



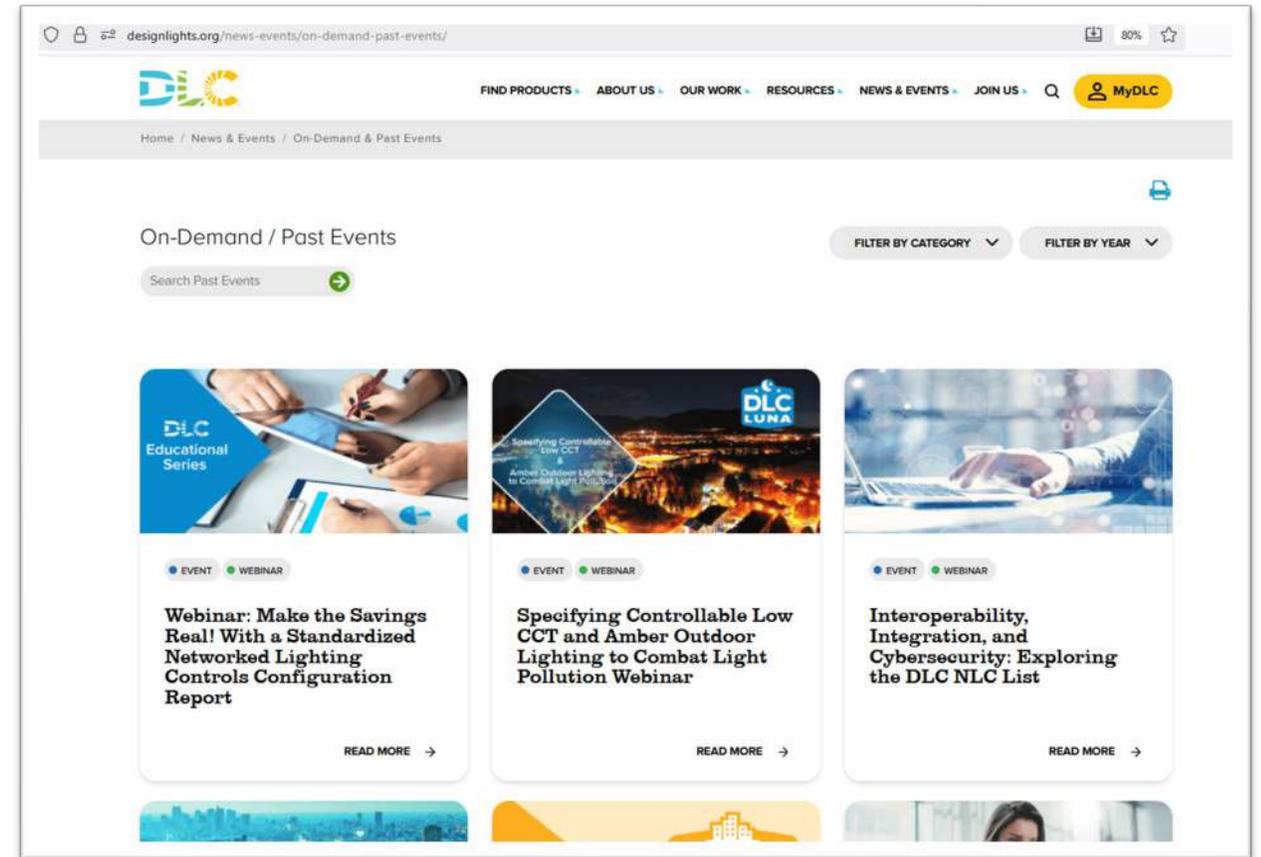
Energy · Quality · Controllability<sup>SM</sup>

# Controls Options Tables Explained: What SSL V6.0 & LUNA V2.0 Require and Why It Matters

2/18/25

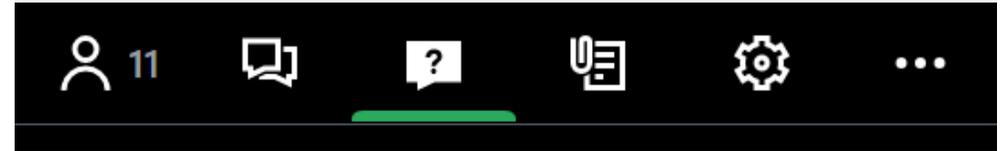
# Welcome!

