

Appendix C

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: Wireless AP/CPE/Access Point/Bridge

Test Model: DIP9526K-H

Environmental Conditions

Temperature:	22.7 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Wang Chuang
Supervised by:	Tom Liu

C.1 Duty Cycle

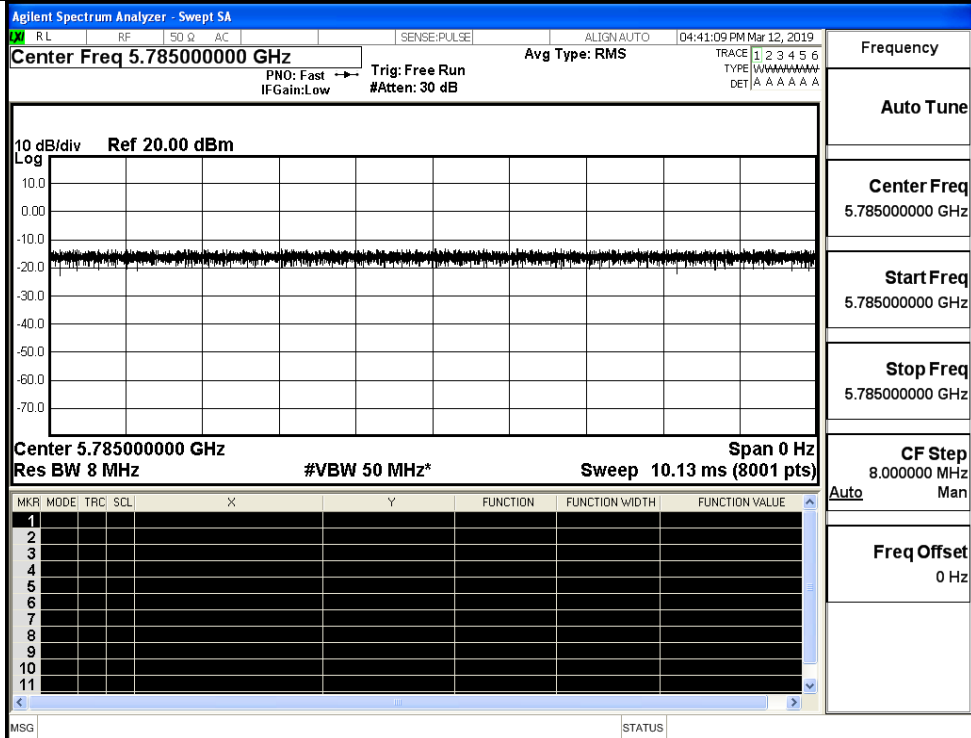
Ant0

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	5785	100	0.00	0.01
11N40	5755	100	0.00	0.01
11AC20	5785	100	0.00	0.01
11AC40	5755	100	0.00	0.01
11AC80	5775	100	0.00	0.01

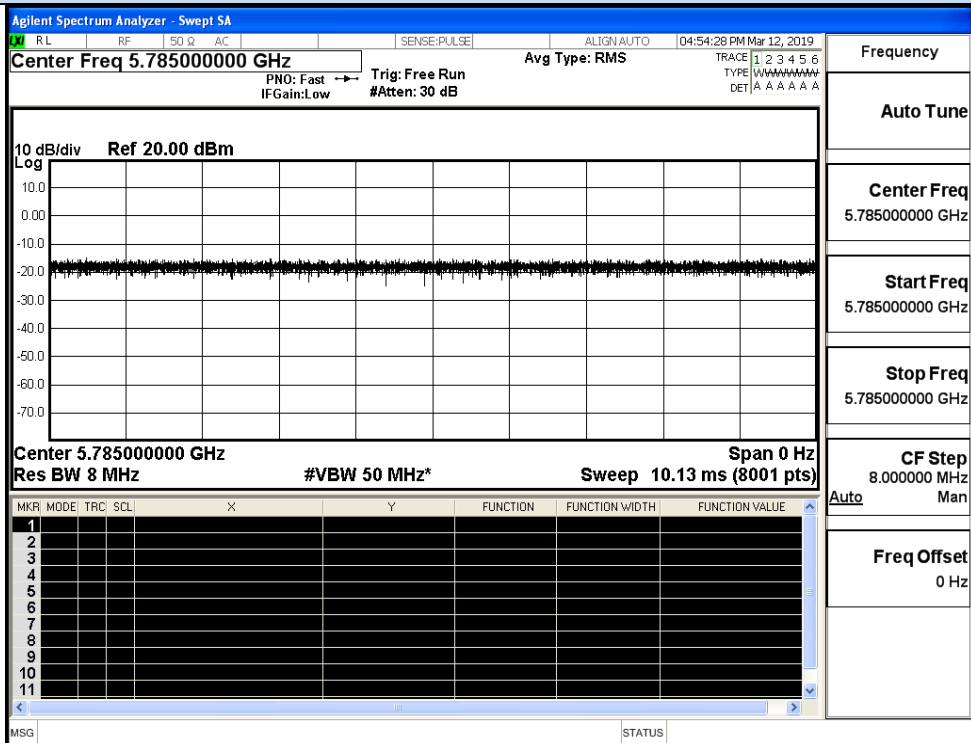
Ant1

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	5785	100	0.00	0.01
11N40	5755	100	0.00	0.01
11AC20	5785	100	0.00	0.01
11AC40	5755	100	0.00	0.01
11AC80	5775	100	0.00	0.01

