

# National Technical Systems Test Report for Electromagnetic Interference (EMI) Testing of the Clear Access

**Prepared For**

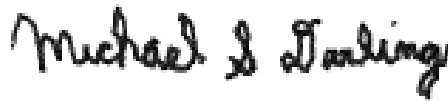
Pro V&V, Inc. | 6705 Odyssey Dr NW Ste C | Huntsville, AL 35806

**Prepared By**

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A handwritten signature in black ink, appearing to read "Greg Gagne", written over a horizontal line.

Greg Gagne  
Technical Writer

A handwritten signature in black ink, appearing to read "Michael S. Darling", written over a horizontal line.

Michael Darling  
EMI Department Manager



This report and the information contained herein represent the results of testing articles/products identified and selected by the client. The tests were performed to specifications and/or procedures approved by the client. National Technical Systems (NTS) makes no representations expressed or implied that such testing fully demonstrates efficiency, performance, reliability, or any other characteristic of the articles being tested, or similar products. This report should not be relied upon as an endorsement or certification by NTS of the equipment tested, nor does it represent any statement whatsoever as to its merchantability or fitness of the test article or similar products for a particular purpose. This document shall not be reproduced except in full without written approval from NTS.



**Revision History**

| <b>Rev.</b> | <b>Description</b> | <b>Issue Date</b> |
|-------------|--------------------|-------------------|
| 0           | Initial Release    | 04/13/2021        |

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## 1.0 Introduction

This document presents the test procedures used and the results obtained during the performance of an Electromagnetic Interference test program. The test program was conducted to assess the ability of the specified Equipment Under Test (EUT) to successfully satisfy the requirements listed in Section 2.0.

## 2.0 References

The following references listed below form a part of this document to the extent specified herein.

- Pro V&V, Inc. Purchase Order(s) 2020-009, dated 11/03/2020
- National Technical Systems (NTS) Quote(s) OP0565149, dated 10/15/2020
- NTS Corporate Quality Policy Manual, Revision 9, dated 9/20/2018
- ISO/IEC 17025:2017(E) *General Requirements for the Competence of Testing and Calibration Laboratories*, dated 11/1/2017
- Test Specification: FCC Part 15

## 3.0 Product Selection and Description

Pro V&V, Inc. selected and provided the test sample(s) to be used as the Equipment Under Test. Details below:

**Table 3.0-1: Product Identification - Equipment Under Test (EUT)**

| Item | Qty. | Name/Description | Part Number   | Serial Number |
|------|------|------------------|---------------|---------------|
| 1    | 1    | ClearAccess      | ClearVote 2.2 | N/A           |

## 3.1 Security Classification

Non-classified

## 4.0 General Test Requirements

### 4.1 Test Equipment

NTS-provided equipment is calibrated according to ISO/IEC 17025:2017(E) and calibration is traceable to the National Institute of Standards and Technology (NIST). Calibration records are maintained on file at NTS.

### 4.2 Measurement Uncertainties

Measurement uncertainty data is available upon request.

### 4.3 Notice of Deviation

In accordance with NTS' quality procedures, when the EUT is observed to exceed or display susceptibility, a Notice of Deviation (NOD) document is generated by the technician performing the test. This NOD documents the requirement, how the EUT deviated from the requirement, and allows room for resolution of the deviation.

This document is reviewed and approved by the NTS Program Manager or Engineer and the NTS Quality Assurance Representative, and then forwarded to the customer contact. Once mitigated (or passed over), the steps taken to correct the deviation (or simply instruction from the customer to continue testing) are recorded in the NOD and a copy of the NOD is integrated into the body of the report, in the appropriate location.

## 5.0 Test Descriptions and Results

**Table 5.0-1: Summary of Test Information & Results**

| Section | Test                                     | Specification | Test Facility | Test Date                  | Part #                          | Serial # | Test Result* |
|---------|--|---------------|---------------|----------------------------|---------------------------------|----------|--------------|
| 5.1     | Radiated Emissions,<br>30 MHz - 1 GHz    | FCC Part 15   | Longmont      | 03/18/2021 -<br>03/18/2021 | ClearVote 2.2 (Clear<br>Access) | N/A      | Complied     |
| 5.2     | Conducted Emissions,<br>150 kHz - 30 MHz | FCC Part 15   | Longmont      | 03/18/2021 -<br>03/18/2021 | ClearVote 2.2 (Clear<br>Access) | N/A      | Complied     |

\*The decision rule used to state compliance is in accordance with the test specification used for testing. Unless otherwise noted, testing was performed in accordance with the latest published version of test specification at time of test.

5.1 Radiated Emissions, 30 MHz - 1 GHz

**Radiated Emissions, FCC Part 15**

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000066    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | BW02001275C0    |
|                          | ELO                          |                 | I193022848      |
|                          |                              |                 | J193011870 (CI) |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |
| Temperature:             | 21°C                         | Humidity:       | 23%             |
| Input Voltage:           | 120Vac/60Hz                  | Pressure:       | 827mb           |
| Configuration of Unit:   | Normal operating mode        |                 |                 |
| Test Engineer:           | Kevin Johnson                |                 |                 |

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| Type | Frequency (MHz) | Level (dBuV) | Transducer (dB/m) | Gain / Loss (dB) | Final (dBuV/m) | Azm(deg)/Pol/Hgt(m) | Margin: FCC Class B QP (dB) |
|------|-----------------|--------------|-------------------|------------------|----------------|---------------------|-----------------------------|
| QP   | 32.742          | 38.2         | 23.4              | -46.8            | 14.8           | 14/V-Pole/1.04      | 14.78                       |
| QP   | 66.539          | 57.1         | 12.0              | -46.8            | 22.3           | 1/V-Pole/2.24       | 7.26                        |
| QP   | 139.085         | 46.4         | 17.4              | -46.9            | 16.8           | 100/V-Pole/2.42     | 16.20                       |
| QP   | 249.999         | 58.8         | 15.6              | -46.8            | 27.6           | 69/V-Pole/1.01      | 7.90                        |
| QP   | 490.475         | 46.3         | 21.8              | -46.9            | 21.2           | 23/H-Pole/1.43      | 14.35                       |
| QP   | 701.239         | 38.7         | 24.3              | -46.9            | 16.1           | 135/V-Pole/1.00     | 19.41                       |
| QP   | 916.575         | 37.9         | 26.6              | -46.9            | 17.6           | 135/V-Pole/1.00     | 17.94                       |
| QP   | 374.998         | 52.8         | 19.1              | -46.9            | 25.0           | 136/V-Pole/1.02     | 10.54                       |

The highest emission measured was at **66.539 MHz**, which was **7.26dB** below the limit.

