Appendix E

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: Wireless network card
Trade Mark: DIEWU TXIC
Test Model: TXA083
Additional Model No.: TXA076

Environmental Conditions

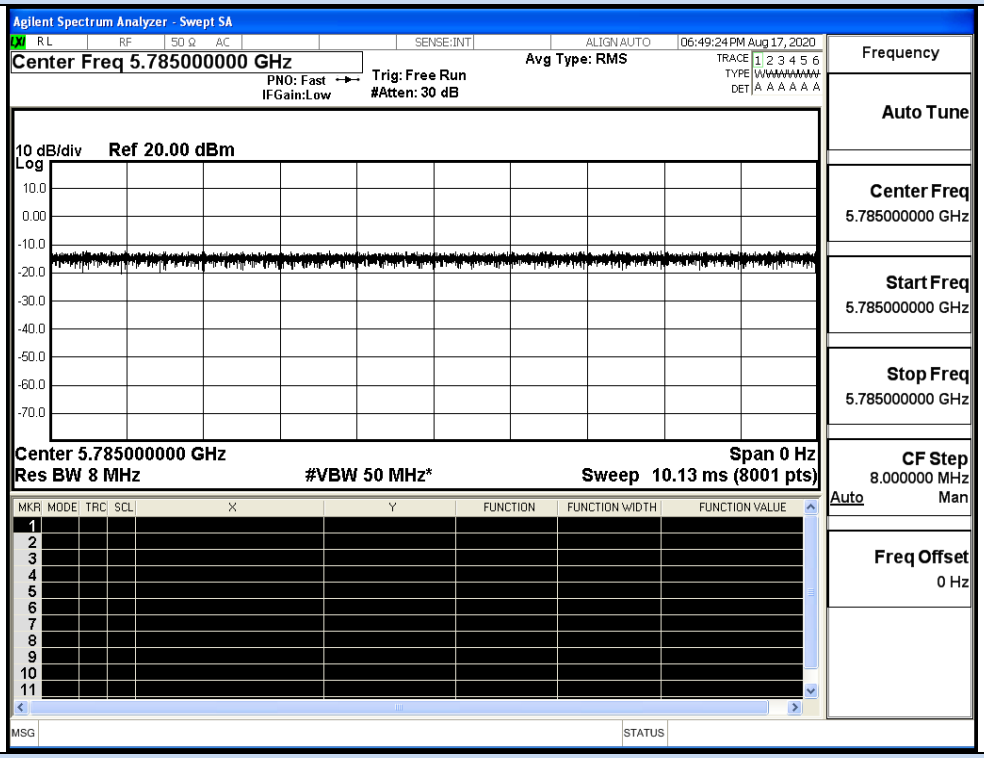
Temperature:	23.1 ° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

E.1 Duty Cycle

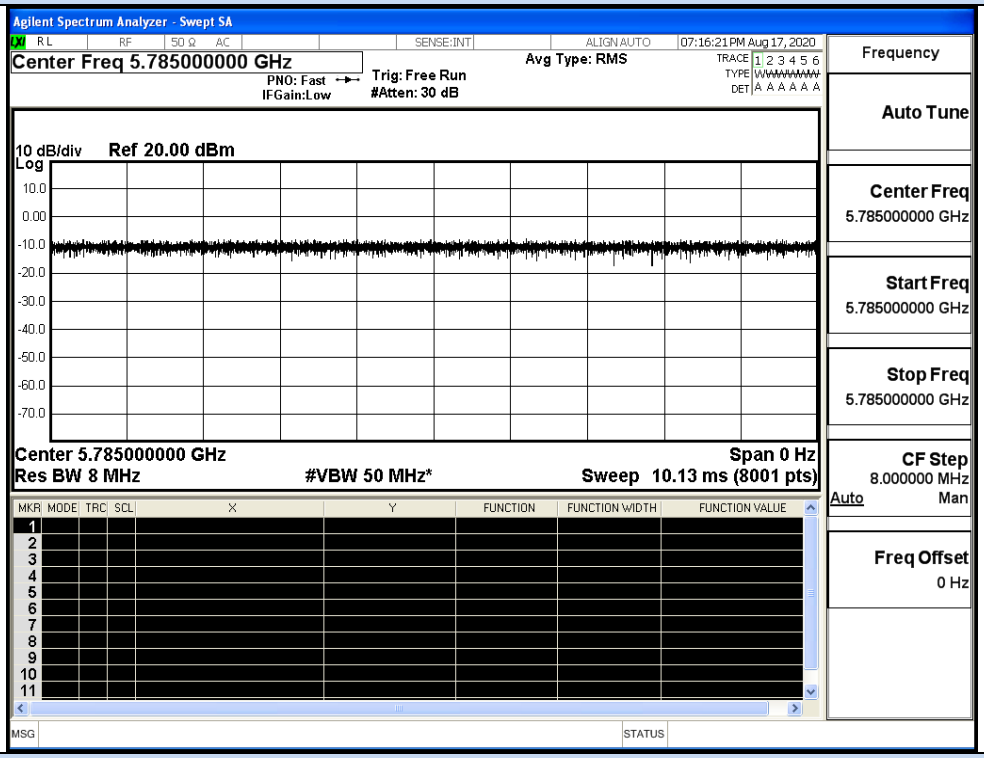
Ant0

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
11AC80 SISO	5775	100	0.00	0.01
11AX20 SISO	5785	98.77	0.05	0.01
11AX40 SISO	5755	98.77	0.05	0.01
11AX80 SISO	5775	98.8	0.05	0.01

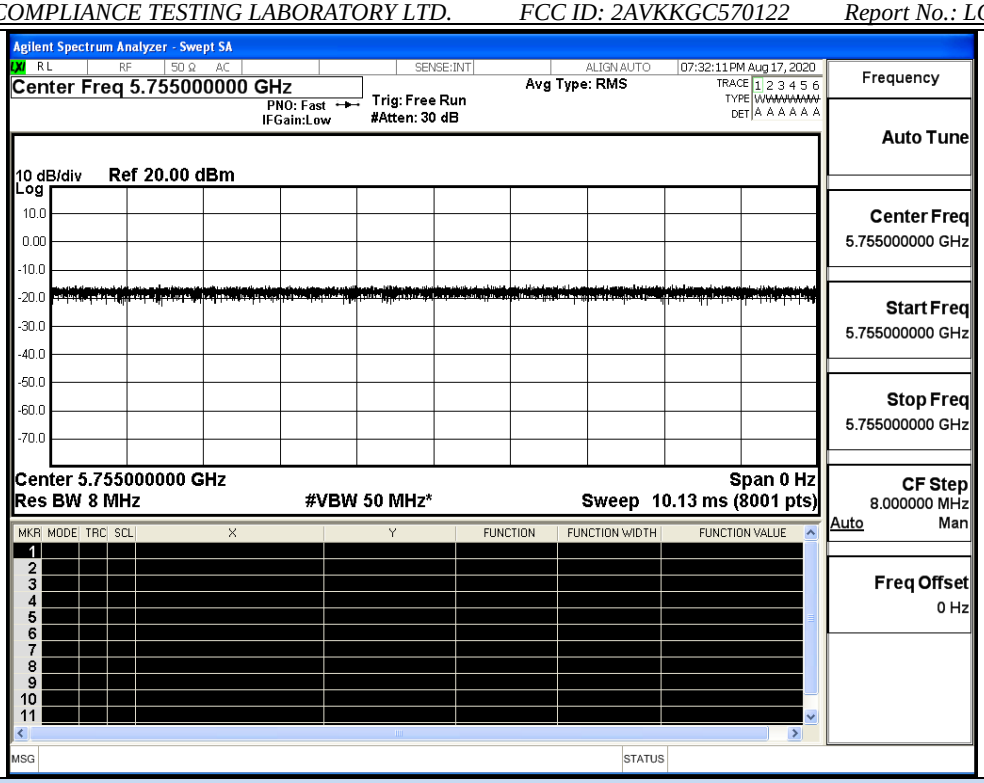
On Time and Duty Cycle



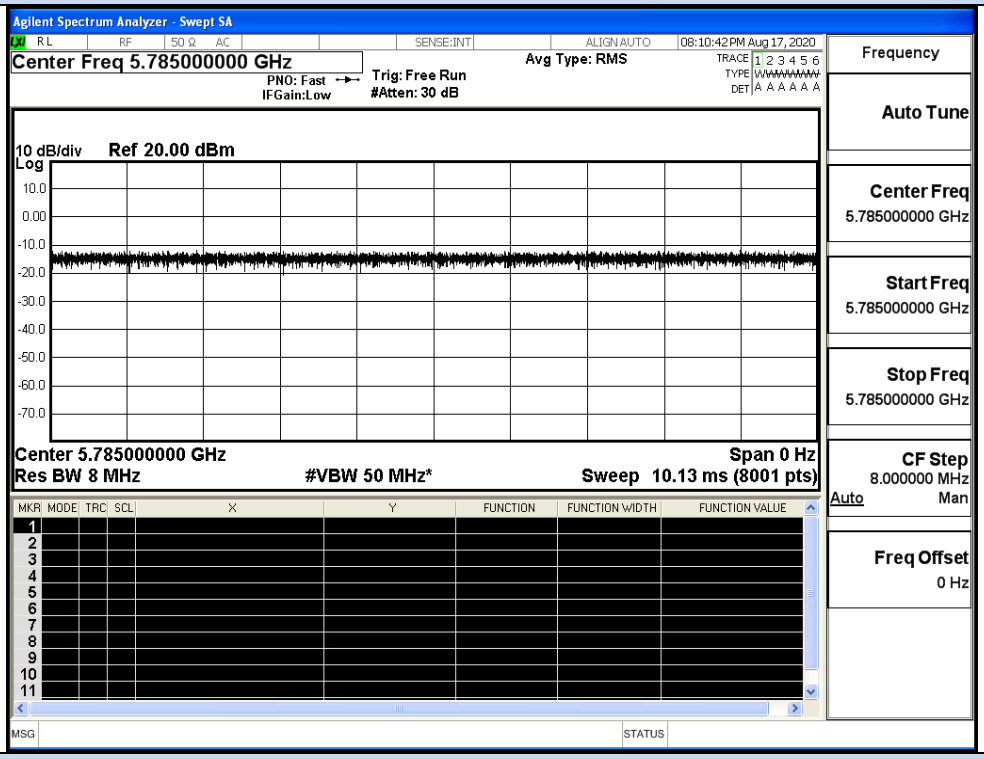
IEEE 802.11A



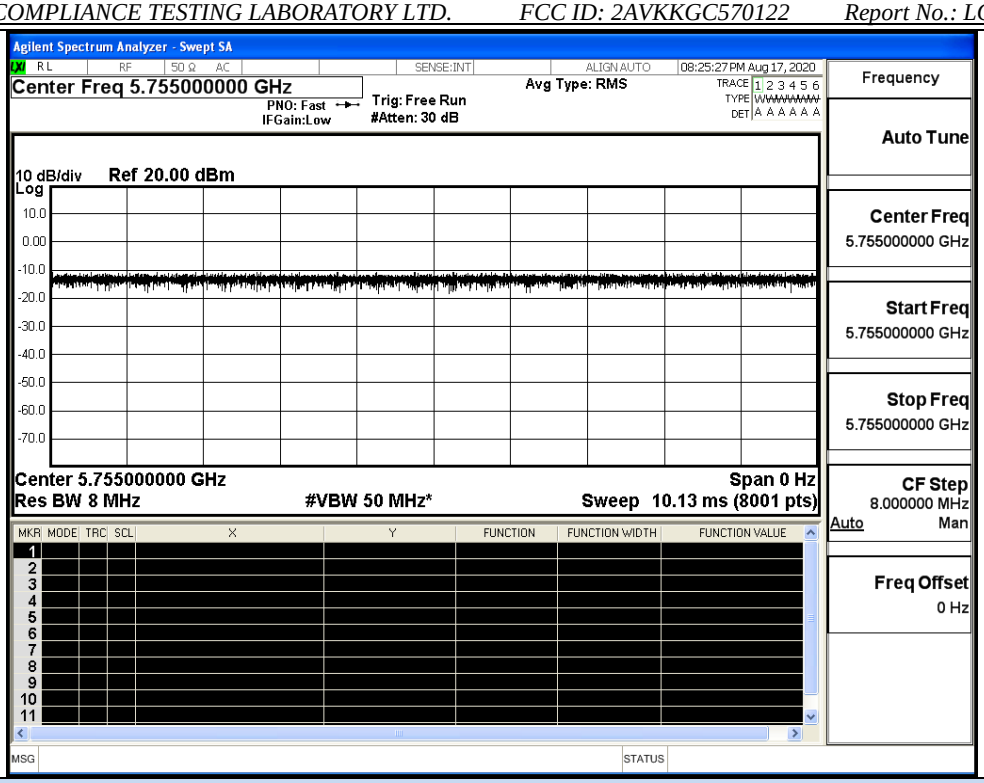
IEEE 802.11N20



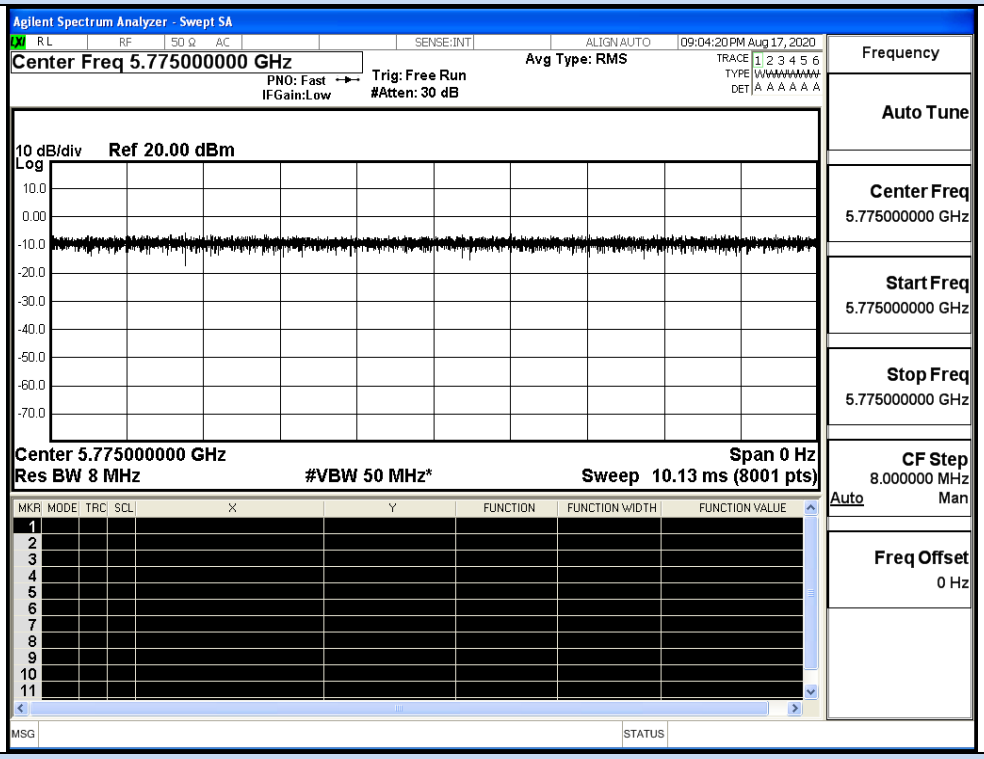
IEEE 802.11N40



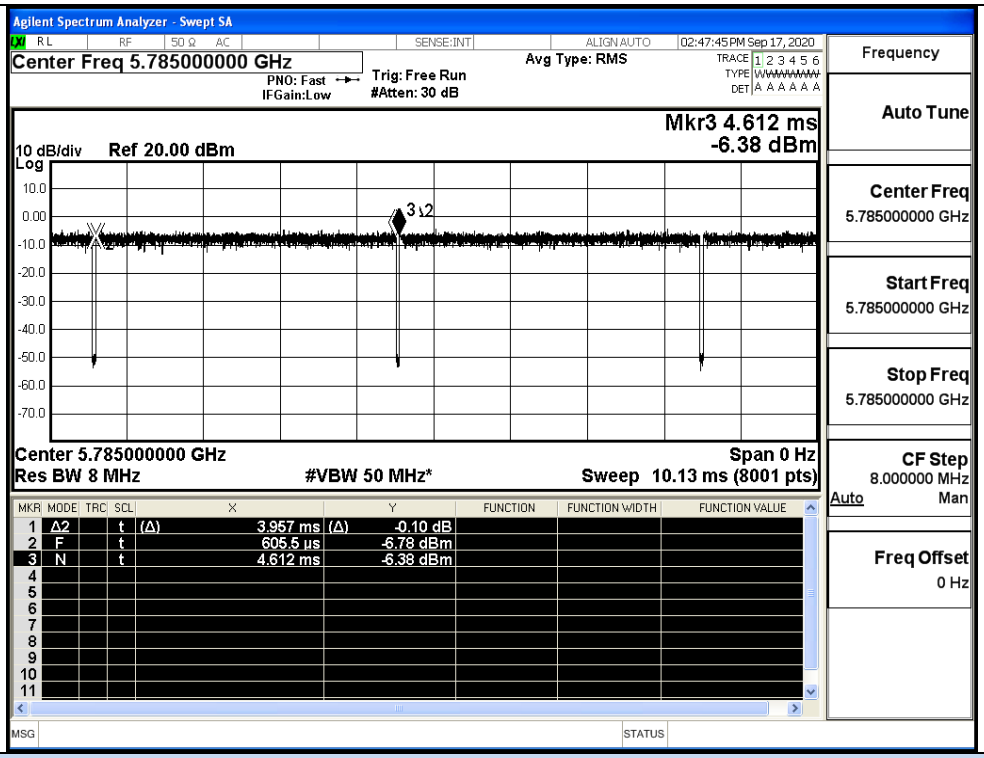
IEEE 802.11AC20



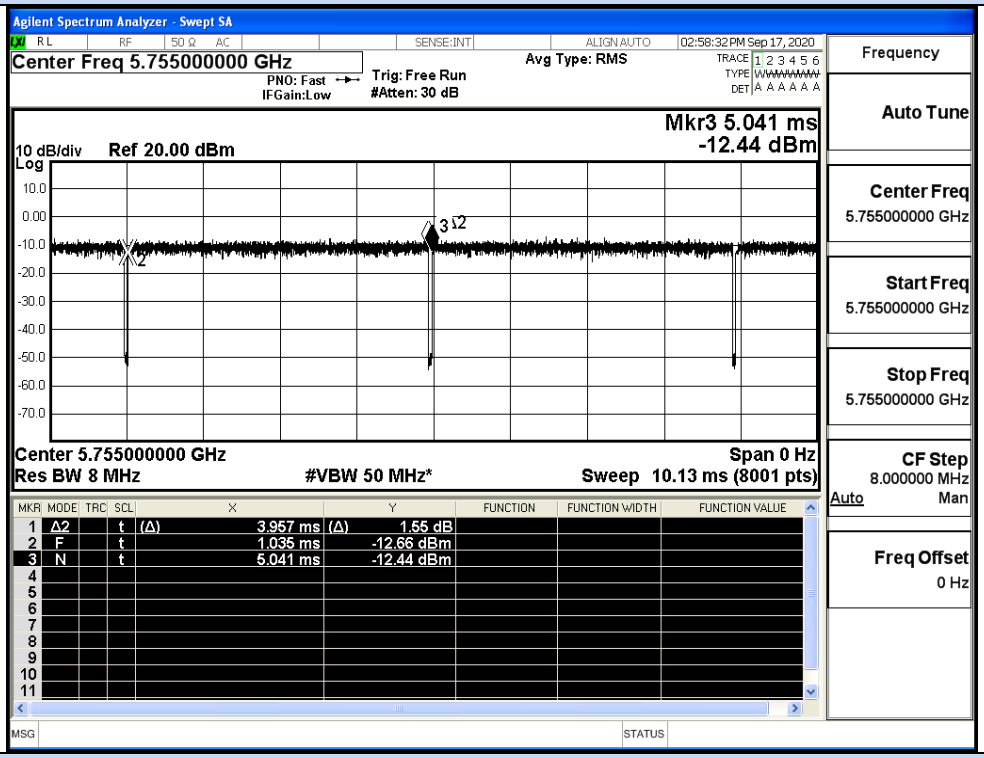
IEEE 802.11AC40



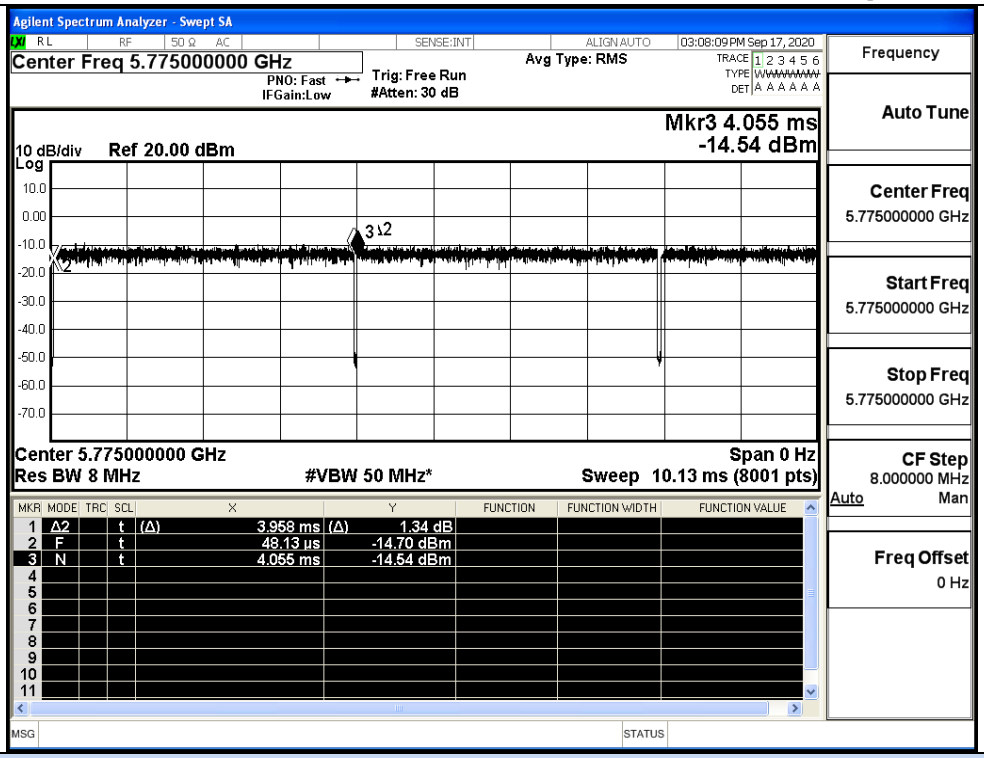
IEEE 802.11AC80



IEEE 802.11AX20



IEEE 802.11AX40

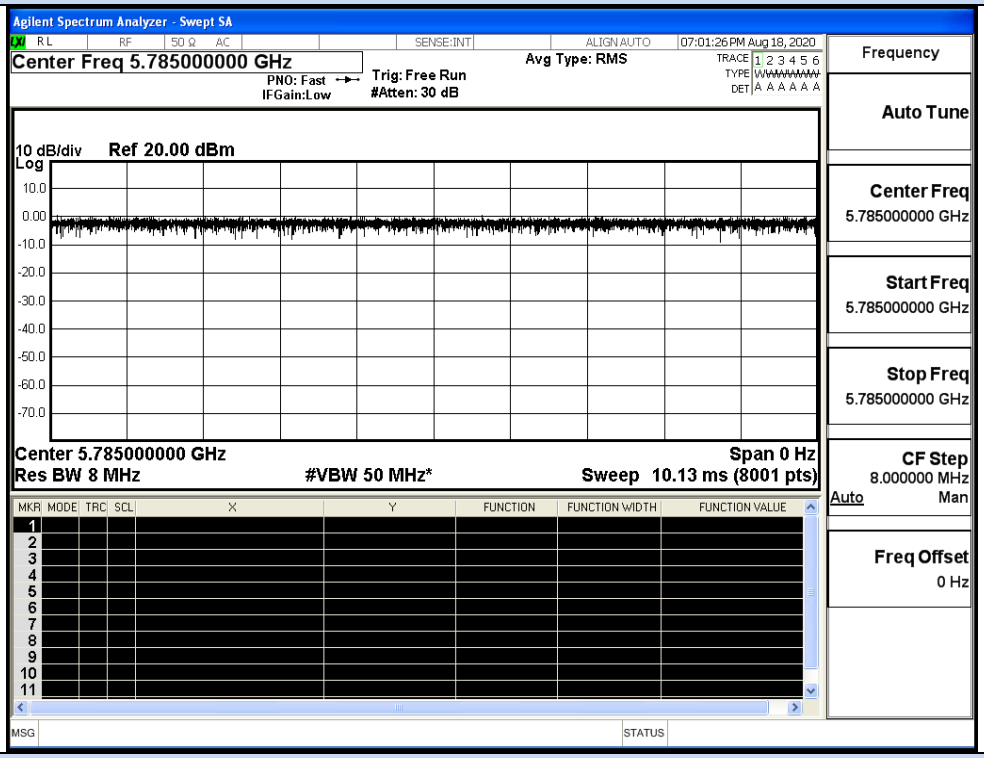


IEEE 802.11AX80

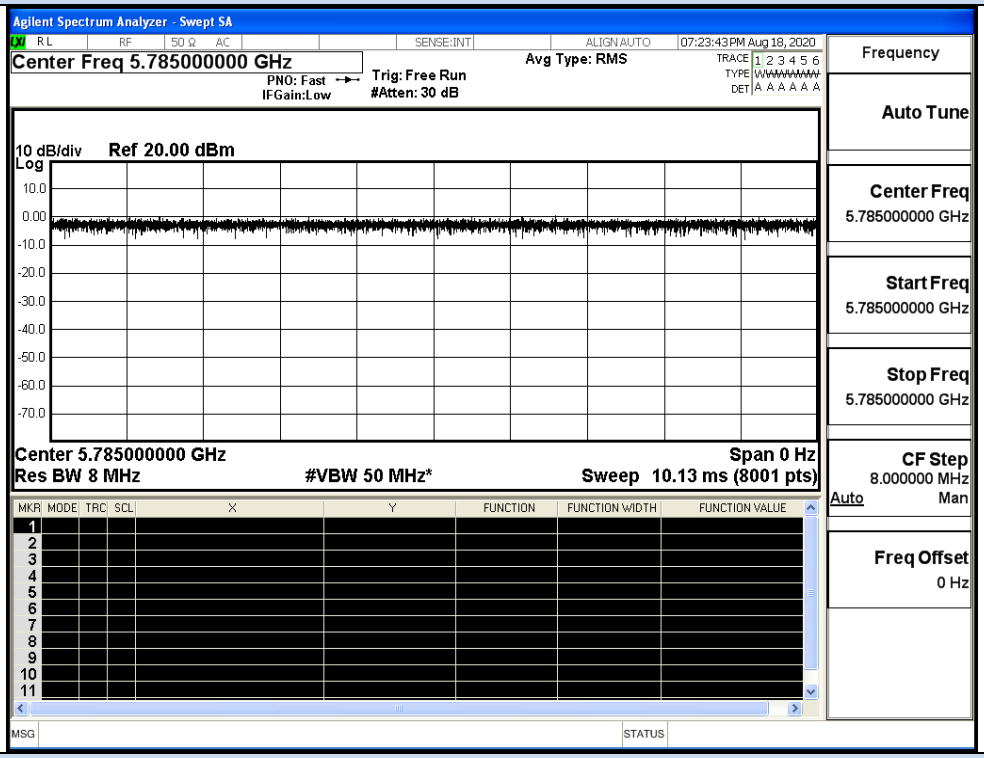
Ant1

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
11AC80 SISO	5775	100	0.00	0.01
11AX20 SISO	5785	98.8	0.05	0.01
11AX40 SISO	5755	98.8	0.05	0.01
11AX80 SISO	5775	98.8	0.05	0.01

