Ingleton Wood

Billericay
Cambridge
Colchester
London
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Nottingham
Oxford

www.ingletonwood.co.uk

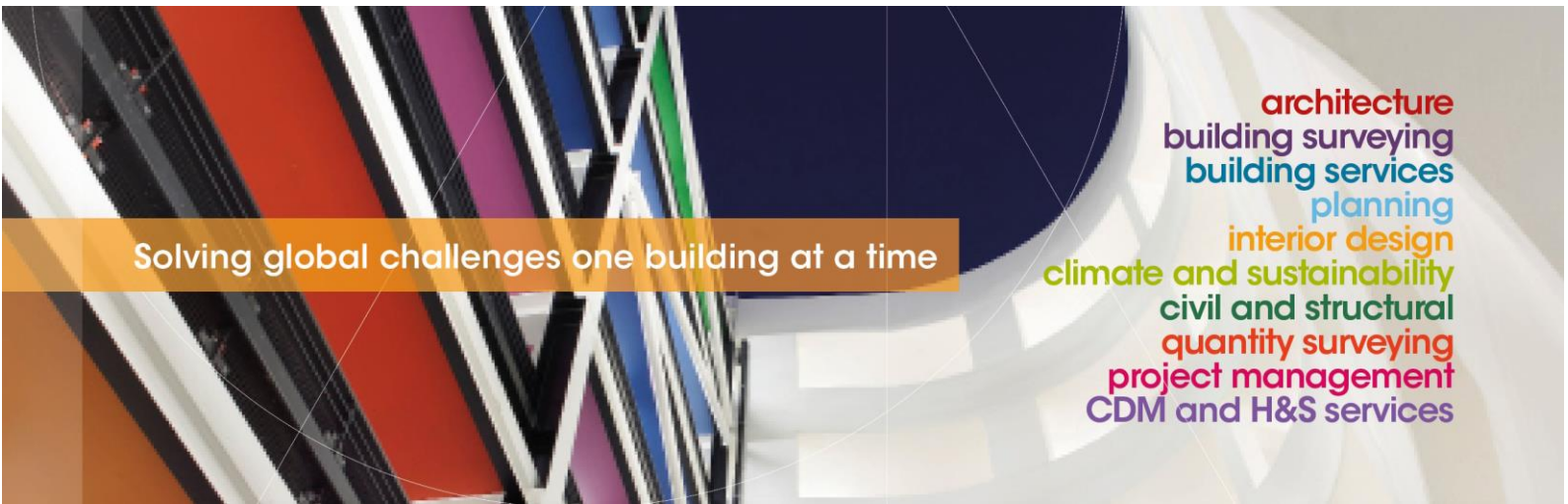
Police HQ Car Parking Improvements

Cambridgeshire Constabulary

Job No. 5000491

External Lighting Report

Author:	SB
Checked by:	PK
Date:	February 2025
Status:	Rev00



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1.0 EXTERNAL LIGHTING 4

APPENDIX A EXTERNAL LIGHTING LAYOUT

APPENDIX B HOLOPHANE BOLLARD DATA SHEET

Solving global challenges one building at a time

Project Details		
Client:	Cambridgeshire Constabulary Headquarters, Hinchingbrook Park, Huntingdon, Cambridgeshire, PE29 6NP	
IW Job reference:	5000491	
Supervising Lead:	Wesley Henderson	
Prepared at:	Ingleton Wood LLP 874 The Crescent, Colchester, Essex, CO4 9YQ	
Report prepared by:	Sam Boone	
Reviewed by:	Peter Knox	

DOCUMENT HISTORY

Version	Date	Description of Version/Change	Author
00	14/2/2025	Planning	SB

Confidentiality

The information contained in this document is confidential, privileged and only for the information of the intended recipient and may not be used, published, or redistributed without the permission of the Client.

1.0 External Lighting

The below information is for planning purposes. The new proposal is for 13no. new proposed bollards alongside the front of the site for Police site of Cambridgeshire Constabulary Headquarters, Hinchingbrook Park, Huntingdon, Cambridgeshire, PE29 6NP.

The new lighting installation shall be designed, supplied, and installed by the Electrical Contractor in compliance with CIBSE Code for Lighting and associated Lighting Guides, Building Regulations Approved Document Part L (e.g. Efficacy).

