

## LD1082

### FIXED HIGH-POWER SHALLOW RECESSED LOW GLARE LED DOWNLIGHT



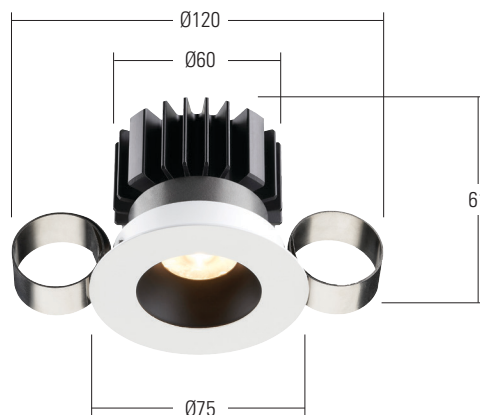
The LD1082 is part of a range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. With two engine options, this compact, high quality downlight can deliver over 900lm making it ideal for general downlighting, as well as wall washing and architectural applications. A matt black internal baffle helps to reduce glare and can be custom painted to suit the design scheme. Rated IP40 as standard, LD1082 can also be specified as IP65 for wet or humid areas including bathrooms and spas. With a minimalistic design it complements most interior project styles that require a high-power light output, from a very compact, shallow fitting.

## KEY FEATURES

- > High-power N1 engine with CREE COB delivering 905lm in 3000K at 700mA
- > E3 engine featuring NICHIA LED delivering over 697lm in 3000K at 700mA
- > Designed for shallow applications with a minimal recess depth of 70mm
- > 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.
- > Matt black baffle low glare inner baffle and deep recessed LED with optional honeycomb louvre available
- > Single optic produces a very consistent beam with no multiple shadows
- > 9 beam angle choices, including 12° narrow and 12° x 49° oval beam (E3 engine)
- > 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°, 12° x 49°                                                                                                                                                                                                                                                                                                                                                                                                       |              |                 | 25°, 35°, 46°, 22° x 43°                                                               |                 |                  |
| LED manufacturer                     | NICHIA                                                                                                                                                                                                                                                                                                                                                                                                                              |              |                 | CREE                                                                                   |                 |                  |
| Colour temperature*                  | 2200K, 2700K, 3000K, 4000K, 5000K                                                                                                                                                                                                                                                                                                                                                                                                   |              |                 | 2200K, 2700K, 3000K, 4000K, 5000K                                                      |                 |                  |
| Current                              | 350mA                                                                                                                                                                                                                                                                                                                                                                                                                               | 500mA        | 700mA           | 350mA                                                                                  | 500mA           | 700mA            |
| LED power (Max)                      | 4.2W<br>(5W**)                                                                                                                                                                                                                                                                                                                                                                                                                      | 6W<br>(7W**) | 8.4W<br>(10W**) | 6.6W<br>(7W**)                                                                         | 9.4W<br>(10W**) | 13.3W<br>(14W**) |
| Delivered lumens (L <sub>100</sub> ) | 407                                                                                                                                                                                                                                                                                                                                                                                                                                 | 517          | 697             | 488                                                                                    | 669             | 905              |
| Lumens per circuit watt              | 81                                                                                                                                                                                                                                                                                                                                                                                                                                  | 74           | 70              | 69                                                                                     | 66              | 64               |
| CRI (Typ)                            | 85                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |                 | 93                                                                                     |                 |                  |
| Forward voltage (V <sub>100</sub> )  | 14V                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                 | 18V                                                                                    |                 |                  |
| Colour consistency                   | 2 SDCM                                                                                                                                                                                                                                                                                                                                                                                                                              |              |                 | 2 SDCM                                                                                 |                 |                  |
| Peak intensity                       | 6749 cd                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                 | 3622 cd                                                                                |                 |                  |
| LED Lumens                           | 840lm                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                 | 1393lm                                                                                 |                 |                  |
| LOR                                  | 0.83                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                 | 0.73                                                                                   |                 |                  |
| TM30                                 | RF85.5                                                                                                                                                                                                                                                                                                                                                                                                                              | RG98.1       |                 | RF92.1                                                                                 | RF100.1         |                  |
| UGR                                  | 11.1                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                 | 13.9                                                                                   |                 |                  |
| LED lifetime                         | L90B5 at 90,000hrs                                                                                                                                                                                                                                                                                                                                                                                                                  |              |                 |                                                                                        |                 |                  |
| Applications                         |      |              |                 |                                                                                        |                 |                  |

These values are based around a LD1082-E3-700-LW30-NB & LD1082-N1-700-LW30-MSB

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

\*\*indicates the nominal power for the LED run at that particular 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 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   | 0.296kg                                                                                                                 |
| 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) |

