

Appendix C

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: ETH Wi-Fi Bridge

Trade Mark: N/A

Test Model: ALXB10

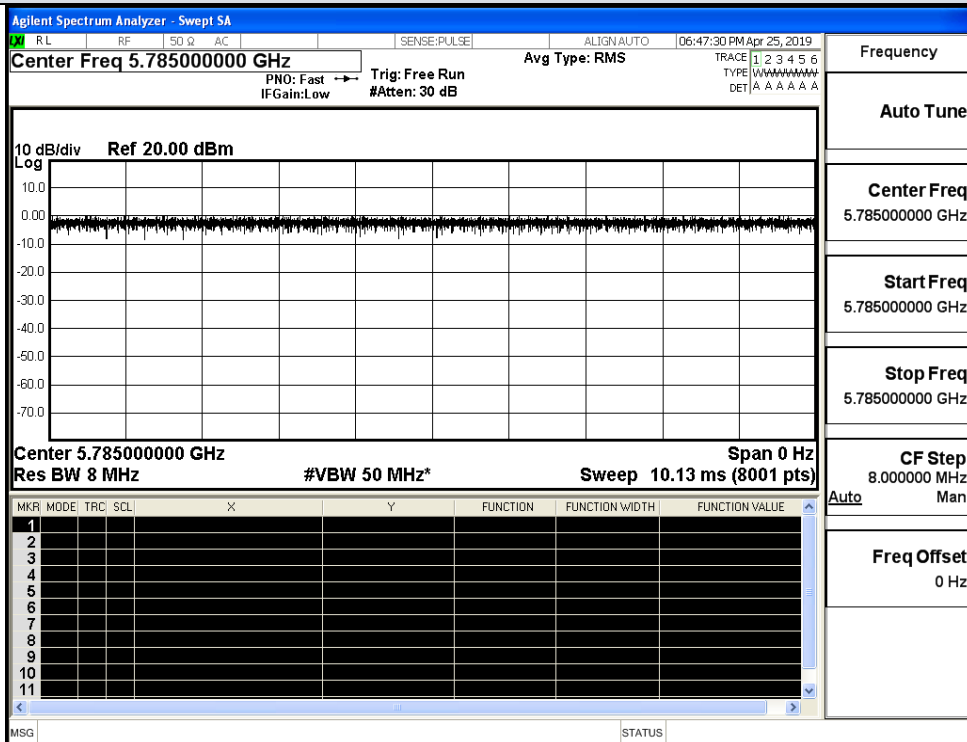
Environmental Conditions

Temperature:	24.6 ° C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	SCENT HU
Supervised by:	Tom.Liu

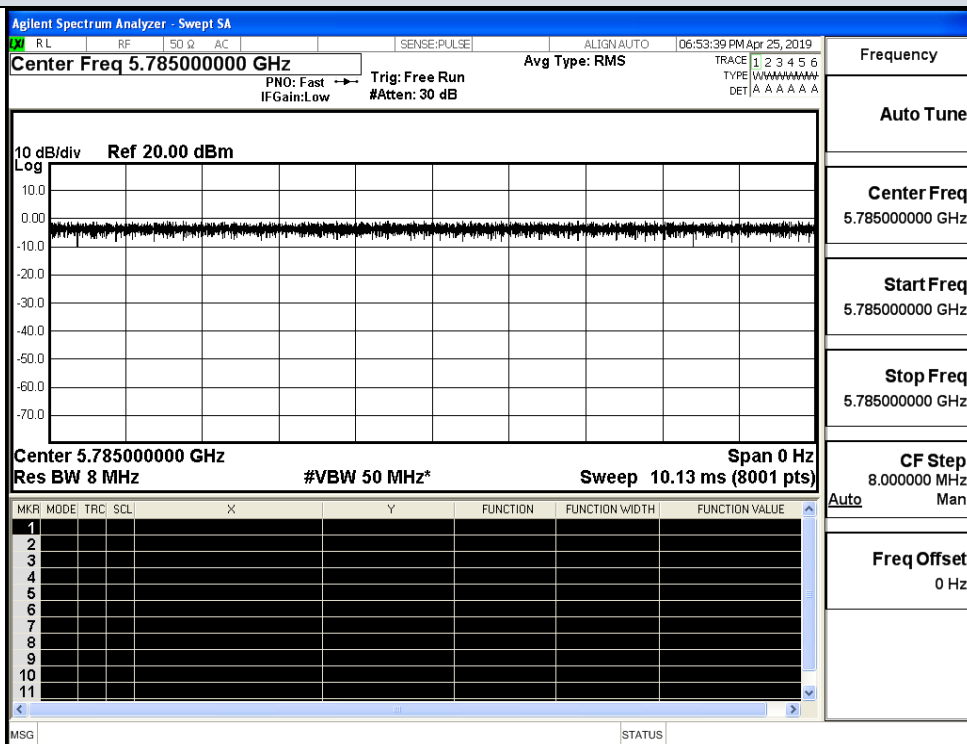
C.1 Duty Cycle

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 802.11n HT20	5785	100	0.00	0.01

