

MEASUREMENT AND TECHNICAL REPORT

ADCOM INFORMATION SERVICES, INC.  
700 West Hillsboro Boulevard  
Deerfield Beach, FL 33441

DATE: 10 April 2002

|  |   |                  |
|--|---|------------------|
| <b>This Report Concerns:</b>   | Original Grant: X                                     | Class II Change: |
| <b>Equipment Type:</b>   | VM105 system, Satellite Slave Unit (SSU), Model 10179 |                  |
| <b>Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?</b>  | Yes:<br><b>Defer until:</b>                           | No: X            |
| <b>Company Name agrees to notify the Commission by:</b>  | N/A   |                  |
| <b>of the intended date of announcement of the product so that the grant can be issued on that date.</b>   |   |                  |
| <b>Transition Rules Request per 15.37?</b>   | Yes:  | *No: X           |
| (*) FCC Part 15, Paragraphs 15.207(a); 15.109(a); 15.249   |   |                  |
| <p><i>Report Prepared by:</i></p> <p><b>TÜV PRODUCT SERVICE</b><br/> <b>10040 Mesa Rim Road</b><br/> <b>San Diego, CA 92121-2912</b><br/> <b>Phone: 858 546 3999</b><br/> <b>Fax: 858 546 0364</b></p> |   |                  |

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**1 GENERAL INFORMATION****1.1 Product Description**EUT Description: VM105 system, Satellite Slave Unit (SSU)EUT Name: SSUModel No.: 10179 Serial No.:**Power Requirements**Voltage: 120VAC# of Phases: 1Current (Amps/phase(max)): .1A Current (Amps/phase(nominal)):Other: Uses 9VDC 500mA wall adapter,**Typical Installation and/or Operating Environment**

(ie. Hospital, Small Business, Industrial/Factory, etc.)

home**EUT Power Cable**

|                                    |    |  |                              |
|------------------------------------|----|--|------------------------------|
| <input type="checkbox"/> Permanent | OR | <input checked="" type="checkbox"/> Removable  | Length (in meters): <u>2</u> |
| <input type="checkbox"/> Shielded  | OR | <input checked="" type="checkbox"/> Unshielded |                              |

| EUT Interface Ports and Cables |                                     |                                     |           |                                     |                                     |                 |             |                        |                          |                    |                                     |                          |
|--------------------------------|-------------------------------------|-------------------------------------|-----------|-------------------------------------|-------------------------------------|-----------------|-------------|------------------------|--------------------------|--------------------|-------------------------------------|--------------------------|
| Interface                      |                                     |                                     | Shielding |                                     |                                     |                 |             |                        |                          |                    |                                     |                          |
| Type                           | Analog                              | Digital                             | Qty       | Yes                                 | No                                  | Type            | Termination | Connector Type         | Port Termination         | Length (in meters) | Removable                           | Permanent                |
| <b>EXAMPLE:</b><br>RS232       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 2         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Foil over braid | Coaxial     | Metallized 9-pin D-Sub | Characteristic Impedance | 6                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Power                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                 |             | 5.5mm con.             | NA                       | 2                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Sensor input                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | braid           | Mini plug   | 3.5mm phono jack       | 2K                       | 2                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Sensor input                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | braid           | RCA jack    | RCA jack               | 50K                      | 2                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| TV cable input                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Foil over braid | Coaxial     | F type                 | 75 ohm                   | NA                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Comm port                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | braid           | Mini DIN    | Mini DIN4              | 1K                       | NA                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

|                      |
|----------------------|
| <b>EUT Software.</b> |
|----------------------|

Revision Level: 10184XF

Description: Fully functional except for feature added for FCC testing: depressing all address switches causes transmitter to continuously transmit.

|   |
|---|
| <b>EUT Operating Modes to be Tested -</b> |
|---|

1. Transmit mode
2. Receive mode (also senses TV signals)

| EUT System Components |                      |          |          |
|-----------------------|----------------------|----------|----------|
| Description           | Model #              | Serial # | FCC ID # |
| RF Splitter           | Holland Elec. M-1000 | NA       | NA       |
| Power Supply          | JameCo DC905F1       | NA       | NA       |

| <b>Support Equipment -</b> |  |  |  |
|----------------------------|--|--|--|
|----------------------------|--|--|--|

| <i>Description</i>              | <i>Model #</i>  | <i>Serial #</i> | <i>FCC ID #</i> |
|---------------------------------|-----------------|-----------------|-----------------|
| Television set- NTSC compatible | Sharp 13H-M60   | 721737          | NA              |
| Ch3 pattern generator           | ADcom TVI 10196 | NA              | NA              |

| <b>Oscillator Frequencies</b> |  |  |  |
|-------------------------------|--|--|--|
|-------------------------------|--|--|--|

| <i>Frequency</i> | <i>Derived Frequency</i> | <i>Component # / Location</i> | <i>Description of Use</i> |
|------------------|--------------------------|-------------------------------|---------------------------|
| 32.768KHz        | NA                       | U18                           | Real time clock chip      |
| 11.0592MHz       | NA                       | U20, feeds U23, U12, U13, U22 | Micro clock               |

