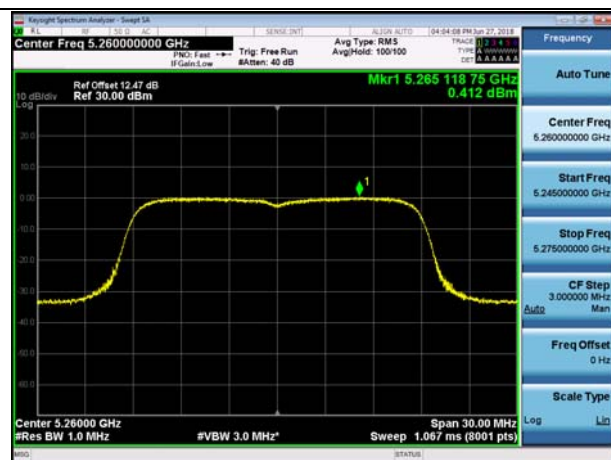
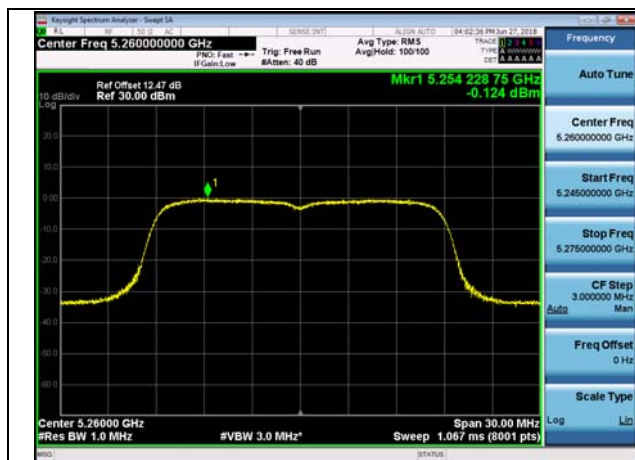
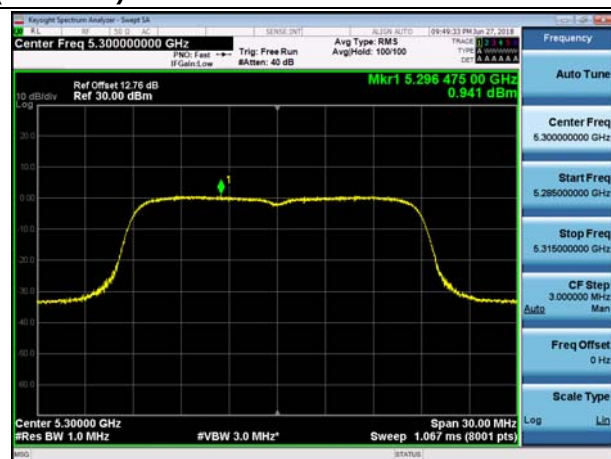
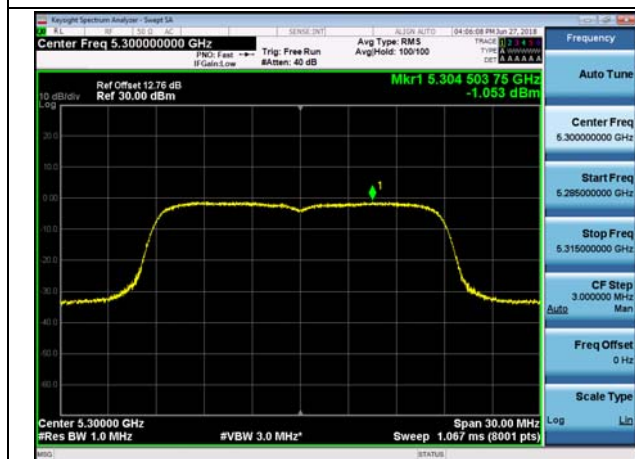
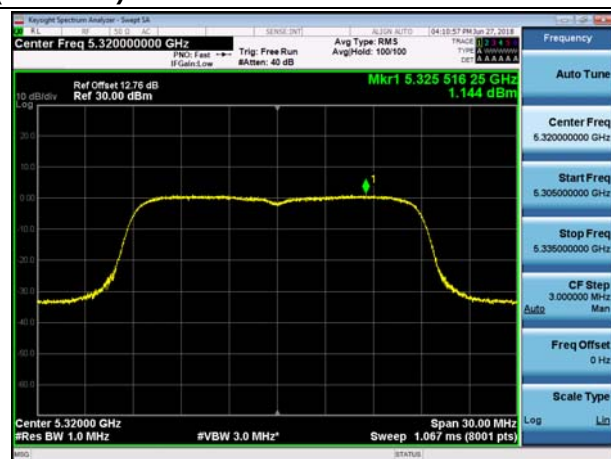
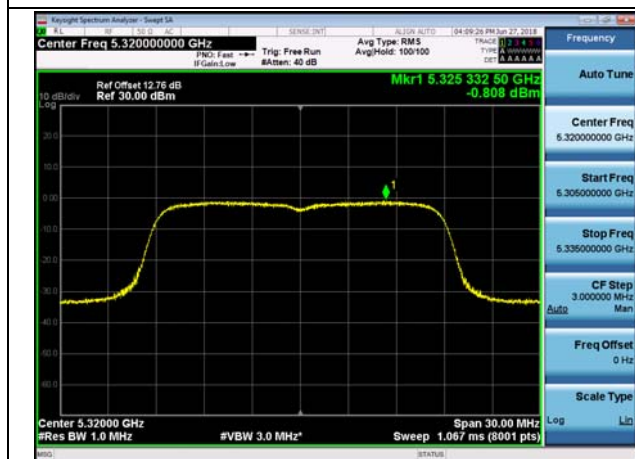




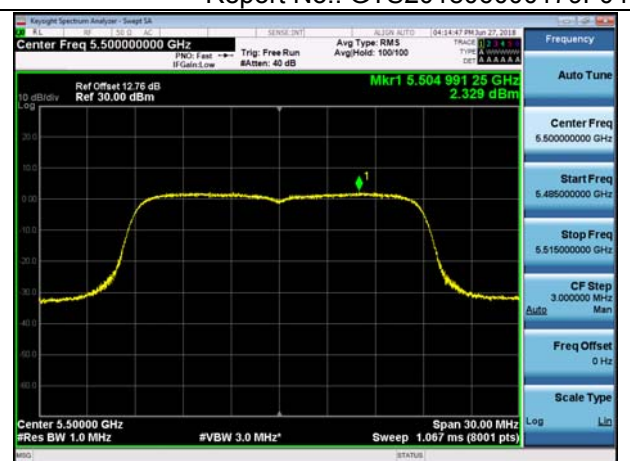
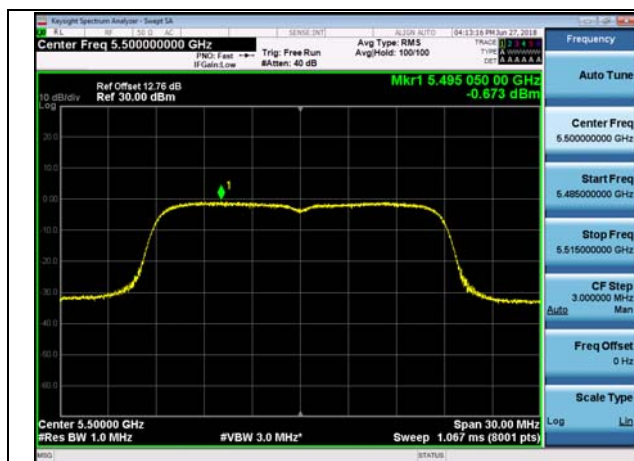
Channel 52 (5260MHz)



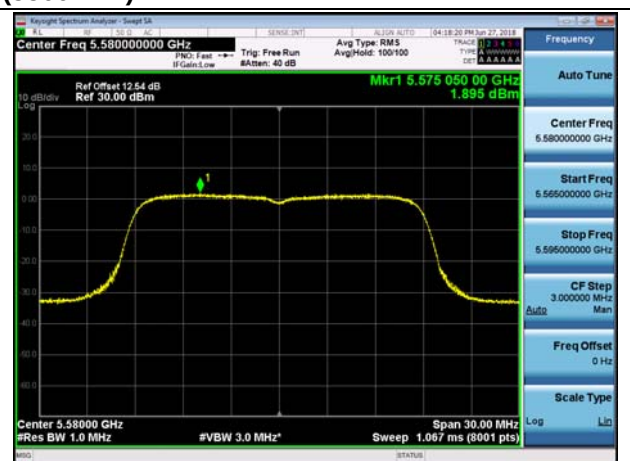
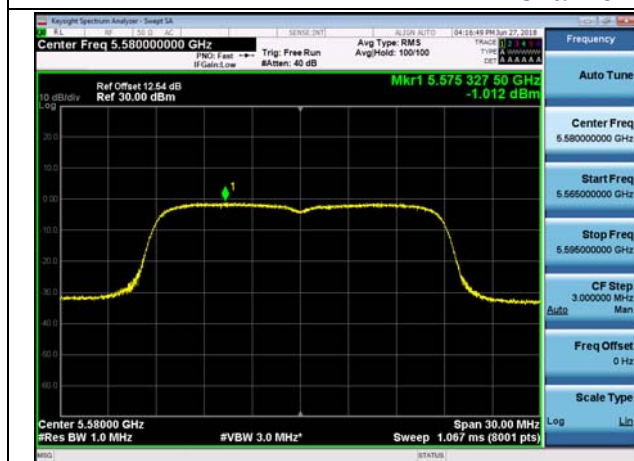
Channel 60 (5300MHz)



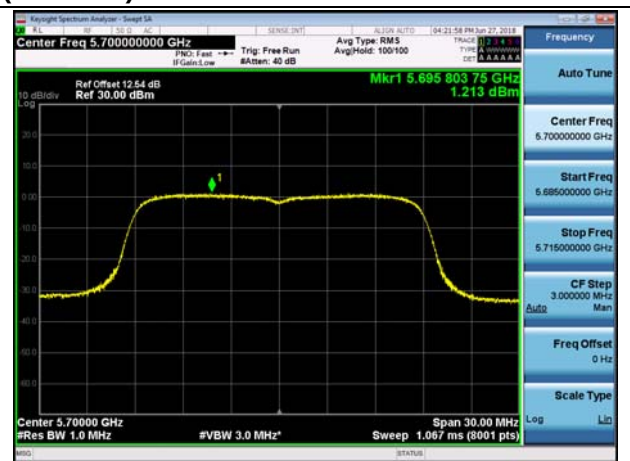
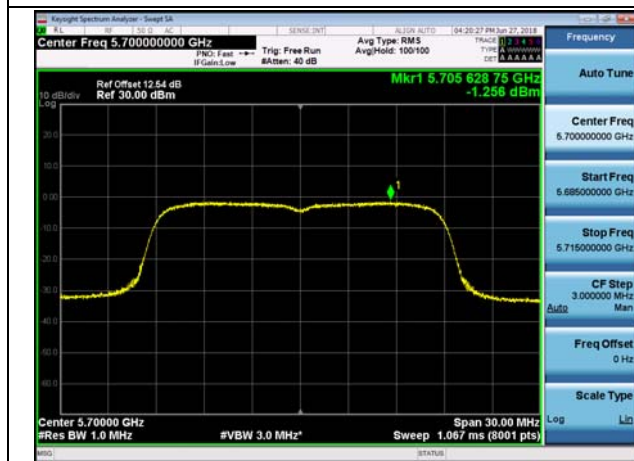
Channel 64 (5320MHz)



Channel 100 (5500MHz)

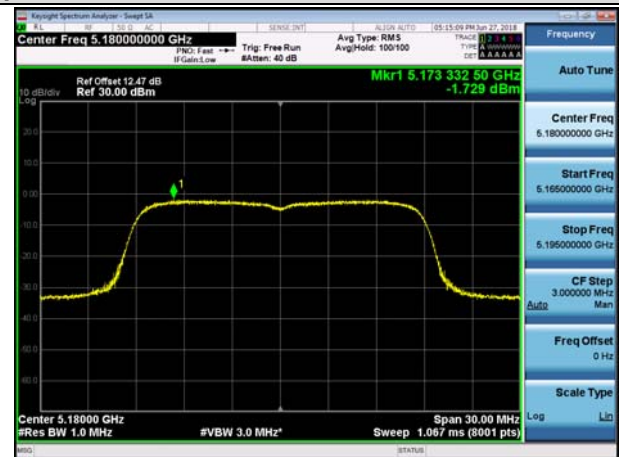
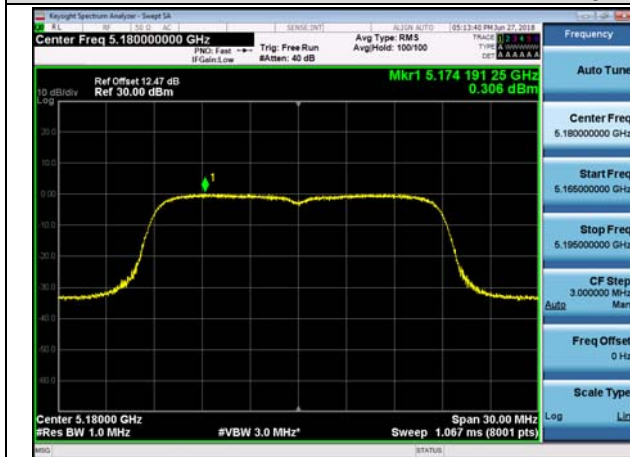


Channel 116 (5580MHz)

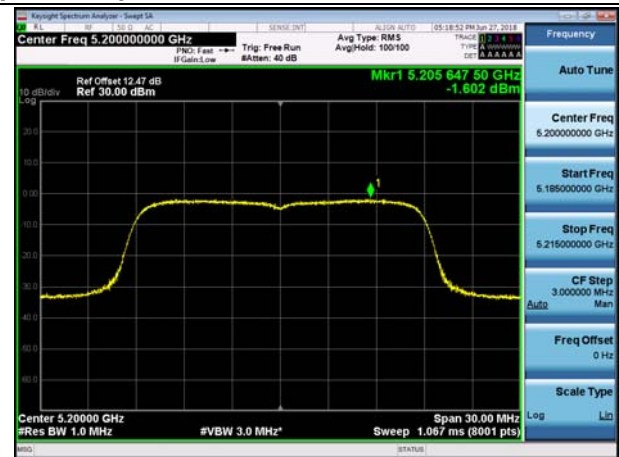
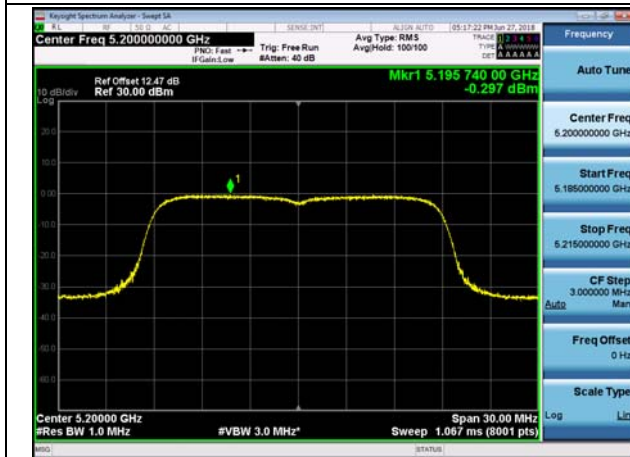


Channel 140 (5700MHz)

