Appendix C

RF Test Data for 5.2G WLAN (Conducted Measurement)

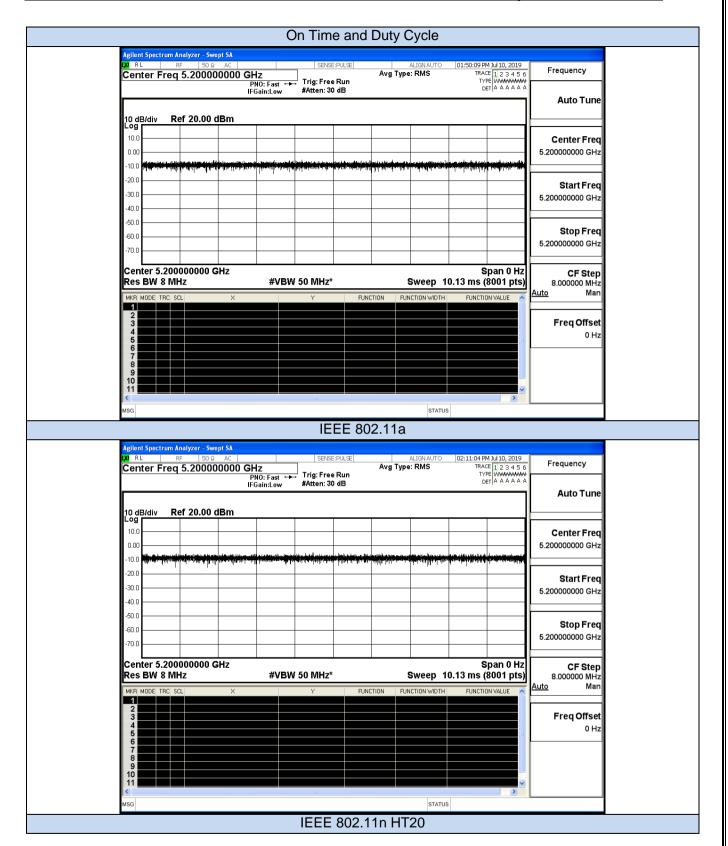
Product Name: Laptop Trade Mark: FUSION5 Test Model: T90B+ Pro

Environmental Conditions

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

C.1 Duty Cycle

Test Mode Frequency (MHz)		Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)	
11A	5200	100	0.00	0.01	
11N20 SISO	5200	100	0.00	0.01	
11N40 SISO	5190	100	0.00	0.01	
11AC20 SISO	5200	100	0.00	0.01	
11AC40 SISO	5190	100	0.00	0.01	
11AC80 SISO	5210	100	0.00	0.01	



SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AEC gilent Spectrum Analyzer - Swept SA ALIGNAUTO 02:26:27 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 5.190000000 GHz 0.00 -20.0 Start Freq -30.0 5.190000000 GHz 40.0 Stop Freq -60.0 5.190000000 GHz -70.0 Center 5.190000000 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 Frequency Center Freq 5.200000000 GHz PNO: Fast → Trig: Free Run IFGain:Low #Atten: 30 dB Auto Tune 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.200000000 GHz 0.00 20.0 Start Freq -30.0 5.200000000 GHz 40.0 -50.0 Stop Freq -60.0 5.200000000 GHz Center 5.200000000 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

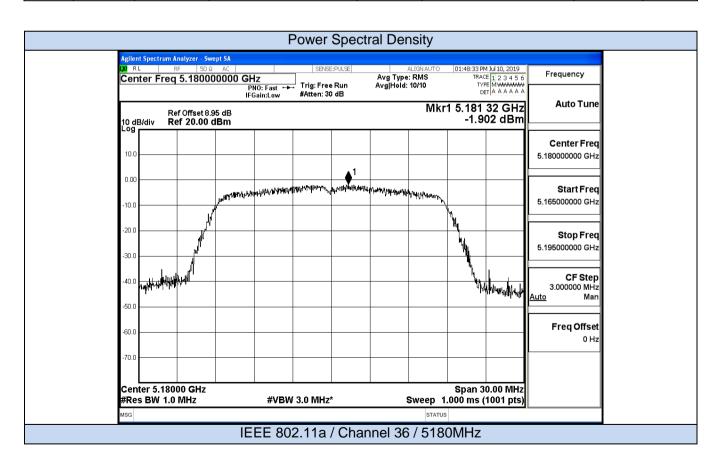
SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AEC gilent Spectrum Analyzer - Swept SA RL | RF | 50 Ω AC | Center Freq 5.1900000000 GHz ALIGNAUTO 02:58:52 PM 3ul 10, 2019 Avg Type: RMS TRACE [1] 2 3 4 5 6 TYPE WWWWWW DET | A A A A A A SENSE:PULSE Frequency PNO: Fast ↔ IFGain:Low Trig: Free Run #Atten: 30 dB **Auto Tune** 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.190000000 GHz 0.00 -20.0 Start Freq 30.0 5.190000000 GHz 40.0 Stop Freq -60.0 5.190000000 GHz -70.0 Center 5.190000000 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 802.11 AC40 Agilent Spectrum Analyzer - Swept SA ALIGNAUTO 03:08:56 PM Jul 10, 2019 Avg Type: RMS TRACE |1 | 2 | 3 | 4 | 5 | TYPE | WWWWWWW DET | A | A | A | A | A | Frequency Center Freq 5.210000000 GHz PNO: Fast → Trig: Free Run IFGain:Low #Atten: 30 dB Auto Tune 10 dB/div Ref 20.00 dBm 10.0 Center Freq 5.210000000 GHz 0.00 -10.0 20.0 Start Freq -30.0 5.210000000 GHz 40.0 -50.0 Stop Freq -60.0 5.210000000 GHz Center 5.210000000 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