- **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

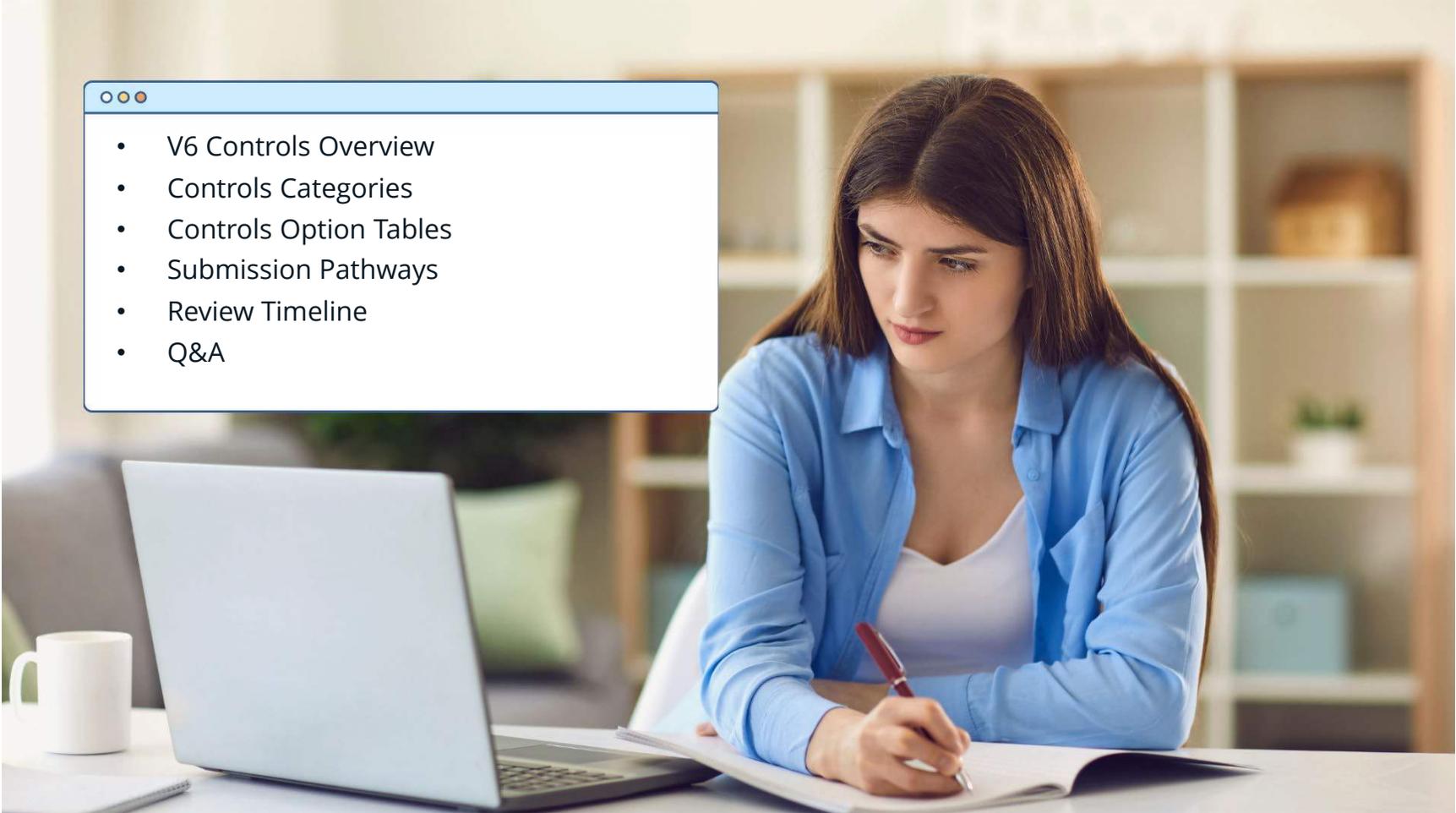




**The DesignLights Consortium is an independent, nonprofit organization providing decision makers with data and resources on quality lighting, controls, and integrated building systems to reduce energy, carbon, and light pollution.**



# Webinar Objectives

- 
- V6 Controls Overview
  - Controls Categories
  - Controls Option Tables
  - Submission Pathways
  - Review Timeline
  - Q&A

