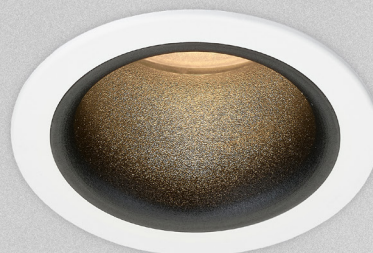


## LD782

### FIXED COMPACT INTERIOR/EXTERIOR 2-TONE LED DOWNLIGHT



The compact LD782 has an excellent size to output ratio with a deep recessed LED which makes it ideal for general downlighting and the highlighting of walls and columns within interior, exterior and marine applications (interior). Featuring as standard a matt black inner baffle for ultra-low glare, this along with the bezel can be painted in a wide range of colours offering endless styling options to suit your design scheme requirements. Available LED engines include E3 and F1, offering colour temperatures of 2200K-5000K and a variety of beam angles, including a tight 12° narrow beam with medium options for general downlighting. Though compact, the LD782 provides brilliant thermal and light output performance, with a single optic generating a superior beam shape and no multiple shadows.



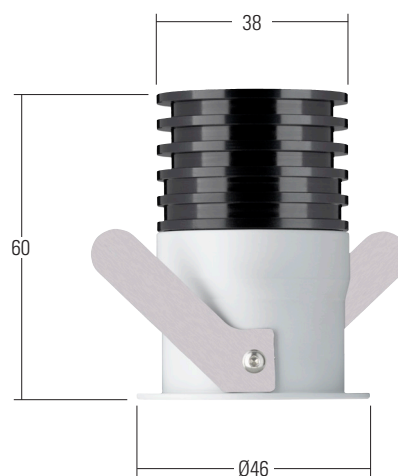
## KEY FEATURES

- > Very low glare with deep recessed optic set back 26mm
- > Single optic for superior beam shapes with no multiple shadows
- > Matt black, low glare inner baffle is supplied as standard and can be painted in a colour of choice
- > Compact powerful fitting delivering 414lm in 3000K
- > Tight 12° narrow spot beam available
- > Machined aluminium bezel available in a wide range of finishes; White (RAL 9016), Black (RAL 9005), Silver, Antique Bronze, Satin Antique Brass, Satin Brass, Anthracite Grey (RAL 7016) or any RAL paint finish
- > Versatile fitting rated IP65, ideal for interior and exterior projects including marine, hospitality and residential general downlighting, column and wall washing
- > Features our E3 & F1 LED engines which are used across our uplight and surface mounted products enabling colour and beam consistency across a project
- > E3 engine features reverse polarity protection
- > F1 COB engine with super warm 2200K option and 90+ CRI
- > Switched, 0-10V, Casambi, DMX, DALI, or Mains dimmable drivers available




## DIMENSIONS

*Dimensions in mm*

For fitting dimensions please go to page 3.



## LED ENGINE SPECIFICATION

Engine	 E3		 F1		
Beam angles	12°, 26°		21°, 28°		
LED manufacturer	NICHIA		CREE		
Colour temperature*	2200K, 2700K, 3000K, 4000K, 5000K		2200K, 2700K, 3000K, 4000K, 5000K		
Current	350mA	500mA	350mA	500mA	700mA
LED power (Max)	4.2W (5W**)	6W (7W**)	3.2W (3.5W**)	4.5W (5W**)	6.3W (7W**)
Delivered lumens (L <sub>100</sub> )	309	414	235	280	385
Lumens per circuit watt	62	59	81	73	67
CRI (Typ)	85		90		
Forward voltage (V <sub>100</sub> )	14V		9V		
Colour consistency	2 SDCM		3 SDCM		
Peak intensity	4233 cd		2076 cd		
LED lumens (at max output)	596		715		
LOR	0.69		0.54		
TM30	86	98	90.1	102.2	
UGR***	7.9		10.3		
LED lifetime	L90B5 at 90,000hrs		L80B5 at 80,000hrs		
Applications					

These values are based around a LD782-E3-500-LW30-NB & LD790-F1-700-LW30-MSB

\*Lumen output data applies to 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 parameters of 4H 8H, C70 W50 F20

