



FCC CO-LOCATION RADIO TEST REPORT

FCC ID : S9GR750
Equipment : Access Point
Brand Name : RUCKUS
Model Name : R750
Applicant : Ruckus Wirelss Inc.
350 W. Java Dr., Sunnyvale CA 94089 USA
Manufacturer : Ruckus Wirelss Inc.
350 W. Java Dr., Sunnyvale CA 94089 USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on Apr. 30, 2020 and testing was started from May 05, 2020 and completed on May 05, 2020. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of government.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval of Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Approved by: Ken Chen

Sporton International (USA) Inc.
1175 Montague Expressway, Milpitas, CA 95035



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	5
1.3 Testing Location	5
1.4 Applicable Standards.....	5
2 Test Configuration of Equipment Under Test	6
2.1 Carrier Frequency and Channel	6
2.2 Test Mode.....	6
2.3 Connection Diagram of Test System.....	6
3 Test Result	7
3.1 Unwanted Emissions Measurement.....	7
3.2 Antenna Requirements.....	10
4 List of Measuring Equipment.....	11
5 Uncertainty of Evaluation	12
Appendix A. Radiated Spurious Emission	
Appendix B. Radiated Spurious Emission Plots	
Appendix C. Duty Cycle Plots	
Appendix D. Setup Photographs	



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(b)	Unwanted Emissions	Pass	Under limit 0.42 dB at 5352.160 MHz
3.2	15.203 15.407(a)	Antenna Requirement	Pass	-

Note: This is a spot check data report and data performed in appendix of this report are chosen from the worst case of the original FCC ID (S9GR750) report.

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1 General Description

1.1 Product Feature of Equipment Under Test

Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and Zigbee.

Product Specification subjective to this standard	
Antenna Type	WLAN: <Ant. 1>: PCB Antenna <Ant. 2>: PCB Antenna <Ant. 3>: PCB Antenna <Ant. 4>: PCB Antenna <Ant. 5>: PCB Antenna <Ant. 6>: PCB Antenna <Ant. 7>: PCB Antenna <Ant. 8>: PCB Antenna Bluetooth: PIFA Antenna Zigbee: PIFA Antenna

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Location

Test Site	Sporton International (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300
Test Site No.	Sporton Site No.
	03CH02-CA

Note: The test site complies with ANSI C63.4 2014 requirement.

1.4 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

2.1 Carrier Frequency and Channel

5180-5240 MHz		5260-5320 MHz	
802.11ax HE80		802.11ax HE80	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
42	5210	58	5290

5500-5720 MHz			
802.11ax HE80			
Channel	Freq. (MHz)	Channel	Freq. (MHz)
106	5530	122	5610