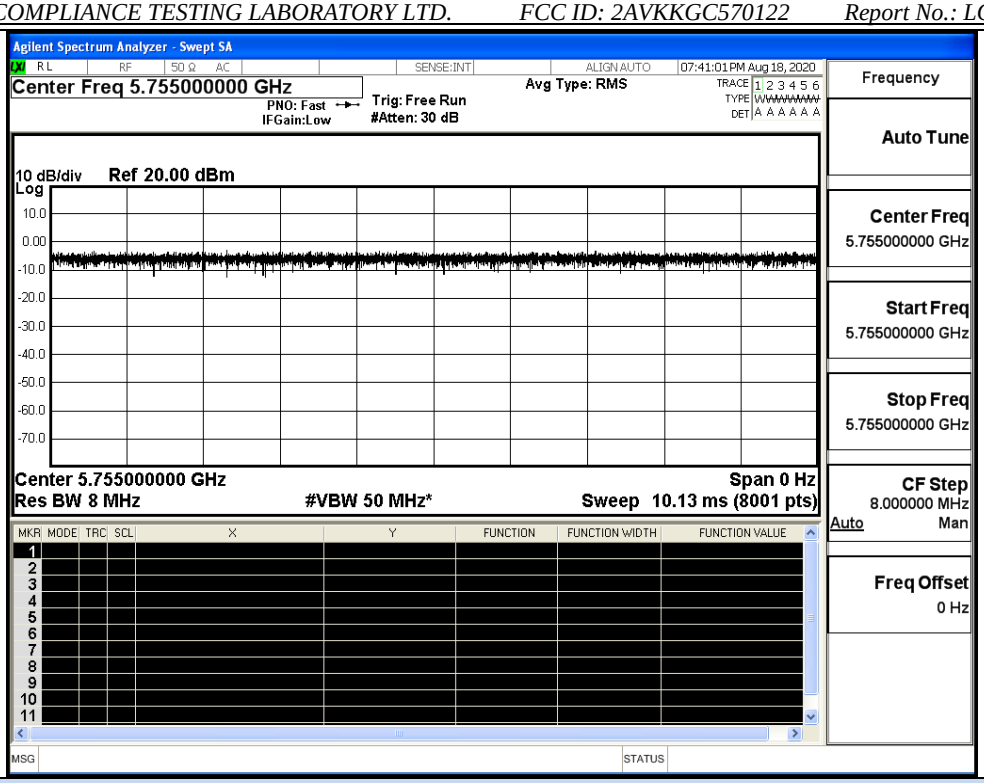
On Time and Duty Cycle



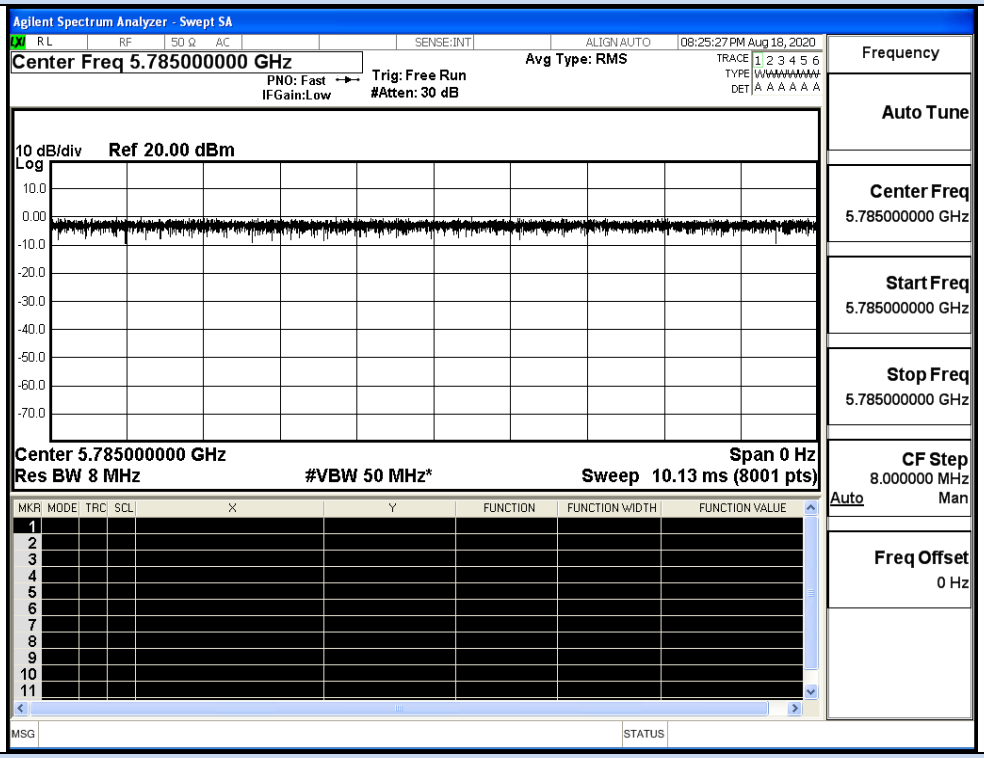
IEEE 802.11A



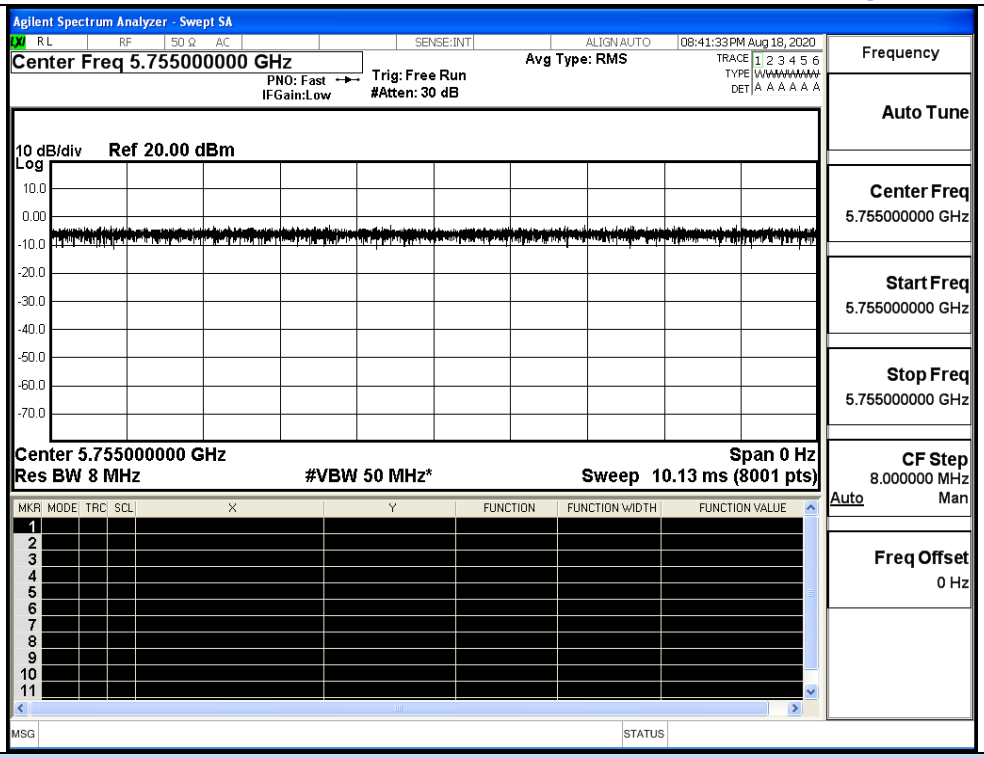
IEEE 802.11N20



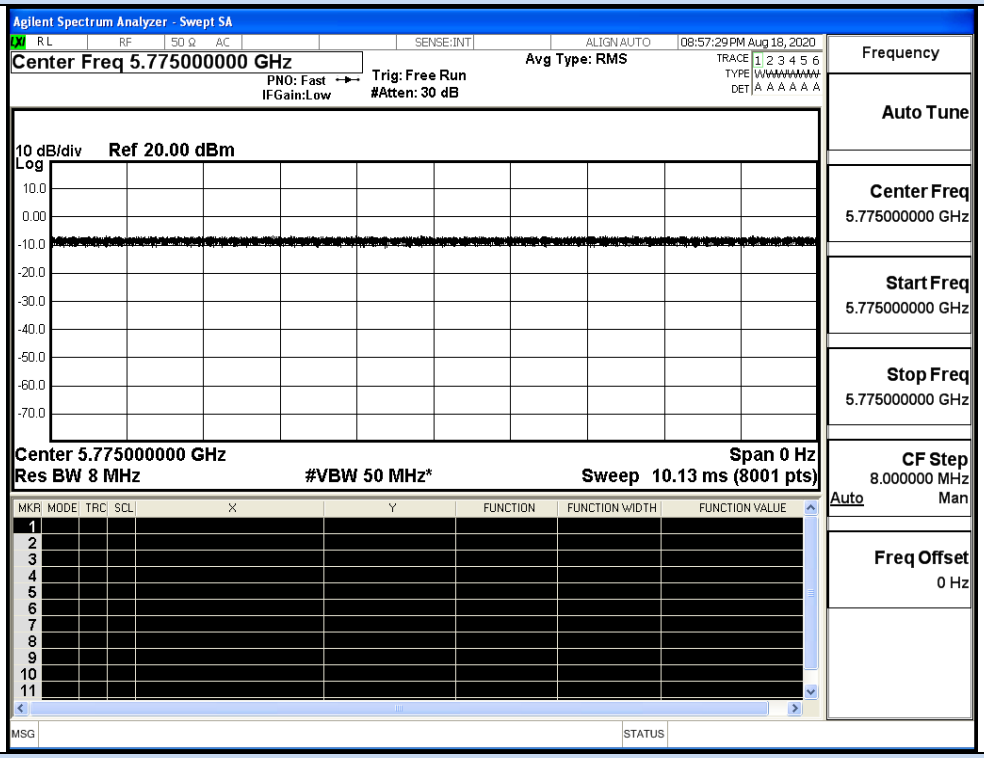
IEEE 802.11N40



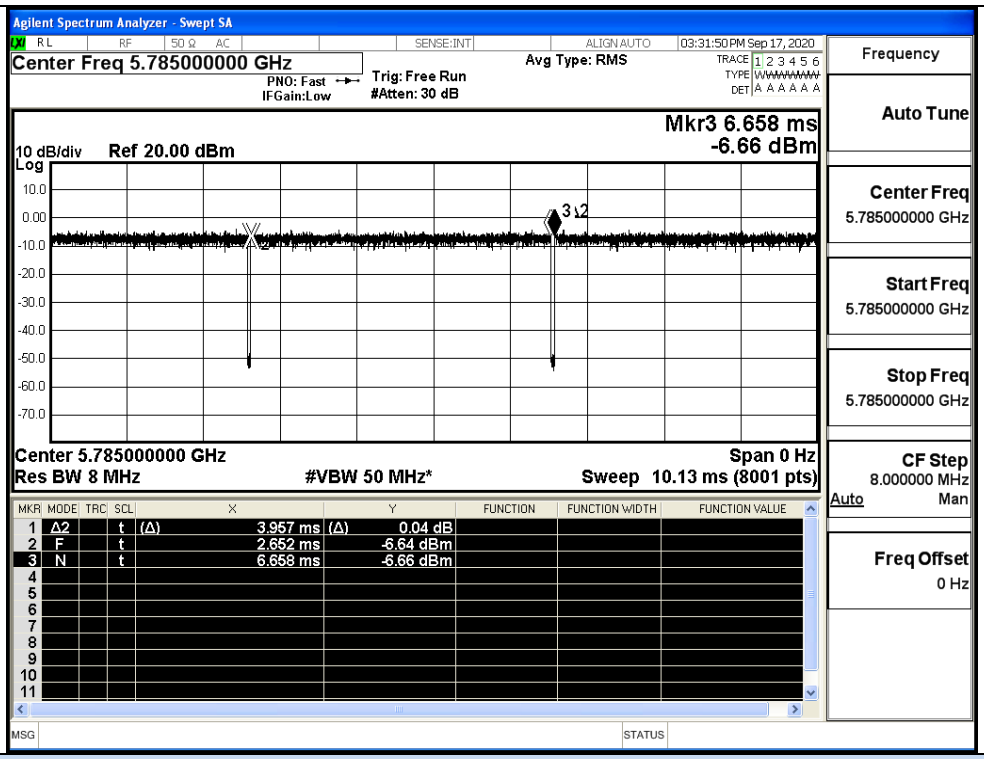
IEEE 802.11AC20



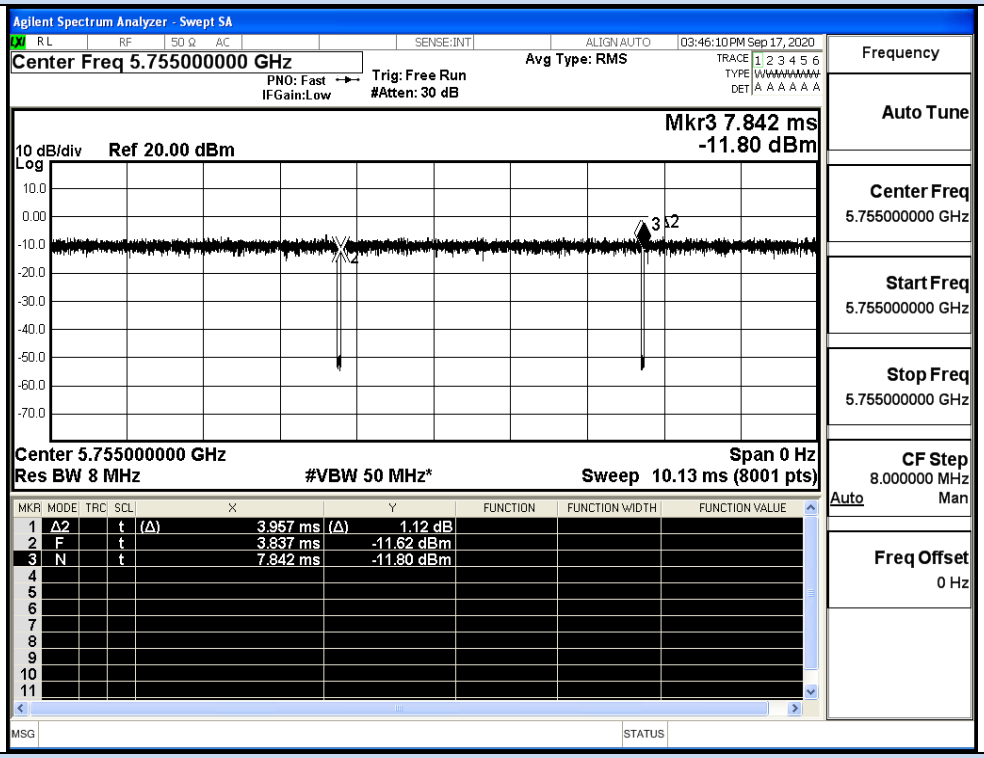
IEEE 802.11AC40



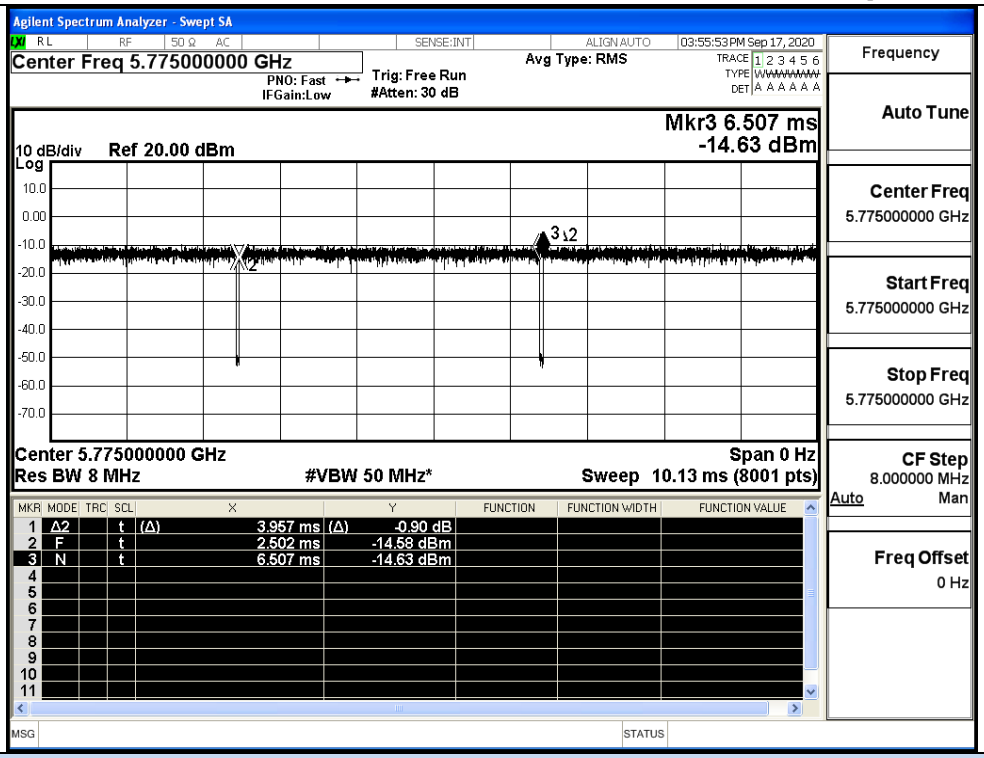
IEEE 802.11AC80



IEEE 802.11AX20



IEEE 802.11AX40



IEEE 802.11AX80

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	11.98	0	11.98	30	Pass
	157	5785	11.92	0	11.92		Pass
	165	5825	11.99	0	11.99		Pass
11N20 SISO	149	5745	12.29	0	12.29	30	Pass
	157	5785	11.41	0	11.41		Pass
	165	5825	11.42	0	11.42		Pass
11N40 SISO	151	5755	11.47	0	11.47	30	Pass
	159	5795	11.44	0	11.44		Pass
11AC20 SISO	149	5745	10.05	0	10.05	30	Pass
	157	5785	10.21	0	10.21		Pass
	165	5825	10.64	0	10.64		Pass
11AC40 SISO	151	5755	10.8	0	10.80	30	Pass
	159	5795	10.97	0	10.97		Pass
11AC80 SISO	155	5775	11.14	0	11.14	30	Pass
11AX20 SISO	149	5745	10.41	0.05	10.46	30	Pass
	157	5785	10.74	0.05	10.79		Pass
	165	5825	10.64	0.05	10.69		Pass
11AX40 SISO	151	5755	10.23	0.05	10.28	30	Pass
	159	5795	10.38	0.05	10.43		Pass
11AX80 SISO	155	5775	10.86	0.05	10.91	30	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	11.46	0	11.46	30	Pass
	157	5785	11.5	0	11.50		Pass
	165	5825	11.19	0	11.19		Pass
11N20 SISO	149	5745	11.5	0	11.50	30	Pass
	157	5785	11.46	0	11.46		Pass
	165	5825	11.54	0	11.54		Pass
11N40 SISO	151	5755	11.55	0	11.55	30	Pass
	159	5795	11.51	0	11.51		Pass
11AC20 SISO	149	5745	10.37	0	10.37	30	Pass
	157	5785	10.81	0	10.81		Pass
	165	5825	11.11	0	11.11		Pass
11AC40 SISO	151	5755	11.04	0	11.04	30	Pass
	159	5795	11.7	0	11.70		Pass
11AC80 SISO	155	5775	11.91	0	11.91	30	Pass
11AX20 SISO	149	5745	10.30	0.05	10.35	30	Pass
	157	5785	10.44	0.05	10.49		Pass
	165	5825	10.64	0.05	10.69		Pass
11AX40 SISO	151	5755	10.69	0.05	10.74	30	Pass
	159	5795	11.11	0.05	11.16		Pass
11AX80 SISO	155	5775	11.07	0.05	11.12	30	Pass

ANT0+ANT1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)			Limit (dBm)
			Ant0	Ant1	Sum	
11N20	149	5745	12.29	11.50	14.92	30
	157	5785	11.41	11.46	14.45	
	165	5825	11.42	11.54	14.49	
11N40	151	5755	11.47	11.55	14.52	30
	159	5795	11.44	11.51	14.49	
11AC20	149	5745	10.05	10.37	13.22	30
	157	5785	10.21	10.81	13.53	
	165	5825	10.64	11.11	13.89	
11AC40	151	5755	10.80	11.04	13.93	30
	159	5795	10.97	11.70	14.36	
11AC80	155	5775	11.14	11.91	14.55	30
11AX20	149	5745	10.46	10.35	13.42	30
	157	5785	10.79	10.49	13.65	
	165	5825	10.69	10.69	13.70	
11AX40	151	5755	10.28	10.74	13.53	30
	159	5795	10.43	11.16	13.82	
11AX80	155	5775	10.91	11.12	14.03	30

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	-1.80	0	2.218	0.41	30	Pass
	157	5785	-2.64	0	2.218	-0.42		Pass
	165	5825	-2.66	0	2.218	-0.44		Pass
11N20 SISO	149	5745	-1.96	0	2.218	0.26	30	Pass
	157	5785	-2.90	0	2.218	-0.68		Pass
	165	5825	-1.65	0	2.218	0.57		Pass
11N40 SISO	151	5755	-5.84	0	2.218	-3.62	30	Pass
	159	5795	-5.66	0	2.218	-3.45		Pass
11AC20 SISO	149	5745	-3.68	0	2.218	-1.46	30	Pass
	157	5785	-3.69	0	2.218	-1.47		Pass
	165	5825	-3.65	0	2.218	-1.43		Pass
11AC40 SISO	151	5755	-6.47	0	2.218	-4.25	30	Pass
	159	5795	-6.24	0	2.218	-4.02		Pass
11AC80 SISO	155	5775	-9.10	0	2.218	-6.88	30	Pass
11AX20 SISO	149	5745	-2.97	0.05	2.218	-0.70	30	Pass
	157	5785	-3.68	0.05	2.218	-1.41		Pass
	165	5825	-4.09	0.05	2.218	-1.82		Pass
11AX40 SISO	151	5755	-6.45	0.05	2.218	-4.18	30	Pass
	159	5795	-7.02	0.05	2.218	-4.75		Pass
11AX80 SISO	155	5775	-9.04	0.05	2.218	-6.77	30	Pass

Ant1

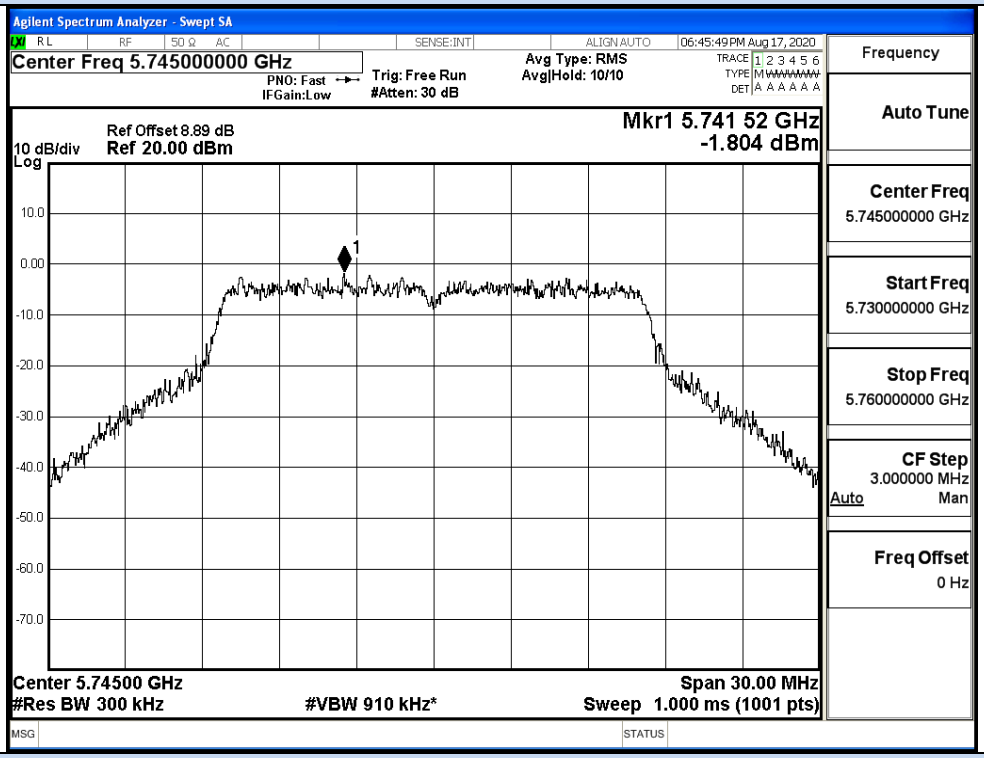
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
11A	149	5745	-2.18	0	2.218	0.04	30	Pass
	157	5785	-3.31	0	2.218	-1.09		Pass
	165	5825	-2.67	0	2.218	-0.45		Pass
11N20 SISO	149	5745	-2.49	0	2.218	-0.27	30	Pass
	157	5785	-3.35	0	2.218	-1.13		Pass
	165	5825	-3.01	0	2.218	-0.79		Pass
11N40 SISO	151	5755	-5.66	0	2.218	-3.44	30	Pass
	159	5795	-5.20	0	2.218	-2.98		Pass
11AC20 SISO	149	5745	-2.46	0	2.218	-0.24	30	Pass
	157	5785	-2.69	0	2.218	-0.47		Pass
	165	5825	-2.33	0	2.218	-0.11		Pass
11AC40 SISO	151	5755	-5.74	0	2.218	-3.52	30	Pass
	159	5795	-5.70	0	2.218	-3.48		Pass
11AC80 SISO	155	5775	-7.96	0	2.218	-5.74	30	Pass
11AX20 SISO	149	5745	-3.38	0.05	2.218	-1.12	30	Pass
	157	5785	-1.88	0.05	2.218	0.39		Pass
	165	5825	-3.93	0.05	2.218	-1.67		Pass
11AX40 SISO	151	5755	-6.35	0.05	2.218	-4.08	30	Pass
	159	5795	-6.32	0.05	2.218	-4.05		Pass
11AX80 SISO	155	5775	-8.26	0.05	2.218	-6.00	30	Pass

ANT0+ANT1

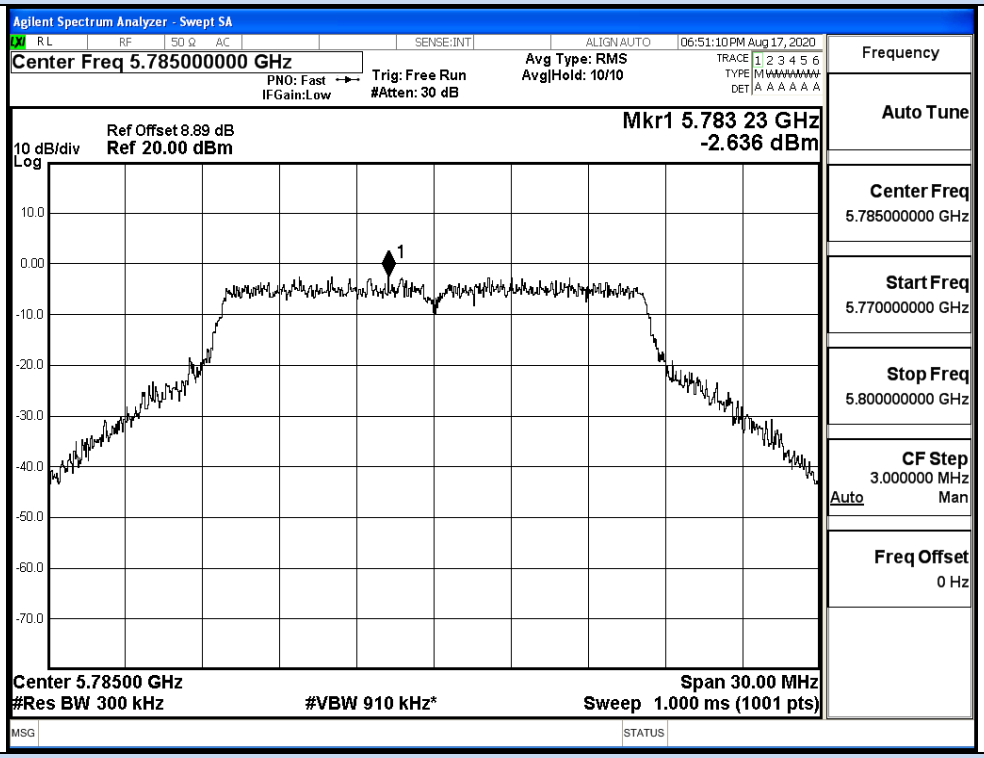
Test Mode	Channel	Frequency (MHz)	Report Power Density (dBm/500KHz)			Limit (dBm)
			Ant0	Ant1	Sum	
11N20	149	5745	0.26	-0.27	3.01	27.99
	157	5785	-0.68	-1.13	2.11	
	165	5825	0.57	-0.79	2.95	
11N40	151	5755	-3.62	-3.44	-0.52	27.99
	159	5795	-3.45	-2.98	-0.20	
11AC20	149	5745	-1.46	-0.24	2.20	27.99
	157	5785	-1.47	-0.47	2.07	
	165	5825	-1.43	-0.11	2.29	
11AC40	151	5755	-4.25	-3.52	-0.86	27.99
	159	5795	-4.02	-3.48	-0.73	
11AC80	155	5775	-6.88	-5.74	-3.26	27.99
11AX20	149	5745	-0.70	-1.12	2.11	27.99
	157	5785	-1.41	0.39	2.59	27.99
	165	5825	-1.82	-1.67	1.27	27.99
11AX40	151	5755	-4.18	-4.08	-1.12	27.99
	159	5795	-4.75	-4.05	-1.38	27.99
11AX80	155	5775	-6.77	-6.00	-3.36	27.99

