Varming
Consulting Engineers Ltd.

GLOVER COURT

RE-DEVELOPMENT

PUBLIC LIGHTING REPORT

Rev: *1*
Date: 04/07/2025

LINKED PRACTICES

VARMING CONSULTING ENGINEERS LTD. ARE LINKED TO
STEENSEN VARMING INTERNATIONAL
OFFICES IN LONDON,
DENMARK, HONG KONG, SYDNEY.

www.varming.ie

DOCUMENT CONTROL

Rev	Purpose	Issued to	Issued by	Date	Notes
0	Part 8	DCC	Domeck Dube	25/11/2024	
1	Part 8	DCC	Howard Mutize	23/01/2025	
2	Part 8	DCC	Dylan O'Reilly	04/07/2025	

CONTENTS

LAYOUT REPORT

General Data:

Dimensions in Metres Angles in Degrees
Grid Origin -142.7m x -61.6m
Area 216.6m x 151.2m
Sample Spacing 2.17m x 1.50m

Luminaires:

Luminaire A Data

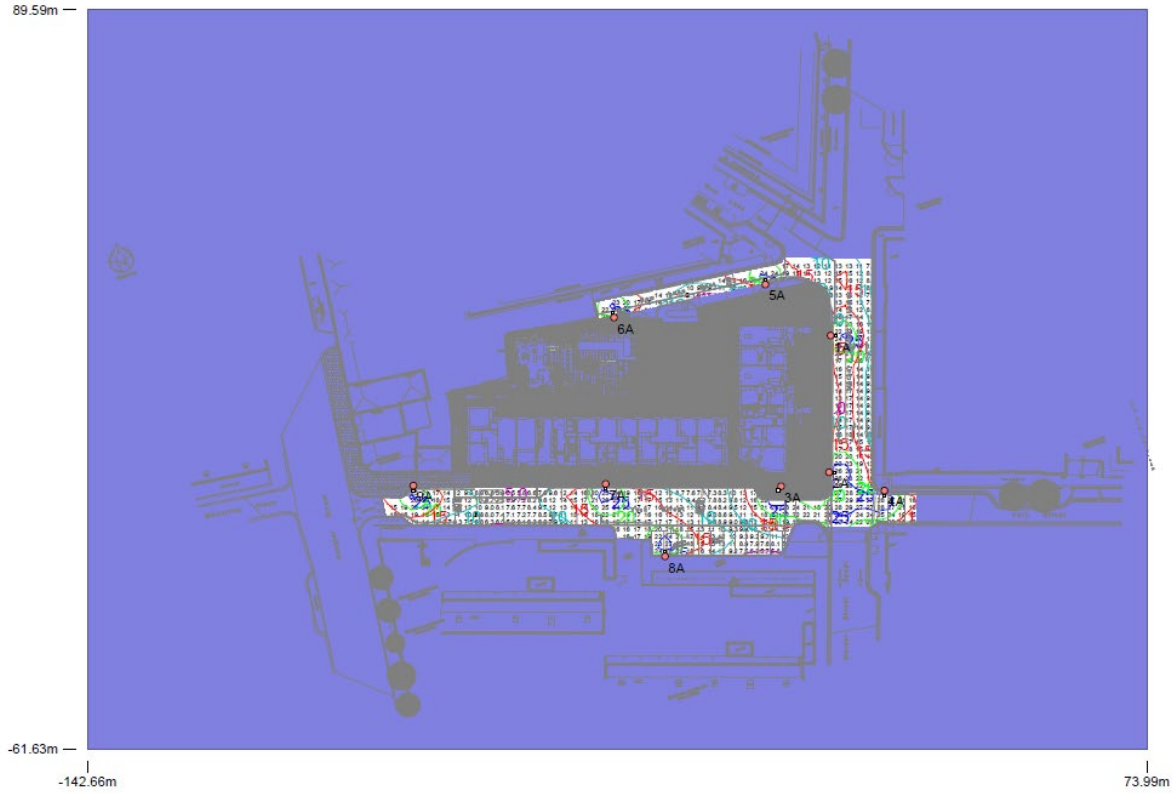
Supplier	
Type	TWEET NEO S2-X2 4BLSB12 ERE 300mA 45W 3000K IRC70
Lamp(s)	OSLON² GEN5
LampFlux(klm)/Colour	6.09 3000K/70
File Name	TWEET NEO S2-X2 4BLSB12 ERE 300mA45W 3000K IRC70.ldt
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	793.0, 54.0, 1.0
No. in Project	9

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	9.26	22.98	8.00	0.00	0.00	0.00	1.00			
2	A	8.95	-5.00	8.00	0.00	0.00	0.00	1.00			
3	A	-0.90	-7.85	8.00	235.00	0.00	0.00	1.00			
4	A	20.23	-8.78	8.00	270.00	0.00	0.00	1.00			
5	A	-4.10	33.42	8.00	90.00	0.00	0.00	1.00			
6	A	-35.03	26.68	8.00	101.00	0.00	0.00	1.00			
7	A	-36.77	-7.41	8.00	270.00	0.00	0.00	1.00			
8	A	-24.64	-22.18	8.00	90.00	0.00	0.00	1.00			
9	A	-76.10	-7.72	8.00	270.00	0.00	0.00	1.00			

Horizontal Illuminance (lux)

Grid 1

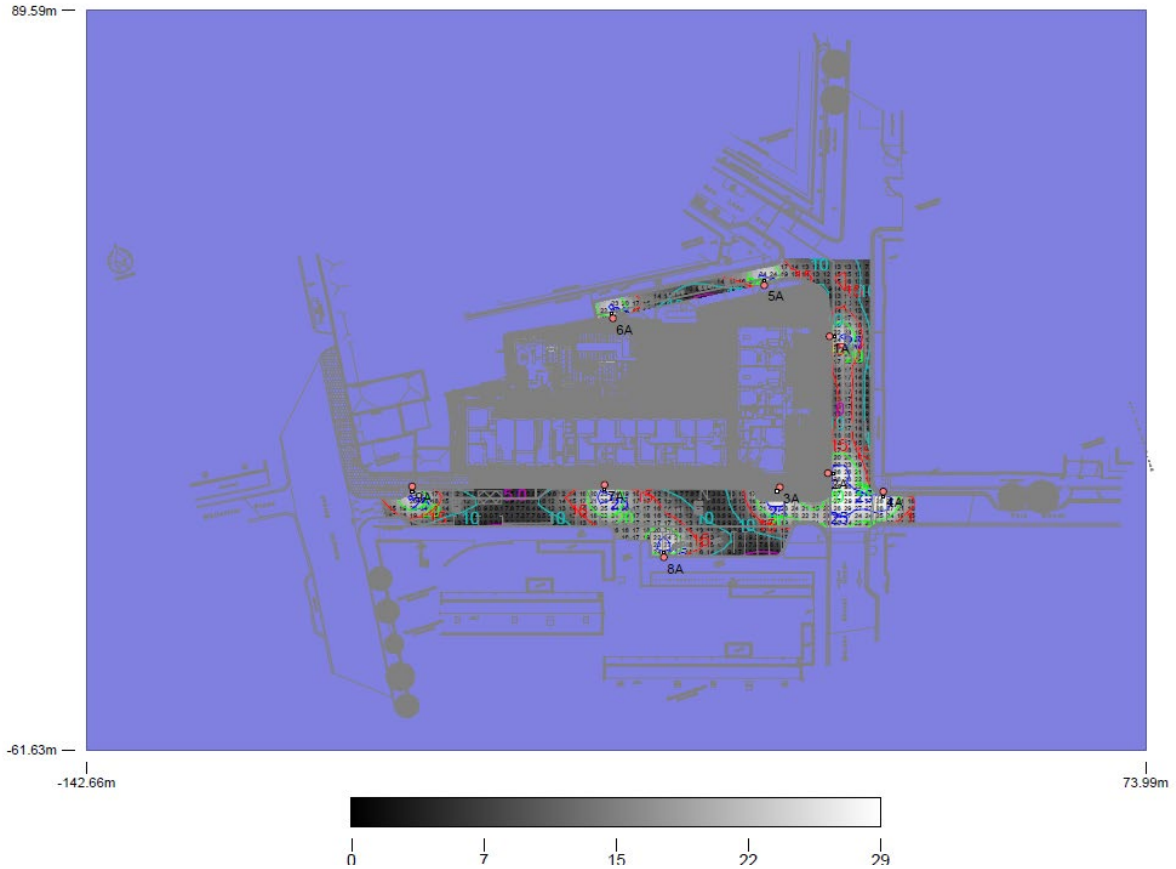


Results

Eav	15.28
Emin	5.45
Emax	29.42
Emin/Emax	0.19
Emin/Eav	0.36

Horizontal Illuminance (lux)

