



Energy · Quality · ControllabilitySM

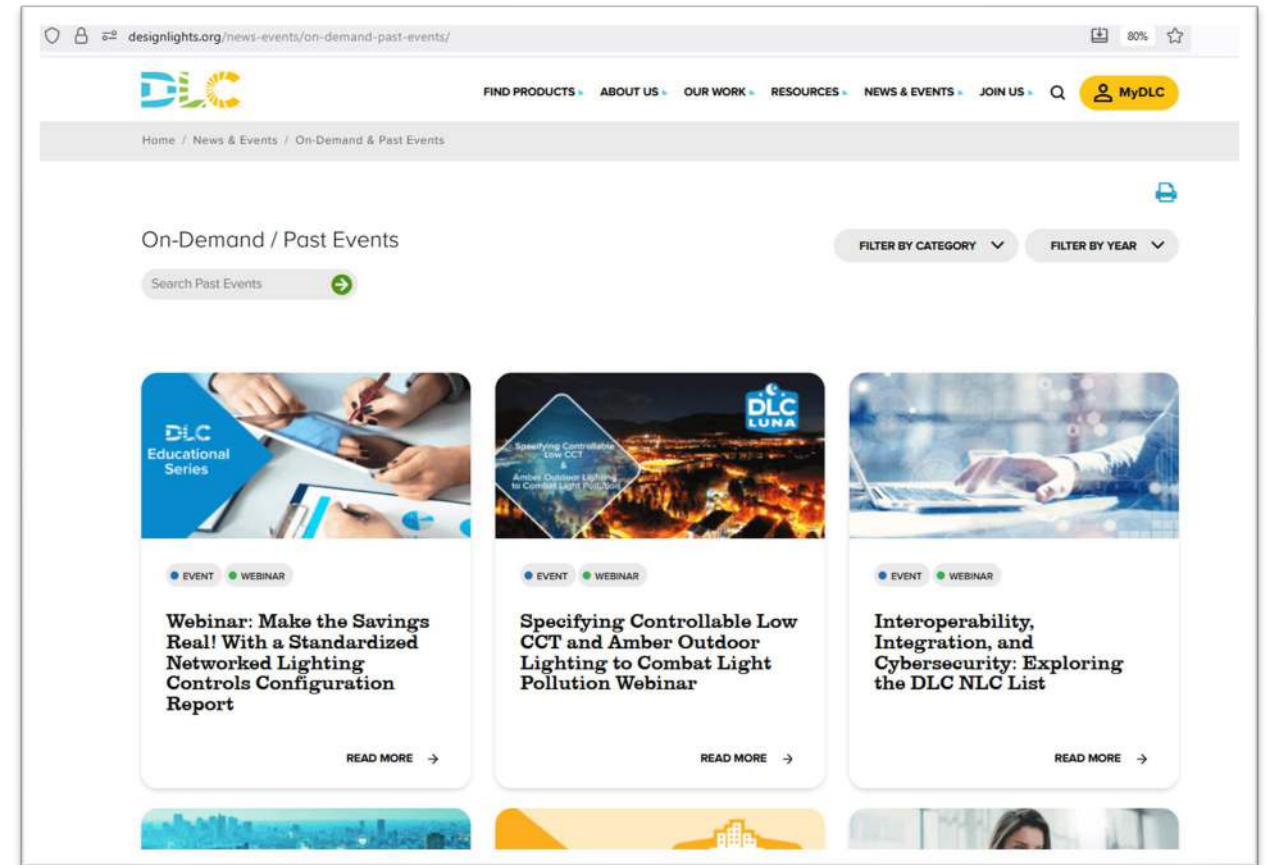
Using Controls Categories to Streamline Lighting Incentive Programs

4/29/26

designlights.org

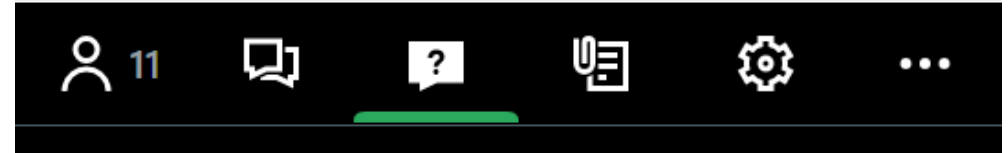
Welcome!

