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Project 20901-15

**Si-EMobility  
X6 Scooter**

**Wireless Certification Report**

Prepared for:

Si-EMobility, LLC  
3267 Bee Caves Road Suite 107-279  
Austin Texas United States 78746

By

Professional Testing (EMI), Inc.  
1601 North A.W. Grimes Blvd., Suite B  
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16 Aug 2019

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Reviewed by



Shakil Murad  
Lead EMC Engineer

Written by



Eric Lifsey  
EMC Engineer

**Revision History**

| <b>Revision Number</b> | <b>Description</b> | <b>Date</b> |
|------------------------|--------------------|-------------|
| Draft 01               | For review.        | 16 Aug 2019 |
| Final 01               |                    | 19 Sep 2019 |
|                        |                    |             |

**Errata:**

All references to Max-X6-2 refer to the same device model X6.

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# Compliance Certificate

FCC MRA Designation Number: US5270 NVLAP Accreditation Number: 200062-0

| Applicant                                                                                                                   | Device & Test Identification                                                             |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Si-EMobility, LLC<br>3267 Bee Caves Road Suite 107-279<br>Austin Texas United States 78746<br>Certificate Date: 13 Aug 2019 | FCC ID: 2ASXR-X6IOT02<br>ISED ID: N/A<br>Model(s): X6<br>Laboratory Project ID: 20901-15 |

The device named above was tested utilizing the following documents and found to be in compliance with the required criteria:

| Requirement          | Reference                                  | Detail                                                                                                |
|----------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------|
| FCC 47 CFR Part 15 C | 15.247                                     | Operation within the bands 902-928 MHz, <u>2400-2483.5 MHz</u> , and 5725-5850 MHz.                   |
| FCC 47 CFR Part 15 C | 15.209                                     | Radiated emission limits; general requirements.                                                       |
| FCC 47 CFR Part 15 C | 15.205                                     | Restricted Bands of Operation                                                                         |
| KDB 558074 D01       | DR01                                       | DTS Measurement Guidance v03r02                                                                       |
| KDB 412172           | D01                                        | Guidelines for Determining the ERP and EIRP of an RF Transmitting System                              |
| OET Bulletin 65*     | Edition 97-01, and Supplement C, Ed. 01-01 | Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields |

\*MPE is reported separately from this document.

I, Eric Lifsey, for Professional Testing (EMI), Inc., being familiar with the above requirements and test procedures have reviewed the test setup, measured data, and this report. I believe them to be true and accurate.

Eric Lifsey  
EMC Engineer

This report has been reviewed and accepted by the Applicant. The undersigned is responsible for ensuring that this device will continue to comply with the requirements listed above.

\_\_\_\_\_  
Representative of Applicant

## 1.0 Introduction

### 1.1 Scope

This report describes the extent to which the equipment under test (EUT) conformed to the intentional radiator requirements of the United States.

Professional Testing (EMI), Inc., (PTI) follows the guidelines of National Institute of Standards and Technology (NIST) for all uncertainty calculations, estimates, and expressions thereof for electromagnetic compatibility testing.

### 1.2 EUT Description

| Table 1.2.1: Equipment Under Test              |          |                                                             |
|------------------------------------------------|----------|-------------------------------------------------------------|
| Manufacturer / Model                           | Serial # | Description                                                 |
| Si-EMobility<br>Max-X6-02 Scooter<br>Model: X6 | none     | 2400-2483.5 MHz DTS transceiver; using BTLE style protocol. |

| Table 1.2.2: Support Equipment |          |             |
|--------------------------------|----------|-------------|
| Manufacturer / Model           | Serial # | Description |
| None                           |          |             |

This system is a public mobility scooter that utilizes various pre-approved radio modules and a Bluetooth Low Energy radio that is the subject of this report. The BTLE radio is used to communicate with the software application on the user's smart phone or similar device. It is powered from the scooter's main battery cells via a down-converter regulated power supply.

### 1.3 EUT Operation

The EUT was exercised in a manner consistent with normal operations. BTLE satisfies the requirements for a DTS device without need to consider or test the hopping feature.

### 1.4 Modifications to Equipment

None.

### 1.5 Test Site

Measurements were made at the PTI semi-anechoic facility designated Site 45 (FCC 459644, IC 3036B-1) in Austin, Texas. The site is registered with the FCC under Section 2.948 and Industry Canada per RSS-GEN, and is subsequently confirmed by laboratory accreditation (NVLAP). The test site is located at 11400 Burnet Road, Austin, Texas 78758, while the main office is located at 1601 North A.W. Grimes Boulevard, Suite B, Round Rock, Texas, 78665.

## 1.6 Radiated Measurements

| Table 1.6 1 Measurement Corrections |                                                                     |
|-------------------------------------|---------------------------------------------------------------------|
| Parameter                           | From Sums Of                                                        |
| Radiated Field Strength             | Raw Measured Level + Antenna Factor + Cable Losses – Amplifier Gain |
| Conducted Antenna Port              | Raw Measured Level + Attenuator Factor + Cable Losses               |
| Conducted Mains Port                | Raw Measured Level + LISN Factor + Cable/Filter/Limiter Losses      |

Additionally, measurement distance extrapolation factors (such as 1/d above 30 MHz) are applied and documented where used.

## 1.7 Applicable Documents and Clauses

| Table 1.7.1: Applicable Documents |                                                                                                |
|-----------------------------------|------------------------------------------------------------------------------------------------|
| Document                          | Title                                                                                          |
| 47 CFR                            | Part 15 – Radio Frequency Devices<br>Subpart C -Intentional Radiators                          |
| ANSI C63.10:2013                  | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices |

| Table 1.7.2: Applicable Clauses |                                      |  |
|---------------------------------|--------------------------------------|--|
| Parameter                       | FCC Part 15 Rule Paragraphs          |  |
| Transmitter Characteristics     | 15.247                               |  |
| Bandwidth                       | 15.247(a)(1), 2.1049, KDB 558074 D01 |  |
| Spurious Emission               | 15.247, 15.209, 15.205               |  |
| Band Edge                       | 15.247, 15.205                       |  |
| Antenna Requirement             | 15.247, 15.203                       |  |

## 2.0 Fundamental Power

### 2.1 Test Procedure

Peak power is measured using radiated method and without modulation.

### 2.2 Test Criteria

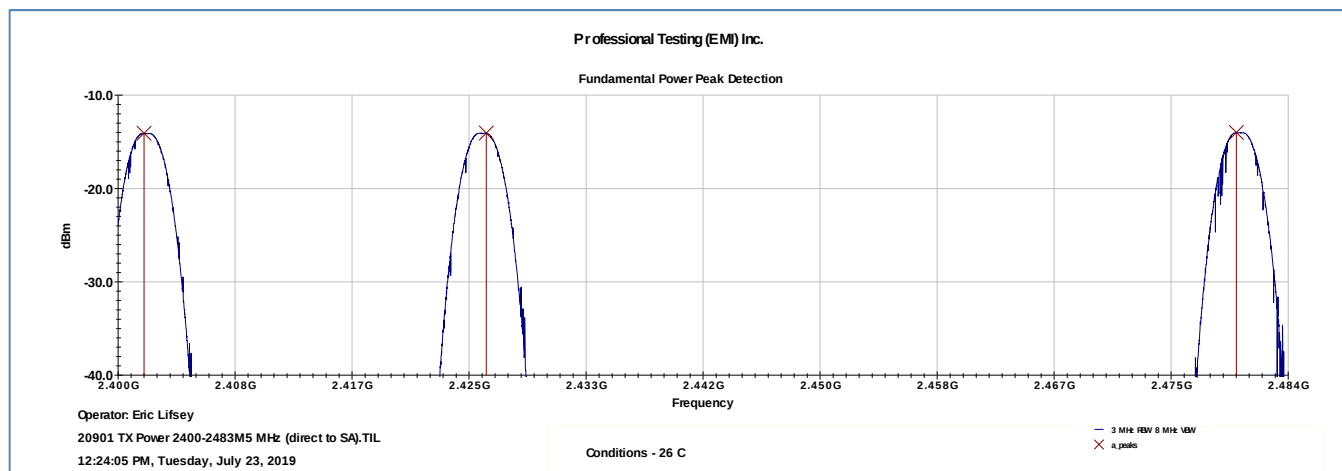
| 47 CFR (USA) // IC (Canada) |                                                                                              |             |
|-----------------------------|----------------------------------------------------------------------------------------------|-------------|
| Section Reference           | Parameter                                                                                    | Date        |
| 15.247(a)(3) //             | Fundamental Power<br>Conducted Limits<br>1 W<br>Limit Restated as Field: 125.23 dBμV/m @ 3 m | 23 Jul 2019 |

### 2.3 Test Results, Peak Power

| Table 2.3.1 Power, Peak, Measured Conducted |       |                |
|---------------------------------------------|-------|----------------|
| Frequency MHz                               | dBm   | Restated in mW |
| 2402                                        | -14.1 | 0.039          |
| 2426                                        | -14.1 | 0.039          |
| 2480                                        | -14.0 | 0.040          |

Measured in 1 MHz RBW, 3 MHz VBW.

