wyle laboratories

Wyle Laboratories, Inc.
7800 Highway 20 West
Huntsville, Alabama 35806
Phone (256) 837-4411 • Fax (256) 721-0144
www.wylelabs.com

REPORT NO.: T56285-01, Appendix A.2
WYLE JOB NO.: T56285
CLIENT P.O. NO.: 001834
CONTRACT: N/A
TOTAL PAGES (INCLUDING COVER): 185
DATE: December 28, 2009

# TEST REPORT

## OPENELECT VOTING SYSTEMS (OVS)
## ENVIRONMENTAL AND EMI
## HARDWARE TEST REPORT
## FOR
## UNISYN VOTING SOLUTIONS, INC.

(sd)

**STATE OF ALABAMA**
**COUNTY OF MADISON** }

Robert D. Hardy, Department Manager, being duly sworn, deposes and says: The information contained in this report is the result of complete and carefully conducted testing and is to the best of his knowledge true and correct in all respects.

Robert Hardy

SUBSCRIBED and sworn to before me this 30 day of Dec 20 09

Sandra A. Daniel
Notary Public in and for the State of Alabama at Large

My Commission expires June 5, 2011

Wyle shall have no liability for damages of any kind to person or property, including special or consequential damages, resulting from Wyle's providing the services covered by this report.

**PREPARED BY:** Wendy Owens 12/28/09
Wendy Owens, Senior Project Engineer Date

for E. Lee 12/30/09
Davin J. Lee, Senior Project Engineer Date

**APPROVED BY:** Frank Padilla 12/30/09
Frank Padilla, Voting Systems Supervisor Date

**WYLE Q. A.:** Raul Terceno 12/30/09
Raul F. Terceno, Q. A. Manager Date

# TABLE OF CONTENTS

## TABLE OF CONTENTS (continued)

**Page No.**

**ATTACHMENTS**

# 1.0 INTRODUCTION

## 1.1 Scope

This report documents the test procedures followed and the results obtained during Environmental and Electrical Testing performed on the OpenElect Voting System (OVS) for Unisyn Voting Solutions, Inc. Upon receipt by Wyle Laboratories, the systems were inspected and subjected to a Physical Configuration Audit (PCA). The receiving inspection revealed the systems to be in good condition. All testing was performed at Wyle Laboratories' Huntsville, Alabama, Test Facility.

## 1.2 Objective

The objective of this test program was to ensure that the Unisyn OVS device complied with the applicable hardware requirements of the Election Assistance Commission (EAC) 2005 Voluntary Voting System Guidelines (VVSG) as described in this report.

The scope and detail of the test program was tailored to the design and complexity of the hardware submitted for testing. Only results for the required non-operating environmental tests and electrical tests are included in this report.

The tests were designed to evaluate system compliance with the requirements of the VVSG. The examination included hardware tests verifying system performance and function under normal and abnormal conditions.

## 1.3 References

- Unisyn Voting Solutions, Inc. Purchase Order No. 001834
- EAC 2005 Voluntary Voting System Guidelines, Volume I, Version 1.0, "Voting System Performance Guidelines", and Volume II, Version 1.0, "National Certification Testing Guidelines"
- United States Election Assistance Commission, "Testing and Certification Program Manual 2006, Ver. 1, January 1, 2007"
- MIL-STD-810D "Military Standard Environmental Test Methods and Engineering Guidelines"
- ISO-9001:2008, "Quality Management Systems – Requirements," Edition 4
- ANSI/NCSL Z540-1, "Calibration Laboratories and Measuring and Test Equipment, General Requirements"
- ISO 10012-1, "Quality Assurance Requirements for Measuring Equipment"
- Wyle Laboratories' Quality Assurance Program Manual, Revision 4
- ISO/IEC 17025:2005, "General Requirements for the Competence of Testing and Calibration Laboratories"
- Wyle Laboratories Certification Test Plan No. T56285-01, Rev. B, dated August 10, 2009, Certification Test Plan EAC Application Number UNS0801
- UL Standard for Safety for Information Technology Equipment, UL 60950-1, Second Edition dated March 27, 2007

## 1.0 INTRODUCTION (continued)

### 1.4 Test Specimen Description

The test specimen was an OpenElect Voting System, hereinafter referred to as the OVS. The OVS is a paper ballot precinct voting system using touch screen and scan technology to scan and validate ballots, provide voter assisted ballots to accommodate voters with special needs, and tabulate results. The components of the OVS that were subjected to the hardware tests included the following: OpenElect Voting Optical (OVO), OpenElect Voting Interface (OVI), Ballot Box, COTS headphones, and Sip & Puff device. The serial numbers tested are listed in Table 1-1. Photographs of the OVS components taken during the PCA are included in Attachment B.

**Table 1-1 OVS EUT Identification**

| EUT # | OVO Serial Number | OVI Serial Number | Ballot Box Serial Number |
|---|---|---|---|
| 1 | UNI000001 | UNI150003 | BB0005 |
| 2 | UNI000002 | UNI150004 | BB0004 |
| 3 | UNI000003 | UNI150005 | BB0003 |
| 4 | UNI000004 | UNI150006 | BB0001 |
| 5 | UNI000007 | UNI150010 | BB0002 |
| Sip & Puff Serial Numbers: 0005953, 0005954 | | | |

### 1.5 Test Program Summary

The OVS was subjected to Non-Operating and Operating Environmental Testing, Electrical Testing, and Product Safety Evaluation in accordance with the hardware requirements set forth in the EAC 2005 VVSG. When operation was required during test performance, the OVS was configured as it would be for use in an election precinct.

The OVS was subjected to hardware tests as summarized in Table 1-2.

**Table 1-2 Test Program Requirements**

| VVSG Vol. II Section | Test Description | Results |
|---|---|---|
| 4.6.2 | Bench Handling Test | PASS |
| 4.6.3 | Vibration Test | PASS |
| 4.6.4 | Low Temperature Test | PASS |
| 4.6.5 | High Temperature Test | PASS |
| 4.6.6 | Humidity Test | PASS |
| 4.7.1<br>4.7.1.1<br>4.7.3 | Temperature/Power Variation Test*<br>Data Accuracy*<br>Reliability Test* | PASS<br>Notice of Anomaly No. 2 |
| 4.7.2 | Maintainability Test | PASS |
| 4.7.4 | Availability Test | PASS |
| 4.8.1 | Electrical Power Disturbance Test | PASS |
| 4.8.2 | Electromagnetic Radiation Test | PASS |
| 4.8.3 | Electrostatic Disruption Test | PASS |
| 4.8.4 | Electromagnetic Susceptibility Test | PASS |

## 1.0 INTRODUCTION (continued)

### 1.5 Test Program Summary (continued)

**Table 1-2 Test Program Requirements (continued)**

| | | |
|---|---|---|
| 4.8.5 | Electrical Fast Transient Test | PASS |
| 4.8.6 | Lightning Surge Test | PASS<br>Notice of Anomaly No. 1 |
| 4.8.7 | Conducted RF Immunity Test | PASS |
| 4.8.8 | Magnetic Fields Immunity Test | PASS |
| 4.3.8 **(VVSG Vol. I)** | Product Safety Review | PASS |
| 3.2.2.2 **(VVSG Vol. I)** | Audio Testing | PASS<br>Notice of Anomaly No. 3 |
| 4.1.2.4 **(VVSG Vol. I)** | Electrical Supply | PASS |

* Performed concurrently

## 2.0 TEST PROCEDURES AND RESULTS

### 2.1 Non-Operating Environmental Tests

The OVS was subjected to various Non-Operating Environmental Tests. Prior to and immediately following each test environment, the OVS was powered and subjected to operability functional checks to verify continued proper operation.

The OVS was not powered during the performance of any of the non-operating tests.

### 2.1.1 Low Temperature Test

The OVS was subjected to a Low Temperature Test in accordance with Section 4.6.2 of Volume II of the VVSG. The purpose of this test was to simulate stresses associated with the storage of voting machines and ballot counters. This test is equivalent to the procedure of MIL-STD-810D, Method 502.2, Procedure I-Storage, with a minimum temperature of -4°F.

Prior to test initiation, the OVS was subjected to a baseline operability checkout to verify system readiness. The OVS was then placed in an environmental test chamber and the chamber temperature was lowered to -4°F and allowed to stabilize. Upon temperature stabilization, the temperature was maintained for an additional four hours. The temperature was then returned to standard laboratory ambient conditions at a rate not exceeding 10°F per minute.

The OVS was removed from the chamber and inspected for any obvious signs of degradation and/or damage. None were observed. The OVS was successfully subjected to a post-test operability checkout.

The OVS successfully completed the requirements of the Low Temperature Test. Photographs of the test setup are presented in Attachment B. The Low Temperature Test Chamber Circular Chart is presented in Attachment C. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.1.2 High Temperature Test

The OVS was subjected to a High Temperature Test in accordance with Section 4.6.5 of Volume II of the VVSG. The purpose of this test was to simulate stresses associated with the storage of voting machines and ballot counters. This test is equivalent to the procedure of MIL-STD-810D, Method 501.2, Procedure I-Storage, with a maximum temperature of 140°F.

Prior to test initiation, the OVS was subjected to a baseline operability checkout to verify system readiness. The OVS was then placed in an environmental test chamber and the chamber temperature was raised to 140°F and allowed to stabilize. Upon temperature stabilization, the temperature was maintained for an additional four hours. The temperature was then returned to standard laboratory ambient conditions at a rate not exceeding 10°F per minute.

The OVS was removed from the chamber and inspected for any obvious signs of degradation and/or damage. None were observed. The OVS was successfully subjected to a post-test operability checkout.

The OVS successfully completed the requirements of the High Temperature Test. Photographs of the test setup are presented in Attachment B. The High Temperature Test Chamber Circular Chart is presented in Attachment C. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

### 2.1.3 Vibration Test

The OVS was subjected to a Vibration Test in accordance with Section 4.6.3 of Volume II of the VVSG. The purpose of this test was to simulate stresses faced during transport of voting machines and ballot counters between storage locations and polling places. This test is equivalent to the procedure of MIL-STD-810D, Method 514.3, Category 1- Basic Transportation, Common Carrier.

Prior to test initiation, the OVS was subjected to a baseline operability checkout to verify system readiness. Upon completion, the OVS was secured to an electrodynamics shaker. One control accelerometer was affixed to the shaker table. The OVS was subjected to the Basic Transportation, Common Carrier profile as depicted in MIL-STD-810D, Method 514.3, Category I, with a frequency range from 10 Hz to 500 Hz and an overall rms level of 1.04, 0.74, and 0.20 G for duration of 30 minutes in each orthogonal axis. Upon test completion, the OVS was inspected for any obvious signs of degradation and/or damage. None were observed. The OVS was successfully subjected to a post-test operability checkout.

The OVS successfully completed the requirements of the Vibration Test. Photographs of the test setup are presented in Attachment B. The Vibration Test Data Sheets/Plots are included in Attachment C. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

### 2.1.4 Bench Handling Test

The OVS was subjected to a Bench Handling Test in accordance with Section 4.6.2 of Volume II of the VVSG. The purpose of this test was to simulate stresses faced during maintenance and repair of voting machines and ballot counters. This test is equivalent to the procedure of MIL-STD-810D, Method 516.3, Procedure VI.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.1.4 Bench Handling Test (continued)

Prior to performance of the test, the OVS was subjected to a baseline operability checkout. Following the checkout, each edge of the base of the machine was raised to a height of four inches above the surface and allowed to drop freely. This was performed six times per edge, for a total of 24 drops. Upon test completion, the OVS was inspected for any obvious signs of degradation and/or damage. None were observed. The OVS was subjected to a post-test operability checkout and continued operability verified.

The OVS successfully completed the requirements of the Bench Handling Test. Photographs of the test setup are presented in Attachment B. The Bench Handling Test Data Sheet is included in Attachment C. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

### 2.1.5 Humidity Test

The OVS was subjected to a Humidity Test in accordance with Section 4.6.6 of Volume II of the VVSG. The purpose of the test was to simulate stresses encountered during storage of voting machines and ballot counters. This test is similar to the procedure of MIL-STD-810D, Method 507.2, Procedure I-Natural Hot-Humid.

The OVS was subjected to a baseline operability checkout to verify system readiness. Upon completion, the OVS was placed in an environmental test chamber and was subjected to a 10-day humidity cycle in accordance with the 24-hour cycle values found in MIL-STD-810D, Method 507.2, Procedure-Natural Hot Humid, as shown in Table 2-1.

**Table 2-1 Humidity Test Cycle Values**

| Time | Hot-Humid (Cycle 1) | | | Time | Hot-Humid (Cycle 1) | | |
|---|---|---|---|---|---|---|---|
| | Temperature | | RH | | Temperature | | RH |
| | ºF | ºC | % | | ºF | ºC | % |
| 0000 | 88 | 31 | 88 | 1200 | 104 | 40 | 62 |
| 0100 | 88 | 31 | 88 | 1300 | 105 | 41 | 59 |
| 0200 | 88 | 31 | 88 | 1400 | 105 | 41 | 59 |
| 0300 | 88 | 31 | 88 | 1500 | 105 | 41 | 59 |
| 0400 | 88 | 31 | 88 | 1600 | 105 | 41 | 59 |
| 0500 | 88 | 31 | 88 | 1700 | 102 | 39 | 65 |
| 0600 | 90 | 32 | 85 | 1800 | 99 | 37 | 69 |
| 0700 | 93 | 34 | 80 | 1900 | 97 | 36 | 73 |
| 0800 | 96 | 36 | 76 | 2000 | 94 | 34 | 76 |
| 0900 | 98 | 37 | 73 | 2100 | 97 | 33 | 85 |
| 1000 | 100 | 38 | 69 | 2200 | 90 | 32 | 85 |
| 1100 | 102 | 39 | 65 | 2300 | 89 | 32 | 88 |

Upon test completion, the OVS was inspected for any obvious signs of degradation and/or damage. None were observed. The OVS was successfully subjected to a post-test operability checkout.

The OVS successfully completed the requirements of the Humidity Test. Photographs of the test setup are presented in Attachment B. The Chamber Circular Chart is included in Attachment C. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests

The OVS was subjected to various electrical tests to ensure continued system operation and reliability in the presence of abnormal electrical events. The OVS was powered and actively counting ballots via an automated test script during all electrical tests, allowing for continual ballot processing. Prior to and immediately following each electrical test, an operational status check was performed.

### 2.2.1 Electrical Power Disturbance Test

Electrical Power Disturbance testing was performed in accordance with Section 4.8 of Volume II of the VVSG. This testing was performed to ensure that the OVS will be able to withstand electrical power line disturbances (dips/surges) without disruption of normal operation or loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing, and subjected to the voltage dips and surges over periods ranging from 20 ms to four hours.

The OVS successfully completed the requirements of the Electrical Power Disturbance Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

### 2.2.2 Electromagnetic Radiation Test (FCC Part 15 Emissions)

Electromagnetic Radiation emissions measurements were performed in accordance with Section 4.8 of Volume II of the VVSG. This testing was performed to ensure that emissions emanating from the unit do not exceed the limits of 47 CFR Part 15, Subpart B, Class B Limits. The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing. The OVS was subjected to the test requirements detailed in Table 2-2.

**Table 2-2 Conducted and Radiated Emissions Requirements**

| Conducted Emissions | | | Radiated Emissions | |
|---|---|---|---|---|
| Frequency Range (MHz) | Limits (dBµV) | | Frequency Range (MHz) | 3 Meter Test Limit (dBµV) |
| | Quasi-peak | Average | | |
| 0.15 to 0.50 | 66 to 56 | 56 to 46 | 30 to 88 | 40.0 |
| 0.50 to 5.0 | 56 | 46 | 88 to 216 | 43.5 |
| 5.0 to 30.0 | 60 | 50 | 216 to 960 | 46.0 |
| | | | 960 to 1000 | 54.0 |

Testing was performed at the Wyle Laboratories' Open Air Test Site 2 (OATS-2) located on the Intergraph Complex in Huntsville, AL. The OATS-2 is fully described in reports provided to the Federal Communication Commission (FCC) (FCC Reference 98597). The site was tested and complies with the requirements of ANSI C63.4-2003.

To perform the Conducted Emissions portion of the test, the OVS was set up as depicted in Figure 2-1.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

#### 2.2.2 Electromagnetic Radiation Test (FCC Part 15 Emissions) (continued)

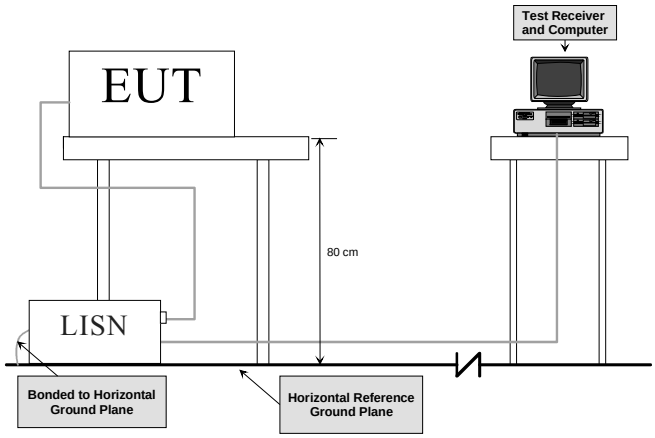



**Figure 2-1 Conducted Emissions Test Setup**

The OVS was then subjected to the following test procedure:

1. The OVS was placed on a non-metallic table 0.8 meters above the turntable and reference ground plane at the Open-Area Test Site.

2. The OVS AC/DC Power Adapter was connected to the power mains through a Line Impedance Stabilization Network (L.I.S.N.). Other support units were connected to the power mains through another L.I.S.N. The L.I.S.Ns provided 50 ohm/50 μH of coupling impedance for the measuring instrument.

3. The OVS was placed in an active state and monitored for functionality throughout testing.

4. Both Line and Neutral of the power mains connected to the OVS were checked for maximum conducted interference.

5. The frequency range from 150 kHz to 30 MHz was evaluated and recorded. Emissions levels below – 20 dB were not recorded.

To perform the Radiated Emissions portion of the test, the OVS was set up as depicted in Figure 2-2.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

### 2.2.2 Electromagnetic Radiation Test (FCC Part 15 Emissions) (continued)

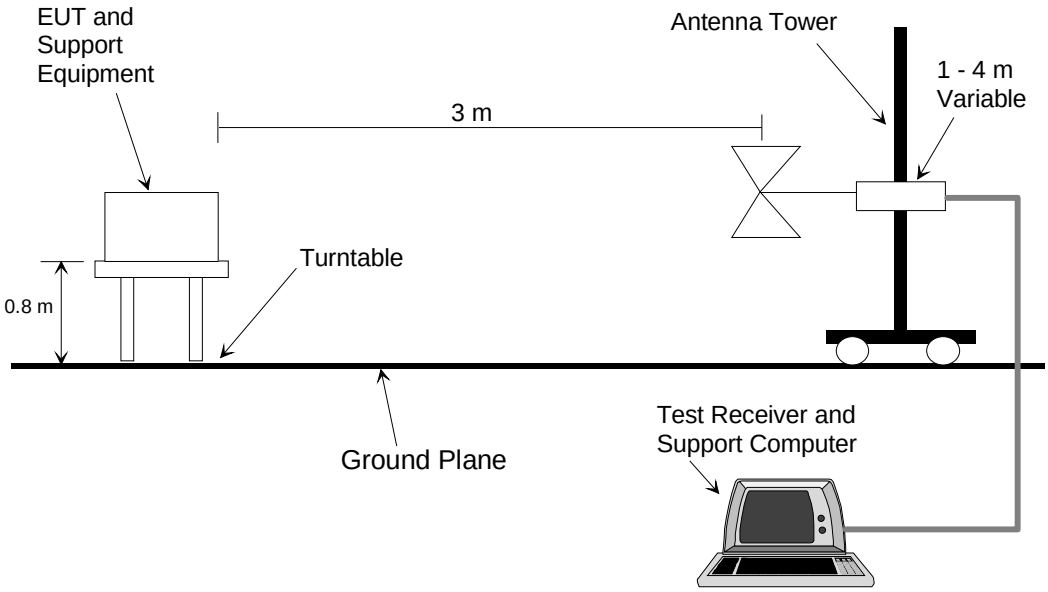



**Figure 2-2 Radiated Emissions Test Setup**

The OVS was then subjected to the following test procedure:

1. The OVS was placed on a non-metallic turn-table 0.8 meters above the reference ground plane at the Open-Area Test Site.

2. The OVS was placed 3 meters away from the interference-receiving antenna, which was mounted on a variable-height antenna tower. The interference-receiving antenna used was a broadband antenna.

3. For each suspected emissions point, the OVS was arranged in a worst case configuration. The table was rotated from 0 to 360 degrees and the antenna height was varied from one (1) to four (4) meters to identify the maximum reading.

4. All emissions points identified within 20 dB of the specified limit were tested individually using the quasi-peak method as specified and then reported in the tabular data.

The OVS was found to comply with the required emissions limits. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

### 2.2.3 Electrostatic Disruption Test

Electrostatic Disruption testing was performed in accordance with Section 4.8 of Volume II of the VVSG to ensure that should an electrostatic discharge event occur during equipment setup and/or ballot counting, that the OVS would continue to operate normally. A momentary interruption is allowed so long as normal operation is resumed without human intervention or loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing without operator intervention. The OVS and the EMI measuring equipment were then setup per the following conditions:

1. Power lines and power line returns were configured as required by the system configuration.

2. The EUT was raised approximately 10 cm from the ground using isolated stand-offs.

3. Signal/control test cables were positioned approximately 5 cm (2 in.) above the ground.

The OVS was then subjected to the electrostatic discharge transients listed in Table 2-3. Discharges were performed at areas typical of those which might be touched during normal operation, including the touch screen, user buttons, and other likely points of contact.

**Table 2-3 Electrostatic Discharge Transients**

| | **Requirements** | | |
|---|---|---|---|
| **Characteristic** | **Capacitance** | **Resistance** | **Value** |
| Pulse Wave Shape (RC Network) | 150 pf | 330 Ω | pf / Ω |
| Test Levels | **Discharge Types** | | **Value** |
| | **Air Gap** | **Direct Contact** | |
| | ±15 | ±8 | KV |
| Rise Time | ≤1 | | nanosecond |
| Pulse Decay Time | ≈30 at 50% height | | nanosecond |
| Pulse Repetition | ≥1 | | per second |
| Total Injected Pulse at each Test Point | 10 | | per polarity (±) |
| Temperature | ≥15 to ≤35 | | °C |
| Relative Humidity | ≥30 to ≤60 | | % |

There was no loss of normal operation or loss of data as a result of the applied discharges.

The OVS successfully completed the requirements of the Electrostatic Disruption Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

#### 2.2.4 Electromagnetic Susceptibility Test

Electromagnetic Susceptibility testing was performed in accordance with Section 4.8 of Volume II of the VVSG. This testing was performed to ensure that the OVS would be able to withstand a moderate level of ambient electromagnetic fields without disruption of normal operation or loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing without operator intervention. The OVS was then subjected to ambient electromagnetic fields at 10 V/m over a range of 80 MHz to 1000 MHz, as shown in Figure 2-3. Testing was conducted utilizing both horizontally and vertically polarized waves. The limits were measured with a maximum scan rate of 1% of the fundamental frequency and the dwell duration was three seconds.

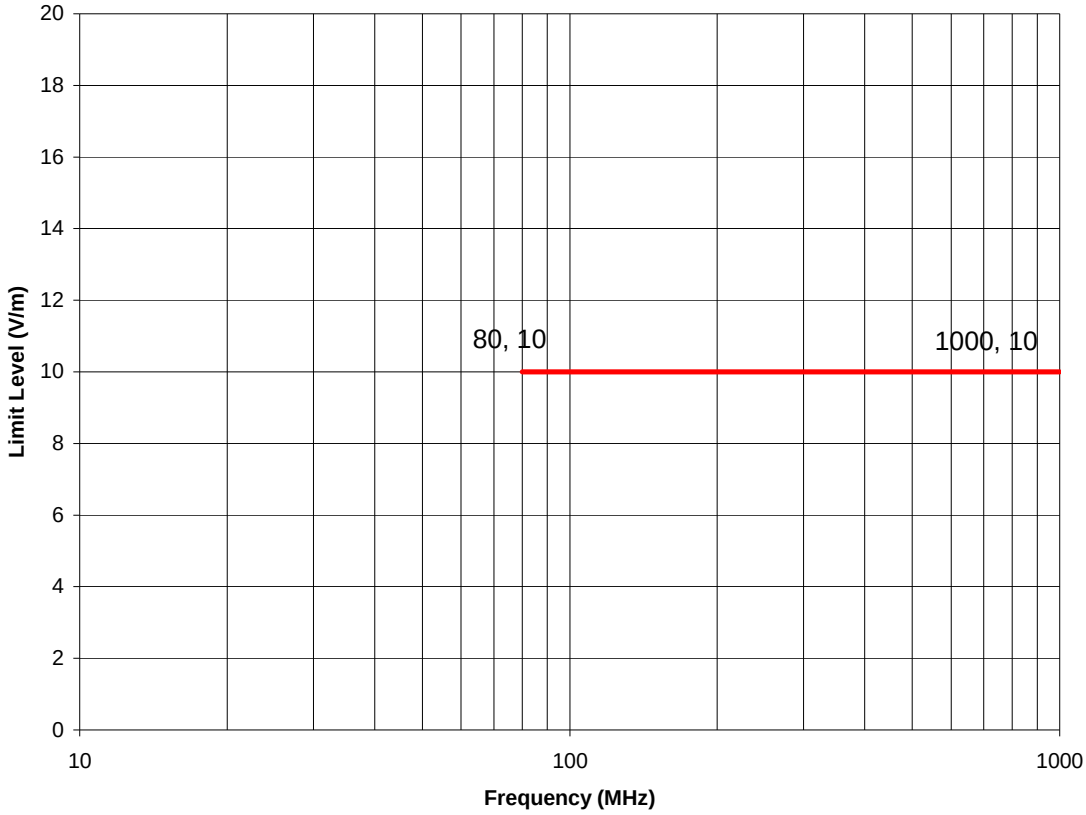



**Figure 2-3 Radiated Susceptibility Limit**

There was no loss of normal operation or loss of data as a result of the applied electromagnetic fields.

The OVS successfully completed the requirements of the Electromagnetic Susceptibility Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

#### 2.2.5 Electrical Fast Transient Test

Electrical Fast Transient (EFT) testing was performed in accordance with Section 4.8 of Volume II of the VVSG to ensure that, should an electrical fast transient event occur on a power line, the OVS would continue to operate without disruption of normal operation or loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing without operator intervention. The OVS was then subjected to electrical fast transients of 2 kV applied to its AC power lines. The pulse characteristics are listed in Table 2-4.

**Table 2-4 EFT Pulse Characteristics**

| Pulse Description | Requirements | Units |
|---|---|---|
| Pulse Amplitude | +/-2.0 | kV peak to peak |
| Pulse Rise Time | 5 ±30% | nanoseconds |
| Pulse Width | 50 ±30% | nanoseconds |
| Pulse Repetition Rate | 100 | kHz |
| Pulse Shape | Double exponential | -- |
| Burst Duration | 15 | milliseconds |
| Burst Period | 300 | milliseconds |
| Test Duration | 60 | seconds |

There was no loss of normal operation or loss of data as a result of the applied transients.

The OVS successfully completed the requirements of the Electrical Fast Transient Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

#### 2.2.6 Lightning Surge Test

Lightning Surge testing was performed in accordance with Section 4.8 of Volume II of the VVSG to ensure that, should a surge event occur on a power line due to a lightning strike, the OVS will continue to operate without disruption of normal operation or loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing. The OVS power input lines were then subjected to lightning surge testing at a level of 2 kV applied to its AC power line per the surge characteristics listed in Table 2-5.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

#### 2.2.6 Lightning Surge Test (continued)

**Table 2-5 Surge Characteristics**

| Test I.D. | Cable Type | Number of Interfacing Cables | Description | Injection Signals Summary Characteristics |
|---|---|---|---|---|
| Surge | Line (L) to Neutral (N) | 1 | 120 VAC Power Lines | Injection at Power Input Sinewave: 0°, 90°, and 270°<br><br>Combination Wave Test Levels: ±2.0 kV and Ring Wave Test Level = ±2.0 kV |
| | Line (L) to (G) | 1 | | |
| | Neutral (N) to Ground (G) | 1 | | |
| | Line (L) & Neutral (N) to Ground (G) | 1 | | |

As the +2 kV lightning pulse was applied, the automated ballot test count mode stopped and the UPS switched to battery backup (reference Notice of Anomaly No. 1, presented in Attachment A, for further details). It was determined that the surge rating on the UPS was not adequate to pass the test requirements. Therefore, an alternate UPS was used with a higher surge rating and testing was repeated with no further anomalies.

The OVS successfully completed the requirements of the Lightning Surge Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

#### 2.2.7 Conducted RF Immunity Test

Conducted RF Immunity testing was performed in accordance with Section 4.8 of Volume II of the VVSG. This testing was performed to ensure that the OVS will be able to withstand conducted RF energy onto its power lines without disruption of normal operation or loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing without operator intervention. The OVS was then subjected to conducted RF energy of 10 Vrms applied to its power lines over a frequency range of 150 kHz to 80 MHz.

There was no loss of normal operation or loss of data as a result of the applied conducted RF energy. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.2 Electrical Tests (continued)

#### 2.2.8 Magnetic Fields Immunity Test

Magnetic Fields Immunity testing was performed in accordance with Section 4.8 of Volume II of the VVSG. This testing was performed to ensure that the OVS will be able to withstand AC magnetic fields without disruption of normal operation of loss of data.

The OVS was configured to run in an automated ballot count test mode, where continual ballot processing would occur during the testing. The OVS was then subjected to AC magnetic fields of 30 A/M at a 60 Hz power line frequency.

There was no loss of normal operation or loss of data as a result of the applied magnetic field.

The OVS successfully completed the requirements of the Magnetic Fields Immunity Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

#### 2.2.9 Electrical Supply Test

Electrical Supply Testing was performed in accordance with Section 4.1.2.4 of Volume I of the VVSG. This test was performed to ensure that the OVS will continue to provide the capability for any voter who is voting at the time of a failure of the main power supply external to the voting system to complete the casting of a ballot. Additionally, it is required that the voting system perform a successful shutdown of without loss or degradation of the voting and audit data, and allow voters to resume voting once the voting system has reverted to back-up power.

To perform the test, the OVS was configured as for normal operation. The OVS was then operated as designed for fifteen minutes prior to the removal of the AC input power. The OVS was then continuously operated for at least two hours until the shutdown was performed. AC power was then restored and the system was operated for an additional fifteen minutes. For testing of the OVI, it was verified that the audio ballot was active throughout the 2-hour period and a total of five audio ballots were cast. For testing of the OVCS, it was verified that a successful shutdown was performed following loss of power.

The OVS successfully completed the requirements of the Electrical Supply Test. Photographs of the test setup are presented in Attachment B. The test data sheet is included in Attachment D. The Instrumentation Equipment Sheet for the test is contained in Attachment G.

### 2.3 Operating Environmental Tests

#### 2.3.1 Temperature/Power Variation Test/Data Accuracy/Reliability Test

The OVS was subjected to a Temperature and Power Variation Test in accordance with Section 4.7.1 of Volume II of the VVSG. Data Accuracy and Reliability Testing (per Sections 4.7.1.1 and 4.7.3, respectively, of Volume II of the VVSG) were performed in conjunction with the Temperature/Power Variation Test. The purpose of these tests was to evaluate OVS operation under various environmental conditions. The total cumulative duration of the test was at least 163 hours, with 48 hours in the environmental test chamber. For the remaining hours, the equipment was operated at room temperature. This test is similar to the low temperature and high temperature tests of MIL-STD-810-D, Method 502.2 and Method 501.2.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.3 Operating Environmental Tests (continued)

#### 2.3.1 Temperature/Power Variation Test/Data Accuracy/Reliability Test (continued)

To perform the test, four OVS systems were placed inside an environmental walk-in test chamber and connected to a variable voltage power source. Three systems were configured to scan ballots and one system was configured to generate audio ballots only. The temperature inside the chamber and the voltage supplied to the hardware varied from 50°F to 95°F and from 105 VAC to 129 VAC (as depicted in Figures 2-4 through 2-7). During test performance, the operational functions were continuously exercised by the scanning of ballots and the generation of ballots via audio voting. A minimum of 100 ballots per hour were scanned.

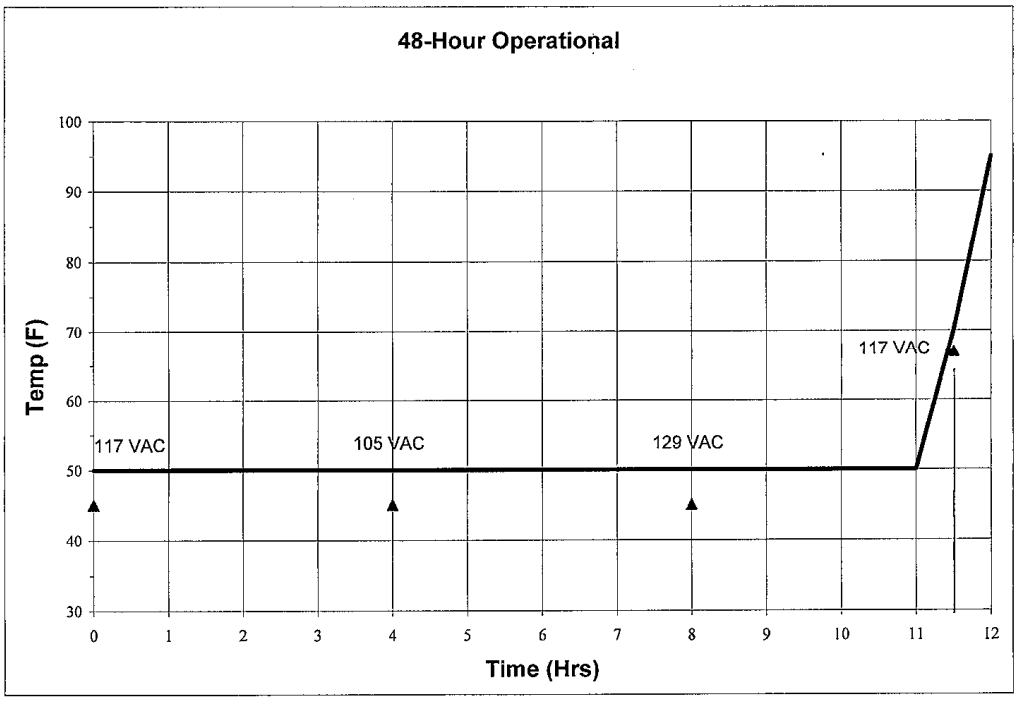



**Figure 2-4 Temperature/Power Variation Profile Hours 0-12**

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.3 Operating Environmental Tests (continued)

#### 2.3.1 Temperature/Power Variation Test/Data Accuracy/Reliability Test (continued)

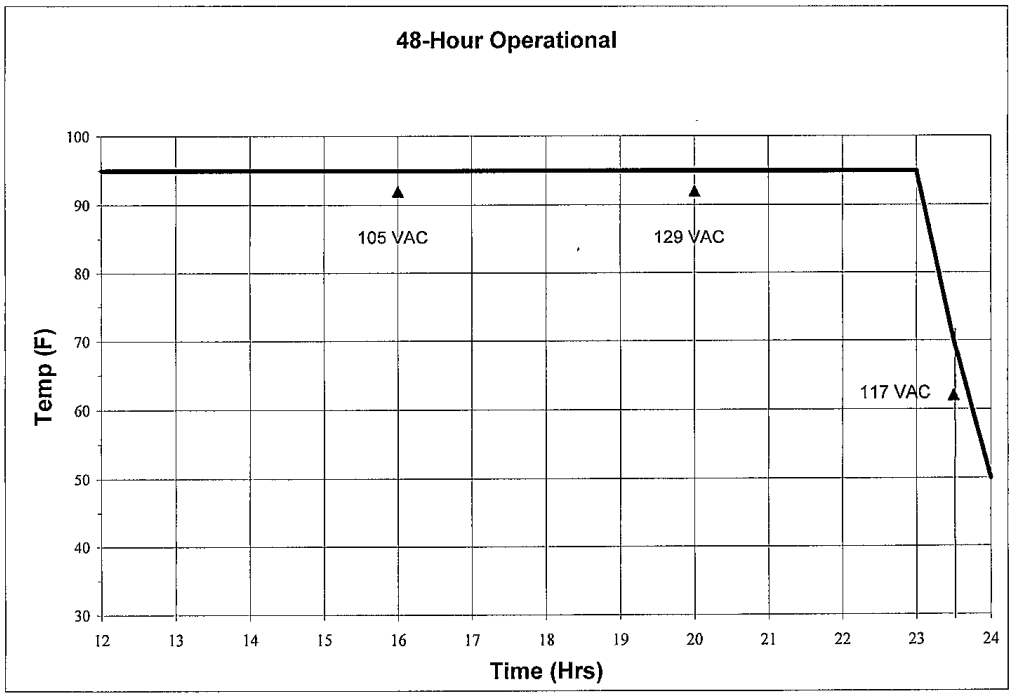



**Figure 2-5 Temperature/Power Variation Profile Hours 12-24**

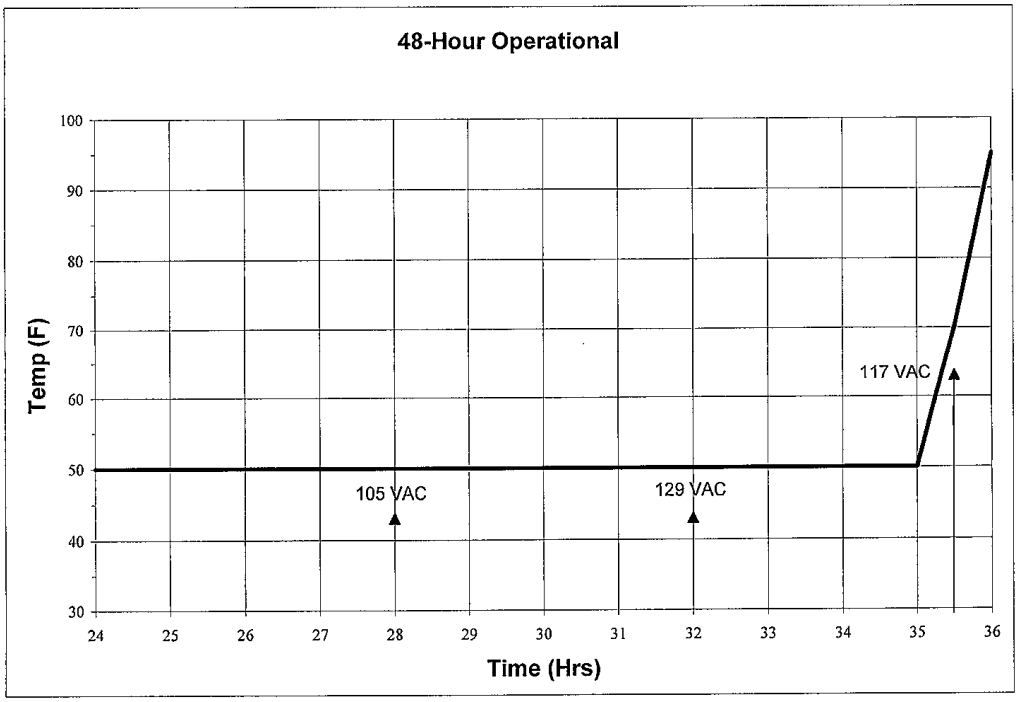



**Figure 2-6 Temperature/Power Variation Profile Hours 24-36**

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.3 Operating Environmental Tests (continued)

#### 2.3.1 Temperature/Power Variation Test/Data Accuracy/Reliability Test (continued)

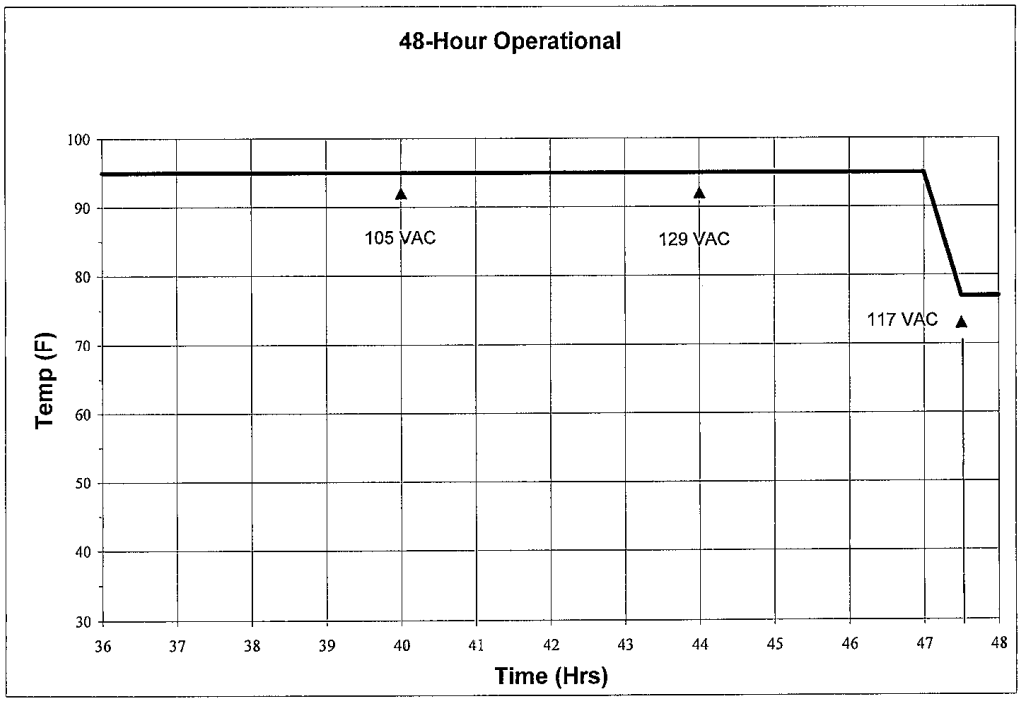



**Figure 2-7 Temperature/Power Variation Profile Hours 36-48**

Three test runs were attempted with anomalies occurring during test performance prior to a successful test run. Descriptions of each test run are provided along with further detail in Notice of Anomaly No. 2, located in Attachment A of this report. At final test conclusion, operational status checks were performed.

The OVS successfully completed the requirements of the Temperature/Power Variation, Data Accuracy, and Reliability Tests. The Environmental Test Data which consists of the Chamber Thermal Circular Charts are included in Attachment E. Test setup photographs are included in Attachment B. The Instrumentation Equipment Sheet for the test is presented in Attachment G.

#### 2.3.2 Maintainability Test

Maintainability Testing was performed in accordance with Section 4.7.2 of Volume II of the VVSG. This test was performed to evaluate the ease with which preventive and corrective maintenance actions can be performed based on the design characteristics of equipment and software and the processes the vendor and election officials have in place for preventing failures and for reacting to failures. It includes the ability of equipment and software to self-diagnose problems and make non-technical election workers aware of a problem and addresses all scheduled and unscheduled events which are performed to determine operational status and make component adjustments or repairs.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.3 Operating Environmental Tests (continued)

#### 2.3.2 Maintainability Test (continued)

The OVS was evaluated with the appropriate vendor documentation (Unisyn Voting Solutions, Inc. Document 04-00459, Version 1.1: System Maintenance Procedures) and maintainability was determined based on the presence of specific physical attributes that aid system maintenance activities, and the ease with which system maintenance tasks were able to be performed.

Any difficulties in performing maintenance activities as described in the system maintenance procedures were noted. A listing of all impediments or difficulties encountered were compiled as findings and delivered to Unisyn Voting Solutions, Inc. for resolution.

#### 2.3.3 Audio Test (Acoustic Level and Hearing Aide Compatibility)

Audio Testing was performed to verify that the amount of noise emitted by the voting machine under normal operating conditions does not interfere with the duties of the election inspectors or voting public and that the voting system achieves at least an ANSI C63.19 category T4 rating for a wireless T-coil coupling for assistive hearing devices. To meet these requirements, the machine shall provide an adjustable volume control from 20 to 100 dB SPL in 10 dB increments with the initial volume level set between 40 to 50 dB, and shall reproduce frequencies over the audible speech range of 315 Hz to 10 kHz.

To perform the test, the OVS was placed inside a semi-anechoic test chamber and configured as would be for normal operation. One side of the system's headphones was placed at the specified positions and orientations from the T-coil probe. Electromagnetic Coupling and interference from the headphones was measured and recorded. Sound Pressure Level (SPL) was then measured with microphones placed 1.2 meters above the floor and 2 meters from the voting system with the voting system operating. The initial available volume and the adjustable volume level from the headphones were also measured.

The initial volume level was measured to be greater than the maximum accepted level of 50 dB. ILTS was notified of the anomaly and performed a source code revision to adjust the initial volume setting (reference Notice of Anomaly No. 3 presented in Attachment A for further details). The test was then repeated and the initial volume setting was measure to be 47.2 dBA, which is within the allowable range.

Photographs of the test setup are presented in Attachment B. The Test data sheet is included in Attachment E. The Instrumentation Equipment Sheet for the test is presented in Attachment G.

#### 2.3.4 Availability Test

The availability of a voting system is defined as the probability that the equipment (and supporting software) needed to perform designated voting functions will respond to operational commands and accomplish the function. System availability is measured as the ratio of the time during which the system is operational (up time) to the total time period of operation (up time plus down time). Inherent availability (Ai) is the fraction of time a system is functional, based upon Mean Time Between Failure (MTBF) and Mean Time To Repair (MTTR), that is: Ai = (MTBF)/(MTBF + MTTR).

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.3 Operating Environmental Tests (continued)

#### 2.3.4 Availability Test (continued)

The adequacy of the OVS availability was assessed during the performance of the following voting functions:

a. For all paper-based systems:

   i. Recording voter selections (such as by ballot marking)

   ii. Scanning the marks on paper ballots and converting them into digital data

b. For all DRE systems, recording and storing voter ballot selections

c. For precinct count systems (paper-based and DRE), consolidation of vote selection data from multiple precinct based systems to generate jurisdiction-wide vote counts, including storage and reporting of the consolidated vote data

d. For central-count systems (paper-based and DRE), consolidation of vote selection data from multiple counting devices to generate jurisdiction-wide vote counts, including storage and reporting of the consolidated vote data

During the hardware testing, there were three anomalies encountered (reference Notice of Anomaly Nos. 1, 2, and 3 in Attachment A for further reference), none of which constituted a hardware failure that caused voting system hardware to be unavailable for normal operation. Additionally, during the 163-hour operational test, there were no hardware failures. Therefore, it was determined that the voting system achieved at least 99 percent availability during normal operation for the applicable functions of the system during the test campaign.

### 2.4 Product Safety Review

The VVSG states that all voting systems shall meet the following requirements for safety:

a. All voting systems and their components shall be designed to eliminate hazards to personnel or to the equipment itself.
b. Defects in design and construction that can result in personal injury or equipment damage must be detected and corrected before voting systems and components are placed into service.
c. Equipment design for personnel safety shall be equal to or better than the appropriate requirements of the Occupational Safety and Health Act, Code of Federal Regulations, Title 29, Part 1910.

To satisfy these requirements, one OVS (OVO S/N UNI000003, OVI S/N UNI150005) was subjected to a Product Safety Review in accordance with the applicable requirements of "UL Standard for Safety for Information Technology Equipment, UL 60950-1", Second Edition, dated March 27, 2007.

## 2.0 TEST PROCEDURES AND RESULTS (continued)

### 2.4 Product Safety Review (continued)

The following performance tests were conducted in addition to construction evaluation and evaluation for protection against injury to persons.

**Table 2-6 Performance Tests**

| Test Description | Clause | Result |
|---|---|---|
| Input Current | 1.6.2 | Compliant |
| Durability | 1.7.11 | Compliant |
| Access to Energized Parts | 2.1.1.1 | Compliant |
| Temperature Tests | 4.5.2 | Compliant |
| Touch Current | 5.1 | Compliant |
| Electric Strength | 5.2 | Compliant |

Non-performance evaluation of the accompanying documentation and unit construction were also performed. No anomalies were discovered during these evaluations.

The OVS was found to be in compliance with the applicable requirements of the Standard for Safety for Information Technology Equipment UL 60950-1, 2nd Edition. The Product Safety Review data, including the test process photographs, is presented in Attachment F.

## 3.0 TEST RESULTS AND RECOMMENDATION

It was demonstrated that the OVS, as tested, successfully met the hardware test requirements of the EAC 2005 VVSG.

This evaluation report/recommendation is valid only for the items listed in Section 3.0 of this report. Any changes, revisions, or corrections made to the product after this evaluation shall be reevaluated, and a revised report/recommendation will be issued.

Any anomalies encountered during qualification testing were successfully resolved prior to test completion. All Notice of Anomalies generated during testing are presented in Attachment A.

**Due to the varying requirements of individual jurisdictions, it is recommended by the VVSG that local jurisdictions perform pre-election logic and accuracy tests on all systems prior to their use in an election within their jurisdiction.**

## 4.0 TEST EQUIPMENT AND INSTRUMENTATION

All instrumentation, measuring, and test equipment used in the performance of this test program was calibrated in accordance with Wyle Laboratories' Quality Assurance Program which complies with the requirements of ANSI/NCSL Z540-1, ISO 10012-1, and ISO/IEC 17025. Standards used in performing all calibrations are traceable to the National Institute of Standards and Technology (NIST) by report number and date. When no national standards exist, the standards are traceable to international standards or the basis for calibration is otherwise documented.

## 5.0 QUALITY ASSURANCE PROGRAM

All work performed on this program was in accordance with Wyle Laboratories' Quality Assurance Program and Wyle Laboratories' Quality Program Manual, which conforms to the applicable portions of International Standard Organization (ISO) Guide 17025.

The Wyle Laboratories, Huntsville Facility, Quality Management System is registered in compliance with the ISO-9001 International Quality Standard. Registration has been completed by Quality Management Institute (QMI), a Division of Canadian Standards Association (CSA).

# ATTACHMENT A

## NOTICES OF ANOMALY NOS. 1, 2 AND 3

wyle laboratories

ORIGINAL **NOTICE OF ANOMALY** | **DATE:** 12 May 2009

**NOTICE NO:** 1 **P.O. NUMBER:** 001834 **CONTRACT NO:** N/A
**CUSTOMER:** ILTS/Unisyn **WYLE JOB NO:** T56285
**NOTIFICATION MADE TO:** Chris Ortiz **NOTIFICATION DATE:** 4 May 2009
**NOTIFICATION MADE BY:** Wendy Owens **VIA:** Phone

**CATEGORY:** [X] **SPECIMEN** [ ] **PROCEDURE** [ ] **TEST EQUIPMENT** **DATE OF ANOMALY:** 4 May 2009
**PART NAME:** OpenElect Voting System **PART NO.** UNI000001
**TEST:** Lightning Surge **I.D. NO.** N/A
**SPECIFICATION:** Voting System Performance Guidelines (2005) **PARA. NO.** 4.1.2.7

## REQUIREMENTS:

Vote scanning and counting equipment for paper-based systems, and all DRE equipment, shall be able to withstand, without disruption of normal operation or loss of data, surges of:

± 2 kV AC line to line

± 2 kV AC line to earth

## DESCRIPTION OF ANOMALY:

The OpenElect Voting System was operated in a simulated voting configuration, the ballot reader was in a shoeshine mode and the audio option was active. A +2 kV lightning pulse at 0°, line to line, was applied to the OpenElect Voting System. As the +2 kV lightning pulse was applied the UPS would switch to battery backup, the ballot reader would stop the shoeshine mode and audio would cut on and off.

## DISPOSITION • COMMENTS • RECOMMENDATIONS:

The results were documented and the customer informed of the anomaly. The customer informed Wyle Laboratories that they are sending a UPS with a higher surge rating to resume testing.

Safety Related ☐ YES ☑ NO Potential 10 CFR Part 21 ☐ YES ☐ NO ☑ N/A

**RESPONSIBILITY TO ANALYZE ANOMALIES AND COMPLY WITH 10 CFR PART 21:** ☐ **CUSTOMER** ☐ **WYLE**

CAR Required: ☐ YES ☐ NO CAR No.

**VERIFICATION:**
**TEST WITNESS:** N/A **PROJECT ENGINEER:** W. Bush 5/12/09
**REPRESENTING:** N/A **PROJECT MANAGER:** Robert Hauf 5/12/09
**QUALITY ASSURANCE:** Brenda Mewe 5/12/09 **INTERDEPARTMENTAL COORDINATION:**

WH-1066, Rev. MAR '09 Page 1 of 1

wyle laboratories

ORIGINAL **NOTICE OF ANOMALY** DATE: 12/02/09

NOTICE NO: 2 P.O. NUMBER: 001834 CONTRACT NO: N/A
CUSTOMER: ILTS/Unisyn WYLE JOB NO: T56285
NOTIFICATION MADE TO: Chris Ortiz NOTIFICATION DATE: 10/28/09
NOTIFICATION MADE BY: W. Owens VIA: verbally

CATEGORY: [√] SPECIMEN [ ] PROCEDURE [ ] TEST EQUIPMENT DATE OF ANOMALY: (see below)
PART NAME: OpenElect Voting System PART NO. (see below)
TEST: Temperature and Power Variation I.D. NO. (see below)
SPECIFICATION: EAC 2005 VVSG PARA. NO. 4.7.1

**REQUIREMENTS:**

The EUT shall not demonstrate any signs of operational failure or degradation of performance when subjected to a Temperature and Power Variation Test in accordance with section 4.7.1 of Volume II of the VVSG. The purpose of this test is to evaluate system operation under various environmental conditions. The duration of the test is 163 hours, with 48 hours in the environmental test chamber. For the remaining hours, the equipment may be operated at room temperature. This test is similar to the low temperature and high temperature tests of MIL-STD-810-D, Method 502.2 and Method 501.2.

To perform the test, the EUT shall be placed inside an environmental walk-in test chamber and connected to a variable voltage power source. The temperature inside the chamber and the voltage supplied to the hardware shall be varied from 40°F to 100°F and from 105 VAC to 129 VAC. During test performance, the operational functions shall be continuously exercised by the scanning of ballots and the generation of ballots via audio voting. A minimum of 100 ballots per hours shall be scanned.

The following EUT serial numbers shall be tested:

| EUT 1 | EUT 2 | EUT 3* | EUT 4 |
|---|---|---|---|
| OVO UNI000004 | OVO UNI000002 | OVO UNI000003 | OVO UNI000001 |
| OVI UNI150006 | OVI UNI150004 | OVI UNI150005 | OVI UNI150003 |

*configured to generate audio ballots only

WH 1066, Revised. Mar '09 Page 1 of 3

wyle laboratories

| NOTICE OF ANOMALY | DATE: 12/02/09 |
|---|---|
| NOTICE NO: 2 P.O. NUMBER: 001834 | CONTRACT NO: N/A |
| CUSTOMER: ILTS/Unisyn | WYLE JOB NO: T56285 |
| NOTIFICATION MADE TO: Chris Ortiz | NOTIFICATION DATE: (see below) |
| NOTIFICATION MADE BY: W. Owens | VIA: verbally |

**DESCRIPTION OF ANOMALY:**

Anomalies occurred during the first three test runs of the Temperature/Power Variation Test. Summaries of each run are provided below.

**Run 1**
Testing commenced on 8/5/09. During test performance it was discovered that multifeeds and ballot misfeeds had ocuured causing the machine totals to be incorrect. The test was restarted with no modifications made to the EUT configurations. However, tighter controls were added to the voting procedures exercised during test performance to control ballot handling.

**Run 2**
Testing commenced on 9/9/09. During test performance it was discovered that multifeeds had ocuured causing the machine totals to be incorrect. The test was halted due to the failures.

**Run 3**
Testing commenced on 10/9/09. The test was inadvertently halted due to an unexpected "Special Handling Required" notification received by the tester.

wyle laboratories

| NOTICE OF ANOMALY | DATE: 12/02/09 |
|---|---|

NOTICE NO: 2 P.O. NUMBER: 001834 CONTRACT NO: N/A
CUSTOMER: ILTS/Unisyn WYLE JOB NO: T56285
NOTIFICATION MADE TO: Chris Ortiz NOTIFICATION DATE: (see below)
NOTIFICATION MADE BY: W. Owens VIA: verbally

**DISPOSITION • COMMENTS • RECOMMENDATIONS:**

The test was successfully completed following the fourth test run. A summary of the test is provided below.

**Run 4**

Testing commenced on 10/20/09. Prior to test initiation, a specially designed gate was installed on each OVO to prevent multifeeds. A ballot handling error was experienced by the tester on EUT 3. This unit was quarantined due to suspect data. The test was extended to 84 hours to compensate for the reduction in the number of units being tested. The test was completed with no anomalies. Testing did continue on the suspect machine to ensure that tester error had been the cause of the anomaly.

Safety Related ☐ YES ☒ NO Potential 10 CFR Part 21 ☐ YES ☐ NO ☒ N/A

RESPONSIBILITY TO ANALYZE ANOMALIES AND COMPLY WITH 10 CFR PART 21: ☐ CUSTOMER ☐ WYLE

CAR Required: ☐ YES ☒ NO CAR No.

VERIFICATION:
TEST WITNESS: ----
REPRESENTING: ----
QUALITY ASSURANCE: 12/4/09

PROJECT ENGINEER: Wendy Owens 12/2/09
PROJECT MANAGER: 12/
INTERDEPARTMENTAL COORDINATION:

WH 1066, Revised. Mar '09 Page 3 of 3

wyle laboratories

ORIGINAL **NOTICE OF ANOMALY** DATE: 12/03/09

NOTICE NO: 3 P.O. NUMBER: 001834 CONTRACT NO: N/A
CUSTOMER: ILTS/Unisyn WYLE JOB NO: T56285
NOTIFICATION MADE TO: Chris Ortiz NOTIFICATION DATE: 8/14/09
NOTIFICATION MADE BY: Wendy Owens VIA: verbally

CATEGORY: [x] SPECIMEN [ ] PROCEDURE [ ] TEST EQUIPMENT DATE OF ANOMALY: 8/14/09
PART NAME: OVI PART NO. UNI150003
TEST: Acoustic Level and Hearing Aid Compatability I.D. NO. ---
SPECIFICATION: EAC 2005 VVSG, Volume I PARA. NO. Sec. 3.2.2.2

**REQUIREMENTS:**

The machine shall provide an adjustable volume control from 20 to 100 dB SPL in 10 dB increments with the initial volume level set between 40 to 50 dB, and shall reproduce frequencies over the audible speech range of 315 Hz to 10KHz.

**DESCRIPTION OF ANOMALY:**

The initial volume level was measured to be greater than the maximum accepted level of 50 dB.

**DISPOSITION • COMMENTS • RECOMMENDATIONS:**

ILTS was notified of the anomaly and performed a source code revision to adjust the initial volume setting. The test was then repeated and the initial volume setting was measure to be 47.2 dBA, which is within the allowable range.

Safety Related ☐ YES ☒ NO Potential 10 CFR Part 21 ☐ YES ☐ NO ☒ N/A

RESPONSIBILITY TO ANALYZE ANOMALIES AND COMPLY WITH 10 CFR PART 21: ☐ CUSTOMER ☐ WYLE

CAR Required: ☐ YES ☒ NO CAR No.