- **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

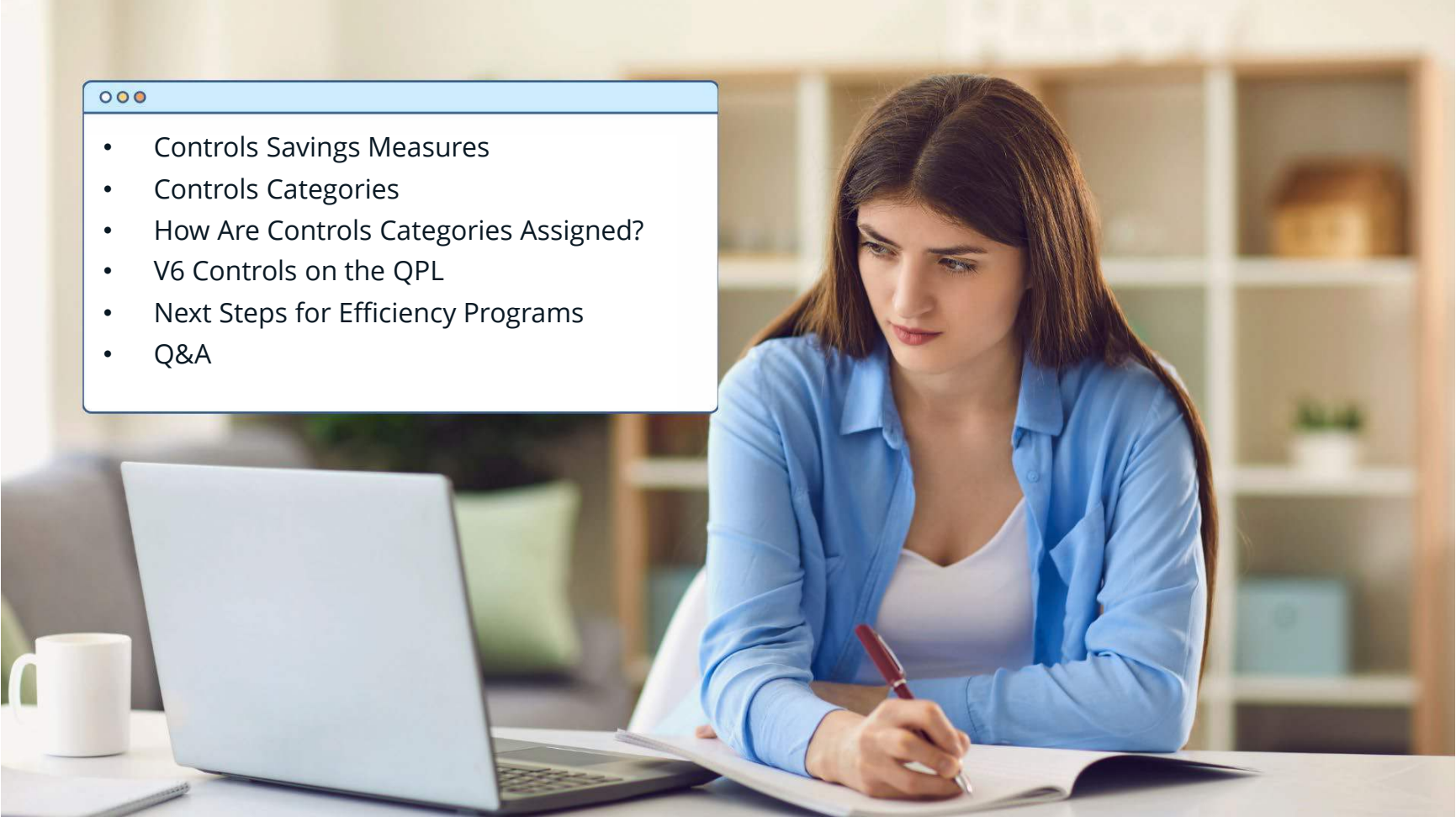




The DesignLights Consortium is an independent, nonprofit organization providing decision makers with data and resources on quality lighting, controls, and integrated building systems to reduce energy, carbon, and light pollution.

