

The OCSC logo is positioned in the upper left. The background features a large, semi-circular architectural line drawing of a city street scene, including buildings, a road, and a river, rendered in a light blue-grey color.

OCSC

O'CONNOR · SUTTON · CRONIN
MULTIDISCIPLINARY CONSULTING ENGINEERS

S1078: **INDEPENDENT HOUSE**

SITE LIGHTING REPORT

For
Summix IHD Developments Ltd

18 March 2025

NOTICE

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DOCUMENT CONTROL & HISTORY

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P03	S4	MT	BF	DB	13/11/2024
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P05	S4	MT	BF	DB	3/03/2025
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1 INTRODUCTION

This report outlines the design criteria and considerations regarding the lighting scheme for the Independent House Development on Abbey Street.

It has been prepared in conjunction as part of a Pre-Planning submission to Dublin County Council.

The report considers the preliminary lighting design as developed by O'Connor Sutton Cronin (OCSC) and should be read in conjunction with OCSC drawing S1078-OCSC-XX-00-SK-E-0001 Proposed Site Lighting Layout Ground Floor Plan.

The external lighting within the proposed development area will be managed and maintained by the developer. The drawings and calculations submitted are to demonstrate the lux level averages across the development are meeting the standard set out by Dublin City Council.

The predicted performance of the external lighting installations has been assessed in detail using Lighting Simulation software.

Standards and guidelines in relation to the lighting design are:

- BS 5489-1-2013 Design of road lighting of roads and public amenity areas. Code of practice (Published on : 31st May 2020 by BSI Standards Limited 2020)
- I.S. EN 13201-2-2015 Road lighting - Performance requirements (Published on: 31st Jan 2016 by BSI Standards Limited 2016)
- Dublin City Council document on General Specification for Public Lighting Design and Installation in the Dublin City Council Area (Published on: January 2020).
- Electrical work shall also comply with the requirements of ESB Networks' National Code of Practice for Customer Interface and ESB Networks' Code of Practice for avoiding Danger from Overhead Electricity Lines.

The electrical services for the external lighting installation will be designed in accordance with NSAI National Rules for Electrical Installations.

2 PROPOSED DEVELOPMENT

Summix IHD Developments Limited intend to apply to Dublin City Council for a permission for a large-scale residential development principally comprising student accommodation at a c. 0.3 Ha site at Nos. 87-93 Middle Abbey Street, Dublin 1, D01 NH70 (known collectively as 'Independent House'). The site is generally bound by Prince's Street North to the north, William's Lane and Nos. 94-96 Middle Abbey Street to the west, Middle Abbey Street to the south, and Nos. 35-39 O'Connell Street Lower (known as 'Penneys') to the east. The site comprises 6 No. interconnecting, long-standing vacant structures as follows: (a) a principally part 5 No. to part 6 No. storey above basement level building fronting Middle Abbey Street, known as Independent House, with a single storey workshop building to the rear; (b) a 5 No. storey (above basement level) building at the corner of Middle Abbey Street and William's Lane, known as Emerald Chambers; (c) a triple height (at basement level) structure towards the centre of the site, known as the 'Printing Hall'; (d) a 2 No. storey (above basement level) warehouse and office fronting William's Lane; (e) a part 3 No. to part 4 No. storey (above basement level) loading bay and office fronting Prince's Street North; and (f) a 3 No. storey (above basement level) office in the eastern portion of the site, bounded by Penneys. The site includes 2 No. Protected Structures (RPS Ref. Nos. 18 & 8797).

The development's surface water and foul water drainage network shall discharge from the site into the existing combined sewer located along Prince's Street North to the north-west of the site. A new pedestrian crossing and upgrade works to the footpath and kerb along Prince's Street North are proposed. Public realm improvements are also proposed to William's Lane. The development site area, drainage works, road works and public realm improvements will provide a total application site area of c. 0.33 Ha.

The development will principally consist of: the retention and refurbishment of part of the building façade along Prince's Street North; the demolition of the 3 No. former warehouses and offices (c. 5,270 sq m) and the lowering of part of the basement level thereat; the demolition of part of the adjoining wall to the north-east of the site, bounding the Penneys loading bay; the partial demolition of the Printing Hall (c. 457 sq m) and the rear of Emerald Chambers (c. 150 sq m) and Independent House (c. 100 sq m); the removal of the existing concrete roof slab at Emerald Chambers to facilitate an increase in floor-to-ceiling height at fourth floor level; the lowering of part of the ground floor level in Independent House and Emerald Chambers for universal access; refurbishment works to the Protected Structures including general internal and external works for conservation repairs, maintenance, change of use and upgrading of the buildings; and the construction of a part 1 No. to part 9 No. storey over basement building connecting into the retained structures and principally comprising 316 No. Student Accommodation bedspaces (267 No. standard rooms, 5 No. accessible rooms, 2 No. twin studios (4 No. bedspaces), 10 No. accessible studios and 30 No. single studios) with associated facilities, which will be utilised for short-term let during student holiday periods. The 272 No. standard and accessible rooms are provided in 42 No. clusters ranging in size from 5 No. bedspaces to 8 No. bedspaces, and all clusters are served by a communal living/kitchen/dining room.

The development also provides: ancillary internal and external communal student amenity spaces and support facilities; cultural and community floor space (c. 644 sq m); 3 No. retail units (c. 216 sq m); a café/restaurant (c. 254 sq m); bicycle stores at basement and ground floor levels; visitor cycle parking spaces; bin stores; ESB substation; hard and soft landscaping; green/blue roofs; new telecommunications infrastructure at roof level, together with all associated equipment; boundary treatments; PV panels; plant; lift overruns; and all associated works above and below ground.

The gross floor area of the development is c. 15,413 sq m comprising c. 12,751 sq m above basement level.