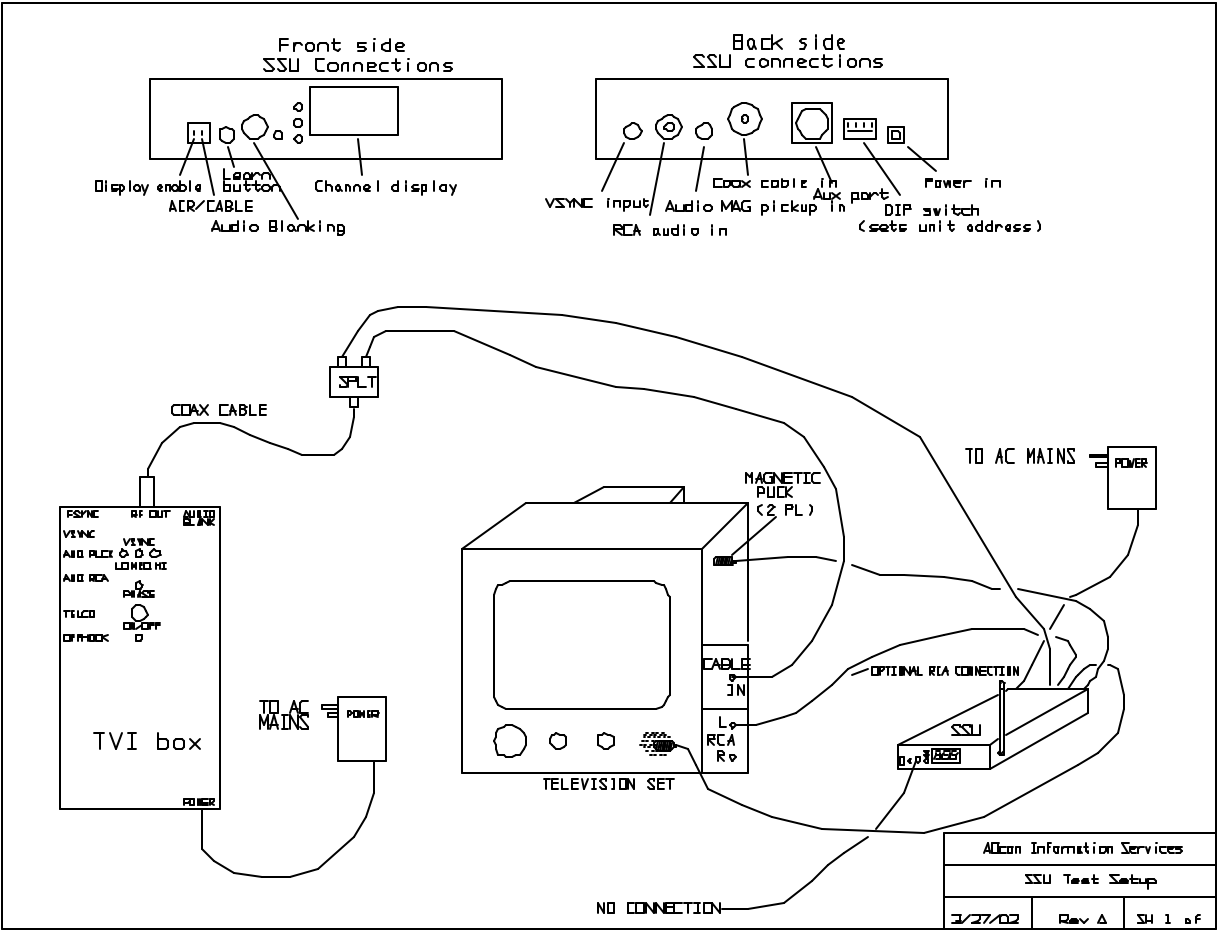
| <b>Power Supply</b> |  |  |  |
|---------------------|--|--|--|
|---------------------|--|--|--|

| <i>Manufacturer</i> | <i>Model #</i> | <i>Serial #</i> | <i>Type</i>   |
|---------------------|----------------|-----------------|---|
| JameCo              | DC905F1        | NA              | <input type="checkbox"/> Switched-mode: (Frequency) _____<br><input checked="" type="checkbox"/> Linear <input type="checkbox"/> Other: |

| <b>Critical EMI Components (Capacitors, ferrites, etc.)</b> |  |  |  |  |
|---|--|--|--|--|
|---|--|--|--|--|

| <i>Description</i> | <i>Manufacturer</i> | <i>Part # or Value</i> | <i>Qty</i> | <i>Component # / Location</i> |
|--------------------|---------------------|------------------------|------------|-------------------------------|
| Ferrite beads      | ACT                 | KCB-1206-1.0A          | 2          | L4, L5                        |

**System Configuration Block Diagram --**



**1 GENERAL INFORMATION (continued)****1.2 Related Submittal/Grant**

None

**1.3 Tested System Details**

The FCC IDs for all equipment, plus descriptions of all cables used in the tested system are:

None

**1.4 Test Methodology**

Purpose of Test: To demonstrate compliance with the ANSI C63.4 setup.

| TEST                | FCC CFR 47 #      | PASS/FAIL |
|---------------------|-------------------|-----------|
| Radiated            | 15.109(a); 15.249 | Pass      |
| Conducted Emissions | 15.107(a)         | Pass      |

Test Performed:

- X 1. Conducted Emissions, FCC Part 15, 15.107(a)
- 2. Radiated Emissions EN55022: 1992 Class B limit, 30 - 1,000 MHz, 10 meters
- X 3. Radiated Emission per FCC Part 15, Paragraph 15.109(a); 15.249
- 4. Engineering evaluations
- 5. Frequency Stability, Part 2, Paragraph 2.995, and Part 87, Paragraph 87.133
- RF Output Power, Part 2, Paragraph 2.985, Part 22, Paragraph 22.917

Both Conducted and radiated testing were performed according to the procedures in FCC/ANSI C63.4 and CSA 108.8 - M1983. Radiated testing was performed at an antenna-to-EUT distance of 3 meters (1 - 25 GHz).

