Appendix C

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: Panda Wireless AC600 Dual Band Wireless AC USB Adapter With 5dBi Antenna

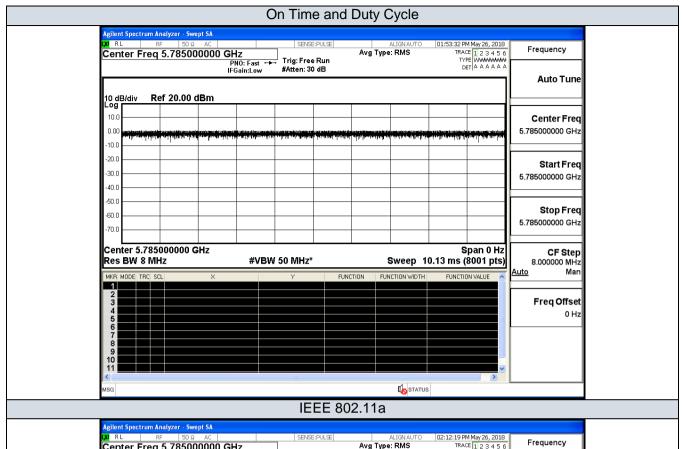
> **Trade Mark: Panda Wireless Test Model: PAU0B**

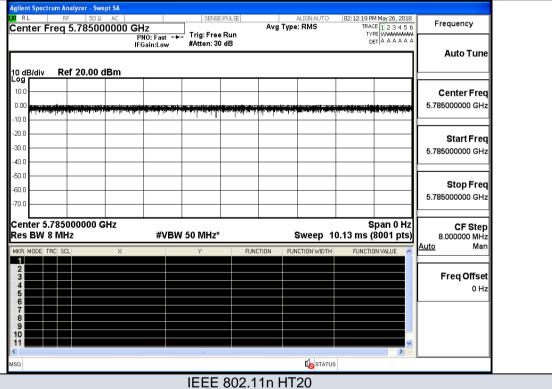
Environmental Conditions

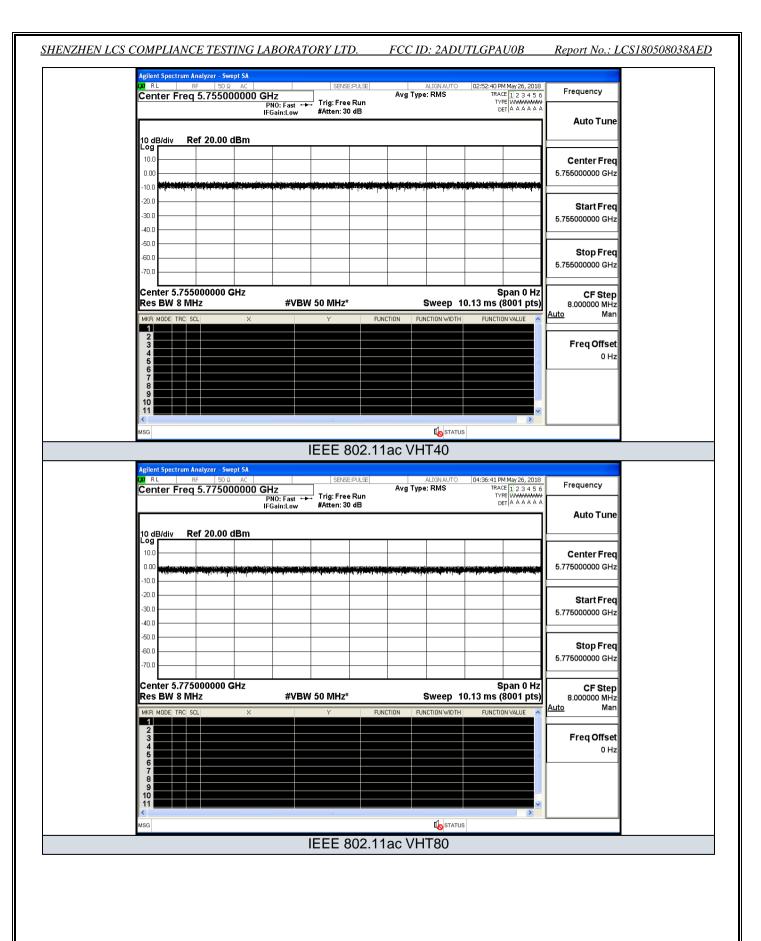
Temperature:	24.6 ° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom Liu
Supervised by:	Jayden Zhuo

