

Wood Green - Bury Road

Installation : Kosnic Lighting Ltd

Project number : TC.PR142

Customer : Mark Matthews - MME

Processed by : Thomas Cross

Date : 19.05.2023

Project description:

Notes:

Lobby Ceiling Height Estimated at 2.4m

Lighting calculations are provided as a guide only.

Schemes are based upon the room dimensions and information issued by the Client.

All dimensions and project information / requirements must be checked prior to order.

The Lighting Scheme has been designed to CIBSE guidelines where applicable. Standard reflectance levels used.

Lighting designs are carried out for estimation purposes only and Kosnic accept no responsibility, and cannot be held liable for, any variances in light levels achieved. It is ultimately the responsibility of the installer to ensure the solution offered is suitable for the installation environment, and meets all of the requirements of the end user.

Where applicable, Emergency Lighting has been suggested in accordance with BS5266, EN1838 and EN50172.

It is the responsibility of the Purchaser/Installer, and not Kosnic, to ensure that the design complies with local fire, health, and safety regulations. The emergency lighting must be checked and approved by a local fire control officer and approved by the building owner. In the event that the design is found not to comply, Kosnic will adjust the design in consultation with the customer to ensure that it does comply with such regulations.

Any emergency lighting calculations included do not account for the location of critical emergency items, such as, but not limited to, plant or switch room task locations, reception telephone, first aid points, extinguisher points, call points, push bars, fire panels, etc. These areas may require higher risk lux levels under emergency conditions.

In the absence of a Fire Strategy plan, any exit signs specified have been done so based on assumptions regarding the shortest exit routes. These are estimations only and should be reviewed in full prior to any order. Responsibility for this lies with the Purchaser/Installer and the responsible person, or building owner, for the site. Any controls or sensors specified by Kosnic are offered purely as a suggestion and Kosnic accept no responsibility, and cannot be held liable for, specified controls meeting the specific needs and/or requirements of the site/installation. It is the responsibility of the Purchaser/Installer to make sure that any proposed controls or sensors meet their specific needs and/or requirements, or the specific needs and/or requirements of the site/installation.

Kosnic Lighting Ltd is not qualified to determine the structural and electrical appropriateness of their designs and is not responsible, and cannot be held liable for, any improper engineering, construction, rigging or handling methods, or for any improper use of structures or equipment that may be employed to realise the design.

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

1 Luminaire data

1.1 Kosnic, LED Amenity Exterior Brickligh... (LDG10-BLK)

1.1.1 Data sheet

Manufacturer: Kosnic

LDG10-BLK LED Amenity Exterior Bricklight - Ledge

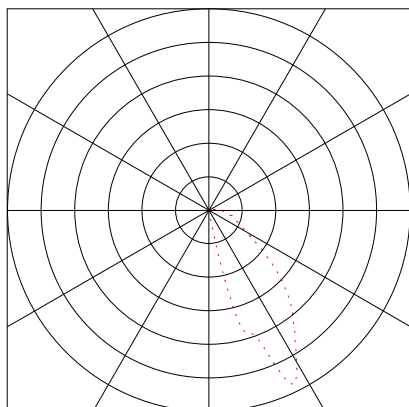
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 16 lm/W
Classification : A31 ↓96.9% ↑3.1%
CIE Flux Codes : 42 79 94 97 101
UGR 4H 8H : 27.6 / <10.0
Power : 10 W
Luminous flux : 160 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 4000
Luminous flux : 160 lm
Colour reproduction : 82

Dimensions : 83 mm x 210 mm x 75 mm



1 Luminaire data

1.2 Kosnic, LED Surface Bulkhead -... (KBHDDC9S65-WHT ...)

1.2.1 Data sheet

Manufacturer: Kosnic



KBHDDC9S65-WHT w/ K2DC9-18CRD (18w Output 4000k) Ceiling / Wall-mounted Luminaire LED Surface Bulkhead - Ossa + K2D

IP65 Ossa Bulkhead (White Trim) w/ K2DC9-18CRD Lamp (18w Output 4000k)

Overview

Kosnic's IP65 Ossa LED bulkhead is perfect for Kosnic's K2D standard and sensor LED lamps. The bulkhead includes an emergency option and offers a low maintenance and robust solution to lighting in all areas where a practical lighting solution is required. The bulkhead may be used as a simple utility style bulkhead without a trim or can be enhanced with one of the decorative trims to give a higher aesthetic appeal where required. Optional backlight rings are supplied with the 379mm trims but do not have to be used. Supplied with small white trim as standard.

