Data sheet - Page 1

High Power Interior LED Uplighter



The new LD150 features the all new E1 LED engine, optional glare shields and a new range of optics. Tunable White and RGBW options are also available. A powerful uplighter for its size and depth, the LD150 has been designed specifically to produce low glare illumination to walls and columns. 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

- New E1 engine, featuring the CREE XHP35 LED with 2-step binning
- New optional 2nd channel LEDs for secondary lighting applications
- New 700mA option when specified with /482N concrete can, delivering up to 555 lumens
- New optics, featuring an impressively narrow 10° spot is for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised body for reduced glare
- Choice of glare shields, developed to minimise the view of the intense light source without affecting the wash of light on the wall/column
- No visible fixings
- Range of bezel finish options
- Built-in reverse polarity protection
- LD150 is available with RGBW and Tunable White LED engines
- Available with Switch, 0-10V, DMX, Dali or Mains dimmable drivers



#### Specification

App	lications
-----	-----------



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 350mA 500mA 700mA\* 350mA 500mA Current 5W LED power (Max) 5W 7W 10W 7W (4.4W)\*\* (6.3W)\*\* (9W)\*\* (4.4W)\*\* (6.4W)\*\* CRI (Min) 85 85 85 80 80 14V Forward voltage (V)100 14V 14V 14V 14V Delivered lumens (L<sub>100</sub>)\*\*\*\* 347 437 555 374 472 Lumens per circuit watt 69 62 55 75 67 LED lifetime (to 70% 50,000hrs at a max ambient temperature of 35°C lumen maintenance) (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) Comes pre-wired with 250mm lead. Single colour equipped Wiring with 2 core cable, 2 channel or TW engine with 4 core cable & RGBW with 8 core cable. Can be specified with up to 10m at extra cost.

IP rating

\*can only be specified with /482N 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

IP54

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



700mA\*

10W

(9W)\*\*

80

14V

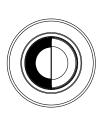
599

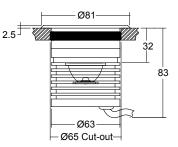
59

High Power Interior LED Uplighter

Data sheet - Page 2

### **Dimensions and Fixing Accessories**

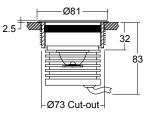




Soft silicon seal holds the fitting into the cut-out

#### /482S First fix sleeve



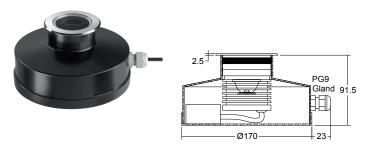


First fix sleeve is polypropylene. Fins on the side lock it into a range of mounting surfaces.

#### **/482N** Concrete housing

/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 housing can be specified with an integral mains in non dimming LED driver.









High Power Interior LED Uplighter



Glare Shields

LD150 now comes with a choice of glare control options.





**/NGS** No glare shield. Deep recessed optic and matt black anodised optic holder aids in glare reduction.

#### **/GS** Standard glare shield introduced in 2010, which provides an excellent

2010, which provides an excellent balance between glare control and light output. This accessory works well in most applications.



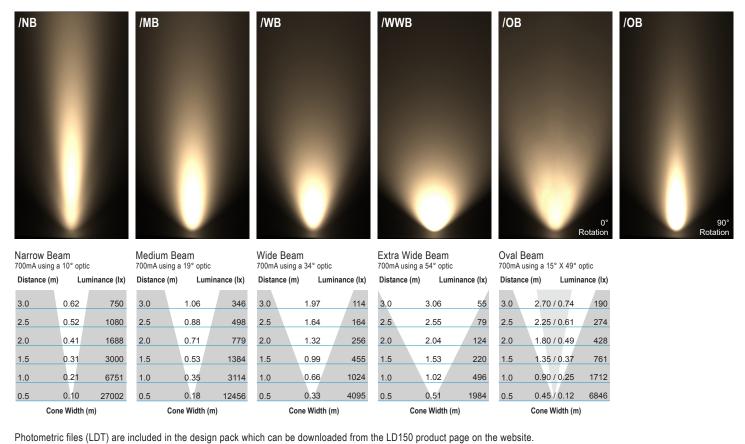
#### /GSHM

Half-moon glare shield for applications that require very low glare. Lumen output typically reduced by 60%.

Please refer to our photometric files for lumen data. These are available to download from the website.