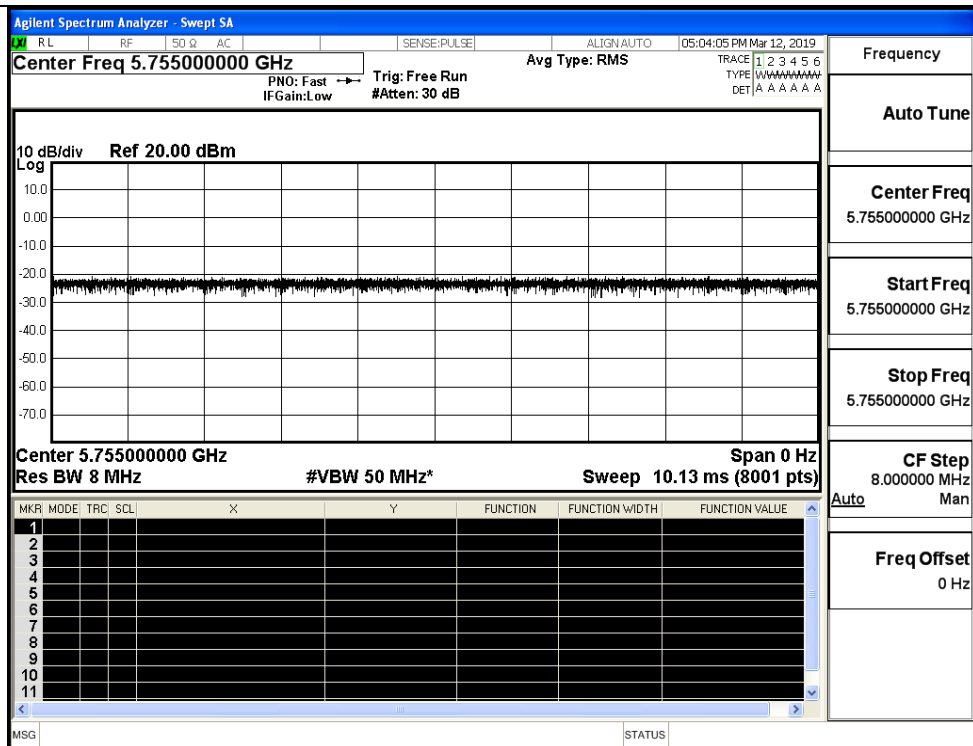
On Time and Duty Cycle_Ant0



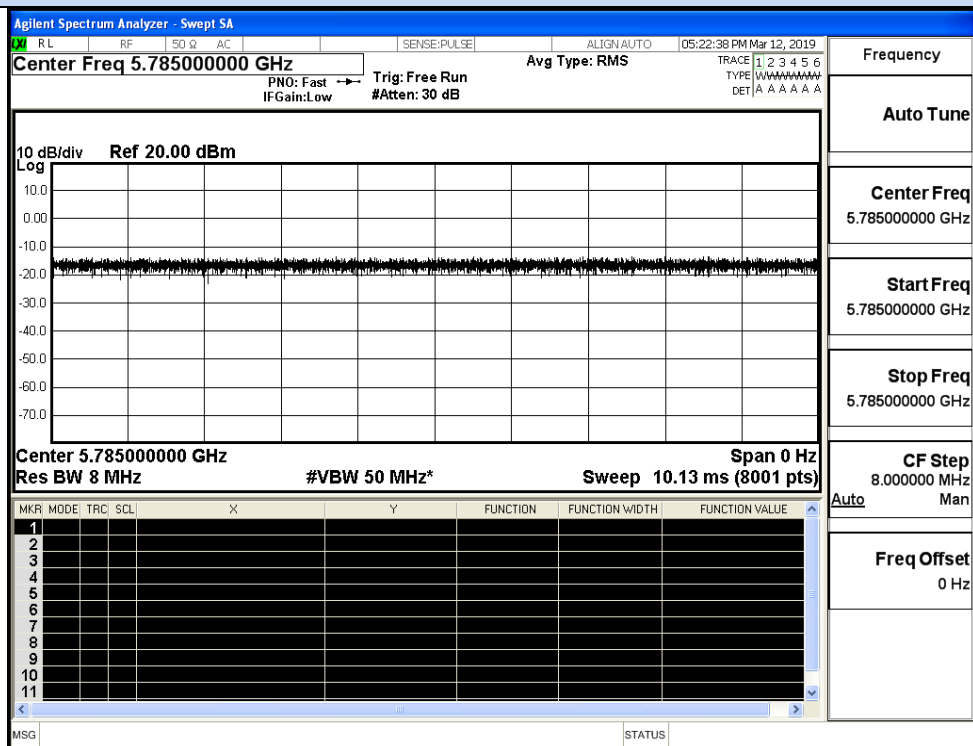
IEEE 802.11a_Ant0



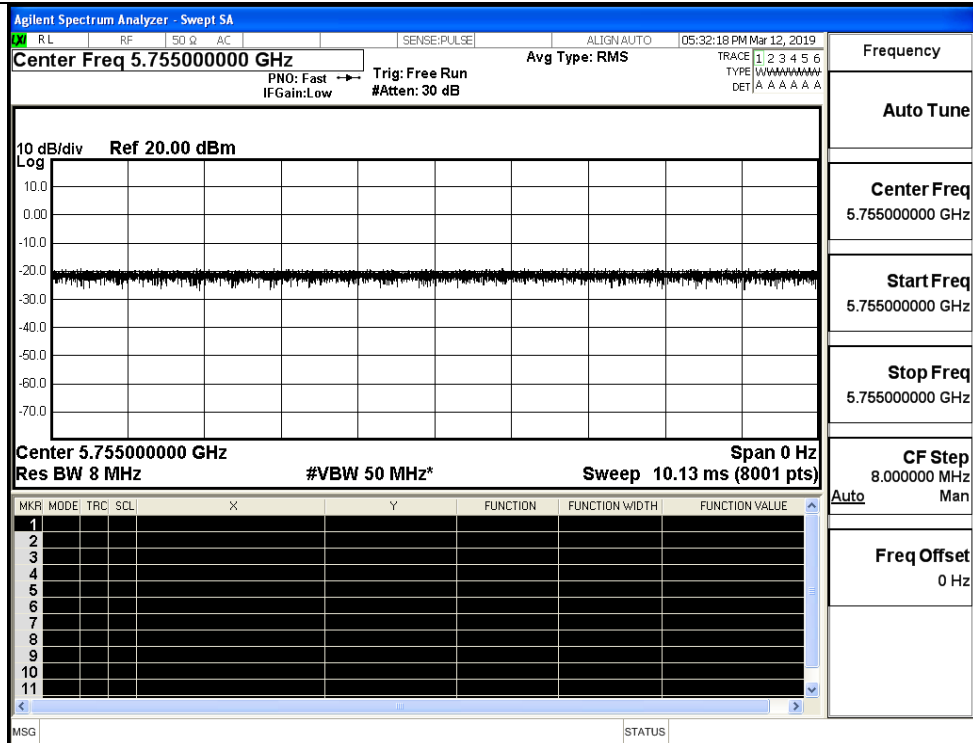
IEEE 802.11n HT20_Ant0



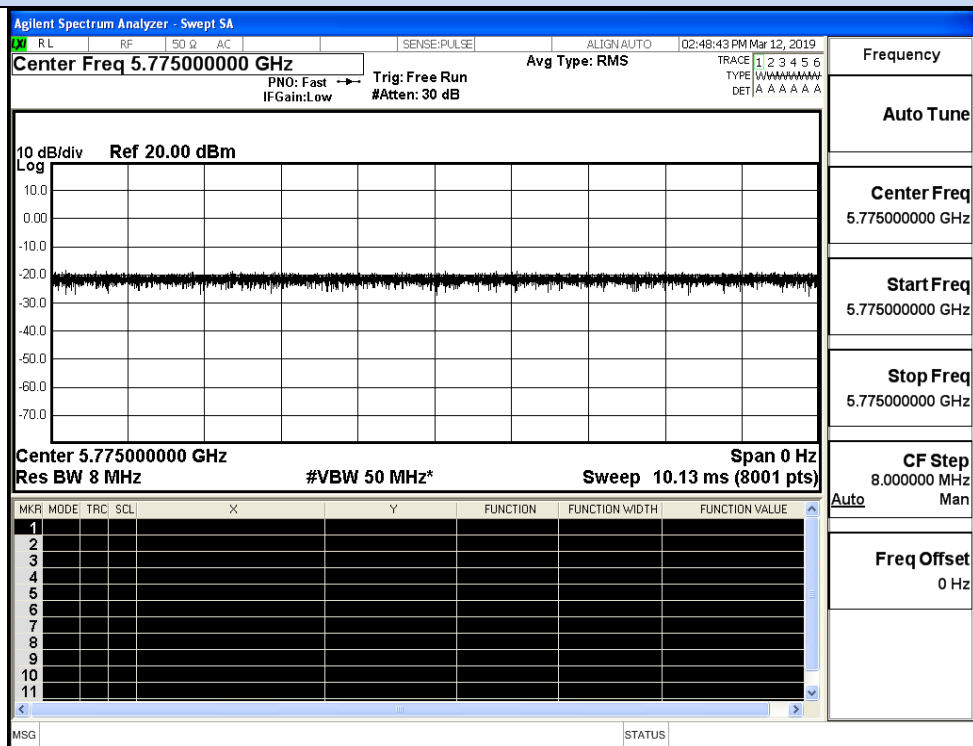
IEEE 802.11n HT40_Ant0



IEEE 802.11AC20_Ant0

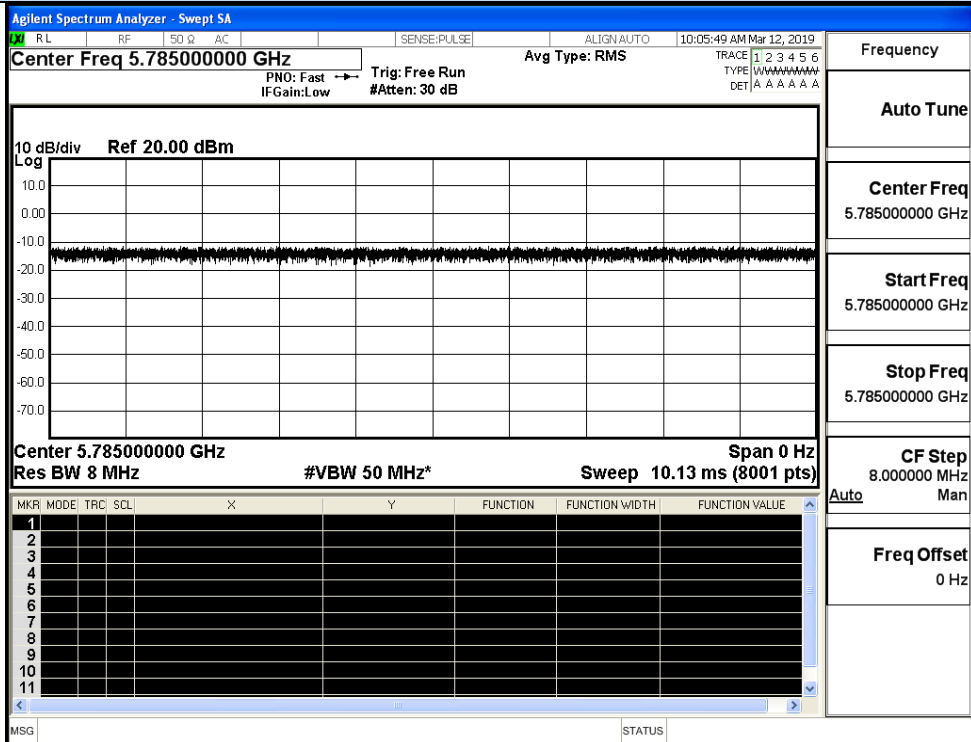


IEEE 802.11AC40_Ant0

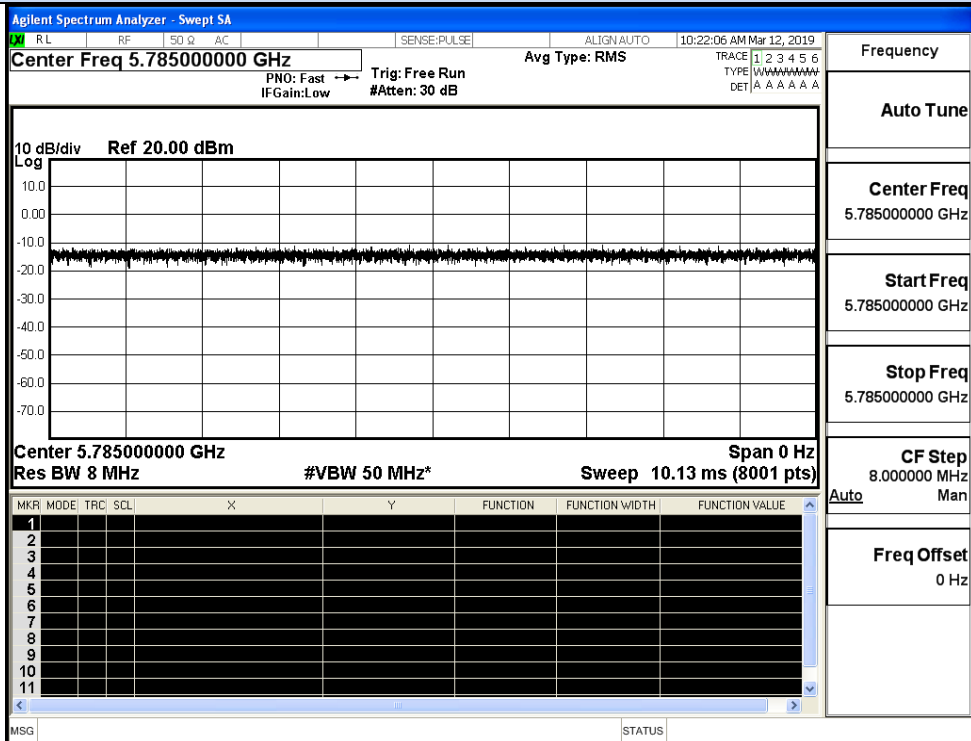


IEEE 802.11AC80_Ant0

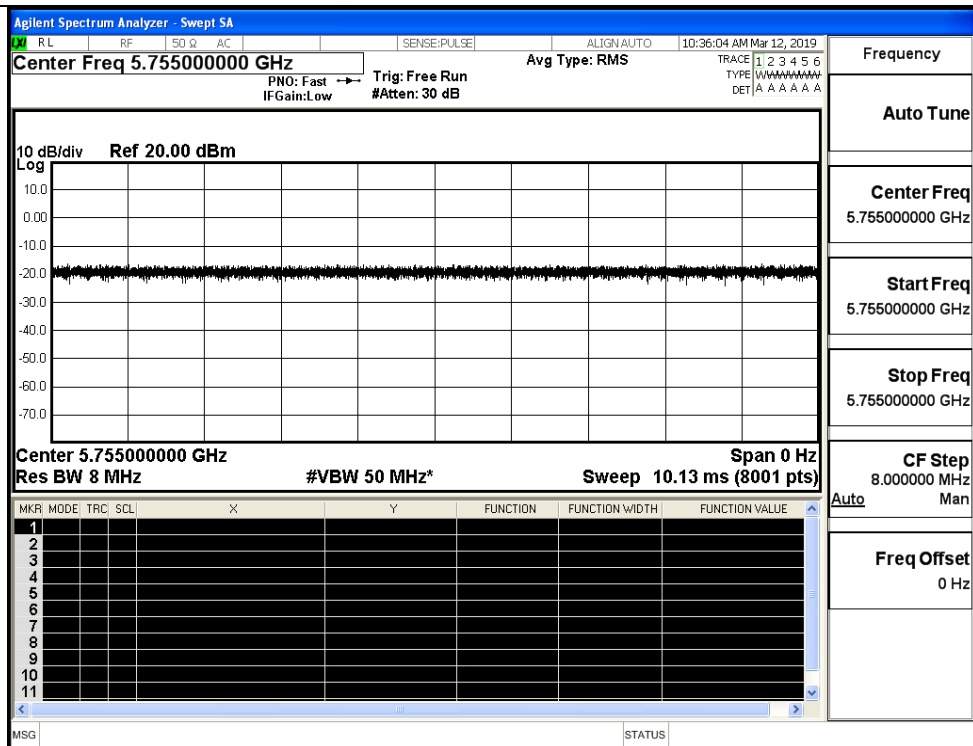
On Time and Duty Cycle_Ant1



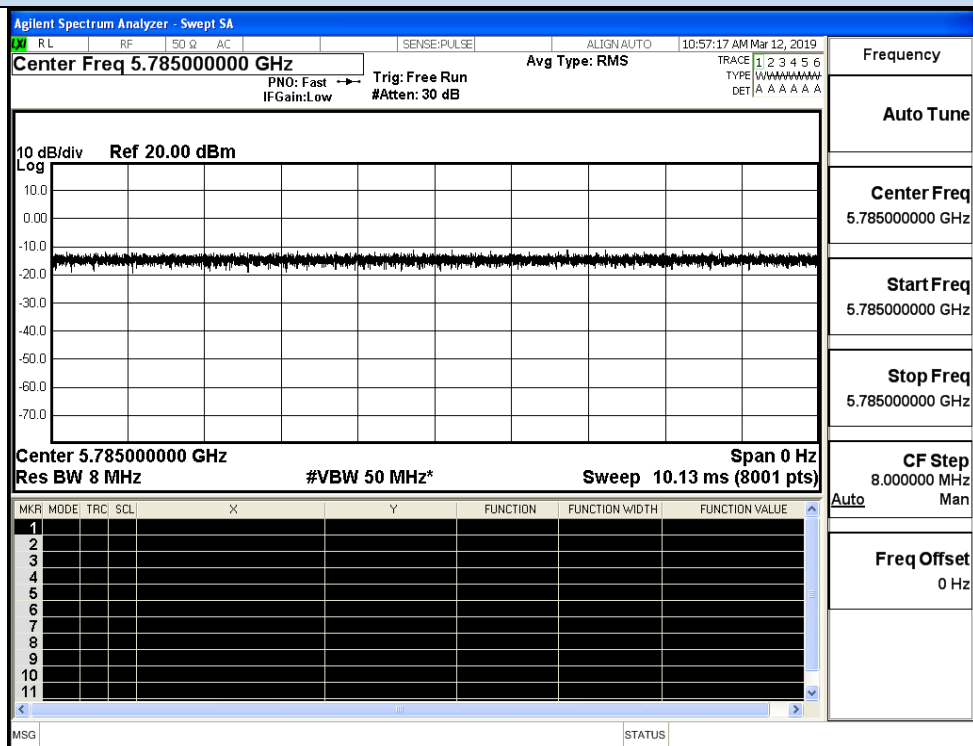
IEEE 802.11a_Ant1



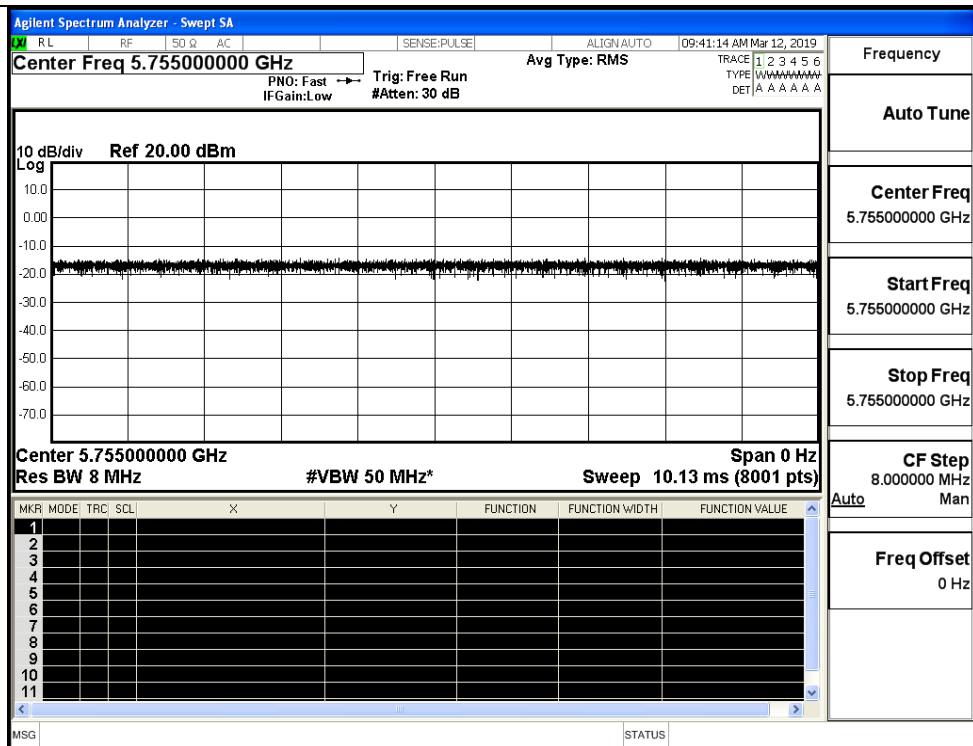
IEEE 802.11n HT20_Ant1



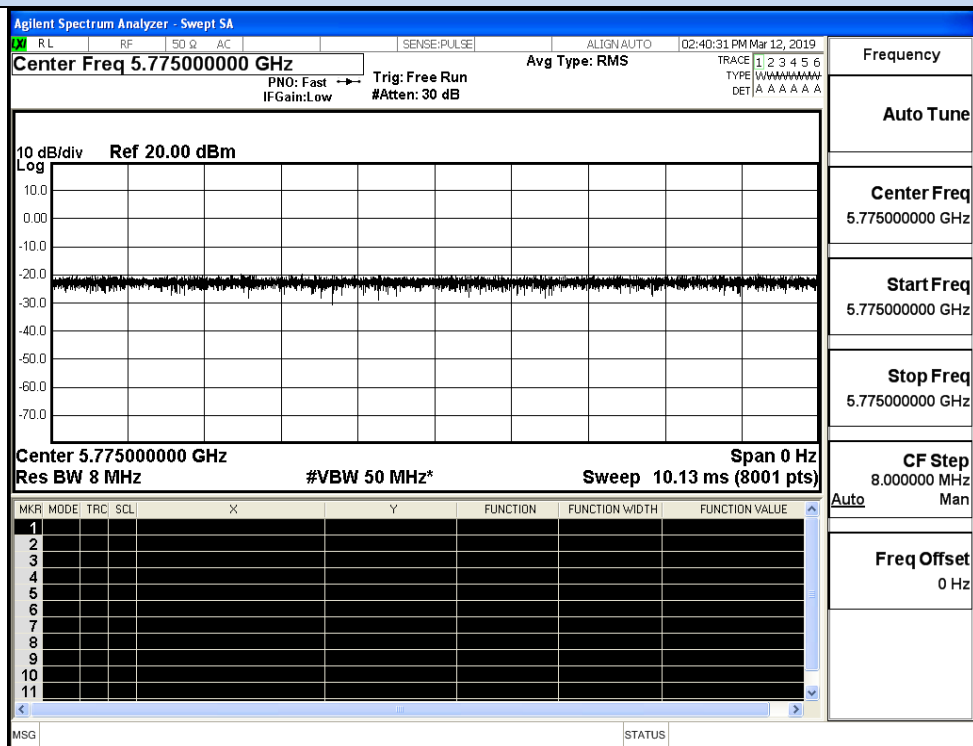
IEEE 802.11n HT40_Ant1



IEEE 802.11AC20_Ant1



IEEE 802.11AC40_Ant1



IEEE 802.11AC80_Ant1

C.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	0.76	0	0.76	24	Pass
	157	5785	1.56	0	1.56		Pass
	165	5825	1.85	0	1.85		Pass
11N20	149	5745	1.81	0	1.81	24	Pass
	157	5785	2.14	0	2.14		Pass
	165	5825	1.62	0	1.62		Pass
11N40	151	5755	1.87	0	1.87	24	Pass
	159	5795	2.44	0	2.44		Pass
11AC20	149	5745	2.45	0	2.45	24	Pass
	157	5785	1.74	0	1.74		Pass
	165	5825	2.24	0	2.24		Pass
11AC40	151	5755	1.98	0	1.98	24	Pass
	159	5795	1.87	0	1.87		Pass
11AC80	155	5775	1.12	0	1.12	24	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	0.50	0	0.50	24	Pass
	157	5785	1.68	0	1.68		Pass
	165	5825	0.86	0	0.86		Pass
11N20	149	5745	1.02	0	1.02	24	Pass
	157	5785	2.12	0	2.12		Pass
	165	5825	1.39	0	1.39		Pass
11N40	151	5755	1.70	0	1.70	24	Pass
	159	5795	2.13	0	2.13		Pass
11AC20	149	5745	2.39	0	2.39	24	Pass
	157	5785	1.68	0	1.68		Pass
	165	5825	2.23	0	2.23		Pass
11AC40	151	5755	1.81	0	1.81	24	Pass
	159	5795	1.67	0	1.67		Pass
11AC80	155	5775	1.02	0	1.02	24	Pass

Ant0+Ant1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)			Duty Cycle Factor (dB)	Report Conducted Power(dBm)			Limit (dBm)
			Ant0	Ant1	Sum		Ant0	Ant1	Sum	
11N20	149	5745	1.81	1.02	4.44	0	1.81	1.02	4.44	20.99
	157	5785	2.14	2.12	5.14	0	2.14	2.12	5.14	
	165	5825	1.62	1.39	4.52	0	1.62	1.39	4.52	
11N40	151	5755	1.87	1.70	4.80	0	1.87	1.70	4.80	20.99
	159	5795	2.44	2.13	5.30	0	2.44	2.13	5.30	
11AC20	149	5745	2.45	2.39	5.43	0	2.45	2.39	5.43	20.99
	157	5785	1.74	1.68	4.72	0	1.74	1.68	4.72	
	165	5825	2.24	2.23	5.25	0	2.24	2.23	5.25	
11AC40	151	5755	1.98	1.81	4.91	0	1.98	1.81	4.91	20.99
	159	5795	1.87	1.67	4.78	0	1.87	1.67	4.78	
11AC80	155	5775	1.12	1.02	4.08	0	1.12	1.02	4.08	20.99

C.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	-17.00	0	2.218	-14.78	24	Pass
	157	5785	-14.14	0	2.218	-11.92		Pass
	165	5825	-11.66	0	2.218	-9.44		Pass
11N20	149	5745	-16.08	0	2.218	-13.86	24	Pass
	157	5785	-16.28	0	2.218	-14.06		Pass
	165	5825	-13.95	0	2.218	-11.73		Pass
11N40	151	5755	-21.10	0	2.218	-18.88	24	Pass
	159	5795	-18.18	0	2.218	-15.96		Pass
11AC20	149	5745	-16.42	0	2.218	-14.20	24	Pass
	157	5785	-14.67	0	2.218	-12.45		Pass
	165	5825	-13.44	0	2.218	-11.22		Pass
11AC40	151	5755	-19.59	0	2.218	-17.37	24	Pass
	159	5795	-19.37	0	2.218	-17.15		Pass
11AC80	155	5775	-19.73	0	2.218	-17.52	24	Pass

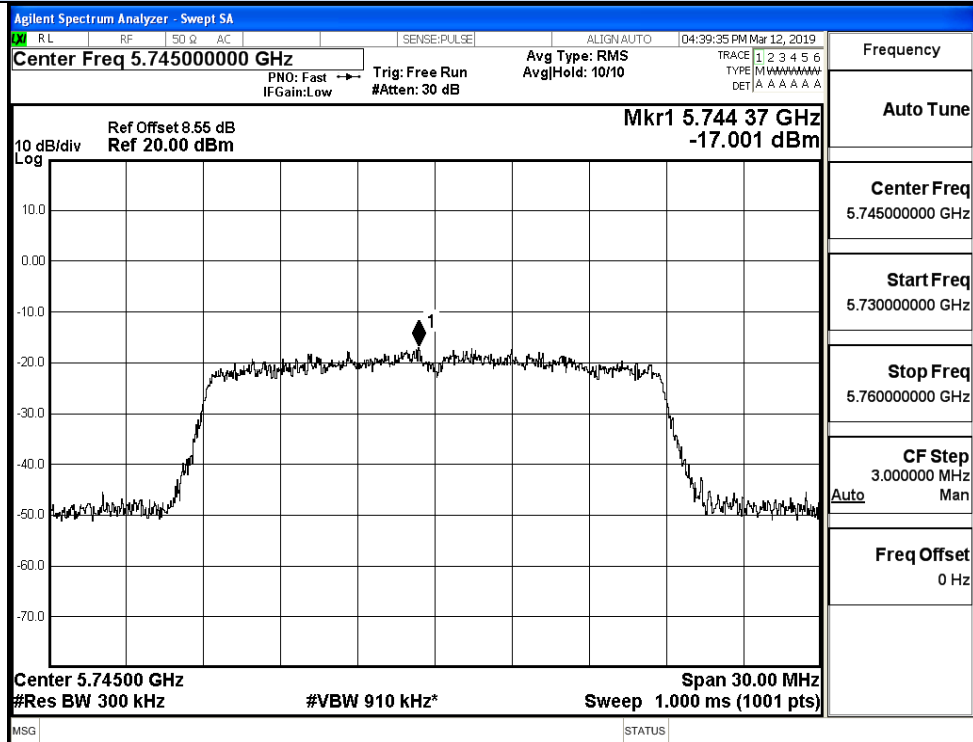
Ant1

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	-14.07	0	2.218	-11.85	24	Pass
	157	5785	-13.13	0	2.218	-10.91		Pass
	165	5825	-12.93	0	2.218	-10.71		Pass
11N20	149	5745	-14.12	0	2.218	-11.90	24	Pass
	157	5785	-11.45	0	2.218	-9.23		Pass
	165	5825	-12.79	0	2.218	-10.57		Pass
11N40	151	5755	-17.24	0	2.218	-15.02	24	Pass
	159	5795	-15.71	0	2.218	-13.49		Pass
11AC20	149	5745	-13.88	0	2.218	-11.66	24	Pass
	157	5785	-11.72	0	2.218	-9.50		Pass
	165	5825	-12.41	0	2.218	-10.19		Pass
11AC40	151	5755	-14.61	0	2.218	-12.39	24	Pass
	159	5795	-13.41	0	2.218	-11.19		Pass
11AC80	155	5775	-20.86	0	2.218	-18.65	24	Pass

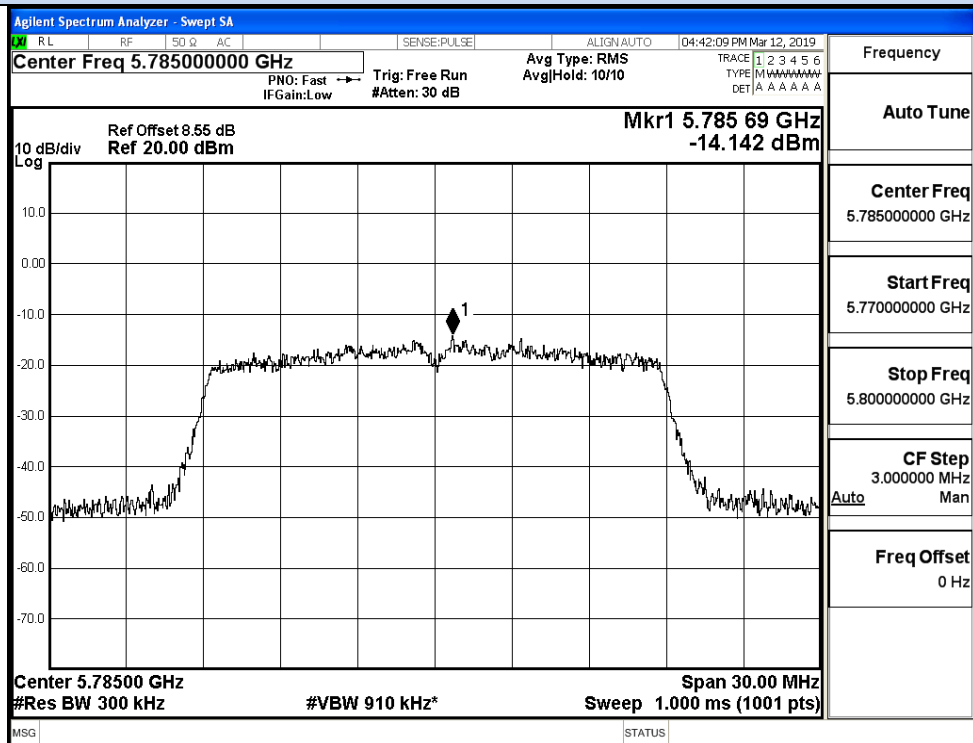
Combined Ant0 and Ant1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)			Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)			Limit (dBm/500 KHz)
			Ant0	Ant1	Sum			Ant0	Ant1	Sum	
11N20	149	5745	-16.08	-14.12	-11.98	0	2.218	-13.86	-11.90	-9.76	20.99
	157	5785	-16.28	-11.45	-10.22	0	2.218	-14.06	-9.23	-8.00	
	165	5825	-13.95	-12.79	-10.32	0	2.218	-11.73	-10.57	-8.10	
11N40	151	5755	-21.10	-17.24	-15.74	0	2.218	-18.88	-15.02	-13.52	20.99
	159	5795	-18.18	-15.71	-13.76	0	2.218	-15.96	-13.49	-11.54	
11AC20	149	5745	-16.42	-13.88	-11.96	0	2.218	-14.20	-11.66	-9.74	20.99
	157	5785	-14.67	-11.72	-9.94	0	2.218	-12.45	-9.50	-7.72	
	165	5825	-13.44	-12.41	-9.88	0	2.218	-11.22	-10.19	-7.66	
11AC40	151	5755	-19.59	-14.61	-13.41	0	2.218	-17.37	-12.39	-11.19	20.99
	159	5795	-19.37	-13.41	-12.43	0	2.218	-17.15	-11.19	-10.21	
11AC80	155	5775	-19.73	-20.86	-17.25	0	2.218	-17.52	-18.65	-15.04	20.99