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
IEEE 802.11n HT10	5755	100	0.00	0.01
IEEE 802.11ac VHT20	5785	100	0.00	0.01
IEEE 802.11ac VHT40	5755	100	0.00	0.01
IEEE 802.11ac VHT80	5775	100	0.00	0.01





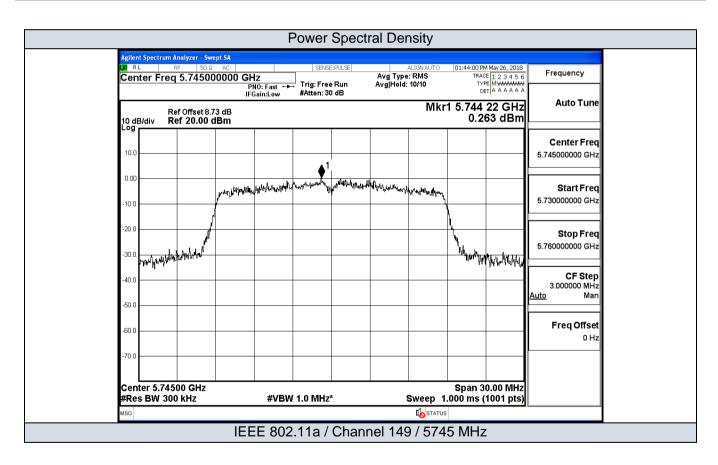


C.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	
	149	5745	13.83	0	13.83		
IEEE 802.11a	157	5785	14.20	0	14.20	30	
	165	5825	14.50	0	14.50		
	149	5745	13.93	0	13.93		
IEEE 802.11n HT20	157	5785	14.21	0	14.21	30	
	165	5825	14.49	0	14.49		
IEEE 802.11n HT40	151	5755	14.09	0	14.09	30	
	159	5795	13.55	0	13.55	30	
	149	5745	12.81	0	12.81		
IEEE 802.11ac VHT20	157	5785	13.26	0	13.26	30	
	165	5825	13.71	0	13.71		
IEEE 802.11ac VHT40	151	5755	13.51	0	13.51	30	
	159	5795	14.17	0	14.17	30	
IEEE 802.11ac VHT80	155	5775	10.52	0	10.52	30	

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)
	149	5745	0.263	0	2.218	2.481	
IEEE 802.11a	157	5785	0.485	0	2.218	2.703	30
	165	5825	0.200	0	2.218	2.418	
	149	5745	-0.096	0	2.218	2.122	
IEEE 802.11n HT20	157	5785	0.332	0	2.218	2.550	30
	165	5825	0.113	0	2.218	2.331	
IEEE 802.11n HT40	151	5755	-3.328	0	2.218	-1.110	30
1EEE 802.1111 H140	159	5795	-4.533	0	2.218	-2.315	30
	149	5745	-1.829	0	2.218	0.389	30
IEEE 802.11ac VHT20	157	5785	-0.967	0	2.218	1.251	30
	165	5825	-0.773	0	2.218	1.445	
IEEE 802.11ac VHT40	151	5755	-4.800	0	2.218	-2.582	30
	159	5795	-4.969	0	2.218	-2.751	
IEEE 802.11ac VHT80	155	5775	-10.892	0	2.218	-8.674	30



