Appendix D

RF Test Data for 5.8G WLAN (Conducted Measurement)

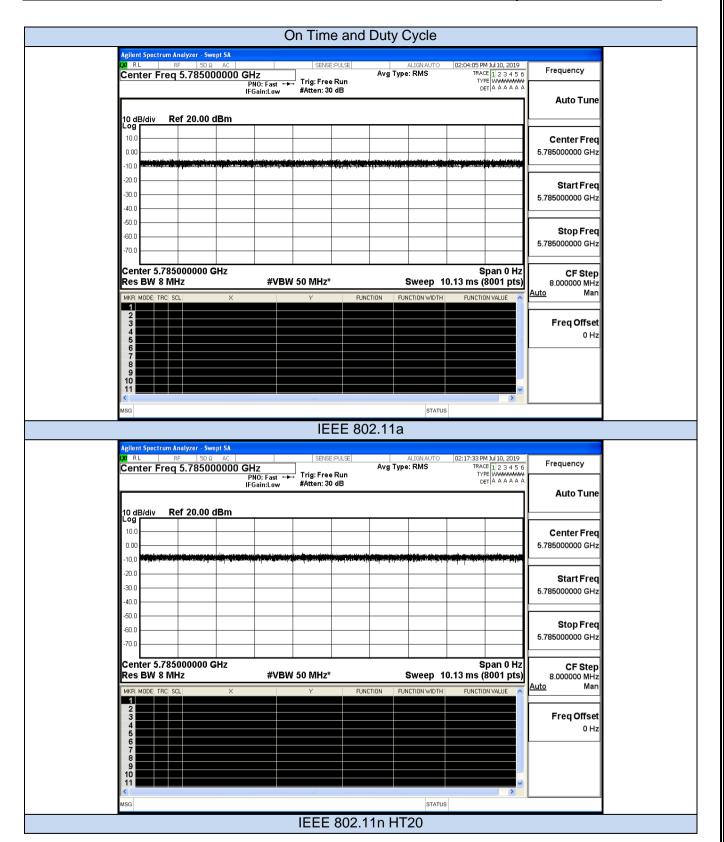
Product Name: Laptop Trade Mark: FUSION5 Test Model: T90B+ Pro

Environmental Conditions

Temperature:	24.3 ° C		
Relative Humidity:	52.8%		
ATM Pressure:	100.0 kPa		
Test Engineer:	JERRY.ZENG		
Supervised by:	Wang.Chuang		

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
11AC80 SISO	5775	100	0.00	0.01



SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AED gilent Spectrum Analyzer - Swept SA RL | RF | 50 Ω AC | Center Freq 5.755000000 GHz ALIGNAUTO 02:31:31 PM 3ul 10, 2019 Avg Type: RMS TRACE [1] 2 3 4 5 6 TYPE WWWWWW DET | A A A A A A SENSE:PULSE Frequency PNO: Fast ↔ IFGain:Low Trig: Free Run #Atten: 30 dB **Auto Tune** 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.755000000 GHz 0.00 -20.0 Start Freq -30.0 5.755000000 GHz 40.0 Stop Freq -60.0 5.755000000 GHz -70.0 Center 5.755000000 GHz Span 0 Hz CF Step Sweep 10.13 ms (8001 pts) Res BW 8 MHz **#VBW 50 MHz*** 8.000000 MHz <u>Auto</u> FUNCTION Freq Offset 0 Hz STATUS IEEE 802.11n HT40 Agilent Spectrum Analyzer - Swept SA ALIGNAUTO 02:51:24 PM Jul 10, 2019 Avg Type: RMS TRACE |1 2 3 4 5 6 TYPE | WWW.WWW. DET | A A A A A A A SENSE:PULSE Center Freq 5.785000000 GHz Frequency PNO: Fast → Trig: Free Run IFGain:Low #Atten: 30 dB Auto Tune 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.785000000 GHz 0.00 -10.0 20.0 Start Freq -30.0 5.785000000 GHz 40.0 -50.0 Stop Freq -60.0 5.785000000 GHz Center 5.785000000 GHz Span 0 Hz CF Step 8.000000 MHz Sweep 10.13 ms (8001 pts) Res BW 8 MHz **#VBW** 50 MHz* <u>Auto</u> FUNCTION FUNCTION WIDTH FUNCTION VALUE Freq Offset 0 Hz STATUS IEEE 802.11AC20

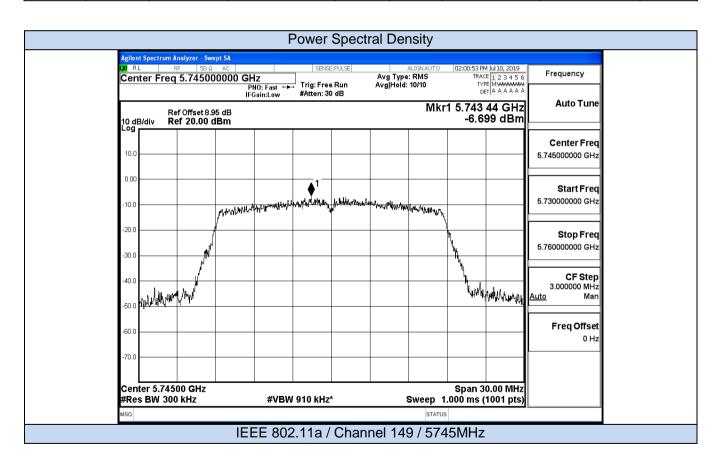
SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AED gilent Spectrum Analyzer - Swept SA RL | RF | 50 Ω AC | Center Freq 5.755000000 GHz SENSE:PULSE Frequency PNO: Fast ↔ IFGain:Low Trig: Free Run #Atten: 30 dB Auto Tune 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.755000000 GHz 0.00 -20.0 Start Freq -30.0 5.755000000 GHz 40.0 Stop Freq -60.0 5.755000000 GHz -70.0 Center 5.755000000 GHz Span 0 Hz CF Step Sweep 10.13 ms (8001 pts) Res BW 8 MHz **#VBW 50 MHz*** 8.000000 MHz <u>Auto</u> FUNCTION Freq Offset 0 Hz STATUS IEEE 802.11AC40 Agilent Spectrum Analyzer - Swept SA ALIGNAUTO 03:12:17 PM Jul 10, 2019 Avg Type: RMS TRACE 1 2 3 4 5 6 TYPE WWW.WW.W. DET A A A A A A SENSE:PULSE Center Freq 5.775000000 GHz Frequency PNO: Fast → Trig: Free Run IFGain:Low #Atten: 30 dB Auto Tune 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.775000000 GHz 0.00 -10.0 20.0 Start Freq -30.0 5.775000000 GHz 40.0 -50.0 Stop Freq -60.0 5.775000000 GHz Center 5.775000000 GHz Span 0 Hz CF Step 8.000000 MHz Sweep 10.13 ms (8001 pts) Res BW 8 MHz **#VBW** 50 MHz* <u>Auto</u> FUNCTION FUNCTION WIDTH FUNCTION VALUE Freq Offset 0 Hz STATUS IEEE 802.11AC80

