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SITE LIGHTING REPORT
FOR
PROPOSED RESIDENTIAL DEVELOPMENT
AT
SWORDS BUSINESS PARK, SWORDS, CO. DUBLIN

Document No: 25016-MAE-XX-XX-RPT-E-6000

Issue: PL1

Date: 5th June 2026

Prepared By: Keith Phelan

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Table of Contents

1.0 INTRODUCTION

The following Public Lighting Report has been prepared to accompany a planning application, for a proposed developed at Swords Business Park, Swords, Co. Dublin, as follows:

Jackie Green Construction Limited intend to apply for permission for a residential development on lands at Swords Business Park, Swords, Co. Dublin.

The proposed development consists of a mixed-use development that constitutes a 'Large-Scale Residential Development' (LRD) at this site of 2.22 Ha principally located at Swords Business Park, Swords, Co. Dublin. The site is principally bound: to the north by an access road and ancillary car park to serve Swords Business Park; to the east by the M1 Motorway; to the south by Mantua Road; and to the west by an access road to serve Swords Business Park. The application site also extends to include parts of: the access road to the north and west for footpath, landscape and foul drainage connection works; Mantua Road to the west for foul drainage connection works; and the green strip to the south at Mantua Road for a pedestrian and cyclist connection.

Permission is sought for a mixed-use development with a gross floor area of 30,358 sq m and principally comprised in 5 No. blocks (A–E), with heights ranging from 1 No. to 9 No. storeys. The proposed block heights are as follows: Block A is 6 No. to 7 No. storeys; Block B is 6 No. to 7 No. storeys; Block C is 6 No. to 7 No. storeys; Block D is 6 No. to 9 No. storeys; and Block E is 1 No. to 9 No. storeys. The development consists of: 289 No. residential apartments (60 No. 1-bed, 200 No. 2-bed and 29 No. 3-bed); retail/commercial unit (701 sq m); and crèche (418 sq m) with outdoor play area (42 sq m).

Permission is also sought for: new multi-modal site entrance to the west; minor relocation of existing northern site entrance to the east; internal road, cycle and footpath network; 132 No. car parking spaces; 13 no. motorcycle parking spaces; cycle parking; hard and soft landscaping, including public open space, communal amenity space (at-grade and as roof gardens atop Block D and Block E) and incidental open space; private amenity space as balconies and terraces facing all directions; public lighting; bin stores; plant rooms; 2 No. sub-stations; green roofs; rooftop plant, PV panels, telecommunications infrastructure, lift overruns and automatic opening vents; and all associated works above and below ground.

Image.1.1 Site Plan

2.0 SITE LIGHTING DESIGN APPROACH

The Public Lighting has been designed in accordance with the requirements of the Irish Standard for Road Lighting, I.S. EN 13201-2:2015 while observing NSAI National Rules for Electrical Installations and ESB Networks Distribution System interface requirements.

In addition, the general guidance offered in BS 5489-1 Code of Practise for the Design of Road Lighting, current edition and the council's public lighting specification has been observed.

The scheme has been designed to:

- Road and footpath illumination levels: BS 5489-1:2020, P4 – 5.00 lux - 7.50 average, 1.5 lux min.
- Maintenance factor calculated as per GN11: 0.81.

In order to benefit local fauna and maintain bat corridors, as well as other fauna active/resting at night, the design of the site and public lighting schemes have been carried-out to minimise light spillage and nuisance/glare by using shielded, downward directed lighting, using narrow spectrum lighting types with no UV & luminaire accessories and providing the facility for switching off all non-essential lighting during the hours of darkness. In addition to the above, we have adjusted the SP ratio from 1.5 to 1.3, changed the colour temperature from 4000k to 3000k, columns have been moved away from areas where bats are likely to be active and lanterns have been fitted with back shields.

3.0 SITE LIGHTING REALITY REPORT

DATE:	**5 June 2026**
DESIGNER:	**Keith Phelan**
PROJECT No:	**25016**
PROJECT NAME:	**Seatown Road Development**

M AND E
CONSULTING ENGINEERS

Outdoor Lighting Report

The scheme has been designed to:
Roads // BS 5489-1:2020,
P4: 5.00 - 7.50 lux average, 1.0 lux minimum, 20% Uniformity
Pedestrian Paths // BS 5489-1:2020,
P4: 5.00 - 7.50 lux average, 1.0 lux minimum, 20% Uniformity
Maintenance factor calculated as per GN11: 0.81

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	Main Car Park	719164.98	747239.47	65.56	66.27	1.31	1.30
2	Small Car Park	719053.71	747191.62	58.28	48.02	1.24	1.30
3	Pedestrian Walkway AB	719085.15	747247.63	26.48	51.95	1.20	1.15
4	Pedestrian Area ABDE	719111.91	747201.62	84.58	38.02	1.34	0.84
5	Pedestrian Walkway BC	719124.30	747247.29	26.48	51.95	1.20	1.15
6	Pedestrian Walkway A	719053.61	747254.37	18.75	19.25	1.44	1.48

Luminaires

Luminaire A Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5267 Integrated lenses 16 OSLO N SQUARE GIANT LED@35
Lamp(s)	16 OSLON SQUARE GIANT@350mA WW 730 230V 01-11-802
LampFlux(klm)/Colour	2.60 WW 3000K/70
File Name	AXIA 3.1 5267 16 OSLON SQUARE GIAN T Drv 350mA WW 730 17.9W 614432 Int...
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	993.0, 97.5, 0.0
No. in Project	15

Luminaire B Data

Supplier	Urbis Schreder
Type	ALBANY GEN2 MIDI 5304 Deep shape PC 10 LEDs LED@300mA Driver
Lamp(s)	10 LEDs@300mA WW 730 230V 01-37-041
LampFlux(klm)/Colour	1.49 WW 3000K/70
File Name	ALBANY GEN2 MIDI 5304 10 LEDs Drv 30 0mA WW 730 10.4W 548512 Deep shape...
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	344.8, 92.0, 2.4
No. in Project	20

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	719172.60	747285.62	6.00	0.00	0.00	0.00	1.00			
2	A	719172.61	747256.82	6.00	0.00	0.00	0.00	1.00			
3	A	719165.89	747303.10	6.00	0.00	0.00	0.00	1.00			
4	A	719198.61	747302.24	6.00	270.00	0.00	0.00	1.00			
5	A	719222.94	747273.30	6.00	170.00	0.00	0.00	1.00			
6	A	719199.78	747238.86	6.00	90.00	0.00	0.00	1.00			
7	A	719218.73	747248.83	6.00	169.00	0.00	0.00	1.00			
8	A	719226.00	747292.57	6.00	169.00	0.00	0.00	1.00			
9	A	719064.71	747239.02	6.00	268.00	0.00	0.00	1.00			
10	B	719194.55	747223.56	4.00	180.00	0.00	0.00	1.00			
11	A	719064.39	747217.80	6.00	88.00	0.00	0.00	1.00			
12	A	719098.79	747221.62	6.00	90.00	0.00	0.00	1.00			
13	A	719077.31	747199.25	6.00	0.00	0.00	0.00	1.00			
14	B	719092.07	747292.21	4.00	180.00	0.00	0.00	1.00			
15	B	719109.47	747253.60	4.00	183.00	0.00	0.00	1.00			

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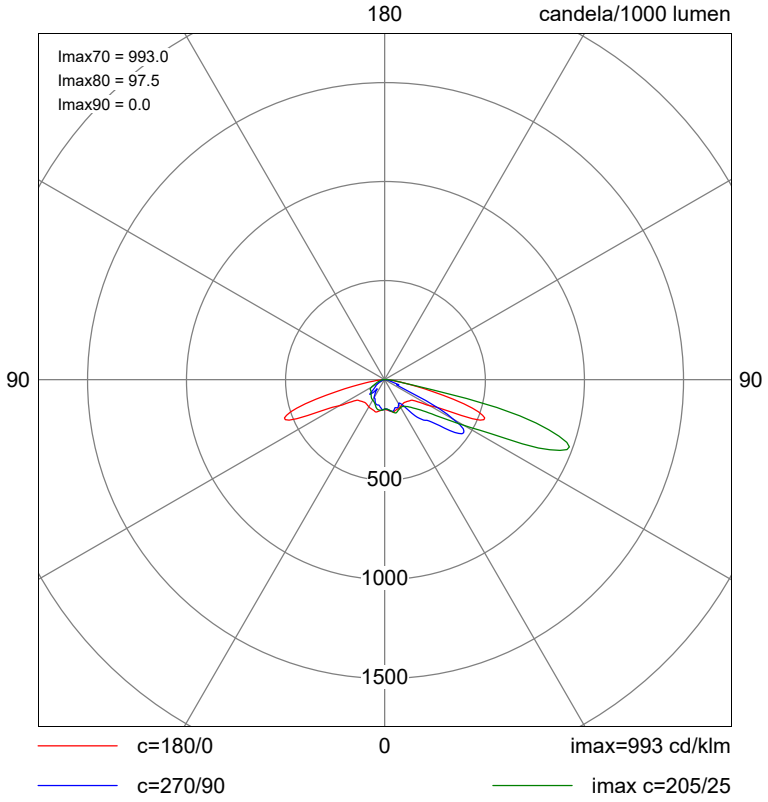
Layout Continued

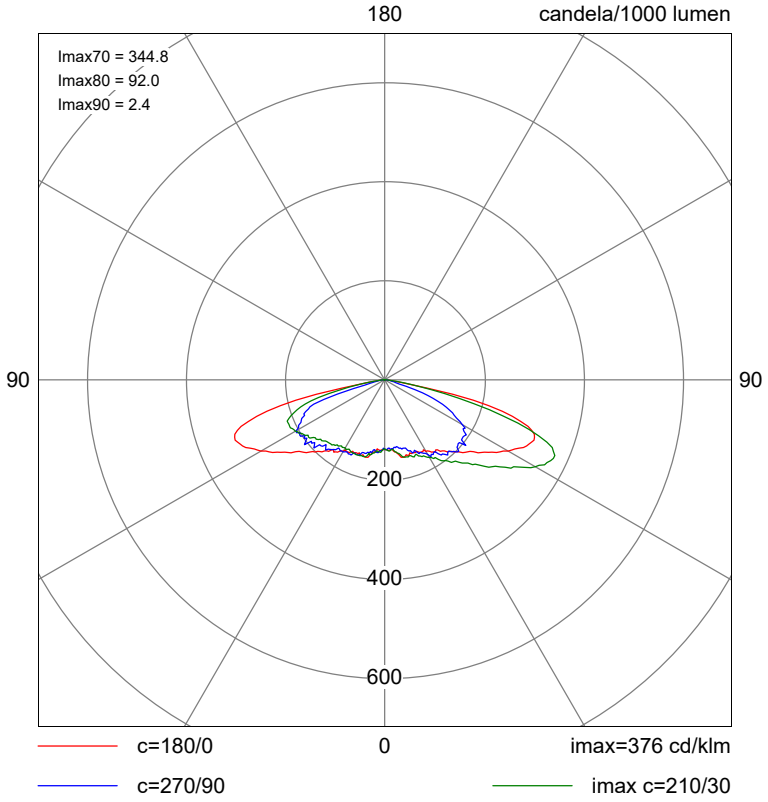
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
16	B	719101.47	747283.70	4.00	0.00	0.00	0.00	1.00			
17	B	719100.46	747268.71	4.00	270.00	0.00	0.00	1.00			
18	A	719135.82	747239.18	6.00	270.00	0.00	0.00	1.00			
20	B	719166.14	747228.91	4.00	0.00	0.00	0.00	1.00			
21	B	719121.73	747221.99	4.00	270.00	0.00	0.00	1.00			
22	B	719123.13	747205.01	4.00	270.00	0.00	0.00	1.00			
22	B	719140.52	747221.94	4.00	270.00	0.00	0.00	1.00			
24	B	719114.82	747212.07	4.00	180.00	0.00	0.00	1.00			
25	B	719194.38	747211.36	4.00	180.00	0.00	0.00	1.00			
26	A	719171.51	747239.07	6.00	270.00	0.00	0.00	1.00			
27	B	719156.22	747221.99	4.00	270.00	0.00	0.00	1.00			
27	B	719145.39	747216.78	4.00	180.00	0.00	0.00	1.00			
28	B	719194.49	747234.30	4.00	180.00	0.00	0.00	1.00			
29	A	719099.45	747239.15	6.00	270.00	0.00	0.00	1.00			
31	B	719145.18	747204.03	4.00	180.00	0.00	0.00	1.00			
31	B	719131.41	747292.32	4.00	180.00	0.00	0.00	1.00			
32	B	719141.07	747283.81	4.00	0.00	0.00	0.00	1.00			
33	B	719139.92	747268.12	4.00	270.00	0.00	0.00	1.00			
34	B	719145.58	747253.01	4.00	0.00	0.00	0.00	1.00			
35	B	719063.60	747267.25	4.00	270.00	0.00	0.00	1.00			

Polar Diagrams

Luminaire A AXIA 3.1 5267 Integrated lenses 16 OSLON SQUARE GIANT LED@35



Luminaire B ALBANY GEN2 MIDI 5304 Deep shape PC 10 LEDs LED@300mA Driver



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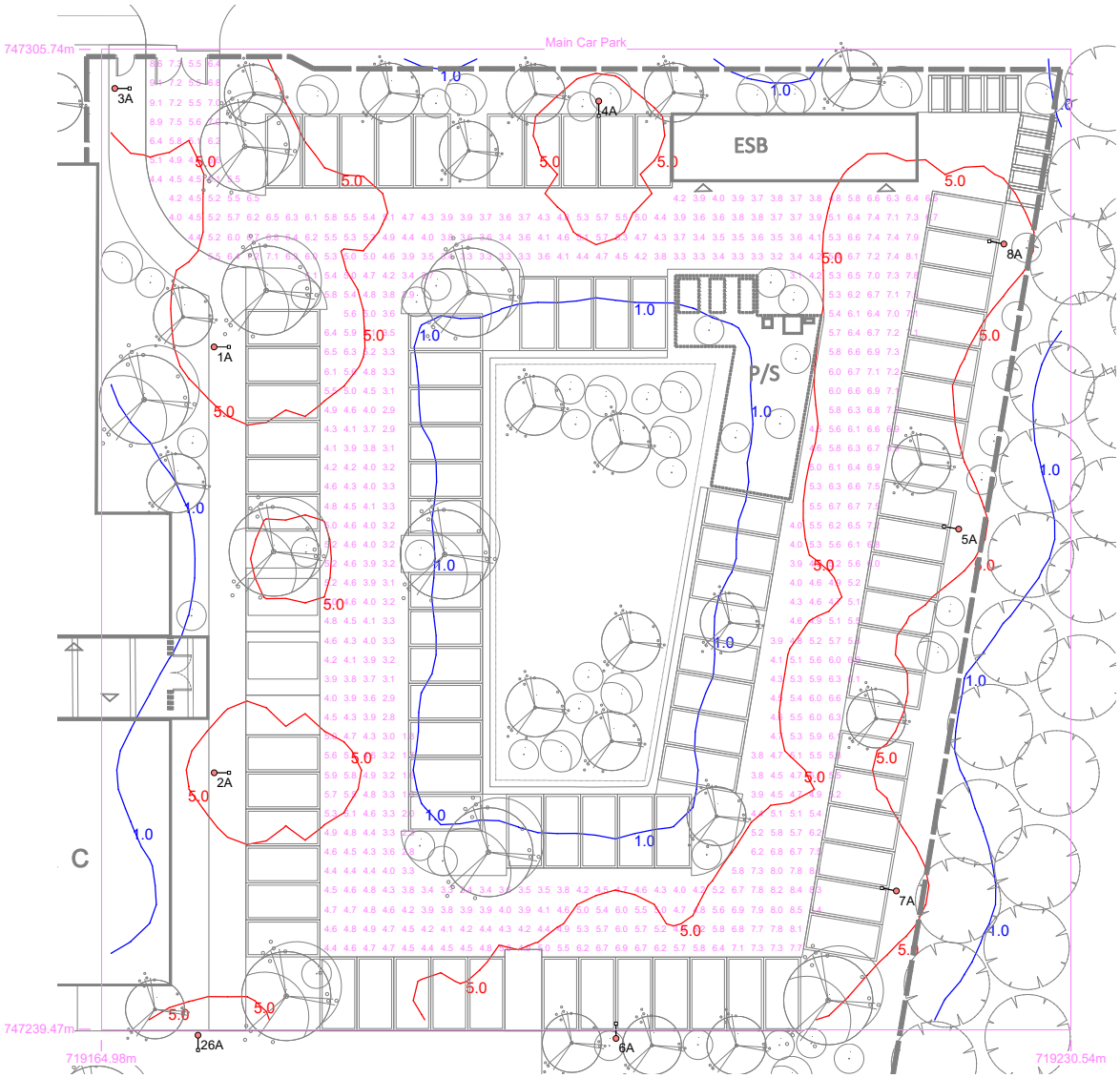
Horizontal Illuminance (lux)

Main Car Park



Results

Eav	5.09
Emin	1.60
Emax	9.09
Emin/Emax	0.18
Emin/Eav	0.31

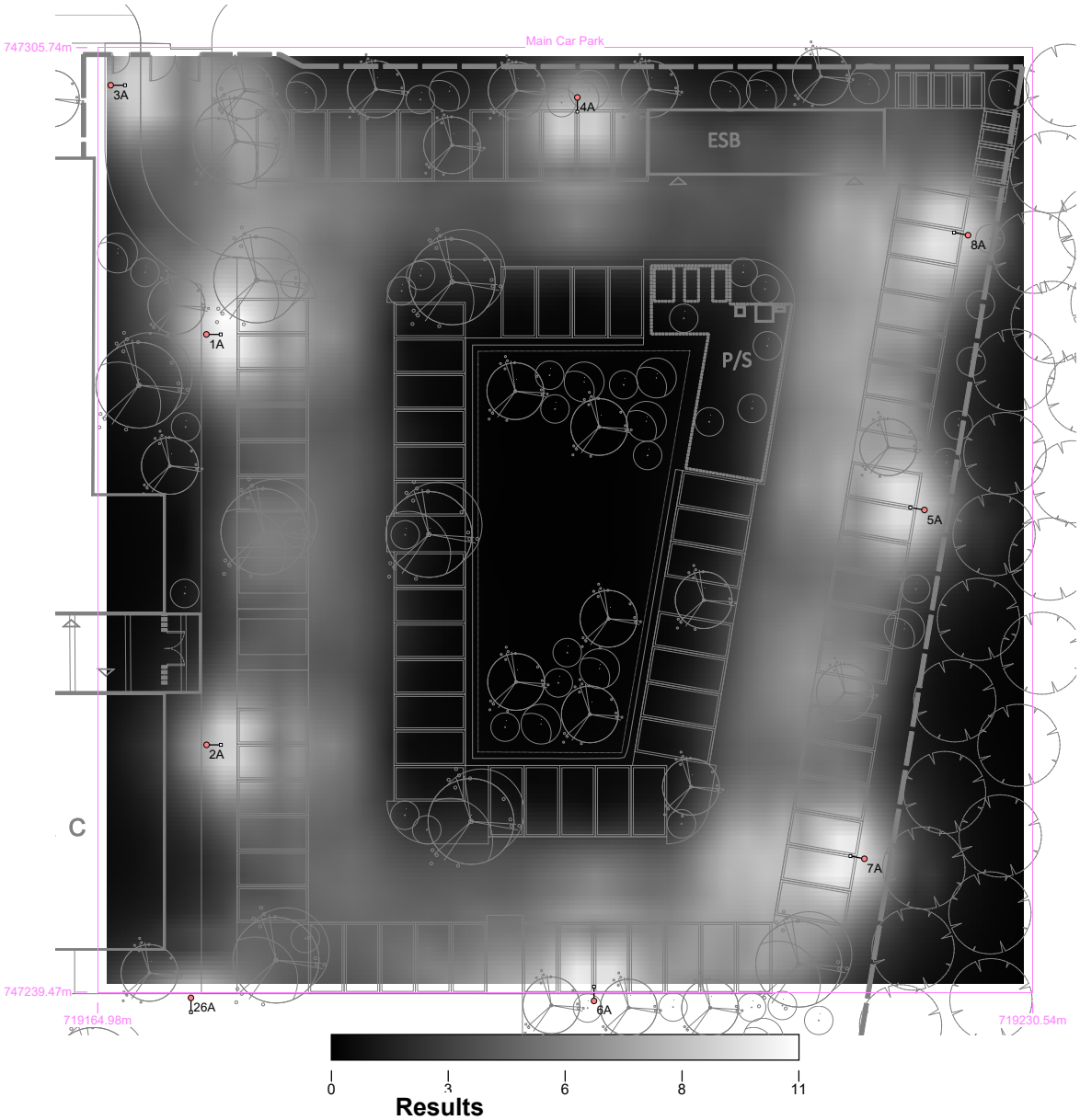
9750176003

DATE: 5 June 2026 DESIGNER: Keith Phelan

PROJECT No: 25016 PROJECT NAME: Seatown Road Development

Horizontal Illuminance (lux)