Ant0

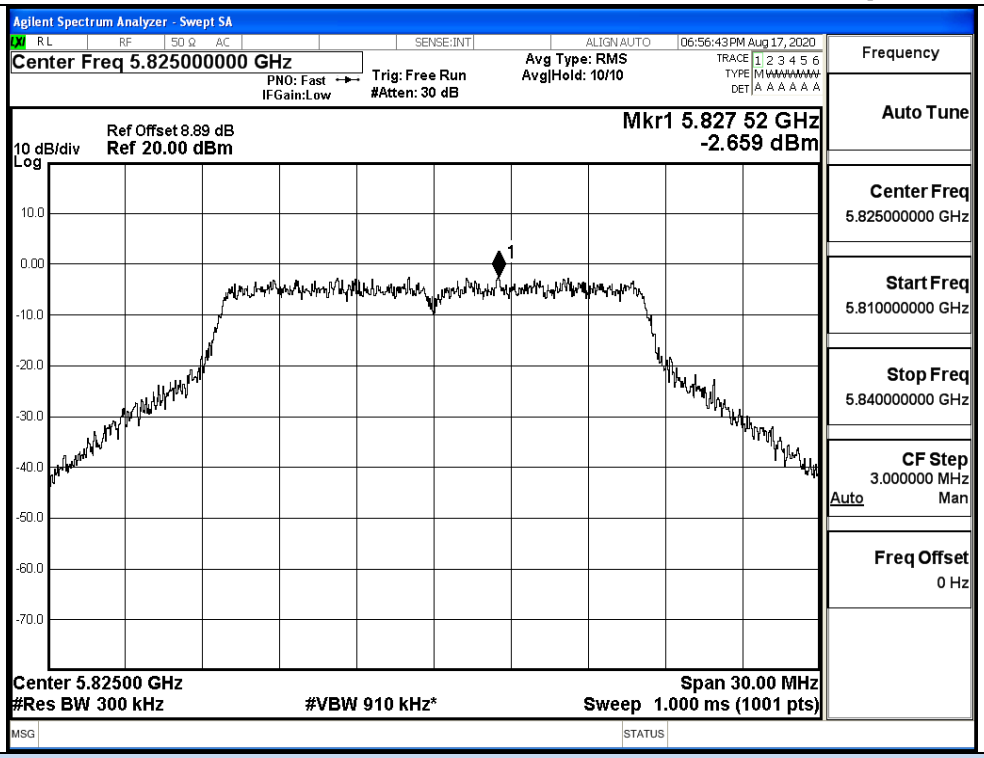
Power Spectral Density



IEEE 802.11a / Channel 149 / 5745MHz

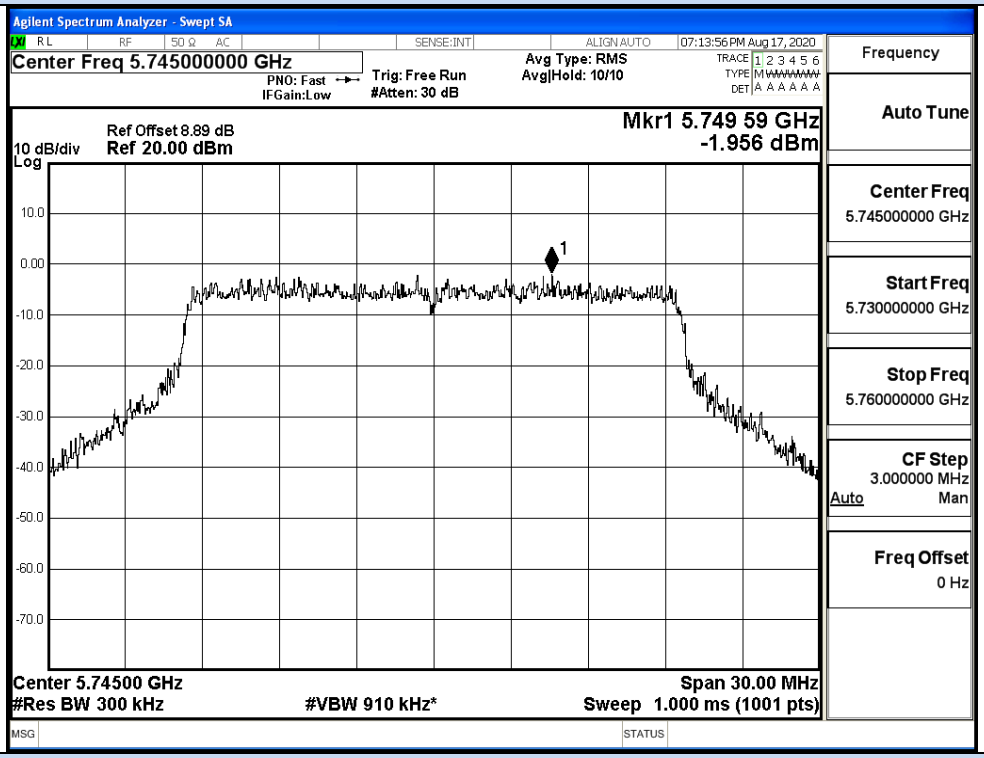


IEEE 802.11na / Channel 157 / 5785MHz

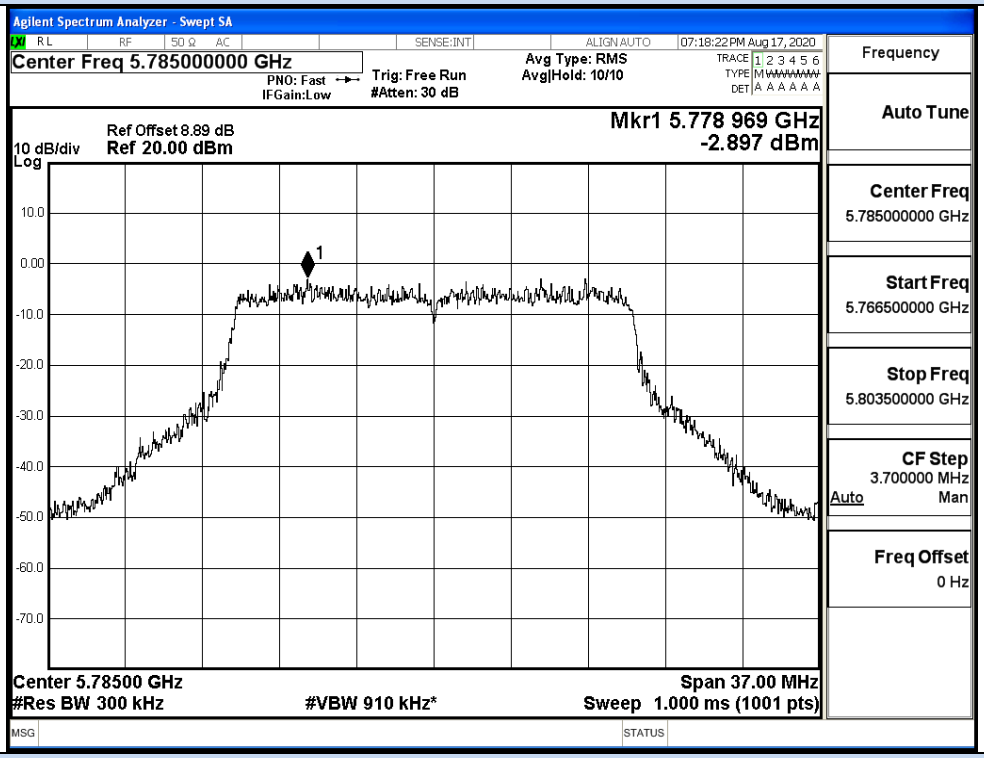


IEEE 802.11na / Channel 165 / 5825MHz

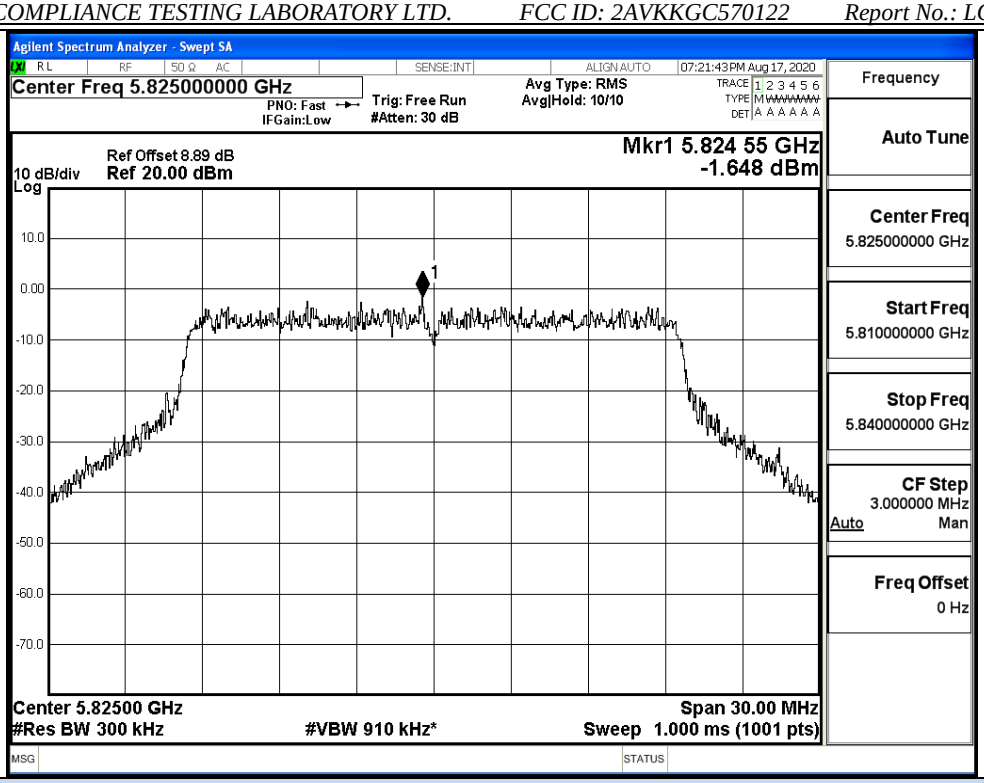
Power Spectral Density



IEEE 802.11n20 / Channel 149 / 5745MHz

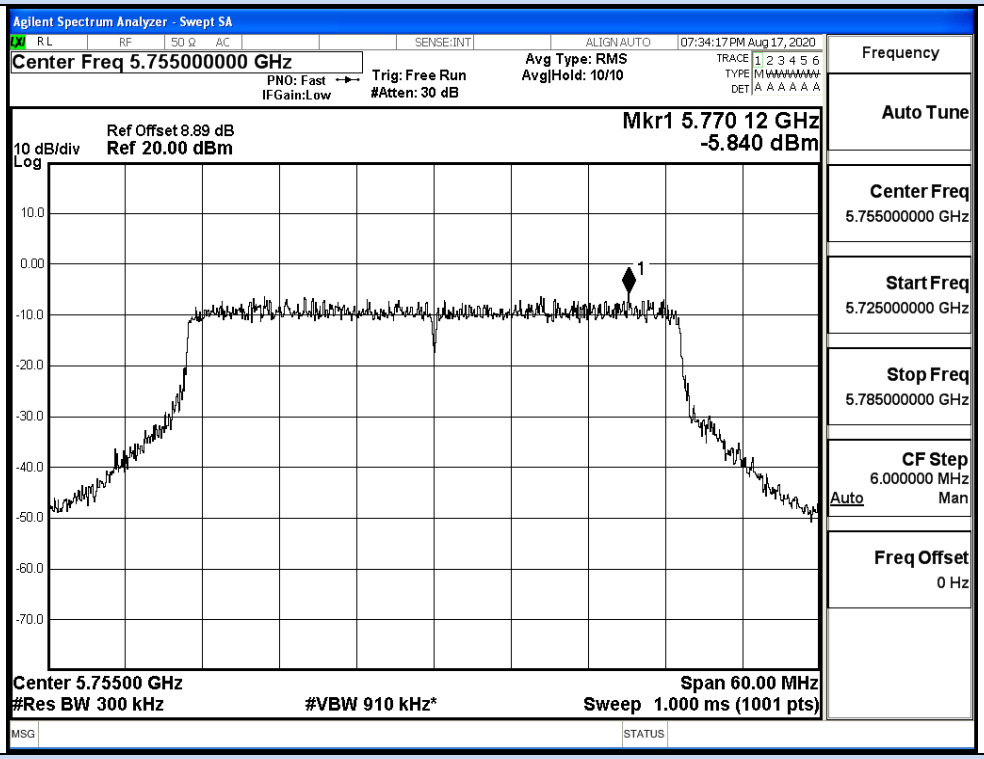


IEEE 802.11n20 / Channel 157 / 5785MHz

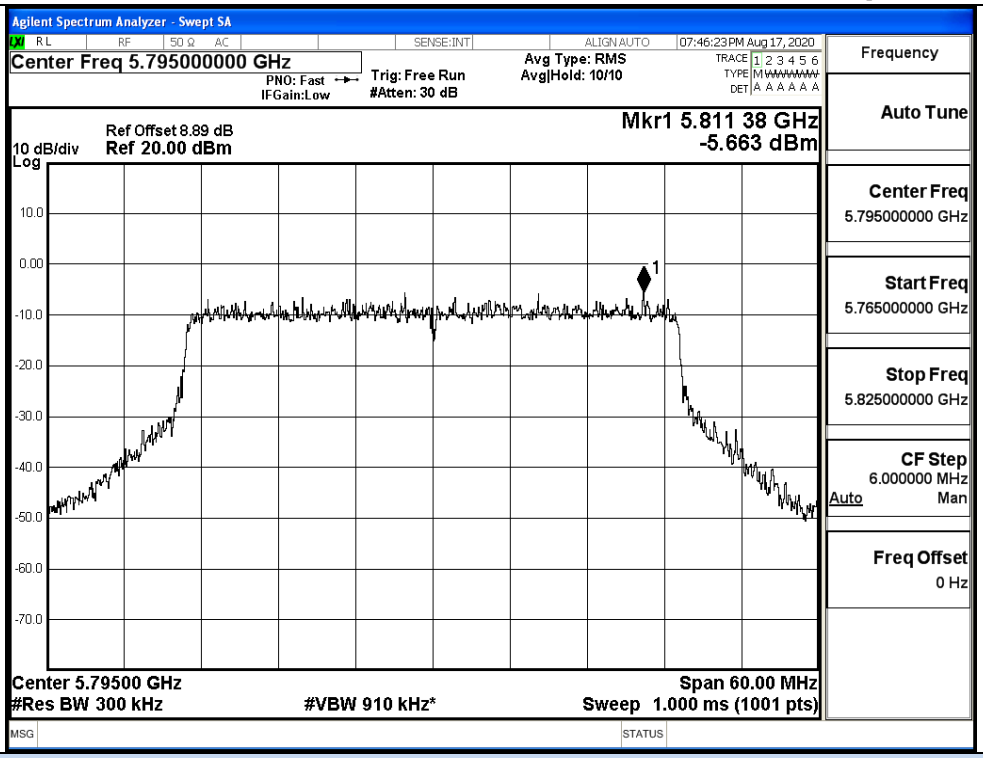


IEEE 802.11n20 / Channel 165 / 5825MHz

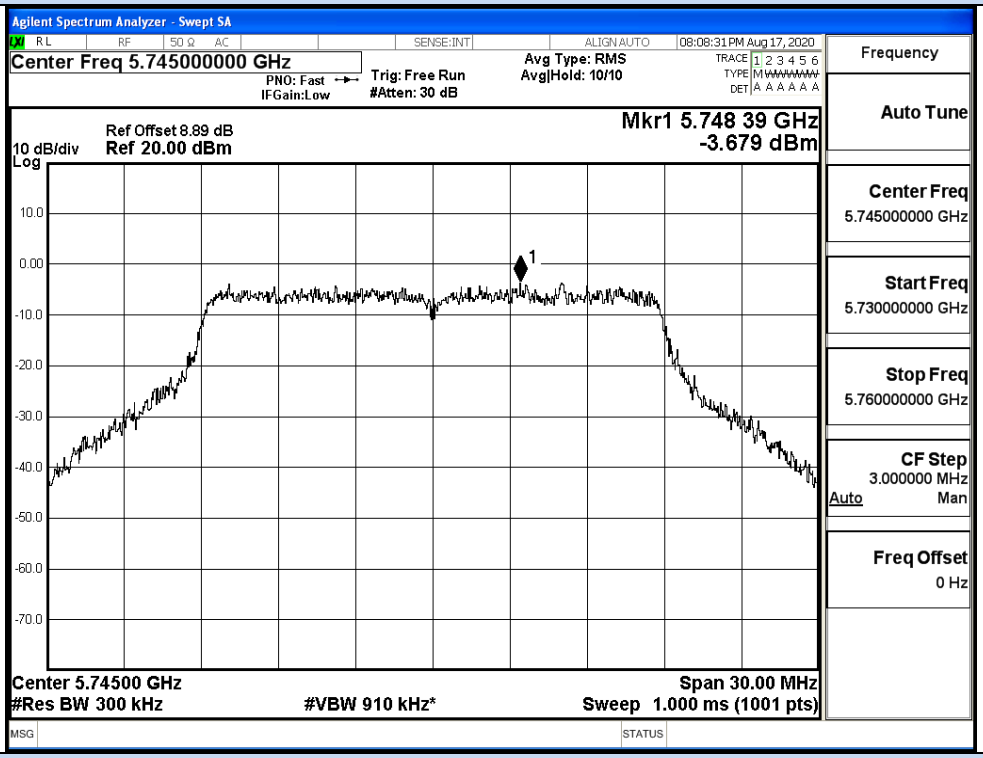
Power Spectral Density



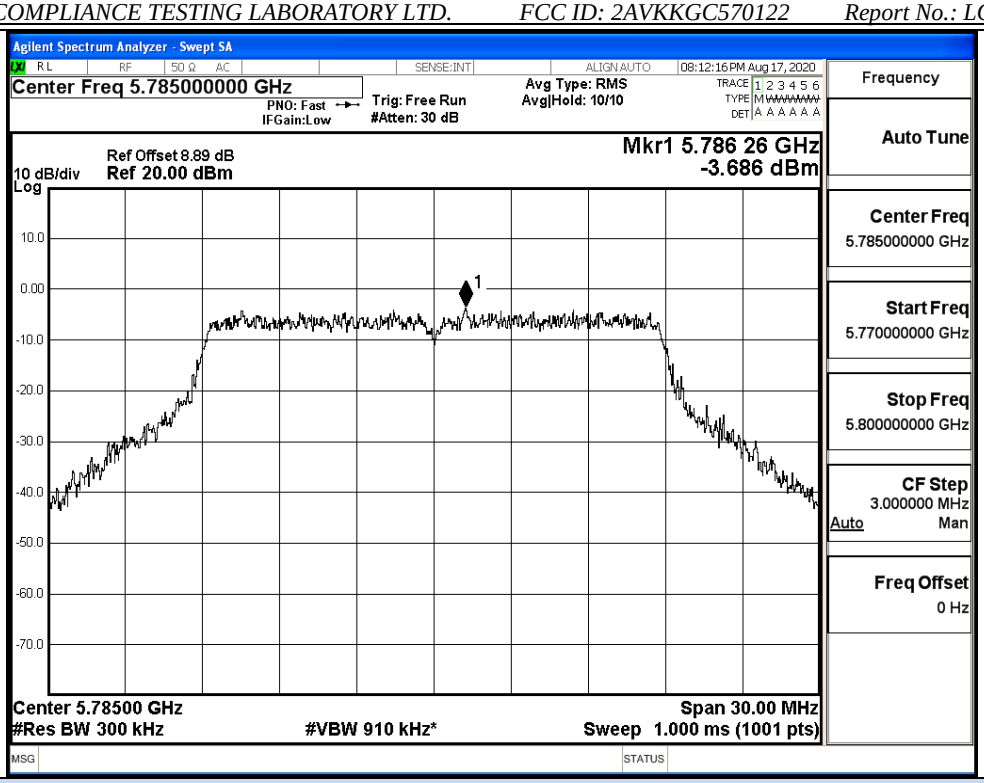
IEEE 802.11n40 / Channel 151 / 5755MHz



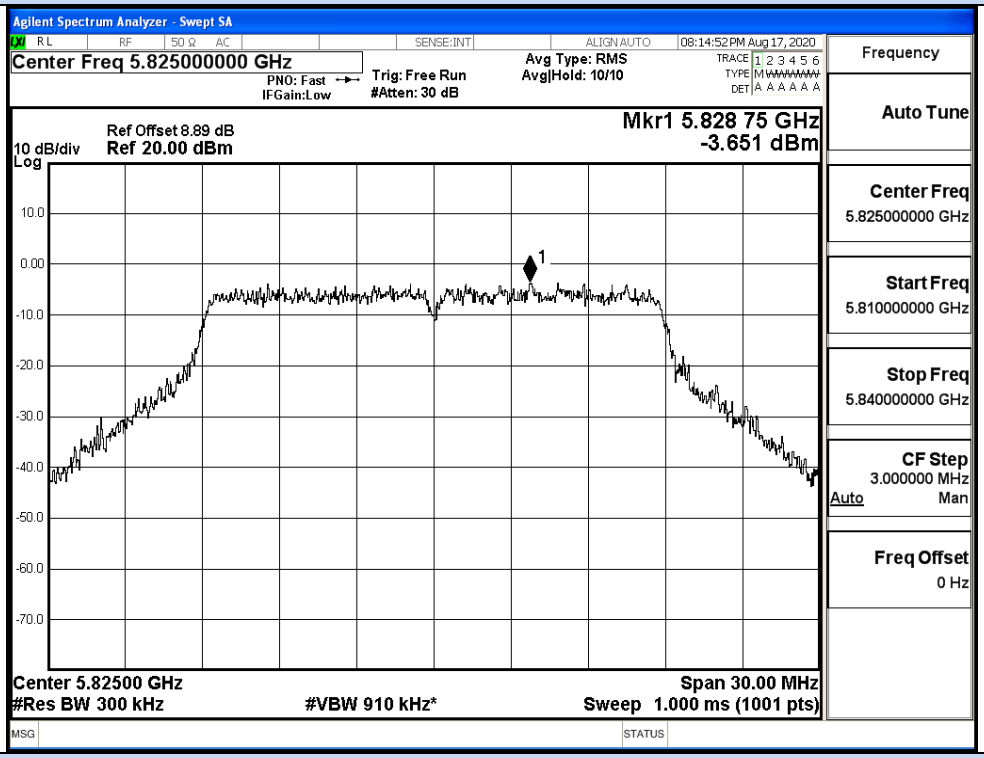
IEEE 802.11n40 / Channel 159 / 5795MHz



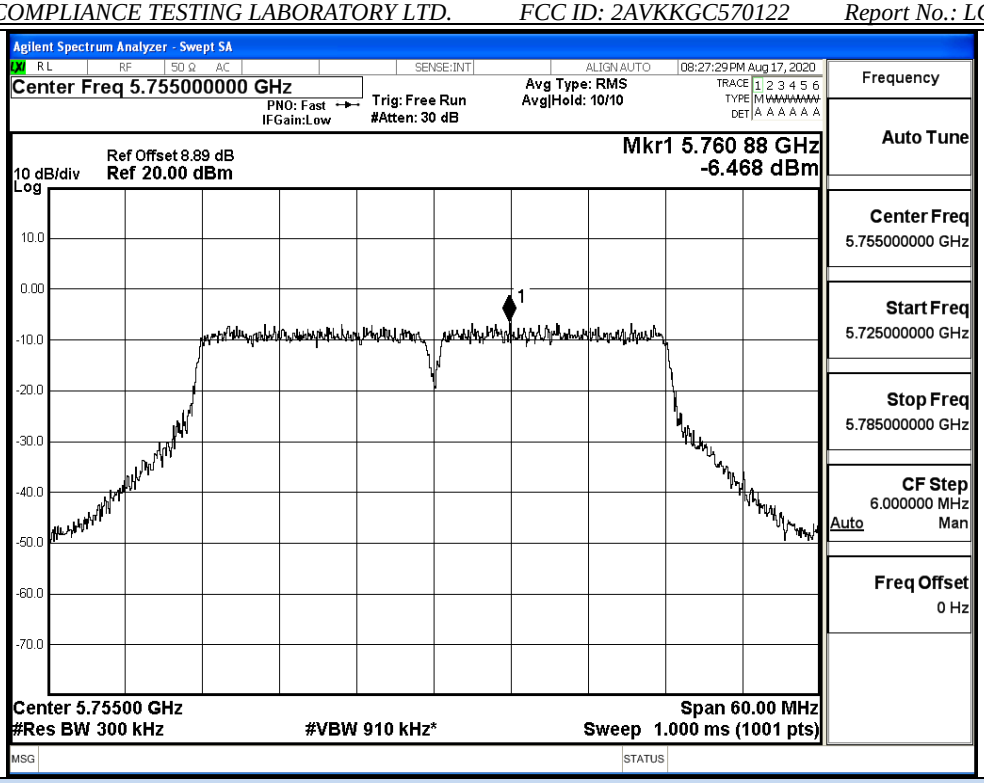
IEEE 802.11ac20 / Channel 149 / 5745MHz



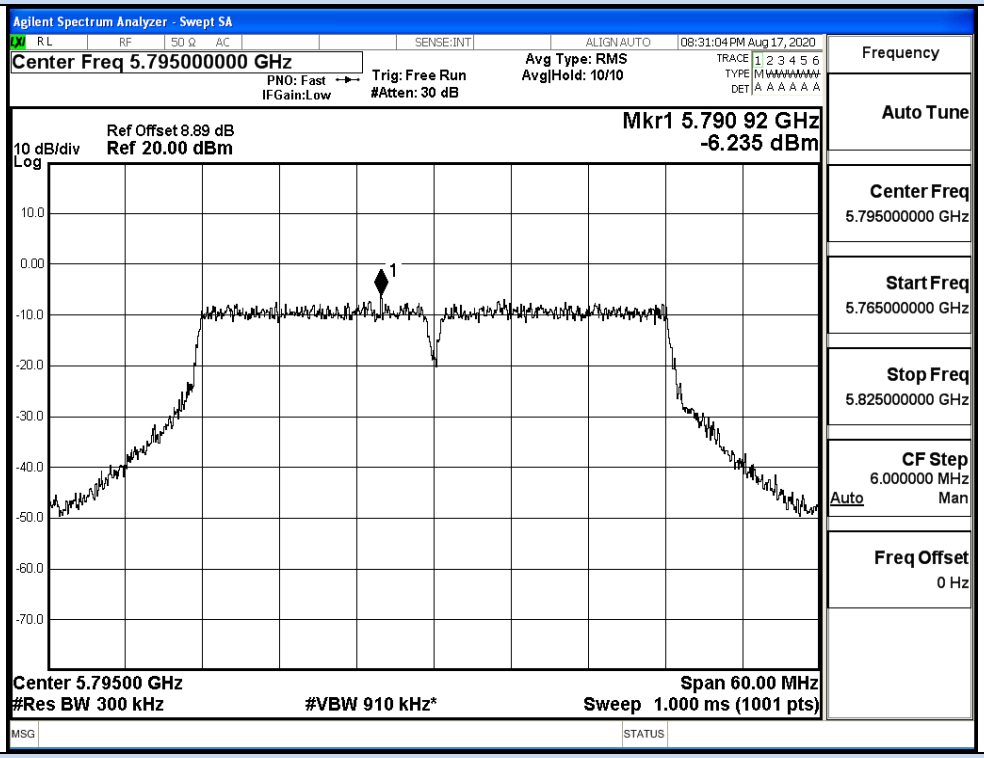
IEEE 802.11ac20 / Channel 157 / 5785MHz



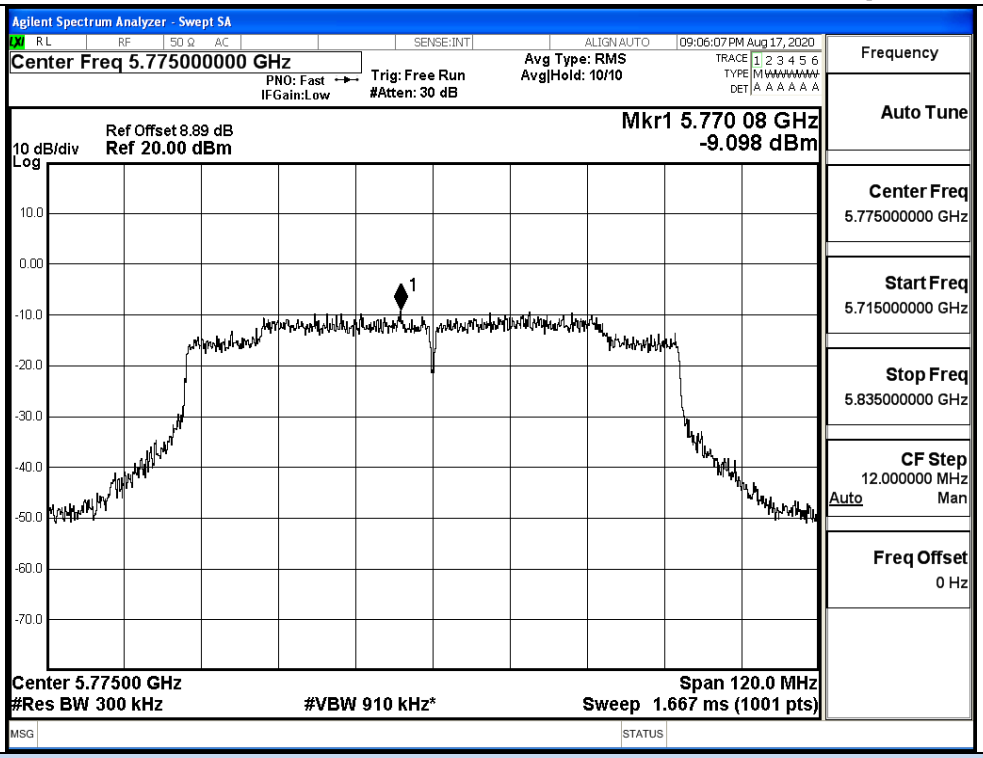
IEEE 802.11ac20 / Channel 165 / 5825MHz



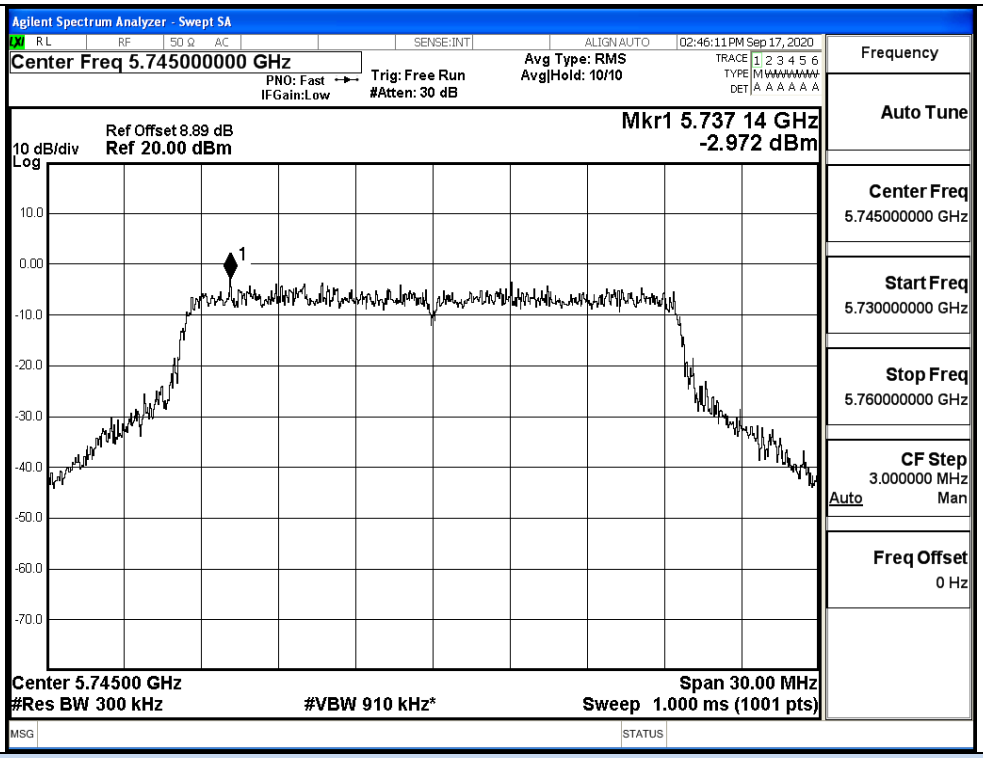
IEEE 802.11ac40 / Channel 151 / 5755MHz



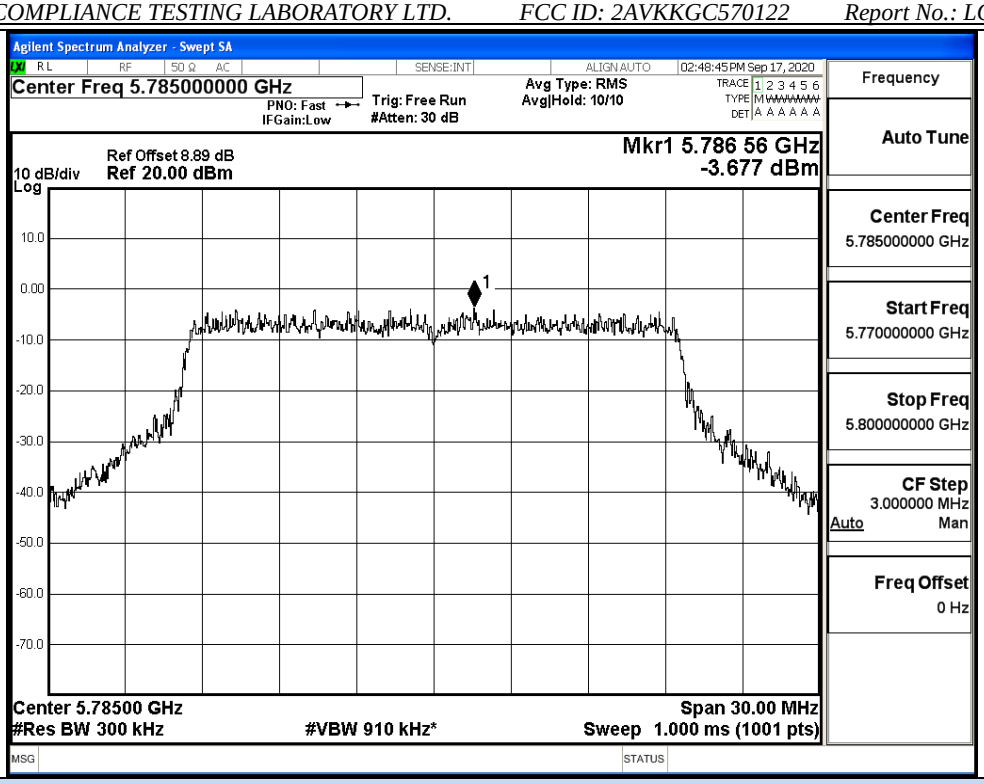
IEEE 802.11ac40 / Channel 159 / 5795MHz



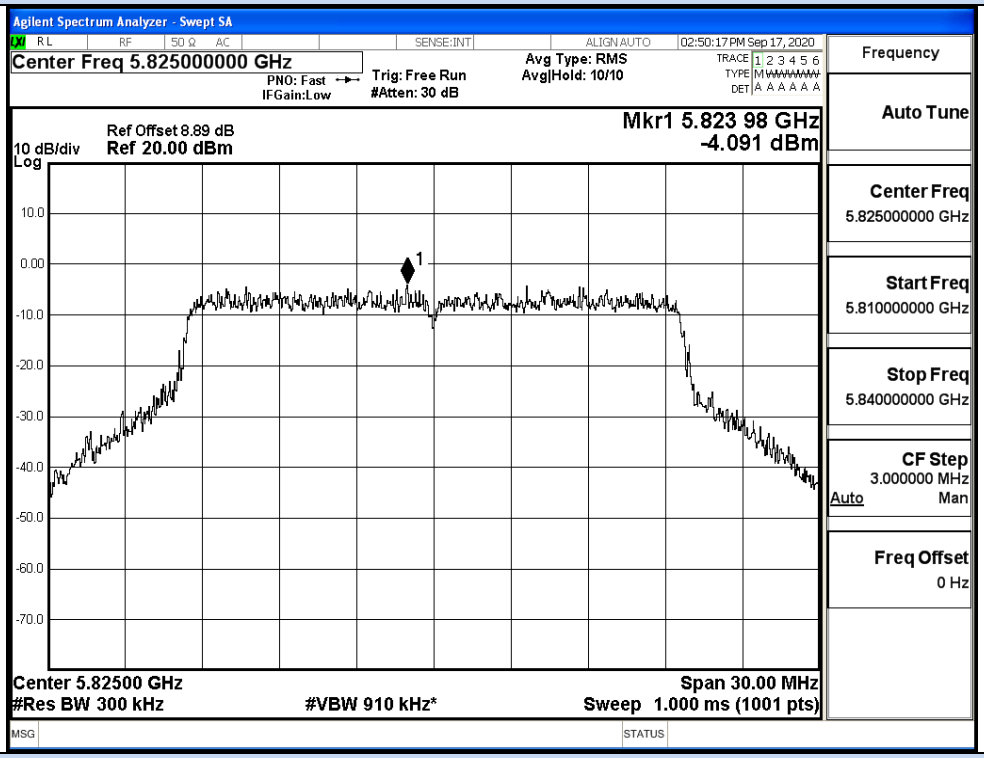
IEEE 802.11ac80 / Channel 155/ 5775MHz



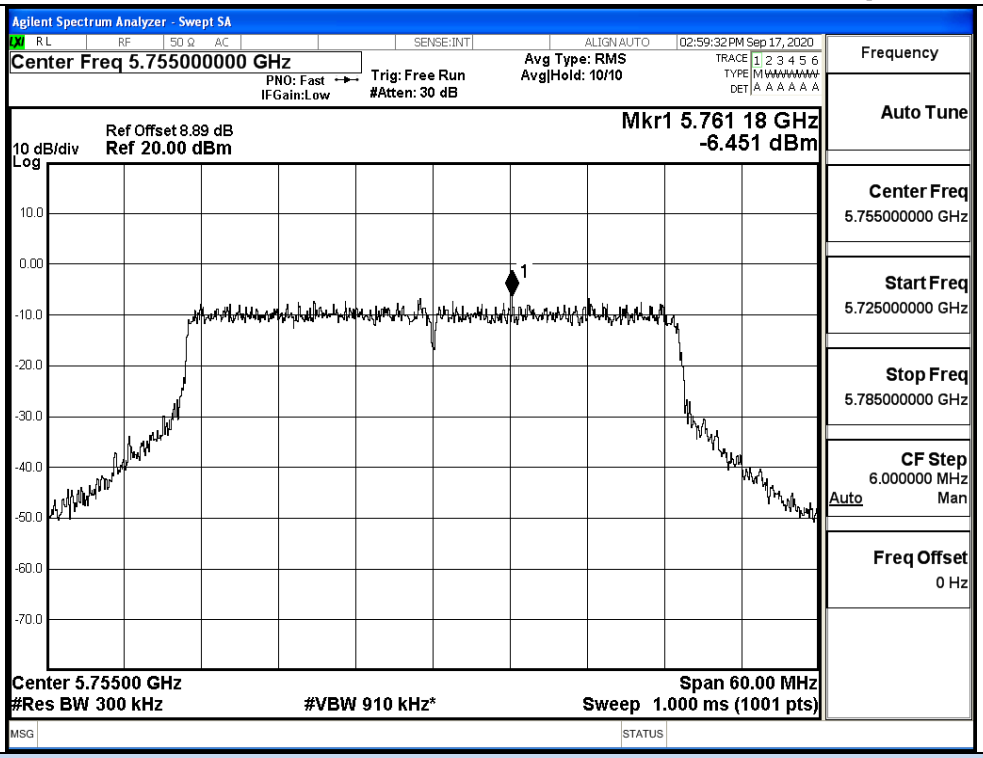
IEEE 802.11AX20 / Channel 149 / 5745MHz



