

LD151T with E1 LED Light Engine

High Power Interior/Exterior Tilted LED Uplighter



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Product: LD151T with /GS



The LD151T has been designed with LED and optics on a 6° tilt. This allows the light to be focused onto the lit surface, and enables the uplighters to be set further away from the wall if required. It has been designed specifically to produce low glare illumination to exterior walls and columns. Very powerful for its size and depth, the LD151T features the E1 LED engine, featuring high efficient optics, along with a range of different light engines. It can be used for a wide range of project styles with a minimal aesthetic and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent thermal and light output performance.

Key Features

- 6° tilt focuses the light onto the lit surface
- Tilt enables uplight to be placed further away from the lit surface whilst still achieving the desired effect, while any glare from the fitting is angled away from your eyes.
- LED/Lens assembly recessed and tilted within a black anodised body for reduced glare
- E1 engine, featuring the CREE XHP35 LED with 2-step binning. Optional 2nd channel, RGBW, Tunable and Colour light engines available
- High output 700mA option when specified with the /484N or 484N-2 concrete can, delivering up to 542 lumens
- Narrow 10° spot is for lighting columns and arches, or a 15°x 49° spreader lens, ideal for wall washing
- Half-moon glare shield option developed to minimise the view of the intense light source without affecting the wash of light on the wall/column
- Single optic produces a very consistent beam with no multiple shadows
- No visible fixings
- Range of bezel finish options
- Built-in reverse polarity protection
- Available with Switch, 0-10V, DMX, Dali or Mains dimmable drivers

Specification

Applications



Beam Angles

10°, 19°, 34°, 54°, 15°x 49°

LED type

1 x E1 LED Engine with 2-step binning (LED data below)

Colour temperature

2700K*** / 3000K / 4000K | 5000K

Current	350mA	500mA	700mA*	350mA	500mA	700mA*
LED power (Max)	5W (4.4W)**	7W (6.3W)**	10W (9W)**	5W (4.4W)**	7W (6.4W)**	10W (9W)**
CRI (Min)	80	80	80	80	80	80
Forward voltage (V) ₁₀₀	14V	14V	14V	14V	14V	14V
Delivered lumens (L ₁₀₀)****	339	427	542	366	461	585
Lumens per circuit watt	67	61	54	73	65	58

LED lifetime (to 70% lumen maintenance) 50,000hrs at a max ambient temperature of 35°C (if higher ambient then run at 500mA up to 45°C)

Glass

6mm thick low iron glass

Materials

Black anodised aluminium body, machine finish 316 stainless steel bezel (other options available)
Sleeve - Black Acetal

Wiring

Comes pre-wired with 250mm lead. Single colour equipped with 2 core cable & 2 channel with 4 core cable.
Can be specified with up to 10m at extra cost.

IP rating

IP67

*can only be specified with /484N or /484N-2 concrete housing

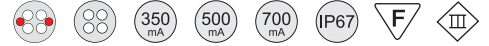
**indicates the nominal power for the LED run at that particular current and includes losses associated with using an 85% efficient driver

***2700K lumen output is 8% lower than the 3000K figure listed

****lumen output indicated is without the glare shield. Allow 30% less with the /GS glare shield.

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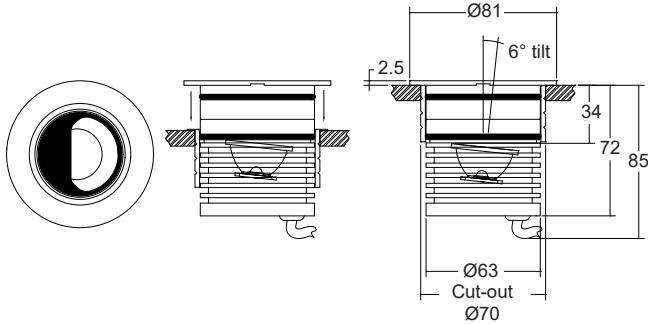


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Fixing Accessories

The fitting is supplied as standard with a fixing sleeve; this is bonded into the mounting surface first. The LD151T is secured into the sleeve by 2 'O' rings on the body. When pushed into the sleeve it creates a watertight seal.

