



DESIGNLIGHTS  
CONSORTIUM

2016

STAKEHOLDER  
MEETING

August 2-3 • Denver, CO

# DLC Solid State Lighting QPL

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# Overview

- You now know “the basics” of the DLC: why it exists, who runs it, who the Members are
- You want to be more involved
- How do I participate? How do I get my products qualified?
- How are DLC decisions made? How do they decide what categories are eligible, what the performance requirements will be, and other nuances?

# Agenda

- How to qualify products
  - Overview
  - Key details
  - Where to find more information
- DLC decision making
  - “How to win friends and influence ~~people~~ the DLC”

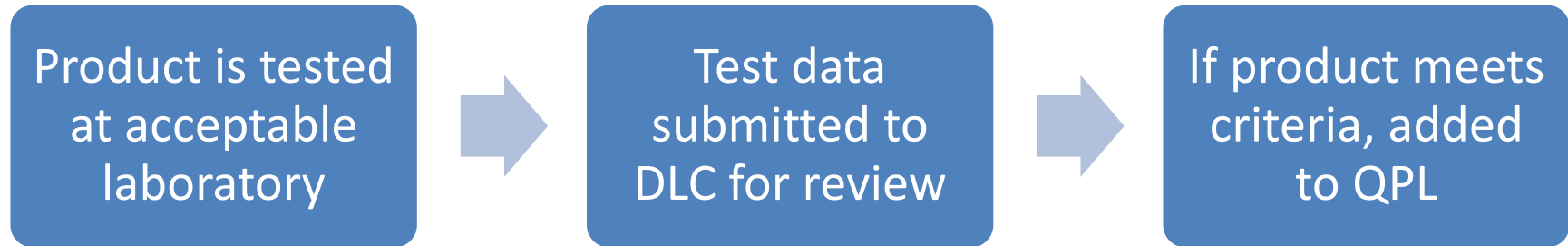
Preview of the 2016 DLC Stakeholder Meeting!

# Generalized DLC Development Process

- DLC aggregates requests/suggestions for developments
  - Maintain “wish lists”
  - Specification Development (new categories)
  - Specification Revisions (new performance thresholds)
  - Policy Development (new or revised policies)
- Prioritize wish lists periodically
  - Program management judgement
  - Active review with Technical Committee
  - Surveys of Members
- Prioritized tasks undertaken for development
  - Any significant program changes to through Stakeholder Input Process (SIP)

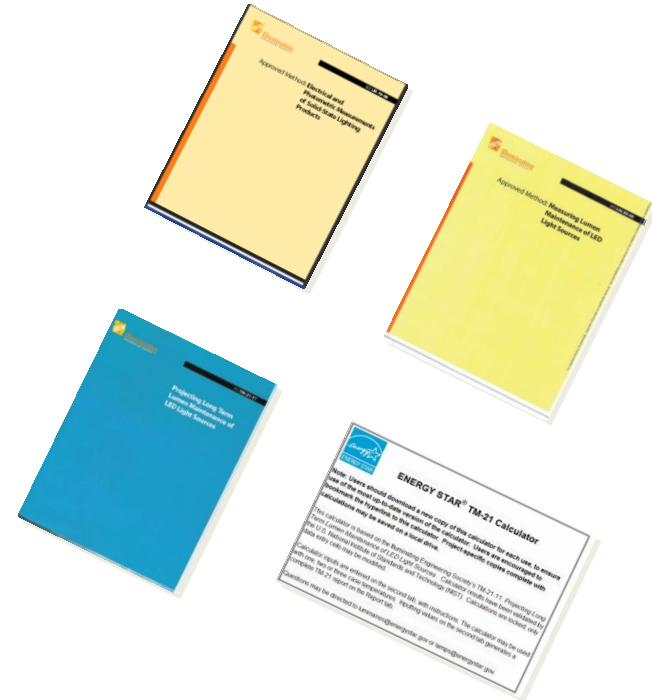
# I Sell LED Lighting: How Do I Qualify a Product?