Grid 1

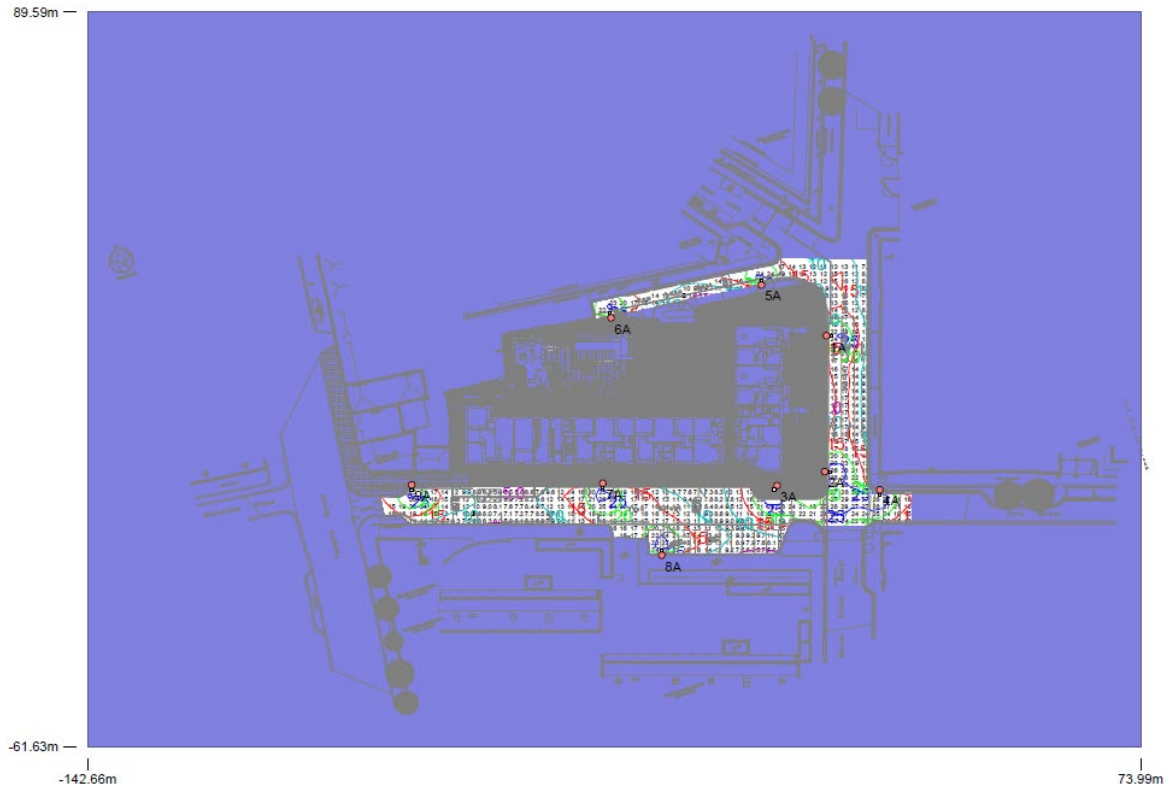


Results

Eav	15.28
Emin	5.45
Emax	29.42
Emin/Emax	0.19
Emin/Eav	0.36

Horizontal Illuminance (lux)

Grid 1



Results

Eav	15.28
Emin	5.45
Emax	29.42
Emin/Emax	0.19
Emin/Eav	0.36

DATE:	**3 July 2025**
DESIGNER:	**JS**
PROJECT No:	**000000**
PROJECT NAME:	**Varming**

LIGHTING REALITY

LR 1 Glovers Court Rev 017

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Grid Origin -71.5m x -12.6m
Area 82.7m x 51.1m
Sample Spacing 1.50m x 1.46m

Luminaires

Luminaire A Data

Supplier	
Type	ELYXE 1BLSB8 ECA 500mA 14W 3000K I RC70
Lamp(s)	OSLON² GEN5
LampFlux(klm)/Colour	1.58 3000K/70
File Name	ELYXE 1BLSB8 ECA 500mA 14W 3000K I RC70.ldt
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	152.0, 19.0, 2.0
No. in Project	2

Luminaire B Data

Supplier	
Type	TWEET NEO S1-X1 1BLSB8 ERE 500mA 14W 3000K IRC70
Lamp(s)	OSLON² GEN5
LampFlux(klm)/Colour	1.56 3000K/70
File Name	TWEET NEO S1-X1 1BLSB8 ERE 500mA 14W 3000K IRC70.ldt
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	795.0, 37.0, 1.0
No. in Project	2

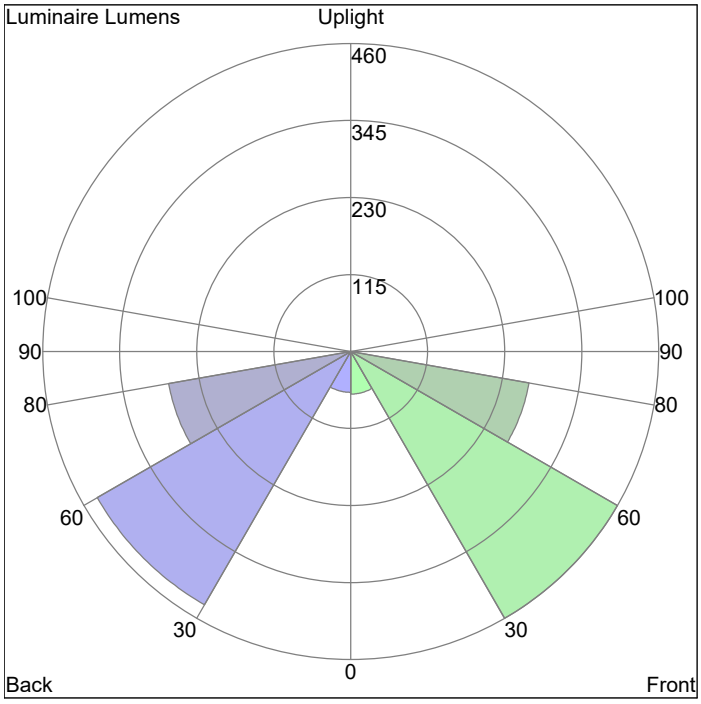
Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
3	A	-22.12	11.17	6.00	90.00	0.00	0.00	0.50			
4	B	-15.05	24.91	6.00	180.00	0.00	0.00	0.50			
9	A	-48.16	11.12	6.00	90.00	0.00	0.00	0.50			
10	B	-29.51	24.94	6.00	3.00	0.00	0.00	0.50			

9750998984

Luminaire Classification System (LCS) Graphs

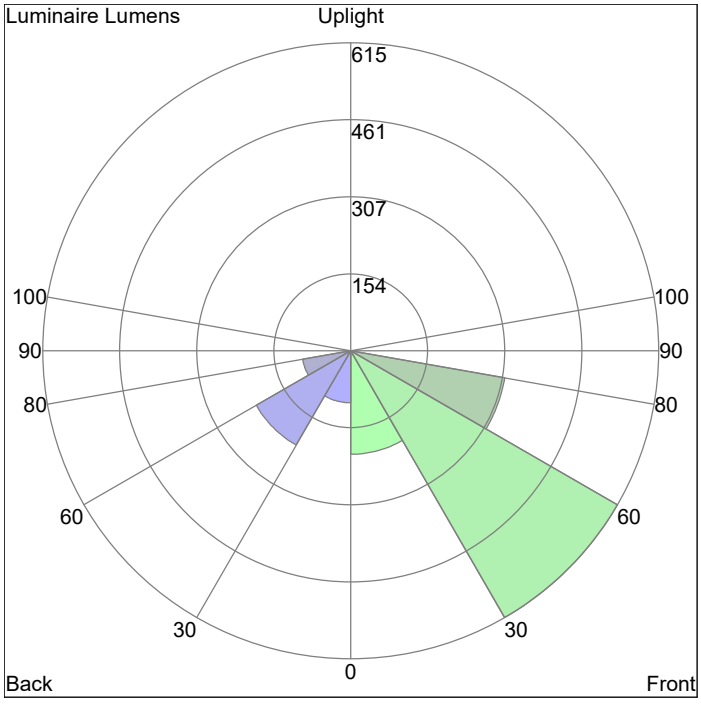
Luminaire A ELYXE 1BLSB8 ECA 500mA 14W 3000K IRC70



