LightGraphix Creative Lighting Solutions

LIGHTGRAPHIX LIGHTGRAPHIX IS AN INTERNATIONAL COMPANY SPECIALISING IN THE DESIGN AND MANUFACTURE OF LIGHTING FOR ARCHITECTURAL, MARINE AND DISPLAY USE. The company started in 1979 in Dartford, Kent and moved to purpose built premises in next door Crayford in 2006. In 2018 the company expanded its premises to double manufacturing and office capacity. Facilities include metalwork and presswork, fabrication, powder and wet spray painting, assembly, a comprehensive showroom and an extensive testing area, which includes a state-of-the-art Goniometer. With over 30 years experience in the lighting industry we have built up a reputation for high quality, well made and innovative products backed up by efficient and reliable customer service. We are very proud that all our products are manufactured in the UK, which helps us to develop new products rapidly, with the highest of quality, flexibility on delivery and the production of custom lengths. We have the pleasure of working with some of the top international lighting designers and supply lighting products all over the world. Many of our products have been developed in consultation with these lighting designers. WHAT MAKES US SO DIFFERENT? High quality products machined from the highest grades of aluminium and stainless steel A wealth of experience and thorough testing ensures long life even in the harshest of environments We work with you to develop products that fulfil your exact project specific requirements Linear products are all made to measure to guarantee the perfect fit for any project When you speak to someone at LightGraphix they can help with most enquiries immediately - you won't be passed from person to person to get the information you need. > We are passionate about what we do! Photography: Gavriil Papadiotis (www.gavriilux.com)

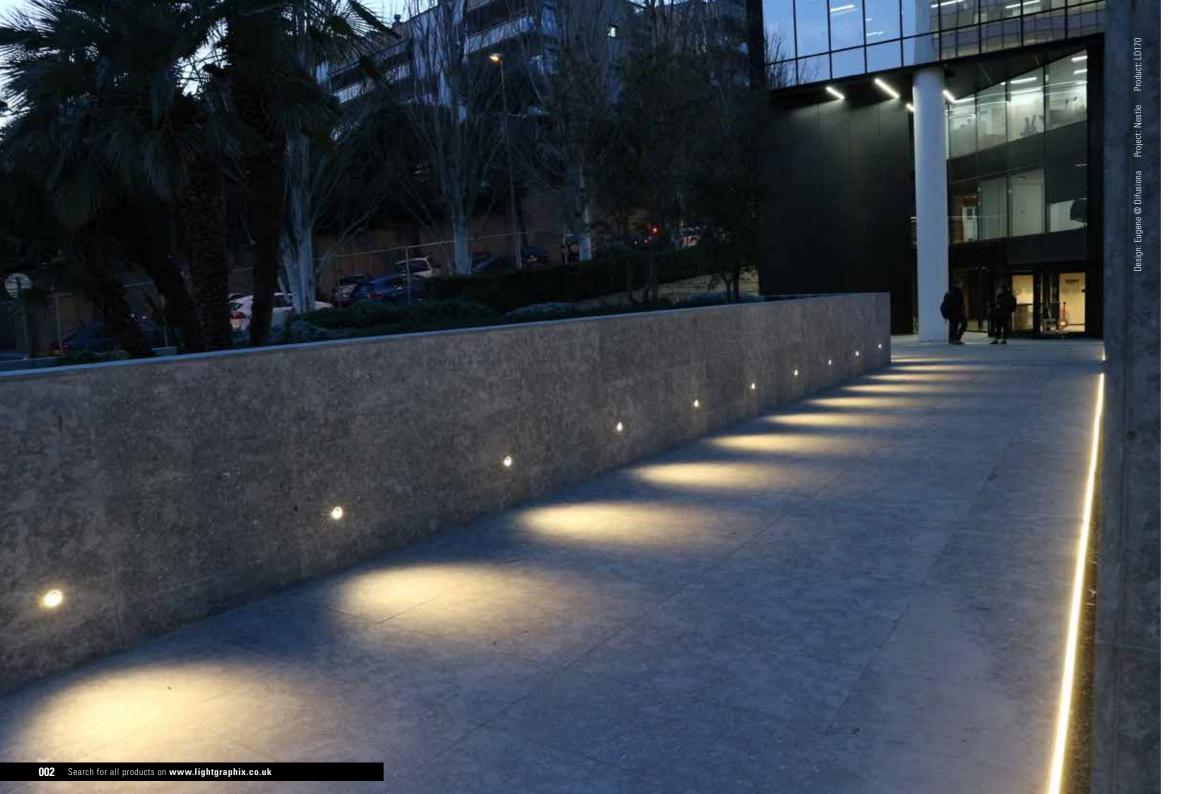


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016



018



018





022

LD18-SSB

022

UPLIGHTS AND WALL LIGHTS



RECESSED FOOTLIGHTS



014



LD62



062









WALL AND FLOOR MARKERS



LD42



LD42W/A







LD45

072



LD46

072





076

076



LD57



LD57SQ

082



LD242A

084





LD242A RGB



LD170



LD59

090



LD175 092

RECESSED WALL MOUNTED



094

LD1082

152



098



100

LD1083

154



104



LD1090

156

108





116

112



120

LD1210

160



124

LD1220

162



LD242

166

126

128 130 SURFACE MOUNTED

LD10238



LD1092

158

DOWNLIGHTS



LINEAR

GLOBAL NETWORK



LightGraphix supplies lighting to a wide variety of prestigious projects throughout the world and 40% of our production is currently exported with exports increasing year on year. Our lighting products are supplied through a global network of agents who have been chosen for their reliability and knowledge. Please see our website for a complete list of our global partners.

PROJECTS

LightGraphix's lighting products are extremely versatile and have been used both internally and externally for a wide range of projects involving retail environments, museums, exhibitions, churches, hotels, yachts and cruise ships, theatres and cinemas, restaurants, bars, clubs, bridges, commercial buildings and private residences.

We take orders for the smallest spare parts and yet at the same time handle complex overseas projects such as the new Hilton in Riyadh with custom finishes and lengths and with a total contract value in excess of 400,000 GBP.

CLIENTS INCLUDE:

20 Fenchurch Street (Walkie Talkie) Adare Manor Hotel

Alias Hotels

British Airways

British Transport Museum Calvin Klein

Clarins

Celebrity Cruises

Christian Louboutin Estée Lauder

First Leisure

Four Seasons Hotels Fraser Hart Jewellers

French Connection

German Gymnasium

Google Harrods Hilton Hotels

Hotel Du Cap-Ferrat Hyatt International

Lansdowne Club
Intercontinental Corp.

Jimmy Choo Kempenski Hotels

Lexus Cars

Mandarin Oriental Hotels

Marriott Hotels Savoy Hotel

Selfridges Skype

St James's Hotel

The Dorchester The Ritz Hotel

The Shard

W Hotel

The Spa at Gleneagles The Waldorf Hotel

Theo Fennel
Travel Lodge
Tussauds Group
Virgin Group

Watches of Switzerland Whitbread Group

Yves Saint Laurent









Search for all products on www.lightgraphix.co.uk

STANDARDS

LIA

All LightGraphix products are designed and tested to comply with the relevant sections of EN60598 (the European Standard for lighting), which promotes good quality, safe lighting combining high performance and efficiency. LightGraphix is a member of the Lighting Industry Association (LIA).

We are members of the LIA Code of Practice scheme which monitors our quality control systems, and adherence to standards with an annual inspection visit to maintain our accreditation. This also allows the company to access the LIA's testing laboratories and technical knowledge.

See the website for more information: www.thelia.org.uk

LLOYD'S TYPE APPROVAL

Type Approval from Lloyd's Register demonstrates that LightGraphix's products in a marine environment conform to recognised industry quality standards, international conventions and LR Rules. Approval includes a process of independent design review, sample testing and verification of production controls. These products are approved for marine, offshore and industrial use in environmental categories ENV1, ENV2, ENV3 and ENV4 as described in LR Test specification No.1:2013 in association with BSEN 60598 and BSEN 60529.

See the website for more information: www.lr.org/en/marine/compliance/type-approval/



OUR WEBSITE

Edition 12 has been designed as more of an ideas booklet. It contains large project images and enough data to enable you to specify our products. However, please always check on our website and look at the data sheets for more detailed and up-to-date technical information as catalogues go out of date very quickly.

On our website you will find the following information:

DATA SHEETS WHICH CONTAIN:

- > Product images
- > Product diagrams
- Output data
- > Accessories
- > Project information
- > Specification codes

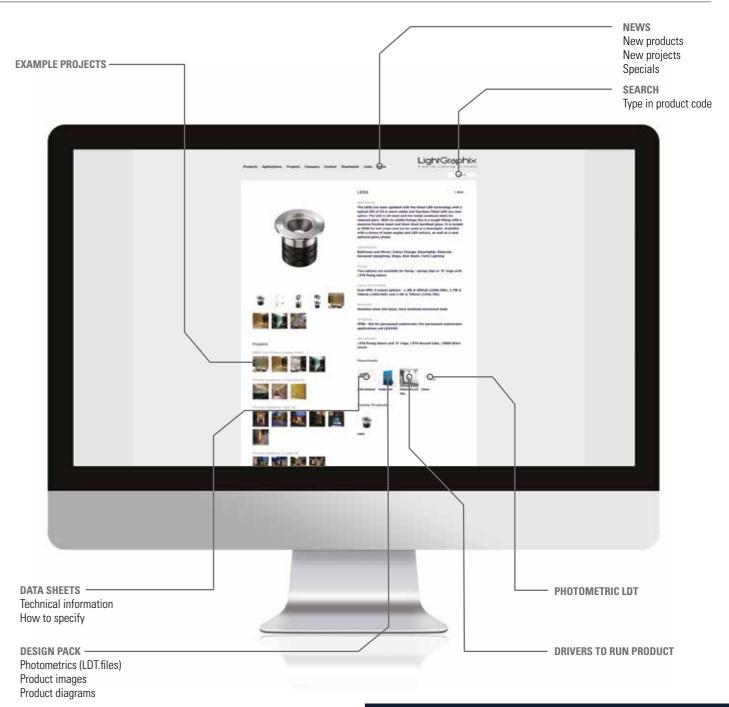
DESIGN PACKS WHICH CONTAIN:

- > Photometrics (ldt files)
- > Product images (jpeg files)
- > Product diagrams (jpeg files)
- > Autocad drawings

DRIVER TABLES WHICH:

List the relevant drivers for that product





010 Search for all products on www.lightgraphix.co.uk 011



In Edition 12 we have tried to reduce the amount of text. Symbols have been used as a quick visual guide to the product's specification. The key below explains what each symbol means. This is repeated on the last page of the catalogue to make finding it easier.

LED CONFIGURATION AND RGB OPTIONS

\odot	Single LED
	COB LED
	3 Cluster LEDs
<u>*</u>	3 Cluster with Red LED
	Quad LEDs
€ 9	Quad LED with Red LED
	6 Cluster LEDs
	Multiple linear LEDs
	Multiple single colour linear LEDs
••	RGB
	RGBW
	Tunable White
	Single Colour

LED INPUT TYPE

(24V)	Constant Voltage
350 mA	350mA Constant Current
(500 _{mA})	500mA Constant Current
700 mA	700mA Constant Current

IP RATING

(IP68)	Totally protected against dust, protected against long periods of immersion under pressure
(IP67)	Totally protected against dust, protected against the effects of temporary immersion between 15cm and 1m
(IP65)	Totally protected against dust, protected against water jets
(IP66)	Totally protected against dust, protected against strong jets of water eg. for use on ship decks
(IP54)	Protected against dust, protected against water sprayed from all directions
(IP44)	Protected against solid objects over 1mm, protected against low pressure jets of water
(IP40)	Protected against solid objects over 1mm, No water ingress protection

APPLICATION SYMBOLS

The symbols below show the suggested applications the products can be used in

ne symbols below show the suggested applications the products can be used in.				
0	Indicator		Display and shelf	
	Low depth		Downlight	
	Low glare		Floor Wash	
	Cove Lighting		Picture lighting	
	Recessed Uplight		Wall Washer	
	Steps		Yacht lighting	
2	Pathway	(4)	Surface Mounted	





012 Search for all products on www.lightgraphix.co.uk Search for all products on www.lightgraphix.co.uk 013

MINIATURE LED UPLIGHT AND WALL LIGHT







(IP68)





Our smallest exterior LED, the LD41 is a very tough, compact fitting containing the latest in LED technology. It can be run up to 1.7W, and comes with a choice of beam angles making it suitable for a wide range of applications.

Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.





KEY FEATURES

- Minimal bezel and recess depth
- > Can be specified with frosted glass for indicator applications, a wide beam works best for this effect
- > Machined from a solid billet of stainless steel 316
- > No visible fixings. Fixing options include 0-rings and a first fix sleeve or bonding directly into the mounting surface or a ground tube
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections

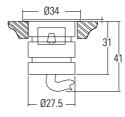
SPECIFICATION

LED	1 x Cree XPG2 500mA	
Max drive current		
Max LED power*	1.7W	
Colour Temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	120	146
Lumens per circuit watt*	71	86

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

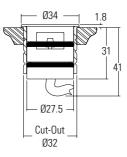
DIMENSION AND FIXING OPTIONS

Dimensions in mm





/480 - O-rings and sleeve





See page 230 for optional ground tube

ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Fixing
LD41-350 -500				
Example: LD41-5	600 / LW30 / MB	/ Stainless Steel ,	/ 480	

PRODUCT CODES WITH OUTPUT OPTION	
1.2W LED at 350mA	LD41-350
1.7W LED at 500mA	LD41-500
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LVV30
Green	/L0
Red	/LF
Amber	/L/
*Other LED colour temperatures are available. Please speak to a member of our sales team.	,
BEAM / LENS ANGLE OPTION	
12º narrow spot	/NE
31º medium	/ME
48° wide	/WE
36° x 12° oval	/OE
SO A 12 GVal	/ 01
BEZEL FINISH OPTION	
Stainless steel 316 (standard)	
Polished stainless steel (passivate for marine environments)	
Paint finish white / black / RAL	
Talle Illian Wille / Didok / TIAL	
FIXING OPTION	
First fix sleeve and O-rings	/480
Ground tube (see page 230 for details)	/480G7

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

KEY FEATURES

> Larger bezel to hide damage that might be caused to delicate surrounding surfaces when drilling hole cut-out

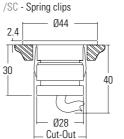
- Can be specified with frosted glass for indicator applications, a wide beam works best for this effect
- Machined from a solid billet of stainless steel 316
- No visible fixings
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections

SPECIFICATION

LED	1 x Cre	1 x Cree XPG2 500mA	
Max drive current	500		
Max LED power*	1.3	1.7W	
Colour Temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	120	146	
Lumens per circuit watt	71	86	

See website for more detailed technical information and photometric files

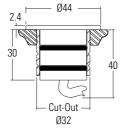
DIMENSION AND FIXING OPTIONS

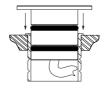




/480 - O-rings and sleeve

Ø32





See page 230 for optional ground tube

LED	1 x Cree XPG2	
Max drive current	500mA	
Max LED power*	1.7W	
Colour Temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	120 146	
Lumens per circuit watt	71 86	

*LED wattage includes losses associated with using an 85% efficient driver

Dimensions in mm

Polished stainless steel (passivate for marine / underwater environments)

FIXING OPTION ___ First fix sleeve and O-rings

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD60

SUFFIX /LW22 /LW27 /LW30 /LW40

Fixing

LD60-350

LD60-500

/LA

/NB

/0B

/SC

/480 /480GT

/LW50

/LB /LG /LR

Finish

*Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION __ 12º narrow spot 31° medium /MB /WB 48° wide 36° x 12° oval

RF7FI	FINISH	OPTION

ORDER CODES AND OPTIONS

LD60-350

1.2W LED at 350mA

1.7W LED at 500mA

LED COLOUR OPTIONS .

Super warm white (2200K)

Extra warm white (2700K)

White (4000K) - on request

Warm white (3000K)

Cool white (5000K)

Blue

Green

Red

Product Code | LED Colour | Beam Angle |

PRODUCT CODES WITH OUTPUT OPTION __

Example: LD60-500 / LW30 / MB / Stainless Steel / 480

Stainless steel 316 (standard)

Paint finish white / black / RAL

Spring clips

Ground tube (see page 230 for details)

LED DRIVERS ____



MINIATURE LED UPLIGHT AND WALL LIGHT









(350) (500) mA



LD60 is a very tough, compact fitting with a larger bezel than the LD41. It can be run up to 1.7W, and comes with a choice of beam angles making it suitable for a wide range of applications.

Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.





LD43/W/A

MINIATURE RECESSED LED UPLIGHT

















The LD43 packs a lot of features into a very compact fitting. It is based on the LD42 wall light, with a flush glass and walkover bezel. This enables the same look for both wall and floor washing. With its very minimal depth and small cables, it is best suited for interior applications, including bathrooms.

Please note: For exterior in-ground applications please use the LD41, LD60, LD43DR, LD56 or LD56T. These have an integral anti wicking barrier as well as having thicker cable which is more suitable for exterior in-ground installations.





KEY FEATURES

- Uplighter version of our LD42 wall light
- Compact size with excellent power
- Soft contoured beams from a range of optics
- Very minimal depth
- Recessed LED position for reduced glare
- LD43W has an integral glare shield
- LD43A has an integral glare shield and 20° tilt film to angle the light towards the lit surface and further reduce glare
- Hard anodised body with stainless steel 316 bezel
- Hidden fixing options include spring clips or O-rings and a first fix sleeve

SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	500)mA
Max LED power*	1.7W	
Colour temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	120	146
Lumens per circuit watt	71	86

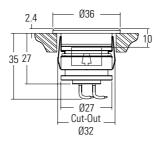
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files



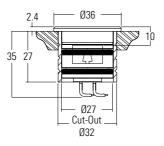
DIMENSION AND FIXING OPTIONS

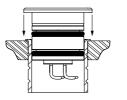
Dimensions in mm

/SC - Spring clip fixing



/480 - O-rings and sleeve A more robust and watertight method of fixing, for in ground applications.



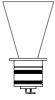




BODY OPTIONS

Lens and LED assembly are recessed into the body by 10mm.







LD43W

Body has a machined half-moon in front of the lens to reduce glare. Please note that the oval lens can not be used in this or the LD43A.







Same as the LD43W but with an integral 20° tilt film which angles the light towards the surface to be lit. This is particularly useful when the fitting has to be spaced away from the lit surface.







ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Fixing
LD43350 -500				
Example: LD43A	-500 / LW30 / ME	3 / Stainless Stee	l / 480	

PRODUCT CODES WITH OUTPUT OPTION	
1.2W LED at 350mA	LD43-35 LD43W-35 LD43A-35
1.7W LED at 500mA	LD43-50 LD43W-50 LD43A-50
Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red Amber *Other LED colour temperatures are available. Please speak to a member of our sa	SUFFIX /LW2 /LW3 /LW4 /LW5 /L /L /L /L
BEAM / LENS ANGLE OPTION 12° narrow spot 31° medium 48° wide 36° x 12° oval (only available on the LD43) BEZEL FINISH OPTION Stainless steel 316 (standard) Polished stainless steel (passivate for marine environments)	/N /M /W /0
Paint finish white / black / RAL Antique bronze (flamed solid bronze) FIXING OPTION Spring clips First fix sleeve and 0-rings	/S /48

LED DRIVERS ____

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

KEY FEATURES

- > LED and lens assembly tilted at 17° within a black anodised aluminium body
- > Tilted beam angle makes it an ideal solution for floor and wall washing
- > Can be mounted as an uplight or wall light
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections

For yacht exteriors the body can be manufactured from stainless steel (max 500mA 1.7W, LD18-SSB-500)





LED 1 x Cree XPG2 Max drive current 700mA Max LED power* 2.4W Colour Temperature 3000K 5000K CRI (typical) 93 75 Delivered lumens (L,,,,) 164 200 83 Lumens per circuit watt

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

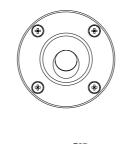
DIMENSION AND FIXING OPTIONS

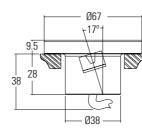
SPECIFICATION

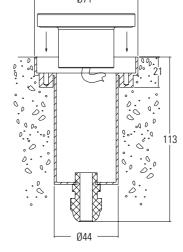
Dimensions in mm

Fixing is by removing the bezel, and then 4 screws go through the body.

/474 - Concrete housing









ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Fixing
LD18-350 -500				
-700				
Example: LD18-7	00 / LW30 / MB ,	/ Stainless Steel ,	/ 474	

LD18			
1.2W LED at 350mA		L	D18-350
1.7W LED at 500mA		L	D18-500

2.4W LED at 700mA LD18-SSB

PRODUCT CODES WITH OUTPUT OPTION

1.2W LED at 350mA	LD18-SSB-350
1.7W LED at 500mA	LD18-SSB-500

LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are quallable. Places appell to a member of our soles team	

*Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION	
12º narrow spot	/\
31° medium	/\
48° wide	//
36° x 12° oval	/0

BEZEL FINISH OPTION .

Stainless steel 316 (standard)

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL

FIXING OPTION .

Concrete housing

/474

LD18-700

Use with 350mA,500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



(IP68)

LD18

WALL WASHER

TILTED EXTERIOR LED FLOOR AND

350 (500 (700 mA)

LD43DR

MINIATURE DEEP RECESSED LED UPLIGHT















The LD43DR has a very deep recessed LED position with a small aperture, resulting in an uplight with little or no glare. The trade off is a beam which is quite hard on the edges, but makes it ideal for lighting doorways or narrow corridors.

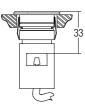




KEY FEATURES

- > LED and lens assembly deep recessed within a matt black anodised body for reduced glare
- Only available with a narrow 12° optic due to the size of the aperture
- > No visible fixings. Options include spring fixing clips or O-rings and a first fix sleeve
- Can be used as an uplighter or downlighter
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Optional glare shield accessory for even less glare
- Range of bezel finishes
- Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.





SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	700mA	
Max LED power*	2.4W	
Colour Temperature	3000K 5000K	
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	137	166
Lumens per circuit watt	57	69

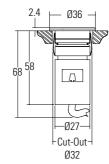
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

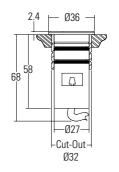
DIMENSION AND FIXING OPTIONS

Dimensions in mm

/SC - Spring clip fixing Useful for plinth or downlight applications.

/480 - O-rings and sleeve A more robust and watertight method of fixing, for in-ground applications.





ACCESSORIES

/GS - Glare shield

An optional glare shield is available to further reduce glare from the LED and optic. This is useful in narrow details where people are going to be directly over the fitting. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling.





ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION ___

Product Code	LED Colour	Beam Angle	Finish	Accessory	Fixing
LD43DR-350 -500					
-700 -700					
Example: LD43D	R-700 / LW30 /	NB / Stainless	Steel / GS	/ 480	

.2W LED at 350mA .7W LED at 500mA .4W LED at 700mA	LD43DR-350 LD43DR-500 LD43DR-700
ED COLOUR OPTIONS	SUFFIX
uper warm white (2200K)	/LW22
xtra warm white (2700K)	/LW27
Varm white (3000K)	/LW30
Vhite (4000K) - on request	/LW40
and white (5000K)	/LW50

Amher *Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION _____ /NB 12° narrow spot

BEZEL FINISH OPTION __

Stainless steel 316

Blue

Green

Red

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL

Flamed solid bronze (antique finish)

ACCESSORIES __

/GS Glare shield

FIXING OPTION —

/SC Spring clips First fix sleeve and O-rings /480 Ground tube (see page 230 for details) /480GT

LED DRIVERS ____

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/LB

/LG

/LR

/LA

LOW GLARE INTERIOR/EXTERIOR IN GROUND LED UPLIGHTER



















The LD56 packs a lot of features into a very compact product. It is an incredibly versatile LED uplighter which has been used in projects all over the world in a multitude of applications. The LED is set back for reduced glare, whilst the optics offer fantastic beam shape and spread. This is a very tough, high quality fitting, machined from high grade materials.



KEY FEATURES

- > Excellent diffused beam shape from a range of optics
- Low glare with the LED and lens assembly recessed within a black anodised body
- Optional glare shield accessory
- Typical 93 CRI in 3000K warm white
- No visible fixings. Options include spring fixing clips, O-rings and a first fix sleeve and a ground tube
- Can be used as an uplighter or downlighter
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Range of bezel finishes available
- Variable output options
- Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.

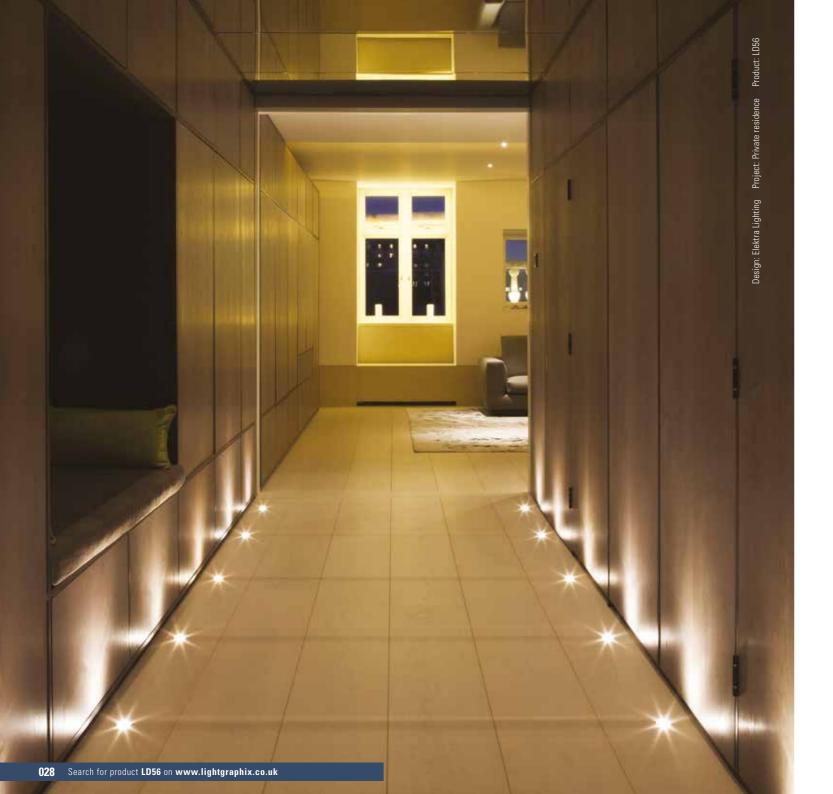
SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	700mA	
Max LED power*	2.4W	
Colour Temperature	3000K 5000K	
CRI (typical)	93 75	
Delivered lumens (L ₁₀₀)	164 200	
Lumens per circuit watt	68	83

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files







DIMENSION AND FIXING OPTIONS

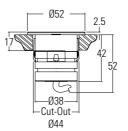
Dimensions in mm

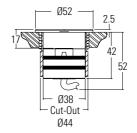
/SC - Spring clip fixing Useful for plinth or downlight applications.

/476 - O-rings and sleeve A more robust and watertight method of fixing, for in-ground applications.











See page 230 for optional ground tube

ACCESSORIES

An optional glare shield is available to further reduce glare from the LED and optic (please note this is not available with oval beam lens).



/GS56 - Half-moon glare shield This glare shield is useful in very narrow details where people are going to be directly over the fitting. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling.

ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Accessory	Fixing	
LD56-350 -500 -700						
Example: LD56-700 / LW30 / MB / Stainless Steel / GS56 / 476						

PRODUCT CODES WITH OUTPUT OPTION 1.2W LED at 350mA 1.7W LED at 500mA 2.4W LED at 700mA	LD56-350 LD56-500 LD56-700
LED COLOUR OPTIONS Super warm white (2200K) Extra warm white (2700K) Warm white (3000K)	SUFFIX /LW22 /LW27 /LW30
White (4000K) - on request Cool white (5000K)	/LW40 /LW50

Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION	
12° narrow spot	/N
31° medium	/N
48° wide	/M
36° x 12° oval (not available with glare shield)	/0

BEZEL FINISH OPTION _

Stainless steel 316

Blue

Green

Red

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL

Flamed solid bronze (antique finish)

ACCESSORIES _

/GS56 Half-moon glare shield

FIXING OPTION ____

/SC Spring clips First fix sleeve and O-rings /476 Ground tube (see page 230 for details) /476GT

LED DRIVERS ___

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/LB

/LG /LR

/LA

LD56T LOW GLARE TILTED EXTERIOR IN GROUND LED UPLIGHTER 350 (500 (700 mA)

KEY FEATURES

- LED and lens assembly recessed and tilted at 6° within a black anodised body for reduced glare
- > Tilted beam angle makes it an ideal solution for wall washing and column uplighting
- Excellent diffused beam shape from a range of optics
- Optional glare shield accessory
- No visible fixings. Options include spring fixing clips, O-rings and a first fix sleeve and a ground tube
- Can be used as an uplighter or downlighter
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Range of bezel finishes available
- Variable output options
- > Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations

SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	700mA	
Max LED power*	2.4W	
Colour Temperature	3000K 5000K	
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	164	200
Lumens per circuit watt	68 83	

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files





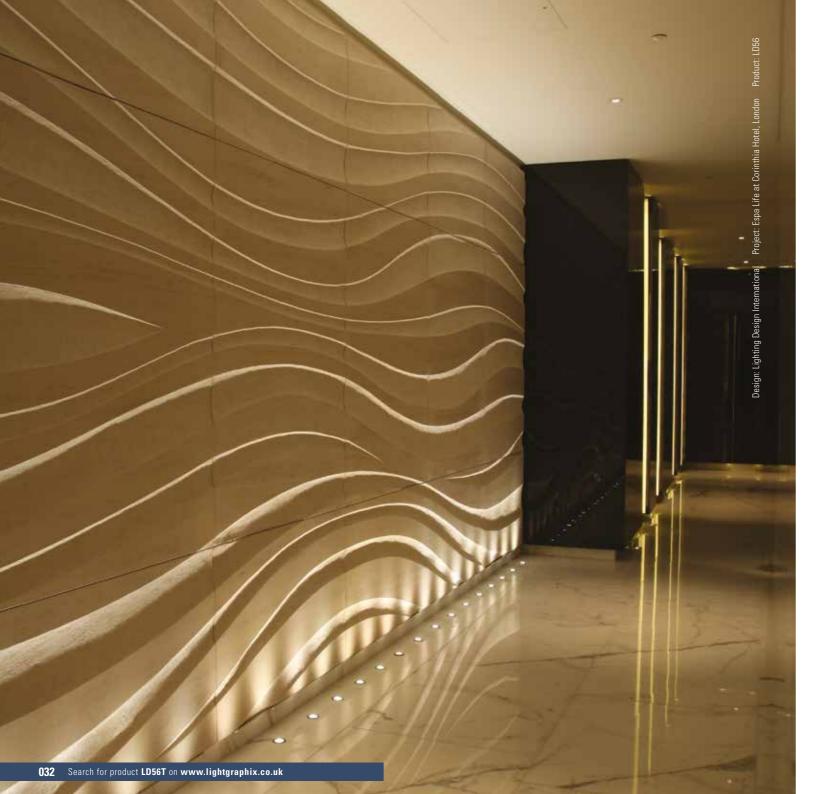






The LD56T packs a lot of features into a very compact product. It is an incredibly versatile LED uplighter which has been used in projects all over the world in a multitude of applications. The LED is angled at 6° to focus the light up a wall or column. It is set back for reduced glare, whilst the optics offer fantastic beam shape and spread. This is a very tough, high quality fitting, machined from high grade materials.





DIMENSION AND FIXING OPTIONS

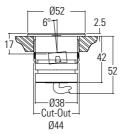
Dimensions in mm

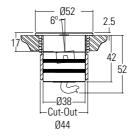
/SC - Spring clip fixing Useful for plinth or downlight applications.

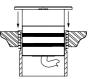
/476 - O-rings and sleeve A more robust and watertight method of fixing, for in-ground applications.











See page 230 for optional ground tube

ACCESSORIES

/GS56 - Glare shield (not available with oval beam lens) An optional glare shield is available for the LD56T to further reduce glare from the LED and optic. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling. Consider the LD56 with glare shield as this is also very low glare but has a higher throw of light up the wall compared to the LD56T.





ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Accessory	Fixing
LD56T-350 -500					
-700	700 / 138/20 / 8	ID / Ctainlana C	tool / 476		l
Example: LD56T-	700 / LVV30 / IV	i B / Sta inless S	teer/4/b		

PRODUCT CODES WITH OUTPUT OPTION 1.2W LED at 350mA 1.7W LED at 500mA 2.4W LED at 700mA	LD56T-350 LD56T-500 LD56T-700
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LD22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/I W50

*Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION	
12° narrow spot	/NB
31° medium	/ME
48° wide	/WE
36° x 12° oval (not available with glare shield)	/OE

BEZEL FINISH OPTION _

Stainless steel 316

Blue

Green Red

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL Flamed solid bronze (antique finish)

Ground tube (see page 230 for details)

ACCESSORIES

Glare shield	/GS56
FIXING OPTION	
Spring clips	/SC
First fix sleeve and O-rings	/476

LED DRIVERS ___

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/476GT

/LB

/LG

/LR /LA

LD56RGB

LOW GLARE EXTERIOR COLOUR CHANGE LED UPLIGHTER













This is a very tough, compact, in-ground RGB LED uplighter. A slightly longer body than the single colour LD56, it features the latest tri chip LED technology offering increased output and efficiencies. The single optic offers good colour mixing and no multiple shadows.

Design tip: The 30° medium beam optic is the best for colour mixing. The narrow 12° can be used if the lighting scheme does not involve mixing of the RGB to create a colour, or if the surface being washed is a reasonable distance away allowing the colour to mix.



KEY FEATURES

- Recessed LED and optic for low glare
- Single LED optic allows colours to mix at the source, with smoother RGB changing
- No multiple shadows
- Fixing options include spring fixing clips, O-rings and a first fix sleeve and a ground tube
- Range of bezel finishes
- > Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.

SPECIFICATION

LED	1 x Cree XML RGB
Max drive current	350mA
Max LED power*	3.6W

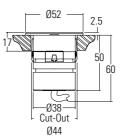
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information

DIMENSION AND FIXING OPTIONS

Dimensions in mm

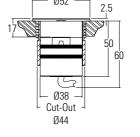
/SC - Spring clip fixing Useful for plinth or downlight applications.





/476 - O-rings and sleeve A more robust and watertight method of fixing, for in-ground applications.







ORDER CODES AND OPTIONS

Product Code	Beam Angle	Finish	Fixing
LD56RGB			
Example: LD56R	GB / MB / Stainless Ste	eel / 476	

BEAM / LENS ANGLE OPTION	
12º Narrow spot	/NB
30° Medium (best RGB colour mixing perfomance)	/MB

BEZEL FINISH OPTION

Stainless steel 316

Polished stainless steel (passivate for marine environments)

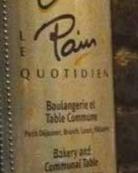
Paint finish white / black / RAL

Flamed solid bronze (antique finish)

FIXING OPTION	
Spring clips	/SC
First fix sleeve and 0-rings	/476
Ground tube (see nage 230 for details)	/476GT

LED DRIVERS -

Use with 350mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



VERY LOW DEPTH IN-GROUND **UPLIGHTER**













LD52 is a very powerful, low depth, triple LED uplight. It has been designed specifically for applications where there is little recess depth. Supplied as standard with a tough, walk over stainless steel bezel and toughened glass. It can also be used as an external downlighter.



