



**FCC 47 CFR PART 15 SUBPART C  
ISED CANADA RSS-247 ISSUE 2**

**SIMULTANEOUS TRANSMISSION REPORT**

**FOR**

**MAGIC LEAP ONE – LIGHTPACK LIGHTWEAR**

**MODEL NUMBER: M1001/M1002**

**FCC ID: 2AM5NM1000  
IC: 23045-M1000**

**REPORT NUMBER: R11694639-ST1**

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1	2018-06-27	Initial Issue	---
2	2018-07-10	Added check of fundamentals operating in same band.	Brian T. Kiewra

## TABLE OF CONTENTS

<b>1. ATTESTATION OF TEST RESULTS</b> .....	<b>4</b>
<b>2. TEST METHODOLOGY</b> .....	<b>5</b>
<b>3. FACILITIES AND ACCREDITATION</b> .....	<b>5</b>
<b>4. CALIBRATION AND UNCERTAINTY</b> .....	<b>6</b>
4.1. MEASURING INSTRUMENT CALIBRATION .....	6
4.2. SAMPLE CALCULATION.....	6
4.3. MEASUREMENT UNCERTAINTY.....	6
<b>5. EQUIPMENT UNDER TEST</b> .....	<b>7</b>
5.1. DESCRIPTION OF EUT.....	7
5.2. DESCRIPTION OF AVAILABLE ANTENNAS .....	7
5.3. SOFTWARE AND FIRMWARE .....	7
5.4. SIMULTANEOUS TRANSMISSION CONFIGURATIONS .....	8
5.5. DESCRIPTION OF TEST SETUP .....	9
<b>6. TEST AND MEASUREMENT EQUIPMENT</b> .....	<b>10</b>
<b>7. SIMULTANEOUS TRANSMISSIONS TEST RESULTS</b> .....	<b>11</b>
7.1. ON TIME AND DUTY CYCLE.....	11
7.2. LIMITS AND PROCEDURE.....	13
7.2.1. CHECK OF FUNDAMENTALS OPERATING IN SAME BAND .....	14
7.2.2. SIMULTANEOUS TX OF BT/BLE (PROPRIETARY)/2.4GHz/5GHz (802.11a MODE) .....	15
7.2.3. SIMULTANEOUS TX OF BT/BLE (PROPRIETARY).....	17
7.2.4. SIMULTANEOUS TX OF BLE (PROPRIETARY)/BT/ 2.4GHz .....	18
7.2.5. SIMULTANEOUS TX OF BLE (PROPRIETARY)/BT/5GHz .....	19
7.2.6. SIMULTANEOUS TX OF BLE (PROPRIETARY)/2.4GHz/5GHz(802.11a MODE) .....	20
7.2.7. SIMULTANEOUS TX OF BLE (PROPRIETARY)/2.4GHz.....	21
7.2.8. SIMULTANEOUS TX OF BLE (PROPRIETARY)/5GHz.....	22
7.2.9. SIMULTANEOUS TX OF BLE (PROPRIETARY)/BT .....	23
7.2.10. SIMULTANEOUS TX OF BLE (PROPRIETARY)/BLE .....	24
7.2.11. SIMULTANEOUS TX OF 2.4GHz/5GHz (802.11a MODE) .....	25
7.2.12. SIMULTANEOUS TX OF 5GHz/BT .....	26
<b>8. SETUP PHOTOS</b> .....	<b>27</b>
<b>END OF REPORT</b> .....	<b>27</b>

# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Magic Leap, Inc.  
7500 West Sunrise Boulevard  
Plantation, FL 33322, USA

**EUT DESCRIPTION:** Magic Leap One – Lightpack Lightwear

**MODEL:** M1001/M1002

**SERIAL NUMBER:** PA1065G0000G, PB1067B00000, PA1065G00003,  
B1067B00001, and PA1065G0000K

**DATE TESTED:** 2018-03-28 to 2018-06-26

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Compliant
ISED CANADA RSS-247 Issue 2	Compliant
ISED CANADA RSS-GEN Issue 5	Compliant

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL LLC based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Approved & Released  
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Project Engineer  
UL – Consumer Technology Division

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, KDB 558074 D01 v04, KDB 789033 D02 v02r01, ANSI C63.10-2013, RSS-GEN Issue 5, RSS-247 Issue 2.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 12 Laboratory Dr., Research Triangle Park, NC 27709, USA and 2800 Perimeter Park Dr., Suite B, Morrisville, NC 27560, USA.

12 Laboratory Dr., RTP, NC 27709
<input type="checkbox"/> Chamber A
<input type="checkbox"/> Chamber C

2800 Perimeter Park Dr., Suite B, Morrisville, NC 27560
<input checked="" type="checkbox"/> Chamber NORTH
<input checked="" type="checkbox"/> Chamber SOUTH

The onsite chambers are covered under Industry Canada company address code 2180C with site numbers 2180C -1 through 2180C-4, respectively.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0. The full scope of accreditation can be viewed at <http://www.nist.gov/nvlap/>.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus

PARAMETER	UNCERTAINTY	Required by standard
Occupied Channel Bandwidth	2.00%	±5 %
RF output power, conducted	1.3 dB	±1,5 dB
Power Spectral Density, conducted	2.47 dB	±3 dB
Unwanted Emissions, conducted	2.94 dB	±3 dB
All emissions, radiated	5.36 dB	±6 dB
Temperature	2.26 °C	±3 °C
Supply voltages	2.40%	±3 %
Time	3.39%	±5 %

Uncertainty figures are valid to a confidence level of 95%.

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

Magic Leap One - Lightpack Lightwear with BT/BLE/802.11a/b/g/n/ac. This test report covers the M1001 and M1002. The only difference between the two models is the size of the headband on the lightwear.

### 5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes antennas with the following maximum gains:

Band of Operation (MHz)	Ant0 gain (dBi)	Ant1 gain (dBi)	Ant2 gain (dBi)
2401-2483	1.54	0.4	-0.8
5150-5250	3.3	4.6	NA
5250-5350	3.2	4.5	NA
5500-5700	2.5	3.7	NA
5745-5850	0.6	4.5	NA

BT and BLE transmits on Ant1, WiFi (2.4GHz and 5GHz) transmits on Ant 0 and 1.

### 5.3. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was PEQ5.

## 5.4. SIMULTANEOUS TRANSMISSION CONFIGURATIONS

All worst-case orientations and power levels of each mode of operation were taken into consideration and it was determined that Z-Axis was worst-case orientation. Therefore, all final testing was performed with the EUT in the Z orientation.

Simultaneous transmission of the following was investigated:

- 2.4GHz and 5GHz (11a) and Proprietary BLE and Bluetooth
- Proprietary BLE and Bluetooth
- 2.4GHz and Bluetooth and Proprietary BLE
- 5GHz and Bluetooth and Proprietary BLE
- 2.4GHz and 5GHz (11a) and Proprietary BLE
- Proprietary BLE and 2.4 GHz WiFi
- Proprietary BLE and 5 GHz WiFi
- Proprietary BLE and BLE
- 2.4GHz and 5GHz (11a)
- 5GHz and Bluetooth

The following does not simultaneously transmit and thus was not considered:

- BLE and Bluetooth

Testing of Bluetooth covers standard BLE mode since it is the same modulation (GFSK) and of higher power.

Device was found to still be compliant.



## 5.5. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Power Supply	Salcomp	M3002	Non-Serialized	NA

### I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB-C	1	USB-C	Shielded	<3m	None
2	Hardwired	1	Hardwired	Unshielded	<3m	Connects Lightwear to Lightpack

### TEST SETUP

The EUT is setup as standalone equipment and exercised using QRCT commands.

### SETUP DIAGRAM FOR TESTS

Refer to UL Document R11694639-STP1

## 6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Note: All equipment within calibration at time of use.

### Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - South Chamber)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
<b>1-18 GHz</b>					
AT0069	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2017-04-05	2018-04-05
AT0069	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2018-04-30	2019-04-30
<b>Gain-Loss Chains</b>					
S-SAC03	Gain-loss string: 1-18GHz	Various	Various	2017-08-18	2018-08-18
<b>Receiver &amp; Software</b>					
SA0026	Spectrum Analyzer	Agilent	N9030A	2018-03-20	2019-03-20
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA

### Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - North Chamber)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
<b>1-18 GHz</b>					
AT0072	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2017-04-05	2018-04-05
AT0072	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2018-04-30	2019-04-30
<b>Gain-Loss Chains</b>					
N-SAC03	Gain-loss string: 1-18GHz	Various	Various	2017-08-18	2018-08-18
<b>Receiver &amp; Software</b>					
SA0027	Spectrum Analyzer	Agilent	N9030A	2017-03-16	2018-03-16
SA0027	Spectrum Analyzer	Agilent	N9030A	2018-04-04	2019-04-04
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA

## 7. SIMULTANEOUS TRANSMISSIONS TEST RESULTS

### 7.1. ON TIME AND DUTY CYCLE LIMITS

None; for reporting purposes only.

### PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

Note – The following duty cycle data was pulled from the RF emissions reports for Model 1000/1001. They are below for reference for this report:

### ON TIME AND DUTY CYCLE RESULTS

R11694639-E9

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
BLE (Proprietary)	0.391	0.625	0.625	62.50%	2.04	2.560

R11694639-E3

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
BLE - Module 1	0.3769	0.6248	0.603	60.32%	2.20	2.653

R11694639-E4

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
<b>2.4 GHz band</b>						
Bluetooth GFSK	2.885	3.751	0.769	76.91%	1.14	0.347
Bluetooth 8PSK	2.888	3.754	0.769	76.93%	1.14	0.346
Bluetooth DQPSK	2.888	3.750	0.770	77.01%	1.13	0.346

R11694639-E5

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
<b>2.4GHz Band</b>						
802.11b	12.420	12.460	0.997	99.68%	0.00	0.010
802.11g	4.063	4.085	0.995	99.46%	0.00	0.010
802.11n HT20	1.908	1.929	0.989	98.91%	0.00	0.010
802.11n HT20 TxBF <sup>1</sup>	1.384					0.723

R11694639-E6

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
<b>5GHz Band</b>						
802.11a 1TX	2.064	2.114	0.976	97.63%	0.10	0.484
802.11n HT20 1TX	1.907	1.928	0.989	98.91%	0.00	0.010
802.11n HT40 1TX	0.9398	0.9598	0.979	97.92%	0.09	1.064
802.11ac VHT80 1TX	0.4586	0.4797	0.956	95.60%	0.19	2.181
802.11ac VHT20 TxBF	0.504					1.986
802.11ac VHT40 TxBF	0.9693					1.032

## 7.2. LIMITS AND PROCEDURE

### LIMITS

FCC §15.205 and §15.209  
ISED RSS-GEN Section 8.9 (Transmitter)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

### TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements for the 30-1000 MHz range, 9 kHz for peak detection measurements or 9 kHz for quasi-peak detection measurements for the 0.15-30 MHz range and 200 Hz for peak detection measurements or 200 Hz for quasi-peak detection measurements for the 9 to 150 kHz range. Peak detection is used unless otherwise noted as quasi-peak.

For peak measurements above 1 GHz, the resolution bandwidth is set to 1 MHz and the video bandwidth is set to 3 MHz. For average measurements above 1GHz, the resolution bandwidth and video bandwidth are set as described in ANSI C63.10:2013 for the applicable measurement. The particular averaging method used for this test program was RMS averaging.

The spectrum from 1 to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. For 9kHz to 1000 MHz and 18 to 26 GHz investigation, the worst-case channel was selected.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

**7.2.1. CHECK OF FUNDAMENTALS OPERATING IN SAME BAND**

Freq. (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity	Notes
2.438	102.21	Pk	32.3	-24.4	110.11	131.2	-21.09	218	267	H	1
2.438	102.49	Pk	32.3	-24.3	110.49	131.2	-20.71	191	260	H	2
2.438	100.69	Pk	32.3	-24.3	108.69	131.2	-22.51	312	359	V	3
2.439	102.92	Pk	32.3	-24.4	110.82	131.2	-20.38	266	251	V	1
2.44	103.31	Pk	32.3	-24.4	111.21	131.2	-19.99	255	257	V	2
2.439	101.7	Pk	32.3	-24.4	109.6	131.2	-21.6	181	317	H	3

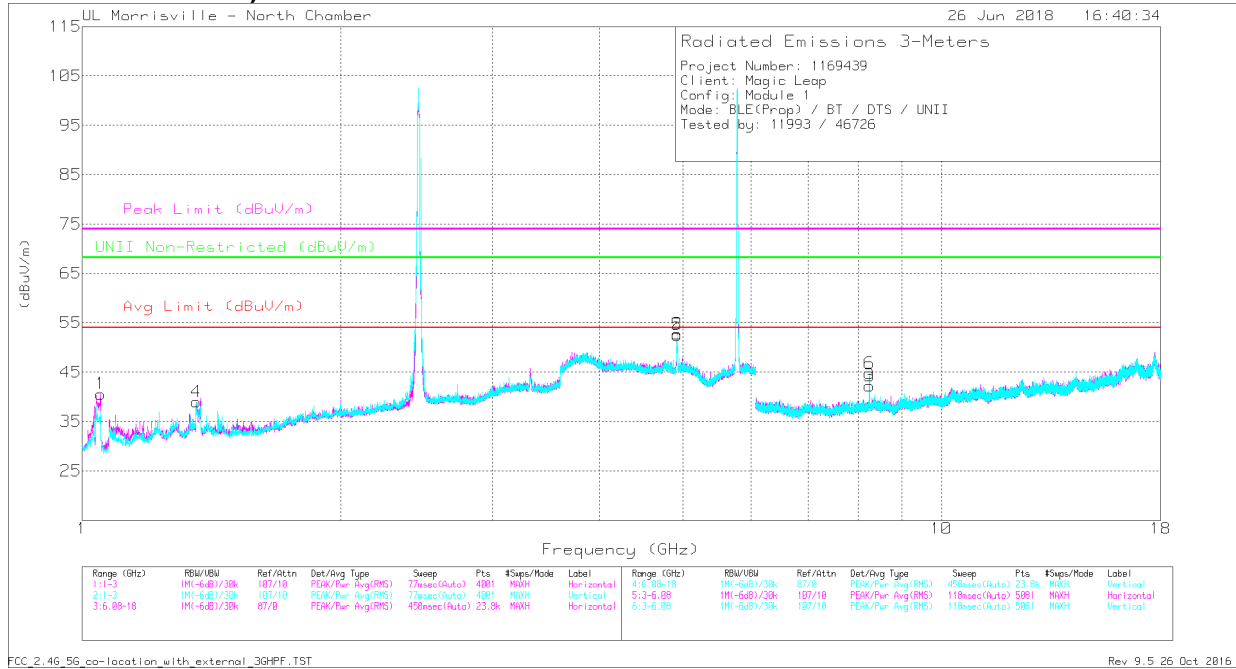
Pk - Peak detector

Notes: 1 - X-Axis

2 - Y-Axis

3 - Z-Axis

### 7.2.2. SIMULTANEOUS TX OF BT/BLE(PROPRIETARY)/2.4GHz/5GHz (802.11a MODE)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Filter (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.051	42.5	PK2	27.1	-27.2	0	0	42.4	-	-	74	-31.6	68.2	-25.8	164	314	H
	* 1.05	25.16	MAV1	27.1	-27.2	0	2.04	27.1	54	-26.9	-	-	-	-	164	314	H
	* 1.051	42.14	PK-U	27.1	-27.2	0	0	42.04	-	-	74	-31.96	68.2	-26.16	164	314	H
	* 1.05	25.3	ADR	27.1	-27.2	0	2.04	27.24	54	-26.76	-	-	-	-	164	314	H
3	* 8.248	42.19	PK2	35.8	-28.7	0	0	49.29	-	-	74	-24.71	68.2	-18.91	75	105	H
	* 8.249	30.92	MAV1	35.8	-28.7	0	2.04	40.06	54	-13.94	-	-	-	-	75	105	H
	* 8.247	42.91	PK-U	35.8	-28.8	0	0	49.91	-	-	74	-24.09	68.2	-18.29	75	105	H
	* 8.249	30.91	ADR	35.8	-28.7	0	2.04	40.05	54	-13.95	-	-	-	-	75	105	H
2	* 4.923	46.64	PK2	34.1	-22	.6	0	59.34	-	-	74	-14.66	68.2	-8.86	89	152	H
	* 4.924	35.41	MAV1	34.1	-22	.6	2.04	50.15	54	-3.85	-	-	-	-	89	152	H
4	* 1.357	43.68	PK2	29.3	-25.5	0	0	47.48	-	-	74	-26.52	68.2	-20.72	304	303	V
	* 1.357	25.12	MAV1	29.3	-25.5	0	2.04	30.96	54	-23.04	-	-	-	-	304	303	V
	* 1.357	43.86	PK-U	29.3	-25.5	0	0	47.66	-	-	74	-26.34	68.2	-20.54	304	303	V
	* 1.357	25.33	ADR	29.3	-25.5	0	2.04	31.17	54	-22.83	-	-	-	-	304	303	V
6	* 8.248	45.55	PK2	35.8	-28.7	0	0	52.65	-	-	74	-21.35	68.2	-15.55	257	105	V
	* 8.247	34	MAV1	35.8	-28.8	0	2.04	43.04	54	-10.96	-	-	-	-	257	105	V
	* 8.246	45.75	PK-U	35.8	-28.8	0	0	52.75	-	-	74	-21.25	68.2	-15.45	257	105	V
	* 8.247	33.95	ADR	35.8	-28.8	0	2.04	42.99	54	-11.01	-	-	-	-	257	105	V
5	* 4.923	47.31	PK2	34.1	-22	.6	0	60.01	-	-	74	-13.99	68.2	-8.19	214	251	V
	* 4.924	36.31	MAV1	34.1	-22	.6	2.04	51.05	54	-2.95	-	-	-	-	214	251	V

