# DARLING ASSOCIATES ARCHITECTS

External Lighting

# **PLANNING CONDITION 15**

Site 3 - JDE

Ruscote Avenue, Banbury Planning Permission Nr.: 21/04171/F

February 2023 Revision A

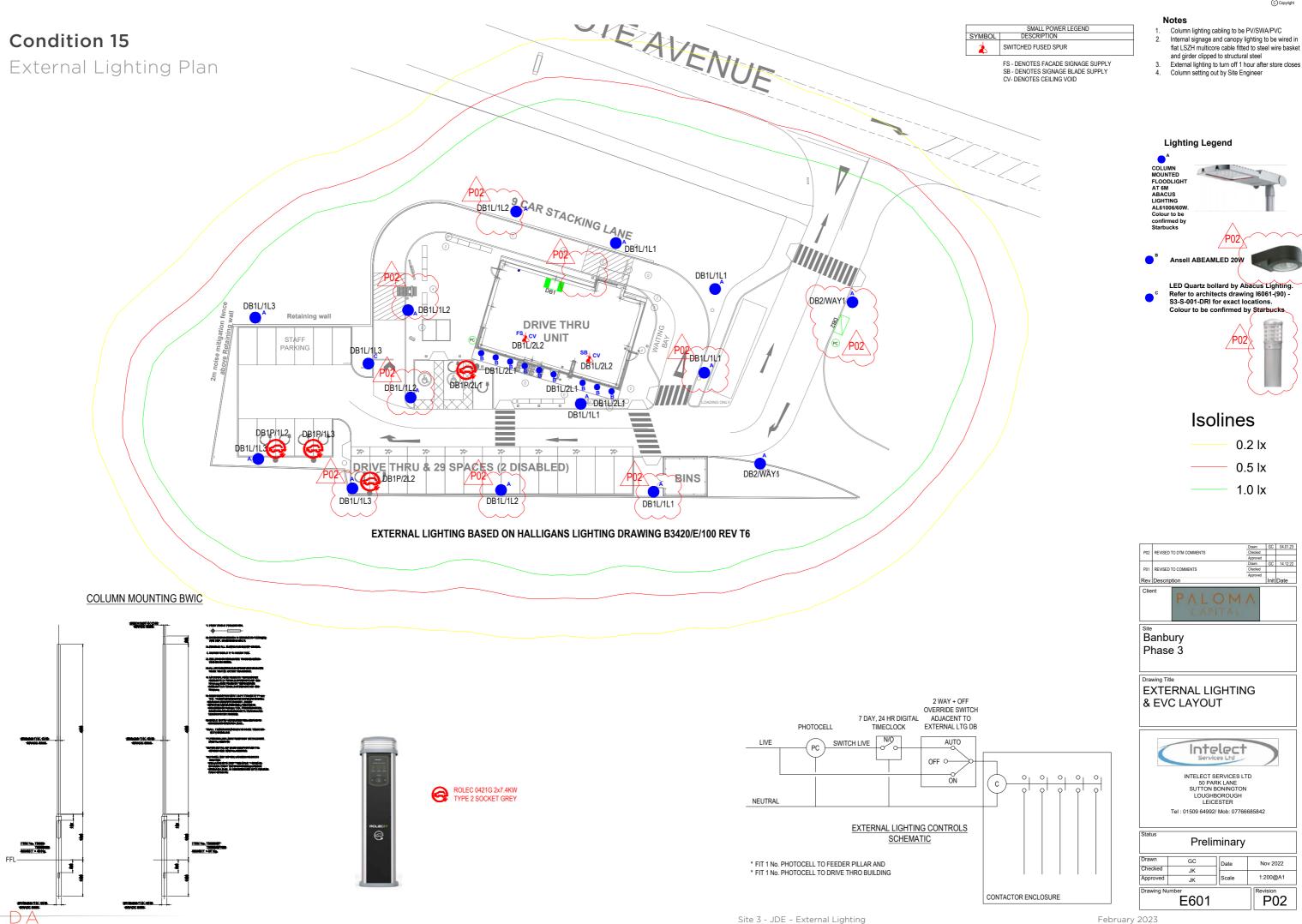


## **Condition 15**

Overview

Prior to the first use of the development hereby approved details of the external [lighting/security lighting/floodlighting] including the design, position, orientation and any screening of the lighting shall be submitted to and approved in writing by the Local Planning Authority. Prior to the first use of the development hereby approved the lighting shall be installed and operated in accordance with the approved scheme at all times thereafter.