## AVAILABLE FINISHES

*Please refer to our finishes guide for full details*

The LD1082 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



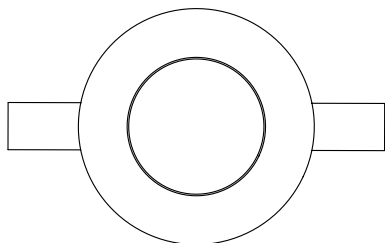
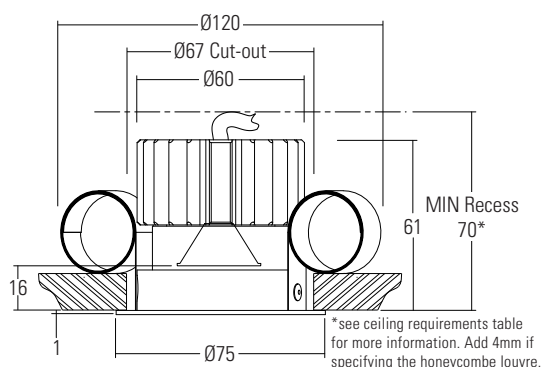
ANTHRACITE GREY (RAL 7016)



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.



## ACCESSORIES

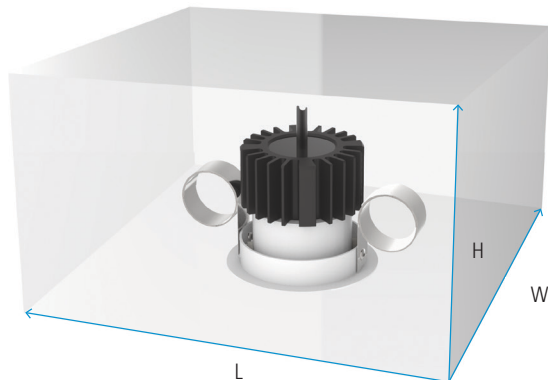
### /HL Honeycomb Louvre

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 50mm.



| 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      |

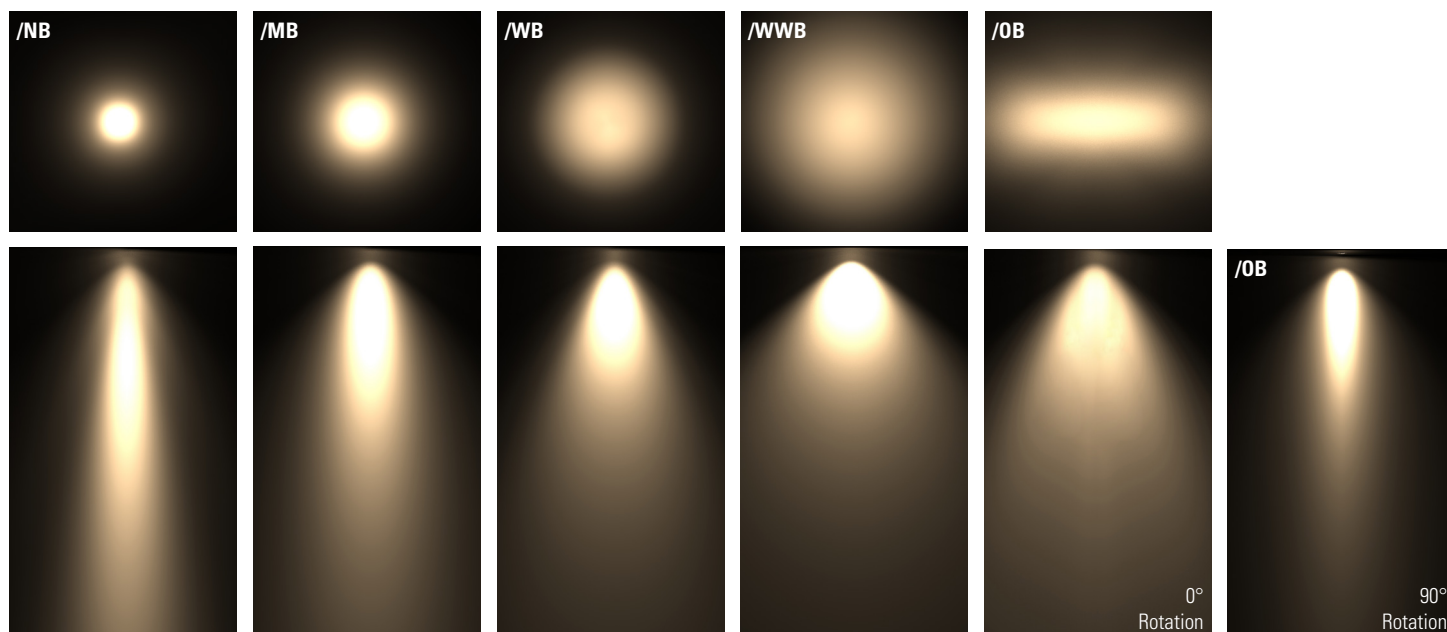
| N1 LED         |                                                       |                     |          |
|----------------|-------------------------------------------------------|---------------------|----------|
| Output current | Minimum void dimension requirements (Lmm x Wmm x Hmm) | Minimum void volume |          |
|                |                                                       | 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          | 230 x 230 x 50 (60 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 LD1082 product page on the website.



