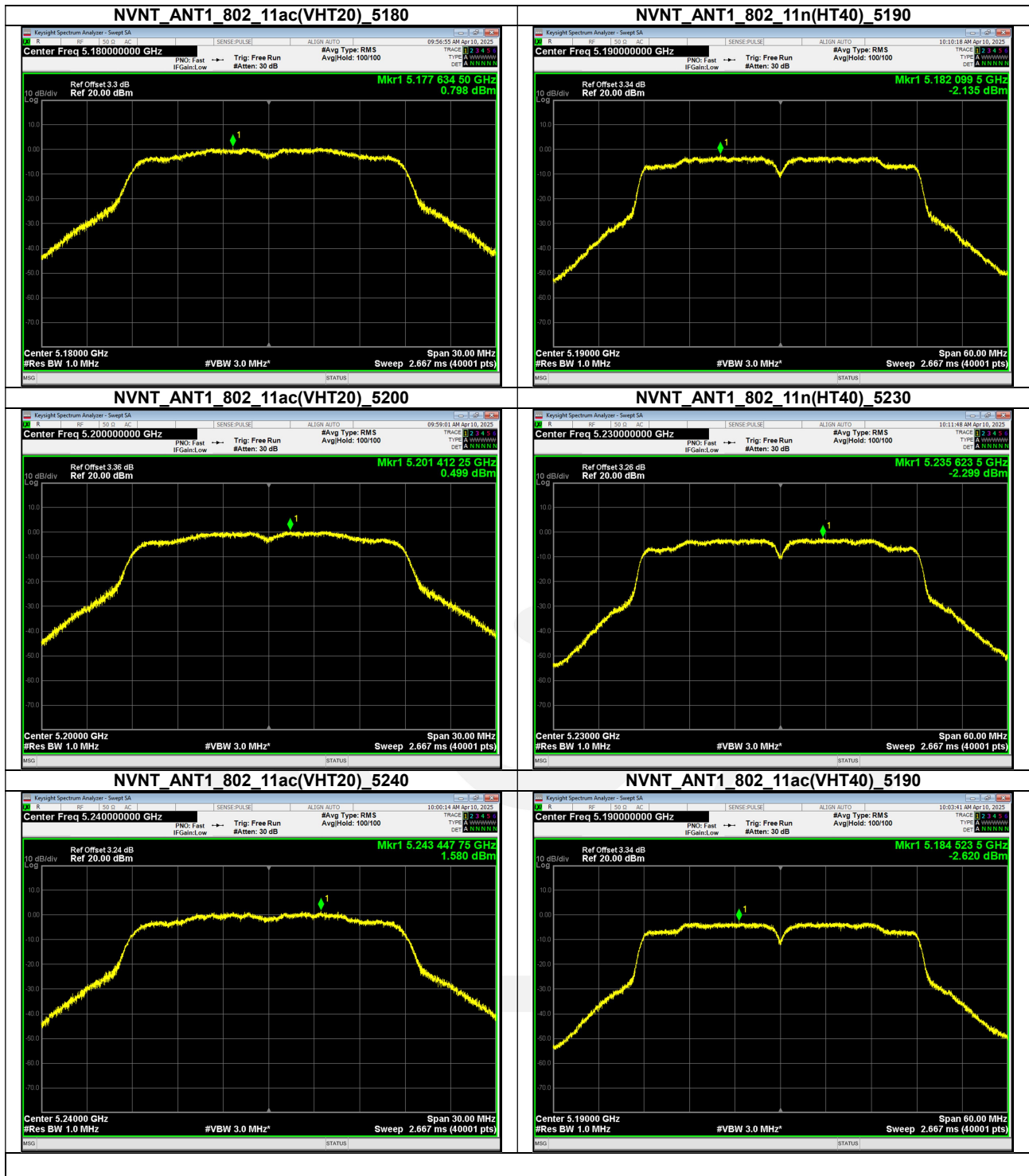


Measurement Data

Condition	Antenna	Modulation	Frequency (MHz)	PSD (dBm/MHz)	Duty factor (dB)	Total PSD (dBm/MHz)	Limit (dBm)	Result
NVNT	ANT1	802.11a	5180.00	1.094	1.03	2.12	11	Pass
NVNT	ANT1	802.11a	5200.00	0.71	1.03	1.74	11	Pass
NVNT	ANT1	802.11a	5240.00	1.231	1.03	2.26	11	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	0.832	0.87	1.70	11	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	0.556	0.87	1.43	11	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	1.241	0.87	2.11	11	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	-2.135	1.06	-1.08	11	Pass
NVNT	ANT1	802.11n(HT40)	5230.00	-2.299	1.06	-1.24	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5180.00	0.798	1.18	1.98	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5200.00	0.499	1.18	1.68	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5240.00	1.58	1.18	2.76	11	Pass
NVNT	ANT1	802.11ac(VHT40)	5190.00	-2.62	0.97	-1.65	11	Pass
NVNT	ANT1	802.11ac(VHT40)	5230.00	-1.826	0.97	-0.86	11	Pass
NVNT	ANT1	802.11ac(VHT80)	5210.00	-5.196	1.18	-4.02	11	Pass



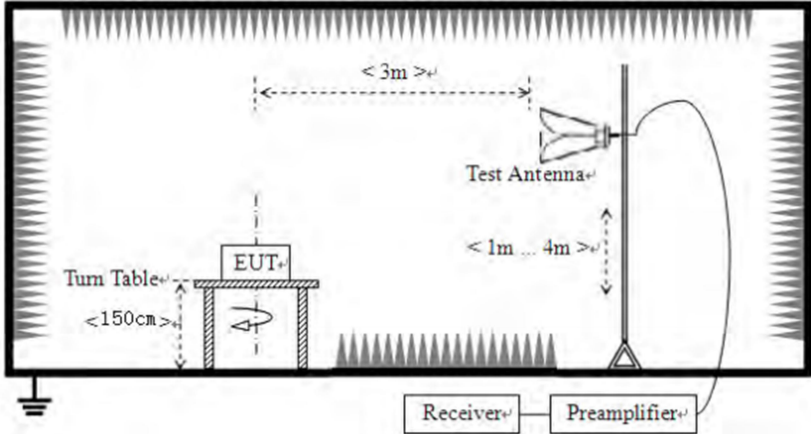






4.6 Band Edge

Test Requirement:	FCC Part15 E Section 15.407 and 15.205																								
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.					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 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Remark:

According to KDB 789033 D02 v02r01 section G) 1) (d), for 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 $\text{EIRP} = -27\text{dBm}$

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

Measurement Data:

Mode:		802.11a		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	57.63	-13.16	44.47	68.20	-23.73	PK