**1.5 Test Facility**

The open area test site and conducted measurement data were tested by:

TÜV PRODUCT SERVICE  
10040 Mesa Rim Road  
San Diego, CA 92121-2912  
Phone: 858 546 3999  
Fax: 858 546 0364

The Test Site Data and performance comply with ANSI 63.4 and are registered with the FCC, 7435 Oakland Mills Rd, Columbia Maryland 21046. All Measurement Data is acquired according to the content of FCC Measurement Procedure and ANSI C63.4, unless supplemented with additional requirements as noted in the test report.

## **2. SYSTEM TEST CONFIGURATION**

### 2.1 Justification

The EUT was initially tested for FCC emission in the following configuration:

See Block Diagram.

### 2.2 EUT Exercise Software

None

### 2.3 Special Accessories

None

### 2.4 Modification

None

### 2.5 Configuration of Tested System

See Block Diagram.



### **3 RADIATED EMISSION EQUIPMENT/DATA**

The following data lists the significant emission frequencies, measured levels, correction factor (which includes cable and antenna corrections), the corrected reading, and the limit.

See following page(s).

[illegible]

**SPEC: FCC Part 15 para 15.109(a)**

**TEST DIST: 3 Meters**

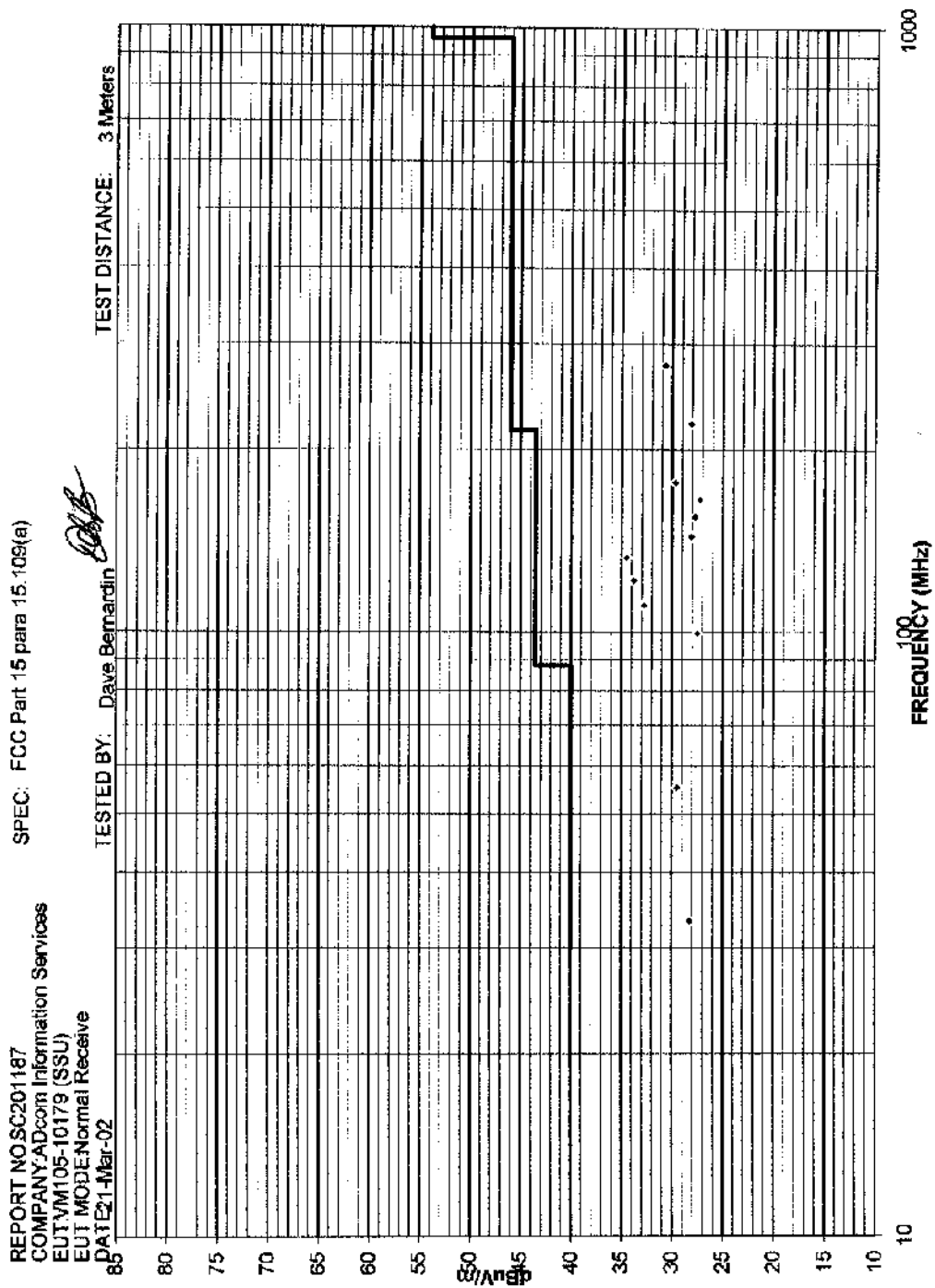
TEST SITE: 2

BICONICAL: 739

LOG PERIODIC: 739

NOTES: Quasi-Peak with 120 KHz measurement bandwidth. RCVR: 427

TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 546 3999 FAX 858 546 0364



**Emissions Test Conditions: RADIATED EMISSIONS, FCC Part 15, Paragraphs 15.109(a); 15.249**

|  |
|--|
| The <i>RADIATED EMISSIONS</i> measurements were performed at the following test location : |
|--|

|  |
|--|
| <input type="checkbox"/> - Test not applicable |
|--|

- - Roof (Small Open Area Test Site)
- - Canyon #1 (10- and 30-Meter Open Area Test Site), Carroll Canyon, San Diego