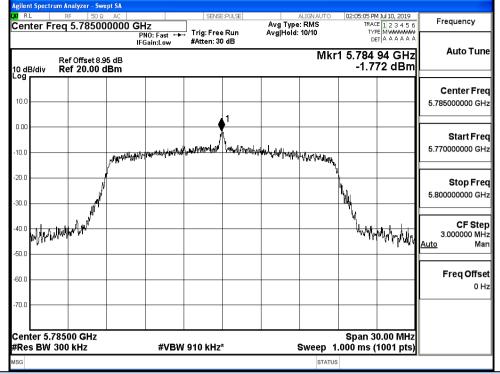
D.2 Maximum Conduct Output Power

Test	Channe	Frequency	AVG Conducted	Duty Cycle	Report Conducted	Limit	Verdict
Mode	I	(MHz)	Power (dBm)	Factor(dB)	Power(dBm)	(dBm)	veruici
	149	5745	6.13	0	6.13		Pass
11A	157	5785	5.94	0	5.94	30	Pass
	165	5825	6.22	0	6.22		Pass
11N20	149	5745	5.53	0	5.53		Pass
SISO	157	5785	6.36	0	6.36	30	Pass
3130	165	5825	6.19	0	6.19		Pass
11N40	151	5755	6.24	0	6.24	30	Pass
SISO	159	5795	5.96	0	5.96	30	Pass
11AC20	149	5745	6.42	0	6.42	30	Pass
SISO	157	5785	5.81	0	5.81	30	Pass
3130	165	5825	6.18	0	6.18		Pass
11AC40	151	5755	6.42	0	6.42	30	Pass
SISO	159	5795	6.02	0	6.02		Pass
11AC80 SISO	155	5775	6.35	0	6.35	30	Pass

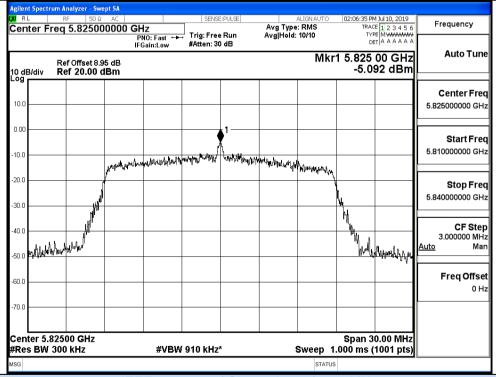
D.3 Power Spectral Density

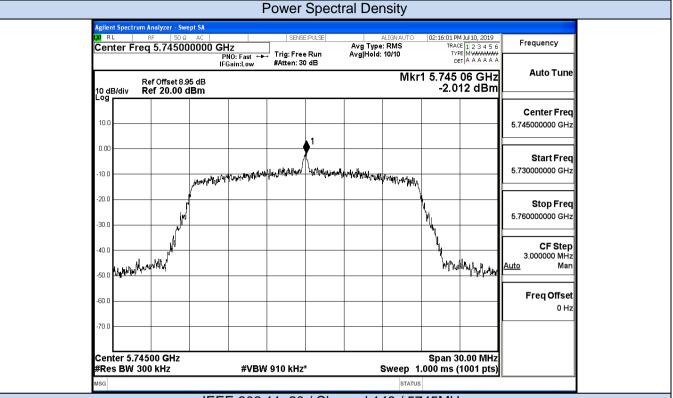
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/500KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
	149	5745	-6.70	0	2.218	-4.482		Pass
11A	157	5785	-1.77	0	2.218	0.448	30	Pass
	165	5825	-5.09	0	2.218	-2.872		Pass
11N20	149	5745	-2.01	0	2.218	0.208		Pass
SISO	157	5785	-0.74	0	2.218	1.478	30	Pass
3130	165	5825	0.08	0	2.218	2.298		Pass
11N40	151	5755	-3.73	0	2.218	-1.512	30	Pass
SISO	159	5795	-4.50	0	2.218	-2.282	30	Pass
11AC20	149	5745	-1.84	0	2.218	0.378	30	Pass
SISO	157	5785	-0.47	0	2.218	1.748	30	Pass
3130	165	5825	-2.94	0	2.218	-0.722		Pass
11AC40	151	5755	-1.72	0	2.218	0.498	30	Pass
SISO	159	5795	-2.64	0	2.218	-0.422		Pass
11AC80 SISO	155	5775	-2.55	0	2.218	-0.332	30	Pass