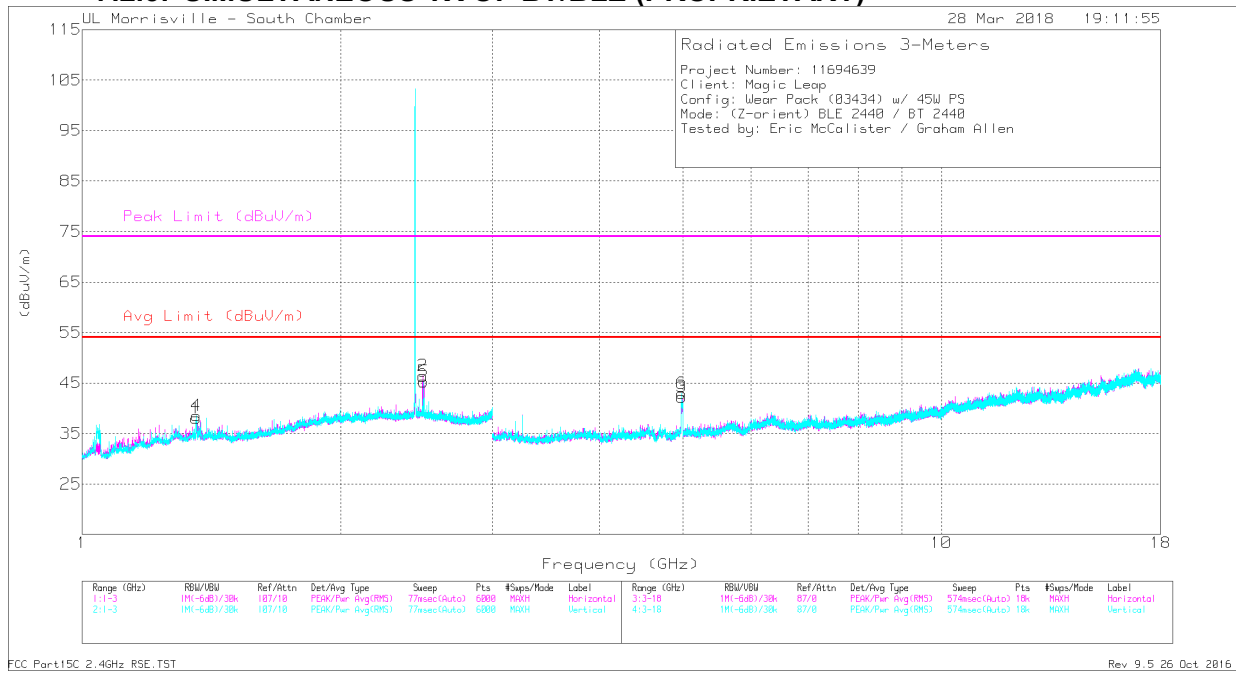
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average

Note – Worst-case duty cycle correction of all technologies was used.





### 7.2.3. SIMULTANEOUS TX OF BT/BLE (PROPRIETARY)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.357	40.81	PK2	28.7	-23	0	46.51	-	-	74	-27.49	120	103	H
	* 1.356	23.95	MAV1	28.7	-23	2.04	31.69	54	-22.31	-	-	120	103	H
2	* 2.493	45.49	PK2	32.4	-24.7	0	53.19	-	-	74	-20.81	120	198	H
	* 2.49	26.53	MAV1	32.4	-24.7	2.04	36.27	54	-17.73	-	-	120	198	H
3	* 4.987	48.11	PK2	34	-31.4	0	50.71	-	-	74	-23.29	84	120	H
	* 4.988	32.05	MAV1	34	-31.4	2.04	36.69	54	-17.31	-	-	84	120	H
4	* 1.357	41.43	PK2	28.7	-23	0	47.13	-	-	74	-26.87	17	262	V
	* 1.358	24.21	MAV1	28.7	-23	2.04	31.95	54	-22.05	-	-	17	262	V
5	* 2.494	47.51	PK2	32.4	-24.7	0	55.21	-	-	74	-18.79	239	234	V
	* 2.494	26.31	MAV1	32.4	-24.7	2.04	36.05	54	-17.95	-	-	239	234	V
6	* 4.985	50.67	PK2	34	-31.3	0	53.37	-	-	74	-20.63	69	101	V
	* 4.984	33.92	MAV1	34	-31.3	2.04	38.66	54	-15.34	-	-	69	101	V

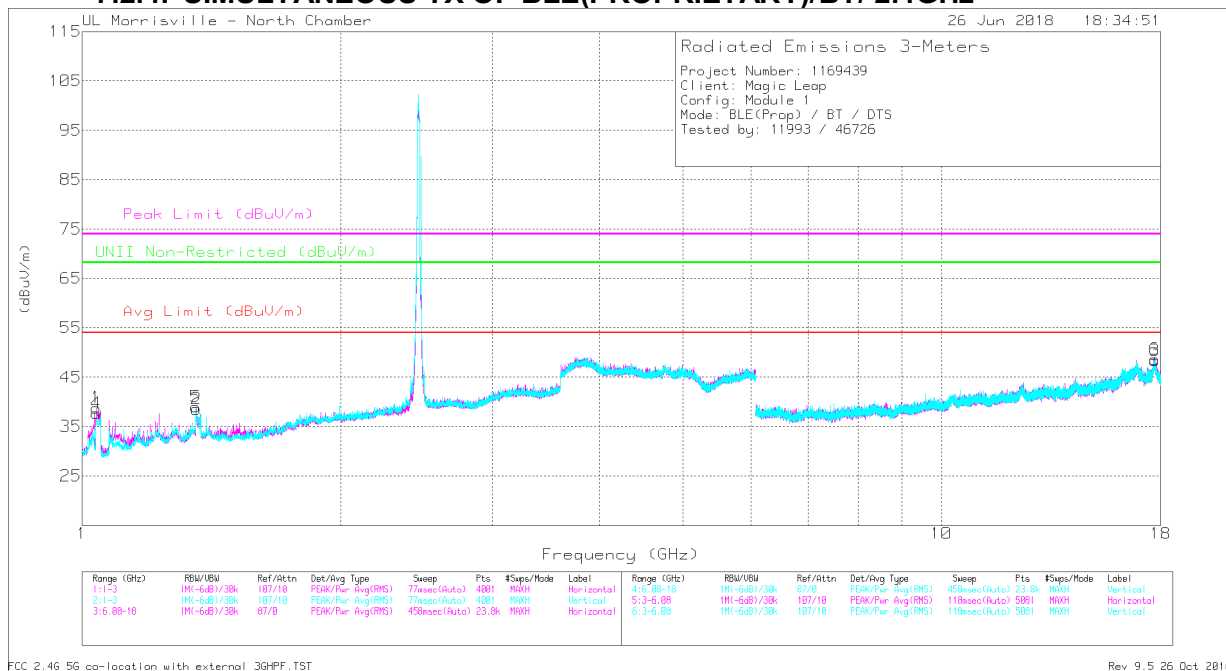
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

Note – Worst-case duty cycle correction of all technologies was used.