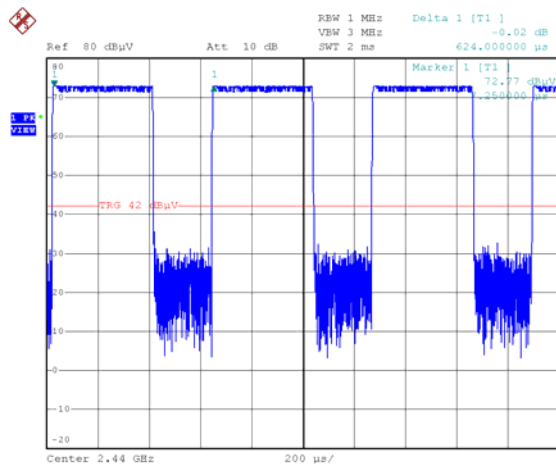
The EUT satisfied the requirement.



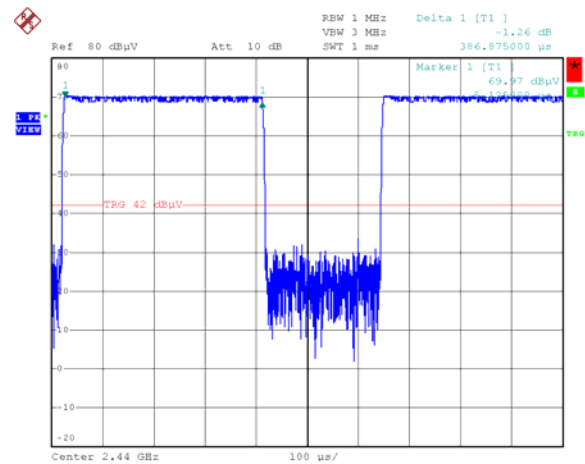
## 2.4 Test Results, Duty Cycle

Measurement is based on intervals not to exceed 100 msec. Maximum transmitter on time is divided by the lesser of 100 msec or the actual measured minimum transmitter interval time. The result is converted to dB and applied as needed to peak measurements of transmitter artifacts to determine average power. This is not a pass/fail measurement.

As the device was operating in advertising mode a streaming worst-case high data rate example of duty cycle was applied for a conservative factor of -4.2 dB. In contrast, this device exchanges only user account information with a smart phone application and has no streaming functionality.



**Example BTLE Maximum Rate  
Transmit Interval 0.624 ms**



**Example BTLE Maximum Rate  
Transmit Time 0.386 ms**

$$\text{Averaging Factor} = 20\log(0.386/0.624) = -4.2 \text{ dB}$$

### 3.0 Power Spectral Density

#### 3.1 Test Procedure

A spectrum analyzer is either connected directly to the EUT or used by radiated means to measure the fundamental emission. It is adjusted to measure the power spectral density in the specified resolution bandwidth.

#### 3.2 Test Criteria

| 47 CFR (USA) // IC (Canada) |                                                                                                                              |      |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|------|
| Section Reference           | Parameter                                                                                                                    | Date |
| 15.247(e) //                | Power Spectral Density, Conducted<br>Limit: 8 dBm / 3 kHz<br>Restated as field strength limit:<br>103.23 dB $\mu$ V/m at 3 m | N/A  |

#### 3.3 Test Results

Full bandwidth unmodulated peak power measured ~22 dB lower than the power spectral density limit. This measurement was not required.

## 4.0 Occupied Bandwidth

### 4.1 Test Procedure

Bandwidth is measured by radiated means. A recording of the results is included.

### 4.2 Test Criteria

| 47 CFR (USA) // IC (Canada)                         |                             |             |
|-----------------------------------------------------|-----------------------------|-------------|
| Section Reference                                   | Parameter                   | Date(s)     |
| 14.247(a)(2), 2.1049, KDB 558074 D01 // RSS-Gen 4.6 | Bandwidth, 6 dB, 20 dB, 99% | 24 Jul 2019 |

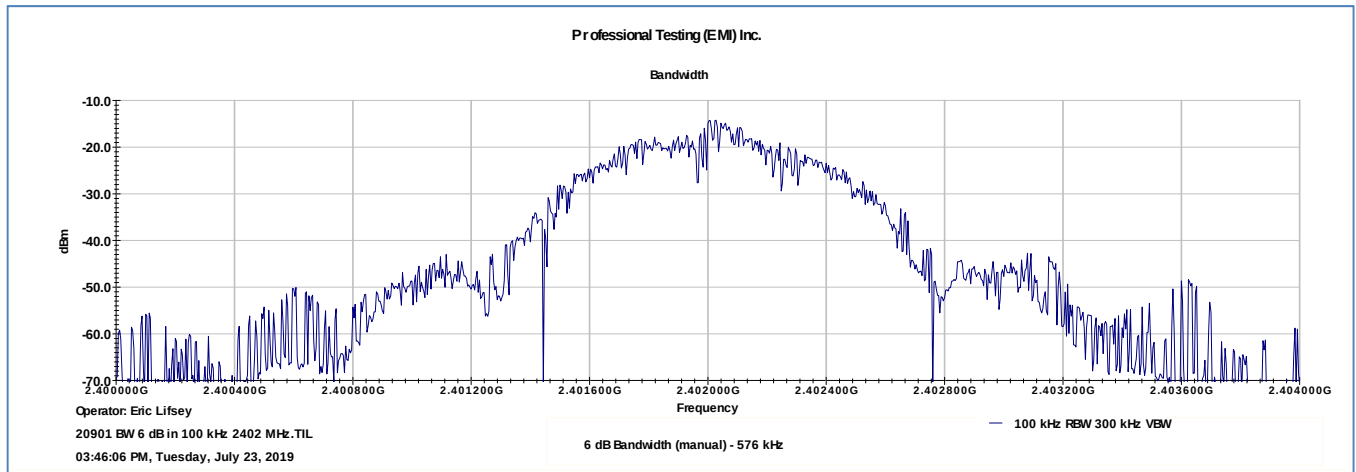
### 4.3 Test Results

The bandwidth measurement is used to verify DTS characteristics and/or for general reporting for agency application.

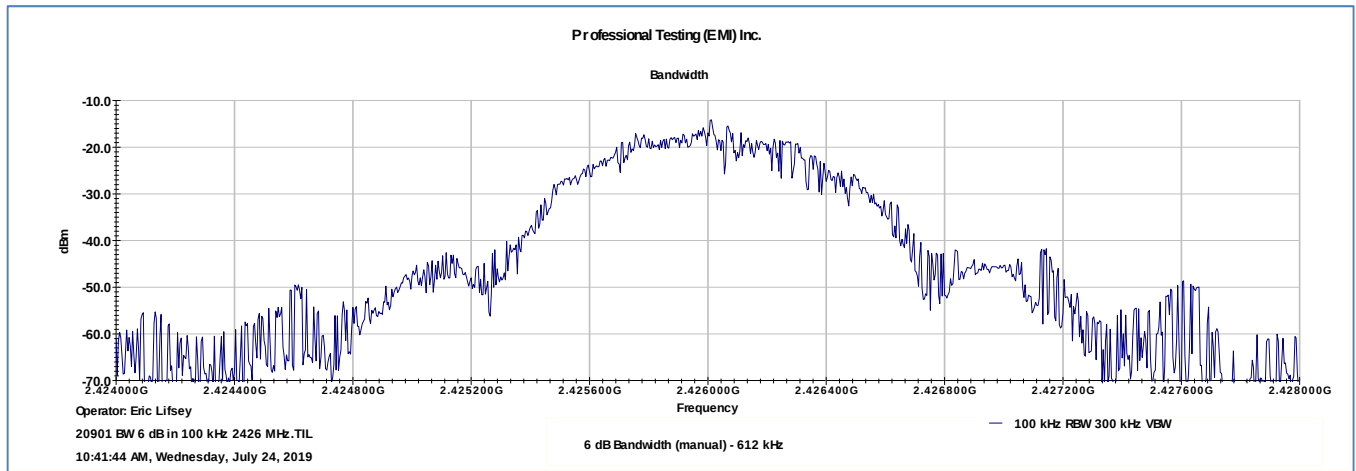
The EUT was found to be in compliance with applicable requirements.

| Table 4.3.1                                    |                               |                                |                           |
|------------------------------------------------|-------------------------------|--------------------------------|---------------------------|
| Bandwidth 6 dB, Minimum 500 kHz in 100 kHz RBW |                               |                                |                           |
| Low Channel Measured BW (kHz)                  | Mid Channel Measured BW (kHz) | High Channel Measured BW (kHz) | Reported Minimum BW (kHz) |
| 576                                            | 612                           | 644                            | 576                       |
| Bandwidth 20 dB, Measure and Report            |                               |                                |                           |
| Low Channel Measured BW (kHz)                  | Mid Channel Measured BW (kHz) | High Channel Measured BW (kHz) | Reported Maximum BW (kHz) |
| 1093                                           | 1082                          | 1034                           | 1093                      |
| Bandwidth 99%, Measure and Report              |                               |                                |                           |
| Low Channel Measured BW (kHz)                  | Mid Channel Measured BW (kHz) | High Channel Measured BW (kHz) | Reported Maximum BW (kHz) |
| 1066                                           | 1066                          | 1032                           | 1066                      |

