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**EMC testing of the Levven Electronics Ltd. LC-Q2 in accordance with FCC
Part 15.247, and ANSI C63.10: 2013 for Co-Location Analysis.**

FCC ID: 2AA9N-LCQ2

Prepared for: Levven Electronics Ltd
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REVISION RECORD

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| | | | |

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1.0 INTRODUCTION

1.1 Scope

The purpose of this report is to present the results of compliance testing performed in accordance with FCC Part 15.247, and ANSI C63.10-2013 to gain permissive change for pre-certified Low-Power License-Exempt transmitters. All test procedures, limits, criteria, and results described in this report apply only to the Levven Electronics Ltd. LC-Q2 test sample, referred to herein as the EUT (Equipment Under Test).

The sample has been provided by the customer.

This report does not imply product endorsement by the Electronics Test Centre, A2LA, nor any Canadian Government agency.

1.2 Applicant

This test report has been prepared for Levven Electronics Ltd, located in Calgary, Alberta, Canada.

1.3 Test Sample Description

As provided to ETC (Airdrie) by Levven Electronics Ltd:

| | | |
|---|----------------------------------|---|
| Product Name: | | Levven Controls Q2 Gateway |
| Levven Radio | Frequency Band | 902 – 928 MHz |
| | Type of Modulation | GFSK |
| | BW/Frequency Range | DTS 750kHz, 903 – 927 MHz, 33 Channels |
| | Associated Antenna | PCB trace, gain 0dBi |
| | Detachable/Non Detachable | Non-Detachable |
| Wi-Fi & Bluetooth Pre-Certified Module | Frequency Band (BT) | 2402 – 2480 MHz |
| | Frequency Band (Wi-Fi) | 2412 – 2462 MHz |
| | FCC ID | 2AC7Z-ESP32WROVERB |
| | Associated Antenna | PCB trace, gain 3.74 dBi |
| Model# / Serial# | | Model: LC-Q2, s/n: EMC1 (radiated) |
| Power supply: | | AC / DC Adaptor (120VAC / 60Hz, 0.55A), mfr: LI TONE Electronics Co. Ltd. Model: LTE18WS-S1, s/n: 184100015 |

Note: All mode and channels were evaluated for pre-certified module using customer provided program. Worst case channel and axis (see test setup photo exhibit for final axis selected) was selected for detail analysis for radiated spurious emission and co-location analysis.

1.4 General Test Conditions and Assumptions

The EUT was set up and exercised using the configurations, modes of operation and arrangements defined in this report only. All inputs and outputs to and from other equipment associated with the EUT were adequately simulated.

The environmental conditions are recorded during each test and are reported in the relevant sections of this document.

1.5 Scope of Testing

Tests were performed in accordance with FCC Part 15.247, ANSI C63.4: 2014, ANSI C63.10: 2013 as referenced in FCC OET KDB 558074 D01 15.247 Measurement Guidance v05r02.

1.5.1 Test Methodology

Test methods are specified in the Basic Standard as referenced and/or modified by the Product Standard in the part of Section 2 of this report associated with each particular test case.

1.5.2 Variations in Test Methodology

Any variance in methodology or deviation from the reference Standard is documented in the part of Section 2 of this report associated with each particular Test Case.

1.5.3 Test Sample Verification, Configuration & Modifications

EUT setup, configuration, protocols for operation and monitoring of EUT functions, and any modifications performed in order to meet the requirements, are detailed in each Test Case of Section 2 of this report.

1.5.4 Uncertainty of Measurement:

The factors contributing to uncertainty of measurement are identified and calculated in accordance with UKAS (United Kingdom Accreditation Service) document "Lab 34, The Expression of Uncertainty in EMC Testing, Aug 2002." as based on the "ISO Guide to the Expression of Uncertainty in Measurement, 1995."

This uncertainty estimate represents an expended uncertainty expressed at approximately 95% confidence using a coverage factor of $k = 2$.

| Test Method | Uncertainty |
|---|---------------|
| Radiated Emissions Level (9 KHz – 1 GHz) | ± 4.6 dB |
| Radiated Emissions Level (1 GHz – 26.5 GHz) | ± 5.31 dB |
| Conducted Emissions Level (150 KHz – 30 MHz) | ± 2.7 dB |
| Uncertainty Conducted Power level | ± 0.5 dB |
| Uncertainty Conducted Spurious emission level | ± 0.6 dB |
| Uncertainty for Bandwidth test | ± 1.5 % |

2.0 TEST CONCLUSION

STATEMENT OF COMPLIANCE

The customer equipment referred to in this report was found to comply with the requirements, as summarized below.

The EUT was subjected to the following tests. Compliance status is reported as **Compliant** or **Non-compliant**. **N/A** indicates the test was Not Applicable to the EUT.

Note: Maintenance of compliance is the responsibility of the Manufacturer. Any modifications to the product should be assessed to determine their potential impact on the compliance status of the EUT with respect to the standards detailed in this test report.

The following table summarizes the tests performed in terms of the specification, class or performance criterion applied, and the EUT modification state.

| Test Case | Test Type | Specification | Test Sample | Modifications | Config. | Result |
|------------------|---|-----------------------------|--------------------|----------------------|----------------|------------------|
| 2.1 | AC Conducted Emissions (Tx) | 15.207 | LC-Q2 s/n EMC1 | none | see § 2.1 | Compliant |
| 2.2 | Radiated Spurious Emission in Restricted Band (Tx Mode) | 15.205, 15.209 15.247(d) | LC-Q2 s/n EMC1 | none | see § 2.2 | Compliant |
| 2.3 | RF Exposure | 15.247(i) | LC-Q2 s/n EMC2 | none | see § 2.3 | Exempt |

Refer to the test data for applicable test conditions.

2.1 AC Power Line Conducted Emissions: Transmit Mode

| | |
|--|-----------------------------------|
| Test Lab: Electronics Test Centre, Airdrie | EUT: LC-Q2 s/n EMC1 |
| Test Personnel: Imran Akram | Standard: FCC Part 15.207 |
| Date: 2019-11-06 (20.8°C, 13.9 % RH) | Basic Standard: ANSI C63.10: 2013 |
| EUT status: Compliant | |

Specification: Part 15.207

| Frequency (MHz) | Quasi-Peak Limit (dBµV) | Average Limit (dBµV) |
|---|-------------------------|----------------------|
| 0.15 – 0.5 | 66 – 56 | 56 – 46 |
| 0.5 – 5 | 56 | 46 |
| 5 – 30 | 60 | 50 |
| Criteria: The conducted emissions produced by a device shall not exceed the limits as specified. | | |

2.1.1 Test Guidance:

Before any testing is performed, the Ambient (measurement noise floor) is recorded, and a QC check is performed to show that the system is functioning correctly.

Testing starts with a scan, performed under software control. After this is complete, the list of frequencies of interest is generated. These frequencies are then investigated for quasi-peak and average amplitude, as applicable. Emissions measured with a QP detector that fall below the Average limit are deemed to meet both requirements.

2.1.2 Deviations From The Standard:

There were no deviations from the EUT setup or methodology specified in the standard.

2.1.3 Test Equipment

Testing was performed with the following equipment:

| Equipment | Manufacturer | Model # | Asset # | Cal. Date (yyyy-mm-dd) | Cal. Due (yyyy-mm-dd) |
|----------------------|---------------------|-----------------------------|----------------|------------------------|-----------------------|
| EMC Software | UL | Ver. 9.5 | ETC-SW-EMC 2.1 | N/A | N/A |
| EMI receiver | Agilent | N9038A (FW A.23.07) | 6130 | 2019-05-10 | 2020-05-10 |
| LISN | Com-Power | LI-215A | 6180 | 2018-06-06 | 2020-06-06 |
| Temp/RH logger | Extech | 42270 | 5892 | 2019-04-05 | 2020-04-05 |
| RE Cable below 30MHz | Insulated Wire Inc. | KPS-1501A-3600-KPA-01102006 | 4436 | 2019-01-03 | 2020-01-03 |

2.1.4 Test Sample Verification, Configuration & Modifications

The EUT PCB is embedded pre-certified radio module which can be configured in either Wi-Fi or Bluetooth mode. Conducted Emission test is performed to analyze the effect of the pre-certified module in the following configurations,

1st Configuration:

Levven radio is configured to transmit at channel 903 MHz and pre-certified module is configured in Wi-Fi mode and worse transmitting channel frequency is 2442 MHz. Both are transmitting in continuous mode.

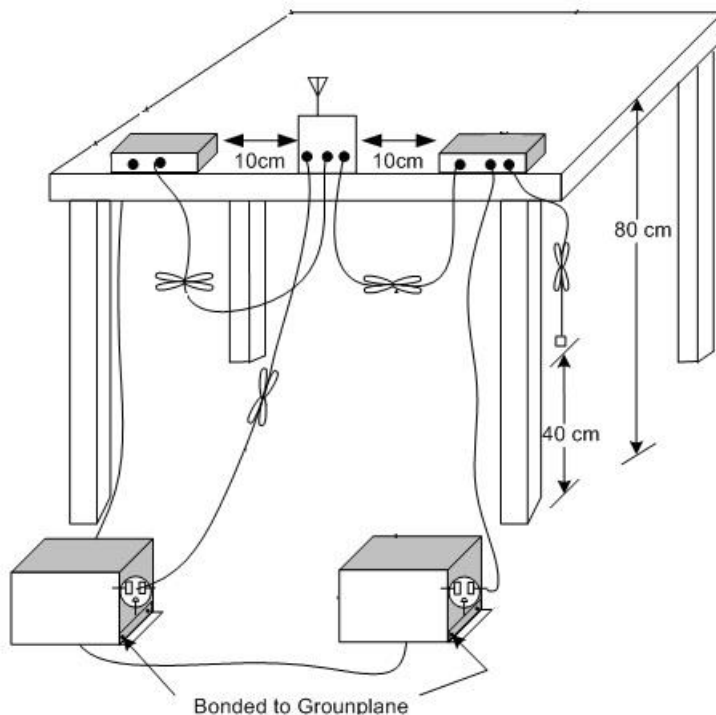
2nd Configuration:

Levven radio is configured to transmit at channel 903 MHz and pre-certified module is configured in BT mode and worse transmitting channel frequency is 2480 MHz. Both are transmitting in continuous mode.

All transmitting channels are selected as worst-case scenario after performing the preliminary analysis on all modes of Wi-Fi and Bluetooth. The output was modulated as in normal operation.

The EUT met the requirements without modification.

Test setup diagram:



2.1.5 Conducted Emissions Data:

| Freq. Marker | Freq. [MHz] | Meter reading [dBμV] | Det | LISN Factor [dB] | Pre amp Gain [dB] | Corrected Reading [dBμV] | FCC 15.207 Limit [dBμV] | Delta [dB] | L/N |
|-------------------------------------|-------------|----------------------|-----|------------------|-------------------|--------------------------|-------------------------|------------|-----|
| 1st Configuration | | | | | | | | | |
| 1 | 0.4039 | 39.97 | Av | 0 | .1 | 40.07 | 47.77 | -7.7 | L |
| 2 | 2.11302 | 36.21 | Av | 0 | .2 | 36.41 | 46 | -8.59 | L |
| 3 | 5.59974 | 34.28 | Av | 0 | .4 | 34.68 | 50 | -15.32 | L |
| 1 | 0.40434 | 39.5 | Av | 0 | .1 | 39.6 | 47.76 | -8.16 | N |
| 2 | 2.11305 | 36.09 | Av | 0 | .2 | 36.29 | 46 | -9.71 | N |
| 3 | 5.54413 | 33.44 | Av | 0 | .4 | 33.84 | 50 | -16.16 | N |
| 2nd Configuration | | | | | | | | | |
| 1 | 0.40314 | 35.52 | Av | 0 | .1 | 36.62 | 47.79 | -12.17 | L |
| 2 | 2.10937 | 35.2 | Av | 0 | .2 | 35.4 | 46 | -10.6 | L |
| 3 | 5.54386 | 33.75 | Av | 0 | .4 | 34.15 | 50 | -15.85 | L |
| 1 | 0.40299 | 35.26 | Av | 0 | .1 | 35.36 | 47.79 | -12.43 | N |
| 2 | 2.11043 | 35.28 | Av | 0 | .2 | 35.48 | 46 | -10.52 | N |
| 3 | 5.54389 | 34.31 | Av | 0 | .4 | 34.71 | 50 | -15.29 | N |

Av = average detector

NOTE: "-" Indicates an emission level below the applicable limit (s).