# How Do Products Get Qualified?



# Testing and Reporting Requirements

- Photometric and Electrical Properties
  - IES LM-79 Electric and Photometric
    - Output and color: integrating sphere
    - Light distribution: goniophotometer
- Lumen maintenance (Option 1)
  - LED package/module/array testing
    - IES LM-80 Lumen Maintenance
  - Luminaire-level testing
    - ISTMT (ANSI/UL1598)
  - $L_{70}$  determination
    - IES TM-21 Projecting Lumen Maintenance



# DLC Technical Requirements Table

**Breakout Session:  
Transition to V4.0  
Wednesday: 1-2  
Ballroom A**

Technical Requirements: Luminaires										
#	Category	General Application	Minimum Light Output (lm)	DLC Standard			DLC Premium*			Distribution
				Minimum Efficacy (lm/W)	Minimum Warranty (years)	CCT / CRI / L <sub>80</sub>	Minimum Efficacy (lm/W)	Minimum Warranty (years)	CCT / CRI / L <sub>80</sub>	
1	Outdoor	Outdoor -- Low Output	250-5,000	90	5	55700 / 265 / 250,000	110	5	11	
2		Outdoor -- Mid Output	5,000-10,000	95						
3		Outdoor -- High Output	≥10,000	100						
4	Indoor	Interior Directional	250-4,500	65	5	55000 / 280 / 250,000	120	5	12	
5		Case Lighting	250 lm/ft	80						
6	Indoor	Troffer	≥1,500	100	5	55000 / 280 / 250,000	120	5	12	
7		Linear Ambient	2375 lm/ft	105						
8	Indoor	High-Bay	25,000	105	5	55700 / 270 / 250,000	130	5	13	

Technical Requirements: Retrofit Kits*										
#	Category	General Application	Minimum Light Output (lm)	DLC Standard			DLC Premium**			Requirements
				Minimum Efficacy (lm/W)	Minimum Warranty (years)	CCT / CRI / L <sub>80</sub>	Minimum Efficacy (lm/W)	Minimum Warranty (years)	CCT / CRI / L <sub>80</sub>	
9	Outdoor Retrofit Kit	Outdoor -- Low Output	250-5,000	90	5	55700 / 265 / 250,000	110	5	<ul style="list-style-type: none"> <li>• Retrofit Luminaire</li> <li>• Retrofit</li> <li>• Retrofit</li> <li>• Retrofit</li> <li>• Retrofit</li> </ul>	
10		Outdoor -- Mid Output	5,000-10,000	95						
11		Outdoor -- High Output	≥10,000	100						
12	Indoor Retrofit Kit	Troffer	≥1,500	100	5	55000 / 280 / 250,000	125	5	<ul style="list-style-type: none"> <li>• Linear</li> <li>• Linear</li> <li>• Linear</li> <li>• Linear</li> <li>• Linear</li> </ul>	
13		Linear Ambient	2375 lm/ft	105						
14	Indoor Retrofit Kit	High-Bay	25,000	105	5	55700 / 270 / 250,000	130	5	<ul style="list-style-type: none"> <li>• Retrofit</li> <li>• Retrofit</li> <li>• Retrofit</li> <li>• Retrofit</li> </ul>	

Technical Requirements: Lamps* **									
#	Category	General Application	Minimum Light Output (lm)	DLC Standard			Requirements		
				Minimum Efficacy (lm/W)	Minimum Warranty (years)	CCT / CRI / L <sub>80</sub>	Requirements	Requirements	Requirements
15	Linear Replacement Lamp	Four-Foot Linear Replacement Lamps	In luminaire: 2 lamps: 3,000 3 lamps: 4,500 4 lamps: 6,000 Bare lamp: 1,800	In luminaire: 100 Bare lamp: 110	5	55000 / 280 / 250,000	<ul style="list-style-type: none"> <li>• Replacement Lamps ("Plug and Play") (UL Type A)</li> <li>• Internal Driver/Line Voltage Lamp-Style Retrofit Kits (UL Type B)</li> <li>• 2-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>• 3-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>• 4-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>• Dual Mode Internal Driver (UL Type A or B)</li> </ul>		
16		Two-Foot Linear Replacement Lamps	In luminaire: 2 lamps: 1,350 3 lamps: 2,000 4 lamps: 2,700 Bare lamp: 800	In luminaire: 100 Bare lamp: 110	5	55000 / 280 / 250,000	<ul style="list-style-type: none"> <li>• Replacement Lamps ("Plug and Play") (UL Type A)</li> <li>• Internal Driver/Line Voltage Lamp-Style Retrofit Kits (UL Type B)</li> <li>• 2-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>• 3-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>• 4-lamp External Driver Lamp-Style Retrofit Kits (UL Type C)</li> <li>• Dual Mode Internal Driver (UL Type A or B)</li> </ul>		
17	Mogul Screw Base (E39) Replacements for HID Lamps	Outdoor -- Low Output	In luminaire: 250-5,000	In luminaire: 90	5	55700 / 265 / 250,000	<ul style="list-style-type: none"> <li>• Replacement Lamps for Outdoor Pole/Arm-mounted Area and Roadway Luminaires (Type B)</li> <li>• Replacement Lamps for Outdoor Pole/Arm-mounted Decorative Luminaires (Type B)</li> <li>• Replacement Lamps for Outdoor Full-Cutoff Wall-mounted Area Luminaires (Type B)</li> <li>• Replacement Lamps for Parking Garage Luminaires (Type B)</li> <li>• Replacement Lamps for Fuel Pump Canopy Luminaires (Type B)</li> </ul>		
18		Outdoor -- Mid Output	In luminaire: 5,000-10,000	In luminaire: 90			<ul style="list-style-type: none"> <li>• Replacement Lamps for Outdoor Pole/Arm-mounted Area and Roadway Luminaires (Type C)</li> <li>• Replacement Lamps for Outdoor Pole/Arm-mounted Decorative Luminaires (Type C)</li> <li>• Replacement Lamps for Outdoor Full-Cutoff Wall-mounted Area Luminaires (Type C)</li> <li>• Replacement Lamps for Parking Garage Luminaires (Type C)</li> <li>• Replacement Lamps for Fuel Pump Canopy Luminaires (Type C)</li> </ul>		
19	Mogul Screw Base (E39) Replacements for HID Lamps	Outdoor -- High Output	In luminaire: ≥10,000	In luminaire: 95	5	55700 / 270 / 250,000	<ul style="list-style-type: none"> <li>• Replacement Lamps for Outdoor Pole/Arm-mounted Area and Roadway Luminaires (Type C)</li> <li>• Replacement Lamps for Outdoor Pole/Arm-mounted Decorative Luminaires (Type C)</li> <li>• Replacement Lamps for Outdoor Full-Cutoff Wall-mounted Area Luminaires (Type C)</li> <li>• Replacement Lamps for Parking Garage Luminaires (Type C)</li> <li>• Replacement Lamps for Fuel Pump Canopy Luminaires (Type C)</li> </ul>		
20		High-Bay	In luminaire: ≥5,000	In luminaire: 100			<ul style="list-style-type: none"> <li>• Replacement Lamps for High-Bay Luminaires (Type B)</li> <li>• Replacement Lamps for Low-Bay Luminaires (Type B)</li> <li>• Replacement Lamps for High-Bay Luminaires (Type C)</li> <li>• Replacement Lamps for Low-Bay Luminaires (Type C)</li> </ul>		