On Time and Duty Cycle



IEEE 802.11a



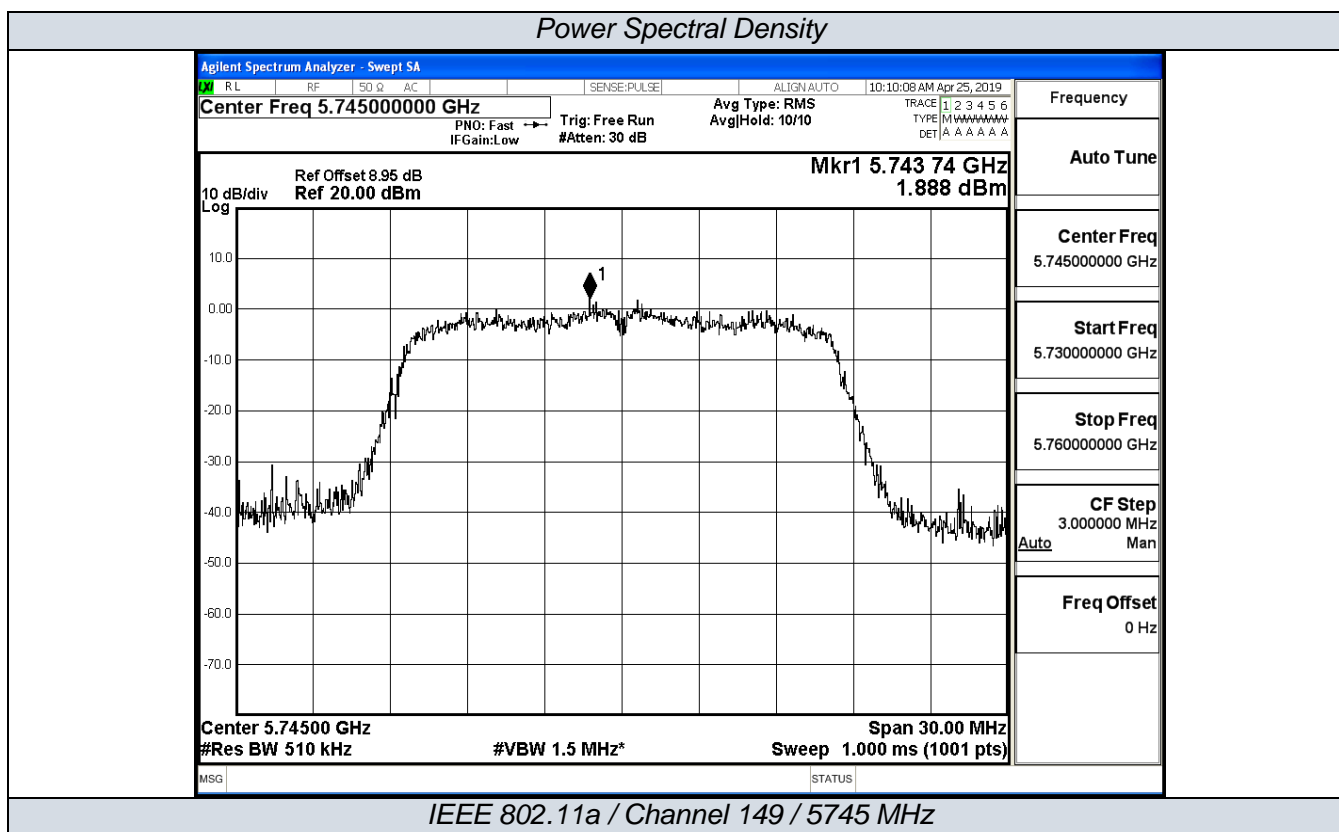
IEEE 802.11n HT20

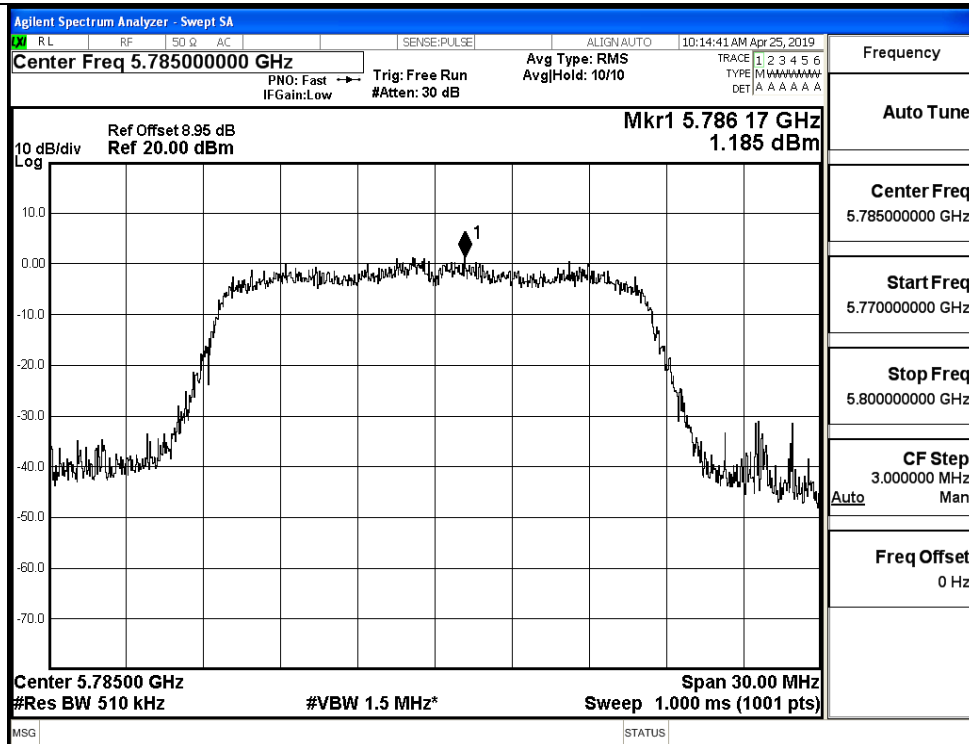
C.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)
IEEE 802.11a	149	5745	12.62	0	12.62	30
	157	5785	12.46	0	12.46	
	165	5825	12.36	0	12.36	
IEEE 802.11n HT20	149	5745	12.64	0	12.64	30
	157	5785	12.45	0	12.45	
	165	5825	12.32	0	12.32	