# Controllability Overview

Goals

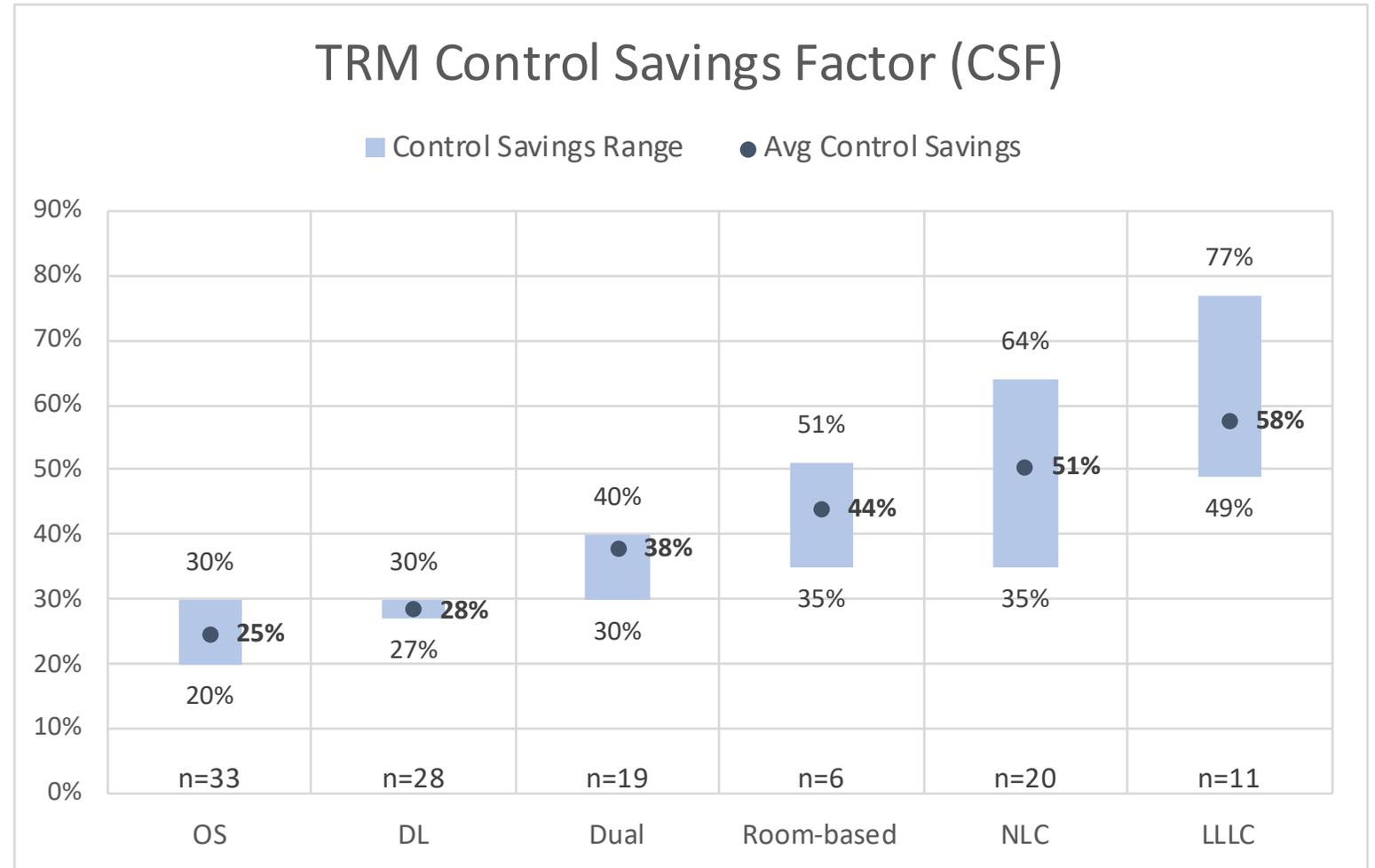
More incentives for integral controls

Requirement

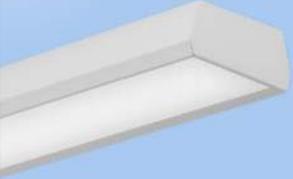
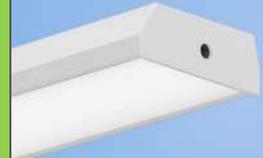
Controls Categories / Controls Options Tables

# Technical Resource Manuals Controls Measures

- CSF defines the % savings of the controlled load, due to the use of controls



# Controls Categories

<p>NO INTEGRAL CONTROLS</p>  <p><b>CATEGORY 0</b></p>	<p>CONTROLS READY PRODUCT</p>  <p><b>CATEGORY 1</b></p>	<p>PRODUCT WITH NON-DLC LISTED NLC CONTROLLER</p>  <p><b>CATEGORY 2</b></p>	<p>PRODUCT WITH INTEGRAL OCCUPANCY OR TRAFFIC SENSOR FUNCTION ONLY</p>  <p><b>CATEGORY 3A</b></p>	<p>PRODUCT WITH INTEGRAL DAYLIGHT OR PHOTOCELL SENSOR FUNCTION ONLY</p>  <p><b>CATEGORY 3B</b></p>
<p>PRODUCT WITH OCCUPANCY OR TRAFFIC AND DAYLIGHT OR PHOTOCELL INTEGRAL SENSOR</p>  <p><b>CATEGORY 4A</b></p>	<p>PRODUCT WITH TRAFFIC OR PHOTOCELL AND/OR PART NIGHT DIM INTEGRAL SENSOR FUNCTIONS</p>  <p><b>CATEGORY 4B</b></p>	<p>PRODUCT WITH DLC NLC QPL LISTED NETWORKED CONTROLLER</p>  <p><b>CATEGORY 5</b></p>	<p>PRODUCT WITH DLC NLC QPL LISTED NETWORKED CONTROLLER AND TWO OR MORE INTEGRAL SENSOR FUNCTIONS (LLC)</p>  <p><b>CATEGORY 6</b></p>	

Eligible for Premium →



# V6 Controls



# Controls Options Tables

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)
[blank]	10V (wired)	Continuous	10%	None	None	None	None	None	N/A	N/A	N/A
<u>ABCD</u>	<u>10V (wired)</u>	<u>Continuous</u>	<u>10%</u>	<u>Bluetooth NLC (wireless)</u>	<u>None</u>	<u>None</u>	<u>Occ. + Daylight</u>	<u>PIR</u>	<u>20</u>	<u>NLC3782</u>	<u>N/A</u>

Controls Category

0

6

Controls Categories will be assigned by the DLC.

# Controls Categories on the QPL

HELIX2-LED240-C-4K-T2-BRZ-DIM-BRI823
X

Search Tip: For an exact search, use quotes around the search term (ex. "PVO5LXDK").

Maximum of 2,500 products displayed. Please use search box and filters to narrow your selection.

Prev
1
2
3
4
5
...
99
100
Next

Viewing **1-25** of **3,305** results

Add All Results to My List

Grey shaded rows indicate parent products, which include tested data.

HELIX2-LED240-B-4K-T2-XXX-DIM-[Controls]

Manufacturer: RDA Lighting Inc.  
Brand: RDA Lighting  
Reported Lumens: 35,175 lm  
Reported Wattage: 241 watts  
Reported CCT: 4000K

Primary Use: Outdoor Pole/Arm-Mounted Area and Roadway Luminaires

Product ID: S-VKG4IN

100%

Match Confidence

Add to my list

Searched:

HELIX2-LED240-B-4K-T2-BRZ-DIM-BRI823

Found:

HELIX2-LED240-B-4K-T2-XXX-DIM-BRI823

Controls Category: 6

HELIX2-LED240-B-4K-T2-XXX-DIM-[Blank, DMS, PC, 7PIN]

Manufacturer: RDA Lighting Inc.  
Brand: RDA Lighting

PRODUCT OVERVIEW

Model Number	HELIX2-LED240-B-4K-T2-XXX-DIM-[Blank, DMS, PC, 7PIN]
Classification	Premium
Primary Use	Outdoor Pole/Arm-Mounted Area and Roadway Luminaires
Reported Input Wattage	240.76 W
Reported Light Output	34600.5 lm
Reported CCT	4000 K
Reported CRI (Ra)	70
Product ID	S-VKG4IN
DLC Family Code	EMWAOT
Listing Status	Listed
Date Qualified	2022-05-23