**Testing was performed at a test distance of:**

- ☐ - 1 meters
- - 3 meters
- ☐ - 10 meters

**Test Equipment Used :**

| Model No.  | Prop. No. | Description                  | Manufacturer     | Serial No. | Cal Date |
|------------|-----------|------------------------------|------------------|------------|----------|
| 3115       | 251       | Antenna, Horn                | EMCO             | 2595       | 10/20/02 |
| 3146       | 244       | Antenna, Log Periodic Dipole | EMCO             | 1063       | 03/21/02 |
| LPB 2520/A | 739       | LPB                          | Antenna Research | 1170       | 03/21/02 |
| ESVS30     | 427       | EMI Test Receiver            | Rhode & Schwarz  | 830350/006 | 12/08/02 |

Remarks: \_\_\_\_\_  
\_\_\_\_\_

### Field Strength Calculation

If a preamplifier was used during the Radiated Emission Testing, it is required that the amplifier gain must be subtracted from the Spectrum Analyzer (Meter) Reading. In addition, a correction factor for the antenna, cable used and a distance factor, if any, must be applied to the Meter Reading before a true field strength reading can be obtained. In the automatic measurement, these considerations are automatically presented as a part of the print out. In the case of manual measurements and for greater efficiency and convenience, instead of using these correlation factors for each meter reading, the specification limit was modified to reflect these correlation factors at each frequency value so that the meter readings can be compared directly to the modified specification limit. This modified specification limit is referred to as the "Corrected Meter Reading Limit" or simply the CMRL, which is the actual field strength present at the antenna. The quantity can be derived in the following manner:

$$\text{Corrected Meter Reading Limit (CMRL)} = \text{SAR} + \text{AF} + \text{CL} - \text{AG} - \text{DC}$$

Where, SAR = Spectrum Analyzer Reading

AF = Antenna Factor

CL = Cable Loss

AG = Amplifier Gain (if any)

DC = Distance Correction (if any)

Assume the following situation: A meter reading of 29.4 dBuV was obtained from a Class A computing device measured at 83 MHz. Assume an antenna factor of 9.2 dB, a cable loss of 1.4 dB and amplifier gain of 20.0 dB at 83 MHz. The final field strength would be determined as follows:

$$\text{CMRL} = 29.4 \text{ dBuV} + 9.2 \text{ dB} - 1.4 \text{ dB} - 20 \text{ dB/M} - 0.0 \text{ dB}$$

$$\text{CMRL} = 20.0 \text{ dBuV/M}$$

This result is well below the FCC and CSA Class A limit of 29.5 dBuV/m at 83 MHz.

For the manual mode of measurement, a table of corrected meter reading limit was used to permit immediate comparison of the meter reading to determine if the measure emission amplitude exceeded the specification limit at that specific frequency.

#### **4 CONDUCTED EMISSION EQUIPMENT/DATA**

See following page(s).

**Emissions Test Conditions: CONDUCTED EMISSIONS, FCC Part 15, Paragraphs 15.107(a)**

|  |
|--|
| The <i>RADIATED EMISSIONS</i> measurements were performed at the following test location : |
|--|

|  |
|--|
| <input type="checkbox"/> - Test not applicable |
|--|

■ - SR-3, Shielded Room, 12' x 20' x 8', Metal Chamber

**Test Equipment Used :**

| <b>Model No.</b> | <b>Prop. No.</b> | <b>Description</b> | <b>Manufacturer</b> | <b>Serial No.</b> | <b>Cal Date</b> |
|------------------|------------------|--------------------|---------------------|-------------------|-----------------|
| ESHS 20          | 428              | EMI Test Receiver  | Rohde & Schwarz     | 837055/001        | 12/19/02        |
| CAT-20           | 616              | 20 dB Attenuator   | Mini-Circuits       | --                | N/A             |
| 9242-50-R-24-BNC | 458              | LISN               | Solar Electronics   | 941719            | 02/11/03        |

Remarks: \_\_\_\_\_  
\_\_\_\_\_



# **TUV Product Service Conducted Emissions**

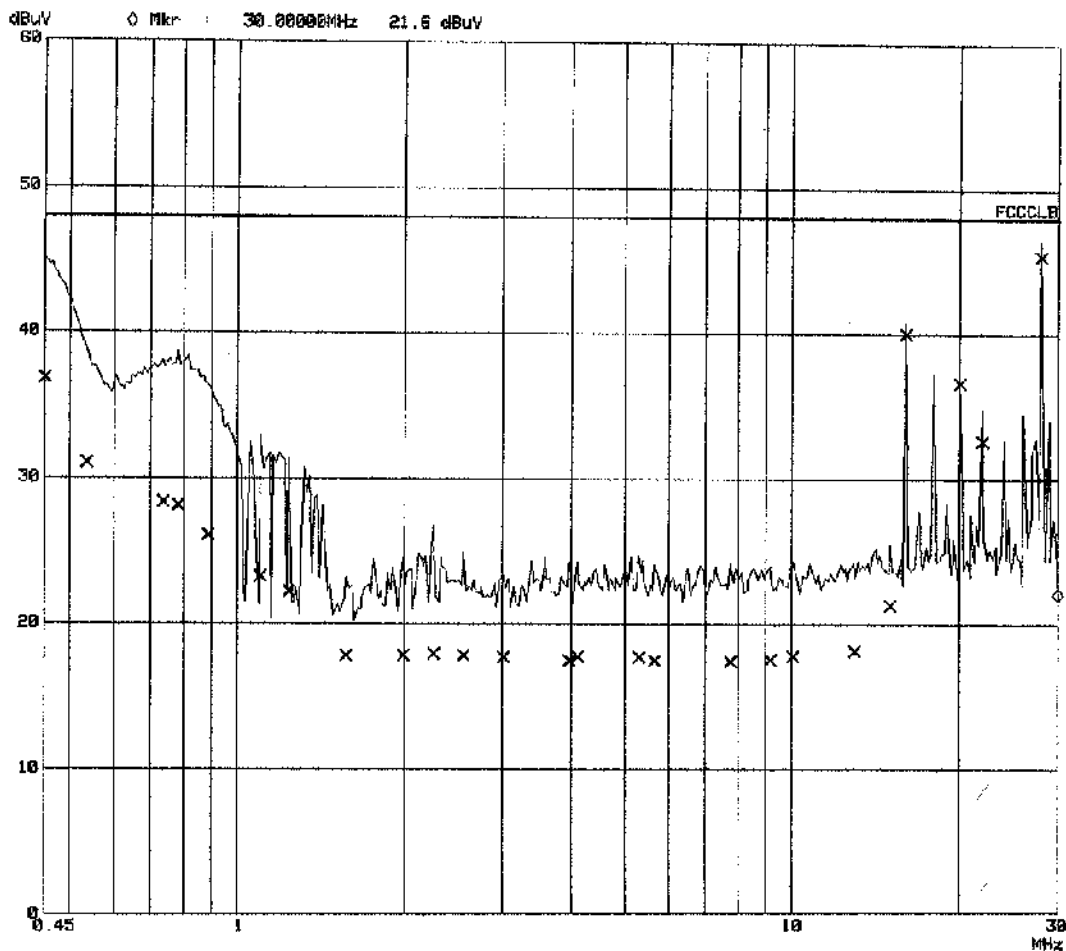
EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Receive Mode  
 Operator: Dave Bernardin  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 1  
 SC201187  
 Date: 07. Mar 02 12:00

