



The Erden E2 is a high-performance compact stainless steel in-ground luminaire that delivers over 810 lumens. Available in tunable white, RGBW, and static white, it features adjustable tilt (-5° to 15°) and 360° rotatability for precise aiming, along with a special emissivity coating for efficient heat dissipation, improving thermal management and operational efficiency. Its polished or brushed stainless steel lid options and flexible installation choices, such as pre-install kits or direct burial, make it adaptable for various projects while ensuring exceptional performance and durability.

Performance

Static White & Colour <sup>1</sup>	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 2,700 K (80 CRI)	720	83	10,000
● 3,000 K (80 CRI)	780	90	10,800
○ 3,500 K (80 CRI)	750	87	10,400
● 4,000 K (80 CRI)	810	93	11,200

<sup>1</sup> Lumen output is based on 14° lens.

Dynamic Colour <sup>2</sup>	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● RGBA	320	40	4,200
● RGBW (4,000 K) with Royal Blue*	380	43	5,400

<sup>2</sup> Lumen output is based on 12° lens.

Tunable White <sup>3</sup>	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 2,700 K – 6,500 K	650	78	10,100

<sup>3</sup> Lumen output is based on 12° lens.

Beam Angles	12°, 14°, 20°, 25°, 35°, 45°, 50°, 55°, 10° x 40°, 40° x 10°, 20° x 60°, 60° x 20°
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**\* NOTE:**

The default RGBW colors have recently changed to the RGBW with Royal Blue (4BW code). These colors will not match existing products with the earlier RGBW with Mid-Blue (4CW code). Contact Lumascape for custom LED Colors.

## Electrical

<b>Power Consumption</b>	9 W
<b>Lifetime</b>	84,309 hours @ 50°C Ambient (B10, L90, TM21 Projected)
<b>Input Voltage</b>	30 to 48 Vdc
<b>Thermal Management</b>	CoolDrive™ onboard thermal monitoring and control.

## Control

<b>Interface</b>	Lumascap <b>PowerSync™</b>
<b>Protocols<sup>1</sup></b>	DMX / RDM, Artnet <sup>1</sup> , 0-10 V <sup>2</sup>
<b>PWM Frequency</b>	2 kHz flicker-free dimming to 0.1%
<b>Systems</b>	Range of third-party controllers

<sup>1</sup> Some protocols require additional hardware. For more information contact Lumascap.

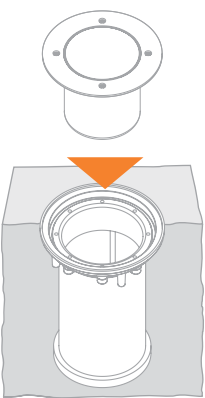
<sup>2</sup> Not available for color-changing.

## Physical

<b>Housing</b>	Marine-grade 316 stainless-steel housing, high-strength glass, teflon coated cover screws, marine-grade 316 stainless-steel cover (polished or brushed finish).
<b>Installation</b>	Pre-Installation Blockout for concrete pour, drive-over and general use applications Direct Burial for landscapes, planters and special applications
<b>Mounting Accessories</b>	<b>LS647-K</b> Pre-Installation Concrete Blockout
<b>Adjustable</b>	-5° to +15° tilt, 360° rotation
<b>Ambient Operating Temperature</b>	-4°F to +122°F (-20°C to +50°C )
<b>Surface Temperature</b>	≤ 149°F (65°C)
<b>Weight</b>	4.4 lbs (2.0 kg)
<b>Drive-Over</b>	With OptiClear lens and pre-installation kit (LS647-K)

## Certification &amp; Compliance

<b>IP Rating</b>	IP68
<b>IK Rating</b>	IK9
<b>Static Load Rating</b>	4,410 lbs (2,000 kg)
<b>Environment</b>	Dry, Damp, Wet locations Inherently Protected Suitable for use in poured concrete
<b>Certifications</b>	UL, CE, RCM