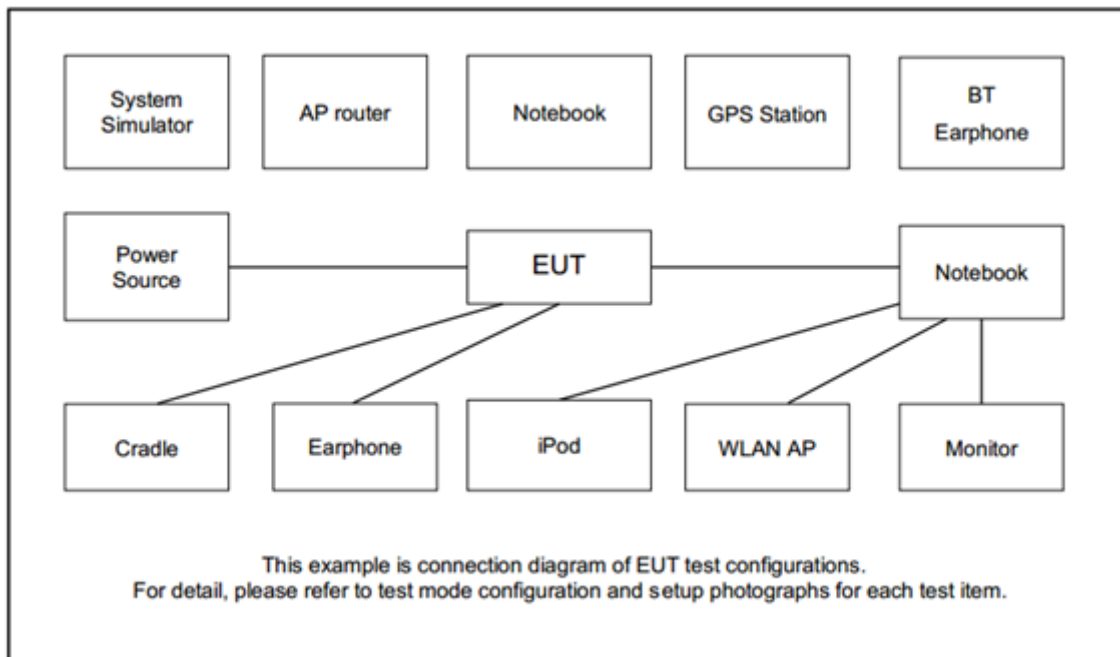
2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

<Co-Location>

Modulation	Data Rate
5GHz 802.11ax HE80 + 5GHz 802.11ax HE80	MCS0 + MCS0

2.3 Connection Diagram of Test System





3 Test Result

3.1 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.1.1 Limit of Unwanted Emissions

(1) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu V/m, \text{ where } P \text{ is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

(2) KDB789033 D02 v02r01 G)2)c)

- (i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

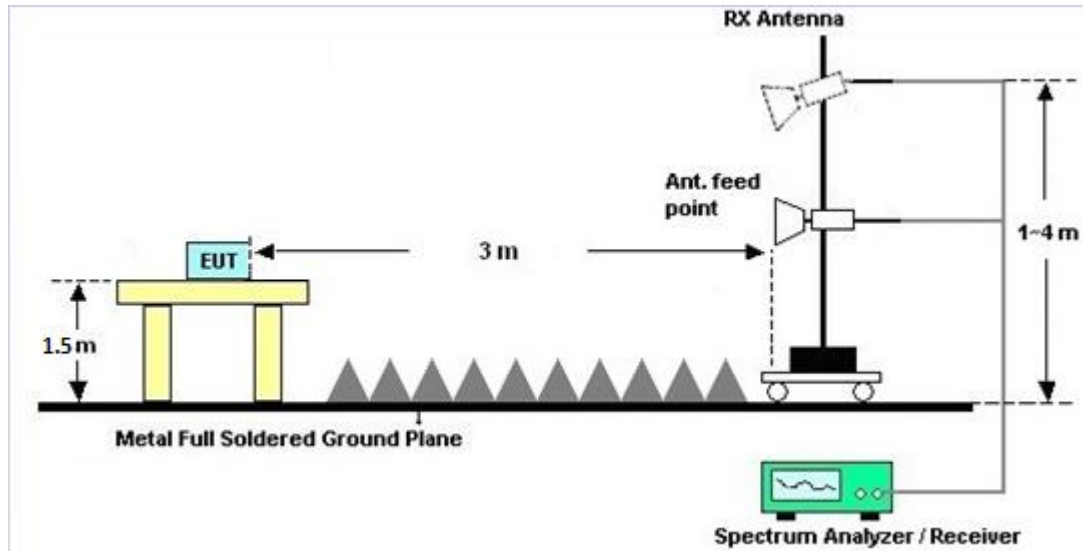


3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (2) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.1.4 Test Setup

For radiated emissions above 1GHz



3.1.5 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A and B.

3.1.6 Duty Cycle

Please refer to Appendix C.

3.1.7 Test Result of Radiated Spurious Emissions

Please refer to Appendix A and B.