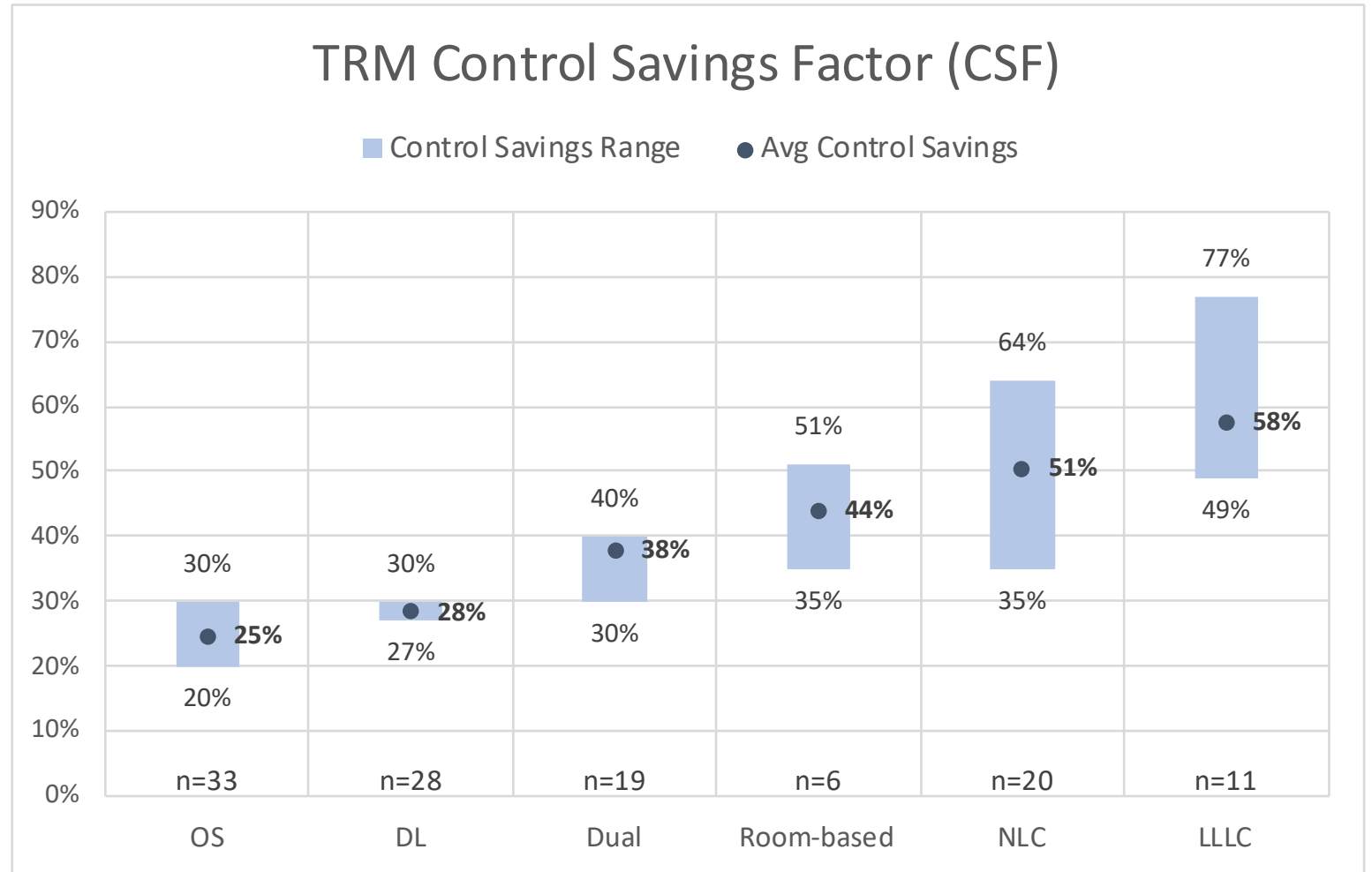


Webinar Objectives

- 
- Controls Savings Measures
 - Controls Categories
 - How Are Controls Categories Assigned?
 - V6 Controls on the QPL
 - Next Steps for Efficiency Programs
 - Q&A

Technical Resource Manuals Controls Measures

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



Integral Controls

Invoice 23423

Mary's Lighting Distributor

Some Street, Some City, MA

replace with
LOGO

Date
2/5/25

To
Bob's Lighting Company
Some Street
Some City, MA

Ship To
Joe's Office and Warehouse
Some Street
Some City, MA

Maxlite - MVL2-D-22W-C5-CR
Maxlite - MVL2-D-13W-C5-CR
Maxlite - BPHE3-U-180W-C5
Maxlite - LS3-8-U-65W-C5-CR
Maxlite - LSV-2-U-20W-C5-CR

Qty	Model Number	Description	Unit Price	Total
0	Maxlite - MVL2-D-22W-C5-CR	Controls Ready 2x4 Field Adjustable Troffer	\$62.00	\$6,200
	Maxlite - MVL2-D-13W-C5-CR	Controls Ready 2x2 Field Adjustable Troffer	\$42.00	\$1,260
	Maxlite - BPHE3-U-180W-C5	Controls Ready Field Adjustable Pendant Mount Round Highbay	\$140.00	\$5,600
	Maxlite - LS3-8-U-65W-C5-CR	Controls Ready Field Adjustable 8ft Linear Strip Surface Mount	\$75.00	\$900
	Maxlite - LSV-2-U-20W-C5-CR	Controls Ready Field Adjustable 2ft Vapor Tight Surface Mount	\$85.00	\$510
2	Maxlite NN-RTPSW	NETWORK NODE RECTANGULAR, PIR MOTION SENSOR/DAYLIGHT HARVESTING, WHITE	\$45.00	\$4,590
	Maxlite NN-RTW	NETWORK NODE RECTANGULAR, WHITE	\$30.00	\$1,200
	Maxlite - NNA-RDMSW	NETWORK NODE (AJ) ROUND, PIR MOTION SENSOR, DAYLIGHT HARVESTING, WHITE	\$45.00	\$450
	Maxlite - NNA-RDW	NETWORK NODE (AJ) ROUND, BLUETOOTH, 12VDC, WHITE	\$30.00	\$900
		Subtotal		\$21,610
		Sales Tax		\$2,161
		Shipping & Handling		\$0.00
		Total Due By Date		\$23,771

Thank you for your business!

Tel: 123-456-7890
Fax: 123-456-7890

Email: mary@marylighting.com
Web: marylighting.com



Controls Option Codes

Example Model Number:

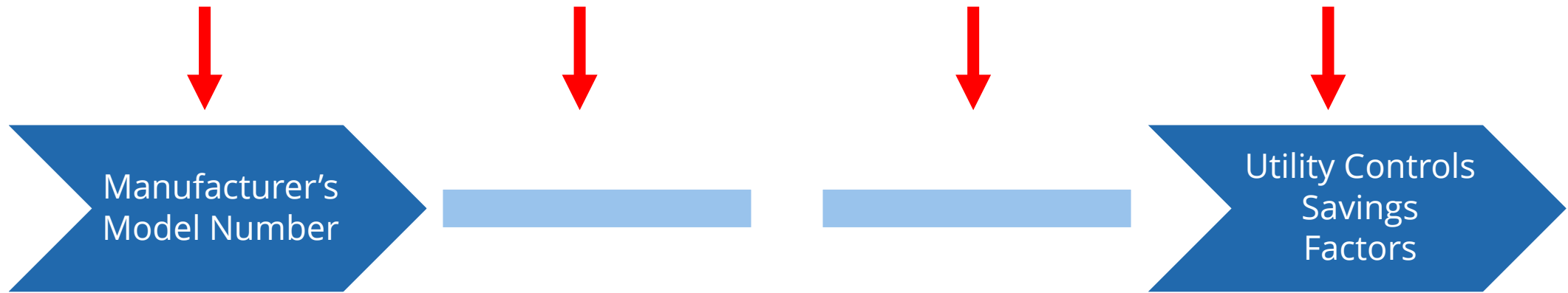
CPHB 24000LM SEF GCL MD 120 GZ10
40K 80CRI CPSBW **SSE PIRHKO HL** DWH