## **Scan Settings (2 Ranges)**

| Frequencies |      |      | Receiver Settings |          |        |       |        |       |
|-------------|------|------|-------------------|----------|--------|-------|--------|-------|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten | Preamp | OpRge |
| 450k        | 1M   | 5k   | 10k               | PK       | 100ms  | AUTO  | LN OFF | 60dB  |
| 1M          | 30M  | 5k   | 10k               | PK       | 2ms    | AUTO  | LN OFF | 60dB  |

| Transducer No. | Start | Stop | Name      |
|----------------|-------|------|-----------|
| 5              | 9k    | 30M  | 20dB LISN |

Final Measurement: x QP  
 Meas Time: 1 s  
 Subranges: 25  
 Acc Margin: 40dB



**TUV Product Service  
 Conducted Emissions**

EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Receive Mode  
 Operator: Dave Bernardin  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 1  
 SC201187  
 Date: 07. Mar 02 12:00

**Final Measurement Results:**

| Frequency<br>MHz | QP Level<br>dBuV | QP Limit<br>dBuV |
|------------------|------------------|------------------|
| 0.45000          | 36.9             | 48.0             |
| 0.53500          | 31.1             | 48.0             |
| 0.73500          | 28.4             | 48.0             |
| 0.78000          | 28.1             | 48.0             |
| 0.88500          | 26.1             | 48.0             |
| 1.10000          | 23.3             | 48.0             |
| 1.23500          | 22.2             | 48.0             |
| 1.57000          | 17.8             | 48.0             |
| 1.99000          | 17.8             | 48.0             |
| 2.25500          | 18.0             | 48.0             |
| 2.56000          | 17.8             | 48.0             |
| 3.02000          | 17.7             | 48.0             |
| 3.96000          | 17.5             | 48.0             |
| 4.10500          | 17.8             | 48.0             |
| 5.30500          | 17.7             | 48.0             |
| 5.66000          | 17.5             | 48.0             |
| 7.77000          | 17.4             | 48.0             |
| 9.14000          | 17.5             | 48.0             |
| 10.05500         | 17.8             | 48.0             |
| 12.95000         | 18.1             | 48.0             |
| 15.00500         | 21.3             | 48.0             |
| 16.00500         | 40.0             | 48.0             |
| 20.00500         | 36.7             | 48.0             |
| 22.01000         | 32.6             | 48.0             |
| 28.01000         | 45.4             | 48.0             |