#VBW 1.0 MHz*

-50 O

-60.0

-70.0

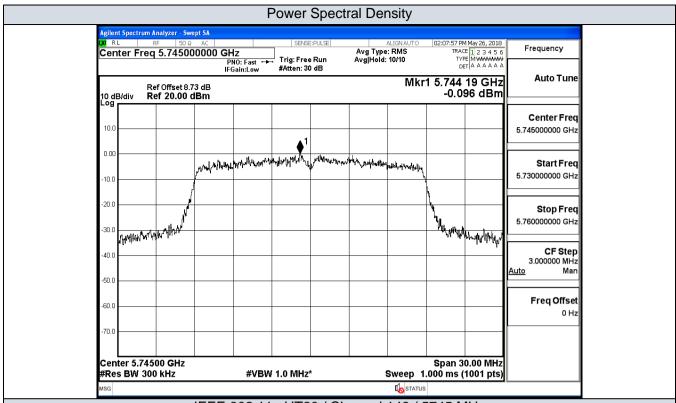
Center 5.82500 GHz #Res BW 300 kHz <u>Auto</u>

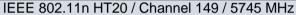
Span 30.00 MHz Sweep 1.000 ms (1001 pts)

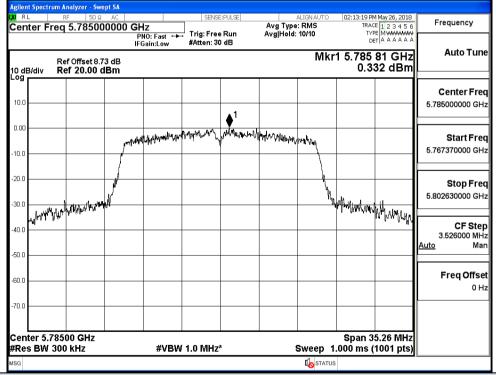
STATUS

Freq Offset

0 Hz

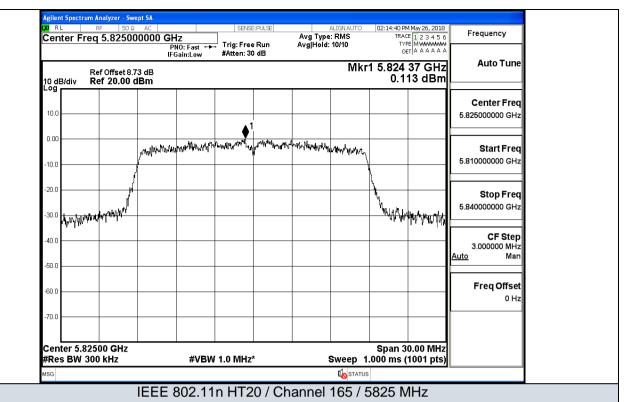


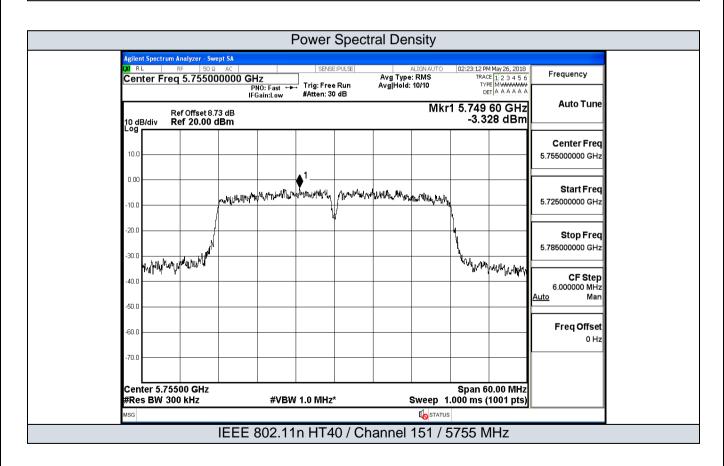


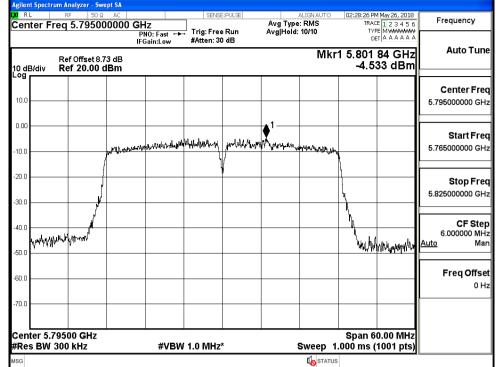


IEEE 802.11n HT20 / Channel 157 / 5785 MHz

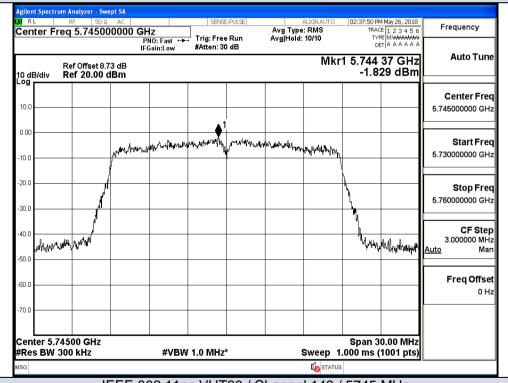




