



CERTIFICATION TEST REPORT

Report Number. : R11694639-E1

Applicant : MAGIC LEAP, INC.
7500 WEST SUNRISE BOULEVARD
PLANTATION, FL 33322, USA

Model : M2001

FCC ID : 2AM5NM2000

IC : 23045-M2000

EUT Description : MAGIC LEAP ONE - CONTROL

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
ISED RSS-210 ISSUE 9

Date Of Issue:

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Prepared by:

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Revision History

| <u>Ver.</u> | <u>Issue Date</u> | <u>Revisions</u> | <u>Revised By</u> |
|-------------|-------------------|---|-------------------|
| 1 | 2018-05-15 | Initial Issue | Brian T. Kiewra |
| 2 | 2018-06-04 | Revised model number to M2001. Removed setup photos and diagram and created a separate report. | Brian T. Kiewra |
| 3 | 2018-06-19 | Added OBW and 20dB measurements. | Niklas Haydon |

TABLE OF CONTENTS

| | |
|---|-----------|
| 1. ATTESTATION OF TEST RESULTS | 4 |
| 2. TEST METHODOLOGY | 5 |
| 3. FACILITIES AND ACCREDITATION | 5 |
| 4. CALIBRATION AND UNCERTAINTY | 6 |
| 4.1. <i>MEASURING INSTRUMENT CALIBRATION</i> | <i>6</i> |
| 4.2. <i>SAMPLE CALCULATION</i> | <i>6</i> |
| 4.3. <i>MEASUREMENT UNCERTAINTY.....</i> | <i>6</i> |
| 5. EQUIPMENT UNDER TEST..... | 7 |
| 5.1. <i>DESCRIPTION OF EUT</i> | <i>7</i> |
| 5.2. <i>FIELD STRENGTH.....</i> | <i>7</i> |
| 5.3. <i>DESCRIPTION OF AVAILABLE ANTENNAS</i> | <i>7</i> |
| 5.4. <i>SOFTWARE AND FIRMWARE.....</i> | <i>7</i> |
| 5.5. <i>WORST-CASE CONFIGURATION AND MODE.....</i> | <i>7</i> |
| 5.6. <i>MODIFICATIONS</i> | <i>7</i> |
| 5.7. <i>DESCRIPTION OF TEST SETUP.....</i> | <i>8</i> |
| 6. TEST AND MEASUREMENT EQUIPMENT | 9 |
| 7. MEASUREMENT METHODS..... | 10 |
| 8. OCCUPIED BANDWIDTH | 11 |
| 9. RADIATED EMISSION TEST RESULTS..... | 12 |
| 9.1. <i>LIMITS AND PROCEDURE.....</i> | <i>12</i> |
| 9.2. <i>FUNDAMENTAL AND TX SPURIOUS EMISSIONS 0.009 TO 30 MHz</i> | <i>13</i> |
| 9.3. <i>TX SPURIOUS EMISSION 30 TO 1000 MHz</i> | <i>15</i> |
| 10. AC MAINS LINE CONDUCTED EMISSIONS | 16 |
| 11. SETUP PHOTOS | 19 |
| END OF REPORT | 19 |

1. ATTESTATION OF TEST RESULTS

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

EUT DESCRIPTION: Magic Leap One - Control with 2.4G Proprietary Radio (BLE) and EM transmitter

MODEL: M2001

SERIAL NUMBER: GA10E4J00966, GA10E4J00964

DATE TESTED: 2017-11-13 to 2018-02-06

| APPLICABLE STANDARDS | |
|-----------------------------|--------------|
| STANDARD | TEST RESULTS |
| FCC PART 15 SUBPART C | Compliant |
| ISED CANADA RSS-210 Issue 9 | Compliant |
| ISED CANADA RSS-GEN Issue 4 | 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.

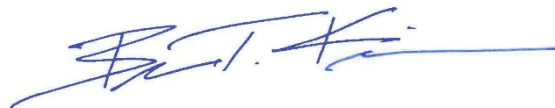
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this 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
For UL LLC By:



Jeffrey Moser
Operations Leader
UL – Consumer Technology Division

Prepared By:



Brian T. Kiewra
Project Engineer
UL – Consumer Technology Division

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 4, and RSS-210 Issue 9.

