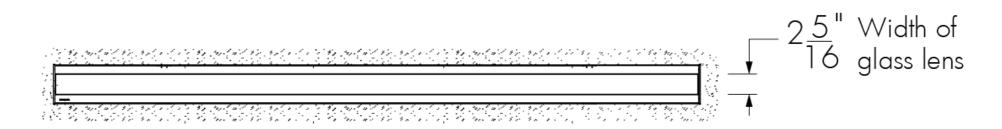
COLOR CHANGING

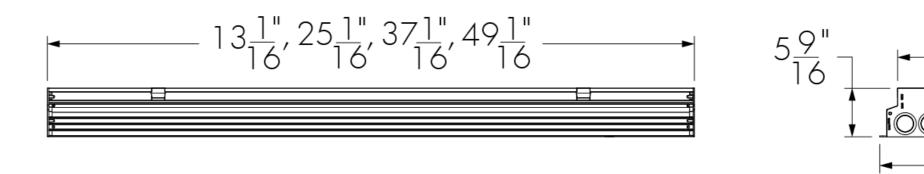
Project Name \_\_\_\_\_\_ Qty \_\_\_\_\_

Type \_\_\_\_\_ Catalog / Part Number \_\_\_\_





Top view



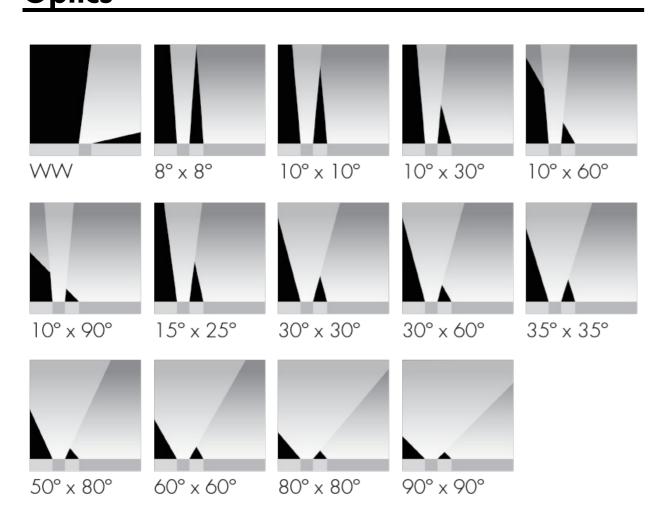
Front and side views

# **Photometric Summary**

	Delivered output (lm)	Intensity (peak cd)
ww	1,600*	1,206*
8°x8°	2,121*	27,842*
10°x10°	1,837*	16,501*
10°x30°	2,155*	11,889*
10°x60°	1,724*	4,765*
10°x90°	1,964*	2,919*
30°x30°	2,202*	7,936*
30°x60°	1,896*	2,499*
60°x60°	1,807*	1,439*
90°x90°	1,913*	1,002*

Based on RGB full output, 4ft [1219mm], 0° tilt setting, DMX/RDM configuration.

# **Optics**



# **Colors and Color Temperatures**







# **Description**

The Lumenfacade Inground Color Changing is a high-performance linear LED luminaire designed for colorful asymmetric wall washing, grazing and linear wayfinding. Featuring second generation LED technology, the Lumenfacade Inground Color Changing is available in four different sizes (12 in, 24 in, 36 in or 48 in), with a wide number of options, including a choice of optics; RGB, RGBW or RGBA color mixing; various mounting options, finishes, accessories 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	Additive RGB, Additive RGB + white 4000K, Additive RGB + amber
Length (nominal)	12 in, 24 in, 36 in, 48 in
Optics	Asymmetric Wallwash, 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 15° x 25°, 30° x 30°, 30° x 60°, 35° x 35°, 50° x 80°, 60° x 60°, 80° x 80°, 90° x 90°
Tilt Setting (factory set)	0 degrees, 2.5 degrees, 5 degrees, 20 degrees
Optical Option	Internal louver
Options	Anti-slip lens
Power Consumption	17.25 W/ft, Typically 20% higher for 12 in fixture lengths
Warranty	5-year limited warranty



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**F** 514.937.6289

<sup>\*</sup>Estimated. Consult website for the latest photometric files.

COLOR CHANGING

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		3

lumen talk

DMXrdm

**Ratings** 

IP68

IK10

**Certifications** 









Performance	
Delivered Output	1,435 lm (48 in fixture, RGB full output, 10° x 60°, 2.5° tilt setting, DMX/RDM), 1,775 lm (48 in fixture, RGBW full output, 10° x 60°, 2.5° tilt setting, DMX/RDM), 800 lm (24 in fixture, RGBA full output, 10° x 60°, 0° tilt setting, DMX/RDM)
Delivered Intensity	4,525 cd at nadir (48 in fixture, RGB full output, 10° x 60°, 2.5° tilt setting, DMX/RDM), 4,477 cd at nadir (48 in fixture, RGBW full output, 10° x 60°, 2.5° tilt setting, DMX/RDM), 1,785 cd at nadir (24 in fixture, RGBA full output, 10° x 60°, 0° tilt setting, DMX/RDM)
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
Trim Material	Anodized aluminum
Lens Material	Tempered 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	100 to 277 volts
Fixture Cable	Power and data in one cable
Leader Cable Conductors	5C #16-5
Connectors	IP68 push-lock
Control	Lumentalk, DMX/RDM enabled
Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-bit or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA)
RGB Color Mixing	12 LEDs per 12 in (4x Red, 4x Green, 4x Blue)
RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White)
RGBA Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber)
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



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COLOR CHANGING

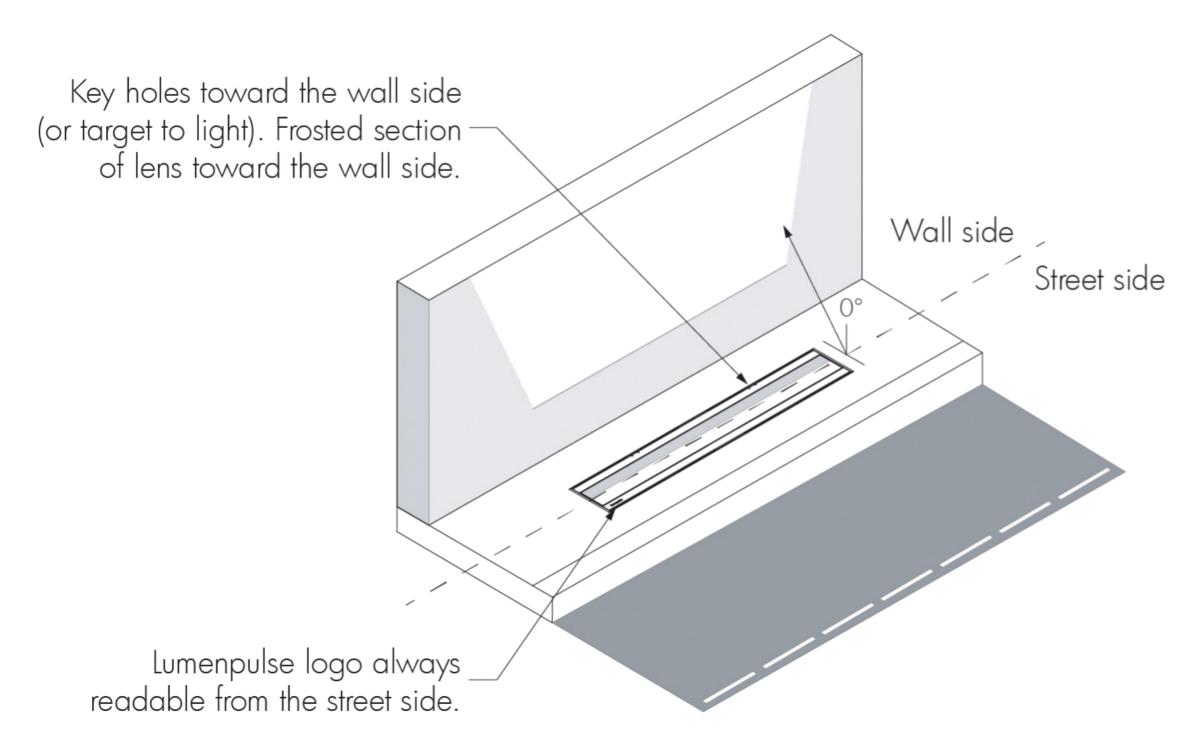
Accessories (order separate	ely)
Cables	Lumenfacade Inground Leader Cable, Lumenfacade Inground Junction Cable
Electrical Accessories	Lumenfacade Inground Junction Box
Control Boxes	DMX/RDM enabled (daisy chain or star configuration), Ethernet enabled (daisy chain or star configuration)
Control Systems	Lumentone™ 2, Pharos® kit

LumenID, LumentalkID

**Diagnostic and Addressing Tools** 

COLOR CHANGING

# **Optical chamber orientation**



# Cables (order separately)

#### LOILC - Leader cable for Lumenfacade Inground



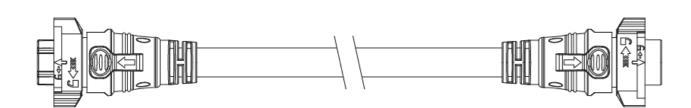
#### LOILC-CERTIFICATION-LENGTH

Please specify:

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

- Suitable for dimming/data and non-dimming applications.
- Sealing end cap is mandatory for any unused connector. One (1) included with every leader cable.
- Consult Lumenfacade Inground leader cable specification sheet for details.

# LOIJC - Jumper cable for Lumenfacade Inground



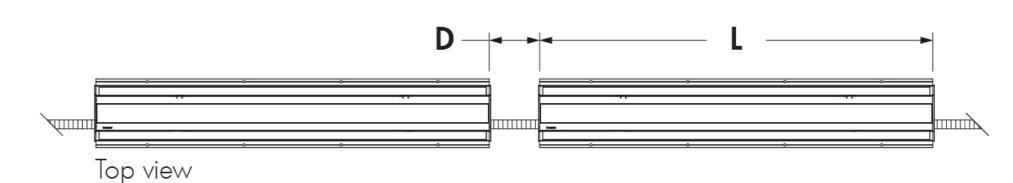
#### LOUC-CERTIFICATION-LENGTH

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.

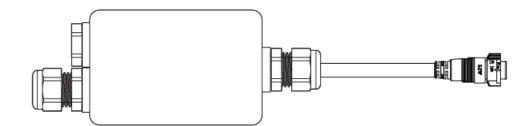
Example: if the distance between two 4 ft fixtures is 0.5 ft, L + D = 4.5 ft, therefore a 10 ft jumper cable is required.

Inground

COLOR CHANGING

# Electrical accessories (order separately)

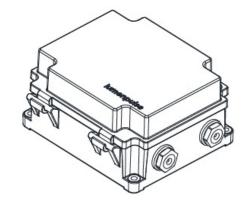
# LOI-JBOX - Lumenfacade Inground Junction Box

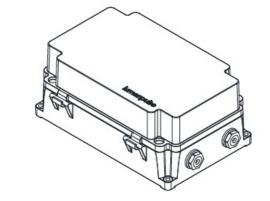


Lumenfacade Inground IP68 sealed junction box starter kit. Use for stand alone fixtures and/or first of run installations. The LOI-JBOX accessory does not fit in 12 in fixtures.

# Control boxes (order separately)

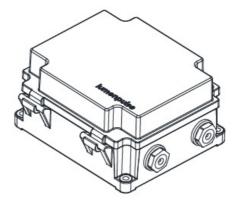
#### CBX-DMX/RDM - DMX/RDM enabled (daisy chain or star configuration)

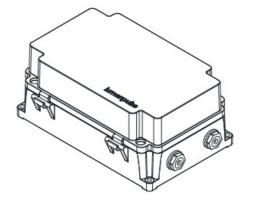




DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for daisy chain configuration, 6x for star configuration), consult factory to order spares.

#### 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.

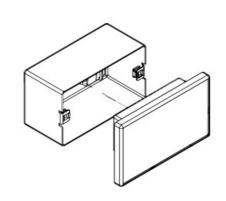
# Control systems (order separately)

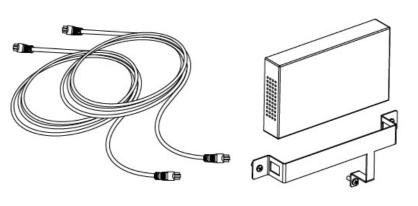
#### LTN2 - Lumentone™ 2

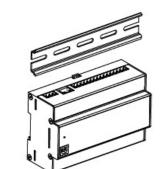


Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback.

#### PHAROS - Pharos® kit



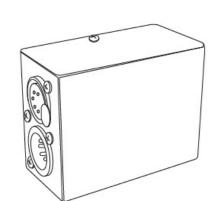




The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

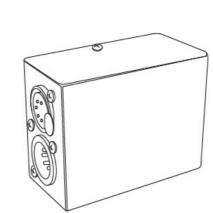
# Diagnostic and addressing tools (order separately)

# 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.

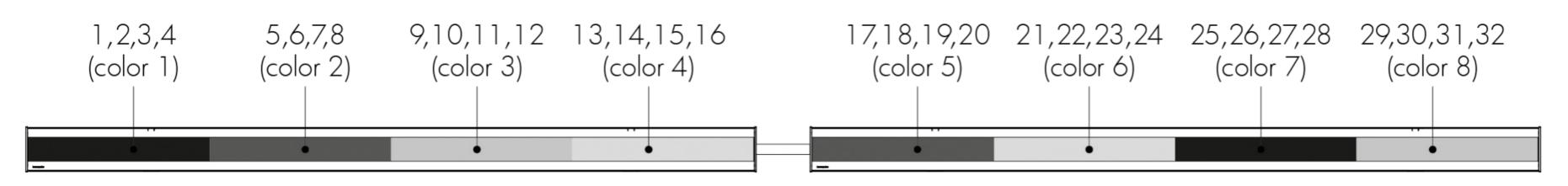
COLOR CHANGING

LOI

# Resolution details

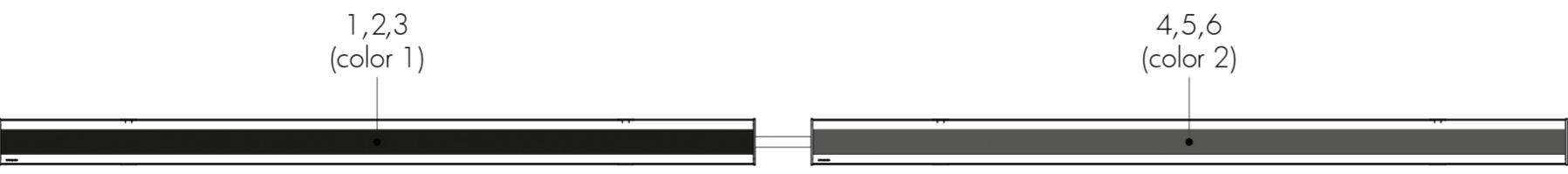
#### Resolution per foot: each 12 in section is addressed independently DMX addresses: 1,2,3 7,8,9 4,5,6 10,11,12 13,14,15 16,17,18 19,20,21 22,23,24 (color 3) (color 2) (color 4) (color 8) (color 1) (color 5) (color 6) (color 7)

RGB color mixing option

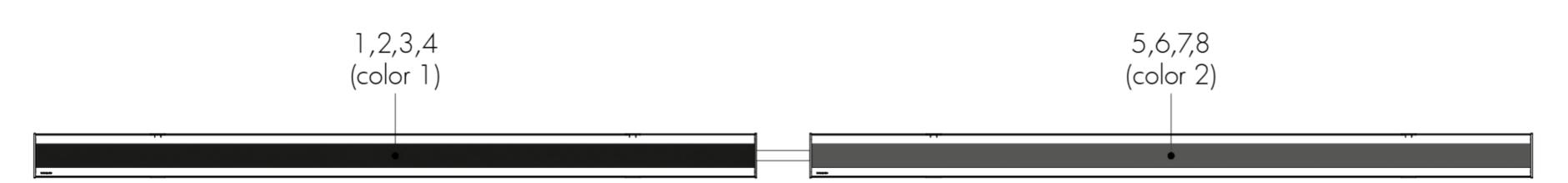


RGBW, RGBA color mixing options

#### Resolution per fixture: each fixture is addressed independently DMX addresses:



RGB color mixing option



RGBW, RGBA color mixing options

- 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.

Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately

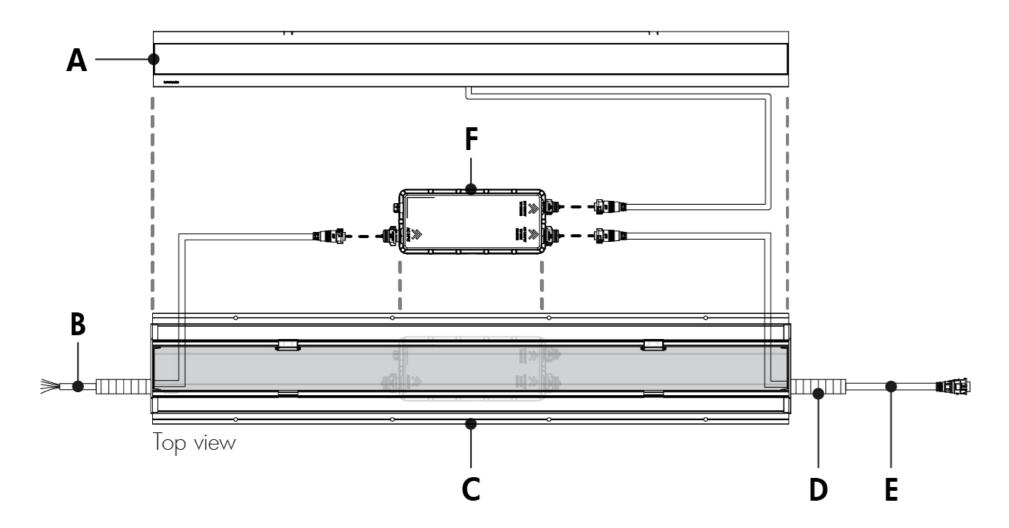
COLOR CHANGING

# Typical wiring diagrams

### Wiring color code

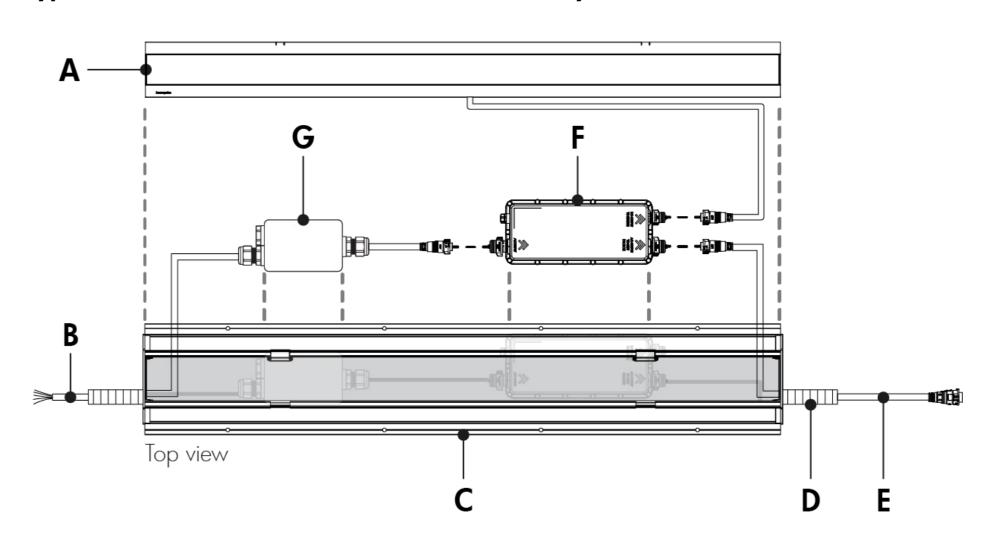
UL Color Code	USE
Green	Ground
Black	Line
White	Line/Neutral
Red or Purple	0-10V / Data +
Orange	0-10V / Data -

#### 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

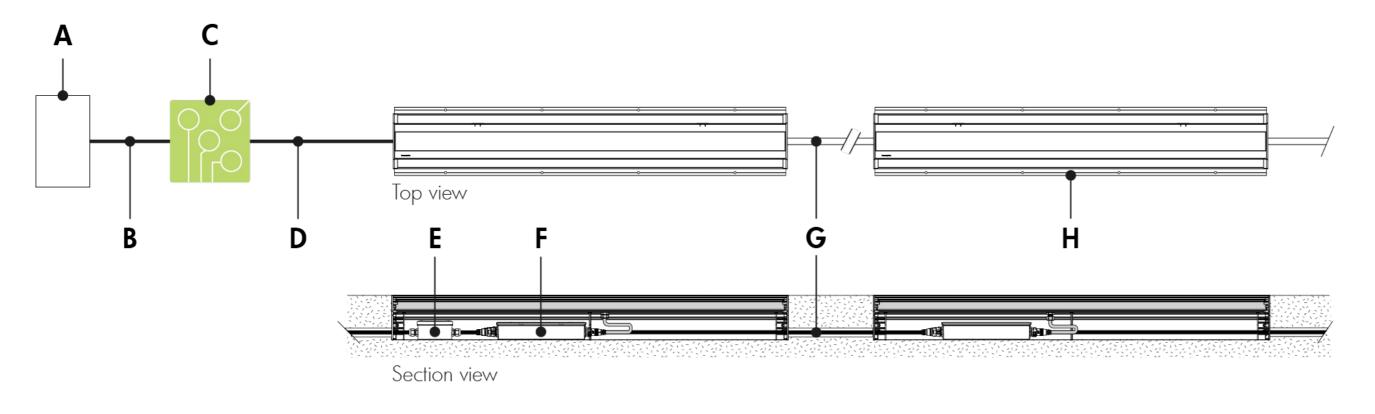
#### Typical installation with IP68 LOI-JBOX accessory



- 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.

# Lumentalk (LT)



- A Controller (order separately from Lumenpulse, or by others)
- **B** Data wiring (by others)
- **C** Lumentranslator (LTL-DMX)
- **D** Power line (120-277V AC, wiring by others)
- E IP68 LOI-JBOX (optional)
- F PACBOX
- **G** Jumper cable (LOIJC)
- **H** 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.
- 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.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- 17.25 W/ft.

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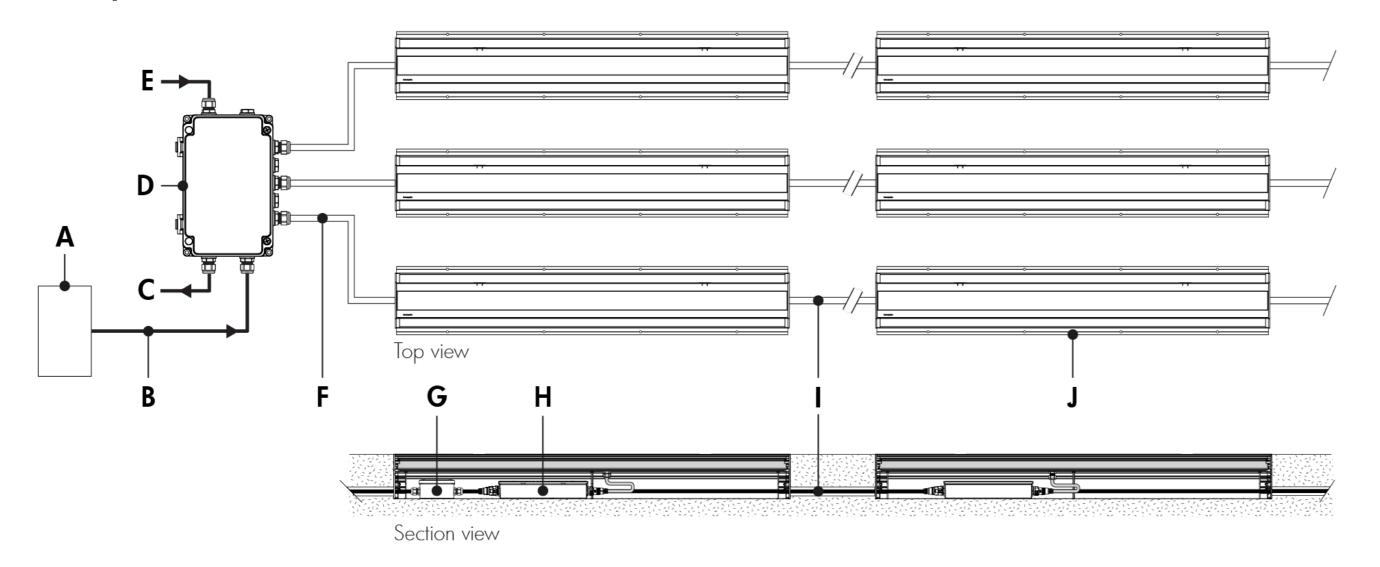
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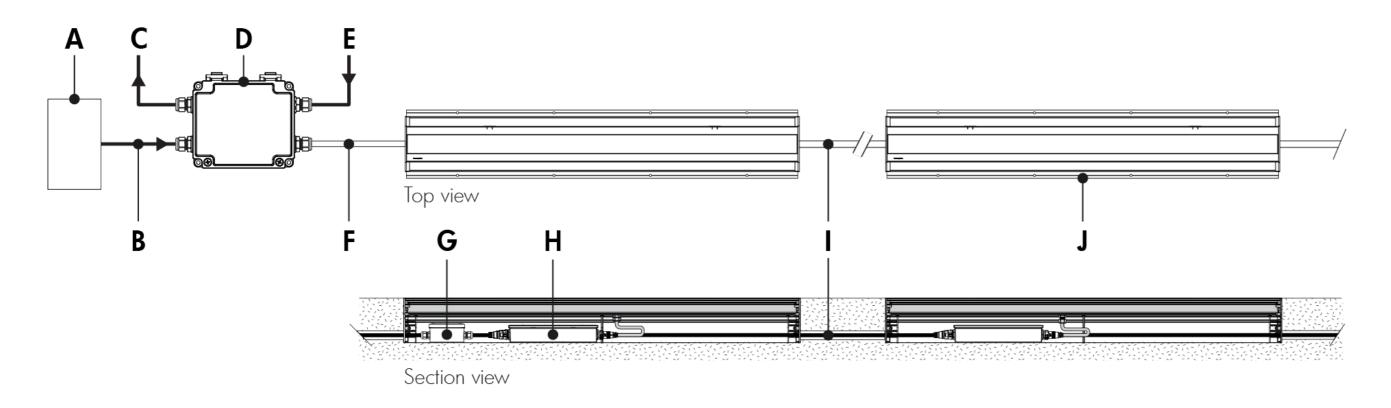
COLOR CHANGING

#### 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 (100-277V, 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 (100-277V, wiring by others)
- **F** Leader cable (LOILC)
- **G** IP68 LOI-JBOX (optional)
- **H** PACBOX
- I Jumper cable (LOIJC)
- J Lumenfacade Inground

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 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.
- RGB color mixture option requires 3 DMX addresses. RGBW color mixture option requires 4 DMX addresses. RGBA color mixture option requires 4 DMX addresses.
- 17.25 W/ft.

COLOR CHANGING

How to order							
1	2	3	4	5	6	7	8
9							

# 1. Housing (1) (2) (3)

Lumenfacade™ Ing	ground
	Lumenfacade™ Ing

<sup>(1)</sup> 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.

# 4. Color and Color Temperature

RGB	Additive RGB
RGBW	Additive RGB + white 4000K standard. 2700K, 3000K and 3500K available, consult factory. (1)
RGBA	Additive RGB + amber

<sup>(1)</sup> Longer lead times apply for Royal Blue, 2700K, 3000K and 3500K white color temperature mixes.

# 2 . Voltage

100/277

3 . Length		
12	13 1/16 in (7.5 lbs) <sup>(1)</sup>	
24	25 1/16 in (15.3 lbs)	
36	37 1/16 in (21.4 lbs)	
48	49 1/16 in (27 lbs)	

100-277 volts

# 5. Optics

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WW	Asymmetric Wallwash	
8x8	$8^{\circ} \times 8^{\circ}$ (1)	
10x10	$10^{\circ} \times 10^{\circ}$ (1)	
10x30	$10^{\circ} \times 30^{\circ}$	
10x60	10° x 60°	
10x90	10° x 90°	
15x25	15° x 25°	
30x30	$30^{\circ} \times 30^{\circ}$	
30x60	30° x 60°	
35x35	$35^{\circ} \times 35^{\circ}$	
50x80	50° x 80°	
60x60	60° x 60°	
80x80	80° x 80°	
90x90	90° x 90°	

<sup>(1)</sup> For best results, we recommend a 6 in setback from surface. Contact factory for application support.

# 6. Tilt Setting (1) (2)

TS0	0 degrees
TS2.5	2.5 degrees
TS5	5 degrees
TS20	20 degrees

<sup>(1)</sup> Do not specify a tilt setting for the asymmetric wallwash option. The asymmetric wallwash optic is factory set with a 2.5 degree tilt.

# 7 . Optical Option

INTL	Internal louver (1)

<sup>(1)</sup> The addition of an internal louver will affect beam distribution. Consult factory for application support.

# 8 . Control

LT	Lumentalk <sup>(1)</sup>
DMX/RDM	DMX/RDM enabled (2)

<sup>(1)</sup> A Lumentranslator and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator and Lumentalk pages and specification sheets for details.

<sup>(2)</sup> Consult the installation instructions to plan all aspects of the fixture installation. A completed Certificate of Installation must be returned to Lumenpulse to activate the warranty.

<sup>(3)</sup> Power consumption is typically 20% higher for 12 in fixture lengths.

<sup>(1)</sup> Power consumption is typically 20% higher for 12 in fixture lengths.

<sup>(2)</sup> Tilt setting is factory set and cannot be adjusted in the field.

<sup>(2)</sup> A control box (CBX) and LumenID (LID) must be specified.

# **Specification Sheet**

lumenfacade

Inground LOI

COLOR CHANGING

9. Options

**ASL** 

Anti-slip lens

