



Prestwich Travel Hub

General & Emergency Lighting Calculations

Document Ref: P02

Revision: 17300-247-P1-XX-T-E-600604

Document Amendment Record Sheet

This sheet has been included to record the status of the document and should always be up-to-date in content.

Revision	Description	Date	By	Approved
P01	First Issue	11/07/2025	JM	DR
P02	Updated to Incorporate Architects Comments & Client Roof Variation	14/10/2025	JM	DR

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Notes

All general and emergency lighting calculations have been undertaken using Relux, an independent lighting modelling software tool which can calculate lighting levels using direct and indirect outputs. Calculations have been completed by Whitecroft Lighting, the specified lighting manufacturer.

Ground Floor Lighting Calculations

Prestwich Village Master Plan - Plot G MSCP

Installation : GROUND FLOOR

Project number : 33401

Customer :

Processed by : BS

Date : 14.10.2025

Project description:

Design parameters adhered to:

Reflectance: 70/50/20 (except plant rooms: 50/30/20 and parking area: 30)

Maintenance Factors: Calculated

Ceiling Heights: Mixed

Rev P02

JM - 14/10/2025

Updated to incorporate architects comments and client roof variation.

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

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

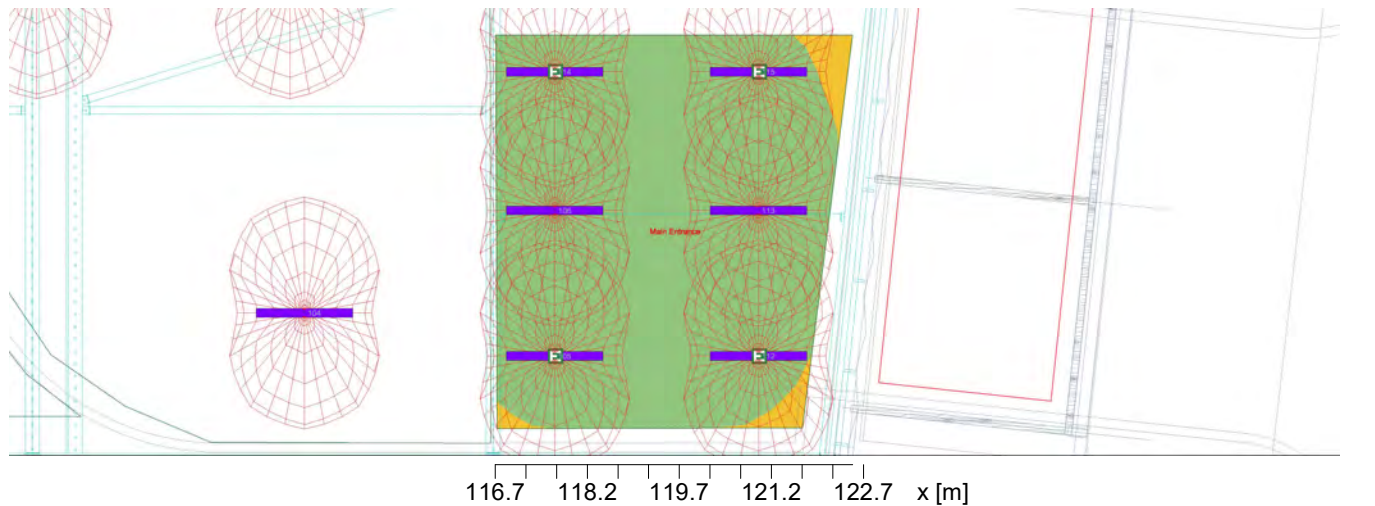
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



1 Parking

1.1 Summary, Parking

1.1.1 Result overview, Main Entrance



200 300

Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	407 lx
Minimum illuminance	E_{min}	297 lx
Maximum illuminance	E_{max}	476 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.37 (0.73)
Diversity U_d	E_{min}/E_{max}	1:1.6 (0.62)

Type No.\Make

	Whitecroft Lighting
1 10 x	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
	Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1 Parking

1.1 Summary, Parking

1.1.1 Result overview, Main Entrance

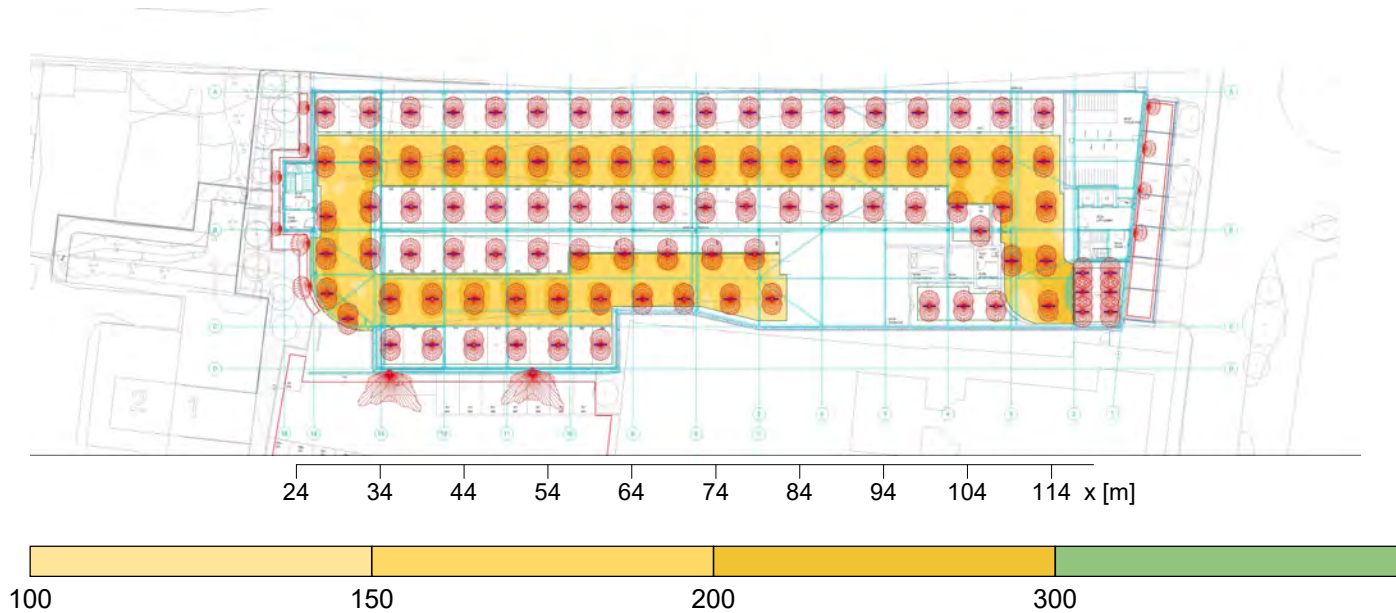
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.2 Result overview, Roadway



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	197 lx
Minimum illuminance	E_{min}	105 lx
Maximum illuminance	E_{max}	367 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.87 (0.54)
Diversity U_d	E_{min}/E_{max}	1:3.48 (0.29)

Type No.Make

1 10 x	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.2 Result overview, Roadway

	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

RELUX®

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.3 Result overview, Walkway

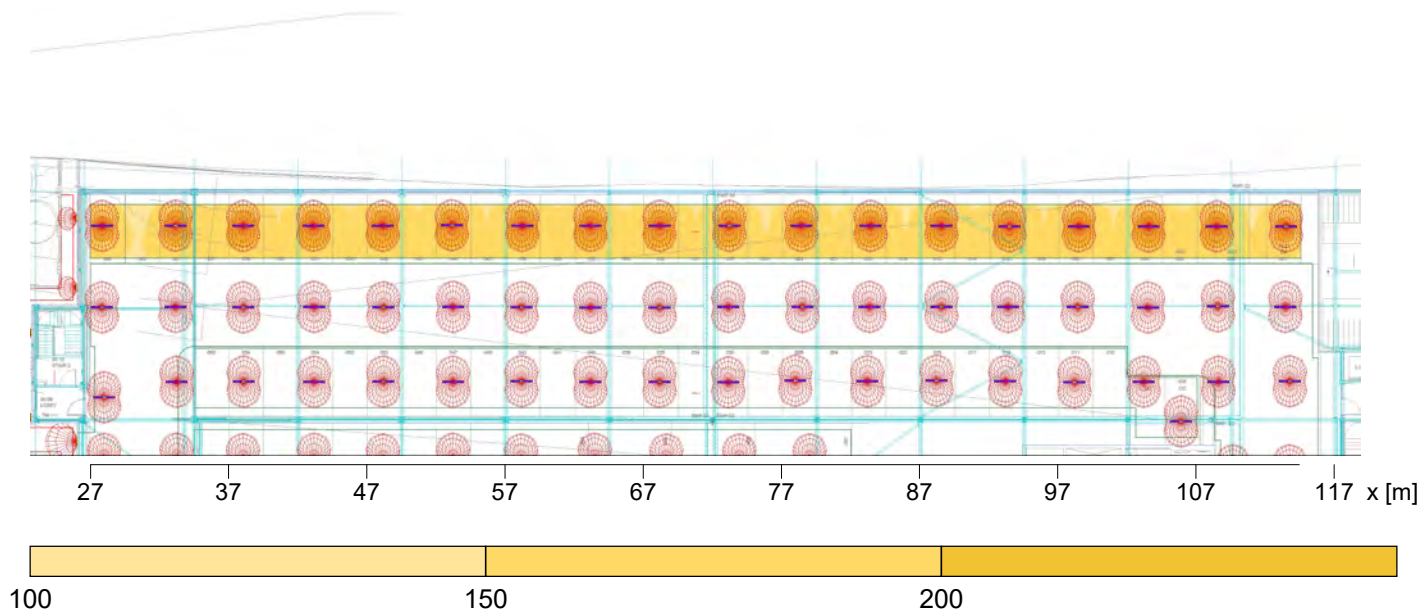
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
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 Date : 14.10.2025



1.1 Summary, Parking

1.1.4 Result overview, Parking - A



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	184 lx
Minimum illuminance	E_{min}	131 lx
Maximum illuminance	E_{max}	231 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.41 (0.71)
Diversity U_d	E_{min}/E_{max}	1:1.76 (0.57)

Type No. \ Make

Whitecroft Lighting	
1	10 x
Order No.	: K6H44KHB
Luminaire name	: KOLO IP65 HOOD
Equipment	: 1 x LED 14 W / 1008 lm
Emergency	: 200 lm (19.8 %)
Maintenance factor:	0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.4 Result overview, Parking - A

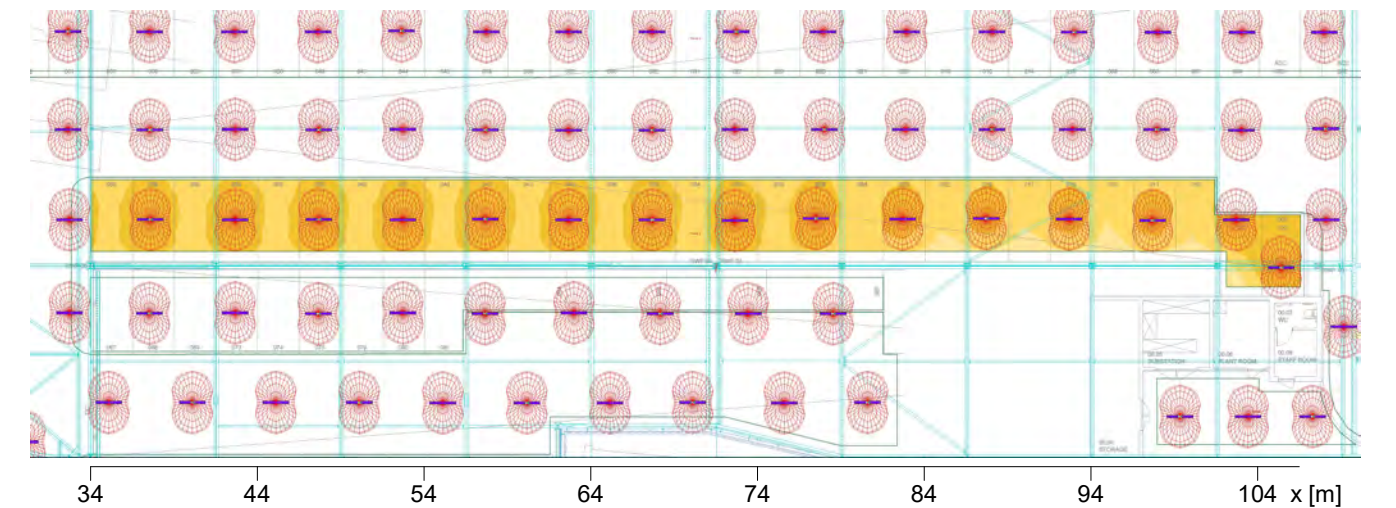
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.5 Result overview, Parking - B



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	205 lx
Minimum illuminance	E_{min}	137 lx
Maximum illuminance	E_{max}	274 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.5 (0.67)
Diversity U_d	E_{min}/E_{max}	1:2 (0.5)

Type No. \ Make

1 10 x	Whitcroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
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1.1 Summary, Parking

1.1.5 Result overview, Parking - B

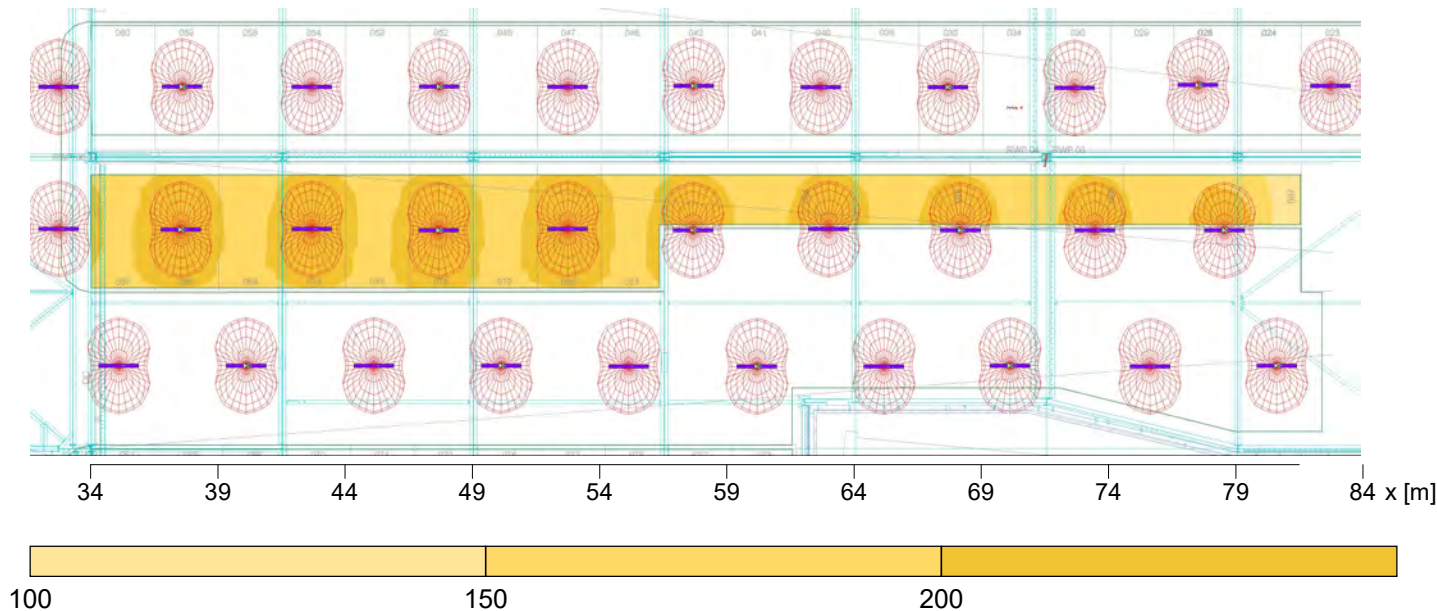
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
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1.1 Summary, Parking

1.1.6 Result overview, Parking - C



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	208 lx
Minimum illuminance	E_{min}	115 lx
Maximum illuminance	E_{max}	267 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.81 (0.55)
Diversity U_d	E_{min}/E_{max}	1:2.32 (0.43)

Type No.\Make

1 10 x	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.6 Result overview, Parking - C

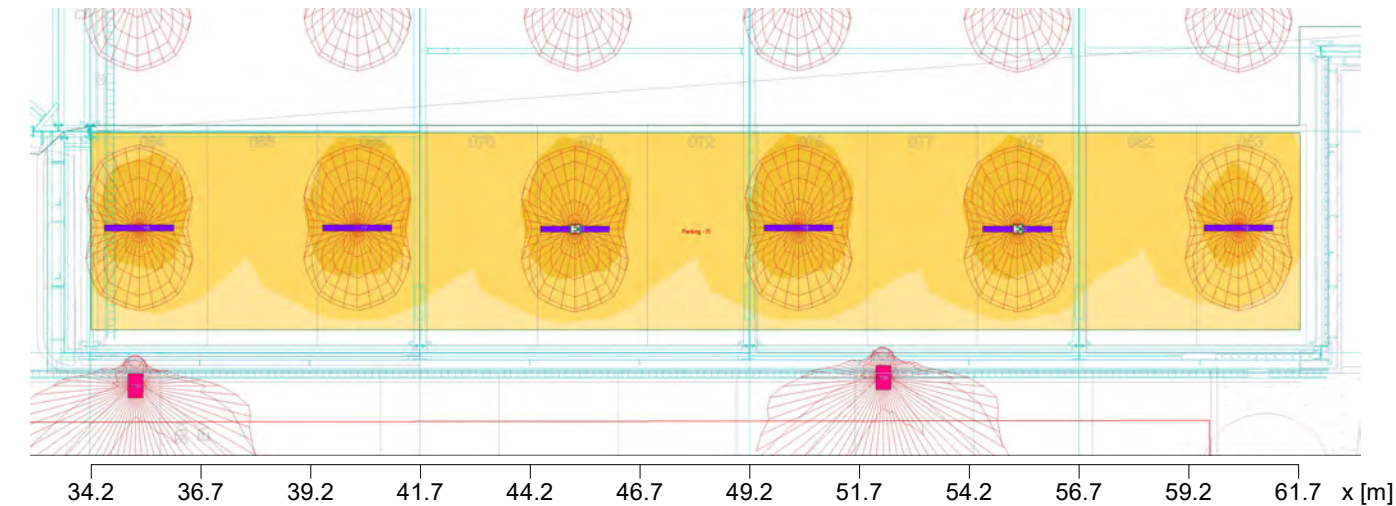
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.7 Result overview, Parking - D



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	183 lx
Minimum illuminance	E_{min}	130 lx
Maximum illuminance	E_{max}	241 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.41 (0.71)
Diversity U_d	E_{min}/E_{max}	1:1.86 (0.54)

Type No. \ Make

Whitecroft Lighting	
1	10 x
Order No.	: K6H44KHB
Luminaire name	: KOLO IP65 HOOD
Equipment	: 1 x LED 14 W / 1008 lm
Emergency	: 200 lm (19.8 %)
Maintenance factor:	0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.7 Result overview, Parking - D

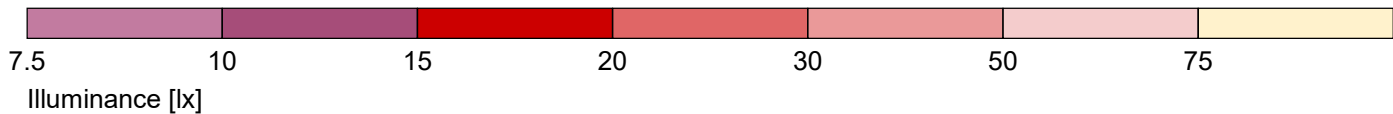
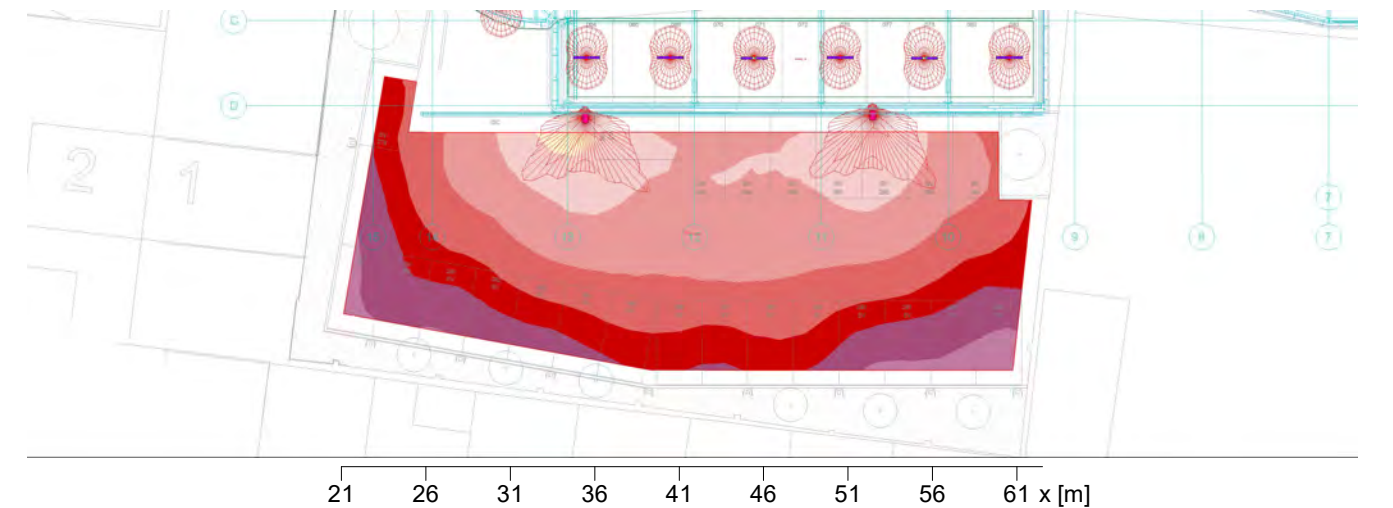
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.8 Result overview, External Car Park



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	30.6 lx
Minimum illuminance	E_{min}	8 lx
Maximum illuminance	E_{max}	79.9 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:3.81 (0.26)
Diversity U_d	E_{min}/E_{max}	1:9.94 (0.1)

Type No. \ Make

Whitecroft Lighting	
1	10 x
Order No.	: K6H44KHB
Luminaire name	: KOLO IP65 HOOD
Equipment	: 1 x LED 14 W / 1008 lm
Emergency	: 200 lm (19.8 %)
Maintenance factor:	0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.8 Result overview, External Car Park

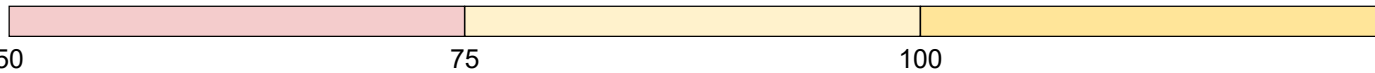
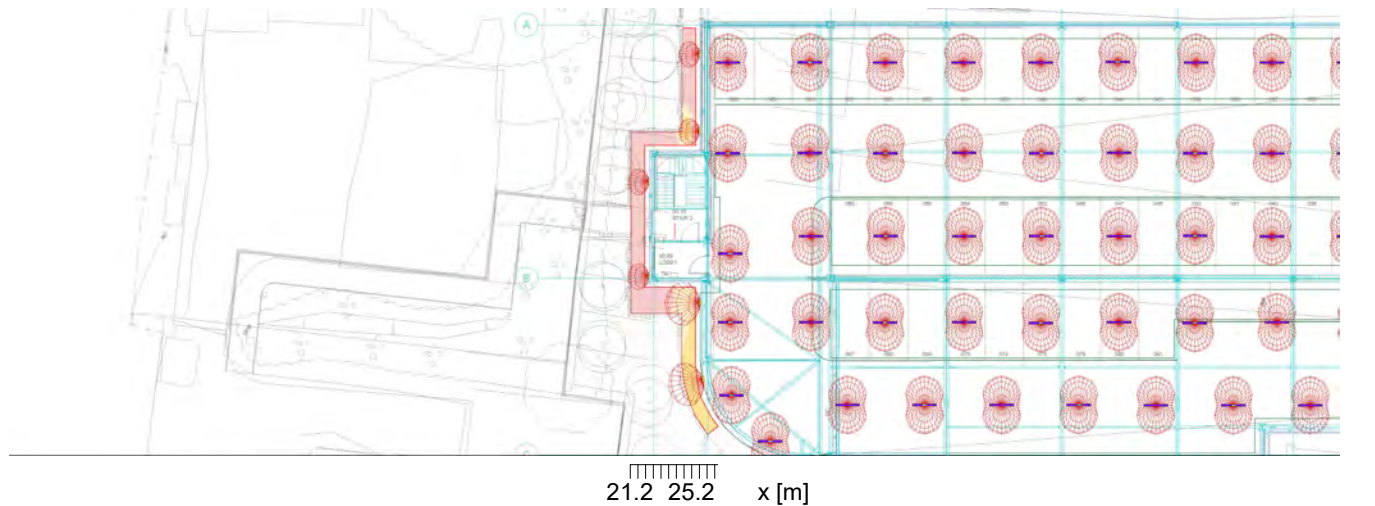
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
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1.1 Summary, Parking