The complete emergency lighting installation shall be designed, in compliance with BS 5266, BS EN 50172, the ICEL Code and the CIBSE Lighting Guide 12: Emergency Lighting Design Guide.

New Light fittings to be added to the perimeter of the building to provide ambient light to any areas of concern as well as feature lighting on the architectural façade. The lighting shall meet the required levels as per CIBSE lighting guide 6 – External lighting environment.

External lighting shall be contactor controlled with photocell and time clock. With exception of testing and servicing the external lights are not ON during daylight hours.

Lights should be designed to prevent horizontal spill e.g. cowls, hoods, reflector skirts or shields To minimise any residual risk of impact to bats, the following precautionary measure should be undertaken:

Any new proposed external lighting should be minimised. Where external lighting is required, it should be warm white LED lamps (>2700k) with glass glazing, rather than plastic, as these produce the least amount of UV light possible, minimising the attraction effects on insects and minimising disturbance to local bats;

Any new external lighting proposed for the development should be aimed carefully, to minimise illumination of boundary habitats and avoid light spillage into the sky, or horizontally out from any buildings, by using hoods or directional lighting.

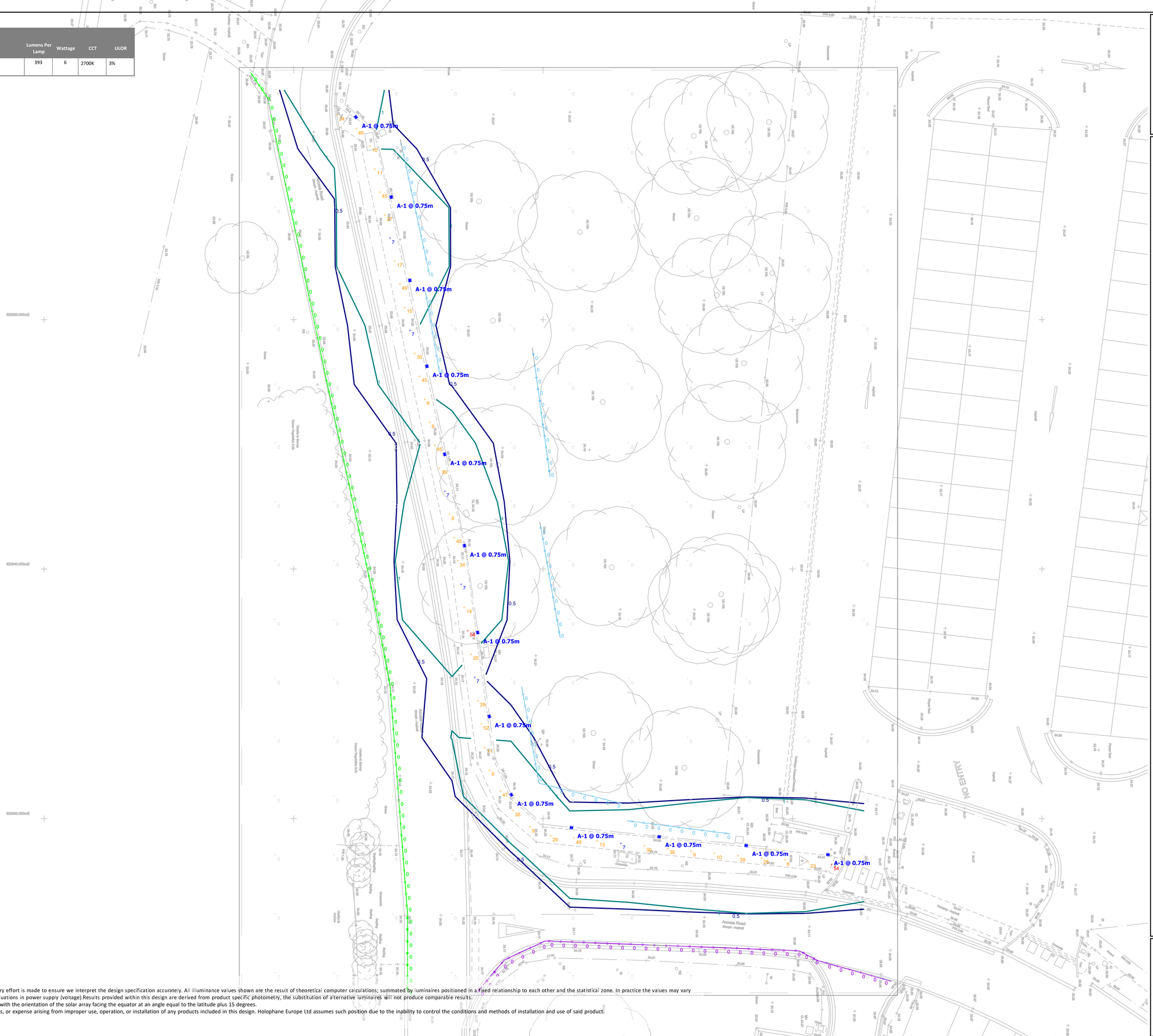
APPENDIX A

EXTERNAL LIGHTING LAYOUT

Schedule								
Symbol	Label	Quantity	Catalog Number	Description	Lumens Per Lamp	Wattage	CCT	ULOR
	A-1	13	DBD.1.LA012.SU.NR.LS.W006	Denver iD Bollard	393	6	2700K	3%

Statistics				
Description	Symbol	Avg	Min	Min/Avg
Pathway	+	25 lux	7 lux	0.28
Spillage	+	0 lux	0 lux	N/A

Vertical Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
East Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
East Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
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West Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
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Note

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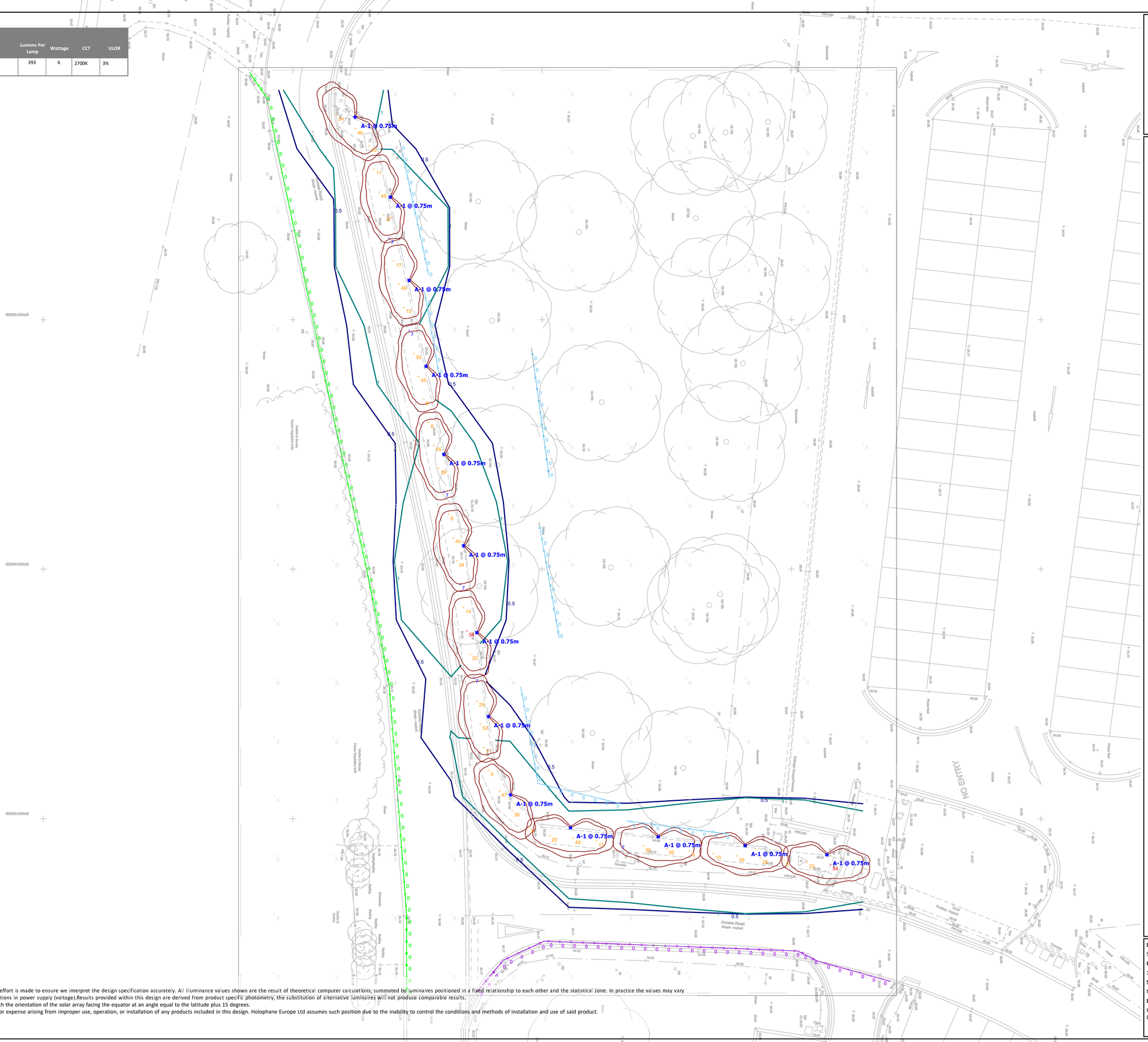
Cambridgeshire Police HQ, Huntingdon - Pathway

