LS363LED Inground













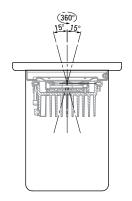
The LS363LED is a robust, medium wattage inground luminaire with high efficacy. As an inherently protected luminaire it can be used in interior spaces and immediately adjacent to combustible materials (such as wood decking, etc). In addition, internal rotation and tilt adjustability ensures the most efficient light delivery can be set according to the site conditions.

Specifications

Source	16 or 20 W LED □ White (4 000 K typical) ■ Warm white (3 000 K typical) ■ Blue (470 nm) Other colors by request ■ RGB (20 W LED only)
Lumen Maintenance (L70)	>60,000 hrs Limited by TM-21 x6 rule
Control Options	PWM
	(0-10 V \rightarrow PWM and DMX \rightarrow PWM conversion available)
IP Rating	IP68
Construction	316 marine grade stainless steel
Installation Types	Pre-Installation Blockout Concrete pour, drive-over & general use applications
	Pre-Installation Collar Decks & grates
	Direct Burial Landscapes, planters & special applications (consult factory)
Drive-over	With OptiClear™ lens and pre-installation blockout (LS644-K)
Static Load Rating	3 968 lb (1 800 kg) with OptiClear ™ lens and pre-
	installation blockout.
Impact Rating	
Impact Rating Standard Inclusions	(Load applied to center of glass across a 2" (50 mm) dia. area)
	(Load applied to center of glass across a 2" (50 mm) dia. area) IK9with OptiClear™ lens Teflon coated cover screws
Standard Inclusions Ambient Operating	(Load applied to center of glass across a 2" (50 mm) dia. area) IK9with OptiClear™ lens Teflon coated cover screws MicroAntiLeach™ cable entry
Standard Inclusions Ambient Operating Temperature	(Load applied to center of glass across a 2" (50 mm) dia. area) IK9with OptiClear™ lens Teflon coated cover screws MicroAntiLeach™ cable entry -4°F to 122°F (-20°C to 50°C)



LS363LED with round flush cover and GripGlass™



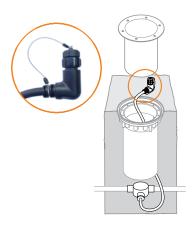
Why Use LS644-K-87 Pre-Installation Blockout?

The LS644-K-87 acts as a blockout, and is intended for installation before the luminaire, however it has other special functions. To simplify the installation, every LS644-K-87 is supplied complete with a 3-way junction box, inside which the installer can make all necessary connections, and allows the completion of all wiring even before the luminaire arrives on site. This method also ensures the luminaire itself is not damaged during concreting or other site works. **Note: The junction box remains serviceable after installation.** To complete the installation, Lumascape provides an IP68 connector, enabling a tool-free final connection from the luminaire to the branch circuit. In addition, this connector is readily detachable, allowing for off-site maintenance.

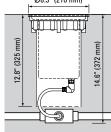
Why Use LS644-K-84 Pre-Installation Blockout?

The LS644-K-84 pre-installation kit (order separately) is ideal for use in applications where maximum flexibility for the type and location of branch circuit connections are required or where exact site conditions may be unknown. The LS644-K-84 is also for use with all applications requiring a color changing or dimmable lighting scheme. For use with the LS644-K-84 Lumascape provides the LS363LED complete with 3 m of factory-installed cable with **MicroAntiLeach™** seal. This provides the installer with greater flexibility to determine the type and location of the branch circuit connection. This option is also 100% hard-wired, and does not feature the IP68 detachable couplings for off-site maintenance. All aspects of the luminaire itself are still field serviceable.

Connection Type '87' for LS644-K-87 Pre-Installation Blockout







IP68 Connector & Junction Box

Pre-Install & Luminaire

The luminaire is fitted with an IP68 connector, which attaches directly to the cable supplied with LS644-K-87, without the use of any tools. The cable is 1 m in length, and is factory assembled with a 3-way junction box – *Remains field serviceable after installation*.

Not suitable for color changing or dimmable applications.

Lens Options



OptiClear™ Glass

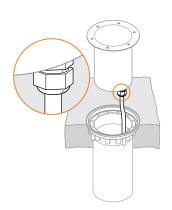
Glass of very high optical purity and load strength. Suitable for walk-over and drive-over applications.



GripGlass™

OptiClear™ glass with slip reduction glazing process. Suitable for walk-over and drive-over applications.

Connection Type '84' for LS644-K-84 Pre-Installation Blockout

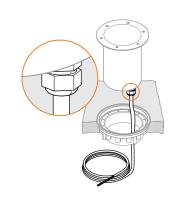


MicroAntiLeach™ Cable

For connection to the branch circuit via junction box (by others) or other approved method.

3 m length. For other length options, consult factory.

Connection Type '84' for LS644-2 Pre-Installation Collar



MicroAntiLeach™ Cable

For connection to the branch circuit via junction box (by others) or other approved method.