KEY FEATURES

- High efficiency optics guarantee excellent beam spread and shape, with 3 beam angles available
- Fixing is by 3 spring clips or by the /484S first fix sleeve and O-rings; this provides a watertight seal ideal for external applications
- Range of bezel finish options
- LD52 can be run up to a current of 500mA (5.1W) at an ambient temperature of 45°C
- Can be used as an external downlighter

SPECIFICATION

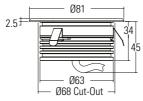
LED	3 x Cree XPG2	
Max drive current	500mA	
Max LED power*	5.1W	
Colour Temperature	3000K 5000K	
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	338	433
Lumens per circuit watt	68 87	

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

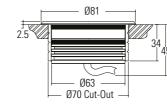
DIMENSION AND FIXING OPTIONS

Dimensions in mm

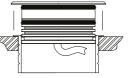
/SC - Spring clips











ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION ____

Product Code	LED Colour	Beam Angle	Finish	Fixing
LD52-350 -500				
Example: LD52-5	500 / LW30 / MB ,	/ Powder coated v	white / SC	

3.6W LED at 350mA 5.1W LED at 500mA	LD52-350 LD52-500
LED COLOUR OPTIONS	SUFFI>
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LE
Green	/L0
Red	/LF
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	
BEAM / LENS ANGLE OPTION	
18º narrow spot	/NF

ZEL FINIS	H OPTION	

Stainless steel 316

Polished stainless steel (passivate for marine environments) Paint finish white / black / RAL (not suitable for high traffic areas)

Flamed solid bronze (antique finish)

FIXING OPTION	
Spring Clips	/\$0
First fix sleeve and 0-rings	/484\$

LED DRIVERS _

25° medium

36° wide

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/MB

/WB

HIGH POWER INTERIOR LED UPLIGHTER



















HE SERVICE WITH





The new LD150 features the all new E1 LED engine, optional glare shields and a new range of optics. Tunable White and RGBW options are also available. A powerful uplighter for its size and depth, the LD150 has been designed specifically to produce low glare illumination to walls and columns. It can be used for a wide range of project styles with a minimal aesthetic and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent thermal and light output performance.



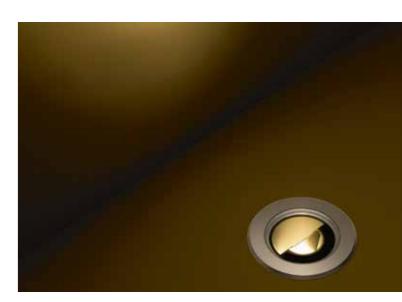
KEY FEATURES

- New LED light engines offer single white, 2nd channel, Colour, RGBW, and Tunable white LED options
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised body for reduced glare
- 700mA option when specified with /482N concrete housing, delivering up to 555 lumens in single white
- Range of beam angles featuring a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- Range of bezel finish options
- Built-in reverse polarity protection

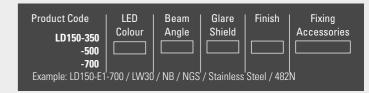
SPECIFICATION

LED type	1 x E1 LED Engine Cree XHP 35		
Max drive current*	700mA		
Max LED power**	10	W	
Colour temperature	3000K	5000K	
CRI (typical)	85	80	
Delivered lumens (L ₁₀₀)	555	599	
Lumens per circuit watt	55	59	

*700mA version can only be specified with /482N concrete housing **LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files



Ø65 Cut-Out



PRODUCT CODES WITH OUTPUT OPTION _

5W LED at 350mA LD150-E1-350 LD150-E1-500 7W LED at 500mA 10W LED at 700mA (Must be specified with /482N) LD150-E1-700

LED COLOUR OPTIONS _ SUFFIX Extra warm white (2700K) /LW27 Warm white (3000K) /LW30 White (4000K) - on request /LW40 Cool white (5000K) /LW50 /I W**+I * With 2nd channel (red for navigation or amber night lighting) LD150-E1-2CH

*Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION __

/NB 10° narrow spot 19° medium /MB 34° wide /WB 54° extra wide /WWB 15° x 49° oval /0B

GLARE SHIELD .

/NGS No glare shield Standard glare shield /GS Half-moon glare shield /GSHM

BEZEL FINISH OPTION _

Stainless steel 316

Paint finish white / black / RAL (not suitable for high traffic areas) Polished and passivated stainless steel (for marine environments)

Flamed solid bronze (antique finish)

FIXING ACCESSORIES _____

First fix sleeve /482S Concrete housing (specify when choosing LD150-E1-700) /482N with integral non-dimming driver (350mA & 500mA outputs only) /ID

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

GLARE SHIELDS

LD150 now comes with a choice of glare control options.



No glare shield for maximum lumen output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



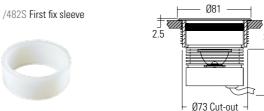
Standard glare shield. Introduced in 2010, this glare shield provides an excellent balance between glare control and lumen output. This accessory works well in most applications.



Half-moon glare shield for applications that require very low glare. Minimal loss of light on lit surface (wall) but overall lumen output typically reduced by 50-60%.



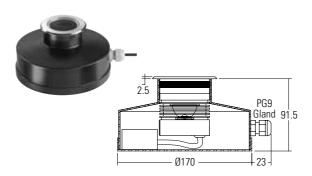
Soft silicon seal holds the fitting into cut-out



First fix sleeve is polypropylene Fins on the side lock it into a range of mounting surfaces

/482N - Concrete housing

Concrete housing must be used when specifying the 700mA fitting. The aluminium aids in keeping the LED fitting cool, as it helps with thermal transfer between the heat within the can to the surrounding concrete.



/ID - Optional non-dimming driver (single colour only) to fit into housing

Concrete housing can be specified with an integral mains in non dimming LED driver.

LD150T

HIGH POWER INTERIOR TILTED LED UPLIGHTER











The LD150T has been designed with the LED and optics on a 6° tilt. This allows the light to be focused onto the lit surface, and enables the uplighters to be set further away from the wall if required. It has been designed specifically to produce low glare illumination to exterior walls and columns. Very powerful for its size and depth, the LD150T features the E1 LED engine, high efficiency optics and a range of different light engine options. It can be used for a wide range of project styles with a minimal aesthetic and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent thermal and light output performance.



KEY FEATURES

- > 6° tilt focuses the light onto the lit surface
- Tilt enables uplight to be placed further away from the lit surface whilst still achieving the desired effect, while any glare from the fitting is angled away from view
- LED/Lens assembly recessed and tilted within a black anodised body for
- E1 engine, featuring the CREE XHP35 LED with 2-step binning
- High output 700mA option when specified with the /482N concrete housing, delivering up to 542 lumens
- Range of beam angles featuring a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, ideal for wall washing
- Half-moon glare shield option developed to minimise the view of the intense light source without affecting the wash of light on the wall/
- Single optic produces a very consistent beam with no multiple shadows
- No visible fixings
- Range of bezel finish options
- Built-in reverse polarity protection

GLARE SHIELDS





No glare shield for maximum lumen output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



Half-moon style glare shield design, unique to the LD150T. Designed for a balanced output and glare control.

Please refer to our photometric files for lumen data.

SPECIFICATION

	1		
LED type	1 x E1 LED Engine Cree XHP 35		
Max drive current*	700mA		
Max LED power**	10\	W	
Colour temperature	3000K	5000K	
CRI (typical)	85	80	
Delivered lumens (L ₁₀₀)	542	585	
Lumens per circuit watt	54	58	

*700mA version can only be specified with 482N concrete housing. 500mA for all other

**LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files



-Ø65 Cut-Out-

Product Code

LD150T-E1 350



PRODUCT CODES WITH OUTPUT OPTION ____

LD150T-E1-350 5W LED at 350mA 7W LED at 500mA LD150T-E1-500 LD150T-E1-700 10W LED at 700mA (Must be specified with /482N)

LED COLOUR OPTIONS SUFFIX Extra warm white (2700K) /LW27 Warm white (3000K) /LW30 White (4000K) - on request /LW40

With 2nd channel (red for navigation or amber night lighting) LD150T-E1-2CH *Other LED colour temperatures are available. Please speak to a member of our sales team.

Example: LD150T-E1-700 / LW30 / NB / NGS / Stainless Steel / 482N

BEAM / LENS ANGLE OPTION __ 10° narrow spot /NB 19° medium /MB 34° wide /WB 54° extra wide /WWB 15° x 49° oval /0B

GLARE SHIELD -No glare shield

BEZEL FINISH OPTION _

Half-moon glare shield

Cool white (5000K)

Stainless steel 316

Paint finish white / black / RAL (not suitable for high traffic areas) Polished and passivated stainless steel (for marine environments)

Flamed solid bronze (antique finish)

FIXING ACCESSORIES ___

/482S First fix sleeve Concrete housing (specify when choosing LD150T-E1-700) /482N with integral non-dimming driver (350mA & 500mA outputs only)

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

DIMENSIONS AND FIXING OPTIONS

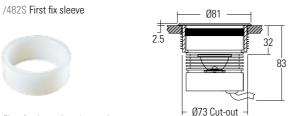
Both the LED and the optic are angled at a 6° tilt, allowing for more efficient use of a glare shield, as more of the light output is directed towards the open aperture of the fitting.

6° TILT





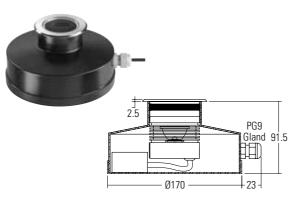
Soft silicon seal holds the fitting into cut-out



First fix sleeve is polypropylene Fins on the side lock it into a range of mounting surfaces

/482N - Concrete housing

Must be used when specifying the 700mA fitting. The aluminium housing aids in keeping the LED fitting cool, as it helps with thermal transfer between the heat within the housing to the surrounding concrete.



/ID - Optional integral non-dimming driver (single colour only at 350mA or 500mA)

/LW50 /LW**+L*

/NGS

HIGH POWER INTERIOR/EXTERIOR TILTED LED UPLIGHTER



















external applications.

The new LD151 features the all new E1 LED engine, optional glare shields and a new range of optics. Tunable White and RGBW options are also available. A powerful uplighter for its size and depth, the new LD151 has been designed specifically to produce low glare illumination to walls and columns. It can be used for a wide range of project styles with a minimal aesthetic and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent thermal and light output performance. Ideal for interior or



KEY FEATURES

- New LED light engines offer single white, 2nd channel, Colour, RGBW, and Tunable white LED options
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised body for reduced glare
- 700mA option when specified with /482N concrete can, delivering up to 555 lumens in single white
- Range of beam angles featuring a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- Range of bezel finish options
- Built-in reverse polarity protection

SPECIFICATION

LED type	1 x E1 LED Engine Cree XHP		
Max drive current*	700mA*		
Max LED power**	10W		
Colour temperature	3000K	5000K	
CRI (typical)	85	80	
Delivered lumens (L ₁₀₀)	555	599	
Lumens per circuit watt	55	59	

^{*700}mA version can only be specified with 484N concrete housing. 500mA for all other

^{**}LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files



glare control options.

LD151 now comes with a choice of

Product Code LD151-E1 350 500 700	LED Colour	Beam Angle	Glare Shield	Finish	Fixing Accessories
Example: I D151-F	1-700 / I.W.31) 1 / NR / NGS	S / Stainless	Steel / 484	1N

PRODUCT CODES WITH OUTPUT OPTION

5W LED at 350mA LD151-E1-350 LD151-E1-500 7W LED at 500mA 10W LED at 700mA (Must be specified with /484N) LD151-E1-700

LED COLOUR OPTIONS _

SUFFIX Extra warm white (2700K) /LW27 Warm white (3000K) /LW30 White (4000K) - on request /LW40 Cool white (5000K) /LW50 /LW**+L* With 2nd channel (red for navigation or amber night lighting) LD151-E1-2CH *Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION _

10° narrow spot /NB 19° medium /MB 34° wide /WB 54° extra wide /WWB 15° x 49° oval /0B

GLARE SHIELD .

No glare shield /NGS Standard glare shield /GS /GSHM Half-moon glare shield

BEZEL FINISH OPTION

Stainless steel 316

Paint finish white / black / RAL (not suitable for high traffic areas) Polished and passivated stainless steel (for marine environments) Flamed solid bronze (antique finish)

FIXING ACCESSORIES

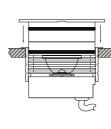
First fix sleeve (supplied as standard) /484S Concrete housing (specify when choosing LD151-E1-700) /484N with integral non-dimming driver (350mA & 500mA outputs only) /ID Ground tube /484GT

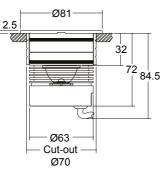
Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

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.

/484S First fix sleeve supplied as standard

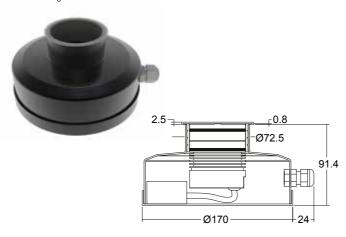






/484N Concrete housing

Must be used when specifying the 700mA fitting. The aluminium housing aids in keeping the LED fitting cool, as it helps with thermal transfer between the heat within the housing to the surrounding concrete.

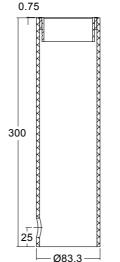


/ID Optional integral non-dimming driver (single colour only at 350mA or 500mA)

/484GT Ground tube

The ground tube has been designed for applications where a recessed uplighter 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.





output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.

No glare shield for maximum lumen

Standard glare shield. Introduced in 2010, this glare shield provides an excellent balance between glare control and lumen output. This accessory works well in most applications.



Half-moon glare shield for applications that require very low glare. Minimal loss of light on lit surface (wall) but overall lumen output typically reduced by 50-60%.



LD151T

HIGH POWER INTERIOR/EXTERIOR TILTED LED UPLIGHTER













The LD151T has been designed with LED and optics on a 6° tilt. This allows the light to be focused onto the lit surface, and enables the uplighters to be set further away from the wall if required. It has been designed specifically to produce low glare illumination to exterior walls and columns. Very powerful for its size and depth, the LD151T features the E1 LED engine, high efficiency optics, along with a range of different light engine options. It can be used for a wide range of project styles with a minimal aesthetic and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent

thermal and light output performance.



- 6° tilt focuses the light onto the lit surface
- Tilt enables uplight to be placed further away from the lit surface whilst still achieving the desired effect, while any glare from the fitting is angled away from the eye
- LED/Lens assembly recessed and tilted within a black anodised body for
- E1 engine, featuring the CREE XHP35 LED with 2-step binning
- High output 700mA option when specified with the /484N concrete housing, delivering up to 542 lumens
- Range of beam angles including a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, ideal for wall washing
- Half-moon glare shield option developed to minimise the view of the intense light source without affecting the wash of light on the wall/column
- Single optic produces a very consistent beam with no multiple shadows
- Range of bezel finish options
- Built-in reverse polarity protection

GLARE SHIELDS





No glare shield for maximum lumen output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



Half-moon style glare shield design, unique to the LD151T. Designed for a balanced output and glare control.

Please refer to our photometric files for lumen data.

SPECIFICATION

LED type	1 x E1 LED Cree XHP 35		
Max drive current*	700mA		
Max LED power**	10)W	
Colour temperature	3000K	5000K	
CRI (typical)	85	80	
Delivered lumens (L ₁₀₀)	542	585	
Lumens per circuit watt	54	58	

*700mA version can only be specified with 484N concrete housing. 500mA for all other

**LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

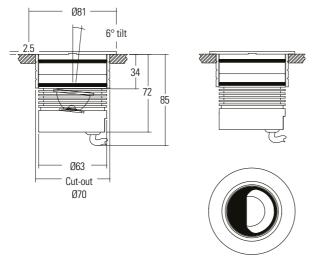




FIXING ACCESSORIES Dimensions in mm

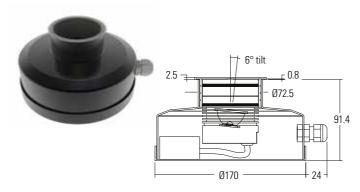
The fitting is supplied as standard with a fixing sleeve which is bonded into the mounting surface first. The LD151T is secured into the sleeve by 2 O-rings on the body, when pushed into the sleeve it creates a watertight seal.

/484S First fix sleeve supplied as standard



/484N Concrete housing

Must be used when specifying the 700mA fitting. The aluminium can aids in keeping the LED fitting cool, as it helps with thermal transfer between the heat within the can to the surrounding concrete.



/ID Optional integral non-dimming driver (single colour only at 350mA or 500mA)

/484GT Ground tube

The ground tube has been designed for applications where a recessed uplighter 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.



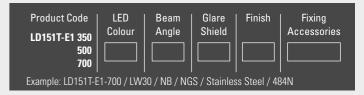
6° TILT

Both the LED and the optic are put at a 6° tilt, allowing for more efficient use of a glare shield, as more of the light output is directed towards the open aperture of the fitting.



ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION ___



7W LED at 500mA 10W LED at 700mA (Must be specified with /484N)	LD151T-E1-500 LD151T-E1-700
LED COLOUR OPTIONS	SUFFIX
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
With 2nd channel (red for navigation or amber night lighting) LD151T-E1-20	H /LW**+L*
*Other LED colour temperatures are available. Please speak to a member of our sales tear	m.
BEAM / LENS ANGLE OPTION	
10° narrow spot	/NB

BEZEL FINISH OPTION

19° medium

54° extra wide

15° x 49° oval

34° wide

5W LED at 350mA

Stainless steel 316

GLARE SHIELD No glare shield

Paint finish white / black / RAL (not suitable for high traffic areas) Polished and passivated stainless steel (for marine environments)

Flamed solid bronze (antique finish)

Half-moon glare shield	/GS
FIXING ACCESSORIES	
First fix sleeve (supplied as standard)	/4845
Concrete housing (specify when choosing LD151T-E1-700)	/484N
with integral non-dimming driver (350mA & 500mA single colour only)	/ID

Ground tube

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/484GT

LD151T-E1-350

/MB

/WB

/0B

/WWB

HIGH POWER INTERIOR/EXTERIOR LED UPLIGHTER



















The new LD153 features the all new E1 LED engine, optional glare shields and a new range of optics. Tunable White and RGBW options are also available. A powerful uplighter for its size and depth, the LD153 has been designed specifically to produce low glare illumination to exterior walls and columns in public areas. The 4 screws in the front allow it to be locked into the mounting surface using a very clever O-ring compression system. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent thermal and light output performance.



KEY FEATURES

- > New LED light engines offer single white, 2nd channel, Colour, RGBW, and Tunable white LED options
- New optional 2nd channel LEDs for secondary lighting applications
- 700mA option when specified with the /483N concrete housing, delivering up to
- Range of beam angles including a narrow 10° spot for lighting columns and arches, or a 15° x 49° spreader lens, which is ideal for wall washing applications
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised body for reduced glare
- > 4 screws in the bezel are tightened to expand 0-rings on the body and secure it into the first fix sleeve or concrete housing, creating a watertight seal
- Range of bezel finish options
- Built-in reverse polarity protection

SPECIFICATION

LED type	1 x E1 LED Engine Cree XHP		
Max drive current*	700mA*		
Max LED power**	10W		
Colour temperature	3000K	5000K	
CRI (typical)	85	80	
Delivered lumens (L ₁₀₀)	555	599	
Lumens per circuit watt	55	59	

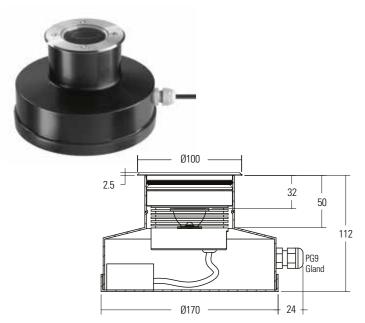
^{*700}mA version can only be specified with 483N concrete housing. 500mA for all other

^{**}LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files





/483S First fix sleeve is polypropelene, with a finned top to fix into various surfaces.



/483N Concrete Housing

/ID Optional integral non-dimming driver (single colour only at 350mA or 500mA)

Concrete housing must be used when specifying the 700mA fitting. The aluminium can aids in keeping the LED fitting cool, as it helps with thermal transfer between the heat within the can to the surrounding concrete.



Fitting pushed into housing



Orientate fitting. Then tighten 4 screws



Ring is pulled up and expands the O ring, locking fitting into the housing

LD153 comes with a choice of glare control options.



For maximum lumen output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



Standard glare shield. Introduced in 2010, this glare shield provides an excellent balance between glare control and lumen output. This accessory works well in most applications.



Half-moon glare shield for applications that require very low glare. Minimal loss of light on lit surface (wall) but overall lumen output typically reduced by 50-60%.

Please refer to our photometric files for lumen data.

ORDER CODES AND OPTIONS FOR E1 LIGHT ENGINE

(for 2nd channel, Colour, RGBW and Tunable white, please see data sheets online)



PRODUCT CODES WITH OUTPUT OPTION	
5W LED at 350mA	LD153-E1-350
7W LED at 500mA	LD153-E1-500
10W LED at 700mA (Must be specified with /483N)	LD153-E1-700

LED COLOUR OPTIONS	. SUFFIX
Extra warm white (2700K)	/LW2
Warm white (3000K)	/LW3
White (4000K) - on request	/LW4
Cool white (5000K)	/LW5
With 2nd channel (red for navigation or amber night lighting) LD153-E1-2CH	/LW**+L

^{*}Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE UPITUN	
10° narrow spot	/NE
19° medium	/ME
34° wide	/WE
54° extra wide	/WWE
15° x 49° oval	/01

GLARE SHIELD	
No glare shield	/NG
Standard glare shield	/G
Half-moon glare shield	/GSHM

BEZEL FINISH OPTION _____

Stainless steel 316

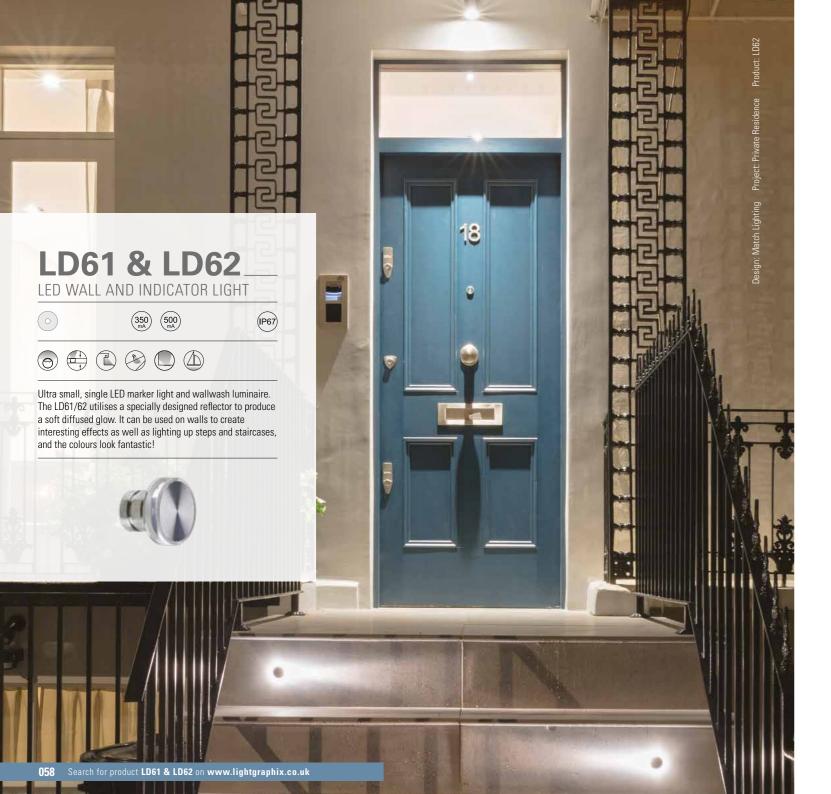
Paint finish white / black / RAL (not suitable for high traffic areas) Polished and passivated stainless steel (for marine environments)

Flamed solid bronze (antique finish)

	FSS	

First fix sleeve	/483S
Concrete housing (specify when choosing LD153-E1-700)	/483N
with integral non-dimming driver (350mA & 500mA single colour outputs only)	/ID

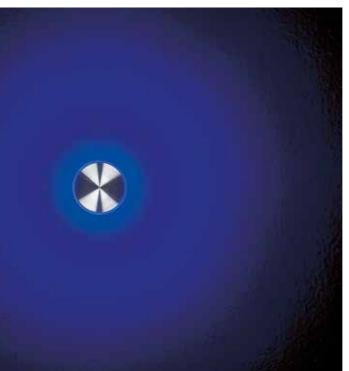
Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



KEY FEATURES

- High quality machined components
- No visible fixings
- Minimal aesthetic
- LD61 produces a soft 360° angle of illumination
- LD62 adds a narrow 25° beam to the 360° angle of illumination, making it ideal for illuminating steps or pathways below
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections (IP connections are still required)
- Fixing options include spring fixing clips or O-rings and a first fix sleeve
- Rated IP67 for exterior or interior walls

LD61 - 360° illumination



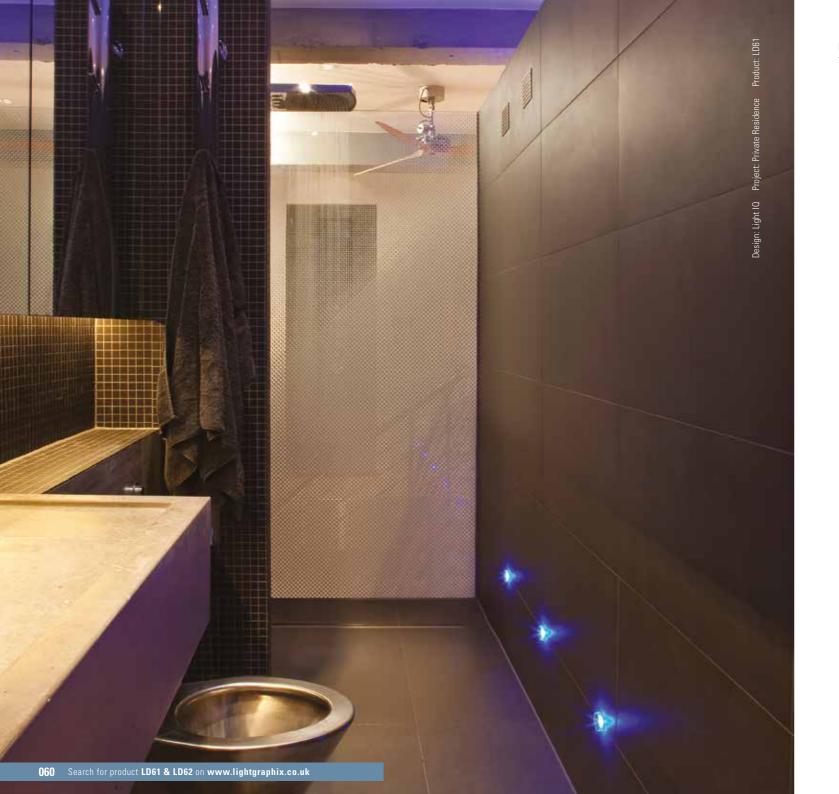
SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	500mA	
Max LED power*	1.7W	
Colour temperature	3000K	5000K
CRI (Typical)	93	75

*LED wattage includes losses associated with using an 85% efficient driver

LD62 - 360° + 25° illumination

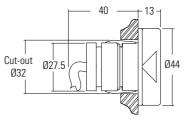




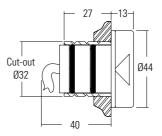
DIMENSIONS AND FIXING OPTIONS

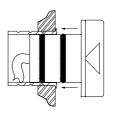
Dimensions in mm

/SC - Spring clip fixing



/480 - O-rings and sleeve This is most suited for wet and exterior environments.





ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION _



1.2W LED at 350mA LD62-350 1.7W LED at 500mA LD61-500 LD62-500 LED COLOUR OPTIONS SUFFIX Super warm white (2200K) /LW22

Extra warm white (2700K) /LW27 Warm white (3000K) /LW30 White (4000K) - on request /LW40 Cool white (5000K) /LW50 Blue /LB Green /LG Red /LR /LA *Other LED colour temperatures are available. Please speak to a member of our sales team.

FINISH OPTIONS _ Stainless steel 316

Polished stainless steel (passivate for marine environments)

FIXING OPTIONS -/SC Spring clips First fix sleeve and O-rings /480

LED DRIVERS ____

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD61-350

LD64 & LD65

MINIATURE IN-GROUND LED SURFACE WASHER















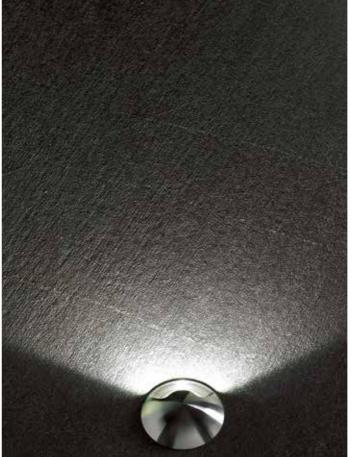
Ultra small, robust, single LED marker light and floorwash luminaire. The LD64/65 utilises a specially designed reflector to produce a soft focused beam of light. Available with a single or double output, it is ideal for pathways and steps. The LED colours look fantastic!





KEY FEATURES

- Manufactured from a single billet of 316 stainless steel
- No visible fixings
- Minimal aesthetic
- LD64 produces a single 120° angle of illumination
- LD65 produces 2 x 120° angles of illumination
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Fixing using O-rings and a first fix sleeve
- Rated IP67 for exterior or interior pathways, staircases and walls

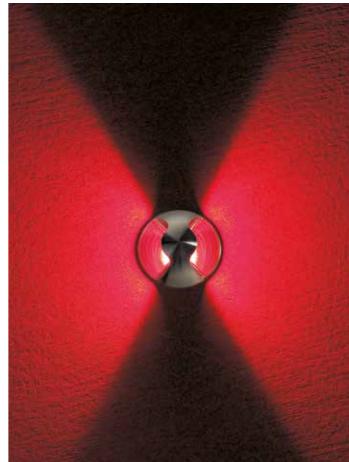


SPECIFICATION

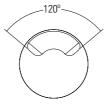
LED	1 x Cree XPG2		
Max drive current	500mA		
Max LED power*	1.7W		
Colour temperature	3000K	5000K	
CRI (Typical)	93	75	

*LED wattage includes losses associated with using an 85% efficient driver

LD65

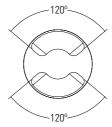








LD65

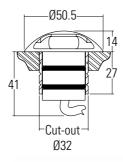


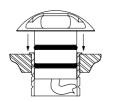


DIMENSIONS AND FIXING OPTIONS

Dimensions in mm

/480 - O-rings and sleeve







See page 230 for optional ground tube

ORDER CODES AND OPTIONS

Product Code	LED Colour	Finish	Fixing
LD64/65-350 -500			
Example: LD64-5	500 / LW30 / Stainless	Steel / 480	

PRODUCT CODES WITH OUTPUT OPTION)N
1.2W LED at 350mA	LD64-350
	LD65-350
1.7W LED at 500mA	LD64-500
	LD65-500
LED COLOUR OPTIONS	SUFFI)
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27

LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LF
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team	

FINISH OPTIONS
Stainless steel 316
Polished stainless steel (passivate for marine environments)

FIXING OPTIONS	
First fix sleeve and O-rings	/480
Ground tube (see page 230 for details)	/480GT

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LED MIRROR LIGHT















The LD63 mirror or decorative light fitting is the LED replacement for the 10148 halogen light. It uses the very latest in LED technology giving a high power LED output and good colour rendering with 93 CRI LED. This shallow, recessed fitting has no projected heat and its two diffused surfaces create an even glow, making it ideal for facial illumination. Rated IP65 as standard, the LD63 is designed for quick and simple installation and features spring clips for hidden fixing. The fitting is available with a choice of switch, 0-10V, DMX, Dali or mains dimmable drivers.







- > High power LED output
- Shallow recessed fitting
- > Two diffused surfaces to create an even glow, perfect for facial lighting
- Good colour rendering with 93 CRI LED
- IP65 as standard
- Hidden fixing with spring clips
- Designed for simple, quick installation

SPECIFICATION

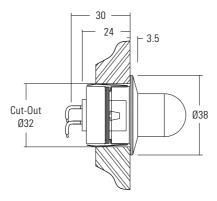
1 x Cree XPG2	
500mA	
1.7W	
3000K	5000K
93	75
59	71
	500 1.7 3000K 93

*LED wattage includes losses associated with using an 85% efficient driver

See our website for more detailed technical information and photometric files

DIMENSIONS

Cross Section View



PHOTOMETRICS

Photometric files are included in the design pack which can be downloaded from the LD63 product page on the website.



ORDER CODES AND OPTIONS

Product Code LED Colour Finish LD63-350 Example: LD63-350 / LW30 / Chrome

PRODUCT CODES WITH OUTPUT OPTION LD63-350 1.2W LED at 350mA LD63-500 1.7W LED at 500mA (recommended)

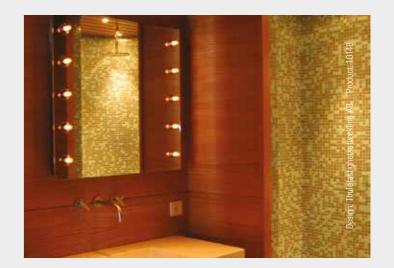
LED COLOUR OPTIONS SUFFIX Super warm white (2200K) /LW22 Extra warm white (2700K) /LW27 Warm white (3000K) /LW30 White (4000K) - on request /LW40 Cool white (5000K) /LW50 Blue /LB Green /LG Red /LR /LA *Other LED colour temperatures are available. Please speak to a member of our sales team.

FINISH OPTIONS _

Bezel - Chrome / paint finish silver/ white (RAL 9016) / RAL finish (Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS _

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



LD42/W/A

LOW GLARE MINIATURE LED RECESSED WALL LIGHT















LD42 is a miniature recessed LED wall light, ideal for discreet lighting of steps and pathways. It is a high quality fitting that can be used for interior or exterior applications, including yachts. Low glare is achieved by a recessed lens assembly set back into a black anodised body. Optional half-moon glare shield and 20° tilt film further reduce glare.







- > Very minimal depth and bezel diameter
- High power for its size
- > High efficiency optics specially designed for LightGraphix guarantee excellent
- Recessed LED position for reduced glare
- Glass fixed with hidden gasket, so no unsightly glue line
- Optional glare shield (LD42W) and 20° tilt film (LD42A) available
- Hidden fixing options include spring clips or O-rings and the /480 first fix sleeve
- For a 2.4W version please see our LD45 or LD46
- Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.

LED	1 x Cre	1 x Cree XPG2	
Max drive current	50	500mA	
Max LED power*	1.	1.7W	
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	120	146	
Lumens per circuit watt	71	86	

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files









- beam spread and shape

SPECIFICATION

LED	1 x Cree XPG2		
Max drive current	500	500mA	
Max LED power*	1.7W		
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	120	146	
Lumens per circuit watt	71	86	







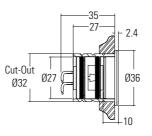


DIMENSION AND FIXING OPTIONS

Dimensions in mm

/480 - O-rings and sleeve

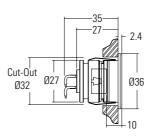
A more robust and watertight method of fixing for external applications.







