LD141DRG

DEEP RECESSED COMPACT TRIMLESS INTERIOR/EXTERIOR RECESSED LED UPLIGHT

350 mA | 500 mA | IP67 | 55°C Ta | PART L Display | 5 YEAR Warranty

CB | R+R | MOISTURE GUARD



The LD141DRG has been designed for exterior applications that require ultra low glare, with the lens assembly recessed 53mm into the body. Compact in size, it offers a powerful output with a large range of features. There are 2 LED engine options available. The E3 engine delivers a high output of 440lm, 12° narrow beam, and both engines are available in a wide range of colour temperatures from 2200K to 5000K. Designed with our all-glass bezel, the LD141DRG offers a seamless, super low-glare solution for a range of exterior-rated applications.



KEY FEATURES

- Deep recessed uplight with optics set back 53mm into the body for super low glare
- High-power E3 engine with NICHIA LED delivering up to 440lm at 500mA
- Available in a wide range of colour temperatures from 2200K to 5000K.
- Durable all glass bezel, suitable for a wide range of applications
- Range of beam angles including 12°, 19°, 25°
- Optional half moon glare shield for further glare reduction
- Fixing options include a rebated trimless fixing sleeve, concrete housing and ground tube
- Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- Switched, 0-10V, Casambi, DMX, DALI or Mains dimmable drivers available

DIMENSIONS

Dimensions in mm

For fixing dimensions please go to page 3.



WHITE LED ENGINE SPECIFICATION

Engine	E3		F1	
Beam angles	12°, 19°		25°	
LED manufacturer	NICHIA		CREE	
Colour temperature*	2200K, 2700K, 3000K, 4000K, 5000K		2200K, 2700K, 3000K, 4000K, 5000K	
Current [Rated Output]	350mA [5W]	500mA [7W]	350mA [3.5W]	500mA [5W]
Typical LED Circuit wattage	4.4W	6.4W	3.3W	5W
Delivered lumens (L_{100})*	336	440	208	268
Delivered lm/Circuit W**	76	68	63	54
Typical LED Source wattage	4W	5.8W	3W	4.5W
Source LED lm	574	740	377	497
Source lm/W	144	128	126	110
Forward voltage (V_{100})	11.3V	11.6V	8.7V	9V
CRI	85	90***	90	
Colour consistency	2SDCM		3SDCM	
Peak intensity**	4,513 cd		1,810 cd	
LOR	0.59		0.54	
TM30	RF88 | RG99		RF93 | RG99	
UGR rating ('downlight' mounted) ***	3.2	4.1	4.1	5.1
BUG rating ('uplight' mounted)	B0-U3-G0		B0-U3-G0	
LED lifetime	L90B5 at 90,000hrs		L90B5 at 90,000hrs	
Applications				

This data is based on LD141DRG-E3-500/830/NB and LD141DRG-F1-500/930/MSB
*Lumen output data applies to all E3 colour temperatures, for F1, please see lumen variance table to the right
**Indicates the nominal power for the LED run at that aprticular current and includes losses associated with using an 85% efficient driver
***90 CRI available in 2700K/3000K only. Approx. 10% lumen drop will occur compared to 85 CRI variants
***UGR values based on room parameter of 4H 8H, C70 W50 F20

Lumen variance by CCT	
2200K	-7%
2700K	+/- 0%
4000K	+7%
5000K	+16%

MECHANICAL

			350mA	500mA
Ambient temperature ○ 55°C	E3	Soil/Sleeve	-20°C to 55°C	-20°C to 40°C
		Concrete	-20°C to 55°C	-20°C to 55°C
	F1	Soil/Sleeve	-20°C to 55°C	-20°C to 40°C
		Concrete	-20°C to 55°C	-20°C to 55°C
Glass	6mm toughened glass with ceramic screen print			
Materials	Black anodised aluminium body with black anodised bezel and glass front			
Weight of product	0.32kg			
IP rating	IP67			
IK rating	IK08			
Wiring	In-series constant current wiring (pre-wired with 2-core exterior cable at a length of 250mm)			

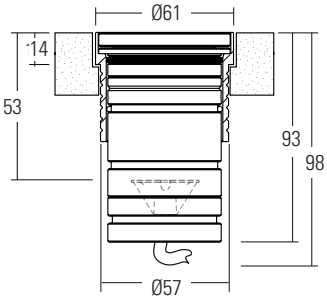
ENVIRONMENTAL

TM65	Available on request
TM66	2.7
Repair + Refurbish	R+R This product is included in our Repair and Refurbish scheme. This offers customers the ability to send back products to us for repair or refurbishment to extend their life without having to buy new fittings.

