Appendix D

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: Laptop
Trade Mark: Trekstor, PEAQ
Test Model: G137

Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	53.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom.Liu
Supervised by:	Jayden.Zhuo

D.1 Duty Cycle

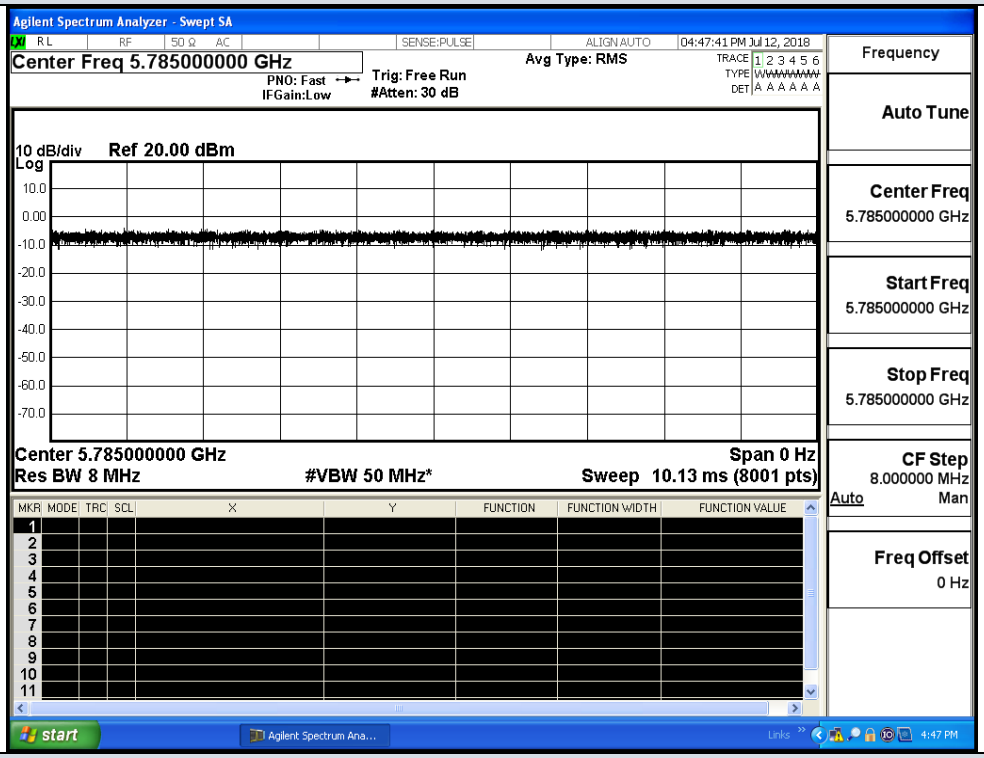
Antenna 0

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
IEEE 802.11a	5785	100	0.00	0.01
IEEE 802.11ac VHT20	5785	100	0.00	0.01

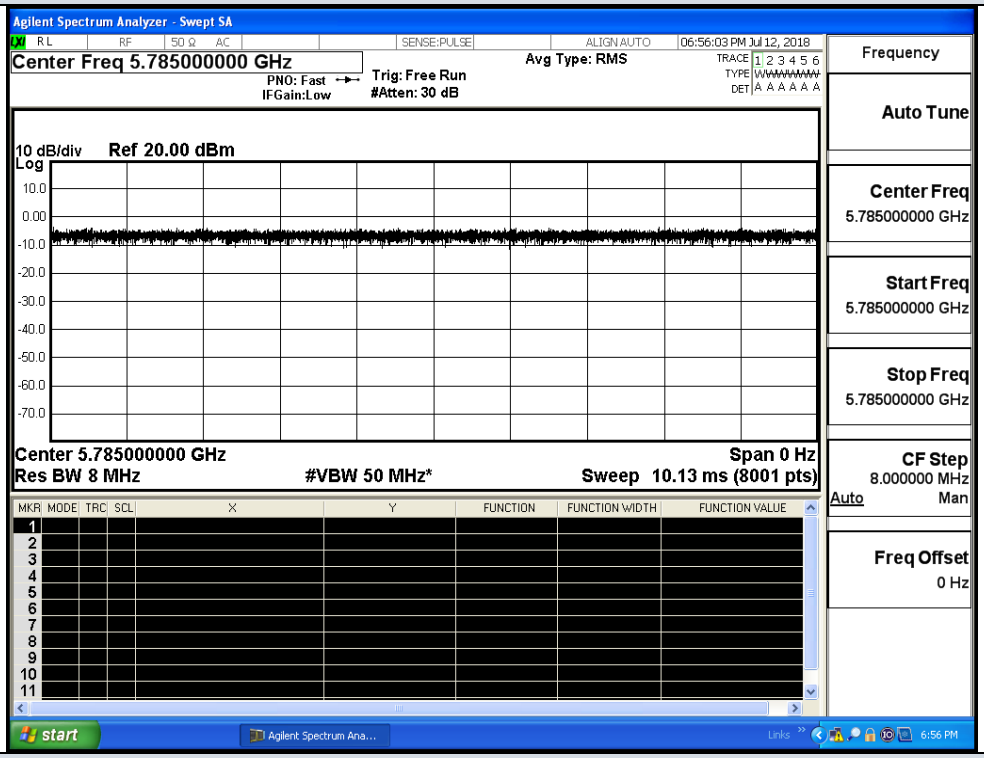
Antenna 1

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
IEEE 802.11a	5785	100	0.00	0.01
IEEE 802.11ac VHT20	5785	100	0.00	0.01

On Time and Duty Cycle_Ant0

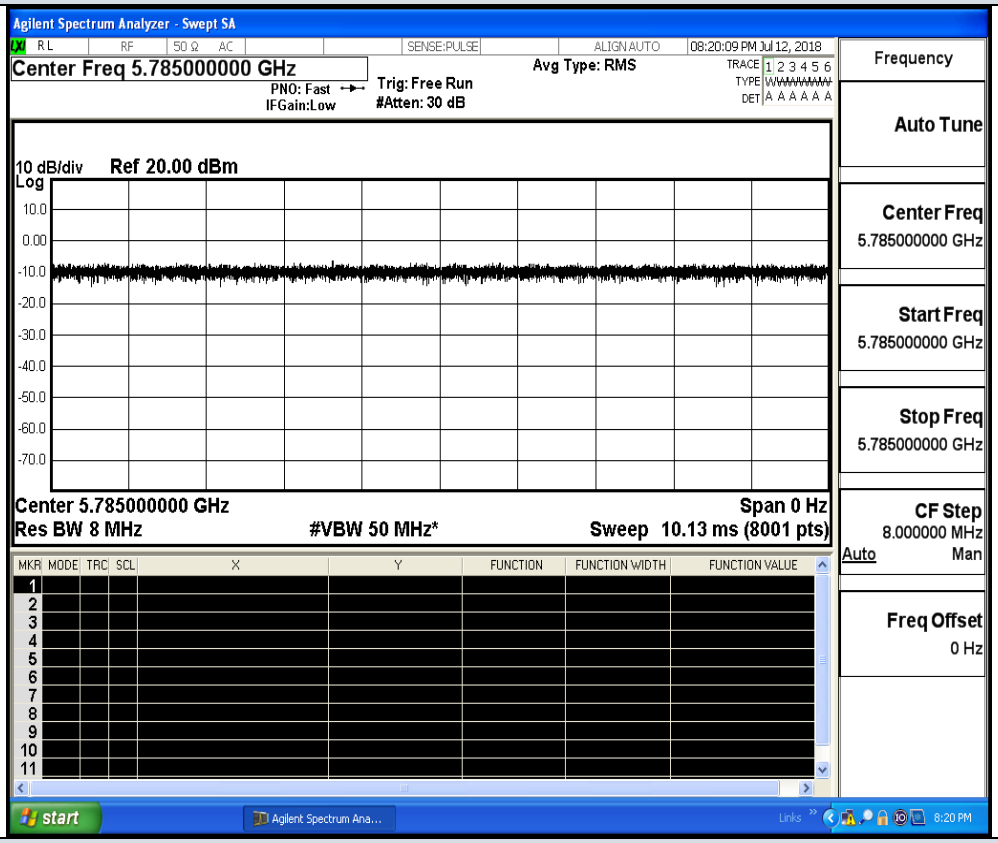


IEEE 802.11a

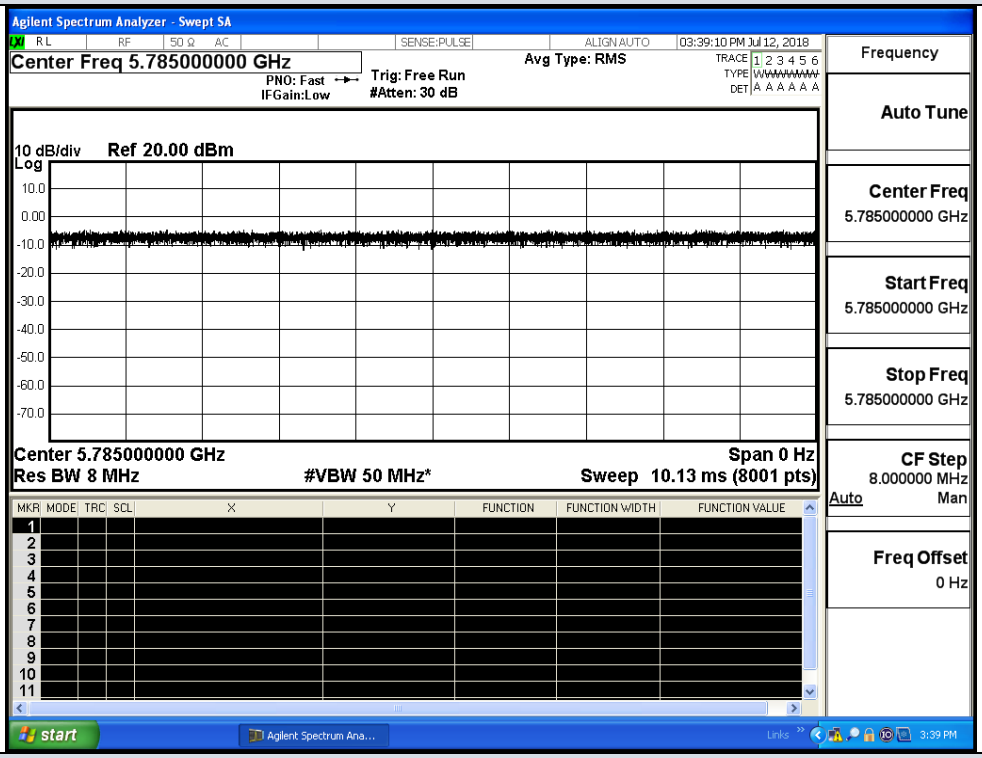


IEEE 802.11ac VHT20

On Time and Duty Cycle_Ant1



IEEE 802.11a



IEEE 802.11ac VHT20

D.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)
IEEE 802.11a	149	5745	11.10	0	7.10	30
	157	5785	11.25	0	7.25	
	165	5825	11.35	0	7.35	
IEEE 802.11ac VHT20	149	5745	12.10	0	6.90	30
	157	5785	12.51	0	6.91	
	165	5825	12.46	0	6.96	

Antenna 1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power(dBm)	Limit (dBm)
IEEE 802.11a	149	5745	11.01	0	7.21	30
	157	5785	11.06	0	7.36	
	165	5825	11.44	0	7.44	
IEEE 802.11ac VHT20	149	5745	11.96	0	6.96	30
	157	5785	11.80	0	6.80	
	165	5825	11.84	0	6.84	