1.1.9 Result overview, External Walkway



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	106 lx
Minimum illuminance	E_{min}	72 lx
Maximum illuminance	E_{max}	128 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.46 (0.69)
Diversity U_d	E_{min}/E_{max}	1:1.76 (0.57)

Type No.\Make

1 10 x	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
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1.1 Summary, Parking

1.1.9 Result overview, External Walkway

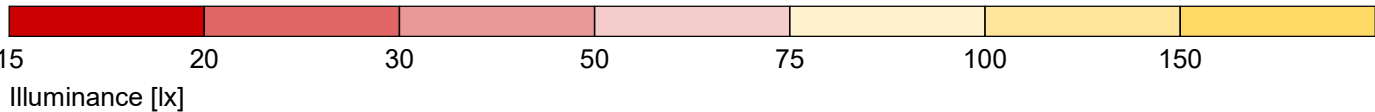
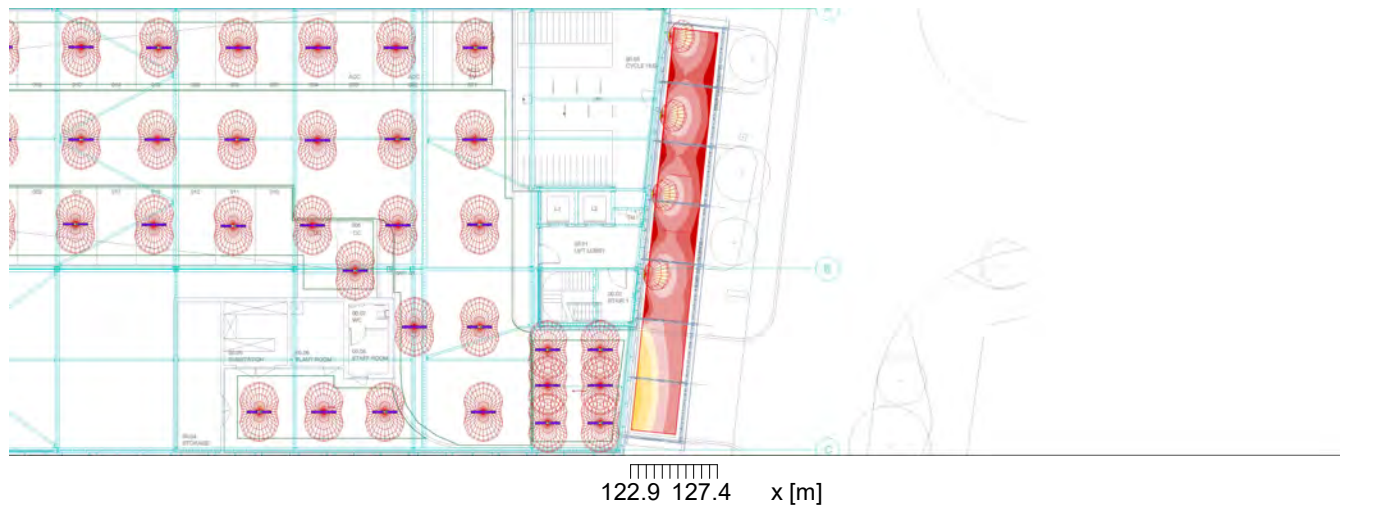
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
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1.1 Summary, Parking

1.1.10 Result overview, Fairfax Road Under Canopy



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	50 lx
Minimum illuminance	E_{min}	16 lx
Maximum illuminance	E_{max}	172 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:3.14 (0.32)
Diversity U_d	E_{min}/E_{max}	1:10.9 (0.09)

Type No.\Make

Whitecroft Lighting	
1	10 x
Order No. : K6H44KHB	
Luminaire name : KOLO IP65 HOOD	
Equipment : 1 x LED 14 W / 1008 lm	
Emergency : 200 lm (19.8 %)	
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
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1.1 Summary, Parking

1.1.10 Result overview, Fairfax Road Under Canopy

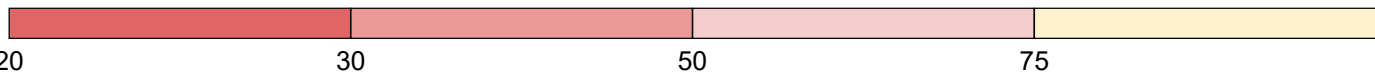
	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
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1.1 Summary, Parking

1.1.11 Result overview, Fairfax Road Pavement



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	-0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	757715.375 lm
Total power	5036 W
Total power per area (35200.00 m²)	0.14 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	42.9 lx
Minimum illuminance	E_{min}	21.6 lx
Maximum illuminance	E_{max}	88.8 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.98 (0.5)
Diversity U_d	E_{min}/E_{max}	1:4.1 (0.24)

Type No.\Make

1 10 x	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
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1.1 Summary, Parking

1.1.11 Result overview, Fairfax Road Pavement

	4	96E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	5	2 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

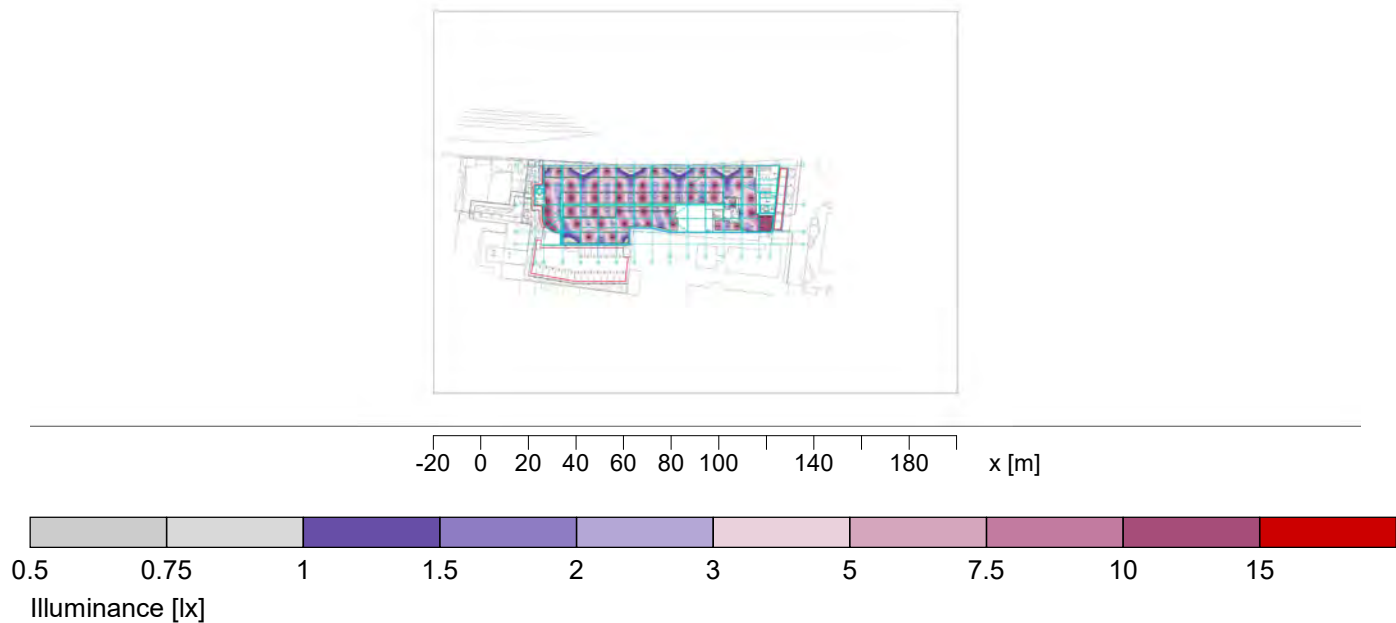
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



1 Parking

1.2 Summary, Parking

1.2.1.1 Result overview (emergency lighting)



General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.95 m
 Maximum I : 120 cd <= 900 cd

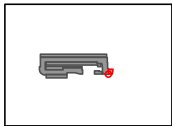
Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
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12 Main Entrance

Calculation field: 5.81m x 6.39m (5 x 6 pts), Height = 0.00m

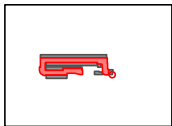
1	7.55 lx >= 1 lx	15.02 lx	1: 1.99 >= 1 : 40
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12 Roadway

Calculation field: 32.54m x 91.92m (22 x 62 pts), Height = 0.00m

2	1.13 lx >= 1 lx	13.23 lx	1: 11.76 >= 1 : 40
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12 Walkway

Calculation field: 11.91m x 3.96m (11 x 3 pts), Height = 0.00m

3	1.87 lx >= 1 lx	10.40 lx	1: 5.56 >= 1 : 40
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Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
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1 Parking

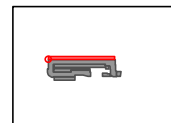
1.2 Summary, Parking

1.2.1.1 Result overview (emergency lighting)

12 Parking - A

Calculation field: 87.49m x 3.89m (87 x 4 pts), Height = 0.00m

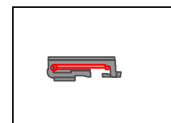
4	0.51 lx	10.73 lx	1: 21.12
	>= 0.5 lx		>= 1 : 40



15 Parking - B

Calculation field: 72.49m x 6.41m (72 x 6 pts), Height = 0.00m

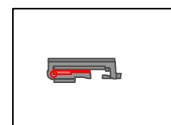
5	1.42 lx	12.09 lx	1: 8.52
	>= 0.5 lx		>= 1 : 40



16 Parking - C

Calculation field: 47.49m x 4.43m (47 x 4 pts), Height = 0.00m

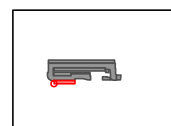
6	2.18 lx	11.96 lx	1: 5.50
	>= 0.5 lx		>= 1 : 40



17 Parking - D

Calculation field: 27.5m x 4.47m (27 x 4 pts), Height = 0.00m

7	0.58 lx	10.84 lx	1: 18.81
	>= 0.5 lx		>= 1 : 40



Type No.\Make

Whitecroft Lighting

4	46E x	Order No.	: ACH74K	-- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY	
		Equipment	: 1 x LED 49 W / 7490 lm	
		Emergency	: 433 lm (5.8 %)	

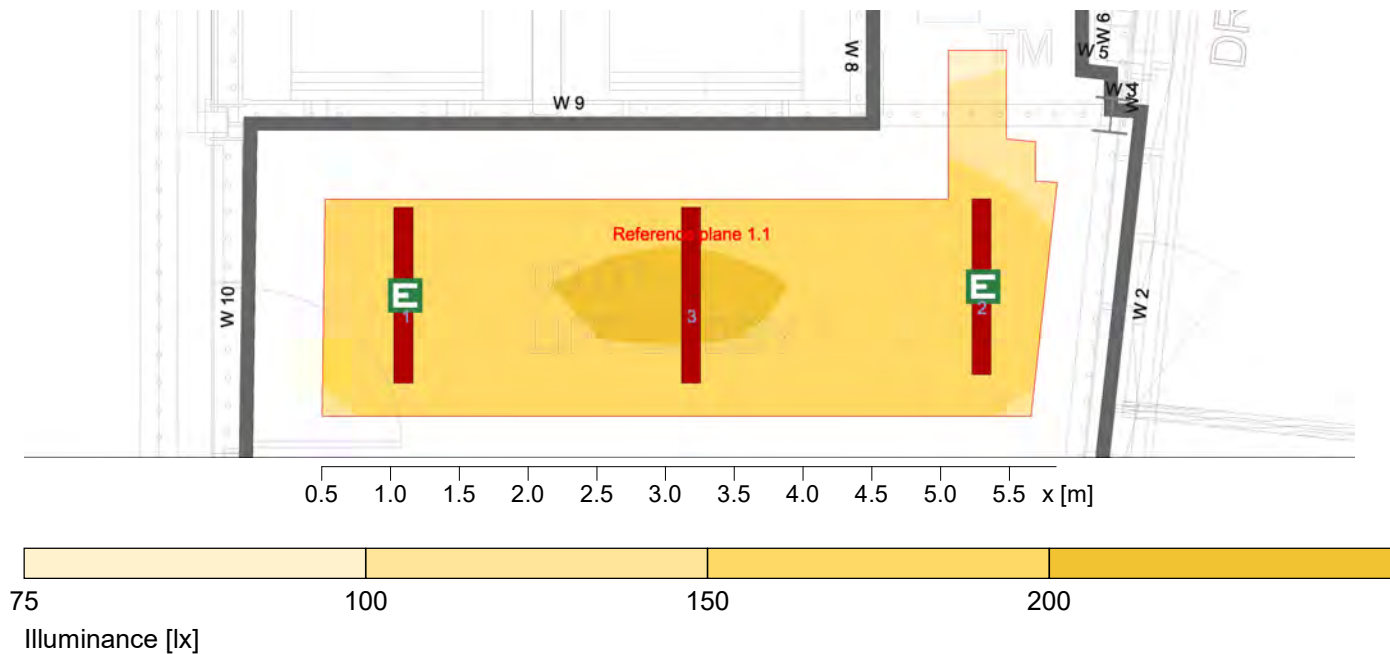
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



2 Lift Lobby

2.1 Summary, Lift Lobby

2.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 see luminaires / maintenance plan

Luminaire luminous flux
 Total power
 Total power per area (17.66 m²)

8382 lm
 54.0 W
 3.06 W/m² (1.69 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal	cylindrical
E_{min}	181 lx	123 lx
$E_{min}/\bar{E}_m (U_o)$	100 lx	67 lx
$E_{min}/E_{max} (U_d)$	0.55	0.55
E_z/E_h	0.49	
Position	0.00 m	0.36
$R_{UG} (2.1H \ 3.7H)$	≤ 19.9	1.60 m
Luminaire :		
(ACL INDUSTRY, ACH24K)		

Major surfaces

$\bar{E}_m$	U_o
M 1.11 (Ceiling)	83 lx
M 1.1 (Wall)	145 lx
M 1.2 (Wall)	188 lx
M 1.3 (Wall)	104 lx
	0.47
	0.67
	0.54
	0.56

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



2 Lift Lobby

2.1 Summary, Lift Lobby

2.1.1 Result overview, Evaluation area 1

M 1.4 (Wall)	93 lx	0.50
M 1.5 (Wall)	99 lx	0.47
M 1.6 (Wall)	57 lx	0.53
M 1.7 (Wall)	62 lx	0.61
M 1.8 (Wall)	57 lx	0.57
M 1.9 (Wall)	161 lx	0.63
M 1.10 (Wall)	186 lx	0.59

Type No.\Make

Whitecroft Lighting

2 3E x
 Order No. : ACH24K
Luminaire name : ACL INDUSTRY
Equipment : 1 x LED 18 W / 2794 lm
Emergency : 414 lm (14.8 %)
Maintenance factor: 0.82

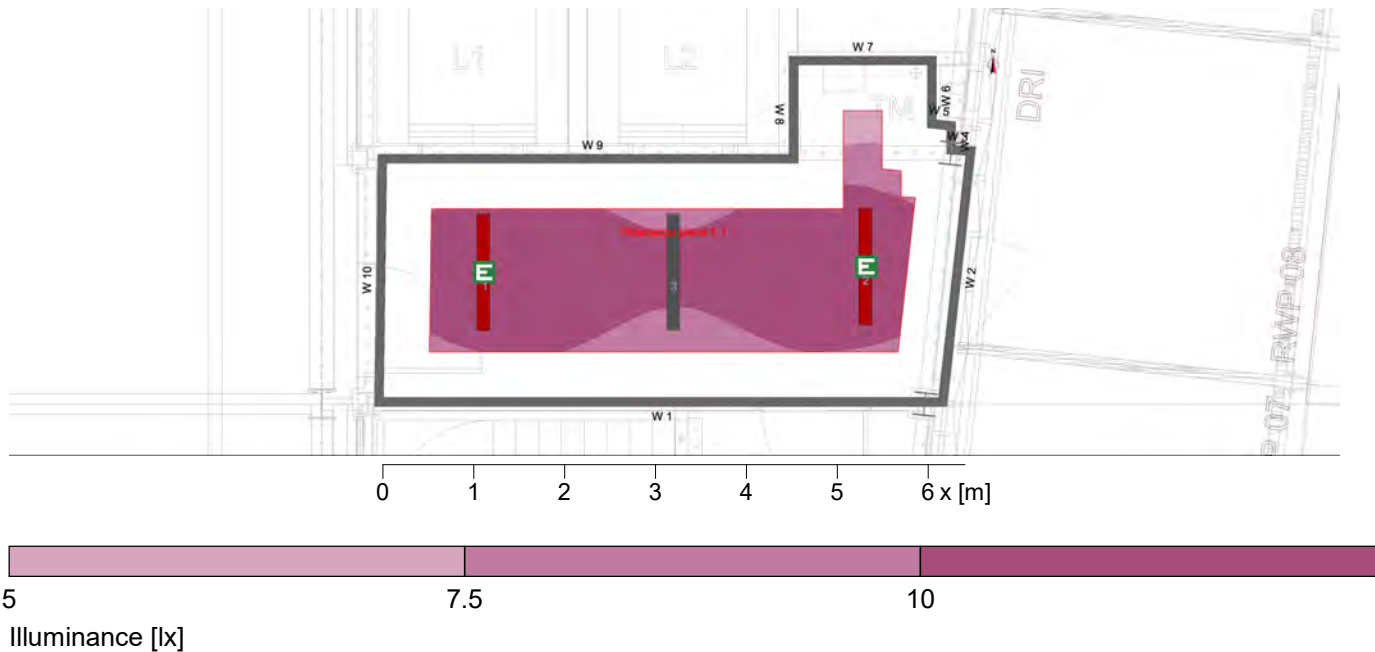
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



2 Lift Lobby

2.2 Summary, Lift Lobby

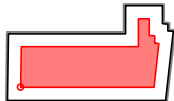
2.2.1.1 Result overview (emergency lighting)



General
 Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.95 m
 Maximum I : 120 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 5.34m x 2.65m (14 x 7 pts), Height = 0.00m			
1	5.32 lx >= 1 lx	12.19 lx	1: 2.29 >= 1 : 40



Type No.\Make

Whitcroft Lighting			
2	2E x	Order No. : ACH24K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 18 W / 2794 lm	
		Emergency : 414 lm (14.8 %)	

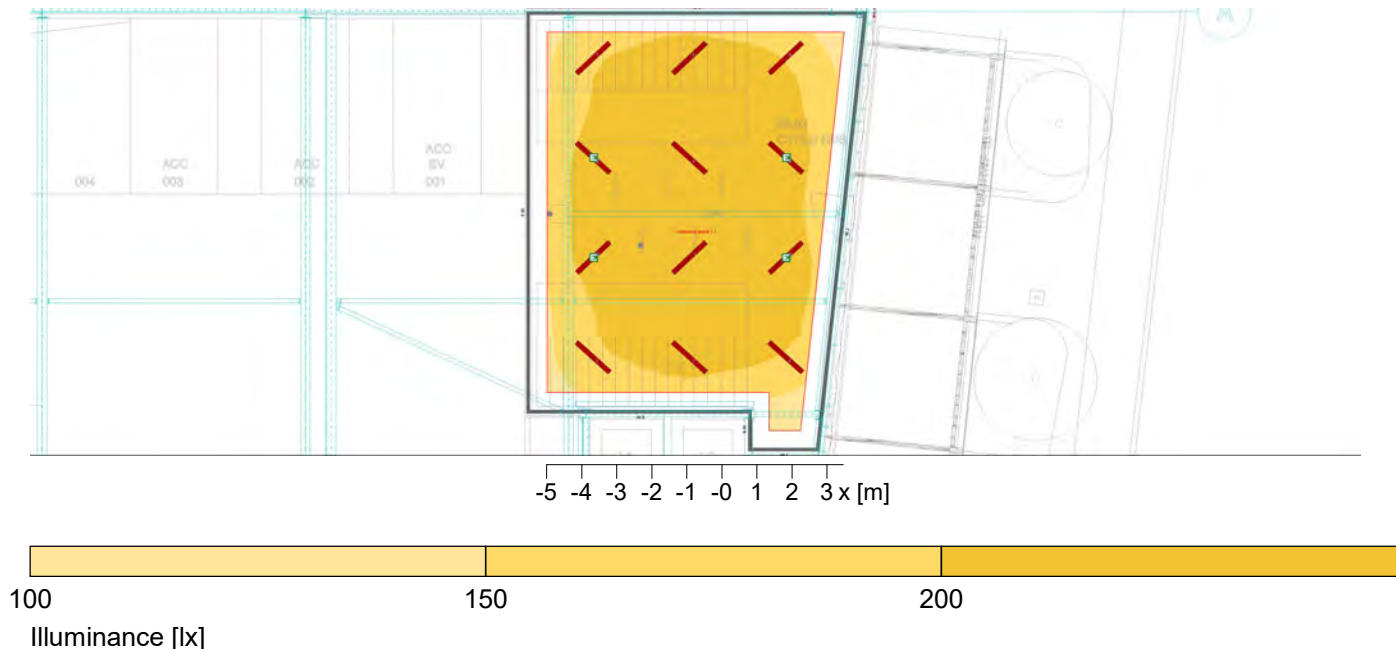
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



3 Cycle Hub

3.1 Summary, Cycle Hub

3.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 see luminaires / maintenance plan

Luminaire luminous flux
 Total power
 Total power per area (102.16 m²)

33528 lm
 216.0 W
 2.11 W/m² (1.00 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	212 lx	129 lx
E_{min}	108 lx	73 lx
$E_{min}/\bar{E}_m (U_o)$	0.51	0.56
$E_{min}/E_{max} (U_d)$	0.42	
E_z/E_h		0.48
Position	0.00 m	1.60 m
$R_{UG} (5.4H \ 7.0H)$	≤ 22.6	
Luminaire : (ACL INDUSTRY, ACH24K)		

Major surfaces

	$\bar{E}_m$	U_o
M 1.7 (Ceiling)	65 lx	0.67
M 1.1 (Wall)	87 lx	0.72
M 1.2 (Wall)	145 lx	0.42
M 1.3 (Wall)	160 lx	0.46

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



3 Cycle Hub

3.1 Summary, Cycle Hub

3.1.1 Result overview, Evaluation area 1

M 1.4 (Wall)	131 lx	0.61
M 1.5 (Wall)	152 lx	0.70
M 1.6 (Wall)	59 lx	0.67

Type No.\Make

Whitecroft Lighting

2 12E x
 Order No. : ACH24K
Luminaire name : ACL INDUSTRY
Equipment : 1 x LED 18 W / 2794 lm
Emergency : 414 lm (14.8 %)
Maintenance factor: 0.82