CPHB		Lumens		Performance Package		GCL		Distribution		Voltage		GZ10		Color Temperature		Color Rendering Index	
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					ND	Narrow Distribution	120	120V			40K	4000 K	80CRI	80 CRI
		15000LM	15,000 lumens	HEF	High Efficiency			WD	Wide Distribution	208	208V			50K	5000 K	90CRI	90 CRI
		18000LM	18,000 lumens †							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 † ‡		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 †	nLight AIR Wireless Controls:			
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)				



V6 Controls



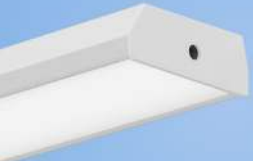
Controls Categories

NO INTEGRAL CONTROLS




CATEGORY 0

CONTROLS READY PRODUCT



CATEGORY 1

PRODUCT WITH NON-DLC LISTED NLC CONTROLLER



CATEGORY 2

PRODUCT WITH INTEGRAL OCCUPANCY OR TRAFFIC SENSOR FUNCTION ONLY



CATEGORY 3A

PRODUCT WITH INTEGRAL DAYLIGHT OR PHOTOCELL SENSOR FUNCTION ONLY



CATEGORY 3B

PRODUCT WITH OCCUPANCY OR TRAFFIC AND DAYLIGHT OR PHOTOCELL INTEGRAL SENSOR




CATEGORY 4A

PRODUCT WITH TRAFFIC OR PHOTOCELL AND/OR PART NIGHT DIM INTEGRAL SENSOR FUNCTIONS



CATEGORY 4B

PRODUCT WITH DLC NLC QPL LISTED NETWORKED CONTROLLER



CATEGORY 5

PRODUCT WITH DLC NLC QPL LISTED NETWORKED CONTROLLER AND TWO OR MORE INTEGRAL SENSOR FUNCTIONS (LLC)