Kosnic's latest LED DD sensor lamp takes a fresh approach to functional lighting with a design that offers selectable 9W, 12W or 18W output and 3000K, 4000K or 5000K CCT options on a single lamp. The lamps are recommended for the Ossa and Viso fittings and compatible with Kosnic's plug-in emergency modules. The products bring the energy saving capabilities of LED technology to the commercial environment and the lamps may quickly replace existing fluorescent lamps with no rewiring where space allows.

Features

- Choice of alternative decorative trims
- Optional backlight rings (red/green/blue) supplied with 379mm trims
- Optimised design for the Kosnic K2D LED lamps
- Optional easy fit emergency modules (requires un-switched supply)
- Class II
- IK10
- IP65
- Polycarbonate
- Rear entry plus 4 x 20mm side knockouts
- Built-in microwave sensor
- Selectable 9W, 12W or 18W option
- Selectable 3000K, 4000K or 5000K option
- Save energy up to 65% compared with a fluorescent lamp with magnetic ballast
- Single side high lumen output for light only where it's needed
- Optional 10% dimming corridor function
- Long life of 30,000h
- Compatible with Kosnic's standard and self-test emergency modules
- Instant start
- Negligible UV output
- Mercury free

Emergency Module Option

An optional manual or self-test emergency module can easily be installed. The emergency module provides power in the event of a cut in the supply and must be wired to the un-switched supply through the un-switched Live terminal. The battery will supply the lamp for over 3 hours at a reduced output level dependent on the lamp wattage.

Compatible Emergency Module = EMDD02 (standard) or CEC02LBL/S (self-test)
Emergency Luminous Flux = 120lm*

*Bulkhead LOR (65%) applied.

1 Luminaire data

1.2 Kosnic, LED Surface Bulkhead -... (KBHDDC9S65-WHT ...)

1.2.1 Data sheet

Please see datasheet or website for further info.

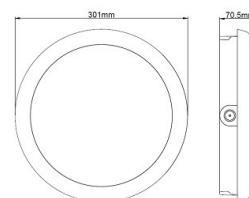
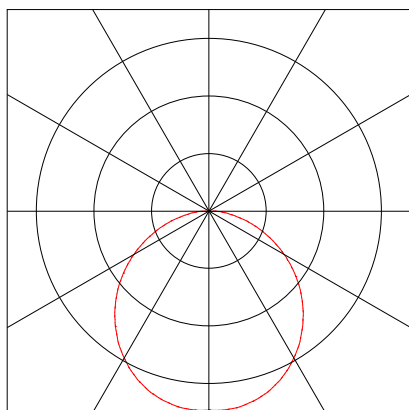
Luminaire data

Absolute Photometry
Luminaire efficacy : 77.78 lm/W
Classification : A40 ↓ 100.0% ↑ 0.0%
CIE Flux Codes : 47 78 95 100 100
UGR 4H 8H : 22.7 / 22.7
Control gear : Electronic ballast
Power : 18 W
Luminous flux : 1400 lm

Dimensions : Ø300 mm x 70 mm

Equipped with

Quantity : 1
Designation : LED
Colour : 4000K
Socket : -
Colour reproduction : 82



