Energy · Quality · Controllability℠

NLC-Local

Energy. Quality. Controllability.

Nonprofit organization

Creates performance specifications

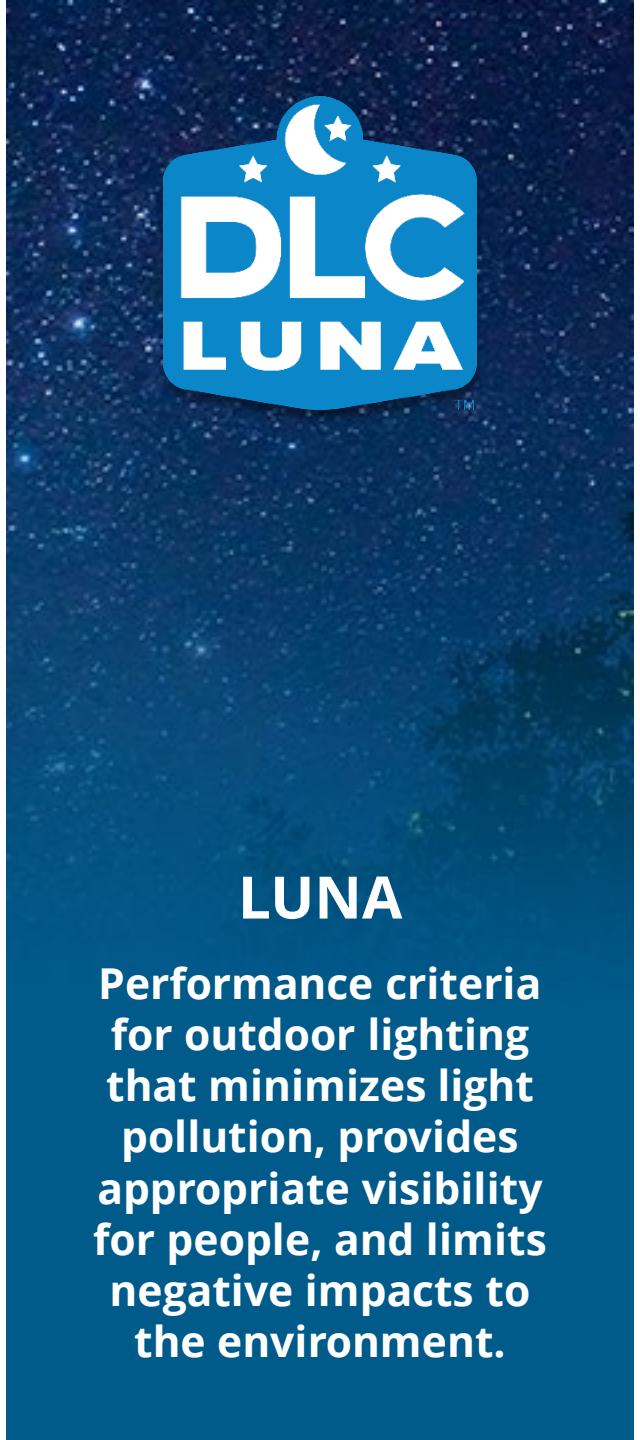
Provides tools, information, & expertise

Accelerates adoption of efficient commercial lighting

DLC Member Utilities

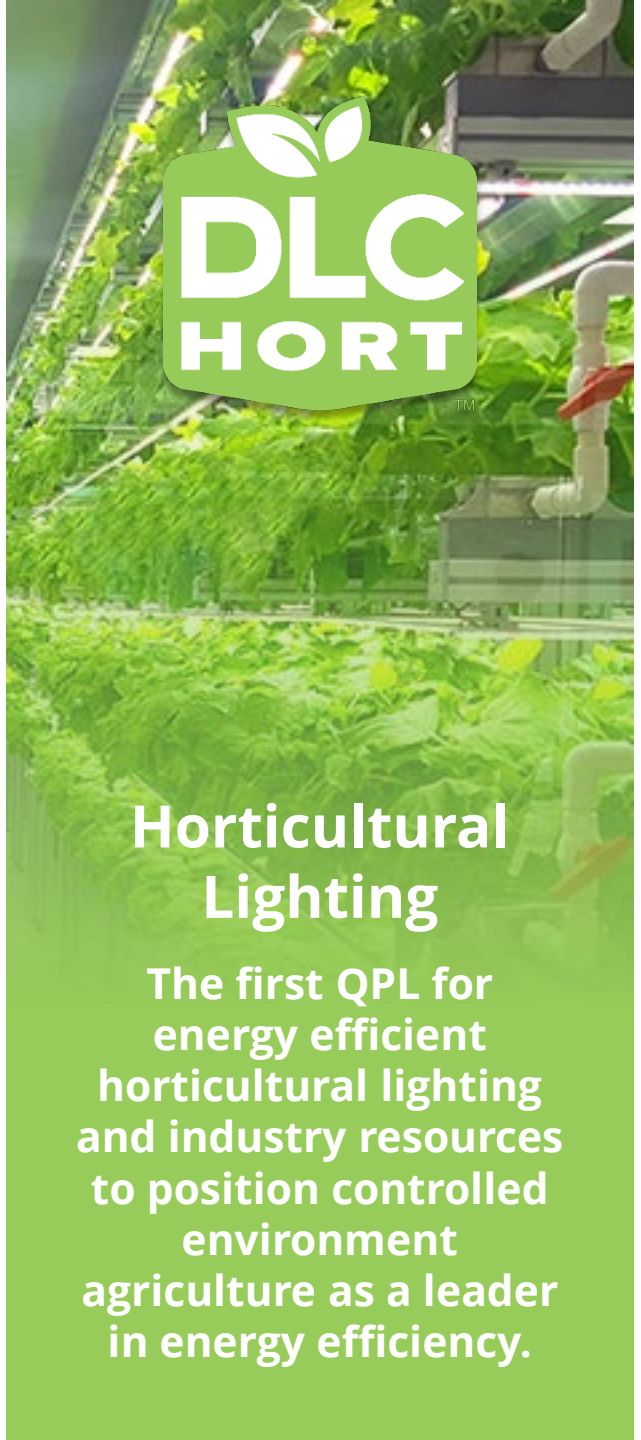
Solid-State Lighting

The world's largest and most influential verified list of high-performing, energy efficient commercial LED lighting products.



LUNA

Performance criteria for outdoor lighting that minimizes light pollution, provides appropriate visibility for people, and limits negative impacts to the environment.



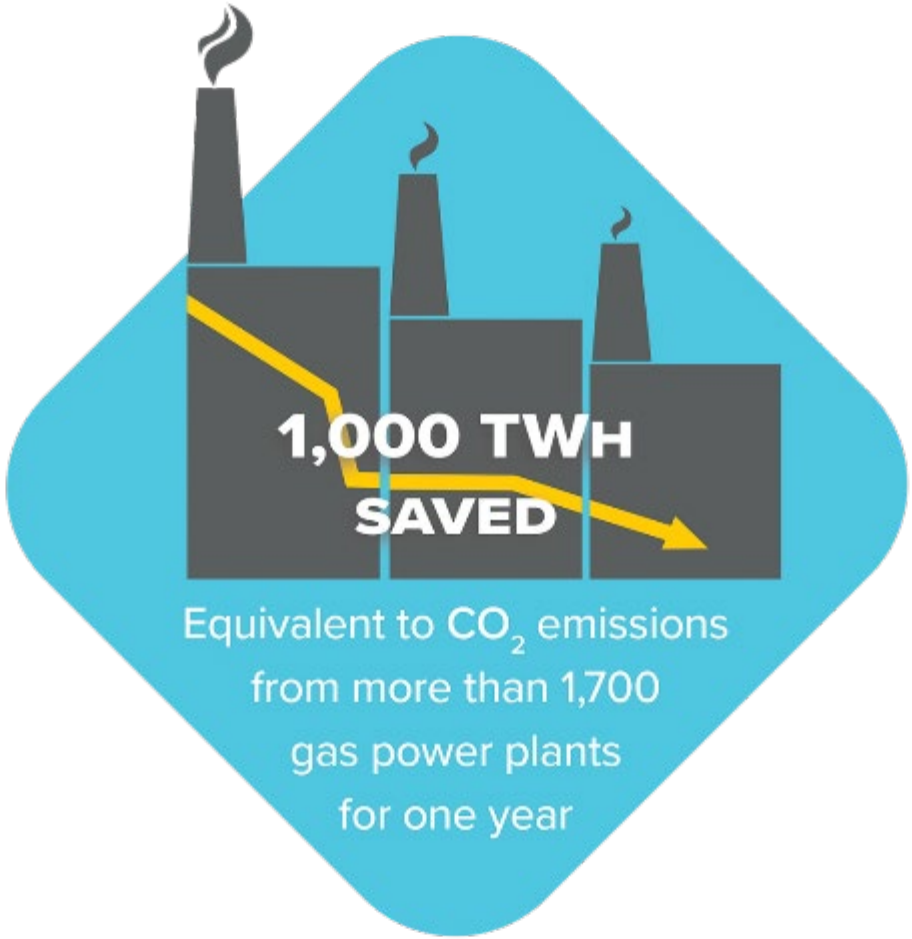
Horticultural Lighting

The first QPL for energy efficient horticultural lighting and industry resources to position controlled environment agriculture as a leader in energy efficiency.

Networked Lighting Controls

Resources to drive the widespread adoption of NLCs and promote the technology as the gateway to enabling connected buildings that support carbon reduction goals.