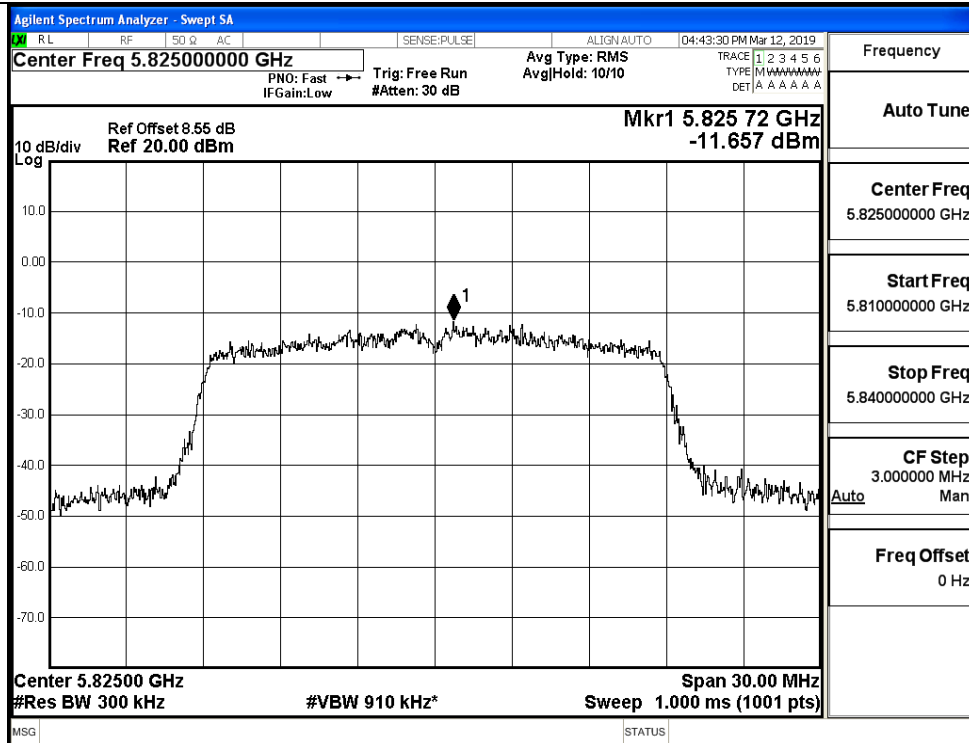
Power Spectral Density_Ant0



IEEE 802.11a / Channel 149 / 5745MHz_Ant0

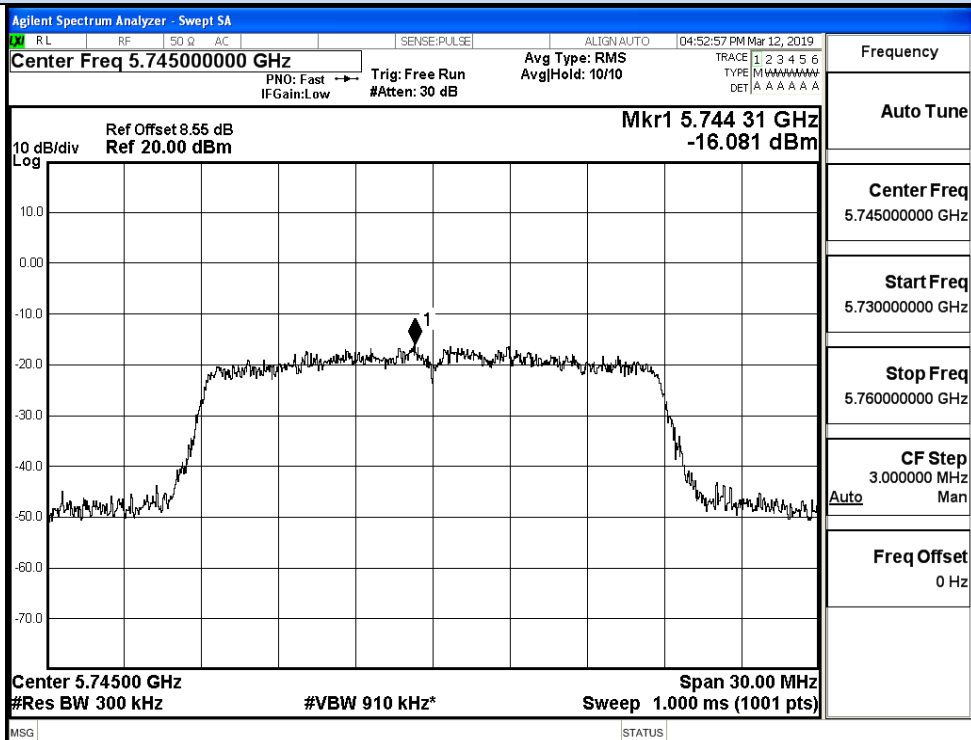


IEEE 802.11a / Channel 157 / 5785MHz_Ant0

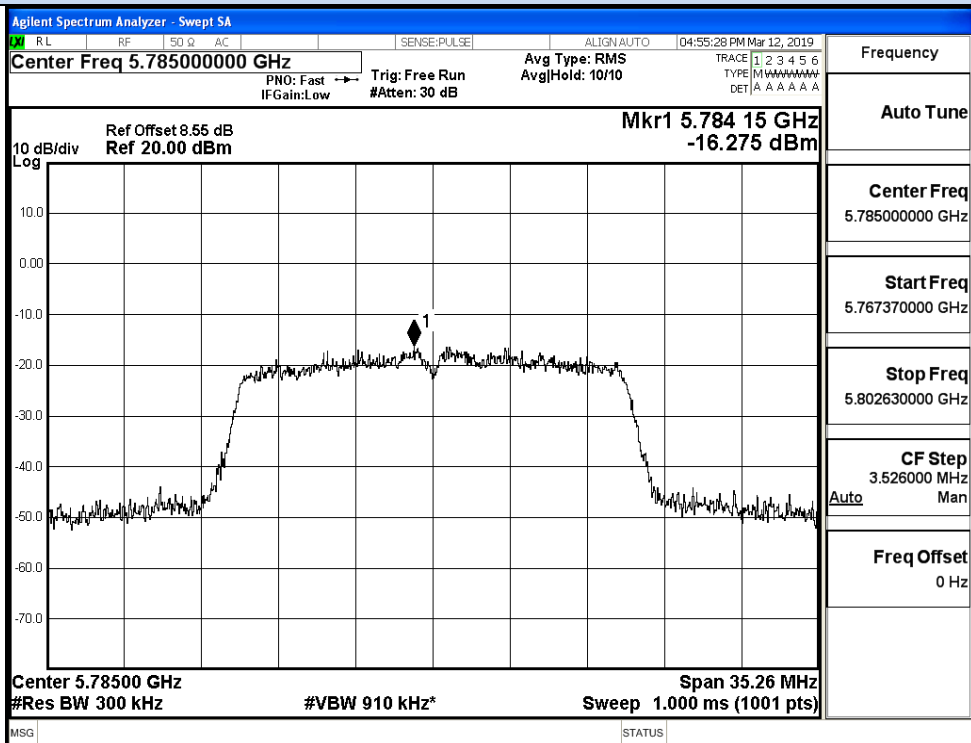


IEEE 802.11a / Channel 165 / 5825MHz_Ant0

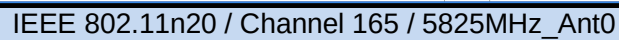
Power Spectral Density_Ant0



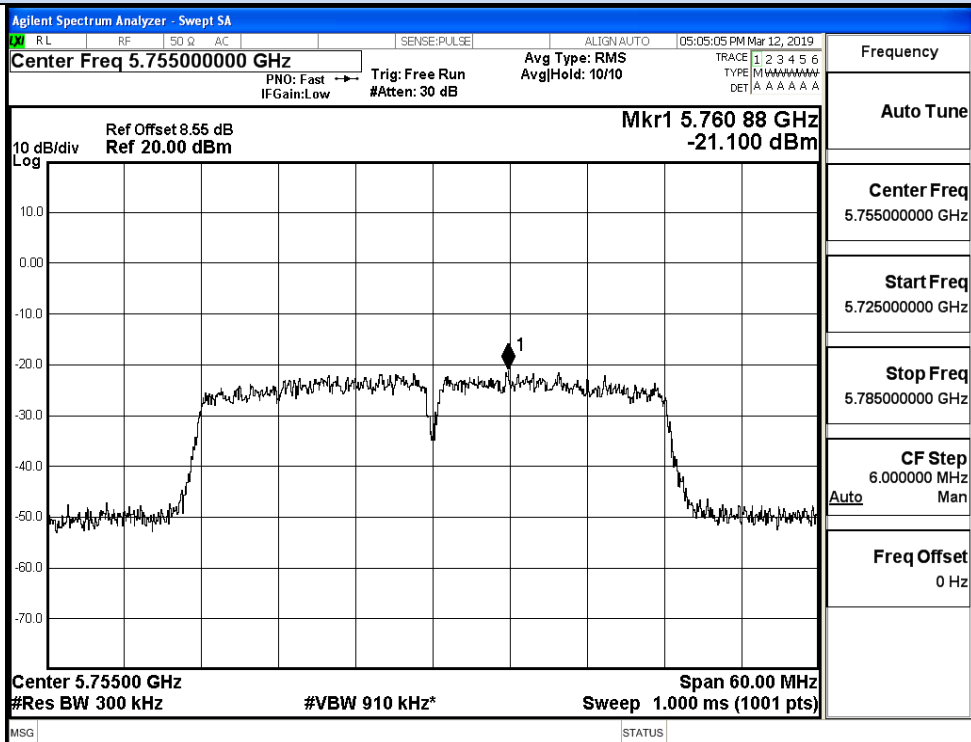
IEEE 802.11n20 / Channel 149 / 5745MHz_Ant0



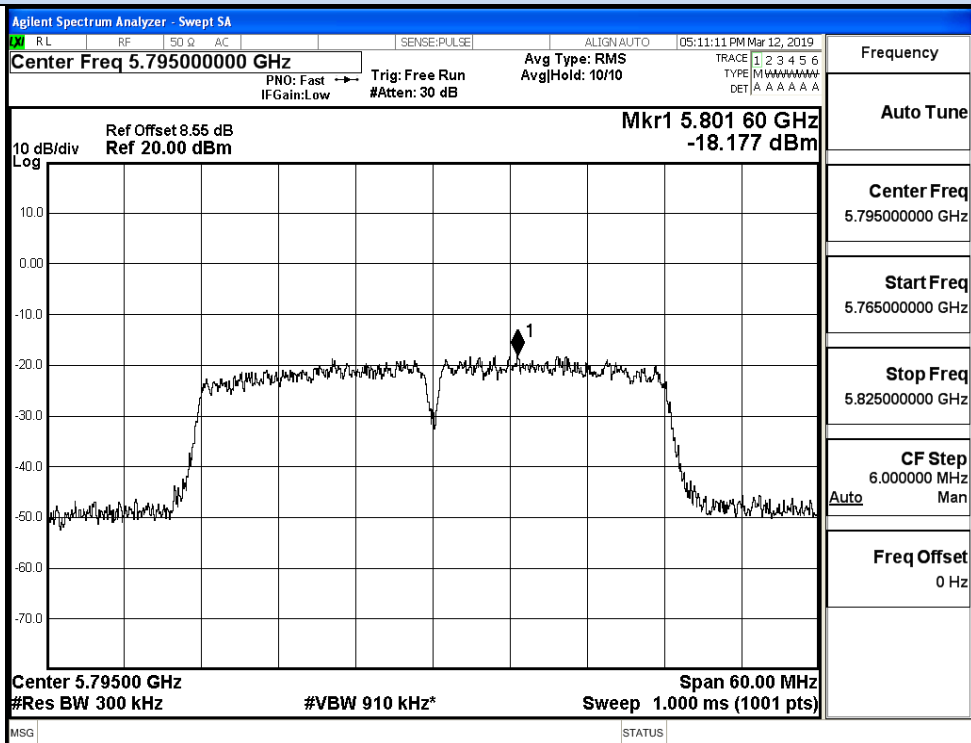
IEEE 802.11n20 / Channel 157 / 5785MHz_Ant0



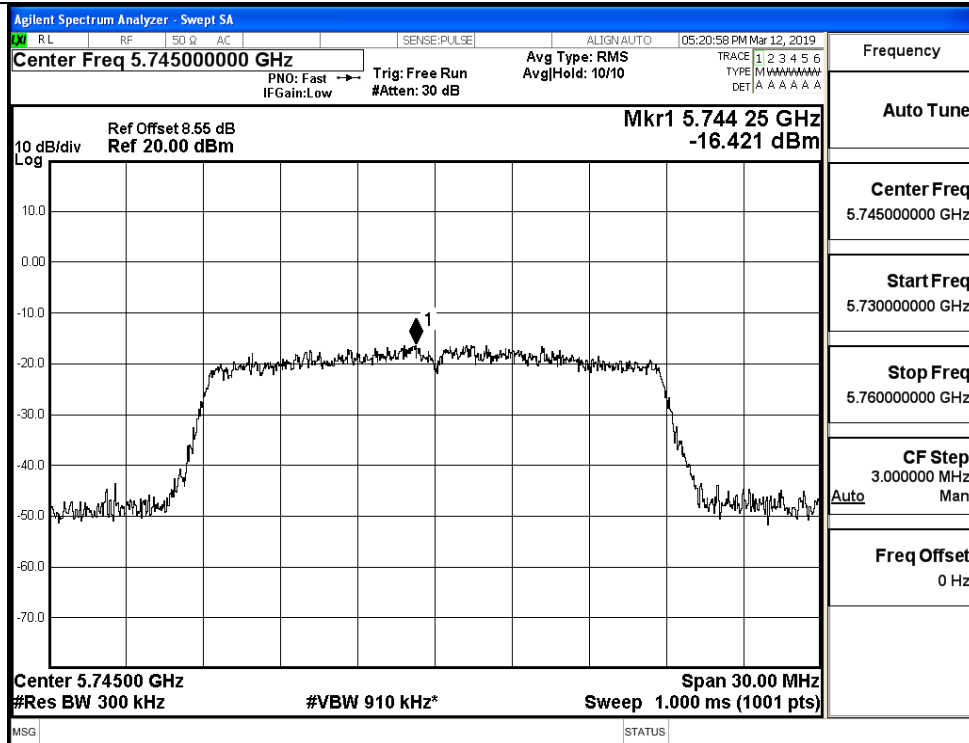
Power Spectral Density_Ant0



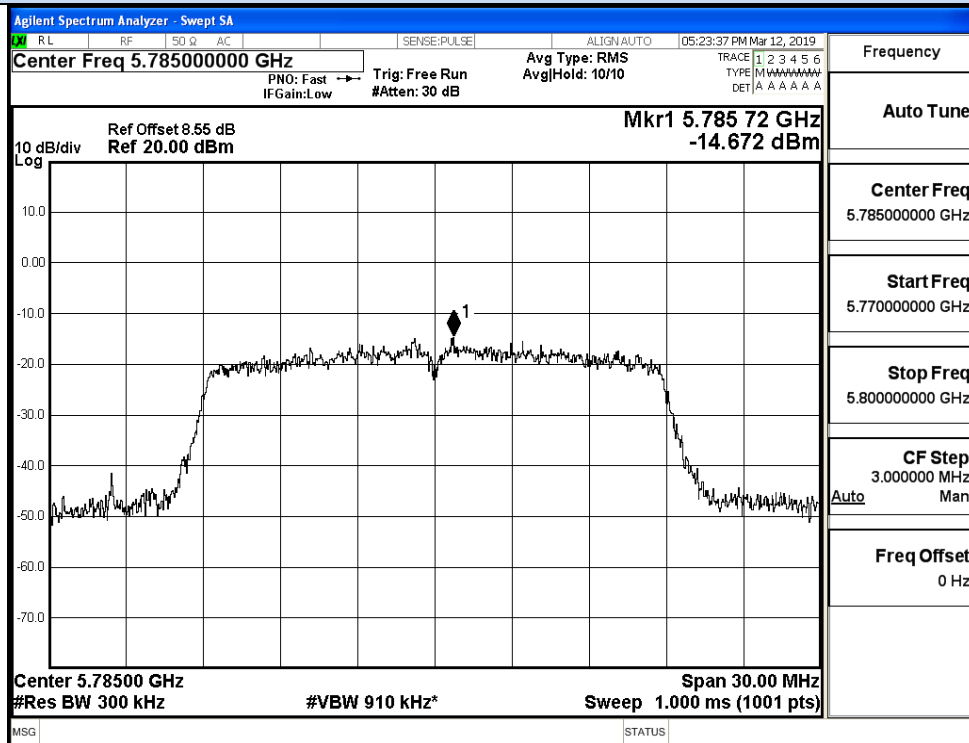
IEEE 802.11n40 / Channel 151 / 5755MHz_Ant0



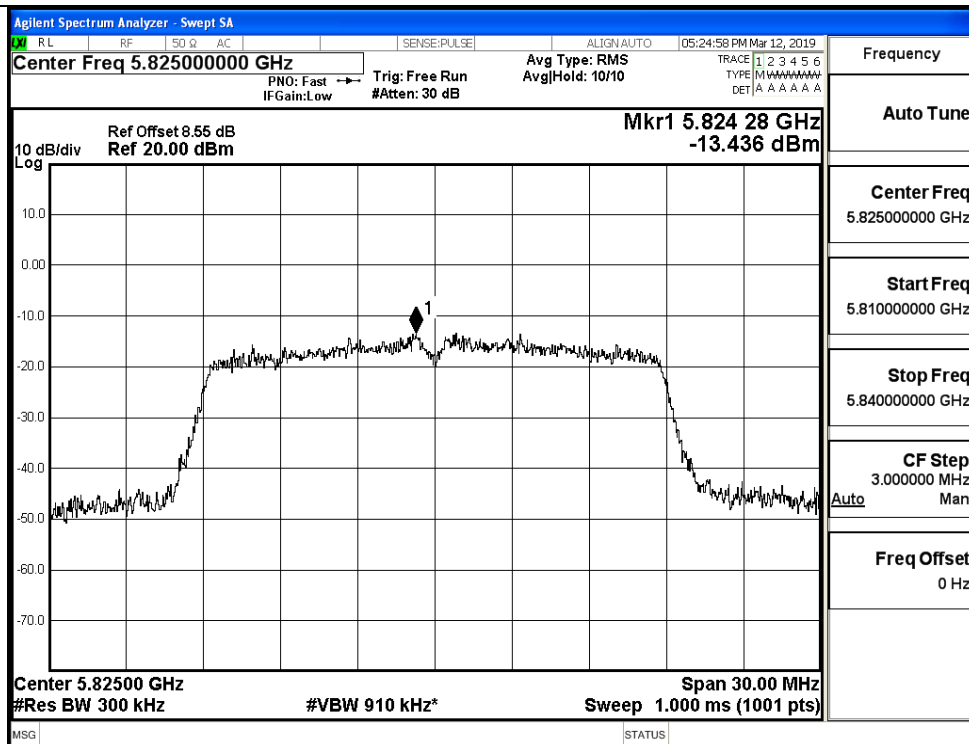
IEEE 802.11n40 / Channel 159 / 5795MHz_Ant0



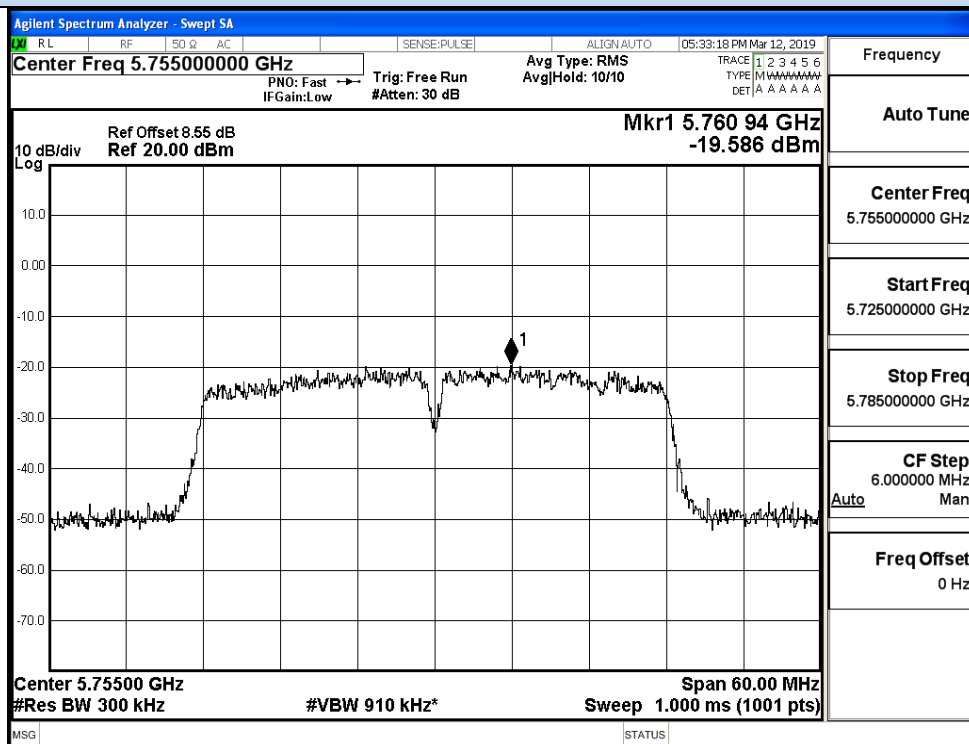
IEEE 802.11ac20 / Channel 149 / 5745MHz_Ant0



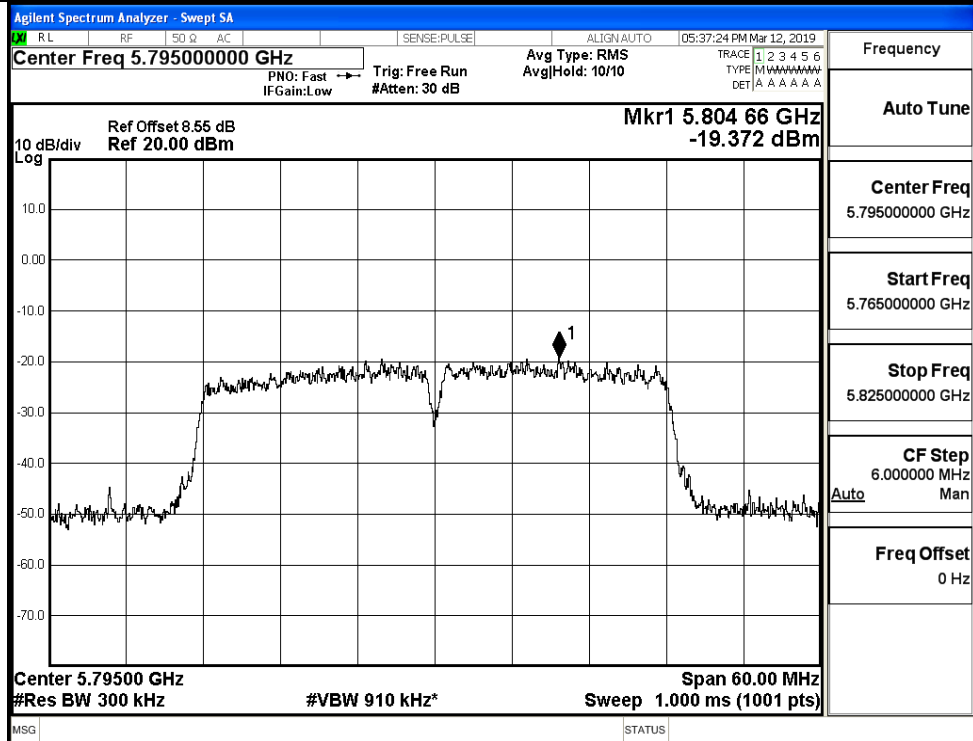
IEEE 802.11ac20 / Channel 157 / 5785MHz_Ant0



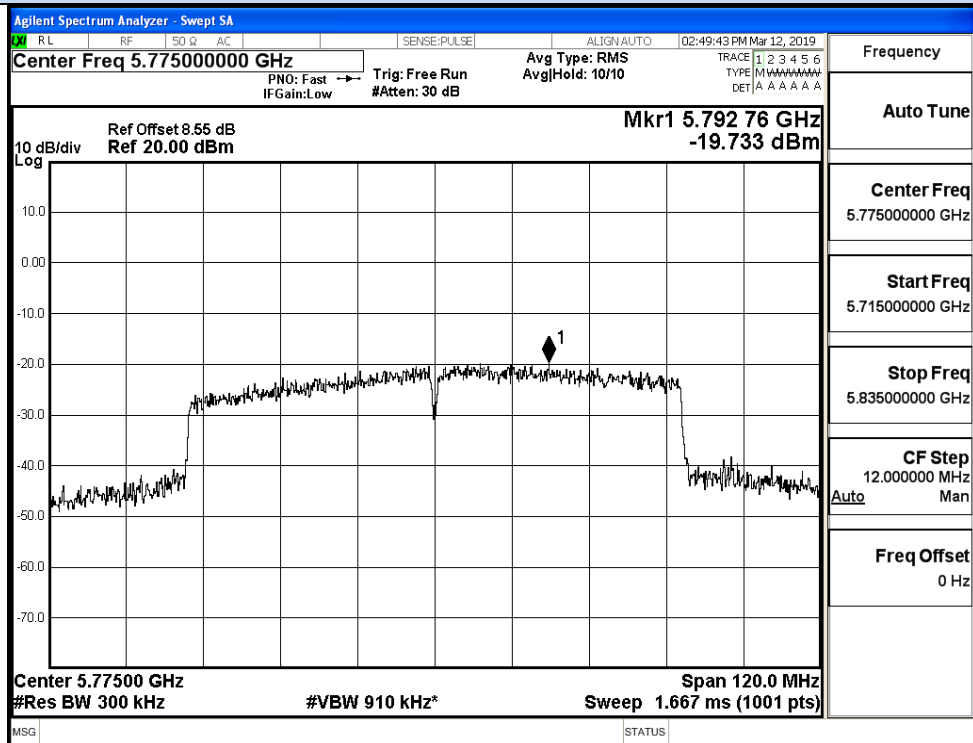
IEEE 802.11ac20 / Channel 165 / 5825MHz_Ant0