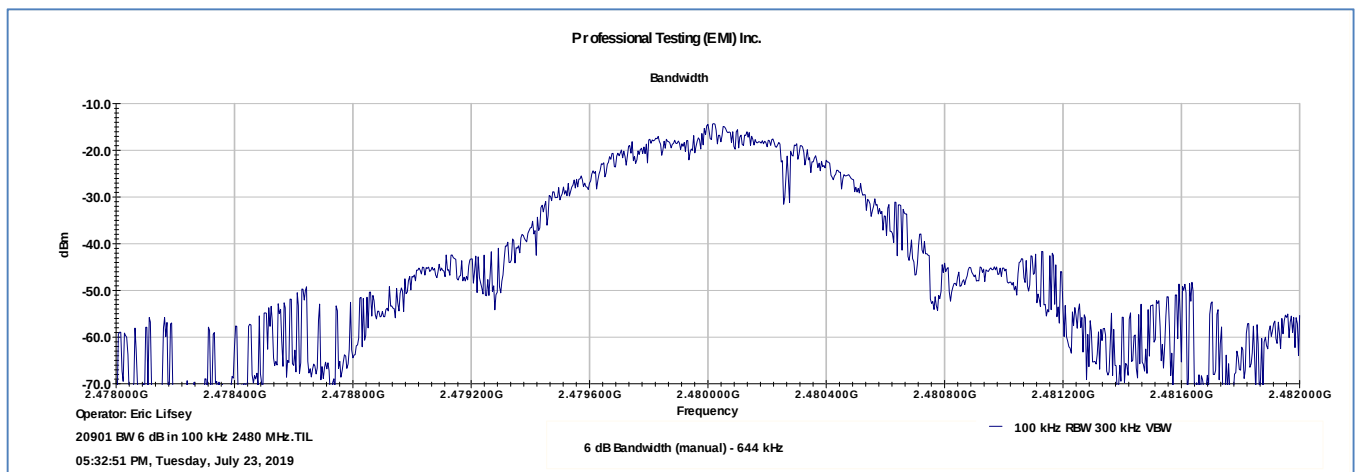
### 4.3.1 Bandwidth Plots, 6 dB



Bottom Channel

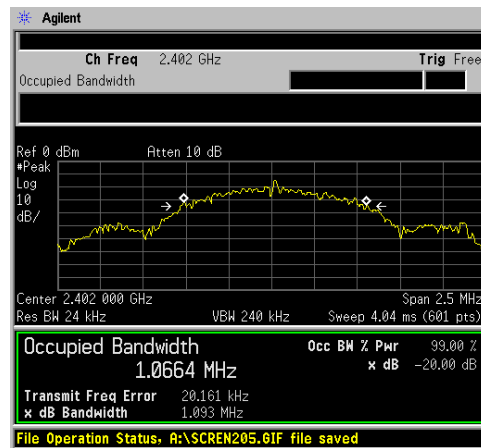


Middle Channel

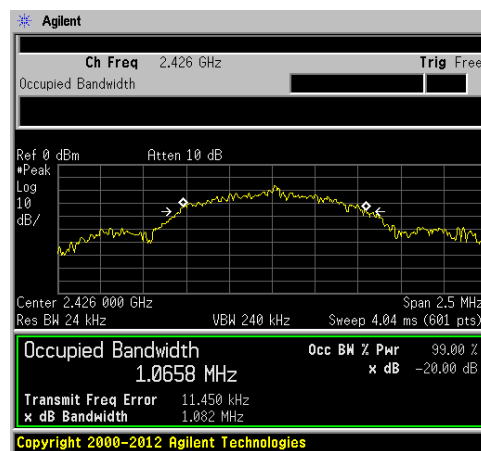


Top Channel

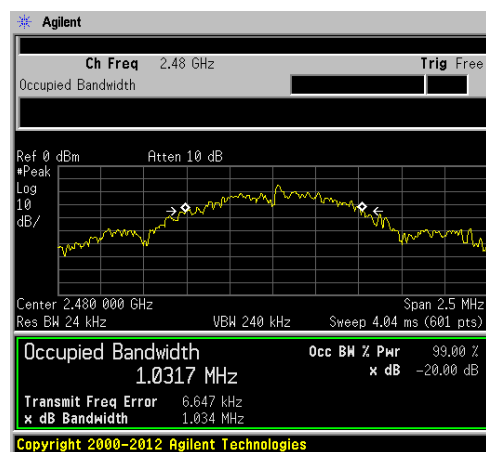
### 4.3.2 Bandwidth Plots, 20 dB & 99%



Bottom Channel



Middle Channel



Top Channel

## 5.0 Band Edge

### 5.1 Test Procedure

EUT is placed into normal transmit operation on the nearest band edge channel. The spectrum analyzer is approximately centered on the band edge frequency with span sufficient to include the peak of the adjacent fundamental signal. Measurement includes at least two standard bandwidths from the respective band edge. If required, the band-edge marker-delta method is utilized.

### 5.2 Test Criteria

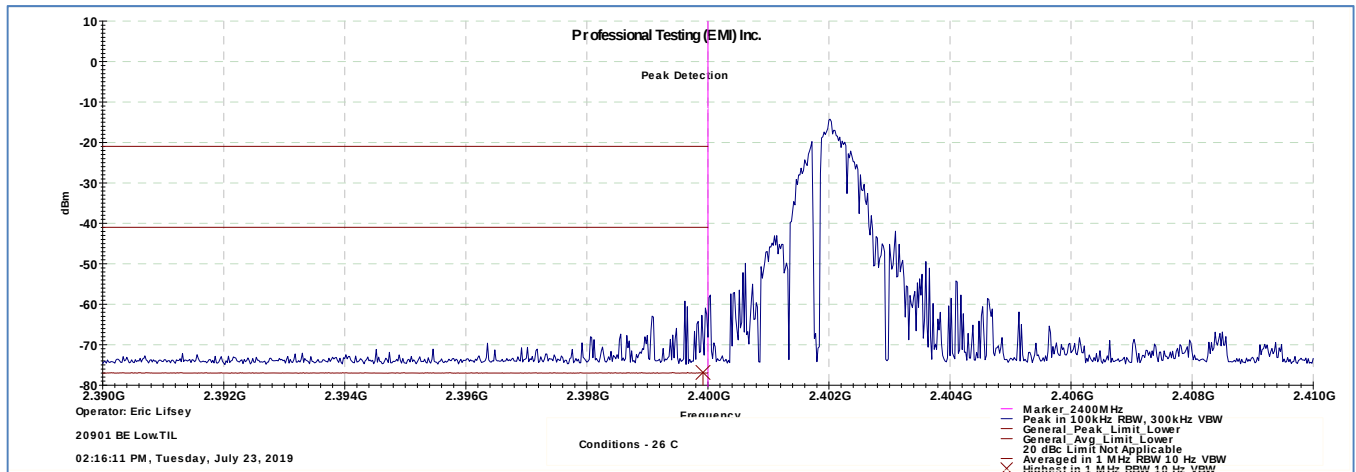
| 47 CFR (USA) // IC (Canada)                |                                                |             |
|--------------------------------------------|------------------------------------------------|-------------|
| Section Reference                          | Parameter                                      | Date(s)     |
| 15.247, 15.205 // RSS-247 5.5, RSS-Gen 4.9 | Unwanted Emissions Adjacent to Authorized Band | 23 Jul 2019 |

### 5.3 Test Results

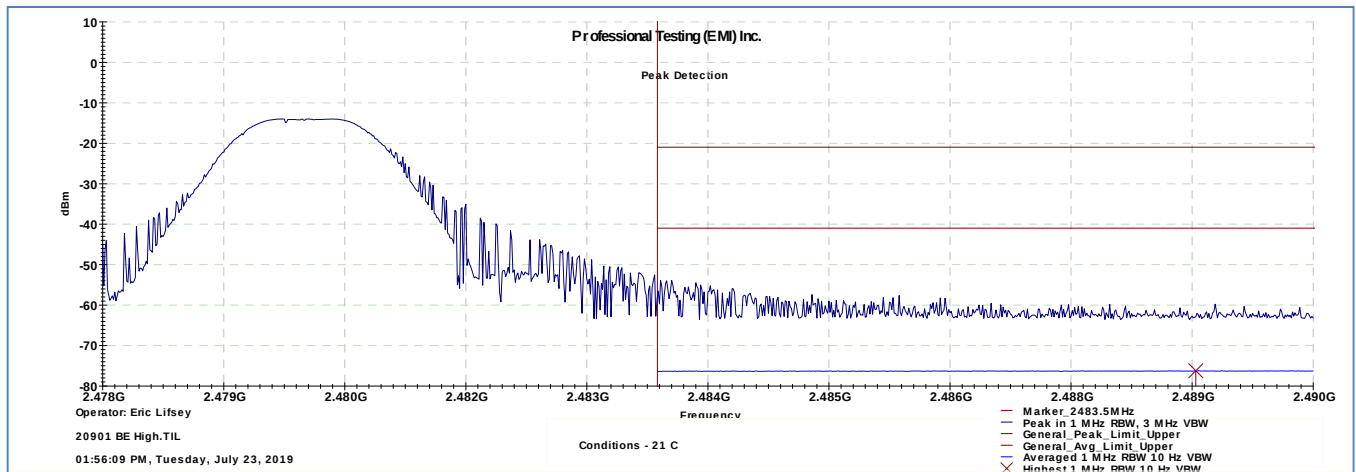
The conducted measurements included fundamental and more than 2 standard bandwidths (standard bandwidth 1 MHz) beyond the band edges to provide a clear view of the fundamental and the declining emission levels.

The EUT satisfied the criteria. Plotted results appear on the following pages.