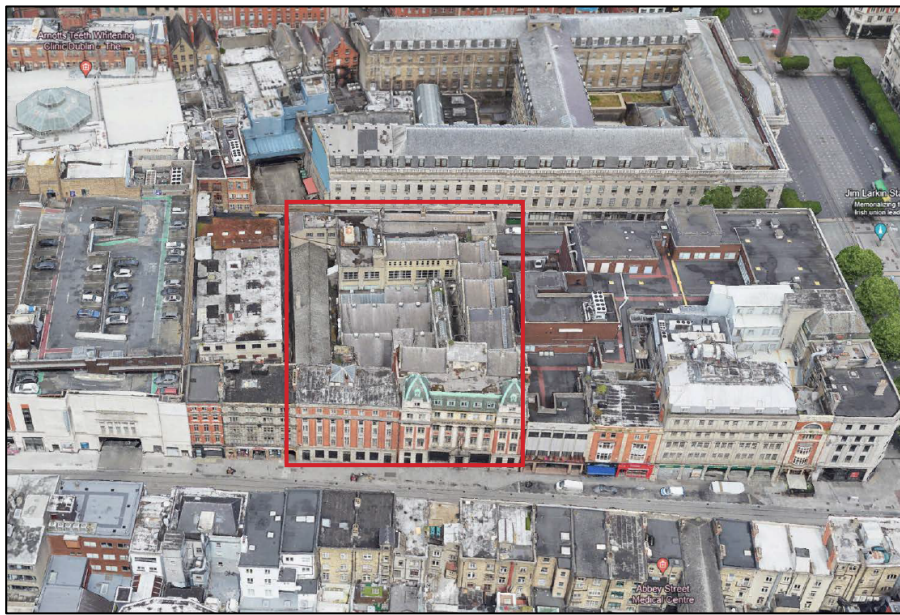


Figure 1 - Outline of Site

3 THE DESIGN

3.1 EXTERNAL LIGHTING

Please refer to Appendix A for site lighting layout.

The external lighting has been designed in the best possible way for visual comfort, biodiversity, and suitability, and shall be specified in accordance with the appropriate maintained illuminance levels recommended by the following documents:

- EN13201-2-2015 Lighting Classes for external lighting. (Published on: 31st Jan 2016 by BSI Standards Limited 2016)
- BS EN 12464-2 Outdoor workplaces (Published on: 31st Jan 2014 by BSI Standards Limited 2014)
- BS 5489-1-2020 Design of road lighting of roads and public amenity areas. Code of practice (Published on : 31st May 2020 by BSI Standards Limited 2020)
- BS EN 13201-2 Lighting Classes for external lighting. (Published on: 31st Jan 2016 by BSI Standards Limited 2016)
- CIBSE Lighting Guide 6 - The Outdoor environment (Published on: Jan 2016 by CIBSE publications)
- Institute of Lighting Professionals (ILP) Guidance notes for the reduction of obtrusive light. (Published on: Jan 2020 by Institution of Lighting Professionals publications)
- Guide on the limitation of the effects of obtrusive light from outdoor lighting installations, 2nd edition
- Dublin City Council document on General Specification for Public Lighting Design and Installation in the Dublin City Council Area (Published on: January 2020).

Lighting design shall ensure that:

- All night-time lighting is concentrated in the appropriate areas
- upward lighting is minimised
- light pollution is minimised
- energy consumption is minimised
- To enhance security

3.2 ENVIRONMENTAL AND BIODIVERSITY STRATEGY

It is widely recognised that artificial lighting can have detrimental effects on nocturnal animals. Therefore, the development lighting strategy has considered the following: -

- **Do not over light** - Where relevant guidance gives a range of illumination levels the lowest one which is appropriate shall be utilised. No lighting is directly at the open water or trees or the canal frontage.
- **Luminance distribution** - The spread of light shall be kept near to or below the horizontal where

possible.

- **Minimise UV light** - Selected luminaires shall emit minimal UV light. This can be achieved by selecting LED luminaires.
- **Colour temperature of lamps** - All light sources shall be 3000K maximum.
- **Lighting controls** – Consideration shall be made to when lighting is operational to reduce detrimental impacts on nocturnal animals.
- **Light spill** – The lighting calculations were conducted to examine if the light spill from the fittings. It was concluded that the levels were appropriately low. As an E4 zone a lux average level below 5 lux would be considered appropriate. To achieve these levels back baffles were installed on the luminaires in question.

Table 2: Environmental zones

Zone	Surrounding	Lighting environment	Examples
E0	Protected	Dark (SQM 20.5+)	Astronomical Observable dark skies, UNESCO starlight reserves, IDA dark sky places
E1	Natural	Dark (SQM 20 to 20.5)	Relatively uninhabited rural areas, National Parks, Areas of Outstanding Natural Beauty, IDA buffer zones etc.
E2	Rural	Low district brightness (SQM ~15 to 20)	Sparsely inhabited rural areas, village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Well inhabited rural and urban settlements, small town centres of suburban locations
E4	Urban	High district brightness	Town / City centres with high levels of night-time activity

Figure 2 - CIE 150 Zone Categorization (2017)

Table 3 (CIE 150 table 2); Maximum values of vertical illuminance on properties.

Light technical parameter	Application conditions	Environmental zone				
		E0	E1	E2	E3	E4
Illuminance in the vertical plane (E_v)	Pre-curfew	n/a	2 lx	5 lx	10 lx	25 lx
	Post curfew	n/a	<0.1 lx*	1 lx	2 lx	5 lx

Figure 3 -CIE 150 Intrusive light (2017)

3.3 LIGHTING CLASSES

The appropriate lighting classes shall be in accordance with BS EN 13201-2: 2015 (Table 3) "Lighting Classes for External Lighting" detailed below:

Class	Horizontal Illuminance	
	Maintained average illuminance. (lx)	Minimum maintained illuminance (lx)
P1	15	3
P2	10	2
P3	7.5	1.5
P4	5	1
P5	3	0.6
P6	2	0.6
P7	Not determined	Not determined

Table 1 - Lighting Classes for external lighting

The points below were used as guidelines in the design of the external lighting. The different lighting classifications used for the proposed development can be seen below:

- Part M and BS8300 guidelines are considered for the stairs/ramps and entrances to the site.
- CIBSE guidelines considered while installing and designing the strategy lighting for areas like roadways.
- Minimum lux level to be used or as required by Health & Safety especially along the perimeters.
- Lighting Classification
 - P4 – All Pathways