PLANNING CONDITION 15

Revision A

1 External Lighting Spec - Lighting Bollards



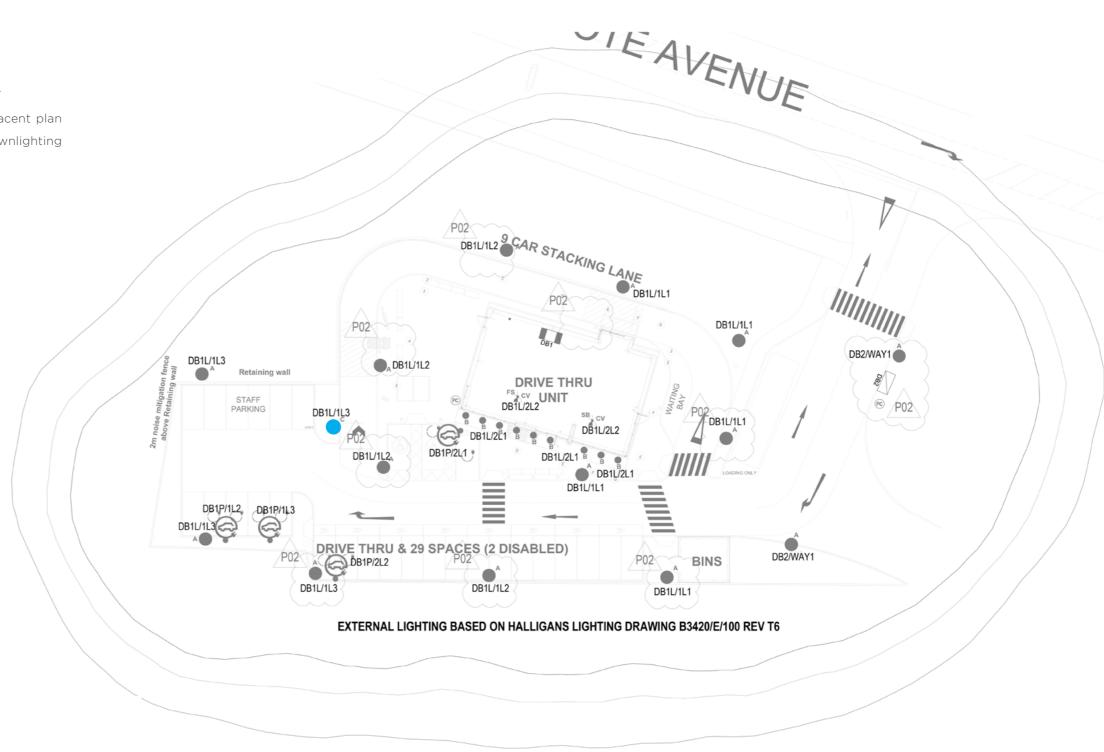
## 1.1 Plan Showing Location and Orientation

Lighting Bollards

AL9001 LED Quartz bollard by Abacus Lighting.

Lighting Bollards are positioned as per the adjacent plan (Highlighted Blue) and provide 360 degree downlighting to the surrounding area.

Please see specification overleaf.





### AL9000 Series Quartz LED Bollard

IP66 **C€** 



High performance architecturally style LED bollard, ideal for paths, car parks, open areas, rail and amenity applications.