### 5.3.1 Bottom Channel Band Edge



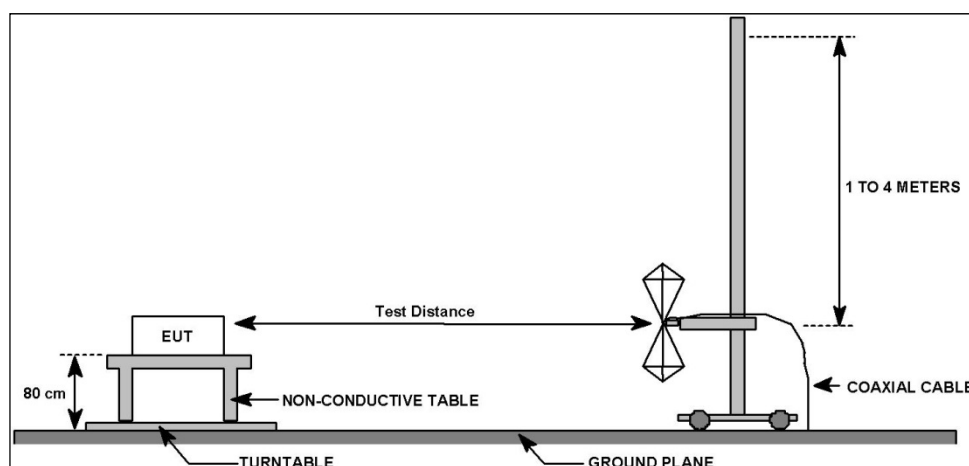
### 5.3.2 Top Channel Band Edge



## 6.0 Radiated Spurious Emissions, Transmit Mode

### 6.1 Test Procedure

Radiated emissions are measured with the EUT transmitting on the required frequencies.



#### 6.1.1 Test Distance and Detection Method

| 30 MHz to 1 GHz | 1 GHz to 18 GHz | 18 GHz to 25 GHz |
|-----------------|-----------------|------------------|
| 10 m            | 3 m             | 1 m              |
| Quasi-peak      | Peak & Average  | Peak & Average   |

### 6.2 Test Criteria

| 47 CFR (USA) // IC (Canada) |                                                                      |                 |
|-----------------------------|----------------------------------------------------------------------|-----------------|
| Section Reference           | Parameter                                                            | Date(s)         |
| 15.247, 15.209 //           | Field Strength of Radiated Spurious/Harmonic Emissions Transmit Mode | 18, 22 Jul 2019 |

### 6.3 Test Results

The EUT was transmitting and receiving in advertising mode on three channels.

Highest recorded peak spurious 56.8 dB $\mu$ V/m (limit 54). Applying 4.2 dB averaging factor = 52.6 dB $\mu$ V/m.

The EUT satisfied the requirement.

## 6.3.1 Advertising, up to 1 GHz

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                  |                        |                                                                                                                                                                                       |                         |                         |                          |                      |             |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|--------------------------|----------------------|-------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                              |                        | ANSI C63.4: 2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz |                         |                         |                          |                      |             |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                       |                        | FCC Part 15.109 - Code of Federal Regulations Part 47, Subpart B - Unintentional Radiators, Radiated Emissions Limits                                                                 |                         |                         |                          |                      |             |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                  |                        | 15.109                                                                                                                                                                                |                         |                         |                          |                      |             |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                             |                        | 7/18/2019                                                                                                                                                                             |                         | <b>EUT Serial #:</b>    |                          | 16703                |             |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                 |                        | Si-Emobility LLC                                                                                                                                                                      |                         | <b>EUT Part #:</b>      |                          | Max-X6-2             |             |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                           |                        | 20901-10                                                                                                                                                                              |                         | <b>Test Technician:</b> |                          | Sergio Gutierrez     |             |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                         |                        | N/A                                                                                                                                                                                   |                         | <b>Supervisor:</b>      |                          | Shakil Murad         |             |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                        |                        | SI-Emobility Max-X6-2                                                                                                                                                                 |                         | <b>Witness' Name:</b>   |                          | N/A                  |             |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                       |                        |                                                                                                                                                                                       |                         |                         |                          |                      |             |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                         |                        | 36 VDC                                                                                                                                                                                |                         | <b>EUT Power:</b>       |                          | 0 N/A                |             |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                      |                        | Vertical                                                                                                                                                                              |                         | <b>Frequency Range:</b> |                          | 30MHz to 1GHz        |             |              |
| <b>EUT Mode of Operation:</b>                                                                                                                                                                                                                                                                                                                                                                    |                        |                                                                                                                                                                                       |                         | Running                 |                          |                      |             |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                         | Test Distance (Meters) | EUT Direction (Degrees)                                                                                                                                                               | Antenna Height (Meters) | Detector Function       | Corrected Level (dBµV/m) | Limit Level (dBµV/m) | Margin (dB) | Test Results |
| 44.683                                                                                                                                                                                                                                                                                                                                                                                           | 10                     | 226                                                                                                                                                                                   | 1.26                    | Quasi-peak              | 7.288                    | 29.5                 | -22.2       | Pass         |
| 46.99                                                                                                                                                                                                                                                                                                                                                                                            | 10                     | 11                                                                                                                                                                                    | 3.28                    | Quasi-peak              | 6.985                    | 29.5                 | -22.5       | Pass         |
| 58.439                                                                                                                                                                                                                                                                                                                                                                                           | 10                     | 14                                                                                                                                                                                    | 2.79                    | Quasi-peak              | 5.927                    | 29.5                 | -23.6       | Pass         |
| 67.389                                                                                                                                                                                                                                                                                                                                                                                           | 10                     | 4                                                                                                                                                                                     | 1.22                    | Quasi-peak              | 17.693                   | 29.5                 | -11.8       | Pass         |
| 154.836                                                                                                                                                                                                                                                                                                                                                                                          | 10                     | 104                                                                                                                                                                                   | 1.32                    | Quasi-peak              | 23.557                   | 33.1                 | -9.5        | Pass         |
| 959.674                                                                                                                                                                                                                                                                                                                                                                                          | 10                     | 153                                                                                                                                                                                   | 1.28                    | Quasi-peak              | 26.666                   | 35.6                 | -8.9        | Pass         |
| <div> Professional Testing, EMI, Inc<br/> Radiated Emissions<br/> 30MHz - 1GHz Vertical Polarity Measured Emissions </div> <div> Operator: Sergio Gutierrez<br/> Current Time -04:17:56 PM, Thursday, July 18, 2019 </div> <div> EUT Mode: Running<br/> EUT Power: 36 VDC<br/> Notes: </div> <div> EUT: SI-Emobility Max-X6-2<br/> Project Number: 20901-10<br/> Client: SI-Emobility LLC </div> |                        |                                                                                                                                                                                       |                         |                         |                          |                      |             |              |
| ≤ 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                              |                        |                                                                                                                                                                                       |                         |                         |                          |                      |             |              |

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |                                                                                                                                                                                       |                         |                   |                          |                      |                  |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | ANSI C63.4: 2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | FCC Part 15.109 - Code of Federal Regulations Part 47, Subpart B - Unintentional Radiators, Radiated Emissions Limits                                                                 |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        | 15.109                                                                                                                                                                                |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | 7/18/2019                                                                                                                                                                             |                         |                   | <b>EUT Serial #:</b>     |                      | 16703            |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | Si-Emobility LLC                                                                                                                                                                      |                         |                   | <b>EUT Part #:</b>       |                      | Max-X6-2         |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        | 20901-10                                                                                                                                                                              |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | N/A                                                                                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Shakil Murad     |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        | SI-Emobility Max-X6-2                                                                                                                                                                 |                         |                   | <b>Witness' Name:</b>    |                      | N/A              |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                                                                                                                                                                                       |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | 36 VDC                                                                                                                                                                                |                         |                   | <b>EUT Power:</b>        |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        | Horizontal                                                                                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | 30MHz to 1GHz    |              |
| <b>EUT Mode of Operation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                                                                                       |                         |                   | <b>Running</b>           |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Test Distance (Meters) | EUT Direction (Degrees)                                                                                                                                                               | Antenna Height (Meters) | Detector Function | Corrected Level (dBμV/m) | Limit Level (dBμV/m) | Margin (dB)      | Test Results |
| 467.984                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10                     | 85                                                                                                                                                                                    | 1.53                    | Quasi-peak        | 24.78                    | 35.6                 | -10.8            | Pass         |
| 480.001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10                     | 201                                                                                                                                                                                   | 1.14                    | Quasi-peak        | 25.097                   | 35.6                 | -10.5            | Pass         |
| 492.009                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10                     | 177                                                                                                                                                                                   | 1.53                    | Quasi-peak        | 25.525                   | 35.6                 | -10.1            | Pass         |
| 959.781                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10                     | 301                                                                                                                                                                                   | 1.13                    | Quasi-peak        | 26.628                   | 35.6                 | -9.0             | Pass         |
| 959.927                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10                     | 2                                                                                                                                                                                     | 1.14                    | Quasi-peak        | 26.708                   | 35.6                 | -8.9             | Pass         |
| 994.515                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10                     | 274                                                                                                                                                                                   | 1.64                    | Quasi-peak        | 27.582                   | 43.5                 | -15.9            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p>Professional Testing, EMI, Inc</p> <p>Radiated Emissions</p> <p>30MHz - 1GHz Horizontal Polarity Measured Emissions</p> </div> <div> <p>Peak Limit<br/>Quasi-peak Limit<br/>Average Limit<br/>Ambient Scan<br/>Pre-scan Emissions<br/>Peak Reading<br/>Quasi-peak Reading<br/>Average Reading<br/>LPFF Verification Limit<br/>Verified LPFF QP Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez</p> <p>Current Time -04:31:55 PM, Thursday, July 18, 2019</p> </div> <div> <p>EUT Mode: Running</p> <p>EUT Power: 36 VDC</p> <p>Notes:</p> </div> <div> <p>EUT: SI-Emobility Max-X6-2</p> <p>Project Number: 20901-10</p> <p>Client: SI-EMobility LLC</p> </div> </div> |                        |                                                                                                                                                                                       |                         |                   |                          |                      |                  |              |
| ≤ 1GHz Horizontal Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |                                                                                                                                                                                       |                         |                   |                          |                      |                  |              |