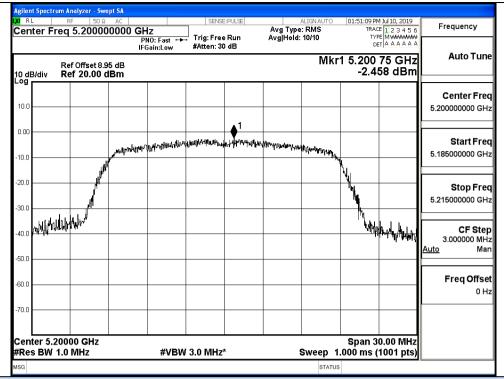
C.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
	36	5180	7.05	0	7.05		Pass
11A	40	5200	7.14	0	7.14	24	Pass
	48	5240	7.25	0	7.25		Pass
11N20	36	5180	7.84	0	7.84		Pass
SISO	40	5200	7.37	0	7.37	24	Pass
3130	48	5240	7.24	0	7.24		Pass
11N40	38	5190	6.56	0	6.56	24	Pass
SISO	46	5230	6.81	0	6.81	24	Pass
11AC20	36	5180	7.82	0	7.82		Pass
SISO	40	5200	7.01	0	7.01	24	Pass
3130	48	5240	7.98	0	7.98		Pass
11AC40	38	5190	7.88	0	7.88	24	Pass
SISO	46	5230	7.02	0	7.02		Pass
11AC80 SISO	42	5210	7.55	0	7.55	24	Pass

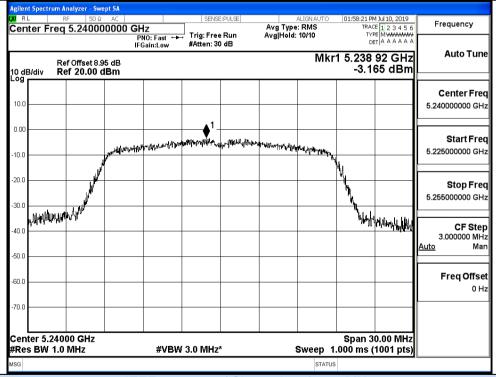
C.3 Power Spectral Density

Test Mode	Channe I	Frequenc y (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(d B)	Report Power Density (dBm/MHz)	Limit (dBm/MH z)	Verdic t
	36	5180	-1.90	0	-1.90		Pass
11A	40	5200	-2.46	0	-2.46	11	Pass
	48	5240	-3.17	0	-3.17	1	Pass
11N2	36	5180	-1.13	0	-1.13		Pass
0	40	5200	-2.36	0	-2.36	11	Pass
SISO	48	5240	-3.00	0	-3.00		Pass
11N4	38	5190	-4.23	0	-4.23		Pass
0 SISO	46	5230	-5.92	0	-5.92	11	Pass
11AC	36	5180	-2.05	0	-2.05		Pass
20	40	5200	-1.83	0	-1.83	11	Pass
SISO	48	5240	-3.36	0	-3.36		Pass
11AC	38	5190	-5.19	0	-5.19	11	Pass
40 SISO	46	5230	-5.66	0	-5.66		Pass
11AC 80 SISO	42	5210	-7.89	0	-7.89	11	Pass