D.3 Power Spectral Density

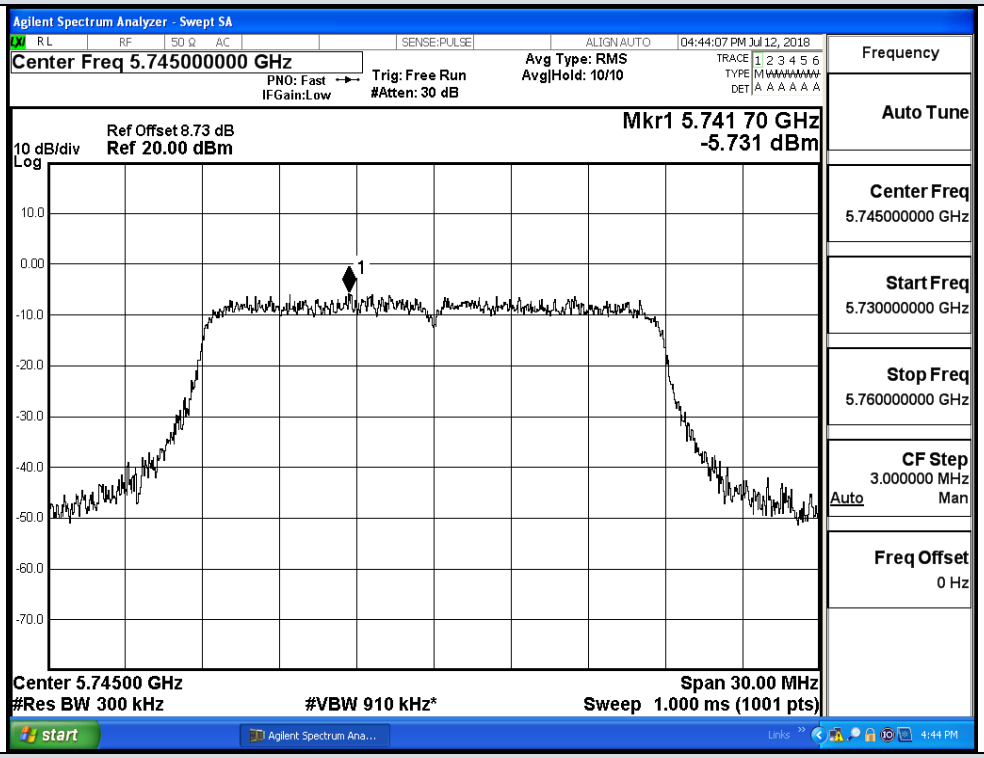
Antenna 0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)
IEEE 802.11a	149	5745	-5.731	0	2.218	-3.513	30
	157	5785	-4.004	0	2.218	-1.786	
	165	5825	-5.388	0	2.218	-3.170	
IEEE 802.11ac VHT20	149	5745	-4.648	0	2.218	-2.430	30
	157	5785	-8.508	0	2.218	-6.290	
	165	5825	-5.454	0	2.218	-3.236	

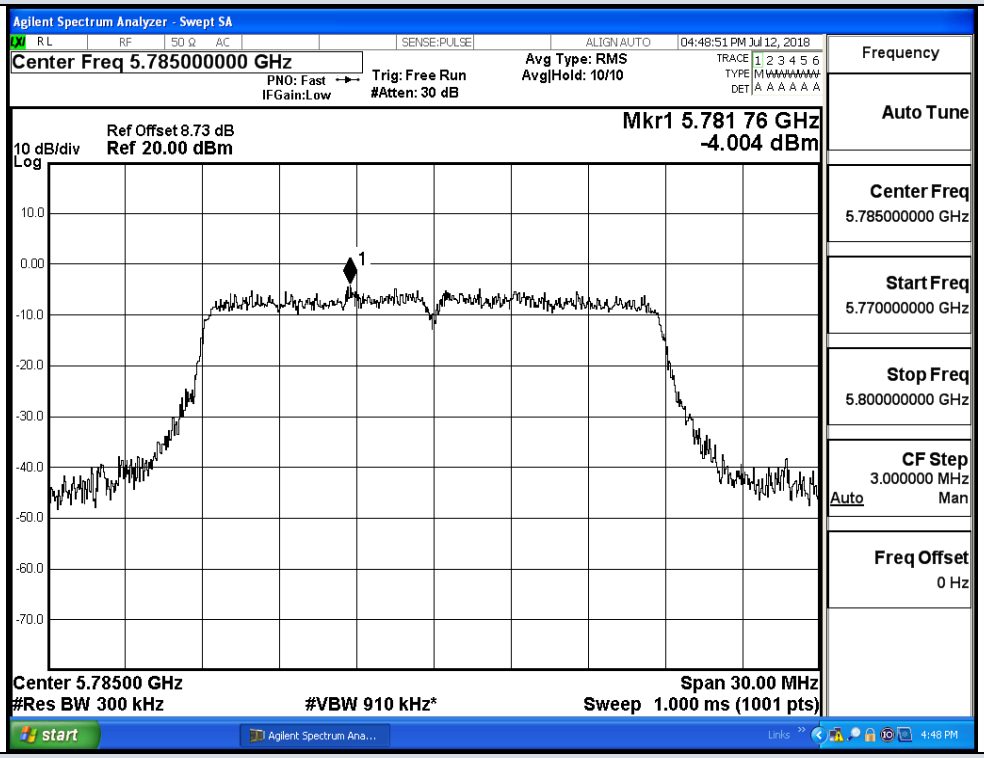
Antenna 1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)
IEEE 802.11a	149	5745	-6.517	0	2.218	-4.299	30
	157	5785	-7.619	0	2.218	-5.401	
	165	5825	-4.660	0	2.218	-2.442	
IEEE 802.11ac VHT20	149	5745	-6.483	0	2.218	-4.265	30
	157	5785	-4.916	0	2.218	-2.698	
	165	5825	-6.770	0	2.218	-4.552	