Narrow Beam  
700mA using a 12° optic

| Distance (m) | Beam Diameter (m) | Illuminance (lx) |
|--------------|-------------------|------------------|
| 0.5          | 0.13              | 27161            |
| 1.0          | 0.26              | 6790             |
| 1.5          | 0.39              | 3018             |
| 2.0          | 0.53              | 1698             |
| 2.5          | 0.66              | 1086             |
| 3.0          | 0.79              | 754              |

Medium Beam  
700mA using a 19° optic

| Distance (m) | Beam Diameter (m) | Illuminance (lx) |
|--------------|-------------------|------------------|
| 0.5          | 0.19              | 14174            |
| 1.0          | 0.38              | 3543             |
| 1.5          | 0.57              | 1575             |
| 2.0          | 0.76              | 886              |
| 2.5          | 0.94              | 567              |
| 3.0          | 1.13              | 394              |

Wide Beam  
700mA using a 34° optic

| Distance (m) | Beam Diameter (m) | Illuminance (lx) |
|--------------|-------------------|------------------|
| 0.5          | 0.28              | 6856             |
| 1.0          | 0.55              | 1714             |
| 1.5          | 0.83              | 762              |
| 2.0          | 1.10              | 428              |
| 2.5          | 1.38              | 274              |
| 3.0          | 1.65              | 190              |

Extra Wide Beam  
700mA using a 54° optic

| Distance (m) | Beam Diameter (m) | Illuminance (lx) |
|--------------|-------------------|------------------|
| 0.5          | 0.56              | 2781             |
| 1.0          | 1.11              | 695              |
| 1.5          | 1.67              | 309              |
| 2.0          | 2.23              | 174              |
| 2.5          | 2.78              | 111              |
| 3.0          | 3.34              | 77               |

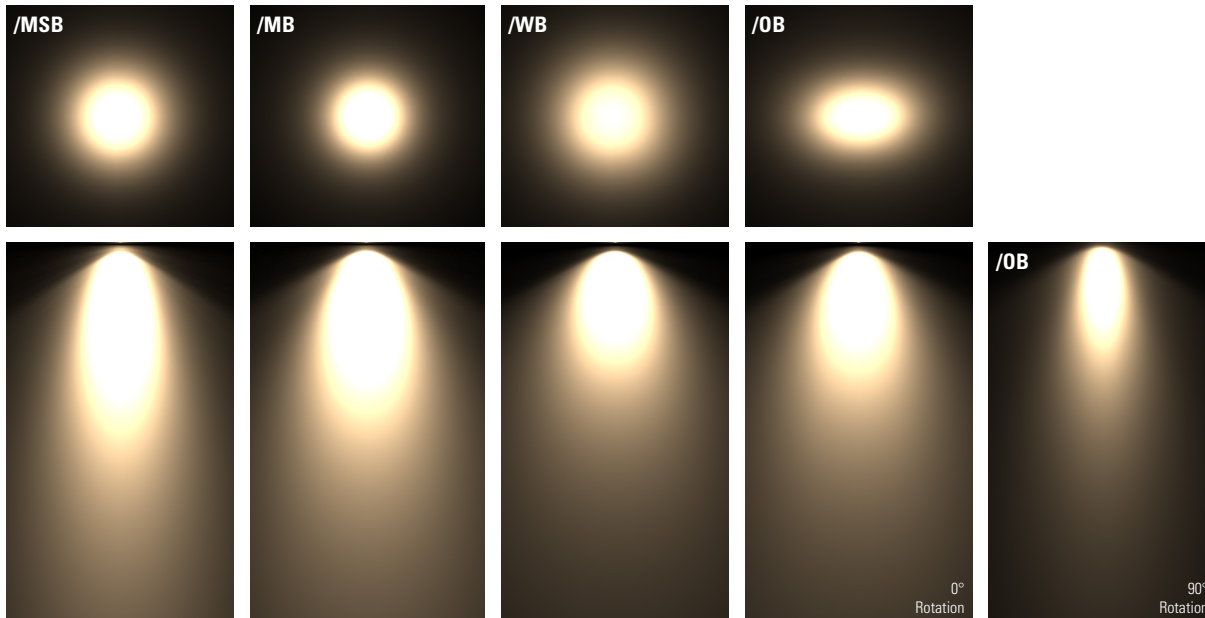
Oval Beam  
700mA using a 12° X 49° optic