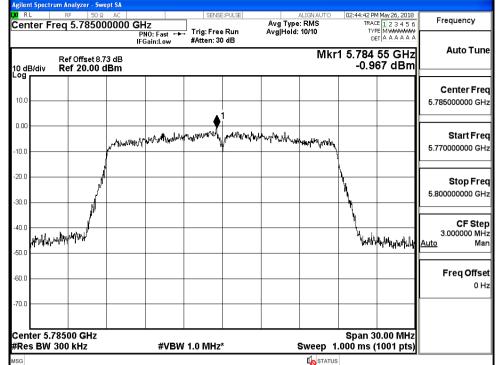




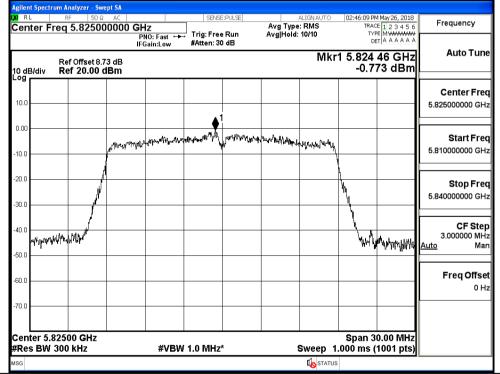
IEEE 802.11n HT40 / Channel 159 / 5795 MHz



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

#VBW 1.0 MHz*

Span 60.00 MHz Sweep 1.000 ms (1001 pts)

STATUS

Freq Offset

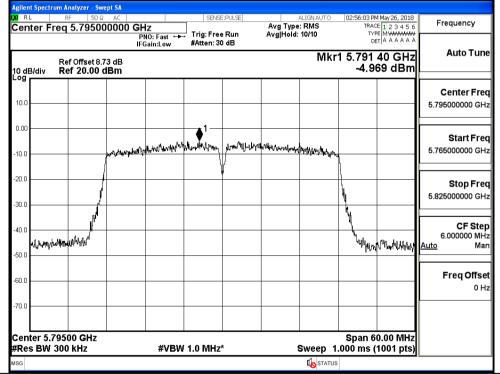
0 Hz

-50.0

-60.0

-70.0

Center 5.75500 GHz #Res BW 300 kHz



#VBW 1.0 MHz*

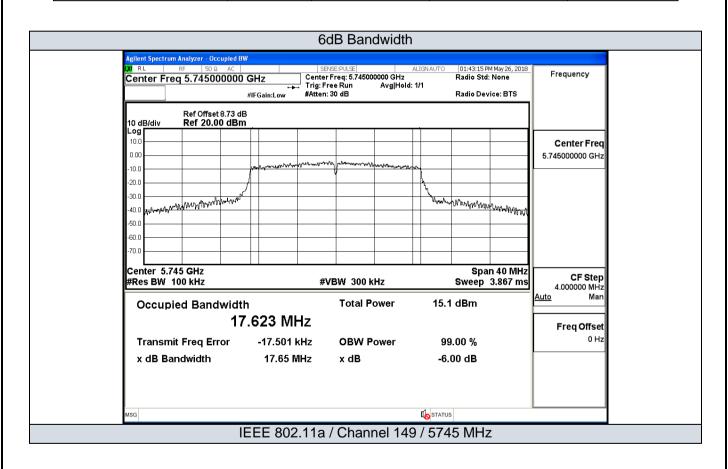
Span 120.0 MHz Sweep 1.667 ms (1001 pts)