/484S First Fix Sleeve supplied as standard



/484N or /484N-2 Concrete housings

/ID Optional integral non-dimming driver (single colour only at 350mA or 500mA)

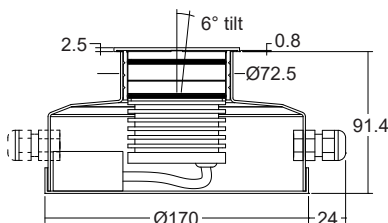
Concrete housing must be used when specifying the 700mA fitting. The aluminium can aids in keeping the LED fitting cool, as it helps with thermal transfer between the heat within the can to the surrounding concrete.

Concrete housings can be specified with 1x PG9 Gland (484N) or 2x PG9 glands (484N-2).

/484N Concrete housing with 1x PG9 IP67 gland

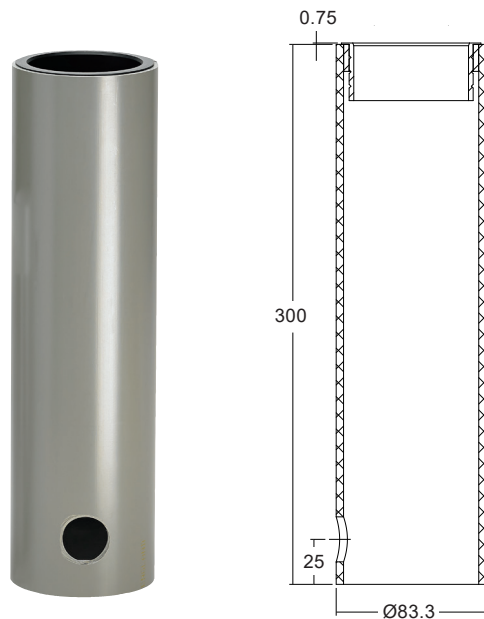


/484N-2 Concrete housing with 2x PG9 IP67 gland



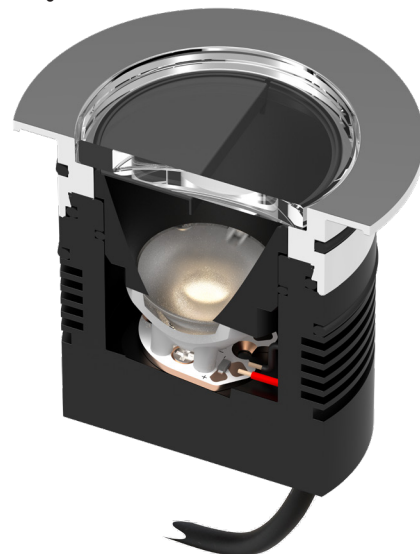
/484GT Ground tube

The in-ground tube has been designed for applications where a recessed uplighter is required in soil or gravel surfaces. The tube can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed. It is supplied with the fixing sleeve bonded into the tube, and can be cut down on site.



6° Tilt

Both the LED and the optic are put at a 6° tilt, allowing for more efficient use of a glare shield, as more of the light output is directed towards the open aperture of the fitting.



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Glare Shields



/NGS

No glare shield for maximum lumen output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.

Please refer to our photometric files for lumen data.