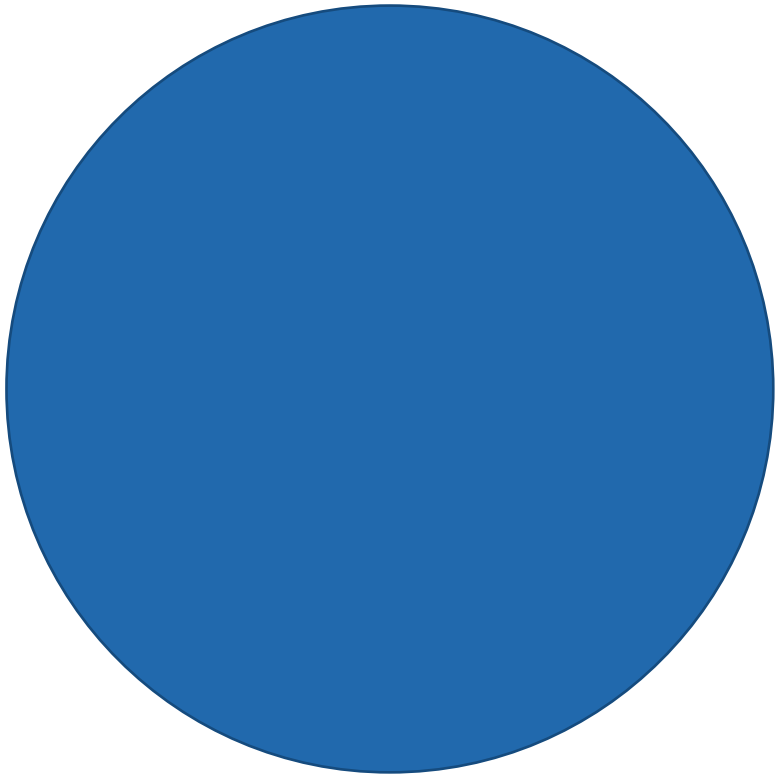
Decade of Impact

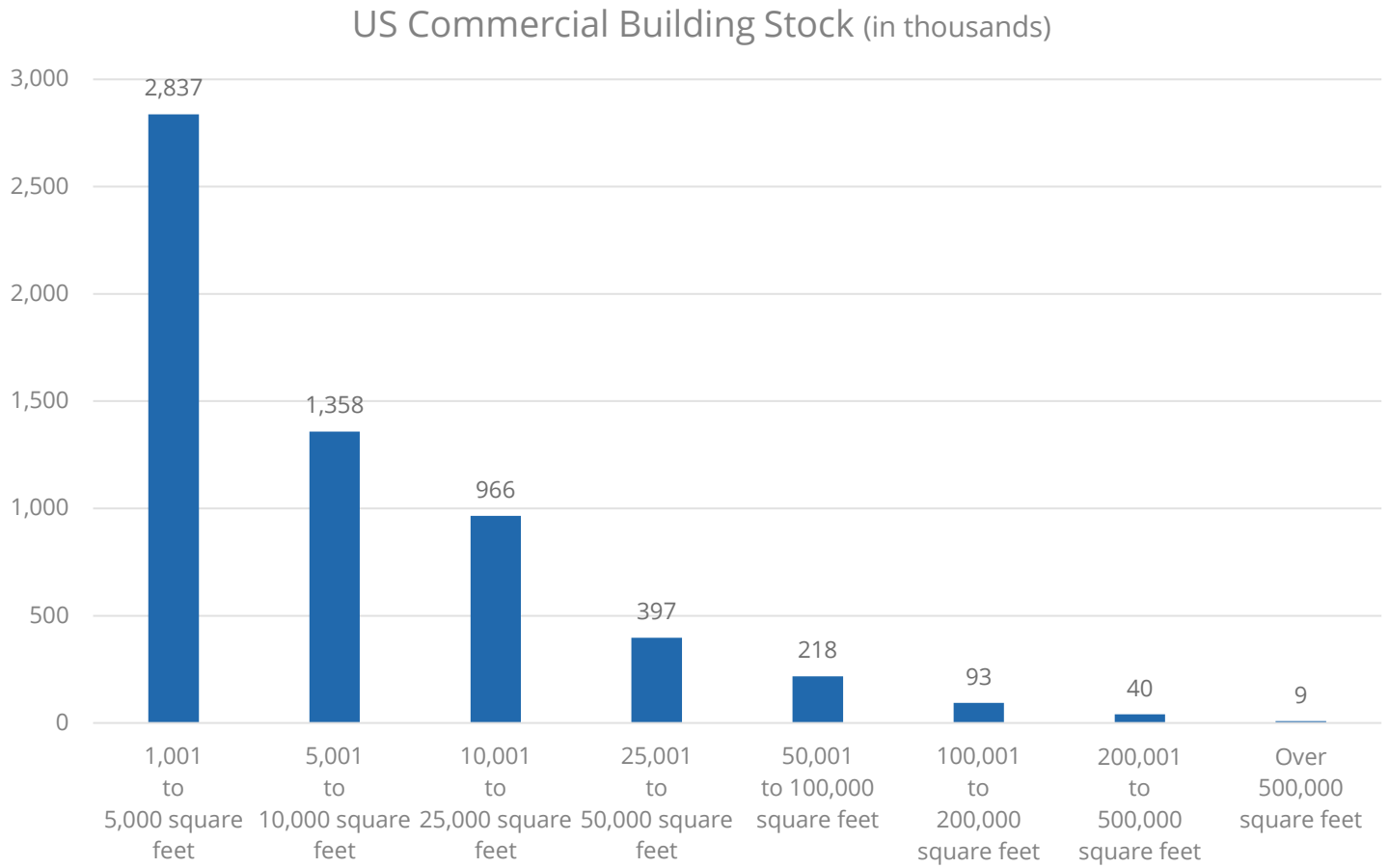


of **energy efficiency programs** in North America require **DLC-listed products**.