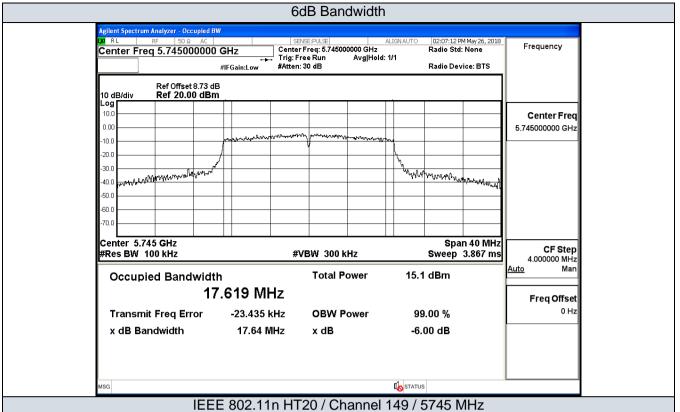
STATUS

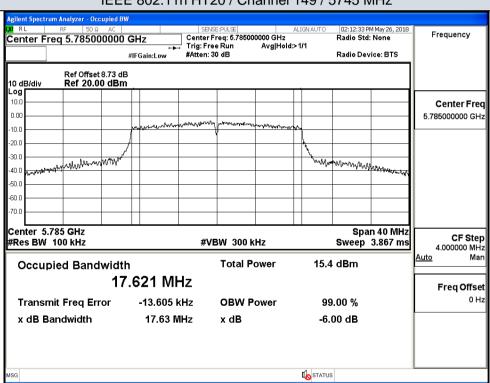
Center 5.77500 GHz #Res BW 300 kHz

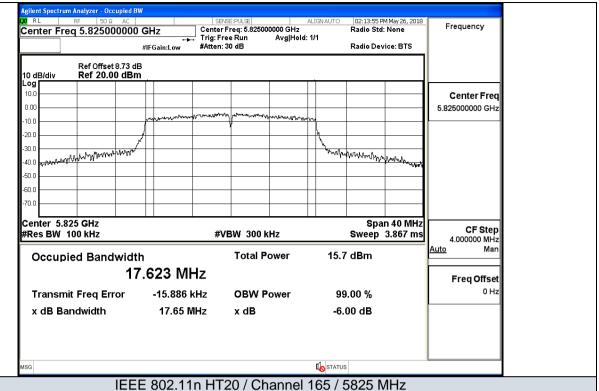
C.4 Emission Bandwidth

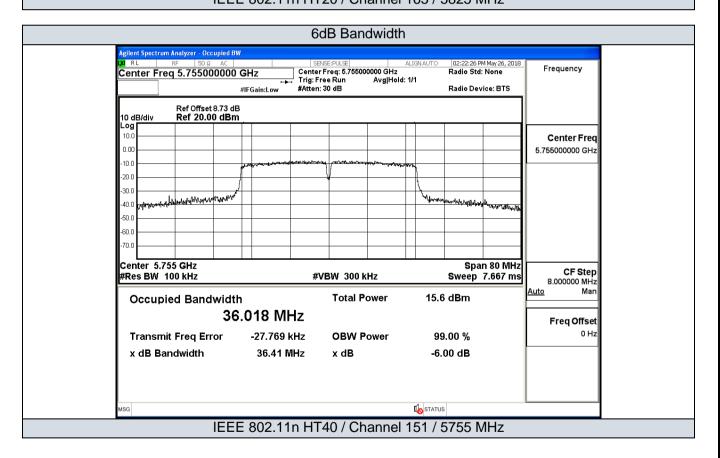
Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	
	149	5745	17.650		
IEEE 802.11a	157	5785	17.660	>=0.5	
	165	5825	17.650		
	149	5745	17.640		
IEEE 802.11n HT20	157	5785	17.630	>=0.5	
	165	5825	17.650		
IEEE 802.11n HT40	151	5755	36.410	>=0.5	
IEEE 802.1111 H140	159	5795	36.380		
	149	5745	17.630		
IEEE 802.11ac VHT20	157	5785	17.330	>=0.5	
	165	5825	17.700		
IEEE 802.11ac VHT40	151	5755	36.360	>=0.5	
IEEE 002.11aC VH140	159	5795	36.360	>=0.5	
IEEE 802.11ac VHT80	155	5775	76.060	>=0.5	