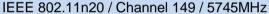


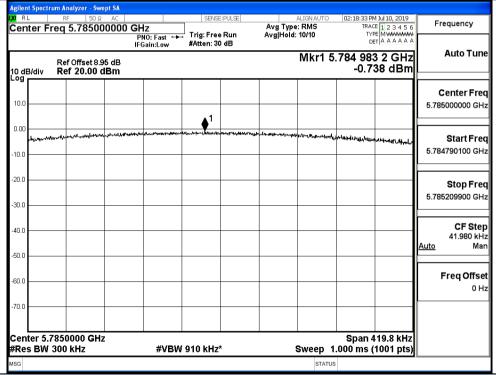


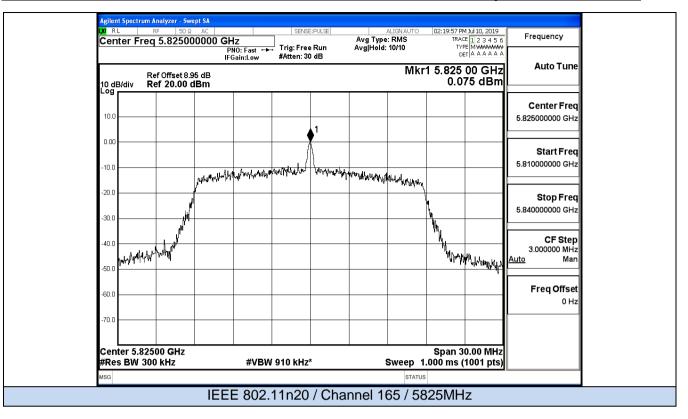
IEEE 802.11na / Channel 157 / 5785MHz

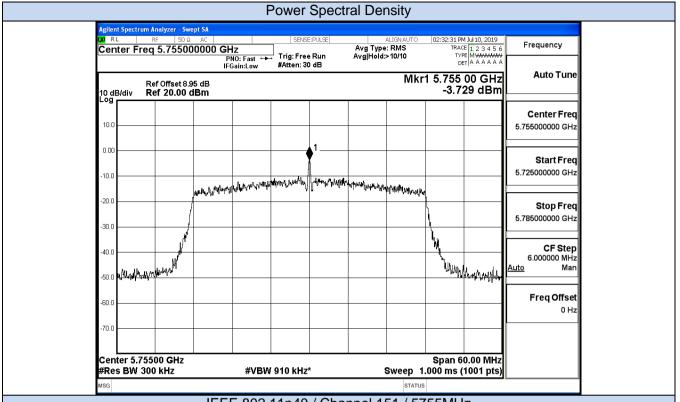


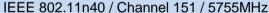


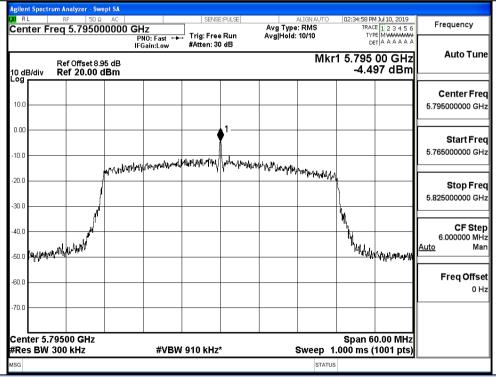


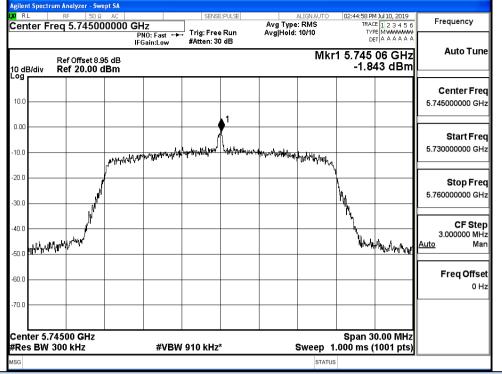




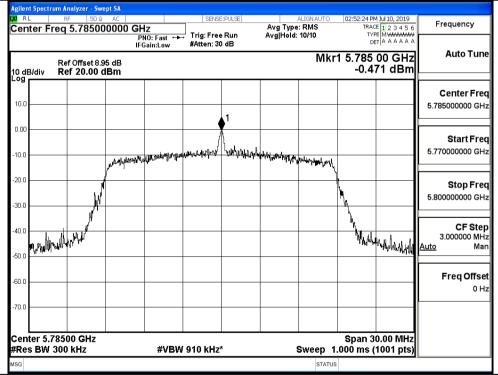




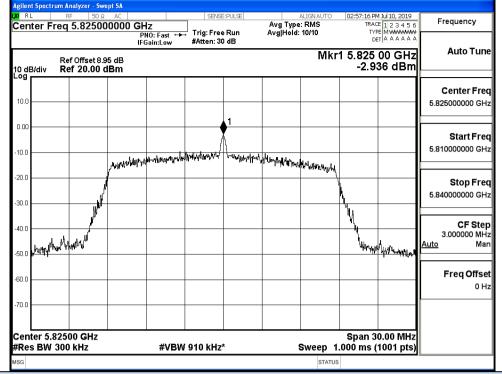




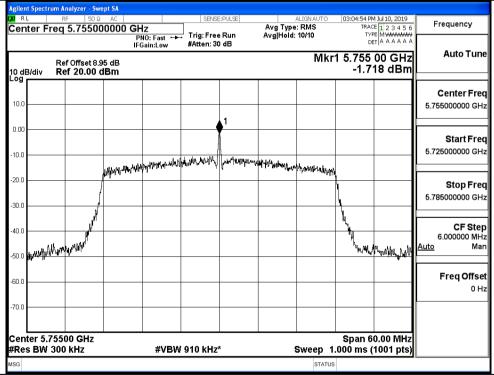
IEEE 802.11ac20 / Channel 149 / 5745MHz



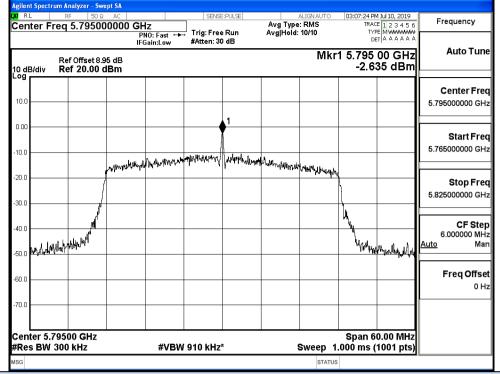
IEEE 802.11ac20 / Channel 157 / 5785MHz



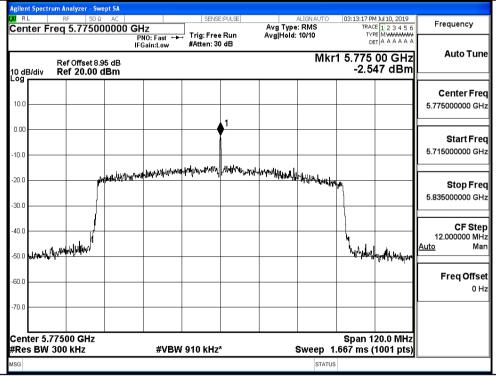
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



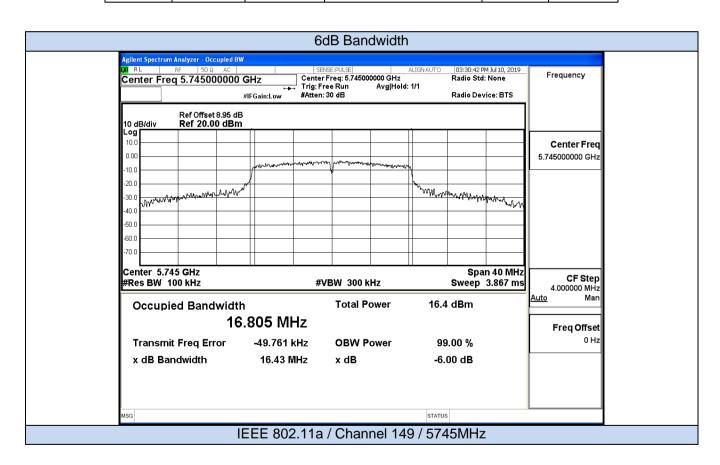
IEEE 802.11ac40 / Channel 159 / 5795MHz

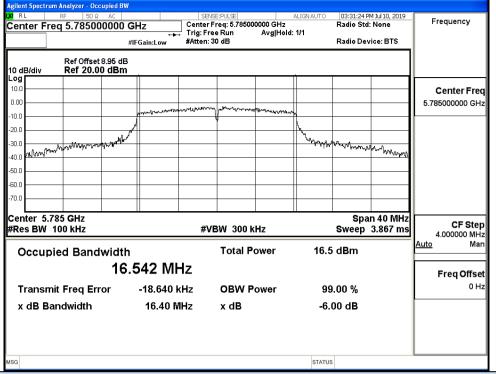


IEEE 802.11ac80 / Channel 155/ 5775MHz

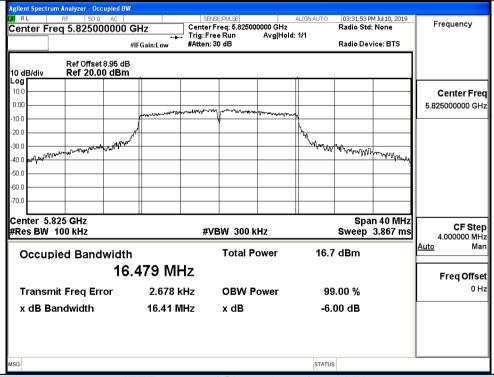
D.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Verdict
	149	5745	16.43		Pass
11A	157	5785	16.40	>=0.5	Pass
	165	5825	16.41		Pass
11N20	149	5745	17.65	>=0.5	Pass
SISO	157	5785	17.63		Pass
3130	165	5825	17.62		Pass
11N40	151	5755	36.39	>=0.5	Pass
SISO	159	5795	36.38	>=0.5	Pass
11AC20S	149	5745	17.65	>=0.5	Pass
ISO	157	5785	17.62	>=0.5	Pass
130	165	5825	17.63		Pass
11AC40S	151	5755	36.41	>=0.5	Pass
ISO	159	5795	36.38		Pass
11AC80S ISO	155	5775	76.63	>=0.5	Pass