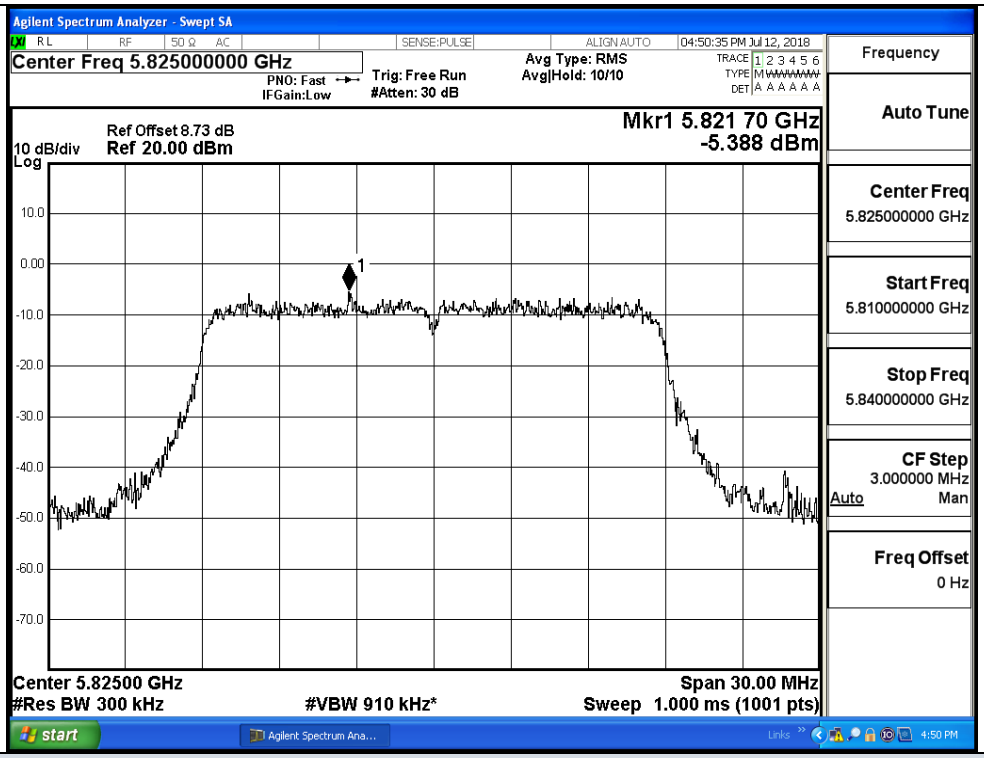
Power Spectral Density_Ant0



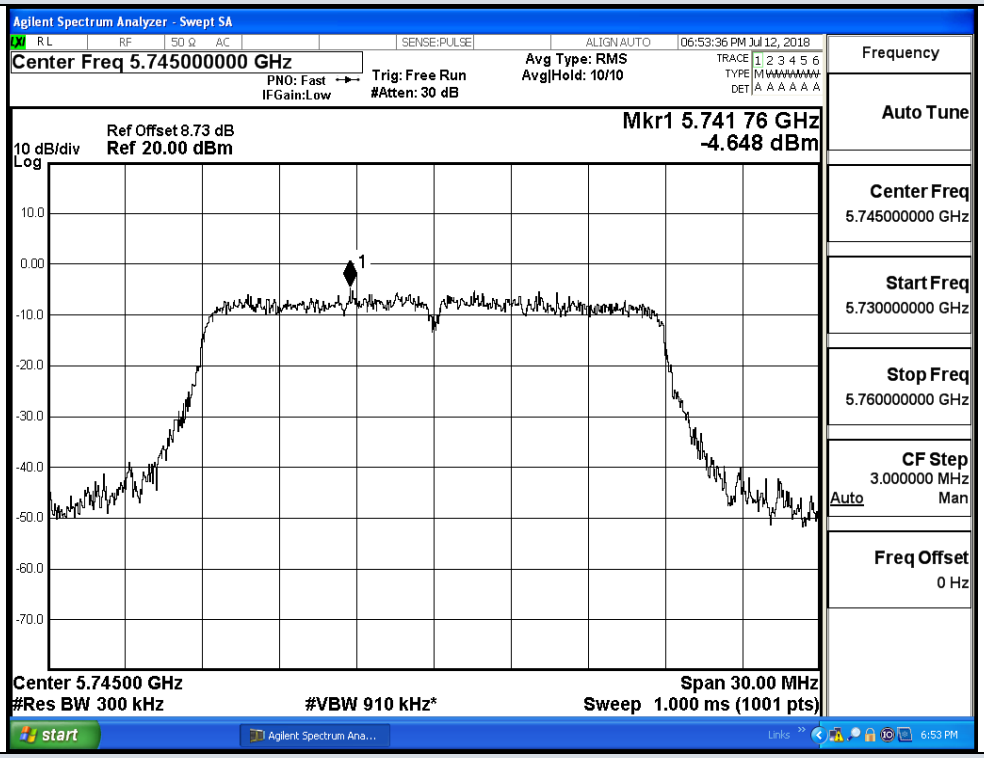
IEEE 802.11a / Channel 149 / 5745 MHz



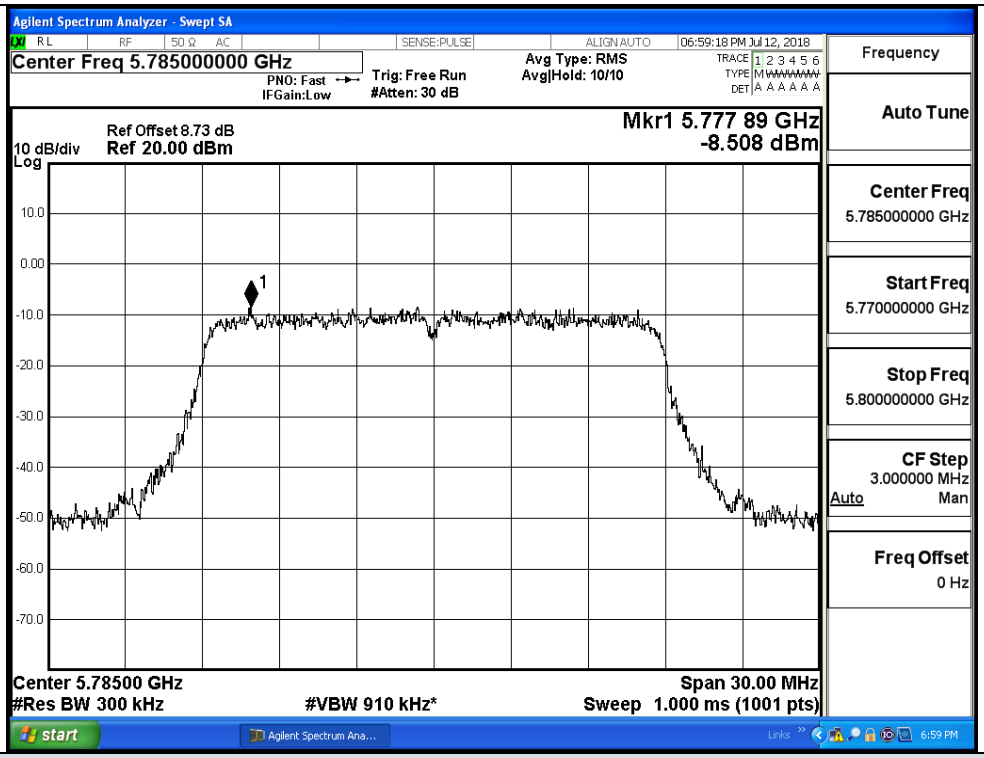
IEEE 802.11a / Channel 157 / 5785 MHz



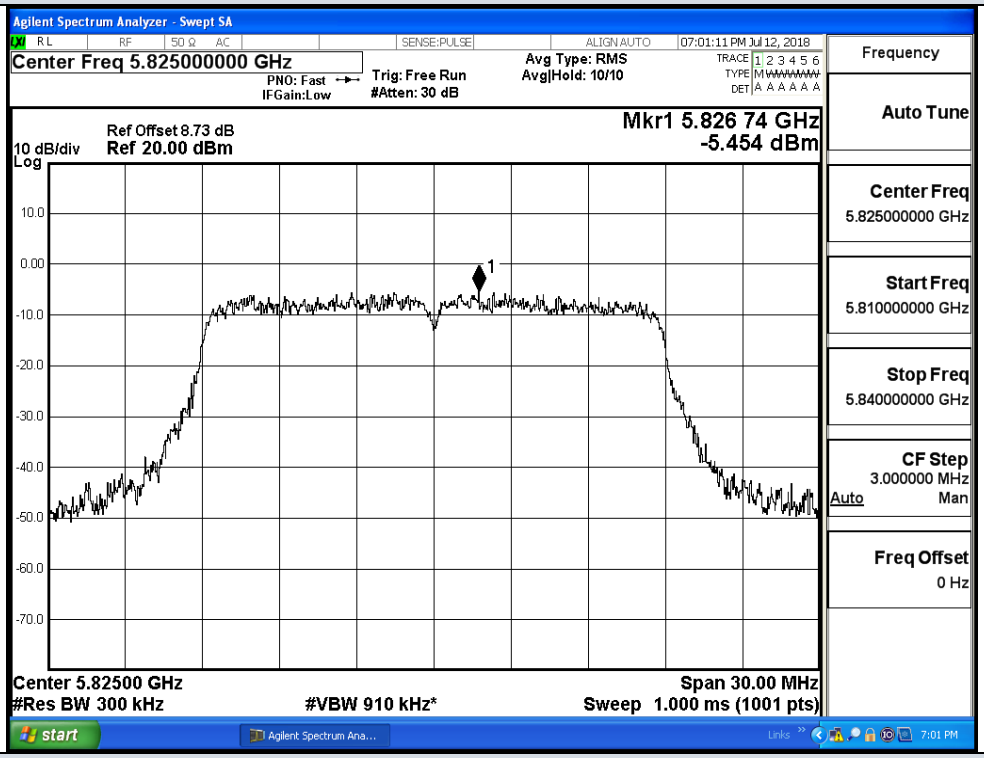
IEEE 802.11a / Channel 165 / 5825 MHz



IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz

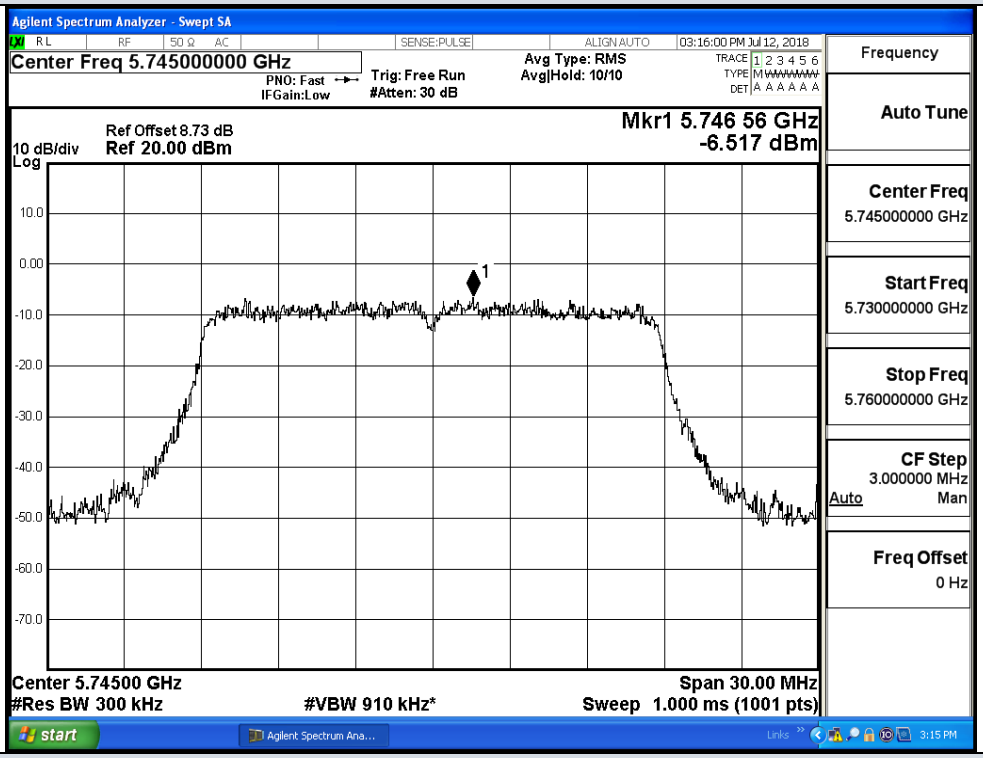


IEEE 802.11ac VHT20 / Channel 157 / 5785 MHz

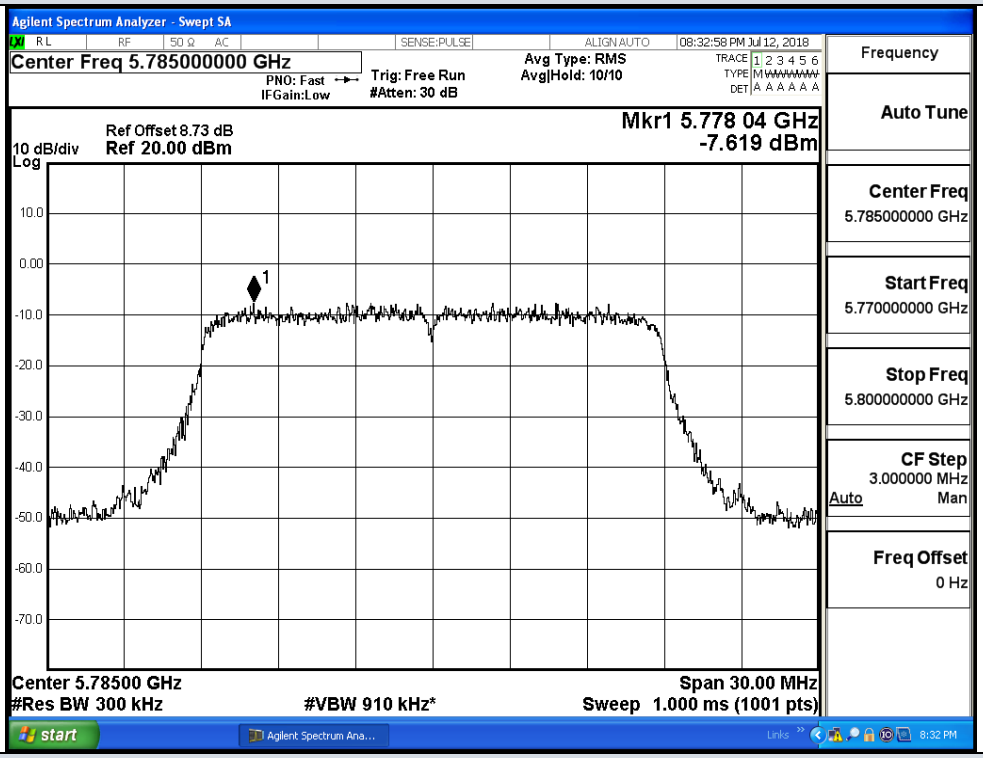


IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz

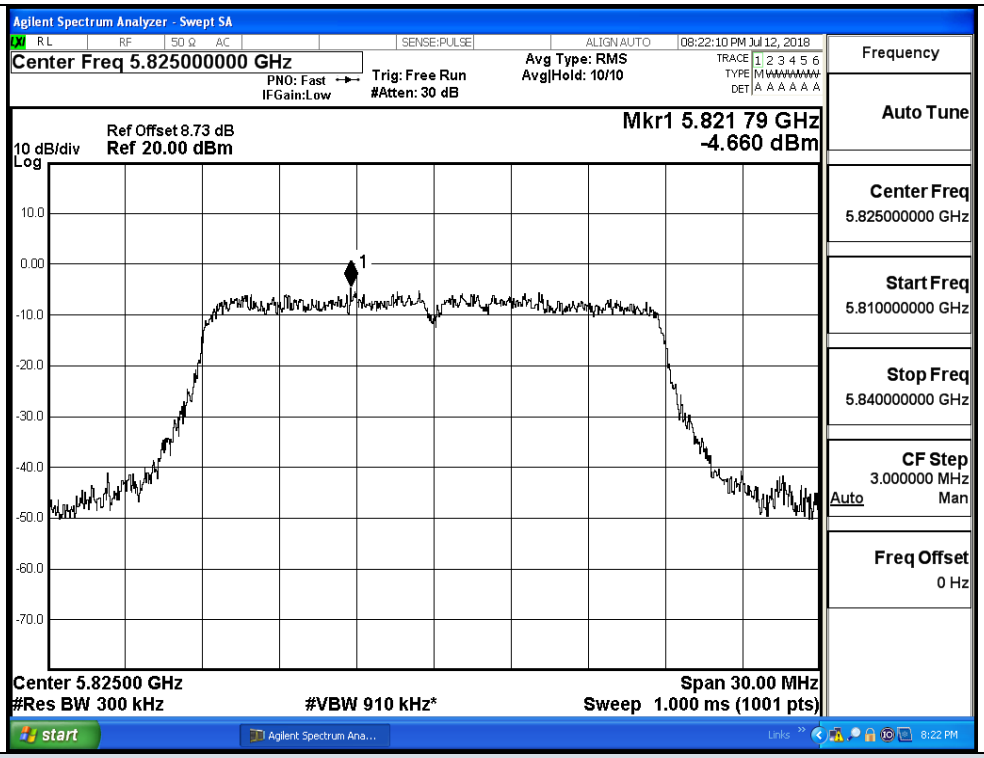
Power Spectral Density_Ant1



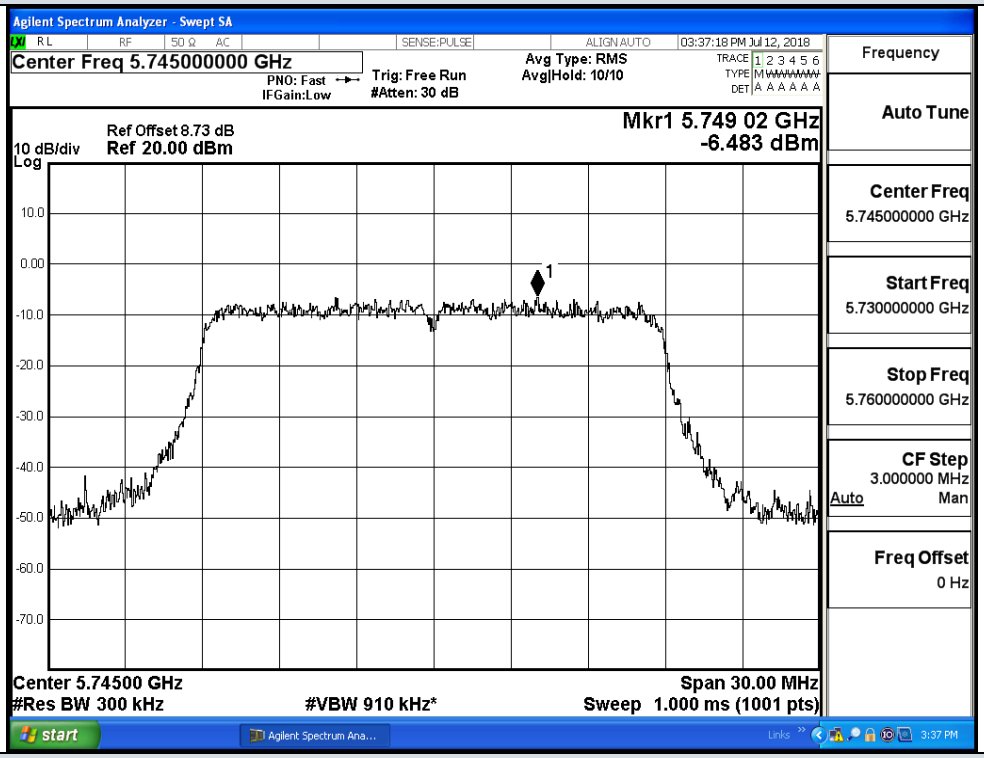
IEEE 802.11a / Channel 149 / 5745 MHz



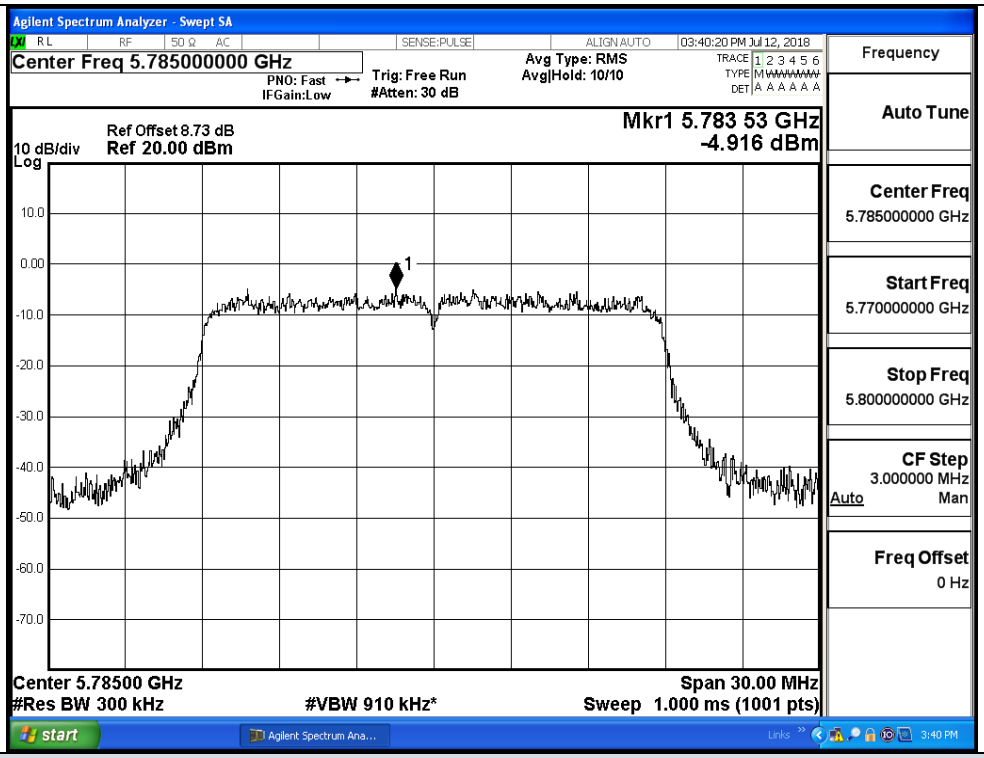
IEEE 802.11a / Channel 157 / 5785 MHz