/SC - Spring clip fixing



BODY OPTIONS

Circular aperture with lens and LED assembly recessed into the body by 10mm.





LD42W

Body has a machined half-moon in front of the lens to reduce glare. Please note that the oval lens can not be used in this or the LD42A.





LD42A

Same as the LD42W but with an integral 20° tilt film which angles the light down onto the surface to be lit.





ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Fixing
LD42350 -500				
Example: LD43A	-500 / LW30 / ME	3 / Polished Stain	less Steel / 480	

PRODUCT CODES WITH OUTPUT OPTION 1.2W LED at 350mA	LD42-350 LD42W-350 LD42A-350
1.7W LED at 500mA	LD42-500 LD42W-500 LD42A-500
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K) Blue	/LW50
Green	/LB /LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our	ır sales team.
BEAM / LENS ANGLE OPTION	
12° narrow spot	/NB
31º medium	/MB
48° wide	/WB
36° x 12° oval (only available with the LD42)	/OB
BEZEL FINISH OPTION	
Stainless steel 316	
Polished stainless steel (passivate for marine environments)	
Flamed solid bronze (antique finish)	
Paint finish white / black / RAL	f : 1 · 1 · 050)
(Custom bronze / brass wet spray paint colours available, please see ou	ir finishes guide on page 250)
FIXING OPTION	/00
Spring clips First fix sleave and O rings	/SC /480
First fix sleeve and 0-rings	/480

LED DRIVERS __ Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD45 & LD46 LOW GLARE INTERIOR/EXTERIOR WALL OR STEP LIGHTS 350 (500) (700) mA IP67 Available in round or square versions, the LD45/46 will fit into most architectural styles. Manufactured with a machined stainless steel 316 bezel and black anodized body they can be used for internal and external use. The compact design with the optic set back makes them ideal for steplighting. A 12° lens will kiss light across the step. 31° lens to wash light more directly to the edges. Available with a choice of lens angles and LED colours.



- > LED and lens assembly recessed within a black anodised body for reduced glare
- > High quality machined bezel and body
- > Square and round versions available
- > Glass fixed with hidden gasket, so no unsightly glue line
- No visible fixings. Options include spring fixing clips or 0-rings and a first fix sleeve
- > Can be used for external and internal applications
- > Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Range of bezel finish options including stainless steel and paint finishes

SPECIFICATION

LED	1 x Cre	e XPG2
Max drive current	700	mA
Max LED power*	2.4	W
Colour Temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	167	206
Lumens per circuit watt	70	86

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

LD45

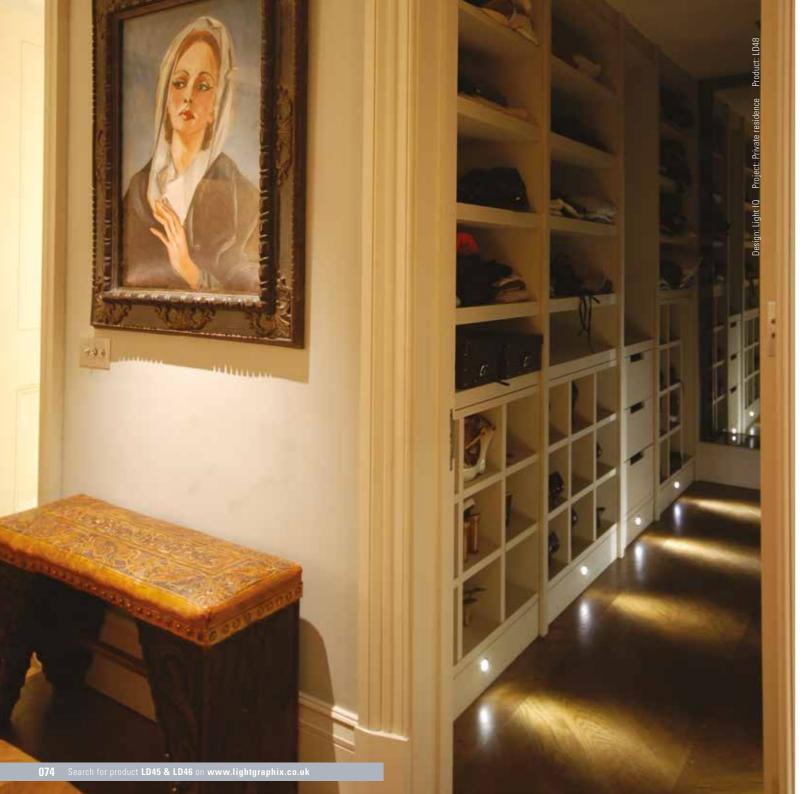






LD46



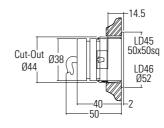


DIMENSION AND FIXING OPTIONS

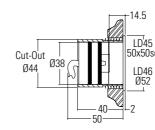
Dimensions in mm

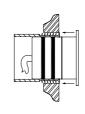
/SC - Spring clip fixing

Useful for most wall mounted applications.

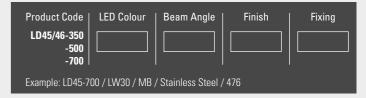


/476 - O-rings and sleeve A more robust and watertight method of fixing, for wet areas.





ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTION 1.2W LED at 350mA	LD45-350 LD46-350
1.7W LED at 500mA	LD45-500 LD46-500
2.4W LED at 700mA	LD45-700 LD46-700
LED COLOUR OPTIONS Super warm white (2200K) Extra warm white (300K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50 /LB /LG /LR /LA
BEAM / LENS ANGLE OPTION	/NB /MB

36° x 12° oval (LD46 only) BEZEL FINISH OPTION _

Stainless steel 316

48° wide

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS __

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/WB



KEY FEATURES

- LED and lens assembly recessed and tilted by 20° within a black anodised body for reduced glare
- > High quality machined bezel and body
- > Square and round versions available
- > Glass fixed with hidden gasket, so no unsightly glue line
- > No visible fixings. Options include spring fixing clips or O-rings and a first fix sleeve
- > Can be used for external and internal applications
- > Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Range of bezel finish options including stainless steel and paint finishes

SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	700mA	
Max LED power*	2.4	łW
Colour Temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	167	206
Lumens per circuit watt	70	86

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

LD47







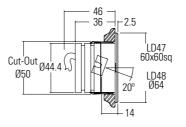




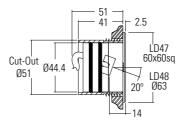
DIMENSION AND FIXING OPTIONS

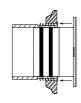
Dimensions in mm

/SC - Spring clip fixing Useful for most wall mounted applications.



/477 - O-rings and sleeve A more robust and watertight method of fixing, for wet areas.





ORDER CODES AND OPTIONS



Example: LD47-700 / LW30 / MB / Stainless Steel / 477	
PRODUCT CODES WITH OUTPUT OPTION	LD47-350
1.244 EED dt 000m/t	LD48-350
1.7W LED at 500mA	LD47-500 LD48-500
2.4W LED at 700mA	LD47-700 LD48-700
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K) Extra warm white (2700K)	/LW22 /LW27
Warm white (2000K)	/LW27
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	/LA
BEAM / LENS ANGLE OPTION	
12º narrow spot	/NB
31° medium	/MB
48° wide	/WB
BEZEL FINISH OPTION	
Stainless steel 316	
Polished stainless steel (passivate for marine environments)	
Paint finish white / black / RAL	
(Custom bronze / brass wet spray paint colours available, please see our finishes guid	e on page 250)
FIXING OPTION	
Spring clips	/SC
First fix sleeve and 0-rings	/477

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



KEY FEATURES

- > LED deep recessed within a black anodised body for no glare
- No optic or reflector
- Minimal aesthetic
- > Typical 93 CRI in 3000K warm white
- No visible fixings. Options include spring fixing clips or 0-rings and a first fix sleeve
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.

SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	x drive current 700mA	
Max LED power*	2.4W	
Colour Temperature	3000K	5000K
CRI (typical)	93	75

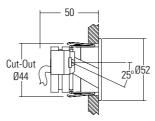
*LED wattage includes losses associated with using an 85% efficient driver

DIMENSION AND FIXING OPTIONS

Dimensions in mm

/SC - Spring clip fixing

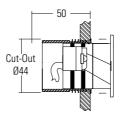
Useful for most wall mounted applications.





/476 - O-rings and sleeve

A more robust and watertight method of fixing, for exterior applications.



ORDER CODES AND OPTIONS

Product Code	LED Colour	Finish	Fixing
LD57-350			
-500 -700			
Example: LD57-7	'00 / LW30 / Stainless :	Steel / 476	

PRODUCT CODES WITH OUTPUT OPTION	
1.2W LED at 350mA	LD57-35
1.7W LED at 500mA	LD57-50

2.4W LED at 700mA

LD57-700

LED COLOUR OPTIONS _______ SUFFIX
Super warm white (2200K) /LW22

 Warm white (3000K)
 /LW30

 White (4000K) - on request
 /LW40

 Cool white (5000K)
 /LW50

 Blue
 /LB

 Green
 /LG

 Red
 /LR

 Amber
 /LA

*Other LED colour temperatures are available. Please speak to a member of our sales team.

BEZEL FINISH OPTION .

Extra warm white (2700K)

Stainless steel 316

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL

Flamed solid bronze (antique finish)

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

FIXING OPTION ___

Spring clips /SC
First fix sleeve and 0-rings /476

LED DRIVERS ___

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/LW27

KEY FEATURES

- > LED deep recessed within a black anodised body for no glare
- No optic or reflector
- Minimal aesthetic
- > Typical 93 CRI in 3000K warm white
- No visible fixings (spring clips or 0-rings and first fix sleeve)
- Integral anti-wicking barrier
- > Range of bezel finish options
- > Available with Switch, 1-10V, DMX, Dali or Mains dimmable drivers
- Not suitable for permanent submersion. Please use the LD242A, which has fixing options designed for underwater installations.

SPECIFICATION

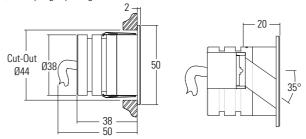
1 x Cree XPG2	
700	mA
2.4	W
3000K	5000K
93	75
	700 2.4 3000K

*LED wattage includes losses associated with using an 85% efficient driver

DIMENSION AND FIXING OPTIONS

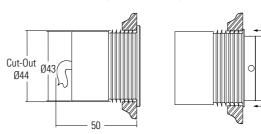
Dimensions in mm

/SC - Spring clip fixing



/476 - O-rings and sleeve

A more robust and water tight method of fixing, for exterior applications.



PRODUCT CODES WITH OUTPUT OPTION

LED Colour

Example: LD57SQ-700 / LW30 / Stainless Steel / 476

ORDER CODES AND OPTIONS

-700

Product Code

LD57SQ-350 -500

1.2W LED at 350mA	LD57SQ-35
1.7W LED at 500mA	LD57SQ-50
2.4W LED at 700mA	LD57SQ-70

Finish

Fixing

LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LE
Green	/L0
Red	/LF
Amber	/LA

^{*}Other LED colour temperatures are available. Please speak to a member of our sales team.

BEZEL FINISH OPTION __

Stainless steel 316

Polished stainless steel (passivate for marine environments)

Paint finish white / black / RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

FIXING OPTION

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
pring clips	/S
irst fix sleeve and O-rings	/47

LED DRIVERS __

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



082 Search for product LD57SQ on www.lightgraphix.co

LD242A UNDERWATER LED POOL LIGHT (350) (500) (700)(IP68) The LD242A has been designed specifically for permanent submersion applications. It is manufactured from high grade 316 stainless steel and anodised aluminium. The LED module is potted to prevent moisture ingress via the cable and the fitting is mechanically sealed. The bezel is polished and passivated for extra protection against chlorine or salt water.

KEY FEATURES

- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- > Excellent diffused beam shape from a range of optics
- New optional glare shield accessory
- > Typical 93 CRI in 3000K warm white
- Reverse polarity protection
- > First fix sleeve and 0-rings to seal fitting into mounting surface
- Concrete-in first fix box
- Bezel is polished and passivated for pool and sea environments
- LD242A RGB also available
- Please specify with long cables to enable connections to be made in a dry location

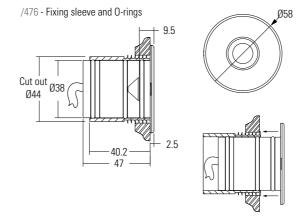
SPECIFICATION

LED type	1 x Cree XPG2 700mA	
Max drive current		
Max LED power*	2.4W	
Colour temperature	3000K	5000K
CRI (min)	93	75
Delivered lumens (L ₁₀₀)	164	200
Lumens per circuit watt	68	83

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files



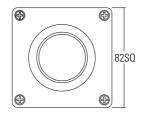
DIMENSIONS AND FIXING OPTIONS

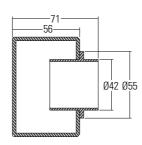


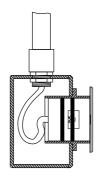
/242N - Concrete Housing



IP rated conduit bonded to box. It is recommended to specify LD242A with a long cable to enable connections to be done in a dry location. No connection should be made within the concrete housing.







ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTION	
1.2W LED at 350mA	LD242A-35
1.7W LED at 500mA	LD242A-50
2.4W LED at 700mA	LD242A-70

LED COLOUR OPHONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	

BEAM / LENS ANGLE OPTION	
12° narrow spot	/NB
31° medium	/MB
48° wide	/WB
36° x 12° oval (/GS not available with this optic)	/OB
GLARE SHIELD	

BEZEL FINISH OPTIONS		
	stainless steel (for marine environments)	

Tononou and papervated etaimose eteet (for marine environ	illiones,
FIXING ACCESSORIES	
First fix sleeve with 0-rings	/476
Concrete housing	/242N

LED DRIVERS .

Half-moon glare shield

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

ACCESSORIES

/GS - Glare shield

For reduced glare applications, a glare shield can be specified. Covering 45% of the lit surface of the optic behind it, whilst maintaining enough coverage as not to be too disruptive to the beam output. Please note that this option is not available for the oval beam lens.





/GS

KEY FEATURES

- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Single LED optic allows colours to mix at the source, with smoother RGB changing and no multiple shadows
- First fix sleeve and 0-rings to seal fitting into mounting surface
- Concrete-in first fix box
- Bezel is polished and passivated for pool and sea environments
- LD242A (single colour) also available
- Please specify with long cables to enable connections to be made in a dry location
- This can only be used underwater due to thermal management. Please see our LD56 RGB for other applications

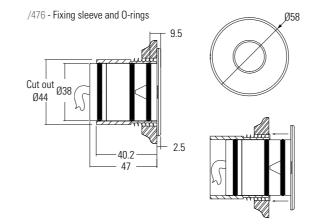
SPECIFICATION

LED type	1 x Cree XML RGB
Current	350mA
Max LED power*	3.6W

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files



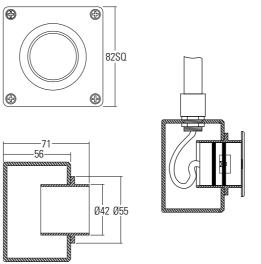
DIMENSIONS AND FIXING OPTIONS



/242N - Concrete Housing



IP rated conduit bonded to box. It is recommended to specify LD242A with a long cable to enable connections to be done in a dry location. No connection should be made within the concrete housing.



ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION



3.6W (3 x 1.2W LEDs) at 350mA	LD242A-RGB-350
BEAM / LENS ANGLE OPTION	/NE /ME
BEZEL FINISH OPTIONS ————————————————————————————————————	
FIXING ACCESSORIES First fix sleeve with 0-rings Concrete housing	/476 /242N
LED DRIVERS	

Use with 350mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD242A RGB

UNDERWATER LED POOL LIGHT

the colour to mix.

(350_{mA})

The LD242A RGB has been designed specifically for permanent

submersion applications. It is manufactured from high grade

316 stainless steel and anodised aluminium. The LED module

passivated for extra protection against chlorine or salt water.

Design Tip: The 30° medium beam optic is the best for colour

mixing. The narrow 12° can be used if the lighting scheme does not involve mixing of the RGB to create a colour, or if the surface being washed is a reasonable distance away allowing

is potted to prevent moisture ingress via the cable and the

fitting is mechanically sealed. The bezel is polished and

(IP68)

KEY FEATURES

- High Power E1 engine, featuring the CREE XHP35 LED with 2-step binning
- Integral glare baffle which minimises the light above the horizontal
- Single optic produces a very consistent beam with no multiple shadows
- Angled kick lens focuses the light down on to the lit surface
- LED and lens recessed in a matt black anodised body for reduced glare
- No visible fixings
- Range of bezel finish options
- Built-in reverse polarity protection

SPECIFICATION

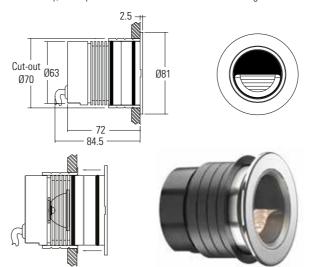
LED type	1 x E1 LED Engine Cree XHP35 500mA	
Max drive current		
Max LED power*	7W	
Colour temperature	3000K	5000K
CRI (typical)	85	80
Delivered lumens (L ₁₀₀)	210	225
. 100.		

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

FIXING AND DIMENSIONS

Dimensions in mm

The fitting is supplied as standard with a fixing sleeve, which is bonded into the mounting surface first. It is secured into the sleeve by 2 O-rings on the body; when pushed into the sleeve it creates a watertight seal.



ORDER CODES AND OPTIONS

Product Code	LED Colour	Finish
LD170-E1-350 -500		
Example: LD170-	E1-500 / LW30 / Stainless Steel	

PRODUCT CODES WITH OUTPUT OPTIONS _ 5W LED at 350mA

LD170-E1-350 7W LED at 500mA LD170-E1-500

LED COLOUR OPTIONS SUFFIX Extra Warm White (2700K) /LW27 Warm White (3000K) /LW30 /LW40 White (4000K) - on request Cool White (5000K) /LW50 /LW**+L*

With 2nd channel (red for navigation or amber night lighting) LD170-E1-2CH *Other LED colour temperatures are available. Please speak to a member of our sales team.

BEZEL FINISH OPTION _

Stainless steel 316

Paint finish white / black / RAL (not suitable for high traffic areas)

Polished and passivated stainless steel (for marine environments)

Flamed solid bronze (antique finish)

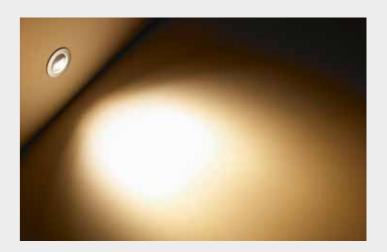
(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

FIXING ACCESSORIES _

Comes standard with /484S first fix sleeve

LED DRIVERS -

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available





HIGH POWER LED INTERIOR/EXTERIOR WALL LIGHT

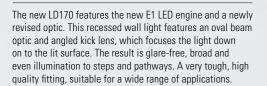
(350) (500) mA

(IP67)

























LD59 replaces the LD10234, offering the same low glare, broad illumination and is rated IP67 for both internal and external projects. The square recessed wall light uses a single LED for a soft edge beam with no multiple shadows. It comes as standard with a polished 1.5mm stainless steel bezel with no visible fixings, creating an attractive fitting for internal or external use. The specular reflector gives a diffused wash of light onto a path or floor with minimal glare.

Please note:

For a higher powered version, please see our LD175 which offers close to 4 x the brightness from the same size package.



KEY FEATURES

- Very broad diffused beam shape
- IP67 as standard
- Low glare with the LED and diffuser assembly recessed deep within the fitting
- Typical 93 CRI in 3000K warm white
- Polished 316 stainless steel bezel as standard, with an optional brushed or yacht grade mirror finish available
- RAL colour paint finishes available
- No visible fixings.

SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	700mA	
Max LED power*	2.4W	
Colour temperature	3000K 5000K	
CRI (typical)	93 75	
Delivered lumens (L ₁₀₀)	135	146
Lumens per circuit watt	56 61	

*LED wattage includes losses associated with using an 85% efficient driver

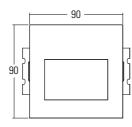
See our website for more detailed technical information and photometric files

DIMENSIONS & FIXING OPTIONS

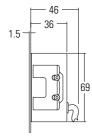
/SC - Spring clips

Spring clips are supplied as standard when the concrete-in box is not specified. This fixing option is suitable for the majority of installations.

Front view

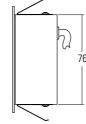


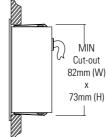
Side view



Dimensions in mm

Top view



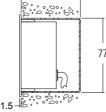


/CB - Concrete-in back box

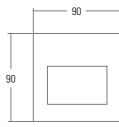
First fix concrete-in box offers the ability to create the correct void in a concrete wall necessary to fit the LD59. There is space behind the product to make connections (internal use only). Please note spring clips are not supplied when the concrete-in box is specified. The fitting is held in place with a silicone gasket provided within the box.



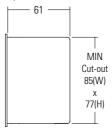
Side view



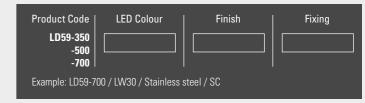
Front view



Top view



ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTIONS	
1.2W LED at 350mA	LD59-350
1.7W LED at 500mA	LD59-500
2.4W LED at 700mA	LD59-700

LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50
*Other LED colour temperatures are available. Please speak to a member of our sales team	

Polished stainless steel 316

Polished and passivated stainless steel 316 (marine grade polish)

Brushed and passivated stainless steel 316

Paint finish white / black / RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

FIXING OPTIONS

,	
Spring clips	/SC
Concrete-in back be	OX /CB

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

Spring clips

















(IP67)





The LD175 features the new E1 LED engine; brighter and more efficient than the previous generation LED. LD175 is designed for lighting installations where a very high output is required over what the LD59 is capable of producing. LD175 builds upon the LD59, with its remarkable uniform floor washing capabilities, together with its broad diffused beam shape and 410 lumen output, it is ideal for larger external projects.

LD175 features a high quality machined anodised body and is IP67 rated making it suitable for both internal and external lighting installations. This shallow recess depth wall light has the LED and diffuser assembly recessed deep within the fitting ensuring low glare.



KEY FEATURES

- > New LED light engines offer single white, RGBW, Tunable white and Colour LED options
- Impressive uniform floor washing capabilities
- Very broad diffused beam shape
- High output, ideal for lighting wider pathways
- Reduced glare with the LED and diffuser assembly recessed deep within the fitting
- IP67 as standard
- Polished 316 stainless steel bezel as standard, with other finishes available
- No visible fixing.
- Built-in reverse polarity protection
- Optional first fix concrete-in back box
- LD175 is also available with RGBW and Tunable White LED engines

SPECIFICATION

LED type	1 x E1 LED Engine Cree XHP35	
Max drive current	500	mA
Max LED power	7W	
Colour temperature	3000K	5000K
CRI (typical)	85	80
Delivered lumens (L ₁₀₀)	410	441
Lumens per circuit watt	59	63

*LED wattage includes losses associated with using an 85% efficient driver

See our website for more detailed technical information and photometric files

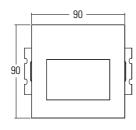
DIMENSIONS & FIXING OPTIONS

Dimensions in mm

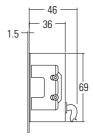
/SC Spring Clips

Spring clips are supplied as standard when the concrete-in box is not specified. This fixing option is suitable for the majority of installations.

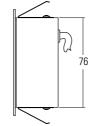
Front view

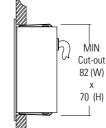


Side view



Top view

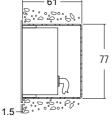




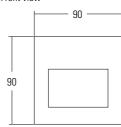
/CB - Concrete-in back box

First fix concrete-in box offers the ability to create the correct void in a concrete wall necessary to fit the LD175. There is space behind the product to make connections (internal use only). Please note spring clips are not supplied when the concrete-in box is specified. The fitting is held in place with a silicone gasket provided within the box.

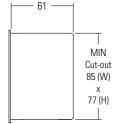




Front view



Top view



ORDER CODES AND OPTIONS FOR E1 LIGHT ENGINE

(for Colour, RGBW and Tunable white, please see data sheets online)



PRODUCT CODES WITH OUTPUT OPTION _

5W LED at 350mA	LD175-E1-350
7W LED at 500mA	LD175-E1-500

LED COLOLIB OPTIONS

ELD GOLOGII OI HONG	30111/
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50

^{*}Other LED colour temperatures are available. Please speak to a member of our sales team.

FINISH OPTIONS

Polished stainless steel 316

Polished and passivated stainless steel 316 (marine grade polish)

Polished and passivated stainless steel 316

Paint finish white / black / RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

FIXING OPTIONS

Spring clips		/SC
Concrete-in back b	00X	/CB

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

Spring clips







MINIATURE SURFACE MOUNTED ADJUSTABLE LED SPOTLIGHT















IP67

LD51 is a miniature IP67 rated, surface mounted, adjustable LED spotlight. The high power LED is focused with a range of optics that offer excellent beam shape in various angles. It is manufactured from high quality machined components with a range of accessories, making it ideal for both interior and exterior projects.





KEY FEATURES

- LED and lens assembly recessed within a black anodised body for reduced glare
- Optional glare cowl accessory can be rotated to hide glare from selected angles
- Lockable tilt mechanism
- Ground spike accessory for garden/planter lighting
- Typical 93 CRI in 3000K warm white
- High efficiency optics available
- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- Range of finishes available

SPECIFICATION

LED	1 x Cree XPG2		
Max drive current	700)mA	
Max LED power*	2.4W		
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	174	211	
Lumens per circuit watt	73	88	

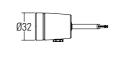
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

DIMENSIONS

Dimensions in mm







PIVOT BRACKET

The pivot bracket is lockable with the supplied allen key.







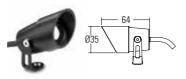


ACCESSORIES

/CO - Anti-glare Cowl

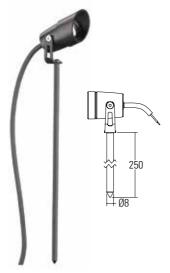
With the aid of an 0-ring the cowl is securely fitted to the LD51.

This allows it to be rotated to hide glare.



/GS - Ground Spike

The ground spike is manufactured out of stainless steel and then painted to match the LD51 body. The standard length is 250mm.



/SMB - Surface Mount Base



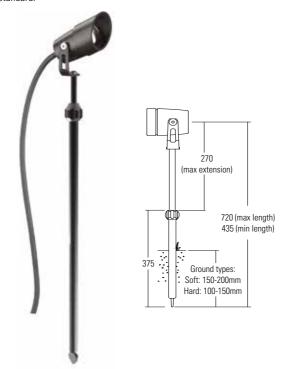
/TS

The tree strap allows the LD51 to grip a trunk when tightened. A tilt adjustment of 10° can be achieved towards the tree to provide a vertical beam.



/GSA

The adjustable ground spike is manufactured out of stainless steel and then painted to match the LD51 body. It is supplied with a 2m cable as standard.



ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTION 1.2W LED at 350mA 1.7W LED at 500mA	LD51-350 LD51-500
2.4W LED at 700mA	LD51-700
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	
BEAM / LENS ANGLE OPTION	
12° narrow spot	/NB
31° medium	/MB
48° wide	/WB
36° x 12° oval beam	/OB
ACCESSORIES	
Cowl	/CO

FINISH OPTION

Surface mount base

Adjustable ground spike

Black anodised

Tree strap

Silver / white (RAL 9016) / RAL paint finish

Ground spike (250mm as standard)

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS _

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/SMB /TS /GSA

MINIATURE FLOOR OR CEILING MOUNTED SPOTLIGHT















LD95 is a miniature floor or ceiling mounted spotlight. It has been designed for applications where a recessed fitting cannot be installed, and a discreet, non obtrusive solution is required. It features a deep recessed LED and optional glare shield, removing the need for a large cowl. Using the latest in LED technology, with a typical 93 CRI in 3000K warm white, the LD95 offers an excellent diffused beam shape from a range of optics.



KEY FEATURES

- > Miniature design with high output LED
- > Excellent diffused beam shape from a range of optics
- Optional glare shield accessory
- Typical 93 CRI in 3000K warm
- > Integral anti-wicking barrier provides increased protection against moisture
- Range of finishes available
- Machined from a solid billet of aluminium
- Reverse polarity protection
- Available with Switch, 0-10V, DMX, Dali or Mains dimmable drivers

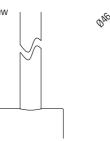
SPECIFICATION

LED 1 x Cree XP		e XPG2
Max drive current	700mA	
Max LED power*	2.4W	
Colour temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	164	200
Lumens per circuit watt	68	83

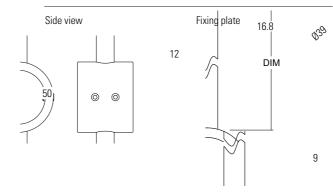
*LED wattage includes losses associated with using an 85% efficient driver

See our website for more detailed technical information and photometric files

DIMENSIONS Dimensions in mm Top view



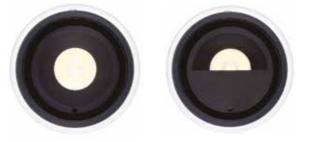
Dimensions in mm



ACCESSORIES

/GS - Glare shield

An optional glare shield is available for the LD95 to further reduce glare from the LED and optic. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling or floor.



FINISH OPTIONS

A range of paint finishes are available which are suitable for exterior applications. Please refer to our finishes guide for more information.



ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Accessory	Finish
LD95-350				
-500 -700				
Example: LD95-7	00 / LW30 / MB ,	/ GS / White		

PRODUCT CODES WITH OUTPUT OPTIONS	LD95-350 LD95-500 LD95-700
Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50 /LB /LG /LR /LA
BEAM / LENS ANGLE OPTIONS 12° narrow spot 31° medium 48° wide 36° x 12° oval	/NB /MB /WB /OB
ACCESSORY	/GS

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

Body - Paint finish white (RAL 9016) / black / RAL

MINIATURE WALL MOUNTED DOUBLE LED UP AND DOWN WALL WASHER













The LD96 is a miniature version of the LD10236 up and down wall washer. Its minimal design allows it to blend seamlessly into most project styles, and will fit into the smallest of features. A choice of beam angles and LED colours offers the designer a range of uses, as well as providing the opportunity to use differing optics on opposite sides of the product. The small but very robust body is machined from a solid billet of aluminium, and incorporates an integral anti-wicking barrier for added protection.



KEY FEATURES

- Excellent diffused beam shape from a range of optics
- High output from a very small fitting
- Reverse polarity protection
- Optional glare shield accessory
- Optimal spacing from mounting surface
- Typical 93 CRI in 3000K warm white
- Integral anti-wicking barrier provides increased protection against moisture
- Range of finishes available
- Variable output options
- Machined from a solid billet of aluminium

SPECIFICATION

LED	2 x Cree XPG2		
	Please note, data below is for 2 LEDs		
Max drive current	700mA		
Max LED power*	4.8W		
Colour temperature	3000K 5000K		
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	328 400		
Lumens per circuit watt	68	83	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

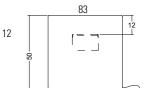
DIMENSIONS

Top View

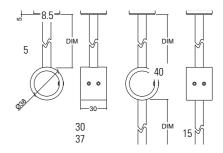


12

Side View







CONNECTIONS

The LD96 has been designed with enough room inside for a connection to be made to a first fix cable, and the remote drivers. It is supplied with two 3M Scotchlok™ connectors, which are IP rated for exterior waterproof applications.





ACCESSORIES

/GS - Glare shield

An optional glare shield is available for the LD96 to further reduce glare from the LED and optic. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling or floor.





ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Accessory	Finish
LD96-350				
-500 -700				
Example: LD96-7	00 / LW30 / MB	/ GS / White		

PRODUCT CODES WITH OUTPUT OPTIONS	LD96-350 LD96-500 LD96-700
Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50 /LB /LG /LR /LA
BEAM / LENS ANGLE OPTIONS 12° narrow spot 31° medium 48° wide 36° x 12° oval Different beam angle at each end	/NB /MB /WB /OB /**/**
ACCESSORYGlare shield	/GS
FINISH OPTIONS	on page 250)

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

MINIATURE WALL MOUNTED SINGLE LED UP OR DOWN WALL WASHER















The LD97 is a miniature surface mounted LED wall light. Minimal design allows it to blend seamlessly into most project styles, and fit into the smallest of details. A choice of beam angles and LED colours offers the designer a range of uses, which include window reveal lighting, wall washing and path illumination. LD97 has been designed to withstand the harshest of conditions. The small but very robust body is machined from a solid billet of aluminium, and incorporates an integral anti-wicking barrier for added protection.



KEY FEATURES

- Ideal product to light window reveals, wall wash, and create interesting light patterns
- > Reverse polarity protection
- > Excellent diffused beam shape from a range of optics
- > Optional glare shield accessory
- > Optimal spacing from mounting surface
- > Typical 93 CRI in 3000K warm white
- > Integral anti-wicking barrier provides increased protection against moisture
- > Large range of paint finishes available
- Machined from a solid billet of aluminium

SPECIFICATION

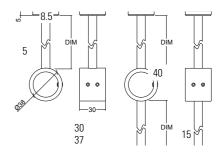
1 x Cree XPG2		
700mA		
2.4W		
3000K	5000K	
93	75	
164	200	
68 83		
	700m 2.4V 3000K 93 164	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS

Top View		Side Vie	W	
	60		83	
40		12		
46				50

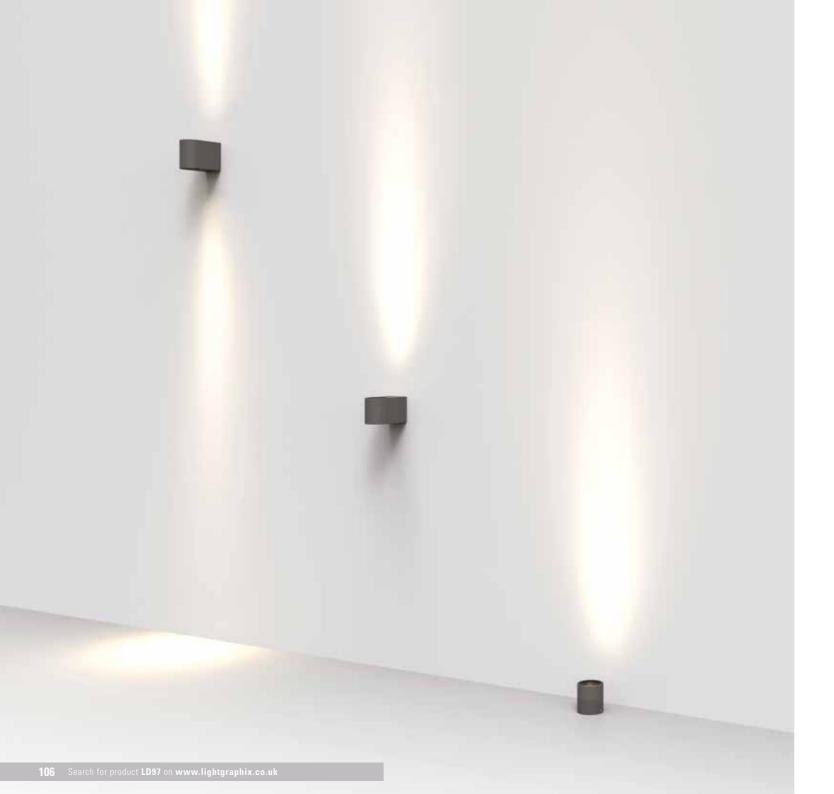
Bracket



CONNECTIONS

The LD97 has been designed with enough room inside for a connection to be made to a first fix cable, and the remote drivers. It is supplied with two 3M Scotchlok™ connectors, which are IP rated for exterior waterproof applications.





