

Appendix B

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: wireless video transmitter system

Trade Mark: N/A

Test Model: 7103&3103

Environmental Conditions

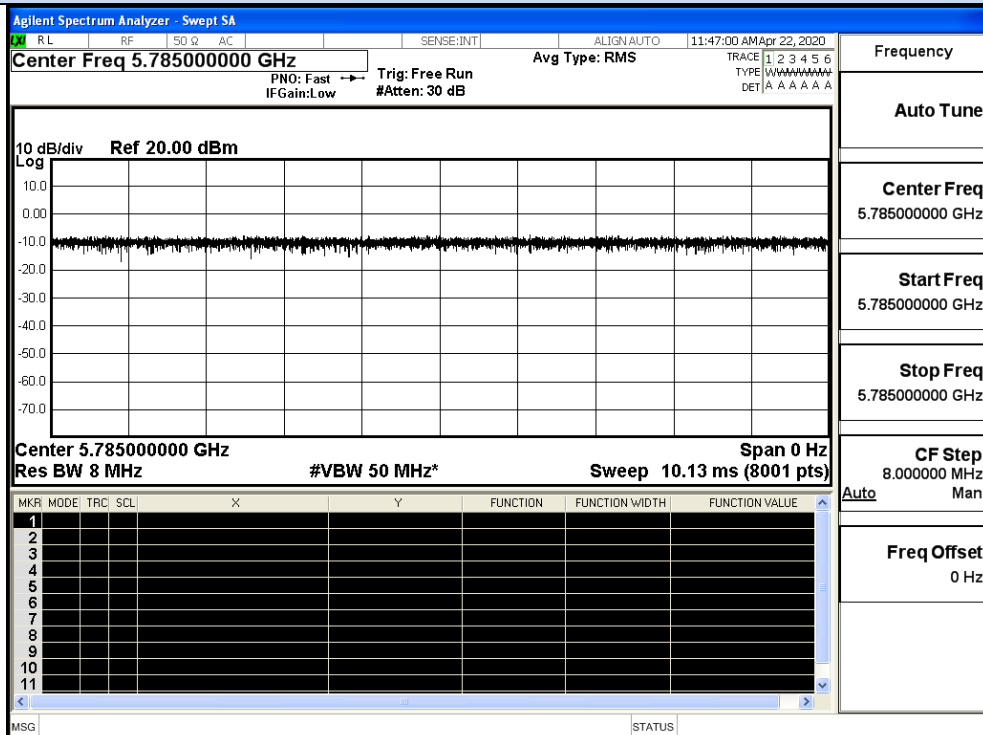
Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Jack Liu
Supervised by:	Li Huan

B.1 Duty Cycle

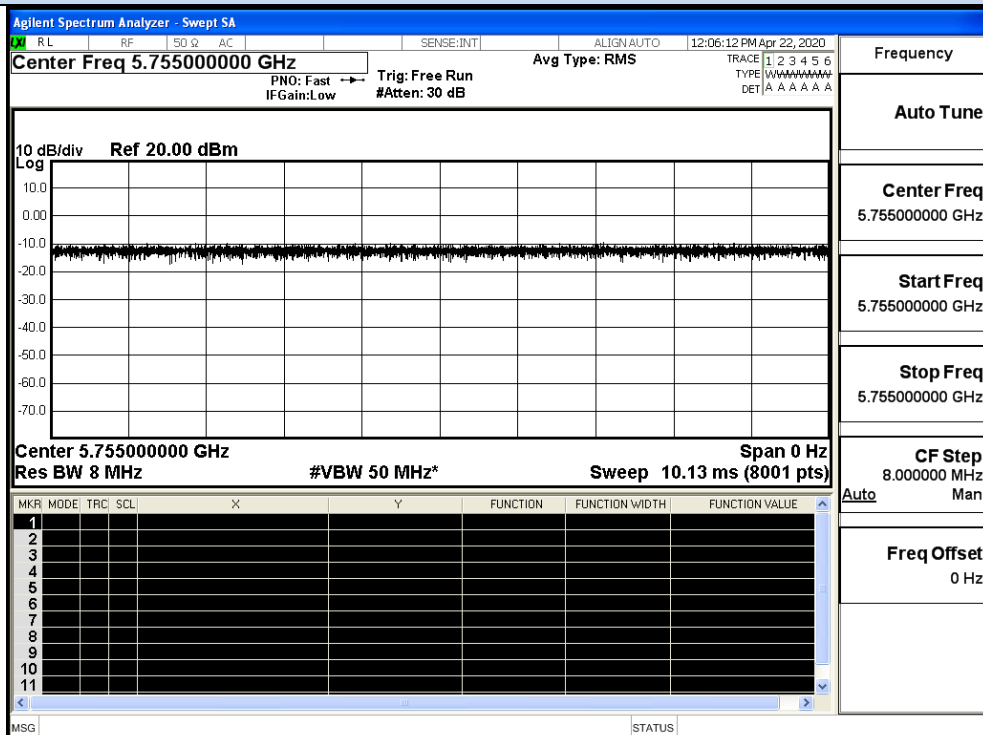
Antenna 0

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11N20 SISO	5785	100	0.0	0.01
11N40 SISO	5755	100	0.0	0.01

On Time and Duty Cycle



IEEE 802.11n HT20

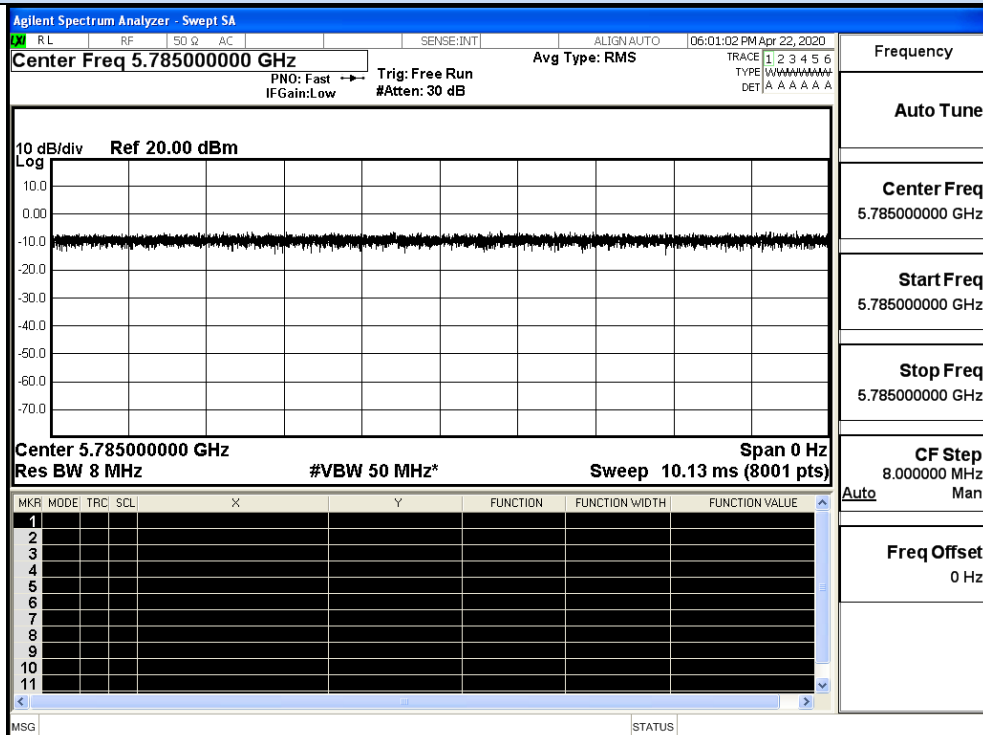


IEEE 802.11n HT40

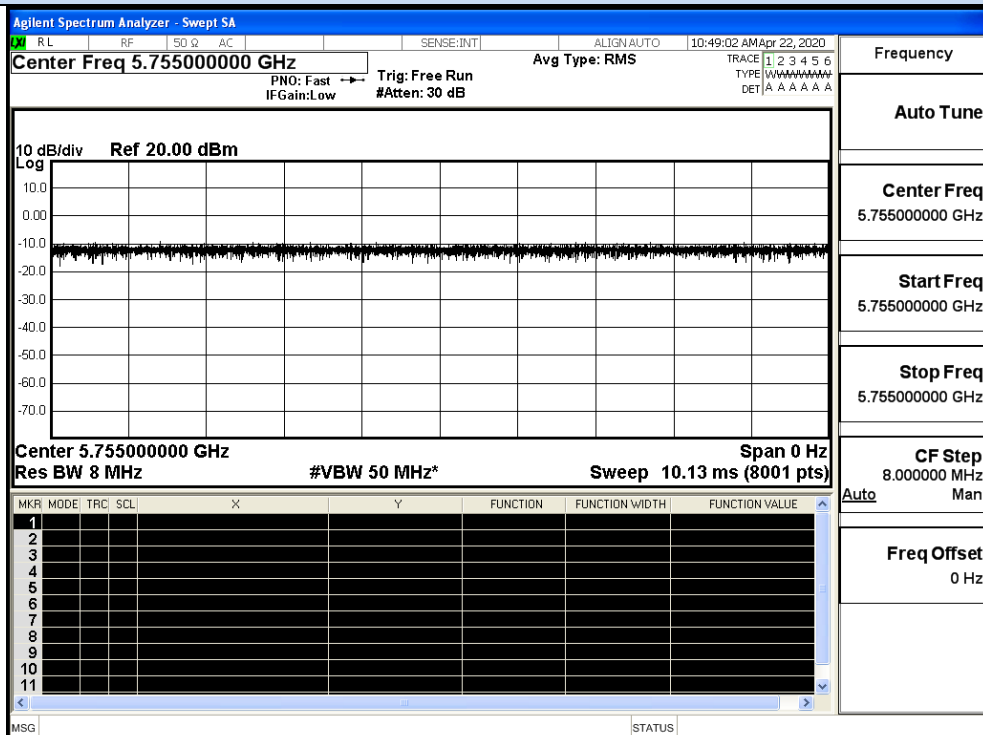
Antenna 1

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11N20 SISO	5785	100	0.0	0.01
11N40 SISO	5755	100	0.0	0.01

On Time and Duty Cycle



IEEE 802.11n HT20



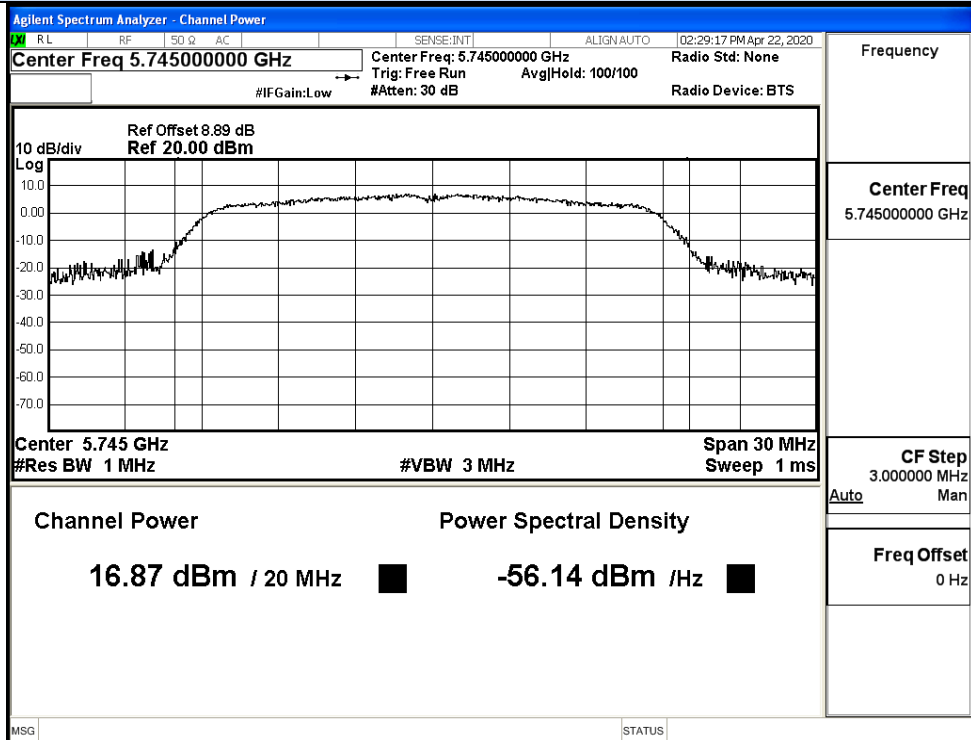
IEEE 802.11n HT40

B.2 Maximum Conduct Output Power

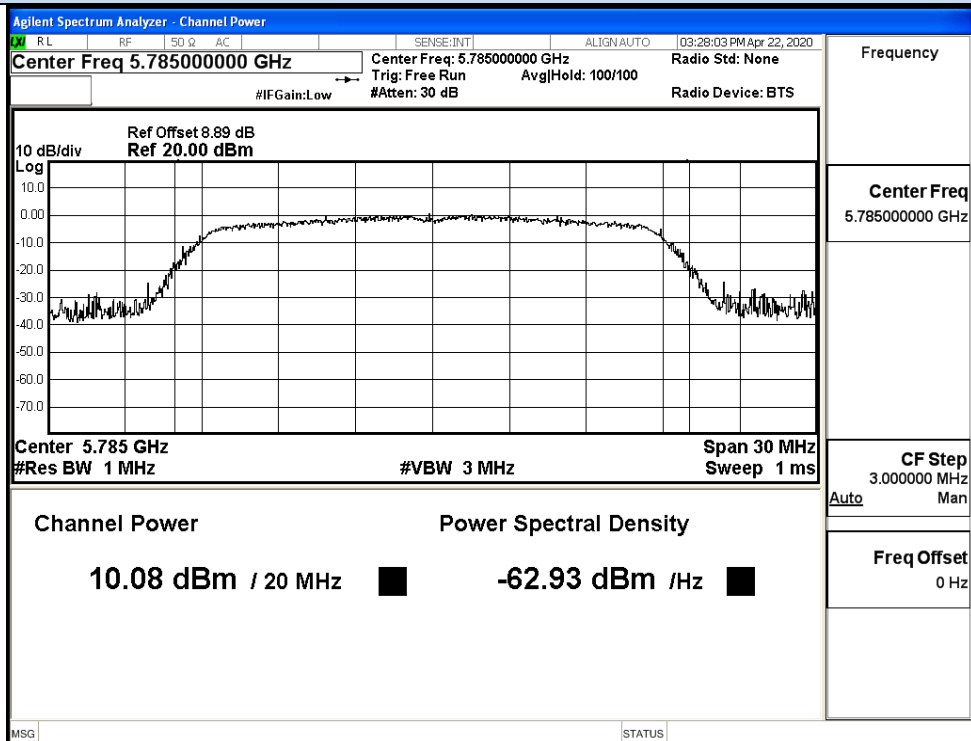
Antenna 0

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11N20 SISO	149	5745	16.87	0	16.87	30	Pass
	157	5785	10.08	0	10.08		Pass
	165	5825	10.39	0	10.39		Pass
11N40 SISO	151	5755	10.01	0	10.01	30	Pass
	159	5795	10.67	0	10.67		Pass