#### **Benefits**

- Louvres protected behind a 5mm thick polycarbonate cylinder
- Louvred light controller produces a highly controlled light output, reducing wasted light
- Anti-vandal screws increase protection against shocks or vibration

#### Key technical features

- Die cast aluminium head unit with clear polycarbonate outer cylinder (UV stabilised)
- Tough bollard shaft made from heavy duty steel CHS tubing
- Louvred light controller with LED light pumped into and through the acrylic louvres
- Operational equipment housed within bollard using IP67 driver on a removable tray. Facility to loop in and loop out electric cabling
- LED bollard has 90% efficiency
- Louvre rings can be printed with a logo, directional arrows or unique colour effects
- Vandal resistant with anti-vandal screws for extra security
- Upward light ratio (ULR) = 8%
- Flange plate or root mounting

### Applications

AmenityRail

### Colour Effects:

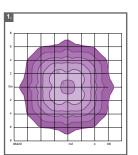
☐ All white

■ White with red band

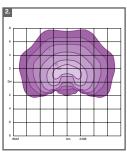
White with blue band

■ White with green band

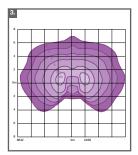
Individual requirements to be specified when ordering. For emergency version, please enquire upon quotation.







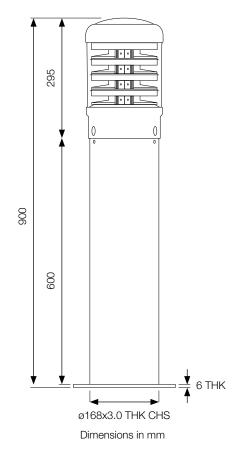
Asymmetric Distribution AL9002



www.abacuslighting.com

Axial Distribution AL9003

Item	No. LEDs & Wattages	Distribution	LED Current	Lumen Output	Colour Temp.
AL9001	16 x 1.6W	Symmetric	500mA	1975lm	4000K
AL9002	16 x 1.6W	Asymmetric	500mA	1975lm	4000K
AL9003	16 x 1.6W	Axial	500mA	1975lm	4000K



2 External Lighting Spec - Lamp Posts



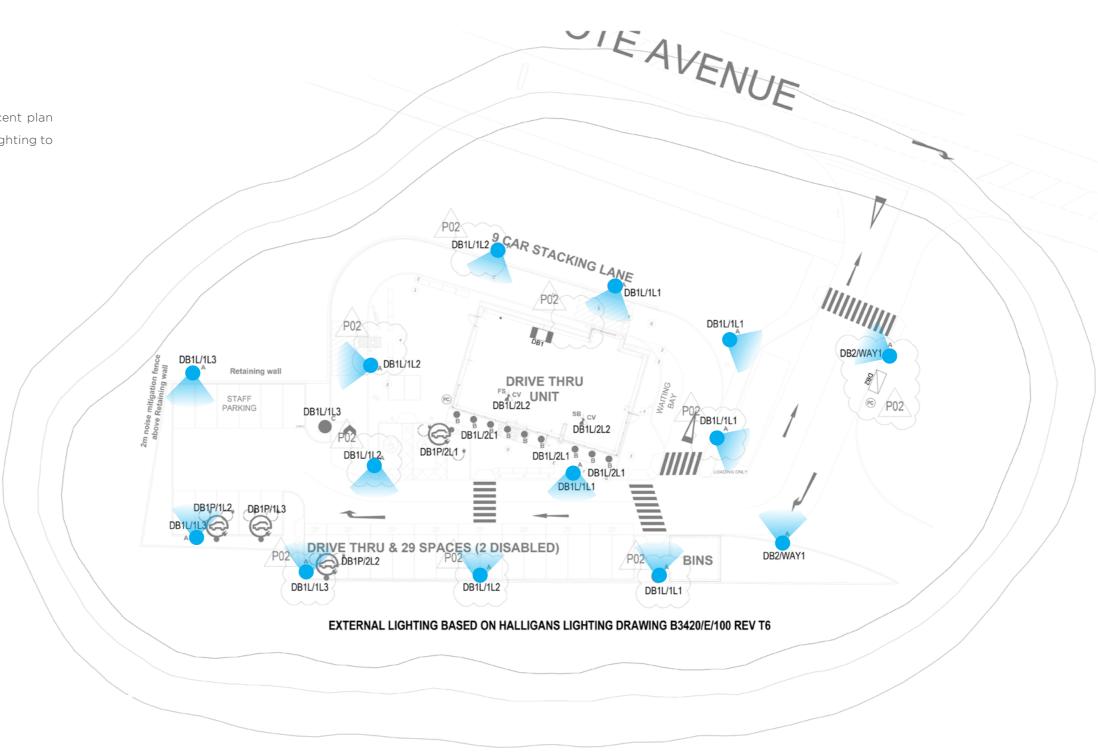
## 2.1 Plan Showing Location and Orientation

Lighting Bollards

ABACUS LIGHTING AL61006/60W.