### 7.2.4. SIMULTANEOUS TX OF BLE(PROPRIETARY)/BT / 2.4GHZ

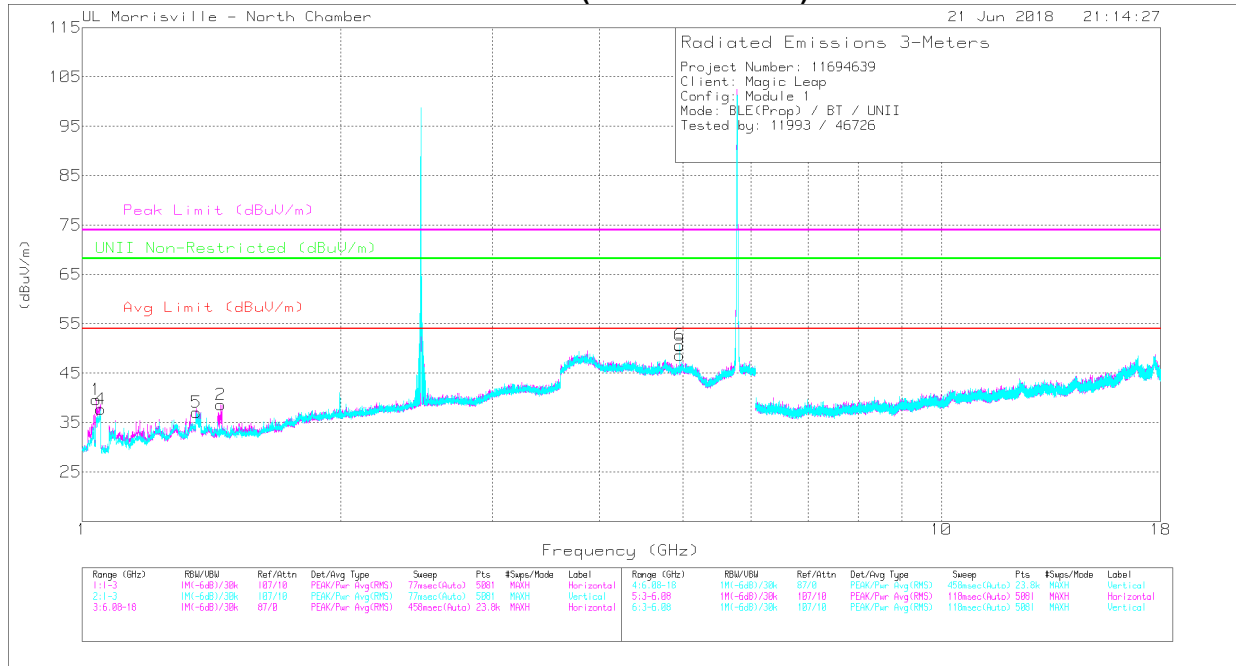


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Filter (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.038	47.67	PK2	27.1	-27.3	0	0	47.47	-	-	74	-26.53	68.2	-20.73	174	214	H
	* 1.038	27.53	MAV1	27.1	-27.3	0	2.04	29.37	54	-24.63	-	-	-	-	174	214	H
	* 1.038	47.89	PK-U	27.1	-27.3	0	0	47.69	-	-	74	-26.31	68.2	-20.51	174	214	H
	* 1.038	27.62	ADR	27.1	-27.3	0	2.04	29.46	54	-24.54	-	-	-	-	174	214	H
2	* 1.357	41.25	PK2	29.3	-25.5	0	0	45.05	-	-	74	-28.95	68.2	-23.15	228	145	H
	* 1.358	24.64	MAV1	29.3	-25.5	0	2.04	30.48	54	-23.52	-	-	-	-	228	145	H
	* 1.357	41.08	PK-U	29.3	-25.5	0	0	44.88	-	-	74	-29.12	68.2	-23.32	228	145	H
	* 1.357	24.62	ADR	29.3	-25.5	0	2.04	30.46	54	-23.54	-	-	-	-	228	145	H
3	* 17.725	33.8	PK2	41.5	-21.1	0	0	54.2	-	-	74	-19.8	68.2	-14	304	359	H
	* 17.724	22.54	MAV1	41.5	-21.1	0	2.04	44.98	54	-9.02	-	-	-	-	304	359	H
	* 17.725	34.52	PK-U	41.5	-21.1	0	0	54.92	-	-	74	-19.08	68.2	-13.28	304	359	H
	* 17.725	22.59	ADR	41.5	-21.1	0	2.04	45.03	54	-8.97	-	-	-	-	304	359	H
4	* 1.038	44.1	PK2	27.1	-27.3	0	0	43.9	-	-	74	-30.1	68.2	-24.3	38	370	V
	* 1.038	25.89	MAV1	27.1	-27.3	0	2.04	27.73	54	-26.27	-	-	-	-	38	370	V
	* 1.038	43.86	PK-U	27.1	-27.3	0	0	43.66	-	-	74	-30.34	68.2	-24.54	38	370	V
	* 1.038	25.79	ADR	27.1	-27.3	0	2.04	27.63	54	-26.37	-	-	-	-	38	370	V
5	* 1.357	42.72	PK2	29.3	-25.5	0	0	46.52	-	-	74	-27.48	68.2	-21.68	333	133	V
	* 1.357	24.98	MAV1	29.3	-25.5	0	2.04	30.82	54	-23.18	-	-	-	-	333	133	V
	* 1.357	42.52	PK-U	29.3	-25.5	0	0	46.32	-	-	74	-27.68	68.2	-21.88	333	133	V
	* 1.357	24.91	ADR	29.3	-25.5	0	2.04	30.75	54	-23.25	-	-	-	-	333	133	V
6	* 17.731	33.88	PK2	41.5	-21	0	0	54.38	-	-	74	-19.62	68.2	-13.82	83	338	V
	* 17.731	22.64	MAV1	41.5	-21	0	2.04	45.18	54	-8.82	-	-	-	-	83	338	V
	* 17.729	34.47	PK-U	41.5	-21	0	0	54.97	-	-	74	-19.03	68.2	-13.23	83	338	V
	* 17.727	22.64	ADR	41.5	-21.1	0	2.04	45.08	54	-8.92	-	-	-	-	83	338	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average

Note – Worst-case duty cycle correction of all technologies was used.