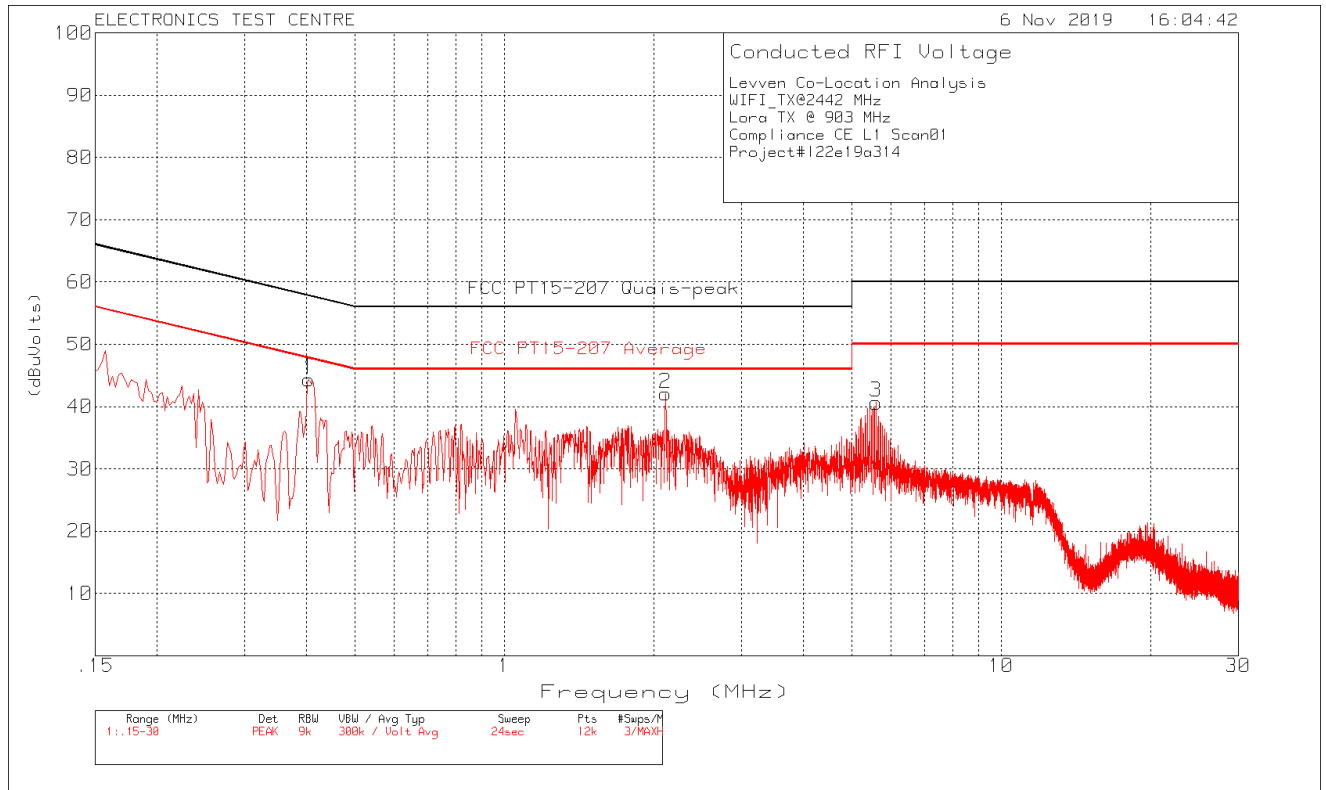
Meter Reading in dBμV + LISN Factor dB + Loss Factor in dB = Corrected Field Strength in dBμV.

Delta = Field Strength - Limit

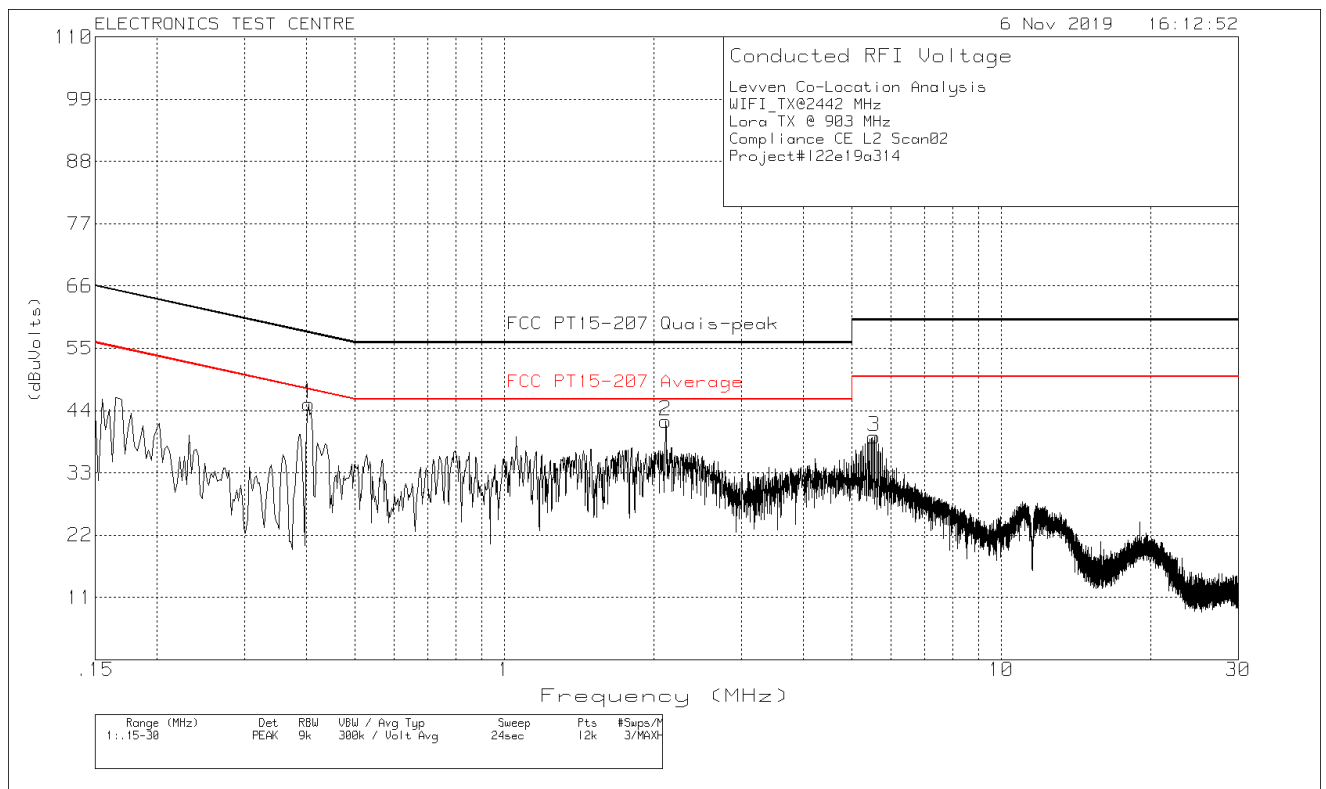
The Ground Bond was measured and found to be 1.25 mΩ.

1st Configuration:

Plot of Conducted Emissions: Line1

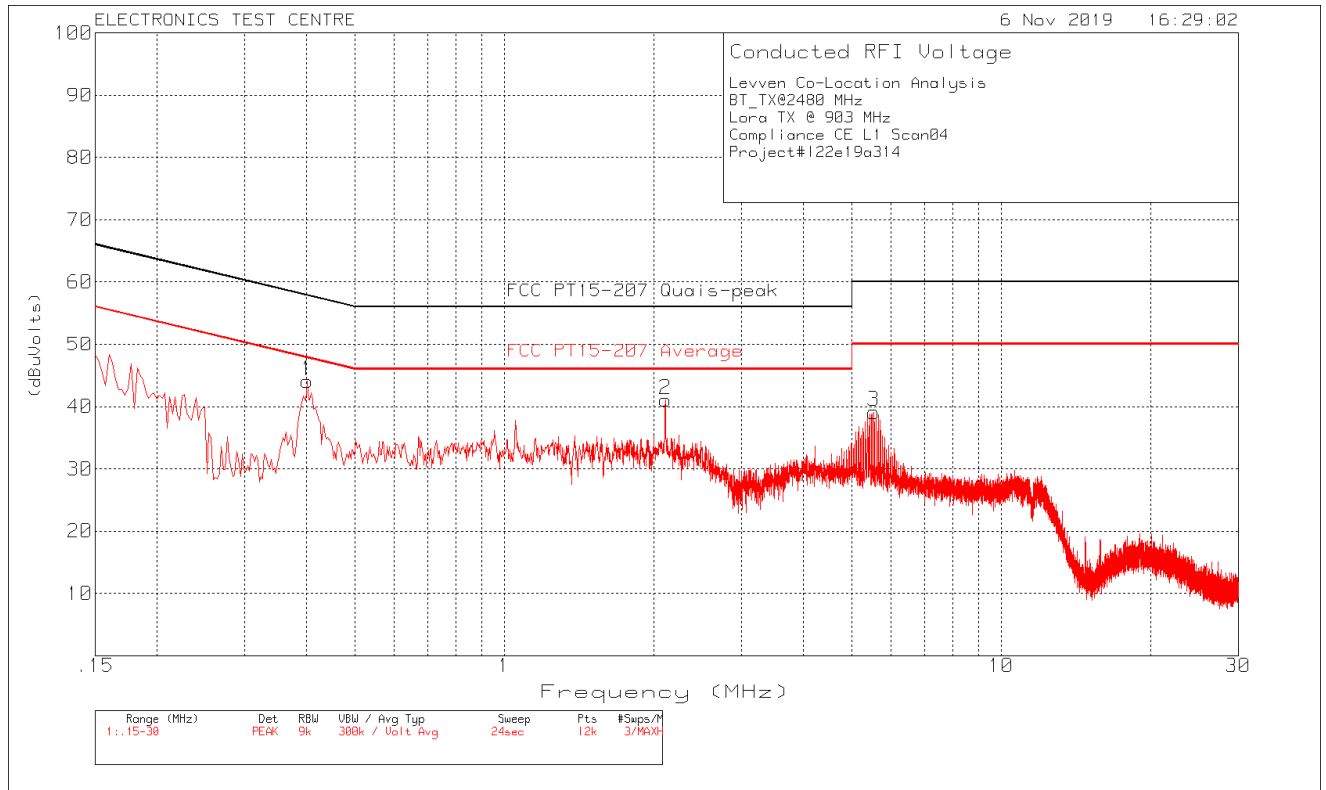


Plot of Conducted Emissions: Line2

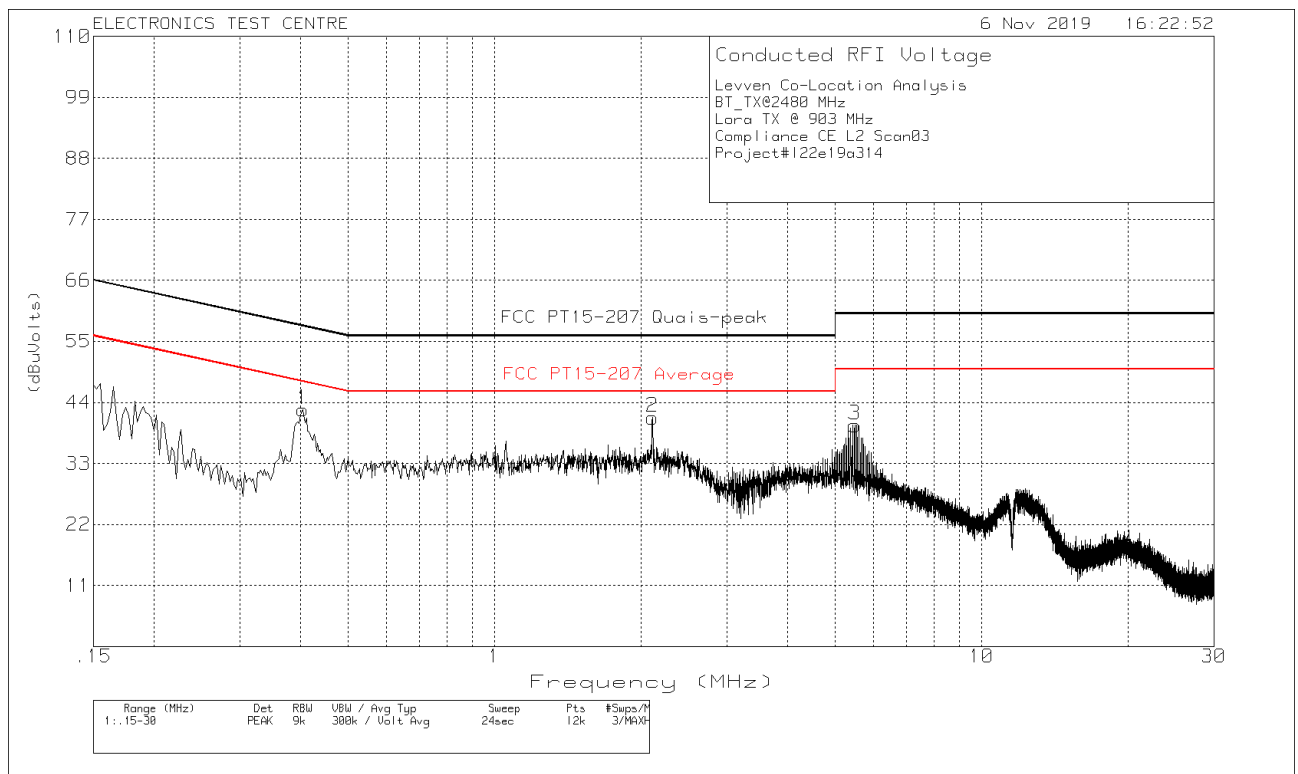


2nd Configuration:

Plot of Conducted Emissions: Line1



Plot of Conducted Emissions: Line2



2.2 Radiated Spurious Emissions in restricted frequency bands Co-Location (TX Mode)

Test Lab: Electronics Test Centre, Airdrie

EUT: LC-Q2 s/n EMC1

Test Personnel: Imran Akram

Standard: FCC PART 15.247

Date: 2019-11-05/06 (19.2°C, 21.5% RH)

Basic Standard: ANSI C63.10-2013

EUT status: Compliant

Specification: FCC PART 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

2.2.1 Test Guidance: ANSI C63.10-2013, Clause 11.12 / KDB 558074 D01 15.247 Measurement Guidance v05r02 Clause 8.6

From 9 kHz to 150 kHz (resolution bandwidth of 200 Hz) and from 150 kHz to 30 MHz (resolution bandwidth 9 kHz) measurements are performed with a loop antenna (as per KDB 460108).

From 30 MHz to 1000 MHz, measurements are performed with a broadband biconilog antenna and a resolution bandwidth of 120 kHz.

Above 1000 MHz, measurements are performed with a DRG Horn antenna or a Standard Gain horn, and a resolution bandwidth of 1 MHz. The EUT is raised to 150 cm above the ground plane, and the area between the EUT and the antenna mast is covered with RF absorbent material.

The scan is performed at discrete increments of turntable azimuth and antenna height, which are selected in accordance with the applicable standard in order to assure capture of frequencies of interest. Optimization is performed based on the scan data.

Frequencies having peak emissions within 10dB of the limits are optimized. The EUT is rotated in azimuth over 360 degrees and the direction of maximum emission is noted.

Antenna height is varied from 1 – 4 meters at this azimuth to obtain the maximum emission. Then the maximum level is measured with the appropriate detector and recorded. Up to 1 GHz, measurements are performed with a Quasi-Peak detector. Above 1 GHz, measurements are recorded with Peak and/or Average detectors, as applicable.

Emission fall in restricted Band = limit is 74 dBuV/m (Peak) / 54dBuV/m (Average)

Emission fall in Non restricted Band = Limit is 20dBc (Peak) / 30dBc (Average)
[attenuation below carrier]

2.2.2 Deviations From The Standard:

There were no deviations from the EUT setup or methodology specified in the standard.

2.2.4 Test Equipment

Testing was performed with the following equipment:

| Equipment | Manufacturer | Model # | Asset # | Cal. Date (yyyy-mm-dd) | Cal. Due (yyyy-mm-dd) |
|--|------------------------|-------------------------------------|----------------|---------------------------|--------------------------|
| EMC Software | UL | Ver. 9.5 | ETC-SW-EMC 2.1 | N/A | |
| EMI receiver | Agilent | N9038A (FW A.23.07) | 6130 | 2019-05-10 | 2020-05-10 |
| Loop Antenna | EMCO | 6502 | 10868 | 2019-04-11 | 2020-04-11 |
| Biconilog Antenna | ARA | LPB-2520/A | 4318 | 2018-09-19 | 2020-09-19 |
| DRG Horn | EMCO | 3115 | 19357 | 2018-09-12 | 2020-09-12 |
| Humidity/Temp Logger | Extech Ins. Corp. | 42270 | 5892 | 2019-04-05 | 2020-04-05 |
| Low Noise Amplifier (1 – 18 GHz) | MITEQ | JS43-01001800- 21-5P | 4354 | 2019-01-03 | 2020-01-03 |
| Pre-Amplifier (30 – 1300 MHz) | HP | 8447D | 9291 | 2019-01-03 | 2020-01-03 |
| RE Cable below 1GHz | Insulated Wire Inc. | KPS-1501A- 3600-KPA- 01102006 | 4419 | 2019-01-03 | 2020-01-03 |
| Re Cable Above 1 GHz | A.H. System Inc. | SAC-26G-8.23 | 6187 | 2019-01-03 | 2020-01-03 |

2.2.5 Test Sample Verification, Configuration & Modifications

The EUT PCB is embedded pre-certified radio module which can be configured in either Wi-Fi or Bluetooth mode. Conducted Emission test is performed to analyze the effect of the pre-certified module in the following configurations,

1st Configuration:

Levven radio is configured to transmit at channel 903 MHz and pre-certified module is configured in Wi-Fi mode and transmitting channel frequency is 2442 MHz. Both are transmitting in continuous mode.

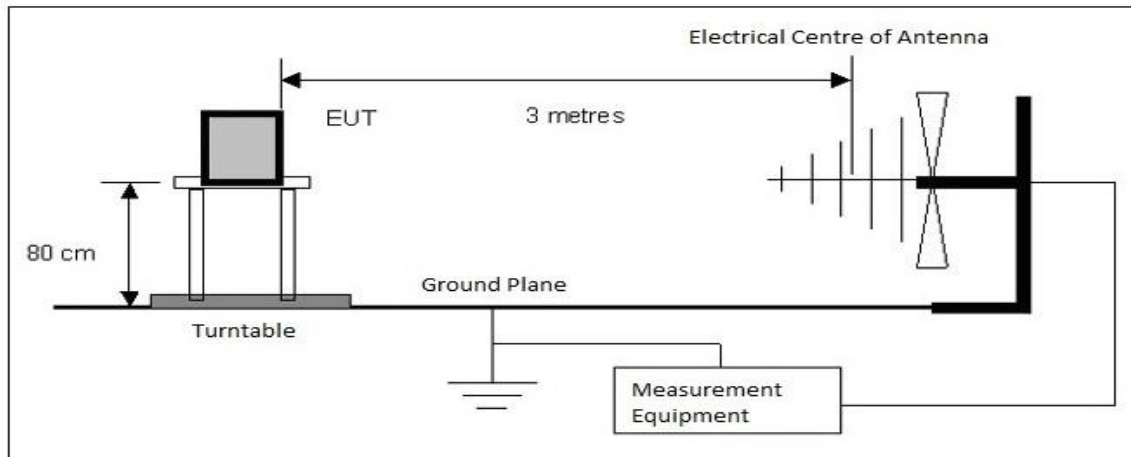
2nd Configuration:

Levven radio is configured to transmit at channel 903 MHz and pre-certified module is configured in BT mode and transmitting channel frequency is 2480 MHz. Both are transmitting in continuous mode.

All transmitting channels are selected as worst-case scenario after performing the preliminary analysis on all modes of Wi-Fi and Bluetooth. The output was modulated as in normal operation.

The EUT met the requirements without modification.

Test setup diagram for Radiated Spurious Emissions testing (below 1GHz):



Above 1GHz, the EUT is raised using a low permittivity material (polystyrene) to a height of 1.5m.

FCC Part 15.205 Restricted Bands of Operation:

| MHz | MHz | MHz | GHz |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| ¹ 0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2690 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | (²) |
| 13.36 - 13.41 | | | |

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz, ² Above 38.6

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in 15.209 shall be demonstrated based on the average value of the measured emissions.

Specification: FCC15.209 Radiated emission limits.

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field strength (microvolts/meter) | Measurement distance (meters) |
|-----------------|-----------------------------------|-------------------------------|
| 0.009 - 0.490 | $2400/F(\text{kHz})$ | 300 |
| 0.490 - 1.705 | $24000/F(\text{kHz})$ | 30 |
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

2.2.6 Radiated Emissions Data:

The emissions data are presented in tabular form, showing turntable azimuth, antenna height and polarization, the uncorrected spectrum analyzer reading, the correction factors applied, the net result, the value of the limit at the frequency investigated, and the Delta between the result and the limit.

Meter Reading in dBμV + Antenna Factor in dB/m + Gain/Loss Factor in dB = Corrected Field Strength in dBμV/m.

Delta = Field Strength - Limit

Notes: When a preamp is used, the resulting gain is compensated, producing a negative value for the Cable Loss.

- Measurements reported are the result of adjusting the turntable azimuth and antenna height to obtain the maximum EUT emission. This may produce a different reading than the plot trace. The plot is a Peak Hold function obtained at discrete increments of height and azimuth, while the reported measurement is obtained with the appropriate Quasi Peak or Average detector after the height and azimuth have been adjusted for maximum emission.
- Preliminary scans were performed for all channels in Transmit modes. The worst-case channels were selected for detailed examination for all radios.
- In Transmit mode, the EUT was assessed up to 25.0 GHz.
- No emission found above 18 GHz to report.