VERIFICATION:
TEST WITNESS: ---
REPRESENTING: ---
QUALITY ASSURANCE: 12/14/09

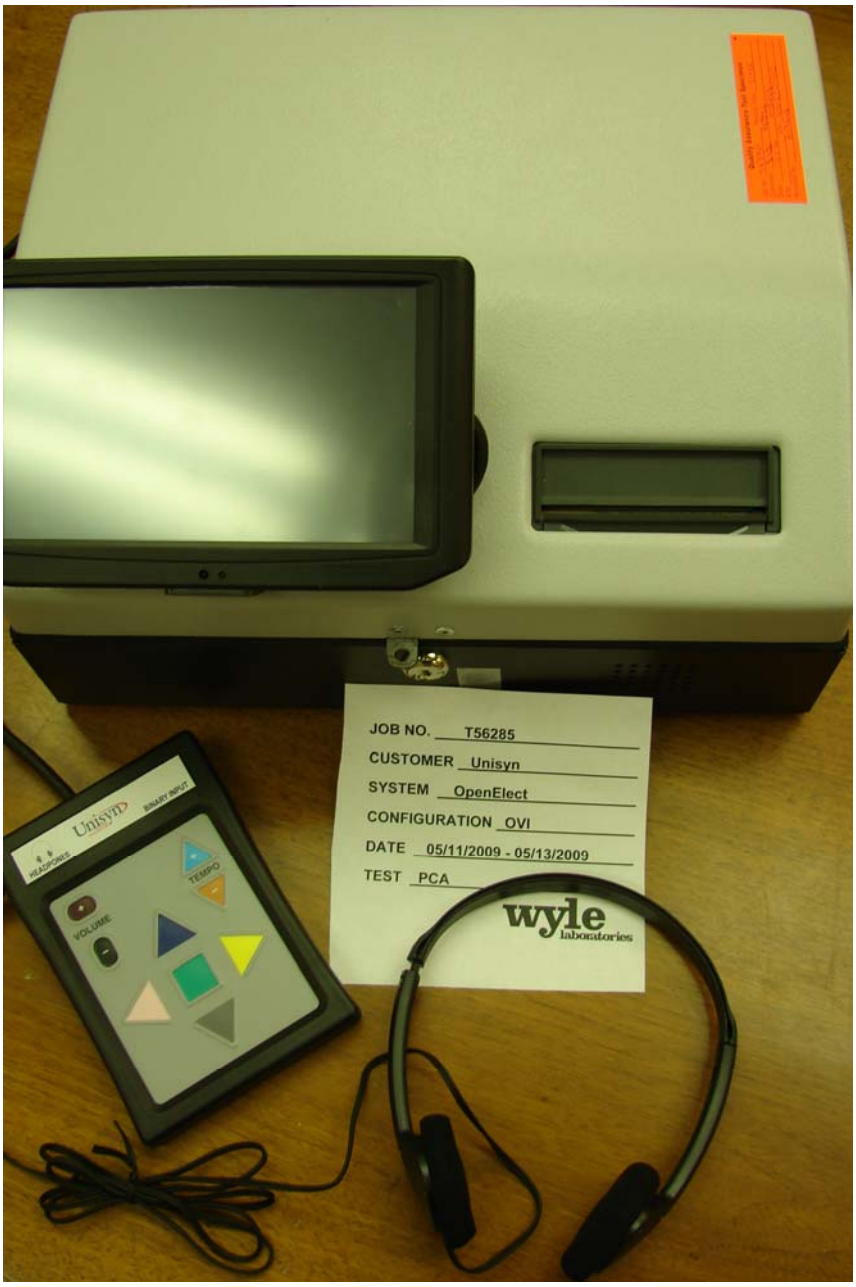
PROJECT ENGINEER: Wendy Owens 12/3/09
PROJECT MANAGER: 12/3/09
INTERDEPARTMENTAL COORDINATION:

WH 1066, Rev. March '09 Page 1 of 1

# ATTACHMENT B

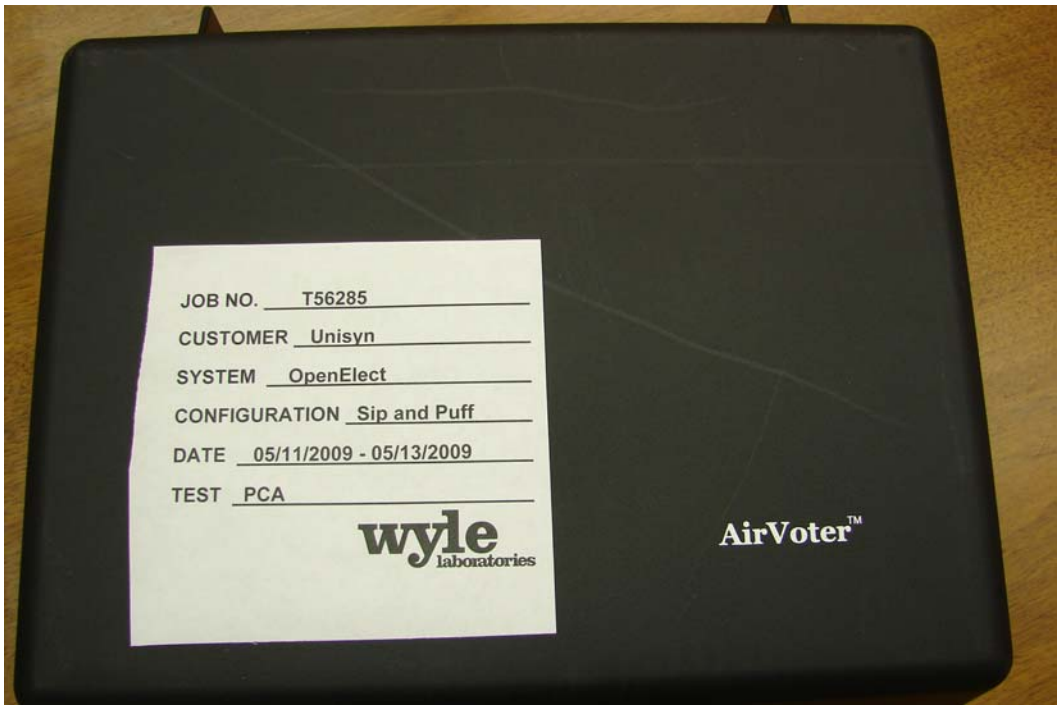
# PHOTOGRAPHS


**Photograph No. 1**
**OVS OVO**

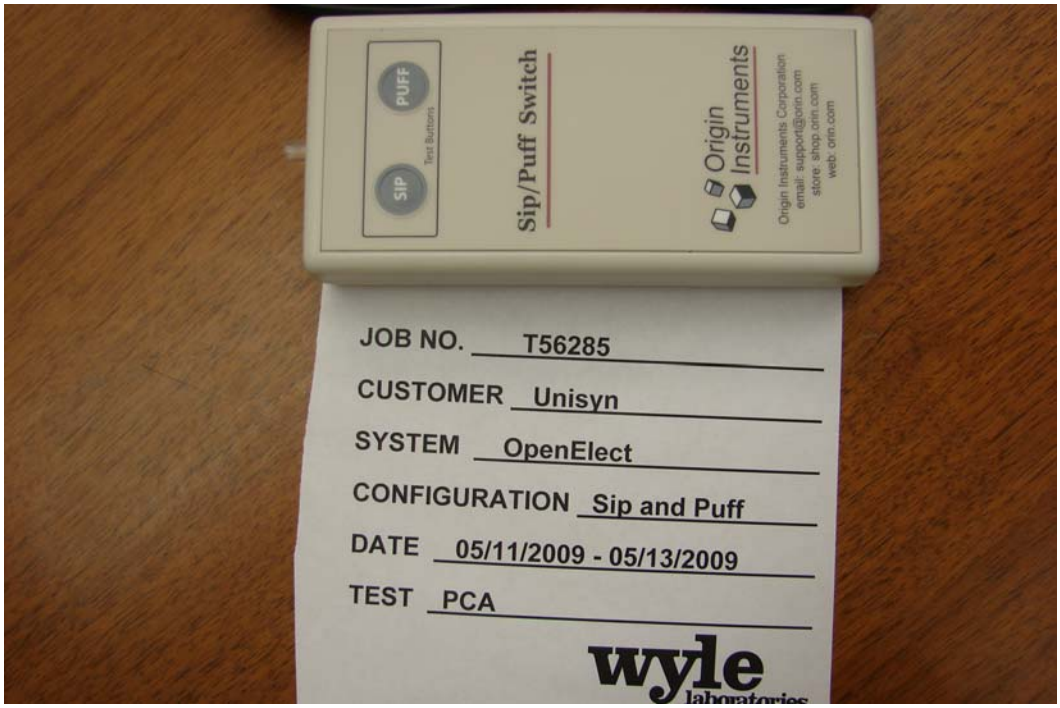



**Photograph No. 2**
**OVS OVI**


**Photograph No. 3**
**OVS Ballot Box**




**Photograph No. 4**
**OVS Sip & Puff**




**Photograph No. 5**
**OVS Sip & Puff**


**Photograph No. 6**
**Low/High Temperature Test Setup**


**Photograph No. 7**
**Vibration Test Setup (Vertical Axis)**


**Photograph No. 8**
**Vibration Test Setup (Longitudinal Axis)**


**Photograph No. 9**
**Vibration Test Setup (Lateral Axis)**

**Photograph No. 10**
**Bench Handling Test Setup**

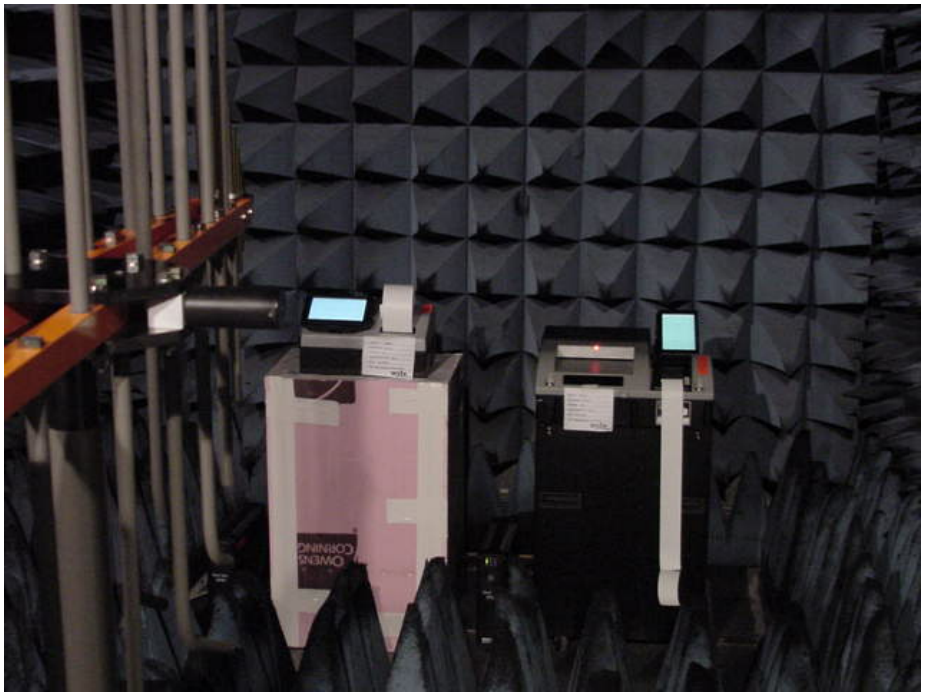

**Photograph No. 11**
**Humidity Test Setup**

**Photograph No. 12**
**Electrostatic Discharge Test Setup**

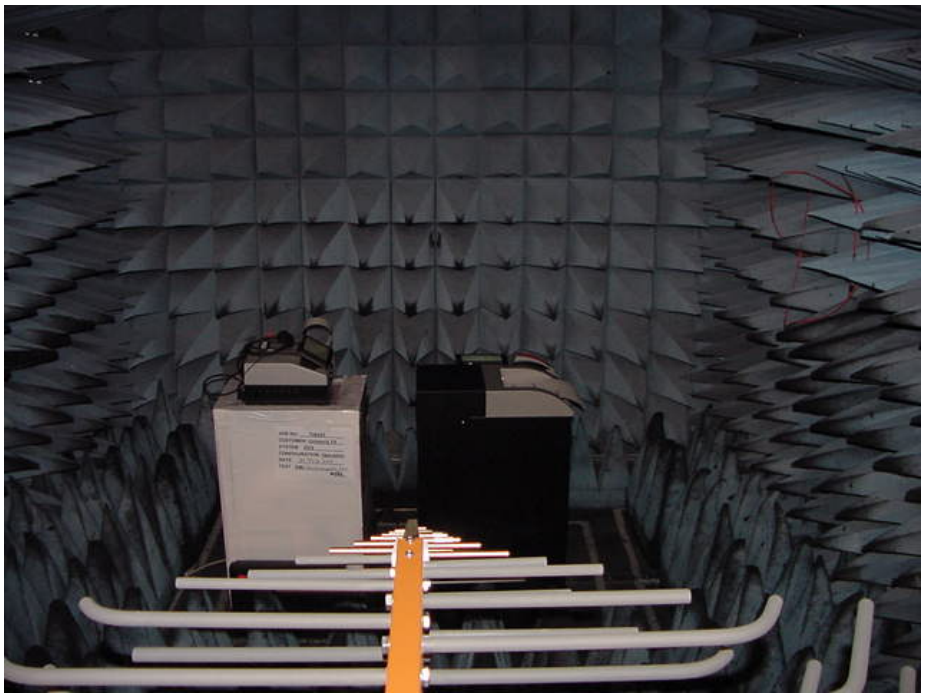
**Photograph No. 13**
**Electrostatic Discharge Test Setup**

**Photograph No. 14**
**Electrostatic Discharge Test**

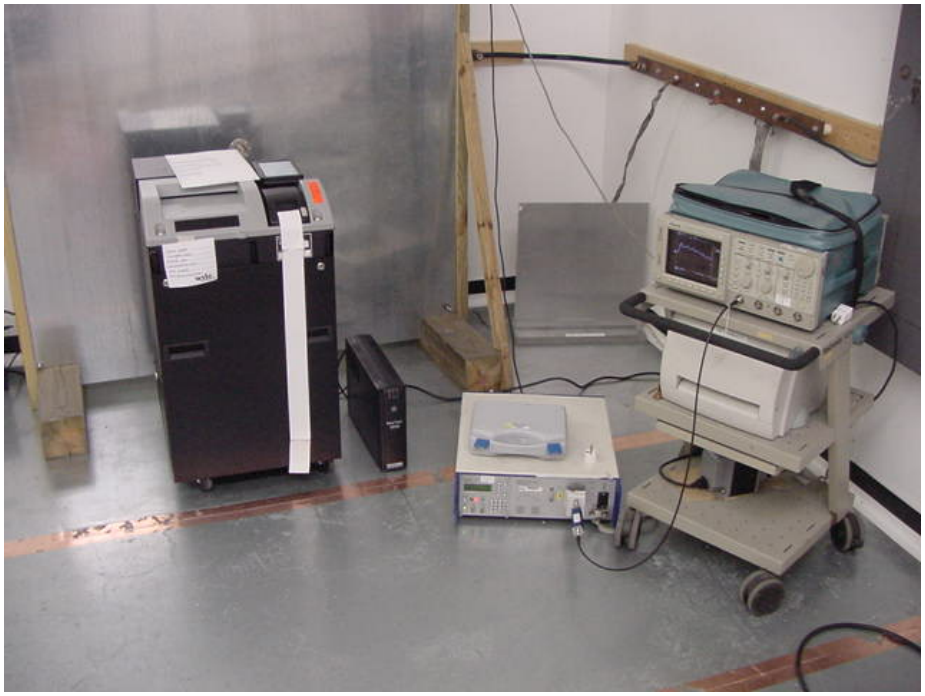
**Photograph No. 15**
**Electromagnetic Susceptibility Test Setup**



**Photograph No. 16**
**Electromagnetic Susceptibility Test Setup**

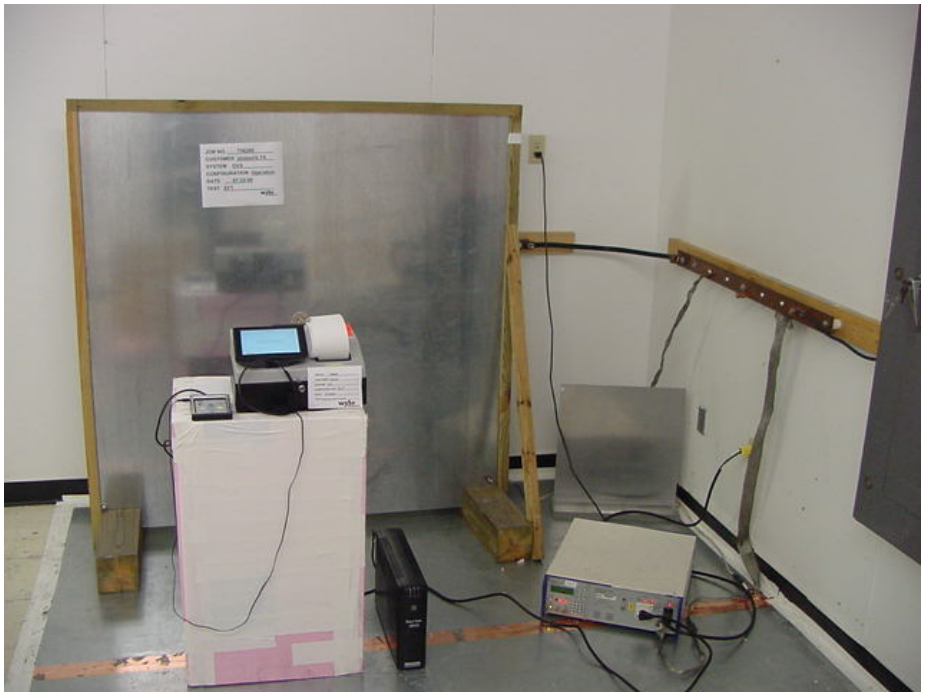


**Photograph No. 17**
**Electromagnetic Susceptibility Test Setup**

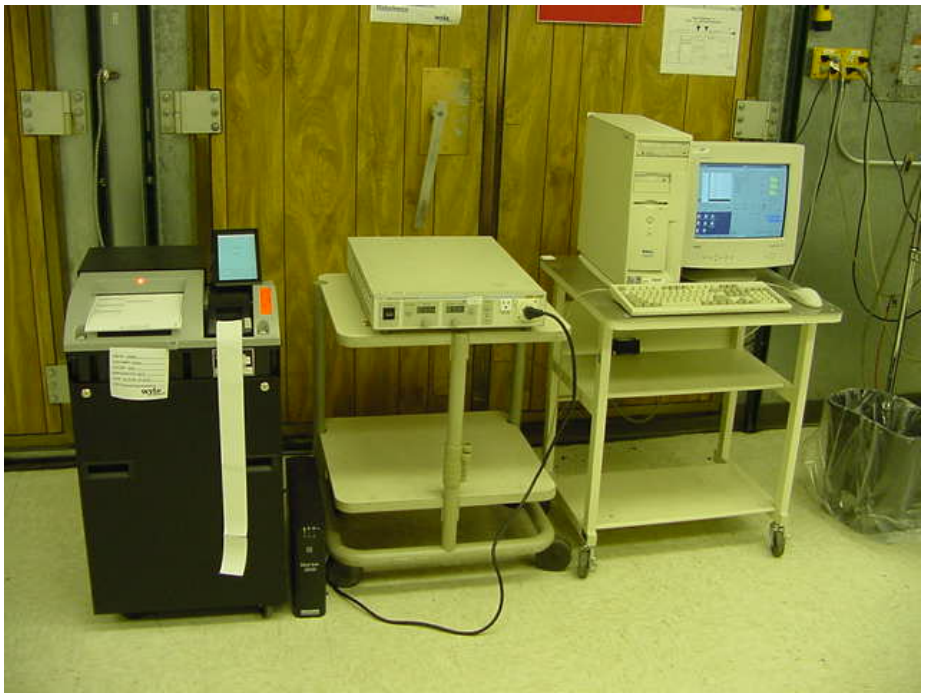


**Photograph No. 18**
**Electrical Power Disturbance Test Setup**

**Photograph No. 19**
**Electrical Fast Transient Test Setup**

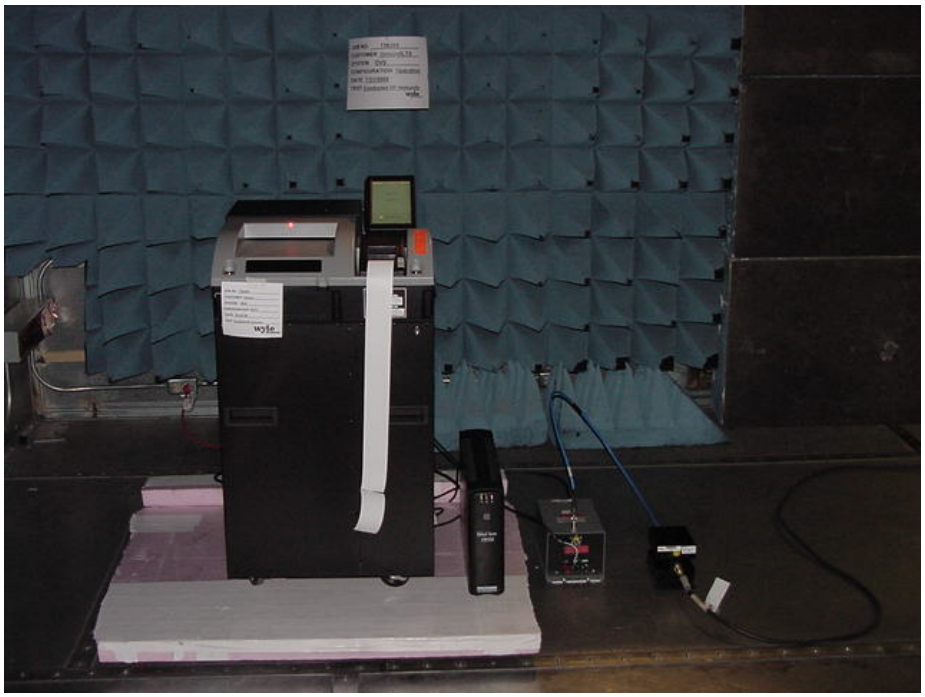


**Photograph No. 20**
**Electrical Fast Transient Test Setup**

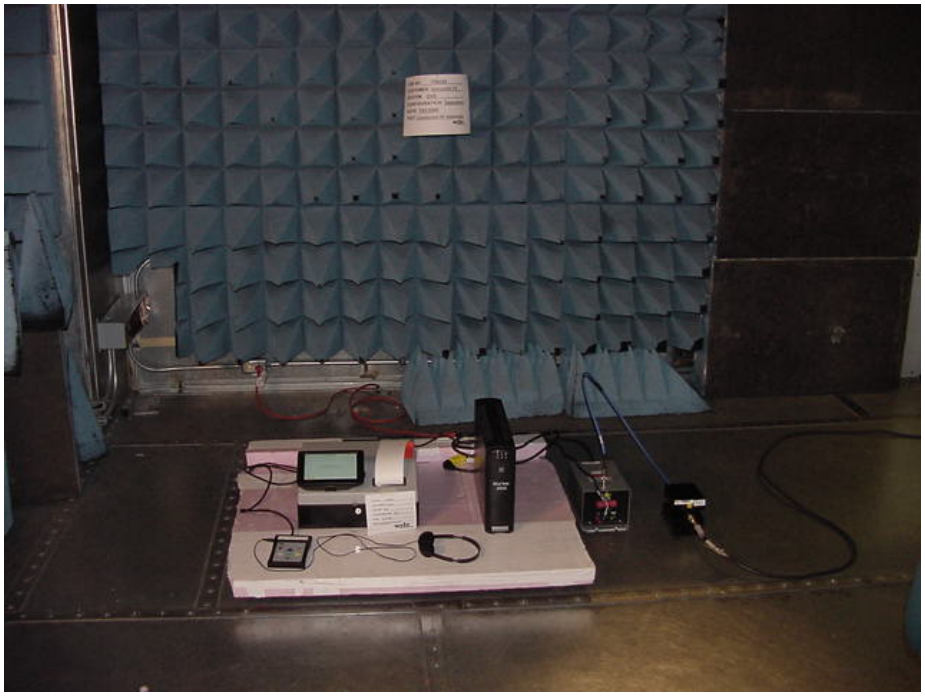


**Photograph No. 21**
**Lightning Surge Test Setup**


**Photograph No. 22**
**Lightning Surge Test Setup**

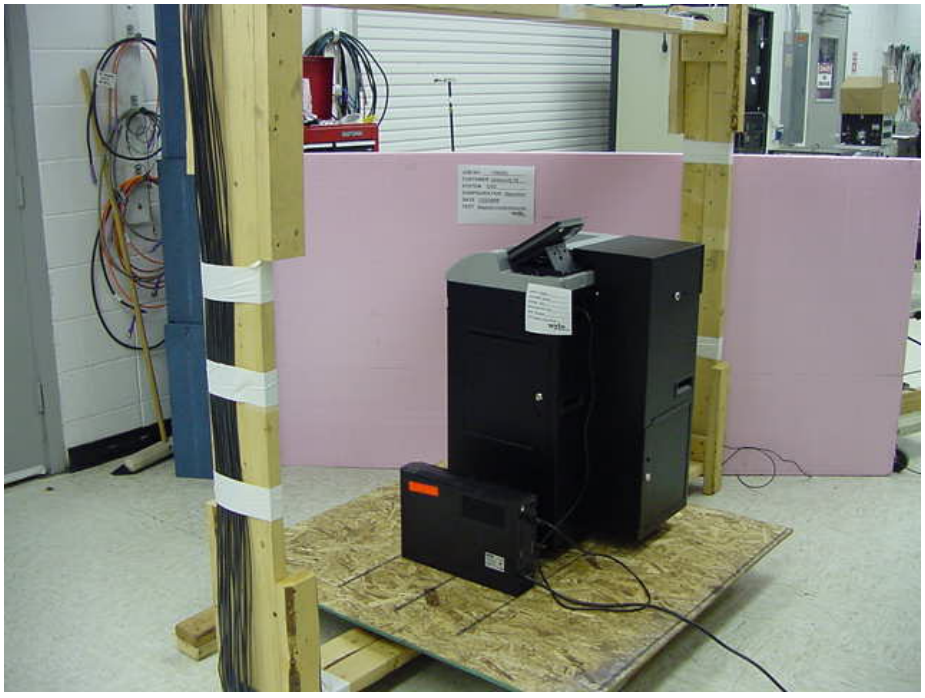


**Photograph No. 23**
**Conducted RF Immunity Test Setup**



**Photograph No. 24**
**Conducted RF Immunity Test Setup**

**Photograph No. 25**
**Magnetic Fields Immunity Test Setup**



**Photograph No. 26**
**Magnetic Fields Immunity Test Setup**

**Photograph No. 27**
**Magnetic Fields Immunity Test Setup**

**Photograph No. 28**
**Magnetic Fields Immunity Test Setup**

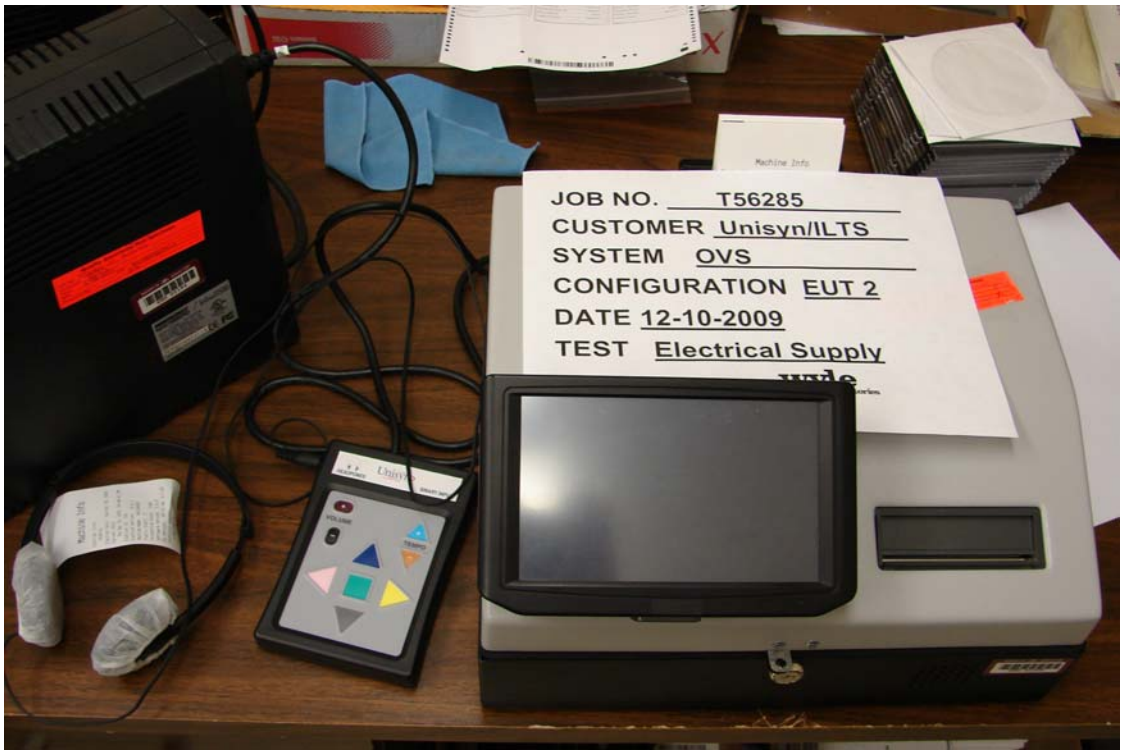
**Photograph No. 29**
**Magnetic Fields Immunity Test Setup**

**Photograph No. 30**
**Magnetic Fields Immunity Test Setup**

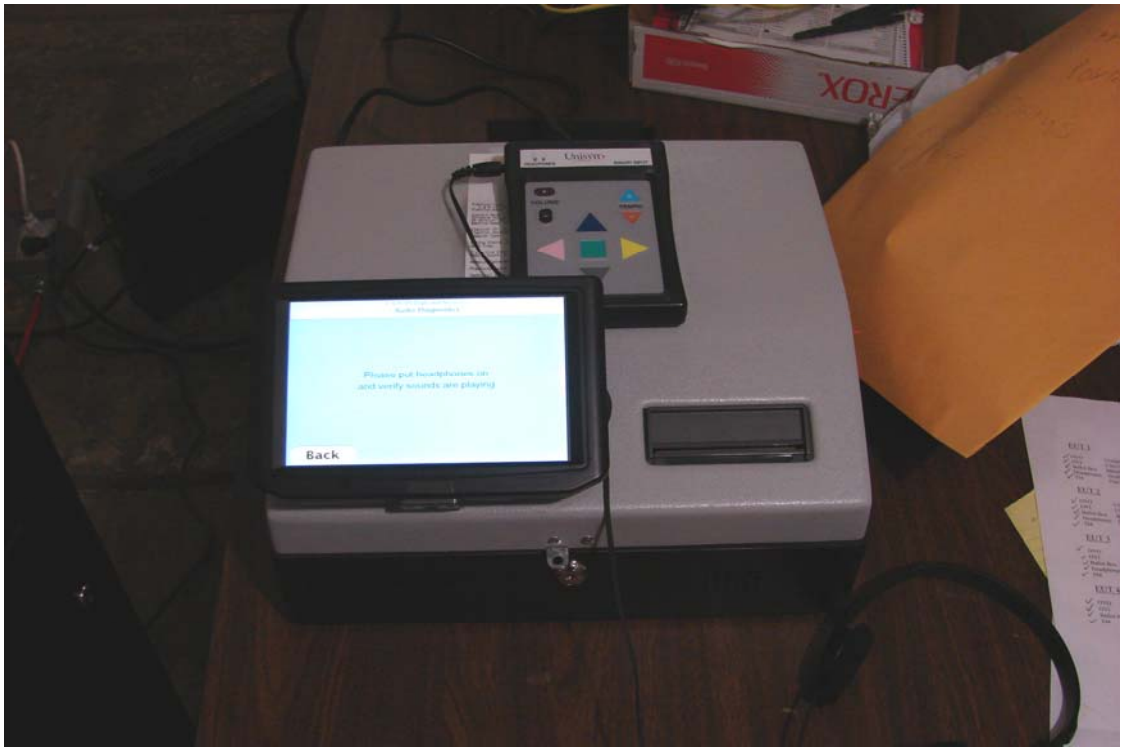

**Photograph No. 31**
**Electromagnetic Radiation (FCC Part 15) Test Setup**

**Photograph No. 32**
**Electromagnetic Radiation (FCC Part 15) Test Setup**


**Photograph No. 33**
**Electrical Supply Test Setup**




**Photograph No. 34**
**Electrical Supply Test Setup**




**Photograph No. 35**
**Temperature/Power Variation Test Setup**

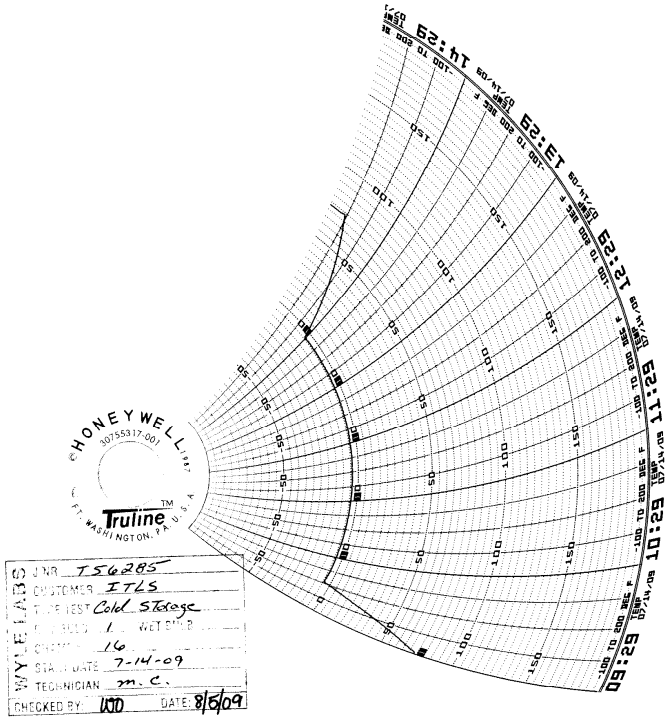
**Photograph No. 36**
**Temperature/Power Variation Test Setup**

**Photograph No. 37**
**Temperature/Power Variation Test Setup**

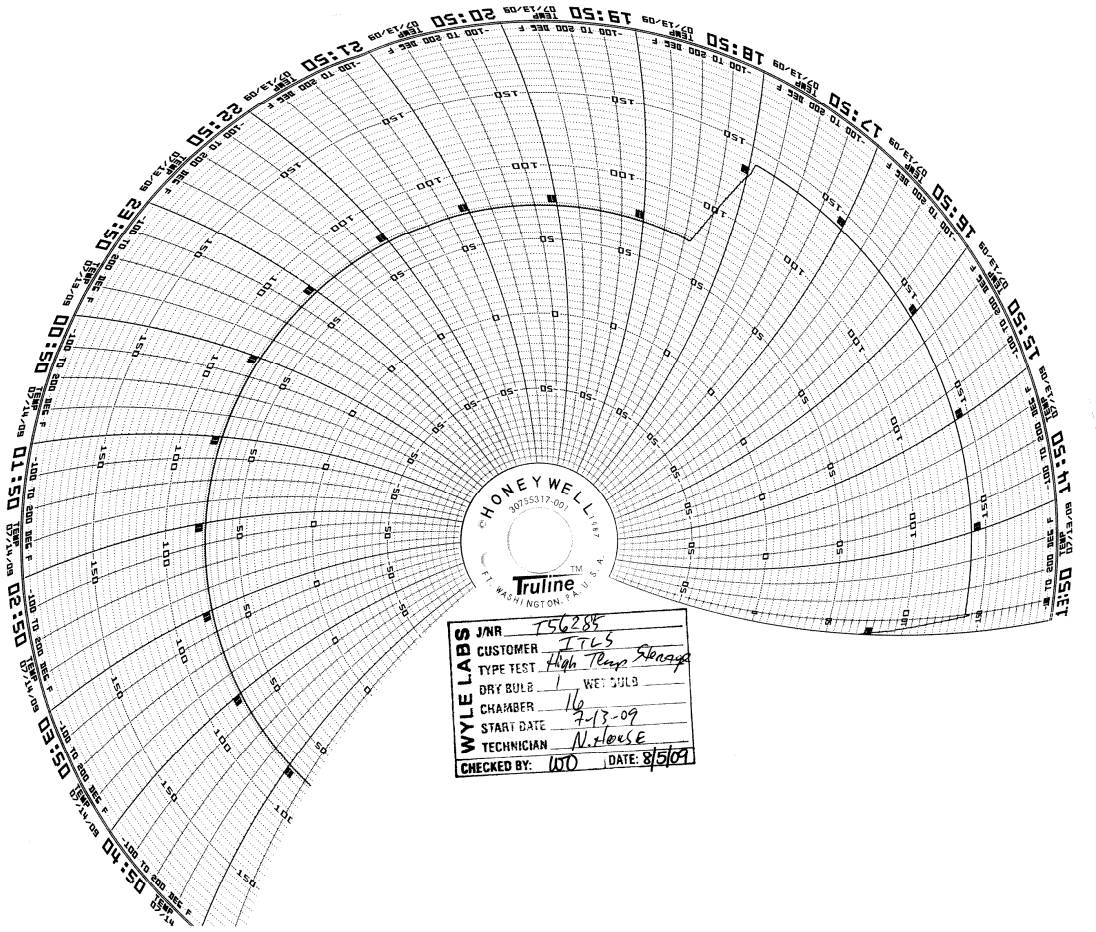
# ATTACHMENT C

# NON-OPERATING ENVIRONMENTAL TEST DATA

## LOW TEMPERATURE TEST DATA


HONEYWELL
Truline
FT. WASHINGTON, PA. U.S.A.
WYLE LABS
JNR T56285
CUSTOMER ITLS
TEST Cold Storage
START DATE 7-14-09
TECHNICIAN M. C.
CHECKED BY WDD DATE 8/5/09

## HIGH TEMPERATURE TEST DATA


HONEYWELL
Truline
FT WASHINGTON, PA U.S.A.
WYLE LABS
J/NR T56285
CUSTOMER ITLS
TYPE TEST High Temp Storage
DRY BULB 1 WET BULB
CHAMBER 16
START DATE 7-13-09
TECHNICIAN N. Loose
CHECKED BY: WO DATE: 8/5/09

## VIBRATION TEST DATA

# VIBRATION TEST DATA SHEET

Customer: Unisyn/ILTS | Spec.: EAC 2005 VVSG | Specimen: OVS

Job No.: T56285 | Method: Volume II | Part No.: EUT 4 | Specimen Temp.: Ambient

GSI Yes [ ] No [X] | Procedure: 4.6.3 | S/N: --- | Photo Yes [X] No [ ]

Test Title: Transportation Vibration

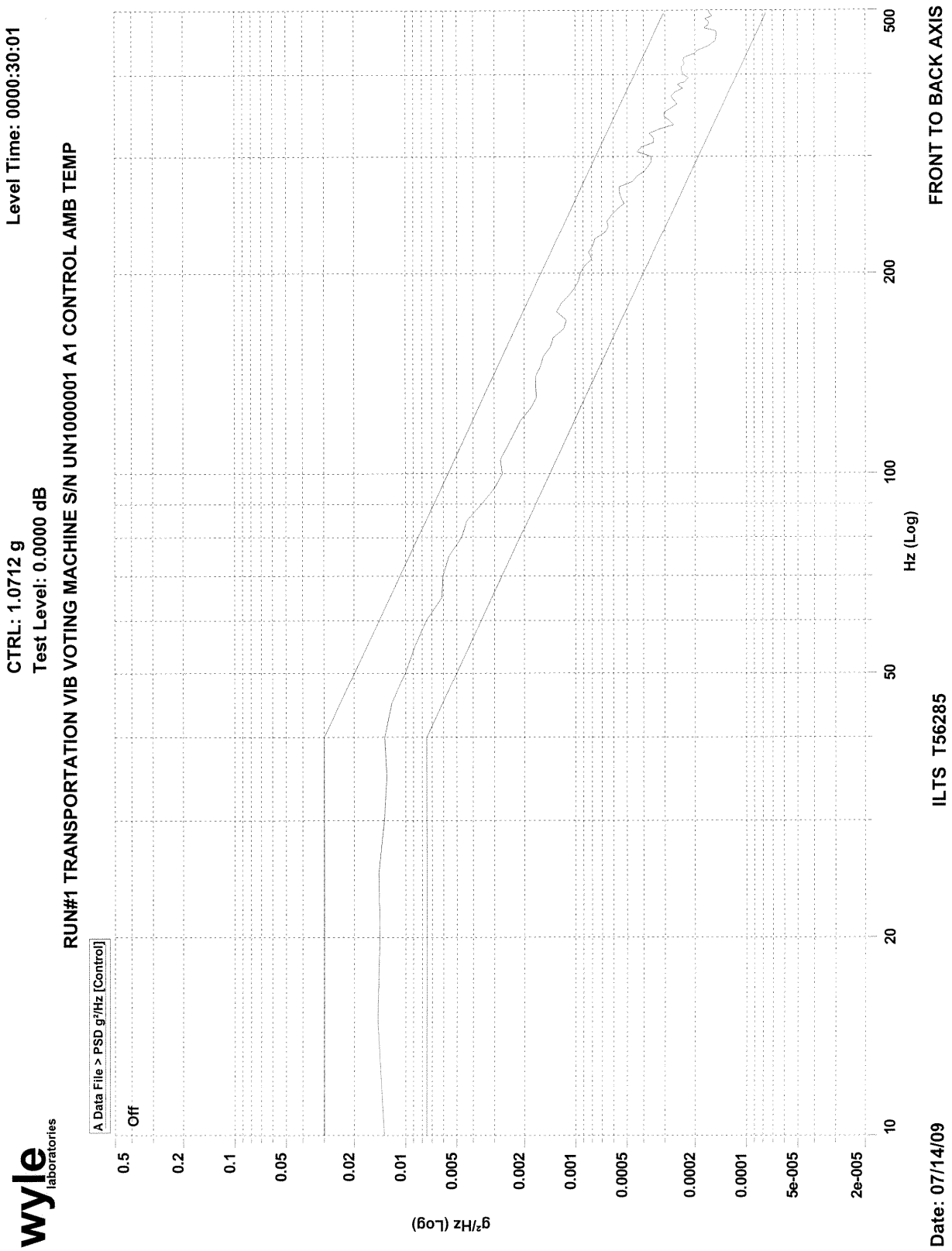
| Date | Time | Axis | Temp (F) | SINUSOIDAL Freq. (cps) | SINUSOIDAL Disp. ("da) | SINUSOIDAL Accel. (±g) | RANDOM Freq. (cps) | RANDOM PSD (g2/Hz) | RANDOM Slope (dB/Oct) | TOTAL Accel. (grms) | Test Time (min) | COMMENTS | NAME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | TEST REQUIREMENT | |
| 7/14/09 | 0817 | Long | AMB | | | | 10-40 | .015 | | | | Test Run #1 | |
| | | | | | | | 500 | .00015 | | 1.04 | 30 | Front to Back Axis | DM |
| | | | | | | | | | | | | | |
| 7/14/09 | 1004 | Lat | AMB | | | | 10-40 | .015 | | | | Test Run #2 | |
| | | | | | | | 500 | .00015 | | 1.04 | 30 | Side to Side Axis | DM |
| | | | | | | | | | | | | | |
| 7/14/09 | 1151 | Vert | AMB | | | | 10-40 | .015 | | | | Test Run #3 | |
| | | | | | | | 500 | .00015 | | 1.04 | 30 | Vertical Axis | DM |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

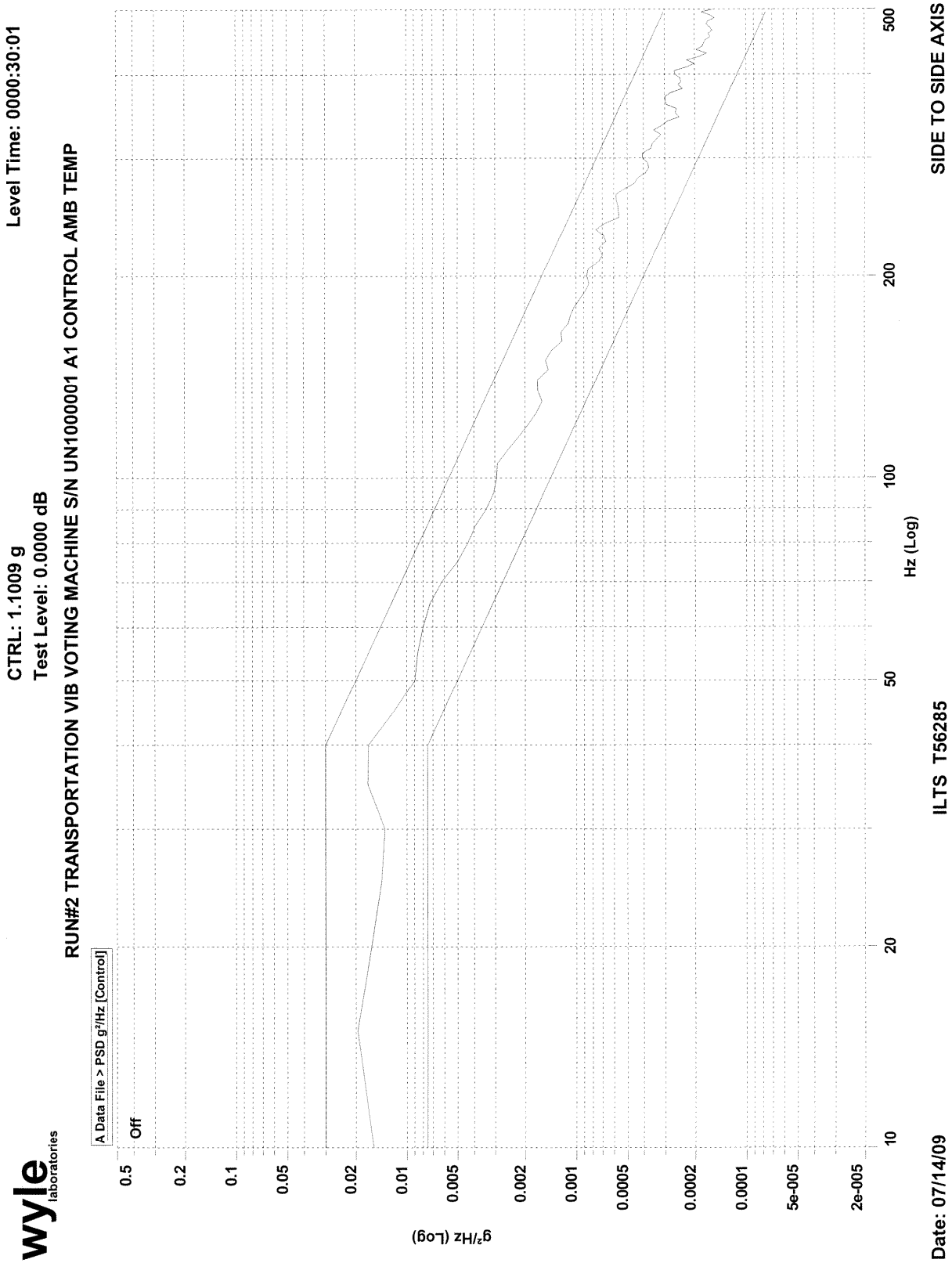
Job No. T56285
Report No. T56285-01
Date 7/14/09
Page No. 1 of 1

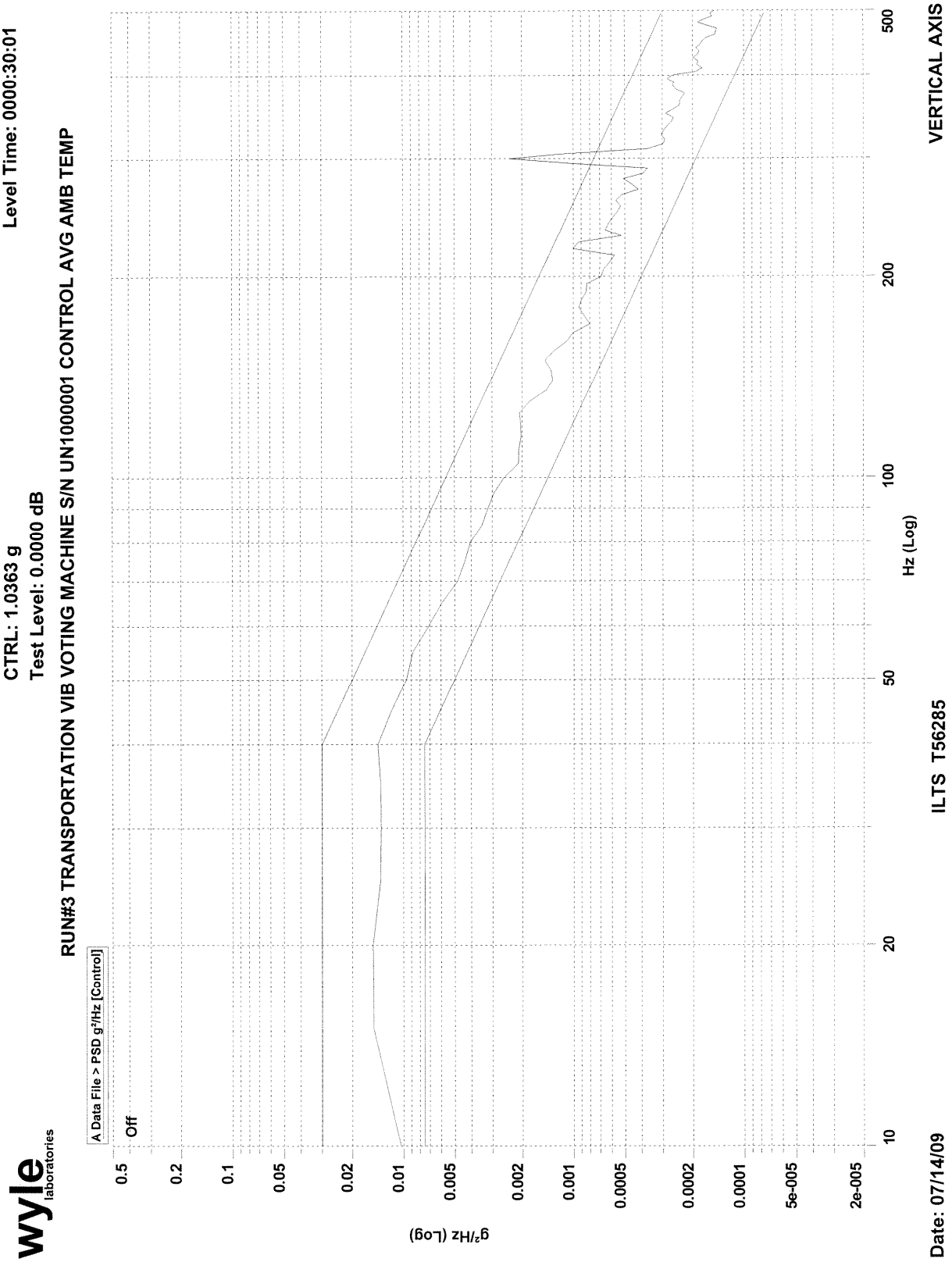
WH-1028A

Signed: Daniel Kelly 7/15/09

Approved: Wendy Owens 7/15/09


wyle laboratories
Level Time: 0000:30:01
CTRL: 1.0712 g
Test Level: 0.0000 dB
RUN#1 TRANSPORTATION VIB VOTING MACHINE S/N UN1000001 A1 CONTROL AMB TEMP
A Data File > PSD g²/Hz [Control]
Off
g²/Hz (Log)
0.5
0.2
0.1
0.05
0.02
0.01
0.005
0.002
0.001
0.0005
0.0002
0.0001
5e-005
2e-005
10
20
50
100
200
500
Hz (Log)
Date: 07/14/09
ILTS T56285
FRONT TO BACK AXIS


wyle laboratories
Level Time: 0000:30:01
CTRL: 1.1009 g
Test Level: 0.0000 dB
RUN#2 TRANSPORTATION VIB VOTING MACHINE S/N UN1000001 A1 CONTROL AMB TEMP
A Data File > PSD g²/Hz [Control]
Off
g²/Hz (Log)
0.5
0.2
0.1
0.05
0.02
0.01
0.005
0.002
0.001
0.0005
0.0002
0.0001
5e-005
2e-005
10
20
50
100
200
500
Hz (Log)
ILTS T56285
SIDE TO SIDE AXIS
Date: 07/14/09


wyle laboratories
Level Time: 0000:30:01
CTRL: 1.0363 g
Test Level: 0.0000 dB
RUN#3 TRANSPORTATION VIB VOTING MACHINE S/N UN1000001 CONTROL AVG AMB TEMP
A Data File > PSD g²/Hz [Control]
Off
g²/Hz (Log)
0.5
0.2
0.1
0.05
0.02
0.01
0.005
0.002
0.001
0.0005
0.0002
0.0001
5e-005
2e-005
10
20
50
100
200
500
Hz (Log)
VERTICAL AXIS
ILTS T56285
Date: 07/14/09

## BENCH HANDLING TEST DATA

# DATA SHEET

wyle laboratories

Customer Unisyn/ILTS
Specimen OpenElect Voting System (OVS)
Part No. EUT4 | Amb. Temp. ~75°F | Job No. T56285
Spec. EAC 2005 VVSG | Photo No | Report No. T56285-01
Para. 4.6.2 | Test Med. Air | Start Date 7-13-09
S/N — | Specimen Temp. Ambient
GSI No

Test Title Bench Handling

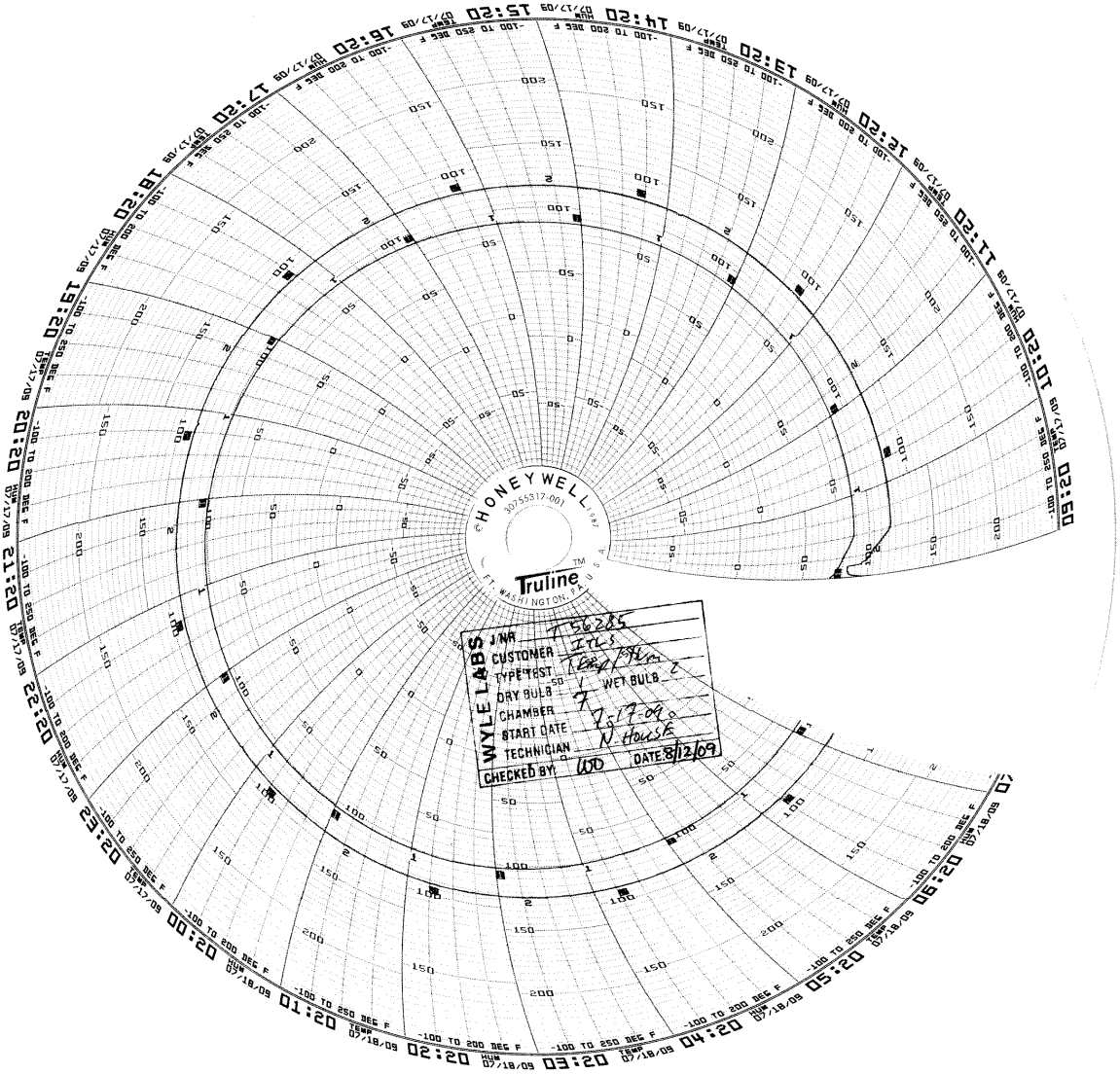
| |
|---|
| Drop Height: 4" |
| Edge 1: Drops 1-6 ✓ |
| Edge 2: Drops 7-12 ✓ |
| Edge 3: Drops 13-18 ✓ |
| Edge 4: Drops 19-24 ✓ |
| Post-test Inspection: |
| Unit passed post-test inspection. No anomalies noted. |

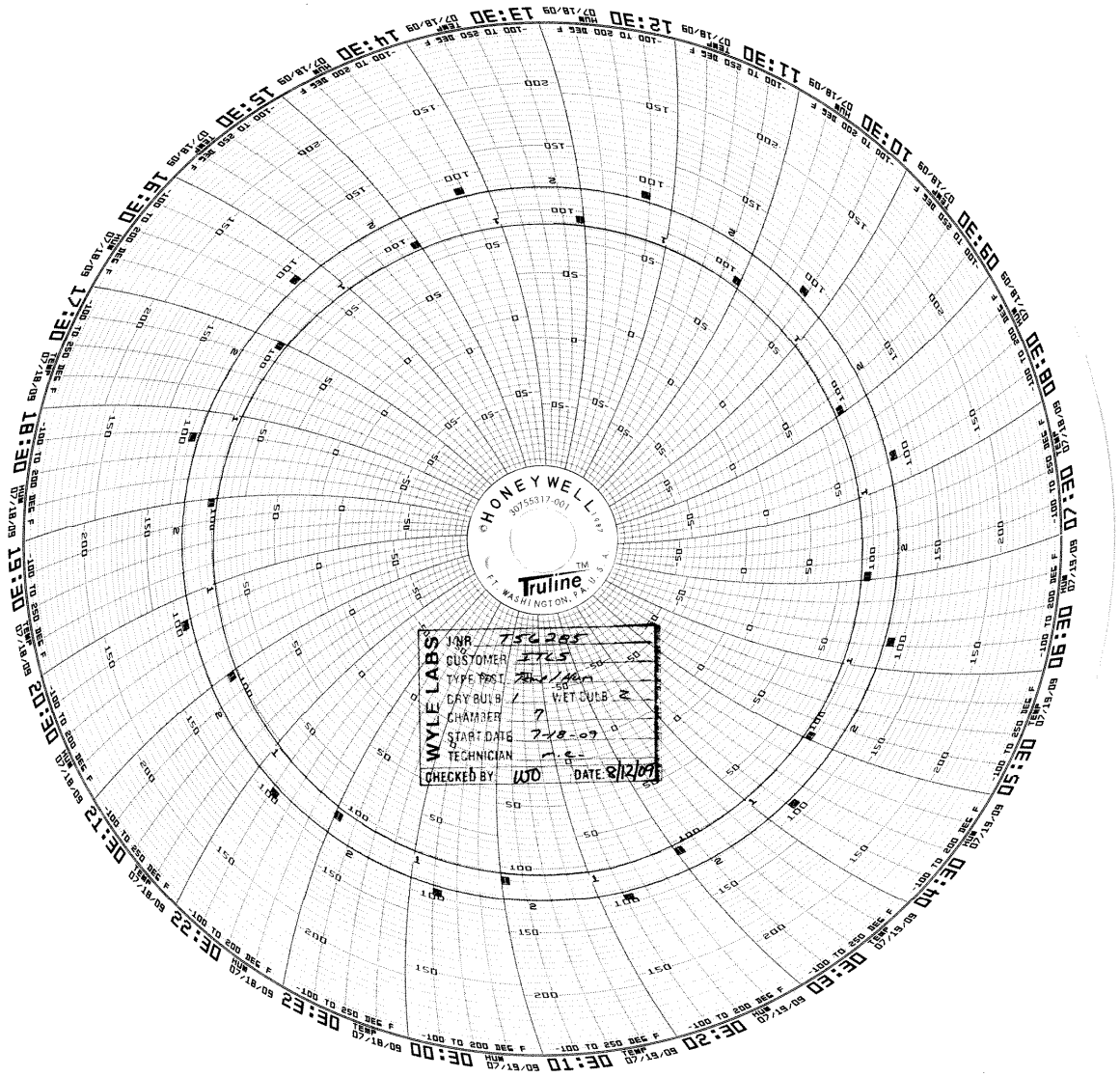
Tested By [signature] Date: 7/13/09
Witness — Date: —
Sheet No. 1 of 1
Approved Wendy Queen 7/13/09

