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# DRAFT Testing and Reporting Requirements for Field-Adjustable Light Distribution Products

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Products with field-adjustable light distribution are eligible to be listed on the DLC Solid-State Lighting Qualified Products List (SSL QPL).

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## Definition

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Field-Adjustable Light Distribution products are lamps, luminaires, or retrofit kits whose light distribution can be altered from the default factory as-shipped configuration, either at the time of installation or subsequently. Products whose light distribution is altered by the addition or removal of optional parts, such as reflectors or house-side shields, are not considered Field-Adjustable Light Distribution Products for the purposes of this policy; these products must be submitted on separate applications with distinct model numbers in order to be listed on the QPL both with and without the optional part. Products with light output that may be altered without changing the light distribution pattern—that is, without changing the intensity of light in one direction relative to any other direction—are defined as a type of dimmable products and not Field-Adjustable Light Distribution, and must comply with the [Testing and Reporting Requirements for Dimmable and Field-Adjustable Light Output Products](#).

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## Eligibility

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The following are eligibility rules for Field-Adjustable Light Distribution products:

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- Field-Adjustable Light Distribution products must meet all DLC Technical Requirements for the category and Primary Use Designation (PUD) for which they are being submitted at one of the product’s light distribution settings. The products shall be tested in the configuration for which the light distribution setting is intended. If multiple product tests are required—for example, in-housing and bare-lamp, or multiple chromaticities—the product shall be in the same light distribution configuration for all tests. A product submitted on multiple applications for listing in multiple PUDs may have its light distribution adjusted differently from one application to another.



- 28 • Field-Adjustable Light Distribution products will only be classified as DLC Premium if they meet  
29 all [DLC Premium classification requirements](#) for the category and PUD for which they are being  
30 submitted, at the light distribution settings at which the product is tested.
- 31 • Field-Adjustable Light Distribution products that fall under other DLC product category and  
32 Primary Use eligibility rules, such as color-tunable or dimmable products, are subject to those  
33 respective Testing and Reporting Requirements.

## 34 Testing and Reporting

35 Field-Adjustable Light Distribution product submittals must conform to the following testing rules in  
36 addition to the requirements for Single Product or Family Grouping applications:

37 All product testing shall be conducted in the same chosen light distribution setting.

38 At the selected and tested distribution setting, testing must be provided sufficient to bracket all  
39 products in the group per the DLC [family grouping requirements](#). This includes:

- 40 • LM-79 testing of the products that represent:
  - 41 ○ The worst-case efficacy product within the group
  - 42 ○ The worst-case lumen output product within the group
  - 43 ○ The worst-case power quality (THD, PF) product(s) within the group
  - 44 ○ Representative highest and lowest CCT
  - 45 ○ Representative lowest CRI
  - 46 ○ Photometric distribution data for all optical variations excluding variations due to the field  
47 adjustability.

48 Additionally, the following information must be provided in the DLC application form:

- 49 • Is the product capable of field-adjustable light distribution? The applicant shall indicate “Yes” or  
50 “No”.
- 51 • If the product is capable of field-adjustable light distribution, describe in brief the adjustable setting  
52 position that was used for testing. The applicant shall describe the adjustment setting.

## 53 Supporting Documentation

54 The DLC will evaluate manufacturer’s claims of Field-Adjustable Light Distribution capability by ensuring  
55 that the adjustability claims are clearly published in the product specification sheet(s) and correspond  
56 with the unique model numbers submitted. The DLC will also evaluate the manufacturer’s product  
57 installation instructions, including any supporting commissioning manuals, to determine eligibility.

58 Documentation must include instructions for altering light distribution, including any required device or  
59 software. The instructions must be the same ones provided to customers and installers in the market.

60 DLC reviewers may check web listings and other marketing materials, and reserve the right to request  
61 additional information to demonstrate capability if information in product specification sheets is not  
62 sufficient.



## 63 Listing on the QPL

64 Field-Adjustable Light Distribution will be identified as such under the “Product Features” tab on the SSL  
65 Qualified Products List (QPL).

66 Field-Adjustable Light Distribution products will be listed on the QPL at the tested light distribution  
67 setting, with the product performance characteristics from that LM-79 testing at that setting: Light  
68 Output, Watts, Efficacy, THD, Power Factor, CRI, CCT, Zonal Lumens, Spacing Criteria.

69 A new text field, **Adjustable Distribution Setting**, will be added for the Field-Adjustable Light  
70 Distribution products on the QPL to document the light distribution setting at which the product  
71 performance characteristics are tested and reported.

## 72 Updating Listings

73 Historically, some product features that fall under this policy – such as aimable products – were  
74 considered eligible outside of any overall “field-adjustable light distribution” policy. These products will  
75 remain listed on the QPL, and will default to **not** being noted as having field-adjustable light distribution.  
76 Following the effective date of this policy, products meeting the eligibility requirements of this policy  
77 will not be eligible for listing except under these field-adjustable provisions; the prior method for  
78 qualifying aimable products will not be available.

79 Manufacturers who desire to update their listings to reflect that their products are field-adjustable  
80 under the definitions in this new policy will be allowed to do so via an update application, requiring spec  
81 sheets, installation instructions, and a current application form. This update will be assessed an  
82 application fee per family group as with the dimming update schedule detailed at  
83 <https://www.designlights.org/solid-state-lighting/submit-a-product/updating-products/>.

84 The DLC may, in a future revision to the Technical Requirements, mandate that products that qualified  
85 prior to adoption of this policy be updated to current listing requirements.