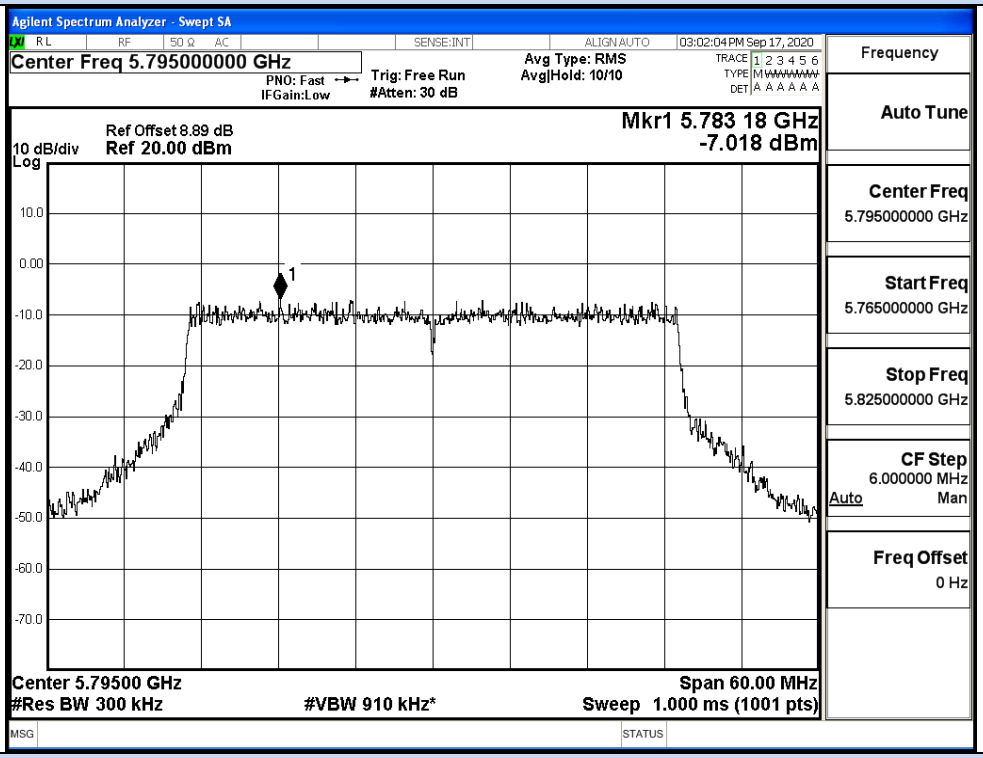
IEEE 802.11AX20 / Channel 157 / 5785MHz



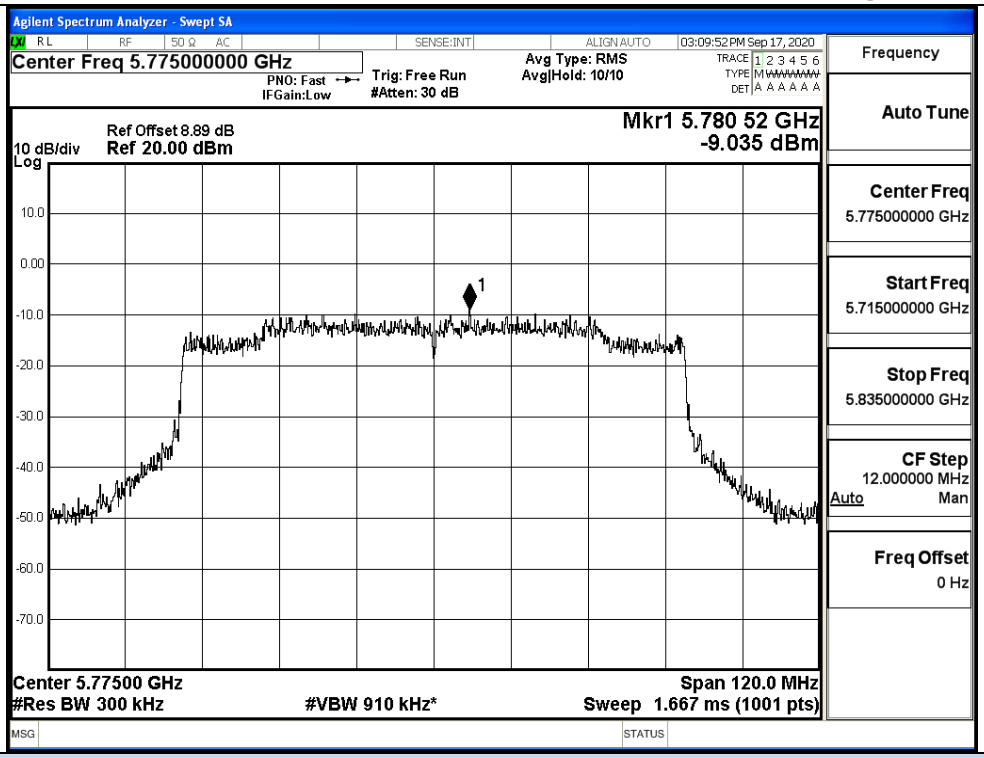
IEEE 802.11AX20 / Channel 165 / 5825MHz



IEEE 802.11AX40 / Channel 151 / 5755MHz



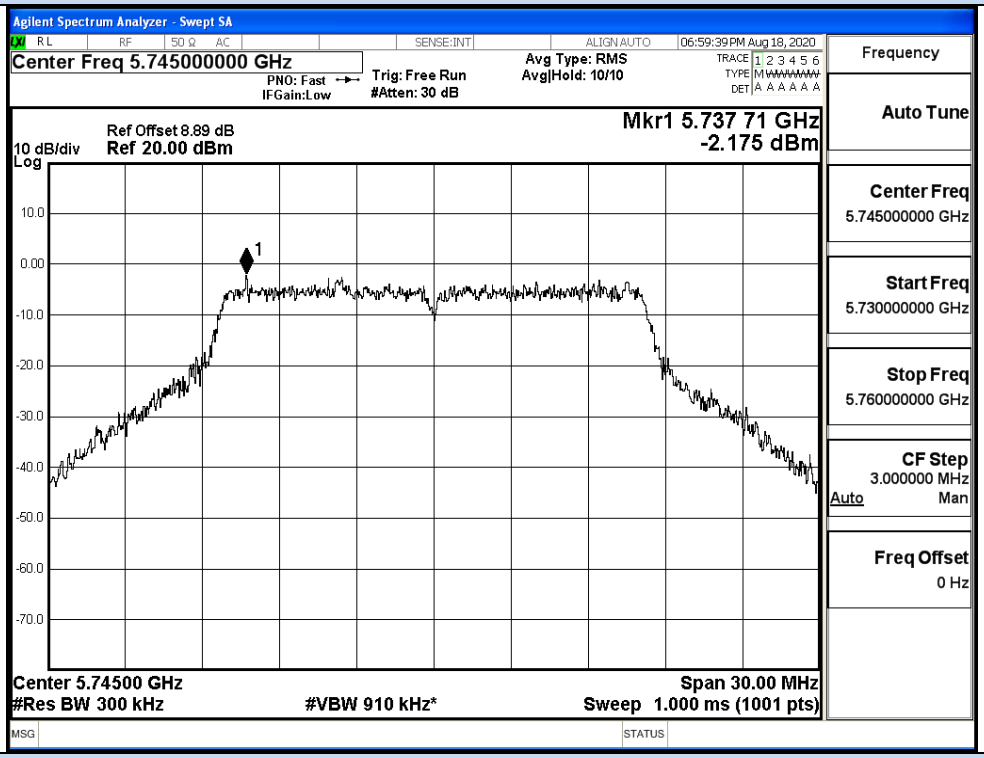
IEEE 802.11AX40 / Channel 159 / 5795MHz



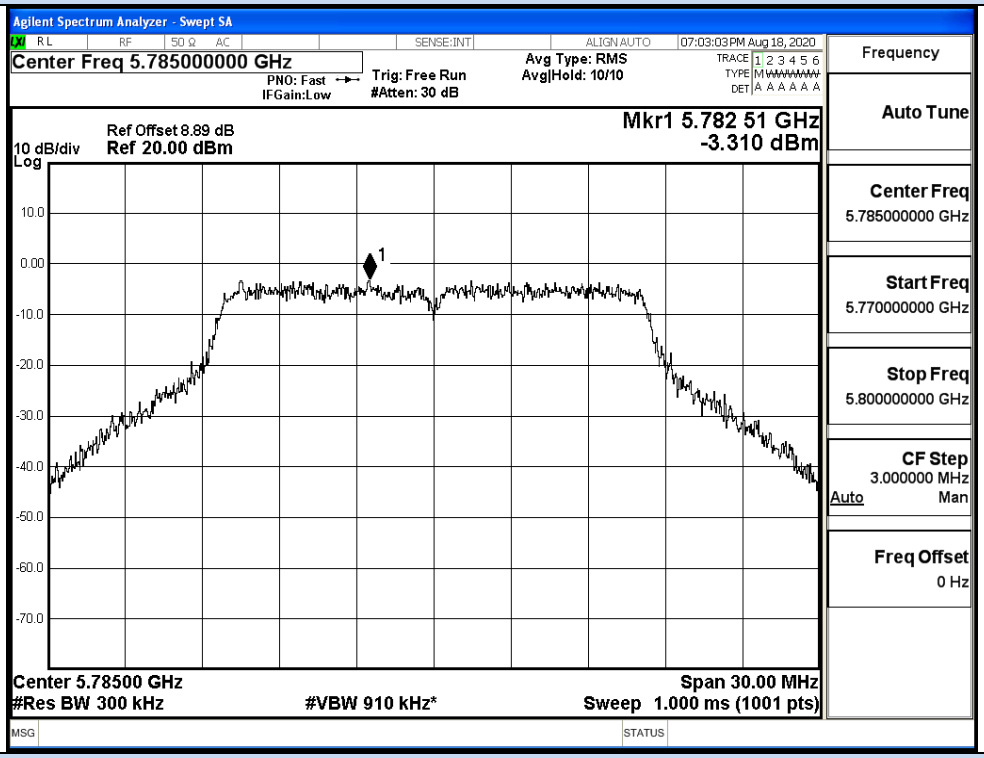
IEEE 802.11AX80 / Channel 155/ 5775MHz

Ant1

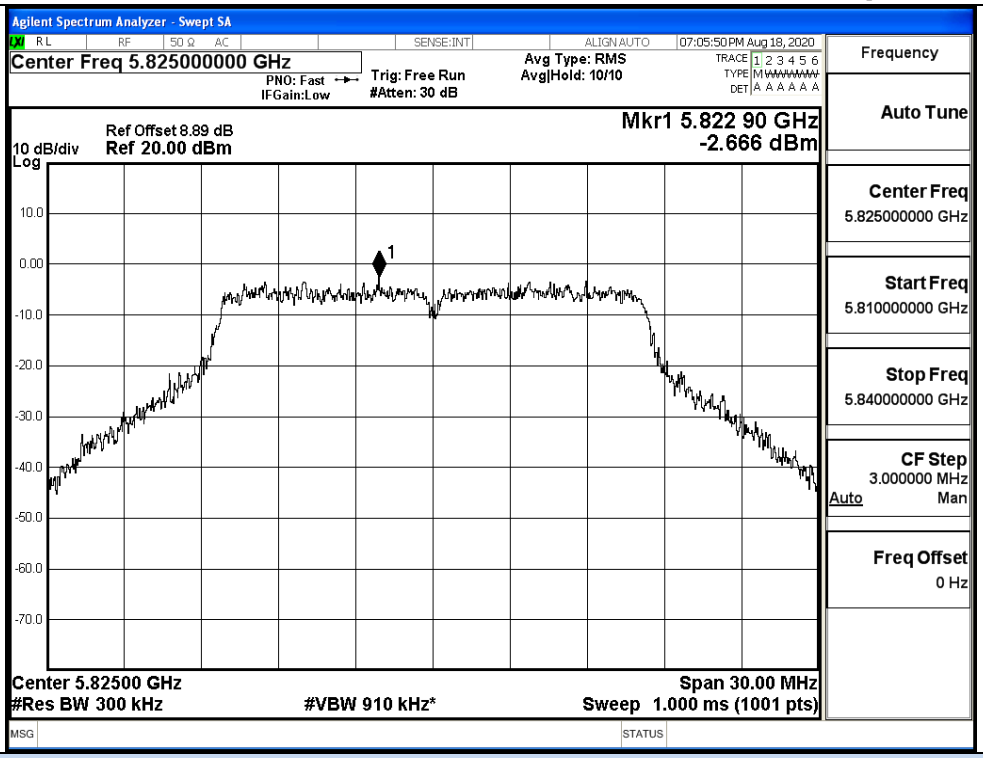
Power Spectral Density



IEEE 802.11a / Channel 149 / 5745MHz

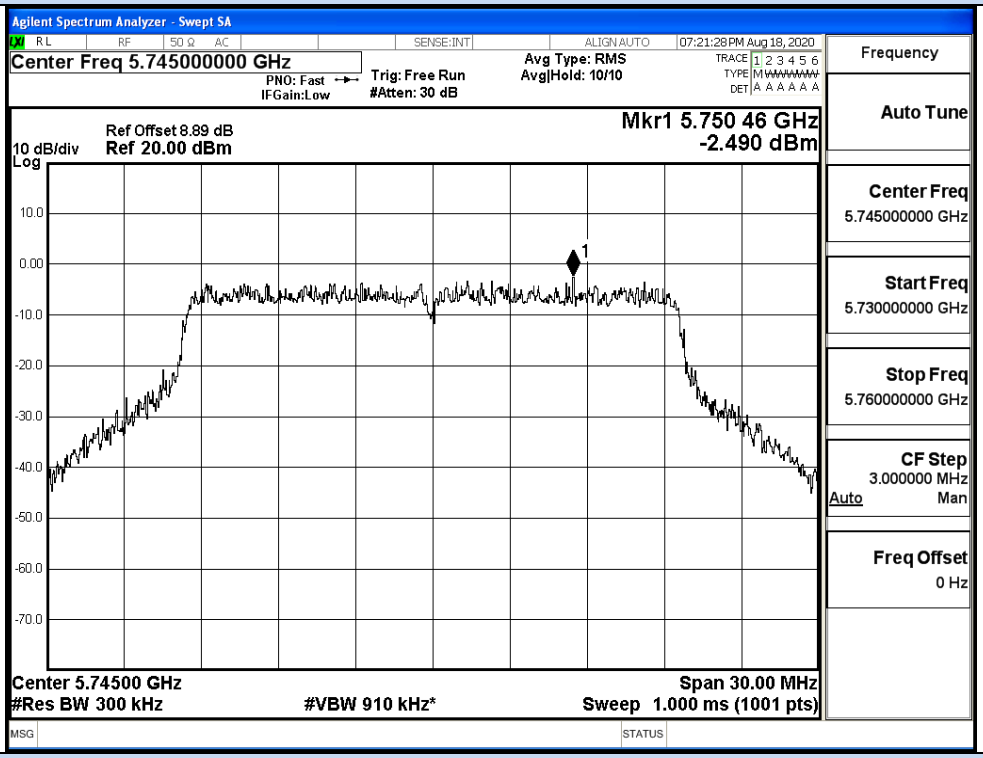


IEEE 802.11na / Channel 157 / 5785MHz

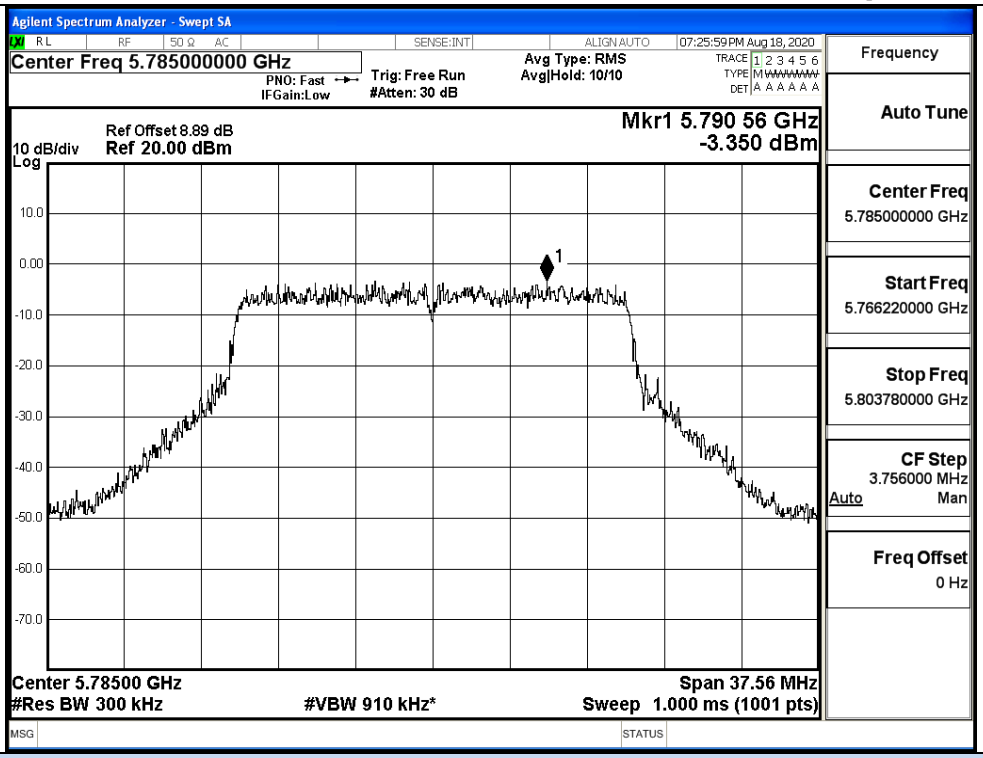


IEEE 802.11na / Channel 165 / 5825MHz

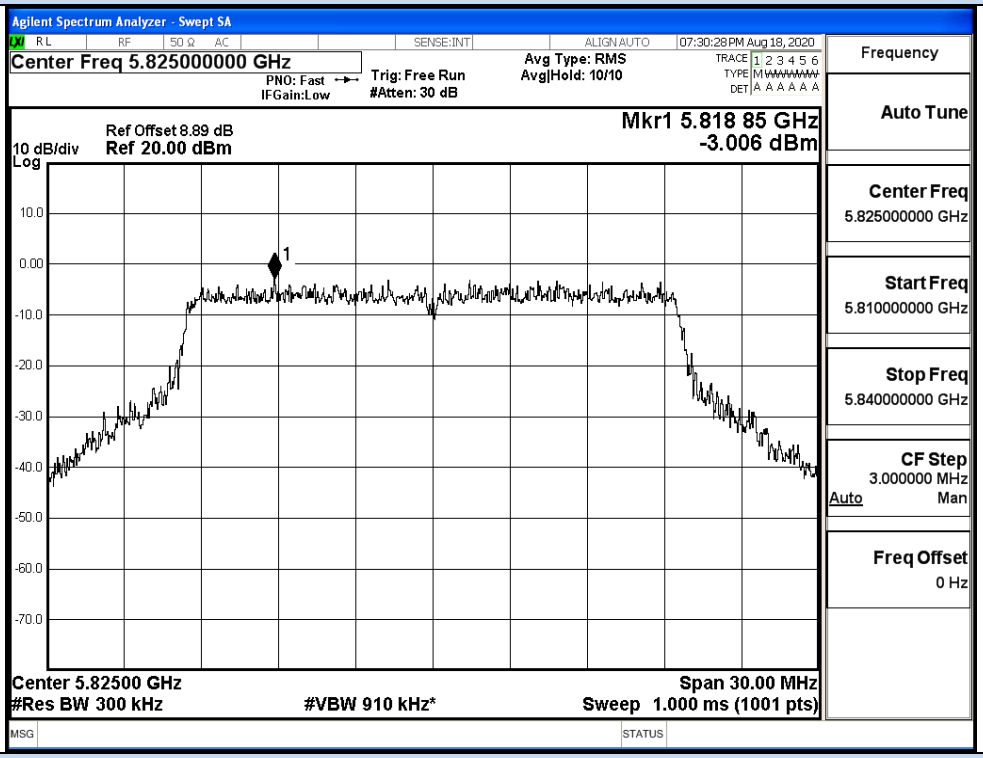
Power Spectral Density



IEEE 802.11n20 / Channel 149 / 5745MHz

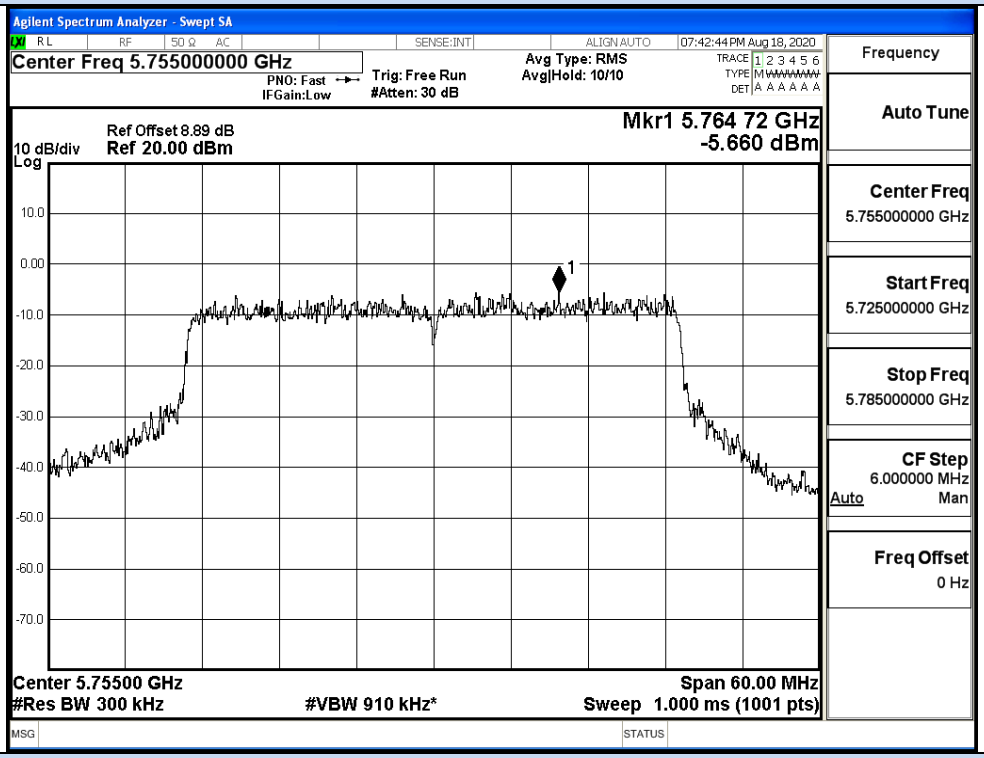


IEEE 802.11n20 / Channel 157 / 5785MHz

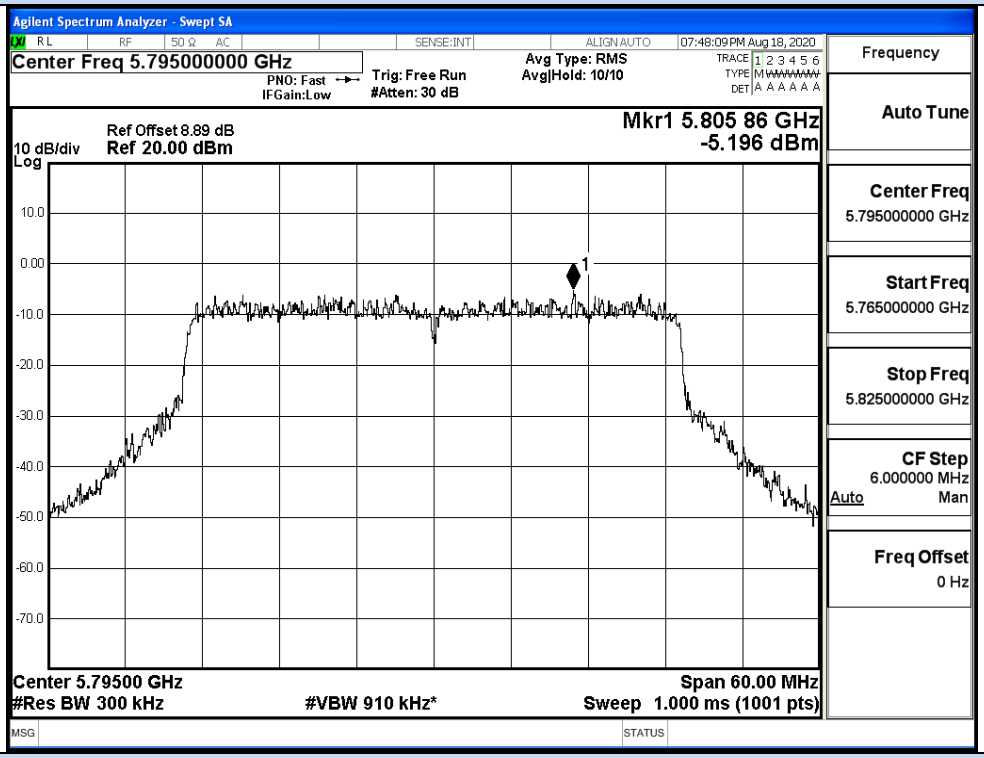


IEEE 802.11n20 / Channel 165 / 5825MHz

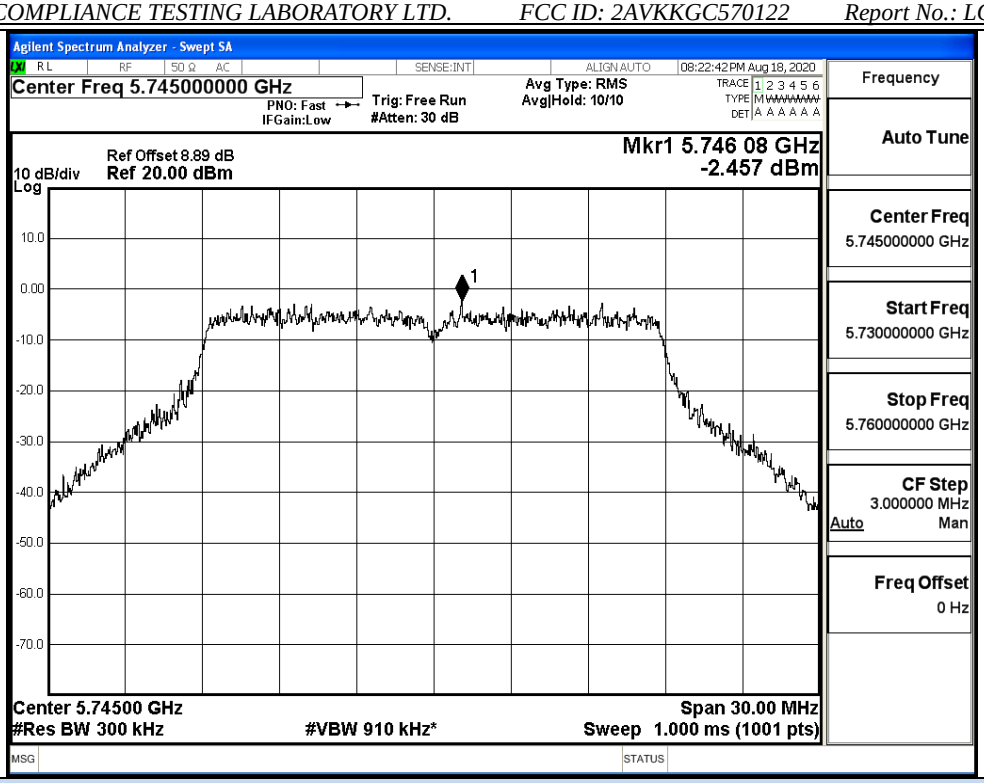
Power Spectral Density



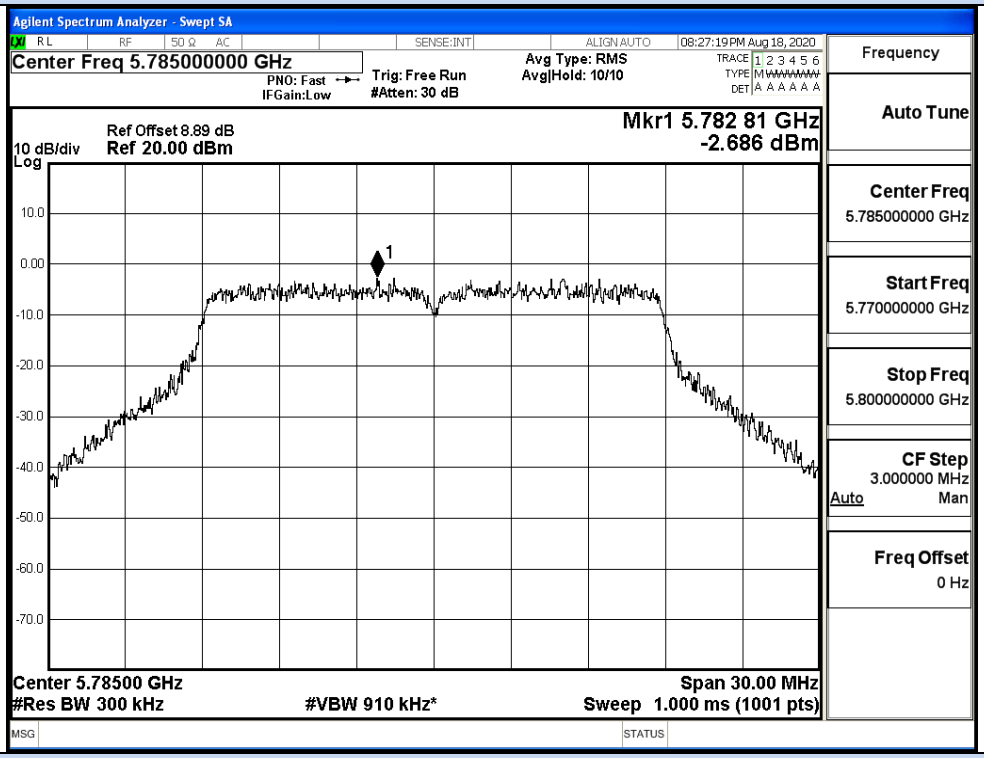
IEEE 802.11n40 / Channel 151 / 5755MHz



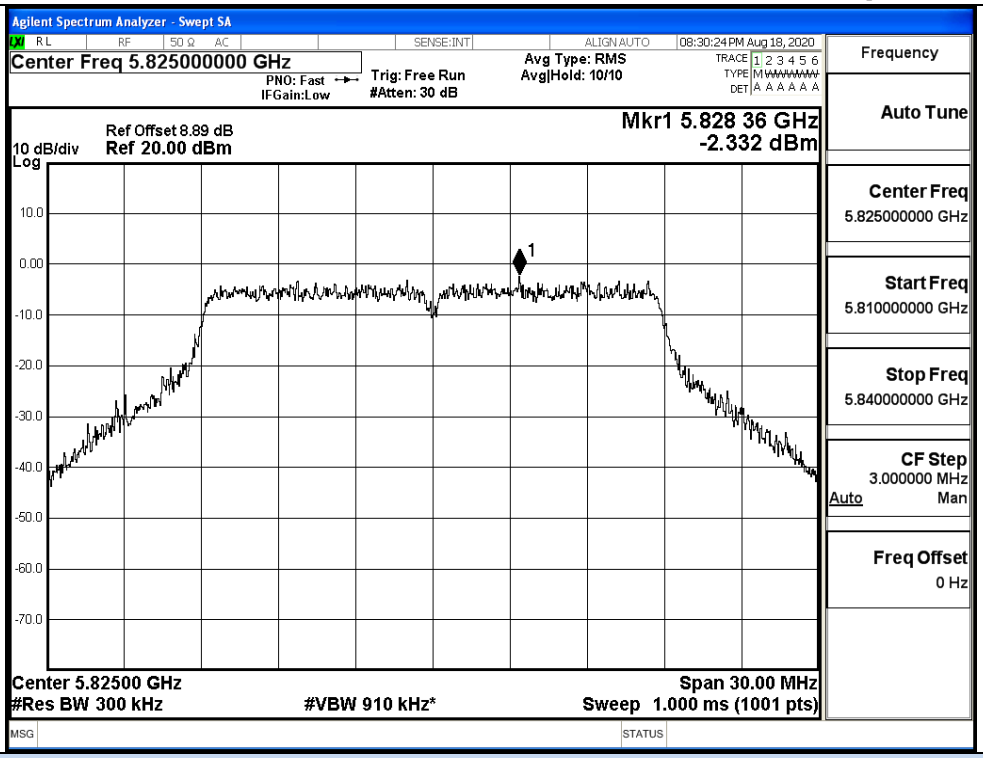
IEEE 802.11n40 / Channel 159 / 5795MHz



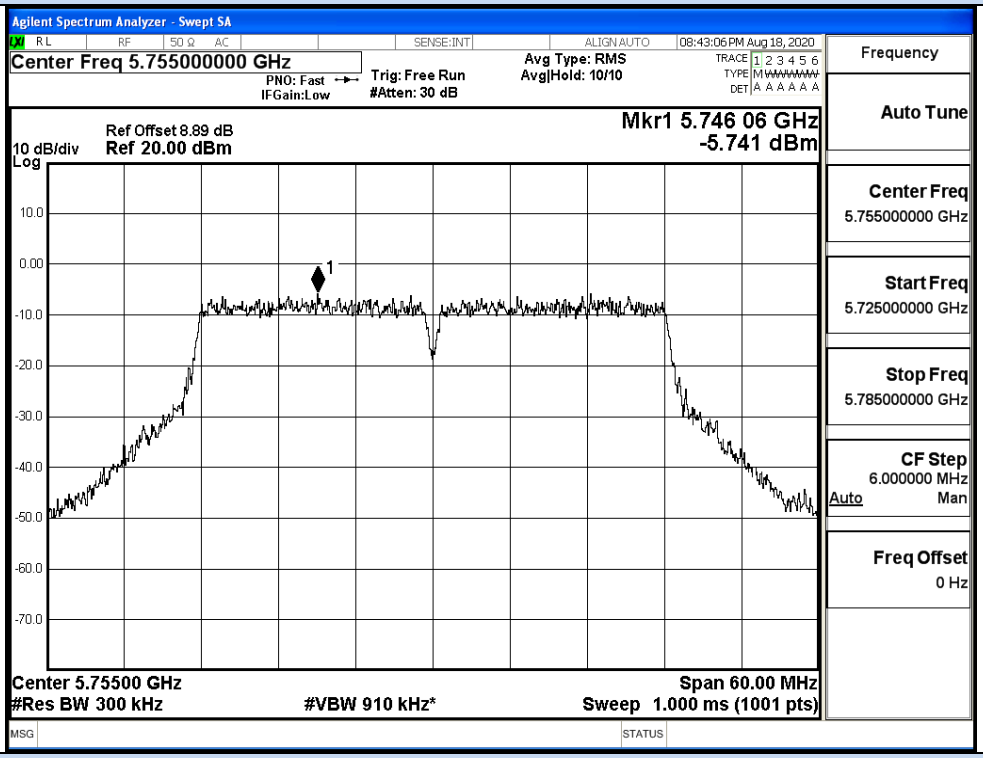
IEEE 802.11ac20 / Channel 149 / 5745MHz



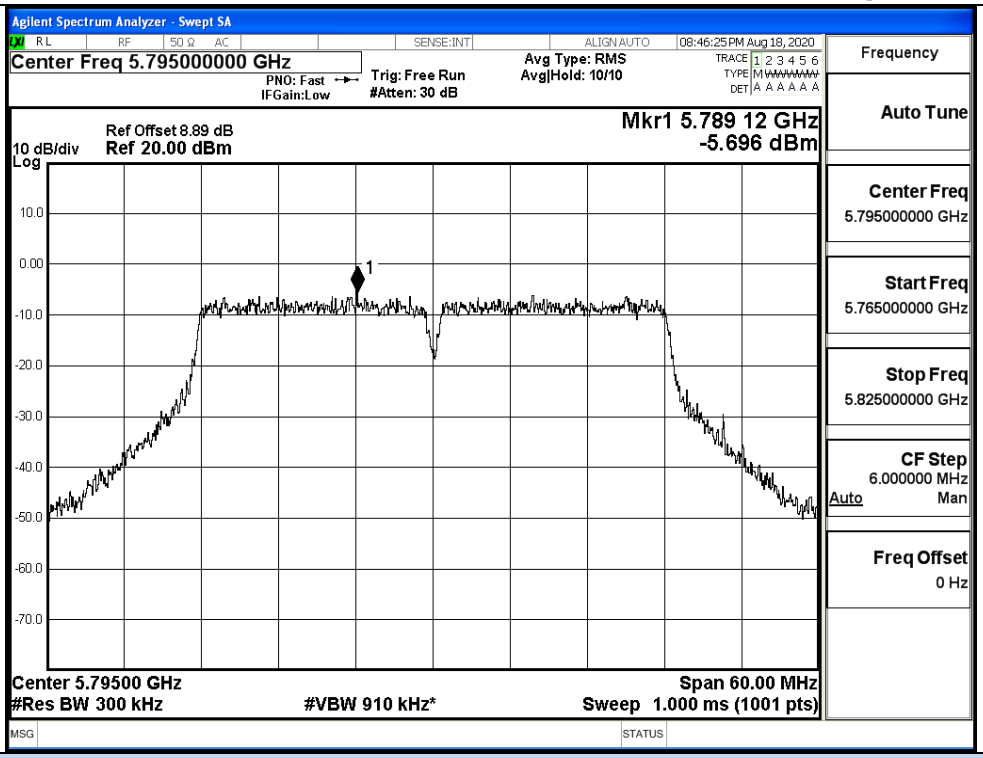
IEEE 802.11ac20 / Channel 157 / 5785MHz



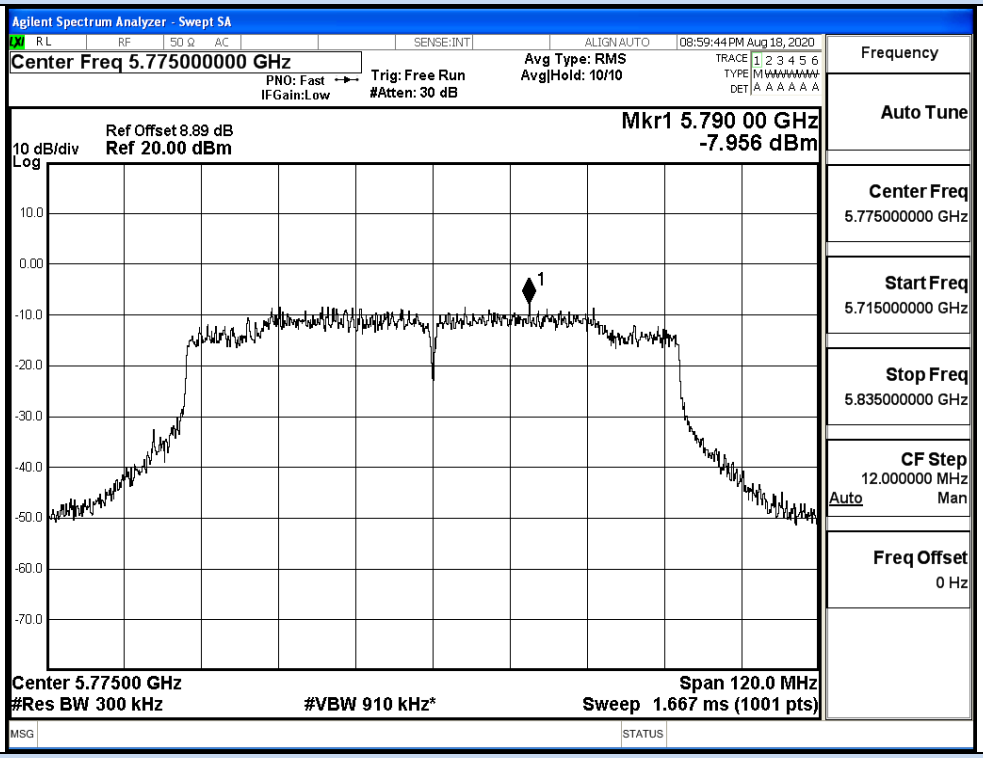