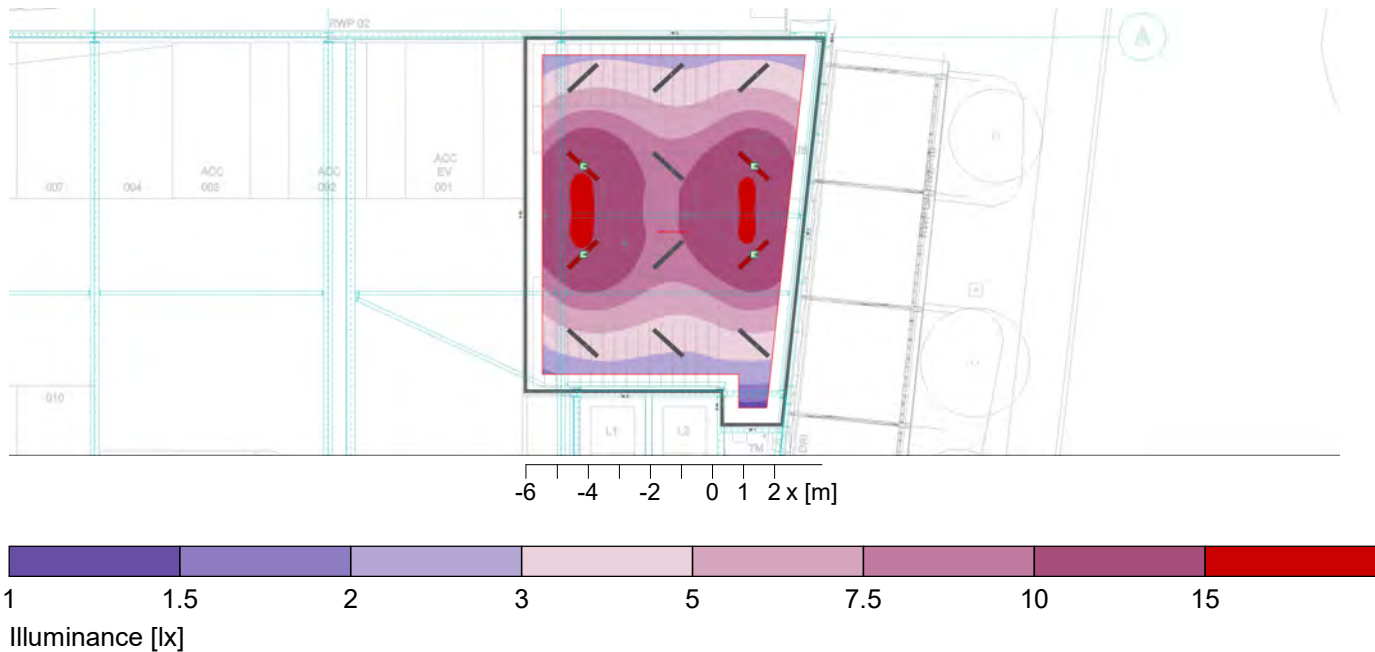
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



3 Cycle Hub

3.2 Summary, Cycle Hub

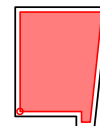
3.2.1.1 Result overview (emergency lighting)



General
 Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.95 m
 Maximum I : 120 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 8.46m x 11.32m (8 x 10 pts), Height = 0.00m			
1	1.03 lx >= 1 lx	15.43 lx	1: 14.95 >= 1 : 40



Type No.\Make

Whitcroft Lighting			
2	4E x	Order No. : ACH24K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 18 W / 2794 lm	
		Emergency : 414 lm (14.8 %)	

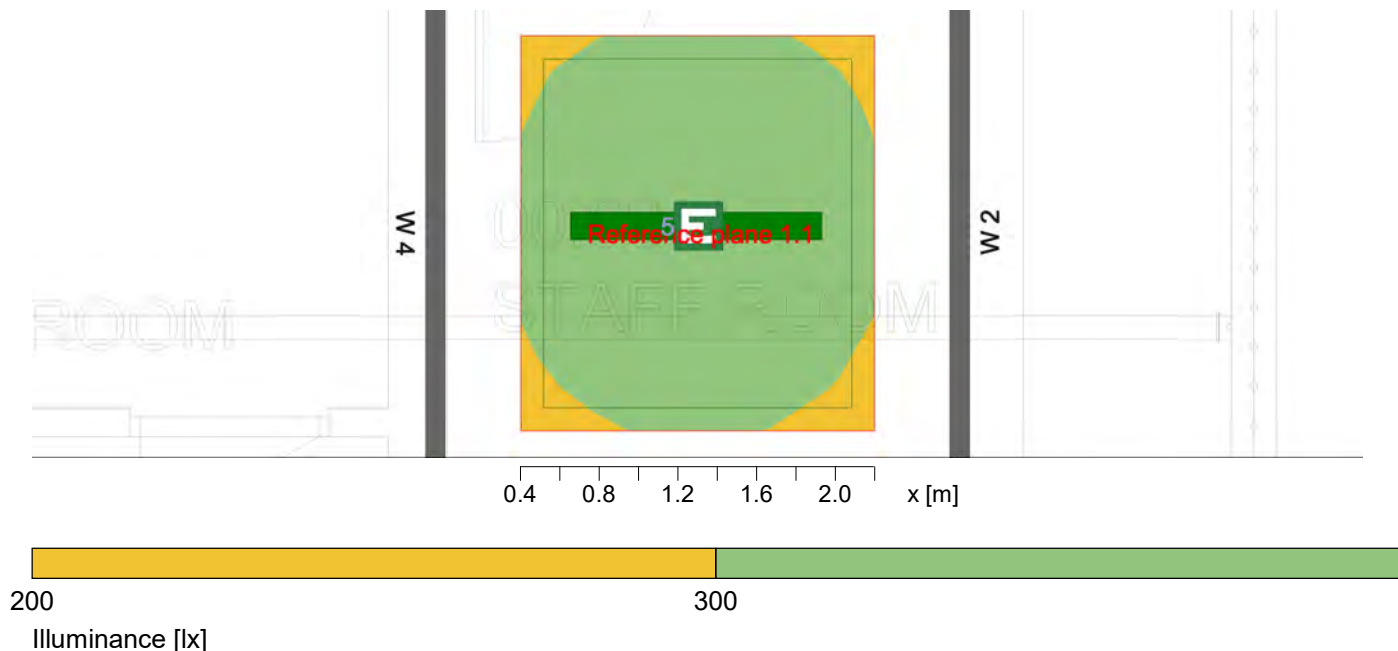
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



4 Staff Room

4.1 Summary, Staff Room

4.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	see luminaires / maintenance plan

Luminaire luminous flux	6425 lm
Total power	46.0 W
Total power per area (7.09 m²)	6.49 W/m² (1.88 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	344 lx	353 lx
E_{min}	294 lx	255 lx
$E_{min}/\bar{E}_m (U_o)$	0.85	0.72
$E_{min}/E_{max} (U_d)$	0.74	
E_z/E_h		0.35
Position	0.75 m	2.35 m
RUG (1.5H 1.6H)	10.0	
Luminaire :		
(ACL INDUSTRY, ACH64K)		
Hints:		
- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.		

Major surfaces

M 1.5 (Ceiling)	$\bar{E}_m$ 140 lx	U_o 0.78
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Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



4 Staff Room

4.1 Summary, Staff Room

4.1.1 Result overview, Evaluation area 1

M 1.1 (Wall)	248 lx	0.59
M 1.2 (Wall)	218 lx	0.62
M 1.3 (Wall)	254 lx	0.57
M 1.4 (Wall)	219 lx	0.62

Type No. Make

Whitecroft Lighting

3 1E x Order No. : ACH64K -- Emergency Lighting --
Luminaire name : ACL INDUSTRY
Equipment : 1 x LED 46 W / 6425 lm
Emergency : 433 lm (6.7 %)
Maintenance factor: 0.81

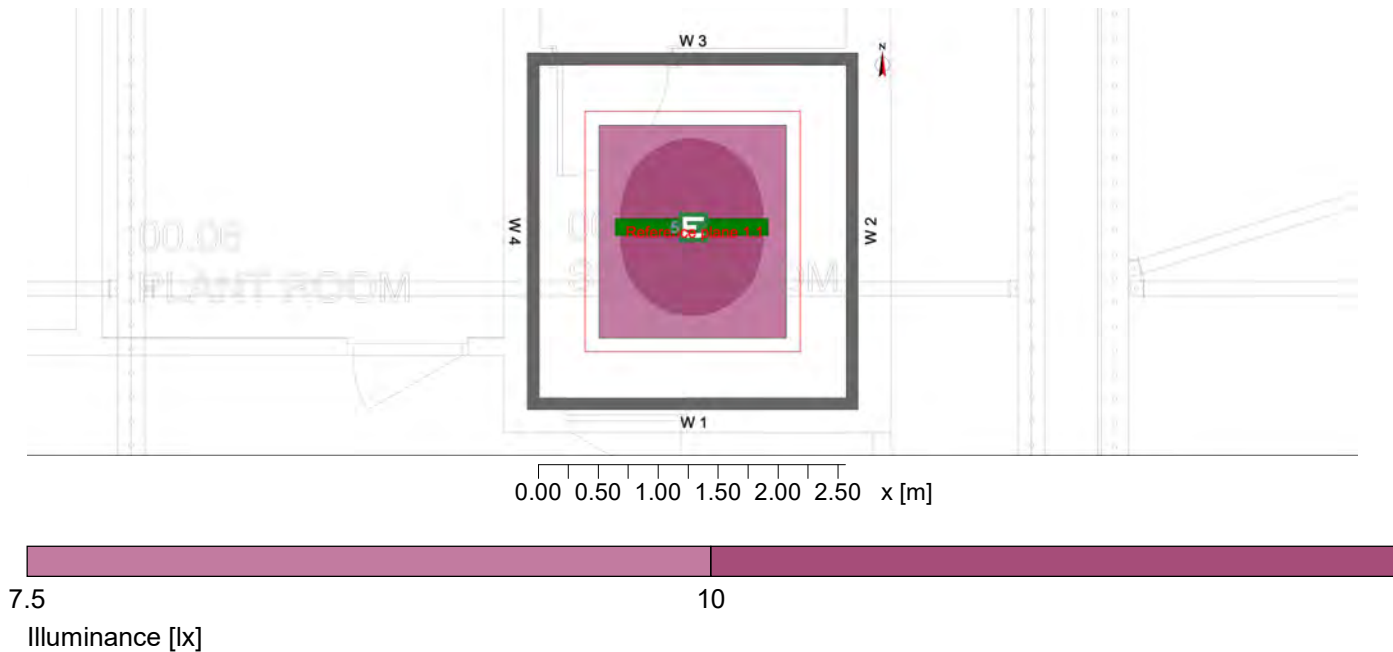
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



4 Staff Room

4.2 Summary, Staff Room

4.2.1.1 Result overview (emergency lighting)

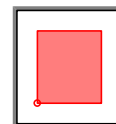


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.95 m
 Maximum I : 130 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 1.56m x 1.77m (5 x 6 pts), Height = 0.00m			
1	8.21 lx	10.97 lx	1: 1.34
	>= 1 lx		>= 1 : 40



Type No. \ Make

Whitcroft Lighting			
3	1E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	

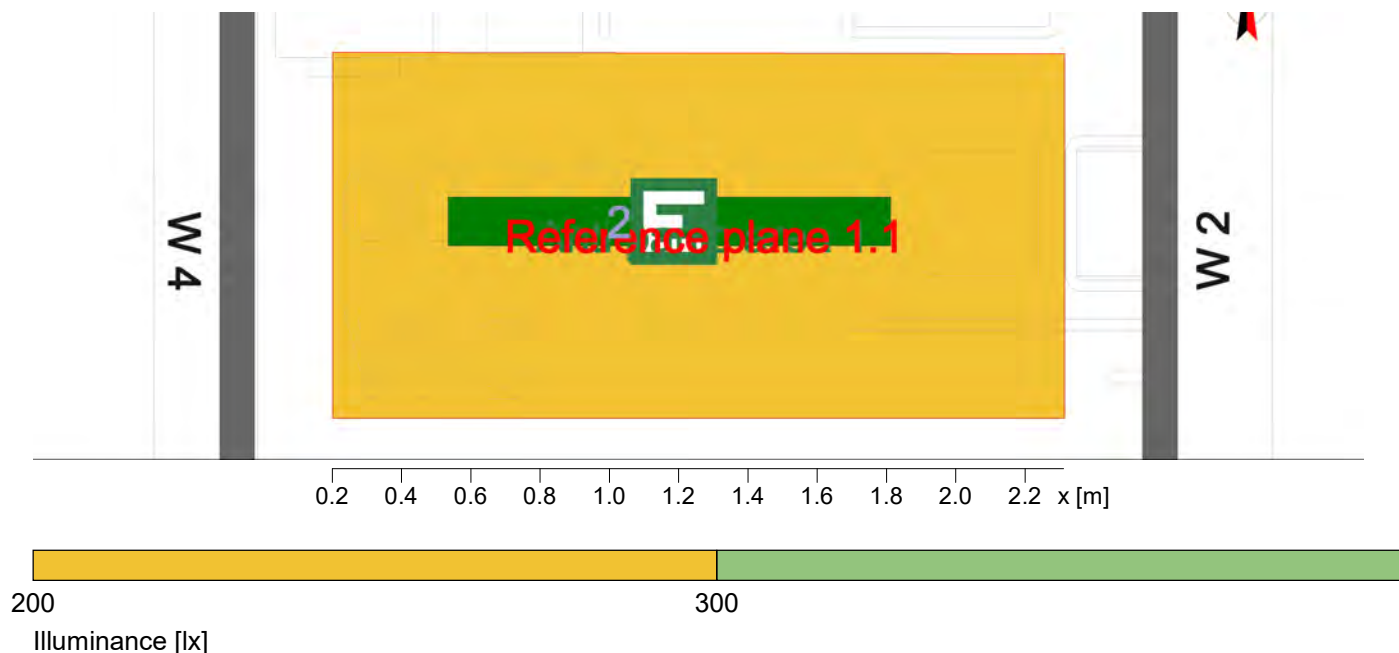
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



5 WC

5.1 Summary, WC

5.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	see luminaires / maintenance plan
Luminaire luminous flux	0 lm

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal	cylindrical
E_{min}	254 lx	218 lx
$E_{min}/\bar{E}_m (U_o)$	213 lx	199 lx
$E_{min}/E_{max} (U_d)$	0.84	0.91
E_z/E_h	0.76	0.31
Position	0.00 m	1.60 m

Major surfaces

	$\bar{E}_m$	U_o
M 1.5 (Ceiling)	237 lx	0.62
M 1.1 (Wall)	339 lx	0.42
M 1.2 (Wall)	257 lx	0.51
M 1.3 (Wall)	0 lx	---
M 1.4 (Wall)	284 lx	0.45

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



5 WC

5.1 Summary, WC

5.1.1 Result overview, Evaluation area 1

Type No. Make

		Whitecroft Lighting	
3	1E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	
		Maintenance factor: 0.81	

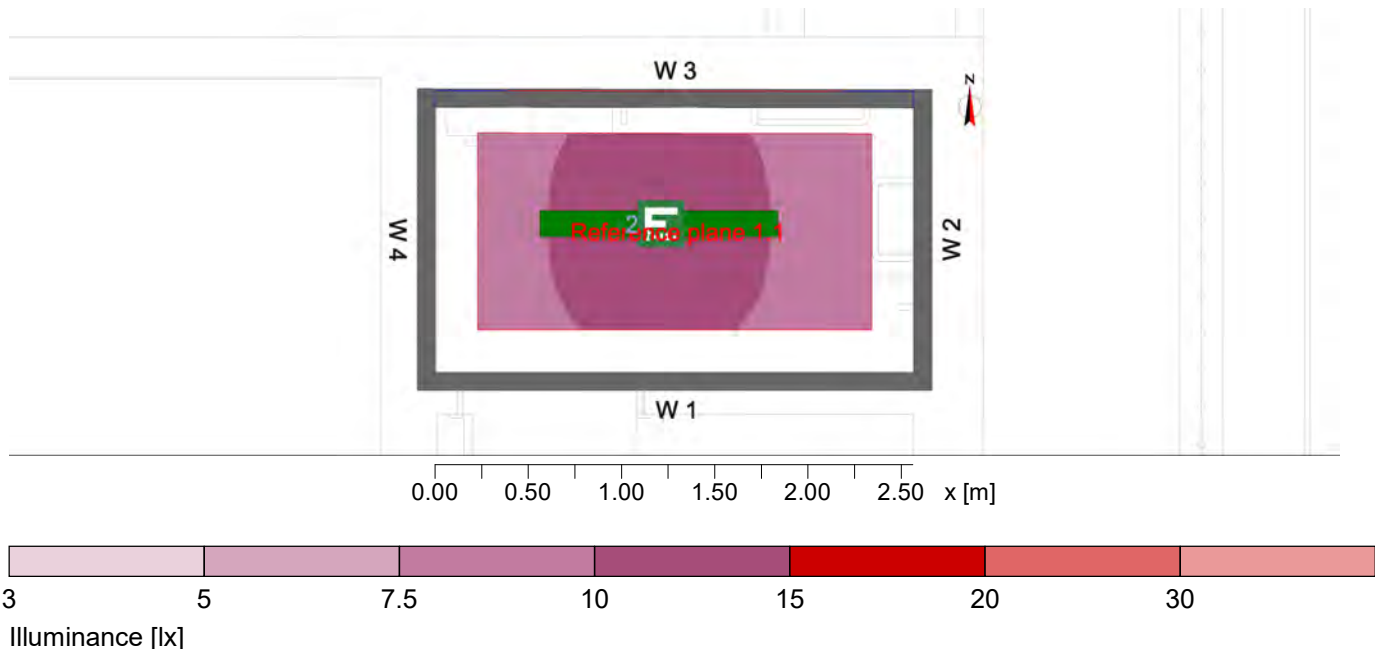
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



5 WC

5.2 Summary, WC

5.2.1.1 Result overview (emergency lighting)

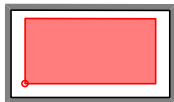


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.95 m
 Maximum I : 130 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1			
Calculation field: 2.11m x 1.05m (10 x 5 pts), Height = 0.00m			
1	7.68 lx	10.99 lx	1: 1.43
	>= 1 lx		>= 1 : 40



Type No.\Make

Whitcroft Lighting			
3	1E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	

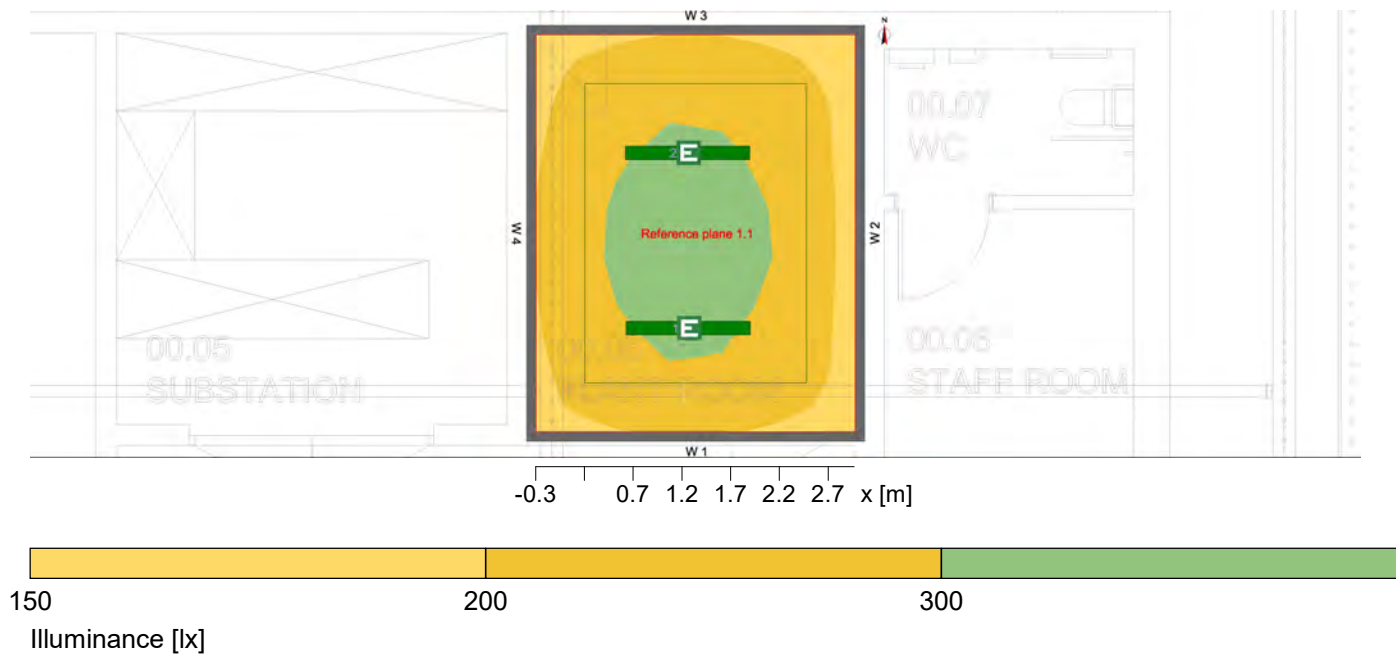
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



6 Plant Room

6.1 Summary, Plant Room

6.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 see luminaires / maintenance plan

Luminaire luminous flux
 Total power
 Total power per area (13.26 m²)

12850 lm
 92.0 W
 6.94 W/m² (2.62 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	265 lx	171 lx
E_{min}	179 lx	120 lx
$E_{min}/\bar{E}_m (U_o)$	0.68	0.70
$E_{min}/E_{max} (U_d)$	0.52	
E_z/E_h		0.34
Position	0.00 m	1.60 m
$R_{UG} (1.9H \ 2.3H)$	≤ 22.8	
Luminaire :		
(ACL INDUSTRY, ACH64K)		

Major surfaces

	$\bar{E}_m$	U_o
M 1.5 (Ceiling)	93 lx	0.55
M 1.1 (Wall)	256 lx	0.38
M 1.2 (Wall)	173 lx	0.51
M 1.3 (Wall)	241 lx	0.41

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



6 Plant Room

6.1 Summary, Plant Room

6.1.1 Result overview, Evaluation area 1

M 1.4 (Wall)	189 lx	0.51
--------------	--------	------

Type No.\Make

Whitecroft Lighting

3	2E x	Order No.	: ACH64K	-- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY	
		Equipment	: 1 x LED 46 W / 6425 lm	
		Emergency	: 433 lm (6.7 %)	
		Maintenance factor:	0.81	

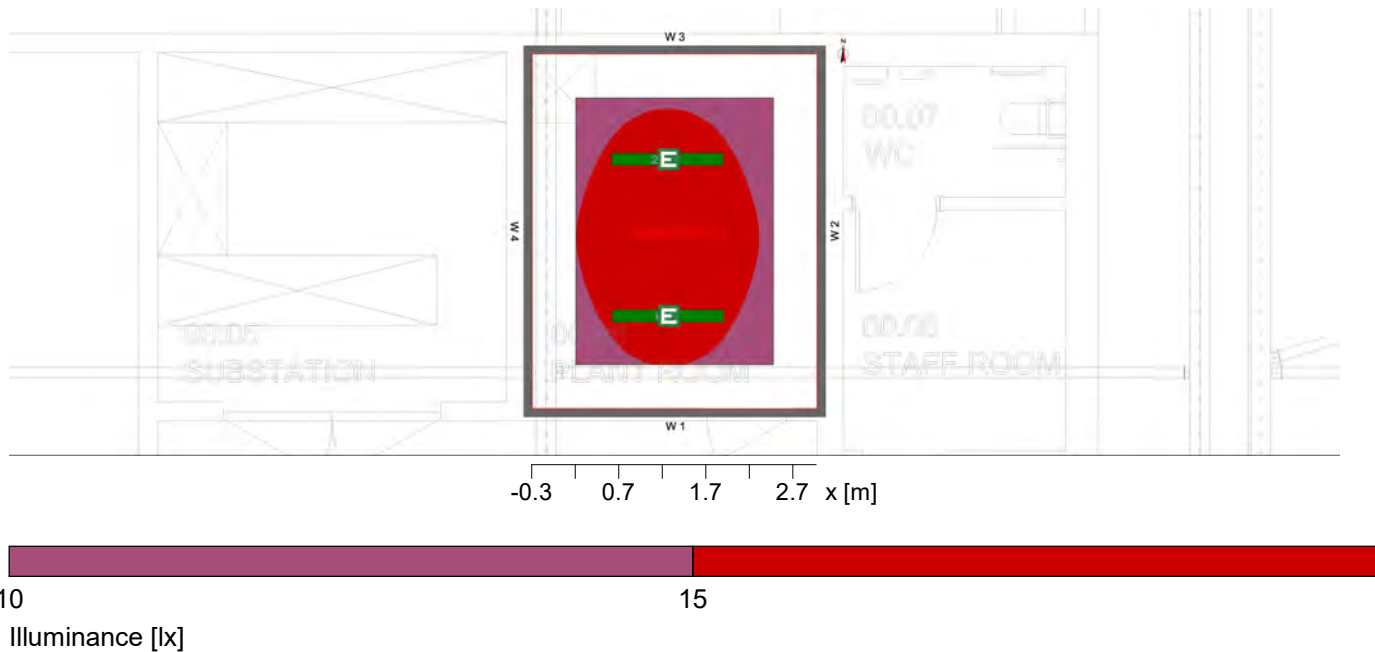
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



