Verification Test Report

For

Compact Fluorescent Lamps

Manufacturer:

Technical Consumer Products, Inc.
300 Lena Drive
Aurora, Ohio 44202

Testing Facility:

F-Squared Laboratories
16740 Peters Road
Middlefield, Ohio 44062

The Compact Fluorescent Lamps, Models EDX-13W, EDX-14W, EDX-15W, EDX-16W, and EDX-20W have been tested and found to comply with the requirements of the Federal Communications Commission outlined in the Federal Register CFR 47, Part 18 for Class A Equipment. The product was received on April 27, 2001 and the testing was completed on April 27, 2001.

Evaluation Conducted By:

Frank Gonzales
EMC Test Engineer

Report Reviewed By:

Rob Pellizze
Vice President

F Squared Laboratories
success thru compliance

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Exhibit I

Engineering Statement

This report has been prepared on behalf of Technical Consumer Products, Inc. to provide documentation for the testing described herein. This equipment has been tested and found to comply with Part 18 of the FCC Rules using ANSI C63.4 1992 standards. The test results found in this test report relate only to the items tested.

EQUIPMENT UNDER TEST: Compact Fluorescent Lamps
Trade Name: Technical Consumer Products, Inc.
Model #: EDX-13W, EDX-14W, EDX-15W, EDX-16W, and EDX-20W
Power Supply: 110VAC

APPLICABLE RULES: CFR 47 Part 18

EQUIPMENT CATEGORY: Compact Fluorescent Lamps

MEASUREMENT LOCATION: F-Squared Laboratories in Burton, Ohio

MEASUREMENT PROCEDURE: All measurements were performed according to the 1992 version of ANSI C63.4. A list of the measurement equipment can be found in Exhibit II.

UNCERTAINTY BUDGET:

- Conducted Emission
  Combined Uncertainty (+ or -) 1.13 dB
  Expanded Uncertainty (+ or -) 2.26 dB

ENGINEERING STATEMENT: I hereby state that: The measurements shown in this application were made in accordance with the procedures indicated and the energy emitted by this equipment was found to be within the limits. I assume full responsibility for the accuracy and completeness of these measurements.

I further state that: On the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 18 of the FCC Rules under normal use and maintenance.

Certified by: _____ for
Rob Pellizze, Vice President

Exhibit II

List of Measurement Instrumentation

Equipment Type	Manufacturer	Model #	Serial #	Calibration Due Date
Receiver	Dynamic Sciences	DSI-2020	604/002	08/23/01
LISN	Fisher Custom Communications	50/250-25-4	9600	08/24/01
Thermohygrometer	Oakton	WD-35700-00	001	03/08/02

Exhibit III

Equipment Under Test Information and Data

TEST ITEM CONDITION: The equipment to be tested was received in good condition.

TESTING ALGORITHM: The Compact Fluorscent Lamps were powered on during the test. The highest emissions were recorded in the data tables.

CONDUCTED EMISSION TESTING: The EUT was placed on a 0.8 meter high, 1 X 1.5 meter non-conductive table. Power was provided to the EUT through a LISN bonded to a 3 X 2 meter ground plane. The LISN and peripherals were supplied power through a filtered AC power source. The output o the LISN was connected to the input of the receiver and emissions in the range 150kHz to 30 MHz were measured. The measurements were recorded using the quasi-peak values, and the resolution bandwidth during testing was 9kHz. All data for conducted emissions is found in Exhibit V.