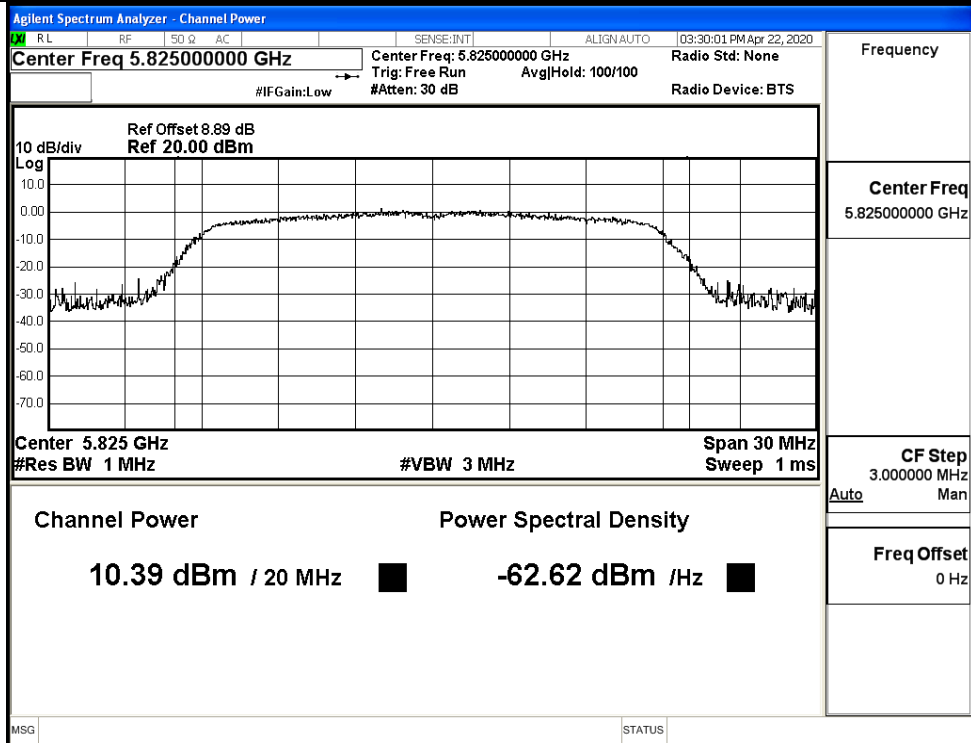
Maximum Conducted Output Power



IEEE 802.11n20 / Channel 149 / 5745MHz

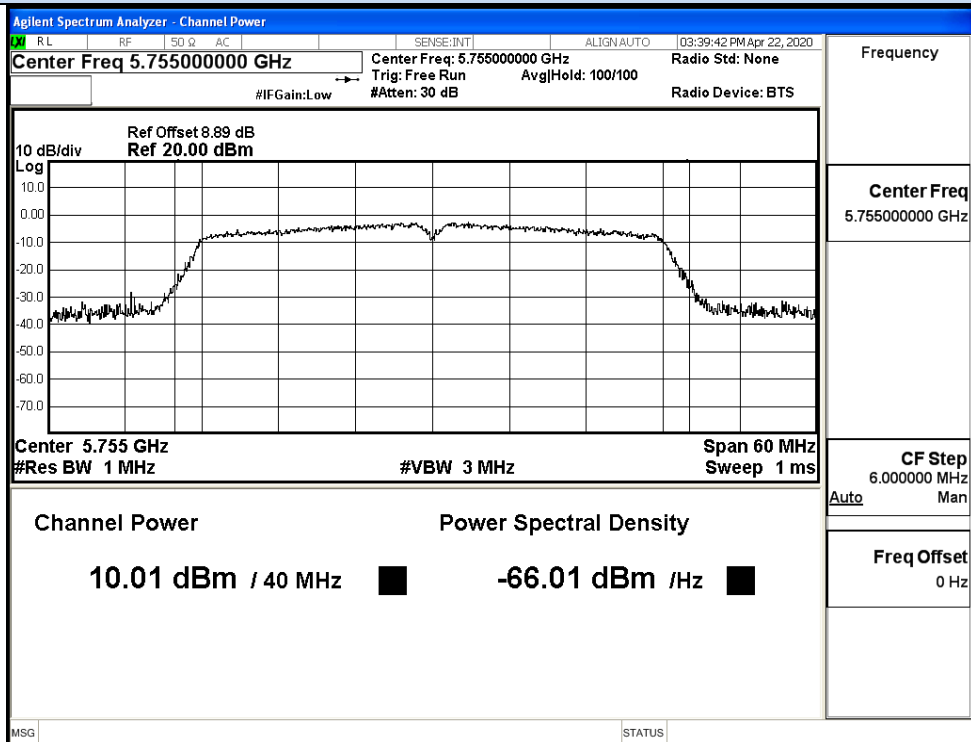


IEEE 802.11n20 / Channel 157 / 5785MHz

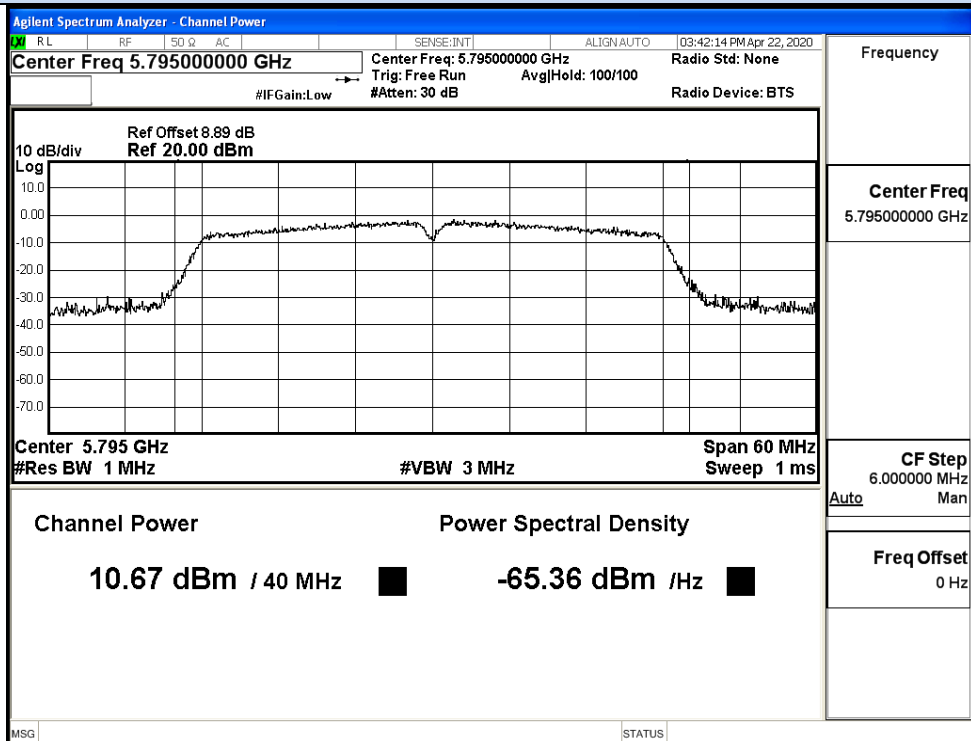


IEEE 802.11n20 / Channel 165 / 5825MHz

Maximum Conducted Output Power



IEEE 802.11n40 / Channel 151 / 5755MHz

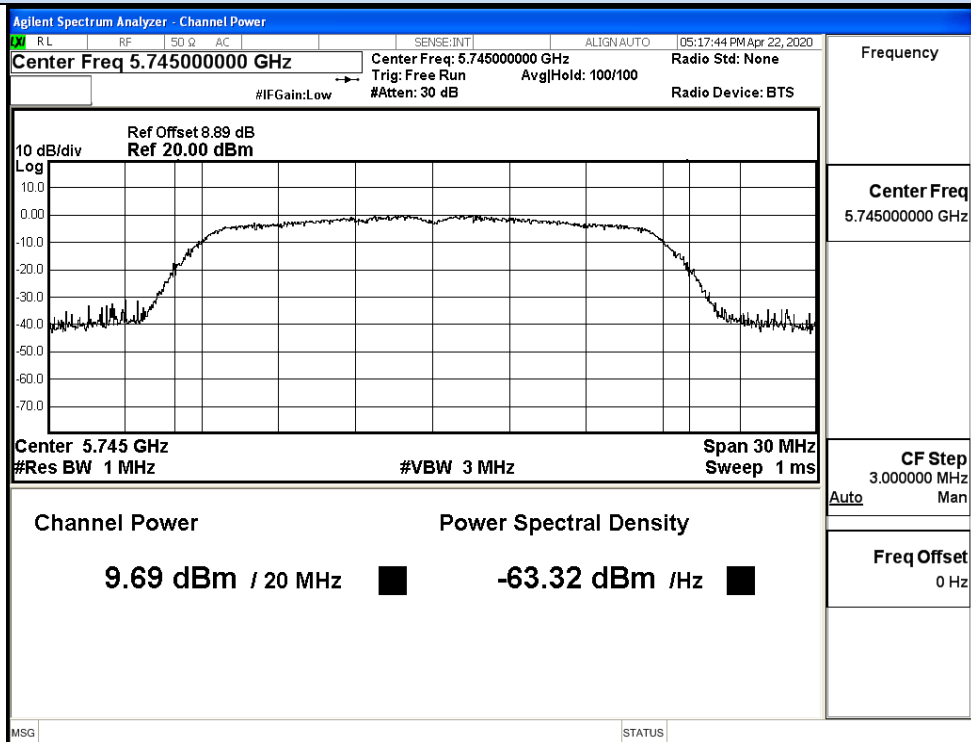


IEEE 802.11n40 / Channel 159 / 5795MHz

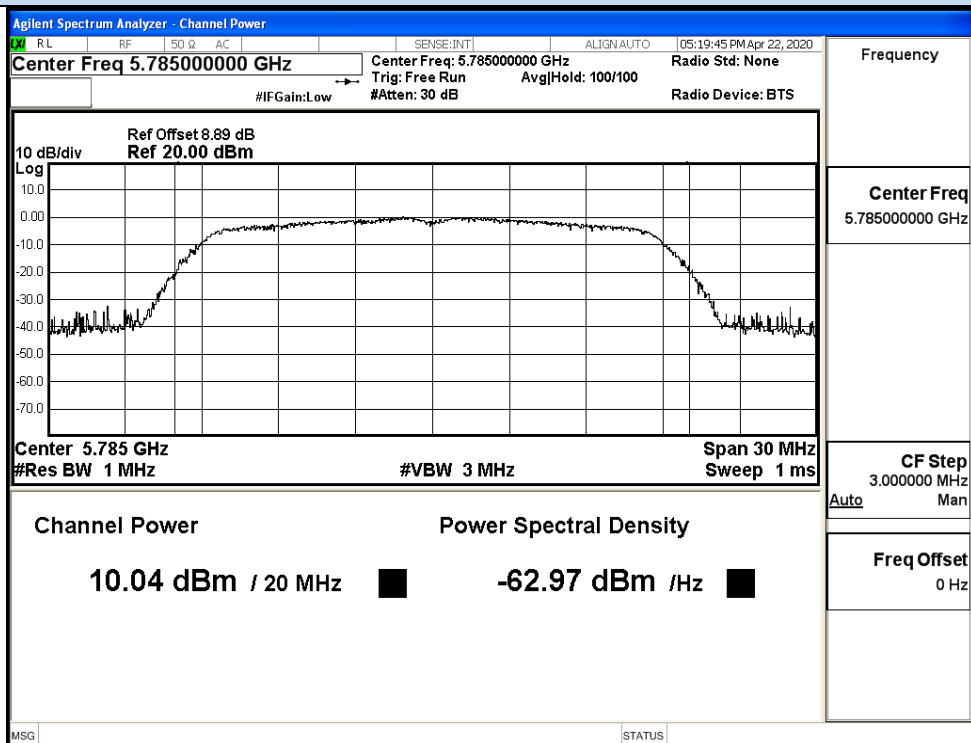
Antenna 1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11N20 SISO	149	5745	9.69	0	9.69	30	Pass
	157	5785	10.04	0	10.04		Pass
	165	5825	9.52	0	9.52		Pass
11N40 SISO	151	5755	10.87	0	10.87	30	Pass
	159	5795	10.24	0	10.24		Pass