3.4 DETAILED STRATEGY

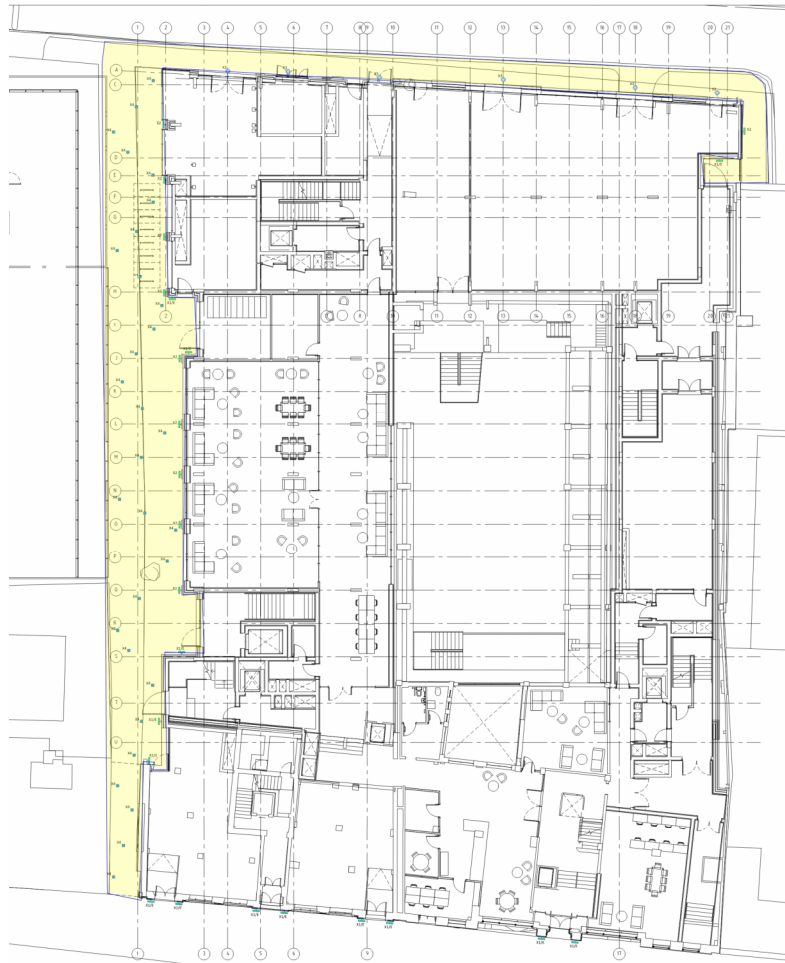


Figure 4- Proposed Typology Lighting Plan

The design considerations taken into account:

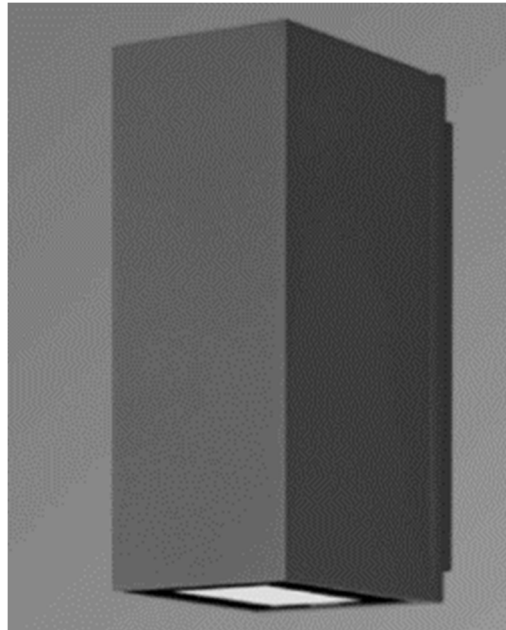
- This area is classified as P4 for walkways.
- Emergency luminaires Mounted near final exists.
- Minimise Light Spill onto Middle Abbey Street

3.5 LUMINAIRES, LIGHTING CONTROL

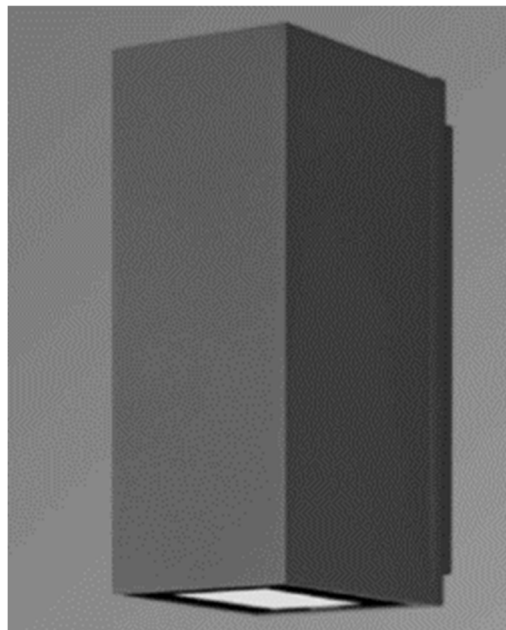
3.5.1 LUMINAIRES

The following luminaires have been used as the basis of this design:

- Type X1 - WE-EF RLS410 LED 6W 3000K A60 wall mounted fitting.



- Type X2 - WE-EF QLS410 LED 12W 3000K E/A60 up/down distribution wall mounted fitting. Has up lighting element directed at building's façade.



- Type X3 – HARTE FARMYARD STYLE WALL LIGHT 7W 3000K, mounted along back of building.



- Type EX – Existing wall mounted light to be retained and refurbished.



All proposed luminaires are 3000K colour temperature. The height of fittings was selected to comply with both private and public specifications. The desired lighting design may also be achieved by other luminaires and the final lighting installation may use other luminaires, with modified positioning and aiming to achieve the same result. Manufacturers' stated performance characteristics are subject to change.

3.5.2 LIGHTING CONTROL

All luminaires shall be able to dim up or down to achieve the desired lighting class and controlled with timers and photocell sensors. Curfews will be accommodated using timers when or if agreed.

4 RESULTS

Figure 5 indicates the predicted illumination levels. See appendix B for detailed results.

