## 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, 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                 |              | <b>(a)</b> F1              |  |  |  |
|---------------------------------------|----------------------|--------------|----------------------------|--|--|--|
| Beam angles                           | 12°, 19°             |              | 25°                        |  |  |  |
| LED manufacturer                      | NICHIA               |              | CREE                       |  |  |  |
| Colour temperature*                   | 2200K, 2700K, 3000K, | 4000K, 5000K | 2200K, 2700K, 3000K, 4000K |  |  |  |
| Current [Rated Output]                | 350mA [5W]           | 500mA [7W]   | 350mA [3.5W]               |  |  |  |
| Typical LED Circuit wattage           | 4.4W                 | 6.4W         | 3.3W                       |  |  |  |
| Delivered lumens (L <sub>100</sub> )* | 336                  | 440          | 208                        |  |  |  |
| Delivered Im/Circuit W**              | 76                   | 68           | 63                         |  |  |  |
| Typical LED Source wattage            | 4W                   | 5.8W         | 3W                         |  |  |  |
| Source LED Im                         | 574                  | 740          | 377                        |  |  |  |
| Source Im/W                           | 144                  | 128          | 126                        |  |  |  |
| Forward voltage (V <sub>100</sub> )   | 11.3V                | 11.6V        | 8.7V                       |  |  |  |
| CRI                                   | 85                   |              | 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                        |  |  |  |
| BUG rating ('uplight' mounted)        | B0-U3-G0             |              | B0-U3-G0                   |  |  |  |
| LED lifetime                          | L90B5 at 90,000hrs   |              | L90B5 at 90,000hrs         |  |  |  |
| Applications                          |                      |              |                            |  |  |  |

| 25°                      |            |  |  |  |
|--------------------------|------------|--|--|--|
| CREE                     |            |  |  |  |
| 2200K, 2700K, 3000K, 400 | 00K, 5000K |  |  |  |
| 350mA [3.5W]             | 500mA [5W] |  |  |  |
| 3.3W                     | 5W         |  |  |  |
| 208                      | 268        |  |  |  |
| 63                       | 54         |  |  |  |
| 3W                       | 4.5W       |  |  |  |
| 377                      | 497        |  |  |  |
| 126                      | 110        |  |  |  |
| 8.7V                     | 9V         |  |  |  |
| 90                       |            |  |  |  |
| 3SDCM                    |            |  |  |  |
| 1,810 cd                 |            |  |  |  |
| 0.54                     |            |  |  |  |
| RF93   RG99              |            |  |  |  |
| 4.1 5.1                  |            |  |  |  |
| B0-U3-G0                 |            |  |  |  |
| L90B5 at 90,000hrs       |            |  |  |  |

This data is based on LD141DRG-E3-500-NB and LD141DRG-F1-500/MSB/LW30

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

# **MECHANICAL**

|                     | F0  | Soil     | -20°C to 50°C (350mA-500mA)             |  |  |  |  |
|---------------------|---|----------|---|--|--|--|--|
|                     | E3  | Concrete | -20°C to 50°C (350mA-700mA) in concrete |  |  |  |  |
| Ambient temperature |   |          |   |  |  |  |  |
|                     | F1  | Soil     | -20°C to 50°C (350mA-500mA)             |  |  |  |  |
|                     |   | Concrete | -20°C to 50°C (350mA-700mA) in concrete |  |  |  |  |
| 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 | 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. |  |  |  |  |







<sup>\*</sup>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

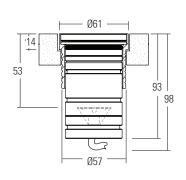
### **DIMENSIONS AND FIXING ACCESSORIES**

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 '0' 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.\*







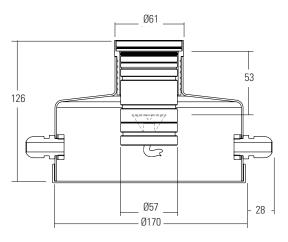
#### /441GTG Trimless ground tube fixing

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





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



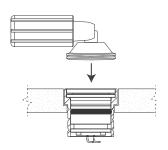
Set tool to a 90° angle.