Main Car Park



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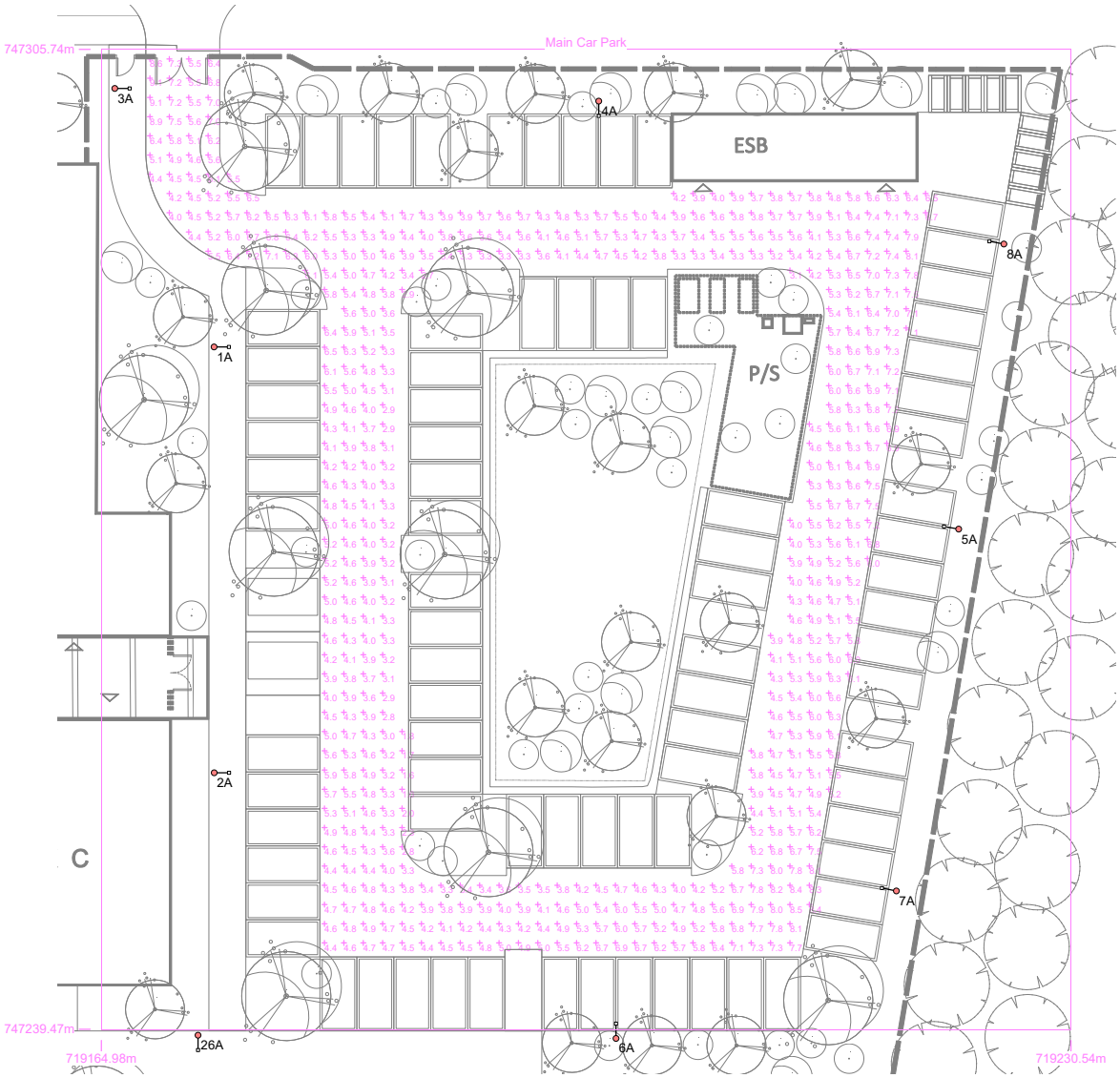
Horizontal Illuminance (lux)

Main Car Park



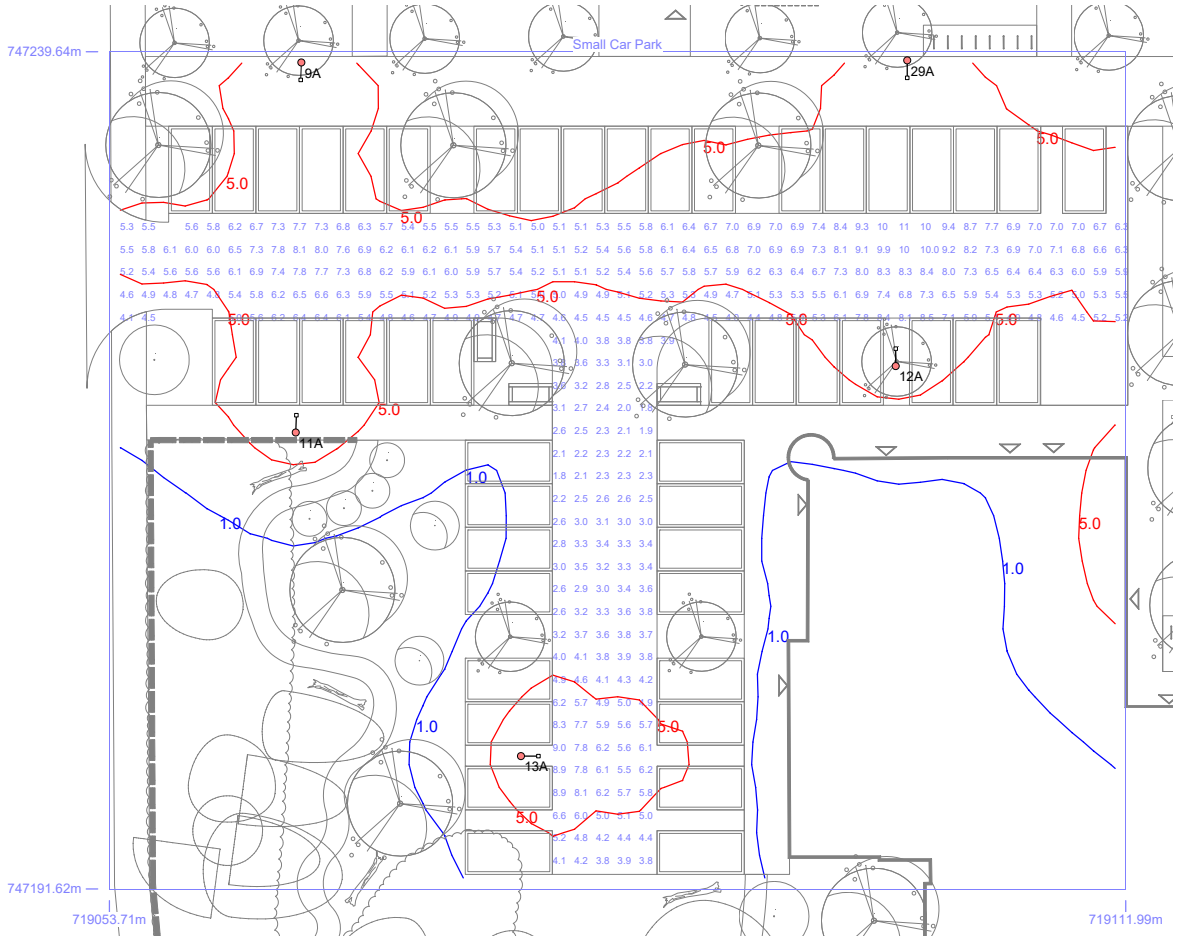
Results

Eav	5.09
Emin	1.60
Emax	9.09
Emin/Emax	0.18
Emin/Eav	0.31

9750176003

Horizontal Illuminance (lux)

Small Car Park



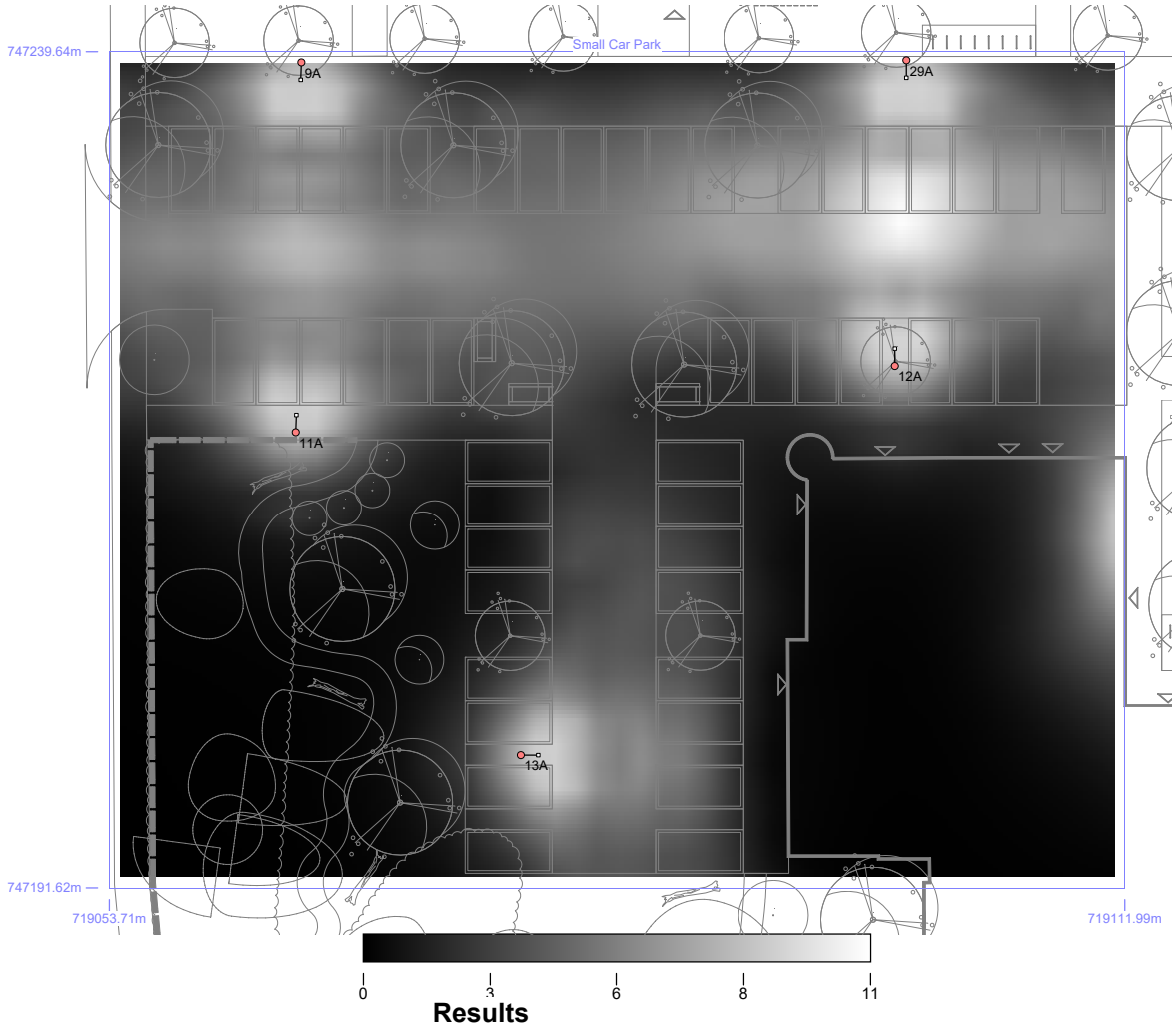
Results

Eav	5.42
Emin	1.78
Emax	11.05
Emin/Emax	0.16
Emin/Eav	0.33

9750176003

Horizontal Illuminance (lux)

Small Car Park



Results

Eav	5.42
Emin	1.78
Emax	11.05
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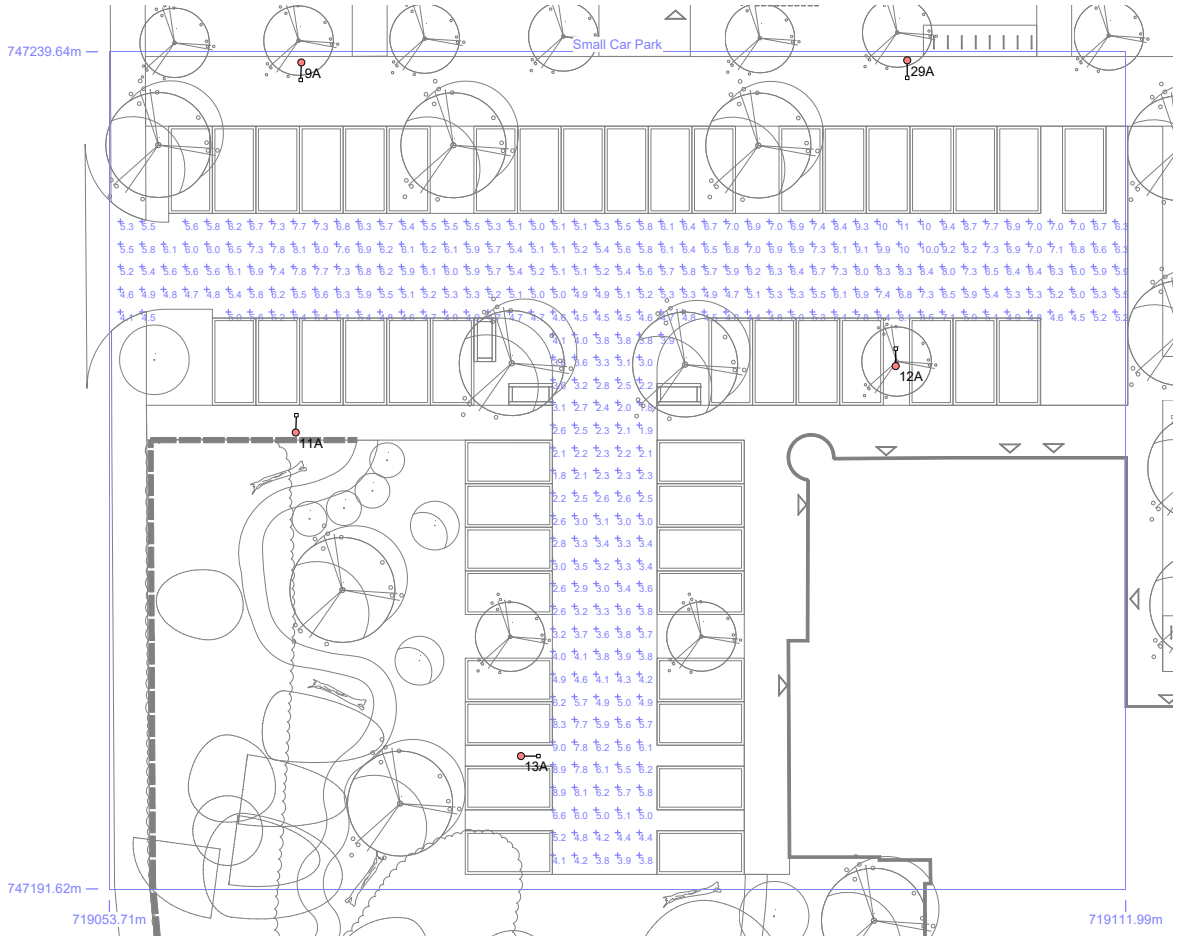
Horizontal Illuminance (lux)

Small Car Park



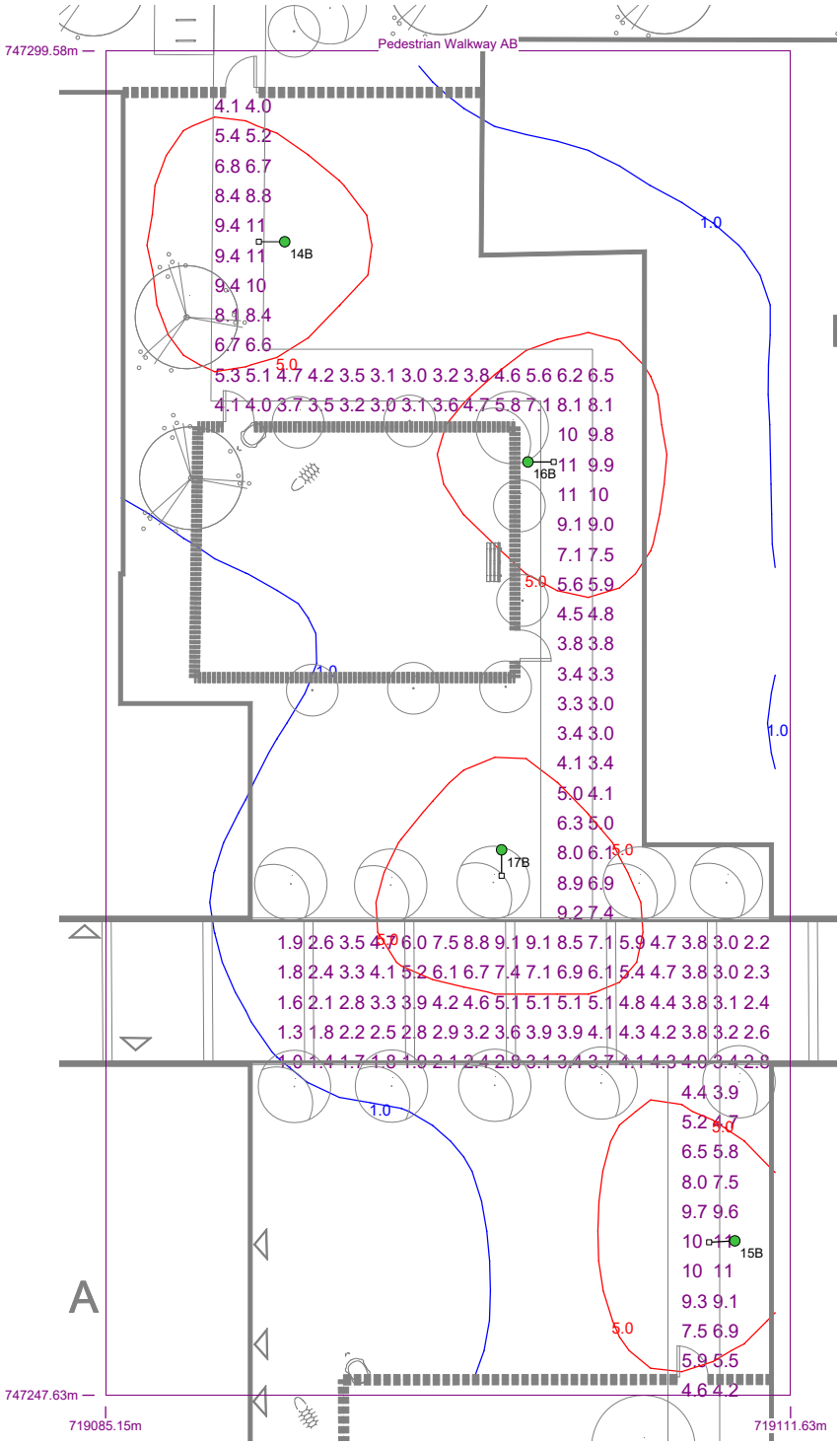
Results

Eav	5.42
Emin	1.78
Emax	11.05
Emin/Emax	0.16
Emin/Eav	0.33

9750176003

Horizontal Illuminance (lux)

Pedestrian Walkway AB



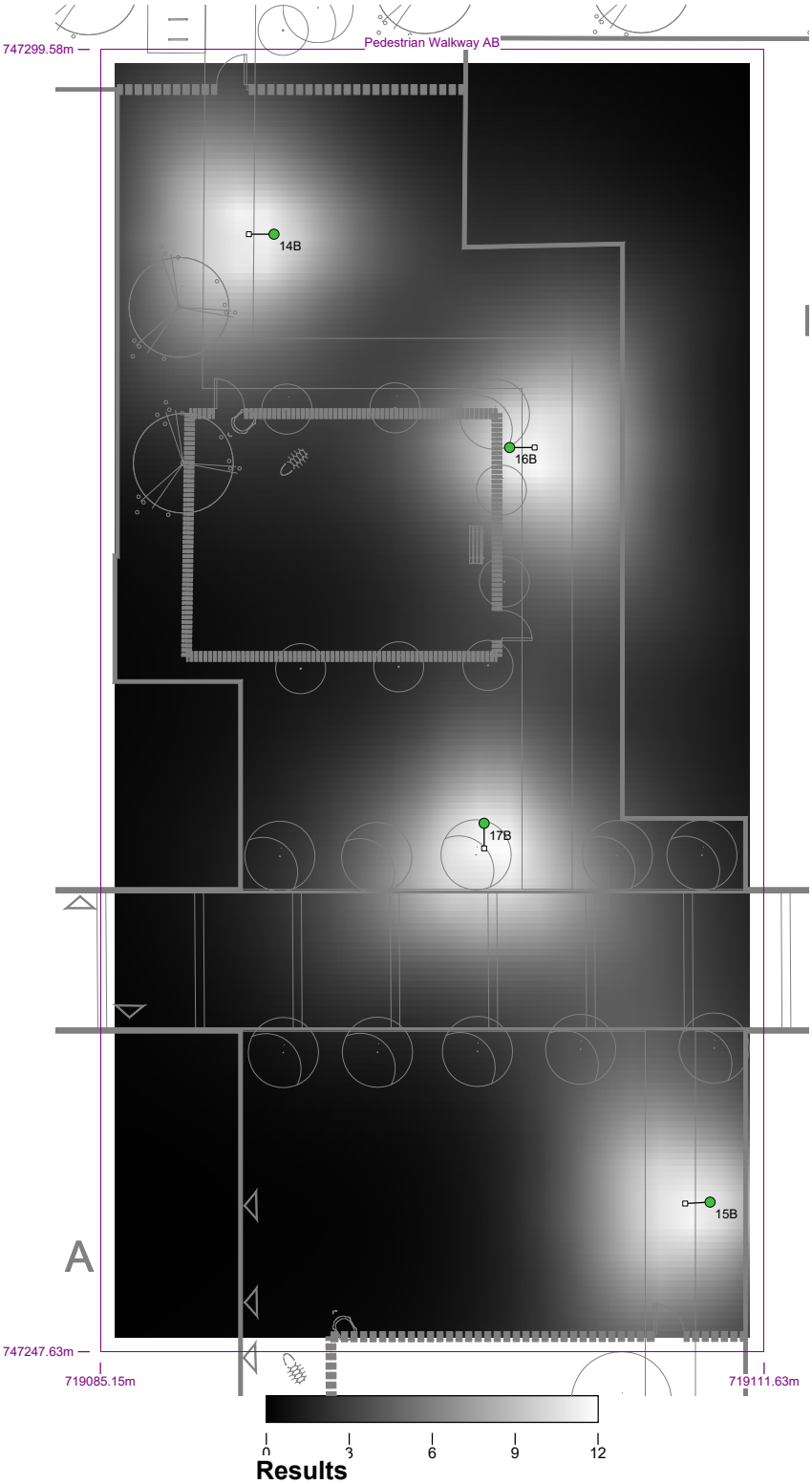
Results

Eav	5.32
Emin	1.05
Emax	11.27
Emin/Emax	0.09
Emin/Eav	0.20

9750176003

Horizontal Illuminance (lux)