LCS	Lumens	%Lamp	%Lum
FL	63.8	4.0	4.0
FM	459.7	29.1	29.1
FH	270.4	17.1	17.1
FVH	5.6	0.4	0.4
BL	61.1	3.9	3.9
BM	436.4	27.6	27.6
BH	275.6	17.5	17.5
BVH	5.7	0.4	0.4
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	1578.5	100.0	100.0

BUG rating=B1-U0-G0

Luminaire B TWEET NEO S1-X1 1BLSB8 ERE 500mA 14W 3000K IRC70



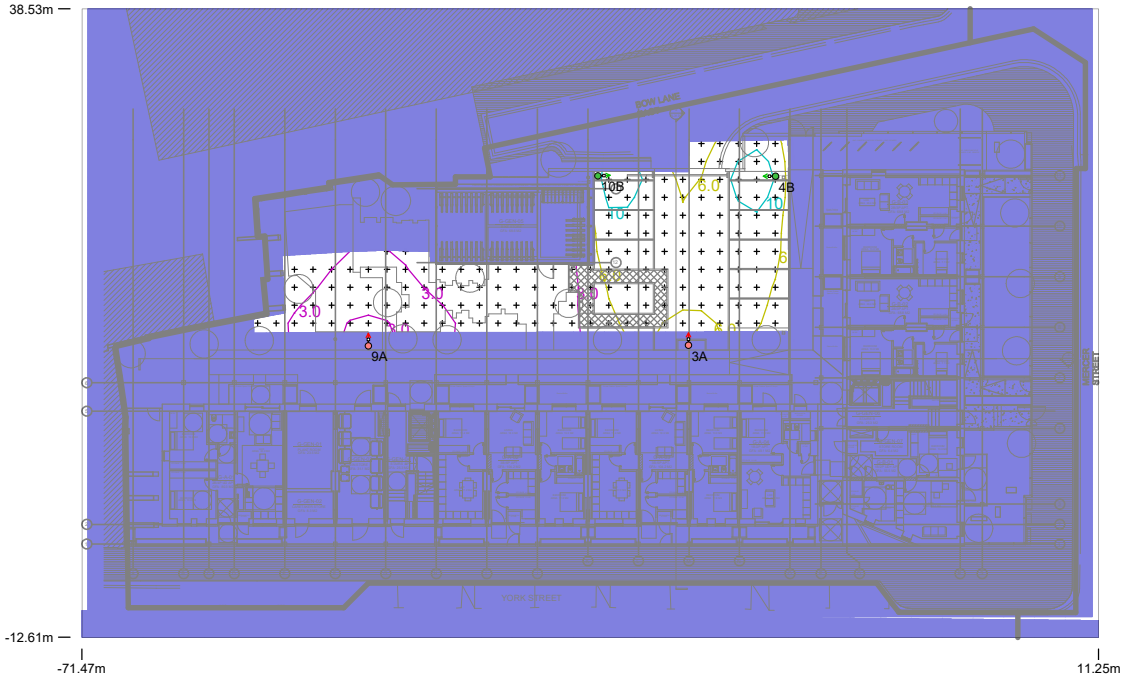
LCS	Lumens	%Lamp	%Lum
FL	206.8	13.2	13.2
FM	614.9	39.4	39.4
FH	312.5	20.0	20.0
FVH	4.4	0.3	0.3
BL	104.1	6.7	6.7
BM	217.6	13.9	13.9
BH	97.3	6.2	6.2
BVH	4.0	0.3	0.3
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	1561.3	100.0	100.0

BUG rating=B1-U0-G0

9750998984

Horizontal Illuminance (lux)

Grid 1



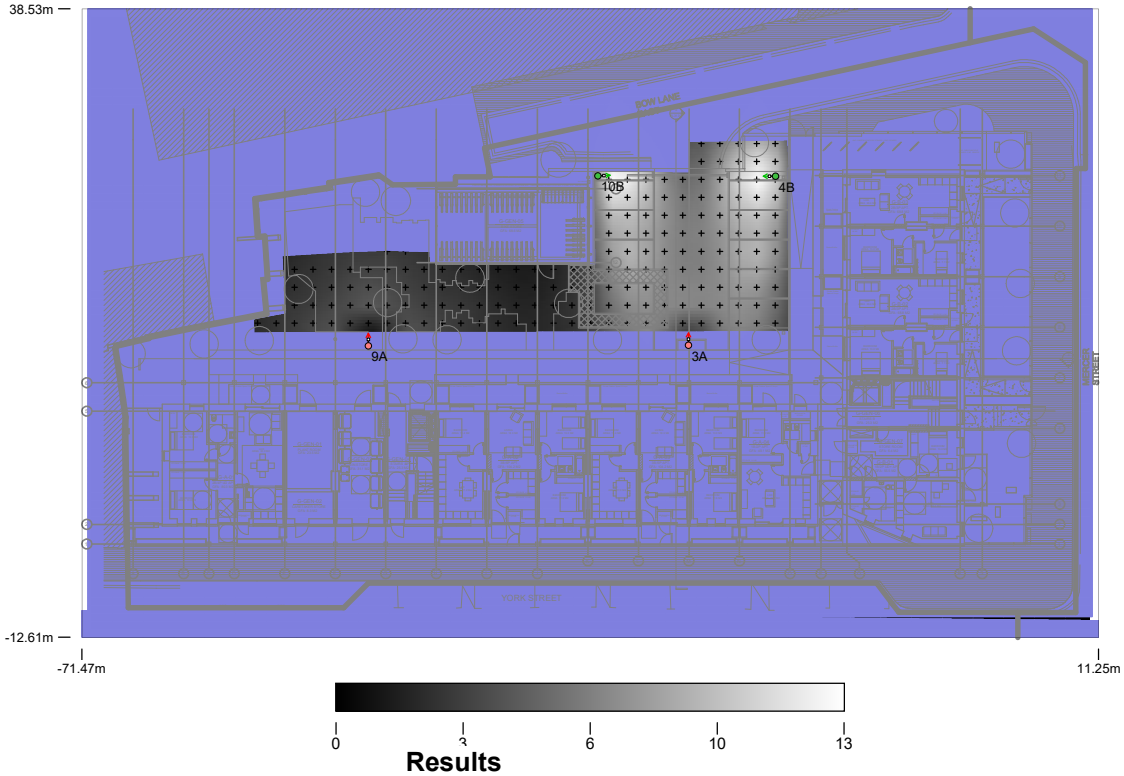
Results

Eav	5.66
Emin	1.43
Emax	12.82
Emin/Emax	0.11
Emin/Eav	0.25

9750998984

Horizontal Illuminance (lux)