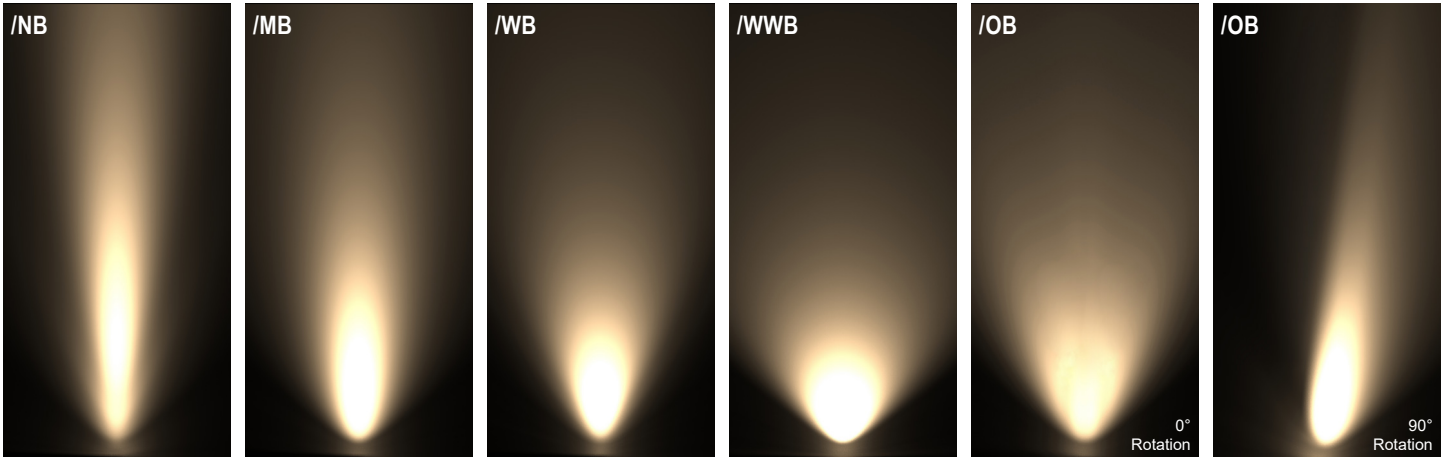
/GS

Half-moon glare shield. For an increased cut-off angle and greater glare control.

Please refer to our photometric files for lumen data.

Cone Diagrams

Cone diagrams below are based on a 3000K E1 LED engine run at maximum output 700mA, 10W. Images below represents beam outputs when wall washing a 3m wall, spaced 250mm away from the lit surface.



Narrow Beam
700mA using a 10° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	0.62	750
2.5	0.52	1080
2.0	0.41	1688
1.5	0.31	3000
1.0	0.21	6751
0.5	0.10	27002

Medium Beam
700mA using a 19° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.06	346
2.5	0.88	498
2.0	0.71	779
1.5	0.53	1384
1.0	0.35	3114
0.5	0.18	12456

Wide Beam
700mA using a 34° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.97	114
2.5	1.64	164
2.0	1.32	256
1.5	0.99	455
1.0	0.66	1024
0.5	0.33	4095

Extra Wide Beam
700mA using a 54° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	3.06	55
2.5	2.55	79
2.0	2.04	124
1.5	1.53	220
1.0	1.02	496
0.5	0.51	1984

Oval Beam
700mA using a 15° X 49° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	2.70 / 0.74	190
2.5	2.25 / 0.61	274
2.0	1.80 / 0.49	428
1.5	1.35 / 0.37	761
1.0	0.90 / 0.25	1712
0.5	0.45 / 0.12	6846

Photometric files (LDT) are included in the design pack which can be downloaded from the LD151T product page on the website.