- "Type" refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:
  - PK = Peak Measurement: RBW is 120kHz, VBW is 3 MHz
  - QP = Quasi-Peak Measurement: RBW is 120kHz, VBW is 3 MHz, and QP Detection is ENABLED
  - AV = Video Average Measurement: RBW is 1 MHz, VBW is 10 Hz
- The "field strength" (FS) emissions level is attained by adding the received amplitude measured (RA), Antenna factor (AF), and cable factor (CF) minus the amplifier gain (AG).  $FS = RA + AF + CF - AG$ . Final measurements are made with the Azimuth, Polarity, Height, and EUT Cables positioned for maximum radiation. If applicable, cables positions are noted in the test log. (Sample Calculation:  $49.6 \text{ dBuV} + 11.4 \text{ dB/m} - 28.8 \text{ dB (CF/AG)} = 32.2 \text{ dBuV/m}$ . **Important Note:** This is a sample calculation only for the purpose of demonstration, and does not reflect data in this report.)
- The "Azm/Pol/Hgt" indicates the turn-table *azimuth*, the antenna *polarity*, and the antenna *height* where the maximum emissions level was measured.
- The "Margin" is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.
- The PRESCAN is a peak measurement and is performed with the RBW set to 120 kHz, VBW set to 3 MHz (30 MHz to 1 GHz), and the RBW set to 1 MHz, VBW set to 100 kHz (> 1 GHz)

### Radiated Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000066    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | BW02001275C0    |
|                          | ELO                          |                 | I193022848      |
|                          |                              |                 | J193011870 (CI) |

Standard Referenced: FCC Part 15 Date: March 18, 2021

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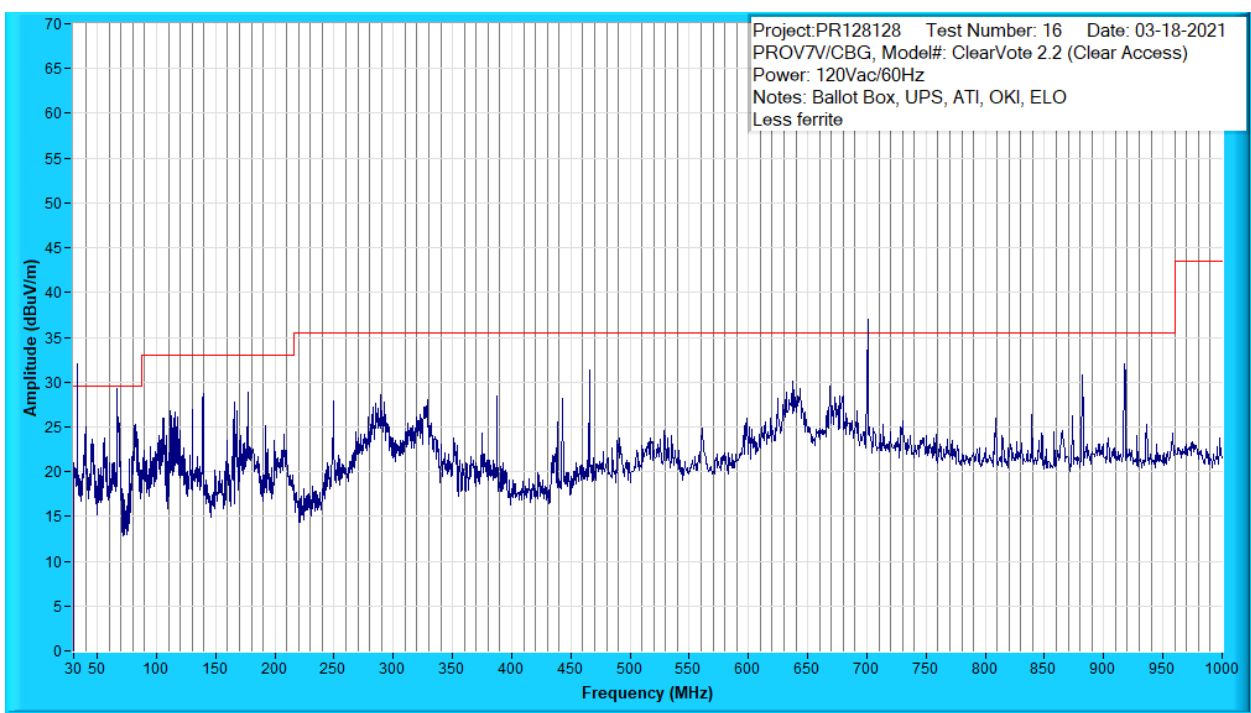


Figure A1: Radiated Emissions Prescan, 30MHz to 1000MHz, Peak Measurements at 10m Distance

## Radiated Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000066    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | BW02001275C0    |
|                          | ELO                          |                 | I193022848      |
|                          |                              |                 | J193011870 (CI) |