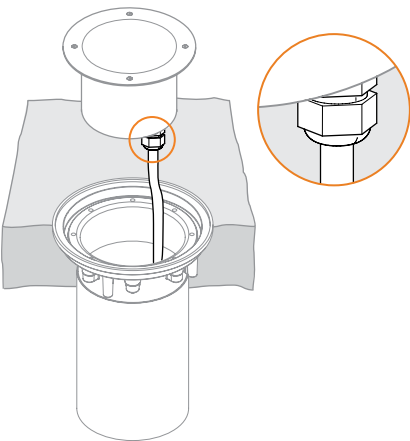


Pre-Installation

This type of installation requires the **LS647-K Pre-Installation Kit** (ordered separately), which acts as a concrete blockout and is intended for installation before the luminaire. This method ensures the luminaire itself is not damaged during concreting or other site works.

Used for	Drive over applications General use applications Concrete pour applications where luminaire is to be installed after site work has been completed.
Benefits	Easy removal for servicing
Restrictions	Connection Type 82 only available for North American market
Accessories	LS647-K Pre-Installation Blockout

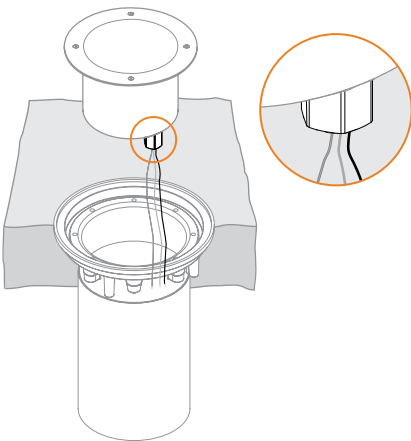
Connection type '84'



Flexible Cable

For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2 m) length. For other length options, contact Lumascape.

Connection type '82'  
North American market only

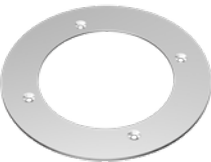


1/2" NPT Adapter

The luminaire is factory-fitted with 6.5' (2.0 m) hookup wire. Ensure terminations can be made within this length. For other length options, consult Lumascape.

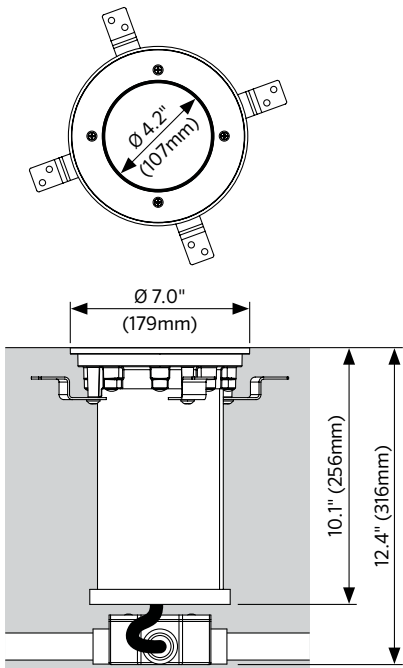
Flush Cover Options

Flush covers for pre-installation use special seals and support bushes to ensure static loads up to 3,968 lbs (1,800 kg) are properly supported. In order to achieve this drive-over rating, OptiClear or GripGlass must be used.



