

LD141DR

DEEP RECESSED COMPACT EXTERIOR RECESSED LED UPLIGHT



The LD141DR has been designed for exterior applications that require super low glare, with the lens assembly recessed 51mm 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 a repairable light engine, the LD141DR offers a circular, low glare, solution for a wide 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
- > Range of beam angles including 12°, 19°, 25°
- > Wide range of high-quality machined metal and painted bezel finishes available, including: 316 Stainless Steel, Polished & Passivated 316 Stainless Steel, Brass, White (RAL 9016), Black (RAL 9005), Classic Bronze (YM262E), Gunmetal Grey (RAL 7021), Textured Mars Bronze (SX350F), Textured Fir Green (RAL 6009) or any RAL colour
- > Optional half-moon glare shield is available
- > Fixing options include spring clips or first fix sleeve with O-rings
- > Repairable 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 4.



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 LD141DR-E3-500-NB and LD141DR-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 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 45° (350mA) or -20° to 35° (500mA)
Glass	6mm toughened glass with ceramic screen print
Materials	Black Anodised aluminium, stainless steel bezel
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

AVAILABLE FINISHES

Please refer to our finishes guide for full details



316 STAINLESS STEEL

- > Marine grade 316 Stainless Steel
- > Standard machined finish
- > Extremely durable with high corrosion resistance
- > Passivation recommended for marine environments to prevent corrosion and build up of brown stains caused by oxidation
- > Interior & exterior use



POLISHED & PASSIVATED 316 STAINLESS STEEL

- > Marine Grade 316 Stainless Steel
- > Pristine mirror like finish
- > Recommended for pools and marine applications
- > Extremely durable with very high corrosion resistance
- > Passivated to extensively prolong resistance to corrosion and brown stains caused by oxidation in marine environments
- > Interior & exterior use



FLAMED SOLID BRONZE

- > Solid Bronze
- > Hand finished Flamed Bronze unique to LightGraphix
- > Extremely durable with very high corrosion resistance.
- > Please note a natural dark patination layer will form after long term exposure to the elements, the extent of this discolouration will be dependant on its location.
- > Interior & exterior use

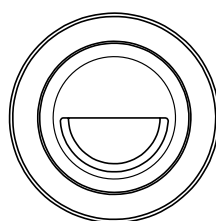


PAINT FINISH - POWDER COAT

- > The powder coated finish is very matt
- > Powder coat finishes: White (RAL 9016), Black (RAL 9005), Classic Bronze (YM262E), Gunmetal Grey (RAL 7021) Textured Mars Bronze (SX350F), Textured Fir Green (RAL 6009) or any RAL colour
- > Not recommended for high traffic in-ground applications, unless placed to one side where the bezel will not be walked on
- > Powder coat paint is generally used on stainless steel or anodised aluminium components
- > Interior and exterior use

GLARE CONTROL OPTIONS

/GSHM For applications that require super low glare. Lumen output is typically reduced by 60% with no light lost on the lit surface.

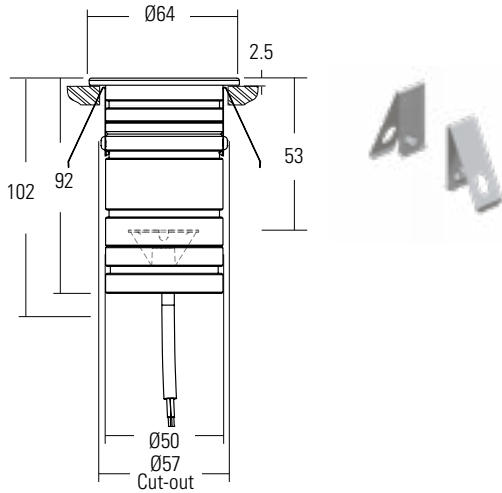


DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

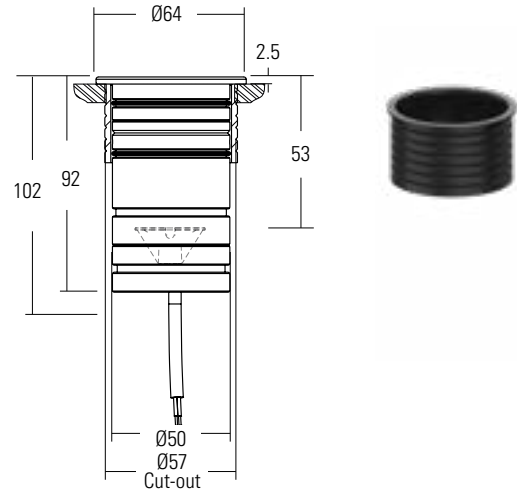
/SC Spring clips

Suitable for use in surfaces with a thickness of 1mm – 25mm. Spring clips provide a simple, single fix mounting method. We recommend that spring clips are only used in interior applications. Weight: 0.05kg