6 Plant Room

6.2 Summary, Plant Room

6.2.1.1 Result overview (emergency lighting)

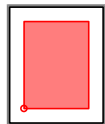


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot. centre) : 2.95 m
 Maximum I : 130 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 2.27m x 3.06m (5 x 7 pts), Height = 0.00m			
1	10.76 lx >= 1 lx	18.99 lx	1: 1.77 >= 1 : 40



Type No. \ Make

Whitcroft Lighting			
3	2E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	

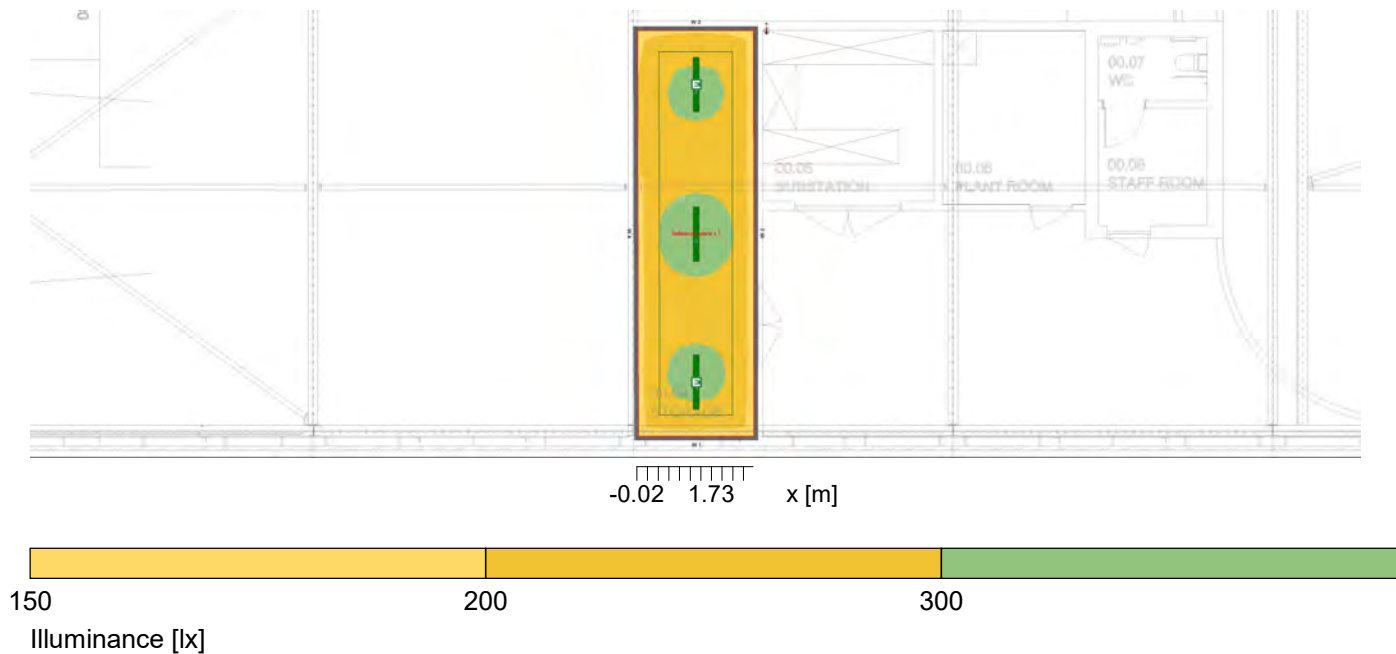
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



7 Storage

7.1 Summary, Storage

7.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.70 m
 see luminaires / maintenance plan

Luminaire luminous flux
 Total power
 Total power per area (25.75 m²)

19275 lm
 138.0 W
 5.36 W/m² (1.94 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	276 lx	201 lx
E_{min}	198 lx	155 lx
$E_{min}/\bar{E}_m (U_o)$	0.72	0.77
$E_{min}/E_{max} (U_d)$	0.59	
E_z/E_h		0.42
Position	0.00 m (rot: 0°/0°)	0.00 m (rot: 0°/0°)
$R_{UG} (1.9H \ 6.5H)$	≤ 24.2	
Luminaire :		
(ACL INDUSTRY, ACH64K)		

Major surfaces

	$\bar{E}_m$	U_o
M 1.5 (Ceiling)	98 lx	0.70
M 1.1 (Wall)	196 lx	0.44
M 1.2 (Wall)	224 lx	0.45
M 1.3 (Wall)	195 lx	0.44

-please put your own address here-

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025



7 Storage

7.1 Summary, Storage

7.1.1 Result overview, Evaluation area 1

M 1.4 (Wall)	224 lx	0.45
--------------	--------	------

Type No.\Make

3	3E x	Whitecroft Lighting
		Order No. : ACH64K
		Luminaire name : ACL INDUSTRY
		Equipment : 1 x LED 46 W / 6425 lm
		Emergency : 433 lm (6.7 %)
		Maintenance factor: 0.81

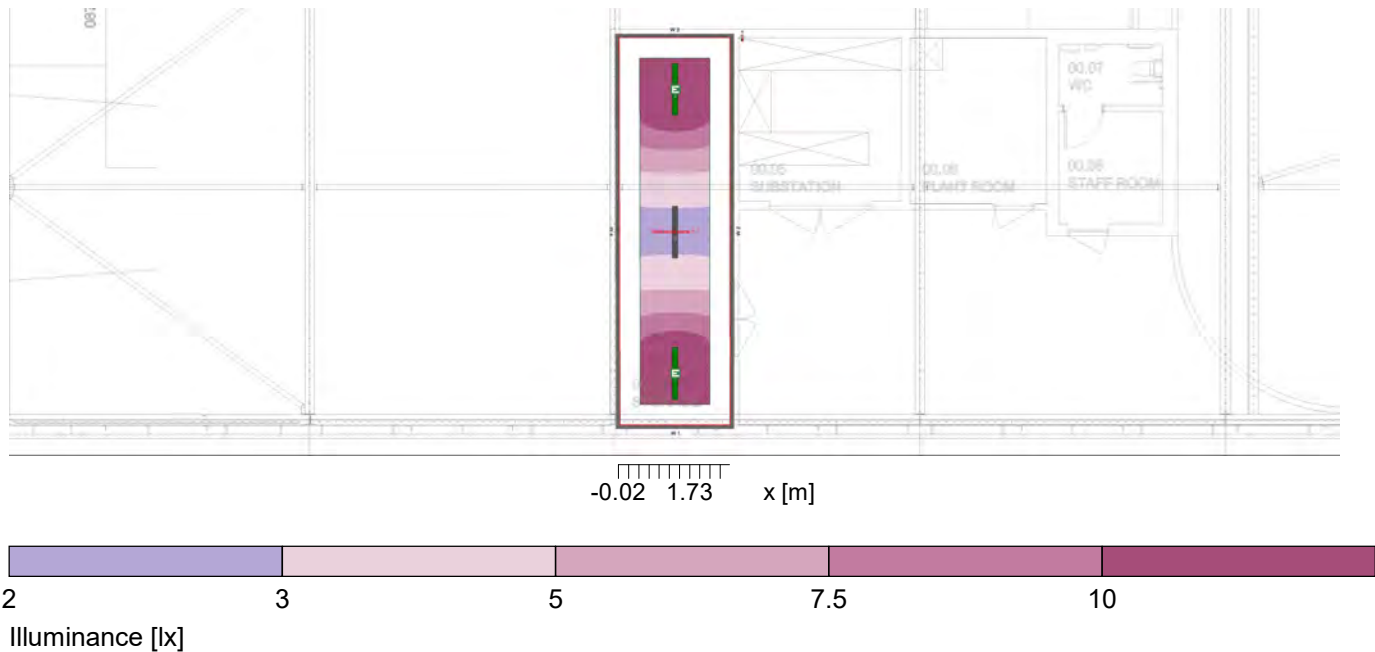
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



7 Storage

7.2 Summary, Storage

7.2.1.1 Result overview (emergency lighting)



General
 Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot. centre) : 2.65 m
 Maximum I : 130 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 1.72m x 8.49m (6 x 29 pts), Height = 0.00m			
1	2.61 lx >= 0.5 lx	13.59 lx	1: 5.20 >= 1 : 40



Type No.\Make

Whitcroft Lighting			
3	2E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	

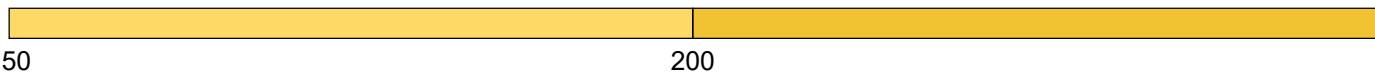
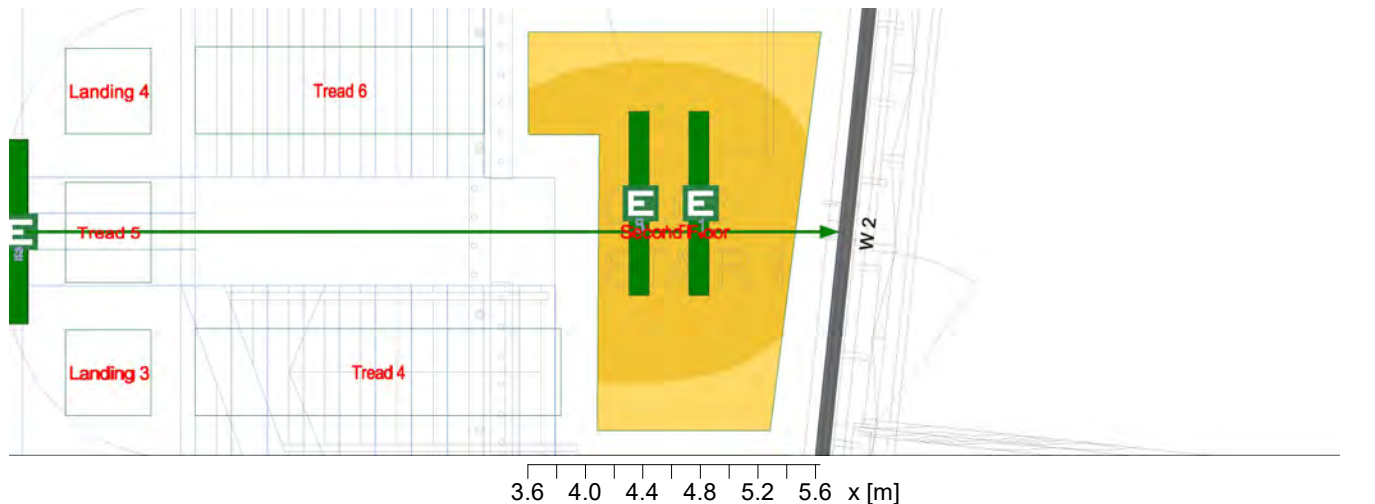
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8 Stairs

8.1 Summary, Stairs

8.1.1 Result overview, Ground Floor



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	-0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	220 lx
Minimum illuminance	E_{min}	186 lx
Maximum illuminance	E_{max}	253 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.19 (0.84)
Diversity U_d	E_{min}/E_{max}	1:1.36 (0.74)

Type No. Make

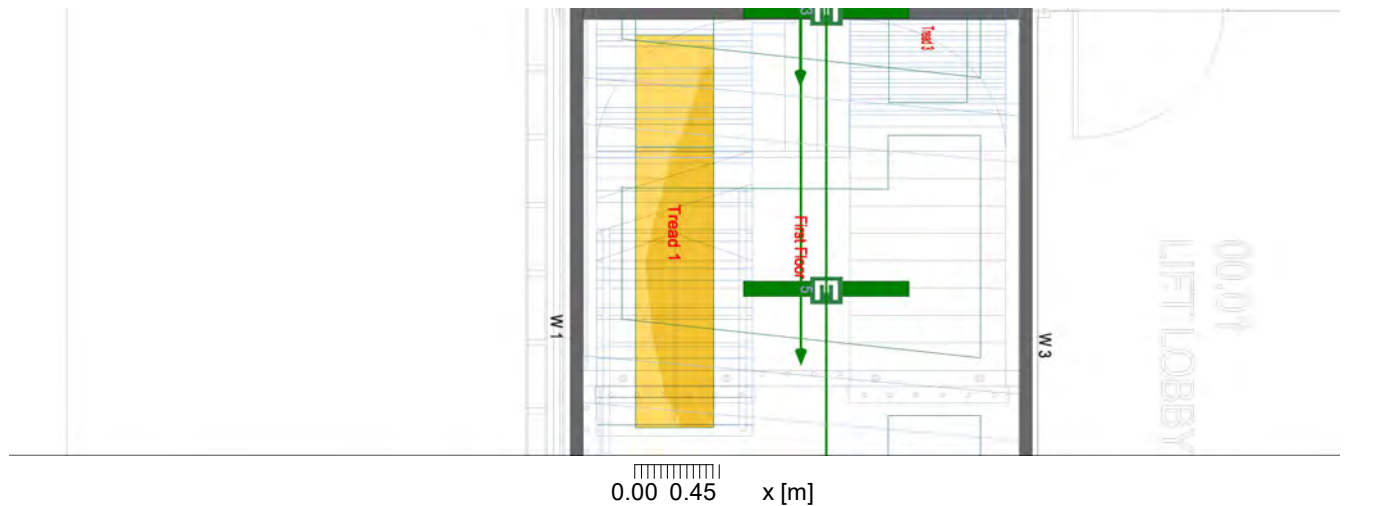
3 5E x	Whitecroft Lighting	
	Order No.	: ACH64K -- Emergency Lighting --
	Luminaire name	: ACL INDUSTRY
	Equipment	: 1 x LED 46 W / 6425 lm
	Emergency	: 433 lm (6.7 %)
Maintenance factor: 0.81		

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.2 Result overview, Tread 1



150 200
 Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

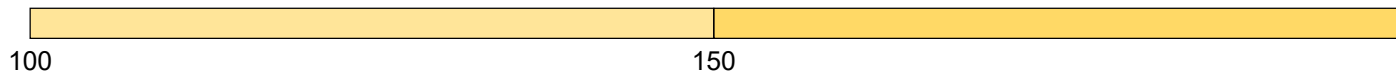
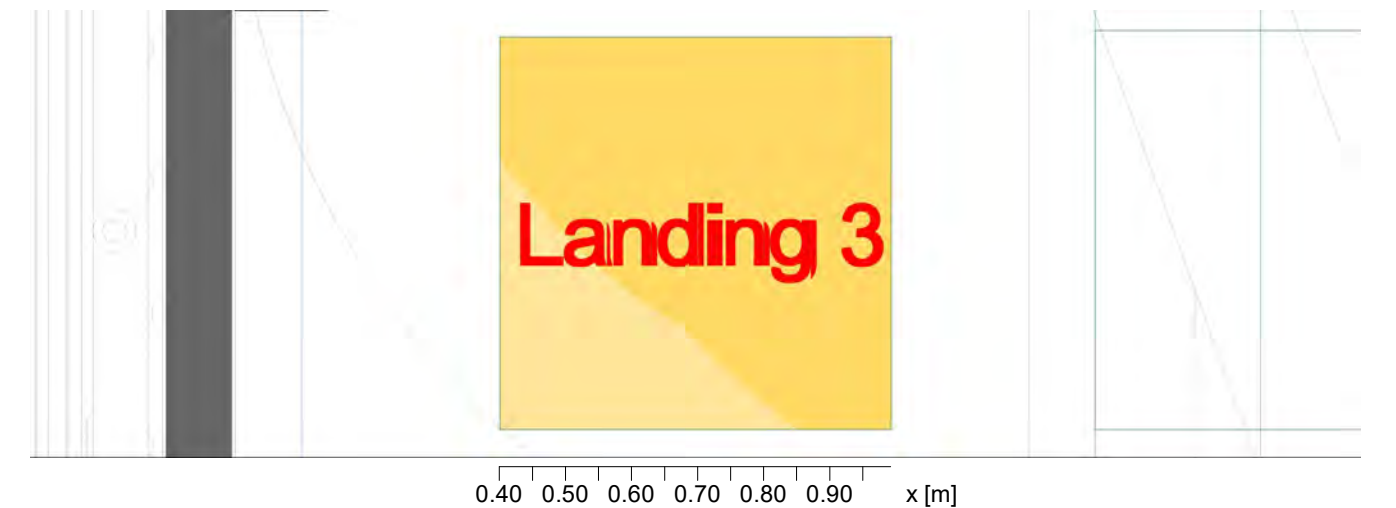
Average illuminance	$\bar{E}_m$	206 lx
Minimum illuminance	E_{min}	174 lx
Maximum illuminance	E_{max}	243 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.19 (0.84)
Diversity U_d	E_{min}/E_{max}	1:1.4 (0.72)

Type No.\Make

3	5E x	Whitecroft Lighting	
		Order No.	: ACH64K -- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY
		Equipment	: 1 x LED 46 W / 6425 lm
		Emergency	: 433 lm (6.7 %)
		Maintenance factor:	0.81

8.1 Summary, Stairs

8.1.3 Result overview, Landing 1



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	1.82 m
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	165 lx
Minimum illuminance	E_{min}	141 lx
Maximum illuminance	E_{max}	190 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.17 (0.86)
Diversity U_d	E_{min}/E_{max}	1:1.34 (0.74)

Type No.\Make

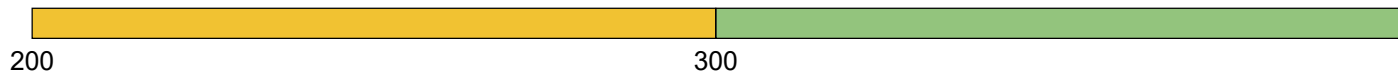
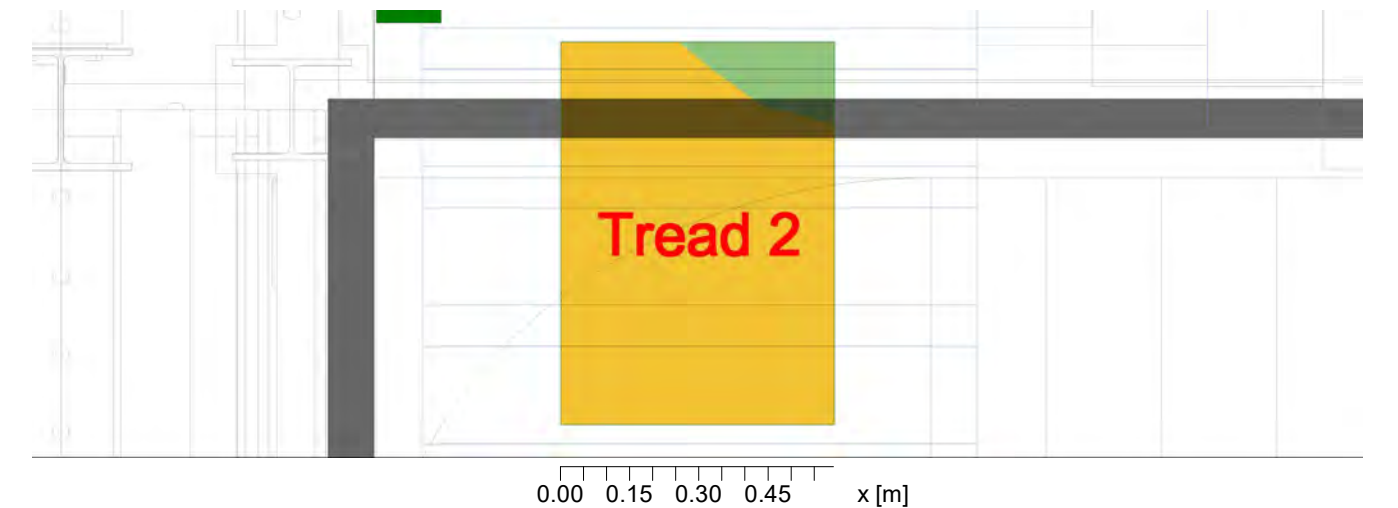
Whitcroft Lighting			
3	5E x	Order No.	: ACH64K -- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY
		Equipment	: 1 x LED 46 W / 6425 lm
		Emergency	: 433 lm (6.7 %)
		Maintenance factor:	0.81

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.4 Result overview, Tread 2



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	249 lx
Minimum illuminance	E_{min}	209 lx
Maximum illuminance	E_{max}	292 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.19 (0.84)
Diversity U_d	E_{min}/E_{max}	1:1.39 (0.72)

Type No.\Make

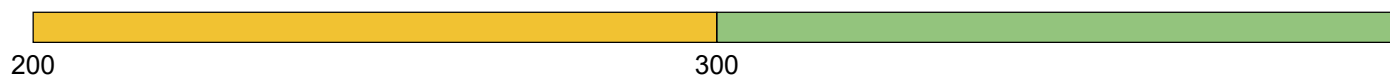
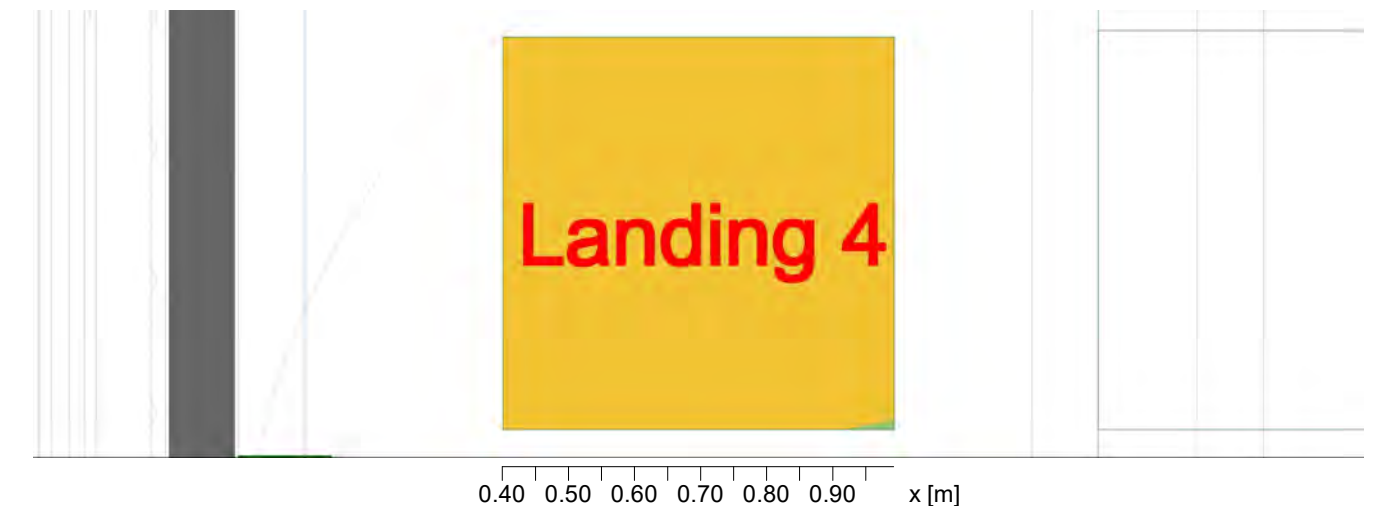
Whitecroft Lighting	
3 5E x	Order No. : ACH64K -- Emergency Lighting --
	Luminaire name : ACL INDUSTRY
	Equipment : 1 x LED 46 W / 6425 lm
	Emergency : 433 lm (6.7 %)
	Maintenance factor: 0.81

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.5 Result overview, Landing 2



