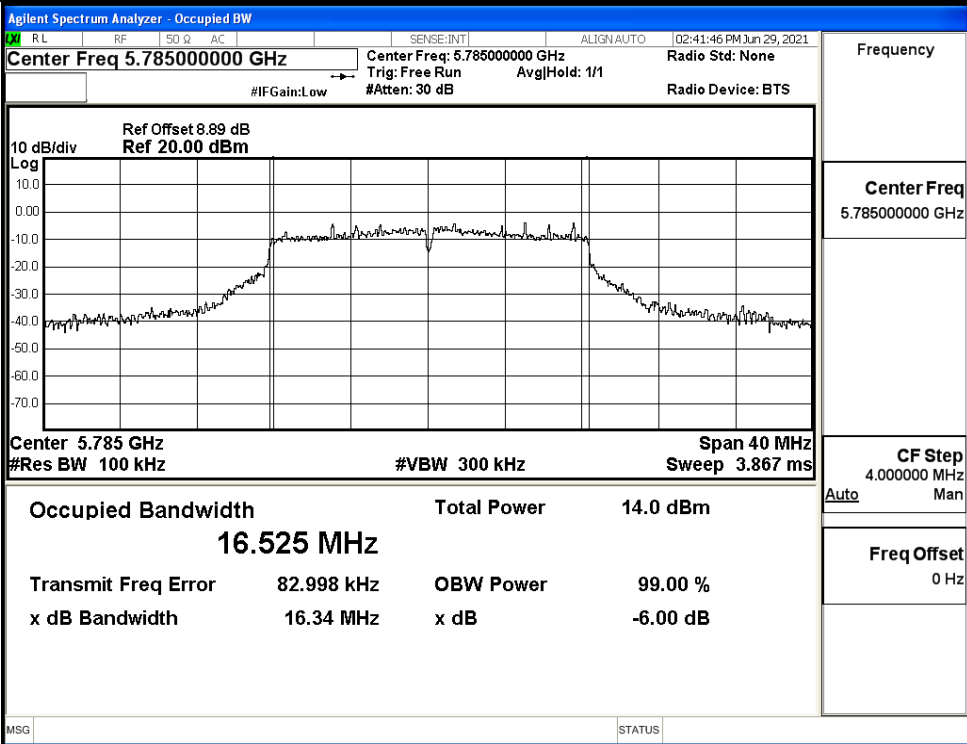
IEEE 802.11n40 / Channel 151 / 5755MHz



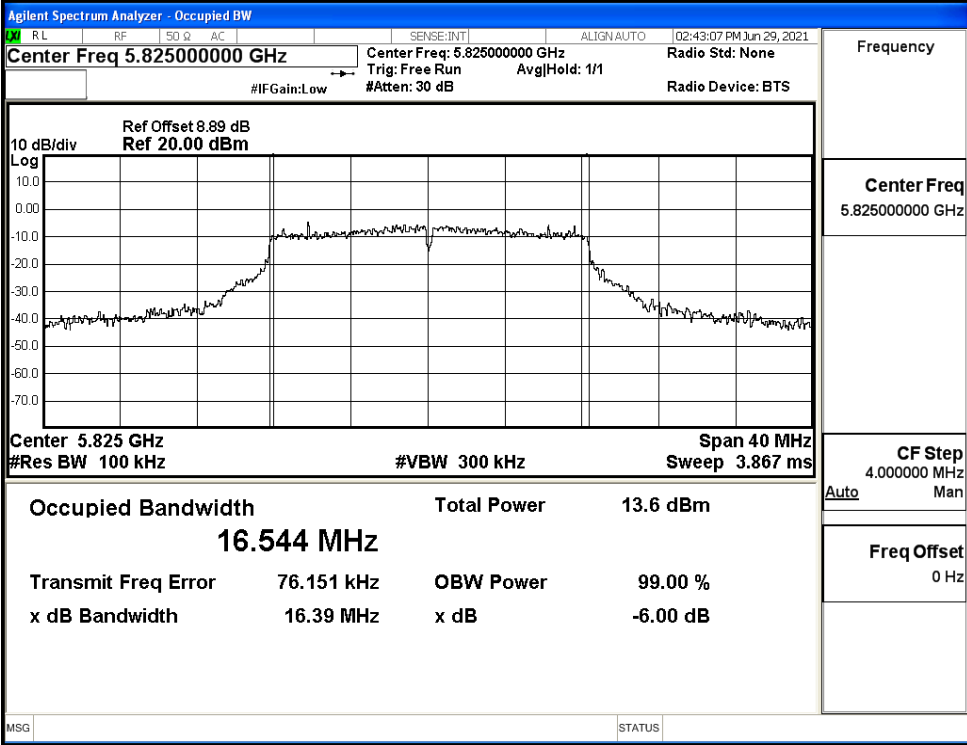
IEEE 802.11n40 / Channel 159 / 5795MHz



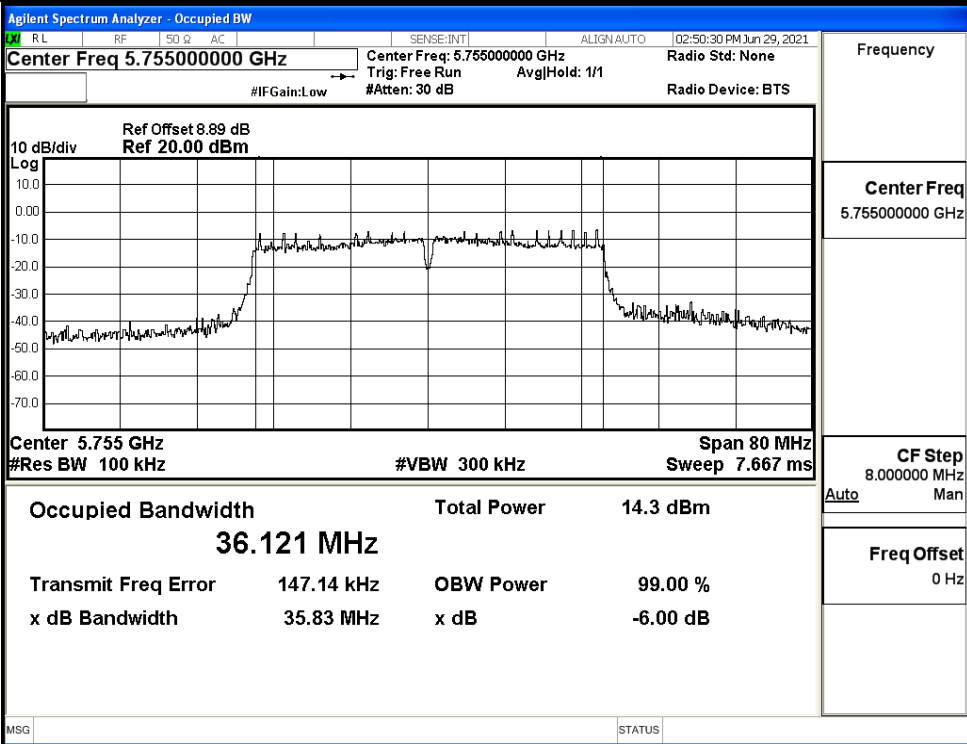
IEEE 802.11ac20 / Channel 149 / 5745MHz



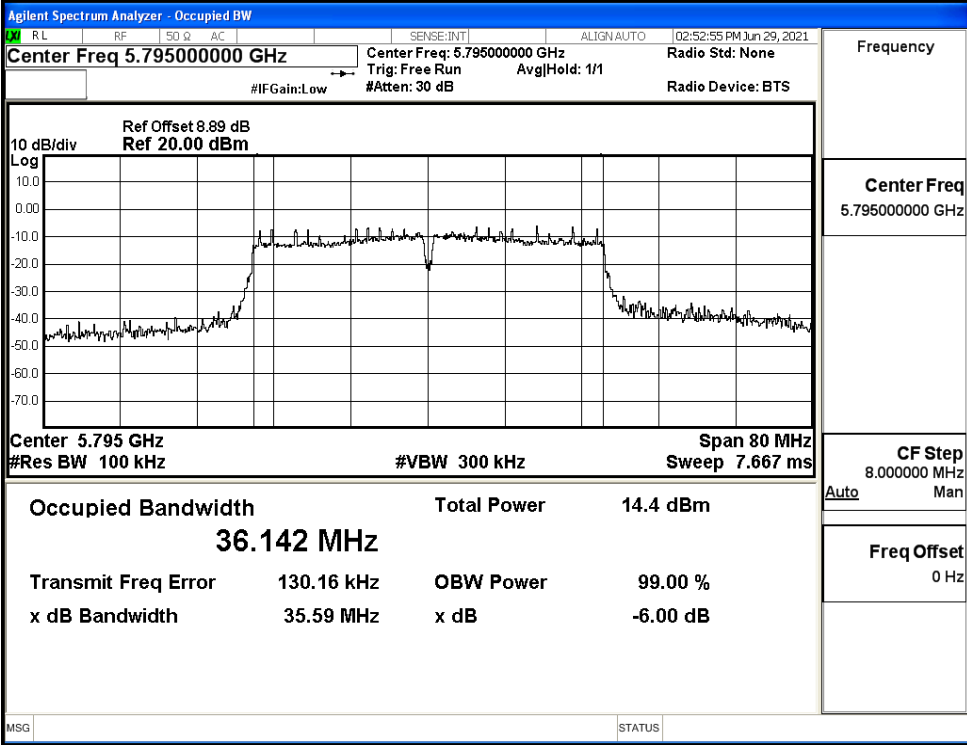
IEEE 802.11ac20 / Channel 157/ 5785MHz



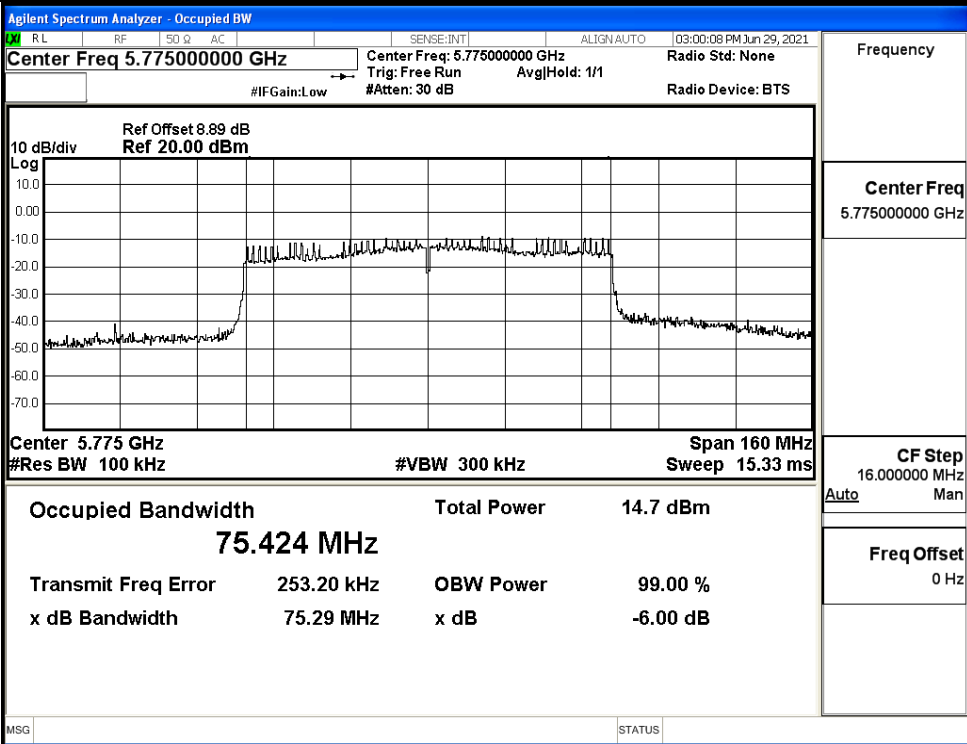
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz



IEEE 802.11ac80 / Channel 155 / 5775MHz

**E.5 Undesirable Emissions Measurement**

ANTO

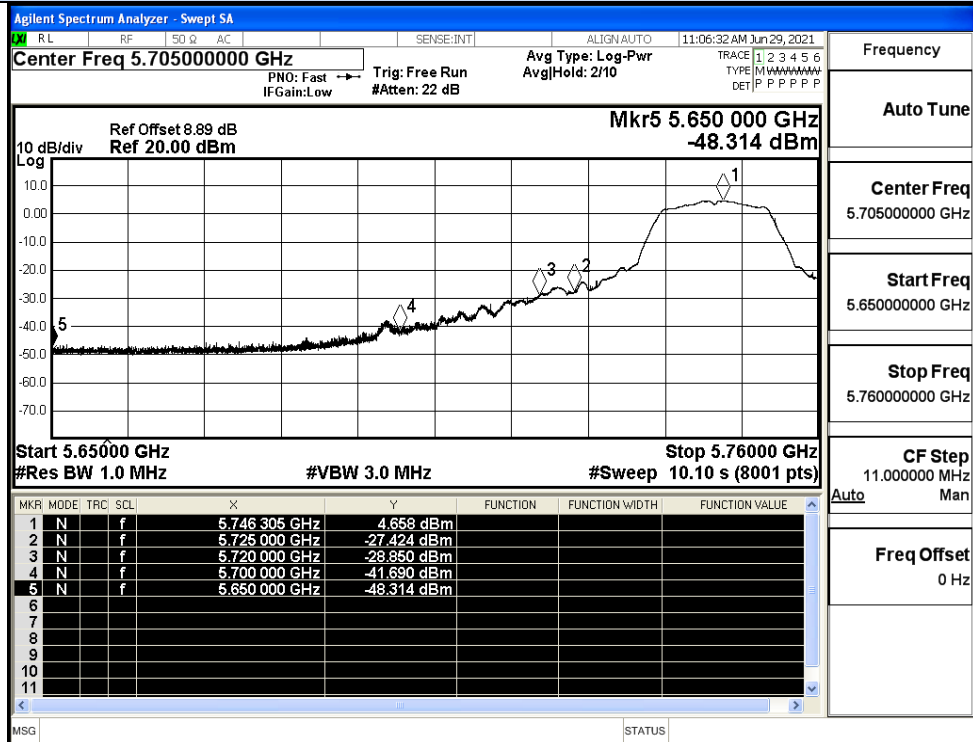
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11A	149	5650.0	-48.31	2.00	-48.31	Peak	-27.0	Pass
		5650.0	-60.91	2.00	-60.91	Average	-27.0	Pass
		5700.0	-41.69	2.00	-41.69	Peak	10	Pass
		5700.0	-57.12	2.00	-57.12	Average	10	Pass
		5720.0	-28.85	2.00	-28.85	Peak	15.6	Pass
		5720.0	-49.52	2.00	-49.52	Average	15.6	Pass
		5725.0	-27.42	2.00	-27.42	Peak	27.0	Pass
	165	5725.0	-45.49	2.00	-45.49	Average	27.0	Pass
		5850.0	-29.69	2.00	-29.69	Peak	27.0	Pass
		5850.0	-48.82	2.00	-48.82	Average	27.0	Pass
		5855.0	-33.78	2.00	-33.78	Peak	15.6	Pass
		5855.0	-51.13	2.00	-51.13	Average	15.6	Pass
		5875.0	-41.55	2.00	-41.55	Peak	10	Pass
		5875.0	-57.31	2.00	-57.31	Average	10	Pass
11N20 SISO	149	5925.0	-49.11	2.00	-49.11	Peak	-27.0	Pass
		5925.0	-60.46	2.00	-60.46	Average	-27.0	Pass
	165	5650.0	-48.20	2.00	-48.20	Peak	-27.0	Pass
		5650.0	-60.92	2.00	-60.92	Average	-27.0	Pass
		5700.0	-43.62	2.00	-43.62	Peak	10	Pass
		5700.0	-50.91	2.00	-50.91	Average	10	Pass
		5720.0	-34.78	2.00	-34.78	Peak	15.6	Pass
	165	5720.0	-58.20	2.00	-58.20	Average	15.6	Pass
		5725.0	-30.21	2.00	-30.21	Peak	27.0	Pass
		5725.0	-48.21	2.00	-48.21	Average	27.0	Pass
		5850.0	-34.65	2.00	-34.65	Peak	27.0	Pass
		5850.0	-51.61	2.00	-51.61	Average	27.0	Pass
		5855.0	-36.15	2.00	-36.15	Peak	15.6	Pass
		5855.0	-53.94	2.00	-53.94	Average	15.6	Pass
		5875.0	-45.67	2.00	-45.67	Peak	10	Pass
		5875.0	-58.34	2.00	-58.34	Average	10	Pass
		5925.0	-48.41	2.00	-48.41	Peak	-27.0	Pass
		5925.0	-60.49	2.00	-60.49	Average	-27.0	Pass