See Primary Use Zonal Lumen Density Requirements in Table 4, below



# Will DLC Accept My Test Reports?

# What are DLC Lab Requirements?

- Evolved based on Stakeholder Input 2012-2013
- LM-79: Recognized by DOE's LED Lighting Facts
- LM-80: Recognized by EPA's ENERGY STAR
- ISTMT
  - OSHA approved Nationally Recognized Test Lab (NRTL), or
  - Approved through OSHA NRTL data acceptance program or OSHA Satellite Notification and Acceptance Program (SNAP), or
  - Accredited by ILAC-MRA Accreditation Body for SSL thermal testing (ANSI/UL 1598 and/or CSA equivalent)
- LM-84 (*Option 2*): Recognized for LM-79 by DOE's LED Lighting Facts and accreditation (by DOE LED Lighting Facts approved accreditation body) includes LM-84-14

# Back to the Application Process

# QPL: Manufacturer Application Process

- Single Product Application
  - Single products
  - CCT variations
  - Voltage variations
  - Dimming variations
- Family Grouping Application
  - Other allowable variations, features for Specialty, Premium
  - Offline communication key!
  - Pre-reviewed “test plan” often helpful
- Private Label/Multiple Listing
  - For listing of products already on the QPL under different names

# Process: Single Product Applications

- Complete and compile all necessary testing
- Compile all necessary additional documentation
- Fill out Application Form (offline)
- Create application through Manufacturer Portal
  - Log-in to online system
  - Upload Application Form and supporting documents
- DLC staff review for eligibility and completeness
  - Invoice information provided through Portal
- Manufacturer logs in and submits payment
- DLC staff complete thorough review of application
  - If product passes, added to QPL
  - If products fails or questions arise, DLC staff communicate with the manufacturer

**Breakout Session:  
DLC Documentation  
Tuesday: 4:30-5  
Ballroom A**

**Breakout Session:  
DLC Documentation  
Wednesday: 2:30-3  
Central City**

# Process: Single Product Applications

## Initial Review

- 2 business days
- Completeness/eligibility
- Additional clarification needed extends time before invoice can be provided



## Invoice



## Comprehensive Review

- 10 business days
- Thorough review for compliance with requirements
- Additional clarification needed extends review time

# Process: Single Product Applications

The screenshot displays the DesignLights Consortium website interface. At the top right, there is a 'LOG IN' button. The main navigation bar includes 'About DLC', 'DLC QPL', and 'Advanced Controls'. The 'DLC QPL' dropdown menu is open, showing options: 'Search the QPL', 'Technical Requirements', 'Submit a Product', 'Frequently Asked Questions', and 'Logo Guidelines'. The 'Submit a Product' option is highlighted. Below the navigation, the DesignLights Consortium logo is visible on the left. In the center, there is a photograph of a city at night with the text 'Photography by Ryan Dravitz'. On the right, there is a dark blue banner with the logo and the text 'Denver, CO'. Below the main content area, there is a teal banner with the text 'The DesignLights Consortium™' and a sub-headline: 'Brings stakeholders together to define and promote leading edge high quality, high efficiency commercial sector lighting solutions.' At the bottom right, there are two buttons: 'Log in to your Account' and 'Reset Your Password'.

