Energy · Quality · Controllability℠

SSL V6.0 & LUNA V2.0 Release Webinar

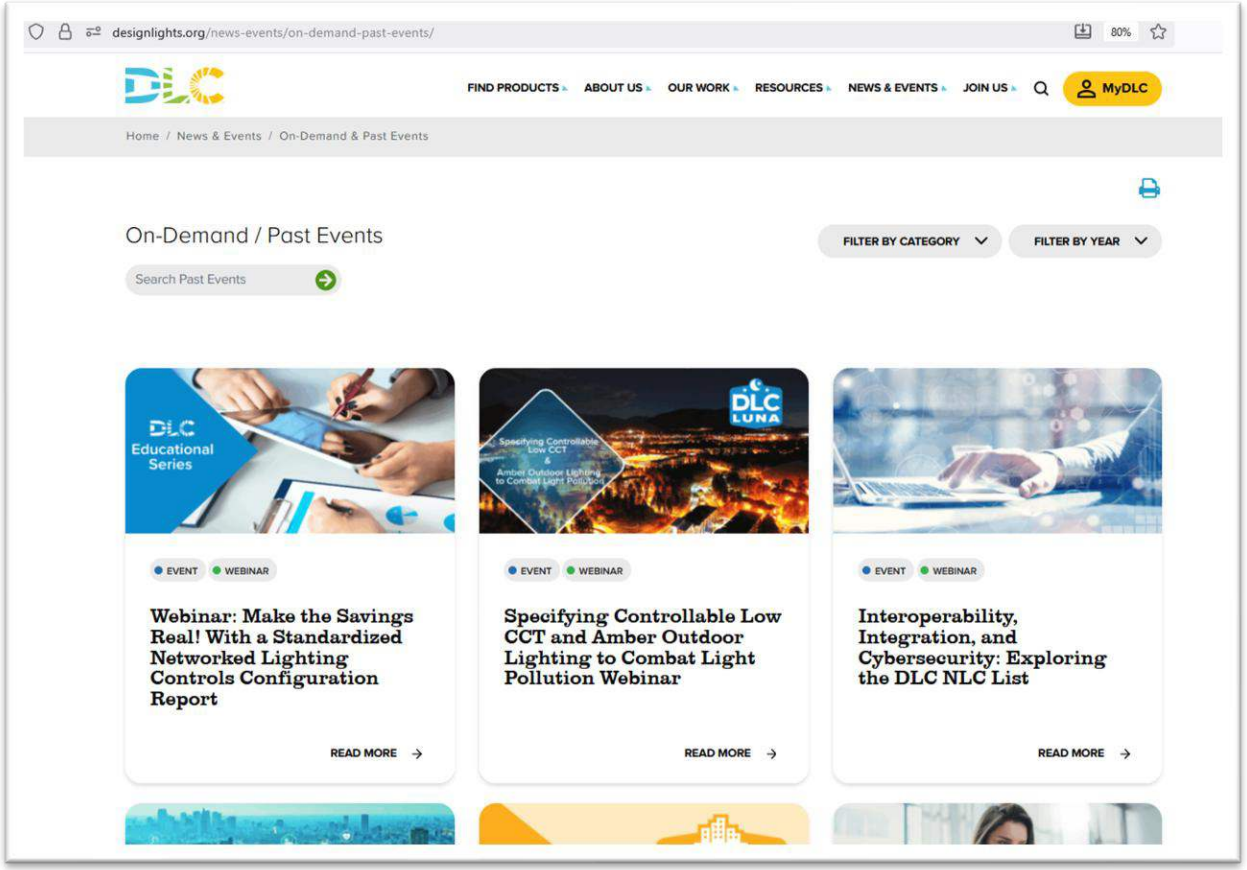
11/12/25

designlights.org

Welcome!

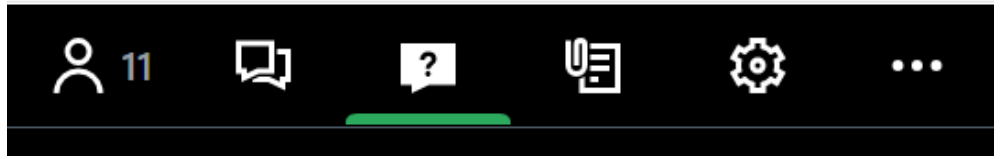
- **Slides and recorded webinar will be posted** on the *DLC News & Events* page at https://designlights.org shortly after today's presentation

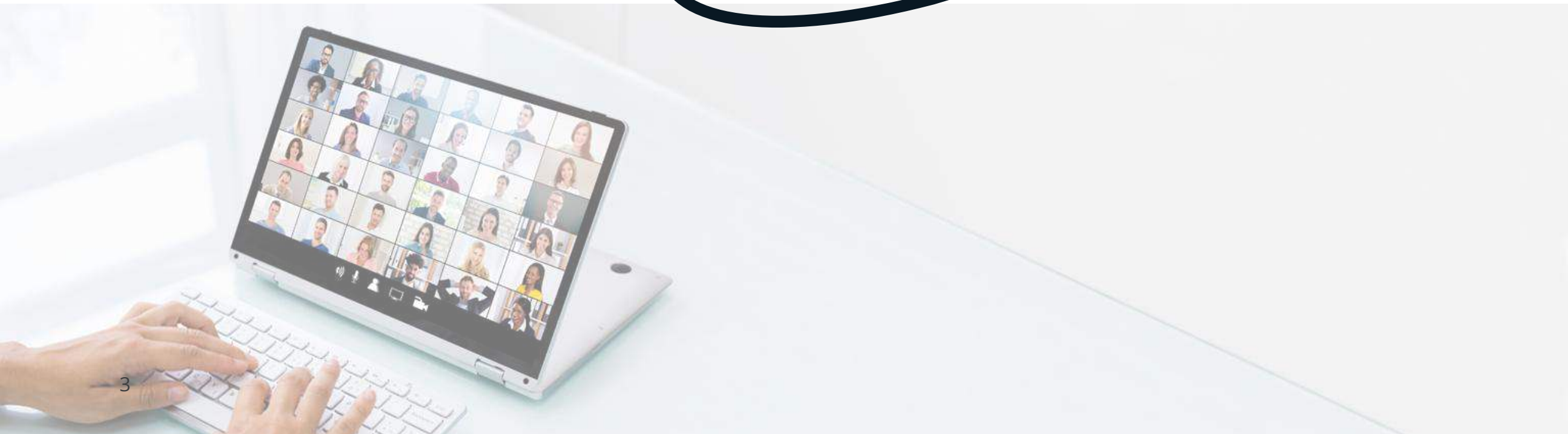
- All attendees are automatically muted



Webinar Orientation

- **Questions will be held until the end during a live Q&A**
  - **Use the Question pane (not Chat) to submit for Q&A**





The DesignLights Consortium is an independent, nonprofit organization providing decision makers with data and resources on quality lighting, controls, and integrated building systems to reduce energy, carbon, and light pollution.

Presenters

Leora Radetsky
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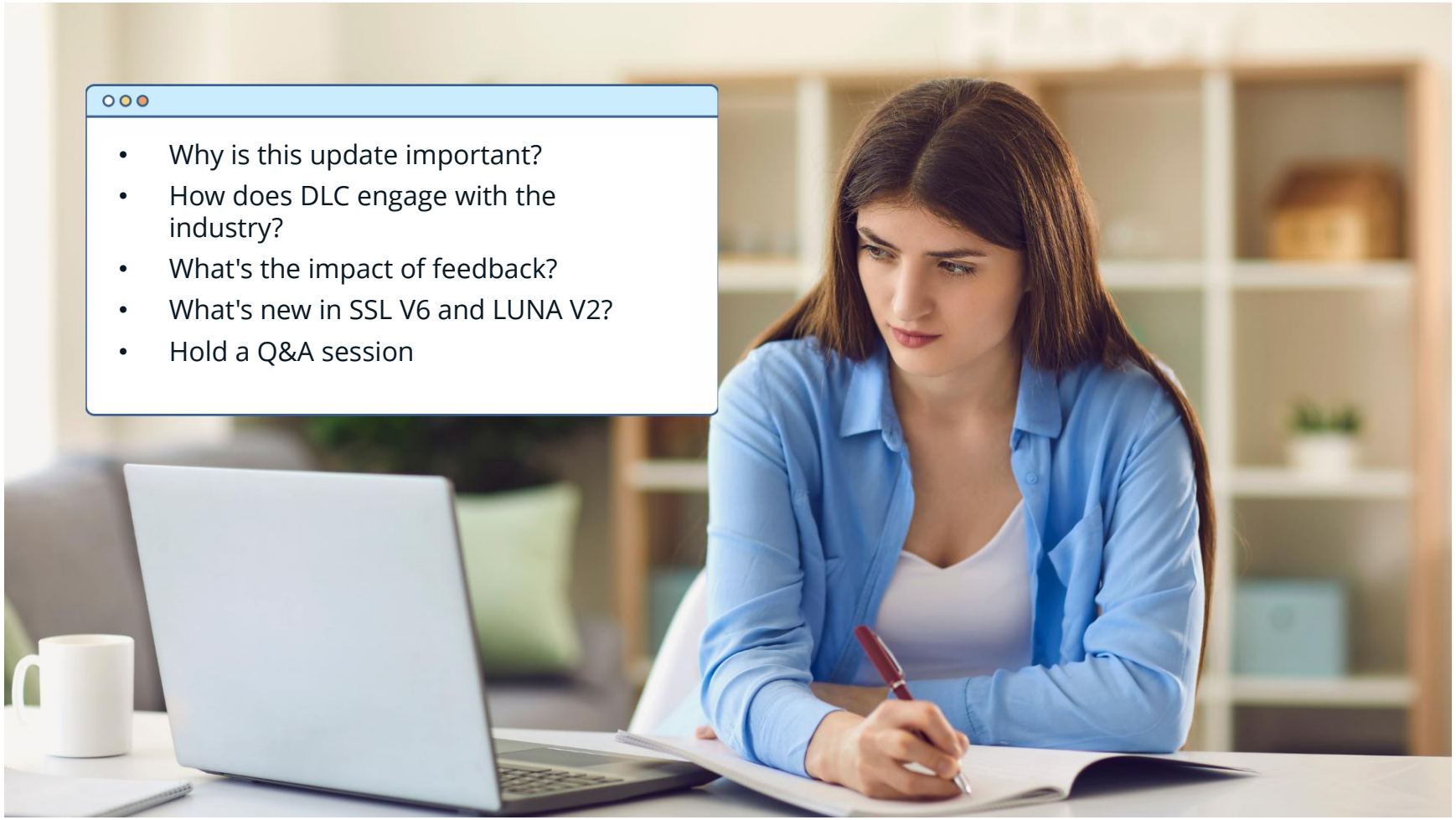
Agenda

