

LD141G

COMPACT TRIMLESS INTERIOR/ EXTERIOR RECESSED LED UPLIGHT/ WALL LIGHT



The LD141G has been designed for exterior applications, with an IP67 rating and a robust seamless all glass bezel. Compact in size, the fitting 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 462lm and beam angles ranging from a 12° narrow to a 15° x 49° extra oval beam, whilst the F1 engine offers a super warm colour temperature of 2200K. Both configurations offer the ability to specify a 20° tilt film to angle the light down onto the lit surface for a more concentrated effect. Designed with our glass bezel, the LD141G offers a discreet, low-glare solution for a range of exterior-rated applications.



KEY FEATURES

- > High-power E3 engine with NICHIA LED delivering up to 462lm at 500mA
- > F1 LED engine with CREE COB with super warm 2200K option
- > For exterior uplight applications
- > Durable all glass bezel, suitable for a wide range of applications
- > Range of beam angles including 12°, 19°, 34°, 54°, 15° x 49°
- > Optional 20° tilt film angles the light onto the lit surface for a concentrated effect
- > Optional glare shield and honeycomb louvre for further glare reduction
- > Fixing options include a rebated trimless fixing sleeve, concrete housing and ground tube
- > Repairable light 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 3.



WHITE LED ENGINE SPECIFICATION

Engine	⊕ E3		⊙ F1	
Beam angles	12°, 19°, 34°, 54°, 15° x 49°		25°, 46°, 65°, 25° x 43°	
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)	379	462	260	340
Lumens per circuit watt	76	66	74	68
CRI (Typ)	85		90	
Forward voltage (V ₁₀₀)	14V		9V	
Colour consistency	2SCDM		3SCDM	
Peak intensity	3626 cd		1885 cd	
LED Lumens	596		715	
LOR	0.78		0.48	
TM30	RF88	RG99	RF93	RG98
LED lifetime	L90B5 at 90,000hrs		L90B5 at 90,000hrs	
UGR***	11.1		10.6	
Applications				

This data is based on LD141G-E3-500-NB and LD141G-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 body with black anodised bezel and glass front
Weight of product	0.25kg
IP rating	IP67
IK rating	IK08 (LD141X)
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

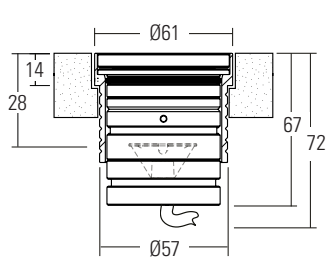
DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

/441SG

Rebated trimless fixing sleeve

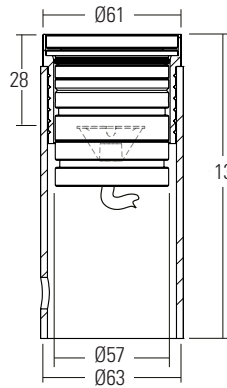
The fitting can be supplied with a rebated fixing sleeve. This is bonded into the mounting surface first. The LD141G is secured into the sleeve by a single 'O' ring on the body. When pushed into the sleeve it creates a watertight seal. Mounting surface will require a 14mm rebate depth to allow for flush installation. Weight: 0.18kg. Fixing ring available with a passivated stainless steel or powder coat black finish.*



/441GTG

Trimless ground tube fixing

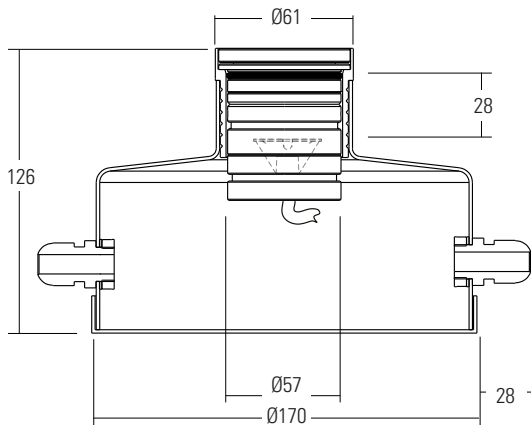
The in-ground tube has been designed for applications where a recessed uplight is required in soil or gravel surfaces. The tube can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed. It is supplied with the fixing sleeve bonded into the 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.*



/485NG

Trimless concrete housing with 1x PG9 IP67 gland



/485NG-2

Trimless concrete housing with 2x PG9 IP67 gland



*NOTE: Powder coat black paint finish is not suitable for high-traffic areas.