3.2 Antenna Requirements

3.2.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.2.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Horn Antenna	SCHWARZBECK	BBHA 9120D	01895	1GHz~18GHz	Aug. 20, 2019	May 05, 2020	Aug. 19, 2020	Radiation (03CH02-CA)
Preamplifier	Keysight	83017A	MY53270323	1GHz~26.5GHz	Jul. 26, 2019	May 05, 2020	Jul. 25, 2020	Radiation (03CH02-CA)
Preamplifier	E-instrument	ERA-10M-18G-56-01-A70	EC1900251	N/A	Nov. 26, 2019	May 05, 2020	Nov. 25, 2020	Radiation (03CH02-CA)
Spectrum Analyzer	Keysight	N9010A	MY57420221	10Hz~44GHz	Sep. 11, 2019	May 05, 2020	Sep. 10, 2020	Radiation (03CH02-CA)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN8	6.75 Highpass	Aug. 02, 2019	May 05, 2020	Aug. 01, 2020	Radiation (03CH02-CA)
Hygrometer	TESEO	608-H1	45142602	N/A	Jul. 25, 2019	May 05, 2020	Jul. 24, 2020	Radiation (03CH02-CA)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	May 05, 2020	N/A	Radiation (03CH02-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	May 05, 2020	N/A	Radiation (03CH02-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	May 05, 2020	N/A	Radiation (03CH02-CA)



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.5
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.3
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Appendix A. Radiated Spurious Emission

Test Engineer :	Calvin Wu	Temperature :	19~22°C
		Relative Humidity :	36~45%

**5GHz 5210MHz + 5GHz 5290MHz
802.11ax HE80_Tx_CH 42 + 802.11ax HE80_Tx_CH 58 (Band Edge @ 3m)**

WIFI Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH 42 5210 MHz		5139.62	62.65	-11.35	74	49.6	32.02	10.96	29.93	386	77	P	H
		5139.1	53.5	-0.5	54	40.45	32.02	10.96	29.93	386	77	A	H
	*	5210	112.99	-	-	100.12	31.64	11.15	29.92	386	77	P	H
	*	5210	103.1	-	-	90.23	31.64	11.15	29.92	386	77	A	H
		5148.72	60.46	-13.54	74	47.42	31.98	10.99	29.93	321	75	P	V
		5149.5	52.63	-1.37	54	39.59	31.98	10.99	29.93	321	75	A	V
	*	5210	110.95	-	-	98.02	31.7	11.15	29.92	321	75	P	V
	*	5210	100.02	-	-	87.09	31.7	11.15	29.92	321	75	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH58 5290 MHz	*	5290	108.57	-	-	95.87	31.37	11.25	29.92	323	92	P	H
	*	5290	99.22	-	-	86.52	31.37	11.25	29.92	323	92	A	H
		5350.24	61.97	-12.03	74	49.1	31.45	11.33	29.91	323	92	P	H
		5352.16	53.58	-0.42	54	40.71	31.45	11.33	29.91	323	92	A	H
	*	5290	108.84	-	-	96.11	31.4	11.25	29.92	400	307	P	V
	*	5290	99.41	-	-	86.68	31.4	11.25	29.92	400	307	A	V
		5351.2	60.95	-13.05	74	48.13	31.4	11.33	29.91	400	307	P	V
		5350.08	52.66	-1.34	54	39.84	31.4	11.33	29.91	400	307	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5GHz 5210MHz + 5GHz 5290MHz

802.11ax HE80_Tx_CH 42 + 802.11ax HE80_Tx_CH 58 (Harmonic @ 3m)

WIFI Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH 42 5210 MHz + 802.11ax HE80 CH58 5290 MHz		10580	52.66	-15.54	68.2	63.69	39.78	16.65	67.46	206	136	P	H
		10580	42.48	-11.52	54	53.51	39.78	16.65	67.46	206	136	A	H
		10580	52.14	-16.06	68.2	63.18	39.77	16.65	67.46	400	10	P	V
		10580	42.55	-11.45	54	53.59	39.77	16.65	67.46	400	10	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5GHz 5530MHz + 5GHz 5610MHz