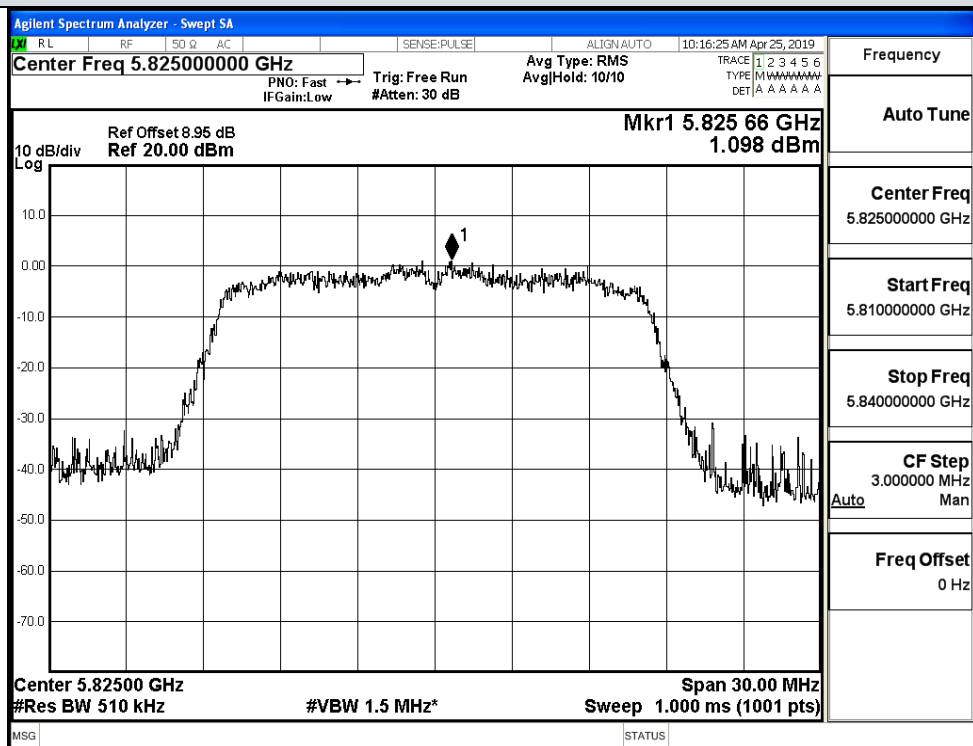
C.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)
IEEE 802.11a	149	5745	1.888	0	2.218	4.106	30
	157	5785	1.185	0	2.218	3.403	
	165	5825	1.098	0	2.218	3.316	
IEEE 802.11n HT20	149	5745	2.160	0	2.218	4.378	30
	157	5785	1.465	0	2.218	3.683	
	165	5825	1.201	0	2.218	3.419	