IEEE 802.11ac20 / Channel 165 / 5825MHz



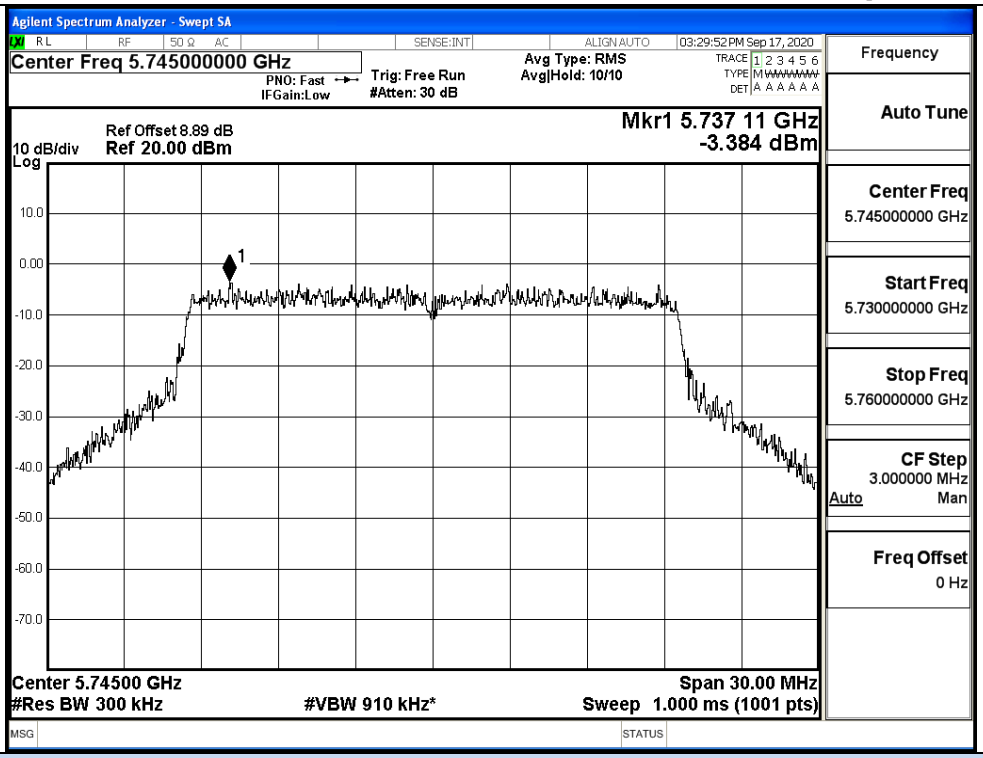
IEEE 802.11ac40 / Channel 151 / 5755MHz



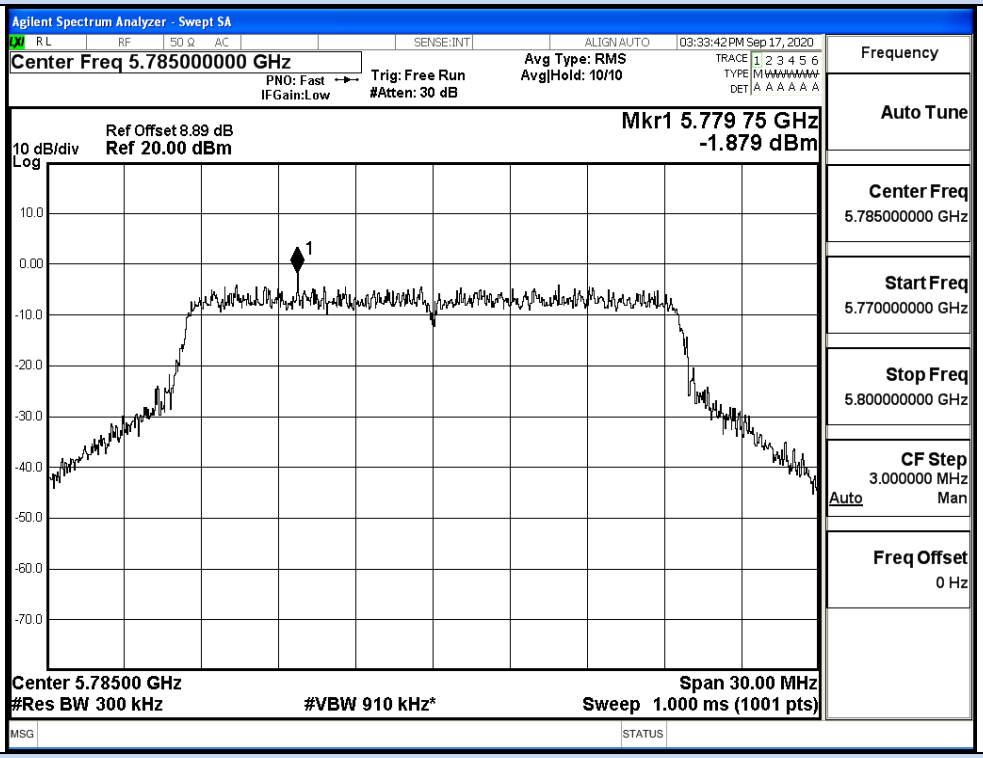
IEEE 802.11ac40 / Channel 159 / 5795MHz



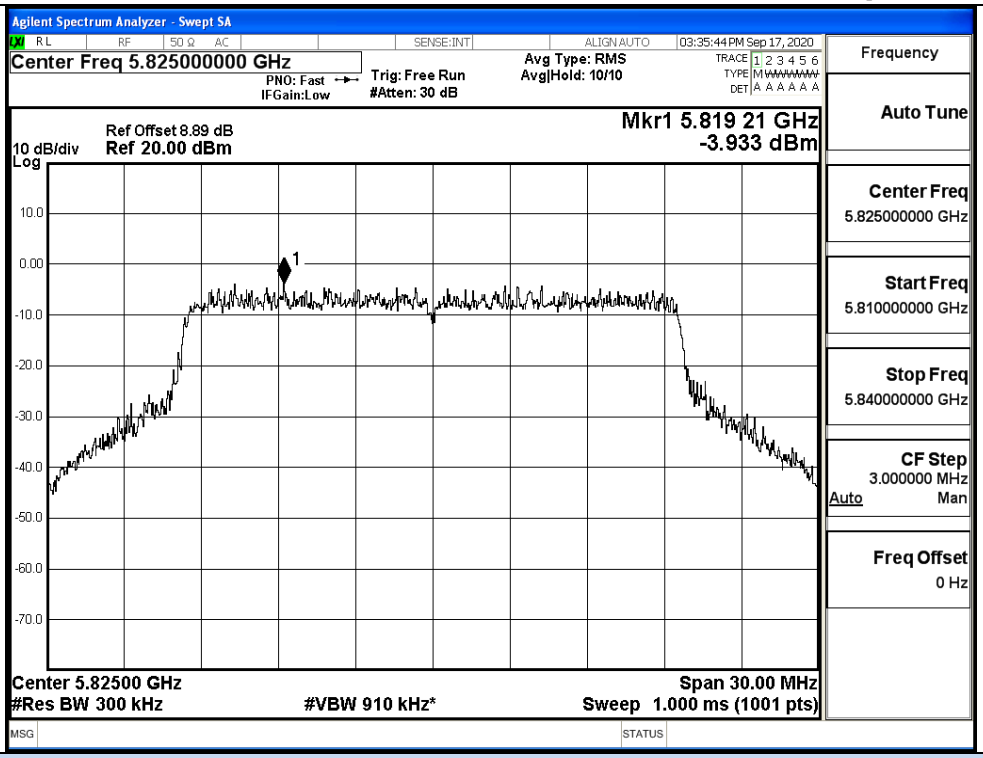
IEEE 802.11ac80 / Channel 155/ 5775MHz



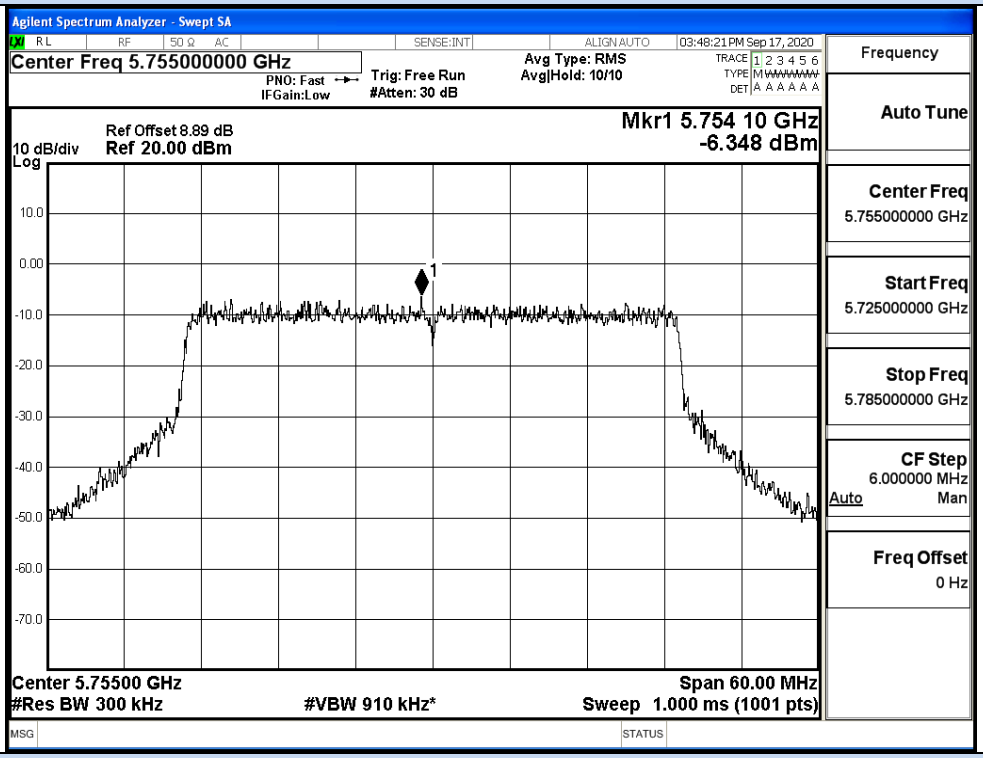
IEEE 802.11AX20 / Channel 149 / 5745MHz



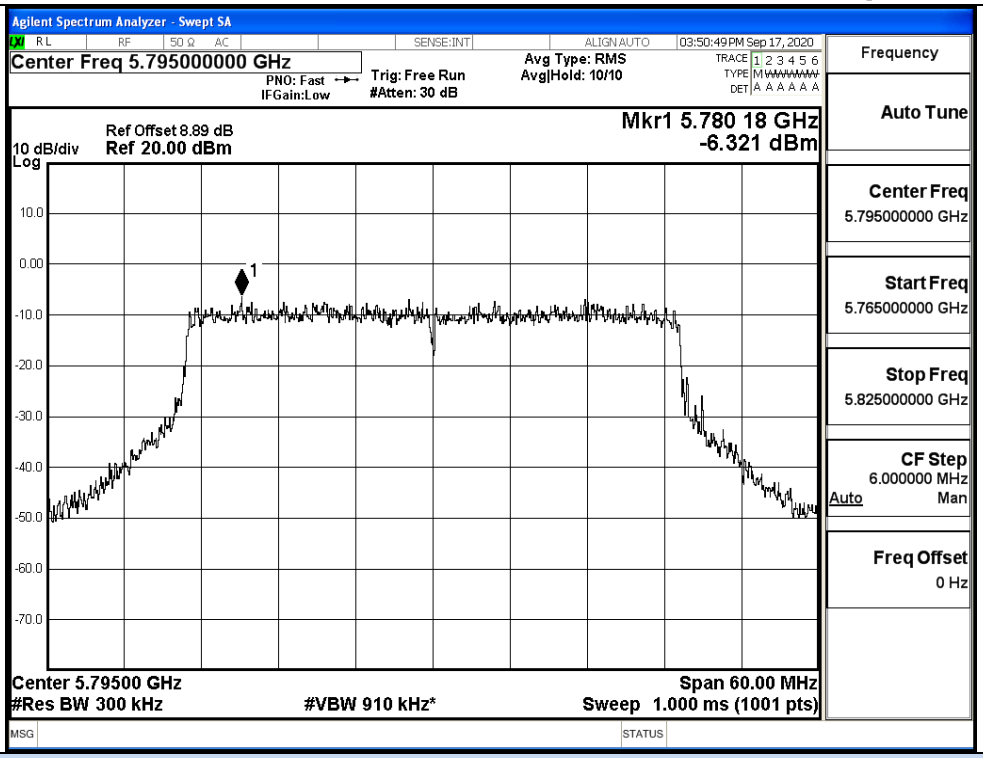
IEEE 802.11AX20 / Channel 157 / 5785MHz



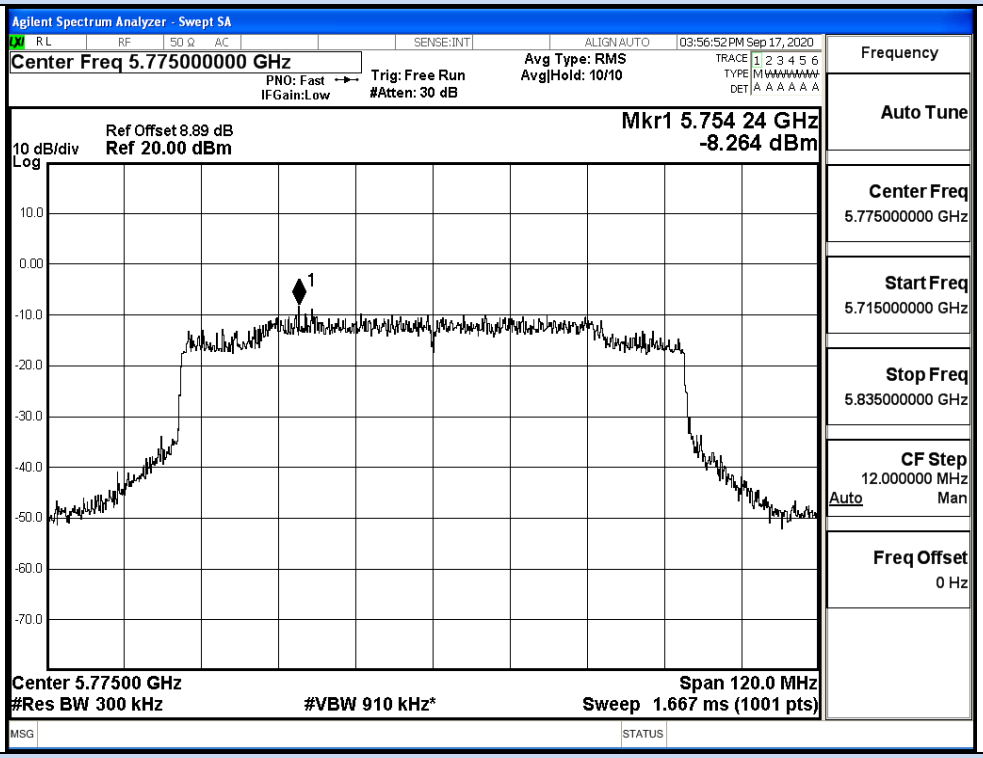
IEEE 802.11AX20 / Channel 165 / 5825MHz



IEEE 802.11AX40 / Channel 151 / 5755MHz



IEEE 802.11AX40 / Channel 159 / 5795MHz



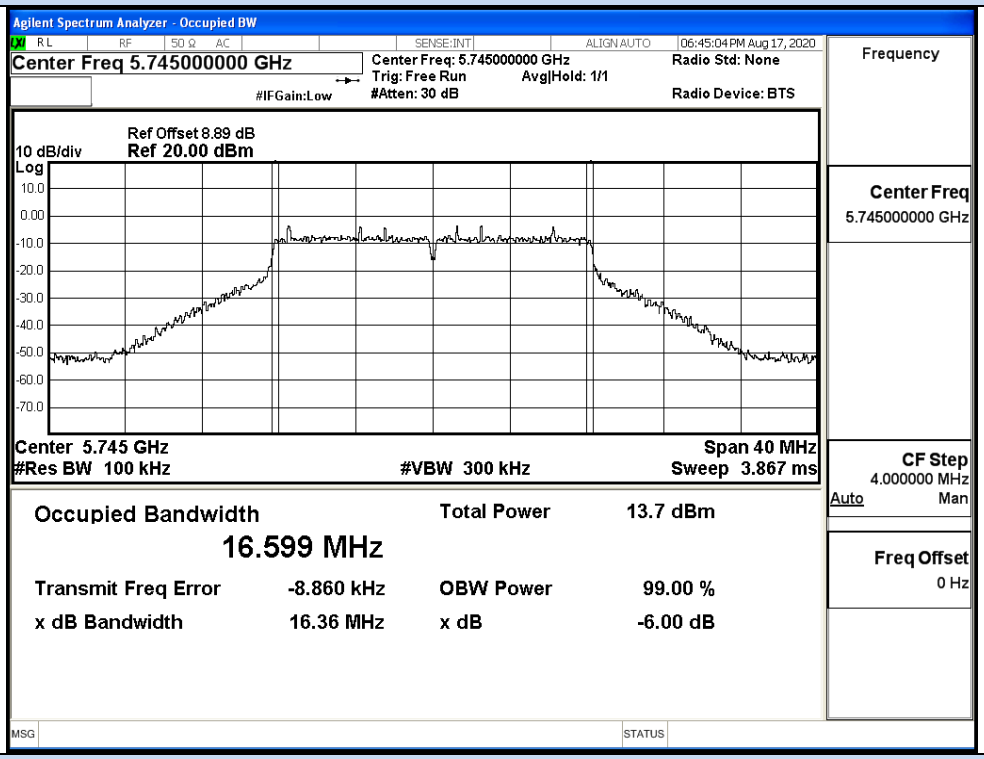
IEEE 802.11AX80 / Channel 155/ 5775MHz

E.4 Emission Bandwidth

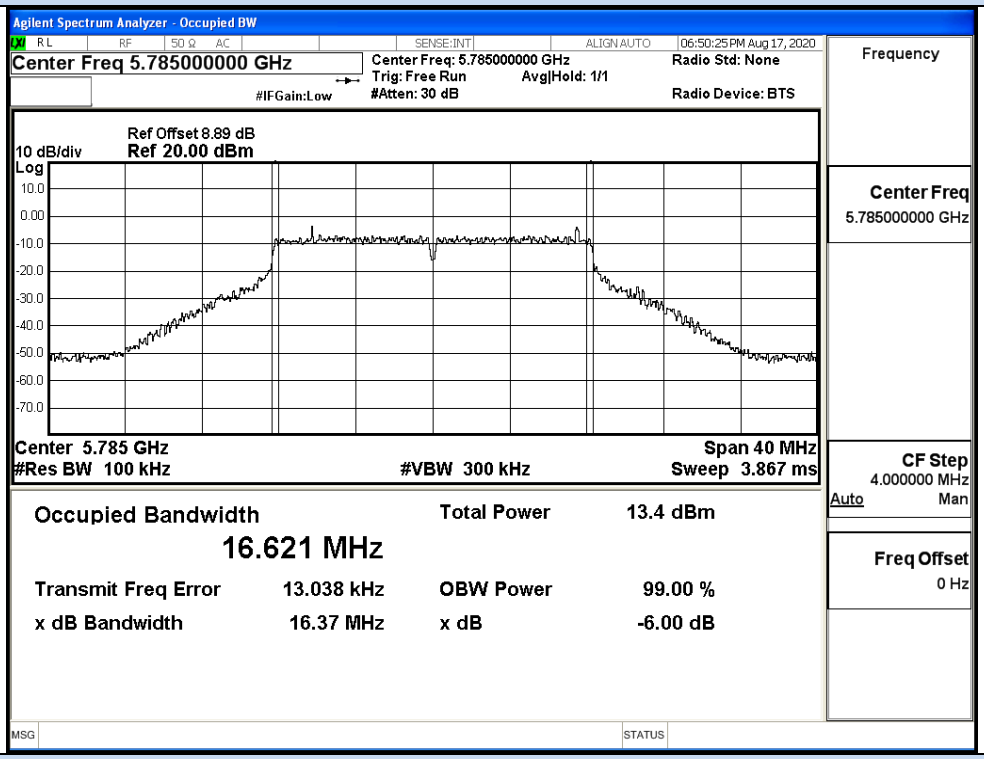
Ant0

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.36	>=0.5	Pass
	157	5785	16.37		Pass
	165	5825	16.39		Pass
11N20 SISO	149	5745	18.62	>=0.5	Pass
	157	5785	18.50		Pass
	165	5825	18.84		Pass
11N40 SISO	151	5755	37.83	>=0.5	Pass
	159	5795	37.84		Pass
11AC20SISO	149	5745	17.61	>=0.5	Pass
	157	5785	17.61		Pass
	165	5825	17.41		Pass
11AC40SISO	151	5755	36.39	>=0.5	Pass
	159	5795	36.37		Pass
11AC80SISO	155	5775	61.04	>=0.5	Pass
11AX20SISO	149	5745	18.70	>=0.5	Pass
	157	5785	18.84		Pass
	165	5825	18.89		Pass
11AX40SISO	151	5755	37.88	>=0.5	Pass
	159	5795	37.60		Pass
11AX80SISO	155	5775	74.62	>=0.5	Pass