802.11ax HE80_Tx_CH 106 + 802.11ax HE80_Tx_CH 122 (Band Edge @ 3m)

WIFI Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH 106 5530 MHz		5445.84	58.12	-15.88	74	44.91	31.69	11.42	29.9	314	183	P	H
		5467.6	59.49	-8.71	68.2	46.22	31.73	11.44	29.9	314	183	P	H
		5370	50.01	-3.99	54	37.08	31.49	11.35	29.91	314	183	A	H
	*	5530	109.18	-	-	95.77	31.84	11.48	29.91	314	183	P	H
	*	5530	98.95	-	-	85.54	31.84	11.48	29.91	314	183	A	H
		5455.12	55.06	-18.94	74	41.75	31.78	11.43	29.9	261	83	P	V
		5466.64	54.07	-14.13	68.2	40.72	31.81	11.44	29.9	261	83	P	V
		5456.08	45.36	-8.64	54	32.04	31.79	11.43	29.9	261	83	A	V
	*	5530	105.19	-	-	91.78	31.84	11.48	29.91	261	83	P	V
	*	5530	95.93	-	-	82.52	31.84	11.48	29.91	261	83	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. Simultaneously	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH122 5610 MHz	*	5610	106.7	-	-	93.26	31.83	11.55	29.94	312	101	P	H
	*	5610	97.44	-	-	84	31.83	11.55	29.94	312	101	A	H
		5760.12	53.97	-14.23	68.2	40.06	32.12	11.78	29.99	312	101	P	H
	*	5610	108.95	-	-	95.55	31.79	11.55	29.94	311	30	P	V
	*	5610	98.91	-	-	85.51	31.79	11.55	29.94	311	30	A	V
		5744.84	53.17	-15.03	68.2	39.36	32.04	11.75	29.98	311	30	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5GHz 5530MHz + 5GHz 5610MHz

802.11ax HE80_Tx_CH 106 + 802.11ax HE80_Tx_CH 122 (Harmonic @ 3m)

WIFI Ant. Simultaneously	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH 106 5530 MHz + 802.11ax HE80 CH122 5610 MHz		11220	52.16	-21.84	74	62.04	39.75	17.07	66.7	220	246	P	H
		11220	41.94	-12.06	54	51.82	39.75	17.07	66.7	220	246	A	H
		11220	52.53	-21.47	74	62.37	39.79	17.07	66.7	218	356	P	V
		11220	42.89	-11.11	54	52.73	39.79	17.07	66.7	218	356	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

BLE	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 00 2402MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix B. Radiated Spurious Emission Plots

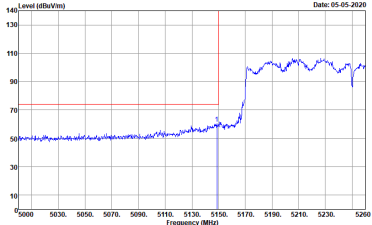
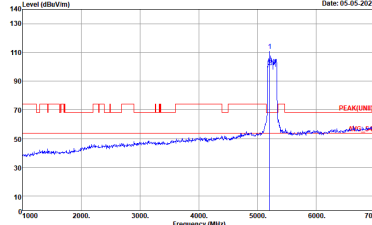
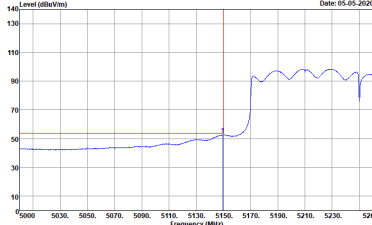
Test Engineer :	Calvin Wu	Temperature :	19~22°C
		Relative Humidity :	36~45%