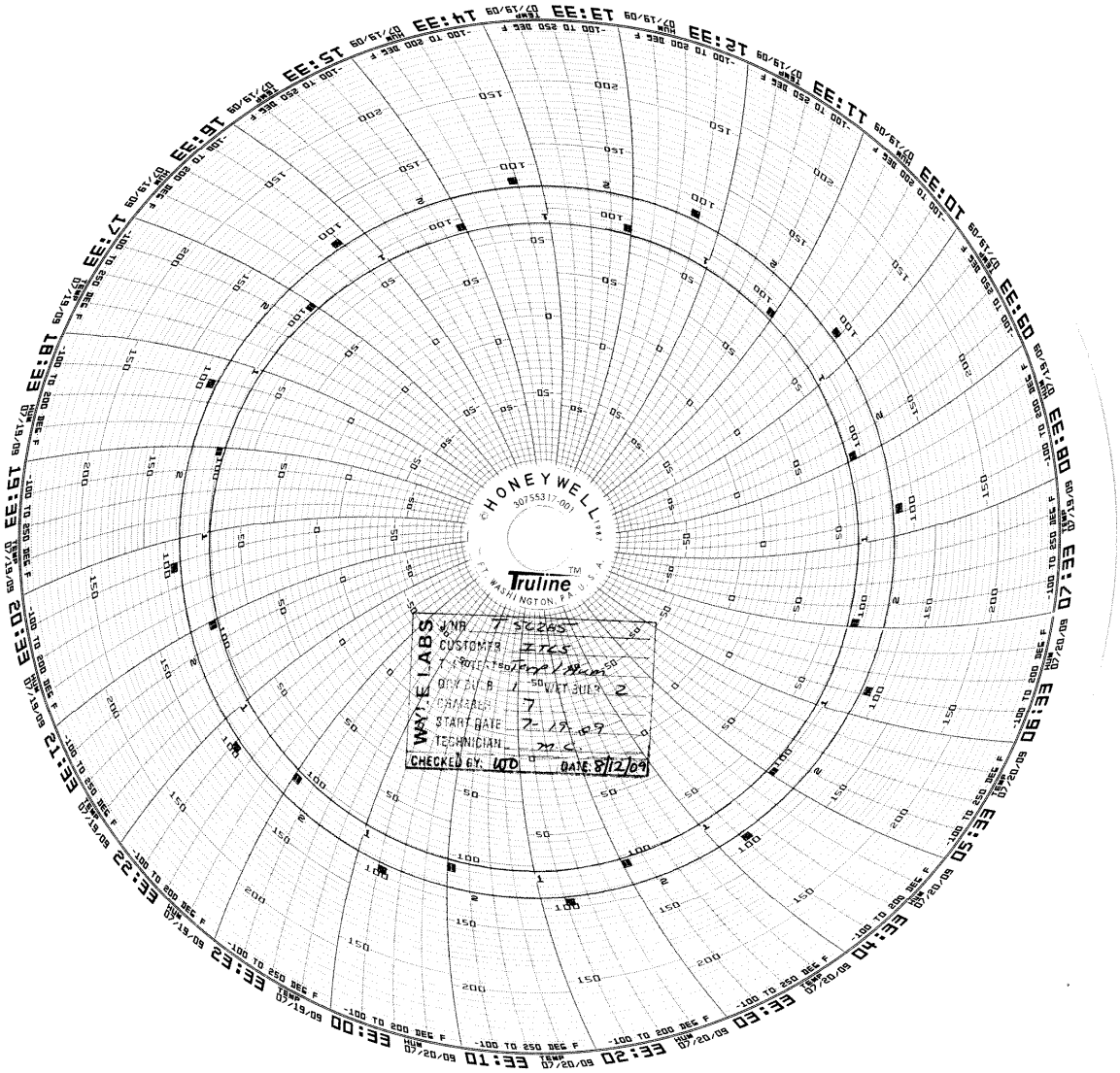
Notice of Anomaly: —

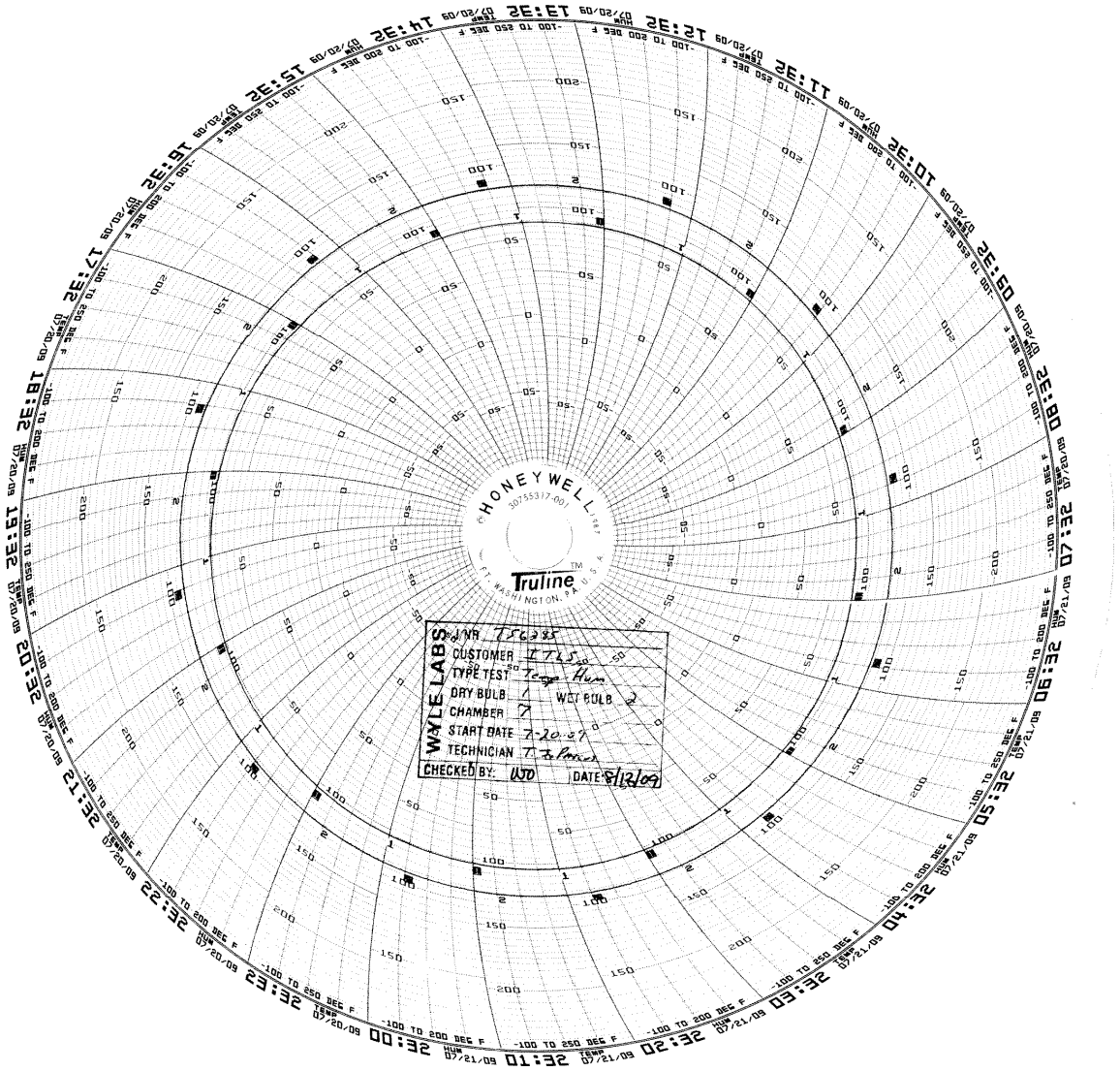
Wyle Form WH 614A, Rev. APR '84

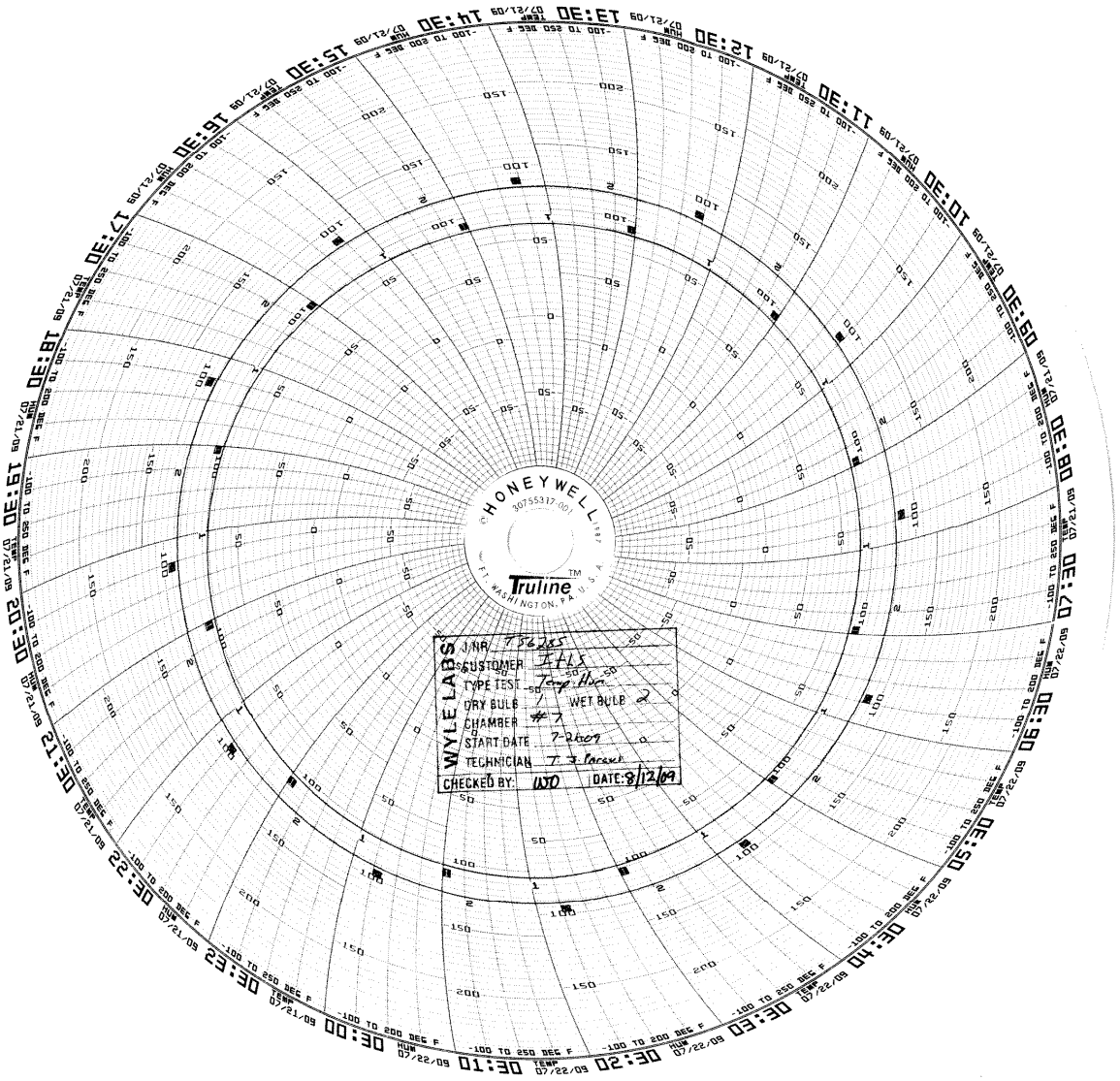
## HUMIDITY TEST DATA

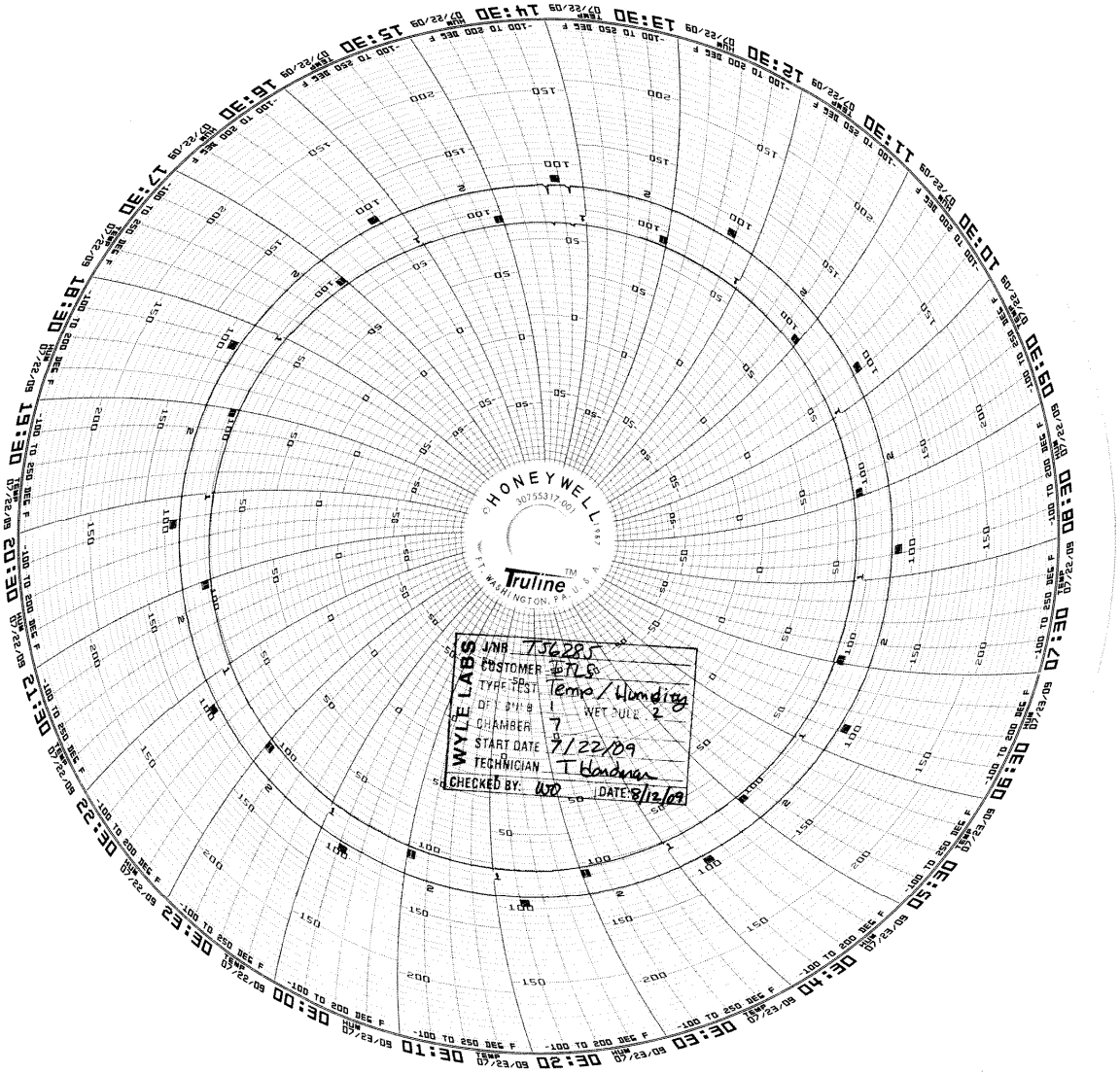

HONEYWELL
30755317-001
Truline
FT. WASHINGTON, PA
WYLE LABS
J/NA T56285
CUSTOMER ITL
TYPE TEST Temp/Humid
WET BULB
DRY BULB 7
CHAMBER
START DATE 7-17-09
TECHNICIAN N House
CHECKED BY: DATE: 8/12/09

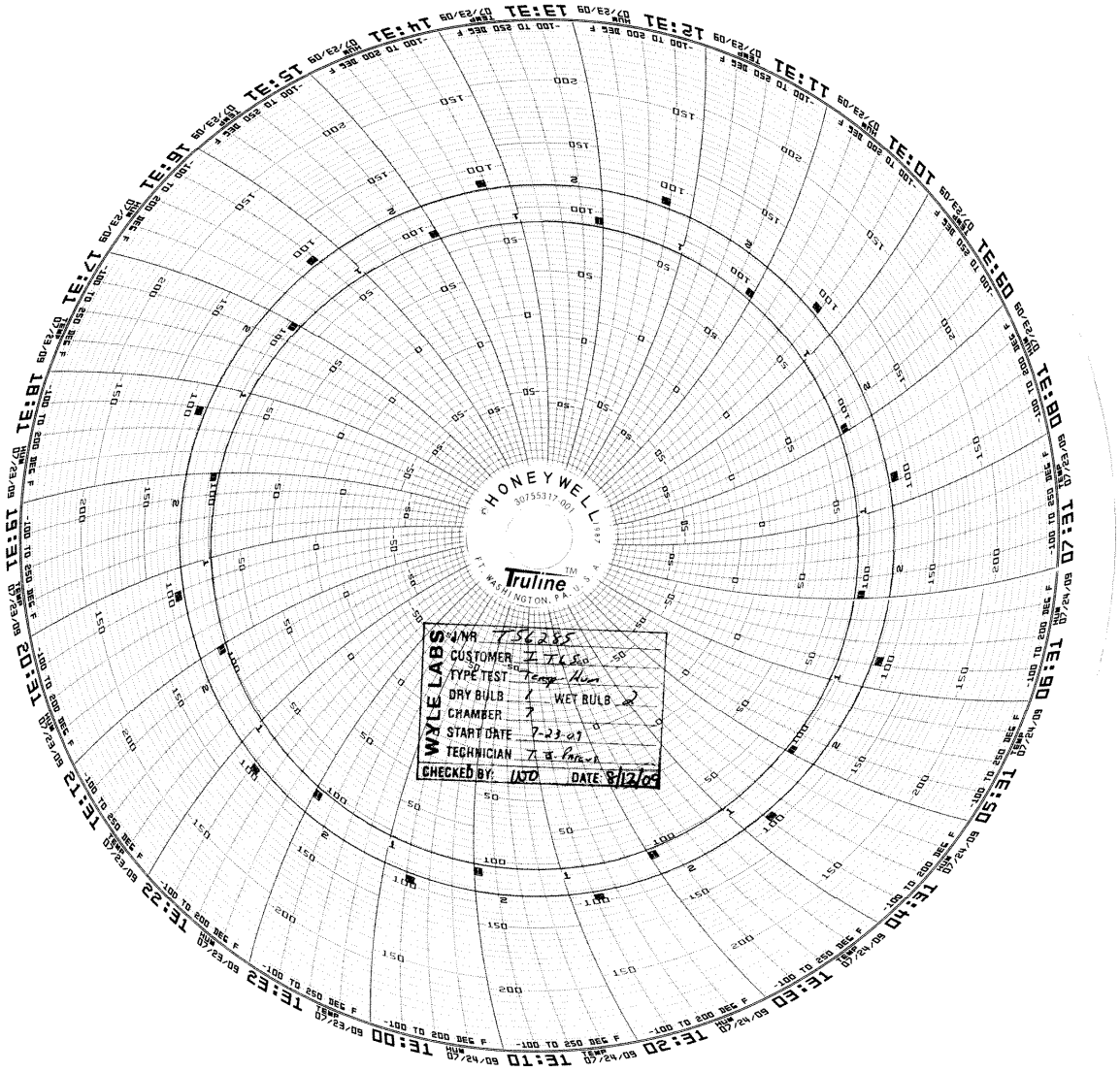

HONEYWELL
30755317-001
Truline
FT WASHINGTON, PA U.S.A.
WYLE LABS
J.NR 756285
CUSTOMER 1725
TYPE TEST 24hr/48hr
DRY BULB / WET BULB N
CHAMBER 7
START DATE 7-28-09
TECHNICIAN
CHECKED BY WO DATE 8/12/09

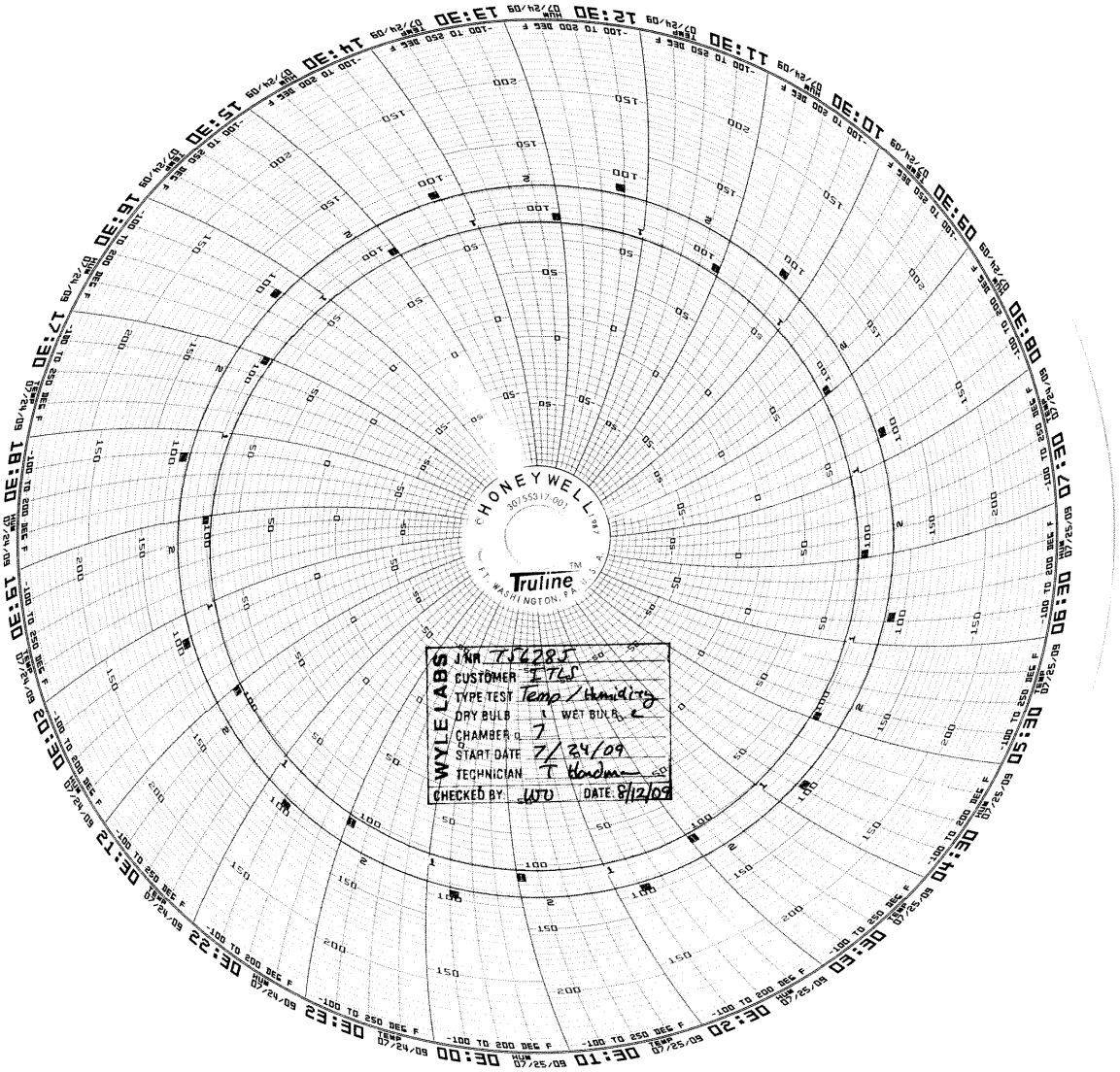

HONEYWELL
Truline
WYLE LABS
CUSTOMER ITCS
CHECKED BY: WD DATE: 8/12/09

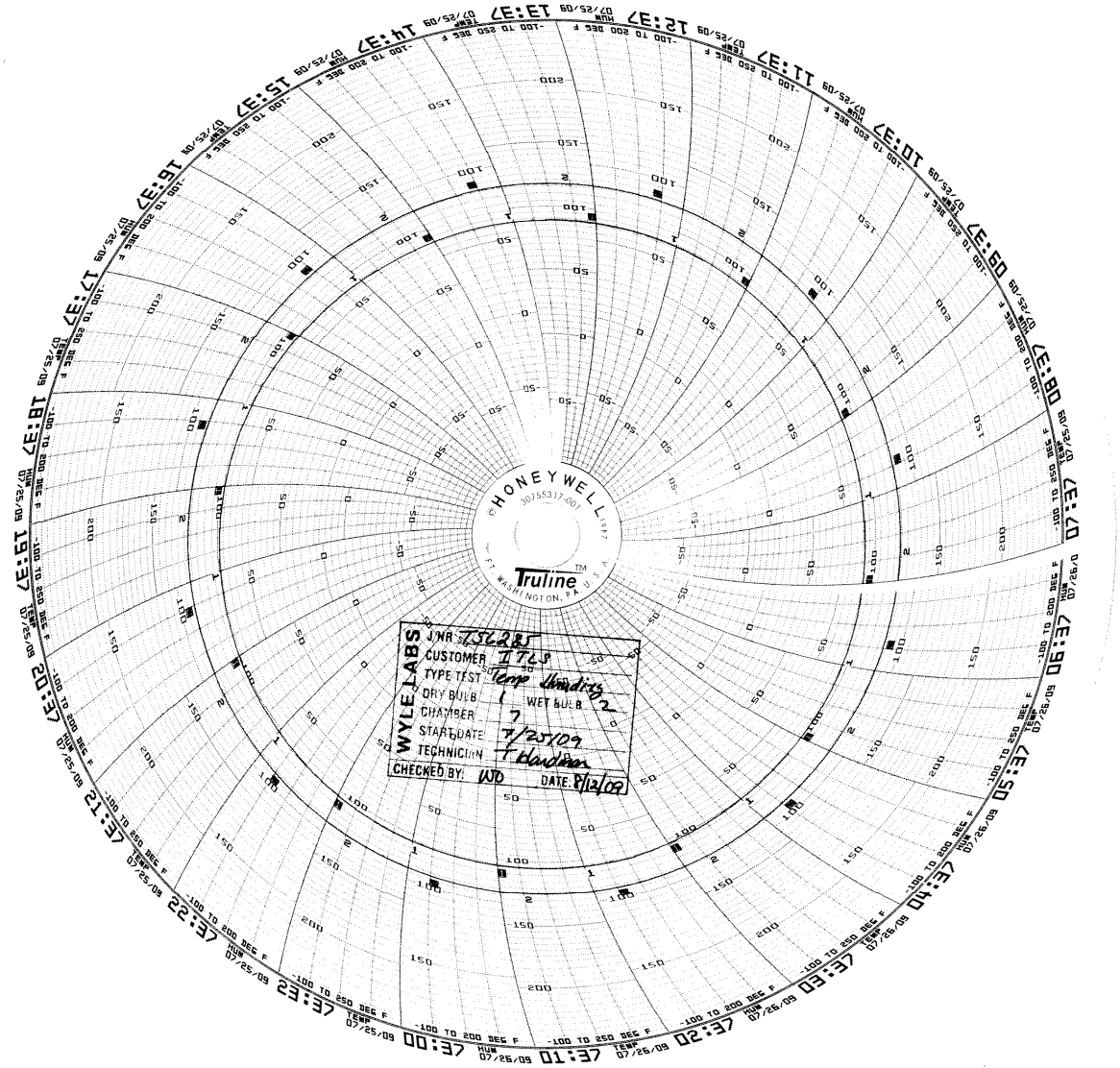

HONEYWELL
50755317-001
Truline
WYLE LABS
S/N/R T56285
CUSTOMER ITAS
TYPE TEST Temp Hum
DRY BULB 1 WET BULB 2
CHAMBER 7
START DATE 7-20-09
TECHNICIAN TJ Pomeroy
CHECKED BY: WJD DATE 8/12/09

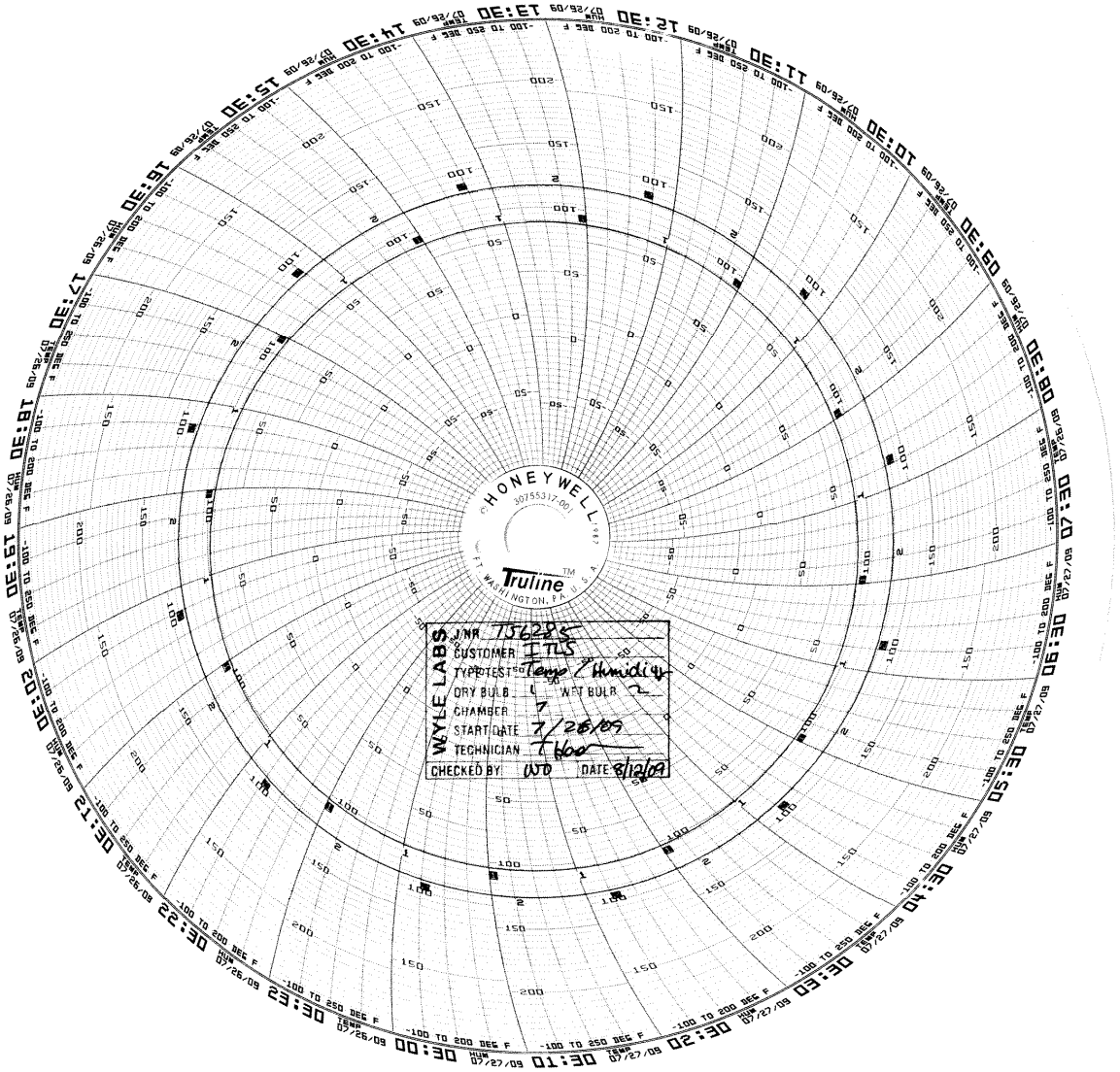

HONEYWELL
Truline
WYLE LABS
J/NR 756285
CUSTOMER THS
TYPE TEST Temp Hum
DRY BULB 1 WET BULB 2
CHAMBER #7
START DATE 7-21-09
TECHNICIAN T. Tarrant
CHECKED BY: WD DATE: 8/12/09

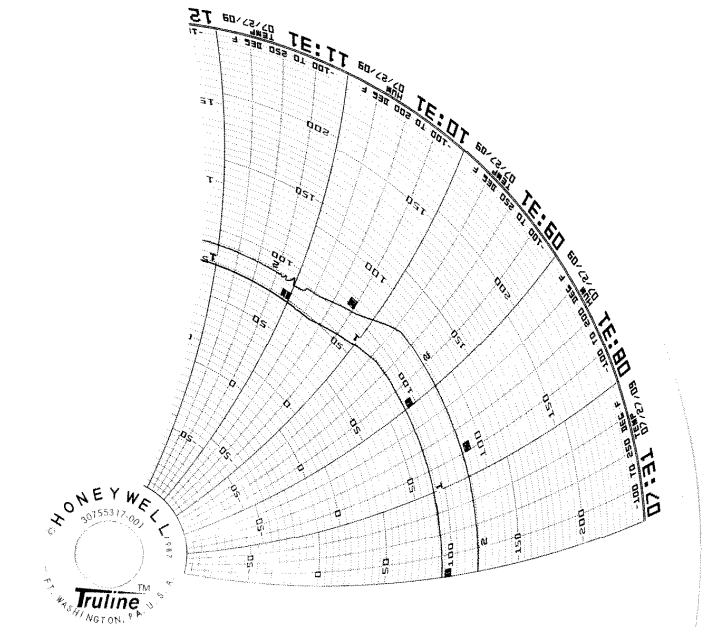

HONEYWELL
Truline
FT WASHINGTON, PA U.S.A.
WYLE LABS
JNR 75628S
CUSTOMER ETLS
TYPE TEST Temp / Humidity
CHAMBER 7
START DATE 7/22/09
TECHNICIAN T Hardman
CHECKED BY: WD DATE 8/12/09


HONEYWELL
30755317-001
Truline
FT WASHINGTON, PA. U.S.A.
WYLE LABS
T/NR T56285
CUSTOMER Z TTS
TYPE TEST Temp Hum
DRY BULB 1 WET BULB 2
CHAMBER 7
START DATE 7-23-09
TECHNICIAN Z. Carroll
CHECKED BY: WD DATE 8/12/09

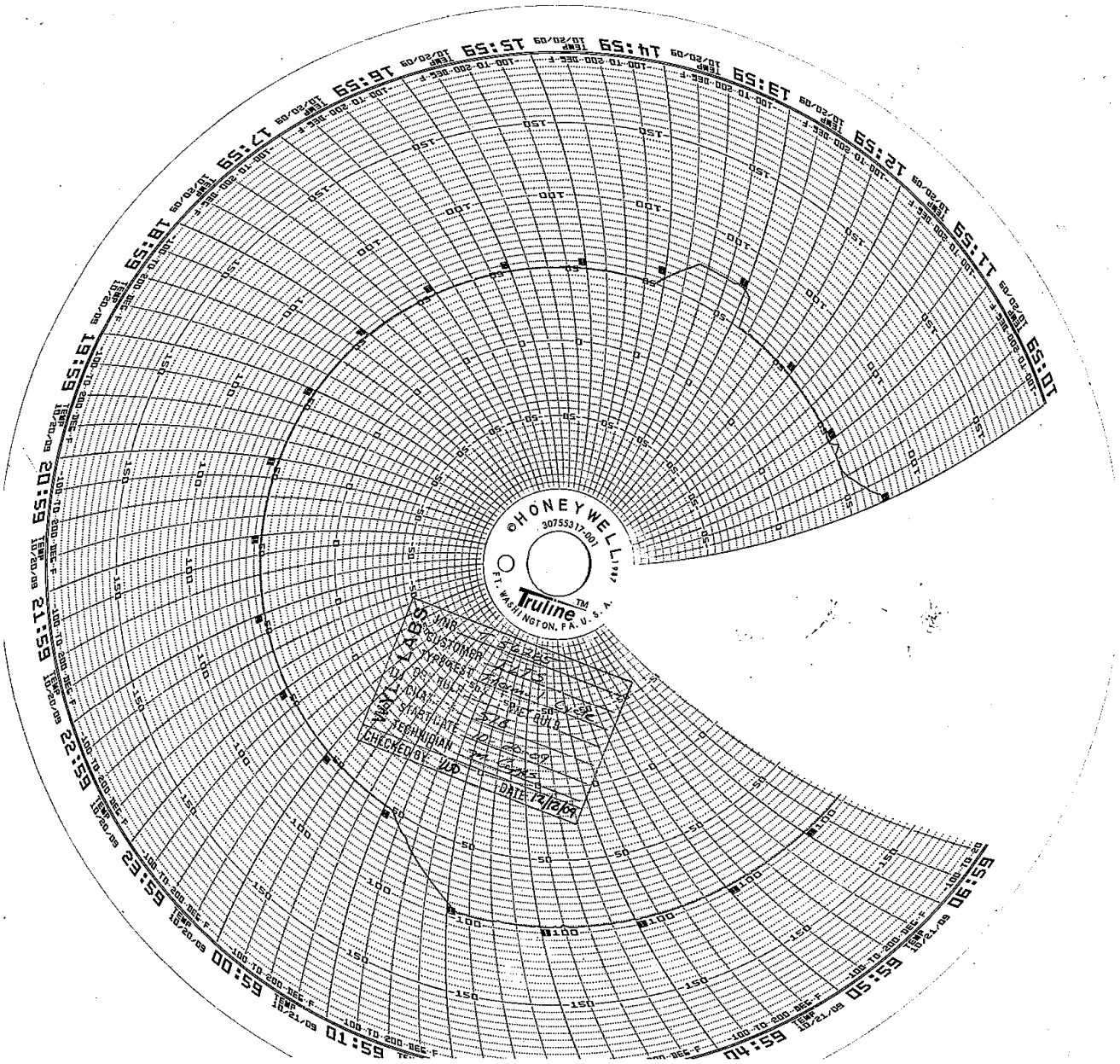

HONEYWELL
Truline
WYLE LABS
JOB NO T56285
CUSTOMER ITAR
TYPE TEST Temp / Humidity
DRY BULB 1 WET BULB 2
CHAMBER 7
START DATE 7/24/09
TECHNICIAN T Hardman
CHECKED BY WTD DATE 8/12/09

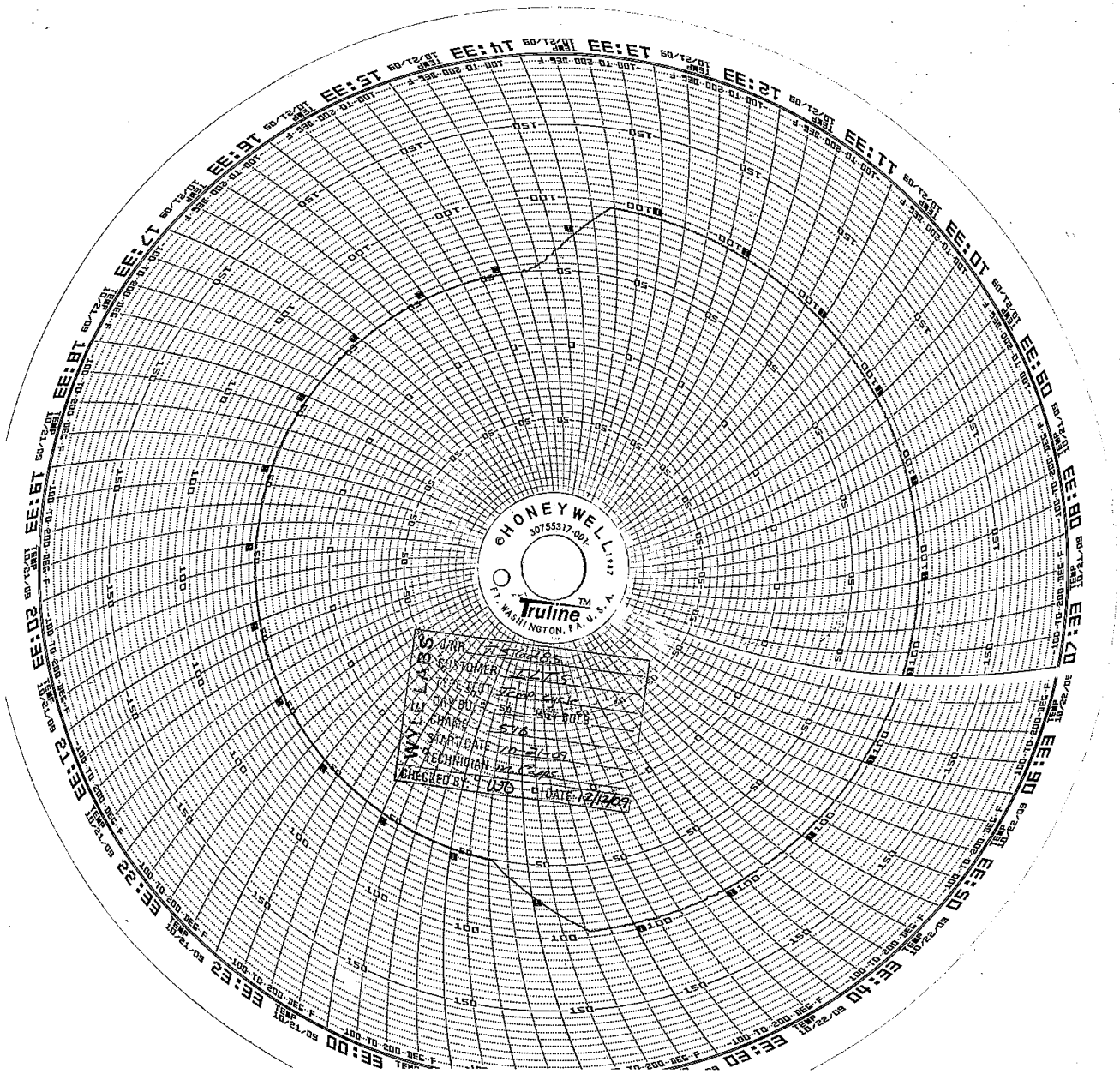

HONEYWELL
Truline
WYLE LABS
J/WR T56285
CUSTOMER ITLS
TYPE TEST Temp Humidity 2
DRY BULB WET BULB
CHAMBER 7
START DATE 7/25/09
TECHNICIAN T Hardman
CHECKED BY WD DATE 8/12/09

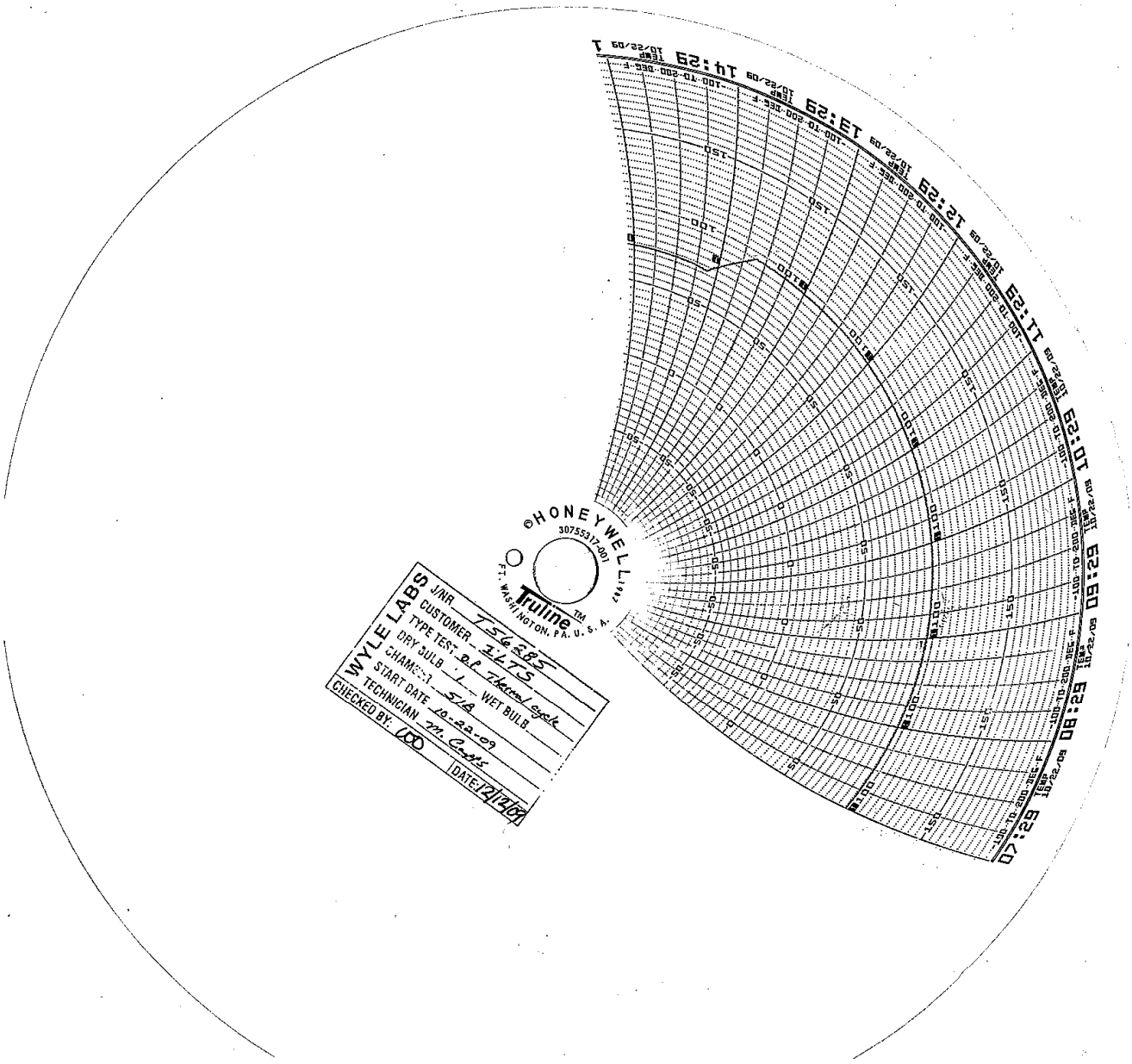

HONEYWELL
Truline
WYLE LABS
J/NR 75628-S
CUSTOMER ITLS
TYP TEST Temp / Humidity
DRY BULB WET BULB
CHAMBER 7
START DATE 7/26/09
TECHNICIAN
CHECKED BY WD DATE 8/12/09


HONEYWELL
Truline
WYLE LABS
J/NR T56285
CUSTOMER ITLS
TYPE TEST Temp/Hum
DRY BULB 1 WET BULB 2
CHAMBER 7
START DATE 7/27/09
TECHNICIAN N. House
CHECKED BY:
DATE:

## TEMPERATURE/POWER VARIATION TEST DATA


©HONEYWELL
30755317-001
Truline
FT. WASHINGTON, PA. U.S.A.
WYLE LABS
TEMP
10/20/09
10/21/09
100 TO 200 DEG F


©HONEYWELL 1987
30755317-001
Truline
FT. WASHINGTON, PA. U.S.A.
TEMP
10/21/09
-100 TO 200 DEG. F


WYLE LABS
J/NR 56285
CUSTOMER
TYPE TEST 24 Thermal cycle
DRY BULB
CHAMBER
WET BULB
START DATE 10-22-09
TECHNICIAN
CHECKED BY:
DATE: 12/3/09
HONEYWELL
3075317-001
Truline
FT. WASHINGTON, PA. U.S.A.

# ATTACHMENT D

# ELECTRICAL TEST DATA

## ELECTRICAL POWER DISTURBANCE TEST DATA

California Instruments Corp.
Data entry mode: Absolute

| No. | Type | Time (s) | Volt |
|---|---|---|---|
| 1 | V Step | 60.000 | 120.0 |
| 2 | V Step | 0.020 | 84.0 |
| 3 | V Step | 60.000 | 120.0 |
| 4 | V Step | 0.100 | 48.0 |
| 5 | V Step | 60.000 | 120.0 |
| 6 | V Step | 1.000 | 48.0 |
| 7 | V Step | 60.000 | 120.0 |
| 8 | V Step | 5.000 | 6.0 |
| 9 | V Step | 60.000 | 120.0 |
| 10 | V Step | 1.000 | 102.0 |
| 11 | V Step | 60.000 | 120.0 |
| 12 | V Step | 1.000 | 138.0 |
| 13 | V Step | 60.000 | 120.0 |
| 14 | V Step | 14400.000 | 129.0 |
| 15 | V Step | 60.000 | 120.0 |
| 16 | V Step | 14400.000 | 105.0 |
| 17 | V Step | 60.000 | 120.0 |
| 18 | Empty | | |

Transient List: <NEW>
Printed on: Wednesday, July 22, 2009 4:40:19 PM

Page #1

California Instruments Corp.
Data entry mode: Absolute

| No. | Type | Time (s) | Volt |
|---|---|---|---|
| 1 | V Step | 60.000 | 120.0 |
| 2 | V Step | 0.020 | 84.0 |
| 3 | V Step | 60.000 | 120.0 |
| 4 | V Step | 0.100 | 48.0 |
| 5 | V Step | 60.000 | 120.0 |
| 6 | V Step | 1.000 | 48.0 |
| 7 | V Step | 60.000 | 120.0 |
| 8 | V Step | 5.000 | 6.0 |
| 9 | V Step | 60.000 | 120.0 |
| 10 | V Step | 1.000 | 102.0 |
| 11 | V Step | 60.000 | 120.0 |
| 12 | V Step | 1.000 | 138.0 |
| 13 | V Step | 60.000 | 120.0 |
| 14 | V Step | 14400.000 | 129.0 |
| 15 | V Step | 60.000 | 120.0 |
| 16 | V Step | 14400.000 | 105.0 |
| 17 | V Step | 60.000 | 120.0 |
| 18 | Empty | | |

Transient List: <NEW>
Printed on: Tuesday, July 21, 2009 4:30:50 PM

Page #1

# ELECTROMAGNETIC RADIATION TEST DATA AND RADIATED EMISSIONS TEST DATA

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B RADIATED

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Radiated Scan | Time: | 1:41:58 PM |
| Equipment: | Voting Device | Sequence: | 1 |
| Manufacturer: | UNISYN | Tested By: | J. Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900268 |
| UPS | Entrust | ETR1500 | 0900407 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***
Vertical Ambient

***Transducer Legend:***
T1=Cable Wyle# 110111 T2=Wyle #114415 3M Vert

***Measurement Data:*** Readings listed by frequency. Test Distance: 3 meters

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36.854 | 19.6 | -0.5 | +15.5 | | | +0.0 | 34.6 | 40.0 | | | Verti | Peak | **-5.4** |
| 2 | 39.981 | 24.2 | -0.5 | +14.2 | | | +0.0 | 37.9 | 40.0 | | | Verti | Peak | **-2.1** |
| 3 | 40.580 | 19.6 | -0.5 | +13.9 | | | +0.0 | 33.0 | 40.0 | | | Verti | Peak | **-7.0** |
| 4 | 45.970 | 23.1 | -0.6 | +12.5 | | | +0.0 | 35.0 | 40.0 | | | Verti | Peak | **-5.0** |
| 5 | 47.500 | 21.8 | -0.6 | +12.2 | | | +0.0 | 33.4 | 40.0 | | | Verti | Peak | **-6.6** |
| 6 | 48.032 | 25.3 | -0.6 | +12.2 | | | +0.0 | 36.9 | 40.0 | | | Verti | Peak | **-3.1** |
| 7 | 49.962 | 24.9 | -0.6 | +12.0 | | | +0.0 | 36.3 | 40.0 | | | Verti | Peak | **-3.7** |
| 8 | 54.819 | 26.6 | -0.6 | +11.3 | | | +0.0 | 37.3 | 40.0 | | | Verti | Peak | **-2.7** |
| 9 | 55.418 | 25.8 | -0.6 | +11.2 | | | +0.0 | 36.4 | 40.0 | | | Verti | Peak | **-3.6** |
| 10 | 64.002 | 24.6 | -0.7 | +10.4 | | | +0.0 | 34.3 | 40.0 | | | Verti | Peak | **-5.7** |
| 11 | 68.061 | 23.6 | -0.7 | +8.3 | | | +0.0 | 31.2 | 40.0 | | | Verti | Peak | **-8.8** |
| 12 | 68.194 | 23.4 | -0.7 | +8.2 | | | +0.0 | 30.9 | 40.0 | | | Verti | Peak | **-9.1** |
| 13 | 68.660 | 23.5 | -0.7 | +8.1 | | | +0.0 | 30.9 | 40.0 | | | Verti | Peak | **-9.1** |
| 14 | 69.658 | 24.9 | -0.7 | +7.9 | | | +0.0 | 32.1 | 40.0 | | | Verti | Peak | **-7.9** |
| 15 | 70.722 | 24.5 | -0.7 | +7.7 | | | +0.0 | 31.5 | 40.0 | | | Verti | Peak | **-8.5** |
| 16 | 71.122 | 25.1 | -0.7 | +7.6 | | | +0.0 | 32.0 | 40.0 | | | Verti | Peak | **-8.0** |
| 17 | 71.854 | 25.7 | -0.7 | +7.4 | | | +0.0 | 32.4 | 40.0 | | | Verti | Peak | **-7.6** |
| 18 | 75.979 | 23.9 | -0.8 | +6.7 | | | +0.0 | 29.8 | 40.0 | | | Verti | Peak | **-10.2** |
| 19 | 80.038 | 19.8 | -0.6 | +6.4 | | | +0.0 | 25.6 | 40.0 | | | Verti | Peak | **-14.4** |
| 20 | 86.027 | 19.5 | -0.8 | +7.4 | | | +0.0 | 26.1 | 40.0 | | | Verti | Peak | **-13.9** |
| 21 | 88.089 | 59.2 | -0.8 | +7.9 | | | +0.0 | 66.3 | 43.5 | | | Verti | Peak | **+22.8** |
| 22 | 88.688 | 48.1 | -0.8 | +8.1 | | | +0.0 | 55.4 | 43.5 | | | Verti | Peak | **+11.9** |
| 23 | 89.354 | 72.8 | -0.8 | +8.2 | | | +0.0 | 80.2 | 43.5 | | | Verti | Peak | **+36.7** |
| 24 | 90.152 | 65.7 | -0.8 | +8.4 | | | +0.0 | 73.3 | 43.5 | | | Verti | Peak | **+29.8** |
| 25 | 90.951 | 70.1 | -0.8 | +8.6 | | | +0.0 | 77.9 | 43.5 | | | Verti | Peak | **+34.4** |
| 26 | 91.749 | 64.8 | -0.8 | +8.8 | | | +0.0 | 72.8 | 43.5 | | | Verti | Peak | **+29.3** |
| 27 | 92.548 | 44.5 | -0.7 | +9.0 | | | +0.0 | 52.8 | 43.5 | | | Verti | Peak | **+9.3** |
| 28 | 93.346 | 59.1 | -0.7 | +9.2 | | | +0.0 | 67.6 | 43.5 | | | Verti | Peak | **+24.1** |
| 29 | 94.211 | 61.6 | -0.7 | +9.4 | | | +0.0 | 70.3 | 43.5 | | | Verti | Peak | **+26.8** |
| 30 | 95.209 | 61.4 | -0.7 | +9.6 | | | +0.0 | 70.3 | 43.5 | | | Verti | Peak | **+26.8** |
| 31 | 96.207 | 38.0 | -0.7 | +9.6 | | | +0.0 | 46.9 | 43.5 | | | Verti | Peak | **+3.4** |
| 32 | 96.740 | 74.6 | -0.7 | +9.7 | | | +0.0 | 83.6 | 43.5 | | | Verti | Peak | **+40.1** |
| 33 | 97.581 | 43.5 | -0.8 | +9.7 | | | +0.0 | 52.4 | 43.5 | | | Verti | Peak | **+8.9** |
| 34 | 98.061 | 35.6 | -0.8 | +9.7 | | | +0.0 | 44.5 | 43.5 | | | Verti | Peak | **+1.0** |
| 35 | 98.902 | 82.4 | -0.8 | +9.8 | | | +0.0 | 91.4 | 43.5 | | | Verti | Peak | **+47.9** |