Illuminance [lx]

General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 2.49 m
 see luminaires / maintenance plan

Total luminous flux
 Total power
 Total power per area (19.39 m²)

32125 lm
 230 W
 11.86 W/m²

Illuminance

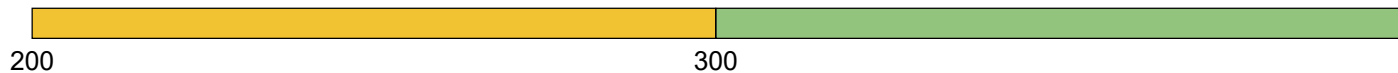
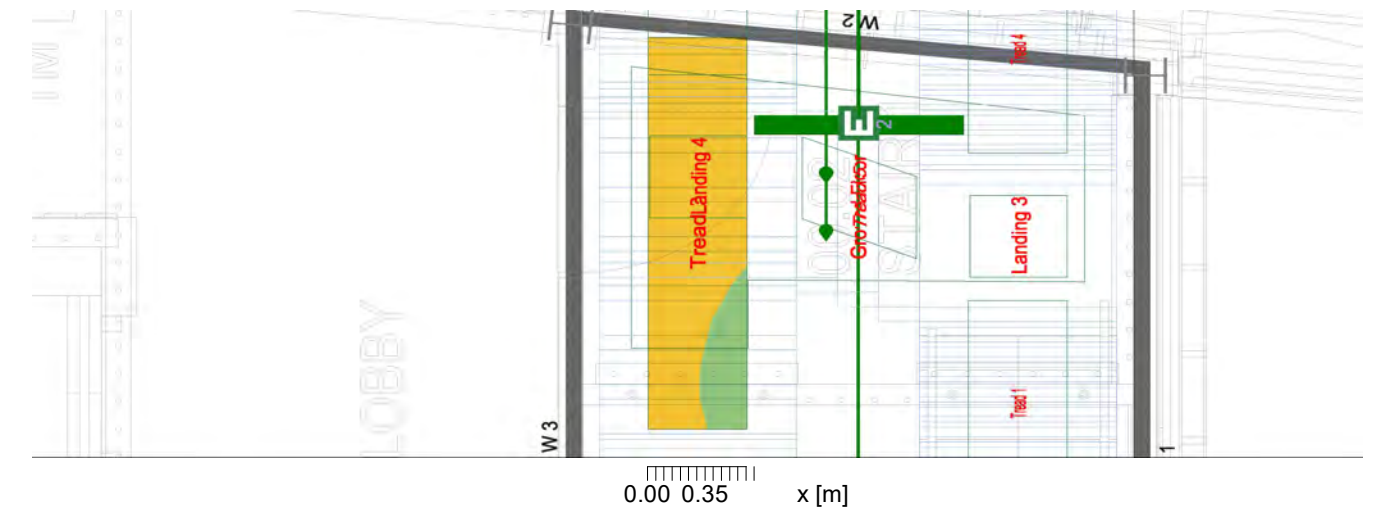
Average illuminance	$\bar{E}_m$	237 lx
Minimum illuminance	E_{min}	203 lx
Maximum illuminance	E_{max}	274 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.17 (0.86)
Diversity U_d	E_{min}/E_{max}	1:1.35 (0.74)

Type No. Make

3	5E x	Whitecroft Lighting	
		Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	
		Maintenance factor: 0.81	

8.1 Summary, Stairs

8.1.6 Result overview, Tread 3



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	258 lx
Minimum illuminance	E_{min}	211 lx
Maximum illuminance	E_{max}	327 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.22 (0.82)
Diversity U_d	E_{min}/E_{max}	1:1.55 (0.65)

Type No.\Make

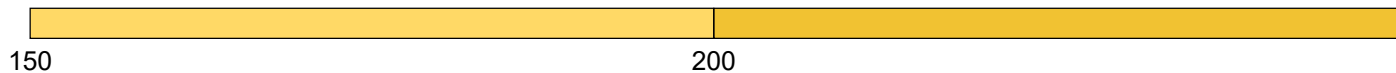
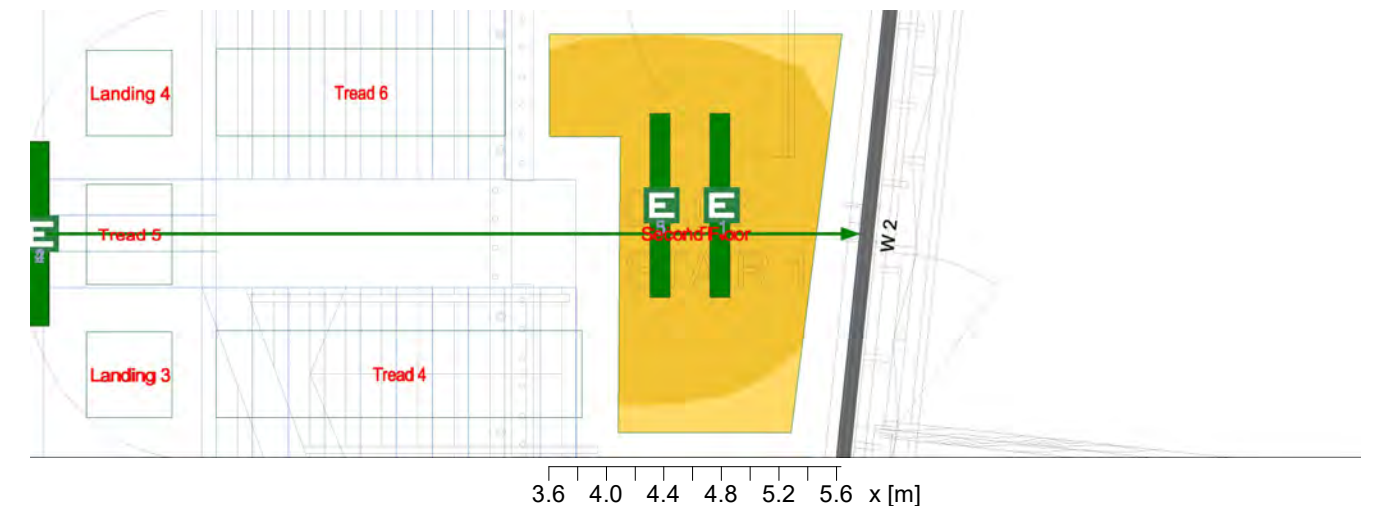
3	5E x	Whitecroft Lighting	
		Order No.	: ACH64K -- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY
		Equipment	: 1 x LED 46 W / 6425 lm
		Emergency	: 433 lm (6.7 %)
		Maintenance factor:	0.81

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.7 Result overview, First Floor



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	3.99 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	236 lx
Minimum illuminance	E_{min}	197 lx
Maximum illuminance	E_{max}	274 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.2 (0.84)
Diversity U_d	E_{min}/E_{max}	1:1.39 (0.72)

Type No.Make

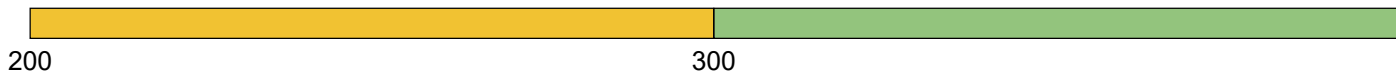
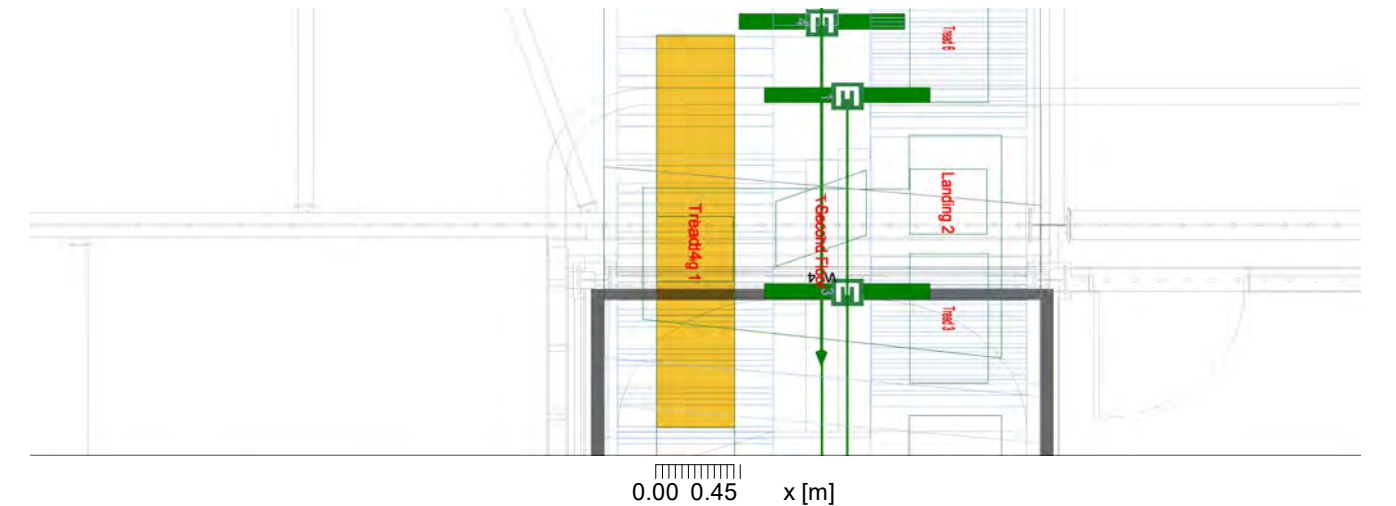
3	5E x	Whitecroft Lighting
		Order No. : ACH64K -- Emergency Lighting --
		Luminaire name : ACL INDUSTRY
		Equipment : 1 x LED 46 W / 6425 lm
		Emergency : 433 lm (6.7 %)
		Maintenance factor: 0.81

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.8 Result overview, Tread 4



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

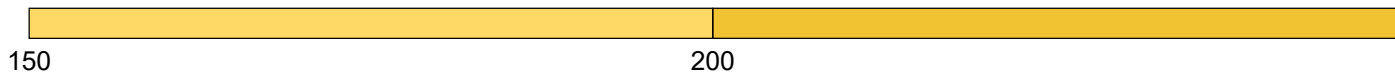
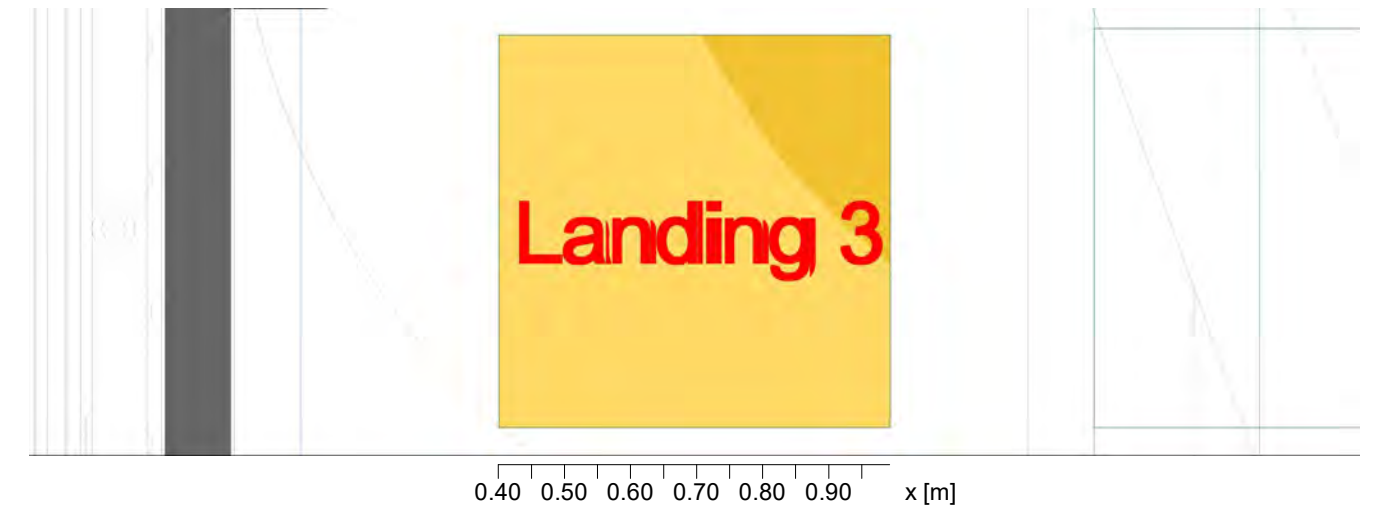
Average illuminance	$\bar{E}_m$	226 lx
Minimum illuminance	E_{min}	205 lx
Maximum illuminance	E_{max}	258 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.1 (0.91)
Diversity U_d	E_{min}/E_{max}	1:1.26 (0.8)

Type No.\Make

3	5E x	Whitecroft Lighting	
		Order No.	: ACH64K -- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY
		Equipment	: 1 x LED 46 W / 6425 lm
		Emergency	: 433 lm (6.7 %)
		Maintenance factor:	0.81

8.1 Summary, Stairs

8.1.9 Result overview, Landing 3



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	5.81 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	184 lx
Minimum illuminance	E_{min}	165 lx
Maximum illuminance	E_{max}	204 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.11 (0.9)
Diversity U_d	E_{min}/E_{max}	1:1.23 (0.81)

Type No.\Make

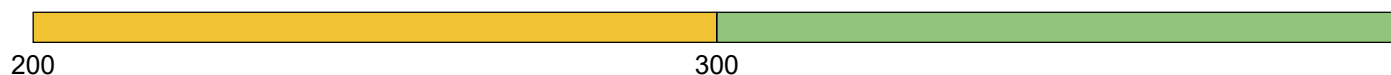
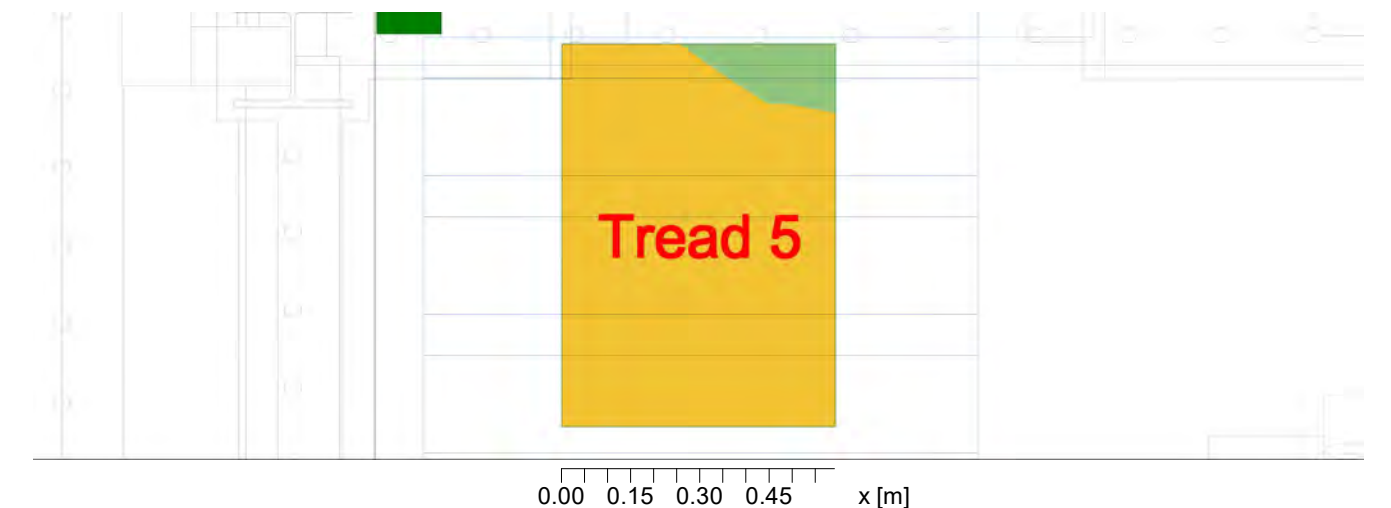
3	5E x	Whitcroft Lighting	
		Order No.	: ACH64K -- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY
		Equipment	: 1 x LED 46 W / 6425 lm
		Emergency	: 433 lm (6.7 %)
		Maintenance factor: 0.81	

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.10 Result overview, Tread 5



Illuminance [lx]

General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 see luminaires / maintenance plan

Total luminous flux 32125 lm
 Total power 230 W
 Total power per area (19.39 m²) 11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	246 lx
Minimum illuminance	E_{min}	206 lx
Maximum illuminance	E_{max}	289 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.2 (0.84)
Diversity U_d	E_{min}/E_{max}	1:1.4 (0.71)

Type No. \ Make

Whitecroft Lighting

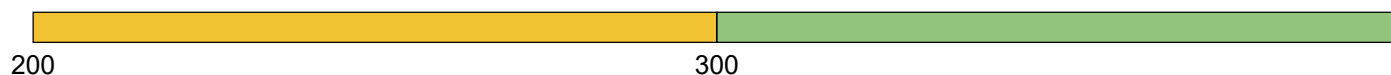
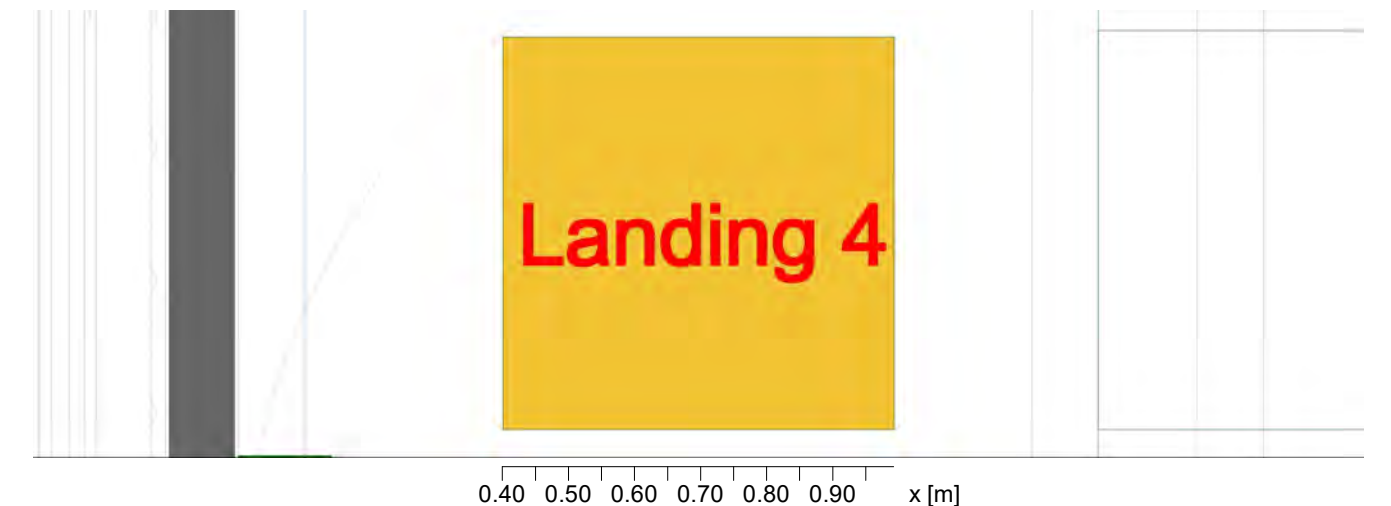
3	5E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	
		Maintenance factor: 0.81	

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.11 Result overview, Landing 4



General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 6.47 m
 see luminaires / maintenance plan

Total luminous flux
 Total power
 Total power per area (19.39 m²)

32125 lm
 230 W
 11.86 W/m²

Illuminance

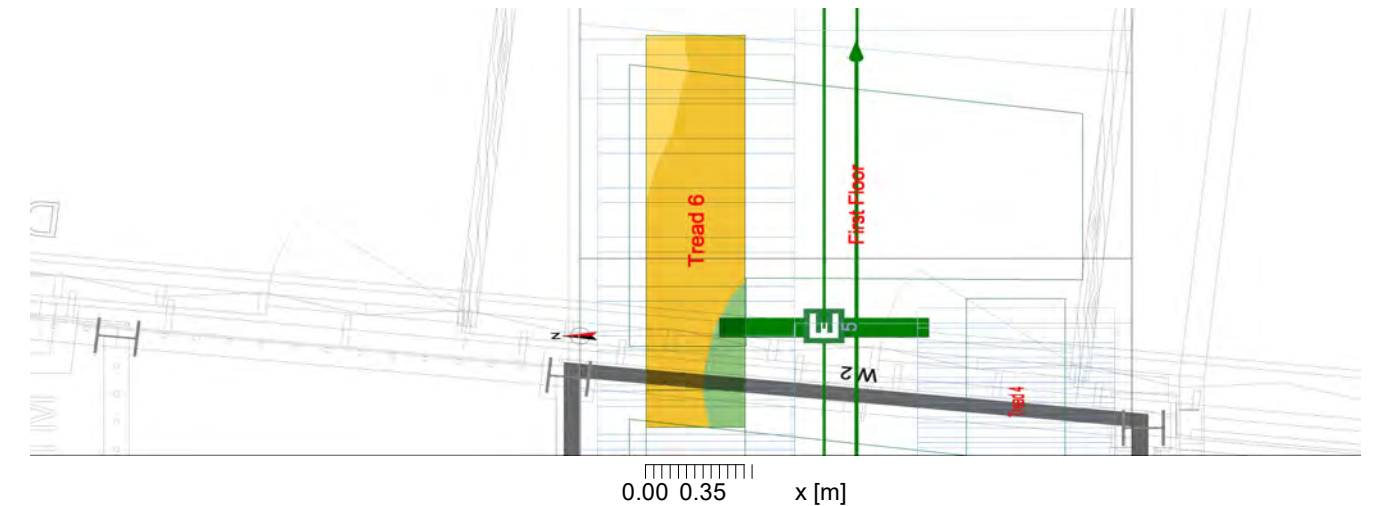
Average illuminance	$\bar{E}_m$	237 lx
Minimum illuminance	E_{min}	202 lx
Maximum illuminance	E_{max}	273 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.17 (0.85)
Diversity U_d	E_{min}/E_{max}	1:1.35 (0.74)

Type No. \ Make

Whitcroft Lighting			
3	5E x	Order No.	: ACH64K -- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY
		Equipment	: 1 x LED 46 W / 6425 lm
		Emergency	: 433 lm (6.7 %)
		Maintenance factor:	0.81

8.1 Summary, Stairs

8.1.12 Result overview, Tread 6



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	see luminaires / maintenance plan
Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	245 lx
Minimum illuminance	E_{min}	194 lx
Maximum illuminance	E_{max}	320 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.26 (0.79)
Diversity U_d	E_{min}/E_{max}	1:1.65 (0.61)

Type No.\Make

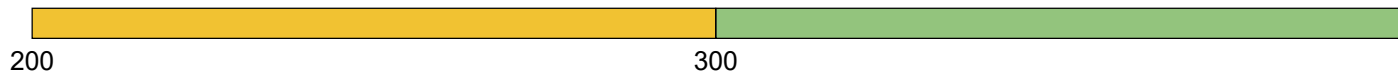
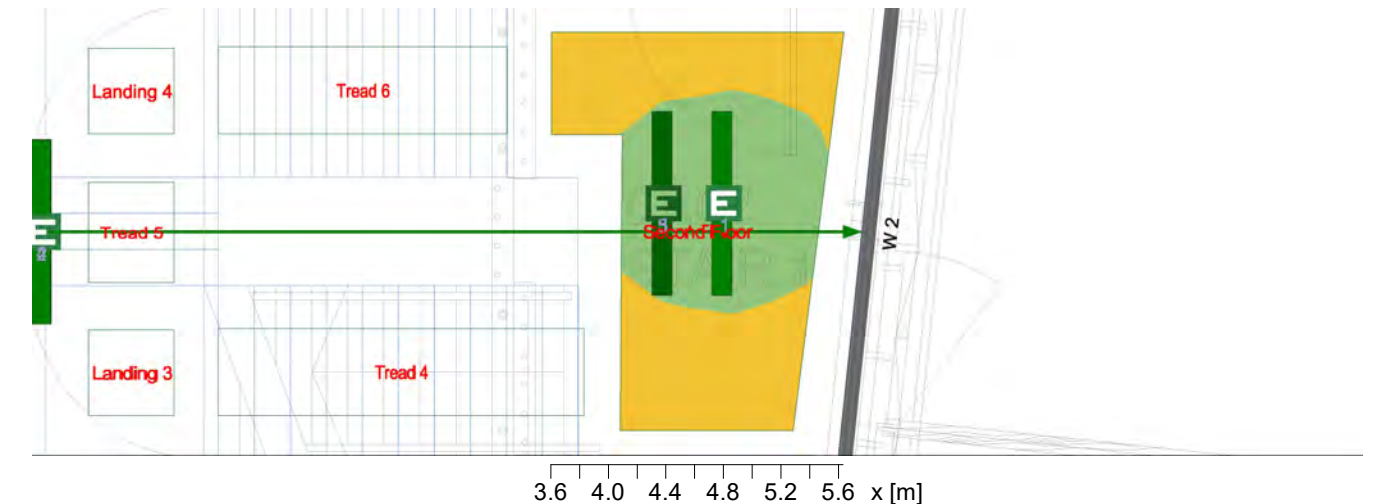
Whitecroft Lighting	
3	5E x
Order No.	: ACH64K -- Emergency Lighting --
Luminaire name	: ACL INDUSTRY
Equipment	: 1 x LED 46 W / 6425 lm
Emergency	: 433 lm (6.7 %)
Maintenance factor:	0.81