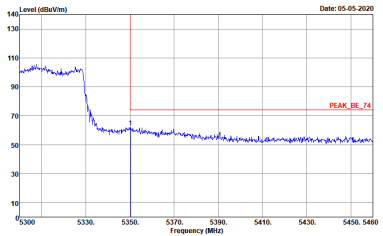
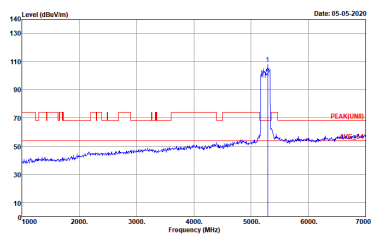
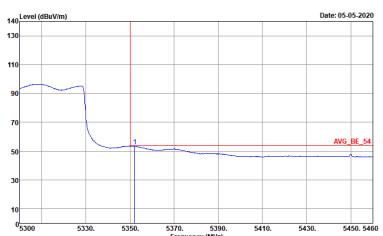
5GHz 5210MHz + 5GHz 5290MHz
802.11ax HE80_Tx_CH 42 + 802.11ax HE80_Tx_CH 58 (Band Edge @ 3m)

WIFI	5GHz 5150~5250MHz Band Edge @ 3m	
ANT	802.11 HE80 CH42 5210MHz	
Simultaneously	Horizontal	Fundamental
Peak	<p>Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	<p>Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>
Avg.	<p>Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak</p>	Left blank

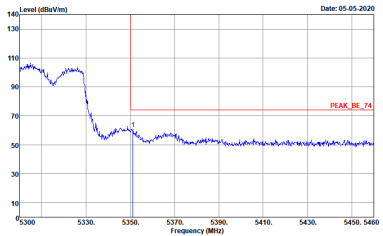
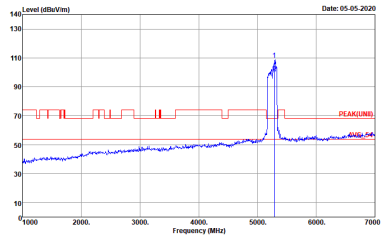
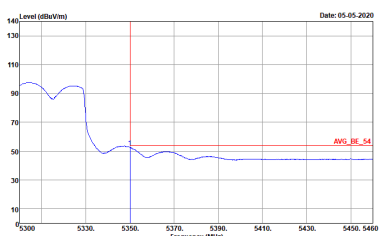


WIFI	5GHz 5150~5250MHz Band Edge @ 3m	
ANT	802.11 HE80 CH42 5210MHz	
Simultaneously	Vertical	Fundamental
<p style="text-align: center;">Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK(FUN1) 3m HORN 9120D-HF_01895 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>
<p style="text-align: center;">Avg.</p>	 <p>Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak</p>	<p style="text-align: center;">Left blank</p>



WIFI	5GHz 5250~5350MHz Band Edge @ 3m	
ANT	802.11 HE80 CH58 5290MHz	
Simultaneously	Horizontal	Fundamental
<p>Peak</p>	 <p>Level (dBm/100kHz) vs Frequency (MHz) plot for Peak Horizontal. The plot shows a signal level around 100 dBm/100kHz at 5250 MHz, dropping to approximately 50 dBm/100kHz by 5350 MHz. A red horizontal line labeled 'PEAK_BE_74' is drawn at approximately 75 dBm/100kHz. The x-axis ranges from 5300 to 5460 MHz, and the y-axis ranges from 10 to 140 dBm/100kHz.</p> <p>Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	 <p>Level (dBm/100kHz) vs Frequency (MHz) plot for Peak Fundamental. The plot shows a signal level around 70 dBm/100kHz from 2000 to 4000 MHz, with a sharp peak at 5290 MHz reaching approximately 100 dBm/100kHz. A red horizontal line labeled 'PEAK(UM)' is drawn at approximately 70 dBm/100kHz. The x-axis ranges from 2000 to 7000 MHz, and the y-axis ranges from 10 to 140 dBm/100kHz.</p> <p>Site : 03CH02-CA Condition : PEAK(UM) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>
<p>Avg.</p>	 <p>Level (dBm/100kHz) vs Frequency (MHz) plot for Avg Horizontal. The plot shows a signal level around 100 dBm/100kHz at 5250 MHz, dropping to approximately 50 dBm/100kHz by 5350 MHz. A red horizontal line labeled 'AVG_BE_54' is drawn at approximately 55 dBm/100kHz. The x-axis ranges from 5300 to 5460 MHz, and the y-axis ranges from 10 to 140 dBm/100kHz.</p> <p>Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak</p>	<p>Left blank</p>