Wyle Laboratories

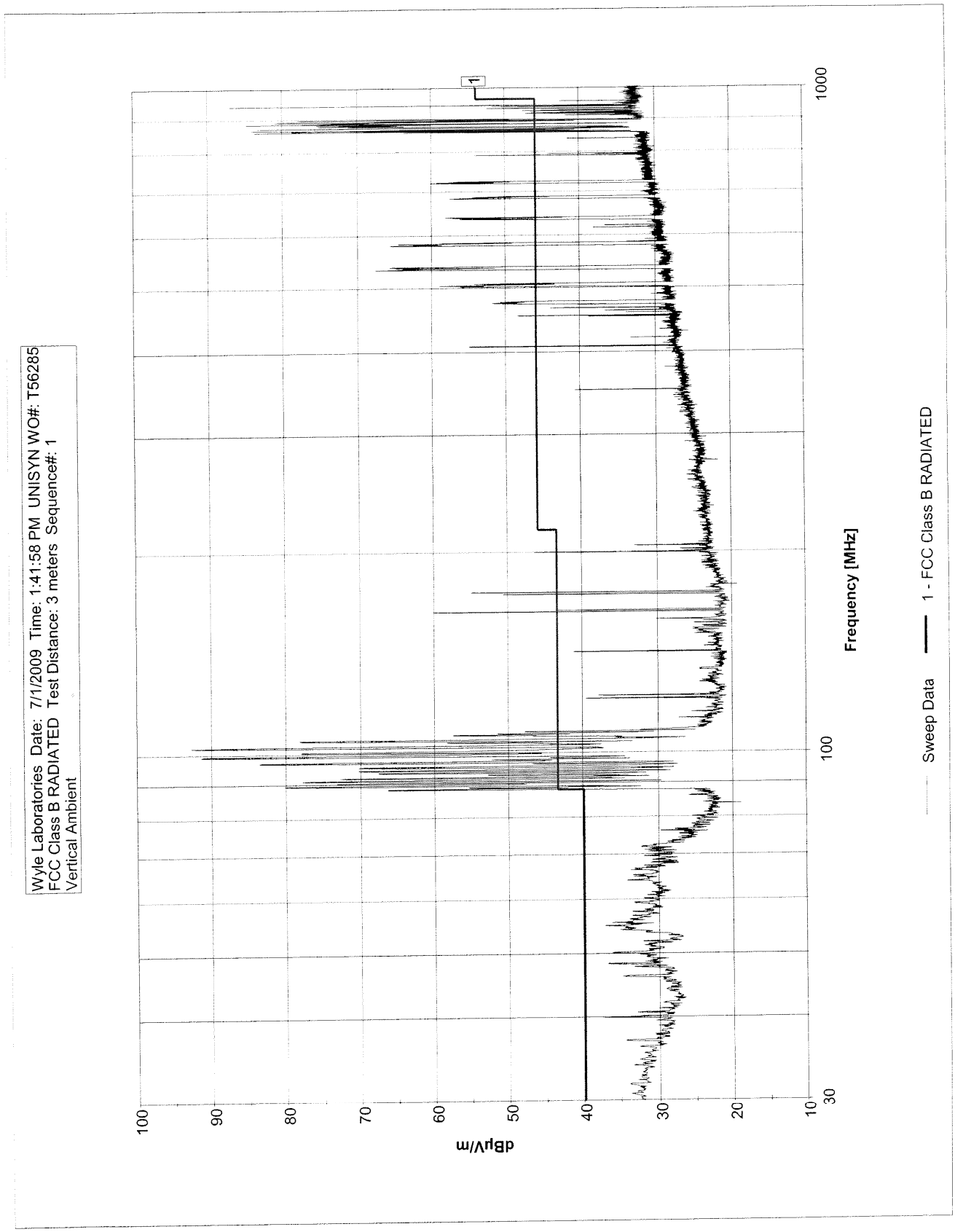
| # | Freq MHz | Rdng dBµV | T1 | T2 | Dist | Corr dBµV/m | Spec dBµV/m | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 100.223 | 69.0 | -0.8 | +9.8 | +0.0 | 78.0 | 43.5 | Verti | Peak | **+34.5** |
| 37 | 102.025 | 84.0 | -0.8 | +9.6 | +0.0 | 92.8 | 43.5 | Verti | Peak | **+49.3** |
| 38 | 103.466 | 49.8 | -0.8 | +9.4 | +0.0 | 58.4 | 43.5 | Verti | Peak | **+14.9** |
| 39 | 104.307 | 69.7 | -0.8 | +9.3 | +0.0 | 78.2 | 43.5 | Verti | Peak | **+34.7** |
| 40 | 105.988 | 49.2 | -0.9 | +9.2 | +0.0 | 57.5 | 43.5 | Verti | Peak | **+14.0** |
| 41 | 106.468 | 43.3 | -0.9 | +9.2 | +0.0 | 51.6 | 43.5 | Verti | Peak | **+8.1** |
| 42 | 107.189 | 39.6 | -0.9 | +9.2 | +0.0 | 47.9 | 43.5 | Verti | Peak | **+4.4** |
| 43 | 107.549 | 24.1 | -0.9 | +9.3 | +0.0 | 32.5 | 43.5 | Verti | Peak | **-11.0** |
| 44 | 112.113 | 19.1 | -0.9 | +9.1 | +0.0 | 27.3 | 43.5 | Verti | Peak | **-16.2** |
| 45 | 120.040 | 31.8 | -0.9 | +8.8 | +0.0 | 39.7 | 43.5 | Verti | Peak | **-3.8** |
| 46 | 121.241 | 30.2 | -0.9 | +8.7 | +0.0 | 38.0 | 43.5 | Verti | Peak | **-5.5** |
| 47 | 141.417 | 33.3 | -1.0 | +9.0 | +0.0 | 41.3 | 43.5 | Verti | Peak | **-2.2** |
| 48 | 158.231 | 22.6 | -1.0 | +8.7 | +0.0 | 30.3 | 43.5 | Verti | Peak | **-13.2** |
| 49 | 162.555 | 52.2 | -1.0 | +8.8 | +0.0 | 60.0 | 43.5 | Verti | Peak | **+16.5** |
| 50 | 163.276 | 35.9 | -1.0 | +8.8 | +0.0 | 43.7 | 43.5 | Verti | Peak | **+0.2** |
| 51 | 172.523 | 43.0 | -1.1 | +8.8 | +0.0 | 50.7 | 43.5 | Verti | Peak | **+7.2** |
| 52 | 173.844 | 47.2 | -1.1 | +8.9 | +0.0 | 55.0 | 43.5 | Verti | Peak | **+11.5** |
| 53 | 199.306 | 37.3 | -1.2 | +10.4 | +0.0 | 46.5 | 43.5 | Verti | Peak | **+3.0** |
| 54 | 203.869 | 23.8 | -1.2 | +10.5 | +0.0 | 33.1 | 43.5 | Verti | Peak | **-10.4** |
| 55 | 204.230 | 17.3 | -1.2 | +10.5 | +0.0 | 26.6 | 43.5 | Verti | Peak | **-16.9** |
| 56 | 350.162 | 28.1 | -1.5 | +14.3 | +0.0 | 40.9 | 46.0 | Verti | Peak | **-5.1** |
| 57 | 406.897 | 40.9 | -1.6 | +15.6 | +0.0 | 54.9 | 46.0 | Verti | Peak | **+8.9** |
| 58 | 407.378 | 41.0 | -1.6 | +15.6 | +0.0 | 55.0 | 46.0 | Verti | Peak | **+9.0** |
| 59 | 410.743 | 14.9 | -1.6 | +15.8 | +0.0 | 29.1 | 46.0 | Verti | Peak | **-16.9** |
| 60 | 419.157 | 19.6 | -1.7 | +15.5 | +0.0 | 33.4 | 46.0 | Verti | Peak | **-12.6** |
| 61 | 431.297 | 15.6 | -1.7 | +15.6 | +0.0 | 29.5 | 46.0 | Verti | Peak | **-16.5** |
| 62 | 441.995 | 15.0 | -1.8 | +16.0 | +0.0 | 29.2 | 46.0 | Verti | Peak | **-16.8** |
| 63 | 451.130 | 25.2 | -1.8 | +15.6 | +0.0 | 39.0 | 46.0 | Verti | Peak | **-7.0** |
| 64 | 452.573 | 34.6 | -1.8 | +15.7 | +0.0 | 48.5 | 46.0 | Verti | Peak | **+2.5** |
| 65 | 457.140 | 20.0 | -1.8 | +15.8 | +0.0 | 34.0 | 46.0 | Verti | Peak | **-12.0** |
| 66 | 460.263 | 22.6 | -1.8 | +16.0 | +0.0 | 36.8 | 46.0 | Verti | Peak | **-9.2** |
| 67 | 462.785 | 15.1 | -1.8 | +16.2 | +0.0 | 29.5 | 46.0 | Verti | Peak | **-16.5** |
| 68 | 464.586 | 29.5 | -1.8 | +16.4 | +0.0 | 44.1 | 46.0 | Verti | Peak | **-1.9** |
| 69 | 470.231 | 25.5 | -1.8 | +16.7 | +0.0 | 40.4 | 46.0 | Verti | Peak | **-5.6** |
| 70 | 471.672 | 35.7 | -1.8 | +16.6 | +0.0 | 50.5 | 46.0 | Verti | Peak | **+4.5** |
| 71 | 472.273 | 36.8 | -1.8 | +16.6 | +0.0 | 51.6 | 46.0 | Verti | Peak | **+5.6** |
| 72 | 472.753 | 37.1 | -1.8 | +16.6 | +0.0 | 51.9 | 46.0 | Verti | Peak | **+5.9** |
| 73 | 474.194 | 36.1 | -1.8 | +16.5 | +0.0 | 50.8 | 46.0 | Verti | Peak | **+4.8** |
| 74 | 479.959 | 14.8 | -1.8 | +16.2 | +0.0 | 29.2 | 46.0 | Verti | Peak | **-16.8** |
| 75 | 486.325 | 15.9 | -1.8 | +16.5 | +0.0 | 30.6 | 46.0 | Verti | Peak | **-15.4** |
| 76 | 498.094 | 15.7 | -1.9 | +17.0 | +0.0 | 30.8 | 46.0 | Verti | Peak | **-15.2** |
| 77 | 500.496 | 41.0 | -1.9 | +17.1 | +0.0 | 56.2 | 46.0 | Verti | Peak | **+10.2** |
| 78 | 501.697 | 42.6 | -1.9 | +17.1 | +0.0 | 57.8 | 46.0 | Verti | Peak | **+11.8** |
| 79 | 502.058 | 43.8 | -1.9 | +17.1 | +0.0 | 59.0 | 46.0 | Verti | Peak | **+13.0** |
| 80 | 504.940 | 39.1 | -1.9 | +17.1 | +0.0 | 54.3 | 46.0 | Verti | Peak | **+8.3** |
| 81 | 505.661 | 31.6 | -1.9 | +17.1 | +0.0 | 46.8 | 46.0 | Verti | Peak | **+0.8** |
| 82 | 520.793 | 14.9 | -1.9 | +16.8 | +0.0 | 29.8 | 46.0 | Verti | Peak | **-16.2** |
| 83 | 530.401 | 52.3 | -1.9 | +17.2 | +0.0 | 67.6 | 46.0 | Verti | Peak | **+21.6** |
| 84 | 531.122 | 49.6 | -1.9 | +17.2 | +0.0 | 64.9 | 46.0 | Verti | Peak | **+18.9** |
| 85 | 531.722 | 48.6 | -1.9 | +17.3 | +0.0 | 64.0 | 46.0 | Verti | Peak | **+18.0** |
| 86 | 533.884 | 49.3 | -1.9 | +17.4 | +0.0 | 64.8 | 46.0 | Verti | Peak | **+18.8** |
| 87 | 534.965 | 50.2 | -1.9 | +17.4 | +0.0 | 65.7 | 46.0 | Verti | Peak | **+19.7** |
| 88 | 542.651 | 14.6 | -2.0 | +17.3 | +0.0 | 29.9 | 46.0 | Verti | Peak | **-16.1** |
| 89 | 564.029 | 14.7 | -2.1 | +17.6 | +0.0 | 30.2 | 46.0 | Verti | Peak | **-15.8** |
| 90 | 569.194 | 14.7 | -2.1 | +18.0 | +0.0 | 30.6 | 46.0 | Verti | Peak | **-15.4** |
| 91 | 574.958 | 14.8 | -2.1 | +17.9 | +0.0 | 30.6 | 46.0 | Verti | Peak | **-15.4** |
| 92 | 578.201 | 49.9 | -2.1 | +17.8 | +0.0 | 65.6 | 46.0 | Verti | Peak | **+19.6** |
| 93 | 581.684 | 48.9 | -2.1 | +17.7 | +0.0 | 64.5 | 46.0 | Verti | Peak | **+18.5** |
| 94 | 583.005 | 43.1 | -2.1 | +17.8 | +0.0 | 58.8 | 46.0 | Verti | Peak | **+12.8** |
| 95 | 583.606 | 41.2 | -2.1 | +17.8 | +0.0 | 56.9 | 46.0 | Verti | Peak | **+10.9** |
| 96 | 585.167 | 18.2 | -2.1 | +17.8 | +0.0 | 33.9 | 46.0 | Verti | Peak | **-12.1** |
| 97 | 589.611 | 15.5 | -2.0 | +17.9 | +0.0 | 31.4 | 46.0 | Verti | Peak | **-14.6** |
| 98 | 615.072 | 22.3 | 2.1 | +18.2 | +0.0 | 38.4 | 46.0 | Verti | Peak | **-7.6** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | Dist | Corr dBµV/m | Spec dBµV/m | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|
| 99 | 619.636 | 20.8 | -2.1 | +18.1 | +0.0 | 36.8 | 46.0 | Verti | Peak | **-9.2** |
| 100 | 633.327 | 39.7 | -2.1 | +18.6 | +0.0 | 56.2 | 46.0 | Verti | Peak | **+10.2** |
| 101 | 635.729 | 40.7 | -2.1 | +18.6 | +0.0 | 57.2 | 46.0 | Verti | Peak | **+11.2** |
| 102 | 637.410 | 41.8 | -2.1 | +18.5 | +0.0 | 58.2 | 46.0 | Verti | Peak | **+12.2** |
| 103 | 680.046 | 41.0 | -2.3 | +18.9 | +0.0 | 57.6 | 46.0 | Verti | Peak | **+11.6** |
| 104 | 680.646 | 40.4 | -2.3 | +18.9 | +0.0 | 57.0 | 46.0 | Verti | Peak | **+11.0** |
| 105 | 681.247 | 39.6 | -2.3 | +19.0 | +0.0 | 56.3 | 46.0 | Verti | Peak | **+10.3** |
| 106 | 683.168 | 37.8 | -2.3 | +19.0 | +0.0 | 54.5 | 46.0 | Verti | Peak | **+8.5** |
| 107 | 684.970 | 34.2 | -2.3 | +19.1 | +0.0 | 51.0 | 46.0 | Verti | Peak | **+5.0** |
| 108 | 717.517 | 43.1 | -2.3 | +19.4 | +0.0 | 60.2 | 46.0 | Verti | Peak | **+14.2** |
| 109 | 718.958 | 42.1 | -2.3 | +19.5 | +0.0 | 59.3 | 46.0 | Verti | Peak | **+13.3** |
| 110 | 719.799 | 40.4 | -2.3 | +19.5 | +0.0 | 57.6 | 46.0 | Verti | Peak | **+11.6** |
| 111 | 721.000 | 39.7 | -2.3 | +19.5 | +0.0 | 56.9 | 46.0 | Verti | Peak | **+10.9** |
| 112 | 768.560 | 14.5 | -2.4 | +20.1 | +0.0 | 32.2 | 46.0 | Verti | Peak | **-13.8** |
| 113 | 774.324 | 14.8 | -2.4 | +20.2 | +0.0 | 32.6 | 46.0 | Verti | Peak | **-13.4** |
| 114 | 776.006 | 14.5 | -2.4 | +20.2 | +0.0 | 32.3 | 46.0 | Verti | Peak | **-13.7** |
| 115 | 778.408 | 14.7 | -2.4 | +20.3 | +0.0 | 32.6 | 46.0 | Verti | Peak | **-13.4** |
| 116 | 786.935 | 14.5 | -2.4 | +20.2 | +0.0 | 32.3 | 46.0 | Verti | Peak | **-13.7** |
| 117 | 788.977 | 36.5 | -2.4 | +20.1 | +0.0 | 54.2 | 46.0 | Verti | Peak | **+8.2** |
| 118 | 792.580 | 20.2 | -2.4 | +20.2 | +0.0 | 38.0 | 46.0 | Verti | Peak | **-8.0** |
| 119 | 793.420 | 26.6 | -2.4 | +20.2 | +0.0 | 44.4 | 46.0 | Verti | Peak | **-1.6** |
| 120 | 806.871 | 14.9 | -2.4 | +20.4 | +0.0 | 32.9 | 46.0 | Verti | Peak | **-13.1** |
| 121 | 807.832 | 14.5 | -2.4 | +20.4 | +0.0 | 32.5 | 46.0 | Verti | Peak | **-13.5** |
| 122 | 816.359 | 14.8 | -2.4 | +20.5 | +0.0 | 32.9 | 46.0 | Verti | Peak | **-13.1** |
| 123 | 835.695 | 23.8 | -2.5 | +20.5 | +0.0 | 41.8 | 46.0 | Verti | Peak | **-4.2** |
| 124 | 835.936 | 23.6 | -2.5 | +20.5 | +0.0 | 41.6 | 46.0 | Verti | Peak | **-4.4** |
| 125 | 853.951 | 45.6 | -2.6 | +20.7 | +0.0 | 63.7 | 46.0 | Verti | Peak | **+17.7** |
| 126 | 856.112 | 41.9 | -2.6 | +20.7 | +0.0 | 60.0 | 46.0 | Verti | Peak | **+14.0** |
| 127 | 856.833 | 46.2 | -2.6 | +20.7 | +0.0 | 64.3 | 46.0 | Verti | Peak | **+18.3** |
| 128 | 857.193 | 65.7 | -2.6 | +20.7 | +0.0 | 83.8 | 46.0 | Verti | Peak | **+37.8** |
| 129 | 857.914 | 48.7 | -2.6 | +20.8 | +0.0 | 66.9 | 46.0 | Verti | Peak | **+20.9** |
| 130 | 858.274 | 50.9 | -2.6 | +20.8 | +0.0 | 69.1 | 46.0 | Verti | Peak | **+23.1** |
| 131 | 859.355 | 52.2 | -2.6 | +20.8 | +0.0 | 70.4 | 46.0 | Verti | Peak | **+24.4** |
| 132 | 859.836 | 60.6 | -2.6 | +20.8 | +0.0 | 78.8 | 46.0 | Verti | Peak | **+32.8** |
| 133 | 860.196 | 46.7 | -2.6 | +20.8 | +0.0 | 64.9 | 46.0 | Verti | Peak | **+18.9** |
| 134 | 860.676 | 51.0 | -2.6 | +20.8 | +0.0 | 69.2 | 46.0 | Verti | Peak | **+23.2** |
| 135 | 861.277 | 52.8 | -2.6 | +20.8 | +0.0 | 71.0 | 46.0 | Verti | Peak | **+25.0** |
| 136 | 862.117 | 66.0 | -2.6 | +20.8 | +0.0 | 84.2 | 46.0 | Verti | Peak | **+38.2** |
| 137 | 863.318 | 36.3 | -2.6 | +20.9 | +0.0 | 54.6 | 46.0 | Verti | Peak | **+8.6** |
| 138 | 863.919 | 46.0 | -2.6 | +20.9 | +0.0 | 64.3 | 46.0 | Verti | Peak | **+18.3** |
| 139 | 865.120 | 30.5 | -2.6 | +20.9 | +0.0 | 48.8 | 46.0 | Verti | Peak | **+2.8** |
| 140 | 866.561 | 21.6 | -2.6 | +20.9 | +0.0 | 39.9 | 46.0 | Verti | Peak | **-6.1** |
| 141 | 867.402 | 21.3 | -2.6 | +20.9 | +0.0 | 39.6 | 46.0 | Verti | Peak | **-6.4** |
| 142 | 868.122 | 65.2 | -2.6 | +20.8 | +0.0 | 83.4 | 46.0 | Verti | Peak | **+37.4** |
| 143 | 868.603 | 44.9 | -2.6 | +20.8 | +0.0 | 63.1 | 46.0 | Verti | Peak | **+17.1** |
| 144 | 869.564 | 20.4 | -2.6 | +20.8 | +0.0 | 38.6 | 46.0 | Verti | Peak | **-7.4** |
| 145 | 872.086 | 53.0 | -2.6 | +20.8 | +0.0 | 71.2 | 46.0 | Verti | Peak | **+25.2** |
| 146 | 872.806 | 52.3 | -2.6 | +20.9 | +0.0 | 70.6 | 46.0 | Verti | Peak | **+24.6** |
| 147 | 873.527 | 50.9 | -2.6 | +20.9 | +0.0 | 69.2 | 46.0 | Verti | Peak | **+23.2** |
| 148 | 874.608 | 56.9 | -2.6 | +20.9 | +0.0 | 75.2 | 46.0 | Verti | Peak | **+29.2** |
| 149 | 876.770 | 54.2 | -2.6 | +20.9 | +0.0 | 72.5 | 46.0 | Verti | Peak | **+26.5** |
| 150 | 878.451 | 57.1 | -2.6 | +21.0 | +0.0 | 75.5 | 46.0 | Verti | Peak | **+29.5** |
| 151 | 879.892 | 51.3 | -2.6 | +21.0 | +0.0 | 69.7 | 46.0 | Verti | Peak | **+23.7** |
| 152 | 880.373 | 49.9 | -2.6 | +21.0 | +0.0 | 68.3 | 46.0 | Verti | Peak | **+22.3** |
| 153 | 880.733 | 66.5 | -2.6 | +21.0 | +0.0 | 84.9 | 46.0 | Verti | Peak | **+38.9** |
| 154 | 881.934 | 59.0 | -2.6 | +21.0 | +0.0 | 77.4 | 46.0 | Verti | Peak | **+31.4** |
| 155 | 883.255 | 56.5 | -2.6 | +21.1 | +0.0 | 75.0 | 46.0 | Verti | Peak | **+29.0** |
| 156 | 884.936 | 55.0 | -2.6 | +21.1 | +0.0 | 73.5 | 46.0 | Verti | Peak | **+27.5** |
| 157 | 885.897 | 62.6 | -2.6 | +21.1 | +0.0 | 81.1 | 46.0 | Verti | Peak | **+35.1** |
| 158 | 886.498 | 48.4 | -2.6 | +21.1 | +0.0 | 66.9 | 46.0 | Verti | Peak | **+20.9** |
| 159 | 887.098 | 49.2 | -2.6 | +21.1 | +0.0 | 67.7 | 46.0 | Verti | Peak | **+21.7** |
| 160 | 888.539 | 62.1 | -2.6 | +21.2 | +0.0 | 80.7 | 46.0 | Verti | Peak | **+34.7** |
| 161 | 889.140 | 40.5 | -2.6 | +21.2 | +0.0 | 59.1 | 46.0 | Verti | Peak | **+13.1** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 162 | 891.422 | 40.9 | -2.6 | +21.2 | | | +0.0 | 59.5 | 46.0 | | | Verti | Peak | **+13.5** |
| 163 | 892.383 | 51.1 | -2.6 | +21.2 | | | +0.0 | 69.7 | 46.0 | | | Verti | Peak | **+23.7** |
| 164 | 892.863 | 59.4 | -2.6 | +21.2 | | | +0.0 | 78.0 | 46.0 | | | Verti | Peak | **+32.0** |
| 165 | 893.103 | 39.6 | -2.6 | +21.2 | | | +0.0 | 58.2 | 46.0 | | | Verti | Peak | **+12.2** |
| 166 | 893.464 | 48.7 | -2.6 | +21.2 | | | +0.0 | 67.3 | 46.0 | | | Verti | Peak | **+21.3** |
| 167 | 905.594 | 17.3 | -2.6 | +21.3 | | | +0.0 | 36.0 | 46.0 | | | Verti | Peak | **-10.0** |
| 168 | 907.515 | 23.2 | -2.6 | +21.4 | | | +0.0 | 42.0 | 46.0 | | | Verti | Peak | **-4.0** |
| 169 | 907.996 | 20.3 | -2.6 | +21.4 | | | +0.0 | 39.1 | 46.0 | | | Verti | Peak | **-6.9** |
| 170 | 908.476 | 21.6 | -2.6 | +21.4 | | | +0.0 | 40.4 | 46.0 | | | Verti | Peak | **-5.6** |
| 171 | 912.079 | 21.6 | -2.6 | +21.5 | | | +0.0 | 40.5 | 46.0 | | | Verti | Peak | **-5.5** |
| 172 | 912.920 | 28.4 | -2.6 | +21.5 | | | +0.0 | 47.3 | 46.0 | | | Verti | Peak | **+1.3** |
| 173 | 915.322 | 27.5 | -2.6 | +21.6 | | | +0.0 | 46.5 | 46.0 | | | Verti | Peak | **+0.5** |
| 174 | 916.643 | 22.7 | -2.6 | +21.7 | | | +0.0 | 41.8 | 46.0 | | | Verti | Peak | **-4.2** |
| 175 | 917.123 | 23.5 | -2.6 | +21.7 | | | +0.0 | 42.6 | 46.0 | | | Verti | Peak | **-3.4** |
| 176 | 918.444 | 17.4 | -2.6 | +21.7 | | | +0.0 | 36.5 | 46.0 | | | Verti | Peak | **-9.5** |
| 177 | 921.207 | 28.2 | -2.6 | +21.8 | | | +0.0 | 47.4 | 46.0 | | | Verti | Peak | **+1.4** |
| 178 | 921.687 | 28.5 | -2.6 | +21.8 | | | +0.0 | 47.7 | 46.0 | | | Verti | Peak | **+1.7** |
| 179 | 923.609 | 23.5 | -2.6 | +21.9 | | | +0.0 | 42.8 | 46.0 | | | Verti | Peak | **-3.2** |
| 180 | 923.969 | 21.9 | -2.6 | +21.9 | | | +0.0 | 41.2 | 46.0 | | | Verti | Peak | **-4.8** |
| 181 | 924.449 | 20.3 | -2.6 | +21.9 | | | +0.0 | 39.6 | 46.0 | | | Verti | Peak | **-6.4** |
| 182 | 928.533 | 25.7 | -2.6 | +22.0 | | | +0.0 | 45.1 | 46.0 | | | Verti | Peak | **-0.9** |
| 183 | 929.013 | 33.1 | -2.6 | +22.0 | | | +0.0 | 52.5 | 46.0 | | | Verti | Peak | **+6.5** |
| 184 | 929.494 | 31.0 | -2.6 | +22.0 | | | +0.0 | 50.4 | 46.0 | | | Verti | Peak | **+4.4** |
| 185 | 934.778 | 31.2 | -2.6 | +21.9 | | | +0.0 | 50.5 | 46.0 | | | Verti | Peak | **+4.5** |
| 186 | 935.859 | 32.5 | -2.6 | +21.9 | | | +0.0 | 51.8 | 46.0 | | | Verti | Peak | **+5.8** |
| 187 | 936.700 | 26.6 | -2.6 | +21.9 | | | +0.0 | 45.9 | 46.0 | | | Verti | Peak | **-0.1** |
| 188 | 937.756 | 17.4 | -2.5 | +21.8 | | | +0.0 | 36.7 | 46.0 | | | Verti | Peak | **-9.3** |
| 189 | 937.944 | 21.3 | -2.5 | +21.8 | | | +0.0 | 40.6 | 46.0 | | | Verti | Peak | **-5.4** |
| 190 | 938.319 | 24.1 | -2.5 | +21.8 | | | +0.0 | 43.4 | 46.0 | | | Verti | Peak | **-2.6** |
| 191 | 938.820 | 67.8 | -2.5 | +21.8 | | | +0.0 | 87.1 | 46.0 | | | Verti | Peak | **+41.1** |
| 192 | 939.321 | 36.8 | -2.5 | +21.8 | | | +0.0 | 56.1 | 46.0 | | | Verti | Peak | **+10.1** |
| 193 | 939.634 | 20.3 | -2.5 | +21.8 | | | +0.0 | 39.6 | 46.0 | | | Verti | Peak | **-6.4** |
| 194 | 940.761 | 14.9 | -2.5 | +21.8 | | | +0.0 | 34.2 | 46.0 | | | Verti | Peak | **-11.8** |
| 195 | 941.262 | 15.0 | -2.5 | +21.8 | | | +0.0 | 34.3 | 46.0 | | | Verti | Peak | **-11.7** |
| 196 | 942.890 | 15.2 | -2.5 | +21.8 | | | +0.0 | 34.5 | 46.0 | | | Verti | Peak | **-11.5** |
| 197 | 944.455 | 16.3 | -2.5 | +21.8 | | | +0.0 | 35.6 | 46.0 | | | Verti | Peak | **-10.4** |
| 198 | 944.956 | 15.5 | -2.5 | +21.8 | | | +0.0 | 34.8 | 46.0 | | | Verti | Peak | **-11.2** |
| 199 | 946.521 | 15.8 | -2.5 | +21.8 | | | +0.0 | 35.1 | 46.0 | | | Verti | Peak | **-10.9** |
| 200 | 952.469 | 23.5 | -2.5 | +21.7 | | | +0.0 | 42.7 | 46.0 | | | Verti | Peak | **-3.3** |


Wyle Laboratories Date: 7/1/2009 Time: 1:41:58 PM UNISYN WO#: T56285
FCC Class B RADIATED Test Distance: 3 meters Sequence#: 1
Vertical Ambient
dBµV/m
100
90
80
70
60
50
40
30
20
10
30
100
1000
Frequency [MHz]
1
Sweep Data
1 - FCC Class B RADIATED

wyle laboratories

Wyle Laboratories

Customer: UNISYN
Specification: FCC Class B RADIATED

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Radiated Scan | Time: | 10:30:18 |
| Equipment: | Voting Device | Sequence: | 2 |
| Manufacturer: | UNISYN | Tested By: | J. Smith J Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900268 |
| UPS | Entrust | ETR1500 | 0900407 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Vertical Active

***Transducer Legend:***

| | |
|---|---|
| T1=Cable Wyle# 110111 | T2=Wyle #114415 3M Vert |

***Measurement Data:*** Readings listed by frequency. Test Distance: 3 meters

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.196 | 18.4 | -0.4 | +17.9 | | | +0.0 | 35.9 | 40.0 | | | Verti | Peak | **-4.1** |
| 2 | 32.243 | 14.1 | -0.4 | +17.9 | | | +0.0 | 31.6 | 40.0 | | | Verti | QP | **-8.4** |
| 3 | 39.981 | 24.5 | -0.5 | +14.2 | | | +0.0 | 38.2 | 40.0 | | | Verti | Peak | **-1.8** |
| 4 | 40.003 | 22.6 | -0.5 | +14.2 | | | +0.0 | 36.3 | 40.0 | | | Verti | QP | **-3.7** |
| 5 | 40.014 | 22.3 | -0.5 | +14.2 | | | +0.0 | 35.9 | 40.0 | | | Verti | QP | **-4.1** |
| 6 | 40.114 | 24.4 | -0.5 | +14.1 | | | +0.0 | 38.0 | 40.0 | | | Verti | Peak | **-2.0** |
| 7 | 47.966 | 24.4 | -0.6 | +12.2 | | | +0.0 | 36.0 | 40.0 | | | Verti | Peak | **-4.0** |
| 8 | 48.024 | 22.7 | -0.6 | +12.2 | | | +0.0 | 34.3 | 40.0 | | | Verti | QP | **-5.7** |
| 9 | 50.024 | 22.1 | -0.6 | +12.0 | | | +0.0 | 33.5 | 40.0 | | | Verti | QP | **-6.5** |
| 10 | 50.095 | 41.0 | -0.6 | +12.0 | | | +0.0 | 52.4 | 40.0 | | | Verti | Peak | **+12.4** |
| 11 | 64.601 | 44.3 | -0.7 | +10.2 | | | +0.0 | 53.8 | 40.0 | | | Verti | Peak | **+13.8** |
| 12 | 64.660 | 20.7 | -0.7 | +10.1 | | | +0.0 | 30.0 | 40.0 | | | Verti | QP | **-10.0** |

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B RADIATED

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Radiated Scan | Time: | 10:30:18 |
| Equipment: | Voting Device | Sequence: | 2 |
| Manufacturer: | UNISYN | Tested By: | J. Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900268 |
| UPS | Entrust | ETR1500 | 0900407 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Vertical Active

***Transducer Legend:***

| | |
|---|---|
| T1=Cable Wyle# 110111 | T2=Wyle #114415 3M Vert |

***Measurement Data:*** Readings listed by frequency. Test Distance: 3 meters

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.196 | 18.4 | -0.4 | +17.9 | | | +0.0 | 35.9 | 40.0 | | | Verti | Peak | **-4.1** |
| 2 | 39.981 | 24.5 | -0.5 | +14.2 | | | +0.0 | 38.2 | 40.0 | | | Verti | Peak | **-1.8** |
| 3 | 40.114 | 24.4 | -0.5 | +14.1 | | | +0.0 | 38.0 | 40.0 | | | Verti | Peak | **-2.0** |
| 4 | 42.842 | 19.2 | -0.6 | +13.1 | | | +0.0 | 31.7 | 40.0 | | | Verti | Peak | **-8.3** |
| 5 | 43.308 | 20.4 | -0.6 | +13.0 | | | +0.0 | 32.8 | 40.0 | | | Verti | Peak | **-7.2** |
| 6 | 45.970 | 23.9 | -0.6 | +12.5 | | | +0.0 | 35.8 | 40.0 | | | Verti | Peak | **-4.2** |
| 7 | 47.433 | 22.2 | -0.6 | +12.2 | | | +0.0 | 33.8 | 40.0 | | | Verti | Peak | **-6.2** |
| 8 | 47.966 | 24.4 | -0.6 | +12.2 | | | +0.0 | 36.0 | 40.0 | | | Verti | Peak | **-4.0** |
| 9 | 50.077 | 26.7 | -0.6 | +12.0 | | | +0.0 | 38.1 | 40.0 | | | Verti | QP | **-1.9** |
| 10 | 50.095 | 41.0 | -0.6 | +12.0 | | | +0.0 | 52.4 | 40.0 | | | Verti | Peak | **+12.4** |
| 11 | 51.958 | 22.8 | -0.6 | +11.9 | | | +0.0 | 34.1 | 40.0 | | | Verti | Peak | **-5.9** |
| 12 | 54.221 | 25.8 | -0.6 | +11.4 | | | +0.0 | 36.6 | 40.0 | | | Verti | Peak | **-3.4** |
| 13 | 64.518 | 27.9 | -0.7 | +10.2 | | | +0.0 | 37.4 | 40.0 | | | Verti | QP | **-2.6** |
| 14 | 64.601 | 44.3 | -0.7 | +10.2 | | | +0.0 | 53.8 | 40.0 | | | Verti | Peak | **+13.8** |
| 15 | 66.397 | 25.9 | -0.7 | +9.2 | | | +0.0 | 34.4 | 40.0 | | | Verti | Peak | **-5.6** |
| 16 | 72.120 | 26.1 | -0.7 | +7.4 | | | +0.0 | 32.8 | 40.0 | | | Verti | Peak | **-7.2** |
| 17 | 72.253 | 23.0 | -0.7 | +7.3 | | | +0.0 | 29.6 | 40.0 | | | Verti | Peak | **-10.4** |
| 18 | 75.913 | 24.0 | -0.8 | +6.7 | | | +0.0 | 29.9 | 40.0 | | | Verti | Peak | **-10.1** |
| 19 | 80.504 | 25.5 | -0.6 | +6.5 | | | +0.0 | 31.4 | 40.0 | | | Verti | Peak | **-8.6** |
| 20 | 81.369 | 23.7 | -0.7 | +6.6 | | | +0.0 | 29.6 | 40.0 | | | Verti | Peak | **-10.4** |
| 21 | 83.964 | 23.8 | -0.8 | +7.0 | | | +0.0 | 30.0 | 40.0 | | | Verti | Peak | **-10.0** |
| 22 | 87.956 | 57.5 | -0.8 | +7.9 | | | +0.0 | 64.6 | 40.0 | | | Verti | Peak | **+24.6** |
| 23 | 88.489 | 48.1 | -0.8 | +8.0 | | | +0.0 | 55.3 | 43.5 | | | Verti | Peak | **+11.8** |
| 24 | 89.287 | 73.9 | -0.8 | +8.2 | | | +0.0 | 81.3 | 43.5 | | | Verti | Peak | **+37.8** |
| 25 | 89.686 | 41.3 | -0.8 | +8.3 | | | +0.0 | 48.8 | 43.5 | | | Verti | Peak | **+5.3** |
| 26 | 90.086 | 65.7 | -0.8 | +8.4 | | | +0.0 | 73.3 | 43.5 | | | Verti | Peak | **+29.8** |
| 27 | 90.884 | 69.7 | -0.8 | +8.6 | | | +0.0 | 77.5 | 43.5 | | | Verti | Peak | **+34.0** |
| 28 | 91.683 | 65.1 | -0.8 | +8.8 | | | +0.0 | 73.1 | 43.5 | | | Verti | Peak | **+29.6** |
| 29 | 92.548 | 45.0 | -0.7 | +9.0 | | | +0.0 | 53.3 | 43.5 | | | Verti | Peak | **+9.8** |
| 30 | 93.280 | 60.4 | -0.7 | +9.2 | | | +0.0 | 68.9 | 43.5 | | | Verti | Peak | **+25.4** |
| 31 | 94.145 | 62.1 | -0.7 | +9.4 | | | +0.0 | 70.8 | 43.5 | | | Verti | Peak | **+27.3** |
| 32 | 95.143 | 59.2 | -0.7 | +9.6 | | | +0.0 | 68.1 | 43.5 | | | Verti | Peak | **+24.6** |
| 33 | 96.141 | 37.1 | -0.7 | +9.6 | | | +0.0 | 46.0 | 43.5 | | | Verti | Peak | **+2.5** |
| 34 | 96.740 | 74.5 | -0.7 | +9.7 | | | +0.0 | 83.5 | 43.5 | | | Verti | Peak | **+40.0** |
| 35 | 97.581 | 44.3 | -0.8 | +9.7 | | | +0.0 | 53.2 | 43.5 | | | Verti | Peak | **+9.7** |

Wyle Laboratories

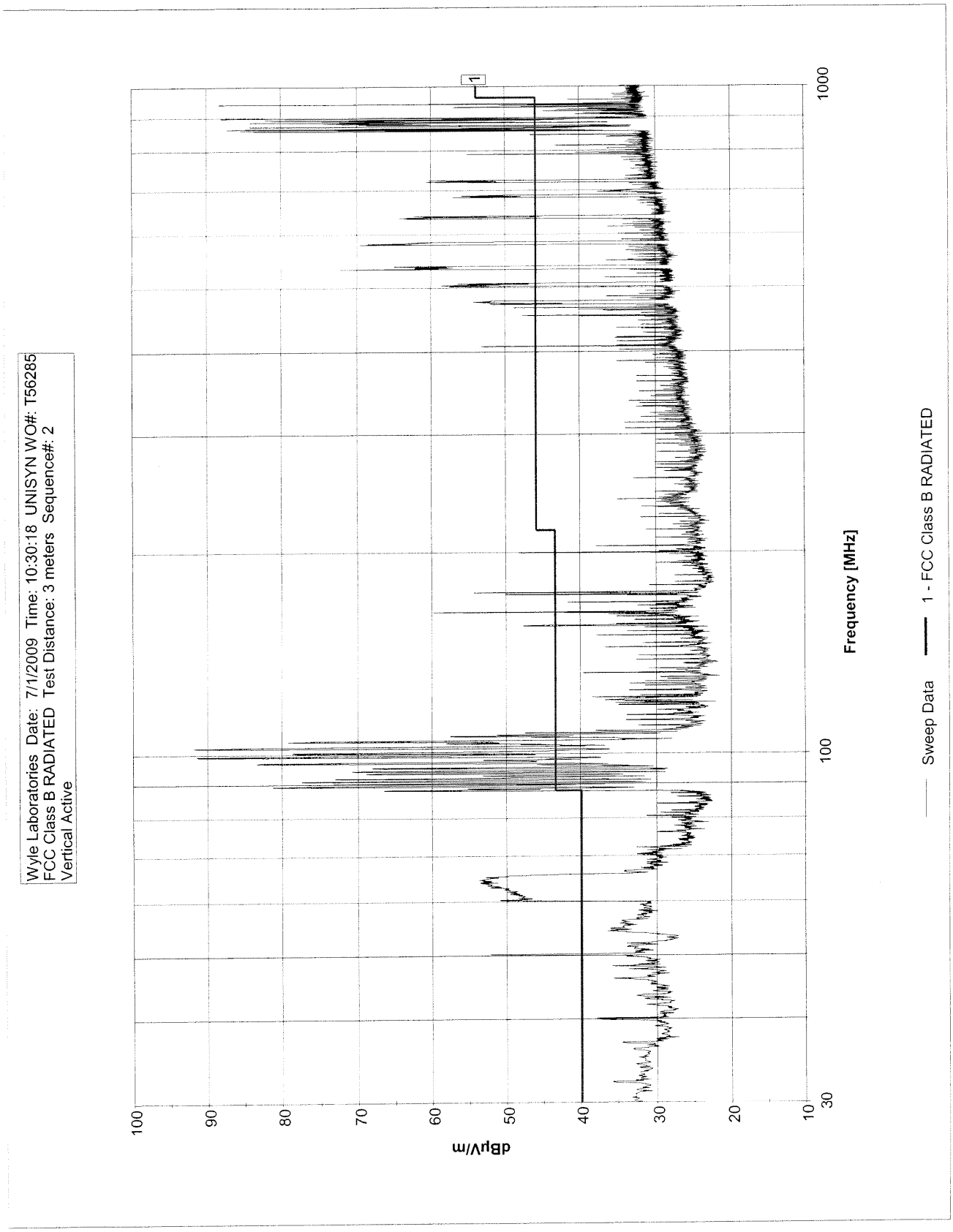
| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 97.941 | 36.0 | -0.8 | +9.7 | | | +0.0 | 44.9 | 43.5 | | | Verti | Peak | **+1.4** |
| 37 | 99.022 | 82.5 | -0.8 | +9.8 | | | +0.0 | 91.5 | 43.5 | | | Verti | Peak | **+48.0** |
| 38 | 100.223 | 69.7 | -0.8 | +9.8 | | | +0.0 | 78.7 | 43.5 | | | Verti | Peak | **+35.2** |
| 39 | 102.025 | 83.1 | -0.8 | +9.6 | | | +0.0 | 91.9 | 43.5 | | | Verti | Peak | **+48.4** |
| 40 | 102.505 | 34.2 | -0.8 | +9.5 | | | +0.0 | 42.9 | 43.5 | | | Verti | Peak | **-0.6** |
| 41 | 102.985 | 39.6 | -0.8 | +9.4 | | | +0.0 | 48.2 | 43.5 | | | Verti | Peak | **+4.7** |
| 42 | 103.466 | 49.6 | -0.8 | +9.4 | | | +0.0 | 58.2 | 43.5 | | | Verti | Peak | **+14.7** |
| 43 | 104.186 | 70.8 | -0.8 | +9.3 | | | +0.0 | 79.3 | 43.5 | | | Verti | Peak | **+35.8** |
| 44 | 105.628 | 38.5 | -0.9 | +9.2 | | | +0.0 | 46.8 | 43.5 | | | Verti | Peak | **+3.3** |
| 45 | 105.988 | 49.3 | -0.9 | +9.2 | | | +0.0 | 57.6 | 43.5 | | | Verti | Peak | **+14.1** |
| 46 | 106.468 | 43.1 | -0.9 | +9.2 | | | +0.0 | 51.4 | 43.5 | | | Verti | Peak | **+7.9** |
| 47 | 107.189 | 39.3 | -0.9 | +9.2 | | | +0.0 | 47.6 | 43.5 | | | Verti | Peak | **+4.1** |
| 48 | 107.910 | 29.7 | -0.9 | +9.3 | | | +0.0 | 38.1 | 43.5 | | | Verti | Peak | **-5.4** |
| 49 | 109.951 | 24.1 | -0.9 | +9.3 | | | +0.0 | 32.5 | 43.5 | | | Verti | Peak | **-11.0** |
| 50 | 111.873 | 25.9 | -0.9 | +9.1 | | | +0.0 | 34.1 | 43.5 | | | Verti | Peak | **-9.4** |
| 51 | 113.915 | 25.9 | -0.9 | +9.0 | | | +0.0 | 34.0 | 43.5 | | | Verti | Peak | **-9.5** |
| 52 | 117.878 | 27.2 | -0.9 | +8.8 | | | +0.0 | 35.1 | 43.5 | | | Verti | Peak | **-8.4** |
| 53 | 118.839 | 27.6 | -0.9 | +8.8 | | | +0.0 | 35.5 | 43.5 | | | Verti | Peak | **-8.0** |
| 54 | 119.559 | 26.4 | -0.9 | +8.8 | | | +0.0 | 34.3 | 43.5 | | | Verti | Peak | **-9.2** |
| 55 | 119.920 | 29.0 | -0.9 | +8.8 | | | +0.0 | 36.9 | 43.5 | | | Verti | Peak | **-6.6** |
| 56 | 121.241 | 30.8 | -0.9 | +8.7 | | | +0.0 | 38.6 | 43.5 | | | Verti | Peak | **-4.9** |
| 57 | 121.961 | 24.5 | -0.9 | +8.7 | | | +0.0 | 32.3 | 43.5 | | | Verti | Peak | **-11.2** |
| 58 | 124.003 | 26.0 | -0.9 | +8.6 | | | +0.0 | 33.7 | 43.5 | | | Verti | Peak | **-9.8** |
| 59 | 126.885 | 25.9 | -0.9 | +8.6 | | | +0.0 | 33.6 | 43.5 | | | Verti | Peak | **-9.9** |
| 60 | 132.050 | 32.3 | -0.9 | +8.4 | | | +0.0 | 39.8 | 43.5 | | | Verti | Peak | **-3.7** |
| 61 | 138.055 | 25.2 | -1.0 | +8.6 | | | +0.0 | 32.8 | 43.5 | | | Verti | Peak | **-10.7** |
| 62 | 139.976 | 24.8 | -1.0 | +8.8 | | | +0.0 | 32.6 | 43.5 | | | Verti | Peak | **-10.9** |
| 63 | 144.060 | 28.5 | -1.0 | +9.4 | | | +0.0 | 36.9 | 43.5 | | | Verti | Peak | **-6.6** |
| 64 | 145.981 | 23.6 | -1.1 | +9.4 | | | +0.0 | 31.9 | 43.5 | | | Verti | Peak | **-11.6** |
| 65 | 150.065 | 30.0 | -1.1 | +9.2 | | | +0.0 | 38.1 | 43.5 | | | Verti | Peak | **-5.4** |
| 66 | 151.986 | 26.1 | -1.1 | +9.0 | | | +0.0 | 34.0 | 43.5 | | | Verti | Peak | **-9.5** |
| 67 | 154.989 | 40.2 | -1.0 | +8.6 | | | +0.0 | 47.8 | 43.5 | | | Verti | Peak | **+4.3** |
| 68 | 156.070 | 27.8 | -1.0 | +8.6 | | | +0.0 | 35.4 | 43.5 | | | Verti | Peak | **-8.1** |
| 69 | 157.991 | 25.2 | -1.0 | +8.7 | | | +0.0 | 32.9 | 43.5 | | | Verti | Peak | **-10.6** |
| 70 | 160.033 | 27.6 | -1.0 | +8.7 | | | +0.0 | 35.3 | 43.5 | | | Verti | Peak | **-8.2** |
| 71 | 161.114 | 28.7 | -1.0 | +8.7 | | | +0.0 | 36.4 | 43.5 | | | Verti | Peak | **-7.1** |
| 72 | 162.075 | 34.6 | -1.0 | +8.7 | | | +0.0 | 42.3 | 43.5 | | | Verti | Peak | **-1.2** |
| 73 | 162.435 | 52.1 | -1.0 | +8.7 | | | +0.0 | 59.8 | 43.5 | | | Verti | Peak | **+16.3** |
| 74 | 166.038 | 24.8 | -1.1 | +8.8 | | | +0.0 | 32.5 | 43.5 | | | Verti | Peak | **-11.0** |
| 75 | 168.080 | 34.3 | -1.1 | +8.7 | | | +0.0 | 41.9 | 43.5 | | | Verti | Peak | **-1.6** |
| 76 | 172.043 | 26.2 | -1.1 | +8.8 | | | +0.0 | 33.9 | 43.5 | | | Verti | Peak | **-9.6** |
| 77 | 172.523 | 42.5 | -1.1 | +8.8 | | | +0.0 | 50.2 | 43.5 | | | Verti | Peak | **+6.7** |
| 78 | 173.724 | 46.7 | -1.1 | +8.8 | | | +0.0 | 54.4 | 43.5 | | | Verti | Peak | **+10.9** |
| 79 | 199.306 | 39.2 | -1.2 | +10.4 | | | +0.0 | 48.4 | 43.5 | | | Verti | Peak | **+4.9** |
| 80 | 203.869 | 28.8 | -1.2 | +10.5 | | | +0.0 | 38.1 | 43.5 | | | Verti | Peak | **-5.4** |
| 81 | 239.899 | 25.3 | -1.3 | +11.2 | | | +0.0 | 35.2 | 46.0 | | | Verti | Peak | **-10.8** |
| 82 | 386.583 | 21.9 | -1.6 | +14.9 | | | +0.0 | 35.2 | 46.0 | | | Verti | Peak | **-10.8** |
| 83 | 401.969 | 21.3 | -1.6 | +15.2 | | | +0.0 | 34.9 | 46.0 | | | Verti | Peak | **-11.1** |
| 84 | 406.897 | 39.2 | -1.6 | +15.6 | | | +0.0 | 53.2 | 46.0 | | | Verti | Peak | **+7.2** |
| 85 | 407.979 | 21.2 | -1.6 | +15.6 | | | +0.0 | 35.2 | 46.0 | | | Verti | Peak | **-10.8** |
| 86 | 413.989 | 21.2 | -1.7 | +15.7 | | | +0.0 | 35.2 | 46.0 | | | Verti | Peak | **-10.8** |
| 87 | 418.797 | 21.6 | -1.7 | +15.5 | | | +0.0 | 35.4 | 46.0 | | | Verti | Peak | **-10.6** |
| 88 | 419.999 | 21.5 | -1.7 | +15.4 | | | +0.0 | 35.2 | 46.0 | | | Verti | Peak | **-10.8** |
| 89 | 433.461 | 21.2 | -1.7 | +15.8 | | | +0.0 | 35.3 | 46.0 | | | Verti | Peak | **-10.7** |
| 90 | 451.130 | 26.4 | -1.8 | +15.6 | | | +0.0 | 40.2 | 46.0 | | | Verti | Peak | **-5.8** |
| 91 | 452.573 | 33.9 | -1.8 | +15.7 | | | +0.0 | 47.8 | 46.0 | | | Verti | Peak | **+1.8** |
| 92 | 460.023 | 22.2 | -1.8 | +16.0 | | | +0.0 | 36.4 | 46.0 | | | Verti | Peak | **-9.6** |
| 93 | 460.383 | 22.8 | -1.8 | +16.0 | | | +0.0 | 37.0 | 46.0 | | | Verti | Peak | **-9.0** |
| 94 | 462.184 | 25.9 | -1.8 | +16.2 | | | +0.0 | 40.3 | 46.0 | | | Verti | Peak | **-5.7** |
| 95 | 464.827 | 34.4 | -1.8 | +16.4 | | | +0.0 | 49.0 | 46.0 | | | Verti | Peak | **+3.0** |
| 96 | 470.351 | 37.2 | -1.8 | +16.7 | | | +0.0 | 52.1 | 46.0 | | | Verti | Peak | **+6.1** |
| 97 | 474.194 | 39.7 | -1.8 | +16.5 | | | +0.0 | 54.4 | 46.0 | | | Verti | Peak | **+8.4** |
| 98 | 483.202 | 22.1 | -1.8 | +16.3 | | | +0.0 | 36.6 | 46.0 | | | Verti | Peak | **-9.4** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | 500.256 | 42.3 | -1.9 | +17.1 | | | +0.0 | 57.5 | 46.0 | | | Verti | Peak | **+11.5** |
| 100 | 501.817 | 43.5 | -1.9 | +17.1 | | | +0.0 | 58.7 | 46.0 | | | Verti | Peak | **+12.7** |
| 101 | 504.460 | 41.3 | -1.9 | +17.1 | | | +0.0 | 56.5 | 46.0 | | | Verti | Peak | **+10.5** |
| 102 | 515.509 | 21.8 | -1.9 | +16.9 | | | +0.0 | 36.8 | 46.0 | | | Verti | Peak | **-9.2** |
| 103 | 530.281 | 57.1 | -1.9 | +17.2 | | | +0.0 | 72.4 | 46.0 | | | Verti | Peak | **+26.4** |
| 104 | 532.083 | 46.9 | -1.9 | +17.3 | | | +0.0 | 62.3 | 46.0 | | | Verti | Peak | **+16.3** |
| 105 | 533.884 | 46.7 | -1.9 | +17.4 | | | +0.0 | 62.2 | 46.0 | | | Verti | Peak | **+16.2** |
| 106 | 535.325 | 49.5 | -1.9 | +17.4 | | | +0.0 | 65.0 | 46.0 | | | Verti | Peak | **+19.0** |
| 107 | 546.014 | 21.4 | -2.0 | +17.2 | | | +0.0 | 36.6 | 46.0 | | | Verti | Peak | **-9.4** |
| 108 | 578.201 | 53.9 | -2.1 | +17.8 | | | +0.0 | 69.6 | 46.0 | | | Verti | Peak | **+23.6** |
| 109 | 580.003 | 53.0 | -2.1 | +17.7 | | | +0.0 | 68.6 | 46.0 | | | Verti | Peak | **+22.6** |
| 110 | 587.929 | 18.7 | -2.0 | +17.9 | | | +0.0 | 34.6 | 46.0 | | | Verti | Peak | **-11.4** |
| 111 | 599.939 | 18.8 | -2.0 | +18.2 | | | +0.0 | 35.0 | 46.0 | | | Verti | Peak | **-11.0** |
| 112 | 615.072 | 20.4 | -2.1 | +18.2 | | | +0.0 | 36.5 | 46.0 | | | Verti | Peak | **-9.5** |
| 113 | 619.636 | 18.4 | -2.1 | +18.1 | | | +0.0 | 34.4 | 46.0 | | | Verti | Peak | **-11.6** |
| 114 | 629.844 | 18.0 | -2.1 | +18.6 | | | +0.0 | 34.5 | 46.0 | | | Verti | Peak | **-11.5** |
| 115 | 633.327 | 47.8 | -2.1 | +18.6 | | | +0.0 | 64.3 | 46.0 | | | Verti | Peak | **+18.3** |
| 116 | 637.290 | 46.0 | -2.1 | +18.5 | | | +0.0 | 62.4 | 46.0 | | | Verti | Peak | **+16.4** |
| 117 | 680.046 | 40.5 | -2.3 | +18.9 | | | +0.0 | 57.1 | 46.0 | | | Verti | Peak | **+11.1** |
| 118 | 681.247 | 38.0 | -2.3 | +19.0 | | | +0.0 | 54.7 | 46.0 | | | Verti | Peak | **+8.7** |
| 119 | 683.289 | 39.2 | -2.3 | +19.0 | | | +0.0 | 55.9 | 46.0 | | | Verti | Peak | **+9.9** |
| 120 | 684.850 | 36.7 | -2.3 | +19.1 | | | +0.0 | 53.5 | 46.0 | | | Verti | Peak | **+7.5** |
| 121 | 693.257 | 21.0 | -2.2 | +19.0 | | | +0.0 | 37.8 | 46.0 | | | Verti | Peak | **-8.2** |
| 122 | 717.397 | 43.6 | -2.3 | +19.4 | | | +0.0 | 60.7 | 46.0 | | | Verti | Peak | **+14.7** |
| 123 | 719.559 | 40.5 | -2.3 | +19.5 | | | +0.0 | 57.7 | 46.0 | | | Verti | Peak | **+11.7** |
| 124 | 720.760 | 43.1 | -2.3 | +19.5 | | | +0.0 | 60.3 | 46.0 | | | Verti | Peak | **+14.3** |
| 125 | 773.003 | 16.5 | -2.4 | +20.2 | | | +0.0 | 34.3 | 46.0 | | | Verti | Peak | **-11.7** |
| 126 | 779.729 | 16.7 | -2.4 | +20.3 | | | +0.0 | 34.6 | 46.0 | | | Verti | Peak | **-11.4** |
| 127 | 788.977 | 37.5 | -2.4 | +20.1 | | | +0.0 | 55.2 | 46.0 | | | Verti | Peak | **+9.2** |
| 128 | 792.580 | 19.7 | -2.4 | +20.2 | | | +0.0 | 37.5 | 46.0 | | | Verti | Peak | **-8.5** |
| 129 | 793.540 | 22.9 | -2.4 | +20.2 | | | +0.0 | 40.7 | 46.0 | | | Verti | Peak | **-5.3** |
| 130 | 805.190 | 18.5 | -2.4 | +20.4 | | | +0.0 | 36.5 | 46.0 | | | Verti | Peak | **-9.5** |
| 131 | 813.477 | 25.3 | -2.4 | +20.5 | | | +0.0 | 43.4 | 46.0 | | | Verti | Peak | **-2.6** |
| 132 | 837.497 | 18.4 | -2.5 | +20.6 | | | +0.0 | 36.5 | 46.0 | | | Verti | Peak | **-9.5** |
| 133 | 839.419 | 17.9 | -2.5 | +20.6 | | | +0.0 | 36.0 | 46.0 | | | Verti | Peak | **-10.0** |
| 134 | 843.622 | 28.5 | -2.5 | +20.7 | | | +0.0 | 46.7 | 46.0 | | | Verti | Peak | **+0.7** |
| 135 | 854.071 | 65.6 | -2.6 | +20.7 | | | +0.0 | 83.7 | 46.0 | | | Verti | Peak | **+37.7** |
| 136 | 855.512 | 48.1 | -2.6 | +20.7 | | | +0.0 | 66.2 | 46.0 | | | Verti | Peak | **+20.2** |
| 137 | 856.112 | 47.4 | -2.6 | +20.7 | | | +0.0 | 65.5 | 46.0 | | | Verti | Peak | **+19.5** |
| 138 | 856.833 | 47.1 | -2.6 | +20.7 | | | +0.0 | 65.2 | 46.0 | | | Verti | Peak | **+19.2** |
| 139 | 857.193 | 67.4 | -2.6 | +20.7 | | | +0.0 | 85.5 | 46.0 | | | Verti | Peak | **+39.5** |
| 140 | 857.914 | 53.7 | -2.6 | +20.8 | | | +0.0 | 71.9 | 46.0 | | | Verti | Peak | **+25.9** |
| 141 | 858.394 | 54.3 | -2.6 | +20.8 | | | +0.0 | 72.5 | 46.0 | | | Verti | Peak | **+26.5** |
| 142 | 859.355 | 52.6 | -2.6 | +20.8 | | | +0.0 | 70.8 | 46.0 | | | Verti | Peak | **+24.8** |
| 143 | 859.956 | 64.8 | -2.6 | +20.8 | | | +0.0 | 83.0 | 46.0 | | | Verti | Peak | **+37.0** |
| 144 | 860.196 | 69.1 | -2.6 | +20.8 | | | +0.0 | 87.3 | 46.0 | | | Verti | Peak | **+41.3** |
| 145 | 860.676 | 58.7 | -2.6 | +20.8 | | | +0.0 | 76.9 | 46.0 | | | Verti | Peak | **+30.9** |
| 146 | 861.277 | 54.7 | -2.6 | +20.8 | | | +0.0 | 72.9 | 46.0 | | | Verti | Peak | **+26.9** |
| 147 | 862.238 | 66.6 | -2.6 | +20.8 | | | +0.0 | 84.8 | 46.0 | | | Verti | Peak | **+38.8** |
| 148 | 863.318 | 37.6 | -2.6 | +20.9 | | | +0.0 | 55.9 | 46.0 | | | Verti | Peak | **+9.9** |
| 149 | 863.919 | 36.7 | -2.6 | +20.9 | | | +0.0 | 55.0 | 46.0 | | | Verti | Peak | **+9.0** |
| 150 | 865.120 | 29.3 | -2.6 | +20.9 | | | +0.0 | 47.6 | 46.0 | | | Verti | Peak | **+1.6** |
| 151 | 866.201 | 20.3 | -2.6 | +20.9 | | | +0.0 | 38.6 | 46.0 | | | Verti | Peak | **-7.4** |
| 152 | 866.921 | 25.3 | -2.6 | +20.9 | | | +0.0 | 43.6 | 46.0 | | | Verti | Peak | **-2.4** |
| 153 | 868.122 | 66.0 | -2.6 | +20.8 | | | +0.0 | 84.2 | 46.0 | | | Verti | Peak | **+38.2** |
| 154 | 868.603 | 44.6 | -2.6 | +20.8 | | | +0.0 | 62.8 | 46.0 | | | Verti | Peak | **+16.8** |
| 155 | 873.047 | 51.4 | -2.6 | +20.9 | | | +0.0 | 69.7 | 46.0 | | | Verti | Peak | **+23.7** |
| 156 | 874.007 | 45.7 | -2.6 | +20.9 | | | +0.0 | 64.0 | 46.0 | | | Verti | Peak | **+18.0** |
| 157 | 875.449 | 53.7 | -2.6 | +20.9 | | | +0.0 | 72.0 | 46.0 | | | Verti | Peak | **+26.0** |
| 158 | 878.691 | 56.0 | -2.6 | +21.0 | | | +0.0 | 74.4 | 46.0 | | | Verti | Peak | **+28.4** |
| 159 | 879.892 | 52.9 | -2.6 | +21.0 | | | +0.0 | 71.3 | 46.0 | | | Verti | Peak | **+25.3** |
| 160 | 880.613 | 65.8 | -2.6 | +21.0 | | | +0.0 | 84.2 | 46.0 | | | Verti | Peak | **+38.2** |
| 161 | 882.174 | 53.9 | -2.6 | +21.0 | | | +0.0 | 72.3 | 46.0 | | | Verti | Peak | **+26.3** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 162 | 885.057 | 56.1 | -2.6 | +21.1 | | | +0.0 | 74.6 | 46.0 | | | Verti | Peak | **+28.6** |
| 163 | 885.897 | 62.8 | -2.6 | +21.1 | | | +0.0 | 81.3 | 46.0 | | | Verti | Peak | **+35.3** |
| 164 | 886.618 | 51.7 | -2.6 | +21.1 | | | +0.0 | 70.2 | 46.0 | | | Verti | Peak | **+24.2** |
| 165 | 887.098 | 52.5 | -2.6 | +21.1 | | | +0.0 | 71.0 | 46.0 | | | Verti | Peak | **+25.0** |
| 166 | 888.539 | 63.6 | -2.6 | +21.2 | | | +0.0 | 82.2 | 46.0 | | | Verti | Peak | **+36.2** |
| 167 | 889.140 | 39.8 | -2.6 | +21.2 | | | +0.0 | 58.4 | 46.0 | | | Verti | Peak | **+12.4** |
| 168 | 891.422 | 39.8 | -2.6 | +21.2 | | | +0.0 | 58.4 | 46.0 | | | Verti | Peak | **+12.4** |
| 169 | 892.863 | 69.5 | -2.6 | +21.2 | | | +0.0 | 88.1 | 46.0 | | | Verti | Peak | **+42.1** |
| 170 | 893.464 | 45.1 | -2.6 | +21.2 | | | +0.0 | 63.7 | 46.0 | | | Verti | Peak | **+17.7** |
| 171 | 901.750 | 16.7 | -2.6 | +21.2 | | | +0.0 | 35.3 | 46.0 | | | Verti | Peak | **-10.7** |
| 172 | 905.233 | 22.0 | -2.6 | +21.3 | | | +0.0 | 40.7 | 46.0 | | | Verti | Peak | **-5.3** |
| 173 | 906.074 | 19.8 | -2.6 | +21.3 | | | +0.0 | 38.5 | 46.0 | | | Verti | Peak | **-7.5** |
| 174 | 906.554 | 17.3 | -2.6 | +21.3 | | | +0.0 | 36.0 | 46.0 | | | Verti | Peak | **-10.0** |
| 175 | 907.876 | 18.6 | -2.6 | +21.4 | | | +0.0 | 37.4 | 46.0 | | | Verti | Peak | **-8.6** |
| 176 | 910.278 | 20.8 | -2.6 | +21.4 | | | +0.0 | 39.6 | 46.0 | | | Verti | Peak | **-6.4** |
| 177 | 910.638 | 17.4 | -2.6 | +21.4 | | | +0.0 | 36.2 | 46.0 | | | Verti | Peak | **-9.8** |
| 178 | 916.643 | 25.9 | -2.6 | +21.7 | | | +0.0 | 45.0 | 46.0 | | | Verti | Peak | **-1.0** |
| 179 | 917.123 | 24.4 | -2.6 | +21.7 | | | +0.0 | 43.5 | 46.0 | | | Verti | Peak | **-2.5** |
| 180 | 917.604 | 23.6 | -2.6 | +21.7 | | | +0.0 | 42.7 | 46.0 | | | Verti | Peak | **-3.3** |
| 181 | 919.045 | 18.5 | -2.6 | +21.8 | | | +0.0 | 37.7 | 46.0 | | | Verti | Peak | **-8.3** |
| 182 | 919.886 | 17.2 | -2.6 | +21.8 | | | +0.0 | 36.4 | 46.0 | | | Verti | Peak | **-9.6** |
| 183 | 921.687 | 24.0 | -2.6 | +21.8 | | | +0.0 | 43.2 | 46.0 | | | Verti | Peak | **-2.8** |
| 184 | 922.167 | 22.5 | -2.6 | +21.8 | | | +0.0 | 41.7 | 46.0 | | | Verti | Peak | **-4.3** |
| 185 | 923.609 | 19.6 | -2.6 | +21.9 | | | +0.0 | 38.9 | 46.0 | | | Verti | Peak | **-7.1** |
| 186 | 924.089 | 16.4 | -2.6 | +21.9 | | | +0.0 | 35.7 | 46.0 | | | Verti | Peak | **-10.3** |
| 187 | 925.170 | 19.8 | -2.6 | +21.9 | | | +0.0 | 39.1 | 46.0 | | | Verti | Peak | **-6.9** |
| 188 | 929.133 | 37.6 | -2.6 | +22.0 | | | +0.0 | 57.0 | 46.0 | | | Verti | Peak | **+11.0** |
| 189 | 931.535 | 28.5 | -2.6 | +22.0 | | | +0.0 | 47.9 | 46.0 | | | Verti | Peak | **+1.9** |
| 190 | 934.778 | 31.6 | -2.6 | +21.9 | | | +0.0 | 50.9 | 46.0 | | | Verti | Peak | **+4.9** |
| 191 | 935.859 | 31.1 | -2.6 | +21.9 | | | +0.0 | 50.4 | 46.0 | | | Verti | Peak | **+4.4** |
| 192 | 936.700 | 27.7 | -2.6 | +21.9 | | | +0.0 | 47.0 | 46.0 | | | Verti | Peak | **+1.0** |
| 193 | 937.756 | 18.2 | -2.5 | +21.8 | | | +0.0 | 37.5 | 46.0 | | | Verti | Peak | **-8.5** |
| 194 | 938.319 | 27.4 | -2.5 | +21.8 | | | +0.0 | 46.7 | 46.0 | | | Verti | Peak | **+0.7** |
| 195 | 938.883 | 69.1 | -2.5 | +21.8 | | | +0.0 | 88.4 | 46.0 | | | Verti | Peak | **+42.4** |
| 196 | 939.321 | 41.0 | -2.5 | +21.8 | | | +0.0 | 60.3 | 46.0 | | | Verti | Peak | **+14.3** |
| 197 | 939.634 | 18.9 | -2.5 | +21.8 | | | +0.0 | 38.2 | 46.0 | | | Verti | Peak | **-7.8** |
| 198 | 940.197 | 37.6 | -2.5 | +21.8 | | | +0.0 | 56.9 | 46.0 | | | Verti | Peak | **+10.9** |
| 199 | 941.262 | 20.3 | -2.5 | +21.8 | | | +0.0 | 39.6 | 46.0 | | | Verti | Peak | **-6.4** |
| 200 | 945.018 | 17.1 | -2.5 | +21.8 | | | +0.0 | 36.4 | 46.0 | | | Verti | Peak | **-9.6** |
| 201 | 952.469 | 22.5 | -2.5 | +21.7 | | | +0.0 | 41.7 | 46.0 | | | Verti | Peak | **-4.3** |
| 202 | 959.982 | 16.2 | -2.5 | +21.6 | | | +0.0 | 35.3 | 46.0 | | | Verti | Peak | **-10.7** |