LD151T with E1 LED Light Engine

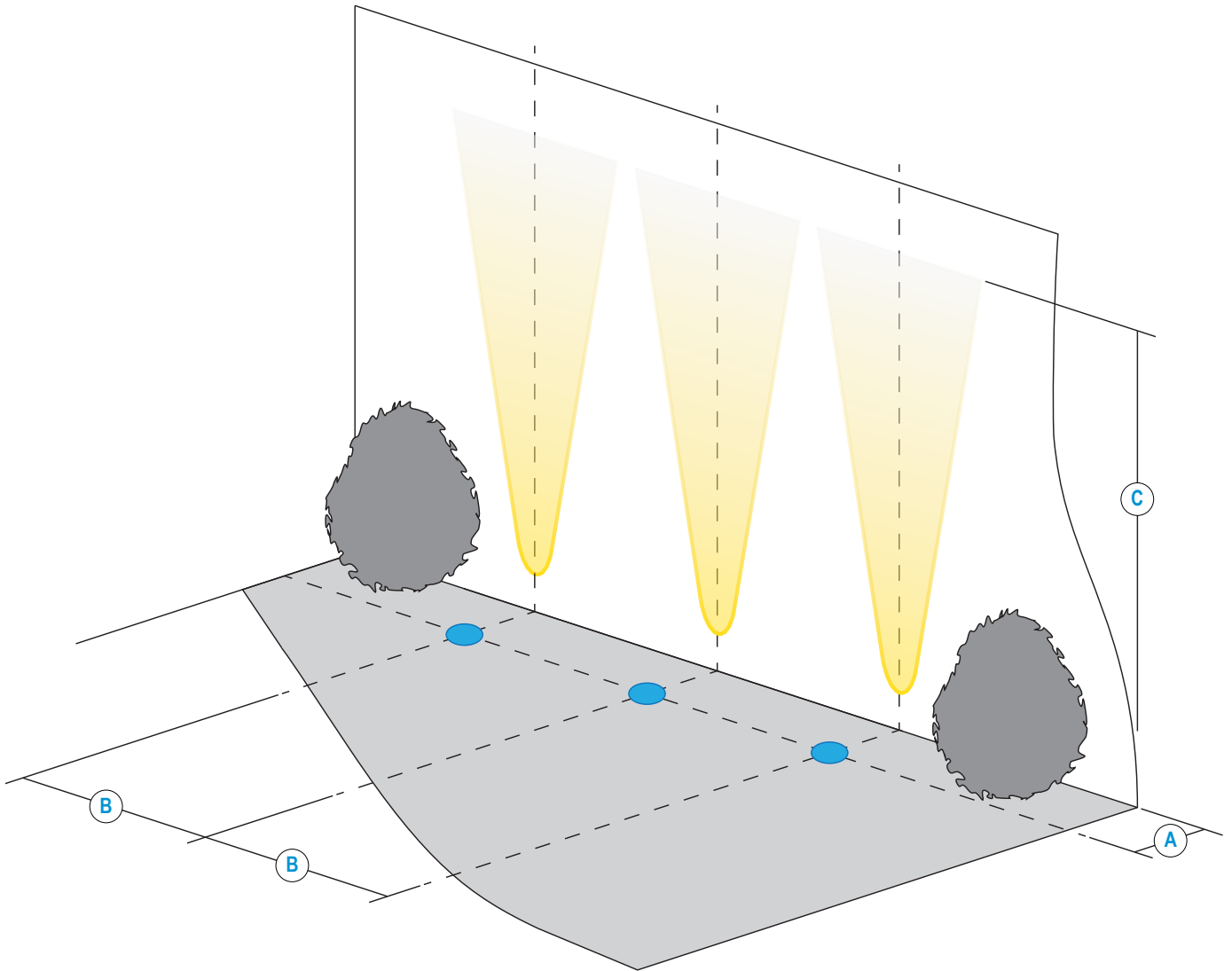


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Installation Guide

Below is a luminaire positioning guide. Every project and lighting scenario will be different; the table below is to be used as a starting point for any wall wash design. Please use our photometric files to further test the desired effect for your application. Files are available on our LD151T product page on our website.



LD151T-E1	/NB	/MB	/WB	/WWB	/OB
A Distance from the centre of the fitting to the lit surface	250mm				
B Spacing for an even wash	250mm*	350mm	400mm	500mm	500mm
C 500mA Lit distance	7m	4.5m	3.5m	2m	4m
C 700mA Lit distance	9m	7m	5m	3m	6m

*Wall washing using narrow beam optics should only be used if the designer requires long distance lighting up the lit surface.

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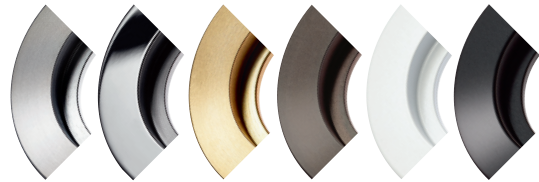


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Product Features

BEZEL

High quality machined bezel available in 316 stainless steel, polished, solid & flamed bronze, paint finish white (RAL 9016) / black / RAL. Other paint finishes available, please talk to sales.