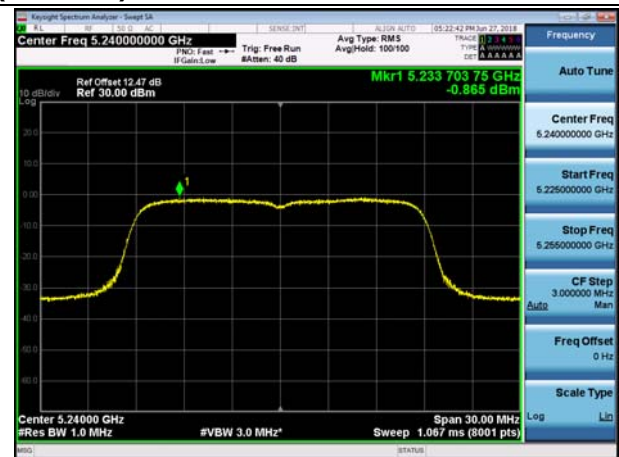
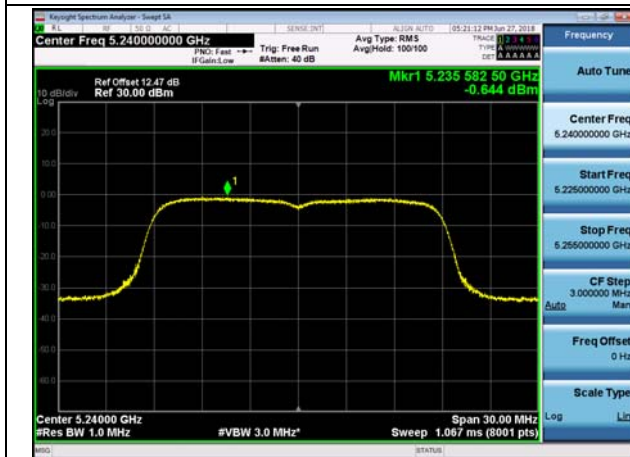
802.11ac(VHT20) MIMO mode



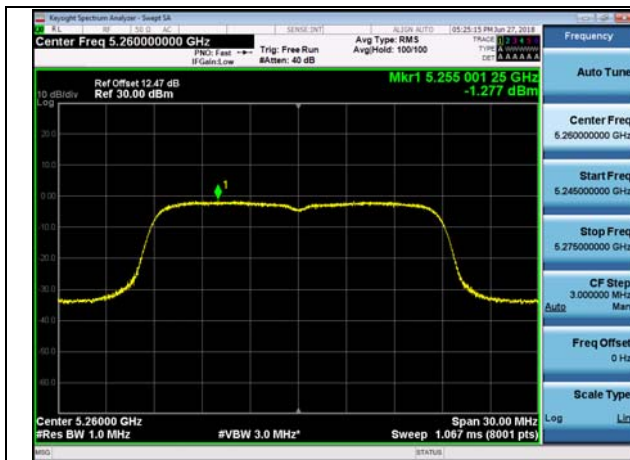
Channel 36 (5180MHz)



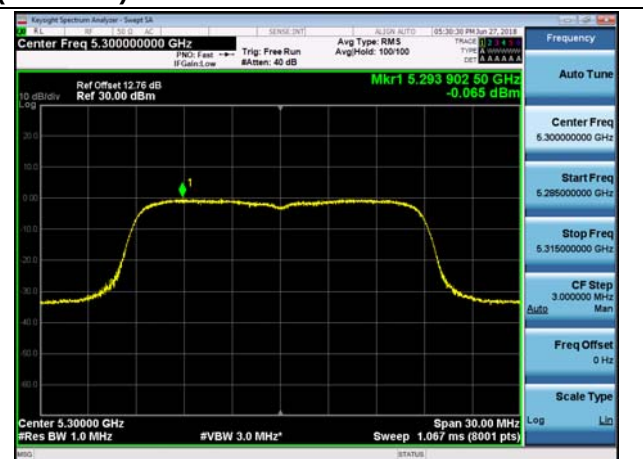
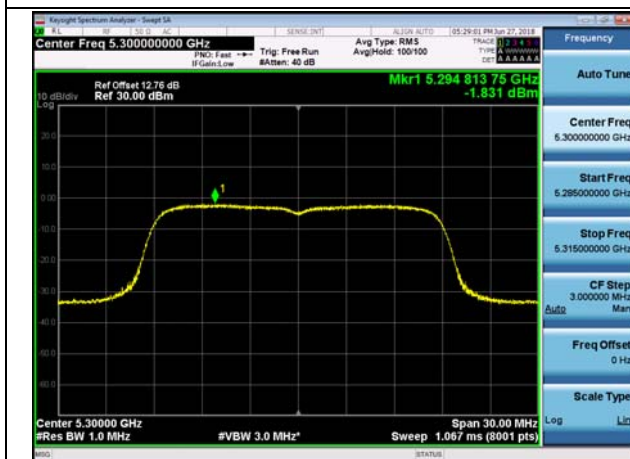
Channel 40 (5200MHz)



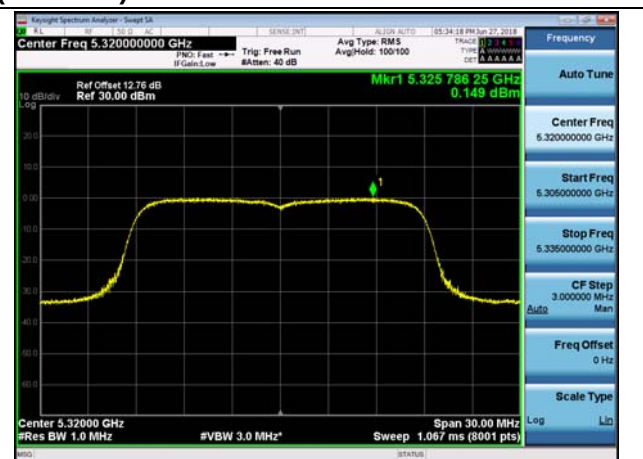
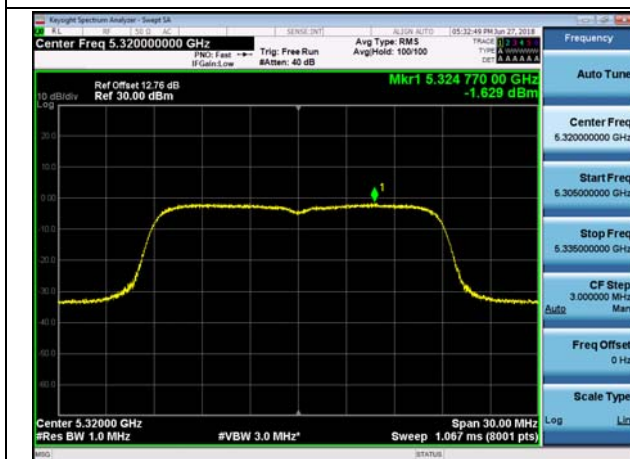
Channel 48 (5240MHz)



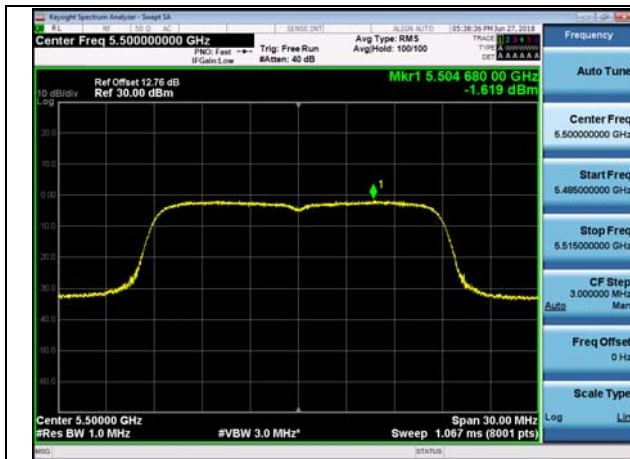
Channel 52 (5260MHz)



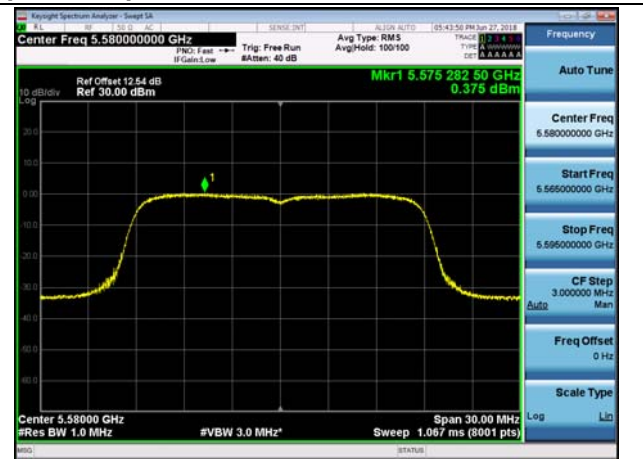
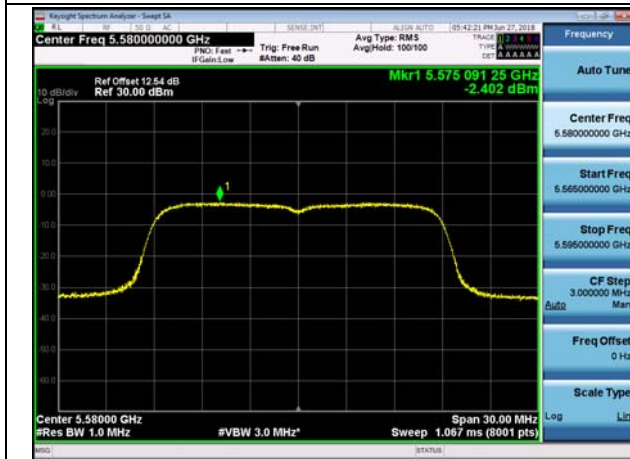
Channel 60 (5300MHz)



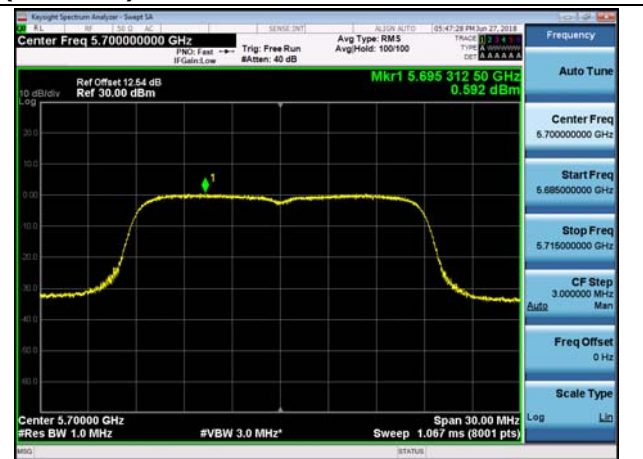
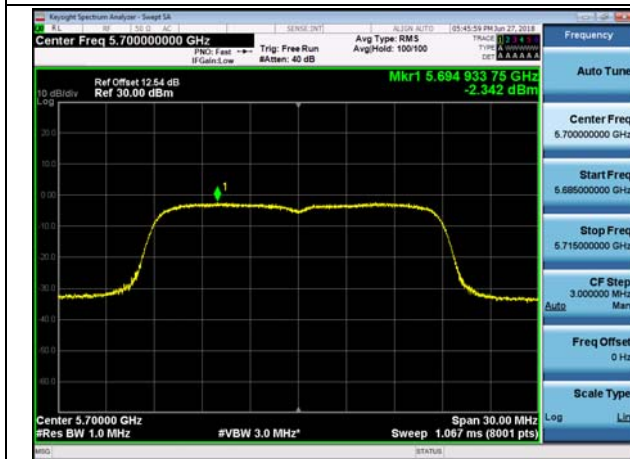
Channel 64 (5320MHz)



Channel 100 (5500MHz)

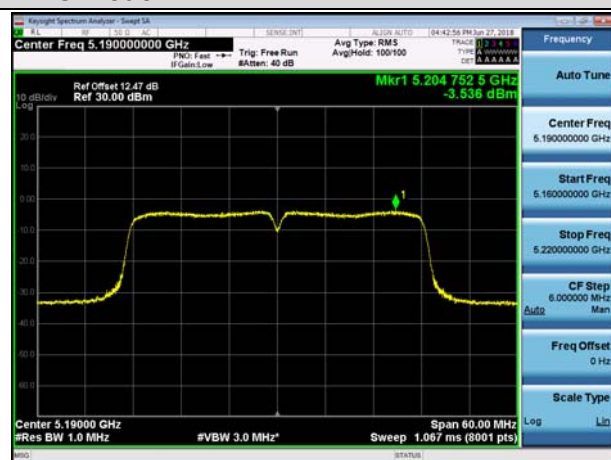
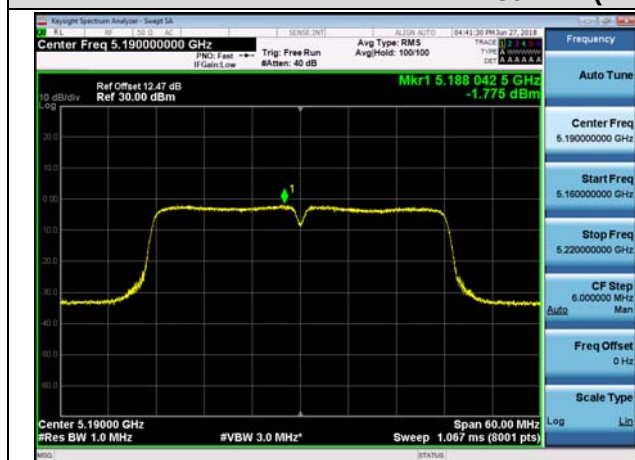


Channel 116 (5580MHz)

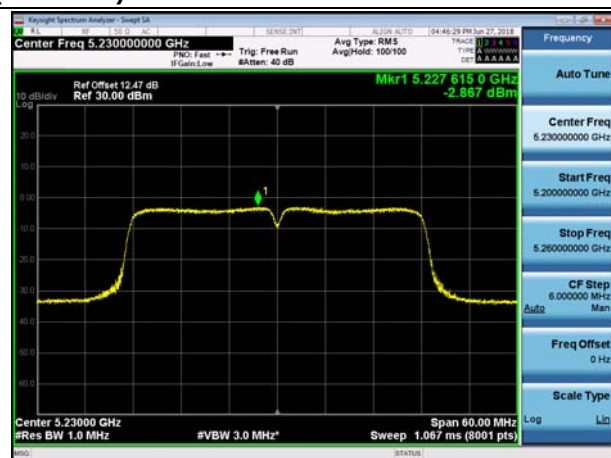
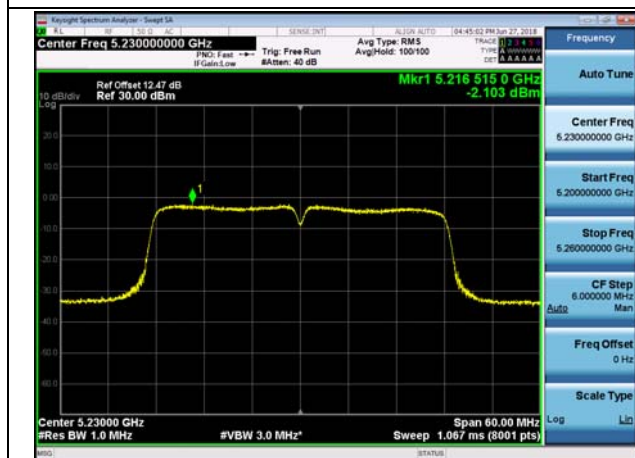


Channel 140 (5700MHz)

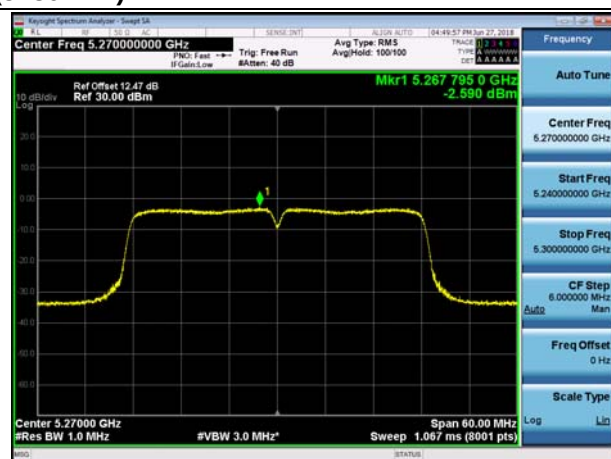
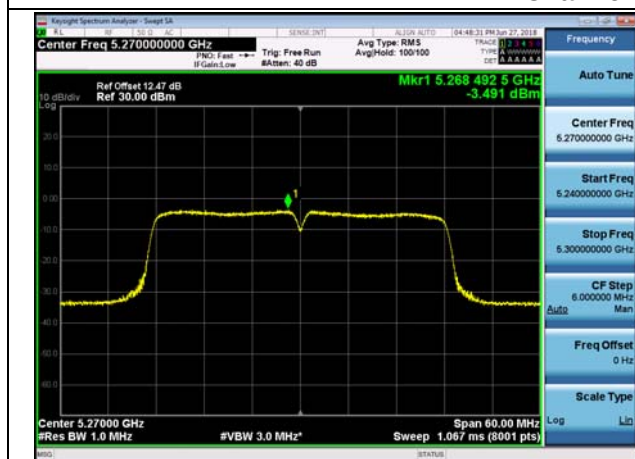
802.11n(HT40) MIMO mode