IEEE 802.11ac40 / Channel 151 / 5755MHz_Ant0

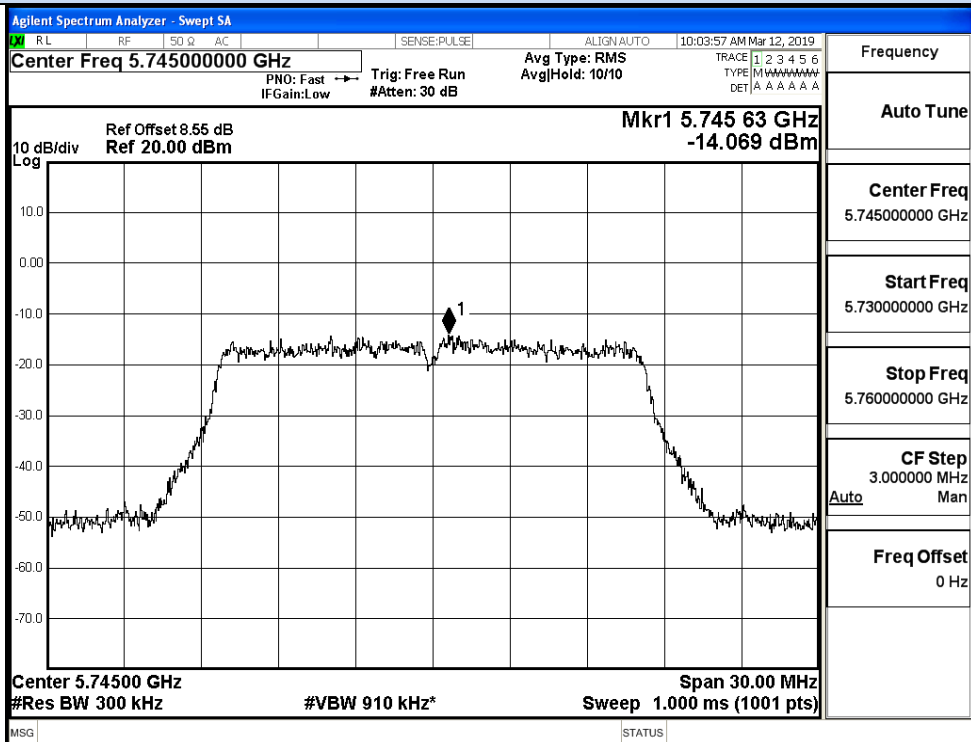


IEEE 802.11ac40 / Channel 159 / 5795MHz_Ant0

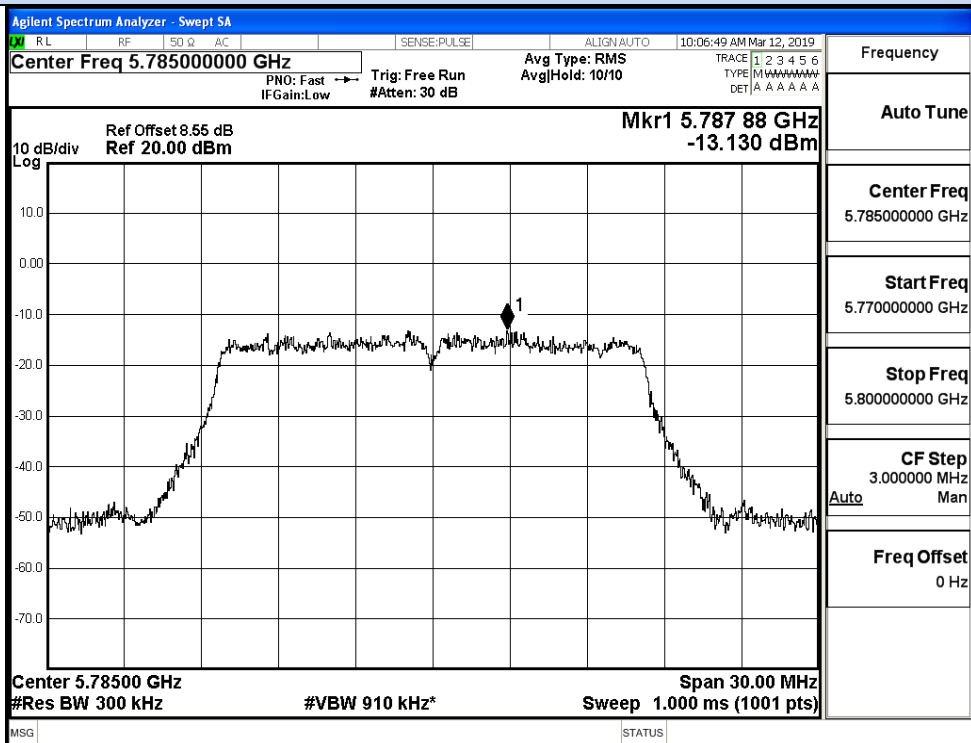


IEEE 802.11ac80 / Channel 155/ 5775MHz_Ant0

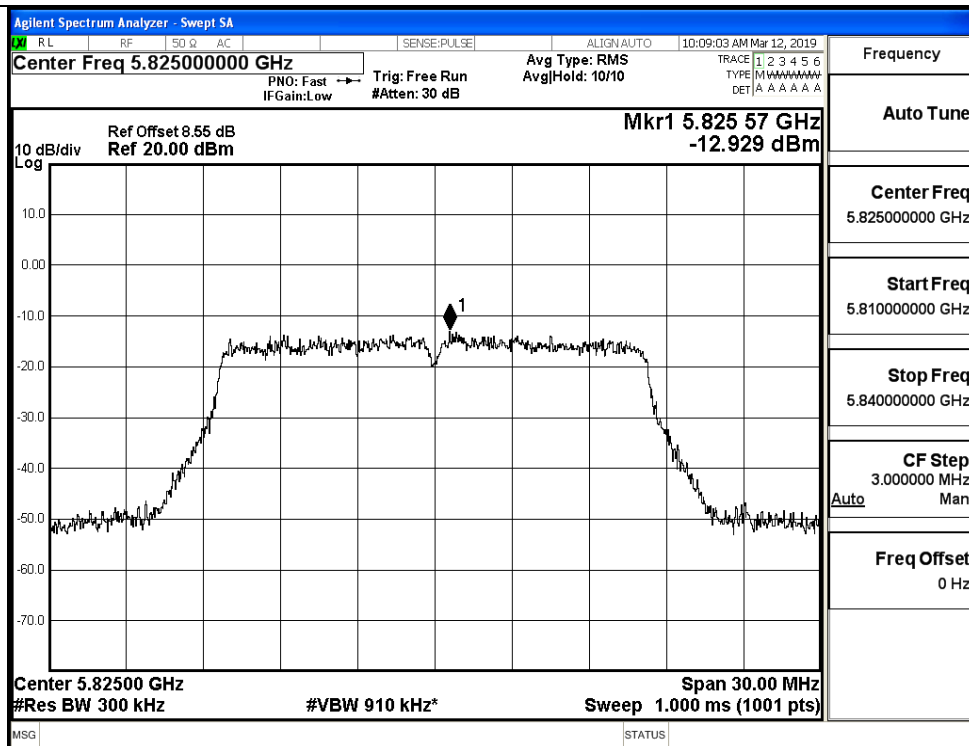
Power Spectral Density_Ant1



IEEE 802.11a / Channel 149 / 5745MHz_Ant1

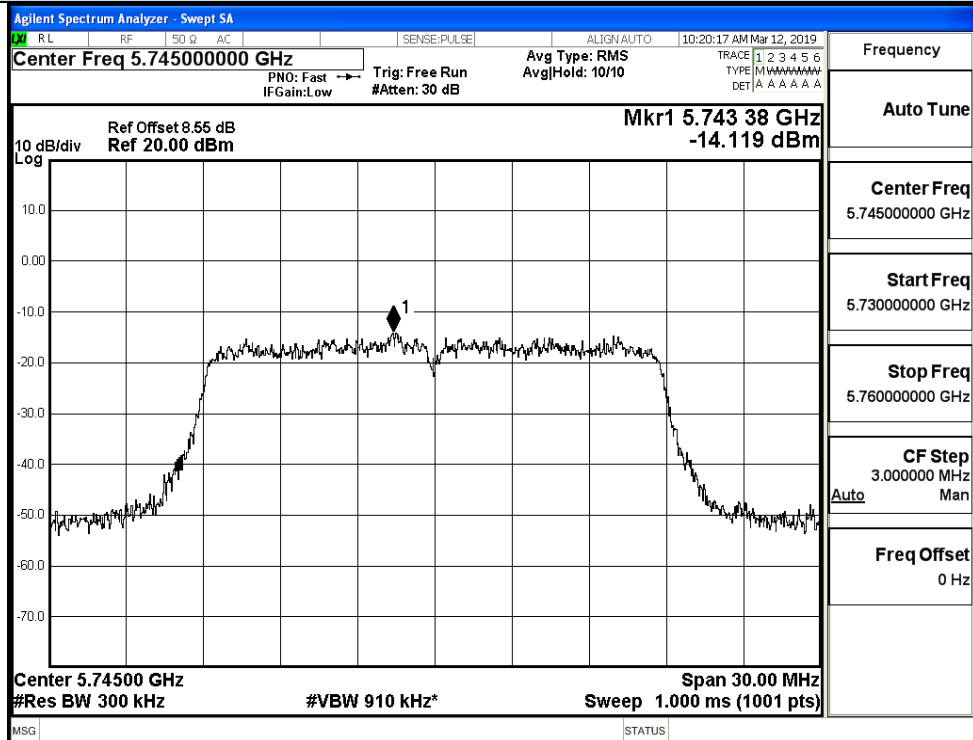


IEEE 802.11a / Channel 157 / 5785MHz_Ant1

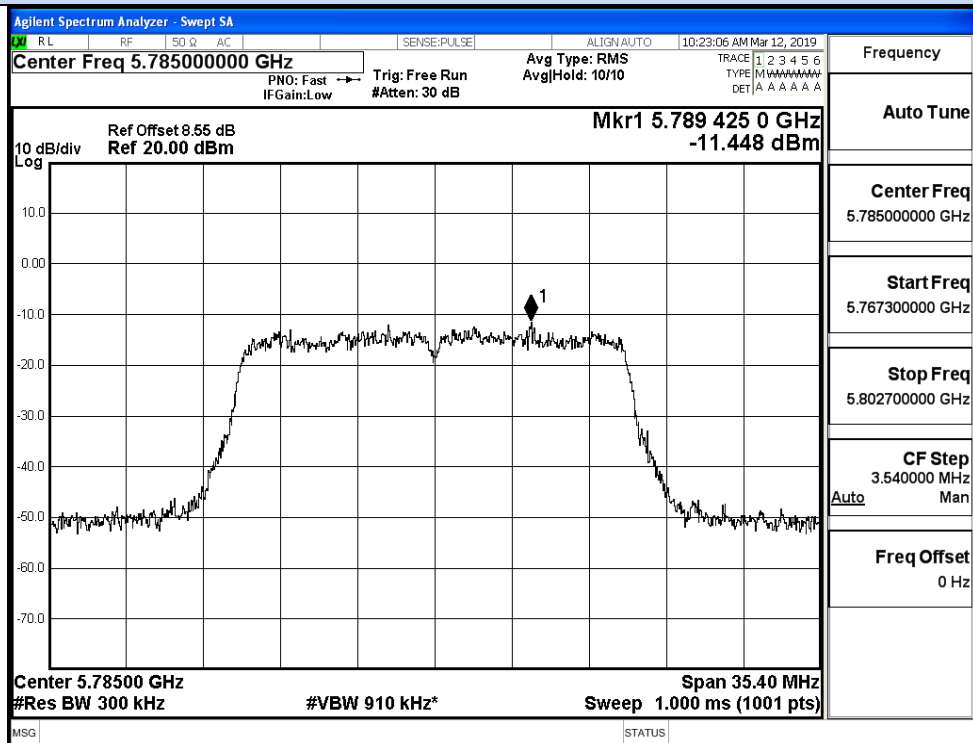


IEEE 802.11a / Channel 165 / 5825MHz_Ant1

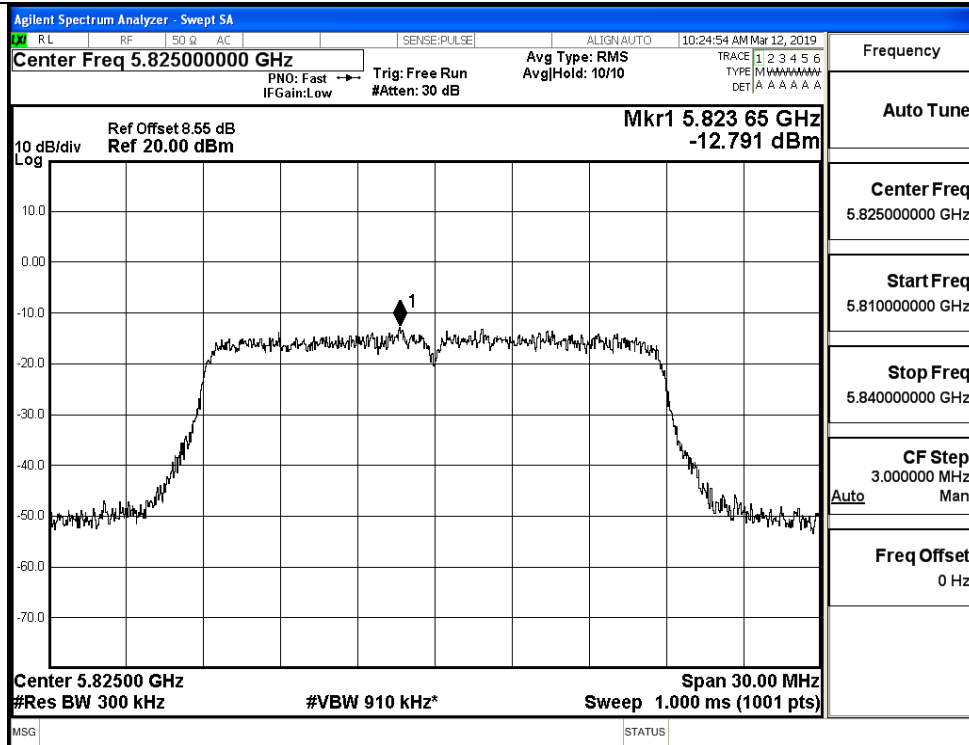
Power Spectral Density_Ant1



IEEE 802.11n20 / Channel 149 / 5745MHz_Ant1

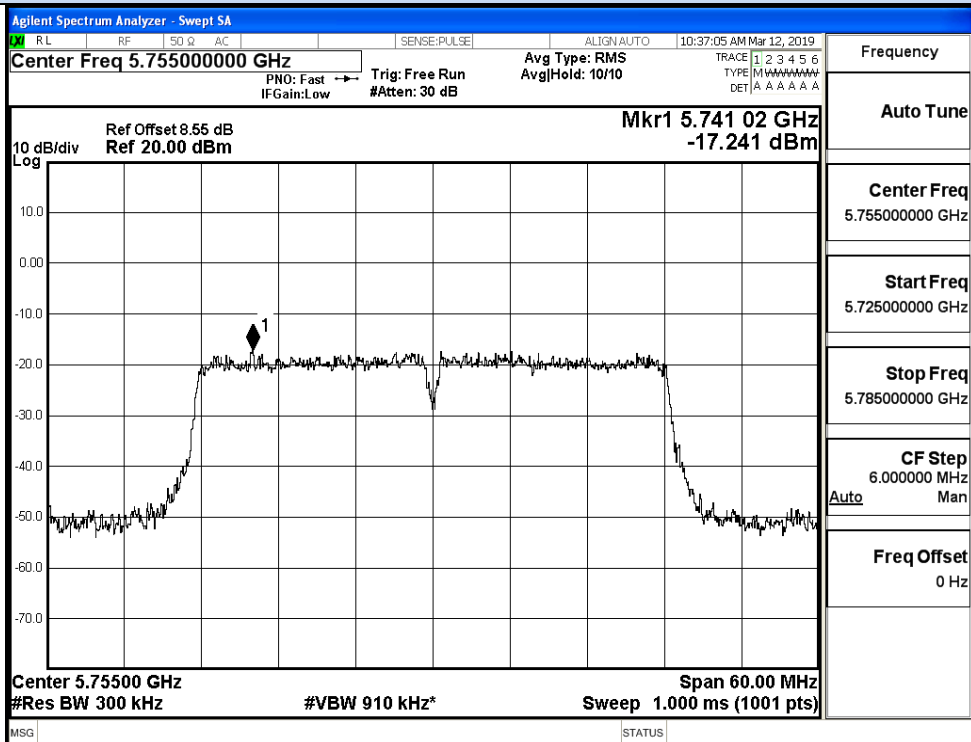


IEEE 802.11n20 / Channel 157 / 5785MHz_Ant1

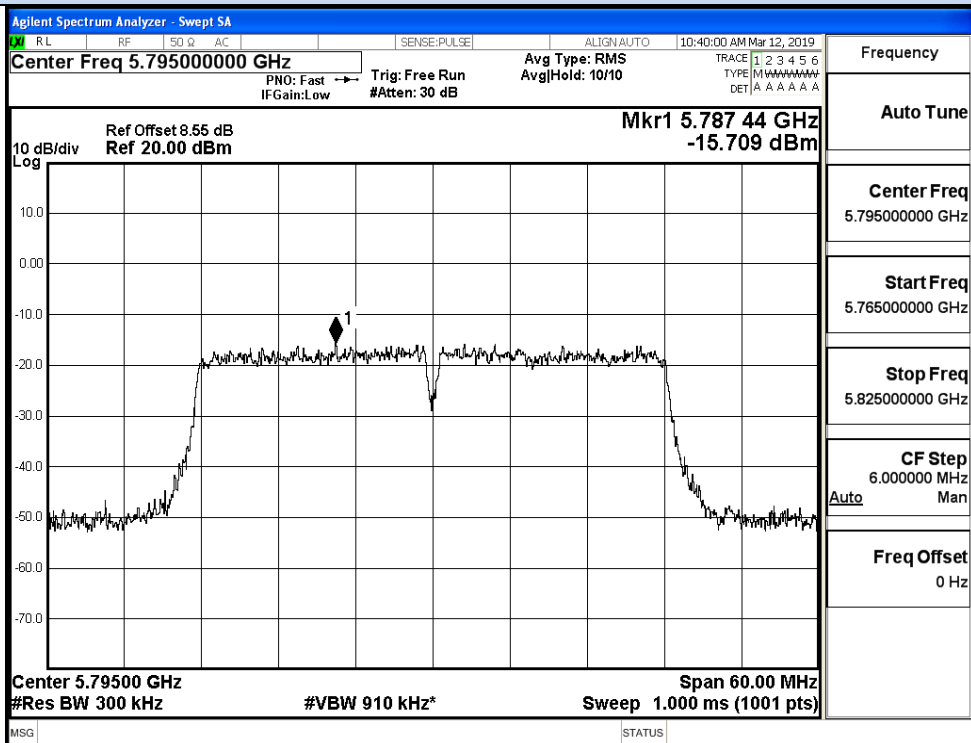


IEEE 802.11n20 / Channel 165 / 5825MHz_Ant1

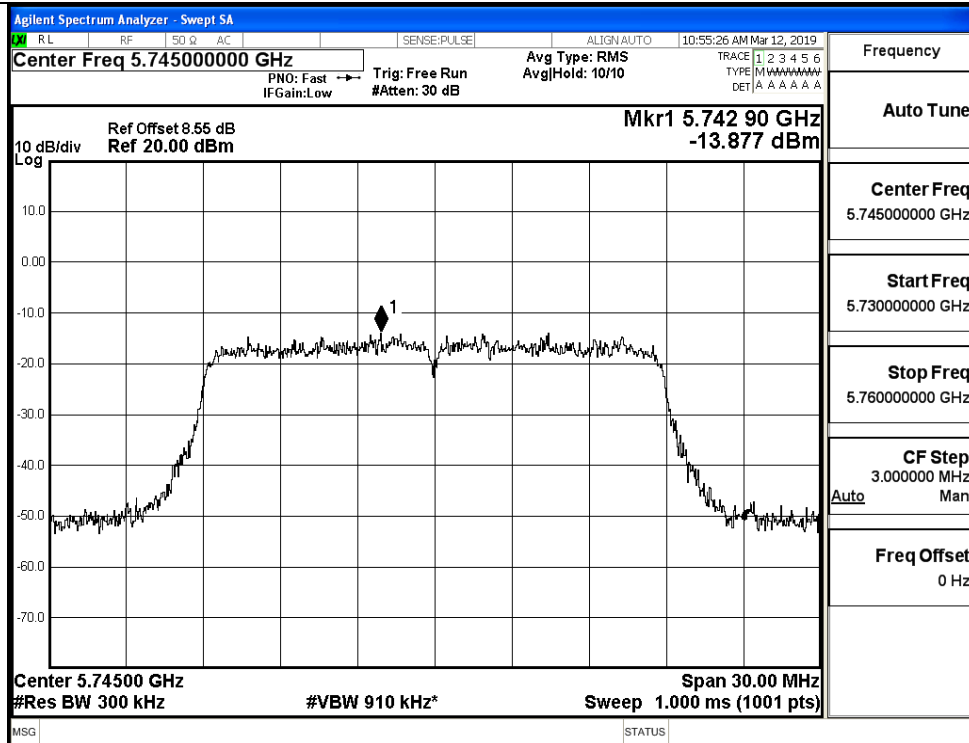
Power Spectral Density_Ant1



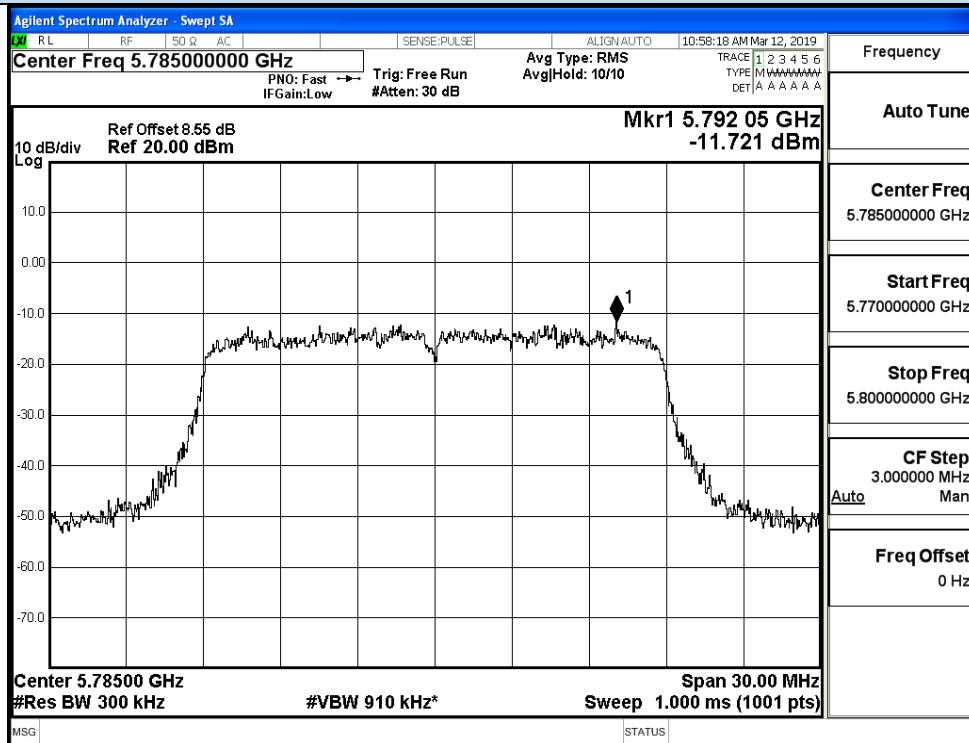
IEEE 802.11n40 / Channel 151 / 5755MHz_Ant1



