TEST REPORT NO. R-2965P

ELECTROMAGNETIC EMISSIONS EVALUATION TESTS

PER FCC PART 15, SUBPARTS B AND C

FOR THE

LUTRON ELECTRONICS

MAESTRO WIRELESS (390 MHz)

21 FEBRUARY 2007

PREPARED FOR: *Lutron Electronics*
7200 Suter Road
Coopersburg, PA 18036

Retlif Testing Laboratories
3131 Detwiler Road
Harleysville, PA 19438

TEST REPORT NO. R-2965P

ELECTROMAGNETIC EMISSION EVALUATION

FCC PART 15, SUBPART B AND C

FOR THE

LUTRON ELECTRONICS

MODEL #: MAESTRO WIRELESS

21 FEBRUARY, 2007

PREPARED FOR:

Lutron Electronics
7200 Suter Road
Coopersburg, PA 18036

SUBMITTED BY:

Retlif Testing Laboratories
3131 Detwiler Road
Harleysville, PA 19438
A wholly owned subsidiary of

PREPARED BY:

John Kavalusky
EMC Test Technician
Retlif Testing Laboratories

REVIEWED BY:

Cathy Lattieri
EMI Test Technician
Retlif Testing Laboratories

TABLE OF CONTENTS

LIST OF FIGURES

ADMINISTRATIVE DATA

TEST PERFORMED:

Measurements of Radiated RF and Conducted Emissions.

PURPOSE OF TEST:

To evaluate the ElectroMagnetic Emissions (EMC) characteristics of the Equipment Under Test **(EUT)** with respect to Subpart B and C of Part 15 of the Federal Communications Commission **(FCC)** rules for intentional and unintentional radiators.

EQUIPMENT UNDER TEST:

Model Number: **MAESTRO WIRELESS (390MHZ)**
Serial Number: **FCC ID: JPZ0042 (Transmitter)**
JPZ0043 (Receiver)

CONTRACT:

Purchase Order Number: **77150**

TEST PERIOD:

07 thru 12 February, 2007

TEST FACILITY:

Retlif Testing Laboratories, EMC Test Laboratory, located at: 3131 Detwiler Road, Harleysville, Pennsylvania 19438.

TEST PERSONNEL AND COORDINATORS:

Retlif Testing Laboratories	**Lutron Electronics**
John Kavalusky	Matt Cardoni

SUMMARY OF TEST RESULTS

The **Model #: MAESTRO WIRELESS (390MHZ)**, configured as described herein, **COMPLIES WITH THE REQUIREMENTS SET FORTH IN SUBPART B AND C OF PART 15 OF THE FEDERAL COMMUNICATIONS COMMISSION (FCC) RULES FOR INTENTIONAL AND UNINTENTIONAL RADIATORS.**

The test results contained in this report represent emission and/or immunity characteristics of only the product(s) (model and serial no.) tested. **Retlif Testing Laboratories** makes no claim that identical test results will be obtained for future tests of the same model/equipment or that the test results contained herein could be duplicated after the tested product leaves the possession of the **Retlif Testing Laboratories**.

1.0 INTRODUCTION

This document is a report to determine the EMC characteristics of the Model #: **MAESTRO WIRELESS (390MHZ)**. Presented by **Lutron Electronics** of Coopersburg, Pennsylvania.

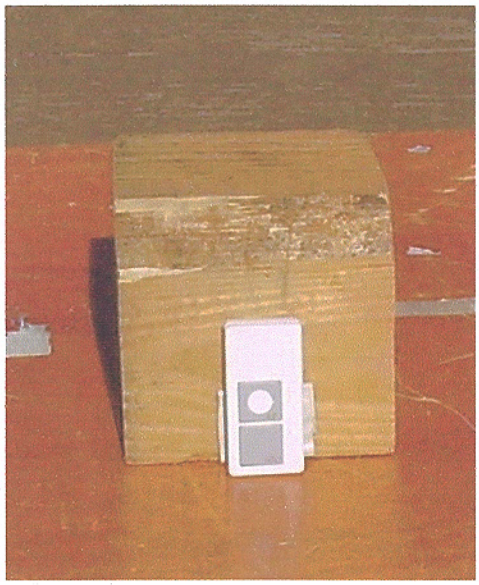
The purpose of the testing was to evaluate the EMC characteristics of the test sample with respect to Subpart B and C of Part 15 of the **FCC** Rules for intentional and unintentional radiators.