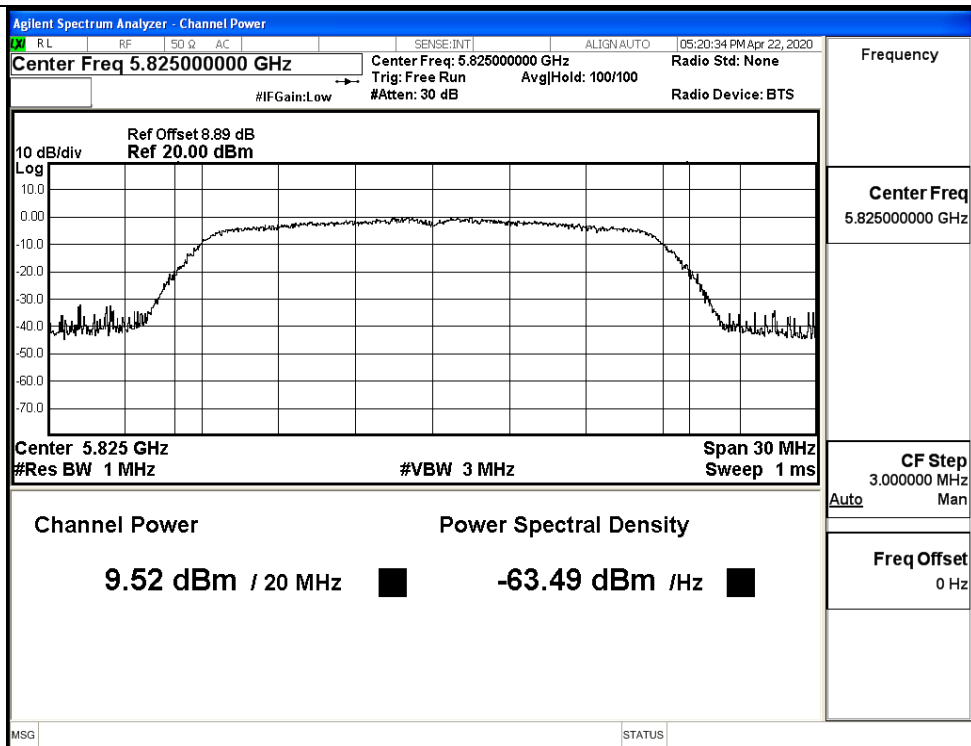
Maximum Conducted Output Power



IEEE 802.11n20 / Channel 149 / 5745MHz

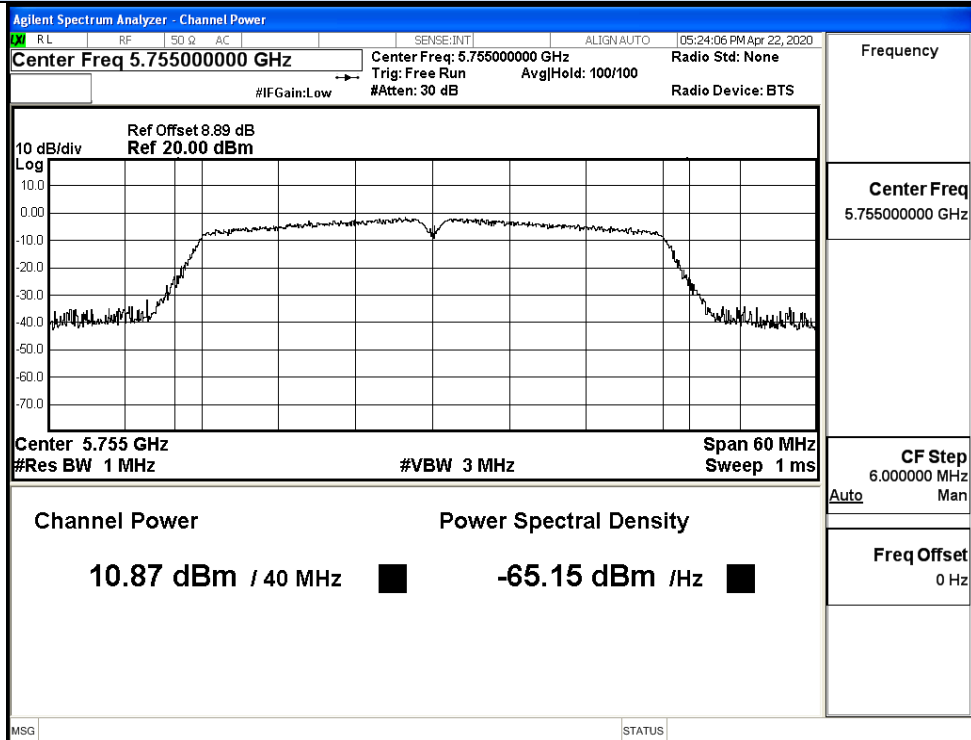


IEEE 802.11n20 / Channel 157 / 5785MHz

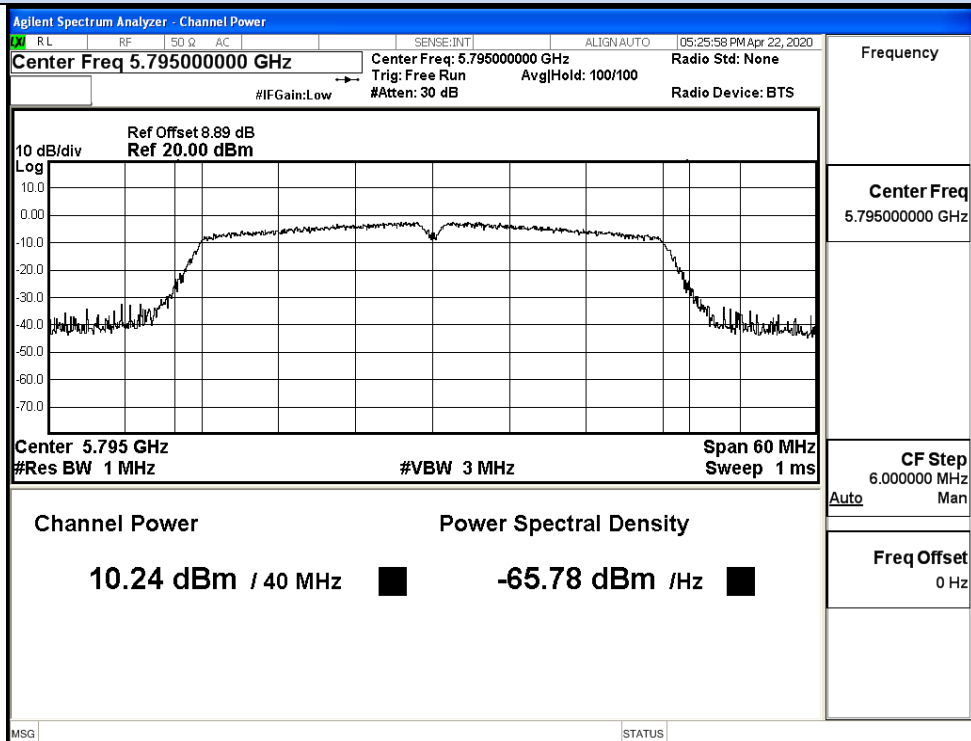


IEEE 802.11n20 / Channel 165 / 5825MHz

Maximum Conducted Output Power



IEEE 802.11n40 / Channel 151 / 5755MHz



IEEE 802.11n40 / Channel 159 / 5795MHz

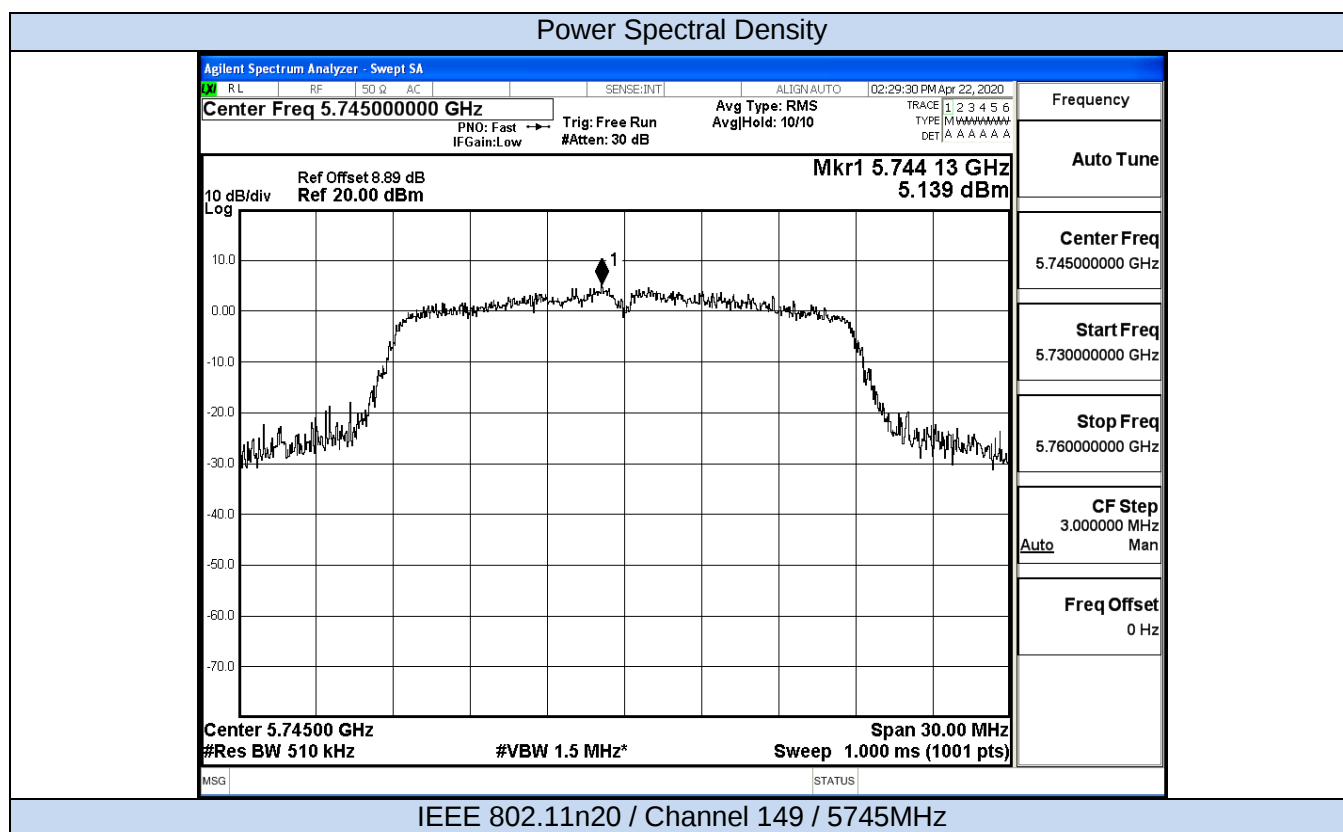
Ant0+1

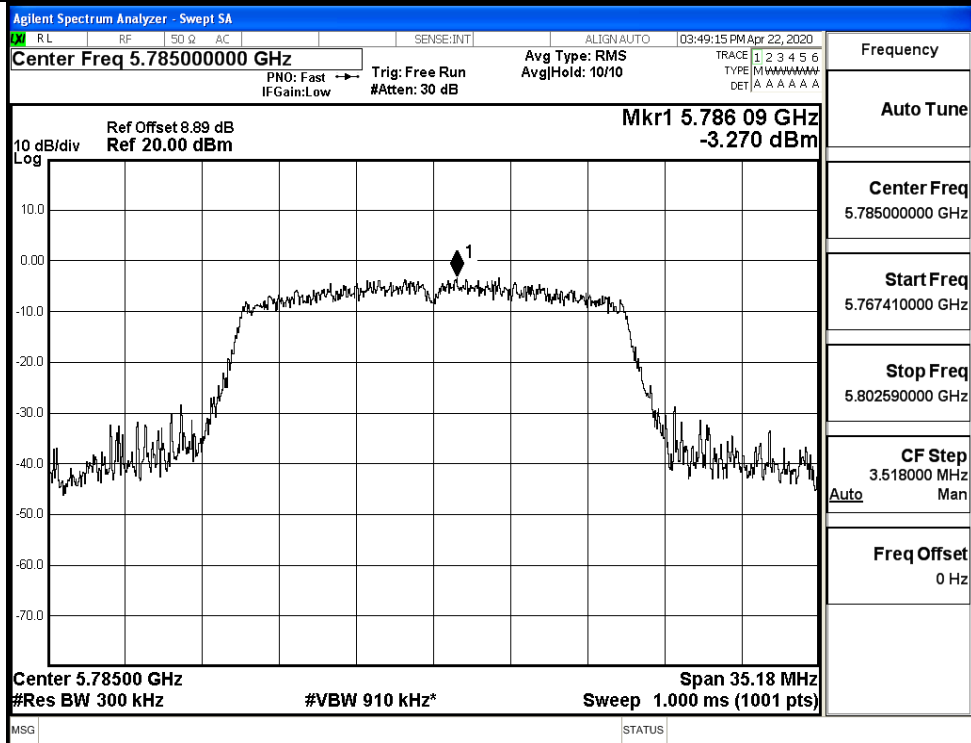
Test Mode	Channel	Frequency (MHz)	ANT 0 AVG Conducted Power (dBm)	ANT 1 AVG Conducted Power (dBm)	ANT 0+1 AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)	Verdict
11N20 SISO	149	5745	16.87	9.69	17.63	0	17.63	30	Pass
	157	5785	10.08	10.04	13.07	0	13.07		Pass
	165	5825	10.39	9.52	12.99	0	12.99		Pass
11N40 SISO	151	5755	10.01	10.87	13.47	0	13.47	30	Pass
	159	5795	10.67	10.24	13.47	0	13.47		Pass

B.3 Power Spectral Density

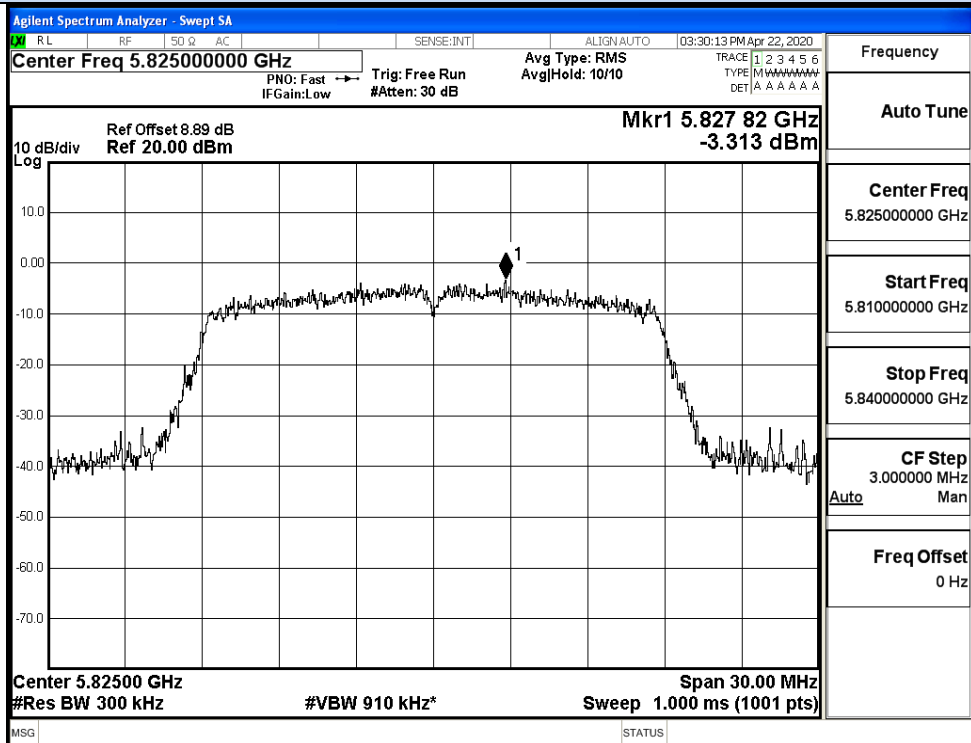
Antenna 0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
11N20 SISO	149	5745	5.14	0	2.218	7.358	30	Pass
	157	5785	-3.27	0	2.218	-1.052		Pass
	165	5825	-3.31	0	2.218	-1.092		Pass
11N40 SISO	151	5755	-6.87	0	2.218	-4.652	30	Pass
	159	5795	-5.94	0	2.218	-3.722		Pass