## 6.3.2 Bottom Channel 1 GHz to 25 GHz

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power:</b>        |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | Vertical                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| <b>EUT Mode of Operation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                                                                     |                         |                   | <b>Advertising TX/RX</b> |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBμV/m) | Limit Level (dBμV/m) | Margin (dB)      | Test Results |
| 4804.89                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                      | 171                                                                                                                 | 3.13                    | Peak              | 54.345                   | 74.0                 | -19.6            | Pass         |
| 7206.36                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                      | 3                                                                                                                   | 2.1                     | Peak              | 46.736                   | 74.0                 | -27.2            | Pass         |
| 9610.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                      | 49                                                                                                                  | 1.02                    | Peak              | 47.939                   | 74.0                 | -26.0            | Pass         |
| 12011                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3                      | 52                                                                                                                  | 1.02                    | Peak              | 49.33                    | 74.0                 | -24.6            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b><br/>Radiated Emissions<br/>1-18GHz Vertical Polarity Measured Emissions</p> </div> <div> <p>— FCC Peak Limit<br/>— FCC Average Limit<br/>— Ambient Scan<br/>— Pre-scan Emissions<br/>△ Peak Reading<br/>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez<br/>Current Time -03:39:44 PM, Friday, July 19, 2019</p> </div> <div> <p>EUT Mode: Charging and Trasmitting<br/>EUT Power: 36 VDC<br/>Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2<br/>Project Number: 21055<br/>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

## Professional Testing, EMI, Inc.

**Test Method:** ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

**In accordance with:** FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits

**Section:** 15.209

**Test Date(s):** 7/22/2019

**EUT Serial #:** 0

**Customer:** Si-Mobility

**EUT Part #:** 0

**Project Number:** 21055

**Test Technician:** Sergio Gutierrez

**Purchase Order #:** 0

**Supervisor:** Lisa Arndt

**Equip. Under Test:** X6

**Witness' Name:** 0

### Radiated Emissions Test Results Data Sheet

**EUT Line Voltage:** 0 VDC

**EUT Power:** 0 N/A

**Antenna Orientation:** Horizontal

**Frequency Range:** Above 1GHz

**EUT Mode of Operation:**

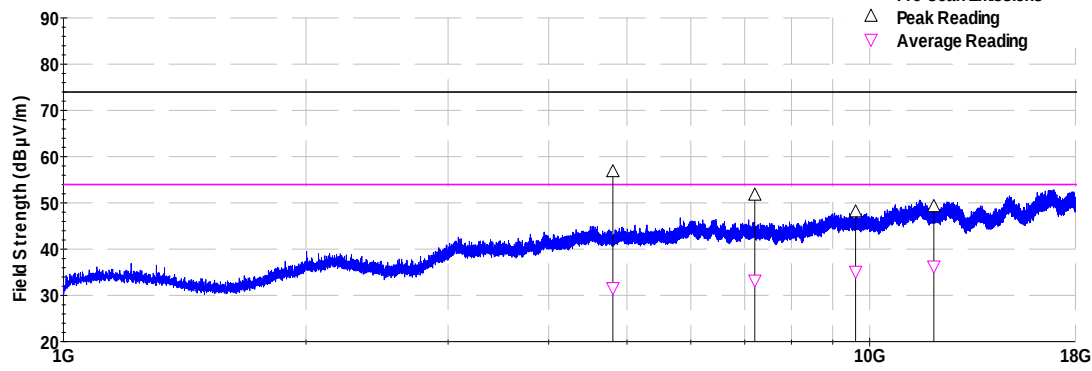
**Advertising TX/RX**

| Frequency Measured (MHz) | Test Distance (Meters) | EUT Direction (Degrees) | Antenna Height (Meters) | Detector Function | Corrected Level (dBμV/m) | Limit Level (dBμV/m) | Margin (dB) | Test Results |
|--------------------------|------------------------|-------------------------|-------------------------|-------------------|--------------------------|----------------------|-------------|--------------|
| 4803.52                  | 3                      | 345                     | 2.24                    | Peak              | 56.747                   | 74.0                 | -17.2       | Pass         |
| 7205.7                   | 3                      | 335                     | 1.01                    | Peak              | 51.684                   | 74.0                 | -22.3       | Pass         |
| 9608.5                   | 3                      | 105                     | 2.61                    | Peak              | 48.068                   | 74.0                 | -25.9       | Pass         |
| 12012.89                 | 3                      | 294                     | 3.54                    | Peak              | 49.192                   | 74.0                 | -24.8       | Pass         |

#### Professional Testing, EMI, Inc

##### Radiated Emissions

1-18GHz Horizontal Polarity Measured Emissions



Operator: Sergio Gutierrez

Current Time -03:42:51 PM, Friday, July 19, 2019

EUT Mode: Charging and Transmitting

EUT Power: 36 VDC

Notes:

EUT: Si-EMobility Max-X6-2

Project Number: 21055

Client: Si-EMobility LLC

**> 1GHz Horizontal Antenna Polarity Measured Emissions**

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>         |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | Vertical                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                                                                                                                     |                         |                   | Advertising TX/RX        |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m) | Limit Level (dBµV/m) | Margin (dB)      | Test Results |
| 24041.86                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 2                                                                                                                   | 1                       | Peak              | 45.325                   | 74.0                 | -28.6            | Pass         |
| 24111.13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 205                                                                                                                 | 1                       | Peak              | 45.387                   | 74.0                 | -28.6            | Pass         |
| 24771.09                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 259                                                                                                                 | 1                       | Peak              | 45.878                   | 74.0                 | -28.1            | Pass         |
| 24934.42                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 249                                                                                                                 | 1                       | Peak              | 45.914                   | 74.0                 | -28.0            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b><br/> Radiated Emissions, Measured at 1m and Scaled to 3m Distance<br/> 18-26.5 GHz Vertical Polarity Measured Emissions</p> </div> <div> <p>— Peak Limit<br/> — Average Limit<br/> — Pre-scan Emissions<br/> △ Peak Reading<br/> ▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez<br/> Current Time -02:27:45 PM, Wednesday, July 24, 2019</p> </div> <div> <p>Frequency<br/> EUT Mode: Charging and Trasmitting<br/> EUT Power: 36 VDC<br/> Notes:</p> </div> <div> <p>EUT: Si-EMobility Max-X6-2<br/> Project Number: 21055<br/> Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|------------------------------------------|----------------------|-------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                                          |                      |             |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                                          |                      |             |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        | 15.209                                                                                                              |                         |                   |                                          |                      |             |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>                     |                      | 0           |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>                       |                      | 0           |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b> Sergio Gutierrez |                      |             |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b> Lisa Arndt            |                      |             |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b> 0                  |                      |             |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>                         |                      | 0 N/A       |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | Horizontal                                                                                                          |                         |                   | <b>Frequency Range:</b>                  |                      | Above 1GHz  |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                                                                                                                     |                         |                   | Advertising TX/RX                        |                      |             |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m)                 | Limit Level (dBµV/m) | Margin (dB) | Test Results |
| 23657.18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                      | 103                                                                                                                 | 1                       | Peak              | 44.6                                     | 74.0                 | -29.4       | Pass         |
| 24092.05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                      | 179                                                                                                                 | 1                       | Peak              | 45.746                                   | 74.0                 | -28.2       | Pass         |
| 24123.19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                      | 325                                                                                                                 | 1                       | Peak              | 45.923                                   | 74.0                 | -28.0       | Pass         |
| 24385.04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                      | 298                                                                                                                 | 1                       | Peak              | 45.315                                   | 74.0                 | -28.6       | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b></p> <p><b>Radiated Emissions, Measured at 1m and Scaled to 3m Distance</b></p> <p>18-26.5 GHz Horizontal Polarity Measured Emissions</p> </div> <div> <p>— Peak Limit</p> <p>— Average Limit</p> <p>— Pre-scan Emissions</p> <p>△ Peak Reading</p> <p>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez</p> <p>Current Time -02:18:28 PM, Wednesday, July 24, 2019</p> </div> <div> <p>Frequency</p> <p>EUT Mode: Charging and Trasnmitting</p> <p>EUT Power: 36 VDC</p> <p>Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2</p> <p>Project Number: 21055</p> <p>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |
| > 1GHz Horizontal Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |

## 6.3.3 Middle Channel, 1 GHz to 25 GHz

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>         |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        | Vertical                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                                                                                                                     |                         |                   | Advertising TX/RX        |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m) | Limit Level (dBµV/m) | Margin (dB)      | Test Results |
| 4852.93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3                      | 329                                                                                                                 | 1.68                    | Peak              | 44.888                   | 74.0                 | -29.1            | Pass         |
| 7278.05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3                      | 109                                                                                                                 | 1.93                    | Peak              | 45.758                   | 74.0                 | -28.2            | Pass         |
| 9706.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3                      | 164                                                                                                                 | 3.78                    | Peak              | 48.302                   | 74.0                 | -25.7            | Pass         |
| 12131.33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3                      | 3                                                                                                                   | 2.01                    | Peak              | 49.719                   | 74.0                 | -24.2            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b></p> <p><b>Radiated Emissions</b></p> <p>1-18GHz Vertical Polarity Measured Emissions</p> </div> <div> <p>— FCC Peak Limit</p> <p>— FCC Average Limit</p> <p>— Ambient Scan</p> <p>— Pre-scan Emissions</p> <p>△ Peak Reading</p> <p>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez</p> <p>Current Time -09:23:58 AM, Monday, July 22, 2019</p> </div> <div> <p>EUT Mode: Charging and Trasnmitting</p> <p>EUT Power: 36 VDC</p> <p>Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2</p> <p>Project Number: 21055</p> <p>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

## Professional Testing, EMI, Inc.

**Test Method:** ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

**In accordance with:** FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits

**Section:** 15.209

**Test Date(s):** 7/22/2019

**EUT Serial #:** 0

**Customer:** Si-Mobility

**EUT Part #:** 0

**Project Number:** 21055

**Test Technician:** Sergio Gutierrez

**Purchase Order #:** 0

**Supervisor:** Lisa Arndt

**Equip. Under Test:** X6

**Witness' Name:** 0

### Radiated Emissions Test Results Data Sheet

**EUT Line Voltage:** 0 VDC

**EUT Power:** 0 N/A

**Antenna Orientation:** Horizontal

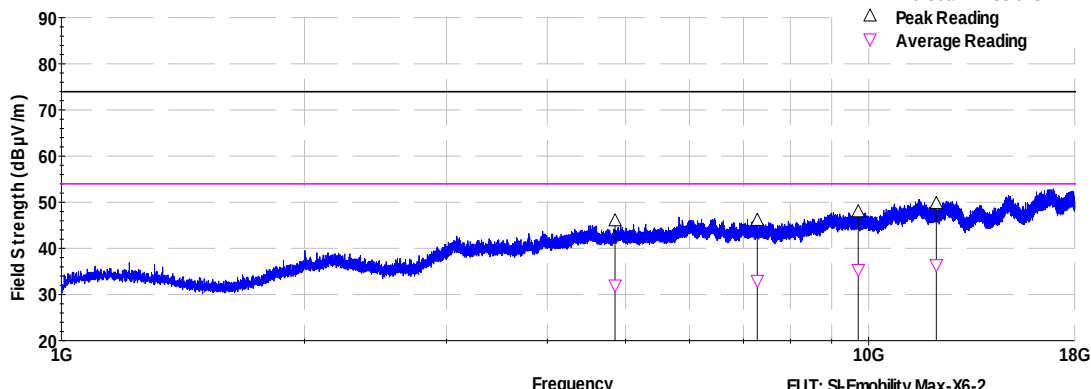
**Frequency Range:** Above 1GHz

**EUT Mode of Operation:**

**Advertising TX/RX**

| Frequency Measured (MHz) | Test Distance (Meters) | EUT Direction (Degrees) | Antenna Height (Meters) | Detector Function | Corrected Level (dBμV/m) | Limit Level (dBμV/m) | Margin (dB) | Test Results |
|--------------------------|------------------------|-------------------------|-------------------------|-------------------|--------------------------|----------------------|-------------|--------------|
| 4852.61                  | 3                      | 235                     | 1.62                    | Peak              | 45.985                   | 74.0                 | -28.0       | Pass         |
| 7281.68                  | 3                      | 356                     | 1.5                     | Peak              | 46.061                   | 74.0                 | -27.9       | Pass         |
| 9708.12                  | 3                      | 164                     | 1.02                    | Peak              | 47.955                   | 74.0                 | -26.0       | Pass         |
| 12130.68                 | 3                      | 289                     | 2.15                    | Peak              | 49.717                   | 74.0                 | -24.2       | Pass         |

Professional Testing, EMI, Inc  
Radiated Emissions  
1-18GHz Horizontal Polarity Measured Emissions



Operator: Sergio Gutierrez

EUT Mode: Charging and Transmitting

EUT: Si-EMobility Max-X6-2

Current Time -09:35:23 AM, Monday, July 22, 2019

EUT Power: 36 VDC

Project Number: 21055

Notes:

Client: Si-EMobility LLC

**> 1GHz Horizontal Antenna Polarity Measured Emissions**

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>         |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | Vertical                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                                                                                                                     |                         |                   | Advertising TX/RX        |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m) | Limit Level (dBµV/m) | Margin (dB)      | Test Results |
| 23927.59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 64                                                                                                                  | 1                       | Peak              | 44.847                   | 74.0                 | -29.1            | Pass         |
| 24090.31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 135                                                                                                                 | 1                       | Peak              | 45.526                   | 74.0                 | -28.4            | Pass         |
| 24395.28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 363                                                                                                                 | 1                       | Peak              | 46.27                    | 74.0                 | -27.7            | Pass         |
| 24404.06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                      | 2                                                                                                                   | 1                       | Peak              | 45.138                   | 74.0                 | -28.8            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b></p> <p><b>Radiated Emissions, Measured at 1m and Scaled to 3m Distance</b></p> <p>18-26.5 GHz Vertical Polarity Measured Emissions</p> </div> <div> <p>— Peak Limit</p> <p>— Average Limit</p> <p>— Pre-scan Emissions</p> <p>△ Peak Reading</p> <p>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez</p> <p>Current Time -02:49:49 PM, Wednesday, July 24, 2019</p> </div> <div> <p>Frequency</p> <p>EUT Mode: Charging and Transmitting</p> <p>EUT Power: 36 VDC</p> <p>Notes:</p> </div> <div> <p>EUT: Si-EMobility Max-X6-2</p> <p>Project Number: 21055</p> <p>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>         |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | Horizontal                                                                                                          |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |                                                                                                                     |                         |                   | Advertising TX/RX        |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m) | Limit Level (dBµV/m) | Margin (dB)      | Test Results |
| 23927.58                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                      | 56                                                                                                                  | 1                       | Peak              | 44.607                   | 74.0                 | -29.4            | Pass         |
| 24066.28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                      | 245                                                                                                                 | 1                       | Peak              | 45.614                   | 74.0                 | -28.3            | Pass         |
| 24424.19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                      | 490                                                                                                                 | 1                       | Peak              | 45.535                   | 74.0                 | -28.4            | Pass         |
| 24788.76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                      | 409                                                                                                                 | 1                       | Peak              | 45.885                   | 74.0                 | -28.1            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b></p> <p><b>Radiated Emissions, Measured at 1m and Scaled to 3m Distance</b></p> <p>18-26.5 GHz Horizontal Polarity Measured Emissions</p> </div> <div> <p>— Peak Limit</p> <p>— Average Limit</p> <p>— Pre-scan Emissions</p> <p>△ Peak Reading</p> <p>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez</p> <p>Current Time -02:43:44 PM, Wednesday, July 24, 2019</p> </div> <div> <p>Frequency</p> <p>EUT Mode: Charging and Trasmitting</p> <p>EUT Power: 36 VDC</p> <p>Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2</p> <p>Project Number: 21055</p> <p>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Horizontal Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

## 6.3.4 Top Channel, 1 GHz to 25 GHz

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|--|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |  |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |  |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |  |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |  |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |  |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |  |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |  |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |  |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |  |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power:</b>        |                      | 0 N/A            |              |  |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | Vertical                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |  |
| <b>EUT Mode of Operation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                                                                                                                     |                         |                   | <b>Advertising TX/RX</b> |                      |                  |              |  |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBμV/m) | Limit Level (dBμV/m) | Margin (dB)      | Test Results |  |
| 4956.93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3                      | 80                                                                                                                  | 1.02                    | Peak              | 45.325                   | 74.0                 | -28.6            | Pass         |  |
| 7441.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3                      | 208                                                                                                                 | 1.51                    | Peak              | 46.083                   | 74.0                 | -27.9            | Pass         |  |
| 9915.79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3                      | 318                                                                                                                 | 3.15                    | Peak              | 48.123                   | 74.0                 | -25.8            | Pass         |  |
| 12403.06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3                      | 250                                                                                                                 | 1.02                    | Peak              | 50.732                   | 74.0                 | -23.2            | Pass         |  |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b></p> <p><b>Radiated Emissions</b></p> <p>1-18GHz Vertical Polarity Measured Emissions</p> </div> <div> <p>— FCC Peak Limit</p> <p>— FCC Average Limit</p> <p>— Ambient Scan</p> <p>— Pre-scan Emissions</p> <p>△ Peak Reading</p> <p>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez</p> <p>Current Time -09:50:58 AM, Monday, July 22, 2019</p> </div> <div> <p>Frequency</p> <p>EUT Mode: Charging and Trasnmitting</p> <p>EUT Power: 36 VDC</p> <p>Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2</p> <p>Project Number: 21055</p> <p>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |  |
| > 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |  |