3 m length. For other length options, consult factory.

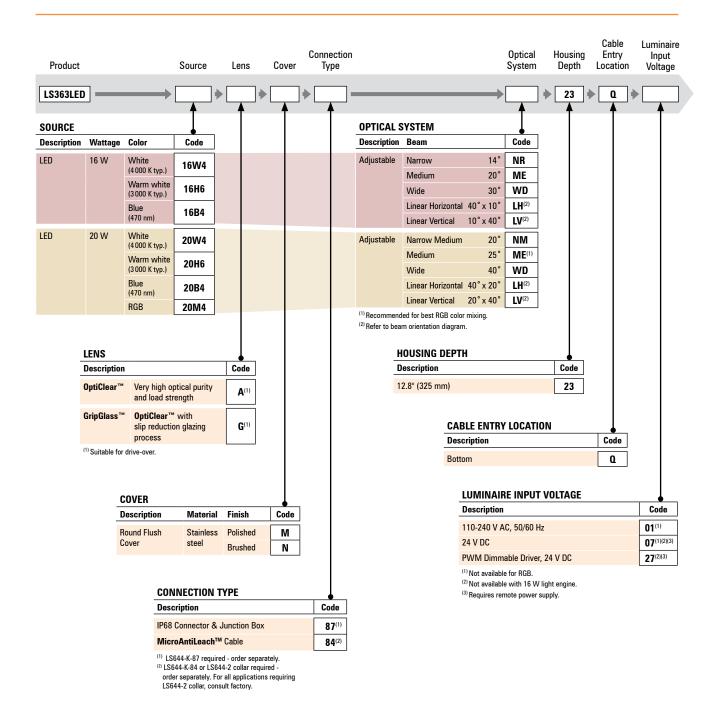
Flush Cover Options

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

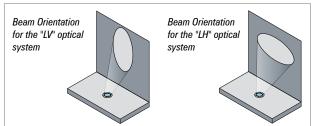


Pre-Installation Blockout Round Flush Cover

■ SS316: Polished ■ SS316: Brushed



Beam Orientations

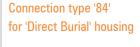


Why Use Direct Burial?

Direct burial installation is ideal for landscaping areas or for special applications where depth is restricted. This type of installation also allows for maximum heat dissipation. The 316 grade Stainless Steel construction of the luminaire performs flawlessly in alkaline and acidic soil types, and is also rated for use in concrete pour applications. **Note: This installation type has no option for a pre-installation blockout.**

Lumascape provides the LS363LED complete with 3 m of factory installed cable, supplied complete with **MicroAntiLeach™** seal. This provides the installer with greater flexibility to determine the location of the electrical connection. This connection is also 100% hard-wired. All aspects of the luminaire itself remains field serviceable.

Consult factory for application advice prior to using this configuration.



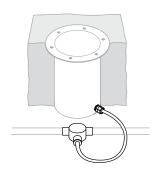


MicroAntiLeach™ Cable

For connections to the branch circuit via junction box (by others) or other approved method. 3 m length.

For other length options, consult factory.

Connection type '81' for 'Direct Burial' housing



Armoured Cable & Junction Box

The luminaire is factory-fitted with a 0.6 m armoured cable. Ensure terminations can be made within this length.

For other length options, consult factory.

Lens Options



OptiClear™ Glass

Glass of very high optical purity and load strength. Suitable for walk-over and drive-over applications.



GripGlass™

OptiClear™ glass with slip reduction glazing process. Suitable for walk-over and drive-over applications.

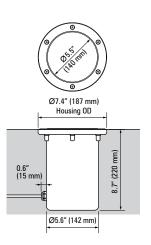
Recessed Cover Options

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



Recessed Cover

SS316: PolishedSS316: Brushed



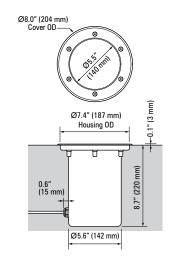
Flush Cover Options

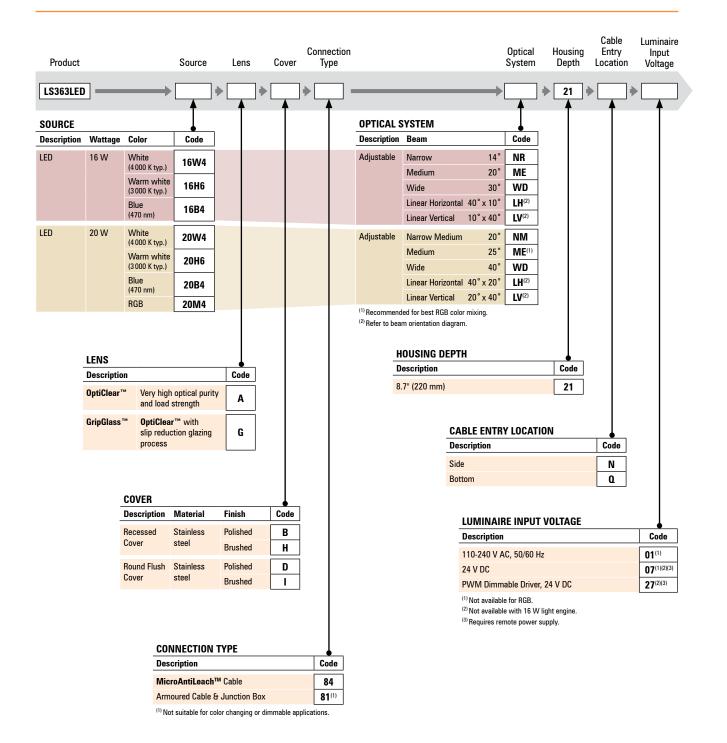
Use flush covers for installation in fine finished surfaces such as granite and marble. They can also be used in some suspended applications. The flush cover will conceal gaps between the luminaire and the surrounding surface.