Exhibit IV

EUT Configuration and Cables

EUT:

Device	Manufacturer	Model Number
Fluorescent Lamp	Technical Consumer Products, Inc.	EDX-13W
Fluorescent Lamp	Technical Consumer Products, Inc.	EDX-14W
Fluorescent Lamp	Technical Consumer Products, Inc.	EDX-15W
Fluorescent Lamp	Technical Consumer Products, Inc.	EDX-16W
Fluorescent Lamp	Technical Consumer Products, Inc.	EDX-20W

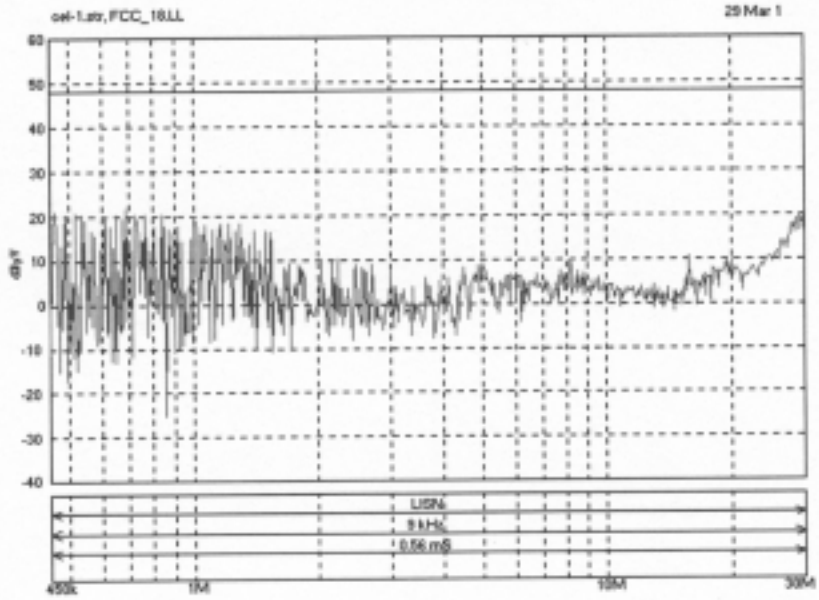
Cable: All one meter or greater in length – bundled according to ANSI C63.4 – 1992.

EUT: Power Cord Unshielded

Exhibit V

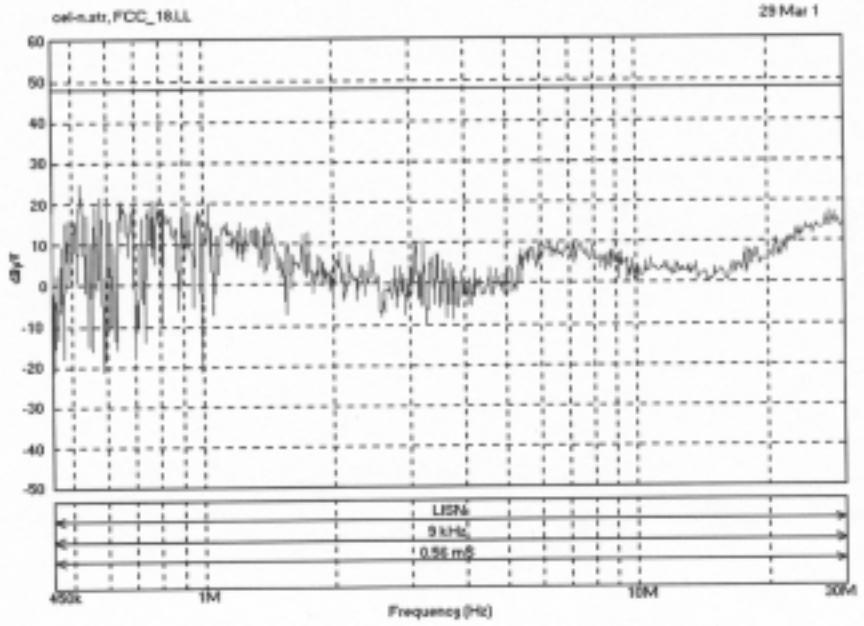
EDX 13W

Conducted Test Line: 1



Detected Value	
Frequency MHz	Peak Level dBµ V
0.46	25.5
0.49	23.5
0.52	22.4
0.54	23.0
0.61	21.4
0.72	23.4