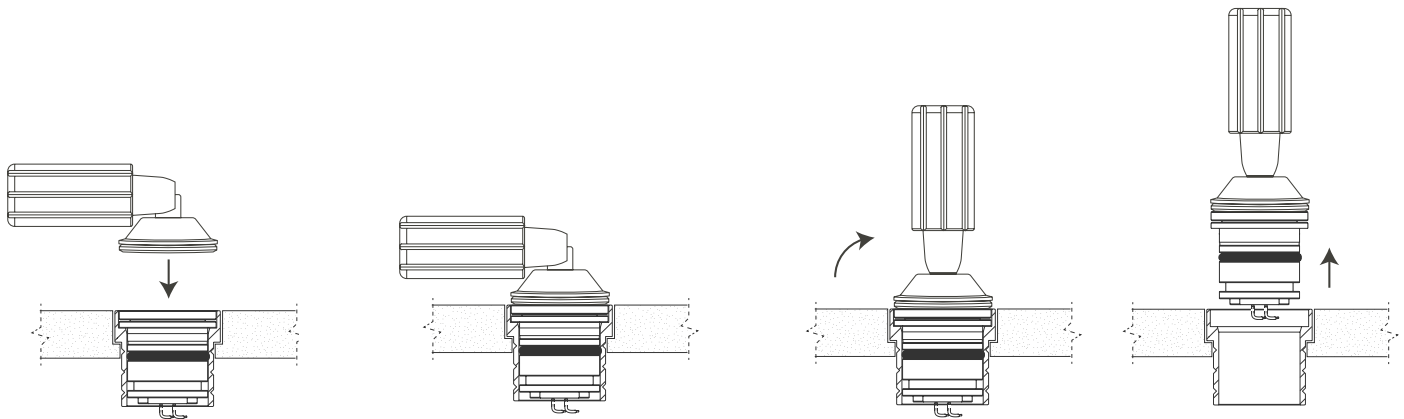
/HT-44-G Trimless Family Hand tool

We supply our Trimless family fittings with a hand tool for easy installation 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

- 1 Set tool to a 90° angle.
- 2 Press tool firmly onto glass.
- 3 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.

/HL Helps reduce glare from all angles and can be used with glare shields. The honeycomb louvre cannot be specified with the tilt lens option.