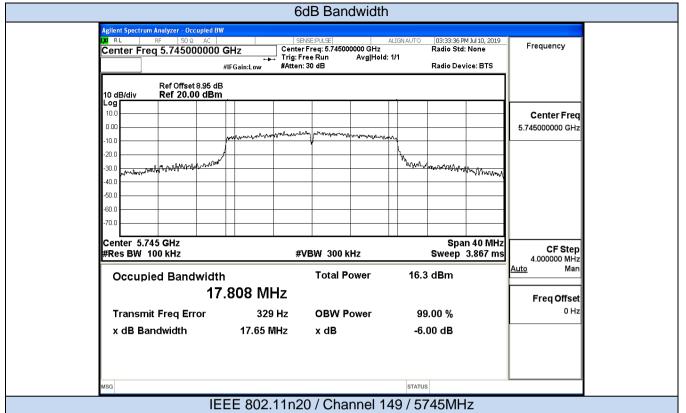


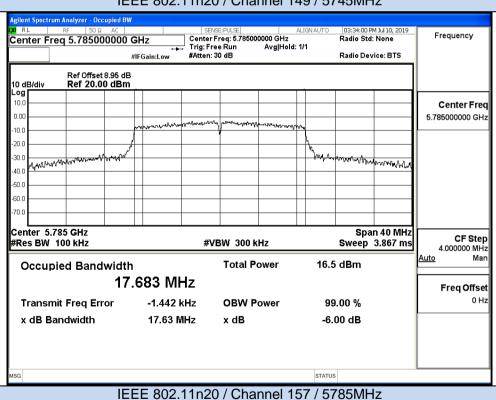


IEEE 802.11a / Channel 157 / 5785MHz



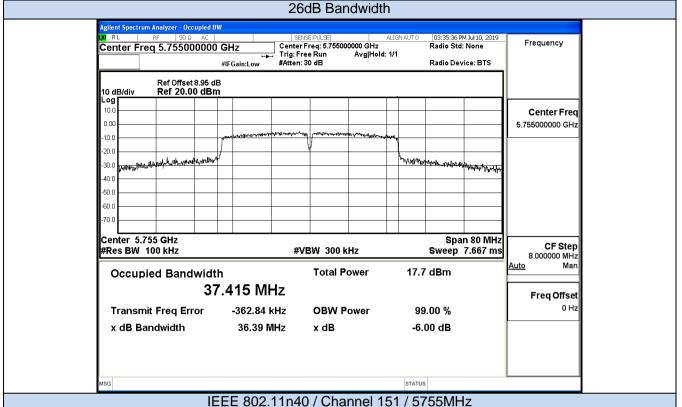
IEEE 802.11a / Channel 165 / 5825MHz

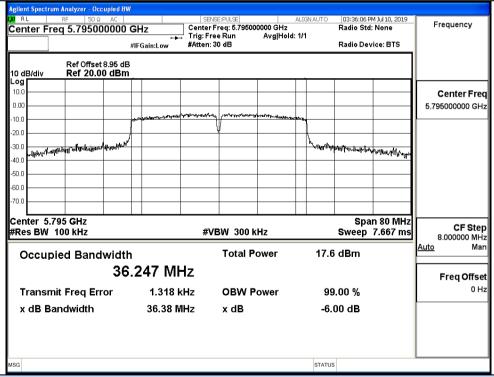


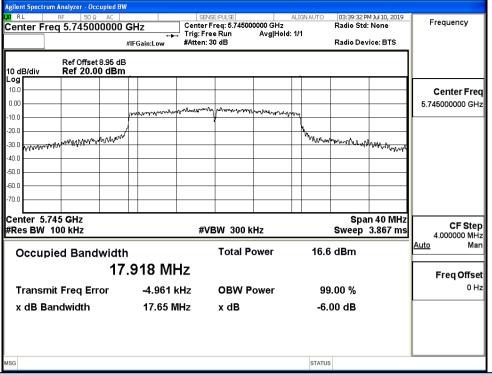


SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AED gilent Spectrum Analyzer - Occupied BW 03:34:21 PM Jul 10, 2019 Radio Std: None | SENSE:PULSE | ALIGN AUTO | Center Freq: 5.825000000 GHz | Trig: Free Run | Avg|Hold: 1/1 |#Atten: 30 dB Frequency Radio Device: BTS Ref Offset 8.95 dB Ref 20.00 dBm 10 dB/div Center Freq 0.00 5.825000000 GHz -10.0 -20.0 www.hwhyhwhyhwhat THE THE PARTY WAS A STREET OF THE PARTY WAS -40.0 -50.0 Center 5.825 GHz #Res BW 100 kHz Span 40 MHz CF Step 4.000000 MHz #VBW 300 kHz Sweep 3.867 ms <u>Auto</u> Man **Total Power** 16.9 dBm Occupied Bandwidth 17.639 MHz Freq Offset 0 Hz -117 Hz Transmit Freq Error **OBW Power** 99.00 % x dB Bandwidth 17.62 MHz x dB -6.00 dB

