FCC CO-LOCATION TEST REPORT

FCC ID	:	**S9GT750**
Equipment	:	**Access point**
Brand Name	:	**RUCKUS**
Model Name	:	**T750**
Applicant	:	**Ruckus Wireless Inc. 350 W. Java Dr., Sunnyvale CA 94089 USA**
Manufacturer	:	**Ruckus Wireless Inc. 350 W. Java Dr., Sunnyvale CA 94089 USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jun. 21, 2019 and testing was started from Sep. 02, 2019 and completed on Sep. 27, 2019. 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 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

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History of this test report

Report No.	Version	Description	Issued Date
FR190621001F	01	Initial issue of report	Nov. 25, 2019
FR190621001F	02	Remove test data of Band 2 and Band 3	Jan. 07, 2020

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 0.68 dB at 30.000 MHz for Quasi-Peak
3.2	15.203 15.407(a)	Antenna Requirement	Pass	-

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, 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> Omni Antenna <Ant. 2> Omni Antenna <Ant. 3> Omni Antenna <Ant. 4> Omni Antenna Bluetooth: Omni Antenna Zigbee: Omni 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.**
	03CH01-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.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- ANSI C63.10-2013

Remark: 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: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). 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

Zigbee		WLAN 2.4GHz		WLAN 5GHz	
Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
25	2475	01	2412	36	5180

2.2 Test Mode

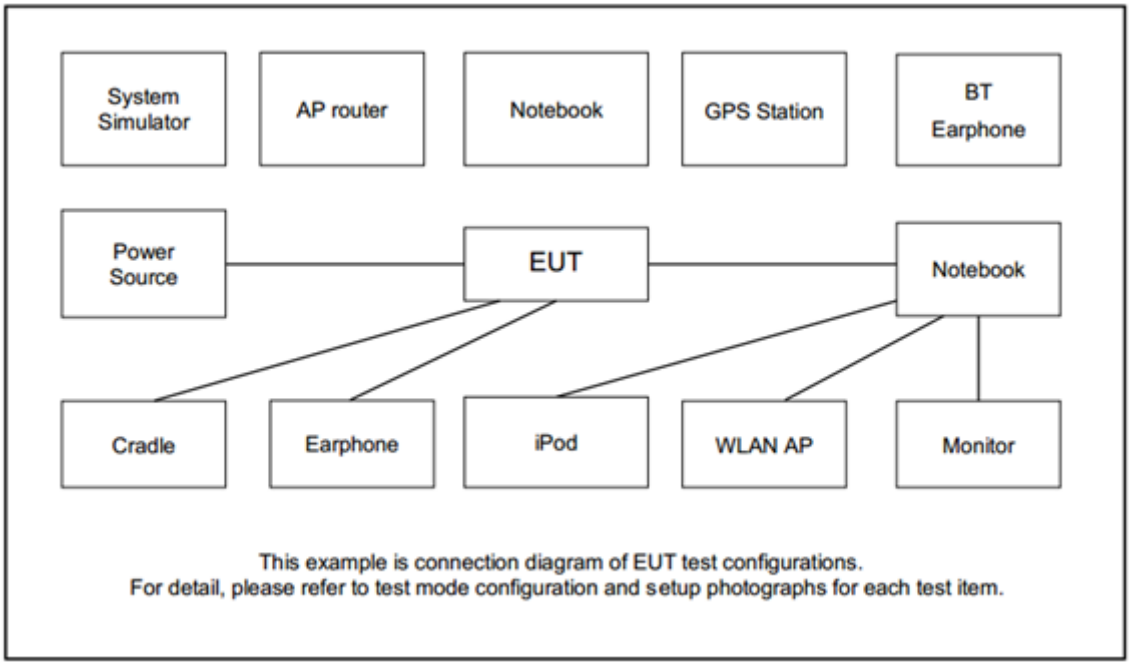
Final test modes are considering the modulation and worse data rates as below table.

<Co-Location>

Modulation	Data Rate
Zigbee + WLAN 2.4GHz + WLAN 5GHz	**250kbps + MCS0 + MCS0**

Remark: The testing for co-transit mode subjects to intermodulation signal which is based on customer's requirement.

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Laptop	HP	15t-cu000	PD97265NG	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “Putty v0.6” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

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.

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

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

(3) 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.

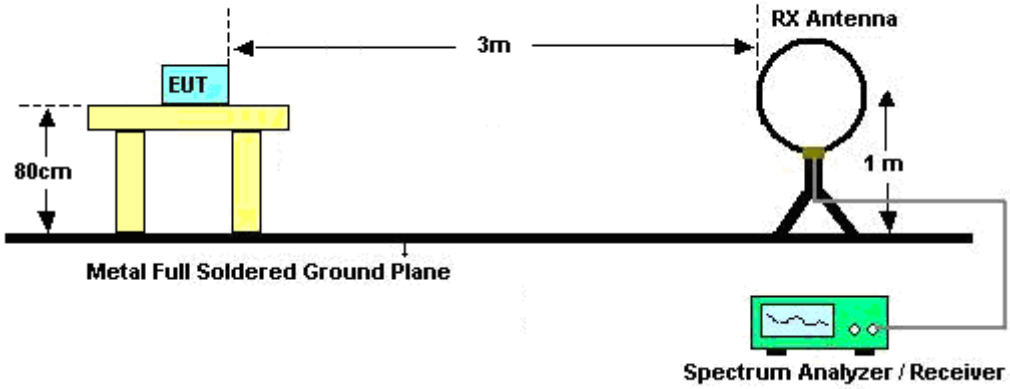
   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