V	5150.00	58.29	-13.16	45.13	68.20	-23.07	PK
Mode:		802.11a		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	47.68	-13.16	34.52	54.00	-19.48	AV
V	5150.00	46.53	-13.16	33.37	54.00	-20.63	AV
Mode:		802.11a		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	56.27	-12.62	43.65	68.20	-24.55	PK
V	5350.00	56.34	-12.62	43.72	68.20	-24.48	PK
Mode:		802.11a		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	44.25	-12.62	31.63	54.00	-22.37	AV
V	5350.00	49.16	-12.62	36.54	54.00	-17.46	AV

Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	53.57	-13.16	40.41	68.20	-27.79	PK
V	5150.00	57.31	-13.16	44.15	68.20	-24.05	PK
Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	47.64	-13.16	34.48	54.00	-19.52	AV
V	5150.00	45.68	-13.16	32.52	54.00	-21.48	AV
Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	55.35	-12.62	42.73	68.20	-25.47	PK
V	5350.00	57.52	-12.62	44.90	68.20	-23.30	PK
Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	47.31	-12.62	34.69	54.00	-19.31	AV
V	5350.00	49.74	-12.62	37.12	54.00	-16.88	AV

Mode:		802.11ac(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	57.21	-13.16	44.05	68.20	-24.15	PK
V	5150.00	58.38	-13.16	45.22	68.20	-22.98	PK
Mode:		802.11ac(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	45.62	-13.16	32.46	54.00	-21.54	AV
V	5150.00	45.41	-13.16	32.25	54.00	-21.75	AV
Mode:		802.11ac(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	56.87	-12.62	44.25	68.20	-23.95	PK
V	5350.00	57.56	-12.62	44.94	68.20	-23.26	PK
Mode:		802.11ac(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	48.47	-12.62	35.85	54.00	-18.15	AV
V	5350.00	48.31	-12.62	35.69	54.00	-18.31	AV