WIFI	5GHz 5250~5350MHz Band Edge @ 3m	
ANT	802.11 HE80 CH58 5290MHz	
Simultaneously	Vertical	Fundamental
<p style="text-align: center;">Peak</p>	 <p>Level (dBm/100kHz) vs Frequency (MHz) plot for Peak Vertical. The plot shows a signal level around 100 dBm/100kHz at 5290 MHz, with a red horizontal line labeled 'PEAK_BE_74' at approximately 75 dBm/100kHz. The x-axis ranges from 5300 to 5460 MHz, and the y-axis ranges from 10 to 140 dBm/100kHz.</p> <p>Site : 03CH02-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_01895 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	 <p>Level (dBm/100kHz) vs Frequency (MHz) plot for Peak Fundamental. The plot shows a signal level around 110 dBm/100kHz at 5290 MHz, with a red horizontal line labeled 'PEAK(FUN)' at approximately 75 dBm/100kHz. The x-axis ranges from 5000 to 7000 MHz, and the y-axis ranges from 10 to 140 dBm/100kHz.</p> <p>Site : 03CH02-CA Condition : PEAK(FUN) 3m HORN 9120D-HF_01895 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>
<p style="text-align: center;">Avg.</p>	 <p>Level (dBm/100kHz) vs Frequency (MHz) plot for Avg Vertical. The plot shows an average signal level around 50 dBm/100kHz at 5290 MHz, with a red horizontal line labeled 'AVG_BE_54' at approximately 55 dBm/100kHz. The x-axis ranges from 5300 to 5460 MHz, and the y-axis ranges from 10 to 140 dBm/100kHz.</p> <p>Site : 03CH02-CA Condition : AVG_BE_54 3m HORN 9120D-HF_01895 VERTICAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak</p>	<p style="text-align: center;">Left blank</p>



5GHz 5210MHz + 5GHz 5290MHz

802.11ax HE80_Tx_CH 42 + 802.11ax HE80_Tx_CH 58 (Harmonic @ 3m)

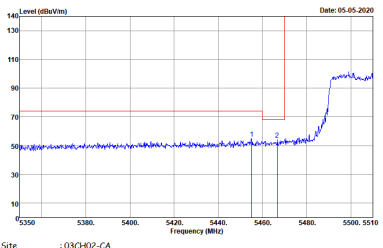
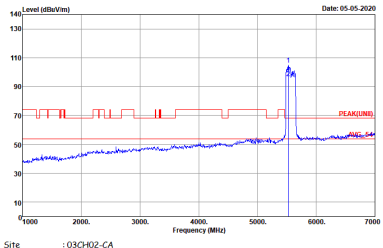
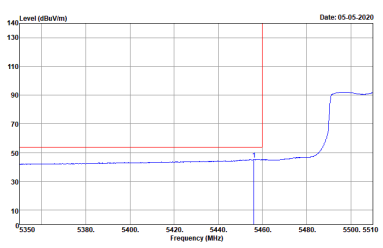
802.11ax HE80_Tx_CH 42 + 802.11ax HE80_Tx_CH 58		
	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_01895 VERTICAL Detector : Peak</p>



