

**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.  
 4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL87301-INSITU  
 DATE: 05/27/16  
 PREPARED FOR: Evluma  
 LUMINAIRE CAT NO: AMAX-70-4K-6-3-D-S3-0

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ADDRESS: 3600 Lind Ave. SW  
 Suite 140  
 Renton, WA 98057

LUMINAIRE: Cast finned metal housing with formed metal access door, 1 white circuit board with 4 sets of 4 LEDs, white fibrous reflector, clear plastic interior lens with one optic below each set of 4 LEDs, clear micro-prismatic glass drop lens, lens prisms out.

LAMPS: Sixteen white light emitting diodes (LEDs) each with clear hemispherical integral lens, vertical base-up position.

LED DRIVER: Evluma Proprietary. Driver information provided by client.

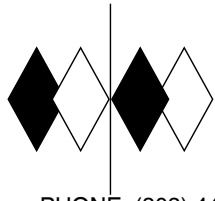
OBJECT OF TEST: Measure temperature of hottest single LED in the luminaire for correlation to the LED manufacturer's lumen depreciation curves. Also measure one additional LED temperature and the hot spot on the LED driver. Evluma provided direction as to which LEDs to measure and where to place the thermocouple on each LED. Evluma also provided direction for thermocouple placement on the LED driver. Type K thermocouples were utilized for all thermal measurements.

INSTRUMENTATION:	APT 6040 AC Power Source Yokogawa WT210 Power Analyzer Omega HH66R Digital Thermometer	<u>Calibration Due</u> NA 11/30/16 09/02/16
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PROCEDURE: In Situ Temperature Measurement Test on pole arm mounted luminaire. The luminaire was mounted in free air per UL 1598 specifications and the Energy Star Manufacturer's Guide for Qualifying Solid State Lighting Luminaires. After mounting, the luminaire was energized at 120VAC 60Hz input to the LED driver and allowed to stabilize in a 25 +/-1 degree Celsius free air ambient. Once stabilization was verified the LED, driver, and ambient temperatures were recorded.

RESULTS: Refer to following pages

**Checked:**     D. Jerger      
**Approved:**     N. White



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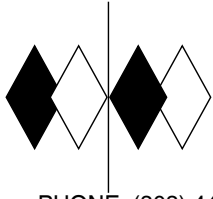
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RESULTS: Performance Data

Thermocouple Location	Temperature in Degrees C	Temperatures corrected to Reflect a 25°C Ambient
T <sub>A</sub> (ambient)	25.6	25.0
T <sub>LD1</sub> (LED1)	69.9	69.3
T <sub>LD2</sub> (LED2)	69.3	68.7
T <sub>DR</sub> (Driver)	86.1	85.5

Luminaire Input Electrical (60Hz)

Input Voltage (Volts AC): 120.0  
 Input Current (Amps AC): 0.711  
 Input Power (Watts AC): 73.1



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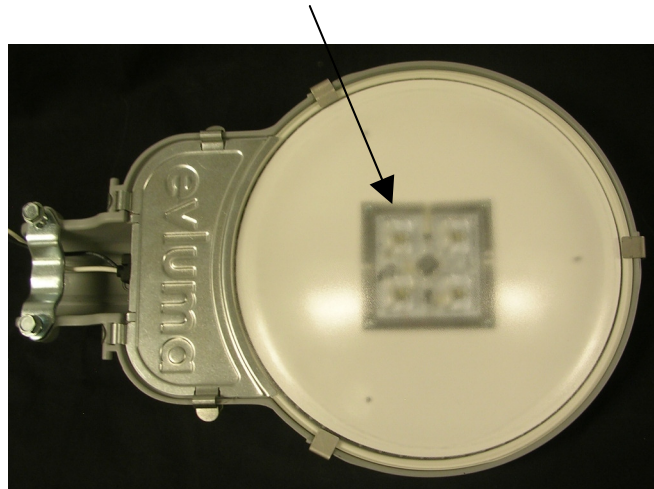
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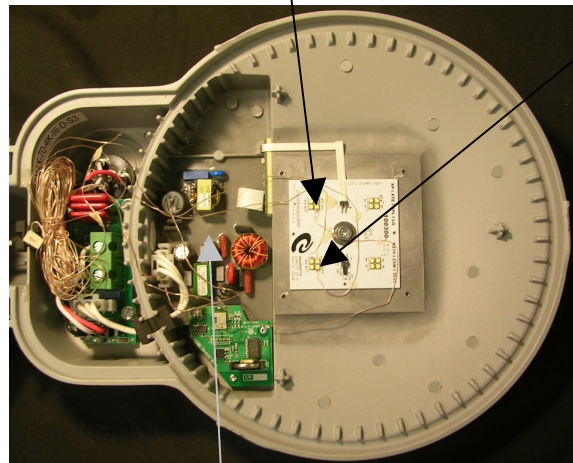
RESULTS: Photographs

### LUMINAIRE WITH LENS

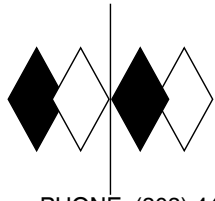


LED 1

LED 2



DRIVER LOCATION



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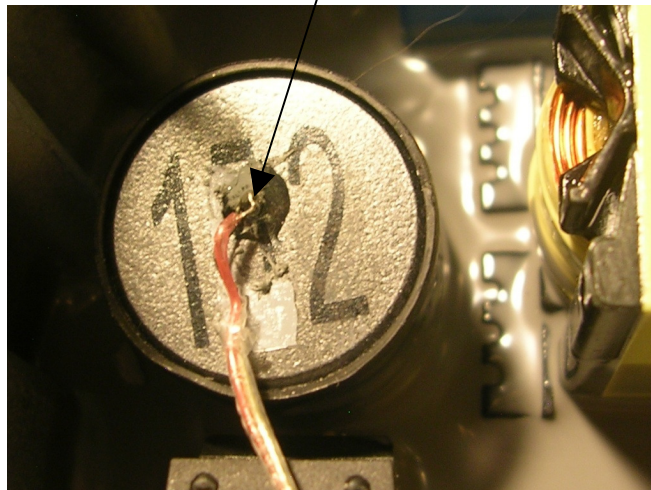
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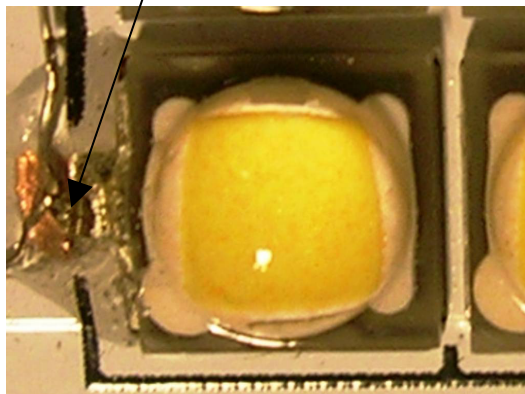
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RESULTS: Photographs (continued)

DRIVER



LED (typical)



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