LD141DRG

DEEP RECESSED COMPACT TRIMLESS INTERIOR/EXTERIOR RECESSED LED UPLIGHT

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 and 12° narrow beam, whilst the F1 engine offers a super warm colour temperature of 2200K. 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
- F1 LED engine with CREE COB with super warm 2200K option
- 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
- Repairable light engine with anti-wicking barrier to increase protection against moisture ingress
- Switched, 0-10V, Casambi, DMX, DALI or Mains dimmable drivers available

DIMENSIONS

Dimensions in mm

For fixing dimensions please go to page 3.

LD141DRG

WHITE LED ENGINE SPECIFICATION

Engine	E3		F1	
Beam angles	12°, 19°		25°	
LED manufacturer	NICHIA		CREE	
Colour temperature*	2700K, 3000K, 4000K, 5000K		2200K, 2700K, 3000K, 4000K, 5000K	
Current	350mA	500mA	350mA	500mA
LED power (Max)	4.2 (5W**)	6 (7W**)	3.2 (3.5W**)	4.5 (5W**)
Delivered lumens (L_{100})	336	440	208	268
Lumens per circuit watt	67	63	59	54
CRI (Typ)	85		90	
Forward voltage (V_{100})	14V		9V	
Colour consistency	2SCDM		3SCDM	
Peak intensity	4513 cd		1810 cd	
LED Lumens	596		715	
LOR	0.74		0.37	
TM30	RF88	RG99	RF93	RG99
LED lifetime	L90B5 at 90,000hrs		L90B5 at 90,000hrs	
UGR***	6.5		7.4	
Applications				

This data is based on LD141DRG-E3-500-NB and LD141DRG-F1-500/MSB/LW30
*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
***UGR values based on room parameter of 4H 8H, C70 W50 F20

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

MECHANICAL

Ambient temperature	-20° to 45° (350mA) or -20° to 35° (500mA)
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 2-core exterior cable at a length of 2000mm)

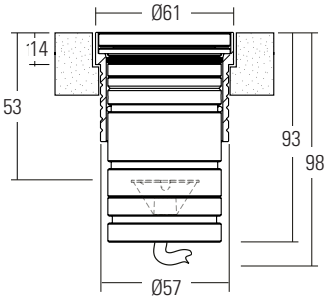
ENVIRONMENTAL

TM65	Available on request
TM66	2.7

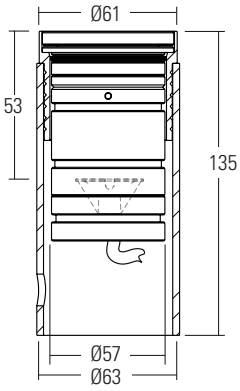
DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

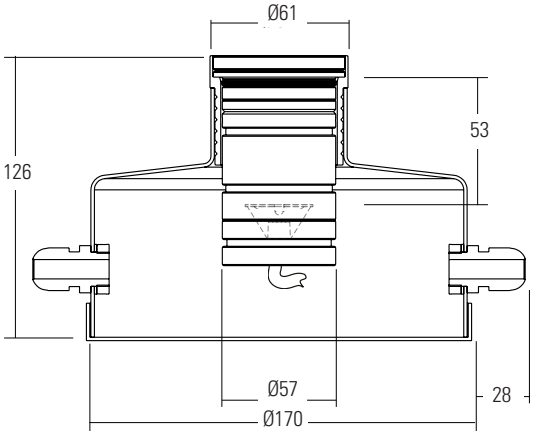
/441SG
Rebated trimless fixing sleeve
The fitting can be supplied with a rebated fixing sleeve. This is bonded into the mounting surface first. The LD141DRG is secured into the sleeve by a single 'O' ring on the body. When pushed into the sleeve it creates a watertight seal. Mounting surface will require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