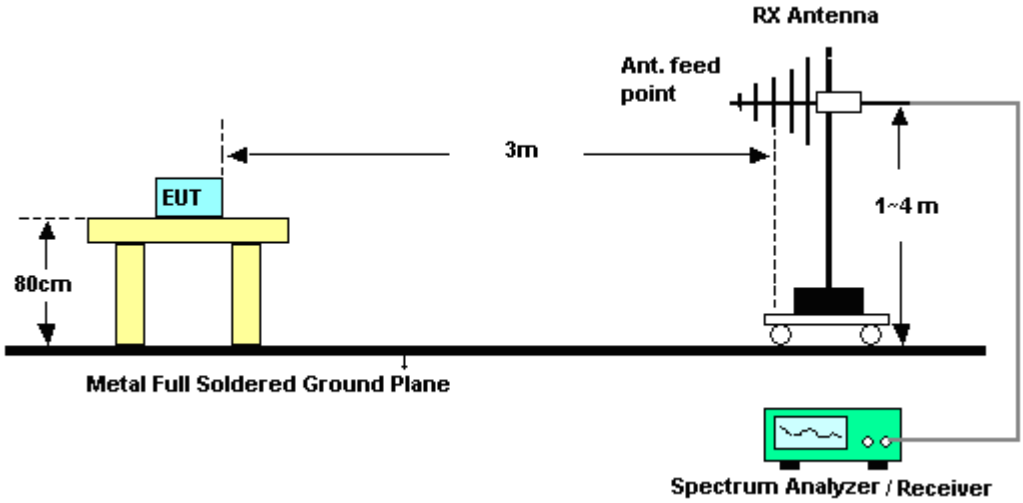
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 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 below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. 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

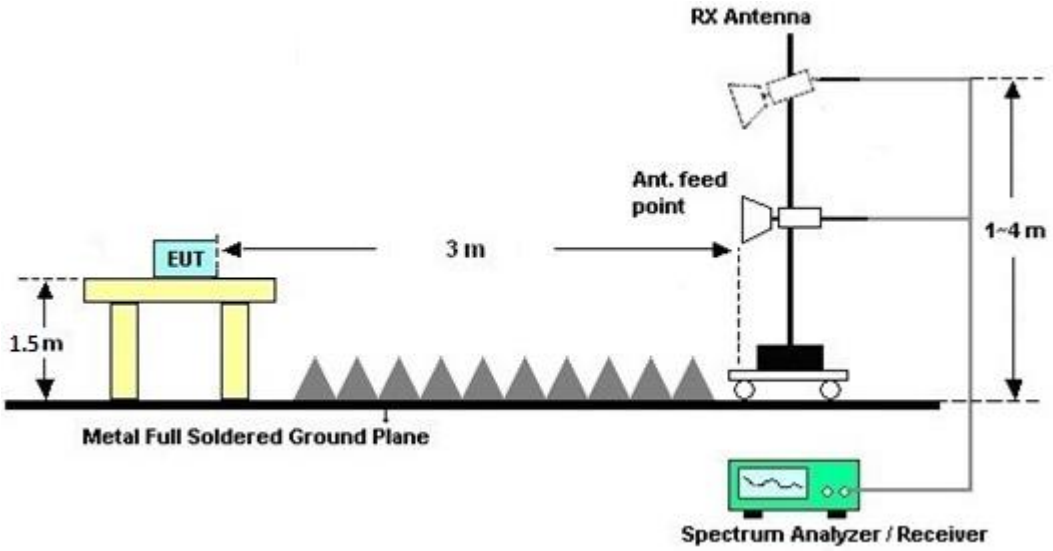
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.1.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

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

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.1.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A and B.

3.1.7 Duty Cycle

Please refer to Appendix C.

3.1.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

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
Bilog Antenna	TESEQ	6111D	50391	30MHz~1GHz	Jun. 26, 2019	Sep. 27, 2019	Jun. 25, 2020	Radiation (03CH01-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	02140	1GHz~18GHz	Aug. 19, 2019	Sep. 27, 2019	Aug. 18, 2020	Radiation (03CH01-CA)
Amplifier	SONOMA	310N	372241	N/A	Jul. 26, 2019	Sep. 27, 2019	Jul. 25, 2020	Radiation (03CH01-CA)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800055007	1GHz~18GHz	Apr. 01, 2019	Sep. 27, 2019	Mar. 31, 2020	Radiation (03CH01-CA)
Preamplifier	Keysight	83017A	MY53270323	1GHz~26.5GHz	Jul. 26, 2019	Sep. 27, 2019	Jul. 25, 2020	Radiation (03CH01-CA)
EMI Test Receiver	R&S	ESU26	100049	20Hz~26.5GHz	Jul. 31, 2019	Sep. 27, 2019	Jul. 30, 2020	Radiation (03CH01-CA)
Filter	Wainwright	WLK12-1200-1272-11000-40SS	SN1	1.2G Low Pass	Aug. 02, 2019	Sep. 27, 2019	Aug. 01, 2020	Radiation (03CH01-CA)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN9	3G High pass	Aug. 02, 2019	Sep. 27, 2019	Aug. 01, 2020	Radiation (03CH01-CA)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN8	6.75 High pass	Aug. 02, 2019	Sep. 27, 2019	Aug. 01, 2020	Radiation (03CH01-CA)
Notch Filter	Wainwright	WRCJV10-2375-2400-2483-2508-40SS	SN4	Notch Filter	Aug. 02, 2019	Sep. 27, 2019	Aug. 01, 2020	Radiation (03CH01-CA)
Notch Filter	Wainwright	WRCJV12-5120-5150-5350-5380-40SS	SN14	Notch Filter	Aug. 02, 2019	Sep. 27, 2019	Aug. 01, 2020	Radiation (03CH01-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Sep. 27, 2019	N/A	Radiation (03CH01-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Sep. 27, 2019	N/A	Radiation (03CH01-CA)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.4**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**6.5**