The Potential

US Commercial stock = 5.9 Million

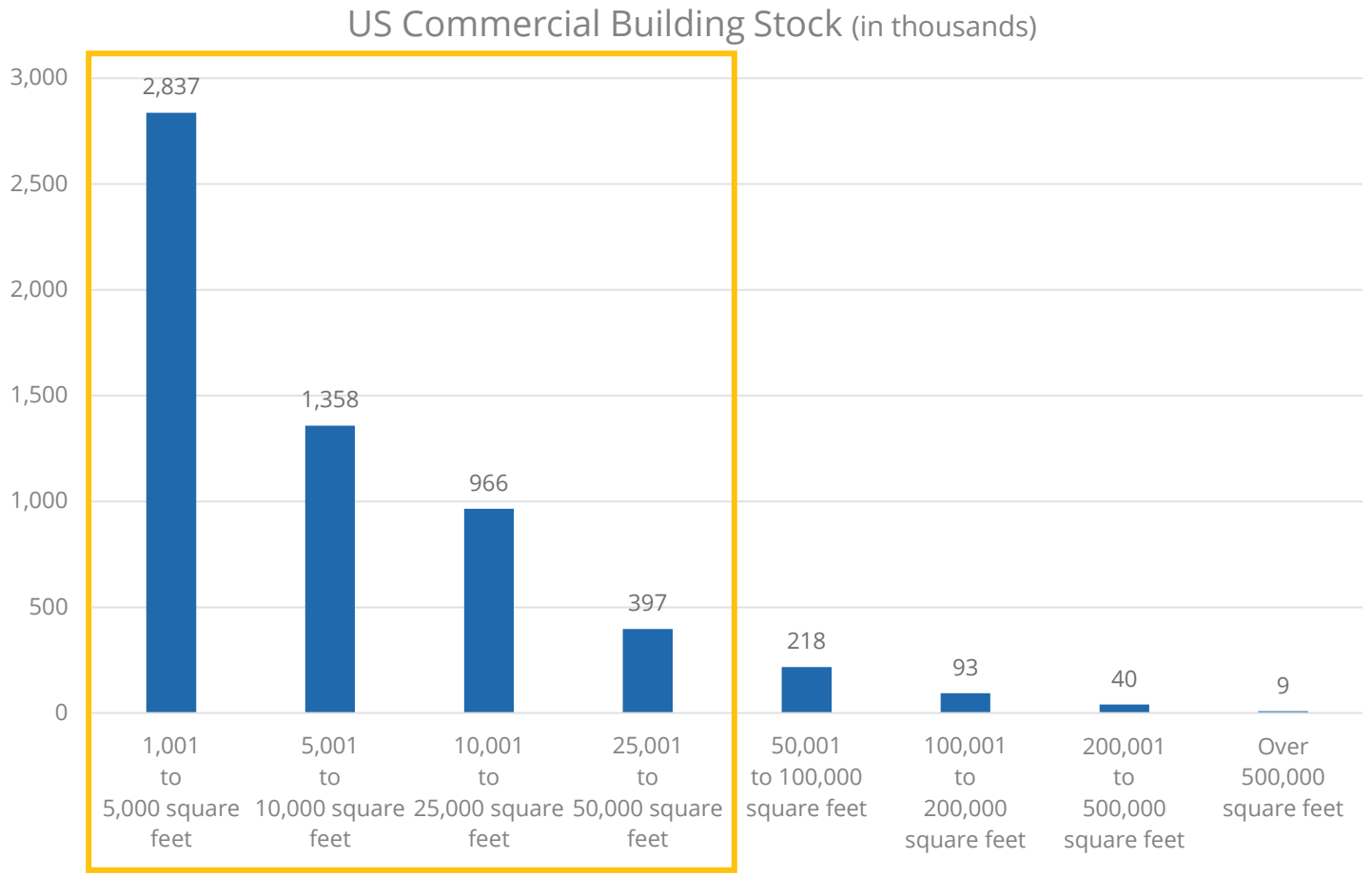




Source: USEIA Commercial Buildings Energy Consumption Survey 2018

The Potential

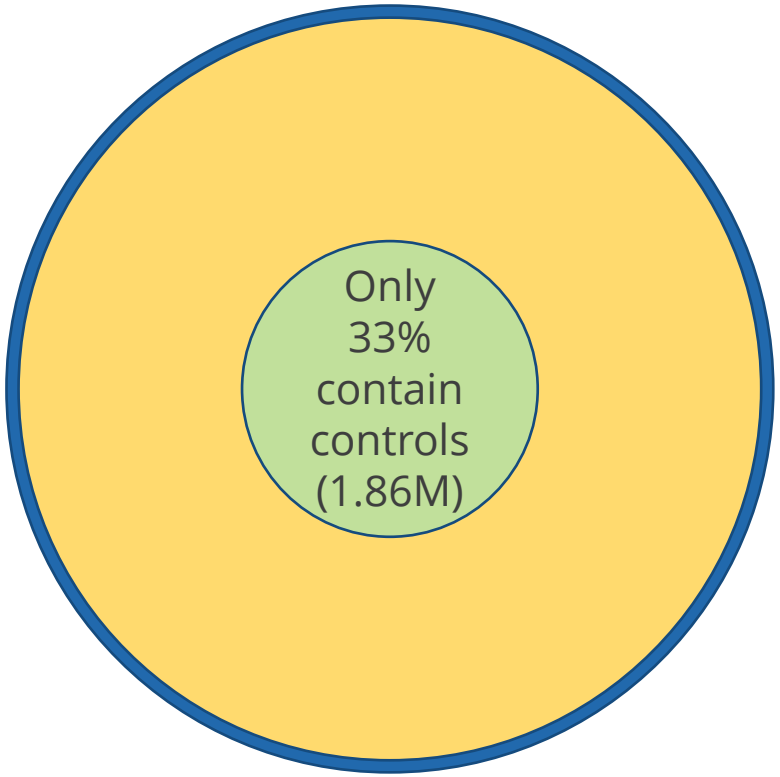
US Commercial stock = 5.9 Million

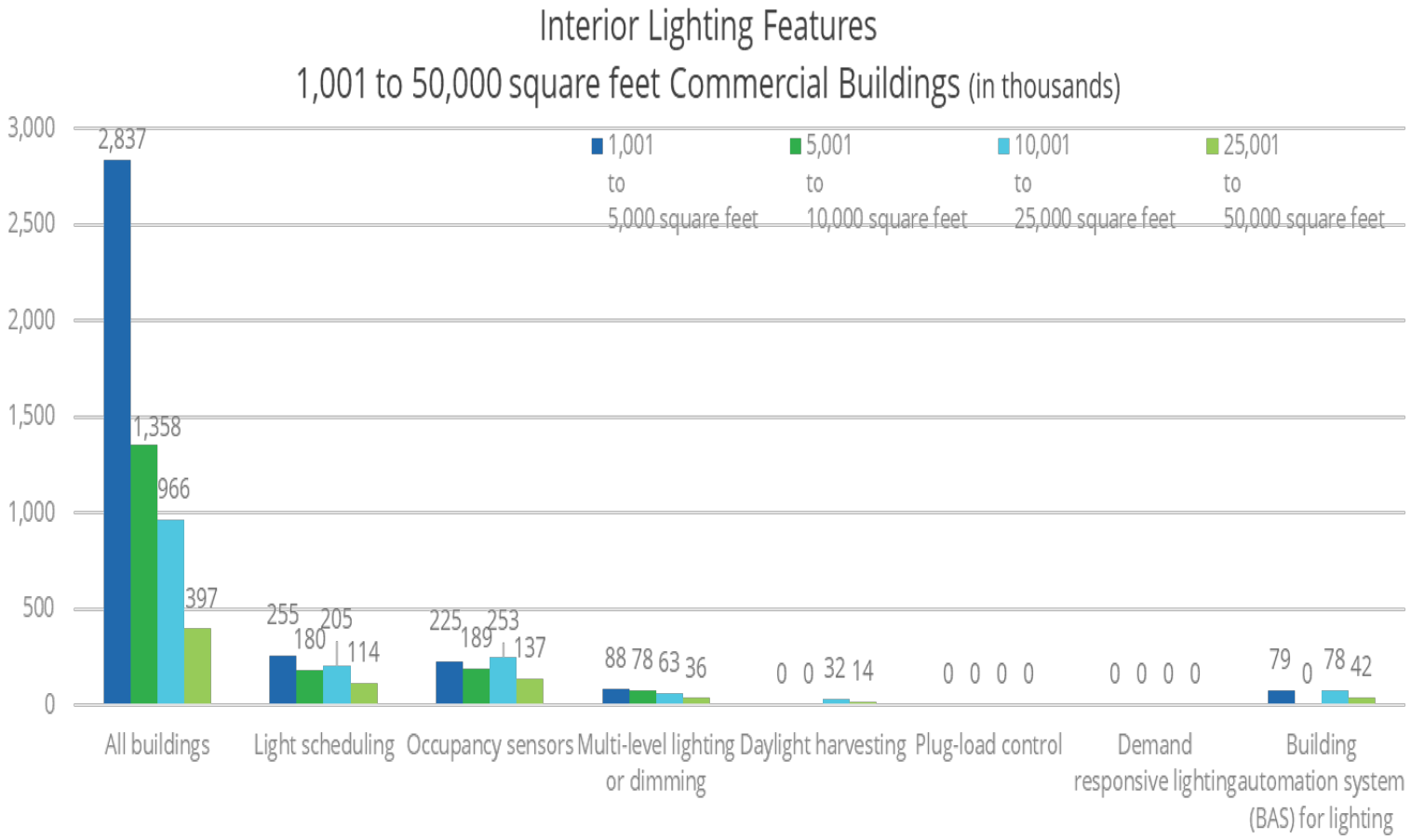


Source: USEIA Commercial Buildings Energy Consumption Survey 2018

The Potential

≤ 50,000 SF = 5.55 Million





Source: USEIA Commercial Buildings Energy Consumption Survey 2018

The Potential

~3 Million Buildings Nationwide

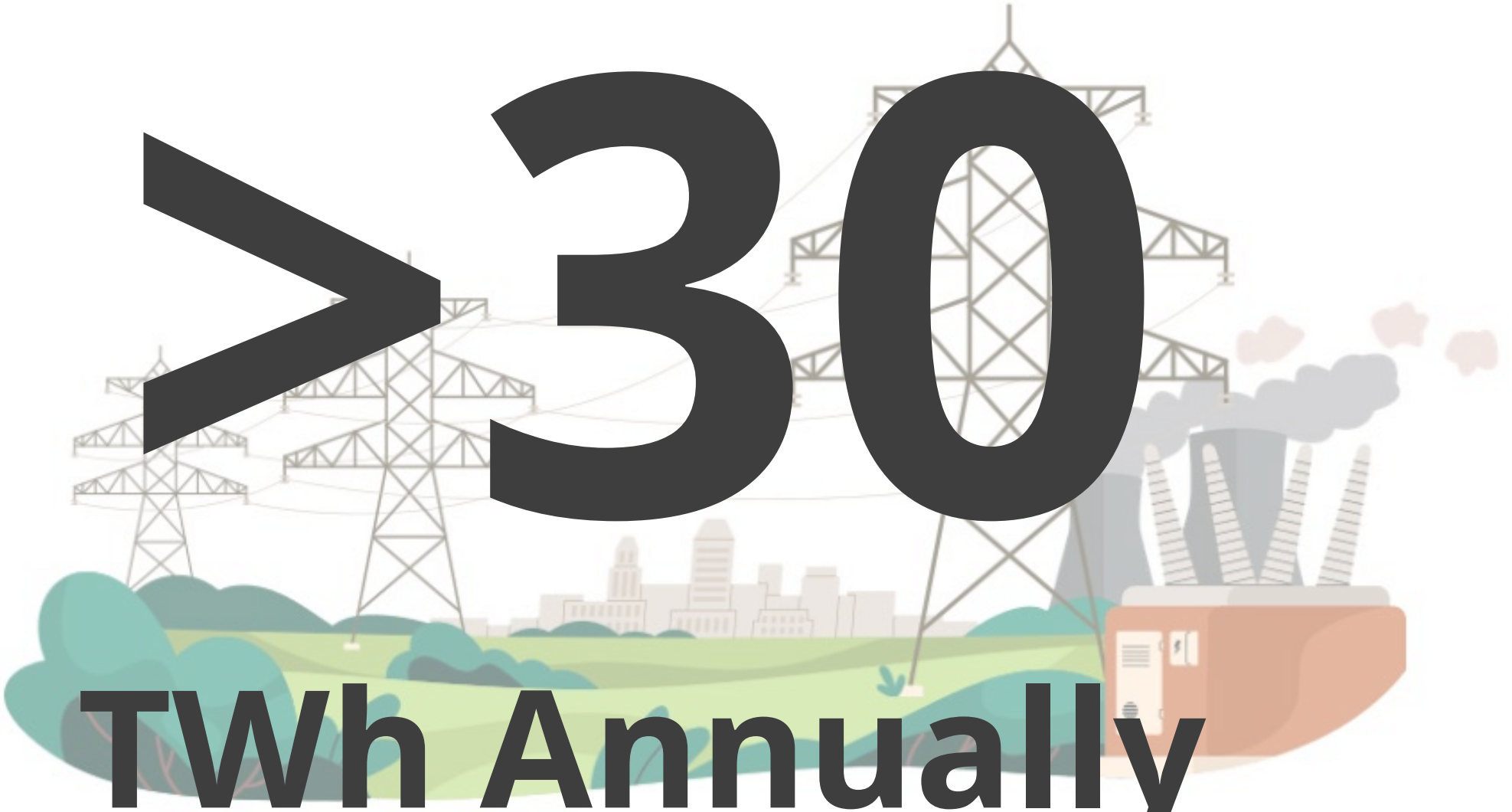
The Potential

DLC Study: Avg. 49% Energy Savings with NLCs

The Potential

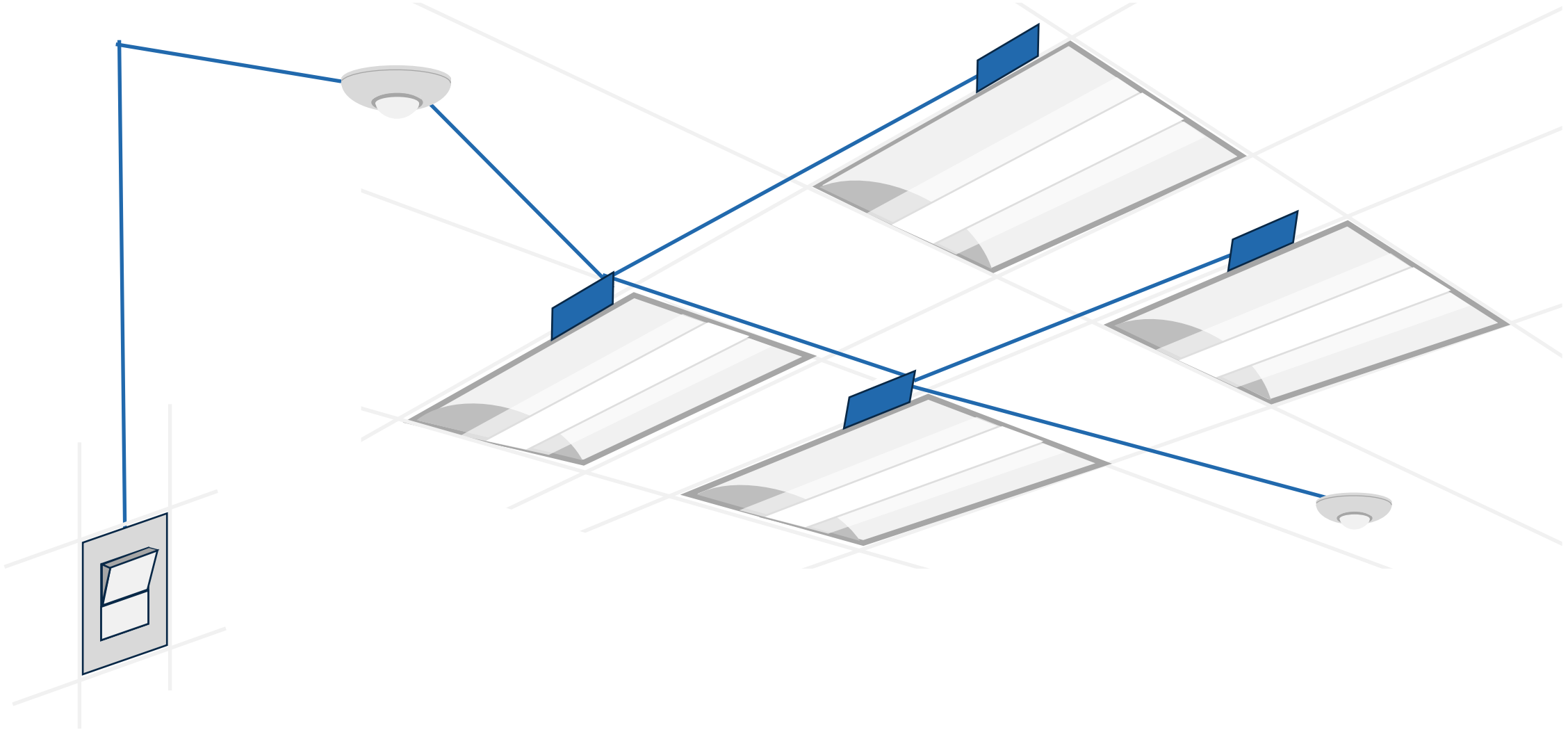
DLC Study: 60-73% Energy Savings with LLLCs