Emergency Lighting

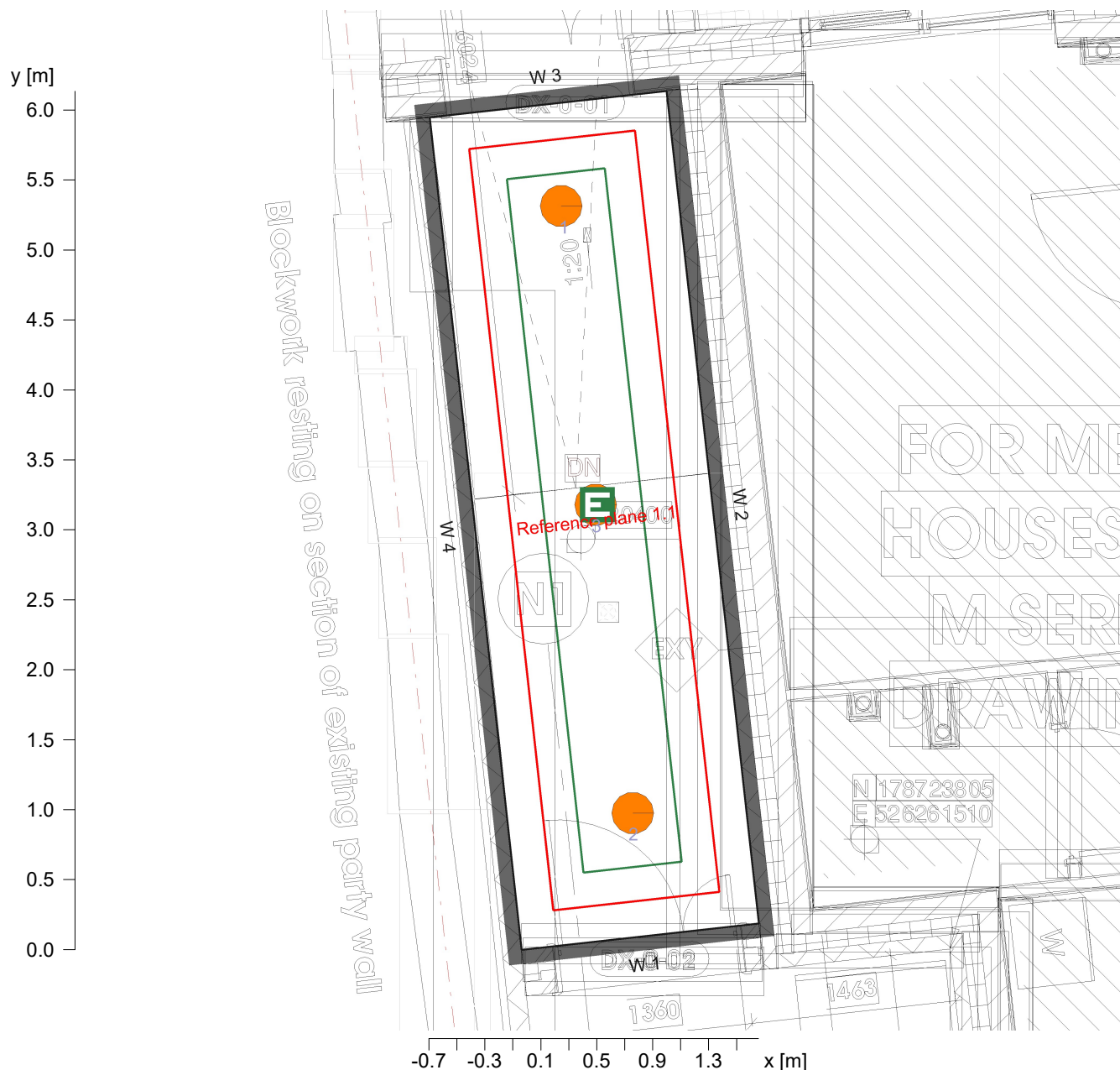
Light source from normal operation with reduced flux