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.9**

Appendix A. Radiated Spurious Emission

Test Engineer :	Eric Jeng	Temperature :	23~25°C
		Relative Humidity :	44~48%

Zigbee_Tx_CH25 + 2.4G_Tx_Ch01+5G_Tx_Ch36

Zigbee_Tx_Ch25 (Band Edge @ 3m)

Zigbee	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)
CH 25 2475MHz	*	2475	90.63	-	-	77.22	27.61	17.07	31.28	347	324	P	H
	*	2475	86.93	-	-	73.53	27.61	17.07	31.28	347	324	A	H
		2485.64	56	-18	74	42.58	27.61	17.09	31.28	347	324	P	H
		2497.48	46.21	-7.79	54	32.73	27.64	17.11	31.27	347	324	A	H
	*	2475	103.97	-	-	90.59	27.58	17.07	31.28	316	274	P	V
	*	2475	100.9	-	-	87.53	27.58	17.07	31.28	316	274	A	V
		2497.2	56.94	-17.06	74	43.48	27.62	17.11	31.27	316	274	P	V
		2485.08	46.96	-7.04	54	33.57	27.58	17.09	31.28	316	274	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4G_Tx_Ch01 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
CH 01 2412MHz		2389.485	70.78	-3.22	74	57.54	27.62	16.93	31.31	324	332	P	H
		2389.905	51.5	-2.5	54	38.26	27.62	16.93	31.31	324	332	A	H
	*	2412	118.72	-	-	105.45	27.6	16.97	31.3	324	332	P	H
	*	2412	107.49	-	-	94.22	27.6	16.97	31.3	324	332	A	H
		2387.49	68.81	-5.19	74	54.7	27.64	16.93	31.31	305	258	P	V
		2389.59	53.32	-0.68	54	39.2	27.64	16.93	31.31	305	258	A	V
	*	2412	120.79	-	-	106.66	27.59	16.97	31.3	305	258	P	V
	*	2412	116.34	-	-	103.08	27.59	16.97	31.3	305	258	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5G_Tx_Ch36 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
CH 36 5180MHz		5148.98	69.79	-4.21	74	57.09	32.08	10.53	29.91	312	318	P	H
		5148.98	52.43	-1.57	54	39.73	32.08	10.53	29.91	312	318	A	H
	*	5180	118.01	-	-	105.47	31.87	10.57	29.9	312	318	P	H
	*	5180	111.21	-	-	98.67	31.87	10.57	29.9	312	318	A	H
		5145.34	68.13	-5.87	74	55.42	32.1	10.52	29.91	301	252	P	V
		5148.46	53.29	-0.71	54	40.57	32.1	10.53	29.91	301	252	A	V
	*	5180	117.6	-	-	105.01	31.92	10.57	29.9	301	252	P	V
	*	5180	108.9	-	-	96.31	31.92	10.57	29.9	301	252	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Co-location mode (Harmonic @ 3m)

Co-location	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Co-location mode		2388	64.46	-9.54	74	60.83	27.62	7.18	31.17	300	341	P	H
		2388	49.93	-4.07	54	46.3	27.62	7.18	31.17	300	341	A	H
		4824	48.23	-25.77	74	61.46	31.43	11.79	56.45	100	0	P	H
		4950	50.41	-23.59	74	63.59	31.46	11.96	56.6	100	0	P	H
		5128	61.93	-12.07	74	74.31	32.11	12.49	56.98	303	324	P	H
		5128	51.51	-2.49	54	63.89	32.11	12.49	56.98	303	324	A	H
		5432	58.71	-15.29	74	70.64	31.76	13.39	57.08	302	263	P	H
		5432	50.75	-3.25	54	62.68	31.76	13.39	57.08	302	263	A	H
		7425	45.61	-28.39	74	52.48	36.5	13.17	56.54	100	0	P	H
		10360	48.22	-19.98	68.2	52.18	39.39	15.35	58.7	100	0	P	H
		15540	46.96	-27.04	74	51.87	38.74	18	61.65	100	0	P	H
		2388	62.11	-11.89	74	58.46	27.64	7.18	31.17	303	321	P	V
		2388	48.25	-5.75	54	44.6	27.64	7.18	31.17	303	321	A	V
		4824	52	-22	74	65.25	31.41	11.79	56.45	267	29	P	V
		4824	42.64	-11.36	54	55.89	31.41	11.79	56.45	267	29	A	V
		4950	51.9	-22.1	74	65.07	31.47	11.96	56.6	266	33	P	V
		4950	42.73	-11.27	54	55.9	31.47	11.96	56.6	266	33	A	V
		5060	59.09	-14.91	74	71.72	31.91	12.25	56.79	276	27	P	V
		5060	47.31	-6.69	54	59.94	31.91	12.25	56.79	276	27	A	V
		5128	61.43	-12.57	74	73.84	32.08	12.49	56.98	268	144	P	V
		5128	50.9	-3.1	54	63.31	32.08	12.49	56.98	268	144	A	V
		5436	61.46	-12.54	74	73.36	31.81	13.37	57.08	309	301	P	V
		5436	51.84	-2.16	54	63.74	31.81	13.37	57.08	309	301	A	V
		7425	45.55	-28.45	74	52.4	36.52	13.17	56.54	100	0	P	V
		10360	48.01	-20.19	68.2	51.86	39.5	15.35	58.7	100	0	P	V
		15540	46.95	-27.05	74	52.03	38.57	18	61.65	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

