



# INTEGRATING SPHERE TEST REPORT

October 29, 2013

## IES LM79-08 Section 9.1

Technical Report

TÜV SÜD America

OT1302074-1-SPH

Sample Tested: L4-18W-41K-132-E

Manufacturer: Redbird LED



Sample Description: LED Replacement 4' tube 18W External Driver

Sample was tested after 2000 hours of continuous operation while installed into troffer.

Test Orientation:

Tested in Horizontal orientation (intended)

Date of Test: October 29, 2013

Tested by

Byrd Evans

TÜV SÜD Project Handler

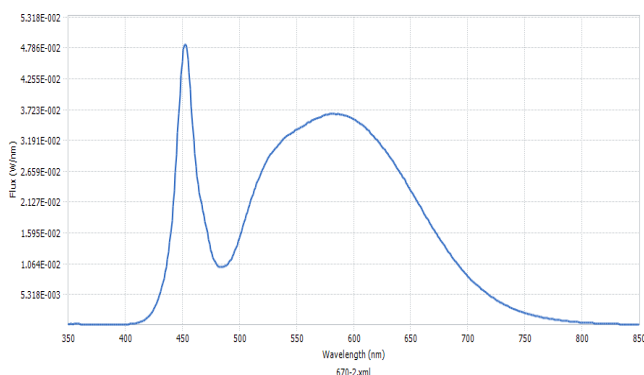
Reviewed by

Bryan Cubitt

TÜV SÜD Program Manager

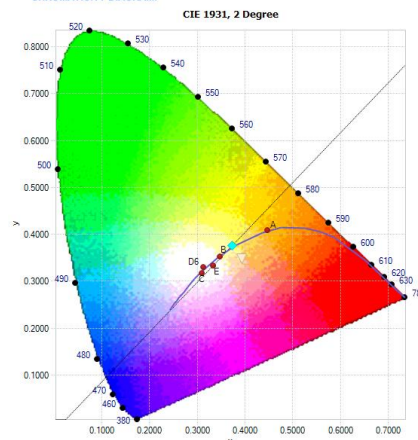
### Test Results:

#### SPECTRAL FLUX GRAPH:



Spectral Response

#### CHROMATICITY DIAGRAM:



Chromaticity Diagram

Tristimulus Values:  $x / y = 0.3740 / 0.3765$

#### Photometric Test Results

<b>Luminous Flux (Lumens)</b>	<b>2835</b>
<b>Efficacy (Lumens/Watt)</b>	<b>157.3</b>
<b>Color Temperature (CCT K)</b>	<b>4175</b>
<b>Color Rendering Index (CRI)</b>	<b>85.6</b>
<b>R<sub>9</sub> Value</b>	<b>23.7</b>
<b>Radiant Flux (W/nm)</b>	<b>8.9</b>
<b>Chroma u' / Chroma v'</b>	<b>0.2210 / 0.5005</b>
<b>Duv</b>	<b>0.00150</b>

#### Electrical Test Results

<b>Input Power (Watts)</b>	<b>18.03</b>
<b>Input Voltage (Volts)</b>	<b>119.98</b>
<b>Input Current (Amps)</b>	<b>0.155</b>
<b>Power Factor (120V)</b>	<b>0.997</b>
<b>Input Frequency (Hz)</b>	<b>60.0</b>
<b>Stabilization Time</b>	<b>60 minutes</b>
<b>Ambient Temperature</b>	<b>25.2°C</b>
<b>A-THD (120V/277V)</b>	<b>3.04 %</b>

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