## MECHANICAL

Ambient temperature	-20°C to 45°C (350mA) or -20°C to 35°C (500mA)
Glass	Low iron clear glass, 1mm thick
Materials	Aluminium bezel, black anodised aluminium body
Weight of product	0.12kg
IP rating	IP65
Wiring	In-series constant current wiring (pre-wired with cables at a length of 190mm)

## ENVIRONMENTAL

TM65	Available on request
TM66	2.5

AVAILABLE FINISHES

Please refer to our finishes guide for full details

The LD782 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)



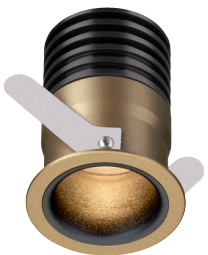
BLACK (RAL 9005)



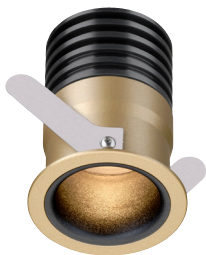
SILVER ANODISED



ANTIQUE BRONZE



SATIN ANTIQUE BRASS



SATIN BRASS



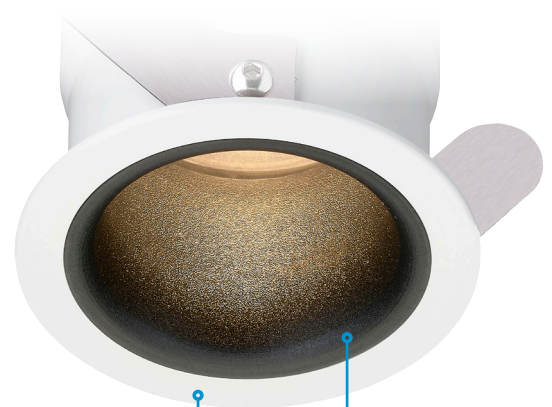
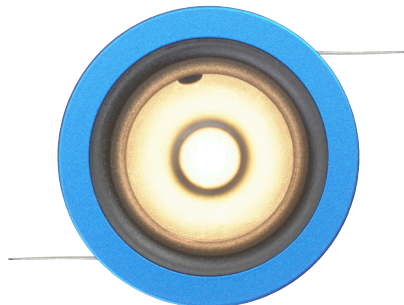
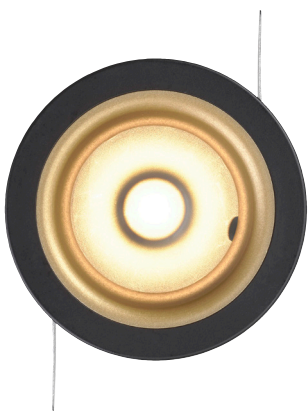
ANTHRACITE GREY (RAL 7016)



RAL

2-TONE PAINTING (BLACK BAFFLE FINISH OPTIONS)

As standard the inner baffle is supplied in a low glare matt black textured finish but can also be painted in a colour of choice to offer complete design scheme flexibility. When specifying your order codes and options, please indicate a bezel finish as well as inner baffle colour. An adjustable version of this product, the LD792 is available.



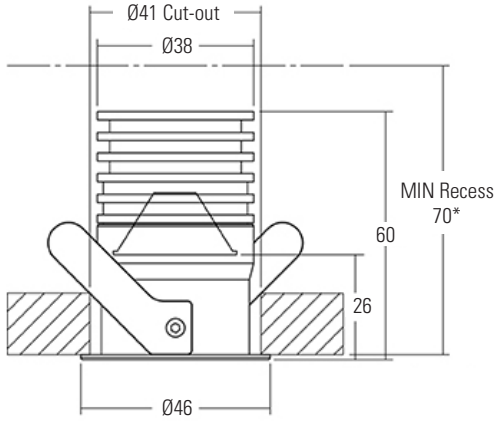
Bezel

Inner Baffle

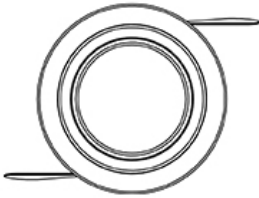
## DIMENSIONS & FIXING OPTIONS

Dimensions in mm

2 x spring clips are supplied as standard and provide a simple single-fix mounting method. Suitable for use in surfaces with a thickness of 5mm – 25mm.