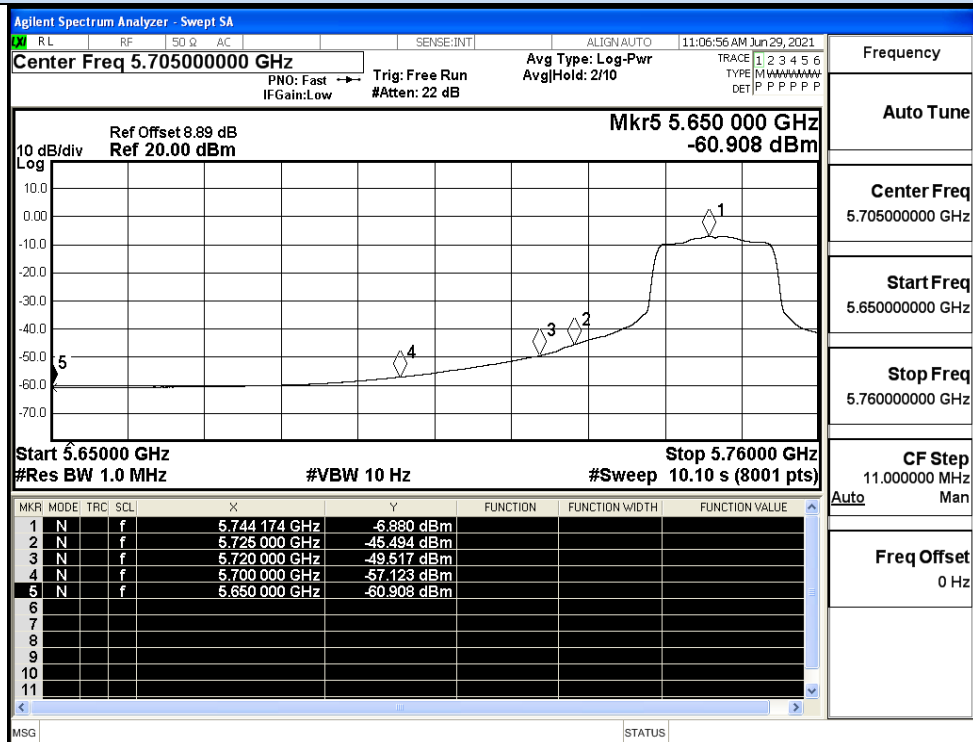
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N40 SISO	151	5650.0	-48.08	2.00	-48.08	Peak	-27.0	Pass
		5650.0	-60.15	2.00	-60.15	Average	-27.0	Pass
		5700.0	-40.26	2.00	-40.26	Peak	10	Pass
		5700.0	-54.09	2.00	-54.09	Average	10	Pass
		5720.0	-33.82	2.00	-33.82	Peak	15.6	Pass
		5720.0	-48.56	2.00	-48.56	Average	15.6	Pass
		5725.0	-32.66	2.00	-32.66	Peak	27.0	Pass
	159	5725.0	-47.83	2.00	-47.83	Average	27.0	Pass
		5850.0	-34.67	2.00	-34.67	Peak	27.0	Pass
		5850.0	-51.52	2.00	-51.52	Average	27.0	Pass
		5855.0	-36.93	2.00	-36.93	Peak	15.6	Pass
		5855.0	-52.39	2.00	-52.39	Average	15.6	Pass
		5875.0	-40.15	2.00	-40.15	Peak	10	Pass
		5875.0	-56.04	2.00	-56.04	Average	10	Pass
11AC20 SISO	149	5925.0	-48.39	2.00	-48.39	Peak	-27.0	Pass
		5925.0	-59.56	2.00	-59.56	Average	-27.0	Pass
		5650.0	-48.54	2.00	-48.54	Peak	-27.0	Pass
		5650.0	-60.95	2.00	-60.95	Average	-27.0	Pass
		5700.0	-39.28	2.00	-39.28	Peak	10	Pass
		5700.0	-50.23	2.00	-50.23	Average	10	Pass
		5720.0	-30.18	2.00	-30.18	Peak	15.6	Pass
	165	5720.0	-57.86	2.00	-57.86	Average	15.6	Pass
		5725.0	-30.00	2.00	-30.00	Peak	27.0	Pass
		5725.0	-47.38	2.00	-47.38	Average	27.0	Pass
		5850.0	-34.32	2.00	-34.32	Peak	27.0	Pass
		5850.0	-51.63	2.00	-51.63	Average	27.0	Pass
		5855.0	-36.13	2.00	-36.13	Peak	15.6	Pass
		5855.0	-53.98	2.00	-53.98	Average	15.6	Pass
11AC40 SISO	151	5875.0	-45.16	2.00	-45.16	Peak	10	Pass
		5875.0	-58.38	2.00	-58.38	Average	10	Pass
		5925.0	-48.75	2.00	-48.75	Peak	-27.0	Pass
		5925.0	-60.46	2.00	-60.46	Average	-27.0	Pass
		5650.0	-47.58	2.00	-47.58	Peak	-27.0	Pass
		5650.0	-60.04	2.00	-60.04	Average	-27.0	Pass
		5700.0	-38.93	2.00	-38.93	Peak	10	Pass
	159	5700.0	-53.72	2.00	-53.72	Average	10	Pass
		5720.0	-33.69	2.00	-33.69	Peak	15.6	Pass
		5720.0	-48.53	2.00	-48.53	Average	15.6	Pass
		5725.0	-31.00	2.00	-31.00	Peak	27.0	Pass
		5725.0	-48.07	2.00	-48.07	Average	27.0	Pass
		5850.0	-35.80	2.00	-35.80	Peak	27.0	Pass
		5850.0	-51.13	2.00	-51.13	Average	27.0	Pass
11AC80 SISO	155	5855.0	-36.47	2.00	-36.47	Peak	15.6	Pass
		5855.0	-52.23	2.00	-52.23	Average	15.6	Pass
		5875.0	-40.55	2.00	-40.55	Peak	10	Pass
		5875.0	-55.73	2.00	-55.73	Average	10	Pass
		5925.0	-48.55	2.00	-48.55	Peak	-27.0	Pass
		5925.0	-59.41	2.00	-59.41	Average	-27.0	Pass
		5725.0	-31.61	2.00	-31.61	Peak	27.0	Pass
		5720.0	-33.78	2.00	-33.78	Peak	15.6	Pass
		5700.0	-38.55	2.00	-38.55	Peak	10	Pass
		5650.0	-45.39	2.00	-45.39	Peak	-27.0	Pass
		5725.0	-48.43	2.00	-48.43	Average	27.0	Pass
		5720.0	-49.30	2.00	-49.30	Average	15.6	Pass
		5700.0	-52.42	2.00	-52.42	Average	10	Pass
		5650.0	-57.12	2.00	-57.12	Average	-27.0	Pass
		5850.0	-31.61	2.00	-31.61	Peak	27.0	Pass
		5855.0	-33.78	2.00	-33.78	Peak	15.6	Pass
		5875.0	-38.55	2.00	-38.55	Peak	10	Pass
		5925.0	-45.39	2.00	-45.39	Peak	-27.0	Pass
		5850.0	-48.43	2.00	-48.43	Average	27.0	Pass
		5855.0	-49.30	2.00	-49.30	Average	15.6	Pass
		5875.0	-52.42	2.00	-52.42	Average	10	Pass
		5925.0	-57.12	2.00	-57.12	Average	-27.0	Pass



Undesirable Emissions Measurement



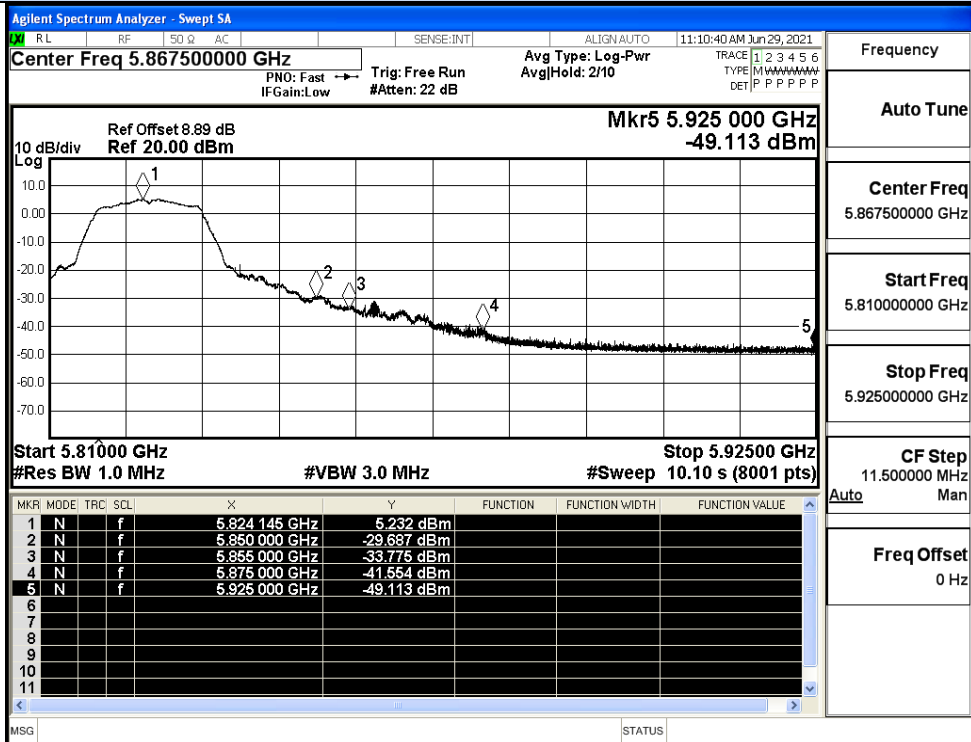
IEEE 802.11a / Channel 149 / 5745MHz / Peak



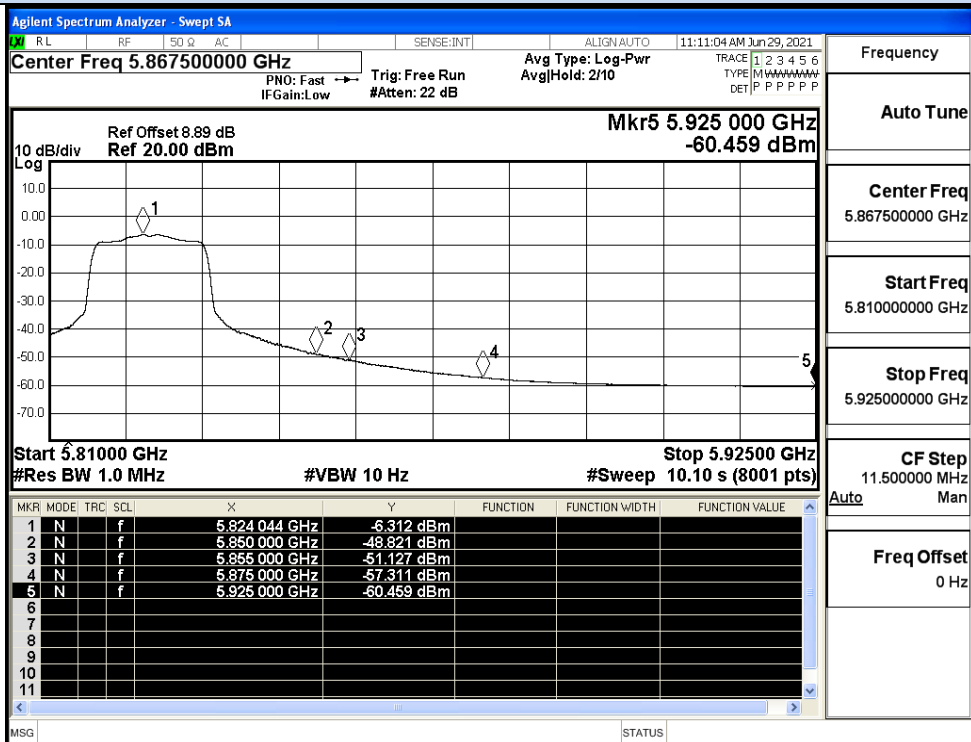
IEEE 802.11a / Channel 148 / 5745MHz / Average



Undesirable Emissions Measurement



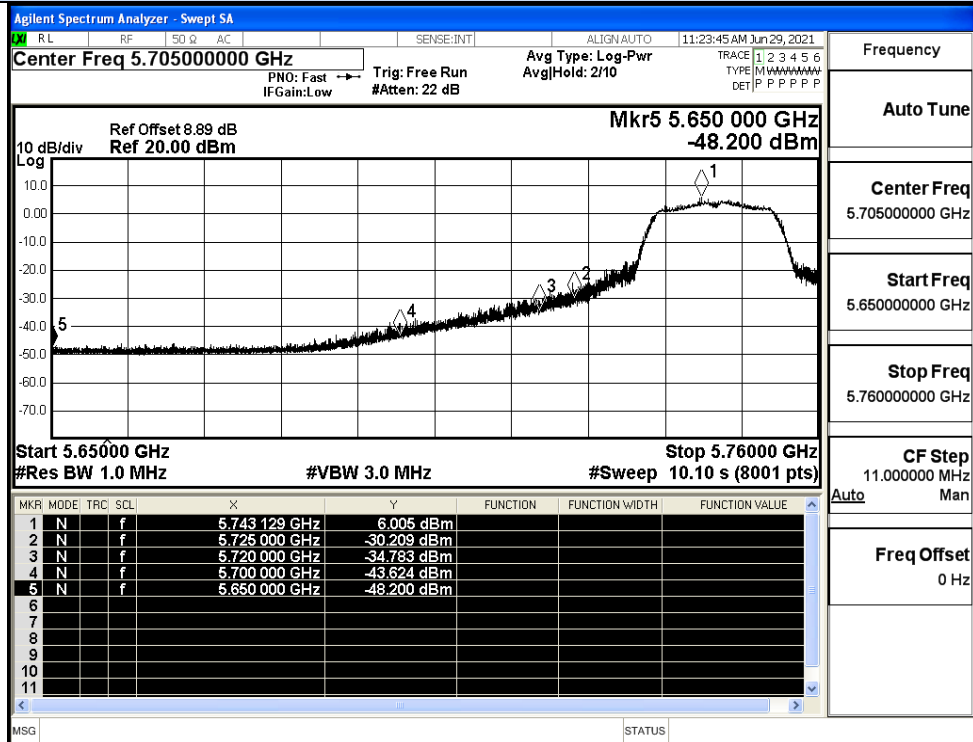
IEEE 802.11a / Channel 165 / 5825MHz / Peak



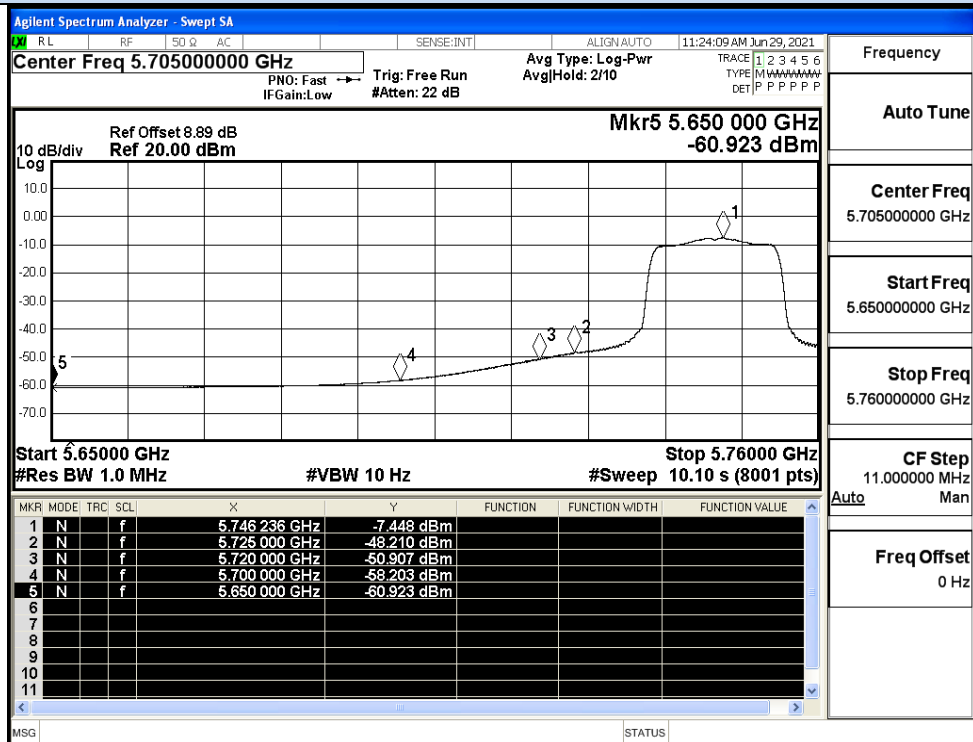
IEEE 802.11a / Channel 165 / 5825MHz / Average



Undesirable Emissions Measurement



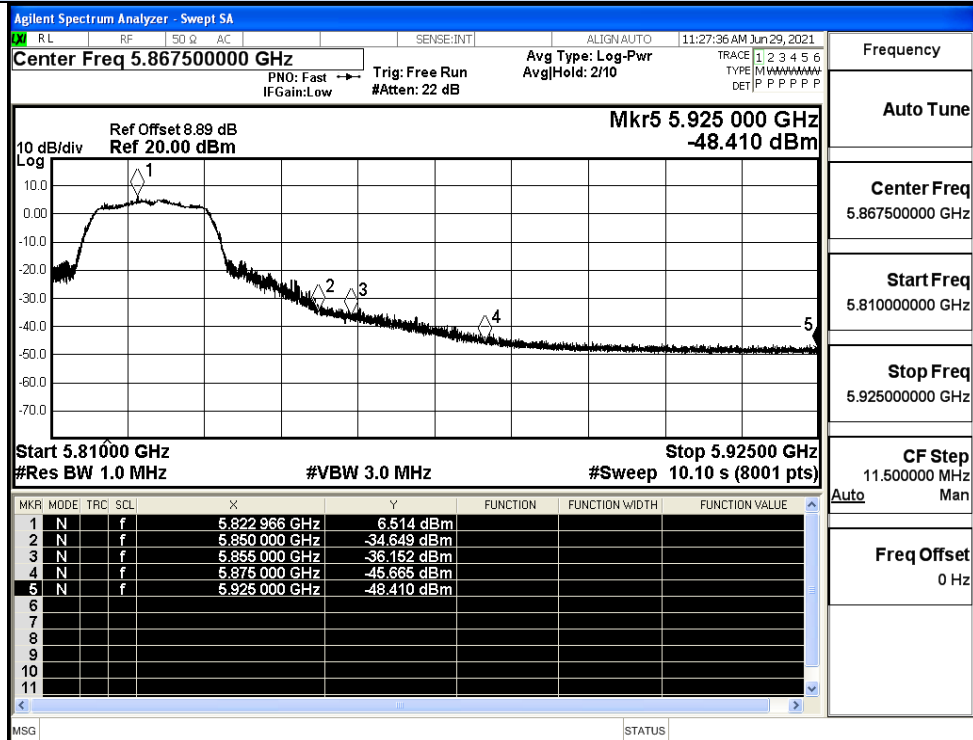
IEEE 802.11n20 / Channel 149 / 5745MHz / Peak



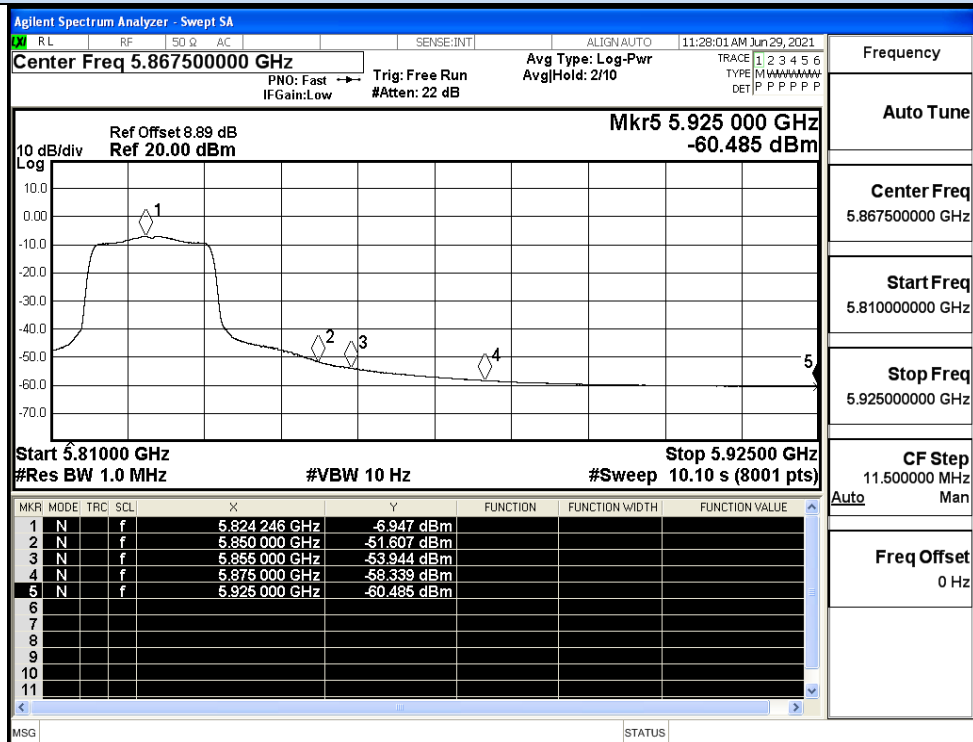
IEEE 802.11n20 / Channel 149 / 5745MHz / Average