### 7.2.5. SIMULTANEOUS TX OF BLE(PROPRIETARY)/BT/5GHz

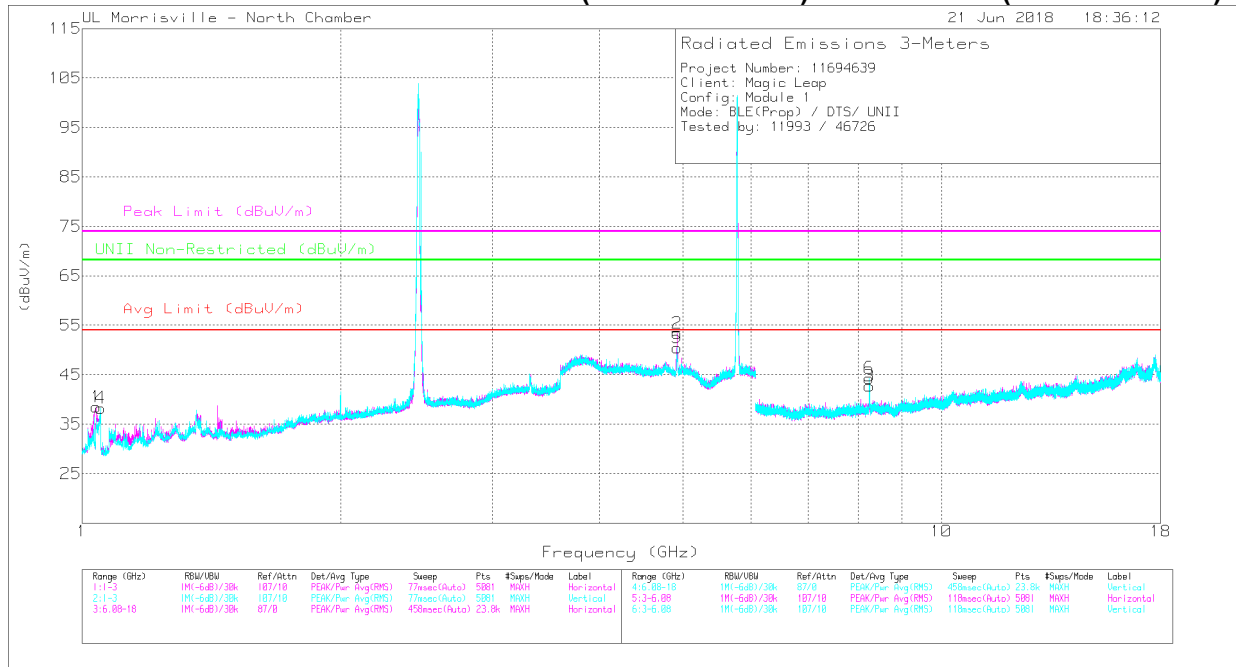


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	HPF010 (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.038	47.02	PK2	27.1	-27.3	0	0	46.82	-	-	74	-27.18	68.2	-21.38	71	146	H
	* 1.038	26.49	MAV1	27.1	-27.3	0	2.04	28.33	54	-25.67	-	-	-	-	71	146	H
	* 1.038	46.53	PK-U	27.1	-27.3	0	0	46.33	-	-	74	-27.67	68.2	-21.87	71	146	H
	* 1.038	26.55	ADR	27.1	-27.3	0	2.04	28.39	54	-25.61	-	-	-	-	71	146	H
2	* 1.451	42.18	PK2	28	-25.1	0	0	45.08	-	-	74	-28.92	68.2	-23.12	68	194	H
	* 1.453	25.67	MAV1	28	-25.1	0	2.04	30.61	54	-23.39	-	-	-	-	68	194	H
	* 1.453	42.86	PK-U	28	-25.1	0	0	45.76	-	-	74	-28.24	68.2	-22.44	68	194	H
	* 1.452	25.58	ADR	28	-25.1	0	2.04	30.52	54	-23.48	-	-	-	-	68	194	H
3	* 4.96	42.65	PK2	34.1	-22	.6	0	55.35	-	-	74	-18.65	68.2	-12.85	79	167	H
	* 4.96	34.32	MAV1	34.1	-22	.6	2.04	49.06	54	-4.94	-	-	-	-	79	167	H
	* 4.96	42.49	PK-U	34.1	-22	.6	0	55.19	-	-	74	-18.81	68.2	-13.01	79	167	H
	* 4.96	34.33	ADR	34.1	-22	.6	2.04	49.07	54	-4.93	-	-	-	-	79	167	H
4	* 1.051	45.72	PK2	27.1	-27.2	0	0	45.62	-	-	74	-28.38	68.2	-22.58	145	104	V
	* 1.048	25.81	MAV1	27.1	-27.2	0	2.04	27.75	54	-26.25	-	-	-	-	145	104	V
	* 1.051	45.5	PK-U	27.1	-27.2	0	0	45.4	-	-	74	-28.6	68.2	-22.8	145	104	V
	* 1.049	25.62	ADR	27.1	-27.2	0	2.04	27.56	54	-26.44	-	-	-	-	145	104	V
5	* 1.357	42.55	PK2	29.3	-25.5	0	0	46.35	-	-	74	-27.65	68.2	-21.85	336	230	V
	* 1.357	25.27	MAV1	29.3	-25.5	0	2.04	31.11	54	-22.89	-	-	-	-	336	230	V
	* 1.357	42.71	PK-U	29.3	-25.5	0	0	46.51	-	-	74	-27.49	68.2	-21.69	336	230	V
	* 1.357	25.31	ADR	29.3	-25.5	0	2.04	31.15	54	-22.85	-	-	-	-	336	230	V
6	* 4.96	42.24	PK2	34.1	-22	.6	0	54.94	-	-	74	-19.06	68.2	-13.26	87	252	V
	* 4.96	34.19	MAV1	34.1	-22	.6	2.04	48.93	54	-5.07	-	-	-	-	87	252	V
	* 4.96	42.75	PK-U	34.1	-22	.6	0	55.45	-	-	74	-18.55	68.2	-12.75	87	252	V
	* 4.96	34.19	ADR	34.1	-22	.6	2.04	48.93	54	-5.07	-	-	-	-	87	252	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average

Note – Worst-case duty cycle correction of all technologies was used.

**7.2.6. SIMULTANEOUS TX OF BLE(PROPRIETARY)/2.4GHZ/5GHZ(802.11a MODE)**

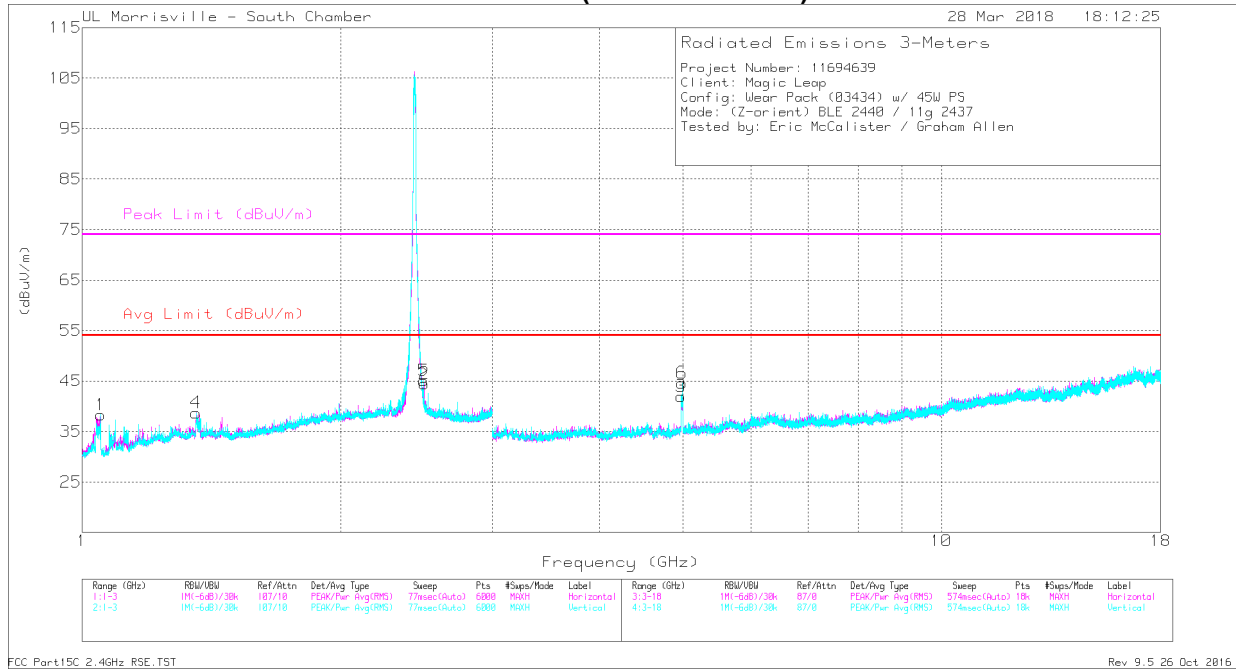


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	HPF010 (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.038	47.43	PK2	27.1	-27.3	0	0	47.23	-	-	74	-26.77	68.2	-20.97	81	246	H
	* 1.038	26.5	MAV1	27.1	-27.3	0	2.04	28.34	54	-25.66	-	-	-	-	81	246	H
	* 1.038	47.51	PK-U	27.1	-27.3	0	0	47.31	-	-	74	-26.69	68.2	-20.89	81	246	H
	* 1.038	26.87	ADR	27.1	-27.3	0	2.04	28.71	54	-25.29	-	-	-	-	81	246	H
3	* 8.249	43.29	PK2	35.8	-28.7	0	0	50.39	-	-	74	-23.61	68.2	-17.81	82	102	H
	* 8.248	31.45	MAV1	35.8	-28.7	0	2.04	40.59	54	-13.41	-	-	-	-	82	102	H
	* 8.249	43.49	PK-U	35.8	-28.7	0	0	50.59	-	-	74	-23.41	68.2	-17.61	82	102	H
	* 8.248	31.45	ADR	35.8	-28.7	0	2.04	40.59	54	-13.41	-	-	-	-	82	102	H
2	* 4.924	46.76	PK2	34.1	-22	.6	0	59.46	-	-	74	-14.54	68.2	-8.74	82	193	H
	* 4.924	35.77	MAV1	34.1	-22	.6	2.04	50.51	54	-3.49	-	-	-	-	82	193	H
	* 4.924	46.78	PK-U	34.1	-22	.6	0	59.48	-	-	74	-14.52	68.2	-8.72	82	193	H
	* 4.924	35.8	ADR	34.1	-22	.6	2.04	50.54	54	-3.46	-	-	-	-	82	193	H
4	* 1.051	42.2	PK2	27.1	-27.2	0	0	42.1	-	-	74	-31.9	68.2	-26.1	142	220	V
	* 1.049	24.9	MAV1	27.1	-27.2	0	2.04	26.84	54	-27.16	-	-	-	-	142	220	V
	* 1.051	41.9	PK-U	27.1	-27.2	0	0	41.8	-	-	74	-32.2	68.2	-26.4	142	220	V
	* 1.05	24.89	ADR	27.1	-27.2	0	2.04	26.83	54	-27.17	-	-	-	-	142	220	V
6	* 8.246	45.7	PK2	35.8	-28.8	0	0	52.7	-	-	74	-21.3	68.2	-15.5	259	117	V
	* 8.243	33.18	MAV1	35.8	-28.8	0	2.04	42.22	54	-11.78	-	-	-	-	259	117	V
	* 8.242	45.12	PK-U	35.8	-28.8	0	0	52.12	-	-	74	-21.88	68.2	-16.08	259	117	V
	* 8.243	33.16	ADR	35.8	-28.8	0	2.04	42.2	54	-11.8	-	-	-	-	259	117	V
5	* 4.927	48.74	PK2	34.1	-22	.6	0	61.44	-	-	74	-12.56	68.2	-6.76	169	225	V
	* 4.927	34.64	MAV1	34.1	-22	.6	2.04	49.38	54	-4.62	-	-	-	-	169	225	V
	* 4.927	49.1	PK-U	34.1	-22	.6	0	61.8	-	-	74	-12.2	68.2	-6.4	169	225	V
	* 4.927	34.5	ADR	34.1	-22	.6	2.04	49.24	54	-4.76	-	-	-	-	169	225	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average

Note – Worst-case duty cycle correction of all technologies was used.