Pedestrian Walkway AB



Results

Eav	5.32
Emin	1.05
Emax	11.27
Emin/Emax	0.09
Emin/Eav	0.20

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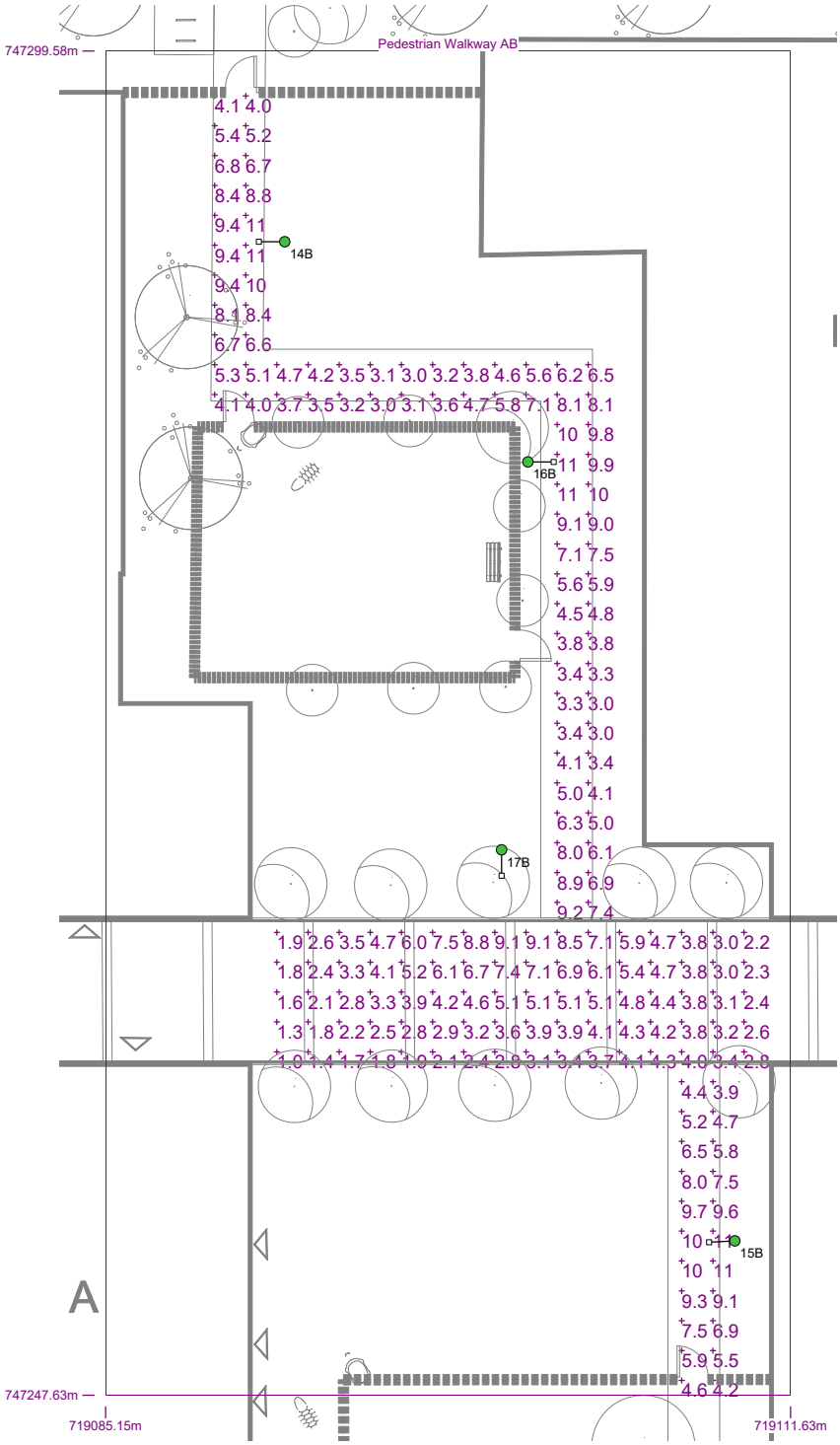
Horizontal Illuminance (lux)

Pedestrian Walkway AB



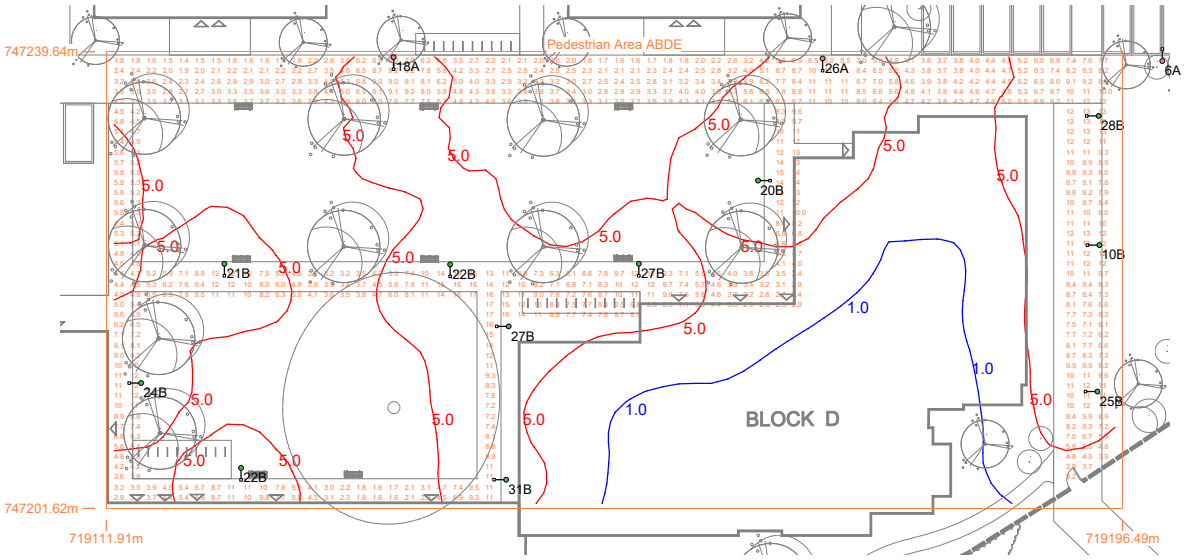
Results

Eav	5.32
Emin	1.05
Emax	11.27
Emin/Emax	0.09
Emin/Eav	0.20

9750176003

Horizontal Illuminance (lux)

Pedestrian Area ABDE



Results

Eav	6.67
Emin	1.45
Emax	17.29
Emin/Emax	0.08
Emin/Eav	0.22

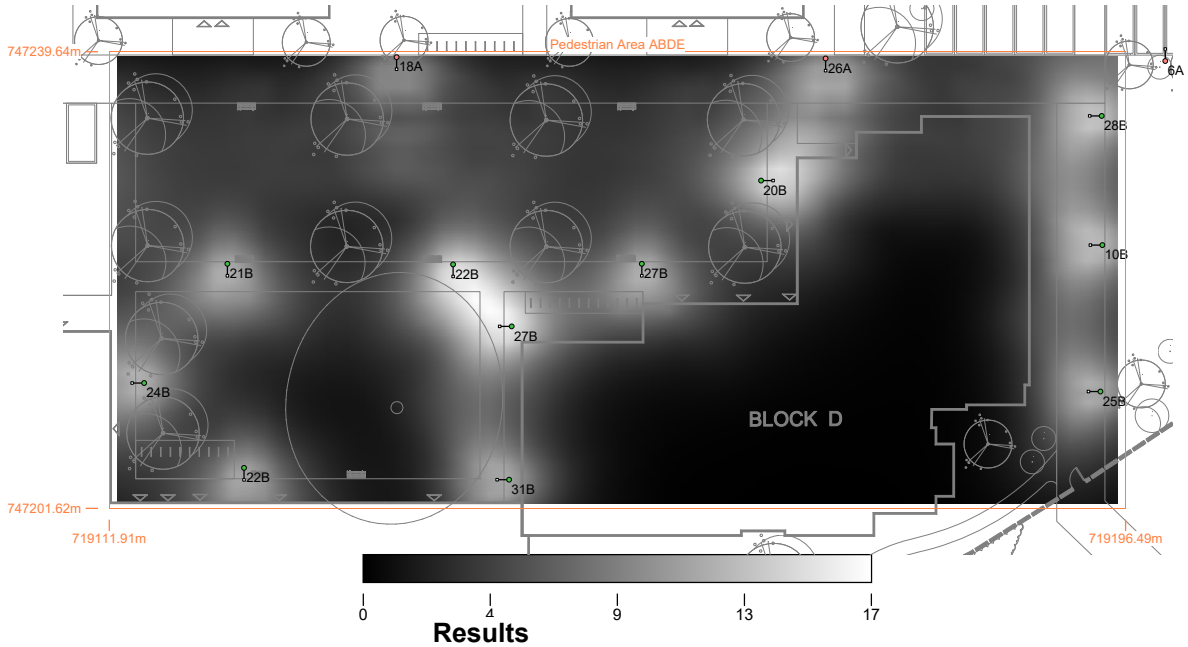
9750176003

DATE: 5 June 2026 DESIGNER: Keith Phelan

PROJECT No: 25016 PROJECT NAME: Seatown Road Development

Horizontal Illuminance (lux)

Pedestrian Area ABDE



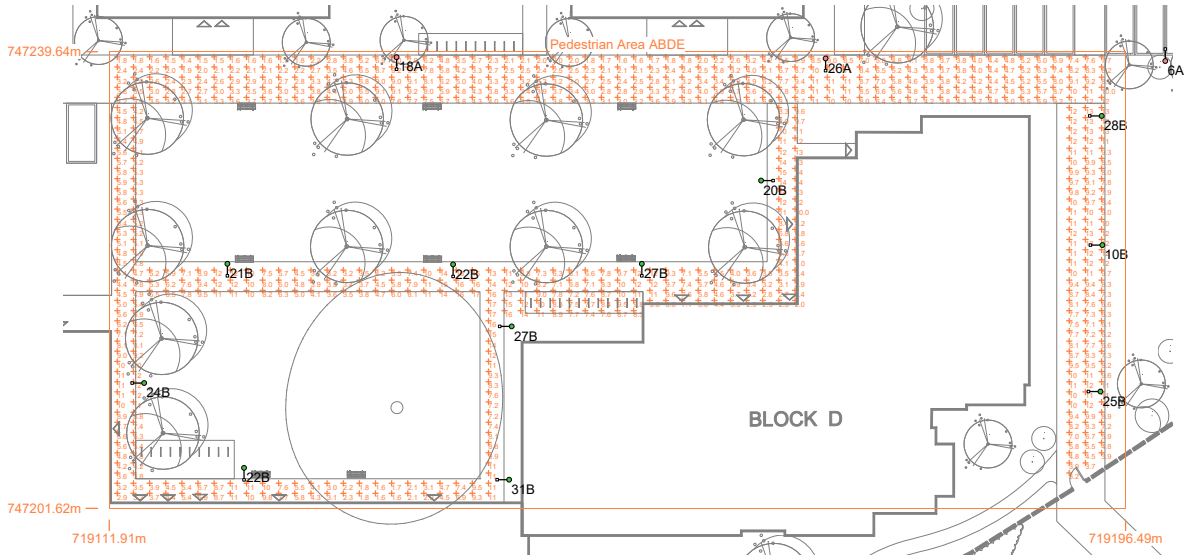
Results

Eav	6.67
Emin	1.45
Emax	17.29
Emin/Emax	0.08
Emin/Eav	0.22

9750176003

Horizontal Illuminance (lux)

Pedestrian Area ABDE



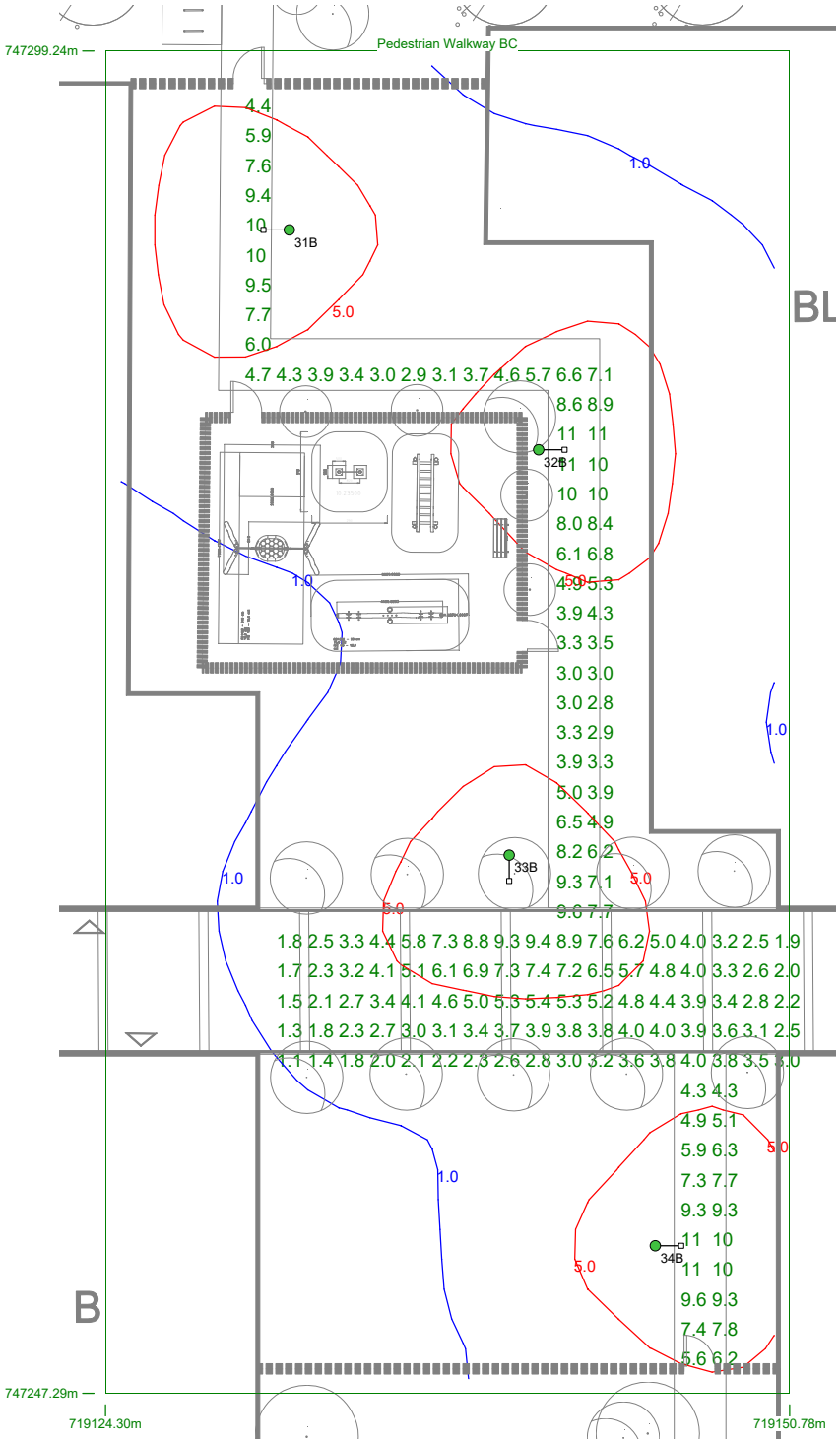
Results

Eav	6.67
Emin	1.45
Emax	17.29
Emin/Emax	0.08
Emin/Eav	0.22

9750176003

Horizontal Illuminance (lux)

Pedestrian Walkway BC



Results

Eav	5.21
Emin	1.05
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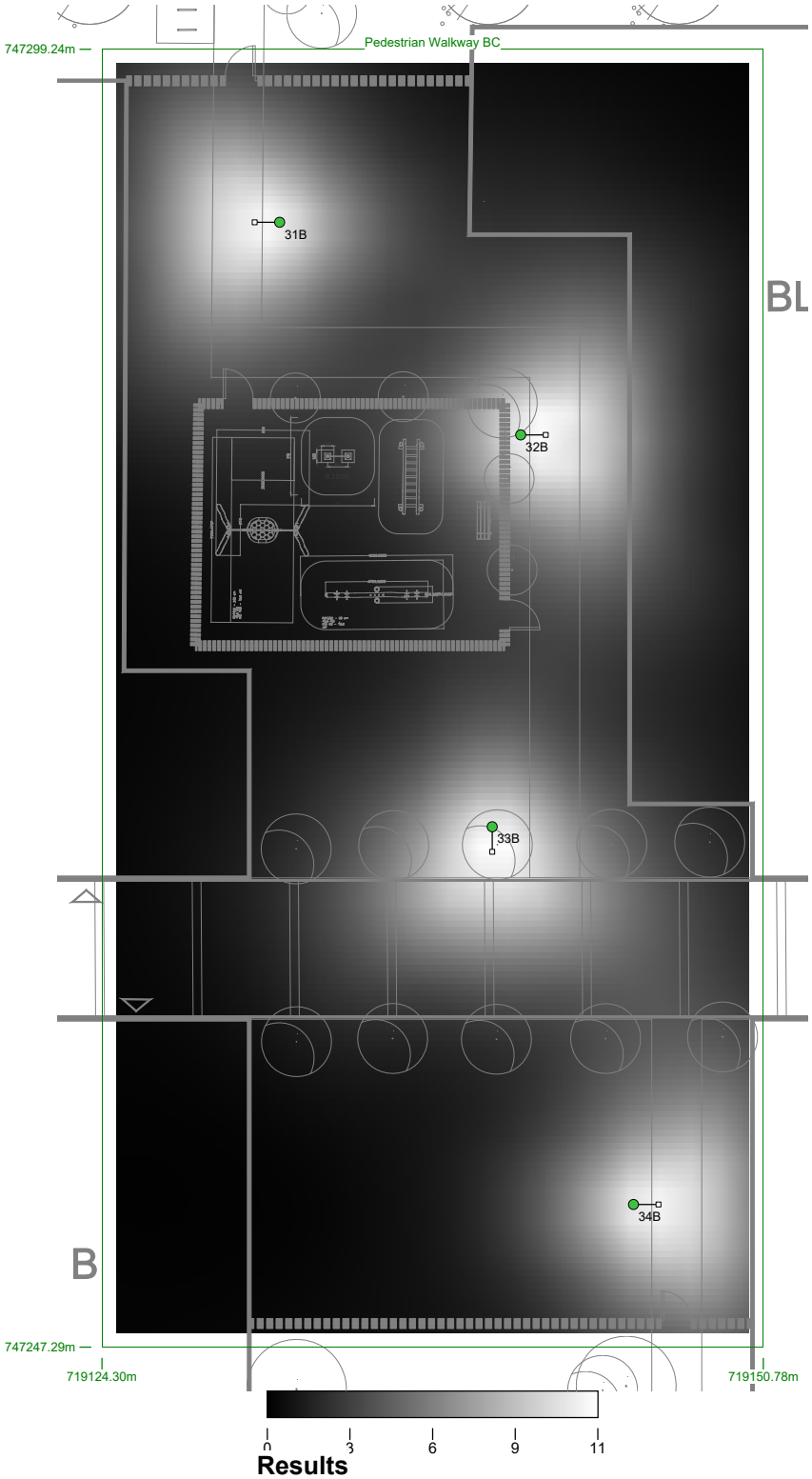
Emin/Emax	0.09
Emin/Eav	0.20

9750176003

Horizontal Illuminance (lux)

