

LD1081



Ultra Shallow Recessed Fixed High Output LED Downlight

Data sheet - Page 1

The LD1081 is part of a new range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. The LD1081 is particularly unique since it only requires a ceiling depth of 50mm, but can deliver up to 900lm. This compact, high quality downlight is ideal for general illumination, as well as wall washing and column lighting applications. A honeycomb accessory is available, which reduces the glare from the powerful light source. Rated at IP40 as standard, an IP65 rating is available for wet/humid areas including bathrooms and spas. Careful LED selection and extensive thermal testing and development time has resulted in a product that offers a huge light output, from a very compact, shallow fitting. A minimalistic design ensures it complements most interior project styles.

Key Features

- Shallow recess depth of only 50mm required (350/500mA version only)
- High power 900lm output
- 93 CRI Cree LED
- A single optic produces a very consistent beam with no multiple shadows
- High quality, machined, anodised aluminium components
- Compact design ensures it fits into most project styles
- IP65 option for wet areas including bathrooms and spas
- Constant force springs make this fitting suitable for delicate mounting surfaces
- Available with Switch, 0-10V, DMX, Dali or Mains dimmable drivers

Specification

Applications



Beam Angles

19°, 28°, 41°

LED type

1 x Cree CXB 1310 COB LED Engine

Colour temperature

2700K** / 3000K | 5000K

Current	350mA	500mA	700mA	350mA	500mA	700mA
LED power (Max)	7W	10W	14W	7W	10W	14W
(Typical)	(6.6W)*	(9.4W)*	(13.3W)*	(6.6W)*	(9.4W)*	(13.3W)*
CRI (Min)	93	93	93	80	80	80
Forward voltage (V) ₁₀₀	18V	18V	18V	18V	18V	18V
Delivered lumens (L ₁₀₀)**	496	677	901	611	824	1107
Lumens per circuit watt***	75	72	68	93	88	83

LED lifetime (to 70% lumen maintenance) 50,000hrs at a max ambient temperature of 35°C (if higher ambient then run at 500mA up to 45°C)

Glass IP65 version uses a 1mm thick low iron glass

Materials Anodised aluminium, stainless steel constant force springs

Wiring Comes pre-wired with a flat 2 core 350mm lead, can be specified with up to 10m at extra cost

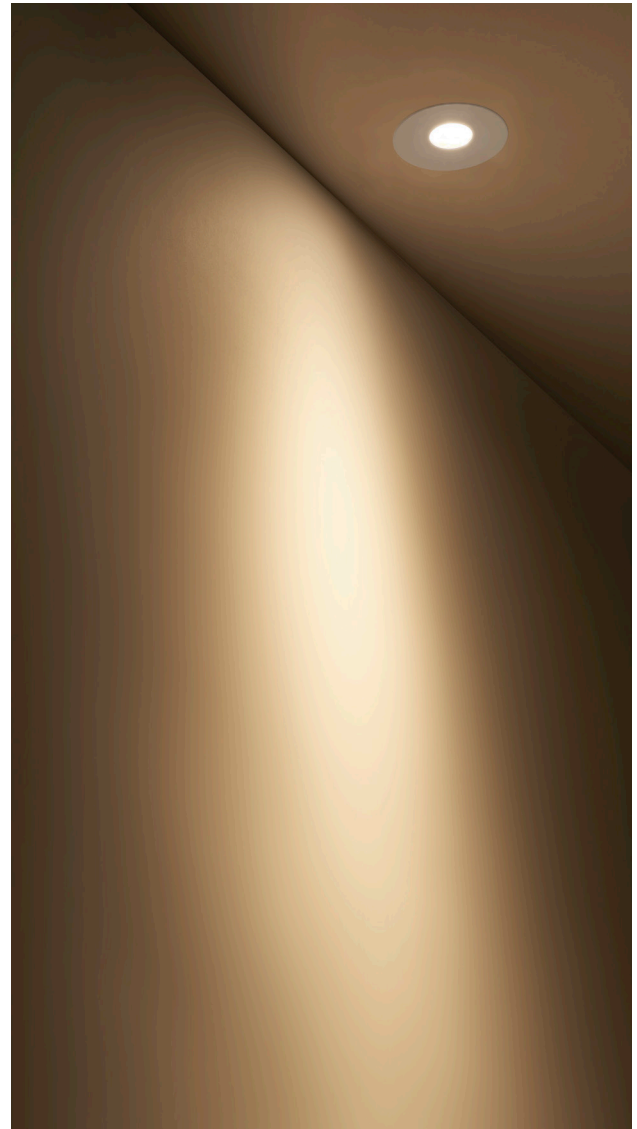
IP rating IP40 & IP65

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

** lumen data is based on a medium beam using the IP40 version of the fitting
2700K lumen output is 12% lower than the 3000K figure listed

4000K lumen output is 14% higher than the 3000K figure listed (80 CRI)