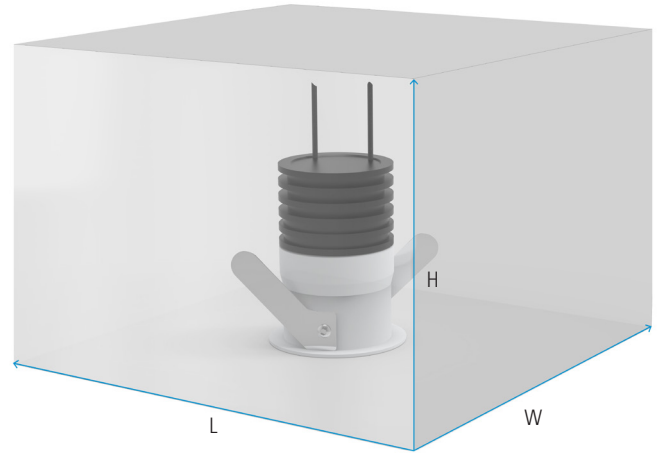


\*see ceiling requirements table for more information



## 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)
LD782-E3-350	120 x 120 x 70	1008cm <sup>3</sup>	1
LD782-E3-500	200 x 200 x 70	2800cm <sup>3</sup>	2.8

F1 LED			
Output current	Minimum void dimension requirements (Lmm x Wmm x Hmm)	Minimum void volume	
		cm <sup>3</sup>	Litre(s)
LD782-F1-350	120 x 120 x 70	1008cm <sup>3</sup>	1
LD782-F1-500	140 x 140 x 70	1372cm <sup>3</sup>	1.3
LD782-F1-700	200 x 200 x 70	2800cm <sup>3</sup>	2.8

## CONE DIAGRAMS

### E3 LED Engine

Cone diagrams below are based on a 3000K E2 LED engine run at maximum output 500mA, 7W. 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 LD782 product page on the website.

#### Narrow Spot Beam 500mA using a 12° optic

Distance (m)	Beam Diameter (m)	Illuminance (lx)
0.5	0.13	16823
1.0	0.26	4206
1.5	0.39	1869
2.0	0.52	1051
2.5	0.65	673
3.0	0.78	467

Cone Width (m)

#### Medium Beam 500mA using a 26° optic

Distance (m)	Beam Diameter (m)	Illuminance (lx)
0.5	0.24	5489
1.0	0.49	1372
1.5	0.73	610
2.0	0.98	343
2.5	1.22	220
3.0	1.46	152

Cone Width (m)

### F1 LED Engine

Cone diagrams below are based on a 3000K F1 LED engine run at maximum output 700mA, 7W. 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 LD782 product page on the website.

#### Medium Spot Beam 700mA using a 21° optic

Distance (m)	Beam Diameter (m)	Illuminance (lx)
0.5	0.20	8423
1.0	0.40	2106
1.5	0.60	936
2.0	0.80	526
2.5	1.00	337
3.0	1.20	234

Cone Width (m)

#### Medium Beam 700mA using a 28° optic

Distance (m)	Beam Diameter (m)	Illuminance (lx)
0.5	0.25	5504
1.0	0.51	1376
1.5	0.76	612
2.0	1.02	344
2.5	1.27	220
3.0	1.53	153

Cone Width (m)

ORDER CODES & OPTIONS

Example: LD782-E3-500 / LW30 / NB / WHITE / BLACK

Light Engine & Drive Current / LED Colour / Beam Angle / Bezel Finish / Inner Baffle Finish

LD782 - / / / /

**E3**

5W LED at 350mA	LD782-E3-350
7W LED at 500mA	LD782-E3-500

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
26° Medium	/MB



Paint Finish White (RAL 9016)



Paint Finish Black (RAL 9005)



Paint Finish Silver Anodised



Paint Finish Antique Bronze



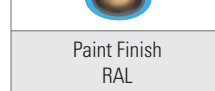
Satin Antique Brass



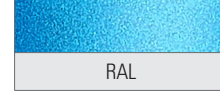
Paint Finish Satin Brass



Paint Finish Anthracite Grey (RAL 7016)



Paint Finish RAL



**F1**

3.5W LED at 350mA	LD782-F1-350
5W LED at 500mA	LD782-F1-500
7W LED at 700mA	LD782-F1-700

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

21° Medium spot	/MSB
28° Medium	/MB

**Drivers**  
Use with 350mA, 500mA & 700mA constant current LED drivers  
We have a wide range of LED drivers available. Please see the downloads section of our website.