Project No.224: 95 Avenue Road, London, NW8 6HY

Lighting Assessment

Thursday, March 16, 2017
224-455 Revision A

Planning Department
London Borough of Camden
5 Pancras Square, Floor 2
London N1C 4AG

The application is for a minor alteration to an existing entrance. The proposal is to remodel the entrance to allow for better safety, lighting and accessibility.

Lighting Assessment:

For details of external lighting please see generally plans, sections and elevations attached.

The existing canopy has a series of large under mounted lights that are non directional and spill light generally.

The proposed lighting scheme is to remove these lights and incorporate directional wall or floor lights with focused lighting where required for safety purposes, navigation, or to help facilitate access.

Exterior Lighting Schedule:

- 4 number downlights, ambient safety lighting, low glare wall mounted down lighter to minimise any light spill out of the property. These are positioned as indicated on the Proposed Ground Floor Plan 224-1.006-A – see following data sheet ref LD10237

- 9 number miniature recessed LED uplights in bench to providing lighting to signage on existing low wall - see following data sheet ref LD43DR. The signage is in accordance with Class 2 part 2C of the Town and Country Planning (Control of Advertisements) England, Regulations 2007.

- 1 LED flexible lighting strip light located in canopy niche as per drawing 224-8.001-A - see following data sheet ref Pro Eco Flex 60 - with waterproof casing option for exterior use.

END

FINE architecture
T   08454 300 120
1 Westmoreland Terrace, London, SW1V 4AG

LD43DR

Miniature Deep Recessed LED Uplight

IP68 F III

Data sheet

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 doorways or narrow corridors.

- 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
- Range of bezel finishes
- Optional glare shield accessory for even less glare
- Available with Switch, 1-10V, DMX, Dali or Mains dimmable drivers

Product: LD43DR-700/LWW/NB

Specification

Applications	Recessed uplighting, Wall washing, External
Beam Angles	12°
LED type	1 x Cree XPG

Colour temperature	3000K			5000K		
Drive Current (mA)	350	500	700	350	500	700
LED power* (W)	1.2W	1.7W	2.4W	1.2W	1.7W	2.4W
CRI (typical)	93	93	93	80	80	80
Forward voltage (V)	3.0V	3.2V	3.4V	3.0V	3.2V	3.4V
Delivered lumens (L_{100})	68	93	114	110	153	190
Lumens per circuit watt**	57	55	48	91	90	79

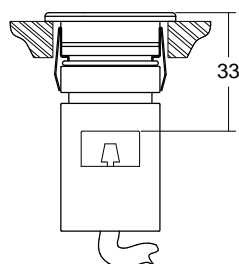| LED lifetime (to 70% lumen maintenance)	50,000hrs at a max ambient temperature of 35°C (if specifying fitting in ambient temperatures of up to 45°C run at 500mA max, LD43DR-500)
Materials	Matt black anodised aluminium body, Machine finish 316 stainless steel bezel (other options available)
Glass	3.3mm thick borosilicate
Wiring	Comes pre-wired with 2 core 100mm lead, can be specified with up to 10m at extra cost
IP rating	IP68 for up to 1 week (for permanent submersion applications use our LD242A, LD41, LD60)

*LED watts allows for 85% efficient driver
**data shown allows for an ambient temperature of 35°C