Lighting Bollards are positioned as per the adjacent plan (Highlighted Blue) and provide 150 degree downlighting to the surrounding area.

Please see specification overleaf.



### AL61000 Series

IP66 IK09



#### **Benefits**

- Tool-less quick access latch
- Screw-less maintenance
- Durable die-cast aluminium housing
- Flexibility with vertical or horizontal spigot mounting
- Multiple optics

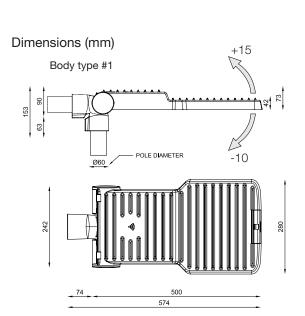
### Key technical features

- Controls; Dali, 1-10V, RF or PLC (specify at enquiry)
- Efficacy up to130 lm/W
- Integrated 5 level dimming module (optional)
- Overheat protection
- Constant light output (optional)
- Time-dependant lumious flux control
- Power reduction; flexible lumious flux
- IP66 and IK09 rated
- Colour temperature 4000K as standard (options available)
- CRI ≥70 (80 optional)
- Power supply 100Vac 277Vac
- Standard surge protection 6kV

### **Applications**

- Road
- Open area
- Rail
- Amenity

Colour: Grey

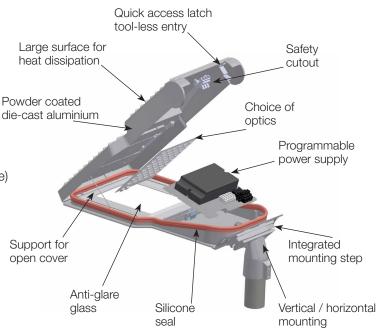


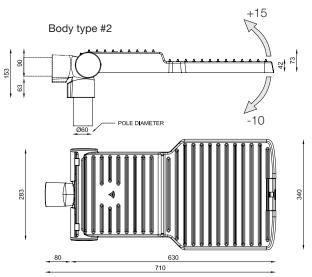


An innovative road lighting luminaire of modular construction designed with ease of maintenance in mind. Tool-less upgrades of key components such as power supply and light engine along with field-replaceable LED modules ensure the luminaire takes full advantage of future improvements in LED technology.

Constructed from high pressure die-cast aluminium, the AL61000 series is available in two body sizes and offers six standard lumen packages, from 1200 to 15,600 lumens, and comes with six different optics.

With a lifetime of 100,000 hours (L80B10) combined with an efficacy of more than 130 lm/W, the AL61000 series keeps both operating and maintenance costs to an absolute minimum.

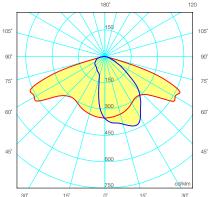




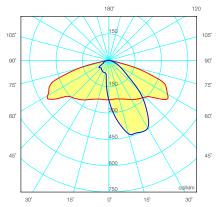
## AL61000 Series IP66 IK09



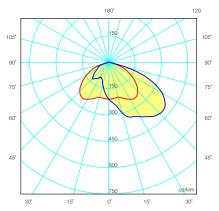
### Optics



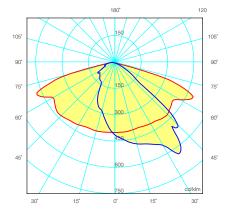
(010) Suitable for larger distance between poles and high mounting installations. Higher uniformity factor



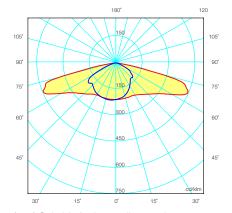
(002) Suitable for narrower roadways across roads, cycling and pedestrian areas



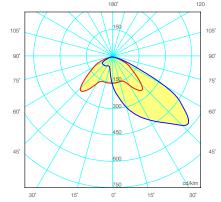
(110) Suitable for wide roadways, parking spaces. Smaller distance between columns



