



Lighting Assessment: New Drive Thru Coffee Shop Facility

Crossbush Service Station, A27/A284 interchange, Arundel. BN17 7QQ

(Please refer to drawing ref: DM134)

Existing Exterior Lighting

The existing lighting (E1 and E2) is indicated on drawing DM134.

New Exterior Lighting

Access Road Lighting (A) type Philips Lighting BGP 303 LED122/740 PSU 1 DM 42/60 (6no) and (A1) type Philips Lighting BGP 303 LED122/740 PSU 1 DM 42/60 (1no) with 1.25m extension arm bracket at 6m mounting height. The proposed new floodlights are concentrated to provide minimum levels of light required for task lighting and pedestrian/traffic route safety. Control of beam direction (below 70 degrees) is provided by the LED beam control system enabling sharp cut off, avoiding glare, spill-light and night sky pollution.

Bollards (B) illuminated type Philips Lighting Coreline ref: BCP155 LED 100/WW PSU 220-240VA 7043, 135 deg. Warm White Asymmetrical Bollard 1m height (6no) complete with Ground Section Anchor (order code 38379400). To be located at approximately 6m intervals and set 600mm behind the kerb face on the opposite side to the Drive Thru Building. These illuminated bollards provide minimal proximity illumination for safety and security.

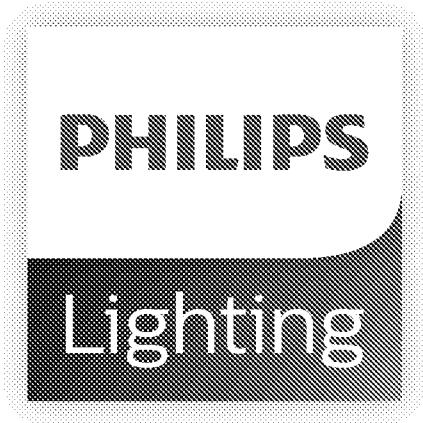
Impact on neighbouring property by the new scheme and compliance

The resulting illuminance contours for each luminaire location are shown on Drawing DM134.

Existing and proposed boundary treatment to adjacent public roads and property along with the benefit of new LED technology and good lighting design will provide a high degree of control to restrict any boundary spillage of light and eliminate nuisance to neighbouring residents and any wildlife habitats.

Graham White (Senior Designer) GWLC.

16/8/21



ClearWay

BGP303 LED122-3S/740 PSU II DM C450CE 42

ClearWay - LED module 12200 lm - 3rd generation, screw fixation - 740 neutral white - Power supply unit - Safety class II (II) - Philips standard surge protection level kV - Cable 450 mm with connector 2-pole - Universal for diameter 42-60 mm

LED technology represents a breakthrough in lighting in many different respects. The light quality provided by LEDs, for example, has made our roads safer, while the tremendous efficacy of LEDs is helping cities reduce their energy bills. At Philips, we believe we can make even more roads safer, and help more municipalities achieve their goal of reducing energy consumption. That's why we have developed ClearWay – a LED road luminaire that is affordable yet does not compromise on light quality and energy efficiency.

Product data

General information	
Number of light sources	1 [1 pc]
Lamp family code	LED122 [LED module 12200 lm]
Lamp version	3S [3rd generation, screw fixation]
Light source color	740 neutral white
Kombipack	Lamp(s) included
Light source replaceable	No
Number of gear units	1 unit
Gear	EBP [Electronic Primalume]
Driver/power unit/transformer	PSU [Power supply unit]
Driver included	Yes
Optical cover/lens type	FG [Flat glass]
Luminaire light beam spread	95° x 160°
Embedded control	No [-]
Light regulation	-

Connection	Screw connection block 5-pole
Cable	Cable 450 mm with connector 2-pole
Protection class IEC	Safety class II (II)
Standard RAL color	Pale gray
Coating	-
Ready-to-install	Ready-to-install
Glow-wire test	960/5 [Temperature 960 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
Country version	NO [Norway]
CE mark	CE mark
ENEC mark	ENEC mark
Warranty period	3 years
Optic type outdoor	Distribution medium
Photocell	No [-]
Gland for mains supply	1PG13 [Cable gland 1x PG 13 mm]

Gland material	Cable gland plastic
Constant light output	No
Number of products on MCB of 16 A type B 8	
RoHS mark	-
WEEE mark	-
Light source engine type	LED
Serviceability class	Class A, luminaire is equipped with serviceable parts (when applicable): LED board, driver, control units, surge protection device, optics, front cover and mechanical parts
Product family code	BGP303 [ClearWay]

Light Technical

Light Distribution	DIR [Direct lighting]
Upward light output ratio	0
Standard tilt angle posttop	0°
Standard tilt angle side entry	0°