# Process: Single Product Applications

## Single Product Applications

The following information describes the process of completing the manufacturer electronic application form - to be used by manufacturers who wish to submit their solid-state lighting (SSL) products to be considered for the DesignLights Consortium™ Qualified Products List (DLC QPL). The submission form requires the manufacturer to provide information on the product's rated performance, as well as company information and details about how the product is designed, and test data demonstrating the product's performance. Measured performance is verified against the test reports provided.

The process described below is for **single product applications** only. Please see below for the definition of a single product application. For groups of products please see the [family group instructions](#).

Please review the following before applying:

- [The DLC QPL categories and requirements](#)
- [The Independent Testing Lab Requirements](#)

### Quick Links

- [General Application Instructions](#)
- [Application Fees](#)
- [Application Review Time Frames](#)
- [Completing the Single Application Form](#)
- [Forms](#)



# Process: Single Product Applications

## Application Review Time Frames

Prior to sending payment information for application fees, a DLC reviewer will conduct an initial review of documentation submitted to ensure the application is complete and the submitted product is eligible for DLC qualification. Upon payment of the application fees, a DLC reviewer will conduct a comprehensive review of the performance information submitted against the Technical Requirements. Below are time frames for these steps for each application type:

Application Type	Initial Review	Comprehensive Review
Private Label	5 business days	5 business days
Single Product	2 business days	10 business days
Family Groupings	5 business days	10 business days


## Quick Links

- [General Application Instructions](#)
- [Application Fees](#)
- [Application Review Time Frames](#)
- [Completing the Single Application Form](#)
- [Forms](#)

## Forms

- [Product Application Form \(xlsx\)](#)
- [Test Report Authorization form \(docx\)](#)
- [Self-certification Statement \(PDF\)](#)

# Process: Single Product Applications

DESIGNLIGHTS CONSORTIUM 		DLC Qualified Products List Family and Single Submission Form: Technical Requirements V4.0 (6/1/2016)
Entire application form must be filled out and submitted online using your manufacturer account. Applications will not be considered complete until payment has been processed and both this Application Form and Scaled Performance Table are submitted.		
Company		
Brand Name		
Contact Name		
Phone		
Email		
Website		
<b>Application Type (Must Select)</b>		
Single Product or Family Group?	Select from Drop-down Menu ----->	
<b>Category Information</b>		
DLC Category	Select from Drop-down Menu ----->	
General Application	Select from Drop-down Menu ----->	
Primary Use	Please note your Primary Use or Specialty Use in the applicable column in the Scaled Performance Table. If you wish to submit the same model number under multiple Primary/Specialty Uses, please list the model number with each additional Primary Use. Please refer to the Category Reference tab for the correct Primary Use language.	
-OR-		
Specialty Use(s): Provide description		
DLC Classification	Please note your DLC Classification for each model in the Scaled Performance Table.	

Fill out form completely AND accurately!



# Process: Family Grouping Applications

- Intended for products lines which have modular, scalable performance characteristics
- Contact [info@designlights.org](mailto:info@designlights.org) prior to testing to discuss family characteristics and testing plan
- Testing sufficient to “bracket” group:
  - Scaled performance tables/identification of worst-case members
  - LM-79s for lowest light output, lowest efficacy, additional CCTs
  - IES files for additional optics
  - LM-80 for LED package/module/array
  - ISTMT for worst case thermals
  - Electrical testing for worst case PF/THDi
  - In-house driver output electrical measurements for driver characteristics
- Please read full policy and instructions
  - At [www.designlights.org](http://www.designlights.org)
  - In the Manufacturer’s Guide!