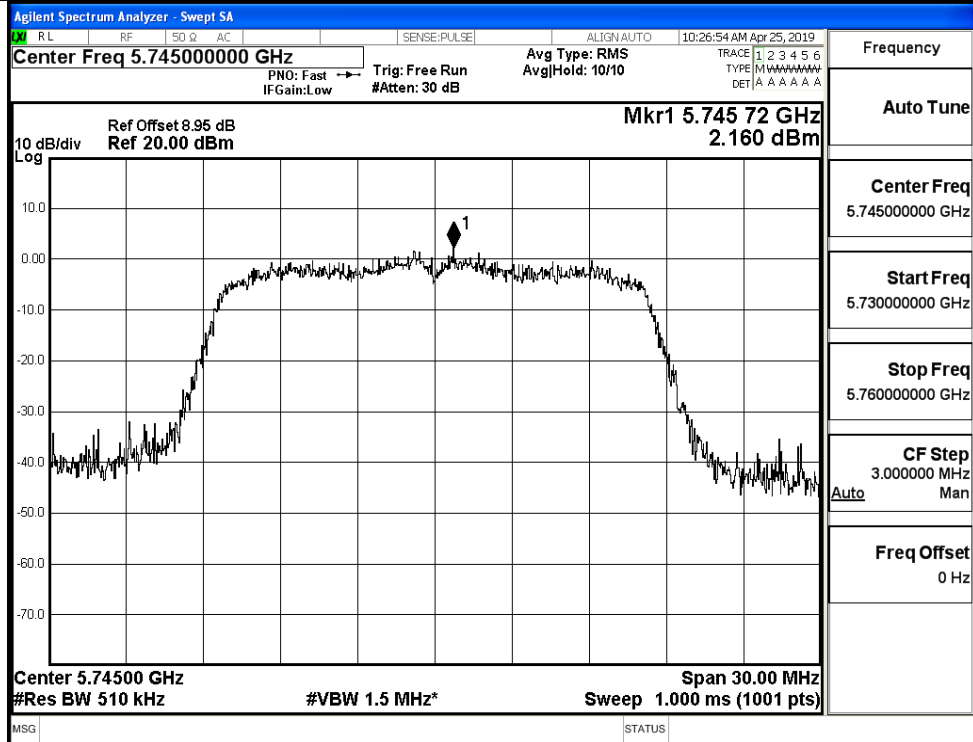


IEEE 802.11a / Channel 157 / 5785 MHz

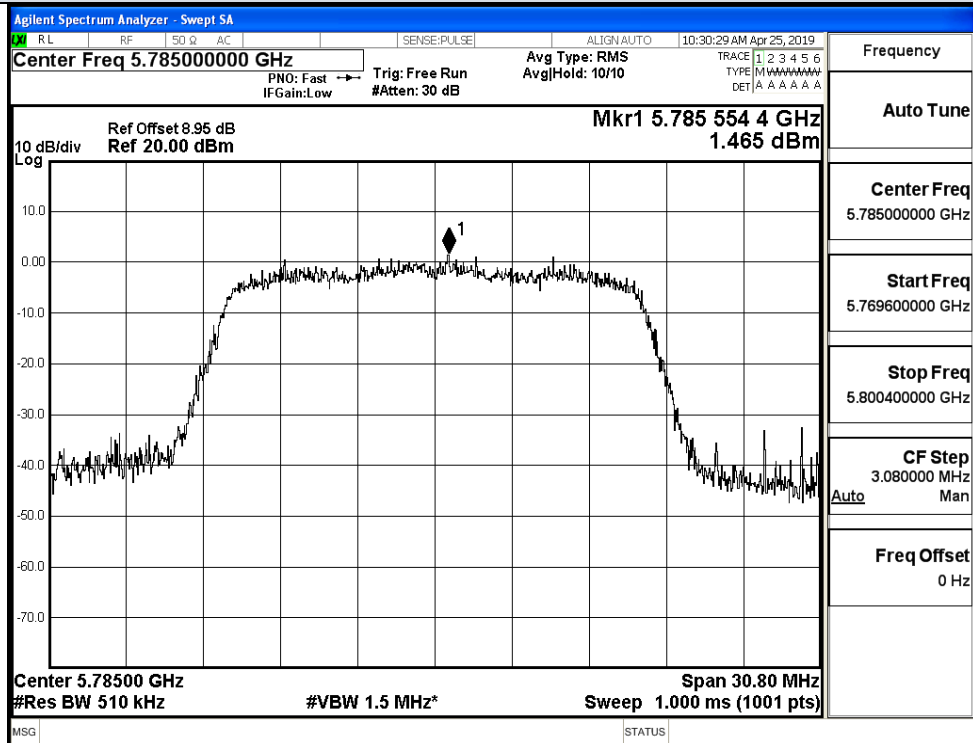


IEEE 802.11a / Channel 165 / 5825 MHz

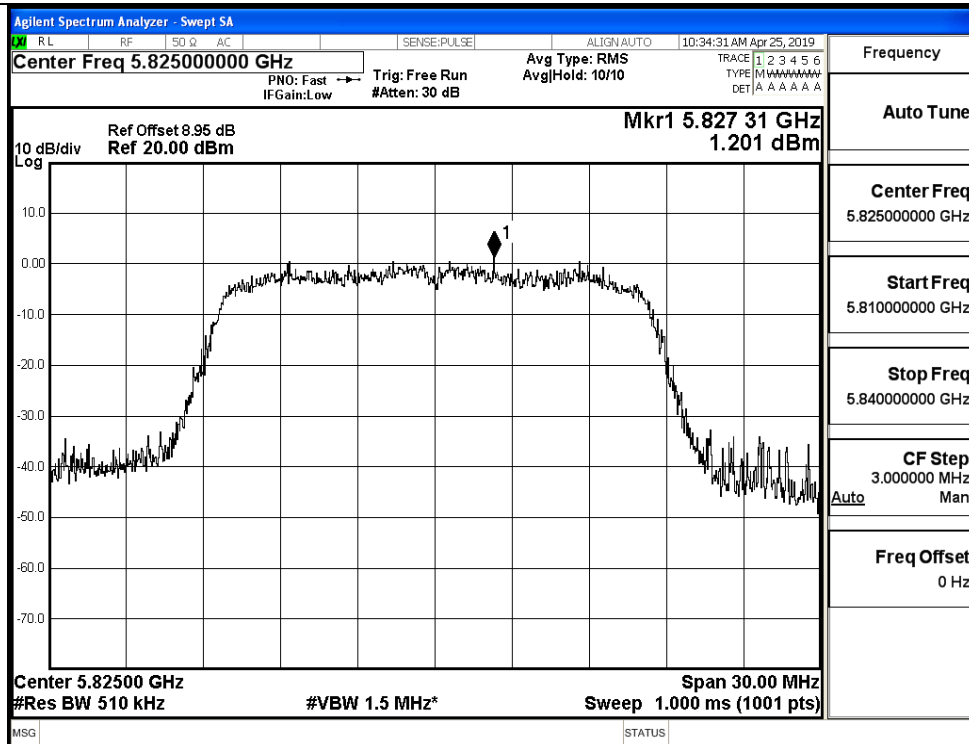
Power Spectral Density



IEEE 802.11n HT20 / Channel 149 / 5745 MHz



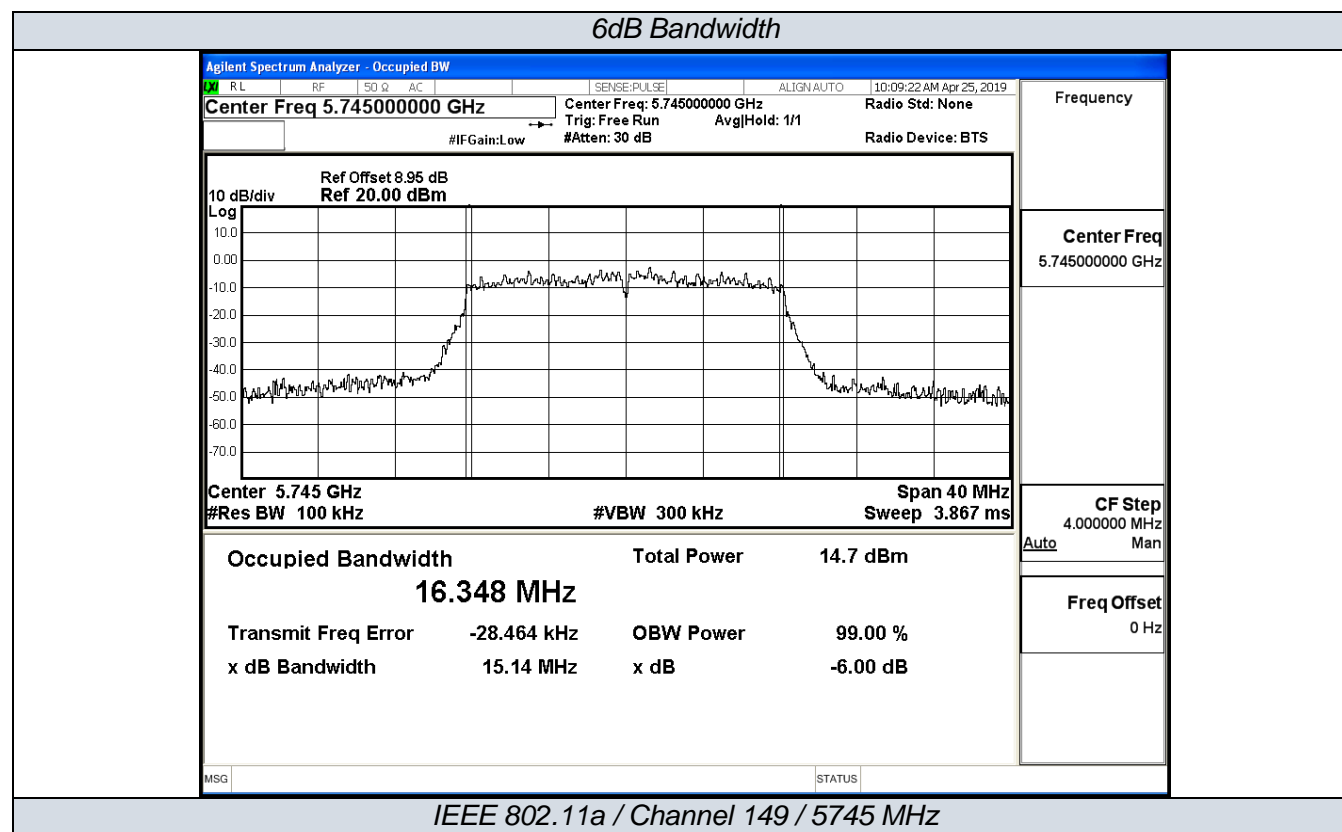
IEEE 802.11n HT20 / Channel 157 / 5785 MHz