33

LD43DR

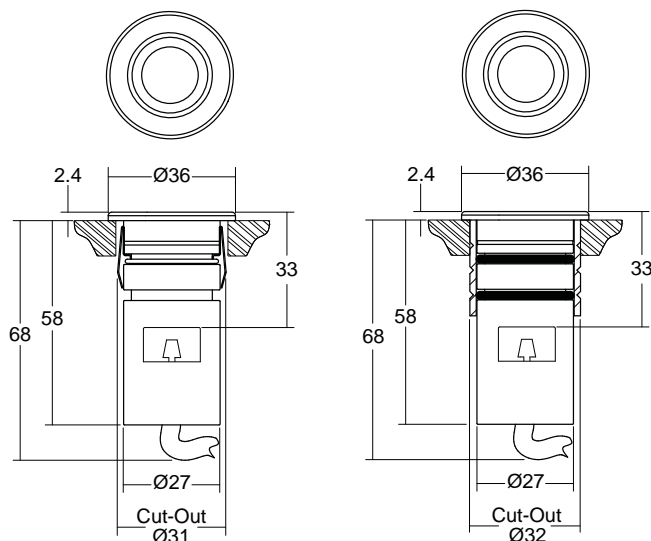Miniature Deep Recessed LED Uplight

IP68 F III

Data sheet

Dimensions and Fixing Options

/SC - Spring clip fixing

Useful for plinth or downlight applications

/480 - 'O' rings and sleeve

A more robust and water tight method of fixing, for in ground applications

2.4   Ø36
33
58
68
Ø27
Cut-Out
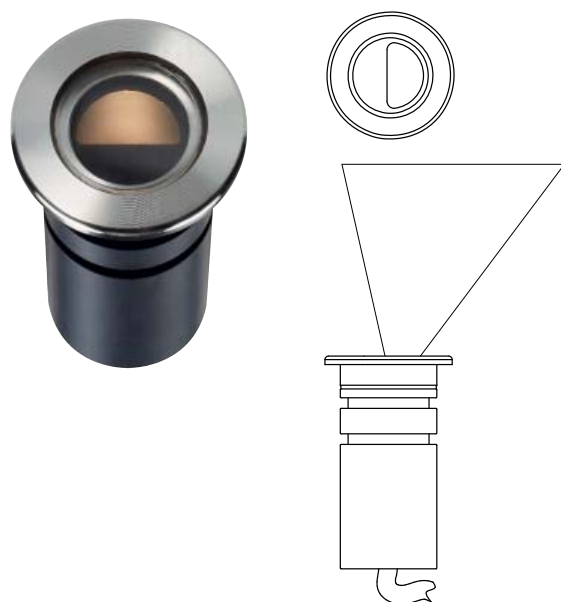Ø31

2.4   Ø36
33
58
68
Ø27
Cut-Out
Ø32

(Dimensions in mm)

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 code	LED colour	Lens angle	Finish	Accessory	Fixing
LD43DR - 350 - 500 - 700					

Example: LD43DR-700 / LWW / NB / Stainless steel / GS / 480

Product codes with output options

1.2W LED at 350mA	**LD43DR-350**
1.7W LED at 500mA	**LD43DR-500**
2.4W LED at 700mA	**LD43DR-700**

LED colour options Suffix

Warm white (3000K)	/LWW
Cool White (5000K)	/LW
Blue	/LB
Green	/LG
Red	/LR
Amber	/LA

Beam / lens angle options

12° narrow spot	/NB

Bezel finish options

Stainless steel 316
Powder coated white / black (interior use only)
Polished and passivated stainless steel (for marine environments)
Antique Bronze (flamed solid bronze)

Accessories

Glare shield	/GS

Fixing options

Spring clips	/SC
First fix sleeve and O rings	/480

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

We have a wide range of dimmable LED drivers, 1-10V, DMX, DALI and Mains dimmable. Please see the downloads section on our website:
To run 4-14 LD43DR-500 in series use a TXDD500D (1-10V dimmable)
To run 4-14 LD43DR-700 in series use a TXDD700D (1-10V dimmable)

LD10237

LED Up or Down Wall Washer

IP67 F

Data sheet - Page 1

The IP67 rated LD10237 up or down wall light can be used externally and internally as general illumination around a building or for creating effects on the building/walls. The Cree MKRs small LED chip size and use of a single lens produces a very consistent, even beam, ideal for wall washing.

The compact, minimal design means the LD10237 will blend into most interior/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. Fixing is by a first fix stainless steel bracket attached to the mounting surface. The main body is then attached to the bracket by two discreet stainless steel M6 security grub screws.

Allowing consistency throughout a project, the LD10237 uses the same Cree MKR LED chip and associated optics as the LD150/LD151/LD153 uplighters and LD170 recessed wall light.

Specification

Applications	Building facades, Column uplighting, Wall wash			
Beam Angles	10°, 15°x 30°			
LED type	1 x Cree MKR 4 die LED			
Colour temperature	3000K		5000K	
Current	350mA	500mA	350mA	500mA
LED power (Max)	5W (4.4W)*	7W (6.3W)*	5W (4.4W)*	7W (6.4W)*
CRI	85	85	80	80
Forward voltage (Max)	15.6V	15.8V	15.6V	15.8V
Delivered lumens (L^{100})	244	318	284	358
Lumens per circuit watt**	59	51	64	56

|	
LED lifetime (to 70% lumen maintenance)	50,000hrs at a max ambient temperature of 35°C (if higher ambient then run at 350mA up to 45°C)
Glass	3mm thick borosilicate
Materials	Anodised aluminium body, stainless steel fixing bracket
Wiring	Comes pre-wired with 2 core 1m lead. Can be specified with up to 10m at extra cost.
IP rating	IP67

* indicates the nominal power for the LED run at that particular current
** data shown allows for an 85% efficient driver at an ambient temperature of 35°C

Dimensions

34

86

88

115

Ø65

14.8*
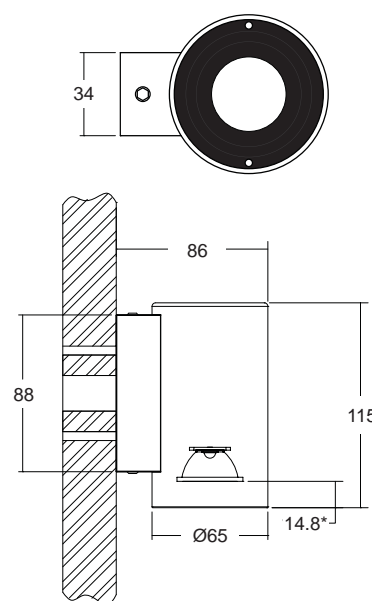
* 4.3mm when using the taller RGBW optic
(Dimensions in mm)

LD10237

LED Up or Down Wall Washer

IP67 F

Data sheet - Page 2

Lens Options

/10 - 10° spot

/85 - 15°x 30° spreader

Photometrics

Photometric files are included in the design pack which can be downloaded from the LD10237 product page on the website.