#### 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 125mm away from the lit surface.



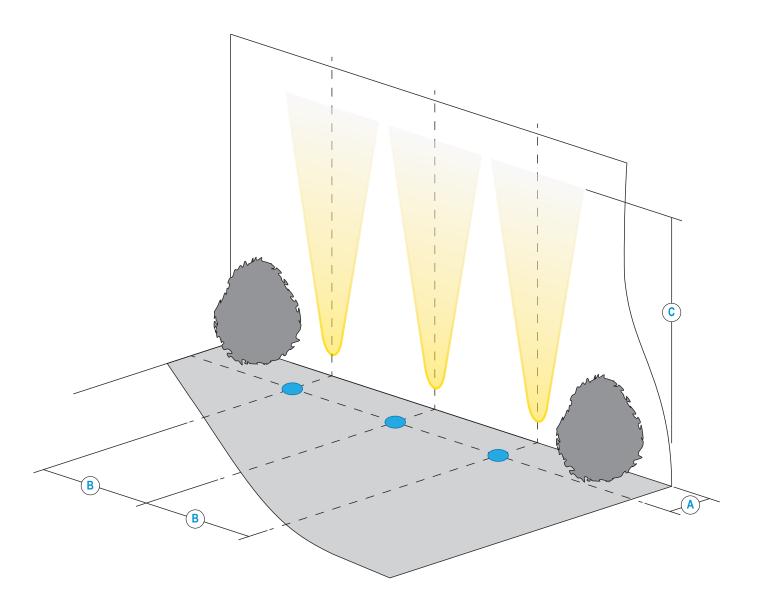


High Power Interior LED Uplighter

Data sheet - Page 4

#### 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 LD150 product page on our website.



LD150-E1		/NB	/MB	/WB	/WWB	/OB
	Distance from the centre of the fitting to the lit surface	125mm				
B	Spacing for an even wash	250mm*	350mm	400mm	500mm	500mm
<b>C</b>	500mA Lit distance	6m	4.5m	2m	2m	4m
С	700mA Lit distance	9m	5.5m	4m	3m	5m

\*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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# LD150 with new E1 LED Light Engine

High Power Interior LED Uplighter

Data sheet - Page 5

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#### **Product Features**

#### BEZEL

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

(350

(500 mA



#### GLASS

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

#### **GLARE SHIELD**

Optional glare shield to reduce glare. With choices between our standard glare shield or a half moon glare shield design.





**OPTIC HOLDER** Matt black anodised for reduced glare.

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

#### ACCESSORY

Choose between our fixing sleeve, concrete can or no fixing at all.





#### 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.
- TW Tunable White LED engine.
- RGBW LED engine with colour mix lens.
- CLR Colour LED engine.

BODY



High Power Interior LED Uplighter

Data sheet - Page 6

LED Options and Technology

#### **New LED Options**

LD150 is now 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 smaller LED chip has enabled a wider range of beam angles to be offered, coupled with increased efficiencies. This engine is also available with two extra LEDs on a second channel, for night lighting and marine navigation applications. The new tunable white engine offers a choice of dynamic colour options.

	E1 Light Engine	E1-2CH 2nd	CLR - C	olour 😮	TW - Tunable White	RGBW	
	(White light)	channel board					
LED Board				***		Just Control	
LED type	Cree XHP35	Cree XHP35 + XQE's	Cree XQE	's	Cree XQE's	Cree XML	
Key Features	<ul> <li>Available in 2700K, 3000K, 4000K and 5000K</li> <li>Very small chip size</li> <li>Tighter narrow beams</li> <li>Wider range of beam angles</li> <li>2 step binning</li> <li>Brighter more efficient LED</li> <li>On board polarity protection</li> <li>All copper LED board for increased thermal transfer</li> </ul>	<ul> <li>Main white LED with op 2nd channel for night ligh or marine navigation app cations</li> <li>2nd channel comprises XQE LEDs mounted next the XHP35</li> <li>Beam shape from the X is different from the main as they are mounted to th sides of the optic</li> <li>2 driver circuits required - All copper LED board</li> </ul>	titing under a sir - All coppe - Red, Blue of 2 colour LEE t to - Single LE QE's LED ne	r LED board e, Green and Amber ) options	<ul> <li>4 XQE LEDs mounted under a single optic</li> <li>2 LEDs per colour</li> <li>Excellent dynamic white mixing from a range of optics</li> <li>All copper LED board</li> <li>2 driver circuits required</li> </ul>	<ul> <li>- RGBW LEDs mounted under a single 26deg optic for superb colour mixing</li> <li>- White LED is 4000K</li> <li>- All copper LED board</li> <li>- 4 LED circuits required</li> </ul>	
Cables		CH 1	CH 2		CH 1 CH 2	CH 1 CH 3 CH 1 CH 3 CH 2 CH 4	
Lumen output	See front page	See front page			See table below		
	nel Light Output					stry Leading LED	
/MB					Ther	mal Management	
						quality, embedded copper PCB,	
Tunable white lumen output			ut data		providir		
		Colour temperature	Warm White 2700K or 3000K	Cool White 4000K or 5000K		nent of the LED. Guaranteeing long minimal colour shift.	
Fitting 2	Im from surface		500mA	500mA			
		ED power (Max) All channels in use	7W (6.3W) 3.5W per channel				
		CRI (Min)	85		-   (	Light of the light	
		Delivered lumens (L100)	148lm	188lm	-		
		umens per circuit watt	42	54	-		
			1				



