LM-79 Test Report

Relevant Standards

IES LM-79-2008
IES TM-30-2015
CIE 13.3-1995

Product SKU

BLAZE™ MINI 4mm LED Tape Light - 12V 2700K
SKU: DI-12V-BL4MN150-27-009

Test Conditions

Test Temperature: 26.5 °C
Luminaire Sample Length: 12.0 in.
Power Supply: Agilent E3634A DC Power Supply
Voltage: 12 VDC
Current: .603 A
Power Consumption: 7.23 W

Test Date

5/15/2020

Prepared By

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Approved By

Andrew Lassen, Compliance Manager

The results contained in this report pertain only to the tested sample. Photometric & Colorimetry data measured in accordance to IES LM-79-2008 standards, at the Elemental LED, Inc. Innovation Lab.
<table>
<thead>
<tr>
<th>Metric</th>
<th>Test</th>
<th>Reference</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R_f$</td>
<td>90</td>
<td>100</td>
<td>IES TM-30-15 Fidelity Index</td>
</tr>
<tr>
<td>$R_g$</td>
<td>98</td>
<td>100</td>
<td>IES TM-30-15 Gamut Index</td>
</tr>
<tr>
<td>$R_s$ (CRI)</td>
<td>93</td>
<td>100</td>
<td>CIE Test Color Method General Index</td>
</tr>
<tr>
<td>$R_9$</td>
<td>63</td>
<td>100</td>
<td>CIE Test Color Method Sample Nine Score</td>
</tr>
<tr>
<td>LER</td>
<td>277</td>
<td>149</td>
<td>Luminous Efficacy of Radiation</td>
</tr>
<tr>
<td>Lumens</td>
<td>556</td>
<td>1852</td>
<td>Luminous Flux</td>
</tr>
<tr>
<td>$R_{f,skin}$</td>
<td>94</td>
<td>100</td>
<td>Average of CES15 and CES18 (skin)</td>
</tr>
</tbody>
</table>

**COLOR RENDERING INDEX**

<table>
<thead>
<tr>
<th>Source</th>
<th>Chromaticity Comparison</th>
</tr>
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</table>

**GENERAL COLOR RENDITION**

- **Summary of Results**
- **Source Properties**
- **Spectral Power Distribution Comparison**
- **Color Rendering Index**
- **Color Vector Graphic**
COLOR SAMPLE COMPARISON (APPROXIMATION)

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Elemental</th>
<th>Competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Nature</td>
<td>Ref</td>
<td>Test</td>
</tr>
<tr>
<td>B - Skin</td>
<td>CES 01</td>
<td>CFS 02</td>
</tr>
<tr>
<td>C - Textiles</td>
<td>CFS 03</td>
<td>CFS 04</td>
</tr>
<tr>
<td>D - Paints</td>
<td>CFS 05</td>
<td>CFS 06</td>
</tr>
</tbody>
</table>

NOTE: CES stands for "Color Evaluation Sample"; these 99 samples are used in place of the 16 R values. The colors shown are approximate and depend on proper monitor calibration. Some colors may be outside of the gamut of the monitor, and will not be displayed accurately. For each sample, the color on the left represents the reference source, and the color on the right represents the test source.
This chart displays the average Fidelity Index for all samples within the hue bin. The number of samples per bin, which can vary based on the CCT used for the calculation, is shown at the top. The color of the bar is based on the average chromaticity under the 5000 K reference illuminant; the colors may not display accurately depending on the calibration of the monitor, and should be used for orientation only.

This chart displays the change in chroma for the average sample within each hue bin. The number of samples per bin, which can vary based on the CCT used for the calculation, is shown at the top. The color of the bar is based on the average chromaticity under the 5000 K reference illuminant; the colors may not display accurately depending on the calibration of the monitor, and should be used for orientation only.

This chart displays the Fidelity Index for each of the 99 CES. The CES are arranged by their hue angle under the 5000 K reference source, which was also used to determine the color of each bar. The colors are approximate and depend on proper monitor calibration. Some colors may be outside of the gamut of the monitor, and will not be displayed accurately.
Goniophotometer Test

SUMMARY OF RESULTS

Luminaire: BLAZE™ MINI 4mm LED Tape Light - 12V 2700K
SKU: DI-12V-BL4MN150-27-009
Luminous Flux: 576 Lumens
Power Consumption: 7.23 Watts
Efficacy: 79.66 Lumens/Watt
Spacing Criterion (0-180): 1.28
Spacing Criterion (90-270): 1.28

*Graphs below are for reference, full IES files are available on Diode LED website*

DISTRIBUTION CHARTS AND TABLES