Is your LM-79 a full LM-79/Color report per V5.1?

LM-79 test reports have always been a key requirement for qualifying products to the DLC Solid-State Lighting QPL. Under Technical Requirements V5.1 (effective July 1, 2020), the DLC requires specific information to be included in each report. Use this guide to make sure that your LM-79 test reports meet the new reporting requirements under Technical Requirements V5.1.

For a complete description of the new LM-79 reporting requirements, please refer to the “Additional Reporting Requirements for LM-79, LM-80, and TM-21 Reports” subsection (p. 33) of Technical Requirements V5.1.
Summarize the required metrics (optional).

One of the most common and helpful practices used in LM-79 test reports is to include a summary page where the tested product’s key performance results (electrical, photometric, thermal, etc.) are listed out. This summary is not a requirement; however, it will assist in the review of your application. An example of how to format a summary page is provided below. The bolded metrics in the captions call out the required components for every full LM-79/color report submitted under V5.1.

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>LED-xxxxxxxxxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTION</td>
<td>Description of product</td>
</tr>
<tr>
<td>LED MODEL NUMBER(S)</td>
<td>LED-XXX; LED-YYY</td>
</tr>
<tr>
<td>DRIVER MODEL NUMBER(S)</td>
<td>DRIVER-XXX</td>
</tr>
</tbody>
</table>

**ELECTRICAL CRITERIA**

- Input Power (W) @ 120 (VAC)
- Input Power Factor @ 120 (VAC)
- Input Current THD (%) @ 120 (VAC)
- Input Power (W) @ 277 (VAC)
- Input Power Factor @ 277 (VAC)
- Input Current THD (%) @ 277 (VAC)

**PHOTOMETRIC CRITERIA**

- Lumen Output (lm)
- Lumen Efficacy (lm/W) @ 120 (VAC)
- Correlated Color Temperature (K)
- Color Rendering Index - Ra
- Color Rendering - R9
- Dw
- Chromaticity Coordinate (x)
- Chromaticity Coordinate (y)
- Chromaticity Coordinate (u’)
- Chromaticity Coordinate (v’)

**THERMAL CRITERIA**

- Max. Measured Source Temperature (°C)
- Max. Measured Driver Temperature (°C)

An ideal electrical results summary table will include:
- Input Voltage
- Current
- Wattage
- Power Factor
- Current THD

An ideal photometric results summary table will include:
- Total Luminous Flux
- Luminous Efficacy
- Chromaticity Coordinates
- CCT & Duv
- IES Rf, Rg, and Rs,h1
- CRI (Ra) and R9
Include an ANSI/IES TM-30-18 full report.

Including an ANSI/IES TM-30 Full Report in your LM-79 test report is a new requirement under Technical Requirements V5.1, so make sure your test lab includes this in each report. See ANSI/IES TM-30-18 Annex D, Figure D-3 in the IES TM-30 standard for an example of a full TM-30-18 report. While the DLC does not require you to include the TM-30-18 report in a specific location, including it at the end of the LM-79/color report is a great way to make sure it’s included and that your DLC reviewer can easily find it.

Include the IES-TM-30-18 Full Report at the end of the full LM-79/color report as the last page of the PDF or as a pasted image (it cannot be a separate document).
Include IES TM-27-14 .SPDX documents for each product.

To enable future improvements to the DLC qualification and review process, IES TM-27-14 .SPDX documents with spectral data in 5 nm increments or smaller are now required for each submitted full LM-79/color report. The IES TM-27-14 standard and accompanying .SPDX document standardizes the format for the electronic transfer of spectral data. So be sure your test lab has provided you with the .SPDX document(s) for each product that is tested! .SPDX files should be separate documents from the LM-79/color test report(s) – there will be a dedicated place to upload each type of file through the DLC Application Portal.