



# INTEGRATING SPHERE TEST REPORT

April 2, 2014

## IES LM79-08 Section 9.1

Technical Report

TÜV SÜD America

J11402415-3-SPH

**Sample Tested:** L4-18W-35K-132-E;  
4' Cardinal™ LED Tube, 3500K CCT, External  
Driver, Clear lens (TUV Sample # 1266-3)

**Manufacturer:** Redbird LED

**Sample Description:** T8 LED Tube

**Test Orientation:** Tested in Horizontal orientation  
(intended)

**Date of Test:** March 31, 2014



**Tested by**

**Byrd Evans**

TÜV SÜD Project Handler

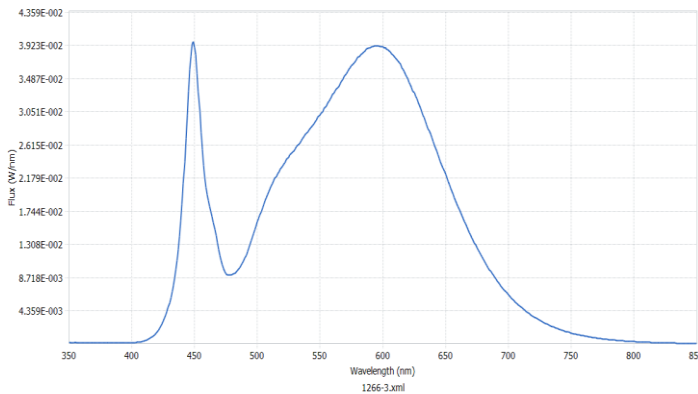
**Reviewed by**

**Bryan Cubitt**

TÜV SÜD Program Manager

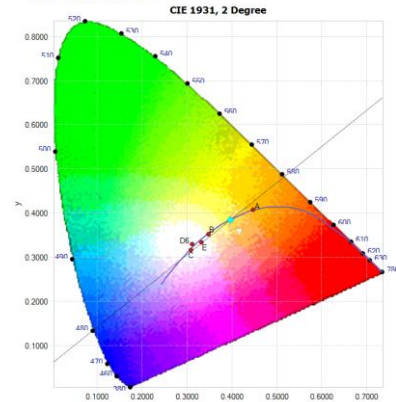
### Test Results:

▼ SPECTRAL FLUX GRAPH:



**Spectral Response**

▼ CHROMATICITY DIAGRAM:



**Chromaticity Diagram**

Tristimulus Values:  $x / y = 0.3967 / 0.3850$

#### Photometric Test Results

<b>Luminous Flux (Lumens)</b>	<b>2192</b>
<b>Efficacy (Lumens/Watt)</b>	<b>136.58</b>
<b>Color Temperature (CCT K)</b>	<b>3648</b>
<b>Color Rendering Index (CRI)</b>	<b>82.1</b>
<b>R<sub>9</sub> Value</b>	<b>9.9</b>
<b>Radiant Flux (W)</b>	<b>6.7</b>
<b>Chroma u' / Chroma v'</b>	<b>0.2324 / 0.5076</b>
<b>Duv</b>	<b>-0.00051</b>

#### Electrical Test Results

<b>Input Power (Watts)</b>	<b>16.05</b>
<b>Input Voltage (Volts)</b>	<b>120.00</b>
<b>Input Current (Amps)</b>	<b>0.134</b>
<b>Power Factor (120V/277V)</b>	<b>0.997 / 0.955</b>
<b>Input Frequency (Hz)</b>	<b>60.0</b>
<b>Stabilization Time</b>	<b>60 minutes</b>
<b>Ambient Temperature</b>	<b>24.1°C</b>
<b>A-THD (120V/277V)</b>	<b>3.86 % / 7.78 %</b>

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