ACCESSORIES

/GS - Glare shield

An optional glare shield is available for the LD97 to further reduce glare from the LED and optic. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling or floor.





ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTIONS	LD97-350 LD97-500 LD97-700
LED COLOUR OPTIONS Super warm white (2200K) Extra Warm White (2700K) Warm White (3000K) White (4000K) - on request Cool White (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50
BEAM / LENS ANGLE OPTIONS 12° narrow spot 31° medium 48° wide	/NB /MB /WB

Glare shield

Body - Paint finish white (RAL 9016) / black / RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS ___

36° x 12° oval

ACCESSORY

FINISH OPTIONS _

Different beam angle at each end

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/0B

/GS

KEY FEATURES

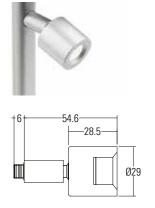
- > Utilizes the latest LED technology with a typical CRI of 93 in warm white
- Broad range of uses including display, picture and sign lighting
- Compact design with high output
- Knuckle joint allows great flexibility in adjustment
- Custom made to suit exact specified dimensions
- Range of mounting options
- Precise beam control with a range of optics

SPECIFICATION

LED	1 x Cre	1 x Cree XPG2	
Max drive current	70	700mA	
Max LED power*	2.	4W	
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	195	237	
Lumens per circuit watt	81	99	

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files







LD82 - For a single spotlight on top of a stem, see our LD82 which has the knuckle joint on the side. This uses the same LED and optics as the LD81.





LD81

HIGH POWER MINIATURE LED SPOTLIGHT WITH MOUNTING SYSTEMS

















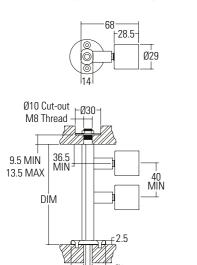


/M1- Method 1 - for fixing to the base of a cabinet, with cables exiting from the M8 all-thread stud. Specify stem length, number of spotlights and spacing.

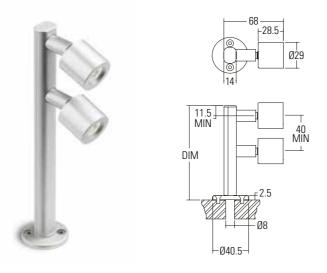
and each is custom made to the specification.



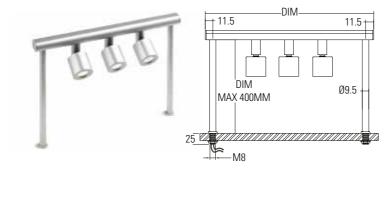
/M3 - Method 3 - stem is fixed at the bottom with a surface mount base and screws. An M8 thread and nut is used to fix at the top. Specify stem length, number of spotlights and spacing.



/M2- Method 2 - surface mounted option. Specify stem length, number of spotlights and spacing.



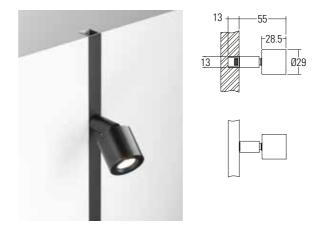
/M4 - Method 4 - goal post method. Specify stem and leg support length, LED spacing and number of spots.



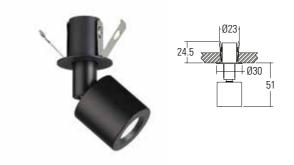
ALTERNATIVE MOUNTING METHODS

/E1313 - Aluminium U channel can be flush mounted into a routed groove into the side of cabinets which makes a very neat detail. All the wiring can be done at the manufacturing stage speeding up installation. Specify length, number of spotlights and spacing.

Dimensions in mm

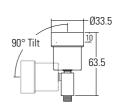


/PL1 - Single swivel mounting plate is very useful for mounting individual spotlights neatly into the sides, top or base of cabinets.



/CO - Anti-glare Cowl
The cowl is securely fitted to the LD81 with the aid of an O-ring.





ORDER CODES AND OPTIONS



PRODUCT CORES WITH OUTPUT ORTION	
PRODUCT CODES WITH OUTPUT OPTION	LD81-350
1.7W 500mA	LD81-500
2.4W 700mA	LD81-700
LED COLOUR OPTIONS	SUFFI>
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW2
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW5
Blue	/LI
Green	/L(
Red Amber	/LI
*Other LED colour temperatures are available. Please speak to a member of our sales team.	/LA
Carlot EED solical compositions and artifactors. I locate operation a minimal of our carlot carlot	
BEAM / LENS ANGLE OPTION	
12° narrow spot	/NE
31° medium	/ME
48° wide	/WE
FINISH OPTIONS	

MOUNTING METHOD	
Method 1	/M1
Method 2	/M2
Method 3	/M3
Method 4	/M4
Aluminium U channel	/E1313
Single swivel mounting plate	/PL1
Anti-glare cowl	/00

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS _______ FOOMA or 700mA constant

Silver / black / white (RAL 9016) / RAL finish

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD81M

MINIATURE LED SPOTLIGHT WITH MOUNTING SYSTEMS













The LD81M is a smaller, more discreet version of the LD81, using the same LED, optics and mounting methods. Maximum output is 1.2W compared to 2.4W in the LD81. Each mounting method is custom made to each project's requirements, allowing the designer to tailor the lighting layout for each display. The best method of specification for these spotlights and mounting systems is to send us a sketch of what is required. This can then be discussed and we will produce a project specification and quote.



- Smaller version of the LD81
- Utilizes the latest LED technology with a typical CRI of 93 in warm white
- Broad range of uses including display, picture and sign lighting
- Compact design with high output
- Knuckle joint allows great flexibility in adjustment
- Custom made fixing solutions to suit exact specified dimensions
- Precise beam control with a range of optics

SPECIFICATION

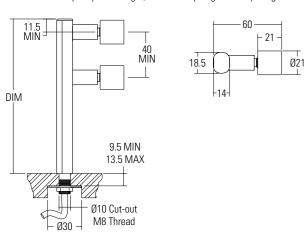
LED	1 x Cre	ee XPG2
Max drive current	350)mA
Max LED power*	1.3	2W
Colour temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	107	130
Lumens per circuit watt	89	108

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

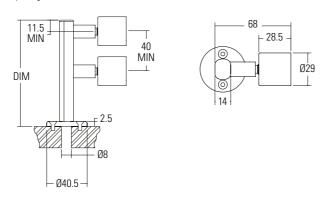


STEM MOUNTING METHODS - This 2 part aluminium profile has been designed as a slight oval and is counterbored where the knuckles attach which gives a slim look and neat detail at the junction. The best method of specification is to send us a sketch of what is required, this can then be discussed and a project quote created. Four mounting methods are available and each is custom made to the specification.

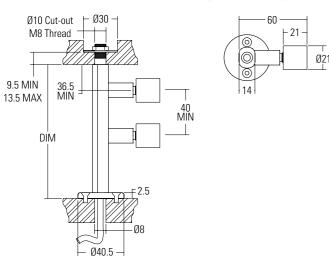
/M1- Method 1 - for fixing to the base of a cabinet, with cables exiting from the M8 all-thread stud. Specify stem length, number of spotlights and spacing.



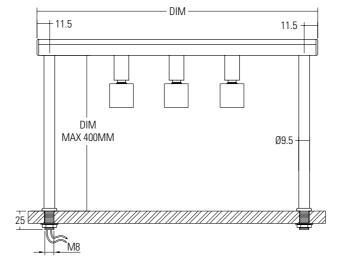
/M2- Method 2 - surface mounted option. Specify stem length, number of spotlights and spacing.



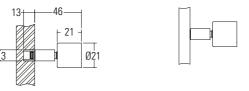
/M3 - Method 3 - stem is fixed at the bottom with a surface mount base and screws. An M8 thread and nut is used to fix at the top. Specify stem length, number of spotlights and spacing.



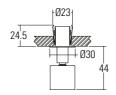
 $/{\rm M4}$ - Method 4 - goal post method. Specify stem and leg support length, LED spacing and number of spots.



/E1313 - Aluminium U channel can be flush mounted into a routed groove into the side of cabinets which makes a very neat detail. All the wiring can be done at the manufacturing stage speeding up installation.



/PL1 - Single swivel mounting plate is very useful for mounting individual spotlights neatly into the sides, top or base of cabinets.



SIZE COMPARISON BETWEEN THE LD81 AND LD81M



ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Finish	Mounting Method	Length
LD81M-350					
Example: LD81N	I-350 / LW30 / I	MB / Silver Ano	dised / M1	/ 500mm	

Example: LD81M-350 / LW30 / MB / Silver Anodised / M1 / 500mm	
PRODUCT CODES WITH OUTPUT OPTION	
1.2W 350mA	LD81M-350
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
*Other LED colour temperatures are available. Please speak to a member of our sales team	n.
BEAM / LENS ANGLE OPTION	
12° narrow spot	/NB
31° medium	/MB
48° wide	/WB
FINISH OPTIONS	
Silver / black / white (RAL 9016) / RAL finish	
(Custom bronze / brass wet spray paint colours available, please see our finishes g	guide on page 250)
MOUNTING METHOD	
Method 1	/M1
Method 2	/M2
Method 3	/M3
Method 4	/M4

	,
Method 3	/M3
Method 4	/M4
Aluminium U channel	/E1313
Single swivel mounting plate	/PL1

LED DRIVERS .

Use with 350mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

HIGH POWER SURFACE MOUNTED MINIATURE LED SPOTLIGHT















The LD82 is a high power, miniature, adjustable LED spotlight. The knuckle attaches to the body from the side making it ideal for instances where a single spotlight is needed. A wide range of mounting methods are available with each being custom made to each project's requirements. This allows the designer to tailor the lighting layout for each display. The best method of specification for these spotlights and mounting systems is to send us a sketch of what is required. This can then be discussed and we will produce a project specification and quote.



KEY FEATURES

- Utilizes the latest LED technology with a typical CRI of 93 in warm white
- Broad range of uses including display, picture and sign lighting
- Compact design with high output
- Knuckle joint allows great flexibility in adjustment
- Custom made to suit exact specified dimensions
- Mounting options
- Precise beam control with a range of optics

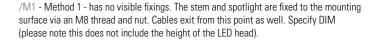
SPECIFICATION

LED	1 x Cre	1 x Cree XPG2	
Max drive current	700	700mA	
Max LED power*	2.	2.4W	
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	195	237	
Lumens per circuit watt	81	99	

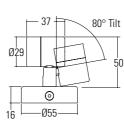
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

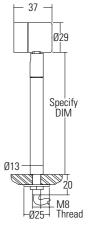
MOUNTING OPTIONS AND DIMENSIONS

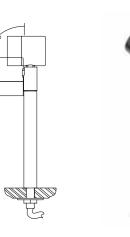
/SMB - Surface mount base offers hidden wiring and a machined pivot arm with lockable tilt and rotation.





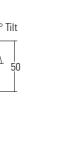






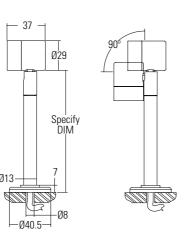






/M2- Method 2 - supplied with a stem and surface mount base which is suited to applications where there is no access to the underside of the mounting surface. Specify DIM (please note this does not include the height of the head).

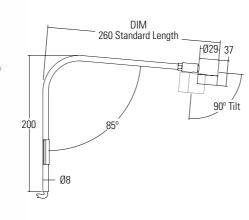




/M3 - Method 3 - is designed for lighting pictures and signs. The range of LightGraphix optics allow the specifier the control and soft edged beam required to light pictures effectively. The arm is height adjustable with the use of the fixing bracket.

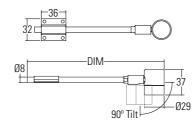






/M4 - Method 4 - is for fixing to an interior ledge, shelf or bookcase. The arm is length adjustable with the use of the fixing bracket. Specify DIM.





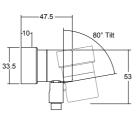
/PL1 - This is a very discreet method of mounting a single spotlight into the base or side of a cabinet or showcase.



/CO - Anti-glare cowl

The cowl is securely fitted to the LD82 with the aid of an O-ring.





ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTION 1.2W 350mA 1.7W 500mA	LD82-350 LD82-500
2.4W 700mA	LD82-700
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	/LA
BEAM / LENS ANGLE OPTION	
12° narrow spot	/NB
31° medium	/MB
48° Wide	

THAIGH	01 110						
Silver /	black /	white	(RAL	9016)/	RAL	finish	

36° x 12° oval beam

FINISH OPTIONS

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

MOUNTING METHOD	
Method 1	/M
Method 2	/M
Method 3	/M
Method 4	/M
PL1	/PL
Surface mount base	/SM
Anti-glare cowl	/C

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/0B

HIGH POWER 3 CLUSTER LED SPOTLIGHT WITH MOUNTING SYSTEMS















The LD83 is a high power, 3 cluster, adjustable LED spotlight. It features a wide range of mounting options and is suitable for a huge variety of applications. Each mounting method is custom made to each projects requirements, allowing the designer to tailor the lighting layout for each display. The best method of specification for these spotlights and mounting systems is to send us a sketch of what is required. This can then be discussed and we will produce a project specification and quote.







KEY FEATURES

- > Utilizes the latest LED technology with a typical CRI of 93 in warm white
- Broad range of uses including display, picture and sign lighting
- Increased airflow & thermal efficiency
- > Knuckle joint allows great flexibility in adjustment
- > Custom made to suit exact specified dimensions
- > Range of mounting options
- > Precise beam control with a range of optics

SPECIFICATION

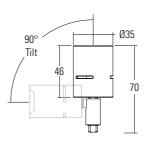
LED	3 x Cre	3 x Cree XPG2	
Max drive current	500	500mA	
Max LED power*	5.	5.1W	
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens (L ₁₀₀)	357	434	
Lumens per circuit watt	71	87	

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

MOUNTING OPTIONS AND DIMENSIONS

LD83 is supplied as standard with a knuckle joint. This is then fixed to a range of mounting options

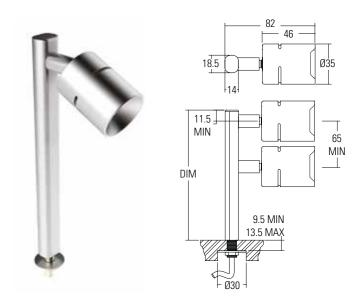




STEM MOUNTING METHODS

This 2 part aluminium profile has been designed as a slight oval and is counterbored where the knuckles attach which gives a slim look and neat detail at the junction. The best method of specification is to send us a sketch of what is required, this can then be discussed and a project quote created. Three mounting methods are available and each is custom made to the specification.

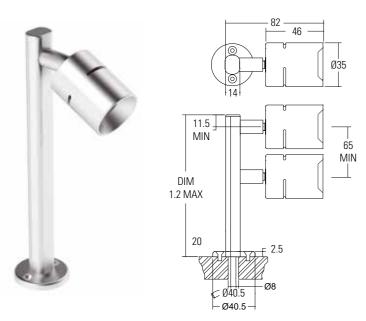
/M1 - Method 1 - for fixing to the base of a cabinet, with cables exiting from the M8 all-thread stud. Specify stem length, number of spotlights and spacing.



MOUNTING OPTIONS AND DIMENSIONS

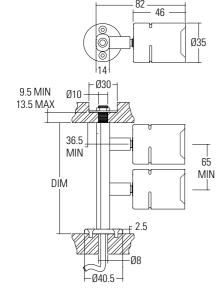
Dimensions in mm

/M2- Method 2 - surface mounted option. Specify stem length, number of spotlights and spacing.



/M3 - Method 3 - stem is fixed at the bottom with a surface mount base and screws. An M8 thread and nut is used to fix at the top. Specify stem length, number of spotlights and spacing.

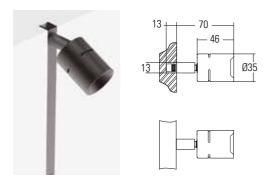




/PL1 - Single swivel mounting plate is very useful for mounting individual spotlights neatly into the sides, top or base of cabinets.



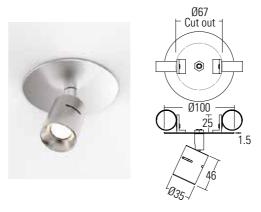
/E1313 - Aluminium U channel can be flush mounted into a routed groove into the side of cabinets which makes a very neat detail. All the wiring can be done at the manufacturing stage speeding up installation. Specify length, number of spotlights and spacing.



/SMB - Surface mount base offers hidden wiring and a machined pivot arm with lockable tilt and rotation.

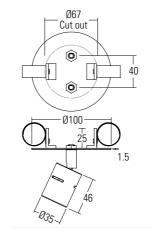


/CP1 - Single LD83 mounted on ceiling plate. Easy to install with constant force springs. Ideal for ceiling applications. Hole cut out is big enough for driver.

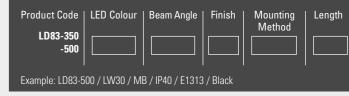


/CP2 - 2x LD83 mounted on a ceiling plate. Easy to install with constant force springs. Ideal for ceiling applications. Hole cut out is big enough for driver.





ORDER CODES AND OPTIONS



Example: LD83-500 / LW30 / MB / IP40 / E1313 / Black	
PRODUCT CODES WITH OUTPUT OPTION3.6W 350mA	LD83-350
5.1W 500mA	LD83-300
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K) White (4000K) - on request	/LW30 /LW40
Cool white (5000K)	/LW50
Optional secondary red circuit (Speak to sales for more information)	/LW** + LR
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	
BEAM / LENS ANGLE OPTION	
22° narrow spot	/NB
30° medium	/MB
40° wide	/WB
FINIOLI OPTIONO	
FINISH OPTIONS	
Silver / black / white (RAL 9016) / RAL finish (Custom bronze / brass wet spray paint colours available, please see our finishes qui	de on nage 250)
(odatom biolizo / bidasa wet apidy paint colodia dvalidate, piedae ace our initalies gui	do on pago 2007
MOUNTING METHOD	
Method 1	/M1
Method 2	/M2
Method 3	/M3
'U' channel Swivel plate mounting	/E1313
Surface mount base	/PL1 /SMB
Single ceiling plate	/CP1
Dual ceiling plate	/CP2

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched. 0-10V. DMX. DALI and Mains dimmable drivers are available

HIGH POWER FLOOR OR CEILING MOUNTED SPOTLIGHT





















LD10235 is a high power floor or ceiling mounted spotlight. It has been designed for applications where a recessed fitting cannot be installed, and a surface mounted solution is required. The LD10235 features a deep recessed E1 LED engine, optional glare shields and a range of optics. The LD10235 has been designed specifically to produce low glare illumination to walls and columns. This is a very tough, high quality fitting, machined from high grade materials ensuring excellent thermal and light output performance. Ideal for interior and exterior applications, incorporating an integral anti-wicking barrier for added protection.



KEY FEATURES

uct: LD10235

- > E1 engine, featuring the CREE XHP35 LED with 2-step binning
- Optional 2nd channel LEDs for secondary lighting applications
- Range of beam angles, featuring an impressively narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised body for reduced
- Optional glare shield accessories available
- Minimal aesthetic enabling it to fit into most project styles
- Body machined from a solid billet of aluminium
- Range of finishes available
- Built-in reverse polarity protection
- LD10235 is available with RGBW and Tunable White LED engines

SPECIFICATION

LED type	1 x E1 Eng CREE)	ine
Max drive current	700)mA
Max LED power	10	W
Colour temperature	3000K	5000K
CRI (typical)	85	80
Delivered lumens (L ₁₀₀)	555	599
Lumens per circuit watt	55	59

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

GLARE SHIELDS

LD10235 comes with a choice of glare control options to further reduce glare from the LED and optic. This does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling or floor.







No glare shield, Deep recessed optic and matt black anodised optic holder aids in

glare reduction.

Standard glare shield provides an excellent balance between glare control and light output. This accessory works well in most applications.

Half-moon glare shield for applications that require very low glare. Minimal loss of light on lit surface (wall) but overall lumen output typically reduced by 50-60%.

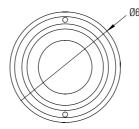
DIMENSIONS

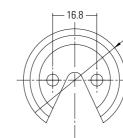
Dimensions in mm

Ø39

LED DRIVERS .

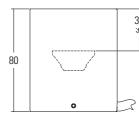
Top view





Mounting Plate

Side view





ORDER CODES AND OPTIONS FOR E1 LIGHT ENGINE



7W LED at 500mA	LD10235-E1-350 LD10235-E1-500 LD10235-E1-700
Extra Warm White (2700K) Warm White (3000K) White (4000K) - on request Cool White (5000K) With 2nd channel (red for navigation or amber night lighting) LD10237-E1-2 *Other LED colour temperatures are available. Please speak to a member of our sales tear	
BEAM / LENS ANGLE OPTIONS 10° narrow spot 19° medium 34° wide 54° extra wide 15° x 49° oval	/NE /ME /WE /WWB
GLARE SHIELD	/NGS /GS /GSHM
FINISH OPTIONSSilver anodised Paint finish black / white (RAL 9016) /RAL	

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

KEY FEATURES

New LED light engines offer single white, 2nd channel, Colour, RGBW, and Tunable white LED options

- Range of beam angles featuring a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised body for reduced glare
- > Interior or exterior use
- > High quality machined components
- Discreet fixing with two grub screws behind the body
- Minimal aesthetic enabling it to fit into most project styles
- Range of finish options
- > Built-in reverse polarity protection

SPECIFICATION

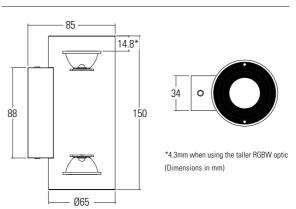
LED type	2 x E1 LED Engine Cree XHP35	
	Please note, data i	below is for 2 LEDs
Max drive current	500mA	
Max LED power*	14W	
Colour temperature	3000K	5000K
CRI (typical)	85	80
Delivered lumens (L ₁₀₀)	951	1022
Lumens per circuit watt	67	73

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS

DEC 23

Dimensions in mm





Product Code |

LD10236-E1-350

ORDER CODES AND OPTIONS FOR E1 LIGHT ENGINE

(for Colour, RGBW and Tunable white, please see data sheets online)

LED Colour

Example: LD10236-E1-500 / LW30 / NB / NB / Silver Anodised

Beam Angle

Finish

 LED COLOUR OPTIONS
 SUFFIX

 Extra warm white (2700K)
 /LW27

 Warm white (3000K)
 /LW30

 White (4000K) - on request
 /LW40

 Cool White (5000K)
 /LW50

With 2nd channel (red for navigation or amber night lighting) LD10236-E1-2CH /LW**+L*

*Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE OPTION ____

10° narrow spot	/N
19° medium	/M
34° wide	/W
54° extra wide	/WW
15° x 49° oval	/0
Different beam angle at each end	/**/*

FINISH OPTION _

Silver anodised

Chemically brightened (Stainless steel effect)

Paint finish black / white (RAL 9016) / RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS __

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



LD10236

2 X LED UP AND DOWN WALL WASHER

The LD10236 features the all new E1 LED engine and a new

range of optics. Tunable White and RGBW options are also available. A compact, high quality wall washer with excellent output. The LD10236 has a very minimal design ensuring it will blend into most interior and exterior project styles. Low glare has been achieved by setting the LED back into the fitting which is then held in place by a matt black anti-glare ring. It has been used for general illumination and creating effects around buildings, as well as an extensive list of

interior projects. LD10236 is available in a range of finishes.

350 500 IP67

LED UP OR DOWN WALL WASHER

























The new LD10237 features the new E1 LED engine, along with a new range of optics. Tunable White and RGBW options are also available. A compact, high quality wall washer with excellent output. The LD10237 has a very minimal design ensuring it will blend into most interior and exterior project styles. Low glare has been achieved by setting the LED back into the fitting which is then held in place by a matt black anti-glare ring. It has been used for general illumination and creating effects around buildings, as well as an extensive list of interior projects. It is available in a range of finishes.

KEY FEATURES

- > New LED light engines offer single white, 2nd channel, Colour, RGBW, and Tunable white LED options
- Range of beam angles featuring a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- Single optic produces a very consistent beam with no multiple shadows
- LED and lens recessed in a matt black anodised bezel for reduced
- High quality machined components
- Interior or exterior use
- Minimal aesthetic enabling it to fit into most project styles
- Discreet fixing with two grub screws behind the body
- Built-in reverse polarity protection

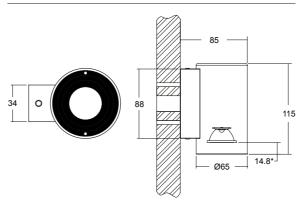
SPECIFICATION

LED type	1 x E1 LED Engine CRE XHP35		
Max drive current	700mA		
Max LED power	10W		
Colour temperature	3000K	5000K	
CRI (typical)	85	80	
Delivered lumens (L ₁₀₀)	566	611	
Lumens per circuit watt	56	61	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS

Dimensions in mm



^{* 4.3}mm when using the taller RGBW optic

ORDER CODES AND OPTIONS FOR E1 LIGHT ENGINE

(for Colour, RGBW and Tunable white, please see data sheets online)



PRODUCT CODES WITH OUTPUT OPTIONS	
5W LED at 350mA	LD10237-E1-350
7W LED at 500mA	LD10237-E1-500
10W LED at 700mA	LD10237-E1-700

LED COLOUR OPTIONS					SUFFIX
Extra Warm White (2700K)					/LW27
Warm White (3000K)					/LW30
White (4000K) - on request					/LW40
Cool White (5000K)					/LW50
M/:1 0 1 1 1/ 10			1. 1.4 (0.1)	\	// / / / / / / / / /

With 2nd channel (red for navigation or amber night lighting) LD10237-E1-2CH /LW**+L* *Other LED colour temperatures are available. Please speak to a member of our sales team.

BEAM / LENS ANGLE UPITONS	
10° narrow spot	/NB
19° medium	/MB
34° wide	/WB
54° extra wide	/WWB
15° x 49° oval	/OB

FINISH OPTIONS

Silver anodised

Chemically brightened (Stainless steel effect)

Paint finish black / white (RAL 9016) /RAL

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

HIGH POWER SURFACE MOUNTED ADJUSTABLE INTERIOR/EXTERIOR LED SPOTLIGHT















The LD10238 features the new E1 LED engine, along with a new range of optics. Tunable White and RGBW options have also been added to the range. A compact, high power surface mounted spotlight, with excellent output suitable for use in the harshest of external conditions. The LD10238 has a very minimal design ensuring it will blend into most interior and exterior project styles. The use of a single optic ensures excellent beam shape and soft edge. It comes with a wide range of fixing options and accessories and is available in a choice of finishes.





- > New LED light engines offer single white, 2nd channel, Colour, RGBW, and Tunable white LED option
- Range of beam angles featuring a narrow 10° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- > Low glare is achieved with a cowl, as well as recessing the LED and lens assembly deep within the body
- Optional glare louvre available
- Lockable tilt adjustment
- High quality machined components
- Single optic produces a very consistent beam with no multiple shadows
- Wide range of fixing options
- Range of finish options
- Built-in reverse polarity protection

SPECIFICATION

LED type	1 x E1 LED End	1 x E1 LED Engine Cree XHP35		
Max drive current	`	0mA		
Max LED power*	1	10W		
Colour temperature	3000K	5000K		
CRI (typical)	85	80		
Delivered lumens (L ₁₀₀)	566	611		
Lumens per circuit watt	56	61		

^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

ACCESSORIES

/HL54 - Honeycombe louvre for reduced glare. Please note this is not suitable for use with the 15° x 49° deg oval beam or RGBW optic due to the quality of the beam.



FIXING OPTIONS AND DIMENSIONS

Dimensions in mm

/SAM - Surface adjustable mounting is screwed to the mounting surface and allows for minor rotational adjustment. The tilt adjustment is lockable via the socket head screw on the side.

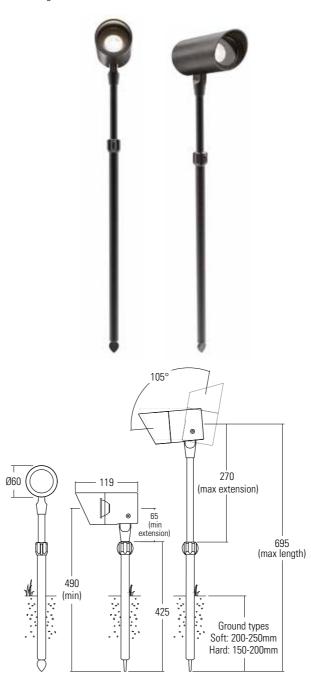
 $/ {\rm SMB}$ - Surface mount base offers hidden wiring and a machined pivot arm with lockable tilt and rotation.

Rotation





Adjustable ground spike with lockable tilt adjustment, for in-ground applications. It also has a height adjustment of 490mm to 695mm to the centre of the fitting.

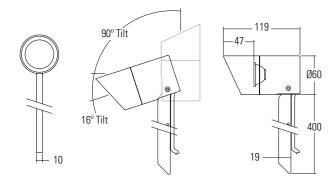




/GS

Ground spike for in-ground applications. Lockable tilt adjustment.

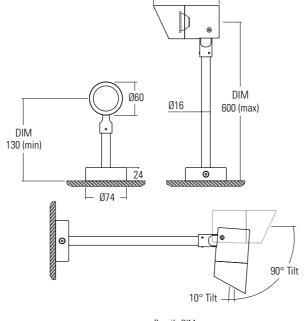




/SMBE

Surface mount base with lockable tilt adjustment has a customisable arm length. It can be specified between 130mm and 600mm to the centre of the fitting. Suitable for vertical and horizontal mounting.



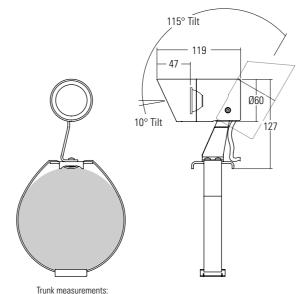


Specify DIM (All dimensions are shown in millimetres.)

/TS

Tree strap accessory is manufactured from a woven nylon webbing, covered with a recycled rubber coating which allows it to grip the trunk when tightened. It allows for minor rotational adjustment. A tilt adjustment of 10° can be achieved towards the tree and is lockable via the socket head screw on the side.





1400mm max circumference Ø450 maximum diameter

ORDER CODES AND OPTIONS FOR E1 LIGHT ENGINE

(for Colour, RGBW and Tunable white, please see data sheets online)



PRODUCT CODES WITH OUTPUT OPTION 5W 350mA 7W 500mA 10W 700mA	LD10238-350 LD10238-500 LD10238-700
Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) With 2nd channel (red for navigation or amber night lighting) LD10238-E1-2CH *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFIX /LW27 /LW30 /LW40 /LW50 /LW**+L*
BEAM / LENS ANGLE OPTION	/NB /MB

Silver / black / white (RAL 9016) / RAL fini (Custom bronze / brass wet spray paint colours	sh available, please see our finishes guide on page 250
FIXING METHODS AND ACCESSORIES _	
Surface mount bracket	10.2\

Surface mount bracket	/SAM
Surface mount base	/SMB
Adjustable ground spike	/GSA
Surface mount base with customisable extended arm (specify DIM)	/SMBEX (DIM)
Ground spike	/GS
Tree strap	/TS
Honeycomb louvre (not suitable for oval beam)	/HL54

LED DRIVERS .

54° extra wide

15° x 49° oval

PAINT FINISH OPTIONS

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/WWB

/0B

MINIATURE SHALLOW LED DOWN AND WALL LIGHT











LD40 is an incredibly shallow downlight for applications where a very small recess depth is required. Originally designed as a special for under cabinet lighting, it has now been added to our standard range as it has proved so popular.



KEY FEATURES

- > Very shallow, only 22mm recess depth required including cable
- Ideal for shelf lighting or under cabinets
- 93 CRI LED in warm white
- Range of beam angles
- Maximum output is 500mA 1.7W due to its small size
- Minimal bezel thickness
- > Spring clip fixing method

SPECIFICATION

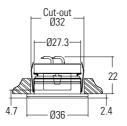
LED	1 x Cree XPG2	
Max drive current	500mA	
Max LED power*	1.7W	
Colour temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	120	146
Lumens per circuit watt	71	86

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

Dimensions in mm

/SC - Spring clips







ORDER CODES AND OPTIONS

1.2W 350mA

PRODUCT CODES WITH OUTPUT OPTION __

Product Code	LED Colour	Beam Angle	Fixing	Bezel Finish
LD40-350 LD40-500				
Example: LD40-5	600 / LW30 / MB	/ Stainless steel /	/ SC	

1.7W 500mA	LD40-500
LED COLOUR OPTIONS Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50 /LB /LG /LR
Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	/LA
BEAM / LENS ANGLE OPTION	

36° x 12° oval bea	am	/vv /0
FIXING OPTIONS		
Spring clips		/S

BEZEL FINISH OPTIONS _

12° narrow spot 31° medium

Stainless steel 316 (standard)

Paint finish silver / black / white (RAL 9016) / RAL

Polished stainless steel (passivate for marine environments)

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS ___

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/NB

/MB

MINIATURE ADJUSTABLE LOW GLARE LED DOWNLIGHT















LD71 is a miniature, adjustable LED downlight, ideal for display, niches or general downlighting effects. It is very discreet with the LED set back by 10mm to reduce the glare, with a maximum tilt of 25°. It utilizes the latest LED technology with a typical CRI of 93 in warm white. IP40 as standard, but can be specified IP54 for bathrooms or wet environments.





KEY FEATURES

- Very minimal depth and bezel diameter
- Adjustable with a 25° tilt
- High power for its size
- High efficiency optics specially designed for LightGraphix guarantee excellent beam spread and shape
- Recessed LED position for reduced glare
- Optional IP54 version for wet areas, comes with glass
- Hidden fixing options include spring clips
- Simple and fast installation

SPECIFICATION

LED	1 x Cre	e XPG2
Max drive current	700mA	
Max LED power*	2.4W	
Colour temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	195	237
Lumens per circuit watt	81	99

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files



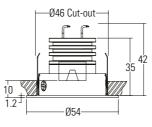


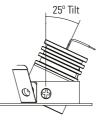
DIMENSIONS

Dimensions in mm

LED and optic position recessed by 10mm for reduced glare

IP54 rated version is supplied with an extra gasket which sits between the bezel and the mounting surface



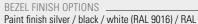


ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	IP rating	Finish
LD71-350 -500 -700				
Example: LD71-700 / LW30 / MB / IP54 / Paint finish white				

2.4W 700mA LD71	
Super warm white (2200K) /LV Extra warm white (2700K) /LV Warm white (3000K) /LV White (4000K) - on request /LV	W22 W27 W30 W40 W50 /LB /LG /LR

48° WIGE	/VV
IP RATING	
IP40 (dry internal use as standard)	/IP40
IP54 rated for wet environments	/IP54



BEAM / LENS ANGLE OPTION

12° narrow spot

31° medium

Chrome finish (minimum order - please contact us)

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS _

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

/NB

/MB

MINIATURE LOW GLARE LED DOWNLIGHT













LD72 is a miniature, LED downlight, ideal for display, niches or general downlighting effects. It is very discreet with the LED set back by 10mm to reduce the glare, and a painted bezel which can be matched to the mounting surface. It utilizes the latest LED technology with a typical CRI of 93 in warm white. IP40 as standard, but can be specified IP54 for bathrooms or wet environments.