Co-location mode (LF @ 3m)

Co-location	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	QP	
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/QP)	(H/V)
Co-location mode		126.03	42.32	-1.18	43.5	55.21	17.6	1.93	32.42	292	318	QP	H
		126.03	44.62	1.12	43.5	57.51	17.6	1.93	32.42	292	318	P	H
		150.28	39.6	-3.9	43.5	52.7	17.18	2.13	32.41	233	70	QP	H
		150.28	40.9	-2.6	43.5	54	17.18	2.13	32.41	233	70	P	H
		227.88	38.85	-7.15	46	52.59	15.99	2.67	32.4	144	54	QP	H
		227.88	43.65	-2.35	46	57.39	15.99	2.67	32.4	144	54	P	H
		242.43	39	-7	46	50.97	17.59	2.85	32.41	-	-	P	H
		273.47	36.1	-9.9	46	46.68	18.89	2.94	32.41	-	-	P	H
		423.82	37.73	-8.27	46	44.27	22.65	3.3	32.49	-	-	P	H
		30	39.32	-0.68	40	45.6	25	1.2	32.48	100	355	QP	V
		30	46.52	6.52	40	52.8	25	1.2	32.48	100	355	P	V
		53.28	36.04	-3.96	40	53.9	12.89	1.69	32.44	100	21	QP	V
		53.28	41.44	1.44	40	59.3	12.89	1.69	32.44	100	21	P	V
		122.15	41.05	-2.45	43.5	54	17.6	1.87	32.42	100	355	QP	V
		122.15	43.05	-0.45	43.5	56	17.6	1.87	32.42	100	355	P	V
		168.71	40.59	-2.91	43.5	54.99	15.83	2.17	32.4	100	0	QP	V
		168.71	43.59	0.09	43.5	57.99	15.83	2.17	32.4	100	0	P	V
		263.77	37.47	-8.53	46	46.75	20.18	2.95	32.41	-	-	P	V
		879.72	38.21	-7.79	46	35.88	29.21	4.89	31.77	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against 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	**P**eak or **A**verage
P/QP	**P**eak or **Quasi-Peak**
H/V	**H**orizontal or **V**ertical

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		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)

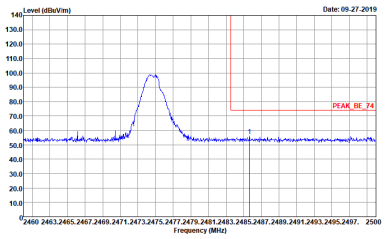
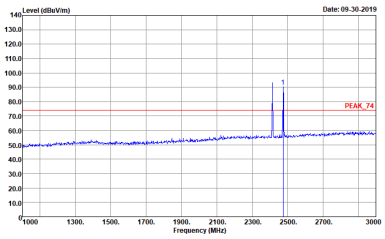
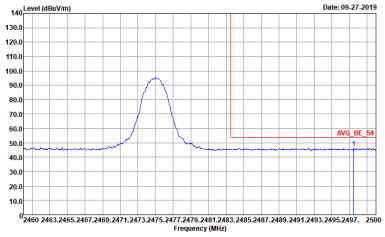
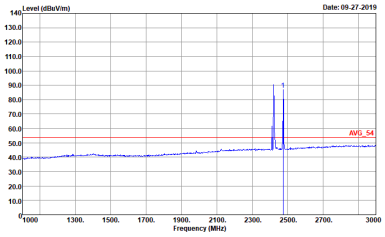
Both peak and average measured complies with the limit line, so test result is “PASS”.

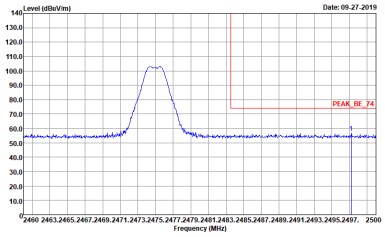
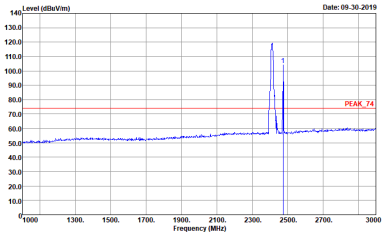
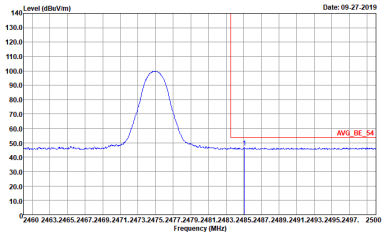
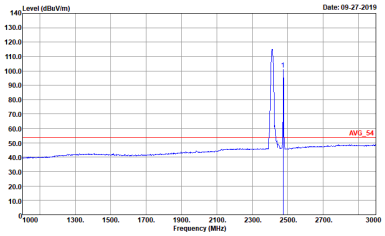
Appendix B. Radiated Spurious Emission Plots