Wyle Laboratories Date: 7/1/2009 Time: 10:30:18 UNISYN WO#: T56285
FCC Class B RADIATED Test Distance: 3 meters Sequence#: 2
Vertical Active
1
100
90
80
70
60
50
40
30
20
10
dBµV/m
30
100
1000
Frequency [MHz]
Sweep Data
1 - FCC Class B RADIATED

wyle laboratories

Wyle Laboratories

Customer: UNISYN
Specification: FCC Class B RADIATED

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Radiated Scan | Time: | 10:37:36 AM |
| Equipment: | Voting Device | Sequence: | 3 |
| Manufacturer: | UNISYN | Tested By: | J. Smith JSmith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900268 |
| UPS | Entrust | ETR1500 | 0900407 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Horizontal Active

***Transducer Legend:***

| | |
|---|---|
| T1=Cable Wyle# 110111 | T2=Wyle #114415 3M Horz |

***Measurement Data:*** Readings listed by frequency. Test Distance: 3 meters

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.196 | 15.1 | -0.4 | +19.6 | | | +0.0 | 34.3 | 40.0 | | | Horiz | Peak | **-5.7** |
| 2 | 32.238 | 9.4 | -0.4 | +19.6 | | | +0.0 | 28.6 | 40.0 | | | Horiz | QP | **-11.4** |
| 3 | 39.981 | 18.1 | -0.5 | +16.4 | | | +0.0 | 34.0 | 40.0 | | | Horiz | Peak | **-6.0** |
| 4 | 40.003 | 13.7 | -0.5 | +16.4 | | | +0.0 | 29.6 | 40.0 | | | Horiz | QP | **-10.4** |
| 5 | 50.024 | 14.4 | -0.6 | +13.5 | | | +0.0 | 27.3 | 40.0 | | | Horiz | QP | **-12.7** |
| 6 | 50.029 | 18.7 | -0.6 | +13.5 | | | +0.0 | 31.6 | 40.0 | | | Horiz | Peak | **-8.4** |
| 7 | 61.806 | 20.6 | -0.6 | +10.8 | | | +0.0 | 30.8 | 40.0 | | | Horiz | Peak | **-9.2** |
| 8 | 61.906 | 8.9 | -0.6 | +10.7 | | | +0.0 | 19.0 | 40.0 | | | Horiz | QP | **-21.0** |
| 9 | 88.525 | 30.0 | -0.8 | +7.3 | | | +0.0 | 36.5 | 43.5 | | | Horiz | QP | **-7.0** |
| 10 | 88.555 | 33.0 | -0.8 | +7.3 | | | +0.0 | 39.5 | 43.5 | | | Horiz | Peak | **-4.0** |
| 11 | 92.548 | 30.6 | -0.7 | +7.9 | | | +0.0 | 37.8 | 43.5 | | | Horiz | Peak | **-5.7** |
| 12 | 92.553 | 28.7 | -0.7 | +7.9 | | | +0.0 | 35.9 | 43.5 | | | Horiz | QP | **-7.6** |

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B RADIATED

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Radiated Scan | Time: | 10:37:36 AM |
| Equipment: | Voting Device | Sequence: | 3 |
| Manufacturer: | UNISYN | Tested By: | J. Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900268 |
| UPS | Entrust | ETR1500 | 0900407 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Horizontal Active

***Transducer Legend:***

| | |
|---|---|
| T1=Cable Wyle# 110111 | T2=Wyle #114415 3M Horz |

***Measurement Data:*** Readings listed by frequency. Test Distance: 3 meters

| # | Freq MHz | Rdng dBµV | T1 | T2 | Dist | Corr dBµV/m | Spec dBµV/m | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32.196 | 15.1 | -0.4 | +19.6 | +0.0 | 34.3 | 40.0 | Horiz | Peak | **-5.7** |
| 2 | 39.981 | 18.1 | -0.5 | +16.4 | +0.0 | 34.0 | 40.0 | Horiz | Peak | **-6.0** |
| 3 | 50.029 | 18.7 | -0.6 | +13.5 | +0.0 | 31.6 | 40.0 | Horiz | Peak | **-8.4** |
| 4 | 61.806 | 20.6 | -0.6 | +10.8 | +0.0 | 30.8 | 40.0 | Horiz | Peak | **-9.2** |
| 5 | 72.186 | 21.2 | -0.7 | +8.5 | +0.0 | 29.0 | 40.0 | Horiz | Peak | **-11.0** |
| 6 | 75.979 | 20.6 | -0.8 | +7.7 | +0.0 | 27.5 | 40.0 | Horiz | Peak | **-12.5** |
| 7 | 88.156 | 45.2 | -0.8 | +7.3 | +0.0 | 51.7 | 43.5 | Horiz | Peak | **+8.2** |
| 8 | 88.555 | 33.0 | -0.8 | +7.3 | +0.0 | 39.5 | 43.5 | Horiz | Peak | **-4.0** |
| 9 | 89.420 | 64.3 | -0.8 | +7.4 | +0.0 | 70.9 | 43.5 | Horiz | Peak | **+27.4** |
| 10 | 90.285 | 58.8 | -0.8 | +7.5 | +0.0 | 65.5 | 43.5 | Horiz | Peak | **+22.0** |
| 11 | 91.017 | 62.1 | -0.8 | +7.6 | +0.0 | 68.9 | 43.5 | Horiz | Peak | **+25.4** |
| 12 | 91.816 | 56.3 | -0.8 | +7.7 | +0.0 | 63.2 | 43.5 | Horiz | Peak | **+19.7** |
| 13 | 92.548 | 30.6 | -0.7 | +7.9 | +0.0 | 37.8 | 43.5 | Horiz | Peak | **-5.7** |
| 14 | 93.346 | 57.0 | -0.7 | +8.0 | +0.0 | 64.3 | 43.5 | Horiz | Peak | **+20.8** |
| 15 | 94.145 | 42.2 | -0.7 | +8.1 | +0.0 | 49.6 | 43.5 | Horiz | Peak | **+6.1** |
| 16 | 95.143 | 55.6 | -0.7 | +8.3 | +0.0 | 63.2 | 43.5 | Horiz | Peak | **+19.7** |
| 17 | 96.008 | 33.0 | -0.7 | +8.4 | +0.0 | 40.7 | 43.5 | Horiz | Peak | **-2.8** |
| 18 | 96.740 | 66.5 | -0.7 | +8.5 | +0.0 | 74.3 | 43.5 | Horiz | Peak | **+30.8** |
| 19 | 97.581 | 31.2 | -0.8 | +8.7 | +0.0 | 39.1 | 43.5 | Horiz | Peak | **-4.4** |
| 20 | 98.302 | 24.7 | -0.8 | +8.8 | +0.0 | 32.7 | 43.5 | Horiz | Peak | **-10.8** |
| 21 | 99.142 | 53.1 | -0.8 | +8.9 | +0.0 | 61.2 | 43.5 | Horiz | Peak | **+17.7** |
| 22 | 99.382 | 33.6 | -0.8 | +8.9 | +0.0 | 41.7 | 43.5 | Horiz | Peak | **-1.8** |
| 23 | 100.223 | 50.9 | -0.8 | +9.0 | +0.0 | 59.1 | 43.5 | Horiz | Peak | **+15.6** |
| 24 | 101.064 | 31.3 | -0.8 | +9.1 | +0.0 | 39.6 | 43.5 | Horiz | Peak | **-3.9** |
| 25 | 102.025 | 65.5 | -0.8 | +9.1 | +0.0 | 73.8 | 43.5 | Horiz | Peak | **+30.3** |
| 26 | 103.466 | 58.1 | -0.8 | +9.2 | +0.0 | 66.5 | 43.5 | Horiz | Peak | **+23.0** |
| 27 | 104.186 | 65.1 | -0.8 | +9.3 | +0.0 | 73.6 | 43.5 | Horiz | Peak | **+30.1** |
| 28 | 106.108 | 39.8 | -0.9 | +9.3 | +0.0 | 48.2 | 43.5 | Horiz | Peak | **+4.7** |
| 29 | 106.348 | 36.9 | -0.9 | +9.3 | +0.0 | 45.3 | 43.5 | Horiz | Peak | **+1.8** |
| 30 | 107.309 | 36.3 | -0.9 | +9.3 | +0.0 | 44.7 | 43.5 | Horiz | Peak | **+1.2** |
| 31 | 144.060 | 23.1 | -1.0 | +9.0 | +0.0 | 31.1 | 43.5 | Horiz | Peak | **-12.4** |
| 32 | 161.114 | 28.1 | -1.0 | +8.8 | +0.0 | 35.9 | 43.5 | Horiz | Peak | **-7.6** |
| 33 | 162.075 | 29.6 | -1.0 | +8.8 | +0.0 | 37.4 | 43.5 | Horiz | Peak | **-6.1** |
| 34 | 162.435 | 41.4 | -1.0 | +8.8 | +0.0 | 49.2 | 43.5 | Horiz | Peak | **+5.7** |
| 35 | 163.396 | 24.1 | -1.0 | +8.8 | +0.0 | 31.9 | 43.5 | Horiz | Peak | **-11.6** |

Wyle Laboratories

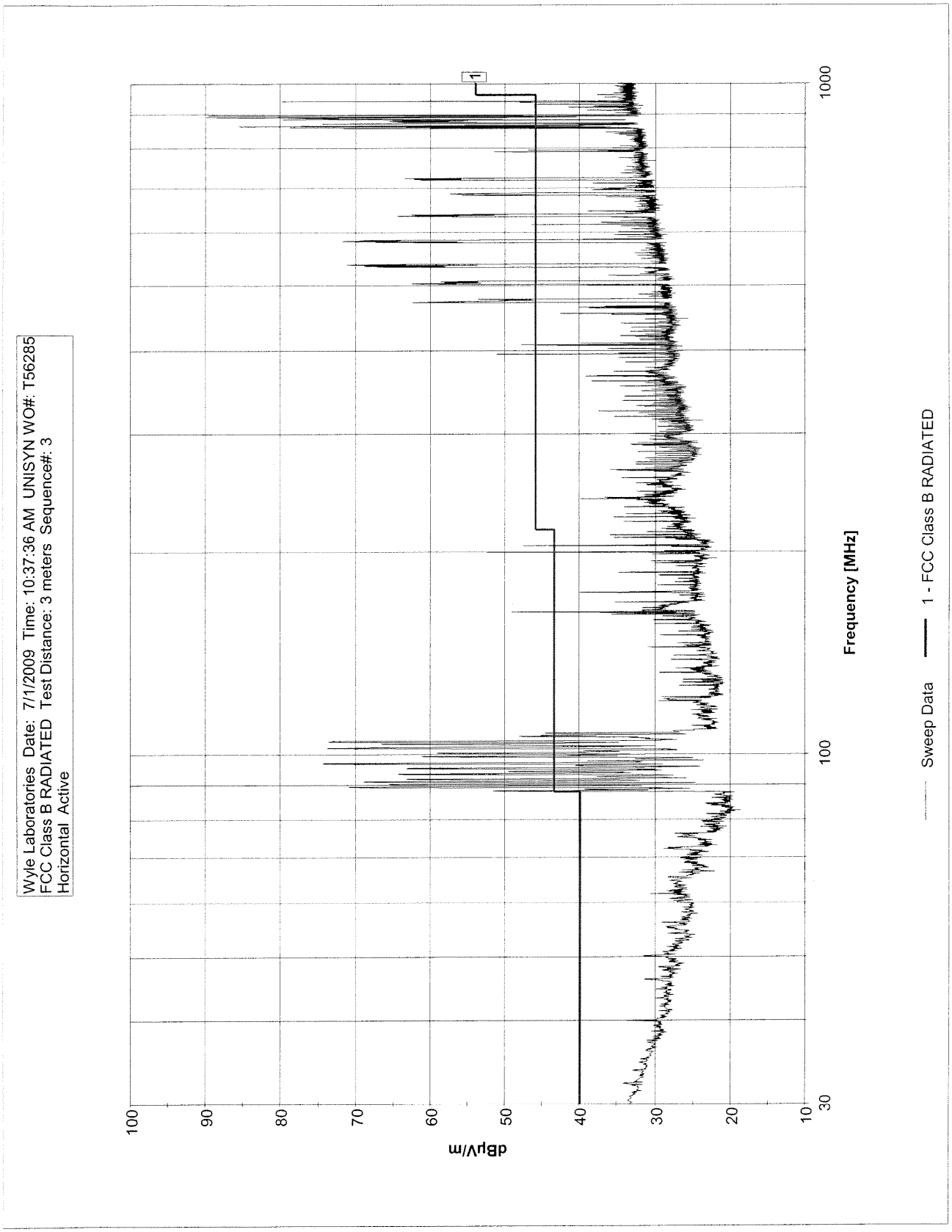
| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 168.080 | 27.6 | -1.1 | +8.9 | | | +0.0 | 35.4 | 43.5 | | | Horiz | Peak | **-8.1** |
| 37 | 173.844 | 31.9 | -1.1 | +9.2 | | | +0.0 | 40.0 | 43.5 | | | Horiz | Peak | **-3.5** |
| 38 | 174.085 | 25.4 | -1.1 | +9.2 | | | +0.0 | 33.5 | 43.5 | | | Horiz | Peak | **-10.0** |
| 39 | 186.095 | 25.8 | -1.1 | +10.3 | | | +0.0 | 35.0 | 43.5 | | | Horiz | Peak | **-8.5** |
| 40 | 193.421 | 21.4 | -1.1 | +10.4 | | | +0.0 | 30.7 | 43.5 | | | Horiz | Peak | **-12.8** |
| 41 | 199.426 | 43.4 | -1.2 | +10.3 | | | +0.0 | 52.5 | 43.5 | | | Horiz | Peak | **+9.0** |
| 42 | 203.869 | 38.6 | -1.2 | +10.3 | | | +0.0 | 47.7 | 43.5 | | | Horiz | Peak | **+4.2** |
| 43 | 210.115 | 26.1 | -1.1 | +10.5 | | | +0.0 | 35.5 | 43.5 | | | Horiz | Peak | **-8.0** |
| 44 | 211.916 | 26.6 | -1.1 | +10.6 | | | +0.0 | 36.1 | 43.5 | | | Horiz | Peak | **-7.4** |
| 45 | 214.078 | 21.6 | -1.1 | +10.7 | | | +0.0 | 31.2 | 43.5 | | | Horiz | Peak | **-12.3** |
| 46 | 221.884 | 24.7 | -1.2 | +10.8 | | | +0.0 | 34.3 | 46.0 | | | Horiz | Peak | **-11.7** |
| 47 | 225.367 | 26.1 | -1.3 | +10.8 | | | +0.0 | 35.6 | 46.0 | | | Horiz | Peak | **-10.4** |
| 48 | 227.889 | 24.4 | -1.3 | +10.9 | | | +0.0 | 34.0 | 46.0 | | | Horiz | Peak | **-12.0** |
| 49 | 233.174 | 24.6 | -1.3 | +11.0 | | | +0.0 | 34.3 | 46.0 | | | Horiz | Peak | **-11.7** |
| 50 | 239.899 | 30.2 | -1.3 | +11.1 | | | +0.0 | 40.0 | 46.0 | | | Horiz | Peak | **-6.0** |
| 51 | 240.380 | 26.6 | -1.3 | +11.1 | | | +0.0 | 36.4 | 46.0 | | | Horiz | Peak | **-9.6** |
| 52 | 240.980 | 26.9 | -1.3 | +11.2 | | | +0.0 | 36.8 | 46.0 | | | Horiz | Peak | **-9.2** |
| 53 | 257.554 | 23.5 | -1.3 | +12.4 | | | +0.0 | 34.6 | 46.0 | | | Horiz | Peak | **-11.4** |
| 54 | 263.919 | 22.6 | -1.3 | +12.5 | | | +0.0 | 33.8 | 46.0 | | | Horiz | Peak | **-12.2** |
| 55 | 264.520 | 24.0 | -1.3 | +12.5 | | | +0.0 | 35.2 | 46.0 | | | Horiz | Peak | **-10.8** |
| 56 | 265.120 | 24.9 | -1.3 | +12.5 | | | +0.0 | 36.1 | 46.0 | | | Horiz | Peak | **-9.9** |
| 57 | 288.540 | 21.7 | -1.4 | +12.9 | | | +0.0 | 33.2 | 46.0 | | | Horiz | Peak | **-12.8** |
| 58 | 289.381 | 21.8 | -1.4 | +13.0 | | | +0.0 | 33.4 | 46.0 | | | Horiz | Peak | **-12.6** |
| 59 | 299.829 | 21.1 | -1.5 | +13.4 | | | +0.0 | 33.0 | 46.0 | | | Horiz | Peak | **-13.0** |
| 60 | 317.844 | 23.2 | -1.5 | +13.8 | | | +0.0 | 35.5 | 46.0 | | | Horiz | Peak | **-10.5** |
| 61 | 323.849 | 25.3 | -1.5 | +13.8 | | | +0.0 | 37.6 | 46.0 | | | Horiz | Peak | **-8.4** |
| 62 | 335.739 | 21.9 | -1.5 | +14.1 | | | +0.0 | 34.5 | 46.0 | | | Horiz | Peak | **-11.5** |
| 63 | 341.869 | 21.4 | -1.5 | +14.3 | | | +0.0 | 34.2 | 46.0 | | | Horiz | Peak | **-11.8** |
| 64 | 353.889 | 21.8 | -1.5 | +14.5 | | | +0.0 | 34.8 | 46.0 | | | Horiz | Peak | **-11.2** |
| 65 | 359.899 | 25.2 | -1.5 | +14.8 | | | +0.0 | 38.5 | 46.0 | | | Horiz | Peak | **-7.5** |
| 66 | 365.909 | 25.8 | -1.6 | +15.1 | | | +0.0 | 39.3 | 46.0 | | | Horiz | Peak | **-6.7** |
| 67 | 366.630 | 24.3 | -1.6 | +15.1 | | | +0.0 | 37.8 | 46.0 | | | Horiz | Peak | **-8.2** |
| 68 | 371.919 | 22.0 | -1.6 | +15.2 | | | +0.0 | 35.6 | 46.0 | | | Horiz | Peak | **-10.4** |
| 69 | 383.939 | 20.6 | -1.6 | +15.0 | | | +0.0 | 34.0 | 46.0 | | | Horiz | Peak | **-12.0** |
| 70 | 389.949 | 21.4 | -1.6 | +15.2 | | | +0.0 | 35.0 | 46.0 | | | Horiz | Peak | **-11.0** |
| 71 | 394.516 | 37.3 | -1.6 | +15.5 | | | +0.0 | 51.2 | 46.0 | | | Horiz | Peak | **+5.2** |
| 72 | 395.959 | 21.0 | -1.6 | +15.5 | | | +0.0 | 34.9 | 46.0 | | | Horiz | Peak | **-11.1** |
| 73 | 401.969 | 22.4 | -1.6 | +15.6 | | | +0.0 | 36.4 | 46.0 | | | Horiz | Peak | **-9.6** |
| 74 | 406.176 | 29.0 | -1.6 | +15.6 | | | +0.0 | 43.0 | 46.0 | | | Horiz | Peak | **-3.0** |
| 75 | 406.777 | 31.8 | -1.6 | +15.6 | | | +0.0 | 45.8 | 46.0 | | | Horiz | Peak | **-0.2** |
| 76 | 407.618 | 33.9 | -1.6 | +15.7 | | | +0.0 | 48.0 | 46.0 | | | Horiz | Peak | **+2.0** |
| 77 | 407.979 | 19.8 | -1.6 | +15.7 | | | +0.0 | 33.9 | 46.0 | | | Horiz | Peak | **-12.1** |
| 78 | 409.661 | 25.9 | -1.6 | +15.7 | | | +0.0 | 40.0 | 46.0 | | | Horiz | Peak | **-6.0** |
| 79 | 419.999 | 19.9 | -1.7 | +16.5 | | | +0.0 | 34.7 | 46.0 | | | Horiz | Peak | **-11.3** |
| 80 | 426.009 | 18.7 | -1.7 | +16.4 | | | +0.0 | 33.4 | 46.0 | | | Horiz | Peak | **-12.6** |
| 81 | 432.019 | 18.8 | -1.7 | +16.2 | | | +0.0 | 33.3 | 46.0 | | | Horiz | Peak | **-12.7** |
| 82 | 438.029 | 20.3 | -1.8 | +16.1 | | | +0.0 | 34.6 | 46.0 | | | Horiz | Peak | **-11.4** |
| 83 | 451.371 | 21.3 | -1.8 | +16.3 | | | +0.0 | 35.8 | 46.0 | | | Horiz | Peak | **-10.2** |
| 84 | 453.054 | 28.1 | -1.8 | +16.4 | | | +0.0 | 42.7 | 46.0 | | | Horiz | Peak | **-3.3** |
| 85 | 460.983 | 22.0 | -1.8 | +16.5 | | | +0.0 | 36.7 | 46.0 | | | Horiz | Peak | **-9.3** |
| 86 | 461.344 | 24.2 | -1.8 | +16.5 | | | +0.0 | 38.9 | 46.0 | | | Horiz | Peak | **-7.1** |
| 87 | 462.184 | 21.9 | -1.8 | +16.5 | | | +0.0 | 36.6 | 46.0 | | | Horiz | Peak | **-9.4** |
| 88 | 462.905 | 25.3 | -1.8 | +16.6 | | | +0.0 | 40.1 | 46.0 | | | Horiz | Peak | **-5.9** |
| 89 | 463.746 | 22.0 | -1.8 | +16.6 | | | +0.0 | 36.8 | 46.0 | | | Horiz | Peak | **-9.2** |
| 90 | 464.586 | 21.8 | -1.8 | +16.6 | | | +0.0 | 36.6 | 46.0 | | | Horiz | Peak | **-9.4** |
| 91 | 470.231 | 47.5 | -1.8 | +16.7 | | | +0.0 | 62.4 | 46.0 | | | Horiz | Peak | **+16.4** |
| 92 | 475.516 | 38.8 | -1.8 | +16.7 | | | +0.0 | 53.7 | 46.0 | | | Horiz | Peak | **+7.7** |
| 93 | 501.217 | 47.2 | -1.9 | +17.2 | | | +0.0 | 62.5 | 46.0 | | | Horiz | Peak | **+16.5** |
| 94 | 503.739 | 43.0 | -1.9 | +17.1 | | | +0.0 | 58.2 | 46.0 | | | Horiz | Peak | **+12.2** |
| 95 | 504.460 | 43.5 | -1.9 | +17.1 | | | +0.0 | 58.7 | 46.0 | | | Horiz | Peak | **+12.7** |
| 96 | 515.509 | 20.9 | -1.9 | +17.3 | | | +0.0 | 36.3 | 46.0 | | | Horiz | Peak | **-9.7** |
| 97 | 530.882 | 51.4 | -1.9 | +17.7 | | | +0.0 | 67.2 | 46.0 | | | Horiz | Peak | **+21.2** |
| 98 | 532.563 | 52.9 | -1.9 | +17.8 | | | +0.0 | 68.8 | 46.0 | | | Horiz | Peak | **+22.8** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | 534.725 | 55.3 | -1.9 | +17.8 | | | +0.0 | 71.2 | 46.0 | | | Horiz | Peak | **+25.2** |
| 100 | 535.686 | 50.9 | -1.9 | +17.8 | | | +0.0 | 66.8 | 46.0 | | | Horiz | Peak | **+20.8** |
| 101 | 578.201 | 45.6 | -2.1 | +18.5 | | | +0.0 | 62.0 | 46.0 | | | Horiz | Peak | **+16.0** |
| 102 | 579.282 | 51.1 | -2.1 | +18.4 | | | +0.0 | 67.4 | 46.0 | | | Horiz | Peak | **+21.4** |
| 103 | 581.083 | 55.5 | -2.1 | +18.4 | | | +0.0 | 71.8 | 46.0 | | | Horiz | Peak | **+25.8** |
| 104 | 582.044 | 53.2 | -2.1 | +18.4 | | | +0.0 | 69.5 | 46.0 | | | Horiz | Peak | **+23.5** |
| 105 | 582.645 | 53.1 | -2.1 | +18.4 | | | +0.0 | 69.4 | 46.0 | | | Horiz | Peak | **+23.4** |
| 106 | 585.167 | 23.4 | -2.1 | +18.4 | | | +0.0 | 39.7 | 46.0 | | | Horiz | Peak | **-6.3** |
| 107 | 593.934 | 18.9 | -2.0 | +18.6 | | | +0.0 | 35.5 | 46.0 | | | Horiz | Peak | **-10.5** |
| 108 | 599.939 | 18.3 | -2.0 | +18.7 | | | +0.0 | 35.0 | 46.0 | | | Horiz | Peak | **-11.0** |
| 109 | 605.944 | 16.5 | -2.0 | +18.8 | | | +0.0 | 33.3 | 46.0 | | | Horiz | Peak | **-12.7** |
| 110 | 611.829 | 17.7 | -2.0 | +19.0 | | | +0.0 | 34.7 | 46.0 | | | Horiz | Peak | **-11.3** |
| 111 | 615.192 | 29.7 | -2.1 | +19.0 | | | +0.0 | 46.6 | 46.0 | | | Horiz | Peak | **+0.6** |
| 112 | 617.834 | 19.6 | -2.1 | +19.0 | | | +0.0 | 36.5 | 46.0 | | | Horiz | Peak | **-9.5** |
| 113 | 619.636 | 20.4 | -2.1 | +19.0 | | | +0.0 | 37.3 | 46.0 | | | Horiz | Peak | **-8.7** |
| 114 | 623.839 | 17.7 | -2.1 | +19.1 | | | +0.0 | 34.7 | 46.0 | | | Horiz | Peak | **-11.3** |
| 115 | 629.844 | 17.2 | -2.1 | +19.3 | | | +0.0 | 34.4 | 46.0 | | | Horiz | Peak | **-11.6** |
| 116 | 633.447 | 47.2 | -2.1 | +19.4 | | | +0.0 | 64.5 | 46.0 | | | Horiz | Peak | **+18.5** |
| 117 | 634.288 | 44.1 | -2.1 | +19.4 | | | +0.0 | 61.4 | 46.0 | | | Horiz | Peak | **+15.4** |
| 118 | 635.249 | 38.9 | -2.1 | +19.4 | | | +0.0 | 56.2 | 46.0 | | | Horiz | Peak | **+10.2** |
| 119 | 636.089 | 45.3 | -2.1 | +19.4 | | | +0.0 | 62.6 | 46.0 | | | Horiz | Peak | **+16.6** |
| 120 | 644.136 | 21.9 | -2.1 | +19.3 | | | +0.0 | 39.1 | 46.0 | | | Horiz | Peak | **-6.9** |
| 121 | 676.323 | 19.3 | -2.3 | +19.6 | | | +0.0 | 36.6 | 46.0 | | | Horiz | Peak | **-9.4** |
| 122 | 680.046 | 38.6 | -2.3 | +19.6 | | | +0.0 | 55.9 | 46.0 | | | Horiz | Peak | **+9.9** |
| 123 | 683.289 | 40.1 | -2.3 | +19.6 | | | +0.0 | 57.4 | 46.0 | | | Horiz | Peak | **+11.4** |
| 124 | 685.450 | 35.9 | -2.3 | +19.6 | | | +0.0 | 53.2 | 46.0 | | | Horiz | Peak | **+7.2** |
| 125 | 692.776 | 21.3 | -2.2 | +19.4 | | | +0.0 | 38.5 | 46.0 | | | Horiz | Peak | **-7.5** |
| 126 | 697.220 | 19.0 | -2.2 | +19.5 | | | +0.0 | 36.3 | 46.0 | | | Horiz | Peak | **-9.7** |
| 127 | 701.904 | 16.7 | -2.2 | +19.7 | | | +0.0 | 34.2 | 46.0 | | | Horiz | Peak | **-11.8** |
| 128 | 708.630 | 20.7 | -2.2 | +19.9 | | | +0.0 | 38.4 | 46.0 | | | Horiz | Peak | **-7.6** |
| 129 | 716.316 | 43.7 | -2.3 | +20.0 | | | +0.0 | 61.4 | 46.0 | | | Horiz | Peak | **+15.4** |
| 130 | 717.757 | 44.5 | -2.3 | +20.0 | | | +0.0 | 62.2 | 46.0 | | | Horiz | Peak | **+16.2** |
| 131 | 720.399 | 45.7 | -2.3 | +20.1 | | | +0.0 | 63.5 | 46.0 | | | Horiz | Peak | **+17.5** |
| 132 | 721.480 | 37.4 | -2.3 | +20.2 | | | +0.0 | 55.3 | 46.0 | | | Horiz | Peak | **+9.3** |
| 133 | 733.370 | 16.7 | -2.3 | +20.3 | | | +0.0 | 34.7 | 46.0 | | | Horiz | Peak | **-11.3** |
| 134 | 740.816 | 15.9 | -2.3 | +20.6 | | | +0.0 | 34.2 | 46.0 | | | Horiz | Peak | **-11.8** |
| 135 | 773.003 | 16.5 | -2.4 | +20.9 | | | +0.0 | 35.0 | 46.0 | | | Horiz | Peak | **-11.0** |
| 136 | 788.977 | 32.8 | -2.4 | +21.2 | | | +0.0 | 51.6 | 46.0 | | | Horiz | Peak | **+5.6** |
| 137 | 790.778 | 17.6 | -2.4 | +21.2 | | | +0.0 | 36.4 | 46.0 | | | Horiz | Peak | **-9.6** |
| 138 | 792.580 | 18.8 | -2.4 | +21.3 | | | +0.0 | 37.7 | 46.0 | | | Horiz | Peak | **-8.3** |
| 139 | 793.540 | 28.2 | -2.4 | +21.3 | | | +0.0 | 47.1 | 46.0 | | | Horiz | Peak | **+1.1** |
| 140 | 799.906 | 17.2 | -2.4 | +21.0 | | | +0.0 | 35.8 | 46.0 | | | Horiz | Peak | **-10.2** |
| 141 | 837.497 | 16.1 | -2.5 | +21.3 | | | +0.0 | 34.9 | 46.0 | | | Horiz | Peak | **-11.1** |
| 142 | 839.419 | 16.7 | -2.5 | +21.3 | | | +0.0 | 35.5 | 46.0 | | | Horiz | Peak | **-10.5** |
| 143 | 842.181 | 15.9 | -2.5 | +21.4 | | | +0.0 | 34.8 | 46.0 | | | Horiz | Peak | **-11.2** |
| 144 | 843.262 | 17.8 | -2.5 | +21.4 | | | +0.0 | 36.7 | 46.0 | | | Horiz | Peak | **-9.3** |
| 145 | 854.071 | 52.7 | -2.6 | +21.6 | | | +0.0 | 71.7 | 46.0 | | | Horiz | Peak | **+25.7** |
| 146 | 854.911 | 27.9 | -2.6 | +21.6 | | | +0.0 | 46.9 | 46.0 | | | Horiz | Peak | **+0.9** |
| 147 | 855.872 | 41.1 | -2.6 | +21.6 | | | +0.0 | 60.1 | 46.0 | | | Horiz | Peak | **+14.1** |
| 148 | 856.833 | 39.3 | -2.6 | +21.6 | | | +0.0 | 58.3 | 46.0 | | | Horiz | Peak | **+12.3** |
| 149 | 857.193 | 59.8 | -2.6 | +21.6 | | | +0.0 | 78.8 | 46.0 | | | Horiz | Peak | **+32.8** |
| 150 | 857.914 | 41.3 | -2.6 | +21.7 | | | +0.0 | 60.4 | 46.0 | | | Horiz | Peak | **+14.4** |
| 151 | 858.394 | 44.2 | -2.6 | +21.7 | | | +0.0 | 63.3 | 46.0 | | | Horiz | Peak | **+17.3** |
| 152 | 859.355 | 42.3 | -2.6 | +21.7 | | | +0.0 | 61.4 | 46.0 | | | Horiz | Peak | **+15.4** |
| 153 | 860.196 | 66.5 | -2.6 | +21.7 | | | +0.0 | 85.6 | 46.0 | | | Horiz | Peak | **+39.6** |
| 154 | 861.277 | 44.5 | -2.6 | +21.7 | | | +0.0 | 63.6 | 46.0 | | | Horiz | Peak | **+17.6** |
| 155 | 862.238 | 58.2 | -2.6 | +21.7 | | | +0.0 | 77.3 | 46.0 | | | Horiz | Peak | **+31.3** |
| 156 | 862.958 | 29.3 | -2.6 | +21.7 | | | +0.0 | 48.4 | 46.0 | | | Horiz | Peak | **+2.4** |
| 157 | 863.919 | 36.4 | -2.6 | +21.7 | | | +0.0 | 55.5 | 46.0 | | | Horiz | Peak | **+9.5** |
| 158 | 865.120 | 21.2 | -2.6 | +21.7 | | | +0.0 | 40.3 | 46.0 | | | Horiz | Peak | **-5.7** |
| 159 | 866.201 | 19.0 | -2.6 | +21.7 | | | +0.0 | 38.1 | 46.0 | | | Horiz | Peak | **-7.9** |
| 160 | 866.921 | 25.9 | -2.6 | +21.7 | | | +0.0 | 45.0 | 46.0 | | | Horiz | Peak | **-1.0** |
| 161 | 868.122 | 55.3 | -2.6 | +21.8 | | | +0.0 | 74.5 | 46.0 | | | Horiz | Peak | **+28.5** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 162 | 868.603 | 35.2 | -2.6 | +21.8 | | | +0.0 | 54.4 | 46.0 | | | Horiz | Peak | **+8.4** |
| 163 | 871.485 | 44.6 | -2.6 | +21.8 | | | +0.0 | 63.8 | 46.0 | | | Horiz | Peak | **+17.8** |
| 164 | 872.806 | 45.1 | -2.6 | +21.9 | | | +0.0 | 64.4 | 46.0 | | | Horiz | Peak | **+18.4** |
| 165 | 873.647 | 46.0 | -2.6 | +21.9 | | | +0.0 | 65.3 | 46.0 | | | Horiz | Peak | **+19.3** |
| 166 | 874.488 | 45.5 | -2.6 | +21.9 | | | +0.0 | 64.8 | 46.0 | | | Horiz | Peak | **+18.8** |
| 167 | 875.328 | 46.3 | -2.6 | +21.9 | | | +0.0 | 65.6 | 46.0 | | | Horiz | Peak | **+19.6** |
| 168 | 876.289 | 45.7 | -2.6 | +21.9 | | | +0.0 | 65.0 | 46.0 | | | Horiz | Peak | **+19.0** |
| 169 | 878.571 | 45.8 | -2.6 | +22.0 | | | +0.0 | 65.2 | 46.0 | | | Horiz | Peak | **+19.2** |
| 170 | 880.253 | 46.9 | -2.6 | +22.0 | | | +0.0 | 66.3 | 46.0 | | | Horiz | Peak | **+20.3** |
| 171 | 880.733 | 60.4 | -2.6 | +22.0 | | | +0.0 | 79.8 | 46.0 | | | Horiz | Peak | **+33.8** |
| 172 | 881.814 | 54.3 | -2.6 | +22.0 | | | +0.0 | 73.7 | 46.0 | | | Horiz | Peak | **+27.7** |
| 173 | 884.816 | 58.7 | -2.6 | +21.9 | | | +0.0 | 78.0 | 46.0 | | | Horiz | Peak | **+32.0** |
| 174 | 885.897 | 69.3 | -2.6 | +21.9 | | | +0.0 | 88.6 | 46.0 | | | Horiz | Peak | **+42.6** |
| 175 | 886.498 | 44.7 | -2.6 | +21.9 | | | +0.0 | 64.0 | 46.0 | | | Horiz | Peak | **+18.0** |
| 176 | 886.978 | 41.8 | -2.6 | +21.9 | | | +0.0 | 61.1 | 46.0 | | | Horiz | Peak | **+15.1** |
| 177 | 888.419 | 70.6 | -2.6 | +22.0 | | | +0.0 | 90.0 | 46.0 | | | Horiz | Peak | **+44.0** |
| 178 | 889.500 | 38.7 | -2.6 | +22.0 | | | +0.0 | 58.1 | 46.0 | | | Horiz | Peak | **+12.1** |
| 179 | 891.542 | 44.1 | -2.6 | +22.0 | | | +0.0 | 63.5 | 46.0 | | | Horiz | Peak | **+17.5** |
| 180 | 892.142 | 45.5 | -2.6 | +22.0 | | | +0.0 | 64.9 | 46.0 | | | Horiz | Peak | **+18.9** |
| 181 | 892.863 | 70.2 | -2.6 | +22.1 | | | +0.0 | 89.7 | 46.0 | | | Horiz | Peak | **+43.7** |
| 182 | 893.464 | 51.6 | -2.6 | +22.1 | | | +0.0 | 71.1 | 46.0 | | | Horiz | Peak | **+25.1** |
| 183 | 901.750 | 15.8 | -2.6 | +22.2 | | | +0.0 | 35.4 | 46.0 | | | Horiz | Peak | **-10.6** |
| 184 | 909.797 | 17.6 | -2.6 | +22.2 | | | +0.0 | 37.2 | 46.0 | | | Horiz | Peak | **-8.8** |
| 185 | 910.278 | 19.0 | -2.6 | +22.2 | | | +0.0 | 38.6 | 46.0 | | | Horiz | Peak | **-7.4** |
| 186 | 910.638 | 19.6 | -2.6 | +22.2 | | | +0.0 | 39.2 | 46.0 | | | Horiz | Peak | **-6.8** |
| 187 | 918.925 | 18.1 | -2.6 | +22.4 | | | +0.0 | 37.9 | 46.0 | | | Horiz | Peak | **-8.1** |
| 188 | 919.886 | 21.8 | -2.6 | +22.4 | | | +0.0 | 41.6 | 46.0 | | | Horiz | Peak | **-4.4** |
| 189 | 921.807 | 18.5 | -2.6 | +22.4 | | | +0.0 | 38.3 | 46.0 | | | Horiz | Peak | **-7.7** |
| 190 | 923.489 | 17.8 | -2.6 | +22.5 | | | +0.0 | 37.7 | 46.0 | | | Horiz | Peak | **-8.3** |
| 191 | 924.449 | 18.3 | -2.6 | +22.5 | | | +0.0 | 38.2 | 46.0 | | | Horiz | Peak | **-7.8** |
| 192 | 929.133 | 26.2 | -2.6 | +22.6 | | | +0.0 | 46.2 | 46.0 | | | Horiz | Peak | **+0.2** |
| 193 | 934.778 | 16.9 | -2.6 | +22.7 | | | +0.0 | 37.0 | 46.0 | | | Horiz | Peak | **-9.0** |
| 194 | 935.859 | 28.1 | -2.6 | +22.7 | | | +0.0 | 48.2 | 46.0 | | | Horiz | Peak | **+2.2** |
| 195 | 936.700 | 18.6 | -2.6 | +22.7 | | | +0.0 | 38.7 | 46.0 | | | Horiz | Peak | **-7.3** |
| 196 | 938.820 | 59.6 | -2.5 | +22.8 | | | +0.0 | 79.9 | 46.0 | | | Horiz | Peak | **+33.9** |
| 197 | 939.321 | 40.4 | -2.5 | +22.8 | | | +0.0 | 60.7 | 46.0 | | | Horiz | Peak | **+14.7** |
| 198 | 941.262 | 17.4 | -2.5 | +22.8 | | | +0.0 | 37.7 | 46.0 | | | Horiz | Peak | **-8.3** |
| 199 | 952.594 | 16.9 | -2.5 | +22.5 | | | +0.0 | 36.9 | 46.0 | | | Horiz | Peak | **-9.1** |
| 200 | 959.982 | 17.6 | -2.5 | +22.6 | | | +0.0 | 37.7 | 46.0 | | | Horiz | Peak | **-8.3** |


Wyle Laboratories Date: 7/1/2009 Time: 10:37:36 AM UNISYN WO#: T56285
FCC Class B RADIATED Test Distance: 3 meters Sequence#: 3
Horizontal Active
1
100
90
80
70
60
50
40
30
20
10
dBµV/m
30
100
1000
Frequency [MHz]
Sweep Data
1 - FCC Class B RADIATED

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B RADIATED

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Radiated Scan | Time: | 1:50:01 PM |
| Equipment: | Voting Device | Sequence: | 4 |
| Manufacturer: | UNISYN | Tested By: | J. Smith JSmith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900268 |
| UPS | Entrust | ETR1500 | 0900407 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Horizontal Ambient

***Transducer Legend:***

| | |
|---|---|
| T1=Cable Wyle# 110111 | T2=Wyle #114415 3M Horz |

***Measurement Data:*** Readings listed by frequency. Test Distance: 3 meters

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.333 | 13.8 | -0.4 | +20.6 | | | +0.0 | 34.0 | 40.0 | | | Horiz | Peak | **-6.0** |
| 2 | 45.970 | 17.7 | -0.6 | +14.6 | | | +0.0 | 31.7 | 40.0 | | | Horiz | Peak | **-8.3** |
| 3 | 49.962 | 18.8 | -0.6 | +13.5 | | | +0.0 | 31.7 | 40.0 | | | Horiz | Peak | **-8.3** |
| 4 | 69.991 | 18.7 | -0.7 | +8.7 | | | +0.0 | 26.7 | 40.0 | | | Horiz | Peak | **-13.3** |
| 5 | 87.956 | 44.9 | -0.8 | +7.2 | | | +0.0 | 51.3 | 40.0 | | | Horiz | Peak | **+11.3** |
| 6 | 88.489 | 31.5 | -0.8 | +7.3 | | | +0.0 | 38.0 | 43.5 | | | Horiz | Peak | **-5.5** |
| 7 | 89.287 | 62.3 | -0.8 | +7.3 | | | +0.0 | 68.8 | 43.5 | | | Horiz | Peak | **+25.3** |
| 8 | 90.086 | 57.9 | -0.8 | +7.4 | | | +0.0 | 64.5 | 43.5 | | | Horiz | Peak | **+21.0** |
| 9 | 90.884 | 62.1 | -0.8 | +7.6 | | | +0.0 | 68.9 | 43.5 | | | Horiz | Peak | **+25.4** |
| 10 | 91.683 | 53.4 | -0.8 | +7.7 | | | +0.0 | 60.3 | 43.5 | | | Horiz | Peak | **+16.8** |
| 11 | 92.548 | 29.7 | -0.7 | +7.9 | | | +0.0 | 36.9 | 43.5 | | | Horiz | Peak | **-6.6** |
| 12 | 93.213 | 56.5 | -0.7 | +8.0 | | | +0.0 | 63.8 | 43.5 | | | Horiz | Peak | **+20.3** |
| 13 | 94.078 | 41.5 | -0.7 | +8.1 | | | +0.0 | 48.9 | 43.5 | | | Horiz | Peak | **+5.4** |
| 14 | 95.076 | 56.5 | -0.7 | +8.3 | | | +0.0 | 64.1 | 43.5 | | | Horiz | Peak | **+20.6** |
| 15 | 95.941 | 32.7 | -0.7 | +8.4 | | | +0.0 | 40.4 | 43.5 | | | Horiz | Peak | **-3.1** |
| 16 | 96.860 | 66.9 | -0.7 | +8.6 | | | +0.0 | 74.8 | 43.5 | | | Horiz | Peak | **+31.3** |
| 17 | 97.581 | 30.8 | -0.8 | +8.7 | | | +0.0 | 38.7 | 43.5 | | | Horiz | Peak | **-4.8** |
| 18 | 98.181 | 25.7 | -0.8 | +8.7 | | | +0.0 | 33.6 | 43.5 | | | Horiz | Peak | **-9.9** |
| 19 | 99.022 | 38.1 | -0.8 | +8.9 | | | +0.0 | 46.2 | 43.5 | | | Horiz | Peak | **+2.7** |
| 20 | 100.223 | 49.8 | -0.8 | +9.0 | | | +0.0 | 58.0 | 43.5 | | | Horiz | Peak | **+14.5** |
| 21 | 102.025 | 63.6 | -0.8 | +9.1 | | | +0.0 | 71.9 | 43.5 | | | Horiz | Peak | **+28.4** |
| 22 | 103.466 | 57.7 | -0.8 | +9.2 | | | +0.0 | 66.1 | 43.5 | | | Horiz | Peak | **+22.6** |
| 23 | 104.186 | 66.6 | -0.8 | +9.3 | | | +0.0 | 75.1 | 43.5 | | | Horiz | Peak | **+31.6** |
| 24 | 106.108 | 41.9 | -0.9 | +9.3 | | | +0.0 | 50.3 | 43.5 | | | Horiz | Peak | **+6.8** |
| 25 | 106.348 | 36.2 | -0.9 | +9.3 | | | +0.0 | 44.6 | 43.5 | | | Horiz | Peak | **+1.1** |
| 26 | 107.189 | 37.6 | -0.9 | +9.3 | | | +0.0 | 46.0 | 43.5 | | | Horiz | Peak | **+2.5** |
| 27 | 117.998 | 23.9 | -0.9 | +9.3 | | | +0.0 | 32.3 | 43.5 | | | Horiz | Peak | **-11.2** |
| 28 | 118.719 | 18.9 | -0.9 | +9.3 | | | +0.0 | 27.3 | 43.5 | | | Horiz | Peak | **-16.2** |
| 29 | 121.121 | 22.7 | -0.9 | +9.0 | | | +0.0 | 30.8 | 43.5 | | | Horiz | Peak | **-12.7** |
| 30 | 124.123 | 17.7 | -0.9 | +8.6 | | | +0.0 | 25.4 | 43.5 | | | Horiz | Peak | **-18.1** |
| 31 | 126.405 | 25.4 | -0.9 | +8.4 | | | +0.0 | 32.9 | 43.5 | | | Horiz | Peak | **-10.6** |
| 32 | 162.435 | 41.2 | -1.0 | +8.8 | | | +0.0 | 49.0 | 43.5 | | | Horiz | Peak | **+5.5** |
| 33 | 173.724 | 41.1 | -1.1 | +9.1 | | | +0.0 | 49.1 | 43.5 | | | Horiz | Peak | **+5.6** |
| 34 | 198.585 | 19.1 | -1.2 | +10.3 | | | +0.0 | 28.2 | 43.5 | | | Horiz | Peak | **-15.3** |
| 35 | 199.306 | 41.9 | -1.2 | +10.3 | | | +0.0 | 51.0 | 43.5 | | | Horiz | Peak | **+7.5** |