The Potential



>30 TWh Annually

Define “Networked Lighting Control” (NLC)



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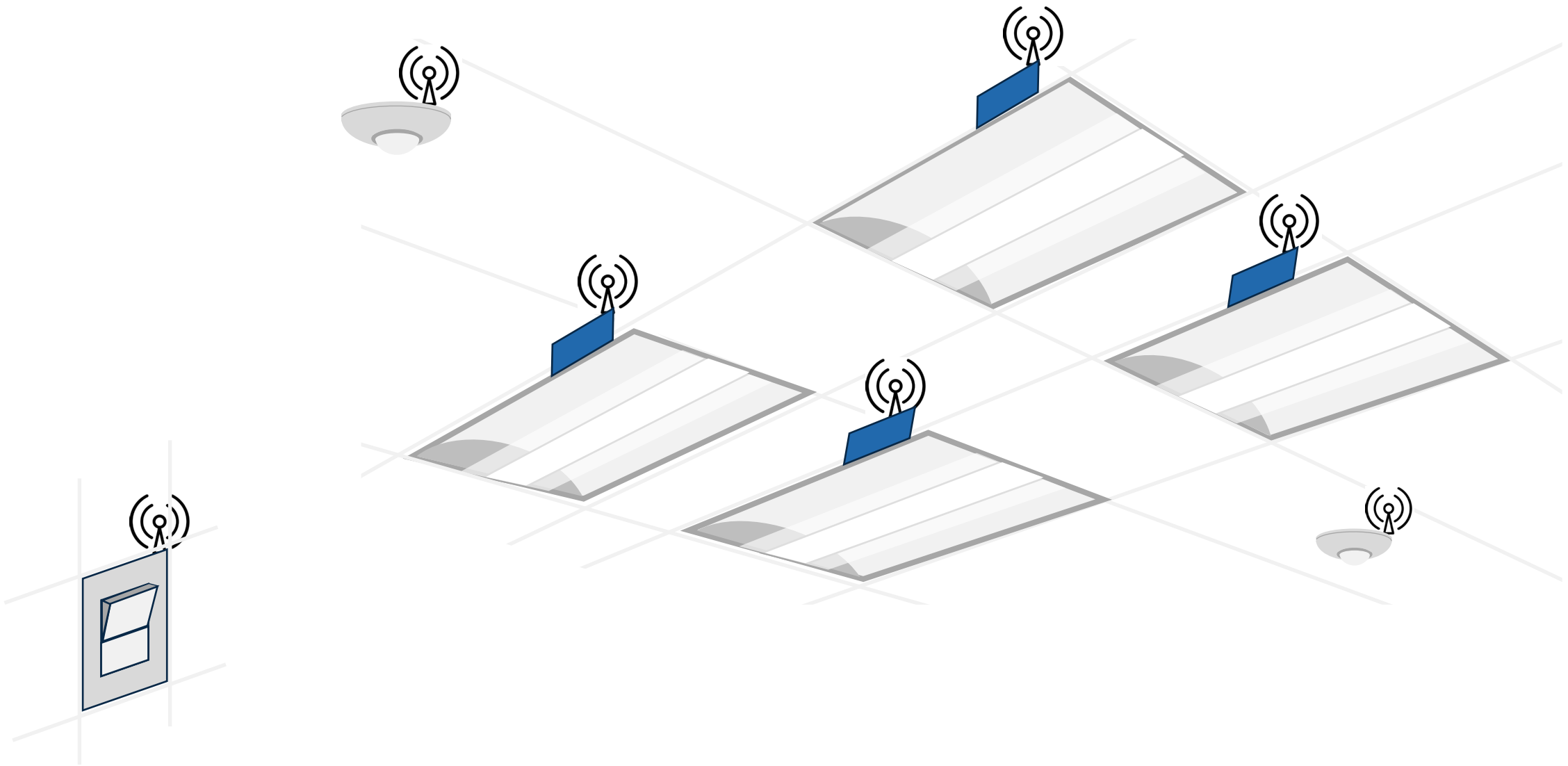

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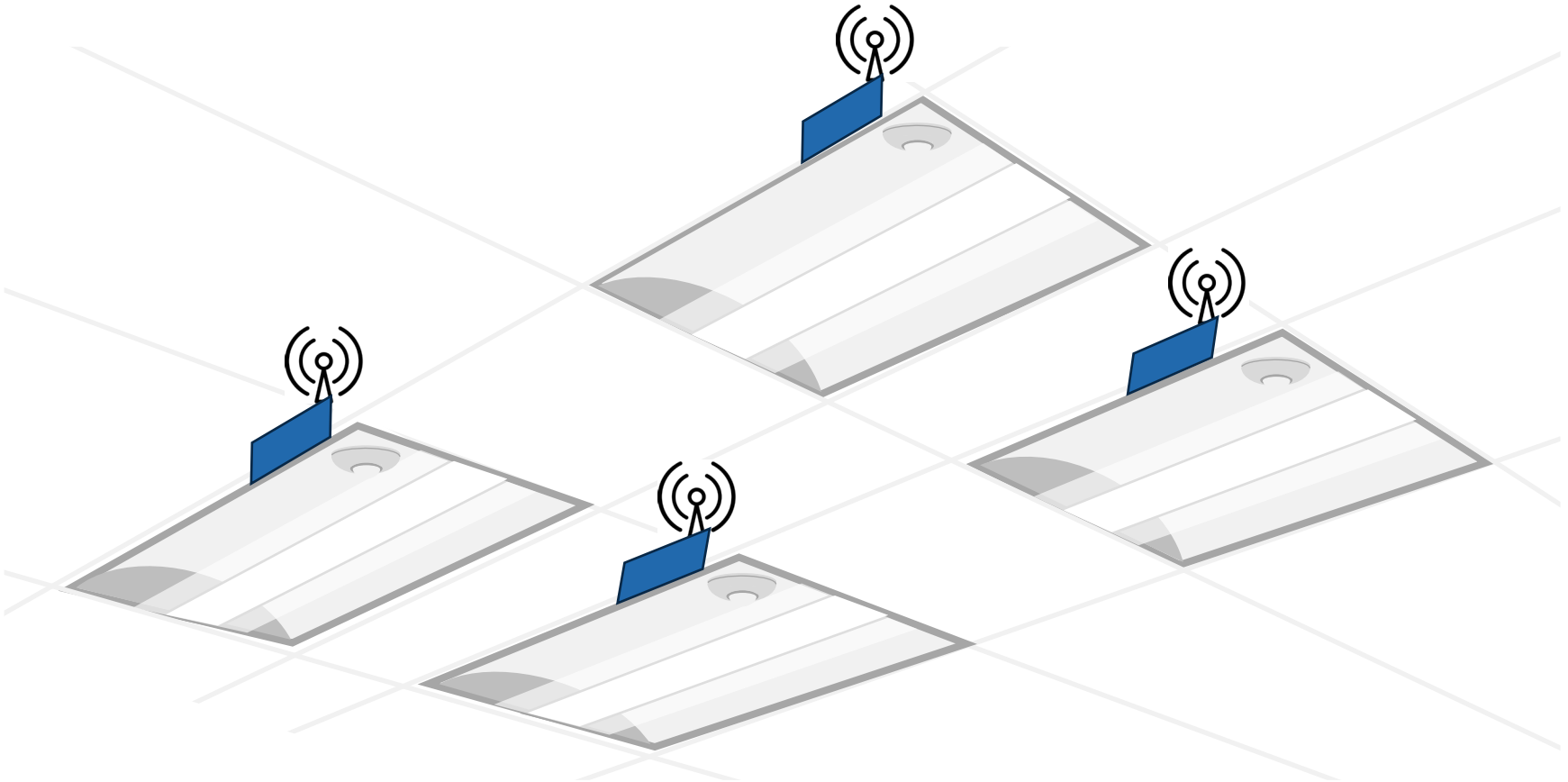
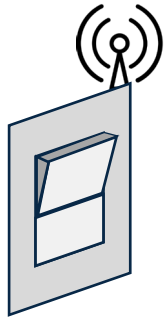
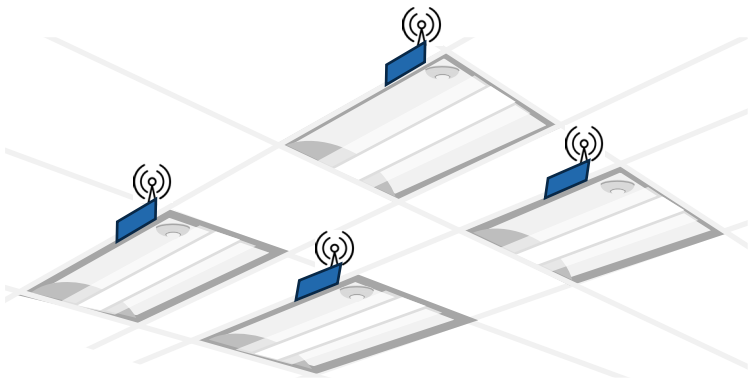
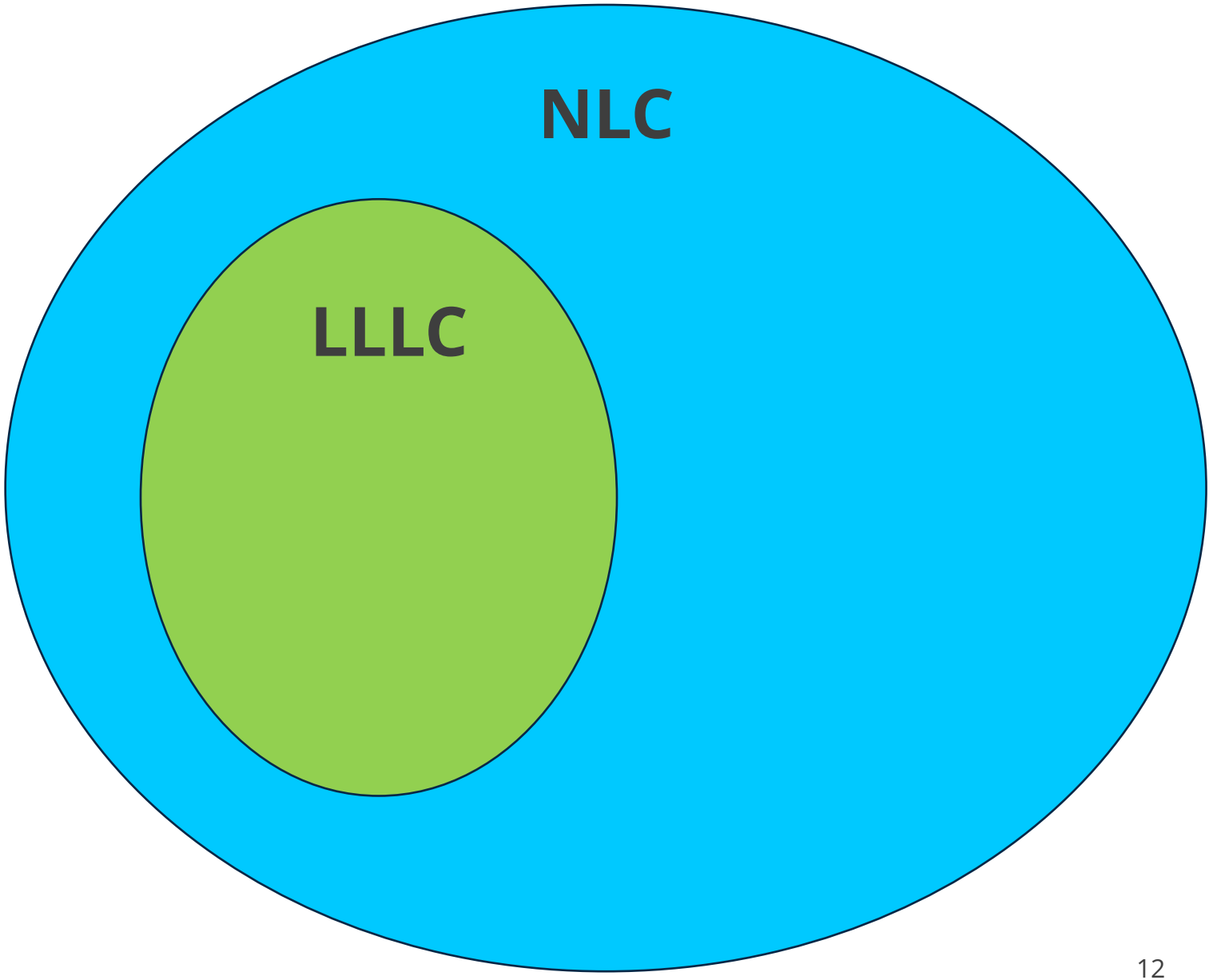