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 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

The EUT is a handheld controller with EM and BLE transmitters. The device utilizes an electromagnetic tracking system used to determine the position and orientation of the Control relative to the user. The Control contains a transmitter that generates 3 orthogonal AC magnetic fields at frequencies ranging from 28.5 kHz to 42.42 kHz. These signals are unmodulated CW sine waves that drive 3 wire wound coils (TX Coils) mounted on Control.

Only middle channel tested per 15.31(m). Middle channel was dependent upon orientation, 34.38kHz in X-axis, 34.62kHz in Y-axis, and 34.86kHz in Z-axis. Testing was performed with EUT configured to transmit on all three mid channels simultaneously.

5.2. FIELD STRENGTH

The testing was performed at 3 meters.

| Fundamental (kHz) | E-field at 3m (dBuV/m) | | E-field at 30m (dBuV/m) | |
|-------------------|------------------------|-------|-------------------------|-------|
| | PK | AV | PK | AV |
| 34.38 | 91.75 | 91.66 | 51.75 | 51.66 |
| 34.62 | 82.47 | 82.10 | 42.47 | 42.10 |
| 34.86 | 91.29 | 91.21 | 51.29 | 51.21 |

Note: E-Field at 30m corrected from 3m measurement using correction factor of $40\log(3/30) = -40$ per FCC §15.31 (f)(2).

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an ferrite loaded coil antenna, with a maximum gain of 2.15 dBi.

5.4. SOFTWARE AND FIRMWARE

None.

5.5. WORST-CASE CONFIGURATION AND MODE

EUT was investigated in three orthogonal orientations, X,Y, and Z-axes using worst-case fundamental. It was determined that Z-axis was worst-case orientation. Therefore all radiated testing was performed in the Z-axis orientation.

5.6. MODIFICATIONS

No modifications were made during testing.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

| Support Equipment List | | | | |
|------------------------|--------------|-------|---------------|--------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| Power Supply | Magic Leap | M3001 | 173700055201 | 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 | USB | <3m | None |

TEST SETUP

The EUT is installed in a standalone device.

SETUP DIAGRAM FOR TESTS

Refer to UL Report R11694639-EP1.

6. TEST AND MEASUREMENT EQUIPMENT

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

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

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|---------------|-------------------------------|----------------------|--------------|------------|------------|
| AT0079 | Active Loop Antenna | ETS-Lindgren | 6502 | 2016-12-28 | 2017-12-31 |
| AT0079 | Active Loop Antenna | ETS-Lindgren | 6502 | 2018-01-02 | 2019-01-02 |
| AT0073 | Hybrid Broadband Antenna | Sunol Sciences Corp. | JB3 | 2017-07-18 | 2018-07-31 |
| N-SAC01 | Gain-loss string: 0.009-30MHz | Various | Various | 2017-09-15 | 2018-09-15 |
| N-SAC02 | Gain-loss string: 30-1000MHz | Various | Various | 2017-06-11 | 2018-06-11 |
| SA0027 | Spectrum Analyzer | Agilent | N9030A | 2017-03-16 | 2018-03-16 |
| SOFTEMI | EMI Software | UL | Version 9.5 | NA | NA |
| s/n 161024690 | Environmental Meter | Fisher Scientific | 15-077-963 | 2016-12-21 | 2018-12-21 |

Test Equipment Used –Conducted Disturbance Emissions Test Equipment (Morrisville – Conducted Room 1)

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|--------------------|---|---------------------|---------------------------|------------|------------|
| CBL076 | Coax cable, RG223, N-male to BNC-male, 20-ft. | Pasternack | PE3476-240 | 2017-06-12 | 2018-06-12 |
| LISN003 | LISN, 50-ohm/50-uH, 2-conductor, 25A | Fischer Custom Com. | FCC-LISN-50-25-2-01-550V | 2017-08-22 | 2018-08-22 |
| PRE0101521 (75141) | EMI Test Receiver 9kHz-7GHz | Rohde & Schwarz | ESCI 7 | 2017-08-23 | 2018-08-23 |
| TL001 | Transient Limiter, 0.009-30MHz | Com-Power | LIT-930A | 2017-06-12 | 2018-06-12 |
| PS214 | AC Power Source | Elgar | CW2501M (s/n 1523A02396) | NA | NA |
| SOFTEMI | EMI Software | UL | Version 9.5 | NA | NA |
| CDECABLE001 | ANSI C63.4 1m extension cable. | UL | Per Annex B of ANSI C63.4 | 2017-07-03 | 2018-07-03 |

7. MEASUREMENT METHODS

20dB and OBW: ANSI C63.10 Sections 6.9.2 and 6.9.3

General Radiated Emissions: ANSI C63.10:2013 Sections 6.3 – 6.6

Line Conducted Emissions: ANSI C63.10:2013 Sections 6.2

8. OCCUPIED BANDWIDTH

LIMITS

None; for reporting purposes only.