**7.2.7. SIMULTANEOUS TX OF BLE(PROPRIETARY)/2.4GHZ**

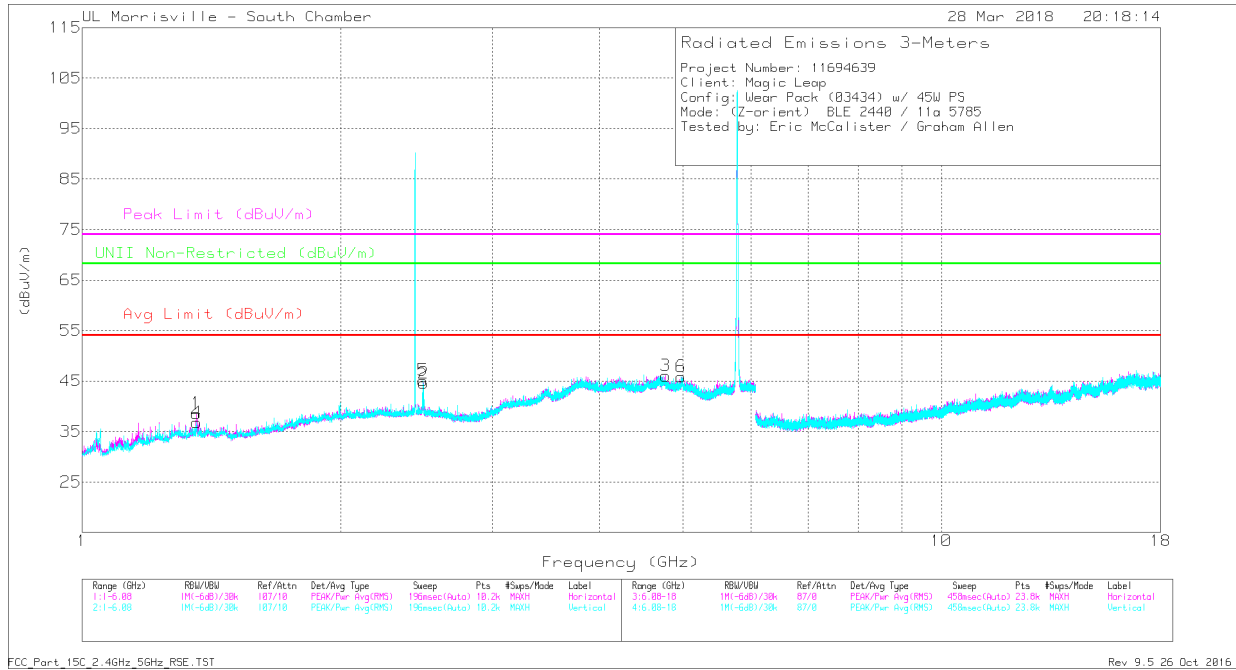


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.051	38.02	PK2	27	-24.6	0	40.42	-	-	74	-33.58	263	228	H
	* 1.049	24.53	MAV1	27	-24.6	2.04	28.97	54	-25.03	-	-	263	228	H
2	* 2.497	48.61	PK2	32.3	-24.7	0	56.21	-	-	74	-17.79	182	115	H
	* 2.484	28.69	MAV1	32.4	-24.6	2.04	38.53	54	-15.47	-	-	182	115	H
3	* 4.978	47.71	PK2	34	-31.3	0	50.41	-	-	74	-23.59	55	239	H
	* 4.978	32.49	MAV1	34	-31.3	2.04	37.23	54	-16.77	-	-	55	239	H
4	* 1.357	40.15	PK2	28.7	-23	0	45.85	-	-	74	-28.15	25	313	V
	* 1.356	24.22	MAV1	28.7	-23	2.04	31.96	54	-22.04	-	-	25	313	V
5	* 2.498	48	PK2	32.3	-24.7	0	55.6	-	-	74	-18.4	202	193	V
	* 2.494	29.52	MAV1	32.4	-24.7	2.04	39.26	54	-14.74	-	-	202	193	V
6	* 4.988	48.86	PK2	34	-31.4	0	51.46	-	-	74	-22.54	71	109	V
	* 4.988	33.42	MAV1	34	-31.4	2.04	38.06	54	-15.94	-	-	71	109	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average

Note – Worst-case duty cycle correction of all technologies was used.

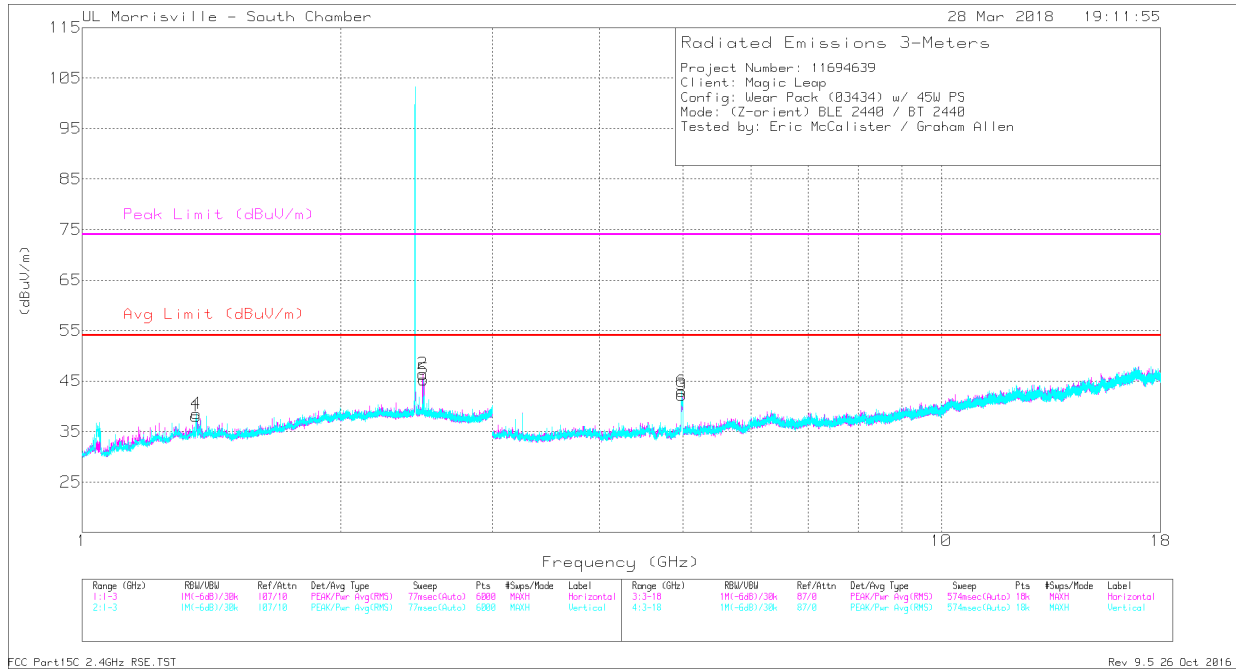
### 7.2.8. SIMULTANEOUS TX OF BLE (PROPRIETARY)/5GHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.357	40.69	PK2	28.7	-23	0	46.39	-	-	74	-27.61	68.2	-21.81	137	121	H
	* 1.357	24.04	MAV1	28.7	-23	2.04	31.78	54	-22.22	-	-	-	-	137	121	H
	* 1.357	40.99	PK-U	28.7	-23	0	46.69	-	-	74	-27.31	68.2	-21.51	137	121	H
	* 1.358	23.87	ADR	28.7	-23	2.04	31.61	54	-22.39	-	-	-	-	137	121	H
2	* 2.494	47.29	PK2	32.4	-24.7	0	54.99	-	-	74	-19.01	68.2	-13.21	302	279	H
	* 2.495	25.93	MAV1	32.4	-24.7	2.04	35.67	54	-18.33	-	-	-	-	302	279	H
	* 2.493	46.8	PK-U	32.4	-24.7	0	54.5	-	-	74	-19.5	68.2	-13.7	302	279	H
	* 2.492	25.85	ADR	32.4	-24.7	2.04	35.59	54	-18.41	-	-	-	-	302	279	H
3	* 4.771	38.83	PK2	34	-21.5	0	51.33	-	-	74	-22.67	68.2	-16.87	64	107	H
	* 4.77	27.26	MAV1	34	-21.5	2.04	41.8	54	-12.2	-	-	-	-	64	107	H
	* 4.781	38.19	PK-U	34	-21.6	0	50.59	-	-	74	-23.41	68.2	-17.61	64	107	H
	* 4.773	27.13	ADR	34	-21.5	2.04	41.67	54	-12.33	-	-	-	-	64	107	H
4	* 1.357	38.19	PK2	28.7	-23	0	43.89	-	-	74	-30.11	68.2	-24.31	319	304	V
	* 1.357	23.9	MAV1	28.7	-23	2.04	31.64	54	-22.36	-	-	-	-	319	304	V
	* 1.357	38.68	PK-U	28.7	-23	0	44.38	-	-	74	-29.62	68.2	-23.82	319	304	V
	* 1.357	23.89	ADR	28.7	-23	2.04	31.63	54	-22.37	-	-	-	-	319	304	V
5	* 2.491	46.05	PK2	32.4	-24.7	0	53.75	-	-	74	-20.25	68.2	-14.45	211	249	V
	* 2.493	26.2	MAV1	32.4	-24.7	2.04	35.94	54	-18.06	-	-	-	-	211	249	V
	* 2.491	46.43	PK-U	32.4	-24.7	0	54.13	-	-	74	-19.87	68.2	-14.07	211	249	V
	* 2.491	25.88	ADR	32.4	-24.7	2.04	35.62	54	-18.38	-	-	-	-	211	249	V
6	* 4.981	42.5	PK2	34	-22.3	0	54.2	-	-	74	-19.8	68.2	-14	69	103	V
	* 4.981	28.64	MAV1	34	-22.3	2.04	42.38	54	-11.62	-	-	-	-	69	103	V
	* 4.981	42.54	PK-U	34	-22.3	0	54.24	-	-	74	-19.76	68.2	-13.96	69	103	V
	* 4.982	28.59	ADR	34	-22.3	2.04	42.33	54	-11.67	-	-	-	-	69	103	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average  
 Note – Worst-case duty cycle correction of all technologies was used.