**Breakout Session:  
Family Grouping  
Tuesday: 4-4:30  
Ballroom A**

**Breakout Session:  
Family Grouping  
Wednesday: 2-2:30  
Central City**

# Process: Family Grouping Applications

## Initial Review

- 5 business days
- Completeness/eligibility/sufficient testing
- Additional clarification needed extends time before invoice can be provided



## Invoice



## Comprehensive Review

- 10 business days
- Thorough review for compliance with requirements
- Additional clarification needed extends review time

# Process: Family Grouping Applications

## Family Grouping Applications

The following information describes the process of completing the manufacturer electronic application form - to be used by manufacturers who wish to submit their solid-state lighting (SSL) products to be considered for the DesignLights Consortium™ Qualified Products List (DLC QPL). The submission form requires the manufacturer to provide information on the product's rated performance, as well as company information and details about how the product is designed, and test data demonstrating the product's performance. Measured performance is verified against the test reports provided.

The process described below is for **Family Grouping applications** only. Please see below for the definition of a Family Grouping application. For single products please see the [single product instructions](#).

Please review the following before applying:

- [The DLC QPL categories and requirements](#)
- [The Independent Testing Lab Requirements](#)
- [What is Worst Case](#) presentation (pdf)
- [Scaled Performance Methodology](#) presentation (pdf)

Quick Links

- [Family Grouping Definition](#)
- [Family Grouping Testing Requirements](#)
- [Family Grouping Testing Guidance](#)
- [General Application Instructions](#)
- [Application Review Time Frames](#)
- [Application Fees](#)
- [Completing the Product Family Application Form](#)
- [Forms](#)

# Process: Family Grouping Applications

## Family Grouping Testing Requirements

The Family Grouping policy is designed to reduce testing burden as well as reduce the number of products required by manufacturers to list groups of products that comply with the Family Grouping policy. By identifying the worst case models within a group and listing all products individually, testing can be provided if the worst case models demonstrate compliance with the Technical Requirements. Many of the Technical Requirements are minimum requirements, by demonstrating that the worst case models within a group meet the minimum requirements, it can be assumed that models performed within the group will also meet the requirements, and therefore do not require testing. The Technical Requirements include the minimum testing required for a family group.

Click on any of the criterion below to read about additional testing guidance.

### Independent Test Reports Required for Each Group

Criterion	Test Required
<a href="#">Minimum Light Output</a>	LM-79

## Family Grouping Testing Guidance

### Minimum Light Output

- The product that is expected to have the lowest overall light output (or lumens-per-foot, as applicable) within the family group will be tested according to LM-79. In general, this is expected to be the product with the fewest number of LEDs, lowest drive current, least efficient optic, and lowest CCT within the family group.
- Please note that if your family group application seeks qualification for your products in more than one Primary Use designation, testing must demonstrate compliance with the requirements for each designation. This may result in the need to provide additional "worst-case light-output" LM-79s, or for a single designation, testing may be evaluated more than one time.
- The only exception to the above will be for groups that cross light output bins in outdoor category. For these groups must supply worst-case light output testing for the whole group, determination of the appropriate bin for family members will be made on the basis of the scaled performance table. For all groups, that testing must still demonstrate compliance with all efficacy levels, as noted below in the [efficacy section](#).

Please review the following before applying:

- [The DLC QPL categories and requirements](#)
- [The Independent Testing Lab Requirements](#)
- [What is Worst Case](#) presentation (pdf)
- [Scaled Performance Methodology](#) presentation (pdf)

## Quick Links

- [Family Grouping Definition](#)
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# Process: Family Grouping Applications

DESIGNLIGHTS CONSORTIUM		DLC Qualified Products List Family and Single Submission Form: Technical Requirements V4.0 (6/1/2016)	
Entire application form must be filled out and submitted online using your manufacturer account. Applications will not be considered complete until payment has been processed and both this Application Form and Scaled Performance Table are submitted.			
Company			
Brand Name			
Contact Name			
Phone			
Email			
Website			
<b>Application Type (Must Select)</b>			
Single Product or Family Group?	Select from Drop-down Menu ----->		
<b>Category Information</b>			
DLC Category	Select from Drop-down Menu ----->		
General Application	Select from Drop-down Menu ----->		
Primary Use	Please note your Primary Use or Specialty Use in the applicable column in the Scaled Performance Table. If you wish to submit the same model number under multiple Primary/Specialty Uses, please list the model number with each additional Primary Use. Please refer to the Category Reference tab for the correct Primary Use language.		
-OR-			
Specialty Use(s): Provide description			
DLC Classification	Please note your DLC Classification for each model in the Scaled Performance Table.		

Fill out form completely AND accurately!