Pre-Installation Blockout  
Round Flush Cover

- SS316: Polished
- SS316: Brushed

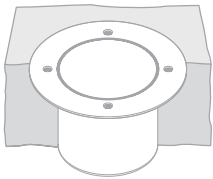


## Pre-Installation Specification

LS3020		-	09D									23	Q		PS
Power		Code		Beam Angle		Code									
09 W		09D		14°		NR									
				25°		NM									
				35°		ME									
				50°		WD									
				10° x 40°		NH									
				40° x 10°		NV									
				20° x 60°		WH									
				60° x 20°		WV									
Static White & Colour		Code		Beam Angle		Code									
2,700 K (80 CRI)		827		12°		NR									
3,000 K (80 CRI)		830		20°		NM									
3,500 K (80 CRI)		835		35°		ME									
4,000 K (80 CRI)		840		45°		WD									
				55°		WF									
Dynamic Color		Code		Internal Accessory		Code									
RGBA		4CA		Louver		L*									
RGBW with Royal Blue		4BW <sup>1</sup>		No Accessory		N									
<sup>1</sup> The default RGBW colors have recently changed to the RGBW with Royal Blue (4BW code). These colors will not match existing products with the earlier RGBW with Mid-Blue (4CW code). Contact Lumascape for custom LED Colors.															
Tunable White		Code		Installation Type		Code									
2,700 K - 6,500 K		2WT		Preinstall Blockout 10.1" [256 mm]		23									
Lens		Code		Cable Entry		Code									
OptiClear™		A		Bottom		Q									
GripGlass™		G													
Cover		Code		Input Voltage		Code									
Stainless steel, polished		M		30 to 48 Vdc (International)		07									
Stainless steel, brushed		N		30 to 48 Vdc (North America)		13									
Connection Type		Code		Control		Code									
Flexible cable, single entry, for hardwired installations		84		PowerSync™		PS <sup>1</sup>									
Hookup wire and ½" NPT, single entry, for hard wired installations (North America).		82													

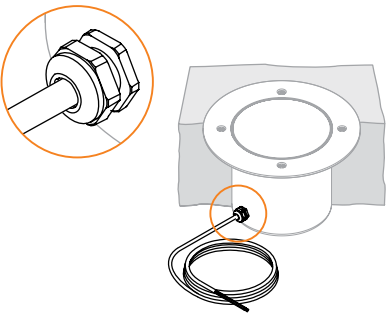
Direct Burial

Luminaire is put directly into soil or concrete.



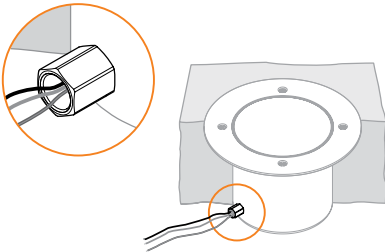
Used for	Landscaping areas Applications where depth is restricted Rate for use in concrete pour applications Economical option
Benefits	Allows for maximum heat dissipation
Restrictions	Not as easy to remove for service as pre-install version Not suitable for drive-over (requires pre-installation) Not available with Connection Type 77 (requires pre-installation) Connection Type 82 only available for North American market.

Connection type '84'



**Flexible Cable**  
For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2 m) length. For other length options, contact Lumascape.

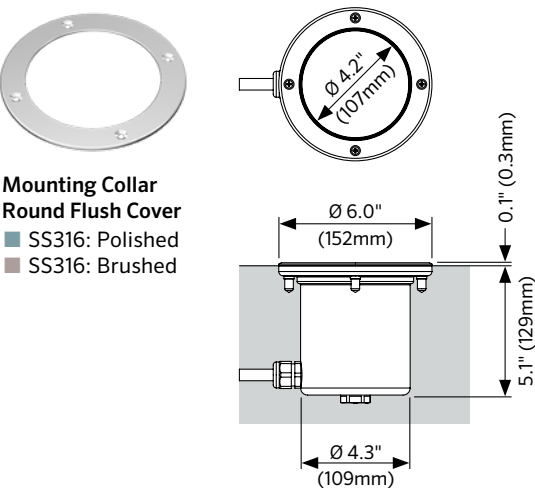
Connection type '82'  
North American market only



**1/2" NPT Adapter**  
The luminaire is factory-fitted with 6.5' (2 m) hookup wire. Ensure terminations can be made within this length. For other length options, consult Lumascape.