Grid 1



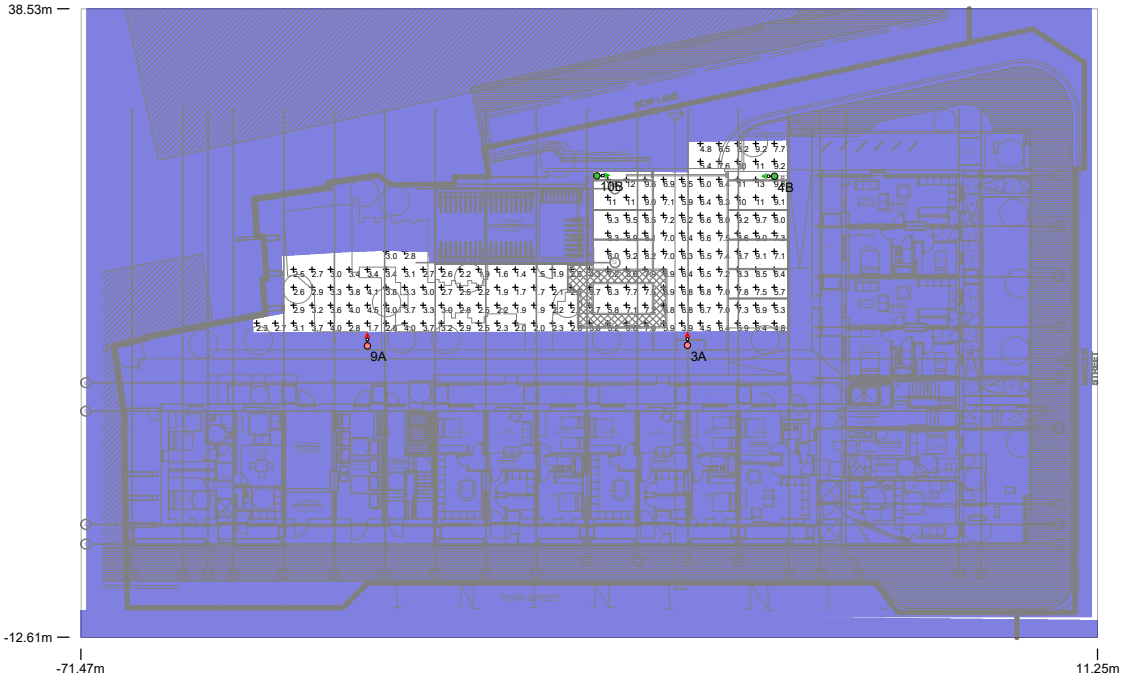
Results

Eav	5.66
Emin	1.43
Emax	12.82
Emin/Emax	0.11
Emin/Eav	0.25

9750998984

Horizontal Illuminance (lux)

Grid 1



Results

Eav	5.66
Emin	1.43
Emax	12.82
Emin/Emax	0.11
Emin/Eav	0.25

9750998984

3. APPENDIX 1: LUMINAIRE DATA SHEETS

Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council

FORM 1 - LED LUMINAIRE TECHNICAL DETAILS

Product Details	
Luminaire Manufacturer, Make & Model:	Eclatec ELYXE
Luminaire Product Order Code	ELYXE 1BLSB8 ECA 500mA 14W 3000K IRC70
LED Module Manufacturer, Make & Model	Osram – Oslon® Square GW CSSRM3.PM
No. LEDs in Luminaire	8 LEDs
LED Driver Manufacturer, Make & Model	OSRAM 4 DIM - D4i option (DEXAL)
Proposed Driver Current (mA)	100mA
Maximum Driver Current (mA)	750mA
CMS Enabled (Yes/No)	Smart-Ready
Details of Electronic Photocell used Please state which of the following is proposed: • 7-prong NEMA socket with electronic photocell • Mini-Photocell to Zhaga Book 18 Protocol, with same functionality as 7-prong NEMA Socket (All photocells shall have 35/18 lux switching levels)	SOCKET NEMA 7 POLES TE
Photocell Manufacturer, Make & Model	
Number of Burn Hours between Dusk and Dawn, at latitude and longitude for Dublin, based on 35/18 lux switching levels	**4031**
Number of Burn Hours between Midnight and 6.00 am, at latitude and longitude for Dublin, based on 35/18 lux switching levels	**1695**

Description	**Value**	**Unit**
Constant Light Output (CLO) Total Circuit Watts of complete luminaire (LEDs & Driver), CLO at 75% of initial lumen output. Also note that Circuits Watts shall take into account 35/18 lux switch on/off levels of integrated photocell.	1x14W	W
S/P Ratio of luminaire for the P-Lighting Class (illuminance) section of the design	1.35 (tbc)	
Actual Maintenance Factor (based on Constant Light Output @ 75% of initial lumen output, 80,000 hrs life, and a 6-year cleaning cycle	1000.000h L90 B10	
Luminaire Outreach (distance to centre of optic from back of fitting)	top posted	
Description	**Value**	**Unit**
Spigot Sizes: Side entry (32 mm x 76 mm long - 42 mm x 100 mm long for P4 Class, 42 mm x 100 mm long – 60 mm x 115 mm long for P2 Classes and above) Post-top entry (60 mm – 76 mm x 115 mm long) Adaptors used? (Y/N)	60mm	mm mm
Angles of Tilt Available Adaptors used? (Y/N)	No	Degrees (°)

Description	Value	Unit
Weight of complete luminaire (Max 15 kg)	15.8kg	kg
Maximum Windage of luminaire	0.08m²	m^2
IP Rating – Complete Luminaire (Min IP65)	IP66	
Impact Resistance Rating (IK Rating) of luminaire (body & optic) (Min IK08)	IK08	
Luminaire Design Life (Min 20 years)	20 years - 10%	years
Rated Life of LED Driver (Min 10 years)	10 years - 10%	years
Risk Group Classification in accordance with EN 62471	RG1	
Rated Input Power (LM-79 Report)	14W	W
Operating Voltage Range (230V ±10% (207V-253V), at 50 Hertz)	180-264V	V
Power Factor – (Min 0.92) (LM-79 Report)	0,93	
Surge Protection Rating (as per IEC 61643-11) (10kA/10kV)	10kV	
Ambient temperature Range (Ta) luminaire is designed to operate in (Min -15°C - +30°C)	-15° / +30°	°C
Upward Light Output Ratio (ULOR) (Max 0.5%)	0	%
Disability Glare Class (G Class)	G5	
Luminous efficacy of Complete Luminaire at 100% initial lumen output (LM-79 Report)	111 lm/wsys	Lm/W
Correlated Colour Temperature (CCT) (Neutral White, approx. 4000K) (LM-79 Report) (Max range 3700K-4300K)	3000K	K
Colour Rendering Index (CRI) (Ra value, Ra ≥ 60) (LM-79 Report)	70	
LED Colour Stability (Bin Class) (LM-79 Report) (Max 5-Step Ellipse)	5	Step Ellipse
Initial Lumen Output of the luminaire (LM-79 Report)	1579 lm sys	Lumens
% Maintained Lumen Output of the luminaire @ 6,000 hours (TM-21 report)	95	%
Lamp Lumen Maintenance Factor (LLMF) (i.e. Lx)	MF = 0.9 = LLMF x LMF = 1x LMF	
Lamp Survival Factor (LSF) (i.e. Fy)		
LxB_{50} at 80,000 hours (TM-21 report)	L90 at 80000	Hours
LxB_{10} at 80,000 hours (TM-21 report)	L90 at 80000	Hours
Operating temperature for proposed driver currents at an ambient temperature of 20°C.	65°	
LED junction temperature for proposed driver currents at an ambient temperature of 20°C.	60°	
Maximum maintained LED junction temperature for proposed driver currents at an ambient temperature of 20°C.	65°	

PL Designer/Contractor: Frederic MINCK

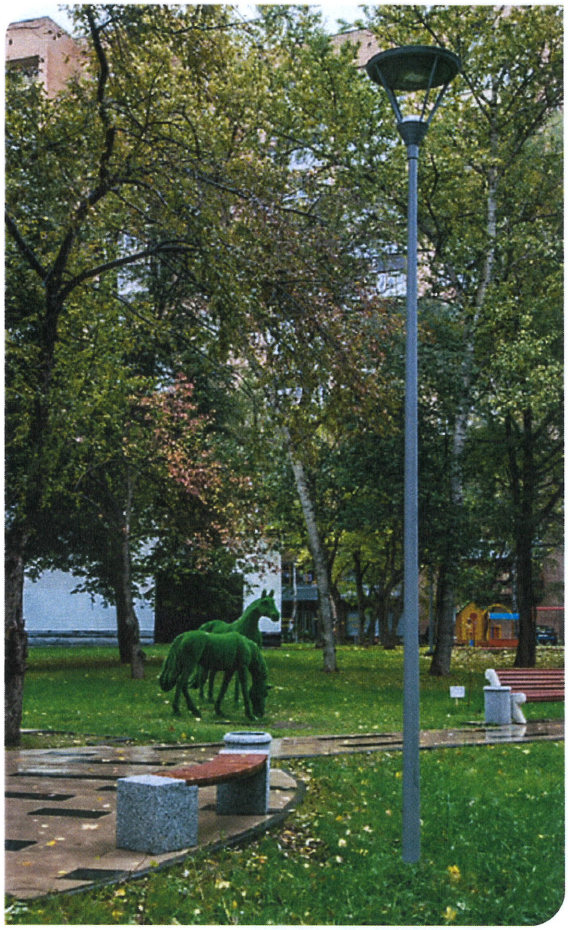
PL Designer/Contractor's Signature: _____ Date: 29/11/2024