3:00	Introduction
3:03	Background & History
3:11	Application Timeline
3:13	Document Structure
3:15	What Hasn't Changed?
3:16	Eligibility
3:19	Non-Performance Reporting
3:22	Efficacy
3:25	Quality of Light
3:31	Controllability
3:36	Field Adjustable Products
3:40	Color Tunable Products
3:42	Premium
3:45	Solar
3:48	Sustainability
3:49	Amber
3:51	LUNA
3:55	Alternatively Sourced LEDs & Drivers
3:57	Q&A
4:25	Review

Webinar Objectives



Background & Value

Why DLC?

Who benefits from the QPLs?

Why do utilities offer lighting rebates?

Why DLC?

Who benefits from the QPLs?

Why do utilities offer lighting rebates?

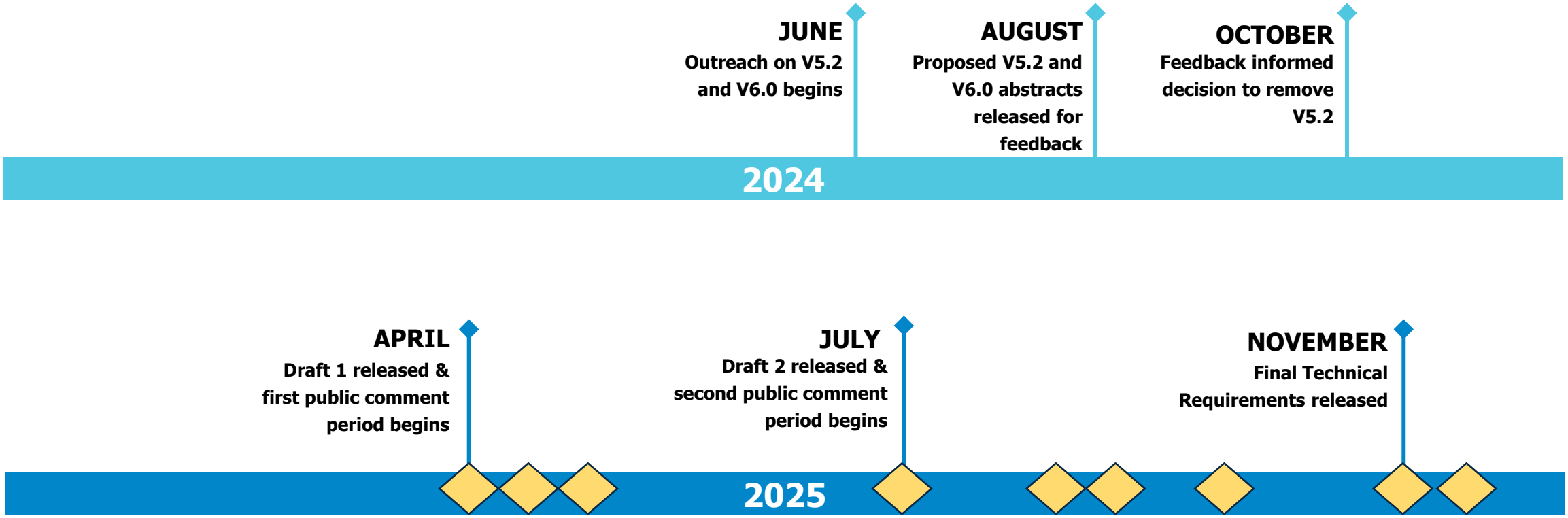
Why did DLC create new Technical Requirements?

What will change on the SSL/LED QPL?

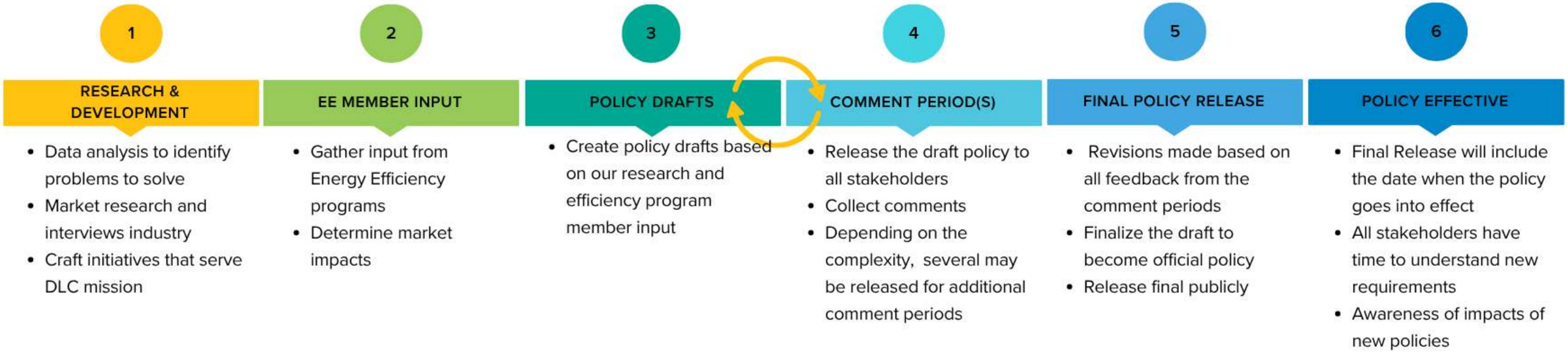
History: SSL & LUNA Technical Requirements

Thank you for being part of our consortium

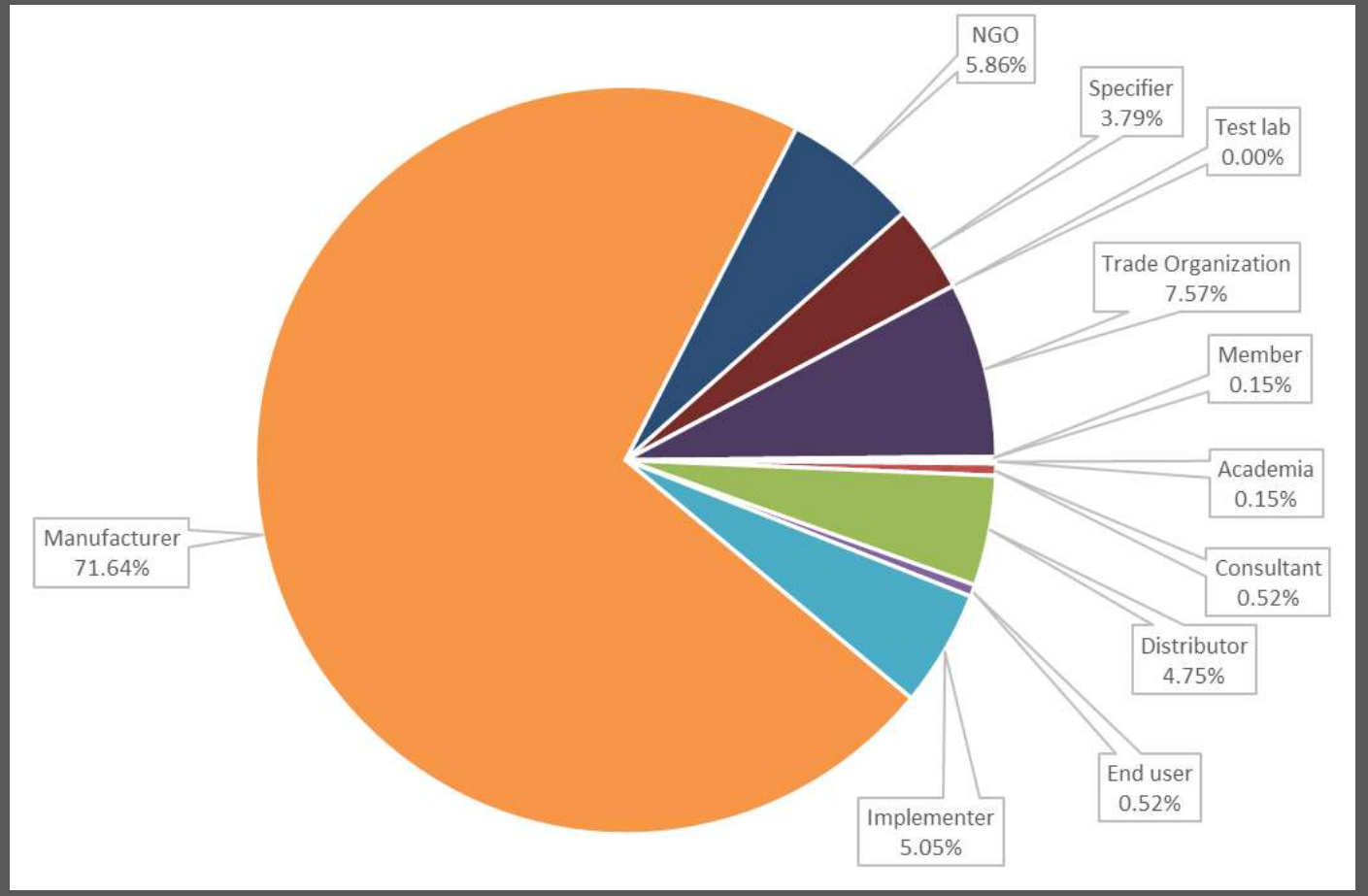
History of SSL V6.0 & LUNA V2.0 Outreach and Collaboration



DLC Stakeholder Input Process



Public Comments Breakdown



Nearly 1500 comments from 50 organizations across two comment periods!

