Appendix E

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: 6-Inch Rugged Windows Handheld tablet

Trade Mark: N/A

Test Model: DP10

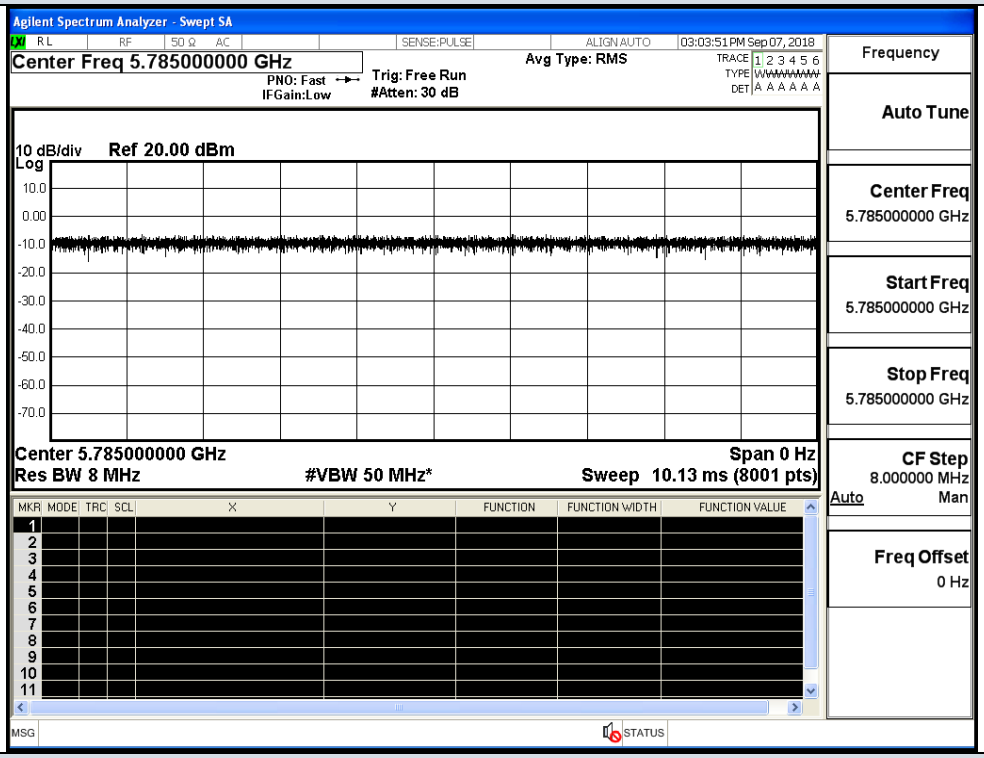
Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

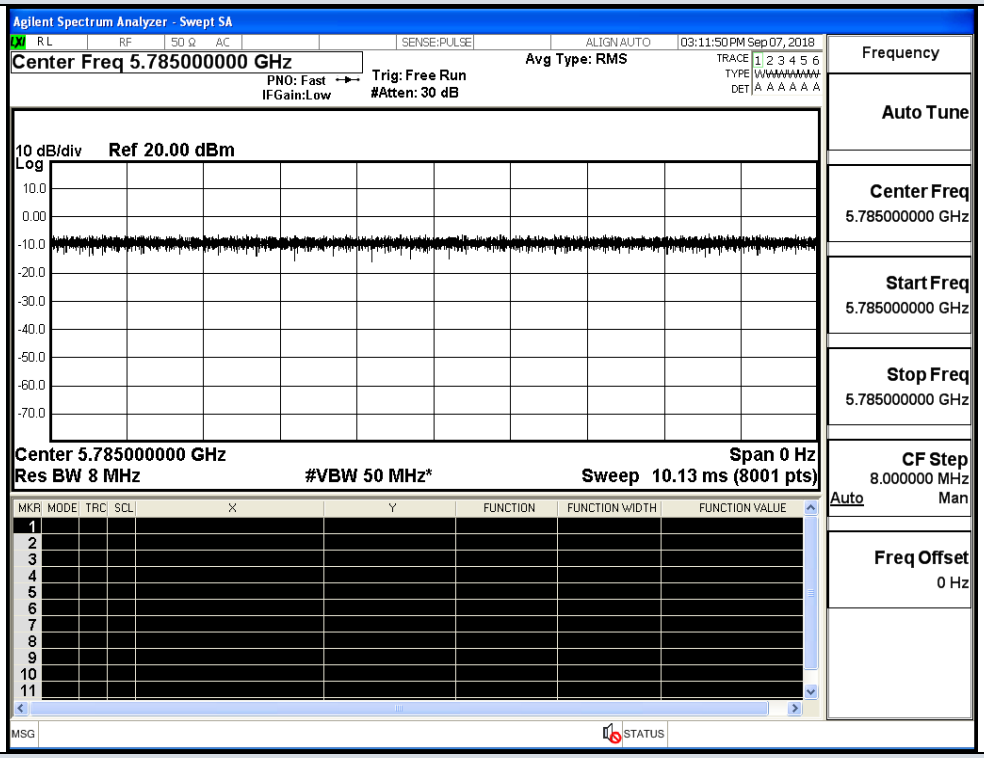
D.1 Duty Cycle

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5785	100	0.00	0.01
11N20 SISO	5785	100	0.00	0.01
11N40 SISO	5755	100	0.00	0.01
11AC20 SISO	5785	100	0.00	0.01
11AC40 SISO	5755	100	0.00	0.01