STATUS

-6.00 dB

STATUS

x dB

17.70 MHz

x dB Bandwidth

OBW Power

x dB

99.00 %

-6.00 dB

STATUS

Freq Offset

35.921 MHz

-21.614 kHz

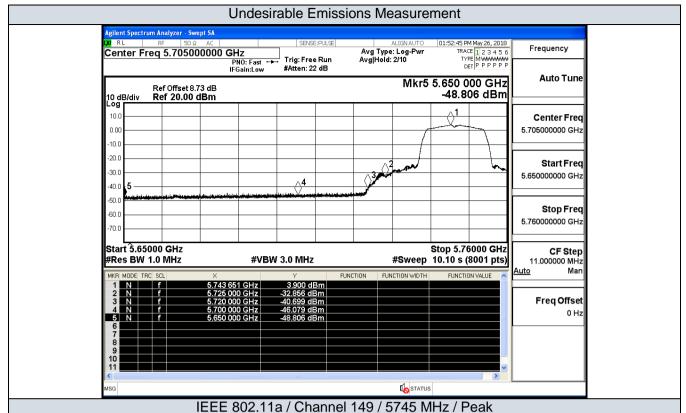
36.36 MHz

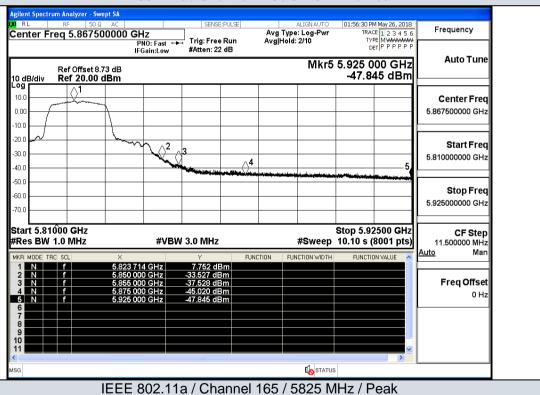
Transmit Freq Error

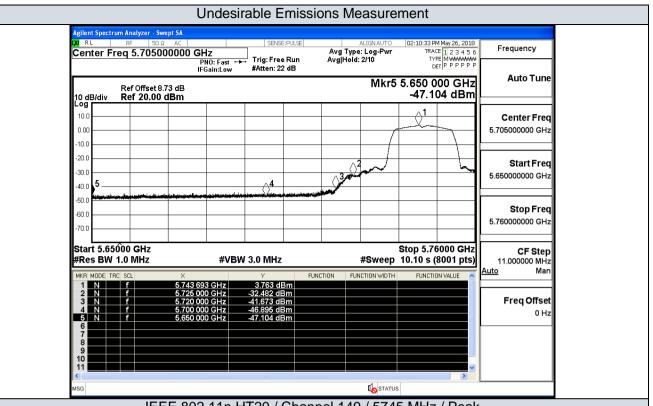
x dB Bandwidth

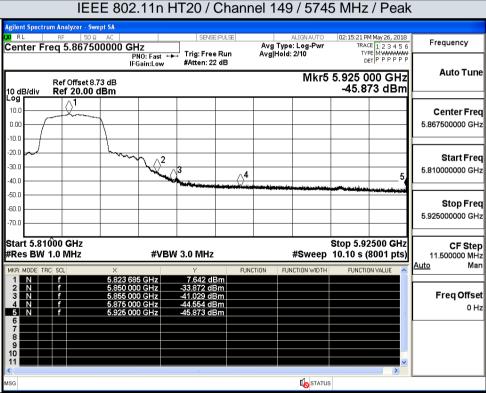
C.5 Undesirable Emissions Measurement

Toot Made	Channal	Frequency	Conducted Power	Antenna Gain	EIRP	Detector	Limit
Test Mode	Channel	(MHz)	(dBm)	(dBi)	(dBm/MHz)	Detector	(dBm/MHz)
		5650.000	-48.806	5.000	-43.806	Peak	-27.00
	149	5700.000	-46.079	5.000	-41.079	Peak	10.00
	143	5720.000	-40.699	5.000	-35.699	Peak	15.60
IEEE 802.11a		5725.000	-32.856	5.000	-27.856	Peak	27.00
ILLE 002.11a		5850.000	-33.527	5.000	-28.527	Peak	27.00
	165	5855.000	-37.528	5.000	-32.528	Peak	15.60
	103	5875.000	-45.020	5.000	-40.020	Peak	10.00
		5925.000	-47.845	5.000	-42.845	Peak	-27.00
		5650.000	-47.104	5.000	-42.104	Peak	-27.00
	149	5700.000	-46.895	5.000	-41.895	Peak	10.00
	143	5720.000	-41.673	5.000	-36.673	Peak	15.60
IEEE 802.11n HT20		5725.000	-32.482	5.000	-27.482	Peak	27.00
IEEE 002.1111 F1120		5850.000	-33.872	5.000	-28.872	Peak	27.00
	165	5855.000	-41.029	5.000	-36.029	Peak	15.60
	105	5875.000	-44.554	5.000	-39.554	Peak	10.00
		5925.000	-45.873	5.000	-40.873	Peak	-27.00
		5650.000	-49.012	5.000	-44.012	Peak	-27.00
	151	5700.000	-48.293	5.000	-43.293	Peak	10.00
	151	5720.000	-42.975	5.000	-37.975	Peak	15.60