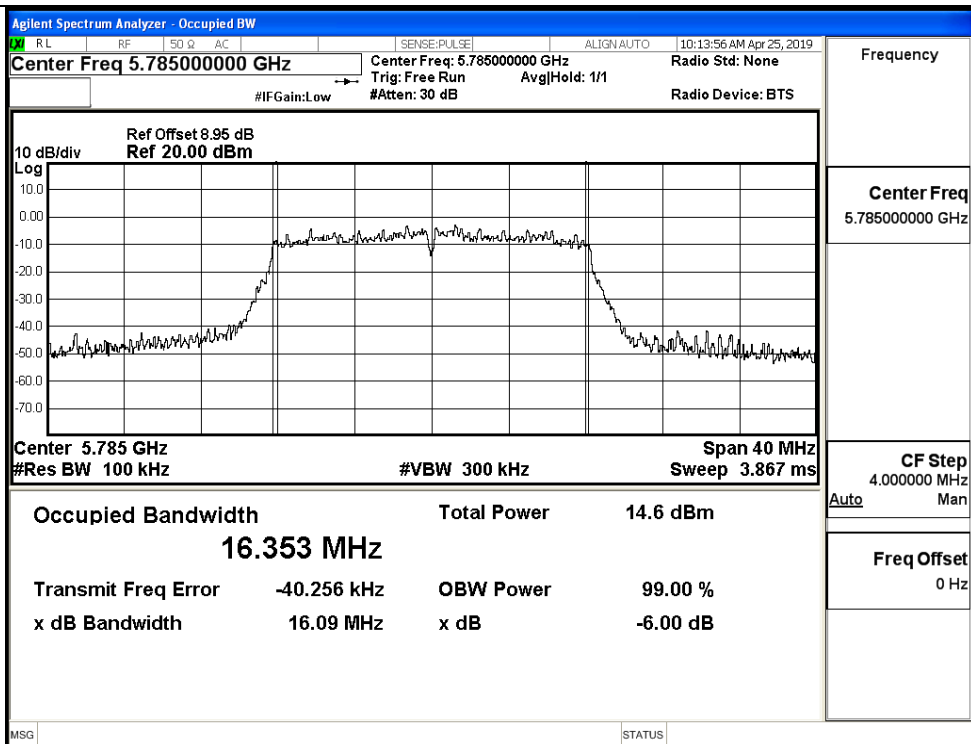


IEEE 802.11n HT20 / Channel 165 / 5825 MHz

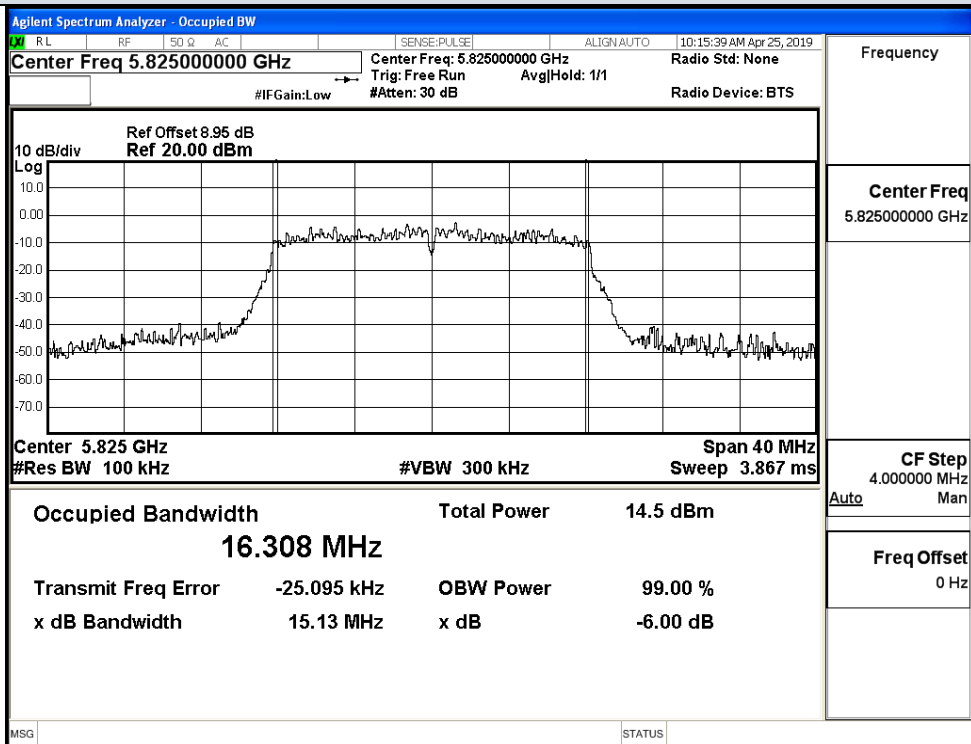
C.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
IEEE 802.11a	149	5745	15.140	≥ 0.5
	157	5785	15.090	
	165	5825	15.130	
IEEE 802.11n HT20	149	5745	16.020	≥ 0.5
	157	5785	15.400	
	165	5825	15.410	