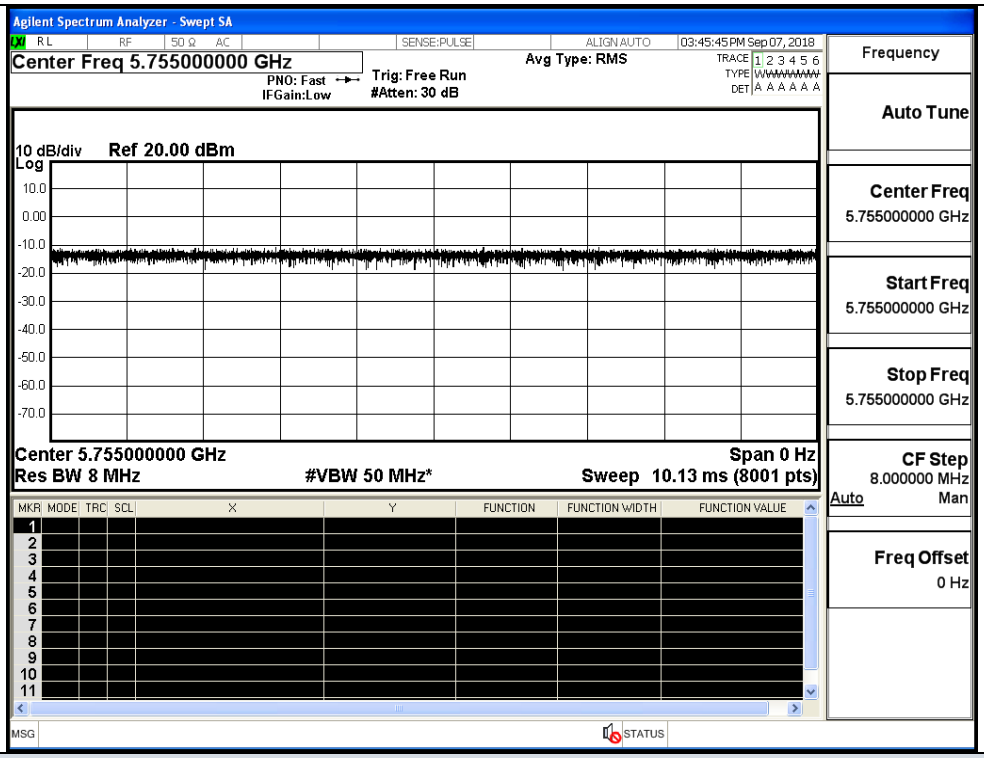
On Time and Duty Cycle



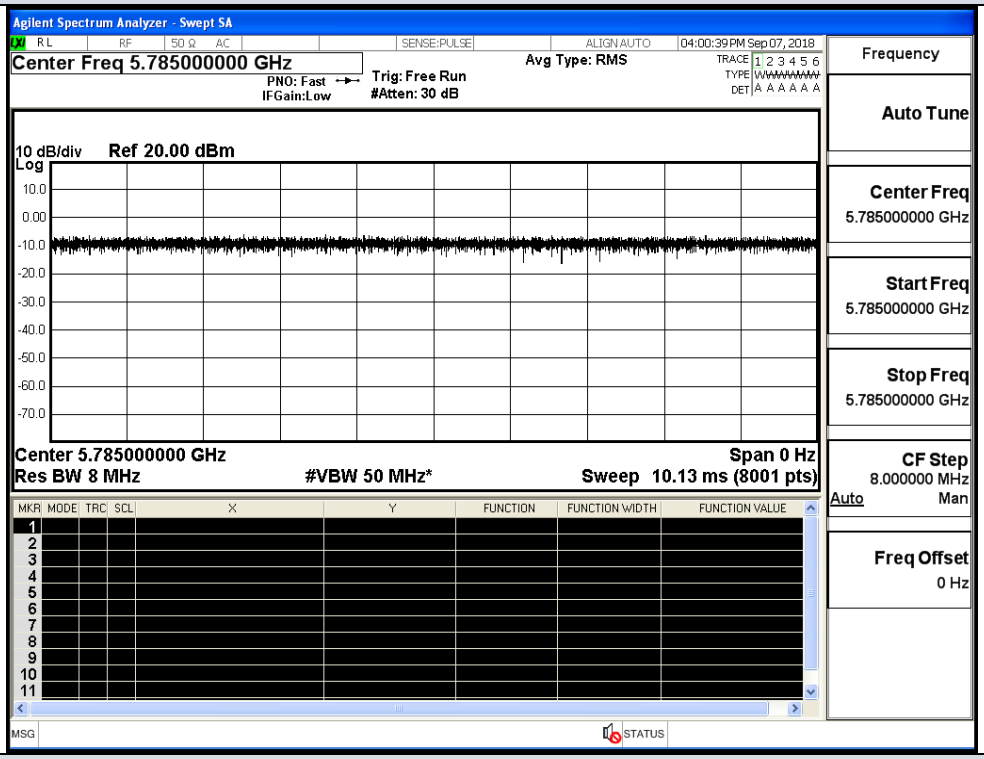
IEEE 802.11a



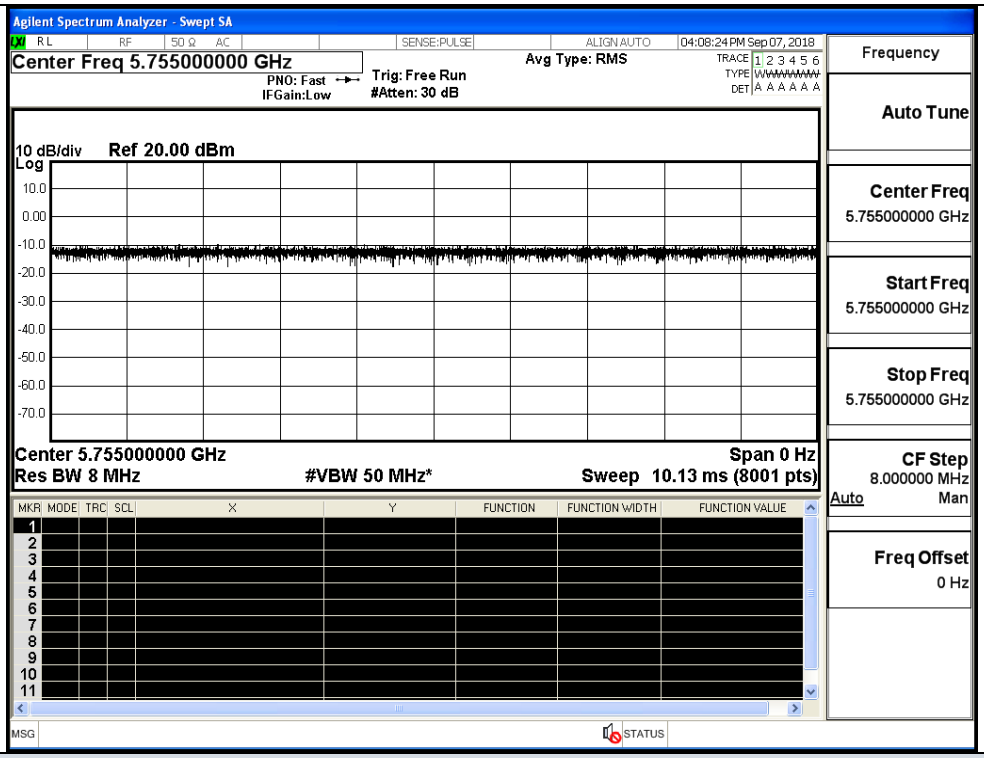
IEEE 802.11n HT20



IEEE 802.11n HT40



IEEE 802.11ac VHT20



IEEE 802.11ac VHT40

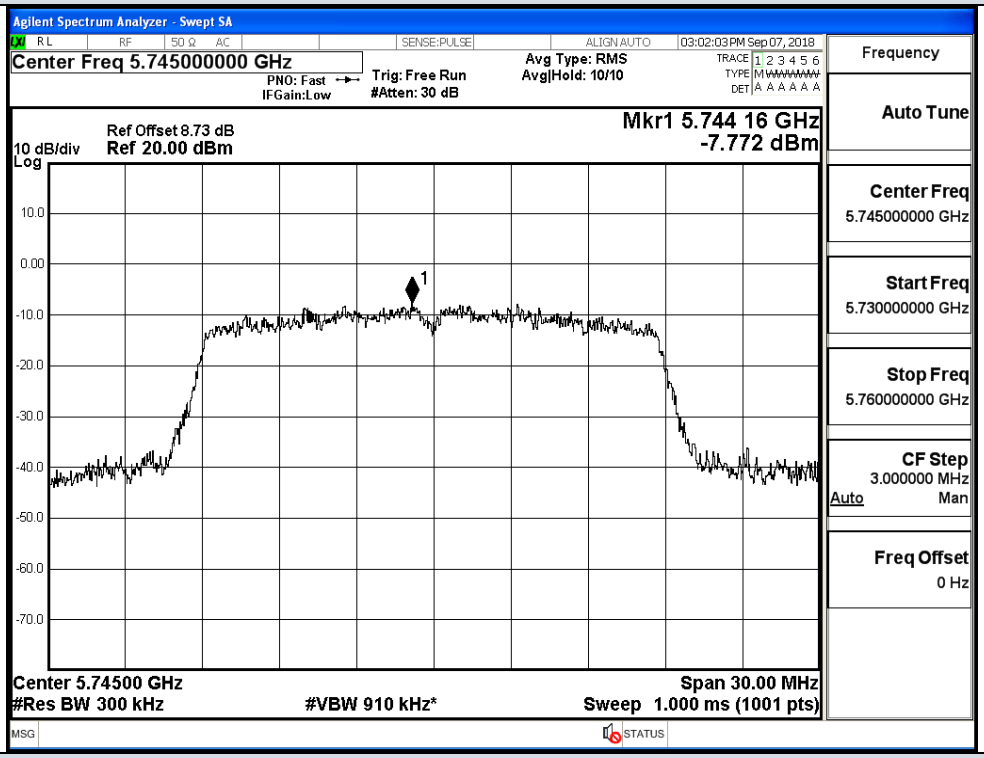
D.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)
11A	149	5745	11.03	0	11.03	30
	157	5785	11.18	0	11.18	
	165	5825	11.15	0	11.15	
11N20 SISO	149	5745	11.78	0	11.78	30
	157	5785	11.86	0	11.86	
	165	5825	11.29	0	11.29	
11N40 SISO	151	5755	11.83	0	11.83	30
	159	5795	11.86	0	11.86	
11AC20 SISO	149	5745	12.35	0	12.35	30
	157	5785	11.79	0	11.79	
	165	5825	12.02	0	12.02	
11AC40 SISO	151	5755	11.71	0	11.71	30
	159	5795	12.25	0	12.25	

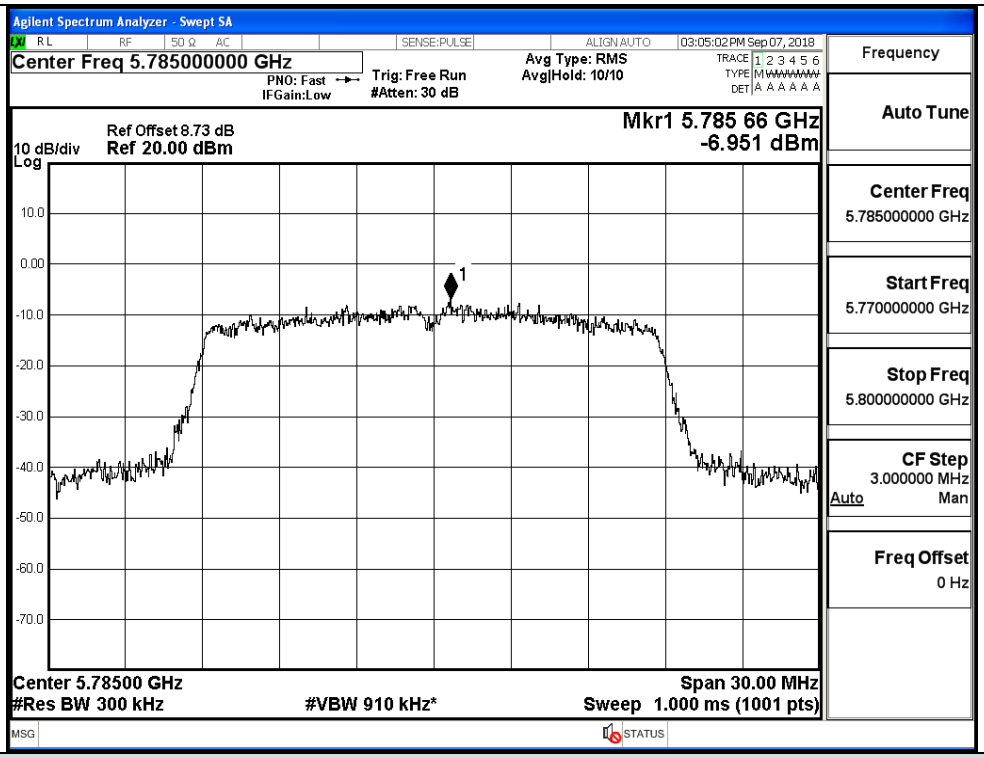
D.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/ 500KHz)	Limit (dBm/ 500KHz)
11A	149	5745	-7.772	0	2.218	-5.554	30
	157	5785	-6.951	0	2.218	-4.733	
	165	5825	-6.039	0	2.218	-3.821	
11N20 SISO	149	5745	-7.322	0	2.218	-5.104	30
	157	5785	-6.967	0	2.218	-4.749	
	165	5825	-6.622	0	2.218	-4.404	
11N40 SISO	151	5755	-10.837	0	2.218	-8.619	30
	159	5795	-10.679	0	2.218	-8.461	
11AC20 SISO	149	5745	-6.627	0	2.218	-4.409	30
	157	5785	-6.126	0	2.218	-3.908	
	165	5825	-7.117	0	2.218	-4.899	
11AC40 SISO	151	5755	-9.794	0	2.218	-7.576	30
	159	5795	-10.140	0	2.218	-7.922	