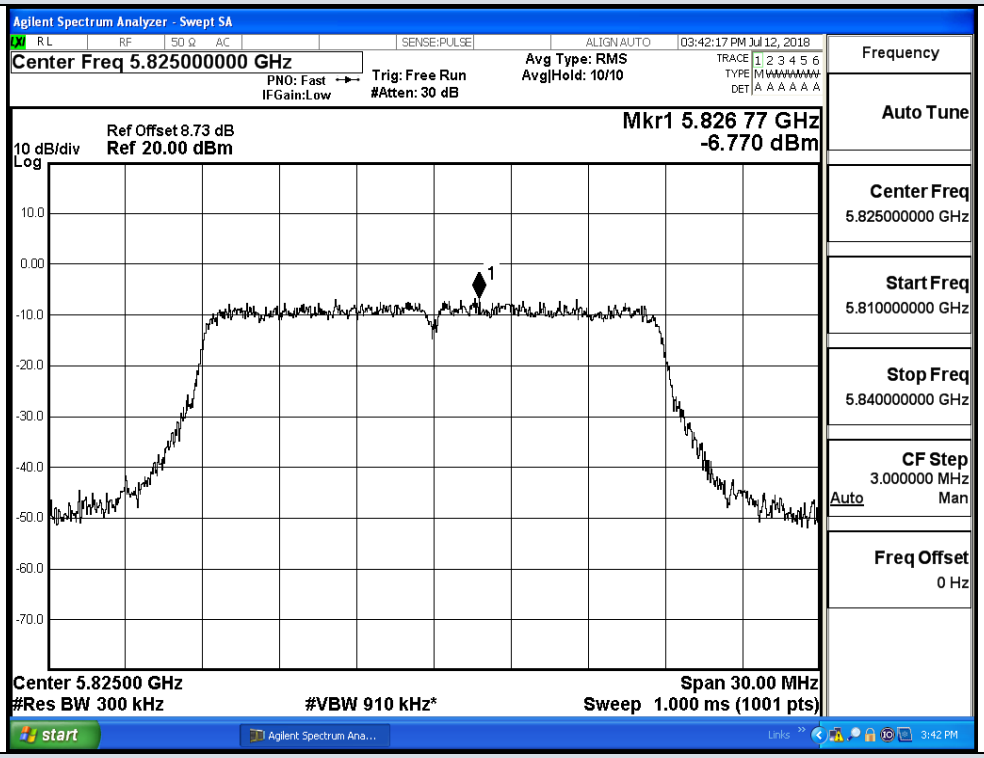
IEEE 802.11a / Channel 165 / 5825 MHz



IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz



IEEE 802.11ac VHT20 / Channel 157 / 5785 MHz



IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz

D.4 Emission Bandwidth

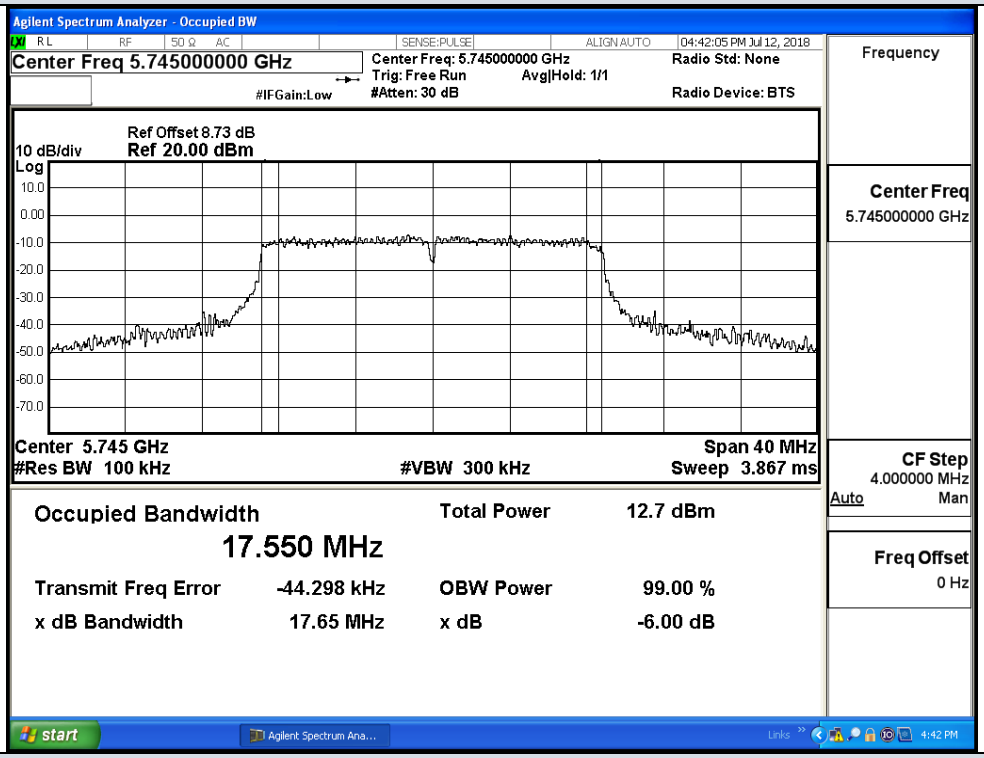
Antenna 0

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
IEEE 802.11a	149	5745	17.65	>=0.5
	157	5785	17.71	
	165	5825	17.70	
IEEE 802.11ac VHT20	149	5745	17.70	>=0.5
	157	5785	17.71	
	165	5825	17.70	

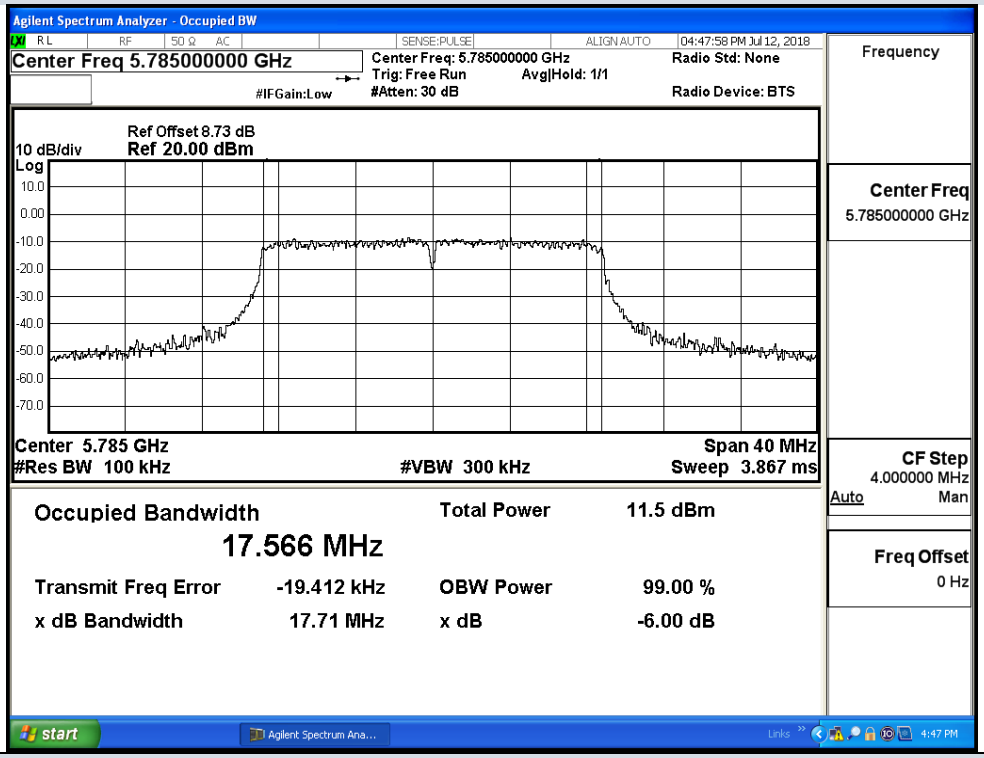
Antenna 1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
IEEE 802.11a	149	5745	17.68	>=0.5
	157	5785	17.70	
	165	5825	17.72	
IEEE 802.11ac VHT20	149	5745	17.71	>=0.5
	157	5785	17.69	
	165	5825	17.71	