Wyle Laboratories

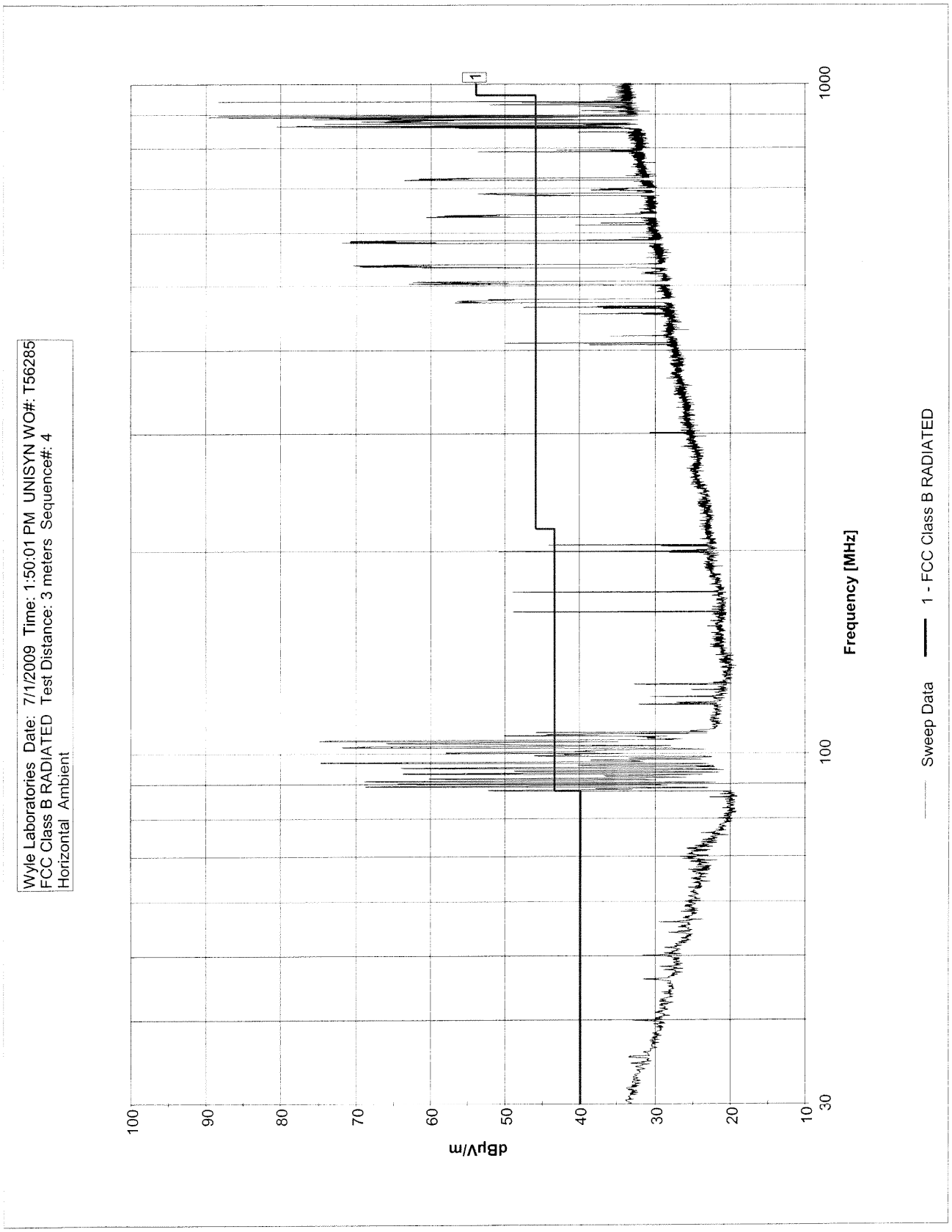
| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 199.906 | 18.8 | -1.2 | +10.3 | | | +0.0 | 27.9 | 43.5 | | | Horiz | Peak | **-15.6** |
| 37 | 202.909 | 20.2 | -1.2 | +10.3 | | | +0.0 | 29.3 | 43.5 | | | Horiz | Peak | **-14.2** |
| 38 | 203.869 | 35.2 | -1.2 | +10.3 | | | +0.0 | 44.3 | 43.5 | | | Horiz | Peak | **+0.8** |
| 39 | 234.975 | 14.8 | -1.3 | +11.0 | | | +0.0 | 24.5 | 46.0 | | | Horiz | Peak | **-21.5** |
| 40 | 265.721 | 14.7 | -1.3 | +12.5 | | | +0.0 | 25.9 | 46.0 | | | Horiz | Peak | **-20.1** |
| 41 | 267.763 | 14.4 | -1.3 | +12.4 | | | +0.0 | 25.5 | 46.0 | | | Horiz | Peak | **-20.5** |
| 42 | 276.410 | 14.7 | -1.4 | +12.3 | | | +0.0 | 25.6 | 46.0 | | | Horiz | Peak | **-20.4** |
| 43 | 281.574 | 14.2 | -1.4 | +12.5 | | | +0.0 | 25.3 | 46.0 | | | Horiz | Peak | **-20.7** |
| 44 | 286.258 | 15.4 | -1.4 | +12.7 | | | +0.0 | 26.7 | 46.0 | | | Horiz | Peak | **-19.3** |
| 45 | 299.829 | 14.8 | -1.5 | +13.4 | | | +0.0 | 26.7 | 46.0 | | | Horiz | Peak | **-19.3** |
| 46 | 300.550 | 18.9 | -1.5 | +13.4 | | | +0.0 | 30.8 | 46.0 | | | Horiz | Peak | **-15.2** |
| 47 | 302.592 | 14.7 | -1.5 | +13.5 | | | +0.0 | 26.7 | 46.0 | | | Horiz | Peak | **-19.3** |
| 48 | 310.158 | 14.6 | -1.5 | +13.7 | | | +0.0 | 26.8 | 46.0 | | | Horiz | Peak | **-19.2** |
| 49 | 310.758 | 14.5 | -1.5 | +13.7 | | | +0.0 | 26.7 | 46.0 | | | Horiz | Peak | **-19.3** |
| 50 | 314.842 | 14.6 | -1.5 | +13.9 | | | +0.0 | 27.0 | 46.0 | | | Horiz | Peak | **-19.0** |
| 51 | 316.763 | 14.6 | -1.5 | +13.9 | | | +0.0 | 27.0 | 46.0 | | | Horiz | Peak | **-19.0** |
| 52 | 327.332 | 15.0 | -1.5 | +13.8 | | | +0.0 | 27.3 | 46.0 | | | Horiz | Peak | **-18.7** |
| 53 | 332.857 | 14.6 | -1.5 | +14.0 | | | +0.0 | 27.1 | 46.0 | | | Horiz | Peak | **-18.9** |
| 54 | 362.663 | 15.2 | -1.6 | +15.0 | | | +0.0 | 28.6 | 46.0 | | | Horiz | Peak | **-17.4** |
| 55 | 388.867 | 14.7 | -1.6 | +15.2 | | | +0.0 | 28.3 | 46.0 | | | Horiz | Peak | **-17.7** |
| 56 | 398.843 | 14.5 | -1.6 | +15.6 | | | +0.0 | 28.5 | 46.0 | | | Horiz | Peak | **-17.5** |
| 57 | 406.777 | 24.9 | -1.6 | +15.6 | | | +0.0 | 38.9 | 46.0 | | | Horiz | Peak | **-7.1** |
| 58 | 409.301 | 36.0 | -1.6 | +15.7 | | | +0.0 | 50.1 | 46.0 | | | Horiz | Peak | **+4.1** |
| 59 | 419.157 | 21.5 | -1.7 | +16.4 | | | +0.0 | 36.2 | 46.0 | | | Horiz | Peak | **-9.8** |
| 60 | 419.758 | 15.5 | -1.7 | +16.5 | | | +0.0 | 30.3 | 46.0 | | | Horiz | Peak | **-15.7** |
| 61 | 451.010 | 17.3 | -1.8 | +16.3 | | | +0.0 | 31.8 | 46.0 | | | Horiz | Peak | **-14.2** |
| 62 | 452.573 | 25.7 | -1.8 | +16.4 | | | +0.0 | 40.3 | 46.0 | | | Horiz | Peak | **-5.7** |
| 63 | 453.534 | 20.5 | -1.8 | +16.4 | | | +0.0 | 35.1 | 46.0 | | | Horiz | Peak | **-10.9** |
| 64 | 460.383 | 19.5 | -1.8 | +16.5 | | | +0.0 | 34.2 | 46.0 | | | Horiz | Peak | **-11.8** |
| 65 | 460.863 | 22.4 | -1.8 | +16.5 | | | +0.0 | 37.1 | 46.0 | | | Horiz | Peak | **-8.9** |
| 66 | 462.785 | 32.9 | -1.8 | +16.6 | | | +0.0 | 47.7 | 46.0 | | | Horiz | Peak | **+1.7** |
| 67 | 464.106 | 23.1 | -1.8 | +16.6 | | | +0.0 | 37.9 | 46.0 | | | Horiz | Peak | **-8.1** |
| 68 | 464.827 | 21.9 | -1.8 | +16.6 | | | +0.0 | 36.7 | 46.0 | | | Horiz | Peak | **-9.3** |
| 69 | 470.231 | 42.0 | -1.8 | +16.7 | | | +0.0 | 56.9 | 46.0 | | | Horiz | Peak | **+10.9** |
| 70 | 472.153 | 41.7 | -1.8 | +16.7 | | | +0.0 | 56.6 | 46.0 | | | Horiz | Peak | **+10.6** |
| 71 | 501.577 | 47.8 | -1.9 | +17.2 | | | +0.0 | 63.1 | 46.0 | | | Horiz | Peak | **+17.1** |
| 72 | 504.940 | 47.4 | -1.9 | +17.1 | | | +0.0 | 62.6 | 46.0 | | | Horiz | Peak | **+16.6** |
| 73 | 530.281 | 45.5 | -1.9 | +17.7 | | | +0.0 | 61.3 | 46.0 | | | Horiz | Peak | **+15.3** |
| 74 | 532.203 | 53.8 | -1.9 | +17.7 | | | +0.0 | 69.6 | 46.0 | | | Horiz | Peak | **+23.6** |
| 75 | 534.365 | 54.6 | -1.9 | +17.8 | | | +0.0 | 70.5 | 46.0 | | | Horiz | Peak | **+24.5** |
| 76 | 579.162 | 55.7 | -2.1 | +18.4 | | | +0.0 | 72.0 | 46.0 | | | Horiz | Peak | **+26.0** |
| 77 | 581.324 | 54.6 | -2.1 | +18.4 | | | +0.0 | 70.9 | 46.0 | | | Horiz | Peak | **+24.9** |
| 78 | 582.525 | 54.5 | -2.1 | +18.4 | | | +0.0 | 70.8 | 46.0 | | | Horiz | Peak | **+24.8** |
| 79 | 585.167 | 23.0 | -2.1 | +18.4 | | | +0.0 | 39.3 | 46.0 | | | Horiz | Peak | **-6.7** |
| 80 | 615.072 | 23.9 | -2.1 | +19.0 | | | +0.0 | 40.8 | 46.0 | | | Horiz | Peak | **-5.2** |
| 81 | 619.636 | 20.5 | -2.1 | +19.0 | | | +0.0 | 37.4 | 46.0 | | | Horiz | Peak | **-8.6** |
| 82 | 632.126 | 43.5 | -2.1 | +19.3 | | | +0.0 | 60.7 | 46.0 | | | Horiz | Peak | **+14.7** |
| 83 | 633.447 | 42.0 | -2.1 | +19.4 | | | +0.0 | 59.3 | 46.0 | | | Horiz | Peak | **+13.3** |
| 84 | 635.849 | 41.0 | -2.1 | +19.4 | | | +0.0 | 58.3 | 46.0 | | | Horiz | Peak | **+12.3** |
| 85 | 680.046 | 32.1 | -2.3 | +19.6 | | | +0.0 | 49.4 | 46.0 | | | Horiz | Peak | **+3.4** |
| 86 | 681.007 | 29.7 | -2.3 | +19.6 | | | +0.0 | 47.0 | 46.0 | | | Horiz | Peak | **+1.0** |
| 87 | 684.129 | 36.5 | -2.3 | +19.6 | | | +0.0 | 53.8 | 46.0 | | | Horiz | Peak | **+7.8** |
| 88 | 692.897 | 21.5 | -2.2 | +19.4 | | | +0.0 | 38.7 | 46.0 | | | Horiz | Peak | **-7.3** |
| 89 | 697.100 | 17.7 | -2.2 | +19.5 | | | +0.0 | 35.0 | 46.0 | | | Horiz | Peak | **-11.0** |
| 90 | 712.713 | 15.4 | -2.3 | +19.9 | | | +0.0 | 33.0 | 46.0 | | | Horiz | Peak | **-13.0** |
| 91 | 716.316 | 45.9 | -2.3 | +20.0 | | | +0.0 | 63.6 | 46.0 | | | Horiz | Peak | **+17.6** |
| 92 | 717.277 | 45.0 | -2.3 | +20.0 | | | +0.0 | 62.7 | 46.0 | | | Horiz | Peak | **+16.7** |
| 93 | 720.279 | 43.9 | -2.3 | +20.1 | | | +0.0 | 61.7 | 46.0 | | | Horiz | Peak | **+15.7** |
| 94 | 727.005 | 16.1 | -2.3 | +20.3 | | | +0.0 | 34.1 | 46.0 | | | Horiz | Peak | **-11.9** |
| 95 | 732.049 | 14.9 | -2.3 | +20.3 | | | +0.0 | 32.9 | 46.0 | | | Horiz | Peak | **-13.1** |
| 96 | 748.263 | 15.0 | -2.3 | +20.7 | | | +0.0 | 33.4 | 46.0 | | | Horiz | Peak | **-12.6** |
| 97 | 754.388 | 14.5 | -2.3 | +20.9 | | | +0.0 | 33.1 | 46.0 | | | Horiz | Peak | **-12.9** |
| 98 | 783.692 | 14.9 | -2.4 | +21.1 | | | +0.0 | 33.6 | 46.0 | | | Horiz | Peak | **-12.4** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | 788.136 | 16.3 | -2.4 | +21.2 | | | +0.0 | 35.1 | 46.0 | | | Horiz | Peak | **-10.9** |
| 100 | 788.977 | 35.0 | -2.4 | +21.2 | | | +0.0 | 53.8 | 46.0 | | | Horiz | Peak | **+7.8** |
| 101 | 792.580 | 17.2 | -2.4 | +21.3 | | | +0.0 | 36.1 | 46.0 | | | Horiz | Peak | **-9.9** |
| 102 | 793.540 | 24.4 | -2.4 | +21.3 | | | +0.0 | 43.3 | 46.0 | | | Horiz | Peak | **-2.7** |
| 103 | 843.862 | 21.5 | -2.6 | +21.5 | | | +0.0 | 40.4 | 46.0 | | | Horiz | Peak | **-5.6** |
| 104 | 854.311 | 37.3 | -2.6 | +21.6 | | | +0.0 | 56.3 | 46.0 | | | Horiz | Peak | **+10.3** |
| 105 | 855.032 | 36.5 | -2.6 | +21.6 | | | +0.0 | 55.5 | 46.0 | | | Horiz | Peak | **+9.5** |
| 106 | 855.872 | 37.9 | -2.6 | +21.6 | | | +0.0 | 56.9 | 46.0 | | | Horiz | Peak | **+10.9** |
| 107 | 856.833 | 38.0 | -2.6 | +21.6 | | | +0.0 | 57.0 | 46.0 | | | Horiz | Peak | **+11.0** |
| 108 | 857.193 | 56.7 | -2.6 | +21.6 | | | +0.0 | 75.7 | 46.0 | | | Horiz | Peak | **+29.7** |
| 109 | 857.914 | 39.3 | -2.6 | +21.7 | | | +0.0 | 58.4 | 46.0 | | | Horiz | Peak | **+12.4** |
| 110 | 858.394 | 45.0 | -2.6 | +21.7 | | | +0.0 | 64.1 | 46.0 | | | Horiz | Peak | **+18.1** |
| 111 | 859.355 | 41.1 | -2.6 | +21.7 | | | +0.0 | 60.2 | 46.0 | | | Horiz | Peak | **+14.2** |
| 112 | 859.956 | 54.2 | -2.6 | +21.7 | | | +0.0 | 73.3 | 46.0 | | | Horiz | Peak | **+27.3** |
| 113 | 860.196 | 61.6 | -2.6 | +21.7 | | | +0.0 | 80.7 | 46.0 | | | Horiz | Peak | **+34.7** |
| 114 | 860.676 | 45.5 | -2.6 | +21.7 | | | +0.0 | 64.6 | 46.0 | | | Horiz | Peak | **+18.6** |
| 115 | 861.277 | 46.3 | -2.6 | +21.7 | | | +0.0 | 65.4 | 46.0 | | | Horiz | Peak | **+19.4** |
| 116 | 862.238 | 58.9 | -2.6 | +21.7 | | | +0.0 | 78.0 | 46.0 | | | Horiz | Peak | **+32.0** |
| 117 | 863.318 | 29.7 | -2.6 | +21.7 | | | +0.0 | 48.8 | 46.0 | | | Horiz | Peak | **+2.8** |
| 118 | 863.919 | 40.6 | -2.6 | +21.7 | | | +0.0 | 59.7 | 46.0 | | | Horiz | Peak | **+13.7** |
| 119 | 865.120 | 20.2 | -2.6 | +21.7 | | | +0.0 | 39.3 | 46.0 | | | Horiz | Peak | **-6.7** |
| 120 | 866.201 | 20.6 | -2.6 | +21.7 | | | +0.0 | 39.7 | 46.0 | | | Horiz | Peak | **-6.3** |
| 121 | 866.921 | 19.1 | -2.6 | +21.7 | | | +0.0 | 38.2 | 46.0 | | | Horiz | Peak | **-7.8** |
| 122 | 867.402 | 19.6 | -2.6 | +21.7 | | | +0.0 | 38.7 | 46.0 | | | Horiz | Peak | **-7.3** |
| 123 | 868.122 | 55.1 | -2.6 | +21.8 | | | +0.0 | 74.3 | 46.0 | | | Horiz | Peak | **+28.3** |
| 124 | 868.603 | 29.8 | -2.6 | +21.8 | | | +0.0 | 49.0 | 46.0 | | | Horiz | Peak | **+3.0** |
| 125 | 872.086 | 47.0 | -2.6 | +21.8 | | | +0.0 | 66.2 | 46.0 | | | Horiz | Peak | **+20.2** |
| 126 | 873.647 | 47.5 | -2.6 | +21.9 | | | +0.0 | 66.8 | 46.0 | | | Horiz | Peak | **+20.8** |
| 127 | 874.608 | 50.1 | -2.6 | +21.9 | | | +0.0 | 69.4 | 46.0 | | | Horiz | Peak | **+23.4** |
| 128 | 875.088 | 46.2 | -2.6 | +21.9 | | | +0.0 | 65.5 | 46.0 | | | Horiz | Peak | **+19.5** |
| 129 | 875.929 | 46.6 | -2.6 | +21.9 | | | +0.0 | 65.9 | 46.0 | | | Horiz | Peak | **+19.9** |
| 130 | 878.451 | 46.3 | -2.6 | +22.0 | | | +0.0 | 65.7 | 46.0 | | | Horiz | Peak | **+19.7** |
| 131 | 880.733 | 56.5 | -2.6 | +22.0 | | | +0.0 | 75.9 | 46.0 | | | Horiz | Peak | **+29.9** |
| 132 | 882.174 | 52.8 | -2.6 | +22.0 | | | +0.0 | 72.2 | 46.0 | | | Horiz | Peak | **+26.2** |
| 133 | 884.096 | 54.4 | -2.6 | +21.9 | | | +0.0 | 73.7 | 46.0 | | | Horiz | Peak | **+27.7** |
| 134 | 885.897 | 67.8 | -2.6 | +21.9 | | | +0.0 | 87.1 | 46.0 | | | Horiz | Peak | **+41.1** |
| 135 | 886.378 | 40.2 | -2.6 | +21.9 | | | +0.0 | 59.5 | 46.0 | | | Horiz | Peak | **+13.5** |
| 136 | 888.419 | 70.4 | -2.6 | +22.0 | | | +0.0 | 89.8 | 46.0 | | | Horiz | Peak | **+43.8** |
| 137 | 889.620 | 41.6 | -2.6 | +22.0 | | | +0.0 | 61.0 | 46.0 | | | Horiz | Peak | **+15.0** |
| 138 | 891.422 | 46.1 | -2.6 | +22.0 | | | +0.0 | 65.5 | 46.0 | | | Horiz | Peak | **+19.5** |
| 139 | 892.142 | 44.2 | -2.6 | +22.0 | | | +0.0 | 63.6 | 46.0 | | | Horiz | Peak | **+17.6** |
| 140 | 892.863 | 69.0 | -2.6 | +22.1 | | | +0.0 | 88.5 | 46.0 | | | Horiz | Peak | **+42.5** |
| 141 | 893.464 | 49.6 | -2.6 | +22.1 | | | +0.0 | 69.1 | 46.0 | | | Horiz | Peak | **+23.1** |
| 142 | 905.233 | 17.5 | -2.6 | +22.2 | | | +0.0 | 37.1 | 46.0 | | | Horiz | Peak | **-8.9** |
| 143 | 910.278 | 20.4 | -2.6 | +22.2 | | | +0.0 | 40.0 | 46.0 | | | Horiz | Peak | **-6.0** |
| 144 | 923.609 | 19.9 | -2.6 | +22.5 | | | +0.0 | 39.8 | 46.0 | | | Horiz | Peak | **-6.2** |
| 145 | 924.089 | 20.6 | -2.6 | +22.5 | | | +0.0 | 40.5 | 46.0 | | | Horiz | Peak | **-5.5** |
| 146 | 924.449 | 19.7 | -2.6 | +22.5 | | | +0.0 | 39.6 | 46.0 | | | Horiz | Peak | **-6.4** |
| 147 | 929.133 | 32.2 | -2.6 | +22.6 | | | +0.0 | 52.2 | 46.0 | | | Horiz | Peak | **+6.2** |
| 148 | 934.778 | 24.0 | -2.6 | +22.7 | | | +0.0 | 44.1 | 46.0 | | | Horiz | Peak | **-1.9** |
| 149 | 935.859 | 27.8 | -2.6 | +22.7 | | | +0.0 | 47.9 | 46.0 | | | Horiz | Peak | **+1.9** |
| 150 | 936.579 | 20.5 | -2.6 | +22.7 | | | +0.0 | 40.6 | 46.0 | | | Horiz | Peak | **-5.4** |
| 151 | 938.820 | 68.2 | -2.5 | +22.8 | | | +0.0 | 88.5 | 46.0 | | | Horiz | Peak | **+42.5** |
| 152 | 939.258 | 33.5 | -2.5 | +22.8 | | | +0.0 | 53.8 | 46.0 | | | Horiz | Peak | **+7.8** |
| 153 | 939.384 | 31.3 | -2.5 | +22.8 | | | +0.0 | 51.6 | 46.0 | | | Horiz | Peak | **+5.6** |
| 154 | 941.262 | 18.0 | -2.5 | +22.8 | | | +0.0 | 38.3 | 46.0 | | | Horiz | Peak | **-7.7** |
| 155 | 944.893 | 16.5 | -2.5 | +22.7 | | | +0.0 | 36.7 | 46.0 | | | Horiz | Peak | **-9.3** |
| 156 | 946.584 | 14.4 | -2.5 | +22.7 | | | +0.0 | 34.6 | 46.0 | | | Horiz | Peak | **-11.4** |
| 157 | 947.398 | 15.4 | -2.5 | +22.7 | | | +0.0 | 35.6 | 46.0 | | | Horiz | Peak | **-10.4** |
| 158 | 949.839 | 15.0 | -2.5 | +22.6 | | | +0.0 | 35.1 | 46.0 | | | Horiz | Peak | **-10.9** |
| 159 | 950.340 | 15.0 | -2.5 | +22.6 | | | +0.0 | 35.1 | 46.0 | | | Horiz | Peak | **-10.9** |
| 160 | 951.342 | 14.4 | -2.5 | +22.6 | | | +0.0 | 34.5 | 46.0 | | | Horiz | Peak | **-11.5** |
| 161 | 952.469 | 16.4 | -2.5 | +22.6 | | | +0.0 | 36.5 | 46.0 | | | Horiz | Peak | **-9.5** |

Wyle Laboratories

| # | Freq MHz | Rdng dBµV | T1 | T2 | | | Dist | Corr dBµV/m | Spec dBµV/m | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 162 | 990.724 | 15.1 | -2.6 | +23.0 | | | +0.0 | 35.5 | 54.0 | | | Horiz | Peak | **-18.5** |
| 163 | 990.849 | 15.5 | -2.6 | +23.0 | | | +0.0 | 35.9 | 54.0 | | | Horiz | Peak | **-18.1** |


Wyle Laboratories Date: 7/1/2009 Time: 1:50:01 PM UNISYN WO#: T56285
FCC Class B RADIATED Test Distance: 3 meters Sequence#: 4
Horizontal Ambient
1
dBµV/m
100
90
80
70
60
50
40
30
20
10
30
100
1000
Frequency [MHz]
Sweep Data
1 - FCC Class B RADIATED

**ELECTROMAGNETIC RADIATION TEST**
**CONDUCTED EMISSIONS TEST DATA**

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B Conducted Ave

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Conducted Emissions | Time: | 13:13:12 |
| Equipment: | Voting Device | Sequence: | 1 |
| Manufacturer: | UNISYN | Tested By: | J. Smith J Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |
| Voltage: | 120V 60Hz | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900407 |
| UPS | Entrust | ETR1500 | 0900268 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Line Active

***Transducer Legend:***

T1=LISN Wyle #110238 L

***Measurement Data:*** Readings listed by frequency. Test Lead: Black

| # | Freq | Rdng dBµV | T1 | Corr dBµV | Spec dBµV | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|
| 1 | 151.454k | 60.1 | +1.5 | 61.6 | 55.9 | Black | Peak | **+5.7** |
| 2 | 154.840k | 24.8 | +1.5 | 26.3 | 55.7 | Black | Ave | **-29.4** |
| 3 | 157.060k | 54.9 | +1.4 | 56.2 | 55.6 | Black | QP | **+0.6** |
| 4 | 163.160k | 53.0 | +1.4 | 54.4 | 55.3 | Black | QP | **-0.9** |
| 5 | 164.544k | 61.9 | +1.4 | 63.3 | 55.2 | Black | Peak | **+8.1** |
| 6 | 172.543k | 55.8 | +1.2 | 57.0 | 54.8 | Black | Peak | **+2.2** |
| 7 | 186.580k | 52.0 | +1.0 | 53.0 | 54.2 | Black | QP | **-1.2** |
| 8 | 190.160k | 51.6 | +1.0 | 52.6 | 54.0 | Black | QP | **-1.4** |
| 9 | 191.420k | 50.8 | +1.0 | 51.8 | 54.0 | Black | QP | **-2.2** |
| 10 | 192.178k | 57.5 | +1.0 | 58.5 | 53.9 | Black | Peak | **+4.6** |
| 11 | 195.086k | 56.3 | +1.0 | 57.3 | 53.8 | Black | Peak | **+3.5** |
| 12 | 200.177k | 55.8 | +1.0 | 56.8 | 53.6 | Black | Peak | **+3.2** |
| 13 | 201.420k | 47.8 | +1.0 | 48.8 | 53.6 | Black | QP | **-4.8** |
| 14 | 205.340k | 47.5 | +1.0 | 48.5 | 53.4 | Black | QP | **-4.9** |
| 15 | 211.085k | 54.0 | +0.9 | 54.9 | 53.2 | Black | Peak | **+1.7** |
| 16 | 729.160k | 34.7 | +0.1 | 34.8 | 46.0 | Black | QP | **-11.2** |
| 17 | 729.578k | 51.0 | +0.1 | 51.1 | 46.0 | Black | Peak | **+5.1** |
| 18 | 768.120k | 48.6 | +0.1 | 48.7 | 46.0 | Black | Peak | **+2.7** |
| 19 | 770.680k | 32.4 | +0.1 | 32.5 | 46.0 | Black | QP | **-13.5** |

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B Conducted Ave

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Conducted Emissions | Time: | 10:56:02 |
| Equipment: | Voting Device | Sequence: | 1 |
| Manufacturer: | UNISYN | Tested By: | J. Smith J Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |
| Voltage: | 120V 60Hz | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900407 |
| UPS | Entrust | ETR1500 | 0900268 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Line Active

***Transducer Legend:***

T1=LISN Wyle #110238 L

***Measurement Data:*** Readings listed by frequency. Test Lead: Black

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 151.454k | 60.1 | +1.5 | | | | | 61.6 | 55.9 | | | Black | Peak | **+5.7** |
| 2 | 164.544k | 61.9 | +1.4 | | | | | 63.3 | 55.2 | | | Black | Peak | **+8.1** |
| 3 | 172.543k | 55.8 | +1.2 | | | | | 57.0 | 54.8 | | | Black | Peak | **+2.2** |
| 4 | 192.178k | 57.5 | +1.0 | | | | | 58.5 | 53.9 | | | Black | Peak | **+4.6** |
| 5 | 195.086k | 56.3 | +1.0 | | | | | 57.3 | 53.8 | | | Black | Peak | **+3.5** |
| 6 | 200.177k | 55.8 | +1.0 | | | | | 56.8 | 53.6 | | | Black | Peak | **+3.2** |
| 7 | 211.085k | 54.0 | +0.9 | | | | | 54.9 | 53.2 | | | Black | Peak | **+1.7** |
| 8 | 221.993k | 50.3 | +0.9 | | | | | 51.2 | 52.7 | | | Black | Peak | **-1.5** |
| 9 | 224.902k | 51.6 | +0.9 | | | | | 52.5 | 52.6 | | | Black | Peak | **-0.1** |
| 10 | 237.264k | 49.0 | +0.8 | | | | | 49.8 | 52.2 | | | Black | Peak | **-2.4** |
| 11 | 242.354k | 49.1 | +0.8 | | | | | 49.9 | 52.0 | | | Black | Peak | **-2.1** |
| 12 | 251.081k | 47.5 | +0.8 | | | | | 48.3 | 51.7 | | | Black | Peak | **-3.4** |
| 13 | 256.171k | 49.2 | +0.8 | | | | | 50.0 | 51.6 | | | Black | Peak | **-1.6** |
| 14 | 261.989k | 49.4 | +0.7 | | | | | 50.1 | 51.4 | | | Black | Peak | **-1.3** |
| 15 | 267.806k | 47.4 | +0.7 | | | | | 48.1 | 51.2 | | | Black | Peak | **-3.1** |
| 16 | 272.897k | 46.0 | +0.7 | | | | | 46.7 | 51.0 | | | Black | Peak | **-4.3** |
| 17 | 279.442k | 46.6 | +0.7 | | | | | 47.3 | 50.8 | | | Black | Peak | **-3.5** |
| 18 | 283.078k | 46.9 | +0.6 | | | | | 47.5 | 50.7 | | | Black | Peak | **-3.2** |
| 19 | 288.168k | 45.6 | +0.6 | | | | | 46.2 | 50.6 | | | Black | Peak | **-4.4** |
| 20 | 292.531k | 43.1 | +0.6 | | | | | 43.7 | 50.5 | | | Black | Peak | **-6.8** |
| 21 | 298.349k | 42.9 | +0.6 | | | | | 43.5 | 50.3 | | | Black | Peak | **-6.8** |
| 22 | 303.439k | 45.4 | +0.6 | | | | | 46.0 | 50.1 | | | Black | Peak | **-4.1** |
| 23 | 307.075k | 45.2 | +0.6 | | | | | 45.8 | 50.0 | | | Black | Peak | **-4.2** |
| 24 | 312.166k | 42.5 | +0.6 | | | | | 43.1 | 49.9 | | | Black | Peak | **-6.8** |
| 25 | 315.802k | 43.3 | +0.5 | | | | | 43.8 | 49.8 | | | Black | Peak | **-6.0** |
| 26 | 320.165k | 44.8 | +0.5 | | | | | 45.3 | 49.7 | | | Black | Peak | **-4.4** |
| 27 | 324.528k | 43.5 | +0.5 | | | | | 44.0 | 49.6 | | | Black | Peak | **-5.6** |
| 28 | 328.891k | 44.2 | +0.5 | | | | | 44.7 | 49.5 | | | Black | Peak | **-4.8** |
| 29 | 331.800k | 42.1 | +0.5 | | | | | 42.6 | 49.4 | | | Black | Peak | **-6.8** |
| 30 | 337.618k | 42.5 | +0.5 | | | | | 43.0 | 49.3 | | | Black | Peak | **-6.3** |
| 31 | 342.708k | 41.9 | +0.5 | | | | | 42.4 | 49.1 | | | Black | Peak | **-6.7** |
| 32 | 347.071k | 43.1 | +0.4 | | | | | 43.5 | 49.0 | | | Black | Peak | **-5.5** |
| 33 | 355.798k | 42.0 | +0.4 | | | | | 42.4 | 48.8 | | | Black | Peak | **-6.4** |
| 34 | 360.888k | 43.8 | +0.4 | | | | | 44.2 | 48.7 | | | Black | Peak | **-4.5** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | 362.342k | 39.8 | +0.4 | | | | | 40.2 | 48.7 | | | Black | Peak | **-8.5** |
| 36 | 363.797k | 41.3 | +0.4 | | | | | 41.7 | 48.6 | | | Black | Peak | **-6.9** |
| 37 | 368.160k | 38.8 | +0.4 | | | | | 39.2 | 48.5 | | | Black | Peak | **-9.3** |
| 38 | 371.069k | 39.3 | +0.4 | | | | | 39.7 | 48.5 | | | Black | Peak | **-8.8** |
| 39 | 375.432k | 39.6 | +0.4 | | | | | 40.0 | 48.4 | | | Black | Peak | **-8.4** |
| 40 | 383.431k | 40.1 | +0.3 | | | | | 40.4 | 48.2 | | | Black | Peak | **-7.8** |
| 41 | 386.340k | 37.0 | +0.3 | | | | | 37.3 | 48.1 | | | Black | Peak | **-10.8** |
| 42 | 399.430k | 40.1 | +0.3 | | | | | 40.4 | 47.9 | | | Black | Peak | **-7.5** |
| 43 | 403.066k | 39.0 | +0.3 | | | | | 39.3 | 47.8 | | | Black | Peak | **-8.5** |
| 44 | 404.520k | 37.3 | +0.3 | | | | | 37.6 | 47.8 | | | Black | Peak | **-10.2** |
| 45 | 408.883k | 40.0 | +0.3 | | | | | 40.3 | 47.7 | | | Black | Peak | **-7.4** |
| 46 | 411.792k | 35.4 | +0.3 | | | | | 35.7 | 47.6 | | | Black | Peak | **-11.9** |
| 47 | 419.064k | 37.0 | +0.3 | | | | | 37.3 | 47.5 | | | Black | Peak | **-10.2** |
| 48 | 425.609k | 36.3 | +0.3 | | | | | 36.6 | 47.3 | | | Black | Peak | **-10.7** |
| 49 | 429.972k | 36.4 | +0.3 | | | | | 36.7 | 47.3 | | | Black | Peak | **-10.6** |
| 50 | 434.335k | 34.7 | +0.3 | | | | | 35.0 | 47.2 | | | Black | Peak | **-12.2** |
| 51 | 443.062k | 36.5 | +0.3 | | | | | 36.8 | 47.0 | | | Black | Peak | **-10.2** |
| 52 | 445.970k | 33.7 | +0.3 | | | | | 34.0 | 46.9 | | | Black | Peak | **-12.9** |
| 53 | 453.970k | 34.0 | +0.3 | | | | | 34.3 | 46.8 | | | Black | Peak | **-12.5** |
| 54 | 458.333k | 32.6 | +0.3 | | | | | 32.9 | 46.7 | | | Black | Peak | **-13.8** |
| 55 | 463.423k | 33.8 | +0.3 | | | | | 34.1 | 46.6 | | | Black | Peak | **-12.5** |
| 56 | 472.877k | 34.6 | +0.3 | | | | | 34.9 | 46.5 | | | Black | Peak | **-11.6** |
| 57 | 477.240k | 34.5 | +0.3 | | | | | 34.8 | 46.4 | | | Black | Peak | **-11.6** |
| 58 | 483.058k | 34.4 | +0.3 | | | | | 34.7 | 46.3 | | | Black | Peak | **-11.6** |
| 59 | 491.784k | 36.1 | +0.2 | | | | | 36.3 | 46.1 | | | Black | Peak | **-9.8** |
| 60 | 502.692k | 36.9 | +0.2 | | | | | 37.1 | 46.0 | | | Black | Peak | **-8.9** |
| 61 | 507.055k | 37.2 | +0.2 | | | | | 37.4 | 46.0 | | | Black | Peak | **-8.6** |
| 62 | 510.691k | 36.3 | +0.2 | | | | | 36.5 | 46.0 | | | Black | Peak | **-9.5** |
| 63 | 515.054k | 36.4 | +0.2 | | | | | 36.6 | 46.0 | | | Black | Peak | **-9.4** |
| 64 | 520.145k | 37.5 | +0.2 | | | | | 37.7 | 46.0 | | | Black | Peak | **-8.3** |
| 65 | 522.326k | 36.2 | +0.2 | | | | | 36.4 | 46.0 | | | Black | Peak | **-9.6** |
| 66 | 531.053k | 37.6 | +0.2 | | | | | 37.8 | 46.0 | | | Black | Peak | **-8.2** |
| 67 | 534.689k | 38.5 | +0.2 | | | | | 38.7 | 46.0 | | | Black | Peak | **-7.3** |
| 68 | 539.052k | 35.3 | +0.2 | | | | | 35.5 | 46.0 | | | Black | Peak | **-10.5** |
| 69 | 544.142k | 37.7 | +0.2 | | | | | 37.9 | 46.0 | | | Black | Peak | **-8.1** |
| 70 | 550.687k | 36.1 | +0.2 | | | | | 36.3 | 46.0 | | | Black | Peak | **-9.7** |
| 71 | 553.596k | 37.2 | +0.2 | | | | | 37.4 | 46.0 | | | Black | Peak | **-8.6** |
| 72 | 560.868k | 38.6 | +0.2 | | | | | 38.8 | 46.0 | | | Black | Peak | **-7.2** |
| 73 | 564.504k | 40.4 | +0.2 | | | | | 40.6 | 46.0 | | | Black | Peak | **-5.4** |
| 74 | 567.413k | 38.7 | +0.2 | | | | | 38.9 | 46.0 | | | Black | Peak | **-7.1** |
| 75 | 573.230k | 40.1 | +0.2 | | | | | 40.3 | 46.0 | | | Black | Peak | **-5.7** |
| 76 | 576.866k | 38.0 | +0.2 | | | | | 38.2 | 46.0 | | | Black | Peak | **-7.8** |
| 77 | 581.957k | 39.3 | +0.2 | | | | | 39.5 | 46.0 | | | Black | Peak | **-6.5** |
| 78 | 586.320k | 36.9 | +0.2 | | | | | 37.1 | 46.0 | | | Black | Peak | **-8.9** |
| 79 | 590.683k | 37.5 | +0.2 | | | | | 37.7 | 46.0 | | | Black | Peak | **-8.3** |
| 80 | 595.774k | 34.9 | +0.2 | | | | | 35.1 | 46.0 | | | Black | Peak | **-10.9** |
| 81 | 600.137k | 33.7 | +0.2 | | | | | 33.9 | 46.0 | | | Black | Peak | **-12.1** |
| 82 | 605.954k | 32.8 | +0.2 | | | | | 33.0 | 46.0 | | | Black | Peak | **-13.0** |
| 83 | 611.772k | 35.2 | +0.2 | | | | | 35.4 | 46.0 | | | Black | Peak | **-10.6** |
| 84 | 618.317k | 33.1 | +0.2 | | | | | 33.3 | 46.0 | | | Black | Peak | **-12.7** |
| 85 | 623.407k | 32.0 | +0.2 | | | | | 32.2 | 46.0 | | | Black | Peak | **-13.8** |
| 86 | 626.316k | 30.3 | +0.2 | | | | | 30.5 | 46.0 | | | Black | Peak | **-15.5** |
| 87 | 632.134k | 27.5 | +0.2 | | | | | 27.7 | 46.0 | | | Black | Peak | **-18.3** |
| 88 | 635.042k | 27.9 | +0.2 | | | | | 28.1 | 46.0 | | | Black | Peak | **-17.9** |
| 89 | 638.678k | 28.9 | +0.2 | | | | | 29.1 | 46.0 | | | Black | Peak | **-16.9** |
| 90 | 656.131k | 24.7 | +0.2 | | | | | 24.9 | 46.0 | | | Black | Peak | **-21.1** |
| 91 | 661.949k | 24.4 | +0.2 | | | | | 24.6 | 46.0 | | | Black | Peak | **-21.4** |
| 92 | 684.492k | 23.3 | +0.2 | | | | | 23.5 | 46.0 | | | Black | Peak | **-22.5** |
| 93 | 729.578k | 51.0 | +0.1 | | | | | 51.1 | 46.0 | | | Black | Peak | **+5.1** |
| 94 | 768.120k | 48.6 | +0.1 | | | | | 48.7 | 46.0 | | | Black | Peak | **+2.7** |
| 95 | 784.846k | 34.0 | +0.1 | | | | | 34.1 | 46.0 | | | Black | Peak | **-11.9** |
| 96 | 799.390k | 33.6 | +0.1 | | | | | 33.7 | 46.0 | | | Black | Peak | **-12.3** |
| 97 | 816.115k | 36.5 | +0.1 | | | | | 36.6 | 46.0 | | | Black | Peak | **-9.4** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | Corr dBµV | Spec dBµV | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|
| 98 | 837.204k | 39.8 | +0.1 | 39.9 | 46.0 | Black | Peak | -6.1 |
| 99 | 875.746k | 35.6 | +0.1 | 35.7 | 46.0 | Black | Peak | -10.3 |
| 100 | 889.759k | 36.2 | +0.1 | 36.3 | 46.0 | Black | Peak | -9.7 |
| 101 | 949.301k | 30.6 | +0.1 | 30.7 | 46.0 | Black | Peak | -15.3 |
| 102 | 966.313k | 26.6 | +0.1 | 26.7 | 46.0 | Black | Peak | -19.3 |
| 103 | 1.000M | 32.1 | +0.1 | 32.2 | 46.0 | Black | Peak | -13.8 |
| 104 | 1.077M | 26.4 | +0.1 | 26.5 | 46.0 | Black | Peak | -19.5 |
| 105 | 1.119M | 24.6 | +0.1 | 24.7 | 46.0 | Black | Peak | -21.3 |
| 106 | 1.136M | 28.8 | +0.1 | 28.9 | 46.0 | Black | Peak | -17.1 |
| 107 | 1.170M | 20.5 | +0.1 | 20.6 | 46.0 | Black | Peak | -25.4 |
| 108 | 1.226M | 28.6 | +0.1 | 28.7 | 46.0 | Black | Peak | -17.3 |
| 109 | 1.311M | 21.7 | +0.1 | 21.8 | 46.0 | Black | Peak | -24.2 |
| 110 | 1.396M | 22.5 | +0.1 | 22.6 | 46.0 | Black | Peak | -23.4 |
| 111 | 1.545M | 30.7 | +0.1 | 30.8 | 46.0 | Black | Peak | -15.2 |
| 112 | 1.698M | 38.0 | +0.1 | 38.1 | 46.0 | Black | Peak | -7.9 |
| 113 | 2.038M | 22.5 | +0.1 | 22.6 | 46.0 | Black | Peak | -23.4 |
| 114 | 2.098M | 23.4 | +0.1 | 23.5 | 46.0 | Black | Peak | -22.5 |
| 115 | 2.174M | 25.8 | +0.1 | 25.9 | 46.0 | Black | Peak | -20.1 |
| 116 | 2.191M | 22.8 | +0.1 | 22.9 | 46.0 | Black | Peak | -23.1 |
| 117 | 2.221M | 21.3 | +0.1 | 21.4 | 46.0 | Black | Peak | -24.6 |
| 118 | 2.259M | 27.2 | +0.1 | 27.3 | 46.0 | Black | Peak | -18.7 |
| 119 | 2.268M | 25.1 | +0.1 | 25.2 | 46.0 | Black | Peak | -20.8 |
| 120 | 2.323M | 26.5 | +0.1 | 26.6 | 46.0 | Black | Peak | -19.4 |
| 121 | 2.340M | 28.3 | +0.1 | 28.4 | 46.0 | Black | Peak | -17.6 |
| 122 | 2.378M | 29.0 | +0.1 | 29.1 | 46.0 | Black | Peak | -16.9 |
| 123 | 2.391M | 28.2 | +0.1 | 28.3 | 46.0 | Black | Peak | -17.7 |
| 124 | 2.455M | 28.8 | +0.1 | 28.9 | 46.0 | Black | Peak | -17.1 |
| 125 | 2.506M | 27.5 | +0.1 | 27.6 | 46.0 | Black | Peak | -18.4 |
| 126 | 2.714M | 22.7 | +0.1 | 22.8 | 46.0 | Black | Peak | -23.2 |
| 127 | 2.889M | 21.3 | +0.1 | 21.4 | 46.0 | Black | Peak | -24.6 |
| 128 | 4.203M | 20.8 | +0.1 | 20.9 | 46.0 | Black | Peak | -25.1 |
| 129 | 4.628M | 25.4 | +0.1 | 25.5 | 46.0 | Black | Peak | -20.5 |
| 130 | 4.934M | 23.0 | +0.1 | 23.1 | 46.0 | Black | Peak | -22.9 |
| 131 | 6.904M | 25.0 | +0.2 | 25.2 | 50.0 | Black | Peak | -24.8 |
| 132 | 6.967M | 25.7 | +0.2 | 25.9 | 50.0 | Black | Peak | -24.1 |
| 133 | 7.039M | 27.2 | +0.2 | 27.4 | 50.0 | Black | Peak | -22.6 |
| 134 | 7.093M | 24.6 | +0.2 | 24.8 | 50.0 | Black | Peak | -25.2 |
| 135 | 7.165M | 26.6 | +0.2 | 26.8 | 50.0 | Black | Peak | -23.2 |
| 136 | 7.300M | 28.3 | +0.2 | 28.5 | 50.0 | Black | Peak | -21.5 |
| 137 | 7.363M | 26.1 | +0.2 | 26.3 | 50.0 | Black | Peak | -23.7 |
| 138 | 7.426M | 28.4 | +0.2 | 28.6 | 50.0 | Black | Peak | -21.4 |
| 139 | 7.489M | 42.8 | +0.2 | 43.0 | 50.0 | Black | Peak | -7.0 |
| 140 | 7.751M | 24.6 | +0.2 | 24.8 | 50.0 | Black | Peak | -25.2 |
| 141 | 9.066M | 26.1 | +0.2 | 26.3 | 50.0 | Black | Peak | -23.7 |
| 142 | 9.138M | 26.8 | +0.2 | 27.0 | 50.0 | Black | Peak | -23.0 |
| 143 | 9.192M | 26.2 | +0.2 | 26.4 | 50.0 | Black | Peak | -23.6 |
| 144 | 9.309M | 26.7 | +0.2 | 26.9 | 50.0 | Black | Peak | -23.1 |
| 145 | 9.534M | 27.0 | +0.2 | 27.2 | 50.0 | Black | Peak | -22.8 |
| 146 | 9.643M | 25.1 | +0.2 | 25.3 | 50.0 | Black | Peak | -24.7 |
| 147 | 9.670M | 24.8 | +0.2 | 25.0 | 50.0 | Black | Peak | -25.0 |
| 148 | 9.886M | 26.2 | +0.2 | 26.4 | 50.0 | Black | Peak | -23.6 |
| 149 | 9.985M | 39.6 | +0.2 | 39.8 | 50.0 | Black | Peak | -10.2 |
| 150 | 10.066M | 25.2 | +0.2 | 25.4 | 50.0 | Black | Peak | -24.6 |
| 151 | 10.264M | 25.8 | +0.2 | 26.0 | 50.0 | Black | Peak | -24.0 |
| 152 | 10.381M | 25.0 | +0.2 | 25.2 | 50.0 | Black | Peak | -24.8 |
| 153 | 10.462M | 27.1 | +0.2 | 27.3 | 50.0 | Black | Peak | -22.7 |
| 154 | 10.507M | 31.5 | +0.2 | 31.7 | 50.0 | Black | Peak | -18.3 |
| 155 | 10.597M | 27.7 | +0.2 | 27.9 | 50.0 | Black | Peak | -22.1 |
| 156 | 10.796M | 27.8 | +0.3 | 28.1 | 50.0 | Black | Peak | -21.9 |
| 157 | 11.030M | 26.6 | +0.3 | 26.9 | 50.0 | Black | Peak | -23.1 |
| 158 | 11.228M | 33.7 | +0.3 | 34.0 | 50.0 | Black | Peak | -16.0 |
| 159 | 11.309M | 42.1 | +0.3 | 42.4 | 50.0 | Black | Peak | -7.6 |
| 160 | 11.381M | 28.4 | +0.3 | 28.7 | 50.0 | Black | Peak | -21.3 |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 11.444M | 26.4 | +0.3 | | | | | 26.7 | 50.0 | | | Black | Peak | **-23.3** |
| 162 | 11.561M | 28.0 | +0.3 | | | | | 28.3 | 50.0 | | | Black | Peak | **-21.7** |
| 163 | 11.688M | 35.0 | +0.3 | | | | | 35.3 | 50.0 | | | Black | Peak | **-14.7** |
| 164 | 11.769M | 31.7 | +0.3 | | | | | 32.0 | 50.0 | | | Black | Peak | **-18.0** |
| 165 | 11.841M | 40.7 | +0.3 | | | | | 41.0 | 50.0 | | | Black | Peak | **-9.0** |
| 166 | 11.877M | 41.0 | +0.3 | | | | | 41.3 | 50.0 | | | Black | Peak | **-8.7** |
| 167 | 11.940M | 45.8 | +0.3 | | | | | 46.1 | 50.0 | | | Black | Peak | **-3.9** |
| 168 | 12.039M | 32.0 | +0.3 | | | | | 32.3 | 50.0 | | | Black | Peak | **-17.7** |
| 169 | 12.075M | 31.7 | +0.3 | | | | | 32.0 | 50.0 | | | Black | Peak | **-18.0** |
| 170 | 12.165M | 25.6 | +0.3 | | | | | 25.9 | 50.0 | | | Black | Peak | **-24.1** |
| 171 | 12.219M | 24.9 | +0.3 | | | | | 25.2 | 50.0 | | | Black | Peak | **-24.8** |
| 172 | 12.805M | 25.7 | +0.4 | | | | | 26.1 | 50.0 | | | Black | Peak | **-23.9** |
| 173 | 13.318M | 24.4 | +0.4 | | | | | 24.8 | 50.0 | | | Black | Peak | **-25.2** |
| 174 | 13.471M | 25.4 | +0.4 | | | | | 25.8 | 50.0 | | | Black | Peak | **-24.2** |
| 175 | 13.588M | 30.9 | +0.5 | | | | | 31.4 | 50.0 | | | Black | Peak | **-18.6** |
| 176 | 13.715M | 36.8 | +0.5 | | | | | 37.3 | 50.0 | | | Black | Peak | **-12.7** |
| 177 | 13.760M | 38.6 | +0.5 | | | | | 39.1 | 50.0 | | | Black | Peak | **-10.9** |
| 178 | 13.886M | 25.4 | +0.5 | | | | | 25.9 | 50.0 | | | Black | Peak | **-24.1** |
| 179 | 13.994M | 24.7 | +0.5 | | | | | 25.2 | 50.0 | | | Black | Peak | **-24.8** |
| 180 | 14.021M | 24.3 | +0.5 | | | | | 24.8 | 50.0 | | | Black | Peak | **-25.2** |
| 181 | 14.129M | 25.0 | +0.6 | | | | | 25.6 | 50.0 | | | Black | Peak | **-24.4** |
| 182 | 14.165M | 24.5 | +0.6 | | | | | 25.1 | 50.0 | | | Black | Peak | **-24.9** |
| 183 | 14.354M | 24.2 | +0.6 | | | | | 24.8 | 50.0 | | | Black | Peak | **-25.2** |
| 184 | 15.138M | 32.9 | +0.6 | | | | | 33.5 | 50.0 | | | Black | Peak | **-16.5** |
| 185 | 15.219M | 35.2 | +0.6 | | | | | 35.8 | 50.0 | | | Black | Peak | **-14.2** |
| 186 | 16.183M | 26.2 | +0.6 | | | | | 26.8 | 50.0 | | | Black | Peak | **-23.2** |
| 187 | 17.805M | 32.3 | +0.6 | | | | | 32.9 | 50.0 | | | Black | Peak | **-17.1** |
| 188 | 21.210M | 24.6 | +0.9 | | | | | 25.5 | 50.0 | | | Black | Peak | **-24.5** |
| 189 | 21.291M | 23.6 | +0.9 | | | | | 24.5 | 50.0 | | | Black | Peak | **-25.5** |
| 190 | 21.561M | 26.4 | +1.0 | | | | | 27.4 | 50.0 | | | Black | Peak | **-22.6** |
| 191 | 21.670M | 26.5 | +1.0 | | | | | 27.5 | 50.0 | | | Black | Peak | **-22.5** |
| 192 | 21.724M | 25.7 | +1.0 | | | | | 26.7 | 50.0 | | | Black | Peak | **-23.3** |
| 193 | 23.332M | 25.0 | +1.2 | | | | | 26.2 | 50.0 | | | Black | Peak | **-23.8** |
| 194 | 23.462M | 24.9 | +1.2 | | | | | 26.1 | 50.0 | | | Black | Peak | **-23.9** |
| 195 | 23.935M | 31.3 | +1.2 | | | | | 32.5 | 50.0 | | | Black | Peak | **-17.5** |
| 196 | 24.058M | 31.1 | +1.2 | | | | | 32.3 | 50.0 | | | Black | Peak | **-17.7** |
| 197 | 24.120M | 31.2 | +1.2 | | | | | 32.4 | 50.0 | | | Black | Peak | **-17.6** |
| 198 | 24.538M | 23.4 | +1.2 | | | | | 24.6 | 50.0 | | | Black | Peak | **-25.4** |
| 199 | 24.655M | 23.6 | +1.2 | | | | | 24.8 | 50.0 | | | Black | Peak | **-25.2** |
| 200 | 24.716M | 23.6 | +1.2 | | | | | 24.8 | 50.0 | | | Black | Peak | **-25.2** |

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B Conducted Ave

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Conducted Emissions | Time: | 11:51:17 |
| Equipment: | Voting Device | Sequence: | 2 |
| Manufacturer: | UNISYN | Tested By: | J. Smith J Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |
| Voltage: | 120V 60Hz | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900407 |
| UPS | Entrust | ETR1500 | 0900268 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***

Neutral Active

***Transducer Legend:***

T1=LISN Wyle #110238 N

***Measurement Data:*** Readings listed by frequency. Test Lead: White

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 150.980k | 54.2 | +1.5 | | | | | 55.7 | 55.9 | | | White | QP | **-0.2** |
| 2 | 153.636k | 59.8 | +1.5 | | | | | 61.3 | 55.8 | | | White | Peak | **+5.5** |
| 3 | 157.272k | 62.8 | +1.4 | | | | | 64.2 | 55.6 | | | White | Peak | **+8.6** |
| 4 | 158.380k | 53.0 | +1.4 | | | | | 54.4 | 55.5 | | | White | QP | **-1.1** |
| 5 | 159.600k | 52.4 | +1.4 | | | | | 53.8 | 55.5 | | | White | QP | **-1.7** |
| 6 | 160.908k | 58.8 | +1.4 | | | | | 60.2 | 55.4 | | | White | Peak | **+4.8** |
| 7 | 167.453k | 61.6 | +1.2 | | | | | 62.8 | 55.1 | | | White | Peak | **+7.7** |
| 8 | 170.980k | 51.4 | +1.2 | | | | | 52.6 | 54.9 | | | White | QP | **-2.3** |
| 9 | 179.815k | 59.7 | +1.1 | | | | | 60.8 | 54.5 | | | White | Peak | **+6.3** |
| 10 | 183.980k | 49.1 | +1.1 | | | | | 50.2 | 54.3 | | | White | QP | **-4.1** |
| 11 | 190.480k | 49.3 | +1.0 | | | | | 50.3 | 54.0 | | | White | QP | **-3.7** |
| 12 | 192.178k | 56.4 | +1.0 | | | | | 57.4 | 53.9 | | | White | Peak | **+3.5** |
| 13 | 193.100k | 48.6 | +1.0 | | | | | 49.6 | 53.9 | | | White | QP | **-4.3** |
| 14 | 193.632k | 55.3 | +1.0 | | | | | 56.3 | 53.9 | | | White | Peak | **+2.4** |
| 15 | 195.860k | 47.3 | +1.0 | | | | | 48.3 | 53.8 | | | White | QP | **-5.5** |
| 16 | 203.086k | 54.9 | +1.0 | | | | | 55.9 | 53.5 | | | White | Peak | **+2.4** |
| 17 | 728.800k | 44.6 | +0.1 | | | | | 44.7 | 46.0 | | | White | Ave | **-1.3** |
| 18 | 728.840k | 48.5 | +0.1 | | | | | 48.6 | 46.0 | | | White | QP | **+2.6** |
| 19 | 729.578k | 51.7 | +0.1 | | | | | 51.8 | 46.0 | | | White | Peak | **+5.8** |
| 20 | 768.120k | 46.9 | +0.1 | | | | | 47.0 | 46.0 | | | White | Peak | **+1.0** |
| 21 | 771.140k | 45.8 | +0.1 | | | | | 45.9 | 46.0 | | | White | QP | **-0.1** |

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B Conducted Ave

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Conducted Emissions | Time: | 11:47:05 |
| Equipment: | Voting Device | Sequence: | 2 |
| Manufacturer: | UNISYN | Tested By: | J. Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |
| Voltage: | 120V 60Hz | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900407 |
| UPS | Entrust | ETR1500 | 0900268 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***
Neutral Active

***Transducer Legend:***
T1=LISN Wyle #110238 N

***Measurement Data:*** Readings listed by frequency. Test Lead: White

| # | Freq | Rdng dBµV | T1 | Corr dBµV | Spec dBµV | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|
| 1 | 153.636k | 59.8 | +1.5 | 61.3 | 55.8 | White | Peak | +5.5 |
| 2 | 157.272k | 62.8 | +1.4 | 64.2 | 55.6 | White | Peak | +8.6 |
| 3 | 160.908k | 58.8 | +1.4 | 60.2 | 55.4 | White | Peak | +4.8 |
| 4 | 167.453k | 61.6 | +1.2 | 62.8 | 55.1 | White | Peak | +7.7 |
| 5 | 179.815k | 59.7 | +1.1 | 60.8 | 54.5 | White | Peak | +6.3 |
| 6 | 192.178k | 56.4 | +1.0 | 57.4 | 53.9 | White | Peak | +3.5 |
| 7 | 193.632k | 55.3 | +1.0 | 56.3 | 53.9 | White | Peak | +2.4 |
| 8 | 203.086k | 54.9 | +1.0 | 55.9 | 53.5 | White | Peak | +2.4 |
| 9 | 215.448k | 51.4 | +0.9 | 52.3 | 53.0 | White | Peak | -0.7 |
| 10 | 220.538k | 49.9 | +0.9 | 50.8 | 52.8 | White | Peak | -2.0 |
| 11 | 225.629k | 50.7 | +0.9 | 51.6 | 52.6 | White | Peak | -1.0 |
| 12 | 238.718k | 49.9 | +0.8 | 50.7 | 52.1 | White | Peak | -1.4 |
| 13 | 244.536k | 50.0 | +0.8 | 50.8 | 51.9 | White | Peak | -1.1 |
| 14 | 253.990k | 49.4 | +0.8 | 50.2 | 51.6 | White | Peak | -1.4 |
| 15 | 261.262k | 47.9 | +0.7 | 48.6 | 51.4 | White | Peak | -2.8 |
| 16 | 264.898k | 47.8 | +0.7 | 48.5 | 51.3 | White | Peak | -2.8 |
| 17 | 272.170k | 46.8 | +0.7 | 47.5 | 51.1 | White | Peak | -3.6 |
| 18 | 282.350k | 45.5 | +0.7 | 46.2 | 50.7 | White | Peak | -4.5 |
| 19 | 287.441k | 45.5 | +0.6 | 46.1 | 50.6 | White | Peak | -4.5 |
| 20 | 291.804k | 45.1 | +0.6 | 45.7 | 50.5 | White | Peak | -4.8 |
| 21 | 296.167k | 45.4 | +0.6 | 46.0 | 50.3 | White | Peak | -4.3 |
| 22 | 299.803k | 41.7 | +0.6 | 42.3 | 50.2 | White | Peak | -7.9 |
| 23 | 307.075k | 44.4 | +0.6 | 45.0 | 50.0 | White | Peak | -5.0 |
| 24 | 311.438k | 43.9 | +0.6 | 44.5 | 49.9 | White | Peak | -5.4 |
| 25 | 320.165k | 41.3 | +0.5 | 41.8 | 49.7 | White | Peak | -7.9 |
| 26 | 330.346k | 43.4 | +0.5 | 43.9 | 49.4 | White | Peak | -5.5 |
| 27 | 335.436k | 42.0 | +0.5 | 42.5 | 49.3 | White | Peak | -6.8 |
| 28 | 344.162k | 44.6 | +0.5 | 45.1 | 49.1 | White | Peak | -4.0 |
| 29 | 348.526k | 43.1 | +0.4 | 43.5 | 49.0 | White | Peak | -5.5 |
| 30 | 352.162k | 40.8 | +0.4 | 41.2 | 48.9 | White | Peak | -7.7 |
| 31 | 359.434k | 42.1 | +0.4 | 42.5 | 48.7 | White | Peak | -6.2 |
| 32 | 365.251k | 41.4 | +0.4 | 41.8 | 48.6 | White | Peak | -6.8 |
| 33 | 368.160k | 41.9 | +0.4 | 42.3 | 48.5 | White | Peak | -6.2 |
| 34 | 379.068k | 39.3 | +0.4 | 39.7 | 48.3 | White | Peak | -8.6 |