DIMENSIONS AND FIXING ACCESSORIES

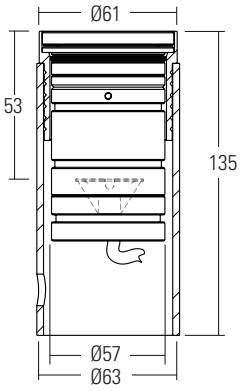
Dimensions in mm

/441SG
Rebated trimless fixing sleeve
The fitting can be supplied with a rebated fixing sleeve. This is bonded into the mounting surface first. The LD141DRG is secured into the sleeve by a single 'O' ring on the body. When pushed into the sleeve it creates a watertight seal. Mounting surface will require a 14mm rebate depth to allow for flush installation. Weight: 0.18kg. Fixing ring available with a passivated stainless steel or powder coat black finish.*



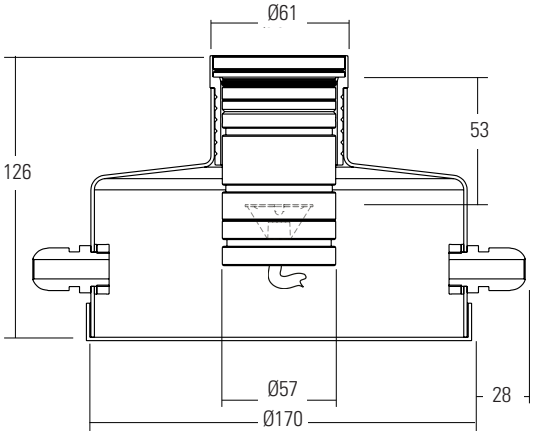


/441GTG Trimless ground tube fixing
The in-ground tube has been designed for applications where a recessed uplight is required in soil or gravel surfaces. The tube can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed. It is supplied with the fixing sleeve bonded into the tube and can be cut down on site. Weight: 1.26kg.
Fixing ring available with a passivated stainless steel or powder coat black finish.*





/441NG or /441NG-2 Trimless concrete housing
The aluminium housing is used as a heat sink which keeps the LED fitting cool through the thermal transfer of the heat within the housing to the surrounding concrete. The housings are big enough for IP rated connections to be made inside the housing and a second gland is available for cabling onto the next luminaire. The housing can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed. Weight: 2.90kg. Fixing ring available with a passivated stainless steel or powder coat black finish.*