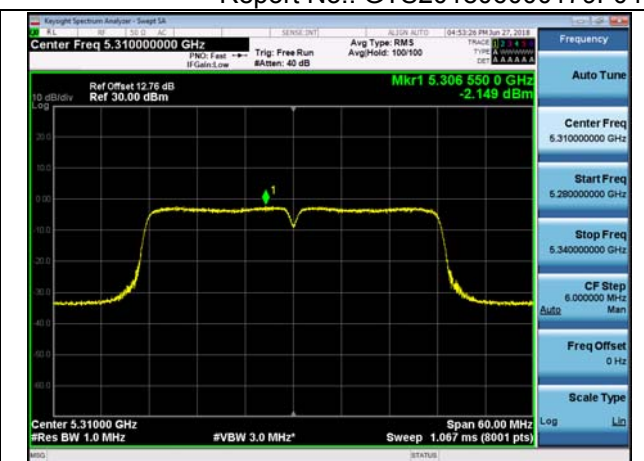
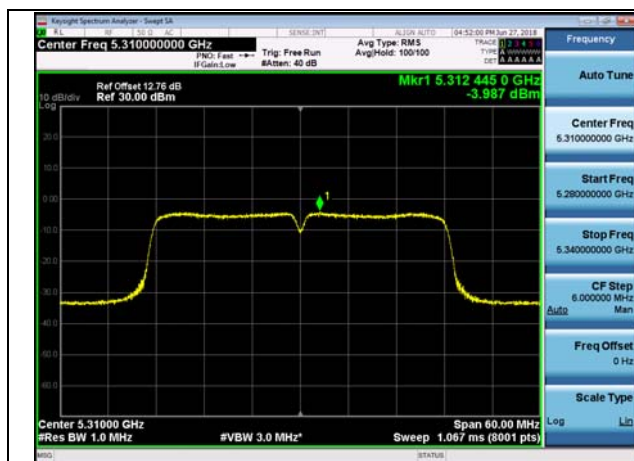
Channel 38 (5190MHz)



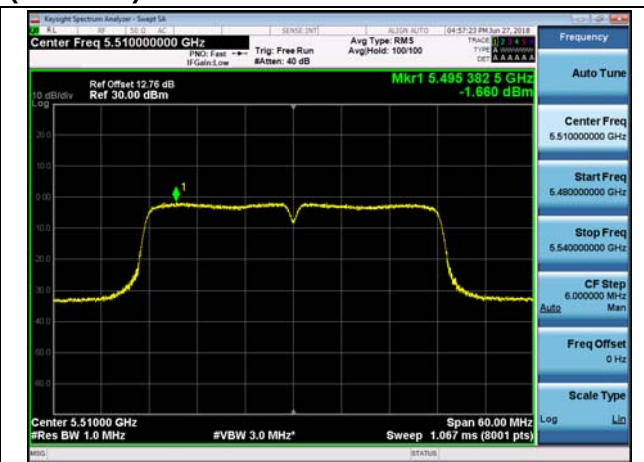
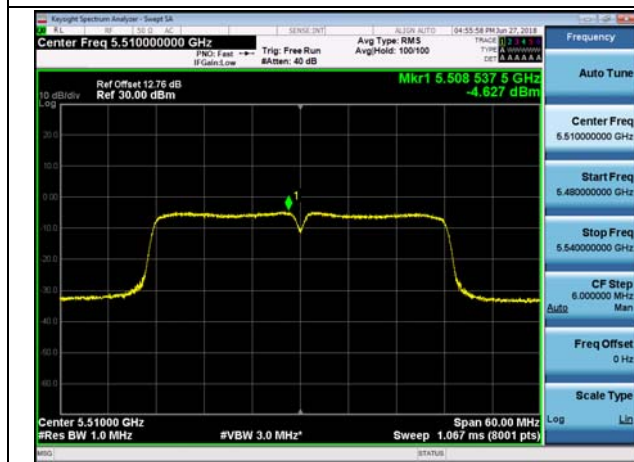
Channel 46 (5230MHz)



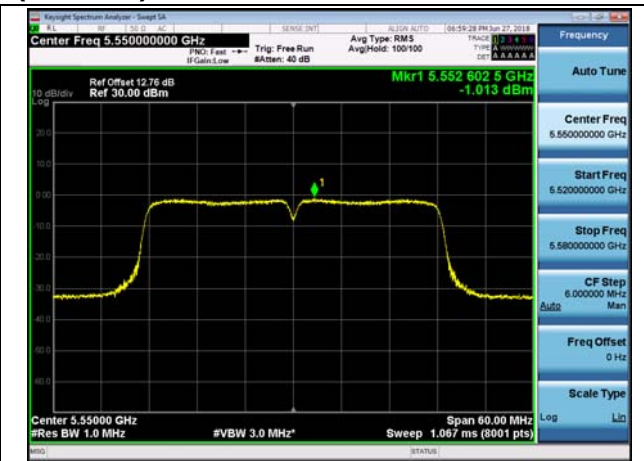
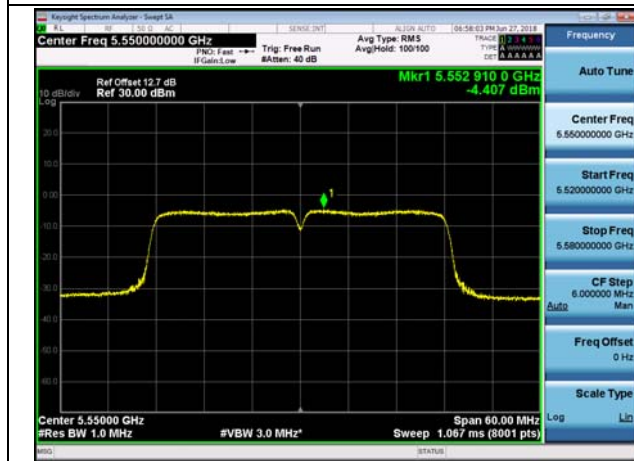
Channel 54 (5270MHz)



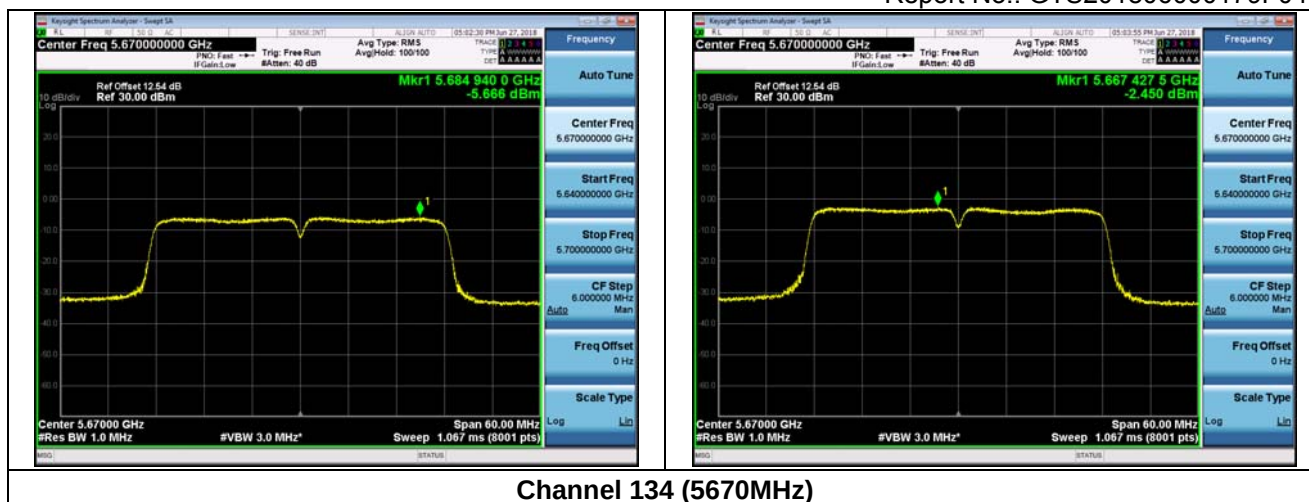
Channel 62 (5310MHz)



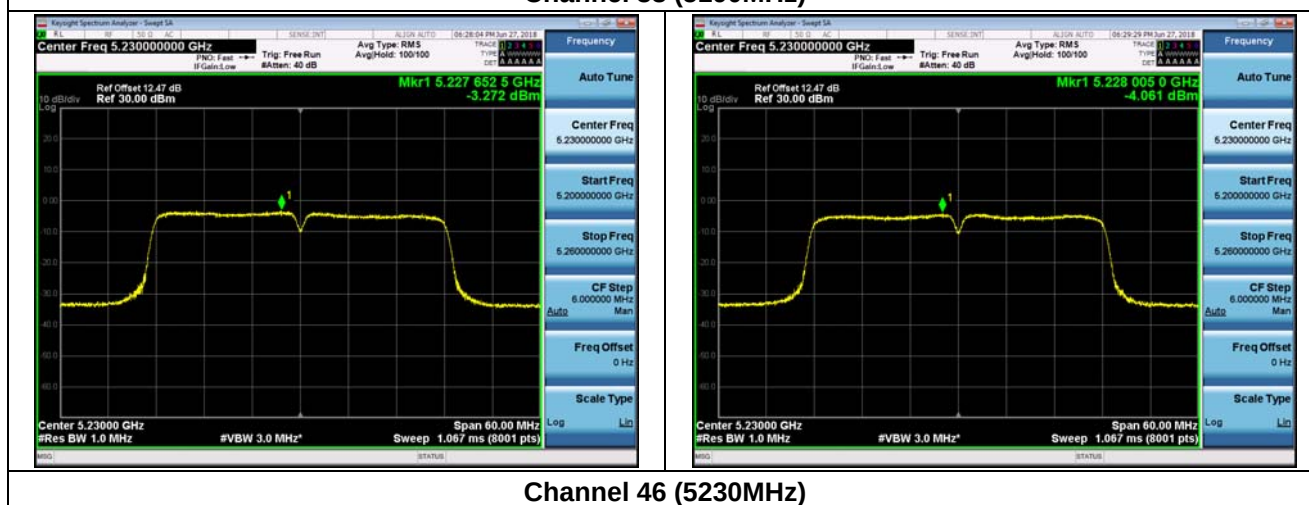
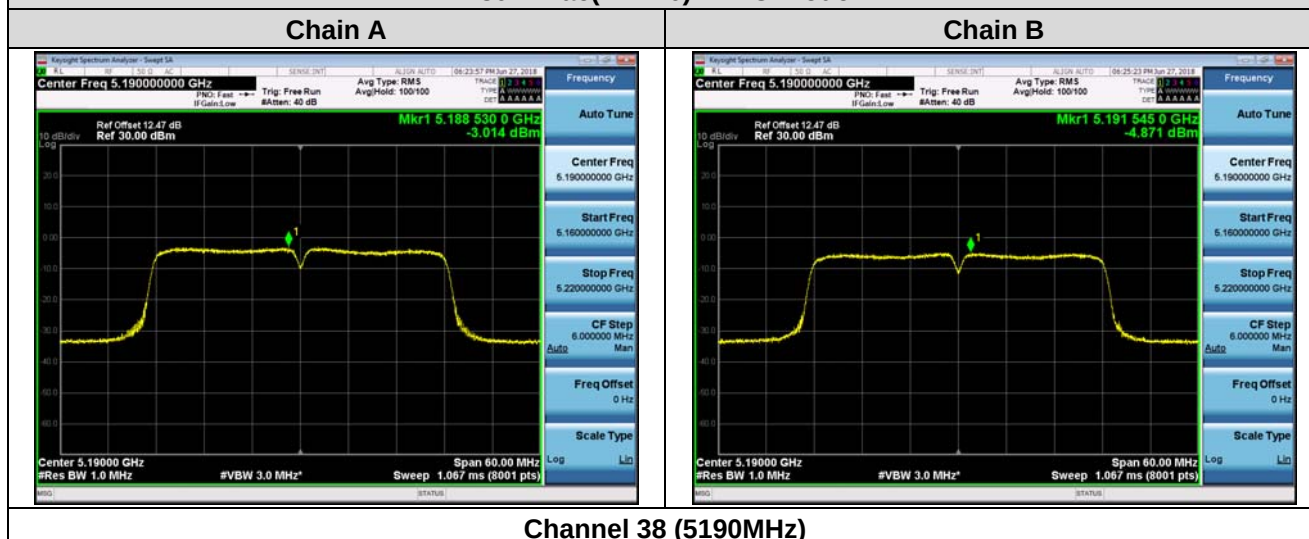
Channel 102 (5510MHz)

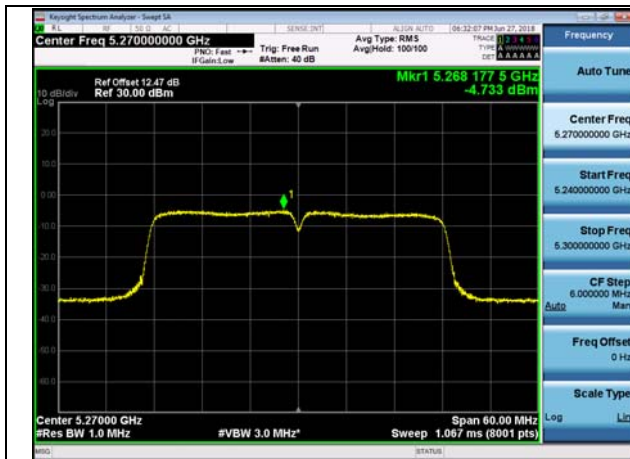


Channel 110 (5550MHz)

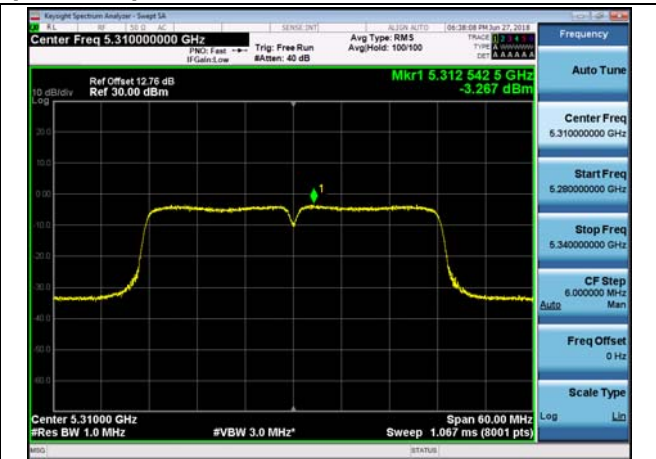
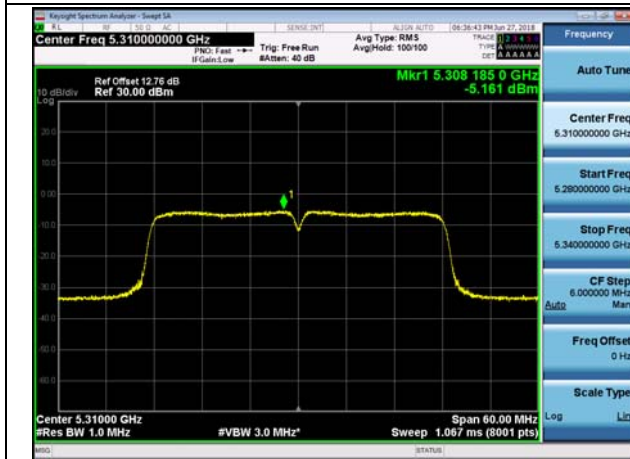


