Specification Sheet

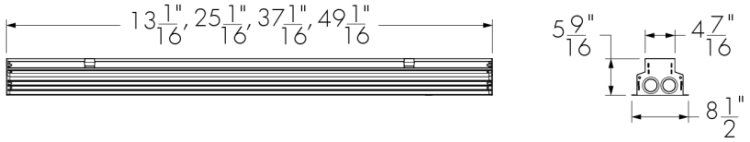
lumenfacade
Inground Direct View
LOID

WHITE AND STATIC COLORS

Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____

Top view



Front and side views

Photometric Summary

Delivered output (lm)	Intensity (peak cd)
810	316

Based on 4000K, 4ft [1219mm] configuration.
Photometric performance is measured in compliance with IESNA LM-79-08.

Optics

Direct view

Colors and Color Temperatures

2200K 2700K 3000K 3500K 4000K

Red Green Blue

Controls

ON/OFF 0-10V DALI

lumentalk DMXrdm EcoSystem Enabled

Ratings

IP68 IK10

Certifications

cULus CE RoHS 5 YEARS

Description

The Lumenfacade Inground Direct View is an LED luminaire designed for ground-recessed lighting applications, including asymmetric wall washing, grazing, and linear wayfinding. An innovative, plug and play design simplifies installation, protecting the system from water infiltration and ensuring long-lasting performance. Featuring second generation LED technology, the Lumenfacade Inground is available in four different sizes (12 in, 24 in, 36 in or 48 in), with a wide choice of outputs, color temperatures, color-mixing systems, optics and controls. A unique asymmetric wallwash distribution is also available, providing exceptional uniformity and brightness for walls and signage.

Features

Construction	Walk over compliant up to 500 kg in any type of ground, Walk over compliant up to 1000 kg in concrete
Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Length (nominal)	12 in, 24 in, 36 in, 48 in
Optics	Direct view
Options	Anti-slip lens, CE (certification covers European Economic Area)
Power Consumption	5 W/ft, Typically 20% higher for 12 in fixture lengths
Warranty	5-year limited warranty

Performance

Color Consistency	2 SDCM, 3 SDCM (2200K)
Color Rendering	Minimum CRI 80
Lumen Maintenance	L70 280,000 hrs, L95 35,000 hrs

Physical

Optical Chamber Material	Aluminum
Blockout Material	Polymer recycled PVC reinforced with a stainless steel frame

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Trim Material	Anodized aluminum
Lens Material	Frosted glass
End Cap Material	Die cast aluminum
Hardware Material	Stainless steel
Weight	12 in: 7.5 lbs, 24 in: 15.3 lbs, 36 in: 21.4 lbs, 48 in: 27 lbs

Electrical and control

Voltage	120 to 277 volts
Fixture Cable	Power and data in one cable
Leader Cable Conductor	5C #16-5
Connectors	IP68 push-lock
Control	On/Off control, Lumentalk, 0-10V dimming, DALI dimming, Lutron® EcoSystem® Enabled dimming, DMX/RDM enabled
Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-bit or 16-bit

Environmental

Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP68 rated for up to 1 ft, not suitable for permanent immersion applications
Impact Resistance Rating	IK10

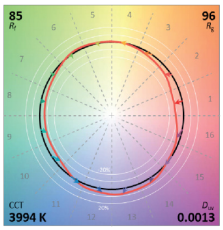
Accessories (order separately)

Cables	Lumenfacade Inground Leader Cable, Lumenfacade Inground Jumper Cable
Electrical Accessories	Lumenfacade Inground Junction Box
Control Boxes	DMX/RDM enabled (daisy chain or star configuration), Ethernet enabled (daisy chain or star configuration)
Control Systems	Lumentone™ 2 (LTN2), Pharos® kit (PHAROS)
Diagnostic and Addressing Tools	LumenID (LID), LumentalkID

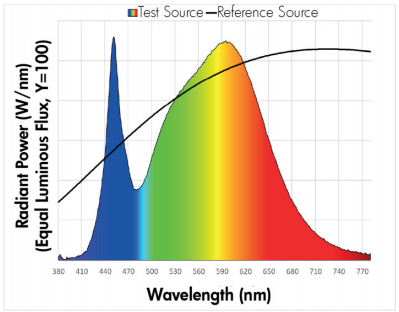
Chromaticity Data

TM-30 - 4000K

CCT	CIE		TM-30	
4000K	R_a	83	85	R_f
	R_9	14	96	R_g



Spectral Power Distribution



Cables (order separately)

LOILC - Leader cable for Lumenfacade Inground

LOILC-**CERTIFICATION-LENGTH**

Please specify:
CERTIFICATION: UL or CE; **LENGTH**: 10 ft, 25 ft or 50 ft

- Suitable for dimming/data and non-dimming applications.
- Consult Lumenfacade Inground leader cable specification sheet for details.

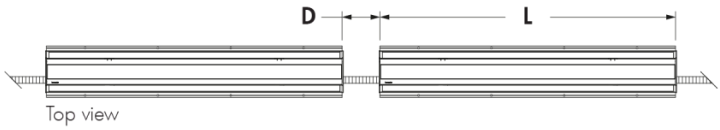
LOIJC - Jumper cable for Lumenfacade Inground

LOIJC-**CERTIFICATION-LENGTH**

Please specify:
CERTIFICATION: UL or CE; **LENGTH**: 2 ft, 4 ft or 10 ft

- Suitable for dimming/data and non-dimming applications.
- Consult Lumenfacade Inground jumper cable specification sheet for details.

Jumper cable length selection



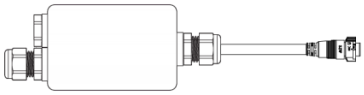
D - distance between two fixtures
L - length of fixture

Add the length of one fixture to the distance between two fixtures: L + D. Order the next longest jumper cable available: 2 ft, 4 ft or 10 ft.

Example: if the distance between two 4 ft fixtures is 0.5 ft, L + D = 4.5 ft, therefore a 10 ft jumper cable is required.

Electrical accessories (order separately)

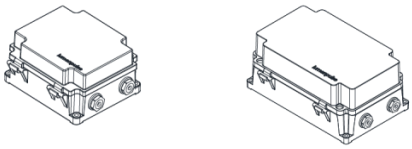
LOI-JBOX - Lumenfacade Inground Junction Box



Lumenfacade Inground IP68 sealed junction box starter kit. Use for stand alone fixtures and/or first of run installations. The LOI-JBOX accessory does not fit in 12 in fixtures.

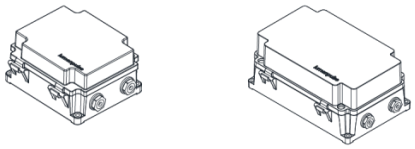
Control boxes (order separately)

CBX-DMX/RDM - DMX/RDM enabled (daisy chain or star configuration)



DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for daisy chain configuration, 6x for star configuration), consult factory to order spares.

CBX-ENET - Ethernet enabled (daisy chain or star configuration)



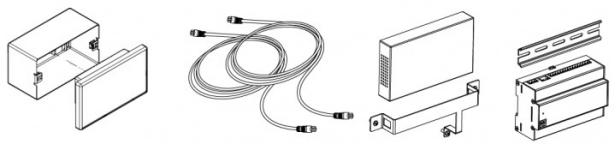
Ethernet control box. Up to four power and data outputs to fixture or fixture runs. Consult Ethernet CBX specification sheet and installation instructions for details.

Control systems (order separately)

LTN2 - Lumentone™ 2

Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback.

PHAROS - Pharos® kit



The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and addressing tools (order separately)

LID - LumenID

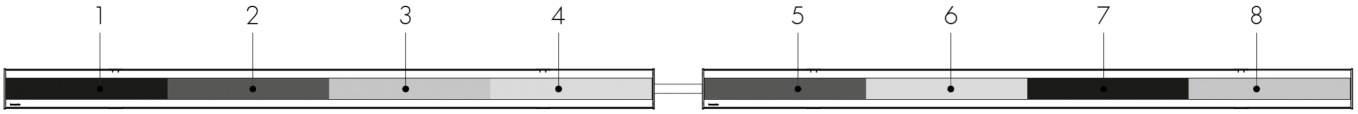
LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Consult LID specification sheet for details.

LID-LT - LumentalkID

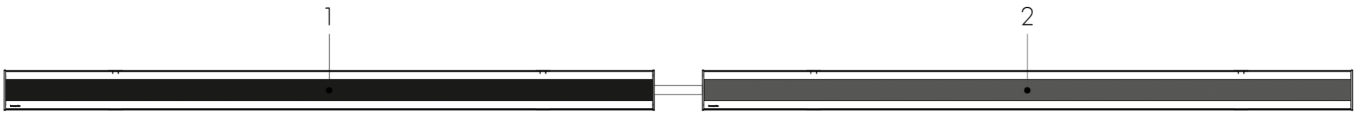
LumentalkID is a diagnostic and addressing tool. It must be specified for all Lumentalk (LT) applications. Consult LID-LT specification sheet for details.

Resolution details

DMX/RDM control, resolution per foot: each 12 in section is addressed independently
DMX addresses:



DMX/RDM control, resolution per fixture: each fixture is addressed independently
DMX addresses:



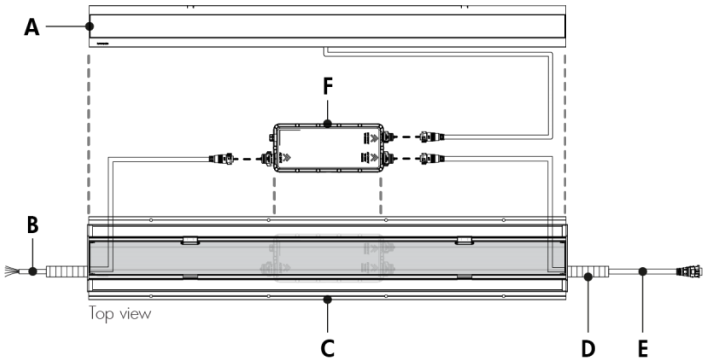
- 48 in fixtures shown.
- Applicable for DMX/RDM control option only. Fixture resolution can be configured on-site within the LumenID V3 software. A DMX/RDM enabled CBX is required.

Typical wiring diagrams

Wiring color code

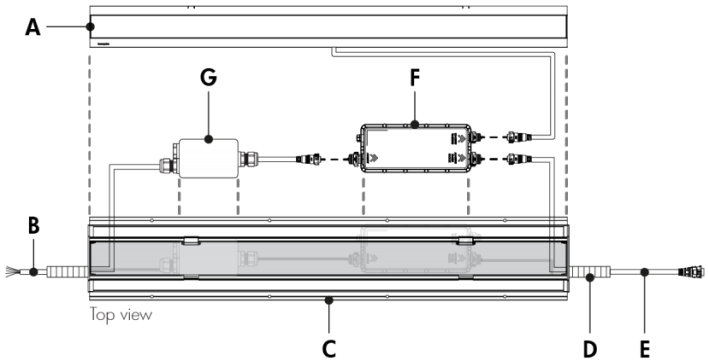
UL Color Code	USE
Green	Ground
Black	Line
White	Line/Neutral
Red or Purple	0-10V / Data +
Orange	0-10V / Data -

Typical installation with leader cable



A - Optical chamber
B - Leader cable (LOILC, order separately)
C - Blockout
D - Conduit (by others)
E - Jumper cable to next fixture (LOIJC, order separately, for continuous run installations)
F - PACBOX

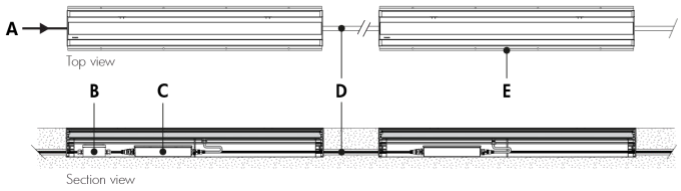
Typical installation with IP68 LOI-JBOX accessory



A - Optical chamber
B - Power and data input cable (by others)
C - Blockout
D - Conduit (by others)
E - Jumper cable to next fixture (LOIJC, order separately, for continuous run installations)
F - PACBOX
G - IP68 LOI-JBOX (order separately)

The IP68 LOI-JBOX accessory cannot be used with 12 in fixtures.

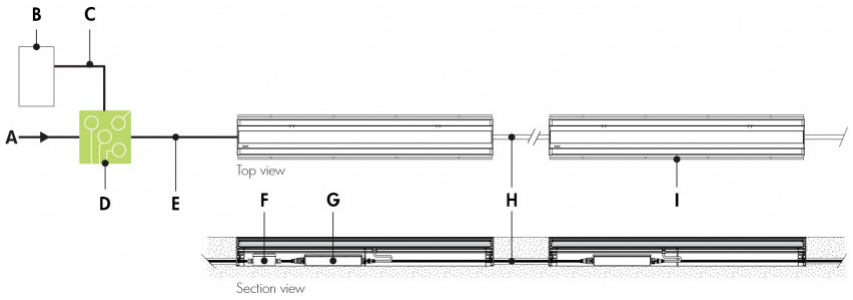
On/Off Control (NO)



A - Power input (120-277V, wiring by others)
B - IP68 LOI-JBOX (optional)
C - PACBOX
D - Jumper cable (LOIJC)
E - Lumenfacade Inground

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 5 W/ft.

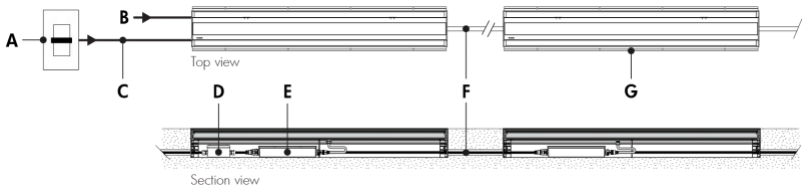
Lumentalk (LT)



A - Power input (100-277V AC, wiring by others)
B - Dimmer/controller (order separately from Lumenpulse, or by others)
C - Data wiring (by others)
D - Lumentranslator 2 (LTL2-DIM, -DMX, -TRIAC, -DALI)
E - Power wiring (by others)
F - IP68 LOI-JBOX (optional)
G - PACBOX
H - Jumper cable (LOIJC)
I - Lumenfacade Inground

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk enabled fixtures must be commissioned using LumentalkID software and a LID-LT. Consult factory for details.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- For DMX applications: 1 DMX controller per Lumentalk network, maximum of 48 DMX channels per Lumentalk network (minimum step transition update rate is 1 second, minimum fade time between two colors is 1 minute). Consult factory for applications that require additional capabilities.
- Consult factory for DALI Lumentalk applications.
- 1% minimum dimming value.
- 5 W/ft.

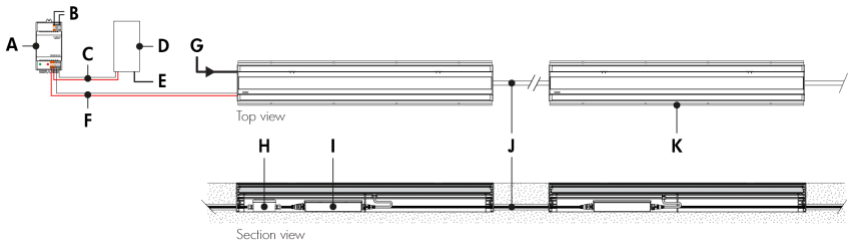
0-10V dimming (DIM)



A - Dimmer (by others)
B - Power input (120-277V, wiring by others)
C - Data wiring (by others)
D - IP68 LOI-JBOX (optional)
E - PACBOX
F - Jumper cable (LOIJC)
G - Lumenfacade Inground

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 0-10V mA ratings: passive dimmer (Current Sink): 3 mA per fixture, active dimmer (Current Source): 0.5 mA per fixture.
- 1% minimum dimming value.
- 5 W/ft.

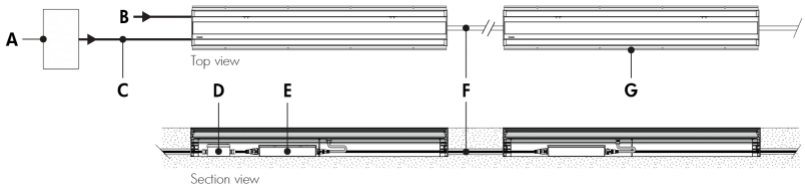
DALI dimming (DALI)



A - DALI bus power supply (by others)
B - Power input for DALI bus power supply (wiring by others)
C - Data output to DALI controller (wiring by others)
D - DALI controller (by others)
E - Power input for DALI controller (wiring by others)
F - Data output to fixture (wiring by others)
G - Power input (120-277V, wiring by others)
H - IP68 LOI-JBOX (optional)
I - PACBOX
J - Jumper cable (LOIJC)
K - Lumenfacade Inground

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Maximum of 64 DALI fixtures per DALI loop.
- 1% minimum dimming value.
- 5 W/ft.