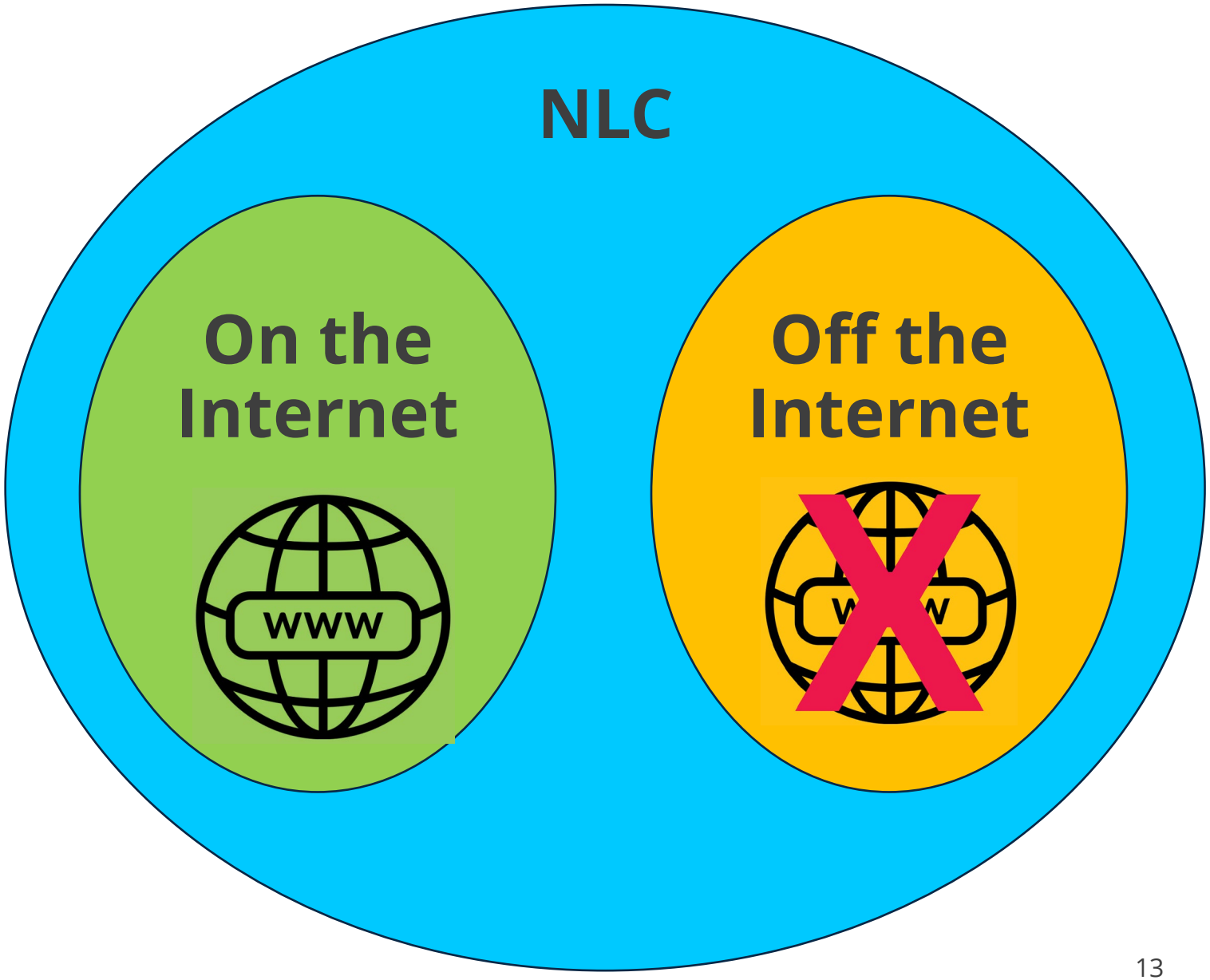
LLLC = sensors on every luminaire

LLLC is a kind of NLC





NLC can be on the Internet or not



Some NLCs access the Internet occasionally through a phone

‘Room Controls’ Working Group (2021)

What is needed to increase market acceptance?

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Right Size

- Promote systems that are well suited for **retrofit** projects in **small to medium** size buildings
- **Balance** system capabilities with affordability

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Confidence

- Increase **confidence** in meeting savings and performance expectations
  - *For owners, contractors, and efficiency programs*
- Provide **greater certainty** around incentives so contractors can use the incentives as part of their sales pitch

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Simplicity

- Keep the incentive application **simple**
- **Simplify** ordering and installation for the contractor

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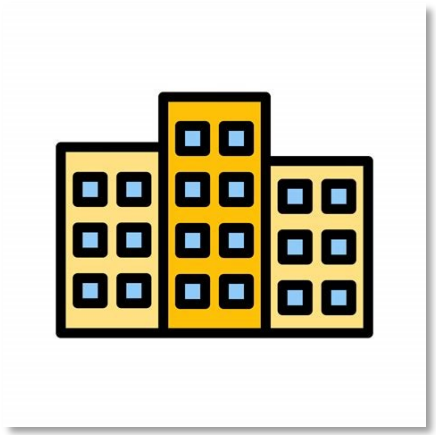
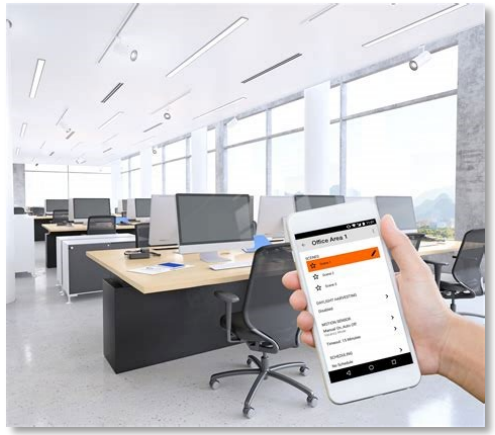
Project Profile

Retrofit



Under 50,000 sq.ft.