PROCEDURE

FCC §15.215 (c)

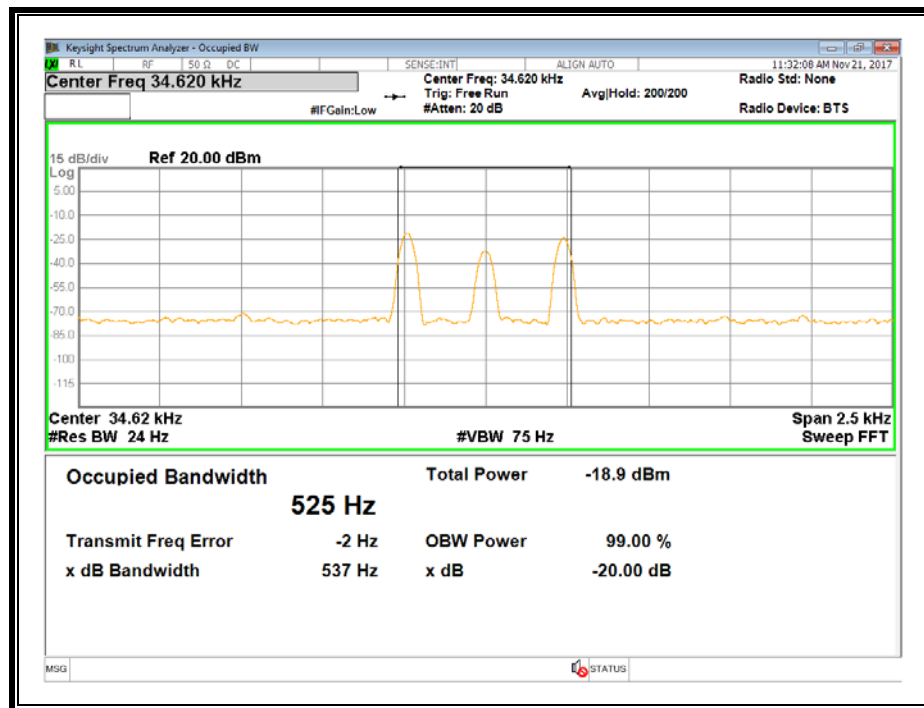
RSS-GEN 6.7

ANSI C63.10 Sections 6.9.2 and 6.9.3.

RESULTS

| Frequency (kHz) | 20dB Bandwidth (Hz) | 99% Bandwidth (Hz) |
|-----------------|---------------------|--------------------|
| 34.62 | 537 | 525 |

20dB and 99% BANDWIDTH



Test Information

Date: 2017-11-17
 Tested By: 17051

9. RADIATED EMISSION TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.209 (a)
IC RSS-GEN, Section 8.9 (Transmitter)

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (m) |
|-----------------|-----------------------------------|--------------------------|
| 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 to 216 | 150 | 3 |
| 216 to 960 | 200 | 3 |
| Above 960 MHz | 500 | 3 |

Note: The lower limit shall apply at the transition frequency.

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.

The spectrum from 0.009 to 1000MHz is investigated with the transmitter set to the X, Y, and Z-axis channels simultaneously.