KEY FEATURES

- > Very minimal depth and bezel diameter
- High power for its size
- > High efficiency optics specially designed for LightGraphix guarantee excellent beam spread and shape
- Recessed LED position for reduced glare
- Optional IP54 version for wet areas, comes with glass and gasket
- Hidden fixing options include spring clips
- Simple and fast installation

SPECIFICATION

LED	1 x Cree XPG2	
Max drive current	700mA	
Max LED power*	2.4W	
Colour temperature	3000K	5000K
CRI (typical)	93	75
Delivered lumens (L ₁₀₀)	195	237
Lumens per circuit watt	81	99

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files



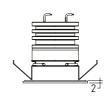


DIMENSIONS

Dimensions in mm

LED and optic position recessed by 10mm for reduced glare

IP54 rated version is supplied with an extra gasket which sits between the bezel and the mounting surface



ORDER CODES AND OPTIONS

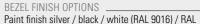
Product Code	LED Colour	Beam Angle	IP rating	Finish
LD72-350 -500 -700				
Example: LD72-7	00 / LW30 / MB ,	/ IP54 / Paint finis	h white	

PRODUCT CODES WITH OUTPUT OPTION	
1.2W 350mA	LD72-350
1.7W 500mA	LD72-500
2.4W 700mA	LD72-700

LED COLOUR OPTIONS	 SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	

BEAM / LENS ANGLE UPITUN	
12° narrow spot	/\
31° medium	/\
48° wide	//
36° x 12° oval beam)/

oo x 12 oran boann	,
IP RATING	
IP40 (dry internal use as standard)	/IF
IP54 rated for wet environments	/IF



Chrome finish (minimum order - please contact us)

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LED DRIVERS ___

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD74SR

HIGH POWER ULTRA SHALLOW RECESSED DOWNLIGHT









IP54

The LD74SR is part of a new range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. The innovative horizontal heatsink plate combined with low profile optics ensure that the LD74SR fits into a ceiling depth of only 40mm, whilst delivering over 357lm, making it ideal for general lighting or display applications. Originally designed for yacht installations, this fitting can be specified with an extra red LED for night time navigation. It is rated IP54 as standard making it ideal for use in wet environments.



KEY FEATURES

- Only 40mm ceiling depth required
- 357 delivered lumens
- Innovative horizontal heatsink
- High power to size ratio
- Recessed LED position for reduced glare
- 93 CRI LEDs
- IP54 as standard
- Hidden fixing with spring clips for simple, quick installation

RED NAVIGATION CIRCUIT

For yacht applications in areas where a night time red navigation light is required, the LD74SR can be supplied with the standard 3 white light LED cluster and an additional single red LED on a second circuit. It is supplied with a 4 core cable (2 circuits) and requires 2 drivers. Please see our driver guide for the quantities of LD74SRs that each driver can run.



SPECIFICATION

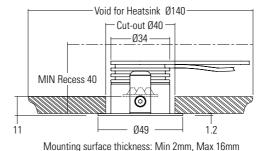
LED	3 x Cree XPG2		
Max drive current	500mA		
Max LED power*	5.1W		
Colour temperature	3000K 5000K		
CRI (typical) 93		75	
Delivered lumens (L ₁₀₀)	357	434	
Lumens per circuit watt	100		

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

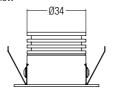
DIMENSIONS

Dimensions in mm

Cross section view



Side view



ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION ____

Bezel - Paint finish white (RAL 9016) / black / RAL

Chrome finish (minimum order - please contact us)



5.1W 500mA	LD74SR-500
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Optional secondary red navigation circuit	/LW**+LR
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales to	eam.
BEAM / LENS ANGLE OPTION	
22° narrow spot	/NB
30° medium	/MB
40° wide	/WB

LED DRIVERS _

FINISH OPTIONS

3 6W/ 350m∆

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

1D74SR-350



LD73SR

HIGH POWER ULTRA SHALLOW ADJUSTABLE RECESSED DOWNLIGHT











IP54

The LD73SR is part of a new range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. The innovative horizontal heatsink plate combined with low profile optics ensure that the LD73SR fits into a ceiling depth of only 40mm, whilst delivering over 357lm. The tilt adjustment of 25° allows plenty of flexibility when focusing and makes it ideal for general lighting or display applications. Originally designed for yacht installations, this fitting can be specified with an extra red LED for night time navigation. It is rated IP54 as standard making it ideal for use in wet environments.



KEY FEATURES

- Only 40mm ceiling depth required
- 357 delivered lumens
- Innovative horizontal heatsink
- Adjustable with a 25° tilt
- High power to size ratio
- Recessed LED position for reduced glare
- 93 CRI LEDs
- IP54 as standard
- Hidden fixing with spring clips for simple, quick installation

RED NAVIGATION CIRCUIT

For yacht applications in areas where a night time red navigation light is required, the LD73SR can be supplied with the standard 3 white light LED cluster and an additional single red LED on a second circuit. It is supplied with a 4 core cable (2 circuits) and requires 2 drivers. Please see our driver guide for the quantities of LD73SRs that each driver can run.



SPECIFICATION

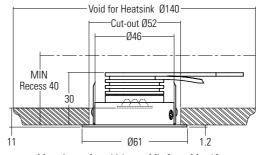
LED 3 x Cree XPG		e XPG2	
Max drive current	500mA		
Max LED power*	5.1W		
Colour temperature	3000K 5000K		
CRI (typical)	ical) 93 7		
Delivered lumens (L ₁₀₀)	357	434	
Lumens per circuit watt	100		

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

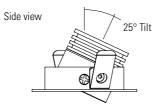
DIMENSIONS

Dimensions in mm

Cross section view



Mounting surface thickness: Min 2mm, Max 16mm



ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION

Product Code	LED Colour	Beam Angle	Finish
LD73SR-350 -500			
Example: LD73S	R-350 / LW30+LR / MB	/ White	

3.6W 350mA	LD73SR-350
5.1W 500mA	LD73SR-500
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Optional secondary red navigation circuit	/LW**+LR
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	
BEAM / LENS ANGLE OPTION	
22° narrow spot	/NB
30° medium	/MB
40° wide	/WB

LED DRIVERS

FINISH OPTIONS

Bezel - Paint finish white (RAL 9016) / black / RAL

Chrome finish (minimum order - please contact us)

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

LD74SR-OP

HIGH POWER ULTRA SHALLOW RECESSED DOWNLIGHT









(IP54)









The LD74SR-OP is a little bit different! It does not use an optic and is supplied with an opal diffuser. The result is an exceptionally wide, diffused beam of light, giving an almost 175° wash. It is part of a new range of ultra shallow, high powered downlights designed to fit into ceilings with a minimal recess depth. The innovative horizontal heatsink plate allows the LD74SR-OP to fit into a 40mm ceiling depth. Applications for this product include display lighting and general illumination where an especially wide spread of light is required. Originally designed for yacht installations, this fitting can be specified with an extra red LED for night time navigation, and is IP54 rated as standard for use in wet environments.



KEY FEATURES

- > 175° beam of light
- > Only 40mm ceiling depth required
- Innovative horizontal heatsink
- > No spotting of LEDs with a glowing disc of light
- High power to size ratio
- 93 CRI LEDs
- IP54 as standard
- Hidden fixing with spring clips for simple, quick installation

RED NAVIGATION CIRCUIT

For yacht applications in areas where a night time red navigation light is required, the LD74SR-OP can be supplied with the standard 3 white light LED cluster and an additional single red LED on a second circuit. It is supplied with a 4 core cable (2 circuits) and requires 2 drivers. Please see our driver guide for the quantities of LD74SR-OPs that each driver can run.



SPECIFICATION

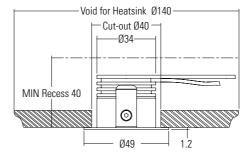
LED	3 x Cree XPG2		
Max drive current	500mA 5.1W 3000K 5000K 93 75		
Max LED power*			
Colour temperature			
CRI (typical)			
Delivered lumens (L ₁₀₀) 171		206	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS

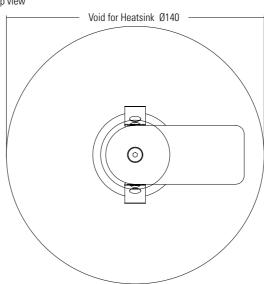
Dimensions in mm

Cross section view



Mounting surface thickness: Min 2mm, Max 16mm

Top view



ORDER CODES AND OPTIONS

FINISH OPTIONS _____



PRODUCT CODES WITH OUTPUT OPTION	
3.6W 350mA	LD74SR-0P-350
5.1W 500mA	LD74SR-OP-500

LED COLOUR OPTIONS ______ SUFFIX

Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Optional secondary red navigation circuit	/LW**+LR
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	

Bezel - Paint finish white (RAL 9016) / black / RAL	
Chrome finish (minimum order - please contact us)	

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

Use with 350mA or 500mA constant current LED drivers (please see page 232)

Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

ULTRA SHALLOW RECESSED FIXED HIGH OUTPUT LED DOWNLIGHT













The LD1081 is part of a 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 louvre accessory is available, which reduces the glare from the powerful light source. Rated IP40 as standard, with an IP65 rating 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
- IP65 option for wet areas including bathrooms and spas
- Constant force springs make this fitting suitable for delicate mounting surfaces

ACCESSORIES

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



IP65 RATED VERSION

For wet areas including spas, bathrooms and showers the LD1081 can be specified as IP65.

SPECIFICATION

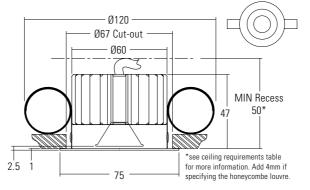
LED	1 x Cree CXB 1310	
Max drive current	700mA	
Max LED power*	14W	
Colour temperature	3000K 5000K	
CRI (typical)	93 80	
Delivered lumens (L ₁₀₀)	901 1107 68 83	
Lumens per circuit watt		

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

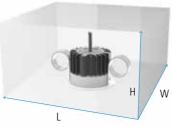
Dimensions in mm

Supplied as standard with constant force springs which are suitable for the majority of installations. They are particularly well suited to delicate surfaces.



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

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

ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	IP Rating	Accessory	Finish
LD1081-350 -500 -700					
Example: LD108	1-500 / 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	SUFFIX
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50
*Other LED colour temperatures are available. Please speak to a member of our sales team.	
BEAM / LENS ANGLE OPTION	
19° narrow spot	/NB
28° medium	/MB
41° wide	/WB
IP RATING	
IP40	/IP40
IP65	/IP65
ACCESSORY	
Honeycombe louvre	/HL36
FINISH OPTIONS	

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

Paint finish white (RAL 9016) / black / RAL

LED DRIVERS _

SHALLOW RECESSED LOW GLARE FIXED LED DOWNLIGHT















KEY FEATURES

- Specially designed for ceilings with a minimal recess depth only 70mm required
- High power 900lm output
- 93 CRI Cree LED
- Recessed LED and optic for reduced glare
- Single optic produces a very consistent beam, no multiple shadows
- High quality, machined, anodised aluminium components
- IP65 option for wet areas including bathrooms and spas
- Constant force springs make this fitting suitable for delicate mounting surfaces

ACCESSORIES

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



IP65 RATED VERSION

For wet areas including spas, bathrooms and showers the LD1080 can be specified as IP65.

SPECIFICATION

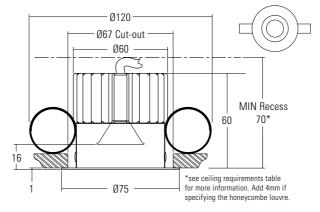
LED	1 x Cree CXB 1310		
Max drive current	700mA		
Max LED power*	14W		
Colour temperature	perature 3000K 500		
CRI (typical)	93	80	
Delivered lumens (L ₁₀₀)	901	1107	
Lumens per circuit watt	68	83	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

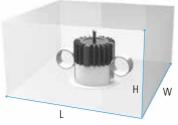
Dimensions in mm

Supplied as standard with constant force springs which are suitable for the majority of installations. They are particularly well suited to delicate surfaces.



CEILING REQUIREMENTS

Ceiling requirements can vary but the minimum ceiling void volume must be adhered to. The minimum possible ceiling depth is 70mm. The volumes below are presented as L x W x H.



Output ou	rrant	Minimum ceiling void dimension	Minimum Ceiling void volume		
Output cu	Output current	requirements (Lmm x Wmm x Hmm)	cm ³	Litre(s)	
LD1080-3	350	120 x 120 x 70 (74 with /HL)	1008	1	
LD1080-5	00	140 x 140 x 70 (74 with /HL)	1372	1.3	
LD1080-7	700	200 x 200 x 70 (74 with /HL)	2800	2.8	

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

ORDER CODES AND OPTIONS

	Product Code	LED Colour	Beam Angle	IP Rating	Accessory	Finish
ı	LD1080-350 -500 -700					
	Example: LD1080	0-500 / LW30 /	WB / IP40 / HL	/ White		

LD1080-700
SUFFIX /LW27 /LW30 /LW40 /LW50 r sales team.
/NB /MB /WB
/IP40 /IP65
/HL36

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

SHALLOW RECESSED LOW GLARE FIXED LED DOWNLIGHT WITH BLACK BAFFLE



















The LD1082 is part of a new range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. This compact, high quality downlight delivers in excess of 900lm light output making it ideal for general downlighting, as well as wall washing and column lighting applications. Glare control has been improved via the use of a matt black internal baffle (other finishes are available). This fitting is rated at IP40 as standard, but can be specified as IP65 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 huge light output, from a very compact, shallow fitting. A minimalistic design ensures it complements most interior project styles.



KEY FEATURES

- Specially designed for ceilings with a minimal recess depth only 70mm required
- High power 900lm output
- Matt black internal baffle provides increased glare control
- 93 CRI Cree LED
- Recessed LED and optic for reduced glare
- Single optic produces a very consistent beam, no multiple shadows
- High quality, machined, anodised aluminium components
- IP65 option for wet areas including bathrooms and spas
- Constant force springs make this fitting suitable for delicate mounting surfaces

ACCESSORIES

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



IP65 RATED VERSION

For wet areas including spas, bathrooms and showers the LD1082 can be specified as IP65.

SPECIFICATION

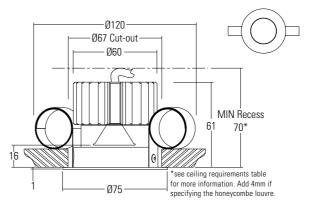
LED	1 x Cree CXB 1310		
Max drive current	700mA		
Max LED power*	14W		
Colour temperature	3000K	5000K	
CRI (typical)	93	80	
Delivered lumens (L ₁₀₀)	901	1107	
Lumens per circuit watt	68	83	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

Dimensions in mm

Supplied as standard with constant force springs which are suitable for the majority of installations. They are particularly well suited to delicate surfaces.



CEILING REQUIREMENTS

Ceiling requirements can vary but the minimum ceiling void volume must be adhered to. The minimum possible ceiling depth is 70mm. The volumes below are presented as L x W x H.



Output aurrant	Minimum ceiling void dimension	Minimum Ceiling void volume		
Output current	requirements (Lmm x Wmm x Hmm)	cm ³	Litre(s)	
LD1082-350	120 x 120 x 70 (74 with /HL)	1008	1	
LD1082-500	140 x 140 x 70 (74 with /HL)	1372	1.3	
LD1082-700	200 x 200 x 70 (74 with /HL)	2800	2.8	

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

ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTIONS.

Product Code	LED Colour	Beam Angle	IP Rating	Accessory	Finish
LD1082-350 -500 -700					
Example: LD108	2-500 / LW30 /	WB / IP40 / HL	/ White		

7W LED at 350mA 10W LED at 500mA 14W LED at 700mA	LD1082-350 LD1082-500 LD1082-700
LED COLOUR OPTIONS Extra Warm White (2700K) Warm White (3000K) White (4000K) - on request Cool White (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales to	SUFFIX /LW27 /LW30 /LW40 /LW50
BEAM / LENS ANGLE OPTION	/NB /MB /WB
IP RATINGIP40 IP65	/IP40 /IP65
ACCESSORY	/HL36

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

Bezel - Paint finish white (RAL 9016) / black / RAL

FINISH OPTIONS.

LED DRIVERS .

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

Baffle - Paint finish black (Standard), other finishes are available on request

EXTERIOR RATED SHALLOW RECESSED LOW GLARE FIXED LED DOWNLIGHT









(IP67)



The LD1083 is an IP67 rated, ultra shallow, high power downlight designed for external use including boats and marine environments. The compact fitting delivers in excess of 900lm light output, making it ideal for general downlighting, as well as for wall washing and column lighting applications. 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. The use of high quality machined components, and LightGraphix' experience in designing products for this type of environment, has resulted in a very robust downlight that is built to last. A minimalistic design ensures it complements most interior and exterior project styles.



KEY FEATURES

- Designed for external applications including boats/ marine environments
- High quality machined stainless steel 316 and anodised aluminium components
- Designed for ceilings with a minimal recess depth - only 70mm required
- Inner baffle is supplied as gun metal grey as standard
- High power 900lm output
- 93 CRI Cree LED
- Recessed LED and optic for reduced glare
- Single optic produces a very consistent beam, no multiple shadows
- IP67 as standard
- Constant force springs make this fitting suitable for delicate mounting surfaces

ACCESSORIES

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



SPECIFICATION

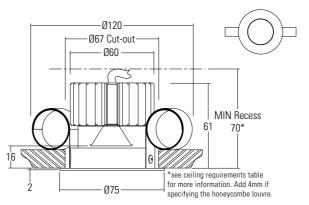
LED	x drive current 700mA	
Max drive current		
Max LED power*		
Colour temperature	3000K	5000K
CRI (typical)	93	80
Delivered lumens (L ₁₀₀)	840	1035
Lumens per circuit watt	63	78

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

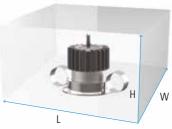
Dimensions in mm

Supplied as standard with constant force springs which are suitable for the majority of installations. They are particularly well suited to delicate surfaces.



CEILING REQUIREMENTS

Ceiling requirements can vary but the minimum ceiling void volume must be adhered to. The minimum possible ceiling depth is 70mm. The volumes below are presented as L x W x H.



Output ourront	Minimum ceiling void dimension	Minimum Ceiling void volume		
Output current	requirements (Lmm x Wmm x Hmm)	cm ³	Litre(s)	
LD1083-350	120 x 120 x 70 (74 with /HL)	1008	1	
LD1083-500	140 x 140 x 70 (74 with /HL)	1372	1.3	
LD1083-700	200 x 200 x 70 (74 with /HL)	2800	2.8	

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

ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTIONS _

Product Code	LED Colour	Beam Angle	Accessory	Finish
LD1083-350 -500 -700				
Example: LD1083	-500 / LW30 / M	B / HL / White		

14W LED at 700MA	LD 1083-700
LED COLOUR OPTIONS Extra Warm White (2700K) Warm White (3000K) White (4000K) - on request Cool White (5000K)	SUFFIX /LW27 /LW30 /LW40 /LW50
$\hbox{*Other LED colour temperatures are available. Please speak to a member of our sales team.}$	
BEAM / LENS ANGLE OPTION 19° narrow spot 28° medium 41° wide	/NB /MB /WB

FINISH OPTIONS

Honeycombe louvre

ACCESSORY

7W LED at 350mA

10W LED at 500mA

14\A/ | ED at 700m A

Bezel - Polished and passivated stainless steel (marine grade polishing) as standard. Paint finish black / white (RAL 9016) / RAL

Baffle - Anodised gun metal grey (standard). Paint finish black / white (RAL 9016) / RAL

LED DRIVERS .

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD1083-350

LD1083-500

/HL36

SHALLOW RECESSED LOW GLARE ADJUSTABLE LED DOWNLIGHT













The LD1090 is part of a new range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. The adjustable, compact, high quality downlight delivers in excess of 900lm light output making it ideal for general downlighting, as well as wall washing and column lighting applications. This fitting is rated at IP40 as standard, but can be specified as IP65 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 huge light output, from a very compact, shallow fitting. A minimalistic design ensures it complements most interior project styles.



KEY FEATURES

- Specially designed for ceilings with minimal recess depth - only 70mm required
- Adjustable with a 25° tilt
- High power 900lm output
- 93 CRI Cree LED
- Recessed LED and optic for reduced glare
- Single optic produces a very consistent beam with no multiple shadows
- High quality, machined, anodised aluminium components
- IP65 option for wet areas including bathrooms and spas
- Constant force springs make this fitting suitable for delicate mounting surfaces



ACCESSORIES

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



IP65 RATED VERSION

For wet areas including spas, bathrooms and showers the LD1090 can be specified as IP65.

SPECIFICATION

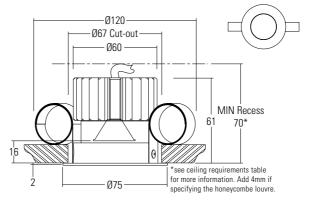
LED	1 x Cree	CXB 1310
Max drive current	Max drive current 70	
Max LED power*	14	W
Colour temperature	3000K	5000K
CRI (typical)	93	80
Delivered lumens (L ₁₀₀)	901	1107
Lumens per circuit watt	68	83

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

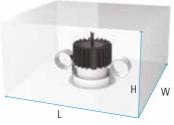
Dimensions in mm

Supplied as standard with constant force springs which are suitable for the majority of installations. They are particularly well suited to delicate surfaces.



CEILING REQUIREMENTS

Ceiling requirements can vary but the minimum ceiling void volume must be adhered to. The minimum possible ceiling depth is 70mm. The volumes below are presented as L x W x H.



Output auront	Minimum ceiling void dimension	Minimum Ceiling void volum	
Output current	requirements (Lmm x Wmm x Hmm)	cm ³	Litre(s)
LD1090-350	120 x 120 x 70 (74 with /HL)	1008	1
LD1090-500	140 x 140 x 70 (74 with /HL)	1372	1.3
LD1090-700	200 x 200 x 70 (74 with /HL)	2800	2.8

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

ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	IP Rating	Accessory	Finish
LD1090-350 -500 -700					
Example: LD109	0-500 / LW30 /	WB / IP40 / HL	/ White		

7W LED at 350mA 10W LED at 500mA 14W LED at 700mA	LD1090-350 LD1090-500 LD1090-700
LED COLOUR OPTIONSExtra Warm White (2700K)	SUFFIX
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales team.	/LW50
DE 114 (1510 AND 5 OPTION	
BEAM / LENS ANGLE OPTION	/NB
78° medium	/MB
41° wide	/WB
IP RATING	
IP40	/IP40
IP65	/IP65
ACCESSORY	
Honeycombe louvre	/HL36
FINISH OPTIONS	
Paint finish white (RAL 9016) / black / RAL (Custom bronze / brass wet spray paint colours available, please see our finishes quid	

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

SHALLOW RECESSED LOW GLARE ADJUSTABLE LED DOWNLIGHT WITH BLACK BAFFLE













The LD1092 is part of a range of ultra shallow, high power downlights designed to fit into ceilings with a minimal recess depth. The adjustable, compact, high quality downlight delivers in excess of 900lm light output making it ideal for general downlighting, as well as wall washing and column lighting applications. Glare control has been improved via the use of a black internal baffle (other finishes are available). This fitting is rated at IP40 as standard, but can be specified as IP65 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 huge light output, from a very compact, shallow fitting. A minimalistic design ensures it complements most interior project styles.



KEY FEATURES

- Internal baffle system provides increased glare control
- Specially designed for ceilings with a minimal recess depth only 70mm required
- High power 900lm output
- 93 CRI Cree LED
- Recessed LED and optic for reduced glare
- Single optic produces a very consistent beam, no multiple shadows
- High quality, machined, anodised aluminium components
- IP65 option for wet areas including bathrooms and spas
- Constant force springs make this fitting suitable for delicate mounting surfaces



ACCESSORIES

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



IP65 RATED VERSION

For wet areas including spas, bathrooms and showers the LD1090 can be specified as IP65. This comes with an additional glass and all parts are anodised.

SPECIFICATION

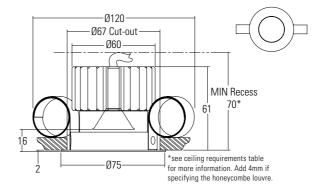
LED	1 x Cree	CXB 1310	
Max drive current	700mA		
Max LED power*	14	! W	
Colour temperature	3000K	5000K	
CRI (typical)	93	80	
Delivered lumens (L ₁₀₀)	901	1107	
Lumens per circuit watt	68	83	

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

DIMENSIONS AND FIXING OPTIONS

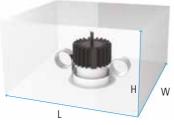
Dimensions in mm

Supplied as standard with constant force springs which are suitable for the majority of installations. They are particularly well suited to delicate surfaces.



CEILING REQUIREMENTS

Ceiling requirements can vary but the minimum ceiling void volume must be adhered to. The minimum possible ceiling depth is 70mm. The volumes below are presented as L x W x H.



Output aurent	Minimum ceiling void dimension	Minimum Ce	imum Ceiling void volume		
Output current	requirements (Lmm x Wmm x Hmm)	cm ³	Litre(s)		
LD1092-350	120 x 120 x 70 (74 with /HL)	1008	1		
LD1092-500	140 x 140 x 70 (74 with /HL)	1372	1.3		
LD1092-700	200 x 200 x 70 (74 with /HL)	2800	2.8		

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

ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTIONS.

Honevcombe louvre

FINISH OPTIONS .

Bezel - Paint finish white (RAL 9016) / black / RAL

Product Code	LED Colour	Beam Angle	IP Rating	Accessory	Finish
LD1092-350 -500 -700					
Example: LD109	2-500 / LW30 /	WB / IP40 / HL	/ White		

7W LED at 350mA 10W LED at 500mA 14W LED at 700mA	LD1092-350 LD1092-500 LD1092-700
LED COLOUR OPTIONS Extra Warm White (2700K) Warm White (3000K) White (4000K) - on request Cool White (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales team	SUFFIX /LW27 /LW30 /LW40 /LW50
BEAM / LENS ANGLE OPTION	/NB /MB /WB
IP RATINGIP40 IP65	/IP40 /IP65
ACCESSORY	

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

Baffle - Paint finish black (Standard), other finishes are available on request

/HL36

KEY FEATURES

- LED and lens assembly recessed within a black anodised body for reduced glare
- High output 6 LED cluster using 93 CRI LEDs
- Interchangeable optics
- Low depth, ideal for restricted
- High quality machined components
- Stainless steel 316 bezel and hard anodized aluminium body for harsh exterior environments
- Fixing is by 3 screws through the body which is then hidden by the bezel. 3 further screws fix the bezel to the body







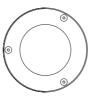
LED 6 x Cree XPG2 Max drive current 700mA Max LED power* 14W Colour temperature 3000K 5000K CRI (typical) 93 75 Delivered lumens (L₁₀₀) 924 1122 67 81 Lumens per circuit watt

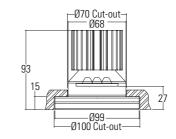
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

DIMENSIONS

SPECIFICATION

Dimensions in mm



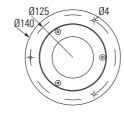


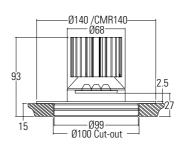
ACCESSORIES

/CMR140 - Ceiling Mount Ring

This accessory allows the LD1210 to be mounted flush into the ceiling with a simple circular cut-out for the bezel. The ceiling ring is fixed to the back of the mounting surface, and the LD1210 is then attached to the ring. If the ceiling is not 15mm thick then a rebate will need to be created on the back of the mounting surface to allow the ceiling mount ring to sit at a depth which allows the bezel to sit flush.

Please note: The /CMR140 accessory can only be used if there is access to behind the mounting surface!





ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION _

Product Code	LED Colour	Beam Angle	Accessory	Finish
LD1210-350 -500 -700				
Example: LD1210	0-350 / LW30 / M	B / CMR140 / Pol	ished Stainless Ste	el

7W LED at 350mA 10W LED at 500mA 14W LED at 700mA	LD1210-350 LD1210-500 LD1210-700
LED COLOUR OPTIONS Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) on request Cool white (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales tea	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50
BEAM / LENS ANGLE OPTION	/NB

ACCESSORIES	
Ceiling mount ring (black anodised)	/CMR140
Honeycomb louvre	/HL50

BEZEL FINISH OPTIONS .

Paint finish black / white (RAL 9016) / RAL

Polished and passivated stainless steel (marine grade polishing)

LED DRIVERS -

25° medium

40° wide

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD1210

set flush into the mounting surface.

EXTERIOR LOW GLARE LED DOWNLIGHT

(350) (500) (700) mA

LD1210 is a very powerful, low glare, IP67 rated downlight which has been primarily designed for use externally on yachts. It is machined from high grade materials, to ensure it can withstand sea environments. Architectural applications

where this fitting can be used include exterior canopies, and

where an IP rated downlighter is required. It is designed to be

(IP67)

/MB

/WB

EXTERIOR LOW GLARE ADJUSTABLE LED DOWNLIGHT



















LD1220 is a very powerful, low glare, exterior rated, adjustable downlight. This is a specialist product primarily designed for use externally on yachts, so special attention needs to be paid to the mounting of this product. It is machined from high grade materials, to ensure it can withstand sea environments.



KEY FEATURES

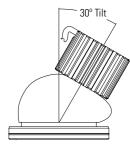
- > LED and lens assembly recessed within a black anodised body for reduced glare
- Lockable tilt of up to 30° and 360° rotation
- Innovative flexible 'boot' which allows adjustment whilst maintaining IP rating
- Fixing ring accessory allows flush mounting into ceiling
- High output 6 LED cluster using 93 CRI LEDs
- Interchangeable optics
- Low depth, ideal for restricted spaces
- High quality machined components
- Stainless steel 316 and hard anodized aluminium for harsh exterior environments

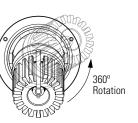
SPECIFICATION

LED	6 x Cree XPG2		
Max drive current	700mA		
Max LED power*	14W		
Colour temperature	3000K 5000K		
CRI (typical)	93 75		
Delivered lumens (L ₁₀₀)	924 1122		
Lumens per circuit watt	67	81	

^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

LOCKABLE ADJUSTMENT





/CMR140 - Metal Ceiling Mount Ring

This is the recommended method of fixing. It can only be used if there is access to behind the mounting surface!

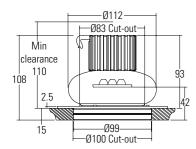
Why use the ceiling mount ring?

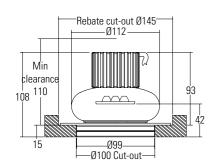
- > The fixing holes for the LD1220 are very close to the cut-out diameter, so if the ceiling ring was not used there would be a risk of the fixing screws breaking out
- Maximum thickness behind the bezel is 5mm to allow for the fixture to tilt. So if fixing into wood, this would not be thick enough for a secure fixing
- CMR140 ceiling mount ring is manufactured from metal and has the threaded fixing holes pre-drilled
- > It provides a surface for the LD1220 to be fixed flush into the mounting surface

What is the thickness of the mounting surface?

The LD1220 is designed to be installed flush, so the thickness of the mounting surface is important to how the ceiling ring is installed:

- > If this surface is 15mm in thickness then the ceiling ring can be fixed directly to the back of it
- > If the surface is thicker than 15mm then a rebate will need to be created to guarantee the LD1220 sits flush with the front surface

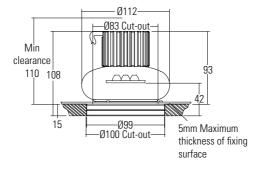




Fixing directly into mounting surface

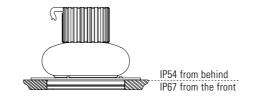
Only recommended if this is being mounted into metal work with pre-drilled mounting holes!

- > Because the fixing holes are so close to the edge of the cut-out this method will only work when mounting into a metal surface
- > This surface should have a maximum thickness of 5mm to allow the adjustment of the LD1220
- > The fixing holes in the ceiling mount ring need to be replicated in the fixing surface, and should only be attempted by a boat yard
- > This method is not suitable for mounting into wood or plaster board





IP RATING











ORDER CODES AND OPTIONS

Product Code	LED Colour	Beam Angle	Accessory	Finish
LD1220-350				
-500 -700				
Example: LD122	0-350 / LW30 / M	IB / CMR140 / Po	lished Stainless St	eel

PRODUCT CODES WITH OUTPUT OPTION 7W LED at 350mA 10W LED at 500mA 14W LED at 700mA	LD1220-350 LD1220-500 LD1220-700
LED COLOUR OPTIONS	SUFFI>
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) on request	/LW40
Cool white (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales team.	/LW50
BEAM / LENS ANGLE OPTION	/NE /ME /WE
ACCESSORIES	
Ceiling mount ring (black anodised)	/CMR140
Honeycomb louvre	/HL50
BEZEL FINISH OPTIONS	
Paint finish black / white (RAL 9016) / RAL	
Polished and passivated stainless steel (marine grade polishing)	
LED DRIVERS	

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

KEY FEATURES

- > Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- 2 countersunk screws fix the body to the mounting surface
- Hard anodised body for high resistance to sea environments
- Range of beam angles
- 12° beam will light a deck from 9m

LED	1 x Cree XPG2		
Max drive current	700mA		
Max LED power*	2.4W		
Colour temperature	3000K 5000K		
CRI (typical)	93 75		
Delivered lumens (L ₁₀₀)	164 200		
Lumens per circuit watt	68 83		

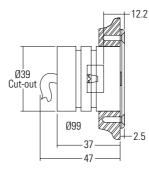
*LED wattage includes losses associated with using an 85% efficient driver

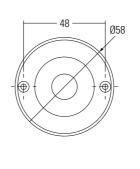




DIMENSIONS

Dimensions in mm





SPECIFICATION



BEZEL FINISH OPTIONS Hard anodised aluminium (gun metal grey)

ORDER CODES AND OPTIONS

-500 -700 LED Colour

Example: LD242-350 / LW30 / MB / Hard anodised

PRODUCT CODES WITH OUTPUT OPTION ___

Finish

LD242-350

LD242-500

LD242-700

SUFFIX

/LW22

/LW27

/LW30

/LW40

/LW50

/LB

/LG

/LR /LA

/NB

/MB

/WB /0B

Beam Angle

Product Code

1.2W LED at 350mA

1.7W LED at 500mA

2.4W LED at 700mA

LED COLOUR OPTIONS .