Pedestrian Walkway BC



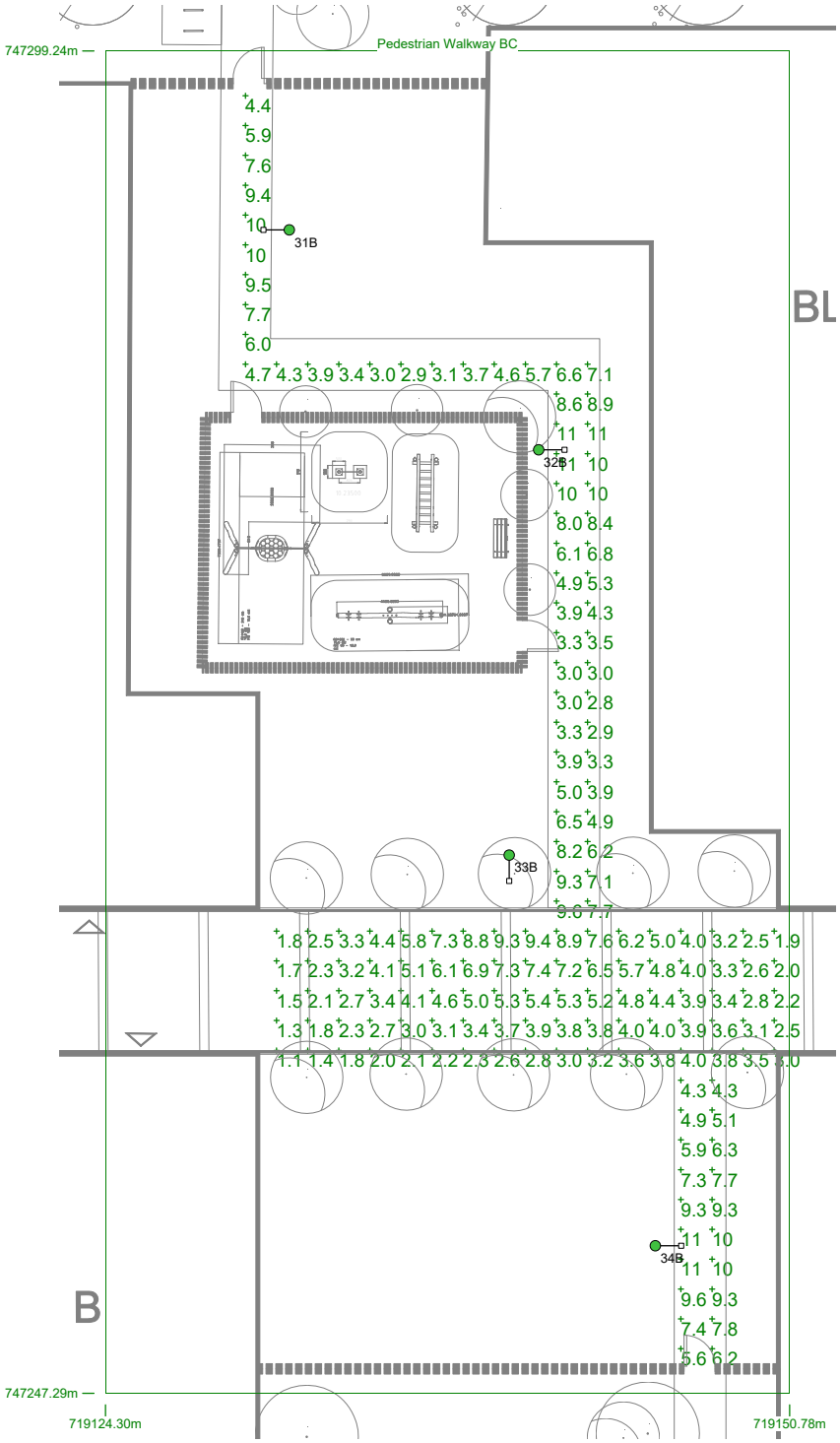
Results

Eav	5.21
Emin	1.05
Emax	11.34
Emin/Emax	0.09
Emin/Eav	0.20

9750176003

Horizontal Illuminance (lux)

Pedestrian Walkway BC



Results

Eav	5.21
Emin	1.05
Emax	11.34
Emin/Emax	0.09
Emin/Eav	0.20

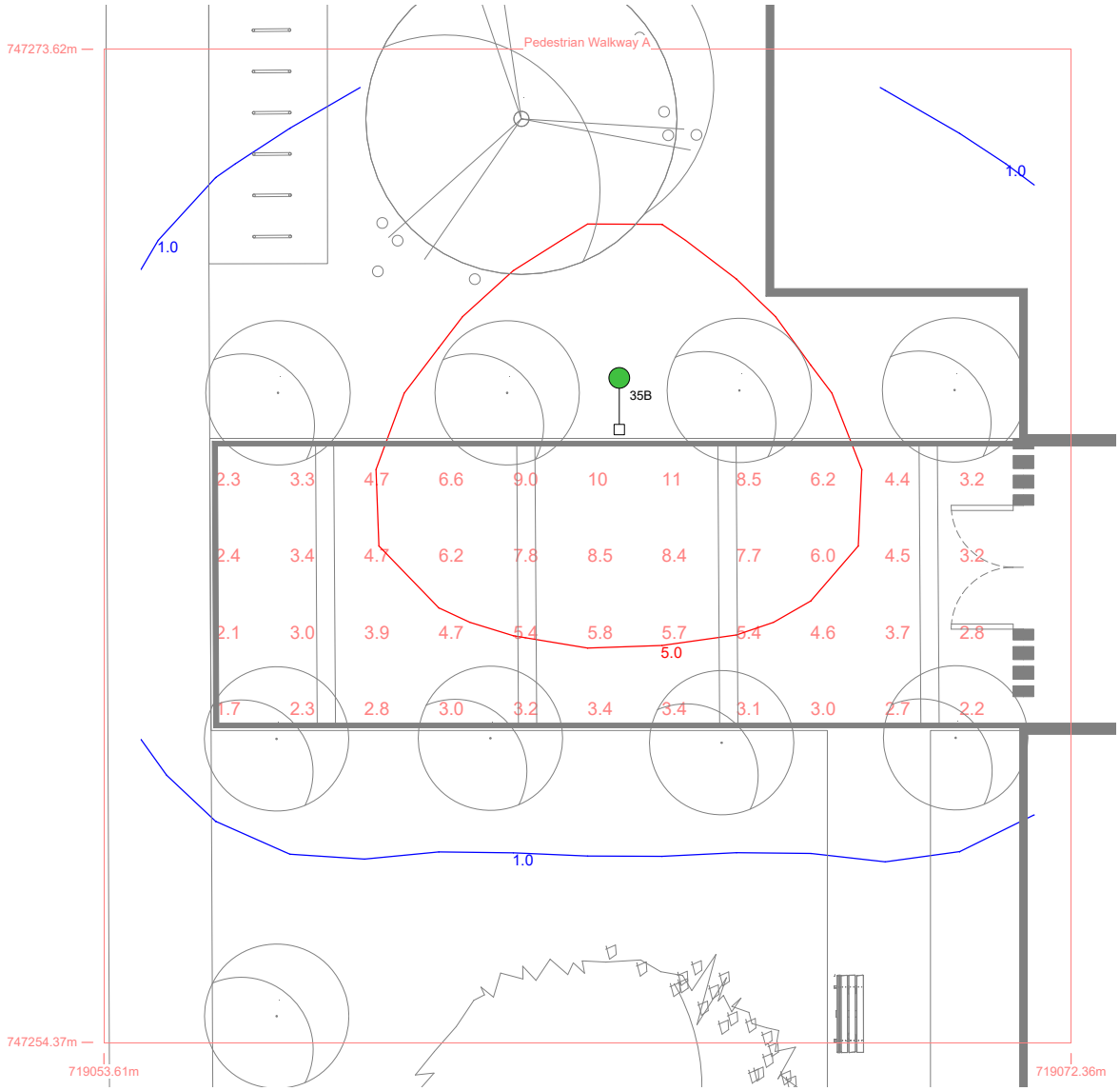
9750176003

DATE: 5 June 2026 DESIGNER: Keith Phelan

PROJECT No: 25016 PROJECT NAME: Seatown Road Development

Horizontal Illuminance (lux)

Pedestrian Walkway A



Results

Eav	4.77
Emin	1.70
Emax	10.65
Emin/Emax	0.16
Emin/Eav	0.36

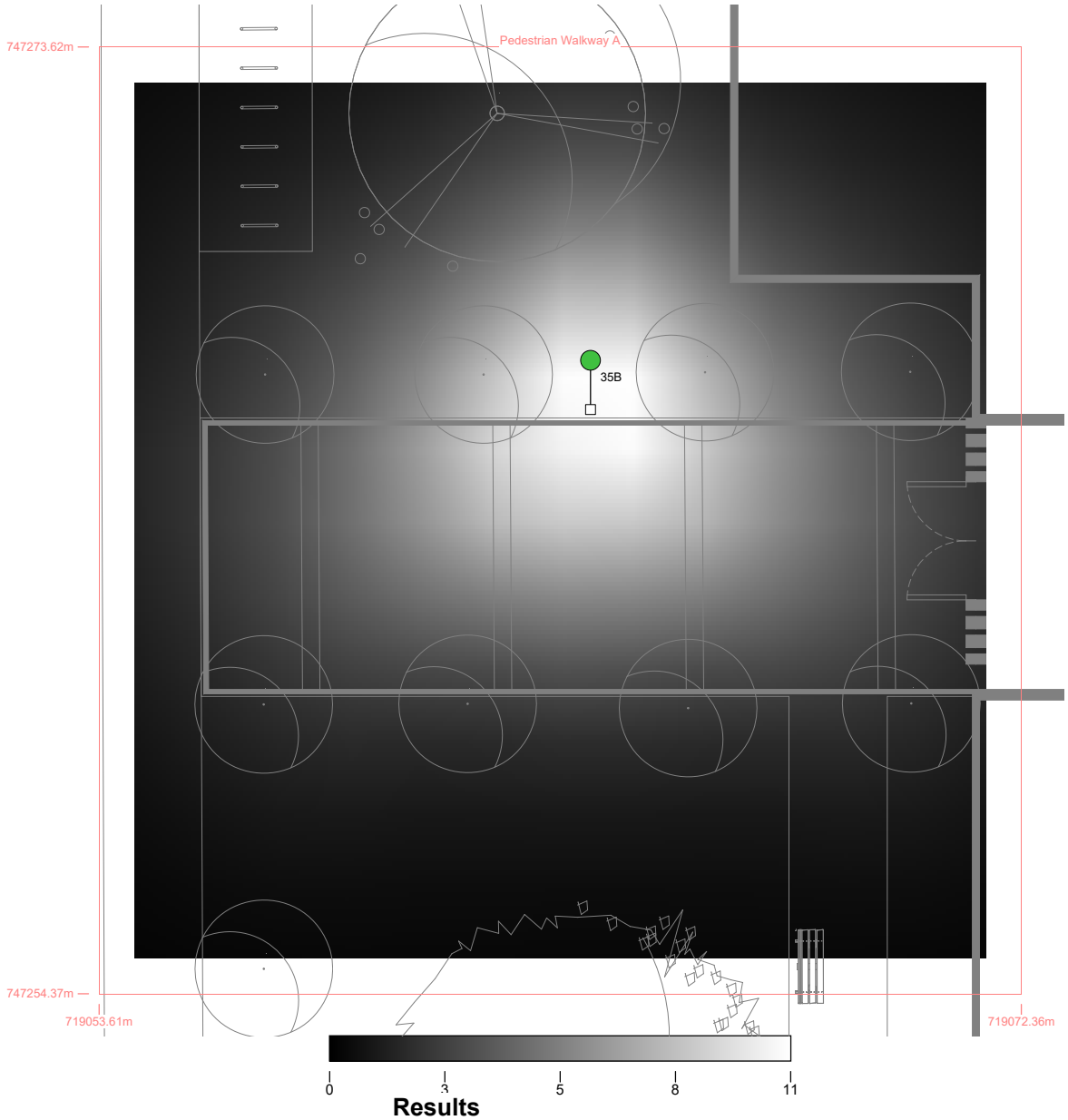
9750176003

DATE: 5 June 2026 DESIGNER: Keith Phelan

PROJECT No: 25016 PROJECT NAME: Seatown Road Development

Horizontal Illuminance (lux)

Pedestrian Walkway A



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Emax	10.65
Emin/Emax	0.16
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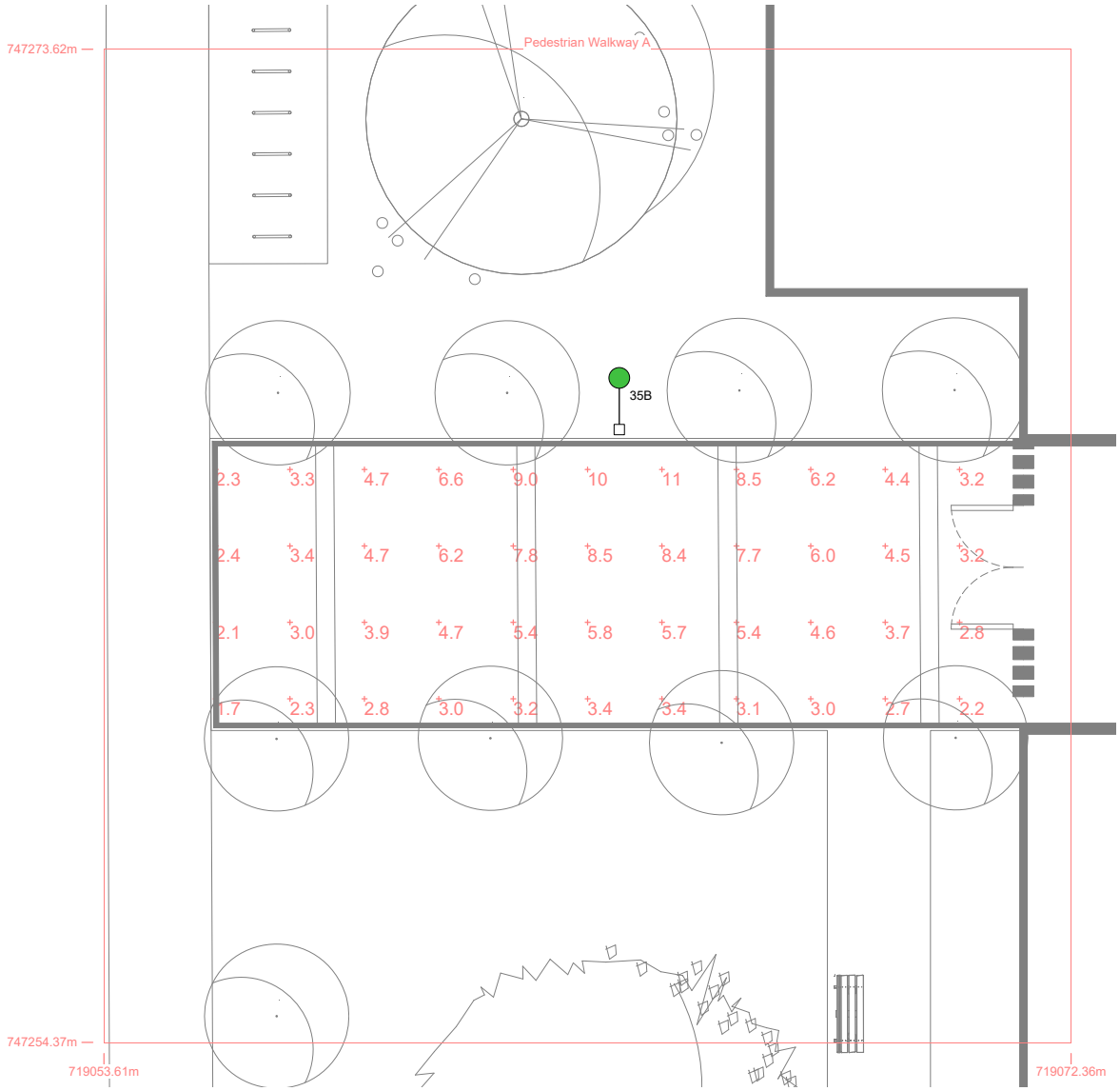
Horizontal Illuminance (lux)

Pedestrian Walkway A

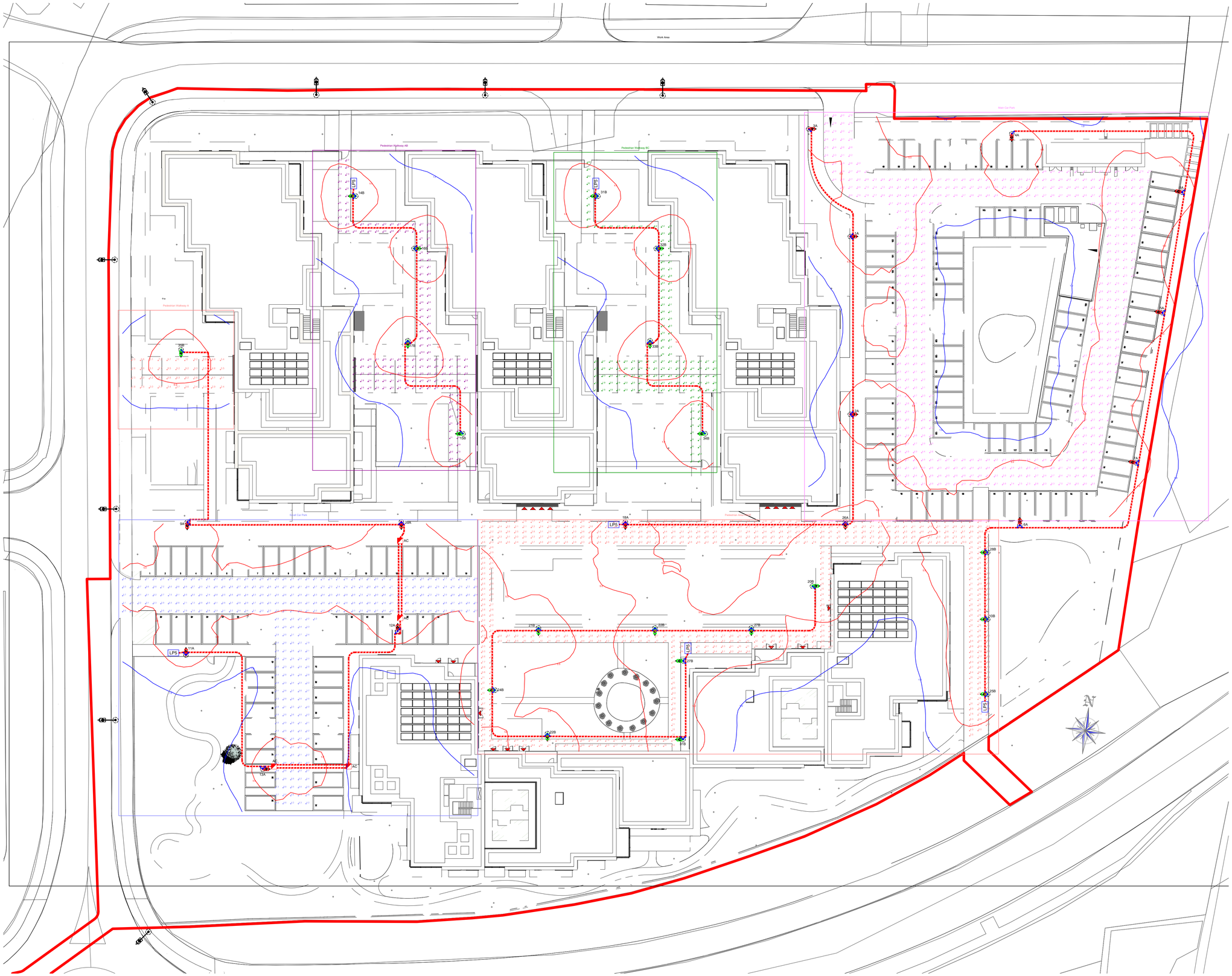


Results

Eav	4.77
Emin	1.70
Emax	10.65
Emin/Emax	0.16
Emin/Eav	0.36

9750176003

4.0 SITE LIGHTING ELECTRICAL SITE LAYOUT DRAWING



NOTES

1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.
3. FINAL LOCATION OF MIDIPILLARS & DUCTS TO BE AGREED WITH COUNCIL & ESB SUPERVISOR PRIOR TO INSTALLATION.
4. PROVIDE FOR CONTINUOUS 10mm PP DRAW ROPE SECURED AT BOTH ENDS IN THE DUCT.
5. PROVIDE A COMPLETION CERTIFICATE FOR THE PUBLIC LIGHTING SYSTEM.
6. PROVIDE 2m SEPARATION BETWEEN ESB MINIPILLAR & PL MIDIPILLAR or PL COLUMN, etc.
8. PUBLIC LIGHTING INSTALLATION TO BE INSTALLED IN ACCORDANCE WITH FINGAL COUNTY COUNCIL'S PUBLIC LIGHTING GUIDANCE DOCUMENT.
9. PROVIDE FOR MINIMUM OF 1m LENGTH OF 50mm FLEX DUCT OR HYDRODARE FROM PUBLIC LIGHTING COLUMNS TO 100mm HDPE DUCTING.