Operating and Electrical

Input Voltage	220-240 V
Input Frequency	50 to 60 Hz
Inrush current	53 A
Inrush time	0.3 ms
Power Factor (Min)	0.98
Power Factor (Nom)	0.98

Controls and Dimming

Dimmable	No
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Mechanical and Housing

Housing Material	Aluminum
Reflector material	Polycarbonate
Optic material	Acrylate
Optical cover/lens material	Tempered glass
Fixation material	Steel
Mounting device	42/60 [Universal for diameter 42-60 mm]
Optical cover/lens shape	Flat
Optical cover/lens finish	Clear
Torque	15
Overall length	481 mm

Overall width	330 mm
Overall height	97 mm
Effective projected area	0.029 m²

Approval and Application

Ingress protection code	IP66 [Dust penetration-protected, jet-proof]
Mech. impact protection code	IK08 [5 J vandal-protected]
Surge Protection (Common/Differential)	Philips standard surge protection level kV

Initial Performance (IEC Compliant)

Initial luminous flux (system flux)	10237 lm
Luminous flux tolerance	+/-7%
Initial LED luminaire efficacy	95 lm/W
Init. Corr. Color Temperature	4000 K
Init. Color Rendering Index	>70
Initial chromaticity	(0.380, 0.380) SDCM <5
Initial input power	105.7 W
Power consumption tolerance	+/-11%

Over Time Performance (IEC Compliant)

Driver failure rate at 5000 h	0.5 %
Useful life L80B10	100000 h

Application Conditions

Ambient temperature range	-30 to +35 °C
Average ambient temperature	25 °C

Product Data

Full product code	871829187561100
Order product name	BGP303 LED122-3S/740 PSU II DM C450CE 42
EAN/UPC - Product	8718291875611
Order code	87561100
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	1
Material Nr. (12NC)	910825438704
Net Weight (Piece)	7.230 kg

ClearWay





Coreline Bollard

Coreline Bollard

Coreline Bollard is a professional bollard that will guide people at night time and will integrate very well in most urban landscape thanks to its discreet design.

Benefits

- Comfortable light
- Easy to install
- Saves energy compared to conventional lamps

Features

- 1000lm system output
- 1m height
- IP65 / IK10
- Available in Warm White and Neutral White
- Available with symmetric and asymmetric optic
- Ground section anchor accessory

Application

- Open spaces: Parks, squares, playgrounds
- Foot and cycle paths
- Car parks

Specifications

Ambient Temperature	-40 to +50 °C
Main colour of the luminaire	Dark Grey
Driver	Power supply unit (PSU)
Initial correlated colour temperature	3000, 4000 K
Initial input power	12, 13 W
Initial LED luminaire efficacy	80, 85 lm/W

Initial luminous flux	1000 lm
Input frequency	50 or 60 Hz
Input voltage	220-240 V
Light source colour	Neutral white, warm white
Light source replaceable	No
Optic	Asymmetrical, symmetrical
Optical cover	Polycarbonate

Coreline Bollard

Versions



LED Module 1000 lm

Accessories



Ordercode 38379400

Approval and Application	
Mech. Impact protection code	IK10
Surge Protection (Common/Differential)	6/8 kV
Controls and Dimming	
Dimmable	No
General Information	
CE mark	CE mark
Optical cover/lens type	O
Driver included	Yes
Flammability mark	NO
Lamp family code	LED10
Light source replaceable	No
Number of gear units	1 unit
Number of light sources	1
Initial Performance (IEC Compliant)	
Init. Colour Rendering Index	>80
Initial luminous flux	1000 lm
Light Technical	
Standard tilt angle side entry	-
Standard tilt angle posttop	-
Upward light output ratio	50
Mechanical and Housing	
Colour	Dark Grey

General Information

Order Code	Full Product Name	Luminaire light beam spread	Light source colour	Optic type
38375600	BCP155 LED100/WW PSU 220-240V A 7043	135°	Warm white	Asymmetrical
38376300	BCP155 LED100/NW PSU 220-240V A 7043	135°	Neutral white	Asymmetrical
38377000	BCP155 LED100/WW PSU 220-240V S 7043	360°	Warm white	Symmetrical
38378700	BCP155 LED100/NW PSU 220-240V S 7043	360°	Neutral white	Symmetrical

Initial Performance (IEC Compliant)

Order Code	Full Product Name	Init. Corr. Colour Temperature
38375600	BCP155 LED100/WW PSU 220-240V A 7043	3000 K
38376300	BCP155 LED100/NW PSU 220-240V A 7043	4000 K

Order Code	Full Product Name	Init. Corr. Colour Temperature
38377000	BCP155 LED100/WW PSU 220-240V S 7043	3000 K
38378700	BCP155 LED100/NW PSU 220-240V S 7043	4000 K