Standard Referenced: FCC Part 15

Date: March 18, 2021

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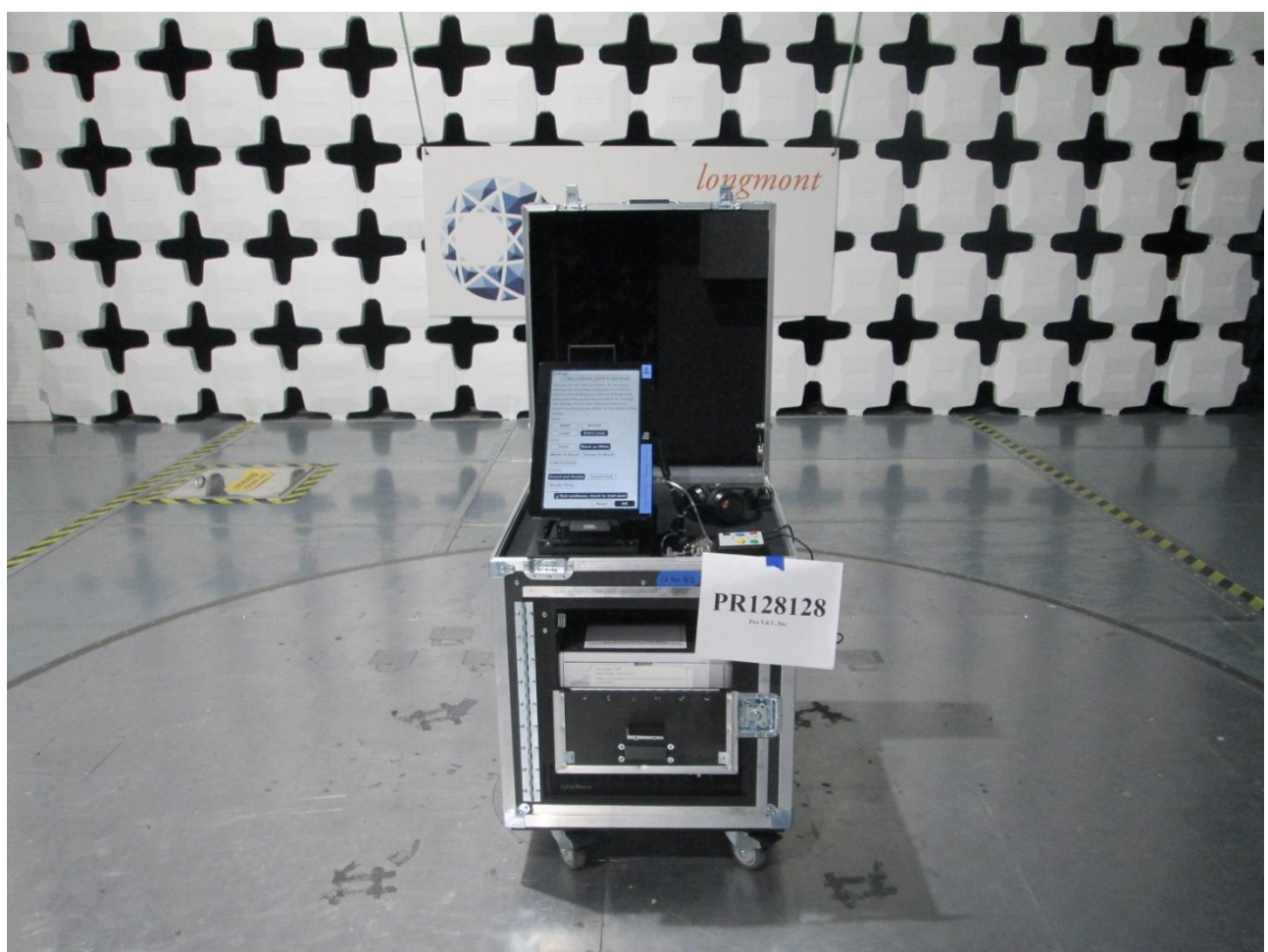


Figure A2: Radiated Emissions Test Setup – Front Side



### Radiated Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000066    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | BW02001275C0    |
|                          | ELO                          |                 | I193022848      |
|                          |                              |                 | J193011870 (CI) |

Standard Referenced: FCC Part 15 Date: March 18, 2021

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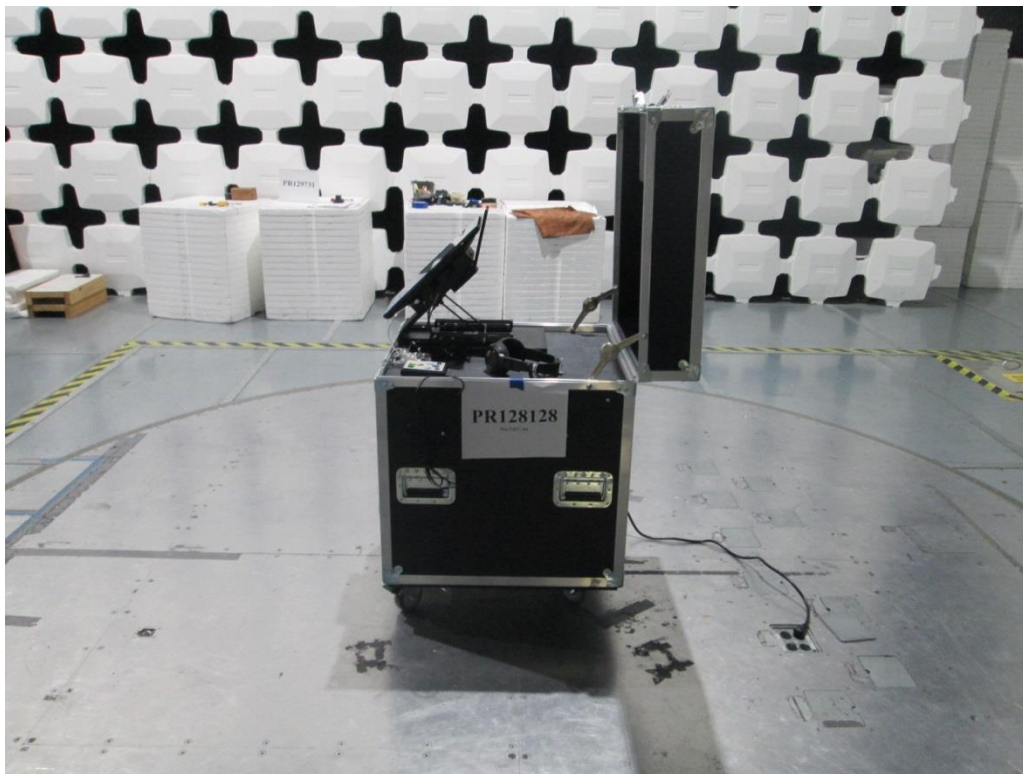


Figure A3: Radiated Emissions Test Setup – Right Side

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**Radiated Emissions, FCC Part 15**

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|                          |  |                 |   |
|--------------------------|--|-----------------|---|
| Manufacturer:            | ProV&V/CBG   | Project Number: | PR128128/B80802   |
| Customer Representative: | Michael Walker   | Test Area:      | 10m2  |
| Model:                   | ClearVote 2.2 (Clear Access)<br>Ballot Box<br>UPS<br>ATI<br>OKI<br>ELO |                 | ---<br>2<br>PY3JU2000066<br>20011271<br>BW02001275C0<br>I193022848<br>J193011870 (CI) |