Designer
Sabrina Coventry
Date
14.02.2025
Scale
Not to Scale
Drawing No.
P195-256 - Denver iD Bollard (SC)

Schedule								
Symbol	Label	Quantity	Catalog Number	Description	Lumens Per Lamp	Wattage	CCT	ULOR
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West Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
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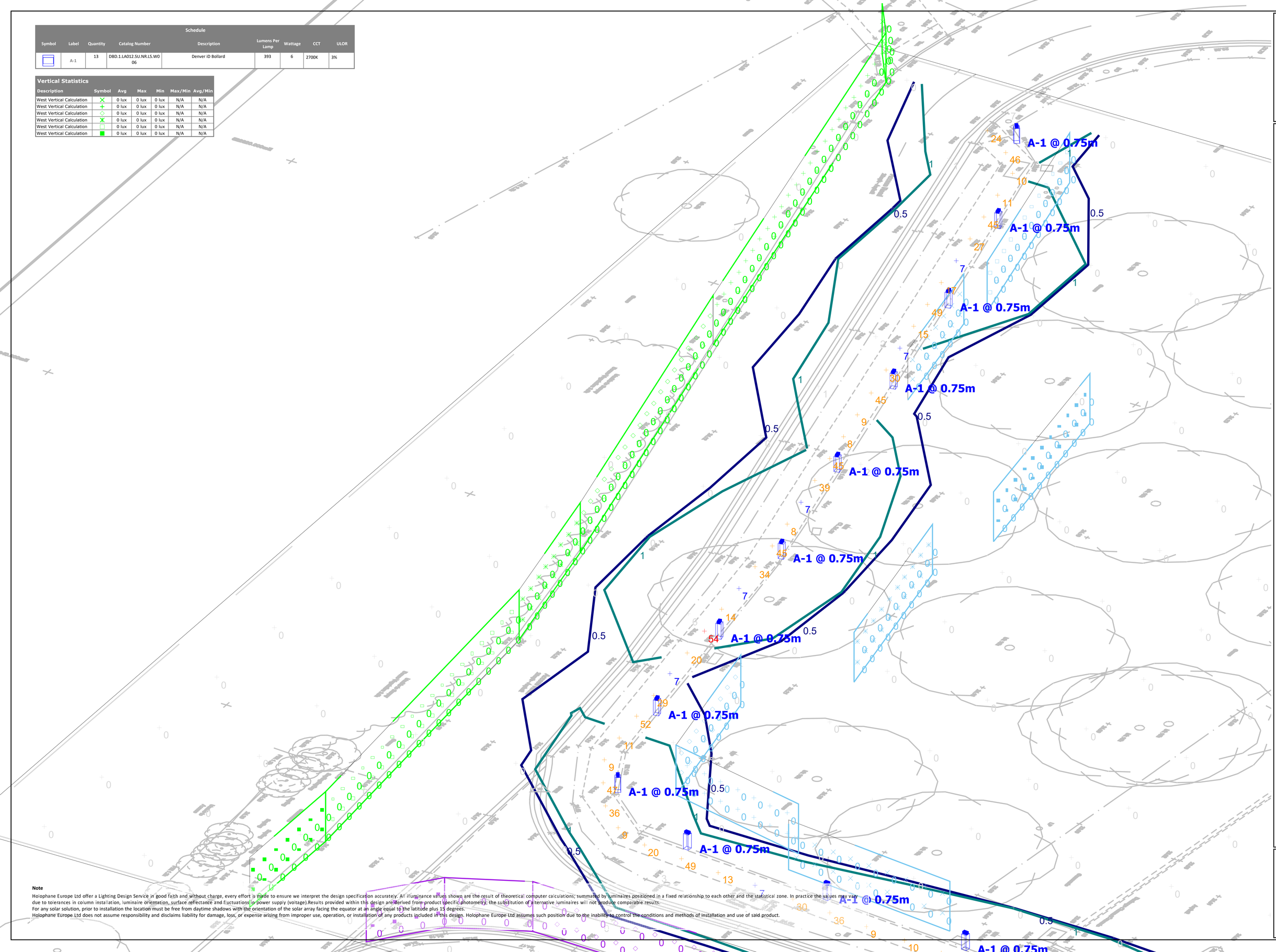
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Designer
Sabrina Coventry
Date
14.02.2025
Scale
Not to Scale
Drawing No.
P195-256 - Denver iD Bollard (SC)

