



INTEGRATING SPHERE TEST REPORT

October 21, 2014

IES LM79-08 Section 9.1

Technical Report

TÜV SÜD America

Ji1409766-04-SPH

Sample Tested: Bob in Resin Shade

Manufacturer: Alva Light, Inc.



Sample Description: LED Luminaire

Test Orientation: Intended (Horizontal)

Date of Test: October 08, 2014

Tested by

Reviewed by

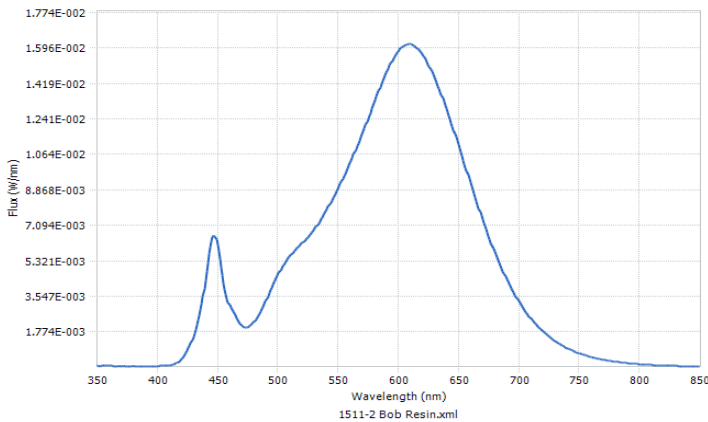
Tim Gentry

Byrd Evans

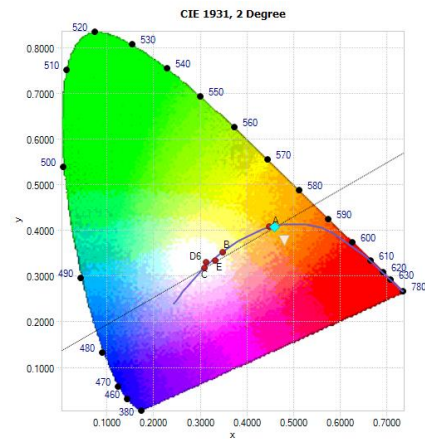
TÜV SÜD Project
Handler

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Test Results: (TÜV SÜD Reference# 1511-2)



Spectral Response



Chromaticity Diagram

Tristimulus Values: x / y = 0.4598 / 0.4076

Photometric Test Results

Luminous Flux (Lumens)	743.8
Efficacy (Lumens/Watt)	77.54
Color Temperature (CCT K)	2675
Color Rendering Index (CRI)	83.5
R₉ Value	16.0
Radiant Flux (W/nm)	2.39
Chroma u' / Chroma v'	0.2638 / 0.5262
Duv	-0.00110

Electrical Test Results

Input Power (Watts)	9.59
Input Voltage (Volts)	120.01
Input Current (Amps)	0.0800
Power Factor	0.999
Input Frequency (Hz)	60.0
Stabilization Time	45 minutes
Ambient Temperature	25.1°C
Harmonic Distortion A-THD	4.90%

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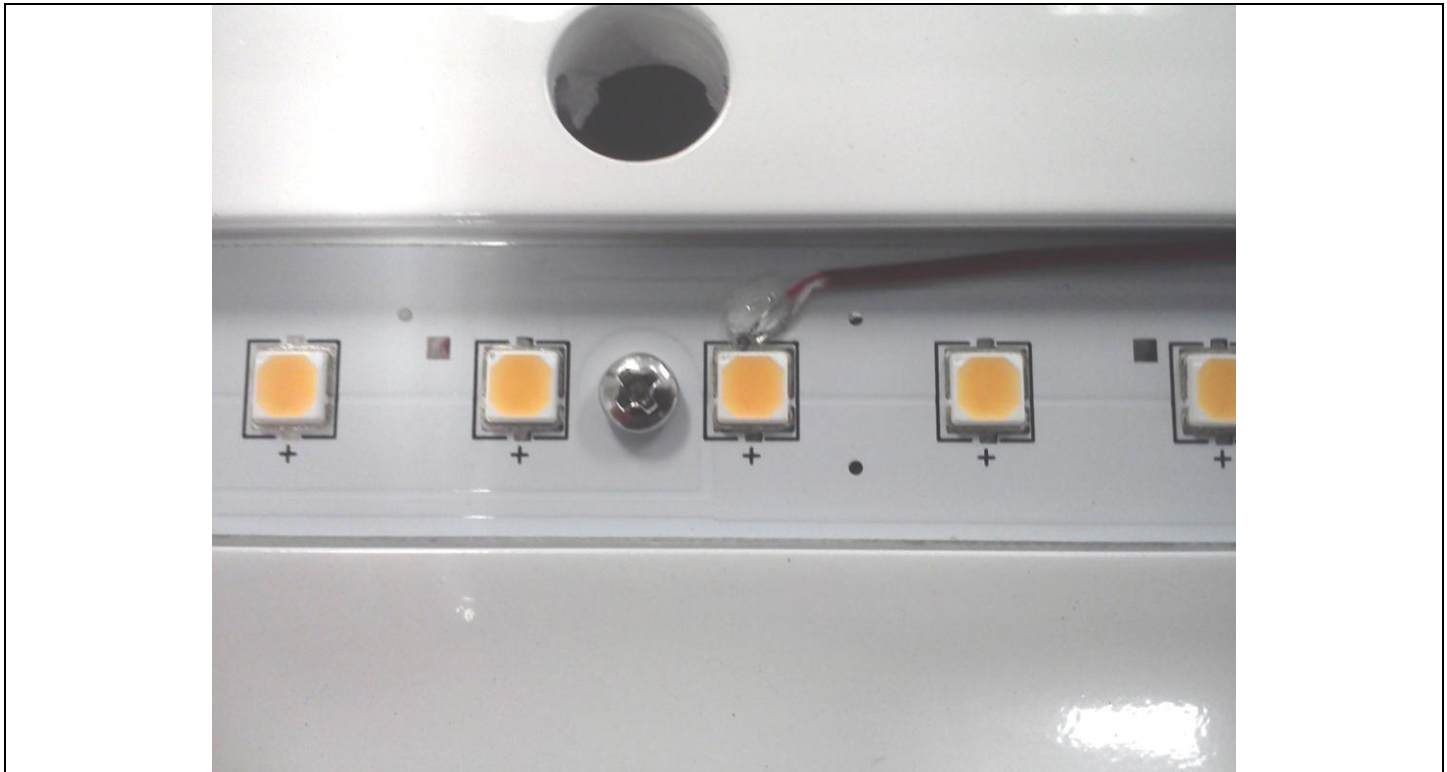
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ISTMT Temperature Measurement

ISTMT temperature measurement at thermal stabilization (8 hours continuous operation).

Thermocouple locations (shown below) are in accordance with manufacturers recommended / stated guidelines for TMP - Temperature Measurement Point.



"LED" Thermocouple location at TMP

Test Results for: Alva Light, Inc. Bob in Resin Shade

LED TMP Temperature (120V)	36.9°C
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All temperatures are normalized to 25°C ambient.

Test Equipment

Description	Manufacturer / Model#	TÜV SÜD Ref#	Calibration Due Date
Thermometer	Fluke 52-II	ATLE0118	1/15/2015