SITE LIGHTING LEGEND

- 125mm ESB UPVC DUCT @600mm WITH WARNING TAPE OVER DUCT. (600mm MIN COVER & 750mm COVER IN ROAD CROSSINGS)
- 100mm POLYTHENE RED DUCTING TO IS135 CLASS B STANDARD PUBLIC LIGHTING DUCT WITH WARNING TAPE OVER (600mm MIN COVER & 750mm COVER IN ROAD CROSSING).
- 50mm DIAMETER FLEXIBLE DUCT OR HYDRODARE FROM PUBLIC LIGHTING COLUMN TO 107mm HDPE RED DUCTING WITHIN 1 METRE OF PL FITTING
- ESB — ESB EXTERNAL MINIPILLAR
- AC — 775x625mm INSPECTION CHAMBER. 'ej' MANUFACTURED FJ60/45 TO EN124
- LP — EXTERNAL LIGHTING MIDIPILLAR
- A — URBIS SCHREDER AXIA 3.1 5267 16 OSLON SQUARE GIANT LAMP @350mA, 17.9W, 230V, NW 740 WITH 614432 INTEGRATED LENSES REAR LOUVERS. CONTRACTOR TO PROVIDE FOR NEW 6m HIGH HINGED COLUMN & BASE.
- B — URBIS SCHREDER ALBANU GEN2 MIDI 5366 PC 10 LED LAMP @350mA, 10.4W, 230V, NW 740 WITH 548662 DEEP SHAPE DIFFUSER. CONTRACTOR TO PROVIDE FOR NEW 4m HIGH HINGED COLUMN & BASE.
- DENOTES EXISTING 8m HIGH COLUMN WITH LED LANTERN INSTALLED AS PART OF THE PREVIOUS ROADWAY INFRASTRUCTURE.

Main Car Park
Results - Horizontal Illuminance (lux)
Eav= 5.58
Emin= 1.75
Emax= 9.96
Emin/Emax= 0.18
Emin/Eav= 0.31
Emax/Eav= 1.79

Small Car Park
Results - Horizontal Illuminance (lux)
Eav= 5.95
Emin= 1.95
Emax= 12.11
Emin/Emax= 0.16
Emin/Eav= 0.33
Emax/Eav= 2.04

Pedestrian Walkway AB
Results - Horizontal Illuminance (lux)
Eav= 5.77
Emin= 1.13
Emax= 12.22
Emin/Emax= 0.09
Emin/Eav= 0.20
Emax/Eav= 2.12

Pedestrian Area ABDE
Results - Horizontal Illuminance (lux)
Eav= 7.25
Emin= 1.59
Emax= 18.75
Emin/Emax= 0.08
Emin/Eav= 0.22
Emax/Eav= 2.59

Pedestrian Walkway BC
Results - Horizontal Illuminance (lux)
Eav= 5.65
Emin= 1.14
Emax= 12.30
Emin/Emax= 0.09
Emin/Eav= 0.20
Emax/Eav= 2.18

Pedestrian Walkway A
Results - Horizontal Illuminance (lux)
Eav= 5.17
Emin= 1.85
Emax= 11.55
Emin/Emax= 0.16
Emin/Eav= 0.36
Emax/Eav= 2.23

ISSUE	DESCRIPTION	DRN	ORIG	APP	DATE
PL1	ISSUED FOR PLANNING INFORMATION	KP	KP	DC	05/06/2026
B	ISSUED FOR INFORMATION	KP	KP	DC	22/04/2026
A	ISSUED FOR INFORMATION	KP	KP	DC	22/10/2025

CLIENT: JACKIE GREENE CONSTRUCTION

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E: info@mande.ie

PROJECT: RESIDENTIAL DEVELOPMENT AT SWORDS BUSINESS PK, SWORDS, CO.DUBLIN

TITLE: SITE LIGHTING LAYOUT SITE PLAN

PROJECT No.	DATE	SCALE	
25016	OCT 2025	1:500	A1

DRG No. 25016-MAE-XX-00-DR-E-6000

5.0 MATERIAL AND LUMINAIRE DATA SHEETS

Schréder
Experts in lightability™

ROAD

AXIA 3

PRO FLEX™

Engineered for performance, designed for the customer experience

With customer feedback playing a critical part in our innovative design process, we developed AXIA 3. More than a luminaire, it is a platform delivering sustainability, cost-effectiveness and customer experience all while supporting smart city frameworks. Based on experience from the hundreds of thousands AXIA luminaires installed worldwide, this third generation luminaire pushes the boundaries with photometric innovation, ease and speed of installation and FutureProof connectivity.

Available in three sizes, AXIA 3 enables towns and cities to maximise efficiency when lighting numerous environments, from bike paths, squares and car parks to residential streets, carriageways, urban roads and large boulevards. This lightweight and compact luminaire combines quality of light with a minimal carbon footprint. It excels in easy installation and carefree maintenance, reducing operating costs.

IP 66 | IK 10

URBAN & RESIDENTIAL STREETS | BIKE & PEDESTRIAN PATHS | RAILWAY STATIONS & METROS | CAR PARKS | LARGE AREAS | SQUARES & PEDESTRIAN AREAS | ROADS & MOTORWAYS

Concept

AXIA 3 is a robust yet compact luminaire, designed with a focus on miniaturisation and superior efficiency. Composed of high-pressure die-cast aluminium, as well as composite materials, AXIA 3 is available in three sizes. Thanks to its reduced weight, this road luminaire is easy to handle during installation. The AXIA 3.1, which can be fitted with up to 16 LEDs, is perfectly suited to low-height applications, whereas AXIA 3.2 and 3.3, with up to 32 or 64 LEDs, are ideal for lighting urban and large roads, carriageways and avenues. The AXIA 3 range is equipped with ProFlex photometric engines, providing the highest efficiency thanks to their ability to maximise the lumen output and to provide very extensive light distributions.

AXIA 3 comes pre-cabled, hence there is no need to open the luminaire. The complete range is available with an integrated universal fixation part adapted for post-top and side-entry mounting on various spigots (Ø32mm with adapter, Ø42-48mm, Ø60mm and Ø76mm). The inclination angle can be adjusted on-site for both post-top (-5°/+15°) and side-entry (-10°/+10°) configurations to optimise lighting, reduce power consumption and control light pollution.

This highly efficient, cost-effective and connected-ready luminaire, offers towns and cities the ideal solution to improve lighting levels, increase safety, generate energy savings and reduce their ecological footprint. AXIA 3 is the ideal tool to provide another 25 years of efficiency, sustainability and safety.

The ProFlex photometric engine provides the highest efficiency.

The AXIA 3 range has a universal fixation part for spigots ranging from Ø32 to Ø76mm.

TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- LARGE AREAS
- SQUARES & PEDESTRIAN AREAS
- ROADS & MOTORWAYS

KEY ADVANTAGES

- Maximised savings in energy and maintenance costs
- ProFlex photometric engines offering high efficiency lighting, comfort and safety
- 3 sizes to provide the most accurate solutions for numerous road and urban applications
- Easy installation: pre-cabled and equipped with universal fixation part adapted for side-entry and post-top mounting
- Adjustable inclination for optimised photometry and uniformity
- Connected-ready

The inclination is adjustable on-site for optimised photometry and further energy savings.

AXIA 3 is connected-ready and can operate with various sensors and control systems.

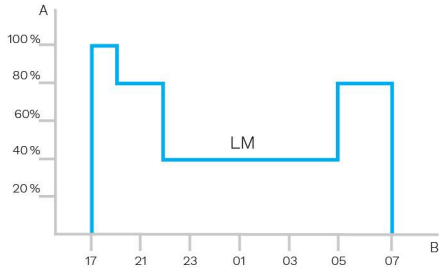
ProFlex™

The ProFlex photometric engine integrates the lenses into a polycarbonate protector. This integration increases the output and reduces the reflection inside the optical unit. The polycarbonate used for the ProFlex photometric engine offers essential characteristics such as high optical clarity for a superior light transmission, better impact resistance compared to glass and a long life span with UV-stabilisation treatment. The ProFlex concept enables a compact design with a thin optical compartment. It provides extensive light distributions so that the spacing between the luminaires can be increased.

Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



A. Dimming level | B. Time

Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.

PIR sensor: motion detection

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

Each luminaire level can be configured individually with several parametres such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.

Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.

Standardisation for interoperable ecosystems

Schréder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schréder EXEDRA system relies on shared and open technologies. Schréder EXEDRA also relies on Microsoft Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

Breaking the silos

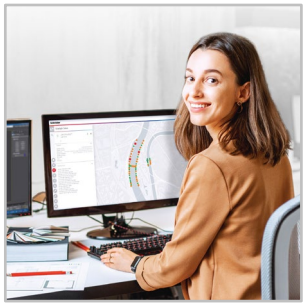
With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- control devices (luminaires) from other brands
- manage controllers and to integrate sensors from other brands
- connect with third-party devices and platforms

A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface. OWLET IV luminaire controllers, optimised for Schréder EXEDRA, operate Schréder's luminaires and luminaires from third parties. They use both cellular and mesh radio networks, optimising geographical coverage and redundancy for continuous operation.

Tailored experience



Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

A powerful tool for efficiency, rationalisation and decision making

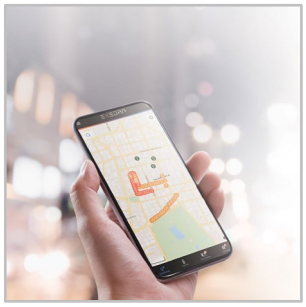
Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

Protected on every side

ISO 27001
BUREAU VERITAS
Certification

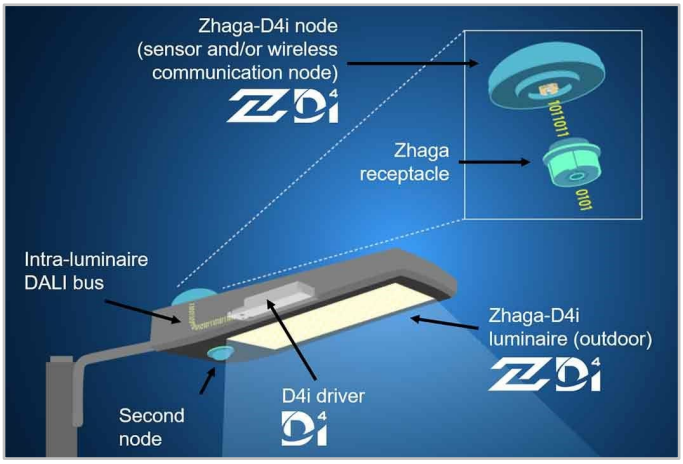
Schréder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services. The whole platform is ISO 27001 certified. It demonstrates that Schréder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

Mobile App: any time, any place, connect to your street lighting



The Schréder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.



Standardisation for interoperable ecosystems

Member of Zhaga

As a founding member of the Zhaga consortium, Schréder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire. According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

Certification program

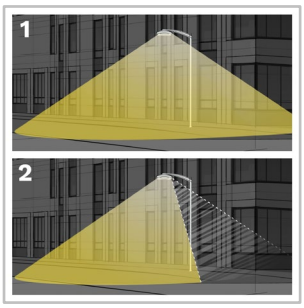
The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

With the PureNight concept, Schréder offers the ultimate solution for restoring the night sky without switching off cities, while maintaining safety and well-being for people and preserving wildlife. The PureNight concept guarantees that your Schréder lighting solution satisfies environmental laws and requirements. Well-designed LED lighting has the potential to improve the environment in all respects.

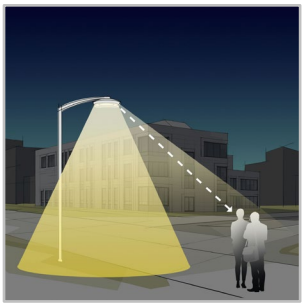
Direct the light only where it is wanted and needed



Schréder is renowned for its expertise in photometry. Our optics direct light only where it is wanted and needed. However, light trespass behind the luminaire might be a key concern when it comes to protecting a sensitive wildlife habitat or avoiding intrusive lighting towards buildings. Our fully integrated backlight solutions easily address this potential risk.

1. Without backlight
2. With backlight

Offer maximum visual comfort to people



Because of the lower installation height compared to road lighting, visual comfort is an essential aspect of urban lighting. Schréder designs lenses and accessories to minimise any type of glare (distracting, discomforting, disabling glare and blinding glare). Our design offices harness a range of possibilities to find the best solutions for each project and ensure that we provide a gentle light that delivers the best night-time experience.

Protect wildlife

If not well designed, artificial lighting can badly affect wildlife. Blue light and excessive intensity can have a damaging effect on all types of life. Blue light radiation has the ability to suppress the production of melatonin, the hormone that contributes to the regulation of the circadian rhythm. It can also alter the behavioural patterns of animals including bats and moths, as it can change their movements towards or away from light sources. Schréder favours warm white LEDs with minimal blue light, combined with advanced control systems including sensors. This enables permanent adaptation of the lighting to the real needs of the moment, minimising disturbance to the fauna and flora.

Choose a Dark Sky certified luminaire

The International Dark-Sky Association (IDA) is the recognised authority on light pollution. It provides leadership, tools and resources to industries and companies willing to reduce light pollution. The IDA's Fixture Seal of Approval programme certifies outdoor lighting fixtures as being Dark Sky Friendly. All products approved by this programme must comply with the following criteria:

- The light sources shall have a maximum correlated colour temperature of 3000K;
- Uplight allowance limited to 0.5% of total output, or 50 lumens, with no more than
  10 lumens in the 90-100 degree UL zone;
- The luminaires must have a dimming capability to 10% of full rating;
- The luminaires must be equipped with a fixed mounting option;
- The luminaires must have Safety Certification by an independent laboratory.

This approved Schréder range of luminaires complies with these requirements.

GENERAL INFORMATION

Recommended installation height	4m to 12m | 13' to 39'
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
ENEC+ certified	Yes
ROHS compliant	Yes
Dark Sky friendly lighting (IDA certification)	Yes
Zhaga-D4i certified	Yes
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Aluminium Composite materials
Optic	Polycarbonate
Protector	Polycarbonate (with integrated lenses)
Housing finish	Polyester powder coating
Standard colour(s)	RAL 7040 window grey RAL 9005 Jet black
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +45°C / -22°F up to 113°F

· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-4-5 / EN 61547
Control protocol(s)	1-10V, DALI
Control options	Bi-power, Custom dimming profile, Photocell, Remote management
Socket	Zhaga (optional) NEMA 3-pin (optional) NEMA 6-pin (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2700K (Warm White WW 727) 3000K (Warm White WW 730) 4000K (Neutral White NW 740)
Colour rendering index (CRI)	>70 (Warm White WW 727) >70 (Warm White WW 730) >70 (Neutral White NW 740)
ULOR	0%
ULR	0%

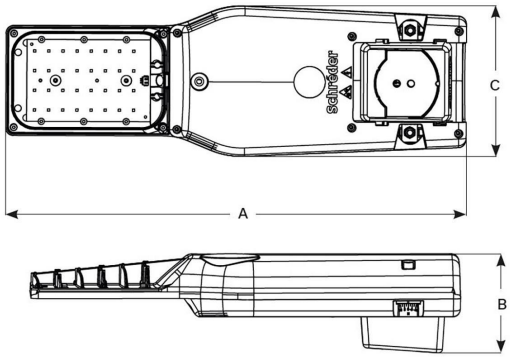
· Meets IDA Dark Sky requirements when fitted with LEDs of 3000K or less.
· ULOR may be different according to the configuration. Please consult us.
· ULR may be different according to the configuration. Please consult us.

LIFETIME OF THE LEDS @ TQ 25°C

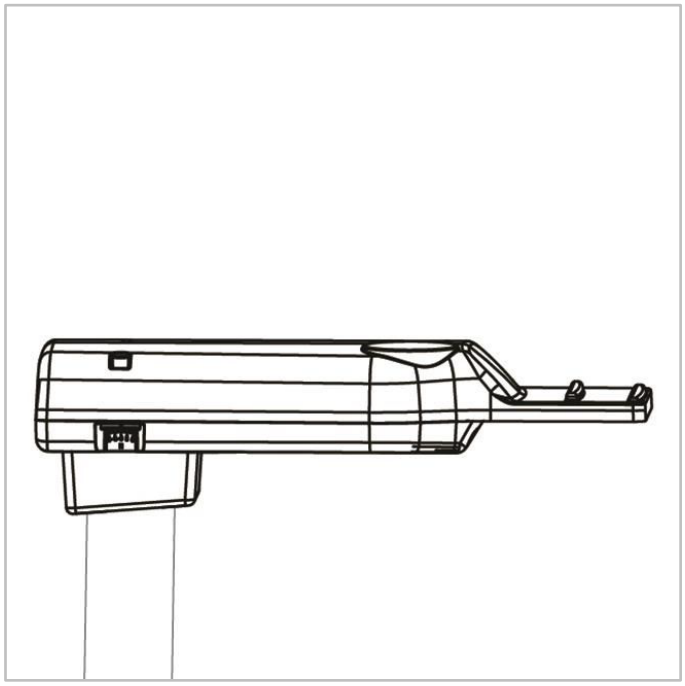
All configurations	100,000h - L90

DIMENSIONS AND MOUNTING

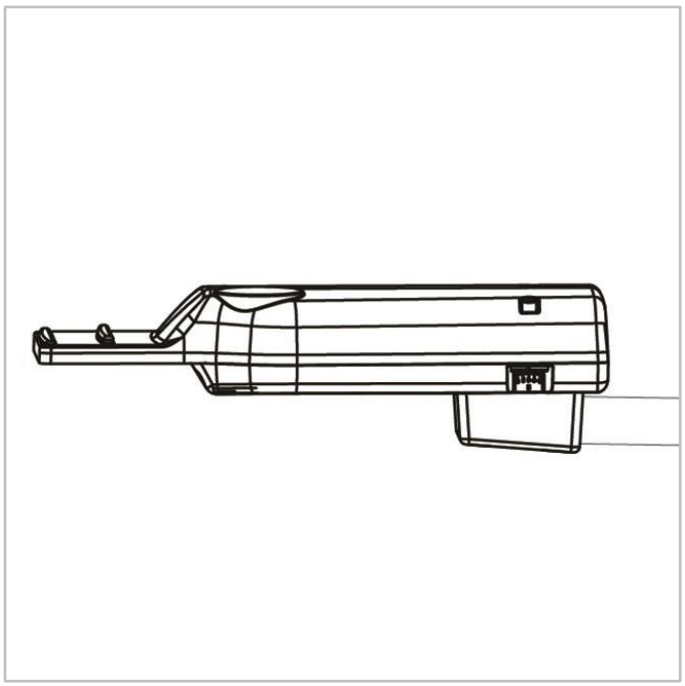
AxBxC (mm | inch)	AXIA 3.1 : 513x130x191 | 20.2x5.1x7.5 AXIA 3.2 : 585x130x191 | 23.0x5.1x7.5 AXIA 3.3 : 550x130x277 | 21.7x5.1x10.9
Weight (kg | lbs)	AXIA 3.1 : 3.6 | 7.9 AXIA 3.2 : 4.8 | 10.6 AXIA 3.3 : 6.0 | 13.2
Aerodynamic resistance (CxS)	AXIA 3.1 : 0.03 AXIA 3.2 : 0.03 AXIA 3.3 : 0.04
Mounting possibilities	Side-entry slip-over – Ø32mm Side-entry slip-over – Ø42mm Side-entry slip-over – Ø48mm Side-entry slip-over – Ø60mm Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm



AXIA 3 | Post-top - Slip-over mounting for Ø60 or Ø76mm spigot - 2xM10 screws



AXIA 3 | Side-entry - Slip-over mounting for Ø32 (with accessory) or Ø42-60mm spigot - 2xM10 screws



AXIA 3.1

Photometry

PRO FLEX™

	Luminaire output flux (lm)						Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
8	600	2500	700	2600	800	3000	8	23	152
16	900	5100	900	5400	1100	6100	11	44	159

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

AXIA 3.2

	Luminaire output flux (lm)						Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
24	2000	8400	2100	8800	2400	9900	16	76	161
32	2700	9500	2800	9900	3200	11300	20	78	166

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

AXIA 3.2

Photometry

PRO FLEX™

	Luminaire output flux (lm)						Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
24	2000	8400	2100	8800	2400	9900	16	76	161
32	2700	9500	2800	9900	3200	11300	20	78	166

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

AXIA 3.3

	Luminaire output flux (lm)						Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
48	4000	14800	4200	15600	4800	17700	30	133	167
64	5300	19800	5600	20800	6400	23600	40	172	170

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

AXIA 3.3

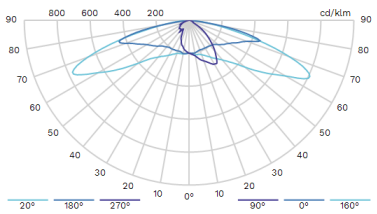
Photometry

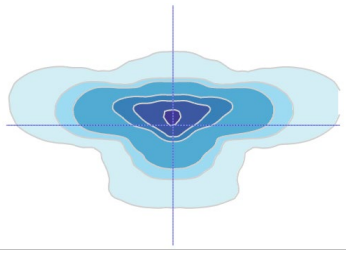
PRO FLEX™

	Luminaire output flux (lm)						Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 727		Warm White WW 730		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Up to
48	4000	14800	4200	15600	4800	17700	30	133	167
64	5300	19800	5600	20800	6400	23600	40	172	170