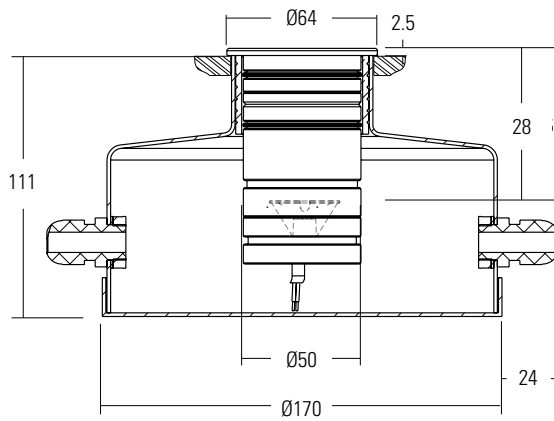
/441S First fix Sleeve

The fitting is supplied as standard with a fixing sleeve; this is bonded into the mounting surface first. The LD151 is secured into the sleeve by 2 'O' rings on the body. When pushed into the sleeve it creates a watertight seal. Weight: 0.18kg



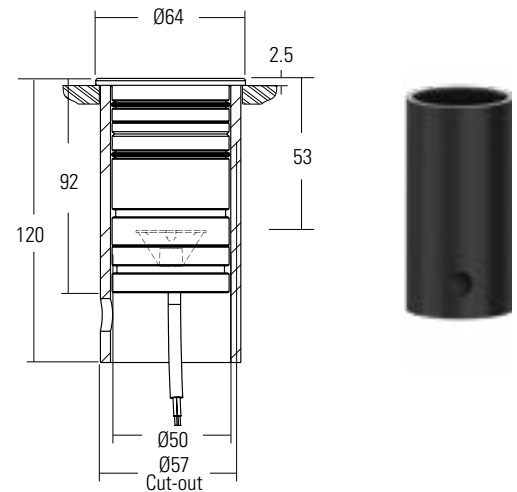
/441N or /441N-2 Concrete housing

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. Weight: 2.90kg



/441GT Ground tube

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



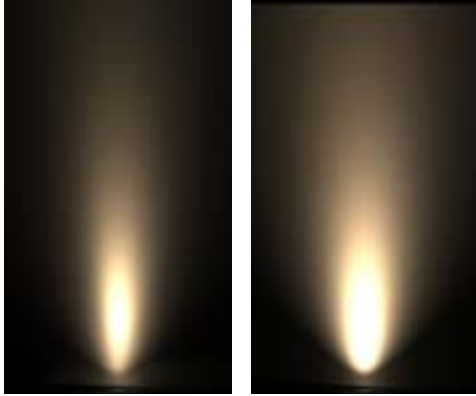
/441N
Concrete housing with 1x PG9 IP67 gland

/441N-2
Concrete housing with 2x PG9 IP67 gland

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)	Cone Width (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

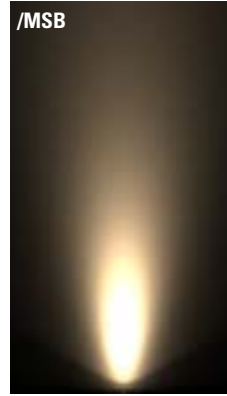
500mA using a 19° optic

Distance (m)	Cone Width (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.

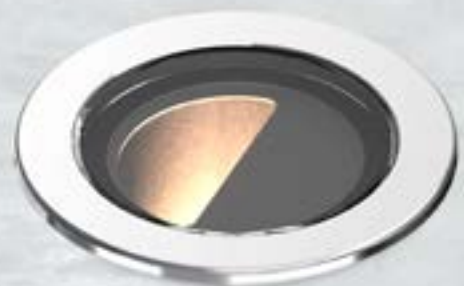


Medium Spot Beam

500mA using a 25° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.09	201
2.5	0.91	288
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: LD141DR-E3-500 / LW30 / OB / L / GS / 316 STAINLESS STEEL / 441S

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

E3

5W LED at 350mA	LD141DRX-E3-350
7W LED at 500mA	LD141DRX-E3-500

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

12° Narrow	/NB
19° Medium	/MB



F1

3.5W LED at 350mA	LD141DRX-F1-350
5W LED at 500mA	LD141DRX-F1-500

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
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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.