Wall wash

(700 mA) (IP54)

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Data sheet - Page 7

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# LD150 with new E1 LED Light Engine

High Power Interior LED Uplighter

### Order Codes and Options

### White LED Options - E1 Light Engine 🛞 👀

White LED Options - E1 Light Engine (88)	
Product code LED Beam Glare Finish LD150-E1 - 350 - 500 - 700 Example: LD150-E1-700 / LW30 / NB / NGS / Stainless Steel / 4	Accesso- ries
Product codes with output options	
5W LED at 350mA	LD150-E1-350
7W LED at 500mA	LD150-E1-500
10W LED at 700mA (Must be specified with /482N)	LD150-E1-700
LED colour options	Suffix
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) LD150-E1-2CH "For other single colour options, please discuss with the sales team	/LW**+L*
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	
Polished and passivated stainless steel (for marine environments)	
Flamed solid bronze (antique finish)	
Paint finish white / black / RAL (not suitable for high traffic areas) "See our finishes guide for other options	
Fixing accessories	
First fix sleeve	/482S
Concrete housing (specify when choosing LD150-E1-700)	/482N
with integral non-dimming driver (350mA & 500mA outputs only)	/ID
Glare shield	
No glare shield	/NGS
Standard glare shield	/GS
Half-moon glare shield	/GSHM
Use with 350mA, 500mA & 700mA constant current LED drivers	
We have a wide range of dimmable LED drivers, 0-10V, DMX, DALI and Mains Please see the downloads section on our website: To run 1-4 LD150-E1-350 in series use a TXDEL350D (0-10V dimmable) To run 1-4 LD150-E1-500 in series use a TXDEL500D (0-10V dimmable) To run 1-3 LD150-E1-700 in series use a TXDEL700D (0-10V dimmable)	s dimmable.

### Colour LED Options - CLR Light Engine

Example: LD150-CLR-500 / LR / MB / NGS / Stainless Steel / 482N	
LED colour options (max 500mA)	Suffix
Red	/LR
Green	/LB
Blue	/LG
Amber	/LA
Driver requirements identical to E1 engine, beam angles identical to TW engine	

### Tunable White Options - TW Light Engine

(350

(500 mA

Tunable White Options - TW Light Engine	
Product code LED Beam Glare Finish colour angle Shield / LD150-TW-350 / / / / - 500 / LW27 + LW40 / NB / NGS / Stainles	
Product codes with output options5W LED at 350mA - 2 channels of 2 x 1.2W7W LED at 500mA - 2 channels of 2 x 1.7W	LD150-TW-350 LD150-TW-500
LED colour options Tunable White 2700K & 4000K (standard option) Tunable White 2700K & 5000K Custom Fitting comprised of 2x LEDs in one colour temperature & 2x LEDs in another Other white colour options available on request, please discuss with our sales	
Beam / lens angle options	
Narrow spot not available due to poor colour mixing 24° medium 38° wide 54° extra wide 20° x 46° oval	/MB /WB /WWB /OB
Beam, Bezel and Glare shield options	
Same as White LED options using the E1 Light Engine	
Finish and fixing options	
Same as White LED options using the E1 Light Engine	
Use with 350mA & 500mA constant current LED drivers We have a wide range of dimmable LED drivers, 0-10V, DMX, DALI and Mair Please see the downloads section on our website: To run 1-7 LD150-TW-350 in series use 2x TXDEL350D (0-10V dimmable) To run 1-7 LD150-TW-500 in series use 2x TXDEL500D (0-10V dimmable)	ns dimmable.
Colour Change RGBW Options - RGBW Light Engine	•
Product code Glare Finish LD150-RGBW - 350 - 500 / / / / / Example: LD150-RGBW-500 / NGS / Stainless Steel / 482N	Accessories
Product codes with output options	
· · · · ·	D150-RGBW-350
7W LED at 500mA (4x 1.7W LEDs) L RGBW features a 4000K white LED for creating hues	.D150-RGBW-500
Beam / lens angle options	
38° colour mix lens	
Bezel and Glare shield options Same as White LED options using the E1 Light Engine	
Finish and fixing options	
Same as White LED options using the E1 Light Engine	
Use with 350mA & 500mA constant current LED drivers	e see the

We have a range of dimmable LED drivers DMX and DALI compatible. Please see the downloads section on our website:

To run 2-13 LD150-RGBW-350 in series use a TXDEL4A350DMX or TXDEL4A350DALI To run 2-13 LD150-RGBW-500 in series use a TXDEL4A500DMX or TXDEL4A500DALI