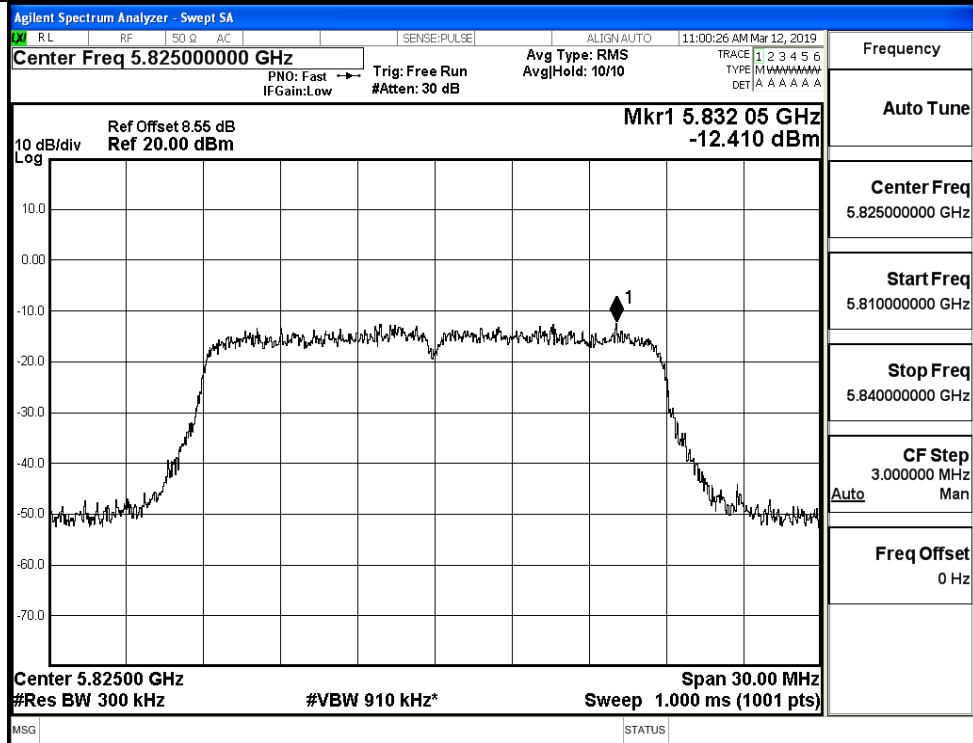
IEEE 802.11n40 / Channel 159 / 5795MHz_Ant1



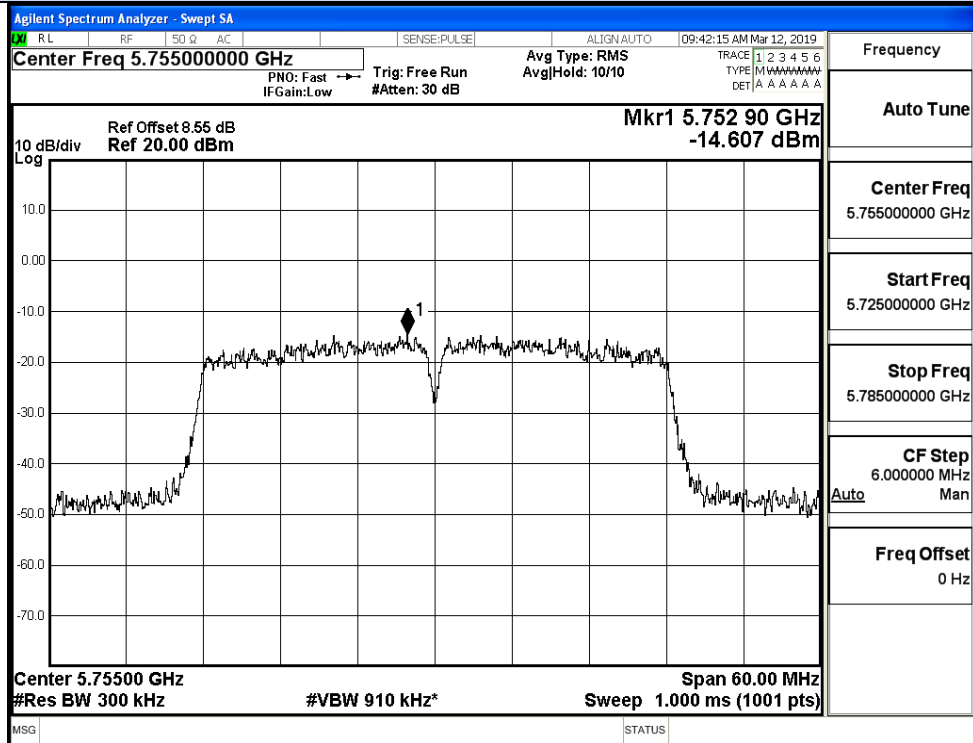
IEEE 802.11ac20 / Channel 149 / 5745MHz_Ant1



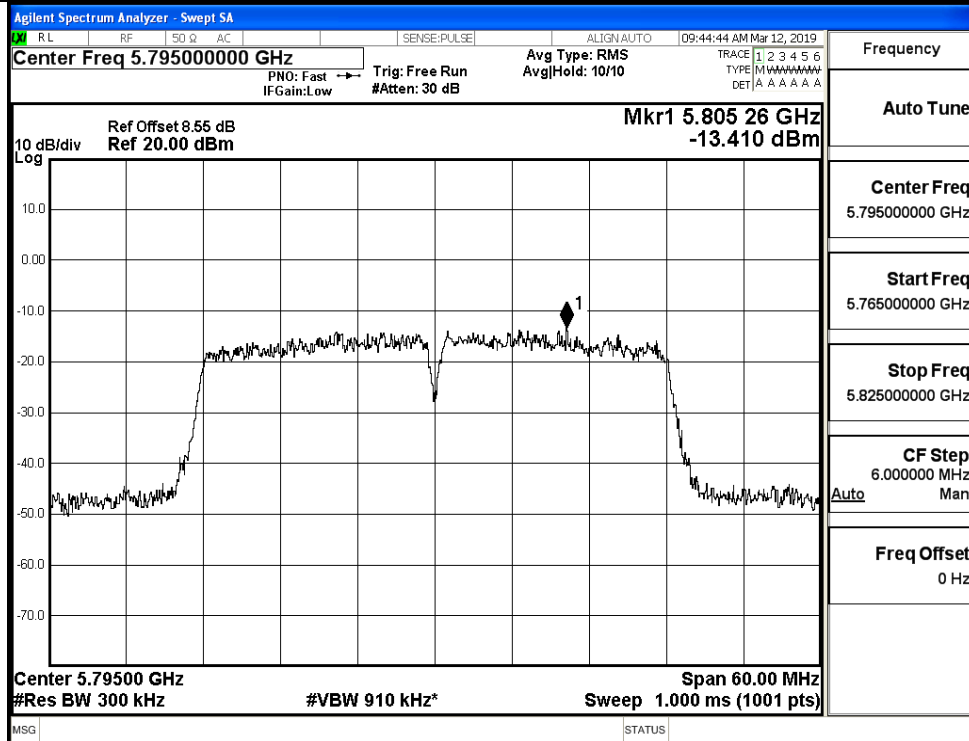
IEEE 802.11ac20 / Channel 157 / 5785MHz_Ant1



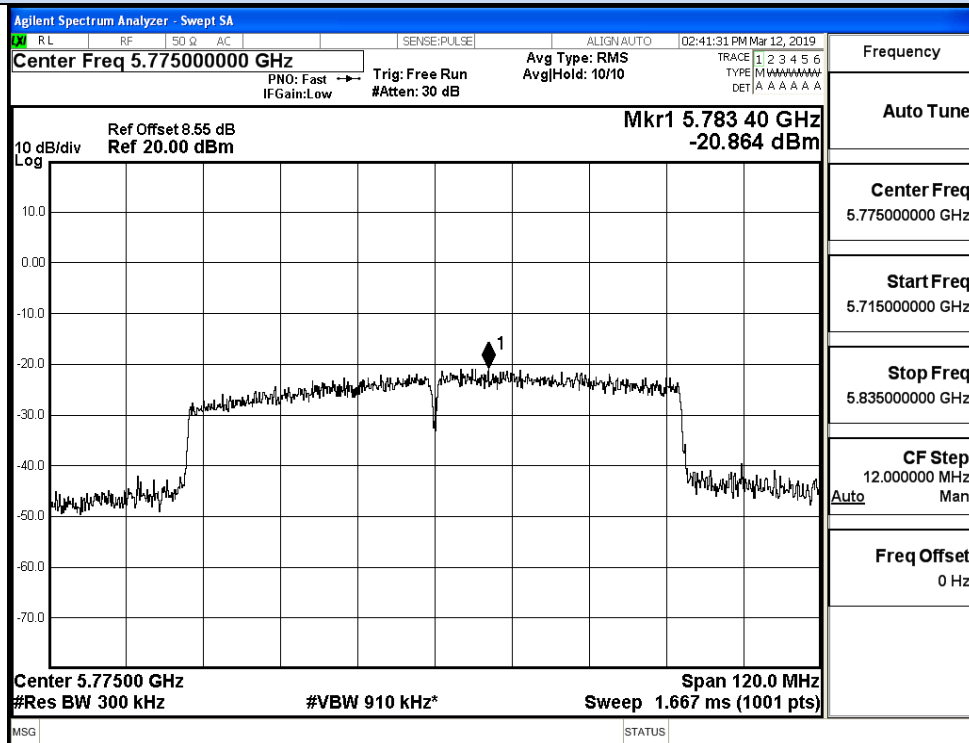
IEEE 802.11ac20 / Channel 165 / 5825MHz_Ant1



IEEE 802.11ac40 / Channel 151 / 5755MHz_Ant1



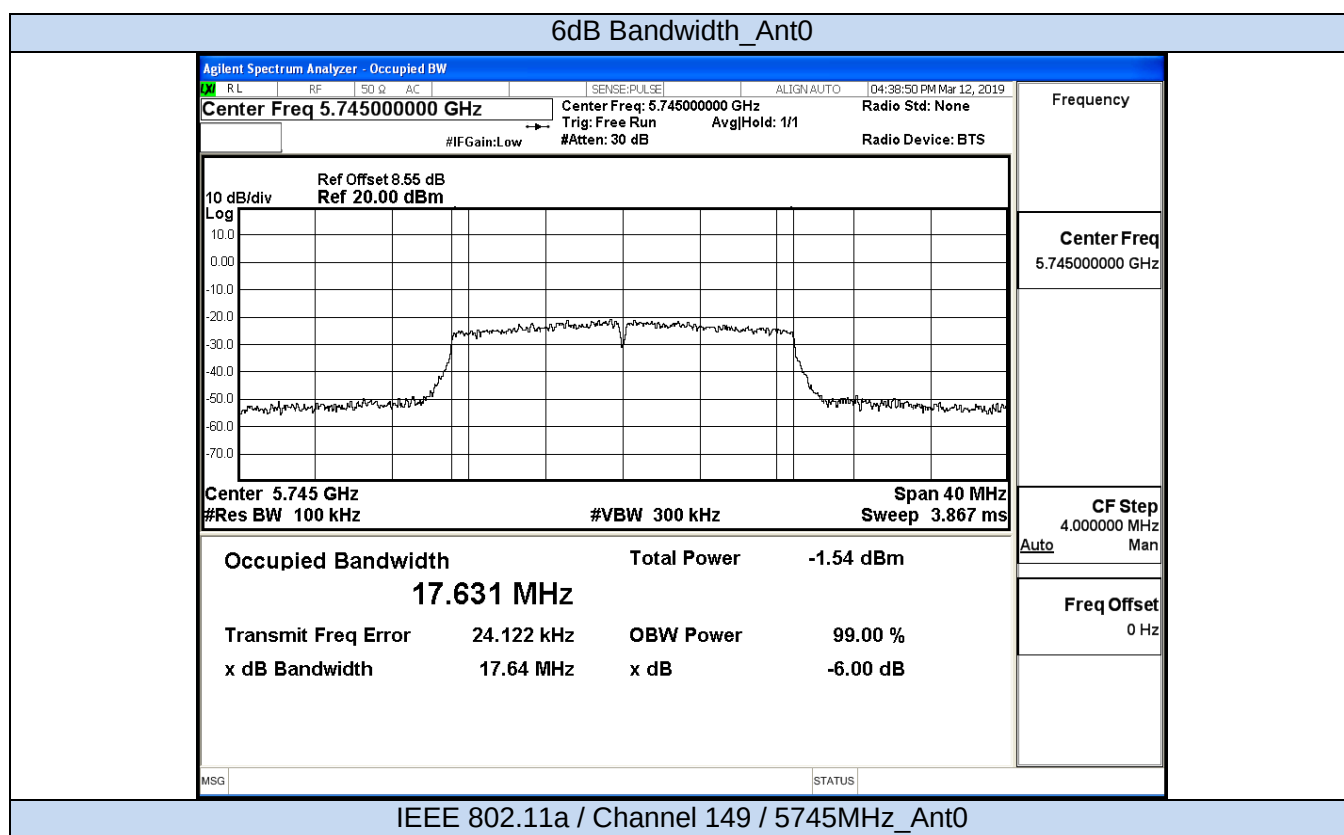
IEEE 802.11ac40 / Channel 159 / 5795MHz_Ant1

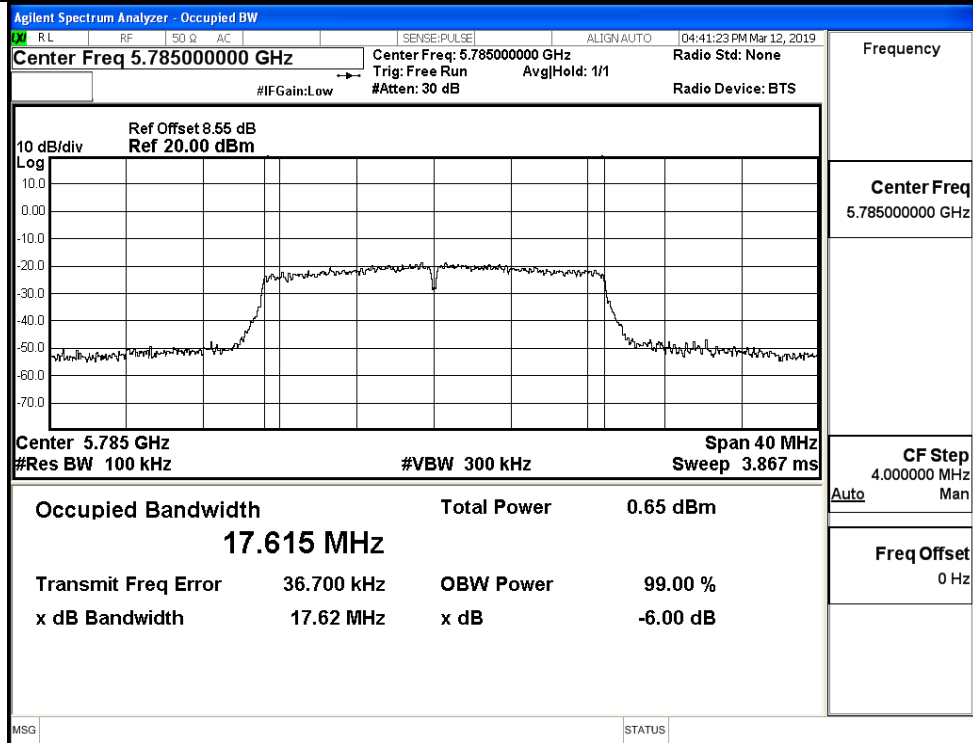


IEEE 802.11ac80 / Channel 155/ 5775MHz_Ant1

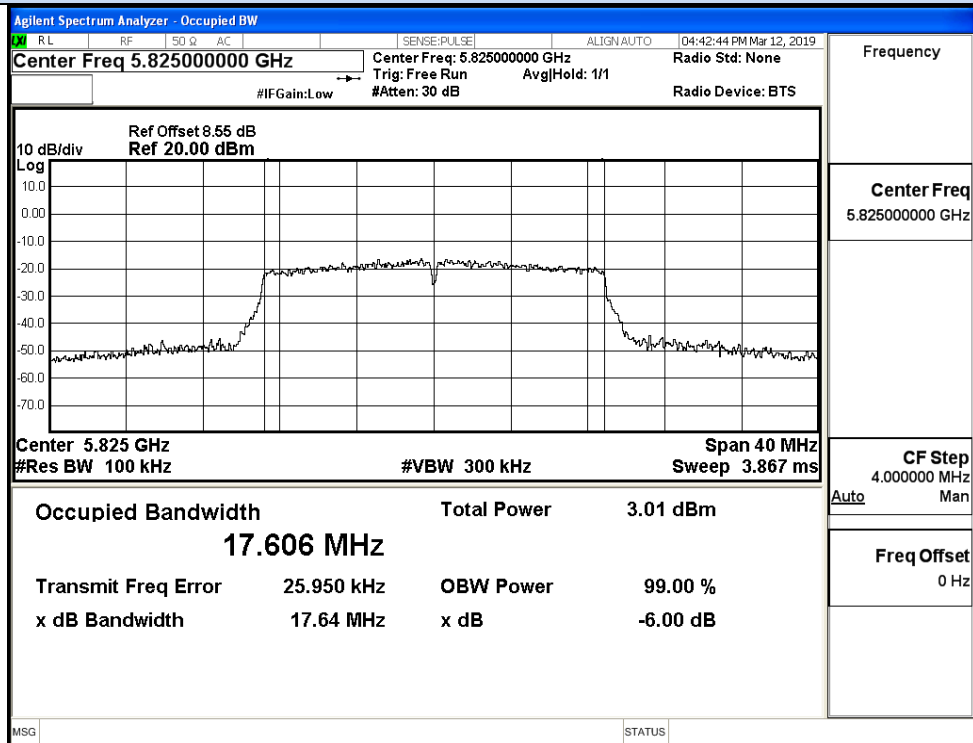
C.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		99% Bandwidth (MHz)		Limit (MHz)	Verdict
			Ant0	Ant1	Ant0	Ant1		
11A	149	5745	17.64	16.51	17.619	17.601	>=0.5	Pass
	157	5785	17.62	16.48	17.604	17.612		Pass
	165	5825	17.64	16.53	17.625	17.619		Pass
11N20	149	5745	17.66	17.69	17.604	17.608	>=0.5	Pass
	157	5785	17.63	17.70	17.605	17.616		Pass
	165	5825	17.64	17.68	17.622	17.638		Pass
11N40	151	5755	36.39	36.57	35.991	35.939	>=0.5	Pass
	159	5795	36.07	36.53	35.932	35.924		Pass
11AC20	149	5745	17.65	17.71	17.613	17.619	>=0.5	Pass
	157	5785	17.62	17.69	17.611	17.597		Pass
	165	5825	17.63	17.70	17.615	17.616		Pass
11AC40	151	5755	36.22	36.37	35.934	35.945	>=0.5	Pass
	159	5795	36.10	36.37	35.940	35.964		Pass
11AC80	155	5775	75.06	74.19	76.513	76.341	>=0.5	Pass



