

#### LD1092 \_

ADJUSTABLE HIGH-POWER SHALLOW RECESSED LOW GLARE LED DOWNLIGHT























### **KEY FEATURES**

- > High-power N1 engine with CREE COB delivering 905lm in 3000K at 700mA
- > E3 engine featuring NICHIA LED delivering 697lm in 3000K at 700mA
- > Adjustable lens assembly with a 25° tilt
- > Matt black baffle low glare inner baffle and deep recessed LED with optional honeycomb louvre available
- > Designed for shallow applications with a minimal recess depth of 70mm
- > Deep recessed LED with optional honeycomb louvre available
- > Single optic produces a very consistent beam with no multiple shadows
- > 7 beam angle choices, including 12° narrow and 55° extra wide beam (E3 engine)
- High quality, machined, anodised aluminium bezel available in a wide range of paint finishes including: White (RAL 9016), Black (RAL 9005), Silver Anodised, Antique Bronze, Satin Brass, Satin Antique Brass, Anthracite Grey (RAL 7016) or any RAL finish.
- > Rated IP40 with IP65 option for wet areas such as bathrooms and spas
- > Simple spring clip fixing method, suitable for surfaces 1mm-23mm thick
- > Switched, 0-10V, Casambi, DMX, Dali or Mains dimmable drivers available

# **DIMENSIONS**

For full dimensions please go to page 3





# WHITE LED ENGINE SPECIFICATION

| Engine                               | ⊕ E3              |                    |        |      | ○ N1                                  |                   |                  |  |  |  |
|--------------------------------------|-------------------|--------------------|--------|------|---------------------------------------|-------------------|------------------|--|--|--|
| Beam angles                          | 12°, 20°, 34°, 55 | j°                 |        | 25°, | 25°, 35°, 46°                         |                   |                  |  |  |  |
| LED manufacturer                     | NICHIA            |                    |        | CRE  | CREE                                  |                   |                  |  |  |  |
| Colour temperature*                  | 2700K / 3000K /   | 4000K / 5000K      |        | 220  | 2200K / 2700K / 3000K / 4000K / 5000K |                   |                  |  |  |  |
| Current                              | 350mA             | 350mA 500mA 700mA  |        |      |                                       | 350mA 500mA 700mA |                  |  |  |  |
| LED power (Max)                      | 4.2W<br>(5W**)    | 6W<br>(7W**)       |        |      | 6.6W 9.4W (7W**) (10W**               |                   | 13.3W<br>(14W**) |  |  |  |
| Delivered lumens (L <sub>100</sub> ) | 407               | 517                | 7 697  |      | 488 669                               |                   | 905              |  |  |  |
| Lumens per circuit watt              | 81                | 74                 | 70     | 69   |                                       | 66                | 64               |  |  |  |
| CRI (Typ)                            | 85                |                    |        | 93   | 93                                    |                   |                  |  |  |  |
| Forward voltage (V <sub>100</sub> )  | 14V               |                    |        | 18V  | 18V                                   |                   |                  |  |  |  |
| Colour consistency                   | 2 SCDM            |                    |        | 2 S0 | 2 SCDM                                |                   |                  |  |  |  |
| Peak intensity                       | 6749 cd           |                    |        | 362  | 3622 cd                               |                   |                  |  |  |  |
| LED Lumens                           | 840lm             |                    |        | 139  | 1393lm                                |                   |                  |  |  |  |
| LOR                                  | 0.83              |                    |        | 0.73 | 0.73                                  |                   |                  |  |  |  |
| TM30                                 | RF85.5            | R                  | RG98.1 |      | RF92.1                                |                   | RF100.1          |  |  |  |
| UGR                                  | 11.1              | 11.1               |        |      |                                       | 13.9              |                  |  |  |  |
| LED lifetime                         | L90B5 at 90,000h  | L90B5 at 90,000hrs |        |      |                                       |                   |                  |  |  |  |
| Applications                         |                   |                    |        |      |                                       |                   |                  |  |  |  |

These values are based around a LD1092-E3-700-LW30-NB & LD1092-N1-700-LW30-MSB

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

#### **MECHANICAL**

| Ambient temperature  | -20° to 35° (700mA) or -20° to 40° (500mA) or -20° to 55° (350mA)              |  |  |
|--|--|--|--|
| Glass  | IP65 version uses a 1mm thick low iron glass                                   |  |  |
| Materials  | Anodised aluminium bezel and body, stainless steel constant force spring clips |  |  |
| Weight of product  | 0.282kg  |  |  |
| IP rating  | IP40 or IP65   |  |  |
| Wiring In-series constant current wiring (Pre-wired with 2 core cable at a length of 350mm - can be specified up to 10 metres) |  |  |  |

<sup>\*</sup>see lumen variance table to the right for N1 engine. E3 lumens apply across all colour temperatures

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

<sup>\*\*\*</sup>UGR values based on room parameter of 4H, 8H, C70 W50 F20

# **AVAILABLE FINISHES**

Please refer to our finishes guide for full details

The LD1092 bezel is machined from aluminium and painted in-house at LightGraphix. Wet spray paint finishes are suitable for interior, exterior and high saline marine environments. Our standard colours are below but we can accommodate any RAL request.