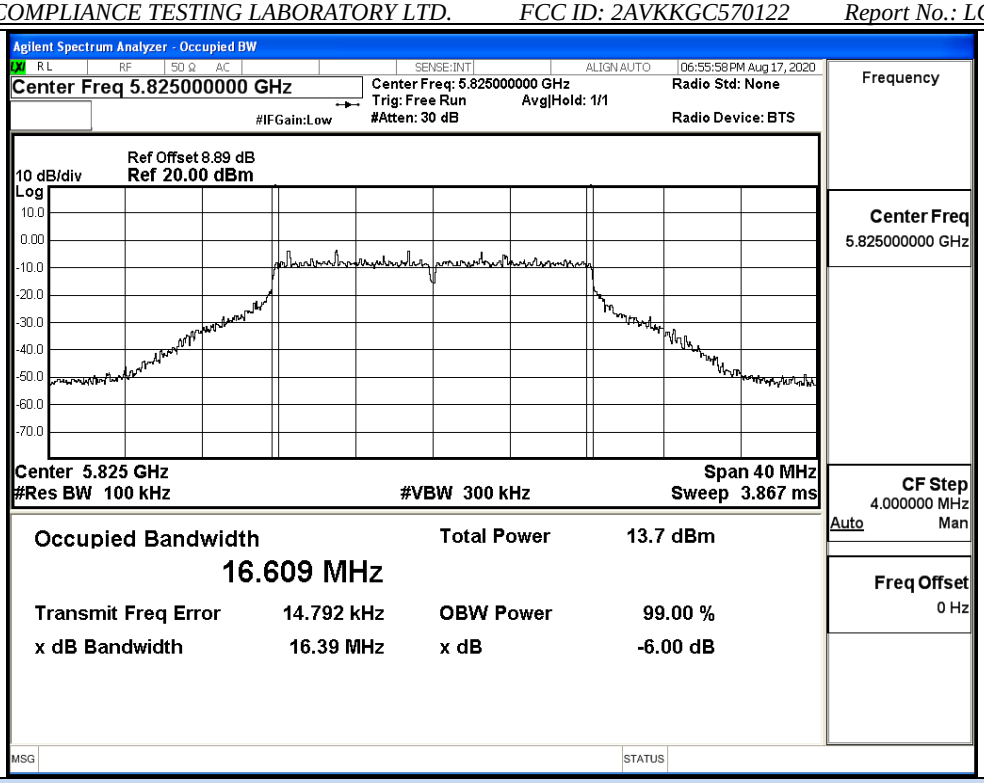
6dB Bandwidth



IEEE 802.11a / Channel 149 / 5745MHz

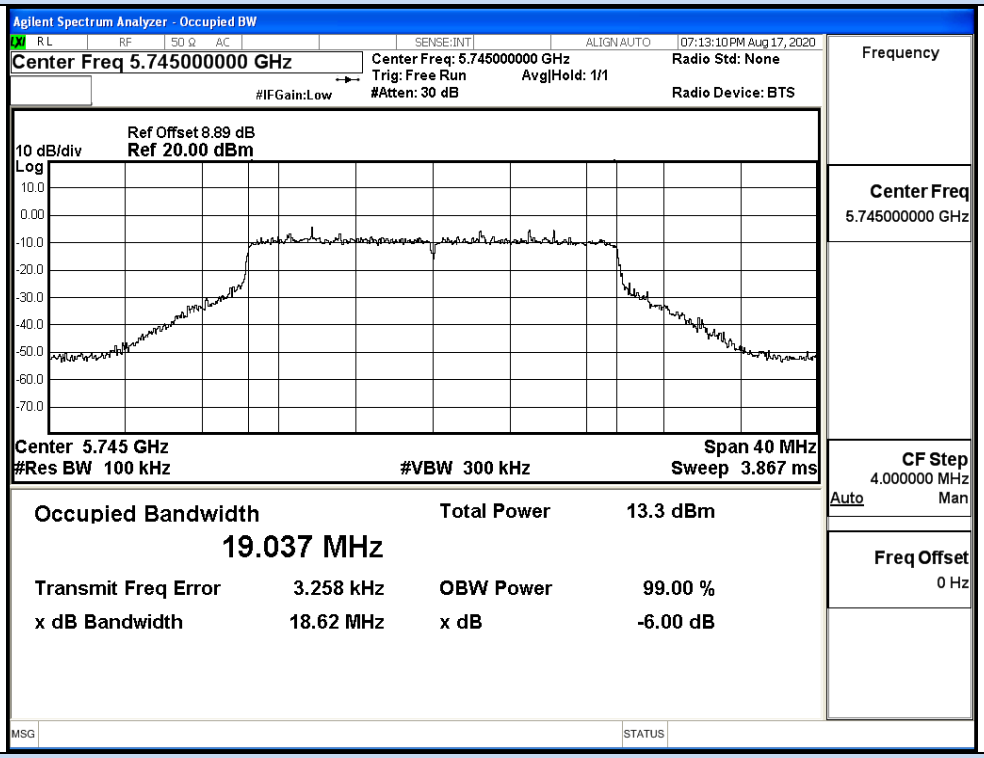


IEEE 802.11a / Channel 157 / 5785MHz

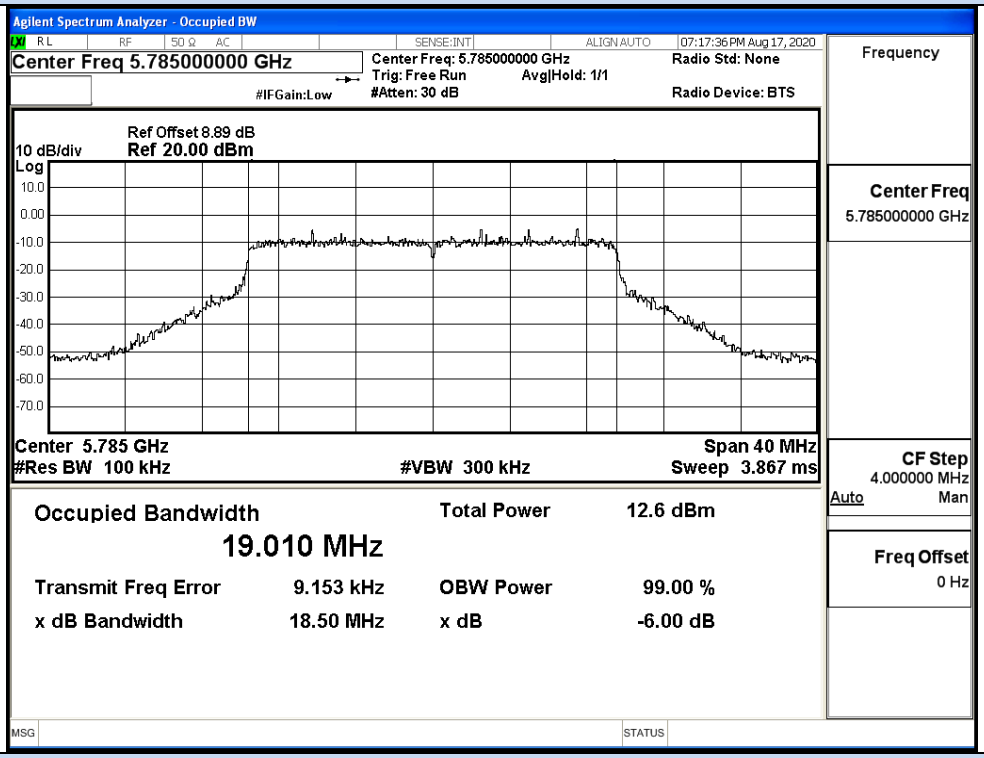


IEEE 802.11a / Channel 165 / 5825MHz

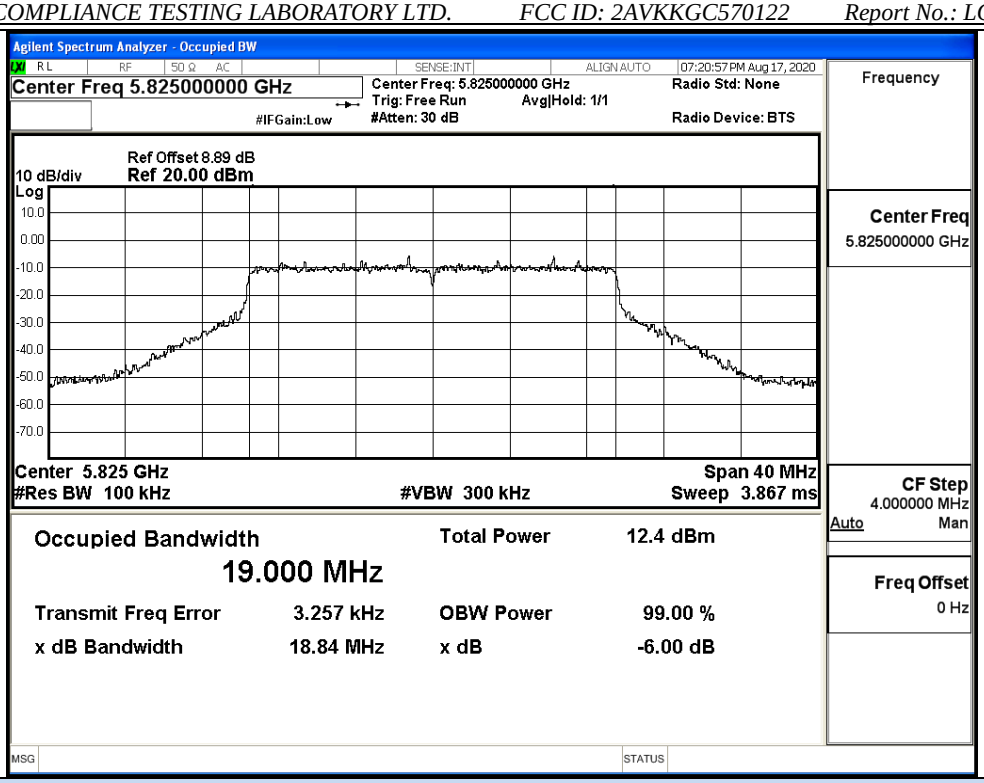
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