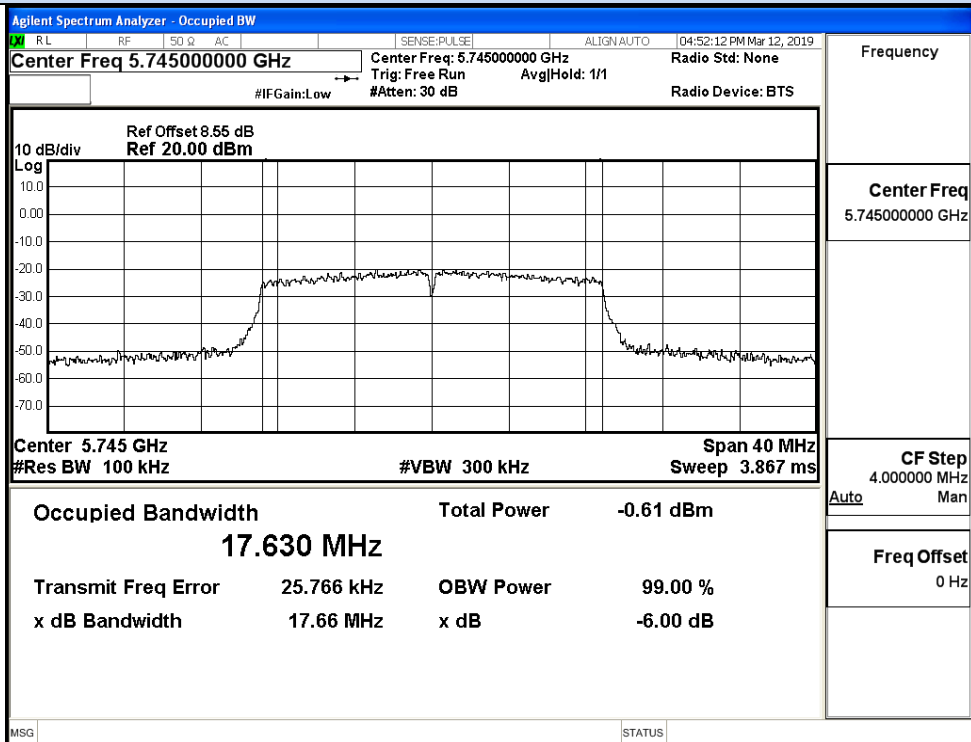


IEEE 802.11a / Channel 157 / 5785MHz_Ant0

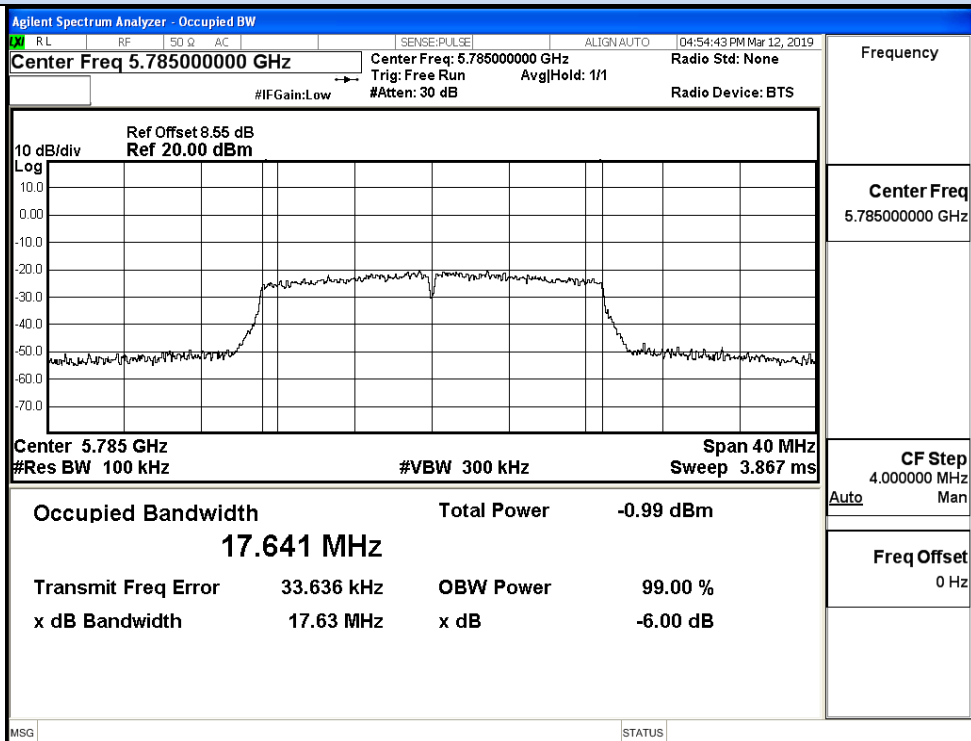


IEEE 802.11a / Channel 165 / 5825MHz_Ant0

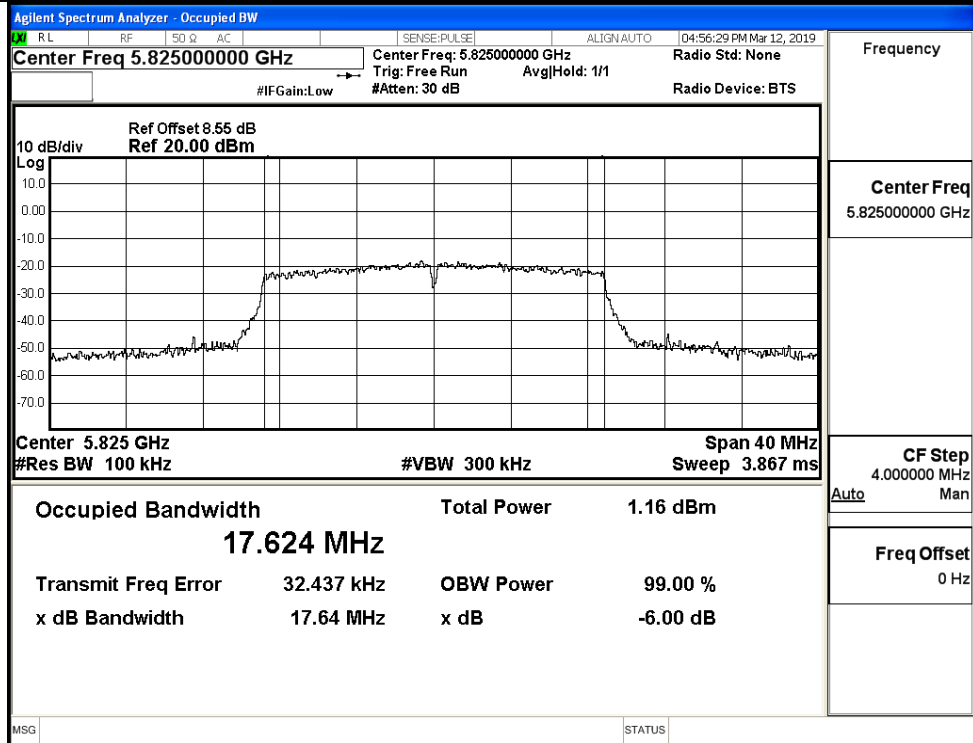
6dB Bandwidth_Ant0



IEEE 802.11n20 / Channel 149 / 5745MHz_Ant0

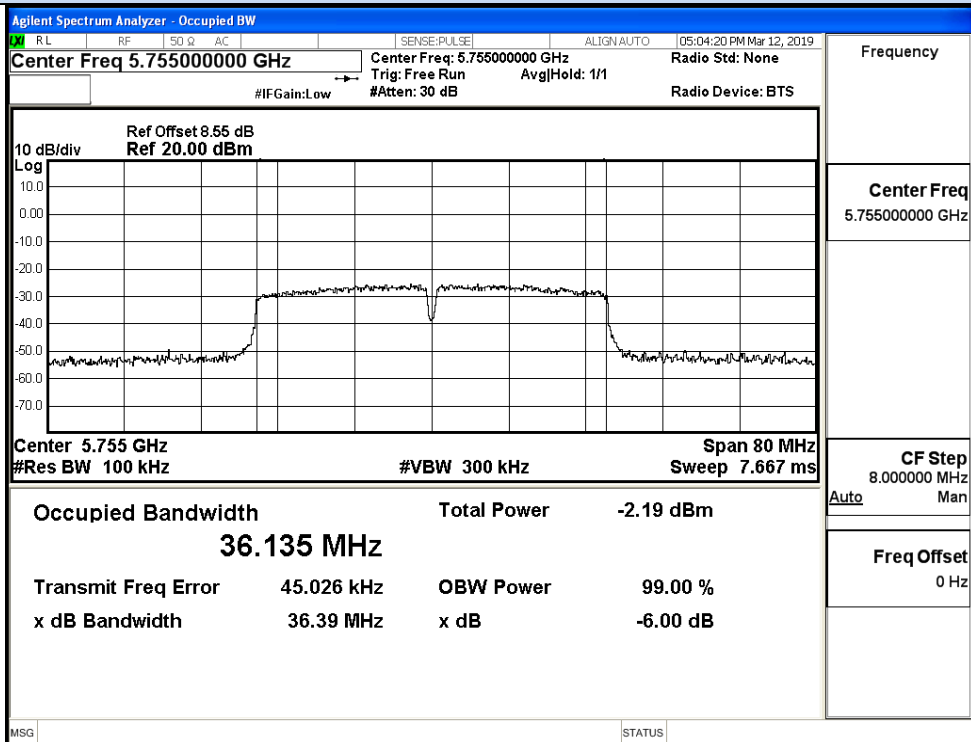


IEEE 802.11n20 / Channel 157 / 5785MHz_Ant0

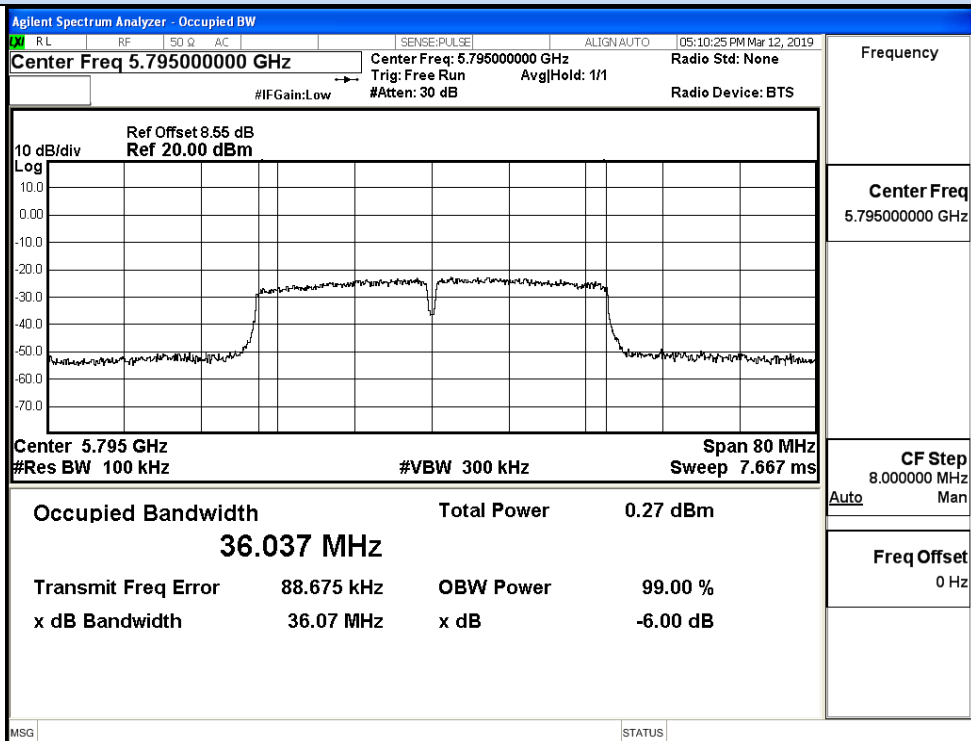


IEEE 802.11n20 / Channel 165 / 5825MHz_Ant0

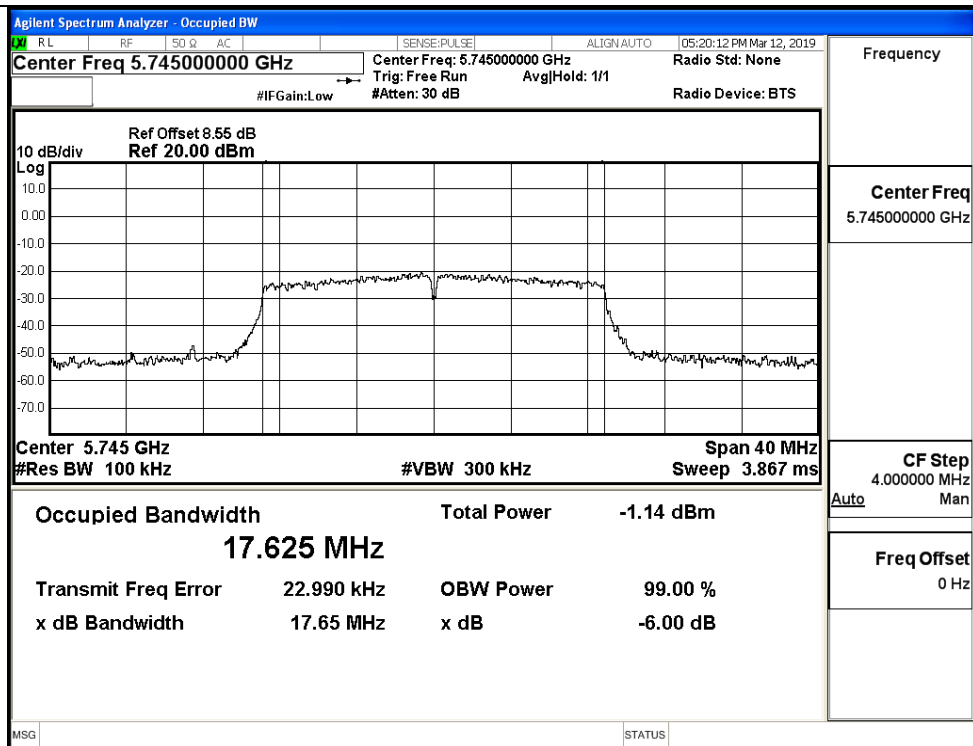
6dB Bandwidth



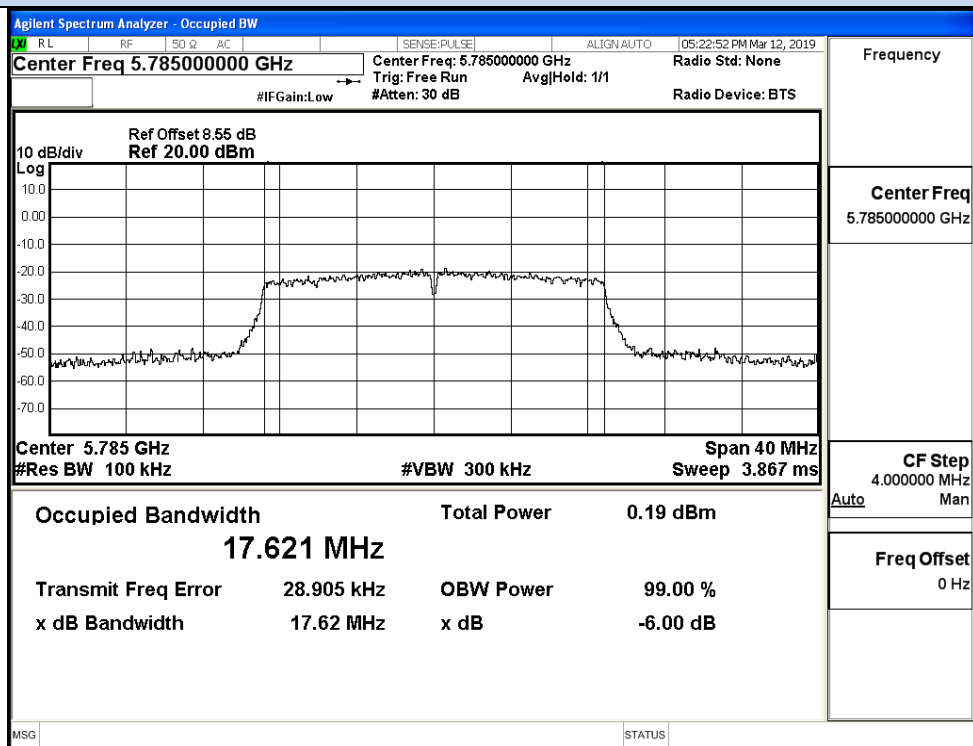
IEEE 802.11n40 / Channel 151 / 5755MHz_Ant0



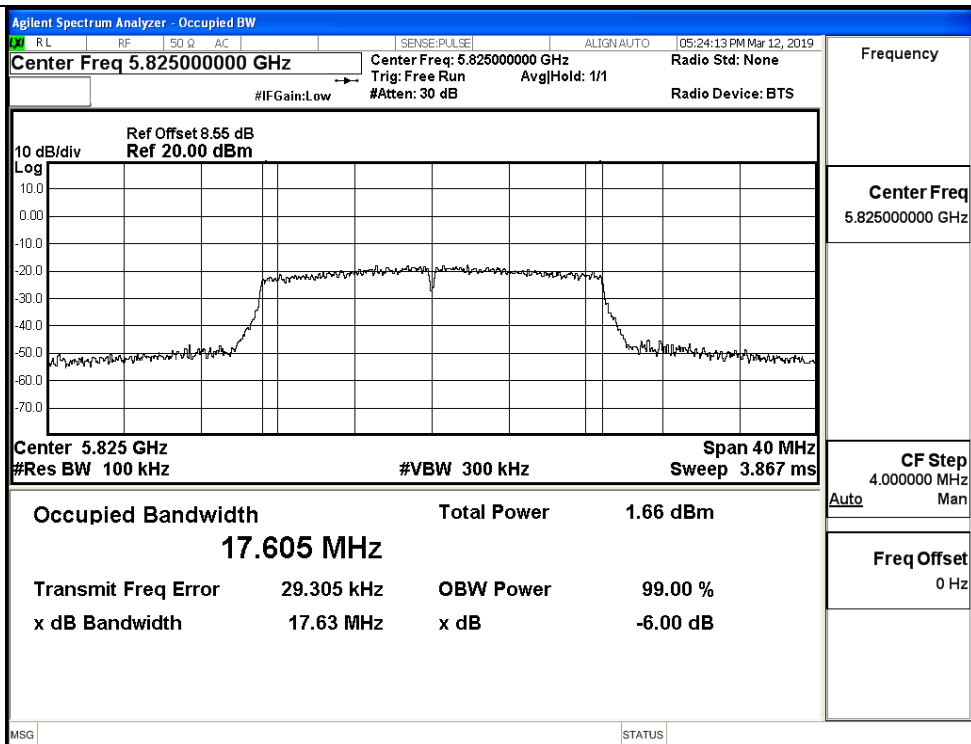
IEEE 802.11n40 / Channel 159 / 5795MHz_Ant0



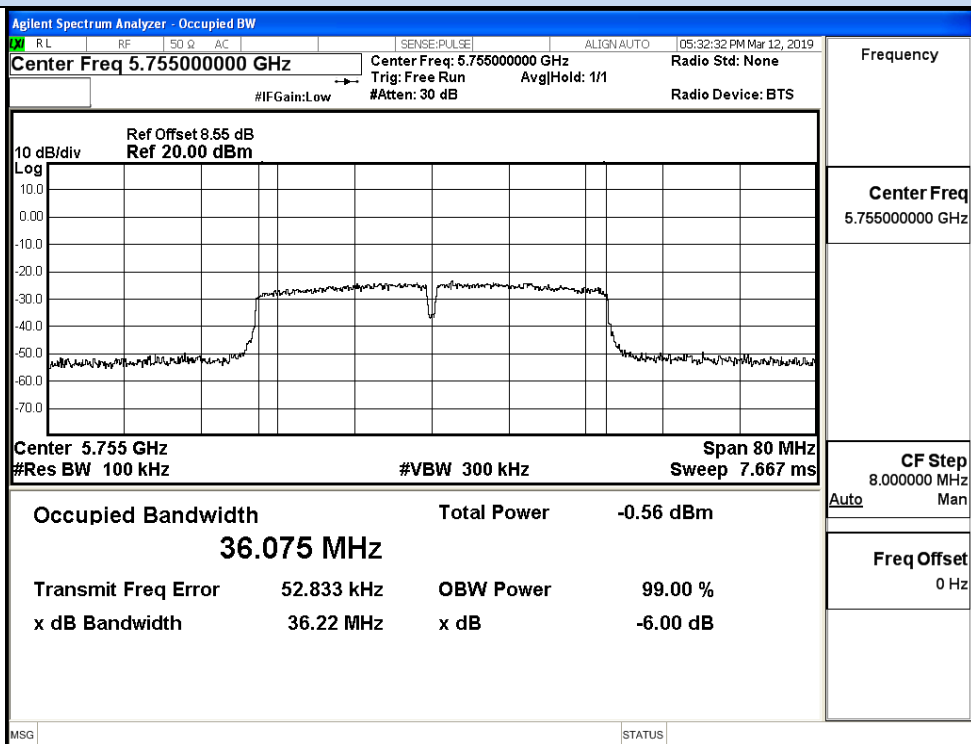
IEEE 802.11ac20 / Channel 149 / 5745MHz_Ant0



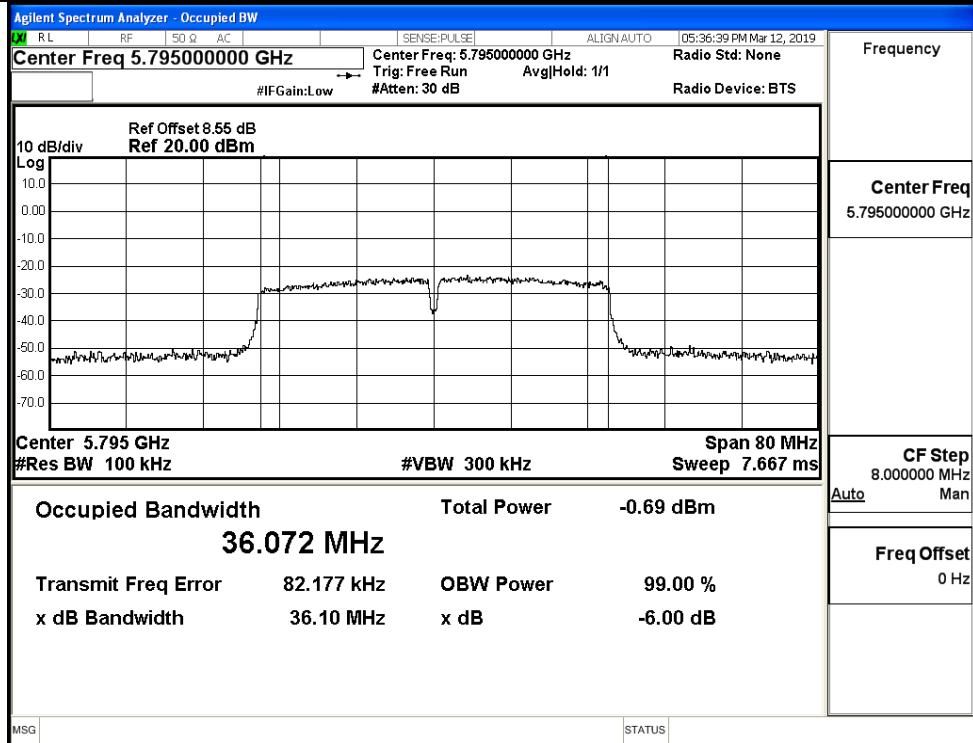
IEEE 802.11ac20 / Channel 157/ 5785MHz_Ant0