Undesirable Emissions Measurement



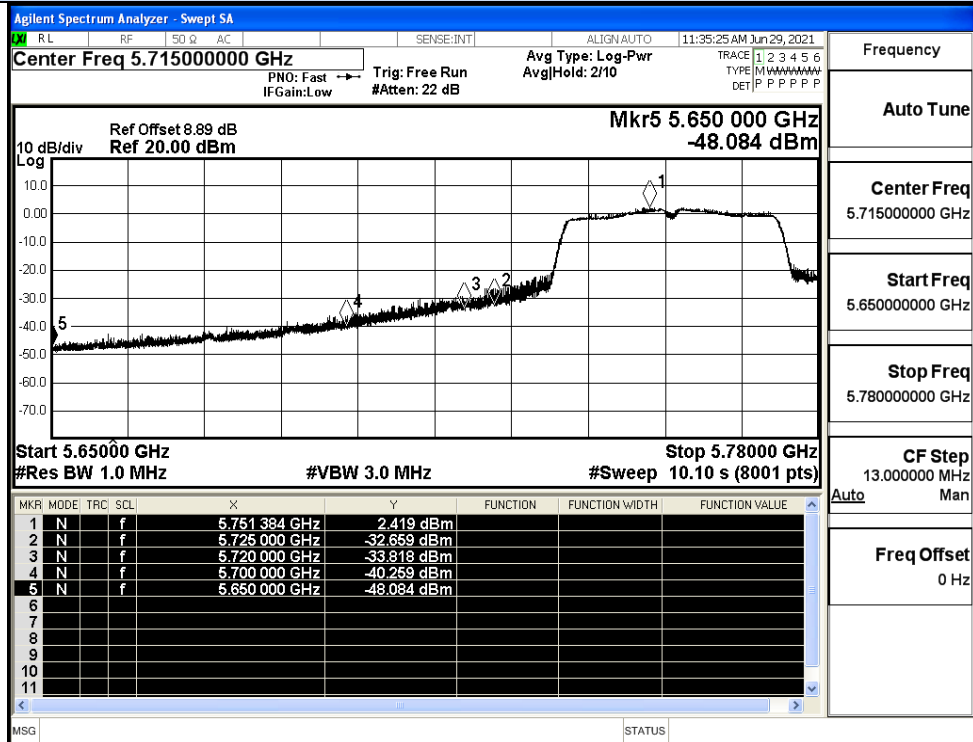
IEEE 802.11n20 / Channel 165 / 5825MHz / Peak



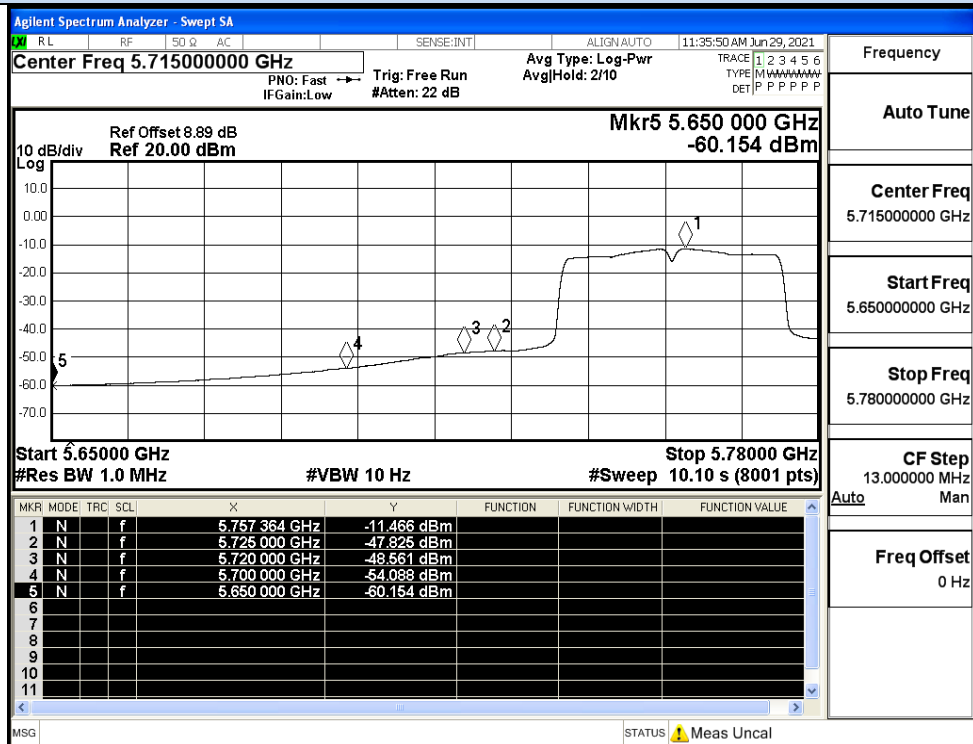
IEEE 802.11n20 / Channel 165 / 5825MHz / Average



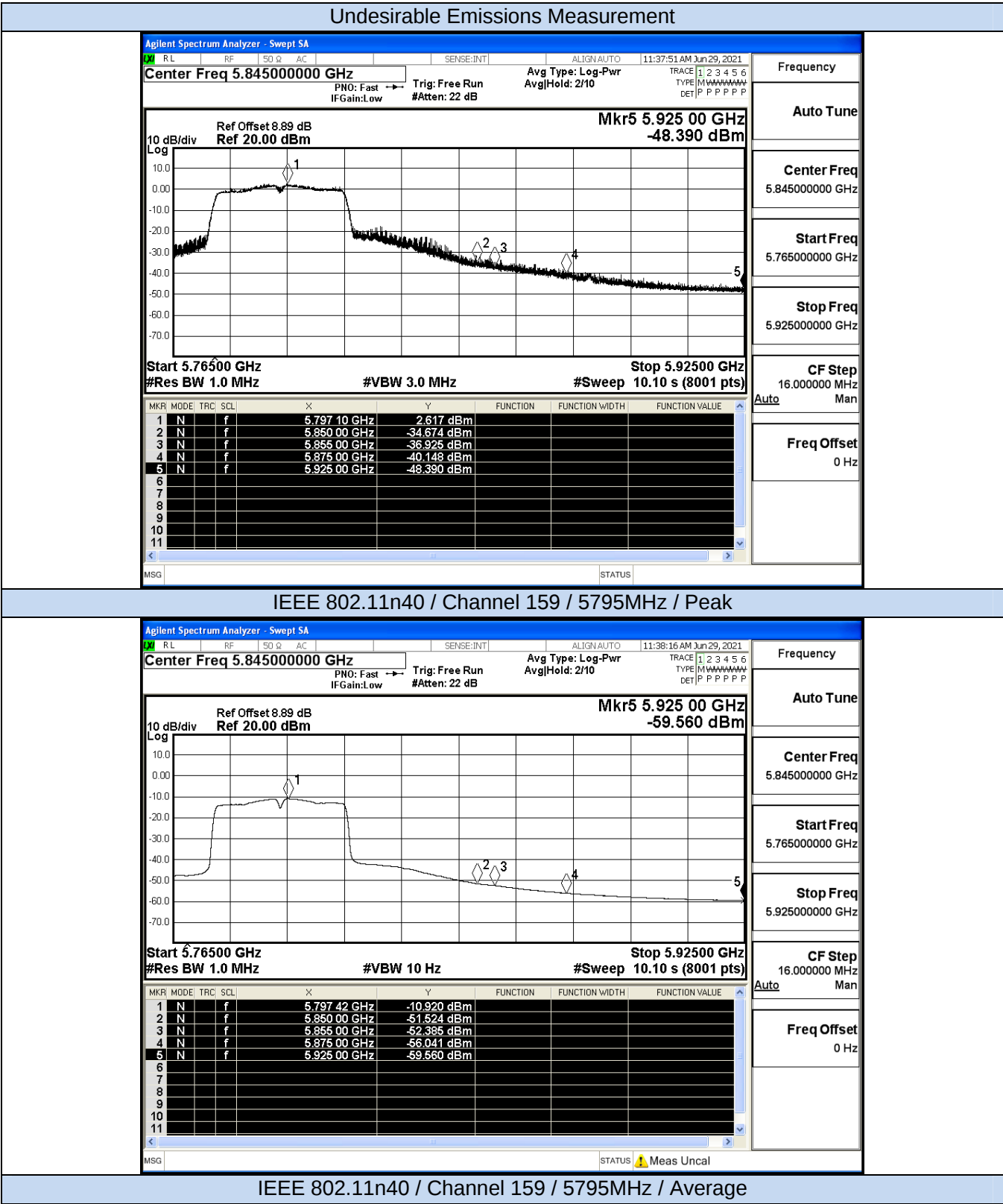
Undesirable Emissions Measurement

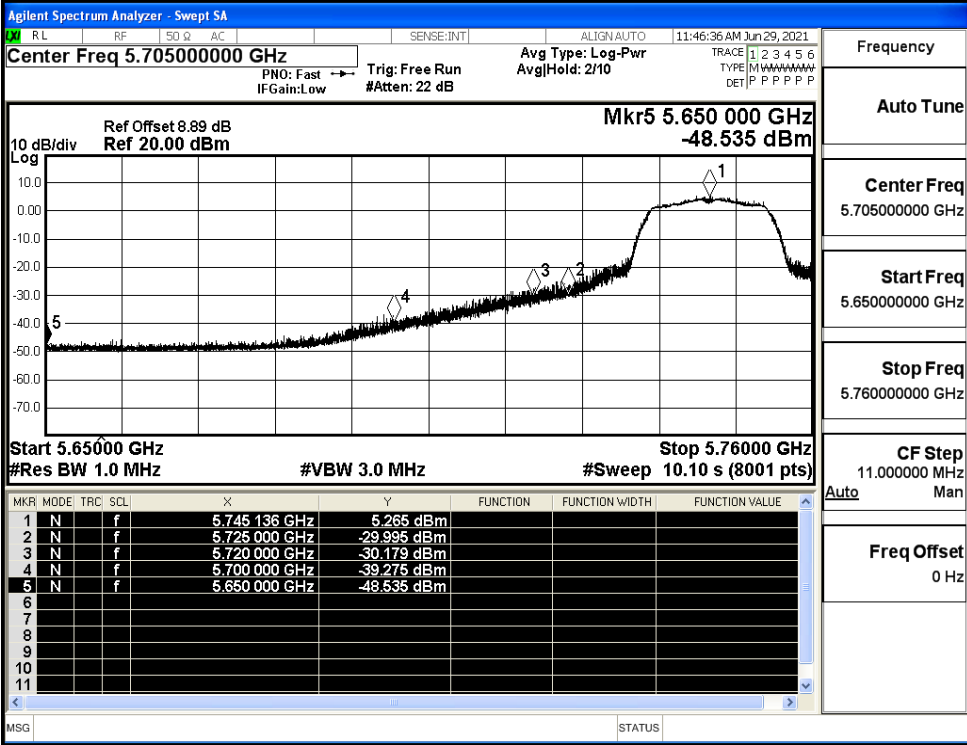


IEEE 802.11n40 / Channel 151 / 5755MHz / Peak

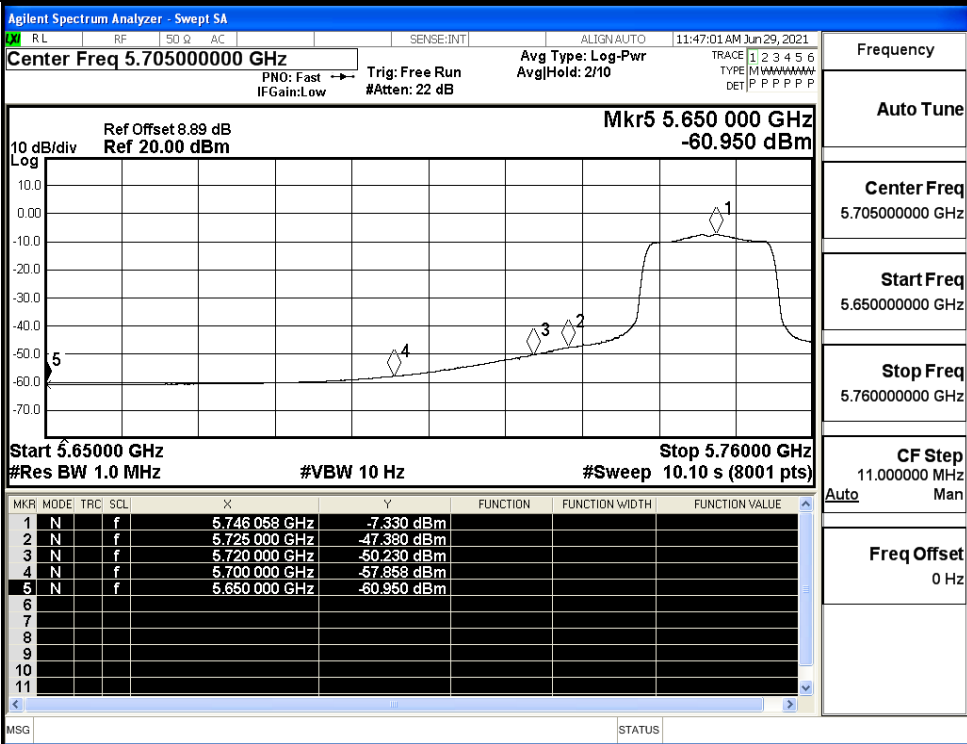


IEEE 802.11n40 / Channel 151 / 5755MHz / Average

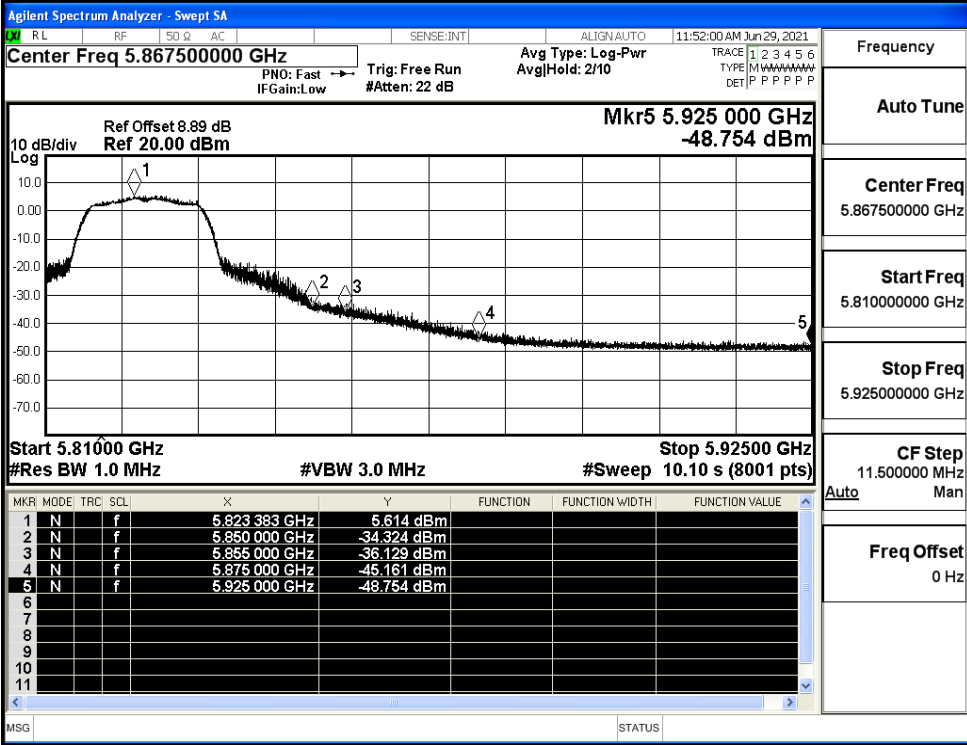




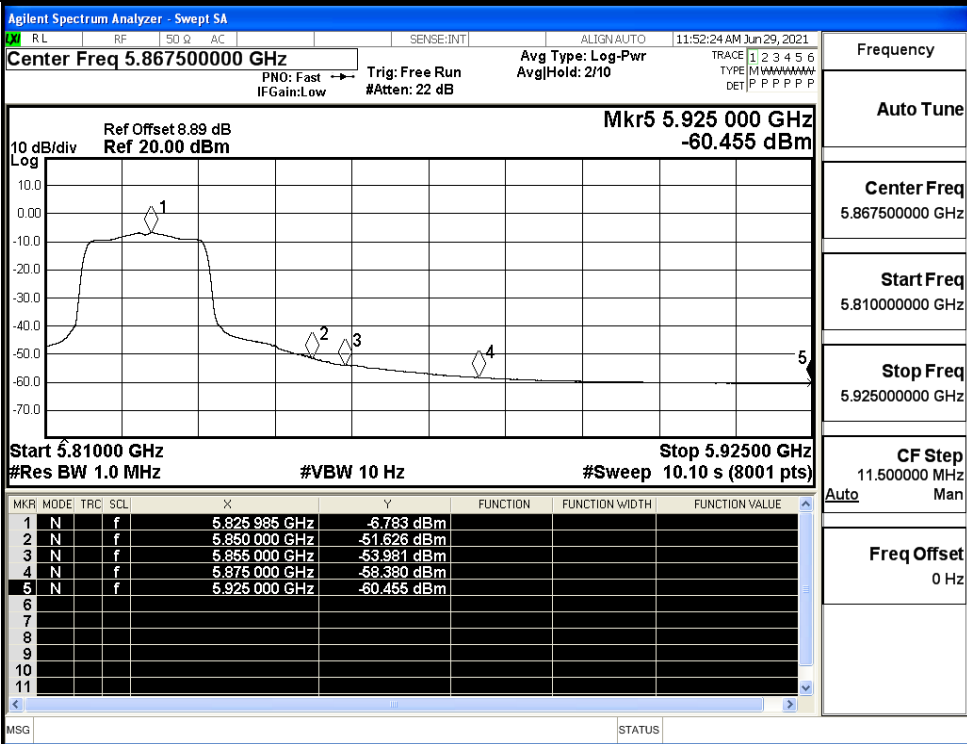
IEEE 802.11ac20 / Channel 149 / 5745MHz / Peak