All test procedures used meet the requirements of the American National Standards Institute Procedure C63.4: 2003: **"Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz"**.

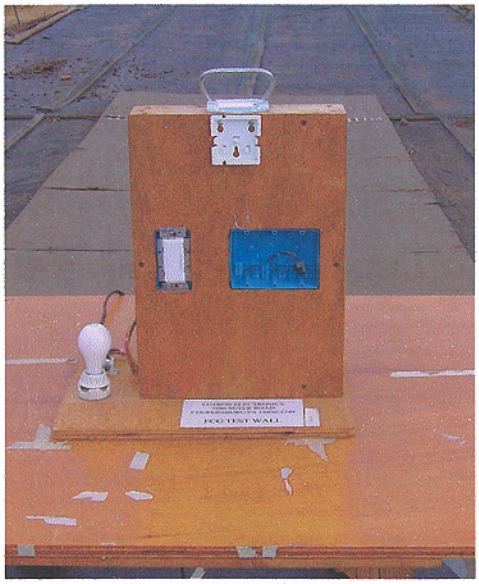
2.0 DESCRIPTION OF THE EQUIPMENT UNDER TEST (EUT)

The **Model# Maestro Wireless,** manufactured by **Lutron Electronics** of Coopersburg Pennsylvania is a wireless transmitter and contains a separate receiver. It operates at a frequency of 390MHz.

Hereinafter, the **Model # Maestro Wireless,** will be referred to as the **EUT** (Equipment Under Test).



Transmitter



Receiver

3.0 TEST INSTRUMENTATION

EN/ RSI INV #	DESCRIPTION	MANUFACTURER	MODEL #	SERIAL #	CAL DUE DATE
712	20ft Cable RG-223	PASTERNACK	BNC TO BNC	N/A	11/29/2007
716	35ft Cable 1318	PASTERNACK	BNC TO BNC	N/A	11/28/2007
8013	ANTENNA	TENSOR	4108	204	6/11/2007
8014	ANTENNA	AMP.RES.ASSOC.	AT1000	4094-025	6/14/2007
8071	SPEC. ANALY.	H.P.	8566B	3638A08767	11/21/2007
8072	SPEC. A.DISPLY	H.P	85662B	3701A22258	11/21/2007
8073	COMPUTER	H.P. SYSTEM	9000 300 SERIES	NSN / CART	5/1/2007
8074	TRANSFORMER	G.E.	9T51B33G3	NSN	5/1/2007
8076	SPEC. ANALY.	H.P.	8568B	2841A04457	5/26/2007
8077	SPEC. A.DISPLY	H.P	85662A	2848A17406	5/26/2007
8080	RECEIVER	R & S	ESVP	861744/015	12/22/2007
8300	TURNTABLE	EMCO	2065-1.21	0001-2156	5/5/2007
8300	CONTROLLER	EMCO	2090	0001-1489	5/5/2007
8300	MINI MAST	EMCO	2075-2	0002-2278	5/5/2007
8317	Pre-Amplifoer	AGILENT	8449B	3008A02311	11/21/2007

IF CAL DUE DATE = BLANK FIELD
Calibration is not required.

4.0 TEST RESULTS

4.1 Conducted Power Line Measurements, §15.107 Test Results

Conducted power line measurements were recorded for the **EUT**.

The **EUT** was placed on a table 80cm above a horizontal ground plane in a shield room. The rear of the **EUT** was positioned at the edge of a 1m x 1.5m tabletop that was 40cm from the vertical ground plane. The **EUT** was positioned 80cm from all metal objects and LISNs. The filtered power (115Vac, 60Hz) was fed through 50µh LISNs to the **EUT.** A spectrum analyzer was used to scan the frequency range of .150-30MHz (as required) for each line.

