

8165 E Kaiser Blvd. Anaheim, CA 92808 p. 714.282.2270

f. 714.676.5558

**Test Report: L01120101** 

Model Number: CATALOG NUMBER

Report Prepared For: COMPANY NAME

1234 Main St. Springfield, CA 94208

**Test:** In-situ Temperature Measurement Test per ANSI/UL standards.

**Standards Used:** Appropriate part or all test guidelines were used for test performed:

ANSI/UL 1598-2004 Luminaires: In-situ Temperature Measurement Test (ISTMT)

**Description of Sample:** Client submitted three samples of LED garage luminaire. Fixture catalog number is

CATALOG NUMBER. Received in working and undamaged condition. No modifications

were necessary.

Sample Arrival Date: 7/5/12

**Date of Tests:** 7/6/12 - 7/9/12

Seasoning of Sample SSL: No seasoning was performed in accordance with ANSI/UL 1598-2004.

## Thermocouple placement:

- 1. Thermocouple is attached to the side of a LED with soldermask scraped off to allow direct attachment to copper substrate. The LED is chosen to be the closest one to the center of the board.
- 2. LED has an optic lens. The lens was drilled through to place the thermocouple and filled with epoxy to seal the hole.
- 3. Thermocouple attached to driver at manufacturer's test point (as indicated on label).

## **Equipment List**

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	<del></del>
Yokogawa Digital Power Meter	WT210	MT-EL06-S1	01/04/13
Xitron Power Analysis System	2503AH	MT-EL01	01/09/13
Fluke Digital Thermometer	52k/J	MT-TP02-GC	01/04/13

<sup>\*</sup>All Results in accordance to ANSI/UL 1595-2004.

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ISTMT Test Summary	
Manufacturer:	COMPANY NAME
Model Number:	CATALOG NUMBER
Input Voltage (VAC):	120.00
Input Current (Amp):	0.71
Input Power (W):	85.54
Input Power Factor:	1.00
Thermocouple #1 (Fig 1) °C:	67.80
Thermocouple #2 (Fig 2) °C:	58.50
Ambient Temperature (°C):	24.7
Stabilization Time (Hours):	3:35
Total Operating Time (Hours):	4:05

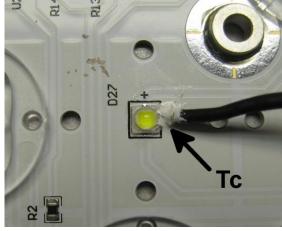




Fig 1: LED Thermocouple #1 Fig 2: Driver/PS Thermocouple #2

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RoHS

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<sup>\*</sup>All Results in accordance to ANSI/UL 1595-2004.



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**Test Methods** 

## **Temperature Measurements - ISTMT**

A Fluke 52K/J Digital Thermometer is used to measure the ambient, LED, and power supply/driver temperature. Ambient temperature is set to 25°C +/- 5°C per ANSI/UL 1598-2004 19.5.1

Ambient temperature is set to 25°C and is measured from the horizontal plane passing through the midpoint of the luminaire's vertical axis at a horizontal distance from the luminaire equal to at least 3 times the luminaire diameter. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 3 hours and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Test Report Released by:

Tinho Shin

Joseph Shin

**Engineering Manager** 

Test Report Reviewed by:

Steve Kang

**Quality Assurance** 

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