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West Vertical Calculation	+	0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation	◇	0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation	✕	0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation	□	0 lux	0 lux	0 lux	N/A	N/A
West Vertical Calculation	■	0 lux	0 lux	0 lux	N/A	N/A



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East Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
East Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
East Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A
East Vertical Calculation		0 lux	0 lux	0 lux	N/A	N/A

A-1 @ 0.75m

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Drawing No.
P195-256 - Denver iD Bollard (SC)

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Symbol	Label	Quantity	Catalog Number	Description	Lumens Per Lamp	Wattage	CCT	ULOR
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Vertical Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
South Vertical Calculation	◇	0 lux	0 lux	0 lux	N/A	N/A
South Vertical Calculation	✕	0 lux	0 lux	0 lux	N/A	N/A
South Vertical Calculation	+	0 lux	0 lux	0 lux	N/A	N/A
South Vertical Calculation	□	0 lux	0 lux	0 lux	N/A	N/A
South Vertical Calculation	■	0 lux	0 lux	0 lux	N/A	N/A

A-1 @ 0.75m

A-1 @ 0.75m

A-1 @ 0.75m

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Designer
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Date
14.02.2025
Scale
Not to Scale
Drawing No.
P195-256 - Denver iD Bollard (SC)

APPENDIX B

HOLOPHANE BOLLARD DATA SHEET

› **Datasheet - EXTERNAL - DBD**

DBD.1.LA012.SU.NR.H75.C4.W006.LS.TSZ



Product image may not represent the final configuration stated above.



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Holophane Europe Limited
Bond Avenue, Milton Keynes
Buckinghamshire, MK1 1JG
United Kingdom

Product Specification

DBD Holophane Website

Holophane Denver iD: Bollard luminaire. Extruded marine grade aluminium body with die-cast aluminium top and base secured by stainless steel nuts and sealed to IP65. The optical arrangement consists of individual opitcal modules with a patented transition zone to minimise glare. Suitable for flange base mounting (bolts available as an accessory).
This specific SKU includes:

- Series 1
- LED light engine producing c.1,000 lm with a nominal 2700K colour temperature
- Single sided
- Long and Narrow light distribution
- 750mm high
- Graphite (RAL7011)
- 6W
- Internal light shield
- Complete with miniature 70 lux factory fitted photocell. (Zodion SS12)

Product Website

Performance

Drive Current from Driver:	285mA
Power:	6W
Fitting Current:	0.03A
Power Factor:	0.96
Fitting Inrush:	15A - 0.36ms
Number of Drivers:	1
1x Driver 1 Inrush:	15A - 0.36ms
Max Drivers per 16A Type B MCB:	23
Max Fittings per 16A Type B MCB:	23
Total Number of LEDs:	5
Minimum Dim Level:	25%
THDi:	13.2
SVM:	0.07
Pst LM:	0.05
Optical Risk Group:	1
SDCM/MacAdam Ellipse:	5