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Standard Referenced: FCC Part 15

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Date: March 18, 2021

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Figure A4: Radiated Emissions Test Setup – Back Side

## Radiated Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000066    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | BW02001275C0    |
|                          | ELO                          |                 | I193022848      |
|                          |                              |                 | J193011870 (CI) |

Standard Referenced: FCC Part 15

Date: March 18, 2021

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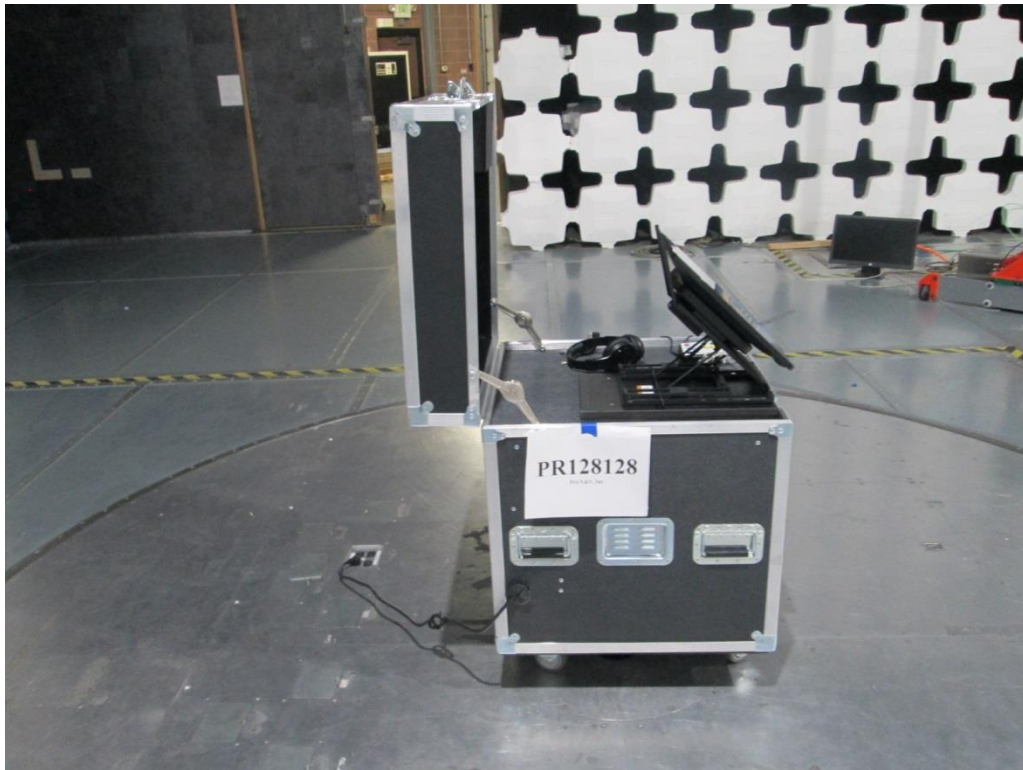


Figure A5: Radiated Emissions Test Setup – Left Side



## Radiated Emissions, FCC Part 15

|                          |                              |                 |                   |
|--------------------------|------------------------------|-----------------|-------------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | P PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2              |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---               |
|                          | Ballot Box                   |                 | 2                 |
|                          | UPS                          |                 | PY3JU2000066      |
|                          | ATI                          |                 | 20011271          |
|                          | OKI                          |                 | BW02001275C0      |
|                          | ELO                          |                 | 1193022848        |
|                          |                              |                 | J193011870 (CI)   |

|                      |             |       |                |
|----------------------|-------------|-------|----------------|
| Standard Referenced: | FCC Part 15 | Date: | March 18, 2021 |
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### Test Equipment List

| ID Number | Manufacturer    | Model #         | Serial #   | Description  | Cal Date   | Cal Due    |
|-----------|-----------------|-----------------|------------|--|------------|------------|
| 1046      | Hewlett Packard | 8566B           | 2403A08106 | Spectrum Analyzer Display                          | 04/01/2020 | 04/01/2021 |
| 1155      | PE              | PE15A1013       | 1          | Preamp, 10 - 1000 MHz, 50 dB                       | 03/17/2021 | 03/17/2022 |
| 1342      | Hewlett Packard | 85650A          | 2412A00392 | Quasi-Peak Adapter                                 | 04/01/2020 | 04/01/2021 |
| 1345      | Hewlett Packard | 85685A          | 2901A00865 | RF Preselector                                     | 03/31/2020 | 07/01/2021 |
| 1381      | Sunol           | JB1             | A010411    | 0.03-2 GHz Broadband Hybrid Antenna                | 08/27/2019 | 08/27/2021 |
| 1396      | CIR Enterprises | 10m Chamber #2  | 002        | 10m Chamber with 4m turntable                      | 04/27/2020 | 04/27/2022 |
| 1410      | Sunol Sciences  | SC110V          | 021611-1   | System Controller 10meter #2                       | NA         | NA         |
| 1492      | Fluke           | 87/5 Multimeter | 23350032   | True RMS Multimeter (WC059765)                     | 12/18/2020 | 12/18/2021 |
| 1501      | Hewlett Packard | 8566B           | 2007A00456 | Spectrum Analyzer - RF Section                     | 04/01/2020 | 04/01/2021 |
| 1592      | EMCI            | CEAS            | V4.1.2     | Commercial Emissions Automation Software - 10M # 2 | NA         | NA         |
| 1902      | EXTECH          | 445703          | 1218-1     | Hygrometer-Thermometer (WC059900)                  | 06/29/2020 | 06/29/2021 |

**5.2 Conducted Emissions, 150 kHz - 30 MHz**

**Conducted Emissions, FCC Part 15**

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | 1193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |
| Temperature:             | 22°C                         | Humidity:       | 23%             |
| Input Voltage:           | 120Vac/60Hz                  | Pressure:       | 827mb           |
| Configuration of Unit:   | Normal operating mode        |                 |                 |
| Test Engineer:           | Kevin Johnson                |                 |                 |