SSL V6.0 & LUNA V2.0 Goals

Advance energy efficiency
and support decarbonization through increased efficacy thresholds and controls requirements.

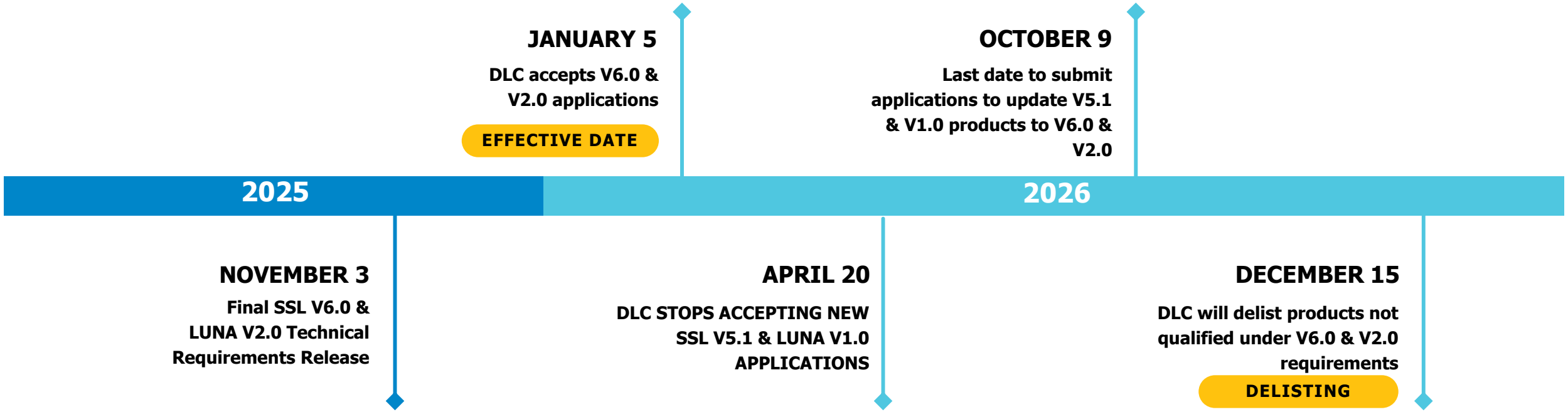
Strengthen the SSL QPL
by expanding eligibility to support sustainability, lighting innovation, and flexible installation practices.

Drive adoption of controls
through compatibility-based product selection from SSL and NLC QPLs.

Mitigate light pollution
by promoting responsible outdoor lighting options.

Applications Timeline

SSL V6.0 & LUNA V2.0 Applications Timeline



Information on Application processes and fees

SSL V6.0 & LUNA V2 Application Overview Webinar

Tuesday, November 18th
2:00 pm EST

Navigating SSL V6.0 & LUNA V2.0

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Document Overview

DLC Technical Requirements for LED Lighting is a comprehensive document that revises and builds upon:

- SSL V5.1 Technical Requirements
- LUNA V1.0 Technical Requirements
- All standalone SSL Technical Requirement policies (e.g. Technical Requirement Tables, Warranty, Lifetime, Testing constraints, Power quality and more)

https://designlights.org/our-work/solid-state-lighting/ssl-v6-luna-v2/

Notable Policy Structural Change

1. Part I – General Information
2. Part II – DLC Standard Requirements
3. Part III – Requirements for DLC Premium
4. Part IV – Requirements for LUNA V2.0
5. Part V – Requirements for Specific Product Types
6. Part VI – Minimum Testing and Reporting Requirements
7. Part VII – Appendices
8. Part VIII – Policy Clarifications and Updates

What hasn't changed in SSL V6.0 & LUNA V2.0

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Technical Requirements unchanged in SSL V6.0 and LUNA V2.0

Standard / Premium Requirements

- Color Rendition Thresholds (CRI and TM-30)
- Power Quality Thresholds
- Warranty
- Lumen Maintenance
- LM-79 / Color Reports
- DC / PoE
- Color Tunable
- Worst-Case Testing Approach
- Efficacy Allowances (Except CCT)
- Safety

LUNA Requirements

- Shields For Roadway / Area Products
- Limit On Tilt Angle
- SPDX Documents
- Max 3000 K CCT
- SPD & Luminous Intensity Images

Premium Requirements

- Incremental efficacy increase
- (15 Lum/Watt)
- Driver lifetime threshold
- Eligibility

Eligibility

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Eligibility Overview

Goals

Support energy efficiency program needs with relevant product types

Requirement

Created PUDs to accurately reflect the market

New & Updated in V6.0

Primary Use Designations (PUDs) - Outdoor

Excerpts from Table 1

Category	General Application	Primary Use Designation (PUD)	Change Type
Outdoor	All Output Levels	Outdoor Zero-Uplight Wall-Mounted Luminaire	Terminology Change Cutoff → Zero-Uplight
Outdoor	All Output Levels	Outdoor Uplight-Emitting Wall-Mounted Luminaire	Terminology Change Semi-Cutoff → Uplight-Emitting
Outdoor	Low Output	Turtle Lighting Zero-Uplight Pole/Arm-Mounted Area and Roadway Luminaire	New PUD
Outdoor	Low Output	Turtle Lighting Zero-Uplight Wall-Mounted Area Luminaire	New PUD
Outdoor	Low Output	Turtle Lighting Zero-Uplight Bollard	New PUD
Outdoor	All Output Levels	Architectural Flood and Spot Luminaire	Combined with Landscape/Accent Flood and Spot Luminaires
Outdoor	All Output Levels	Hazardous Environment Area Luminaire	Converted Specialty
Outdoor	All Output Levels	Sports Lighting Luminaire	Converted Specialty

New in V6.0

NEW Solar Powered Outdoor Luminaire Category

Excerpts from Table 1

General Application	Primary Use Designations
Low Output	• Pole/Arm-Mounted Area and Roadway • Pole/Arm-Mounted Decorative • Zero-Uplight Wall-Mounted Area • Uplight-Emitting Wall-Mounted Area • Bollard • Parking Garage • Fuel Pump Canopy • Architectural Flood and Spot • Stairwell and Passageway • Sports Lighting • Hazardous Environment Area • Turtle Lighting Zero-Uplight Wall-Mounted Area (Low Output Only) • Turtle Lighting Zero-Uplight Pole/Arm-Mounted Area and Roadway (Low Output Only) • Turtle Lighting Zero-Uplight Bollard
Mid Output	
High Output	
Very High Output	

- All requirements for products in the Outdoor category apply
- Additional required reported fields

New in V6.0

Primary Use Designations (PUDs) - Indoor

Excerpts from Table 1

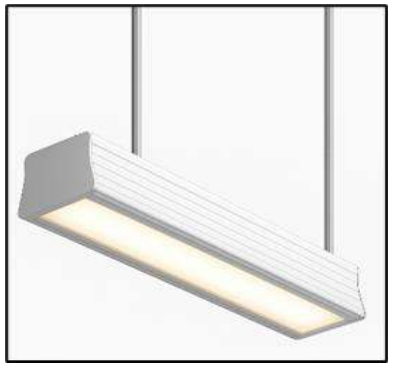
Category	General Application	Primary Use Designation (PUD)	Change Type
Indoor	High-Bay	Hazardous Environment High-Bay Luminaires	Converted Specialty
Indoor	High-Bay	Indirect High-Bay Luminaires	Converted Specialty
Indoor	Low-Bay	Hazardous Environment Low-Bay Luminaires	Converted Specialty

Converted Specialty PUDs

Sports Lighting Luminaire

Hazardous Environment Area Luminaire

Hazardous Environment High-Bay Luminaire



Hazardous Environment Low-Bay Luminaire

Indirect High-Bay Luminaire

New HID Replacement Lamps

Excerpts from Table 1

#	Category	General Application	Primary Use Designation (PUD)
32	Mogul Screw-Base (E39/E40) Replacements for HID Lamps	Omnidirectional/Directional Lamps	Omnidirectional/Directional Replacement Lamp (UL Type B)
33			
34	Medium Screw-Base (E26) Replacements for HID Lamps	Omnidirectional/Directional Lamps	Omnidirectional/Directional Replacement Lamp (UL Type B)
35			

Non-Performance Reporting to Improve the QPL

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Non-Performance Reporting Overview

Goals

The DLC needs to make it simple for incentive reviewers to determine if products are qualified and are being installed according to their intended end use