PRODUCT INFORMATION

Brand	RDA Lighting
Model Number	HELIX2-LED240-B-4K-T2-XXX-DIM-[Blank, DMS, PC, 7PIN]
Parent	No
Classification	Premium
DLC Family Code	EMWAOT
Input Power Type	AC

PRODUCT CATEGORIZATION

VIEW DETAILS

CONTROL FEATURES

Controls Option Code	Category	Driver Type	Dim Capability	Min Dim 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	NLC QPL Listed System
[blank]	n/a	10V (Wired)	Continuo...	10%	None	None	None	None	None	n/a	n/a
DMS	n/a	10V (Wired)	Continuo...	10%	Infrared Remote (Wireless)	None	None	Occ. + Photocell	PIR	50 ft.	n/a
PC	n/a	10V (Wired)	Continuo...	10%	None	3-Pin Twistlock	None	None	None	n/a	n/a
7PIN	2	10V (Wired)	Continuo...	10%	None	7-Pin Twistlock	None	None	None	n/a	n/a
BRI823	6	10V (Wired)	Continuo...	10%	Bluetooth (Proprietary)	None	None	Occ. + Photocell	PIR	40 ft.	Synapse SimplySNAP

REPORTED PHOTOMETRIC PERFORMANCE

VIEW DETAILS

Search Results

Product Detail Page

11

The image shows a multi-story office building at night, with its windows illuminated from within, revealing office interiors with desks, chairs, and computers. A large, white, arrow-shaped graphic with a yellow border points from the left towards the right, partially overlapping the building's facade. The text "Controls Option Codes" is centered within this white arrow.

# Controls Option Codes

# Controls Option Codes

## Example Model Number:

CPHB 2400LM SEF GCL MD 120 GZ10  
40K 80CRI CPSBW **SSE PIRHKO HL** DWH

ORDERING INFORMATION		Lead times will vary depending on options selected. Consult with your sales representative.					Example: CPHB 2400LM SEF GCL MD 120 GZ10 40K 80CRI CPSBW SSE PIRHKO HL DWH									
CPHB		Lumens		Performance Package		GCL		Voltage		GZ10		Color Temperature		Color Rendering Index		
Series						Lens	Distribution			Driver						
CPHB Compact Pro High Bay	9000LM	9,000 lumens	SEF	Standard Efficiency	GCL	Glare Control Lens	MD	Medium Distribution	MVOLT	120-277V	GZ10	0-10V dimming driver	35K	3500 K	70CRI	70 CRI
	12000LM	12,000 lumens							120	120V			40K	4000 K	80CRI	80 CRI
	15000LM	15,000 lumens	HEF	High Efficiency			ND	Narrow Distribution	208	208V			50K	5000 K	90CRI	90 CRI
	18000LM	18,000 lumens †					WD	Wide Distribution	240	240V						
	24000LM	24,000 lumens							277	277V						
	30000LM	30,000 lumens							347	347V †						
	36000LM	36,000 lumens							480	480V †						
48000LM	48,000 lumens							HVOLT	347-480V †							
60000LM	60,000 lumens															

Options		Individual Controls † ‡		DWH	
				Finish	
BAA	Buy America(n) Act and/or Build America Buy America Qualified	SSE PIRHKO	360" integral high mount motion sensor with standard on/off operation	DWH	Gloss White
E10W	IOTA 10W emergency battery pack, Constant Power, Certified in CA Title 20 MAEDBS, Self-diagnostics (LINK) †	SSE PIRHKO HL	360" integral high mount motion sensor with high/low/off occupancy operation. For High/Low/never off		
E10WCP	10W emergency battery pack, Certified in CA Title 20 MAEDBS †	SSE PIRHKO P	360" integral high mount motion sensor with on/off switching photocell		
E15W MCP	15W emergency battery pack, Certified in CA Title 20 MAEDBS †	SSE APIRHKO	360" integral high mount motion sensor with dimming & switching photocell		
IE10W MCP	10W emergency battery pack, Certified in CA Title 20 MAEDBS †	SSE APIRHKO ANL	360" integral high mount motion sensor with High/Low occupancy dimming & auto-dimming photocell		
IE15W MCP	15W emergency battery pack, Certified in CA Title 20 MAEDBS †	*For 360" integral LOW MOUNT sensors, remove "H". For High Mount AISLEWAY sensors, replace "H" in nomenclature with "A".			
IE20W CPHE	Iota 20W emergency battery pack, Certified in CA Title 20 MAEDBS †	<b>nLight AIR Wireless Controls:</b>			
ETS	Generator Transfer Device †	NLTAIR2	Embedded wireless controls by nLight		
WGX	Wireguard installed	NLTAIR2 KO	Embedded wireless controls by nLight, Control mounted external to the luminaire via a KO †		
IMP	Integrated modular plug †	NLTAIREM2 KO	Embedded wireless controls by nLight with UL924 listed emergency operation Control mounted external to the luminaire via a KO †		
SPD	Additional 10kV surge protection device †	NLTAIRER2 KO	Embedded wireless controls by nLight with UL924 listed emergency operation via power sense leads, mounted external to fixture via KO †		
RRL_	RELOC - Ready luminaire. (Not available with Haleon sensor options). See page 14 for ordering information	NLTAIR2 APIRH*	Embedded wireless controls by nLight, Passive Infrared Occ sensor with auto-dimming photocell for high mounting height applications		
OCS	RELOC OnePass selectable cable 6' installed † ‡	NLTAIREM2 APIRH*	Embedded wireless controls by nLight, with UL924 listed emergency operation, Passive Infrared Occ sensor with auto-dimming photocell for high mounting height applications		
OCS4C	RELOC One Pass selectable cable 6' installed. † ‡	*For 360" integral LOW MOUNT sensors, remove "H" from the nomenclature. For AISLE MOUNT sensors, remove "H" replace with "A".			
2470P	24/7 operation, factory installed battery with 3-conductor cordset or Reloc, with on/off controlled by sensor rather than switch, the normal hot and unswitched hot wired together in the fixture. Consult local codes to determine if this is allowable	NLTAIR2 APIRHKO*	Embedded wireless controls by nLight, Knock out mounted Passive Infrared Occ sensor with auto-dimming photocell for high mounting height applications		
JP	Job Pack †	NLTAIR2 APIRAKO	Embedded wireless controls by nLight, Knock out mounted Passive Infrared Occ sensor with auto-dimming photocell for Aisleway applications		
CPSBW	6' white damp location cord with straight blade plug (voltage will match fixture, 120, 208, 240, or 277V only)	NLTAIRER2 APIRKO	Embedded wireless controls by nLight with UL924 listed emergency operation via power sense leads, Control mounted external to the luminaire via a KO †		
CPTLW	6' white damp location cord with 15 amp twist-lock plug (voltage will match fixture) †	NLTAIREM2 APIRHKO*	Embedded wireless controls by nLight with UL924 listed emergency operation, Knock out mounted Passive Infrared Occ sensor with auto-dimming photocell for high mounting height applications		
CPTL20AW	6' white damp location cord with 20 amp twist lock plug (voltage will match fixture) †	NLTAIREM2 APIRAKO	Embedded wireless controls by nLight with UL924 listed emergency operation, Knock out mounted Passive Infrared Occ sensor with auto-dimming photocell for Aisleway applications		
CNPW	6' white cord, no plug				
CNP4CW	6' white cord, 4 conductors (for use with battery)				
CNP5CDW	6' white cord, 5 conductors (includes dimming leads)				