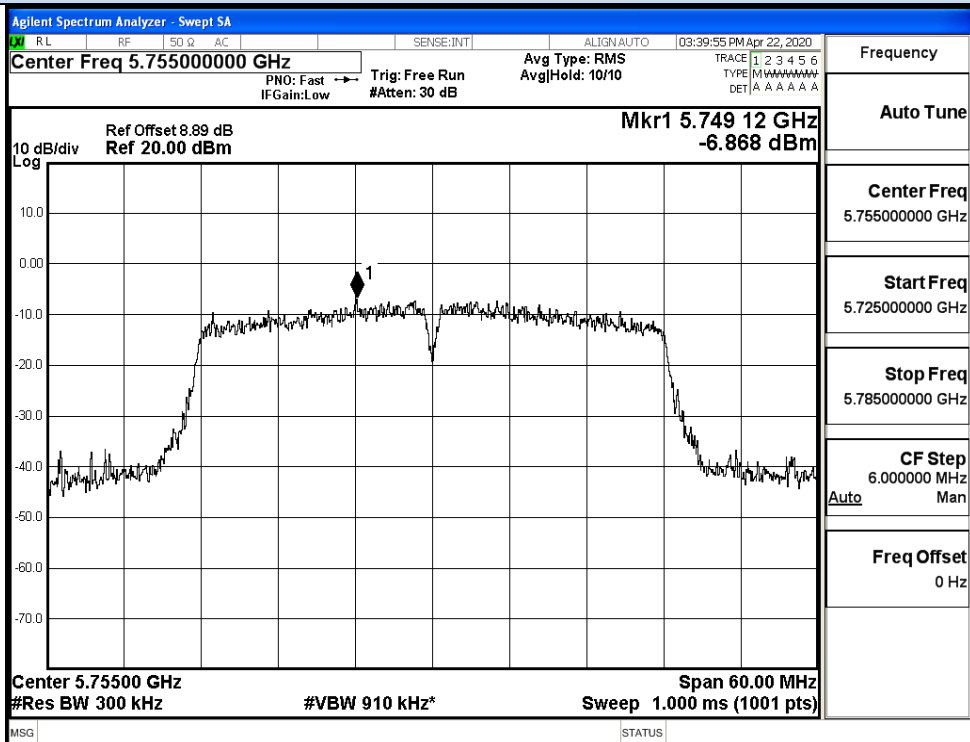


IEEE 802.11n20 / Channel 157 / 5785MHz

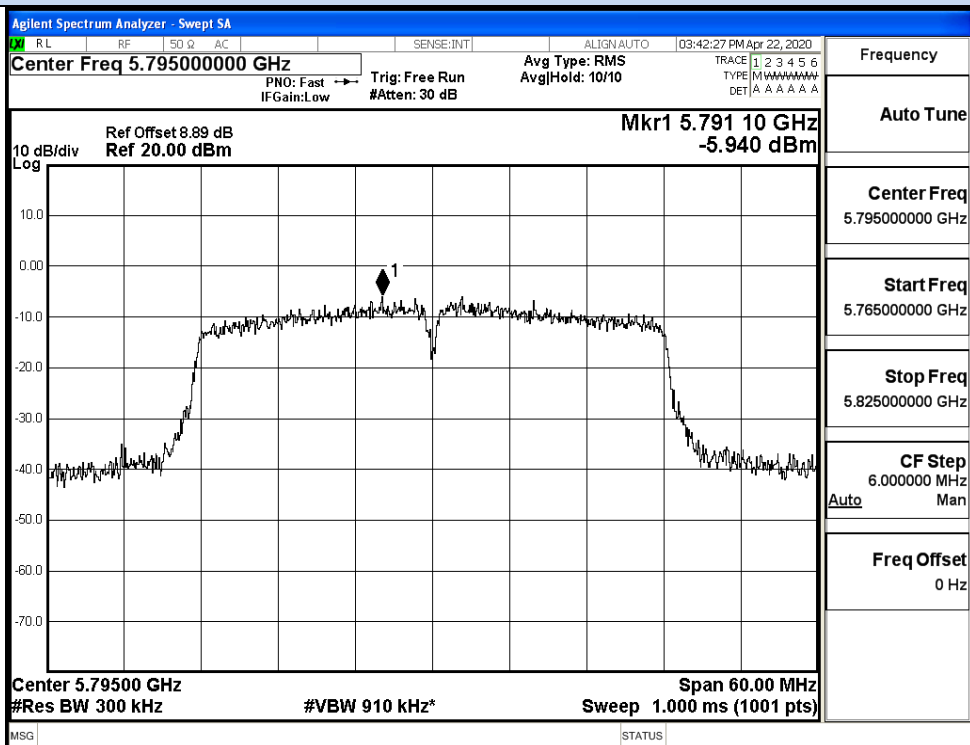


IEEE 802.11n20 / Channel 165 / 5825MHz

Power Spectral Density



IEEE 802.11n40 / Channel 151 / 5755MHz

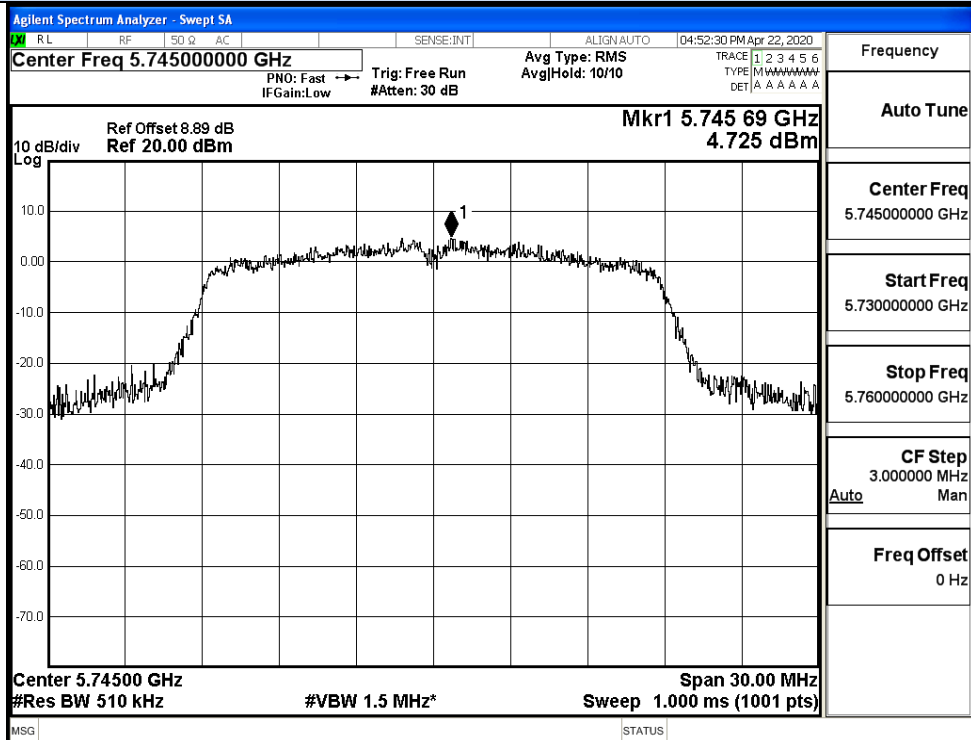


IEEE 802.11n40 / Channel 159 / 5795MHz

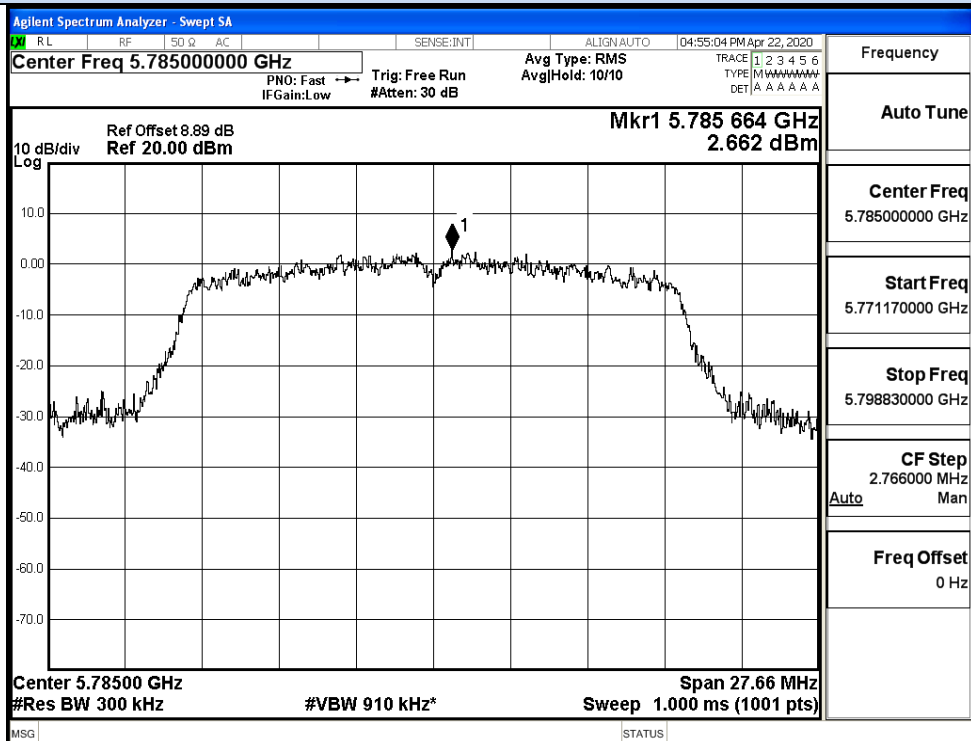
Antenna 1

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
11N20 SISO	149	5745	4.73	0	2.218	6.948	30	Pass
	157	5785	2.66	0	2.218	4.878		Pass
	165	5825	5.36	0	2.218	7.578		Pass
11N40 SISO	151	5755	2.68	0	2.218	4.898	30	Pass
	159	5795	-3.87	0	2.218	-1.652		Pass

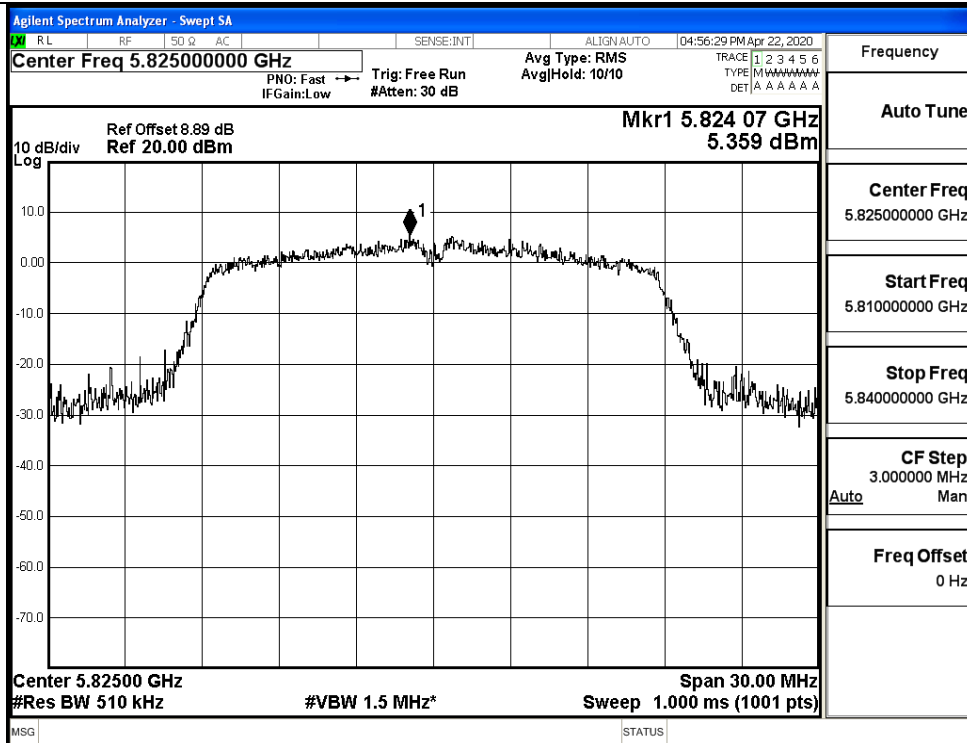
Power Spectral Density



IEEE 802.11n20 / Channel 149 / 5745MHz

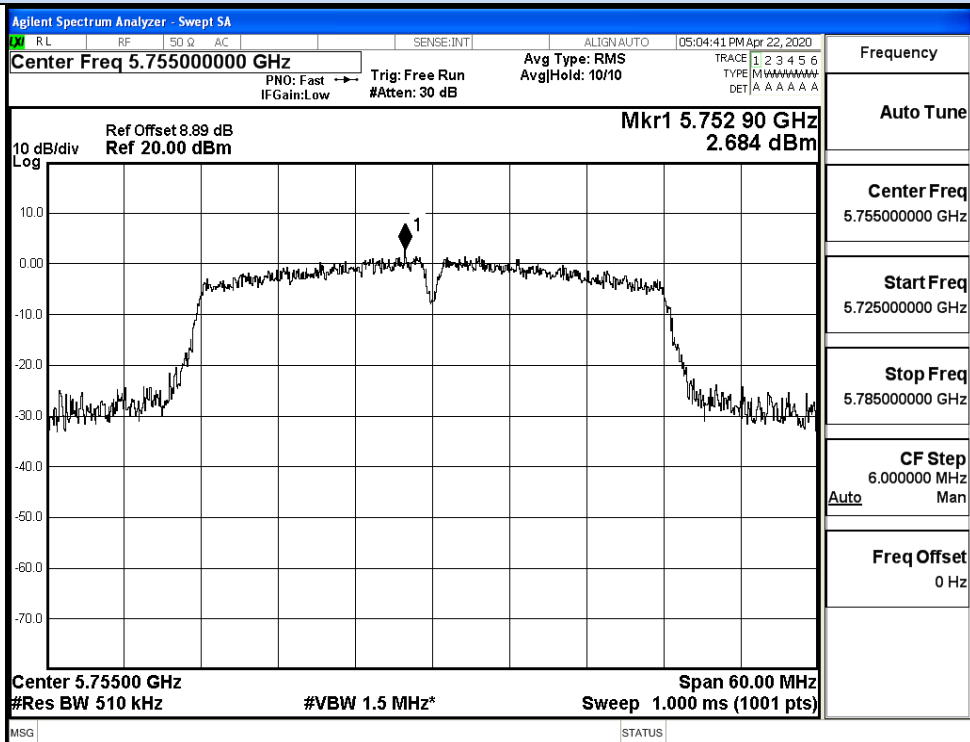


IEEE 802.11n20 / Channel 157 / 5785MHz

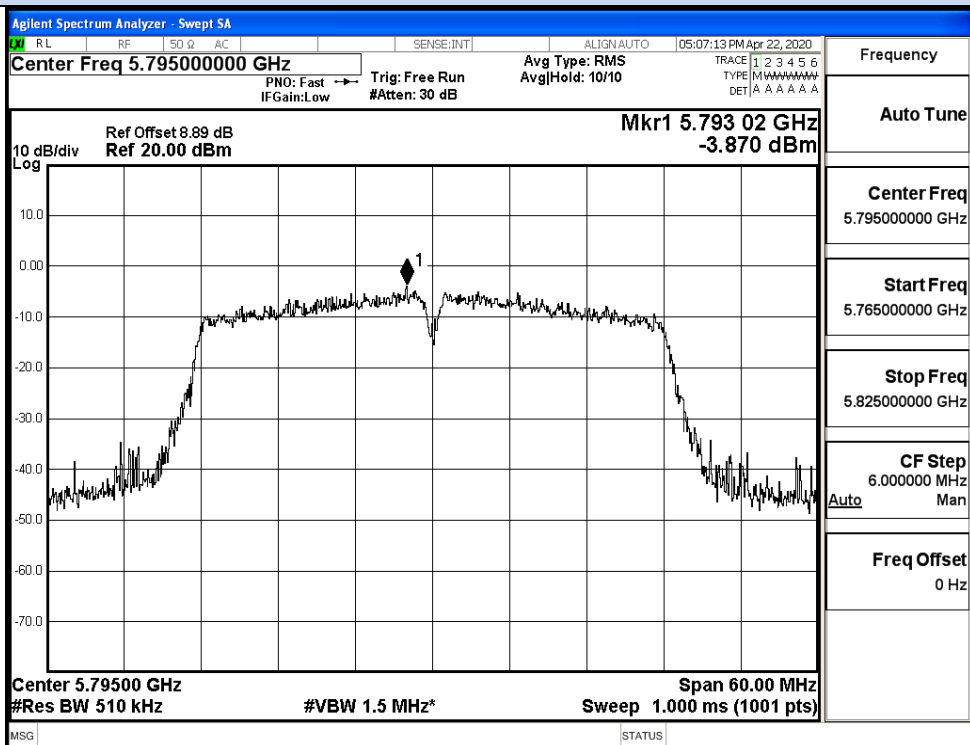


IEEE 802.11n20 / Channel 165 / 5825MHz

Power Spectral Density



IEEE 802.11n40 / Channel 151 / 5755MHz



IEEE 802.11n40 / Channel 159 / 5795MHz

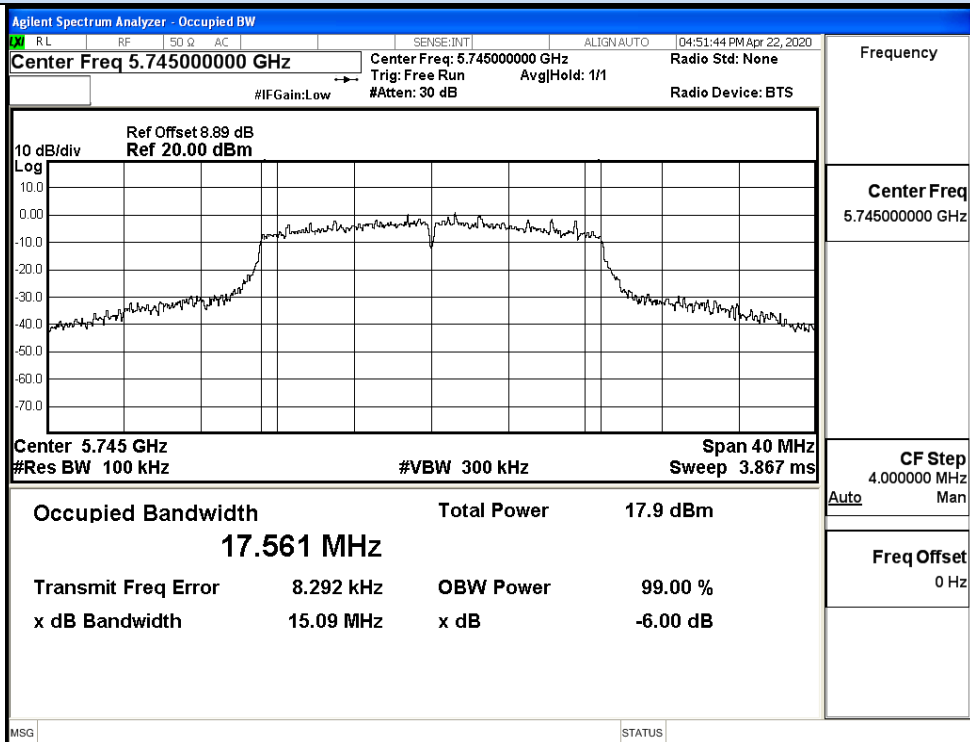
Ant0+1

Test Mode	Channel	Frequency (MHz)	ANT 0 Power Density (dBm/300K Hz)	ANT 1 Power Density (dBm/300K Hz)	ANT 0+1 Power Density (dBm/300K Hz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500 KHz)	Report Power Density (dBm/500 KHz)	Verdict
11N20 SISO	149	5745	5.14	4.73	7.95	0	2.218	10.168	30	Pass
	157	5785	-3.27	2.66	3.65	0	2.218	5.868		Pass
	165	5825	-3.31	5.36	5.91	0	2.218	8.128		Pass
11N40 SISO	151	5755	-6.87	2.68	3.14	0	2.218	5.358	30	Pass
	159	5795	-5.94	-3.87	-1.77	0	2.218	0.448		Pass

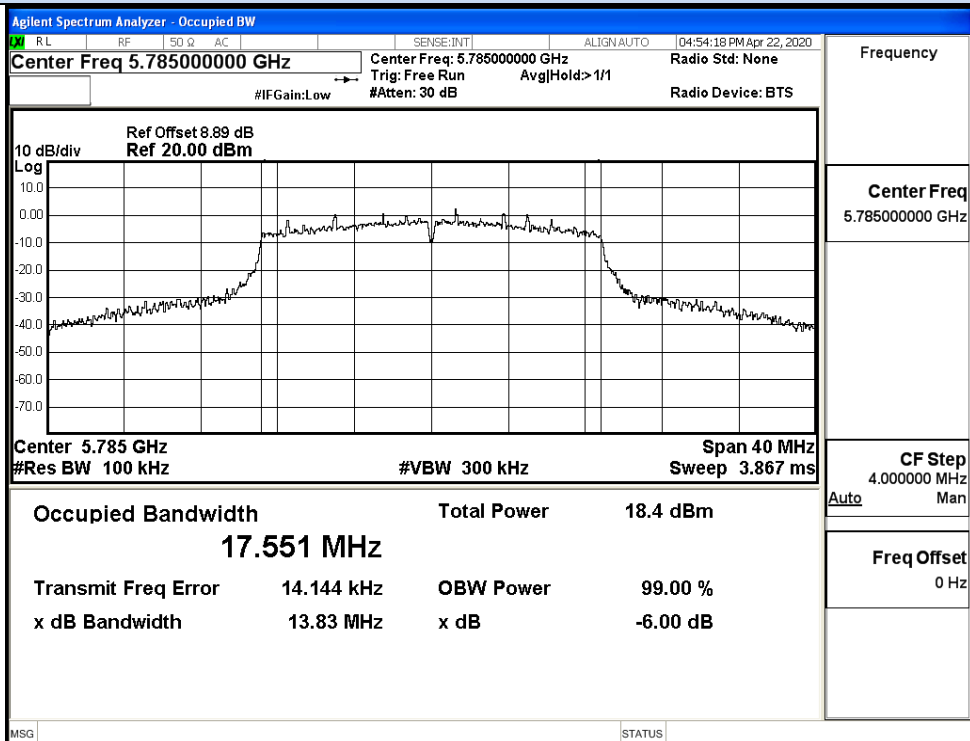
Antenna 1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11N20 SISO	149	5745	15.09	>=0.5	Pass
	157	5785	13.83		Pass
	165	5825	14.04		Pass
11N40 SISO	151	5755	33.82	>=0.5	Pass
	159	5795	33.91		Pass