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**Conducted Emissions-Quasi-Peak/ Average Data Table**  
L1

| Frequency | Amplitude (dBµV) | Quasi-peak Limit (dBµV) | Delta to Quasi-peak Limit (dB) | Average Limit (dBµV) | Delta to Average Limit (dB) |
|-----------|------------------|-------------------------|--------------------------------|----------------------|-----------------------------|
| 0.15      | 18.3             | 66                      | -60.7                          | N/A                  | N/A                         |
| 6.85      | 15.43            | 60                      | -57.57                         | N/A                  | N/A                         |
| 7.81      | 15.48            | 60                      | -57.52                         | N/A                  | N/A                         |
| 8.01      | 15.5             | 60                      | -57.5                          | N/A                  | N/A                         |
| 8.01      | 15.75            | 60                      | -57.25                         | N/A                  | N/A                         |
| 8.09      | 15.74            | 60                      | -57.26                         | N/A                  | N/A                         |
| 8.49      | 16.04            | 60                      | -56.96                         | N/A                  | N/A                         |
| 9.21      | 15.81            | 60                      | -57.19                         | N/A                  | N/A                         |
| 16.69     | 15.51            | 60                      | -57.49                         | N/A                  | N/A                         |
| 0.16      | 43.19            | N/A                     | N/A                            | 56                   | -22.81                      |
| 0.16      | 43.27            | N/A                     | N/A                            | 56                   | -22.73                      |
| 0.16      | 43.3             | N/A                     | N/A                            | 56                   | -22.7                       |
| 0.16      | 43.26            | N/A                     | N/A                            | 56                   | -22.74                      |
| 0.16      | 43.28            | N/A                     | N/A                            | 56                   | -22.72                      |
| 0.16      | 43.24            | N/A                     | N/A                            | 56                   | -22.76                      |
| 0.16      | 43.07            | N/A                     | N/A                            | 56                   | -22.93                      |
| 0.16      | 43.25            | N/A                     | N/A                            | 56                   | -22.75                      |
| 0.16      | 42.74            | N/A                     | N/A                            | 56                   | -23.26                      |

Conducted Emissions-Quasi-Peak/ Average Data Table  
L2

| Frequency | Amplitude (dBµV) | Quasi-peak Limit (dBµV) | Delta to Quasi-peak Limit (dB) | Average Limit (dBµV) | Delta to Average Limit (dB) |
|-----------|------------------|-------------------------|--------------------------------|----------------------|-----------------------------|
| 0.15      | 18.3             | 66                      | -60.7                          | N/A                  | N/A                         |
| 6.85      | 15.43            | 60                      | -57.57                         | N/A                  | N/A                         |
| 7.81      | 15.48            | 60                      | -57.52                         | N/A                  | N/A                         |
| 8.01      | 15.5             | 60                      | -57.5                          | N/A                  | N/A                         |
| 8.01      | 15.75            | 60                      | -57.25                         | N/A                  | N/A                         |
| 8.09      | 15.74            | 60                      | -57.26                         | N/A                  | N/A                         |
| 8.49      | 16.04            | 60                      | -56.96                         | N/A                  | N/A                         |
| 9.21      | 15.81            | 60                      | -57.19                         | N/A                  | N/A                         |
| 16.69     | 15.51            | 60                      | -57.49                         | N/A                  | N/A                         |
| 0.16      | 43.19            | N/A                     | N/A                            | 56                   | -22.81                      |
| 0.16      | 43.27            | N/A                     | N/A                            | 56                   | -22.73                      |
| 0.16      | 43.3             | N/A                     | N/A                            | 56                   | -22.7                       |
| 0.16      | 43.26            | N/A                     | N/A                            | 56                   | -22.74                      |
| 0.16      | 43.28            | N/A                     | N/A                            | 56                   | -22.72                      |
| 0.16      | 43.24            | N/A                     | N/A                            | 56                   | -22.76                      |
| 0.16      | 43.07            | N/A                     | N/A                            | 56                   | -22.93                      |
| 0.16      | 43.25            | N/A                     | N/A                            | 56                   | -22.75                      |
| 0.16      | 42.74            | N/A                     | N/A                            | 56                   | -23.26                      |
| 0.16      | 43.19            | N/A                     | N/A                            | 56                   | -22.81                      |

- “Type” refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:
  - PK = Peak Measurement: RBW is 9 kHz, VBW is 3 MHz
  - QP = Quasi-Peak Measurement: RBW is 9 kHz, VBW is 3 MHz, and QP Detection is ENABLED
  - AV = Video Average Measurement: RBW is 9 kHz, VBW is 10 Hz
- The “field strength” (FS) emissions level is attained by adding the received amplitude measured (RA), Antenna factor (AF), and cable factor (CF) minus the amplifier gain (AG).  $FS = RA + AF + CF - AG$ . Final measurements are made with the Azimuth, Polarity, Height, and EUT Cables positioned for maximum radiation. If applicable, cables positions are noted in the test log. (Sample Calculation:  $49.6 \text{ dBuV} + 11.4 \text{ dB/m} - 28.8 \text{ dB (CF/AG)} = 32.2 \text{ dBuV/m}$ . **Important Note:** This is a sample calculation only for the purpose of demonstration, and does not reflect data in this report.)
- The “TestPoint” indicates which AC or DC input power line or which I/O cable the measurement was made on.
- The “Margin” is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.
- The PRESCAN is a peak measurement and is performed with the RBW set to 9 kHz, and the VBW set to 3 MHz