Test Engineer :	Eric Jeng	**Temperature :**	23~25°C
		Relative Humidity :	44~48%

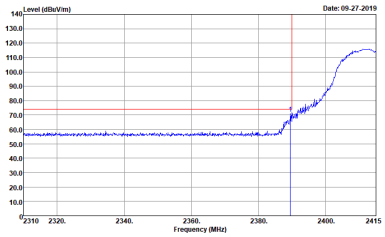
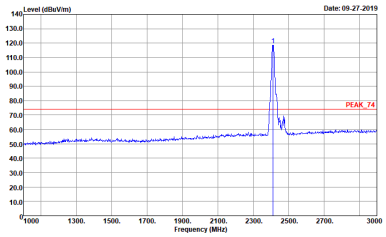
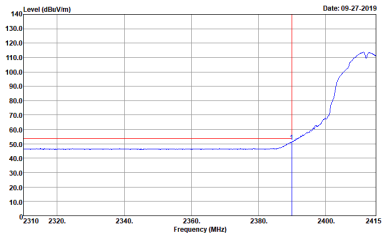
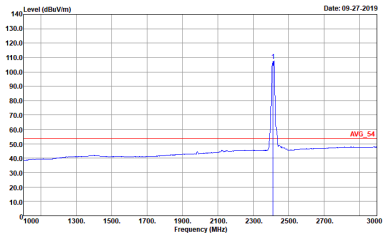
Zigbee_Tx_CH25 + 2.4G_Tx_Ch01+5G_Tx_Ch36

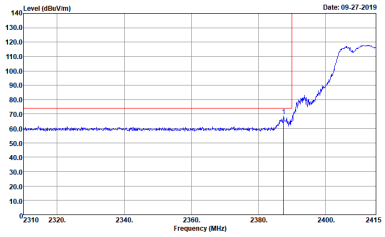
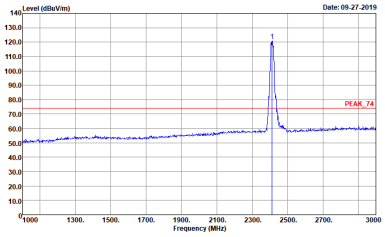
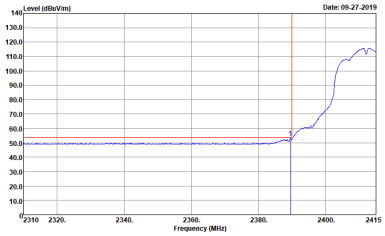
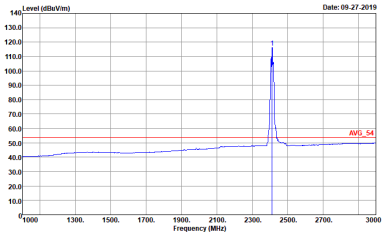
Zigbee_Tx_Ch25 (Band Edge @ 3m)

Zigbee	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	Zigbee_Tx_Ch25 2475MHz	
	Horizontal	Fundamental
Peak	 Site : 03CH01-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2485.64 56.00 -18.00 74.00 42.58 27.61 7.11 31.28 347 324 Peak	 Site : 03CH01-CA Condition : PEAK_74 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2475.00 90.63 16.63 74.00 77.23 27.61 7.09 31.28 347 324 Peak
Avg.	 Site : 03CH01-CA Condition : AVG_BE_54 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2497.48 46.21 -7.79 54.00 32.73 27.64 7.13 31.27 347 324 Average	 Site : 03CH01-CA Condition : AVG_54 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2475.00 86.93 32.93 54.00 73.53 27.61 7.09 31.28 347 324 Average

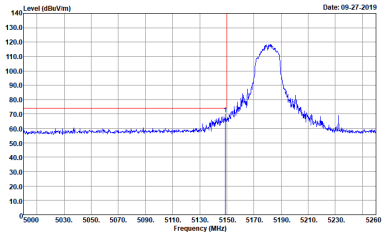
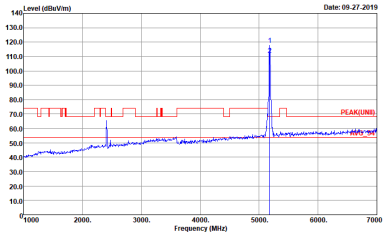
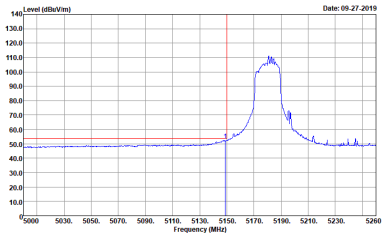
Zigbee	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	Zigbee_Tx_Ch25 2475MHz	
	Vertical	Fundamental
Peak	 Site : 03CH01-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2497.20 56.94 -17.06 74.00 43.48 27.62 7.13 31.27 316 274 Peak	 Site : 03CH01-CA Condition : PEAK_74 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2475.00 103.97 29.97 74.00 90.60 27.58 7.09 31.28 316 274 Peak
Avg.	 Site : 03CH01-CA Condition : AVG_BE_54 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2485.08 46.96 -7.04 54.00 33.57 27.58 7.11 31.28 316 274 Average	 Site : 03CH01-CA Condition : AVG_54 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2475.00 100.90 46.90 54.00 87.53 27.58 7.09 31.28 316 274 Average