***data shown is based on typical wattage



LD1081

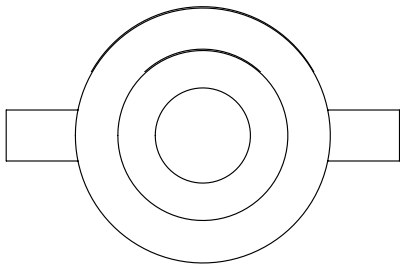
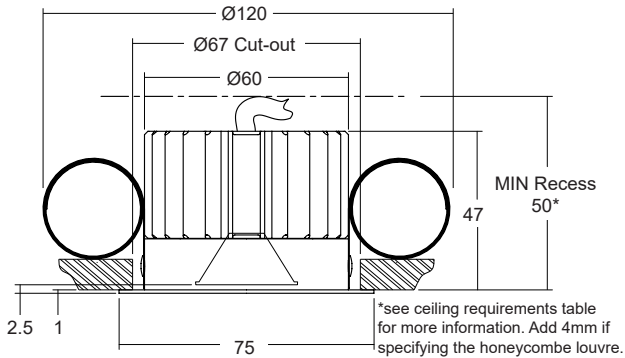
Ultra Shallow Recessed Fixed High Output LED Downlight

Data sheet - Page 2



Dimensions and Fixing Options

Supplied as standard with constant force springs which allow the downlight to be installed/removed without damaging delicate ceilings.



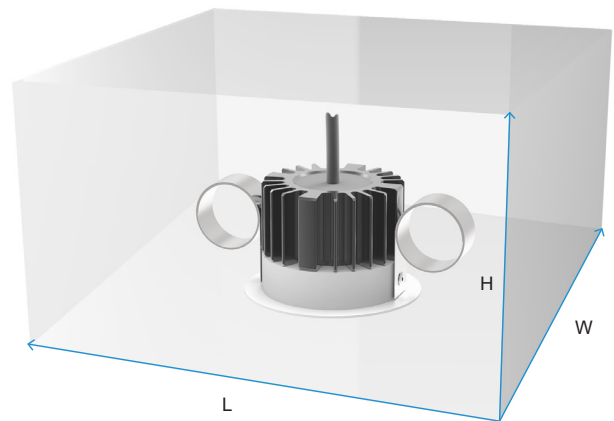
Accessories

/HL - Honeycombe louvre for reduced glare. Please note this will increase the height of the fitting by 4mm.



Ceiling Requirements

Ceiling requirements can vary but the minimum ceiling void volume must be adhered to. The minimum possible ceiling depth is 50mm at 350/500mA, and 56mm at 700mA. The volumes below are presented as L x W x H.



Output current	Minimum ceiling void dimension requirements (Lmm x Wmm x Hmm)	Minimum Ceiling void volume	
		cm ³	Litre(s)
LD1081-350	150 x 150 x 50 (54 with /HL)	1125cm ³	1.1
LD1081-500	160 x 160 x 50 (54 with /HL)	1280cm ³	1.3
LD1081-700	230 x 230 x 56 (60 with /HL)	2962cm ³	3

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

IP65 rated version

/IP65 - For wet areas including spas, bathrooms and showers the LD1081 can be specified as IP65. This comes with an additional glass and all parts are anodised.

LD1081



Ultra Shallow Recessed Fixed High Output LED Downlight

Data sheet - Page 3

Cone Diagrams

Cone diagrams below are based on a 3000K LED run at maximum output 700mA, 14W.

Narrow Beam

700mA using a 19° optic

Distance (m)	Luminaire (lx)	Luminance (lx)
0.5	0.20	22020
1.0	0.40	5499
1.5	0.55	2447
2.0	0.70	1376
2.5	0.90	881
3.0	1.10	611

Cone Width (m)

Medium Beam

700mA using a 28° optic

Distance (m)	Luminaire (lx)	Luminance (lx)
0.5	0.25	11416
1.0	0.50	2854
1.5	0.75	1268
2.0	1.00	713
2.5	1.25	457
3.0	1.50	317

Cone Width (m)

Wide Beam

700mA using a 41° optic

Distance (m)	Luminaire (lx)	Luminance (lx)
0.5	0.45	5704
1.0	0.70	1426
1.5	1.10	634
2.0	1.50	357
2.5	1.85	228
3.0	2.20	158

Cone Width (m)

Photometric files (LDT) are included in the design pack which can be downloaded from the LD1081 product page on the website.

Order Codes and Options

Product code	LED colour	Beam angle	IP rating	Accessory	Finish
LD1081 - 350 - 500 - 700	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Example: LD1081-500 / LW30 / WB / IP40 / HL / White

Product codes with output options

7W LED at 350mA	LD1081-350
10W LED at 500mA	LD1081-500
14W LED at 700mA	LD1081-700

LED colour options

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

Beam / lens angle options

19° narrow spot	/NB
28° medium	/MB
41° wide	/WB

IP rating

IP40	/IP40
IP65	/IP65

Accessory

Honeycombe louver	/HL
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Finish options

Paint finish silver / black / white (RAL 9016) / antique bronze / satin antique brass / satin brass / RAL finish

Use with 350mA, 500mA and 700mA constant current LED drivers

We have a wide range of dimmable LED drivers, 0-10V, DMX, DALI and Mains dimmable. Please see the downloads section on our website:

- To run 1-2 LD1081-350 in series use a TXDEL350D (0-10V dimmable)
- To run 1-2 LD1081-500 in series use a TXDEL500D (0-10V dimmable)
- To run 1-2 LD1081-700 in series use a TXDEL700D (0-10V dimmable)