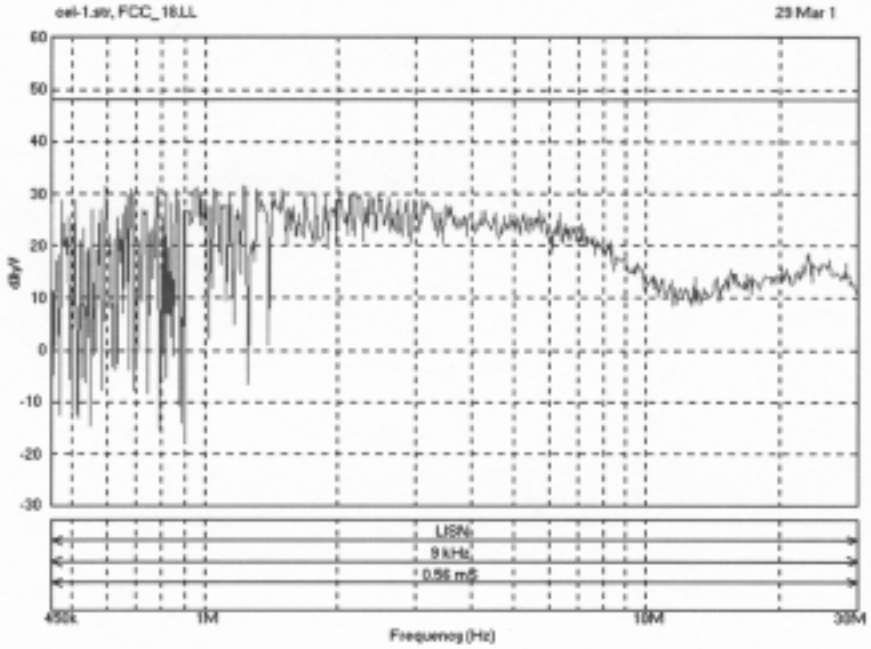
Conducted Test Line: Neutral



Detected Value	
Frequency MHz	Peak Level dBµ V
0.52	25.4
0.58	24.0
0.60	22.2
0.64	20.2
0.65	20.0
0.76	20.7

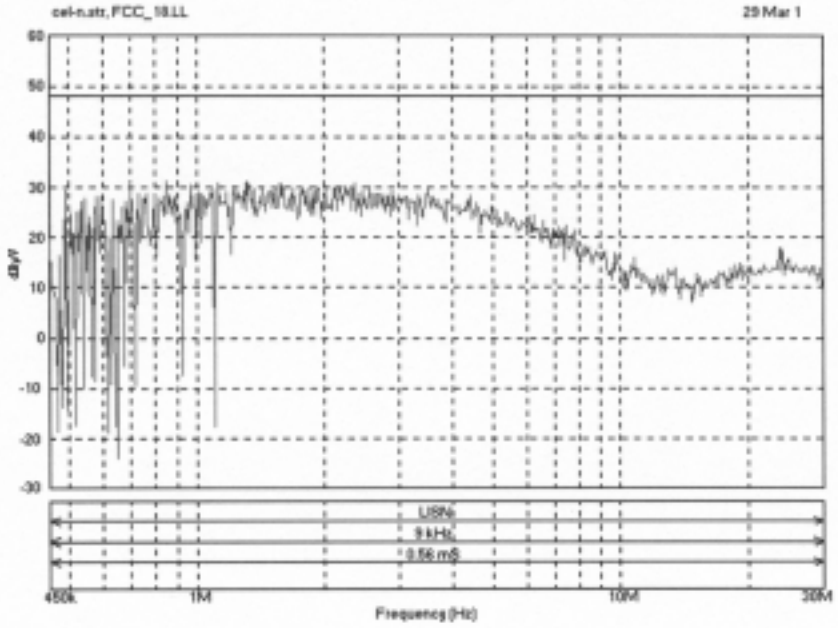
EDX 14W

Conducted Line: 1



Detected Value	
Frequency MHz	Peak Level dBµ V
0.86	31.0
0.94	30.9
0.95	30.7
1.49	31.4
1.77	31.2
2.02	31.5