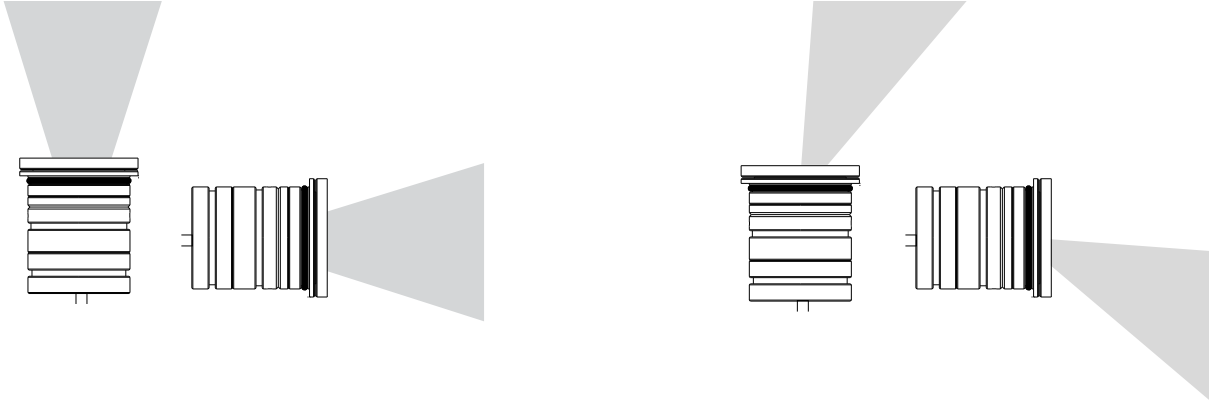
LIGHT OUTPUT OPTIONS

LD141G without tilt lens

Ideal for discreet lighting applications where a throw of light is required.

LD141G with tilt lens

The addition of a 20° tilt film focuses the light towards the lit surface for a more concentrated effect.



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 LD141 product page on the website.

Narrow Beam

500mA using a 12° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	0.82	406
2.5	0.68	585
2.0	0.55	914
1.5	0.41	1625
1.0	0.27	3656
0.5	0.14	14624

Medium Beam

500mA using a 19° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	0.96	387
2.5	0.80	557
2.0	0.64	871
1.5	0.48	1548
1.0	0.32	3483
0.5	0.16	13933

Wide Beam

500mA using a 34° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.64	139
2.5	1.37	200
2.0	1.09	312
1.5	0.82	555
1.0	0.55	1249
0.5	0.27	4495

Extra Wide Beam

500mA using a 54° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	3.02	50
2.5	2.51	72
2.0	2.01	112
1.5	1.51	199
1.0	1.01	448
0.5	0.50	1791

Extra Oval Beam

500mA using a 15° X 49° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.77 / 0.90	181
2.5	1.47 / 0.75	260
2.0	1.18 / 0.60	407
1.5	0.88 / 0.45	723
1.0	0.59 / 0.30	1627
0.5	0.29 / 0.15	6510

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 LD141 product page on the website.

Medium Spot Beam

500mA using a 25° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.10	212
2.5	0.92	305
2.0	0.73	476
1.5	0.55	847
1.0	0.37	1905
0.5	0.18	7621

Wide Beam

500mA using a 46° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.82	79
2.5	1.52	113
2.0	1.22	177
1.5	0.91	315
1.0	0.61	709
0.5	0.30	2835

Extra Wide Beam

500mA using a 65° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	2.87	40
2.5	2.40	57
2.0	1.92	90
1.5	1.44	158
1.0	0.96	358
0.5	0.48	1432

Extra Oval Beam

500mA using a 25° X 43° optic









Distance (m)	Cone Width (m)	Luminance (lx)
3.0	0.93 / 2.58	112
2.5	0.77 / 2.15	161
2.0	0.62 / 1.72	251
1.5	0.46 / 1.29	447
1.0	0.31 / 0.86	1005
0.5	0.15 / 0.43	4020

ORDER CODES & OPTIONS

Example: LD141G-E3-500 / LW30 / NB / GSHM / 441SG / Paint finish black

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

E3

5W LED at 350mA	LD141G-E3-350	Extra Warm White (2700K)	/LW27	12° Narrow	/NB	20° tilt	A			Passivated Stainless Steel Paint finish Black (Powder Coat)
7W LED at 500mA	LD141G-E3-500	Warm White (3000K)	/LW30	19° Medium	/MB	No tilt	L			
		White (4000K) - on request	/LW40	34° Wide	/WB					
		Cool White (5000K)	/LW50	54° Extra Wide	/WWB					
				15° x 49° Extra Oval Beam	/EOB					

F1

5W LED at 350mA	LD141G-F1-350	Super Warm White (2200K)	/LW22	25° Medium spot	/MSB
7W LED at 500mA	LD141G-F1-500	Extra Warm White (2700K)	/LW27	46° Wide	/WB
		Warm White (3000K)	/LW30	65° Extra wide	/WWB
		White (4000K) - on request	/LW40	25° x 43° Oval	/EOB
		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.