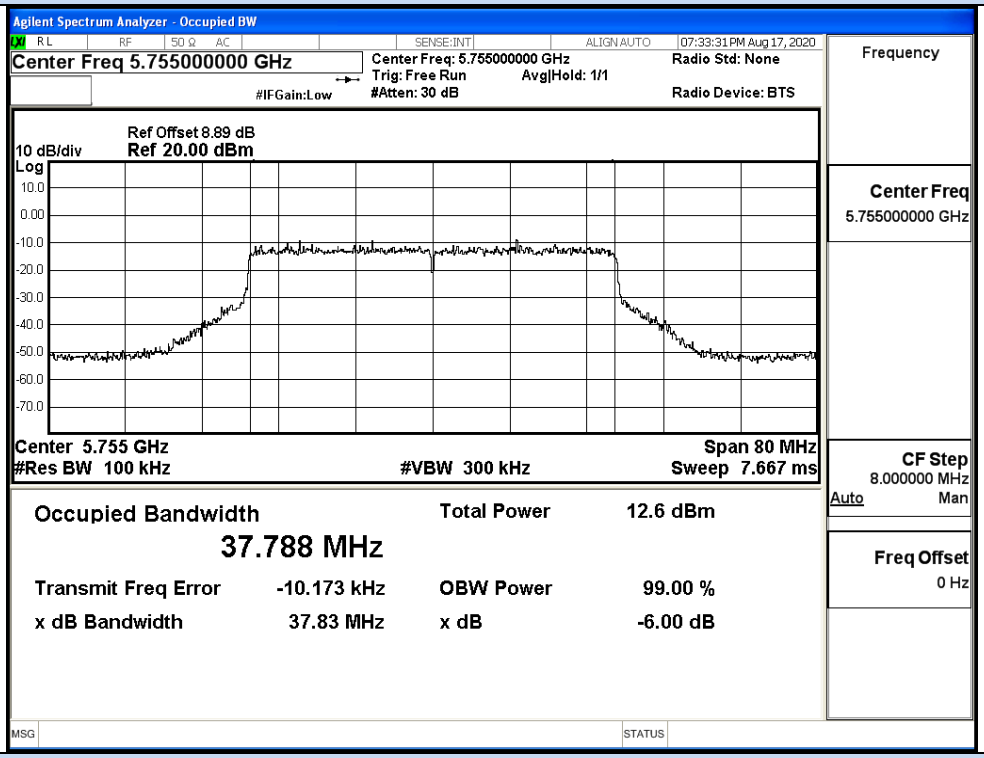


IEEE 802.11n20 / Channel 157 / 5785MHz

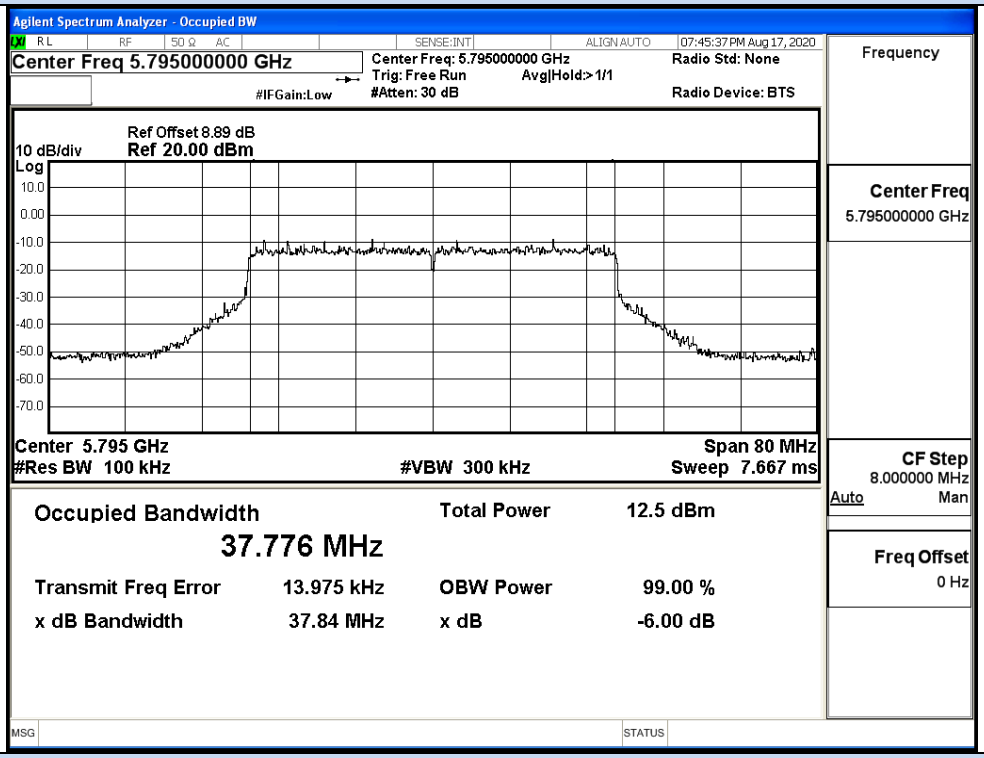


IEEE 802.11n20 / Channel 165 / 5825MHz

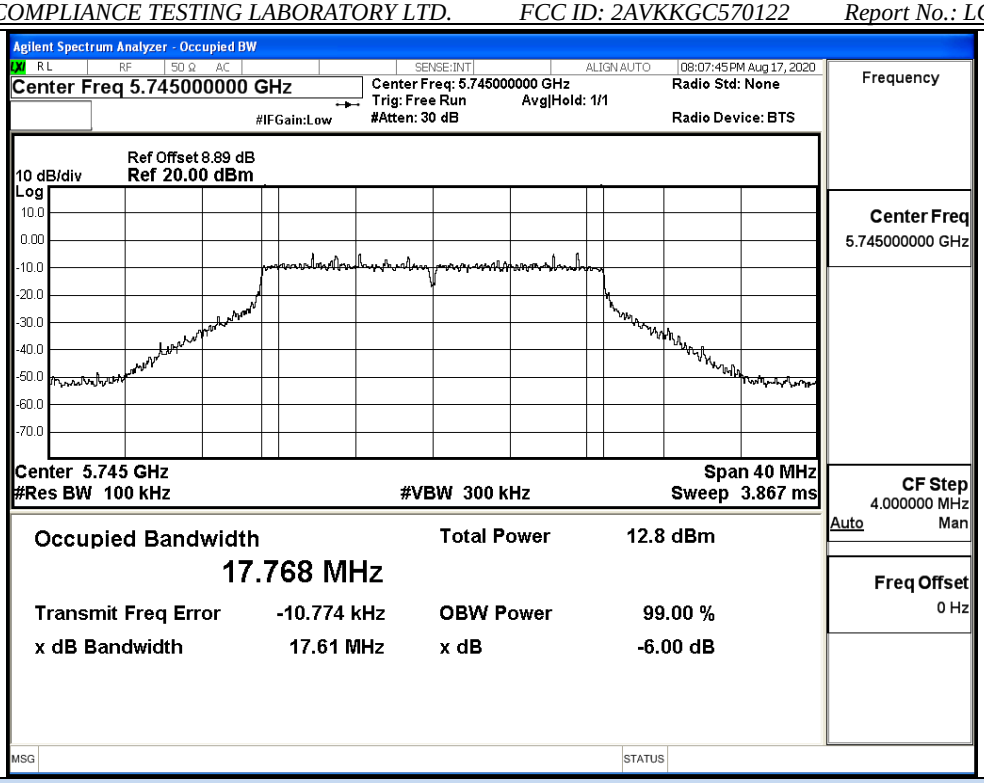
26dB Bandwidth



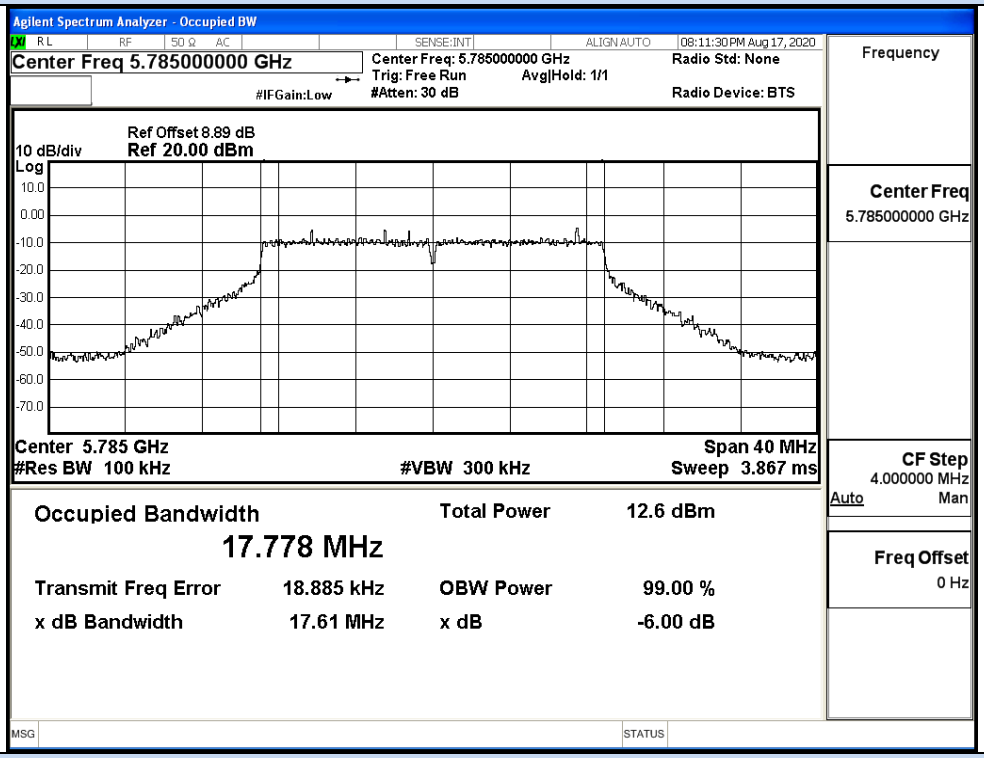
IEEE 802.11n40 / Channel 151 / 5755MHz



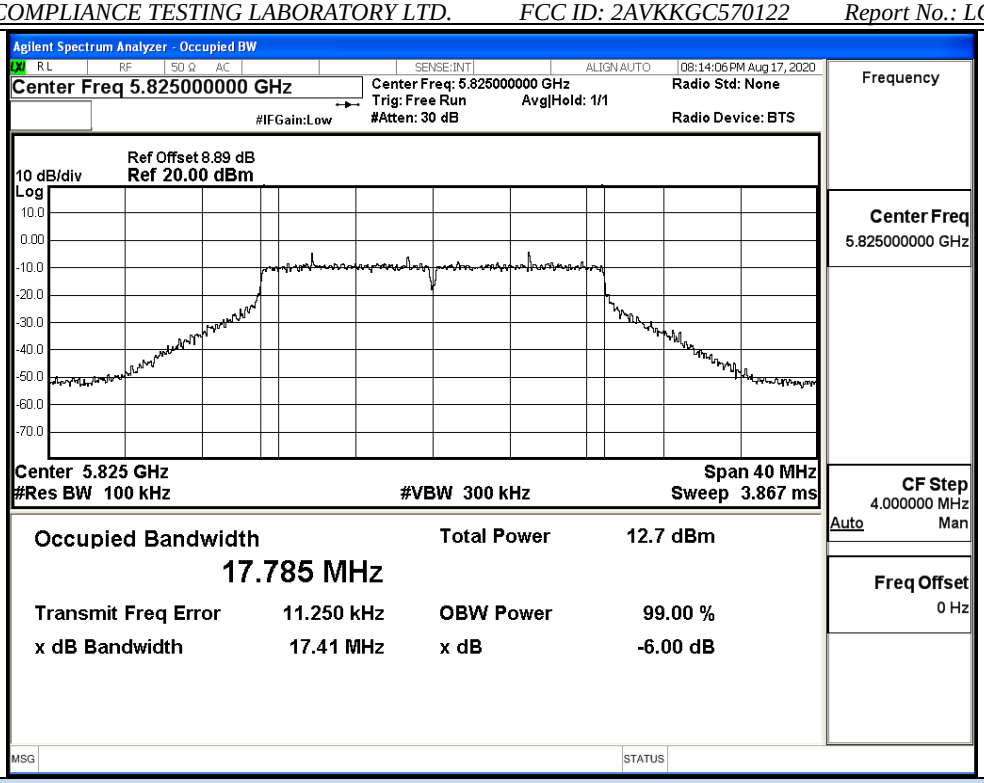
IEEE 802.11n40 / Channel 159 / 5795MHz



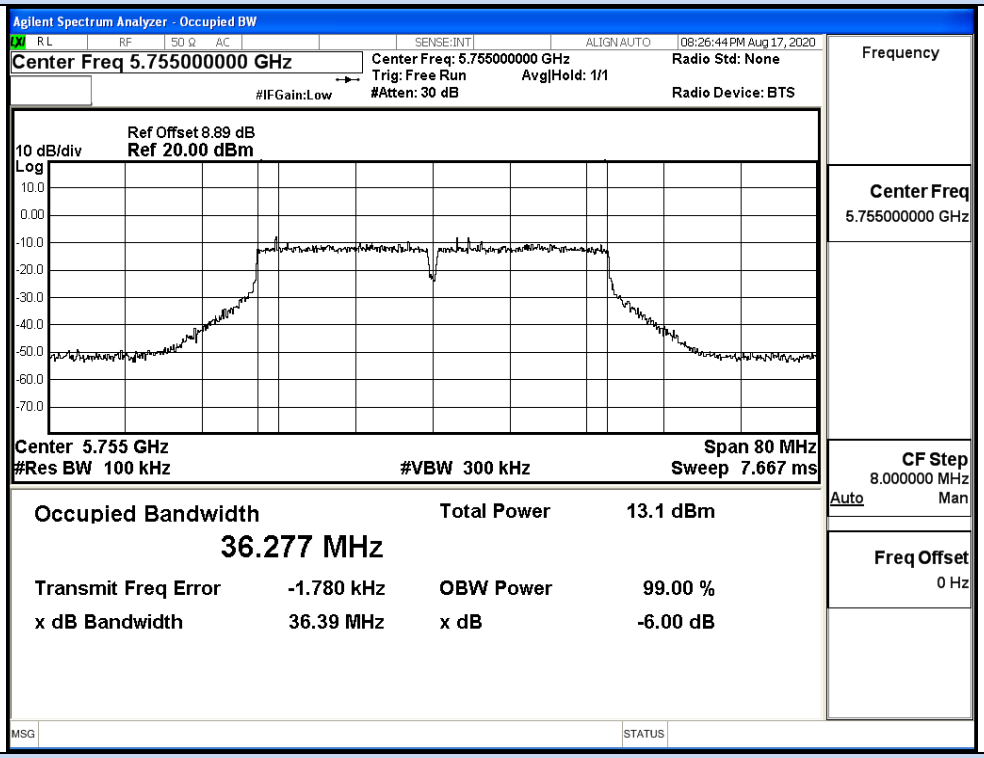
IEEE 802.11ac20 / Channel 149 / 5745MHz



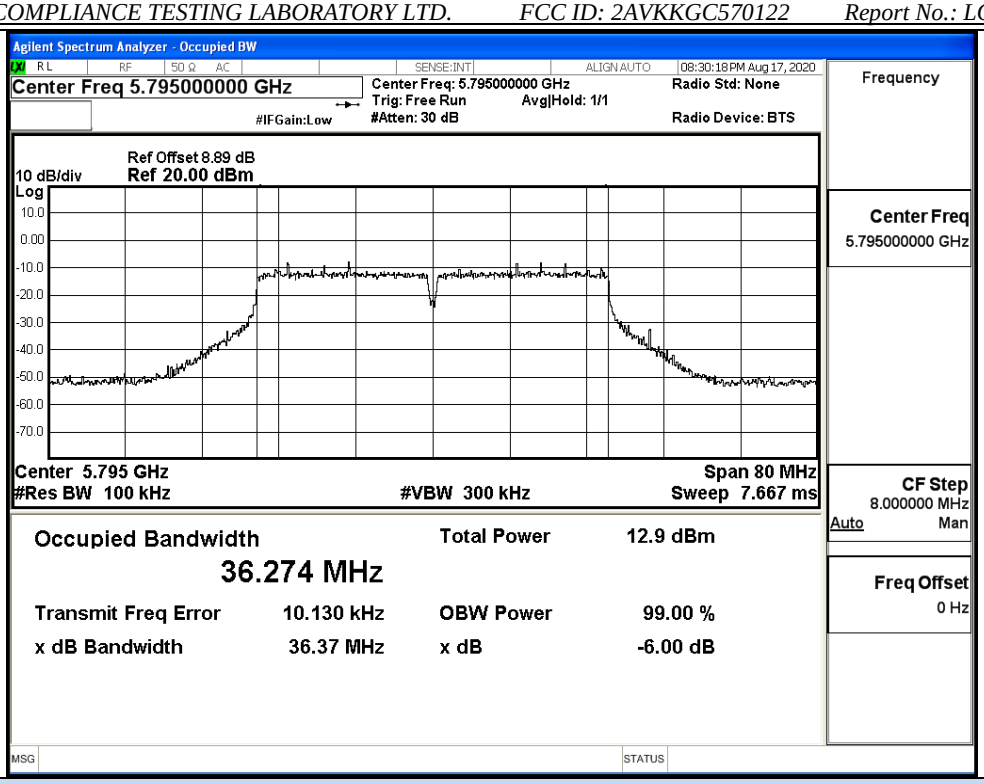
IEEE 802.11ac20 / Channel 157/ 5785MHz



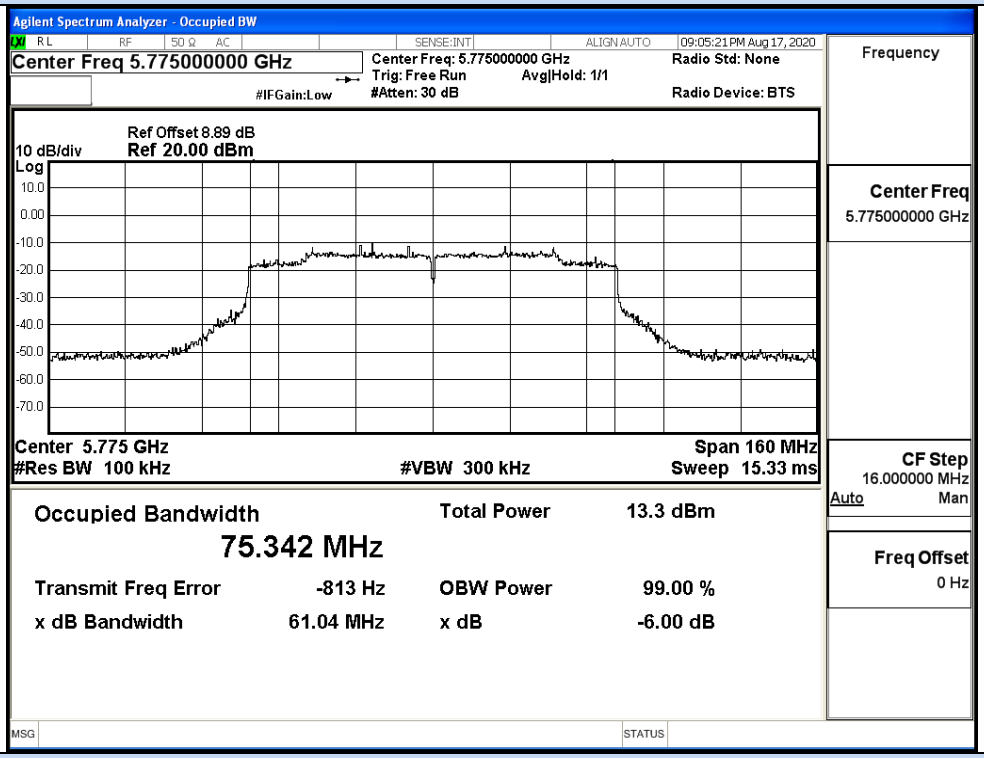
IEEE 802.11ac20 / Channel 165 / 5825MHz



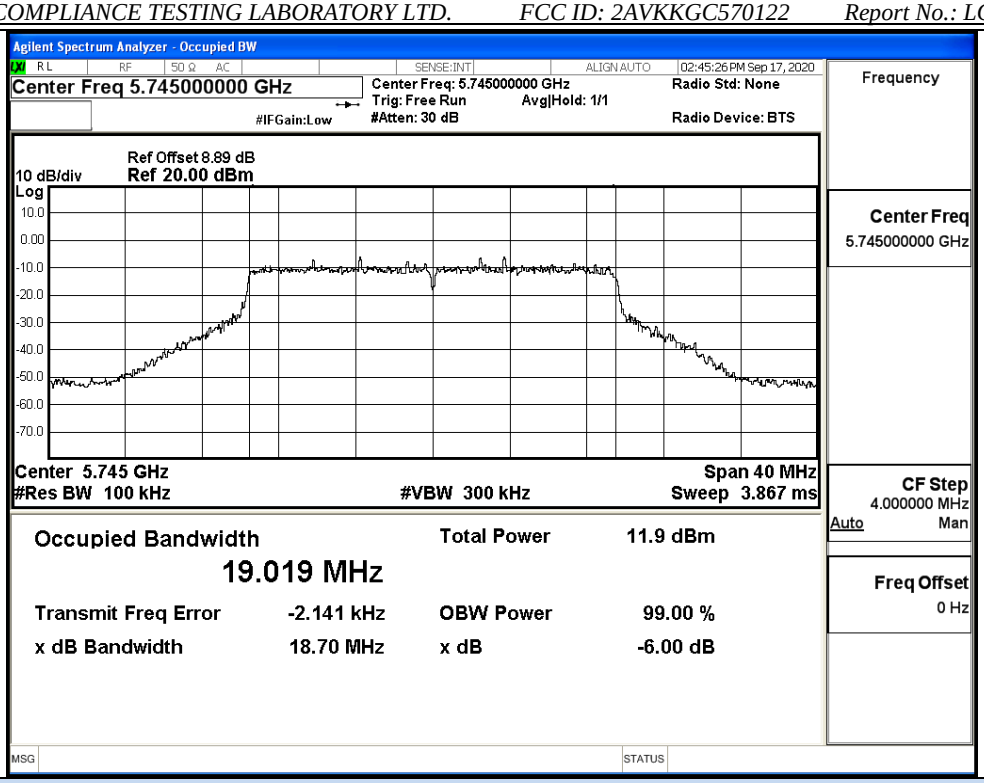
IEEE 802.11ac40 / Channel 151 / 5755MHz



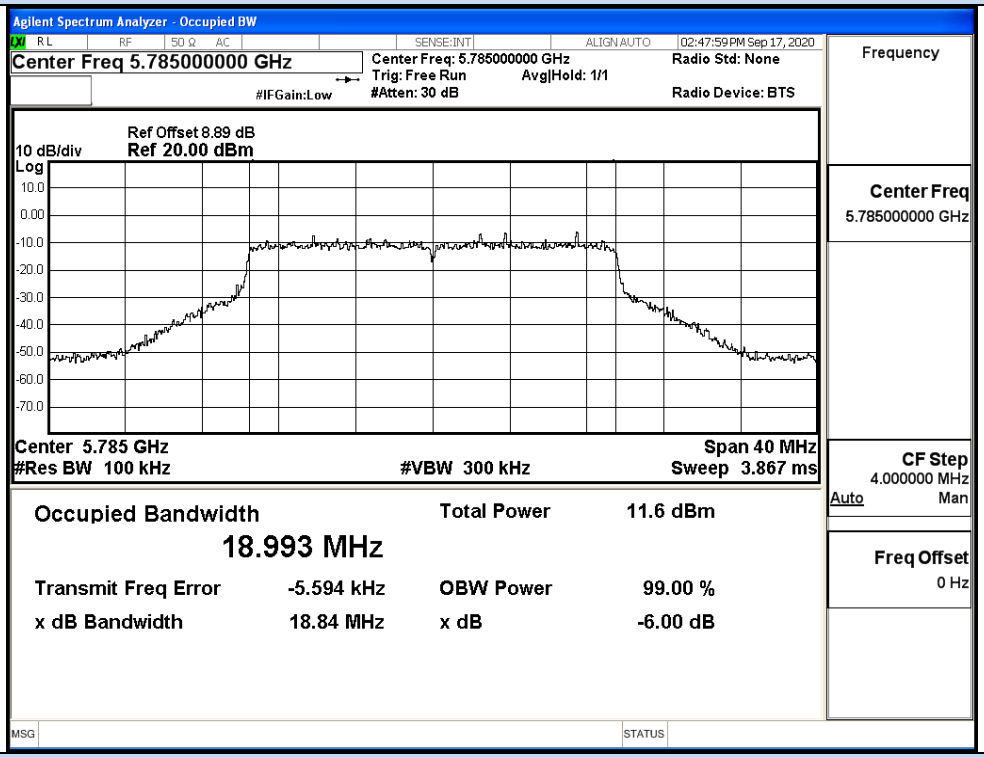
IEEE 802.11ac40 / Channel 159 / 5795MHz



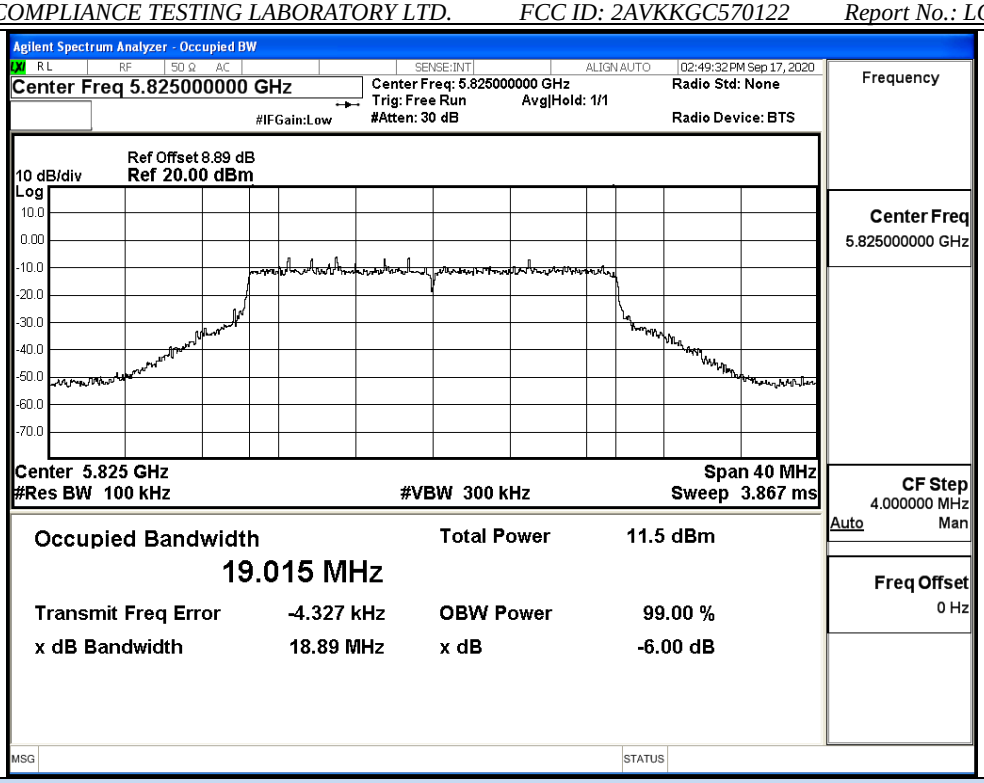
IEEE 802.11ac80 / Channel 155 / 5775MHz



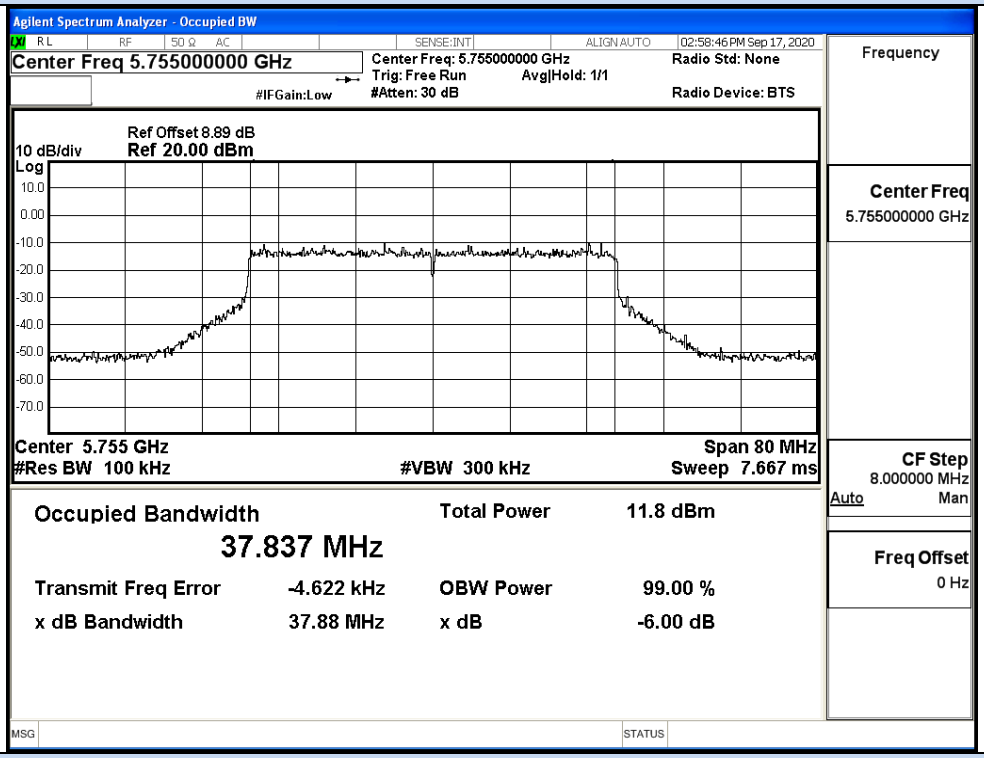
IEEE 802.11AX20 / Channel 149 / 5745MHz



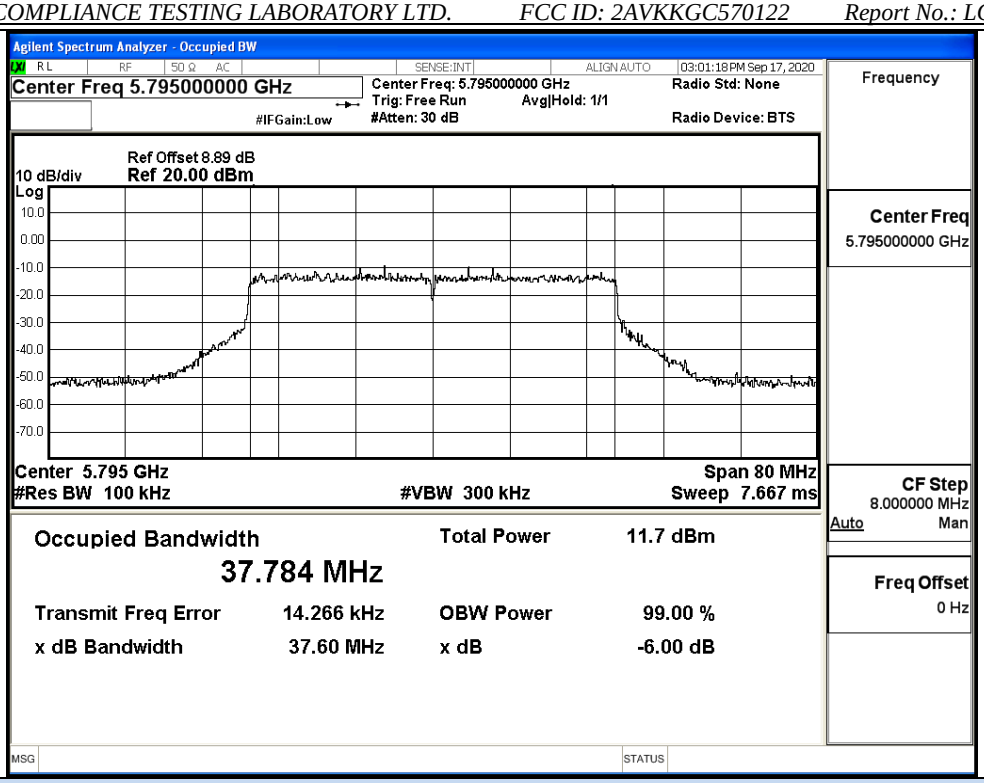
IEEE 802.11AX20 / Channel 157/ 5785MHz



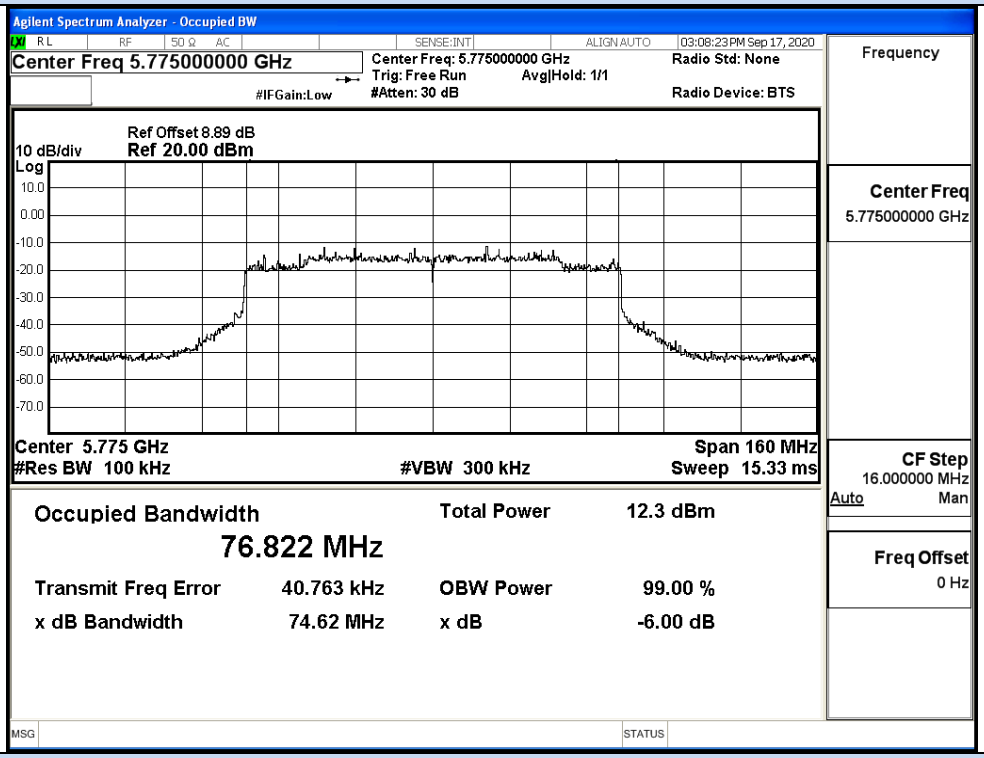
IEEE 802.11AX20 / Channel 165 / 5825MHz



IEEE 802.11AX40 / Channel 151 / 5755MHz



IEEE 802.11AX40 / Channel 159 / 5795MHz

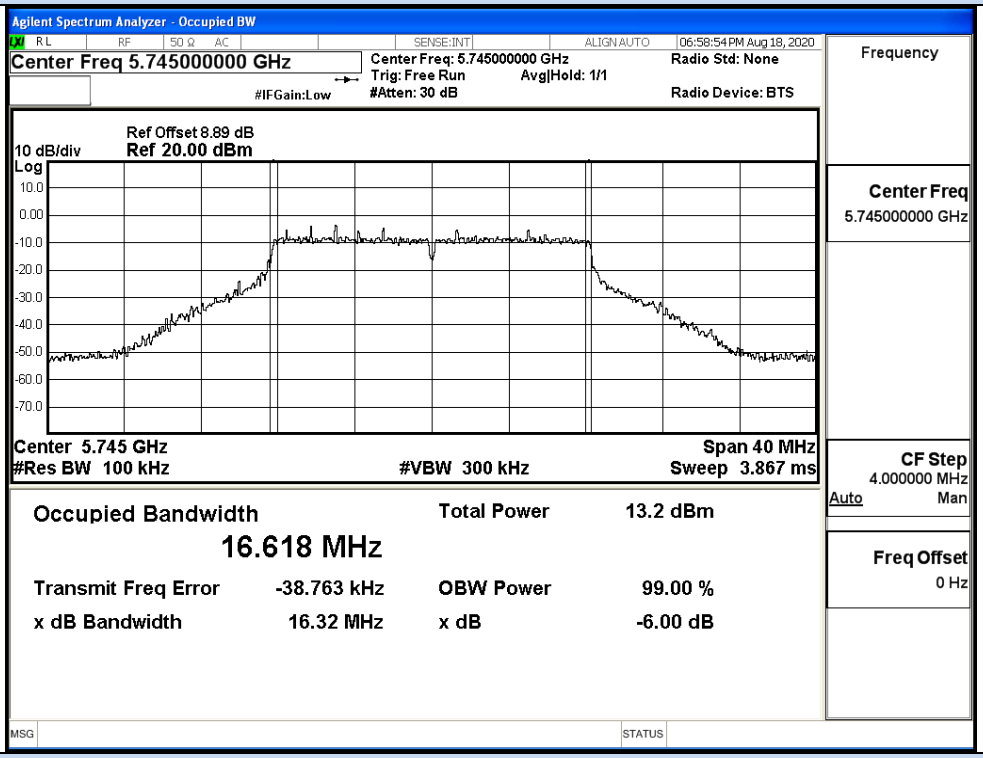


IEEE 802.11AX80 / Channel 155 / 5775MHz

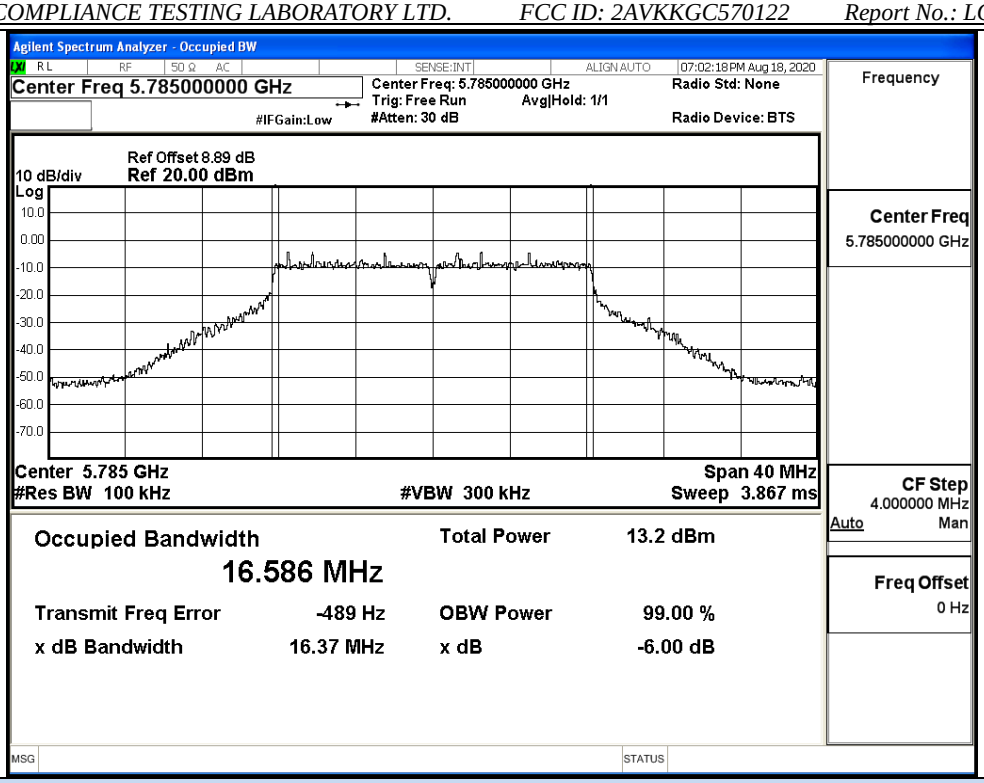
Ant1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	149	5745	16.32	>=0.5	Pass
	157	5785	16.37		Pass
	165	5825	16.36		Pass
11N20 SISO	149	5745	18.94	>=0.5	Pass
	157	5785	18.78		Pass
	165	5825	18.95		Pass
11N40 SISO	151	5755	37.80	>=0.5	Pass
	159	5795	37.79		Pass
11AC20SISO	149	5745	17.64	>=0.5	Pass
	157	5785	17.59		Pass
	165	5825	17.59		Pass
11AC40SISO	151	5755	36.40	>=0.5	Pass
	159	5795	36.42		Pass
11AC80SISO	155	5775	75.21	>=0.5	Pass
11AX20SISO	149	5745	18.95	>=0.5	Pass
	157	5785	18.61		Pass
	165	5825	18.86		Pass
11AX40SISO	151	5755	37.61	>=0.5	Pass
	159	5795	38.01		Pass
11AC80SISO	155	5775	67.61	>=0.5	Pass