802.11ac(VHT40) MIMO mode

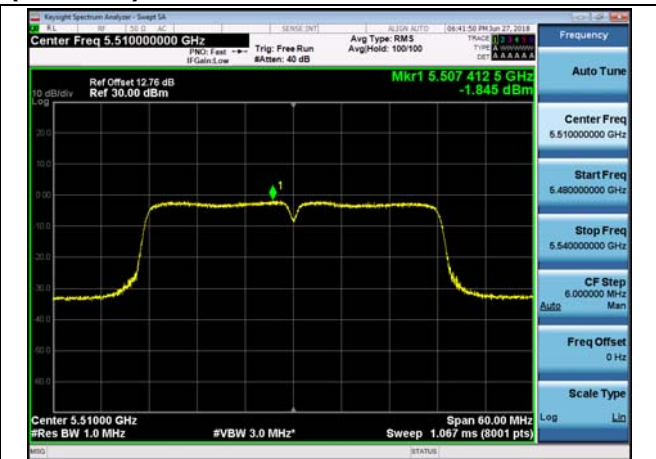




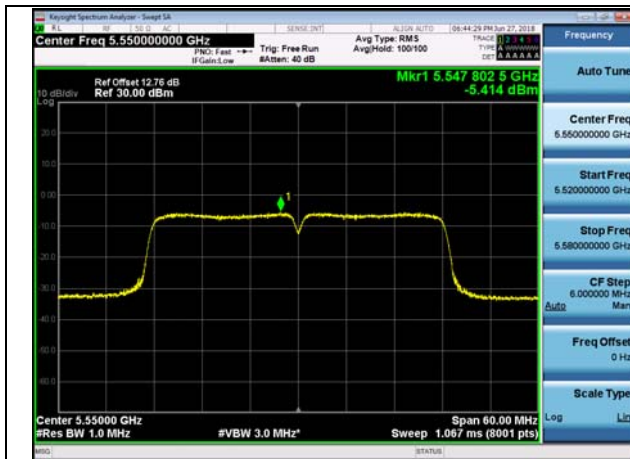
Channel 54 (5270MHz)



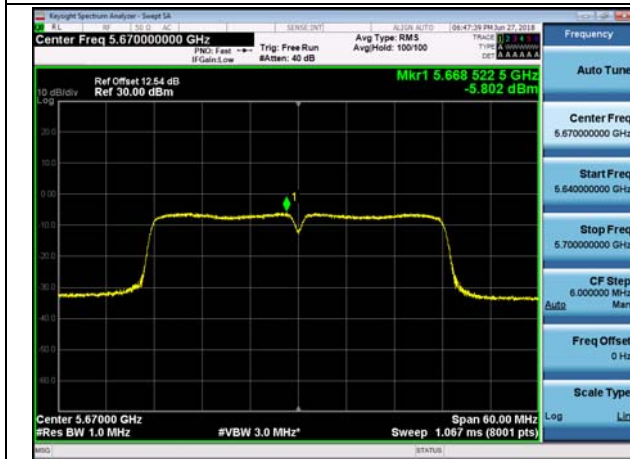
Channel 62 (5310MHz)



Channel 102 (5510MHz)



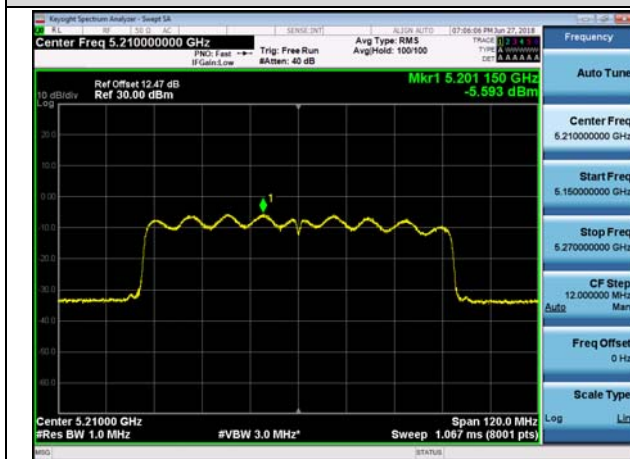
Channel 110 (5550MHz)



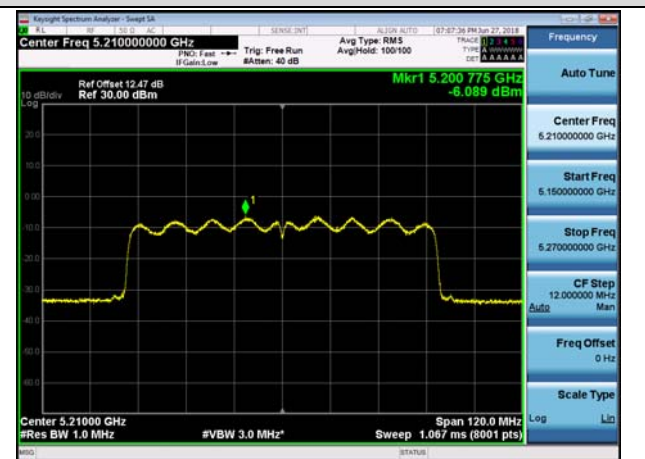
Channel 134 (5670MHz)

802.11ac(VHT80) mode

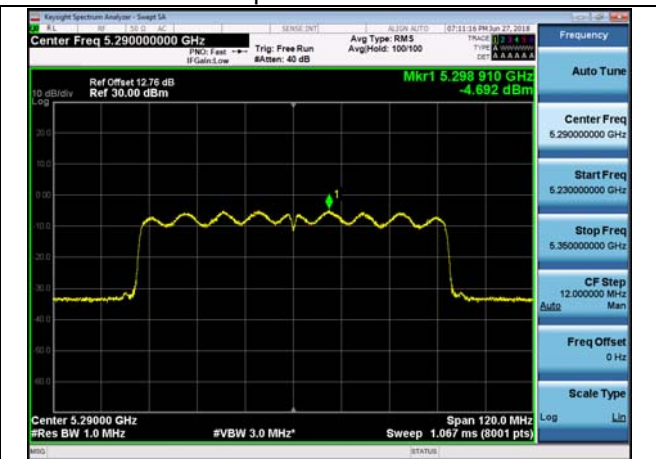
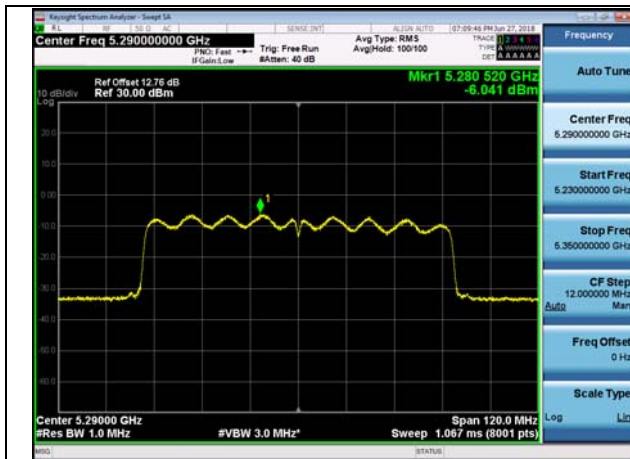
Chain A



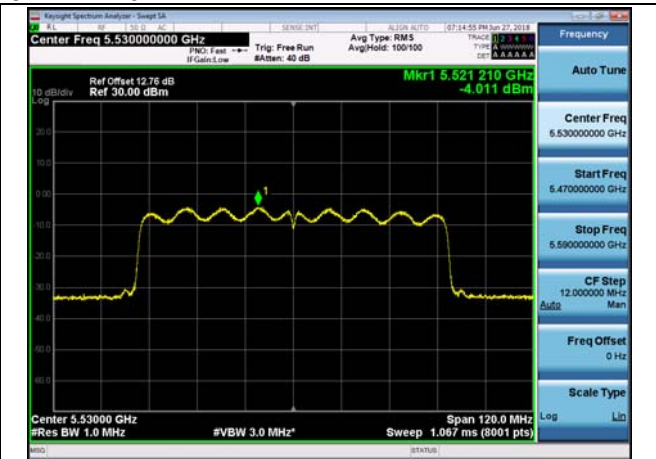
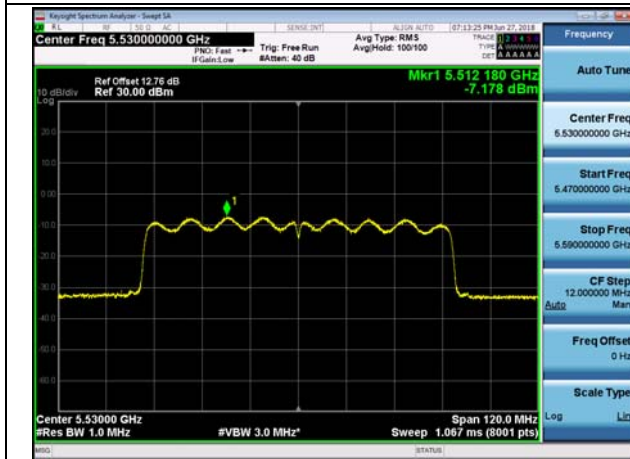
Chain B



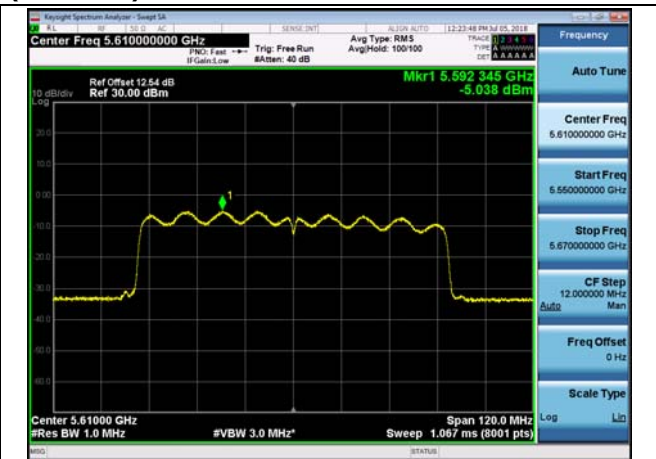
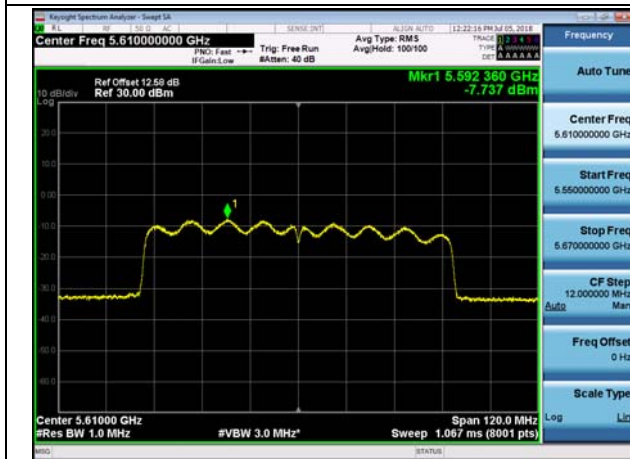
Channel 40 (5210MHz)



Channel 58 (5290MHz)



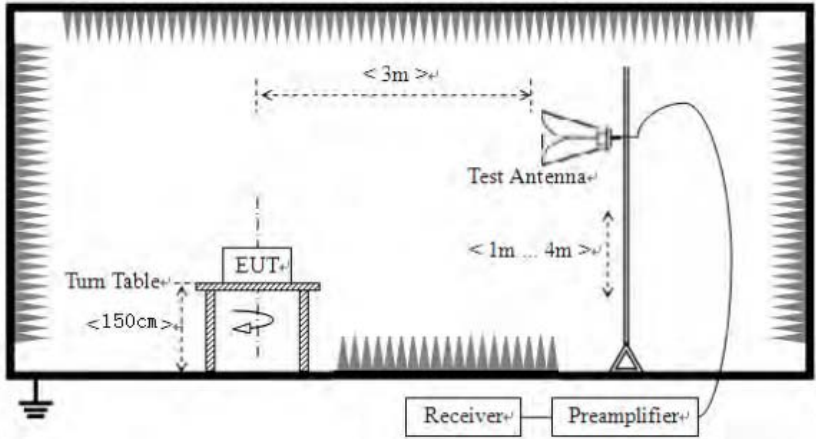
Channel 58 (5530MHz)



Channel 58 (5610MHz)

7.6 Band Edge

Test Requirement:	47 CFR Part 15, Subpart C 15.205 & Subpart E 15.407(b)																								
Test Method:	ANSI C63.10:2013																								
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)																								
Receiver setup:	<table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr><tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr></table>					Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value	Above 1GHz	Peak	1MHz	3MHz	Peak Value	AV	1MHz	3MHz	Average Value	
Frequency	Detector	RBW	VBW	Remark																					
30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value																					
Above 1GHz	Peak	1MHz	3MHz	Peak Value																					
	AV	1MHz	3MHz	Average Value																					
Limit:	<table><tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr><tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr><tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr><tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr><tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr><tr><td>68.2</td><td>Peak Value</td></tr></table> Undesirable emission limits: (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band. (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.					Frequency	Limit (dBuV/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value	68.2	Peak Value
Frequency	Limit (dBuV/m @3m)	Remark																							
30MHz-88MHz	40.0	Quasi-peak Value																							
88MHz-216MHz	43.5	Quasi-peak Value																							
216MHz-960MHz	46.0	Quasi-peak Value																							
960MHz-1GHz	54.0	Quasi-peak Value																							
Above 1GHz	54.0	Average Value																							
	68.2	Peak Value																							
Test Procedure:	a. The EUT was placed on the top of a rotating table 1.5 m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not																								

	have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test setup:	Above 1GHz 
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*
4. *According to KDB 789033 D02v02r01 section G) 1) d), for measurements above 1000 MHz @3m distance, the limit of field strength is computed as follows:*

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$$
For example, if EIRP = -27dBm

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$$

Measurement Data:

Band I & Band II-A & Band II-C

IEEE 802.11a_MIMO_Chain A+B								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	50.31	31.82	5.40	35.98	51.55	68.20	-16.65	Horizontal
5350.00	52.98	31.98	5.98	36.68	54.26	68.20	-13.94	Horizontal
5470.00	46.08	32.08	6.19	35.50	48.85	68.20	-19.35	Horizontal
5725.00	48.93	32.28	6.42	35.13	52.50	68.20	-15.70	Horizontal
5150.00	55.72	31.82	5.40	35.98	56.96	68.20	-11.24	Vertical
5350.00	56.37	31.98	5.98	36.68	58.65	68.20	-9.55	Vertical
5470.00	50.77	32.08	6.19	35.50	53.54	68.20	-14.66	Vertical
5725.00	61.00	32.28	6.42	35.13	64.57	68.20	-3.63	Vertical

IEEE 802.11a_MIMO_Chain A+B								
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	32.37	31.82	5.40	35.98	33.61	54.00	-20.39	Horizontal
5350.00	32.03	31.98	5.98	35.68	34.31	54.00	-19.69	Horizontal
5470.00	30.84	32.08	6.19	35.50	33.61	54.00	-20.39	Horizontal
5725.00	32.34	32.28	6.42	35.13	35.91	54.00	-18.09	Horizontal
5150.00	35.66	31.82	5.40	35.98	36.90	54.00	-17.10	Vertical
5350.00	35.44	31.98	5.98	35.68	37.72	54.00	-16.28	Vertical
5470.00	34.17	32.08	6.19	35.50	36.94	54.00	-17.06	Vertical
5725.00	41.58	32.28	6.42	35.13	45.15	54.00	-8.85	Vertical

IEEE 802.11n HT20_MIMO_Chain A+B								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	57.15	31.82	5.40	35.98	58.39	68.20	-9.81	Horizontal
5350.00	49.91	31.98	5.98	35.68	52.19	68.20	-16.01	Horizontal
5470.00	49.80	32.08	6.19	35.50	52.57	68.20	-15.63	Horizontal
5725.00	53.25	32.28	6.42	35.13	56.82	68.20	-11.38	Horizontal
5150.00	56.20	31.82	5.40	35.98	57.44	68.20	-10.76	Vertical
5350.00	56.52	31.98	5.98	35.68	58.80	68.20	-9.40	Vertical
5470.00	60.84	32.08	6.19	35.50	63.61	68.20	-4.59	Vertical
5725.00	58.95	32.28	6.42	35.13	62.52	68.20	-5.68	Vertical

