



## Dear DLC Members and Stakeholders:

The DLC is pleased to release the following incremental update to its Testing and Reporting Requirements for Horticultural Lighting as Version 1.1.

## Testing and Reporting Requirements for LED-based Horticultural Lighting: Version 1.1

The DLC has updated four aspects of its [application and review process for horticultural lighting products](#), effective immediately. Each of these updates are meant to speed the transition to solid-state lighting in Controlled Environment Agriculture (CEA) by adapting currently used measurements and practices to the emerging CEA application space.

### 1. Revision to provisional policy allowing non-Photosynthetic Photon Flux (PPF)-based data

The first update is to the provisional policy allowing non-Photosynthetic Photon Flux (PPF)-based data to be used in applications' LM-80 reports until October 15, 2019. **Lumens- and radiometric-based LM-80 reports are now allowable without a required conversion scaling factor** until October 15, 2019, when the DLC will require PPF-based data in LM-80 reports.

- Starting on October 15, 2019, all new product applications **must** use PPF-based data in LM-80 reports, as originally described in the DLC's V1.0 policy.
- All products using non-PPF-based data without LM-85-based scaling factors accompanying LM-80 reports during the provisional period will be asked by the DLC to **resubmit PPF-based data by April 2020, or be delisted**.
- All products using non-PPF-based data in LM-80 reports that have been converted with LM-85-based scaling factors and submitted before October 15<sup>th</sup>, 2019 will be permitted to stay on the QPL through the first two-year cycle, including its six-month grace period, **resulting in a listing through April 2021**. If reapplying for the second two-year cycle, these products will be asked by the DLC to resubmit with PPF-based data.

### 2. Revision to driver testing policy

The second update is to the driver testing policy. **If a product uses multiple drivers from both the same manufacturer and product line or series, then the single worst case thermal environment of the set requires a driver ISTMT**. The DLC will operate with the expectation that the least electrically efficient driver in the manufacturer's product line or series is the worst-case thermal environment, but the reviewer may ask the manufacturer to provide detailed evidence to demonstrate the worst case driver thermals. This eliminates the need for duplicative tests that were called for in the DLC's V1.0 policy. Any product's drivers that do not share a manufacturer and product line or series will face independent evaluation of the ISTMT-based lifetime requirement.

### 3. Revision to test requirements for PPID and single-channel “tunable” spectral content

The third update is to the test requirements for PPID and single-channel “tunable” spectral content. **V1.1 clarifies that “in-house” assessments created without the customary chain of accreditation and proficiency are acceptable sources for PPID images and single-channel “tunable” spectral content.** Although it is generally expected to align with LM-79 methodology, a formal LM-79 test will not be required. If the DLC does add categories, thresholds, or other more meaningful distinctions based on PPID or single-channel “tunable” output in future revisions, standard accreditation and proficiency testing measures will be required.

### 4. Clarification of requirements for onboard cooling fans

The fourth update is to clarify requirements for onboard cooling fans. **If a fixture uses varying models of onboard fans for supply chain flexibility, DLC reviewers will inspect the various models for consistency in power and flow rate to ensure that fixture efficiency and component temperature limits are consistent.** Reviewers may request more detailed documentation if the fan model performance is divergent.

[View V1.1 Requirements and Supporting Materials](#)

[View Revision Cycle Timelines](#)

If you have questions about Version 1.1 of the horticultural lighting requirements, please contact [horticulture@designlights.org](mailto:horticulture@designlights.org).

Best regards,

The DLC Team