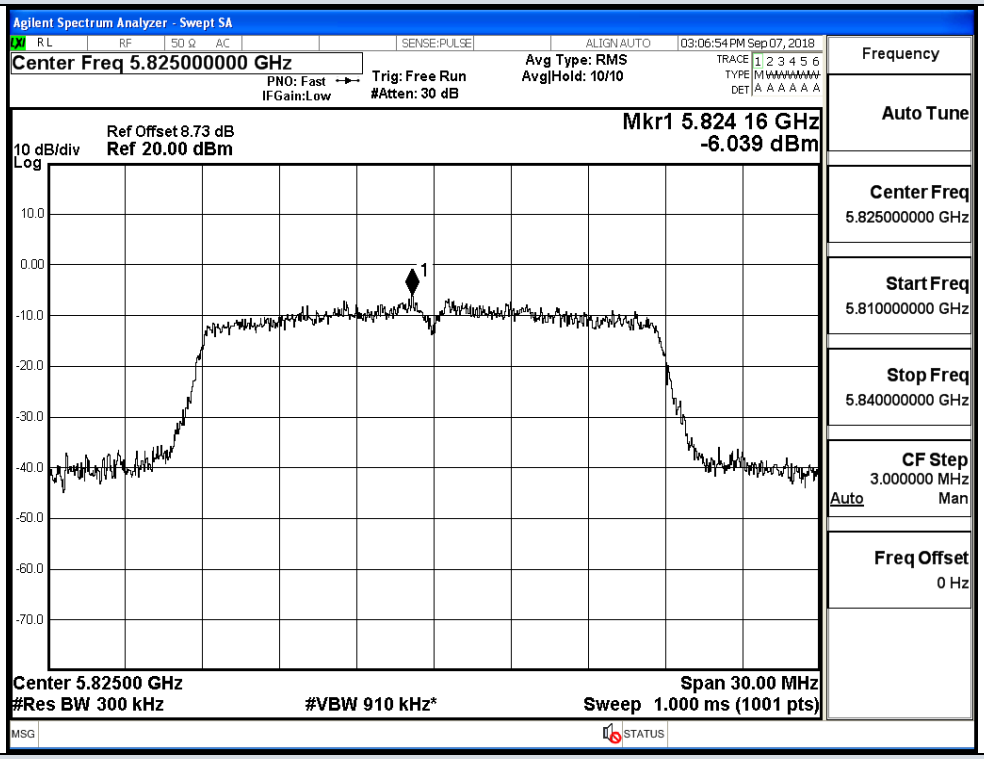
Power Spectral Density



IEEE 802.11a / Channel 149 / 5745 MHz

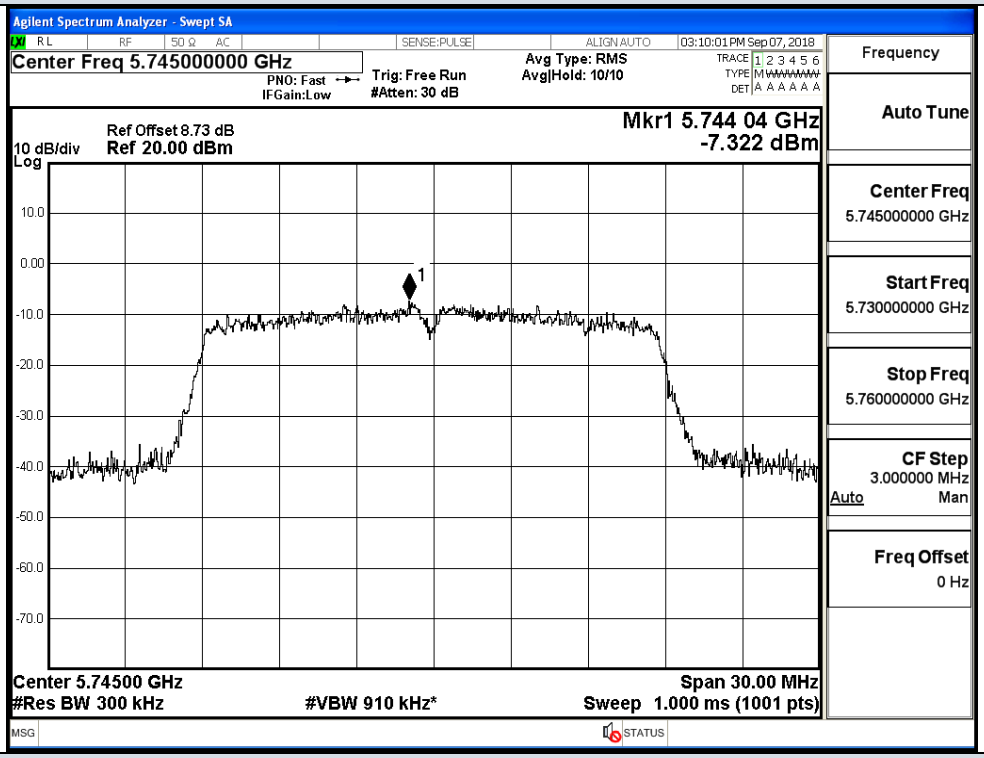


IEEE 802.11a / Channel 157 / 5785 MHz

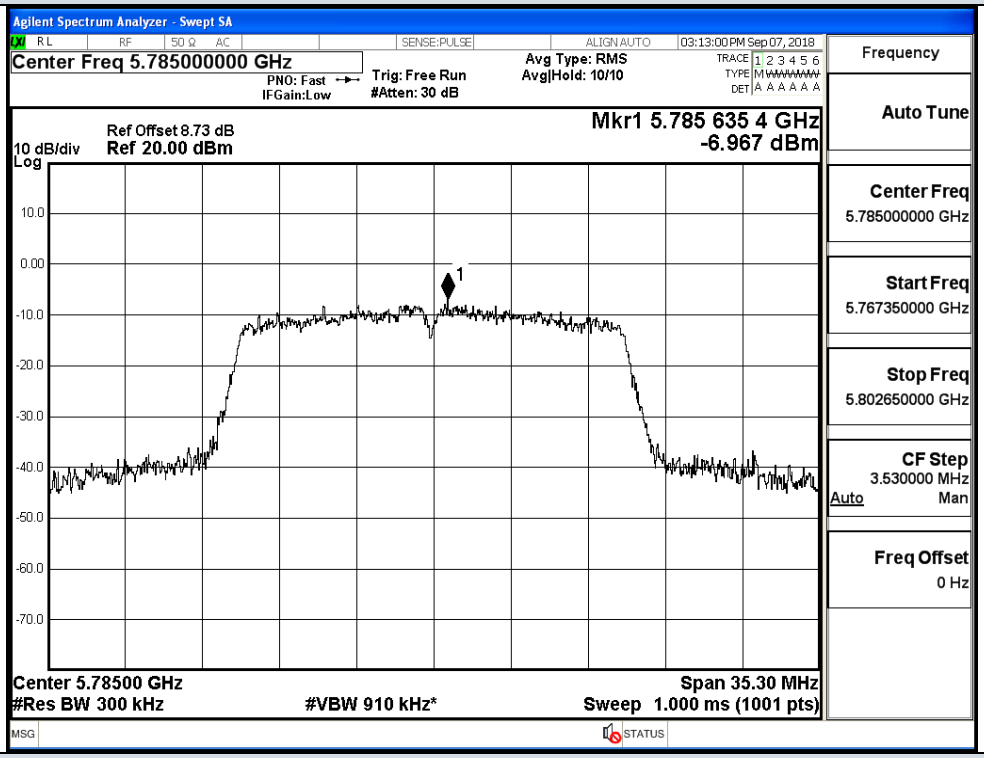


IEEE 802.11a / Channel 165 / 5825 MHz

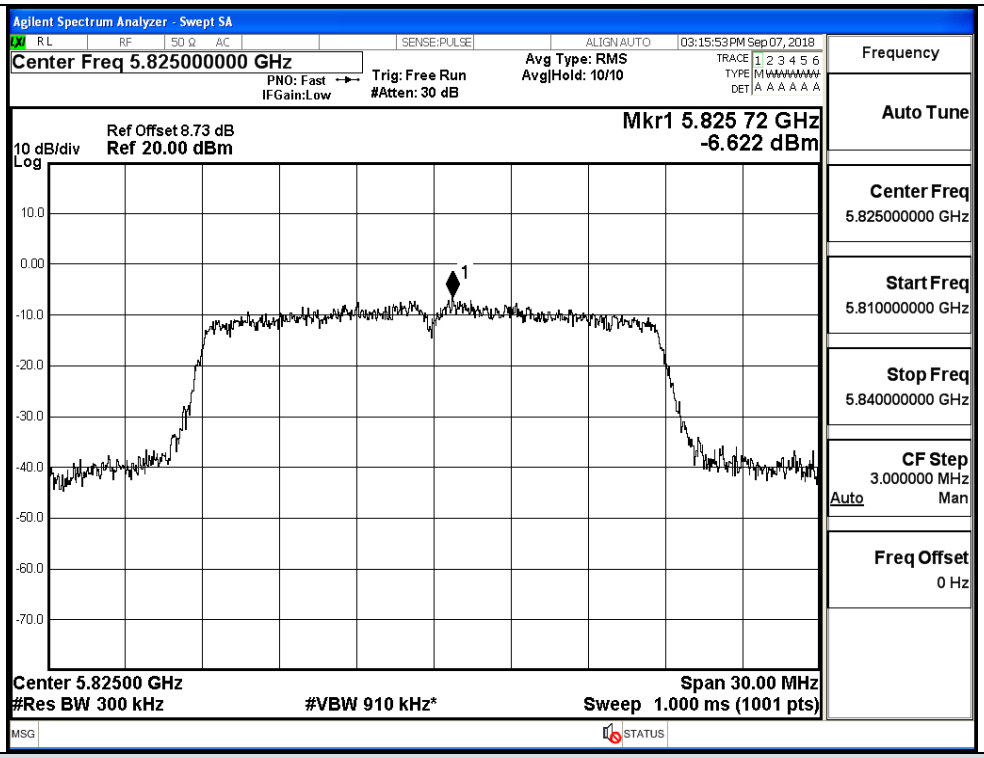
Power Spectral Density



IEEE 802.11n HT20 / Channel 149 / 5745 MHz

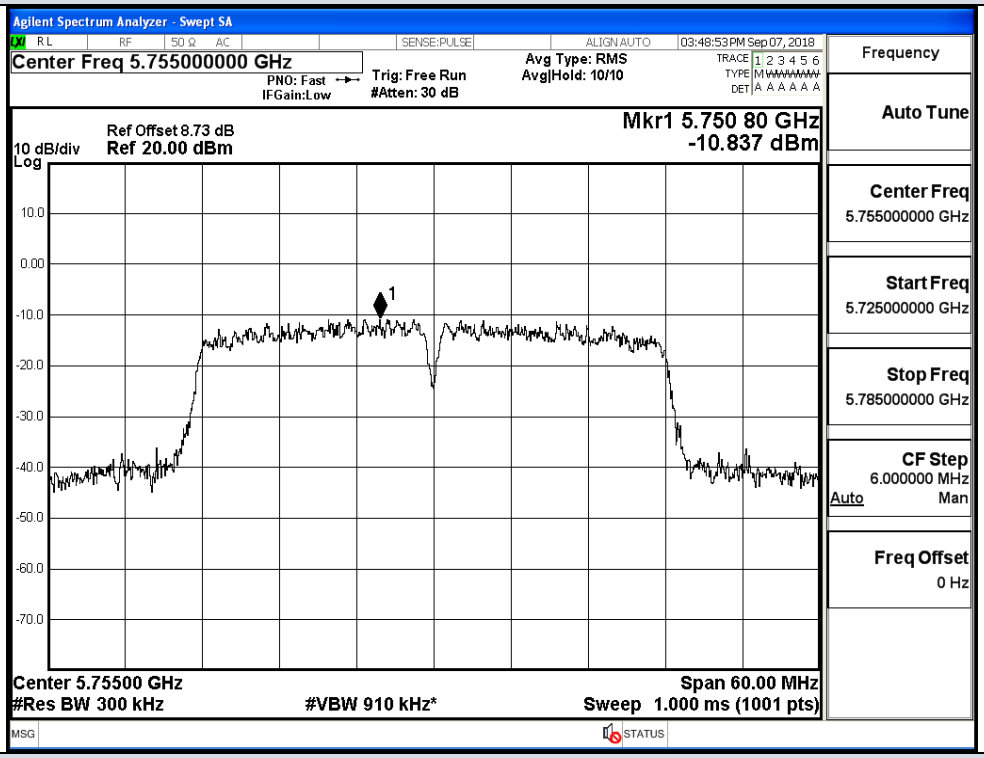


IEEE 802.11n HT20 / Channel 157 / 5785 MHz

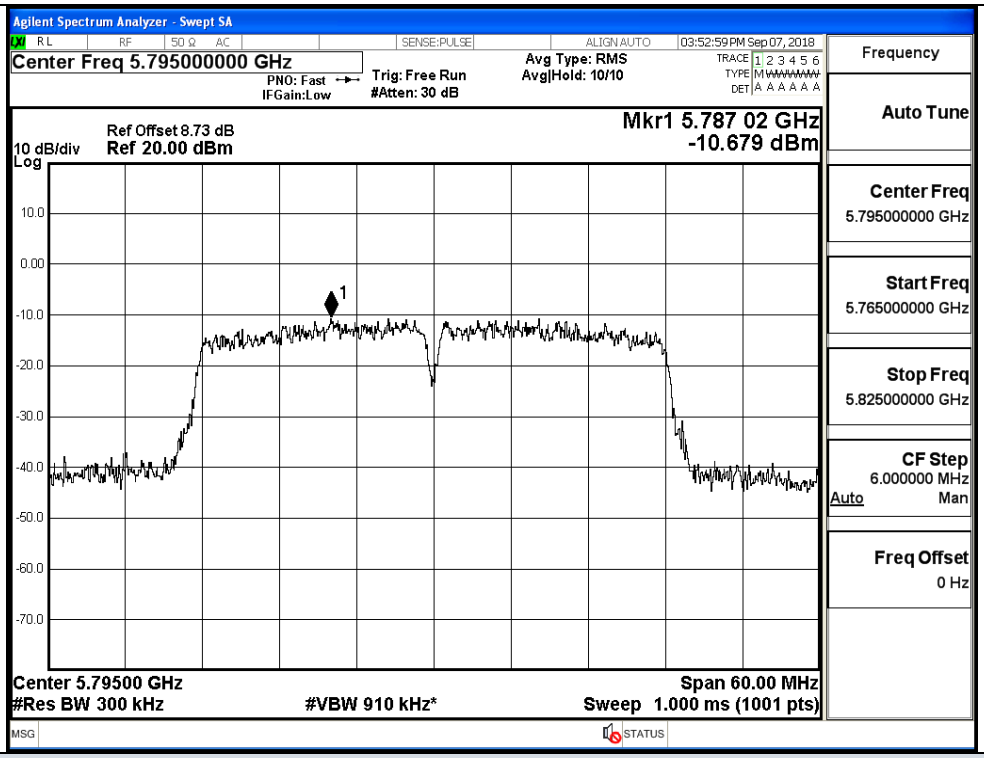


IEEE 802.11n HT20 / Channel 165 / 5825 MHz

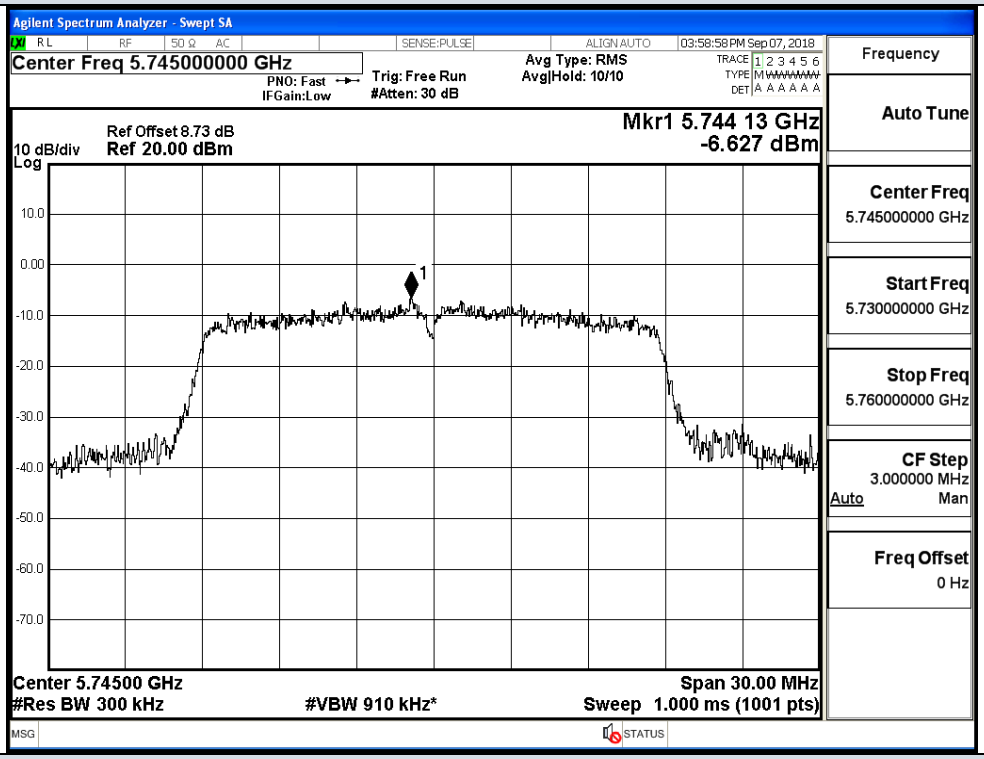
Power Spectral Density



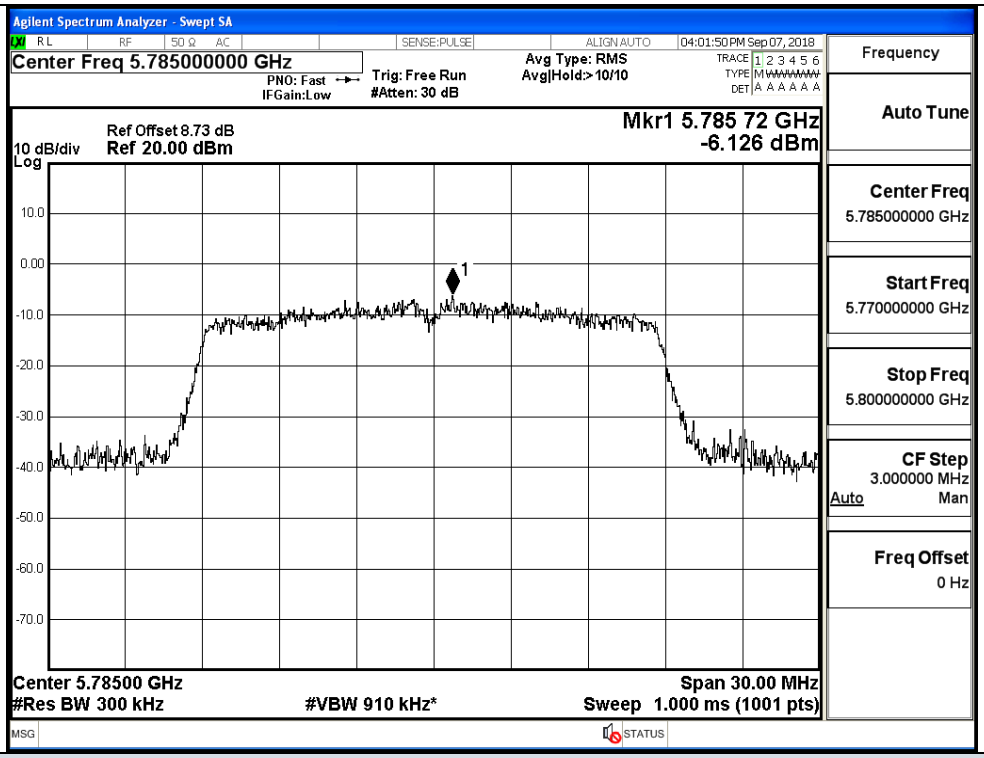
IEEE 802.11n HT40 / Channel 151 / 5755 MHz



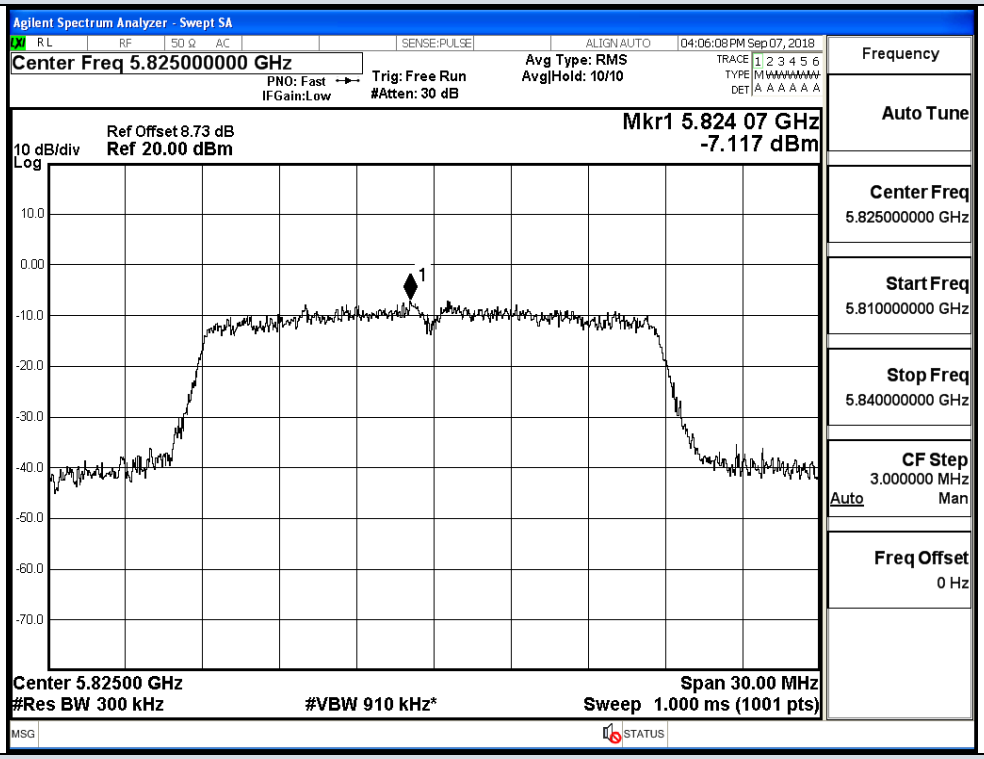
IEEE 802.11n HT40 / Channel 159 / 5795 MHz