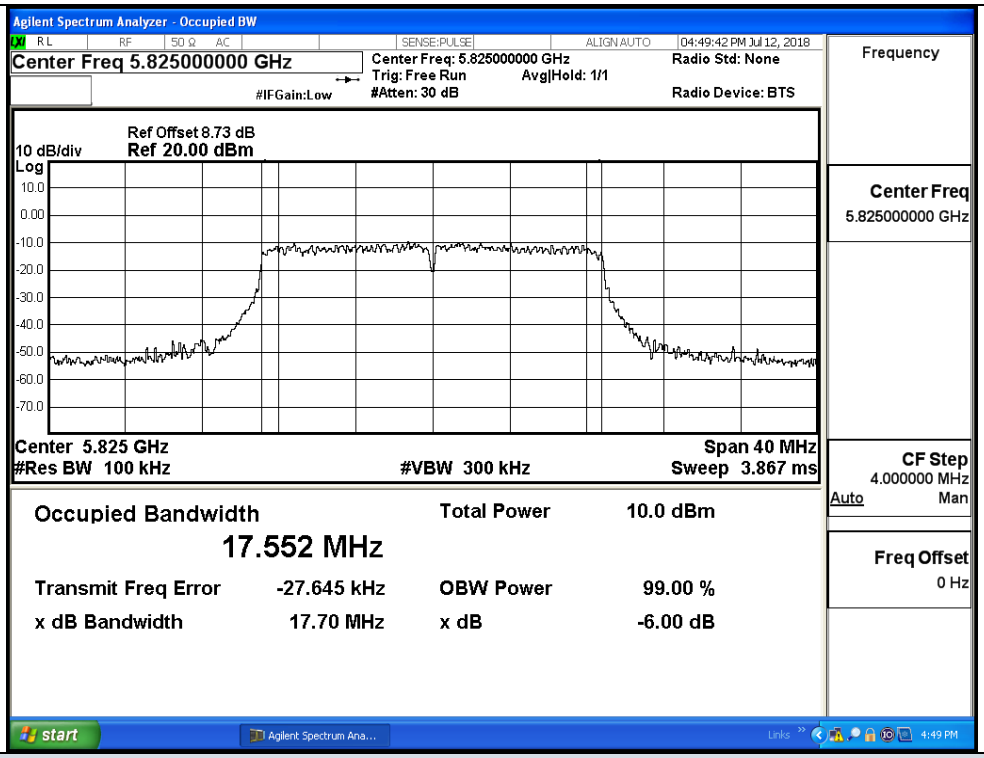
6dB Bandwidth_Ant0



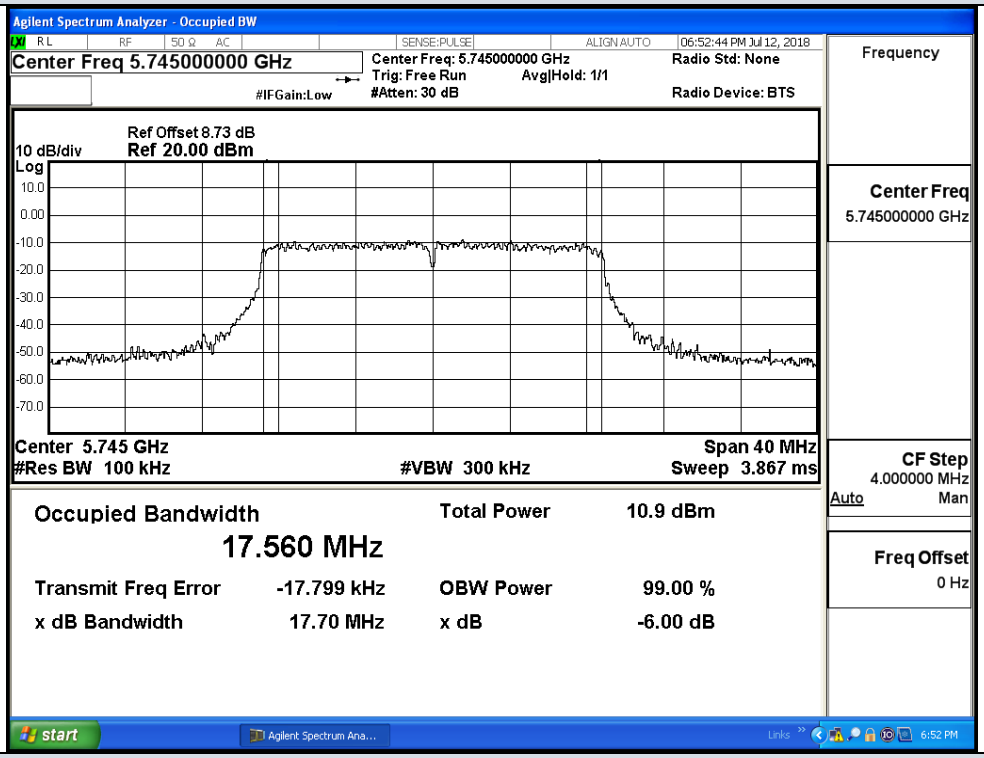
IEEE 802.11a / Channel 149 / 5745 MHz



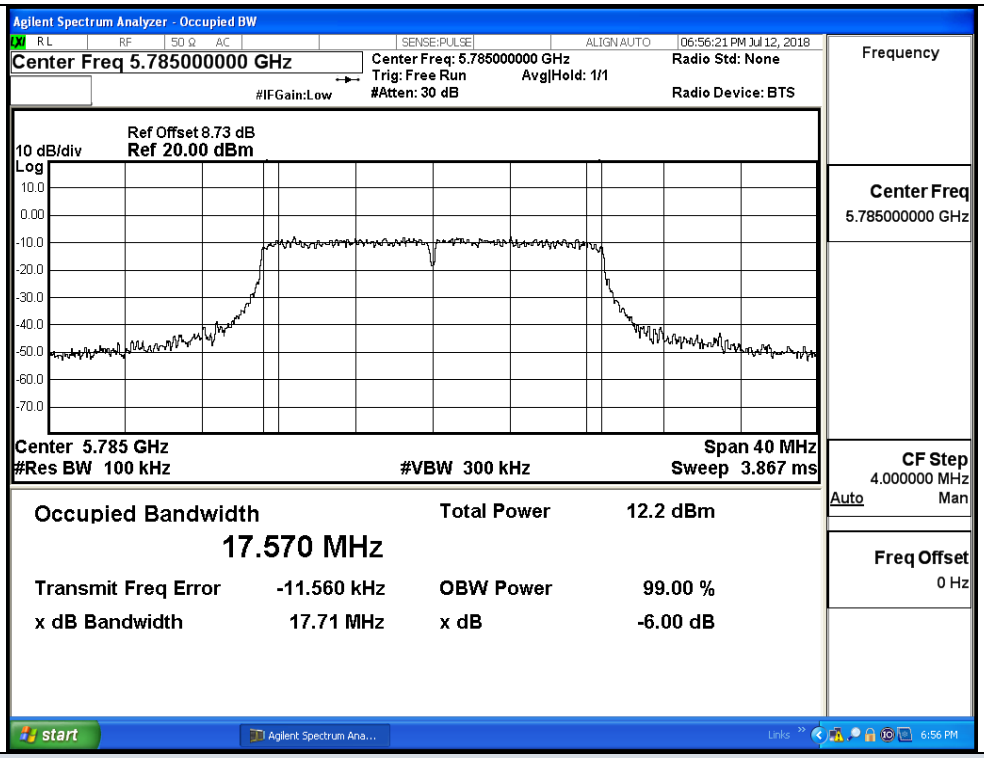
IEEE 802.11a / Channel 157 / 5785 MHz



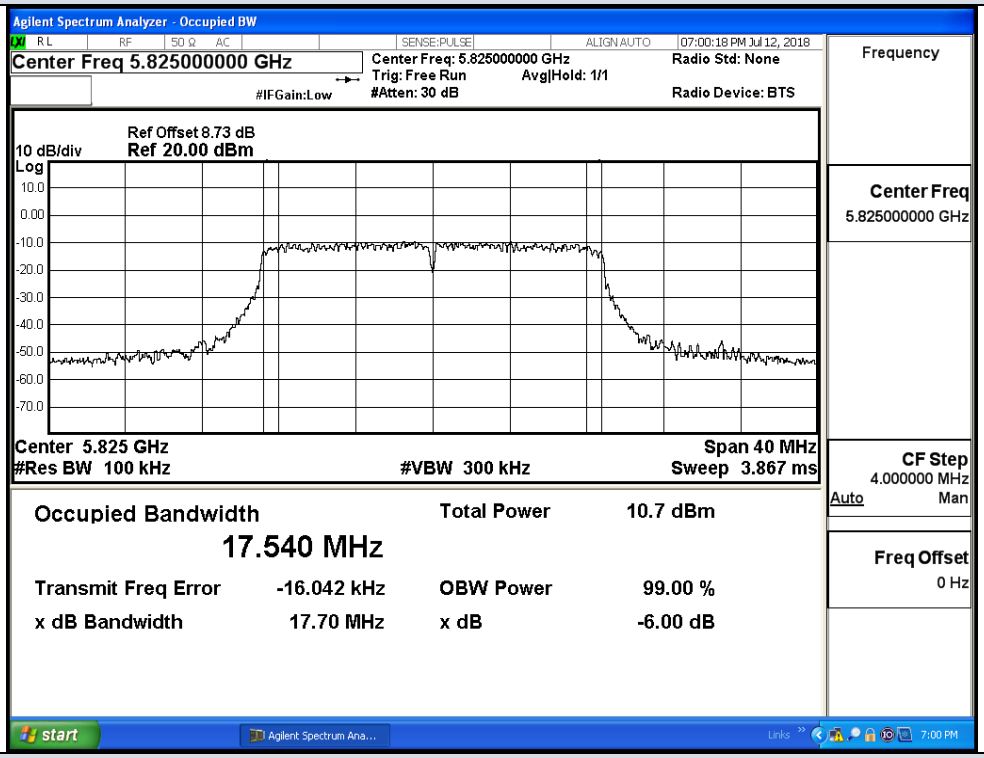
IEEE 802.11a VHT20 / Channel 165 / 5825 MHz



IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz

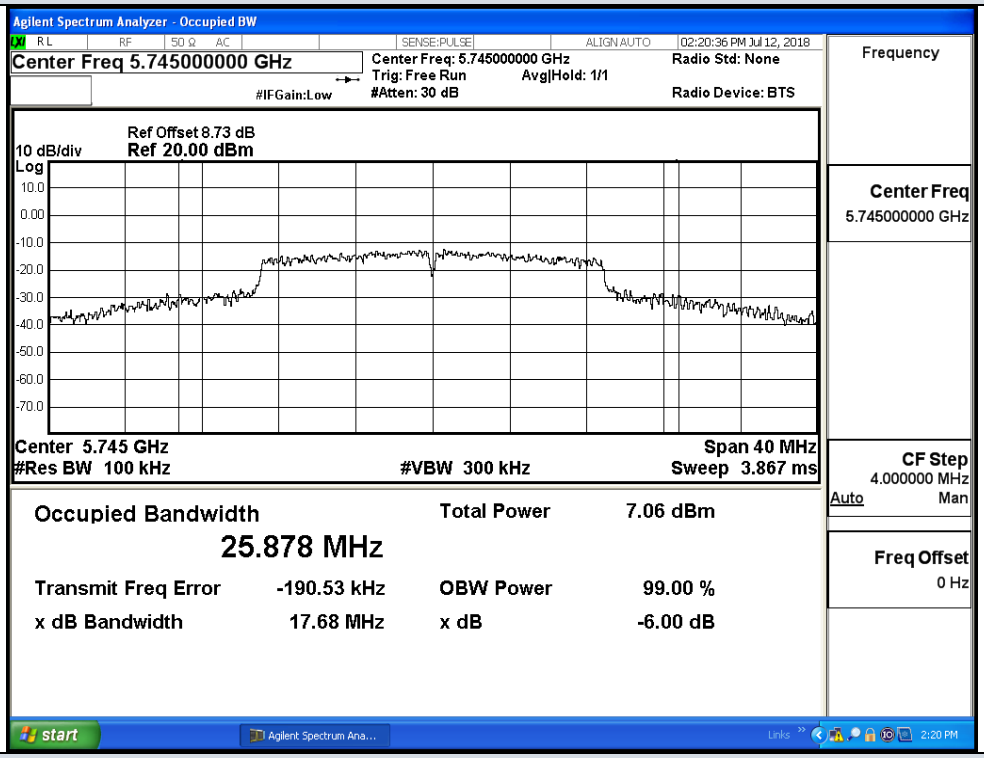


IEEE 802.11ac VHT20 / Channel 157/ 5785 MHz

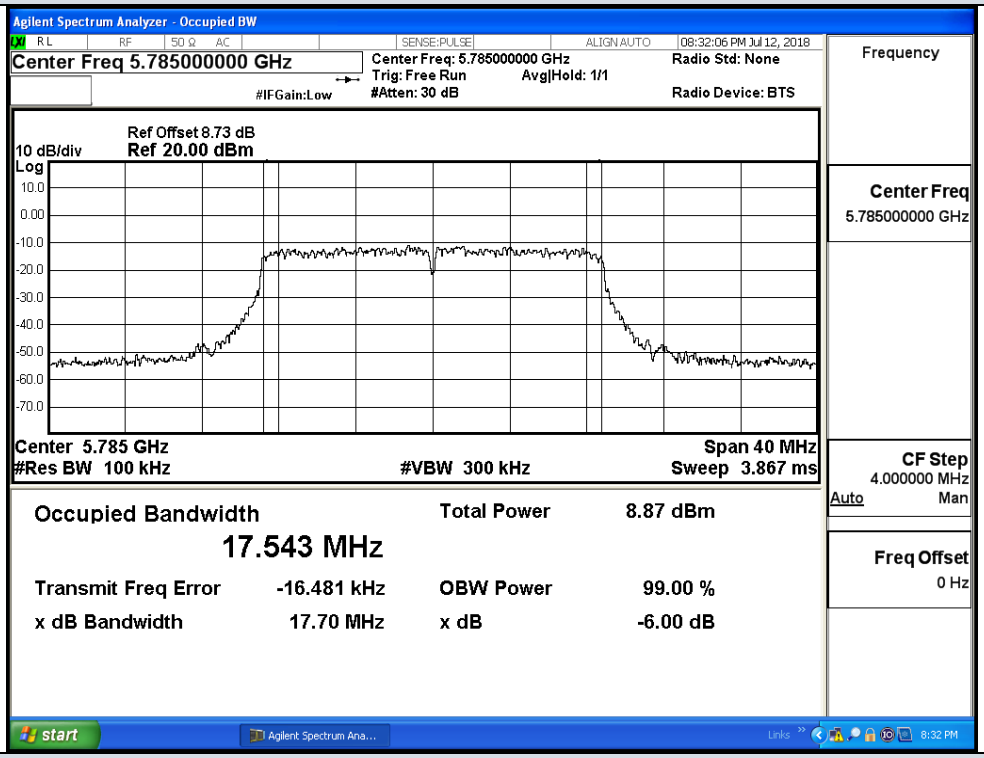


IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz

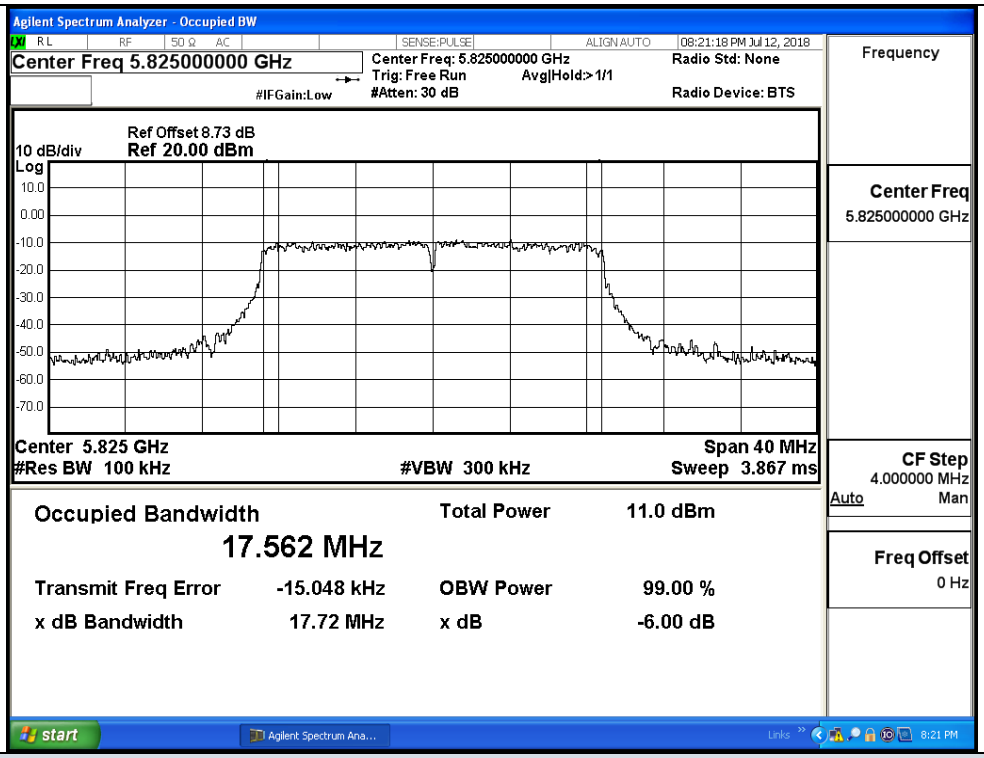
6dB Bandwidth_Ant1



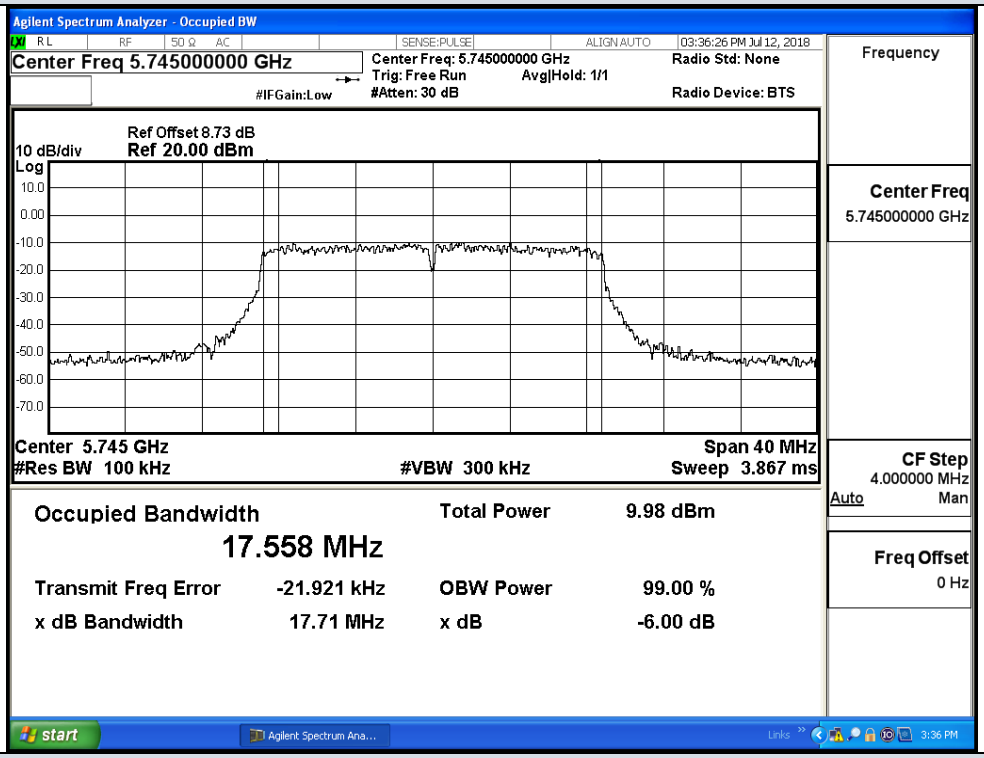
IEEE 802.11a / Channel 149 / 5745 MHz



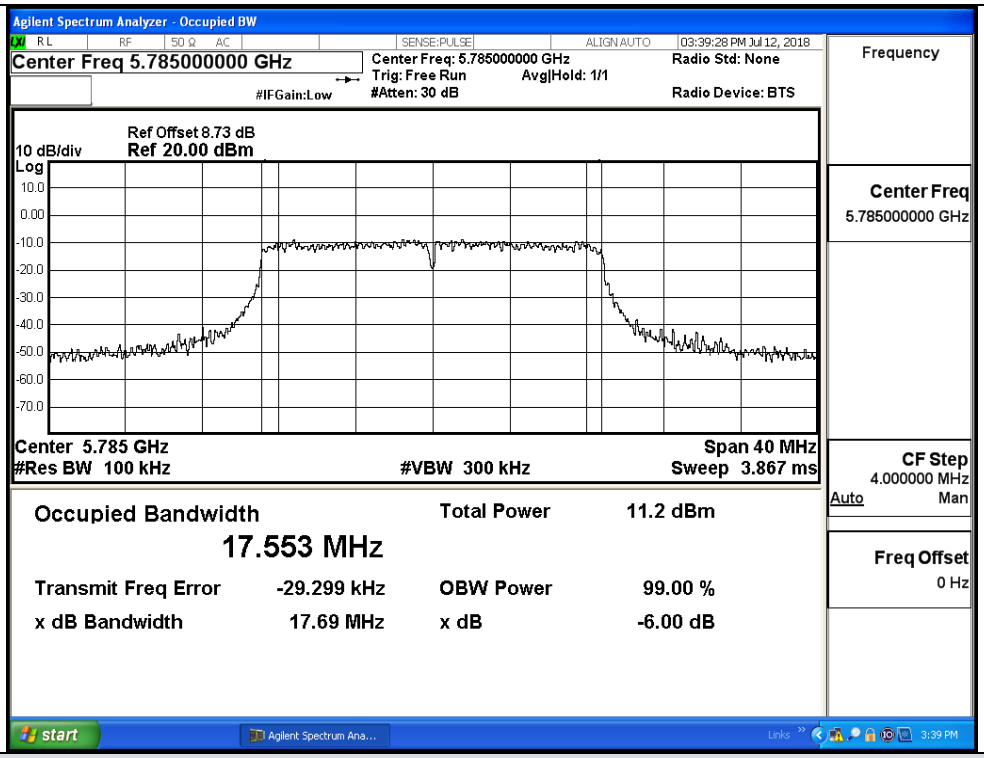
IEEE 802.11a / Channel 157 / 5785 MHz



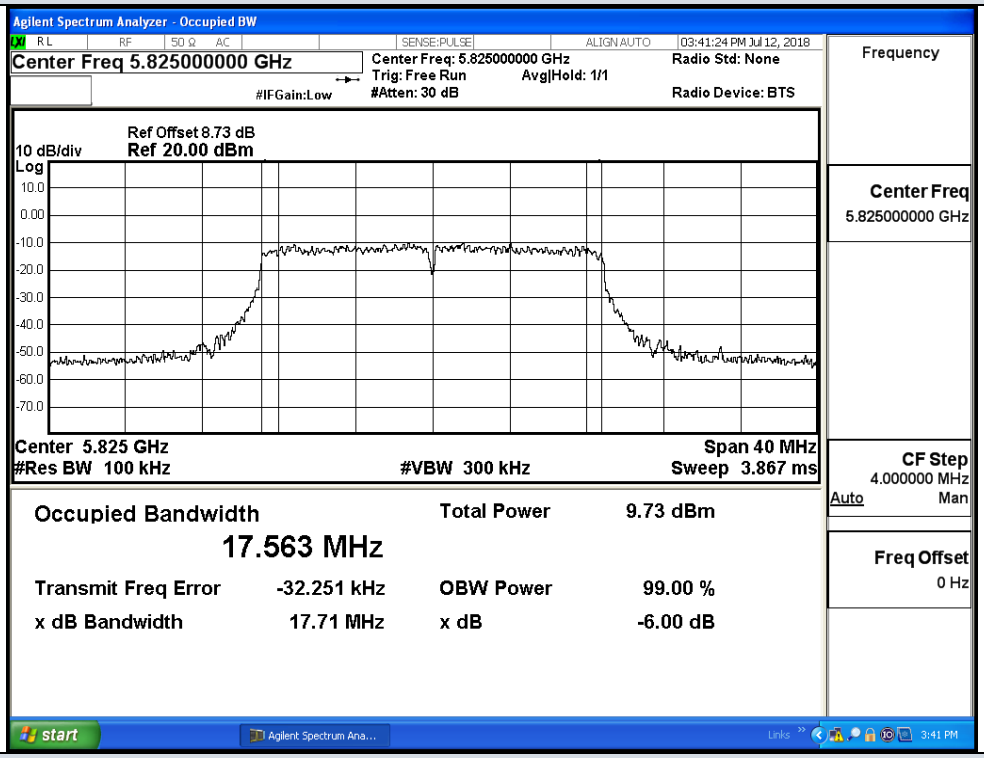
IEEE 802.11a / Channel 165 / 5825 MHz



IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz



IEEE 802.11ac VHT20 / Channel 157/ 5785 MHz



IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz

D.5 Undesirable Emissions Measurement

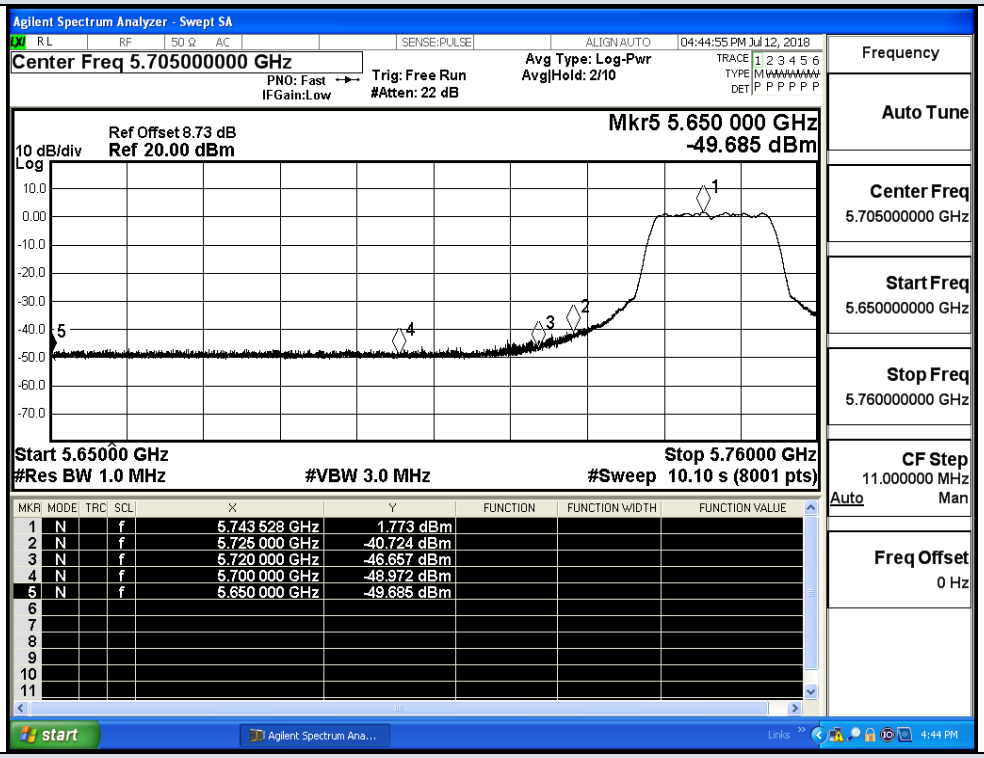
Antenna 0

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
IEEE 802.11a	149	5650.0	-49.685	2.00	-47.685	Peak	-27.0
		5700.0	-48.972	2.00	-46.972	Peak	10.0
		5720.0	-46.657	2.00	-44.657	Peak	15.6
		5725.0	-40.724	2.00	-38.724	Peak	27.0
	165	5850.0	-44.735	2.00	-42.735	Peak	27.0
		5855.0	-48.756	2.00	-46.756	Peak	15.6
		5875.0	-47.948	2.00	-45.948	Peak	10.0
		5925.0	-49.610	2.00	-47.610	Peak	-27.0
IEEE 802.11ac VHT20	149	5650.0	-49.672	2.00	-47.672	Peak	-27.0