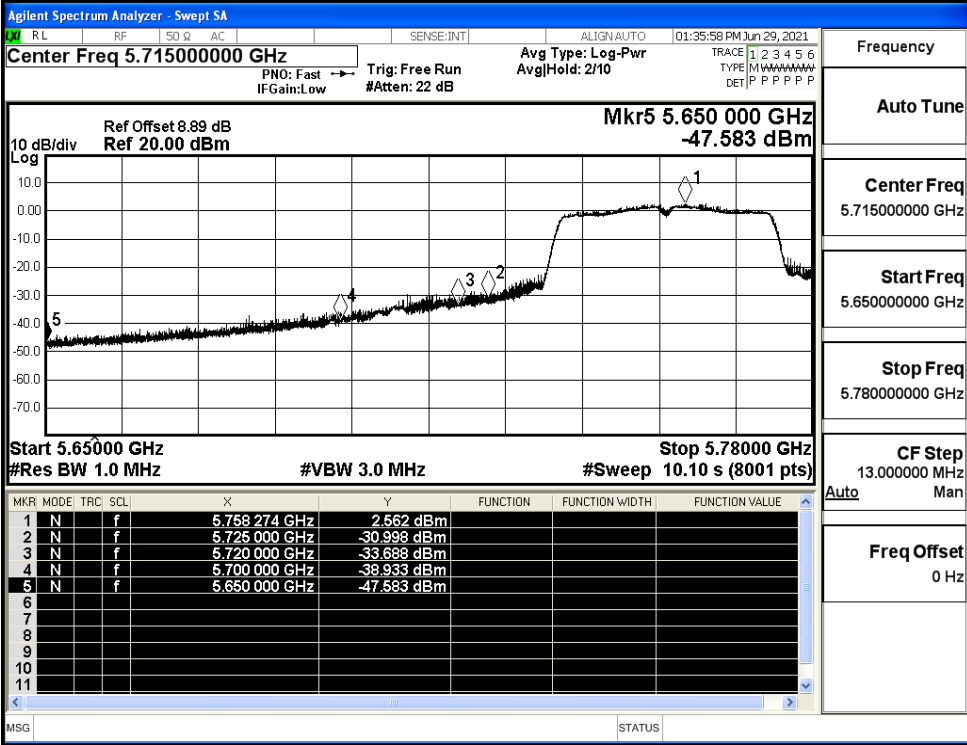
IEEE 802.11ac20 / Channel 149 / 5745MHz / Average



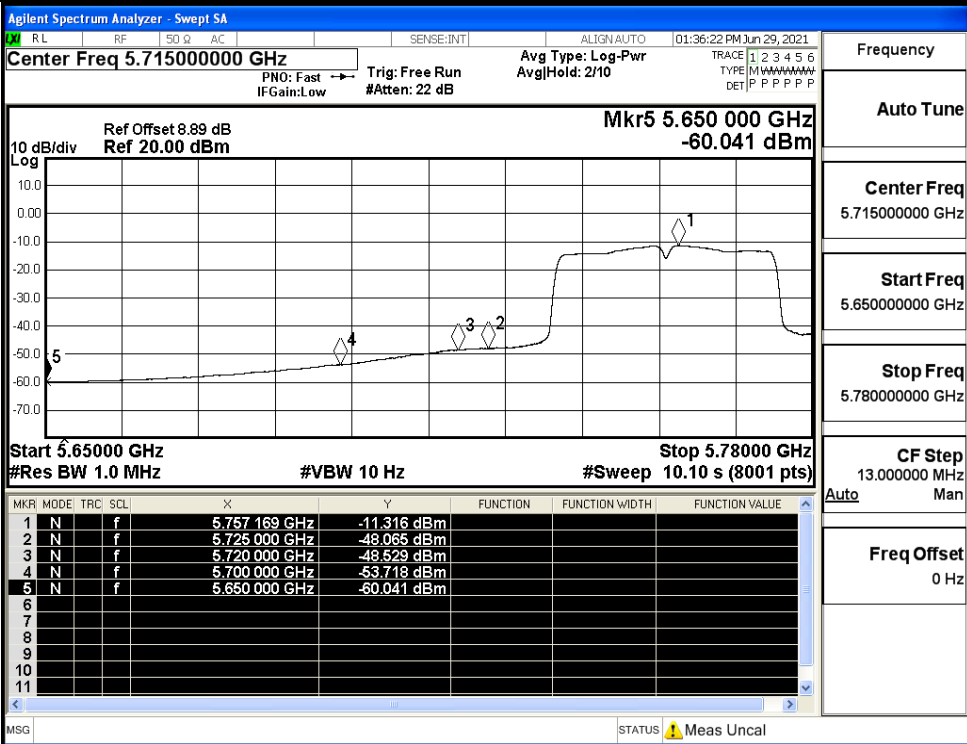
IEEE 802.11ac20 / Channel 165 / 5825MHz / Peak



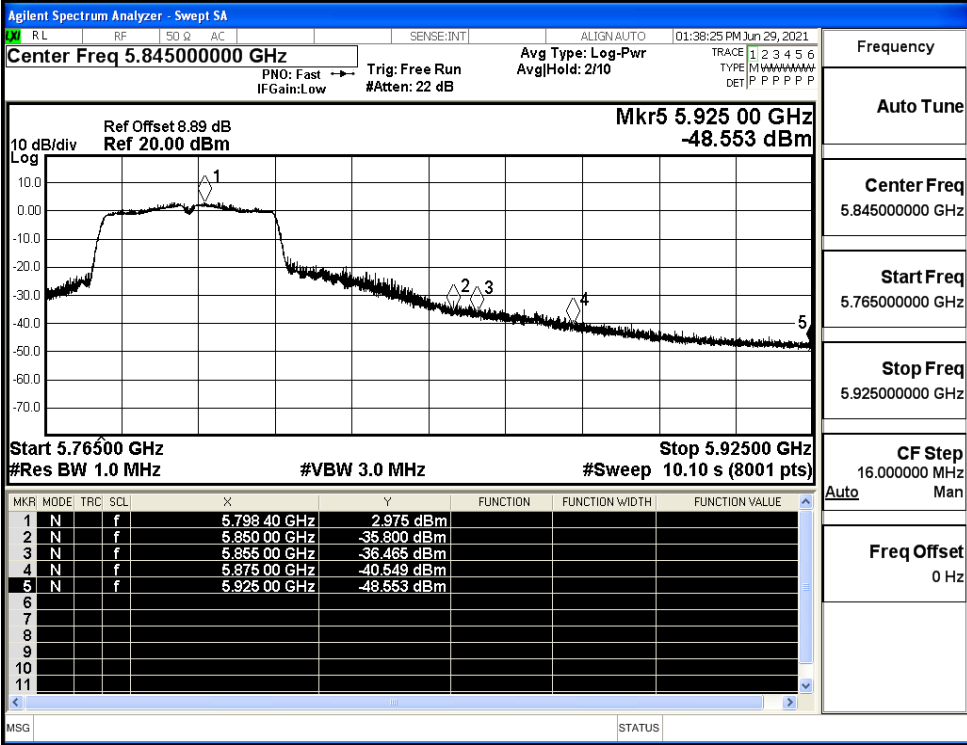
IEEE 802.11ac20 / Channel 165 / 5825MHz / Average



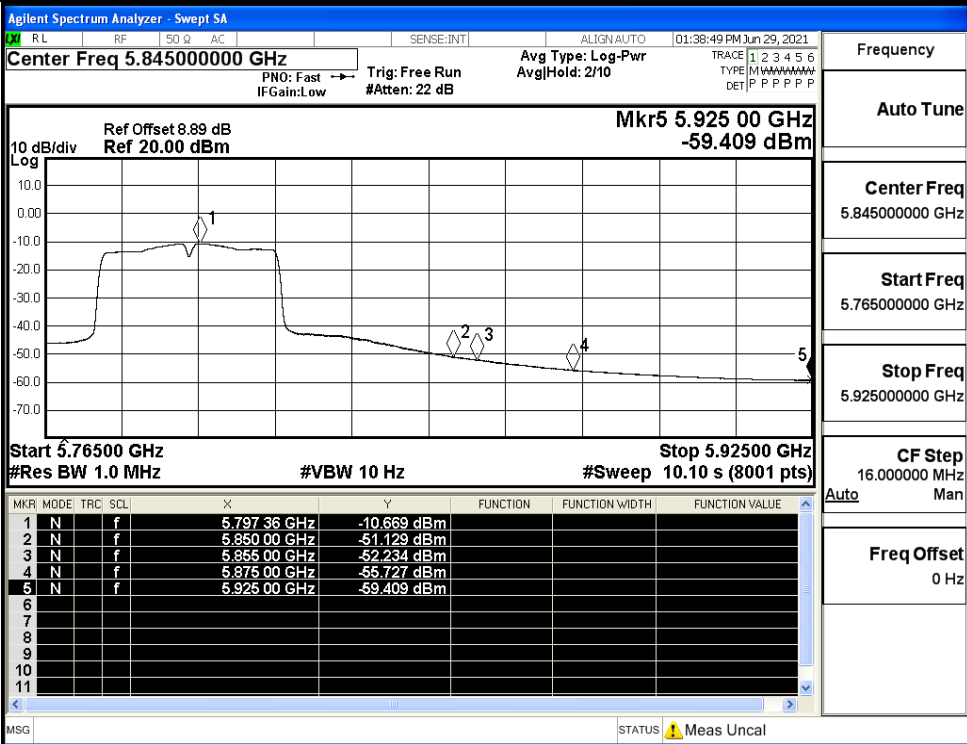
IEEE 802.11ac40 / Channel 151 / 5755MHz / Peak



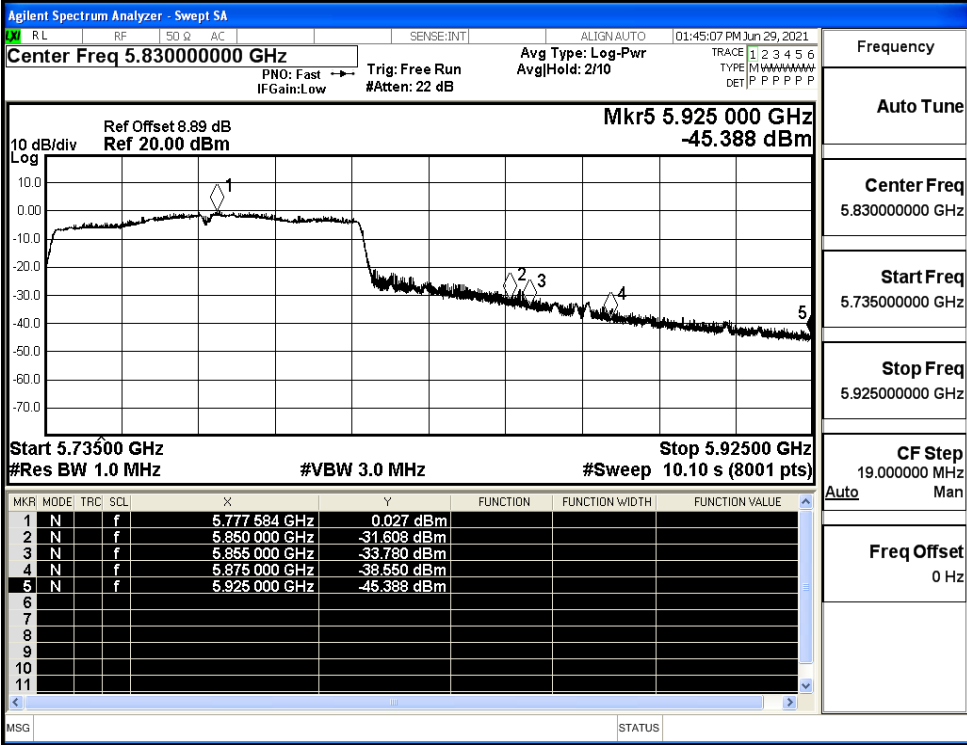
IEEE 802.11ac40 / Channel 151 / 5755MHz / Average



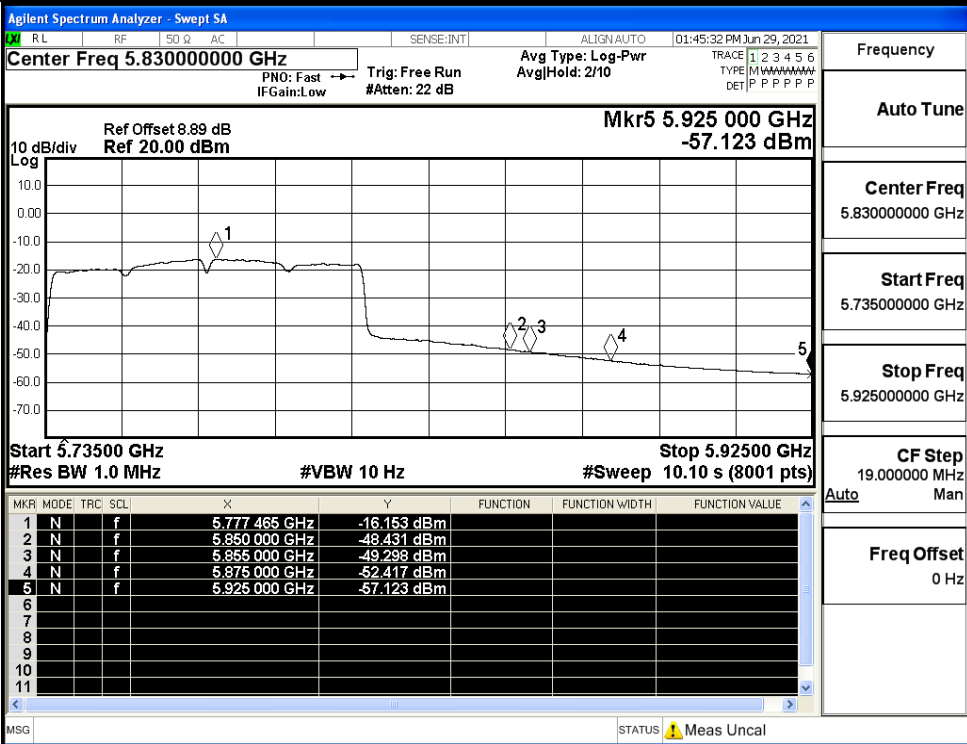
IEEE 802.11ac40 / Channel 159 / 5795MHz / Peak



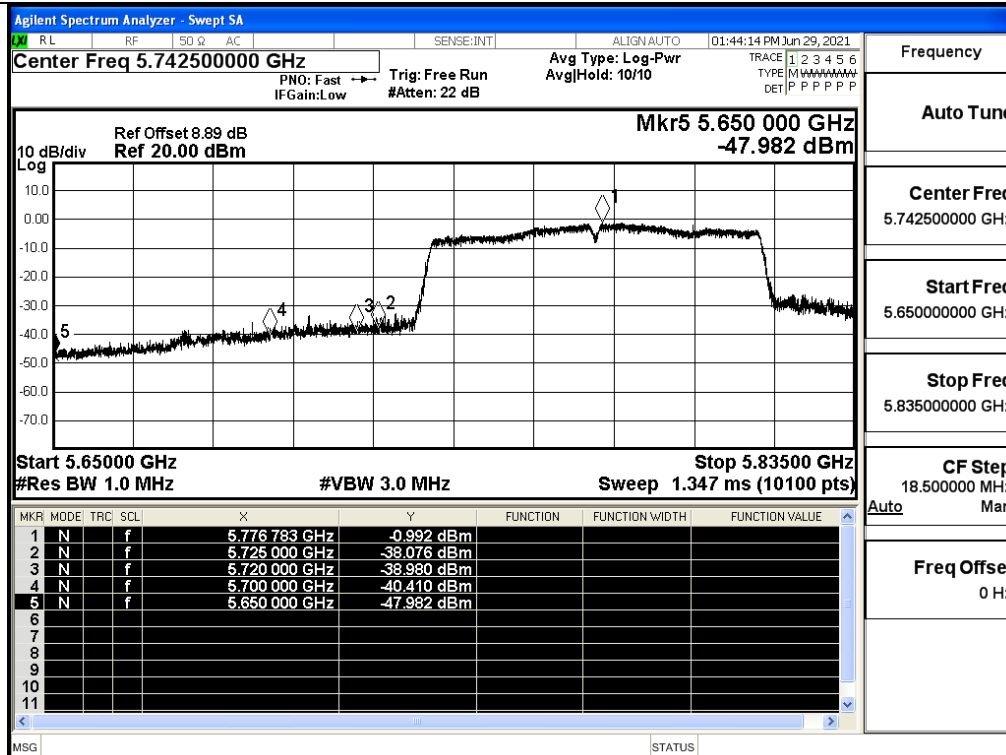
IEEE 802.11ac40 / Channel 159 / 5795MHz / Average



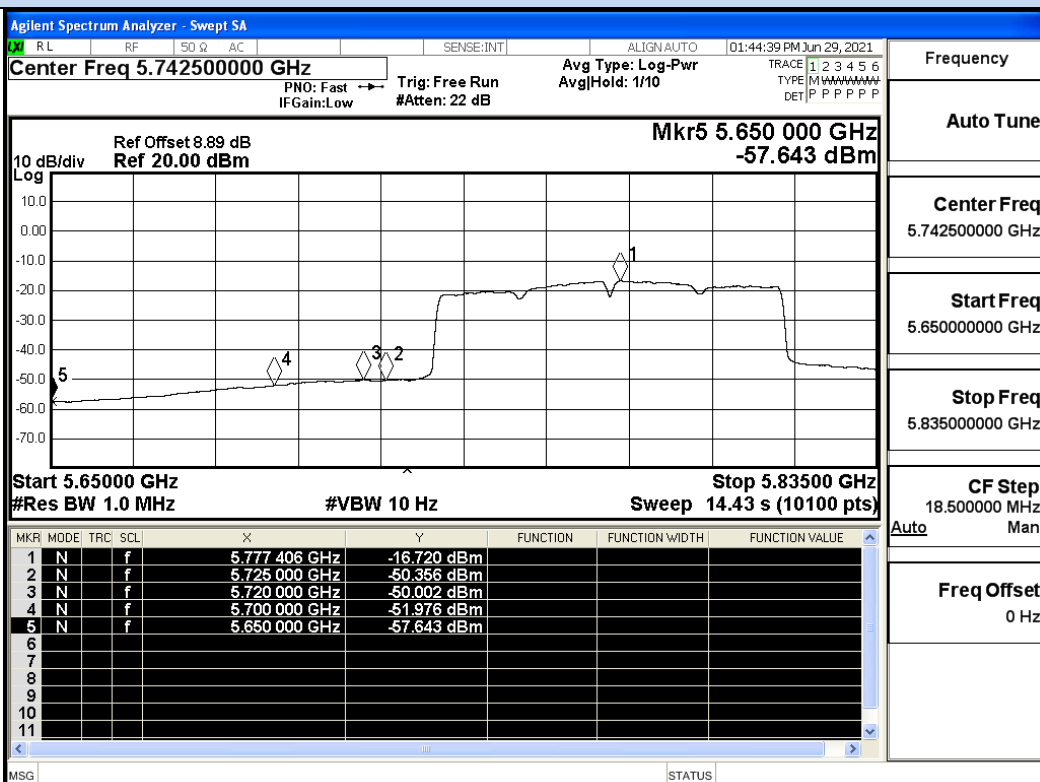
IEEE 802.11ac80 / Channel 155 / 5775MHz / Peak