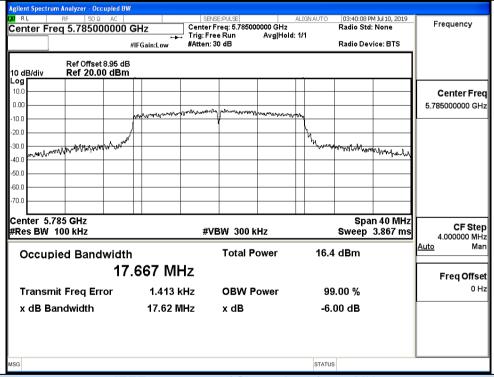
STATUS



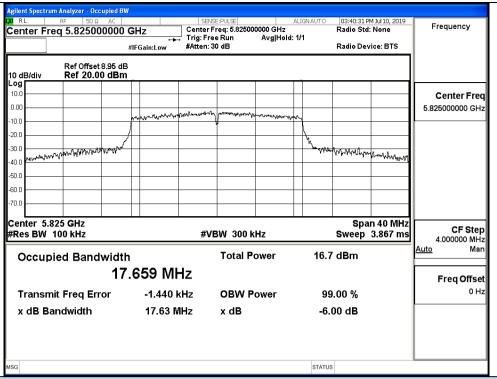




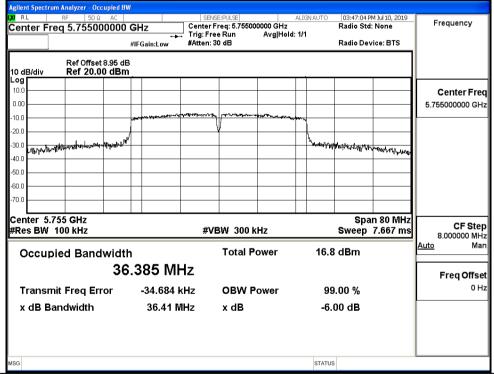
IEEE 802.11ac20 / Channel 149 / 5745MHz



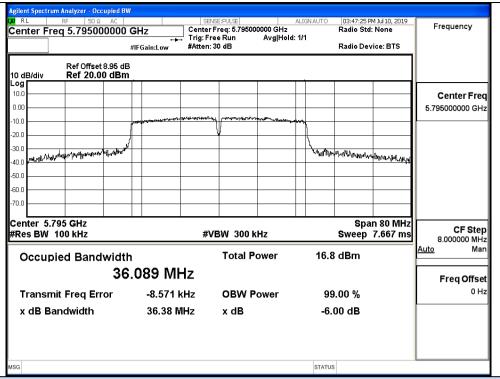
IEEE 802.11ac20 / Channel 157/ 5785MHz



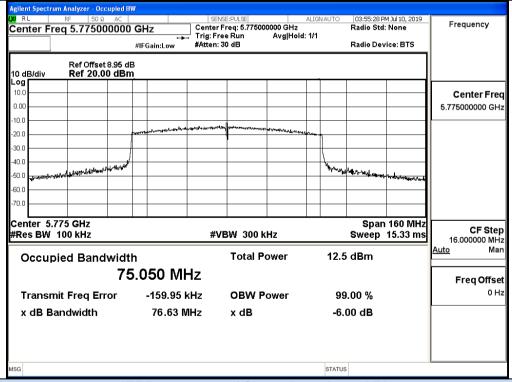
IEEE 802.11ac20 / Channel 165 / 5825MHz



IEEE 802.11ac40 / Channel 151 / 5755MHz



IEEE 802.11ac40 / Channel 159 / 5795MHz



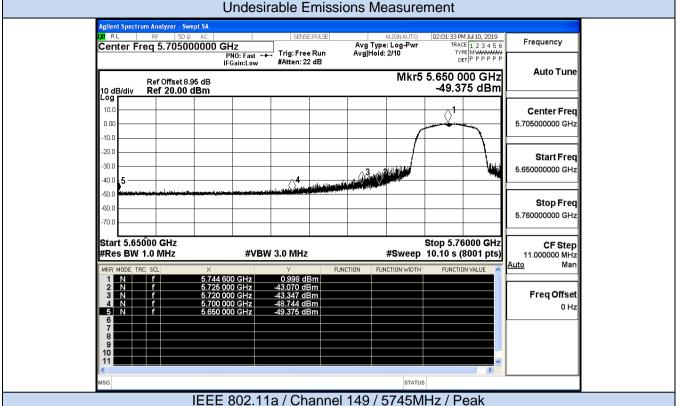
IEEE 802.11ac80 / Channel 155 / 5775MHz

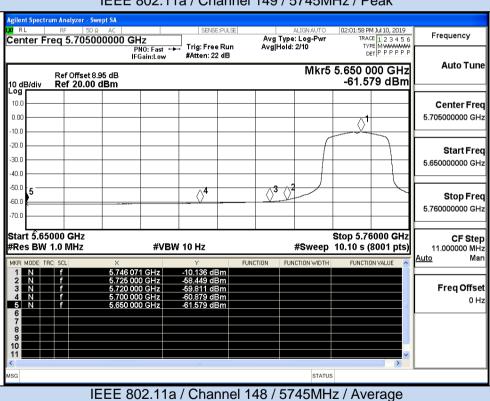
D.5 Undesirable Emissions Measurement

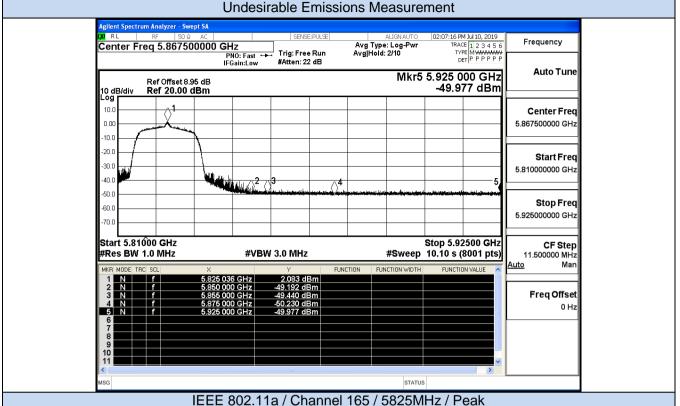
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
		5650.0	-49.38	3.00	-46.38	Peak	-27.0	Pass
		5650.0	-61.58	3.00	-58.58	Average	-27.0	Pass
		5700.0	-48.74	3.00	-45.74	Peak	10	Pass
	149	5700.0	-60.88	3.00	-57.88	Average	10	Pass
	149	5720.0	-43.35	3.00	-40.35	Peak	15.6	Pass
		5720.0	-59.81	3.00	-56.81	Average	15.6	Pass
		5725.0	-43.07	3.00	-40.07	Peak	27.0	MHz) Verdict .0 Pass
11A		5725.0	-58.45	3.00	-55.45	Average	27.0	Pass
HA		5850.0	-49.19	3.00	-46.19	Peak	27.0	Pass
		5850.0	-60.67	3.00	-57.67	Average	27.0	Pass
		5855.0	-49.44	3.00	-46.44	Peak	15.6	Pass
	165	5855.0	-60.93	3.00	-57.93	Average	15.6	Pass
	165	5875.0	-50.23	3.00	-47.23	Peak	10	Pass
		5875.0	-61.21	3.00	-58.21	Average	10	Pass Pass Pass Pass Pass Pass Pass Pass
		5925.0	-49.98	3.00	-46.98	Peak	-27.0	
		5925.0	-61.46	3.00	-58.46	Average	-27.0	
		5650.0	-49.58	3.00	-46.58	Peak	-27.0	Pass
		5650.0	-61.44	3.00	-58.44	Average	-27.0	Pass
		5700.0	-49.44	3.00	-46.44	Peak	10	Pass
	149	5700.0	-59.94	3.00	-56.94	Average	10	Pass
	149	5720.0	-47.57	3.00	-44.57	Peak	15.6	Pass
		5720.0	-60.83		-57.83	Average	15.6	Pass
		5725.0	-44.84	3.00	-41.84	Peak		Pass
11N20		5725.0	-58.82	3.00	-55.82	Average	27.0	Pass Pass Pass Pass Pass Pass Pass Pass
SISO		5850.0	-48.73	3.00	-45.73	Peak	27.0	Pass
		5850.0	-60.54	3.00	-57.54	Average	27.0	Pass
		5855.0	-48.18	3.00	-45.18	Peak	15.6	Pass
	165	5855.0	-60.87	3.00	-57.87	Average	15.6	Pass
	100	5875.0	-48.93	3.00	-45.93	Peak	10	-27.0 Pass 10 Pass 10 Pass 10 Pass 15.6 Pass 27.0 Pass 27.0 Pass 27.0 Pass 27.0 Pass 15.6 Pass 10 Pass -27.0 Pass -27.0 Pass -27.0 Pass 10 Pass -27.0 Pass 10 Pass 10 Pass 27.0 Pass 15.6 Pass 27.0 Pass 27.0 Pass 27.0 Pass 27.0 Pass 27.0 Pass 27.0 Pass 15.6 Pass 15.6 Pass 15.6 Pass 15.6 Pass 15.6 Pass 10 Pass 10 <t< td=""></t<>
		5875.0	-61.25	3.00	-58.25	Average	-	Pass
		5925.0	-49.82	3.00	-46.82	Peak	-27.0	Pass
		5925.0	-61.42	3.00	-58.42	Average	-27.0	Pass