# Determining Controls Option Codes

Ordering codes for products with multiple driver options shall wildcard any attributes that fall in between driver options and integral controls options.

Driver	Mounting	Integral Controls
Driver 1	Mounting 1	Integral Controls 1
Driver 2	Mounting 2	Integral Controls 2
Driver 3	Mounting 3	Integral Controls 3
	Mounting 4	

Controls Options Code
Driver 1-[Mounting]-Integral Controls 1
Driver 1-[Mounting]-Integral Controls 2
Driver 1-[Mounting]-Integral Controls 3
Driver 2-[Mounting]-Integral Controls 1
Driver 2-[Mounting]-Integral Controls 2
Driver 2-[Mounting]-Integral Controls 3
Driver 3-[Mounting]-Integral Controls 1
Driver 3-[Mounting]-Integral Controls 2
Driver 3-[Mounting]-Integral Controls 3

Controls Options Code
Driver 1-[XXX]-Integral Controls 1
Driver 1-[XXX]-Integral Controls 2
Driver 1-[XXX]-Integral Controls 3
Driver 2-[XXX]-Integral Controls 1
Driver 2-[XXX]-Integral Controls 2
Driver 2-[XXX]-Integral Controls 3
Driver 3-[XXX]-Integral Controls 1
Driver 3-[XXX]-Integral Controls 2
Driver 3-[XXX]-Integral Controls 3



## 3-Pin Twistlock Receptacles

### COCs Representing Twistlock Receptacles

- Assumed to be 3-pin unless otherwise indicated.



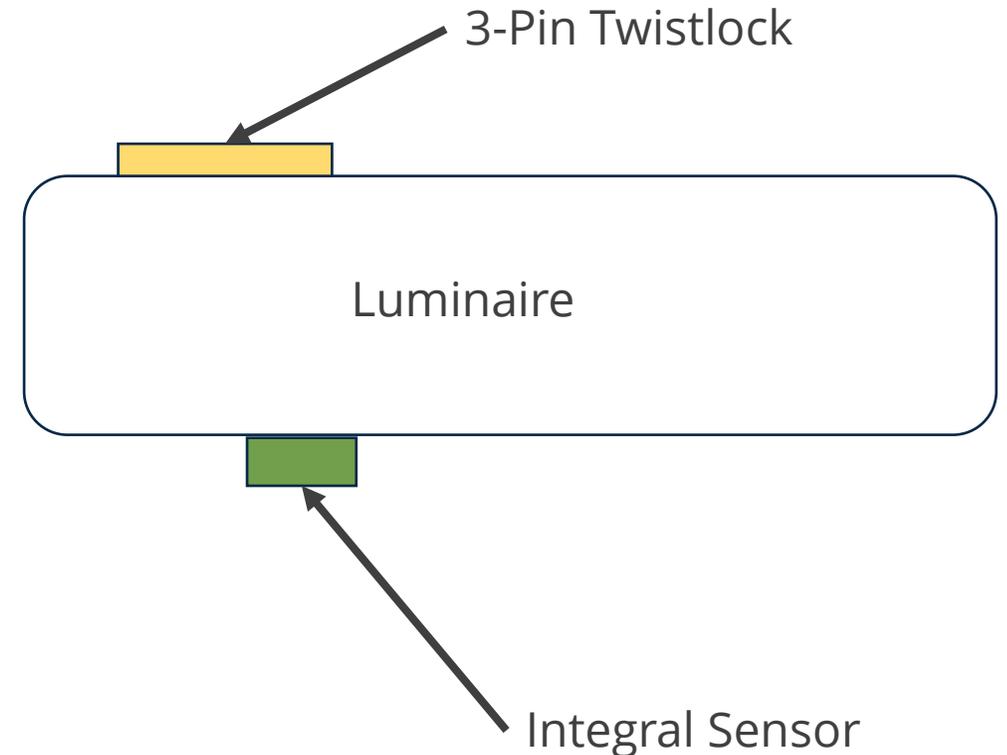
**Not Eligible for listing.**

## 3-Pin Twistlock Receptacles

### One Acceptable Scenario:

- Product has a 3-pin Twistlock receptacle IN ADDITION to an integral sensor.
  - Integral sensor used for motion/dimming
  - 3-Pin receptacle used for daylight on/off

Note: Integral sensor MUST be ordered as part of the model number.