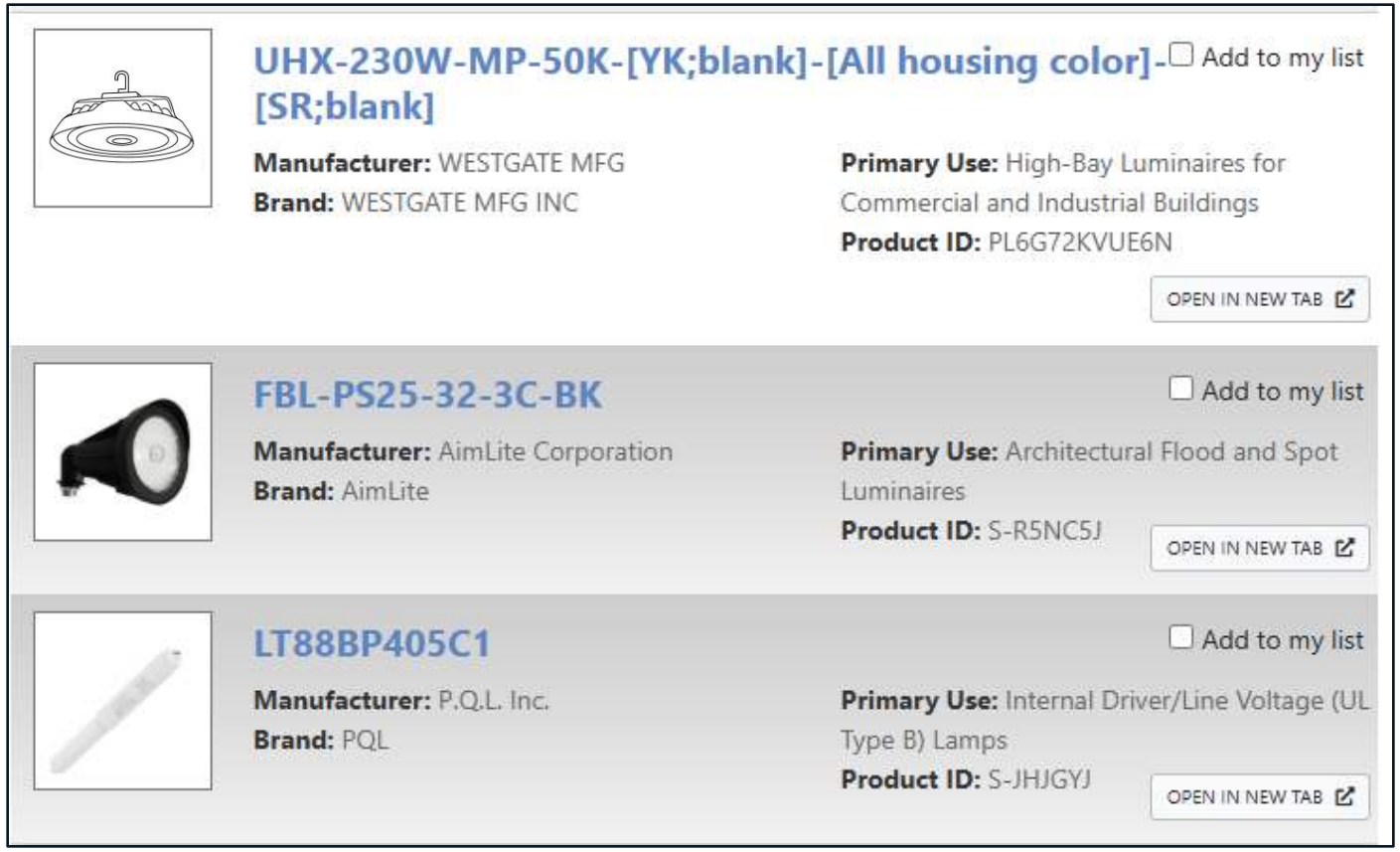
Requirement

We introduced non-performance reporting to improve the user experience of the QPL

New in V6.0

Product Images

- Each listing required to have an associated image
- May use DLC's reference image library or submit your own image
- Images can represent the entire family or specific product listing

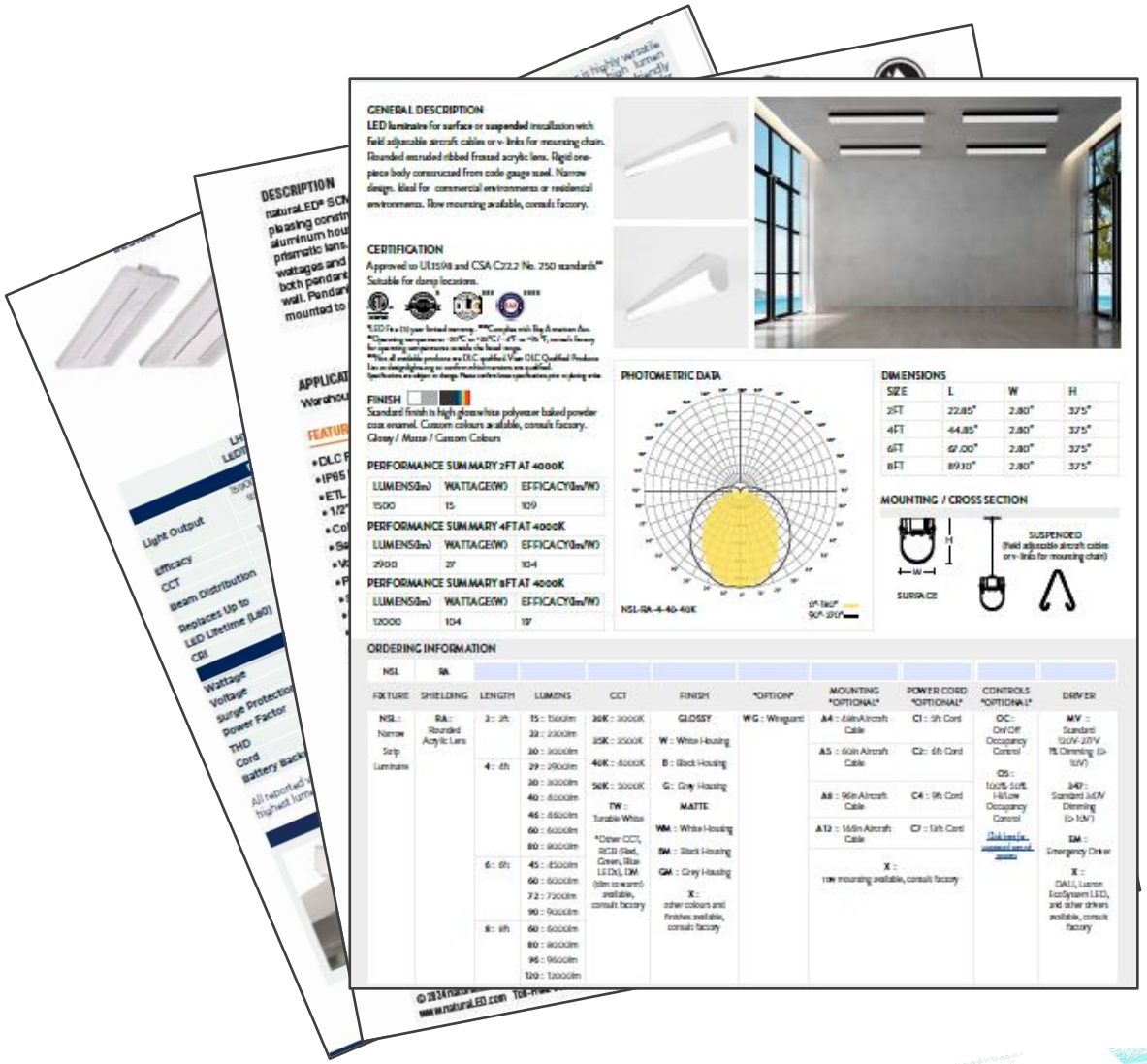


New in V6.0

Specification Sheets

Manufacturers have two options:

- DLC-hosted
- Link to manufacturer site



Can update at any time

Efficacy

40

Efficacy Overview and Goals

Goals

Continue to save energy by setting thresholds that keep pace with technological advancements, ensuring that DLC represents the most efficient products on the market

Requirement

Increase standard efficacy (lm/W) thresholds by an average of 14% (range of 4%-19%)

Updated in V6

Standard Efficacy Thresholds: Indoor

Excerpts from Table 2

Category	General Application	V5.1 Threshold (lm/W)	V6.0 Threshold (lm/W)
Indoor Luminaires and Retrofit Kits	Troffer	110	120
	Linear Ambient	115	125
	High Bay	120	135 (130 for hazardous)
	Low Bay	115	130 (125 for hazardous)
	Case Lighting	95	105
	Interior Directional	80	95

Standard Efficacy Thresholds: Outdoor

Excerpts from Table 2

Updated in V6

Category	PUD	V5.1 Threshold (lm/W)	V6.0 Threshold (lm/W)
Outdoor Luminaires and Retrofit Kits	Pole/Arm-Mounted Area and Roadway	105	125
	Pole/Arm-Mounted Decorative		115
	Outdoor Zero-Uplight Wall-Mounted Area		125
	Outdoor Uplight-Emitting Wall-Mounted Area		125
	Bollards		115
	Parking Garage		115
	Fuel Pump Canopy		125
	Architectural Flood and Spot Luminaires		125
	Stairwell and Passageway		125
	Sports Lighting		115
	Hazardous Environment Area		115