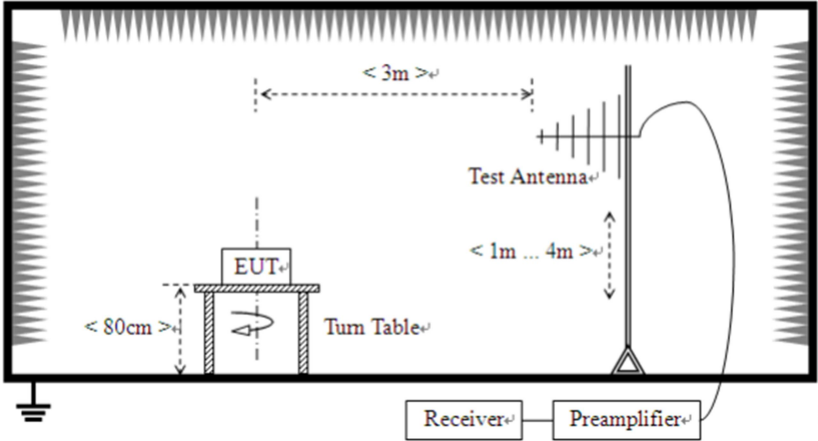
Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	55.60	-13.16	42.44	68.20	-25.76	PK
V	5150.00	57.39	-13.16	44.23	68.20	-23.97	PK
Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	45.32	-13.16	32.16	54.00	-21.84	AV
V	5150.00	48.66	-13.16	35.50	54.00	-18.50	AV
Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	55.62	-12.62	43.00	68.20	-25.20	PK
V	5350.00	55.48	-12.62	42.86	68.20	-25.34	PK
Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	47.17	-12.62	34.55	54.00	-19.45	AV
V	5350.00	46.95	-12.62	34.33	54.00	-19.67	AV

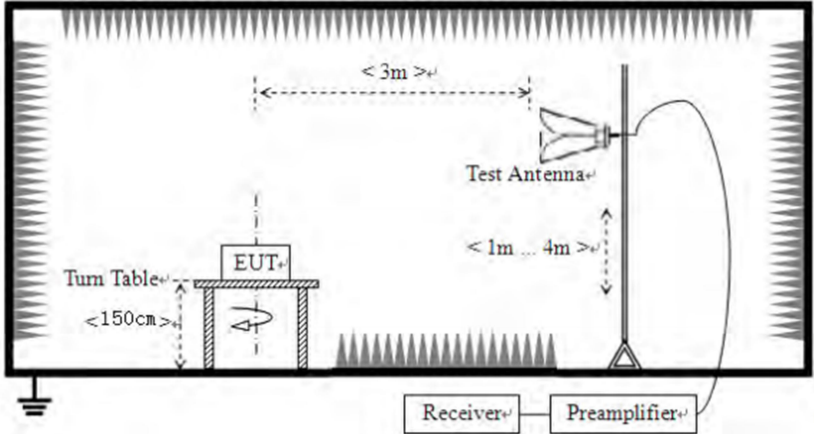
Mode:		802.11ac(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	56.82	-13.16	43.66	68.20	-24.54	PK
V	5150.00	56.65	-13.16	43.49	68.20	-24.71	PK
Mode:		802.11ac(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	47.91	-13.16	34.75	54.00	-19.25	AV
V	5150.00	47.55	-13.16	34.39	54.00	-19.61	AV
Mode:		802.11ac(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	56.32	-12.62	43.70	68.20	-24.50	PK
V	5350.00	58.48	-12.62	45.86	68.20	-22.34	PK
Mode:		802.11ac(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	48.64	-12.62	36.02	54.00	-17.98	AV
V	5350.00	45.20	-12.62	32.58	54.00	-21.42	AV

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	56.79	-13.16	43.63	68.20	-24.57	PK
V	5150.00	57.33	-13.16	44.17	68.20	-24.03	PK
Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	44.56	-13.16	31.40	54.00	-22.60	AV
V	5150.00	46.21	-13.16	33.05	54.00	-20.95	AV
Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	55.57	-12.62	42.95	68.20	-25.25	PK
V	5350.00	54.59	-12.62	41.97	68.20	-26.23	PK
Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	45.41	-12.62	32.79	54.00	-21.21	AV
V	5350.00	49.32	-12.62	36.70	54.00	-17.30	AV