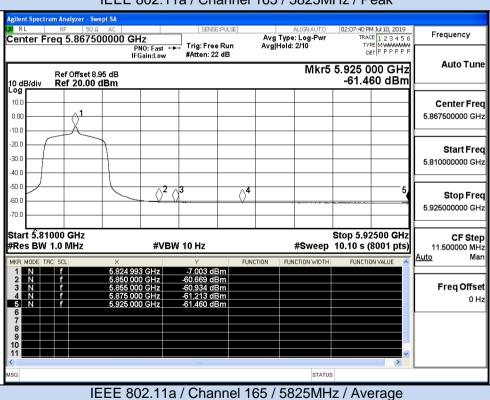
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)	Verdict
		5650.0	-49.28	3.00	-46.28	Peak	-27.0	Pass
		5650.0	-61.29	3.00	-58.29	Average	-27.0	Pass
		5700.0	-48.42	3.00	-45.42	Peak		
	151	5700.0	-60.76	3.00	-57.76	Average		
		5720.0	-47.01	3.00	-44.01	Peak		Nerdict Nerdict
		5720.0	-58.79	3.00	-55.79	Average		
44140		5725.0 5725.0	-43.52 -56.24	3.00	-40.52 -53.24	Peak Average		
11N40 SISO		5850.0	-56.24 -49.43	3.00	-53.24 -46.43	Peak		
3130		5850.0	-49.43	3.00	-57.76	Average		
		5855.0	-48.30	3.00	-45.3	Peak		
		5855.0	-60.87	3.00	-57.87	Average		
	159	5875.0	-49.50	3.00	-46.5	Peak		
		5875.0	-60.96	3.00	-57.96	Average		
		5925.0	-48.75	3.00	-45.75	Peak		
		5925.0	-61.08	3.00	-58.08	Average		
		5650.0	-49.80	3.00	-46.8	Peak		
		5650.0	-61.42	3.00	-58.42	Average		
		5700.0	-47.92	3.00	-44.92	Peak		
		5700.0	-59.96	3.00	-56.96	Average		
	149	5720.0	-47.87	3.00	-44.87	Peak		
		5720.0	-60.86	3.00	-57.86	Average		
		5725.0	-45.14	3.00	-42.14	Peak		
11AC2		5725.0	-58.04	3.00	-55.04	Average		
0		5850.0	-48.27	3.00	-45.27	Peak		
SISO		5850.0	-60.78	3.00	-57.78	Average		
		5855.0	-49.61	3.00	-46.61	Peak		
		5855.0	-60.97	3.00	-57.97	Average		10 Pass 15.6 Pass 15.6 Pass 27.0 Pass 27.0 Pass 27.0 Pass 27.0 Pass 15.6 Pass 15.6 Pass 10 Pass 10 Pass -27.0 Pass -27.0 Pass -27.0 Pass -27.0 Pass 10 Pass 10 Pass 10 Pass 15.6 Pass 27.0 Pass 27.0 Pass 27.0 Pass 15.6 Pass 15.6 Pass 10 Pass -27.0 Pass 15.6 Pass 10 Pass 10 Pass 15.6 Pass 15.6 Pass 15.6 Pass 15.6 <t< td=""></t<>
	165	5875.0	-49.03	3.00	-46.03	Peak		
		5875.0	-61.24	3.00	-58.24	Average		Pass Pass Pass Pass Pass Pass Pass Pass
		5925.0	-50.14	3.00	-47.14	Peak		
		5925.0	-61.42	3.00	-58.42	Average		
		5650.0	-49.84	3.00	-46.84	Peak		
		5650.0	-61.30	3.00	-58.3	Average		
		5700.0	-48.54	3.00	-45.54	Peak		
		5700.0	-60.71	3.00	-57.71	Average	10	Pass
	151	5720.0	-45.87	3.00	-42.87	Peak	15.6	Pass
		5720.0	-58.16	3.00	-55.16	Average	15.6	Pass
		5725.0	-35.67	3.00	-32.67	Peak	27.0	Pass
11AC4		5725.0	-55.11	3.00	-52.11	Average	27.0	Pass
0 SISO		5850.0	-49.66	3.00	-46.66	Peak		
5150		5850.0	-60.69	3.00	-57.69	Average	27.0	Pass
		5855.0	-48.30	3.00	-45.3	Peak	15.6	Pass
	150	5855.0	-60.82	3.00	-57.82	Average	15.6	Pass
	159	5875.0	-49.14	3.00	-46.14	Peak	10	Pass
		5875.0	-60.93	3.00	-57.93	Average	10	Pass
		5925.0	-49.52	3.00	-46.52	Peak		Pass
		5925.0	-61.09	3.00	-58.09	Average	-27.0	Pass
		5725.0	-48.16	3.00	-45.16	Peak	27.0	Pass
		5720.0	-48.45	3.00	-45.45	Peak	15.6	Pass
		5700.0	-48.46	3.00	-45.46	Peak	10	Pass
11AC8		5650.0	-49.25	3.00	-46.25	Peak	-27.0	
0 SISO	155	5725.0	-59.93	3.00	-56.93	Average	27.0	
2,00		5720.0	-60.25	3.00	-57.25	Average .	15.6	
		5700.0	-60.60	3.00	-57.6	Average	10	
		5650.0	-60.79	3.00	-57.79	Average	-27.0	
		5850.0	-48.16	3.00	-45.16 -45.45	Peak	27.0	
		5855.0	-48.45	3.00	-45.45	Peak	15.6	Pass