### 7.2.9. SIMULTANEOUS TX OF BLE (PROPRIETARY)/BT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.357	40.81	PK2	28.7	-23	0	46.51	-	-	74	-27.49	120	103	H
	* 1.356	23.95	MAv1	28.7	-23	2.04	31.69	54	-22.31	-	-	120	103	H
2	* 2.493	45.49	PK2	32.4	-24.7	0	53.19	-	-	74	-20.81	120	198	H
	* 2.49	26.53	MAv1	32.4	-24.7	2.04	36.27	54	-17.73	-	-	120	198	H
3	* 4.987	48.11	PK2	34	-31.4	0	50.71	-	-	74	-23.29	84	120	H
	* 4.988	32.05	MAv1	34	-31.4	2.04	36.69	54	-17.31	-	-	84	120	H
4	* 1.357	41.43	PK2	28.7	-23	0	47.13	-	-	74	-26.87	17	262	V
	* 1.358	24.21	MAv1	28.7	-23	2.04	31.95	54	-22.05	-	-	17	262	V
5	* 2.494	47.51	PK2	32.4	-24.7	0	55.21	-	-	74	-18.79	239	234	V
	* 2.494	26.31	MAv1	32.4	-24.7	2.04	36.05	54	-17.95	-	-	239	234	V
6	* 4.985	50.67	PK2	34	-31.3	0	53.37	-	-	74	-20.63	69	101	V
	* 4.984	33.92	MAv1	34	-31.3	2.04	38.66	54	-15.34	-	-	69	101	V

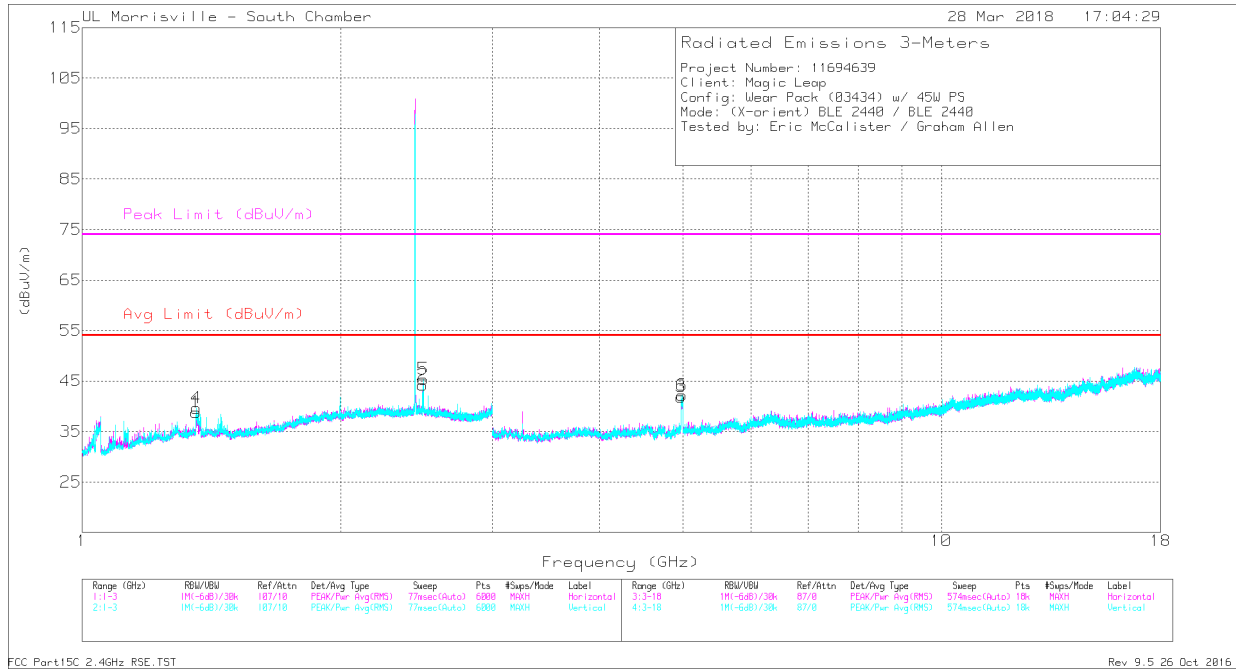
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note – Worst-case duty cycle correction of all technologies was used.

### 7.2.10. SIMULTANEOUS TX OF BLE (PROPRIETARY)/BLE



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.357	38.88	PK2	28.7	-23	0	44.58	-	-	74	-29.42	68.2	-23.62	H
	* 1.352	24.1	MAv1	28.7	-23	2.2	32.00	54	-22	-	-	-	-	H
2	* 2.49	46.16	PK2	32.4	-24.7	0	53.86	-	-	74	-20.14	68.2	-14.34	H
	* 2.49	25.84	MAv1	32.4	-24.7	2.2	35.74	54	-18.26	-	-	-	-	H
3	* 4.978	47.79	PK2	34	-31.3	0	50.49	-	-	74	-23.51	68.2	-17.71	H
	* 4.978	32.41	MAv1	34	-31.3	2.2	37.31	54	-16.69	-	-	-	-	H
4	* 1.357	39.56	PK2	28.7	-23	0	45.26	-	-	74	-28.74	68.2	-22.94	V
	* 1.356	23.89	MAv1	28.7	-23	2.2	31.79	54	-22.21	-	-	-	-	V
5	* 2.492	47.49	PK2	32.4	-24.7	0	55.19	-	-	74	-18.81	68.2	-13.01	V
	* 2.494	26.16	MAv1	32.4	-24.7	2.2	36.06	54	-17.94	-	-	-	-	V
6	* 4.994	48.77	PK2	34	-31.4	0	51.37	-	-	74	-22.63	68.2	-16.83	V
	* 4.991	33.44	MAv1	34	-31.4	2.2	38.24	54	-15.76	-	-	-	-	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

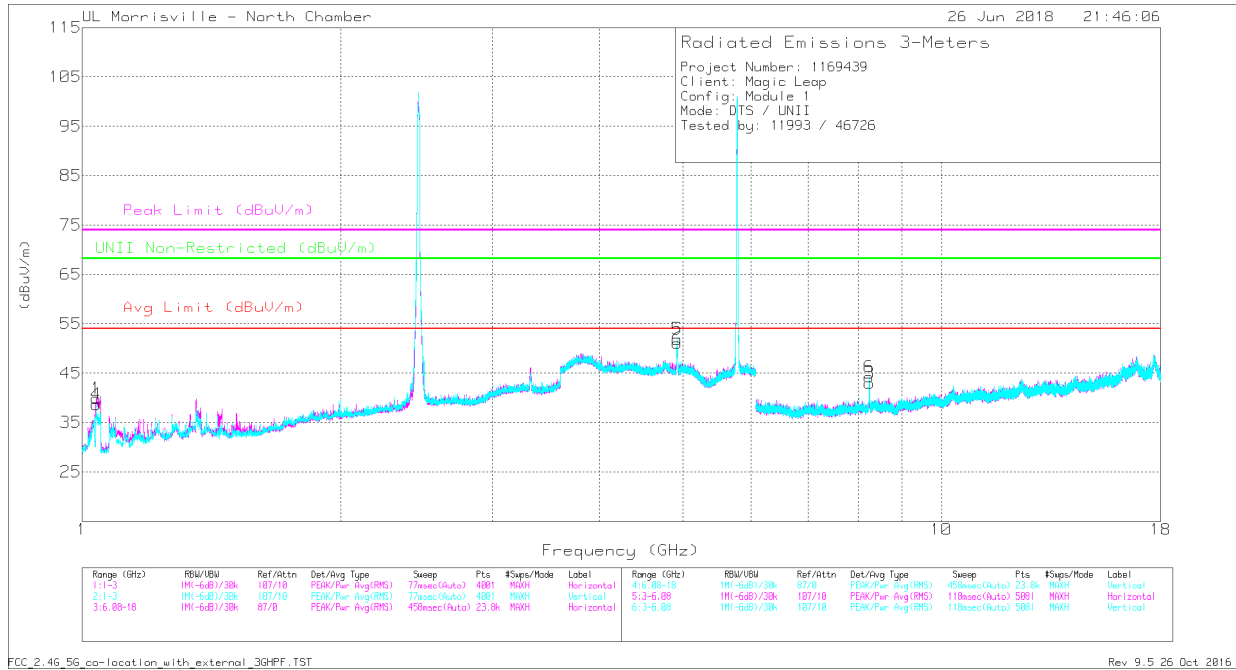
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Note – Worst-case duty cycle correction of all technologies was used.



