



# Horticultural Testing Constraints: Equipment Size Restriction

## Testing linear style products with a length greater or equal to five feet:

Under the Horticultural V2.1, a representative product for each different optical and/or distribution pattern must be tested and provide photosynthetic photon intensity distribution data. The DLC understands that conducting this testing may be difficult due to the size of the certain products. Due to this limitation, **products with a dimension greater than or equal to five feet** may deviate from the published requirement within the TM-33 reporting section of the requirements that “Intensity Scaling element field shall be ‘false’” by following the requirements and procedure below:

- Products with a length equal to or greater than five feet must be submitted in a family with equivalent shorter products that can be tested for intensity distribution data.
  - Equivalent shorter products are defined as products whose cross-sectional distribution is equivalent to that of the 5+ foot configuration at issue. The configuration at issue is the configuration that would be tested to demonstrate compliance with the intensity distribution requirements, were there to be no testing constraints.
  - Families that do not contain equivalent shorter products must follow the generic testing constraints procedure described in the [Horticultural testing requirements policy](#).
- An LM-79 photometric report produced via an integrating sphere must be provided for the 5+ foot configuration at issue and must be conducted strictly according to LM-79, with no scaling.
- Photometric report(s) containing spectral and distribution data must be provided for the equivalent shorter product.
- A photometric report containing distribution data must be provided for the 5+ foot configuration at issue, and must contain:
  - Electrical characteristics from the LM-79 photometric report produced via an integrating sphere of the 5+ foot configuration at issue.
  - Photosynthetic Photon intensity distribution (candela array) derived from the goniophotometer testing of the equivalent shorter product and a multiplier whose value is the flux output result of the LM-79 photometric report produced via an integrating sphere of the 5+ foot configuration at issue divided by the flux output result of the LM-79 photometric report produced via an integrating

sphere of the equivalent shorter product. The luminous surface information in the .ies or .xml file must be reflective of the 5+ foot configuration at issue.

If using this alternative method, data from scaled .ies or .xml files will not be shown on the QPL as tested data. The equivalent shorter product will be listed on the QPL as a parent product with tested data from the equivalent shorter product's .ies or .xml file shown on the QPL.

*The DLC reserves the right to seek clarification on any aspect of the process described above and manufacturers should be prepared to provide documentation that addresses concerns that arise.*