Round Flush Cover

SS316: PolishedSS316: Brushed





Beam Orientations



Photometrics

Photometric data is based on test results from a NIST traceable testing lab. IES data is available at www.lumascape.com. *Note: No depreciation factor is applied to the data shown*.

Polar Candela Distribution

C 0° C 10° C 20° C 30° C 40° C 50° C 60° C 70° C 80° C 90° 0° 16730 16730 16730 16730 16730 16730 16730 16730 16730 16730 4183 10° 4384 4553 4451 4385 4362 4300 4241 4178 4126 4092 47 47 50 49 8365 13 13 13 12548 0 0 16730 0 100 ■ C-0°

Illuminance at a Distance

m	Center Beam Ix	Beam Ø
2	4183	0.5 m
5	669	1.2 m
10	167	2.5 m
12	116	3.0 m
15	74	3.7 m

LS363LED 4 000 K 20° Beam Angle

LS363LED

14° Beam Angle

Power Input

Lumens

Efficacy

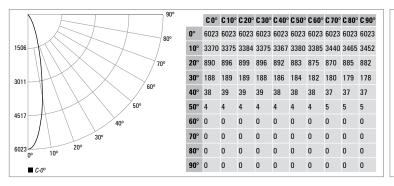
4 000 K

17.7 W

1331 lm

75 lm/W

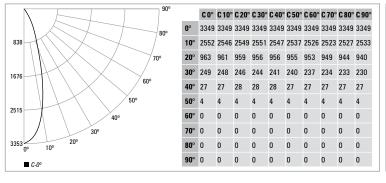
Power Input	17.6 W
Lumens	1198 lm
Efficacy	68 lm/W



m	Center Beam Ix	Beam Ø
2	1506	0.8 m
5	241	1.9 m
10	60	3.9 m
12	42	4.7 m
15	27	5.8 m

LS363LED 4 000 K 30° Beam Angle

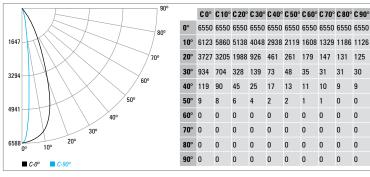
Power Input	17.8 W
Lumens	1064 lm
Efficacy	60 lm/W

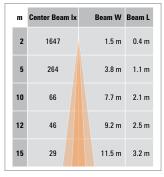


m	Center Beam Ix	Beam Ø
2	838	1.1 m
5	134	2.7 m
10	34	5.4 m
12	23	6.4 m
15	15	8.0 m

LS363LED 4 000 K 10° x 40° Beam Angle

Power Input	17.8 W
Lumens	1267 lm
Efficacy	71 lm/W





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SAFETY STANDARDS

Lumascape's **GripGlass**TM pattern is specifically designed to maximise effective contact area achieved between an average pedestrian footprint and the slip resistant **GripGlass**TM treated area, while minimising the impact on luminaire output and performance.

Independent laboratories using German standard DIN 51130, have determined the GripGlass™ treated surface area achieves an R11 (or greater) performance rating, using the Oil Wet Ramp Test. This R11 rating relates to the surface area effected with the GripGlass™ treatment only (see diagram), and is not applicable to the entire luminaire including untreated glass area and surrounding stainless steel or brass cover.

A brief explanation of this test is as follows.

OIL-WET RAMP TEST METHOD

Two test persons, wearing standard test shoes, are used to determine the angle of inclination at which safe walking no longer occurs, after the pedestrian surface material being tested is coated with engine lubricating oil. The angles of inclination obtained are used to assess the friction characteristics of the test surface.

Rating	Angle (degrees)
R9	≥6 <10
R10	≥10 <19
R11	≥19 <27
R12	≥27 <35
R13	≥35

LS343 recessed cover with GripGlass™ depicted

SLIP RESISTANCE RATINGS FOR TYPICAL PEDESTRIAN SURFACE

Rating
R10
R10
R9
R9
R10
R9
R10
R10

The above information is for reference only. Ratings only refer to the treated area.