# Process: Private Labeling Applications

- For “multiple listing” of products by >1 manufacturer
- OEM product must already be qualified
- Submit Private Label Application form
- Submit Private Label Agreement form (**New!**)
- Submit signed Self-Certification Statement by private labeler
- Submit spec sheets of private labeler
- *Proposed: Safety certification under private labeler’s organization/model number*

# Process: Private Labeling Applications

## Initial Review

- 5 business days
- Completeness/eligibility
- Additional clarification needed extends time before invoice can be provided



## Invoice



## Comprehensive Review

- 5 business days
- Thorough review for compliance with requirements
- Additional clarification needed extends review time

# Process: Private Labeling Applications

## Required Documentation

- Download and complete the [Private Label Application form \(xlsx\)](#). The OEM's qualified products downloaded directly from the DLC QPL and the model numbers listed in the form. Instructions for downloading products from the DLC QPL are available in the new How to Download the DLC QPL document.
- Download and complete the [Private Label Agreement form \(docx\)](#). This private label agreement must be signed by representatives of all organizations involved, and filled out in its entirety. For OEMs listing products under different brand names, the signature of a representative of the OEM is sufficient.

## Forms

- [Private Label Application form \(xlsx\)](#)
- [Private Label Agreement form \(docx\)](#)
- [Self-certification Statement \(PDF\)](#)

## Quick Links

- [Required Documentation](#)
- [Application Fees](#)
- [Application Review Time Frames](#)
- [Forms](#)

# Common Pitfalls

- Failure to read instructions!
  - General instructions and category-specific requirements
- Not providing all necessary test information and associated documentation
  - Spec sheets for model and LED package/module/array, official warranty, safety documentation, Self-Certification Statement, installation instructions, etc.
- Get defensive when questions are asked
- Check out this week's Breakout Sessions for more information on product qualification and common stumbling blocks!

# Breakout Sessions

## Using DLC Logos to Get the Most out of Your Qualified Products

Tuesday, 3-4pm – Ballroom A

## Transition to Technical Requirements Table V4.0

Wednesday, 1-2pm – Ballroom A

### SSL: Family Grouping – What is Worst Case?

Tuesday, 4-4:30 – Ballroom A

Wednesday, 2-2:30 – Central City

### SSL: Updating Products

Tuesday, 4-4:30 – Ballroom B

Wednesday, 2-2:30 – Onyx

## SSL: QPL Supporting Documentation

Tuesday, 4:30-5 – Ballroom A

Wednesday, 2:30-3 – Central City

# How Do I Get More Involved?

Remember: Why does the DLC exist?

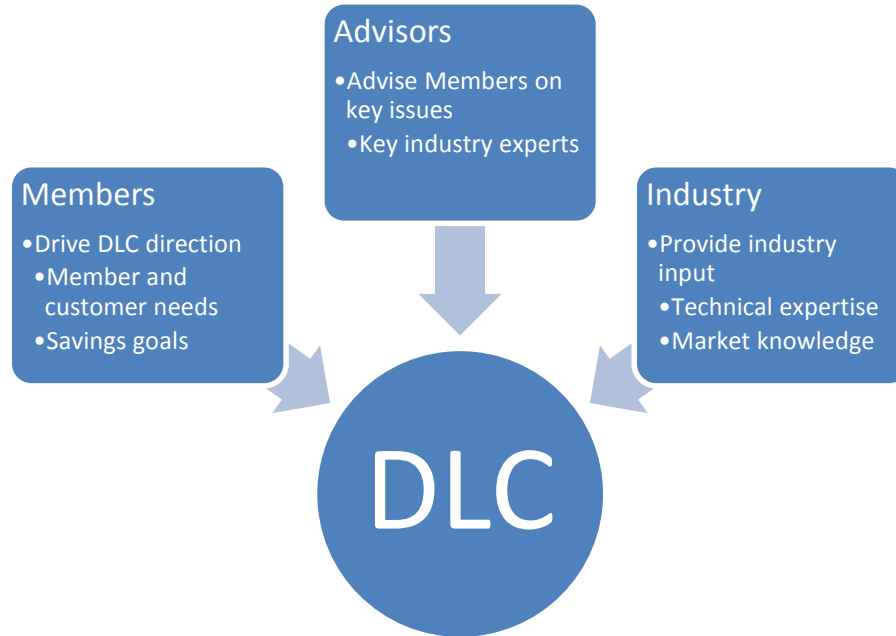
*Answer: To serve the needs of the DLC Members!*

# DLC Members





# DLC Structure



# General Thoughts and Suggestions

- You must understand the DLC, utility/efficiency programs, needs of the Members
  - Comments and requests that demonstrate a lack of understanding are difficult to move forward
- Demonstrating significant energy savings can help
  - Reality: DLC is resource constrained like everyone else
  - Market research: what is the realistic energy savings potential?
- Specific suggestions can help
  - Reduces legwork/cost for program to develop from scratch
- Be friendly. Or at least professional.