| Distance (m) | Beam Dimensions (m) | Illuminance (lx) |
|--------------|---------------------|------------------|
| 0.5          | 0.14 / 0.41         | 9159             |
| 1.0          | 0.28 / 0.82         | 2290             |
| 1.5          | 0.43 / 1.24         | 1018             |
| 2.0          | 0.57 / 1.65         | 572              |
| 2.5          | 0.71 / 2.06         | 572              |
| 3.0          | 0.85 / 2.47         | 254              |

## 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 LD1082 product page on the website.



Medium Spot Beam  
700mA using a 25° optic

| Distance (m) | Illuminance (lx) |       |
|--------------|------------------|-------|
| 0.5          | 0.23             | 14350 |
| 1.0          | 0.46             | 3588  |
| 1.5          | 0.69             | 1594  |
| 2.0          | 0.92             | 897   |
| 2.5          | 1.15             | 574   |
| 3.0          | 1.39             | 399   |

Cone Width (m)

Medium Beam  
700mA using a 35° optic

| Distance (m) | Illuminance (lx) |      |
|--------------|------------------|------|
| 0.5          | 0.32             | 8890 |
| 1.0          | 0.64             | 2222 |
| 1.5          | 0.96             | 988  |
| 2.0          | 1.28             | 556  |
| 2.5          | 1.61             | 356  |
| 3.0          | 1.93             | 247  |

Cone Width (m)

Wide Beam  
700mA using a 46° optic

| Distance (m) | Illuminance (lx) |      |
|--------------|------------------|------|
| 0.5          | 0.43             | 5863 |
| 1.0          | 0.85             | 1466 |
| 1.5          | 1.28             | 651  |
| 2.0          | 1.71             | 366  |
| 2.5          | 2.13             | 235  |
| 3.0          | 2.56             | 163  |

Cone Width (m)

Oval Beam  
700mA using a 22° X 43° optic

| Distance (m) | Illuminance (lx) |      |
|--------------|------------------|------|
| 0.5          | 0.19 / 0.39      | 9992 |
| 1.0          | 0.39 / 0.77      | 2498 |
| 1.5          | 0.58 / 1.16      | 1110 |
| 2.0          | 0.78 / 1.54      | 625  |
| 2.5          | 0.97 / 1.93      | 400  |
| 3.0          | 1.17 / 2.32      | 278  |

Cone Width (m)

## ORDER CODES & OPTIONS

Example: LD1082-E3-500 / LW30 / MB / IP65 / White / HL

| Light engine & drive current | LED colour | Beam angle | IP rating | Finishes | Accessory |
|------------------------------|------------|------------|-----------|----------|-----------|
| LD1082-                      | /          | /          | /         | /        | /         |

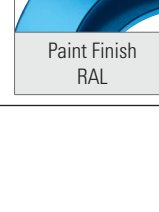
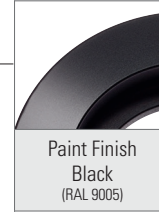
### E3

|                  |               |
|------------------|---------------|
| 5W LED at 350mA  | LD1082-E3-350 |
| 7W LED at 500mA  | LD1082-E3-500 |
| 10W LED at 700mA | LD1082-E3-700 |

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

|                     |      |
|---------------------|------|
| 12° Narrow spot     | /NB  |
| 19° Medium          | /MB  |
| 34° Wide            | /WB  |
| 54° Extra wide      | /WWB |
| 12° x 49° Oval Beam | /OB  |

|      |       |
|------|-------|
| IP40 | /IP40 |
| IP65 | /IP65 |



### N1

|                  |               |
|------------------|---------------|
| 7W LED at 350mA  | LD1082-N1-350 |
| 10W LED at 500mA | LD1082-N1-500 |
| 14W LED at 700mA | LD1082-N1-700 |

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

|                     |      |
|---------------------|------|
| 25° Medium spot     | /MSB |
| 35° Medium          | /MB  |
| 46° Wide            | /WB  |
| 22° x 43° Oval Beam | /OB  |

|      |       |
|------|-------|
| IP40 | /IP40 |
| IP65 | /IP65 |

| Drivers                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------|
| Use with 350mA, 500mA & 700mA constant current LED drivers                                                        |
| We have a range of dimmable LED drivers DMX and DALI compatible. Please see the downloads section on our website. |