(020) Suitable for wide roadways, larger distance bewteen columns



(200) Suitable for larger distance between columns, within bicycle paths



(202) Suitable for wide roadways and parking spaces with smaller distances between columns

Technical Specification	Body type 1	Body type 2		
Lifetime L80B10	> 100,000 hours			
Supply voltage	100Vac - 277Vac			
LED	4-8 12-24			
Power (W)	10, 25, 40	60, 80, 120		
Light flux (lm)	1,200 - 5,100 7,530 - 15,540			
Power factor	> 0.96			
CCT	4,000 K (other CCT available)			
Factor of colour rendering CRI	≥ 70 (80 optional)			
Mechanical strength	IK09			
Protection class	IP66			
Additional surge protection	6kV standard (10kV or 20kV option)			
Operating temperature	-40°C to +55°C			
Electrical class	Class I (Class II optional)			
Weight	6kg	9kg		
EPA rating	0.0336m²	0.0406m²		
Dimensions (mm)	574 x 242 x 153 703 x 285 x 153			
Mounting	60mm pole (adaptor required for other columns dimensions)			
Tilt	-10° to +15° (horizontal and vertical installation)			
Certificates	IEC 60598-1:2014 (8 edition); IEC 60598-2-3:2002 + A1:2011; EN 60598-1:2015; EN 60598-2-3:2003 + A1:2011; IEC/EN 62031:2008 + A1+A2; IEC/TR 62778:2014; EN60068-2-6: N60068-2-27: CE, ENEC			
Guarantee	5 years on electronics, 10 years on mechanics, upon request			
Remote control	Optional RF or PLC			

## AL61000 Series IP66 IK09



Luminaire code	LED type	Luminaire Wattage	Luminaire - Lumen output (Im)	Driver current (mA)	Number of LEDs	Body type	Light distribution type	Weight (kg)	Wind area (m²)
AL61001 Standard	10	1200	700	4	1		6	0.0336	
		25	3270	700	6	1	(010) Suitable for larger	6	0.0336
	Standard	40	5100	700	8	1	distance between poles and high mounting	6	0.0336
	Starraara	60	7530	700	12	2	installations. Higher	9	0.0406
	120	10200 15540	700 700	16 24	2	uniformity factor	9	0.0406	
		10	1200	700				6	
					4	1			0.0336
		25	3270	700	6	1	(002) Suitable for	6	0.0336
AL61002	Standard	40	5100	700	8	1	narrower roadways	6	0.0336
		60	7530	700	12	2	across roads, cycling and pedestrian areas	9	0.0406
		80	10200	700	16	2		9	0.0406
		120	15540	700	24	2		9	0.0406
		10	1200	700	4	1		6	0.0336
		25	3270	700	6	1	(110) Suitable for	6	0.0336
AL 61003	Standard	40	5100	700	8	1	wide roadways and parking spaces. Smaller distance between	6	0.0336
AL61003 Standard	Stariuaru	60	7530	700	12	2		9	0.0406
		80	10200	700	16	2	columns	9	0.0406
		120	15540	700	24	2		9	0.0406
	10	1200	700	4	1		6	0.0336	
		25	3270	700	6	1	(020) Suitable for wide roadways, larger distance between	6	0.0336
		40	5100	700	8	1		6	0.0336
AL61004 Standard	Standard	60	7530	700	12	2		9	0.0406
		80	10200	700	16	2	columns	9	0.0406
		120	15540	700	24	2	-	9	0.0406
		10	1200	700	4	1		6	0.0336
		25	3270	700	6	1	-	6	0.0336
		40	5100	700	8	1	(200) Suitable for larger distance between columns, within bicycle paths	6	0.0336
AL61005	Standard	60	7530	700	12	2		9	0.0406
		80	10200	700	16	2		9	0.0406
		120	15540	700	24	2	-	9	0.0406
	AL61006 Standard	10	1200	700	4	1		6	0.0336
AL61006		25	3270	700	6	1	(222) 0 11 1 1 1	6	0.0336
		40	5100	700	8	1	(202) Suitable for wide roadways and parking	6	0.0336
		60	7530	700	12	2	spaces with smaller	9	0.0300
		80	10200	700	16	2	distances between columns	9	0.0406
		120	15540	700	24	2	_	9	0.0406