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8.1 Summary, Stairs

8.1.13 Result overview, Second Floor



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	7.98 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	32125 lm
Total power	230 W
Total power per area (19.39 m²)	11.86 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	296 lx
Minimum illuminance	E_{min}	224 lx
Maximum illuminance	E_{max}	356 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.32 (0.76)
Diversity U_d	E_{min}/E_{max}	1:1.59 (0.63)

Type No. \ Make

Whitcroft Lighting			
3	5E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	
		Maintenance factor: 0.81	

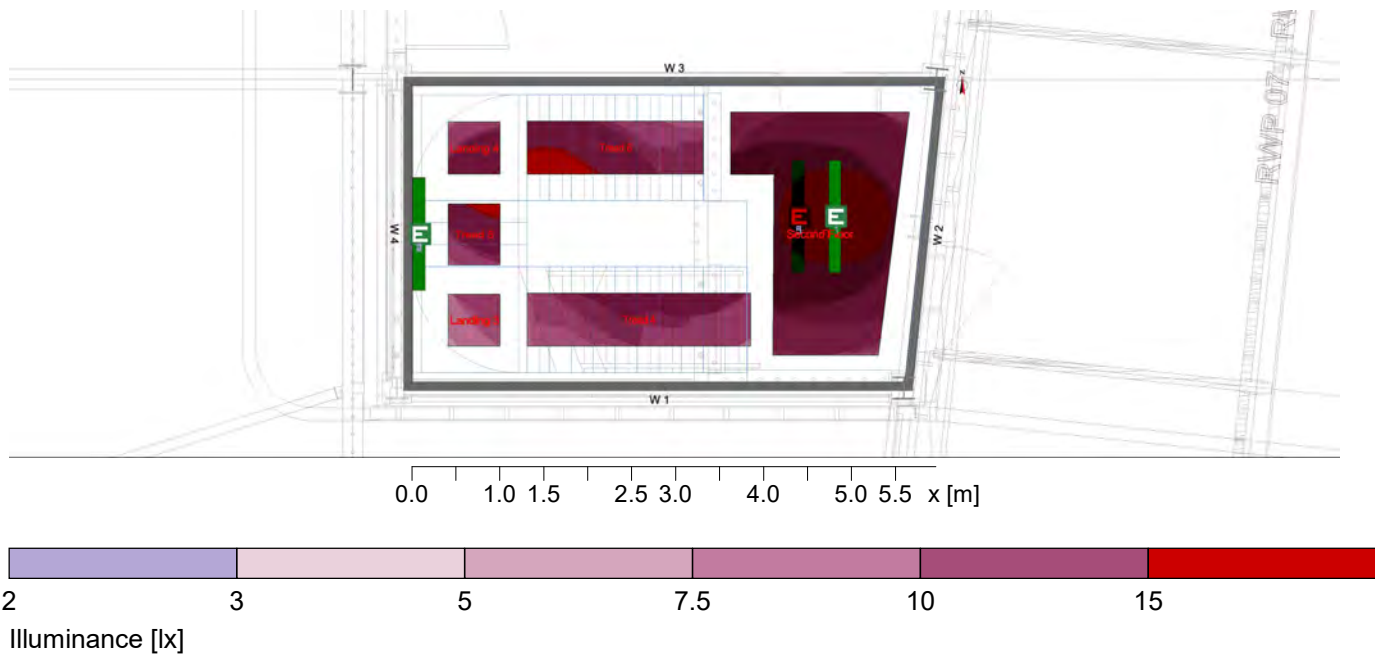
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8 Stairs

8.2 Summary, Stairs

8.2.1.1 Result overview (emergency lighting)

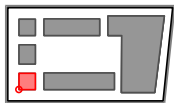
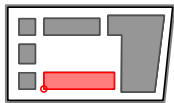
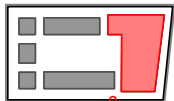


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot. centre) -variable-
 Maximum I : 130 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
7 Ground Floor			
Calculation field: 2.03m x 2.76m (4 x 6 pts), Height = 0.00m			
1	6.63 lx >= 1 lx	12.68 lx	1: 1.91 >= 1 : 40
8 Tread 1			
Calculation field: 3.02m x 0.6m (6 x 2 pts), Height = 1.81m			
2	2.97 lx >= 1 lx	13.03 lx	1: 4.38 >= 1 : 40
9 Landing 1			
Calculation field: 0.59m x 0.59m (2 x 2 pts), Height = 1.82m			
3	4.60 lx >= 1 lx	9.81 lx	1: 2.13 >= 1 : 40



Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : GROUND FLOOR
 Project number : 33401
 Date : 14.10.2025



8 Stairs

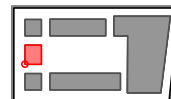
8.2 Summary, Stairs

8.2.1.1 Result overview (emergency lighting)

10 Tread 2

Calculation field: 0.59m x 0.83m (2 x 2 pts), Height = 2.03m

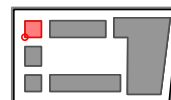
4	7.32 lx	16.54 lx	1: 2.26
	>= 1 lx		>= 1 : 40



11 Landing 2

Calculation field: 0.59m x 0.59m (2 x 2 pts), Height = 2.49m

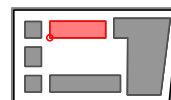
5	7.05 lx	15.08 lx	1: 2.14
	>= 1 lx		>= 1 : 40



12 Tread 3

Calculation field: 2.38m x 0.6m (6 x 2 pts), Height = 2.69m

6	8.25 lx	18.80 lx	1: 2.28
	>= 1 lx		>= 1 : 40



13 First Floor

Calculation field: 2.03m x 2.76m (4 x 6 pts), Height = 3.99m

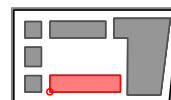
7	6.73 lx	13.02 lx	1: 1.93
	>= 1 lx		>= 1 : 40



14 Tread 4

Calculation field: 3.02m x 0.6m (6 x 2 pts), Height = 5.80m

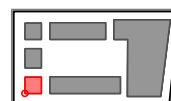
8	7.15 lx	13.22 lx	1: 1.85
	>= 1 lx		>= 1 : 40



15 Landing 3

Calculation field: 0.59m x 0.59m (2 x 2 pts), Height = 5.81m

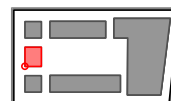
9	5.42 lx	9.89 lx	1: 1.82
	>= 1 lx		>= 1 : 40



16 Tread 5

Calculation field: 0.59m x 0.83m (2 x 2 pts), Height = 6.02m

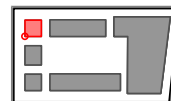
10	6.74 lx	16.20 lx	1: 2.40
	>= 1 lx		>= 1 : 40



17 Landing 4

Calculation field: 0.59m x 0.59m (2 x 2 pts), Height = 6.48m

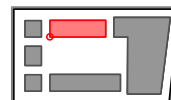
11	6.69 lx	14.71 lx	1: 2.20
	>= 1 lx		>= 1 : 40



18 Tread 6

Calculation field: 2.38m x 0.6m (6 x 2 pts), Height = 6.68m

12	7.19 lx	18.36 lx	1: 2.55
	>= 1 lx		>= 1 : 40



Object : Prestwich Village Master Plan - Plot G MSCP
Installation : GROUND FLOOR
Project number : 33401
Date : 14.10.2025

RELUX®

8 Stairs

8.2 Summary, Stairs

8.2.1.1 Result overview (emergency lighting)

19 Second Floor

Calculation field: 2.03m x 2.76m (4 x 6 pts), Height = 7.98m

13	7.13 lx	16.68 lx	1: 2.34
	>= 1 lx		>= 1 : 40



Type No.\Make

Whitecroft Lighting

3	5E x	Order No.	: ACH64K	-- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY	
		Equipment	: 1 x LED 46 W / 6425 lm	
		Emergency	: 433 lm (6.7 %)	

First Floor Lighting Calculations

Prestwich Village Master Plan - Plot G MSCP

Installation : FIRST FLOOR

Project number : 33401

Customer :

Processed by : BS

Date : 14.10.2025

Project description:

Design parameters adhered to:

Reflectance: 70/50/20 (except plant rooms: 50/30/20 and parking area: 30)

Maintenance Factors: Calculated

Ceiling Heights: Mixed

Rev P02

JM - 14/10/2025

Updated to incorporate architects comments and client roof variation.

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

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

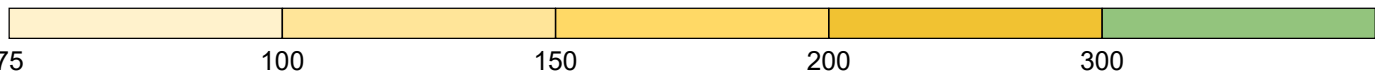
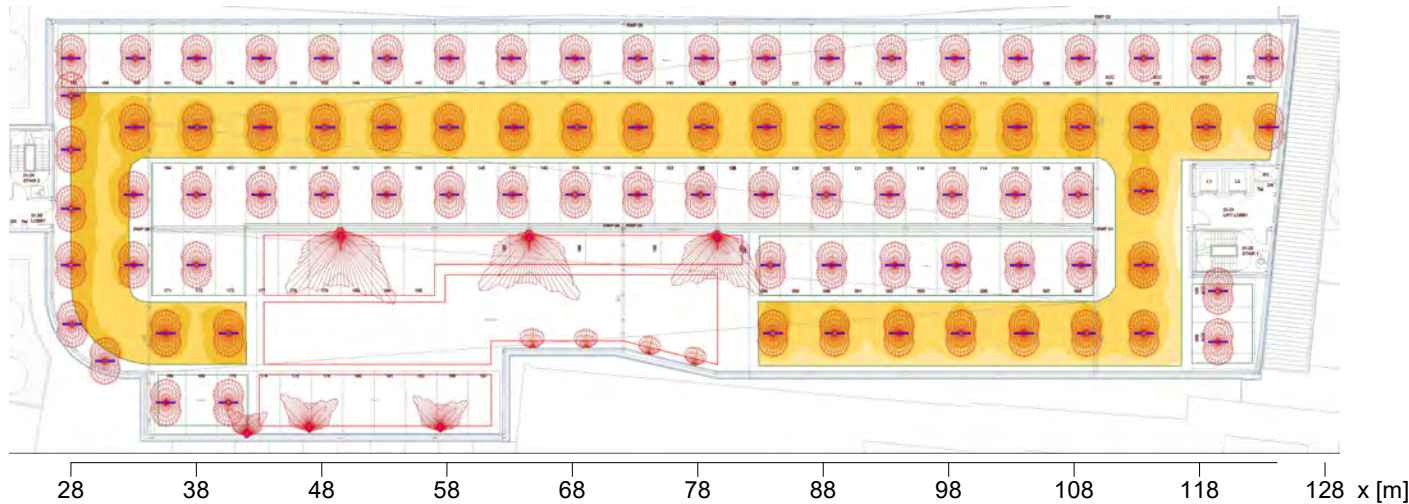
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2 Parking

2.2 Summary, Parking

2.2.1 Result overview, Roadway Internal



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	196 lx
Minimum illuminance	E_{min}	81 lx
Maximum illuminance	E_{max}	308 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.42 (0.41)
Diversity U_d	E_{min}/E_{max}	1:3.79 (0.26)

Type No.\Make

1	4 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2 Parking

2.2 Summary, Parking

2.2.1 Result overview, Roadway Internal

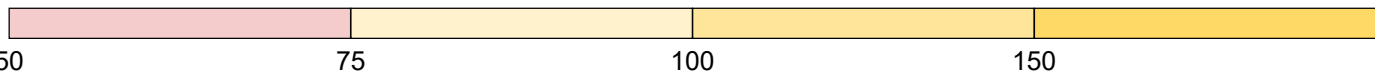
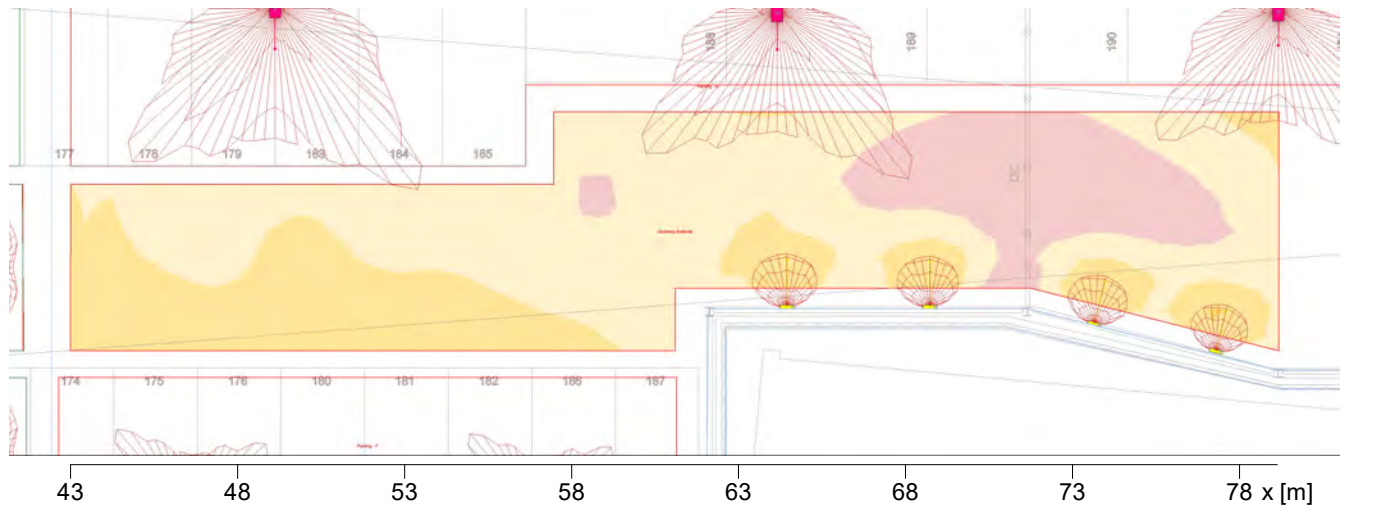
3 84E x 	Order No.	: ACH74K
	Luminaire name	: ACL INDUSTRY
	Equipment	: 1 x LED 49 W / 7490 lm
	Emergency	: 433 lm (5.8 %)
	Maintenance factor:	0.81
4 6 x 	Order No.	: MIMH44KA
	Luminaire name	: MISTRAL MIDI - AREA OPTIC
	Equipment	: 1 x LED 96 W / 14297.7 lm
	Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.2 Result overview, Roadway External



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	92 lx
Minimum illuminance	E_{min}	63 lx
Maximum illuminance	E_{max}	156 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.46 (0.68)
Diversity U_d	E_{min}/E_{max}	1:2.49 (0.4)

Type No.\Make

1 4 x 	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.2 Result overview, Roadway External

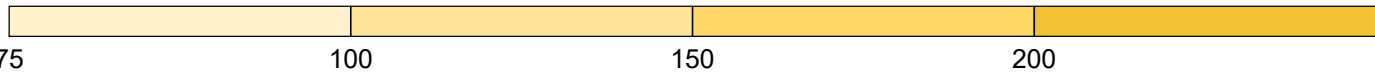
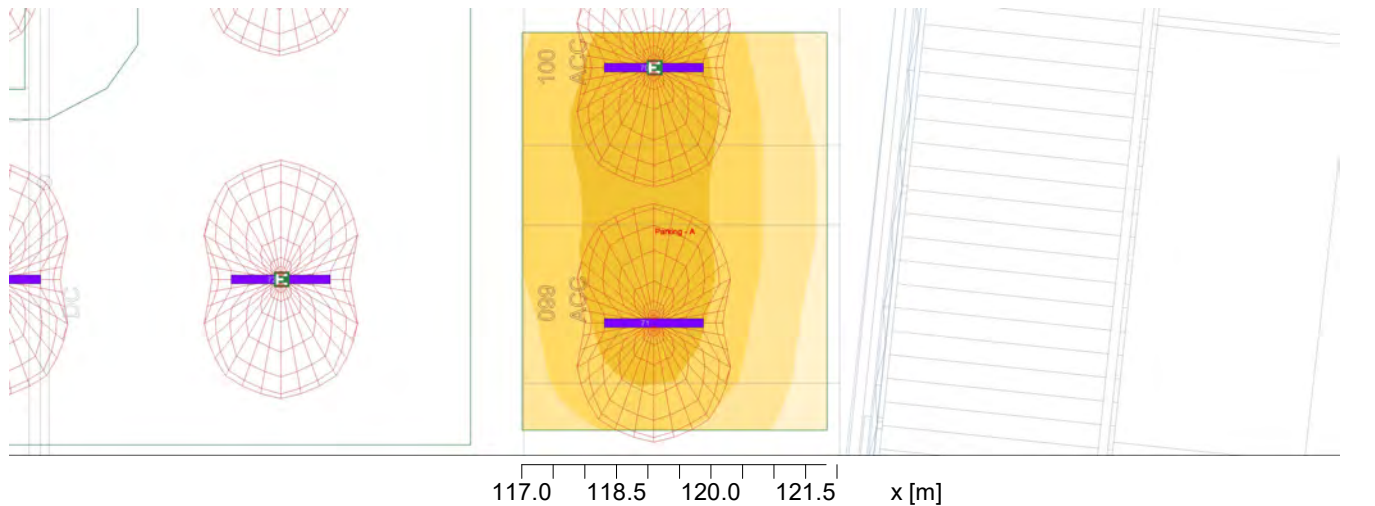
	3	84E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	4	6 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.3 Result overview, Parking - A



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	176 lx
Minimum illuminance	E_{min}	81 lx
Maximum illuminance	E_{max}	246 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.17 (0.46)
Diversity U_d	E_{min}/E_{max}	1:3.03 (0.33)

Type No.\Make

1 4 x	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.3 Result overview, Parking - A

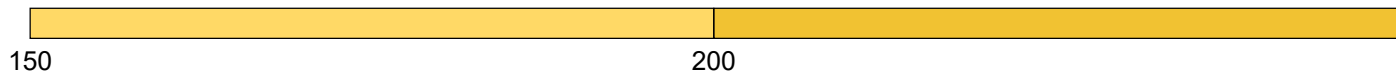
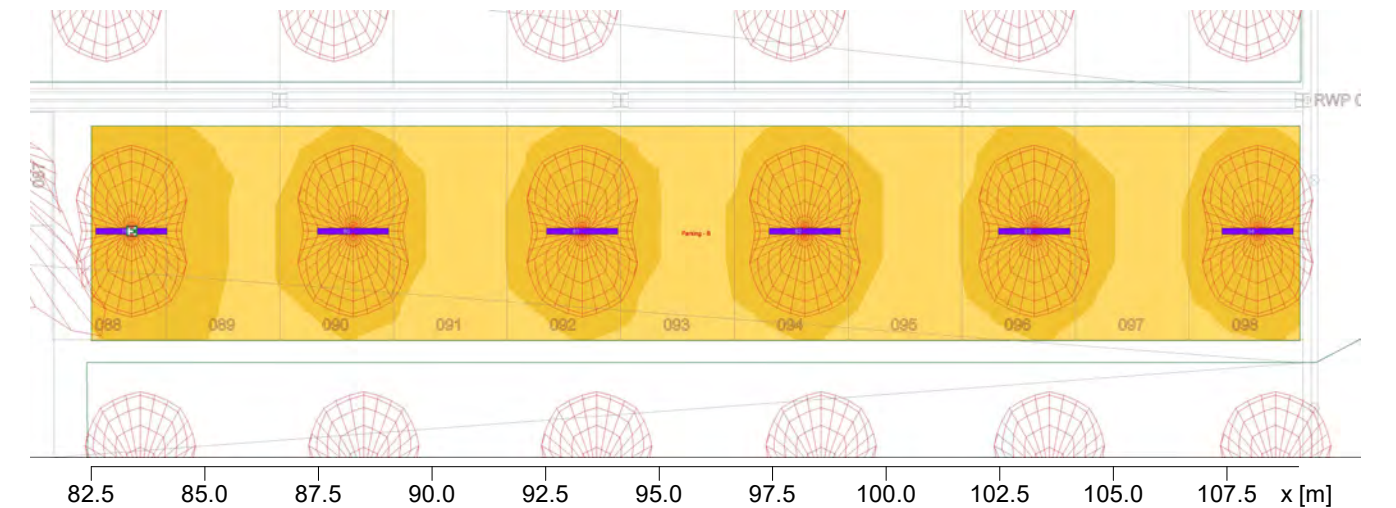
	3	84E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	4	6 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.4 Result overview, Parking - B



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	212 lx
Minimum illuminance	E_{min}	178 lx
Maximum illuminance	E_{max}	275 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.2 (0.84)
Diversity U_d	E_{min}/E_{max}	1:1.55 (0.64)

Type No.\Make

1	4 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.4 Result overview, Parking - B

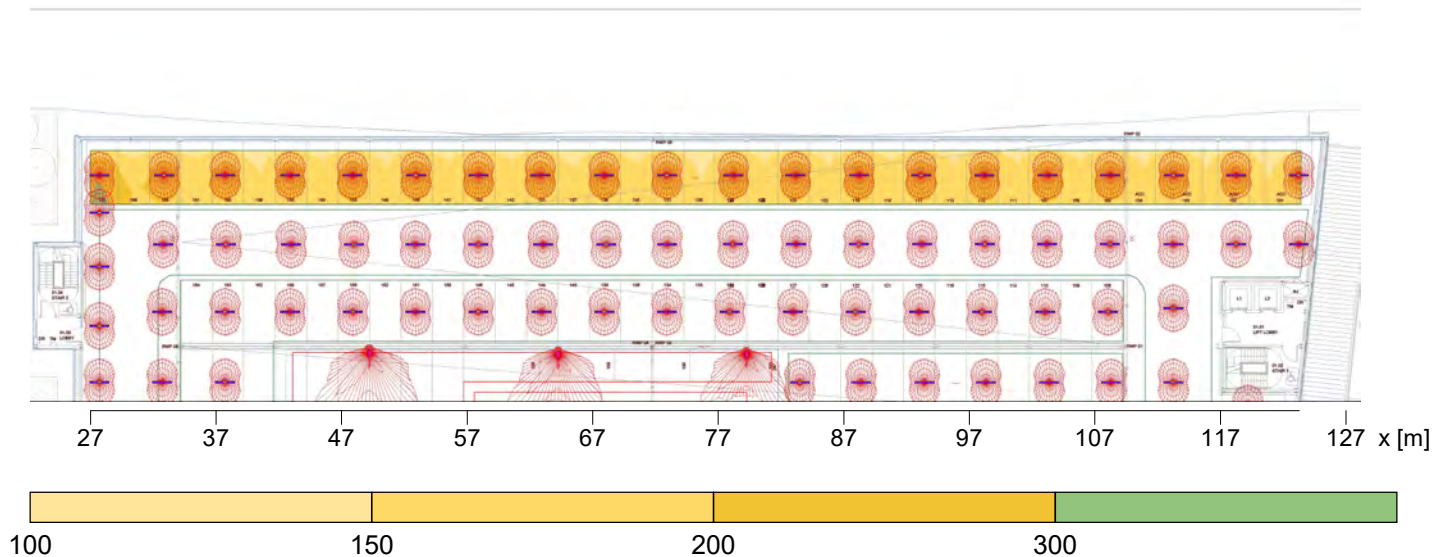
3 84E x 	Order No.	: ACH74K
	Luminaire name	: ACL INDUSTRY
	Equipment	: 1 x LED 49 W / 7490 lm
	Emergency	: 433 lm (5.8 %)
	Maintenance factor:	0.81
4 6 x 	Order No.	: MIMH44KA
	Luminaire name	: MISTRAL MIDI - AREA OPTIC
	Equipment	: 1 x LED 96 W / 14297.7 lm
	Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.5 Result overview, Parking - C