IEEE 802.11ac80 / Channel 155 / 5775MHz / Average



IEEE 802.11ac80 / Channel 155 / 5775MHz / Peak



IEEE 802.11ac80 / Channel 155 / 5775MHz / Average



ANT1

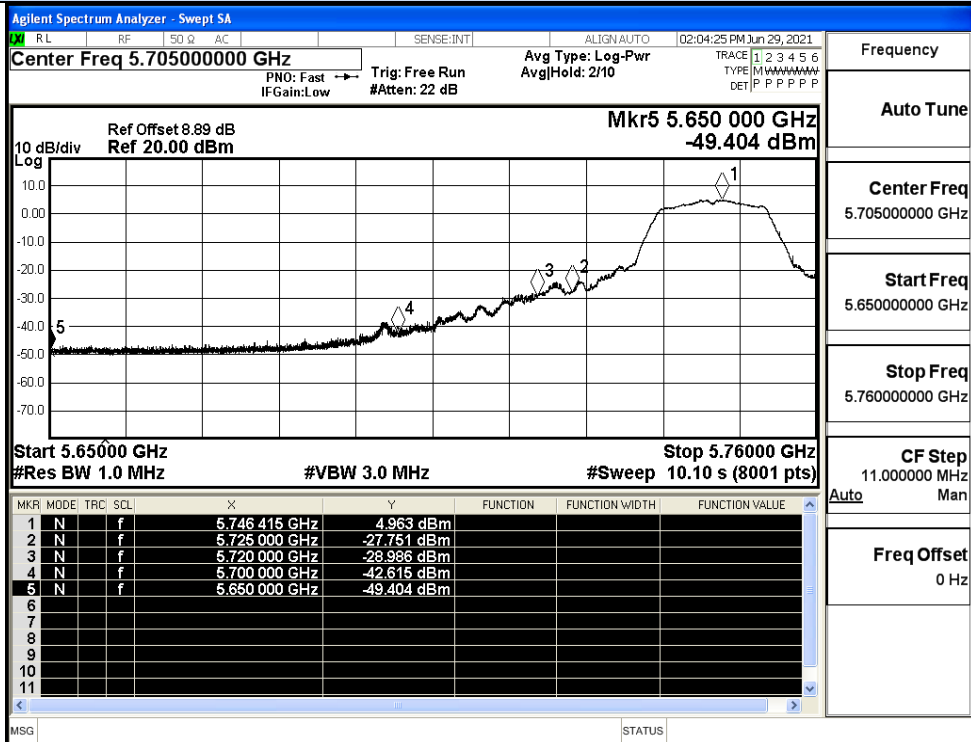
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11A	149	5650.0	-49.40	2.00	-49.40	Peak	-27.0	Pass
		5650.0	-60.91	2.00	-60.91	Average	-27.0	Pass
		5700.0	-42.62	2.00	-42.62	Peak	10	Pass
		5700.0	-56.96	2.00	-56.96	Average	10	Pass
		5720.0	-28.99	2.00	-28.99	Peak	15.6	Pass
		5720.0	-49.55	2.00	-49.55	Average	15.6	Pass
		5725.0	-27.75	2.00	-27.75	Peak	27.0	Pass
	165	5725.0	-45.51	2.00	-45.51	Average	27.0	Pass
		5850.0	-30.28	2.00	-30.28	Peak	27.0	Pass
		5850.0	-48.97	2.00	-48.97	Average	27.0	Pass
		5855.0	-33.42	2.00	-33.42	Peak	15.6	Pass
		5855.0	-51.15	2.00	-51.15	Average	15.6	Pass
		5875.0	-40.98	2.00	-40.98	Peak	10	Pass
		5875.0	-57.35	2.00	-57.35	Average	10	Pass
11N20 SISO	149	5925.0	-47.94	2.00	-47.94	Peak	-27.0	Pass
		5925.0	-60.48	2.00	-60.48	Average	-27.0	Pass
	165	5650.0	-49.37	2.00	-49.37	Peak	-27.0	Pass
		5650.0	-60.93	2.00	-60.93	Average	-27.0	Pass
		5700.0	-42.07	2.00	-42.07	Peak	10	Pass
		5700.0	-50.35	2.00	-50.35	Average	10	Pass
		5720.0	-31.07	2.00	-31.07	Peak	15.6	Pass
	165	5720.0	-57.85	2.00	-57.85	Average	15.6	Pass
		5725.0	-27.37	2.00	-27.37	Peak	27.0	Pass
		5725.0	-47.81	2.00	-47.81	Average	27.0	Pass
		5850.0	-33.46	2.00	-33.46	Peak	27.0	Pass
		5850.0	-51.46	2.00	-51.46	Average	27.0	Pass
		5855.0	-35.60	2.00	-35.60	Peak	15.6	Pass
		5855.0	-53.86	2.00	-53.86	Average	15.6	Pass
		5875.0	-42.46	2.00	-42.46	Peak	10	Pass
		5875.0	-58.37	2.00	-58.37	Average	10	Pass
		5925.0	-48.31	2.00	-48.31	Peak	-27.0	Pass
		5925.0	-60.45	2.00	-60.45	Average	-27.0	Pass



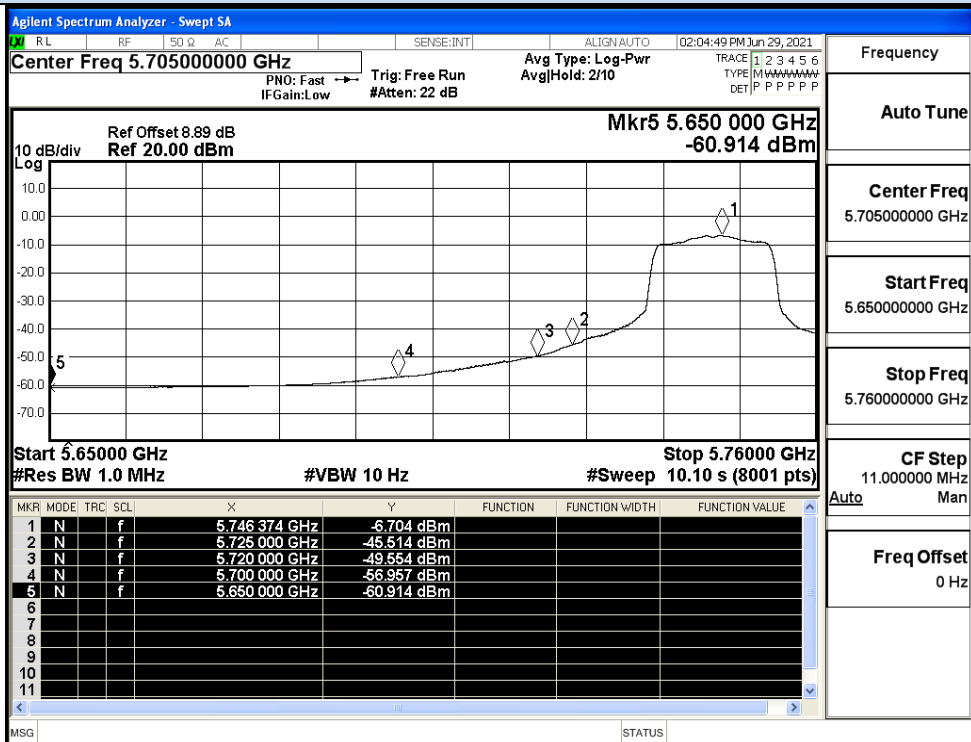
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N40 SISO	151	5650.0	-47.36	2.00	-47.36	Peak	-27.0	Pass
		5650.0	-60.04	2.00	-60.04	Average	-27.0	Pass
		5700.0	-39.52	2.00	-39.52	Peak	10	Pass
		5700.0	-53.76	2.00	-53.76	Average	10	Pass
		5720.0	-30.03	2.00	-30.03	Peak	15.6	Pass
		5720.0	-47.78	2.00	-47.78	Average	15.6	Pass
		5725.0	-28.74	2.00	-28.74	Peak	27.0	Pass
		5725.0	-47.00	2.00	-47.00	Average	27.0	Pass
	159	5850.0	-35.94	2.00	-35.94	Peak	27.0	Pass
		5850.0	-51.44	2.00	-51.44	Average	27.0	Pass
		5855.0	-37.65	2.00	-37.65	Peak	15.6	Pass
		5855.0	-52.24	2.00	-52.24	Average	15.6	Pass
		5875.0	-39.86	2.00	-39.86	Peak	10	Pass
		5875.0	-56.01	2.00	-56.01	Average	10	Pass
		5925.0	-48.73	2.00	-48.73	Peak	-27.0	Pass
		5925.0	-59.59	2.00	-59.59	Average	-27.0	Pass
11AC2 0 SISO	149	5650.0	-48.72	2.00	-48.72	Peak	-27.0	Pass
		5650.0	-60.73	2.00	-60.73	Average	-27.0	Pass
		5700.0	-44.21	2.00	-44.21	Peak	10	Pass
		5700.0	-50.57	2.00	-50.57	Average	10	Pass
		5720.0	-29.06	2.00	-29.06	Peak	15.6	Pass
		5720.0	-57.88	2.00	-57.88	Average	15.6	Pass
		5725.0	-29.47	2.00	-29.47	Peak	27.0	Pass
		5725.0	-48.20	2.00	-48.20	Average	27.0	Pass
	165	5850.0	-27.66	2.00	-27.66	Peak	27.0	Pass
		5850.0	-48.61	2.00	-48.61	Average	27.0	Pass
		5855.0	-31.75	2.00	-31.75	Peak	15.6	Pass
		5855.0	-50.89	2.00	-50.89	Average	15.6	Pass
		5875.0	-42.53	2.00	-42.53	Peak	10	Pass
		5875.0	-57.21	2.00	-57.21	Average	10	Pass
		5925.0	-48.16	2.00	-48.16	Peak	-27.0	Pass
		5925.0	-60.44	2.00	-60.44	Average	-27.0	Pass
11AC4 0 SISO	151	5650.0	-47.17	2.00	-47.17	Peak	-27.0	Pass
		5650.0	-60.01	2.00	-60.01	Average	-27.0	Pass
		5700.0	-37.91	2.00	-37.91	Peak	10	Pass
		5700.0	-53.72	2.00	-53.72	Average	10	Pass
		5720.0	-32.68	2.00	-32.68	Peak	15.6	Pass
		5720.0	-47.98	2.00	-47.98	Average	15.6	Pass
		5725.0	-30.80	2.00	-30.80	Peak	27.0	Pass
		5725.0	-47.29	2.00	-47.29	Average	27.0	Pass
	159	5850.0	-36.25	2.00	-36.25	Peak	27.0	Pass
		5850.0	-51.45	2.00	-51.45	Average	27.0	Pass
		5855.0	-37.07	2.00	-37.07	Peak	15.6	Pass
		5855.0	-52.45	2.00	-52.45	Average	15.6	Pass
		5875.0	-42.36	2.00	-42.36	Peak	10	Pass
		5875.0	-56.14	2.00	-56.14	Average	10	Pass
		5925.0	-48.00	2.00	-48.00	Peak	-27.0	Pass
		5925.0	-59.54	2.00	-59.54	Average	-27.0	Pass
11AC8 0 SISO	155	5725.0	-31.46	2.00	-31.46	Peak	27.0	Pass
		5720.0	-33.15	2.00	-33.15	Peak	15.6	Pass
		5700.0	-39.48	2.00	-39.48	Peak	10	Pass
		5650.0	-45.50	2.00	-45.50	Peak	-27.0	Pass
		5725.0	-47.38	2.00	-47.38	Average	27.0	Pass
		5720.0	-48.55	2.00	-48.55	Average	15.6	Pass
		5700.0	-52.32	2.00	-52.32	Average	10	Pass
		5650.0	-57.27	2.00	-57.27	Average	-27.0	Pass
		5850.0	-31.46	2.00	-31.46	Peak	27.0	Pass
		5855.0	-33.15	2.00	-33.15	Peak	15.6	Pass
		5875.0	-39.48	2.00	-39.48	Peak	10	Pass
		5925.0	-45.50	2.00	-45.50	Peak	-27.0	Pass
		5850.0	-47.38	2.00	-47.38	Average	27.0	Pass
		5855.0	-48.55	2.00	-48.55	Average	15.6	Pass
		5875.0	-52.32	2.00	-52.32	Average	10	Pass
		5925.0	-57.27	2.00	-57.27	Average	-27.0	Pass



Undesirable Emissions Measurement



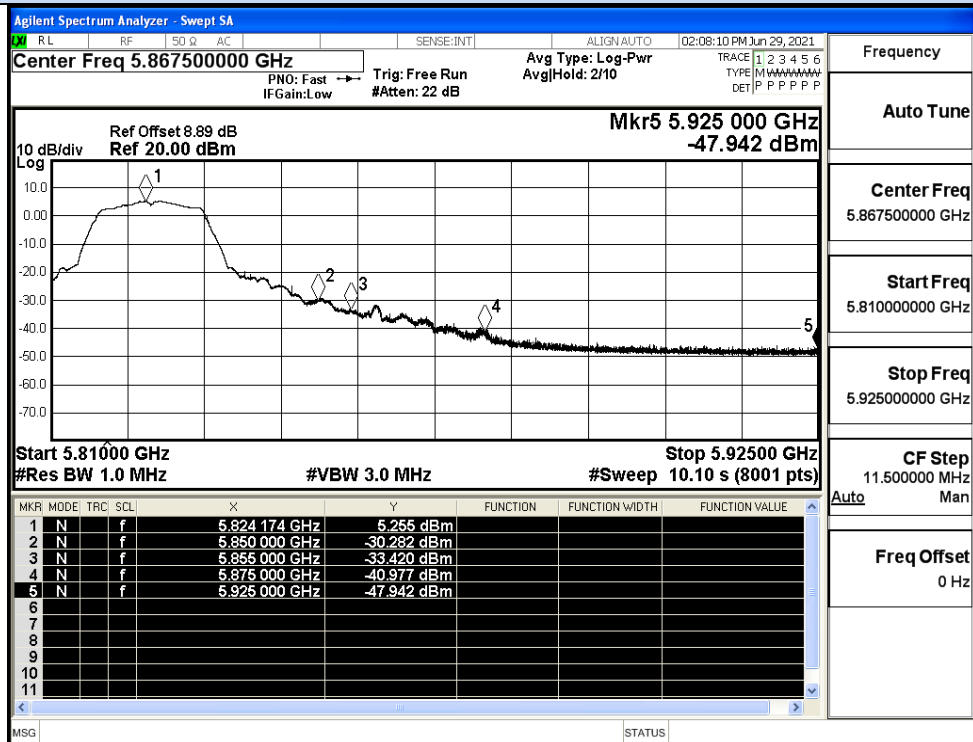
IEEE 802.11a / Channel 149 / 5745MHz / Peak



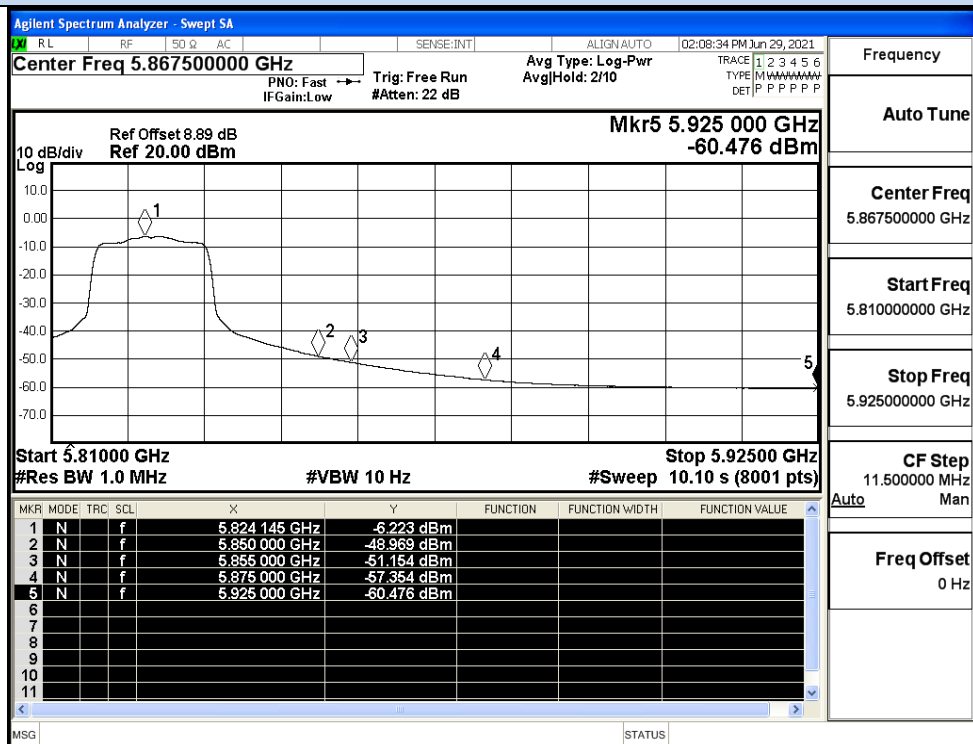
IEEE 802.11a / Channel 148 / 5745MHz / Average