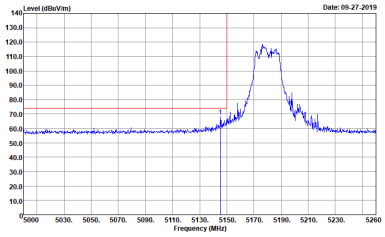
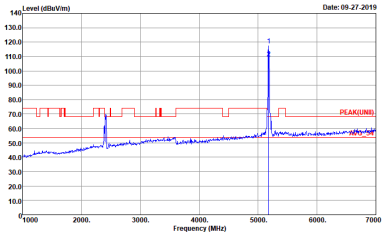
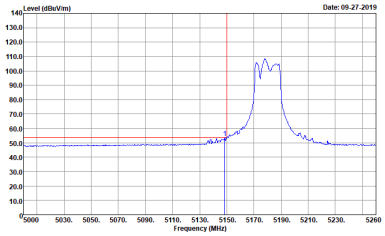
2.4G_Tx_Ch01 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	2.4G_Tx_Ch01 2412MHz	
	Horizontal	Fundamental
Peak	 Site : 03CH01-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2389.49 70.78 -3.22 74.00 57.54 27.62 6.95 31.31 324 332 Peak	 Site : 03CH01-CA Condition : PEAK_74 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2412.00 118.72 44.72 74.00 105.45 27.60 6.99 31.30 324 332 Peak
Avg.	 Site : 03CH01-CA Condition : AVG_BE_54 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2389.91 51.50 -2.50 54.00 38.26 27.62 6.95 31.31 324 332 Average	 Site : 03CH01-CA Condition : AVG_54 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2412.00 107.49 53.49 54.00 94.22 27.60 6.99 31.30 324 332 Average

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	2.4G_Tx_Ch01 2412MHz	
	Vertical	Fundamental
Peak	 Site : 03CH01-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2387.49 68.81 -5.19 74.00 54.70 27.64 6.95 31.31 305 258 Peak	 Site : 03CH01-CA Condition : PEAK_74 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2412.00 120.79 46.79 74.00 106.66 27.59 6.99 31.30 305 258 Peak
Avg.	 Site : 03CH01-CA Condition : AVG_BE_54 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2389.59 53.32 -0.68 54.00 39.20 27.64 6.95 31.31 305 258 Average	 Site : 03CH01-CA Condition : AVG_54 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2412.00 116.34 62.34 54.00 103.08 27.59 6.99 31.30 305 258 Average

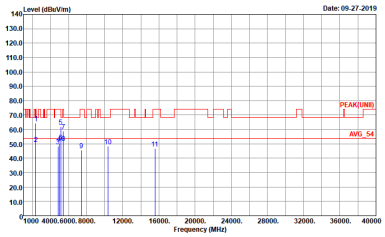
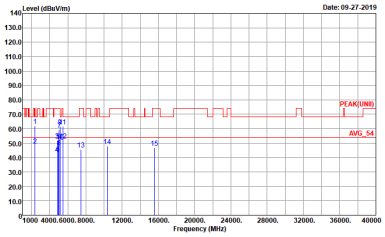
5G_Tx_Ch36 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
	5G_Tx_Ch36 5180MHz	
	Horizontal	Fundamental
Peak	 Site : 03CH01-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 5148.98 69.79 -4.21 74.00 57.09 32.08 10.53 29.91 312 318 Peak	 Site : 03CH01-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 5180.00 118.01 49.81 68.20 105.47 31.87 10.57 29.90 312 318 Peak 2 * 5180.00 111.21 57.21 54.00 98.67 31.87 10.57 29.90 312 318 Average
Avg.	 Site : 03CH01-CA Condition : AV6_BE_54 3m HORN 9120D-HF_02140 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 5148.98 52.43 -1.57 54.00 39.73 32.08 10.53 29.91 312 318 Average	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
	5G_Tx_Ch36 5180MHz	
	Vertical	Fundamental
Peak	 Site : 03CH01-CA Condition : PEAK_BE_74 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 5145.34 68.13 -5.87 74.00 55.42 32.10 10.52 29.91 301 252 Peak	 Site : 03CH01-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 5180.00 117.60 49.40 68.20 105.01 31.92 10.57 29.90 301 252 Peak 2 * 5180.00 108.90 54.90 54.00 96.31 31.92 10.57 29.90 301 252 Average
Avg.	 Site : 03CH01-CA Condition : AVG_BE_54 3m HORN 9120D-HF_02140 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 5148.46 53.29 -0.71 54.00 40.57 32.10 10.53 29.91 301 252 Average	Left blank

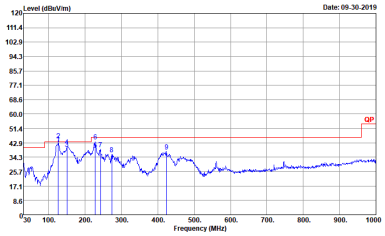
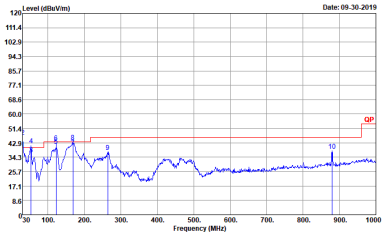
Zigbee_Tx_CH25 + 2.4G_Tx_Ch01+5G_Tx_Ch36