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	188 lx
Minimum illuminance	E_{min}	133 lx
Maximum illuminance	E_{max}	316 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.41 (0.71)
Diversity U_d	E_{min}/E_{max}	1:2.37 (0.42)

Type No. Make

1 4 x	Whitecroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.5 Result overview, Parking - C

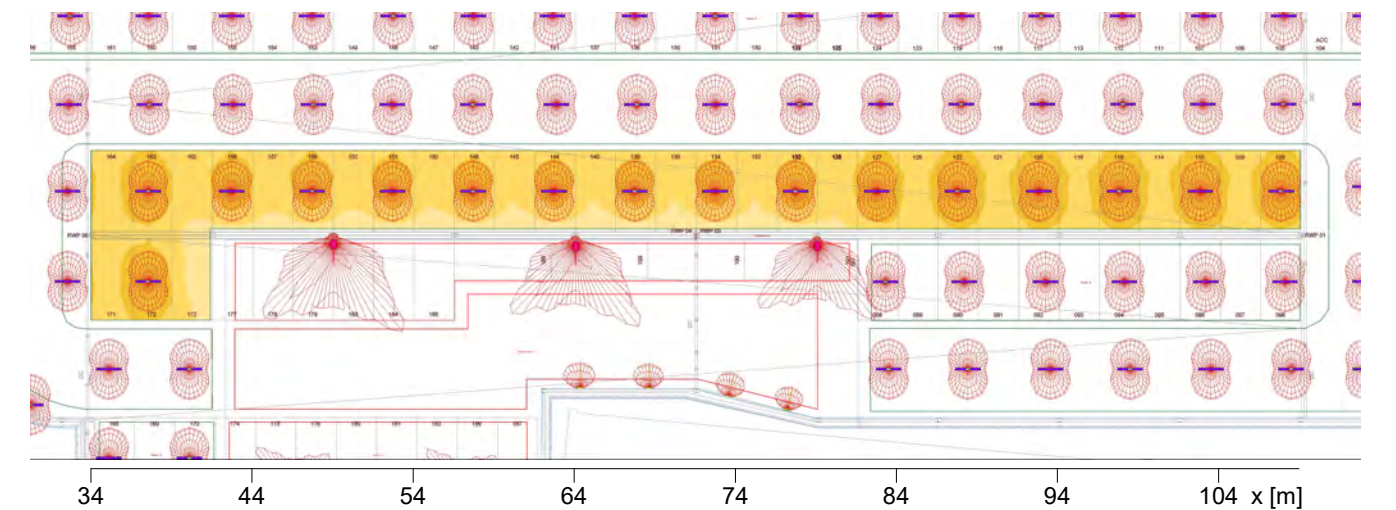
3 84E x 	Order No.	: ACH74K
	Luminaire name	: ACL INDUSTRY
	Equipment	: 1 x LED 49 W / 7490 lm
	Emergency	: 433 lm (5.8 %)
	Maintenance factor:	0.81
4 6 x 	Order No.	: MIMH44KA
	Luminaire name	: MISTRAL MIDI - AREA OPTIC
	Equipment	: 1 x LED 96 W / 14297.7 lm
	Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.6 Result overview, Parking - D



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	190 lx
Minimum illuminance	E_{min}	110 lx
Maximum illuminance	E_{max}	266 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.73 (0.58)
Diversity U_d	E_{min}/E_{max}	1:2.41 (0.41)

Type No.\Make

1 4 x	Whitcroft Lighting
	Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.6 Result overview, Parking - D

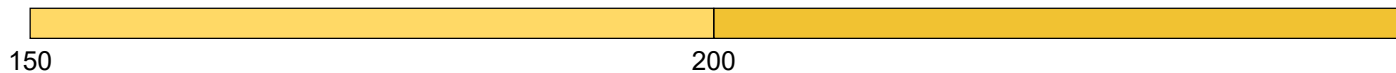
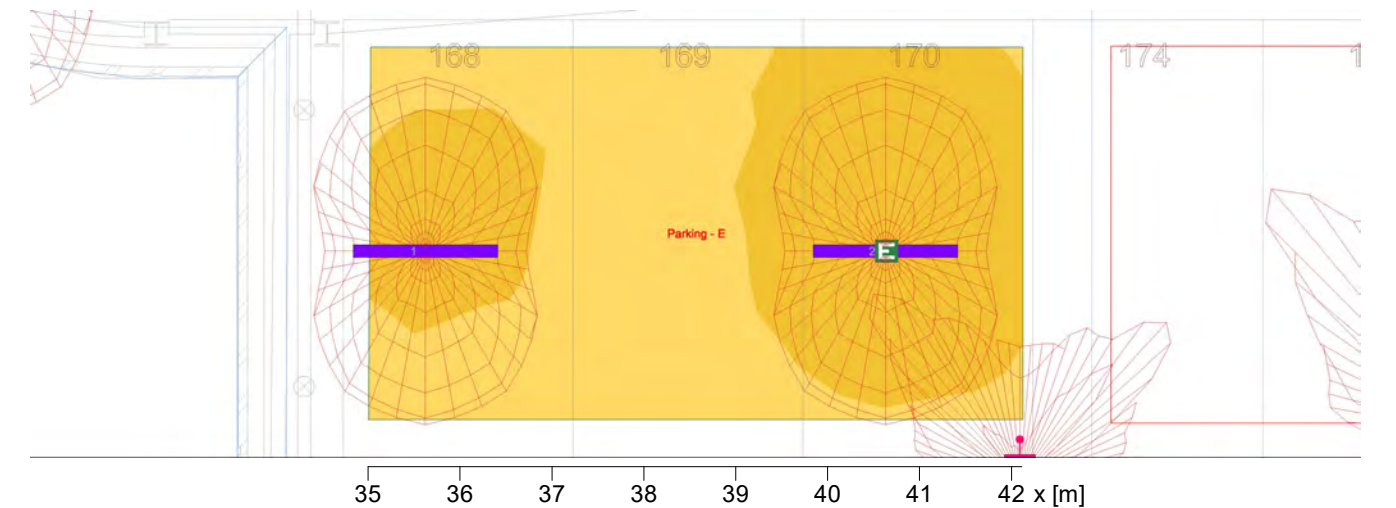
	3	84E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	4	6 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.7 Result overview, Parking - E



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	205 lx
Minimum illuminance	E_{min}	151 lx
Maximum illuminance	E_{max}	269 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.36 (0.74)
Diversity U_d	E_{min}/E_{max}	1:1.78 (0.56)

Type No.\Make

Whitecroft Lighting	
1	4 x Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
	Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.7 Result overview, Parking - E

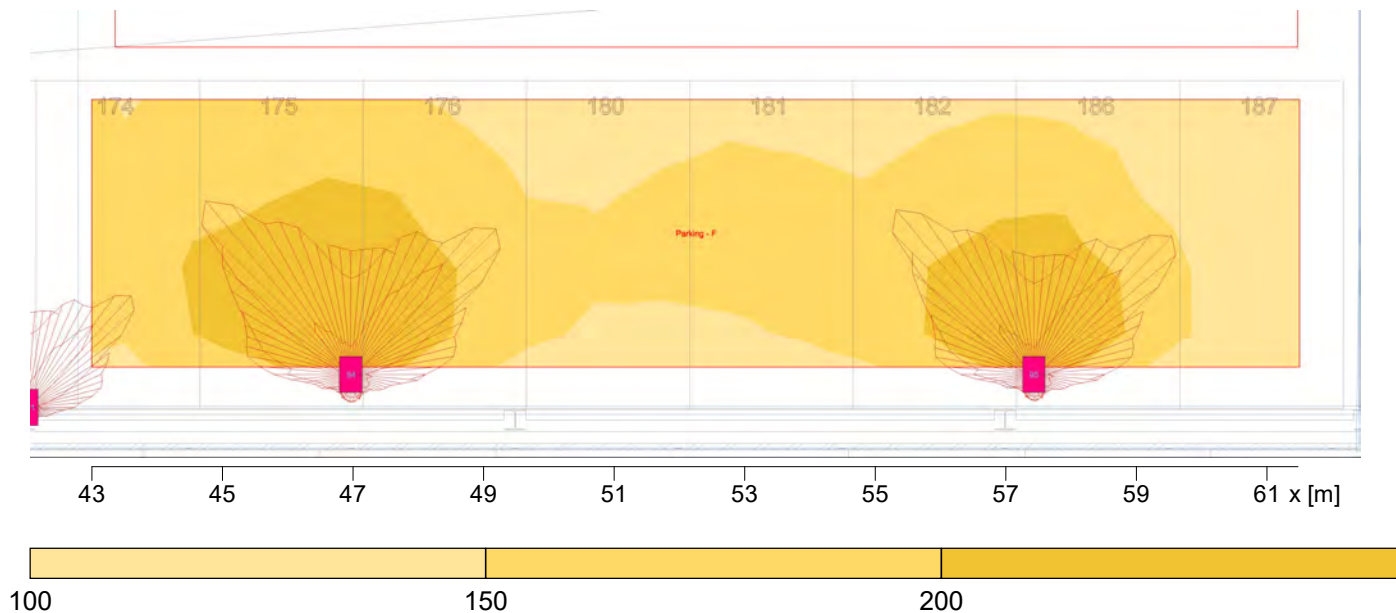
3 84E x 	Order No.	: ACH74K
	Luminaire name	: ACL INDUSTRY
	Equipment	: 1 x LED 49 W / 7490 lm
	Emergency	: 433 lm (5.8 %)
	Maintenance factor:	0.81
4 6 x 	Order No.	: MIMH44KA
	Luminaire name	: MISTRAL MIDI - AREA OPTIC
	Equipment	: 1 x LED 96 W / 14297.7 lm
	Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.8 Result overview, Parking - F



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	172 lx
Minimum illuminance	E_{min}	100 lx
Maximum illuminance	E_{max}	256 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.71 (0.58)
Diversity U_d	E_{min}/E_{max}	1:2.55 (0.39)

Type No. \ Make

Whitcroft Lighting	
1	4 x
Order No. : K6H44KHB	
Luminaire name : KOLO IP65 HOOD	
Equipment : 1 x LED 14 W / 1008 lm	
Emergency : 200 lm (19.8 %)	
Maintenance factor: 0.75	

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
Date : 14.10.2025



2.2 Summary, Parking

2.2.8 Result overview, Parking - F

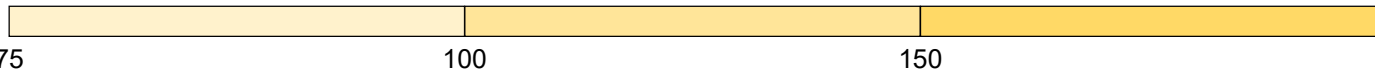
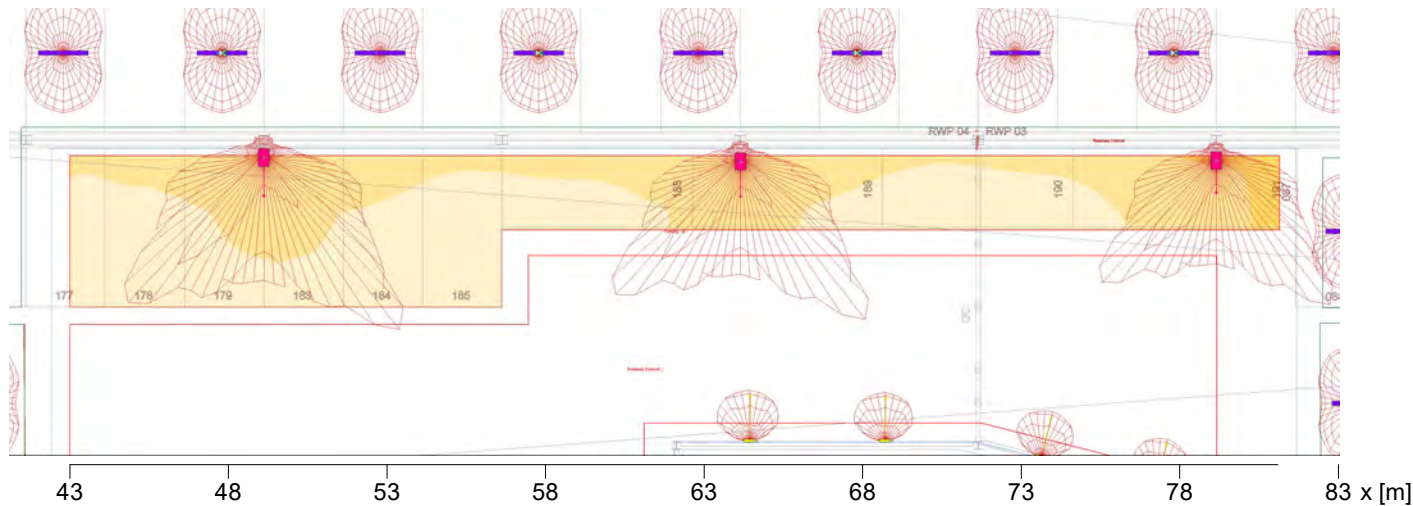
3 84E x 	Order No.	: ACH74K
	Luminaire name	: ACL INDUSTRY
	Equipment	: 1 x LED 49 W / 7490 lm
	Emergency	: 433 lm (5.8 %)
	Maintenance factor:	0.81
4 6 x 	Order No.	: MIMH44KA
	Luminaire name	: MISTRAL MIDI - AREA OPTIC
	Equipment	: 1 x LED 96 W / 14297.7 lm
	Maintenance factor:	0.92

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



2.2 Summary, Parking

2.2.9 Result overview, Parking - G



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	718978.125 lm
Total power	4748 W
Total power per area (6012.52 m²)	0.79 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	100 lx
Minimum illuminance	E_{min}	80 lx
Maximum illuminance	E_{max}	159 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.25 (0.8)
Diversity U_d	E_{min}/E_{max}	1:1.98 (0.51)

Type No.\Make

1	4 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
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2.2 Summary, Parking

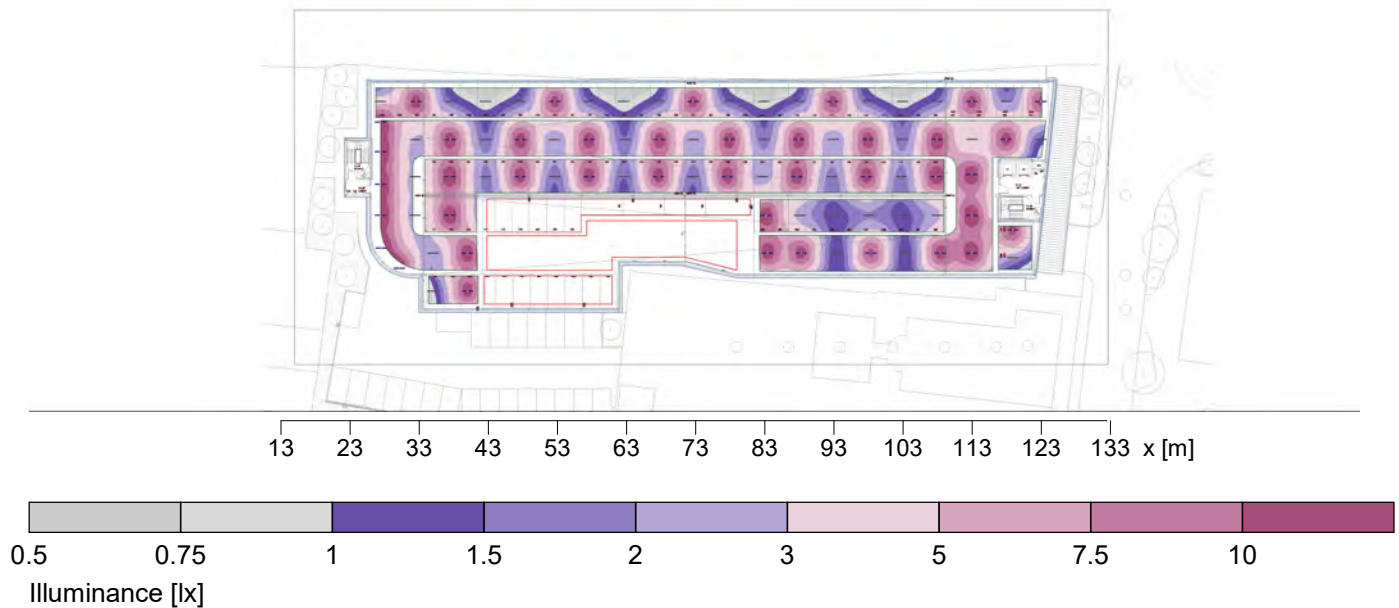
2.2.9 Result overview, Parking - G

	3	84E x	Order No.	: ACH74K
			Luminaire name	: ACL INDUSTRY
			Equipment	: 1 x LED 49 W / 7490 lm
			Emergency	: 433 lm (5.8 %)
			Maintenance factor:	0.81
	4	6 x	Order No.	: MIMH44KA
			Luminaire name	: MISTRAL MIDI - AREA OPTIC
			Equipment	: 1 x LED 96 W / 14297.7 lm
			Maintenance factor:	0.92

2 Parking

2.4 Summary, Parking

2.4.1.1 Result overview (emergency lighting)



General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.95 m
 Maximum I : 120 cd <= 900 cd

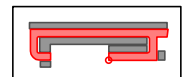
Anti panic area:

No.	Surface	Emin [lx]	Emax [lx]	Ud
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9 Roadway Internal

Calculation field: 96.19m x 21.74m (176 x 40 pts), Height = 0.00m

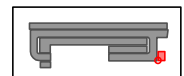
1		0.74 lx	13.29 lx	1: 18.06
		>= 0.5 lx		>= 1 : 40



10 Parking - A

Calculation field: 4.83m x 6.29m (9 x 12 pts), Height = 0.00m

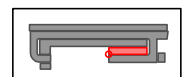
2		0.63 lx	10.57 lx	1: 16.80
		>= 0.5 lx		>= 1 : 40



11 Parking - B

Calculation field: 26.58m x 4.72m (26 x 4 pts), Height = 0.00m

3		1.28 lx	11.86 lx	1: 9.24
		>= 0.5 lx		>= 1 : 40



Object : Prestwich Village Master Plan - Plot G MSCP
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2 Parking

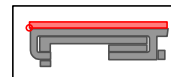
2.4 Summary, Parking

2.4.1.1 Result overview (emergency lighting)

12 Parking - C

Calculation field: 96.29m x 4.26m (96 x 4 pts), Height = 0.00m

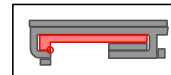
4	0.51 lx	11.41 lx	1: 22.46
	>= 0.5 lx		>= 1 : 40



13 Parking - D

Calculation field: 10.5m x 74.99m (10 x 74 pts), Height = 0.00m

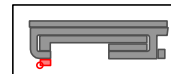
5	1.33 lx	12.05 lx	1: 9.04
	>= 0.5 lx		>= 1 : 40



14 Parking - E

Calculation field: 7.11m x 4.04m (7 x 4 pts), Height = 0.00m

6	0.54 lx	11.13 lx	1: 20.73
	>= 0.5 lx		>= 1 : 40



Type No.\Make

Whitecroft Lighting

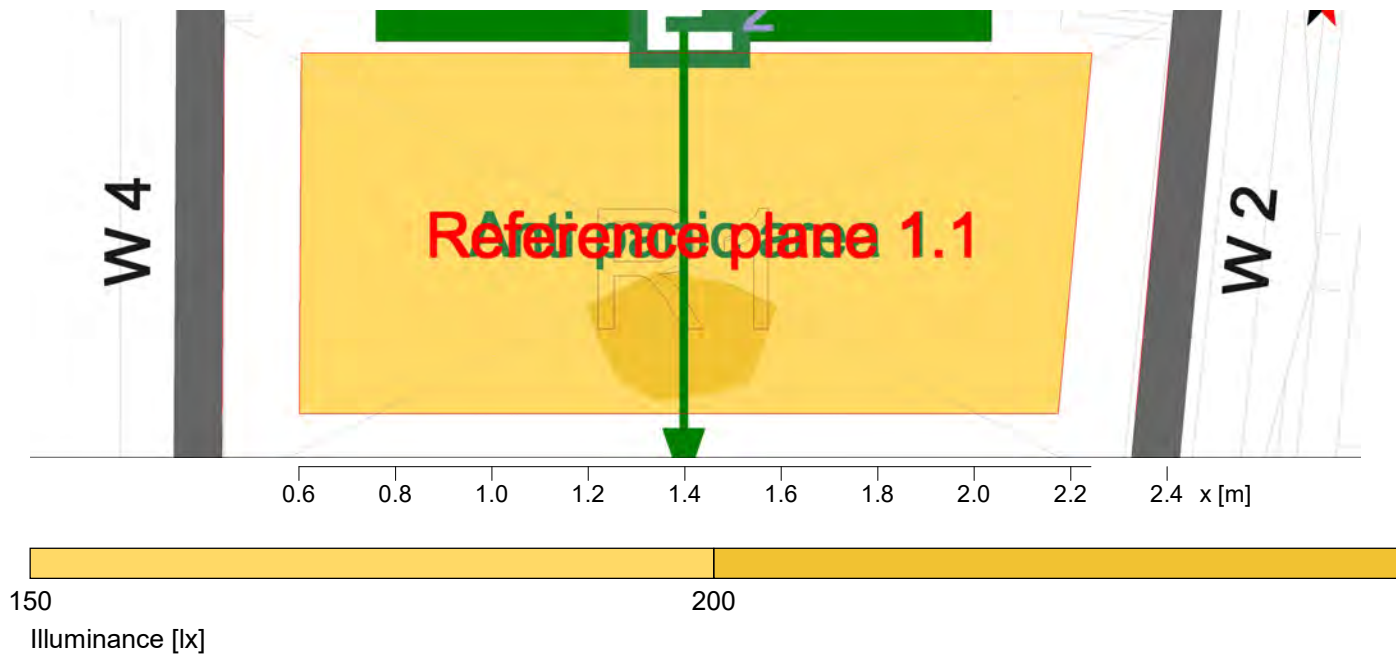
3	41E x	Order No.	: ACH74K	-- Emergency Lighting --
		Luminaire name	: ACL INDUSTRY	
		Equipment	: 1 x LED 49 W / 7490 lm	
		Emergency	: 433 lm (5.8 %)	



3 Riser 1

3.2 Summary, Riser 1

3.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.70 m
 see luminaires / maintenance plan

Luminaire luminous flux
 Total power
 Total power per area (2.05 m²)

6425 lm
 46.0 W
 22.44 W/m² (12.17 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	184 lx	234 lx
E_{min}	156 lx	184 lx
$E_{min}/\bar{E}_m (U_o)$	0.85	0.78
$E_{min}/E_{max} (U_d)$	0.77	
E_z/E_h		0.34
Position	0.00 m	1.60 m
$R_{UG} (1.3H \ 0.7H)$	10.0	
Luminaire :		
(ACL INDUSTRY, ACH64K)		
Hints:		

- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.