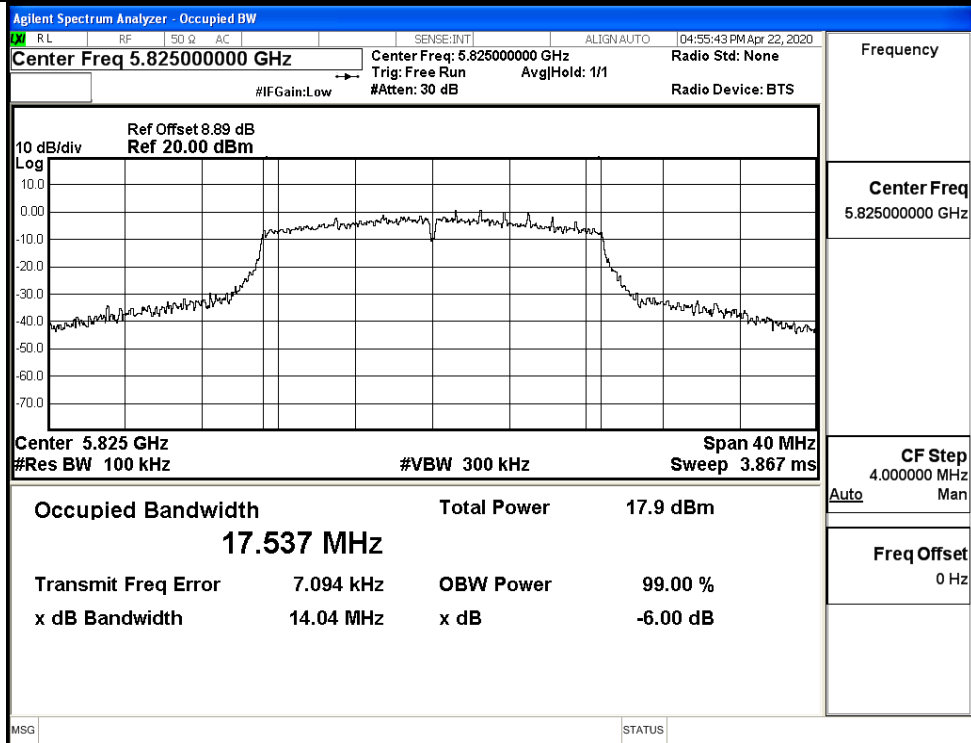
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

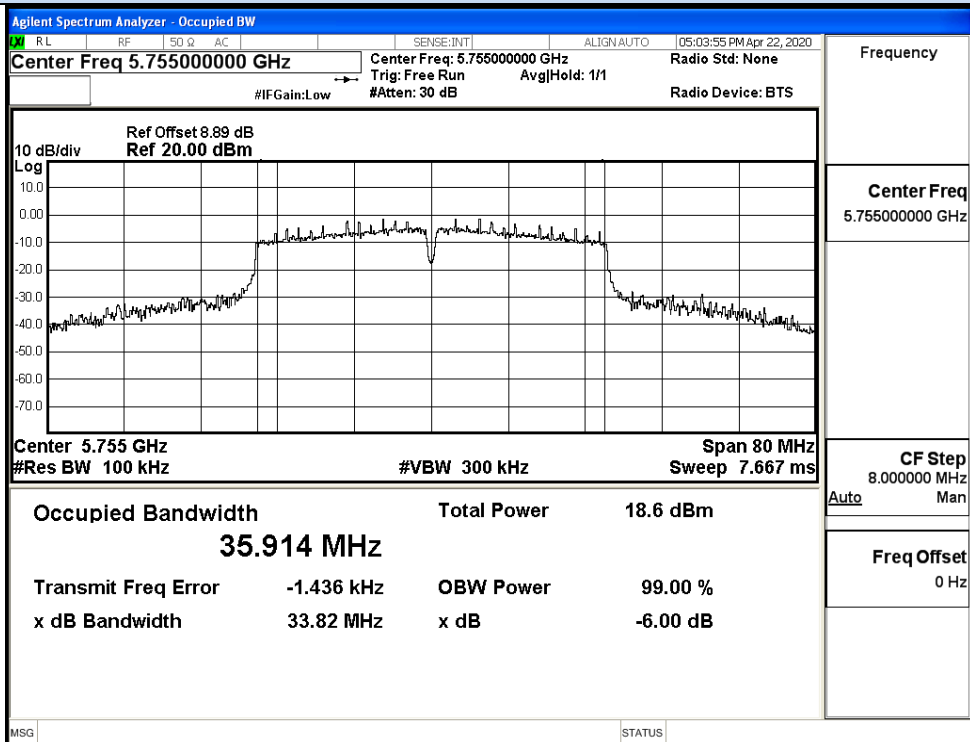


IEEE 802.11n20 / Channel 157 / 5785MHz

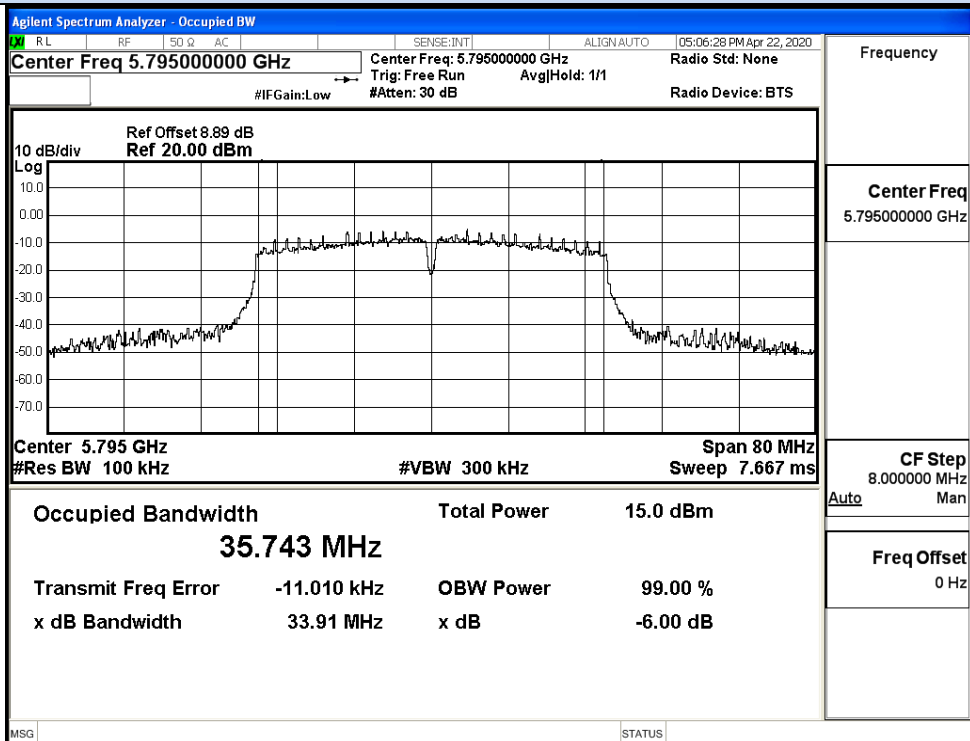


IEEE 802.11n20 / Channel 165 / 5825MHz

26dB Bandwidth



IEEE 802.11n40 / Channel 151 / 5755MHz



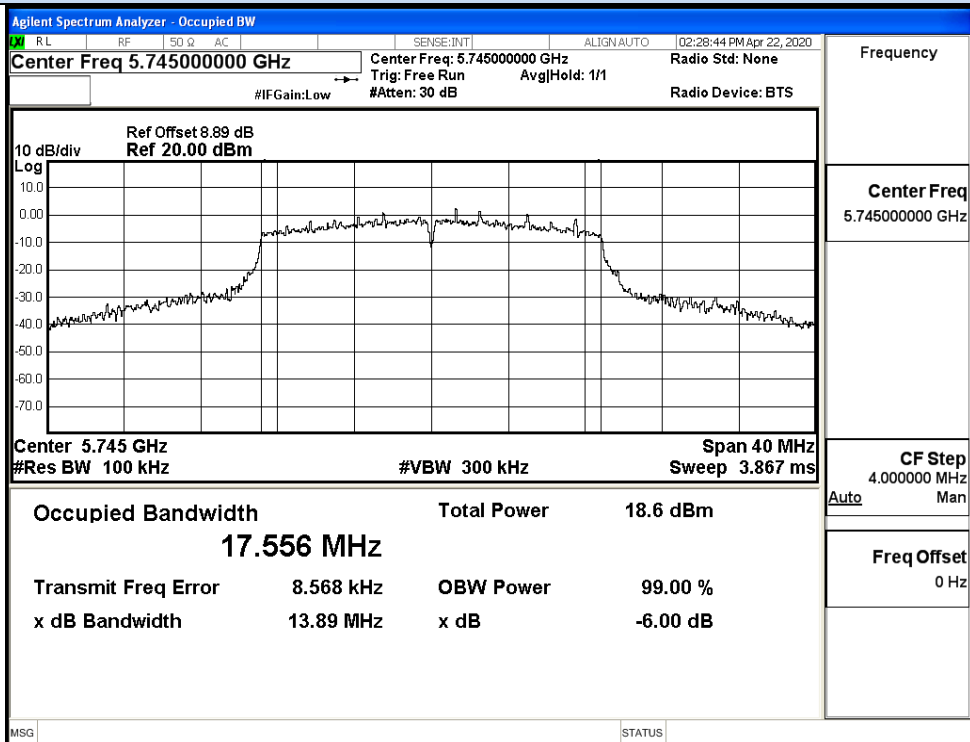
IEEE 802.11n40 / Channel 159 / 5795MHz

B.4 Emission Bandwidth

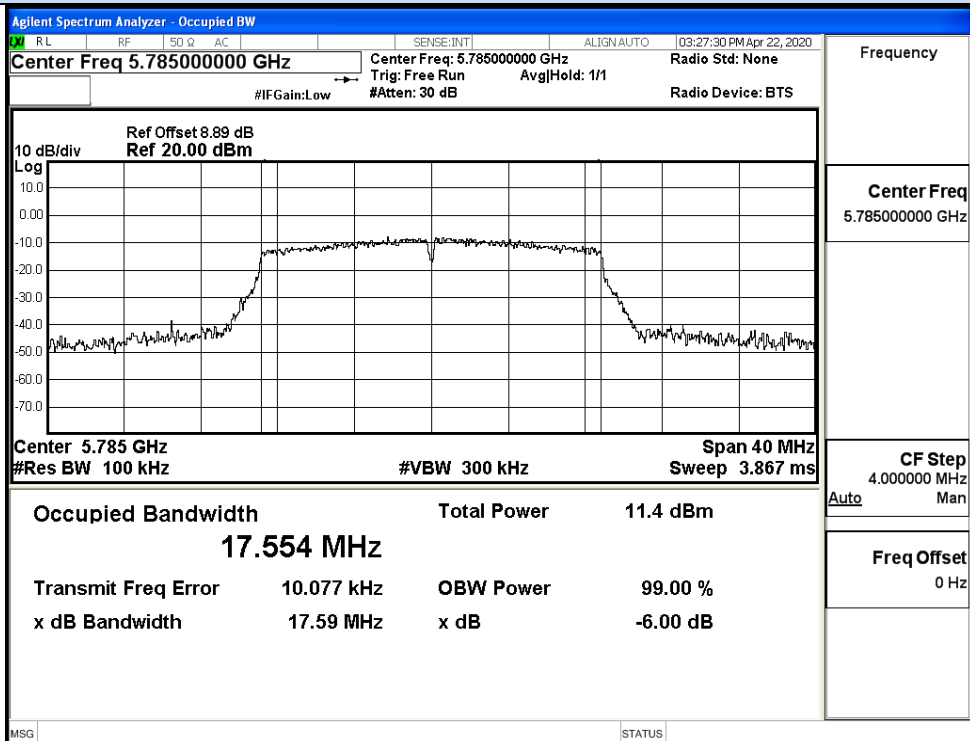
Antenna 0

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11N20 SISO	149	5745	13.89	>=0.5	Pass
	157	5785	17.59		Pass
	165	5825	17.60		Pass
11N40 SISO	151	5755	35.02	>=0.5	Pass
	159	5795	35.94		Pass

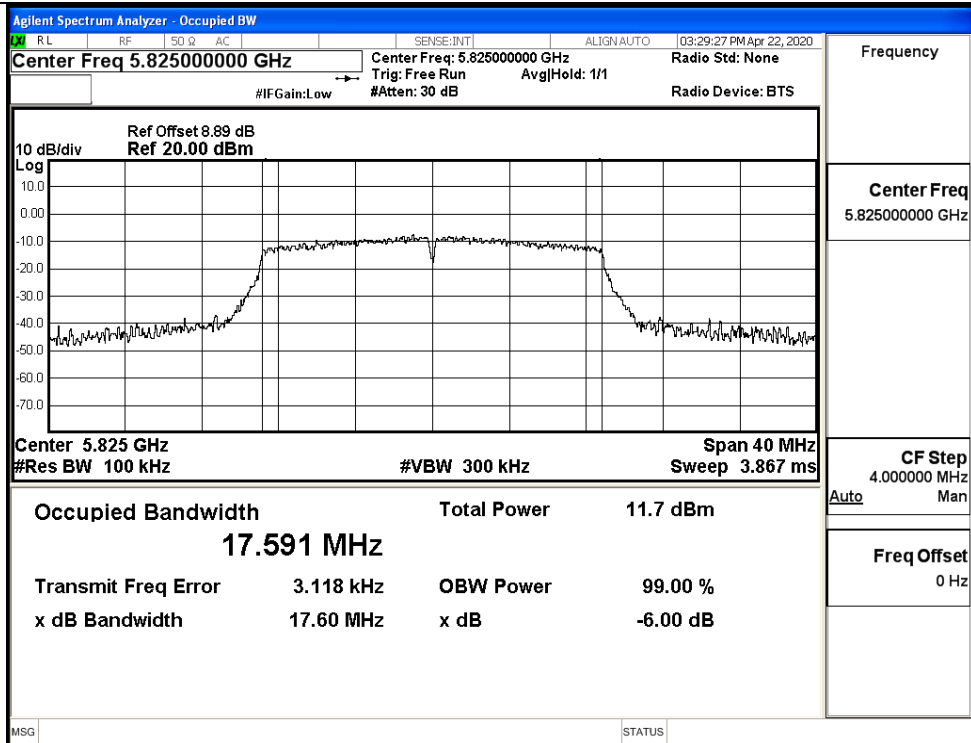
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