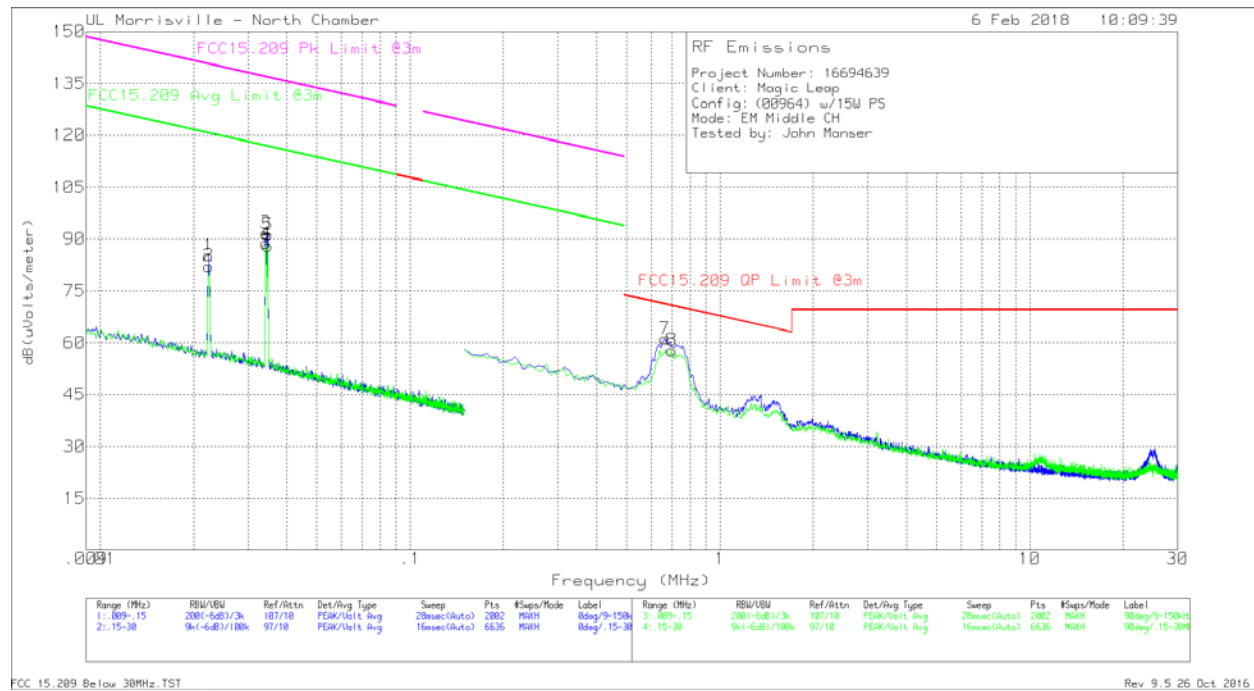
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

9.2. FUNDAMENTAL AND TX SPURIOUS EMISSIONS 0.009 TO 30 MHz

SPURIOUS EMISSIONS 9kHz TO 30 MHz

Note: All measurements were made at a test distance of 3 m. The limits in the plots and tabular data are the FCC/IC limits extrapolated from the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to the measurement distance to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were $40 \cdot \log(\text{specification distance} / \text{test distance})$.

Although these tests were performed at a test site other than an open area test site, adequate comparison measurements were confirmed against an open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.



Fundamental Data

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0079 AF (dB/m) | Cbl (dB) | Corrected Reading dB(uV/m) | FCC 15.209 Pk Limit @3m dB(uV/m) | PK Margin (dB) | FCC 15.209 Avg Limit @3m dB(uV/m) | Margin (dB) | FCC 15.209 QP Limit @3m dB(uV/m) | Margin (dB) | Azimuth (Degs) |
|----------|-----------------|----------------------|-----|------------------|----------|----------------------------|----------------------------------|----------------|-----------------------------------|-------------|----------------------------------|-------------|----------------|
| Face On | | | | | | | | | | | | | |
| 3 | .03438 | 78.35 | Pk | 13.3 | .1 | 91.75 | 136.86 | -45.11 | - | - | - | - | 321 |
| | .03438 | 78.26 | Av | 13.3 | .1 | 91.66 | - | - | 116.86 | -25.2 | - | - | 321 |
| 5 | .03461 | 69.17 | Pk | 13.2 | .1 | 82.47 | 136.8 | -54.33 | - | - | - | - | 50 |
| | .03462 | 68.8 | Av | 13.2 | .1 | 82.1 | - | - | 116.8 | -34.7 | - | - | 50 |
| 5a | .03486 | 77.99 | Pk | 13.2 | .1 | 91.29 | 136.74 | -45.45 | - | - | - | - | 245 |
| | .03486 | 77.91 | Av | 13.2 | .1 | 91.21 | - | - | 116.74 | -25.53 | - | - | 245 |
| Face Off | | | | | | | | | | | | | |
| 4 | .03438 | 75.18 | Pk | 13.3 | .1 | 88.58 | 136.86 | -48.28 | - | - | - | - | 54 |
| | .03438 | 75.2 | Av | 13.3 | .1 | 88.6 | - | - | 116.86 | -28.26 | - | - | 54 |
| 6 | .0346 | 61.29 | Pk | 13.2 | .1 | 74.59 | 136.8 | -62.21 | - | - | - | - | 327 |
| | .0346 | 61 | Av | 13.2 | .1 | 74.3 | - | - | 116.8 | -42.5 | - | - | 327 |
| 6a | .03486 | 74.62 | Pk | 13.2 | .1 | 87.92 | 136.74 | -48.82 | - | - | - | - | 335 |
| | .03486 | 74.63 | Av | 13.2 | .1 | 87.93 | - | - | 116.74 | -28.81 | - | - | 335 |