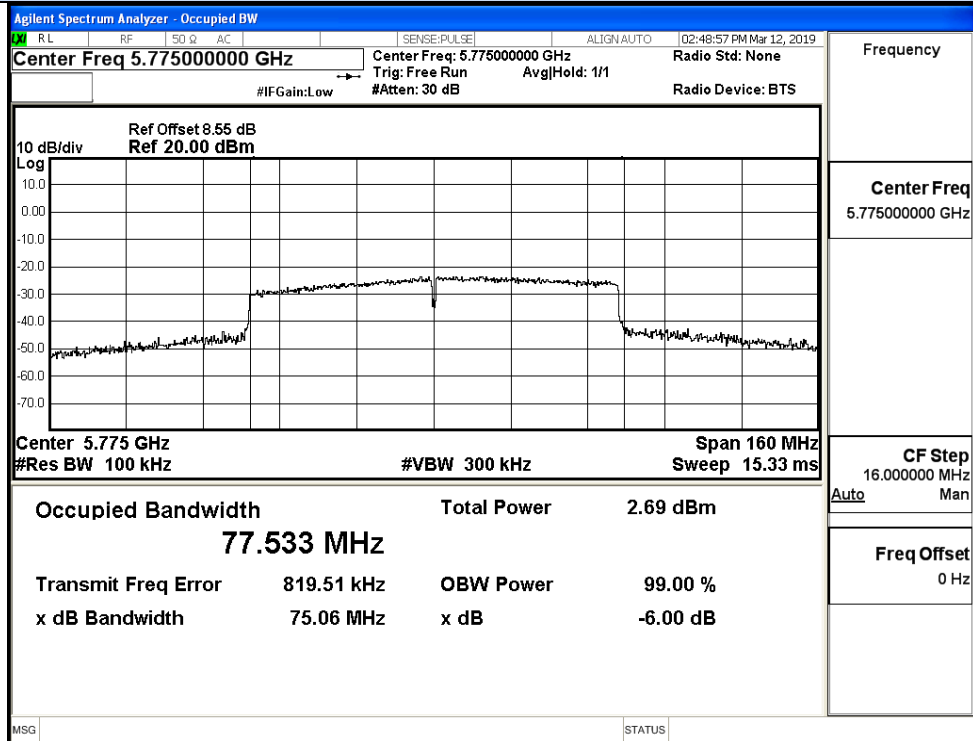
IEEE 802.11ac20 / Channel 165 / 5825MHz_Ant0