Conducted Line: Neutral



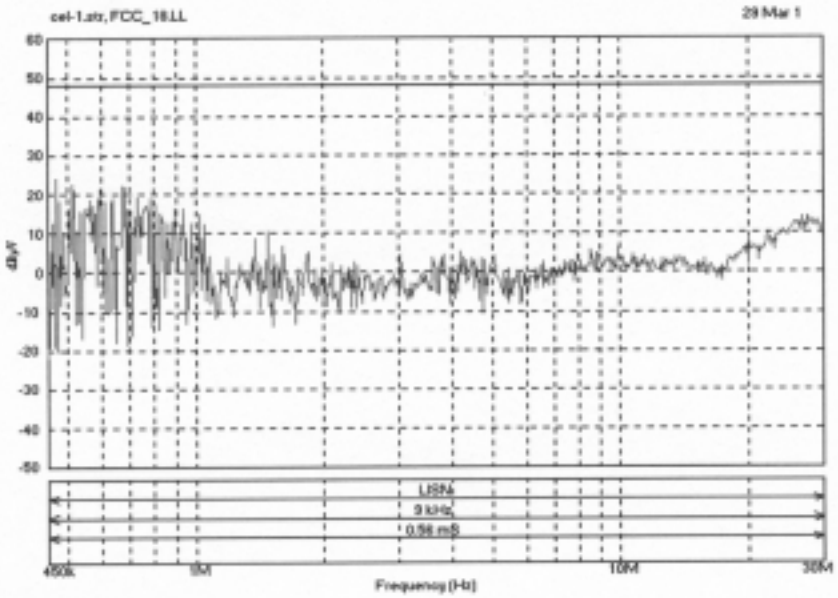
Detected Value	
Frequency MHz	Peak Level dBµ V
1.12	32.4
1.22	31.2
1.58	31.7
1.77	31.7
2.02	31.7
2.10	31.7

Client: Technical Consumer Products, Inc.
Model: EDX Series

Report No.: CLE032201-02
Issue Date: 04/27/01

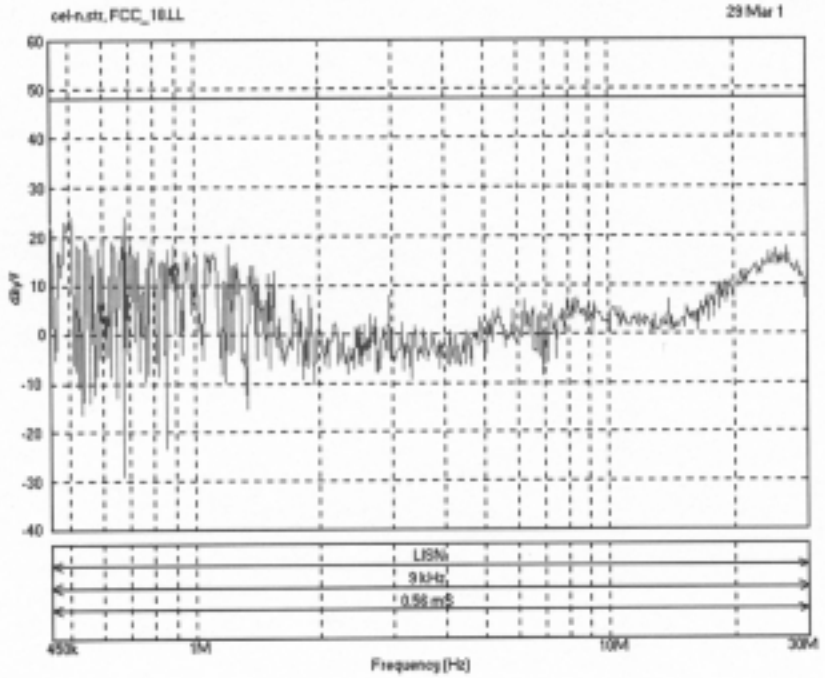
EDX 15W

Conducted Line: 1



Detected Value	
Frequency MHz	Peak Level dBµ V
0.47	25.2
0.51	26.0
0.59	24.9
0.76	20.7
0.77	24.9
0.78	24.2