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|------------------------------------------|----------------------|-------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                                          |                      |             |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                                          |                      |             |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        | 15.209                                                                                                              |                         |                   |                                          |                      |             |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>                     |                      | 0           |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>                       |                      | 0           |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b> Sergio Gutierrez |                      |             |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b> Lisa Arndt            |                      |             |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b> 0                  |                      |             |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>                         |                      | 0 N/A       |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | Horizontal                                                                                                          |                         |                   | <b>Frequency Range:</b>                  |                      | Above 1GHz  |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                                                                                                                     |                         |                   | Advertising TX/RX                        |                      |             |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m)                 | Limit Level (dBµV/m) | Margin (dB) | Test Results |
| 4959.46                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3                      | 357                                                                                                                 | 1.02                    | Peak              | 45.328                                   | 74.0                 | -28.6       | Pass         |
| 7441.55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3                      | 101                                                                                                                 | 3.76                    | Peak              | 45.892                                   | 74.0                 | -28.1       | Pass         |
| 9918.73                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3                      | 26                                                                                                                  | 3.54                    | Peak              | 47.95                                    | 74.0                 | -26.0       | Pass         |
| 12401.25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3                      | 262                                                                                                                 | 1.02                    | Peak              | 50.588                                   | 74.0                 | -23.4       | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b><br/>Radiated Emissions<br/>1-18GHz Horizontal Polarity Measured Emissions</p> </div> <div> <p>— FCC Peak Limit<br/>— FCC Average Limit<br/>— Ambient Scan<br/>— Pre-scan Emissions<br/>△ Peak Reading<br/>▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez<br/>Current Time -10:02:38 AM, Monday, July 22, 2019</p> </div> <div> <p>EUT Mode: Charging and Trasnmitting<br/>EUT Power: 36 VDC<br/>Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2<br/>Project Number: 21055<br/>Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |
| > 1GHz Horizontal Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |                                                                                                                     |                         |                   |                                          |                      |             |              |

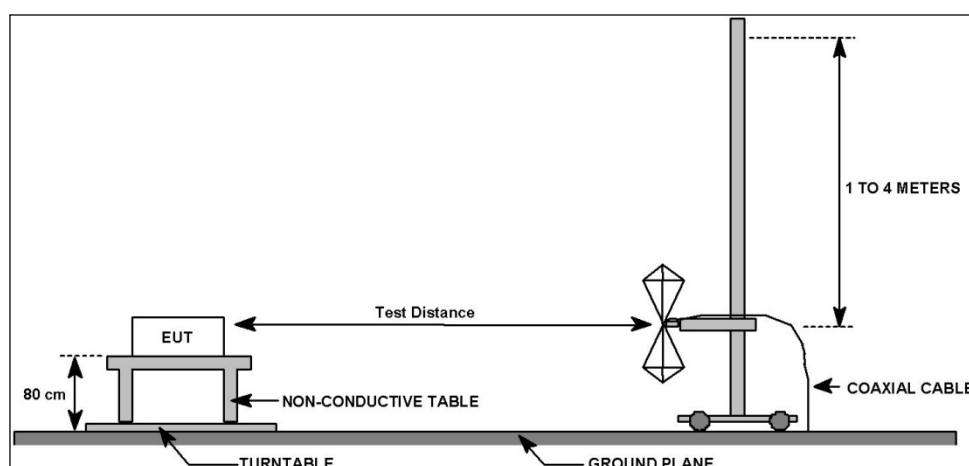
| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>         |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        | Vertical                                                                                                            |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                                                                                                                     |                         |                   | Advertising TX/RX        |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBµV/m) | Limit Level (dBµV/m) | Margin (dB)      | Test Results |
| 24205.81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 91                                                                                                                  | 1                       | Peak              | 44.4                     | 74.0                 | -29.6            | Pass         |
| 24263.41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 188                                                                                                                 | 1                       | Peak              | 44.89                    | 74.0                 | -29.1            | Pass         |
| 24394.59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 407                                                                                                                 | 1                       | Peak              | 45.095                   | 74.0                 | -28.9            | Pass         |
| 24793.99                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 308                                                                                                                 | 1                       | Peak              | 45.994                   | 74.0                 | -28.0            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b><br/> <b>Radiated Emissions, Measured at 1m and Scaled to 3m Distance</b><br/>           18-26.5 GHz Vertical Polarity Measured Emissions</p> </div> <div> <p>— Peak Limit<br/>           — Average Limit<br/>           — Pre-scan Emissions<br/>           △ Peak Reading<br/>           ▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez<br/>           Current Time -03:34:06 PM, Wednesday, July 24, 2019</p> </div> <div> <p>Frequency<br/>           EUT Mode: Charging and Trasnmitting<br/>           EUT Power: 36 VDC<br/>           Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2<br/>           Project Number: 21055<br/>           Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Vertical Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

| Professional Testing, EMI, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|--------------------------|----------------------|------------------|--------------|
| <b>Test Method:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        | ANSI C63.10: 2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices   |                         |                   |                          |                      |                  |              |
| <b>In accordance with:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | FCC Part 15.209 - Code of Federal Regulations Part 47, Subpart C - Intentional Radiators, Radiated Emissions Limits |                         |                   |                          |                      |                  |              |
| <b>Section:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                        | 15.209                                                                                                              |                         |                   |                          |                      |                  |              |
| <b>Test Date(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        | 7/22/2019                                                                                                           |                         |                   | <b>EUT Serial #:</b>     |                      | 0                |              |
| <b>Customer:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        | Si-Mobility                                                                                                         |                         |                   | <b>EUT Part #:</b>       |                      | 0                |              |
| <b>Project Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | 21055                                                                                                               |                         |                   | <b>Test Technician:</b>  |                      | Sergio Gutierrez |              |
| <b>Purchase Order #:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | 0                                                                                                                   |                         |                   | <b>Supervisor:</b>       |                      | Lisa Arndt       |              |
| <b>Equip. Under Test:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | X6                                                                                                                  |                         |                   | <b>Witness' Name:</b>    |                      | 0                |              |
| Radiated Emissions Test Results Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| <b>EUT Line Voltage:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | 0 VDC                                                                                                               |                         |                   | <b>EUT Power</b>         |                      | 0 N/A            |              |
| <b>Antenna Orientation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        | Horizontal                                                                                                          |                         |                   | <b>Frequency Range:</b>  |                      | Above 1GHz       |              |
| EUT Mode of Operation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                                                                                                                     |                         |                   | Advertising TX/RX        |                      |                  |              |
| Frequency Measured (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Test Distance (Meters) | EUT Direction (Degrees)                                                                                             | Antenna Height (Meters) | Detector Function | Corrected Level (dBμV/m) | Limit Level (dBμV/m) | Margin (dB)      | Test Results |
| 24102.54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 83                                                                                                                  | 1                       | Peak              | 45.625                   | 74.0                 | -28.3            | Pass         |
| 24221.34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 229                                                                                                                 | 1                       | Peak              | 44.812                   | 74.0                 | -29.1            | Pass         |
| 24416.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 571                                                                                                                 | 1                       | Peak              | 45.586                   | 74.0                 | -28.4            | Pass         |
| 24891.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3                      | 67                                                                                                                  | 1                       | Peak              | 45.926                   | 74.0                 | -28.0            | Pass         |
| <div style="display: flex; justify-content: space-between;"> <div> <p><b>Professional Testing, EMI, Inc</b><br/> <b>Radiated Emissions, Measured at 1m and Scaled to 3m Distance</b><br/>           18-26.5 GHz Horizontal Polarity Measured Emissions</p> <p>The graph displays field strength in dBμV/m on the y-axis (30 to 90) against frequency in GHz on the x-axis (18.0G to 25.0G). A blue line represents pre-scan emissions, fluctuating between approximately 38 and 45 dBμV/m. A solid magenta line at 55 dBμV/m represents the peak limit, and a dashed magenta line at 50 dBμV/m represents the average limit. Several peak readings are marked with orange triangles and average readings with magenta inverted triangles, all well below the limits.</p> </div> <div> <p>— Peak Limit<br/>           — Average Limit<br/>           — Pre-scan Emissions<br/>           △ Peak Reading<br/>           ▽ Average Reading</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <p>Operator: Sergio Gutierrez<br/>           Current Time -03:17:58 PM, Wednesday, July 24, 2019</p> </div> <div> <p>Frequency<br/>           EUT Mode: Charging and Trasnmitting<br/>           EUT Power: 36 VDC<br/>           Notes:</p> </div> <div> <p>EUT: Si-Emobility Max-X6-2<br/>           Project Number: 21055<br/>           Client: Si-EMobility LLC</p> </div> </div> |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |
| > 1GHz Horizontal Antenna Polarity Measured Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                                                                                                                     |                         |                   |                          |                      |                  |              |

## 7.0 Radiated Spurious Emissions, Receive Mode

### 7.1 Test Procedure

Radiated emissions are measured with the EUT receiving on the center channel.



#### 7.1.1 Test Distance and Detection Method

| 30 MHz to 1 GHz | 1 GHz to 18 GHz | 18 GHz to 25 GHz |
|-----------------|-----------------|------------------|
| 10 m            | 3 m             | 1 m              |
| Quasi-peak      | Peak & Average  | Peak & Average   |

### 7.2 Test Criteria

| 47 CFR (USA) // IC (Canada) |                                                                     |             |
|-----------------------------|---------------------------------------------------------------------|-------------|
| Section Reference           | Parameter                                                           | Date(s)     |
| 15.247, 15.209 //           | Field Strength of Radiated Spurious/Harmonic Emissions Receive Mode | 22 Jul 2019 |

### 7.3 Test Results

The EUT satisfied the requirement while in advertising mode.