Undesirable Emissions Measurement



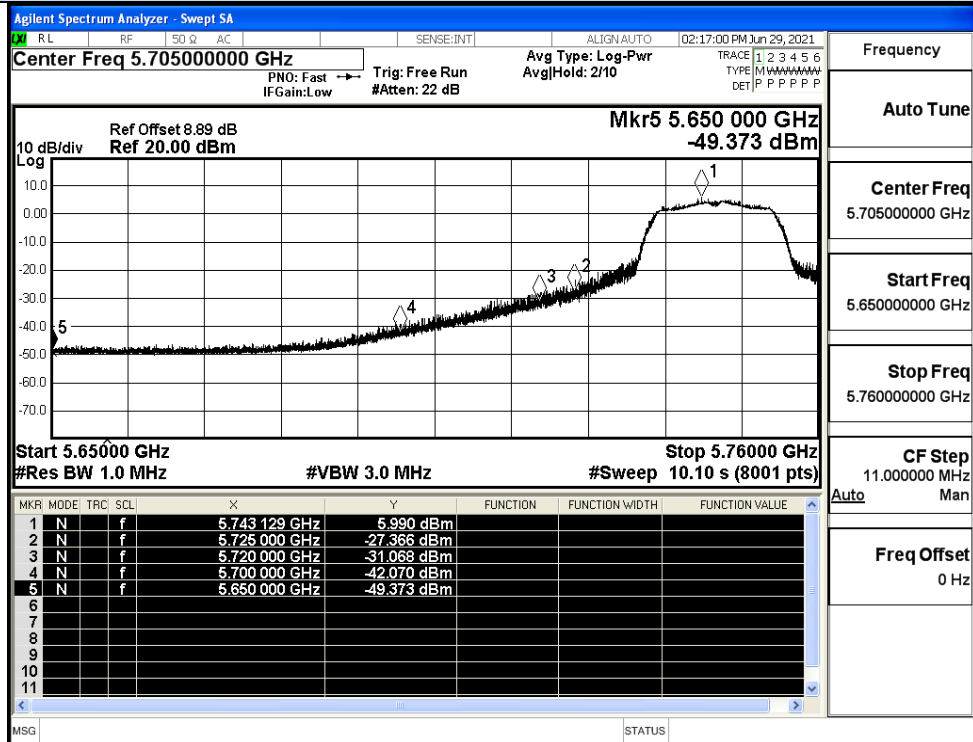
IEEE 802.11a / Channel 165 / 5825MHz / Peak



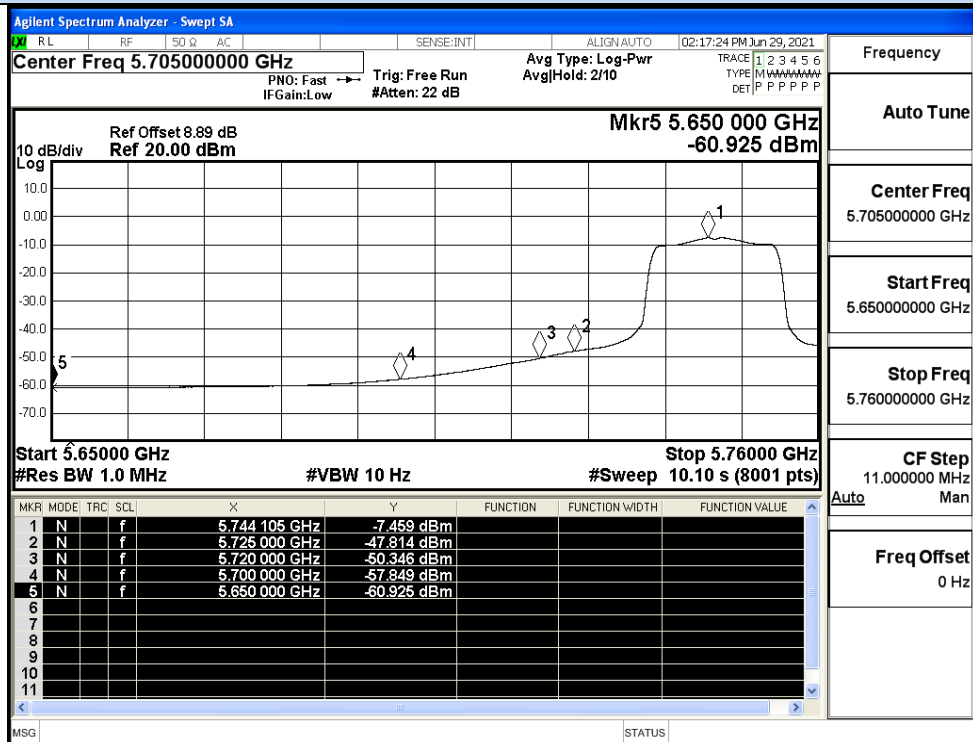
IEEE 802.11a / Channel 165 / 5825MHz / Average



Undesirable Emissions Measurement



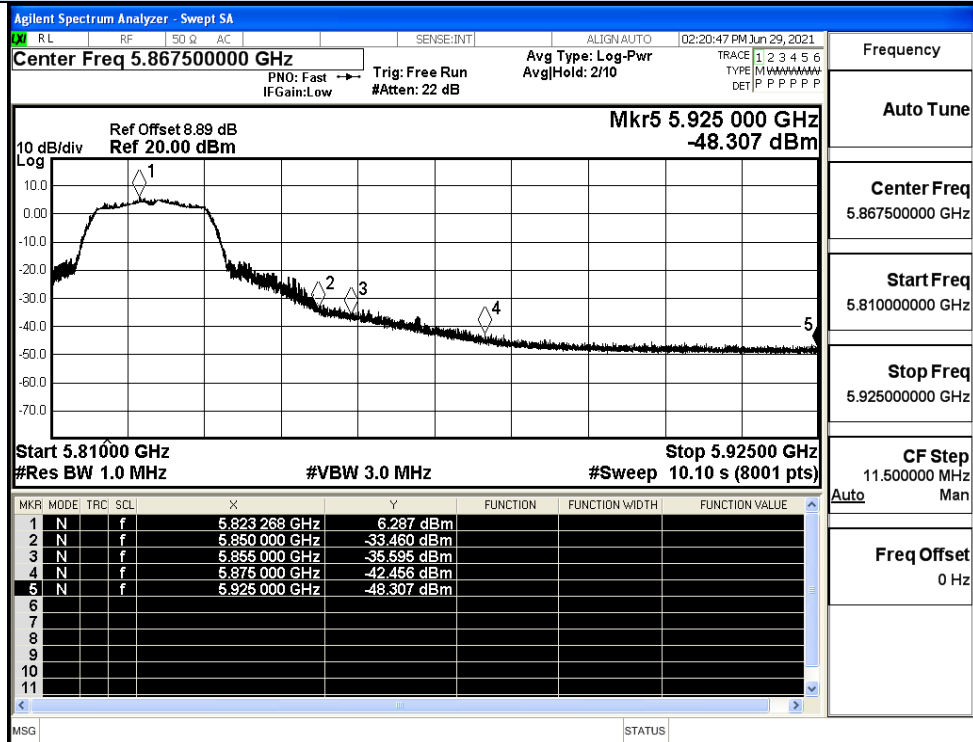
IEEE 802.11n20 / Channel 149 / 5745MHz / Peak



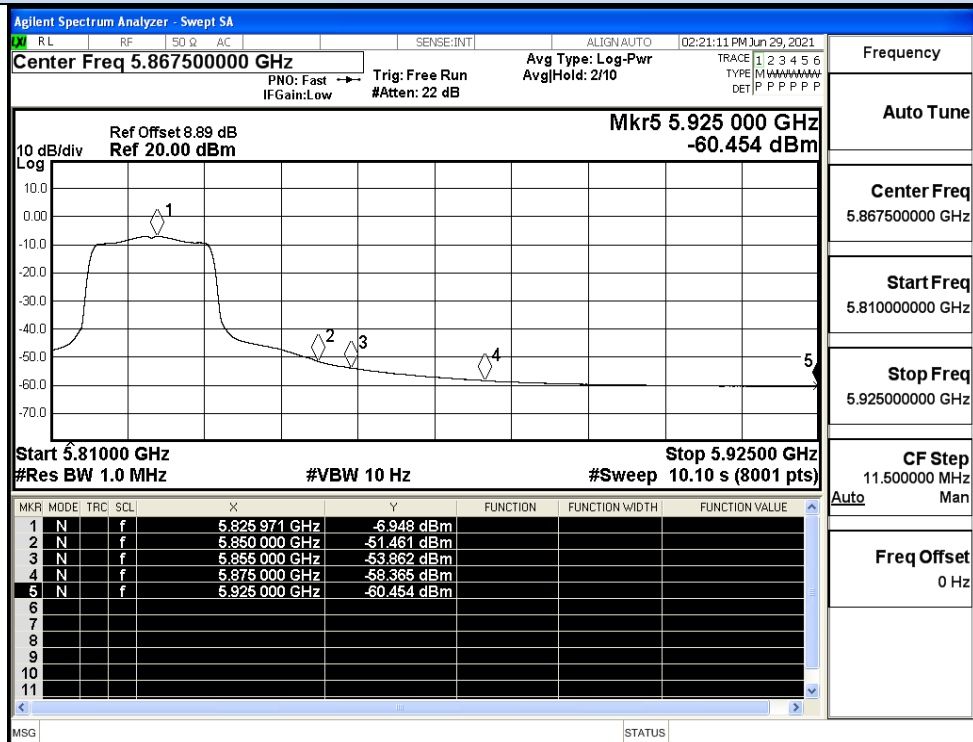
IEEE 802.11n20 / Channel 149 / 5745MHz / Average



Undesirable Emissions Measurement



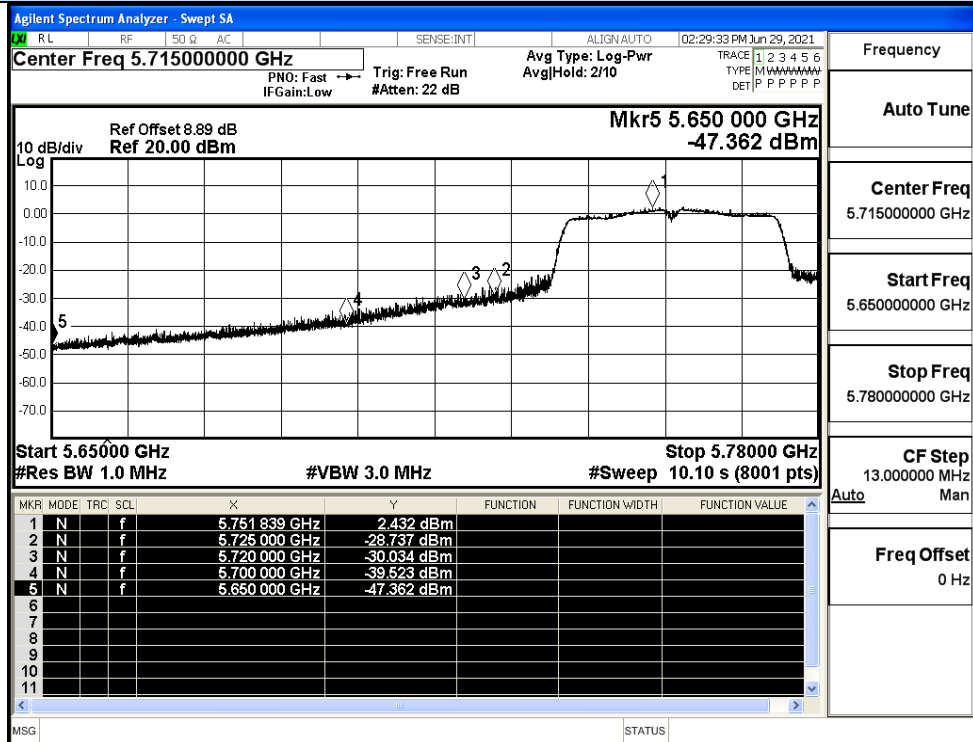
IEEE 802.11n20 / Channel 165 / 5825MHz / Peak



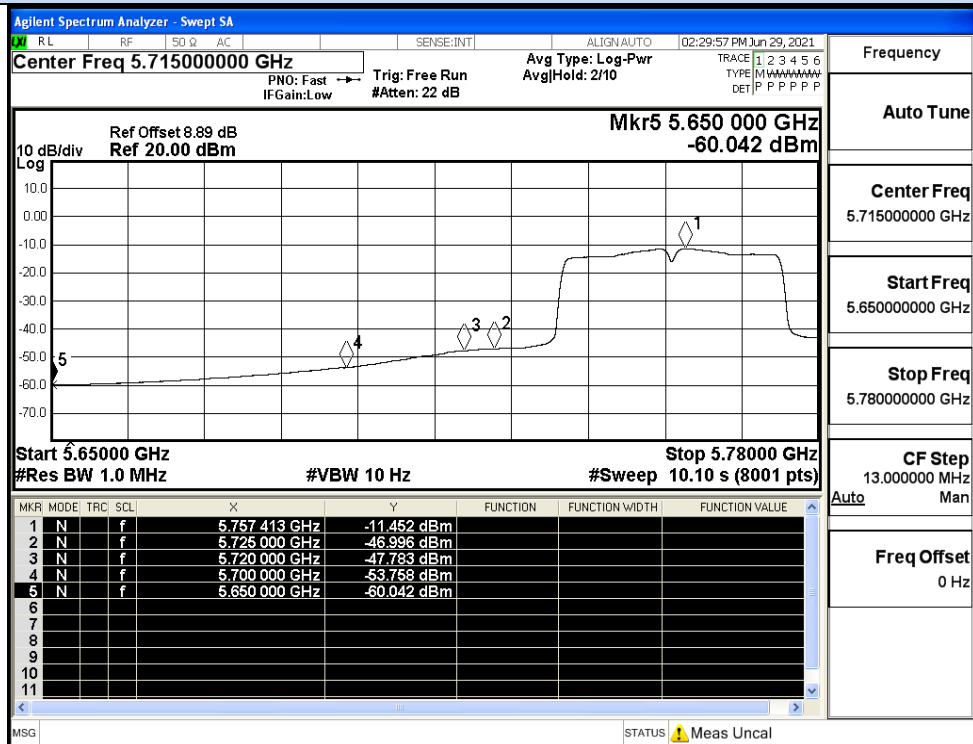
IEEE 802.11n20 / Channel 165 / 5825MHz / Average



Undesirable Emissions Measurement



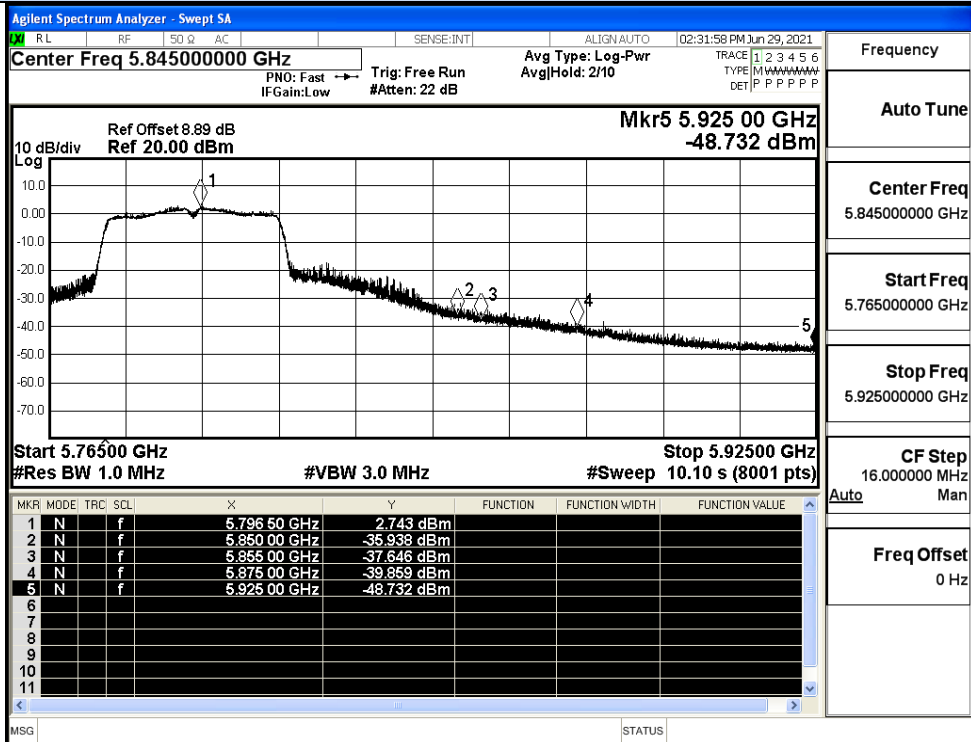
IEEE 802.11n40 / Channel 151 / 5755MHz / Peak



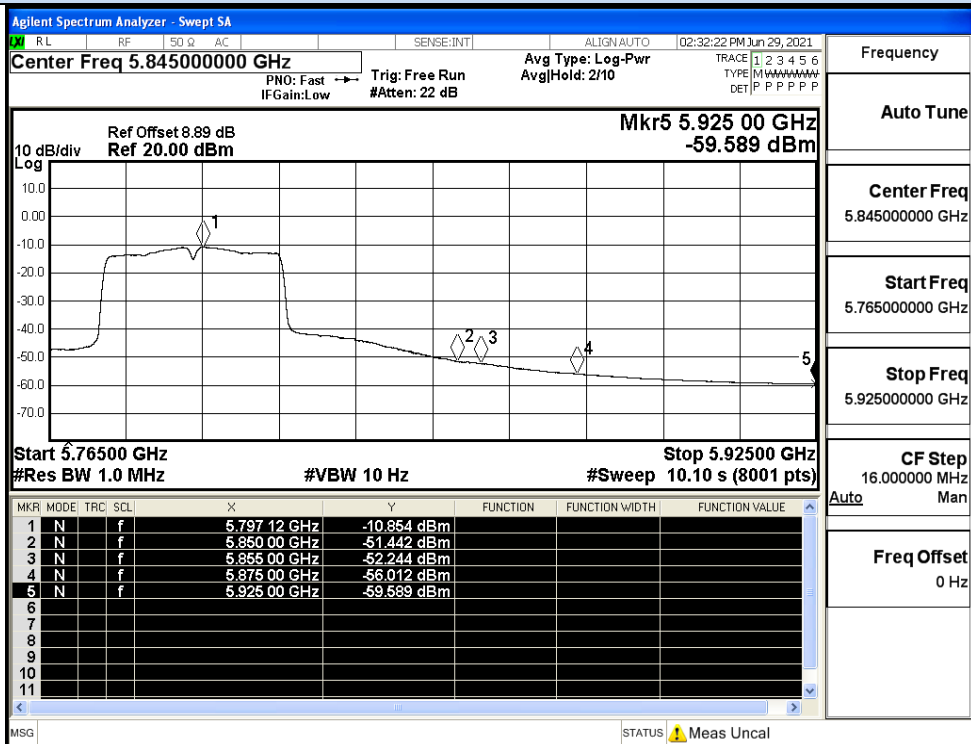
IEEE 802.11n40 / Channel 151 / 5755MHz / Average