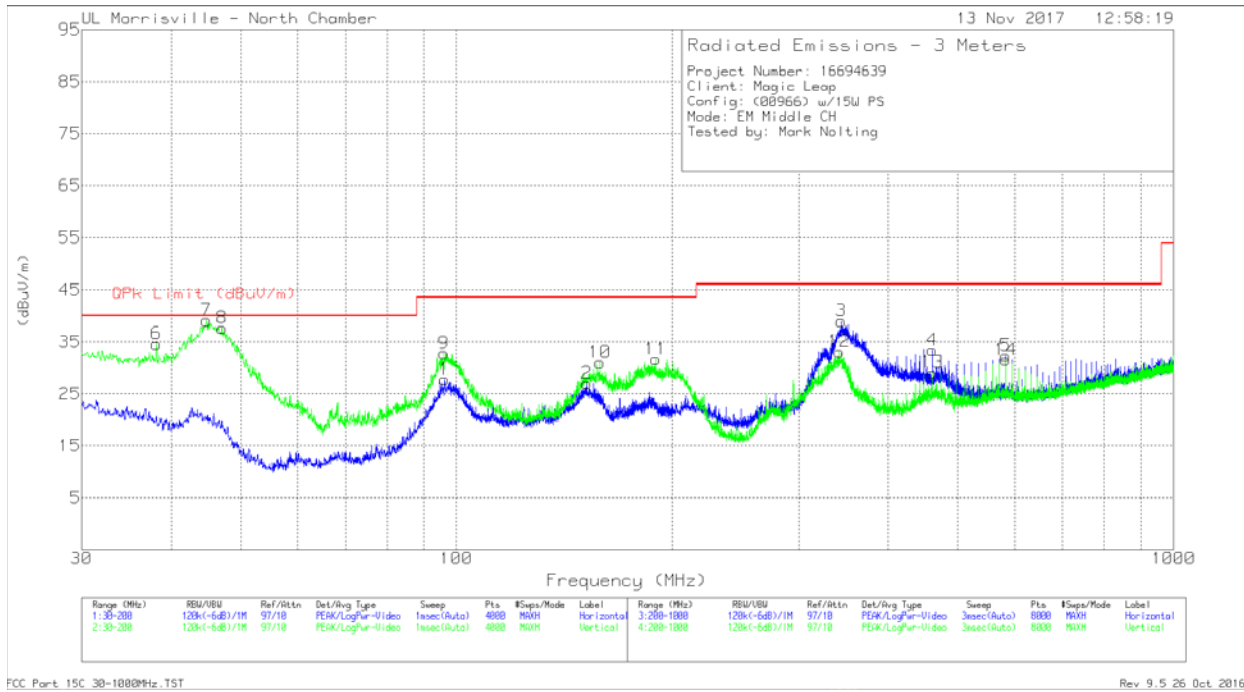
Pk - Peak detector
 Qp - Quasi-Peak detector
 Av - Average detection

Spurious Data

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0079 AF (dB/m) | Cbl (dB) | Corrected Reading dB(uV/m) | FCC 15.209 Pk Limit @3m dB(uV/m) | PK Margin (dB) | FCC 15.209 Avg Limit @3m dB(uV/m) | Margin (dB) | FCC 15.209 QP Limit @3m dB(uV/m) | Margin (dB) | Azimuth (Degs) |
|----------|-----------------|----------------------|-----|------------------|----------|----------------------------|----------------------------------|----------------|-----------------------------------|-------------|----------------------------------|-------------|----------------|
| Face On | | | | | | | | | | | | | |
| 1 | .0225 | 70.94 | Pk | 14.2 | .1 | 85.24 | 140.54 | -55.3 | - | - | - | - | 324 |
| | .0225 | 55.97 | Av | 14.2 | .1 | 70.27 | - | - | 120.54 | -50.27 | - | - | 324 |
| 7 | .67487 | 45.78 | Qp | 11.5 | .1 | 57.38 | - | - | - | - | 71.03 | -13.65 | 291 |
| Face Off | | | | | | | | | | | | | |
| 2 | .0225 | 26.51 | Pk | 14.2 | .1 | 40.81 | 140.54 | -99.73 | - | - | - | - | 59 |
| | .0225 | 51.43 | Av | 14.2 | .1 | 65.73 | - | - | 120.54 | -54.81 | - | - | 59 |
| 8 | .67248 | 23.96 | Qp | 11.5 | .1 | 35.56 | - | - | - | - | 71.06 | -35.5 | 182 |