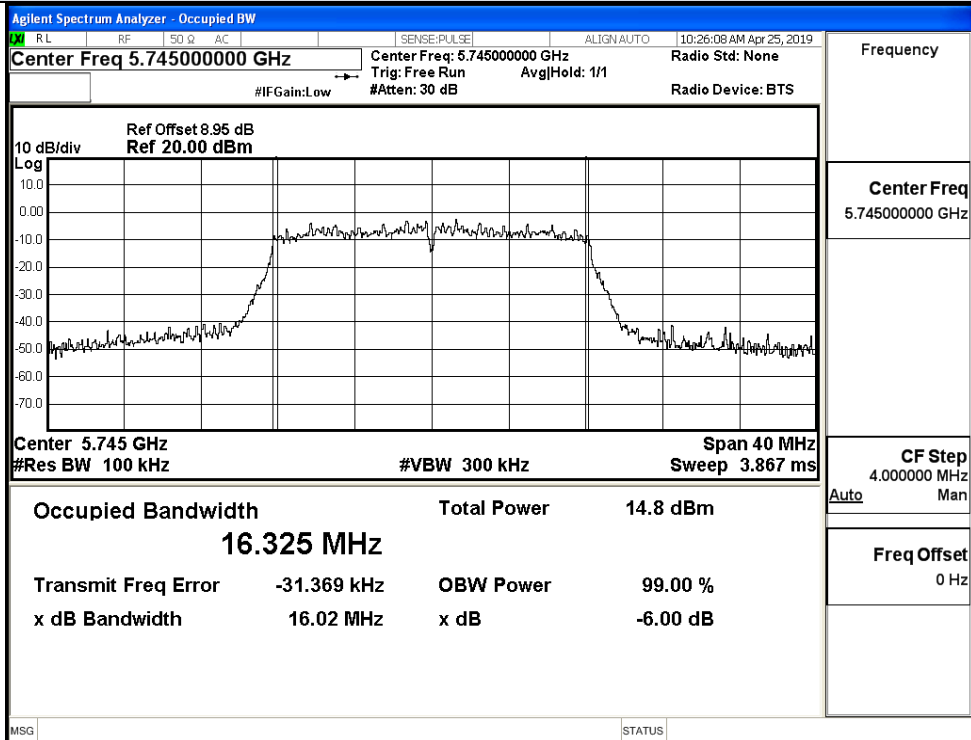


IEEE 802.11a / Channel 157 / 5785 MHz

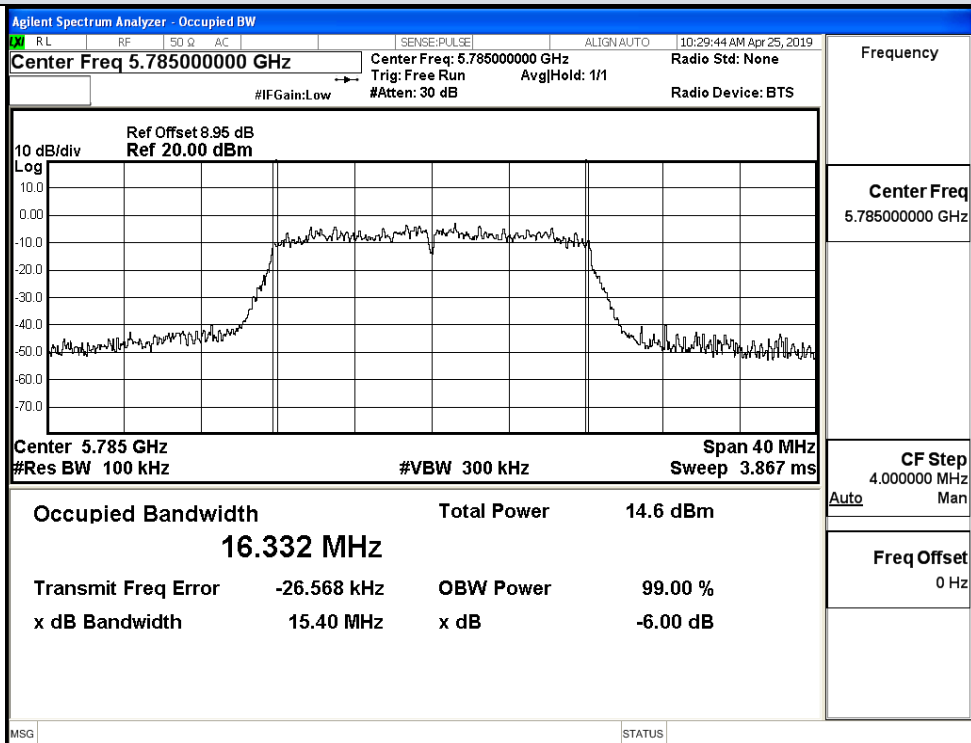


IEEE 802.11a / Channel 165 / 5825 MHz

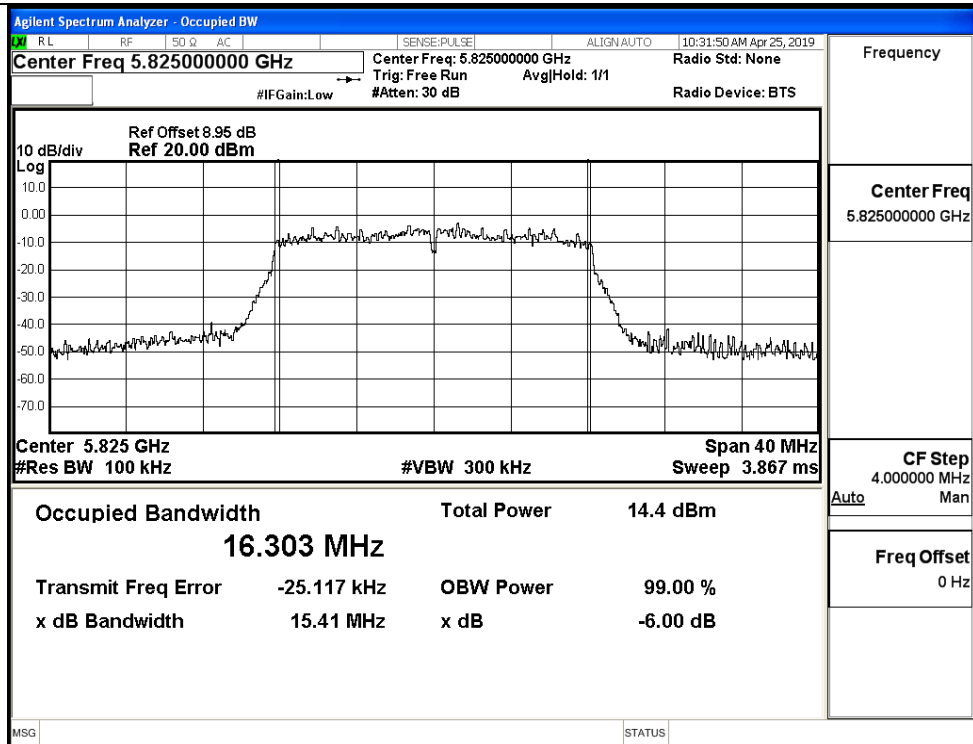
6dB Bandwidth



IEEE 802.11n HT20 / Channel 149 / 5745 MHz



IEEE 802.11n HT20 / Channel 157 / 5785 MHz

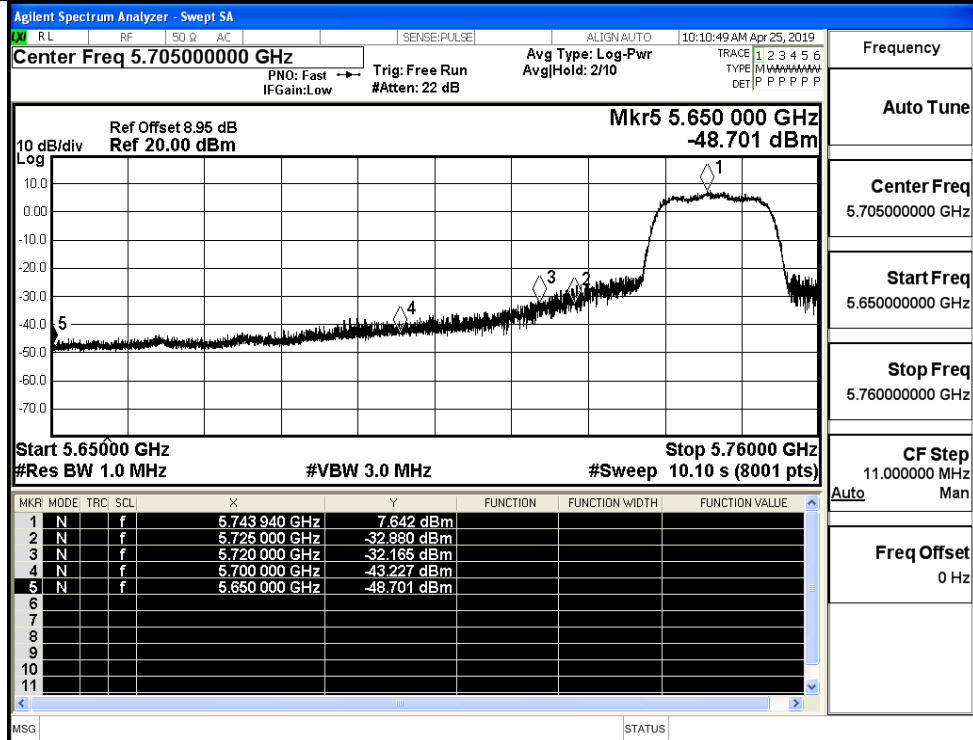


IEEE 802.11n HT20 / Channel 165 / 5825 MHz

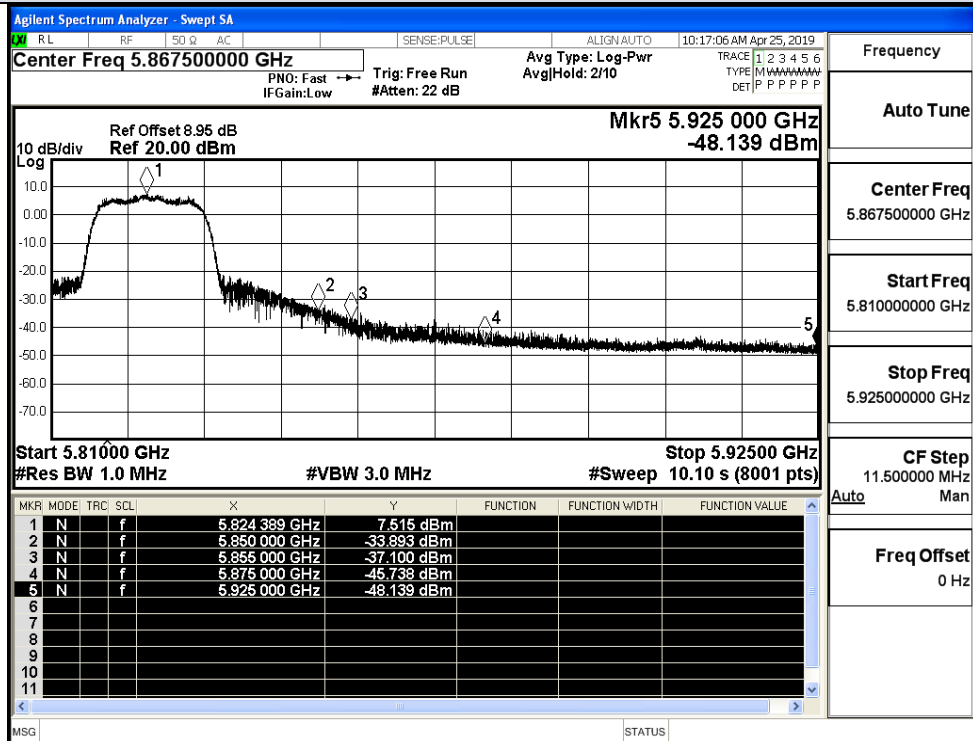
C.5 Undesirable Emissions Measurement

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