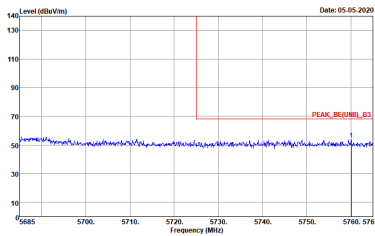
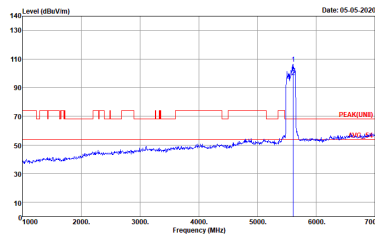
5GHz 5530MHz + 5GHz 5610MHz
802.11ax HE80_Tx_CH 106 + 802.11ax HE80_Tx_CH 122 (Band Edge @ 3m)

WIFI	5GHz 5470~5725MHz Band Edge @ 3m	
ANT	802.11 HE80 CH106 5530MHz	
Simultaneously	Horizontal	Fundamental
Peak	<p>Site : 03CH02-CA Condition : PEAK_BE(UNIT)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	<p>Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>
Avg.	<p>Site : 03CH02-CA Condition : AVG_BE(UNIT)_B3 3m HORN 9120D-HF_01895 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak</p>	Left blank

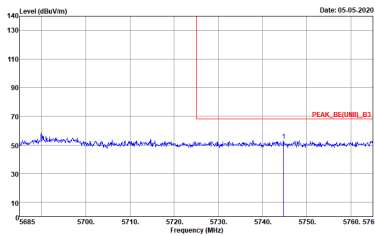
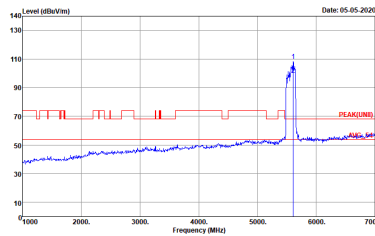


WIFI	5GHz 5470~5725MHz Band Edge @ 3m	
ANT	802.11 HE80 CH106 5530MHz	
Simultaneously	Vertical	Fundamental
<p style="text-align: center;">Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK_BE(UNII)_B3 3m HORN 91200-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN 91200-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>
<p style="text-align: center;">Avg.</p>	 <p>Site : 03CH02-CA Condition : AVG_BE(UNII)_B3 3m HORN 91200-HF_01895 VERTICAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak</p>	<p style="text-align: center;">Left blank</p>



WIFI	5GHz 5470~5725MHz Band Edge @ 3m	
ANT	802.11 HE80 CH122 5610MHz	
Simultaneously	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK_BE(LIN)_53 3m HORN 9120D-HE_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK(LIN)_3m HORN 9120D-HE_01895 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>



WIFI	5GHz 5250~5350MHz Band Edge @ 3m	
ANT	802.11 HE80 CH122 5610MHz	
Simultaneously	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK_BE(LIN)_B3 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>	 <p>Site : 03CH02-CA Condition : PEAK(LIN)_1 3m HORN 9120D-HF_01895 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak</p>



5GHz 5530MHz + 5GHz 5610MHz
802.11ax HE80_Tx_CH 106 + 802.11ax HE80_Tx_CH 122 (Harmonic @ 3m)

802.11ax HE80_Tx_CH 106 + 802.11ax HE80_Tx_CH 122		
	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH02-CA Condition : PEAK(LINII) 3m HORN 9120D-HF_01895 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH02-CA Condition : PEAK(LINII) 3m HORN 9120D-HF_01895 VERTICAL Detector : Peak</p>



Appendix C. Duty Cycle Plots

Mode	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
4*4	5GHz 802.11ax HE80 for Ant. 1	95.42	5420	0.18	300Hz	0.20

802.11ax HE80

