



LUNA IS LIVE!

Application Processing and Tips

April 8, 2022

Agenda

- What is LUNA?
- How to Submit LUNA Applications
 - The Process and What Changed
 - Application Excel Forms
- New Submitter Tools
 - New DLC-formatted SPD and Luminous Intensity Images
- New Controllability Terms (Table 7 vs Table 9)
- How to Find LUNA Products on the QPL
- Fees and Review Timelines
- Resources Available

Webinar Team



Q&A Moderator



Dave Ryan
SSL/LUNA Lead Reviewer



Levin Nock
Technical Manager
Controllability



Leora Radetsky
Senior Lighting Scientist
Distribution



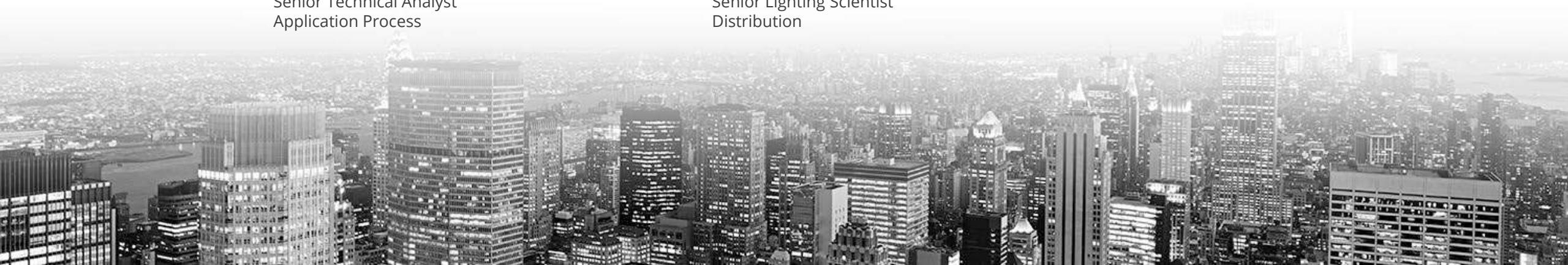
Kasey Holland
Technical Manager
Spectral Quality



Aaron Feldman
Senior Technical Analyst
Application Process



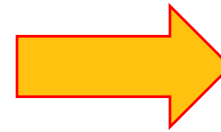
Bernadette Boudreaux
Ass. Director of Operations
Application Process



Webinar Logistics

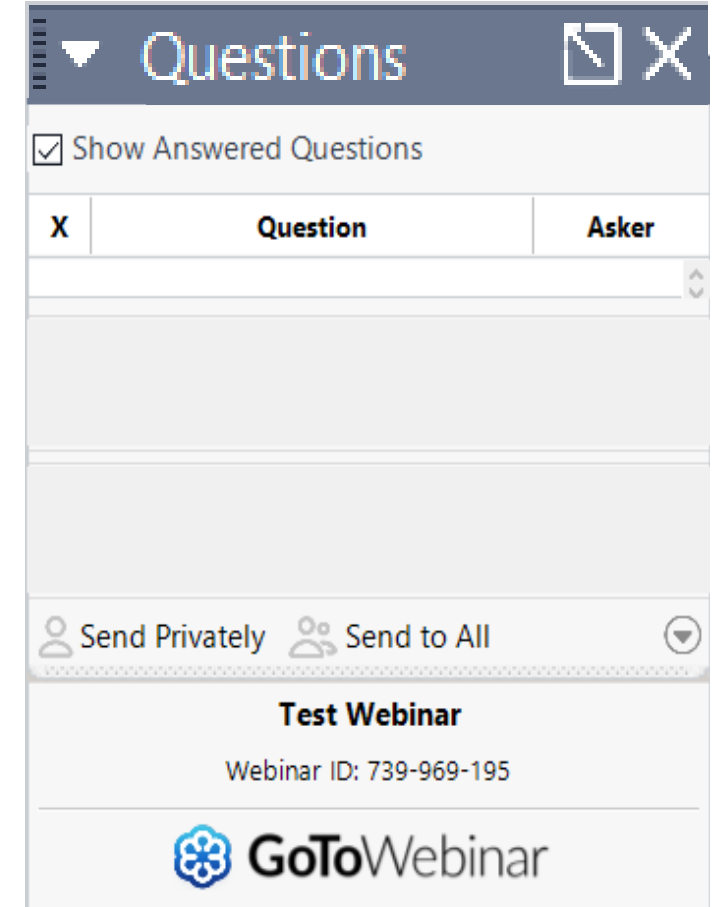
Please enter your questions in the Questions pane in GoToWebinar.

- Some questions answered in the Questions Pane
- Some questions answered aloud (anonymously) at the end during the Q&A session



All attendees are automatically muted

If you experience technical issues, please use the chat pane to let us know



Recordings

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

The screenshot shows the DLC website's navigation and content sections. The 'NEWS & EVENTS' menu item is circled in yellow. The 'On-Demand Webinars / Past Events' link at the bottom is also circled in yellow.

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

LATEST ANNOUNCEMENTS →

Meet the DLC! Bagwat Mohan: Your NLC Application Expert
January 25, 2022

PERSPECTIVES →

Meet the DLC! Bagwat Mohan: Your NLC Application Expert
January 25, 2022

Changes Ahead: Transition to SSL V5.1 in 2022
December 15, 2021

UPCOMING EVENTS →

Final Policy Release Webinar: LUNA Technical Requirements V1.0 (English)
January 26, 2022 1:00 pm

On-Demand Webinars / Past Events



Overview



LUNA Outdoor Luminaires

1. Minimize lighting energy use

2. Minimize light pollution

3. Provide appropriate visibility for people

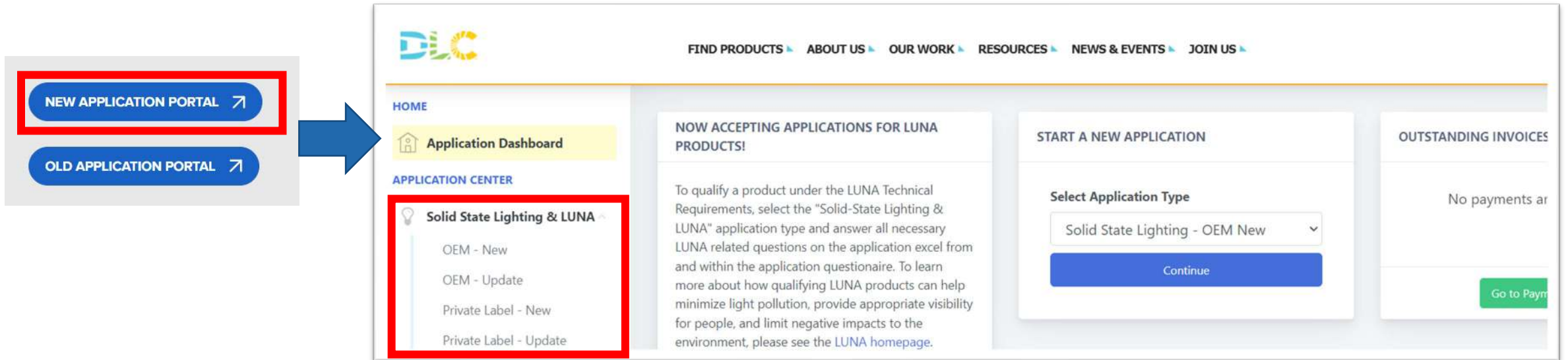




How to Submit Applications



How to Submit a LUNA Application



The screenshot displays the DLC application portal. On the left, a navigation menu is shown with two buttons: "NEW APPLICATION PORTAL" (highlighted with a red box) and "OLD APPLICATION PORTAL". A blue arrow points from the "NEW APPLICATION PORTAL" button to the main application center. The application center features a "HOME" section with an "Application Dashboard" button. Below this is the "APPLICATION CENTER" section, which includes a "Solid State Lighting & LUNA" category (highlighted with a red box) and four sub-options: "OEM - New", "OEM - Update", "Private Label - New", and "Private Label - Update". The main content area contains a "NOW ACCEPTING APPLICATIONS FOR LUNA PRODUCTS!" announcement and a "START A NEW APPLICATION" section with a "Select Application Type" dropdown menu (set to "Solid State Lighting - OEM New") and a "Continue" button. On the right, there is an "OUTSTANDING INVOICES" section with a "Go to Paym" button.

**To submit for LUNA you must submit the appropriate SSL application:
Each application type will include specific questions related to LUNA**

- SSL OEM NEW AND UPDATE
- SSL PL NEW AND UPDATE

You can update a product to LUNA or qualify a product to 5.1 and LUNA with the same application.

PL manufacturers have the OPTION to qualify a product to LUNA if the OEM products have the LUNA designation

Apps that were submitted prior to 4/4 must submit a new app to add LUNA

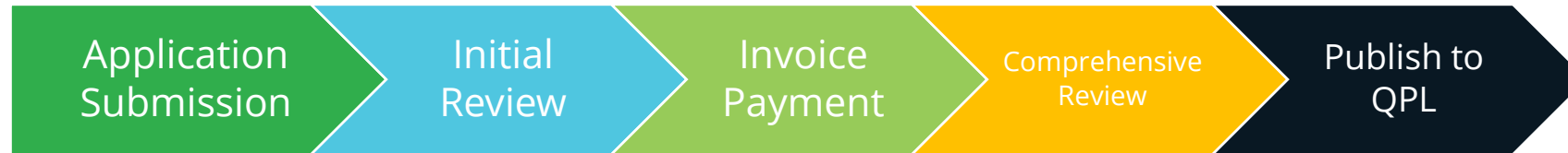


The Process and What Has Changed



Application process flow the same for SSL and LUNA

SSL and LUNA OEM New & Update Applications



SSL and LUNA Private Label New & Update Applications



INSTRUCTIONS

For instructions on how to submit this application type and to download the SSL OEM New App Excel Form for SSL Level 1 applications (previously known as single product applications) or SSL Level 2 applications (previously known as family grouping applications) please see:

[View SSL & LUNA Level 1 Instructions](#)

[View SSL & LUNA Level 2 Instructions](#)

Questionnaire

There are new and updated questions added to the LUNA application form:

2. Please select if any products in this application are targeting LUNA qualification.

Required

This is only eligible for specific primary use designations within the outdoor luminaires category. Additional information on LUNA qualification can be found on the [LUNA program page](#).

Yes

No

Added to ALL apps
Default = No
Existing App – select No
Only addition for PL

Include Shield/Mounting Info where applicable on spec sheet or other docs

3. Please upload a specification sheet for each product included in your application.

Required

For LUNA applications, if your specification sheet does not include shielding and/or mounting options/accessories please upload additional documentation describing these options/accessories. Specification sheets that are submitted must be the customer-facing specification sheets used in the marketplace. Specification sheets created for the sole purpose of DLC submission are not acceptable. Product specification sheets must clearly detail dimming/control capabilities if products are capable of dimming and/or have controls. Multiple specification sheets are acceptable if all products are not included in a single document.

25. Please upload an LM-79/distribution report PDF for each unique optical variation submitted.

Required

This is required for LUNA applications and optional for non-LUNA application.

PDF distribution reports may be beneficial for the reviewer to understand the testing conducted on your products.

The following are for LUNA products only:

These must accompany all IES photometric files uploaded above.

The tested product from this report must be the highest light output within the family and include the worst case performance affecting mounting options.

A product image must be included in this report showing the optics, mounting and shields if applicable.

Required for LUNA

Use Submitter Tools on MyDLC Portal

29. Please upload a luminous intensity distribution image, also known as a polar candela plot, for each unique optical variation submitted. Images must be generated from the LUNA tool on the [myDLC portal](#).

Required

For instructions and information on how to utilize the tool please refer to this reference guide.

Questionnaire

28. Please upload all relevant .SPDX Files (IES TM-27). Required

These should accompany all "full LM-79/color reports" submitted and should include spectral power distribution data from 380- 780 nm in ≤ 5 nm increments.

Choose File No file chosen

Associated Model Number

Choose...

Upload Another

29. Please upload a spectral power distribution image for each .SPDX file submitted. Images must be generated from the LUNA tool Required
on the [myDLC portal](#).

For instructions and information on how to utilize the tool please refer to this reference guide.

Choose File No file chosen

Associated Model Number

Choose...

Upload Another

30. Optionally, upload available TM-33 files corresponding to the submitted LM-79/Color Reports and LM-79/Distribution Reports.
These are not required at this time however will be required in the future to maintain LUNA qualification

Choose File No file chosen

Associated Model Number

Choose...

Submit same file used
to generate images

Use TM-27

Use Submitter Tools
on MyDLC Portal

OPTIONAL:
Will be required in
future revisions



Application Excel Forms



Application Excel Forms

New Excel Forms need to be used for LUNA

- SSL OEM New
- SSL OEM Update
- There will be new fields that capture info on LUNA products
- LUNA sections are required when LUNA is selected

FIND PRODUCTS ▾ ABOUT US ▾ OUR WORK ▾ RESOURCES ▾ NEWS

in Timeline Solid-State Lighting **LUNA** Horticultural Lighting Networked Lighting Cont

Technical Requirements
LUNA Technical Requirements V1.0
Testing Lab Requirements

Qualify a LUNA Product
Application Process
Level 1 (formerly Single Product) Applications
Level 2 (Formerly Family Grouping) Applications
Private Label Applications
Update Listed Products
Application Review Timeframes
Application Fees
Logo Use Guidelines

LUNA qualification is only available for specific Primary Use Designations within the Outdoor category

tion down)	DLC Primary Use Designation (please select from dropdown)	LUNA (please select from dropdown)	Clas (pleas dr
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Controllability: Integral Controls

Select in addition to 5.1 controls

LUNA Specific Columns Start Here				
Integral Control Capabilities Please select any additional capabilities beyond those selected in column AG			Integral Control Receptacle Standard	
			Please leave blank if not applicable	
Part Night Dim <i>(please select from dropdown)</i>	Photocontrol with Self-Calibrating Astronomic Clock <i>(please select from dropdown)</i>	Low-end Trim for Vacancy Mode <i>(please select from dropdown)</i>	Integral Control Receptacle Standard <i>(please select from dropdown)</i>	Other Integral Control Receptacle Standard Name

Controllability

Wired Communication for a Single Control Point- Table 7

Wired Communication for a Single Control Point - Table 7 of LUNA specification									
									Please type in any wired communication protocols for a single control point available on the product that are not listed on the left.
Minimum Dimming Level	0-10V IEC 60929 Annex E <i>(please select from dropdown)</i>	0-10V ANSI C137.1 (8V) <i>(please select from dropdown)</i>	0-10V ANSI C137.1 (9V) <i>(please select from dropdown)</i>	Fwd Phase NEMA SSL 7A <i>(please select from dropdown)</i>	DALI <i>(please select from dropdown)</i>	DALI2 <i>(please select from dropdown)</i>	D4i <i>(please select from dropdown)</i>	DMX512 <i>(please select from dropdown)</i>	Other Wired Communication for a Single Control Point

Controllability

Wired Communication Between Multiple Control Points-Table 9

Wired Communication Between Multiple Control Points - Table 9 of LUNA specification						
						Please type in any wired communication protocols between multiple control points available on the product that are not listed on the left.
DALI	DALI2	DMX512	BACnet <i>(please select from dropdown)</i>	LONworks <i>(please select from dropdown)</i>	Modbus <i>(please select from dropdown)</i>	Other Wired Communication Between Multiple Control Points

Controllability-Wireless

Wireless Communication Between Multiple Control Points

Table 9 of LUNA specification

Wireless Communication Between Multiple Control Points - Table 9 of LUNA specification										
										Please type in any wireless communication protocols between multiple control points available on the product that are not listed on the left.
BLE MDP v2 <i>(please select from dropdown)</i>	BLE SIG Mesh v1 <i>(please select from dropdown)</i>	BLE Proprietary <i>(please select from dropdown)</i>	4G <i>(please select from dropdown)</i>	5G <i>(please select from dropdown)</i>	EnOcean <i>(please select from dropdown)</i>	Wi-Fi <i>(please select from dropdown)</i>	Zigbee Certified Product <i>(please select from dropdown)</i>	Zigbee 3.0 <i>(please select from dropdown)</i>	Zigbee Proprietary <i>(please select from dropdown)</i>	Other Wireless Communication Between Multiple Control Points






New Submitter Tools





Web


[NEW APPLICATION PORTAL ↗](#)


[APPLICATION PORTAL ↗](#)


 **Dashboard**


 **QPL Search**


 **News & Updates**

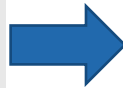
 **Events & Webinars**

 **Application Pre-submission Tools**

 **Resources & Tools**

 **QPL Data Access & API**

 **Profile Settings**



The LUNA Pre-submission Tool was designed by the DLC for use by submitters who intend to submit products for qualification to the DLC Solid-State Lighting Qualified Products List (QPL) with the additional LUNA designation. This tool allows submitters to upload an .IES or .SPDX document to validate, generate, preview and download DLC-formatted luminous intensity distribution images and spectral power distribution (SPD) in .png format for use in the application submission process.

The generated images provide a consistent format for the appearance of these graphics on the QPL. *The image files are not stored and must be downloaded by the submitter to include in the application submission.* Alternative SPD and luminous intensity images from other software will not be accepted for LUNA applications.

This Pre-submission tool also validates that the uploaded document meets the DLC requirements for .IES or .SPDX files required for LUNA V1.0, and helps submitters identify missing information by generating an error message in the tool. Please see the "helpful articles" for information about common error messages.

If you have questions about this tool, please reach out to applications@designlights.org

Upload IES file or SPDX document

Click on the upload IES or SPDX button below to select one .ies file or .spdx document. After uploading, you will see the validation results on the next screen. If the file has validation errors, you will be informed of errors that need to be resolved prior to re-uploading the file. If the file has no errors, you will be able to view and download the generated .png image for use in the LUNA application.

[UPLOAD IES OR SPDX ↕](#)

DOWNLOAD SAMPLE FILES

-  [Example IES file](#)
-  [Example SPDX](#)

Sample files to preview graphics

HELPFUL ARTICLES

- [Intro to the LUNA Pre-submission Tool](#) 
- [Common SPDX and IES Validation Errors](#) 
- [View More](#) 

Helpful articles including common error messages

Instructions

Step 1: Upload data

Upload IES file or SPDX document

Click on the upload IES or SPDX button below to select one .ies file or .spdx document. After uploading, you will see the validation results on the next screen. If the file has validation errors, you will be informed of errors that need to be resolved prior to re-uploading the file. If the file has no errors, you will be able to view and download the generated .png image for use in the LUNA application.

UPLOAD IES OR SPDX 



Instructions

Step 2a: Preview file (no validation errors)

The screenshot displays a web interface for file processing. At the top, it states "Files successfully Processed". Below this, a session header shows "Session > Mar 31, 2022 - 04:01 PM" and a button labeled "SHOW UPLOADED IES, SPD (1)". A yellow bar highlights the "Your Generated Files" section. The main content area features a line graph titled "SPD_Catalog_Number.png" with a y-axis labeled "SPD_Catalog_Number" and an x-axis labeled "SPD_Catalog_Number". The graph shows a curve with two peaks. Below the graph is a "DOWNLOAD ALL" button and a "Go Back" link.

Instructions

Step 2b: Fix validation errors

Validation Errors to be Addressed

Please review the following errors:

- [TESTDATE] keyword is required by LUNA V1, and was not found in the submitted file. This must be resolved before a photometric image can be created.
- Intensity scaling is not allowed by LUNA V1, and the multiplier value must be 1.0. This must be resolved before a photometric image can be created.

[< Go Back](#) [Download Error Log](#)

Validation errors for .ies

Validation Errors to be Addressed

Please review the following errors:

- The uploaded file does not comply with the IESTM2714 document format and therefore cannot be used with this pre-submission tool. Please refer to the TM-27 standard and DLC supplemental documentation for more information on how to format your .spdx document.

[< Go Back](#)

Validation Errors to be Addressed

Please review the following errors:

- DocumentCreator is required by LUNA V1, and was not found in the correct location in the submitted file. This must be resolved before an SPD image can be created.

[< Go Back](#) [Download Error Log](#)


Validation errors for .spdx documents

<https://www.designlights.org/graphics-tool/common-spdx-and-ies-validation-errors/>

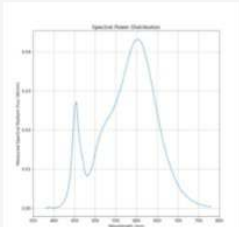
Instructions

Step 3: Download image for submission


Files successfully Processed

Session >  Apr 4, 2022 - 01:09 PM SHOW UPLOADED IES, SPDX (1)


Your Generated Files



Download image

SPD_9092174_Catalog_Number.png 

Download image and data file

DOWNLOAD ALL 

< Go Back

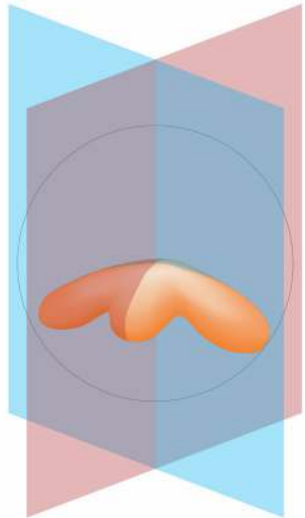


Requirements: **Distribution**



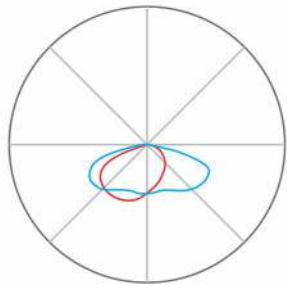
What may be different

Fixed vertical planes



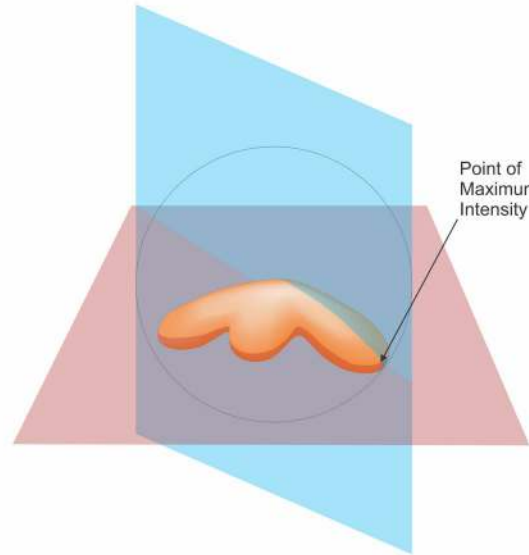
0-180 degree plane

90-270 degree plane

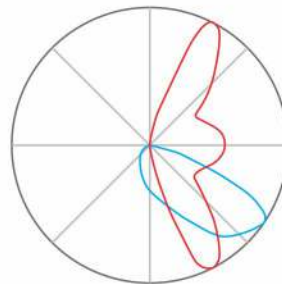


DLC:

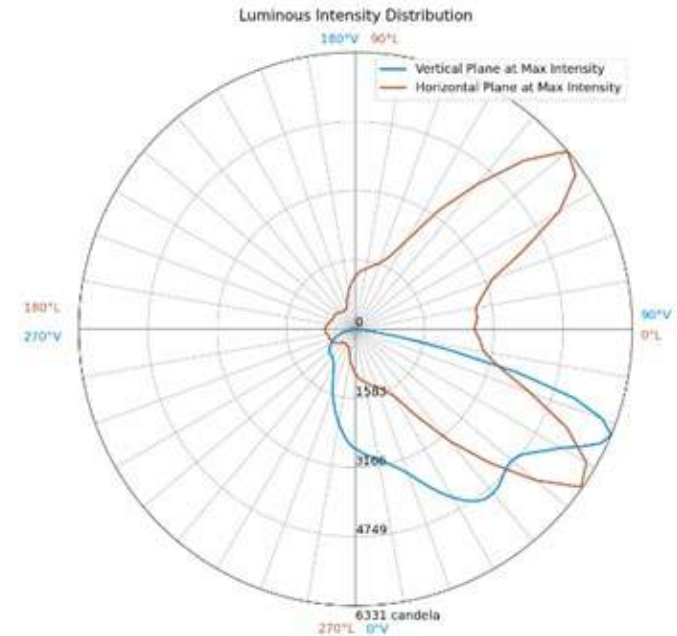
Planes through max intensity



Point of Maximum Intensity



DLC formatted image from LUNA Pre-submission Tool

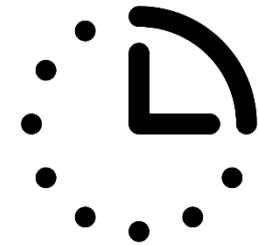


Requirements: **Controllability**



LUNA Controllability Rationale

- 1) Minimize sky glow and light trespass flexibly throughout the night
- 2) Minimize lighting energy use flexibly throughout the night
- 3) Recognize circuit level controls and standalone controls as inexpensive ways to address Goals 1,2



Controllability: Overview

LUNA controllability testing and reporting requirements.

Highlights from Table 7 of the LUNA Technical Requirements.

(not required for Specialty Primary Use Designations intended for hazardous locations)

Metric	LUNA V1 Requirements
Dimming Capability	Continuous dimming capability to $\leq 20\%$ of maximum output power is required . Each product is required must support at least one Communication method for dimming (either wired communication for a single control point, or communication between multiple controls points)
Wired Communication for a Single Control Point	Wired Communication for a Single Control Point is reported .
Integral Controls	Capability for integral controls is reported .
Communication Between Multiple Control Points (Wired or Wireless)	The communication standard protocol is reported .

The Parameter Formerly Known as Dimming Protocol



Old

- Dimming standard protocol between driver and sensor/controller
- Communication standard protocol between luminaires and other devices

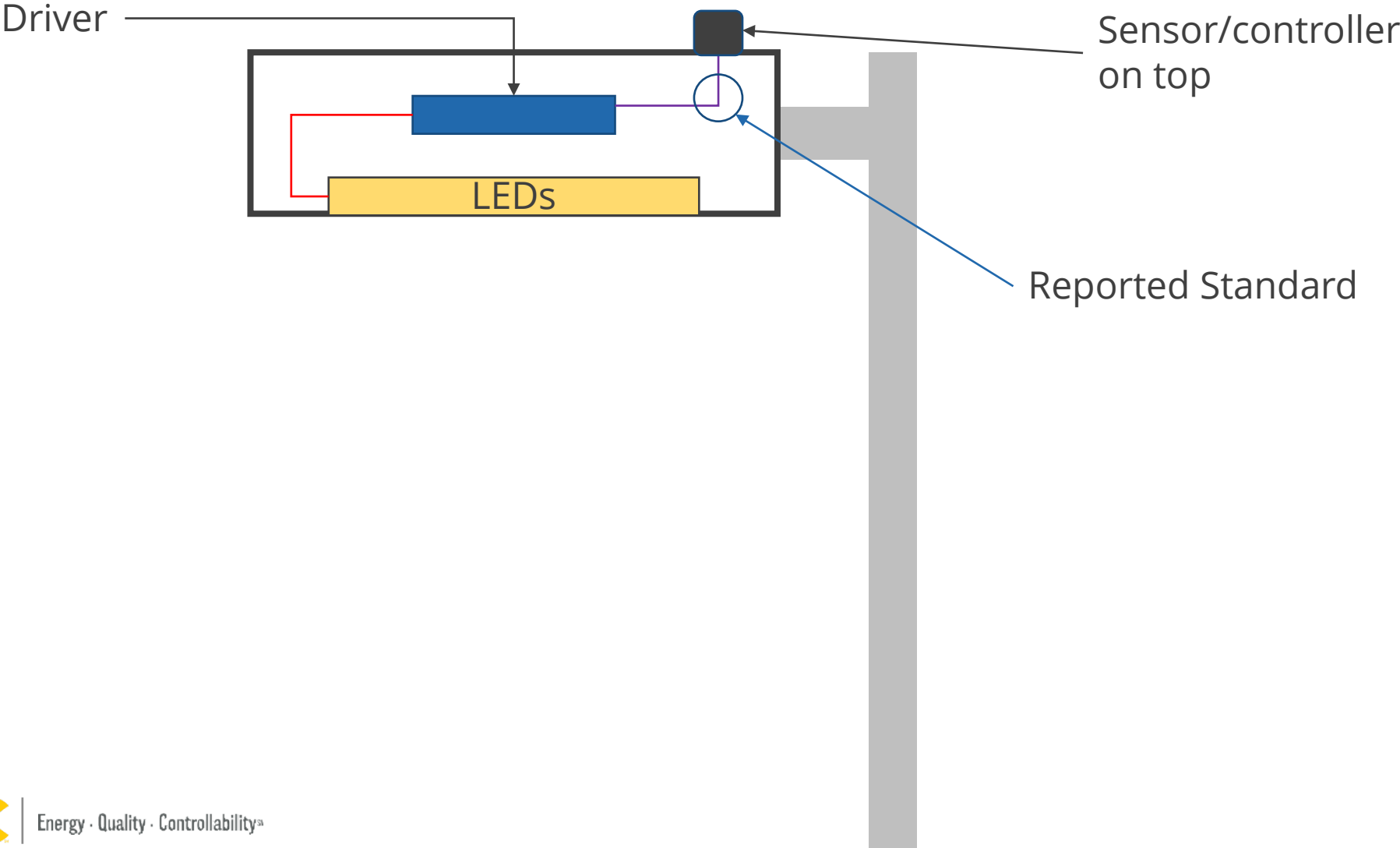
became



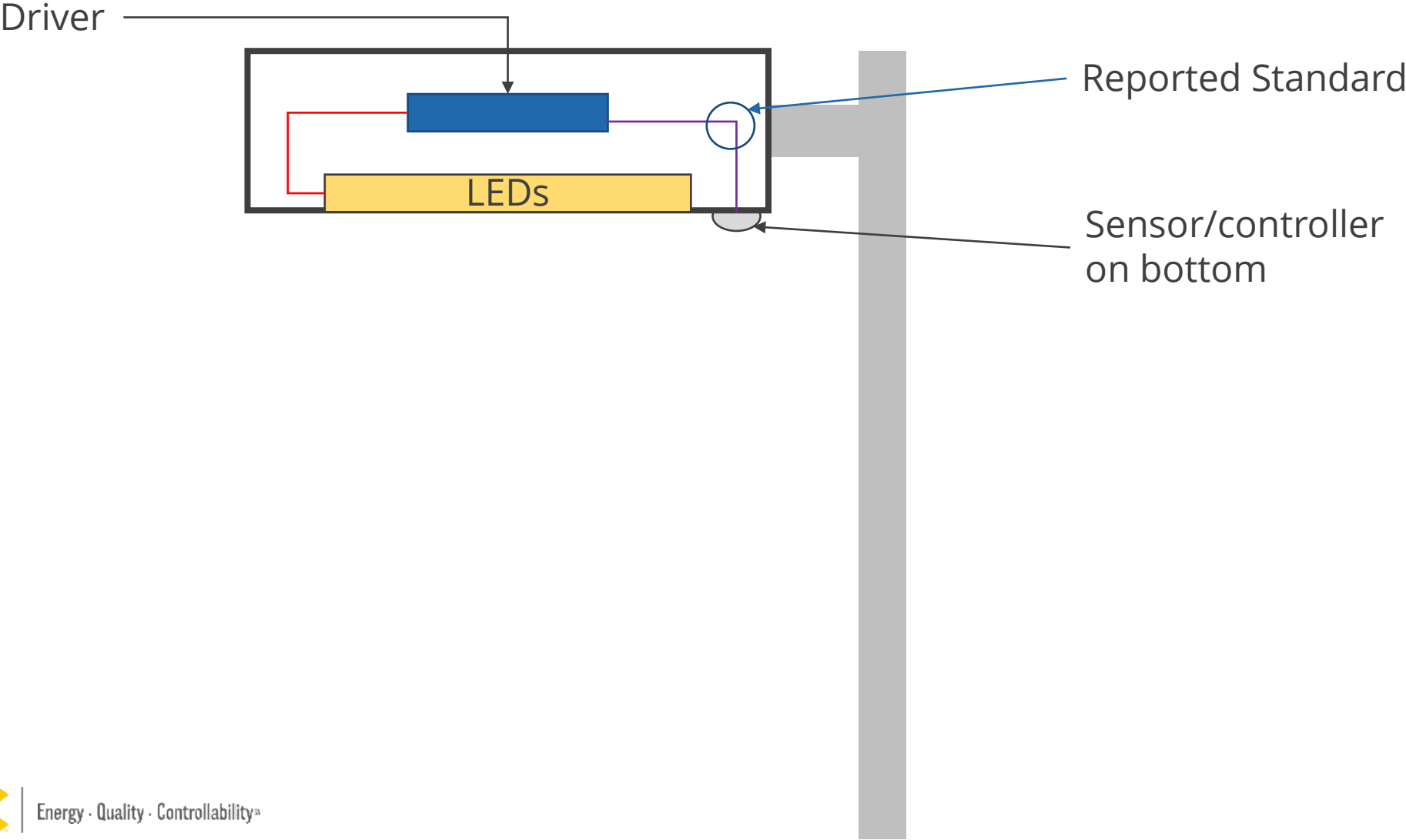
New

- Wired Communication for a Single Control Point
- Communication Between Multiple Control Points

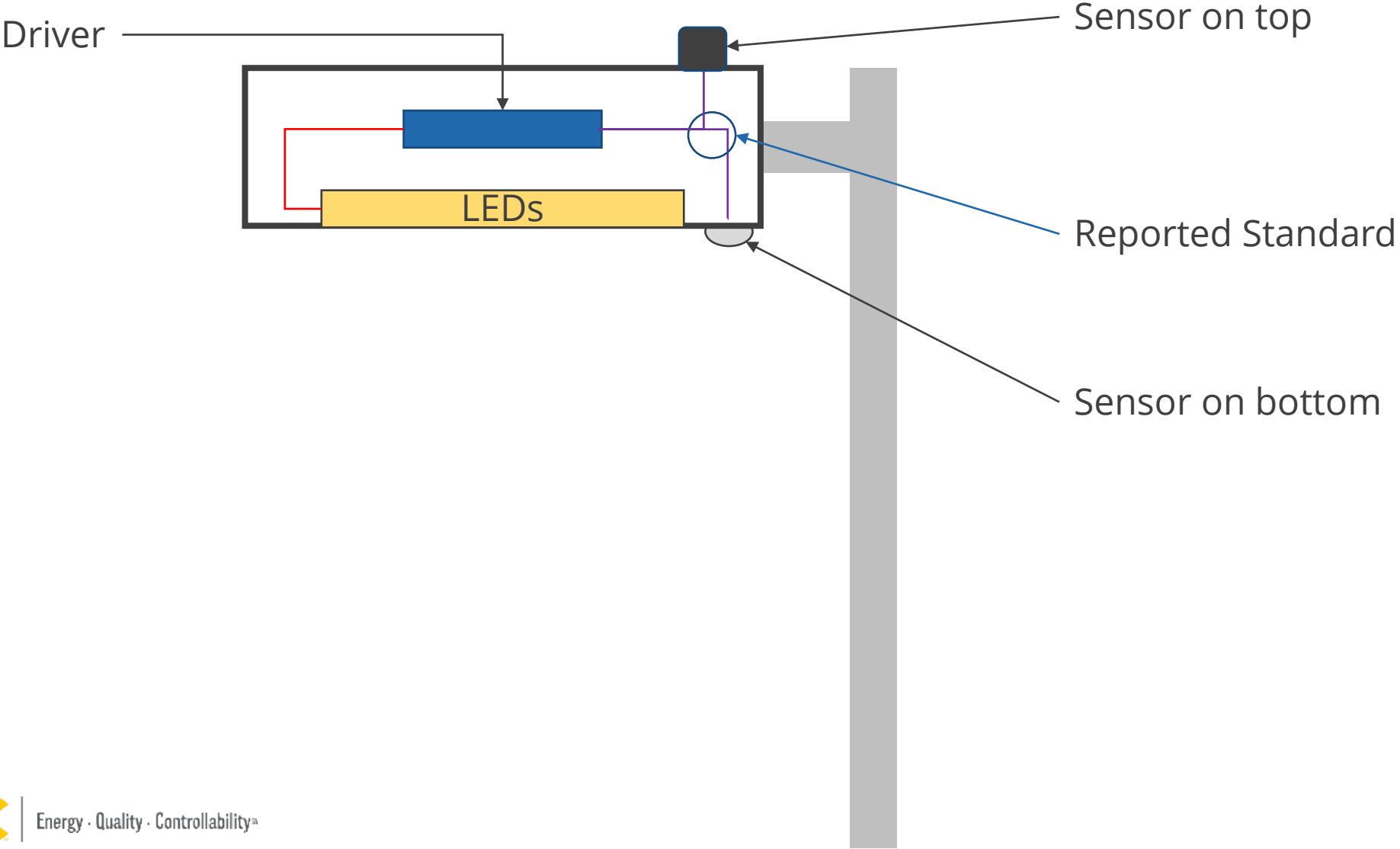
Wired Communication for a Single Control Point



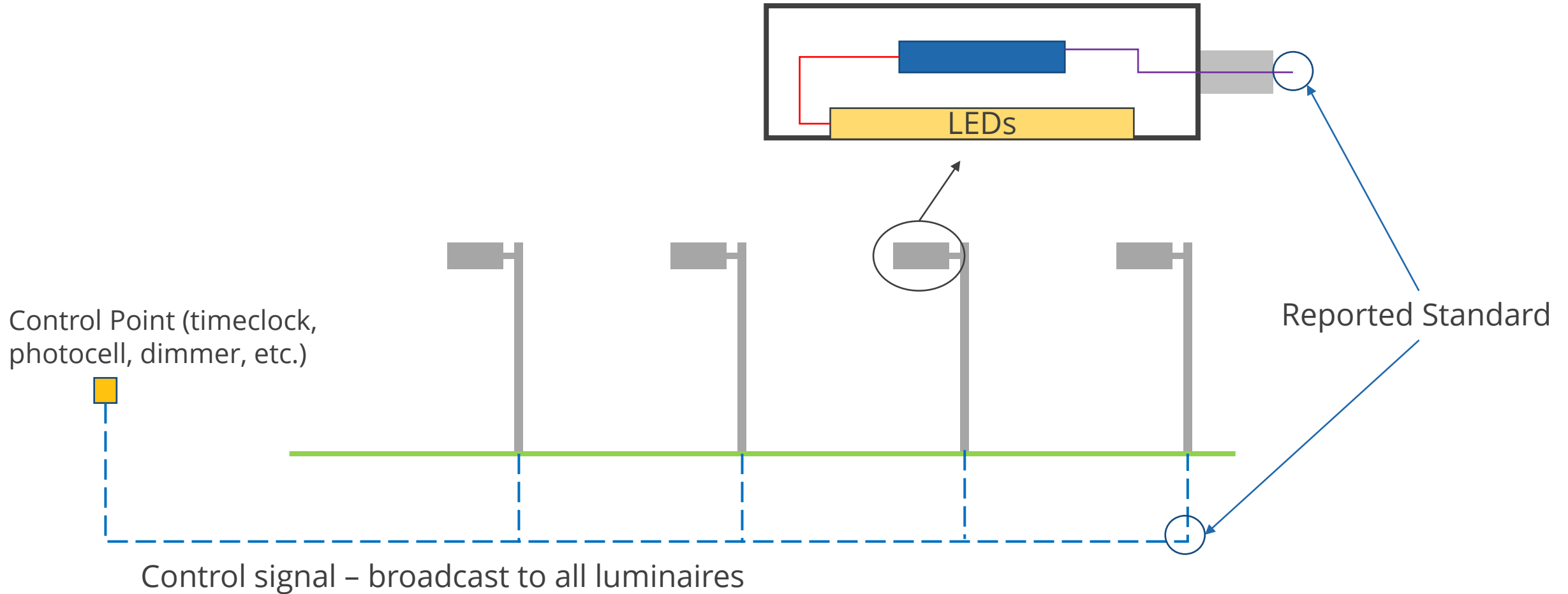
Wired Communication for a Single Control Point



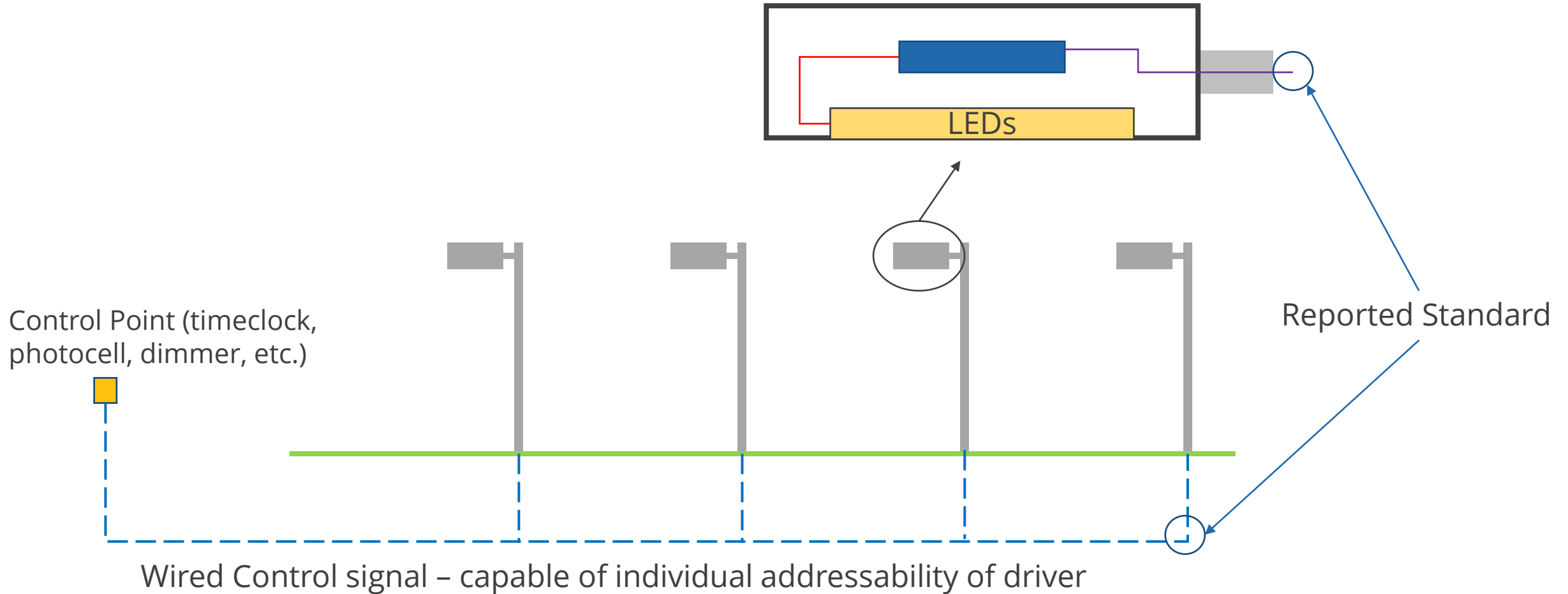
Wired Communication for a Single Control Point



Wired Communication for a Single Control Point



Communication Between Multiple Control Points



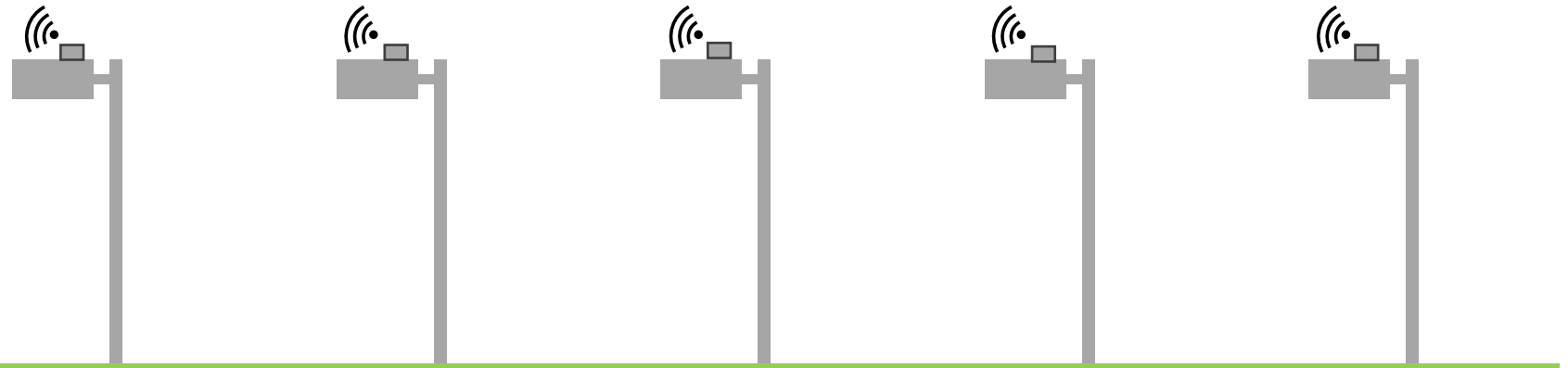
Communication Between Multiple Control Points

Wireless Control signal – capable of individual addressability of driver/controller

Reported Standard



Control Point (timeclock, photocell, dimmer, etc.)



Wired Communication for a Single Control Point is Reported.

From Table 7 of the LUNA Technical Requirements

Metric	LUNA V1 Requirements
Dimming Capability	Continuous dimming capability to $\leq 20\%$ of maximum output power is required . Each product is required must support at least one Communication method for dimming (either wired communication for a single control point, or communication between multiple control points)
Wired Communication for a Single Control Point	Wired Communication for a Single Control Point is reported .
Integral Controls	Capability for integral controls is reported .
Communication Between Multiple Control Points (Wired or Wireless)	The communication standard protocol is reported .

- Wired, Analog

0-10V IEC 60929 Annex E

0-10V ANSI C137.1-2019 (8-Volt)

0-10V ANSI C137.1-2019 (9-Volt)

Forward Phase NEMA SSL 7A-2015 (R2021)

- Wired, Digital

DALI

DALI 2

D4i

DMX512

- Other

Communication Between Multiple Control Points is Reported

From Table 9 of the LUNA Technical Requirements

Metric	LUNA V1 Requirements
Dimming Capability	Continuous dimming capability to $\leq 20\%$ of maximum output power is required . Each product is required must support at least one Communication method for dimming (either wired communication for a single control point, or communication between multiple controls points)
Wired Communication for a Single Control Point	Wired Communication for a Single Control Point is reported .
Integral Controls	Capability for integral controls is reported .
Communication Between Multiple Control Points (Wired or Wireless)	The communication standard protocol is reported .

Table 9: Communication Between Multiple Control Points (reported capability)

Physical Medium	Standard Protocol	Acceptable Terms or Conditions
Wired	DALI	DALI, "Registered" at https://www.dali-alliance.org/products
	DALI2	DALI2, DALI-2, "Certified product" at https://www.dali-alliance.org/products
	DMX512	DMX512
	BACnet	BACnet
	LONworks	LONworks
	Modbus	Modbus
	Other (describe)	
Wireless	Bluetooth Mesh	
	<ul style="list-style-type: none"> BLE MDP v2 	Bluetooth SIG mesh version 2, BLE SIG mesh v2
	<ul style="list-style-type: none"> BLE SIG Mesh v1.x 	Bluetooth SIG mesh version 1, BLE SIG mesh v1
	<ul style="list-style-type: none"> BLE Proprietary 	Bluetooth mesh, BLE mesh, Product listing at https://launchstudio.bluetooth.com/Listings/Search
	Cellular	
	<ul style="list-style-type: none"> 4G 	4G, IMT-2000, LTE Advanced, IEEE 802.16m
	<ul style="list-style-type: none"> 5G 	5G, 3GPP 5G NR, IMT-2020
	EnOcean	EnOcean, Product listing at https://www.enocean-alliance.org/products/
	Wi-Fi	Wi-Fi, WiFi, IEEE 802.11, Wi-Fi Certified, Product listing at https://www.wi-fi.org/product-finder
	Zigbee Certified Product	Zigbee Certified Product, Product listing as "Zigbee Certified Product" at https://zigbeealliance.org/product_type/certified_product/
	Zigbee 3.0	Zigbee 3.0
	Zigbee Proprietary	Zigbee
	Other (describe)	

Control Filters

DLC FIND PRODUCTS ABOUT US OUR WORK RESOURCES NEWS & EVENTS JOIN US MyDLC

DLC Qualified Product Lists > Solid State Lighting

You have 0 saved items

Listed Products ▾

- SSL Technical Requirements Version (+)
- LUNA Technical Requirements Version (+)
- Classification (+)
- Category (+)
- General Application (+)
- Primary Use Designation (+)
- Manufacturer (+)
- Brand (+)
- Tested Performance Criteria (+)
- Reported Performance Criteria (+)
- Distribution and Glare Criteria (+)
- Control Features (+)**
- LUNA Specific Control Features (+)

RESET FILTERS

Search by model, manufacturer, brand, product ID, or family ID

Search Tip: For an exact search, use quotes around the search term (ex. "PV05LXDK"). [View additional search tips](#)

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

Displaying 1-25 of 10,000+ results

[Add All Results to My List](#)

Showing top 2,500 returned results.
Grey shaded rows indicate parent products, which include tested data.

EFH1-02-[0,1,2,3,4,5,D,E]-30-66-7-30-X-X-XX-XXXX-XXXXXX <input type="checkbox"/> Add to my list [Excluding V1 Option]	
Manufacturer: GE Current, a Daintree company Brand: GE Lighting Evolve	Primary Use: Architectural Flood and Spot Luminaires Product ID: PIZSE0T2
EFH1-02-[0,1,2,3,4,5,D,E]-55-66-7-27-X-X-XX-XXXX-XXXXXX <input type="checkbox"/> Add to my list [Excluding V1 Option]	
Manufacturer: GE Current, a Daintree company Brand: GE Lighting Evolve	Primary Use: Architectural Flood and Spot Luminaires Product ID: PW13JJ1J
EFH1-02-[0,1,2,3,4,5,D,E]-35-65-7-50-X-X-XX-XXXX-XXXXXX <input type="checkbox"/> Add to my list [Excluding V1 Option]	
Manufacturer: GE Current, a Daintree company Brand: GE Lighting Evolve	Primary Use: Architectural Flood and Spot Luminaires Product ID: PYSX8W3T
EFH1-02-[0,1,2,3,4,5,D,E]-55-76-7-30-X-X-XX-XXXX-XXXXXX <input type="checkbox"/> Add to my list [Excluding V1 Option]	
Manufacturer: GE Current, a Daintree company Brand: GE Lighting Evolve	Primary Use: Architectural Flood and Spot Luminaires Product ID: P7C0PKL7

Existing Control Filters in SSL V5.1

Control Features

For LUNA specific controllability features see LUNA filter panel below

Dimming Capacity and Range

- Continuous Dimming To 10% Or Below
- Continuous Dimming Above 10%
- Stepped Dimmable
- Not Dimmable

SSL V5 Wireless Communication Protocol

- Zigbee
- Bluetooth
- Wi-Fi

SSL V5 Wired Communication Protocol

- 0-10V Analog
- DALI
- DMX
- Phase Cut
- Other Wired Communication Protocol
- No Wired Communication Protocol

Sensor Type

- Daylight Sensing
- Occupancy Sensing
- Traffic Sensing
- Multifunction Sensor
- Exterior Photocell
- Sensor Receptacle
- No Sensor

(Continued from previous column)

Integral Control Capability

- Energy Monitoring
- Networked Replacement Lamp
- High End Trim
- LLLC
- Integral Control Capability

Field-Adjustable

- Field Adjustable Light Distribution
- Field Adjustable Light Output
- Not Field Adjustable

Color-Tunable

- White-Tunable
- Warm-Dimming
- Not Color-Tunable

Integral Controls

- Available With Integral Controls
- Doesn't Have Integral Controls

LUNA Specific Control Features

RESET FILTERS

New LUNA Specific Control Filters

From LUNA Technical Requirements Table 7

From LUNA Technical Requirements Table 8

LUNA Specific Control Features

For V5.1 control options please see the control features panel above

Minimum Dimming Level %

0 - 20

Wired Communication for a Single Control Point, e.g. a circuit of luminaires all at one dim level

- Analog - 0-10V IEC 60929 Annex E
- Analog - 0-10V ANSI C137.1 (8V)
- Analog - 0-10V ANSI C137.1 (9V)
- Analog - Fwd Phase NEMA SSL 7A
- Digital - DALI
- Digital - DALI-2
- Digital - D4i
- Digital - DMX512
- Other

Integral Controls Receptacle Standard

- NEMA (ANSI C136.41) 5-Pin
- NEMA (ANSI C136.41) 7-Pin
- Zhaga Book 18 (ANSI C136.58)
- Other

Additional LUNA Integral Control Capabilities

- Part Night Dim
- Photocontrol With Self-Calibrating Astronomic Time Clock
- Low-End Trim For Vacancy Mode

(Continued from previous column)

Wireless Communication Between Multiple Control Points, e.g. Between Luminaires

- Bluetooth Mesh: BLE MDP V2
- Bluetooth Mesh: BLE Sig Mesh V1
- Bluetooth Mesh: BLE Proprietary
- Cellular: 4G
- Cellular: 5G
- En-Ocean
- Wi-Fi
- Zigbee Certified Product
- Zigbee 3.0
- Zigbee Proprietary
- Other

Wired Communication Between Multiple Control Points, e.g. Between Luminaires

- DALI
- DALI-2
- DMX512
- BACnet
- LONworks
- Modbus
- Other

From LUNA Technical Requirements Table 9

RESET FILTERS



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How New LUNA Capabilities Appear on the SSL Qualified Products List

PRODUCT INFORMATION	
PRODUCT CATEGORIZATION	VIEW DETAILS
PRODUCT CAPABILITIES	VIEW DETAILS
REPORTED PHOTOMETRIC PERFORMANCE	VIEW DETAILS
REPORTED ELECTRICAL PERFORMANCE	VIEW DETAILS
TESTED PHOTOMETRIC PERFORMANCE	VIEW DETAILS
TESTED ELECTRICAL PERFORMANCE	VIEW DETAILS
PHOTOMETRIC IMAGES AND FILES	VIEW DETAILS
VERSION HISTORY	VIEW DETAILS



PRODUCT CATEGORIZATION		VIEW DETAILS
PRODUCT CAPABILITIES		
Integral Controls	Yes	
Dimming Capability and Range	Continuous Dimming above 10%	
Integral Control Capability	No Control Capability	
Sensor Type	Exterior Photocell, Sensor Receptacle, Occupancy Sensing	
SSL V5 Wired Communication Protocol	0-10V Analog, DALI	
SSL V5 Wireless Communication Protocol	No Wireless Protocol	
Field Adjustable Light Output	No	
White-Tunable	Yes	
Warm-Dimming	Yes	
Field Adjustable Light Distribution	No	
Wired Communication for a Single Control Point	0-10V ANSI C137 (9V)	
Wired Communication Between Multiple Control Points	DALI, DALI-2, DMX655	
Wireless Communication Between Multiple Control Points	BLE MDP v2, BLE Proprietary, Zigbee Certified Product, Zigbee 3.143	
Integral Control Receptacle Standard	NEMA 7-pin	
Minimum Dimming Level	14.4 %	
REPORTED PHOTOMETRIC PERFORMANCE		VIEW DETAILS



Existing SSL Control Capabilities

New LUNA Control Capabilities

Field Adjustable Distribution Type

How New LUNA Capabilities Appear on the SSL Qualified Products List



Wired Communication for a Single Control Point	0-10V ANSI C137 (9V)
Wired Communication Between Multiple Control Points ⓘ	DALI-2
Wireless Communication Between Multiple Control Points ⓘ	BLE MDP v2, BLE Proprietary, Zigbee Certified Product,
Integral Control Receptacle Standard	NEMA 7-pin
Minimum Dimming Level ⓘ	14.4 %

New LUNA Control Capabilities



How to Find Luna Products



QPL and Downloads

Search the DLC Qualified Products Lists

The DLC Qualified Products Lists are the largest verified lists of high performing and energy saving LED lighting solutions in the world. Qualified products undergo thorough vetting and review by DLC experts to ensure they meet our rigorous energy and quality requirements. Choose between solid-state lighting products, horticultural lighting products, or networked lighting controls systems below to begin your search for energy efficient lighting solutions.



Solid-State Lighting & LUNA

Search over 80 categories of indoor and outdoor commercial LED products, including options that minimize light pollution.

[Browse Qualified Products](#)

[Browse LUNA Qualified Products](#)



Horticultural Lighting

Browse the greenest horticultural lighting fixtures on the market to capture energy and cost savings for your facility.

[Browse Qualified Products](#)



Networked Lighting Controls

Find out what networked lighting controls can do for your facility while saving up to 50% more energy than LED lighting alone.

[Browse Qualified Products](#)

Downloads

DLC Qualified Product Lists are updated daily and made available to paid subscribers using the following links:

QPL

[Solid State Lighting & LUNA](#)

Downloadable Files

- [SSL - Full QPL csv](#)
- [SSL - New Listings \(Last 30 Days\) csv](#)
- [SSL - Delisted \(Last 30 Days\) csv](#)

SSL Downloads will include SSL and LUNA properties



Energy · Quality · ControllabilitySM

New LUNA Filter Panels

DLC Qualified Product Lists > Solid State Lighting

You have 0 saved items

Save Search Criteria View Saved Searches

Listed Products

SSL Technical Requirements Version

5.1
 5.0

LUNA Technical Requirements Version

1.0

Classification

Category

General Application

Primary Use Designation

Manufacturer

Brand

Tested Performance Criteria

Reported Performance Criteria

Distribution and Glare Criteria

Control Features

LUNA Specific Control Features

RESET FILTERS

Search by model, manufacturer, brand, product ID, or family ID

Search Tip: For an exact search, use quotes around the search term (ex. "PVO5LXDK"). [View additional search tips](#)

Prev 1 2 3 4 5 6 7 Next

Displaying 1-25 of 173 results

Add All Results to My List

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

AAF SSL 20220329_133	<input type="checkbox"/> Add to my list
Manufacturer: DLC Brand: Feldman Flux	Primary Use: Outdoor Full-Cutoff Wall-Mounted Area Luminaires Product ID: S-PMKBZC
AAF SSL 20220329_159	<input type="checkbox"/> Add to my list
Manufacturer: DLC Brand: Feldman Flux	Primary Use: Fuel Pump Canopy Luminaires Product ID: S-TYL04A
AAF SSL 20220329_21	<input type="checkbox"/> Add to my list
Manufacturer: DLC Brand: Feldman Flux	Primary Use: Fuel Pump Canopy Luminaires Product ID: S-3O7610
AAF SSL 20220329_53	<input type="checkbox"/> Add to my list
Manufacturer: DLC Brand: Feldman Flux	Primary Use: Outdoor Pole/Arm-Mounted Area and Roadway Luminaires Product ID: S-9DVY4A
AAF SSL 20220329_15	<input type="checkbox"/> Add to my list
Manufacturer: DLC Brand: Feldman Flux	Primary Use: Fuel Pump Canopy Luminaires Product ID: S-2MB07Y
AAF SSL 20220329_05	<input type="checkbox"/> Add to my list
Manufacturer: DLC Brand: Feldman Flux	Primary Use: Outdoor Pole/Arm-Mounted Area and Roadway Luminaires Product ID: S-12S9QV

Filter for LUNA products

Filter for LUNA controls

New Product Display Page

New LUNA Logo for Standard and Premium



Product ID: S-PMKBZC

DLC LISTED
DLC LUNA

AAF SSL 20220329_133
Manufacturer: DLC
Brand: Feldman Flux

PRODUCT OVERVIEW	
Classification	Standard
Primary Use	Outdoor Full-Cutoff Wall-Mounted Area Luminaires
Reported Input Wattage	20 W
Reported Light Output	10000 lm
Reported CCT	2700 K
Reported CRI (Ra)	80
Product ID	S-PMKBZC
DLC Family Code	YHJFXQ
Listing Status	Listed
Date Qualified	2022-03-25

PRODUCT INFORMATION	
Qualified Product List	Solid State Lighting
Technical Requirements Version	5.1
LUNA Technical Requirements Version	1.0
Product ID	S-PMKBZC
Manufacturer	DLC
Brand	Feldman Flux
Model Number	AAF SSL 20220329_133

PRODUCT CATEGORIZATION	VIEW DETAILS
PRODUCT CAPABILITIES	VIEW DETAILS
REPORTED PHOTOMETRIC PERFORMANCE	VIEW DETAILS
REPORTED ELECTRICAL PERFORMANCE	VIEW DETAILS
TESTED PHOTOMETRIC PERFORMANCE	VIEW DETAILS
TESTED ELECTRICAL PERFORMANCE	VIEW DETAILS
PHOTOMETRIC IMAGES AND FILES	VIEW DETAILS

LUNA Technical Req

New LUNA Images

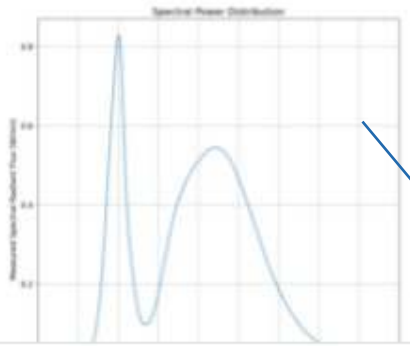
LUNA Photometric Files & Images

For PARENT products

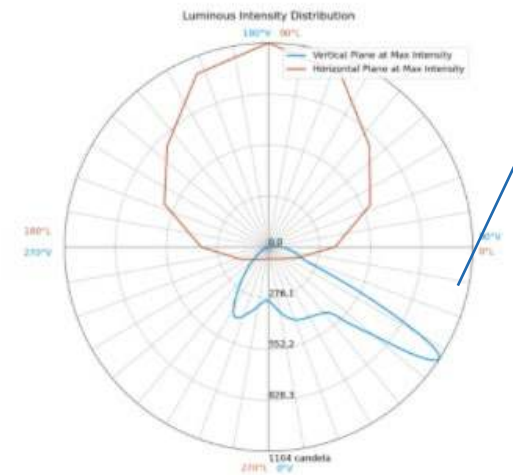
PHOTOMETRIC IMAGES AND FILES

SPDX File [Download File](#)

Spectral Power Distribution Image



Luminous Intensity Distribution Image ⓘ



Downloadable SPDX File (TM-27)
Please ensure to remove confidential information

Images generated on myDLC portal by submitters on website and uploaded to portal during submission

Click on Images to Enlarge

For CHILD products

PHOTOMETRIC IMAGES AND FILES

Associated Spectral Power Distribution Parent ⓘ	S-E6C10D
Associated Luminous Intensity Distribution Parent ⓘ	S-T0MZDO

Fees and Review Timelines



Review Timeframes

- LUNA reviews will have a longer processing time than Non LUNA
- LUNA reviews will have 5 business days added to review time