IEEE 802.11n HT20_MIMO_Chain A+B								
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	32.28	31.82	5.40	35.98	33.52	54.00	-20.48	Horizontal
5350.00	32.19	31.98	5.98	35.68	34.47	54.00	-19.53	Horizontal
5470.00	30.71	32.08	6.19	35.50	33.48	54.00	-20.52	Horizontal
5725.00	34.64	32.28	6.42	35.13	38.21	54.00	-15.79	Horizontal
5150.00	35.06	31.82	5.40	35.98	36.30	54.00	-17.70	Vertical
5350.00	35.22	31.98	5.98	35.68	37.50	54.00	-16.50	Vertical
5470.00	34.96	32.08	6.19	35.50	37.73	54.00	-16.27	Vertical
5725.00	38.02	32.28	6.42	35.13	41.59	54.00	-12.41	Vertical

IEEE 802.11ac VHT20_MIMO_Chain A+B								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	50.66	31.82	5.40	35.98	51.90	68.20	-16.30	Horizontal
5350.00	47.32	31.98	5.98	35.68	49.60	68.20	-18.60	Horizontal
5470.00	49.71	32.08	6.19	35.50	52.48	68.20	-15.72	Horizontal
5725.00	50.25	32.28	6.42	35.13	53.82	68.20	-14.38	Horizontal
5150.00	55.38	31.82	5.40	35.98	56.62	68.20	-11.58	Vertical
5350.00	53.94	31.98	5.98	35.68	56.22	68.20	-11.98	Vertical
5470.00	55.68	32.08	6.19	35.50	58.45	68.20	-9.75	Vertical
5725.00	60.09	32.28	6.42	35.13	63.66	68.20	-4.54	Vertical

IEEE 802.11ac VHT20_MIMO_Chain A+B								
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	31.80	31.82	5.40	35.98	33.04	54.00	-20.96	Horizontal
5350.00	31.46	31.98	5.98	35.68	33.74	54.00	-20.26	Horizontal
5470.00	30.29	32.08	6.19	35.50	33.06	54.00	-20.94	Horizontal
5725.00	32.74	32.28	6.42	35.13	36.31	54.00	-17.69	Horizontal
5150.00	34.56	31.82	5.40	35.98	35.80	54.00	-18.20	Vertical
5350.00	34.29	31.98	5.98	35.68	36.57	54.00	-17.43	Vertical
5470.00	34.31	32.08	6.19	35.50	34.08	54.00	-16.92	Vertical
5725.00	38.35	32.28	6.42	35.13	41.92	54.00	-12.08	Vertical

IEEE 802.11n HT40_MIMO_Chain A+B								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	54.68	31.82	5.40	35.98	55.92	68.20	-12.28	Horizontal
5350.00	52.77	31.98	5.98	35.68	55.05	68.20	-13.15	Horizontal
5470.00	46.33	32.08	6.19	35.50	49.10	68.20	-19.10	Horizontal
5725.00	47.50	32.28	6.42	35.13	51.07	68.20	-17.13	Horizontal
5150.00	59.91	31.82	5.40	35.98	61.15	68.20	-7.05	Vertical
5350.00	60.76	31.98	5.98	35.68	63.04	68.20	-5.16	Vertical
5470.00	62.34	32.08	6.19	35.50	65.11	68.20	-3.09	Vertical
5725.00	59.12	32.28	6.42	35.13	62.69	68.20	-5.51	Vertical

IEEE 802.11n HT40_MIMO_Chain A+B								
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	38.31	31.82	5.40	35.98	39.55	54.00	-14.45	Horizontal
5350.00	37.07	31.98	5.98	35.68	39.35	54.00	-14.65	Horizontal
5470.00	31.77	32.08	6.19	35.50	34.54	54.00	-19.46	Horizontal
5725.00	31.55	32.28	6.42	35.13	35.12	54.00	-18.88	Horizontal
5150.00	41.42	31.82	5.40	35.98	42.66	54.00	-11.34	Vertical
5350.00	40.19	31.98	5.98	35.68	42.47	54.00	-11.53	Vertical
5470.00	44.00	32.08	6.19	35.50	46.77	54.00	-7.23	Vertical
5725.00	39.77	32.28	6.42	35.13	43.34	54.00	-10.66	Vertical

IEEE 802.11ac VHT40_MIMO_Chain A+B								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	53.71	31.82	5.40	35.98	54.95	68.20	-13.25	Horizontal
5350.00	51.55	31.98	5.98	35.68	53.83	68.20	-14.37	Horizontal
5470.00	52.50	32.08	6.19	35.50	55.27	68.20	-12.93	Horizontal
5725.00	47.76	32.28	6.42	35.13	51.33	68.20	-16.87	Horizontal
5150.00	59.59	31.82	5.40	35.98	60.83	68.20	-7.37	Vertical
5350.00	58.51	31.98	5.98	35.68	60.79	68.20	-7.41	Vertical
5470.00	60.92	32.08	6.19	35.50	63.69	68.20	-4.51	Vertical
5725.00	59.21	32.28	6.42	35.13	62.78	68.20	-5.42	Vertical

IEEE 802.11ac VHT40_MIMO_Chain A+B								
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	37.00	31.82	5.40	35.98	38.24	54.00	-15.76	Horizontal
5350.00	35.65	31.98	5.98	35.68	37.96	54.00	-16.07	Horizontal
5470.00	35.70	32.08	6.19	35.50	38.47	54.00	-15.53	Horizontal
5725.00	31.24	32.28	6.42	35.13	34.81	54.00	-19.19	Horizontal
5150.00	39.59	31.82	5.40	35.98	40.83	54.00	-13.17	Vertical
5350.00	39.37	31.98	5.98	35.68	41.65	54.00	-12.35	Vertical
5470.00	43.69	32.08	6.19	35.50	46.46	54.00	-7.54	Vertical
5725.00	37.77	32.28	6.42	35.13	41.34	54.00	-12.66	Vertical

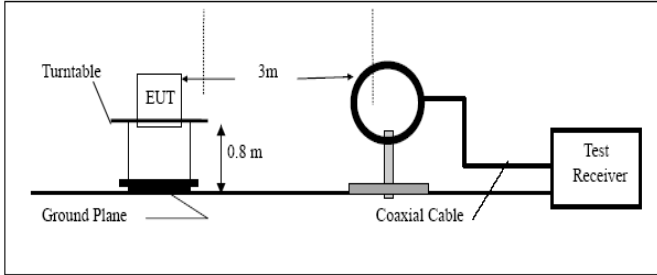
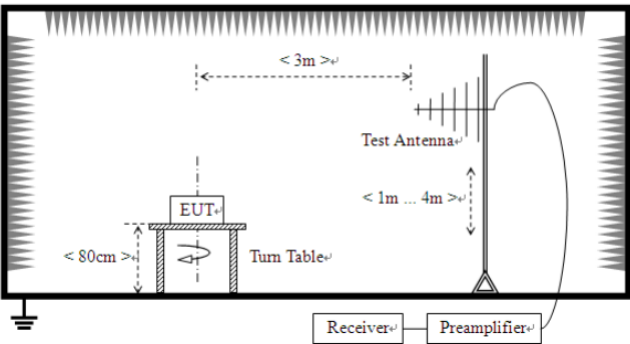
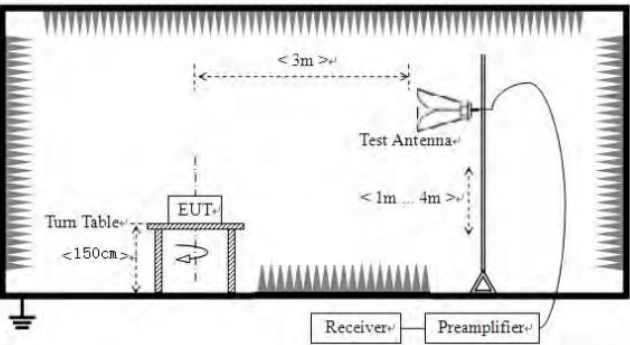
IEEE 802.11ac VHT80 MIMO Chain A+B								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	53.53	31.82	5.40	35.98	54.77	68.20	-13.43	Horizontal
5350.00	52.30	31.98	5.98	35.68	54.58	68.20	-13.62	Horizontal
5470.00	53.07	32.08	6.19	35.50	55.84	68.20	-12.36	Horizontal
5725.00	42.50	32.28	6.42	35.13	46.07	68.20	-22.13	Horizontal
5150.00	59.20	31.82	5.40	35.98	60.44	68.20	-7.76	Vertical
5350.00	60.32	31.98	5.98	35.68	62.60	68.20	-5.60	Vertical
5470.00	62.05	32.08	6.19	35.50	64.82	68.20	-3.38	Vertical
5725.00	47.53	32.28	6.42	35.13	51.10	68.20	-17.10	Vertical

IEEE 802.11ac VHT80 MIMO Chain A+B								
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	38.67	31.82	5.40	35.98	39.91	54.00	-14.09	Horizontal
5350.00	37.61	31.98	5.98	35.68	39.89	54.00	-14.11	Horizontal
5470.00	36.51	32.08	6.19	35.50	39.28	54.00	-14.72	Horizontal
5725.00	30.16	32.28	6.42	35.13	33.73	54.00	-20.27	Horizontal
5150.00	40.73	31.82	5.40	35.98	41.97	54.00	-12.03	Vertical
5350.00	41.42	31.98	5.98	35.68	43.70	54.00	-10.30	Vertical
5470.00	43.30	32.08	6.19	35.50	46.07	54.00	-7.93	Vertical
5725.00	33.09	32.28	6.42	35.13	36.66	54.00	-17.34	Vertical

7.7 Radiated Emission

Test Requirement:	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 40GHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9kHz-150KHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		AV	1MHz	3MHz	Average Value
Limit:	Frequency		Limit (uV/m)	Value	Measurement Distance
	0.009MHz-0.490MHz		2400/F(KHz)	QP	300m
	0.490MHz-1.705MHz		24000/F(KHz)	QP	300m
	1.705MHz-30MHz		30	QP	30m
	30MHz-88MHz		100	QP	3m
	88MHz-216MHz		150	QP	
	216MHz-960MHz		200	QP	
	960MHz-1GHz		500	QP	
	Above 1GHz		500	Average	
			5000	Peak	
Test Procedure:	Substitution method was performed to determine the actual ERP emission levels of the EUT. The following test procedure as below: 1>.Below 1GHz test procedure: 1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using				

	peak, quasi-peak or average method as specified and then reported in a data sheet. 2>.Above 1GHz test procedure: 1. On the test site as test setup graph above,the EUT shall be placed at the 0.8m support on the turntable and in the position closest to normal use as declared by the provider. 2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver. 3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the transmitter under test. 4. The test antenna shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver. 5. Repeat step 4 for test frequency with the test antenna polarized horizontally. 6. Remove the transmitter and replace it with a substitution antenna 7. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output. 8. Repeat step 7 with both antennas horizontally polarized for each test frequency. 9. Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula: $EIRP(dBm) = Pg(dBm) - \text{cable loss (dB)} + \text{antenna gain (dBi)}$ where: Pg is the generator output power into the substitution antenna.
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Test setup:	Below 30MHz  Below 1GHz  Above 1GHz 
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement Data:

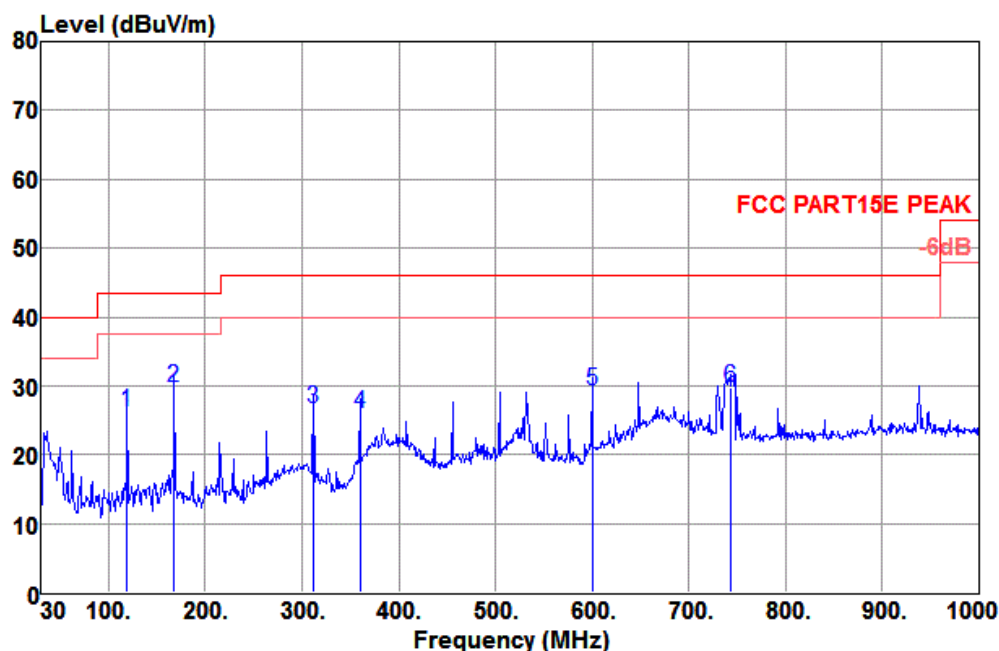
9 kHz ~ 30 MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Below 1GHz

Horizontal:

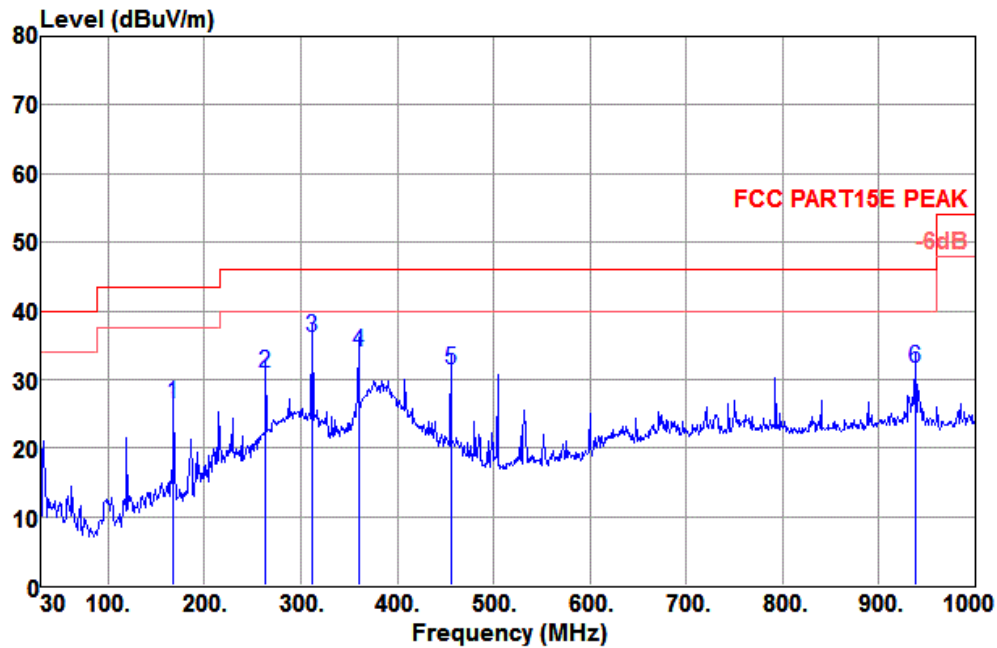
Data: 3



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
119.240	44.50	12.12	2.11	32.47	26.26	43.50	-17.24	QP
167.740	46.23	13.43	2.53	32.52	29.67	43.50	-13.83	QP
312.270	42.56	13.13	3.52	32.51	26.70	46.00	-19.30	QP
359.800	40.59	14.04	3.86	32.49	26.00	46.00	-20.00	QP
600.360	38.48	18.40	5.02	32.69	29.21	46.00	-16.79	QP
743.920	36.63	20.18	5.58	32.72	29.67	46.00	-16.33	QP

Vertical:

Data: 4



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBUV/m	Over limit dB	Remark
167.740	43.06	13.43	2.53	32.52	26.50	43.50	-17.00	QP
263.770	48.36	11.81	3.25	32.53	30.89	46.00	-15.11	QP
312.270	51.86	13.13	3.52	32.51	36.00	46.00	-10.00	QP
359.800	48.69	14.04	3.86	32.49	34.10	46.00	-11.90	QP
455.830	43.92	15.75	4.34	32.52	31.49	46.00	-14.51	QP
937.920	35.40	21.93	6.43	32.06	31.70	46.00	-14.30	QP