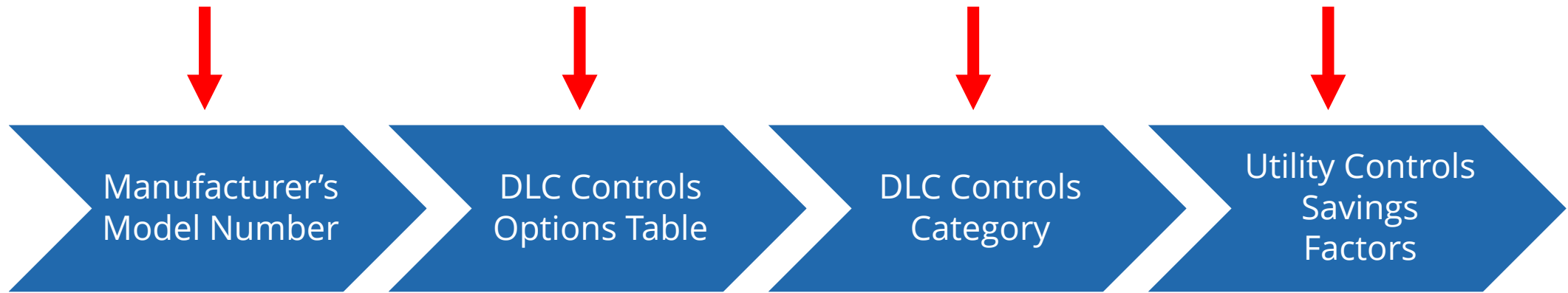


CATEGORY 6

Eligible for Premium →



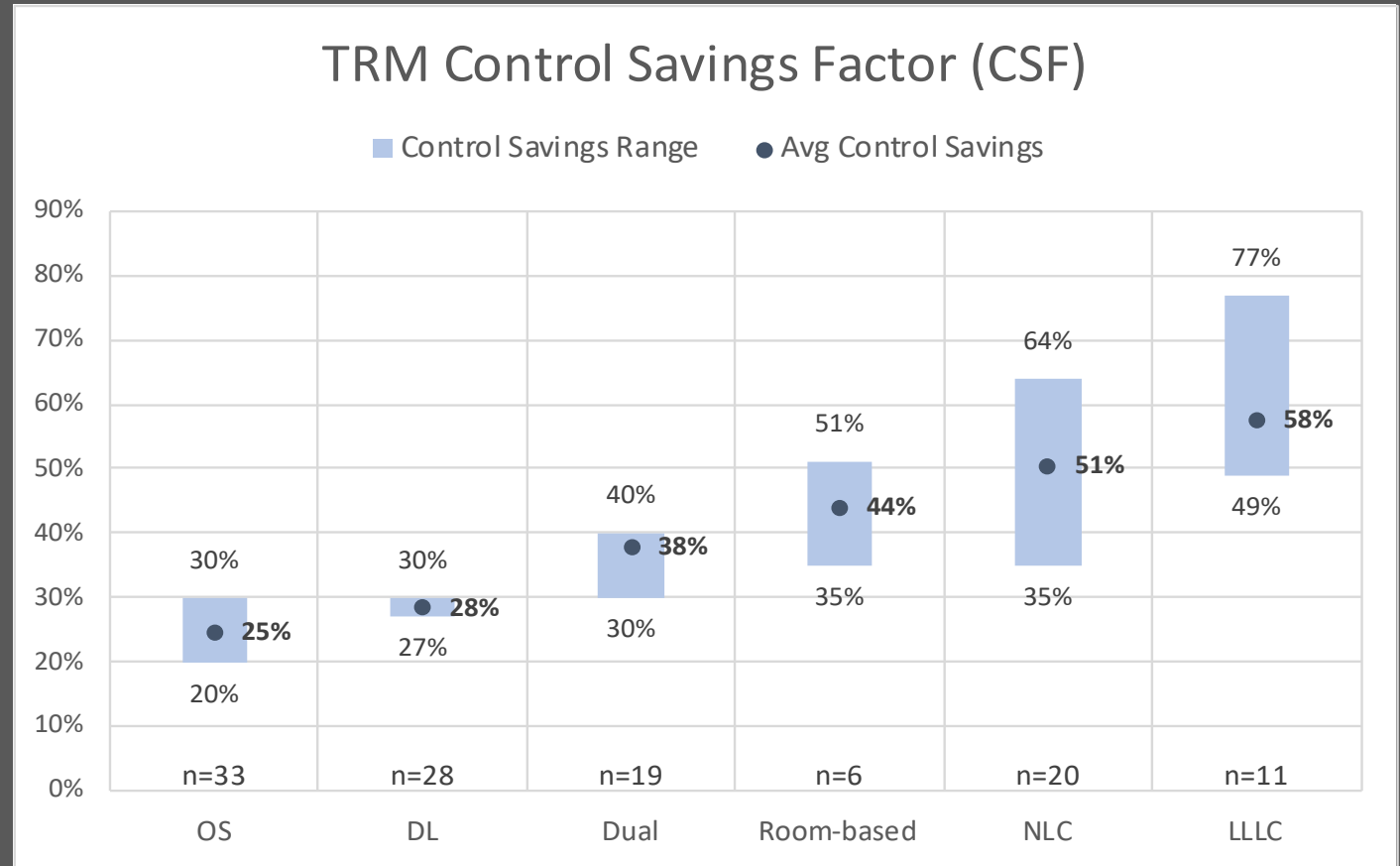
V6 Controls





Control Savings Factor (CSF)

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



Controls Category: **3** **3** **4** **3 or 4** **5** **6**

V6 Controls

Identify Products

Add Controls Categories to eligible measures on rebate forms and websites

✓ BENEFIT

Easier for customers and contractors to identify eligible products on the QPL

Verify Eligibility

Use Controls Categories to verify eligibility between rebate applications and the DLC QPL

✓ BENEFIT

Reduce program administrative time and increase confidence

Map to Savings

Map Controls Categories to relevant measures and energy savings calculations within TRMs

✓ BENEFIT

Increase accuracy of energy savings claims



How Are Controls Categories Assigned?



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
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	36000LM	36,000 lumens							480	480V †						
48000LM	48,000 lumens							HVOLT	347-480V †							
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Options		Finish	
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Emergency Options: †			
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E10WCP	10W emergency battery pack, Certified in CA Title 20 MAEDBS †		
E15W MCP	15W emergency battery pack, Certified in CA Title 20 MAEDBS †		
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JP	Job Pack †		
Cord Sets: †			
CPSBW	6' white damp location cord with straight blade plug (voltage will match fixture, 120, 208, 240, or 277V only)		
CPTLW	6' white damp location cord with 15 amp twist-lock plug (voltage will match fixture) †		
CPTL20AW	6' white damp location cord with 20 amp twist lock plug (voltage will match fixture) †		
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Controls Options Tables