Application Type	Application Version	Initial Review	Comprehensive Review
Level 1 (formerly Single Product)	V5.1	9 Business Days	7 Business Days
Level 1 (formerly Single Product)	LUNA	14 Business Days	12 Business Days
Level 2 (formerly Family Grouping)	V5.1	9 Business Days	10 Business Days
Level 2 (formerly Family Grouping)	LUNA	14 Business Days	15 Business Days
Private Label	V5.1	--	12 Business Days**
Product Updates*	V5.1	9 Business Days	10 Business Days

Application Fees

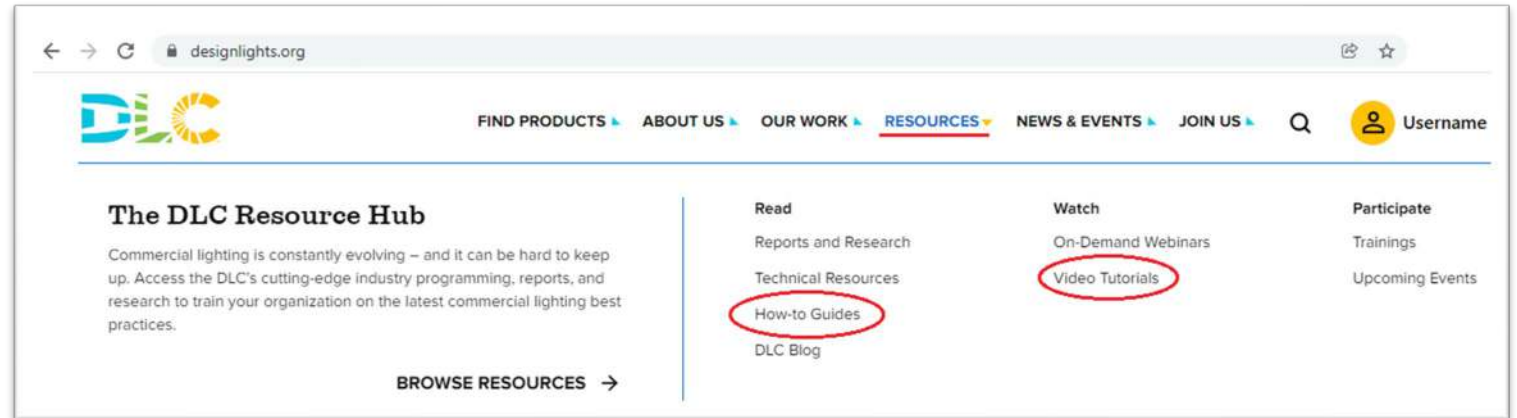
- **For LUNA applications,** in addition to the Single Product Application (LEVEL 1) fee:
 - **\$375** for each additional independent test report (ITR) included in the LUNA application
 - **\$50** for each product qualified as LUNA
- **For Family Grouping (LEVEL 2) LUNA applications,**
 - **\$375** for each additional independent test report (ITR) included in the LUNA application
 - **\$50** for each product qualified as LUNA
- **For PL LUNA applications,**
 - **\$325** for each Single Product Application (Level 1) fee or independent test report (ITR) included in the original application. Note that driver ISTMT reviews charged for the Premium classification count as an ITR.
 - **\$30** for each additional family member in the product group.
 - **\$50** for each product qualified as LUNA.

Resources Available



Resources Available

- Slides and recorded webinar will be **posted** on the *DLC website* www.designlights.org shortly after today's presentation
- Videos to assist with the portal transition will be located in the Resource Hub under How to Guides



Find LUNA Requirements at designlights.org "OUR WORK"



FIND PRODUCTS ▾

ABOUT US ▾

OUR WORK ▾

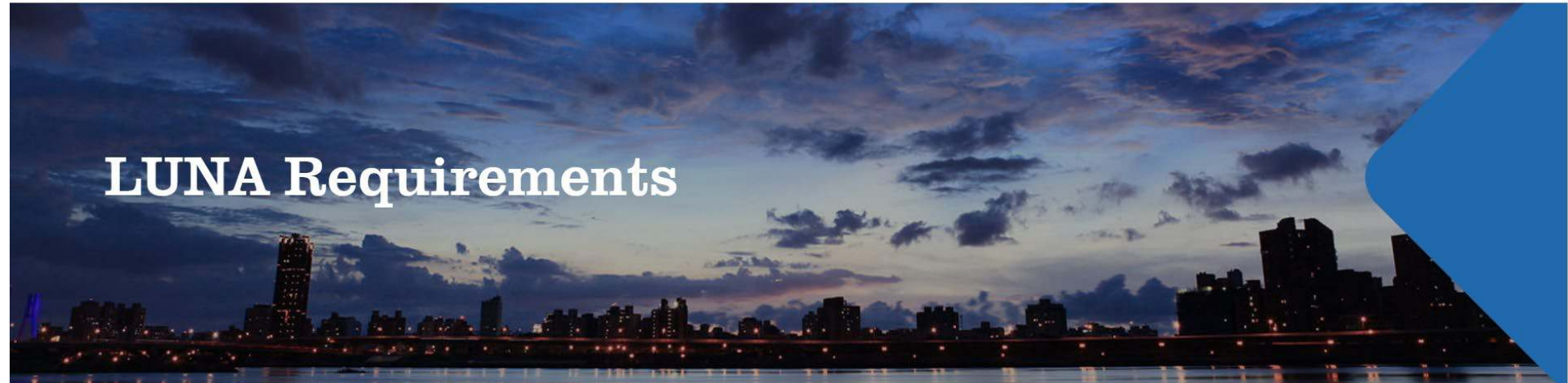
RESOURCES ▾

NEWS & EVENTS ▾

JOIN US ▾



MyDLC



Addressing Light Pollution Alongside Energy Savings

The DLC's LUNA requirements establish criteria for using the highest quality outdoor lighting at night – lighting that minimizes light pollution, provides appropriate visibility for people, and limits negative impacts to the environment. In addition to the benefits that appropriate lighting can provide to our outdoor environment, there are also energy savings to be



Light pollution unnecessarily contributes to climate change.

[WHY LUNA? →](#)

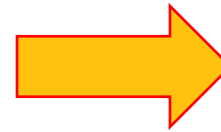
Question and Answer



Webinar Logistics

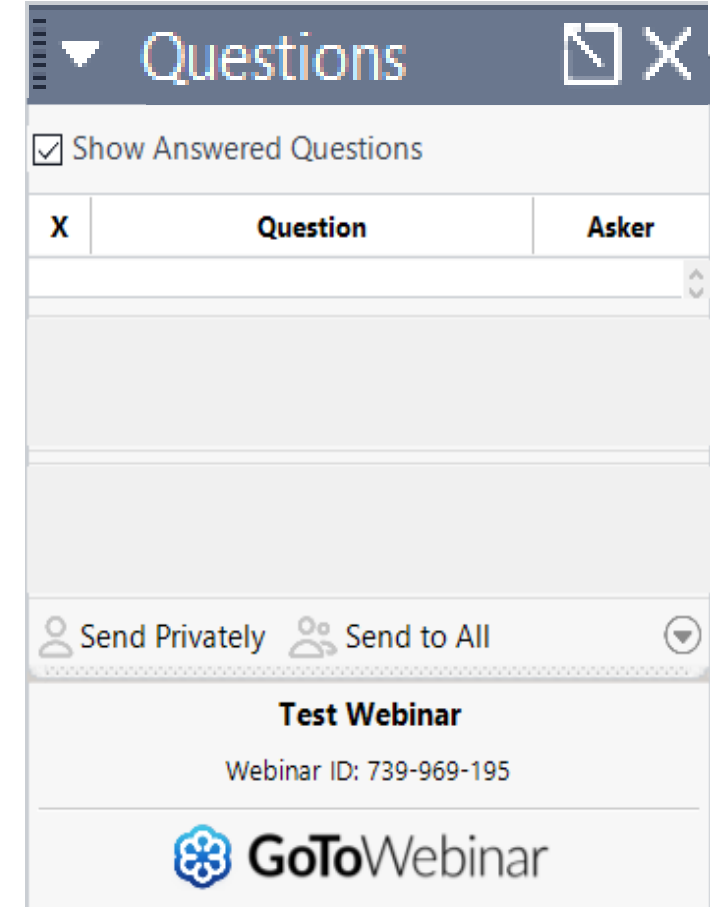
Please enter your questions in the Questions pane in GoToWebinar.

- Some questions answered in the Questions Pane
- Some questions answered aloud (anonymously) at the end during the Q&A session



All attendees are automatically muted

If you experience technical issues, please use the chat pane to let us know





THANK YOU.

**Questions: please email us at
applications@designlights.org!**



DLC SUMMIT '22

May 24, 2022 • Boston, MA

Aloft Boston Seaport

LIGHTING THE PATH TO A DECARBONIZED FUTURE

KEY TOPICS:

- Driving energy and financial savings in buildings and outdoor environments while reducing environmental impact
- Addressing stakeholder needs and overcoming barriers to adoption
- Applying a systems approach to new versions of the DLC technical requirements

WHEN:

Welcome Reception May 23rd 4-6:00 pm

DLC Summit Meeting May 24th 8:30 am-5:00 pm

WHERE:

[Aloft Boston Seaport District](#)



Register by May 1st for Early Bird Rate!
designlights.org/events/2022-dlc-summit-meeting