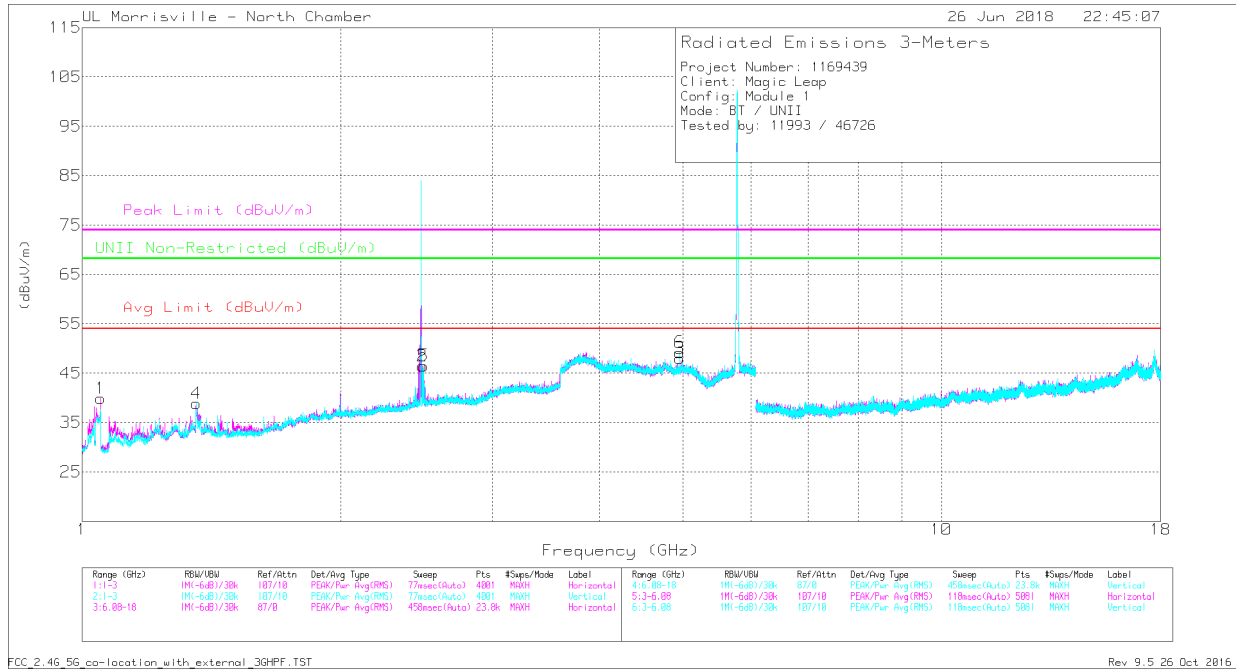
**7.2.11. SIMULTANEOUS TX OF 2.4GHz/5GHz (802.11a MODE)**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Filter (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.038	48.73	PK2	27.1	-27.3	0	0	48.53	-	-	74	-25.47	68.2	-19.67	170	206	H
	* 1.038	27.74	MAV1	27.1	-27.3	0	0.2	27.74	54	-26.26	-	-	-	-	170	206	H
	* 1.038	48.65	PK-U	27.1	-27.3	0	0	48.45	-	-	74	-25.55	68.2	-19.75	170	206	H
	* 1.038	27.43	ADR	27.1	-27.3	0	0.2	27.43	54	-26.57	-	-	-	-	170	206	H
3	* 8.249	43.92	PK2	35.8	-28.7	0	0	51.02	-	-	74	-22.98	68.2	-17.18	74	116	H
	* 8.248	31.86	MAV1	35.8	-28.7	0	0.2	39.16	54	-14.84	-	-	-	-	74	116	H
	* 8.246	43.5	PK-U	35.8	-28.8	0	0	50.5	-	-	74	-23.5	68.2	-17.7	74	116	H
	* 8.249	31.76	ADR	35.8	-28.7	0	0.2	39.06	54	-14.94	-	-	-	-	74	116	H
2	* 4.923	46.91	PK2	34.1	-22	.6	0	59.61	-	-	74	-14.39	68.2	-8.59	89	182	H
	* 4.924	35.35	MAV1	34.1	-22	.6	0.2	48.25	54	-5.75	-	-	-	-	89	182	H
	* 4.923	46.5	PK-U	34.1	-22	.6	0	59.2	-	-	74	-14.8	68.2	-9	89	182	H
	* 4.924	35.3	ADR	34.1	-22	.6	0.2	48.2	54	-5.8	-	-	-	-	89	182	H
4	* 1.038	47.2	PK2	27.1	-27.3	0	0	47	-	-	74	-27	68.2	-21.2	287	266	V
	* 1.038	26.94	MAV1	27.1	-27.3	0	0.2	26.94	54	-27.06	-	-	-	-	287	266	V
	* 1.038	47	PK-U	27.1	-27.3	0	0	46.8	-	-	74	-27.2	68.2	-21.4	287	266	V
	* 1.038	26.95	ADR	27.1	-27.3	0	0.2	26.95	54	-27.05	-	-	-	-	287	266	V
6	* 8.242	45.9	PK2	35.8	-28.8	0	0	52.9	-	-	74	-21.1	68.2	-15.3	259	119	V
	* 8.246	33.22	MAV1	35.8	-28.8	0	0.2	40.42	54	-13.58	-	-	-	-	259	119	V
	* 8.246	45.24	PK-U	35.8	-28.8	0	0	52.24	-	-	74	-21.76	68.2	-15.96	259	119	V
	* 8.246	33.06	ADR	35.8	-28.8	0	0.2	40.26	54	-13.74	-	-	-	-	259	119	V
5	* 4.923	48.31	PK2	34.1	-22	.6	0	61.01	-	-	74	-12.99	68.2	-7.19	222	246	V
	* 4.924	36.88	MAV1	34.1	-22	.6	0.2	49.78	54	-4.22	-	-	-	-	222	246	V
	* 4.924	48.04	PK-U	34.1	-22	.6	0	60.74	-	-	74	-13.26	68.2	-7.46	222	246	V
	* 4.924	36.92	ADR	34.1	-22	.6	0.2	49.82	54	-4.18	-	-	-	-	222	246	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average  
 Note – Worst-case duty cycle correction of all technologies was used.

**7.2.12. SIMULTANEOUS TX OF 5GHz/BT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Filter (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.051	47.3	PK-U	27.1	-27.2	0	0	47.2	-	-	74	-26.8	68.2	-21	156	260	H
	* 1.05	26.3	ADR	27.1	-27.2	0	1.14	27.34	54	-26.66	-	-	-	-	156	260	H
2	* 2.489	48.87	PK-U	32.3	-24.4	0	0	56.77	-	-	74	-17.23	68.2	-11.43	24	161	H
	* 2.49	25.66	ADR	32.3	-24.4	0	1.14	34.7	54	-19.3	-	-	-	-	24	161	H
3	* 4.959	42.31	PK-U	34.1	-22	.6	0	55.01	-	-	74	-18.99	68.2	-13.19	84	186	H
	* 4.96	33.12	ADR	34.1	-22	.6	1.14	46.96	54	-7.04	-	-	-	-	84	186	H
4	* 1.357	43.1	PK-U	29.3	-25.5	0	0	46.9	-	-	74	-27.1	68.2	-21.3	278	116	V
	* 1.357	24.88	ADR	29.3	-25.5	0	1.14	29.82	54	-24.18	-	-	-	-	278	116	V
5	* 2.497	50.75	PK-U	32.3	-24.4	0	0	58.65	-	-	74	-15.35	68.2	-9.55	159	240	V
	* 2.498	26.08	ADR	32.3	-24.4	0	1.14	35.12	54	-18.88	-	-	-	-	159	240	V
6	* 4.96	41.97	PK-U	34.1	-22	.6	0	54.67	-	-	74	-19.33	68.2	-13.53	98	206	V
	* 4.96	33.17	ADR	34.1	-22	.6	1.14	47.01	54	-6.99	-	-	-	-	98	206	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Note – Worst-case duty cycle correction of all technologies was used.

## 8. SETUP PHOTOS

Refer to UL Document R11694639-STP1

**END OF REPORT**