Above 1GHz:

802.11a_MIMO_ChainA+B_5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10360.00	43.71	39.15	8.10	33.99	56.97	74.00	-17.03	Vertical	Peak
10360.00	29.61	39.15	8.10	33.99	42.87	54.00	-11.13	Vertical	Average
15540.00	38.82	39.03	9.68	31.62	55.91	74.00	-18.09	Vertical	Peak
15540.00	25.32	39.03	9.68	31.62	42.41	54.00	-11.59	Vertical	Average
10360.00	39.90	39.15	8.10	33.99	53.16	74.00	-20.84	Horizontal	Peak
10360.00	26.44	39.15	8.10	33.99	39.70	54.00	-14.30	Horizontal	Average
15540.00	38.53	39.03	9.68	31.62	55.62	74.00	-18.38	Horizontal	Peak
15540.00	25.31	39.03	9.68	31.62	42.40	54.00	-11.60	Horizontal	Average

802.11a_MIMO_ChainA+B_5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10400.00	45.41	39.22	8.10	33.95	58.78	74.00	-15.22	Vertical	Peak
10400.00	16.81	39.22	8.10	33.95	58.78	54.00	-23.82	Vertical	Average
15600.00	38.52	39.22	8.10	33.95	58.78	74.00	-18.57	Vertical	Peak
15600.00	24.51	39.22	8.10	33.95	58.78	54.00	-12.58	Vertical	Average
10400.00	40.67	39.22	8.10	33.95	58.78	74.00	-19.96	Horizontal	Peak
10400.00	27.05	39.22	8.10	33.95	58.78	54.00	-13.58	Horizontal	Average
15600.00	38.17	39.22	8.10	33.95	58.78	74.00	-18.92	Horizontal	Peak
15600.00	24.51	39.22	8.10	33.95	58.78	54.00	-12.58	Horizontal	Average

802.11a_MIMO_ChainA+B_5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10480.00	45.30	39.36	8.11	33.88	58.89	74.00	-15.11	Vertical	Peak
10480.00	30.95	39.36	8.11	33.88	58.89	54.00	-9.46	Vertical	Average
15720.00	38.28	38.47	9.60	31.54	54.81	74.00	-19.19	Vertical	Peak
15720.00	24.32	38.47	9.60	31.54	54.81	54.00	-13.15	Vertical	Average
10480.00	38.68	39.36	8.11	33.88	58.89	74.00	-21.73	Horizontal	Peak
10480.00	26.71	39.36	8.11	33.88	58.89	54.00	-13.70	Horizontal	Average
15720.00	37.46	38.47	9.60	31.54	54.81	74.00	-20.01	Horizontal	Peak
15720.00	24.35	38.47	9.60	31.54	54.81	54.00	-13.12	Horizontal	Average

802.11a_MIMO_ChainA+B_5260MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10520.00	43.13	39.44	8.12	33.85	52.86	74.00	-17.16	Vertical	Peak
10520.00	29.62	39.44	8.12	33.85	52.86	54.00	-10.67	Vertical	Average
15780.00	39.17	38.28	9.58	31.51	41.92	74.00	-18.48	Vertical	Peak
15780.00	25.57	38.28	9.58	31.51	41.92	54.00	-12.08	Vertical	Average
10520.00	39.15	39.44	8.12	33.85	52.86	74.00	-21.14	Horizontal	Peak
10520.00	26.33	39.44	8.12	33.85	52.86	54.00	-13.96	Horizontal	Average
15780.00	38.95	38.28	9.58	31.51	41.92	74.00	-18.70	Horizontal	Peak
15780.00	25.57	38.28	9.58	31.51	41.92	54.00	-12.08	Horizontal	Average

802.11a_MIMO_ChainA+B_5300MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10600.00	43.46	39.58	8.17	33.78	57.43	74.00	-16.57	Vertical	Peak
10600.00	28.37	39.58	8.17	33.78	42.34	54.00	-11.66	Vertical	Average
15900.00	37.90	37.91	9.52	31.45	53.88	74.00	-20.12	Vertical	Peak
15900.00	25.23	37.91	9.52	31.45	41.21	54.00	-12.79	Vertical	Average
10600.00	40.50	39.58	8.17	33.78	54.47	74.00	-19.53	Horizontal	Peak
10600.00	26.00	39.58	8.17	33.78	39.97	54.00	-14.03	Horizontal	Average
15900.00	37.97	37.91	9.52	31.45	53.95	74.00	-20.05	Horizontal	Peak
15900.00	25.08	37.91	9.52	31.45	41.06	54.00	-12.94	Horizontal	Average

802.11a_MIMO_ChainA+B_5320MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10640.00	41.52	39.65	8.19	33.74	54.66	74.00	-18.38	Vertical	Peak
10640.00	27.90	39.65	8.19	33.74	54.66	54.00	-12.00	Vertical	Average
15960.00	38.59	37.72	9.50	31.43	54.14	74.00	-19.62	Vertical	Peak
15960.00	24.85	37.72	9.50	31.43	40.52	54.00	-13.36	Vertical	Average
10640.00	40.56	39.65	8.19	33.74	54.66	74.00	-19.34	Horizontal	Peak
10640.00	26.53	39.65	8.19	33.74	54.66	54.00	-13.37	Horizontal	Average
15960.00	38.35	37.72	9.50	31.43	54.14	74.00	-19.86	Horizontal	Peak
15960.00	24.73	37.72	9.50	31.43	40.52	54.00	-13.48	Horizontal	Average

802.11a_MIMO_ChainA+B_5500MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11000.00	42.34	40.30	8.39	33.43	57.60	74.00	-16.40	Vertical	Peak
11000.00	26.79	40.30	8.39	33.43	42.05	54.00	-11.95	Vertical	Average
16500.00	37.41	39.55	9.42	31.07	55.31	74.00	-18.69	Vertical	Peak
16500.00	24.04	39.55	9.42	31.07	55.31	54.00	-12.06	Vertical	Average
11000.00	43.55	40.30	8.39	33.43	58.81	74.00	-15.19	Horizontal	Peak
11000.00	30.02	40.30	8.39	33.43	45.28	54.00	-8.72	Horizontal	Average
16500.00	38.22	39.55	9.42	31.07	56.12	74.00	-17.88	Horizontal	Peak
16500.00	23.84	39.55	9.42	31.07	41.74	54.00	-12.26	Horizontal	Average

802.11a_MIMO_ChainA+B_5580MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11160.00	40.91	40.17	8.50	33.29	56.29	74.00	-17.71	Vertical	Peak
11160.00	25.63	40.17	8.50	33.29	41.01	54.00	-12.99	Vertical	Average
16740.00	37.36	40.49	9.42	30.90	56.37	74.00	-17.63	Vertical	Peak
16740.00	23.65	40.49	9.42	30.90	42.66	54.00	-11.34	Vertical	Average
11160.00	41.83	40.17	8.50	33.29	57.21	74.00	-16.79	Horizontal	Peak
11160.00	26.99	40.17	8.50	33.29	42.37	54.00	-11.63	Horizontal	Average
16740.00	37.83	40.49	9.42	30.90	56.84	74.00	-17.16	Horizontal	Peak
16740.00	23.82	40.49	9.42	30.90	42.83	54.00	-11.17	Horizontal	Average

802.11a_MIMO_ChainA+B_5700MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11400.00	41.52	39.98	8.66	33.08	57.08	74.00	-16.92	Vertical	Peak
11400.00	26.21	39.98	8.66	33.08	41.77	54.00	-12.23	Vertical	Average
17100.00	36.67	42.21	9.44	30.65	57.67	74.00	-16.33	Vertical	Peak
17100.00	23.39	42.21	9.44	30.65	44.39	54.00	-9.61	Vertical	Average
11400.00	39.56	39.98	8.66	33.08	57.08	74.00	-18.88	Horizontal	Peak
11400.00	26.56	39.98	8.66	33.08	41.77	54.00	-11.88	Horizontal	Average
17100.00	36.89	42.21	9.44	30.65	57.67	74.00	-16.11	Horizontal	Peak
17100.00	23.36	42.21	9.44	30.65	44.39	54.00	-9.64	Horizontal	Average

802.11n(HT20)_MIMO_ChainA+B_5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10360.00	42.62	39.15	8.10	33.99	55.88	74.00	-18.12	Vertical	Peak
10360.00	28.89	39.15	8.10	33.99	42.15	54.00	-11.85	Vertical	Average
15540.00	38.36	39.03	9.68	31.62	55.45	74.00	-18.55	Vertical	Peak
15540.00	25.30	39.03	9.68	31.62	42.39	54.00	-11.61	Vertical	Average
10360.00	39.91	39.15	8.10	33.99	53.17	74.00	-20.83	Horizontal	Peak
10360.00	26.49	39.15	8.10	33.99	39.75	54.00	-14.25	Horizontal	Average
15540.00	39.22	39.03	9.68	31.62	56.31	74.00	-17.69	Horizontal	Peak
15540.00	25.29	39.03	9.68	31.62	42.38	54.00	-11.62	Horizontal	Average

802.11n(HT20)_MIMO_ChainA+B_5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10400.00	44.38	39.22	8.10	33.95	57.75	74.00	-16.25	Vertical	Peak
10400.00	30.40	39.22	8.10	33.95	43.77	54.00	-10.23	Vertical	Average
15600.00	38.86	38.84	9.66	31.59	55.77	74.00	-18.23	Vertical	Peak
15600.00	24.45	38.84	9.66	31.59	41.36	54.00	-12.64	Vertical	Average
10400.00	40.82	39.22	8.10	33.95	54.19	74.00	-19.81	Horizontal	Peak
10400.00	27.32	39.22	8.10	33.95	40.69	54.00	-13.31	Horizontal	Average
15600.00	37.93	38.84	9.66	31.59	54.84	74.00	-19.16	Horizontal	Peak
15600.00	24.45	38.84	9.66	31.59	41.36	54.00	-12.64	Horizontal	Average

802.11n(HT20)_MIMO_ChainA+B_5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10480.00	46.02	39.36	8.11	33.88	59.61	74.00	-14.39	Vertical	Peak
10480.00	29.56	39.36	8.11	33.88	43.15	54.00	-10.85	Vertical	Average
15720.00	38.61	38.47	9.60	31.54	55.14	74.00	-18.86	Vertical	Peak
15720.00	24.23	38.47	9.60	31.54	40.76	54.00	-13.24	Vertical	Average
10480.00	40.87	39.36	8.11	33.88	54.46	74.00	-19.54	Horizontal	Peak
10480.00	26.70	39.36	8.11	33.88	40.29	54.00	-13.71	Horizontal	Average
15720.00	37.40	38.47	9.60	31.54	53.93	74.00	-20.07	Horizontal	Peak
15720.00	24.40	38.47	9.60	31.54	40.73	54.00	-13.27	Horizontal	Average

802.11n(HT20) _MIMO_ChainA+B_5260MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10520.00	39.37	39.44	8.12	33.85	53.08	74.00	-20.92	Vertical	Peak
10520.00	26.79	39.44	8.12	33.85	40.50	54.00	-13.50	Vertical	Average
15780.00	38.59	38.28	9.58	31.51	54.94	74.00	-19.06	Vertical	Peak
15780.00	25.53	38.28	9.58	31.51	41.88	54.00	-12.12	Vertical	Average
10520.00	44.10	39.44	8.12	33.85	57.81	74.00	-16.19	Horizontal	Peak
10520.00	30.02	39.44	8.12	33.85	43.73	54.00	-10.27	Horizontal	Average
15780.00	39.14	38.28	9.58	31.51	55.49	74.00	-18.51	Horizontal	Peak
15780.00	25.58	38.28	9.58	31.51	41.93	54.00	-12.07	Horizontal	Average

802.11n(HT20) _MIMO_ChainA+B_5300MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10600.00	44.56	39.58	8.17	33.78	58.53	74.00	-15.47	Vertical	Peak
10600.00	29.88	39.58	8.17	33.78	43.85	54.00	-10.15	Vertical	Average
15900.00	37.53	37.91	9.52	31.45	53.51	74.00	-20.49	Vertical	Peak
15900.00	24.99	37.91	9.52	31.45	40.97	54.00	-13.03	Vertical	Average
10600.00	39.61	39.58	8.17	33.78	53.58	74.00	-20.42	Horizontal	Peak
10600.00	27.03	39.58	8.17	33.78	41.00	54.00	-13.00	Horizontal	Average
15900.00	37.61	37.91	9.52	31.45	53.59	74.00	-20.41	Horizontal	Peak
15900.00	24.99	37.91	9.52	31.45	40.97	54.00	-13.03	Horizontal	Average

802.11n(HT20) _MIMO_ChainA+B_5320MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10640.00	44.48	39.65	8.19	33.74	58.58	74.00	-15.42	Vertical	Peak
10640.00	30.77	39.65	8.19	33.74	44.87	54.00	-9.13	Vertical	Average
15960.00	38.70	37.72	9.50	31.43	54.49	74.00	-19.51	Vertical	Peak
15960.00	28.09	37.72	9.50	31.43	43.88	54.00	-10.12	Vertical	Average
10640.00	39.77	39.65	8.19	33.74	53.87	74.00	-20.13	Horizontal	Peak
10640.00	27.54	39.65	8.19	33.74	41.64	54.00	-12.36	Horizontal	Average
15960.00	38.02	37.72	9.50	31.43	53.81	74.00	-20.19	Horizontal	Peak
15960.00	24.70	37.72	9.50	31.43	40.49	54.00	-13.51	Horizontal	Average

802.11n(HT20) _MIMO_ChainA+B_5500MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11000.00	44.80	40.30	8.39	33.43	60.06	74.00	-13.94	Vertical	Peak
11000.00	29.18	40.30	8.39	33.43	44.44	54.00	-9.56	Vertical	Average
16500.00	38.52	39.55	9.42	31.07	56.42	74.00	-17.58	Vertical	Peak
16500.00	23.86	39.55	9.42	31.07	41.76	54.00	-12.24	Vertical	Average
11000.00	42.92	40.30	8.39	33.43	58.18	74.00	-15.82	Horizontal	Peak
11000.00	30.47	40.30	8.39	33.43	45.73	54.00	-8.27	Horizontal	Average
16500.00	37.02	39.55	9.42	31.07	54.92	74.00	-19.08	Horizontal	Peak
16500.00	23.84	39.55	9.42	31.07	41.74	54.00	-12.26	Horizontal	Average

802.11n(HT20) _MIMO_ChainA+B_5580MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11160.00	42.13	40.17	8.50	33.29	57.51	74.00	-16.49	Vertical	Peak
11160.00	27.54	40.17	8.50	33.29	42.92	54.00	-11.08	Vertical	Average
16740.00	37.08	40.49	9.42	30.90	56.09	74.00	-17.91	Vertical	Peak
16740.00	23.78	40.49	9.42	30.90	42.79	54.00	-11.21	Vertical	Average
11160.00	41.99	40.17	8.50	33.29	57.37	74.00	-16.63	Horizontal	Peak
11160.00	28.03	40.17	8.50	33.29	43.41	54.00	-10.59	Horizontal	Average
16740.00	36.12	40.49	9.42	30.90	55.13	74.00	-18.87	Horizontal	Peak
16740.00	23.68	40.49	9.42	30.90	42.69	54.00	-11.31	Horizontal	Average

802.11n(HT20) _MIMO_ChainA+B_5700MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11400.00	39.46	39.98	8.66	33.08	55.02	74.00	-18.98	Vertical	Peak
11400.00	26.45	39.98	8.66	33.08	42.01	54.00	-11.99	Vertical	Average
17100.00	37.32	42.21	9.44	30.65	58.32	74.00	-15.68	Vertical	Peak
17100.00	23.40	42.21	9.44	30.65	44.40	54.00	-9.60	Vertical	Average
11400.00	39.81	39.98	8.66	33.08	55.37	74.00	-18.63	Horizontal	Peak
11400.00	26.58	39.98	8.66	33.08	42.14	54.00	-11.86	Horizontal	Average
17100.00	36.43	42.21	9.44	30.65	57.43	74.00	-16.57	Horizontal	Peak
17100.00	23.31	42.21	9.44	30.65	44.31	54.00	-9.69	Horizontal	Average