# How Do I Get Involved?

- Join us at the DLC Stakeholder Meeting (Welcome!)
  - Annual event
  - Understand program/Members; interact with other stakeholders; build coalitions
- Join our mailing list
  - Email us at [info@designlights.org](mailto:info@designlights.org) with subject “Sign Me Up!”
  - Industry Update comes out ~quarterly
  - Comment during Stakeholder Input Process
  - Monitor the DLC News on the DLC homepage
- Articulate interests to efficiency programs by **highlighting projects by their customers!**
  - Efficiency programs under many different sets of constraints
  - Often will have custom programs, when prescriptive programs not yet practical

# Generalized DLC Development Process

- DLC aggregates requests/suggestions for developments
  - Maintain “wish lists”
  - Specification Development (new categories)
  - Specification Revisions (new performance thresholds)
  - Policy Development (new or revised policies)
- Prioritize wish lists periodically
  - Program management judgement
  - Active review with Technical Committee
  - Surveys of Members
- Prioritized tasks undertaken for development
  - Any significant program changes to through Stakeholder Input Process (SIP)

**Panel: Strategic  
Development of  
Specs  
Tues: 1-2:30  
Ballroom**

# Stakeholder Input Process

- Identify issue for input – new spec, update to existing spec, change to DLC procedure, etc.
- Provide clear request to stakeholders for input
  - Sent to entire distribution list (manufacturer, testing labs, lighting designers, specifiers, members)
  - Sent via email, posted on website
  - Includes firm response date
- Use ad-hoc respondent committee to review input
- Discuss critical issues via conference call and create a “statement of input”
- Deliver input to DLC Technical Committee

# What If There Is No Category?

- DLC can only qualify products that are intended for applications that have categories (Primary Uses) on the Technical Requirements Table
- DLC does not currently have categories for every possible lighting application
- Dozens of categories and policies outstanding on wish lists
  - NEW: Wish lists published on the DLC website

# Wish Lists

## Specification and Policy Development

The DLC continually strives to identify products that will deliver significant energy savings via luminaire-level performance specifications. The evolution of LED technology, market transformation, efficiency regulations, and consumer incentives are shaping agents in DLC's progressive policy development.

### Efforts in Process:

Effort	Description	Time Frame for Next Steps
<a href="#">Specification Revision</a>	DLC regularly evaluates the performance requirements for existing Primary Use designations. These efforts are conducted through the Specification Revision process.	July 18, 2016 Proposals for Allowances under V4.0 Technical Requirements due. See <a href="#">Announcement Cover Letter</a> for details.
<a href="#">Specification Development</a>	DLC regularly evaluates the need for new Primary Use designations based on industry and Member feedback. These efforts are conducted through the Specification Development process.	September 7, 2016 Comments on draft V4.1 Technical Requirements, covering several additions and revisions are due. See <a href="#">Draft Announcement Cover Letter</a> for details.
<a href="#">Policy Development</a>	DLC regularly evaluates the policies and procedures for products to be tested, evaluated, and included in the DLC QPL. These efforts are conducted through the Policy Development process.	July 2016 Framework proposals and drafts of new policies out for feedback.
<a href="#">Surveillance Testing</a>	DLC has been developing a performance verification program for qualified products to monitor the validity of data submitted to the DLC SSL QPL pre- and post-qualification.	Fall 2016
<a href="#">Category and Policy Development Wish Lists</a>	These wish lists are running compilations of all new categories and policies DLC has been asked to develop.	Ongoing

## Category and Policy Development Wish Lists:

### About SSL QPL Category and Policy Development

Category and policy development for the DLC SSL QPL is a yearly process involving input from Members, stakeholders, and our Technical Committee. The DLC strives to be responsive to the constantly-evolving SSL market and ensure that our updates serve the needs and interests of both our Member utilities and our many industry stakeholders equally.

### The Category and Policy Development Process

The DLC maintains an unprioritized wish list comprised of requests for new categories of products and new policies from DLC Members, manufacturers, and other stakeholders. We use this wish list as a jumping-off point for our yearly category and policy development process. See below for an illustration of the annual process that DLC undergoes to update categories and policies for the QPL:



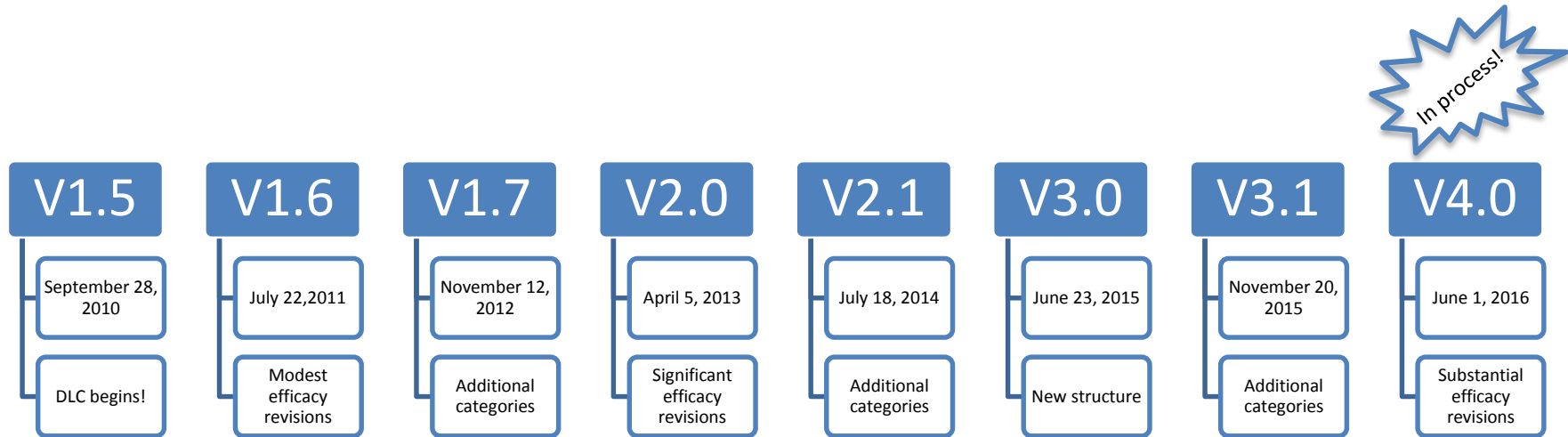
### 2016 Category Wish List

The category wish list is a running compilation of all the new categories the DLC has been asked for at some point, in no particular hierarchy or order. The list is reviewed periodically to identify priorities for specification development. The DLC does not guarantee that any of the categories listed below will be developed or the timeframe for when they might be developed.

Updated July 2016.

<b>Ambient Lighting Categories</b>	1. Linear panels with different specific form-factors (1x8, 1x1) 1. High power LED area light <sup>1</sup> 2. Retrofit kits/lamps for refrigerator case lights (including bin-base) 3. Tubes for bare-batten fixtures 4. Expanded retrofit kits for high-bay - retrofits for fluorescent-style high-bay luminaires
<b>Retrofit and Lamp Lighting Categories</b>	5. Expanded retrofit kits for parking garage and stairwell lighting - retrofits for fluorescent-style parking garage luminaires

# Specification Development/Revision History





# V4.0 Transition Timeline

Finalized V4.0 TRT  
Announcement:  
**June 1, 2016**

Cutoff for Submission  
under V3.0/V3.1:

**August 31, 2016**

- Allows submission of products currently in process

V4.0 Compliant Products  
Identified on QPL:

**January 2017**

- Allows programs to filter/sort/search as needed

Delisting of products not  
meeting V4.0:  
**April 1, 2017**

# Specification Development/Revision

- Since last year...V3.1 and V4.0 released!
  - V3.1: Screw-Based Replacements for HID Lamps, Full-Cutoff and Non-Cutoff/Semi-Cutoff Wall-Mounted Area Luminaires, Retrofit Kits for Direct Linear Ambient Luminaires, 2, 3, 4-lamp External Driver Lamp-Style Retrofit Kits
  - V4.0: Revised performance thresholds (efficacy)
- Current efforts focused on adding Primary Uses to V4.0
  - PL lamps (draft sent out 6/16), hazardous environment lighting, higher-output outdoor lighting, backlighting for signs, medium screw-base LED replacements for HID lamps, additional styles of fluorescent replacement lamps
  - Allowances for V4.0 efficacy requirements
  - Horticultural Lighting

**Discussion Session:  
SSL Category & PUD  
Wed: 10:30-12  
Onyx**

# Recent Policy Development Changes

- Revision to the Retrofit Kit Policy
  - Addition of “Option B” testing for Luminaire Specific Retrofit Kits
  - Discussion Session at 2015 Stakeholder Meeting
- Revision to the Family Grouping Policy
  - Allowance of driver variations within a Family Group
  - Discussion Session at 2015 Stakeholder Meeting

# Policy Development Efforts

- 3 policies out for comment via SIP
  - Requiring safety certification for private labels
  - Adoption of ANSI C78-377-2015
  - Clarification on Rated Data
- 2 requests for proposals for policies
  - DC/PoE systems
  - White Color Tuning luminaires

Discussion Session!  
DC & PoE Lighting  
Wed: 10:30-12  
Lodo

Discussion Session:  
White Color Tuning  
Wed: 10:30-12  
Highlands

# Thank You!

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