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

5364 Medium

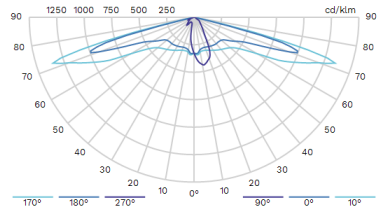


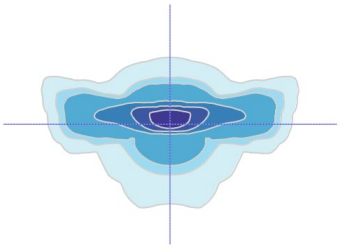


ProFlex

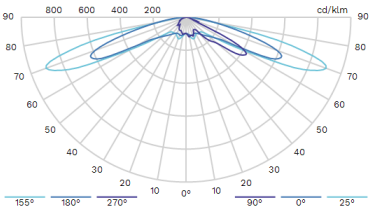
PRO FLEX™

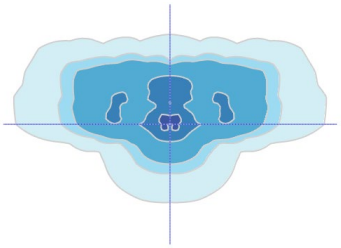
5296 Ultra-Narrow



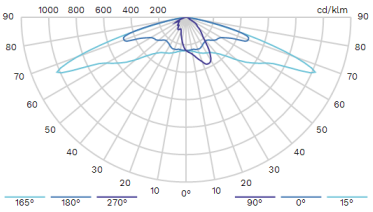


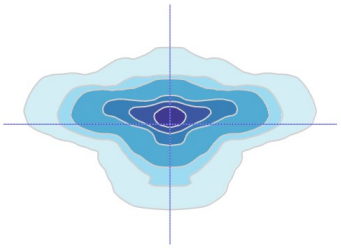
5384 Ultra-Narrow



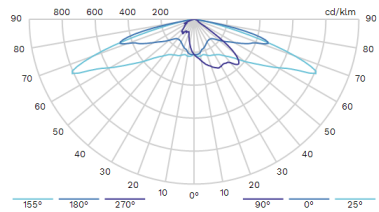


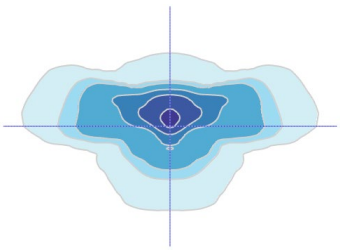
5273 Narrow



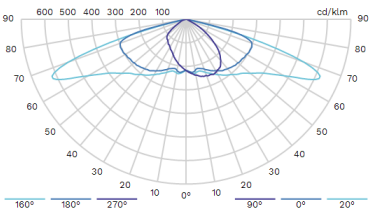


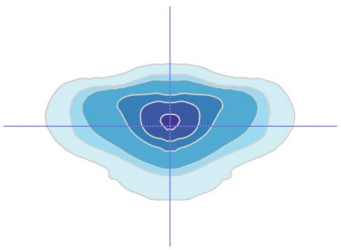
5279 Medium



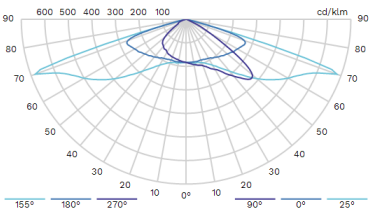


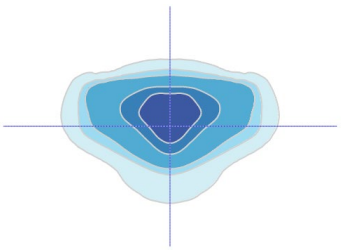
5294 Medium



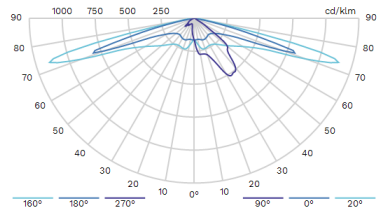


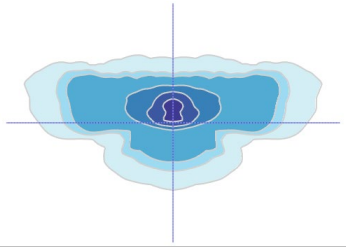
5295 Wide



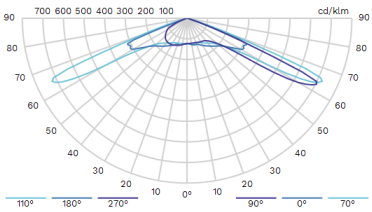


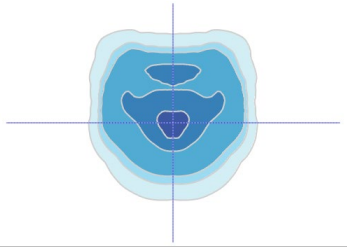
PRO FLEX™ 5266 Extra-Wide



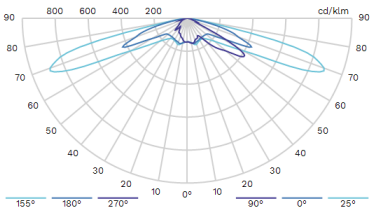


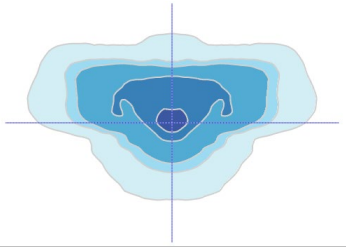
PRO FLEX™ 5293 Extra-Wide





PRO FLEX™ 5267 Ultra-Wide





Schréder
Experts in lightability™

DECORATIVE

ALBANY GEN2

LENSO FLEX™4

Connected street lantern with timeless design

Preserving the distinctive design and the philosophy of the renowned ALBANY luminaires, ALBANY GEN2 opens up the range to new technological possibilities for your urban lighting.

This second generation benefits from the latest innovations in lighting technology to offer a high-performance, versatile, connected-ready urban lighting solution.

With its design derived from Victorian lanterns, ALBANY GEN2 helps you to either add character or simply preserve the cultural heritage of your urban spaces, while creating comfortable, safe lighting for your citizens.

Discover the many possibilities of the ALBANY GEN2 luminaires and create welcoming spaces full of charm and history.

IP 66 · IK 10 · RoHS · UKCA · PLUS 02

URBAN & RESIDENTIAL STREETS · BRIDGES · BIKE & PEDESTRIAN PATHS · RAILWAY STATIONS & METROS · CAR PARKS · SQUARES & PEDESTRIAN AREAS

Concept

The ALBANY GEN2 upper and a lower body is made of high-pressure die-casted aluminium. It can be supplied with a flat glass or deep UV-resistant polycarbonate protector. To prevent direct glare in a low-height installation, an internal PMMA diffusor can be combined with the deep protector, or diffuse glass for the flat glass version. The flat glass version offers a ULOR of 0% and is compatible with preservation of the night sky.

With its recyclable materials, high mechanical performance, smart readiness and energy adaptation options, this urban luminaire fully meets the requirements of a circular economy for optimum resource management.

Equipped with the latest LensoFlex® photometric engines, ALBANY GEN2 provides powerful lighting with numerous colour temperatures and light distributions to fit any type of urban lighting project and requirement.

To suit multiple technical requirements, ALBANY GEN2 is available with various mounting options. It can be installed using a suspended mounting: ¾" male, 1" or 1¼" gas male, 1" female on male, all secured with a counter nut.

For post-top mounting, a new Lyre bracket made of high-pressure die-casted aluminium is also available to keep the renowned signature of the ALBANY luminaires. Whether it is suspended or post-top mounted, ALBANY GEN2 is available with a flat glass or deep protector. As an option, access to the gear compartment is tool-less.

Despite its vintage design, ALBANY GEN2 is a connected-ready urban lighting solution. It is optionally available with a NEMA or a Zhaga socket, opening up possibilities for easy integration with various connected lighting systems. The addition of a PIR motion sensor offers the opportunity for a more responsible use of energy resources by adjusting the lighting to the precise needs of the moment.

TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- SQUARES & PEDESTRIAN AREAS

KEY ADVANTAGES

- A classic shape with the advantages of LED technology
- Proven LensoFlex®4 photometrical engines
- Low energy consumption
- Numerous light distributions
- Quality recyclable materials
- Connected-ready
- Post-top or suspended mounting
- Zhaga-D4i certified

The perfect blend of historic heritage and advanced lighting technologies.

More than an aesthetic lighting solution, ALBANY GEN2 is a connected-ready luminaire allowing compatibility with various connected lighting systems.

Benefiting from the latest LensoFlex® photometric engines, ALBANY GEN2 offers a high-performance luminaire with low energy consumption.

ALBANY GEN2 is available with various mounting options to fit any kind of space.

ALBANY GEN2 | Suspended with flat glass

ALBANY GEN2 | Suspended with a deep polycarbonate protector

ALBANY GEN2 | Post-top with flat glass (on Lyre bracket)

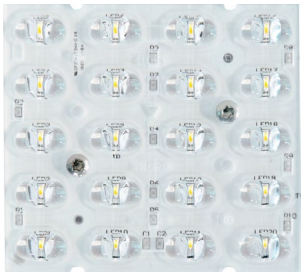
ALBANY GEN2 | Post-top with deep polycarbonate protector (on Lyre bracket)

ALBANY GEN2 | With internal diffusor

LensoFlex®4

LensoFlex®4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.

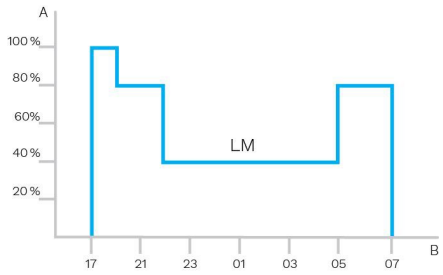
LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.



Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

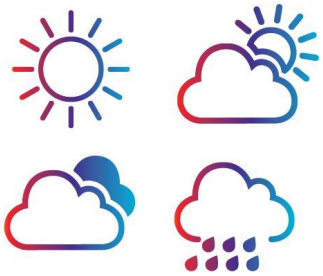
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



A. Dimming level | B. Time

Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.

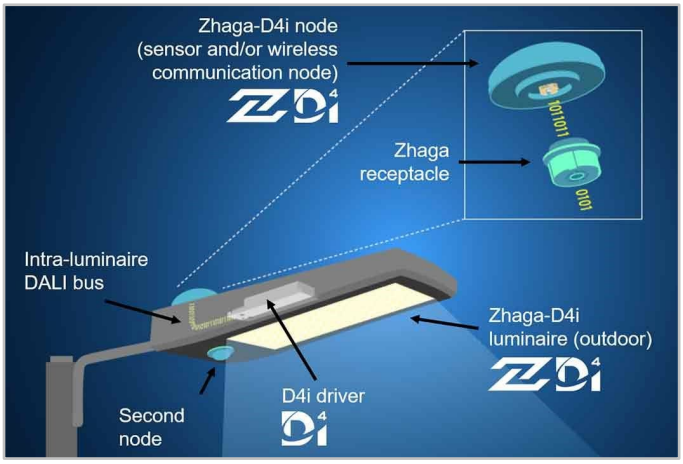


PIR sensor: motion detection

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

Each luminaire level can be configured individually with several parametres such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.

The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.



Standardisation for interoperable ecosystems

Member of Zhaga

As a founding member of the Zhaga consortium, Schréder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire. According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

Certification program

The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.

Standardisation for interoperable ecosystems

Schréder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schréder EXEDRA system relies on shared and open technologies. Schréder EXEDRA also relies on Microsoft™ Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

Breaking the silos

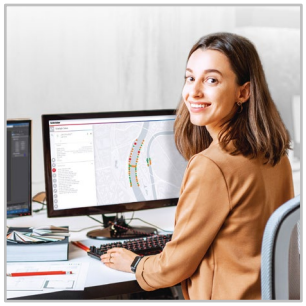
With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- control devices (luminaires) from other brands
- manage controllers and to integrate sensors from other brands
- connect with third-party devices and platforms

A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface. OWLET IV luminaire controllers, optimised for Schréder EXEDRA, operate Schréder's luminaires and luminaires from third parties. They use both cellular and mesh radio networks, optimising geographical coverage and redundancy for continuous operation.

Tailored experience



Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

A powerful tool for efficiency, rationalisation and decision making

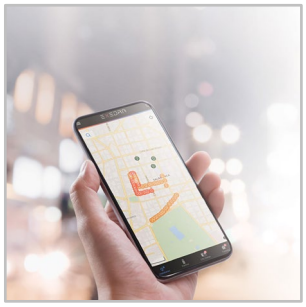
Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

Protected on every side

ISO 27001
BUREAU VERITAS
Certification

Schréder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services. The whole platform is ISO 27001 certified. It demonstrates that Schréder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

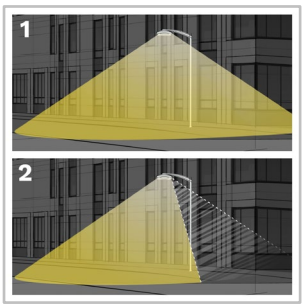
Mobile App: any time, any place, connect to your street lighting



The Schréder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

With the PureNight concept, Schréder offers the ultimate solution for restoring the night sky without switching off cities, while maintaining safety and well-being for people and preserving wildlife. The PureNight concept guarantees that your Schréder lighting solution satisfies environmental laws and requirements. Well-designed LED lighting has the potential to improve the environment in all respects.

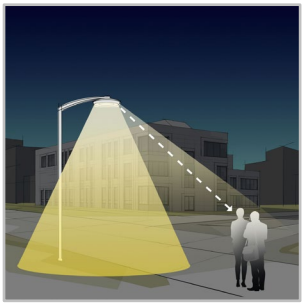
Direct the light only where it is wanted and needed



Schréder is renowned for its expertise in photometry. Our optics direct light only where it is wanted and needed. However, light trespass behind the luminaire might be a key concern when it comes to protecting a sensitive wildlife habitat or avoiding intrusive lighting towards buildings. Our fully integrated backlight solutions easily address this potential risk.

1. Without backlight
2. With backlight

Offer maximum visual comfort to people



Because of the lower installation height compared to road lighting, visual comfort is an essential aspect of urban lighting. Schréder designs lenses and accessories to minimise any type of glare (distracting, discomforting, disabling glare and blinding glare). Our design offices harness a range of possibilities to find the best solutions for each project and ensure that we provide a gentle light that delivers the best night-time experience.

Protect wildlife

If not well designed, artificial lighting can badly affect wildlife. Blue light and excessive intensity can have a damaging effect on all types of life. Blue light radiation has the ability to suppress the production of melatonin, the hormone that contributes to the regulation of the circadian rhythm. It can also alter the behavioural patterns of animals including bats and moths, as it can change their movements towards or away from light sources. Schréder favours warm white LEDs with minimal blue light, combined with advanced control systems including sensors. This enables permanent adaptation of the lighting to the real needs of the moment, minimising disturbance to the fauna and flora.

Choose a Dark Sky certified luminaire

The International Dark-Sky Association (IDA) is the recognised authority on light pollution. It provides leadership, tools and resources to industries and companies willing to reduce light pollution. The IDA's Fixture Seal of Approval programme certifies outdoor lighting fixtures as being Dark Sky Friendly. All products approved by this programme must comply with the following criteria:

- The light sources shall have a maximum correlated colour temperature of 3000K;
- Uplight allowance limited to 0.5% of total output, or 50 lumens, with no more than
  10 lumens in the 90-100 degree UL zone;
- The luminaires must have a dimming capability to 10% of full rating;
- The luminaires must be equipped with a fixed mounting option;
- The luminaires must have Safety Certification by an independent laboratory.

This approved Schréder range of luminaires complies with these requirements.

ALBANY GEN2 | CHARACTERISTICS

Schréder

GENERAL INFORMATION

Recommended installation height	4m to 10m | 13' to 33'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
ENEC+ certified	Yes
ROHS compliant	Yes
Dark Sky friendly lighting (IDA certification)	Yes
Zhaga-D4i certified	Yes
UKCA marking	Yes
Testing standard	EN 60598-1 EN 60598-2-1 EN 62262 IEC 62717 (LLM ENEC +) IEC 62722-2-1 IEC 62493 IEC 62471

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G) Compliant with modified IEC 68-2-6 (0.34G)
Access for maintenance	By loosening screws on the bottom cover Tool-less access to gear compartment (option)

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +40°C / -22°F up to 104°F with wind effect

· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547
Control protocol(s)	1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile, Photocell, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2200K (WW 722) 2700K (WW 727) 3000K (WW 730) 3000K (WW 830) 4000K (NW 740)
Colour rendering index (CRI)	>70 (WW 722) >70 (WW 727) >70 (WW 730) >80 (WW 830) >70 (NW 740)
ULOR	0%
ULR	0%

· ULOR 0%: only for flat glass version.
· ULOR may be different according to the configuration. Please consult us.
· ULR may be different according to the configuration. Please consult us.
· Meets IDA Dark Sky requirements when fitted with LEDs of 3000K or less.

LIFETIME OF THE LEDS @ TQ 25°C

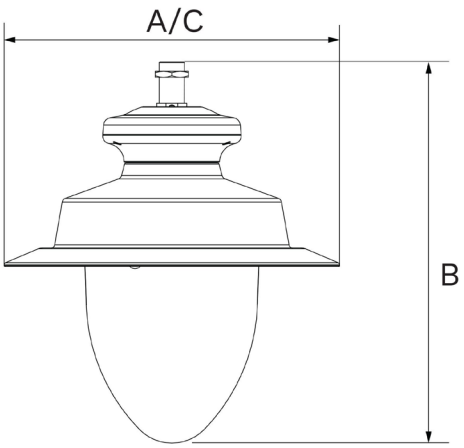
All configurations	100,000h - L95

· Lifetime may be different according to the size/configurations. Please consult us.

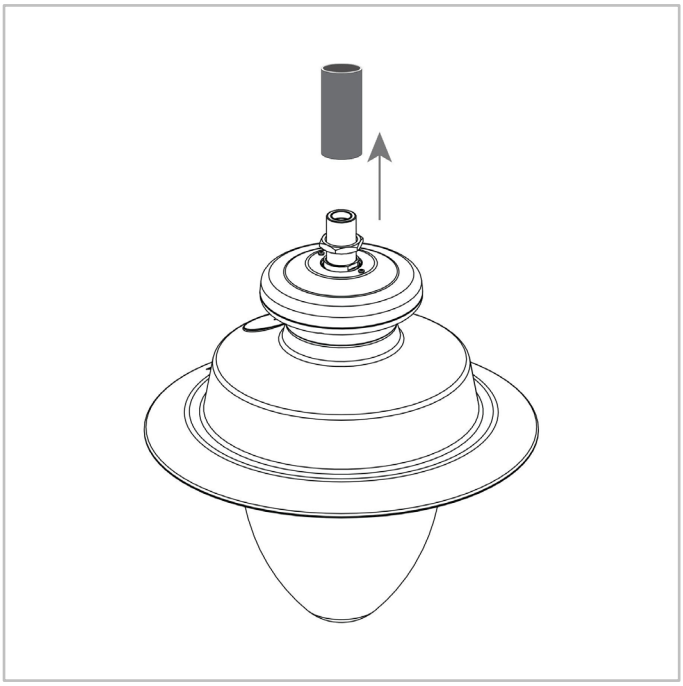
DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	555x629x555 | 21.9x24.8x21.9
Weight (kg | lbs)	8.8-11.8 | 19.4-26.0
Aerodynamic resistance (CxS)	0.18
Mounting possibilities	Post-top slip-over – Ø60mm Suspended ¾" gas male Suspended 1" gas male Suspended 1" 1/4 gas male Suspended 1" gas female

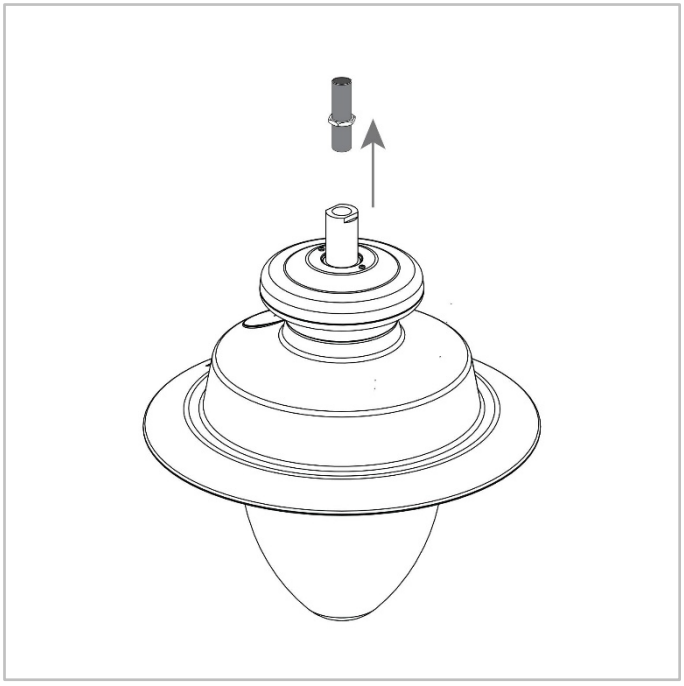
· Dimensions given for the suspended version with deep protector. For more information about other configurations, please consult us.