IEEE 802.11n HT40		5725.000	-40.223	5.000	-35.223	Peak	27.00
IEEE 002.1111 1140		5850.000	-45.535	5.000	-40.535	Peak	27.00
	450	5855.000	-45.825	5.000	-40.825	Peak	15.60
	159	5875.000	-46.532	5.000	-41.532	Peak	10.00
		5925.000	-49.242	5.000	-44.242	Peak	-27.00
		5650.000	-48.737	5.000	-43.737	Peak	-27.00
	149	5700.000	-45.525	5.000	-40.525	Peak	10.00
	149	5720.000	-39.671	5.000	-34.671	Peak	15.60
IEEE 802.11ac VHT20		5725.000	-38.138	5.000	-33.138	Peak	27.00
IEEE 002.11ac VH120		5850.000	-40.362	5.000	-35.362	Peak	27.00
	405	5855.000	-45.032	5.000	-40.032	Peak	15.60
	165	5875.000	-45.832	5.000	-40.832	Peak	10.00
		5925.000	-46.905	5.000	-41.905	Peak	-27.00
		5650.000	-48.024	5.000	-43.024	Peak	-27.00
	1.40	5700.000	-45.274	5.000	-40.274	Peak	10.00
	149	5720.000	-38.844	5.000	-33.844	Peak	15.60
1555 000 44 NUIT40		5725.000	-38.174	5.000	-33.174	Peak	27.00
IEEE 802.11ac VHT40		5850.000	-44.147	5.000	-39.147	Peak	27.00
	405	5855.000	-42.325	5.000	-37.325	Peak	15.60
	165	5875.000	-47.807	5.000	-42.807	Peak	10.00
		5925.000	-49.082	5.000	-44.082	Peak	-27.00
		5650.000	-50.488	5.000	-45.488	Peak	-27.00
		5700.000	-45.843	5.000	-40.843	Peak	10.00
		5720.000	-44.149	5.000	-39.149	Peak	15.60
IEEE 000 44 \/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	155	5725.000	-38.785	5.000	-33.785	Peak	27.00
IEEE 802.11ac VHT80		5850.000	-45.613	5.000	-40.613	Peak	27.00
		5855.000	-45.615	5.000	-40.615	Peak	15.60
		5875.000	-47.322	5.000	-42.322	Peak	10.00
		5925.000	-49.497	5.000	-44.497	Peak	-27.00