4.7 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	30MHz to 40GHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	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 (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		74.0		Peak Value
54.0			Average Value		
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 1.5m 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. - 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. - Repeat step 4 for test frequency with the test antenna polarized horizontally. - Remove the transmitter and replace it with a substitution antenna - 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. - Repeat step 7 with both antennas horizontally polarized for each test frequency. - 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: $\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}$ where: Pg is the generator output power into the substitution antenna.
Test setup:	Below 1GHz  Above 1GHz

	
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data:**Below 1GHz**

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
52.58	48.93	-14.35	34.58	40.00	-5.42	Vertical
64.66	44.97	-15.80	29.17	40.00	-10.83	Vertical
95.09	43.33	-17.44	25.89	43.50	-17.61	Vertical
170.79	40.05	-13.31	26.74	43.50	-16.76	Vertical
211.53	51.10	-15.82	35.28	43.50	-8.22	Vertical
292.06	37.34	-11.32	26.02	46.00	-19.98	Vertical
52.2080	47.25	-14.31	32.94	40.00	-7.06	Horizontal
64.4330	43.59	-15.77	27.82	40.00	-12.18	Horizontal
95.0930	40.59	-17.44	23.15	43.50	-20.35	Horizontal
170.1950	35.88	-13.23	22.65	43.50	-20.85	Horizontal
209.3130	49.62	-15.91	33.71	43.50	-9.79	Horizontal
296.1840	42.62	-11.07	31.55	46.00	-14.45	Horizontal

Above 1GHz:**802.11a 5180MHz**

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
10360.94	50.49	11.54	14.97	32.78	44.22	68.20	-23.98	Vertical
15540.50	51.14	12.30	17.82	34.54	46.72	74.00	-27.28	Vertical
10360.68	52.02	9.47	14.71	33.04	43.16	68.20	-25.04	Horizontal
15540.86	53.67	8.98	18.14	34.61	46.18	74.00	-27.82	Horizontal

802.11a 5200MHz

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
10360.91	50.40	11.70	14.83	33.03	43.90	68.20	-24.30	Vertical
15540.58	51.61	12.28	17.89	34.89	46.89	74.00	-27.11	Vertical
10360.04	52.66	9.64	14.79	32.82	44.27	68.20	-23.93	Horizontal
15540.90	53.65	8.57	18.11	34.57	45.76	74.00	-28.24	Horizontal

802.11a 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
10360.54	50.18	11.43	14.99	33.15	43.45	68.20	-24.75	Vertical
15540.06	51.29	12.17	18.04	34.93	46.57	74.00	-27.43	Vertical
10360.16	52.84	9.51	14.72	32.95	44.12	68.20	-24.08	Horizontal
15540.89	53.60	8.55	17.93	34.47	45.61	74.00	-28.39	Horizontal

802.11n(HT20) 5180MHz

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
10360.81	50.23	11.52	14.81	33.06	43.50	68.20	-24.70	Vertical
15540.69	51.42	12.17	17.83	34.58	46.84	74.00	-27.16	Vertical
10360.74	51.81	9.41	14.91	32.92	43.21	68.20	-24.99	Horizontal
15540.02	53.63	8.82	17.99	34.69	45.75	74.00	-28.25	Horizontal

802.11n(HT20) 5200MHz

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
10360.32	50.17	11.69	15.05	32.93	43.98	68.20	-24.22	Vertical
15540.15	51.58	11.98	17.71	34.78	46.49	74.00	-27.51	Vertical
10360.86	51.85	9.68	14.73	32.87	43.39	68.20	-24.81	Horizontal
15540.34	53.77	8.59	17.71	34.90	45.17	74.00	-28.83	Horizontal

802.11n(HT20) 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
10360.32	50.19	11.72	15.08	32.98	44.01	68.20	-24.19	Vertical
15540.73	51.05	12.12	17.88	34.67	46.38	74.00	-27.62	Vertical
10360.46	52.08	9.63	14.84	32.78	43.77	68.20	-24.43	Horizontal
15540.15	53.32	8.60	17.99	34.75	45.16	74.00	-28.84	Horizontal

802.11ac(HT20) 5180MHz

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
10360.69	49.88	11.63	14.87	33.08	43.30	68.20	-24.90	Vertical
15540.83	51.45	12.37	17.66	34.95	46.53	74.00	-27.47	Vertical
10360.11	52.09	9.88	14.77	33.05	43.69	68.20	-24.51	Horizontal
15540.74	53.12	8.60	18.14	34.72	45.14	74.00	-28.86	Horizontal