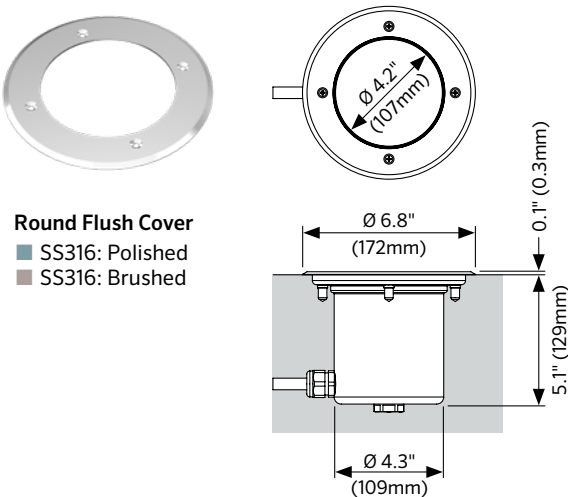
Recessed Cover Options

Use recessed cover for installation in soil, grass, pavers and other uneven surfaces where no cover overhang is required.



Flush Cover Options

Use flush covers for installation in fine finished surfaces such as granite and marble. Can also be used in some suspended applications to conceal gaps between the luminaire and the surrounding surface.



## Direct Burial Specification Matrix

LS3020

-

09D

21

Q

PS

Power

Code

09 W

09D

Static White & Colour

Code

2,700 K (80 CRI)

827

3,000 K (80 CRI)

830

3,500 K (80 CRI)

835

4,000 K (80 CRI)

840

Dynamic Color

Code

RGBA

4CA

RGBW with Royal Blue

4BW<sup>1</sup>

<sup>1</sup>The default RGBW colors have recently changed to the RGBW with Royal Blue (4BW code). These colors will not match existing products with the earlier RGBW with Mid-Blue (4CW code). Contact Lumascape for custom LED Colors.

Tunable White

Code

2,700 K - 6,500 K

2WT

Lens

Code

OptiClear™

A

GripGlass™

G

Cover

Code

Recessed type, stainless steel, polished

B

Recessed type, stainless steel, brushed

H

Round flush type, stainless steel, polished

D

Round flush type, stainless steel, brushed

I

Connection Type

Code

Flexible cable, single entry, for hardwired installations

84

Hookup wire and ½" NPT, single entry, for hard wired installations (North America).

82

Beam Angle

Code

14°

NR

25°

NM

35°

ME

50°

WD

10° x 40°

NH

40° x 10°

NV

20° x 60°

WH

60° x 20°

WV

Beam Angle

Code

12°

NR

20°

NM

35°

ME

45°

WD

55°

WF

Internal Accessory

Code

Louver

L\*

No Accessory

N

<sup>1</sup>Factory fitted accessory.

Installation Type

Code

Direct Burial 5.1" (129 mm)

21

Cable Entry

Code

Side

N

Bottom

Q

Input Voltage

Code

30 to 48 Vdc (International)

07

30 to 48 Vdc (North America)

13

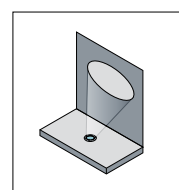
Control

Code

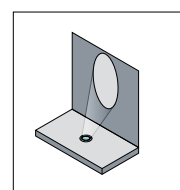
PowerSync™

PS<sup>1</sup>

<sup>1</sup>Required for all dimming and color-changing applications. LS6540 Data Injector required (order separately).