## 8.0 Antenna Construction

### 8.1 Procedure

A direct examination of the antenna construction is performed and compared to rule criteria that prevent wireless device antennas from being modified by end users.

### 8.2 Criteria

| 47 CFR (USA) // IC (Canada) |                      |             |
|-----------------------------|----------------------|-------------|
| Section Reference           | Parameter            | Date(s)     |
| 15.203, 15.247 //           | Antenna Construction | 16 Aug 2019 |

### 8.3 Results

| Table 8.3.1 Antenna Construction Details                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Manufacturer: Applicant</p> <p>Part Number: N/A</p> <p>Type: Inverted-F type antenna, radiating element shortened ~ 50%.</p> <p>Gain 0.0 dBi</p> <p>Construction: Etched on circuit board.</p> <p>Connector Supplied: No.</p> |

The antenna system design above satisfies the requirements of the rules.

## 9.0 Equipment

### 9.1 Radiated Emissions 30 MHz to 18 GHz

| Radiated Emissions Test Equipment List |              |                                                                                         |                                               |                |                      |
|----------------------------------------|--------------|-----------------------------------------------------------------------------------------|-----------------------------------------------|----------------|----------------------|
| Tile! Software Version:                |              | Version: 7.1.2.17 ( Jan 08, 2016 - 02:12:48 PM ) or 4.1.A.0, April 14, 2009, 11:01:00PM |                                               |                |                      |
| Test Profile:                          |              | 2018_Radiated Emissions_TILE7_v1EL.til                                                  |                                               |                |                      |
| Asset #                                | Manufacturer | Model                                                                                   | Equipment Nomenclature                        | Serial Number  | Calibration Due Date |
| 1509A                                  | Braden       | TDK 10M                                                                                 | TDK 10M Chamber, NSA < 1 GHz                  | DAC-012915-005 | 7/10/2019            |
| 1890                                   | HP           | 8447F-H64                                                                               | Preamp/Amp, 9kHz-1300MHz, 28/25dB             | 3313A05298     | 1/10/2020            |
| 1937                                   | Agilent      | E4440A - AYZ                                                                            | PSA , 3 Hz - 26.5 GHz, Opt. AYZ               | MY44808298     | 11/8/2019            |
| 1926                                   | ETS-Lindgren | 3142D                                                                                   | Antenna, Biconilog, 26 MHz - 6 GHz            | 135454         | 3/7/2019             |
| C027D                                  | NAD          | NAD 2400                                                                                | Amplifier, 100W, 3Hz-100kHz                   | 11524464       | N/A                  |
| 1327                                   | EMCO         | 1050                                                                                    | Controller, Antenna Mast                      | none           | N/A                  |
| 0942                                   | EMCO         | 11968D                                                                                  | Turntable, 4ft.                               | 9510-1835      | N/A                  |
| 1969                                   | HP           | 11713A                                                                                  | Attenuator/Switch Driver                      | 3748A04113     | N/A                  |
|                                        |              |                                                                                         |                                               |                |                      |
| 1509B                                  | Braden       | TDK 10M                                                                                 | TDK 10M Chamber,sVSWR > 1 GHz                 | DAC-012915-005 | 11/16/2019           |
| 2004                                   | Miteq        | AFS44-00101800-2S-10P-44                                                                | Amplifier, 40dB, .1-18GHz                     | 0              | 1/10/2020            |
| C030                                   | none         | none                                                                                    | Cable Coax, N-N, 30m, 1 - 18GHz               | none           | 9/21/2019            |
| 1325                                   | EMCO         | 1050                                                                                    | Controller, Antenna Mast                      | 9003-1461      | N/A                  |
| 1780                                   | ETS-Lindgren | 3117                                                                                    | Antenna, Double Ridged Guide Horn, 1 - 18 GHz | 110313         | 3/15/2019            |
|                                        |              |                                                                                         |                                               |                |                      |

**9.2 Fundamental Power, Bandwidth, Duty Cycle, Band Edge**

| Asset # | Manufacturer | Model # | Description       | Calibration Due |
|---------|--------------|---------|-------------------|-----------------|
| 2295    | Agilent      | E4440A  | Spectrum Analyzer | 6 Nov 2019      |

**9.3 Radiated Emissions 18-25 GHz**

| Asset # | Manufacturer | Model # | Description                | Calibration Due |
|---------|--------------|---------|----------------------------|-----------------|
| 2295    | Agilent      | E4440A  | Spectrum Analyzer          | 6 Nov 2019      |
| 1974    | Agilent      | 83017A  | Microwave Amplifier        | 7 Nov 2020      |
| 1542    | A H Systems  | SAS-572 | Antenna, Horn, 18-26.5 GHz | CNR             |
| 0524    | EMCO         | 1060    | Turntable controller       | CNR             |

## 10.0 Measurement Bandwidths

| Radiated Emissions Spectrum Analyzer Bandwidth and Measurement Time - Peak Scan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                           |                      |                       |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------|-----------------------|----------------------------|
| Frequency Band Start (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Frequency Band Stop (MHz) | 6 dB Bandwidth (kHz) | Number of Ranges Used | Measurement Time per Range |
| 0.009                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.15                      | 0.3                  | 2                     | Multiple Sweeps            |
| 0.15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 30                        | 9                    | 6                     | Multiple Sweeps            |
| 30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1000                      | 120                  | 2                     | Multiple 800 mS Sweeps     |
| 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6000                      | 1000                 | 2                     | Multiple Sweeps            |
| 6000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 18000                     | 1000                 | 2                     | Multiple Sweeps            |
| 18000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 26500                     | 1000                 | 2                     | Multiple Sweeps            |
| *Notes:<br>1. The settings above are specifically calculated for the E4440A series of spectrum analyzers, which have 8,000 data points per range.<br>2. The measurement receiver resolution bandwidth setting was 300 Hz for quasi-peak measurements from 9-150 kHz.<br>3. The measurement receiver resolution bandwidth setting was 9 kHz for quasi-peak measurements from 0.15-30 MHz.<br>4. The measurement receiver resolution bandwidth setting was 120 kHz for quasi-peak measurements from 30-1000 MHz.<br>5. The measurement receiver resolution bandwidth setting was 1 MHz for average measurements from 1-18 GHz. |                           |                      |                       |                            |

## Appendix: Policy, Rationale, and Evaluation of EMC Measurement Uncertainty

All uncertainty calculations, estimates and expressions thereof shall be in accordance with NIST policy. Since PTI operates in accordance with NIST (NVLAP) Handbook 150-11: 2007, all instrumentation having an effect on the accuracy or validity of tests shall be periodically calibrated or verified traceable to national standards by a competent calibration laboratory. The certificates of calibration or verification on this instrumentation shall include estimates of uncertainty as required by NIST Handbook 150-11.

### 1. Rationale and Summary of Expanded Uncertainty.

Each piece of instrumentation at PTI that is used in making measurements for determining conformance to a standard (or limit), shall be assessed to evaluate its contribution to the overall uncertainty of the measurement in which it is used. The assessment of each item will be based on either a type A evaluation or a type B evaluation. Most of the evaluations will be type B, since they will be based on the manufacturer's statements or specifications of the calibration tolerances, or uncertainty will be stated along with a brief rationale for the type of evaluation and the resulting stated uncertainties.

The individual uncertainties included in the combined standard uncertainty for a specific test result will depend on the configuration in which the item of instrumentation is used. The combination will always be based on the law of propagation of uncertainty. Any systematic effects will be accommodated by including their uncertainties, in the calculation of the combined standard uncertainty; except that if the direction and amount of the systematic effect cannot be determined and separated from its uncertainty, the whole effect will be treated as uncertainty and combined along with the other elements of the test setup.

Type A evaluations of standard uncertainty will usually be based on calculating the standard deviation of the mean of a series of independent observations, but may be based on a least-squares curve fit or the analysis of variance for unusual situations. Type B evaluations of standard uncertainty will usually be based on manufacturer's specifications, data provided in calibration reports, and experience. The type of probability distribution used (normal, rectangular, a priori, or u-shaped) will be stated for each Type B evaluation.

In the evaluation of the uncertainty of each type of measurement, the uncertainty caused by the operator will be estimated. One notable operator contribution to measurement uncertainty is the manipulation of cables to maximize the measured values of radiated emissions. The operator contribution to measurement uncertainty is evaluated by having several operators independently repeat the same test. This results in a Type A evaluation of operator-contributed measurement uncertainty.

A summary of the expanded uncertainties of PTI measurements is shown as Table 1. These are the worst-case uncertainties considering all operative influence factors.

**Table 1: Summary of Measurement Uncertainties for Site 45**

| Type of Measurement         | Frequency Range   | Meas. Dist. | Expanded Uncertainty<br>U, dB (k=2) |
|-----------------------------|-------------------|-------------|-------------------------------------|
| Mains Conducted Emissions   | 150 kHz to 30 MHz | N/A         | 2.9                                 |
| Telecom Conducted Emissions | 150 kHz to 30 MHz | N/A         | 2.8                                 |
| Radiated Emissions          | 30 to 1,000 MHz   | 10 m        | 4.8                                 |
|                             | 1 to 18 GHz       | 3 m         | 5.7                                 |

## End of Report