**WHITE (RAL 9016)** 



**BLACK (RAL 9005)** 



SILVER ANODISED



**ANTIQUE BRONZE** 



**SATIN ANTIQUE BRASS** 



**SATIN BRASS** 



**ANTHRACITE GREY (RAL 7016)** 

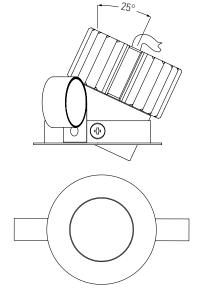


RAL

# **DIMENSIONS AND FIXING OPTIONS**

Supplied as standard with spring clips, which are suitable for use in surfaces with a thickness of 1mm – 23mm. Spring clips provide a simple, single fix mounting method.

# Ø120 Ø67 Cut-out Ø60 MIN Recess 70\* \*see ceiling requirements table Ø75 specifying the honeycombe louvre.



# **ACCESSORIES**

#### /HL Honeycomb Louvre

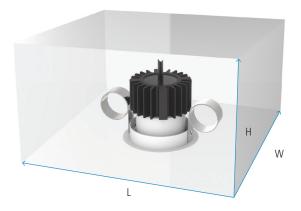
Honeycomb louvre for reduced glare from all angles. Please note this will increase the height of the fitting by 4mm.





# **CEILING VOID REQUIREMENTS**

Installation requirements can vary but the minimum installation volume requirements must be adhered to. The volume of air within the void ensures that the thermal performance of the product is not compromised and that proper cooling of the LED can take place. The minimum void height is 70mm.



| E3 LED         |   |                     |          |  |  |  |  |  |
|----------------|---|---------------------|----------|--|--|--|--|--|
| Output current | Minimum void dimension requirements (Lmm x Wmm x Hmm) | Minimum void volume |          |  |  |  |  |  |
|                |   | cm <sup>3</sup>     | Litre(s) |  |  |  |  |  |
| 350mA / 500mA  | 120 x 120 x 70 (74 with /HL)                          | 1008cm <sup>3</sup> | 1        |  |  |  |  |  |
| 700mA          | 150 x 150 x 70 (74 with /HL)                          | 1575cm <sup>3</sup> | 1.5      |  |  |  |  |  |

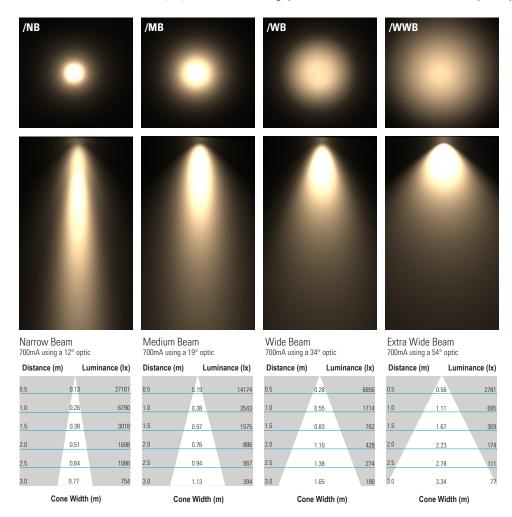
| N1 LED         |   |                          |          |  |  |  |  |  |  |
|----------------|---|--------------------------|----------|--|--|--|--|--|--|
| Output current | Minimum void dimension requirements (Lmm x Wmm x Hmm) | Minimum void volume Imm) |          |  |  |  |  |  |  |
|                |   | cm <sup>3</sup>          | Litre(s) |  |  |  |  |  |  |
| 350mA          | 120 x 120 x 70 (74 with /HL)                          | 1008cm <sup>3</sup>      | 1        |  |  |  |  |  |  |
| 500mA          | 140 x 140 x 70 (74 with /HL)                          | 1372cm <sup>3</sup>      | 1.3      |  |  |  |  |  |  |
| 700mA          | 200 x 200 x 70 (74 with /HL)                          | 2800cm <sup>3</sup>      | 2.8      |  |  |  |  |  |  |

Note: At 700mA the minimum dimension between a wall, within the ceiling void and the edge of the fitting must be 70mm.