IEEE 802.11ac40 / Channel 151 / 5755MHz_Ant0

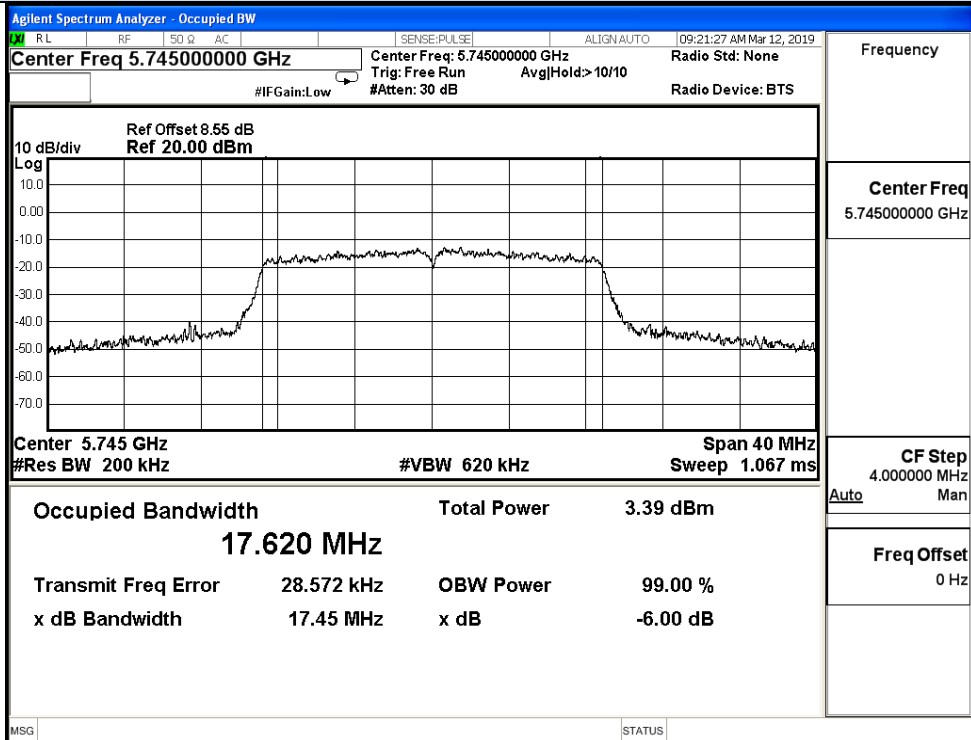


IEEE 802.11ac40 / Channel 159 / 5795MHz_Ant0

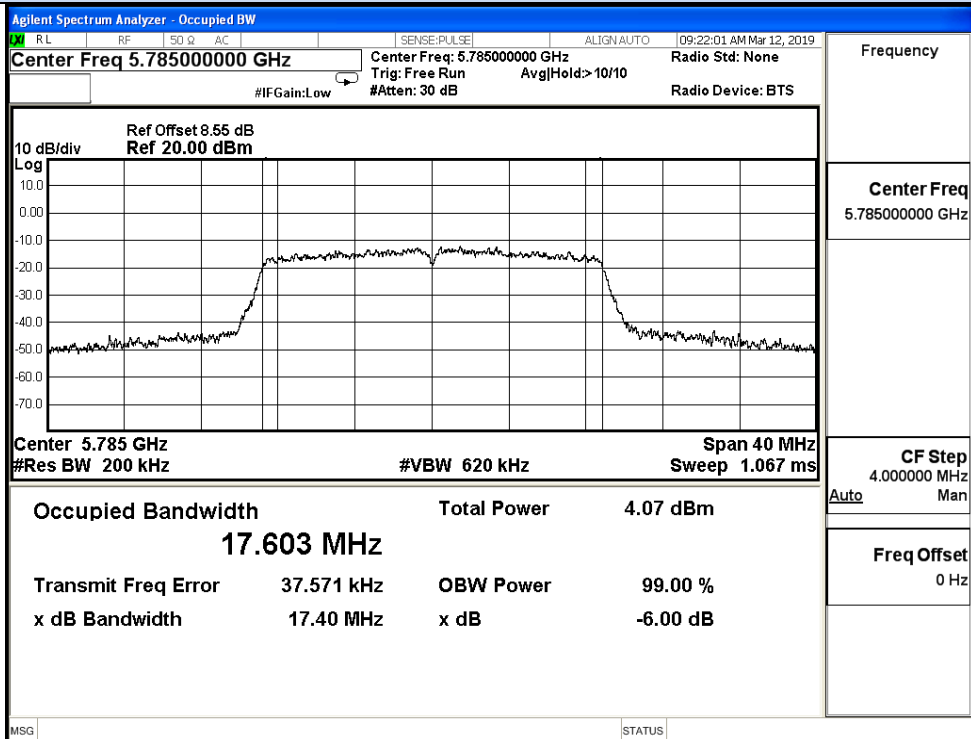


IEEE 802.11ac80 / Channel 155 / 5775MHz_Ant0

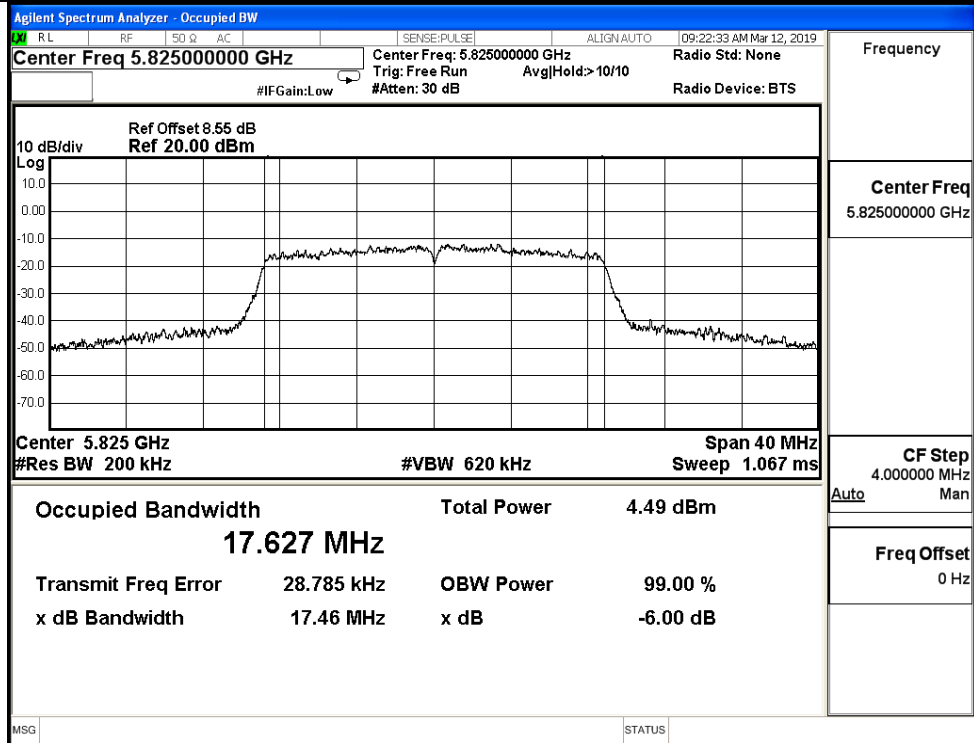
99% Occupied Bandwidth_Ant0



IEEE 802.11a / Channel 149 / 5745MHz_Ant0

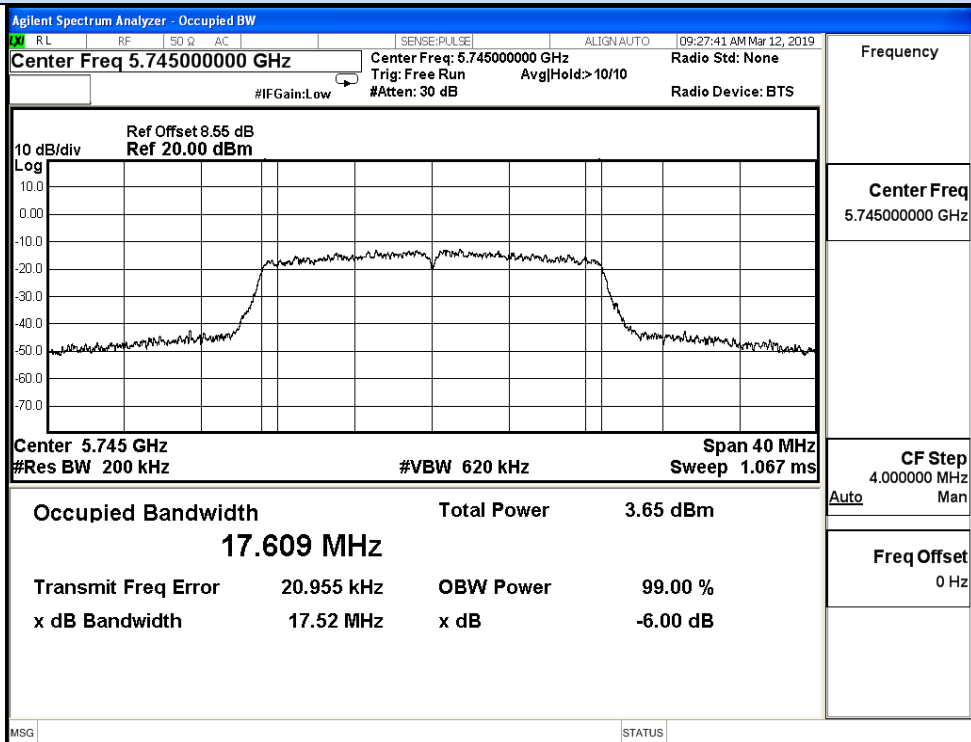


IEEE 802.11a / Channel 157 / 5785MHz_Ant0

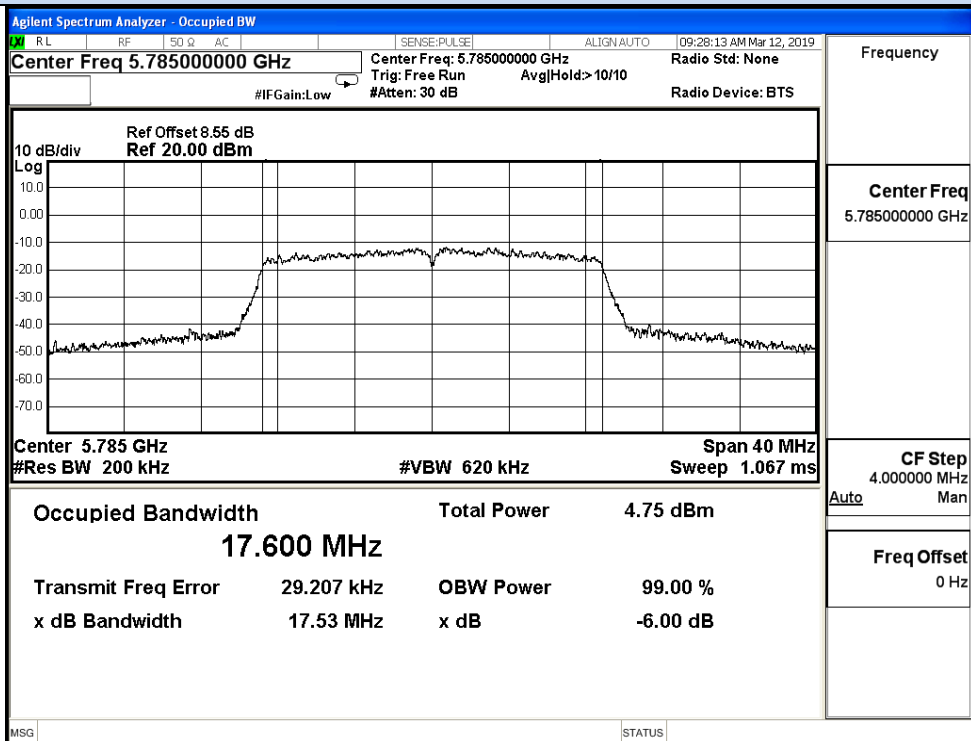


IEEE 802.11a / Channel 165 / 5825MHz_Ant0

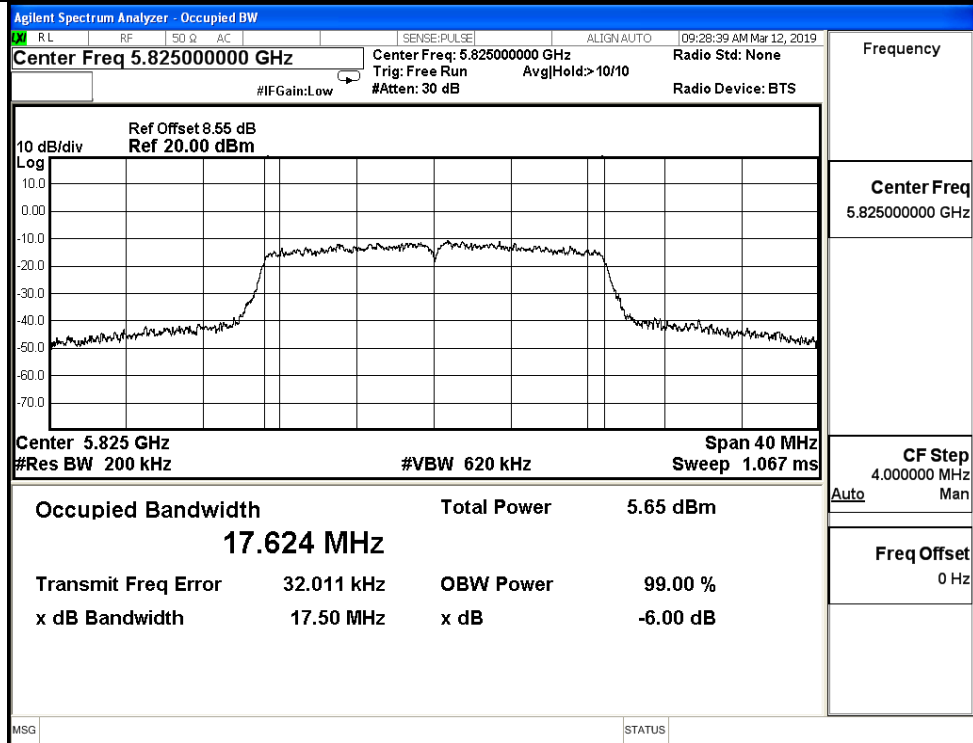
99% Occupied Bandwidth_Ant0



IEEE 802.11n20 / Channel 149 / 5745MHz_Ant0

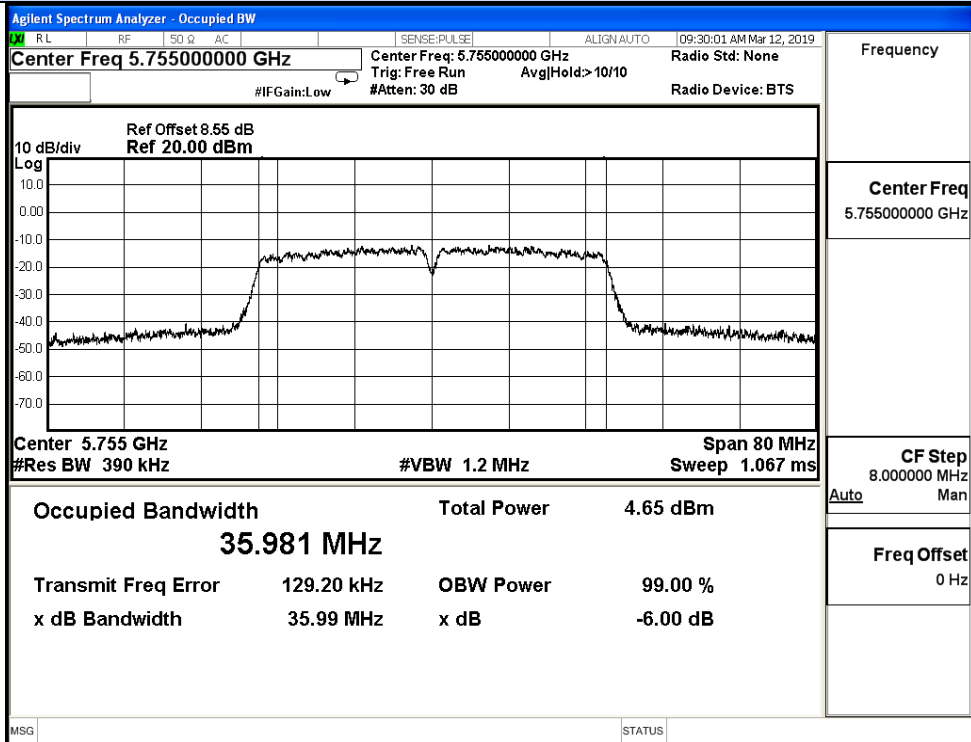


IEEE 802.11n20 / Channel 157 / 5785MHz_Ant0

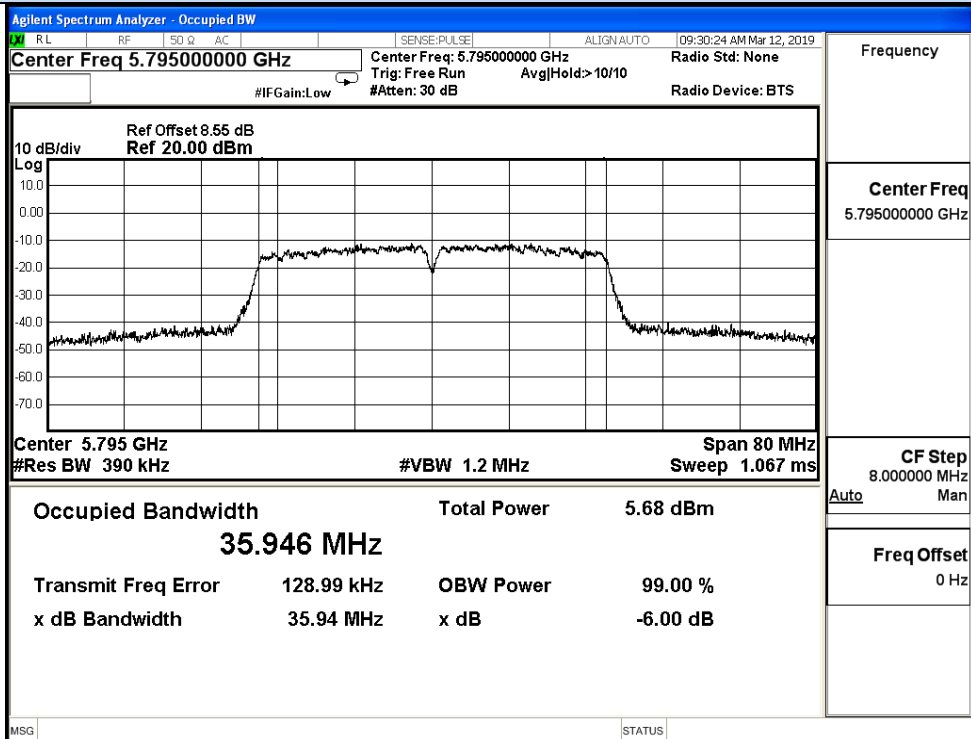


IEEE 802.11n20 / Channel 165 / 5825MHz_Ant0

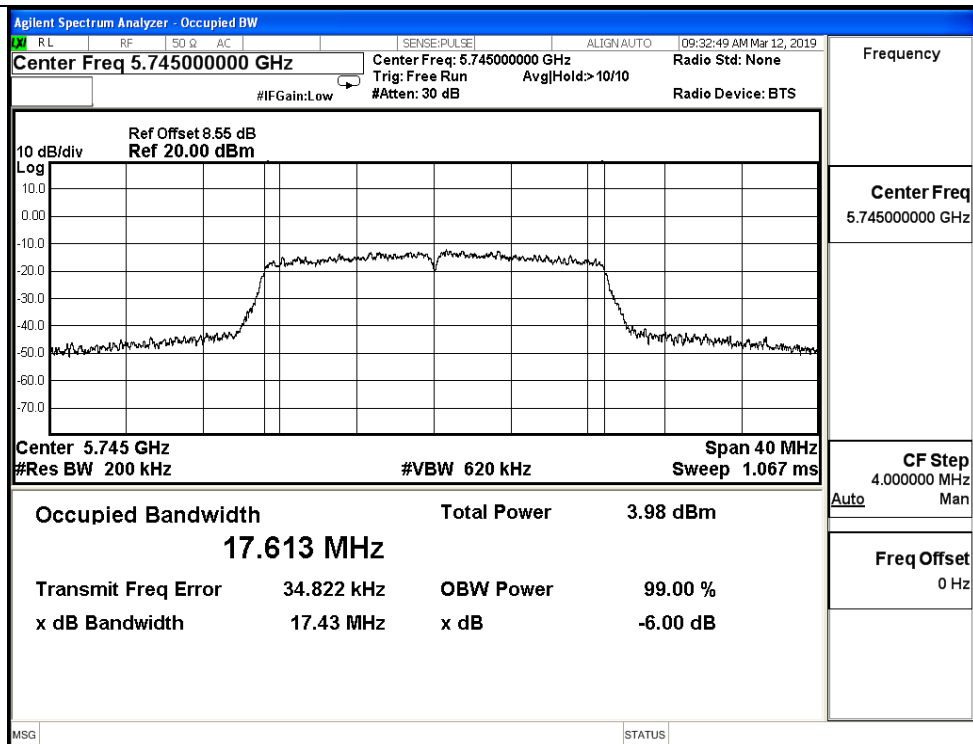
99% Occupied Bandwidth_Ant0



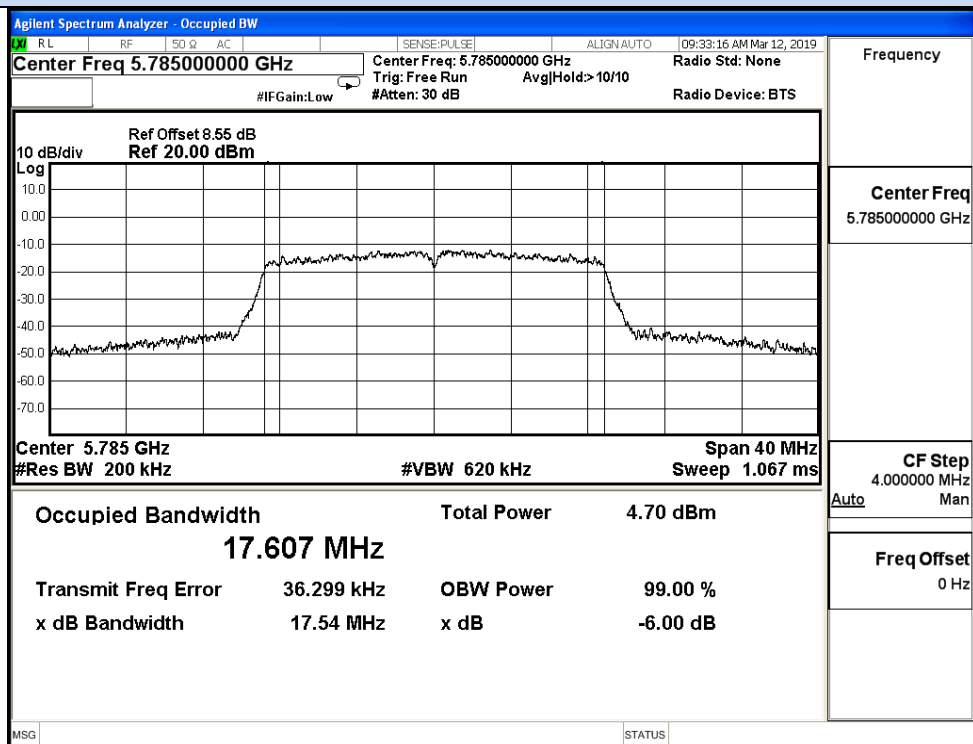
IEEE 802.11n40 / Channel 151 / 5755MHz_Ant0



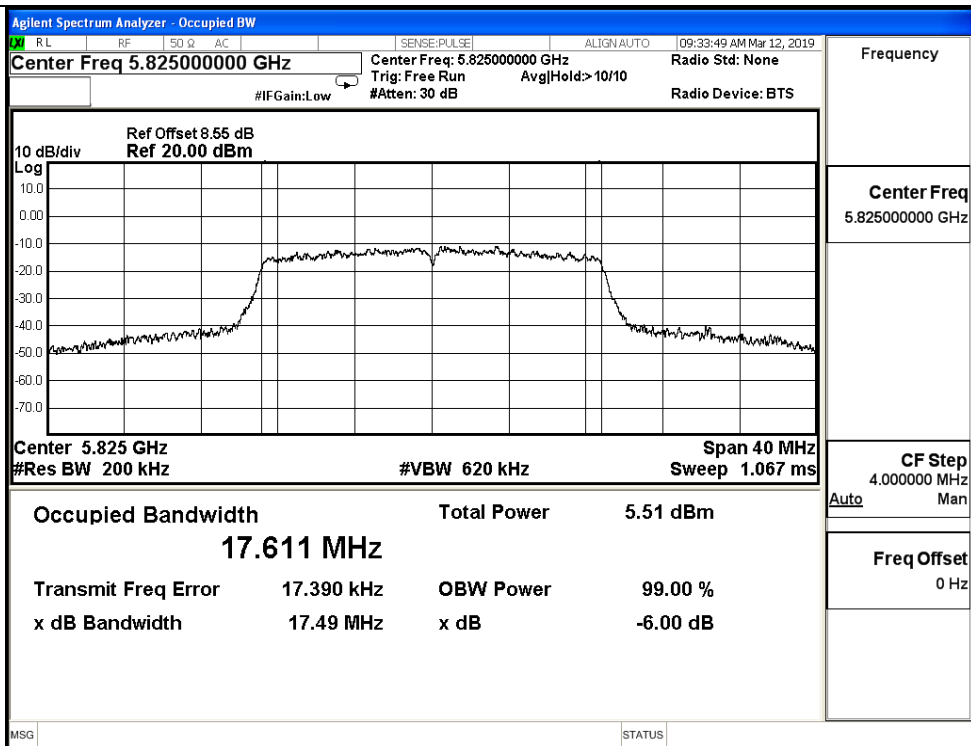
IEEE 802.11n40 / Channel 159 / 5795MHz_Ant0



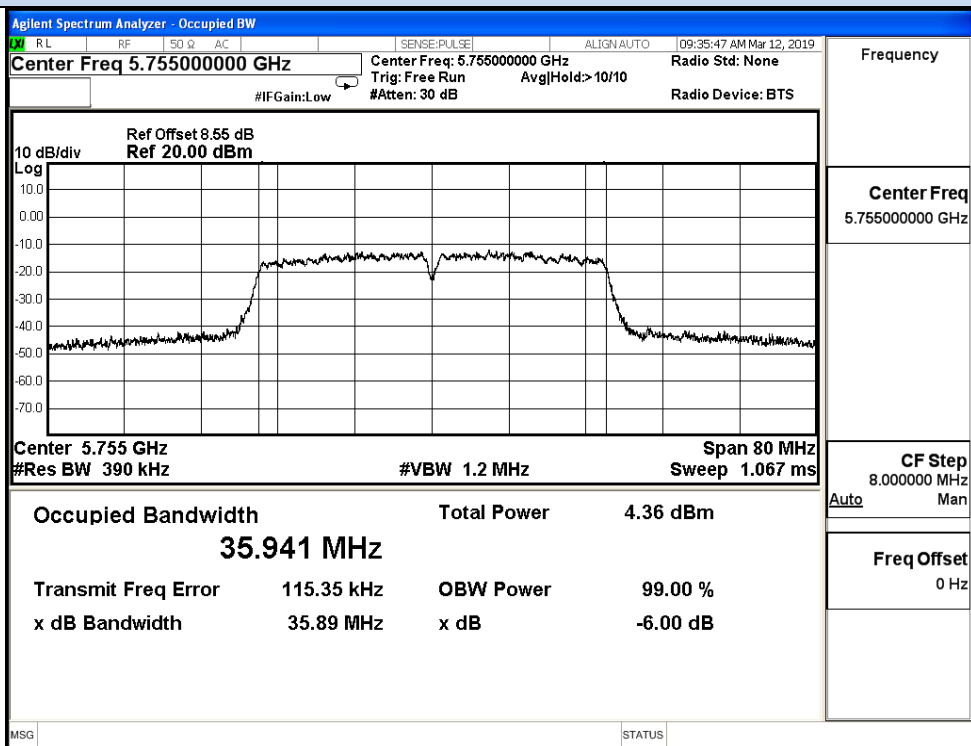
IEEE 802.11ac20 / Channel 149 / 5745MHz_Ant0



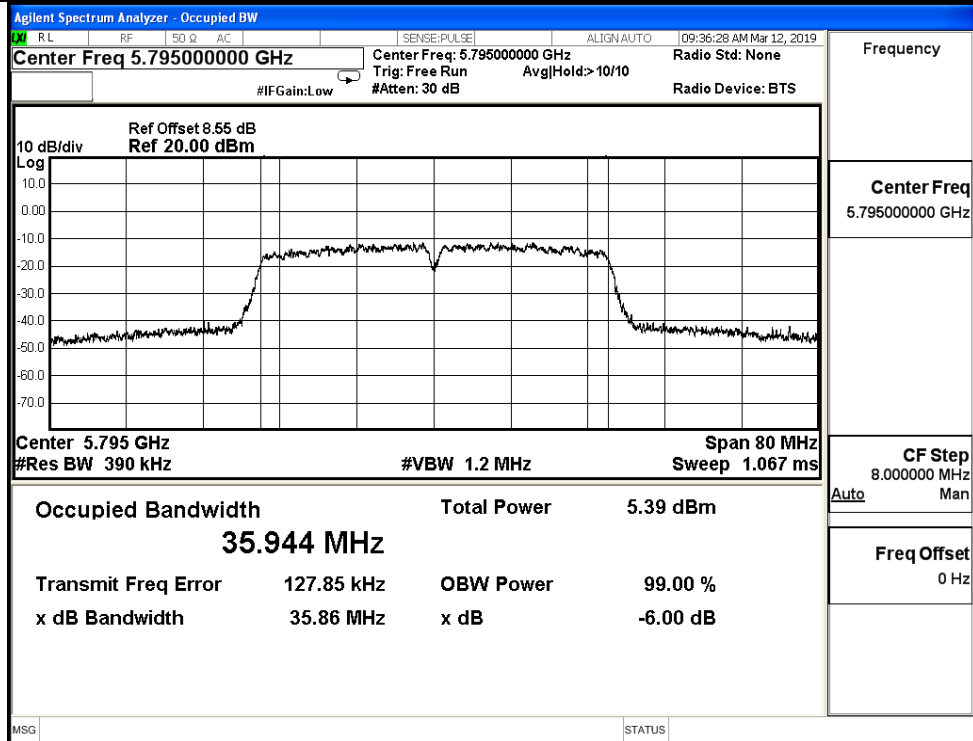
IEEE 802.11ac20 / Channel 157 / 5785MHz_Ant0



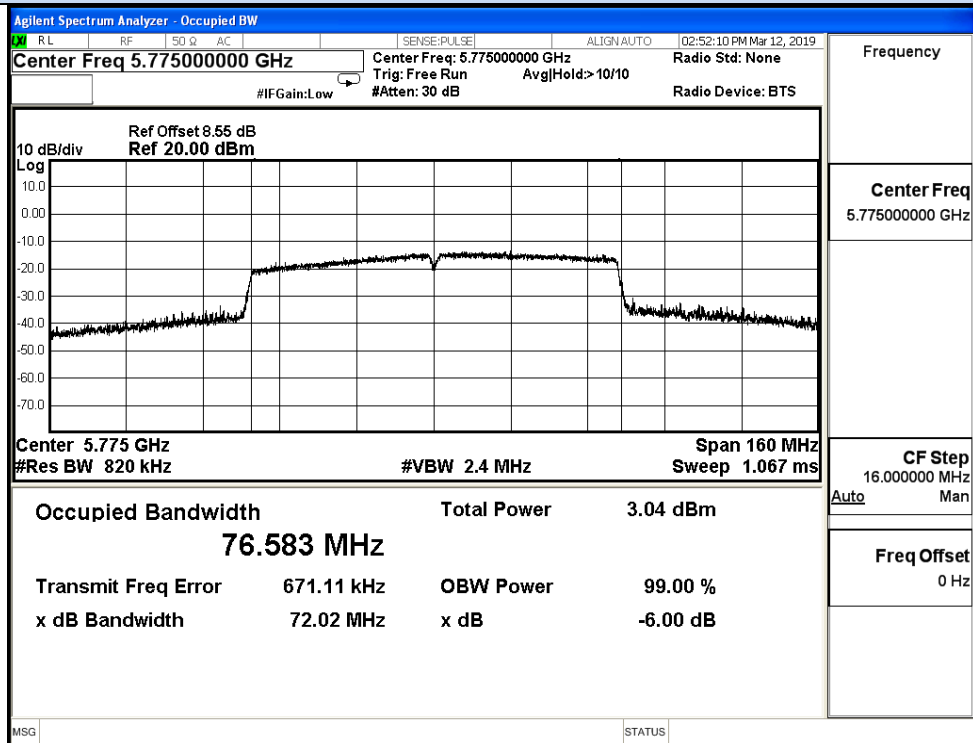
IEEE 802.11ac20 / Channel 165 / 5825MHz_Ant0



IEEE 802.11ac40 / Channel 151 / 5755MHz_Ant0

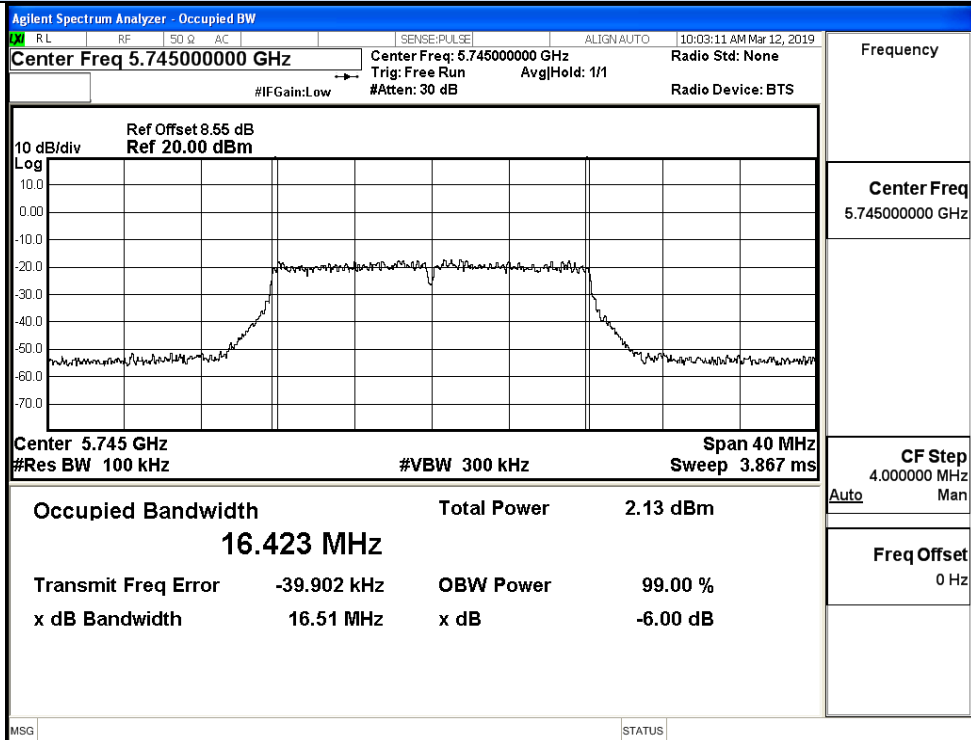


IEEE 802.11ac40 / Channel 159 / 5795MHz_Ant0

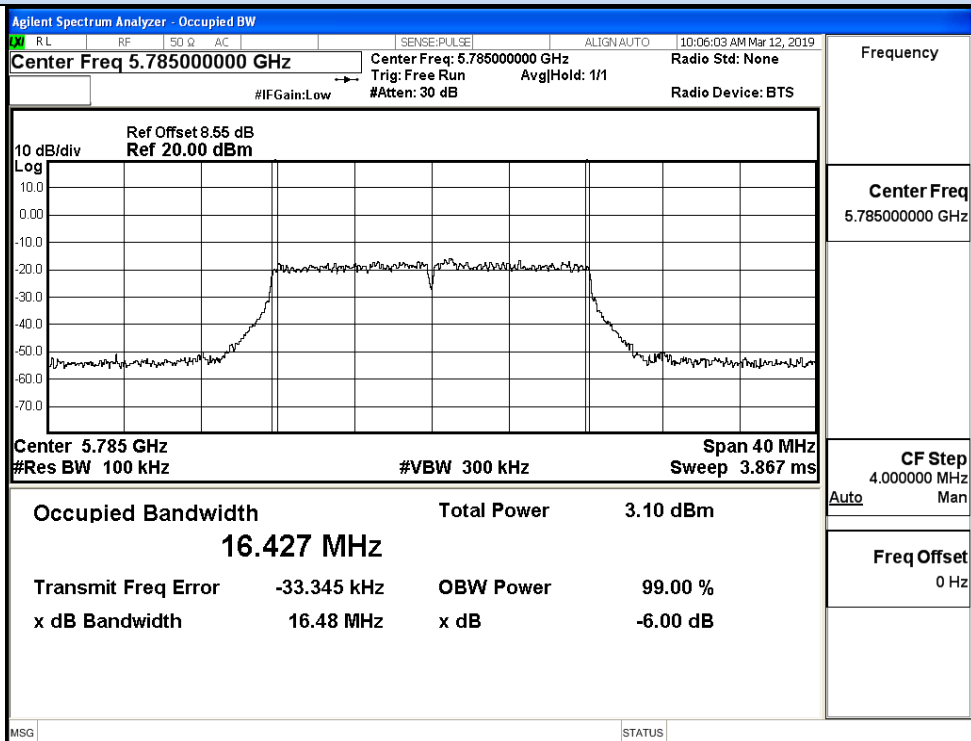


IEEE 802.11ac80 / Channel 155 / 5775MHz_Ant0

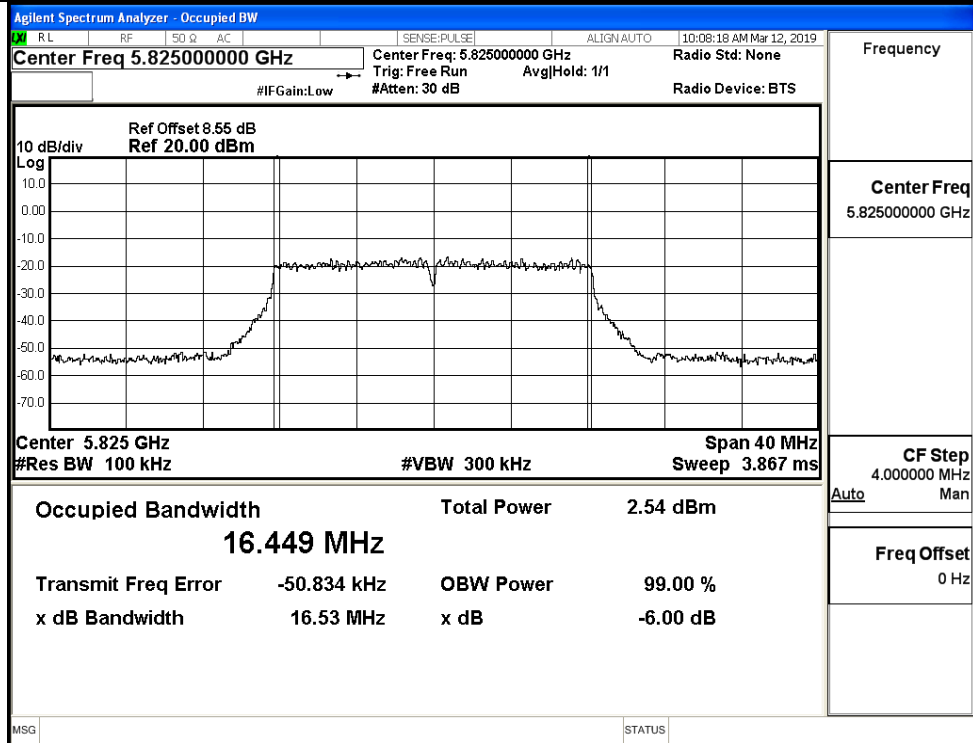
6dB Bandwidth_Ant1



IEEE 802.11a / Channel 149 / 5745MHz_Ant1



IEEE 802.11a / Channel 157 / 5785MHz_Ant1



IEEE 802.11a / Channel 165 / 5825MHz_Ant1