ECLATEC S.A.S.
L'Eclairage Technique
41, Rue Lafayette - CS20069 - Maxéville
54320 Laxou Cedex
Tél. 03 83 39 38 00 - Fax 03 83 37 16 16
RCS Nancy B 352 031 843

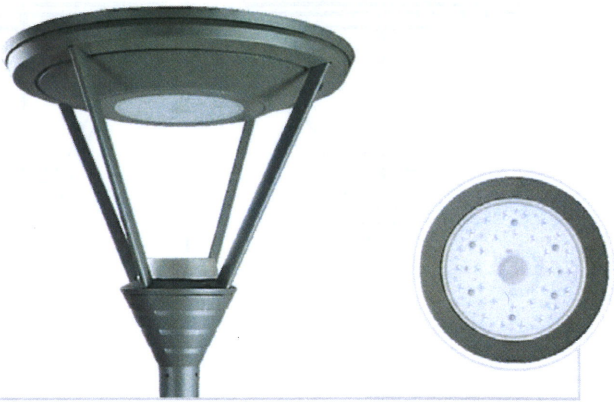
ELYXE

Luminaire design: Luc DAVY

RoHS | IP 66 | IK 08 | ELYXE: 3-6 m



ELYXE with ORALED 1 module



ELYXE with SEOLED 1 module

APPLICATIONS

- Mounting: top, wall bracket top mounted or suspended
- Urban routes, pedestrian walkways, cycle paths, squares, parks and pedestrian areas.
- Recommended heights: 3 to 6 m

DESCRIPTION

- Injection die-cast aluminium body
- Extruded aluminium arms
- Control gear in the upper luminaire body
- Polyester powder coating, any colour available
- IP 66
- IK 08
- Class I or II
- Luminaire pre-wired in the factory (6 m)
- 2 types of sources:

ORALED 1 module :
- equipped with an **ORALENS** mono lens in PMMA/**IK 08**, module colour grey 2150 sanded or 2900 sanded
- colour temperature: 4000 K and 3000 K

SEOLED 1 module:
- equipped with BLS with **QUADRALENS** lenses and glass bowl/**IK 08**, module colour grey 2150 sanded or 2900 sanded
- colour temperature: 2400 K, 2700 K, 3000 K or 4000 K

CITIZEN REFERENCE POINTS

- Materials used: Aluminium 89%, Other 5%, Steel 4%, Plastic 2%
- Complies with the RoHS directive
- High recyclability rate

WATERPROOFING

- IP 66 waterproofing in accordance with the standard EN 60 529
- Extruded pneumatic silicone gasket
- Cable gland with anchoring device
- Breathing system with activated carbon filter

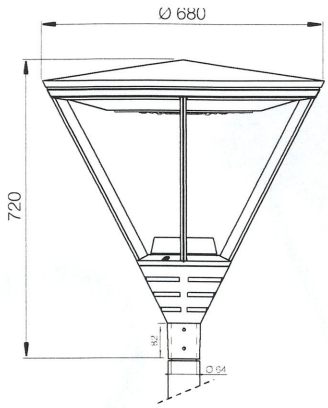
MECHANICAL INTERFACES

- Post top fastening on standard pole Ø 60/62 mm
- Post top fastening on specific pole Ø 76 mm with spigot Ø 60 mm, L 85 mm
  For pole Ø 76 mm top, optional spigot C (see page 278)
- Top mounted or suspended from an Indigo wall bracket with integrated connection box

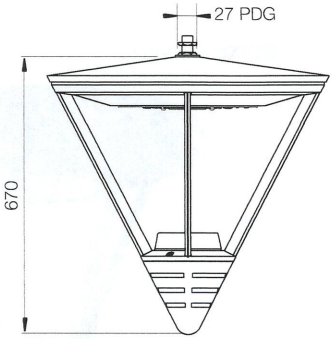
Top fixation for Ø 76 mm pole

Top mounted Indigo wall-bracket

Suspended Indigo wall-bracket



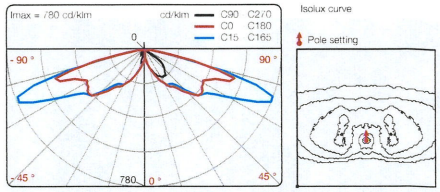
Elyxe post top



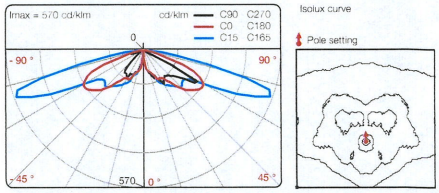
Elyxe suspended

PHOTOMETRIC DISTRIBUTIONS

ELYXE **ORALED** ERS



ELYXE **ORALED** ERL



KEY POINTS

		ELYXE
Applications		Urban routes, pedestrian walkways, cycle paths, squares, parks and pedestrian areas.
Recommended heights		3 to 6 m
Mounting		Post-top fastening on pole Ø 60/62 mm
Dimensions	**Ø**	680 mm
	height	720 mm (post top Elyxe) and 670 mm (suspended Elyxe)
Weight		15,8 kg
Windage area		0,08 m²
Source		**ORALED 1**
		SEOLED 1
Sources access		Removable **LED** modules
Optics and light distribution options		**ORALENS**: ERS, ERL, ECL, LRM
		QUADRALENS(1): ERS, ERL, ERE, LRS, LRL, PFA, EPD, EPG, ETS, ECa
OPTIONS	**Backlight shield**(1) (factory or site assembly)	o
	SMART-READY® (2) by Eclatec (construction)	o
	DALI (construction)	o
	Dimming 5 (preset)	o
	CLO (preset)	Compatible with standard version, Dimming 5, Motion 5 or DALI option
	Motion 5 (preset)	o
	Motion (setting on site)	o
	Motion COM (setting on site)	o
	Motion P (set in the bottom of the pole)	o
	POLEDRIVE (set in the bottom of the pole)	o

(1) Backlight shield optional except for EPD, EPG, ECa

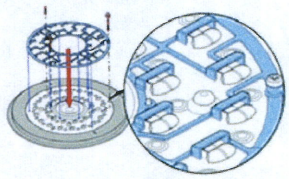
(2) Preconfigured communicating system: Wired Sensor Ready type driver and Zhaga consortium base

Glossary:

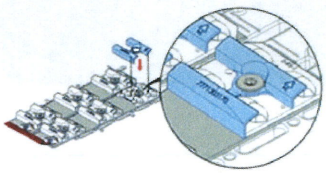
● Standard o Option - Not available

E/**L**/**P**: Lighting/Luminance/Projection. R/C/**T**/**F**/**P**: **R**oad/Circulation/Path/Beam/Pedestrian walkway. E/S/L/A/**D**/**G**: **N**arrow/Standard/Wide/Asymmetric/Right/Left. **POLEDRIVE:** preset at the bottom of the pole / night diming calculator with 2 configurable thresholds, set in the bottom of the pole. **Dimming 5:** night diming calculator with 5 configurable thresholds. **Motion:** moving sensor. **Motion P:** Configurable offset presence detector at the foot of the pole. **Motion DALI:** Detector integrated to the luminaire, adjustable at pole base. **Motion 5:** Motion sensor and dimming calculator. **Motion COM:** Wireless detection and communication. **DALI:** compatible with the DALI protocol. **CLO:** Constant Lumen Output option