/441NG
Trimless concrete housing with 1x PG9 IP67 gland



/441NG-2
Trimless concrete housing with 2x PG9 IP67 gland



***NOTE:** Powder coat black paint finish is not suitable for high-traffic areas.

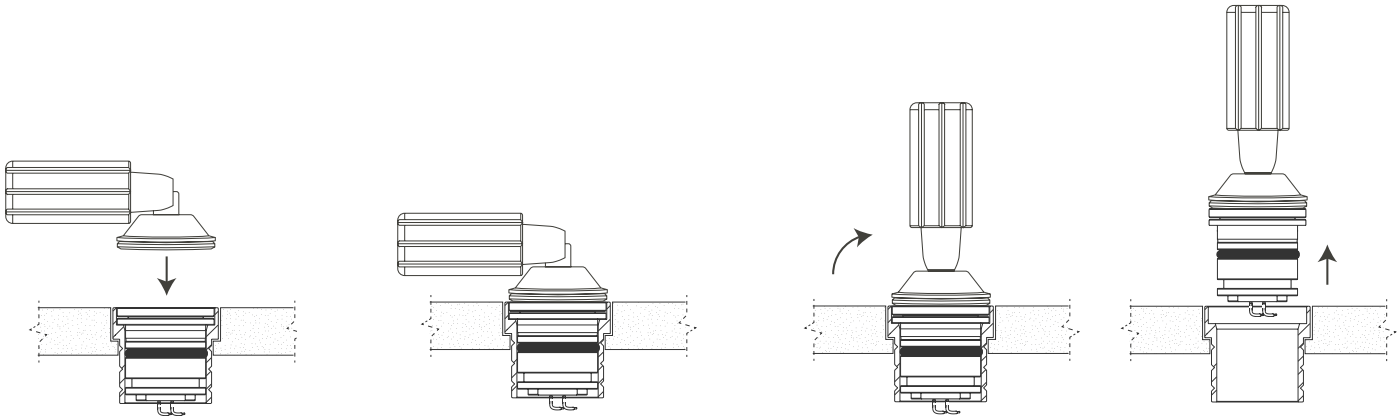
/HT-44-G Trimless Family Hand tool

We supply our Trimless family fittings with a hand tool for easy intallation and removal. Use the /HT-44-G suction cup or a similar suction tool for the removal of the fittings from their fixing options. Please contact your LightGraphix sales representative for more information.



How to use the hand tool

1. Set tool to a 90° angle.
2. Press tool firmly onto glass.
3. Tilt handle up to create suction, and pull directly upwards to remove fitting.
   Note: Do not twist during removal as this could damage the bezel.



GLARE CONTROL OPTIONS

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



/GSHM For applications that require low glare.
Lumen output is typically reduced by 60% with no light lost on the lit surface.





CONE DIAGRAMS

E3 LED Engine

Cone diagrams below are based on a 3000K E3 LED engine run at maximum output 500mA, 7W. Images below represents beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD141DR product page on the website.

Narrow Beam
500mA using a 12° optic

Distance (m)		Illuminance (lx)
3.0	0.80	505
2.5	0.67	727
2.0	0.53	1136
1.5	0.40	2020
1.0	0.27	4544
0.5	0.13	18176

Cone Width (m)

Medium Beam
500mA using a 19° optic

Distance (m)		Illuminance (lx)
3.0	0.98	370
2.5	0.82	532
2.0	0.66	832
1.5	0.49	1479
1.0	0.33	3327
0.5	0.16	13309

Cone Width (m)

F1 LED Engine

Cone diagrams below are based on a 3000K F1 LED engine run at maximum output 500mA, 5W. Images below represents beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD141DR product page on the website.

Medium Spot Beam
500mA using a 25° optic

Distance (m)		Illuminance (lx)
3.0	1.09	201
2.5	0.91	289
2.0	0.73	451
1.5	0.55	802
1.0	0.36	1806
0.5	0.18	7222

Cone Width (m)

ORDER CODES & OPTIONS

EXAMPLE: LD141DRG-E3-500/830/NB/GSHM/441SG/Paint Finish Black

Light Engine & Drive Current		LED Colour		Beam Angle		Glare shield	Fixing	Fixing Finish
	/		/		/	/	/	/

Ambient temperature key: 55°C

E3

		LED Colour		Beam Angle		Glare shield	Fixing	Fixing Finish
55°C Ta	3.5W LED at 350mA — LD141DRG-E3-350	2200K 85+ CRI	/822	12° Narrow	/NB	 /NGS	 /441GS	Passivated Stainless Steel
55°C Ta	7W LED at 500mA* — LD141DRG-E3-500	2700K 85+ CRI	/827	19° Medium	/MB	 /GSHM	 /441GTG	Paint finish Black (Powder Coat)
		3000K 85+ CRI	/830				 /441NG	
		4000K 85+ CRI on request	/840				 /441NG-2	
		5000K 85+ CRI	/850					
		2700K 90+ CRI	/927					
		3000K 90+ CRI	/930					

*55°C ambient when placed in a 485N / 485N-2 concrete can in concrete.

F1

		LED Colour		Beam Angle		Glare shield	Fixing	Fixing Finish
55°C Ta	3.5W LED at 350mA — LD141DRG-F1-350	2200K 90+ CRI	/922	25° Medium spot	/MSB			
55°C Ta	5W LED at 500mA* — LD141DRG-F1-500	2700K 90+ CRI	/927					
		3000K 90+ CRI	/930					
		4000K 90+ CRI on request	/940					
		5000K 90+ CRI	/950					

*55°C ambient when placed in a 485N / 485N-2 concrete can in concrete.

Drivers
Use with 350mA and 500mA constant current LED drivers We have a range of dimmable LED drivers including DMX and DALI compatible. Please see the downloads section on our website.