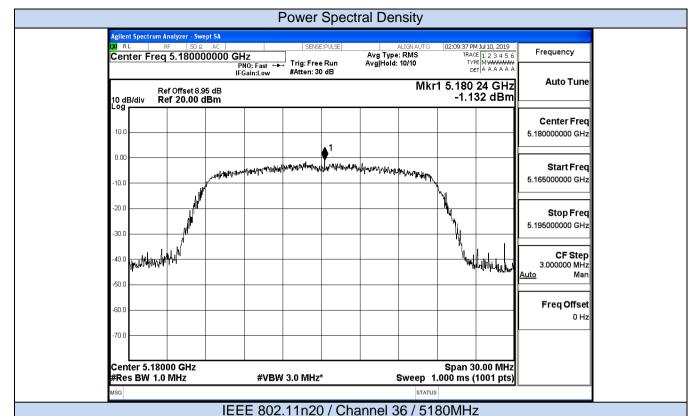




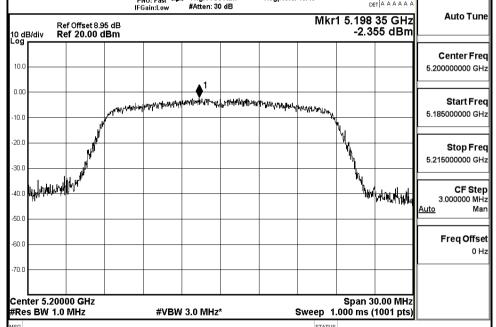
IEEE 802.11na / Channel 40 / 5200MHz

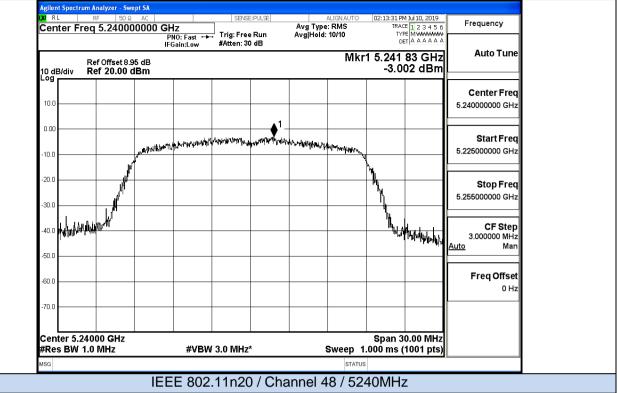


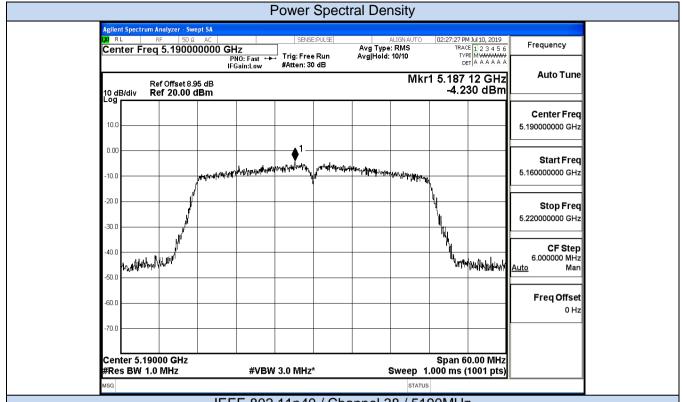
IEEE 802.11na / Channel 48 / 5240MHz

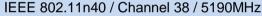


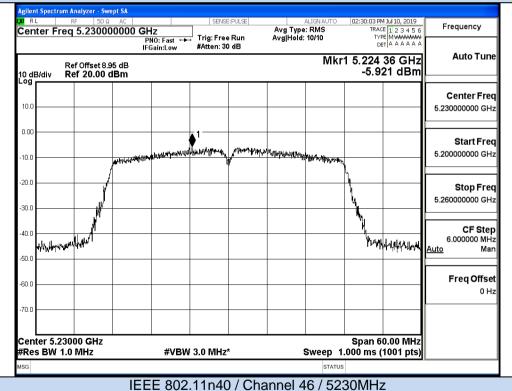
Frequency

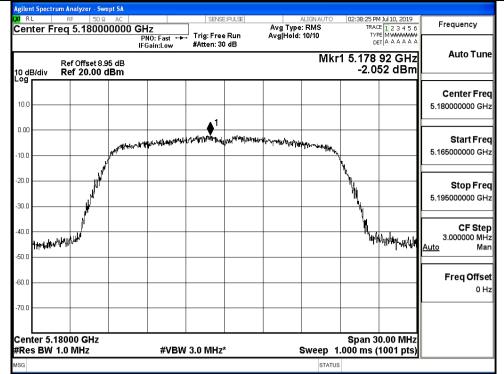




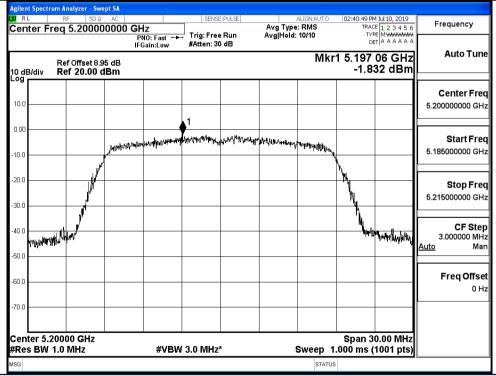




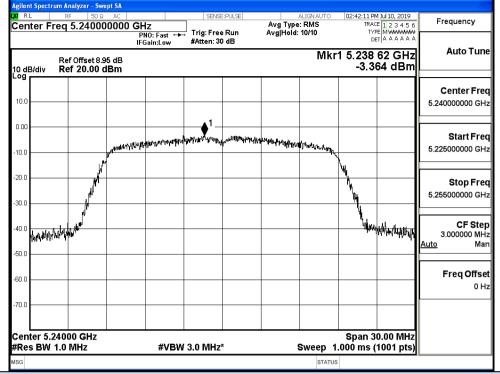




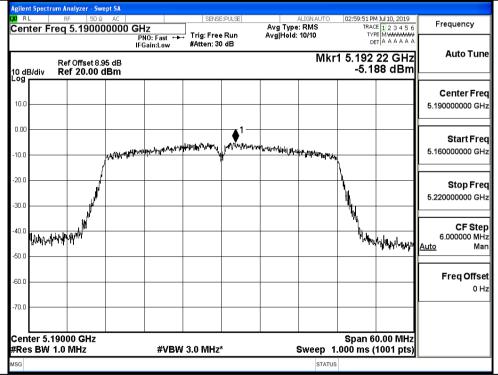
IEEE 802.11ac20 / Channel 36 / 5180MHz



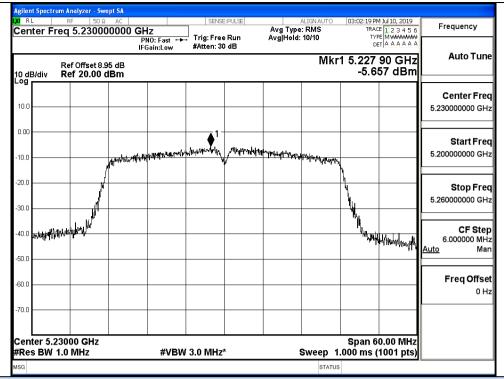
IEEE 802.11ac20 / Channel 40 / 5200MHz



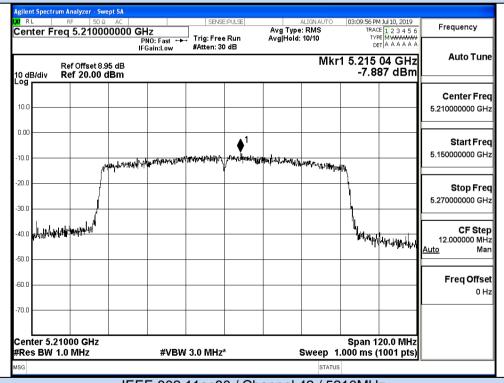
IEEE 802.11ac20 / Channel 48 / 5240MHz



IEEE 802.11ac40 / Channel 38 / 5190MHz



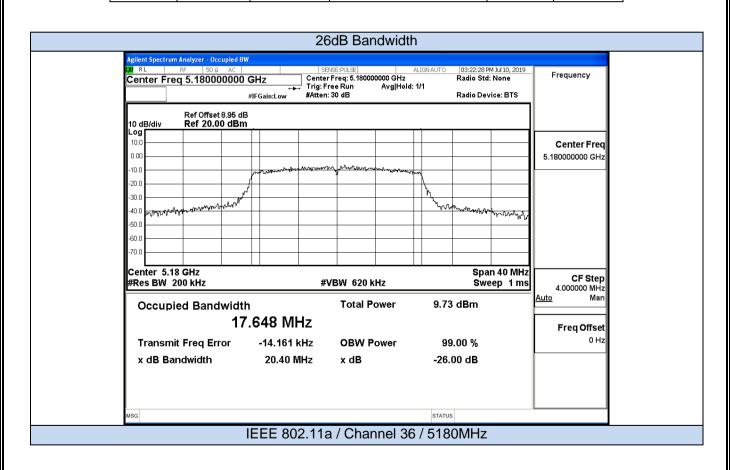
IEEE 802.11ac40 / Channel 46 / 5230MHz



IEEE 802.11ac80 / Channel 42 / 5210MHz

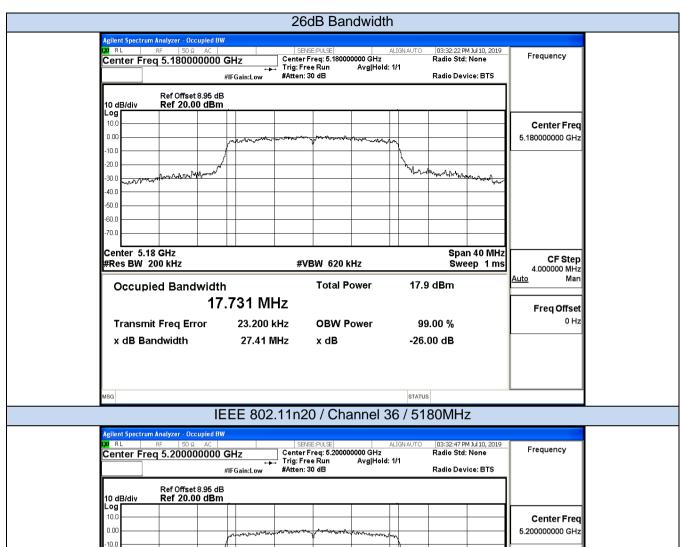
C.4 Emission Bandwidth

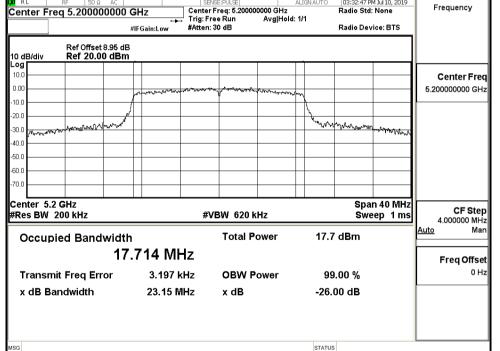
Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
	36	5180	20.40		Pass
11A	40	5200	20.51	No Limit	Pass
	48	5240	18.53		Pass
111100	36	5180	27.41		Pass
11N20	40	5200	23.15	No Limit	Pass
SISO	48	5240	23.94		Pass
11N40 SISO	38	5190	49.69	No Limit	Pass