Pk - Peak detector
 Qp - Quasi-Peak detector
 Av - Average detection

9.3. TX SPURIOUS EMISSION 30 TO 1000 MHz



FCC Part 15C 30-1000MHz TST

Rev 9.5 26 Oct 2016

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0073 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | QPK Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|--------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 1 | 96.1896 | 44.55 | Pk | 14.2 | -31 | 27.75 | 43.52 | -15.77 | 0-360 | 299 | H |
| 2 | 152.0066 | 39.82 | Pk | 17.7 | -30.5 | 27.02 | 43.52 | -16.5 | 0-360 | 199 | H |
| 3 | 344.0573 | 47.35 | Qp | 19.7 | -29.2 | 37.85 | 46.02 | -8.17 | 113 | 102 | H |
| 4 | 460.7339 | 39.77 | Pk | 22.2 | -28.6 | 33.37 | 46.02 | -12.65 | 0-360 | 102 | H |
| 5 | 583.6499 | 36.61 | Pk | 24 | -28.3 | 32.31 | 46.02 | -13.71 | 0-360 | 199 | H |
| 6 | 38.1621 | 38.76 | Qp | 20.6 | -31.7 | 27.66 | 40 | -12.34 | 182 | 101 | V |
| 7 | 45.4843 | 50.58 | Qp | 15.4 | -31.5 | 34.48 | 40 | -5.52 | 278 | 103 | V |
| 8 | 46.2313 | 50.61 | Qp | 15 | -31.5 | 34.11 | 40 | -5.89 | 278 | 103 | V |
| 9 | 96.0621 | 49.65 | Pk | 14.1 | -31 | 32.75 | 43.52 | -10.77 | 0-360 | 101 | V |
| 10 | 158.4682 | 43.87 | Pk | 17.6 | -30.5 | 30.97 | 43.52 | -12.55 | 0-360 | 101 | V |
| 11 | 189.6288 | 45.52 | Pk | 16.3 | -30.2 | 31.62 | 43.52 | -11.9 | 0-360 | 101 | V |
| 12 | 341.9184 | 42.48 | Pk | 19.7 | -29.1 | 33.08 | 46.02 | -12.94 | 0-360 | 102 | V |
| 13 | 460.7339 | 35.45 | Pk | 22.2 | -28.6 | 29.05 | 46.02 | -16.97 | 0-360 | 102 | V |
| 14 | 583.6499 | 35.83 | Pk | 24 | -28.3 | 31.53 | 46.02 | -14.49 | 0-360 | 102 | V |

Pk - Peak detector

Qp - Quasi-Peak detector

10. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207 (a)
ISED RSS-GEN, Section 8.8

| Frequency of emission (MHz) | Conducted Limit (dB μ V) | |
|--------------------------------|------------------------------|-----------|
| | Quasi-peak | Average |
| 0.15 to 0.50 | 66 to 56* | 56 to 46* |
| 0.50 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