802.11ac(VHT20) _MIMO_ChainA+B_5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10360.00	41.98	39.15	8.10	33.99	55.24	74.00	-18.76	Vertical	Peak
10360.00	28.19	39.15	8.10	33.99	41.45	54.00	-12.55	Vertical	Average
15540.00	37.96	39.03	9.68	31.62	55.05	74.00	-18.95	Vertical	Peak
15540.00	25.50	39.03	9.68	31.62	42.59	54.00	-11.41	Vertical	Average
10360.00	39.88	39.15	8.10	33.99	53.14	74.00	-20.86	Horizontal	Peak
10360.00	26.29	39.15	8.10	33.99	39.55	54.00	-14.45	Horizontal	Average
15540.00	39.42	39.03	9.68	31.62	56.51	74.00	-17.49	Horizontal	Peak
15540.00	25.35	39.03	9.68	31.62	42.44	54.00	-11.56	Horizontal	Average

802.11ac(VHT20) _MIMO_ChainA+B_5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10400.00	43.20	39.22	8.10	33.95	56.57	74.00	-17.43	Vertical	Peak
10400.00	31.54	39.22	8.10	33.95	44.91	54.00	-9.09	Vertical	Average
15600.00	38.43	38.84	9.66	31.59	55.34	74.00	-18.66	Vertical	Peak
15600.00	24.12	38.84	9.66	31.59	41.03	54.00	-12.97	Vertical	Average
10400.00	40.52	39.22	8.10	33.95	53.89	74.00	-20.11	Horizontal	Peak
10400.00	27.23	39.22	8.10	33.95	40.60	54.00	-13.40	Horizontal	Average
15600.00	37.56	38.84	9.66	31.59	54.47	74.00	-19.63	Horizontal	Peak
15600.00	24.35	38.84	9.66	31.59	41.26	54.00	-12.74	Horizontal	Average

802.11ac(VHT20) _MIMO_ChainA+B_5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10480.00	46.17	39.36	8.11	33.88	59.76	74.00	-14.24	Vertical	Peak
10480.00	29.38	39.36	8.11	33.88	42.97	54.00	-11.03	Vertical	Average
15720.00	38.52	38.47	9.60	31.54	55.05	74.00	-18.95	Vertical	Peak
15720.00	24.37	38.47	9.60	31.54	40.90	54.00	-13.10	Vertical	Average
10480.00	40.31	39.36	8.11	33.88	53.90	74.00	-20.10	Horizontal	Peak
10480.00	26.53	39.36	8.11	33.88	40.12	54.00	-13.88	Horizontal	Average
15720.00	37.53	38.47	9.60	31.54	54.06	74.00	-19.94	Horizontal	Peak
15720.00	24.28	38.47	9.60	31.54	40.81	54.00	-13.19	Horizontal	Average

802.11ac(VHT20) _MIMO_ChainA+B_5260MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10520.00	44.33	39.44	8.12	33.85	58.04	74.00	-15.96	Vertical	Peak
10520.00	30.21	39.44	8.12	33.85	43.92	54.00	-10.08	Vertical	Average
15780.00	39.37	38.28	9.58	31.51	55.72	74.00	-18.28	Vertical	Peak
15780.00	25.63	38.28	9.58	31.51	41.98	54.00	-12.02	Vertical	Average
10520.00	39.84	39.44	8.12	33.85	53.55	74.00	-20.45	Horizontal	Peak
10520.00	26.52	39.44	8.12	33.85	40.23	54.00	-13.77	Horizontal	Average
15780.00	38.69	38.28	9.58	31.51	55.04	74.00	-18.96	Horizontal	Peak
15780.00	25.63	38.28	9.58	31.51	41.98	54.00	-12.02	Horizontal	Average

802.11ac(VHT20) _MIMO_ChainA+B_5300MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10600.00	44.32	39.58	8.17	33.78	58.29	74.00	-15.71	Vertical	Peak
10600.00	29.21	39.58	8.17	33.78	43.18	54.00	-10.82	Vertical	Average
15900.00	37.41	37.91	9.52	31.45	53.39	74.00	-20.61	Vertical	Peak
15900.00	24.38	37.91	9.52	31.45	40.36	54.00	-13.64	Vertical	Average
10600.00	39.48	39.58	8.17	33.78	53.45	74.00	-20.55	Horizontal	Peak
10600.00	27.51	39.58	8.17	33.78	41.48	54.00	-12.52	Horizontal	Average
15900.00	37.34	37.91	9.52	31.45	53.32	74.00	-20.68	Horizontal	Peak
15900.00	24.56	37.91	9.52	31.45	40.54	54.00	-13.46	Horizontal	Average

802.11ac(VHT20) _MIMO_ChainA+B_5320MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10640.00	44.32	39.65	8.19	33.74	58.42	74.00	-15.58	Vertical	Peak
10640.00	31.42	39.65	8.19	33.74	45.52	54.00	-8.48	Vertical	Average
15960.00	38.42	37.72	9.50	31.43	54.21	74.00	-19.79	Vertical	Peak
15960.00	27.97	37.72	9.50	31.43	43.76	54.00	-10.24	Vertical	Average
10640.00	39.51	39.65	8.19	33.74	53.61	74.00	-20.39	Horizontal	Peak
10640.00	27.24	39.65	8.19	33.74	41.34	54.00	-12.66	Horizontal	Average
15960.00	38.11	37.72	9.50	31.43	53.90	74.00	-20.10	Horizontal	Peak
15960.00	24.46	37.72	9.50	31.43	40.25	54.00	-13.75	Horizontal	Average

802.11ac(VHT20) MIMO ChainA+B 5500MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11000.00	44.73	40.30	8.39	33.43	59.99	74.00	-14.01	Vertical	Peak
11000.00	29.18	40.30	8.39	33.43	44.44	54.00	-9.56	Vertical	Average
16500.00	38.43	39.55	9.42	31.07	56.33	74.00	-17.67	Vertical	Peak
16500.00	23.52	39.55	9.42	31.07	41.42	54.00	-12.58	Vertical	Average
11000.00	42.65	40.30	8.39	33.43	57.91	74.00	-16.09	Horizontal	Peak
11000.00	30.53	40.30	8.39	33.43	45.79	54.00	-8.21	Horizontal	Average
16500.00	37.14	39.55	9.42	31.07	55.04	74.00	-18.96	Horizontal	Peak
16500.00	23.71	39.55	9.42	31.07	41.61	54.00	-12.39	Horizontal	Average

802.11ac(VHT20) MIMO ChainA+B 5580MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11160.00	42.38	40.17	8.50	33.29	57.56	74.00	-16.24	Vertical	Peak
11160.00	27.42	40.17	8.50	33.29	42.80	54.00	-11.20	Vertical	Average
16740.00	37.24	40.49	9.42	30.90	56.25	74.00	-17.75	Vertical	Peak
16740.00	23.51	40.49	9.42	30.90	42.52	54.00	-11.48	Vertical	Average
11160.00	41.88	40.17	8.50	33.29	57.26	74.00	-16.74	Horizontal	Peak
11160.00	28.14	40.17	8.50	33.29	43.52	54.00	-10.48	Horizontal	Average
16740.00	36.23	40.49	9.42	30.90	55.24	74.00	-18.76	Horizontal	Peak
16740.00	23.36	40.49	9.42	30.90	42.37	54.00	-11.63	Horizontal	Average

802.11ac(VHT20) MIMO ChainA+B 5700MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11400.00	39.24	39.98	8.66	33.08	54.80	74.00	-19.20	Vertical	Peak
11400.00	26.38	39.98	8.66	33.08	41.94	54.00	-12.06	Vertical	Average
17100.00	37.81	42.21	9.44	30.65	55.81	74.00	-15.19	Vertical	Peak
17100.00	23.34	42.21	9.44	30.65	44.34	54.00	-9.66	Vertical	Average
11400.00	39.76	39.98	8.66	33.08	55.32	74.00	-18.68	Horizontal	Peak
11400.00	25.99	39.98	8.66	33.08	41.55	54.00	-12.45	Horizontal	Average
17100.00	36.28	42.21	9.44	30.65	57.28	74.00	-16.72	Horizontal	Peak
17100.00	23.48	42.21	9.44	30.65	44.48	54.00	-9.52	Horizontal	Average

802.11n(HT40) MIMO ChainA+B 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10380.00	46.58	39.18	8.10	33.97	59.89	74.00	-14.11	Vertical	Peak
10380.00	28.78	39.18	8.10	33.97	42.09	54.00	-11.91	Vertical	Average
15570.00	38.09	39.84	8.74	32.93	53.74	74.00	-20.26	Vertical	Peak
15570.00	25.32	39.84	8.74	32.93	40.97	54.00	-13.03	Vertical	Average
10380.00	42.18	39.18	8.10	33.97	55.49	74.00	-18.51	Horizontal	Peak
10380.00	26.94	39.18	8.10	33.97	40.25	54.00	-13.75	Horizontal	Average
15570.00	38.04	39.84	8.74	32.93	55.04	74.00	-18.96	Horizontal	Peak
15570.00	25.42	39.84	8.74	32.93	42.42	54.00	-11.58	Horizontal	Average

802.11n(HT40) _MIMO_ChainA+B_5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10460.00	45.88	39.33	8.11	33.90	59.42	74.00	-14.58	Vertical	Peak
10460.00	29.49	39.33	8.11	33.90	43.03	54.00	-10.97	Vertical	Average
15690.00	37.55	38.56	9.62	31.55	54.18	74.00	-19.82	Vertical	Peak
15690.00	24.16	38.56	9.62	31.55	40.79	54.00	-13.21	Vertical	Average
10460.00	39.25	39.33	8.11	33.90	52.79	74.00	-21.21	Horizontal	Peak
10460.00	27.05	39.33	8.11	33.90	40.59	54.00	-13.41	Horizontal	Average
15690.00	37.68	38.56	9.62	31.55	54.31	74.00	-19.69	Horizontal	Peak
15690.00	24.91	38.56	9.62	31.55	41.54	54.00	-12.46	Horizontal	Average

802.11n(HT40) _MIMO_ChainA+B_5270MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10540.00	42.99	39.47	8.13	33.83	56.76	74.00	-17.24	Vertical	Peak
10540.00	28.69	39.47	8.13	33.83	42.46	54.00	-11.54	Vertical	Average
15810.00	37.44	38.19	9.56	31.50	53.69	74.00	-20.31	Vertical	Peak
15810.00	24.45	38.19	9.56	31.50	40.70	54.00	-13.30	Vertical	Average
10540.00	39.00	39.47	8.13	33.83	52.77	74.00	-21.23	Horizontal	Peak
10540.00	25.27	39.47	8.13	33.83	39.04	54.00	-14.96	Horizontal	Average
15810.00	38.01	38.19	9.56	31.50	54.26	74.00	-19.74	Horizontal	Peak
15810.00	24.50	38.19	9.56	31.50	40.75	54.00	-13.25	Horizontal	Average

802.11n(HT40) _MIMO_ChainA+B_5310MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10620.00	42.95	39.62	8.18	33.76	56.99	74.00	-17.01	Vertical	Peak
10620.00	28.88	39.62	8.18	33.76	42.92	54.00	-11.08	Vertical	Average
15930.00	38.84	37.82	9.51	31.44	54.73	74.00	-19.27	Vertical	Peak
15930.00	25.26	37.82	9.51	31.44	41.15	54.00	-12.85	Vertical	Average
10620.00	40.90	39.62	8.18	33.76	54.94	74.00	-19.06	Horizontal	Peak
10620.00	25.44	39.62	8.18	33.76	39.48	54.00	-14.52	Horizontal	Average
15930.00	38.36	37.82	9.51	31.44	54.25	74.00	-19.75	Horizontal	Peak
15930.00	25.29	37.82	9.51	31.44	41.18	54.00	-12.82	Horizontal	Average

802.11n(HT40) _MIMO_ChainA+B_5510MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11020.00	40.83	40.28	8.40	33.41	56.10	74.00	-17.90	Vertical	Peak
11020.00	26.27	40.28	8.40	33.41	41.54	54.00	-12.46	Vertical	Average
16530.00	37.91	39.67	9.42	31.04	55.96	74.00	-18.04	Vertical	Peak
16530.00	24.01	39.67	9.42	31.04	42.06	54.00	-11.94	Vertical	Average
11020.00	41.52	40.28	8.40	33.41	56.79	74.00	-17.21	Horizontal	Peak
11020.00	26.43	40.28	8.40	33.41	41.70	54.00	-12.30	Horizontal	Average
16530.00	37.02	39.67	9.42	31.04	55.07	74.00	-18.93	Horizontal	Peak
16530.00	24.00	39.67	9.42	31.04	42.05	54.00	-11.95	Horizontal	Average

802.11n(HT40)_MIMO_ChainA+B_5550MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11100.00	42.06	40.22	8.46	33.34	57.40	74.00	-16.60	Vertical	Peak
11100.00	27.70	40.22	8.46	33.34	43.04	54.00	-10.96	Vertical	Average
16650.00	38.08	40.13	9.42	30.96	56.67	74.00	-17.33	Vertical	Peak
16650.00	24.88	40.13	9.42	30.96	43.47	54.00	-10.53	Vertical	Average
11100.00	40.19	40.22	8.46	33.34	55.53	74.00	-18.47	Horizontal	Peak
11100.00	27.65	40.22	8.46	33.34	42.99	54.00	-11.01	Horizontal	Average
16650.00	37.19	40.13	9.42	30.96	55.78	74.00	-18.22	Horizontal	Peak
16650.00	24.05	40.13	9.42	30.96	42.64	54.00	-11.36	Horizontal	Average

802.11n(HT40)_MIMO_ChainA+B_5670MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11340.00	38.67	40.03	8.62	33.13	54.19	74.00	-19.81	Vertical	Peak
11340.00	24.26	40.03	8.62	33.13	39.78	54.00	-14.22	Vertical	Average
17010.00	36.99	41.57	9.41	30.71	57.26	74.00	-16.74	Vertical	Peak
17010.00	23.77	41.57	9.41	30.71	44.04	54.00	-9.96	Vertical	Average
11340.00	38.15	40.03	8.62	33.13	53.67	74.00	-20.33	Horizontal	Peak
11340.00	25.07	40.03	8.62	33.13	40.59	54.00	-13.41	Horizontal	Average
17010.00	37.33	41.57	9.41	30.71	57.60	74.00	-16.40	Horizontal	Peak
17010.00	23.73	41.57	9.41	30.71	44.00	54.00	-10.00	Horizontal	Average

802.11ac(VHT40)_MIMO_ChainA+B_5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10380.00	46.71	39.18	8.10	33.97	60.02	74.00	-13.98	Vertical	Peak
10380.00	28.56	39.18	8.10	33.97	41.87	54.00	-12.13	Vertical	Average
15570.00	38.15	39.84	8.74	32.93	53.80	74.00	-20.20	Vertical	Peak
15570.00	25.42	39.84	8.74	32.93	41.07	54.00	-12.93	Vertical	Average
10380.00	42.24	39.18	8.10	33.97	55.55	74.00	-18.45	Horizontal	Peak
10380.00	26.74	39.18	8.10	33.97	40.05	54.00	-13.95	Horizontal	Average
15570.00	38.12	39.84	8.74	32.93	55.12	74.00	-18.88	Horizontal	Peak
15570.00	25.37	39.84	8.74	32.93	42.37	54.00	-11.63	Horizontal	Average

802.11ac(VHT40)_MIMO_ChainA+B_5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10460.00	45.71	39.33	8.11	33.90	59.25	74.00	-14.75	Vertical	Peak
10460.00	29.61	39.33	8.11	33.90	43.15	54.00	-10.85	Vertical	Average
15690.00	37.42	38.56	9.62	31.55	54.05	74.00	-19.95	Vertical	Peak
15690.00	24.33	38.56	9.62	31.55	40.86	54.00	-13.14	Vertical	Average
10460.00	39.20	39.33	8.11	33.90	52.74	74.00	-21.16	Horizontal	Peak
10460.00	27.31	39.33	8.11	33.90	40.85	54.00	-13.15	Horizontal	Average
15690.00	37.22	38.56	9.62	31.55	53.85	74.00	-20.15	Horizontal	Peak
15690.00	24.87	38.56	9.62	31.55	41.50	54.00	-12.50	Horizontal	Average