Conducted Line: Neutral



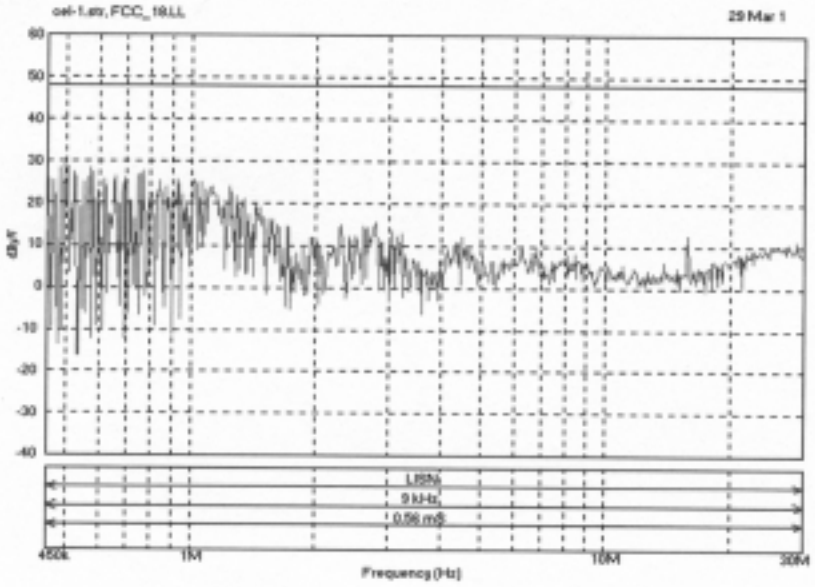
Detected Value	
Frequency MHz	Peak Level dBµ V
0.45	22.0
0.50	26.7
0.67	22.7
0.68	22.0

Client: Technical Consumer Products, Inc.
Model: EDX Series

Report No.: CLE032201-02
Issue Date: 04/27/01

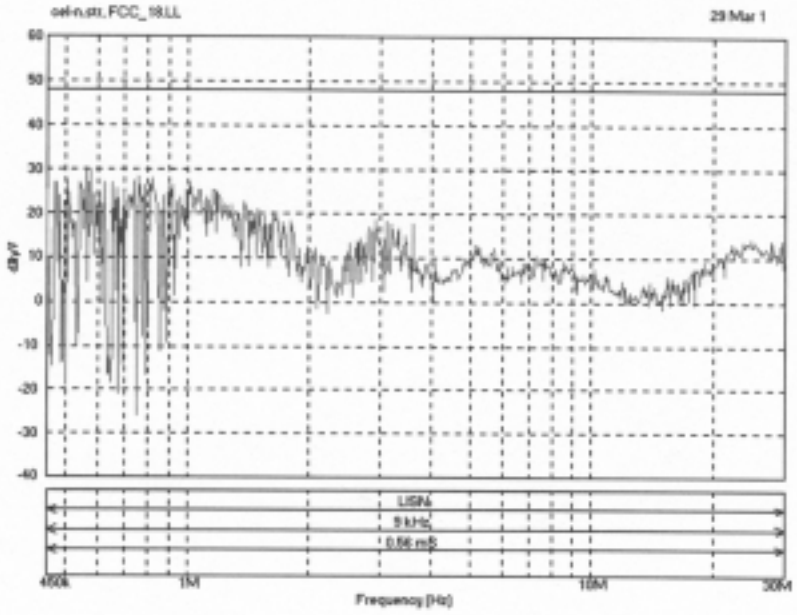
EDX 16W

Conducted Line: 1



Detected Value	
Frequency MHz	Peak Level dBµ V
0.49	30.2
0.52	29.5
0.54	28.0
0.72	30.9
0.76	28.5
0.84	26.0