Local Control Only

No System Integration

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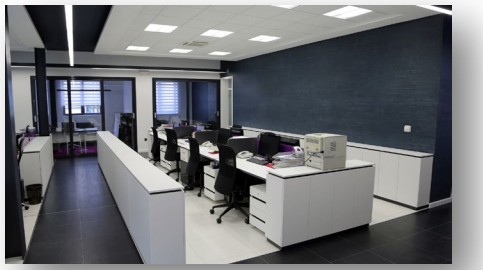
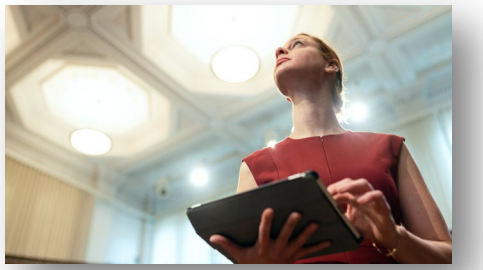
System Requirements

Wireless



Standalone

Embedded



Self-Serve Startup

Required Capabilities




Optional Capabilities



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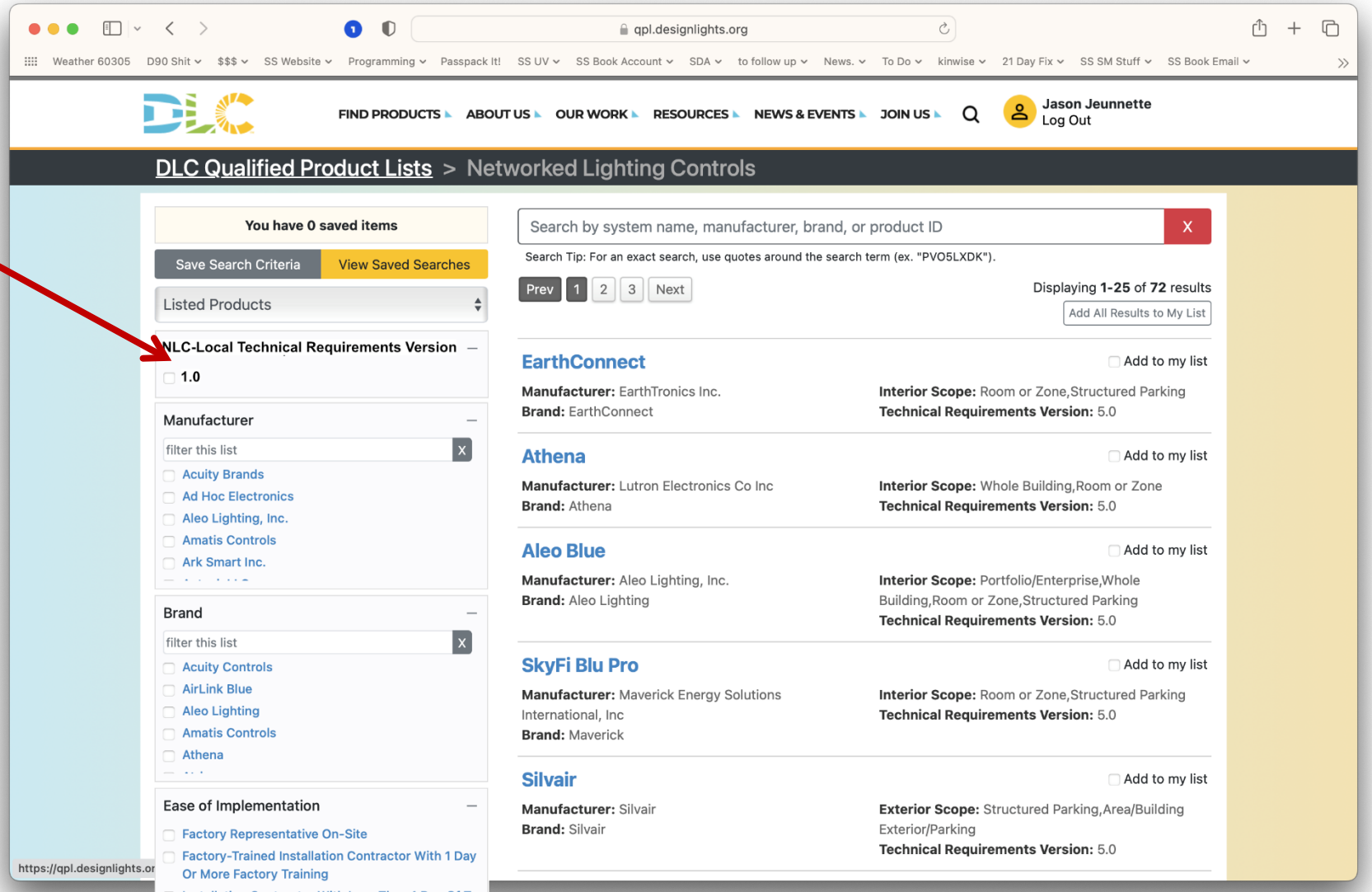
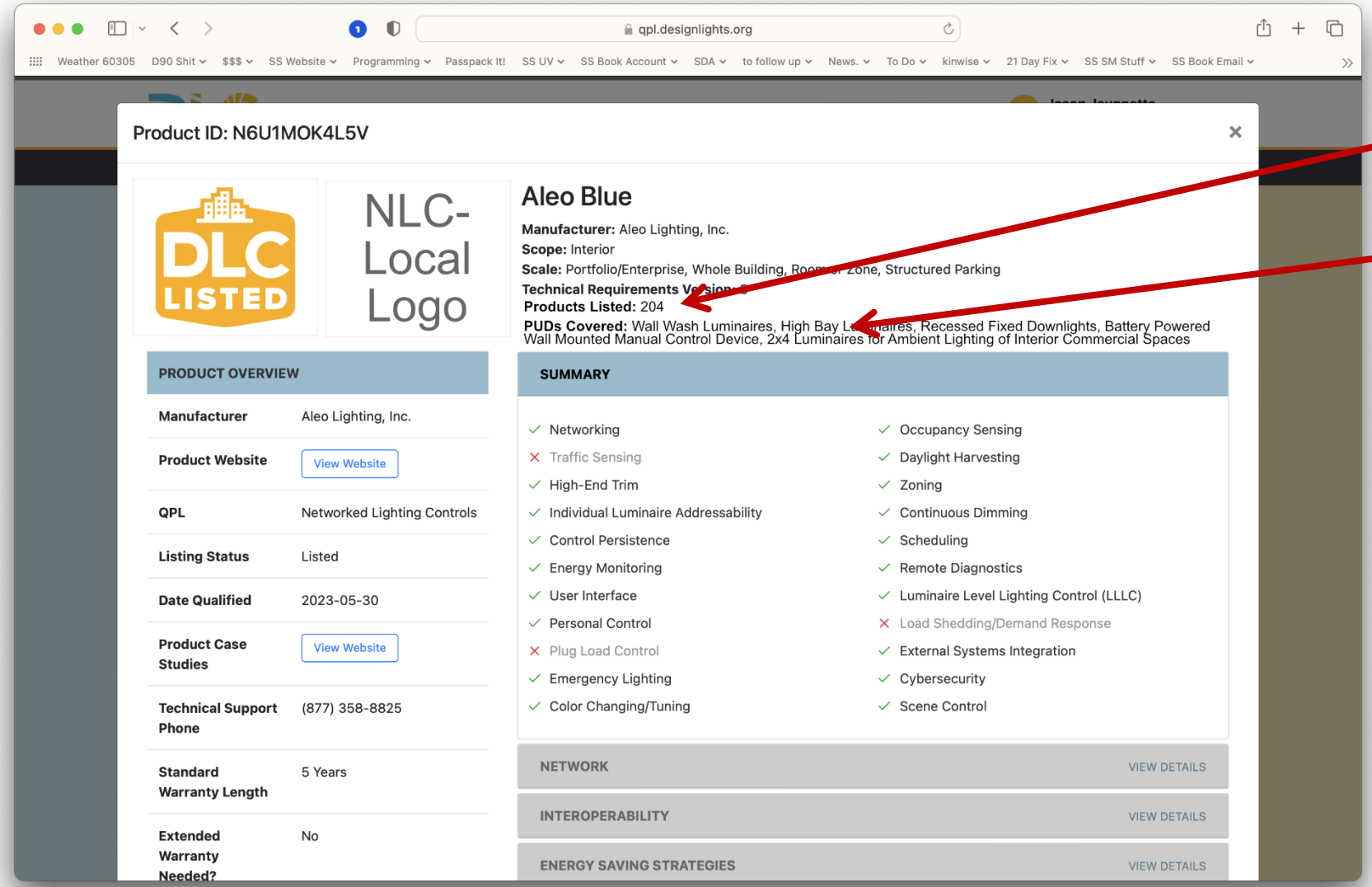
NLC-Local Filter



NLC-Local

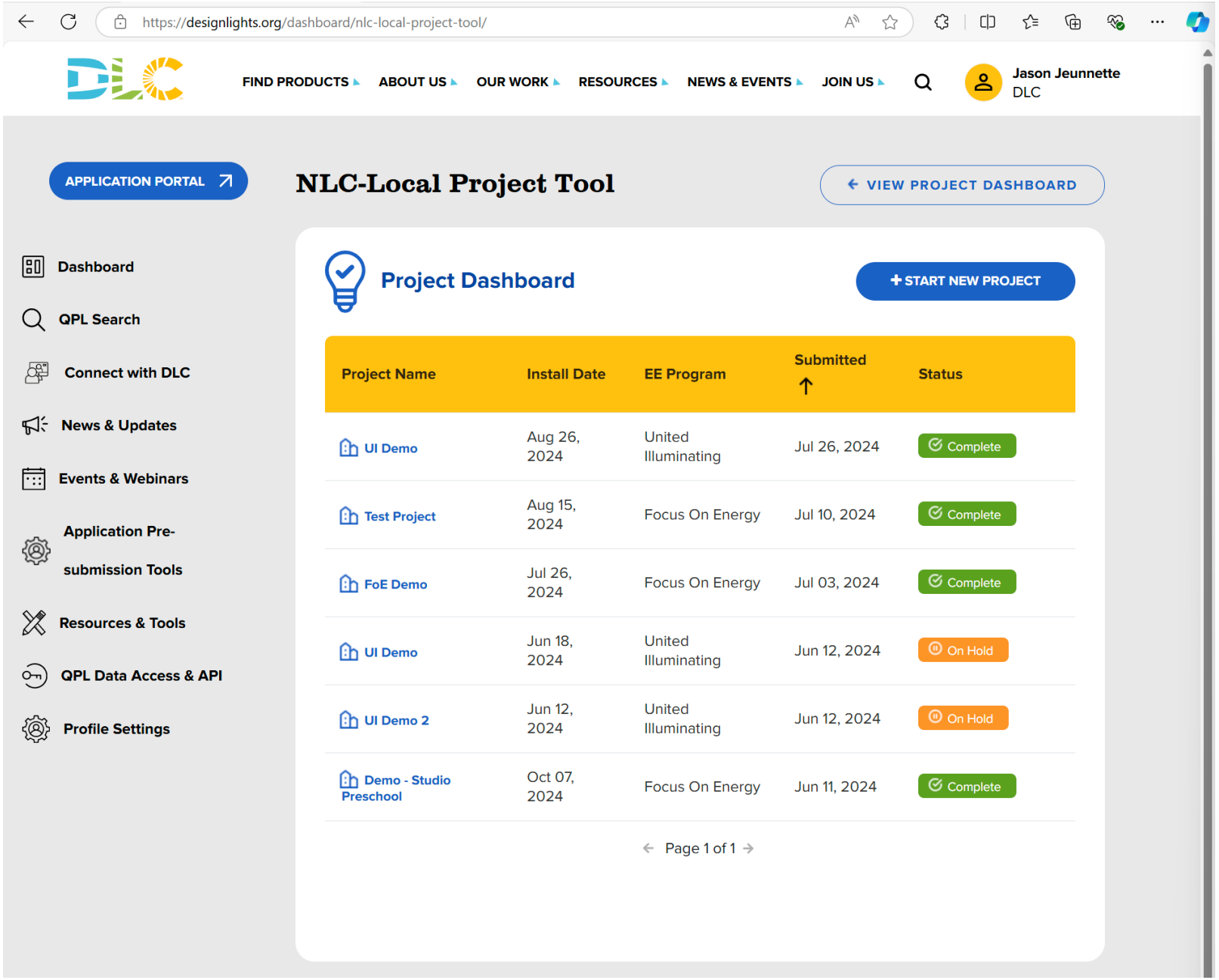


 # Products Listed

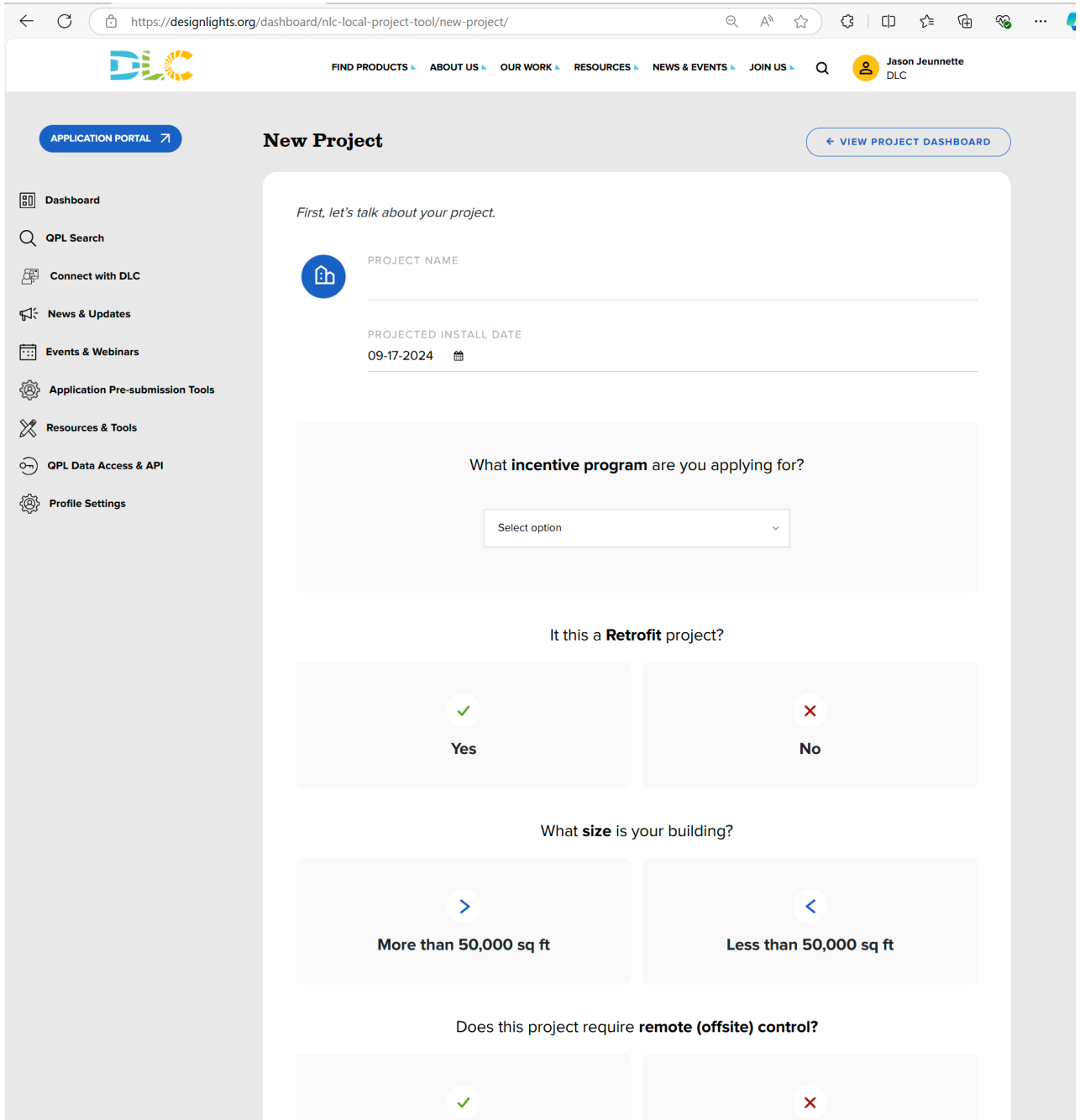
PUDs Covered

NLC-Local Project Tool

Project Tool



Project Tool



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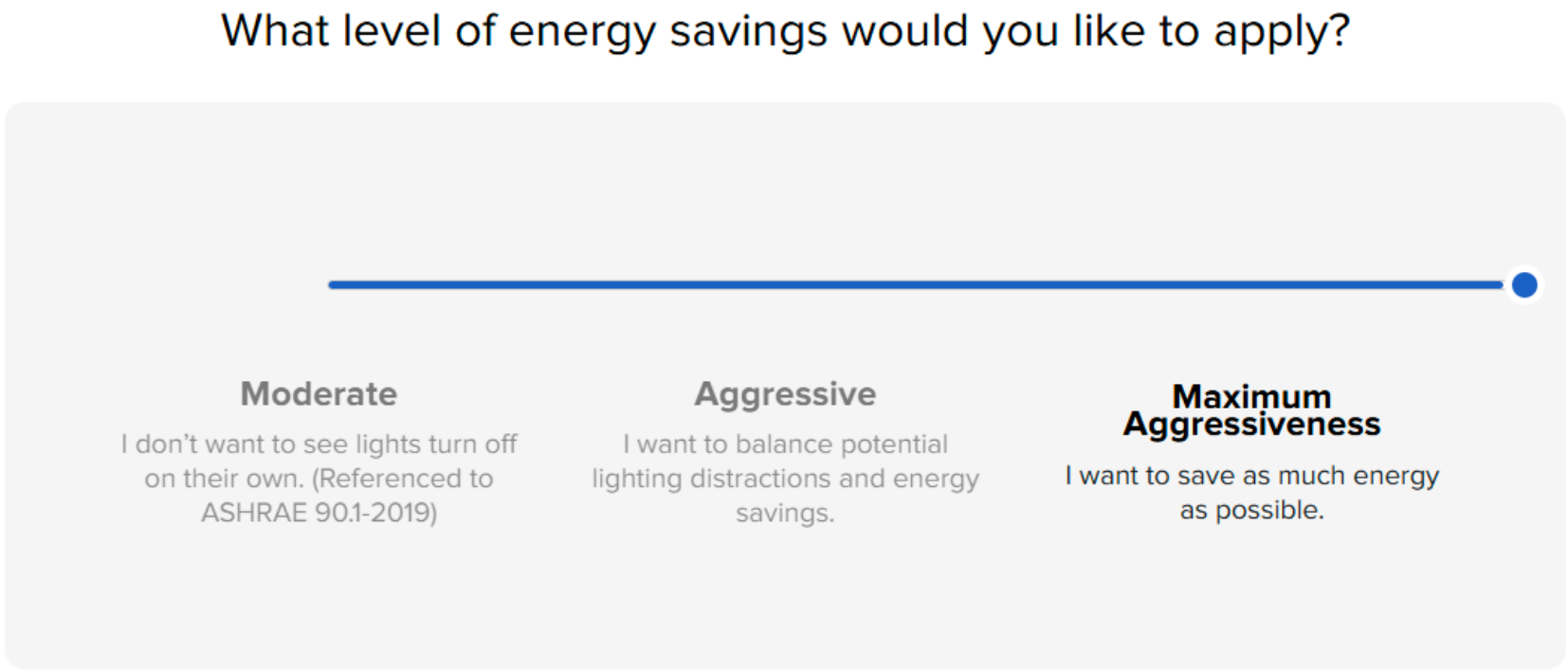

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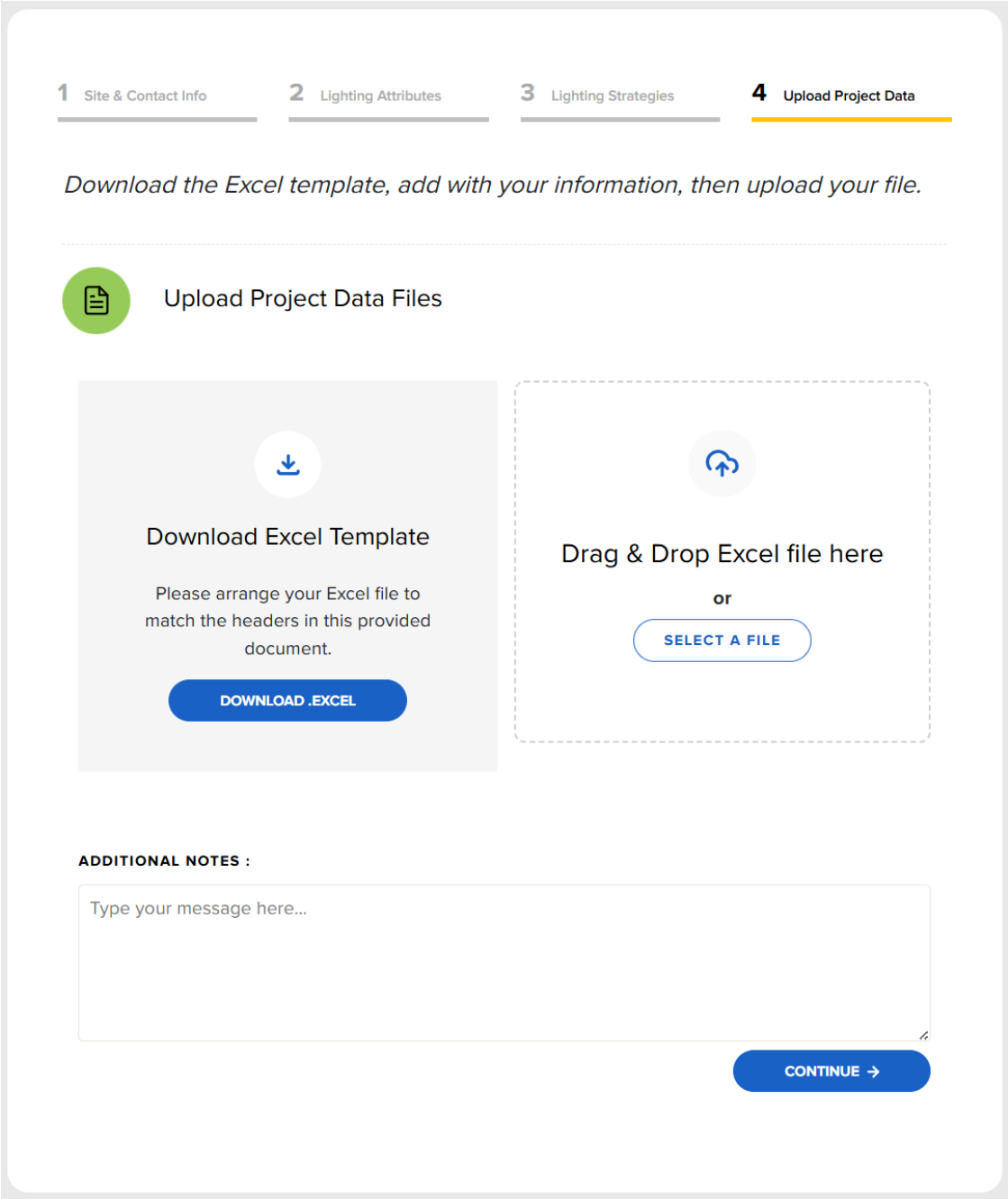