802.11ac(VHT40)_MIMO_ChainA+B_5270MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10540.00	42.69	39.47	8.13	33.83	56.46	74.00	-17.54	Vertical	Peak
10540.00	28.54	39.47	8.13	33.83	42.31	54.00	-11.69	Vertical	Average
15810.00	37.59	38.19	9.56	31.50	53.84	74.00	-20.16	Vertical	Peak
15810.00	24.59	38.19	9.56	31.50	40.84	54.00	-13.16	Vertical	Average
10540.00	39.32	39.47	8.13	33.83	53.09	74.00	-20.91	Horizontal	Peak
10540.00	24.32	39.47	8.13	33.83	38.09	54.00	-15.91	Horizontal	Average
15810.00	38.16	38.19	9.56	31.50	54.41	74.00	-19.59	Horizontal	Peak
15810.00	24.65	38.19	9.56	31.50	40.90	54.00	-13.10	Horizontal	Average

802.11ac(VHT40)_MIMO_ChainA+B_5310MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10620.00	42.86	39.62	8.18	33.76	56.90	74.00	-17.10	Vertical	Peak
10620.00	28.73	39.62	8.18	33.76	42.77	54.00	-11.23	Vertical	Average
15930.00	38.74	37.82	9.51	31.44	54.63	74.00	-19.37	Vertical	Peak
15930.00	25.26	37.82	9.51	31.44	41.15	54.00	-12.85	Vertical	Average
10620.00	40.55	39.62	8.18	33.76	54.59	74.00	-19.41	Horizontal	Peak
10620.00	25.44	39.62	8.18	33.76	39.48	54.00	-14.52	Horizontal	Average
15930.00	38.62	37.82	9.51	31.44	54.51	74.00	-19.49	Horizontal	Peak
15930.00	25.39	37.82	9.51	31.44	41.28	54.00	-12.72	Horizontal	Average

802.11ac(VHT40)_MIMO_ChainA+B_5510MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11020.00	40.72	40.28	8.40	33.41	55.99	74.00	-18.01	Vertical	Peak
11020.00	26.36	40.28	8.40	33.41	41.63	54.00	-12.37	Vertical	Average
16530.00	37.63	39.67	9.42	31.04	55.68	74.00	-18.32	Vertical	Peak
16530.00	24.35	39.67	9.42	31.04	42.40	54.00	-11.60	Vertical	Average
11020.00	41.27	40.28	8.40	33.41	56.54	74.00	-17.46	Horizontal	Peak
11020.00	26.24	40.28	8.40	33.41	41.51	54.00	-12.49	Horizontal	Average
16530.00	38.55	39.67	9.42	31.04	56.60	74.00	-17.40	Horizontal	Peak
16530.00	24.15	39.67	9.42	31.04	42.20	54.00	-11.80	Horizontal	Average

802.11ac(VHT40)_MIMO_ChainA+B_5550MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11100.00	42.25	40.22	8.46	33.34	57.59	74.00	-16.41	Vertical	Peak
11100.00	27.58	40.22	8.46	33.34	42.92	54.00	-11.08	Vertical	Average
16650.00	38.21	40.13	9.42	30.96	56.80	74.00	-17.20	Vertical	Peak
16650.00	24.66	40.13	9.42	30.96	43.25	54.00	-10.75	Vertical	Average
11100.00	40.67	40.22	8.46	33.34	56.01	74.00	-17.99	Horizontal	Peak
11100.00	27.38	40.22	8.46	33.34	42.72	54.00	-11.28	Horizontal	Average
16650.00	37.28	40.13	9.42	30.96	55.87	74.00	-18.13	Horizontal	Peak
16650.00	24.18	40.13	9.42	30.96	42.77	54.00	-11.23	Horizontal	Average

802.11ac(VHT40) _MIMO_ChainA+B_5670MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11340.00	38.54	40.03	8.62	33.13	54.06	74.00	-19.94	Vertical	Peak
11340.00	24.31	40.03	8.62	33.13	39.83	54.00	-14.17	Vertical	Average
17010.00	36.71	41.57	9.41	30.71	56.98	74.00	-17.02	Vertical	Peak
17010.00	23.54	41.57	9.41	30.71	43.81	54.00	-10.19	Vertical	Average
11340.00	38.26	40.03	8.62	33.13	53.78	74.00	-20.22	Horizontal	Peak
11340.00	25.13	40.03	8.62	33.13	40.65	54.00	-13.35	Horizontal	Average
17010.00	37.62	41.57	9.41	30.71	57.89	74.00	-16.11	Horizontal	Peak
17010.00	23.55	41.57	9.41	30.71	43.82	54.00	-10.18	Horizontal	Average

802.11ac(VHT80) _MIMO_ChainA+B_5210MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10420.00	44.01	39.26	8.10	33.93	57.44	74.00	-16.56	Vertical	Peak
10420.00	27.53	39.26	8.10	33.93	40.96	54.00	-13.04	Vertical	Average
15630.00	39.47	38.75	9.64	31.58	56.28	74.00	-17.72	Vertical	Peak
15630.00	24.54	38.75	9.64	31.58	41.35	54.00	-12.65	Vertical	Average
10420.00	41.36	39.26	8.10	33.93	54.79	74.00	-19.21	Horizontal	Peak
10420.00	26.58	39.26	8.10	33.93	40.01	54.00	-13.99	Horizontal	Average
15630.00	39.55	38.75	9.64	31.58	53.36	74.00	-17.64	Horizontal	Peak
15630.00	24.54	38.75	9.64	31.58	41.35	54.00	-12.65	Horizontal	Average

802.11ac(VHT80) _MIMO_ChainA+B_5290MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10580.00	42.67	39.54	8.15	33.80	56.56	74.00	-17.44	Vertical	Peak
10580.00	26.70	39.54	8.15	33.80	40.59	54.00	-13.41	Vertical	Average
15870.00	39.42	38.00	9.54	31.47	55.49	74.00	-18.51	Vertical	Peak
15870.00	24.94	38.00	9.54	31.47	41.01	54.00	-12.99	Vertical	Average
10580.00	40.02	39.54	8.15	33.80	53.91	74.00	-20.09	Horizontal	Peak
10580.00	25.51	39.54	8.15	33.80	39.40	54.00	-14.60	Horizontal	Average
15870.00	39.72	38.00	9.54	31.47	55.79	74.00	-18.21	Horizontal	Peak
15870.00	24.97	38.00	9.54	31.47	41.04	54.00	-12.96	Horizontal	Average

802.11ac(VHT80) _MIMO_ChainA+B_5530MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
10580.00	42.37	39.54	8.15	33.80	56.56	74.00	-17.44	Vertical	Peak
10580.00	26.70	39.54	8.15	33.80	40.59	54.00	-13.41	Vertical	Average
15870.00	39.42	38.00	9.54	31.47	55.49	74.00	-18.51	Vertical	Peak
15870.00	24.94	38.00	9.54	31.47	41.01	54.00	-12.99	Vertical	Average
10580.00	40.02	39.54	8.15	33.80	53.91	74.00	-20.09	Horizontal	Peak
10580.00	25.51	39.54	8.15	33.80	39.40	54.00	-14.60	Horizontal	Average
15870.00	39.72	38.00	9.54	31.47	55.79	74.00	-18.21	Horizontal	Peak
15870.00	24.97	38.00	9.54	31.47	41.04	54.00	-12.96	Horizontal	Average

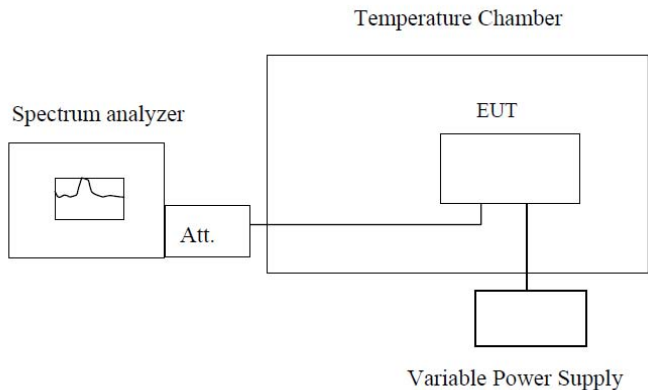
802.11ac(VHT80) _MIMO_ChainA+B_5610MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	Detector
11220.00	42.60	40.12	8.54	33.24	58.02	74.00	-15.98	Vertical	Peak
11220.00	27.48	40.12	8.54	33.24	42.90	54.00	-11.10	Vertical	Average
16830.00	43.27	40.84	9.41	30.84	62.68	74.00	-11.32	Vertical	Peak
16830.00	28.53	40.84	9.41	30.84	47.94	54.00	-6.06	Vertical	Average
11220.00	42.55	40.12	8.54	33.24	57.97	74.00	-16.03	Horizontal	Peak
11220.00	27.46	40.12	8.54	33.24	42.88	54.00	-11.12	Horizontal	Average
16830.00	43.44	40.84	9.41	30.84	62.85	74.00	-11.15	Horizontal	Peak
16830.00	28.50	40.84	9.41	30.84	47.91	54.00	-6.09	Horizontal	Average

Note:

1. $Level = Read\ Level + Antenna\ Factor + Cable\ loss - Preamplifier\ Factor$.
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

7.8 Frequency stability

Test Requirement:	47 CFR Part 15, Subpart C 15.407 (g)
Test Method:	ANSI C63.10:2013, FCC Part 2.1055
Limit:	Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified
Test Procedure:	a. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minute s. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test setup:	 Note : Measurement setup for testing on Antenna connector
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Remark: Set the EUT transmits at un-modulation mode to test frequency stability.

Measurement data:

Frequency stability versus Temp.									
Worse Case Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 minute		2 minute		5 minute		10 minute	
		Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail
-30	3.3	5177.9624	Pass	5182.6818	Pass	5183.0869	Pass	5179.4661	Pass
-20	3.3	5178.7616	Pass	5182.9621	Pass	5181.9775	Pass	5179.8629	Pass
-10	3.3	5180.3301	Pass	5180.7298	Pass	5181.0604	Pass	5180.354	Pass
0	3.3	5180.7218	Pass	5181.4486	Pass	5181.18	Pass	5179.6783	Pass
10	3.3	5179.9827	Pass	5180.4463	Pass	5180.7869	Pass	5180.1948	Pass
20	3.3	5179.999	Pass	5180.428	Pass	5180.7005	Pass	5179.7399	Pass
30	3.3	5179.8119	Pass	5180.6321	Pass	5181.2039	Pass	5179.4396	Pass
40	3.3	5180.2361	Pass	5180.222	Pass	5180.1477	Pass	5179.1235	Pass
50	3.3	5180.8483	Pass	5180.3876	Pass	5181.6974	Pass	5180.2911	Pass

Frequency stability versus Temp.									
Worse Case Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 minute		2 minute		5 minute		10 minute	
		Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail
25	3.15	5177.5617	Pass	5182.3452	Pass	5182.6825	Pass	5182.8924	Pass
25	3.3	5178.6099	Pass	5182.2239	Pass	5182.176	Pass	5181.4817	Pass
25	3.45	5179.9364	Pass	5181.3791	Pass	5181.0394	Pass	5180.2893	Pass

Frequency stability versus Temp.									
Worse Case Operating Frequency: 5260MHz									
Temp. (°C)	Power Supply (Vdc)	0 minute		2 minute		5 minute		10 minute	
		Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail
-30	3.3	5261.6252	Pass	5261.718	Pass	5260.6726	Pass	5261.8145	Pass
-20	3.3	5258.5623	Pass	5259.2445	Pass	5258.5315	Pass	5261.2391	Pass
-10	3.3	5260.693	Pass	5261.543	Pass	5258.22	Pass	5261.97	Pass
0	3.3	5259.6543	Pass	5261.5349	Pass	5259.8265	Pass	5261.6416	Pass
10	3.3	5261.2207	Pass	5259.9186	Pass	5259.8045	Pass	5260.7803	Pass
20	3.3	5260.1919	Pass	5260.1319	Pass	5260.4558	Pass	5260.129	Pass
30	3.3	5261.9365	Pass	5259.337	Pass	5258.3166	Pass	5258.0797	Pass
40	3.3	5259.2294	Pass	5259.4718	Pass	5259.3632	Pass	5260.0649	Pass
50	3.3	5260.072	Pass	5259.254	Pass	5259.3036	Pass	5261.0605	Pass

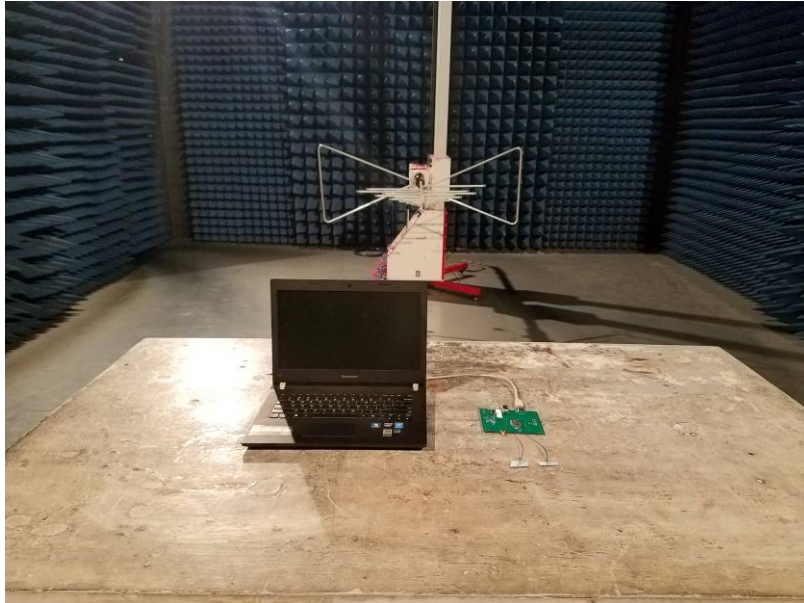
Frequency stability versus Temp.									
Worse Case Operating Frequency: 5260MHz									
Temp. (°C)	Power Supply (Vdc)	0 minute		2 minute		5 minute		10 minute	
		Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail
25	3.15	5261.3973	Pass	5258.6549	Pass	5261.119	Pass	5261.8284	Pass
25	3.3	5260.2981	Pass	5261.1578	Pass	5259.2722	Pass	5258.2712	Pass
25	3.45	5259.7089	Pass	5260.1116	Pass	5260.6018	Pass	5261.2235	Pass

Frequency stability versus Temp.									
Worse Case Operating Frequency: 5500MHz									
Temp. (°C)	Power Supply (Vdc)	0 minute		2 minute		5 minute		10 minute	
		Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail
-30	3.3	5499.8906	Pass	5500.6661	Pass	5500.4543	Pass	5501.3979	Pass
-20	3.3	5500.3449	Pass	5498.6024	Pass	5501.6265	Pass	5498.6354	Pass
-10	3.3	5498.7793	Pass	5501.2213	Pass	5500.3355	Pass	5498.8719	Pass
0	3.3	5501.6696	Pass	5500.4887	Pass	5500.3197	Pass	5499.9247	Pass
10	3.3	5499.8202	Pass	5501.1824	Pass	5499.9276	Pass	5499.524	Pass
20	3.3	5501.7137	Pass	5501.4016	Pass	5498.1167	Pass	5499.2107	Pass
30	3.3	5500.8286	Pass	5501.9614	Pass	5499.1594	Pass	5498.7255	Pass
40	3.3	5498.6727	Pass	5498.4476	Pass	5501.1266	Pass	5501.6969	Pass
50	3.3	5498.1802	Pass	5500.4701	Pass	5499.8439	Pass	5498.3622	Pass

Frequency stability versus Temp.									
Worse Case Operating Frequency: 5500MHz									
Temp. (°C)	Power Supply (Vdc)	0 minute		2 minute		5 minute		10 minute	
		Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail	Measured Frequency (MHz)	Pass /Fail
25	3.15	5498.7131	Pass	5498.9047	Pass	5500.4357	Pass	5498.9625	Pass
25	3.3	5499.9451	Pass	5498.7159	Pass	5501.2081	Pass	5498.0977	Pass
25	3.45	5501.0341	Pass	5498.4826	Pass	5500.6141	Pass	5499.6837	Pass

8 Test Setup Photo

Radiated Emission



Conducted Emission



9 EUT Constructional Details

Reference to the test report No. GTS201806000179E01

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