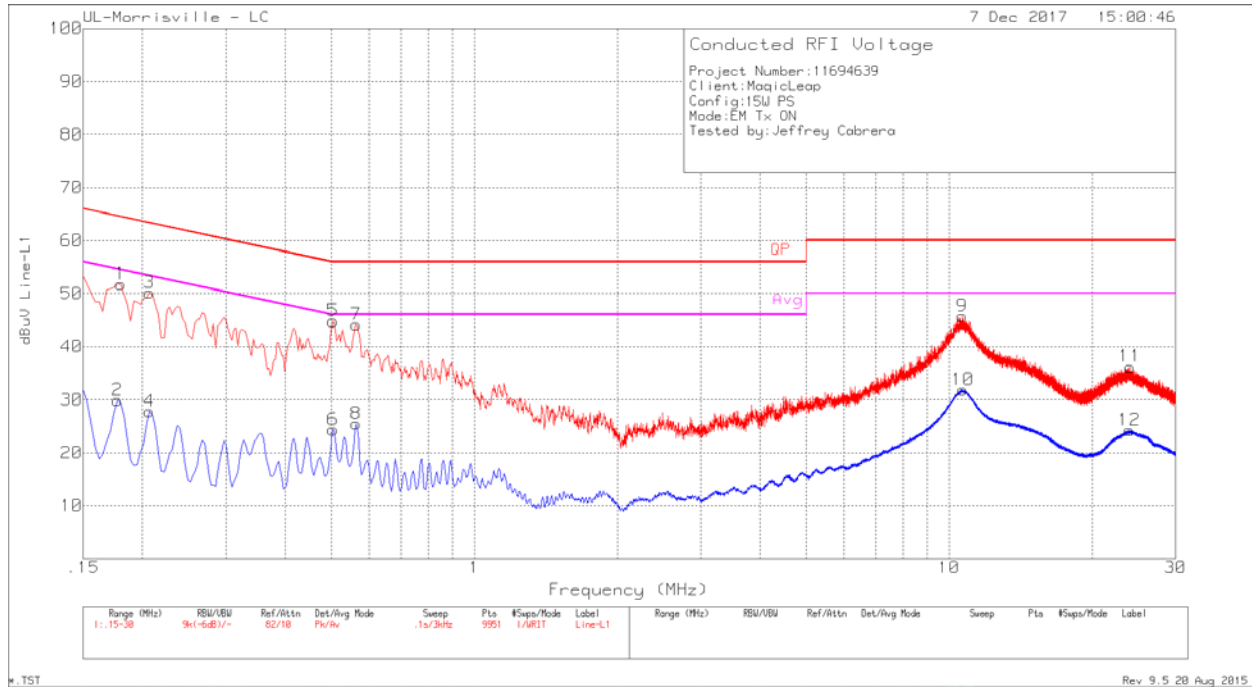
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both lines.

RESULTS

No non-compliance noted.