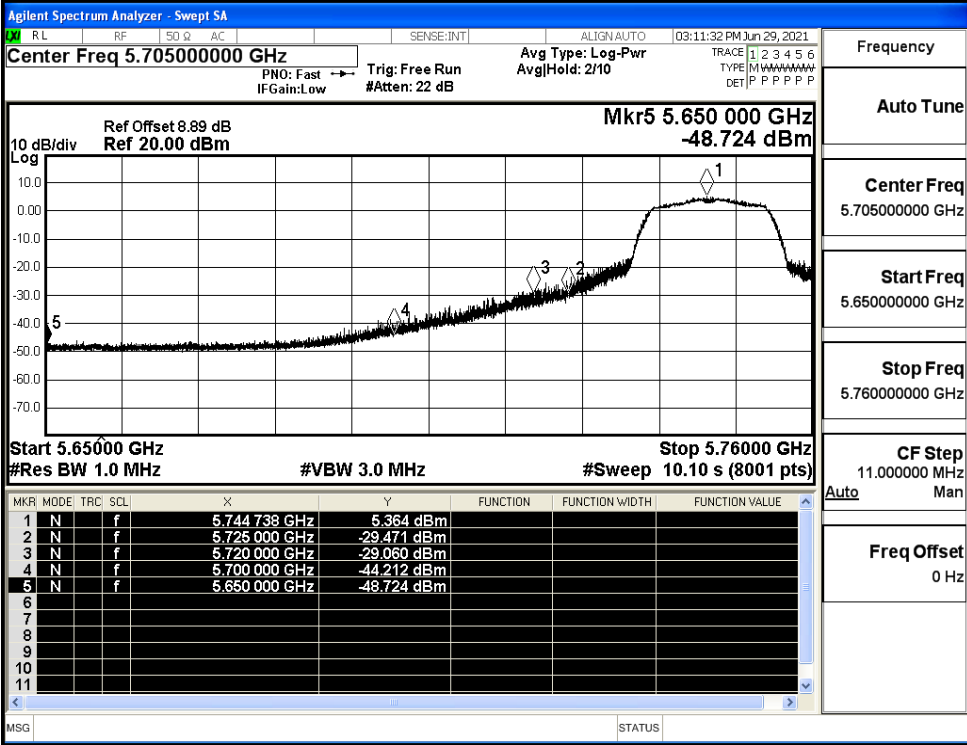
Undesirable Emissions Measurement



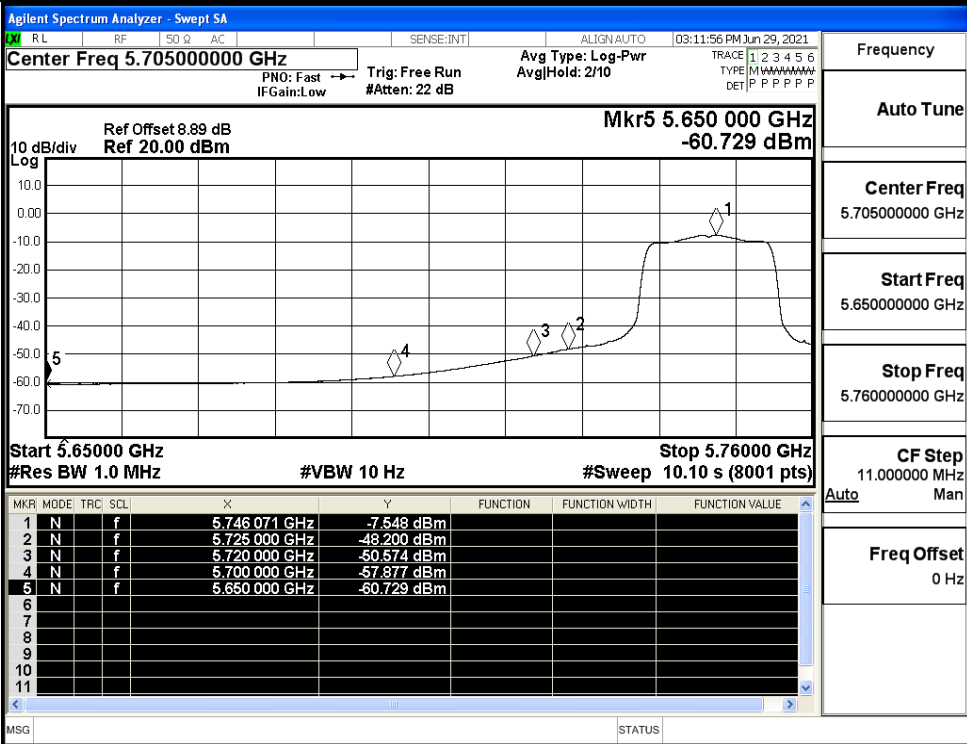
IEEE 802.11n40 / Channel 159 / 5795MHz / Peak



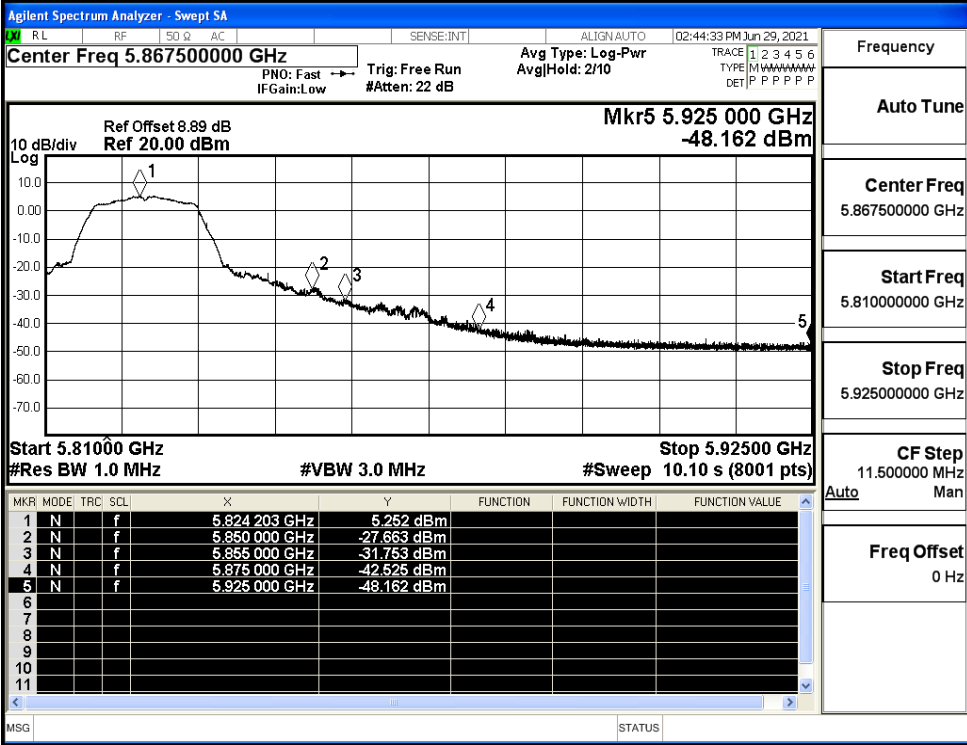
IEEE 802.11n40 / Channel 159 / 5795MHz / Average



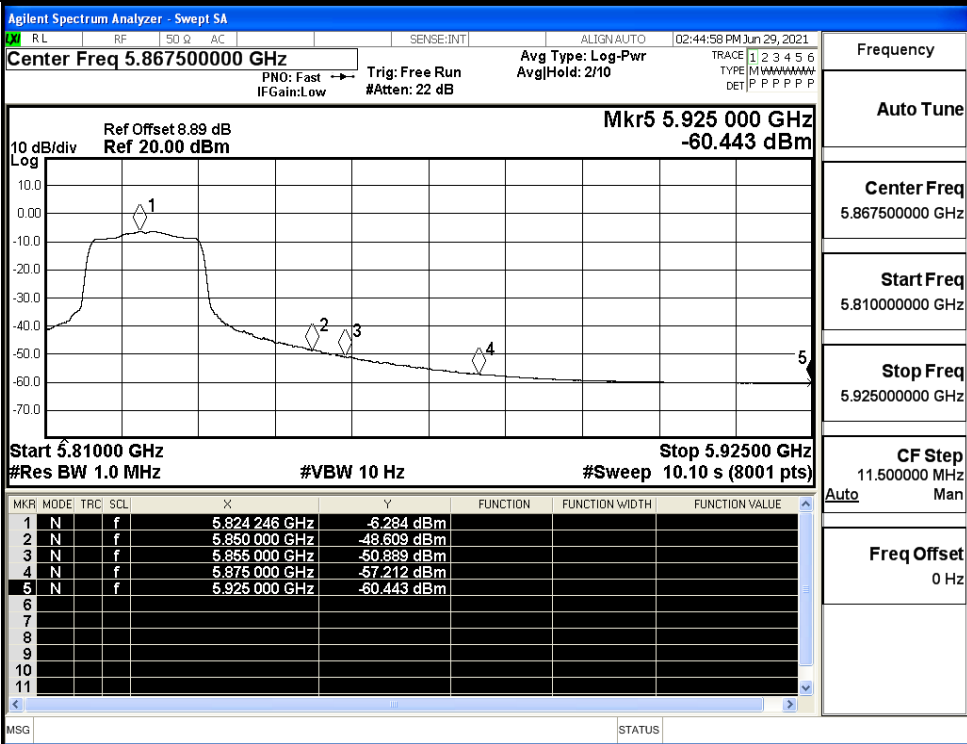
IEEE 802.11ac20 / Channel 149 / 5745MHz / Peak



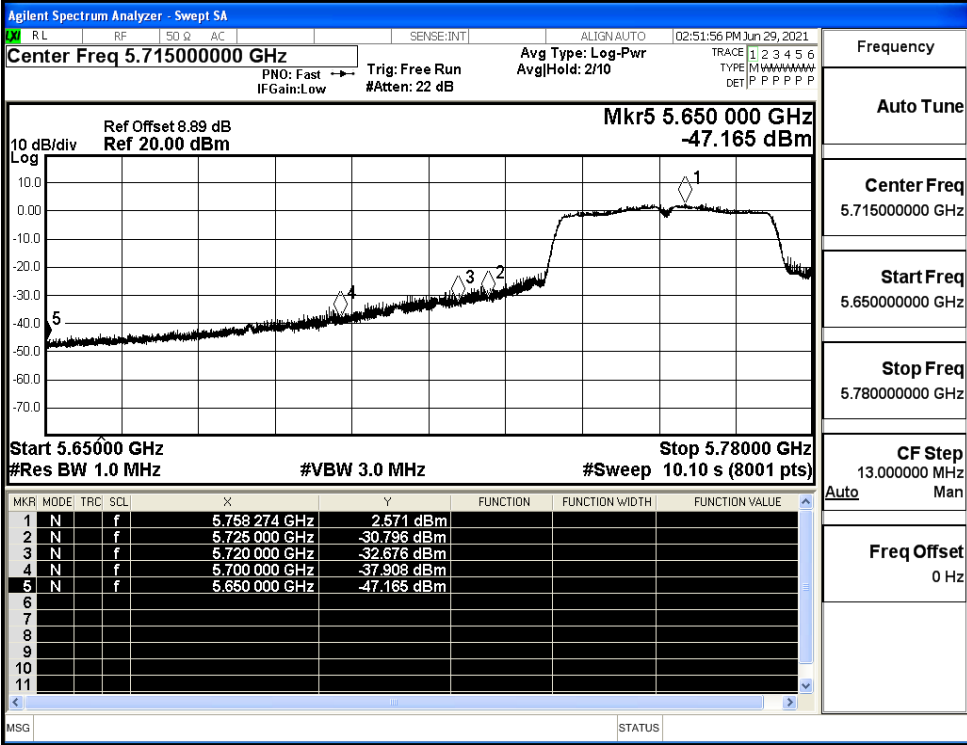
IEEE 802.11ac20 / Channel 149 / 5745MHz / Average



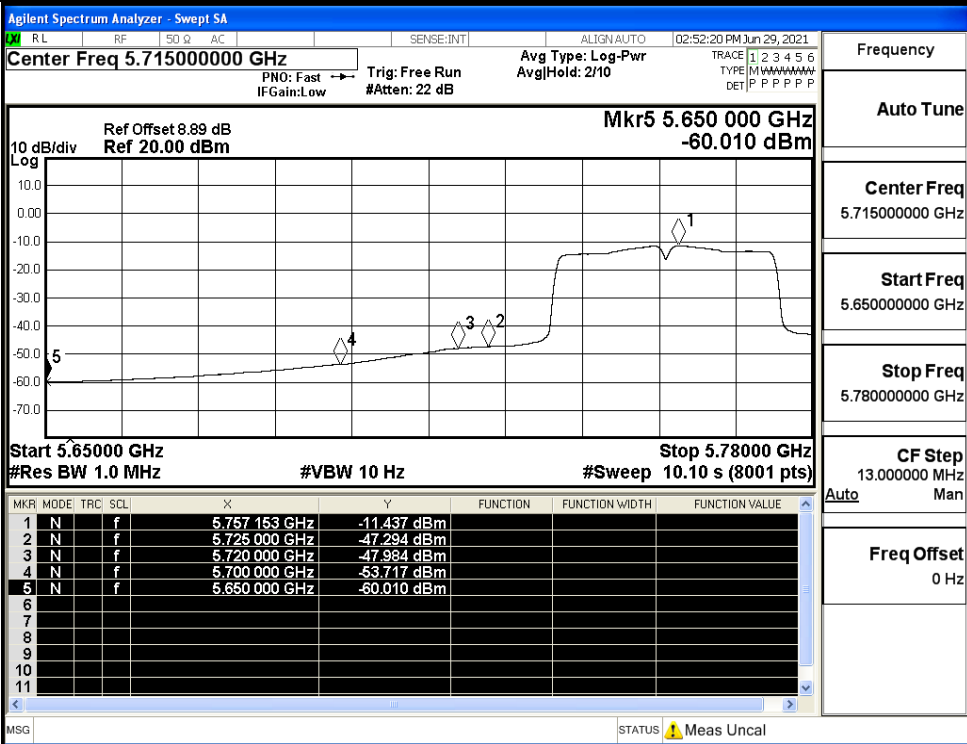
IEEE 802.11ac20 / Channel 165 / 5825MHz / Peak



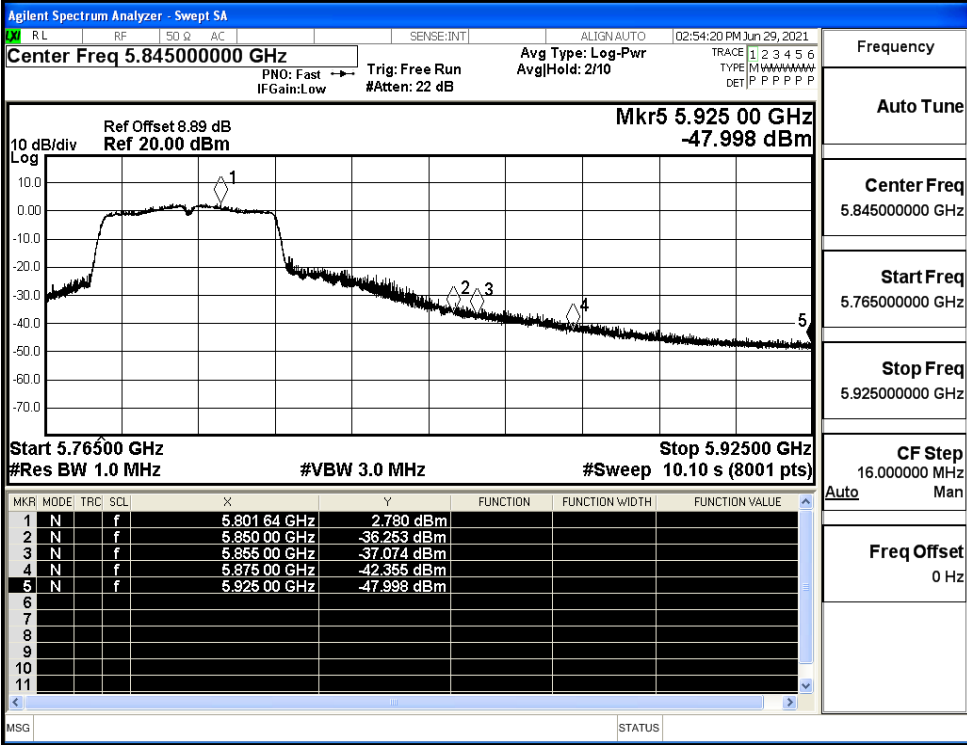
IEEE 802.11ac20 / Channel 165 / 5825MHz / Average



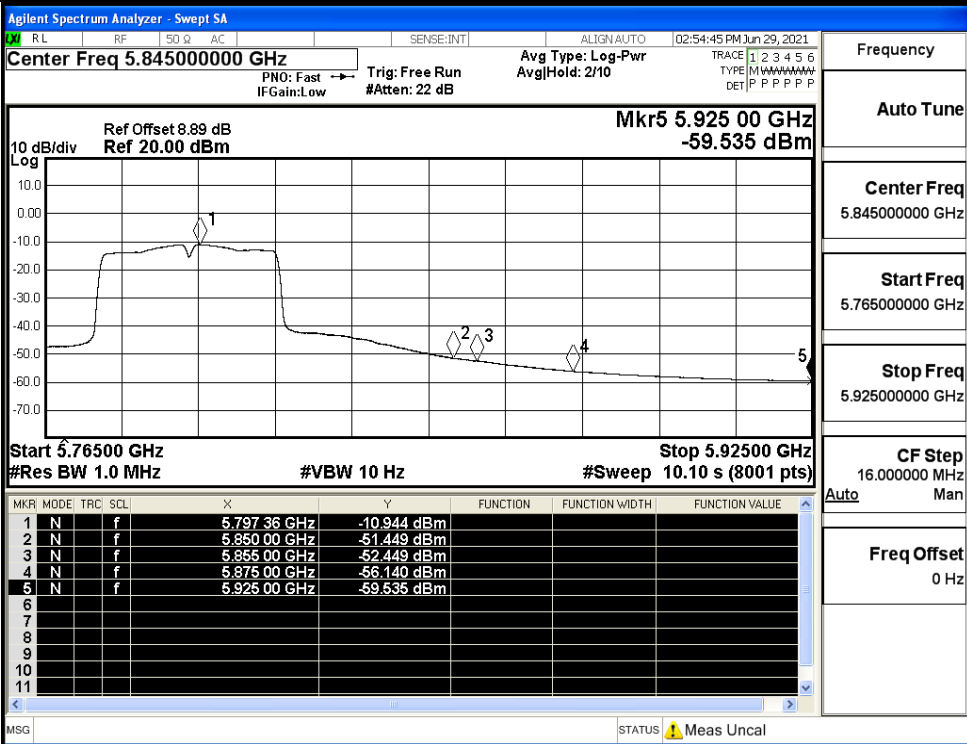
IEEE 802.11ac40 / Channel 151 / 5755MHz / Peak