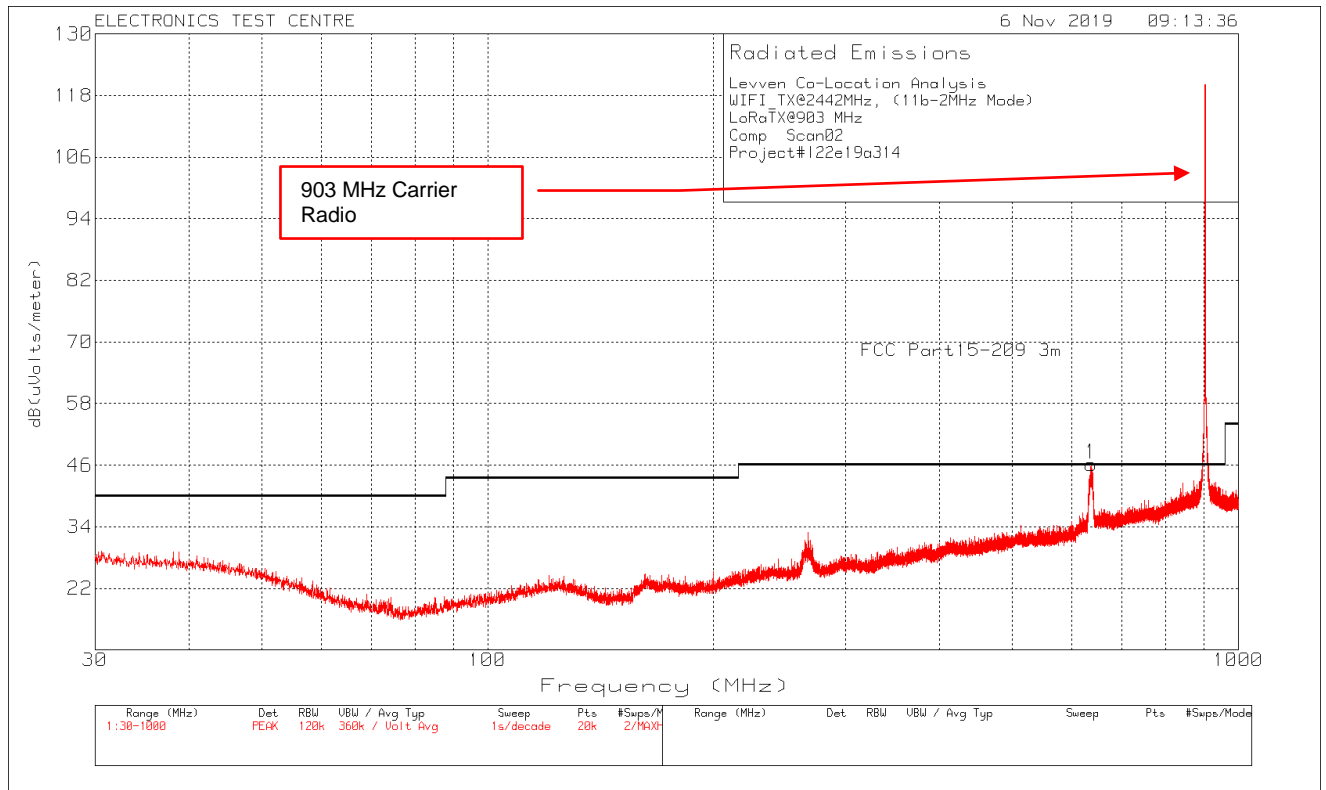
| Freq. Marker | Freq. [MHz] | Raw reading [dBμV] | Det | Antenna Factor [dB/m] | Pre amp Gain [dB] | Corrected Reading [dBμV/m] | FCC 15.209 Limit [dBμV/m] | Delta [dB] | Azimuth [Deg] | Height [cm] | Polarization |
|---------------------------------|-------------|--------------------|-----|-----------------------|-------------------|----------------------------|---------------------------|------------|---------------|-------------|--------------|
| (1 st Configuration) | | | | | | | | | | | |
| 1 | 636.7842 | 22.81 | QP | 23.1 | -20 | 25.91 | 46.02 | -20.11 | 0 | 110 | Horizontal |
| 1 | 4884.0 | 42.82 | PK | 33.4 | -32.1 | 44.12 | 54 | -9.88 | 26 | 251 | Horizontal |
| 2 | 4884.0 | 43.71 | PK | 33.4 | -32.1 | 45.01 | 54 | -8.99 | 45 | 251 | Vertical |
| (2 nd Configuration) | | | | | | | | | | | |
| 1 | 37.73 | 37.73 | QP | 23.5 | -19.8 | 41.43 | 46.02 | -4.59 | 0 | 105 | Horizontal |
| 2 | 33.42 | 33.42 | QP | 25.1 | -18.6 | 39.92 | 46.02 | -6.1 | 330 | 106 | Horizontal |
| 3 | 31.93 | 31.93 | QP | 25.6 | -18.8 | 38.73 | 46.02 | -7.29 | 71 | 111 | Horizontal |
| 4 | 31.1 | 31.16 | QP | 26.3 | -18.6 | 38.86 | 46.02 | -7.16 | 1 | 102 | Horizontal |
| 5 | 32.81 | 32.81 | QP | 12.2 | -23.8 | 21.21 | 43.5 | -22.29 | 354 | 117 | Vertical |

Negative values for Delta indicate compliance.

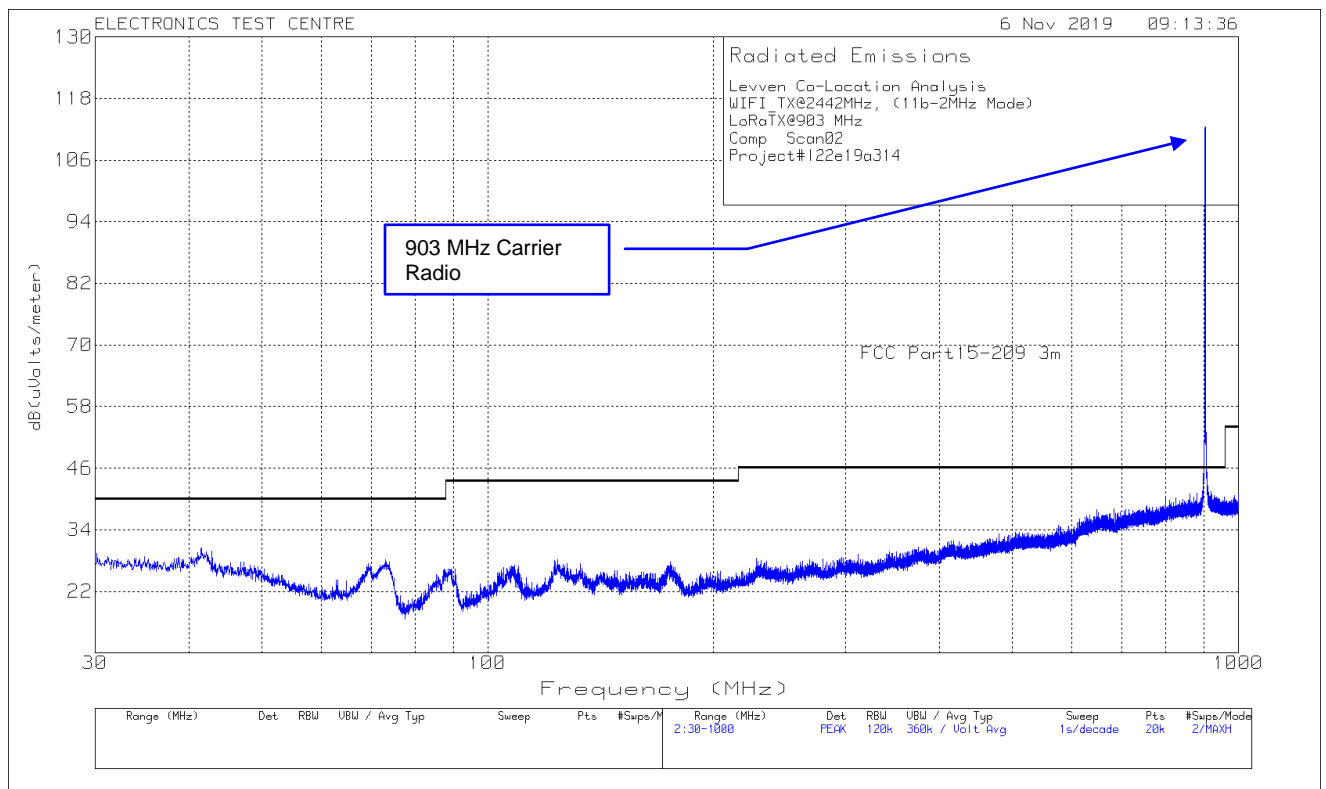
*** Restricted Band**

1st Configuration Plots

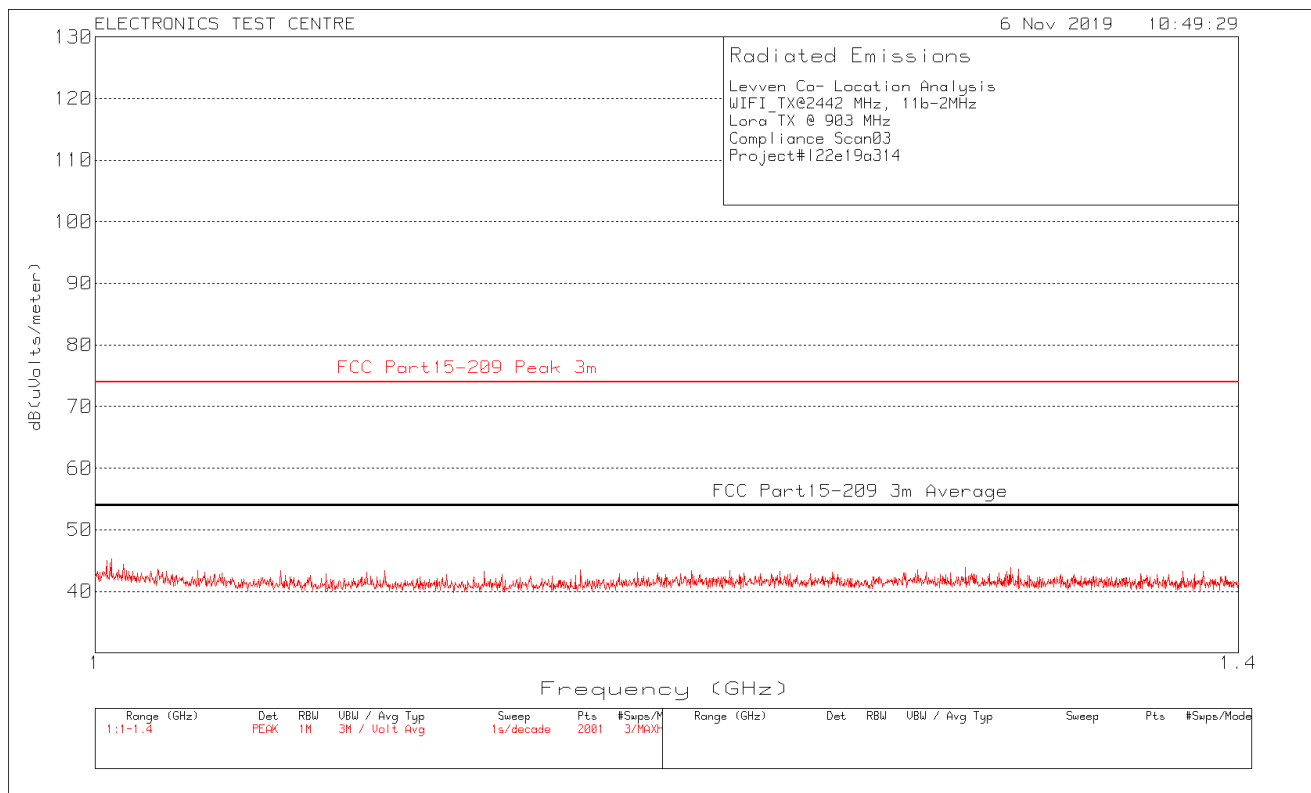
Plot of Radiated Emissions: Horizontal polarization



