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Installation Instructions
lumenfacade™ inground

Part 2
Optical Chamber

INSTALLATION INSTRUCTIONS
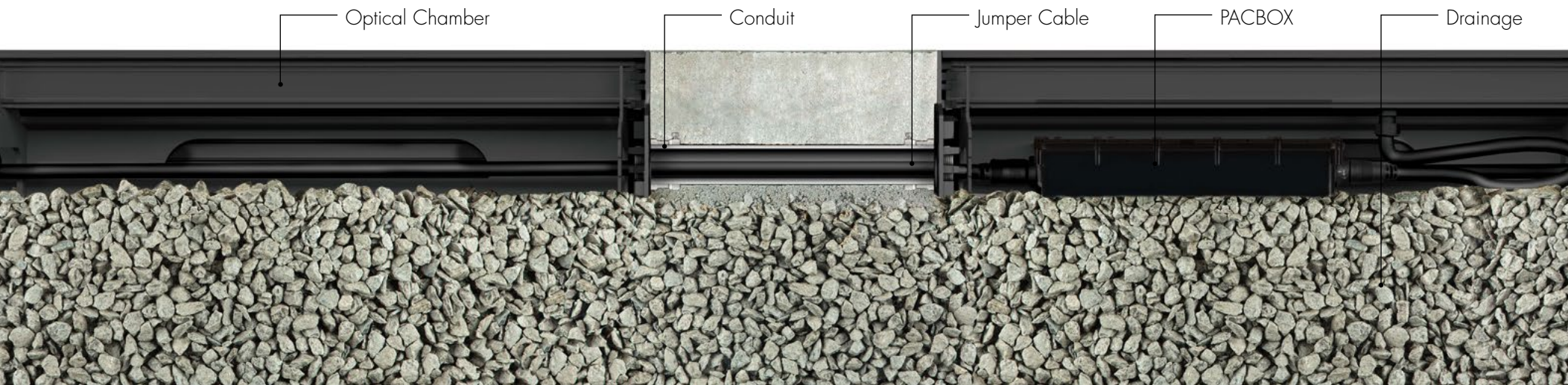
drawing number 117633

Typical Completed Installation

lumenfacade™

Inground
Optical Chamber Installation

Optical Chamber   Conduit   Jumper Cable   PACBOX   Drainage

Easy Installation

With the Lumenfacade Inground, we believe we've created the first truly stress-free, installation-friendly inground luminaire. Using an innovative plug and play technique, the luminaire removes uncertainty and risk from the installation process, allowing easy, tool-free connection.

Nothing is set in stone!

A unique feature allows the luminaire to be reversed for onsite reorientation.

The luminaire can only be released by means of a unique Lumenpulse™ key tool.

Reversible IP68 optical chamber

lumenbin™, a proprietary binning method, guarantees color temperature consistency within a 3-step MacAdam ellipse.

lumentalk™ **lumenear**™ Combine lumentranslator with Lumentalk-enabled luminaires housing Lumenpulse's proprietary lumenear control card to build your Lumentalk system.

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INSTALLATION INSTRUCTIONS

drawing number 117633
Step by Step Overview

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Inground
Optical Chamber Installation

4 Easy Steps

Remove Blockout Temporary Cover

1

Inspect Cables, Connectors, Blockout, Optical Chamber and Optical Chamber Power Cable

2

Connect PACBOX and Optical Chamber

3

Slide the PACBOX and Optical Chamber into position

4

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INSTALLATION INSTRUCTIONS

drawing number 117633
Installation Checklist

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Inground
Optical Chamber Installation

Each step must be completed to ensure proper installation of the optical chamber

1. Associate the PACBOX with its optical chamber by referring to the information on the labels (refer to page 10).

2. Inspect the PACBOX and optical chamber components to ensure they are not damaged (fixture cord, connectors and housings).

3. Remove blockout cover (refer to page 8).

4. Clean the inside of the blockout, the mounting tracks and the clips (refer to page 9).

5. Inspect leader and jumper cables to ensure they are not damaged.

6. Connect PACBOX and optical chamber. Place PACBOX cover side up in the blockout. Ensure sealing cap is installed on every unused connector (refer to page 11).

7. Clip the optical chamber in place in the blockout. Ensure that the PACBOX is not positioned directly under the fixture's cord entry point.

8. Ensure the optical chamber is inserted properly across the full length of the blockout and that it is level.

9. The Certificate of Installation must be completed, signed and returned by the installing contractor to Lumenpulse immediately upon completion of the installation of lumenfacade inground products. Failure to return the Certificate of Installation, duly completed and signed, shall void the standard 5-year limited warranty."

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INSTALLATION INSTRUCTIONS

drawing number 117633

Table of Contents

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Inground
Optical Chamber Installation

1.

2.

1. Optical chamber
2. Installation blockout

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INSTALLATION INSTRUCTIONS

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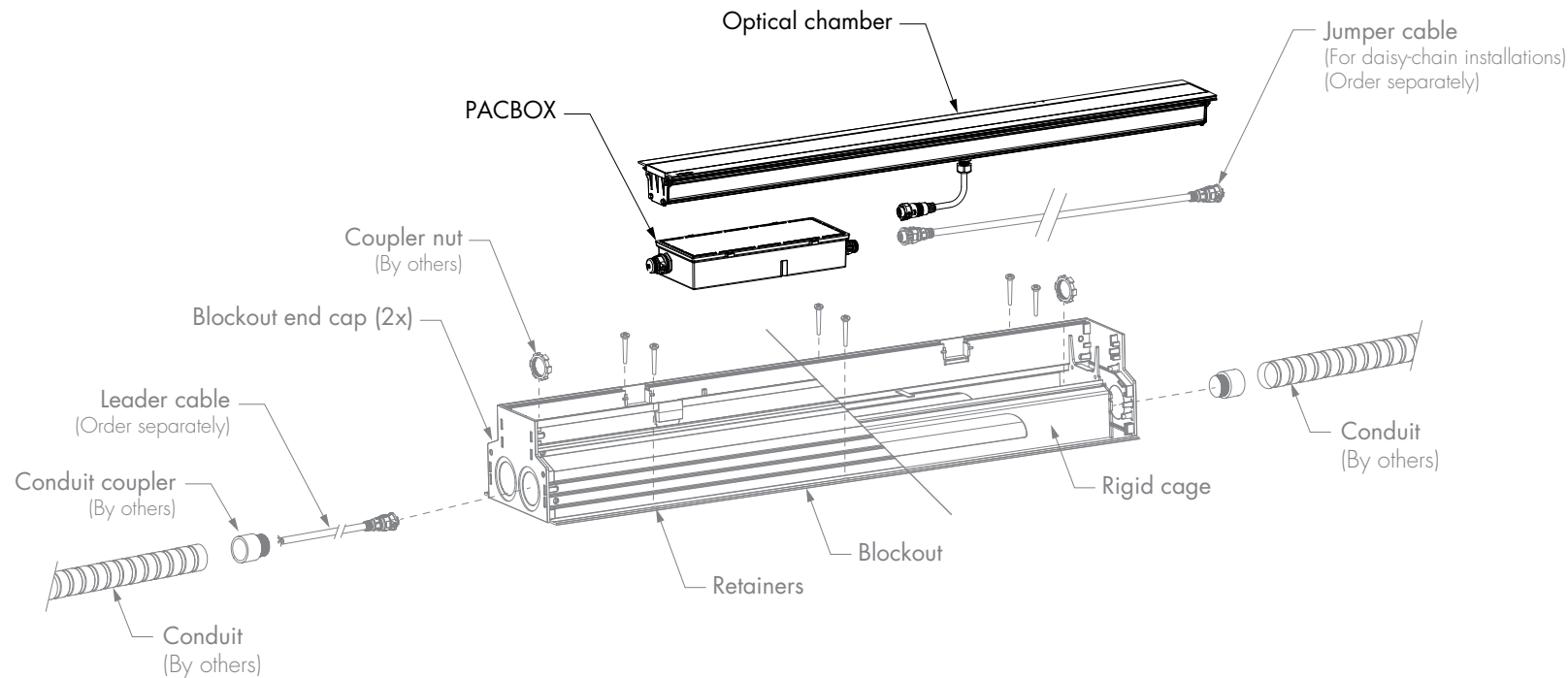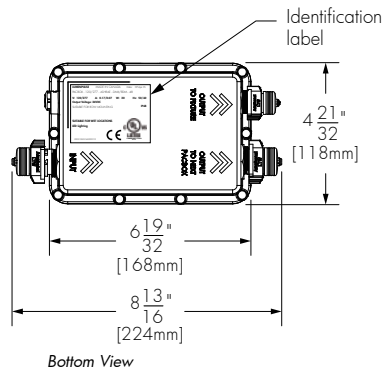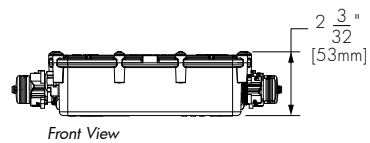
Bill of Materials : Exploded View

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Inground
Optical Chamber Installation

Typical installation with leader cable
Exploded view

For information only. Do not disassemble blockout on site.

Optical chamber

Jumper cable
(For daisy-chain installations)
(Order separately)

PACBOX

Coupler nut
(By others)

Blockout end cap (2x)

Leader cable
(Order separately)

Conduit
(By others)

Conduit coupler
(By others)

Rigid cage

Blockout

Retainers

Conduit
(By others)

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drawing number 117633

PACBOX and Optical Chamber Overview

Inground
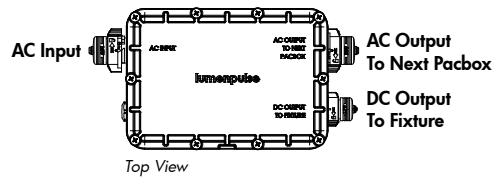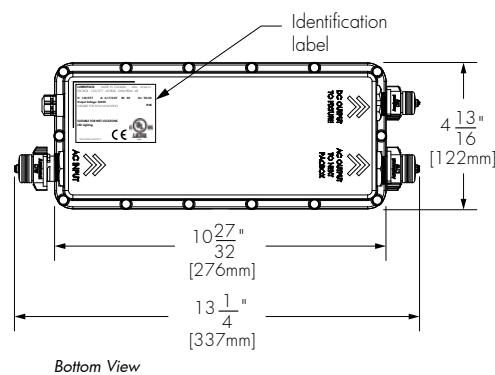Optical Chamber Installation

PACBOX20
(20 Watts)
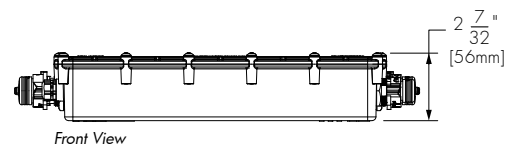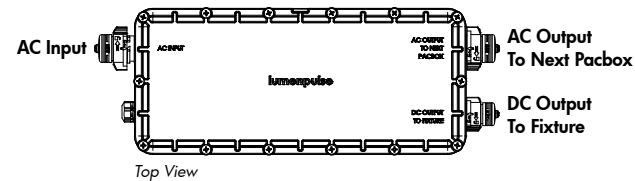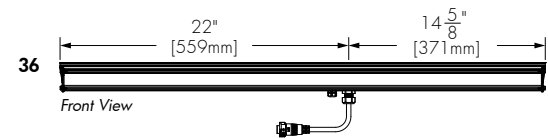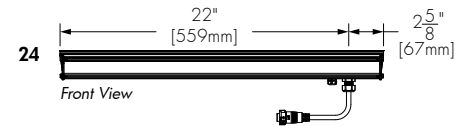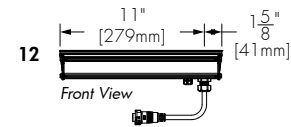
AC Input

AC INPUT

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AC OUTPUT TO NEXT PACBOX

DC OUTPUT TO FIXTURE

AC Output To Next Pacbox

DC Output To Fixture

Top View

$2\frac{3}{32}$" [53mm]

Front View

Identification label

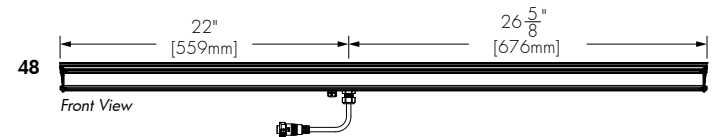$4\frac{21}{32}$" [118mm]

$6\frac{19}{32}$" [168mm]

$8\frac{13}{16}$" [224mm]

Bottom View

PACBOX40/PACBOX60/PACBOX90
(40, 60, 90 Watts)

AC Input

AC INPUT

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AC OUTPUT TO NEXT PACBOX

DC OUTPUT TO FIXTURE

AC Output To Next Pacbox

DC Output To Fixture

Top View

$2\frac{7}{32}$" [56mm]

Front View

Identification label

$4\frac{13}{16}$" [122mm]

$10\frac{27}{32}$" [276mm]

$13\frac{1}{4}$" [337mm]

Bottom View

Optical Chamber

12

11" [279mm]

$1\frac{5}{8}$" [41mm]

Front View

24

22" [559mm]

$2\frac{5}{8}$" [67mm]

Front View

36

22" [559mm]

$14\frac{5}{8}$" [371mm]

Front View

48

22" [559mm]

$26\frac{5}{8}$" [676mm]

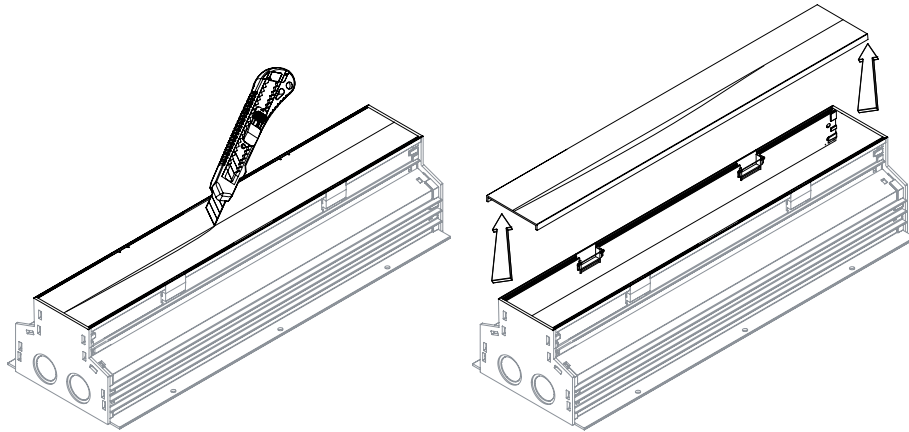*Front View*

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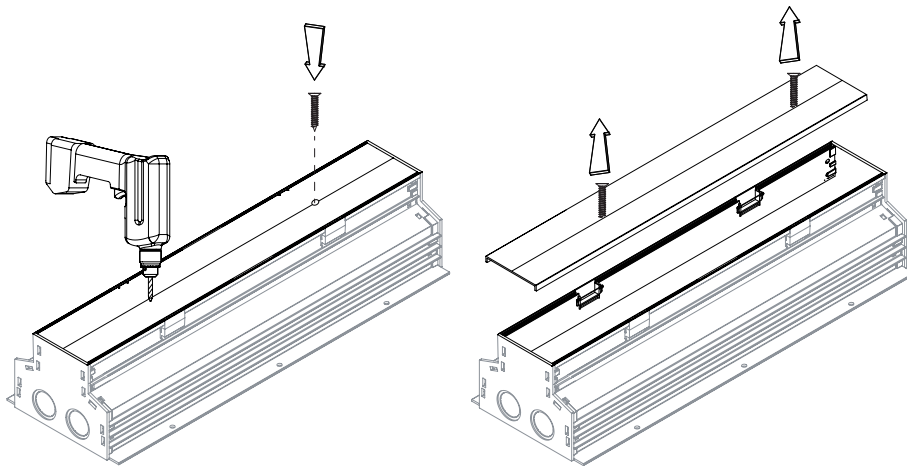**lumenpulse**™

STEP 1 : Remove Blockout Temporary Cover

Option A. Using a Knife

Remove Blockout Cover Using a Knife:

- Use knife to create an opening in the temporary cover.

- Pull cover out.

Option B. Using Screws

Remove Blockout Cover Using Screws:

- Use a drill to insert screws into the cover.

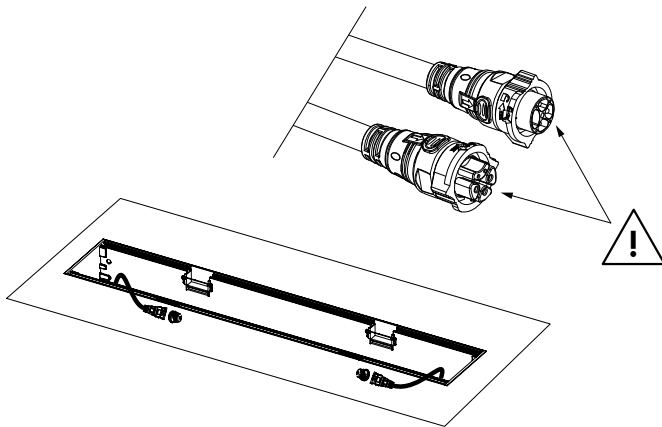- Use the screws as a pivot and pull the cover out of the blockout.

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STEP 2 : Inspect Cable, Connectors and Blockout
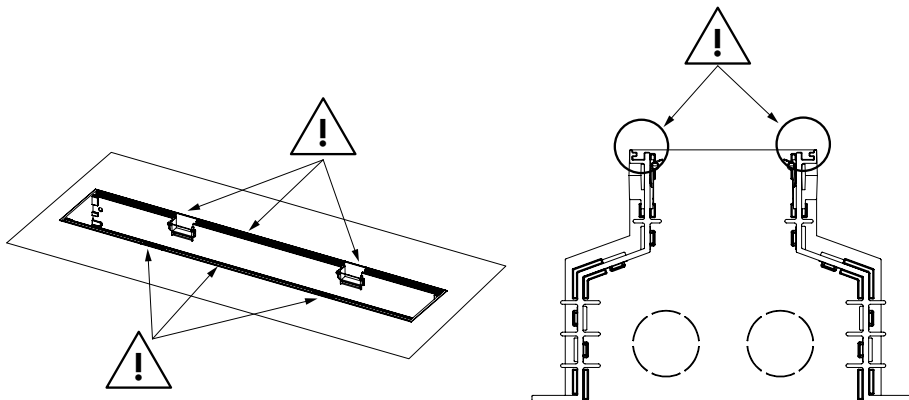
2.1 Inspect Cables and Connectors

What to Inspect:

- Remove connectors' sealing caps.

- Inspect connectors to ensure they are clean.

- Do not use if damaged.

2.2 Inspect Blockout

What to Inspect:

- Inspect mounting track all along the top of the blockout.

- Inspect clip slots on both sides of the blockout.

- Remove any accumulated cement or dirt to ensure proper installation and locking of the optical chamber.

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INSTALLATION INSTRUCTIONS

PACBOX and Optical Chamber Cross Reference Chart

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Inground
Optical Chamber Installation

⚠ Warning

Optical chambers must be associated with their PACBOX according to the combination of output/color - control - length. Consult product labels on each component to locate this information. Mismatching the optical chamber and PACBOX might damage both components.

The PACBOX must be binded to the optical chamber for all DMX/RDM applications. Use the binding feature of the LumenID V3 software's "Tech Mode" to complete the process. Mismatching the optical chamber and PACBOX might damage both components.
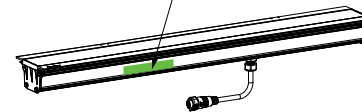Consult factory for support 1.877.937.3003 or 1. 617.307.5700.

Optical Chamber Configuration		Optical Chamber Length	Optical Chamber Wattage Consumption	PACBOX Wattage			
				20W	40W	60W	90W
White Light (24V)	ASHRAE	1 ft	4.2W	●			
		2 ft	8.4W	●			
		3 ft	12.6W	●			
		4 ft	16.8W	●	●*		
	RO	1 ft	7.5W	●			
		2 ft	15W	●	●*		
		3 ft	22.5W		●		
		4 ft	30W		●		
	HO	1 ft	15W	●			
		2 ft	30W		●		
		3 ft	45W			●	
		4 ft	60W				●
Color Changing Dynamic White (15V or 12V)	RGB (15V) DWH (15V) DWW (15V)	1 ft	15W	●			
		2 ft	30W		●		
		3 ft	45W			●	
		4 ft	60W			●	
	RGBW (12V) RGBA (12V)	1 ft	15W	●			
		2 ft	30W		●		
		3 ft	45W			●	
		4 ft	60W			●	●*
Direct View (24V)	White Light	1 ft	4.2W	●			
		2 ft	8.4W	●			
		3 ft	12.6W	●			
		4 ft	16.8W	●			
	RGB	1 ft	5W	●			
		2 ft	10W	●			
		3 ft	15W	●	●*		
		4 ft	20W		●		

*Lumentalk control option only.

Label Details

Optical Chamber Typical Product Label

LUMENPULSE   MADE IN CANADA   Date: 07-Apr-16
LOIC-ASHRAE-24V-48-30K-10X10-TS5-INTL-DMX/RDM-ASL

V: 24   A: 0.83   W: 20   IP68

SUITABLE FOR CONTINUOUS ROW MOUNTING   IK10

SUITABLE FOR WET LOCATIONS
LED Lighting   E332675
III
DMX: 1
051012D7
UL LISTED LOW VOLTAGE LIGHTING SYSTEM 47VS

PACBOX Typical Product Label

LUMENPULSE   MADE IN CANADA   Date: 07-Apr-16
PACBOX - 120/277 - ASHRAE - DMX/RDM - 48

V: 120/277   A: 0.17/0.07   W: 20   Hz: 50/60
Output Voltage: 24VDC
SUITABLE FOR ROW MOUNTING   IP68

SUITABLE FOR WET LOCATIONS
LED Lighting
3DE9CB82-GA000010
UL LISTED LUMINAIRE FITTING 4CT3

PACBOX Warning Labels Located on Top of the Box (2x per PACBOX)

⚠ CAUTION / ATTENTION
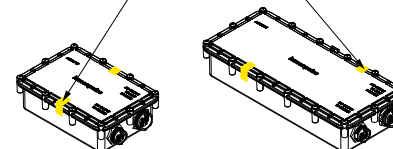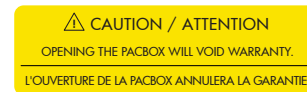OPENING THE PACBOX WILL VOID WARRANTY.
L'OUVERTURE DE LA PACBOX ANNULERA LA GARANTIE.

PACBOX20 (20 Watts)   PACBOX40/PACBOX60/PACBOX90 (40, 60, 90 Watts)

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1220 Marie-Victorin Boulevard, Longueuil (Quebec) Canada J4G 2H9   1.877.937.3003 P. 514.937.3003 F. 514.937.6289
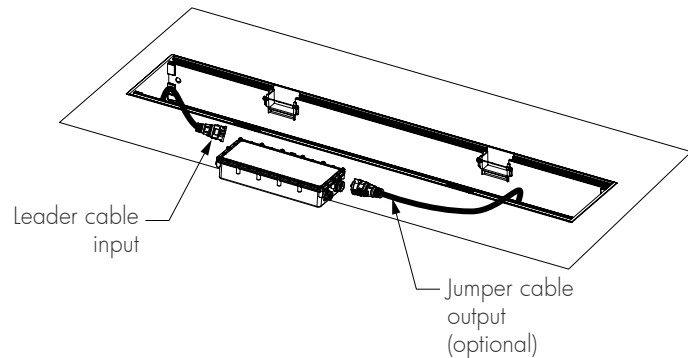info@lumenpulse.com **www.lumenpulse.com**

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STEP 3 : Connect PACBOX and Optical Chamber

3.1 Connect PACBOX


Leader cable input

Jumper cable output (optional)

Make PACBOX Connections:

- Connect leader cable to PACBOX input. Follow indications on the PACBOX cover.

- For daisy-chain configuration, connect jumper cable to PACBOX output. Follow indications on the PACBOX cover.

- To secure connections, align the arrows on the cable connector and the PACBOX connector.

- Push in place. Clicking sound will occur when properly connected.

- Pull on the connections to ensure proper locking.

- To unlock, press on connector wing-nut, turn 1/4 counterclockwise and pull.

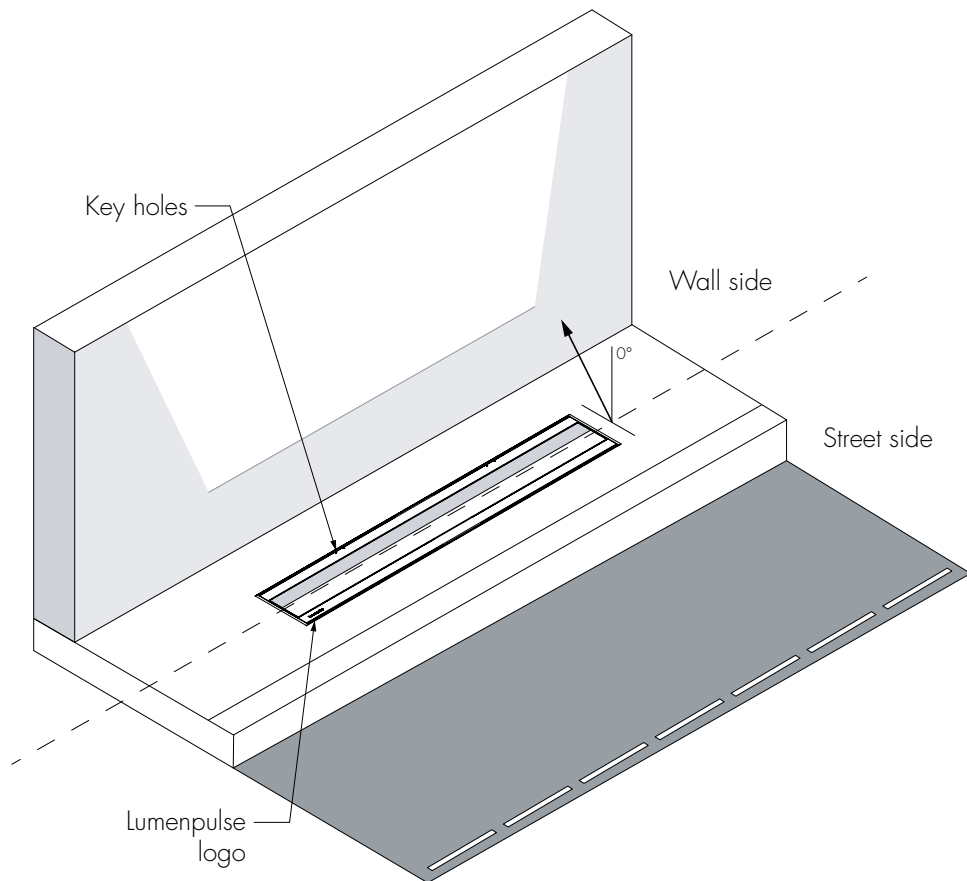### 3.2 Connect Optical Chamber
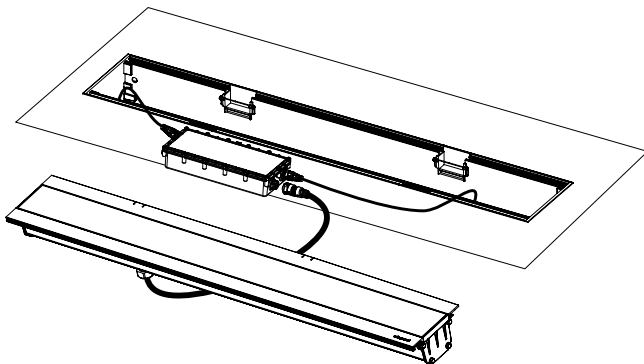
3.3 Verify Sealing Cap
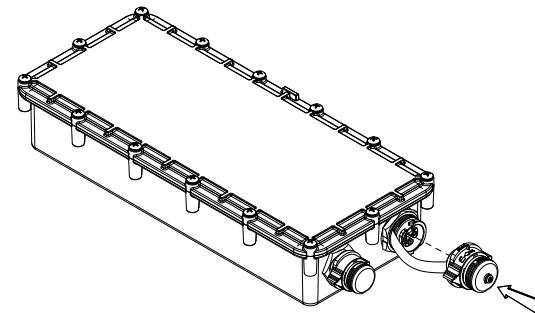
- Make sure all unused PACBOX connectors have sealing caps.

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STEP 4 : Install Optical Chamber

4.1 Define Optical Chamber Orientation

Key holes

Wall side

0°

Street side

Lumenpulse logo

Orient Optical Chamber:

- Identify the wall side, or the target surface to light (see diagram)

- Orient the optical chamber:

    - Key holes towards the wall side

    - Frosted section of lens towards the wall side

    - Lumenpulse logo always readable from the street side

Did you know?

The blockout is perfectly symmetrical: the optical chamber can be rotated 180 degrees without having to modify the blockout installation.

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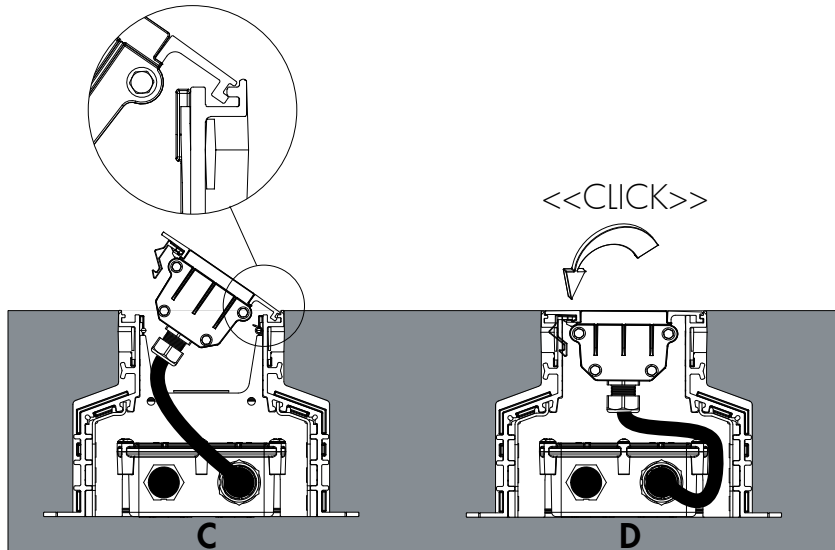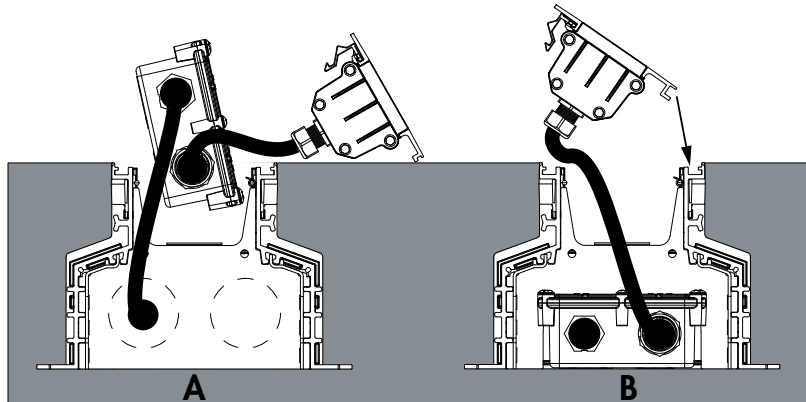
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STEP 4 : Install Optical Chamber

⚠ Warning

Don't forget to complete the LOI Certificate of Installation on the last page and return the certificate to Lumenpulse to activate the warranty.

4.2 Finalize PACBOX and Optical Chamber Installation

Install PACBOX and Optical Chamber in Blockout:

A. Once all connections are made, insert PACBOX in blockout. Lay it flat at the bottom of the blockout with the cover facing up.

B. Ensure the PACBOX is not directly under the optical chamber power cable.

C. Insert the optical chamber flange in the blockout mounting slot.

D. Pivot the optical chamber in place to close assembly.

E. Make sure optical chamber is secured in place and flush with the ground.

⚠ Warning
Do not position PACBOX directly under the fixture cord.

Optical chamber
Fixture cord
PACBOX
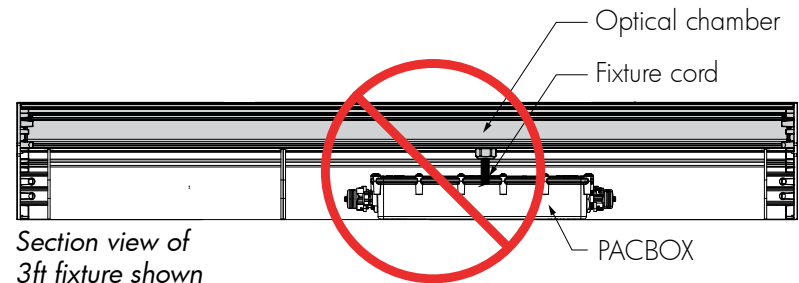
Section view of 3ft fixture shown

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INSTALLATION INSTRUCTIONS

drawing number 117633
Warnings

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Inground
Optical Chamber Installation

⚠ Warning

This product must be installed in accordance with applicable national and local electrical and construction codes by a person familiar with the construction and operation of the product and the hazards involved.

Failure to comply with the installation instructions may result in death or serious injury and will void warranty.

⚠ Warning

Do not exceed product specified fixture voltage.

⚠ Warning

Do not install if fixture, parts or connectors are damaged.

⚠ Warning

The blockout is walk-over compliant up to 500kg, self-supported, and up to 1000kg, concrete-supported. To meet 1000kg walk-over resistance requirements, concrete must support 100% of the exterior surfaces of the blockout.

⚠ Warning

Failure to provide adequate draining installation will void warranty.

⚠ Warning

Storage temperature range for blockout parts is -20°C to 50°C (-10°F to 122°F). Avoid UV exposure.

⚠ Warning

Separation of field installed power limited circuit (dimming/control) wiring from the branch circuit in the outlet box are to be made in accordance with local and/or national electrical installation codes.

⚠ Warning

Lumenfacade inground is not suitable for areas with high concentrations of pesticides. Highly corrosive compounds may also affect the fixture's integrity. Do not install in environments where petroleum-derived products may get in contact with the fixture.

⚠ Warning

Lumenfacade inground is not suitable for marine applications. Do not install within 100ft (30m) of the coast.

⚠ Caution

Optical chamber and PACBOX must never be opened. Unauthorized repair or modification will void warranty.
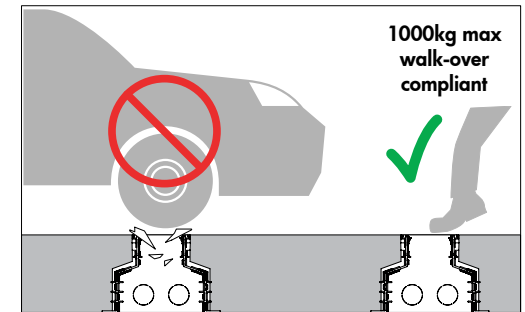
1000kg max walk-over compliant

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LOI Certificate of Installation

THIS CERTIFICATE OF INSTALLATION MUST BE COMPLETED, SIGNED AND RETURNED BY THE INSTALLING CONTRACTOR TO LUMENPULSE IMMEDIATELY UPON COMPLETION OF THE INSTALLATION OF LUMENFACADE INGROUND PRODUCTS. **FAILURE TO RETURN THIS CERTIFICATE OF INSTALLATION, DULY COMPLETED AND SIGNED, SHALL VOID THE STANDARD 5-YEAR LIMITED WARRANTY** WITH REGARD TO THE LUMENFACADE INGROUND PRODUCTS SHIPPED PURSUANT TO THE SALES ORDER INDICATED BELOW.

THIS CERTIFICATE IS AVAILABLE ONLINE AT: www.lumenpulse.com/support/loi-installation-certificate

This certificate of installation attests that the Lumenfacade Inground products manufactured by Lumenpulse and shipped pursuant to the following sales order were installed by the undersigned installing contractor as per the products' installation instructions provided in shipment with the products:

Sales order number: _____

In accordance with the Lumenpulse Terms and Conditions, a duly completed and signed certificate of installation must be returned to Lumenpulse in order for the Lumenfacade Inground products shipped pursuant to the above-mentioned sales order to be covered by the Lumenpulse standard 5-year limited warranty set forth in the Lumenpulse Terms and Conditions available at: www.lumenpulse.com/support/terms-and-conditions

Certificates of installation may be returned as follows:

- Online at: www.lumenpulse.com/support/loi-installation-certificate

- PDF emailed to: Team-InsideSales@lumenpulse.com

- Paper copy mailed to:

  · **Lumenpulse Group Inc.** - Inside Sales
    1220 Marie-Victorin Blvd.
    Longueuil, Quebec
    J4G 2H9 CANADA

  · **Lumenpulse Group Inc.** - Inside Sales
    10 Post Office Square, Suite 900
    Boston, Massachusetts
    02109 UNITED STATES

  · **Lumenpulse Group Inc.** - Inside Sales
    19 Vivienne Street
    75002 Paris
    FRANCE

  · **Lumenpulse Group Inc.** - Inside Sales
    11/13 Weston Street, Unit no 13.3.2
    London
    SE1 3ER UNITED KINGDOM

Signed this_____ day of_____ , 20 ____

Signature: _____

Name and title of signatory: _____

If installing contractor is a company, full legal name of company: _____

Address of installing contractor: _____

_____