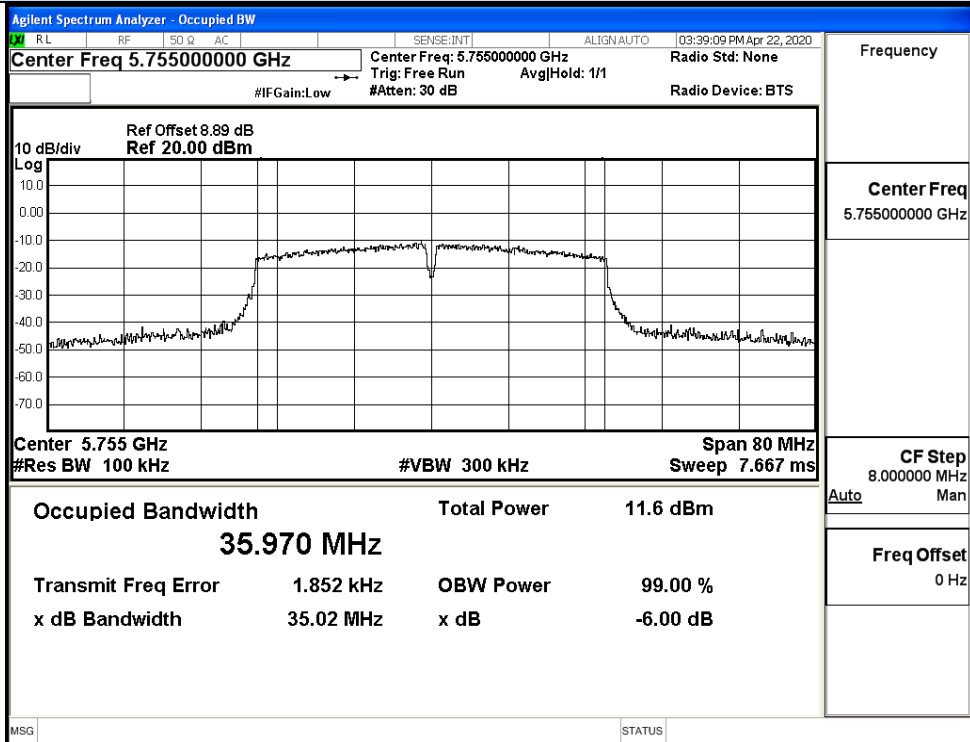


IEEE 802.11n20 / Channel 157 / 5785MHz

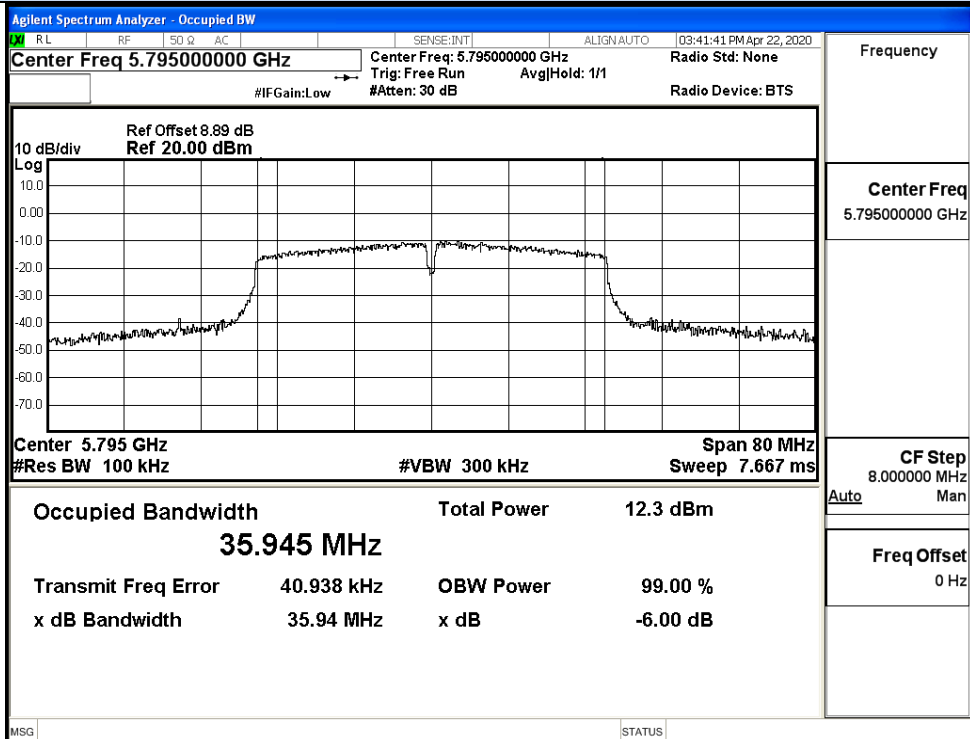


IEEE 802.11n20 / Channel 165 / 5825MHz

26dB Bandwidth



IEEE 802.11n40 / Channel 151 / 5755MHz



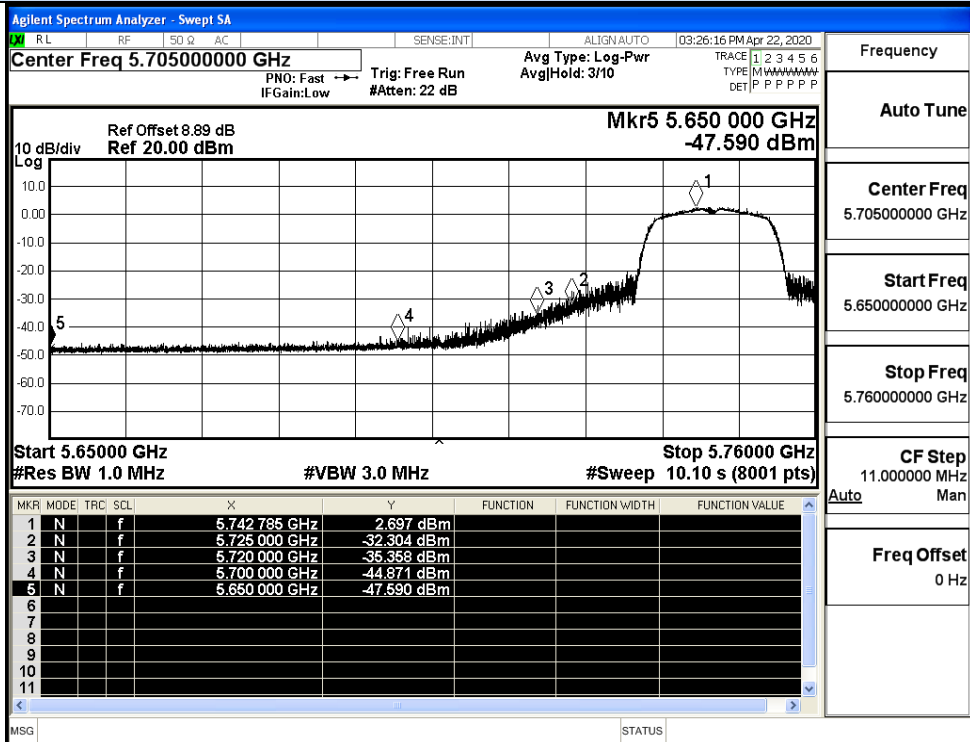
IEEE 802.11n40 / Channel 159 / 5795MHz

B.5 Undesirable Emissions Measurement

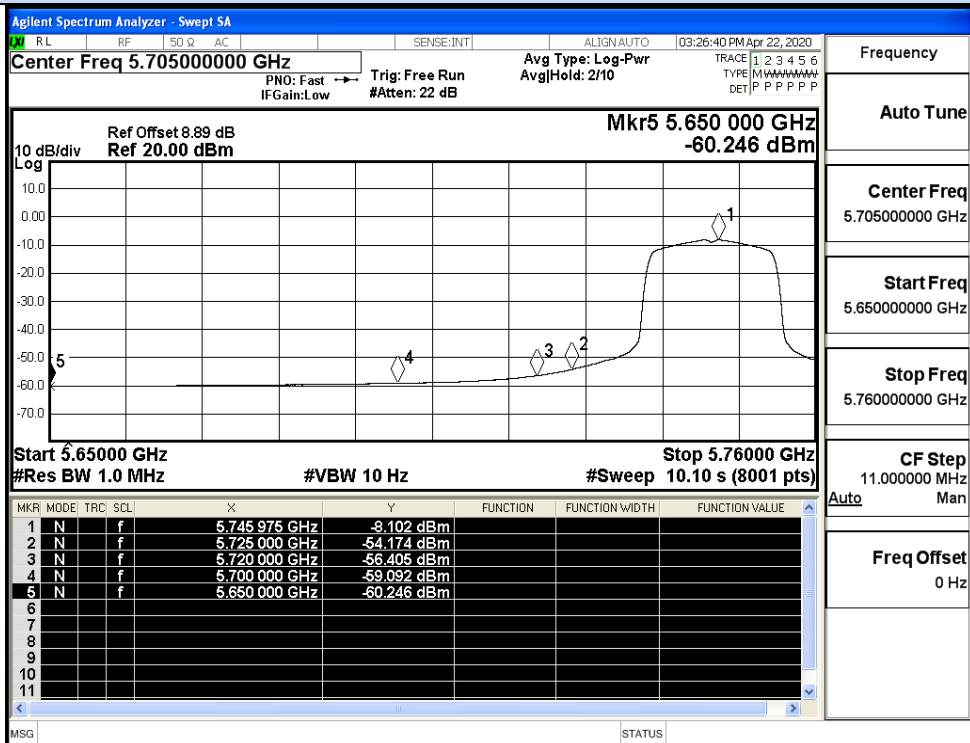
Antenna 0

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N20 SISO	149	5650.0	-47.59	2.50	-45.09	Peak	-27.0	Pass
		5650.0	-60.25	2.50	-57.75	Average	-27.0	Pass
		5700.0	-44.87	2.50	-42.37	Peak	10	Pass
		5700.0	-56.41	2.50	-53.91	Average	10	Pass
		5720.0	-35.36	2.50	-32.86	Peak	15.6	Pass
		5720.0	-59.09	2.50	-56.59	Average	15.6	Pass
		5725.0	-32.30	2.50	-29.80	Peak	27.0	Pass
		5725.0	-54.17	2.50	-51.67	Average	27.0	Pass
	165	5850.0	-31.34	2.50	-28.84	Peak	27.0	Pass
		5850.0	-54.44	2.50	-51.94	Average	27.0	Pass
		5855.0	-36.72	2.50	-34.22	Peak	15.6	Pass
		5855.0	-55.87	2.50	-53.37	Average	15.6	Pass
		5875.0	-46.60	2.50	-44.10	Peak	10	Pass
		5875.0	-58.39	2.50	-55.89	Average	10	Pass
		5925.0	-47.71	2.50	-45.21	Peak	-27.0	Pass
		5925.0	-59.74	2.50	-57.24	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	-47.57	2.50	-45.07	Peak	-27.0	Pass
		5650.0	-60.06	2.50	-57.56	Average	-27.0	Pass
		5700.0	-41.03	2.50	-38.53	Peak	10	Pass
		5700.0	-56.50	2.50	-54.00	Average	10	Pass
		5720.0	-33.47	2.50	-30.97	Peak	15.6	Pass
		5720.0	-50.27	2.50	-47.77	Average	15.6	Pass
		5725.0	-31.23	2.50	-28.73	Peak	27.0	Pass
		5725.0	-48.35	2.50	-45.85	Average	27.0	Pass
	159	5850.0	-34.91	2.50	-32.41	Peak	27.0	Pass
		5850.0	-52.87	2.50	-50.37	Average	27.0	Pass
		5855.0	-37.38	2.50	-34.88	Peak	15.6	Pass
		5855.0	-54.01	2.50	-51.51	Average	15.6	Pass
		5875.0	-44.64	2.50	-42.14	Peak	10	Pass
		5875.0	-57.39	2.50	-54.89	Average	10	Pass
		5925.0	-49.31	2.50	-46.81	Peak	-27.0	Pass
		5925.0	-59.58	2.50	-57.08	Average	-27.0	Pass