		5700.0	-48.922	2.00	-46.922	Peak	10.0
		5720.0	-46.683	2.00	-44.683	Peak	15.6
		5725.0	-41.490	2.00	-39.490	Peak	27.0
	165	5850.0	-42.977	2.00	-40.977	Peak	27.0
		5855.0	-47.166	2.00	-45.166	Peak	15.6
		5875.0	-48.038	2.00	-46.038	Peak	10.0
		5925.0	-48.830	2.00	-46.830	Peak	-27.0

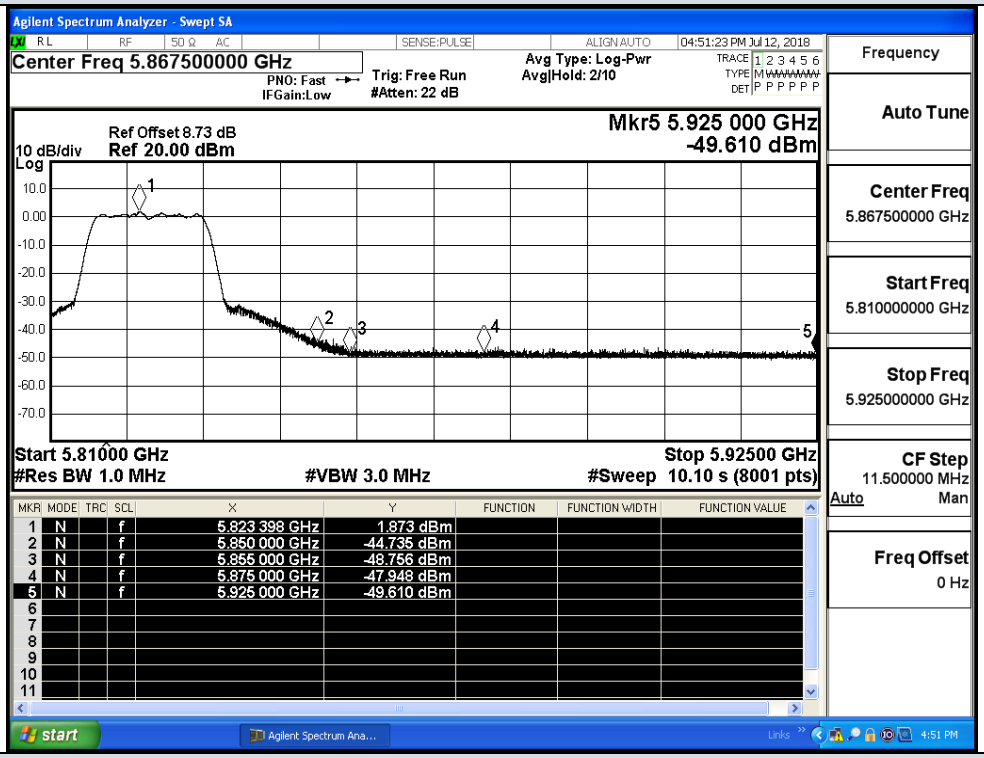
Antenna 1

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
IEEE 802.11a	149	5650.0	-48.355	2.00	-46.355	Peak	-27.0
		5700.0	-50.382	2.00	-48.382	Peak	10.0
		5720.0	-48.949	2.00	-46.949	Peak	15.6
		5725.0	-44.420	2.00	-42.420	Peak	27.0
	165	5850.0	-45.099	2.00	-43.099	Peak	27.0
		5855.0	-46.578	2.00	-44.578	Peak	15.6
		5875.0	-49.022	2.00	-47.022	Peak	10.0
		5925.0	-49.747	2.00	-47.747	Peak	-27.0
IEEE 802.11ac VHT20	149	5650.0	-49.090	2.00	-47.090	Peak	-27.0
		5700.0	-49.745	2.00	-47.745	Peak	10.0
		5720.0	-48.296	2.00	-46.296	Peak	15.6
		5725.0	-44.320	2.00	-42.320	Peak	27.0
	165	5850.0	-45.882	2.00	-43.882	Peak	27.0
		5855.0	-49.030	2.00	-47.030	Peak	15.6
		5875.0	-49.369	2.00	-47.369	Peak	10.0
		5925.0	-49.082	2.00	-47.082	Peak	-27.0

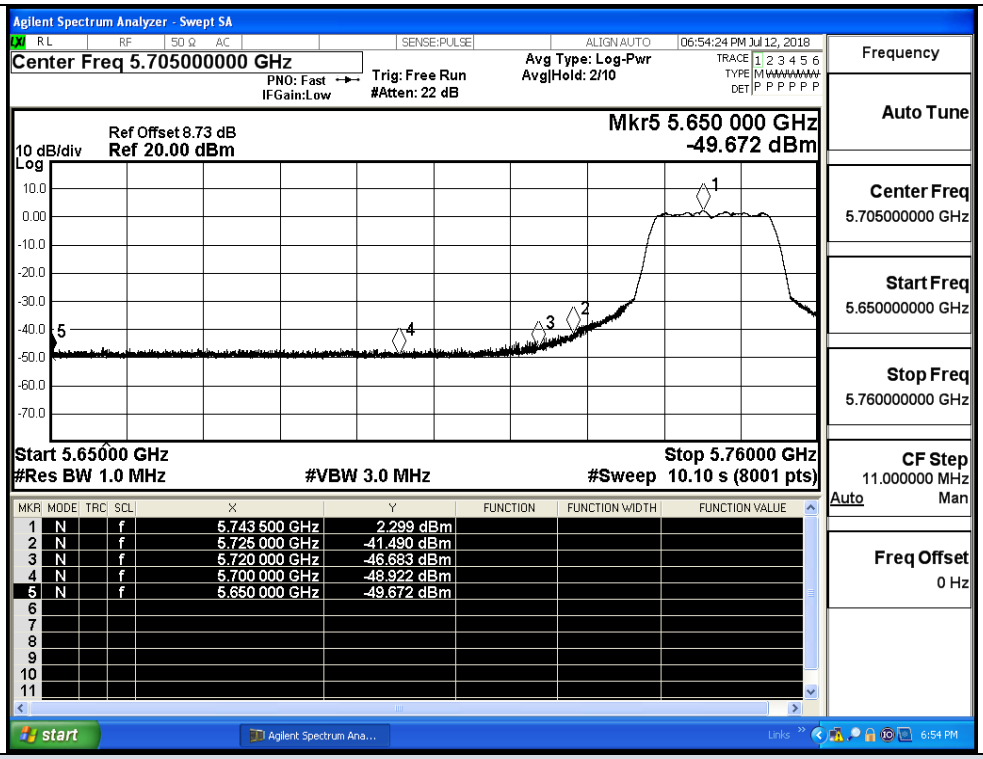
Undesirable Emissions Measurement_Ant0



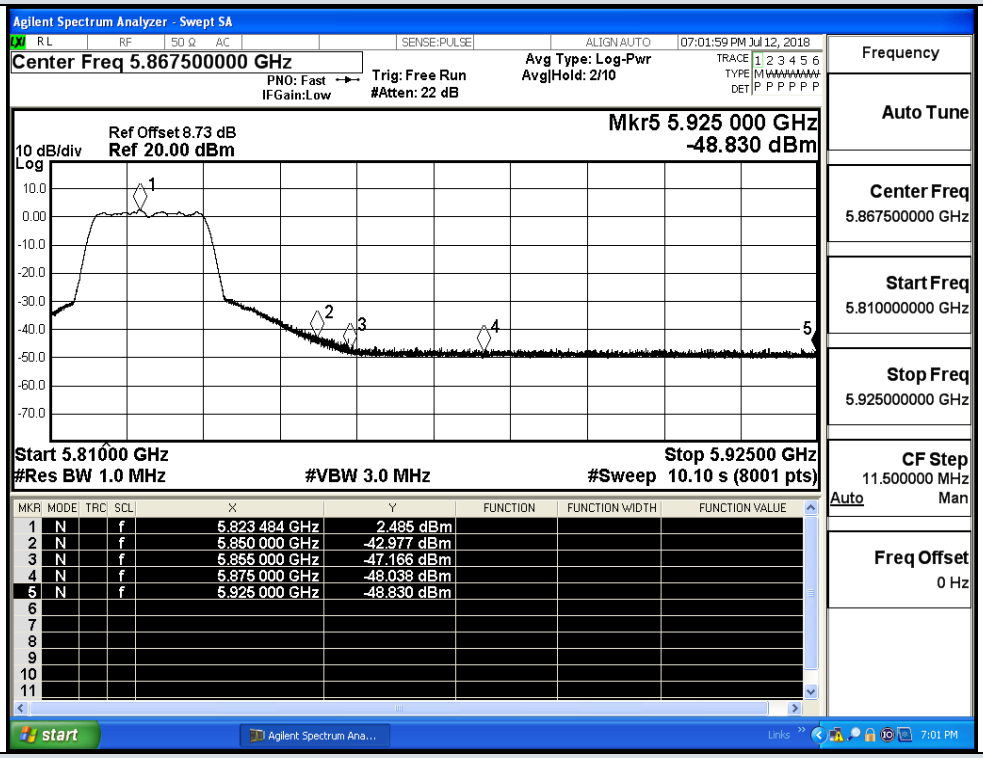
IEEE 802.11a / Channel 149 / 5745 MHz / Peak