\* limit exceeded

# **TUV Product Service Conducted Emissions**

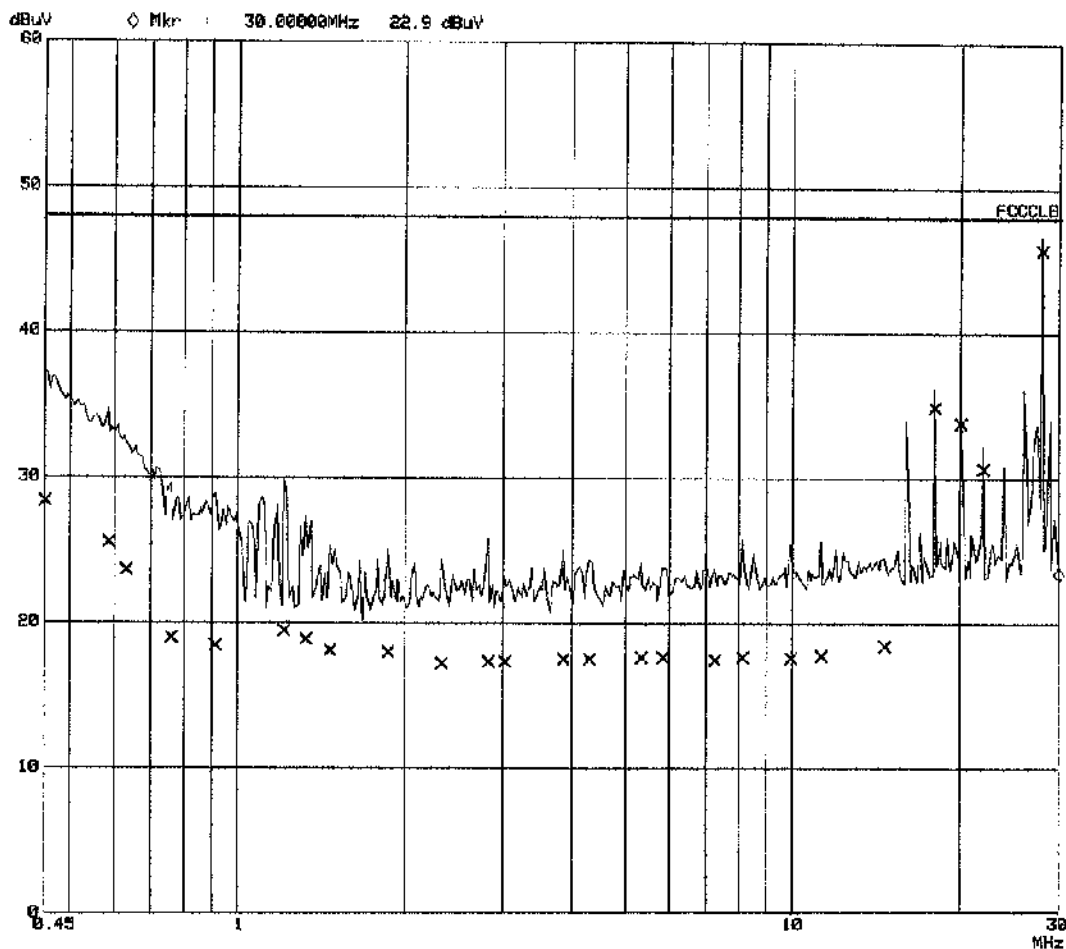
EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Receive Mode  
 Operator: Dave Bernardin  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 2  
 SC201187  
 Date: 07. Mar 02 11:46

## **Scan Settings (2 Ranges)**

| Frequencies |      |      | Receiver Settings |          |        |       |        |     |
|-------------|------|------|-------------------|----------|--------|-------|--------|-----|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten | Preamp | OpR |
| 450k        | 1M   | 5k   | 10k               | PK       | 100ms  | AUTO  | LN OFF | 60d |
| 1M          | 30M  | 5k   | 10k               | PK       | 2ms    | AUTO  | LN OFF | 60d |

| Transducer No. | Start | Stop | Name     |
|----------------|-------|------|----------|
| 5              | 9k    | 30M  | 20dBLISN |

Final Measurement: x QP  
 Meas Time: 1 s  
 Subranges: 25  
 Acc Margin: 40dB



**TUV Product Service  
Conducted Emissions**

EUT: VM105-10179 (SSU)  
Manuf: ADcom Information Services  
Op Cond: Receive Mode  
Operator: Dave Bernardin  
Test Spec: FCC Part 15.207(a)  
Comment: 115 Vac 60 Hz Line 2  
SC201187  
Date: 07. Mar 02 11:46

**Final Measurement Results:**

| Frequency<br>MHz | QP Level<br>dBuV | QP Limit<br>dBuV |
|------------------|------------------|------------------|
| 0.45000          | 28.4             | 48.0             |
| 0.58500          | 25.6             | 48.0             |
| 0.63000          | 23.7             | 48.0             |
| 0.76000          | 19.0             | 48.0             |
| 0.91000          | 18.5             | 48.0             |
| 1.21000          | 19.5             | 48.0             |
| 1.32500          | 18.9             | 48.0             |
| 1.46500          | 18.1             | 48.0             |
| 1.86500          | 18.0             | 48.0             |
| 2.32500          | 17.2             | 48.0             |
| 2.82500          | 17.4             | 48.0             |
| 3.02500          | 17.4             | 48.0             |
| 3.87000          | 17.5             | 48.0             |
| 4.31000          | 17.5             | 48.0             |
| 5.34000          | 17.7             | 48.0             |
| 5.84000          | 17.7             | 48.0             |
| 7.24000          | 17.5             | 48.0             |
| 8.12000          | 17.7             | 48.0             |
| 9.94500          | 17.6             | 48.0             |
| 11.25500         | 17.8             | 48.0             |
| 14.63500         | 18.4             | 48.0             |
| 18.00500         | 34.9             | 48.0             |
| 20.00500         | 33.8             | 48.0             |
| 22.01000         | 30.7             | 48.0             |
| 28.01000         | 45.8             | 48.0             |

\* limit exceeded

# **TUV Product Service Conducted Emissions**

EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Transmit Mode  
 Operator: Dave Bernardin  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 1  
 SC201187  
 Date: 07. Mar 02 10:27