BACKLIGHT SHIELD OPTION



Backlight shield ORALED version



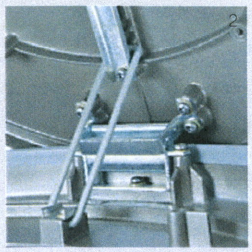
Backlight shield SEOLED version

MAINTENANCE

Opening and closing

Opening of the luminaire by the action of a hidden screw {1}

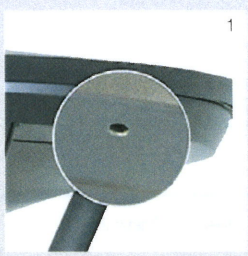
The upper body is held in position by a safety prop {2}



LED module maintenance

Direct access to the module

Removable module interchangeable onsite



Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

FORM 1 - LED LUMINAIRE TECHNICAL DETAILS

Product Details	
Luminaire Manufacturer, Make & Model:	TWEET-NEO-X1
Luminaire Product Order Code	TWEET-NEO-X1 2BLSB12 ERL + coupe flux 200mA 16W 2700K IRC70
LED Module Manufacturer, Make & Model	Osram – Oslon® Square GW CSSRM3.PM
No. LEDs in Luminaire	24 LEDs
LED Driver Manufacturer, Make & Model	Philips Xitanium Full Prog or OSRAM 4 DIM - D4i option (SR or DEXAL)
Proposed Driver Current (mA)	100mA
Maximum Driver Current (mA)	750mA
CMS Enabled (Yes/No)	Smart-Ready
Details of Electronic Photocell used Please state which of the following is proposed: • 7-prong NEMA socket with electronic photocell • Mini-Photocell to Zhaga Book 18 Protocol, with same functionality as 7-prong NEMA Socket (All photocells shall have 35/18 lux switching levels)	SOCKET NEMA 7 POLES TE
Photocell Manufacturer, Make & Model	
Number of Burn Hours between Dusk and Dawn, at latitude and longitude for Dublin, based on 35/18 lux switching levels	**4031**
Number of Burn Hours between Midnight and 6.00 am, at latitude and longitude for Dublin, based on 35/18 lux switching levels	**1695**

Description	**Value**	**Unit**
Constant Light Output (CLO) Total Circuit Watts of complete luminaire (LEDs & Driver), CLO at 75% of initial lumen output. Also note that Circuits Watts shall take into account 35/18 lux switch on/off levels of integrated photocell.	1x16W	W
S/P Ratio of luminaire for the P-Lighting Class (illuminance) section of the design	1.2 (tbc)	
Actual Maintenance Factor (based on Constant Light Output @ 75% of initial lumen output, 80,000 hrs life, and a 6-year cleaning cycle	1000.000h L90 B10	
Luminaire Outreach (distance to centre of optic from back of fitting)	450mm	
Description	**Value**	**Unit**
Spigot Sizes: Side entry (32 mm x 76 mm long - 42 mm x 100 mm long for P4 Class, 42 mm x 100 mm long – 60 mm x 115 mm long for P2 Classes and above) Post-top entry (60 mm – 76 mm x 115 mm long) Adaptors used? (Y/N)	76mm	mm mm
Angles of Tilt Available Adaptors used? (Y/N)	No	Degrees (°)

Description	Value	Unit
Weight of complete luminaire (Max 15 kg)	4.8kg	kg
Maximum Windage of luminaire	0.05m²	m²
IP Rating – Complete Luminaire (Min IP65)	IP66	
Impact Resistance Rating (IK Rating) of luminaire (body & optic) (Min IK08)	IK10	
Luminaire Design Life (Min 20 years)	20 years - 10%	years
Rated Life of LED Driver (Min 10 years)	10 years - 10%	years
Risk Group Classification in accordance with EN 62471	RG1	
Rated Input Power (LM-79 Report)	52W	W
Operating Voltage Range (230V ±10% (207V-253V), at 50 Hertz)	180-264V	V
Power Factor – (Min 0.92) (LM-79 Report)	0,93	
Surge Protection Rating (as per IEC 61643-11) (10kA/10kV)	10kV	
Ambient temperature Range (Ta) luminaire is designed to operate in (Min -15°C - +30°C)	-15° / +30°	°C
Upward Light Output Ratio (ULOR) (Max 0.5%)	0	%
Disability Glare Class (G Class)	G2	
Luminous efficacy of Complete Luminaire at 100% initial lumen output (LM-79 Report)	109 lm/wsys	Lm/W
Correlated Colour Temperature (CCT) (Neutral White, approx. 4000K) (LM-79 Report) (Max range 3700K-4300K)	2700K	K
Colour Rendering Index (CRI) (Ra value, Ra ≥ 60) (LM-79 Report)	70	
LED Colour Stability (Bin Class) (LM-79 Report) (Max 5-Step Ellipse)	5	Step Ellipse
Initial Lumen Output of the luminaire (LM-79 Report)	1740 lm sys	Lumens
% Maintained Lumen Output of the luminaire @ 6,000 hours (TM-21 report)	95	%
Lamp Lumen Maintenance Factor (LLMF) (i.e. Lx)	MF = 0.9 = LLMF x LMF = 1x LMF	
Lamp Survival Factor (LSF) (i.e. Fy)		
LxB_{50} at 80,000 hours (TM-21 report)	L90 at 80000	Hours
LxB_{10} at 80,000 hours (TM-21 report)	L90 at 80000	Hours
Operating temperature for proposed driver currents at an ambient temperature of 20°C.	65°	
LED junction temperature for proposed driver currents at an ambient temperature of 20°C.	60°	
Maximum maintained LED junction temperature for proposed driver currents at an ambient temperature of 20°C.	65°	

PL Designer/Contractor: Frederic MINCK

PL Designer/Contractor's Signature: _____ Date: 14/01/2025

ECLATEC S.A.S.
L'Eclairage Technique
41, Rue Lafayette - CS20069 - Maxéville
54320 Laxou Cedex
Tél. 03 83 39 38 00 - Fax 03 83 37 16 16
RCS Nancy B 352 031 843

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

FORM 1 - LED LUMINAIRE TECHNICAL DETAILS

Product Details	
Luminaire Manufacturer, Make & Model:	TWEET-NEO-S2-X2
Luminaire Product Order Code	TWEET-NEO-S2-X2 4BLSB12 ERE 300mA 45W 3000K IRC70
LED Module Manufacturer, Make & Model	Osram – Oslon@ Square GW CSSRM3.PM
No. LEDs in Luminaire	48 LEDs
LED Driver Manufacturer, Make & Model	Philips Xitanium Full Prog or OSRAM 4 DIM - D4i option (SR or DEXAL)
Proposed Driver Current (mA)	100mA
Maximum Driver Current (mA)	750mA
CMS Enabled (Yes/No)	Smart-Ready
Details of Electronic Photocell used Please state which of the following is proposed: • 7-prong NEMA socket with electronic photocell • Mini-Photocell to Zhaga Book 18 Protocol, with same functionality as 7-prong NEMA Socket (All photocells shall have 35/18 lux switching levels)	SOCKET NEMA 7 POLES TE
Photocell Manufacturer, Make & Model	
Number of Burn Hours between Dusk and Dawn, at latitude and longitude for Dublin, based on 35/18 lux switching levels	**4031**
Number of Burn Hours between Midnight and 6.00 am, at latitude and longitude for Dublin, based on 35/18 lux switching levels	**1695**

Description	**Value**	**Unit**
Constant Light Output (CLO) Total Circuit Watts of complete luminaire (LEDs & Driver), CLO at 75% of initial lumen output. Also note that Circuits Watts shall take into account 35/18 lux switch on/off levels of integrated photocell.	1x45W	W
S/P Ratio of luminaire for the P-Lighting Class (illuminance) section of the design	1.2 (tbc)	
Actual Maintenance Factor (based on Constant Light Output @ 75% of initial lumen output, 80,000 hrs life, and a 6-year cleaning cycle	1000.000h L90 B10	
Luminaire Outreach (distance to centre of optic from back of fitting)	550mm	
Description	**Value**	**Unit**
Spigot Sizes: Side entry (32 mm x 76 mm long - 42 mm x 100 mm long for P4 Class, 42 mm x 100 mm long – 60 mm x 115 mm long for P2 Classes and above) Post-top entry (60 mm – 76 mm x 115 mm long) Adaptors used? (Y/N)	76mm	mm mm
Angles of Tilt Available Adaptors used? (Y/N)	No	Degrees (°)