Updated in V6

Standard Efficacy Thresholds: Lamps

Table 3

Category		General Application	V5.1 Threshold (lm/W)	V6.0 Threshold (lm/W)
In Luminaire	Mogul-Base (E39/E40) Replacement Lamp	Outdoor	105	115
		High-Bay	120	135
		Low-Bay	115	130
	Four Pin-Base Lamps	Vertically and Horizontally Mounted (In-Luminaire)	75	80
Bare Lamp	Mogul-Base (E39/E40) Replacement Lamp	Omnidirectional/Directional	N/A	145
	Medium-Base (E26) Replacement Lamp	Omnidirectional/Directional	N/A	130
	Linear Replacement Lamp	All	120	130
	Four Pin-Base Lamps	Vertically and Horizontally Mounted (Bare Lamp)	85	90
		2G11 Base	120	125

Updated in V6

Efficacy Allowances

Excerpts from Table 18

Performance Metric	Allowance
CCT ≤ 2700 K	8%
CCT ≤ 2200 K	10%
CCT ≤ 2000 K	20%
CCT ≤ 1800 K	25%

Cumulative total allowance of up to 15%, except for 2000K and 1800K products, which may have a cumulative total allowance of up to 25%

Allowances for other metrics remain the same as in V5.1

No Change in V6

Premium Efficacy Thresholds

Goals

Differentiate **the most energy efficient products** to enhance energy savings

Requirement

15 lm/W above standard thresholds (allowances apply)

Quality of Light

50

Quality of Light V6 Goals

Goals

Support lighting characteristics that improve the visual environment and mitigate light pollution

Requirement

- NWL options and max CCT limits
- Standardized color maintenance reporting options
- New distribution requirements for converted Specialty PUDs
- Aligning output and distribution requirements with market expectations

New in V6.0

Quality of Light – Non-white light (NWL) options

Indoor and outdoor products may also include the following options:

1) 1800 K and 2000 K
2) Amber options

NWL options must report color rendition and color maintenance values, but no thresholds are stipulated.

NWL options are not eligible for Premium.

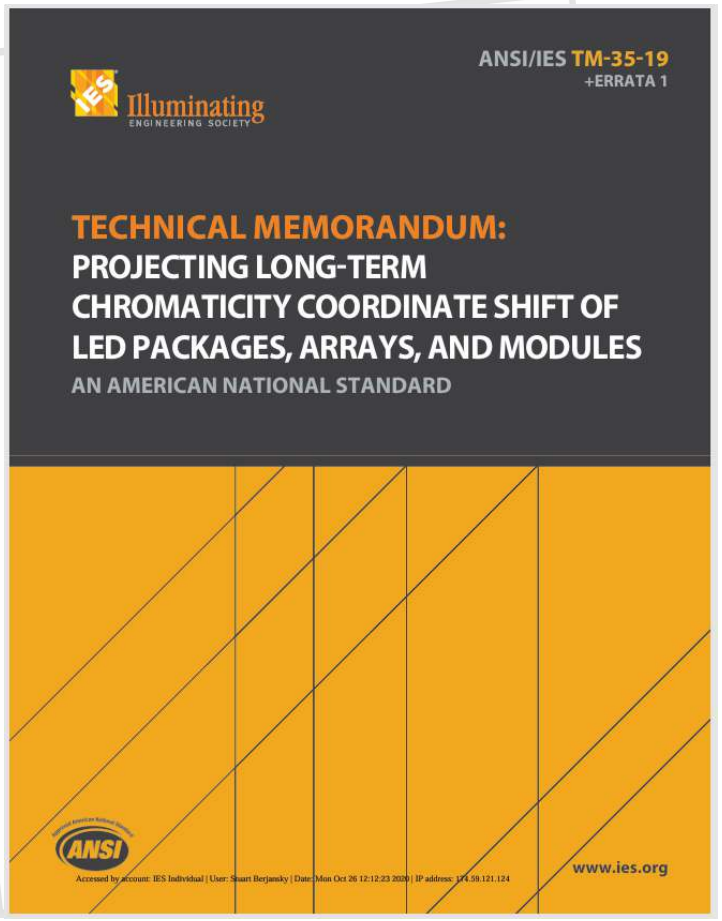
Updated in V6

Quality of Light – Chromaticity (DLC Standard)

Metric and/or Application	Applicable Products	SSL V6.0 & LUNA V2.0 Draft 2 Standard Requirements	QPL Listing	Method of Measurement/ Evaluation
Chromaticity (CCT & D_{uv})	Chromaticity consistent with at least one of the basic, flexible, or extended, nominal 7-step quadrangle CCTs detailed below:		CCT and Duv for parent products from LM-79 test reports listed as Tested Data. Nominal CCT for child products listed as Reported Data.	ANSI/IES LM-79 ANSI C78.377-2024
	All indoor products, including linear replacement lamps and replacements for CFLs	**1800 K** – 6500 K		
	All outdoor products, including omnidirectional/ Directional E39 and E26 lamps, exceptions below	**1800 K – 5000 K**		
	Sports Lighting and Fuel Pump Canopy	**1800 K – 5700 K**		

New in V6.0

Quality of Light – Color Maintenance



V6.0 maintains existing color maintenance requirements and introduces **optional reporting** of CS4 and CS7 values per ANSI/IES TM-35-19.

No thresholds are stipulated and reporting is optional.

Updated in V6

Output Thresholds: V5.1 vs V6.0

Excerpts from Tables 5 and 6

Category	General Application	V5.1 Minimum Output (lm)	V6.0 Minimum Output (lm)
Outdoor Luminaires	Low Output	250	150
Mogul-Base (E39/E40) Replacement Lamp	Omnidirectional / Directional	N/A	2000
Medium-Base (E26) Replacement Lamp	Omnidirectional / Directional	N/A	2000

Updated in V6

Converted Specialty PUDs – Distribution Requirements

Excerpts from Tables 5 & 8

Primary Use Letter	Primary Use Designation	Minimum Light Output (lm)*	Zonal Lumens (ZL)/Spacing Criteria(SC)/Beam Angle (BA)*	ZL/SC/BA Nominal Requirement*	ZL/SC/BA Tolerance	ZLD/SC/BA Requirement with Tolerance
BA	Hazardous Environment Area Luminaire	1000	ZLD: 0-90º	100%	-1%	≥99%
			ZLD: 80º - 90º	≤20%	+3%	≤13%
BB	Sports Lighting Luminaire	1000	ZLD: 0-90º	100%	1%	≥99%
BC	Hazardous Environment High-Bay Luminaire	10,000	ZLD: 20-50º	≥30%	-10%	≥20%
BD	Indirect High-Bay Luminaire	10,000	ZL: 90-180º	>90%	-3%	≥87%
BE	Hazardous Environment Low-Bay Luminaire	5,000	ZL: 20-50º	≥30%	-10%	≥20%

Updated in V6

Updated Wall-Mounted PUDs – Distribution Requirements

Excerpt from Table 8

Primary Use Letter	Primary Use Designation	Nominal Zonal Lumens (ZL) Requirement		Tolerance	Requirement with Tolerance
C	Outdoor Zero-Uplight Wall-Mounted Area Luminaire	ZLD: 0-90°	100%	0%	100%
		ZLD: 80° - 90°	≤5%	+3%	≤8%
D	Outdoor Uplight Emitting Wall-Mounted Area Luminaire	ZLD: 80° - 90°	≤10%	+3%	≤13%
		ZLD: > 90°	≤20%	+3%	≤23%

Controllability

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Controllability Overview

Goals More incentives for integral controls

Requirement Controls Categories / Controls Options Tables

New in V6.0

Controls Categories

Eligible for Premium →

New in V6.0

Controls Options Tables

Collected at Brand Level

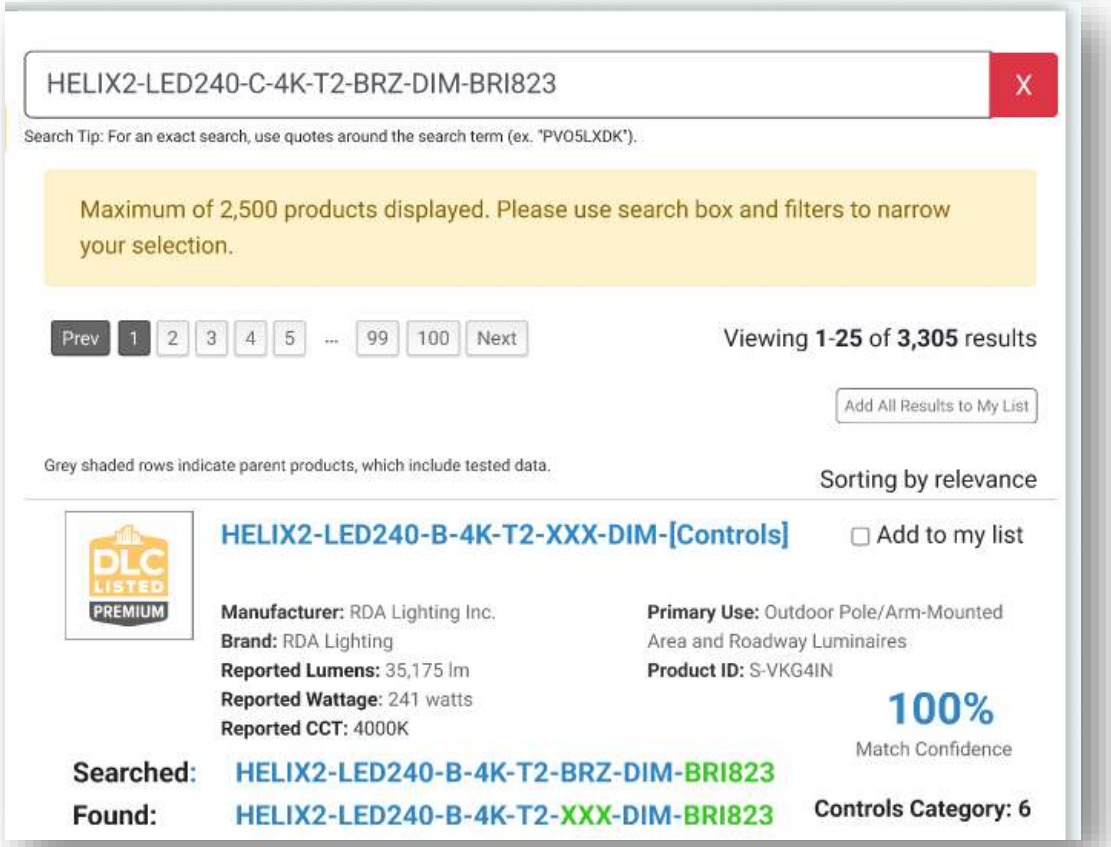
- Unique Controls Option Codes for each Brand

