Reconvene and Report
Controllability
* There are certain applications where we have proposed to *not* require dimming, like refrigerated case lights, or fixtures for hazardous locations.
Issues Identified

• Dimming
  o Dimming shouldn’t be applied to lamps (TLEDs and MogLEDs) and retrofit kits
  o Value vs. cost (is the juice worth the squeeze?)
  o Building code considerations
  o Other concerns (safety, flicker)

• QPL and Implementation
  o Wildcarding
  o Dimming verification

• Integral Controls
  o Support for more granular information
  o However, don’t over complicate the QPL
  o Standby power is increasingly important
Proposals for Controllability in Draft 2

• Allow self-reporting of dimming / controllability capability
• Provide access for manufacturers to update the controllability aspects of their QPL listing themselves
• DLC could link to manufacturer spec sheet from the QPL listing so utilities will have the information needed for their programs
Next Steps

Ways to Continue to Engage:
• Talk to the Topic Lead, Damon Bosetti
• Fill out Post-It notes in the reception area
• Send feedback to comments@designlights.org
• Keep an eye out for Draft 2 and subsequent comment period

Thank you for your participation!
Cybersecurity
Topic Overview
Issues Identified

Topic 1: Exceptions if systems are not connected to external networks?

Topic 2: Criteria for acceptable standards?

Topic 3: New Cybersecurity standards to add or drop?
## Takeaways – Exceptions for stand-alone systems

<table>
<thead>
<tr>
<th>Process</th>
<th>Components</th>
<th>Systems</th>
<th>Cloud</th>
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<tr>
<td>Stand-Alone</td>
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<td>?</td>
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<tr>
<td>Connected System</td>
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<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

** Also need to better distinguish the type and upgradability of systems on the QPL
Takeaways – Criteria for standards

Standards development:
- Standards should have industry involvement during development process
- Shouldn’t be a penalty for early adopters (when changes/updates occur)
- At what stage should standards be considered?

Testing Labs:
- Multiple labs should be able to verify/certify to standards

Certification:
- Should annual cybersecurity certification be required?
- Could there be a pathway for self-certification?
Takeaways – Adding or Dropping Standards

- Consider the impact of removing standards
- UL 2900-1 should be Y for system
- CSA STAR should be Y for cloud
- Define and maintain equivalence among options

Overview of relevant standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Process</th>
<th>Components</th>
<th>System</th>
<th>Cloud Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI/UL 2900-1</td>
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<td></td>
</tr>
<tr>
<td>CTIA (cellular)</td>
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<td>Y</td>
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</tr>
<tr>
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<td>-4-2</td>
<td>-3-3</td>
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<tr>
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<tr>
<td>ISO 27017</td>
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<tr>
<td>FedRAMP</td>
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</tr>
<tr>
<td>SOC2</td>
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<tr>
<td>CSA STAR</td>
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</tr>
</tbody>
</table>
Next Steps

* Leave your comments on the post-it notes!
* Keep an eye out for Draft 2 (V4.0)
* Continue to Engage…

...If you dare
Glare and Distribution
Key Topics

• Topic 1: .IES file generation
• Topic 2: QPL metric generation
• Topic 3: Preventing metrics misapplication
• Topic 4: Efficacy Allowances for low-glare products

~60 people, 90% manufacturers, very engaged!
Issues Identified & Proposed Solutions:

**Topic 1: .IES file generation**

- Everyone thinks that IES files can be scaled
- There should be consistency in scaling methodology (or standardized)
- DLC should propose a tool for scaling methodology
- Tested vs. modified data should be identified
Issues Identified & Proposed Solutions:

**Topic 2: QPL metric generation**

- .IES files and metrics generation should be done by an accredited lab
- Option to self-generate by sophisticated manufacturers
- Option for smaller manufacturers to have DLC autogenerate
- Rated data should be considered in autogenerated data
- Nominal values should be considered for metrics on QPL
- Some metrics are application specific
Issues Identified & Proposed Solutions:

**Topic 3: Preventing metrics misapplication**

- Report the right metrics for the PUDs (application specific reporting)
- General support for reporting BUG rating
- Preference for reporting Modified UGR over standard UGR
- Concerns with lack of education/familiarity of UGR in North America
- Suggestions to educate QPL users before metrics are rolled out
Issues Identified & Proposed Solutions:

**Topic 4: Allowances for low-glare products**

- There is consensus that allowances are needed
- DLC needs to better understand the tradeoffs using data to establish allowances
- Suggestions to work with component, optics, and luminaire manufacturers to understand the tradeoffs
- Priority for premium designation needs to be clarified
Next Steps

• Include a plan for implementation in Draft 2
• Targeted research, education, and outreach efforts
SSL V5.0: Other Topics Under Consideration
Other V5.0 Topics Under Consideration

- The DLC is considering a number of other topics to include in the next draft of V5.0 and requested comment from stakeholders on the following:
  - DLC Premium
  - DLC Product Information Sheet
  - Non-Standard Form Factors
  - Platform Qualification
  - Reference Housings
  - Dark-Sky Friendly Luminaires
Questions we asked in the draft:

• From your individual industry perspective, rank Topics 1-6 in order of priority for the DLC to address

• Identify any major issues or concerns with what is proposed with each topic and how they might be addressed
DLC Premium

- Current DLC Premium designation includes:
  - Higher Efficacy (typically by 15%)
  - Better Lumen maintenance ($L90 \geq 50,000 \text{ hr}$)
  - Pass in-situ temperature measurement test of the driver
- However, this performance might come at the expense of lighting quality
- Considering revising the Premium designation to incorporate additional quality metrics

Considering changes to Premium designation to award products with both high efficiency and quality of light
DLC Product Information Sheet

The DLC is considering:

- Standardized PDF for each listing
- Includes existing and V5.0 product information in written and graphical format
- Could be customizable so users can select what information to display
Non Standard Form Factors

• With LEDs, new form factors are possible, but don’t align with DLC categories

Innovation is good!

Considering other approaches to enable new form factors of products that can demonstrate high quality and efficiency to be qualified.
Some manufacturers have been challenged with qualifying certain types of products that are more modular in nature and built-to-order and may not match traditional form factors.

Qualifying all variations could mean thousands of listings for a single product family.

Considering other approaches to enable platforms that can demonstrate high quality and efficiency to be qualified.
Reference Housings

• Currently, lamps and retrofit kits are required to be tested in traditional reference housings
• Traditional housings becoming difficult to procure
• Increases testing and review costs, complicates surveillance
• The DLC is considering eliminating the reference housing requirement for certain products
Dark-Sky Friendly Luminaires

The DLC is considering indicating glare-related light trespass and/or Dark-Sky rating compliance on the QPL

This would give QPL users the ability to easily cross-reference the uplight and glare components of the BUG rating with the specification set by the International Dark-Sky Association or the Smart Outdoor Lighting Alliance.
### Ranking Results (Highest Priority to Lowest)

<table>
<thead>
<tr>
<th>General Stakeholders</th>
<th>Utility Technical Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DLC Premium</td>
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</tr>
<tr>
<td>2. Reference Housings</td>
<td>2. Product Information Sheet</td>
</tr>
<tr>
<td>3. Platform Qualification</td>
<td>3. Darksky Friendly Luminaires</td>
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<td>5. Darksky Friendly Luminaires</td>
<td>5. Non-Standard Form Factors</td>
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### Ranking Results (Highest Priority to Lowest)

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#### Utility Technical Committee
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2. Product Information Sheet
3. Darksky Friendly Luminaires
4. Platform Qualification
5. Non-Standard Form Factors
6. Reference Housings
DLC Next Steps

• Consider comments received and rankings
• Evaluate options
• Propose topics to move forward with next V5.0 draft