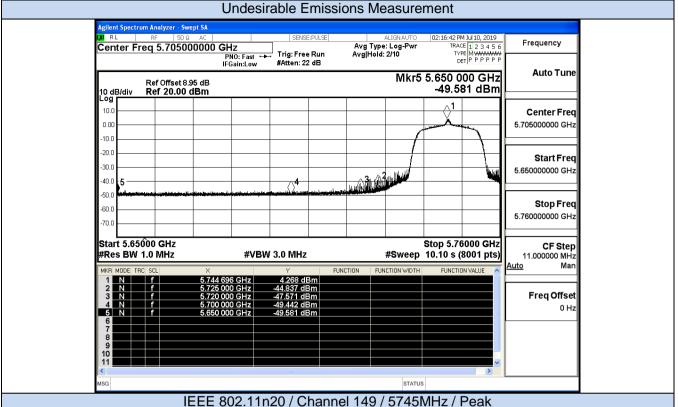
SHENZHEN LCS C	OMPLIANCE T	ESTING LABORATOR	Y LTD.	FCC ID: 2AIKXT90BPR	O Report No	o.: LCS1906210	68AED
	5875.0	-48.46	3.00	-45.46	Peak	10	Pass
	5925.0	-49.25	3.00	-46.25	Peak	-27.0	Pass
	5850.0	-59.93	3.00	-56.93	Average	27.0	Pass
	5855.0	-60.25	3.00	-57.25	Average	15.6	Pass
	5875.0	-60.60	3.00	-57.6	Average	10	Pass
	5925.0	-60.79	3.00	-57.79	Average	-27.0	Pass