Table 11

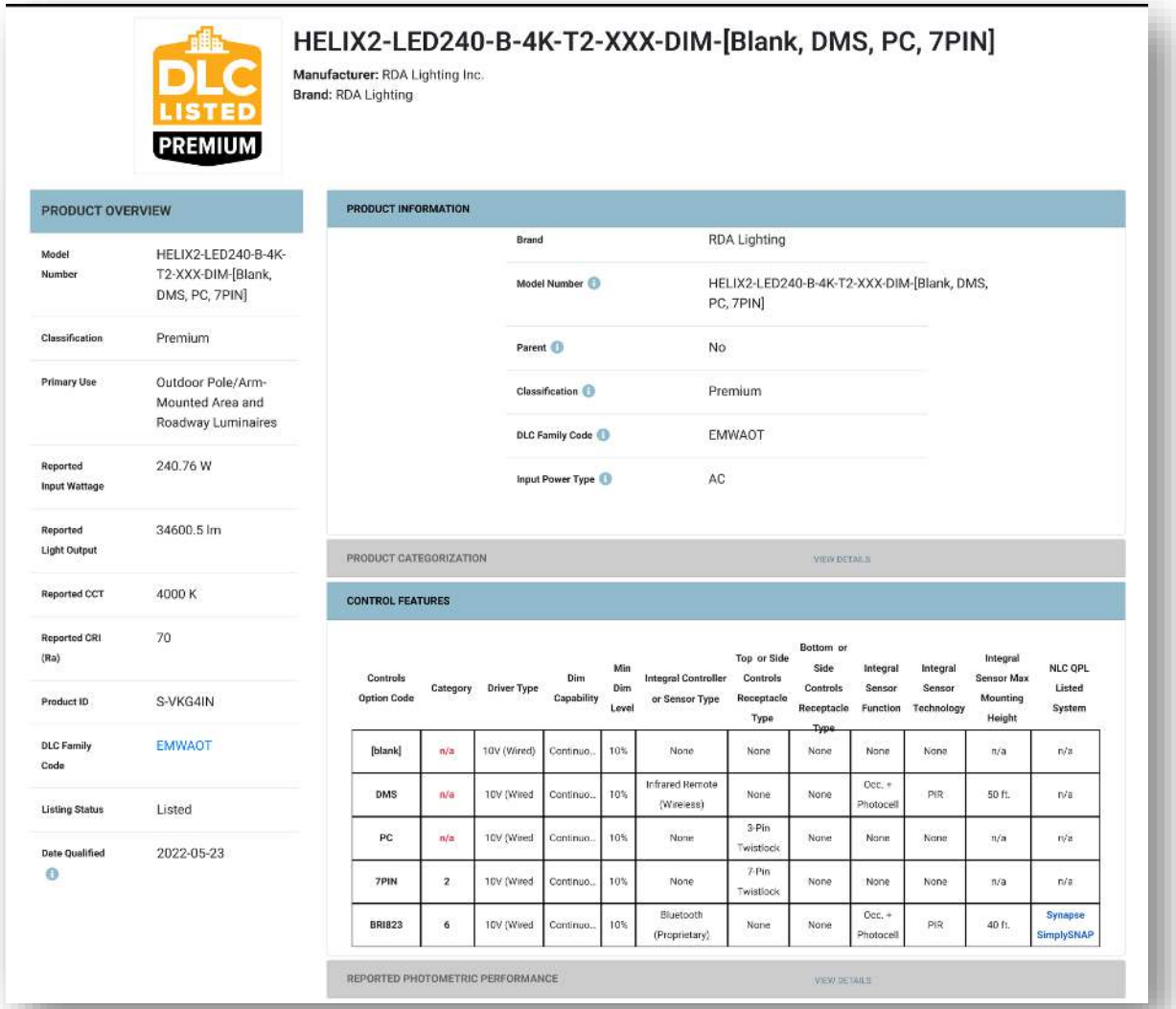
ALL PRODUCTS												
1	2	3	4	5	6	7	8	9	10	11	12	
Controls Option Code	Driver Type	Dimming Capability	Min. Dimming Level	Integral Controller or Sensor Type	Top or Side Controls Receptacle Type	Bottom or Side Controls Receptacle Type	Integral Sensor Function	Integral Sensor Technology	Integral Sensor Max Mounting Height (ft)	NLC Product ID	Controls Ready Accessory Model Numbers (optional)	Controls Category
[blank]	10V (wired)	Continuous	10%	None	None	None	None	None	N/A	N/A	N/A	0
ABCD	10V (wired)	Continuous	10%	Bluetooth NLC (wireless)	None	None	Occ. + Daylight	PIR	20	NLC3782	N/A	6

Controls Categories will by assigned by the DLC.

Controls Categories on the QPL



Search Results



Product Detail Page

Field Adjustable Products

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Field Adjustable Overview

Goals

Better align with industry practice and encourage use of lower light output and CCTs.

Requirement

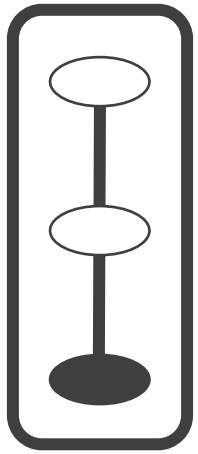
Submit information for three FA Types:

- FALO (field adjustable light output)
- FALD (field adjustable light distribution)
- FACT (field adjustable color temp)

Changed in V6.0

Field Adjustable Light Output (FALO)

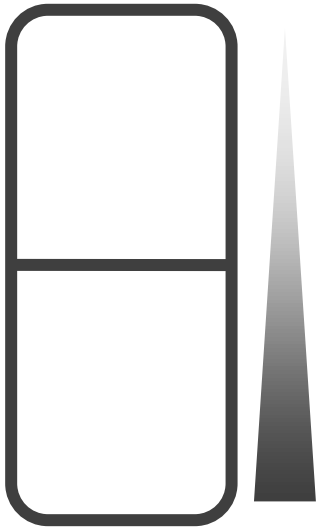
Splitting Field Adjustable Light Output from dimming



Field Adjustable Light Output

Set at installation

Manufacturers **report** default light output and wattage settings



Dimming

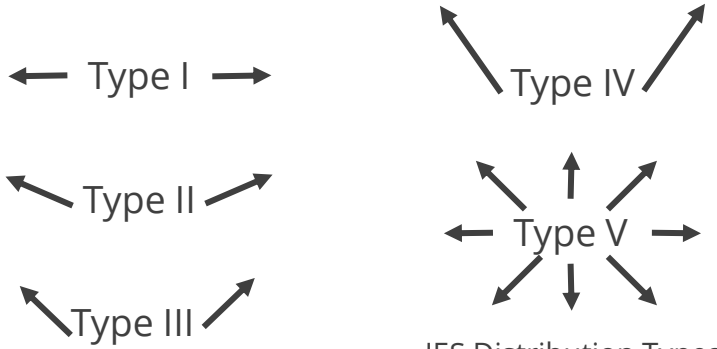
Changed during normal operation

Changed in V6.0

Field Adjustable Light Distribution (FALD)

- Field Adjustable Light Distribution
  - Type
  - Range
    - Indoor: degrees
    - Outdoor: IES + NEMA Distribution Types
- Aimable
- Levelable

Manufacturers **report** default settings



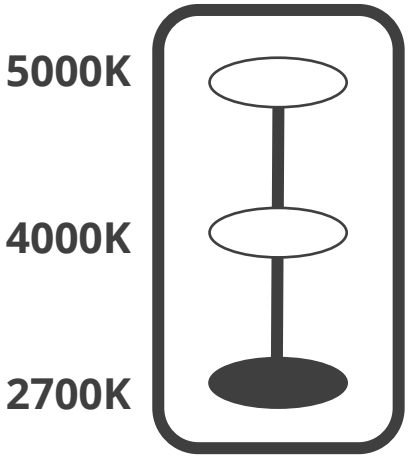
IES Distribution Types

Beam Spread (deg)	NEMA Type	Description
10-18	1	Very Narrow
18-29	2	Narrow
29-46	3	Medium Narrow
46-70	4	Medium
70-100	5	Medium Wide
100-130	6	Wide
130+	7	Very Wide

Changed in V6.0

Field Adjustable Color Temperature (FACT)