Super warm white (2200K)

Extra warm white (2700K) Warm white (3000K)

White (4000K) on request Cool white (5000K)

Blue

Red

Green

LD242-350

Paint finish black / white (RAL 9016) / RAL

BEAM / LENS ANGLE OPTION _____

12° narrow spot

31° medium

36° x 12° oval

48° wide

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

*Other LED colour temperatures are available. Please speak to a member of our sales team.

This has been specifically designed for use on yacht spreaders

LD242

YACHT SPREADER LED LIGHT

to illuminate the deck or other spreaders below. It is fitted with the latest LED technology and machined from a solid billet of high grade aluminium. This is hard anodised making it resistant to harsh sea environments. The narrow 12 degree beam will light a deck from 9m.

 $\begin{pmatrix} 350 \\ MA \end{pmatrix} \begin{pmatrix} 500 \\ MA \end{pmatrix} \begin{pmatrix} 700 \\ MA \end{pmatrix}$

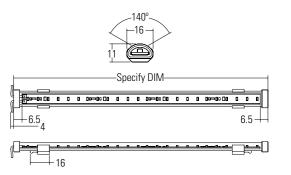
IP68

0



KEY FEATURES DIMENSIONS Dimensions in mm

- Choice of LED outputs depending on the application, including RGB
- Economical solution compared to bare LED tape
- Added advantage of protecting LEDs from impacts, dust and moisture
- Range of fixing options depending on the detail
- Flexible in the vertical plane to a minimum bend radius of 500mm
- IP67 rated version for wet environments
- Integral anti-wicking barrier on the IP67 version increases protection against moisture ingress due to incorrect IP rated cable connections (excludes RGB version)
- Lengths are custom made to suit to a maximum of 4022mm*, so no dark spots!



SPECIFICATION

LED OUTPUT OPTIONS >	LG500 500 lm/m			ORT lm/m	RGB ECO 180 lm/m		
Applications	Highlighting architectural details, steps		Highlighting architectural details, steps Same applications as Eco but with increased output and closer pitch LEDs				Colour change
Description	500 In	n tape	Short pi	tch tape	Eco RGB tape		
Colour temperature	2200K / 2500K / 2700K	3000K / 4000K	2400K / 2700K / 3000K 4000K / 5000K		-		
Delivered lumens / m	480lm/m	520lm/m	800lm/m 850lm/m		180lm/m		
Watts / m	3.9V	3.9W/m		N/m	6.5W/m		
Lumens per watt	1281	m/w	92lm/w 98lm/w		-		
Voltage							
CRI (typical)	80+				-		

^{*} Shipping and practicalities of installation need to be considered when specifying long lengths

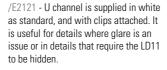
Please see our website for more detailed technical information and photometric files

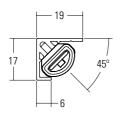
FIXING OPTIONS Dimensions in mm

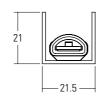
/SC - Flat fixing clip

/LBM - 'L' bracket mounting. Comes with fixing clips attached.

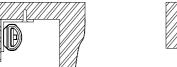
/E1917 - Aluminium P channel angled at 45°. Ideal for shelf details. Silver anodised as standard. Comes with fixing clips attached.

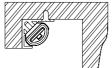


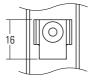


























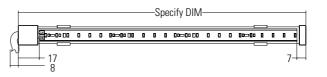




See our website for mounting details.

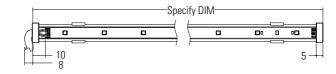
IP67 RATED

To achieve an IP67 rating, resin is used to seal each end of the product, and the cable upgraded to an exterior version. This does create a larger gap between the last LED and the end of the extrusion, so particular attention needs to be paid to the mounting detail to avoid a gap in the light between multiple lengths.



RGB IP54 RATED

Dimensions below apply to the IP54 RGB variant. This is to allow extra space to connect the 4 cables to the LED board.

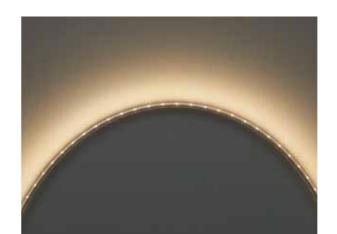


LINKED LENGTHS

Only the IP54 version in a single colour is available with multiple linked lengths. The IP67 version can have 1 link only. RGB lengths are not available with links.

FLEXIBLE

LD11 is flexible in the vertical plane (around the thinnest side) to a minimum bend radius of 500mm. Cable ties might be needed to fix the profile into the clips. Further details can be found on the instruction leaflet.



ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION —

Product Code LED LED Colour Fixing IP rating Length
LD11
Example: LD11 / Eco / LW30 / SC / IP54 / 2000mm

LG500 500lm/m Short 800lm/m RGB Eco 180lm/m	/LG500 /Short /RGB Eco
LED WHITE COLOUR OPTIONS	
LG500	
Candle White (2200K)	/LW22
Super warm white (2500K)	/LW25
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K)	/LW40
Short	
Super warm white (2400K)	/LW24
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
Cool White (4000K)	/LW40
Cool White (5000K)	/LW50
FIXING OPTIONS	
Fixing clip (3 fixing clips supplied per metre)	/SC
L bracket mounting	/LBM
45° P channel	/E1917
U channel	/E2121
IP OPTIONS	
IP54 (standard)	/IP54
IP67 rated for wet environments	/IP67

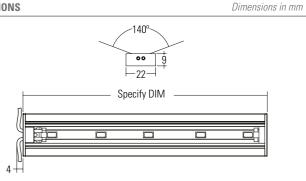
Use with 24V constant voltage LED drivers (please see page 242) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LED DRIVERS _

KEY FEATURES DIMENSIONS

> Choice of white LED outputs depending on the application, as well as RGB and tunable white

- Very low profile
- > Clear cover is supplied as standard. A frosted diffuser can be specified, creating a softer light effect which can be useful in tight details
- > A range of fixing options including a miniature adjustable bracket allows it to be installed into a wide variety of details
- IP40 as standard with an IP54 option for pool/spa coffers (not exterior applications)
- Lengths are custom made to suit to a maximum of 3000mm, so no dark spots!
- Short pieces can be made interlinked to accommodate curves
- Available with Switched, 1-10V, DMX or Dali drivers



LD22

HIGH POWER 24V LINEAR LED COVE LIGHT













LD22 is a very small, low profile linear system. Designed to maximise the light output with a broad beam, it is ideal for coves, shelf details, recesses and highlighting architectural details. It is a 24V DC system allowing long lengths to be powered from a single driver.



LED OUTPUT OPTIONS >	LG500 LG1200 500 lm/m 1200 lm/m		LG2000 2000 lm/m		RGB 435 lm/m	TW2000 2000lm/m		
Description	500 lm t	500 lm tape 1200lm tape		2000lm tape		RGB tape	Tunable white	
Colour temperature*	2200K / 2500K / 2700K	3000K / 4000K	2000K / 2400K / 5000K	2700K / 3000K / 4000K	2000K / 2400K / 5000K	2700K / 3000K / 4000K	-	2700K + 6500K
CRI (typical)	80+		80+	90+	80+	90+	-	80+
Delivered lumens / m	480lm/m	520lm/m	1200	1200lm/m		m/m	435lm/m	2000lm/m
Watts / m	3.9W/	m	10.4W/m		10.4W/m 18W/m		18W/m	18.5W/m
Lumens per watt	128lm,	/w	113lm/w		1111	m/w	24.1lm/w	108lm/w
Voltage (V)	24V DC							

See our website for more detailed technical information and photometric files

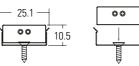


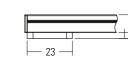


DIMENSIONS AND FIXING OPTIONS

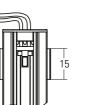
Dimensions in mm

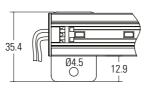
/SC - Flat fixing clip





/BSM - Bracket side mounting



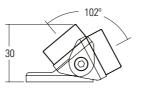


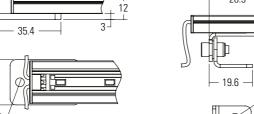




/BEM - Bracket end mounting (max 1m)

/ABM - Adjustable bracket mounting









COVER OPTIONS

Frosted cover diffuses the light source and softens the beam edges

/CC - Clear cover

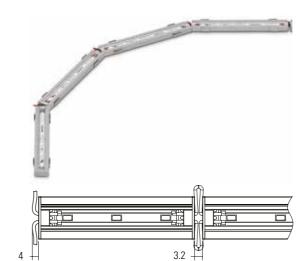


/FC - Frosted cover

LINKED SECTIONS

LD22 can be linked to allow for curves. The length of each module depends on the LED used and the radius of the curve.





ORDER CODES AND OPTIONS

Product Code LED LED Colour Cover Fixing IP rating Length
Example: LD22 / LG1200 / LW30 / CC / SC / IP40 / 2000mm

LED OUTPUT OPTION	SUFFIX
LG500 500lm/m	/LG500
LG1200 1200lm/m	/LG1200
LG2000 2000lm/m	/LG2000
RGB 475lm/m	/RGB
TW2000 2000lm/m	/TW2000
LED COLOUR OPTIONS	
LG500	
Candle White (2200K)	/LW22
Super warm white (2500K)	/LW25
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K)	/LW40
LG1200 + LG2000	#1.A./O.O
Candle White (2200K)	/LW20
Super warm white (2400K) Extra warm white (2700K)	/LW24 /LW27
Warm white (3000K)	/LW2/ /LW30
White (4000K)	/LW40
Cool White (5000K)	/LW50
TW2000	
Tunable White - 2700K + 6500K	/LW27 + LW65
COVER OPTIONS	
Clear cover	/CC
Frosted cover	/FC
FIXING OPTIONS	
Spring clips	/SC
Bracket end mounting	/BEM
Bracket side mounting	/BSM
Adjustable bracket mounting	/ABM

LED DRIVERS ____

IP OPTIONS _

IP40 (internal use as standard)

Use with 24V constant voltage LED drivers (please see page 242) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

IP54 rated for moist environments (not for exterior use)

/IP40

/IP54



Fixing is by stainless steel fixing clips, with a choice of two depending on the installation detail

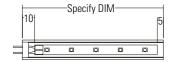
LD Flexi only bends in the vertical plane (around the thinnest side), to a minimum bend radius of 200mm

Lengths are custom made to suit to a maximum of 3015mm**

Not suitable for permanent underwater use



Dimensions in mm



LD FLEXI

IP68 FLEXIBLE 24V LINEAR LED











LD Flexi is a robust, very shallow, IP68 rated flexible 24V linear LED product. Ideal for a range of architectural applications such as step details. LD Flexi is not intended for permanent

Please note colour shift: Due to the resin being in contact with the LED there is a colour shift of around 600K to a cooler white colour temperature. This means the warmest white we can supply is 2800K which uses 2200K LED tape.



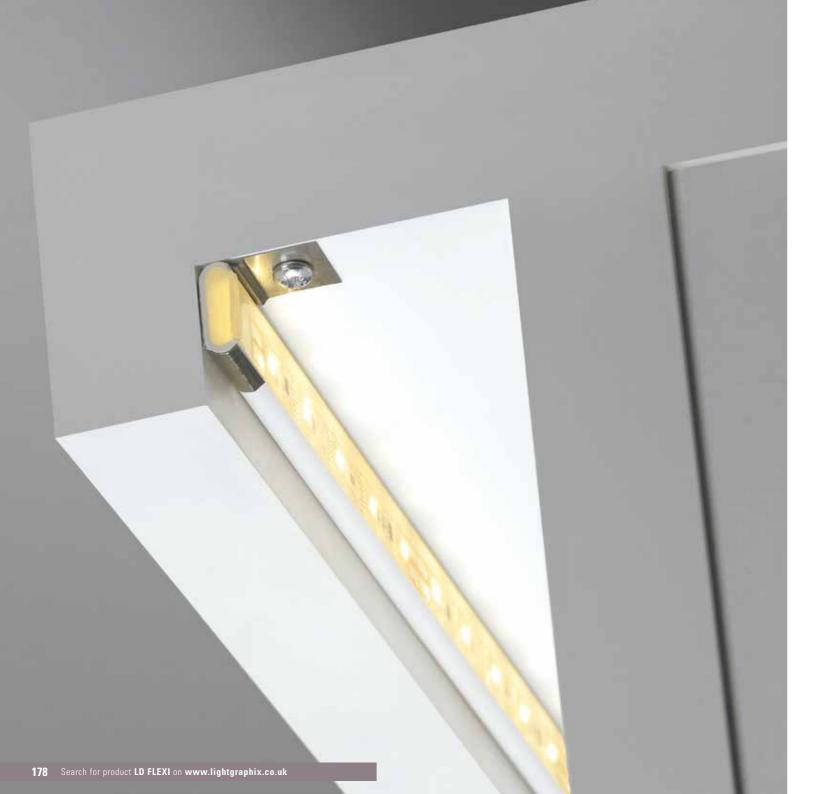
LED OUTPUT OPTIONS >	LG500 500 lm/m			ORT lm/m	RGB ECO 180 lm/m		
Applications			Same applications as Eco but with		Same applications as Fee but with		
	Highlighting archite	ctural details, steps	increased output and closer pitch LEDs		Colour change		
Description	500lm	n tape	Short pi	tch tape	RGB Eco tape		
Colour temperature	2800K (2200K)* / 3100K (2500K)* / 3300K (2700K)*	3600K (3000K)* / 4600K (4000K)*	3000K (2400K)* / 3300K (2700K)* / 3600K (3000K)* 4600K (4000K)* / 5600K (5000K)*		-		
Delivered lumens / m	480lm/m	520lm/m	800lm/m	850lm/m	180lm/m		
Watts / m	3.9V	V/m	8.7\	N/m	6.5W/m		
Lumens per watt	128	m/w	92lm/w	98lm/w	-		
Voltage (V)	24V DC						
CRI	80+				-		

DIMENSIONS

Please see our website for more detailed technical information and photometric files

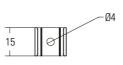
^{*} Resin used within the LD Flexi causes a 600K shift. Bracketed temperature indicates reading before colour shift.

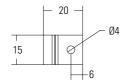
^{**} Shipping and practicalities of installation need to be considered when specifying long lengths



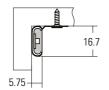
FIXING OPTIONS Dimensions in mm

/AFC - Angled fixing clip /FFC - Flat fixing clip





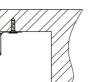




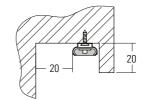
SUGGESTED MOUNTING DETAILS

We recommend the distances shown below when mounting multiple lengths end to end to ensure a continuous wash of light.

ANGLED FIXING CLIP



FLAT FIXING CLIP





ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTION	SUFFIX /LG500 /Short /RGB Eco
LED WHITE COLOUR OPTIONS LG500 Candle White (2800K) Warm white (3100K) Warm white (3300K) White (3600K) Cool white (4600K)	/LW28 /LW31 /LW33 /LW36 /LW46
Short Warm white (3000K) Warm white (3300K) White (3600K) Cool White (4600K) Cool White (5000K)	/LW30 /LW33 /LW36 /LW46 /LW56
FIXING OPTIONS	/AFC /FFC

Use with 24V constant voltage LED drivers (please see page 242) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD LINE 15

MINIATURE LOW PROFILE 24V LINEAR LINE OF LIGHT























LD Line 15 is an incredibly shallow line of light. It has been designed for indirect applications that require no spotting of LEDs. With a depth of only 15mm, it is ideal for shelves as shallow as 30mm and lighting polished/reflective surfaces. LightGraphix worked very closely with BWF in Germany to create a new polycarbonate extrusion based on their colourLED® technology. The special formulation, coupled with the built-in reflector, resulted in a product that achieves no spotting from the LEDs whilst achieving minimal efficiency losses.



KEY FEATURES > 15mm depth

No spotting of LEDs

Built-in reflector

Extruded polycarbonate ColourLED® technology Increased light transmission over conventional opal diffusers

Range of fixing options depending on the detail

Very minimal 1mm thick end caps

IP54 as standard

Rigid profile

IP67 rated version for wet environments

Very cost effective solution when IP40/44 is not enough, and the alternative is an expensive IP68 rated product

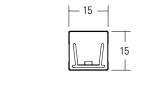
> Lengths are custom made to suit to a maximum of 4013mm*, so no dark spots!

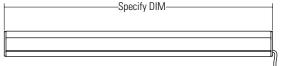
SPECIFICATION

LED	Short pitch LED		
Colour temperature	2400K / 2700K / 3000K 4000K / 5000K		
Delivered lumens / (L ₁₀₀)	490lm/m 530lm/m		
Watts/m	8.7W/m		
Lumens per watt	56lm/w 61lm/w		
Voltage (V)	24V DC		
CRI (typical)	80+		

* Shipping and practicalities of installation need to be considered when specifying long lengths

Please see our website for more detailed technical information





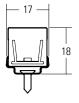


FIXING OPTIONS Dimensions in mm

/NF - No fixing supplied. Product is bonded directly onto the mounting surface. Ideal for routed grooves in 30mm thick shelves.



/SC - Stainless steel fixing clips are ideal for exterior environments. For example under steps or around water features.





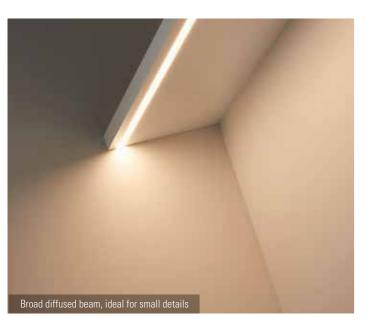
/3M - 3M adhesive tape is suitable for most applications and will provide a very good bond to metal, wood and painted surfaces. 1mm thickness allows for any bumps in the mounting surface. Ideal for routed grooves where the fitting needs to sit flush. Indoor applications only.



/LBM - L brackets change the fixing location to the side of the product, instead of underneath. This is particularly useful in step details where they may not be room to fix up into the step. Supplied with the fixing clips attached.









MOUNTING DETAIL NOTES

End caps are only 1mm thick, and the material matches the linear profile, enabling a very neat join between two non-cable feed ends. The images show the IP54 rated version.





If more than 2 lengths are used (over 8m run) then they would need to be arranged as per above.



IP67 RATED

/IP67 - LD Line 15 can be supplied as IP67. This can be very useful for lighting the edges of ponds or water features, where the LED can be seen in the reflection of the water.

To achieve an IP67 rating, resin is used to seal each end of the product. This produces a 15mm break between the end of the product and the LED. The result is a slightly less bright zone at each end.





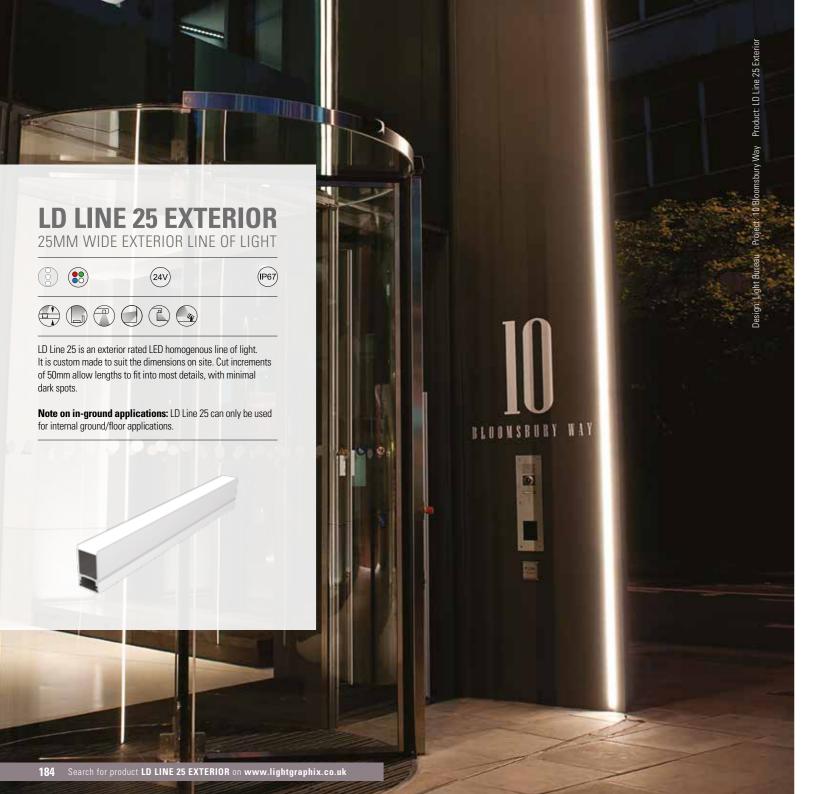
ORDER CODES AND OPTIONS



PRODUCT CODES WITH OUTPUT OPTION Short 490Im/m	SUFFI /Sho
LED COLOUR OPTIONS Super Warm White (2400K) Extra warm white (2700K) Warm white (3000K) White (4000K) Cool white (5000K)	/LW2 /LW3 /LW4 /LW5
FIXING OPTIONS	/N /3N /S /LBN
IP54 (standard) IP67 rated for wet environments	/IP5 /IP6

Use with 24V constant voltage LED drivers (please see page 242) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LED DRIVERS



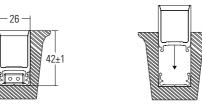
KEY FEATURES

Completely homogeneous line of light

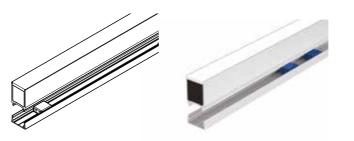
- No spotting of LEDs
- Multiple lengths can be installed end to end for a continuous line of light
- Custom made lengths from 56mm to 1956mm
- 50mm cut increments
- Minimal recess depth
- Surface or recessed mounted
- First fix channel
- Easy installation with innovative wiring method
- IP67 as standard (not suitable for external in-ground high footfall areas)
- Single colour or RGBW
- Not flexible
- 15m can be run off one driver, please talk to us about driver locations and distances

FIXING AND MOUNTING DETAILS

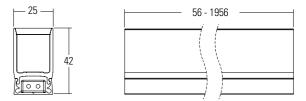
Dimensions in mm



The system has two parts. A first fix aluminium channel is screwed to the mounting surface, a llowing the main body to clip into this.



DIMENSIONS Dimensions in mm



SPECIFICATION

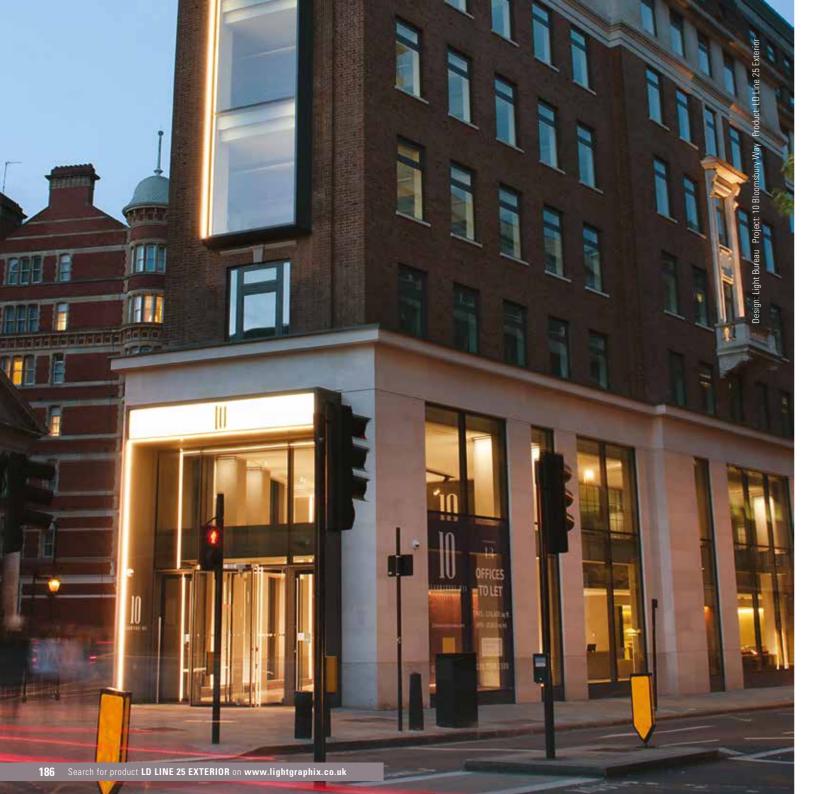
LED	Short LED		RGBW		
Colour temperature	2400K / 2700K / 3000K 4000K / 5000K		RGB + 3000K (2200K)*		
Delivered lumens / (L ₁₀₀)**	300lm/m 400lm/m		600lm/m		
Watts/m	8.9W/m		19.9W/m		
Voltage (V)	24V DC				
CRI (typical)	80+				

*RGBW tape is in direct contact with the resin which causes the white LED to shift in colour by 800K. Bracketed temperature indicates reading before colour shift. With the white LED LD Line 25 this is not an issue as it is encased in a protective housing so there is no colour shift.

Please see our website for more detailed technical information

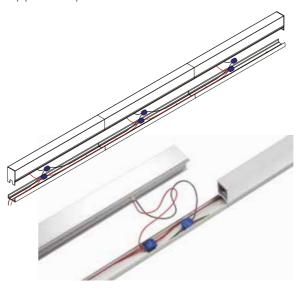


^{**} Lumen data is estimated. Please check website for tested output results



WIRING

LD Line 25 Exterior uses a bus wire to connect each length to the power supply. The supplied pair of wires is laid into the first fix channel to the end of the run. Using the supplied IP rated 3M connectors, each LED length is connected to the bus wire as they are installed. This makes for a very quick and easy installation.



MULTIPLE LENGTHS

Multiple lengths can be installed end to end to create a continuous line of light. 90° corners can be accommodated. Angled mitred corners are not possible.

BROAD DIFFUSED BEAM



ORDER CODES AND OPTIONS

Product Code	LED	LED Colour	Length
LD Line 25 Exterior			
Example: LD Line	e 25 Exterior / Short / L	W30 / 1006mm	

Short RGBW	300lm/m 600 lm/m	/Short /RGBW
Super Warn Extra warm Warm whit	00K) - on request	/LW24 /LW27 /LW30 /LW40 /LW50

LED DRIVERS _

LED LENGTH CODE _

Use with 24V constant voltage LED drivers (please see page 242) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

KEY FEATURES

Choice of LED tapes with higher outputs

90+ CRI LED

Very slim profile for minimal viewing angles

Height adjustable with 90° tilt

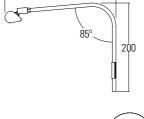
LED assembly is set deep within the profile for reduced glare

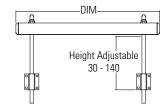
Very lightweight

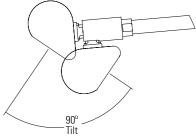
High quality look and feel with machined end caps and brass arms

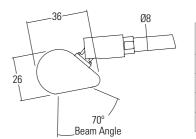
Standard lengths and custom lengths available

Frosted cover available for a more diffused wash



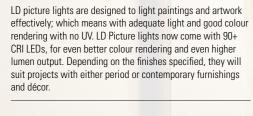






RODUCT LENGTH	ARMS
30mm - 330mm	1
30mm - 1230mm	2
330mm - 2130mm	3
230mm - 3030mm	4





LD PICTURE LIGHT

(24V)

MINIATURE 24V LED PICTURE LIGHT



SPECIFICATION

LED OUTPUT OPTIONS >	LG1200 1200 lm/m		LG2000 2000 lm/m		
Description	1200lm tape		2000lm tape		
Colour temperature*	2000K / 2400K / 5000K 2700K / 3000K / 4000K		2000K / 2400K / 5000K	2700K / 3000K / 4000K	
CRI (typical)	80+ 90+		80+	90+	
Delivered lumens / m	1200lm/m		2000lm/m		
Watts / m	10.4W/m		18W/m		
Lumens per watt	115lm/w		111lm/w		
Voltage (V)	24V DC				

See our website for more detailed technical information and photometric files



WET SPRAY FINISHES

LightGraphix has had four custom colours made up to allow us to give a much closer match to our anodised finishes. This allows us to match the finish of all the component parts of the LED picture light, which is manufactured from many different materials.

/ANTIQUE BRONZE







/SATIN BRASS

/SILVER ANODISED





MOUNTING A DRIVER BEHIND A PICTURE

If the LED driver can not be located remotely then one of the drivers below can be located in a box recessed into the wall behind the picture (wall box supplied by others).

TXDA24008 (8W) - Non dim, to suit standard single gang wall box

TXDTC24020DIM (20W), DALI (16W) - 1-10V / DALI dim, to suit standard double gang wall box





ORDER CODES AND OPTIONS

EXAMPLE PRODUCT LENGTH CODES .



230mm - Single arm 330mm - Single arm 430mm 530mm 630mm Custom lengths up to 3030mm	LD-PL23 LD-PL33 LD-PL43 LD-PL53 LD-PL63 LD-PL**
LED OUTPUT OPTIONS LG1200 - 1200 lm/m - 10.4W/m	SUFFI. /LG120
LG2000 - 2000 lm/m - 18W/m	/LG200
LED COLOUR OPTIONS	SUFFI
Candle White (2000K) - LG1200 & LG2000 only	/LW2
Super Warm White (2400K) - LG1200 & LG2000 only	/LW2
Extra Warm White (2700K)	/LW2
Warm White (3000K)	/LW3
White (4000K)	/LW4
Cool White (5000K)	/LW5
COVER OPTIONS	
Clear	/0
Frosted	/F
EINICH OPTIONS	

Paint finishes – Matt white RAL 9016, Cream white RAL9001, Matt black 9005, Antique bronze, Satin antique brass, Satin brass, Silver anodised Special finishes – please discuss with our sales team

LED DRIVERS ____

Use with 24V constant voltage LED drivers (please see page 242) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

KEY FEATURES

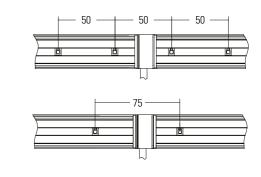
DIMENSIONS

Dimensions in mm

Custom made lengths



LED spacing maintained over multiple lengths





LD26 & LD26A_

HIGH POWER LINEAR REFLECTOR LED SYSTEM











LD26 is available in two versions. A symmetric 82° reflector (LD26) and the LD26A with an asymmetric reflector tilted at 8deg. By mounting the LEDs within a linear reflector, there is no uneven spotting from lenses or loss of output from just using the LED itself. Designed with the latest LED technology to create a continuous wash, the LED spacing is maintained across multiple lengths, so no dark spots! It offers great flexibility to the designer, with a range of options that suit most applications, details and project budgets.

High power for its compact size

SPECIFICATION

LED	Cree XPG2			
Max drive current	500mA			
Max LED power per metre*	34W			
Colour temperature	3000K 5000K			
CRI (typical)	93 75			
Delivered lumens / (L ₁₀₀)				
50mm spacing	2767	3361		
75mm spacing	1798	2185		
100mm spacing	1385	1681		
Lumens per circuit watt	81	99		

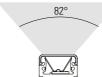
^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

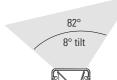


1/0:



/ABM - Adjustable Bracket Mounting





ORDER CODES AND OPTIONS

Product Code	LED	LED	Fixing	Cable	IP	Length
LD26 (A)-350 -500	Colour	Spacing		Entry	rating	
Example: LD26-500 / LW30 / 50 / ABM / SCE / IP40 / 1200mm						

Example. 2020 000 / 2000 / 00 / Note / 10 00 / 1200 mm	
PRODUCT CODES WITH OUTPUT OPTION	
1.2W 350mA	LD26(A)-350
1.7W 500mA	LD26(A)-330 LD26(A)-500
1.7 W 300IIIA	LD20(A)-300
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	SUFFIX /LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA
$\hbox{*Other LED colour temperatures are available. Please speak to a member of our sales team.}$	
LED CDACIALO	
LED SPACING	/[0
75mm	/50 /75
100mm	/100
10011111	7100
FIXING OPTIONS	
Spring clips	/SC
Bracket end mounting	/BEM
Bracket side mounting	/BSM
Adjustable bracket mounting	/ABM
CARLE FAITRY ORTIONS	
CABLE ENTRY OPTIONS	/005
Side cable entry Rear cable entry	/SCE /RCE
End cable entry	/ECE
Lifu Cable effuly	/EUE
IP OPTIONS	
IP40 (internal use as standard)	/IP40
IP54 rated for moist environments	/IP54
LED DRIVERS	

LED DRIVERS

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD26 & LD26A_ **IP66**

HIGH POWER LINEAR REFLECTOR LED SYSTEM













LD26 is now offered in a redesigned IP66 rated housing to reduce the cost per metre. This makes it a far more cost effective solution for lighting walls in showers where IP54 is not a high enough rating, and IP68 is not cost effective. It is a reflector based linear system which has been designed to produce a continuous, even wash with the latest in LED technology. By mounting the LEDs within a linear reflector, there is no uneven spotting from lenses or loss of output from just using the LED itself. It comes in two versions, LD26 with a symmetric 82° reflector and the LD26A with an asymmetric reflector tilted at 8°.

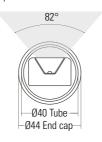


KEY FEATURES

- > Superb continuous lighting capabilities
- IP66 rated for bathrooms and showers
- Reflectors focus the light to where
- Custom made lengths as standard
- High power for its compact size

REFLECTOR OPTIONS

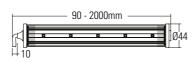
LD26 - Symmetric



LD26A - Asymmetric



Custom made lengths



SPECIFICATION

LED	Cree XPG2			
Max drive current	500mA			
Max LED power per metre*	34W			
Colour temperature	3000K 5000K			
CRI (typical)	93 75			
Delivered lumens / (L ₁₀₀)				
50mm spacing	2767	3361		
75mm spacing	1798	2185		
100mm spacing	1383 168			
Lumens per circuit watt	81 99			

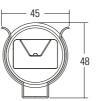
^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

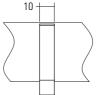
FIXING OPTIONS AND DIMENSIONS

Dimensions in mm









ORDER CODES AND OPTIONS

Product Code	LED Colour	LED Spacing	Fixing Option	Length
LD26 (A) -350 IP66 -500 IP66				
Example: LD26-5	00 IP66 / LW30 /	50 / SC / 2000mm	1	

PRODUCT CODES WITH OUTPUT OPTION 1.2W 350mA 1.7W 500mA	LD26(A)-350 IP66 LD26(A)-500 IP66
Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red Amber *Other LED colour temperatures are available. Please speak to a	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50 /LB /LG /LR /LA member of our sales team.
LED SPACING 50mm 75mm 100mm PRODUCT COLOUR	/50 /75 /100
Silver anodised FIXING OPTIONS Spring clips	

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



KEY FEATURES

- > Superb continuous lighting capabilities
- Multiple point sources create maximum sparkle
- High power for compact size
- > 5 different mounting options
- > Reflector focuses the light where it is needed
- > LED spacing of 50, 75 and 100mm are available, allowing cost savings with fewer LEDs and drivers whilst still achieving the desired effect
- > Custom made lengths as standard

SPECIFICATION

LED	Cree XPG2			
Max drive current	500mA			
Max LED power per metre*	34W			
Colour temperature	3000K	5000K		
CRI (typical)	93	75		
Delivered lumens / (L ₁₀₀)				
50mm spacing	2800	3402		
75mm spacing	1820	2211		
100mm spacing	1400	1701		
Lumens per circuit watt	82	100		

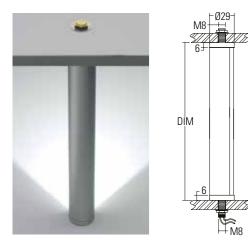
^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files



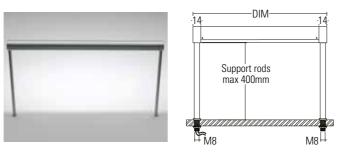
/M1 - Method 1 - Profile fixed from one end using an M8 all-thread and nut. Cable exit through all-thread. Specify Dim.