Luminous flux : 120 lm

2 N1 - Lobby

2.1 Description, N1 - Lobby

2.1.1 Floor plan

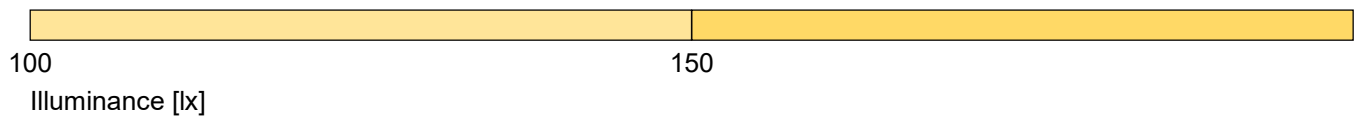
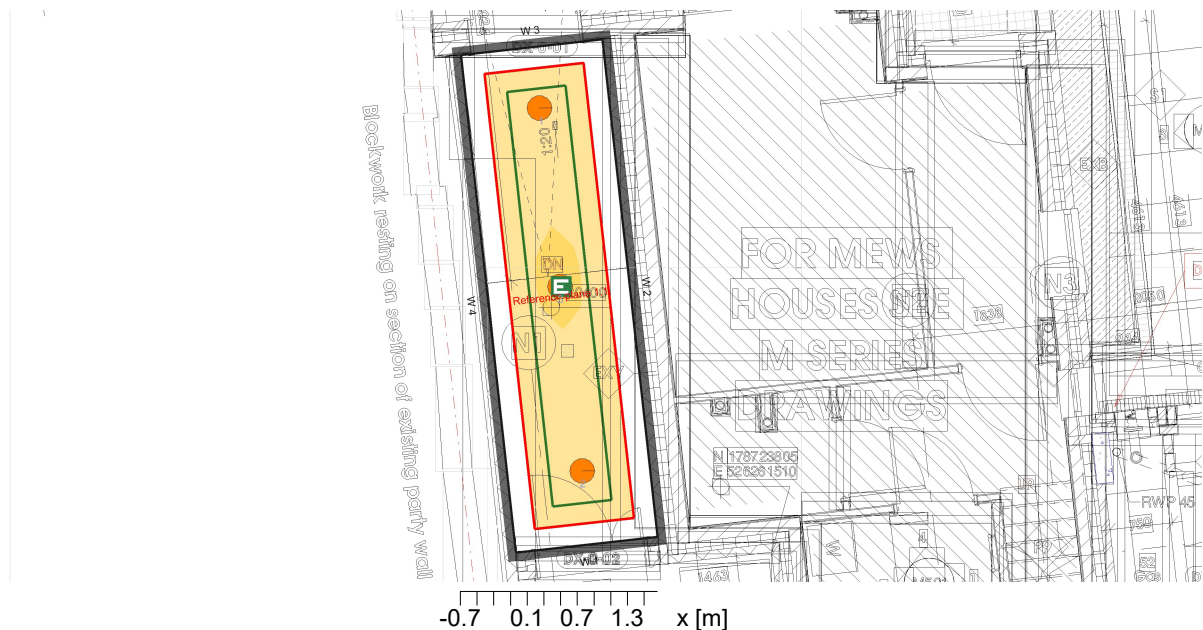


Wall	x	y	Length	Reflectance
1	8.26 m	-11.75 m	1.71 m	50.0 %
2	7.60 m	-5.80 m	5.98 m	50.0 %
3	5.91 m	-5.99 m	1.70 m	50.0 %
4	6.56 m	-11.94 m	5.98 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.40 m		
Height of ref. plane		0.00 m		

2 N1 - Lobby

2.2 Summary, N1 - Lobby

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux	4200.00 lm
Total power	54.0 W
Total power per area (10.20 m ²)	5.30 W/m ² (3.82 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal	cylindrical
E_{min}	139 lx	117 lx
$E_{min}/\bar{E}_m (U_o)$	0.80	0.57
$E_{min}/E_{max} (U_d)$	0.73	
E_z/E_h		0.35
Position	0.00 m	1.60 m
$R_{UG} (1.5H \ 5.1H)$	≤ 21.4	