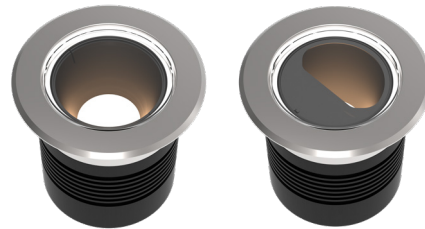


GLASS

6mm thick low iron glass, suitable for walkover applications.

GLARE SHIELD

Optional glare shield to further reduce glare.



OPTIC HOLDER

Matt black anodised for reduced glare.

OPTIC

Revised high efficiency optics with a new range of beam angles to create the ideal lit effect.

LED

- E1 LED engine.
- E1 LED engine, with the optional 2nd channel.

BODY

Machined and anodised body. 6000 series aluminium chosen for its thermal characteristics and resistance to corrosion.

ACCESSORY

Choose between a range of fixings options



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LED Options and Technology

New LED Options

LD150T is available with a choice of light engines which feature a new all copper board for increased thermal transfer. The new E1 light engine for white light applications uses the new Cree XHP35 LED and features on board polarity protection. This engine is also available with two extra LEDs on a second channel, for night lighting and marine navigation applications.

	E1 Light Engine (White light applications)	E1 Light Engine with 2nd channel
LED Board		
LED type	Cree XHP35	Cree XHP35 + XQE's
Key features	<ul style="list-style-type: none"> - Available in 2700K, 3000K, 4000K and 5000K - Very small chip size - Tighter narrow beam - Wider range of beam angles - 2 step binning - Brighter more efficient LED - On board polarity protection - All copper LED board for increased thermal transfer 	<ul style="list-style-type: none"> - Main white LED with optional 2nd channel for night lighting or marine navigation applications - 2nd channel comprises of 2 XQE LEDs mounted next to the XHP35 - Beam shape from the XQE's is different from the main LED as they are not centralised within the optic - Mixing is not recommended - 2 driver circuits required - All copper LED board
Cables		

Industry Leading LED Thermal Management

High quality, embedded copper PCB, with direct contact cooling for the LEDs providing industry leading thermal management of the LED. Guaranteeing long life and minimal colour shift.



Order Codes and Options

Product code	LED colour	Beam angle	Finish	Glare shield	Accessories
LD151T-E1-350 -500 -700	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Example: LD151T-E1-700 / LW30 / NB / Stainless Steel / NGS / 484N

Product codes with output options	
5W LED at 350mA	LD151T-E1-350
7W LED at 500mA	LD151T-E1-500
10W LED at 700mA (Must be specified with /484N)	LD151T-E1-700
LED colour options	
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50
With 2nd channel (red for navigation or amber night lighting) LD151T-E1-2CH	/LW**+L*
<small>*Other LED colour temperatures are available. Please speak to a member of our sales team.</small>	
Beam / lens angle options	
10° narrow spot	/NB
19° medium	/MB
34° wide	/WB
54° extra wide	/WWB
15° x 49° oval	/OB
Bezel finish options	
Stainless steel 316	
Paint finish white / black / RAL (not suitable for high traffic areas)	
Polished and passivated stainless steel (for marine environments)	
Flamed solid bronze (antique finish)	
Glare shield	
No glare shield	/NGS
Half-moon	/GS
Fixing accessories	
First fix sleeve (supplied as standard)	/484S
Concrete housing (specify when choosing LD151T-E1-700) - 1x PG9 Gland	/484N
Concrete housing (specify when choosing LD151T-E1-700) - 2x PG9 Gland	/484N-2
with integral non-dimming driver (single colour 350mA & 500mA single colour only)	/ID
Ground tube	/484GT
Use with 350mA, 500mA & 700mA constant current LED drivers	
We have a wide range of dimmable LED drivers, 0-10V, DMX, DALI and Mains dimmable. Please see the downloads section on our website:	
To run 1-4 LD151T-E1-350 in series use a TXDEL350D (0-10V dimmable)	
To run 1-4 LD151T-E1-500 in series use a TXDEL500D (0-10V dimmable)	
To run 1-3 LD151T-E1-700 in series use a TXDEL700D (0-10V dimmable)	