Co-location mode (Harmonic @ 3m)

	Co-location mode Harmonic @ 3m	
	Horizontal	**Vertical**
Peak **Avg.**	 Site : 03CH01-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_02140 HORIZONTAL Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Link : AVG VBW:10K Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2388.00 64.46 -9.54 74.00 60.83 27.62 6.95 31.17 300 341 Peak 2 2388.00 49.93 -4.07 54.00 46.30 27.62 6.95 31.17 300 341 Average 3 4824.00 48.23 -25.77 74.00 61.46 31.43 10.24 56.45 100 0 Peak 4 4950.00 50.41 -23.59 74.00 63.59 31.46 10.30 56.60 100 0 Peak 5 5128.00 61.93 -12.07 74.00 74.31 32.11 10.50 56.98 303 324 Peak 6 5128.00 51.51 -2.49 54.00 63.89 32.11 10.50 56.98 303 324 Average 7 5432.00 58.71 -15.29 74.00 70.64 31.76 10.91 57.08 302 263 Peak 8 5432.00 50.75 -3.25 54.00 62.68 31.76 10.91 57.08 302 263 Average 9 7425.00 45.61 -28.39 74.00 52.48 36.50 12.55 56.54 100 0 Peak 10 10360.00 48.22 -19.98 68.20 52.18 39.39 14.90 58.70 100 0 Peak 11 15540.00 46.96 -27.04 74.00 51.87 38.74 17.52 61.65 100 0 Peak	 Site : 03CH01-CA Condition : PEAK(UNII) 3m HORN 9120D-HF_02140 VERTICAL Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Link : AVG VBW:10K Freq Level Over Limit Limit Line ReadAntenna Level Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2388.00 62.11 -11.89 74.00 58.46 27.64 6.95 31.17 303 321 Peak 2 2388.00 48.25 -5.75 54.00 44.60 27.64 6.95 31.17 303 321 Average 3 4824.00 52.00 -22.00 74.00 65.25 31.41 10.24 56.45 267 29 Peak 4 4824.00 42.64 -11.36 54.00 55.89 31.41 10.24 56.45 267 29 Average 5 4950.00 51.90 -22.10 74.00 65.07 31.47 10.30 56.60 266 33 Peak 6 4950.00 42.73 -11.27 54.00 55.90 31.47 10.30 56.60 266 33 Average 7 5060.00 59.09 -14.91 74.00 71.72 31.91 10.41 56.79 276 27 Peak 8 5060.00 47.31 -6.69 54.00 59.94 31.91 10.41 56.79 276 27 Average 9 5128.00 61.43 -12.57 74.00 73.84 32.08 10.50 56.98 268 144 Peak 10 5128.00 50.90 -3.10 54.00 63.31 32.08 10.50 56.98 268 144 Average 11 5436.00 61.46 -12.54 74.00 73.36 31.81 10.91 57.08 309 301 Peak 12 5436.00 51.84 -2.16 54.00 63.74 31.81 10.91 57.08 309 301 Average 13 7425.00 45.55 -28.45 74.00 52.40 36.52 12.55 56.54 100 0 Peak 14 10360.00 48.01 -20.19 68.20 51.86 39.50 14.90 58.70 100 0 Peak 15 15540.00 46.95 -27.05 74.00 52.03 38.57 17.52 61.65 100 0 Peak
Peak **Avg.**	Left blank	Left blank

Emission below 1GHz

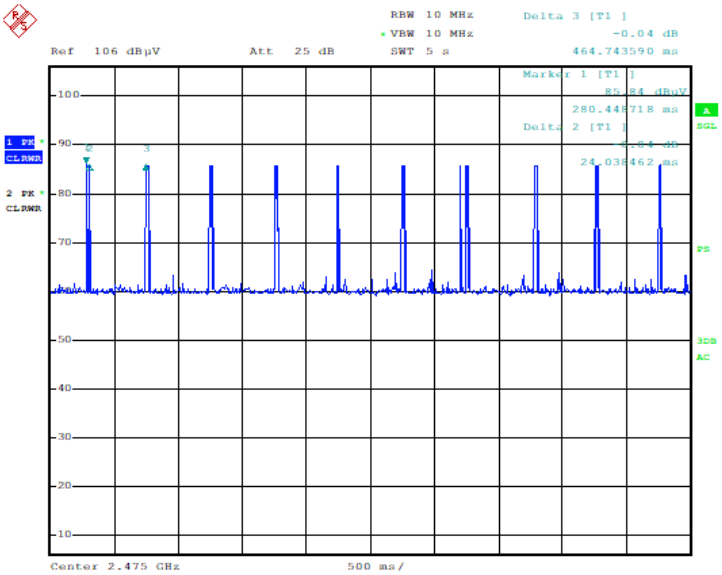
Co-location mode (LF)