Finish Options

A range of finishes are available. Powder coated and anodised finishes are both suitable for exterior applications. However for harsh environments anodised is more hard wearing.

Silver Anodised

Powder Coated Black

Bright Anodised

Powder Coated White

*Fitting shown is a modified LD10236

Order Codes and Options

Product code	LED colour	Beam angle	Finish
LD10237 - 350 - 500			

Example: LD10237-350 / LWW / 10 / White

Product codes with output options

5W 350mA	**LD10237-350**
7W 500mA	**LD10237-500**

LED colour options — Suffix

Warm white (3000K)	/LWW
White (5000K)	/LW
RGBW	/RGBW

Lens options — Suffix

10° spot	/10
15° x 30° spreader	/85
RGBW LED comes with a 26° lens	

Finish options

Silver Anodised
Bright Anodised (stainless steel effect)
Powder Coated Black (matt)
Powder Coated White (RAL 9016 as standard)

Use with 350mA or 500mA remote constant current LED drivers

For our complete range of LED drivers please download the data sheet from the downloads section at **www.lightgraphix.co.uk**

SPECIFICATIONS

POWER CONSUMPTION

7.2 W/M | 0.3 A | DC

CUTTING INTERVALS

24V 6 LED 100MM

OPERATING TEMPERATURE

0 - 50ºC

PRODUCT OPTIONS

Power Supplies

Cables

Profiles

Connectors

PCB Colour

HIGH CRI

PRODUCT DIMENSIONS

IP20

100.00 / 10.00 / 2.10 / +24V / +24V / +24V / GND / 8.33 / 16.67 / 16.67

IP67

100.00 / 12.00 / 4.50 / +24V / +24V / +24V / GND / 8.33 / 16.67 / 16.67

LUMEN OUTPUT

450-550Lm

| 0 | 400 | 800 | 1200 | 1600 | 2000 |

3 STEP MACADAM

PRO ECO FLEX 60

Pro Eco Flex 60 is designed with simplicity in mind. Integrated constant current technology enables this product to run longer lengths than the standard constant voltage LED strip light. Engineered to perfection with 95+ CRI creates true colours for every application. Available in different colour temperatures ranging from 2700K to 6000K and available with an IP rating of 67.

TECHNICAL DATA

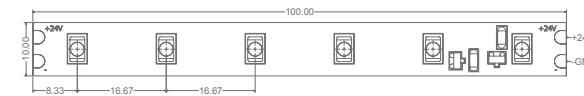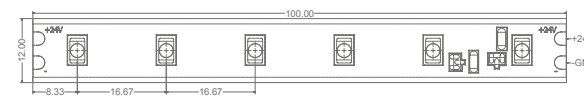| IP OPTIONS	DIMENSIONS (mm)	PACKAGE WEIGHT	PACKAGE SIZE (mm)	LED TYPE	LIFESPAN	POWER SOURCE	PRODUCT LENGTH	DIMMABLE	ENERGY CONSUMPTION	EFFICIENCY CLASS	CRI	BEAM ANGLE
IP 20	2.1 x 10	104g	240 x 210 x 10	SMD CHIP 3528	5 YEARS	24 VDC	5m	YES	0.7 KWh/1000h	A++	95+	120°
IP 67	4.5 x 12	383g	255 x 245 x 15									

PRODUCT TYPE

COLOUR	VOLTAGE	IP RATING	LED QTY/M	WATTAGE/M	COLOUR TEMPERATURE	LUMINOUS EFFICIENCY	LUMEN/M	DOMINANT WAVELENGTH (nm)	PITCH	SKU
WARM WHITE	24V	20	60	7.2	2700K	62.5Lm/W	450	-	16.67mm	010-3801
WARM WHITE	24V	67	60	7.2	2700K	62.5Lm/W	450	-	16.67mm	010-3804
NATURE WHITE	24V	20	60	7.2	4000K	69.44Lm/W	500	-	16.67mm	010-3802
NATURE WHITE	24V	67	60	7.2	4000K	69.44Lm/W	500	-	16.67mm	010-3805
PURE WHITE	24V	20	60	7.2	6000K	76.39Lm/W	550	-	16.67mm	010-3803
PURE WHITE	24V	67	60	7.2	6000K	76.39Lm/W	550	-	16.67mm	010-3806