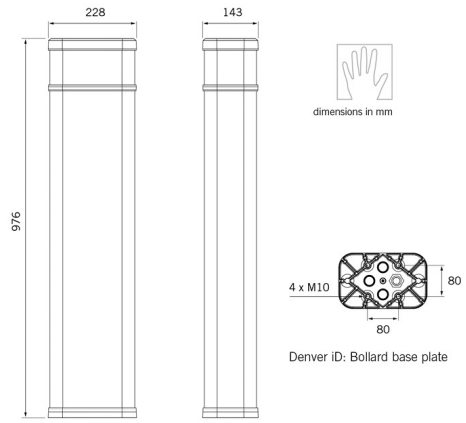
9.5Kg

Installation Guide

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Dimensions



CIBSE TM66 - CEAM Rating



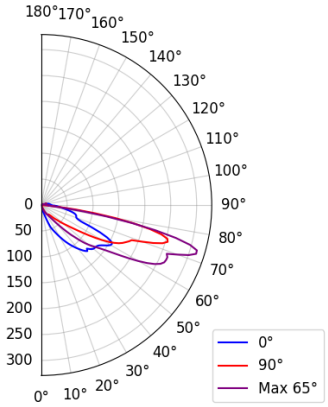
2.5 to 4.0	1.5 to 2.5	0.5 to 1.5	0 to 0.5
Excellent circularity	Definite/ substantial progress to circularity	Some circular economy functionality	Very poor circular economy performance

*Preliminary Score

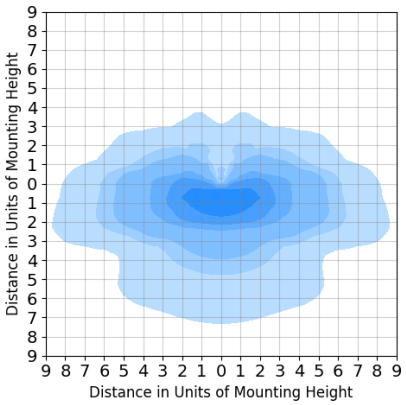
Photometry

IES File

Polar Plot



Isoilluminance Plot

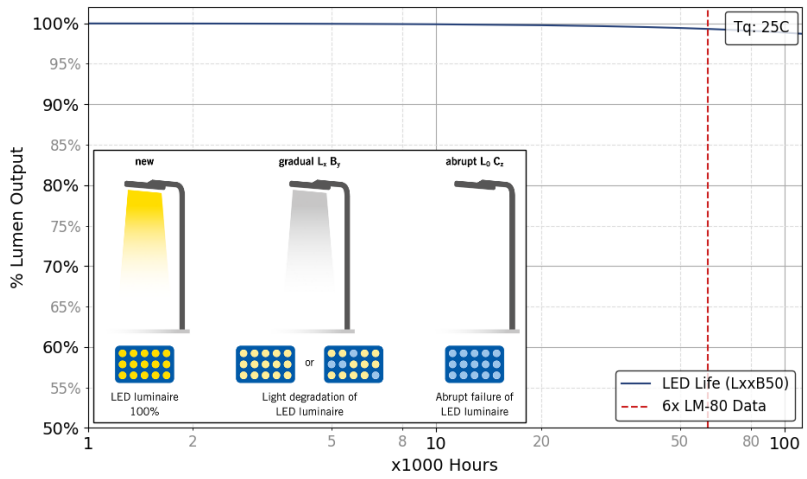


Lumens:	393
CCT:	2700K
CRI:	70
IES File:	DBD.1.LA012.SU.NR.LS.W006

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LLMF Graph



For reference purposes, the graph extrapolates beyond the recommend 6x LM-80 data in TM-21, which our calculations are based on.

Colour Temperatures

2700K

3000K

4000K

Colours

Selected Colour

C4 Smooth Graphite (RAL7011)

Custom Colour Available

RAL**** Customer specified colour

*Choosing a custom colour may increase the cost and lead time.