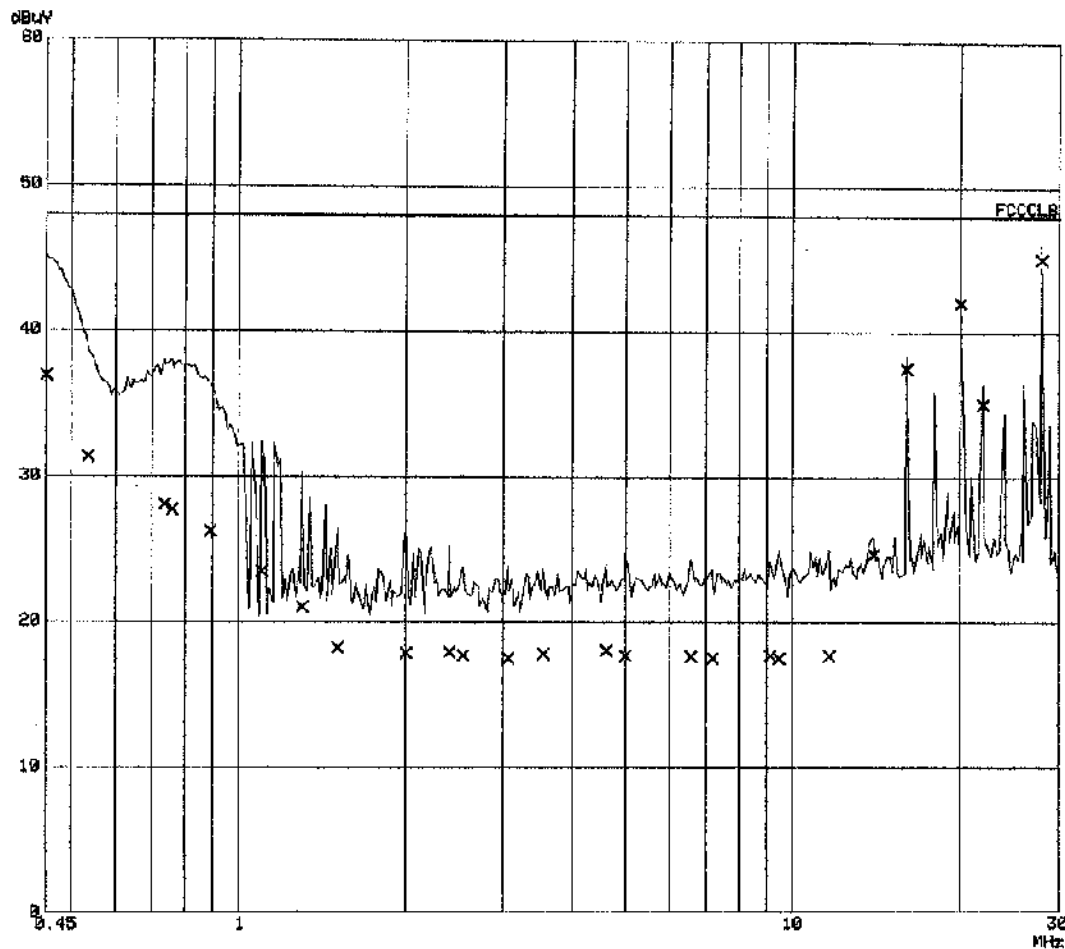
## **Scan Settings (2 Ranges)**

| Frequencies |      |      | Receiver Settings |          |        |       |        |       |
|-------------|------|------|-------------------|----------|--------|-------|--------|-------|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten | Preamp | OpRge |
| 450k        | 1M   | 5k   | 10k               | PK       | 100ms  | AUTO  | LN OFF | 60dB  |
| 1M          | 30M  | 5k   | 10k               | PK       | 2ms    | AUTO  | LN OFF | 60dB  |

| Transducer No. | Start | Stop | Name     |
|----------------|-------|------|----------|
| 5              | 9k    | 30M  | 20dBLISN |

Final Measurement: x QP

Meas Time: 1 s  
 Subranges: 25  
 Acc Margin: 40dB



**TUV Product Service  
Conducted Emissions**

EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Transmit Mode  
 Operator: Dave Bernardin *DB*  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 1  
 SC201187  
 Date: 07. Mar 02 10:27

**Final Measurement Results:**

| Frequency<br>MHz | QP Level<br>dBuV | QP Limit<br>dBuV |
|------------------|------------------|------------------|
| 0.45000          | 36.9             | 48.0             |
| 0.53500          | 31.4             | 48.0             |
| 0.73500          | 28.1             | 48.0             |
| 0.76000          | 27.8             | 48.0             |
| 0.89000          | 26.2             | 48.0             |
| 1.10000          | 23.5             | 48.0             |
| 1.30000          | 21.1             | 48.0             |
| 1.50500          | 18.3             | 48.0             |
| 2.00000          | 17.9             | 48.0             |
| 2.40000          | 18.0             | 48.0             |
| 2.53500          | 17.7             | 48.0             |
| 3.05500          | 17.5             | 48.0             |
| 3.54500          | 17.8             | 48.0             |
| 4.60500          | 18.1             | 48.0             |
| 4.99000          | 17.7             | 48.0             |
| 6.55000          | 17.6             | 48.0             |
| 7.16500          | 17.5             | 48.0             |
| 9.12000          | 17.7             | 48.0             |
| 9.45500          | 17.5             | 48.0             |
| 11.65000         | 17.7             | 48.0             |
| 14.00500         | 24.7             | 48.0             |
| 16.00500         | 37.5             | 48.0             |
| 20.00500         | 42.0             | 48.0             |
| 22.00500         | 35.1             | 48.0             |
| 28.01000         | 45.1 <i>OK</i>   | 48.0             |

\* limit exceeded

# **TUV Product Service Conducted Emissions**

EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Transmit Mode  
 Operator: Dave Bernardin  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 2  
 SC201187  
 Date: 07. Mar 02 11:23