Conducted Line: Neutral



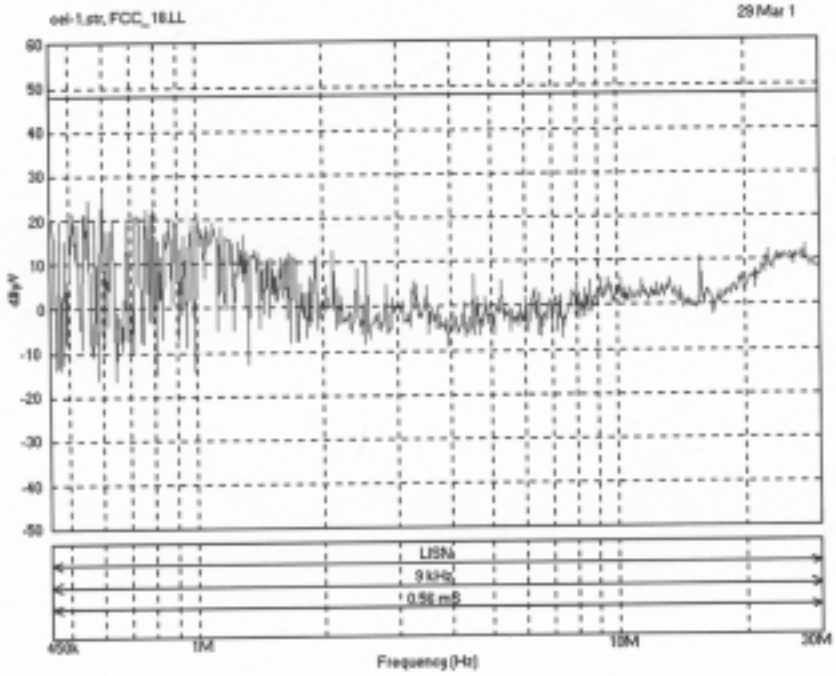
Detected Value	
Frequency MHz	Peak Level dBµ V
0.47	29.2
0.54	29.0
0.56	27.9
0.57	27.2
0.75	27.2
0.82	29.9

Client: Technical Consumer Products, Inc.
Model: EDX Series

Report No.: CLE032201-02
Issue Date: 04/27/01

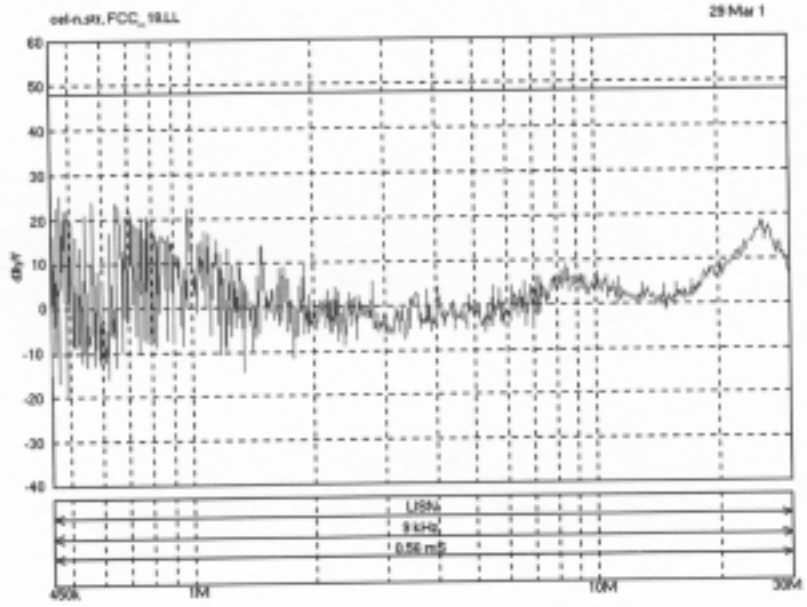
EDX 20W

Conducted Line: 1



Detected Value	
Frequency MHz	Peak Level dBµ V
0.46	27.0
0.47	26.5
0.54	27.7
0.56	28.5
0.65	24.5
0.78	25.5