Description	Value	Unit
Weight of complete luminaire (Max 15 kg)	6.6kg	kg
Maximum Windage of luminaire	0.06m²	m^2
IP Rating – Complete Luminaire (Min IP65)	IP66	
Impact Resistance Rating (IK Rating) of luminaire (body & optic) (Min IK08)	IK10	
Luminaire Design Life (Min 20 years)	20 years - 10%	years
Rated Life of LED Driver (Min 10 years)	10 years - 10%	years
Risk Group Classification in accordance with EN 62471	RG1	
Rated Input Power (LM-79 Report)	45W	W
Operating Voltage Range (230V ±10% (207V-253V), at 50 Hertz)	180-264V	V
Power Factor – (Min 0.92) (LM-79 Report)	0,93	
Surge Protection Rating (as per IEC 61643-11) (10kA/10kV)	10kV	
Ambient temperature Range (Ta) luminaire is designed to operate in (Min -15°C - +30°C)	-15° / +30°	°C
Upward Light Output Ratio (ULOR) (Max 0.5%)	0	%
Disability Glare Class (G Class)	G3	
Luminous efficacy of Complete Luminaire at 100% initial lumen output (LM-79 Report)	135 lm/wsys	Lm/W
Correlated Colour Temperature (CCT) (Neutral White, approx. 4000K) (LM-79 Report) (Max range 3700K-4300K)	3000K	K
Colour Rendering Index (CRI) (Ra value, Ra ≥ 60) (LM-79 Report)	70	
LED Colour Stability (Bin Class) (LM-79 Report) (Max 5-Step Ellipse)	5	Step Ellipse
Initial Lumen Output of the luminaire (LM-79 Report)	6087 lm sys	Lumens
% Maintained Lumen Output of the luminaire @ 6,000 hours (TM-21 report)	95	%
Lamp Lumen Maintenance Factor (LLMF) (i.e. Lx)	MF = 0.9 = LLMF x LMF = 1x LMF	
Lamp Survival Factor (LSF) (i.e. Fy)		
LxB_{50} at 80,000 hours (TM-21 report)	L90 at 80000	Hours
LxB_{10} at 80,000 hours (TM-21 report)	L90 at 80000	Hours
Operating temperature for proposed driver currents at an ambient temperature of 20°C.	65°	
LED junction temperature for proposed driver currents at an ambient temperature of 20°C.	60°	
Maximum maintained LED junction temperature for proposed driver currents at an ambient temperature of 20°C.	65°	

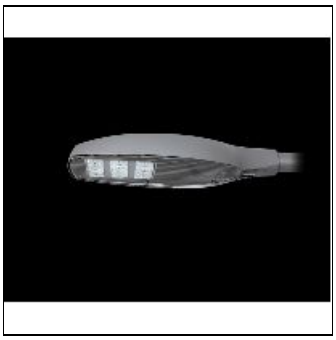
PL Designer/Contractor: Frederic MINCK

PL Designer/Contractor's Signature: _____ Date: 13/12/2024

ECLATEC S.A.S.
L'Eclairage Technique
41, Rue Lafayette - CS20069 - Maxéville
54320 Laxou Cedex
Tél. 03 83 39 38 00 - Fax 03 83 37 16 16
RCS Nancy B 352 031 843

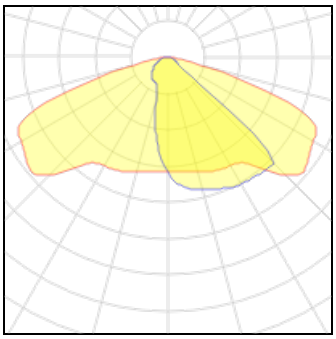
Product data sheet

TWEET NEO S1-X1 1BLSB8 LRS 700MA 19W 3000K IRC70
ECLATEC
ECLATEC



TWEET NEO S1-X1 1BLSB8 LRS 700mA 19W 3000K IRC70

Light output 1 (integrated)



Lamp type	LED	CCT	3000 K
Nominal lamp power	19 W	CRI	70
Total flux	2191 lm	LOR	100%
Luminous efficacy	115 lm/W	Total power	19 W

Mounting mode

Pole top mounted

Shape and measurements

Length: 19.69 in
Width: 19.69 in
Height: 3.94 in

Adjustability

Fixed

Electric

System power: 19 W

4. APPENDIX 2: LIGHTING COLUMN DETAILS

Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council

Lighting Column Design Compliance Sheet

State Column Type (Conical, Stepped Tubular)	Stepped Tubular
State Column Height above ground	6m.

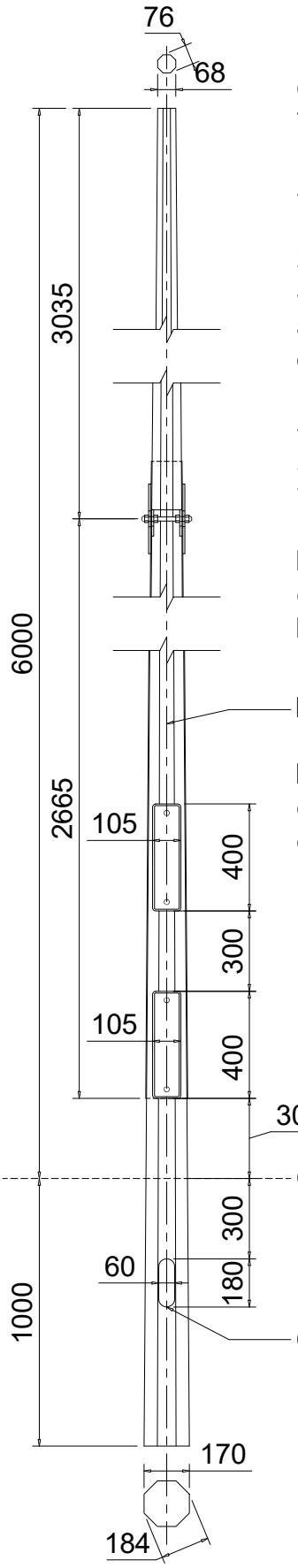
Data	Requirements to be completed by Column Manufacturer	Yes/ No?	Supplied Value(s) by Column Manufacturer (Where Applicable)
EN 40	Do the Columns Comply with EN 40?	YES	n/a
Spec	Do the Columns Comply with the specification?	See note 1	n/a
Design Life: (Years)	Do the Columns have a design life of 30 years?	YES	n/a
Terrain Category: (I - IV)	Do the columns meet the required Terrain Category for the locations proposed (Terrain Category II etc.)?	YES	As Per A.2
Wind Speed: (Vref - m/s)	Does the recorded 10 min mean wind velocity (not hourly) comply with Irish Government Department Guidance (Vref 31m/s RWF587)?	YES	n/a
Door Size	Does calculation data correctly reflect column specification for proposed door size?	YES	n/a
Banners	Have column structural calculations taken into account the banner size proposed in the specification (2.3m high x 0.75m wide at 3.4m above ground level)?	NO	n/a
Signs	Have column structural calculations taken into account the Sign size and orientation in the specification?	YES	As Per A.2
Bracket Length	Have bracket lengths and weights been included in structural calculations for the column as stated in the specification?	YES	As Per A.5.1
Luminaire Data	Have the correct luminaire values for windage been used in the calculations as stated in the specification?	YES	As Per A.5.1
Material Strength	Has the correct material strength been used in calculations? Note that column material strengths as laid down in the EN 1999-1-1:2007 that MUST be adhered to.	No	See Note 2
Product ID Label	Is the Product ID label installed on inside of column door as per column specification	YES	n/a