# Submission Pathways

# Brand-Level vs Family-Level Controls Options Tables

## Brand-Level COTs

- A single Controls Option Code represents the same configuration for all product sold under one Brand Name.
- Each code must be unique.
- Approved outside of submission process.
- COCs referenced in Reported Performance Table.

Email to  
[controls@designlights.org](mailto:controls@designlights.org)  
with spec sheets

## Family-Level COTs

- Submitted with each application.
- “[Blank]” submitted here.
- Duplicate codes may have different configurations.
- Reviewed during listing process.

Submit with Reported  
Performance Table



# All Applications

## Excel Demo



# SSL-NLC Manufacturer Agreements

CREATE NEW SSL - NLC MANUFACTURER AGREEMENT

Create new SSL - NLC Manufacturer Agreement

This tool is used to create new agreements between DLC SSL Manufacturers and DLC NLC Manufacturers. Agreements are required to claim controls capability of a DLC NLC listed system. Click the button below to start an agreement.

Create new SSL - NLC Manufacturer Agreement

**Confirms Business Relationship with NLC Manufacturer**

**Only required when NLC Manufacturer is a third-party**

CREATE NEW SSL - NLC MANUFACTURER AGREEMENT

SSL Manufacturer

Select SSL Manufacturer...

Select the SSL manufacturer from your associated companies

NLC Manufacturer

Select NLC Manufacturer...

Select an NLC manufacturer with listed systems on the NLC QPL.

Are you authorized to sign the Agreement Form on behalf of the SSL Manufacturer? \*

Yes

No

Full name of the person responsible for signing on behalf of the NLC Manufacturer \*

Enter the full name of the person who will sign the agreement on behalf of the NLC Manufacturer.

Email of the person responsible for signing on behalf of the NLC Manufacturer \*

The agreement will be sent to this email from DocuSign. If the submitted email is incorrect a new SSL - NLC Manufacturer Agreement request will need to be created.

Create Agreement Cancel





# Review Process and Timelines

# Brand-Level Controls Option Tables

## Brand-Level COTs

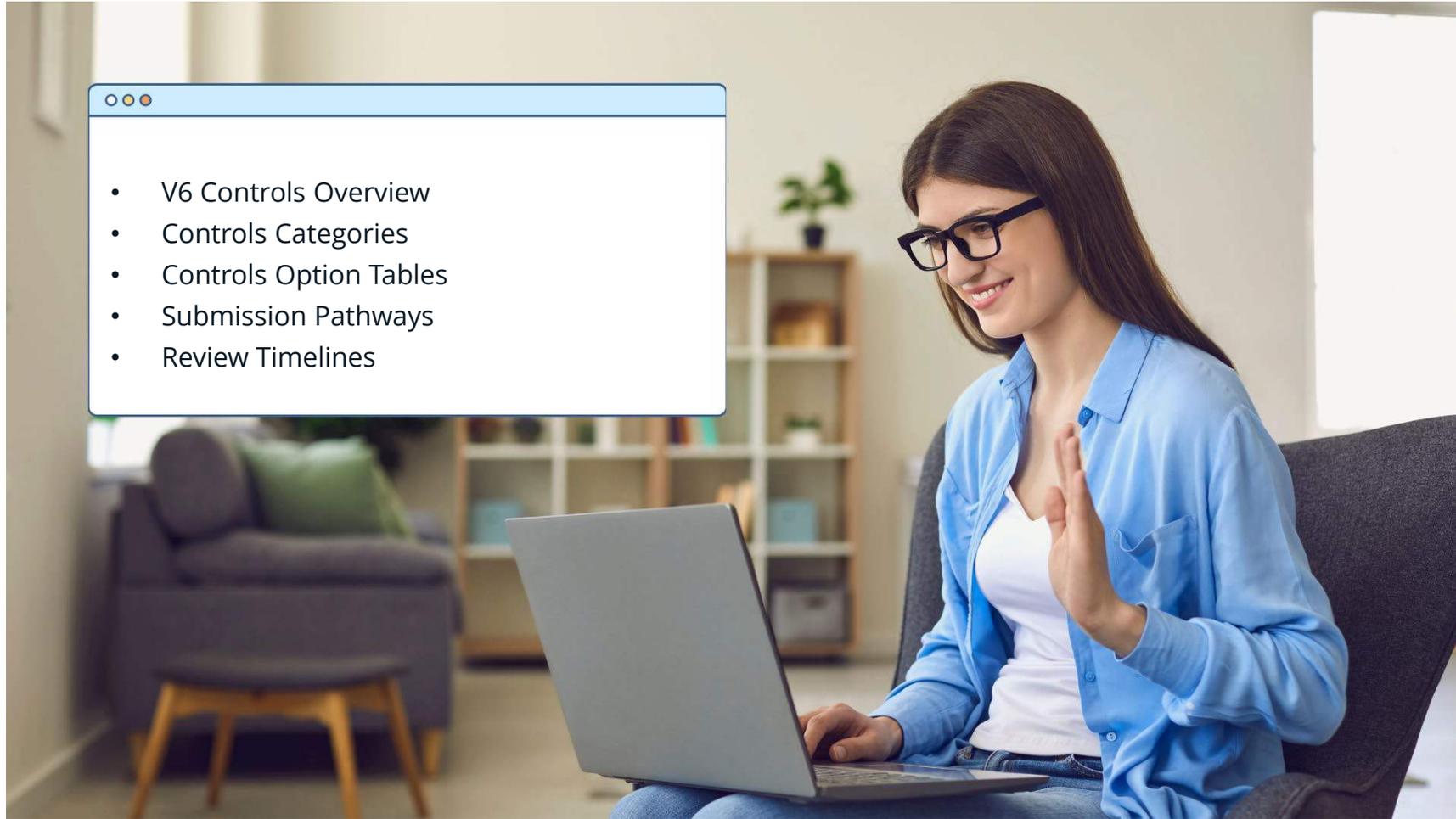
- Active, ongoing review as they come in
- Reviews complete within 90 days of submission

## Family-Level COTs

- Non-controls review according to normal timeline.
- Controls review begins once product is published to QPL.
- 90 days for review from publishing.



