



Dear DLC Members and Stakeholders:

The DLC is pleased to release the following second draft update to the Technical Requirements for Horticultural Lighting as Version 2.1. This proposed update adds additional eligible product types to the Technical Requirements, with a proposed effective date of July 1, 2021. Please submit all comments using the [V2.1 Comment Form](#) to comments@designlights.org by **Friday, April 9, 2021**.

[View Draft 2 Horticultural V2.1 Technical Requirements](#)

SECOND DRAFT Technical Requirements for LED-based Horticultural Lighting V2.1

In response to DLC Member and stakeholder input, V2.1 proposes establishing eligibility for three new horticultural lighting product types. To support the qualification of fixtures that enable greater whole facility energy savings by removing excess heat from the grow environment, among other strategies, the DLC is proposing Technical Requirements specific to **externally supplied actively cooled and DC-powered fixtures**. Additionally, the DLC is proposing adding eligibility and establishing performance criteria for **LED replacements for linear fluorescent and HID lamps**.

While no new requirements are added for existing products, proposed requirements specific to the new product types are included in V2.1 under the “Special Considerations” section of the policy document (beginning on page 13). New language is called out in the draft with yellow boxes to indicate additions for ease of review.

Draft 2 contains changes made in response to stakeholder comment. Key changes from Draft 1 are noted below:

1. Externally Supplied Actively Cooled Horticultural Fixtures

The DLC defines externally supplied circulating liquid cooled horticultural fixtures to be products in which liquid, often water or a water/glycol solution, flows through input and output ports of each fixture in the system, being channeled through a cooling plate or other heat exchanger within the fixture. V2.1 describes how to test and report on these types of products to ensure comparable performance to typical V2.0 listed products.

Key changes from Draft 1:

- New self-protect functionality requirements
- Revisions to requirements for testing and reporting with respect to fixture-level allowable operating conditions for the cooling system
- Reporting of image showing PPE as a function of inlet fluid temperature

- Removal of requirements specific to the cooling system, not measurable at the fixture-level

2. DC-Powered Fixtures

Horticultural lighting fixtures powered by direct current (DC) considered in V2.1 include modular fixtures, where one AC-to-DC power source supplies power to multiple fixtures, and fixtures that operate on DC power, where one or more AC-to-DC power source may or may not be sold with the fixture. V2.1 describes how to test and report on these DC-powered fixtures in place of the typical equivalent AC testing and reporting.

Key changes from Draft 1:

- Revisions to testing and reporting of range of loading points required for the test power source report
- Reporting of cabling conditions to maintain less than 2% cabling loss for a fully loaded power source
- Removal of maximum cabling length testing requirement

3. LED Replacement Lamps

V2.1 considers eligibility for two types of horticultural lamps: LED replacements for linear fluorescent lamps and LED replacements for mogul-base high intensity discharge (HID) lamps. Draft 2 proposes that LED replacement lamps for horticultural applications meet Horticultural V2 Technical Requirements and allows for some horticulture lamp specific requirements.

Key changes from Draft 1:

- Clarifies eligibility information
- Proposes reporting intended mounting of screw-base replacements for HID lamps
- Proposes allowing directional screw-base replacements for HID lamps
- Proposes reporting beam and/or field angle for all lamps
- Revises electronics lifetime requirements

[View Draft 2 Horticultural Technical Requirements V2.1](#)

[View Horticultural Revision Cycle Timelines](#)

Comment Form

The DLC is seeking stakeholder input through the Horticultural Lighting V2.1 Comment Form before releasing the final V2.1 Requirements in June 2021. Please submit all comments using the V2.1 Comment Form to comments@designlights.org by **Friday, April 9, 2021**.

[Download Comment Form](#)

Informational Webinar

The DLC will host an informational webinar on **Thursday, March 11 at 1pm EST / 10am PST** to review Draft 2 of Horticultural Technical Requirements V2.1.

[Register for the Webinar](#)

If you have questions about Version 2.1 of the Horticultural Lighting Requirements, please contact horticulture@designlights.org.

Best regards,

The DLC Team