	46	5230	50.60	No Limit	Pass
444000	36	5180	24.91		Pass
11AC20	40	5200	22.66	No Limi	Pass
SISO	48	5240	25.73		Pass
11AC40	38	5190	50.99	No Limi	Pass
SISO	46	5230	52.83	INO LIMI	Pass
11AC80 SISO	42	5210	80.41	No Limi	Pass



SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AEC gilent Spectrum Analyzer - Occupied BW 03:24:05 PM Jul 10, 2019 Radio Std: None | SENSE:PULSE | ALIGN AUTO | Center Freq: 5.200000000 GHz | Trig: Free Run | Avg|Hold: 1/1 Frequency Avg|Hold: 1/1 Radio Device: BTS Ref Offset 8.95 dB Ref 20.00 dBm 10 dB/div 10.0 Center Freq 0.00 5.200000000 GHz -10.0 -20.0 Muse March 40 O 50.0 Center 5.2 GHz Span 40 MHz CF Step #Res BW 200 kHz #VBW 620 kHz Sweep 1 ms 4.000000 MHz <u>Auto</u> Man **Total Power** 9.65 dBm Occupied Bandwidth 17.698 MHz Freq Offset 0 Hz Transmit Freq Error -41.859 kHz **OBW Power** 99.00 % x dB Bandwidth 20.51 MHz -26.00 dB x dB STATUS IEEE 802.11a / Channel 40 / 5200MHz Agilent Spectrum Analyzer - Occupied BW 03:24:27 PM Jul 10, 2019 Radio Std: None Frequency Center Freq 5.240000000 GHz Radio Device: BTS #IFGain:Low Ref Offset 8.95 dB Ref 20.00 dBm 10 dB/div 10.0 Center Freq 0.00 5.240000000 GHz 10.0 -20.0 30.0 Astronomy and the many ment per 40.0 -50.0 Center 5.24 GHz