Standard Colours Available

C1 Smooth White (RAL9016)

C4 Smooth Graphite (RAL7011)

C6 Smooth Grey (RAL7035)

C7 Textured Black (RAL9005)

C9 Metallic Silver (RAL9006)

Lumen data is considered to be representative of the configuration shown, and may vary, with a tolerance on flux of +/- 7% (typical of LED manufacturer's data) and luminaire power of +/- 5%.

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› **Datasheet - EXTERNAL - DBD**

DBD.1.LA012.SU.NR.H75.C4.W006.TSZ



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SDCM/MacAdam Ellipse:	5

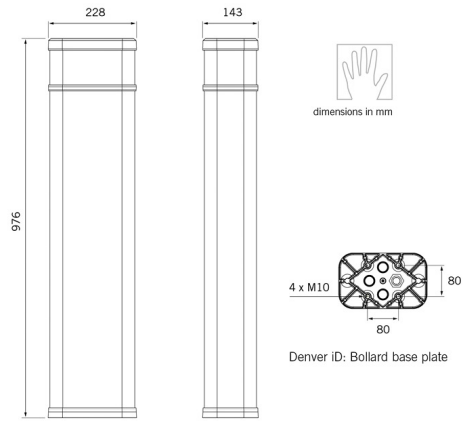
9.5Kg

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CIBSE TM66 - CEAM Rating



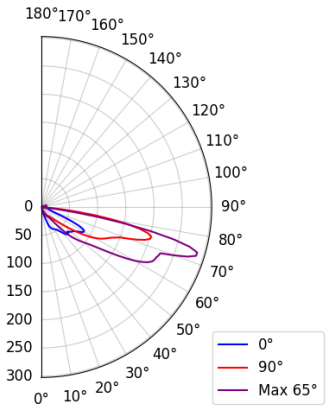
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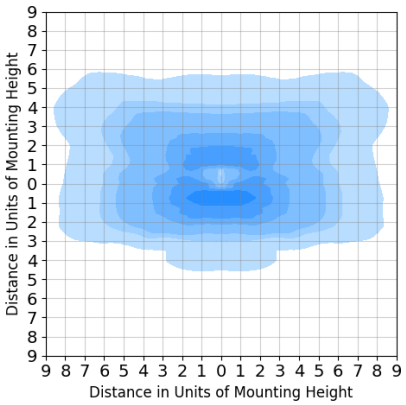
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Isoilluminance Plot

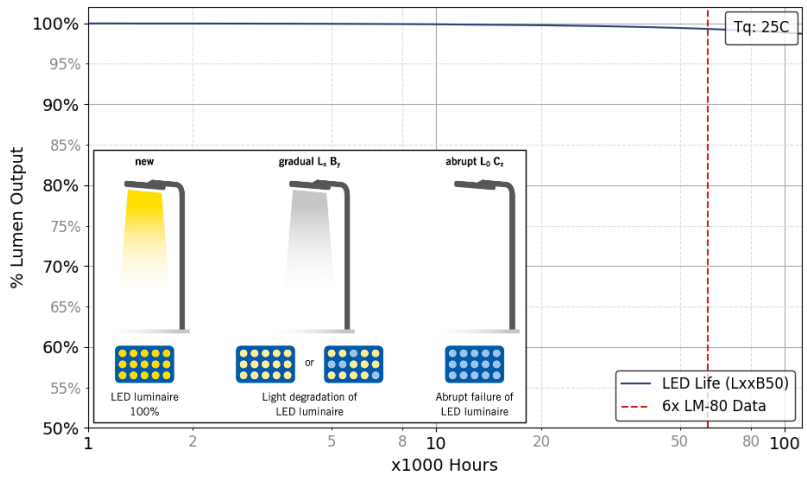


Lumens:	432
CCT:	2700K
CRI:	70
IES File:	DBD.1.LA012.SU.NR.W006

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Buckinghamshire, MK1 1JG
United Kingdom

Summary P195-256 - Cambridgeshire Police HQ, Huntingdon - Pathway

Line No.	Item Ref	Quantity	Catalogue
LUMINAIRE			
10		13	DBD.1.LA012.SU.NR.H75.C4.W006.LS.TSZ
LUMINAIRE			
20		13	DBD.1.LA012.SU.NR.H75.C4.W006.TSZ

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