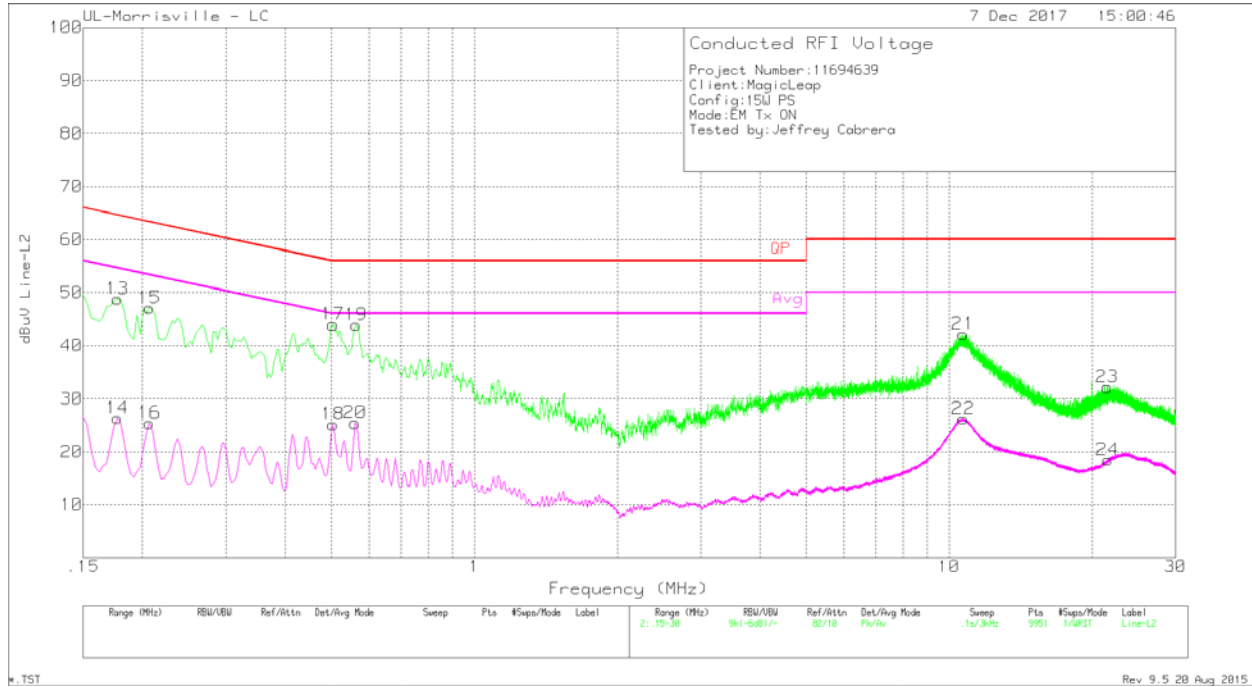
LINE 1 RESULTS



| Range 1: Line-L1 .15 - 30MHz | | | | | | | | | | |
|------------------------------|-----------------|----------------------|-----|---------------|------------------|------------------------|-----------------|----------------|-----------------|----------------|
| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit (dBuV) | QP Margin (dB) | AV Limit (dBuV) | AV Margin (dB) |
| 1 | .18 | 41.62 | Pk | .2 | 10 | 51.82 | 64.49 | -12.67 | - | - |
| 2 | .177 | 19.65 | Av | .2 | 10 | 29.85 | - | - | 54.63 | -24.78 |
| 3 | .207 | 40.2 | Pk | .1 | 9.9 | 50.2 | 63.32 | -13.12 | - | - |
| 4 | .207 | 17.8 | Av | .1 | 9.9 | 27.8 | - | - | 53.32 | -25.52 |
| 5 | .504 | 34.93 | Pk | 0 | 9.9 | 44.83 | 56 | -11.17 | - | - |
| 6 | .504 | 14.49 | Av | 0 | 9.9 | 24.39 | - | - | 46 | -21.61 |
| 7 | .564 | 34.22 | Pk | 0 | 9.9 | 44.12 | 56 | -11.88 | - | - |
| 8 | .564 | 15.57 | Av | 0 | 9.9 | 25.47 | - | - | 46 | -20.53 |
| 9 | 10.653 | 35.53 | Pk | .1 | 10.1 | 45.73 | 60 | -14.27 | - | - |
| 10 | 10.68 | 21.63 | Av | .1 | 10.1 | 31.83 | - | - | 50 | -18.17 |
| 11 | 24.027 | 25.82 | Pk | .2 | 10.2 | 36.22 | 60 | -23.78 | - | - |
| 12 | 23.961 | 13.82 | Av | .2 | 10.2 | 24.22 | - | - | 50 | -25.78 |

Pk - Peak detector
 Av - Average detection

LINE 2 RESULTS



| Range 2: Line-L2 .15 - 30MHz | | | | | | | | | | |
|------------------------------|-----------------|----------------------|-----|---------------|------------------|------------------------|-----------------|----------------|-----------------|----------------|
| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit (dBuV) | QP Margin (dB) | AV Limit (dBuV) | AV Margin (dB) |
| 13 | .177 | 38.63 | Pk | .2 | 10 | 48.83 | 64.63 | -15.8 | - | - |
| 14 | .177 | 16.09 | Av | .2 | 10 | 26.29 | - | - | 54.63 | -28.34 |
| 15 | .207 | 37.06 | Pk | .1 | 9.9 | 47.06 | 63.32 | -16.26 | - | - |
| 16 | .207 | 15.39 | Av | .1 | 9.9 | 25.39 | - | - | 53.32 | -27.93 |
| 17 | .504 | 34.08 | Pk | 0 | 9.9 | 43.98 | 56 | -12.02 | - | - |
| 18 | .504 | 15.26 | Av | 0 | 9.9 | 25.16 | - | - | 46 | -20.84 |
| 19 | .564 | 34.02 | Pk | 0 | 9.9 | 43.92 | 56 | -12.08 | - | - |
| 20 | .561 | 15.51 | Av | 0 | 9.9 | 25.41 | - | - | 46 | -20.59 |
| 21 | 10.707 | 31.99 | Pk | .1 | 10.1 | 42.19 | 60 | -17.81 | - | - |
| 22 | 10.71 | 15.98 | Av | .1 | 10.1 | 26.18 | - | - | 50 | -23.82 |
| 23 | 21.54 | 21.78 | Pk | .2 | 10.2 | 32.18 | 60 | -27.82 | - | - |
| 24 | 21.576 | 8.07 | Av | .2 | 10.2 | 18.47 | - | - | 50 | -31.53 |

Pk - Peak detector
 Av - Average detection

11. SETUP PHOTOS

Refer to UL Report R11694639-EP1.

END OF REPORT