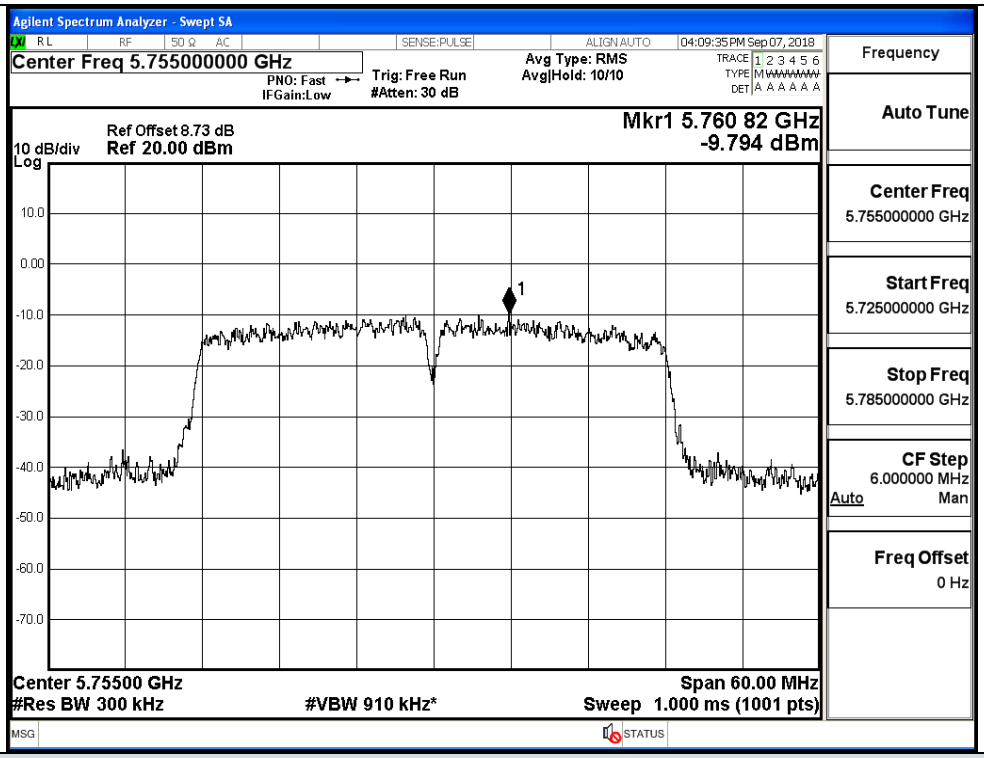
IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz



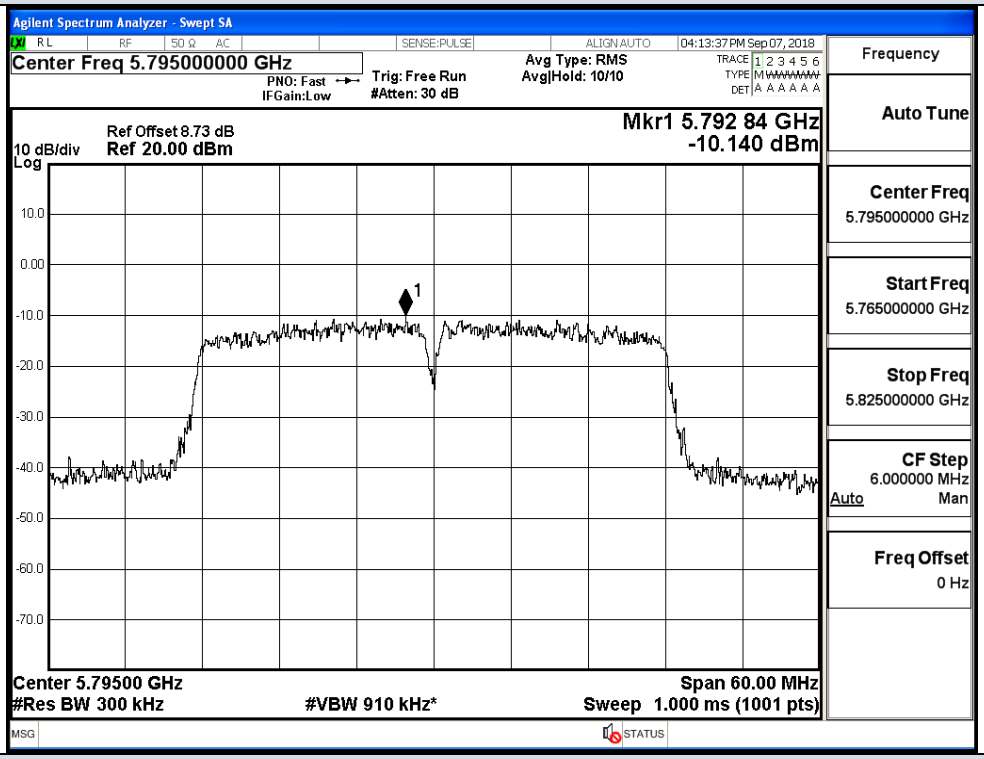
IEEE 802.11ac VHT20 / Channel 157 / 578 5MHz



IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz



IEEE 802.11ac VHT40 / Channel 151 / 5755 MHz

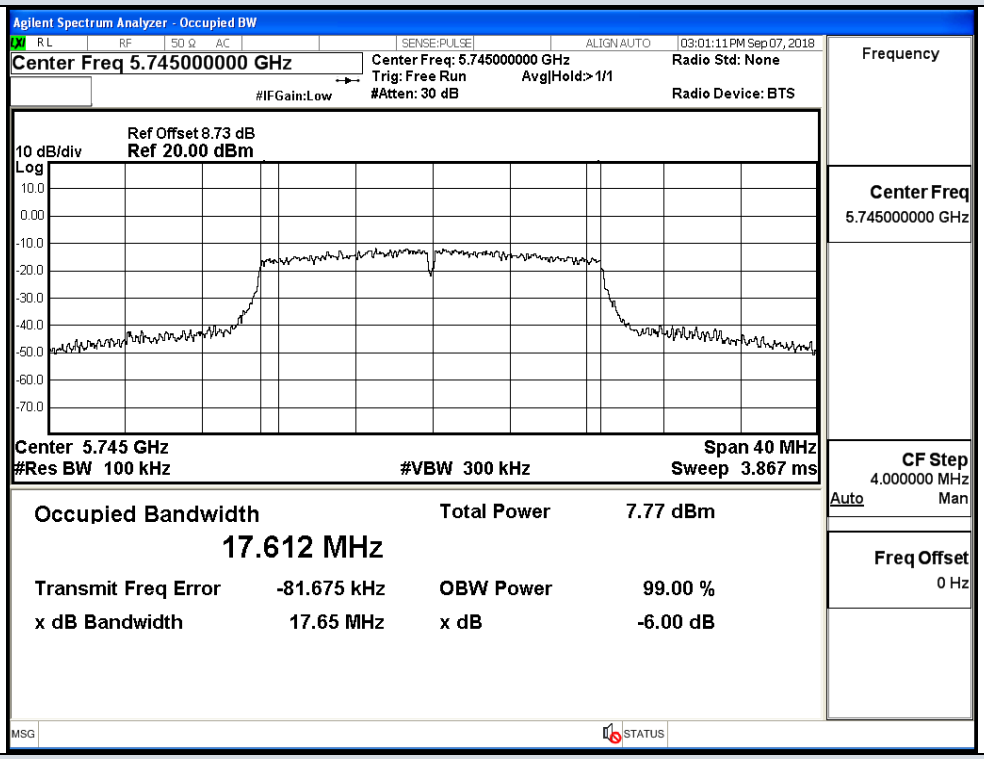


IEEE 802.11ac VHT40 / Channel 159 / 5795 MHz

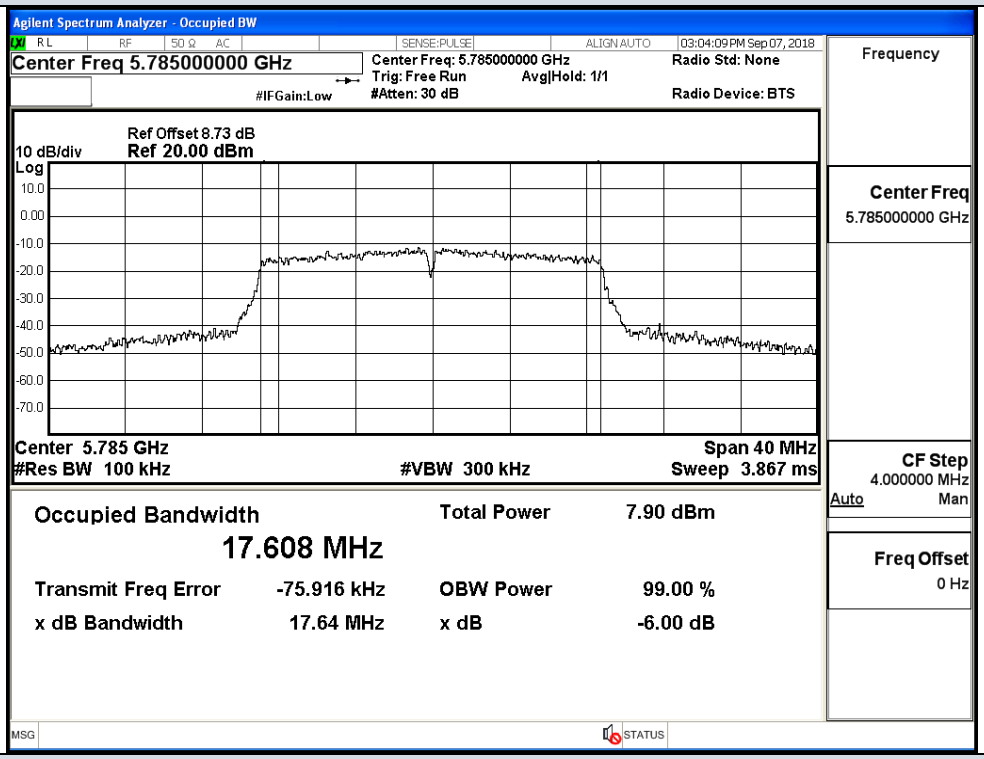
D.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
11A	149	5745	17.65	>=0.5
	157	5785	17.64	
	165	5825	17.66	
11N20 SISO	149	5745	17.65	>=0.5
	157	5785	17.65	
	165	5825	17.64	
11N40 SISO	151	5755	36.37	>=0.5
	159	5795	36.37	
11AC20SISO	149	5745	17.62	>=0.5
	157	5785	17.64	
	165	5825	17.66	
11AC40SISO	151	5755	36.37	>=0.5
	159	5795	36.41	