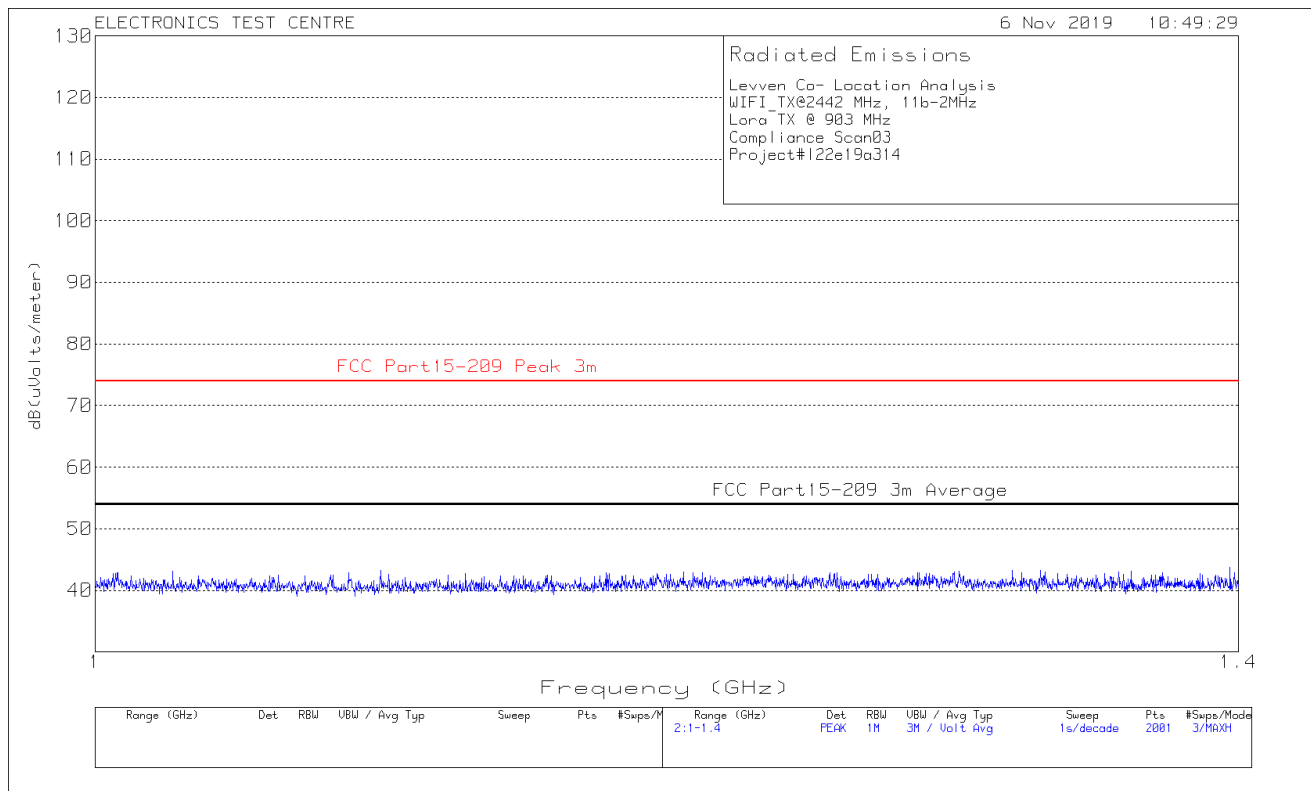
Plot of Radiated Emissions: Vertical polarization



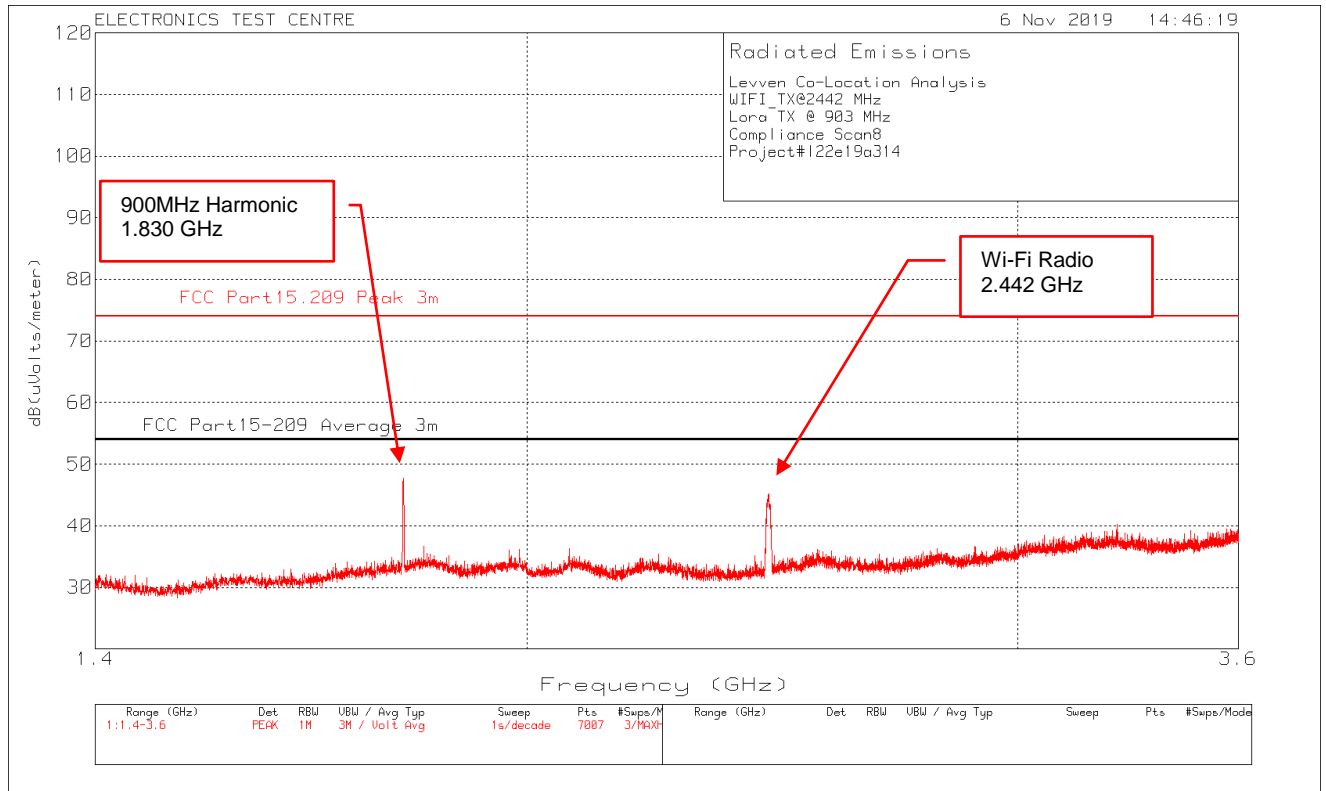
Plot of Radiated Emissions: Horizontal polarization



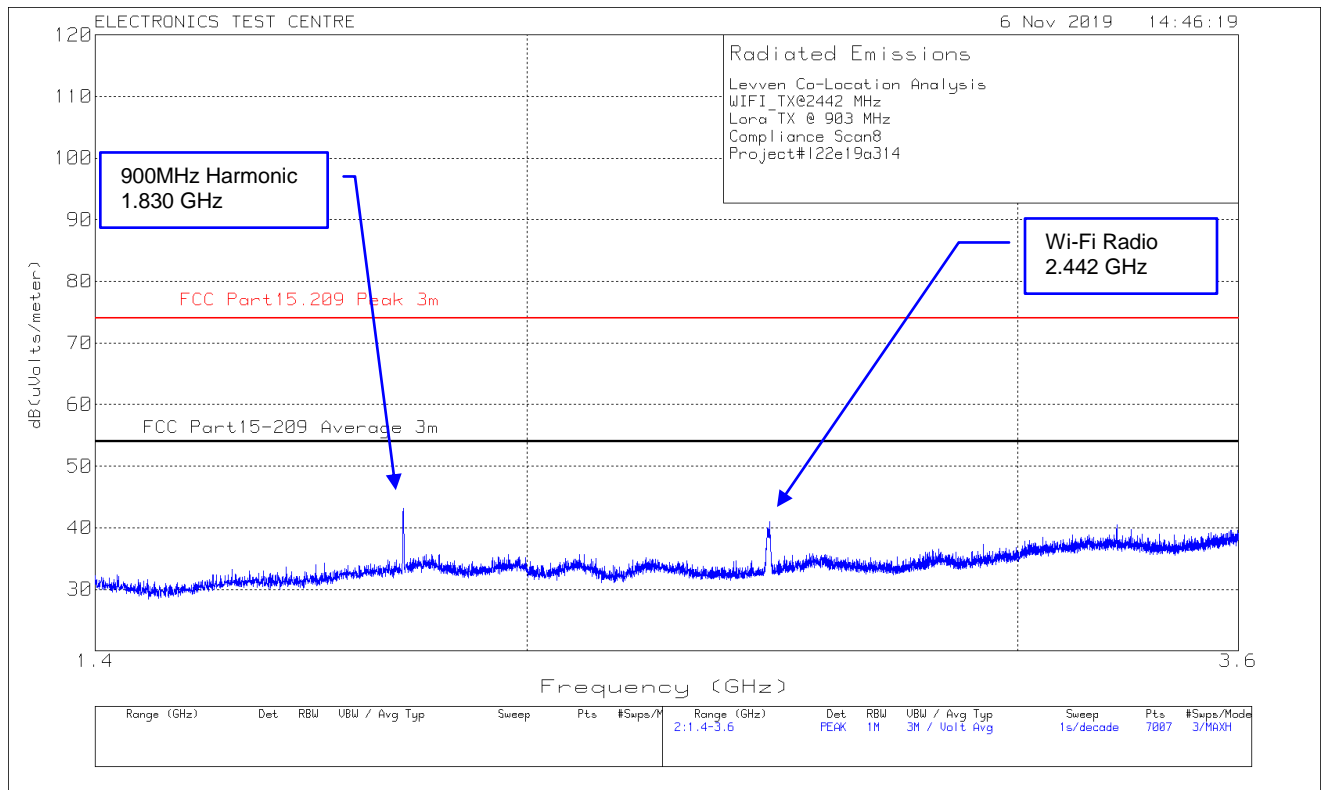
Plot of Radiated Emissions: Vertical polarization