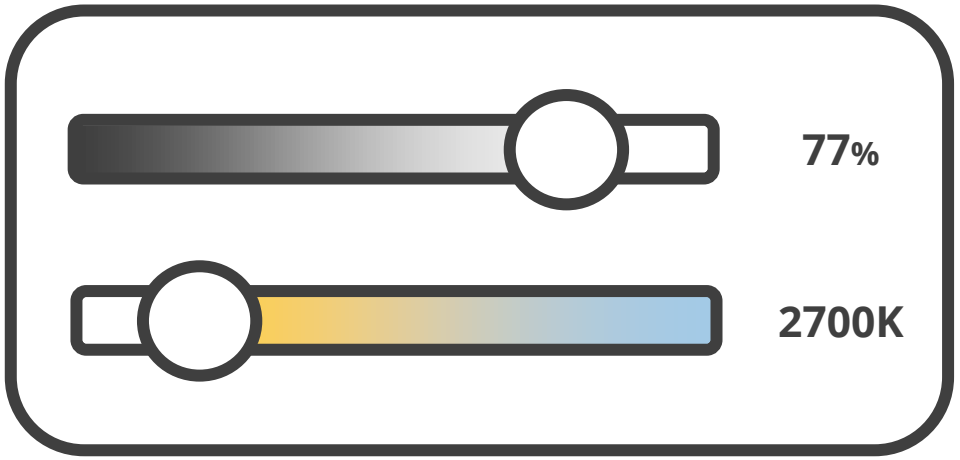
Splitting FACT from CCT Tunable



Color Temperature

Set at installation

Manufacturers **report** default CCT setting



CCT Tunable

Changed during normal operation

Color Tunable Products

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New & Updated in V6.0

Color Tunable

Goals

Better support incentives for color tunable products and industry changes in product designs

Requirement

- Added eligibility for full-color tunable products
- Rename "white tunable" to "CCT tunable"

Testing and reporting requirements are unchanged from V5.1

Premium

75

Goal for Premium in SSL V6.0

Improve the value of V6.0 Premium listings for members by enhancing focus on controlled LED lighting solutions

New & Updated in V6

Premium Controllability

Goal

Greater **energy savings & better integration** with control systems

Premium Requirement

- Continuous dimming **to 10% or lower**
- **Controls Category 1-6** only

Updated in V6

Premium Discomfort from Glare

Goal

Support **glare mitigation** while aligning with industry practice

Premium Requirement

Troffers maintain UGR thresholds from V5.1

Solar Powered Outdoor Luminaires

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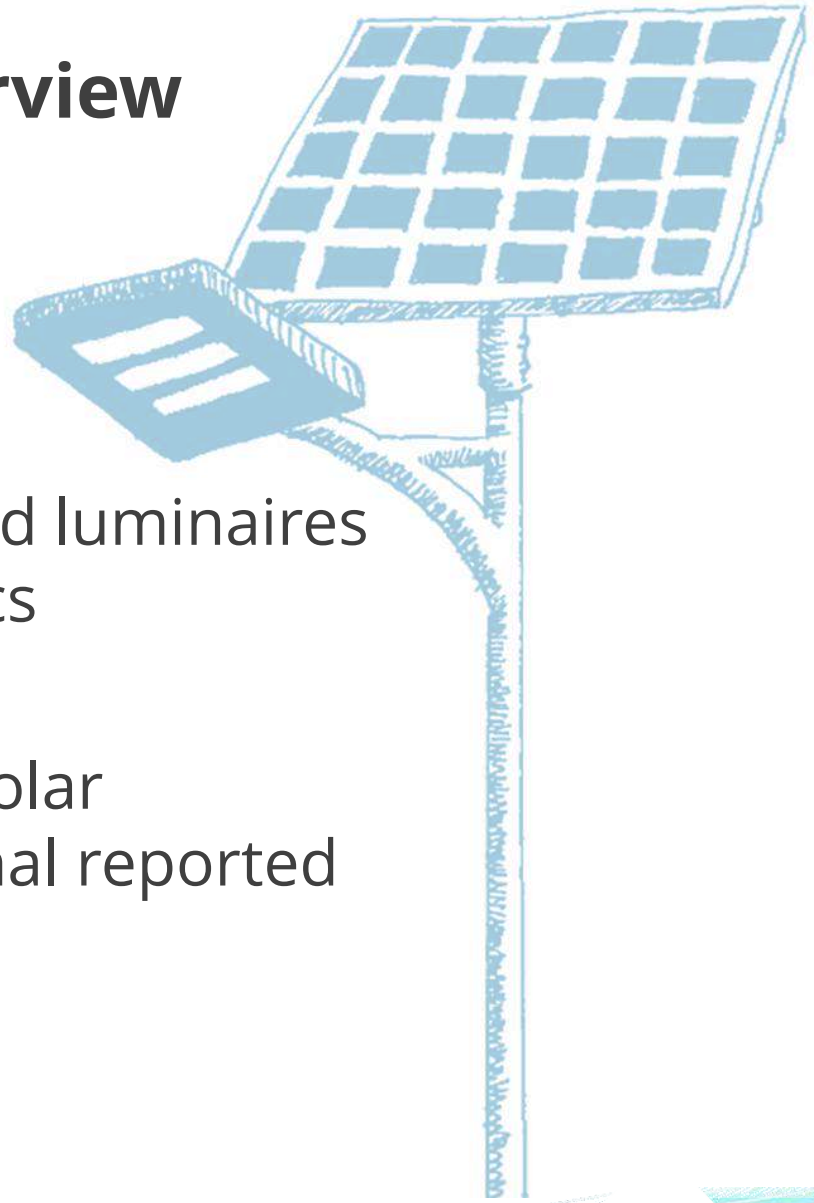
Solar Powered Outdoor Luminaires Overview



Goals

Support adoption of solar powered luminaires and reporting of key characteristics

Requirement

Introduce Category for Outdoor Solar Powered Luminaires with additional reported characteristics

New in V6

Additional Reporting for Solar Powered Luminaires

Excerpts from Table 32

Reported Field	Options
Configuration	Integrated 
	 Split-Type
	Luminaire Only 
Grid Connection	Off Grid
	Hybrid
Battery Type	$LiFePO_4$
	Lead Acid
	NIMH
	NMC
	Lead Crystal®

Other Reported Values

- PV Wattage
- Recommended Install Height
- Battery Capacity
- Battery Lifetime
- Solar Panel Lifetime

Sustainability

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Sustainability Overview and Goals

Goals

Promote lighting sustainability efforts and encourage lifecycle reporting

Requirement

Optional reporting of third party verified certifications

New in V6.0

Optionally Reported Certifications

EPD®
THE INTERNATIONAL EPD® SYSTEM

Green Product
TÜVRheinland®
CERTIFIED
www.tuv.com
ID 0100000000

Declare.

RoHS

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818

CERTIFIED CM
cradle to cradle

lighting for good

Amber LED

92

New in V6

Amber LED types eligible for SSL V6 & LUNA V2

- de-Amber: Produced by a narrowband LED (such as an aluminum indium gallium phosphide (AlInGaP) LED).
- pc-Amber: Produced by a broadband LED (such as a phosphor-converted (pc-) indium gallium nitride (InGaN) LED).
- Filtered Amber: A white-LED (2200 K to 5000 K) lamp, retrofit kit, or luminaire with an amber filtered lens or optic that reduces the short wavelength radiation to no more than 2% of the total optical radiation

New in V6

Efficacy Thresholds by Amber LED Technology

Table 30

Amber LED Technology	Minimum product efficacy threshold (lm/W)
de-Amber	30
pc-Amber	70
Filtered-Amber	95

New in V6.0

Spectral Quality for Products with Amber LEDs (DLC Standard)

Adapted from Table 31

Metric and/or Application	Applicable Products	SSL V6.0 & LUNA V2.0 Standard Requirements	QPL Listing
Chromaticity	All amber	Chromaticity consistent with technology-specific definitions	Amber technology nomenclature Dominant wavelength (parents) Chromaticity coordinates (parents)
SPDX document	Amber parents		SPDX document
SPD image	Amber parents		SPD image
Color rendition	All amber	Same as Standard reporting with no thresholds	All color rendition metrics
Color maintenance	Amber parents	Same as Standard reporting with no thresholds	CS4 and CS7 values for all products when reported

Lumen Maintenance Requirements for Products with Amber LEDs (DLC Standard)

New in V6.0

Adapted from Table 16

Applicable Products	Lumen Maintenance Requirements
De-Amber, pc-Amber	L70 ≥ 36,000 hours
Filtered-Amber	L70 ≥ 50,000 hours

LUNA V2.0

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LUNA V2.0: Eligibility

New in LUNA V2.0

Details in Table 22

Goals

Support adoption of high-quality, energy-efficient lighting that mitigates light pollution

Requirement

Expand product eligibility to allow bare HID replacement lamps, retrofit kits and NWL LEDs.