Signed: Eoin Holligan. Date: 01/03/24

Company Name: Piltown Engineering

PILTOWN ENGINEERING LTD
QUARRYLANDS
FIDDOWN
PILTOWN
CO KILKENNY E32 FD32
TELE: 051 643131

RevNo	Revision note	Date	Signature	Checked



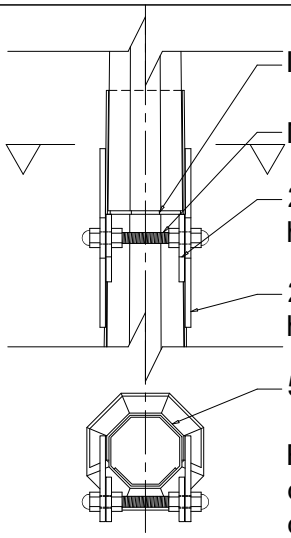
Octagonal Hinged Tapered Column

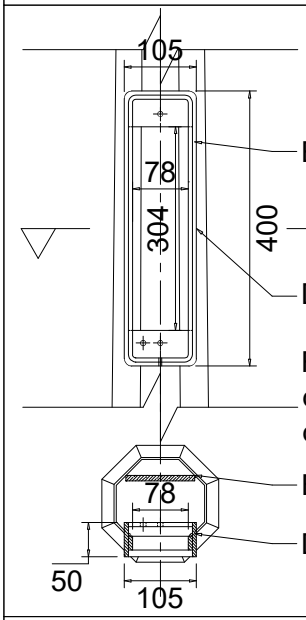
Spec:

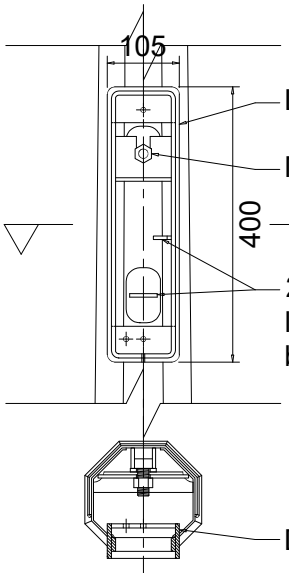
2 piece 3mm S275 Steel Plasma Cut and folded to shape on Press Brake

Submerged SUB ARC longitudinal welded seam

Hot Dip Galvanized coated finish to BS EN ISO 1461







Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	File name	Date	Scale
E HOLLIGAN	D FURMAN	D FURMAN 04/05/2022	PRODUCT	04/05/2022	NTS

PILTOWN ENG LTD

OCTAGONAL HINGED COLUMN 6MT X 76MM

OHC6X76	Edition 1.2	Sheet 1/1

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

Lighting Column Design Compliance Sheet **TC8x89-76S**

State Column Type (Conical, Stepped Tubular)	Tubular
State Column Height above ground	8m

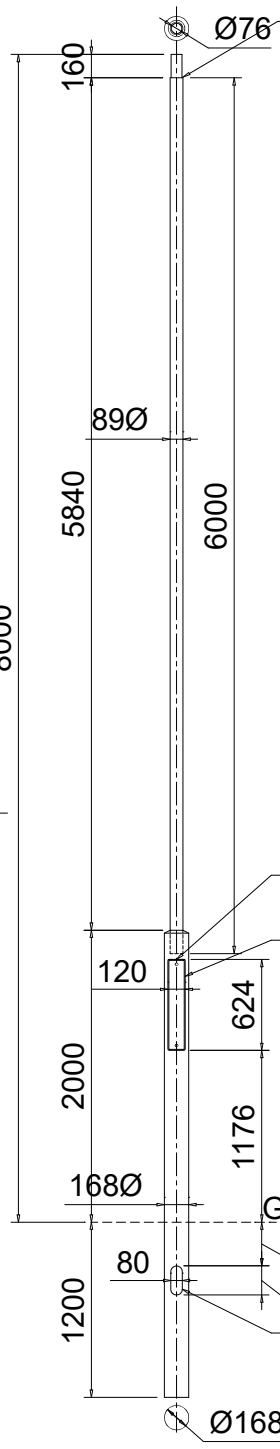
Data	Requirements to be completed by Column Manufacturer	Yes/ No?	Supplied Value(s) by Column Manufacturer (Where Applicable)
EN 40	Do the Columns Comply with EN 40?	Yes	
Spec	Do the Columns Comply with the specification?	No	Variation from DCC sepc. include: number of Cable slots , size of back board, Anti Rotation for bracket application, Earth lugs are included , earth cable to be fitted by installer.
Design Life: (Years)	Do the Columns have a design life of 30 years?	Yes	
Terrain Category: (I - IV)	Do the columns meet the required Terrain Category for the locations proposed (Terrain Category II etc.)?	Yes	
Wind Speed: (Vref - m/s)	Does the recorded 10 min mean wind velocity (not hourly) comply with Irish Government Department Guidance (Vref 31m/s RWF587)?	Yes	
Door Size	Does calculation data correctly reflect column specification for proposed door size?	Yes	
Banners	Have column structural calculations taken into account the banner size proposed in the specification (2.3m high x 0.75m wide at 3.4m above ground level)?	No	
Signs	Have column structural calculations taken into account the Sign size and orientation in the specification?	Yes	
Bracket Length	Have bracket lengths and weights been included in structural calculations for the column as stated in the specification?	Yes	
Luminaire Data	Have the correct luminaire values for windage been used in the calculations as stated in the specification?	Yes	0.15
Material Strength	Has the correct material strength been used in calculations? Note that column material strengths as laid down in the EN 1999-1-1:2007 that MUST be adhered to.	Yes	
Product ID Label	Is the Product ID label installed on inside of column door as per column specification	Yes	

Signed: Eoin Holligan Date: 19/11/2024

Company Name: Piltown Engineering

PILTOWN ENGINEERING LTD
QUARRYLANDS
FIDDOWN
PILTOWN
CO KILKENNY E32 FD32
TELE: 051 643131

RevNo	Revision note	Date	Signature	Checked



Detail B-B

Tubular Column Spec:

1 piece 3x76Ø S275
Steel tube cut to length

1 piece 4x89Ø S355
Steel tube cut to length

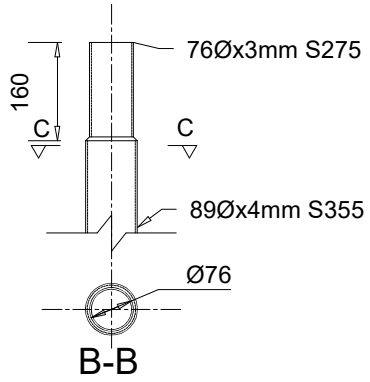
1 piece 4x168Ø S355
cut to length with opes
cut out on pipe plasma

Hot Dip Galvanized
coated finish to BS EN
ISO 1461

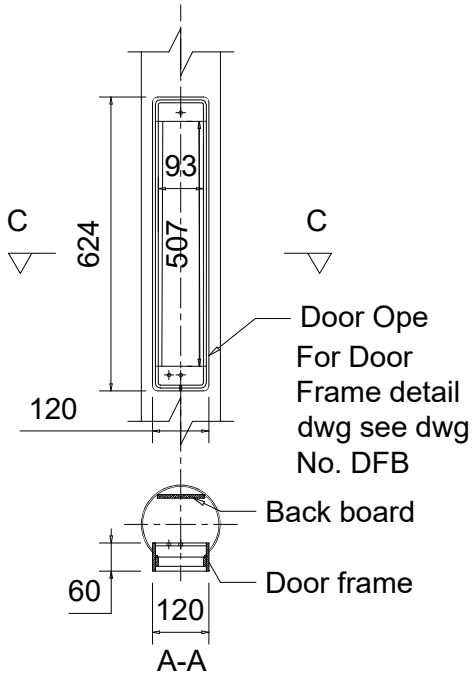
Detail A-A

Door Ope

For Door
Frame detail
dwg see dwg
No. DFB



B-B



A-A

NOTES:

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by E HOLLIGAN		Checked by D FURMAN	Approved by - date NA	File name PROTOTYPE	Date 27/09/2023	Scale NTS

PILTOWN ENG LTD

TUBULAR COLUMN 8MT X 89MM - 76S

TC 8X89-76S	Edition PT1.0	Sheet 1/1