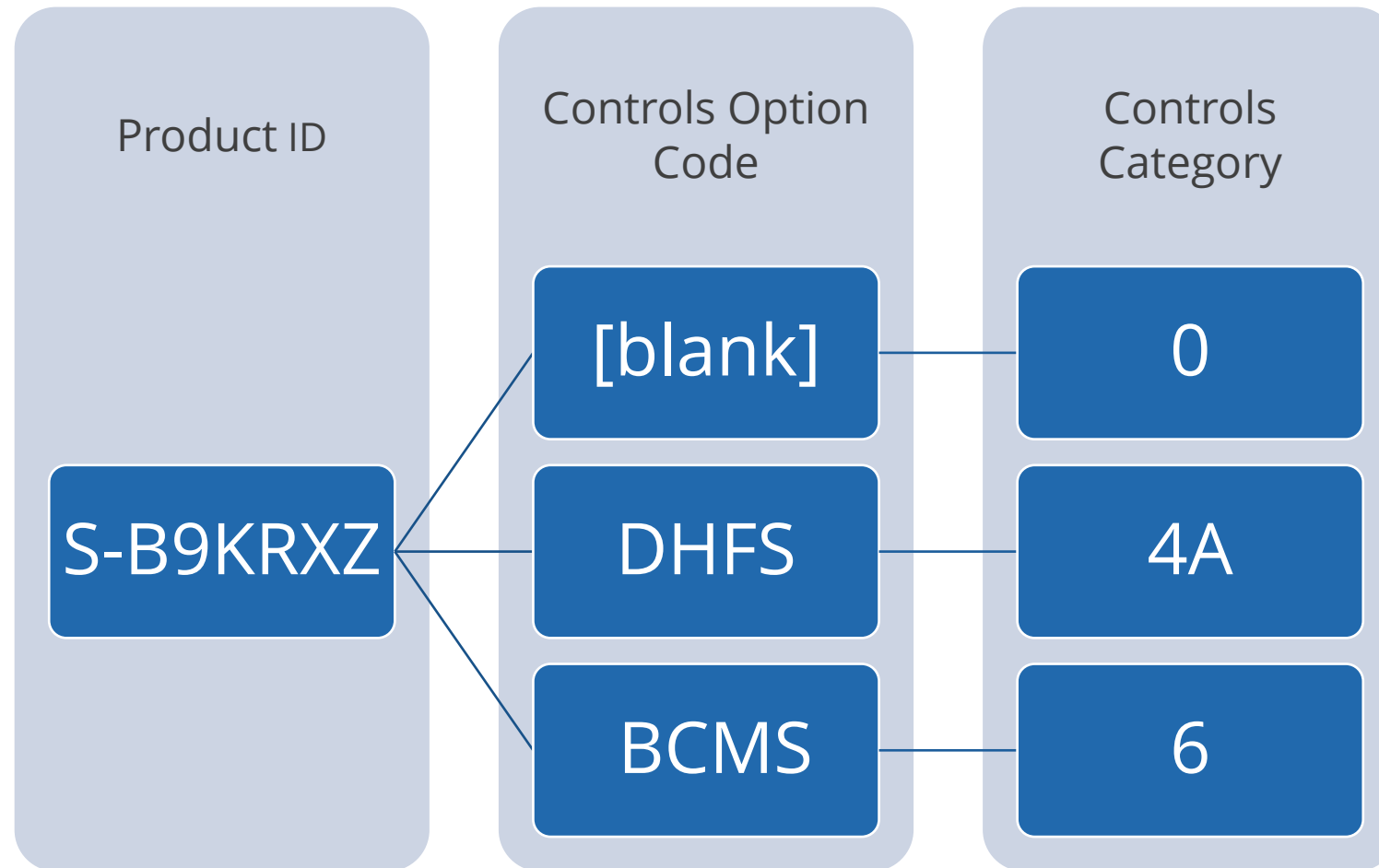
ALL PRODUCTS											
1	2	3	4	5	6	7	8	9	10	11	12
Controls Option Code	Driver Type	Dimming Capability	Min. Dimming Level	Integral Controller or Sensor Type	Top or Side Controls Receptacle Type	Bottom or Side Controls Receptacle Type	Integral Sensor Function	Integral Sensor Technology	Integral Sensor 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



How Do Controls Categories Work on the QPL?



3-Pin Twistlock Receptacles



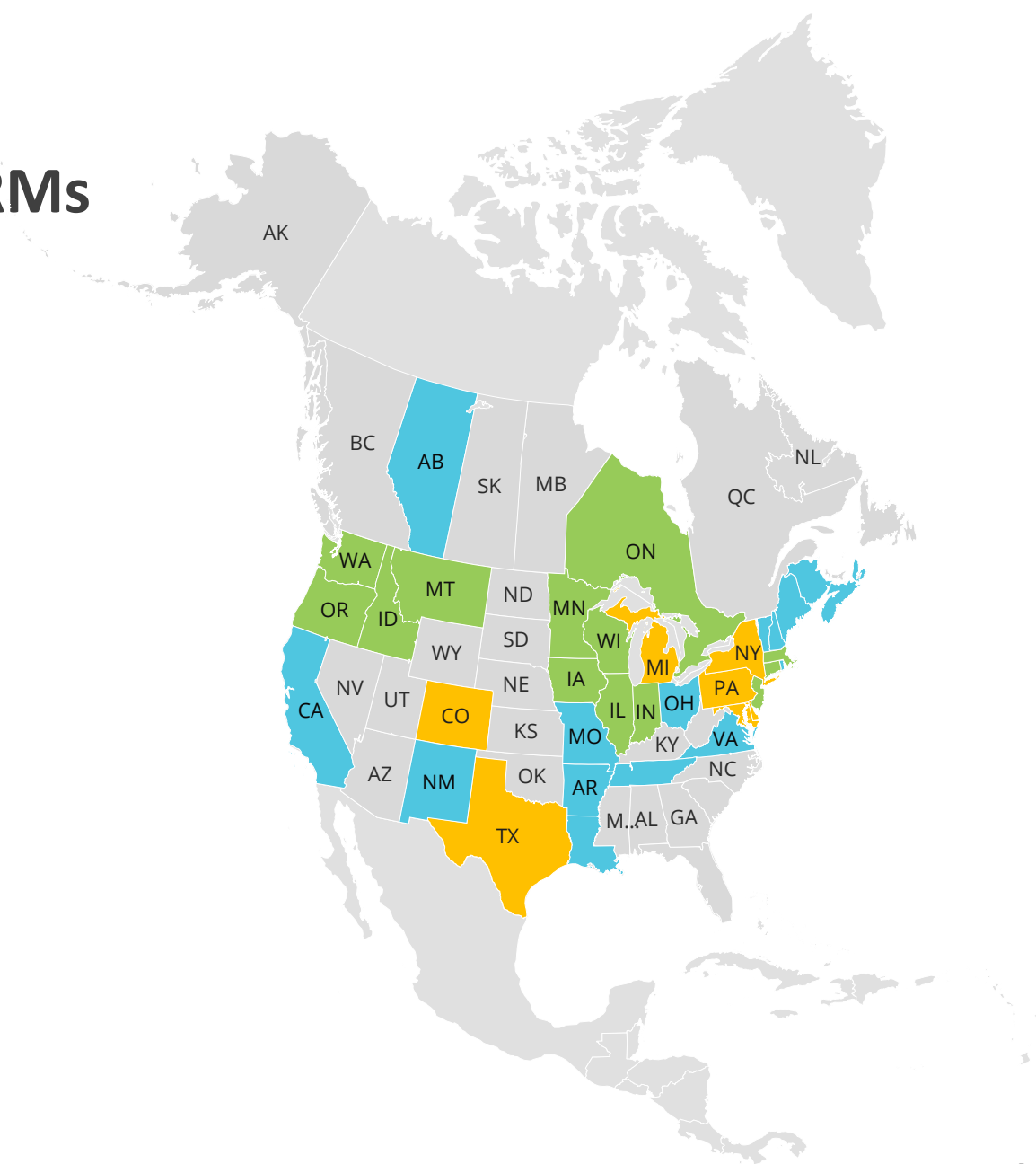
Not Eligible for listing.