Conducted Line: Neutral



Detected Value	
Frequency MHz	Peak Level dBµ V
0.45	27.9
0.50	25.2
0.54	28.0
0.55	28.5
0.57	28.5
0.72	25.5

Exhibit VI

TEST SET-UP

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EUT

PHOTOS

CONDUCTED TEST – *Front View*

CONDUCTED TEST – *Back View*

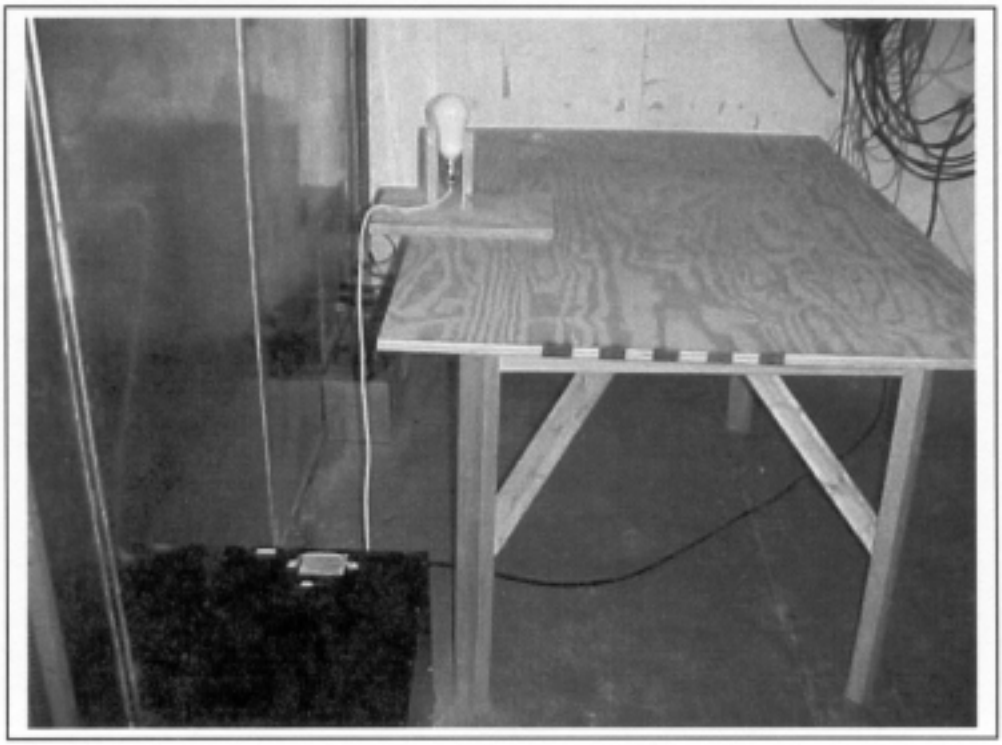

Exhibit VII

Modifications

EUT COMPLIES

WITHOUT MODIFICATIONS

Exhibit VIII

Labeling of Equipment

It will be the responsibility of the manufacturer or importer to permanently affix the appropriate label when marketing the equipment.

The label shall be located in a conspicuous location on the device and shall contain the unique identification described in Section 2.954 which reads as follows:

Identification: Section 2.954

Devices subject only to Verification shall be uniquely identified by the responsible party. This identification shall not be of a format which could be confused with the FCC Identifier on certified, notified, type accepted or type approved equipment. The responsible party shall maintain adequate identification records to facilitate positive identification for each device.

The label shall bear the following statement:

> *Operation of this equipment is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.*