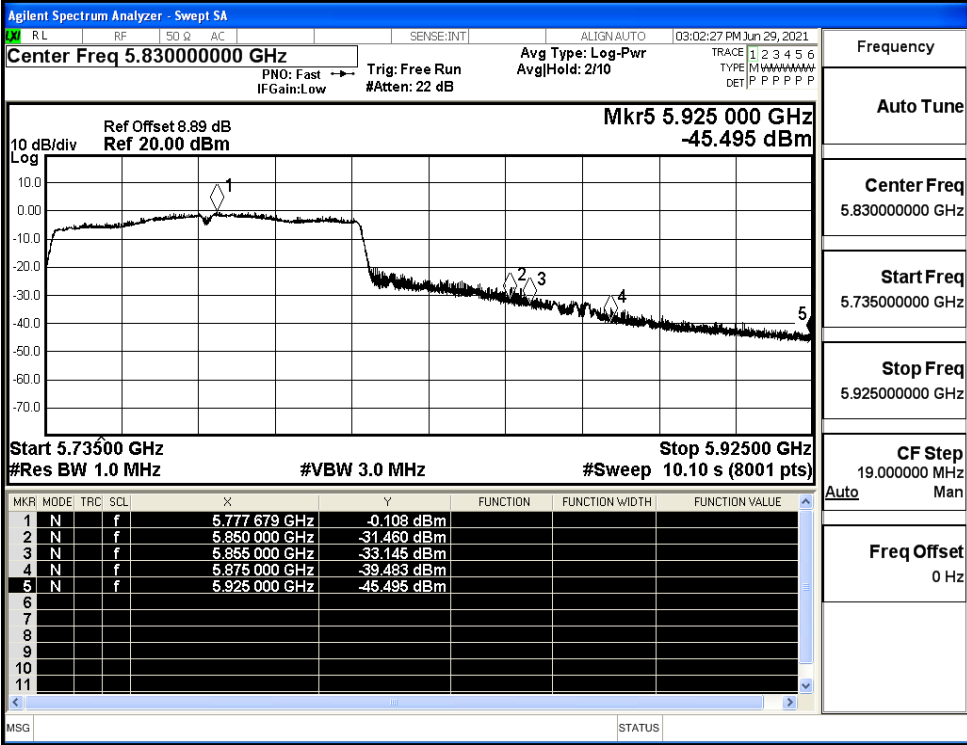
IEEE 802.11ac40 / Channel 151 / 5755MHz / Average



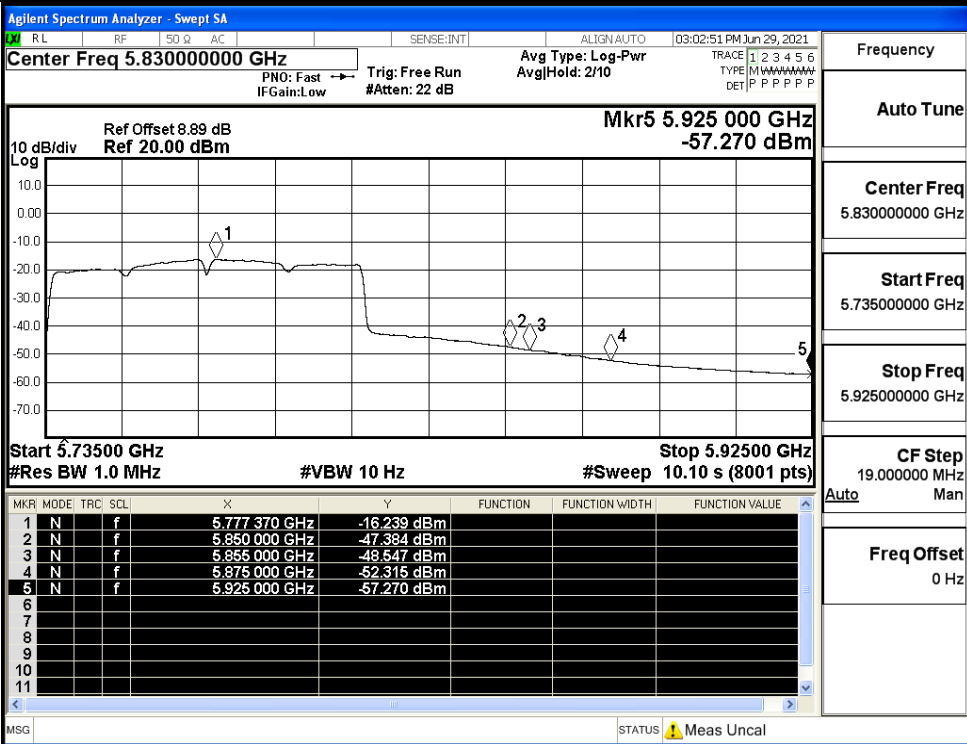
IEEE 802.11ac40 / Channel 159 / 5795MHz / Peak



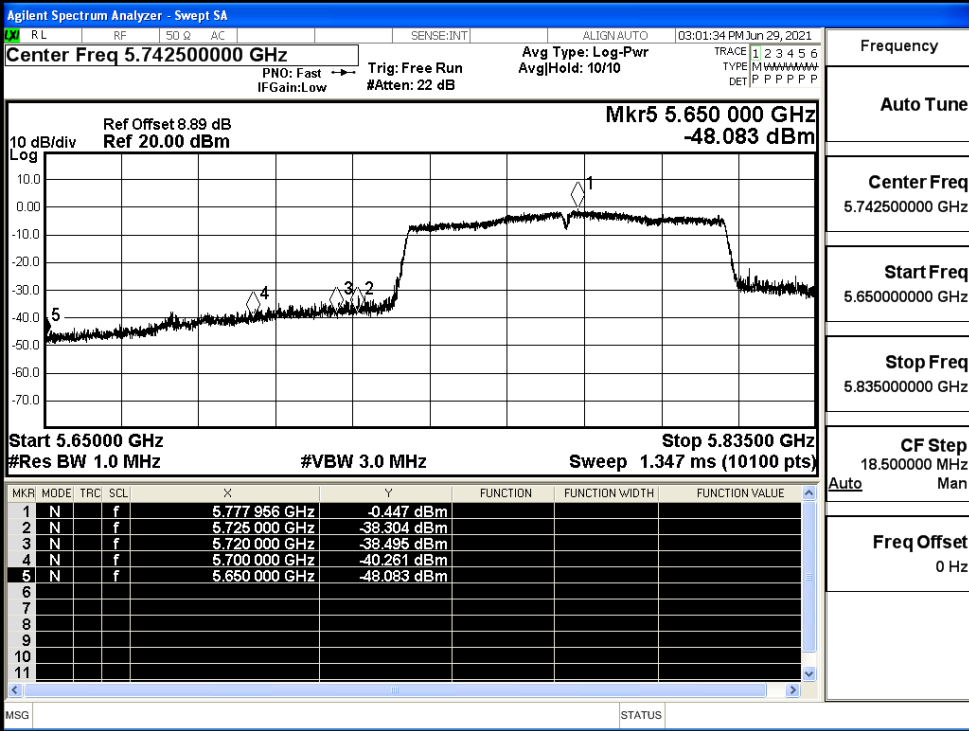
IEEE 802.11ac40 / Channel 159 / 5795MHz / Average



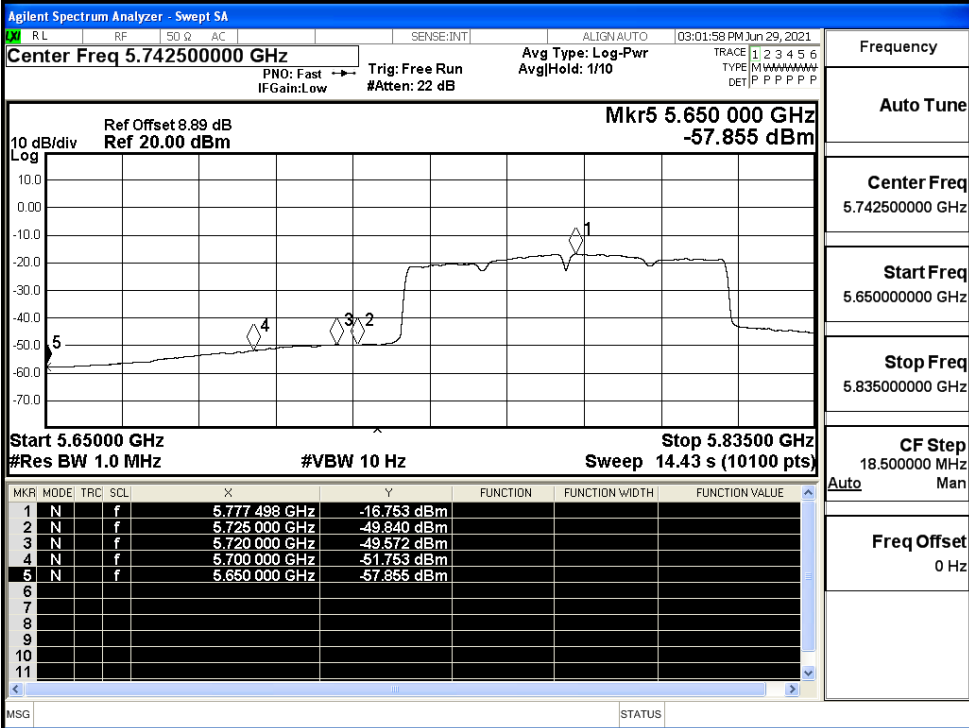
IEEE 802.11ac80 / Channel 155 / 5775MHz / Peak



IEEE 802.11ac80 / Channel 155 / 5775MHz / Average



IEEE 802.11ac80 / Channel 155/ 5775MHz / Peak



IEEE 802.11ac80 / Channel 155 / 5775MHz / Average



MIMO

Test Mode	Channel	Frequency (MHz)	ANT 0 Conducted Power (dBm)	ANT 1 Conducted Power (dBm)	MIMO Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N20	149	5650.0	-48.20	-49.37	-45.74	5.01	-40.73	Peak	-27.0	Pass
		5650.0	-60.92	-60.93	-57.91	5.01	-52.90	Average	-27.0	Pass
		5700.0	-43.62	-42.07	-39.77	5.01	-34.76	Peak	10	Pass
		5700.0	-50.91	-50.35	-47.61	5.01	-42.60	Average	10	Pass
		5720.0	-34.78	-31.07	-29.53	5.01	-24.52	Peak	15.6	Pass
		5720.0	-58.20	-57.85	-55.01	5.01	-50.00	Average	15.6	Pass
		5725.0	-30.21	-27.37	-25.55	5.01	-20.54	Peak	27.0	Pass
		5725.0	-48.21	-47.81	-45.00	5.01	-39.99	Average	27.0	Pass
	165	5850.0	-34.65	-33.46	-31.00	5.01	-25.99	Peak	27.0	Pass
		5850.0	-51.61	-51.46	-48.52	5.01	-43.51	Average	27.0	Pass
		5855.0	-36.15	-35.60	-32.86	5.01	-27.85	Peak	15.6	Pass
		5855.0	-53.94	-53.86	-50.89	5.01	-45.88	Average	15.6	Pass
		5875.0	-45.67	-42.46	-40.76	5.01	-35.75	Peak	10	Pass
		5875.0	-58.34	-58.37	-55.34	5.01	-50.33	Average	10	Pass
		5925.0	-48.41	-48.31	-45.35	5.01	-40.34	Peak	-27.0	Pass
		5925.0	-60.49	-60.45	-57.46	5.01	-52.45	Average	-27.0	Pass

Test Mode	Channel	Frequency (MHz)	ANT 0 Conducted Power (dBm)	ANT 1 Conducted Power (dBm)	MIMO Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N40	151	5650.0	-48.08	-47.36	-44.69	5.01	-39.68	Peak	-27.0	Pass
		5650.0	-60.15	-60.04	-57.08	5.01	-52.07	Average	-27.0	Pass
		5700.0	-40.26	-39.52	-36.86	5.01	-31.85	Peak	10	Pass
		5700.0	-54.09	-53.76	-50.91	5.01	-45.90	Average	10	Pass
		5720.0	-33.82	-30.03	-28.51	5.01	-23.50	Peak	15.6	Pass
		5720.0	-48.56	-47.78	-45.14	5.01	-40.13	Average	15.6	Pass
		5725.0	-32.66	-28.74	-27.26	5.01	-22.25	Peak	27.0	Pass
		5725.0	-47.83	-47.00	-44.38	5.01	-39.37	Average	27.0	Pass
	159	5850.0	-34.67	-35.94	-32.25	5.01	-27.24	Peak	27.0	Pass
		5850.0	-51.52	-51.44	-48.47	5.01	-43.46	Average	27.0	Pass
		5855.0	-36.93	-37.65	-34.26	5.01	-29.25	Peak	15.6	Pass
		5855.0	-52.39	-52.24	-49.30	5.01	-44.29	Average	15.6	Pass
		5875.0	-40.15	-39.86	-36.99	5.01	-31.98	Peak	10	Pass
		5875.0	-56.04	-56.01	-53.01	5.01	-48.00	Average	10	Pass
		5925.0	-48.39	-48.73	-45.55	5.01	-40.54	Peak	-27.0	Pass
		5925.0	-59.56	-59.59	-56.56	5.01	-51.55	Average	-27.0	Pass
11AC20	149	5650.0	-48.54	-48.72	-45.62	5.01	-40.61	Peak	-27.0	Pass
		5650.0	-60.95	-60.73	-57.83	5.01	-52.82	Average	-27.0	Pass
		5700.0	-39.28	-44.21	-38.07	5.01	-33.06	Peak	10	Pass
		5700.0	-50.23	-50.57	-47.39	5.01	-42.38	Average	10	Pass
		5720.0	-30.18	-29.06	-26.57	5.01	-21.56	Peak	15.6	Pass
		5720.0	-57.86	-57.88	-54.86	5.01	-49.85	Average	15.6	Pass
		5725.0	-30.00	-29.47	-26.72	5.01	-21.71	Peak	27.0	Pass
		5725.0	-47.38	-48.20	-44.76	5.01	-39.75	Average	27.0	Pass
	165	5850.0	-34.32	-27.66	-26.81	5.01	-21.80	Peak	27.0	Pass
		5850.0	-51.63	-48.61	-46.85	5.01	-41.84	Average	27.0	Pass
		5855.0	-36.13	-31.75	-30.40	5.01	-25.39	Peak	15.6	Pass
		5855.0	-53.98	-50.89	-49.16	5.01	-44.15	Average	15.6	Pass
		5875.0	-45.16	-42.53	-40.64	5.01	-35.63	Peak	10	Pass
		5875.0	-58.38	-57.21	-54.75	5.01	-49.74	Average	10	Pass
		5925.0	-48.75	-48.16	-45.43	5.01	-40.42	Peak	-27.0	Pass
		5925.0	-60.46	-60.44	-57.44	5.01	-52.43	Average	-27.0	Pass
11AC40	151	5650.0	-47.58	-47.17	-44.36	5.01	-39.35	Peak	-27.0	Pass
		5650.0	-60.04	-60.01	-57.01	5.01	-52.00	Average	-27.0	Pass
		5700.0	-38.93	-37.91	-35.38	5.01	-30.37	Peak	10	Pass
		5700.0	-53.72	-53.72	-50.71	5.01	-45.70	Average	10	Pass
		5720.0	-33.69	-32.68	-30.15	5.01	-25.14	Peak	15.6	Pass
		5720.0	-48.53	-47.98	-45.24	5.01	-40.23	Average	15.6	Pass
		5725.0	-31.00	-30.80	-27.89	5.01	-22.88	Peak	27.0	Pass
		5725.0	-48.07	-47.29	-44.65	5.01	-39.64	Average	27.0	Pass
	159	5850.0	-35.80	-36.25	-33.01	5.01	-28.00	Peak	27.0	Pass
		5850.0	-51.13	-51.45	-48.28	5.01	-43.27	Average	27.0	Pass
		5855.0	-36.47	-37.07	-33.75	5.01	-28.74	Peak	15.6	Pass
		5855.0	-52.23	-52.45	-49.33	5.01	-44.32	Average	15.6	Pass



11AC80		5875.0	-40.55	-42.36	-38.35	5.01	-33.34	Peak	10	Pass
		5875.0	-55.73	-56.14	-52.92	5.01	-47.91	Average	10	Pass
		5925.0	-48.55	-48.00	-45.26	5.01	-40.25	Peak	-27.0	Pass
		5925.0	-59.41	-59.54	-56.46	5.01	-51.45	Average	-27.0	Pass
	155	5725.0	-31.61	-31.46	-28.52	5.01	-23.51	Peak	27.0	Pass
		5720.0	-33.78	-33.15	-30.44	5.01	-25.43	Peak	15.6	Pass
		5700.0	-38.55	-39.48	-35.98	5.01	-30.97	Peak	10	Pass
		5650.0	-45.39	-45.50	-42.43	5.01	-37.42	Peak	-27.0	Pass
		5725.0	-48.43	-47.38	-44.86	5.01	-39.85	Average	27.0	Pass
		5720.0	-49.30	-48.55	-45.90	5.01	-40.89	Average	15.6	Pass
		5700.0	-52.42	-52.32	-49.36	5.01	-44.35	Average	10	Pass
		5650.0	-57.12	-57.27	-54.18	5.01	-49.17	Average	-27.0	Pass
		5850.0	-31.61	-31.46	-28.52	5.01	-23.51	Peak	27.0	Pass
		5855.0	-33.78	-33.15	-30.44	5.01	-25.43	Peak	15.6	Pass
		5875.0	-38.55	-39.48	-35.98	5.01	-30.97	Peak	10	Pass
		5925.0	-45.39	-45.50	-42.43	5.01	-37.42	Peak	-27.0	Pass
		5850.0	-48.43	-47.38	-44.86	5.01	-39.85	Average	27.0	Pass
		5855.0	-49.30	-48.55	-45.90	5.01	-40.89	Average	15.6	Pass
		5875.0	-52.42	-52.32	-49.36	5.01	-44.35	Average	10	Pass
		5925.0	-57.12	-57.27	-54.18	5.01	-49.17	Average	-27.0	Pass

$EIRP(dBm/MHz) = \text{Conducted Power (dBm)} + \text{Antenna Gain (dBi)}$

The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater