SB County

Chino Airport Perimeter Upgrades

Lighting Cutsheets – 100% Construction Documents

Project Name _____   **Qty** _____

Type _____ **Catalog / Part Number** _____

$2\frac{5}{16}$" Width of glass lens

Top view

$13\frac{1}{16}$", $25\frac{1}{16}$", $37\frac{1}{16}$", $49\frac{1}{16}$"

$5\frac{9}{16}$" $4\frac{7}{16}$" $8\frac{1}{2}$"
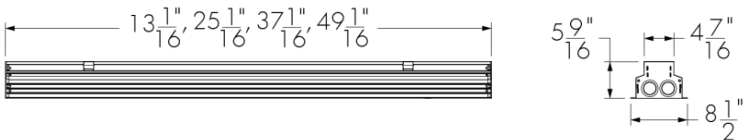
Front and side views

Photometric Summary

	Delivered output (lm)	Intensity (peak cd)
WW	3,634	10,795
8°x8°	4,512	59,238
10°x10°	4,410	33,872
10°x30°	4,586	25,296
10°x60°	3,876	12,062
10°x90°	4,077	6,927
15°x25°	4,346	19,773
30°x30°	4,730	16,886
30°x60°	4,035	5,317
35°x35°	4,612	11,616
50°x80°	4,656	3,904
60°x60°	3,868	3,368
80°x80°	4,548	2,992
90°x90°	4,070	2,132

Based on HO 40K full output, 4ft [1219mm], DMX/RDM configuration.
2.5° factory-set tilt setting for WW optic, 0° tilt setting for all other optics.
Photometric performance is measured in compliance with IESNA LM-79-08.

Optics

WW	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°	
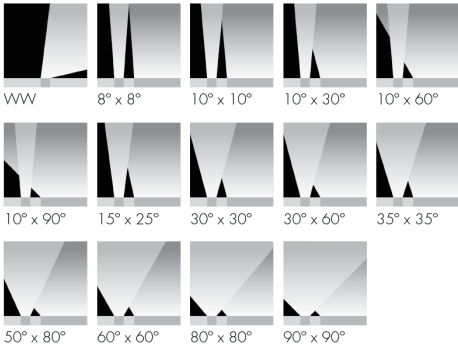
Description

The Lumenfacade Inground 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.
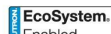
Features

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	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, CE (certification covers European Economic Area)
Power Consumption	5 W/ft (meets ASHRAE standards for linear lighting on building facades - not available for 12 in fixture lengths), 8.5 W/ft (RO version), 15.25 W/ft (HO version), Typically 20% higher for 12 in fixture lengths
Warranty	5-year limited warranty

Colors and Color Temperatures

2200K 2700K 3000K 3500K 4000K

Red Green Blue

Controls

ON/OFF   0-10V   DALI

lumen talk   DMXrdm   EcoSystem. Enabled

Ratings

IP68   IK10

Certifications

cULus   CE   RoHS   5 YEARS lumenpulse

Performance

Maximum Delivered Output	4,730 lm (48 in fixture, 4000K, 30° x 30°, 0° tilt setting, DMX/RDM)
Maximum Delivered Intensity	59,238 cd at nadir (48 in fixture, 4000K, 8° x 8°, 0° tilt setting, DMX/RDM)
Illuminance at Distance	Minimum 1 fc at 243 ft (48 in fixture, 4000K, 8° x 8°, 0° tilt setting, DMX/RDM)
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
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	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

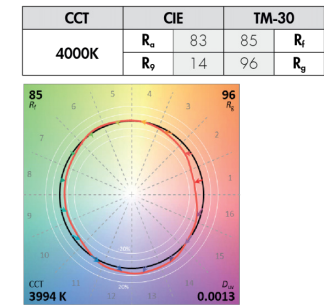|	
Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP68 rated for up to 1 ft, not suitable for permanent immersion applications
Impact Resistance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

Accessories (order separately)

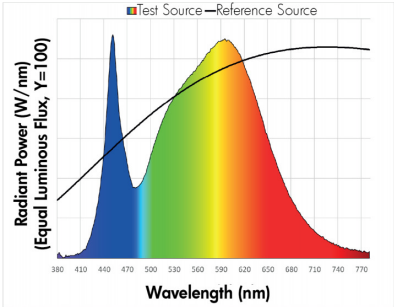|	
Cables	Lumenfacade Inground Leader Cable, Lumenfacade Inground Jumper Cable
Electrical Accessories	Lumenfacade Inground Junction Box

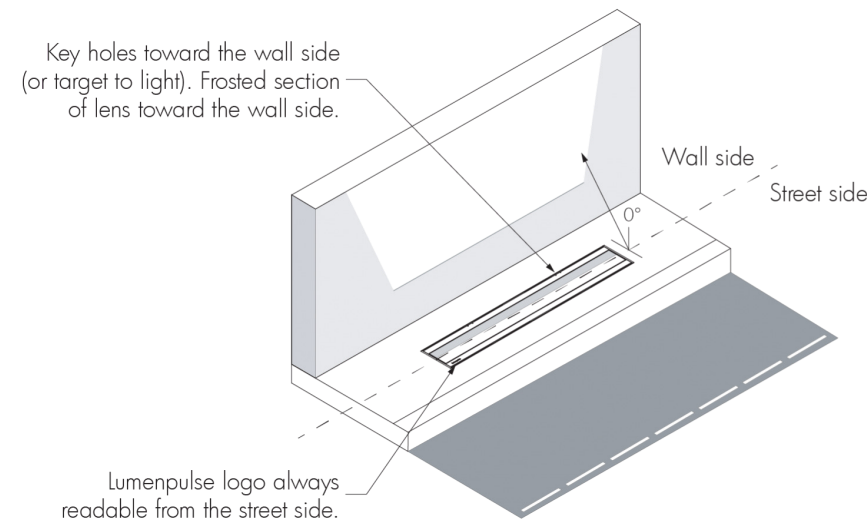|	
Control Boxes	DMX/RDM enabled (daisy chain or star configuration), Ethernet enabled (daisy chain or star configuration)
Control Systems	Lumentone™ 2 (LTN2), Pharos® kit (PHAROS)
Diagnostic and Addressing Tools	LumenID (LID), LumentalkID (LIDLT)

![lumenpulse™]

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA
info@lumenpulse.com   **www.lumenpulse.com**

T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003   **F** 514.937.6289

www.lumenpulse.com/products/2556

3 / 11

Chromaticity data

TM-30 - 4000K

CCT	CIE		TM-30	
4000K	R$_a$	83	85	R$_f$
	R$_9$	14	96	R$_g$

85 R$_f$ 96 R$_g$

CCT 3994 K   D$_uv$ 0.0013

Spectral Power Distribution

■ Test Source — Reference Source

Radiant Power (W/nm)
(Equal Luminous Flux, Y=100)

Wavelength (nm)

380 410 440 470 500 530 560 590 620 650 680 710 740 770

Optical chamber orientation

Key holes toward the wall side
(or target to light). Frosted section
of lens toward the wall side.

Wall side

Street side

0°

Lumenpulse logo always
readable from the street side.

Cables (order separately)

LOILC - Leader cable for Lumenfacade Inground
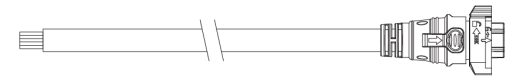
LOILC-**CERTIFICATION-LENGTH**

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.

lumenpulse™

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA
info@lumenpulse.com   **www.lumenpulse.com**

T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003   **F** 514.937.6289

www.lumenpulse.com/products/2556

4 / 11

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.

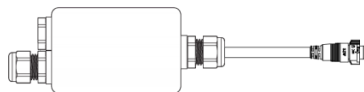## Jumper cable length selection

Top view
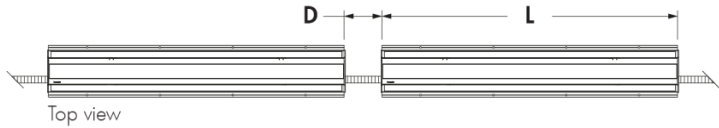
D - distance between two fixtures
L - length of fixture

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.

lumenpulse™

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA
info@lumenpulse.com   **www.lumenpulse.com**

T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003   **F** 514.937.6289

www.lumenpulse.com/products/2556

5 / 11

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.
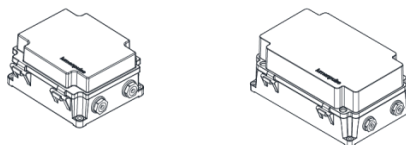
Control boxes (order separately)

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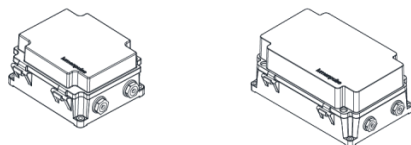
DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for daisy chain configuration, 6x for star configuration), consult factory to order spares.

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.

lumenpulse™

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA
info@lumenpulse.com   **www.lumenpulse.com**

T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003   **F** 514.937.6289
www.lumenpulse.com/products/2556

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately
2022.12.19 copyright © 2022 LMPG Inc.
EM - R24

6 / 11

Resolution details

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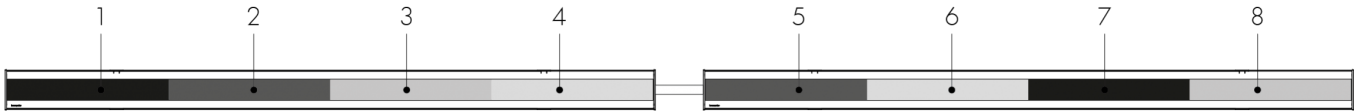
DMX/RDM control, resolution per fixture: each fixture is addressed independently
**DMX addresses:**

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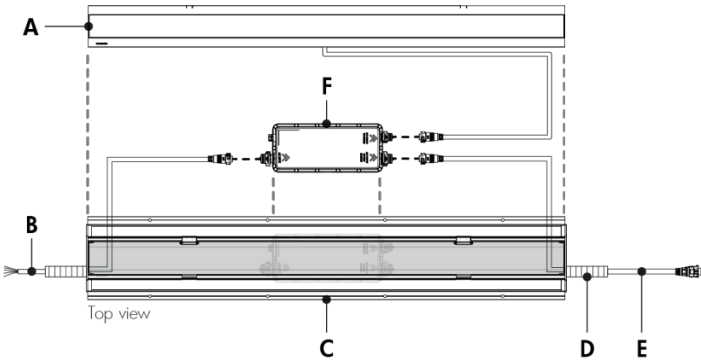
A - Optical chamber
B - Leader cable (LOILC, order separately)
C - Blockout
D - Conduit (by others)
E - Jumper cable to next fixture (LOIJC, order separately, for continuous run installations)
F - PACBOX

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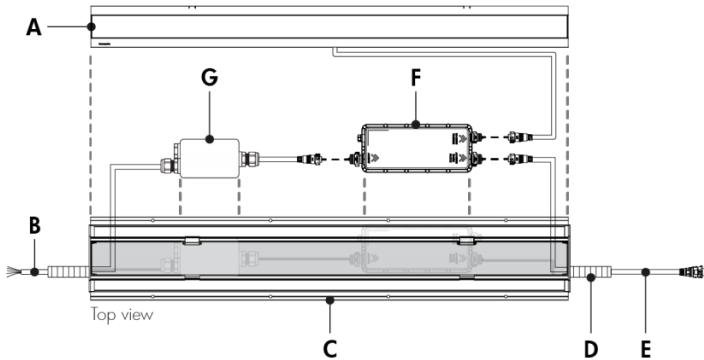
A - Optical chamber
B - Power and data input cable (by others)
C - Blockout
D - Conduit (by others)
E - Jumper cable to next fixture (LOIJC, order separately, for continuous run installations)
F - PACBOX
G - IP68 LOI-JBOX (order separately)

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

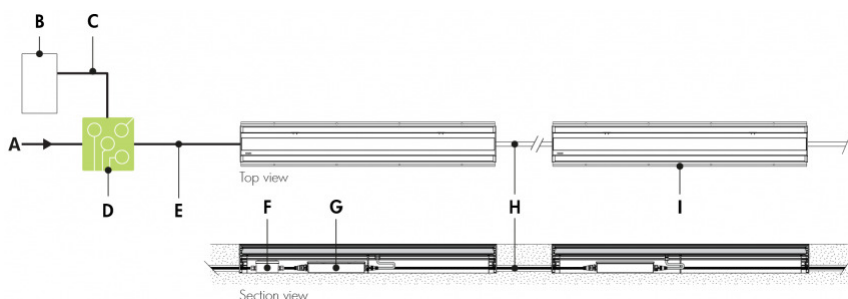## On/Off Control (NO)
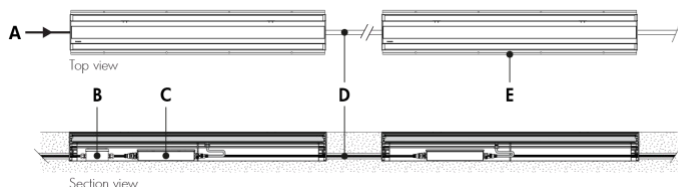
A - Power input (120-277V, wiring by others)
B - IP68 LOI-JBOX (optional)
C - PACBOX
D - Jumper cable (LOIJC)
E - Lumenfacade Inground

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft; Regular Output version: 8.5 W/ft; High Output version: 15.25 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.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft; Regular Output version: 8.5 W/ft; High Output version: 15.25 W/ft.
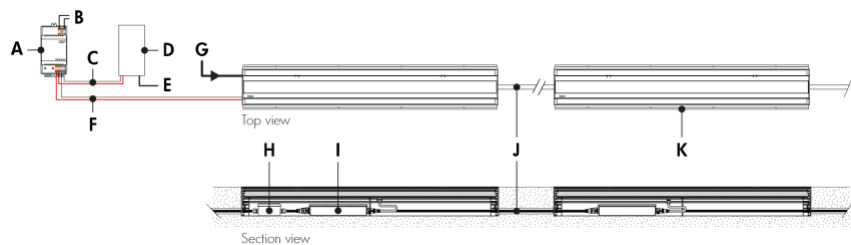
0-10V dimming (DIM)
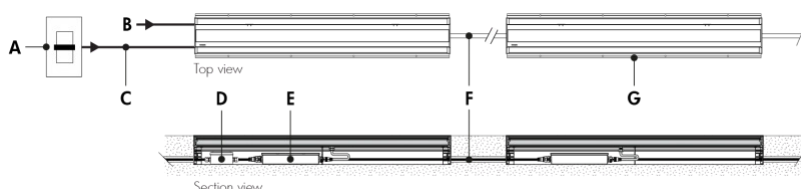
A - Dimmer (by others)
B - Power input (120-277V, wiring by others)
C - Data wiring (by others)
D - IP68 LOI-JBOX (optional)
E - PACBOX
F - Jumper cable (LOIJC)
G - Lumenfacade Inground

- 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.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft; Regular Output version: 8.5 W/ft; High Output version: 15.25 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.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft; Regular Output version: 8.5 W/ft; High Output version: 15.25 W/ft.
- Commissioning may be required based on the selection of 3rd party DALI controller. Controller and commissioning provided by others.
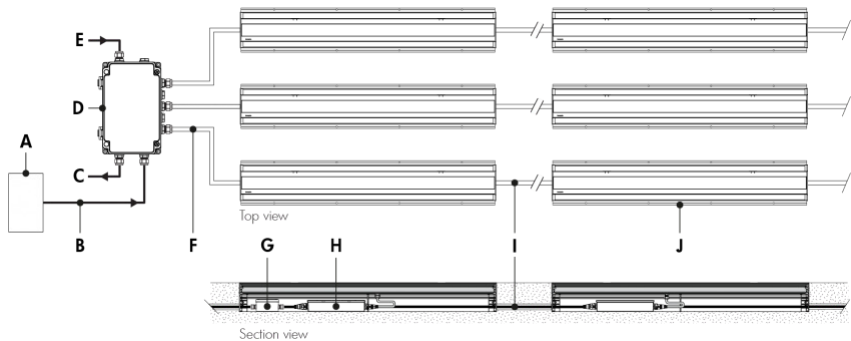
Lutron® EcoSystem® Enabled dimming (ES)
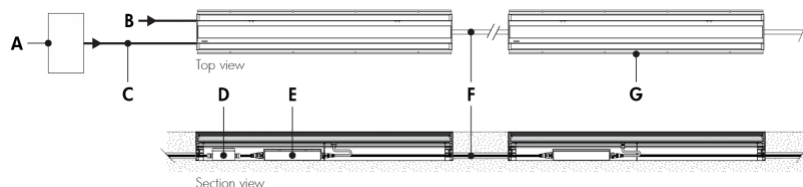
A - Lutron® EcoSystem® controller (by others)
B - Power input (120-277V, wiring by others)
C - Data wiring (by others)
D - IP68 LOI-JBOX (optional)
E - PACBOX
F - Jumper cable (LOIJC)
G - Lumenfacade Inground

- 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.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft; Regular Output version: 8.5 W/ft; High Output version: 15.25 W/ft.

lumenpulse™

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA
info@lumenpulse.com   **www.lumenpulse.com**

T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003   **F** 514.937.6289

www.lumenpulse.com/products/2556

9 / 11

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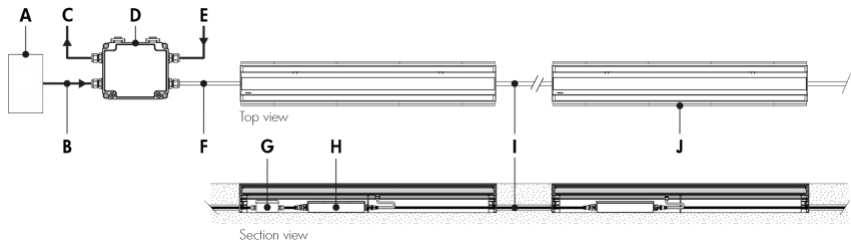
A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-DS
E - Power input (120-277V, wiring by others)
F - Leader cable (LOILC)
G - IP68 LOI-JBOX (optional)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

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

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

Maximum Run of Fixtures, Lumenfacade® LOI RO White & Static Colors 8.5 W/ft

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

Maximum Run of Fixtures, Lumenfacade® LOI HO White & Static Colors 15.25 W/ft

Voltage	**120/277V**
Maximum Run of Fixtures*	68ft

Based on 15A maximum, 50ft leader cable.
*Example: 120V = 120ft maximum run of end to end fixtures (30 fixtures maximum for 4ft LOI RO).

- 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.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft; Regular Output version: 8.5 W/ft; High Output version: 15.25 W/ft.

lumenpulse™

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA
info@lumenpulse.com **www.lumenpulse.com**

T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 **F** 514.937.6289
www.lumenpulse.com/products/2556

10 / 11

How to order

Housing (1) (4) (5)	Voltage	Length	Color and Color Temperature (6)	Optics	Tilt Setting (10) (11)	Optical Option	Control	Options
LOI ASHRAE Lumenfacade™ Inground, 5 W/ft ASHRAE compliant (2) (3)	**120/277** 120-277 volts	**12** 13 1/16 in (7.5 lbs) (5)	**22K** 2200K	**WW** Asymmetric Wallwash (8)	**TS2.5** 2.5 degrees	**INTL** Internal louver (12)	**NO** On/Off control	**ASL** Anti-slip lens
LOI RO Lumenfacade™ Inground, Regular Output, 8.5 W/ft (3)		**24** 25 1/16 in (15.3 lbs)	**27K** 2700K	**8x8** 8° x 8° (8) (9)	**TS0** 0 degrees		**LT** Lumentalk (13)	**CE** CE (European certification) (15)
LOI HO Lumenfacade™ Inground, High Output, 15.25 W/ft (3)		**36** 37 1/16 in (21.4 lbs)	**30K** 3000K	**10x10** 10° x 10° (8) (9)	**TS5** 5 degrees		**DIM** 0-10V dimming	
		48 49 1/16 in (27 lbs)	**35K** 3500K	**10x30** 10° x 30° (8)	**TS20** 20 degrees		**DALI** DALI dimming	
			40K 4000K	**10x60** 10° x 60° (8)			**ES** Lutron® EcoSystem® Enabled dimming	
			RD Red (7)	**10x90** 10° x 90° (8)			**DMX/RDM** DMX/RDM enabled (14)	
			GR Green (7)	**15x25** 15° x 25° (8)				
			BL Blue (7)	**30x30** 30° x 30°				
				30x60 30° x 60°				
				35x35 35° x 35°				
				50x80 50° x 80°				
				60x60 60° x 60°				
				80x80 80° x 80°				
				90x90 90° x 90°				

length per drawing.

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. ASHRAE version not available for 12 in fixture lengths.

3. Consult factory for products that are BAA-approved (Buy America.n Act).

4. Consult the installation instructions to plan all aspects of the fixture installation.

5. Power consumption is typically 20% higher for 12 in fixture lengths.

6. Consult factory for availability of static Royal Blue, 6500K and 90+ CRI.

7. Static colors made to order 8-10 weeks.

8. 8x8, 10x10, 10x30, 10x60, 10x90, 15x25 and WW distributions come with a half-frosted lens to bring light low on the wall for grazing applications. Clear lens also available, consult factory.

9. For best results use with HO fixtures at a 6 in setback from surface. Contact factory for application support.

10. Do not specify a tilt setting for the asymmetric wallwash option. The asymmetric wallwash optic is factory set with a 2.5 degree tilt.

11. Tilt setting is factory set and cannot be adjusted in the field.

12. The addition of an internal louver will affect beam distribution. Consult factory for application support.

13. A Lumentranslator 2 (LTL2) and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.

14. A control box (CBX) and LumenID (LID) must be specified.

15. Consult European specification sheet and installation instructions for CE wiring information.

Targetti

KEPLERO MINI HIGH EFFICACY FACTORY SEALED

Professional Inground LED Fixture

KEPLERO® Mini HE Factory Sealed with brushed natural trim and clear lens

Ø 6.34"
8.00"
Ø 4.29"
Ø 6.34"

Marine | RoHS3 COMPLIANT | Drive Over | Cool Touch | IP69K | IP68 | c(UL)us
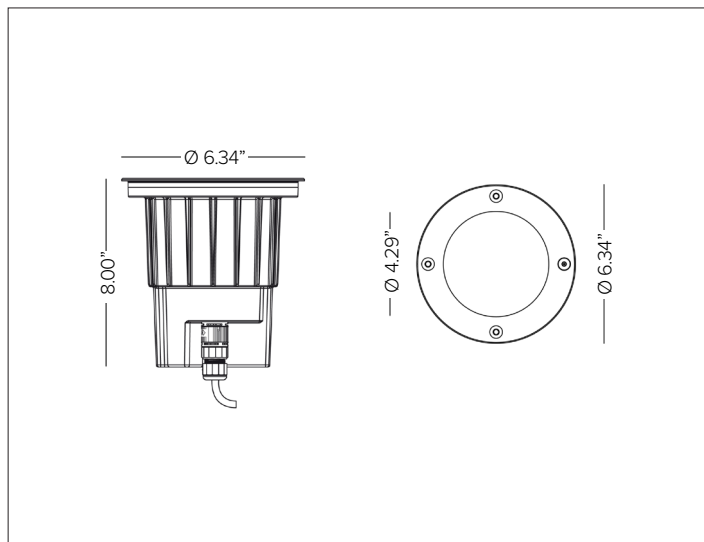
CONCEPT

Factory sealed compact high performance inground for even illumination with maximum efficiency.

MECHANICAL CHARACTERISTICS

Housing	8"H x 6.34"Dia. Housing.
Materials	Anodized marine grade cataphoresis A die-cast aluminum heat sink body with PVC installation sleeve. AISI316L stainless steel trim ring with beveled edge with extra clear glass lens.
Finish	⬤ Brushed Natural ⬤ Bronze PVD* ⬤ Black PVD* *Physical Vapor Deposition.
Power Connection	Provided with 4ft SJ00W 16-6 cable and DSMT anti-wicking quick disconnect to direct burial brass ingrade j-box (required, sold separately).
Functionality	Light beam is fixed at 0° on the vertical axis. Consult factory for preset tilt angles.
Mounting	Flush, semi-flush or raised tube mountings. Installation sleeve for flush or semi-flush mountings includes optional stainless steel 'L' brackets for additional mounting support. Fixture equipped with fastening holes and stainless steel screws for attachment into installation sleeve assembly.
Weight	2.43lbs
Protection	IP68B / IP69K
Impact	IK10
Load	Resistant to static loads up to 4,496lbs in flush mounted cement and pavement installations.

CERTIFICATIONS

cULus Wet Location Listed.
Tested in accordance with LM-79-08.
Compliant for California installations.
IEC 62471
RoHS3 EU 215/863

SUSTAINABILITY

Luminaire designed for disposal/recycling at end-of-life. Replaceable LED light source and control gear by a Targetti technician.

ELECTRICAL CHARACTERISTICS

Power Supply	Integral 4/1 smart driver (Non-Dimmable / 0-10V / Reverse Phase / Forward Phase).
Wattage	14W
Voltage	Universal Voltage 120-277V AC 50/60Hz

SOURCE

High efficiency LED Chip on Board.

TM30	CCT (Nominal)	CRI	Rf	Rg	SDCM
	2700K	80	82	96	2
	3000K	80	83	96	2
	3500K	80	83	95	2
	4000K	80	82	95	2

Ra90 available upon request

OPTIC

Highly reflective metallic polycarbonate optic.

Beam		SP 11°	FL 18°	MWFL 40°
Delivered Lumens	3000K	1387Lm	1397Lm	1384Lm
	4000K	1423Lm	1434Lm	1420Lm

For 2700K lumen values use multiplier of 0.96 from 3000K. For 3500K lumen values use multiplier of 1.02 from 3000K.

Efficacy	102Lm/W max. Refer to photometric graphs for specific values.
Lifetime	L92/B10 30,000hrs at max TA +25°C L90/B10 50,000hrs at max TA +25°C
Photobiological Classification	Low risk safety RG1

WARRANTY

5 year limited warranty.
A Fixture body complete with marine grade cataphoresis suitable for use in marine grade environments. Stainless steel trim will need to be maintained and cleaned regularly to avoid mineral deposits. Not to be in direct contact with salt or corrosive agents for extended periods of time.
B Temporary immersion up to 24 hours at a max depth of 2 meters. Installation of fixture requires proper drainage to prevent any standing water. Should not be used for permanent submersion.

TARGETTI

# KEPLERO MINI HIGH EFFICACY FACTORY SEALED

SPECIFICATION INFORMATION

KPLMFS ___ ___ ___ ___ / ___ / ___

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Ex: KPLMFSHESF27RN / 1DU2521 / 1DU2530

OPTIONAL **REQUIRED** **OPTIONAL**

1 - PRODUCT CODE	2 - TYPE	3 - OPTICS	4 - KELVIN	5 - INTEGRAL OPTICAL ACCESSORIES	6 - TRIM
KPLMFS — KEPLERO MINI	**HE** — High Efficacy	**S** — SP 11°	**27** — 2700K	___ — No Optical Accessory	**RN** — Round Natural
		F — FL 18°	**30** — 3000K	**LV** — Honeycomb anti glare grid	**RB** — Round Bronze
		M — MWFL 40°	**35** — 3500K	**BL** — Parallel ribbed glass light blade filter	**RK** — Round Black
			40 — 4000K	**HM** — Half Moon Anti glare shutter	

7 - INSTALLATION	8 - INSTALLATION ACCESSORIES
Flush Mount Sleeve *See section for details*	Fixture Removal Tool *See section for details*
Raised Tube *See section for details*	
Junction Box *See section for details*	

7 - INSTALLATION (REQUIRED)
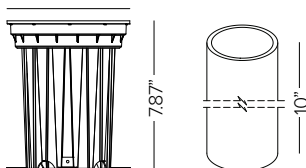
Installation sleeve for concrete pour applications. Grey Nylon casing with PVC installation outer pipe. For flush or semi-flush installations. **Required for use with 1DU2530 by NEC.**
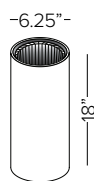
Part No.	**1DU2521**
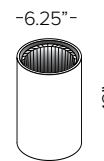
At grade or raised installation sleeve for turf or ground cover applications. 12"H stainless steel, includes factory pre-installed inner PVC installation sleeve. **To be used with round trim options only. Not suitable for use with 1DU2521 or 1DU2522.** (Field cuttable. Used for fixture elevations at grade to 3" above grade). **Required for use with 1DU2530 by NEC.**
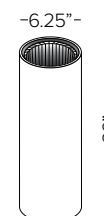
Finish	● Deep Black
Part No.	**1DU434412**

Raised installation sleeve for ground cover (succulents and low level planting) applications. 18"H stainless steel, includes factory pre-installed inner PVC sleeve. **To be used with round trim options. Not suitable with 1DU2521 or 1DU2522.** (Field cuttable. Used for fixture elevation 7" above grade). **Required for use with 1DU2530 by NEC.**

| Finish	● Deep Black
Part No.	**1DU434418**

Raised installation sleeve for landscape applications. 36"H stainless steel, includes factory pre-installed inner PVC sleeve. **To be used with round trim options. Not suitable with 1DU2521 or 1DU2522.** (Field cuttable. Used for fixture elevation 21" above grade). **Required for use with 1DU2530 by NEC.**

Finish	● Deep Black
Part No.	**1DU4344**
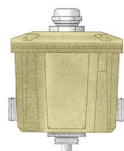
Direct burial brass ingrade j-box. Features stainless steel cover screws and strain relief for power cord, (2) 3/4" NPT bottom holes and (2) 3/4" NPT side holes. Includes (4) 3/4" to 1/2" adapters and (2) 1/2" NPT plugs. **(REQUIRED by NEC).**

Part No.	**1DU2530**

8 - INSTALLATION (OPTIONAL)

Fixture metal maintenance removal handle. Helpful one per 10 fixtures.

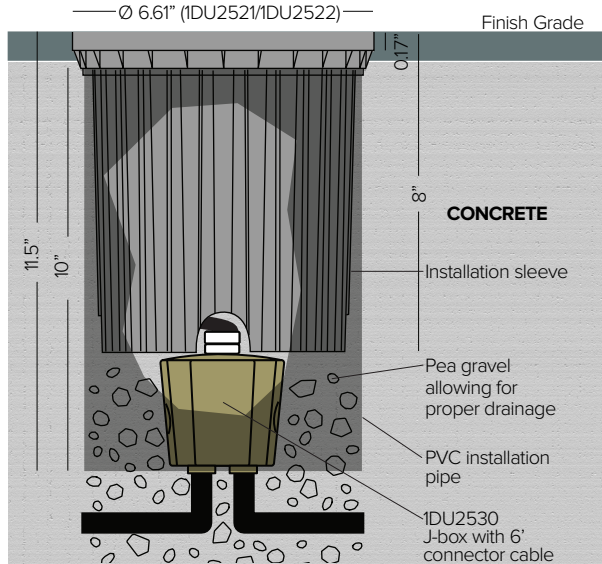| Part No.	**1E2524**

INSTALLATION DIAGRAM
CONCRETE POUR APPLICATION

Flush Mount Sleeve Assembly
1DU2521 and 1DU2522 Sleeves

Ø 6.61" (1DU2521/1DU2522)

Finish Grade

0.17"

8"

CONCRETE

11.5"

10"

Installation sleeve

Pea gravel allowing for proper drainage

PVC installation pipe

1DU2530 J-box with 6' connector cable

Semi-Flush Mount Sleeve Assembly
1DU2521 Sleeve Only

Ø 6.34" (1DU2521)

Beveled trim ring 0.08"H

Finish Grade

8"

CONCRETE

11.5"

10"

Installation sleeve

Pea gravel allowing for proper drainage

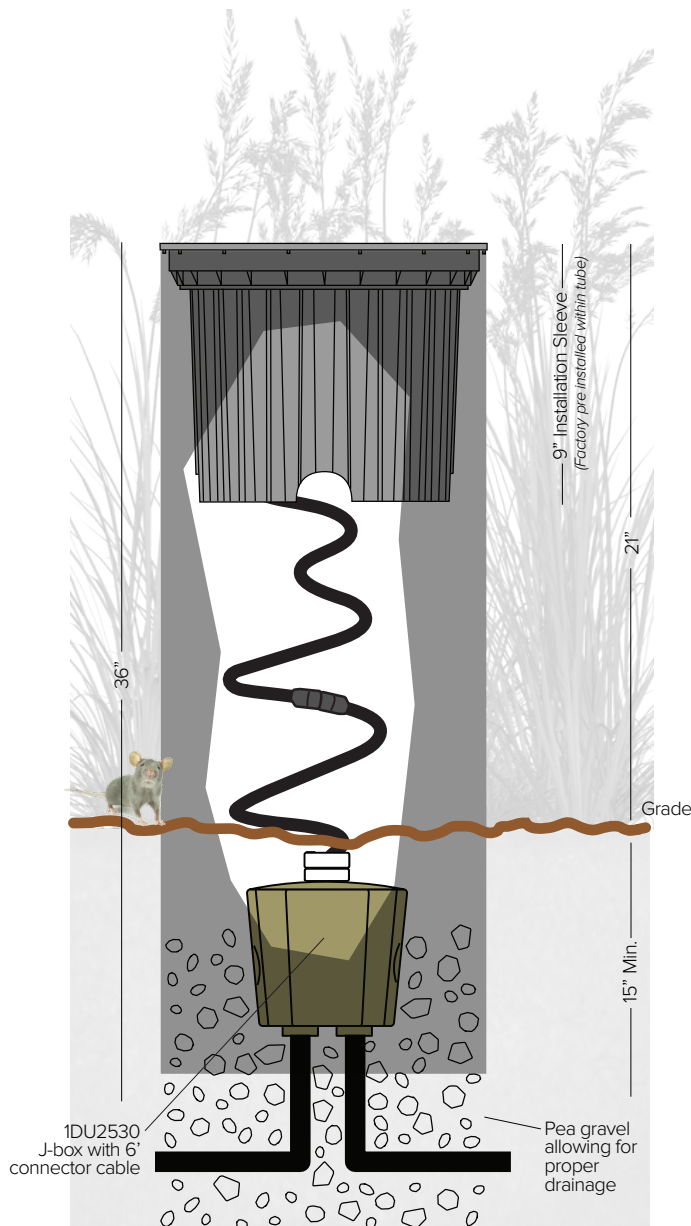PVC installation pipe

1DU2530 J-box with 6' connector cable
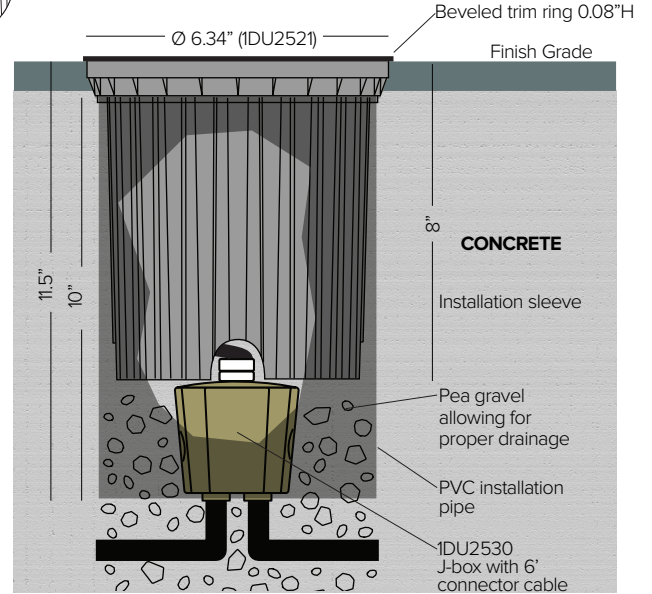
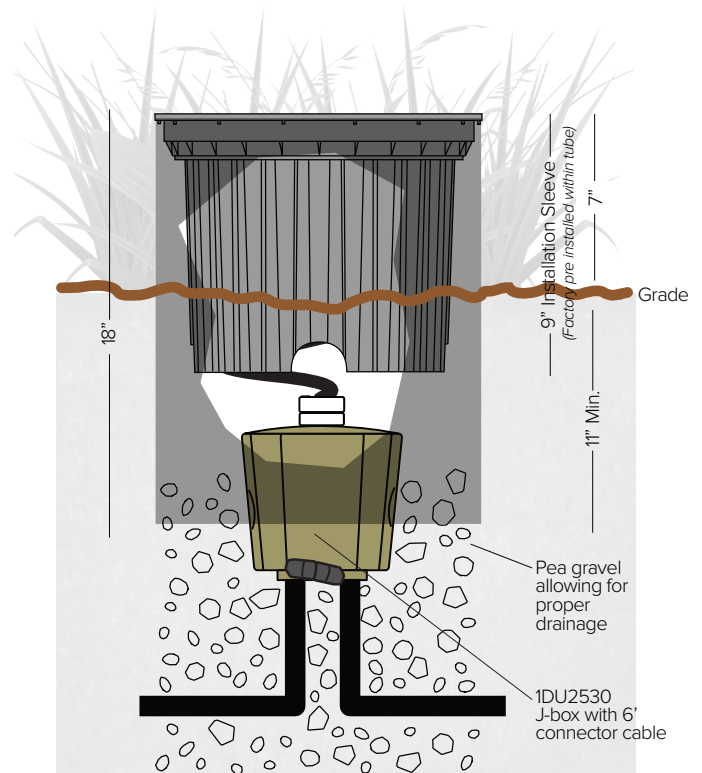# KEPLERO MINI HIGH EFFICACY FACTORY SEALED

INSTALLATION DIAGRAM
LANDSCAPE APPLICATION

RAISED TUBE INSTALLATION ASSEMBLY
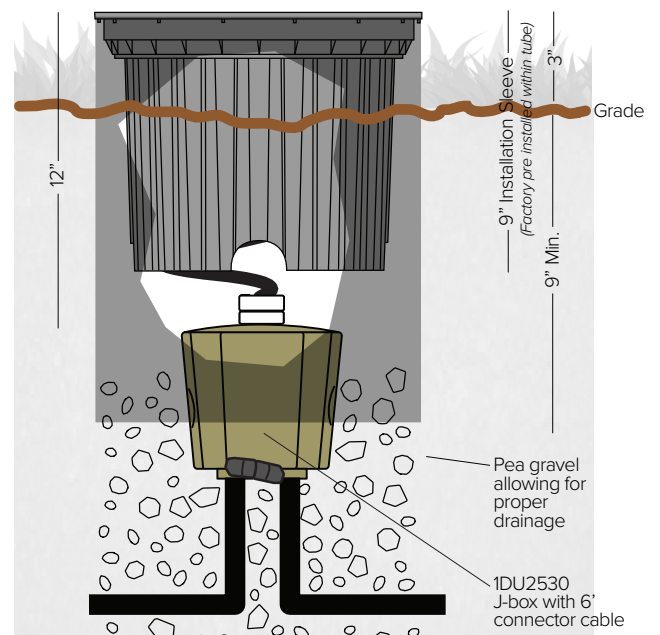Recommended for Landscape Installation
1DU4344 with Round Trim ONLY

9" Installation Sleeve
(Factory pre installed within tube)

21"

36"

Grade

15" Min.

1DU2530
J-box with 6'
connector cable

Pea gravel
allowing for
proper
drainage

RAISED TUBE INSTALLATION ASSEMBLY
Recommended for Ground Level Installation
1DU434418 with Round Trim ONLY

9" Installation Sleeve
(Factory pre installed within tube)

7"

Grade

18"

11" Min.

Pea gravel
allowing for
proper
drainage

1DU2530
J-box with 6'
connector cable

RAISED TUBE INSTALLATION ASSEMBLY
Recommended for Turf Installation
1DU434412 with Round Trim ONLY

9" Installation Sleeve
(Factory pre installed within tube)

3"

Grade

12"

9" Min.

Pea gravel
allowing for
proper
drainage

1DU2530
J-box with 6'
connector cable

KEPLERO MINI HIGH EFFICACY FACTORY SEALED

INSTALLATION DIAGRAM - 1DU2530 J-Box

⌀ 3.75"

3.60"

cULus
Wet Listed
E496240
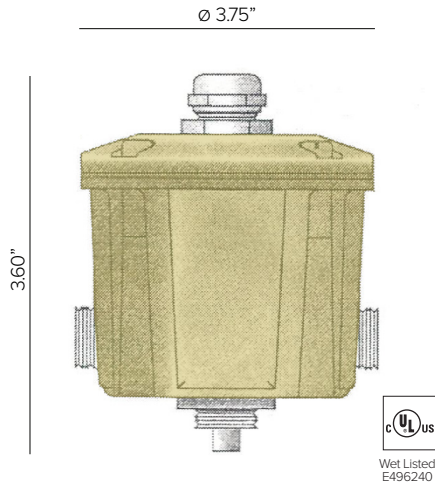
Brass junction box is supplied with the following components:
(4) ¾" side/bottom NPT holes
(4) ½" reduction NPT adapters
(2) ½" cap plugs

NOTE: Box fill size = 15.94 IN³

STEP 1:
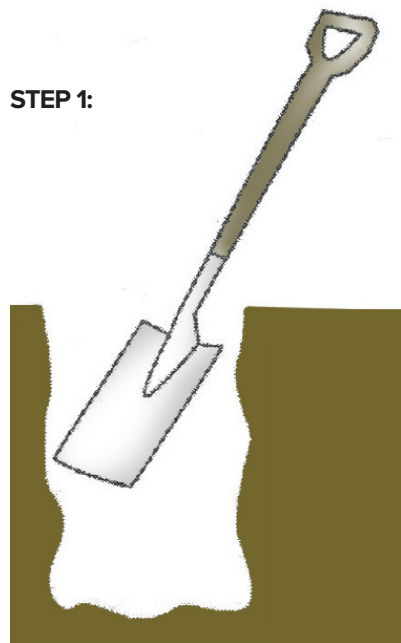
Dig a hole large enough to accommodate the junction box.

STEP 2:
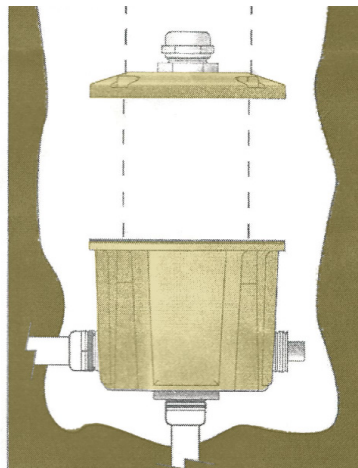
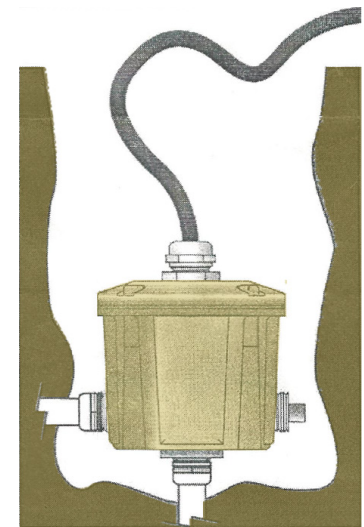Connect brass junction box to conduit system. Seal conduit entries inside junction box with a good grade RTV sealant per sealant manufacturer's instructions.
Note: Drainage must be in place below junction box.

STEP 3:

Seal threads. Tighten locking screw on bottom of cover. Connect all wires observing polarity (i.e. green-to-ground, white-to-common, and black-to-voltage). Provided with 1/2" strain relief.

PHOTOMETRY

SPOT

3000K		H(m)	D(m)	Emax(lx)
Ra84			11°	
Fixture Power	14W	1	0.20	17736
Source Flux	1775lm	2	0.39	4434
Fixture Flux	1387lm	3	0.59	1971
Efficacy	103lm/W	4	0.79	1109
Imax	17736cd	5	0.99	709

TS821 Imax=9992cd/klm

4000K		H(m)	D(m)	Emax(lx)
Ra84			11°	
Fixture Power	14W	1	0.20	18196
Source Flux	1821lm	2	0.39	4549
Fixture Flux	1423lm	3	0.59	2022
Efficacy	105lm/W	4	0.79	1137
Imax	18196cd	5	0.99	728

TS821 Imax=9992cd/klm

FLOOD

3000K		H(m)	D(m)	Emax(lx)
Ra84			18°	
Fixture Power	14W	1	0.31	7969
Source Flux	1775lm	2	0.63	1992
Fixture Flux	1397lm	3	0.94	885
Efficacy	104lm/W	4	1.25	498
Imax	7969cd	5	1.57	319

TS822 Imax=4490cd/klm

4000K		H(m)	D(m)	Emax(lx)
Ra84			18°	
Fixture Power	14W	1	0.31	8175
Source Flux	1821lm	2	0.63	2044
Fixture Flux	1434lm	3	0.94	908
Efficacy	106lm/W	4	1.25	511
Imax	8175cd	5	1.57	327

TS822 Imax=4490cd/klm

MEDIUM WIDE FLOOD

3000K		H(m)	D(m)	Emax(lx)
Ra84			40°	
Fixture Power	14W	1	0.73	2861
Source Flux	1775lm	2	1.47	715
Fixture Flux	1384lm	3	2.20	318
Efficacy	102lm/W	4	2.93	179
Imax	2882cd	5	3.67	114

TS823 Imax=1624cd/klm

4000K		H(m)	D(m)	Emax(lx)
Ra84			40°	
Fixture Power	14W	1	0.73	2935
Source Flux	1821lm	2	1.47	734
Fixture Flux	1420lm	3	2.20	326
Efficacy	105lm/W	4	2.93	183
Imax	2957cd	5	3.67	117

TS823 Imax=1624cd/klm