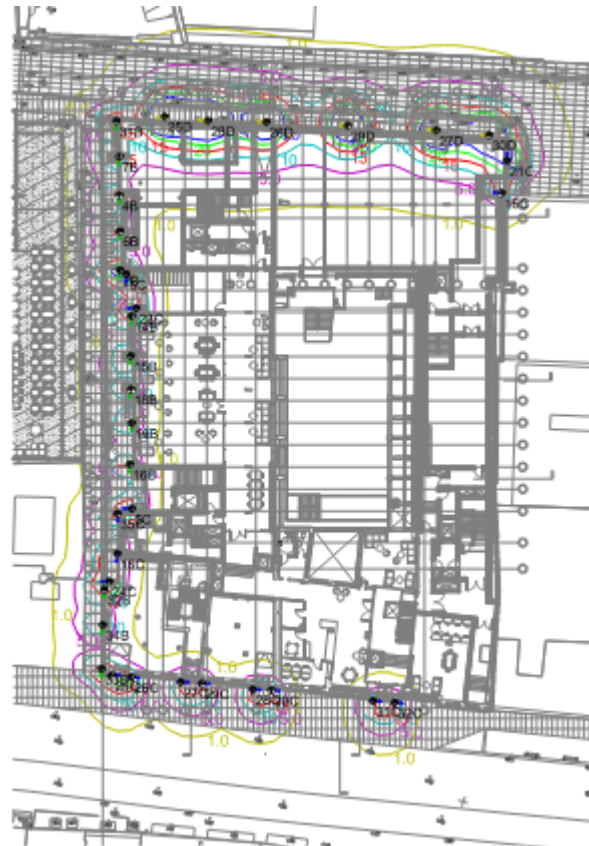
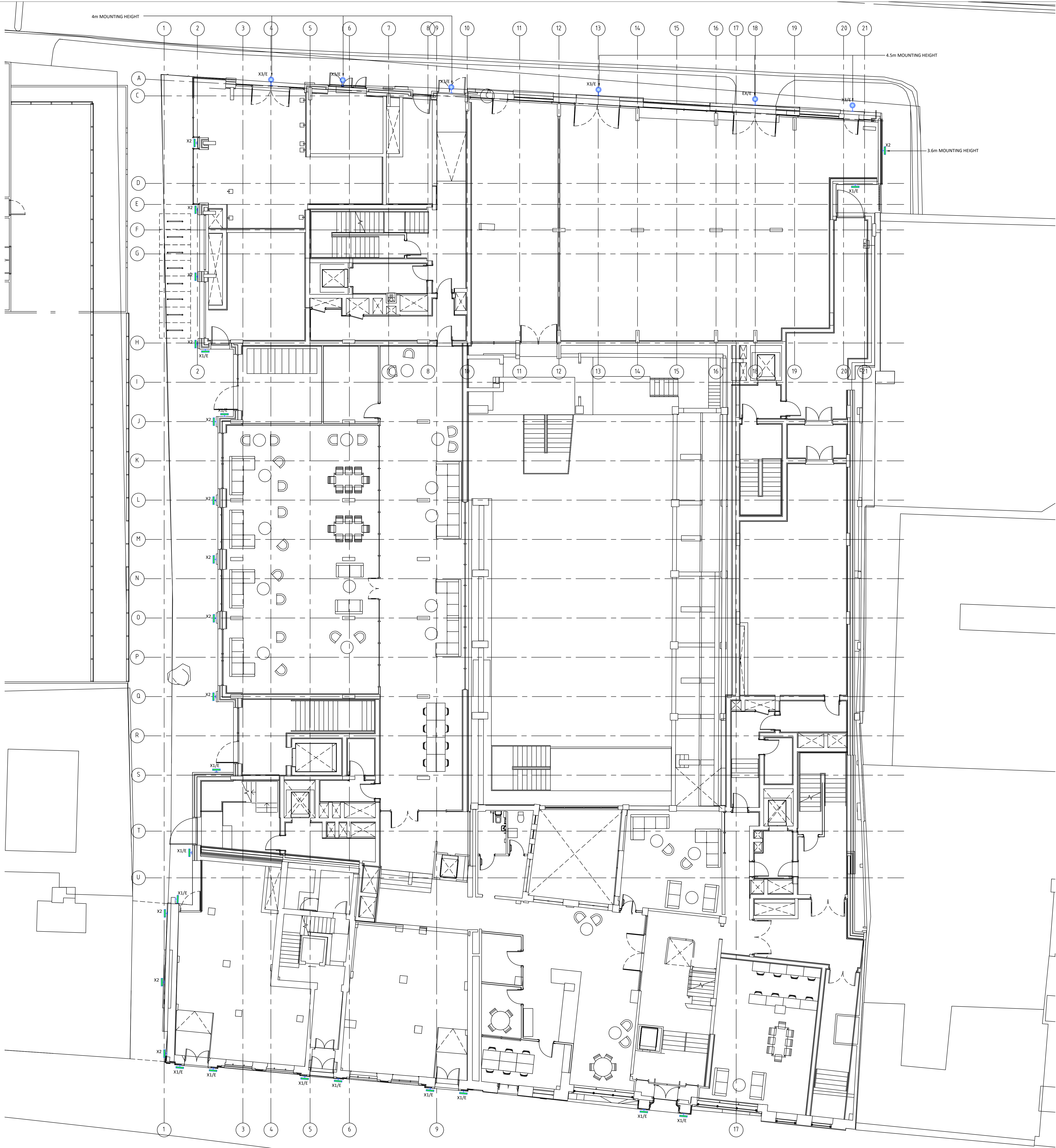


Figure 5 - Results

Results for the Walkways on proposed development indicate the following:

- The average 13.45 lux level maintained and a minimum of 1.13 lux on all pathways throughout the site in line with P4 class. Individual or circuited light fittings, may be dimmed to achieve lower light levels if recommended or due to the implementation of a curfew if agreed.
- The high average is due to the availability of manufactures .ldt files.

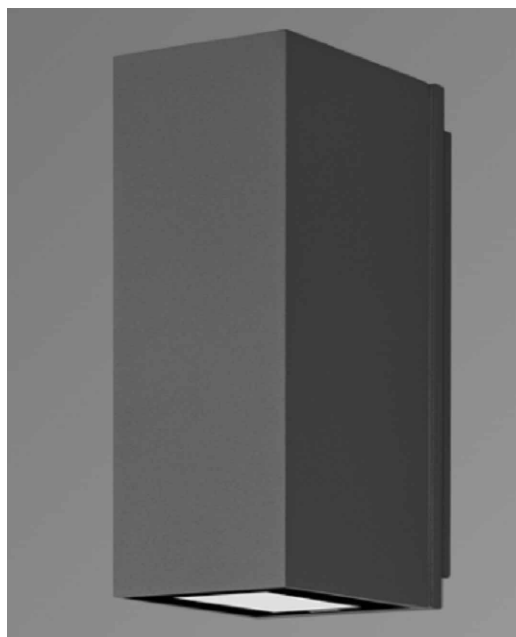
Appendix A **SITE LIGHTING DRAWING**



- DRAWING NOTES:**
1. ALL EQUIPMENT TO BE SUITABLY IP RATED FOR THE ENVIRONMENT THEY ARE BEING INSTALLED.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS & SPECIFICATIONS.
 3. CONTRACTOR SHALL ALLOW FOR PROVISION OF SAMPLE FITTINGS.
 4. CONTRACTOR TO MAKE FULL TECHNICAL SUBMITTAL BEFORE PROCURING ANY FITTINGS. ANY CHANGES TO EQUIPMENT SPECIFIED AT TENDER MUST BE SIGNED OFF BY OCSC.
 5. THE CONTRACTOR SHALL ALLOW FOR ANY SUSPENSION EQUIPMENT, LAMPS, END CAPS & ANY ASSOCIATED ACCESSORIES.
 6. OCSC RESERVES THE RIGHT TO HAVE ANY UNAPPROVED FITTINGS THAT MAY BE INSTALLED REMOVED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE CONTRACT.
 7. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH ETCI REGULATIONS.
 8. ALL LIGHTING CIRCUITS TO BE WIRED IN 2.5mm² LSF SINGLES UNLESS OTHERWISE STATED.
 9. ALL EXTERNAL LIGHTING CONTROLLED VIA SOLAR TIMECLOCK.