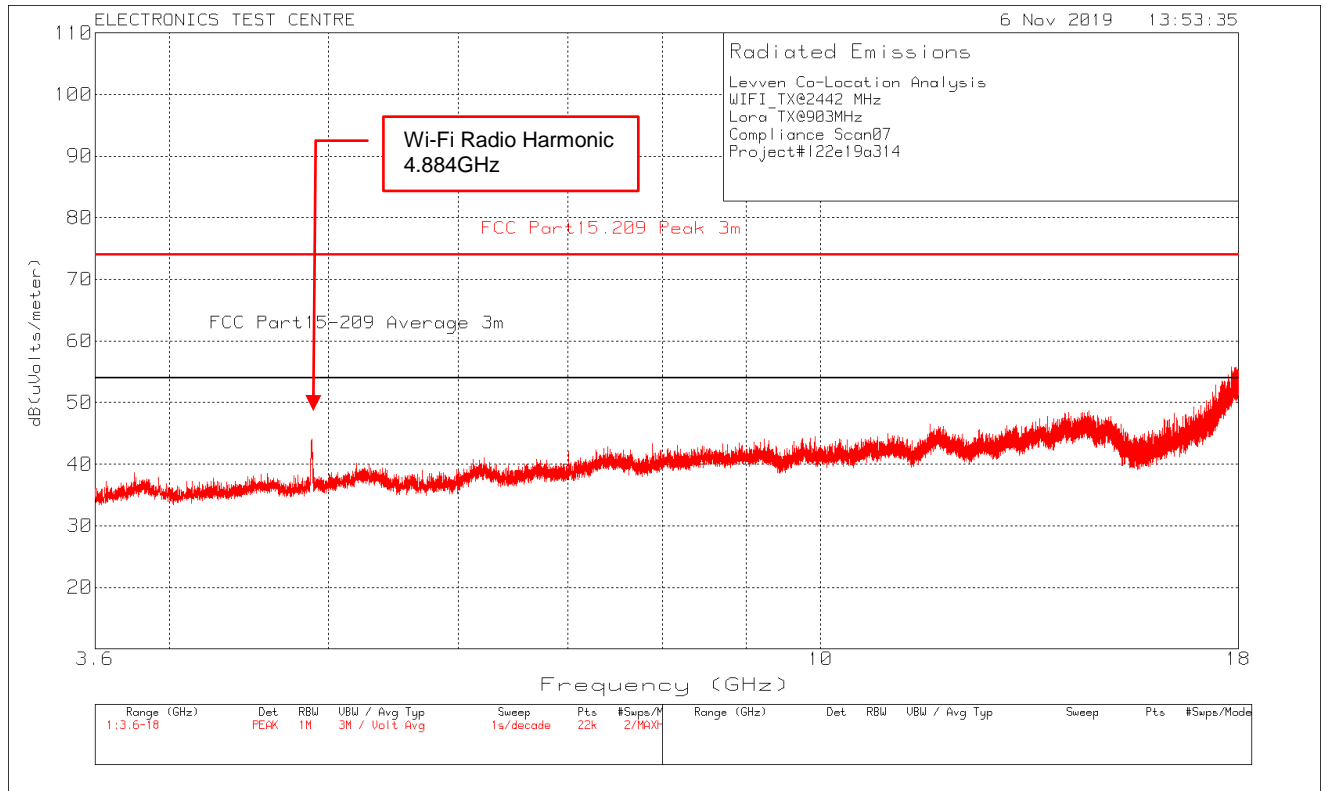
Plot of Radiated Emissions: Horizontal polarization



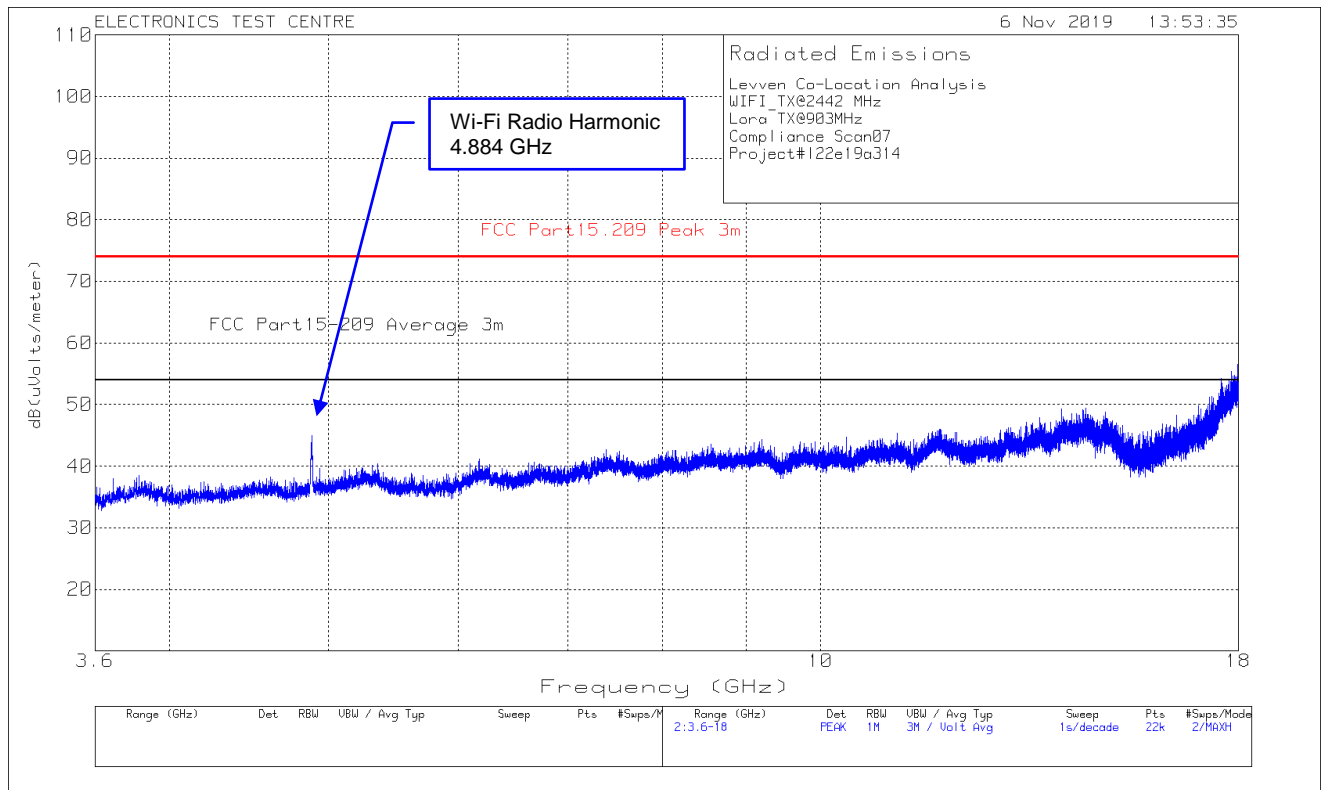
Plot of Radiated Emissions: Vertical polarization



Plot of Radiated Emissions: Horizontal polarization

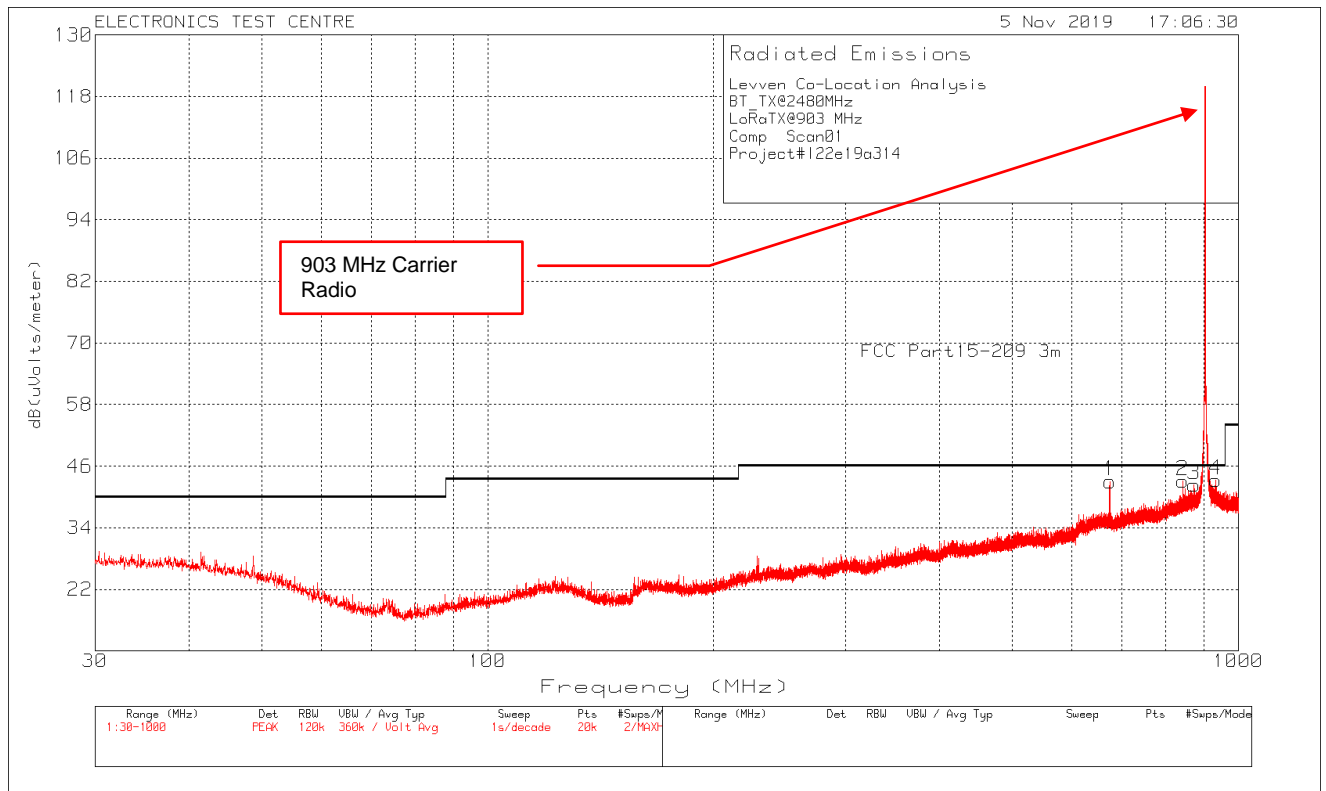


Plot of Radiated Emissions: Vertical polarization

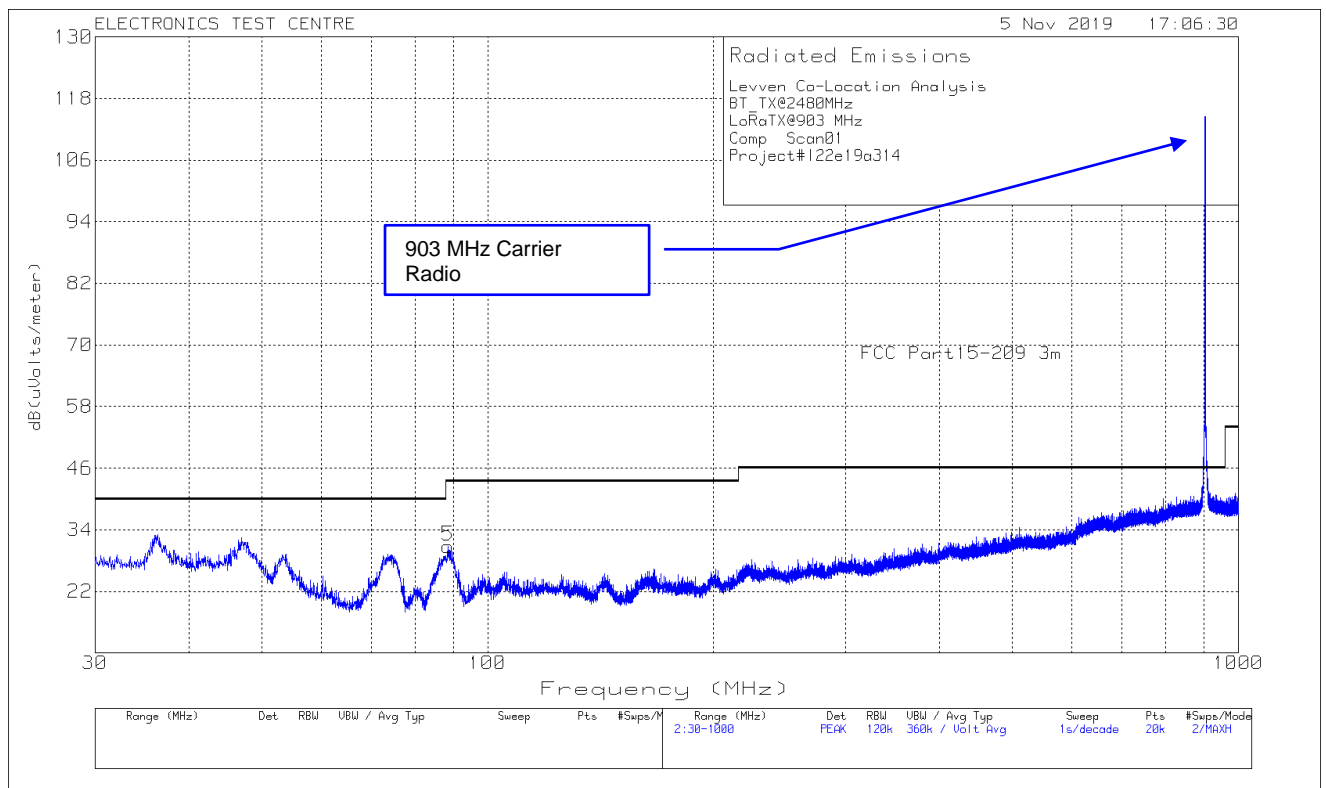


2nd Configuration Plots:

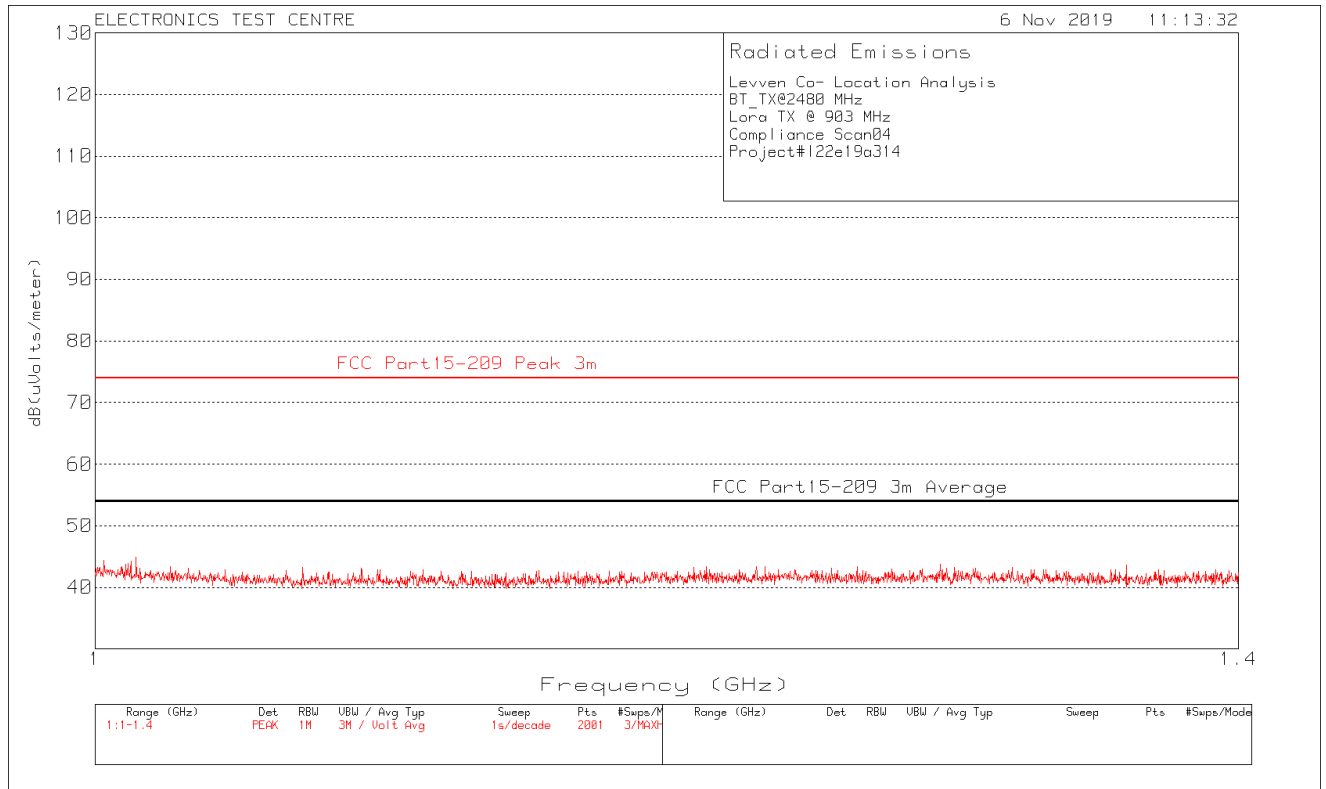
Plot of Radiated Emissions: Horizontal polarization



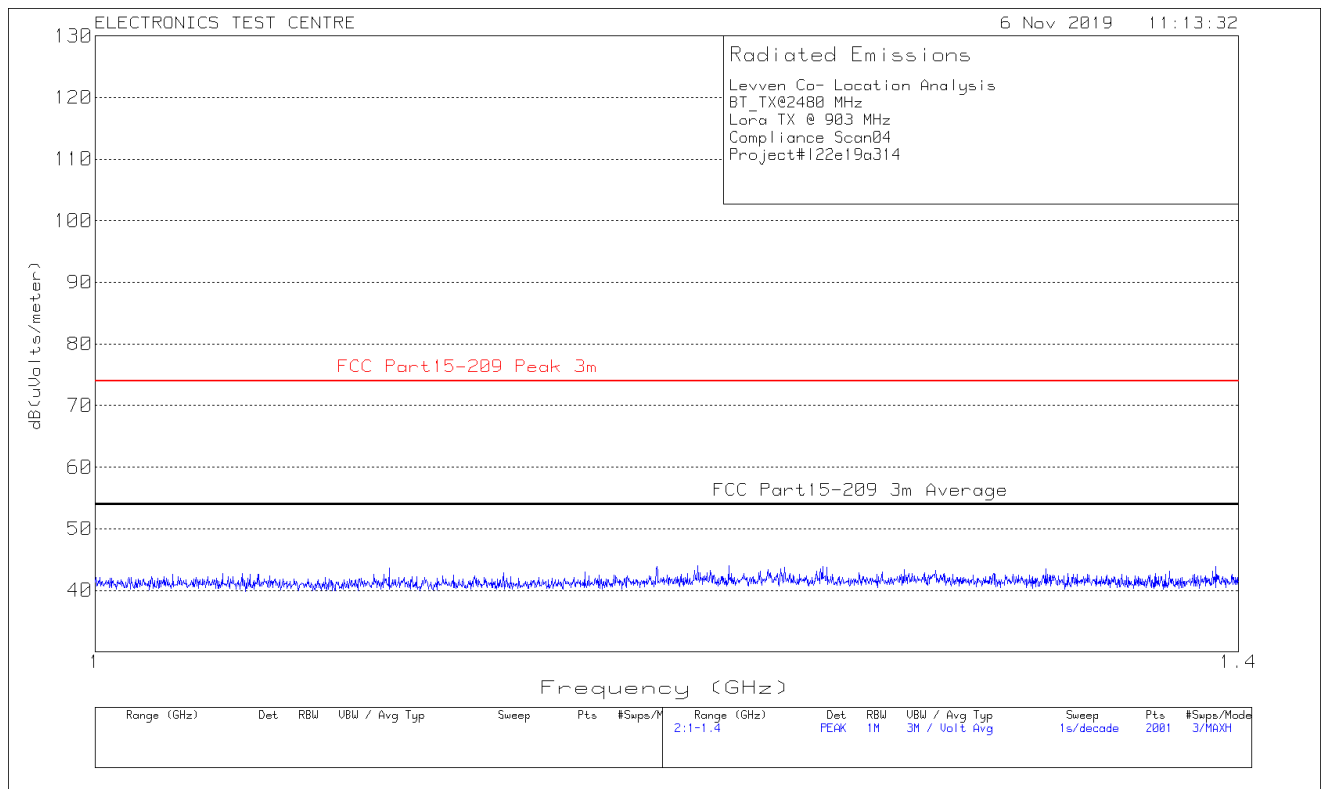
Plot of Radiated Emissions: Vertical polarization



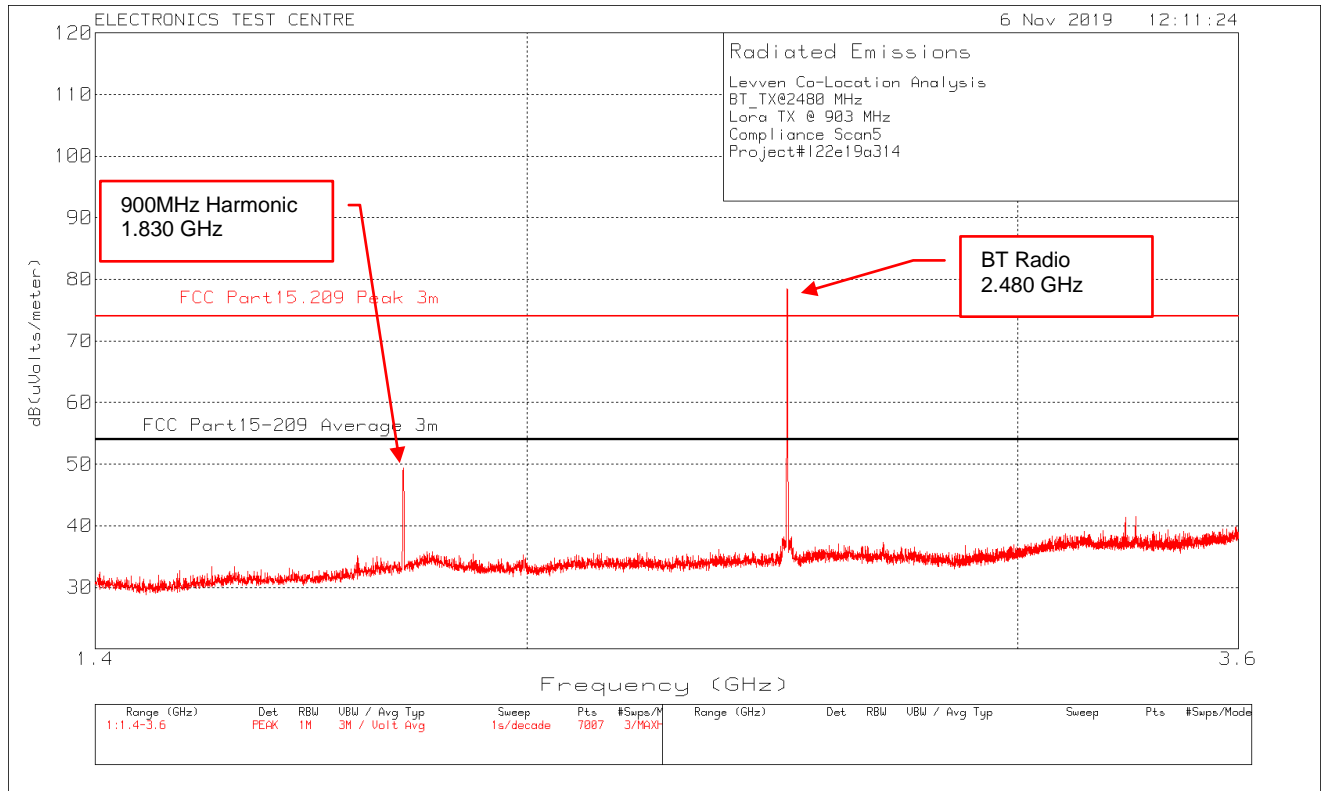
Plot of Radiated Emissions: Horizontal polarization