IEEE 802.11a	149	5650.0	-48.701	5.00	-43.701	Peak	-27.0
		5700.0	-43.227	5.00	-38.227	Peak	10.0
		5720.0	-32.165	5.00	-27.165	Peak	15.6
		5725.0	-32.880	5.00	-27.880	Peak	27.0
	165	5850.0	-33.893	5.00	-28.893	Peak	27.0
		5855.0	-37.100	5.00	-32.100	Peak	15.6
		5875.0	-35.738	5.00	-30.738	Peak	10.0
		5925.0	-48.139	5.00	-43.139	Peak	-27.0
IEEE 802.11n HT20	149	5650.0	-31.321	5.00	-26.321	Peak	-27.0
		5700.0	-32.869	5.00	-27.869	Peak	10.0
		5720.0	-41.648	5.00	-36.648	Peak	15.6
		5725.0	-48.200	5.00	-43.200	Peak	27.0
	165	5850.0	-35.642	5.00	-30.642	Peak	27.0
		5855.0	-38.526	5.00	-33.526	Peak	15.6
		5875.0	-45.575	5.00	-40.575	Peak	10.0
		5925.0	-48.516	5.00	-43.516	Peak	-27.0

Undesirable Emissions Measurement

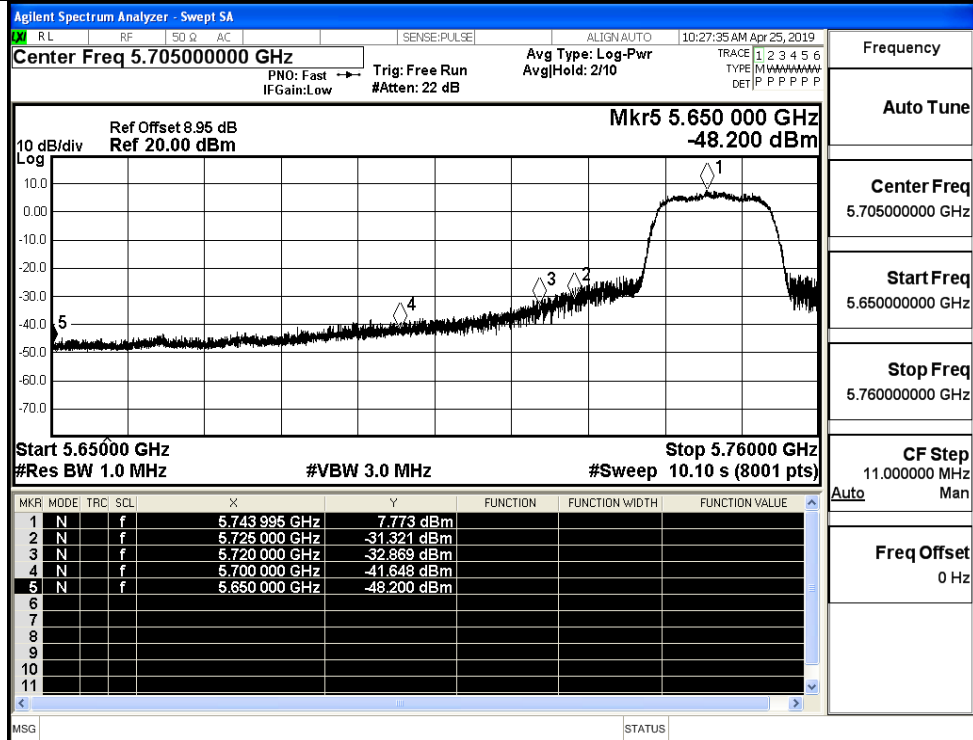


IEEE 802.11a / Channel 149 / 5745 MHz / Peak

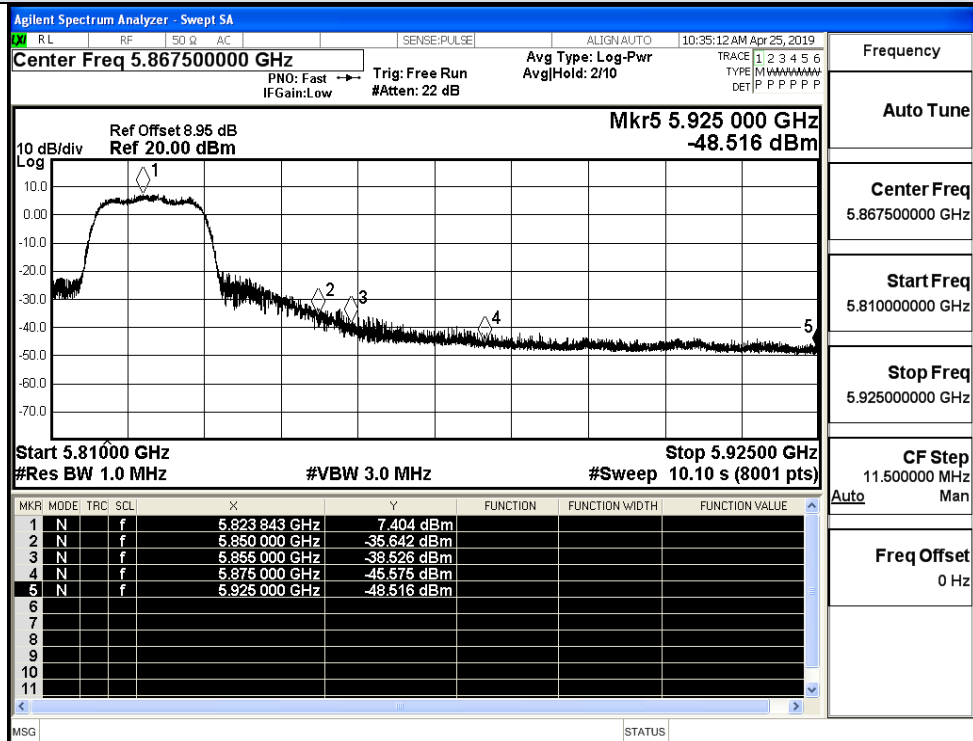


IEEE 802.11a / Channel 165 / 5825 MHz / Peak

Undesirable Emissions Measurement



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



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