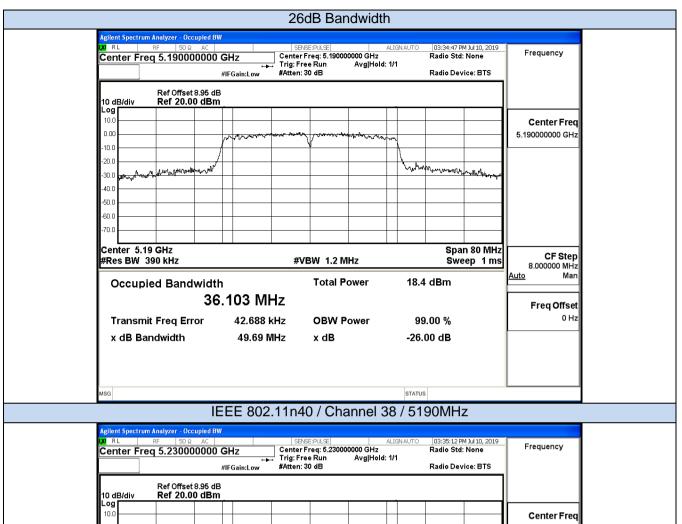
#Res BW 200 kHz

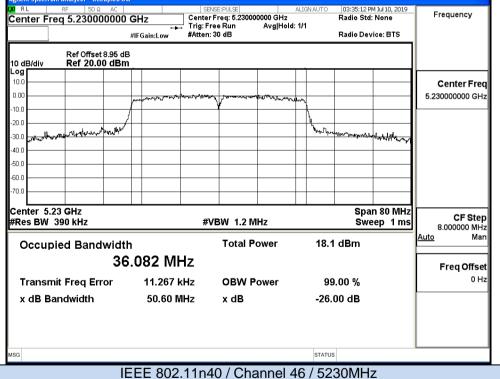


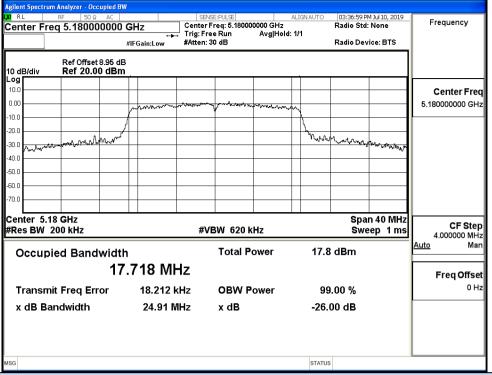


IEEE 802.11n20 / Channel 40 / 5200MHz

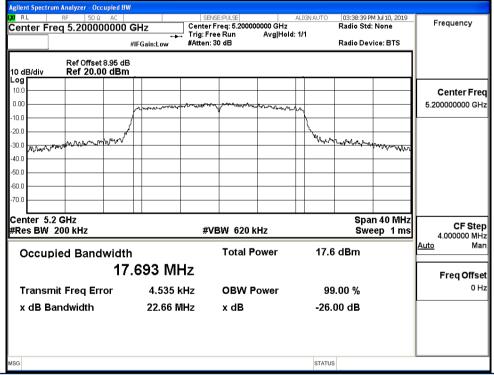
SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AIKX--T90BPRO Report No.: LCS190621068AEC gilent Spectrum Analyzer - Occupied BW |03:33:11 PM Jul 10, 2019 | Radio Std: None Frequency Radio Device: BTS Ref Offset 8.95 dB Ref 20.00 dBm 10 dB/div Center Freq 0.00 5.240000000 GHz -10.0 -20.0 wal More and a way of what would -40.0 -50.0 Center 5.24 GHz #Res BW 200 kHz Span 40 MHz CF Step 4.000000 MHz #VBW 620 kHz Sweep 1 ms <u>Auto</u> Man **Total Power** 17.6 dBm Occupied Bandwidth 17.692 MHz Freq Offset 0 Hz -8.378 kHz Transmit Freq Error **OBW Power** 99.00 % x dB Bandwidth 23.94 MHz x dB -26.00 dB STATUS IEEE 802.11n20 / Channel 48 / 5240MHz