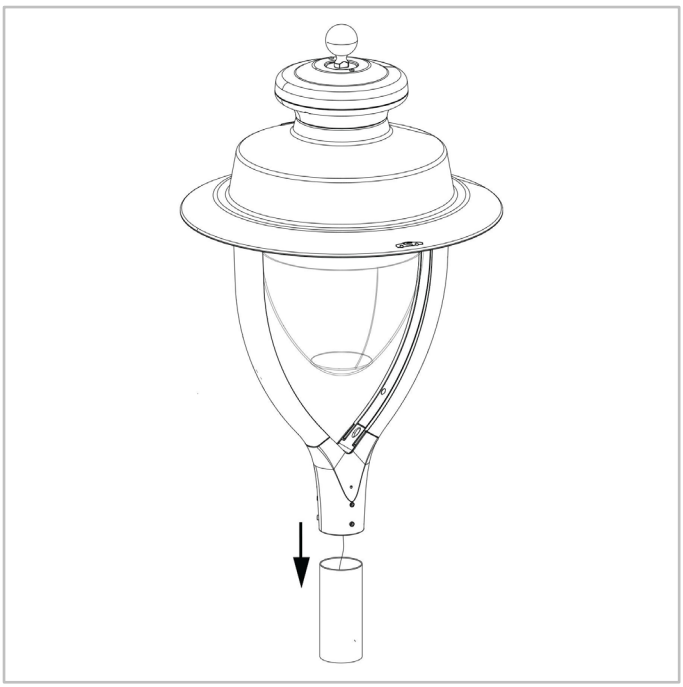
ALBANY GEN2 | Suspended male (1” gas, 1”-¼ gas and ¾” gas)



ALBANY GEN2 | Suspended female 1” gas



ALBANY GEN2 | Post-top Ø60mm with Lyre bracket



ALBANY GEN2 MIDI

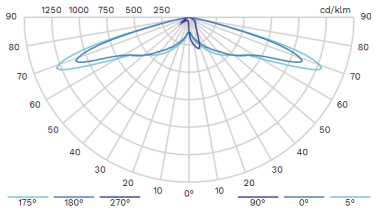
Photometry

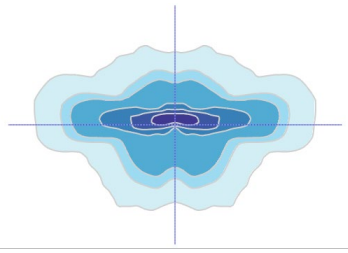
LENSO FLEX™4

	Luminaire output flux (lm)										Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White 722		Warm White 727		Warm White 730		Warm White 830		Neutral White 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
10	600	2200	700	2500	800	2800	700	2500	900	3000	8	22	150
20	1300	5700	1500	6500	1700	7100	1500	6500	1800	7800	13	60	169
30	3300	8500	3800	9800	4200	10700	3800	9800	4600	11700	33	87	168
40	2700	11400	3100	13100	3400	14300	3100	13100	3700	15600	25	114	178

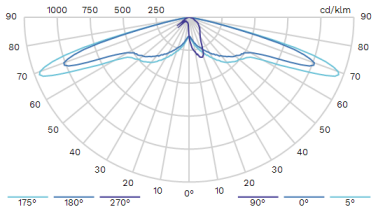
Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

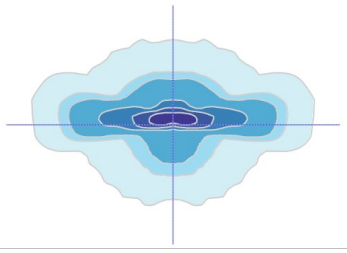
5300



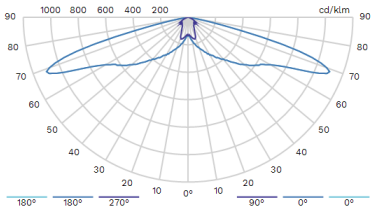


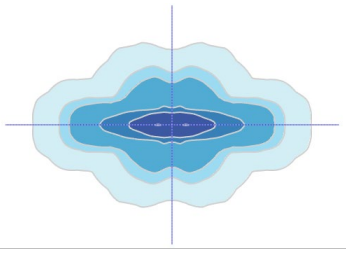
5300 BL



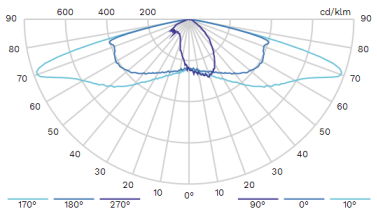


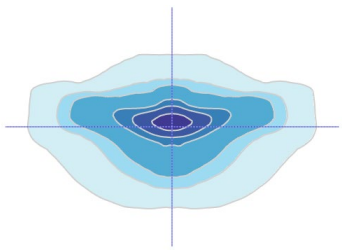
5300 SY





5301





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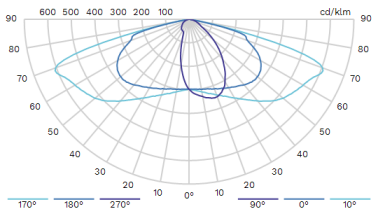

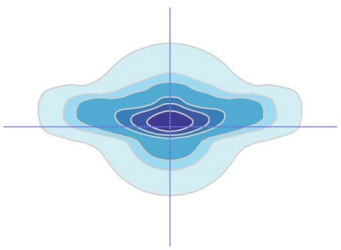

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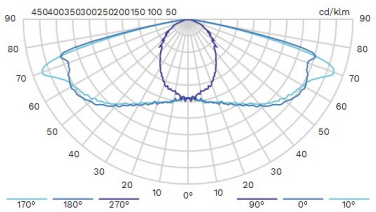

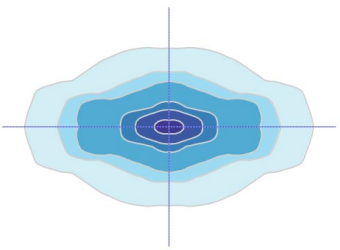

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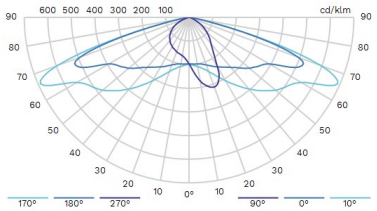

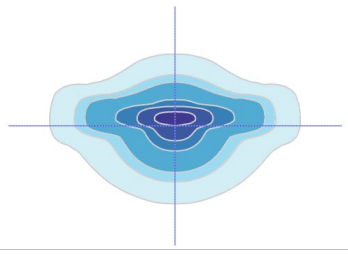

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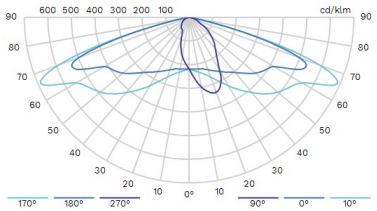

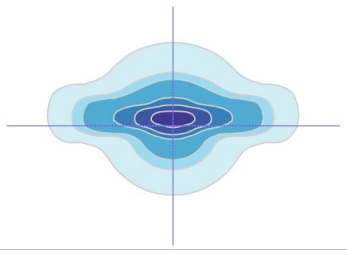

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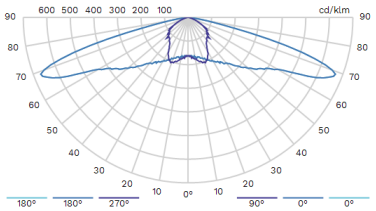

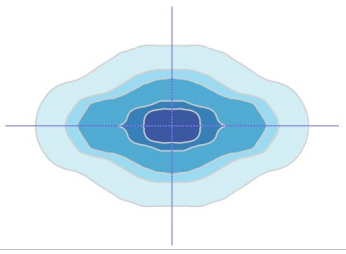

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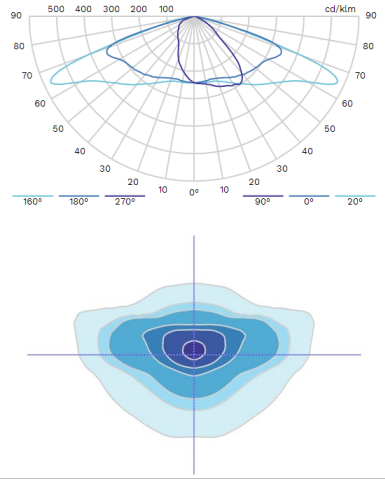

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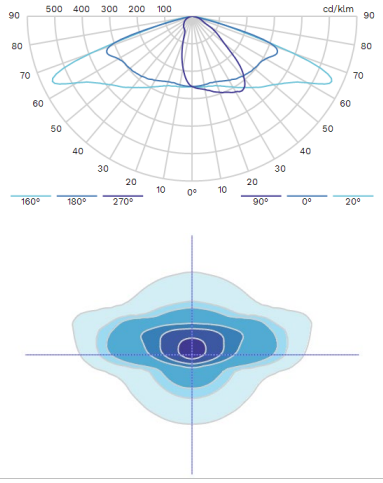

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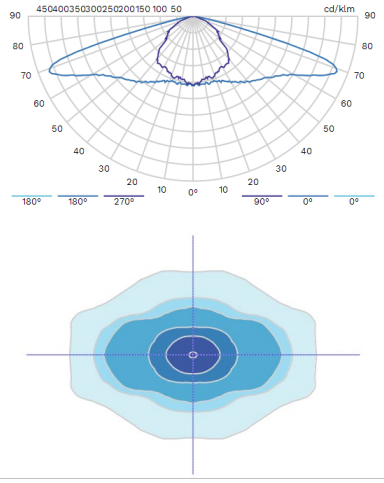

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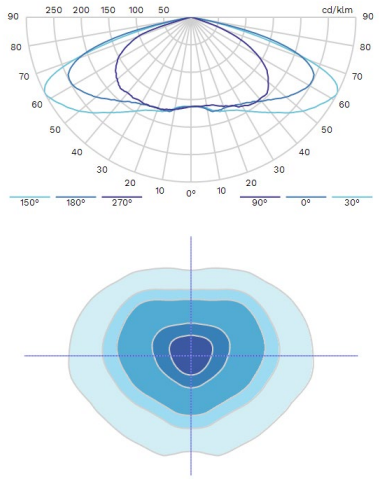

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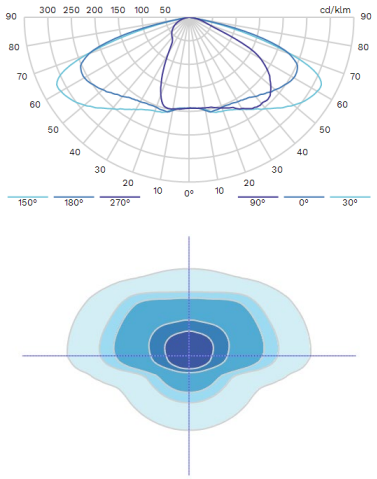

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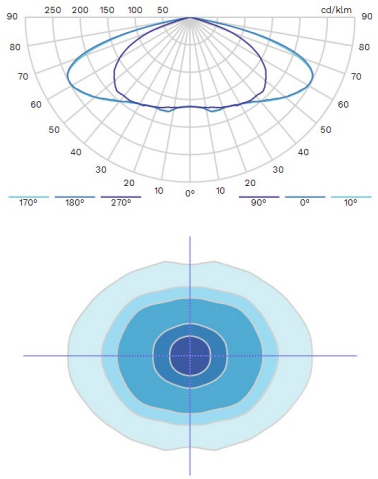

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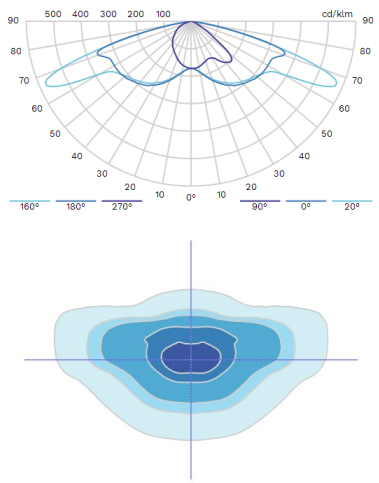

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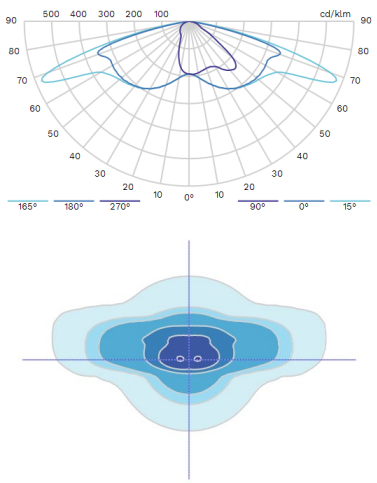

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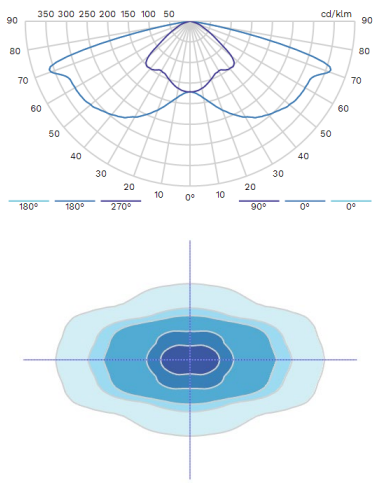

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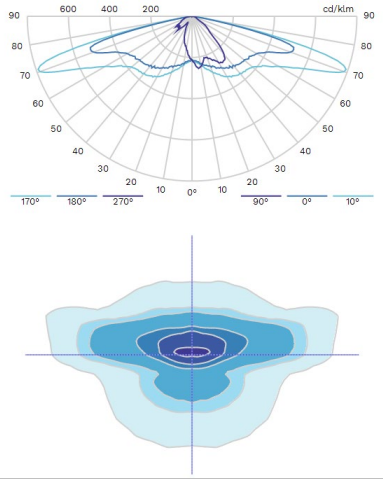

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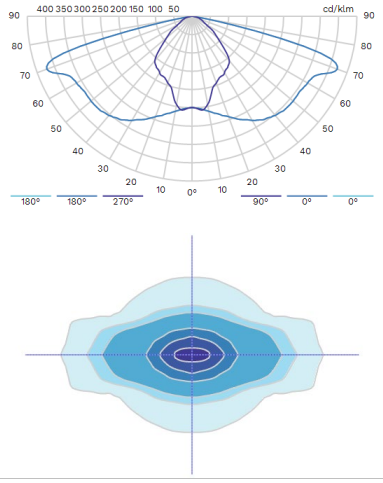

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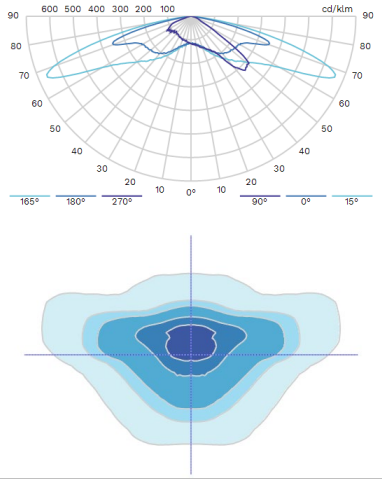

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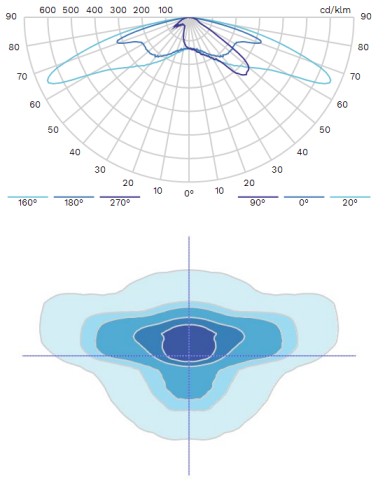

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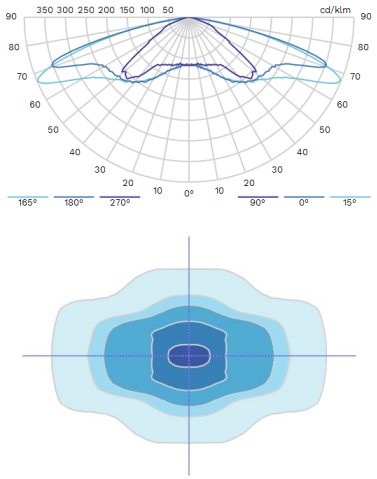

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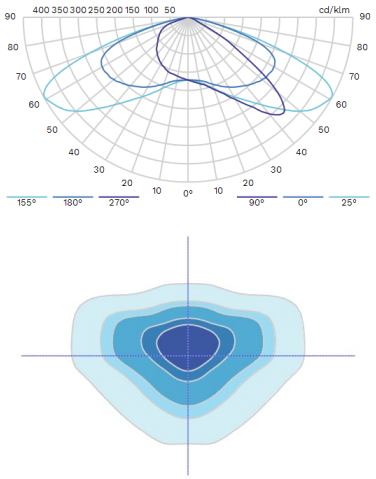

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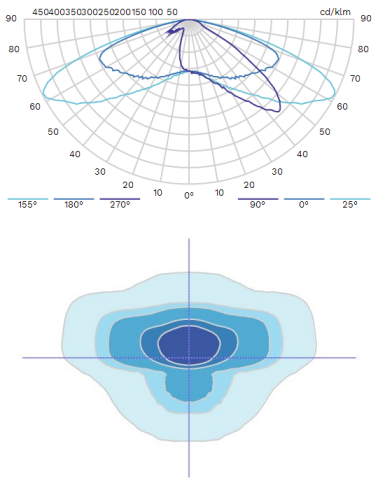

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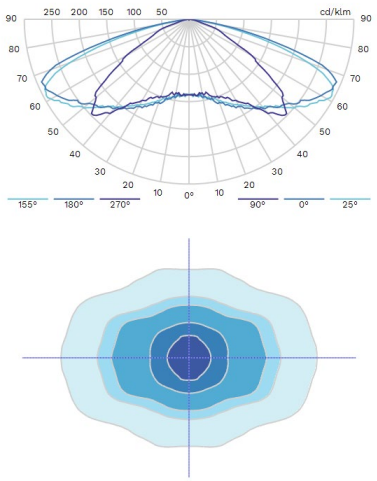

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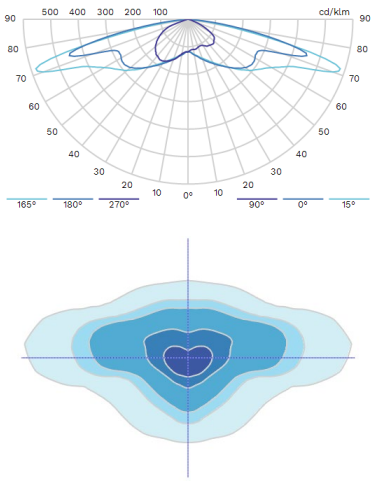

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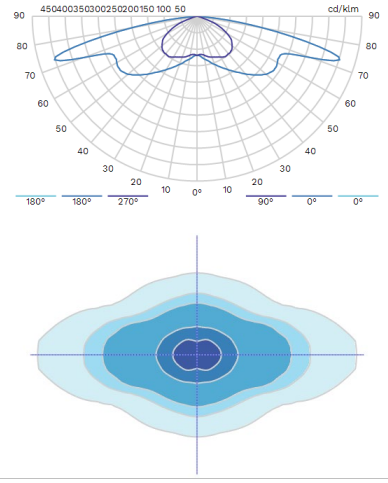

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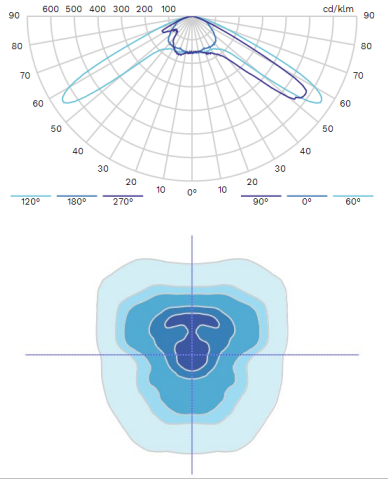

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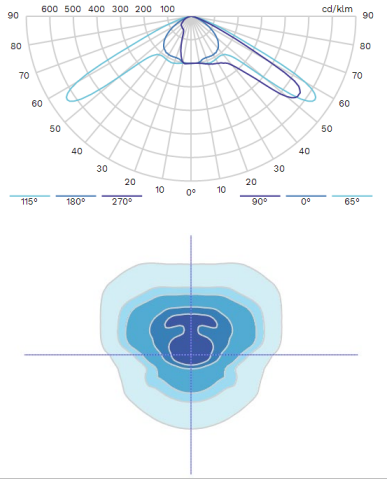

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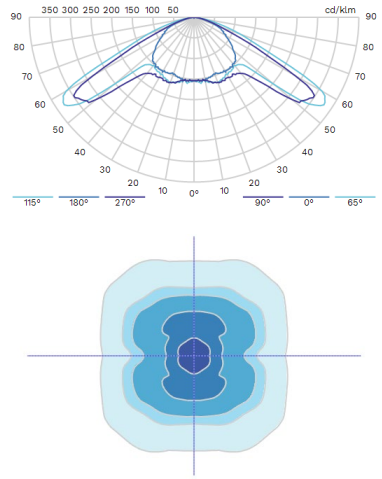