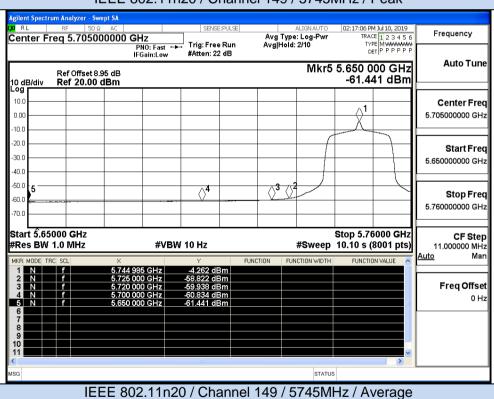


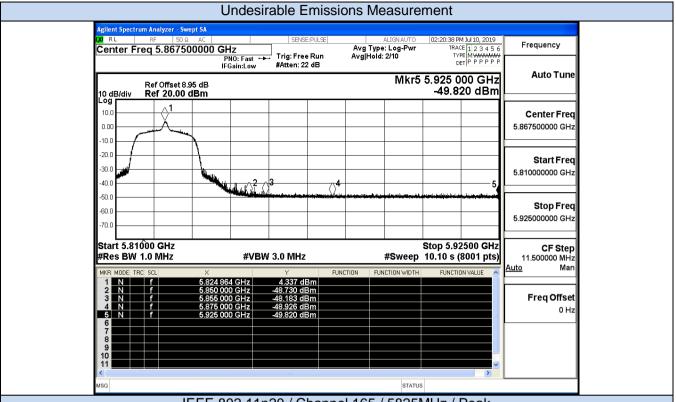




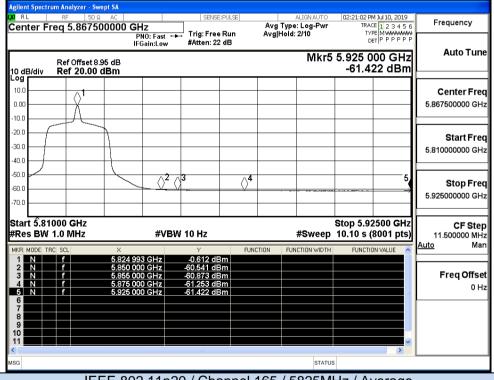


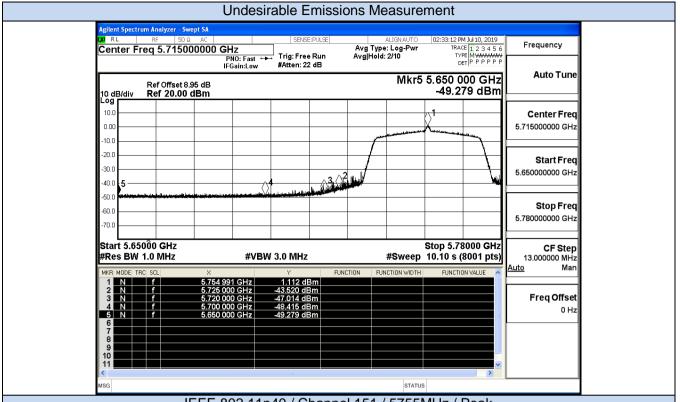




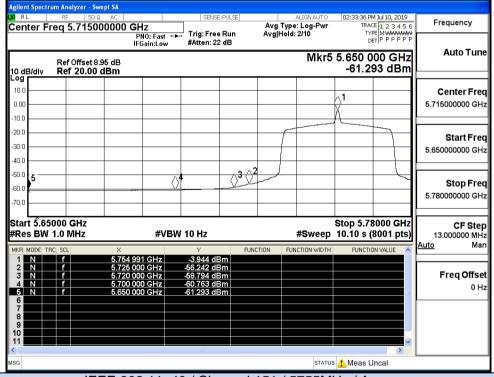


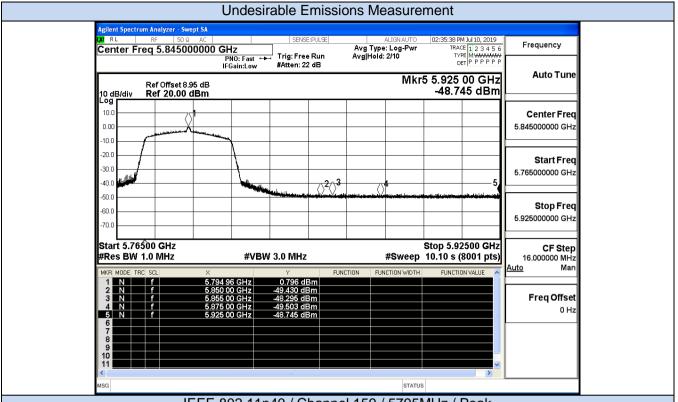


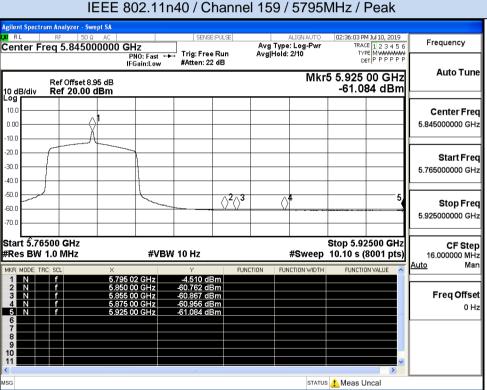




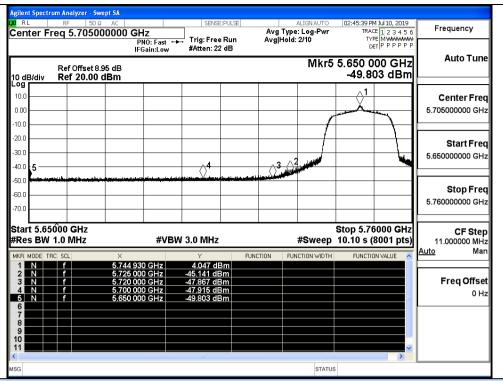




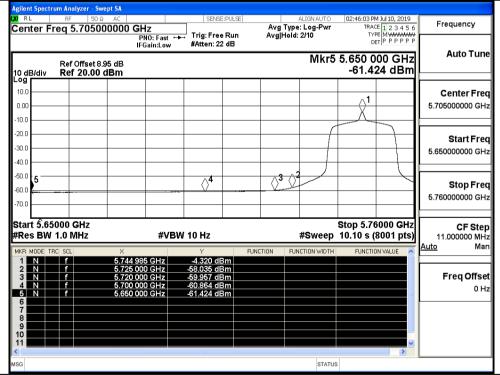




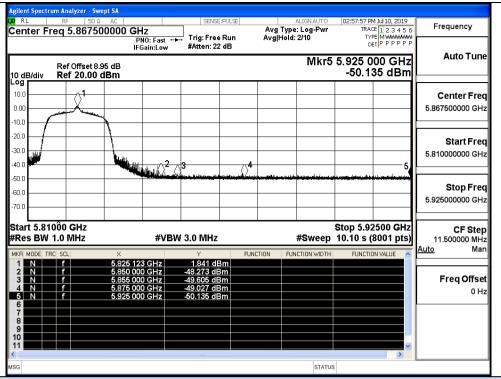
IEEE 802.11n40 / Channel 159 / 5795MHz / Average



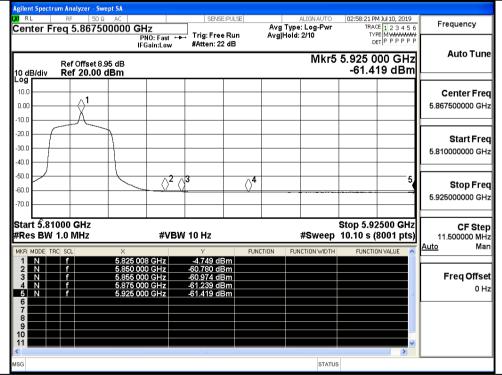
IEEE 802.11ac20 / Channel 149 / 5745MHz / Peak



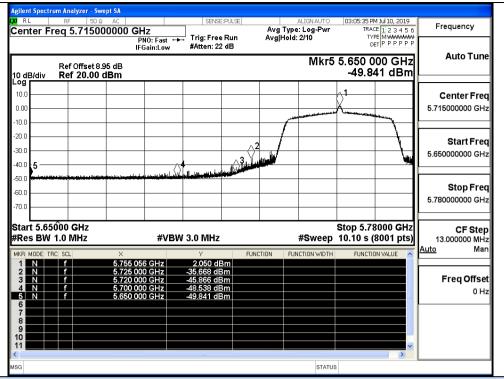
IEEE 802.11ac20 / Channel 149 / 5745MHz / Average



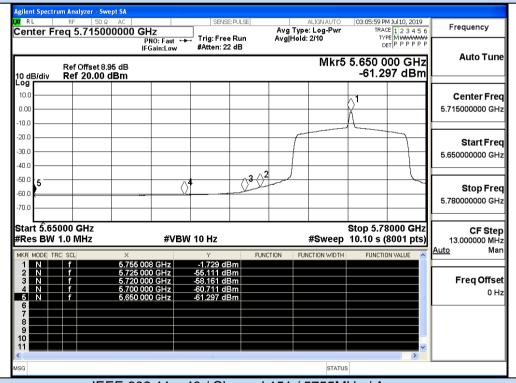
IEEE 802.11ac20 / Channel 165 / 5825MHz / Peak



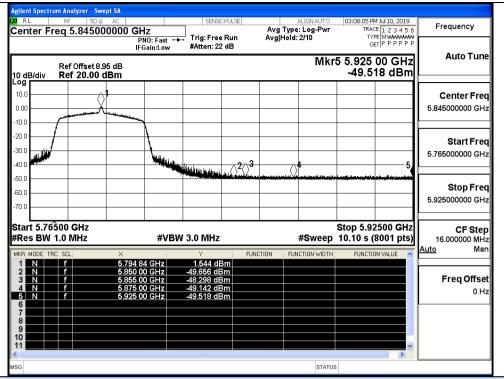
IEEE 802.11ac20 / Channel 165 / 5825MHz / Average



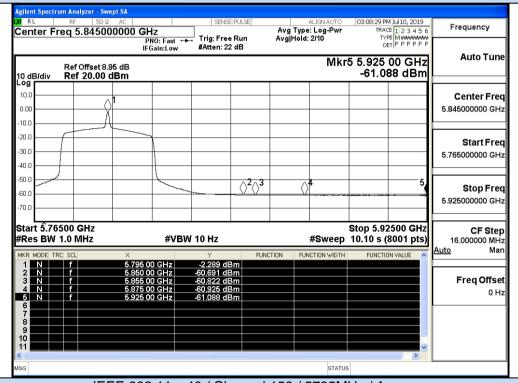
IEEE 802.11ac40 / Channel 151 / 5755MHz / Peak



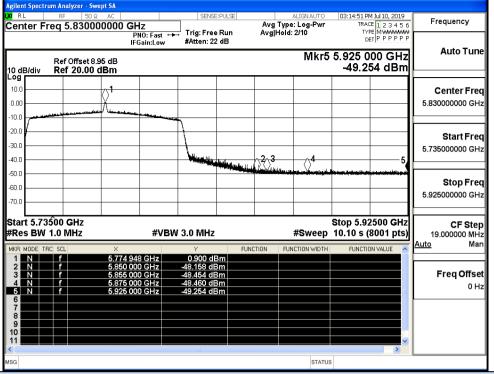
IEEE 802.11ac40 / Channel 151 / 5755MHz / Average



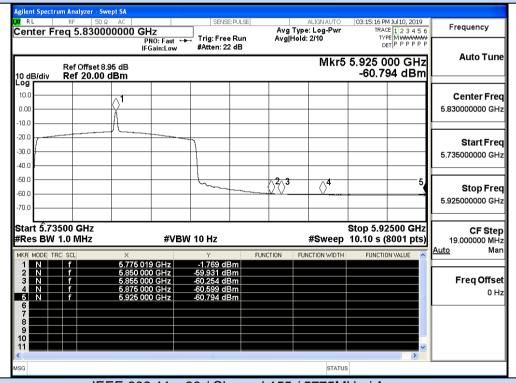
IEEE 802.11ac40 / Channel 159 / 5795MHz / Peak



IEEE 802.11ac40 / Channel 159 / 5795MHz / Average



IEEE 802.11ac80 / Channel 155 / 5775MHz / Peak



IEEE 802.11ac80 / Channel 155 / 5775MHz / Average