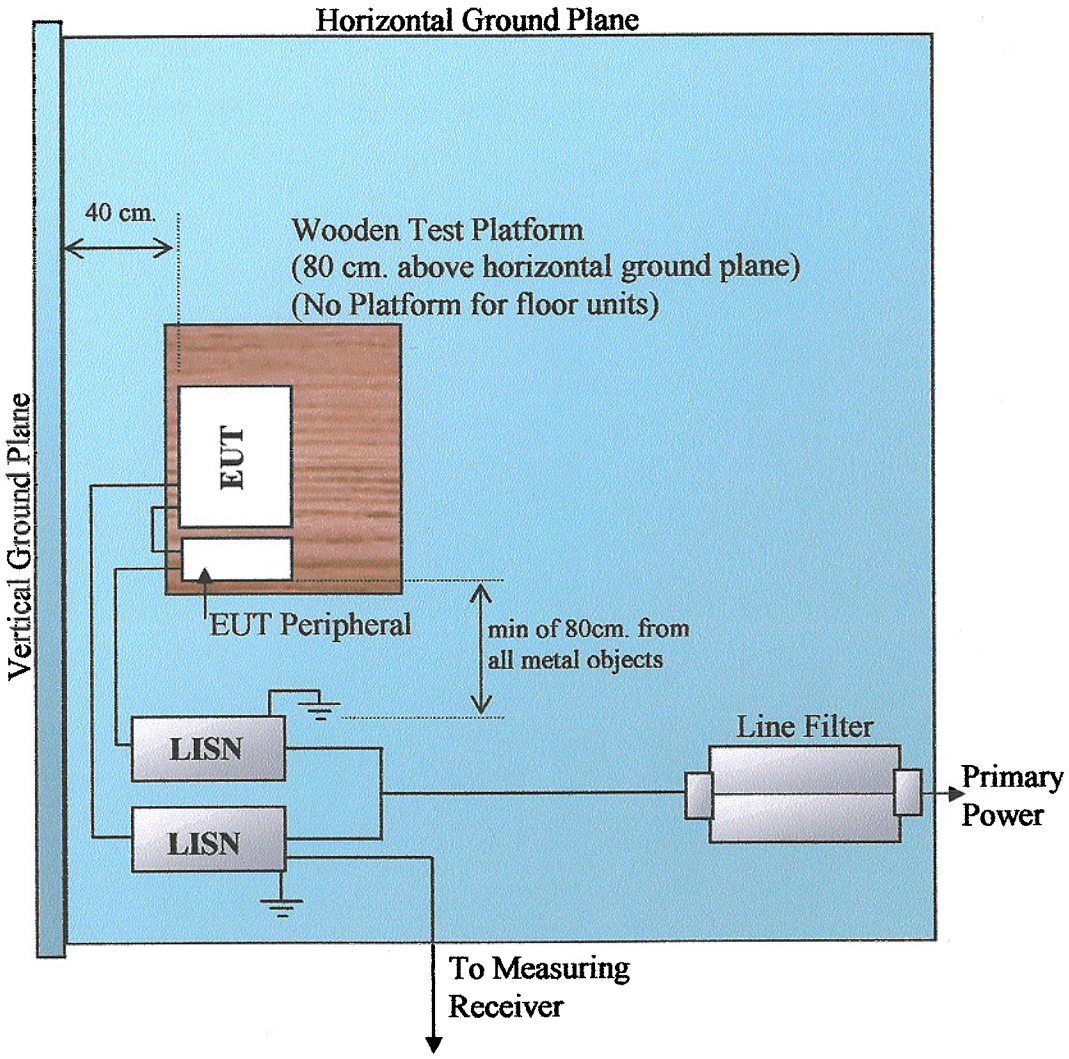
The test setup diagram is shown in Figure 1 and the photographs are shown in Figure 2.

The **EUT** was tested while operated at the transmit frequency of 390MHz.

The results of the line-go-ground radio noise voltage measurements are shown in Figures 3 and 4 (Graphs) tested with no load.

Note: Customer claims that they are exempt from testing with the load on (Dimmer On) by the rule found in part 15.103(d). This states that digital devices in an appliance (dimmers are appliances) are exempt from testing, therefore Conducted Emissions testing was performed with the **EUT** receiving power. No load = Dimmer off and receiver receiving power.

THE LEVELS ARE BELOW THE APPLICABLE LIMITS OF AS SPECIFIED BY FCC IN §15.107.



Conducted Emissions Test Setup Diagram (Top View)
Figure 1