Wyle Laboratories

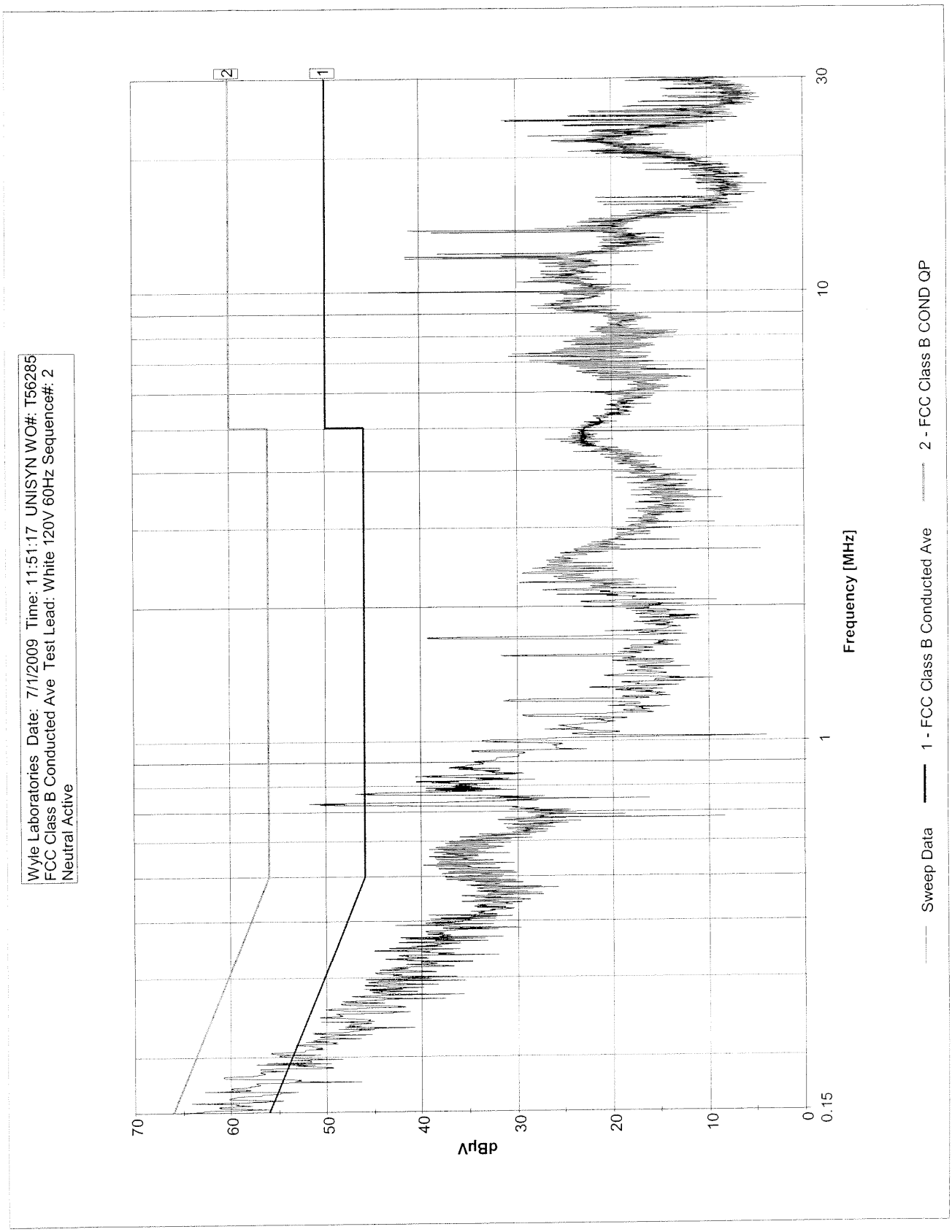
| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | 384.886k | 37.6 | +0.3 | | | | | 37.9 | 48.2 | | | White | Peak | **-10.3** |
| 36 | 391.430k | 42.6 | +0.3 | | | | | 42.9 | 48.0 | | | White | Peak | **-5.1** |
| 37 | 395.794k | 39.4 | +0.3 | | | | | 39.7 | 47.9 | | | White | Peak | **-8.2** |
| 38 | 403.793k | 38.9 | +0.3 | | | | | 39.2 | 47.8 | | | White | Peak | **-8.6** |
| 39 | 405.247k | 37.8 | +0.3 | | | | | 38.1 | 47.7 | | | White | Peak | **-9.6** |
| 40 | 411.792k | 39.1 | +0.3 | | | | | 39.4 | 47.6 | | | White | Peak | **-8.2** |
| 41 | 440.880k | 35.6 | +0.3 | | | | | 35.9 | 47.0 | | | White | Peak | **-11.1** |
| 42 | 448.152k | 33.3 | +0.3 | | | | | 33.6 | 46.9 | | | White | Peak | **-13.3** |
| 43 | 453.242k | 35.6 | +0.3 | | | | | 35.9 | 46.8 | | | White | Peak | **-10.9** |
| 44 | 458.333k | 32.9 | +0.3 | | | | | 33.2 | 46.7 | | | White | Peak | **-13.5** |
| 45 | 462.696k | 33.7 | +0.3 | | | | | 34.0 | 46.6 | | | White | Peak | **-12.6** |
| 46 | 464.150k | 34.1 | +0.3 | | | | | 34.4 | 46.6 | | | White | Peak | **-12.2** |
| 47 | 470.695k | 34.0 | +0.3 | | | | | 34.3 | 46.5 | | | White | Peak | **-12.2** |
| 48 | 474.331k | 33.3 | +0.3 | | | | | 33.6 | 46.4 | | | White | Peak | **-12.8** |
| 49 | 476.513k | 34.6 | +0.3 | | | | | 34.9 | 46.4 | | | White | Peak | **-11.5** |
| 50 | 478.694k | 35.1 | +0.3 | | | | | 35.4 | 46.4 | | | White | Peak | **-11.0** |
| 51 | 488.875k | 36.0 | +0.3 | | | | | 36.3 | 46.2 | | | White | Peak | **-9.9** |
| 52 | 492.511k | 37.3 | +0.2 | | | | | 37.5 | 46.1 | | | White | Peak | **-8.6** |
| 53 | 498.329k | 37.4 | +0.2 | | | | | 37.6 | 46.0 | | | White | Peak | **-8.4** |
| 54 | 501.965k | 36.0 | +0.2 | | | | | 36.2 | 46.0 | | | White | Peak | **-9.8** |
| 55 | 507.782k | 37.8 | +0.2 | | | | | 38.0 | 46.0 | | | White | Peak | **-8.0** |
| 56 | 511.418k | 37.1 | +0.2 | | | | | 37.3 | 46.0 | | | White | Peak | **-8.7** |
| 57 | 520.145k | 38.1 | +0.2 | | | | | 38.3 | 46.0 | | | White | Peak | **-7.7** |
| 58 | 526.690k | 38.4 | +0.2 | | | | | 38.6 | 46.0 | | | White | Peak | **-7.4** |
| 59 | 530.326k | 39.7 | +0.2 | | | | | 39.9 | 46.0 | | | White | Peak | **-6.1** |
| 60 | 533.234k | 38.3 | +0.2 | | | | | 38.5 | 46.0 | | | White | Peak | **-7.5** |
| 61 | 538.325k | 38.1 | +0.2 | | | | | 38.3 | 46.0 | | | White | Peak | **-7.7** |
| 62 | 545.597k | 38.4 | +0.2 | | | | | 38.6 | 46.0 | | | White | Peak | **-7.4** |
| 63 | 550.687k | 38.5 | +0.2 | | | | | 38.7 | 46.0 | | | White | Peak | **-7.3** |
| 64 | 553.596k | 39.1 | +0.2 | | | | | 39.3 | 46.0 | | | White | Peak | **-6.7** |
| 65 | 560.141k | 37.7 | +0.2 | | | | | 37.9 | 46.0 | | | White | Peak | **-8.1** |
| 66 | 565.231k | 38.6 | +0.2 | | | | | 38.8 | 46.0 | | | White | Peak | **-7.2** |
| 67 | 574.685k | 39.1 | +0.2 | | | | | 39.3 | 46.0 | | | White | Peak | **-6.7** |
| 68 | 579.775k | 38.4 | +0.2 | | | | | 38.6 | 46.0 | | | White | Peak | **-7.4** |
| 69 | 586.320k | 37.3 | +0.2 | | | | | 37.5 | 46.0 | | | White | Peak | **-8.5** |
| 70 | 592.865k | 37.4 | +0.2 | | | | | 37.6 | 46.0 | | | White | Peak | **-8.4** |
| 71 | 597.228k | 37.0 | +0.2 | | | | | 37.2 | 46.0 | | | White | Peak | **-8.8** |
| 72 | 606.682k | 34.2 | +0.2 | | | | | 34.4 | 46.0 | | | White | Peak | **-11.6** |
| 73 | 611.772k | 35.9 | +0.2 | | | | | 36.1 | 46.0 | | | White | Peak | **-9.9** |
| 74 | 641.587k | 31.0 | +0.2 | | | | | 31.2 | 46.0 | | | White | Peak | **-14.8** |
| 75 | 651.041k | 30.4 | +0.2 | | | | | 30.6 | 46.0 | | | White | Peak | **-15.4** |
| 76 | 653.222k | 31.3 | +0.2 | | | | | 31.5 | 46.0 | | | White | Peak | **-14.5** |
| 77 | 661.222k | 29.8 | +0.2 | | | | | 30.0 | 46.0 | | | White | Peak | **-16.0** |
| 78 | 669.948k | 31.9 | +0.2 | | | | | 32.1 | 46.0 | | | White | Peak | **-13.9** |
| 79 | 677.220k | 31.2 | +0.2 | | | | | 31.4 | 46.0 | | | White | Peak | **-14.6** |
| 80 | 679.402k | 28.4 | +0.2 | | | | | 28.6 | 46.0 | | | White | Peak | **-17.4** |
| 81 | 693.946k | 28.9 | +0.1 | | | | | 29.0 | 46.0 | | | White | Peak | **-17.0** |
| 82 | 707.035k | 30.8 | +0.1 | | | | | 30.9 | 46.0 | | | White | Peak | **-15.1** |
| 83 | 729.578k | 51.7 | +0.1 | | | | | 51.8 | 46.0 | | | White | Peak | **+5.8** |
| 84 | 741.941k | 31.1 | +0.1 | | | | | 31.2 | 46.0 | | | White | Peak | **-14.8** |
| 85 | 749.213k | 35.4 | +0.1 | | | | | 35.5 | 46.0 | | | White | Peak | **-10.5** |
| 86 | 755.030k | 32.3 | +0.1 | | | | | 32.4 | 46.0 | | | White | Peak | **-13.6** |
| 87 | 768.120k | 46.9 | +0.1 | | | | | 47.0 | 46.0 | | | White | Peak | **+1.0** |
| 88 | 779.755k | 39.5 | +0.1 | | | | | 39.6 | 46.0 | | | White | Peak | **-6.4** |
| 89 | 783.391k | 38.5 | +0.1 | | | | | 38.6 | 46.0 | | | White | Peak | **-7.4** |
| 90 | 789.209k | 39.5 | +0.1 | | | | | 39.6 | 46.0 | | | White | Peak | **-6.4** |
| 91 | 814.661k | 40.5 | +0.1 | | | | | 40.6 | 46.0 | | | White | Peak | **-5.4** |
| 92 | 837.204k | 40.6 | +0.1 | | | | | 40.7 | 46.0 | | | White | Peak | **-5.3** |
| 93 | 873.564k | 37.1 | +0.1 | | | | | 37.2 | 46.0 | | | White | Peak | **-8.8** |
| 94 | 877.000k | 37.0 | +0.1 | | | | | 37.1 | 46.0 | | | White | Peak | **-8.9** |
| 95 | 949.301k | 34.7 | +0.1 | | | | | 34.8 | 46.0 | | | White | Peak | **-11.2** |
| 96 | 1.000M | 33.6 | +0.1 | | | | | 33.7 | 46.0 | | | White | Peak | **-12.3** |
| 97 | 1.034M | 24.2 | +0.1 | | | | | 24.3 | 46.0 | | | White | Peak | **-21.7** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | Corr dBµV | Spec dBµV | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|
| 98 | 1.060M | 27.1 | +0.1 | 27.2 | 46.0 | White | Peak | -18.8 |
| 99 | 1.115M | 23.1 | +0.1 | 23.2 | 46.0 | White | Peak | -22.8 |
| 100 | 1.141M | 29.4 | +0.1 | 29.5 | 46.0 | White | Peak | -16.5 |
| 101 | 1.192M | 20.5 | +0.1 | 20.6 | 46.0 | White | Peak | -25.4 |
| 102 | 1.226M | 31.4 | +0.1 | 31.5 | 46.0 | White | Peak | -14.5 |
| 103 | 1.307M | 22.4 | +0.1 | 22.5 | 46.0 | White | Peak | -23.5 |
| 104 | 1.396M | 20.9 | +0.1 | 21.0 | 46.0 | White | Peak | -25.0 |
| 105 | 1.502M | 20.0 | +0.1 | 20.1 | 46.0 | White | Peak | -25.9 |
| 106 | 1.549M | 31.6 | +0.1 | 31.7 | 46.0 | White | Peak | -14.3 |
| 107 | 1.698M | 39.3 | +0.1 | 39.4 | 46.0 | White | Peak | -6.6 |
| 108 | 1.753M | 20.8 | +0.1 | 20.9 | 46.0 | White | Peak | -25.1 |
| 109 | 1.983M | 23.0 | +0.1 | 23.1 | 46.0 | White | Peak | -22.9 |
| 110 | 2.038M | 23.3 | +0.1 | 23.4 | 46.0 | White | Peak | -22.6 |
| 111 | 2.115M | 25.8 | +0.1 | 25.9 | 46.0 | White | Peak | -20.1 |
| 112 | 2.170M | 27.3 | +0.1 | 27.4 | 46.0 | White | Peak | -18.6 |
| 113 | 2.208M | 22.3 | +0.1 | 22.4 | 46.0 | White | Peak | -23.6 |
| 114 | 2.251M | 29.7 | +0.1 | 29.8 | 46.0 | White | Peak | -16.2 |
| 115 | 2.268M | 23.8 | +0.1 | 23.9 | 46.0 | White | Peak | -22.1 |
| 116 | 2.361M | 29.4 | +0.1 | 29.5 | 46.0 | White | Peak | -16.5 |
| 117 | 2.383M | 24.5 | +0.1 | 24.6 | 46.0 | White | Peak | -21.4 |
| 118 | 2.400M | 27.3 | +0.1 | 27.4 | 46.0 | White | Peak | -18.6 |
| 119 | 2.425M | 28.3 | +0.1 | 28.4 | 46.0 | White | Peak | -17.6 |
| 120 | 2.459M | 26.8 | +0.1 | 26.9 | 46.0 | White | Peak | -19.1 |
| 121 | 2.527M | 26.9 | +0.1 | 27.0 | 46.0 | White | Peak | -19.0 |
| 122 | 2.668M | 24.0 | +0.1 | 24.1 | 46.0 | White | Peak | -21.9 |
| 123 | 2.706M | 23.2 | +0.1 | 23.3 | 46.0 | White | Peak | -22.7 |
| 124 | 2.731M | 22.6 | +0.1 | 22.7 | 46.0 | White | Peak | -23.3 |
| 125 | 2.808M | 20.4 | +0.1 | 20.5 | 46.0 | White | Peak | -25.5 |
| 126 | 2.965M | 20.1 | +0.1 | 20.2 | 46.0 | White | Peak | -25.8 |
| 127 | 3.965M | 19.8 | +0.1 | 19.9 | 46.0 | White | Peak | -26.1 |
| 128 | 4.258M | 20.7 | +0.1 | 20.8 | 46.0 | White | Peak | -25.2 |
| 129 | 4.330M | 21.2 | +0.1 | 21.3 | 46.0 | White | Peak | -24.7 |
| 130 | 4.390M | 24.0 | +0.1 | 24.1 | 46.0 | White | Peak | -21.9 |
| 131 | 4.590M | 24.4 | +0.1 | 24.5 | 46.0 | White | Peak | -21.5 |
| 132 | 4.632M | 25.3 | +0.1 | 25.4 | 46.0 | White | Peak | -20.6 |
| 133 | 4.688M | 26.9 | +0.1 | 27.0 | 46.0 | White | Peak | -19.0 |
| 134 | 4.922M | 24.2 | +0.1 | 24.3 | 46.0 | White | Peak | -21.7 |
| 135 | 5.994M | 24.1 | +0.1 | 24.2 | 50.0 | White | Peak | -25.8 |
| 136 | 6.823M | 24.4 | +0.1 | 24.5 | 50.0 | White | Peak | -25.5 |
| 137 | 6.904M | 25.6 | +0.1 | 25.7 | 50.0 | White | Peak | -24.3 |
| 138 | 6.967M | 26.9 | +0.1 | 27.0 | 50.0 | White | Peak | -23.0 |
| 139 | 7.039M | 28.5 | +0.1 | 28.6 | 50.0 | White | Peak | -21.4 |
| 140 | 7.156M | 25.2 | +0.1 | 25.3 | 50.0 | White | Peak | -24.7 |
| 141 | 7.192M | 30.7 | +0.1 | 30.8 | 50.0 | White | Peak | -19.2 |
| 142 | 7.291M | 30.3 | +0.1 | 30.4 | 50.0 | White | Peak | -19.6 |
| 143 | 7.309M | 28.6 | +0.1 | 28.7 | 50.0 | White | Peak | -21.3 |
| 144 | 7.354M | 26.2 | +0.1 | 26.3 | 50.0 | White | Peak | -23.7 |
| 145 | 7.417M | 25.8 | +0.1 | 25.9 | 50.0 | White | Peak | -24.1 |
| 146 | 7.480M | 24.9 | +0.1 | 25.0 | 50.0 | White | Peak | -25.0 |
| 147 | 7.615M | 24.1 | +0.2 | 24.3 | 50.0 | White | Peak | -25.7 |
| 148 | 7.643M | 23.6 | +0.2 | 23.8 | 50.0 | White | Peak | -26.2 |
| 149 | 7.679M | 23.6 | +0.2 | 23.8 | 50.0 | White | Peak | -26.2 |
| 150 | 7.751M | 24.9 | +0.2 | 25.1 | 50.0 | White | Peak | -24.9 |
| 151 | 7.814M | 24.0 | +0.2 | 24.2 | 50.0 | White | Peak | -25.8 |
| 152 | 7.877M | 23.6 | +0.2 | 23.8 | 50.0 | White | Peak | -26.2 |
| 153 | 9.075M | 25.6 | +0.2 | 25.8 | 50.0 | White | Peak | -24.2 |
| 154 | 9.183M | 27.5 | +0.2 | 27.7 | 50.0 | White | Peak | -22.3 |
| 155 | 9.228M | 25.2 | +0.2 | 25.4 | 50.0 | White | Peak | -24.6 |
| 156 | 9.291M | 28.2 | +0.2 | 28.4 | 50.0 | White | Peak | -21.6 |
| 157 | 9.877M | 27.3 | +0.2 | 27.5 | 50.0 | White | Peak | -22.5 |
| 158 | 9.985M | 45.2 | +0.2 | 45.4 | 50.0 | White | Peak | -4.6 |
| 159 | 10.048M | 25.0 | +0.2 | 25.2 | 50.0 | White | Peak | -24.8 |
| 160 | 10.147M | 23.8 | +0.2 | 24.0 | 50.0 | White | Peak | -26.0 |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 10.480M | 29.1 | +0.2 | | | | | 29.3 | 50.0 | | | White | Peak | **-20.7** |
| 162 | 10.498M | 29.7 | +0.2 | | | | | 29.9 | 50.0 | | | White | Peak | **-20.1** |
| 163 | 10.570M | 28.0 | +0.2 | | | | | 28.2 | 50.0 | | | White | Peak | **-21.8** |
| 164 | 10.715M | 28.3 | +0.2 | | | | | 28.5 | 50.0 | | | White | Peak | **-21.5** |
| 165 | 10.769M | 27.0 | +0.2 | | | | | 27.2 | 50.0 | | | White | Peak | **-22.8** |
| 166 | 10.850M | 26.7 | +0.2 | | | | | 26.9 | 50.0 | | | White | Peak | **-23.1** |
| 167 | 10.904M | 27.2 | +0.2 | | | | | 27.4 | 50.0 | | | White | Peak | **-22.6** |
| 168 | 11.066M | 27.2 | +0.2 | | | | | 27.4 | 50.0 | | | White | Peak | **-22.6** |
| 169 | 11.336M | 26.7 | +0.2 | | | | | 26.9 | 50.0 | | | White | Peak | **-23.1** |
| 170 | 11.543M | 27.4 | +0.2 | | | | | 27.6 | 50.0 | | | White | Peak | **-22.4** |
| 171 | 11.615M | 25.3 | +0.2 | | | | | 25.5 | 50.0 | | | White | Peak | **-24.5** |
| 172 | 11.778M | 28.5 | +0.3 | | | | | 28.8 | 50.0 | | | White | Peak | **-21.2** |
| 173 | 11.832M | 41.3 | +0.3 | | | | | 41.6 | 50.0 | | | White | Peak | **-8.4** |
| 174 | 11.868M | 37.3 | +0.3 | | | | | 37.6 | 50.0 | | | White | Peak | **-12.4** |
| 175 | 11.931M | 41.3 | +0.3 | | | | | 41.6 | 50.0 | | | White | Peak | **-8.4** |
| 176 | 11.967M | 31.1 | +0.3 | | | | | 31.4 | 50.0 | | | White | Peak | **-18.6** |
| 177 | 12.030M | 31.3 | +0.3 | | | | | 31.6 | 50.0 | | | White | Peak | **-18.4** |
| 178 | 12.165M | 37.9 | +0.3 | | | | | 38.2 | 50.0 | | | White | Peak | **-11.8** |
| 179 | 13.570M | 38.4 | +0.4 | | | | | 38.8 | 50.0 | | | White | Peak | **-11.2** |
| 180 | 13.697M | 40.9 | +0.4 | | | | | 41.3 | 50.0 | | | White | Peak | **-8.7** |
| 181 | 13.823M | 27.6 | +0.4 | | | | | 28.0 | 50.0 | | | White | Peak | **-22.0** |
| 182 | 13.850M | 23.7 | +0.4 | | | | | 24.1 | 50.0 | | | White | Peak | **-25.9** |
| 183 | 13.958M | 24.3 | +0.4 | | | | | 24.7 | 50.0 | | | White | Peak | **-25.3** |
| 184 | 20.534M | 23.8 | +0.8 | | | | | 24.6 | 50.0 | | | White | Peak | **-25.4** |
| 185 | 21.516M | 24.3 | +0.7 | | | | | 25.0 | 50.0 | | | White | Peak | **-25.0** |
| 186 | 21.543M | 24.9 | +0.7 | | | | | 25.6 | 50.0 | | | White | Peak | **-24.4** |
| 187 | 21.661M | 25.6 | +0.7 | | | | | 26.3 | 50.0 | | | White | Peak | **-23.7** |
| 188 | 21.715M | 25.4 | +0.7 | | | | | 26.1 | 50.0 | | | White | Peak | **-23.9** |
| 189 | 21.841M | 24.3 | +0.7 | | | | | 25.0 | 50.0 | | | White | Peak | **-25.0** |
| 190 | 22.219M | 28.0 | +0.7 | | | | | 28.7 | 50.0 | | | White | Peak | **-21.3** |
| 191 | 23.339M | 24.1 | +0.8 | | | | | 24.9 | 50.0 | | | White | Peak | **-25.1** |
| 192 | 23.449M | 24.3 | +0.8 | | | | | 25.1 | 50.0 | | | White | Peak | **-24.9** |
| 193 | 23.497M | 23.4 | +0.8 | | | | | 24.2 | 50.0 | | | White | Peak | **-25.8** |
| 194 | 23.921M | 30.3 | +0.8 | | | | | 31.1 | 50.0 | | | White | Peak | **-18.9** |
| 195 | 24.045M | 30.7 | +0.8 | | | | | 31.5 | 50.0 | | | White | Peak | **-18.5** |
| 196 | 24.106M | 29.8 | +0.8 | | | | | 30.6 | 50.0 | | | White | Peak | **-19.4** |
| 197 | 24.524M | 23.6 | +0.9 | | | | | 24.5 | 50.0 | | | White | Peak | **-25.5** |
| 198 | 24.648M | 23.7 | +0.9 | | | | | 24.6 | 50.0 | | | White | Peak | **-25.4** |
| 199 | 24.709M | 23.5 | +0.9 | | | | | 24.4 | 50.0 | | | White | Peak | **-25.6** |


Wyle Laboratories Date: 7/1/2009 Time: 11:51:17 UNISYN WO#: T56285
FCC Class B Conducted Ave Test Lead: White 120V 60Hz Sequence#: 2
Neutral Active
2
1
70
60
50
40
30
20
10
0
dBµV
0.15
1
10
30
Frequency [MHz]
Sweep Data
1 - FCC Class B Conducted Ave
2 - FCC Class B COND QP

wyle laboratories

Wyle Laboratories

Customer: UNISYN
Specification: FCC Class B Conducted Ave

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Conducted Emissions | Time: | 1:59:38 PM |
| Equipment: | Voting Device | Sequence: | 3 |
| Manufacturer: | UNISYN | Tested By: | J. Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |
| Voltage: | 120V 60Hz | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900407 |
| UPS | Entrust | ETR1500 | 0900268 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***
Line Ambient

***Transducer Legend:***
T1=LISN Wyle #110238 L

***Measurement Data:*** Readings listed by frequency. Test Lead: Black

| # | Freq | Rdng dBµV | T1 | Corr dBµV | Spec dBµV | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|
| 1 | 151.454k | 16.4 | +1.5 | 17.9 | 55.9 | Black | Peak | **-38.0** |
| 2 | 167.453k | 11.4 | +1.3 | 12.7 | 55.1 | Black | Peak | **-42.4** |
| 3 | 215.448k | 15.4 | +0.9 | 16.3 | 53.0 | Black | Peak | **-36.7** |
| 4 | 253.990k | 13.2 | +0.8 | 14.0 | 51.6 | Black | Peak | **-37.6** |
| 5 | 269.261k | 14.6 | +0.7 | 15.3 | 51.1 | Black | Peak | **-35.8** |
| 6 | 279.442k | 11.6 | +0.7 | 12.3 | 50.8 | Black | Peak | **-38.5** |
| 7 | 302.712k | 15.2 | +0.6 | 15.8 | 50.2 | Black | Peak | **-34.4** |
| 8 | 335.436k | 9.6 | +0.5 | 10.1 | 49.3 | Black | Peak | **-39.2** |
| 9 | 344.890k | 8.4 | +0.4 | 8.8 | 49.1 | Black | Peak | **-40.3** |
| 10 | 349.253k | 6.6 | +0.4 | 7.0 | 49.0 | Black | Peak | **-42.0** |
| 11 | 355.070k | 7.2 | +0.4 | 7.6 | 48.8 | Black | Peak | **-41.2** |
| 12 | 372.523k | 6.7 | +0.4 | 7.1 | 48.4 | Black | Peak | **-41.3** |
| 13 | 407.429k | 7.8 | +0.3 | 8.1 | 47.7 | Black | Peak | **-39.6** |
| 14 | 430.699k | 5.9 | +0.3 | 6.2 | 47.2 | Black | Peak | **-41.0** |
| 15 | 440.880k | 5.8 | +0.3 | 6.1 | 47.0 | Black | Peak | **-40.9** |
| 16 | 471.422k | 7.7 | +0.3 | 8.0 | 46.5 | Black | Peak | **-38.5** |
| 17 | 515.782k | 7.4 | +0.2 | 7.6 | 46.0 | Black | Peak | **-38.4** |
| 18 | 529.598k | 5.3 | +0.2 | 5.5 | 46.0 | Black | Peak | **-40.5** |
| 19 | 535.416k | 5.4 | +0.2 | 5.6 | 46.0 | Black | Peak | **-40.4** |
| 20 | 564.504k | 5.7 | +0.2 | 5.9 | 46.0 | Black | Peak | **-40.1** |
| 21 | 579.048k | 5.3 | +0.2 | 5.5 | 46.0 | Black | Peak | **-40.5** |
| 22 | 583.411k | 5.5 | +0.2 | 5.7 | 46.0 | Black | Peak | **-40.3** |
| 23 | 605.954k | 6.2 | +0.2 | 6.4 | 46.0 | Black | Peak | **-39.6** |
| 24 | 629.952k | 5.5 | +0.2 | 5.7 | 46.0 | Black | Peak | **-40.3** |
| 25 | 635.770k | 5.1 | +0.2 | 5.3 | 46.0 | Black | Peak | **-40.7** |
| 26 | 652.495k | 5.4 | +0.2 | 5.6 | 46.0 | Black | Peak | **-40.4** |
| 27 | 666.312k | 5.1 | +0.2 | 5.3 | 46.0 | Black | Peak | **-40.7** |
| 28 | 671.402k | 5.6 | +0.2 | 5.8 | 46.0 | Black | Peak | **-40.2** |
| 29 | 677.220k | 5.8 | +0.2 | 6.0 | 46.0 | Black | Peak | **-40.0** |
| 30 | 680.129k | 6.4 | +0.2 | 6.6 | 46.0 | Black | Peak | **-39.4** |
| 31 | 709.944k | 6.1 | +0.1 | 6.2 | 46.0 | Black | Peak | **-39.8** |
| 32 | 726.670k | 14.5 | +0.1 | 14.6 | 46.0 | Black | Peak | **-31.4** |
| 33 | 743.395k | 6.2 | +0.1 | 6.3 | 46.0 | Black | Peak | **-39.7** |
| 34 | 757.939k | 5.6 | +0.1 | 5.7 | 46.0 | Black | Peak | **-40.3** |

Wyle Laboratories

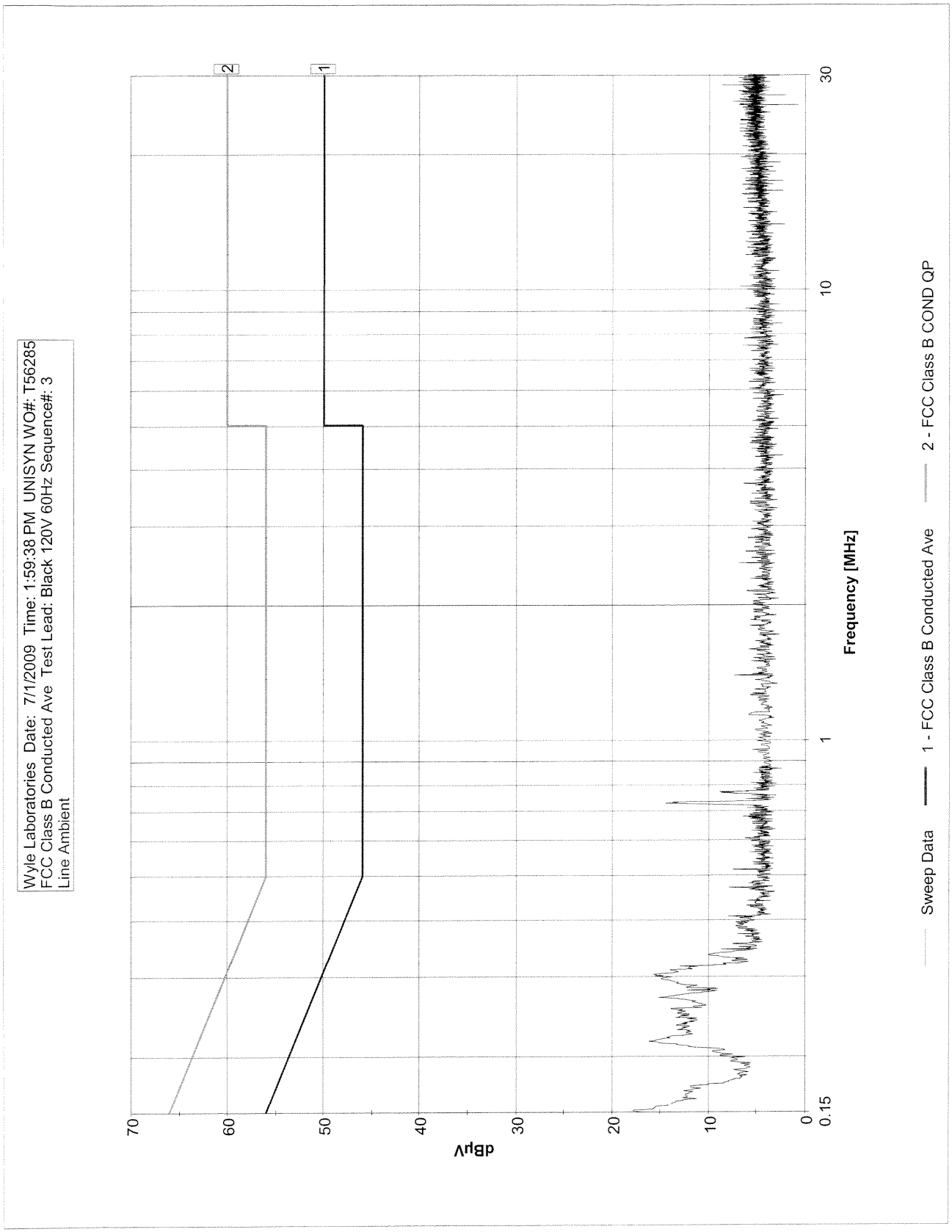
| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | 770.302k | 8.9 | +0.1 | | | | | 9.0 | 46.0 | | | Black | Peak | **-37.0** |
| 36 | 805.934k | 5.7 | +0.1 | | | | | 5.8 | 46.0 | | | Black | Peak | **-40.2** |
| 37 | 848.112k | 5.5 | +0.1 | | | | | 5.6 | 46.0 | | | Black | Peak | **-40.4** |
| 38 | 953.554k | 5.5 | +0.1 | | | | | 5.6 | 46.0 | | | Black | Peak | **-40.4** |
| 39 | 1.136M | 5.9 | +0.1 | | | | | 6.0 | 46.0 | | | Black | Peak | **-40.0** |
| 40 | 1.256M | 5.7 | +0.1 | | | | | 5.8 | 46.0 | | | Black | Peak | **-40.2** |
| 41 | 1.396M | 7.4 | +0.1 | | | | | 7.5 | 46.0 | | | Black | Peak | **-38.5** |
| 42 | 1.404M | 5.5 | +0.1 | | | | | 5.6 | 46.0 | | | Black | Peak | **-40.4** |
| 43 | 1.498M | 5.6 | +0.1 | | | | | 5.7 | 46.0 | | | Black | Peak | **-40.3** |
| 44 | 1.523M | 5.4 | +0.1 | | | | | 5.5 | 46.0 | | | Black | Peak | **-40.5** |
| 45 | 1.549M | 5.1 | +0.1 | | | | | 5.2 | 46.0 | | | Black | Peak | **-40.8** |
| 46 | 1.592M | 5.9 | +0.1 | | | | | 6.0 | 46.0 | | | Black | Peak | **-40.0** |
| 47 | 1.660M | 5.2 | +0.1 | | | | | 5.3 | 46.0 | | | Black | Peak | **-40.7** |
| 48 | 1.796M | 5.8 | +0.1 | | | | | 5.9 | 46.0 | | | Black | Peak | **-40.1** |
| 49 | 1.847M | 5.7 | +0.1 | | | | | 5.8 | 46.0 | | | Black | Peak | **-40.2** |
| 50 | 2.140M | 6.1 | +0.1 | | | | | 6.2 | 46.0 | | | Black | Peak | **-39.8** |
| 51 | 2.195M | 5.0 | +0.1 | | | | | 5.1 | 46.0 | | | Black | Peak | **-40.9** |
| 52 | 2.280M | 5.7 | +0.1 | | | | | 5.8 | 46.0 | | | Black | Peak | **-40.2** |
| 53 | 2.468M | 6.9 | +0.1 | | | | | 7.0 | 46.0 | | | Black | Peak | **-39.0** |
| 54 | 2.531M | 5.6 | +0.1 | | | | | 5.7 | 46.0 | | | Black | Peak | **-40.3** |
| 55 | 2.616M | 6.2 | +0.1 | | | | | 6.3 | 46.0 | | | Black | Peak | **-39.7** |
| 56 | 2.812M | 6.0 | +0.1 | | | | | 6.1 | 46.0 | | | Black | Peak | **-39.9** |
| 57 | 3.242M | 5.3 | +0.1 | | | | | 5.4 | 46.0 | | | Black | Peak | **-40.6** |
| 58 | 3.348M | 5.8 | +0.1 | | | | | 5.9 | 46.0 | | | Black | Peak | **-40.1** |
| 59 | 3.437M | 5.3 | +0.1 | | | | | 5.4 | 46.0 | | | Black | Peak | **-40.6** |
| 60 | 3.522M | 5.6 | +0.1 | | | | | 5.7 | 46.0 | | | Black | Peak | **-40.3** |
| 61 | 3.705M | 6.4 | +0.1 | | | | | 6.5 | 46.0 | | | Black | Peak | **-39.5** |
| 62 | 3.769M | 5.2 | +0.1 | | | | | 5.3 | 46.0 | | | Black | Peak | **-40.7** |
| 63 | 3.960M | 5.4 | +0.1 | | | | | 5.5 | 46.0 | | | Black | Peak | **-40.5** |
| 64 | 4.016M | 5.2 | +0.1 | | | | | 5.3 | 46.0 | | | Black | Peak | **-40.7** |
| 65 | 4.250M | 5.2 | +0.1 | | | | | 5.3 | 46.0 | | | Black | Peak | **-40.7** |
| 66 | 4.433M | 5.6 | +0.1 | | | | | 5.7 | 46.0 | | | Black | Peak | **-40.3** |
| 67 | 4.556M | 5.8 | +0.1 | | | | | 5.9 | 46.0 | | | Black | Peak | **-40.1** |
| 68 | 4.594M | 5.6 | +0.1 | | | | | 5.7 | 46.0 | | | Black | Peak | **-40.3** |
| 69 | 4.675M | 5.3 | +0.1 | | | | | 5.4 | 46.0 | | | Black | Peak | **-40.6** |
| 70 | 4.696M | 5.8 | +0.1 | | | | | 5.9 | 46.0 | | | Black | Peak | **-40.1** |
| 71 | 4.807M | 5.4 | +0.1 | | | | | 5.5 | 46.0 | | | Black | Peak | **-40.5** |
| 72 | 5.724M | 5.5 | +0.1 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 73 | 5.904M | 5.5 | +0.1 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 74 | 6.048M | 5.9 | +0.1 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 75 | 6.255M | 5.9 | +0.1 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 76 | 6.624M | 5.7 | +0.2 | | | | | 5.9 | 50.0 | | | Black | Peak | **-44.1** |
| 77 | 6.688M | 5.8 | +0.2 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 78 | 7.525M | 6.5 | +0.2 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 79 | 7.805M | 6.3 | +0.2 | | | | | 6.5 | 50.0 | | | Black | Peak | **-43.5** |
| 80 | 7.832M | 5.8 | +0.2 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 81 | 7.850M | 5.4 | +0.2 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 82 | 8.165M | 5.7 | +0.2 | | | | | 5.9 | 50.0 | | | Black | Peak | **-44.1** |
| 83 | 8.417M | 5.3 | +0.2 | | | | | 5.5 | 50.0 | | | Black | Peak | **-44.5** |
| 84 | 8.480M | 5.4 | +0.2 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 85 | 8.534M | 5.4 | +0.2 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 86 | 8.606M | 5.4 | +0.2 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 87 | 9.066M | 6.2 | +0.2 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 88 | 9.994M | 6.0 | +0.2 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 89 | 10.084M | 4.9 | +0.2 | | | | | 5.1 | 50.0 | | | Black | Peak | **-44.9** |
| 90 | 10.138M | 6.7 | +0.2 | | | | | 6.9 | 50.0 | | | Black | Peak | **-43.1** |
| 91 | 10.210M | 5.6 | +0.2 | | | | | 5.8 | 50.0 | | | Black | Peak | **-44.2** |
| 92 | 10.327M | 5.1 | +0.2 | | | | | 5.3 | 50.0 | | | Black | Peak | **-44.7** |
| 93 | 10.534M | 5.4 | +0.2 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 94 | 10.742M | 5.7 | +0.3 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 95 | 10.904M | 5.1 | +0.3 | | | | | 5.4 | 50.0 | | | Black | Peak | **-44.6** |
| 96 | 11.913M | 6.1 | +0.3 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 97 | 12.003M | 5.4 | +0.3 | | | | | 5.7 | 50.0 | | | Black | Peak | **-44.3** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98 | 12.102M | 5.2 | +0.3 | | | | | 5.5 | 50.0 | | | Black | Peak | **-44.5** |
| 99 | 12.156M | 5.6 | +0.3 | | | | | 5.9 | 50.0 | | | Black | Peak | **-44.1** |
| 100 | 12.237M | 5.3 | +0.3 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 101 | 12.399M | 5.9 | +0.3 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 102 | 12.561M | 5.5 | +0.3 | | | | | 5.8 | 50.0 | | | Black | Peak | **-44.2** |
| 103 | 12.643M | 5.3 | +0.3 | | | | | 5.6 | 50.0 | | | Black | Peak | **-44.4** |
| 104 | 12.769M | 6.0 | +0.4 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 105 | 12.994M | 5.6 | +0.4 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 106 | 13.210M | 5.3 | +0.4 | | | | | 5.7 | 50.0 | | | Black | Peak | **-44.3** |
| 107 | 13.417M | 5.9 | +0.4 | | | | | 6.3 | 50.0 | | | Black | Peak | **-43.7** |
| 108 | 13.435M | 5.6 | +0.4 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 109 | 13.922M | 5.4 | +0.5 | | | | | 5.9 | 50.0 | | | Black | Peak | **-44.1** |
| 110 | 13.994M | 4.7 | +0.5 | | | | | 5.2 | 50.0 | | | Black | Peak | **-44.8** |
| 111 | 14.201M | 5.5 | +0.6 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 112 | 14.742M | 5.5 | +0.6 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 113 | 15.192M | 6.0 | +0.6 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 114 | 15.624M | 5.5 | +0.6 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 115 | 15.733M | 5.5 | +0.6 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 116 | 15.913M | 5.6 | +0.6 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 117 | 16.246M | 6.0 | +0.6 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 118 | 16.318M | 6.2 | +0.6 | | | | | 6.8 | 50.0 | | | Black | Peak | **-43.2** |
| 119 | 16.390M | 5.4 | +0.6 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 120 | 16.670M | 5.8 | +0.6 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 121 | 16.787M | 5.6 | +0.6 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 122 | 16.967M | 5.4 | +0.6 | | | | | 6.0 | 50.0 | | | Black | Peak | **-44.0** |
| 123 | 17.084M | 6.1 | +0.6 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 124 | 17.381M | 5.7 | +0.6 | | | | | 6.3 | 50.0 | | | Black | Peak | **-43.7** |
| 125 | 17.426M | 5.8 | +0.6 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 126 | 17.643M | 5.8 | +0.6 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 127 | 17.715M | 5.1 | +0.6 | | | | | 5.7 | 50.0 | | | Black | Peak | **-44.3** |
| 128 | 17.922M | 5.3 | +0.6 | | | | | 5.9 | 50.0 | | | Black | Peak | **-44.1** |
| 129 | 18.210M | 5.6 | +0.6 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 130 | 18.282M | 5.8 | +0.6 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 131 | 18.516M | 6.2 | +0.6 | | | | | 6.8 | 50.0 | | | Black | Peak | **-43.2** |
| 132 | 19.615M | 6.2 | +0.7 | | | | | 6.9 | 50.0 | | | Black | Peak | **-43.1** |
| 133 | 19.733M | 5.7 | +0.7 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 134 | 20.724M | 5.8 | +0.9 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 135 | 21.399M | 5.3 | +1.0 | | | | | 6.3 | 50.0 | | | Black | Peak | **-43.7** |
| 136 | 21.453M | 5.1 | +1.0 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 137 | 21.633M | 5.1 | +1.0 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 138 | 21.751M | 5.6 | +1.0 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 139 | 22.030M | 5.3 | +1.1 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 140 | 22.345M | 5.9 | +1.1 | | | | | 7.0 | 50.0 | | | Black | Peak | **-43.0** |
| 141 | 22.715M | 5.9 | +1.1 | | | | | 7.0 | 50.0 | | | Black | Peak | **-43.0** |
| 142 | 23.627M | 5.7 | +1.2 | | | | | 6.9 | 50.0 | | | Black | Peak | **-43.1** |
| 143 | 24.696M | 5.0 | +1.2 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 144 | 24.764M | 5.1 | +1.2 | | | | | 6.3 | 50.0 | | | Black | Peak | **-43.7** |
| 145 | 24.956M | 5.3 | +1.2 | | | | | 6.5 | 50.0 | | | Black | Peak | **-43.5** |
| 146 | 25.155M | 5.2 | +1.2 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 147 | 25.306M | 5.5 | +1.2 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 148 | 25.340M | 5.0 | +1.2 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 149 | 25.361M | 5.4 | +1.2 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 150 | 25.635M | 5.9 | +1.2 | | | | | 7.1 | 50.0 | | | Black | Peak | **-42.9** |
| 151 | 26.101M | 6.5 | +1.2 | | | | | 7.7 | 50.0 | | | Black | Peak | **-42.3** |
| 152 | 26.176M | 5.1 | +1.2 | | | | | 6.3 | 50.0 | | | Black | Peak | **-43.7** |
| 153 | 26.293M | 5.5 | +1.2 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 154 | 26.416M | 5.8 | +1.2 | | | | | 7.0 | 50.0 | | | Black | Peak | **-43.0** |
| 155 | 27.074M | 5.7 | +1.2 | | | | | 6.9 | 50.0 | | | Black | Peak | **-43.1** |
| 156 | 27.204M | 5.3 | +1.2 | | | | | 6.5 | 50.0 | | | Black | Peak | **-43.5** |
| 157 | 27.355M | 5.5 | +1.2 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 158 | 27.430M | 5.4 | +1.2 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 159 | 27.464M | 5.6 | +1.2 | | | | | 6.8 | 50.0 | | | Black | Peak | **-43.2** |
| 160 | 27.567M | 5.9 | +1.2 | | | | | 7.1 | 50.0 | | | Black | Peak | **-42.9** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 27.588M | 4.9 | +1.2 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |
| 162 | 27.834M | 5.2 | +1.2 | | | | | 6.4 | 50.0 | | | Black | Peak | **-43.6** |
| 163 | 28.396M | 7.7 | +1.1 | | | | | 8.8 | 50.0 | | | Black | Peak | **-41.2** |
| 164 | 28.520M | 5.6 | +1.1 | | | | | 6.7 | 50.0 | | | Black | Peak | **-43.3** |
| 165 | 28.554M | 5.1 | +1.1 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 166 | 28.739M | 5.5 | +1.1 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 167 | 28.828M | 6.0 | +1.1 | | | | | 7.1 | 50.0 | | | Black | Peak | **-42.9** |
| 168 | 29.102M | 5.5 | +1.1 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 169 | 29.164M | 5.4 | +1.1 | | | | | 6.5 | 50.0 | | | Black | Peak | **-43.5** |
| 170 | 29.198M | 5.7 | +1.1 | | | | | 6.8 | 50.0 | | | Black | Peak | **-43.2** |
| 171 | 29.315M | 5.5 | +1.1 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 172 | 29.459M | 6.0 | +1.1 | | | | | 7.1 | 50.0 | | | Black | Peak | **-42.9** |
| 173 | 29.644M | 5.4 | +1.1 | | | | | 6.5 | 50.0 | | | Black | Peak | **-43.5** |
| 174 | 29.733M | 5.5 | +1.1 | | | | | 6.6 | 50.0 | | | Black | Peak | **-43.4** |
| 175 | 29.815M | 5.1 | +1.1 | | | | | 6.2 | 50.0 | | | Black | Peak | **-43.8** |
| 176 | 29.979M | 5.0 | +1.1 | | | | | 6.1 | 50.0 | | | Black | Peak | **-43.9** |


Wyle Laboratories Date: 7/1/2009 Time: 1:59:38 PM UNISYN WO#: T56285
FCC Class B Conducted Ave Test Lead: Black 120V 60Hz Sequence#: 3
Line Ambient
2
1
70
60
50
40
30
20
10
0
dBµV
0.15
1
10
30
Frequency [MHz]
Sweep Data
1 - FCC Class B Conducted Ave
2 - FCC Class B COND QP

Wyle Laboratories

wyle laboratories

Customer: UNISYN
Specification: FCC Class B Conducted Ave

| | | | |
|---|---|---|---|
| Work Order #: | T56285 | Date: | Wed Jul-01-2009 |
| Test Type: | Conducted Emissions | Time: | 2:14:01 PM |
| Equipment: | Voting Device | Sequence: | 4 |
| Manufacturer: | UNISYN | Tested By: | J. Smith J Smith 7-1-09 |
| Model: | Open Elect Voting Optical | | |
| S/N: | UNI000004 | | |
| Voltage: | 120V 60Hz | | |

***Equipment Under Test (* = EUT):***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| *Voting Device | UNISYN | Open Elect Voting Optical | UNI000004 |
| Interface | UNISYN | Open Elect Voting Interface | UNI150006 |
| UPS | Entrust | ETR1500 | 0900407 |
| UPS | Entrust | ETR1500 | 0900268 |

***Support Devices:***

| Function | Manufacturer | Model# | S/N |
|---|---|---|---|
| None | | | |

***Test Conditions / Notes:***
Neutral Ambient

***Transducer Legend:***
T1=LISN Wyle #110238 N

***Measurement Data:*** Readings listed by frequency. Test Lead: White

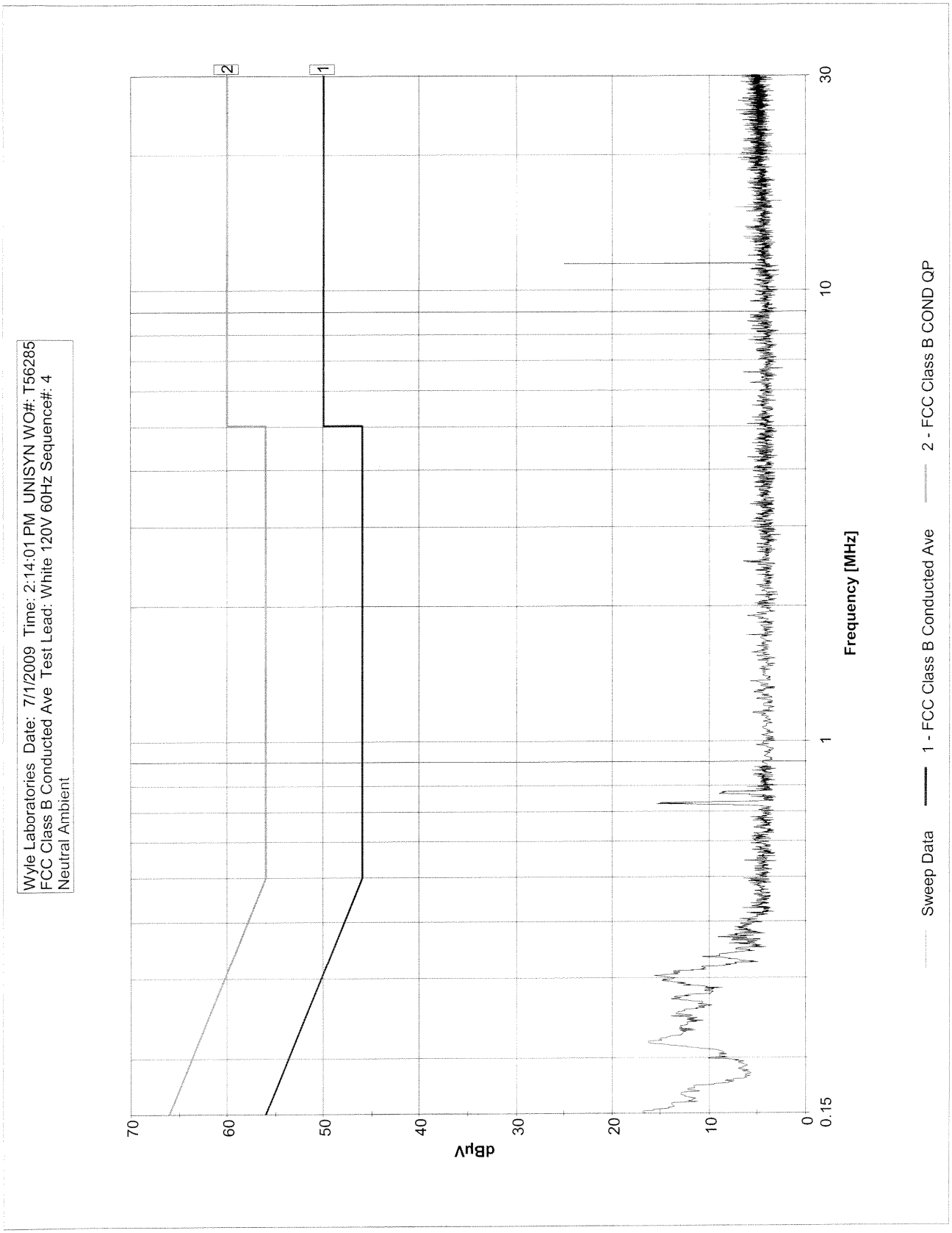
| # | Freq | Rdng dBµV | T1 | Corr dBµV | Spec dBµV | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|
| 1 | 151.454k | 15.4 | +1.5 | 16.9 | 55.9 | White | Peak | **-39.0** |
| 2 | 216.902k | 15.5 | +0.9 | 16.4 | 52.9 | White | Peak | **-36.5** |
| 3 | 302.712k | 15.2 | +0.6 | 15.8 | 50.2 | White | Peak | **-34.4** |
| 4 | 334.709k | 10.3 | +0.5 | 10.8 | 49.3 | White | Peak | **-38.5** |
| 5 | 357.979k | 7.7 | +0.4 | 8.1 | 48.8 | White | Peak | **-40.7** |
| 6 | 368.887k | 8.8 | +0.4 | 9.2 | 48.5 | White | Peak | **-39.3** |
| 7 | 496.147k | 6.4 | +0.2 | 6.6 | 46.1 | White | Peak | **-39.5** |
| 8 | 543.415k | 6.3 | +0.2 | 6.5 | 46.0 | White | Peak | **-39.5** |
| 9 | 727.397k | 15.4 | +0.1 | 15.5 | 46.0 | White | Peak | **-30.5** |
| 10 | 730.306k | 15.1 | +0.1 | 15.2 | 46.0 | White | Peak | **-30.8** |
| 11 | 764.484k | 9.0 | +0.1 | 9.1 | 46.0 | White | Peak | **-36.9** |
| 12 | 1.719M | 6.3 | +0.1 | 6.4 | 46.0 | White | Peak | **-39.6** |
| 13 | 1.893M | 6.1 | +0.1 | 6.2 | 46.0 | White | Peak | **-39.8** |
| 14 | 2.485M | 6.2 | +0.1 | 6.3 | 46.0 | White | Peak | **-39.7** |
| 15 | 2.497M | 6.5 | +0.1 | 6.6 | 46.0 | White | Peak | **-39.4** |
| 16 | 3.067M | 5.7 | +0.1 | 5.8 | 46.0 | White | Peak | **-40.2** |
| 17 | 3.106M | 5.4 | +0.1 | 5.5 | 46.0 | White | Peak | **-40.5** |
| 18 | 3.348M | 5.8 | +0.1 | 5.9 | 46.0 | White | Peak | **-40.1** |
| 19 | 3.386M | 5.4 | +0.1 | 5.5 | 46.0 | White | Peak | **-40.5** |
| 20 | 3.497M | 5.1 | +0.1 | 5.2 | 46.0 | White | Peak | **-40.8** |
| 21 | 3.654M | 5.3 | +0.1 | 5.4 | 46.0 | White | Peak | **-40.6** |
| 22 | 3.735M | 5.4 | +0.1 | 5.5 | 46.0 | White | Peak | **-40.5** |
| 23 | 3.748M | 5.2 | +0.1 | 5.3 | 46.0 | White | Peak | **-40.7** |
| 24 | 3.841M | 5.4 | +0.1 | 5.5 | 46.0 | White | Peak | **-40.5** |
| 25 | 3.884M | 5.0 | +0.1 | 5.1 | 46.0 | White | Peak | **-40.9** |
| 26 | 3.960M | 5.5 | +0.1 | 5.6 | 46.0 | White | Peak | **-40.4** |
| 27 | 4.028M | 5.4 | +0.1 | 5.5 | 46.0 | White | Peak | **-40.5** |
| 28 | 4.045M | 5.3 | +0.1 | 5.4 | 46.0 | White | Peak | **-40.6** |
| 29 | 4.194M | 5.4 | +0.1 | 5.5 | 46.0 | White | Peak | **-40.5** |
| 30 | 4.250M | 6.1 | +0.1 | 6.2 | 46.0 | White | Peak | **-39.8** |
| 31 | 4.560M | 5.6 | +0.1 | 5.7 | 46.0 | White | Peak | **-40.3** |
| 32 | 5.032M | 6.1 | +0.1 | 6.2 | 50.0 | White | Peak | **-43.8** |
| 33 | 6.219M | 5.8 | +0.1 | 5.9 | 50.0 | White | Peak | **-44.1** |
| 34 | 6.561M | 6.5 | +0.1 | 6.6 | 50.0 | White | Peak | **-43.4** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | 7.742M | 5.9 | +0.2 | | | | | 6.1 | 50.0 | | | White | Peak | **-43.9** |
| 36 | 8.507M | 6.0 | +0.2 | | | | | 6.2 | 50.0 | | | White | Peak | **-43.8** |
| 37 | 9.426M | 5.7 | +0.2 | | | | | 5.9 | 50.0 | | | White | Peak | **-44.1** |
| 38 | 9.453M | 5.3 | +0.2 | | | | | 5.5 | 50.0 | | | White | Peak | **-44.5** |
| 39 | 9.733M | 5.2 | +0.2 | | | | | 5.4 | 50.0 | | | White | Peak | **-44.6** |
| 40 | 10.237M | 5.3 | +0.2 | | | | | 5.5 | 50.0 | | | White | Peak | **-44.5** |
| 41 | 10.516M | 5.3 | +0.2 | | | | | 5.5 | 50.0 | | | White | Peak | **-44.5** |
| 42 | 10.760M | 5.1 | +0.2 | | | | | 5.3 | 50.0 | | | White | Peak | **-44.7** |
| 43 | 11.111M | 5.8 | +0.2 | | | | | 6.0 | 50.0 | | | White | Peak | **-44.0** |
| 44 | 11.417M | 24.9 | +0.2 | | | | | 25.1 | 50.0 | | | White | Peak | **-24.9** |
| 45 | 11.931M | 5.9 | +0.3 | | | | | 6.2 | 50.0 | | | White | Peak | **-43.8** |
| 46 | 12.237M | 5.2 | +0.3 | | | | | 5.5 | 50.0 | | | White | Peak | **-44.5** |
| 47 | 12.390M | 5.3 | +0.3 | | | | | 5.6 | 50.0 | | | White | Peak | **-44.4** |
| 48 | 12.561M | 5.1 | +0.3 | | | | | 5.4 | 50.0 | | | White | Peak | **-44.6** |
| 49 | 12.787M | 5.7 | +0.3 | | | | | 6.0 | 50.0 | | | White | Peak | **-44.0** |
| 50 | 12.850M | 5.2 | +0.3 | | | | | 5.5 | 50.0 | | | White | Peak | **-44.5** |
| 51 | 12.922M | 5.4 | +0.3 | | | | | 5.7 | 50.0 | | | White | Peak | **-44.3** |
| 52 | 13.003M | 6.2 | +0.3 | | | | | 6.5 | 50.0 | | | White | Peak | **-43.5** |
| 53 | 13.129M | 6.3 | +0.4 | | | | | 6.7 | 50.0 | | | White | Peak | **-43.3** |
| 54 | 13.615M | 5.9 | +0.4 | | | | | 6.3 | 50.0 | | | White | Peak | **-43.7** |
| 55 | 13.715M | 5.9 | +0.4 | | | | | 6.3 | 50.0 | | | White | Peak | **-43.7** |
| 56 | 13.805M | 6.1 | +0.4 | | | | | 6.5 | 50.0 | | | White | Peak | **-43.5** |
| 57 | 14.931M | 6.0 | +0.4 | | | | | 6.4 | 50.0 | | | White | Peak | **-43.6** |
| 58 | 15.237M | 7.2 | +0.4 | | | | | 7.6 | 50.0 | | | White | Peak | **-42.4** |
| 59 | 15.318M | 4.9 | +0.4 | | | | | 5.3 | 50.0 | | | White | Peak | **-44.7** |
| 60 | 15.417M | 5.8 | +0.4 | | | | | 6.2 | 50.0 | | | White | Peak | **-43.8** |
| 61 | 19.381M | 6.2 | +0.7 | | | | | 6.9 | 50.0 | | | White | Peak | **-43.1** |
| 62 | 19.516M | 5.3 | +0.8 | | | | | 6.1 | 50.0 | | | White | Peak | **-43.9** |
| 63 | 19.579M | 6.4 | +0.8 | | | | | 7.2 | 50.0 | | | White | Peak | **-42.8** |
| 64 | 19.624M | 5.8 | +0.8 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 65 | 19.922M | 6.1 | +0.8 | | | | | 6.9 | 50.0 | | | White | Peak | **-43.1** |
| 66 | 20.093M | 6.0 | +0.8 | | | | | 6.8 | 50.0 | | | White | Peak | **-43.2** |
| 67 | 20.372M | 5.8 | +0.8 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 68 | 20.534M | 5.9 | +0.8 | | | | | 6.7 | 50.0 | | | White | Peak | **-43.3** |
| 69 | 20.570M | 5.3 | +0.8 | | | | | 6.1 | 50.0 | | | White | Peak | **-43.9** |
| 70 | 21.165M | 5.2 | +0.7 | | | | | 5.9 | 50.0 | | | White | Peak | **-44.1** |
| 71 | 21.336M | 5.9 | +0.7 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 72 | 21.534M | 5.9 | +0.7 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 73 | 21.606M | 5.5 | +0.7 | | | | | 6.2 | 50.0 | | | White | Peak | **-43.8** |
| 74 | 22.327M | 5.5 | +0.7 | | | | | 6.2 | 50.0 | | | White | Peak | **-43.8** |
| 75 | 22.606M | 5.8 | +0.7 | | | | | 6.5 | 50.0 | | | White | Peak | **-43.5** |
| 76 | 22.778M | 5.2 | +0.8 | | | | | 6.0 | 50.0 | | | White | Peak | **-44.0** |
| 77 | 23.066M | 5.8 | +0.8 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 78 | 23.147M | 5.0 | +0.8 | | | | | 5.8 | 50.0 | | | White | Peak | **-44.2** |
| 79 | 23.270M | 5.6 | +0.8 | | | | | 6.4 | 50.0 | | | White | Peak | **-43.6** |
| 80 | 23.743M | 5.9 | +0.8 | | | | | 6.7 | 50.0 | | | White | Peak | **-43.3** |
| 81 | 23.791M | 5.6 | +0.8 | | | | | 6.4 | 50.0 | | | White | Peak | **-43.6** |
| 82 | 24.010M | 5.2 | +0.8 | | | | | 6.0 | 50.0 | | | White | Peak | **-44.0** |
| 83 | 24.079M | 5.4 | +0.8 | | | | | 6.2 | 50.0 | | | White | Peak | **-43.8** |
| 84 | 24.381M | 5.7 | +0.9 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 85 | 24.449M | 6.1 | +0.9 | | | | | 7.0 | 50.0 | | | White | Peak | **-43.0** |
| 86 | 24.504M | 5.9 | +0.9 | | | | | 6.8 | 50.0 | | | White | Peak | **-43.2** |
| 87 | 24.771M | 5.7 | +0.9 | | | | | 6.6 | 50.0 | | | White | Peak | **-43.4** |
| 88 | 24.847M | 5.4 | +0.9 | | | | | 6.3 | 50.0 | | | White | Peak | **-43.7** |
| 89 | 24.895M | 5.2 | +0.9 | | | | | 6.1 | 50.0 | | | White | Peak | **-43.9** |
| 90 | 25.059M | 6.5 | +0.9 | | | | | 7.4 | 50.0 | | | White | Peak | **-42.6** |
| 91 | 26.327M | 6.3 | +0.9 | | | | | 7.2 | 50.0 | | | White | Peak | **-42.8** |
| 92 | 26.402M | 5.2 | +0.9 | | | | | 6.1 | 50.0 | | | White | Peak | **-43.9** |
| 93 | 26.436M | 4.9 | +0.9 | | | | | 5.8 | 50.0 | | | White | Peak | **-44.2** |
| 94 | 26.484M | 5.2 | +0.9 | | | | | 6.1 | 50.0 | | | White | Peak | **-43.9** |
| 95 | 26.601M | 5.8 | +0.9 | | | | | 6.7 | 50.0 | | | White | Peak | **-43.3** |
| 96 | 26.669M | 5.8 | +0.9 | | | | | 6.7 | 50.0 | | | White | Peak | **-43.3** |
| 97 | 28.862M | 5.4 | +1.0 | | | | | 6.4 | 50.0 | | | White | Peak | **-43.6** |

Wyle Laboratories

| # | Freq | Rdng dBµV | T1 | | | | | Corr dBµV | Spec dBµV | | | Polar | Type | Margin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98 | 28.958M | 5.9 | +1.0 | | | | | 6.9 | 50.0 | | | White | Peak | **-43.1** |
| 99 | 29.582M | 5.8 | +1.0 | | | | | 6.8 | 50.0 | | | White | Peak | **-43.2** |
| 100 | 29.740M | 5.3 | +1.1 | | | | | 6.4 | 50.0 | | | White | Peak | **-43.6** |
| 101 | 29.938M | 5.6 | +1.1 | | | | | 6.7 | 50.0 | | | White | Peak | **-43.3** |


Wyle Laboratories Date: 7/1/2009 Time: 2:14:01 PM UNISYN WO#: T56285
FCC Class B Conducted Ave Test Lead: White 120V 60Hz Sequence#: 4
Neutral Ambient
2
1
70
60
50
40
30
20
10
0
dBµV
0.15
1
10
30
Frequency [MHz]
Sweep Data
1 - FCC Class B Conducted Ave
2 - FCC Class B COND QP

## ELECTROSTATIC DISRUPTION TEST DATA

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/10/09

| | | | | | |
|---|---|---|---|---|---|
| Customer: | Unisyn/ILTS | Temperature: | 70° | Humidity: | 48% |
| EUT: | OVS | Measurement Point: | See Test Points Below | | |
| Model No.: | --- | Interference Signal: | See Applied Level Below | | |
| Serial No.: | EUT4 | Frequency Range: | N/A | | |

Test Title Electrostatic Disruption

| Test Points | Meets Limit | | Applied Level (kV) | Discharge Type | Times Tested | Comments |
|---|---|---|---|---|---|---|
| | Yes | No | | | | |
| Vertical Coupling Plane | X | | ±2,4,6,8 | Contact | 10 | Each Side of EUT *(No Discharge)* |
| Horizontal Coupling Plane | X | | ±2,4,6,8 | Contact | 10 | Each Side of EUT *(No Discharge)* |
| OVI All Four Sides | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Front keylock | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Right Side Rear | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Rear RJ45 Cover | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Top Right Rear Corner | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Rear Slot for Remote | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Rear Left AC Cord | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Left Side Rear | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Front LCD Bracket | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI Tabletop Ground Plane All Four Sides | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVI LCD Upper Left Corner | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Left Middle Side | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Bottom Left Corner | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Bottom Middle Side | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Right Bottom Corner | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Right Middle Side | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Upper Right Corner | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |

Notice of Anomaly: N/A

Witness: N/A

Tested By: W. Bush (Technician) Date: 7/10/09

Approved: Robert Hauser (Project Engineer) Date: 8/17/09



WH-1433, Rev. Dec. 2004

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/10/09

| | | | | | |
|---|---|---|---|---|---|
| Customer: | Unisyn/ILTS | Temperature: | 70° | Humidity: | 48% |
| EUT: | OVS | Measurement Point: | See Test Points Below | | |
| Model No.: | --- | Interference Signal: | See Applied Level Below | | |
| Serial No.: | EUT4 | Frequency Range: | N/A | | |

Test Title Electrostatic Disruption

| Test Points | Meets Limit | | Applied Level (kV) | Discharge Type | Times Tested | Comments |
|---|---|---|---|---|---|---|
| | Yes | No | | | | |
| OVI LCD Upper Middle Side | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Middle | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Middle | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI LCD Middle | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Lower Card Slot | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Upper Card Slot | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Rear Top Left | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Rear Top Right | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI AC Cord | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI RJ45 Cover | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Volume + | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Volume - | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Back Button | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Up Button | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Forward Button | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Down Button | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Enter Button | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Tempo - | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Tempo + | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |

Notice of Anomaly: N/A

Witness: N/A

Tested By: W. Bush (Technician) Date: 7/10/09

Approved: Robert Ames (Project Engineer) Date: 8/17/09



WH-1433, Rev. Dec. 2004

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/10/09

Customer: Unisyn/ILTS
EUT: OVS
Model No.: ---
Serial No.: EUT4

Temperature: 70°
Humidity: 48%
Measurement Point: See Test Points Below
Interference Signal: See Applied Level Below
Frequency Range: N/A

Test Title: Electrostatic Disruption

| Test Points | Meets Limit | | Applied Level (kV) | Discharge Type | Times Tested | Comments |
|---|---|---|---|---|---|---|
| | Yes | No | | | | |
| OVI Keypad Right Side | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVI Keypad Left Side | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO Front Left | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Bottom Left | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Front Right | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Bottom Right | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO LCD Bracket Front | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO LCD Bracket Back | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO LCD Side | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Ballot Box Power Cord Receptacle | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Ballot Box Access Door Lock | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Key Lock Top | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Ballot Box Back Door Access Lock | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| OVO Ballot Box Top Cover | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| Vertical Coupling Plane | X | | ±2,4,6,8 | Contact | 10 | Each Side of EUT *(No Discharge)* |
| OVO All Four Sides | X | | ±2,4,6,8 | Contact | 10 | *(No Discharge)* |
| Front Left Key Lock | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| Front Bottom | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| Voter Receipt Printer Bottom | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |

Notice of Anomaly: N/A

Witness: N/A

Tested By: W. Rush (Technician) Date: 7/10/09

Approved: Robert Hay (Project Engineer) Date: 8/07/09



WH-1433, Rev. Dec. 2004

wyle laboratories

# DATA SHEET

**Job No.:** T56285
**Start Date:** 7/10/09

| | | | | | |
|---|---|---|---|---|---|
| **Customer:** | Unisyn/ILTS | **Temperature:** | 70° | **Humidity:** | 48% |
| **EUT:** | OVS | **Measurement Point:** | See Test Points Below | | |
| **Model No.:** | --- | **Interference Signal:** | See Applied Level Below | | |
| **Serial No.:** | EUT4 | **Frequency Range:** | N/A | | |

**Test Title** Electrostatic Disruption

| Test Points | Meets Limit | | Applied Level (kV) | Discharge Type | Times Tested | Comments |
|---|---|---|---|---|---|---|
| | Yes | No | | | | |
| Voter Receipt Printer Bottom | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| Voter Receipt Printer Corner | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| Voter Receipt Printer Bottom | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| Voter Receipt Printer Top | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Middle | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Top | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Bottom | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Corner | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Left | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Bracket Right | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO LCD Bracket Left | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO Ballot Box Front Handle Slot Left | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| OVO Ballot Box Front Handle Slot Right | X | | ±2,4,8,15 | Air | 10 | *(No Discharge)* |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Notice of Anomaly:** N/A

**Witness:** N/A

**Tested By:** W. Burd (Technician) **Date:** 7/10/09

**Approved:** Robert Hanson (Project Engineer) **Date:** 8/17/09

Page 4 of 4

WH-1433, Rev. Dec. 2004

## ELECTROMAGNETIC SUSCEPTIBILITY TEST DATA

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/17/09

| | | | | | |
|---|---|---|---|---|---|
| Customer: | Unisyn/ILTS | Temperature: | N/A | Humidity: | N/A |
| EUT: | OVS | Measurement Point: | EUT @ All Four Sides | | |
| Model No.: | --- | Interference Signal: | 1Khz @ 80% AM | | |
| Serial No.: | EUT4 | Frequency Range: | 80Mhz to 1Ghz | | |

Test Title Electromagnetic Susceptibility

| Test Frequency | Meets Limit | | Susceptibility Threshold Level | Maximum Signal Applied | Comments |
|---|---|---|---|---|---|
| ( )kHz (X)MHz ( )GHz | Yes | No | ( )A ( )V ( )kV (X )V/m ( )Vrms ( )dBµA ( )dBµV ( )dBµV/m ( )dBpT | | |
| 80 | X | | >10 | 10 | Vertical and Horizontal |
| ↓ | ↓ | | ↓ | ↓ | ↓ |
| ↓ | ↓ | | ↓ | ↓ | ↓ |
| 1,000 | X | | >10 | 10 | Vertical and Horizontal |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Notice of Anomaly: N/A

Witness: N/A

Tested By: W. Brock Technician Date: 7/17/09

Approved: Robert Hargett Project Engineer Date: 8/17/09

Page 1 of 1

WH-1432, Rev. Dec. 2004

## ELECTRICAL FAST TRANSIENT TEST DATA

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/21/09

Customer: Unisyn/ILTS
EUT: OVS
Model No.: ---
Serial No.: EUT4
Temperature: N/A
Humidity: N/A
Measurement Point: See Comments Below
Interference Signal: Test Signal Applied @ 5/50nS
Frequency Range: See Test Frequencies Below

Test Title: Electrical Fast Transient

| Test Frequency | Meets Limit | | Susceptibility Threshold Level | Maximum Signal Applied | Comments |
|---|---|---|---|---|---|
| (X)kHz ( )MHz ( )GHz | Yes | No | ( )A ( )V (X)kV ( )V/m ( )Vrms ( )dBµA ( )dBµV ( )dBµV/m ( )dBpT | | |
| 100 | X | | NA | ± 2 | AC Power Cable, Line to Neutral |
| 100 | ↓ | | NA | ± 2 | AC Power Cable, Line to Ground |
| 100 | ↓ | | NA | ± 2 | AC Power Cable, Neutral to Ground |
| 100 | X | | NA | ± 2 | AC Power Cable, Line to Neutral to Ground |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Notice of Anomaly: N/A
Witness: N/A

Tested By: W. Bush (Technician) Date: 7/21/09
Approved: Robert Haught (Project Engineer) Date: 8/17/09

Page 1 of 1

WH-1432, Rev. Dec. 2004

## LIGHTNING SURGE TEST DATA

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/7/09

Customer: Unisyn/ILTS
EUT: OVO
Model No.: ---
Serial No.: UNI000004
Temperature: N/A
Humidity: N/A
Measurement Point: See Comments Below
Interference Signal: Test Signal Applied @ 1.2/50uS
Frequency Range: See Test Frequencies Below

Test Title: Lightning Surge

| Test Frequency | Meets Limit | | Susceptibility Threshold Level | Maximum Signal Applied | Comments |
|---|---|---|---|---|---|
| (X)kHz ( )MHz ( )GHz | Yes | No | ( )A ( )V (X)kV ( )V/m ( )Vrms ( )dBµA ( )dBµV ( )dBµV/m ( )dBpT | | |
| .060 | X | | >±.5 | ±.5 | Line to Neutral @ 0°, 90°, 180°, and 270° |
| .060 | ↓ | | ↓ | ↓ | Line to Ground @ 0°, 90°, 180°, and 270° |
| .060 | X | | >±.5 | ±.5 | Neutral to Ground @ 0°, 90°, 180°, and 270° |
| | | | | | |
| .060 | X | | >±1 | ±1 | Line to Neutral @ 0°, 90°, 180°, and 270° |
| .060 | ↓ | | ↓ | ↓ | Line to Ground @ 0°, 90°, 180°, and 270° |
| .060 | X | | >±1 | ±1 | Neutral to Ground @ 0°, 90°, 180°, and 270° |
| | | | | | |
| .060 | X | | >±2 | ±2 | Line to Neutral @ 0°, 90°, 180°, and 270° |
| .060 | ↓ | | ↓ | ↓ | Line to Ground @ 0°, 90°, 180°, and 270° |
| .060 | X | | >±2 | ±2 | Neutral to Ground @ 0°, 90°, 180°, and 270° |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Notice of Anomaly: N/A
Witness: N/A

Tested By: W. Bush (Technician) Date: 7/7/09
Approved: Robert Hauser (Project Engineer) Date: 8/17/09

Page 1 of 2

WH-1432, Rev. Dec. 2004

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/8/09

Customer: Unisyn/ILTS
EUT: OVI
Model No.: ---
Serial No.: UNI150006

Temperature: N/A
Humidity: N/A
Measurement Point: See Comments Below
Interference Signal: Test Signal Applied @ 1.2/50uS
Frequency Range: See Test Frequencies Below

Test Title: Lightning Surge

| Test Frequency | Meets Limit | | Susceptibility Threshold Level | Maximum Signal Applied | Comments |
|---|---|---|---|---|---|
| (X)kHz ( )MHz ( )GHz | Yes | No | ( )A ( )V (X)kV ( )V/m ( )Vrms ( )dBµA ( )dBµV ( )dBµV/m ( )dBpT | | |
| .060 | X | | >±.5 | ±.5 | Line to Neutral @ 0°, 90°, 180°, and 270° |
| .060 | ↓ | | ↓ | ↓ | Line to Ground @ 0°, 90°, 180°, and 270° |
| .060 | X | | >±.5 | ±.5 | Neutral to Ground @ 0°, 90°, 180°, and 270° |
| | | | | | |
| .060 | X | | >±1 | ±1 | Line to Neutral @ 0°, 90°, 180°, and 270° |
| .060 | ↓ | | ↓ | ↓ | Line to Ground @ 0°, 90°, 180°, and 270° |
| .060 | X | | >±1 | ±1 | Neutral to Ground @ 0°, 90°, 180°, and 270° |
| | | | | | |
| .060 | X | | >±2 | ±2 | Line to Neutral @ 0°, 90°, 180°, and 270° |
| .060 | ↓ | | ↓ | ↓ | Line to Ground @ 0°, 90°, 180°, and 270° |
| .060 | X | | >±2 | ±2 | Neutral to Ground @ 0°, 90°, 180°, and 270° |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Notice of Anomaly: N/A
Witness: N/A

Tested By: W Bush (Technician) Date: 7/8/09
Approved: Robert Hauptfleisch (Project Engineer) Date: 8/17/09

Page 2 of 2

WH-1432, Rev. Dec. 2004

## CONDUCTED RF IMMUNITY TEST DATA

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/21/09

| | | | | | |
|---|---|---|---|---|---|
| Customer: | Unisyn/ILTS | Temperature: | N/A | Humidity: | N/A |
| EUT: | OVS | Measurement Point: | See Comments Below | | |
| Model No.: | --- | Interference Signal: | 1Khz @ 80% AM | | |
| Serial No.: | EUT4 | Frequency Range: | 150Khz to 80Mhz | | |

Test Title Conducted RF Immunity

| Test Frequency | Meets Limit | | Susceptibility Threshold Level | Maximum Signal Applied | Comments |
|---|---|---|---|---|---|
| ( )kHz (X)MHz ( )GHz | Yes | No | ( )A ( )V ( )kV ( )V/m (X)Vrms ( )dBµA ( )dBµV ( )dBµV/m ( )dBpT | | |
| .150 | X | | >10 | 10 | AC Power Cable |
| ↓ | ↓ | | ↓ | ↓ | ↓ |
| 80 | X | | >10 | 10 | AC Power Cable |

Notice of Anomaly: N/A

Witness: N/A

Tested By: W. Bush (Technician) Date: 7/21/09

Approved: Robert Haug (Project Engineer) Date: 8/17/09

Page 1 of 1

WH-1432, Rev. Dec. 2004

## MAGNETIC FIELDS IMMUNITY TEST DATA

wyle laboratories

# DATA SHEET

Job No.: T56285
Start Date: 7/23/09

Customer: Unisyn/ILTS
Temperature: N/A
Humidity: N/A
EUT: OVS
Measurement Point: See Comments Below
Model No.: ---
Interference Signal: 60Hz at 30 A/m
Serial No.: EUT4
Frequency Range: See Test Frequencies Below

Test Title: Magnetic Fields RF Immunity

| Test Frequency | Meets Limit | | Susceptibility Threshold Level | Maximum Signal Applied | Comments |
|---|---|---|---|---|---|
| (X)kHz ( )MHz ( )GHz | Yes | No | (X)A ( )V ( )kV ( )V/m ( )Vrms ( )dBµA ( )dBµV ( )dBµV/m ( )dBpT | | |
| .060 | X | | >30 A/m | 30 A/m | EUT on X, Y, and Z Axis |

Notice of Anomaly: N/A
Witness: N/A

Tested By: W. Buhr (Technician) Date: 7/23/09
Approved: Robert Dacy (Project Engineer) Date: 8/17/09

Page 1 of 1

WH-1432, Rev. Dec. 2004

## ELECTRICAL SUPPLY TEST DATA

# DATA SHEET

wyle laboratories

Customer Unisyn/ILTS
Specimen OVS
Part No. Version 1.0 Amb. Temp. Amb. Job No. T56285
Spec. EAC 2005 VVSG Photo No Report No. T56285-01
Para. 4.1.2.4 Test Med. ------ Start Date 2/10/09
S/N See Below Specimen Temp. Amb.
GSI No

Test Title Electrical Supply Test

Test Parameters:

The purpose of this test is: to ensure that the voting system will continue to provide the capability for any voter who is voting at the time of a failure of the main power external to the voting system to complete the casting of a ballot; to perform a successful shutdown without loss or degradation of the voting and audit data; and to allow voters to resume voting once the voting system has reverted to back-up power. The test shall be performed per the following steps:

**Step 1:** Configure the system for normal operation.

**Step 2:** Operate system as designed for fifteen minutes.

**Step 3:** Remove AC input power.

**Step 4:** Continuously operate system for at least two hours.

**Step 5:** Allow system to perform shutdown.

**Step 6:** Restore AC power and resume operation for an additional fifteen minutes.

*Note: Central Count devices must perform a shutdown after removal of external power without loss of data.*

Notes:

For testing of the OVI:

- It was verified that the audio ballot was active throughout the 2-hour period.
- A total of five ballots were cast.

For testing of the OVO:

- The test procedure was performed as required.
- The system performed a shutdown

For testing of the OVCS:

- The system performed a shutdown as required with no loss of data.

Tested By Ryan Wilson Date: 12/10/09
Witness ------ Date: -----
Sheet No. 1 of 1
Approved Wendy Owens 12/10/09

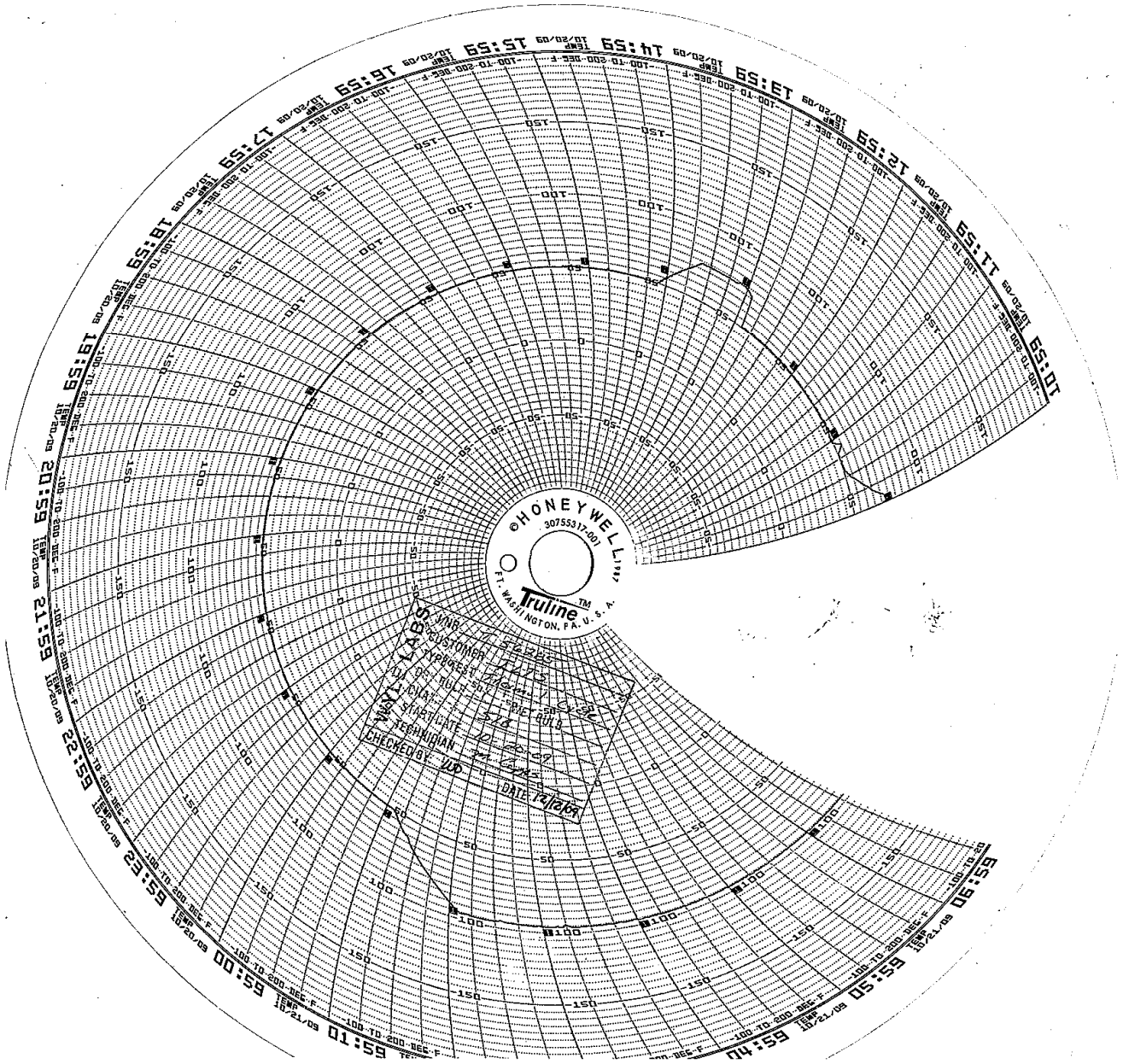
Notice of Anomaly: None

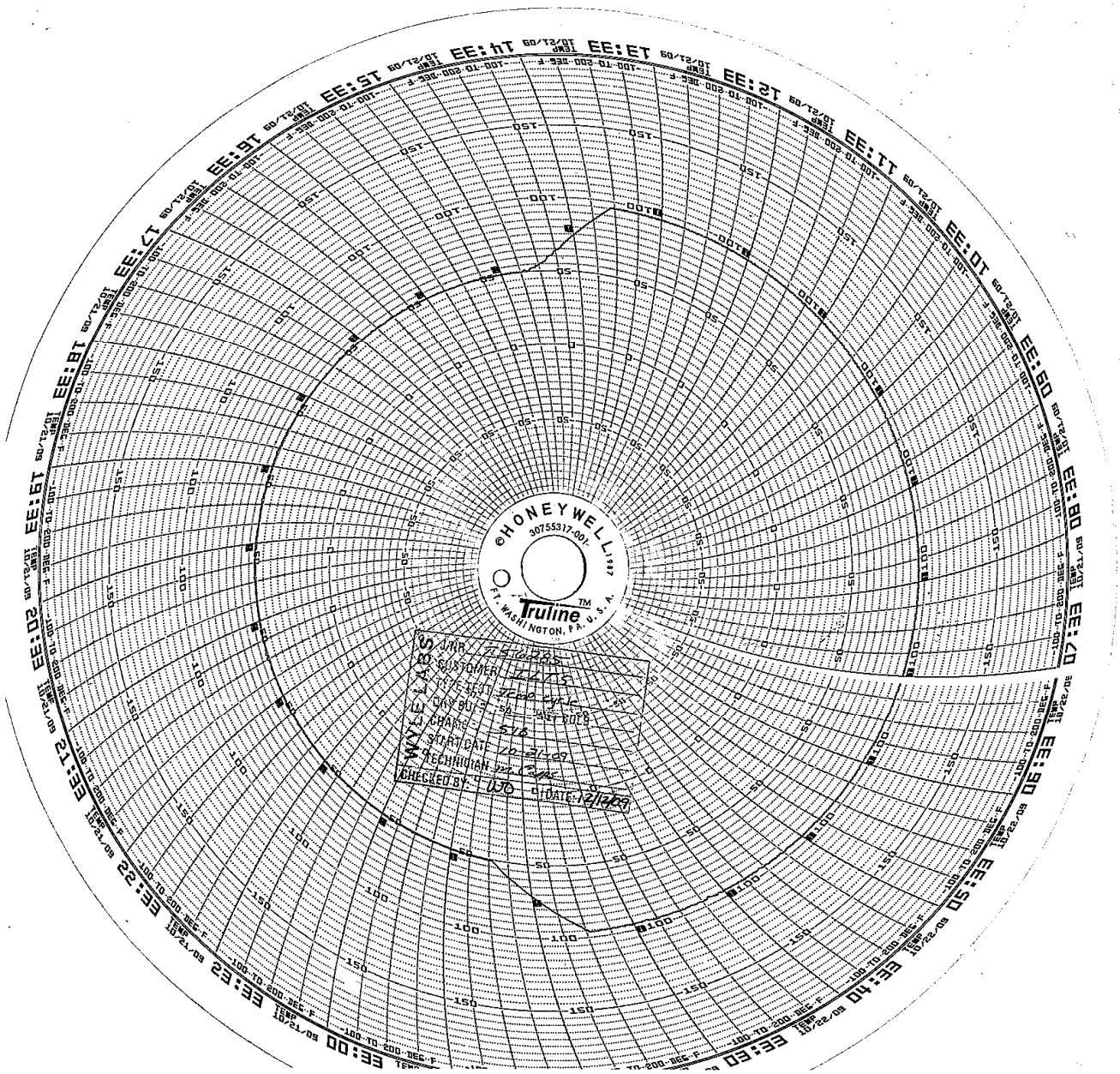
Wyle Form WH 614A, Rev. APR '84

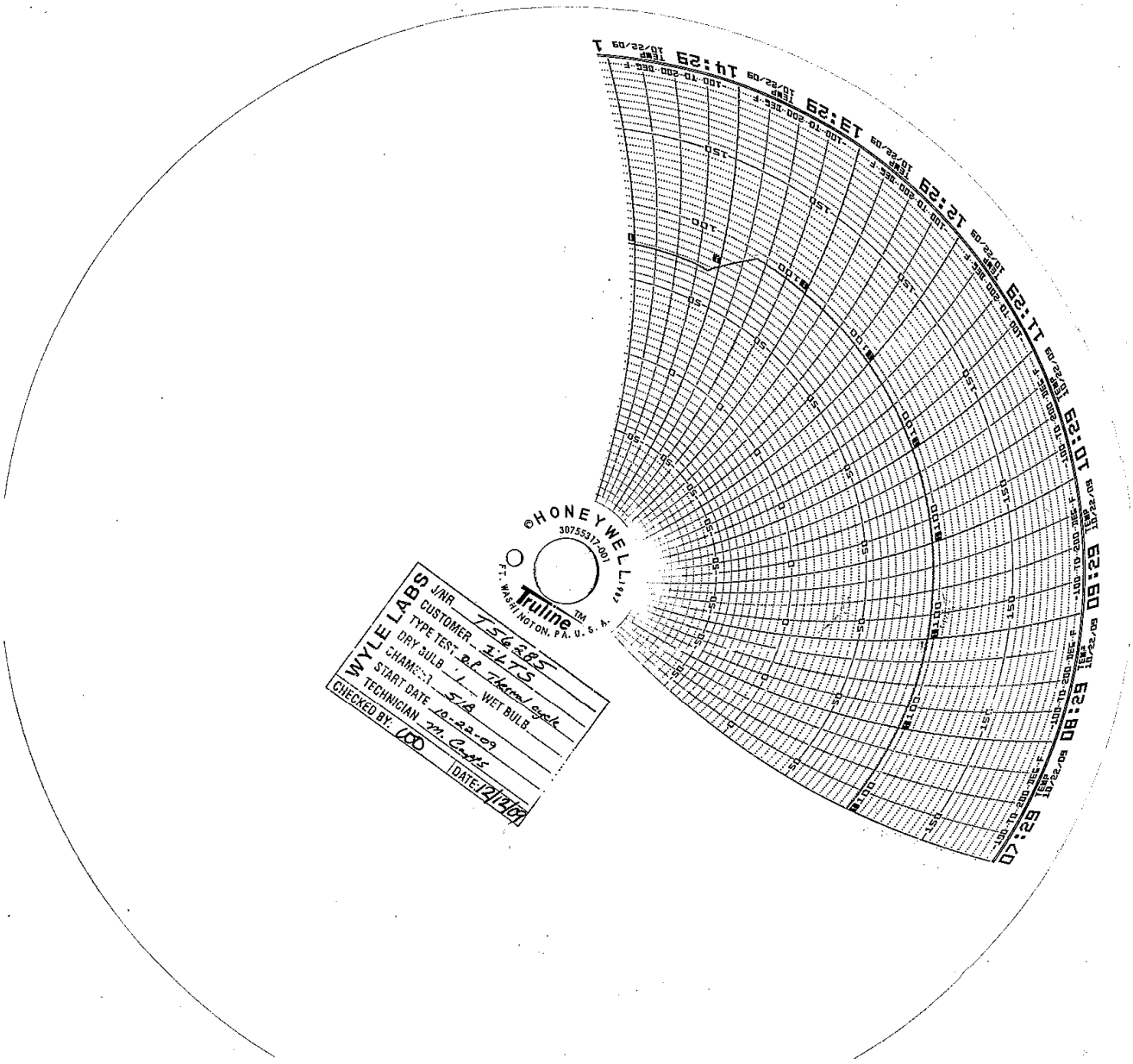
# ATTACHMENT E

# OPERATING ENVIRONMENTAL TEST DATA

## TEMPERATURE/POWER VARIATION TEST DATA


©HONEYWELL 1992
3075531 7-001
Truline™
FT. WASHINGTON, PA. U.S.A.
WYLE LABS
CUSTOMER
TYPE TEST
DUCT
CHART
START DATE
TECHNICIAN
CHECKED BY
DATE


HONEYWELL
30755317-001
Truline
FT. WASHINGTON, PA. U.S.A.
WYLE LABS
JAN
CUSTOMER
TEST SEQ
CHAMBER
SPECIMEN
TECHNICIAN
CHECKED BY
DATE


©HONEYWELL 1971
3075317-001
Truline TM
FT. WASHINGTON, PA. U.S.A.
WYLE LABS
J/NR 56285
CUSTOMER
TYPE TEST 24 Thermal cycle
DRY BULB WET BULB
CHAMBER
START DATE 10-22-09
TECHNICIAN M. Cook
CHECKED BY: DATE: 12/2/09
07:29
08:29
09:29
10:29
11:29
12:29
13:29
14:29

## AUDIO TEST DATA

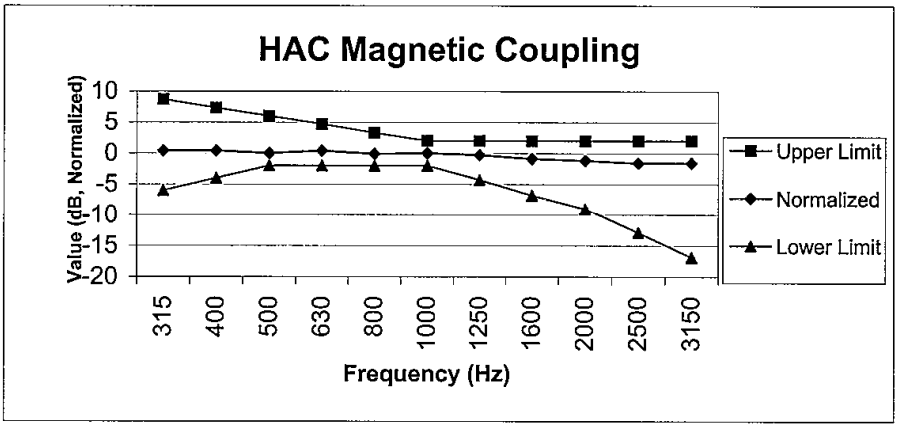
## Magnetic Field for Hearing Aid Coupling

**Wyle Task No.:** T56285 **Customer:** Unisyn/iLTS **Make/Model:** Sony MDR-210

***Enter data in yellow highlighted cells on this sheet only. Use this sheet if Axial 1000 Hz Corrected Reading (green cell) is higher than -15 dB re: 1 A/m; otherwise use other sheet.***

Magnetic Field for Hearing Aid Compatibility (HAC) per ANSI C63.19-2007, Section 7.3; @ 94 dB SPL

| **Axial Measurement** | | | | **dB re: 1 A/m** | | | |
|---|---|---|---|---|---|---|---|
| Frequency (Hz) | Measured Level | Calib. Factor | Probe Correction | Corrected Reading | Normalized | Upper Limit | Lower Limit |
| 315 | -66.1 | -57.68 | 10 | 1.58 | 0.4 | 8.7 | -6 |
| 400 | -64.1 | -57.68 | 8 | 1.58 | 0.4 | 7.3 | -4 |
| 500 | -62.5 | -57.68 | 6 | 1.18 | 0 | 6 | -2 |
| 630 | -60.1 | -57.68 | 4 | 1.58 | 0.4 | 4.7 | -2 |
| 800 | -58.5 | -57.68 | 1.9 | 1.08 | -0.1 | 3.3 | -2 |
| 1000 | -56.5 | -57.68 | 0 | 1.18 OK | 0 | 2 | -2 |
| 1250 | -54.9 | -57.68 | -1.9 | 0.88 | -0.3 | 2 | -4.3 |
| 1600 | -53.3 | -57.68 | -4.1 | 0.28 | -0.9 | 2 | -6.8 |
| 2000 | -51.7 | -57.68 | -6 | -0.02 | -1.2 | 2 | -9 |
| 2500 | -50.1 | -57.68 | -8 | -0.42 | -1.6 | 2 | -12.9 |
| 3150 | -48.1 | -57.68 | -10 | -0.42 | -1.6 | 2 | -16.9 |




| **Radial Measurement** | | | | **dB re: 1 A/m** | | | |
|---|---|---|---|---|---|---|---|
| Frequency (Hz) | Measured Level | Calib. Factor | Corrected Reading | Max. Corrected | | | |
| 1000 | -64.1 | -57.68 | -6.42 | | | | |
| 1000 | -64.1 | -57.68 | -6.42 | -6.42 OK | | | |
| 1000 | -64.1 | -57.68 | -6.42 | | | | |
| 1000 | -64.1 | -57.68 | -6.42 | | | | |

Prepared By: Darin Lee 08/10/09

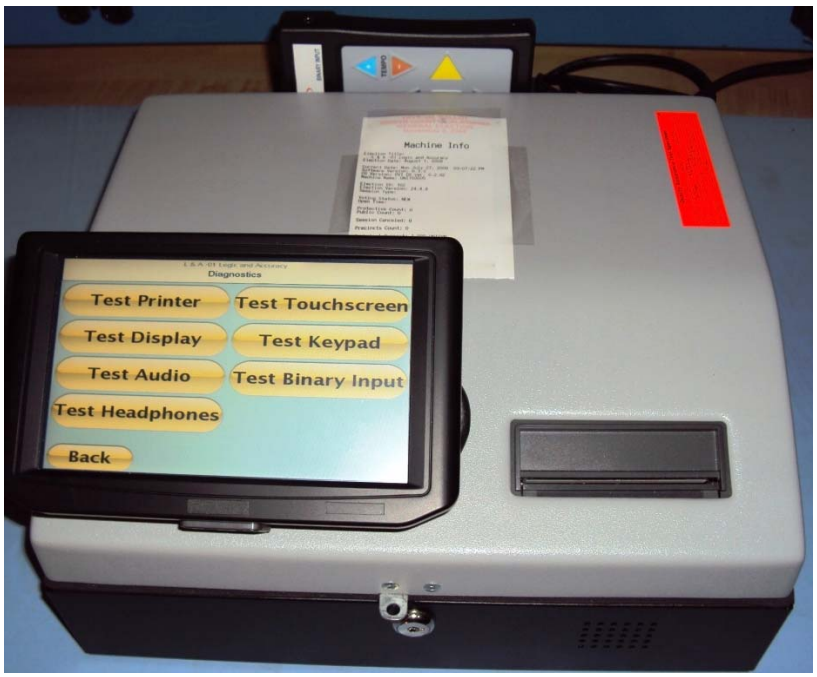
 Reviewed By: Jim Smith 08/14/09

# ATTACHMENT F

# PRODUCT SAFETY REVIEW DATA

**PRODUCT SAFETY REVIEW**
**PHOTOGRAPHS**


**Photograph No. 1**
**Openelect Voting Optical (OVO)**




**Photograph No. 2**
**Openelect Voting Interface (OVI)**

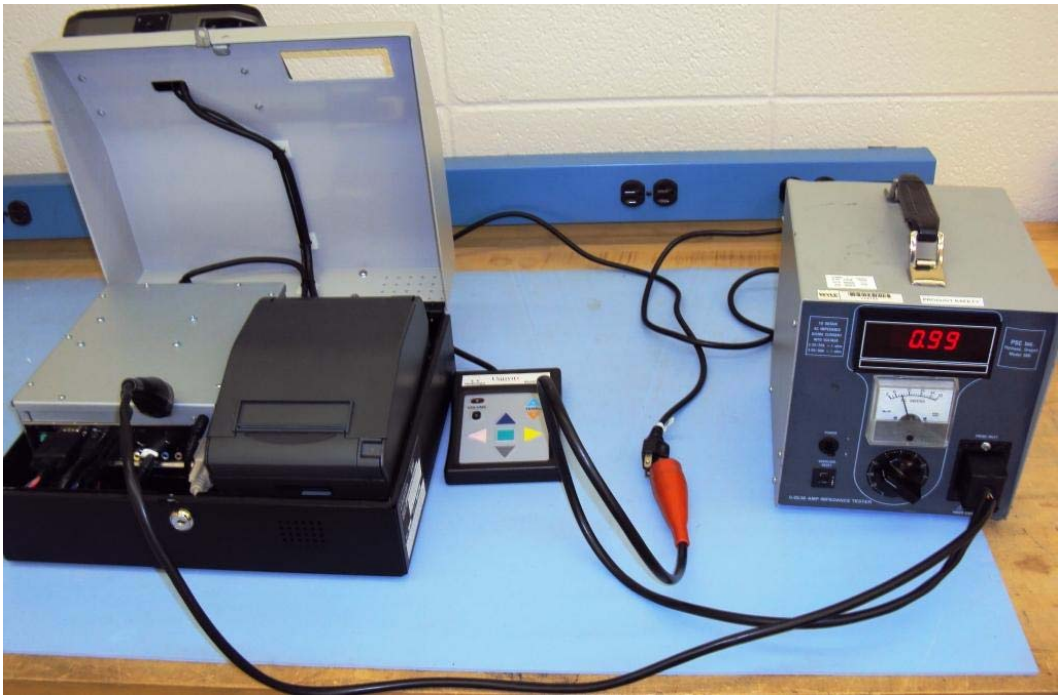
**Photograph No. 3**
**OVO Input Current Test Set-up**


**Photograph No. 4**
**OVI Input Current Test Set-up**

**Photograph No. 5**
**OVO Touch Current Test Set-up**

**Photograph No. 6**
**OVI Touch Current Test Set-up**


**Photograph No. 7**
**OVO Bonding Resistance Test Set-up**



**Photograph No. 8**
**OVI Bonding Resistance Test Set-up**

**Photograph No. 9**
**OVO Electric Strength Test Set-up**

**Photograph No. 10**
**OVO Electric Strength Test Set-up**

**PRODUCT SAFETY REVIEW**
**SAFETY CRITICAL COMPONENTS**

**Safety Critical Components**

| Object/Device | Manufacturer | Type/Model | Technical Data | Marks of Conformity |
|---|---|---|---|---|
| AC/DC Power Adapter | MGP | F10903-C | Input: 100-240 VAC, 50/60 Hz<br>Output: 12 VDC @ 6.67 Amps Maximum | UL, CE, FCC |
| AC/DC Power Adapter | EURASIA | STD-2412P | Input: 100-240 VAC, 50/60 Hz<br>Output: 24 VDC @ 1.25 Amps Maximum | UL Listed, CE |
| AC/DC Power Adapter | CITIZENS SYSTEMS | EA 1030A2 | Input: 100-240 VAC, 50/60 Hz<br>Output: 5-8.5 VDC @ 2.82 Amps Maximum | UL Listed, CE |
| EMI Filter | Delta Electronics | 10BEEG3G | 115/250-volts, 50/60 Hz, 10-amps | UL Recognized, & CSA |

**PRODUCT SAFETY REVIEW**
**TEST DATA SHEETS**

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ILTS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | Y | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 1.6.2 | Specimen Temp. | N/A | | |

Test Title: Input Current

REQUIREMENT

*"The steady state input current of the equipment shall not exceed the rated current by more than 10% under normal load."*

Test Performance

The equipment has an input rating of 120 VAC at 60 Hz. The equipment was allowed to run until steady state current had stabilized. The current was then recorded at the rated voltage range per Section 1.6.2.

| Openelect Voting Optical | | | |
|---|---|---|---|
| **Test Voltage (AC)** | **Test Frequency (Hz)** | **Measured Current (A)** | **Rated Current (A)** |
| 120 | 60 | 0.68 | 1.5 – 7.0 |
| **Openelect Voting Interface** | | | |
| **Test Voltage (AC)** | **Test Frequency (Hz)** | **Measured Current (A)** | **Rated Current (A)** |
| 120 | 60 | 1.20 | 1.5 – 7.0 |

Result:

The input current of the EUT was within the manufacturer's published current rating.

Tested By Jim Smith Date 10-23-09
Witness N/A Date NA
Sheet No. 1 of 1
Approved Frank M Padilla 10-23-09

Notice of Anomaly None

Wyle Form WH614A, Rev. APR '84

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ILTS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | N | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 1.7.11 | Specimen Temp. | N/A | | |

Test Title: Durability

REQUIREMENT
"*Any marking required by this standard shall be durable and legible. In considering the durability of the marking, the effect of normal use shall be taken into account..*"

Test Performance:
All labels and markings on the external enclosure were rubbed first by hand with a rag soaked with water for 15 seconds, followed by rubbing by hand with a rag soaked with a petroleum spirit for 15 seconds.

Result:
All labels and markings remained legible, were not easily removable, and showed no signs of curling at the edges which meets the acceptance criteria.

Tested By Jm Smith Date 10-23-09
Witness N/A Date NA
Sheet No. 1 of 1
Notice of Anomaly None
Approved Frank M Padilla 10-23-09

Wyle Form WH614A, Rev. APR '84

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ILTS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | N | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 2.1.1.1 | Specimen Temp. | N/A | | |

Test Title: Access to Energized Parts

REQUIREMENT

"*The equipment shall be so constructed that in operator access areas there is adequate protection against contact with energized parts or parts that have the potential to become energized as specified in 2.1.1.1.*"

Test Performance:

There are no openings in the enclosure of either the Openelect Voting Optical or the Openelect Voting Interface which would allow access to any energized parts.

Result:

No contact could be made with hazardous parts, hazardous voltages, or parts that have the potential to become hazardous as a result of a fault condition using the test finger and test pin on the enclosure.

Tested By: [signature] Date: 10-23-09
Witness: N/A Date: NA
Sheet No.: 1 of: 1
Approved: [signature] 10-23-09

Notice of Anomaly: None

Wyle Form WH614A, Rev. APR '84

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ILTS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | Y | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 2.6.3.3 | Specimen Temp. | N/A | | |

Test Title: Bonding Resistance of Earthing Conductors and Terminals

REQUIREMENT:

*"If the current rating of the circuit under test is 16 A or less, the test current, test voltage and the duration of the test are determined as follows:*
*– the test current is at least two times the current rating of the circuit under test; and*
*– the test voltage is not to exceed 12 V; and*
*– the duration of the test is 60-120 s;*
*and the resistance of the PROTECTIVE BONDING CONDUCTOR, calculated from the voltage drop, shall not exceed 0,1 ohm."*

| Openelect Voting Optical | | | |
|---|---|---|---|
| **Location** | **Test Current** | **Voltage Drop** | **Results** |
| Ground Pin Of Cord Set To Screw Terminal At Front Of Enclosure | 15 Amps | 0.99 volts | Pass: (0.066 ohm) |
| **Openelect Voting Interface** | | | |
| **Location** | **Test Current** | **Voltage Drop** | **Results** |
| Ground Pin Of Cord Set To Screw Terminal At Front Of Enclosure | 15 Amps | 0.99 volts | Pass: (0.066 ohm) |

Result:

Measured resistance is within the standard's requirements.

Tested By Jm Smith Date 10-23-09
Witness N/A Date NA
Sheet No. 1 of 1
Notice of Anomaly None
Approved Frank M Rabbitt 10-23-09

Wyle Form WH614A, Rev. APR '84

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ILTS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | N | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 4.5.2 | Specimen Temp. | N/A | | |

Test Title: Temperature Tests

REQUIREMENT

*"Materials used in components and in the construction of the equipment shall be selected so that under normal load, temperatures do not exceed safe values in the meaning of this standard."*

Test Performance:

Both units were powered in normal operational mode and remained powered for 16 hours. Temperature measurements were recorded at the locations indicated in the following table. Ambient humidity was 35%.

| Start date/time | 10/19/09, 16:00 | | Ambient Temperature and Humidity |
|---|---|---|---|
| Stop date/time | 10/20/09, 09:00 | | 25° C, 35% RH |
| Voltage/Freq. | 120 VAC/60Hz | | |
| **Position** | **Recorded temp. (°C)** | | **Tmax (°C)** |
| | **OVO** | **OVI** | |
| Touch Screen | 44.0 | 49.7 | 65 |
| Printer | 25.3 | 30.7 | |
| Transport Media (TM) | 38.0 | 36.0 | |
| Top Lock | 28.2 | N/A | |
| Front Lock | 23.4 | 30.8 | |
| AC Switch | 27.3 | 32.3 | |
| AC/DC Adapter | 50.2 | 48.3 | |
| EMI Filter | 32.4 | 37.6 | |
| Ballot Feeder (Top) | 36.2 | N/A | |
| Audio Pad | N/A | 23.0 | |

Tested By Jm Smith Date 10-23-09
Witness N/A Date NA
Sheet No. 1 of 1
Approved Frank M Pachl 10-23-09

Notice of Anomaly None

Wyle Form WH614A, Rev. APR '84

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ILTS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | Y | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 5.1 | Specimen Temp. | N/A | | |

Test Title: Touch Current and Protective Conductor Current

REQUIREMENT:

*"Equipment shall be so designed and constructed that neither touch current nor protective conductor current is likely to create an electric shock hazard."*

Test Performance:

Using circuit specified in D1 of Appendix D the following leakage current measurements were recorded:

| Openelect Voting Optical | | | |
|---|---|---|---|
| **Polarity** | **Ground** | **Conductor** | **Reading (mA)** |
| Forward | Open | Line | 0.371 |
| Forward | Open | Neutral | 0.363 |
| Reverse | Open | Line | 0.367 |
| Reverse | Open | Neutral | 0.364 |
| **Openelect Voting Interface** | | | |
| **Polarity** | **Ground** | **Conductor** | **Reading (mA)** |
| Forward | Open | Line | 0.546 |
| Forward | Open | Neutral | 0.546 |
| Reverse | Open | Line | 0.558 |
| Reverse | Open | Neutral | 0.539 |

Result:
Current leakage was measured to be less than maximum level of 3.5mA for stationary equipment per Table 5A in Section 5.1.6.

Tested By Jay Smith Date 10-23-09
Witness N/A Date NA
Sheet No. 1 of 1
Notice of Anomaly None
Approved Frank M Padilla 10-23-09

Wyle Form WH614A, Rev. APR '84

# LABORATORY TEST DATA SHEET

wyle laboratories

Customer: ITLS
Specimen: Openelect Voting System

| | | | | | |
|---|---|---|---|---|---|
| Model Numbers | Openelect Voting Optical & Openelect Voting Interface | Amb. Temp. | 25° C | Job. No. | T56285 |
| Serial Numbers | UNI000003 & UNI150005 | Photo | Y | Report No. | T56285-06 |
| Spec. | UL 60950-1 2nd Ed. | Test Med. | N/A | Start Date | 10/19/2009 |
| Para. | 5.2.2 | Specimen Temp. | N/A | | |

Test Title: Electric Strength (Hi-pot)

REQUIREMENT:

"*There shall be no insulation breakdown during test.*"

Test Performance:

Gradually apply 1000 VAC in accordance with Table 5B and hold for a duration of 60 seconds.

| Openelect Voting Optical | | |
|---|---|---|
| **Location** | **Test Voltage** | **Results** |
| Voltage Applied Across Grounding Pin Of The Cord Set And Line/Neutral Shorted Together | 1000 VAC | Pass |
| **Openelect Voting Interface** | | |
| **Location** | **Test Voltage** | **Results** |
| Voltage Applied Across Grounding Pin Of The Cord Set And Line/Neutral Shorted Together | 1000 VAC | Pass |

Result:

No insulation breakdown during test

Tested By Jay Smith Date 10-23-09
Witness N/A Date NA
Sheet No. 1 of 1
Notice of Anomaly None
Approved Frank M Rachel 10-23-09

Wyle Form WH614A, Rev. APR '84

**PRODUCT SAFETY REVIEW**
**INSTRUMENTATION EQUIPMENT SHEET**

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 10/19/2009 JOB NUMBER: T56285 TYPE OF TEST PRODUCT SAFETY

TECHNICIAN: J. SMITH CUSTOMER: ILTS TEST AREA: PRODUCT SAFETY LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | CALIPER | CHINA | 150 | 109918 | 109918 | 150mm/6in | .001" | 9/28/2009 | 12/28/2009 |
| 2 | HIPOT TSTR | BIDDLE | 230425 | 254666 | 110745 | 5 KV | MFG | 8/19/2009 | 8/19/2010 |
| 3 | IMP MTR | PSC INC | 30D | 3166 | 112726 | 50AMP | 1% | 9/9/2009 | 9/9/2010 |
| 4 | LEAKAGE TSTR | ED&D | LT-15 | B05260061 | 112404 | 2mA | 1% | 6/24/2009 | 6/24/2010 |
| 5 | LEAKAGE TSTR | ED&D | LT-952 | 09980109 | 114812 | 2mA | 1% | 12/23/2008 | 12/23/2009 |
| 6 | SCOPEMETER | FLUKE | 124 | DM9260098 | 04609 | MULTI | CERT | 1/8/2009 | 1/8/2010 |
| 7 | STOP WATCH | HANHART | STRATOS1 | 110132 | 110132 | 10HR | ±0.5sec | 3/27/2009 | 3/27/2010 |
| 8 | TAPE MEASURER | LUFKIN | HI-VIZ | NSN | 04604 | 26' | ±1/32" | 2/13/2009 | 2/13/2010 |
| 9 | TEMP IND | OMEGA | MDSS41.TC | 4203D6 | 116000 | MULTI | ±0.2° | 9/28/2009 | 9/28/2010 |
| 10 | TEMP RECORDER | DICKSON | THDX | 6348805 | 113410 | -20-120°F | 1.8°F | 12/23/2008 | 12/23/2009 |
| 11 | THERMOMETER | FLUKE | 68 | 2667260601-0 | 110762 | -25 TO +1400°F | ±2°F | 8/19/2009 | 8/19/2010 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Jim Smith 10-19-09 CHECKED & RECEIVED BY: Wendy Avers 10/19/09

Q.A.: [signature] 10/19/09

WH-1029A,REV,APR'99

# ATTACHMENT G

## INSTRUMENTATION EQUIPMENT SHEETS

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/13/2009 JOB NUMBER: T56285 TYPE OF TEST BENCH HANDLING

TECHNICIAN: D.MEDLEY CUSTOMER: ILTS TEST AREA: DYN LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | RULER | PRODUCTS ENGI | TEMPERED | NSN | 04468 | 48" | ±1/32NDS | 6/13/2007 | 6/12/2012 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: D. Medley 7/13/09 CHECKED & RECEIVED BY: Wendy Owens 7/13/09

Q.A.: 7/13/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/23/2009 JOB NUMBER: T56285 TYPE OF TEST MAGNETIC FIELDS IMMUNITY

TECHNICIAN: J.MCDERMOTT CUSTOMER: ILTS TEST AREA: EMI LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | AMPLIFIER | TECHRON | 7560 | 015075 | 04566 | 600W | NCR | 7/8/2008 | 7/8/2020 |
| 2 | DMM | FLUKE | 87 | 64860172 | 112627 | MULTI | ±0.1%+1 | 5/19/2009 | 5/19/2010 |
| 3 | FUNC GEN | AGILENT | 33120A | MY40007922 | 110432 | 15 MHz | MFG | 3/2/2009 | 3/2/2010 |
| 4 | METER | HOLADAY | HOL-HI3604 | 76285 | 117549 | 30-2KHz | MFG | 12/17/2007 | 12/17/2009 |
| 5 | STOP WATCH | CRONUS | 603 | 115313 | 115313 | 24HR 1 EVENT | 0.5 SEC | 11/11/2008 | 11/11/2009 |
| 6 | TAPE MEASURER | LUFKIN | HV1048CME | NSN | 02243 | 26'/8m | MFG | 11/21/2008 | 11/21/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-23-2009 CHECKED & RECEIVED BY: Darin Lee 07/23/09

Q.A.: 7/23/09

WH-1029A,REV,APR'99

wyle laboratories

## INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/21/2009 JOB NUMBER: T56285 TYPE OF TEST: POWER DISTURBANCE

TECHNICIAN: J.MCDERMOTT CUSTOMER: ILTS TEST AREA: EMI LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | DMM | FLUKE | 87 CAT III | 80150149 | 116887 | 4VDC,AC,Ohms | .05%,1%,.2% | 12/23/2008 | 12/23/2009 |
| 2 | POWER SOURCE | CALIFORNIA | 1251RP/IF | L06361 | 117347 | 0-135VAC RMS | 1% | 8/15/2008 | 8/15/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-21-2009 CHECKED & RECEIVED BY: Dawn Lee 07/21/09

Q.A.: 7/21/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/20/2009 JOB NUMBER: T56285 TYPE OF TEST: ELECTRICAL FAST TRANSIENT

TECHNICIAN: J.MCDERMOTT CUSTOMER: ILTS TEST AREA: EMI LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ATTEN | HAEFELY | 2520111/00 | 153823 153808 | 04590 | MFG | MFG | 12/19/2007 | 12/19/2009 |
| 2 | DMM | FLUKE | 87 CAT III | 80150149 | 116887 | 4VDC,AC,Ohms | .05%,1%,.2% | 12/23/2008 | 12/23/2009 |
| 3 | EFT JUNIOR TSTR | HAEFELY | 093204.1 | 83762-14 | 112575 | 5NS/50NS | 30% | 10/3/2008 | 10/3/2010 |
| 4 | OSCILLOSCOPE | TEKTRONIX | TDS684C | B020598 | 116832 | 1GHz BW | <50ps@5GS/s | 9/4/2008 | 9/4/2009 |
| 5 | TAPE MEASURER | LUFKIN | HV1048CME | NSN | 02243 | 26'/8m | MFG | 11/21/2008 | 11/21/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-20-2009 CHECKED & RECEIVED BY: 07/20/09

Q.A.: 7/20/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/21/2009 JOB NUMBER: T56285 TYPE OF TEST CONDUCTED RF IMMUNITY

TECHNICIAN: J.MCDERMOTT CUSTOMER: ILTS TEST AREA: EMI CHAMBER 2

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | AMPLIFIER | AMP RESEARCH | 75A220 | 17801 | L17801 | 10KHZ-200MHz | NCR | 6/26/2009 | 6/26/2010 |
| 2 | ATTEN | BIRD | 25-T-MN | 0129 | 03142 | 50 OHMS 25 W. | MFG | 3/25/2008 | 3/25/2010 |
| 3 | ATTENUATOR | NARDA | 769-6 | 03180 | 04860 | DC to 6GHz | MFG | 11/18/2008 | 11/18/2009 |
| 4 | COUPL NETWK | FISHER CC | FCC-801-M3-25A | 06066 | 04606 | .15-230MHz | ±.4dB | 5/4/2009 | 5/4/2010 |
| 5 | DIR COUPLER | AMP RESEARCH | DC3010 | 304022 | 117208 | .01-1000MHz | ±0.8dB | 3/23/2009 | 3/23/2010 |
| 6 | DMM | FLUKE | 87 CAT III | 80150149 | 116887 | 4VDC,AC,Ohms | .05%,1%,.2% | 12/23/2008 | 12/23/2009 |
| 7 | PASSIVE | FISHER CC | FCC-801-150-50-CDN | 04049/04050 | 110405 | 150KHZ - 230M | MFG | 5/18/2009 | 5/18/2011 |
| 8 | SIG GEN | WAYNE KERR | PSG1000B | 295 | 114979 | 10K-1GHZ | 2x10-7 | 4/20/2009 | 4/20/2010 |
| 9 | SPEC ANAL | AGILENT | E4446A | US42070108 | 110948 | 44 GHz | CERT | 6/11/2009 | 6/11/2010 |
| 10 | SPEC ANAL | AGILENT | E446A/H70 | US44020335 | 03123 | MFG | MFG | 3/30/2009 | 3/30/2010 |
| 11 | TAPE MEASURER | LUFKIN | HV1048CME | NSN | 02243 | 26'/8m | MFG | 11/21/2008 | 11/21/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-21-2009 CHECKED & RECEIVED BY: 07/21/09

Q.A.: 7/21/09

WH-1029A,REV,APR'99

Page 1 of 1

wyle laboratories

## INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/17/2009 JOB NUMBER: T56285 TYPE OF TEST: ELECTROMAGNETIC SUSCEPTIBILITY

TECHNICIAN: J.MCDERMOTT CUSTOMER: UNISYN TEST AREA: EMI CHAMBER 3

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | AMPLIFIER | AMP RESEARCH | 500W/000A | 25361 | 03141 | 80MHz to 1GHz | NCR | 7/8/2008 | 7/8/2020 |
| 2 | ANTENNA | AR | AT6080 | 0330329 | 02247 | 80-6000MHz | MFG | 12/10/2008 | 12/10/2010 |
| 3 | DIR COUPLER | AMP RESEARCH | DC6080 | 21207 | 113788 | 80-1000MHZ | .5db | 3/20/2009 | 3/20/2010 |
| 4 | DMM | FLUKE | 87 CAT III | 80150149 | 116887 | 4VDC,AC,Ohms | .05%,1%,.2% | 12/23/2008 | 12/23/2009 |
| 5 | ISOTROPIC PROBE | AMP RESEARCH | FP2000 | 17657 | L17657 | 10 KHz - 1 GHz | ±0.7 dB | 9/5/2008 | 9/5/2009 |
| 6 | SIG GEN | MARCONI | 2023 | 112224/092 | L12224 | 9kHz-1.2GHz | ±0.8dB | 5/11/2009 | 5/11/2010 |
| 7 | SPEC ANAL | ROHDE SCHWARZ | FSP30 | 100882 | 117804 | MULTI | MFG | 4/20/2009 | 4/20/2010 |
| 8 | TAPE MEASURER | LUFKIN | HV1048CME | NSN | 02242 | 26'/8m | MFG | 11/21/2008 | 11/21/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-17-2009 CHECKED & RECEIVED BY: 7/17/09

Q.A.: 7/17/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/7/2009 JOB NUMBER: T56285 TYPE OF TEST LIGHTING SURGE

TECHNICIAN: J.MCDERMOTT CUSTOMER: UNISYN TEST AREA: EMI LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | COUPL NETWK | HAEFELY TRENCI | PCD100 | 149869 | R90540 | MFG | MFG | 5/21/2009 | 5/21/2010 |
| 2 | OSCILLOSCOPE | TEKTRONIX | TDS684C | B020598 | 116832 | 1GHz BW | <50ps@5GS/s | 9/4/2008 | 9/4/2009 |
| 3 | SURGE TSTR | HAEFELY TRENCI | PSURGE8000 | 150270 | R90537 | MULTI | MFG | 5/21/2009 | 5/21/2010 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-7-2009 CHECKED & RECEIVED BY: W. Burke 7/7/09

Q.A.: Brenda Moore 7/7/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/10/2009 JOB NUMBER: T56285 TYPE OF TEST ESD

TECHNICIAN: P.BREWINGTON CUSTOMER: UNISYN TEST AREA: PRODUCT SAFETY

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | CHART RECORDER | OMEGA | CT485B | 60507010 | 04492 | -200 +200°F | ±3% | 12/15/2008 | 12/15/2009 |
| 2 | ESD GUN | PARTNER | ESD3000 | 059 | 04446 | 16.5 KV | ±10% | 3/31/2009 | 3/31/2010 |
| 3 | ESD TARGET | HAEFELY TRENCI | 2520311 | 152461 | 110794 | 15KV | ±5% | 10/25/2007 | 10/25/2009 |
| 4 | OSCILLOSCOPE | TEKTRONIX | TDS684C | B020598 | 116832 | 1GHz BW | <50ps@5GS/s | 9/4/2008 | 9/4/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Patrick Brewington 07/10/09

CHECKED & RECEIVED BY: Darwin Lee 07/10/09

Q.A.: 7/10/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/1/2009 JOB NUMBER: T56285 TYPE OF TEST VVSG/FCC PART 15

TECHNICIAN: J SMITH CUSTOMER: UNISYN TEST AREA: OATS 2

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ANTENNA | EMCO | EM-6917A-1 | 124116 | 114415 | 30MHZ - 3GHZ | SEE DATA | 1/9/2008 | 1/9/2010 |
| 2 | LISN | FISHER CC | FCC-LISN-50-15-1-01 | 02067 | 117145 | 10KHz to 100MI | ±0.7dB | 7/5/2007 | 7/5/2009 |
| 3 | LISN | FISHER CC | FCC-LISN-50-15-1-01 | 02068 | 117146 | 10KHz to 100MI | ±0.7dB | 7/17/2007 | 7/17/2009 |
| 4 | LISN | FISHER CC | FCC-LISN-50/250-16 | 04001 | 110238 | 9kHz to 30MHz | ±0.7dB±5% | 5/21/2009 | 5/21/2010 |
| 5 | PRESELECTOR | HP | 85685A | 2648A00447 | 113853 | 20HZ-2GHZ | ±2dB | 2/25/2009 | 2/25/2010 |
| 6 | Q-PEAK ADAPTER | HP | 85650A | 2811A01189 | 112109 | BY PASS MODI | .3db | 2/25/2009 | 2/25/2010 |
| 7 | RF CABLE | STORM | 90-195-610 | 01-04-001 | 110111 | .001-40 GHz | ±3 dB | 3/21/2007 | 3/21/2010 |
| 8 | SPEC ANAL | HP | 8566B | 3014A06704 | 117093 | 100HZ-22GHZ | CERT | 2/16/2009 | 2/16/2010 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-1-09 CHECKED & RECEIVED BY: 7-1-09

Q.A.: 7-1-09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/17/2009 JOB NUMBER: T56285 TYPE OF TEST TEMP HUM

TECHNICIAN: LARRY IVEY CUSTOMER: ILTS TEST AREA: ENV CHAMBER 7

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | MICROCOMPUTER | THERMOTRON | 3038 | 7626-TP | 114130 | -125 - 375°F | 1.0% | 6/5/2009 | 9/5/2009 |
| 2 | TEMP ALARM | THERMOTRON | 12005 | 263002 | 094751 | -125-375°F | .25% | 6/5/2009 | 9/5/2009 |
| 3 | TEMP RECORDER | HONEYWELL | DR4500 | 9628Y626294 | 112722 | -200-600°F | .4°F | 6/5/2009 | 9/5/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: 7-17-09 CHECKED & RECEIVED BY: Wendy Owens 7/17/09

Q.A.: 7/17/09

WH-1029A,REV,APR'99

Page 1 of 1

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/13/2009 JOB NUMBER: T56285 TYPE OF TEST VIBRATION

TECHNICIAN: D.MEDLEY CUSTOMER: ILTS TEST AREA: DYN LAB

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ACCELEROMETER | ENDEVCO | 7704A-50 | 12608 | 04868 | 50pC/g | ±5% | 6/15/2009 | 9/13/2009 |
| 2 | ACCELEROMETER | ENDEVCO | 7704A-50 | 12607 | 04869 | 50pC/g | ±5% | 6/15/2009 | 9/13/2009 |
| 3 | CHARGE | ENDEVCO | 2735 | GZ10 | 000860 | GAIN | 1.5% | 4/14/2009 | 10/14/2009 |
| 4 | CHARGE | ENDEVCO | 2735GPQS | FM64 | 113405 | GAIN | 1.5% | 4/15/2009 | 10/12/2009 |
| 5 | DMM | KEITHLEY | 179A | 196804 | 101203 | 1200VDC | ±.04%DC | 1/5/2009 | 1/5/2010 |
| 6 | VIB CONTROL | SPECTRAL DYNAI | 2400 | 1657 | 116969 | MFG | MFG | 3/6/2009 | 3/6/2010 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Dan Melly 7/13/09 CHECKED & RECEIVED BY: Wendy Owens 7/13/09

Q.A.: 7/13/09

WH-1029A,REV,APR'99

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 11/13/2009 JOB NUMBER: T56285 TYPE OF TEST ACOUSTIC VOLUME LEVEL\

TECHNICIAN: D. LEE CUSTOMER: UNISYN/ILTS TEST AREA: EMI CHAMBER 3

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SOUND LVL MTR | EXTECH | 407736 | 010305516 | 116831 | 35-130 dB | ±1.5dB | 12/26/2008 | 12/26/2009 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Darin Lee 11/13/09 CHECKED & RECEIVED BY: [signature] 13 Nov 09

Q.A.: [signature] 11/13/09

WH-1029A,REV,APR'99

Page 1 of 1

wyle laboratories

# INSTRUMENTATION EQUIPMENT SHEET

DATE: 12/10/2009 JOB NUMBER: T56285 TYPE OF TEST ELECTRICAL SUPPLY

TECHNICIAN: R. WILSON CUSTOMER: UNISYN/ILTS TEST AREA: VOTING LAB 3

| No. | Description | Manufacturer | Model | Serial # | WYLE # | RANGE | ACCURACY | Cal Date | Cal Due |
|---|---|---|---|---|---|---|---|---|---|
| 1 | STOP WATCH | HANHART | STRATOS1 | 110131 | 110131 | 10HR | ±0.5sec | 11/11/2009 | 2/11/2010 |

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Ryan Trio 12/10/09 CHECKED & RECEIVED BY: Wendy Owens 12/10/09

Q.A.: Brenda Nash 12/10/09

WH-1029A,REV,APR'99