IEEE 802.11a / Channel 165 / 5825 MHz / Peak

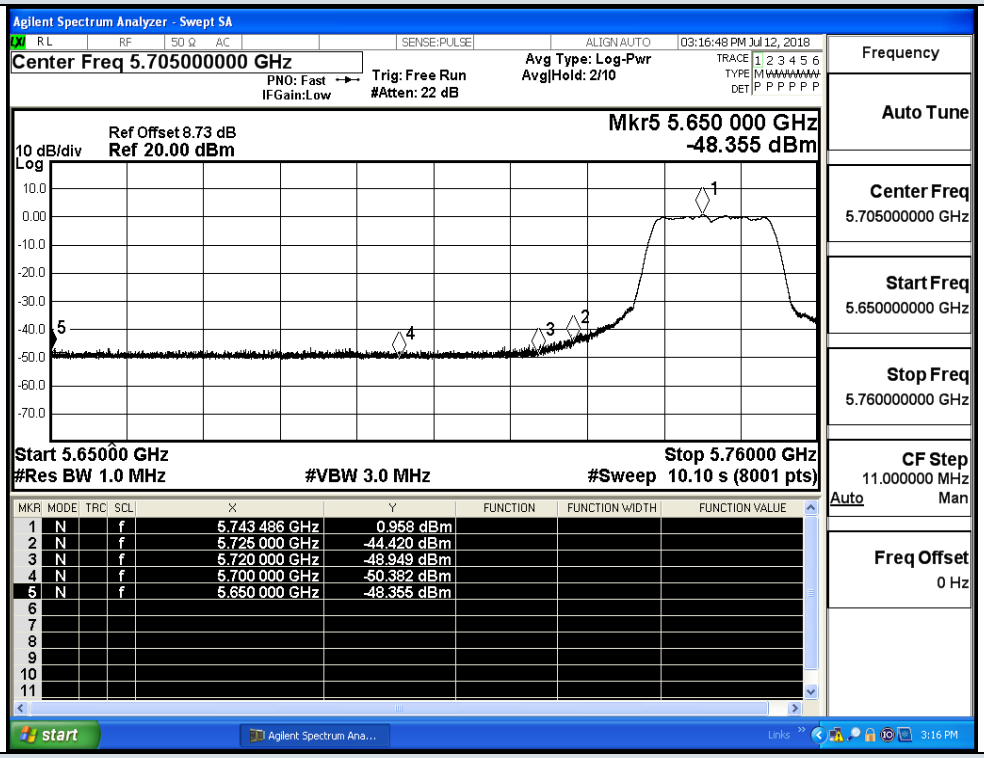


IEEE 802.11ac VHT20 / Channel 149 / 5745 MHz / Peak

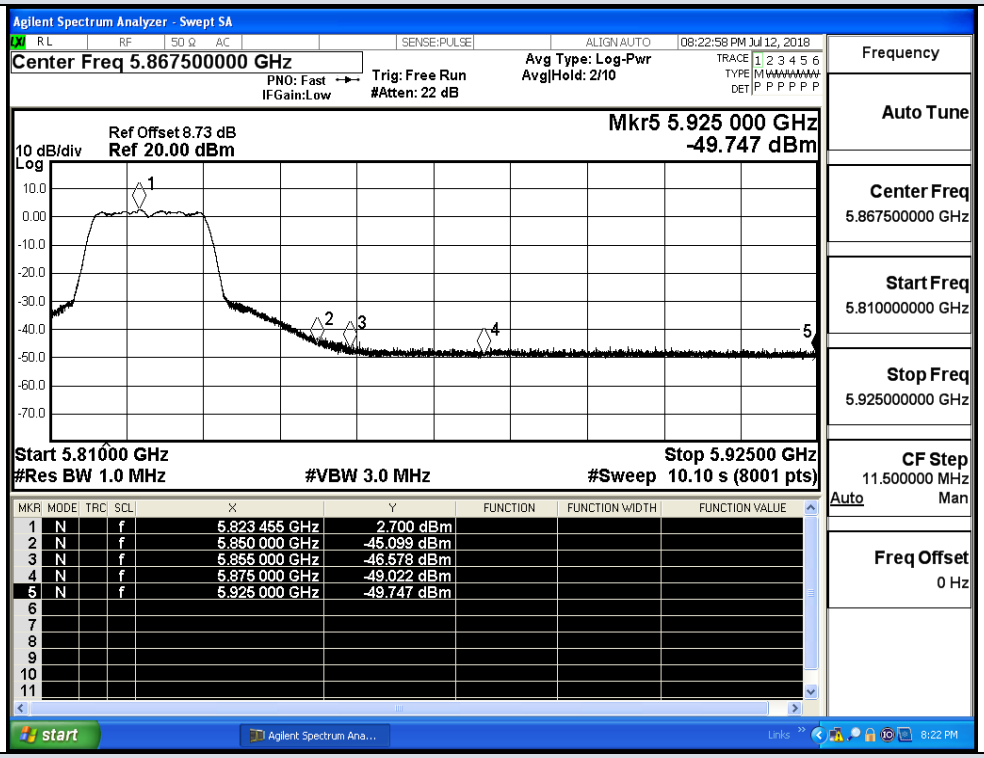


IEEE 802.11ac VHT20 / Channel 165 / 5825 MHz / Peak

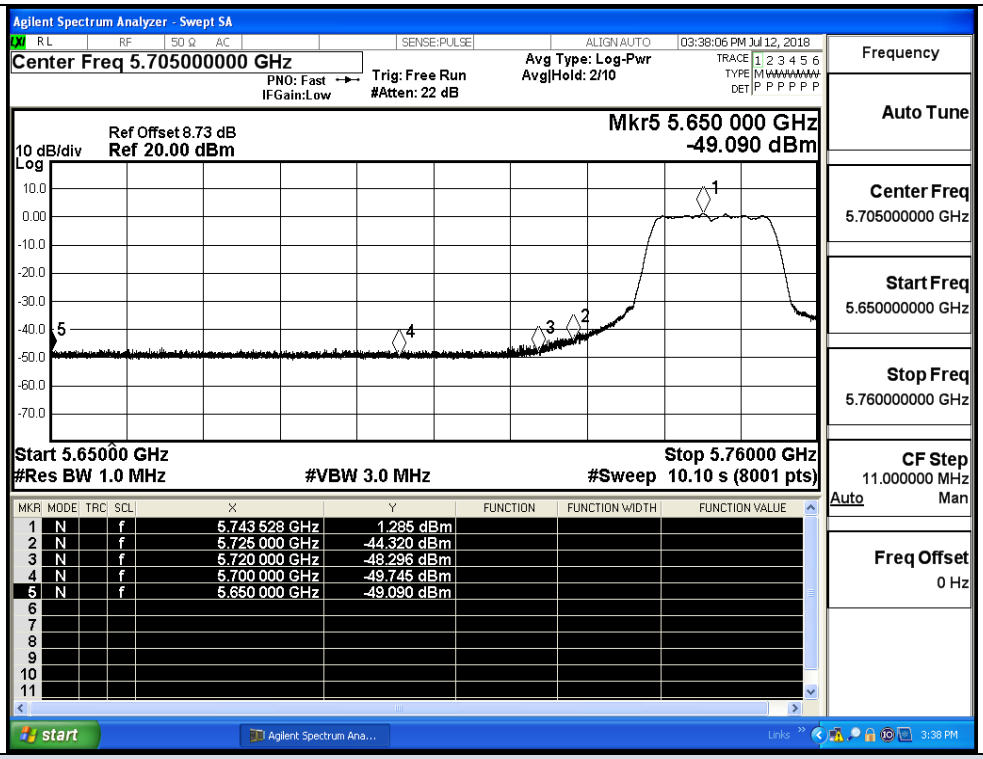
Undesirable Emissions Measurement_Ant1



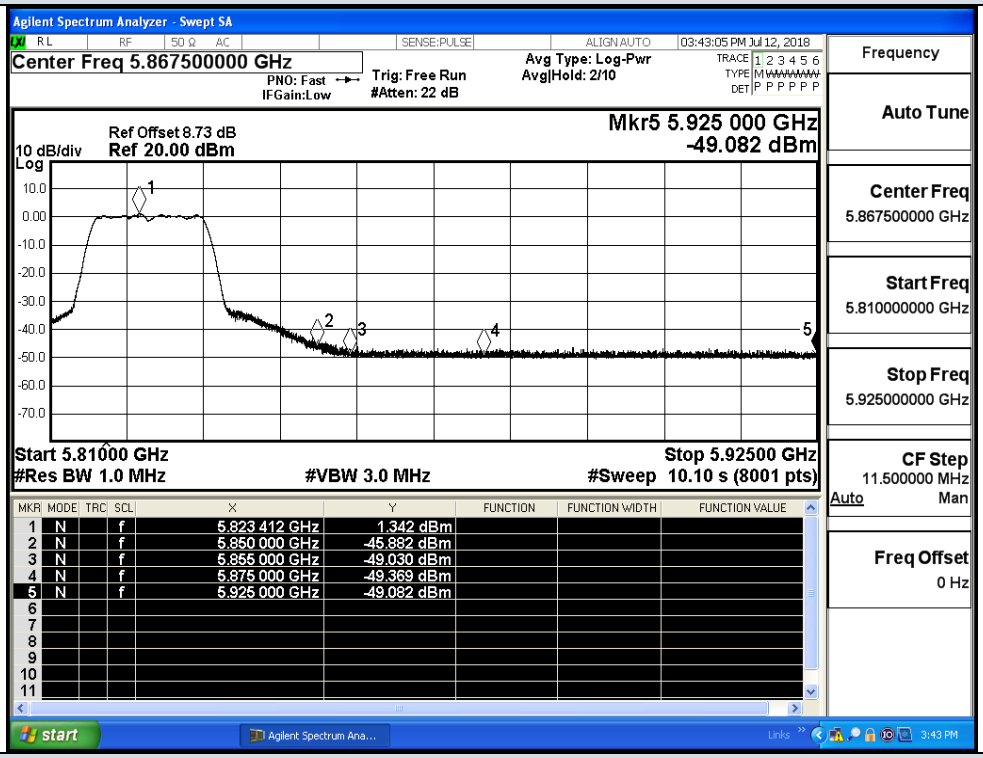
IEEE 802.11a / Channel 149 / 5745 MHz / Peak



IEEE 802.11a / Channel 165 / 5825 MHz / Peak



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



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