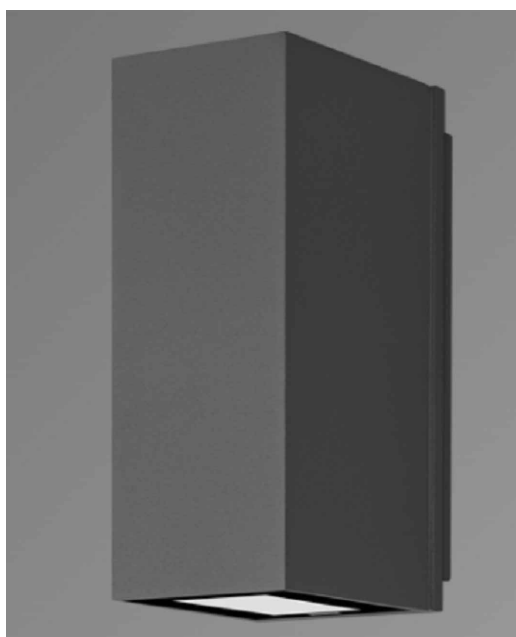
- LEGEND OF SYMBOLS:**
- X1 WE-EF RL5410 LED 6W 3000K A60 WALL 2.5m MOUNTED FITTING (UNLESS HEIGHT IS SPECIFIED OTHERWISE ON DRAWING)
 - X2 WE-EF QL5410 LED 12W 3000K A60 UP/DOWN DISTRIBUTION 2.5m WALL MOUNTED FITTING (UNLESS HEIGHT IS SPECIFIED OTHERWISE ON DRAWING)
 - X3 HABITE FARBYARD STYLE WALL LIGHT 7W 3000K HEIGHT IS SPECIFIED ON DRAWING
 - EX EXISTING WALL MOUNTED LUMINAIRE TO BE RETAINED AND REFURBISHED
 - /E/ DENOTES TO 3 HOUR INTEGRAL EMERGENCY CONVERSION PACK

REF: 'X1' LUMINAIRE
WE-EF RL5410 LED 6W 3000K A60 WALL MOUNTED FITTING



REFER TO PUBLIC LIGHTING REPORT

REF: 'X2' LUMINAIRE
WE-EF QL5410 LED 12W 3000K A60 UP/DOWN DISTRIBUTION WALL MOUNTED FITTING



REFER TO PUBLIC LIGHTING REPORT

REF: 'X3' LUMINAIRE
HABITE FARBYARD STYLE WALL LIGHT 7W 3000K WALL MOUNTED FITTING



REFER TO PUBLIC LIGHTING REPORT

- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DESIGN TEAM DRAWINGS AND SPECIFICATIONS.
- FOR SETTING OUT REFER TO ARCHITECT'S DRAWINGS. DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS ONLY.
- NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR STORED IN ANY RETRIEVAL SYSTEM OF ANY NATURE WITHOUT THE WRITTEN PERMISSION OF O'CONNOR SUTTON CRONIN AS COPYRIGHT HOLDER EXCEPT AS AGREED FOR USE ON THE PROJECT FOR WHICH THE DOCUMENT WAS ORIGINALLY ISSUED.

Rev No.	Date	Revision Note	Drn by	Chkd by
P01	04.10.24	SUITABLE FOR PLANNING.	B.M.	M.T.
P02	01.11.24	SUITABLE FOR PLANNING.	M.T.	B.F.
P03	06.11.24	REVISED FOR PLANNING.	M.T.	B.F.
P04	25.03.03	REVISED FOR PLANNING.	M.T.	B.F.
P05	11.03.25	REVISED FOR PLANNING.	M.T.	B.F.
P06	18.03.25	REVISED FOR PLANNING.	M.T.	B.F.

Rev No.	Date	Revision Note	Drn by	Chkd by



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Client: SUMMIX CAPITAL LIMITED
Project: INDEPENDENT HOUSE STUDENT ACCOMMODATION

Title: ELECTRICAL
PROPOSED SITE LIGHTING LAYOUT
GROUND FLOOR PLAN

Code	Originator	Zone	Level	Type	Role	Number	Status	Revision
S1078	OCSC	XX	00	SK	E	0001	S4	P06

Date: 04.10.24 Scale @ A0 1:100 Drn by: B.M. Chkd by: M.T. Aprvd by: B.F.

Appendix B **LIGHTING CALCULATION REPORT**

DATE: 11 March 2025
DESIGNER: MT
PROJECT No: S1078
PROJECT NAME: INDEPENDENT HOUSE

**LIGHTING
REALITY**

Outdoor Lighting Report

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Walkway	-12.11	-8.67	64.00	75.11	1.21	0.74
2	Light Spill	-37.96	-39.56	116.34	118.93	1.49	1.49

Luminaires

Luminaire B Data

Supplier	
Type	VLS410 [E/A60] IP66-2xLED-3/12W/4K;VLS 410 LED, Wall Luminaire
Lamp(s)	LED 2x3/12W/840 - 4000K
LampFlux(klm)/Colour	1.86 4000K/80
File Name	nw updown 131-9512.Idt
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	36.2, 3.5, 0.9
No. in Project	12

Luminaire C Data

Supplier	
Type	VLS410 [A60] IP66-1LED-3/6W/3K;VLS410 LED, Wall Luminaires / S
Lamp(s)	LED-3/6W/830 - 3000K
LampFlux(klm)/Colour	0.87 3000K/80
File Name	new forward em 131-9502.Idt
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	72.4, 6.9, 0.3
No. in Project	16

Luminaire D Data

Supplier	
Type	R-LAB-1957-1 V1 - Harte Outdoor - Tear Drop lantern TD301L
Lamp(s)	R-LAB-1957-1 V1 - Harte Outdoor - Tear Drop lantern TD301L
Lamp Flux (klm)	6.75
File Name	Tear Drop lantern TD301LLDIT
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	129.1, 25.6, 6.3
No. in Project	6