Next Steps for Programs



NLC and LLLC Presence in TRMs

- NLC & LLLC
- NLC Only
- NLC/LLLC Not Found
- No Known TRM



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Controls Categories

Member Guidance: Using Controls Categories



MEMBER GUIDANCE: USING CONTROLS CATEGORIES

The DLC introduced **Controls Categories** within the SSL V6.0 & LUNA V2.0 Technical Requirements to support the expansion of energy efficiency programs that incentivize luminaires, lamps, and retrofit kits with integral controls, as well as products with controls-ready features.

Controls Categories create a standardized link between manufacturer product data, the Qualified Products List, energy efficiency programs, and technical reference manuals, streamlining the path from product to rebate.

This document provides DLC members and program implementers with the information needed to understand Controls Categories and adopt them within commercial lighting energy efficiency programs.

How Controls Categories Relate to Energy Efficiency Programs

Controls Categories define a common language between products with integral controls and energy efficiency program measures, rebates, and **energy savings claims** tied to lighting control strategies. They are designed to reflect measures commonly defined in [technical reference manuals \(TRMs\)](#).

Controls Categories can:

- Simplify incentive program administration
- Reduce barriers to adoption of advanced lighting controls
- Directly link model number variations of products with integral controls to:
 - Control strategies
 - Eligible rebates
 - Measures and associated control savings factors (CSF)¹ within TRMs

¹ Also known as control savings fraction, energy savings factor, or other similar terms.

Controls Categories

Proposed mapping of Controls Categories to Savings Measures

U.S., Illinois Statewide Technical Reference Manual v14

Lighting Control Type	Energy Savings Factor	Controls Category
Fixture Measurement of Control savings through Networked Trending	Custom	N/A
Interior Occupancy Sensor (Switch, Wall, Fixture or Remote Mounted or Integrated in Fixture)	24% 37% with High End Trim	3A ¹¹
Interior Occupancy Sensor configured as "Vacancy Sensor" (Switch, Wall, Fixture or Remote Mounted or Integrated in Fixture)	31% 44% with High End Trim	3A ¹²
Interior Daylight Sensor (Wall, Fixture or Remote Mounted)	28% 41% with High End Trim	3B ¹³
Interior Dual Occupancy & Daylight Sensor (Integrated or Fixture Mounted)	38% 51% with High End Trim	4A
Interior Networked Luminaire-Level Lighting Controls	61%	6
Interior Networked Lighting Controls Only with No LLLCs	35%	2 or 5
Interior Networked Lighting Controls (Unknown or mixed LLLCs)	49%	2 or 5 or 6
Refrigerated Case Occupancy Sensor – Freezer and Cooler	27%	3A
Exterior Occupancy Sensor	41%	3A
No Lighting Control	0%	0

<https://www.ilsag.info/technical-reference-manual/>



Program Planning Working Group Subcommittee

2026 Measure	Avg. CSF	2027 Proposed Measure	Avg. CSF
Dual	25%	Dual	34% ↑
Standard	25%	Standard	25%
Advanced	45%	Advanced Interior, Integral	58% ↑
		Advanced Interior, Remote	53% ↑
		Advanced Exterior, Integral	63% ↑
		Advanced Exterior, Remote	49% ↑