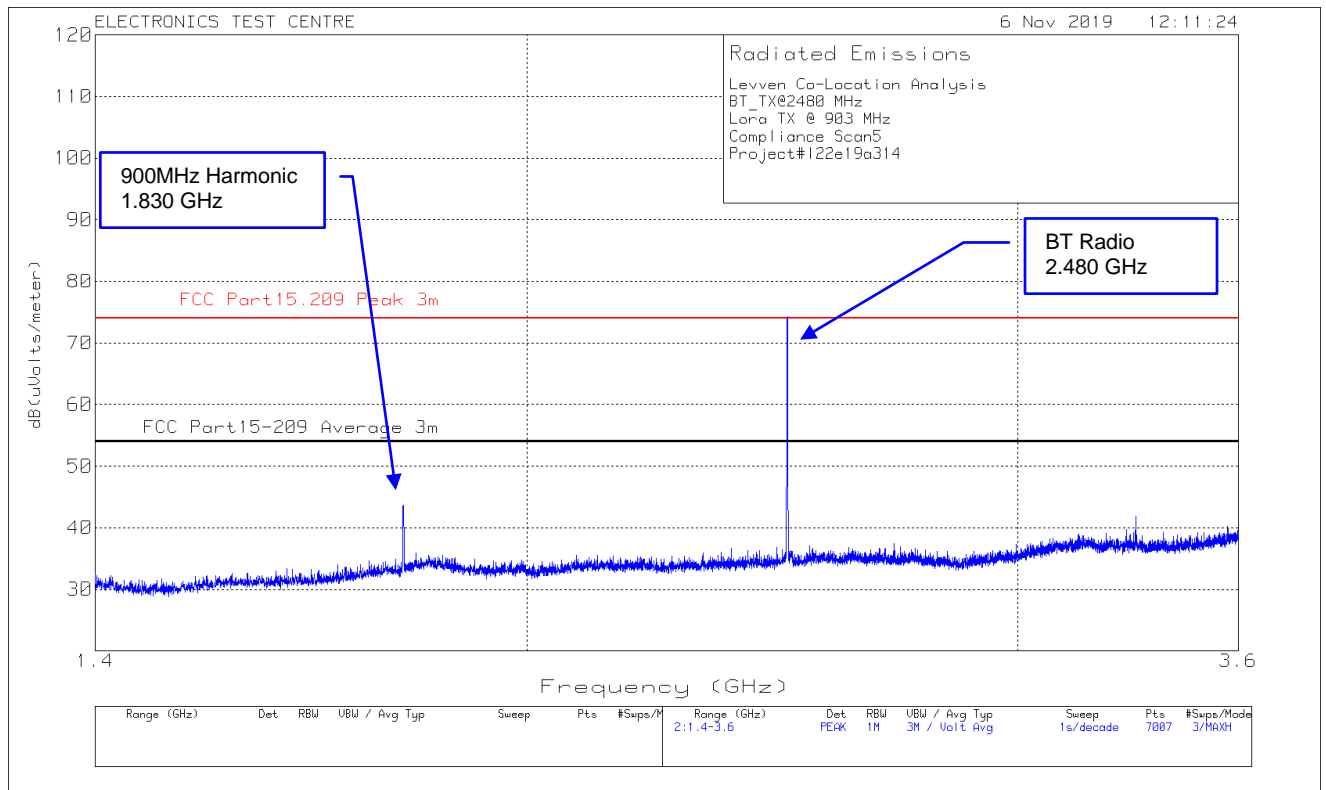
Plot of Radiated Emissions: Vertical polarization



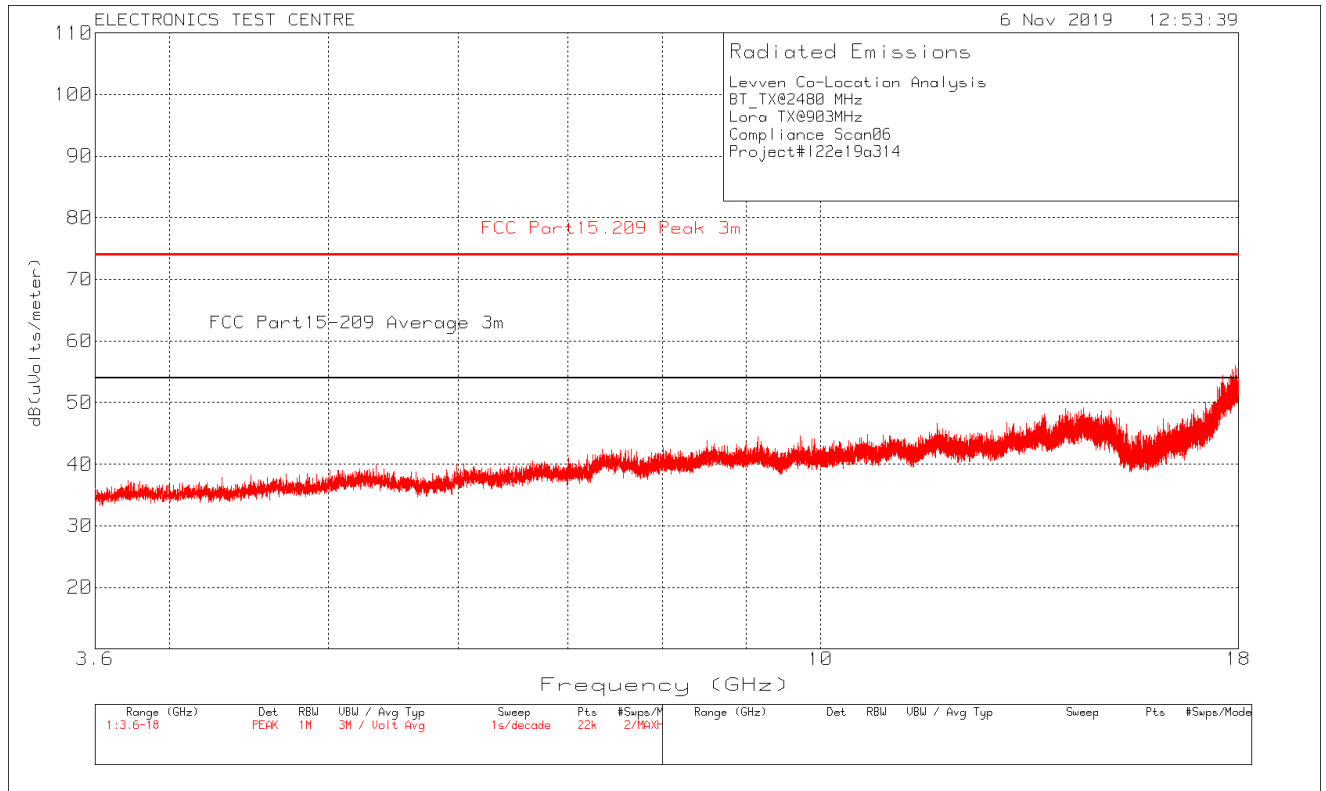
Plot of Radiated Emissions: Horizontal polarization



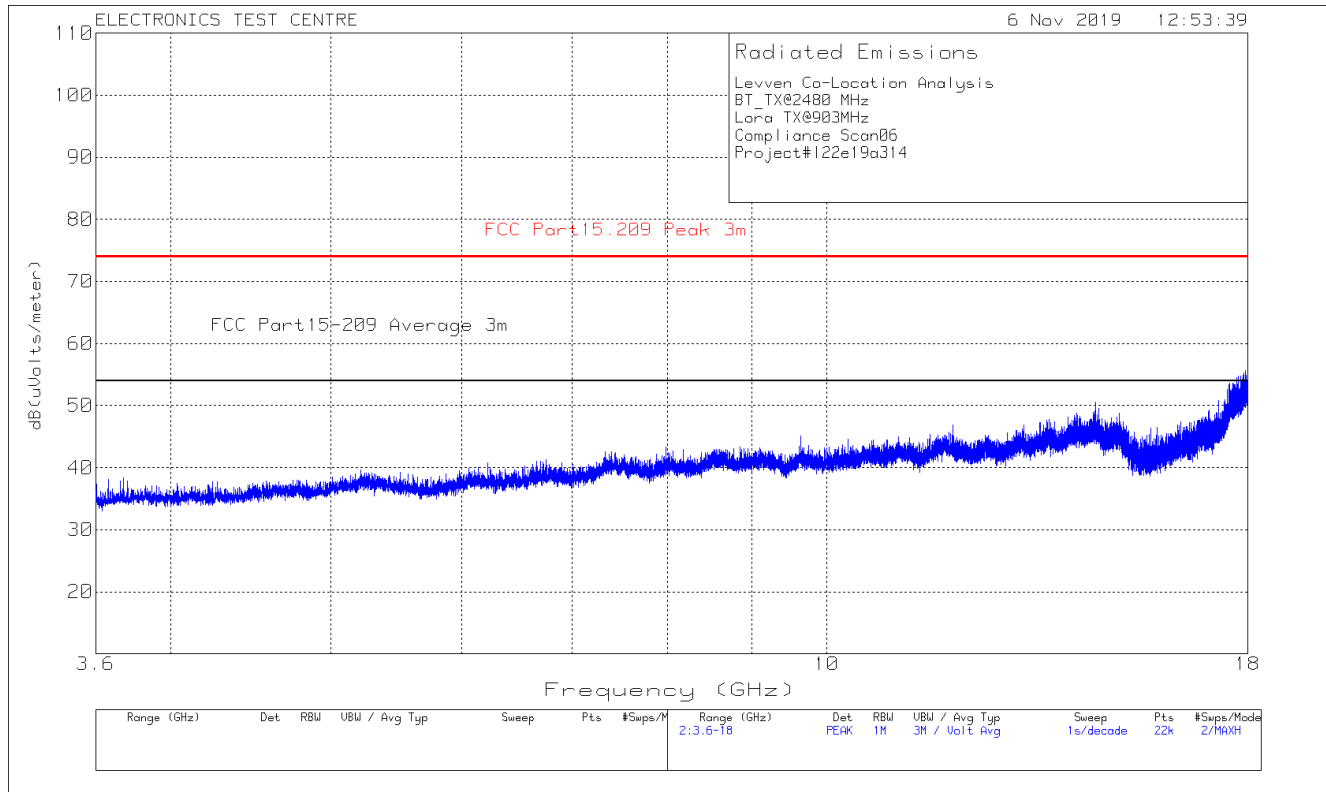
Plot of Radiated Emissions: Vertical polarization



Plot of Radiated Emissions: Horizontal polarization



Plot of Radiated Emissions: Vertical polarization



2.3 RF Exposure

| | |
|--|---------------------------|
| Test Lab: Electronics Test Centre, Airdrie | EUT: LC-Q2 s/n EMC2 |
| Test Personnel: | Standard: FCC PART 15.247 |
| Date: | |
| EUT status: Exempt | |
| Compliant: RF exposure assessment to be provided in a separate Exhibit. | |

3.0 TEST FACILITY

3.1 Location

The LC-Q2 was tested for emissions at the Electronics Test Centre laboratory located in Airdrie, Alberta, Canada. The Radio Frequency Anechoic Chamber (RFAC), identified as Chamber 1, has a usable working space measuring 10.6 m long x 7.3 m wide x 6.5 m high.

Measurements taken at this site are accepted by Industry Canada as evidence of conformity per registration file # 2046A. This site is also listed with the FCC under Registration Number CA2046.

The floor, walls and ceiling consist of annealed steel panels. The walls and ceiling are covered with ferrite tile, augmented by RF absorbant foam material on the end wall nearest the turntable, and on the adjacent walls and the ceiling. The chamber floor supports a 15 cm high internal floor, constructed of annealed steel panels, that forms the ground plane, and is bonded to the chamber walls.

The 3-m diameter turntable is flush-mounted with the floor. A sub-floor cable-way is provided to route cables between the turntable pit and EUT support equipment located in the Control Room. Cables reach the EUT through an opening in the centre of the turntable.

Test instrumentation and EUT support equipment is located in the Control Room, consisting of two shielded vestibules joined together at the side of the main room. Cables are routed through bulkhead panels between the rooms and the test chamber as required. Power feeds are routed into the main room and vestibules through line filters providing at least 100 dB of attenuation between 10 kHz and 10 GHz.

Either floor mounted or table-top equipment can be tested at this facility.

3.2 Grounding Plan

The LC-Q2 was placed at the center of the test chamber turntable on a Styrofoam table. The EUT was **NOT** grounded according to specifications.

3.3 Power Supply

All EUT power was supplied by AC/DC Adaptor connected to a filtered AC Main source for radiated emission measurement.

End of Document