Project Tool

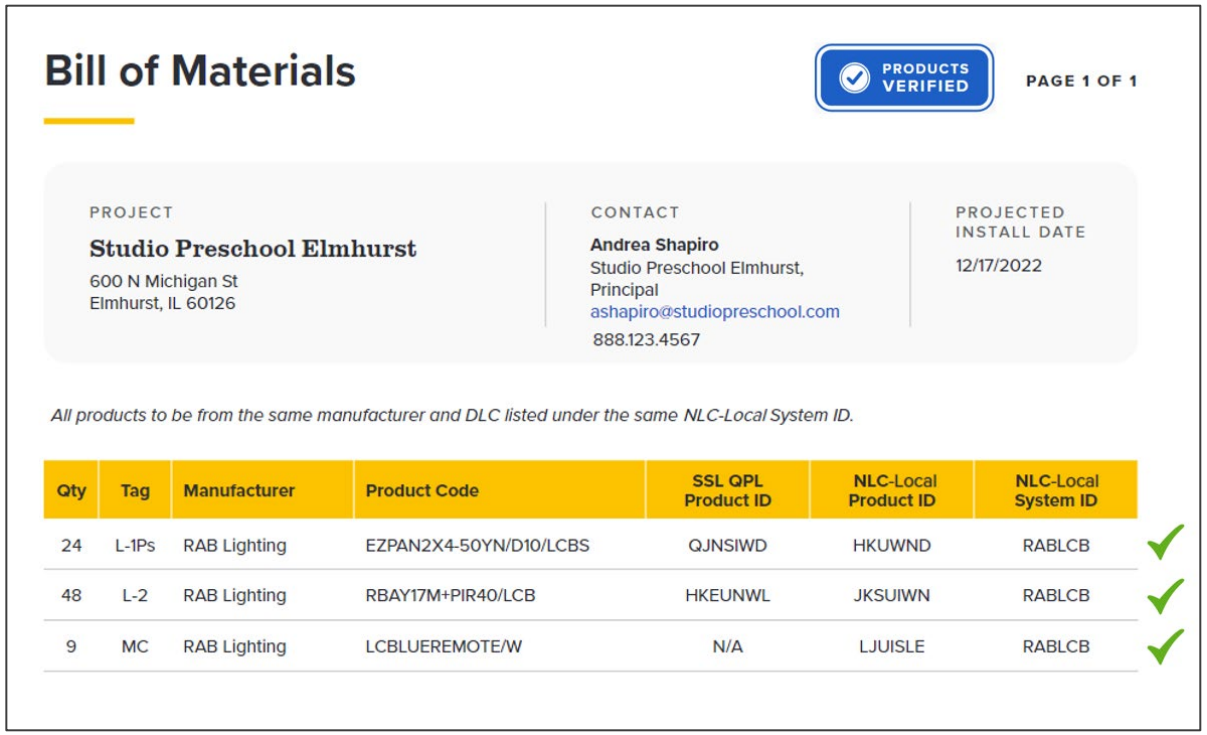
Automated Sequence Of Operations Generation

#1 Admin/Classrooms Area

Room #	Room Name / Type	# of Fixtures	# of Sensors (embedded/ standalone)	# of Manual Control Pts	Sensing/ Timeout	High-End Trim	Daylight Harvesting	Scheduling	Manual Demand Response
600a	**Sondheim** Classroom	12	12/0	2	Vac / 20 min	80%	✓	✓	✓
601	**Office** Open Office	8	8/0	2	Vac / 20 min	80%	✓	✓	✓
602	**Office** Enclosed Office	4	4/0	1	Vac / 20 min	80%	✓	✓	✓

Project Tool

Automated Product Verification



Bill of Materials

PRODUCTS VERIFIED

PAGE 1 OF 1

PROJECT
Studio Preschool Elmhurst
600 N Michigan St
Elmhurst, IL 60126

CONTACT
Andrea Shapiro
Studio Preschool Elmhurst,
Principal
ashapiro@studiopreschool.com
888.123.4567

PROJECTED INSTALL DATE
12/17/2022

All products to be from the same manufacturer and DLC listed under the same NLC-Local System ID.

Qty	Tag	Manufacturer	Product Code	SSL QPL Product ID	NLC-Local Product ID	NLC-Local System ID	
24	L-1Ps	RAB Lighting	EZPAN2X4-50YN/D10/LCBS	QJNSIWD	HKUWND	RABLCB	✓
48	L-2	RAB Lighting	RBAY17M+PIR40/LCB	HKEUNWL	JKSUIWN	RABLCB	✓
9	MC	RAB Lighting	LCBLUEREMOTE/W	N/A	LJUISLE	RABLCB	✓

Installers

PROJECT DETAILS BY ROOM	ROOM NUMBER	ROOM TYPE	BUILDING AREA
Sondheim	600a	Classroom	Admin/Classrooms

Lighting Fixtures

#	Tag	Type (PUD)	Description	High-End Trim	Dim / Non-Dim	Daylight Enabled *(circle one)*	Device ID *(6 digits)*	Installed? *(check)*	Programmed? *(check)*
1	L-1Ps	EZPAN2X4-50YN/D10/LCBS	2x4 Flat Panel with Controller and Sensor	80%	Dim	Yes / No	_____	☐	☐
2	L-1Ps	EZPAN2X4-50YN/D10/LCBS	2x4 Flat Panel with Controller with Sensor	80%	Dim	Yes / No	_____	☐	☐
3	L-1Ps	EZPAN2X4-50YN/D10/LCBS	2x4 Flat Panel with Controller with Sensor	80%	Dim	Yes / No	_____	☐	☐
4	L-1Ps	EZPAN2X4-50YN/D10/LCBS	2x4 Flat Panel with Controller with Sensor	80%	Dim	Yes / No	_____	☐	☐
5	L-1Ps	EZPAN2X4-50YN/D10/LCBS	2x4 Flat Panel with Controller with Sensor	80%	Dim	Yes / No	_____	☐	☐

Project details by room simplifies installation

Installers

Pick List
simplifies material delivery

NLC-Local Project Report | Monona Grove School District - Taylor Prairie School | Focus On Energy

Lighting Inventory

Unique ID - Loc Ref# - Room Name	Tag	Qty	Manufacturer	Product Code	Fixture Mounting	Description
1 - Classroom 31	L-01b	4	Acuity	2BLT4R 30L ADP EZ1 LP840 NLTAIR2 RES7	Existing Luminaire	2x4 Retrofit for Fluorescent Troffers with Curved Linear Prismatic Lens, 3000 lumens, 4000K, 120-277v, nLight Air Gen 2 control with integral PIR sensor.
1 - Classroom 31	LW-01	1	Acuity	RPODU 2S DX WH G2 J5	Wall Surface	Battery Powered Wireless Wall Switch with On/off + Raise/Lower Control, White, 5-Pack
1 - Classroom 31	LW-1GP	1	Acuity	1G Decora Plate	Wall Surface	-
2 - Classroom 30	L-01b	4	Acuity	2BLT4R 30L ADP EZ1 LP840 NLTAIR2 RES7	Existing Luminaire	2x4 Retrofit for Fluorescent Troffers with Curved Linear Prismatic Lens, 3000 lumens, 4000K, 120-277v, nLight Air Gen 2 control with integral PIR sensor.
2 - Classroom 30	LW-01	1	Acuity	RPODU 2S DX WH G2 J5	Wall Surface	Battery Powered Wireless Wall Switch with On/off + Raise/Lower Control, White, 5-Pack
2 - Classroom 30	LW-1GP	1	Acuity	1G Decora Plate	Wall Surface	-
3 - Classroom 29	L-01b	4	Acuity	2BLT4R 30L ADP EZ1 LP840 NLTAIR2 RES7	Existing Luminaire	2x4 Retrofit for Fluorescent Troffers with Curved Linear Prismatic Lens, 3000 lumens, 4000K, 120-277v, nLight Air Gen 2 control with integral PIR sensor.
3 - Classroom 29	LW-01	1	Acuity	RPODU 2S DX WH G2 J5	Wall Surface	Battery Powered Wireless Wall Switch with On/off + Raise/Lower Control, White, 5-Pack
3 - Classroom 29	LW-1GP	1	Acuity	1G Decora Plate	Wall Surface	-
4 - Library 28	RM-01	44	-	Fixtures Removed - Do Not Quote	n/a	Remove 2 lamp F32 T-8 Luminaires
4 - Library 28	L-06	38	Acuity	2BLT4 30L ADP EZ1 LP840 NLTAIR2 RES7	Ceiling Recessed Grid	2x4 Center Basket Troffer with Smooth Reflector and Curved, Ribbed Diffuser, 3000 lumens, 4000K, 120-277v, nLight Air Gen 2 control with integral PIR sensor.
4 - Library 28	LW-01	4	Acuity	RPODU 2S DX WH G2 J5	Wall Surface	Battery Powered Wireless Wall Switch with

Building Occupants

NOTICE TO ROOM OCCUPANTS

Sondheim

ROOM NUMBER	BUILDING AREA
600a	Admin/Classrooms

Your lights have been updated!

This room now has an updated lighting control system.
The new system may operate differently than you are used to.
Here are some details of how the new system will operate.

VACANCY MODE

The lights in this room operate in vacancy mode, or manual-on/auto-off.

How do I TURN ON the lights?

When you enter the room, ***push the button*** to turn on the lights.
The lights will come on to their last level.

Notice to room occupants
manages expectations

NLC-Local

Increase Confidence in Savings

Reduce Admin Burden

Sound Helpful?

Energy · Quality · Controllability℠

Thank You

Jason Jeunnette

jjeunnette@designlights.org