Undesirable Emissions Measurement

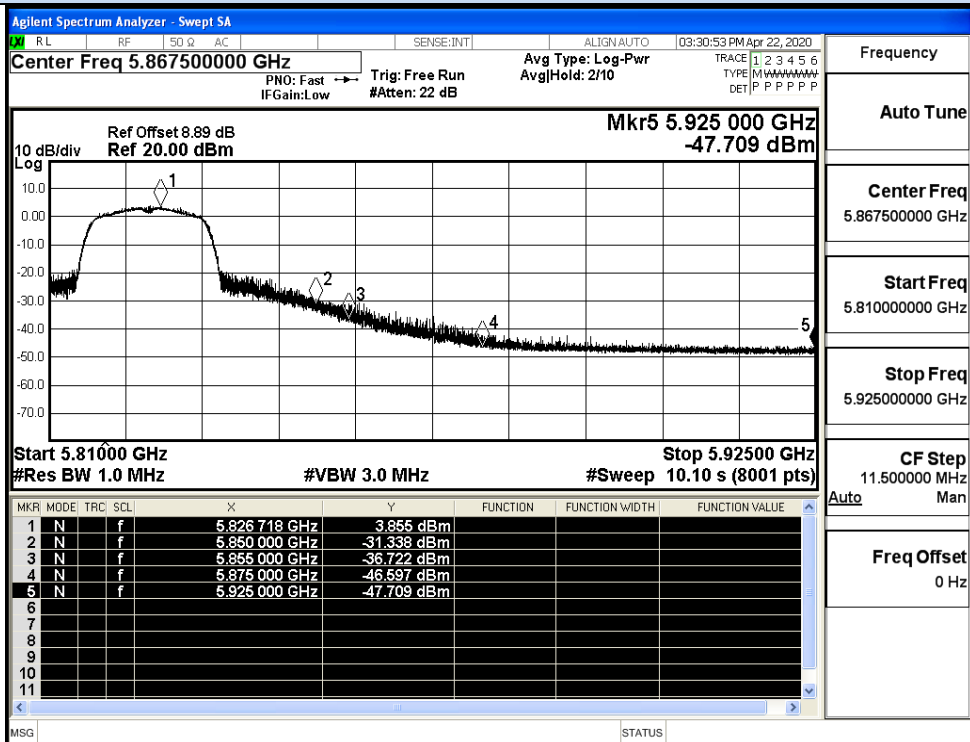


IEEE 802.11n20 / Channel 149 / 5745MHz / Peak

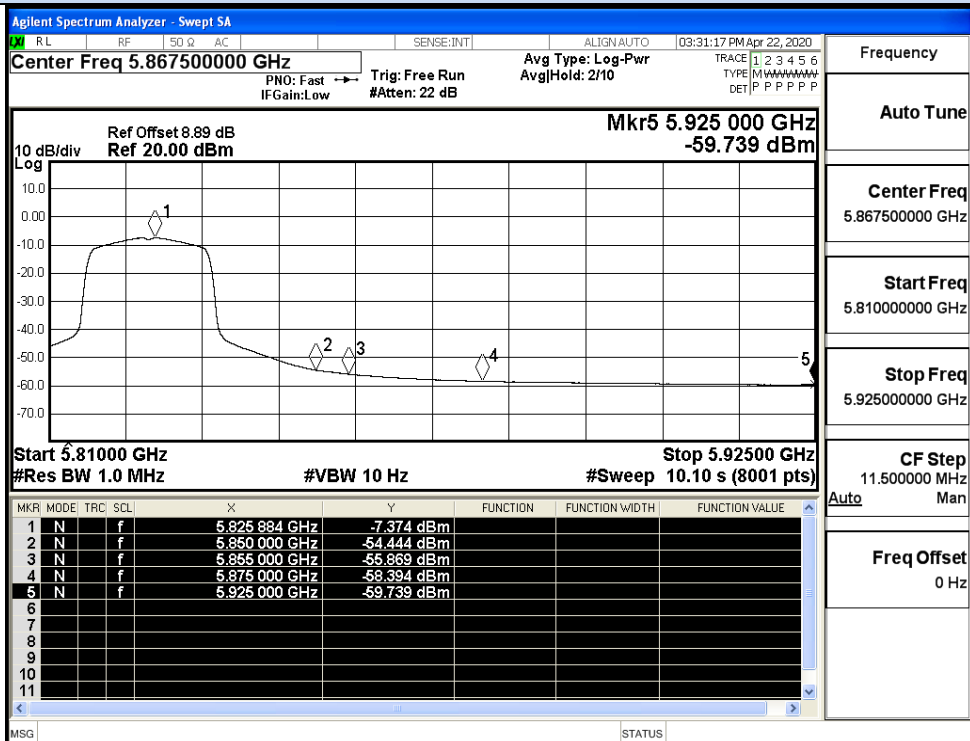


IEEE 802.11n20 / Channel 149 / 5745MHz / Average

Undesirable Emissions Measurement

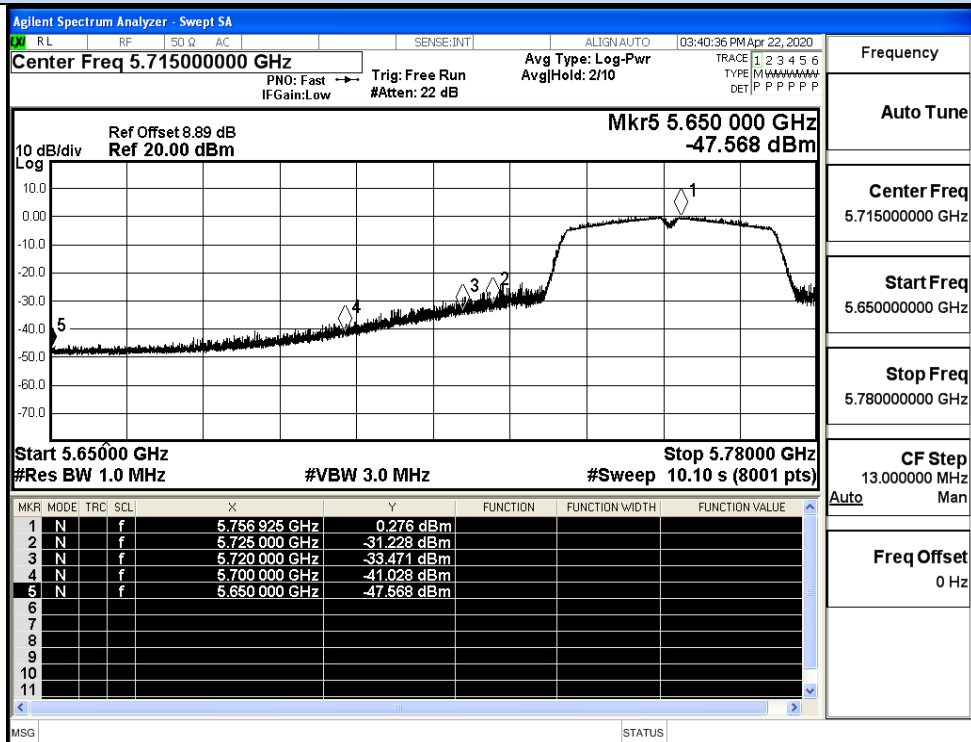


IEEE 802.11n20 / Channel 165 / 5825MHz / Peak

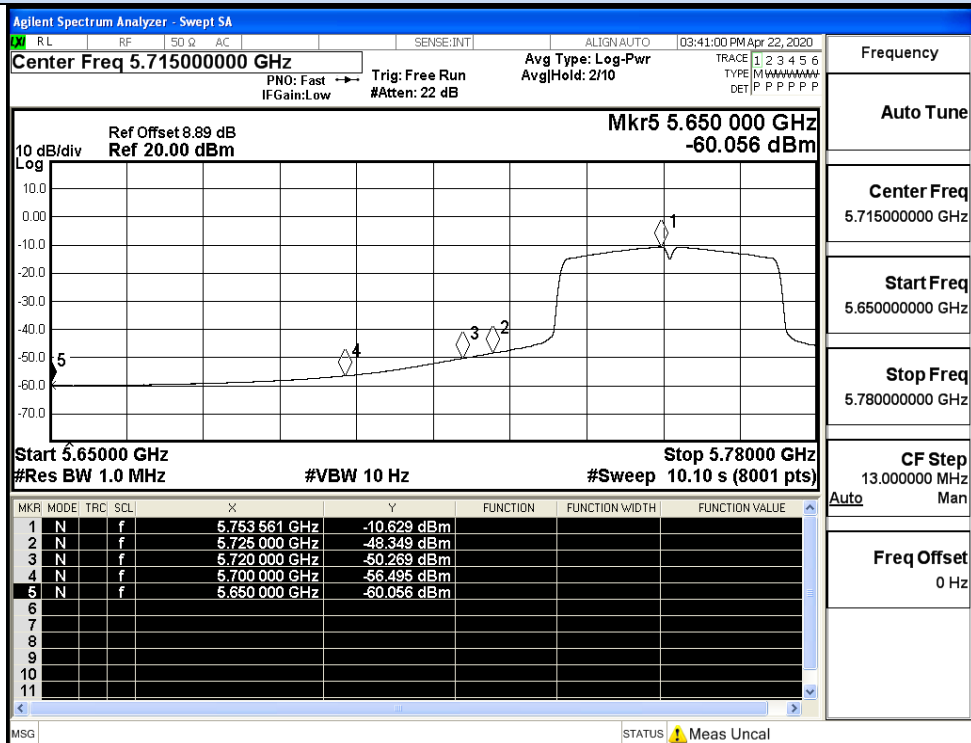


IEEE 802.11n20 / Channel 165 / 5825MHz / Average

Undesirable Emissions Measurement

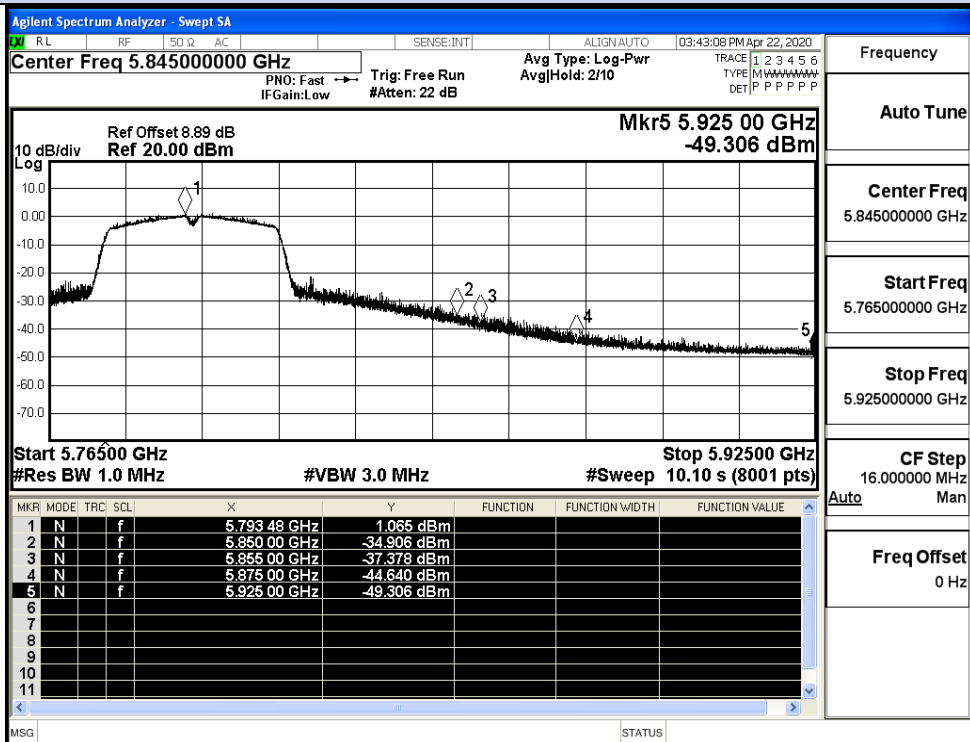


IEEE 802.11n40 / Channel 151 / 5755MHz / Peak

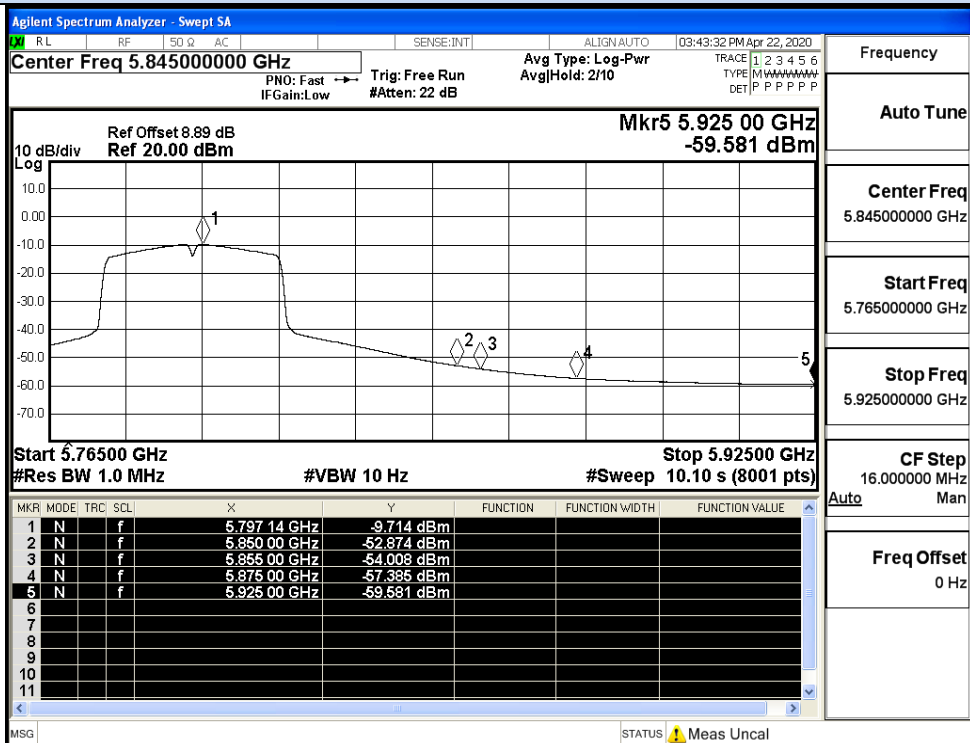


IEEE 802.11n40 / Channel 151 / 5755MHz / Average

Undesirable Emissions Measurement



IEEE 802.11n40 / Channel 159 / 5795MHz / Peak

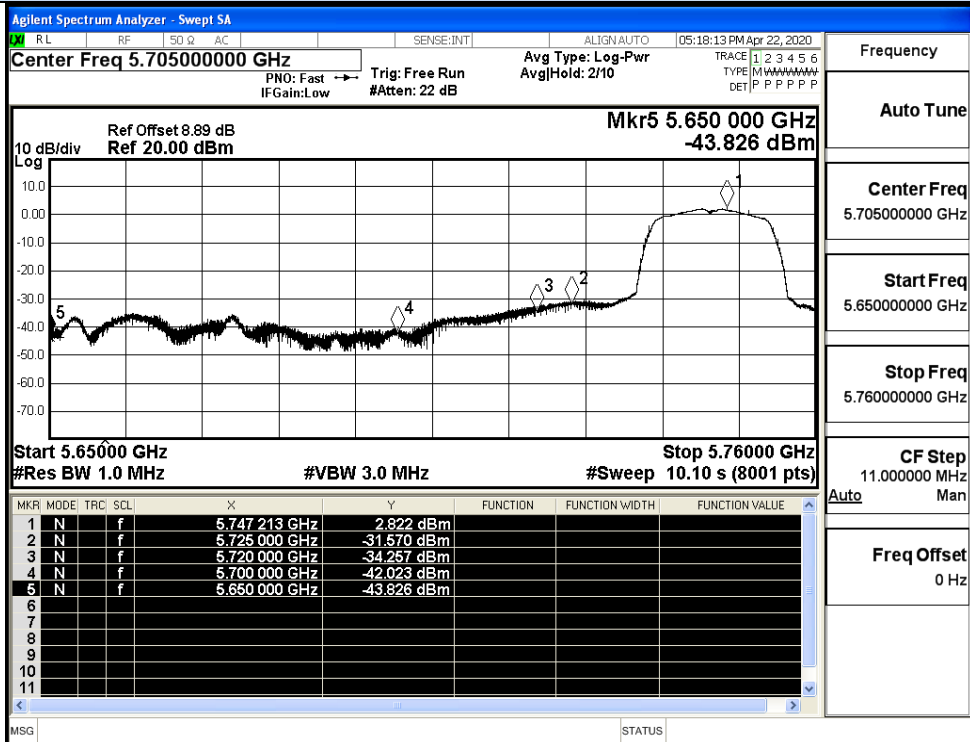


IEEE 802.11n40 / Channel 159 / 5795MHz / Average

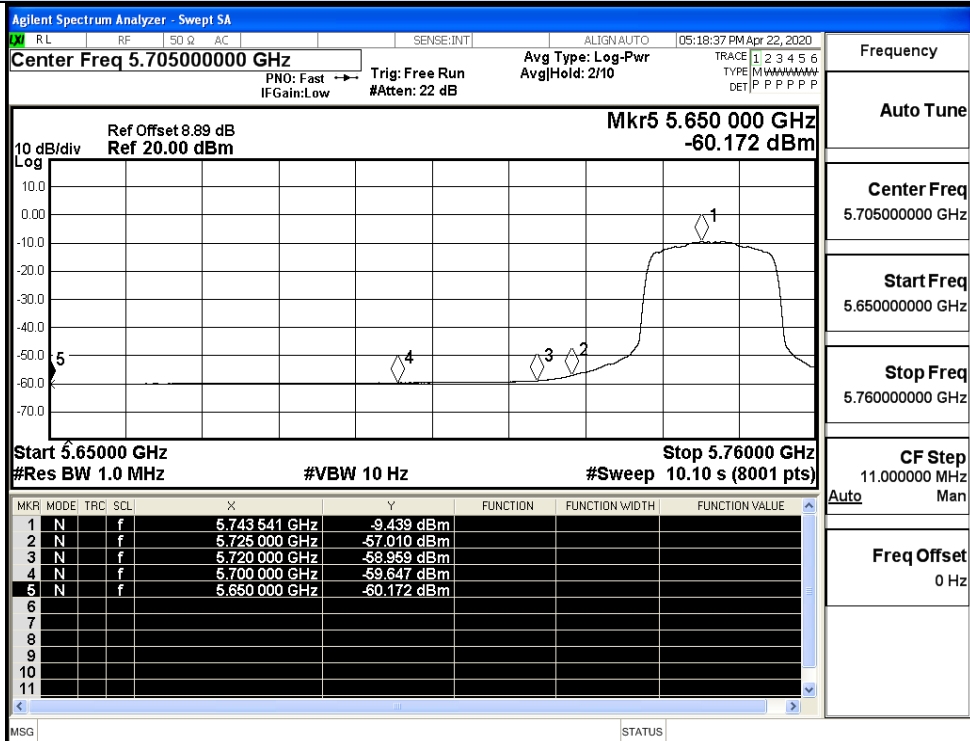
Antenna 1

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N20 SISO	149	5650.0	-43.83	2.50	-41.33	Peak	-27.0	Pass
		5650.0	-60.17	2.50	-57.67	Average	-27.0	Pass
		5700.0	-42.02	2.50	-39.52	Peak	10	Pass
		5700.0	-58.96	2.50	-56.46	Average	10	Pass
		5720.0	-34.26	2.50	-31.76	Peak	15.6	Pass
		5720.0	-59.65	2.50	-57.15	Average	15.6	Pass
		5725.0	-31.57	2.50	-29.07	Peak	27.0	Pass
		5725.0	-57.01	2.50	-54.51	Average	27.0	Pass
	165	5850.0	-29.70	2.50	-27.20	Peak	27.0	Pass
		5850.0	-58.61	2.50	-56.11	Average	27.0	Pass
		5855.0	-36.38	2.50	-33.88	Peak	15.6	Pass
		5855.0	-58.92	2.50	-56.42	Average	15.6	Pass
		5875.0	-44.61	2.50	-42.11	Peak	10	Pass
		5875.0	-59.29	2.50	-56.79	Average	10	Pass
		5925.0	-46.73	2.50	-44.23	Peak	-27.0	Pass
		5925.0	-60.02	2.50	-57.52	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	-44.27	2.50	-41.77	Peak	-27.0	Pass
		5650.0	-59.50	2.50	-57.00	Average	-27.0	Pass
		5700.0	-44.73	2.50	-42.23	Peak	10	Pass
		5700.0	-58.71	2.50	-56.21	Average	10	Pass
		5720.0	-36.09	2.50	-33.59	Peak	15.6	Pass
		5720.0	-55.02	2.50	-52.52	Average	15.6	Pass
		5725.0	-33.94	2.50	-31.44	Peak	27.0	Pass
		5725.0	-52.53	2.50	-50.03	Average	27.0	Pass
	159	5850.0	-41.49	2.50	-38.99	Peak	27.0	Pass
		5850.0	-58.61	2.50	-56.11	Average	27.0	Pass
		5855.0	-38.23	2.50	-35.73	Peak	15.6	Pass
		5855.0	-58.64	2.50	-56.14	Average	15.6	Pass
		5875.0	-37.68	2.50	-35.18	Peak	10	Pass
		5875.0	-58.97	2.50	-56.47	Average	10	Pass
		5925.0	-47.61	2.50	-45.11	Peak	-27.0	Pass
		5925.0	-59.72	2.50	-57.22	Average	-27.0	Pass