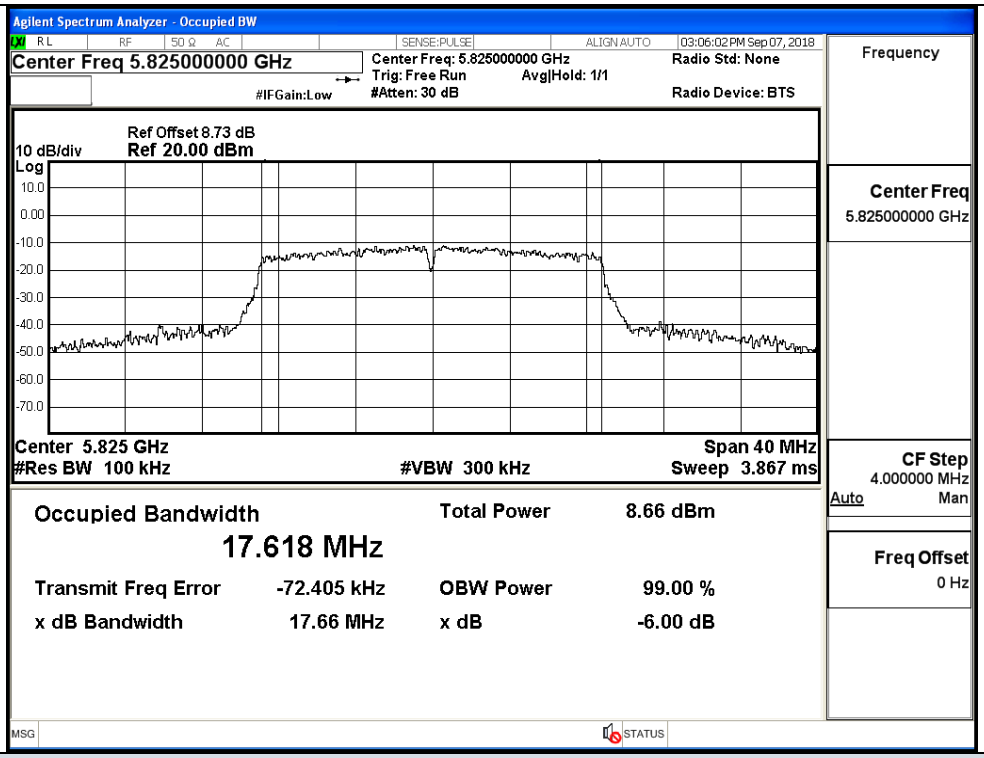
6dB Bandwidth



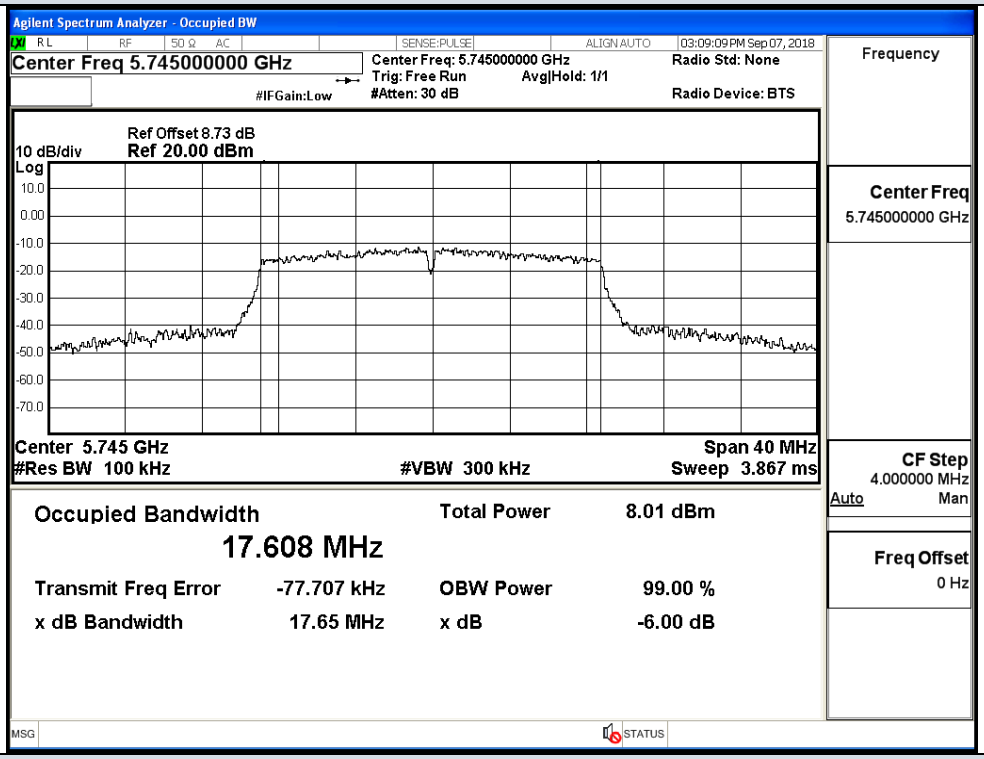
IEEE 802.11a / Channel 149 / 5745 MHz



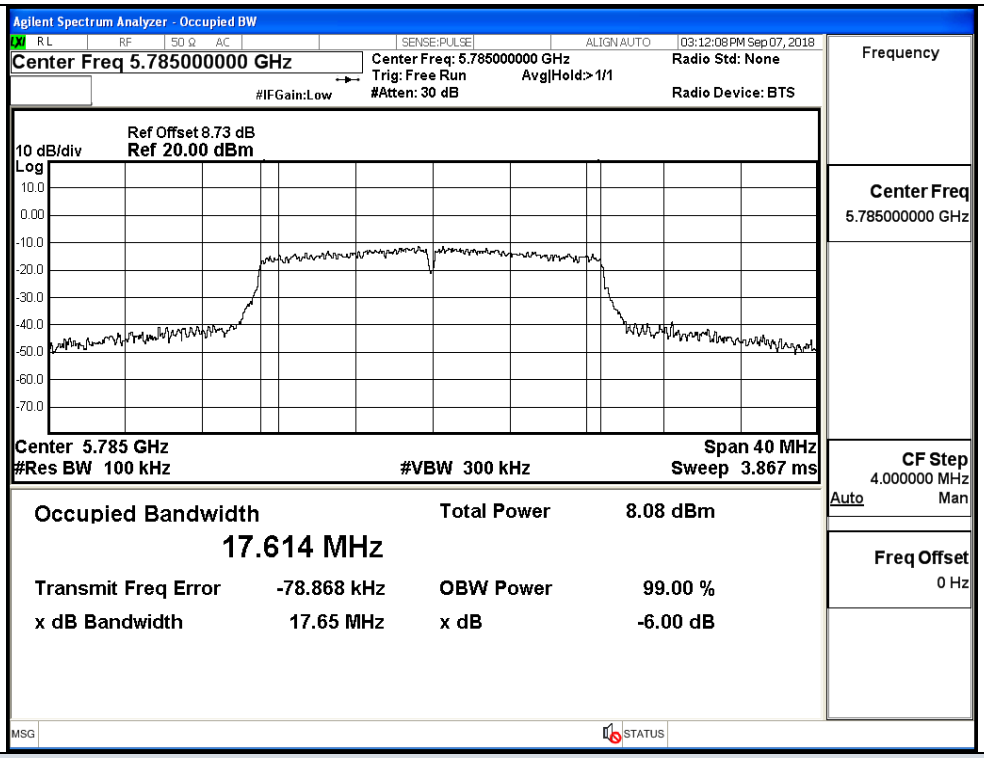
IEEE 802.11a / Channel 157 / 5785 MHz



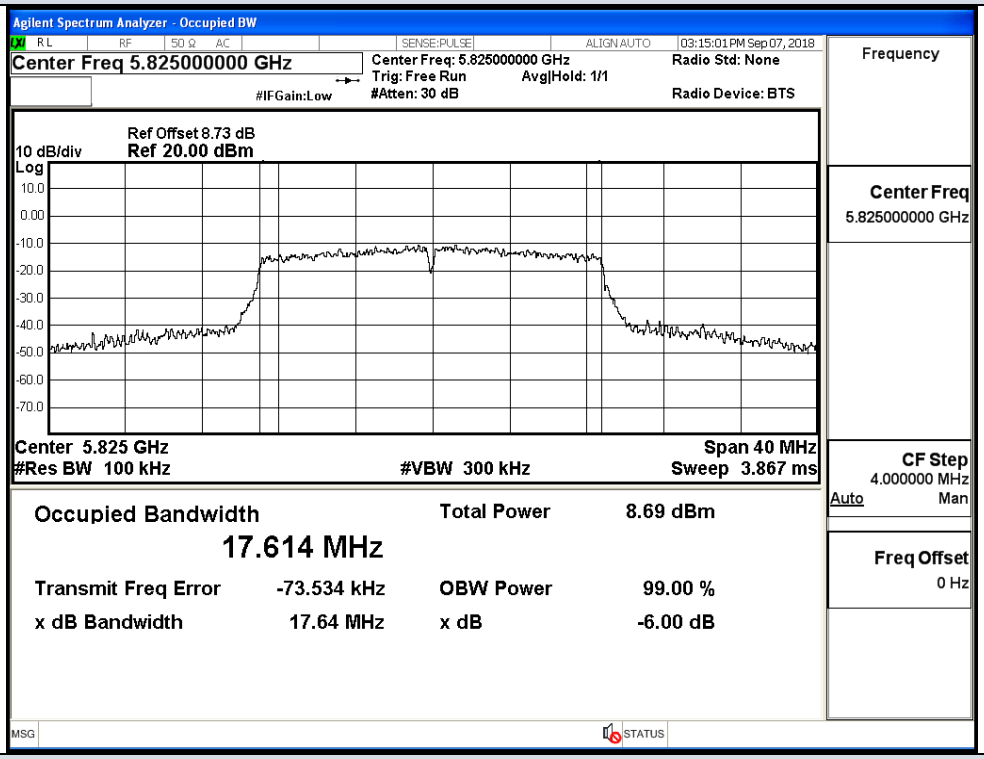
IEEE 802.11a / Channel 165 / 5825 MHz



IEEE 802.11n HT20 / Channel 149 / 5745 MHz

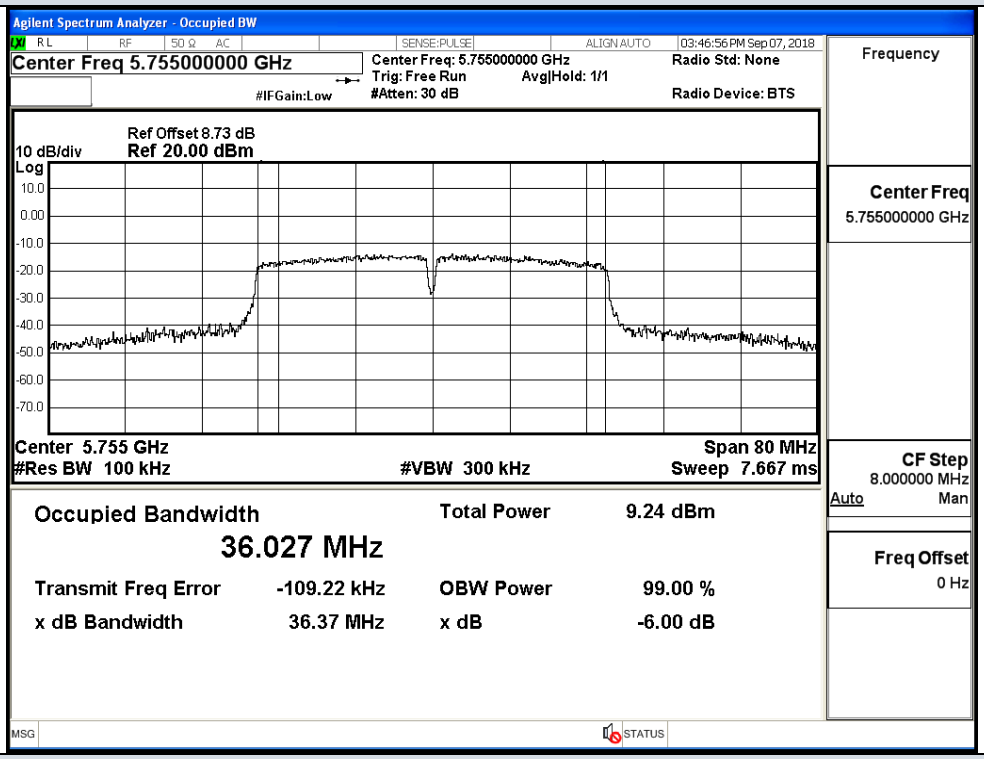


IEEE 802.11n HT20 / Channel 157 / 5785 MHz

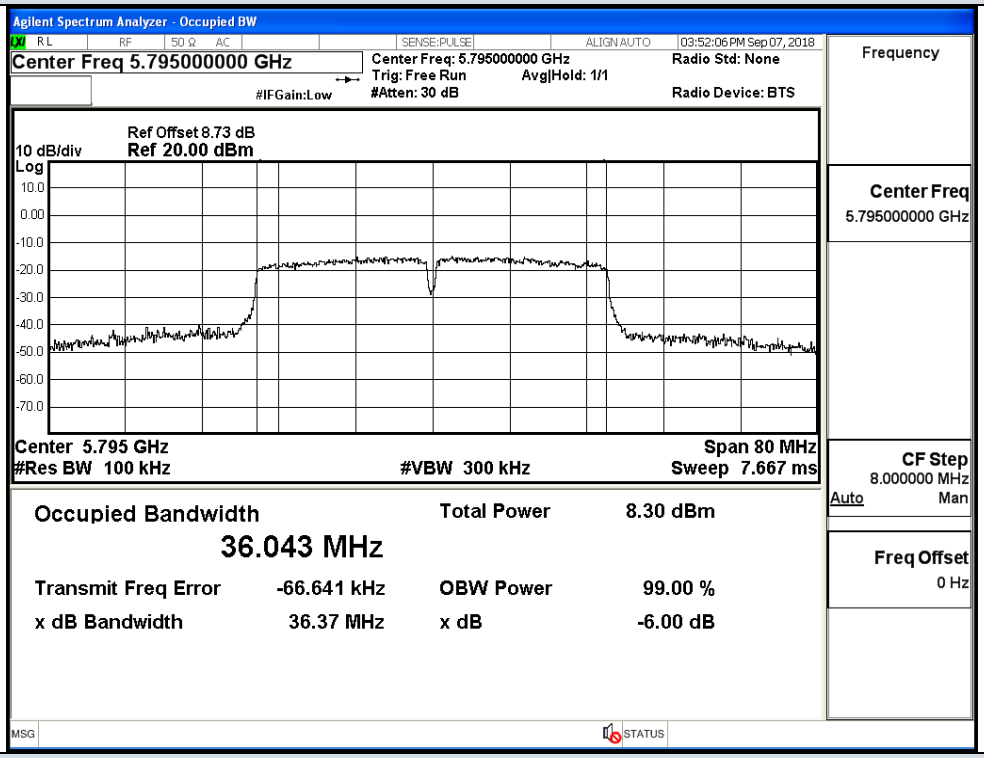