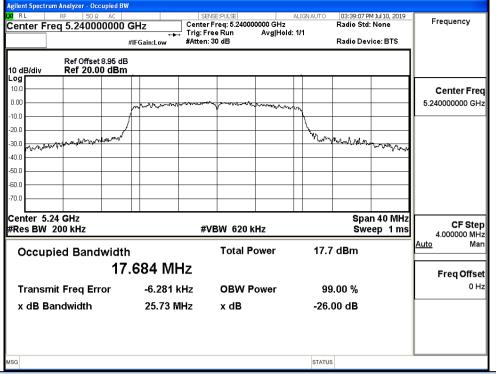




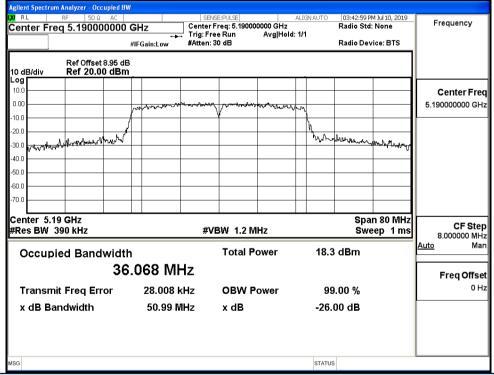
IEEE 802.11ac20 / Channel 36 / 5180MHz



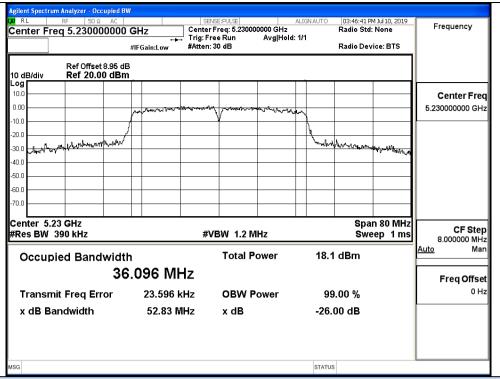
IEEE 802.11ac20 / Channel 40 / 5200MHz



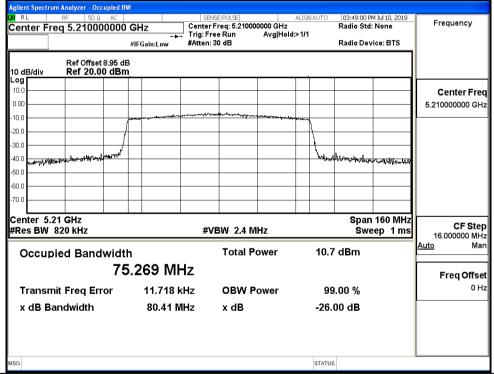
IEEE 802.11ac20 / Channel 48 / 5240MHz



IEEE 802.11ac40 / Channel 38 / 5190MHz



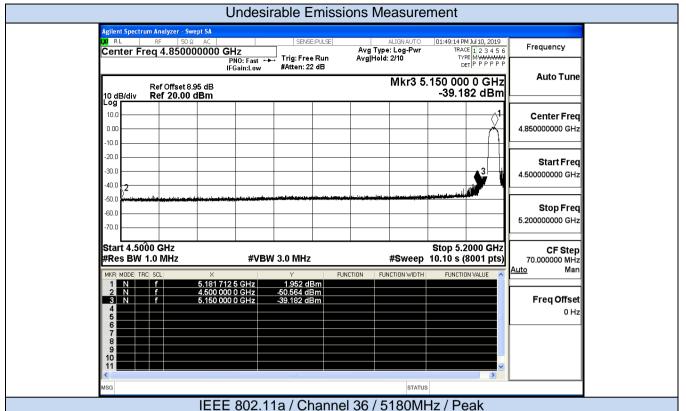
IEEE 802.11ac40 / Channel 46 / 5230MHz

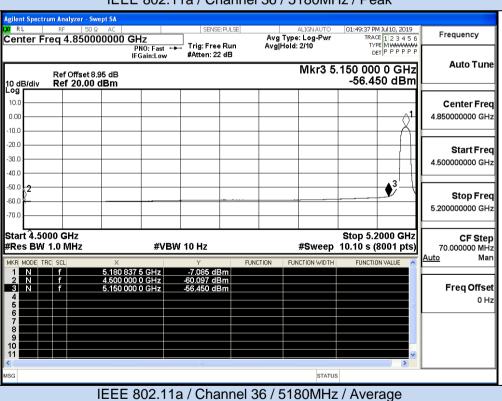


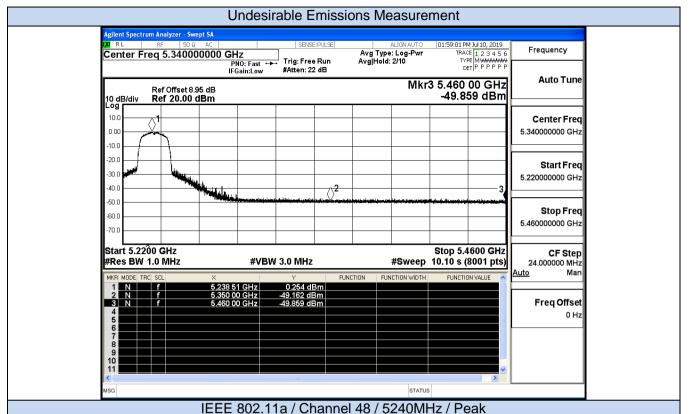
IEEE 802.11ac80 / Channel 42 / 5210MHz

C.5 Undesirable Emissions Measurement

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
		4500.0	-50.56	3.00	0	47.7	Peak	68.20	Pass
	20	4500.0	-60.10	3.00	0	38.16	Average	54.00	Pass
	36	5150.0	-39.18	3.00	0	59.08	Peak	68.20	Pass
444		5150.0	-56.45	3.00	0	41.81	Average	54.00	Pass
11A		5350.0	-49.16	3.00	0	49.1	Peak	68.20	Pass
	40	5350.0	-59.83	3.00	0	38.43	Average	54.00	Pass
	48	5460.0	-49.86	3.00	0	48.4	Peak	68.20	Pass
		5460.0	-60.38	3.00	0	37.88	Average	54.00	Pass
		4500.0	-50.38	3.00	0	47.88	Peak	68.20	Pass
	00	4500.0	-60.06	3.00	0	38.2	Average	54.00	Pass
4.41.10	36	5150.0	-37.99	3.00	0	60.27	Peak	68.20	Pass
11N2		5150.0	-56.56	3.00	0	41.7	Average	54.00	Pass
0		5350.0	-48.51	3.00	0	49.75	Peak	68.20	Pass
SISO	40	5350.0	-59.61	3.00	0	38.65	Average	54.00	Pass
	48	5460.0	-48.61	3.00	0	49.65	Peak	68.20	Pass
		5460.0	-60.26	3.00	0	38.0	Average	54.00	Pass
		4500.0	-50.67	3.00	0	47.59	Peak	68.20	Pass
		4500.0	-60.10	3.00	0	38.16	Average	54.00	Pass
	38	5150.0	-44.40	3.00	0	53.86	Peak	68.20	Pass
11N4		5150.0	-56.19	3.00	0	42.07	Average	54.00	Pass
0		5350.0	-49.12	3.00	0	49.14	Peak	68.20	Pass
SISO		5350.0	-59.29	3.00	0	38.97	Average	54.00	Pass
	46	5460.0	-47.99	3.00	0	50.27	Peak	68.20	Pass
		5460.0	-59.99	3.00	0	38.27	Average	54.00	Pass
		4500.0	-50.21	3.00	0	48.05	Peak	68.20	Pass
		4500.0	-60.07	3.00	0	38.19	Average	54.00	Pass
11A	36	5150.0	-47.23	3.00	0	51.03	Peak	68.20	Pass
C20		5150.0	-56.75	3.00	0	41.51	Average	54.00	Pass
SIS		4500.0	-50.21	3.00	0	48.05	Peak	68.20	Pass
	48	4500.0	-60.07	3.00	0	38.19	Average	54.00	Pass
0		5150.0	-47.23	3.00	0	51.03	Peak	68.20	Pass
		5150.0	-56.75	3.00	0	41.51	Average	54.00	Pass
		4500.0	-50.56	3.00	0	47.7	Peak	68.20	Pass
		4500.0	-60.08	3.00	0	38.18	Average	54.00	Pass
11A	38	5150.0	-30.39	3.00	0	67.87	Peak	68.20	Pass
C40		5150.0	-45.12	3.00	0	53.14	Average	54.00	Pass
SIS		5350.0	-50.03	3.00	0	48.23	Peak	68.20	Pass
		5350.0	-59.30	3.00	0	38.96	Average	54.00	Pass
0	46	5460.0	-49.05	3.00	0	49.21	Peak	68.20	Pass
		5460.0	-59.98	3.00	0	38.28	Average	54.00	Pass
		4500.0	-49.35	3.00	0	48.91	Peak	68.20	Pass
		5150.0	-58.45	3.00	0	39.81	Average	54.00	Pass
111		4500.0	-50.71	3.00	0	47.55	Peak	68.20	Pass
11A C80	42	5150.0	-59.50	3.00	0	38.76	Average	54.00	Pass
SIS O	44	5350.0	-49.35	3.00	0	48.91	Peak	68.20	Pass
		5460.0	-58.45	3.00	0	39.81	Average	54.00	Pass
		5350.0	-50.71	3.00	0	47.55	Peak	68.20	Pass
		5460.0	-59.50	3.00	0	38.76	Average	54.00	Pass