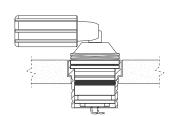


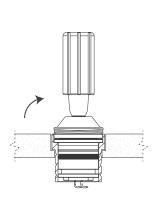
Press tool firmly onto glass.

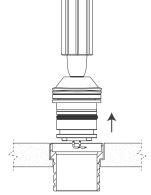


Tilt handle up to create suction, and pull directly upwards to remove fitting. Note: Do not twist during removal as this could damage the bezel.















# **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.

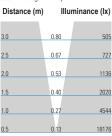




## **CONE DIAGRAMS**

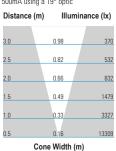
Cone diagrams below are based on a 3000K E3 LED engine run at maximum output 500mA, 7W. Images below represents beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD141DR product page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

Narrow Beam 500mA using a 12° optic



Cone Width (m)

Medium Beam 500mA using a 19° optic



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 (Ix) |      |  |  |  |  |
|--------------|------------------|------|--|--|--|--|
| 3.0          | 1.09             | 201  |  |  |  |  |
| 2.5          | 0.91             | 289  |  |  |  |  |
| 2.0          | 0.73             | 451  |  |  |  |  |
| 1.5          | 0.75             | 802  |  |  |  |  |
| 1.0          | 0.36             | 1806 |  |  |  |  |
|              | M                |      |  |  |  |  |
| 0.5          | 0.18             | 7222 |  |  |  |  |









## **ORDER CODES & OPTIONS**

## EXAMPLE: LD141DRG-E3-500 / LW30 / NB / GSHM / 441SG / PAINT FINISH BLACK

| Light Eng            | ine & Drive Current | LED Co                         | our     | Beam Angle           |   | Glare shield |   | Fixing   |   | Fixing Finish                 |
|----------------------|---------------------|--------------------------------|---------|----------------------|---|--------------|---|----------|---|-------------------------------|
|                      |                     | /                              |         | /                    | / |              | / |          | / |                               |
| <b>(</b>             | E3                  |                                |         |                      |   |              |   |          |   |                               |
| 3.5W LED at 350mA    | LD141DRG-E3-350     | Super<br>Warm White<br>(2200K) | /LW22   | 12° /NB              |   |              |   |          |   |                               |
| 7W LED at 500mA      | LD141DRG-E3-500     | Extra<br>Warm White<br>(2700K) | /LW27   | 19° /MB              |   | /NGS         |   | - /NGS   |   | Passivated<br>Stainless Steel |
|                      |                     | Warm White (3000K)             | /LW30   |                      |   |              |   |          |   |                               |
|                      |                     | White (4000K) on request       | /LW40   |                      |   | /GSHM        |   | /GSHM    |   | Paint finish                  |
|                      |                     | Cool White (5000K)             | /LW50   |                      |   | /doffivi     |   | /d3ilivi |   | Black<br>(Powder Coat)        |
|                      |                     |                                |         |                      |   |              |   | -        |   |                               |
|                      |                     |                                |         |                      |   |              |   | /NGS     |   |                               |
|                      |                     |                                |         |                      |   |              |   | -        |   |                               |
| 0                    | F1                  |                                |         |                      |   |              |   | /GSHM    |   |                               |
| 3.5W LED<br>at 350mA | LD141DRX-F1-350     | Super<br>Warm White<br>(2200K) | /LW22 = | 25° Medium /MSB spot |   |              |   |          |   |                               |
| 5W LED at 500mA      | LD141DRX-F1-500     | Extra<br>Warm White<br>(2700K) | /LW27   |                      |   |              |   |          |   |                               |
|                      |                     | Warm White (3000K)             | /LW30   |                      |   |              |   |          |   |                               |
|                      |                     | White (4000K) on request       | /LW40   |                      |   |              |   |          |   |                               |
|                      |                     | Cool White (5000K)             | /LW50   |                      |   |              |   |          |   |                               |

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.