IEEE 802.11n HT20 / Channel 165 / 5825 MHz

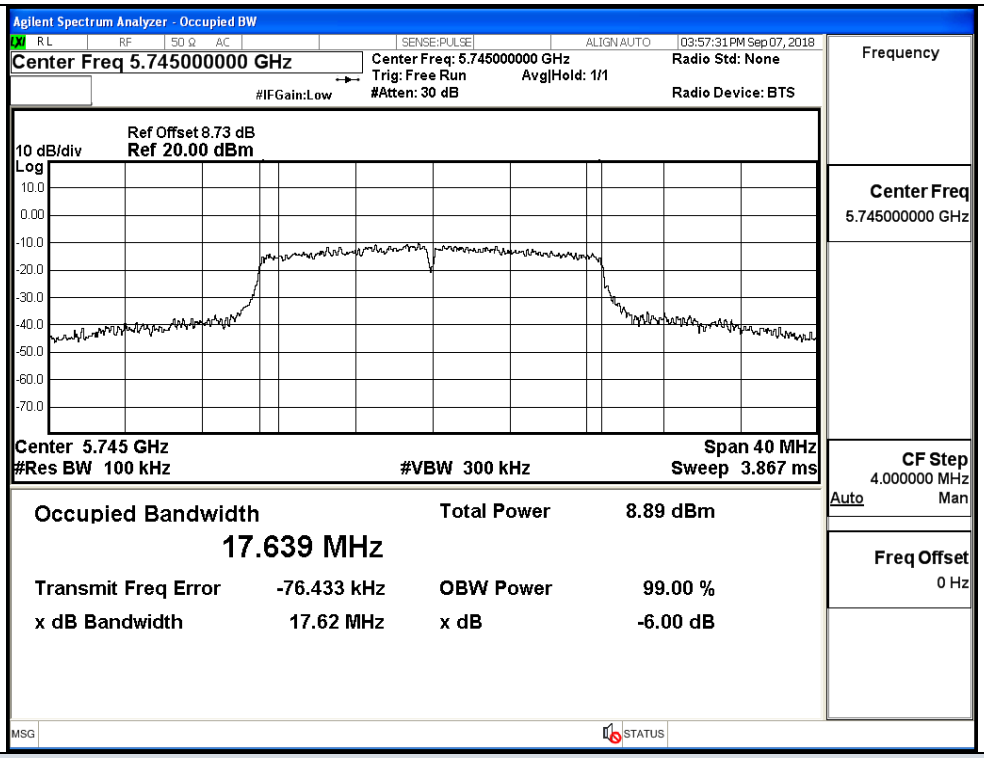
6dB Bandwidth



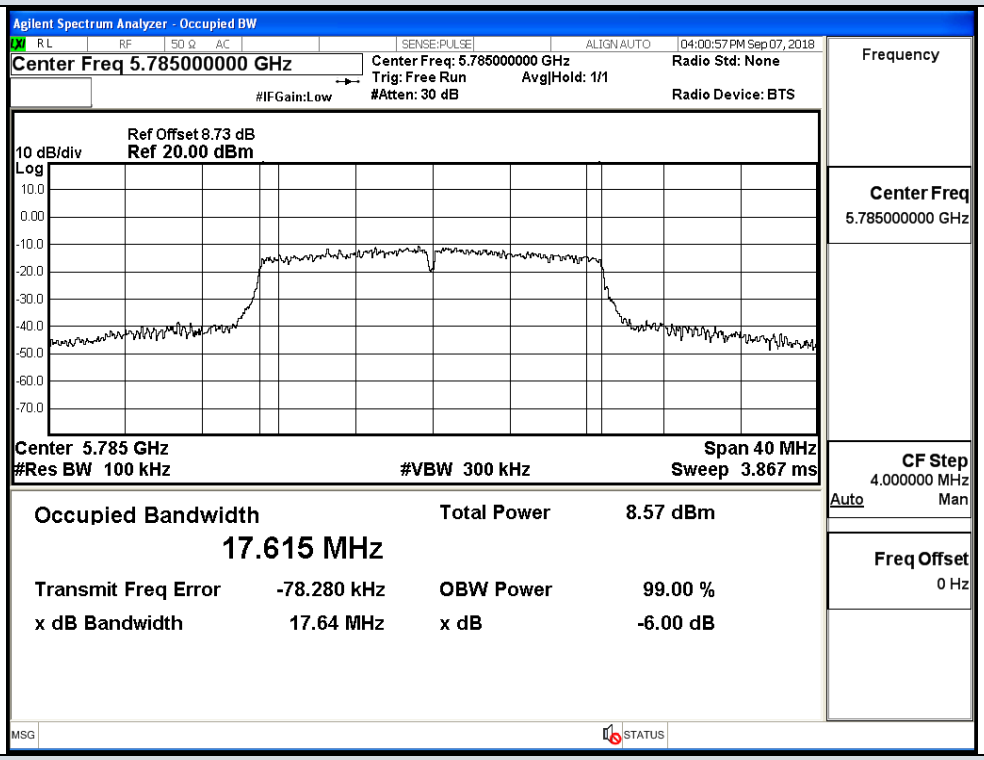
IEEE 802.11n HT40 / Channel 151 / 5755 MHz



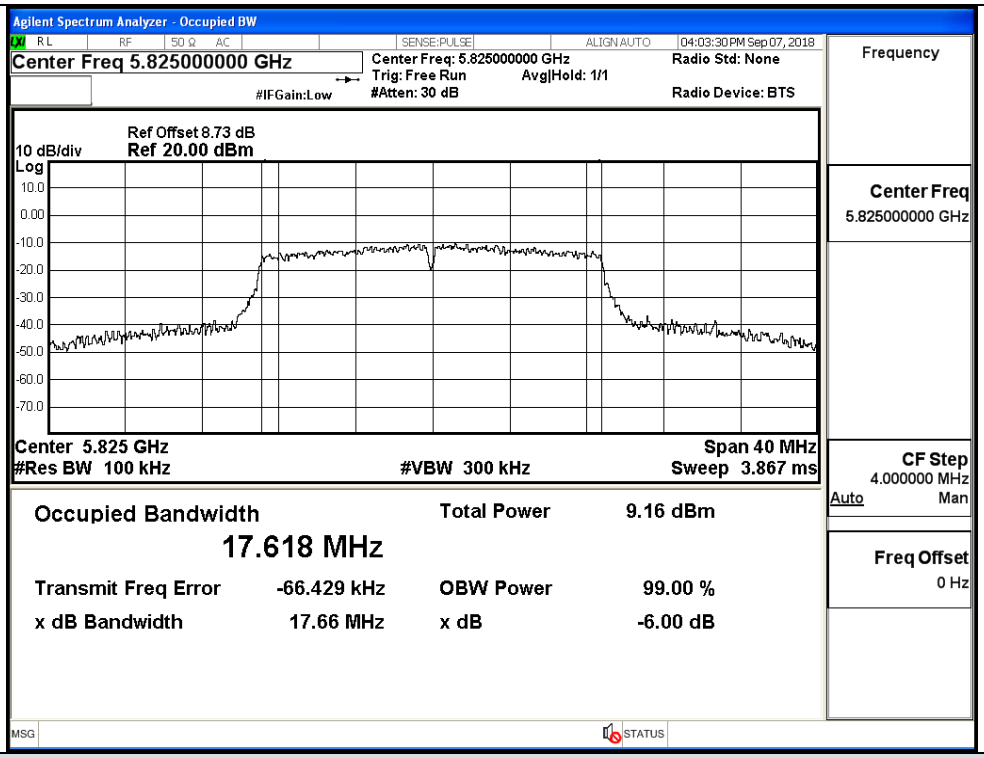
IEEE 802.11n HT40 / Channel 159 / 5795 MHz



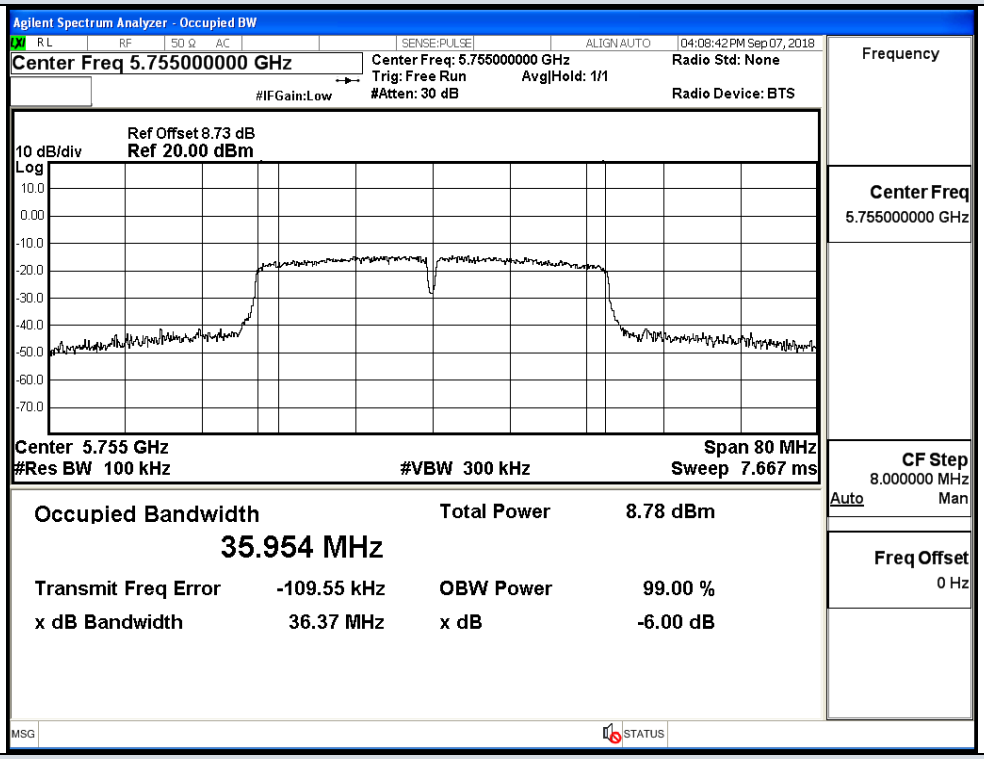
IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz



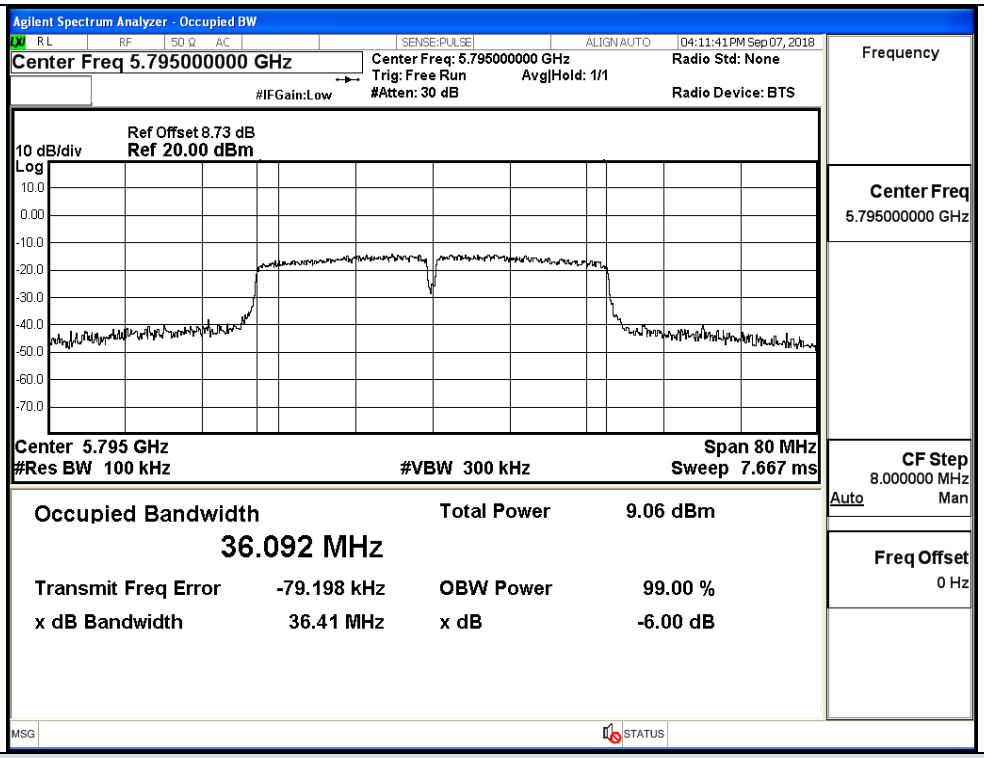
IEEE 802.11ac VHT20 / Channel 157/ 5785 MHz



IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz



IEEE 802.11ac VHT40 / Channel 151 / 5755 MHz

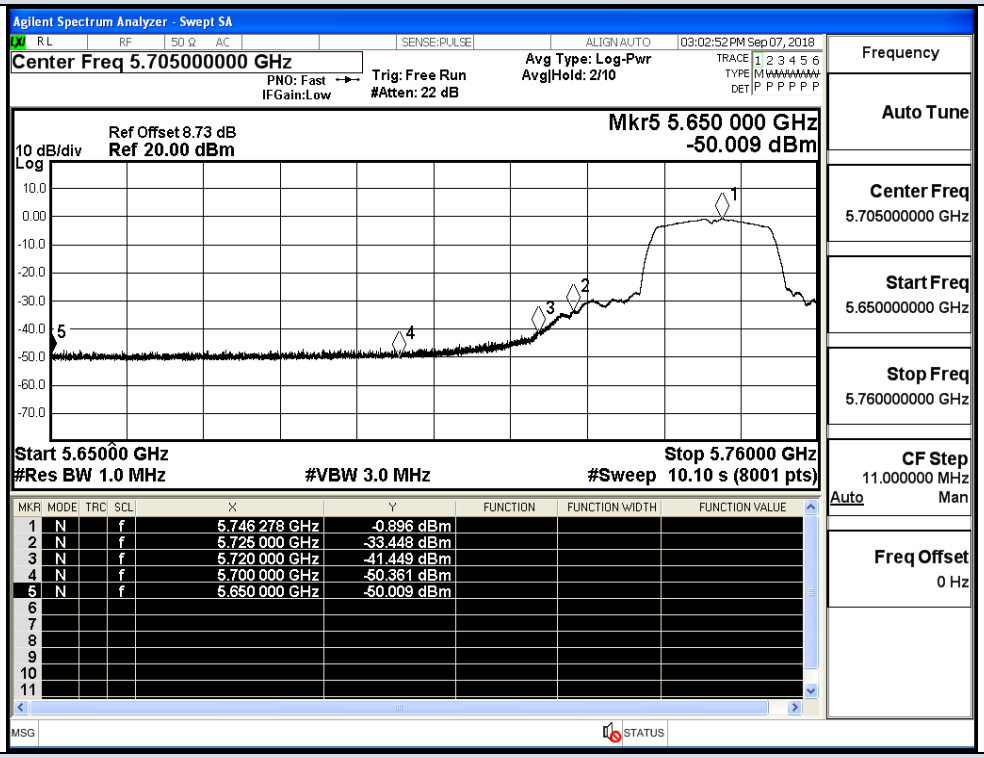


IEEE 802.11ac VHT40 / Channel 159 / 5795 MHz

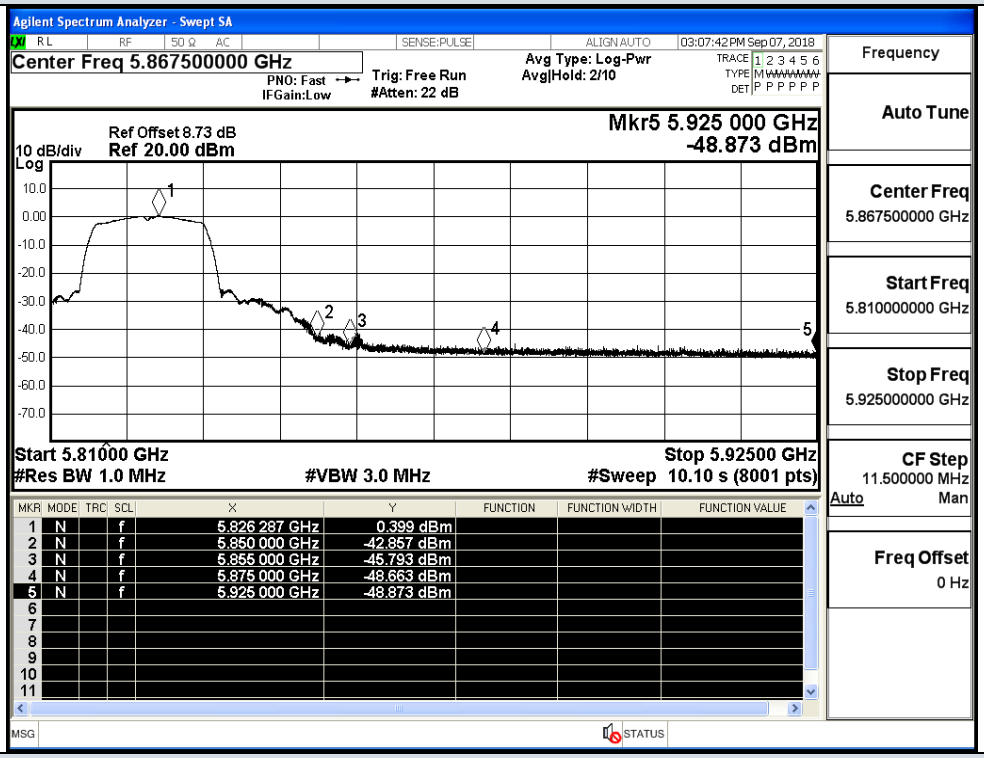
D.5 Undesirable Emissions Measurement

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
11A	149	5650.0	-50.009	2.50	-47.509	Peak	-27.0
		5700.0	-50.361	2.50	-47.861	Peak	10.0
		5720.0	-41.449	2.50	-38.949	Peak	15.6
		5725.0	-33.448	2.50	-30.948	Peak	27.0
	165	5850.0	-42.857	2.50	-40.357	Peak	27.0
		5855.0	-45.793	2.50	-43.293	Peak	15.6
		5875.0	-48.663	2.50	-46.163	Peak	10.0
		5925.0	-48.873	2.50	-46.373	Peak	-27.0
11N20 SISO	149	5650.0	-49.716	2.50	-47.216	Peak	-27.0
		5700.0	-48.768	2.50	-46.268	Peak	10.0
		5720.0	-41.016	2.50	-38.516	Peak	15.6
		5725.0	-34.976	2.50	-32.476	Peak	27.0
	165	5850.0	-41.392	2.50	-38.892	Peak	27.0
		5855.0	-46.345	2.50	-43.845	Peak	15.6
		5875.0	-46.384	2.50	-43.884	Peak	10.0
		5925.0	-49.196	2.50	-46.696	Peak	-27.0
11N40 SISO	151	5650.0	-49.876	2.50	-47.376	Peak	-27.0
		5700.0	-44.384	2.50	-41.884	Peak	10.0
		5720.0	-35.059	2.50	-32.559	Peak	15.6
		5725.0	-30.972	2.50	-28.472	Peak	27.0
	159	5850.0	-42.818	2.50	-40.318	Peak	27.0
		5855.0	-45.378	2.50	-42.878	Peak	15.6
		5875.0	-47.342	2.50	-44.842	Peak	10.0
		5925.0	-49.598	2.50	-47.098	Peak	-27.0
11AC20 SISO	149	5650.0	-50.512	2.50	-48.012	Peak	-27.0
		5700.0	-48.253	2.50	-45.753	Peak	10.0
		5720.0	-38.355	2.50	-35.855	Peak	15.6
		5725.0	-31.230	2.50	-28.73	Peak	27.0
	165	5850.0	-42.374	2.50	-39.874	Peak	27.0
		5855.0	-44.905	2.50	-42.405	Peak	15.6
		5875.0	-48.262	2.50	-45.762	Peak	10.0
		5925.0	-49.496	2.50	-46.996	Peak	-27.0
11AC40 SISO	151	5650.0	-49.031	2.50	-46.531	Peak	-27.0
		5700.0	-45.852	2.50	-43.352	Peak	10.0
		5720.0	-35.304	2.50	-32.804	Peak	15.6
		5725.0	-31.998	2.50	-29.498	Peak	27.0
	159	5850.0	-41.575	2.50	-39.075	Peak	27.0
		5855.0	-43.959	2.50	-41.459	Peak	15.6
		5875.0	-47.209	2.50	-44.709	Peak	10.0
		5925.0	-49.847	2.50	-47.347	Peak	-27.0