Layout

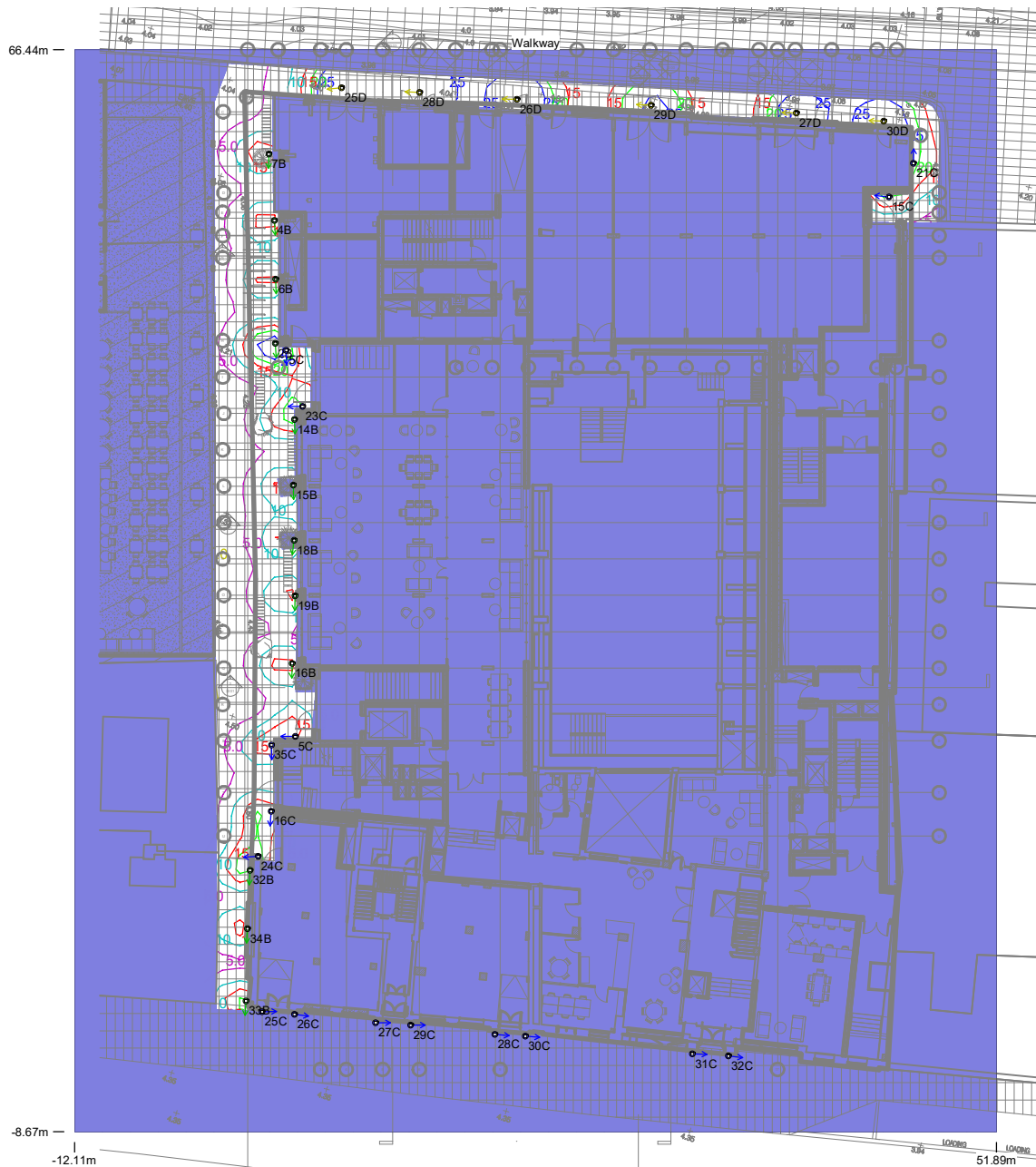
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Dimmed to	Target X	Target Y	Target Z
2	B	1.82	46.07	2.50	273.00	0.00	0.00	0.00	100%			
4	B	1.75	54.59	2.50	274.00	0.00	0.00	0.00	100%			
5	C	3.20	18.76	2.50	179.00	0.00	0.00	0.00	100%			
5	C	2.59	45.58	2.50	270.00	0.00	0.00	0.00	100%			
6	B	1.84	50.51	2.50	272.00	0.00	0.00	0.00	100%			
7	B	1.38	59.21	2.50	268.00	0.00	0.00	0.00	100%			
15	C	44.41	56.21	2.50	175.00	0.00	0.00	0.00	100%			
16	C	1.53	13.59	2.50	266.00	0.00	0.00	0.00	100%			
14	B	3.15	40.79	2.50	272.00	0.00	0.00	0.00	100%			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Dimmed to	Target X	Target Y	Target Z
15	B	3.06	36.23	2.50	271.00	0.00	0.00	0.00	100%			
16	B	2.98	23.85	2.50	269.00	0.00	0.00	0.00	100%			
18	B	3.13	32.40	2.50	263.00	0.00	0.00	0.00	100%			
19	B	3.20	28.54	2.50	268.00	0.00	0.00	0.00	100%			
21	C	46.10	58.56	3.60	88.00	0.00	0.00	0.00	100%			
23	C	3.72	41.69	2.50	180.00	0.00	0.00	0.00	100%			
24	C	0.63	10.46	2.50	183.00	0.00	0.00	0.00	100%			
25	C	0.90	-0.32	2.50	1.00	0.00	0.00	0.00	100%			
26	C	3.15	-0.51	2.50	353.00	0.00	0.00	0.00	100%			
27	C	8.79	-1.09	2.50	0.00	0.00	0.00	0.00	100%			
28	C	17.05	-1.89	2.50	355.00	0.00	0.00	0.00	100%			
29	C	11.22	-1.24	2.50	0.00	0.00	0.00	0.00	100%			
30	C	19.17	-2.01	2.50	355.00	0.00	0.00	0.00	100%			
31	C	30.77	-3.24	2.50	357.00	0.00	0.00	0.00	100%			
32	C	33.26	-3.39	2.50	353.00	0.00	0.00	0.00	100%			
25	D	6.43	63.79	4.00	185.00	0.00	0.00	0.00	30%			
26	D	18.59	62.98	4.00	178.00	0.00	0.00	0.00	30%			
27	D	37.99	62.04	4.50	178.00	0.00	0.00	0.00	30%			
28	D	11.84	63.47	4.00	178.00	0.00	0.00	0.00	30%			
29	D	27.89	62.60	4.50	178.00	0.00	0.00	0.00	30%			
30	D	44.05	61.48	4.50	178.00	0.00	0.00	0.00	30%			
32	B	0.07	9.49	2.50	266.00	0.00	0.00	0.00	100%			
33	B	-0.21	0.43	2.50	266.00	0.00	0.00	0.00	100%			
34	B	-0.11	5.45	2.50	266.00	0.00	0.00	0.00	100%			
35	C	1.57	18.17	2.50	272.00	0.00	0.00	0.00	100%			