/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

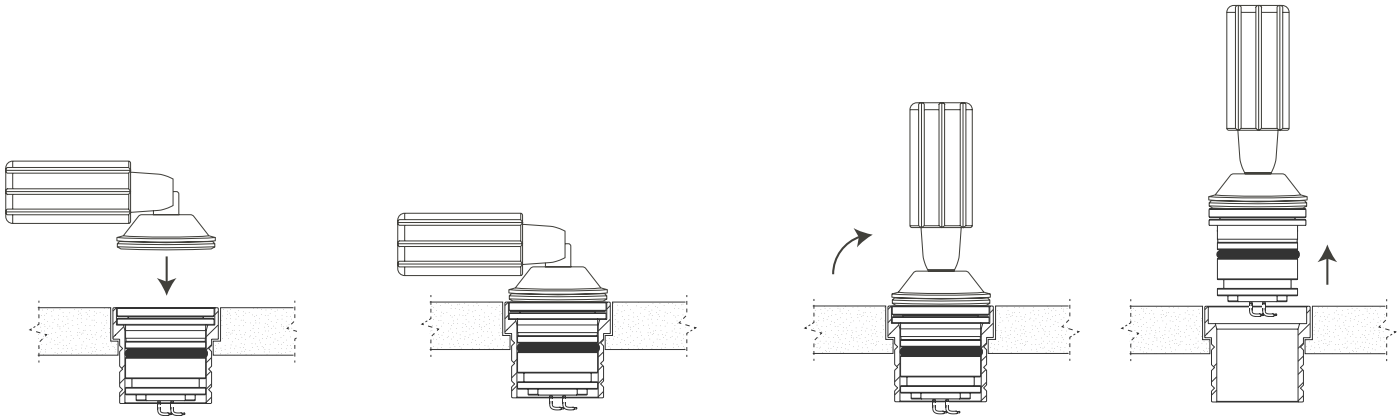
***NOTE:** Powder coat black paint finish is not suitable for high-traffic areas.

/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

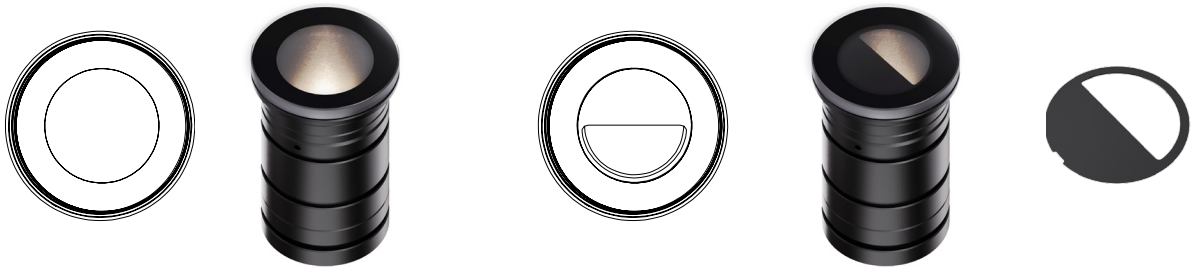
1. Set tool to a 90° angle.
2. Press tool firmly onto glass.
3. Tilt handle up to create suction, and pull directly upwards to remove fitting.
   Note: Do not twist during removal as this could damage the bezel.



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)		Luminance (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)		Luminance (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)		Luminance (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 / LW30 / NB / GSHM / 441SG / Paint finish black

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

E3

Light Engine & Drive Current	
5W LED at 350mA	LD141DRG-E3-350
7W LED at 500mA	LD141DRG-E3-500

LED Colour	
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50

Beam Angle	
12° Narrow	/NB
19° Medium	/MB

Glare shield	
	/NGS
	/GSHM

Fixing	
	/441SG
	/441GTG
	/441NG
	/441NG-2

Fixing Finish	
	Passivated Stainless Steel
	Paint finish Black (Powder Coat)

F1

Light Engine & Drive Current	
3.5W LED at 350mA	LD141DRG-F1-350
7W LED at 500mA	LD141DRG-F1-500

LED Colour	
Super Warm White (2200K)	/LW22
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50

Beam Angle	
25° Medium spot	/MSB

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.