# **CONE DIAGRAMS**

#### E3 LED Engine

Cone diagrams below are based on a 3000K E3 LED engine run at maximum output 700mA, 10W. Images below represent 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 LD1092 product page on the website.

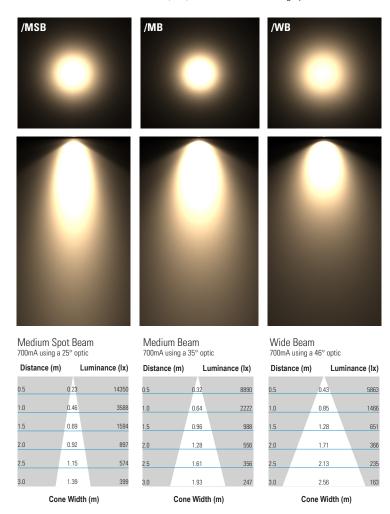




# **CONE DIAGRAMS**

#### N1 LED Engine

Cone diagrams below are based on a 3000K N1 LED engine run at maximum output 700mA, 14W. Images below represent 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 LD1092 product page on the website.





# **ORDER CODES & OPTIONS**

Example: LD1092-E3-500 / LW30 / MB / IP65 / White / HL

| ght engine & drive current                                   |   | LED colo                            | our   |   | Beam                         | angle |   | IP           | rating         |   | Finishes  |   | Accessor |
|--|---|-------------------------------------|-------|---|------------------------------|-------|---|--------------|----------------|---|---|---|----------|
| D1092-   | / |                                     |       | / |                              |       | / |              |                | / |   | / |          |
| <b>Е</b> 3   |   |                                     |       |   |                              |       |   |              |                |   |   |   |          |
| V LED<br>350mA LD1092-E3-350                                 |   | Extra<br>Warm                       | /LW27 |   | 12°<br>Narrow                | /NB   |   | IP40<br>IP65 | /IP40          |   |   |   |          |
| V LED LD1092-E3-500  |   | White (2700K)                       |       |   | spot<br>20°<br>Medium        | /MB   |   |              | ,              |   |   |   |          |
| W LED<br>700mA LD1092-E3-700                                 |   | White (3000K)                       | /LW30 |   | 34°<br>Wide                  | /WB   |   |              |                |   | Paint Finish -<br>White                         |   | /HL      |
|  |   | White<br>(4000K)<br>- on<br>request | /LW40 |   | 55°<br>Extra wide            | /WWB  |   |              |                |   | (RAL 9016)                                      |   |          |
|  |   | Cool<br>White<br>(5000K)            | /LW50 |   |                              |       |   |              |                |   | Paint Finish -                                  |   |          |
|  |   |                                     |       |   |                              |       |   |              |                |   | Black<br>(RAL 9005)                             |   |          |
| N1   |   | Curan                               |       |   | 25°                          |       |   | IP40         | /ID40          |   |   |   |          |
| V LED LD1092-N1-350  |   | vviiite                             | /LW22 |   | Medium<br>spot               | /MSB  |   | IP65         | /IP40<br>/IP65 |   | Paint Finish -                                  |   |          |
| N LED<br>500mA LD1092-N1-500<br>N LED<br>700mA LD1092-N1-700 |   | (2200K)  Extra  Warm  White (2700K) | /LW27 |   | 35°<br>Medium<br>46°<br>Wide | /MB   |   |              |                |   | Silver Anodised                                 |   |          |
|  |   | Warm                                | /LW30 |   |                              |       |   |              |                |   | Paint Finish -<br>Antique Bronze                |   |          |
|  |   | White<br>(4000K)<br>- on<br>request | /LW40 |   |                              |       |   |              |                |   | 7 III. I QUE DI OILE                            |   |          |
|  |   | Cool<br>White<br>(5000K)            | /LW50 |   |                              |       |   |              |                |   | Paint Finish -<br>Satin Antique<br>Brass        |   |          |
|  |   |                                     |       |   |                              |       |   |              |                |   |   |   |          |
|  |   |                                     |       |   |                              |       |   |              |                |   | Paint Finish -<br>Satin Brass                   |   |          |
|  |   |                                     |       |   |                              |       |   |              |                |   |   |   |          |
|  |   |                                     |       |   |                              |       |   |              |                |   | Paint Finish -<br>Anthracite Grey<br>(RAL 7016) |   |          |
|  |   |                                     |       |   |                              |       |   |              |                |   |   |   |          |

Paint Finish - RAL

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