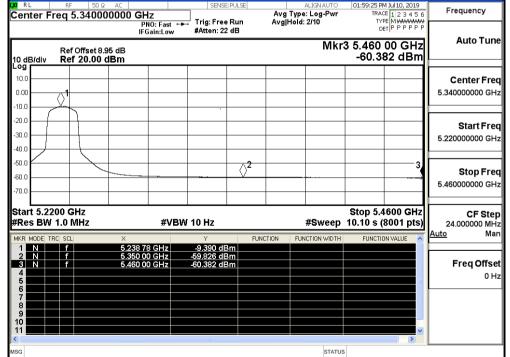


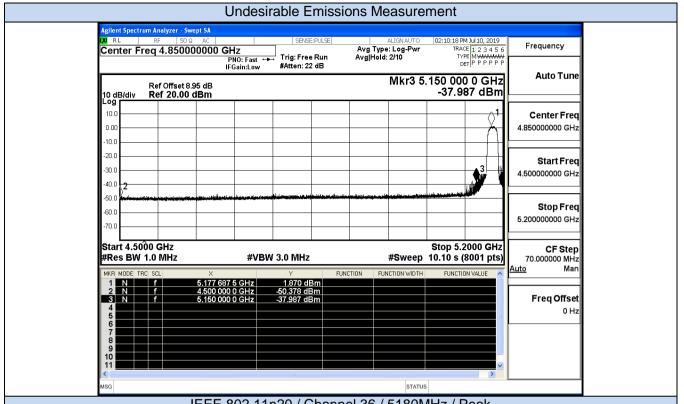


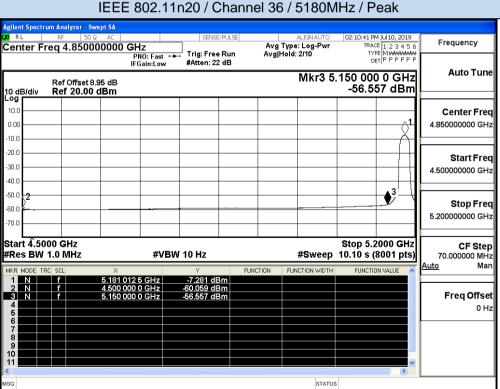




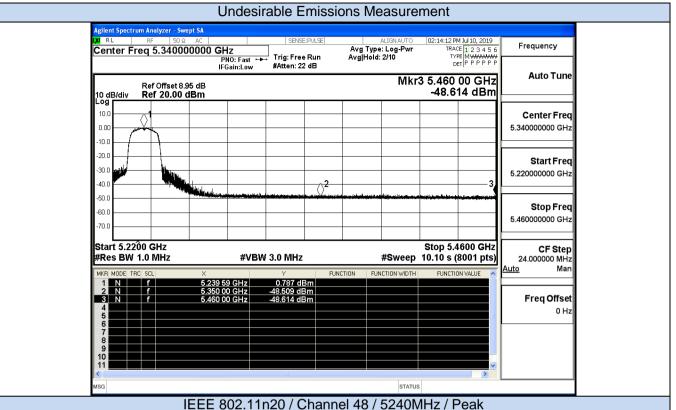
Frequency

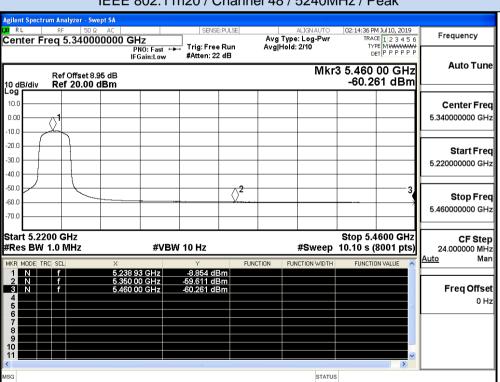




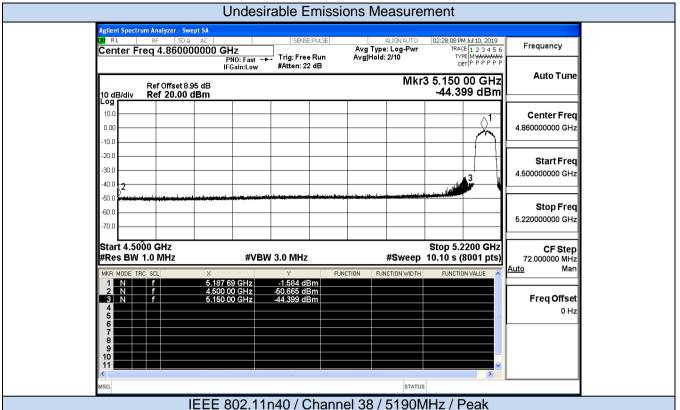


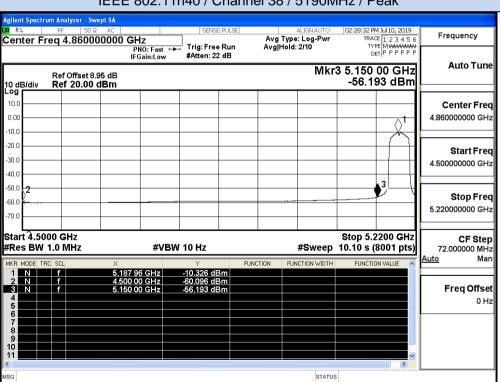
IEEE 802.11n20 / Channel 36 / 5180MHz / Average



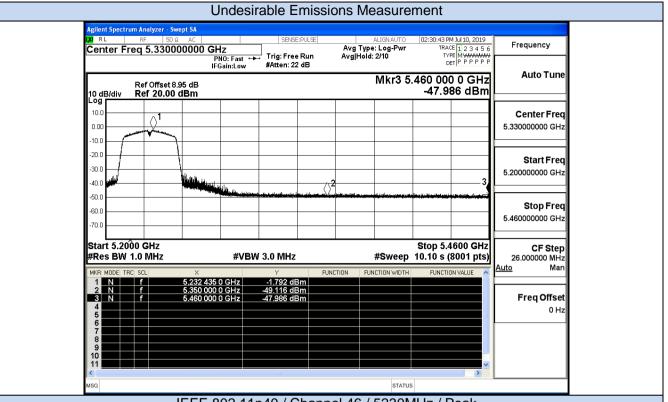


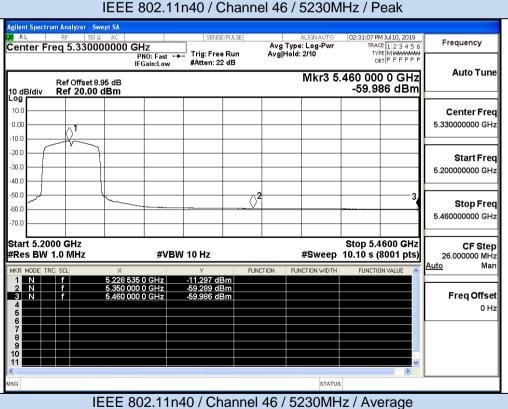
IEEE 802.11n20 / Channel 48 / 5240MHz / Average

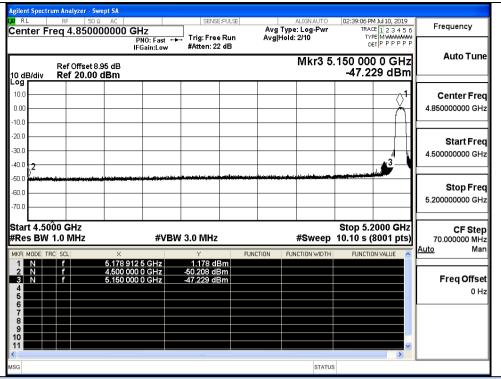




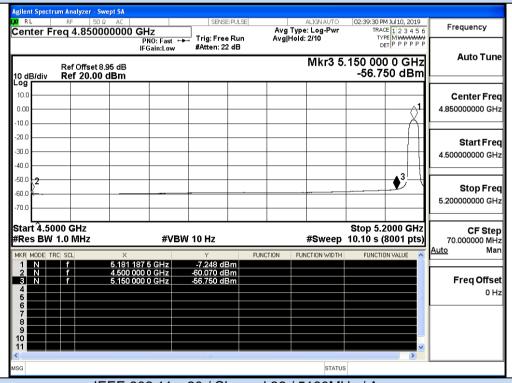
IEEE 802.11n40 / Channel 38 / 5190MHz / Average