3 External Lighting Spec - Building Downlights



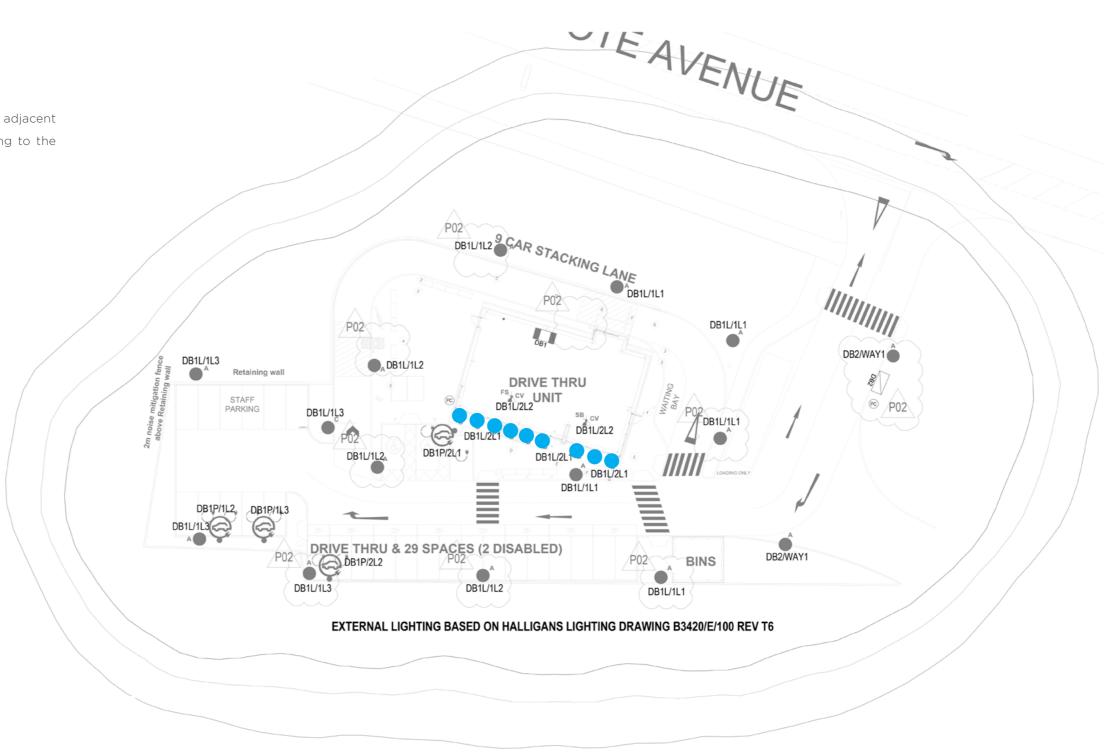
## 3.1 Plan Showing Location and Orientation

**Building Downlights** 

Ansell ABEAMLED 20W

Building Downlights are positioned as per the adjacent plan (Highlighted Blue) and provide downlighting to the facade and surrounding area.

Please see specification overleaf.







## **ABEAMLED**

Beam AC Graphite



## **Features**

Compact and powerful die-cast aluminium wall light suitable for residential and hospitality applications

Dual purpose design allows installation as either a canopy downlight or as an uplight

Allen key screws manufactured from marine grade stainless steel

Non-dimmable



Belfast: +44 (0) 2890 773750

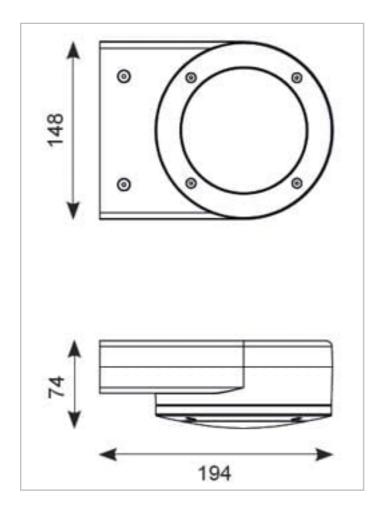
## **General Information**

Lamp Type	LED
Colour / Finish	Graphite
IP Rating	IP65
IK Rating	IK02
Class Protection	1
Internal / External	Internal / External
Surface / Recessed / Suspended	Surface
Lifetime (Hrs)	L70 70,000h
Warranty (Years)	5
CE Mark	Yes
Length (mm)	194 mm
Width (mm)	148 mm
Height (mm)	74 mm