Luminaire :
 (LED Surface Bulkhead - Ossa + K2D, KBHDDC9S65-WHT w/ K2DC9-18CRD (18w Output 4000k))

Major surfaces

	$\bar{E}_m$	U_o
M 1.5 (Ceiling)	49 lx	0.88
M 1.1 (Wall)	127 lx	0.61
M 1.2 (Wall)	125 lx	0.60
M 1.3 (Wall)	145 lx	0.54
M 1.4 (Wall)	122 lx	0.62

2 N1 - Lobby

2.2 Summary, N1 - Lobby

2.2.1 Result overview, Evaluation area 1

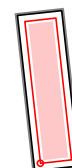
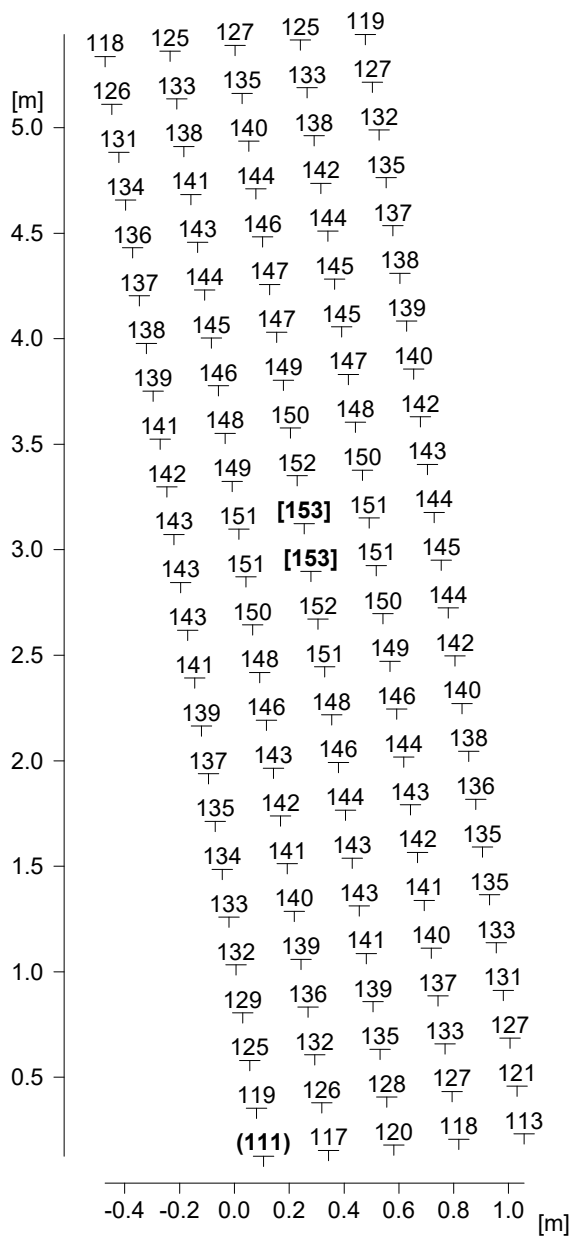
Type No. \ Make

2	3 x		Kosnic	
			Order No.	: KBHDDC9S65-WHT w/ K2DC9-18CRD (18w Output 4000k)
			Luminaire name	: LED Surface Bulkhead - Ossa + K2D
			Equipment	: 1 x LED 18 W / 1400 lm
			Emergency	: 120 lm (8.6 %)

2 N1 - Lobby

2.3 Calculation results, N1 - Lobby

2.3.1 Table, Reference plane 1.1 (E)



Height reference plane	: 0.00 m
Average illuminance	$\bar{E}_m$: 139 lx
Minimum illuminance	E_{min} : 111 lx
Maximum illuminance	E_{max} : 153 lx
Uniformity U_o	$E_{min}/\bar{E}_m$: 1 : 1.25 (0.80)
Diversity U_d	E_{min}/E_{max} : 1 : 1.38 (0.73)