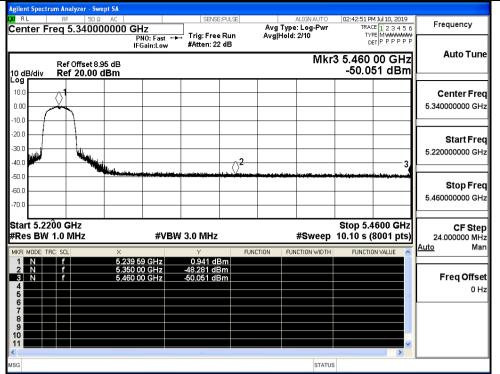




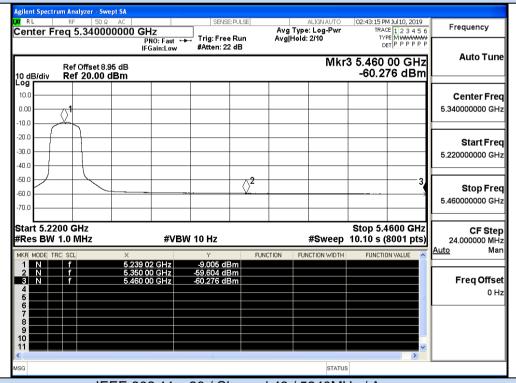
IEEE 802.11ac20 / Channel 36 / 5180MHz / Peak



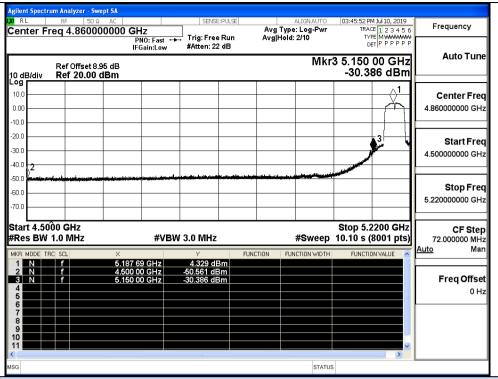
IEEE 802.11ac20 / Channel 36 / 5180MHz / Average



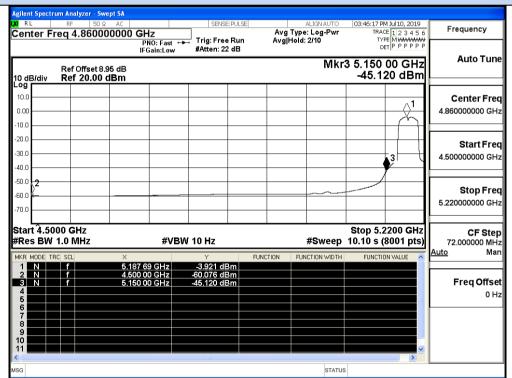
IEEE 802.11ac20 / Channel 48 / 5240MHz / Peak



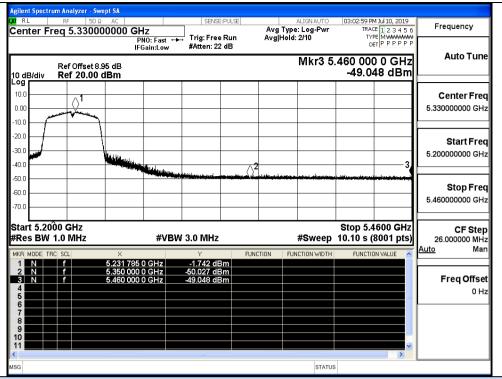
IEEE 802.11ac20 / Channel 48 / 5240MHz / Average



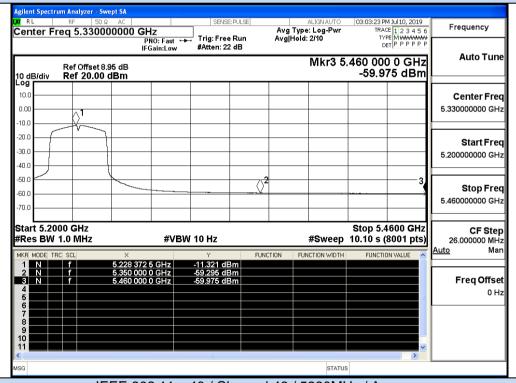
IEEE 802.11ac40 / Channel 38/5190MHz / Peak



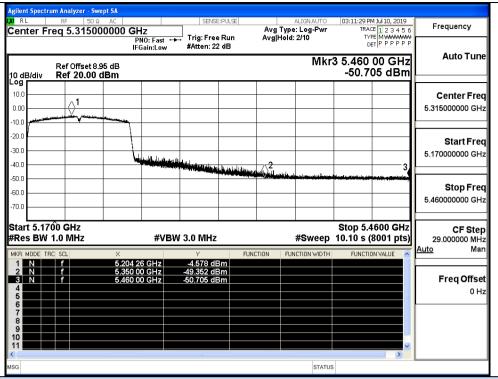
IEEE 802.11ac40 / Channel 38 / 5190MHz / Average



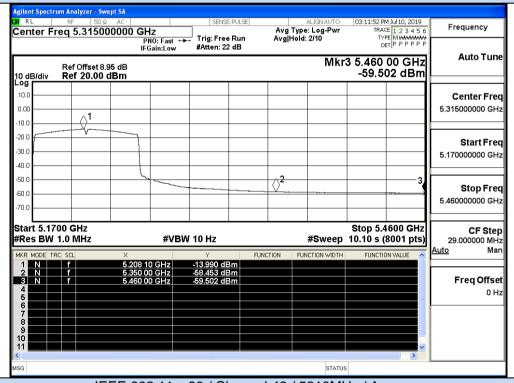
IEEE 802.11ac40 / Channel 46/5230MHz / Peak



IEEE 802.11ac40 / Channel 46 / 5230MHz / Average



IEEE 802.11ac80 / Channel 42 / 5210MHz / Peak



IEEE 802.11ac80 / Channel 42 / 5210MHz / Average