## **Technical Information**

Wattage	20W
Lumens Delivered	1300lm
Lm/W	65lm/W
Beam Angle	65
CRI	80
ССТ	4000K
Input	220/240V
Hertz	50/60Hz
Operating Temp	0°C to 25°C
SDCM	3





Datasheet generated from <a href="https://onetimepim.com">https://onetimepim.com</a> last updated Monday, July 25, 2022 10:07:48 AM

Belfast: +44 (0) 2890 773750

#### Luminaire data 1

### 1.1 Ansell, AMENITY - Beam AC LED (ABEAMLED)

### 1.1.1 Data sheet

Manufacturer: Ansell

#### **ABEAMLED AMENITY - Beam AC LED**

Luminaire data

Luminaire efficiency : 68.37%

Luminaire efficiency : 64.95 lm/W

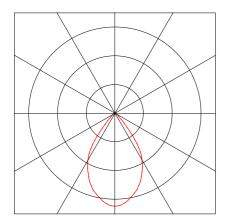
Classification : A60 ↓100.0% ↑0.0%

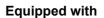
CIE Flux Codes : 89 98 99 100 68

UGR 4H 8H : 16.9 / 16.9 : 89 98 99 100 68 : 16.9 / 16.9

UGR 4H 8H : 20 W Power Luminous flux : 1299 lm

**Dimensions** : 148 mm x 194 mm x 75 mm



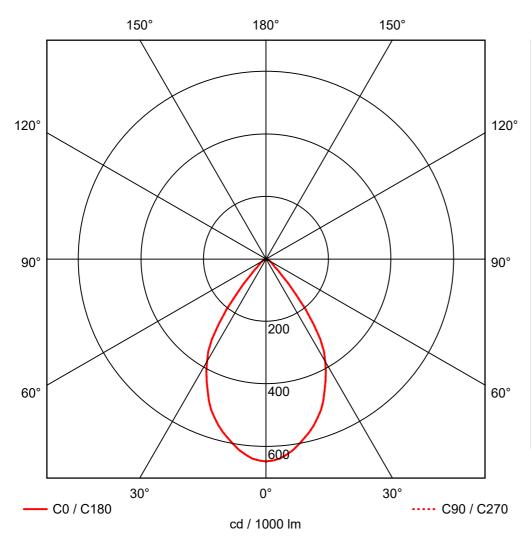


Quantity : 1 Designation : LED 0
Colour : 840/4000K
Luminous flux : 1900 lm Colour reproduction : 1B/80...89



### 1.1 Ansell, AMENITY - Beam AC LED (ABEAMLED)

### 1.1.2 LDC



	C0	C90	C180
0°	648	648	648
5°	634	634	634
10°	602	602	602
15°	564	564	564
20°	514	514	514
25°	448	448	448
30°	378	378	378
35°	287	287	287
40°	153	153	153
45°	60	60	60
50°	31	31	31
55°	20	20	20
60°	13	13	13
65°	9	9	9
70°	5	5	5
75°	4	4	4
80°	3	3	3
85°	3	3	3
90°	2	2	2
	cd / 1000 lm		

Manufacturer : Ansell
Order number : ABEAMLED

Luminaire name : AMENITY - Beam AC LED Equipment : 1 x LED 0 20 W / 1900 Im Dimensions : L 148 mm x W 194 mm x H 75 mm

File name : ABEAMLED.ldt

Efficiency factor Luminaire efficacy Light distribution Beam Angle : 68.37% : 64.95 lm/W (A60)

: 33.3° C0

33.3° C90 33.3° C180 33.3° C270

# DARLING ASSOCIATES ARCHITECTS

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