	Co-location mode LF	
	Horizontal	Vertical
QP / Peak	 Site : 03CH01-CA Condition : QP 3m BILOG 6111D-LF_50391 HORIZONTAL Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal 1 126.03 42.32 -1.18 43.50 55.21 17.60 1.81 32.42 292 318 QP 2 * 126.03 44.62 1.12 43.50 57.51 17.60 1.81 32.42 292 318 Peak 3 150.28 39.60 -3.90 43.50 52.70 17.18 1.96 32.41 233 70 QP 4 150.28 40.90 -2.60 43.50 54.00 17.18 1.96 32.41 233 70 Peak 5 227.88 38.85 -7.15 46.00 52.59 15.99 2.42 32.40 144 54 QP 6 227.88 43.65 -2.35 46.00 57.39 15.99 2.42 32.40 144 54 Peak 7 242.43 39.00 -7.00 46.00 50.97 17.59 2.50 32.41 --- --- Peak 8 273.47 36.10 -9.90 46.00 46.68 18.89 2.68 32.41 --- --- Peak 9 423.82 37.73 -8.27 46.00 44.27 22.65 3.14 32.49 --- --- Peak	 Site : 03CH01-CA Condition : QP 3m BILOG 6111D-LF_50391 VERTICAL Detector : Peak Peoject : 190621001 Power : 120Vac/60Hz Mode : 1 Plane : X Setting : Wifi 2.4G Ch01 iperf : Wifi 5G Ch36 iperf : Zigbee Ch25 Normal 1 30.00 39.32 -0.68 40.00 45.60 25.00 1.15 32.48 100 355 QP 2 * 30.00 46.52 6.52 40.00 52.80 25.00 1.15 32.48 100 355 Peak 3 53.28 36.04 -3.96 40.00 53.90 12.89 1.38 32.44 100 21 QP 4 * 53.28 41.44 1.44 40.00 59.30 12.89 1.38 32.44 100 21 Peak 5 122.15 41.05 -2.45 43.50 54.00 17.60 1.79 32.42 100 355 QP 6 122.15 43.05 -0.45 43.50 56.00 17.60 1.79 32.42 100 355 Peak 7 168.71 40.59 -2.91 43.50 54.99 15.83 2.07 32.40 100 0 QP 8 * 168.71 43.59 0.09 43.50 57.99 15.83 2.07 32.40 100 0 Peak 9 263.77 37.47 -8.53 46.00 46.75 20.18 2.63 32.41 --- --- Peak 10 879.72 38.21 -7.79 46.00 35.88 29.21 4.48 31.77 --- --- Peak	

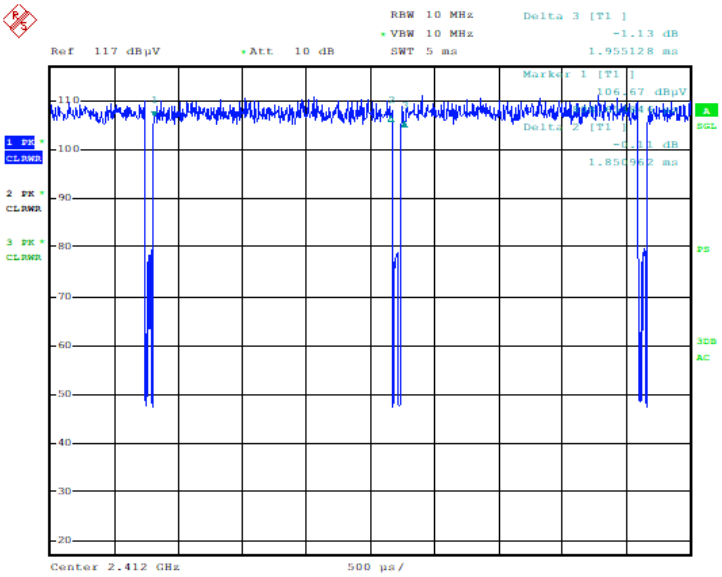
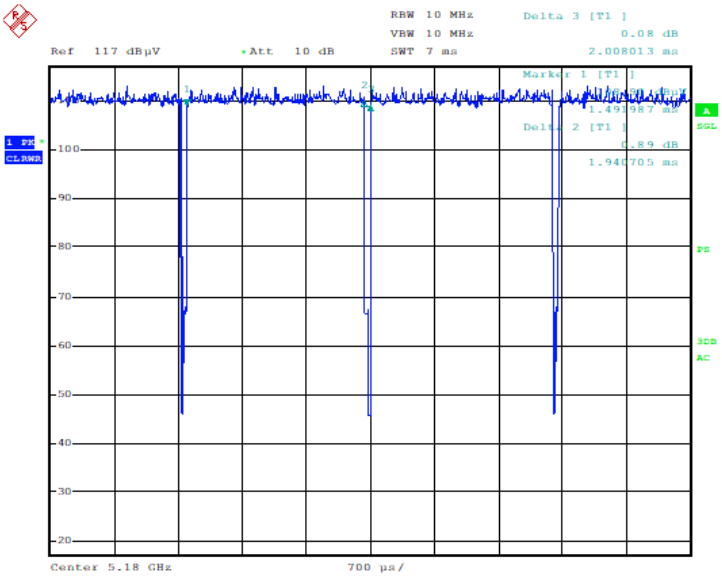
Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor (dB)
-	Zigbee	5.17	24038	0.04	10kHz	12.87
1+2+3+4	WLAN 2.4GHz	94.67	1850	0.54	1kHz	0.24
1+2+3+4	WLAN 5GHz	96.65	1940	0.52	1kHz	0.15

Zigbee



WLAN 2.4GHz



WLAN 5GHz