/M2 - Method 2 - Profile fixed from both ends using M8 all-thread and nut. Cable exit through all-thread and can be either end. Specify Dim.



/M3 - Method 3 - Profile is mounted in a 'goal post' configuration. To direct the light output by 350° loosen M3 grub screws and rotate profile. Specify Dim and support rod length.



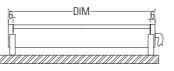
/M4 - Method 4 - Profile fixed from one end using M8 all-thread and nut. Cable exit through all-thread. Specify Dim.





/M5 - Method 5 - Linear profile is fixed using spring fixing clips which are screwed to the surface, cables exit one or both ends. Specify Dim.





THERMALS

Max ambient temp. @ 50mm spacing:-

350mA - 45°C

500mA - 35°C

Requires consideration in small, unventilated display cabinets.



ORDER CODES AND OPTIONS

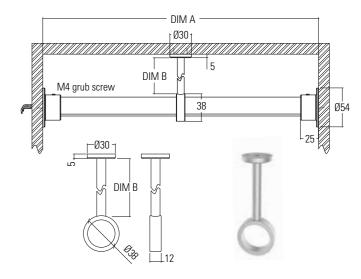
Product Code		LED	Cover	· ·	Finish	Length
LD30-350	Colour	Spacing		Method		(DIM)
-500						
Example: LD30-3	350 / LW30 /	/ 50 / CC / N	11 / Silver	anodised / 10	000mm	

Example: LD30-350 / LW30 / 50 / CC / M1 / Silver anodised / 1000mm	
PRODUCT CODES WITH OUTPUT OPTION 1.2W 350mA 1.7W 500mA	LD30-350 LD30-500
Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) Blue Green Red Amber *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFI) /LW22 /LW27 /LW30 /LW40 /LW50 /LE /LC
LED SPACING	/50 /75 /100
COVER OPTIONS Clear cover Frosted cover	/CC /FD
MOUNTING METHOD Method 1 Method 2 Method 3 Method 4 Method 5	/M1 /M2 /M3 /M4 /M5
FINISH OPTIONS Silver anodised (standard) Black anodised Bronze anodised Paint finish white / black / RAL (only available with LD30-350)	
LED DDIVEDS	

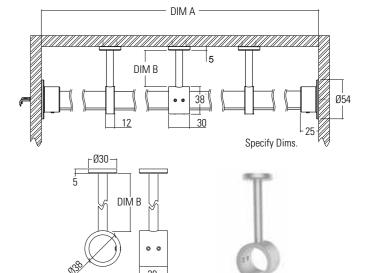
Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

DIMENSIONS AND FIXING OPTIONS

/CS - Centre support is required for lengths over 1.2m. Specify Dim A and B

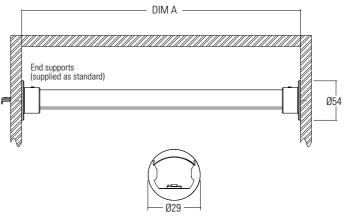


/CP - Coupler is required when the hanging rail exceeds 3m. In this case 2 lengths will be supplied and the coupler hides the join allowing up to a 6m hanging rail. Cable entry will be required at both ends. Specify Dim A and B





- Custom made lengths as standard to suit on site dimensions, max 3m
- Ultra slim profile
- No spotting of LEDs
- 80+ CRI LEDs
- Great colour rendering on the clothes below
- Silver anodised finish recommended as this is the hardest wearing
- Opal cover supplied as standard
- 3mm tolerance built in allowing for adjustment on site



SPECIFICATION

Description	Short pitch tape		
Colour Temperature	2400K / 2700K / 3000K 4000K / 5000K		
Delivered lumens / m*	439lm/m 488lm/m		
CRI (typical)	80+		
Lumens per watt*	50lm/w 56lm/w		
Voltage (V)	24V DC		
Watts / m	8.7W/m		

*LED wattage includes losses associated with using an 85% efficient driver See our website for more detailed technical information and photometric files

LD30HR-24V

LINEAR LED HANGING RAIL







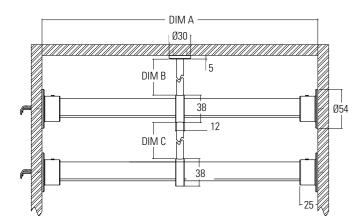




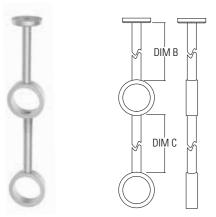


The ultra slim profile of the updated LD30HR creates a very neat way of illuminating clothes in a wardrobe. LD30HR-24V incorporates a 24V LED tape with very close pitch LEDs and an opal diffuser. This creates a very consistent, diffused wash of light onto the clothes below, with no spotting of LEDs. Due to the 24V conversion the LED hanging rail no longer requires multiple drivers, ensuring that savings are achieved on both costs and installation time. Manufactured from high quality, hard wearing extruded and machined aluminium parts this fitting is ideal for high usage environments such as hotels and cloakrooms. The system is custom made to the exact dimensions on site ensuring no gaps in the light output.

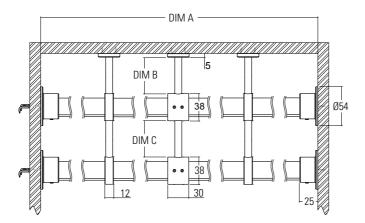
/CSD - Double centre support is required for two lengths over 1.2m. Specify Dim A, B and C



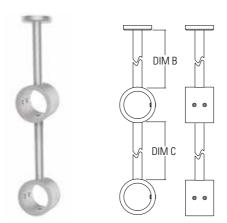
Cable entry is via the ends of the extrusion. (Dimensions in mm)



/CPD - Double coupler. Specify Dim A, B and C



Cable entry is via the ends of the extrusion. (Dimensions in mm)



DESIGN ADVICE

The LD30HR-24V requires various supports depending on the specified length of the fitting. A single centre support must be used every 1.2m. As the longest single length that can be supplied is 3m a coupler must be used when DIM A exceeds this.

DIM A (M)	SHORT PITCH TAPE
0 - 1.1	No support needed
1.2 - 2.4	1 central support
2.5 - 3	2 central supports

Example: Defined dimension is 3.4m. This will be supplied as two lengths of 1.7m. As these individual lengths are between 1.2m - 2.4m, one central supporting ring must be used per length. The image below depicts what the fitting would look like in this situation. Cable exits are from each end.



LD30HR-24V can support up to 20kg of evenly distributed weight.

ORDER CODES AND OPTIONS

Product Code	LED Colour	Fixing	Length (DIM A)	Finish
LD30HR-24				
Example: LD30HF	R-24 / LW30 / CS (I	DIM B = 250mm	n) / 1700mm / Silver a	anodised

LED COLOUR OPTIONS Super Warm White (2400K) Extra Warm White (2700K) Warm White (3000K) White (4000K) Cool White (5000K)	SUFFIX /LW24 /LW27 /LW30 /LW40 /LW50
FIXING OPTION	/CS /CSD /CP /CPD

FINISH OPTIONS_

Silver anodised (recommended)

Black anodised

LED DRIVERS _

Use with 24V constant voltage LED drivers. Please see page 232 1-10V, DMX, DALI dimmable drivers are available

204 Search for product LD30HR-24V on www.lightgraphix.co.uk

KEY FEATURES

- > Low glare with the LEDs set back into the profile within the broad beam reflector
- Illuminates entire shelf area
- By mounting the LEDs within a linear reflector, the light is focused to where it is needed with no loss of output from just using the
- > Clear cover is supplied as standard. A frosted diffuser can be specified, creating a softer light effect which can be useful in tight details
- LED spacings of 50mm and 75mm are available, allowing cost savings with fewer double space LEDs and drivers whilst still achieving the desired effect
- Lengths are custom made to suit to a maximum of 2.1 metres, with LED spacing maintained between lengths, so no dark spots!

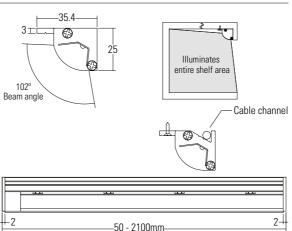
SPECIFICATION

LED	Cree XPG2		
Max drive current	500mA		
Max LED power per metre*	34W		
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens / (L ₁₀₀)			
50mm spacing	2800	3402	
75mm spacing	1820	2211	
100mm spacing	1400	1701	
Lumens per circuit watt	82	100	

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

DIMENSIONS

Dimensions in mm



Product Code | LED Colour | LED Spacing | Cover Length LD32-350 Example: LD32-500 / LW30 / 50 / CC / 1200mm

ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION 1.2W 350mA 1.7W 500mA	LD32-350 LD32-500
LED COLOUR OPTIONS Super warm white (2200K) Extra warm white (2700K) Warm white (3000K) White (4000K) - on request Cool white (5000K) *Other LED colour temperatures are available. Please speak to a member of our sales team.	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50
LED SPACING 50mm 75mm	/50 /75
COVER	/CC /FD /OD
LED DDIVEDS	

Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available



206 Search for product LD32 on www.lightgraphix.co.uk

3 0000

LD32

HIGH POWER LINEAR REFLECTOR LED SYSTEM

HIGH POWER LINEAR LENSED LED SURFACE WASHER

















LD36 surface washer offers superb continuous wall washing capabilities from a very compact product. It offers great flexibility to the designer with a range of options that suit most design details and applications.



KEY FEATURES

- Excellent wall wash capabilities
- Uses the latest in LED technology
- LED spacing is maintained across multiple lengths, so no dark spots!
- High efficiency optics specially designed for LightGraphix guarantee excellent beam spread and shape
- LED spacing of 50, 75 and 100mm are available, allowing cost savings with fewer LEDs and drivers whilst still achieving the desired effect
- 4 fixing options are offered, which include a mini adjustable bracket, ideal for coffers
- IP40 as standard with an IP54 option for wet environments
- Short pieces can be made interlinked to accommodate curves
- More cost effective than using a linked system for an entire project
- Exactly the same product used for both straight and linked sections
- Lengths are custom made, up to 2.1m

SPECIFICATION

LED	Cree XPG2		
Max drive current	500mA		
Max LED power per metre*	34W		
Colour temperature	3000K	5000K	
CRI (typical)	93 75		
Delivered lumens / (L ₁₀₀)			
50mm spacing	2818	3423	
75mm spacing	1832	2225	
100mm spacing	1409	1712	
Lumens per circuit watt	83	101	

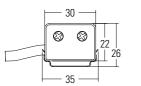
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

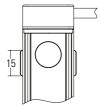


Cable entry is from the side as standard. With the adjustable brackets it is rear cable entry.



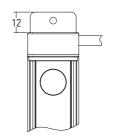






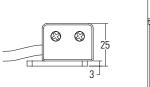


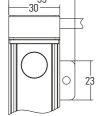


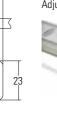


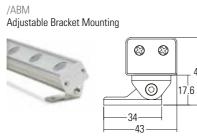
Bracket Side Mounting

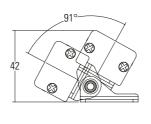












LINKED SECTIONS

Around curves LD36 can be specified in smaller sections depending on the radius. These are hard wired together so the LED spacing is maintained.



ACCESSORIES

Anti-glare louvre. Please note this is always supplied in black finish.







ORDER CODES AND OPTIONS

Product							Acces-	Length
Code	Colour	Spacing	Angle	Colour	Option	rating	sory	
LD36-350 -500								
Example: LD36-500 / LW30 / 50 / OR / White / ARM / IP40 / GL36 / 1200mm								

1.2W LEDs at 350mA 1.7W LEDs at 500mA	LD36-350 LD36-500
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
*Other LED colour temperatures are available. Please speak to a member of	our sales team.
LED SPACING	/50
75mm	/75
100mm	/100
BEAM / LENS ANGLE OPTION	
12º narrow spot	/NB
31º medium	/MB
48° wide	/WB
36° x 12° oval beam	/OB
PRODUCT COLOUR	
White or RAL - lens cover only (extrusion is silver anodised) Black - End caps, lens cover and extrusion all black	
FIXING OPTION	
Spring clips	/\$0
Bracket end mounting (max length 1.2m)	/BEN
Bracket side mounting	/BSN
Adjustable bracket mounting	/ABN
IP OPTION	/IP4(
	/1540
IP40 (internal use as standard)	/IDE/
IP54 rated for moist environments	/IP54

LED DRIVERS -Use with 350mA or 500mA constant current LED drivers (please see page 232)

Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD36 IP66

HIGH POWER LINEAR LENSED LED SYSTEM













LD36 is now offered in a redesigned IP66 rated housing to reduce the cost per metre. This makes it a far more cost effective solution for lighting walls in showers where IP54 is not a high enough rating, and IP68 is not cost effective. It features all the benefits of LD36 with excellent output and wall wash capabilities. It uses the latest in LED technology and collimating lenses to focus the light to create a continuous wash of light. For an IP68 exterior wall grazer, please see our LD38 on page XXX.



- Excellent wall wash capabilities
- Uses the latest in LED technology
- High efficiency optics specially designed for LightGraphix quarantee excellent beam spread and shape
- LED spacing of 50, 75 and 100mm are available, allowing cost savings with fewer LEDs and drivers whilst still achieving the desired effect
- High power from compact size
- Custom made lengths as standard, max 2.1m

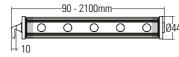
DIMENSIONS

Dimensions in mm



Custom made lengths

accent



SPECIFICATION

LED	Cree XPG2		
Max drive current	500mA		
Max LED power per metre*	34W		
Colour temperature	3000K	5000K	
CRI (typical)	93	75	
Delivered lumens / (L ₁₀₀)			
50mm spacing	2818	3423	
75mm spacing	1832	2225	
100mm spacing	1409	1712	
Lumens per circuit watt	83	101	

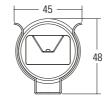
*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

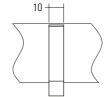
FIXING OPTIONS AND DIMENSIONS

Dimensions in mm









ORDER CODES AND OPTIONS

Silver anodised (white lens cover)

ı	Product Code	LED Colour	LED Spacing	Beam Angle	Product Colour	Fixing Option	Length
ı	LD36 -350 IP66 -500 IP66						
ı	Example: LD36-500 IP66 / LW30 / 50 / OB / White / SC / 1200mm						

PRODUCT CODES WITH OUTPUT OPTION 1.2W 350mA 1.7W 500mA	LD36-350 IP66 LD36-500 IP66
LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request	/LW40
Cool white (5000K)	/LW50
*Other LED colour temperatures are available. Please speak to a member of our sales	team.

LED SPACING	
50mm	/50
75mm	/75
100mm	/100
BEAM / LENS ANGLE OPTIONS	

12° narrow spot	/NB
31° medium	/MB
48° wide	/WB
36° x 12° oval beam	/OB
PRODUCT COLOUR	

,	•	
FIXING OPTIONS		
Spring clips		/



Use with 350mA or 500mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD36 RGB

HIGH POWER LINEAR RGB LENSED SURFACE WASHER















LD36 RGB surface washer offers superb continuous wall washing capabilities, from a very compact product. The use of a single colour mix optic and a single RGB LED allows for very effective near field colour mixing. It offers great flexibility to the designer with a range of options that suit most design details and applications.





- Single colour mix optic for very effective colour mixing
- High power for wall washing
- > Uses the latest in LED technology with an RGB LED mixing at source
- LED spacing is maintained across multiple lengths, so no dark spots!
- 4 fixing options are offered, which include a mini adjustable bracket, ideal for coffers
- IP40 as standard with an IP54 option for wet environments
- Lengths are custom made to suit to a maximum of 975mm
- Short pieces can be made interlinked to accommodate curves

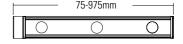
SPECIFICATION

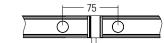
LED	Cree XML
Max drive current	350mA
Max LED power per metre*	42W
Delivered lumens / (L ₁₀₀)	1712

*LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

Custom made lengths

LED spacing maintained over multiple lengths so no gaps in the light output



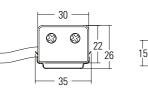


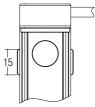


Cable entry is from the side as standard. With the adjustable brackets it is rear cable entry.

/SC Spring Clip Fixing

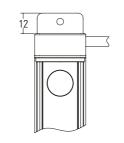






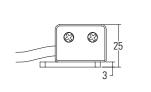


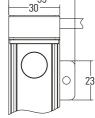




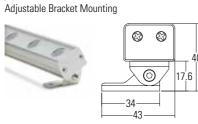
/BSM Bracket Side Mounting

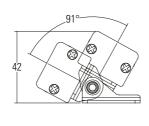












LINKED SECTIONS

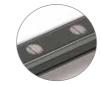
Around curves LD36 can be specified in smaller sections depending on the radius. These are hard wired together so the LED spacing is maintained.

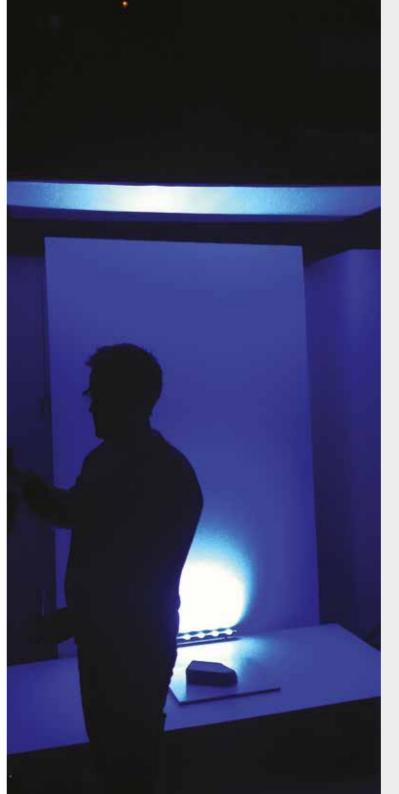


ACCESSORIES

Anti-glare louvre. Please note this is always supplied in black finish.







ORDER CODES AND OPTIONS

Product Code	LED Spacing	Beam Angle	Product Colour	Fixing Option	IP Rating	Accessory	Length		
LD36RGB									
Example: LD36 RGB / 75 / MB / White / ABM / IP40 / 975mm									

PRODUCT CODES WITH OUTPUT OPTION	
3.6W LED 350mA	LD36 RGI
LED SPACING	/7
BEAM / LENS ANGLE OPTION60° wide	/WI
PRODUCT COLOUR	
FIXING OPTION	/S /BEI /BSI /ABI
IP OPTION	/IP4 /IP5
ACCESSORY Linear anti glare louvre (Black)	/GL3
LED DRIVERS	

Use with 350mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

KEY FEATURES

- > Superb continuous wall washing capabilities
- Very high power for surface grazing or flood lighting
- > Compact, minimal design
- > High efficiency optics specially designed for LightGraphix
- > LED spacing of 50, 75 and 100mm
- > Spacing is maintained across multiple lengths, so no dark spots!
- Wide range of fixing options
- > Short pieces can be made interlinked to accommodate curves
- > Lengths are custom made to suit to a maximum of 2.1 metres
- Available with Switched, 0-10V, DMX or Dali drivers

SPECIFICATION

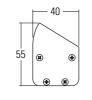
LED	Cree XPG2				
Max drive current	700	lmA			
Max LED power per metre*	48W				
Colour temperature	3000K	5000K			
CRI (typical)	93	75			
Delivered lumens per metre (L ₁₀₀)					
50mm spacing	3920	4763			
75mm spacing	2548	3096			
100mm spacing	1960	2381			
Lumens per circuit watt	57	99			

^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files









LD38S & LD38C EXTERIOR HIGH POWER LINEAR LENSED LED SURFACE GRAZER AND FLOOD LIGHT (500) (700) (500) (700) The LD38 has been redesigned with an easy clean glass cover, which offers increased lumen output and quicker production times. It is an exterior rated, high power surface grazer that offers superb continuous wall washing capabilities. The compact minimal design and RAL finish option enables it to blend into most project styles. It offers great flexibility to the designer with a range of options that suit most design details and applications; available in custom lengths up to 2.1m; optics for wall washing or flood lighting; a range of colour temperatures including RGBW and Tunable White; various mounting options, finishes and accessories. This coupled with the latest in LED technology make LD38 the perfect choice for illuminating an entire external project.

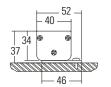
218 Search for product LD38S & LD38C on www.lightgraphix.co.uk



DIMENSIONS AND FIXING OPTIONS Dimensions in mm

Bracket Side Mounting



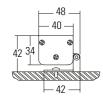


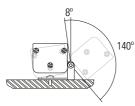


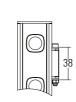


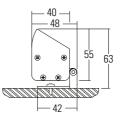
Surface Adjustable Bracket Mounting





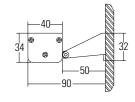


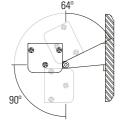


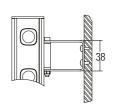


/AWB-50 Adjustable Wall Bracket 50mm



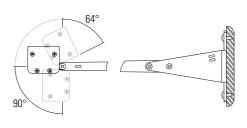


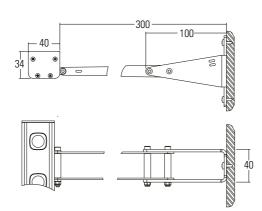




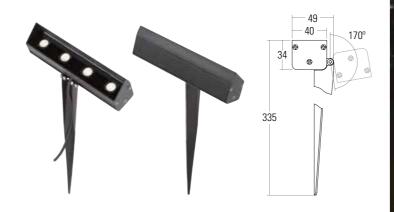
/AWB-300 Adjustable Wall Bracket 300mm (for custom dimensions please contact us)

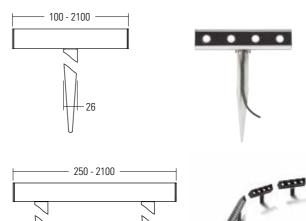


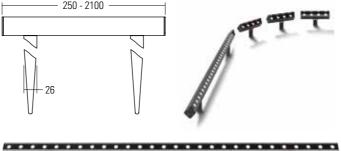




The ground spike accessory enables the use of the LD38 as an innovative alternative to conventional spotlights. It offers linear lighting to a range of landscape and garden lighting effects. Ideal for lighting hedge rows, walls and short pieces to light around trees. It can be specified with wider LED spacing to suit the budget or light output needed.





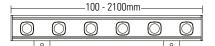


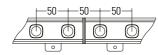


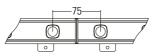


Custom made lengths as standard allow the designer to specify exactly the length they require. Spacing is maintained across multiple lengths, so no dark spots!

• •







FINISHES AND MATERIALS

LD38 has been designed for extreme environments, so only high quality materials and finishes are used to ensure long lasting reliability. All parts are silver anodised to a minimum thickness of 25 microns which offers high protection in all external environments. RAL external paint finishes are also available and allow the LD38 to blend into the surrounding architecture.

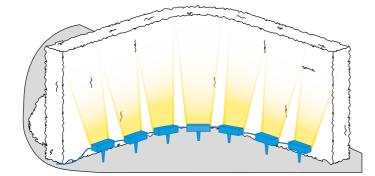
/SILVER ANODISED

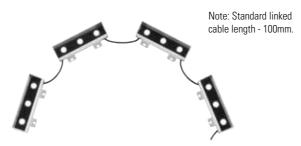
/PAINT FINISH BLACK/WHITE/RAL



LINKED

LD38 can be specified in short sections linked together for going around curves and lighting up columns. Two channels can be used to provide up to 28 LEDs at 500mA or 26 at 700mA.





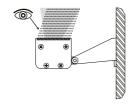
ACCESSORIES

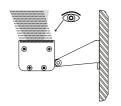
Anti-glare louvre. Please note this is always supplied in black finish, and is supplied as standard with the louvre positioned to reduce glare when looking at the lit surface. The GLF orientation is useful for applications where the LD38 is placed on a window ledge and reduced glare is required from inside the building looking out.



Standard orientation of smart louvre

Orientation available on request







ORDER CODES AND OPTIONS

Product						Accessory	Length		
Code	Colour	Spacing	Angle	Colour	Option				
LD38-500									
-700									

Code LD38-500 -700 Example: LD	Colour 	Spacing (LW30 / 50		Colour	Option (R-50 / GI	/ 500mm	
PRODUCT COD LD38S (without of 1.7W LEDs 5000 2.4W LEDs 7000 LD38C (with cow 1.7W LEDs 5000 2.4W LEDs 7000	ES WITH cowl) mA mA wA mI				D 007 GE	, 63011111	LD38S-500 LD38S-700 LD38C-500 LD38C-700
WHITE LED CO Super warm wh Extra warm white (30 White (4000K) - Cool white (500 Red Green Blue Amber *Other LED colour t	ite (2200K) te (2700K) 000K) on reques 0K)	st	. Please spe	eak to a men	nber of our s	ales team.	SUFFIX /LW22 /LW27 /LW30 /LW40 /LW50 /LR /LB /LB /LG
LED SPACING 50mm 75mm 100mm							/50 /75 /100
BEAM / LENS / 12º narrow spot 31º medium		TION					/NB /MB

BEAM / LENS ANGLE OPTION	
12º narrow spot	/NE
31° medium	/ME
48° wide	/WE
36° x 12° oval beam	/OE
PRODUCT COLOUR	

Silver - End caps, extrusion and fixings (silver anodised) Black - End caps, extrusion and fixings (black powder coat)

White or RAL - End caps, extrusion and fixings (paint finish)

(Custom bronze / brass wet spray paint colours available, please see our finishes guide on page 250)

FIXING OPTION

Adjustable wall bracket (50mm)	/AWB-50
Adjustable wall bracket (300mm)	/AWB-300
Surface mounted bracket	/ABM
Bracket side mounting	/BSM
Ground spike	/GS38
ACCESSORY	
Anti-glare louvre	/GL
Anti-glare louvre (front facing)	/GLF

LED DRIVERS .

Use with 350mA, 500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

LD34

HIGH POWER LINEAR IN-GROUND LED WALL GRAZER



















LD34 is a fixed 2.5° tilt, shallow recessed, low glare, in-ground linear wall grazer, which offers outstanding continuous wall washing capabilities. This IP67 rated, high power surface grazer features an optional frosted diffusion filter to illuminate lower parts of the wall, with individual cowls over each LED ensuring low glare from the viewer's perspective. Available in customised lengths up to 1.4m, with integral glare control options and a range of colour temperatures, including RGBW and Tunable white, the LD34 combines a compact minimal design with the latest in LED technology.





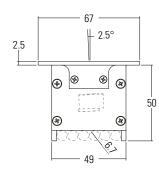
- Superb wall grazing capabilities with a new 60° x 15° beam
- Compact design with only a 55mm recess depth required
- High power with up to 4100lm/m at 5000K
- Range of glare control options
- Individual LED cowls ensure low glare from all directions
- Optional frosted diffusion filter to illuminate lower parts of the wall
- First fix concrete housing available
- LED spacings of 50, 75 and 100mm
- Fixed 2.5° tilt
- Spacing is maintained across multiple lengths, ensuring no dark spots
- Lengths are customised to suit, to a maximum of 1.4 metres
- Available in Switched, 0-10V, DMX, DALI and Mains dimmable drivers

SPECIFICATION

Cree XPG2					
700mA					
3000K	5000K				
93	75				
Delivered lumens / (L ₁₀₀)					
3749	4554				
2437	2960				
1874	2277				
78	95				
	700 3000K 93 3749 2437 1874				

^{*}LED wattage includes losses associated with using an 85% efficient driver See website for more detailed technical information and photometric files

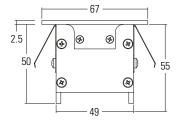
DIMENSIONS Dimensions in mm

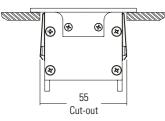


FIXING OPTIONS

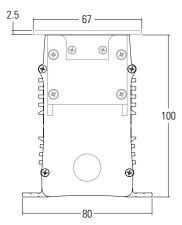
Dimensions in mm

/SC - Spring Clips





/CH - Concrete Housing



ACCESSORIES - GLARE CONTROL OPTIONS



No glare shield for maximum lumen output. Deep recessed optic and matt black cowl aids in glare reduction.



Teamed with the 2.5° fixed tilt the 40% glare shield provides glare protection with only a 28% reduction in total lumens. No loss of light on the lit surface.



Half glare shield. For an increased cut-off angle and greater glare control. No loss of light on the lit surface.



/GS40 WITH /FD

40% glare shield and diffusion film combination. The aperture allows the main punch of the beam to leave the fitting, providing glare protection from one side and moving the start of the beam down to the floor on the other.

ACCESSORIES



Anti-glare louvre. LD34 can be supplied with the glare louvre however the /GS40 is recomended as it provides the same amount of glare protection and delivers a better lit effect on the wall. Please note this is always supplied in a black finish, and is supplied as standard with the louvre positioned to reduce glare when looking at the lit surface.

FINISHES

LD34 has been designed for extreme environments, so only high quality materials and finishes are used to ensure long lasting reliability. All parts are silver anodised to a minimum thickness of 25 microns which offers high protection in all external environments.

ORDER CODES AND OPTIONS

PRODUCT CODES WITH OUTPUT OPTION _

Product	Code	LED	LED	Beam	Product	Fixing	Accessory	Length
LD34	-350 -500	Colour	LED Spacing	Angle	Colour			
Exampl	le: LD3	34-500 / L\	W30 / 50 / N	NB / Silve	r / CH / FD ,	/ 1200mr	n	

1.7W LEDs at 500mA 2.4W LEDs at 700mA	LD34-500 LD34-700
WHITE LED COLOUR OPTIONS	SUFFIX
Super warm white (2200K)	/LW22
Extra warm white (2700K)	/LW27
Warm white (3000K)	/LW30
White (4000K) - on request Cool white (5000K)	/LW40 /LW50
Red	/LVV5C
Green	/LF
Blue	/LG
Amber	/LA
*Other LED colour temperatures are available. Please speak to a member of our sales team.	, 2,
LED SPACING	
50mm	/50
75mm	/75
100mm	/100
BEAM / LENS ANGLE OPTIONS	
12° narrow spot	/NE
31° medium	/ME
48° wide	/WE
36° x 12° oval beam	/OE
60° x 15° extra oval beam	/EOE
PRODUCT COLOUR	
FIXING OPTIONSSpring Clips	/CH
Concrete housing	/\$0
onoroto nodoling	/00
ACCESSORY	
Frosted Diffusion Film	/FD
Glare shield (40%)	/GS40
Glare shield (50%) Anti-glare louvre	/GS50 /GL
Anu-yide iouvie	/61
LED DRIVERS	

Use with 350mA,500mA or 700mA constant current LED drivers (please see page 232) Switched, 0-10V, DMX, DALI and Mains dimmable drivers are available

ROBNORRESINS EN AMERICAN **IP KIT 10** RESIN KIT FOR IP68 RATED CONNECTIONS IP68 IP connections are very important when wiring fittings in wet or damp environments. When fittings are not wired with an IP68 connection, water that pools around exposed cables can corrode wires or be drawn through the cable sheath and into the fitting, which can lead to irreparable damage. The IP connection kit is designed for use in all exterior applications. We would always recommend in exterior applications that connections are done in a dry location if possible. LightGraphix products can be specified with longer leads if needed. Connections should never be

made under water.

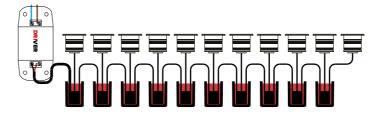
KEY FEATURES

- > Up to 10 connections (11 LED fittings) per IP Kit
- Designed for single colour constant current LED fittings and 24V linear
- Quick and simple method of creating IP68 connections on site
- Resin-filled cartridge for easy handling on site
- > Once fully cured it provides reliable and robust protection
- Potted connections ready to install within 2 hours (light handling)
- Minimal size, can fit in cut-outs as small as 26mm in diameter
- Works with both in series and parallel wiring

KEY FEATURES

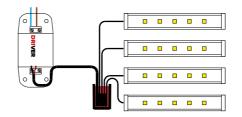
CONSTANT CURRENT (WIRING IN SERIES)

Up to 10 connections for 11 LED fittings per Resin Kit



24V CONSTANT VOLTAGE (PARALLEL WIRING)

Up to 4 Linear LED fittings per connection



ORDER CODES AND OPTIONS

DESCRIPTION .

ORDER CODE

IPKit10

IP68 resin kit for 10 connections

Example: LD56 - 700 / LW27 / MB / SS / 476 / IP KIT 10

INSTALLATION

For more detailed instructions, please contact our sales team

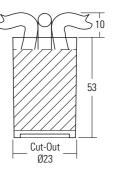








DIMENSIONS



228 Search for product IP KIT 10 on www.lightgraphix.co.uk

GROUND FIXING TUBES

FIRST FIX IN-GROUND MOUNTING TUBES

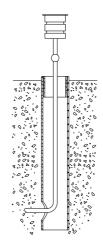
The in-ground tubes have been designed for applications where a recessed uplighter is required in soil or gravel surfaces. The tube can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed.





KEY FEATURES

- > Ideal for use in soil or gravel where a recessed uplight is required
- Supplied with fixing sleeve bonded into tube
- Manufactured from PVC or polycarbonate for high chemical and environmental resistance
- Can be cut down on site (cable will need to come up from underneath)
- IP rated connection required inside tube or specify longer cables for remote connection

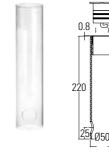


ORDER CODES AND DIMENSIONS

For use with any fitting that uses the /480 sleeve e.g. LD41, LD43, LD60, LD61, LD62, LD64 & LD65 Outer Diameter: 36.6mm, Length: 200mm



For use with any fitting that uses the /476 sleeve e.g. LD56, LD56T & LD56 RGB Outer Diameter: 50mm Length: 220mm



For use with any fitting that uses the /484S sleeve e.g. LD151

Outer Diameter: 83.3mm Length: 300mm



HOW TO SPECIFY

To specify the in-ground tubes, add the relevant code to the end of your specification. The fixing sleeve is supplied bonded into the tube.

EXAMPLE:

LD41-350 / LW27 / NB / Stainless steel / 480GT LD56-700 / LW27 / MB / Stainless steel / 476GT LD151-500 / LW27 / NB / Stainless steel / 484GT

230 Search for product GROUND TUBES on www.lightgraphix.co.uk

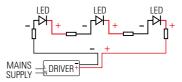
350mA LED Drivers

LEDs use specific drivers to run them. They are different from normal low voltage fittings in that they must be wired in series and need a constant current. Drivers can be placed 10m from the LEDs. Longer distances of 10-40m can be achieved by using a larger diameter cable to reduce the volt drop, or taking one LED off the maximum the driver can run. Please contact us for more information.

Example fittings that use these drivers include: LD41-350, LD42-350, LD150-350, LD10236-350, LD26-350, LD36-350

WIRING IN SERIES

LEDs need to be connected with an 'in-series' wiring method.