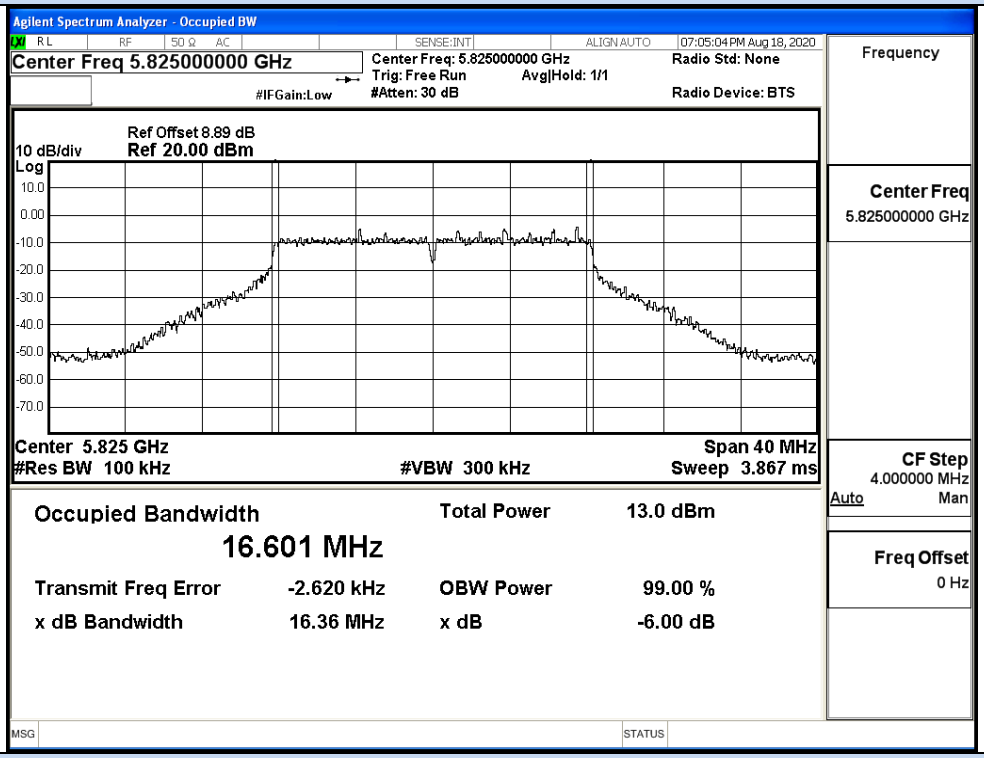
6dB Bandwidth



IEEE 802.11a / Channel 149 / 5745MHz

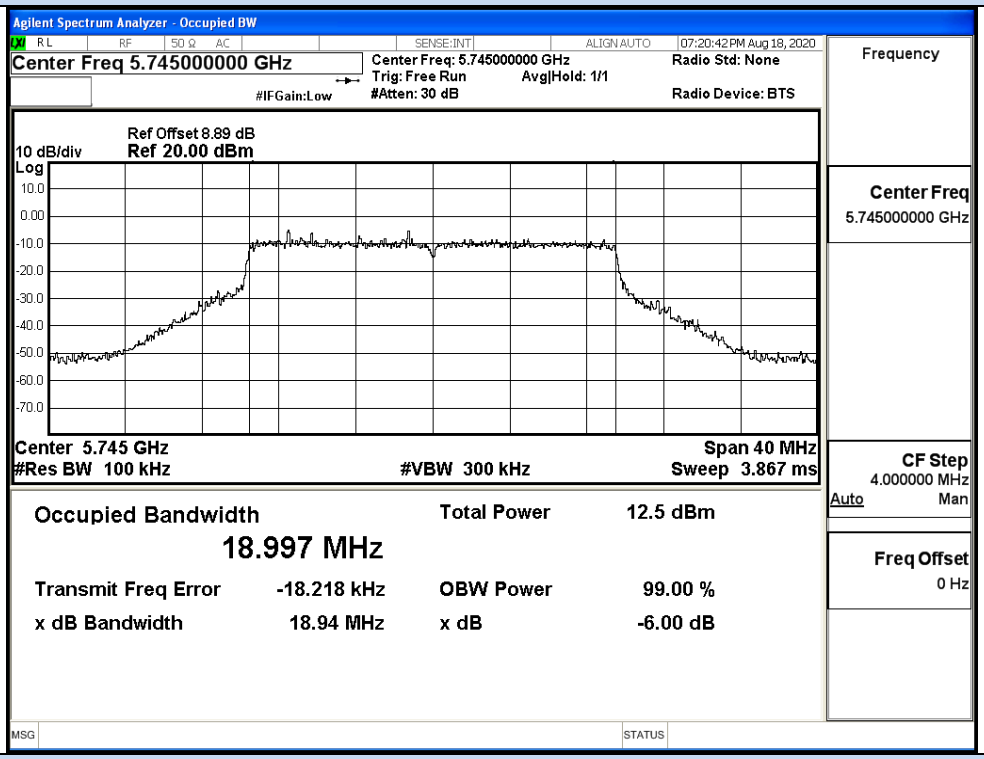


IEEE 802.11a / Channel 157 / 5785MHz

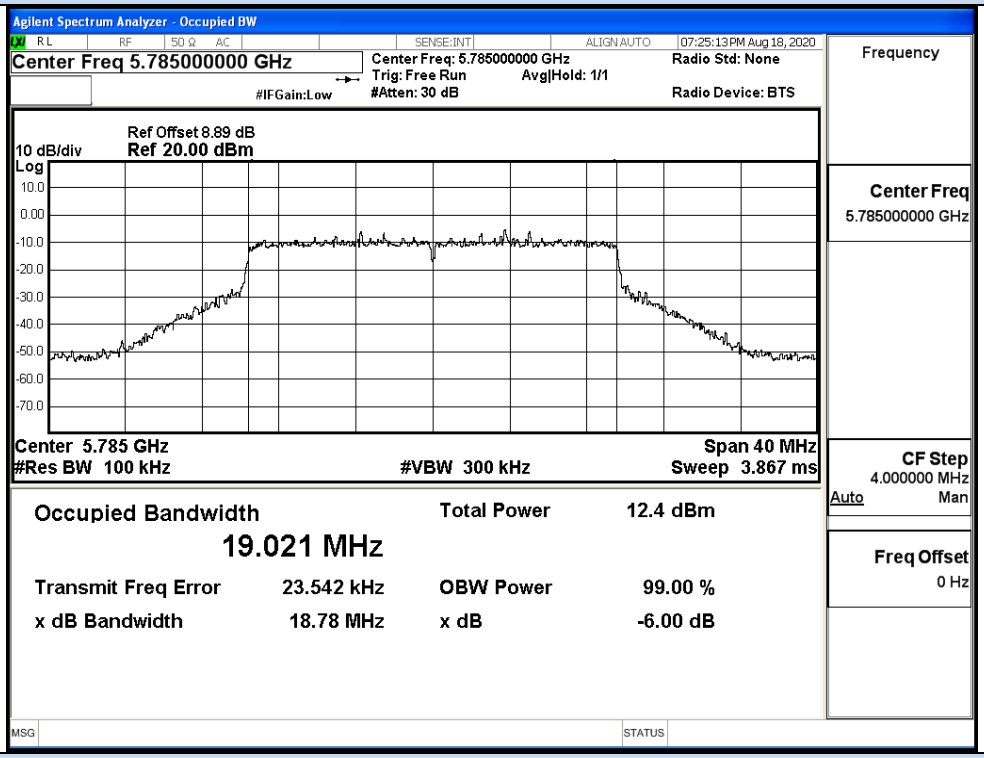


IEEE 802.11a / Channel 165 / 5825MHz

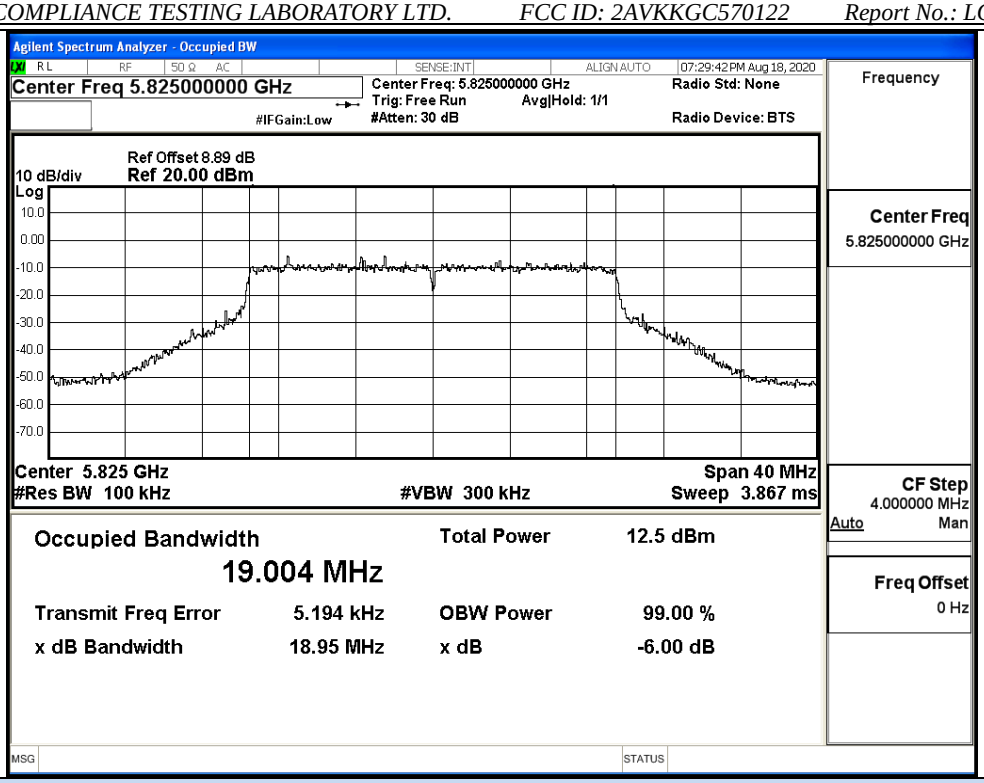
6dB Bandwidth



IEEE 802.11n20 / Channel 149 / 5745MHz

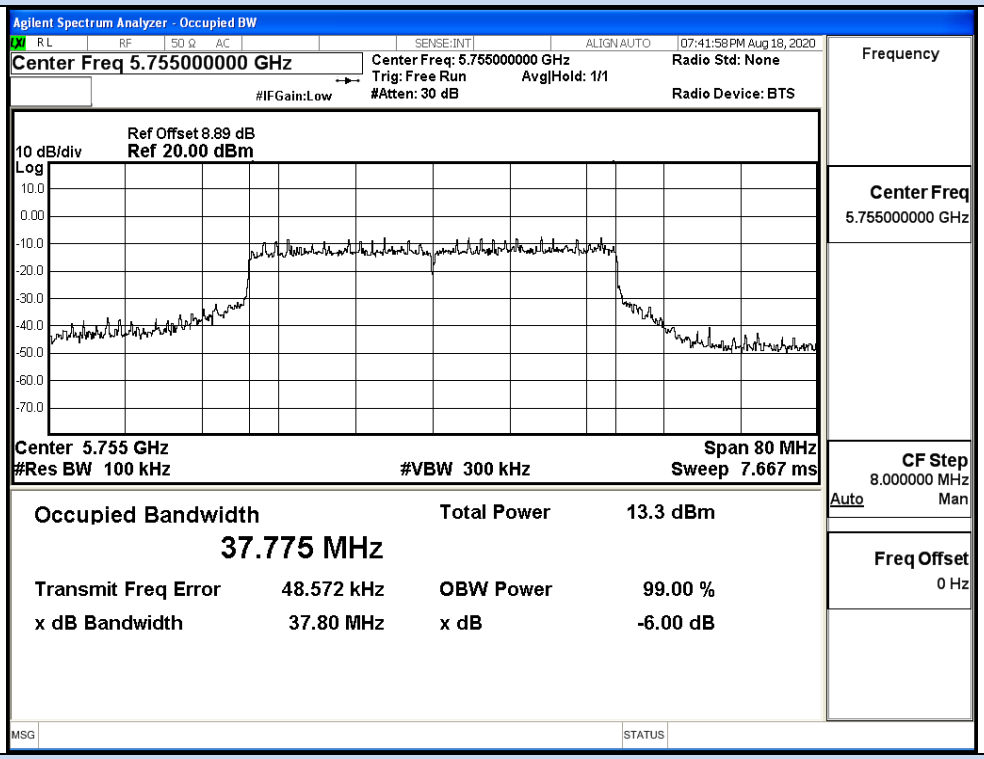


IEEE 802.11n20 / Channel 157 / 5785MHz

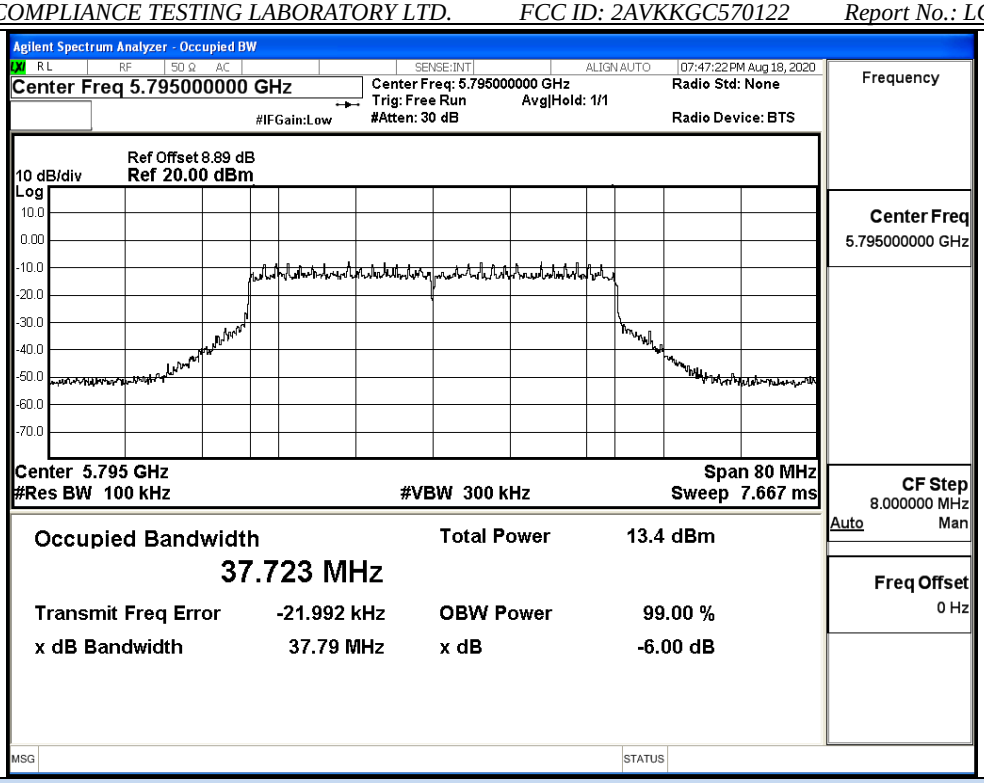


IEEE 802.11n20 / Channel 165 / 5825MHz

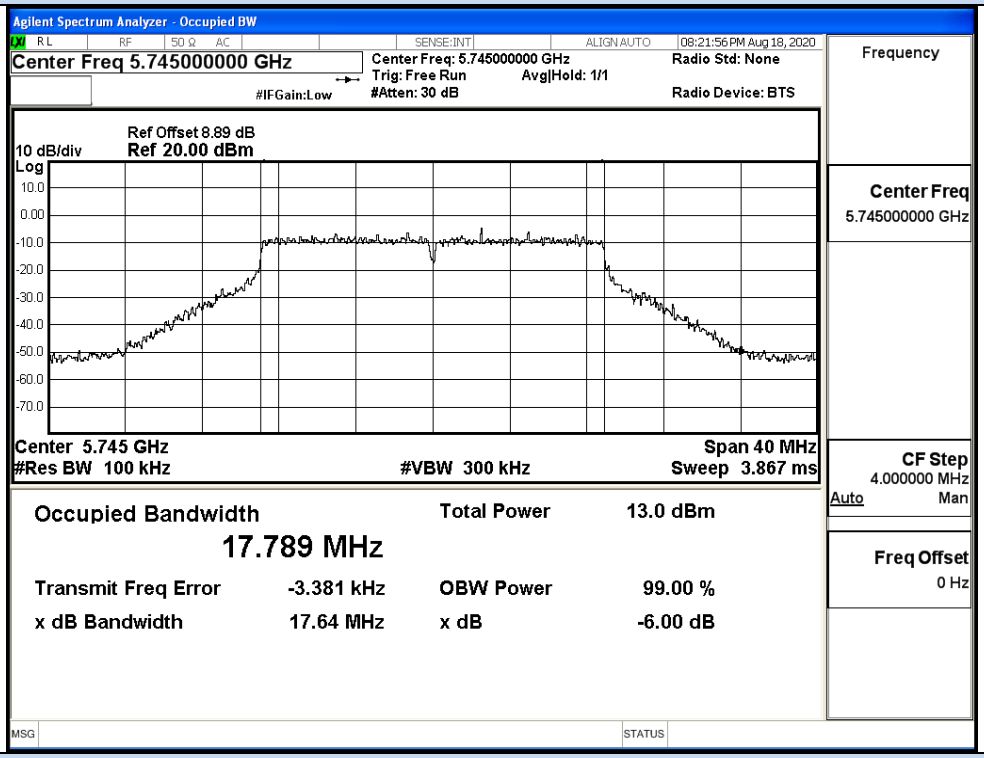
26dB Bandwidth



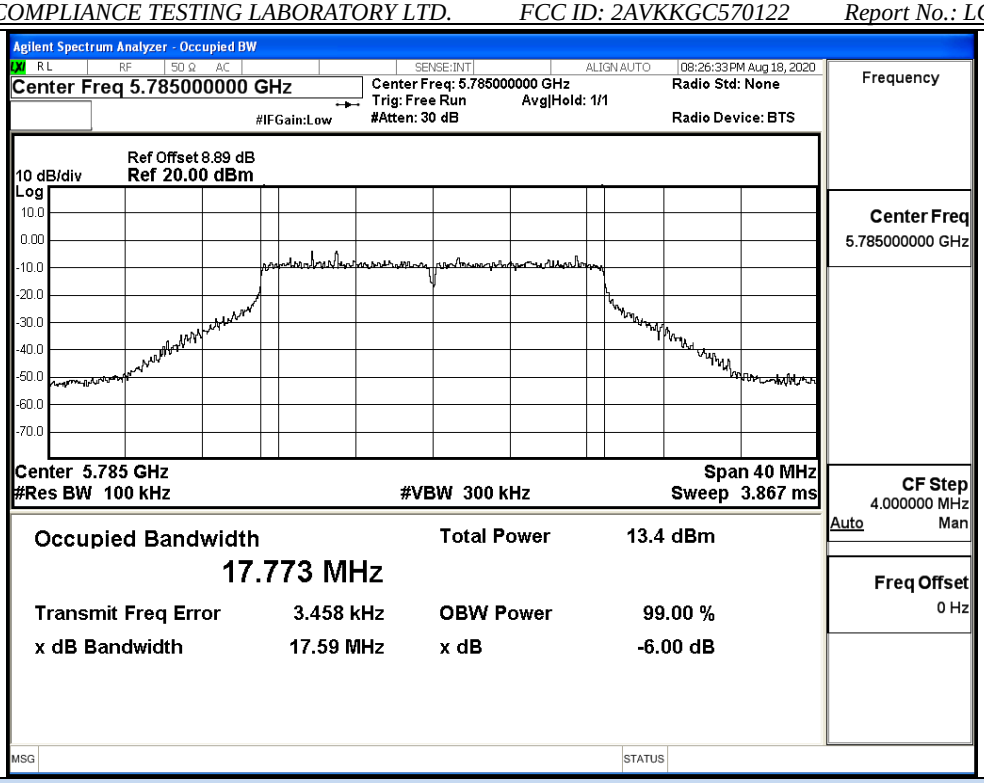
IEEE 802.11n40 / Channel 151 / 5755MHz



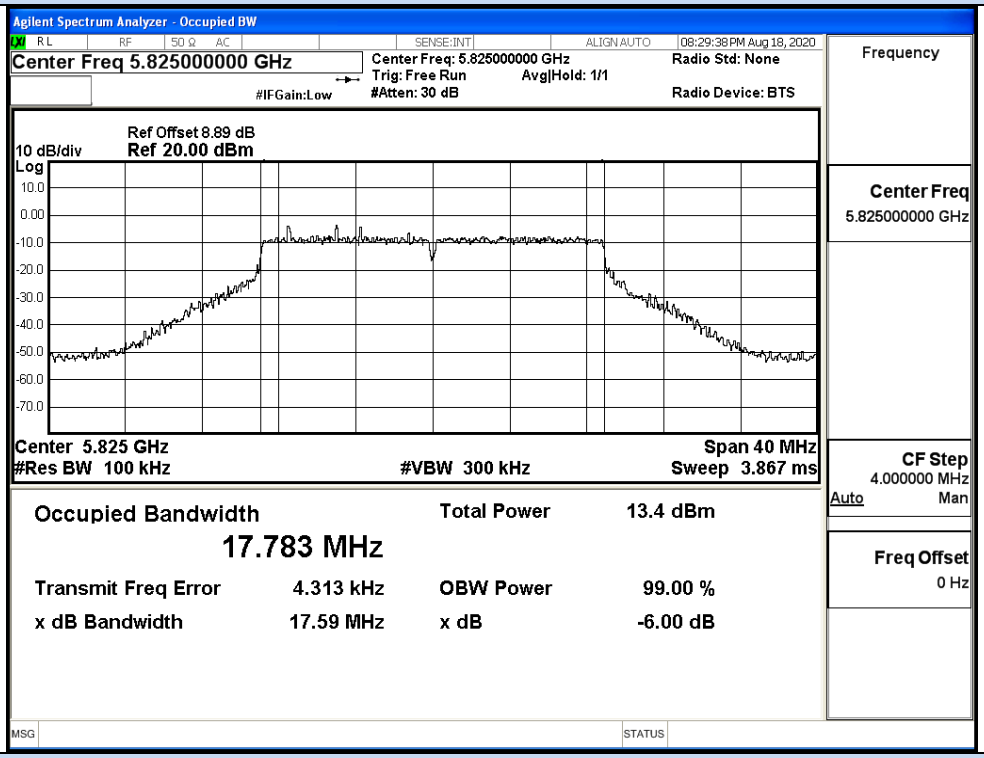
IEEE 802.11n40 / Channel 159 / 5795MHz



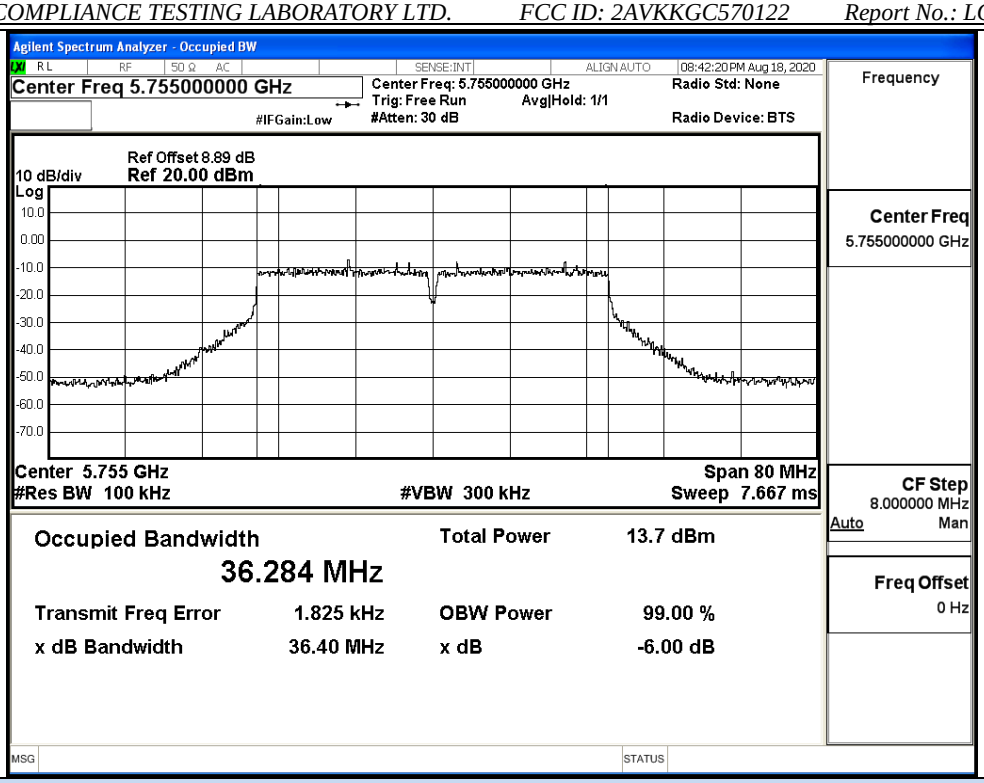
IEEE 802.11ac20 / Channel 149 / 5745MHz



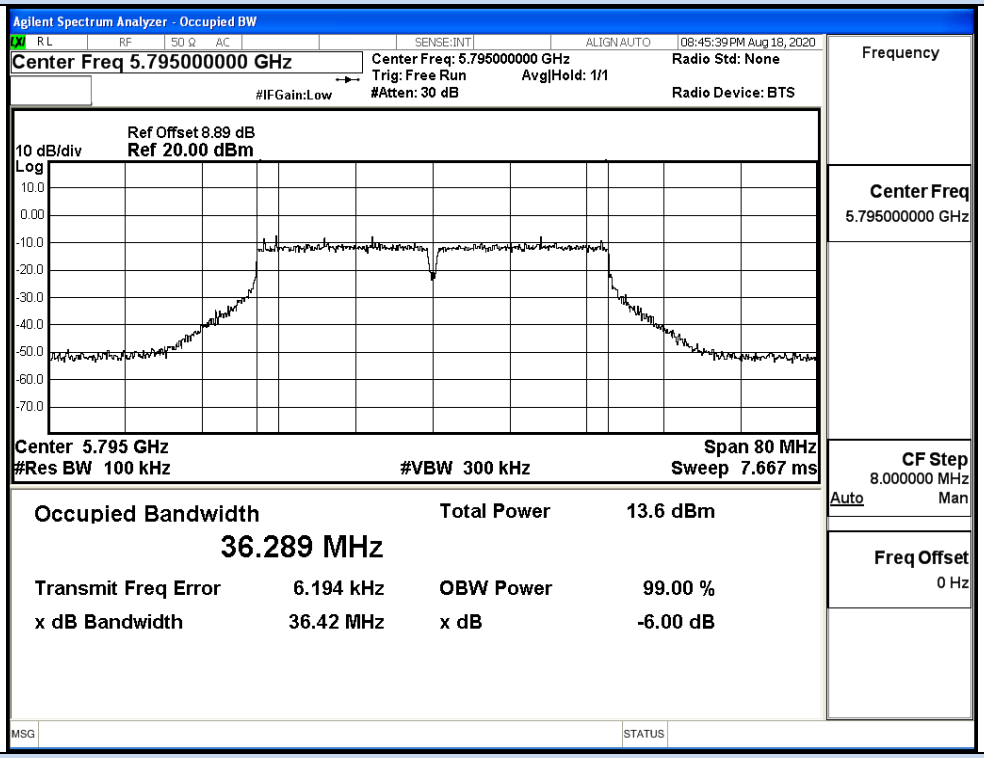
IEEE 802.11ac20 / Channel 157/ 5785MHz



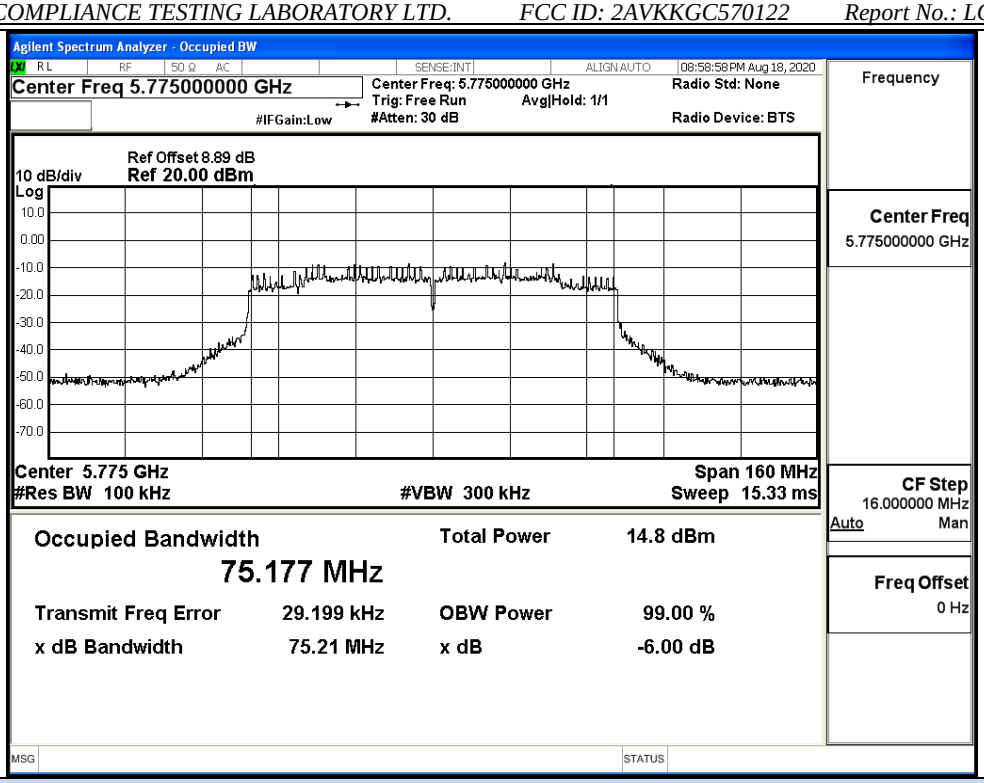
IEEE 802.11ac20 / Channel 165 / 5825MHz



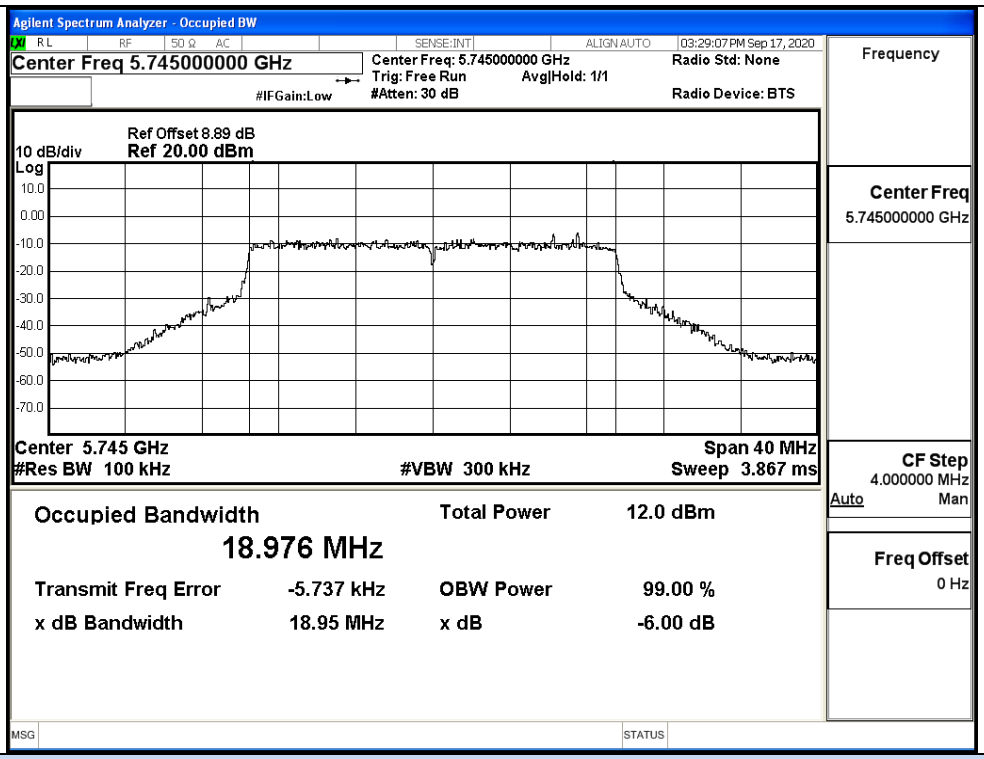
IEEE 802.11ac40 / Channel 151 / 5755MHz



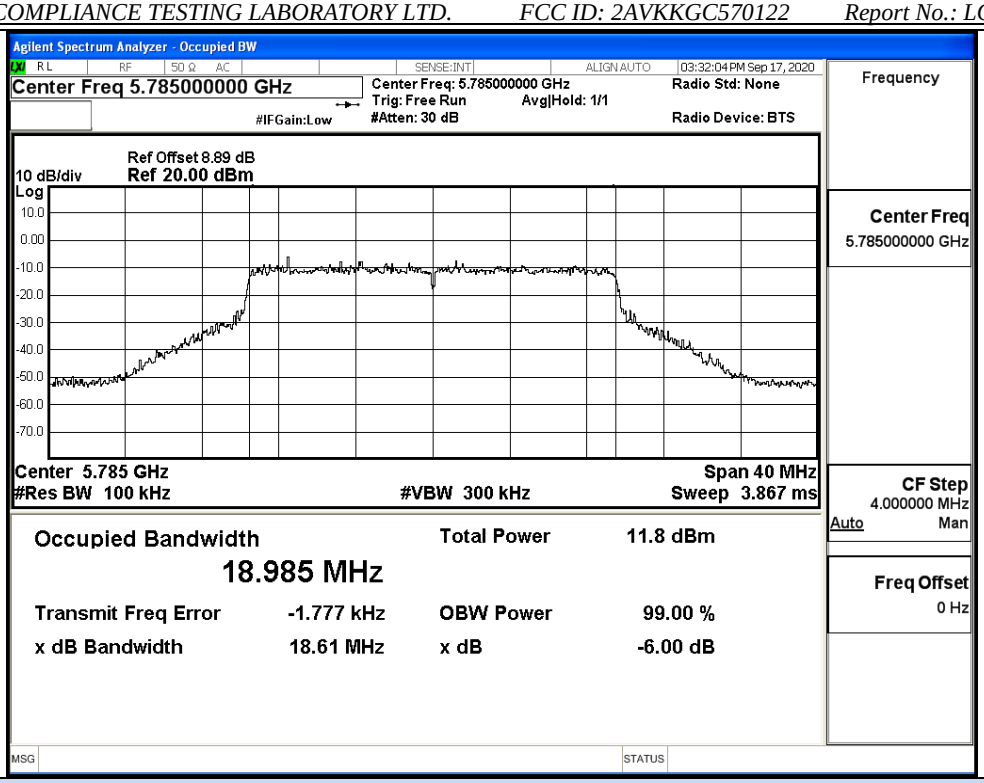
IEEE 802.11ac40 / Channel 159 / 5795MHz



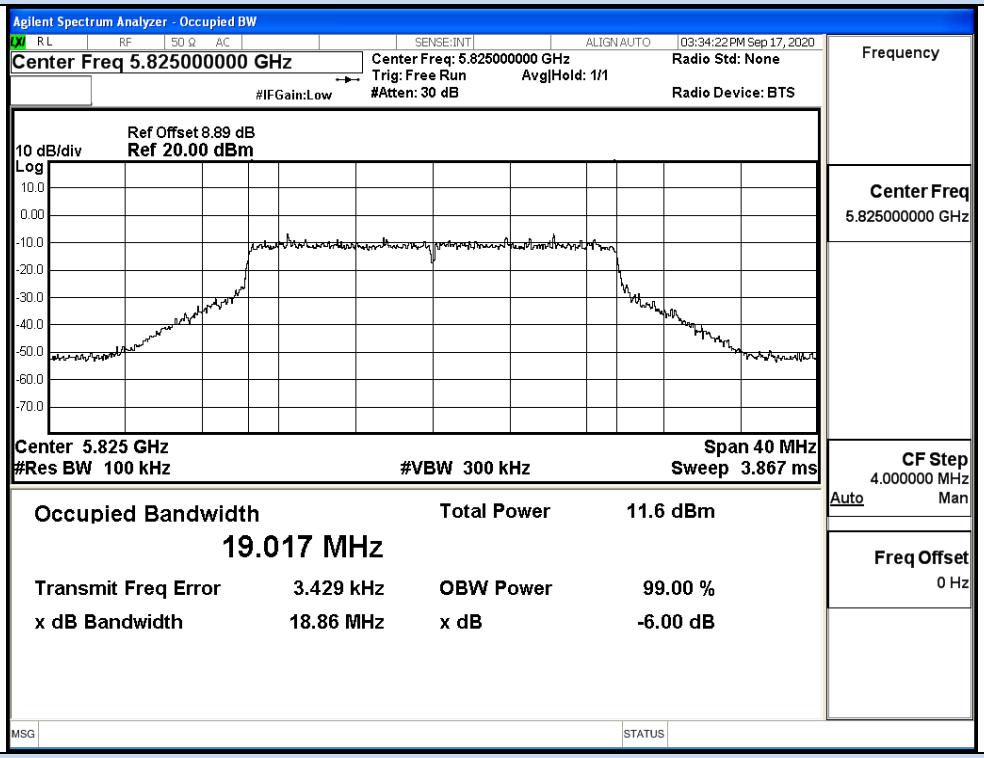
IEEE 802.11ac80 / Channel 155 / 5775MHz



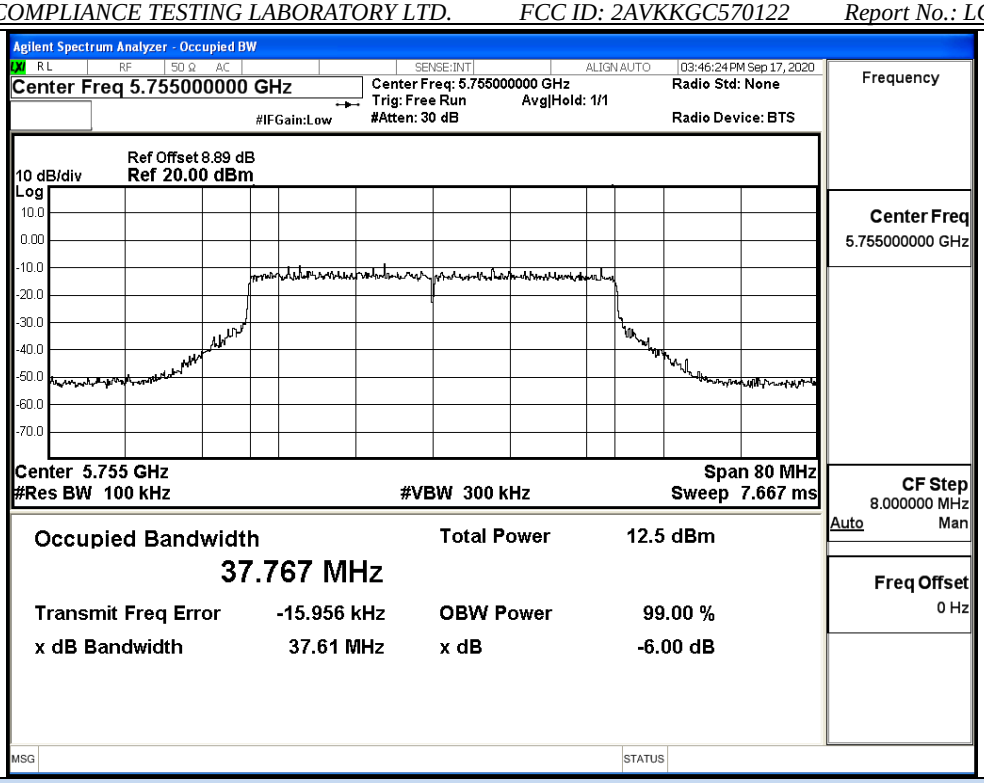
IEEE 802.11AX20 / Channel 149 / 5745MHz



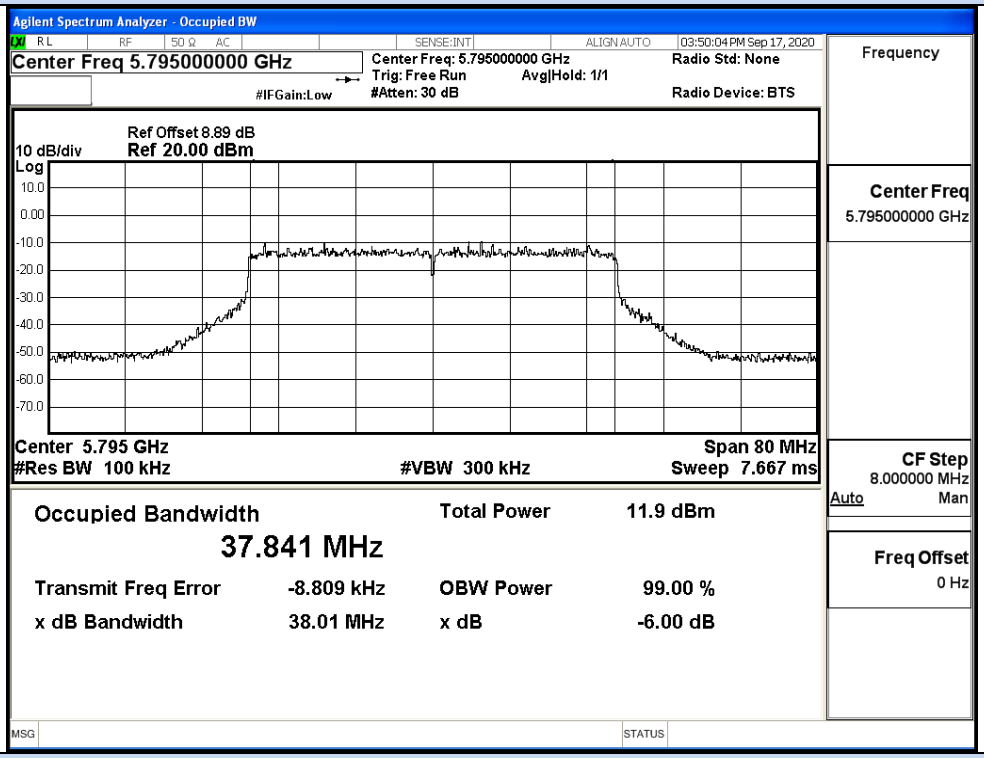
IEEE 802.11AX20 / Channel 157/ 5785MHz



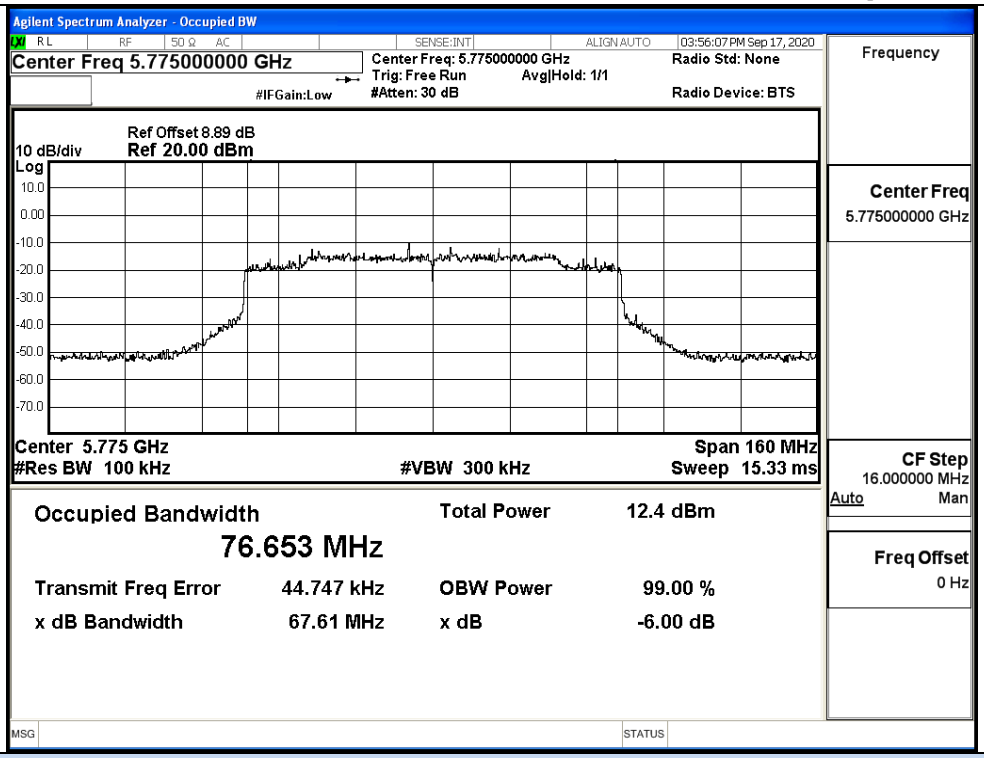
IEEE 802.11AX20 / Channel 165 / 5825MHz



IEEE 802.11AX40 / Channel 151 / 5755MHz



IEEE 802.11AX40 / Channel 159 / 5795MHz



IEEE 802.11AX80 / Channel 155 / 5775MHz