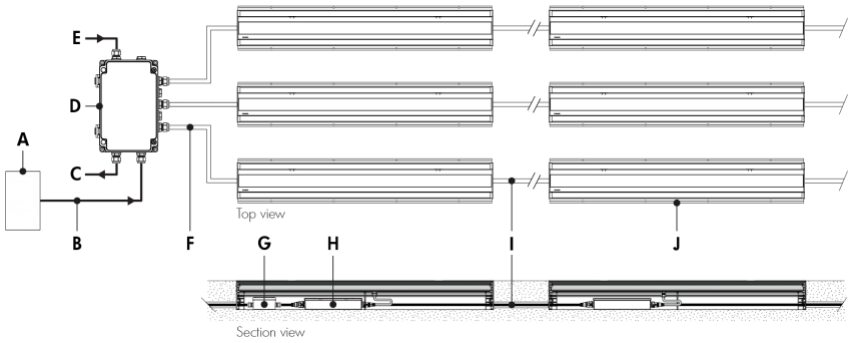
Lutron® EcoSystem® Enabled dimming (ES)



A - Lutron® EcoSystem® controller (by others)
B - Power input (120-277V, wiring by others)
C - Data wiring (by others)
D - IP68 LOI-JBOX (optional)
E - PACBOX
F - Jumper cable (LOIJC)
G - Lumenfacade Inground

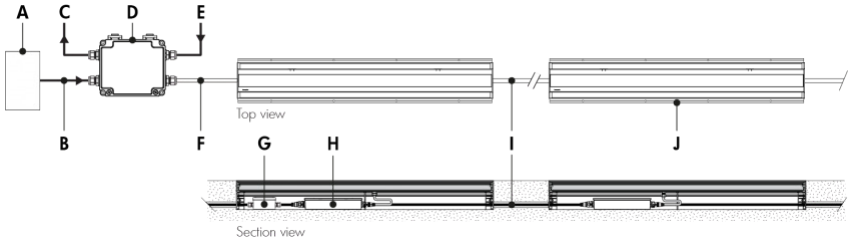
- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Each Lutron® EcoSystem® enabled fixture has its own address; for the example shown, there are a total of 2 EcoSystem® addresses.
- 1% minimum dimming value.
- 5 W/ft.

Star Layout (DMX/RDM)



A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-ST
E - Power input (120-277V, wiring by others)
F - Leader cable (LOILC)
G - IP68 LOI-JBOX (optional)
H - PACBOX
I - Jumper cable (LOIJC)
J - Lumenfacade Inground

Daisy Chain Layout (DMX/RDM)



A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-DS
E - Power input (120-277V, wiring by others)
F - Leader cable (LOILC)
G - IP68 LOI-JBOX (optional)
H - PACBOX
I - Jumper cable (LOIJC)
J - Lumenfacade Inground

Maximum Run of Fixtures, Lumenfacade® LOID White & Static Colors 5 W/ft

Voltage	**120/277V**
Maximum Run of Fixtures*	128ft

Based on 15A maximum, 50ft leader cable.
*Example: 120V = 128ft maximum run of end to end fixtures (32 fixtures maximum for 4ft LOID).

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations. Maximum run length calculations are typically based on 48 in fixtures.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 6 outputs per CBX-ST; maximum of 1 output per CBX-DS.
- Each fixture requires 1 DMX address.
- 1% minimum dimming value.
- 5 W/ft.

How to order

Housing [1] [3] [4]	**Voltage**	**Length**	**Color and Color Temperature** [5]	**Control**	**Options**
LOID Lumenfacade™ Inground Direct View, 5 W/ft [2]	**120/277** 120-277 volts	**12** 13 1/16 in (7.5 lbs) [4] **24** 25 1/16 in (15.3 lbs) **36** 37 1/16 in (21.4 lbs) **48** 49 1/16 in (27 lbs)	**22K** 2200K **27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **RD** Red [6] **GR** Green [6] **BL** Blue [6]	**NO** On/Off control **LT** Lumentalk [7] **DIM** 0-10V dimming **DALI** DALI dimming **ES** Lutron® EcoSystem® Enabled dimming **DMX/RDM** DMX/RDM enabled [8]	**ASL** Anti-slip lens **CE** CE (certification covers European Economic Area) [9]

Notes:

1. A Lumenfacade Inground fixture includes one optical chamber (LOIC), one power and control box (PACBOX) and one recessed blockout (RBO). The LOIC, PACBOX and RBO are provided according to the output/color, length and control configuration.
2. Consult factory for products that are BAA-approved (Buy America.n Act).
3. Consult the installation instructions to plan all aspects of the fixture installation.
4. Power consumption is typically 20% higher for 12 in fixture lengths.
5. Consult factory for availability of static Royal Blue, 6500K and 90+ CRI.
6. Static colors made to order 8-10 weeks.
7. A Lumentranslator 2 (LTL2) and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.
8. A control box (CBX) and LumenID (LID) must be specified.
9. Consult European specification sheet and installation instructions for CE wiring information.