Horizontal Illuminance (lux)

Walkway

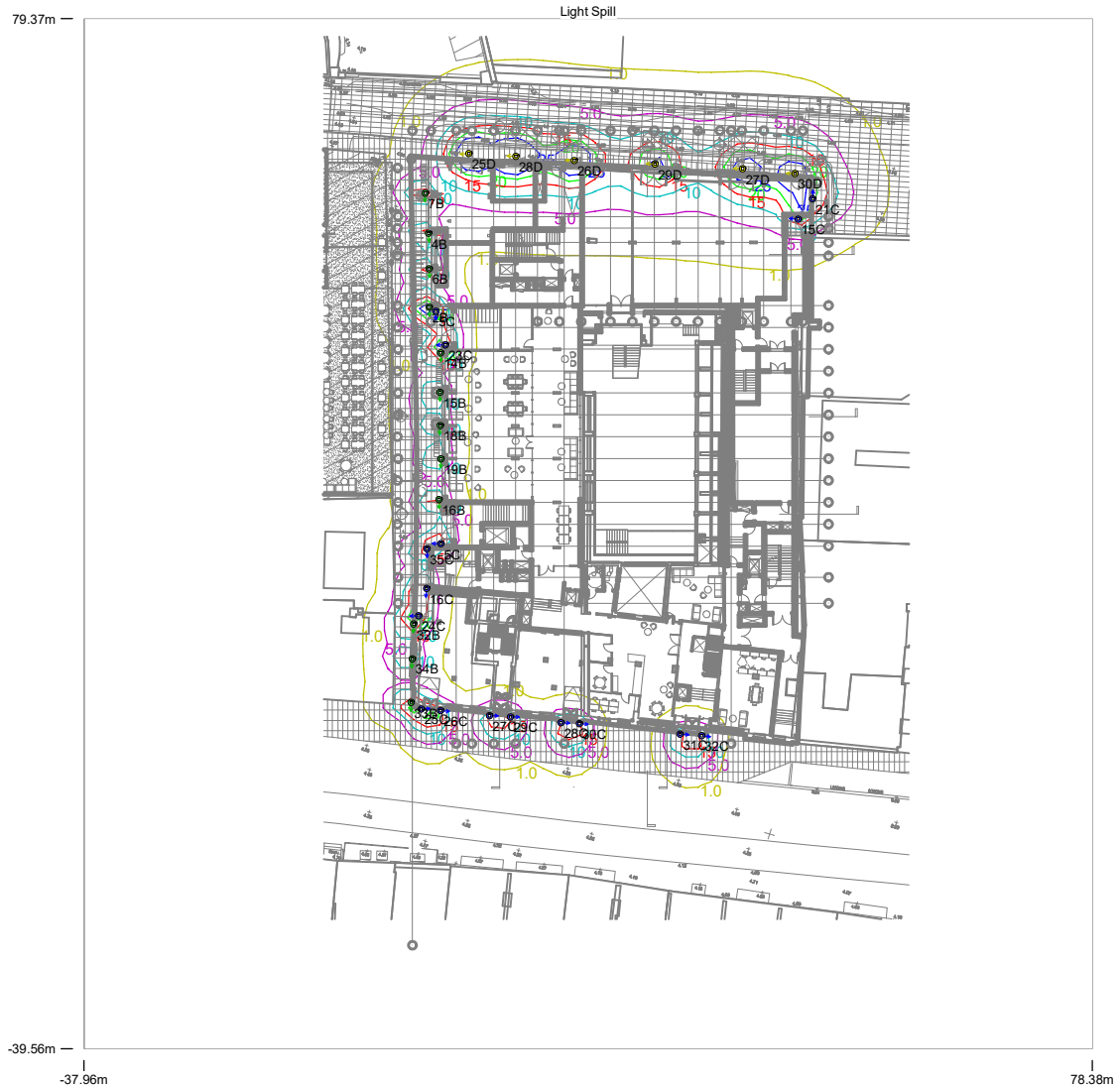


Results

Eav	12.08
Emin	1.13
Emax	40.30
Emin/Emax	0.03
Emin/Eav	0.09

Horizontal Illuminance (lux)

Light Spill



Results

Eav	1.12
Emin	0.00
Emax	38.48
Emin/Emax	0.00
Emin/Eav	0.00

Appendix C **LUMINAIRE DATA SHEETS**



Description

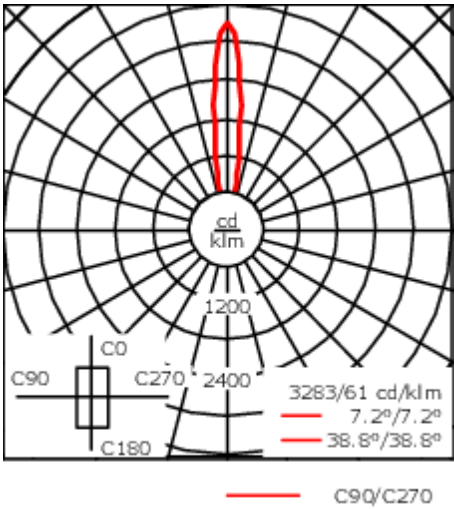
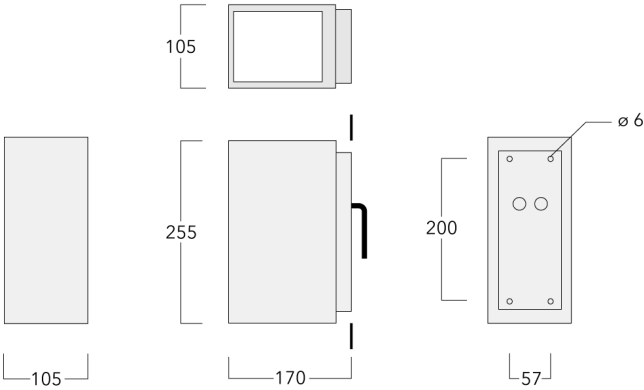
IP66, Class I. Class II on request. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Silicone rubber gasket. Safety glass lens. Two cable entries. Integral EC electronic converter. CAD-optimised optics for superior illumination and glare control. OLC® One LED Concept. Factory installed LED circuit board. 1-10V or DALI interface on request.

Optional 2200 K version up to max. 1050mA available. To be specified at time of ordering.