Undesirable Emissions Measurement

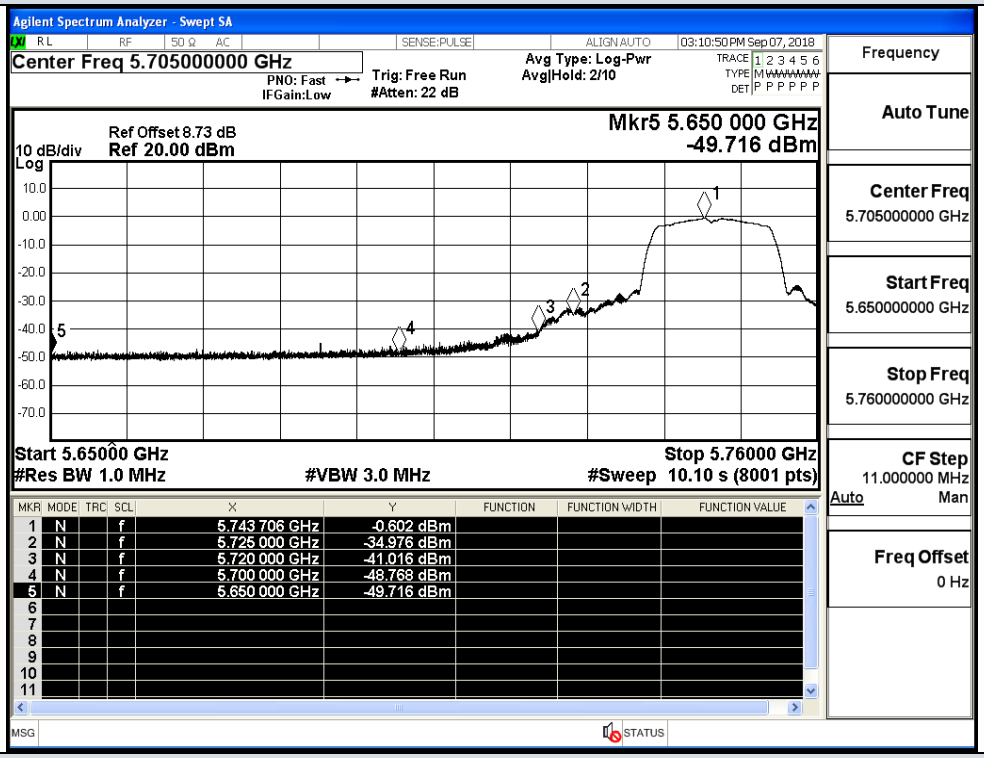


IEEE 802.11a / Channel 149 / 5745 MHz / Peak

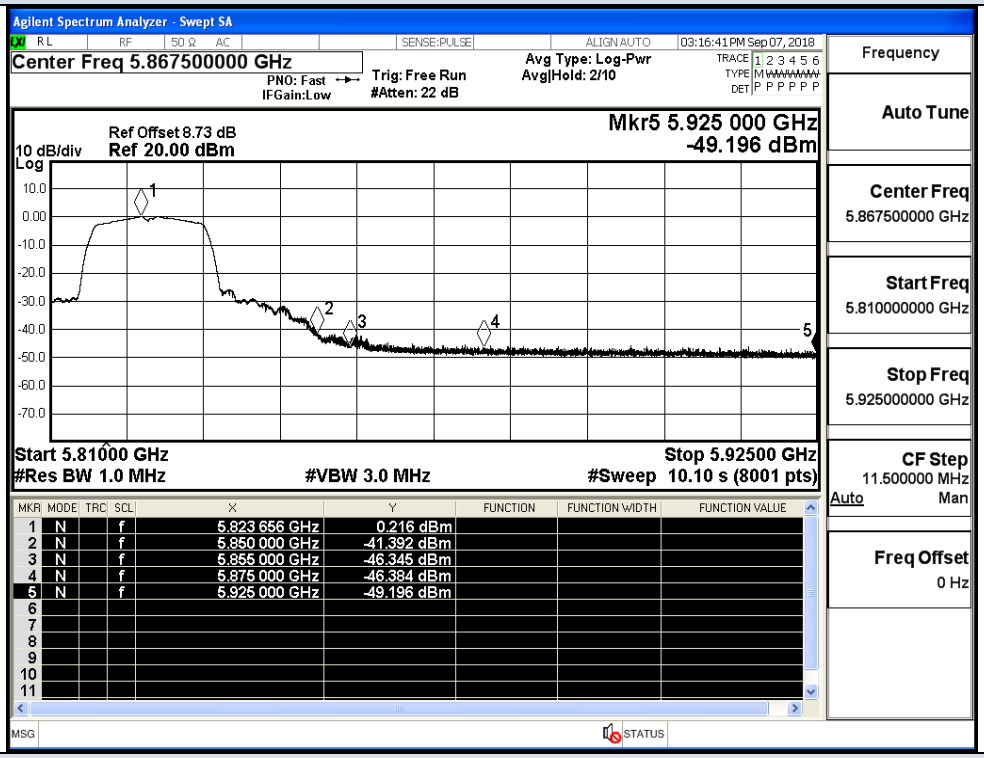


IEEE 802.11a / Channel 165 / 5825 MHz / Peak

Undesirable Emissions Measurement

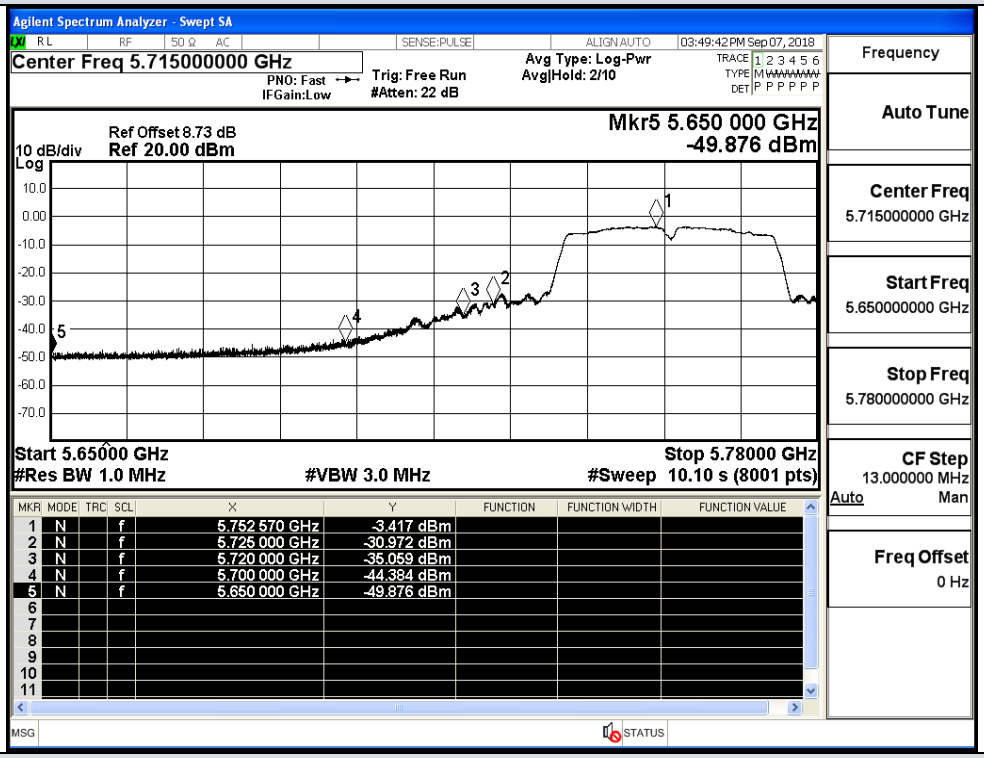


IEEE 802.11n HT20 / Channel 149 / 5745 MHz / Peak

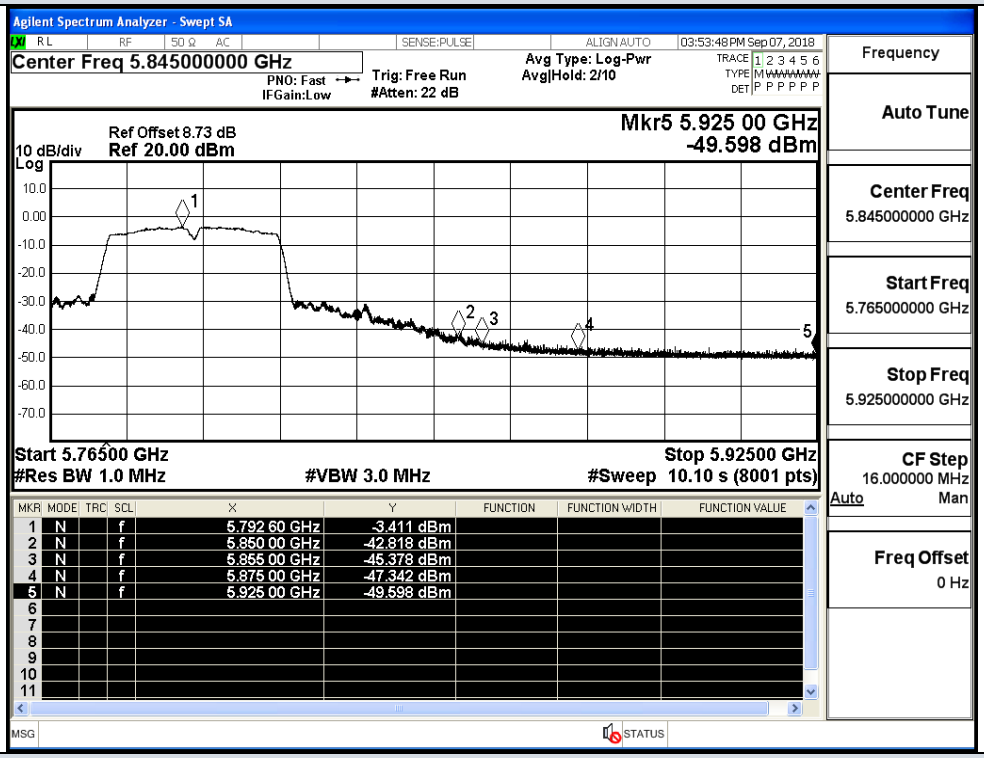


IEEE 802.11n HT20 / Channel 165 / 5825 MHz / Peak

Undesirable Emissions Measurement

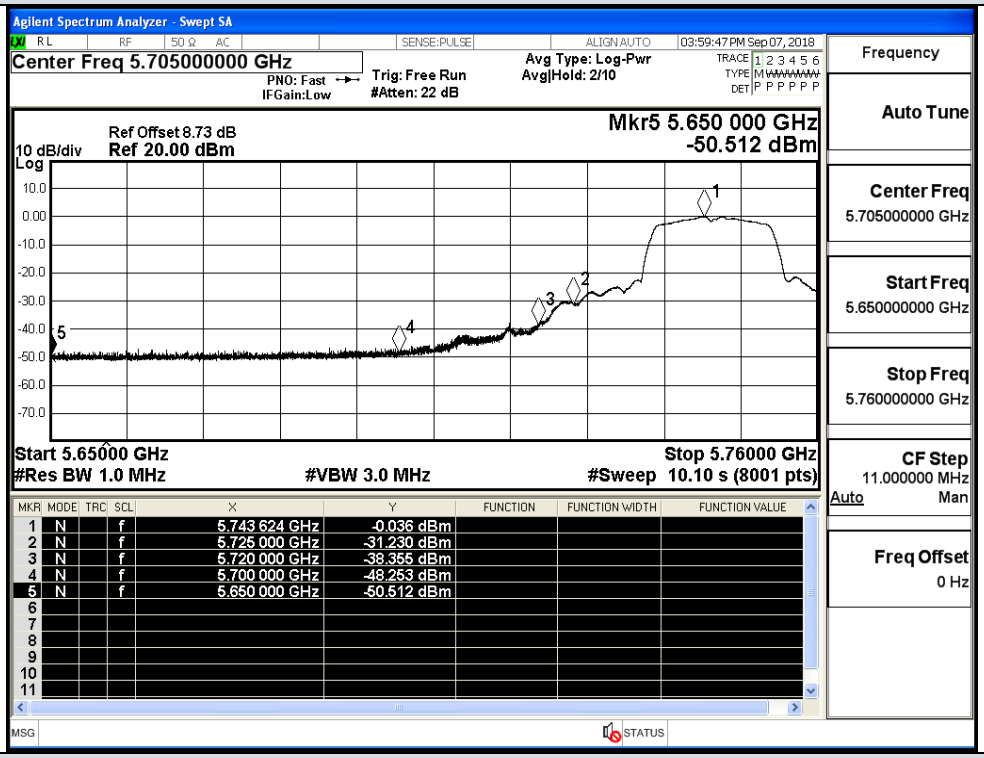


IEEE 802.11n HT40 / Channel 151 / 5755 MHz / Peak

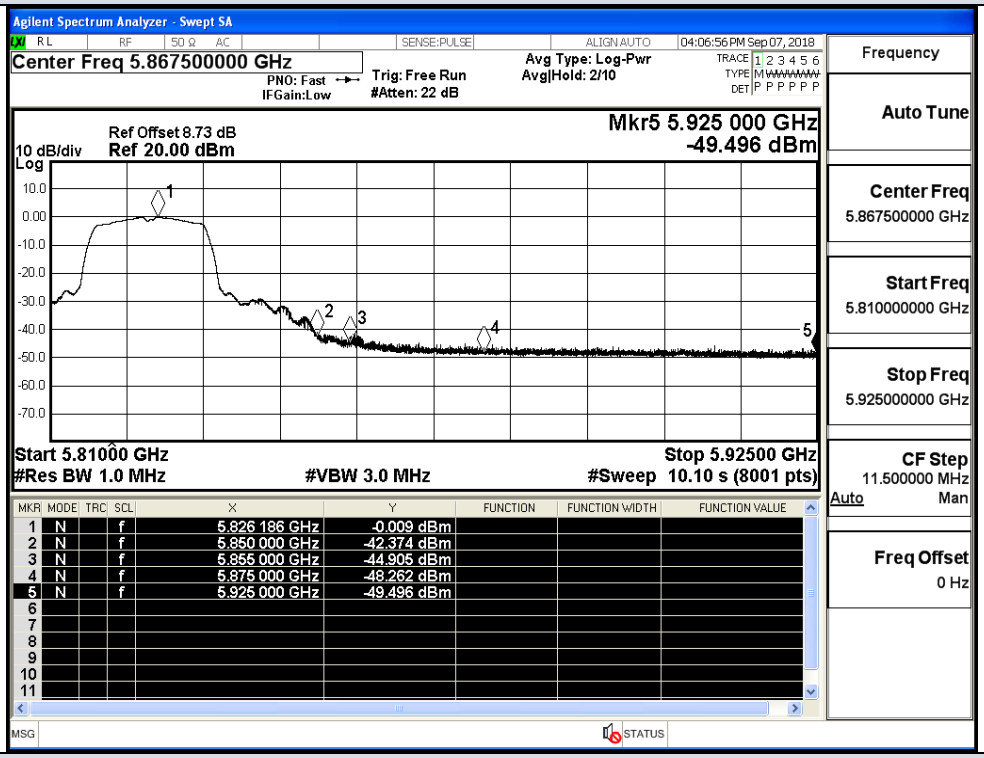


IEEE 802.11n HT40 / Channel 159 / 5795 MHz / Peak

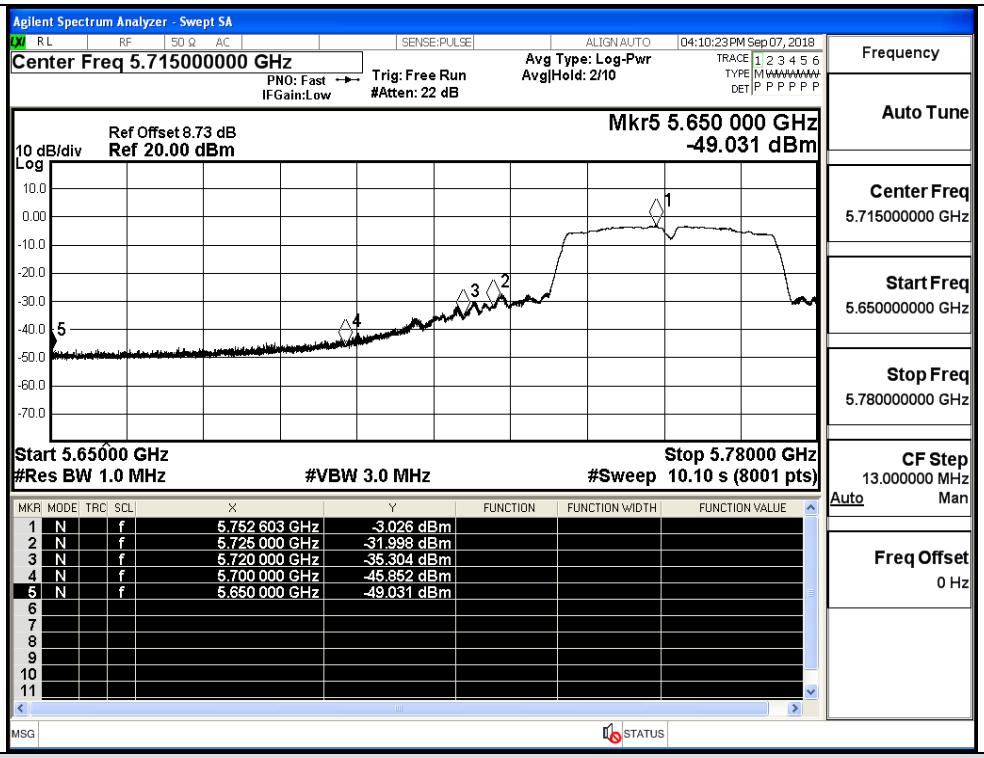
Undesirable Emissions Measurement



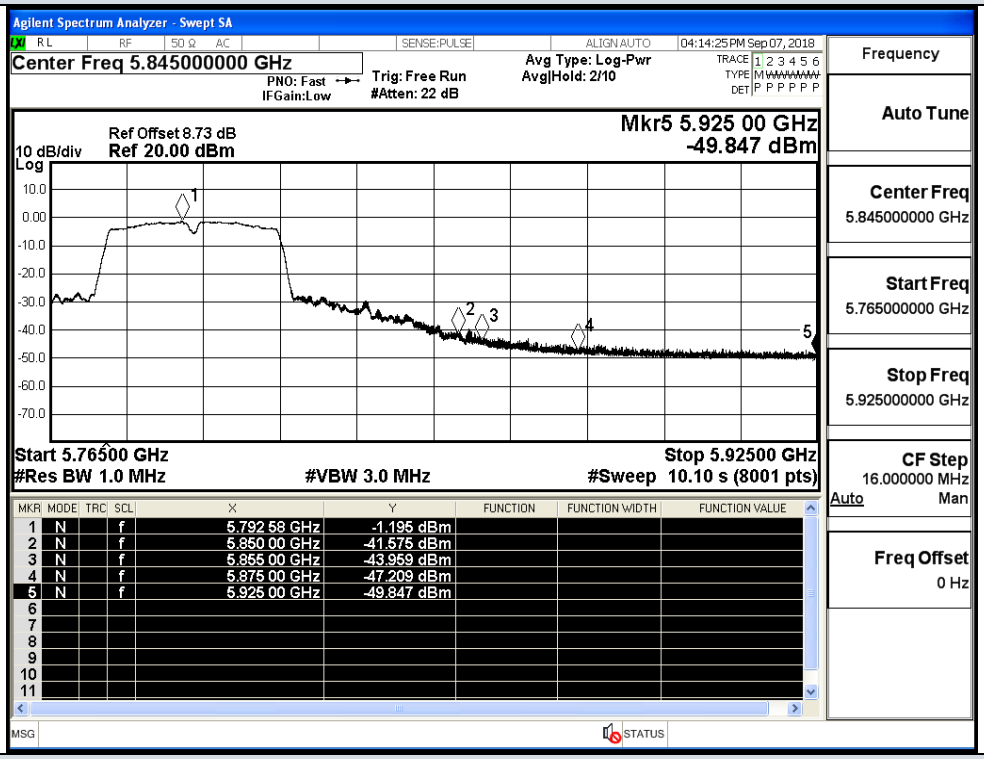
IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz / Peak



IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz / Peak



IEEE 802.11ac VHT40 / Channel 151 / 5755 MHz / Peak



IEEE 802.11ac VHT40 / Channel 159 / 5795 MHz / Peak