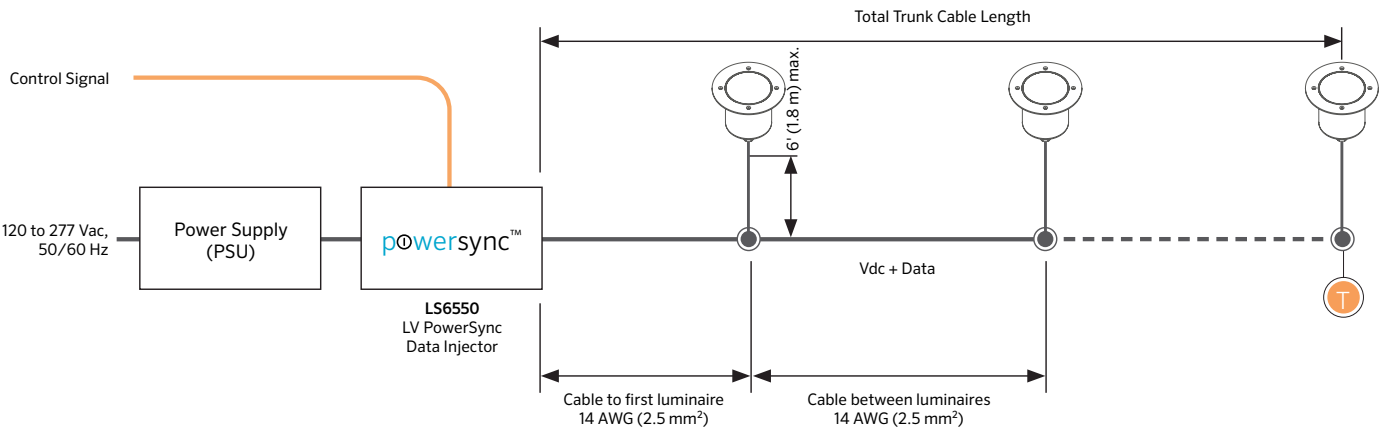
### Beam Orientation for the "NH" and "WH" optical system



### Beam Orientation for the "NV" and "WV" optical system

Trunk Topology – Recommended for Above Water Applications

Circuit Limits – Dimmable and Color-Changing via PowerSync™



- Refer to "Transformer Compatability Table", for maximum number of luminaires
- Calculations based on 14 AWG (2.5 mm²) trunk cable, and 16' (5 m) trunk cable between luminaires.
- Always observe local electrical codes for branch circuit current limitations
- For other configurations, contact Lumascape.

Transformer Compatability Table

Supply Voltage	Luminaire Power	Max. Leader Cable Length from Power Supply to First Luminaire	Maximum Number of Luminaires per Power Supply				
			120 W	240 W	320 W	480 W	600 W
30 Vdc	9 W	50' (15 m)	9	9	9	9	9
		98' (30 m)	7	7	7	7	7
		164' (50 m)	4	4	4	4	4
48 Vdc	9 W	50' (15 m)	9	18	21	21	21
		98' (30 m)	9	17	18	18	18
		164' (50 m)	9	16	16	16	16



Terminator

Use PowerSync™ terminator, supplied with PowerSync Injector to terminate last luminaire in chain.

Accessories

PowerSync Low Voltage 30-48 Vdc Data Injector

Translates control signals into a digital format, delivering integral power and data to intelligent LED luminaires. This allows highly-granular addressing and high-speed digital control of every luminaire, using only three wires. The data injector is DIN rail mountable designed to be installed in a switchboard, next to the power supply and circuit breaker that is supplying power to the controlled lighting circuit. Accepts a growing list of standard protocols (0-10 V, DMX/RDM) for simple integration with a wide selection of control systems using these industry standard protocols.



Note:

PowerSync Data Injector ships with three (3) hardwired terminators and one (1) hardwired DMX terminator.

LS6550	
Product	Code
LV Data Injector PS4	LS6550

Use the table below to specify your Pre-Installation Blockout.

LS647-K	
Connection Type	Code
Flexible cable, single entry, for hardwired installations (International) or Hookup wire and ½" NPT (82), single entry, for hard wired installations (North America only)	LS647-K

Luminaire Wire Colors & Designations

Low Voltage 30 Vdc + PowerSync™

Designation	Color
Positive	Red
Negative	Black
Data	Orange