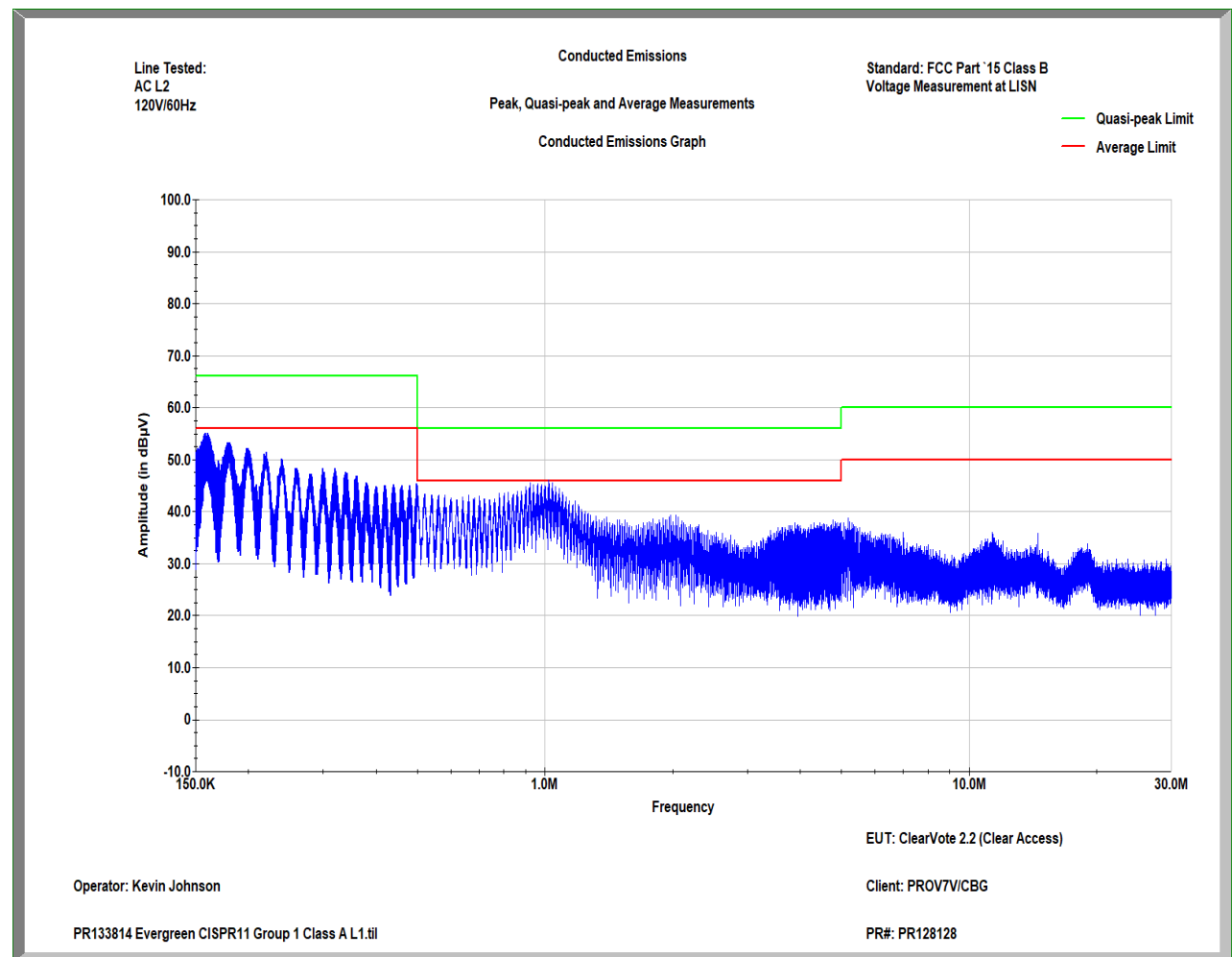
## Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |

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### Conducted Emissions Line 1, 150kHz – 30MHz



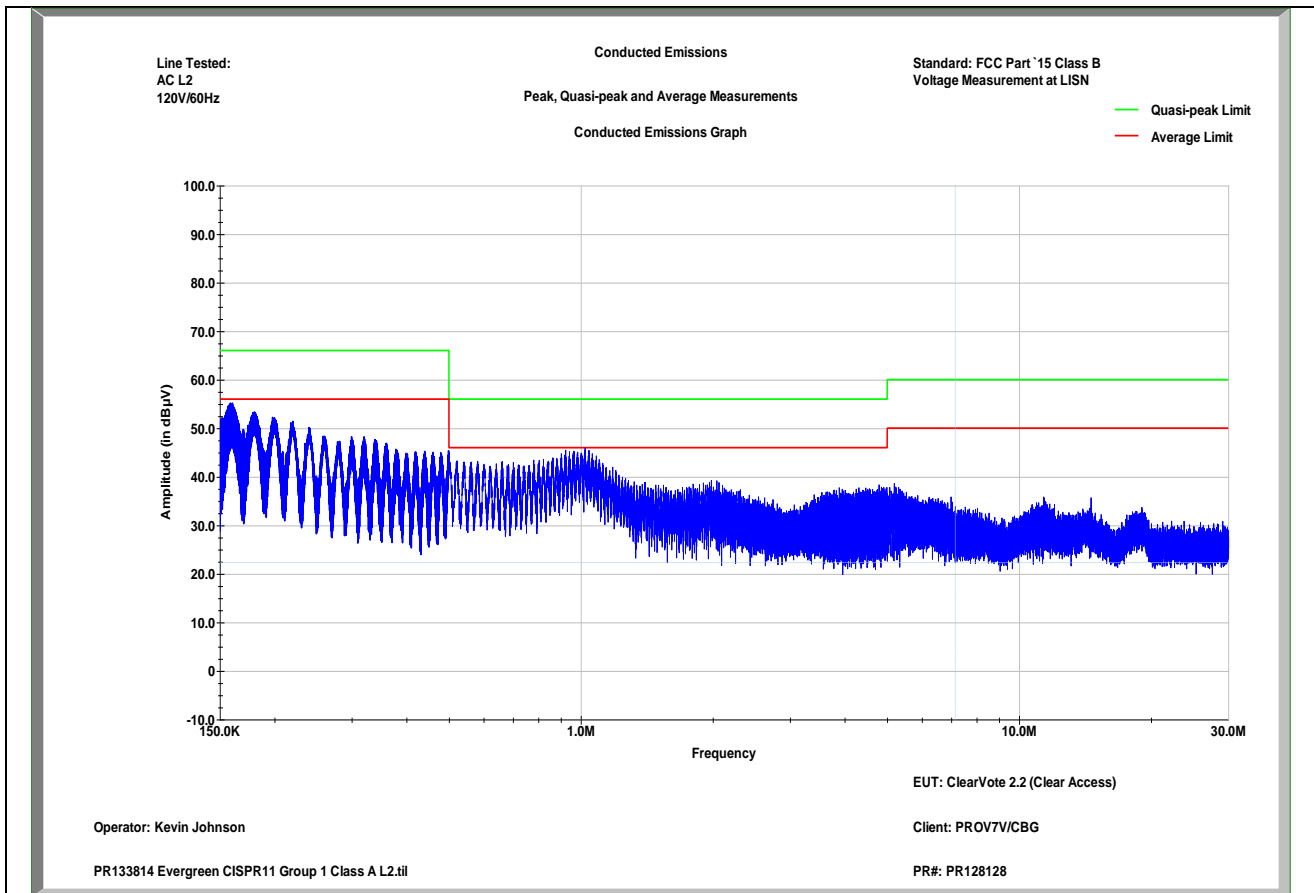
### Conducted Emissions L1, 150kHz – 30MHz Line 1

## Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |

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Conducted Emissions Neutral, 150kHz – 30MHz Line 2



### Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |

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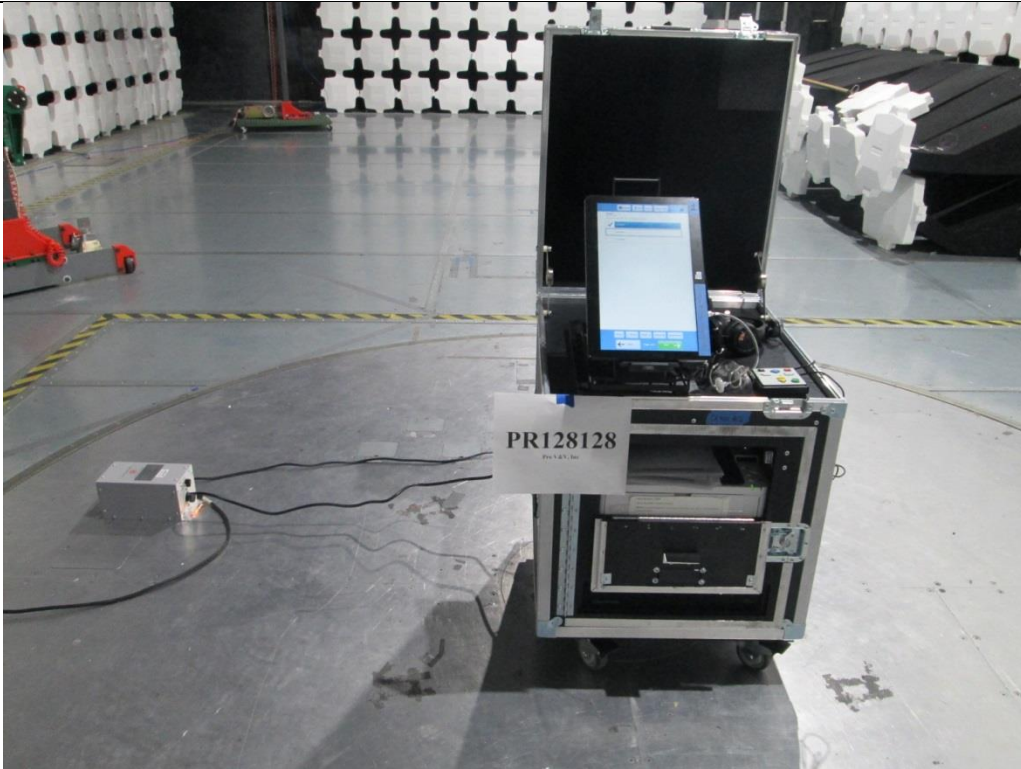


Figure A1. Conducted Emissions Test Setup – Front side

### Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |

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Figure A2. Conducted Emissions Test Setup - Right side

### Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |

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Figure A3. Conducted Emissions Test Setup – Back Side

### Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |

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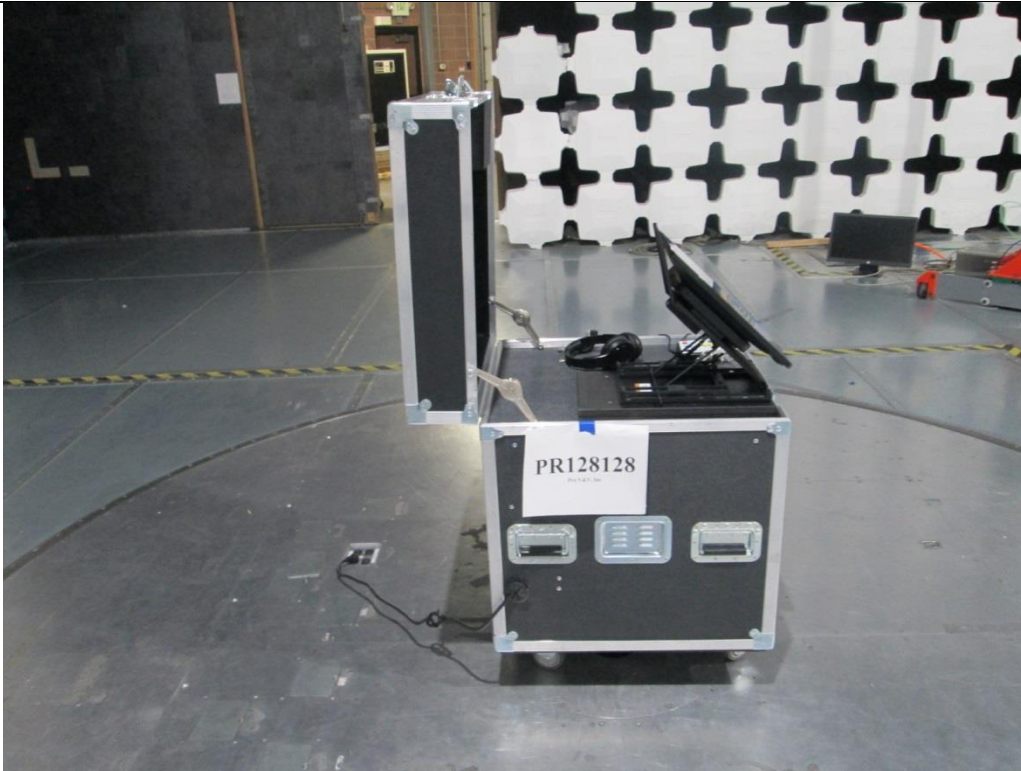


Figure A4. Conducted Emissions Test Setup – Left Side



## Conducted Emissions, FCC Part 15

|                          |                              |                 |                 |
|--------------------------|------------------------------|-----------------|-----------------|
| Manufacturer:            | ProV&V/CBG                   | Project Number: | PR128128/B80802 |
| Customer Representative: | Michael Walker               | Test Area:      | 10m2            |
| Model:                   | ClearVote 2.2 (Clear Access) |                 | ---             |
|                          | Ballot Box                   |                 | 2               |
|                          | UPS                          |                 | PY3JU2000097    |
|                          | ATI                          |                 | 20011271        |
|                          | OKI                          |                 | AK89016409CO    |
|                          | ELO                          |                 | I193022854      |
| Standard Referenced:     | FCC Part 15                  | Date:           | March 18, 2021  |
| B80802-22-CE.doc         |                              |                 | FR0100          |