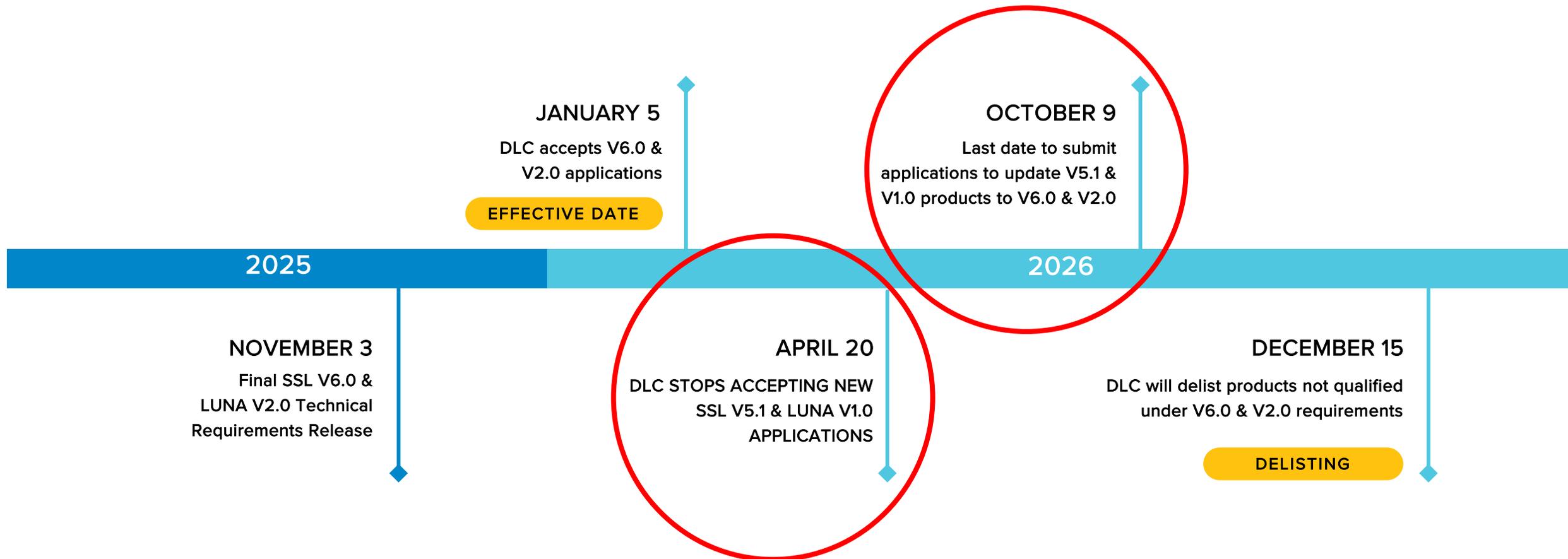
# Webinar review



# Q&A

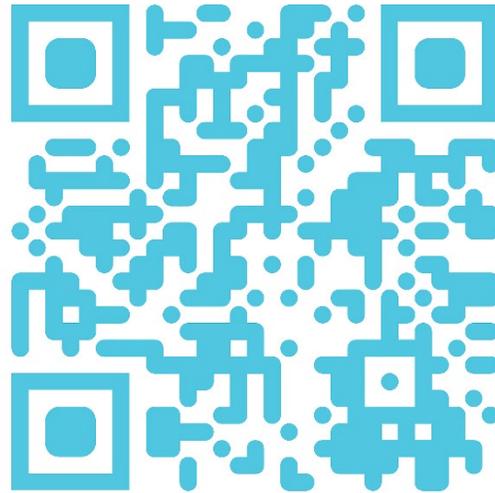


# SSL V6.0 & LUNA V2.0 Technical Requirements Timeline



# Information on Application Processes and Fees

Understanding How To Submit for SSL  
V6.0 & LUNA V2.0 Webinar

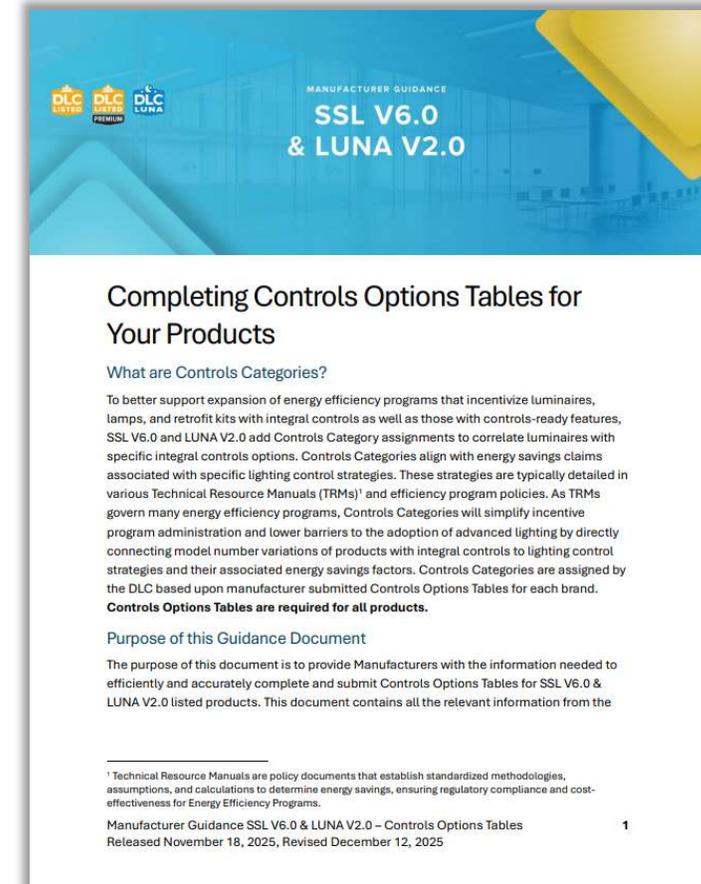


Recording at link above

# Controls Options Tables Guidance Document

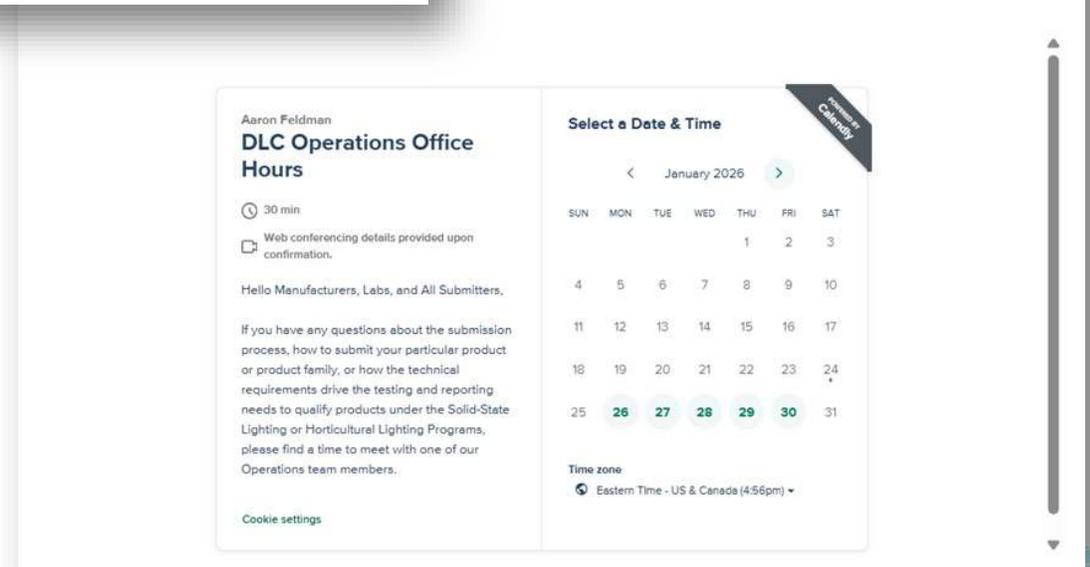
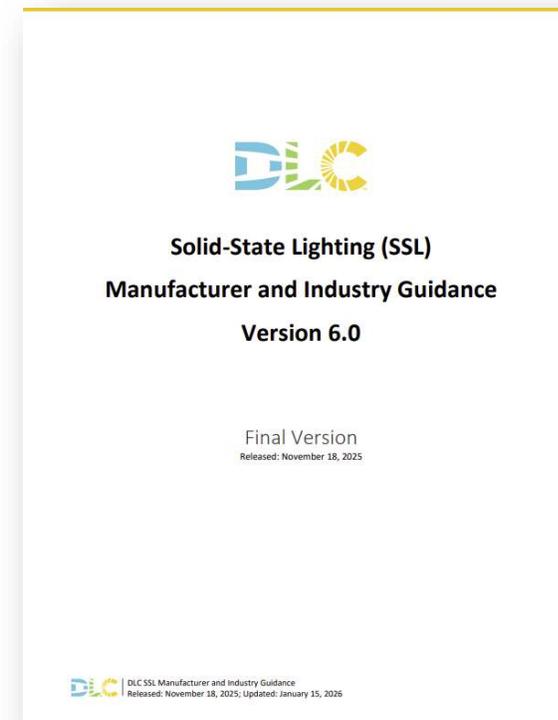
## Controls Options Table Guidance

- Details on
  - Controls Categories
  - Determining Controls Option Codes
  - Submission Pathways
  - Relevant TR Excerpts



# Additional Resources

- [Manufacturer and Industry Guidance](#)
- [Open Office Hours](#)
- [Applications@designlights.org](mailto:Applications@designlights.org)
- Video Tutorials
  - [Image Submission](#)
  - [Simplified Update Eligibility and Policy](#)
  - [Simplified update submission process](#)



# Technical Requirements Document

- [SSL V6.0 & LUNA V2.0 TR](#)  
comprehensive, 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)



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



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November 3, 2025

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November 3, 2025

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October 28, 2025

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### Technical Requirements for LED Lighting: SSL V6.0 & LUNA V2.0 Final Webinar

November 12, 2025 3:00 pm

### 2024 DLC Controls Summit

[On-Demand Webinars / Past Events](#)

2



Save the Date!  
DLC Summit 2026  
October 26th-27th  
Los Angeles, CA

# SAVE THE DATE

OCTOBER 26-27, 2026  
LOS ANGELES, CA

**DLC SUMMIT 2026**  
Next Gen Lighting:  
Controls, Integration,  
and the Environment



[DESIGNLIGHTS.ORG/2026DLCSUMMIT](https://designlights.org/2026dlcsummit)

MORE DETAILS COMING SOON.