Weight	3.30 kg
Light distribution	symmetric, narrow beam up and forward throw down [E/A60]
Light source	LED-2x3/12W / 700 mA - 3000 K
CRI	80
Power supply	EC
LEDs	6
Rated input power	15 W

Nominal Lumen (lm)	
LED Lumen	310
Total Lumen	1860
Tj	85

Rated lumens (lm)	
LED Lumen	163.5
Total Lumen	981.1
Ta	25



Specifications

Material description

Body	Marine-grade die-cast aluminium alloy
Lens	Safety glass lens
Colours	RAL9004 Signal black RAL9006 White aluminium RAL9007 Grey aluminium RAL7016 Anthracite grey RAL9016 Traffic white
Gasket	Silicone rubber gasket
Fasteners	PCS Polymer Coated Stainless Steel Hardware
Ingress protection	IP66
Impact resistance	IK07
Corrosion resistance	5CE

Electrical description

Power supply	220-240V / 50-60 Hz
Driver / Ballast	Standard. Optional DALI version available. To be specified at time of ordering.
Surge protection	1/2 kV

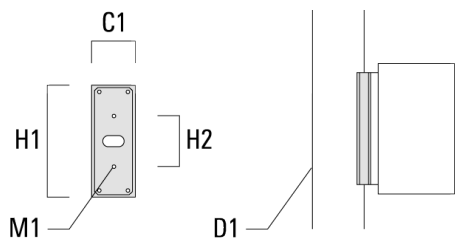
Additional information

Lifetime	Ta=25° L90B10 > 90000h
Energy efficiency class	C-D (Light source)

Mounting Accessories

Column fitter

Description	Part ID	C1	D1	H1	H2	M1	Weight (kg)
CF-410/420	131-9140	83	≥ 140	220	100	6	0.60





Description

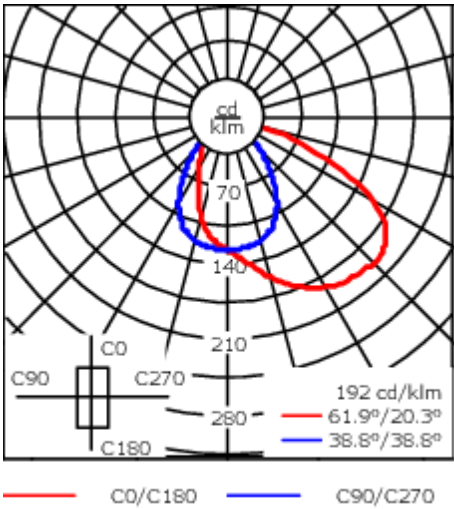
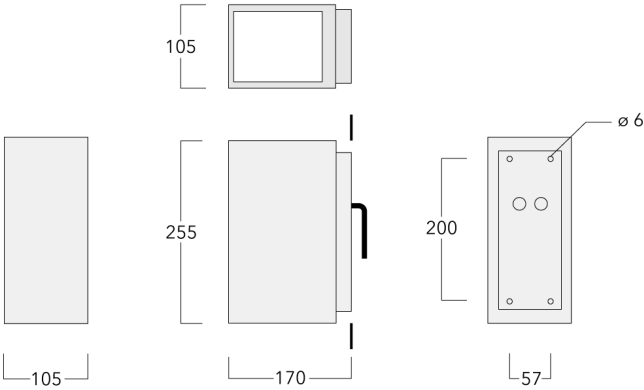
IP66, Class I. Class II on request. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Silicone rubber gasket. Safety glass lens. Two cable entries. Integral EC electronic converter. CAD-optimised optics for superior illumination and glare control. OLC® One LED Concept. Factory installed LED circuit board. 1-10V or DALI interface on request.

Optional 2200 K version up to max. 1050mA available. To be specified at time of ordering.

Weight	3.30 kg
Light distribution	asymmetric, forward throw [A60]
Light source	LED-3/6W / 700 mA - 3000 K
CRI	80
Power supply	EC
LEDs	3
Rated input power	7.5 W

Nominal Lumen (lm)	
LED Lumen	290
Total Lumen	870
Tj	85

Rated lumens (lm)	
LED Lumen	86.9
Total Lumen	260.6
Ta	25



Specifications

Material description

Body	Marine-grade die-cast aluminium alloy
Lens	Safety glass lens
Colours	RAL9004 Signal black RAL9006 White aluminium RAL9007 Grey aluminium RAL7016 Anthracite grey RAL9016 Traffic white
Gasket	Silicone rubber gasket
Fasteners	PCS Polymer Coated Stainless Steel Hardware
Ingress protection	IP66
Impact resistance	IK07
Corrosion resistance	5CE

Electrical description

Power supply	220-240V / 50-60 Hz
Driver / Ballast	Standard. Optional DALI version available. To be specified at time of ordering.
Surge protection	1/2 kV

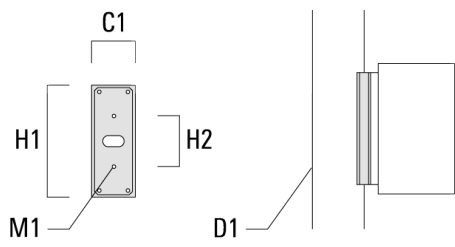
Additional information

Lifetime	Ta=25° L90B10 > 90000h
Energy efficiency class	C-D (Light source)

Mounting Accessories

Column fitter

Description	Part ID	C1	D1	H1	H2	M1	Weight (kg)
CF-410/420	131-9140	83	≥ 140	220	100	6	0.60





Farmyard style wall light 0.49m (H066)

Product code	H066	
Location:	Wall Light	
Use:	Exterior	
IP Rating:	IP65	
Main Materials:	Galvanised Steel	
Height (mm / ") :	490	19.29
Width (mm / ") :	680	26.77
Weight (KGs / lbs) :	9	19.85
Glazing:	Hand-Cut Glass	
Bulb holder (STD / US):	E27	E26
Bulb included:	No	
Reccomended bulb:	LED 7W 2700K	
Voltage (STD / US):	220/240v	110/120V
Power Max:	100W	
Cable type:	3 core insulated	
Driver required:	No	
LED panel option:	Yes	
Finish:	Hand sprayed enamel gloss paint	
Colour:	Black as standard. Other colours available on request.	
Warranty:	Cast iron elements	
Chain Length (mm / ") :	N/A	N/A



For more information on our lifetime guarantee please visit our website.

Please visit our website for information on best practices relating to the care and maintenance of this product.

www.harteoutdoorlighting.com

Proudly handmade in Ireland

Product notes: 1) All products are individually made to order so final dimensions may differ within manufacturing tolerances. 2) Additional colour finishes are available. 3) Bulbs not included





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