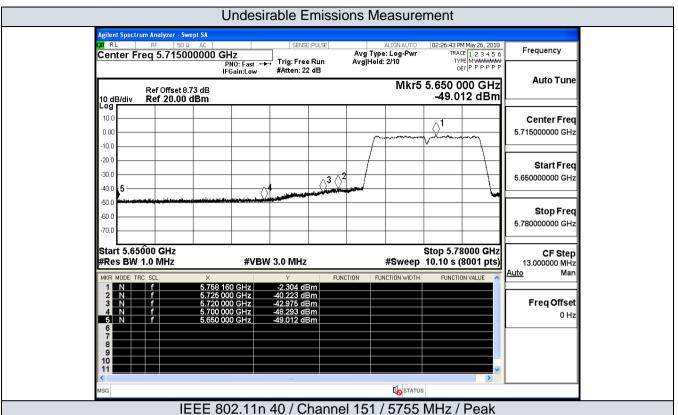


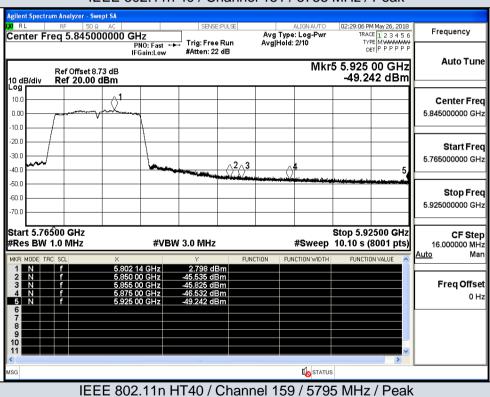


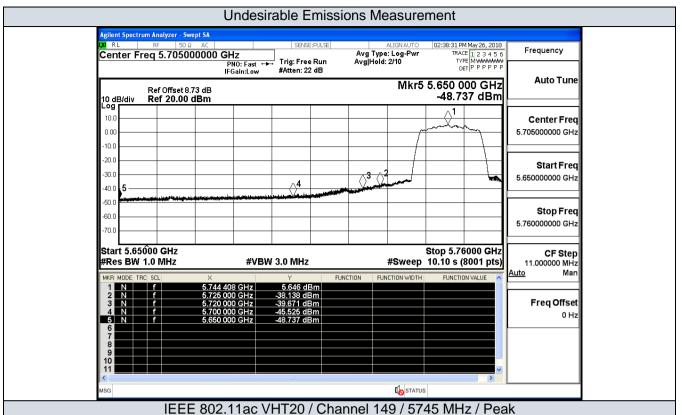


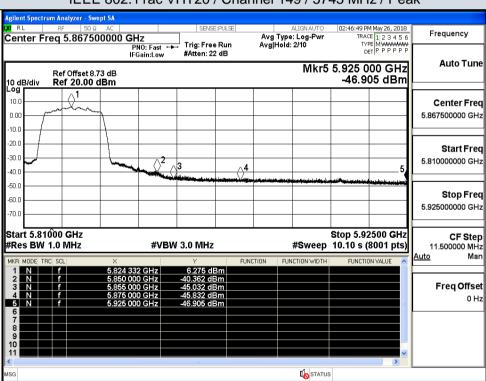
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IEEE 802.11n HT20 / Channel 165 / 5825 MHz / Peak









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

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

STATUS

5.925 00 GHz

0 Hz

STATUS