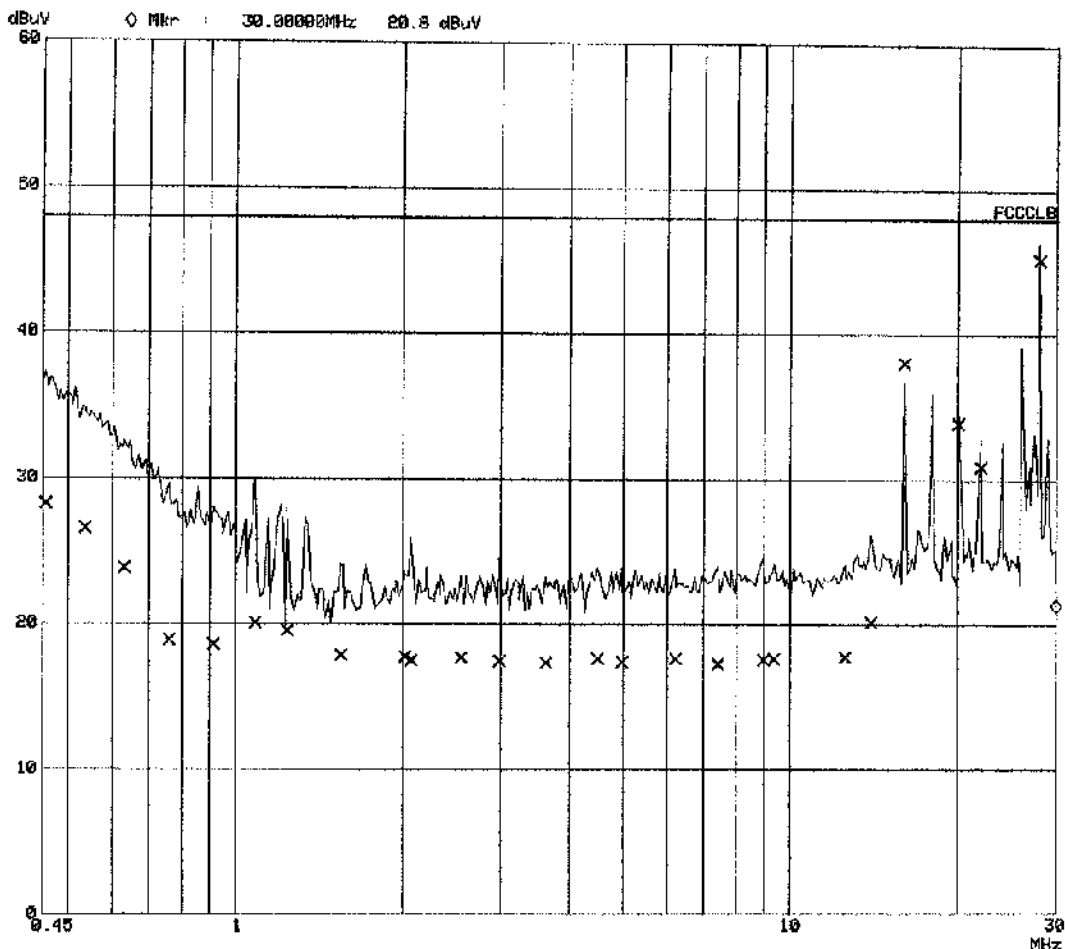
## **Scan Settings (2 Ranges)**

| Frequencies |      |      | Receiver Settings |          |        |       |        |      |
|-------------|------|------|-------------------|----------|--------|-------|--------|------|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten | Preamp | OpRg |
| 450k        | 1M   | 5k   | 10k               | PK       | 100ms  | AUTO  | LN     | OFF  |
| 1M          | 30M  | 5k   | 10k               | PK       | 2ms    | AUTO  | LN     | OFF  |
|             |      |      |                   |          |        |       |        | 60dB |

| Transducer No. | Start | Stop | Name     |
|----------------|-------|------|----------|
| 5              | 9k    | 30M  | 20dBLISN |

Final Measurement: x QP

Meas Time: 1 s  
 Subranges: 25  
 Acc Margin: 40dB



**TUV Product Service  
Conducted Emissions**

EUT: VM105-10179 (SSU)  
 Manuf: ADcom Information Services  
 Op Cond: Transmit Mode  
 Operator: Dave Bernardine *DB*  
 Test Spec: FCC Part 15.207(a)  
 Comment: 115 Vac 60 Hz Line 2  
 SC201187  
 Date: 07. Mar 02 11:23

**Final Measurement Results:**

| Frequency<br>MHz | QP Level<br>dBuV | QP Limit<br>dBuV |
|------------------|------------------|------------------|
| 0.45500          | 28.3             | 48.0             |
| 0.53500          | 26.6             | 48.0             |
| 0.63000          | 23.9             | 48.0             |
| 0.76000          | 18.9             | 48.0             |
| 0.91000          | 18.6             | 48.0             |
| 1.08500          | 20.1             | 48.0             |
| 1.23500          | 19.6             | 48.0             |
| 1.54500          | 17.9             | 48.0             |
| 2.01500          | 17.8             | 48.0             |
| 2.06500          | 17.5             | 48.0             |
| 2.54500          | 17.7             | 48.0             |
| 2.98500          | 17.5             | 48.0             |
| 3.62500          | 17.3             | 48.0             |
| 4.50000          | 17.7             | 48.0             |
| 4.97000          | 17.4             | 48.0             |
| 6.20500          | 17.7             | 48.0             |
| 7.41000          | 17.3             | 48.0             |
| 8.94000          | 17.6             | 48.0             |
| 9.36000          | 17.7             | 48.0             |
| 12.54000         | 17.8             | 48.0             |
| 14.00000         | 20.1             | 48.0             |
| 16.00500         | 38.1             | 48.0             |
| 20.00500         | 33.9             | 48.0             |
| 22.00500         | 30.9             | 48.0             |
| 28.01000         | 45.3 <i>DB</i>   | 48.0             |

\* limit exceeded



## ATTESTATION STATEMENT

### GENERAL REMARKS:

### SUMMARY:

All tests were performed per CFR 47, *Part 15, Paragraphs 15.207(a); 15.109(a); 15.249.*

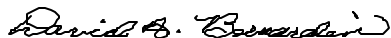
■ - Performed

The Equipment Under Test

■ - **Fulfills** the requirements of CFR 47, *Part 15, Paragraphs 15.207(a); 15.109(a); 15.249.*

- TÜV PRODUCT SERVICE, INC. -

Responsible Engineer:



Dave Bernardin  
EMC Engineer