Verification Test Report

For a

Circle Lamp

Manufacturer:

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

Testing Facility:

F-Squared Laboratories 10880 Moxley Road Damascus, MD 20872

The Circle Lamp, model EC-40, has 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 May 18, 2000 and the testing was completed on May 18, 2000.

Evaluation Conducted By:

· In lun Chan

Frank Gonzales EMC Test Engineer Report Reviewed By:

Rob Pellizze Vice President



success thru compliance

F-Squared Laboratories

9890A Main Street Damascus, MD 20872 (301) 253 – 4500

Fax: (301) 253 - 5179

This report shall not be duplicated except in full without the written approval of F-Squared Laboratories

Model: EC-40 **Issue Date:** 10/30/00 **Revision Date:** 05/04/01

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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: Circle Lamp

Trade Name: Technical Consumer Products, Inc.

Model #: EC-40

Power Supply: 110VAC

APPLICABLE RULES: CFR 47 Part 18

EQUIPMENT CATEGORY: Circle Lamp

MEASUREMENT LOCATION: F-Squared Laboratories in Damascus, MD. Site description and attenuation

data are on file with the FCC's Sampling and Measurement Branch at the FCC

Laboratory in Columbia, MD.

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.

A2LA STATEMENT: This laboratory is accredited by the American Association for Laboratory

Accreditation (A2LA) and the results shown in this test report have been determined in accordance with the laboratory's terms of accreditation unless

stated otherwise in the report.

A2LA CERTIFICATE NUMBER: 793.01

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UNCERTAINTY BUDGET:

• <u>Conducted Emission</u> 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: _____

Rob Pellizze, Vice President

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Exhibit II

List of Measurement Instrumentation

Equipment Type	Manufacturer	Model #	Serial #	Calibration Due
				Date
Receiver System	Rohde & Schwarz	ESMI	DE23119	Feb. 2001
LISN #1	Solar	8012-50-R-24-BNC	910488	Feb. 2001
LISN #2	Solar	8012-50-R-24-BNC	933201	Feb. 2001
Biconical Antenna	Compliance Design, Inc.	B100	386	Jan. 2001
Biconical Antenna	Compliance Design, Inc.	B200	292	Jan. 2001
Biconical Antenna	Compliance Design, Inc.	B300	318	Jan. 2001
Horn Antenna	Antenna Research	DRG-118/A	1105	Jan. 2001
	Associates			
Antenna Mast	Compliance Design, Inc.	M100	NA	NA
Amplifier	HP	8447F	3113A04704	Aug. 2001
Turntable	F-Squared Laboratories	Site 1	NA	NA
Spectrum Analyzer	HP	8391A	3149A07546	Feb. 2001

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Exhibit III

Equipment Under Test Information and Data

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

TESTING ALGORITHM: The Circle Lamp was 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.

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Exhibit IV

EUT Configuration and Cables

EUT:

Device	Manufacturer	Model #
Circle Lamp	Technical Consumer Products, Inc.	EC-40

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

EUT: Power - Shielded

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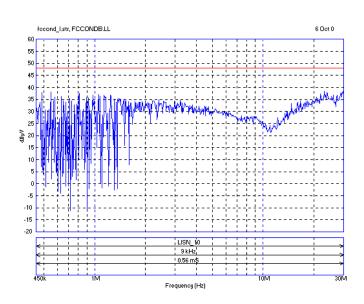
Client: Technical Consumer Products, Inc.

Model: EC-40

Report No.: CLE092800-01 **Issue Date:** 10/30/00 **Revision Date:** 05/04/01

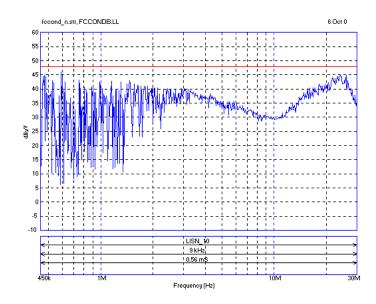
Exhibit V

Conducted Test Line: Phase



QP Detect	QP Detected Value	
Frequency	Level	
MHz	dΒμV	
0.59	42.70	
0.60	41.10	
0.75	41.10	
0.77	42.50	
0.81	41.30	
0.90	40.60	

Conducted Test Line: Neutral



QP Detect	QP Detected Value	
Frequency	Level	
MHz	dΒμV	
0.55	41.60	
0.57	41.60	
0.64	41.10	
7.11	41.10	
0.81	41.30	
1.24	40.10	

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Exhibit VI



TEST SET-UP

&

EUT

PHOTOS

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CONDUCTED TEST – *Front View*



CONDUCTED TEST – Back View



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Exhibit VII

Modifications

EUT COMPLIES

WITHOUT MODIFICATIONS

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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.

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