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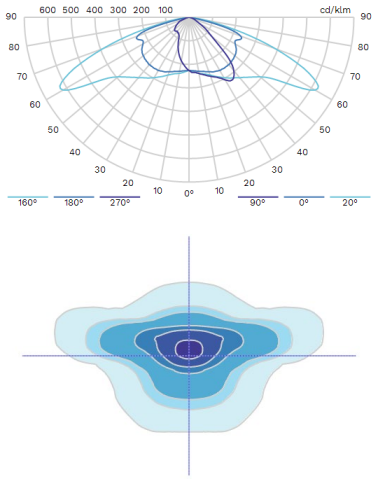

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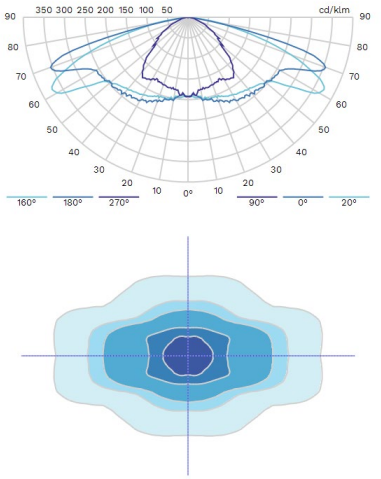
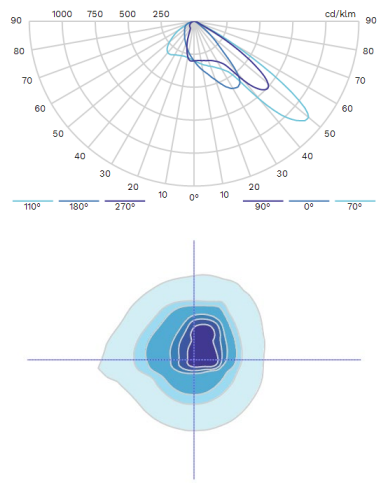


LENSO FLEX 4

5369 BL ZR



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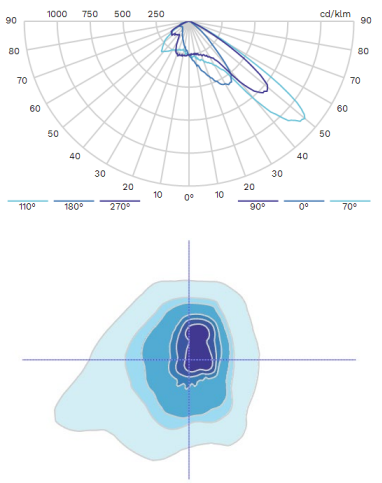

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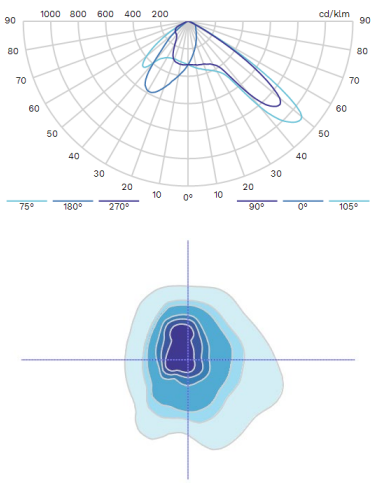

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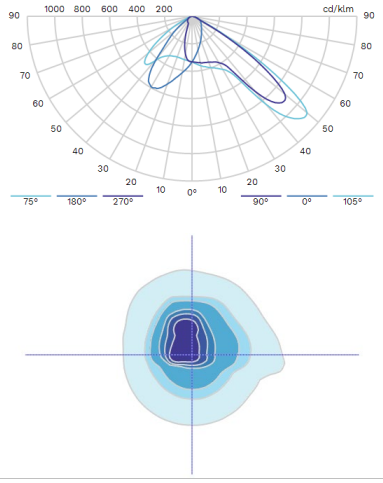

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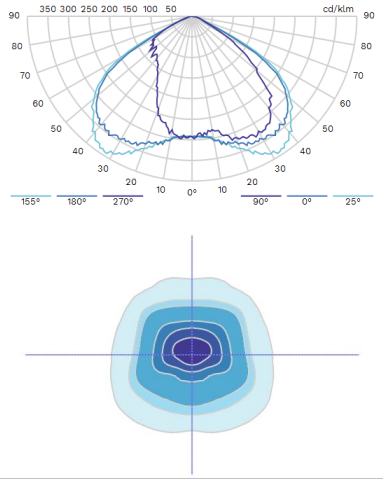

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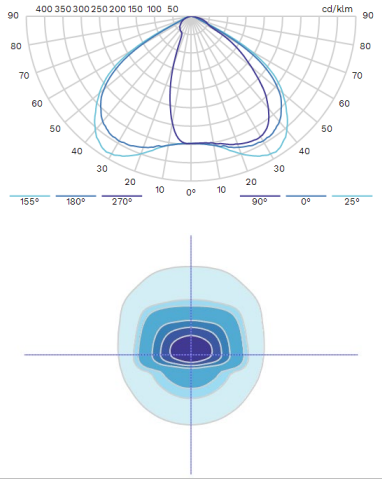

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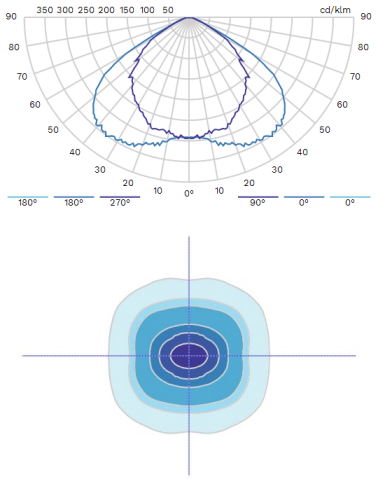

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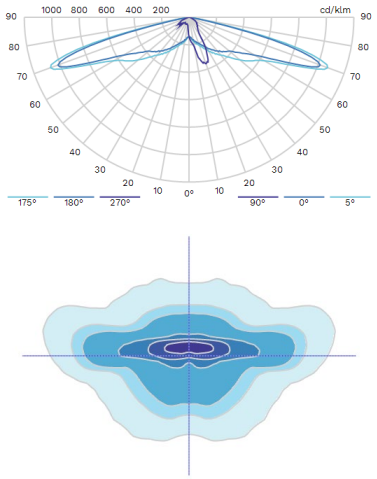

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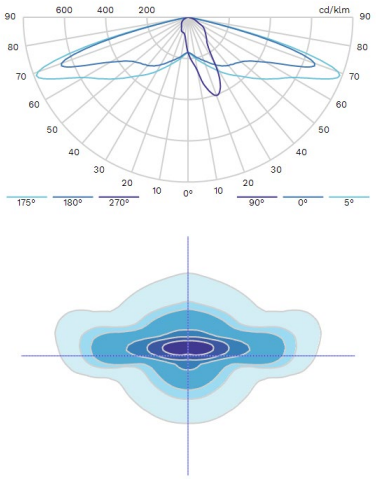

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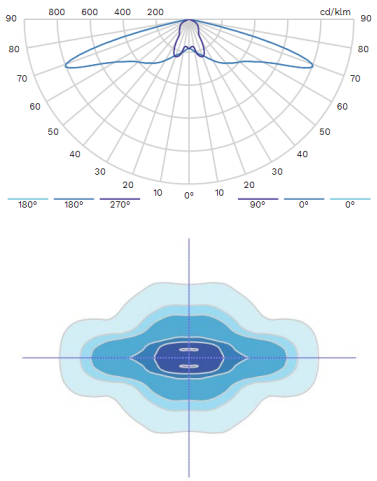

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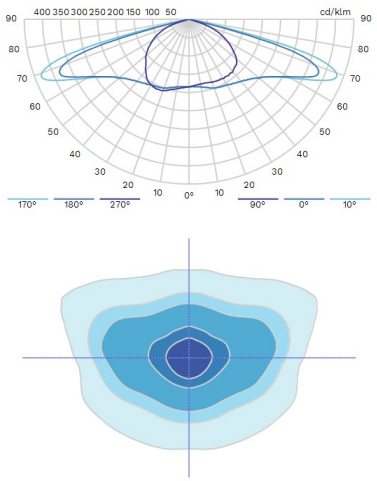

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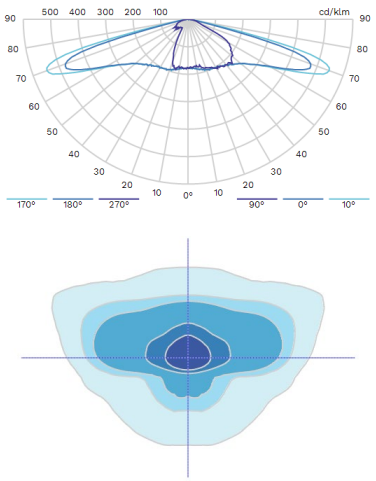

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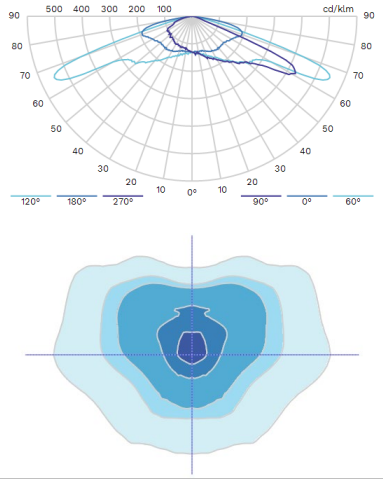

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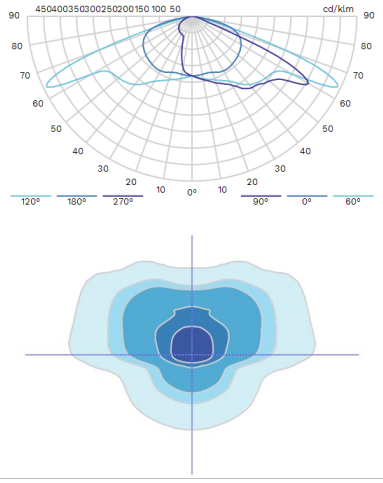

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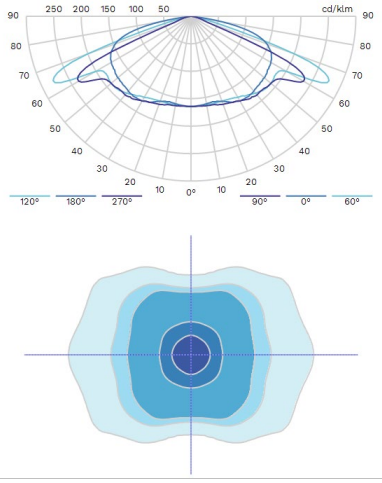

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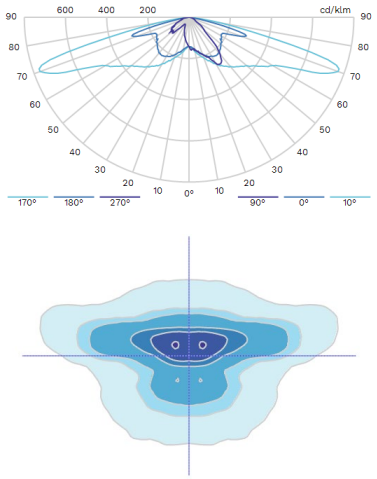

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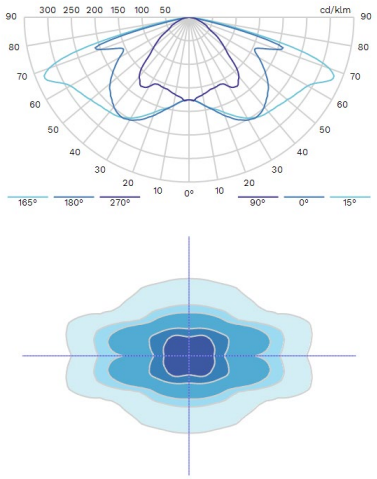

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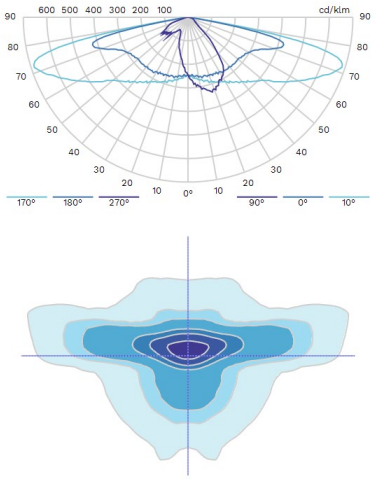

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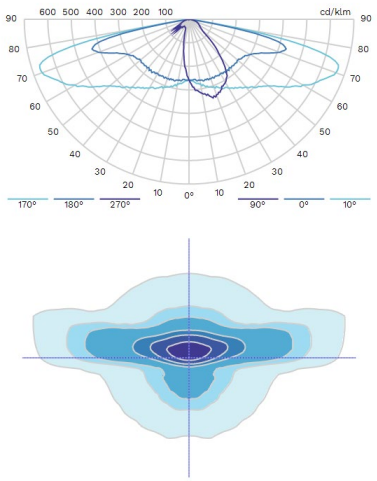

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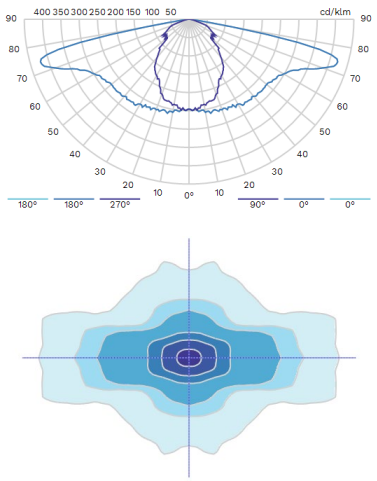

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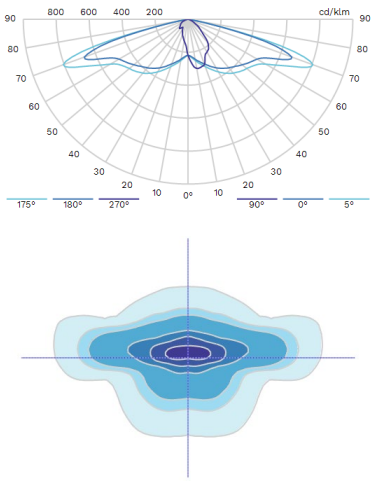

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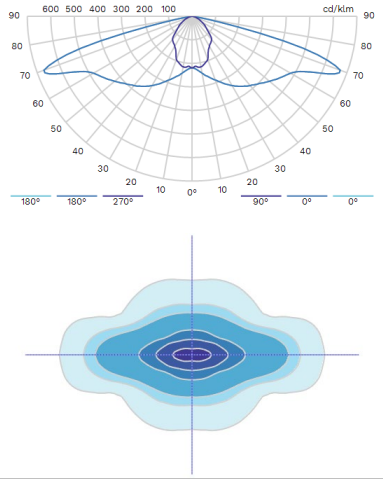

LENSO FLEX 4

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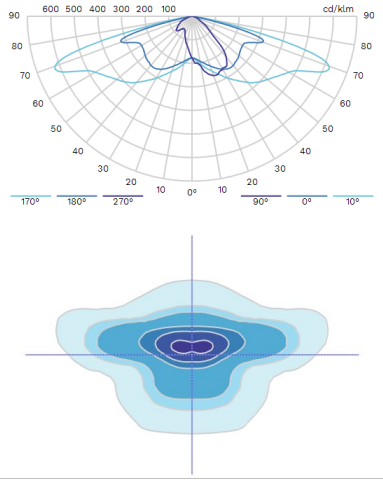

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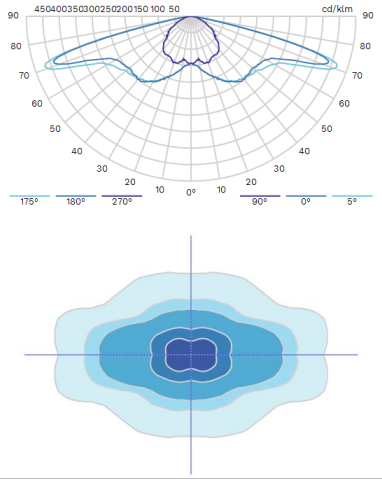

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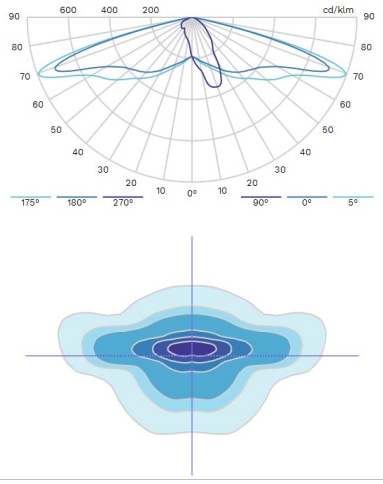

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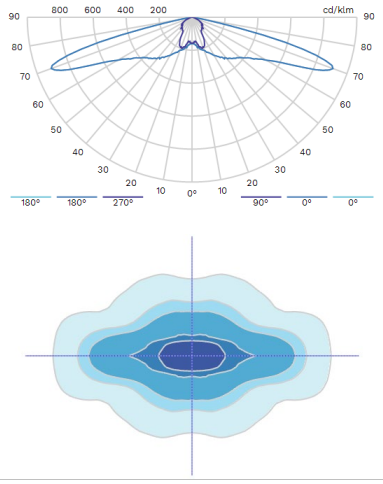

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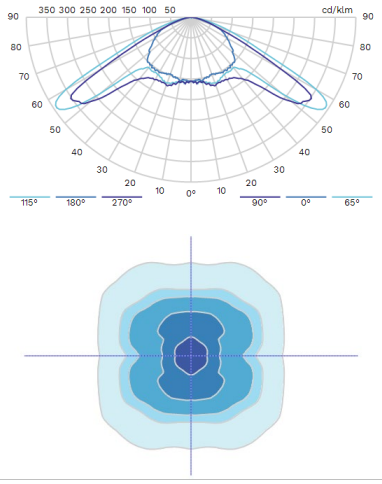

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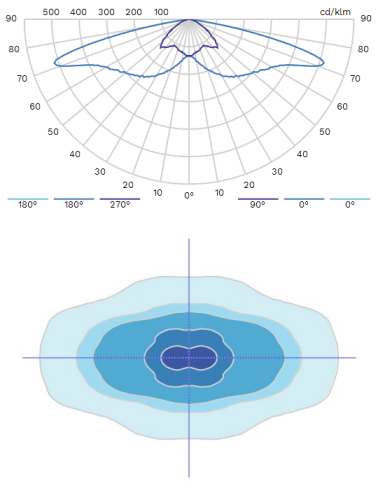

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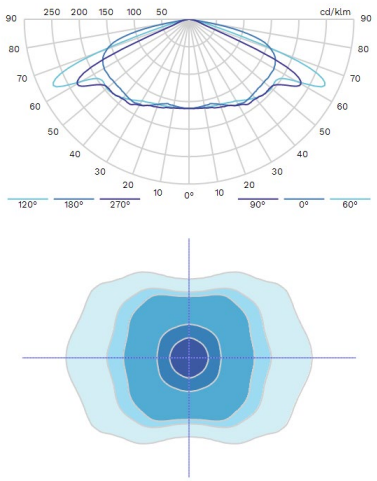

LENSO FLEX 4

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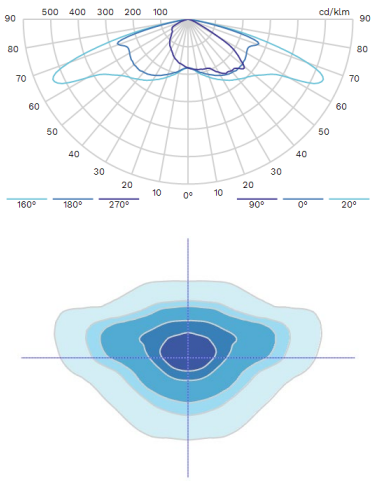

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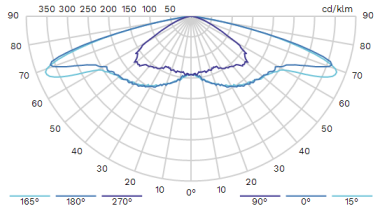

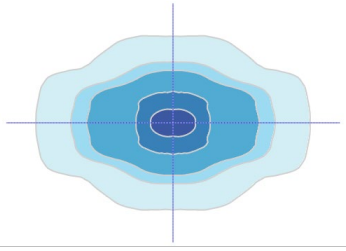

LENSO FLEX 4

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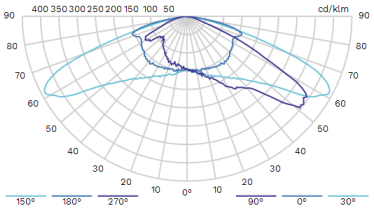

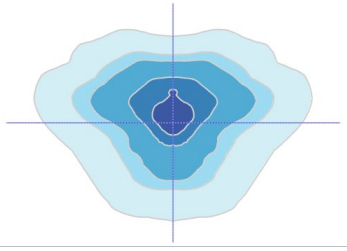

LENSO FLEX 4

50010 SY