LUNA V2.0 retrofit kit and lamp requirements

New in LUNA V2.0

Details in Table 22

Excerpt from Table 22

Table 22: PUDs Eligible for LUNA V2.0 Qualification and Respective U Rating Maximums

Primary Use Letter	PUDs Eligible for LUNA Qualification	Maximum U Rating	Maximum Light Output (Lumens)
Y	Retrofit Kits for Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	1	10,000
Z	Retrofit Kits for Outdoor Pole/Arm-Mounted Decorative Luminaires	2	10,000
AA	Retrofit Kits for Large Outdoor Pole/Arm Mounted Area and Roadway Luminaires	1	10,000
AB	Retrofit Kits for Zero-Uplight Outdoor Wall Mounted Area Luminaires	1	10,000
AD	Retrofit Kits for Fuel Pump Canopy Luminaires	2	10,000
BI	Omnidirectional/Directional Mogul Screw-Base Replacements for HID Lamps (Type B)	N/A	10,000 (bare lamp)
BJ	Omnidirectional/Directional Medium Screw-Base Replacements for HID Lamps (UL Type B)	N/A	10,000 (bare lamp)

Max CCT for LUNA qualified lamps and retrofit kits is 2700 K

LUNA V2.0: Spectral Quality

New in LUNA V2.0

Details in Table 24 and Section 15.4

Goals

Support adoption of high-quality, energy-efficient lighting that mitigates light pollution

Requirement

Simplify and clarify color test requirements to minimize additional burden; calculated metrics (percent blue, S/P Ratio, traffic color compliance, Hawaii code compliance

LUNA V2 spectral requirements

Excerpt from Table 24

New in LUNA V2.0

Details in Table 24

Metric and/or Application	Applicable Products	LUNA V2.0 Spectral Quality Requirements	QPL Listing	Method of Measurement or Evaluation
S/P Ratio	All LUNA parent products	All LUNA parent products will show the calculated S/P ratio. No threshold is stipulated.	Parent products: S/P ratio for parent products is listed as Tested Data.	S/P Ratio calculated with the LUNA pre-submission tool per the 2-degree scotopic and photopic luminous efficiency functions in ANSI/IES LS-2-20.
Percent Blue	All LUNA parent products	All LUNA parent products will show the calculated percent blue. No threshold is stipulated, except for Hawaii code compliance.	Parent products: % blue for parent products is listed as Tested Data.	% blue, per DLC's definition, calculated with the LUNA pre-submission tool.
Traffic compliance and Hawaii code compliance (Spectral Compliance Information)	All LUNA parent products	Traffic color compliant: LUNA parents that have chromaticities outside of ITE Yellow (amber) (per SAE J578 APR2020) per the DLC's definition. Hawaii code compliance: LUNA parents that are Hawaii code compliant will be traffic color compliant AND have percent blue ≤ 2%.	LUNA parents: Will report traffic color compliance and Hawaii code compliance. Will be listed using outputs from the LUNA pre-submission tool in the Tested Data section	Traffic compliance and Hawaii code compliance will be calculated with the LUNA pre-submission tool
Chromaticity (Spectral Compliance Information)	LUNA Amber products (luminaires, lamps, and retrofit kits	Chromaticity consistent with technology-specific definitions provided in the *Amber Products* section.	Nomenclature for *Amber Products* (de-Amber, pc-Amber, Filtered Amber) for parent and child products.	ANSI/IES LM-79 ANSI/IES TM-27-20 or IES TM-27-14 Optionally: ANSI/IES TM-33-18

LUNA V2.0: Turtle Lighting Luminaires

New in LUNA V2.0

Details in Table 25

Goals

Support adoption of high-quality, turtle lighting products

Requirement

Turtle Lighting PUDs have de-Amber LEDs, zero uplight, and thresholds for maximum light output and high-angle light.

LUNA V2: Turtle Lighting

New in LUNA V2.0

Details Table 25

Table 25: Turtle Lighting PUD Requirements: Light Output and Distribution

Primary Use Letter	Primary Use Designation	Maximum Light Output (lm)	Amber LED type	Maximum U Rating	Maximum G Rating
BF	Turtle Lighting Zero-Uplight Pole/Arm-Mounted Area and Roadway Luminaires	8,000	de-Amber	U0	G1
BG	Turtle Lighting Zero-Uplight Wall-Mounted Area Luminaires	2,500	de-Amber	U0	G0
BH	Turtle Lighting Zero-Uplight Bollards	1,000	de-Amber	U0	G0

Alternatively Sourced, Equivalent LEDs and Drivers

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New in V6.0

What you see on the QPL is what you get

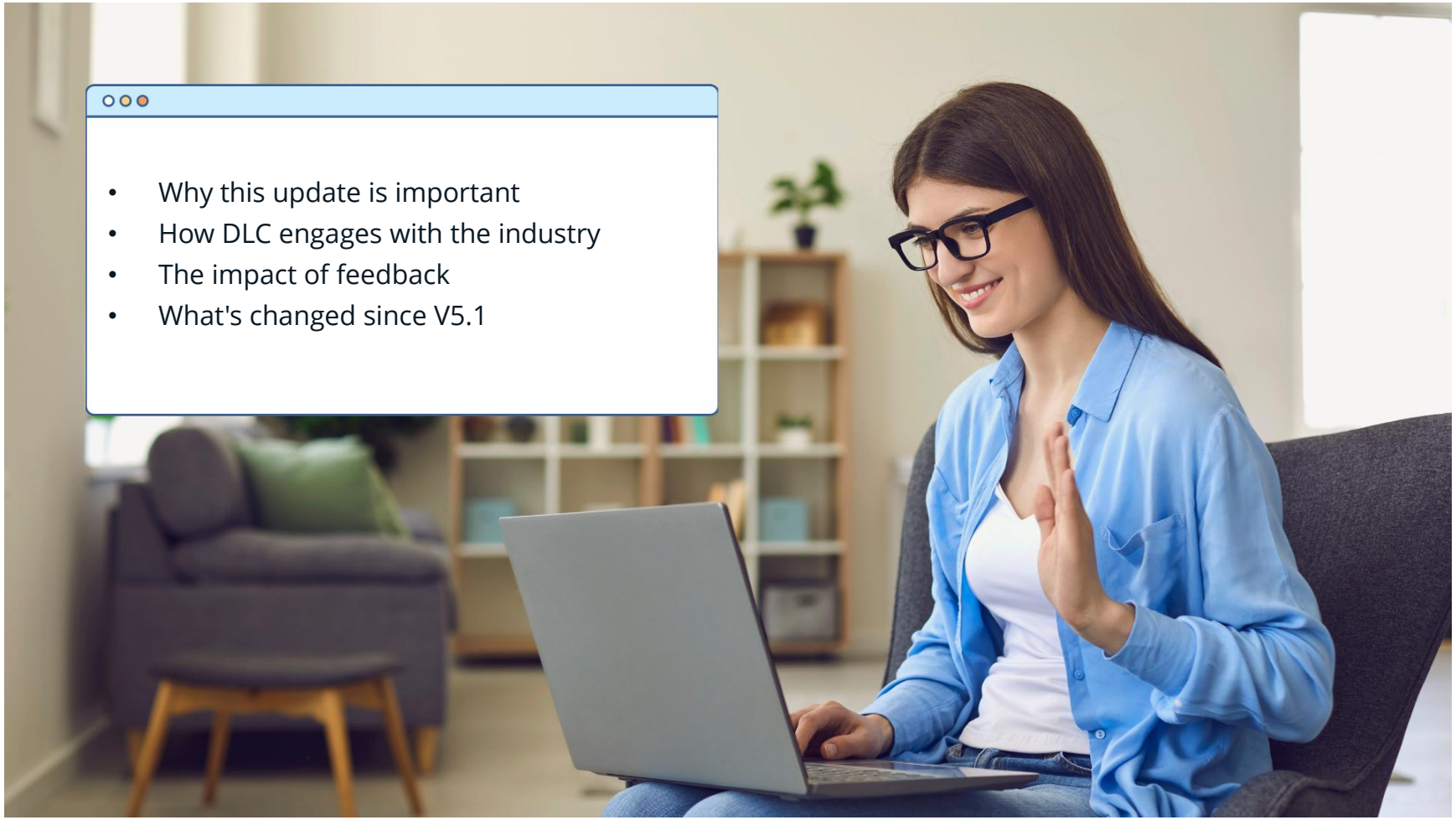
Qualified Product(s)

Alternate LEDs

Alternate Drivers

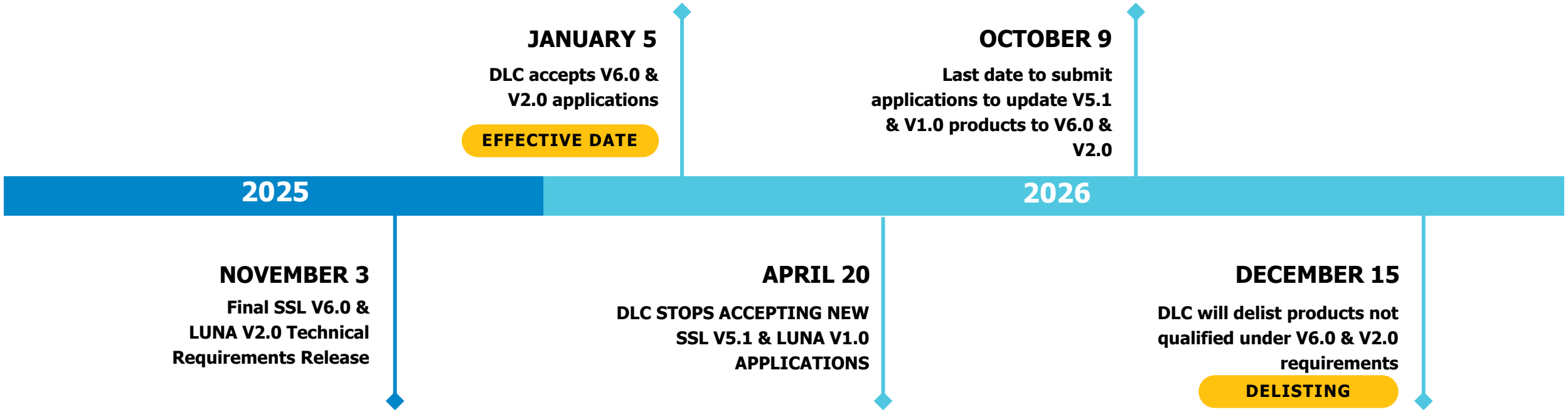
Alternate LEDs and drivers must perform within existing performance tolerances and provide subcomponent data to validate alternates meet DLC lifetime thresholds

Webinar review



Q&A

SSL V6.0 & LUNA V2.0 Technical Requirements Timeline



Information on Application Processes and Fees

SSL V6.0 & LUNA V2 Application Overview Webinar

Tuesday, November 18th
2:00 pm EST

Thank you for attending!
The webinar will be available online later this week