802.11ac(HT20) 5200MHz

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
10360.12	50.46	11.52	14.86	32.86	43.98	68.20	-24.22	Vertical
15540.73	51.33	12.13	17.81	34.80	46.47	74.00	-27.53	Vertical
10360.04	52.10	9.67	15.12	33.09	43.80	68.20	-24.40	Horizontal
15540.80	53.75	8.80	18.03	34.96	45.62	74.00	-28.38	Horizontal

802.11ac(HT20) 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
10360.62	50.44	11.42	14.92	33.01	43.77	68.20	-24.43	Vertical
15540.86	51.65	12.19	18.09	34.67	47.26	74.00	-26.74	Vertical
10360.70	53.08	9.51	15.08	32.97	44.70	68.20	-23.50	Horizontal
15540.13	53.46	8.53	17.81	34.59	45.21	74.00	-28.79	Horizontal

802.11n(HT40) 5190MHz

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
10360.77	50.37	11.52	15.00	32.75	44.14	68.20	-24.06	Vertical
15540.62	51.08	11.97	17.84	34.91	45.98	74.00	-28.02	Vertical
10360.65	52.80	9.62	14.65	32.68	44.39	68.20	-23.81	Horizontal
15540.98	53.81	8.56	18.15	34.88	45.64	74.00	-28.36	Horizontal

802.11n(HT40) 5230MHz

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
10360.38	51.06	11.36	14.78	33.08	44.12	68.20	-24.08	Vertical
15540.58	51.25	12.03	18.06	34.90	46.44	74.00	-27.56	Vertical
10360.11	53.11	9.61	15.09	32.73	45.08	68.20	-23.12	Horizontal
15540.61	53.70	8.57	18.08	34.94	45.41	74.00	-28.59	Horizontal

802.11ac(HT40) 5190MHz

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
10360.08	50.24	11.52	15.04	33.10	43.70	68.20	-24.50	Vertical
15540.22	51.38	12.09	17.89	34.82	46.54	74.00	-27.46	Vertical
10360.38	51.74	9.71	14.65	32.82	43.28	68.20	-24.92	Horizontal
15540.38	52.98	8.73	17.71	34.74	44.68	74.00	-29.32	Horizontal

802.11ac(HT40) 5230MHz

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
10360.88	50.29	11.73	14.77	32.92	43.87	68.20	-24.33	Vertical
15540.08	50.96	12.29	17.99	34.78	46.46	74.00	-27.54	Vertical
10360.84	51.94	9.83	15.08	33.15	43.70	68.20	-24.50	Horizontal
15540.44	53.10	8.76	17.67	34.68	44.85	74.00	-29.15	Horizontal

802.11ac(HT80) 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
10360.55	50.30	11.50	15.04	32.98	43.86	68.20	-24.34	Vertical
15540.08	51.76	12.36	17.89	34.75	47.26	74.00	-26.74	Vertical
10360.54	52.87	9.88	14.95	32.96	44.74	68.20	-23.46	Horizontal
15540.57	53.86	8.66	17.76	34.48	45.80	74.00	-28.20	Horizontal

Note:

1. Level = Read Level + Antenna Factor+ Cable loss- Preamp 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.
4. This Report only show the test plots of the worst case (U-NII-1).

4.8 Frequency stability

Test Standard	15.407(f)
Test limit	Manufacturers 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 in the user's manual.
Test results:	Pass

Measurement Data:

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	AC207V	5179.994	6	5239.992	8
	AC230V	5179.996	4	5239.997	3
	AC253V	5179.995	5	5239.994	6
Mode	Voltage (V)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)

Mode	Temperature (°C)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	-10°C	5179.995	5	5239.994	6
	0°C	5179.991	9	5239.993	7
	+10°C	5179.995	5	5239.993	7
	+20°C	5179.996	4	5239.995	5
	+30°C	5179.993	7	5239.996	4
	+40°C	5179.992	8	5239.992	8
	+50°C	5179.994	6	5239.993	7

5 Photos Of Test Setup

Reference to the **appendix I Test Setup Photo** for details.

6 Photos Of EUT

Reference to the **appendix II external photos** and **appendix III internal photos** for details.

-----END OF REPORT-----