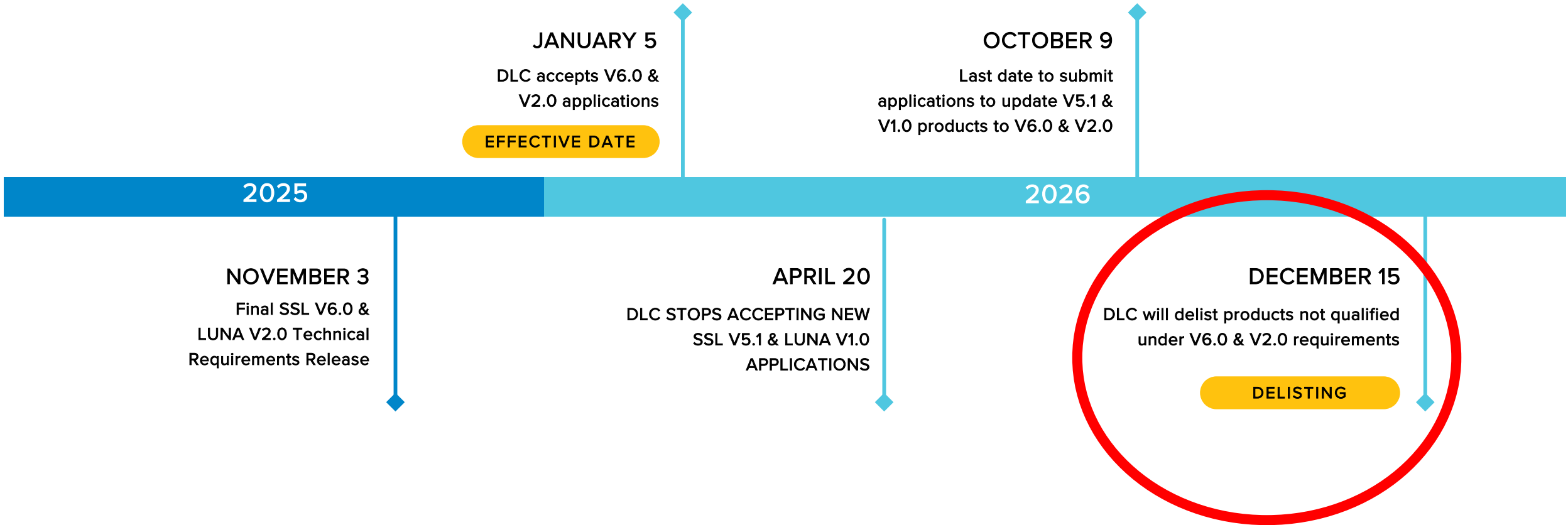
Webinar review



Q&A



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





NEXT GEN LIGHTING:

CONTROLS, INTEGRATION, AND THE ENVIRONMENT

OCTOBER 26–27, 2026 | LOS ANGELES, CA

Thank you to our hosts!




Los Angeles
Department of
Water & Power

Why attend the DLC summit?



Learn from
expert
panelists



Bring home
insights



Solve
program
challenges



Engage with
industry
colleagues

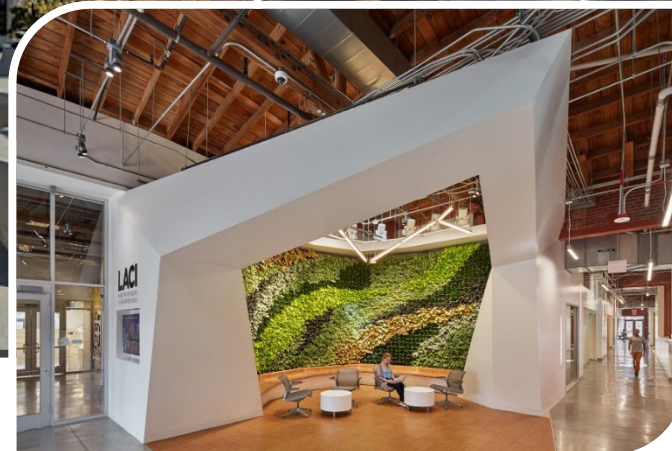
Day 1: Lighting Programs 201 for Industry Partners



Mid-afternoon meeting centered around:

- understanding EE program challenges
- learning terminology
- getting up to speed on summit themes

Day 1: Tour & Mixer at the La Kretz Innovation Campus



Day 2: Sessions Begin

Morning

Next Gen Lighting Savings:
Scaling Advanced Controls

Next Gen Buildings: Integrating Lighting
and HVAC for Whole Building Savings

Capturing Controls in TRMs for Next Gen Savings

Lighting Controls and Light Pollution: Aligning
Energy Savings and Environmental Responsibility

concurrent

Afternoon

Next Gen Lighting Programs:

Market Realities
&
New Opportunities

working session

Sponsorship Opportunities



Cocktails, coffee, sessions, meals, and more!

Speaking opportunities



Promotion before and during summit



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



FIND PRODUCTS ▾ ABOUT US ▾ OUR WORK ▾ RESOURCES ▾ **NEWS & EVENTS ▾** JOIN US ▾



1

LATEST ANNOUNCEMENTS →



Introducing the DLC Technical Requirements for LED Lighting: SSL V6.0 and LUNA V2.0

November 3, 2025

[See All News](#)

PERSPECTIVES →

Introducing the DLC Technical Requirements for LED Lighting: SSL V6.0 and LUNA V2.0

November 3, 2025

You Spoke, We Listened: How Your Feedback Shaped DLC SSL V6.0 and LUNA V2.0

October 28, 2025

[GET UPDATES ↗](#)

UPCOMING EVENTS →



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