350mA		=		UL	UL	UL	UL	UL	UL
Constant Current Drivers	TXDL06CC350	TXDS2	TXDP12	TXDEL350S	TXDEL350D	TXDEL350DALI	TXDEL4S350D	TXDEL4S350DALI	TXDEL4A350DMX TXDEL4A350DALI
	GE Lightec	Arditi	TCI	EldoLED	EldoLED	EldoLED	EldoLED	EldoLED	EldoLED
1.2W FITTINGS	1 - 4	1 - 3	1 - 12	1 - 14	1 - 14	1 - 14	56 (4 x 1 - 14)	56 (4 x 1 - 14)	56 (4 x 1 - 14) 2 - 13 RGB tri chips
3.6W (3x1.2W) FITTINGS	1	1	1 - 4	1-4	1 - 4	1 - 4	16 (4 x 1 - 4)	16 (4 x 1 - 4)	16 (4 x 1 - 4)
5W FITTINGS	1	-	1 - 3	1 - 4	1 - 4	1 - 4	12 (4 x 1 - 3)	12 (4 x 1 - 3)	12 (4 x 1 - 3) 2 - 13 RGBW
7W FITTINGS	-	-	1 - 2	1-2	1-2	1-2	8 (4 x 1 - 2)	8 (4 x 1 - 2)	8 (4 x 1 - 2)
Number of outputs/circuits	1	1	1	1	1	1	4	4	4 individually addressable
Dimmable	no	no	no	no	0 - 10V (1 - 100%)*	DALI (0 - 100%)*	0 - 10V (0 - 100%)*	DALI (0 - 100%)*	DMX, DALI (0 - 100%)*
Output Current (mA)	350mA	350mA	350mA	350mA	350mA	350mA	350mA	350mA	350mA
Output Voltage (V)	2 - 20V	3 - 12V	43V	2 - 55V	2 - 55V	2 - 55V	2 - 57V per channel	2 - 57V per channel	2 - 57V per channel
Output Wattage (W)	6W	6W	15W	30W	30W	30W	100W	100W	100W
Dimensions L x W x H (mm)	45 x 60 x 25	42 x 40 x21	115 x 34 x 19	210 x 41 x 34	210 x 41 x 34	210 x 41 x 34	388 x 42 x 30	388 x 42 x 30	388 x 42 x 30
Hole Cut-out (mm)	51Ø	44Ø	40Ø	51Ø	51Ø	51Ø	N/A	N/A	N/A
IP Rating	IP67 as standard	Drivers can be supplied in an IP rated box for use in wet environments.					Drivers can be supplied in an IP rated	I box for use in wet environments.	

RGB LED NOTE:

Green and blue LEDs have a maximum forward voltage of 3.8V (white is max 3.2V at 350mA). So take 1 LED off the total the driver can run. TXDL36RGB and TXDEL4A350 drivers list the amount of RGB and RGBW LEDs they can run. NB: (number of circuits) x (number of LEDs)

* Dimming range can vary depending on the manufacturer and type of control system used

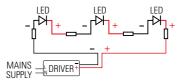
500mA LED Drivers

LEDs use specific drivers to run them. They are different from normal low voltage fittings in that they must be wired in series and need a constant current. Drivers can be placed 10m from the LEDs. Longer distances of 10-40m can be achieved by using a larger diameter cable to reduce the volt drop, or taking one LED off the maximum the driver can run. Please contact us for more information.

Example fittings that use these drivers include: LD42-500, LD1030-500, LD36-500, LD26-500

WIRING IN SERIES

LEDs need to be connected with an 'in-series' wiring method.



500mA			UL	UL	UL UL	UL	UL	UL
Constant Current Drivers	TXDL06CC550	TXDL12CC500	TXDEL500S	TXDEL500D	TXDEL500DALI	TXDEL4S500D	TXDEL4S500DALI	TXDEL4A500DMX TXDEL4A500DALI
	GE Lightec	GE Lightec	EldoLED	EldoLED	EldoLED	EldoLED	EldoLED	EldoLED
1.7W FITTINGS	1-3	1 - 8	1 - 14	1 - 14	1 - 14	56 (4 x 1 - 14)	56 (4 x 1 - 14)	56 (4 x 1 - 14)
5.1W (3x1.7W) FITTINGS	1	1 - 2	1 - 4	1 - 4	1 - 4	16 (4 x 1 - 4)	16 (4 x 1 - 4)	16 (4 x 1 - 4)
7W FITTINGS	1	1	1 - 4	1 - 4	1 - 4	12 (4 x 1 - 3)	12 (4 x 1 - 3)	12 (4 x 1 - 3) 2 - 13 RGBW
10W FITTINGS	-	1	1-2	1-2	1-2	8 (4 x 1 - 2)	8 (4 x 1 - 2)	8 (4 x 1 - 2)
Number of outputs/circuits	1	1	1	1	1	4	4	4 individually addressable
Dimmable	no	no	no	0 - 10V (1 - 100%)*	DALI (0 - 100%)*	0 - 10V (0 - 100%)*	DALI (0 - 100%)*	DMX, DALI (0 - 100%)*
Output Current (mA)	500mA	500mA	500mA	500mA	500mA	500mA	500mA	500mA
Output Voltage (V)	2 - 14V	2 - 26V	2 - 55V	2 - 55V	2 - 55V	2 - 50V per channel	2 - 50V per channel	2 - 50V per channel
Output Wattage (W)	6W	12W	30W	30W	30W	100W	100W	100W
Dimensions L x W x H (mm)	45 x 60 x 25	100 x 40 x 28	210 x 41 x 34	210 x 41 x 34	210 x 41 x 34	388 x 42 x 30	388 x 42 x 30	388 x 42 x 30
Hole Cut-out (mm)	51Ø	48Ø	51Ø	51Ø	51Ø	N/A	N/A	N/A
IP Rating	IP67 as standard	Drivers can be su	Drivers can be supplied in an IP rated box for use in wet environments. Drivers can be supplied in an IP rated box for use in wet environments.					

RGB LED NOTE:

Green and blue LEDs have a maximum forward voltage of 3.8V (white is max 3.2V at 350mA). So take 1 LED off the total the driver can run. TXDEL4A500 drivers list the amount of RGBW LEDs they can run. NB: (number of circuits) x (number of LEDs)

* Dimming range can vary depending on the manufacturer and type of control system used

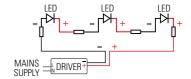
700mA LED Drivers

LEDs use specific drivers to run them. They are different from normal low voltage fittings in that they must be wired in series and need a constant current. Drivers can be placed 10m from the LEDs. Longer distances of 10-40m can be achieved by using a larger diameter cable to reduce the volt drop, or taking one LED off the maximum the driver can run. Please contact us for more information.

Example fittings that use these drivers include: LD56-700, LD1090-700, LD51-700

WIRING IN SERIES

LEDs need to be connected with an 'in-series' wiring method.



700mA		The state of the s	UL	UL	UL UL	UL	UL	UL
Constant Current Drivers	TXDS2/700	TXDP17	TXDEL700S	TXDEL700D	TXDEL700DALI	TXDEL4S700D	TXDEL4S700DALI	TXDEL4A700DMX TXDEL4A700DALI
	Arditi	Arditi	EldoLED	EldoLED	EldoLED	EldoLED	EldoLED	EldoLED
2.4W FITTINGS	1-2	1 - 6	1 - 13	1 - 13	1 - 13	40 (4 x 1 - 10)	40 (4 x 1 - 10)	40 (4 x 1 - 10)
10W FITTINGS	-	1	1-3	1-3	1-3	8 (4 x 1 - 2)	8 (4 x 1 - 2)	8 (4 x 1 - 2)
14W FITTINGS	-	1	1-2	1 - 2	1-2	4 (4 x 1)	4 (4 x 1)	4 (4 x 1)
Number of outputs/circuits	1	1	1	1	1	4	4	4 individually addressable
Dimmable	no	no	no	0 - 10V (1 - 100%)*	DALI (0 - 100%)*	1 - 10V (0 - 100%)*	DALI (0 - 100%)*	DMX, DALI (0 - 100%)*
Output Current (mA)	700mA	700mA	700mA	700mA	700mA	700mA	700mA	700mA
Output Voltage (V)	3 - 8.5V	3 - 24V	2 - 42V	2 - 42V	2 - 42V	2 - 35.7V	2 - 35.7V	2 - 35.7V
Output Wattage (W)	6W	17W	30W	30W	30W	100W	100W	100W
Dimensions L x W x H (mm)	42 x 40 x 21	125 x 38 x 22	210 x 41 x 34	210 x 41 x 34	210 x 41 x 34	388 x 42 x 30	388 x 42 x 30	388 x 42 x 30
Hole Cut-out (mm)	44Ø	43Ø	51Ø	51Ø	51Ø	N/A	N/A	N/A
IP Rating	Drivers can be supplied in an IP rated box for use in wet environments. Drivers can be supplied in an IP rated box for use in wet environments.							

NB: (number of circuits) x (number of LEDs)

^{*} Dimming range can vary depending on the manufacturer and type of control system used

350 - 700mA Phase ______ Mains Dimmable LED Drivers

Phase/mains dimmable drivers must always be specified with care as there are many factors that can affect how well they dim. If possible on a project it is best to use mains dimmable drivers from the same manufacturer, especially if they are on the same room or circuit. Drivers can be placed 10m from the LEDs. Longer distances of 10-40m can be achieved by using a larger diameter cable to reduce the volt drop, or taking one LED off the maximum the driver can run. Please contact us for more information.

350mA Constant Current Drivers	
	TXDTC350PHD
1.2W FITTINGS	1 - 14
3.6W (3x1.2W) FITTINGS	1 - 4
5W FITTINGS	1-3
7W FITTINGS	1-2
Number of outputs/circuits	1
Dimmable	240V trailing & leading edge (5 - 100%)*
Output Current (mA)	350mA
Output Voltage (V)	2 - 47V
Dimensions L x W x H (mm)	166 x 46 x 34
Hole Cut-out (mm)	51Ø
IP Rated	Can be supplied in an IP rated box for use in wet environments

500mA Constant Current Drivers	()
	TXDTC500PHD
1.7W FITTINGS	1 - 14
5.1 (3x1.7W) FITTINGS	1 - 4
7W FITTINGS	1 - 3
10W FITTINGS	1 - 2
Number of outputs/circuits	1
Dimmable	240V trailing & leading edge (5 - 100%)*
Output Current (mA)	500mA
Output Voltage (V)	2 - 47V
Dimensions L x W x H (mm)	166 x 46 x 34
Hole Cut-out (mm)	51Ø
IP Rated	Can be supplied in an IP rated box for use in wet environments

* Dimming range can vary depending on the manufacturer of the dimmer/control system used

700mA Constant Current Drivers	
	TXDTC700PHD
2.4W FITTINGS	1 - 13
10W FITTINGS	1-3
14W FITTINGS	1-2
Number of outputs/circuits	1
Dimmable	240V trailing & leading edge (5 - 100%)*
Output Current (mA)	700mA
Output Voltage (V)	2 - 46V
Dimensions L x W x H (mm)	166 x 46 x 34
Hole Cut-out (mm)	51Ø
IP Rated	Can be supplied in an IP rated box for use in wet environments



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350 - 700mA LED Drivers 24V Input

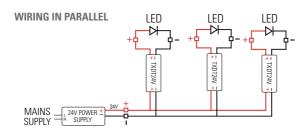
These drivers require a 24V input and provide an output of either 350mA, 500mA or 700mA constant current supply. This makes them particularly useful for boat applications where there is only a 24V supply. The drivers can dimmed using a pulse width modulation signal (PWM) from a TXDO DIM controller (see 24V LED driver section).

350mA 24V DC Input		122		
·	TXDT24V350	TXDT24V350IP68		
1.2W FITTINGS	1 - 6	1 - 6		
3.6W (3x1.2W) FITTINGS	1 - 2	1 - 2		
5W FITTINGS	1	1		
7W FITTINGS	1	1		
Number of outputs/circuits	1	1		
Dimmable	PWM (TXDO-DIM, 1-10V, DALI, DMX)	PWM (TXDO-DIM, 1-10V, DALI, DMX)		
Output Current (mA)	350mA	350mA		
Output Voltage (V)	20V	20V		
Dimensions L x W x H (mm)	58 x 31 x 21	57 x 34 x 22		
Hole Cut-out (mm)	38Ø	35Ø		
IP Rating	-	IP68		

^{*} See driver data sheet for more information

500mA 24V DC Input	The same of the sa	TXDT24V500IP68		
	TXDT24V500			
1.7W FITTINGS	1 - 6	1 - 6		
5.1W (3x1.7W) FITTINGS	1 - 2	1 - 2		
7W FITTINGS	1	1		
10W FITTINGS	1	1		
Number of outputs/circuits	1	1		
Dimmable	PWM (TXDO-DIM, 1-10V, DALI, DMX)	PWM (TXDO-DIM, 1-10V, DALI, DMX)		
Output Current (mA)	500mA	500mA		
Output Voltage (V)	20V	20V		
Dimensions L x W x H (mm)	58 x 31 x 21	57 x 34 x 22		
Hole Cut-out (mm)	38Ø	35Ø		
IP Rating	-	IP68		

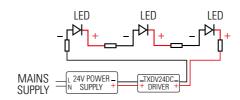
^{*} See driver data sheet for more information

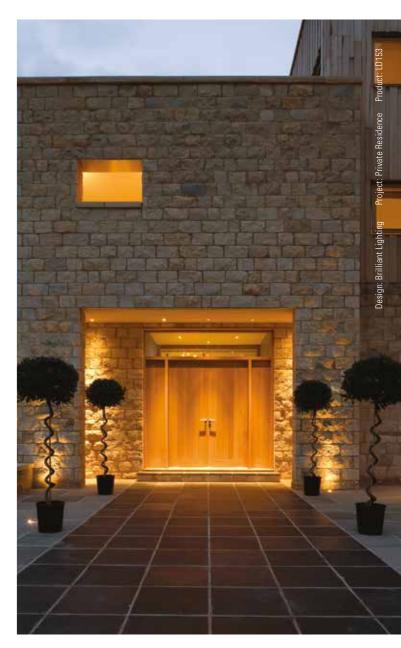


700mA 24V DC Input	W. J.			
217 Bo input	TXDT24V700	TXDT24V700IP68		
2.4W FITTINGS	1 - 6	1 - 6		
10W FITTINGS	1	1		
14W FITTINGS	1	1		
Number of outputs/circuits	1	1		
Dimmable	PWM (TXDO-DIM, 1-10V, DALI, DMX)	PWM (TXDO-DIM, 1-10V, DALI, DMX)		
Output Current (mA)	700mA	700mA		
Output Voltage (V)	20V	20V		
Dimensions L x W x H (mm)	58 x 31 x 21	57 x 34 x 22		
Hole Cut-out (mm)	38Ø	35Ø		
IP Rating	-	IP68		

^{*} See driver data sheet for more information

WIRING IN SERIES





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^{*} Information provided above is based on a 24V input

24V LED Drivers

LEDs using these specific drivers require a 24V DC constant voltage input with a parallel wiring method. Max 10m. Example fittings that use these drivers include: LD Picture Light, LD Flexi, LD11, LD Line 15, LD22.

24V Constant Voltage Drivers	No.					W-2010	
	TXDA24008	TXDTC24020DIM	TXDTC2402DALI	TXD024020	TXD024075	TXDL24150	TXDL24200
Output Power (W)	8W	20W	20W	20W	75W	150W	200W
Dimmable	use with Dimming Contoller	Integrated Dimming (1-10) controller	Integrated Dimming (DALI) controller	use with Dimming Controller	use with Dimming Controller	use with Dimming Controller	use with Dimming Contoller
Output Voltage (V)	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC
Dimensions L x W x H (mm)	68 x 35 x 21.5	108 x 52 x 22	108 x 52 x 22	109 x 50 x 35	220 x 46.2 x 43.6	300 x 65 x 42	300 x 65 x 42
IP Rating		Dri	vers can be supplied i	n an IP rated box for u	use in wet environmer	nts.	

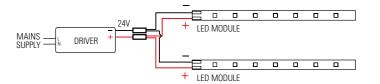
24V Dimming Controllers	UL	UL	UL	UL	UL	UL	UL	UL
Controllers	TXD0-DIM	TXDO-DIM DALI	TXDO-DIM RGB	TXDEL-DIM	TXDEL-DIM DALI	TXDEL-DIM DMX	TXDEL-DIM DMX 2CH	TXDEL-DIM RGBW DMX
Output Power (W)	0 - 120W	0 - 120W	3 x 48W	192W	192W	192W	192W	4 x 36W
UL approved	1	1	3	1	1	1	2	4
Dimmable	1 - 10V (0 - 100%)	DALI (0 - 100%)	1 - 10V (0 - 100%)	0-10V (0 - 100%)	DALI (0 - 100%)	DMX (0 - 100%)	DMX (0 - 100%)	DMX (0 - 100%)
Output Voltage (V)	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC
Dimensions L x W x H (mm)	172 x 42 x 20	172 x 42 x 20	172 x 42 x 20	153 x 50 x 23	153 x 50 x 23	153 x 50 x 23	153 x 50 x 23	153 x 50 x 23
IP Rating		Dim	ming controllers ca	n be supplied in an	IP rated box for us	e in wet environme	ents.	

24V Constant Voltage		
Mains Dimmable Drivers	TXDEC24050PHD	
Output Power (W)	50W	
Dimmable	240V leading edge dimmable	
Output Voltage (V)	24V DC	
Dimensions L x W x H (mm)	174 x 61 x 24	
IP Rating	Drivers can be supplied in an IP rated box for use in wet environments.	

Please Note: Dimming drivers must be tested with control systems to assess compatibility.

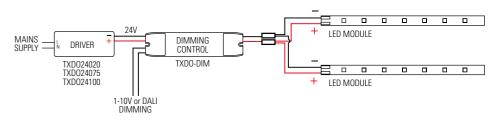
NON DIMMING WIRING DIAGRAMS

LED modules are wired to the driver using a parallel wiring method.

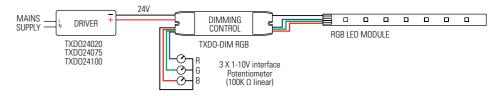


DIMMING WIRING DIAGRAMS

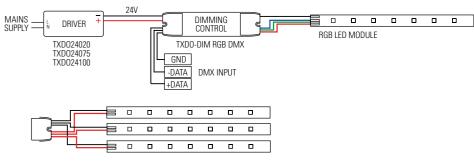
1-10V or DALI dimming for single colour modules with a TXDO-DIM or TXDO-DIM DALI controller.



1-10V dimming for RGB modules with a TXDO-DIM RGB controller.



DMX dimming for RGB or single colour LED modules with a TXDO-DIM RGB DMX controller.



SINGLE COLOUR LED MODULES

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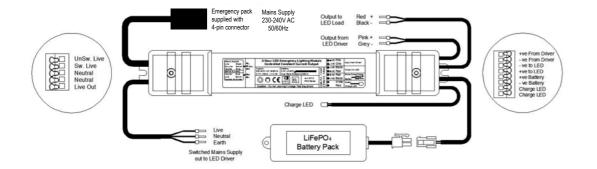
LED Emergency Packs - EP4

3Hr emergency lighting conversion kits designed to suit a wide variety of LED types and circuits. They are designed to be installed by breaking into the low voltage connection between the mains LED driver and the LEDs and allows the LEDs to be operated as normal under mains healthy conditions and operated at reduced light output in an emergency. The emergency driver is designed to automatically adjust the LED output current to provide the best match between the battery and the load, providing maximum illumination whilst ensuring full battery duration.

The emergency pack will need a specified LED driver to run the LEDs when not in emergency mode.

EP4 - (NLP/1/TP40) Emergency LED driver and batteries supplied in a kit. Specified driver supplied and wired separately.





BALLAST LUMEN FACTOR

The Ballast Lumen Factor is the output of the LED in emergency mode, and is described as a percentage of the output in normal operation

Output 0	Current	t (mA)							Number	of fittings						
		Example product	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Single LED fittings	0	LD41, LD72	560mA	320mA	230mA	180mA	145mA	120mA	105mA	90mA	80mA	75mA	70mA	60mA	55mA	55mA
3 die LED fittings	00	LD52, LD75	230mA	120mA	80mA	60mA										
4 die LED fittings	88	LD151, LD153	180mA	90mA	60mA		•									
6 die LED fittings	&	LD1210	120mA	60mA		•				Lui	minaire Pov	ver 5	W 7	W 1	DW 1	1W
COB LED	0	LD1080, LD1092	120mA	60mA							BLF	60	1% 43	3% 3	0% 2	1%

BLF can be worked out by dividing the current in emergency (see above) by the normal running current. E.g. for 3 LEDs normally run at 700mA the BLF will be 250mA ÷ 700mA = 36%.

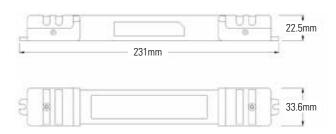
SPECIFICATION

Supply Voltage	220 - 240 Volts AC 50/60 Hz
Power Rating	3.2 Watts
Power Factor	0.4
Duration	3 hours
Ambient Temp	0°C to + 50°C
Max case temperature	70°C
Max battery temperature	55°C
Terminal blocks	0.5 - 1.5mm ² Push Wire terminal
Battery fuse	Internal
Supply fuse	N/A
Battery pack	3.2V 3.6Ah LiFePO4 Cell
Charge current	0-250mA
Recharged period	24 hours

DIMENSIONS

RCE

Dimensions - Module	231 x 34 x 23mm
Total weight	1.0kg



EMERGENCY PACK OPTION CODE EP4 EP4 (NLP/1/TP40)

LED Emergency Pack - EP3









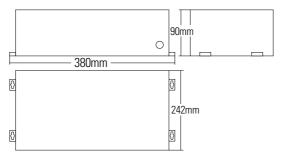
A remote conversion kit designed to provide full output in emergency mode and will power all loads capable of accepting 230VDC, up to 40W. 3Hr emergency lighting conversion kits designed to suit a wide variety of LED types and circuits. It is suitable for both constant current and constant voltage LEDs.

KEY FEATURES

- > Full output in emergency mode
- Conversion kit for mains voltage LED drivers
- Deep discharge protection
- Entire unit housed inside one enclosure
- High capacity VRLA batteries (integral)
- Max 40W load
- Supplied with 1m green charge healthy LED indicator and mounting collar

FIXING OPTIONS AND DIMENSIONS

Dimensions - Module (WxHxD)	380mm x 242mm x 90mm
Total Weight	9.0 Kg



QUANTITY OF FITTINGS PER EMERGENCY PACK

Output	Current (mA)	Maximum amount of LEDs per Emergency Pack				
LED type	Example fittings	350mA	500mA	700mA		
1 LED cluster	O LD56, LD72	33	23	16		
3 LED cluster	© LD52, LD74	11	7	-		
4 LED cluster	(S) LD151, LD10238	8	5	4		
6 LED cluster	(S) LD1210, LD1220	5	4	2		
COB LED	O LD1080, LD1092	5	4	2		

SPECIFICATION

_
220-240 Volts AC 50/60Hz
6.0 Watts
3 Hours
100% in Emergency Mode
40 Watts
12 Volt Valve Regulated Lead-Acid
17Ah
Constant Voltage
24 Hours
10.2 Volts
0°C to + 25°C
IP20
Sheet Steel Hinged Enclosure
380mm x 242mm x 90mm
Integral
9.0KG



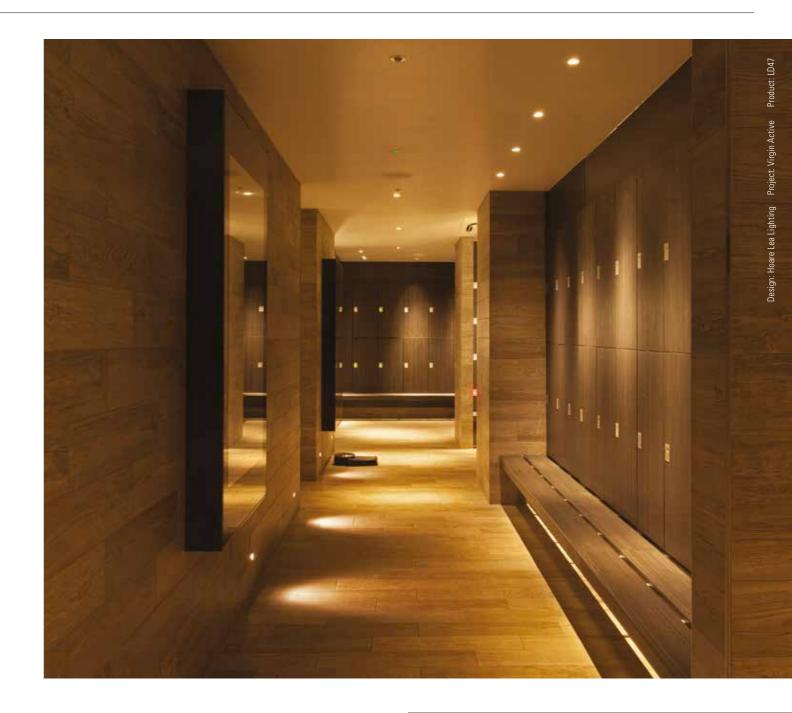
EMERGENCY PACK OPTION . CODE EP3 EP3 (MMA/LA/40)

IP Enclosures for LED drivers

IP enclosures offer a dry place for drivers to be used externally and in damp locations. Wiring between fittings can be done inside the enclosure eliminating the risk of non IP rated connections. 4 sizes allow up to 4 drivers to be installed in 1 enclosure. Cable glands are supplied separately and are not fitted to the box. We recommend these are not buried.



IP Enclosures	Ko	Ła -	Ya .	Ku Ku
	TXIPB002	TXIPB004	TXIPB006	TXIPB008
Size	Small	Medium	Large	Extra Large
Dimensions L x W x H (mm)	202 x 122 x 75	202 x 152 x 75	252 x 162 x 90	302 x 232 x 90
Material	ABS	ABS	ABS	ABS
Max ambient	40°C	40°C	40°C	40°C
IP Rating	IP67	IP67	IP67	IP67



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Finishes and Materials Guide

MATERIAL	FINISH	IMAGE	EXTERIOR USE	DESCRIPTION	
STAINLESS STEEL 316	Stainless		Yes	The standard material for our bezels is marine grade 316 stainless steel. It is a tough material suitable for all environments. Standard finish is as machined	
	Polished		Yes	 a fine grained reflective finish. We recommend polishing for pools and sea environments. This brings the chromium to the surface and gives excellent protection from oxidation (also see passivated note). 	
	Brushed		Yes	Creating a grained effect which matches the finish used frequently on kitchen appliances and cooker hoods, etc. Concentric on round fittings and linear on square ones. Needs to be passivated if used externally.	
	Satin		Yes	Bead blasting the stainless steel creates a matt surface of similar colour to silver anodising. Needs to be passivated if used externally.	
	ВМА		No	When the bezel is unavailable in bronze, an antique finish can be achieved using a stainless steel bezel. The bezel is copper plated then BMA (see bronze BMA note) and burnished to reveal copper highlights - usually a darker finish. Not for external walkover, internal footlights with low traffic only. Use flamed bronze instead for a more robust finish. There may be some colour variance between bezels.	
	Passivated		Yes	Passivation removes ferrous material from detail like threads and prevents brown stains caused by oxidation. Added protection for use on yachts, swimming pools and projects by the sea. Necessary if satin or brushed finishes are used externally. Passivated and polished for yacht and marine use. Protects anaerobic areas behind the bezel. Yacht grade polishing gives a mirror finish.	
BRASS	Machined		No	We use brass bezels for some parts and these are usually chrome plated. If brass is polished, parts need to be lacquered to stop tarnishing. Machine finish can be used in footlights, it will go green over time. Polished is not suitable for footlight	
	Polished		No	applications. If fittings like LD71/LD72 are required in a chrome finish then they need to be made from brass. Minimum order required.	
	Bright Nickel		No	Nickel plating on brass materials only. Slightly "warmer" effect than Chrome. Can be Bright or Satin. Not walkover.	

MATERIAL	FINISH	IMAGE	EXTERIOR USE	DESCRIPTION
BRONZE (ANTIQUE FINISH)	Flamed		Yes	To achieve an antique look, a number of our footlight and wall light fittings have bronze bezels as an option. The bronze will not corrode, but will age nicely over time, colour will depend on location and what elements they will be subjected too. Bronze bezels are either flamed in manufacture, to give an aged patinated finish
	BMA (Bronze Metal Antique)		No	which is suitable for exterior footlights, or BMA, which is a more distressed, aged look. The BMA process involves the application of a darkened chemical compound to a bronze or copper surface, it is then burnished to reveal bronze highlights to achieve the aged look. Low traffic, in ground internal use only. There may be some colour variance between bezels with both finishes. Bronze is a standard option for the LD42, LD43, LD56, LD150, LD151 and LD170. Other products require minimum order quantities or use stainless steel BMA.
ALUMINIUM	Black Anodised		Yes	All exterior aluminium bodies are hard black anodised to a thickness of 50 microns, giving extra protection for in-ground and exterior applications.
	Silver Anodised		Yes	Silver anodised products are now limited to linear extrusions only, for example our LD30 Hanging Rail and LD22. Spotlights that were supplied in silver or black anodised are now offered in a
	Bronze Anodised		Yes	paint finish which matches the anodised effect. Please see the paint finish section for more information.

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LIGHTGRAPHIX RANGE OF PAINT FINISHES

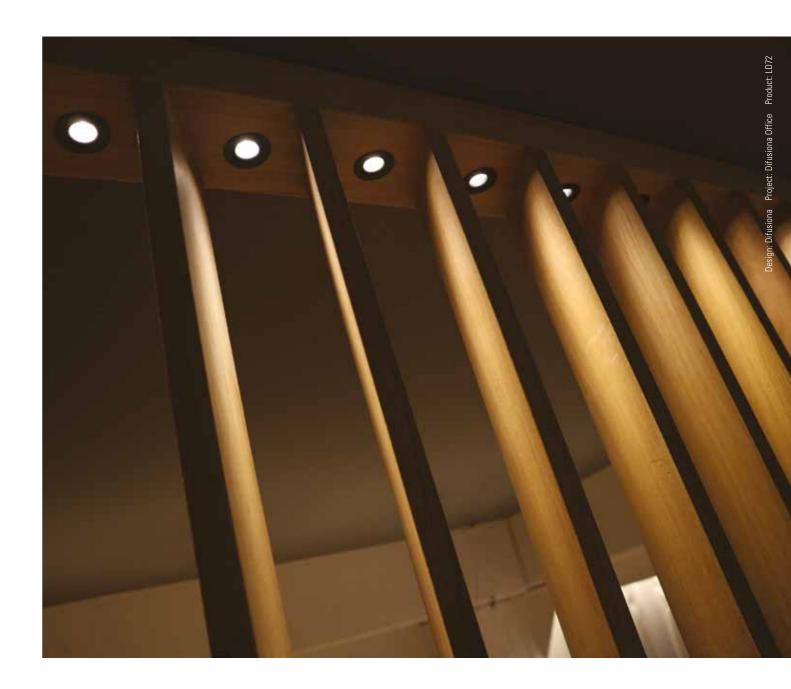
Finishes and Materials Guide

PAINT FINISHES	FINISH	IMAGE	EXTERIOR USE	DESCRIPTION
POWDER COATED	Matt Black RAL 9005		Yes	Most of our products can be powder coated, but generally we do this only on either stainless steel or anodised aluminium components. We would not recommend painting for footlights where there is going to be high traffic. It can be done if they are placed to one side where they will not be walked on
	Matt White RAL 9016		Yes	so much. Our standard finish is very matt on all powder coats. If we don't have the RAL you require in stock, we can buy this is in for an additional fee.
	Mars Bronze		Yes	LightGraphix have in-house powder coating facilities (max 1.2m) For more complicated products that involve threads then we will sometimes use a RAL colour PTFE coating which is just as durable but slightly finer.
WET SPRAY	Silver Anodised		Yes	LightGraphix has taken delivery of a new wet spray facility. This is still stove
	Antique Bronze		. Yes	baked, so has replaced powder coating as it offers an increased range of finishes. As well as standard RAL colours, four custom anodised finishes have been made up especially for LightGraphix. This allows us to match the finish of all the component parts of products such as our LED picture light, which is manufactured from many different materials. Most of our products can be painted, however we do not recommend this for footlights where there is going to be high traffic. It can be done if they
	Satin Antique Brass		. Yes	are placed to one side where they will not be walked on so much. In sea environments please talk to us as we can obtain special paint suitable for this environment. Our standard paint finishes are very matt. If we don't have the RAL you require in stock, we can buy this is in for an additional fee. Currently the maximum length that can be painted in house is 2.1m.
	Satin Brass		_ Yes	

Note on dissimilar metals:- When aluminium is in contact with both an electrolyte (like seawater) and dissimilar metals like stainless steel, galvanic corrosion can occur.

The effect is worse with copper, brass and bronze. As most of our bodies are manufactured from aluminium, care needs to be taken when installing our products in wet environments.

Always specify a fixing sleeve if being used externally as this adds protection. A fitting with brass or bronze screws threaded into aluminium should not be used outdoors.



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LightGraphix are constantly seeking to improve their products and whilst the illustrations and descriptions in this catalogue are as accurate as possible, they shall not form part of any contract. We reserve the right to change specifications without notice.

KEY

LED INPUT TYPE

(24V)	Constant Voltage
350 mA	350mA Constant Current
(500)	500mA Constant Current
(700)	700mA Constant Current

LED CONFIGURATION AND RGB OPTIONS

\odot	Single LED	Multiple linear LEDs
	COB LED	Multiple single colour linear LEDs
	3 Cluster LEDs	RGB
	3 Cluster with Red LED	RGBW
	Quad LEDs	Tunable White
69	Quad LED with Red LED	Single Colour
	6 Cluster LEDs	

IP RATING

(IP68)	Totally protected against dust, protected against long periods of immersion under pressure
(IP67)	Totally protected against dust, protected against the effects of temporary immersion between 15cm and 1m
(IP66)	Totally protected against dust, protected against strong jets of water e.g. for use on ship decks
IP65	Totally protected against dust, protected against water jets
(IP54)	Protected against dust, protected against water sprayed from all directions
IP44	Protected against solid objects over 1mm, protected against low pressure jets of water
(IP40)	Protected against solid objects over 1mm,

No water ingress protection

APPLICATION SYMBOLS

The symbols below show the suggested applications the products can be used in.

(a)	Indicator	Display and shelf
	Low depth	Downlight
	Low glare	Floor Wash
	Cove Lighting	Picture lighting
	Recessed Uplight	Wall Washer
	Steps	Yacht lighting
P	Pathway	Surface Mounted

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014

LD60

016





018



018

022



UPLIGHTS AND WALL LIGHTS













030



034





036



038

022



042



046



050



LD153 054

RECESSED FOOTLIGHTS





LD62





062







WALL AND FLOOR MARKERS



LD42



LD42W/A







LD45 072





LD46

072



LD47

076



076



LD57SQ

082

LD57



084





LD242A LD242A RGB



LD170





092

LD59 LD175 090

RECESSED WALL MOUNTED





098





104









116



124

120



126



128

SURFACE MOUNTED

130



DOWNLIGHTS



LINEAR

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