Undesirable Emissions Measurement

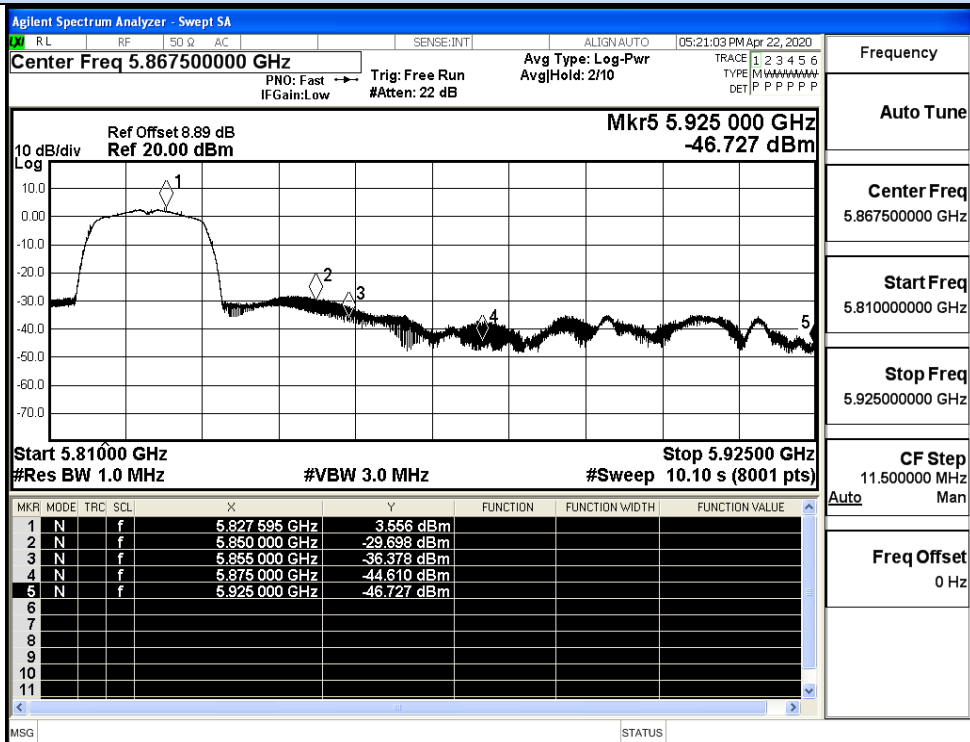


IEEE 802.11n20 / Channel 149 / 5745MHz / Peak

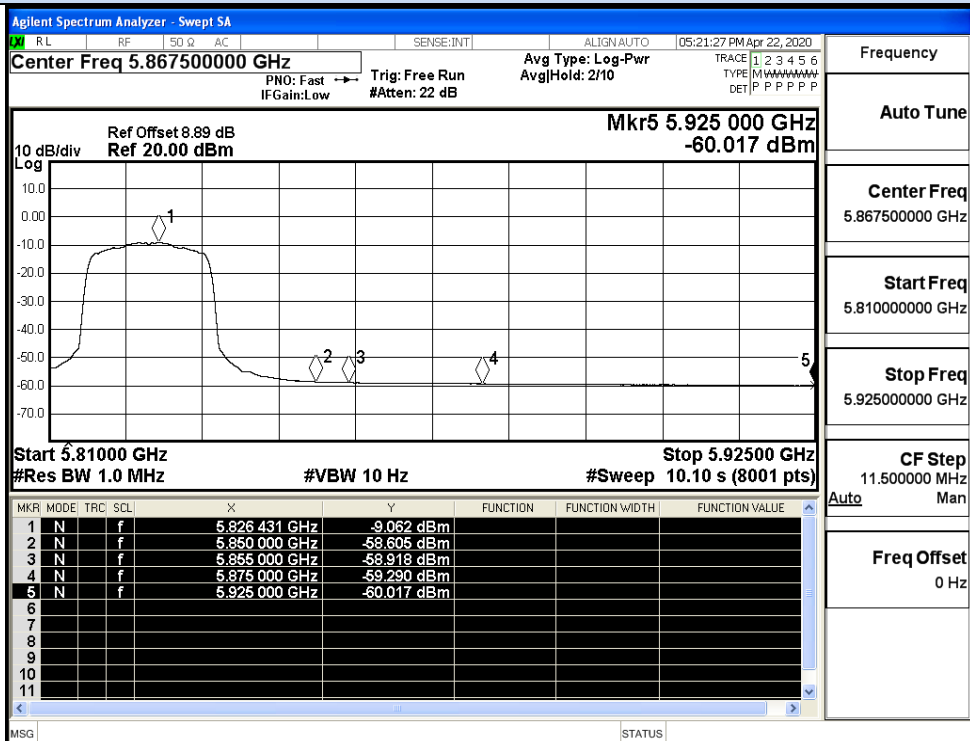


IEEE 802.11n20 / Channel 149 / 5745MHz / Average

Undesirable Emissions Measurement

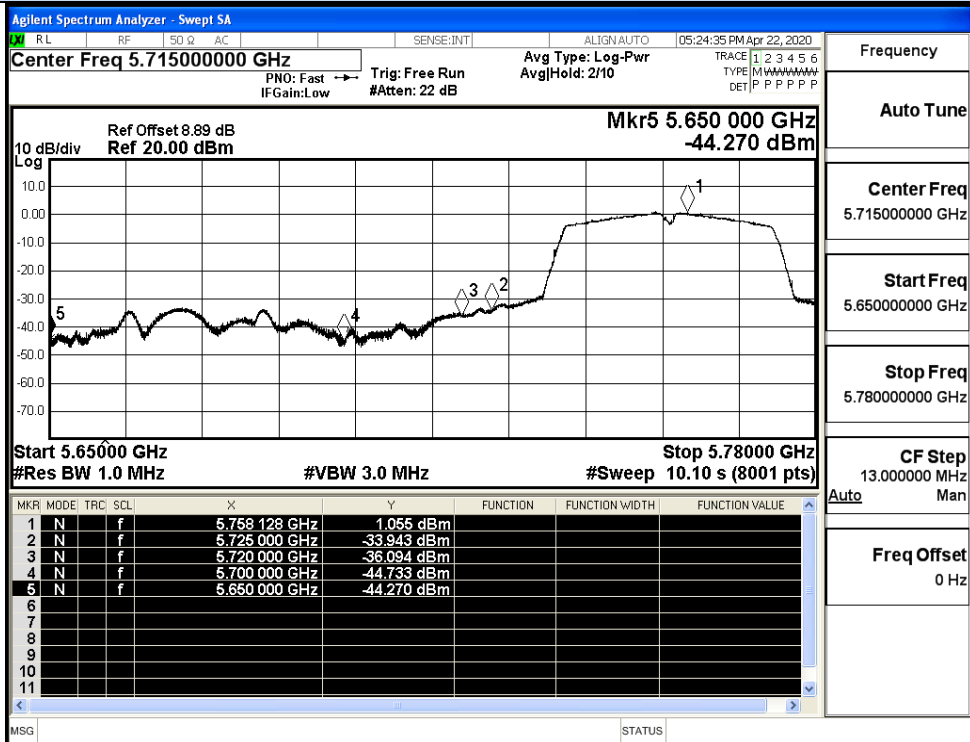


IEEE 802.11n20 / Channel 165 / 5825MHz / Peak

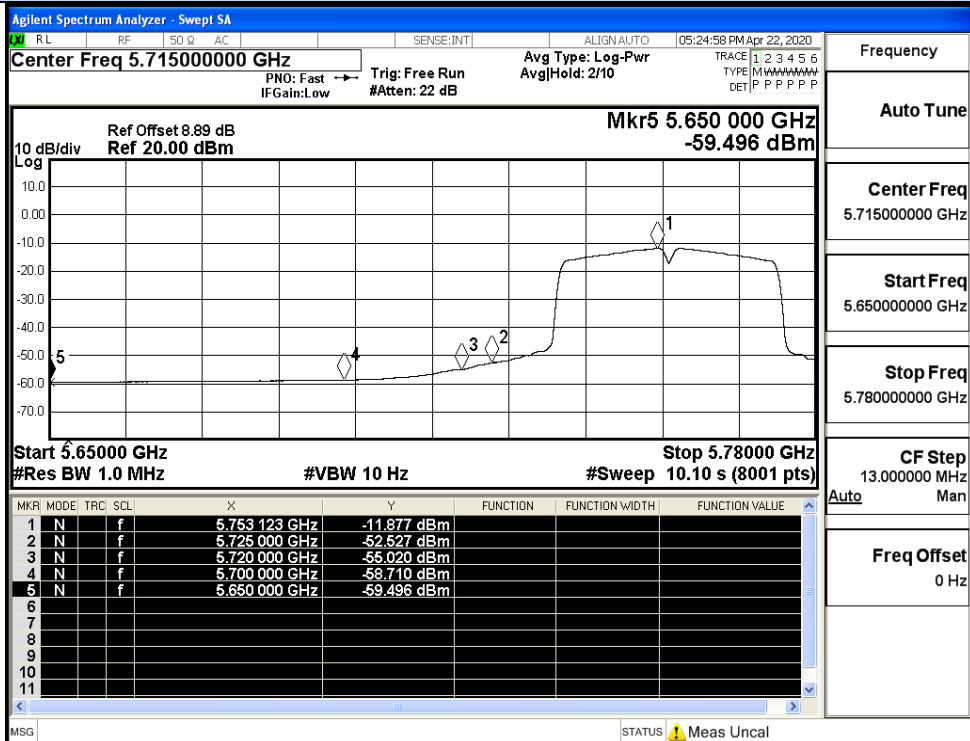


IEEE 802.11n20 / Channel 165 / 5825MHz / Average

Undesirable Emissions Measurement

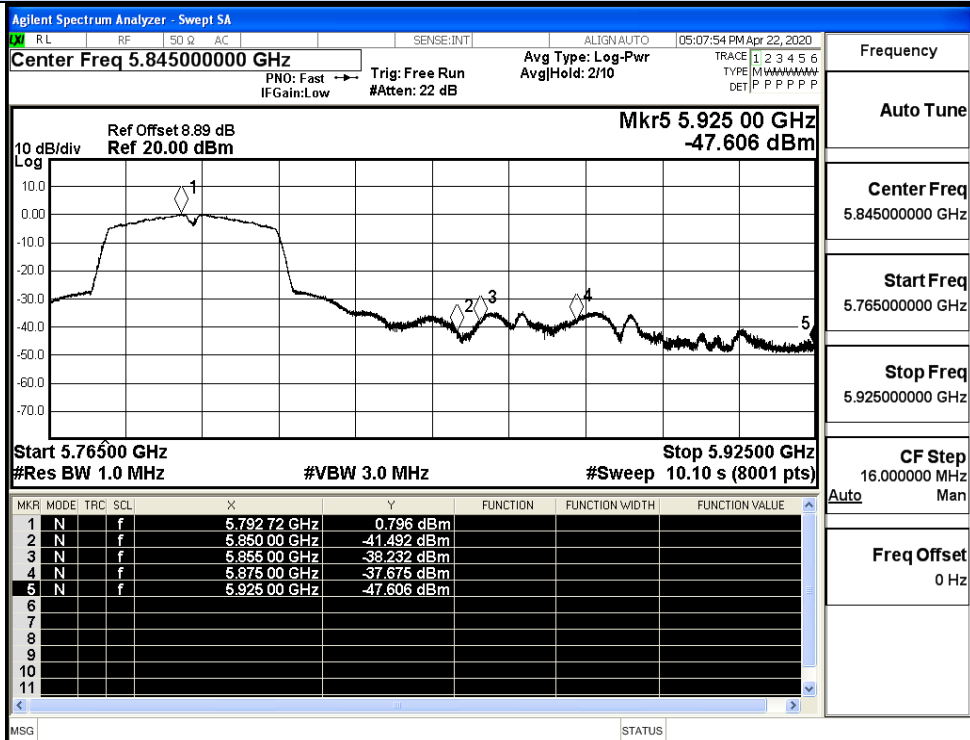


IEEE 802.11n40 / Channel 151 / 5755MHz / Peak

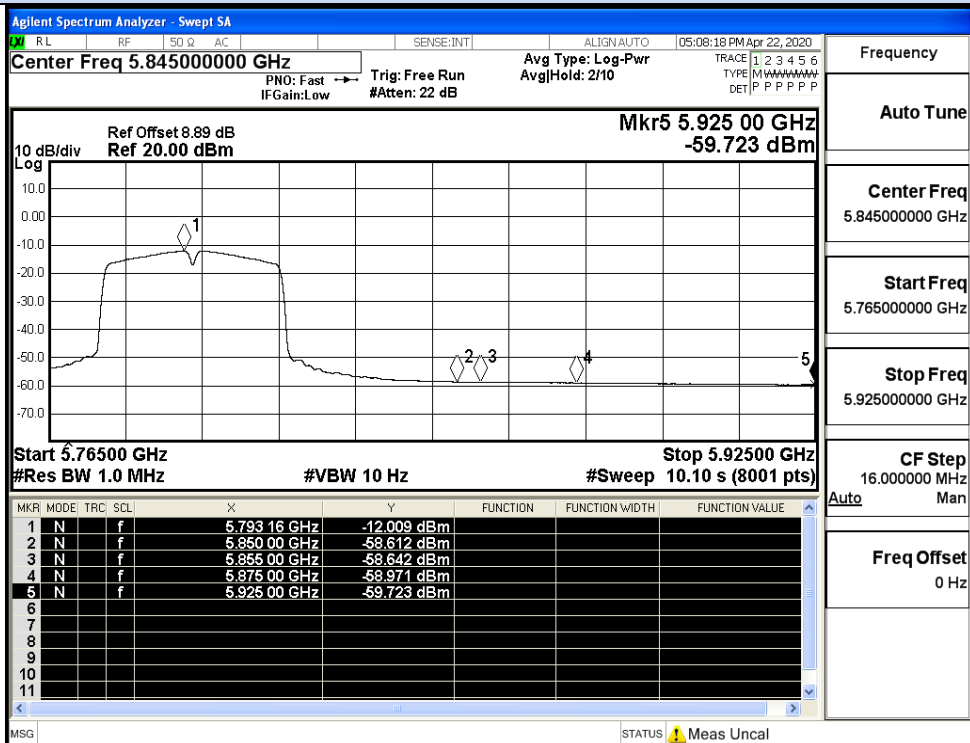


IEEE 802.11n40 / Channel 151 / 5755MHz / Average

Undesirable Emissions Measurement



IEEE 802.11n40 / Channel 159 / 5795MHz / Peak



IEEE 802.11n40 / Channel 159 / 5795MHz / Average

Ant0+1

Test Mode	Channel	Frequency (MHz)	ANT 0 Conducted Power (dBm)	ANT 1 Conducted Power (dBm)	ANT 0-1 Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N20 SISO	149	5650.0	-47.59	-43.83	-42.30	5.51	-36.79	Peak	-27.0	Pass
		5650.0	-60.25	-60.17	-57.20	5.51	-51.69	Average	-27.0	Pass
		5700.0	-44.87	-42.02	-40.20	5.51	-34.69	Peak	10	Pass
		5700.0	-56.41	-58.96	-54.49	5.51	-48.98	Average	10	Pass
		5720.0	-35.36	-34.26	-31.76	5.51	-26.25	Peak	15.6	Pass
		5720.0	-59.09	-59.65	-56.35	5.51	-50.84	Average	15.6	Pass
		5725.0	-32.3	-31.57	-28.91	5.51	-23.40	Peak	27.0	Pass
		5725.0	-54.17	-57.01	-52.35	5.51	-46.84	Average	27.0	Pass
	165	5850.0	-31.34	-29.7	-27.43	5.51	-21.92	Peak	27.0	Pass
		5850.0	-54.44	-58.61	-53.03	5.51	-47.52	Average	27.0	Pass
		5855.0	-36.72	-36.38	-33.54	5.51	-28.03	Peak	15.6	Pass
		5855.0	-55.87	-58.92	-54.12	5.51	-48.61	Average	15.6	Pass
		5875.0	-46.6	-44.61	-42.48	5.51	-36.97	Peak	10	Pass
		5875.0	-58.39	-59.29	-55.81	5.51	-50.30	Average	10	Pass
		5925.0	-47.71	-46.73	-44.18	5.51	-38.67	Peak	-27.0	Pass
		5925.0	-59.74	-60.02	-56.87	5.51	-51.36	Average	-27.0	Pass

Test Mode	Channel	Frequency (MHz)	ANT 0 Conducted Power (dBm)	ANT 1 Conducted Power (dBm)	ANT 0-1 Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
11N40 SISO	151	5650.0	-47.57	-44.27	-42.60	5.51	-37.09	Peak	-27.0	Pass
		5650.0	-60.06	-59.5	-56.76	5.51	-51.25	Average	-27.0	Pass
		5700.0	-41.03	-44.73	-39.49	5.51	-33.98	Peak	10	Pass
		5700.0	-56.5	-58.71	-54.46	5.51	-48.95	Average	10	Pass
		5720.0	-33.47	-36.09	-31.58	5.51	-26.07	Peak	15.6	Pass
		5720.0	-50.27	-55.02	-49.02	5.51	-43.51	Average	15.6	Pass
		5725.0	-31.23	-33.94	-29.37	5.51	-23.86	Peak	27.0	Pass
	159	5725.0	-48.35	-52.53	-46.95	5.51	-41.44	Average	27.0	Pass
		5850.0	-34.91	-41.49	-34.05	5.51	-28.54	Peak	27.0	Pass
		5850.0	-52.87	-58.61	-51.84	5.51	-46.33	Average	27.0	Pass
		5855.0	-37.38	-38.23	-34.77	5.51	-29.26	Peak	15.6	Pass
		5855.0	-54.01	-58.64	-52.72	5.51	-47.21	Average	15.6	Pass
		5875.0	-44.64	-37.68	-36.88	5.51	-31.37	Peak	10	Pass
		5875.0	-57.39	-58.97	-55.10	5.51	-49.59	Average	10	Pass
		5925.0	-49.31	-47.61	-45.37	5.51	-39.86	Peak	-27.0	Pass
		5925.0	-59.58	-59.72	-56.64	5.51	-51.13	Average	-27.0	Pass