### Test Equipment List

| ID Number | Manufacturer       | Model #          | Serial #    | Description                         | Cal Date   | Cal Due    |
|-----------|--------------------|------------------|-------------|-------------------------------------|------------|------------|
| 1200      | Agilent Technology | 11947A           | 3107A03807  | Transient Limiter, 9 kHz to 200 MHz | 04/24/2020 | 04/24/2021 |
| 1396      | CIR Enterprises    | 10m Chamber #2   | 002         | 10m Chamber with 4m turntable       | 04/27/2020 | 04/27/2022 |
| 1492      | Fluke              | 87/5 Multimeter  | 23350032    | True RMS Multimeter (WC059765)      | 12/18/2020 | 12/18/2021 |
| 1902      | EXTECH             | 445703           | 1218-1      | Hygrometer-Thermometer (WC059900)   | 06/29/2020 | 06/29/2021 |
| 1939      |                    | 8012-50-R-25-BNC | SN221373-1B | 150kHz to 30MHz LISN                | 11/10/2020 | 11/10/2021 |
| 1951      | RHODE & SCHWARZ    | ESW44            | 101866      | EMI Test Receiver (2Hz-44GHz)       | 01/08/2021 | 01/08/2022 |

6.0 Test Log

**EMI Test Log**

|                          |                              |                  |
|--------------------------|------------------------------|------------------|
| Manufacturer:            | CBG                          | PR128128/ B80802 |
| Model:                   | ClearVote 2.2 (Clear Access) | ---              |
|                          | Ballot Box                   | 2                |
|                          | UPS                          | PY3JU2000210     |
|                          | ATI                          | PY3JU2000066     |
|                          | OKI                          | 20011271         |
|                          | ELO                          | BW01017754C0     |
|                          |                              | BW02001275C0     |
|                          |                              | I193022848       |
|                          |                              | J193011870 (CI)  |
| Customer Representative: | Michael Walker               |                  |
| Standard Referenced:     | EAC 2005 VVSG                |                  |

FR0105

**10m Emissions**

| Test | Test Code | Date                          | Event   | O<br>T | Time (hrs) | Result | Initials |
|------|-----------|-------------------------------|---|--------|------------|--------|----------|
| RE   |           | January 11, 2021<br>0800-0900 | Test#8: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>UPS-PY3JV2000053<br>ELO-J19301870<br>ATI – 20011265<br>BB-1<br>OKI-BW02001268CO<br>Prescan stopped-multiple failing frequencies |        | 1.0        | Fail   | KJ       |
| RE   |           | 0900-1000                     | Test#9: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>UPS-PY3JV2000053<br>ELO-J19301870<br><b>ATI – 20011268</b><br>BB-1<br>OKI-BW02001268CO<br><b>Changed out the keypad</b>         |        | 1.0        | Fail   | KJ       |
| RE   |           | 1000-1030                     | Test#10: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br><b>UPS-PY3JU2000066</b><br><b>ELO-I193022854</b><br><b>ATI – 20011271</b><br><b>BB-2</b><br><b>OKI-BW02001275C0</b>            |        | 0.5        | Fail   | KJ       |



### 10m Emissions

| Test | Test Code | Date                          | Event   | O T | Time (hrs) | Result   | Initials |
|------|-----------|-------------------------------|---|-----|------------|----------|----------|
| RE   |           | 1030-1100                     | Test#11: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>UPS-PY3JU2000066<br>ELO-I193022854<br>ATI – 20011271<br>BB-2<br>OKI-BW02001275C0<br><b>Added ferrites to ac power line</b><br>Prescan stopped                                    |     | 0.5        | Fail     | KJ       |
| RE   |           | 1100-1200                     | Test#12: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>UPS-PY3JU2000066<br>ELO-I193022854<br>ATI – 20011271<br>BB-2<br>OKI-BW02001275C0<br><b>Client would like to switch to 10m1 where the noise floor is not above the limit line</b> |     | 1.0        | Fail     | KJ       |
| RE   |           | 1430-1630                     | Test#13: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>UPS-PY3JU2000066<br>ELO-I193022854<br>ATI – 20011271<br>BB-2<br>OKI-BW02001275C0<br>Failed @ 67.7MHz In 10M #1   |     | 2.0        | Fail     | MT       |
| RE   |           | January 12, 2021<br>0800-1000 | Trouble shooting RE Failure   |     | 2.0        | ---      | MT       |
| RE   |           | 1000-1530                     | New EUT<br>30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance (Vertical Only)<br>120Vac/60Hz<br>UPS-PY3JV2000053<br>ELO-J193011870<br>ATI-20010615<br>BB-1<br>OKI-BW02001268C0   |     | 5.5        | ---      | MT       |
| RE   |           | March 17, 2021<br>1230-1400   | Factoring new preamp  |     | 1.5        | Complete | KJ       |
|      |           | 1400-1430                     | Ambient run   |     | 0.5        | Complete | KJ       |



### 10m Emissions

| Test | Test Code | Date           | Event  | O T | Time (hrs) | Result | Initials |
|------|-----------|----------------|--|-----|------------|--------|----------|
| RE   |           | 1430-1530      | Test#14: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>Manufacturer: CBG<br>System: ClearVote 2.2<br>UPS: PY3JU200097<br>ATI: 20011271<br>BB:2<br>ELO: I193022854<br>OKI: AK89016409CO |     | 1.0        | Pass   | KJ       |
| CE   |           | 1530-1630      | CE<br>150kHz – 30MHz<br>120vac/60Hz  |     | 1.0        | Pass   | KJ       |
| RE   |           | March 18, 2021 | Test#15: 30MHz – 1GHz, 8 rads, 4 heights, 3 second dwell, ref level = 80dBu, 10 meter distance<br>120Vac/60Hz<br>Manufacturer: CBG<br>System: ClearVote 2.2<br>UPS: PY3JU200097<br>ATI: 20011271<br>BB:2<br>ELO: I193022854<br>OKI: AK89016409CO |     |            | Pass   | KJ       |





**End of Report**