Major surfaces

M 1.5 (Ceiling)	$\bar{E}_m$ 0 lx	U_o ---
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Object : Prestwich Village Master Plan - Plot G MSCP
Installation : FIRST FLOOR
Project number : 33401
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3 Riser 1

3.2 Summary, Riser 1

3.2.1 Result overview, Evaluation area 1

M 1.1 (Wall)	680 lx	0.16
M 1.2 (Wall)	428 lx	0.21
M 1.3 (Wall)	329 lx	0.27
M 1.4 (Wall)	431 lx	0.21

Type No. Make

Whitecroft Lighting

2 1E x Order No. : ACH64K -- Emergency Lighting --
Luminaire name : ACL INDUSTRY
Equipment : 1 x LED 46 W / 6425 lm
Emergency : 433 lm (6.7 %)
Maintenance factor: 0.81

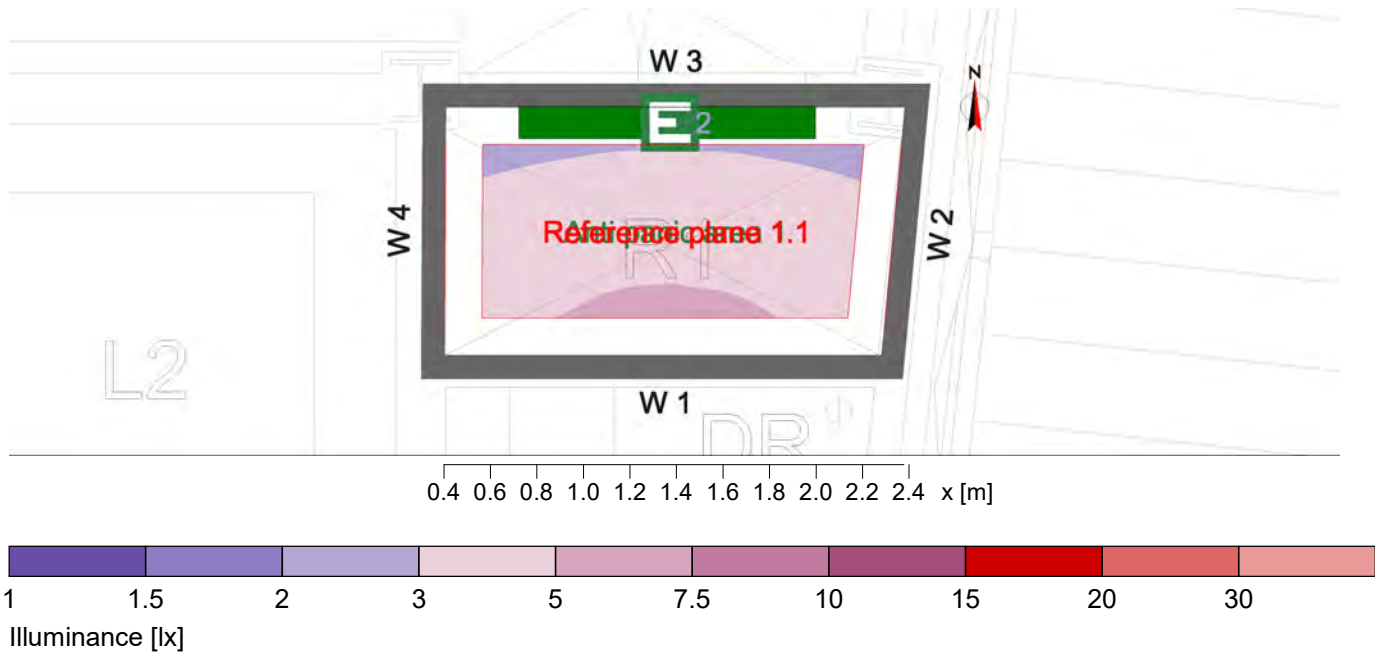
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : FIRST FLOOR
 Project number : 33401
 Date : 14.10.2025



3 Riser 1

3.4 Summary, Riser 1

3.4.1.1 Result overview (emergency lighting)

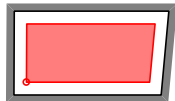


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.70 m
 Maximum I : 130 cd <= 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1			
Calculation field: 1.64m x 0.75m (10 x 5 pts), Height = 0.00m			
1	2.44 lx >= 0.5 lx	5.31 lx	1: 2.18 >= 1 : 40



Type No.\Make

Whitcroft Lighting			
2	1E x	Order No. : ACH64K	-- Emergency Lighting --
		Luminaire name : ACL INDUSTRY	
		Equipment : 1 x LED 46 W / 6425 lm	
		Emergency : 433 lm (6.7 %)	

Second Floor Lighting Calculations

Prestwich Village Master Plan - Plot G MSCP

Installation : ROOF LEVEL

Project number : 33401

Customer :

Processed by : JM

Date : 14.10.2025

Project description:

Design parameters adhered to:

Reflectance: 70/50/20 (except plant rooms: 50/30/20 and parking area: 30)

Maintenance Factors: Calculated

Ceiling Heights: Mixed

Rev P02

JM - 14/10/2025

Updated to incorporate architects comments and client roof variation.

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

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

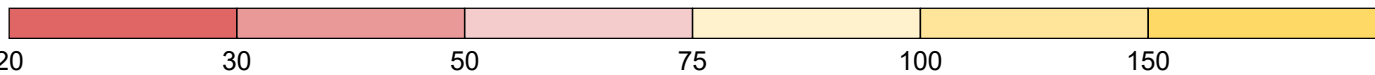
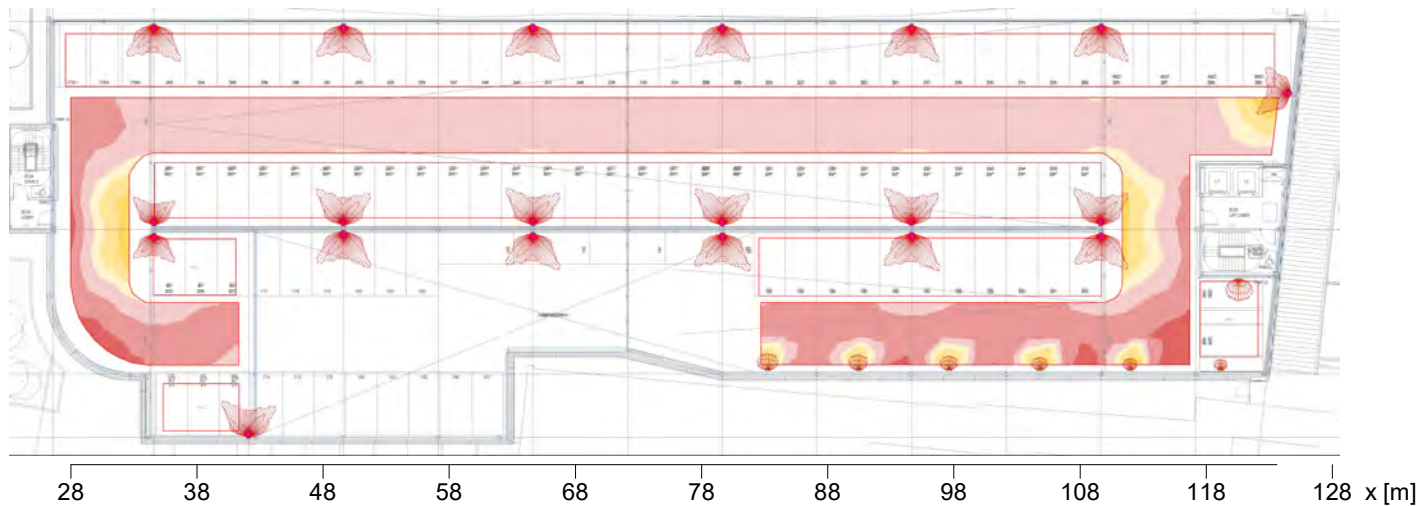
Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1 Parking

1.1 Summary, Parking

1.1.1 Result overview, Roadway



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	293010 lm
Total power	2018 W
Total power per area (4444.75 m²)	0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	60 lx
Minimum illuminance	E_{min}	22 lx
Maximum illuminance	E_{max}	195 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.76 (0.36)
Diversity U_d	E_{min}/E_{max}	1:9.01 (0.11)

Type No. \ Make

Whitcroft Lighting	
1	7 x
Order No.	: K6H44KHB
Luminaire name	: KOLO IP65 HOOD
Equipment	: 1 x LED 14 W / 1008 lm
Emergency	: 200 lm (19.8 %)
Maintenance factor:	0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1 Parking

1.1 Summary, Parking

1.1.1 Result overview, Roadway

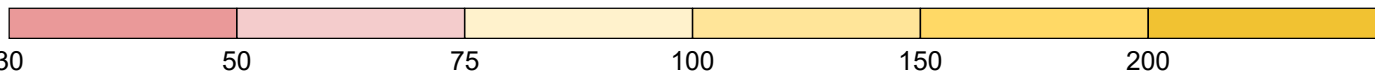
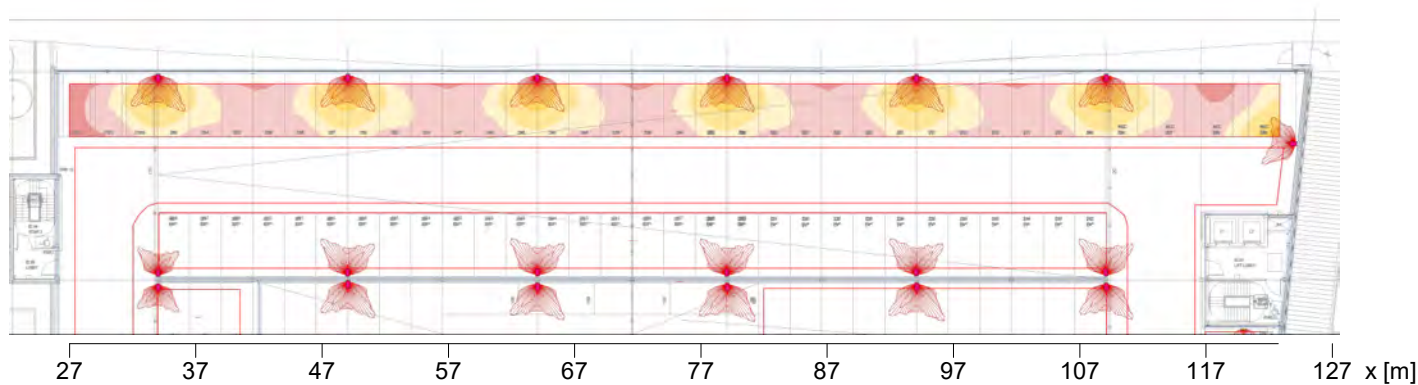
2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.2 Result overview, Parking - A



General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 0.00 m
 see luminaires / maintenance plan

Total luminous flux
 Total power
 Total power per area (4444.75 m²)

293010 lm
 2018 W
 0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	90 lx
Minimum illuminance	E_{min}	40 lx
Maximum illuminance	E_{max}	211 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.22 (0.45)
Diversity U_d	E_{min}/E_{max}	1:5.21 (0.19)

Type No.\Make

1	7 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.2 Result overview, Parking - A

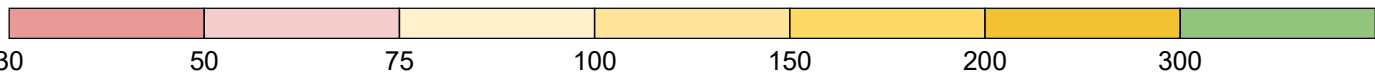
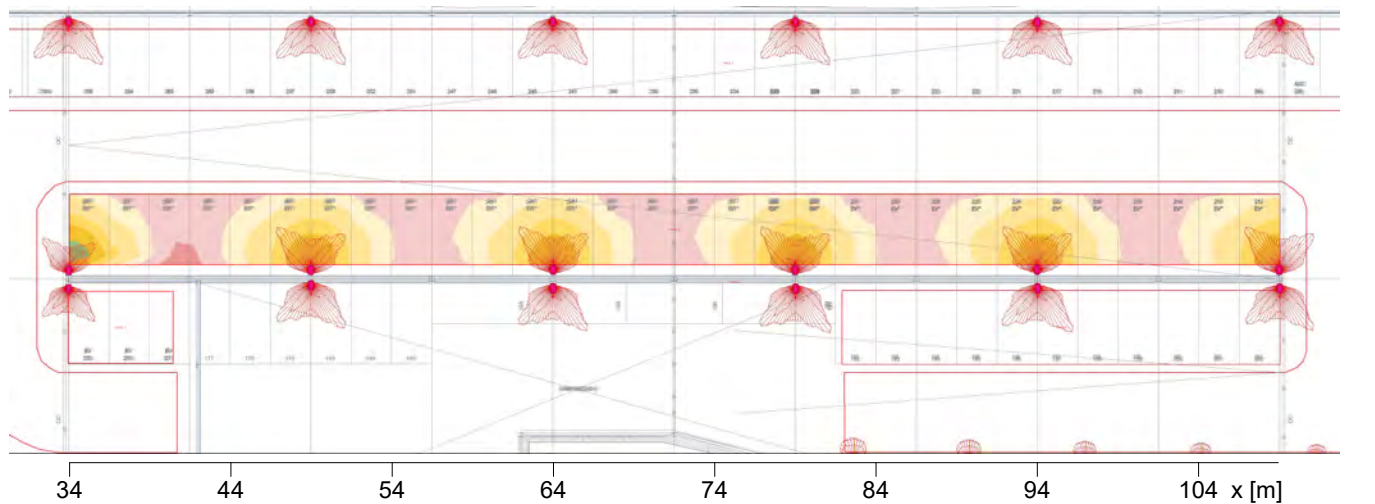
2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.3 Result overview, Parking - B



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	293010 lm
Total power	2018 W
Total power per area (4444.75 m²)	0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	107 lx
Minimum illuminance	E_{min}	43 lx
Maximum illuminance	E_{max}	404 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.48 (0.4)
Diversity U_d	E_{min}/E_{max}	1:9.32 (0.11)

Type No. \ Make

1	7 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.3 Result overview, Parking - B

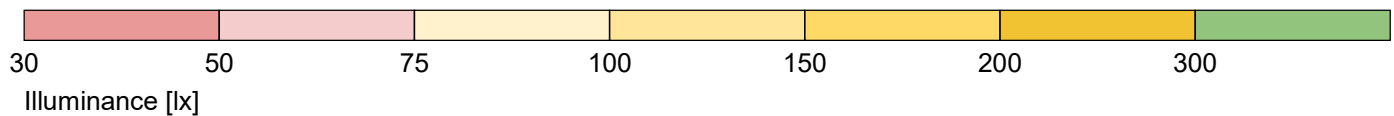
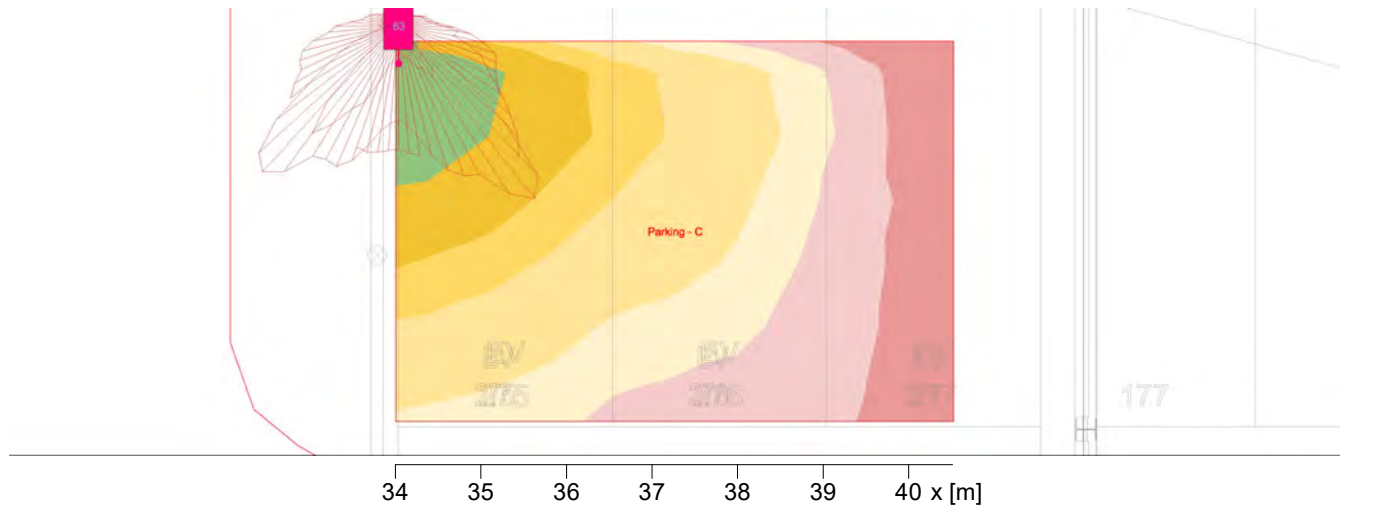
2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.4 Result overview, Parking - C



General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 0.00 m
 see luminaires / maintenance plan

Total luminous flux
 Total power
 Total power per area (4444.75 m²)

293010 lm
 2018 W
 0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	127 lx
Minimum illuminance	E_{min}	32 lx
Maximum illuminance	E_{max}	417 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:3.99 (0.25)
Diversity U_d	E_{min}/E_{max}	1:13.1 (0.08)

Type No. \ Make

Whitecroft Lighting

1 7 x

Order No. : K6H44KHB
 Luminaire name : KOLO IP65 HOOD
 Equipment : 1 x LED 14 W / 1008 lm
 Emergency : 200 lm (19.8 %)
 Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.4 Result overview, Parking - C

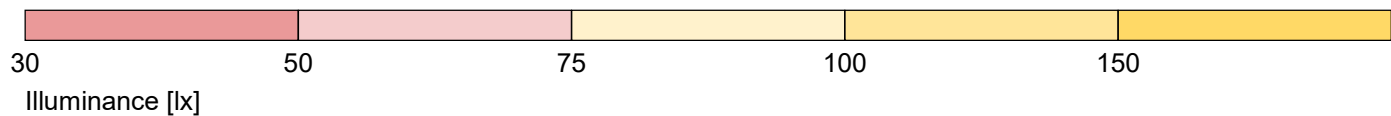
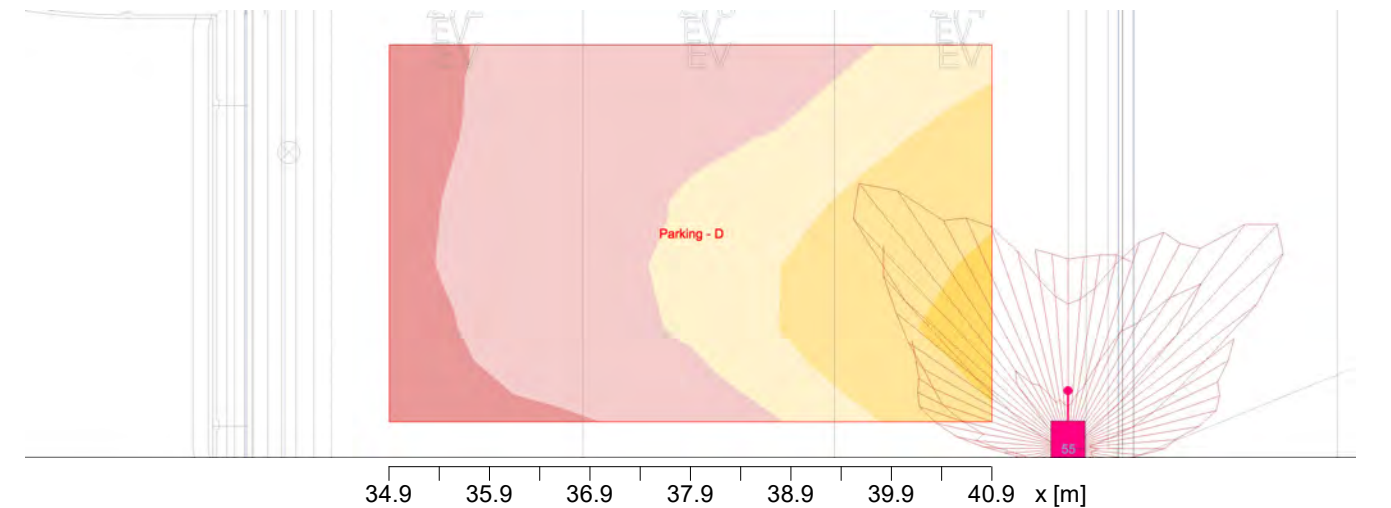
2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.5 Result overview, Parking - D



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	293010 lm
Total power	2018 W
Total power per area (4444.75 m²)	0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	80 lx
Minimum illuminance	E_{min}	41 lx
Maximum illuminance	E_{max}	163 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.95 (0.51)
Diversity U_d	E_{min}/E_{max}	1:3.96 (0.25)

Type No. \ Make

1	7 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.5 Result overview, Parking - D

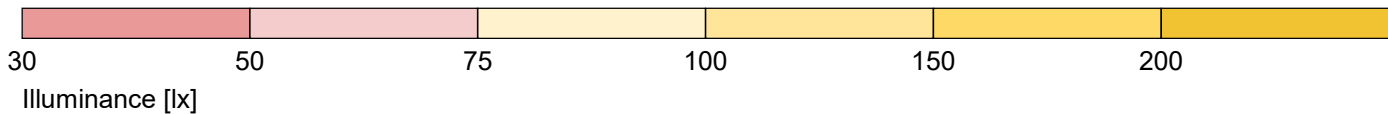
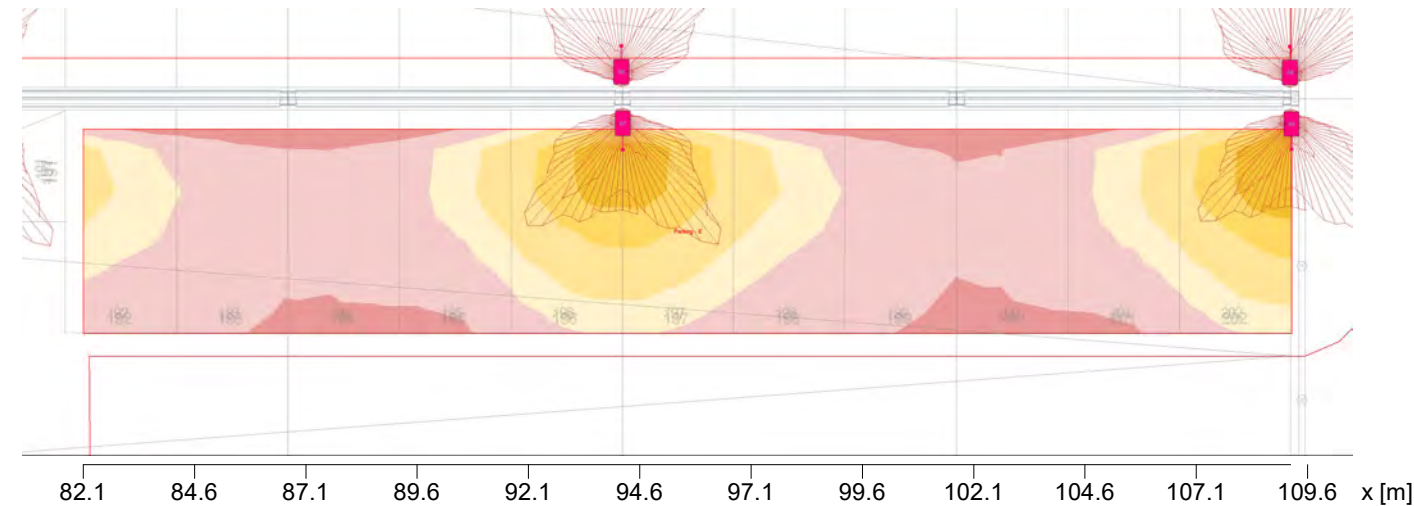
2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.6 Result overview, Parking - E



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	293010 lm
Total power	2018 W
Total power per area (4444.75 m²)	0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	88 lx
Minimum illuminance	E_{min}	48 lx
Maximum illuminance	E_{max}	253 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.84 (0.54)
Diversity U_d	E_{min}/E_{max}	1:5.29 (0.19)

Type No.\Make

1	7 x	Whitecroft Lighting
		Order No. : K6H44KHB
		Luminaire name : KOLO IP65 HOOD
		Equipment : 1 x LED 14 W / 1008 lm
		Emergency : 200 lm (19.8 %)
		Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.6 Result overview, Parking - E

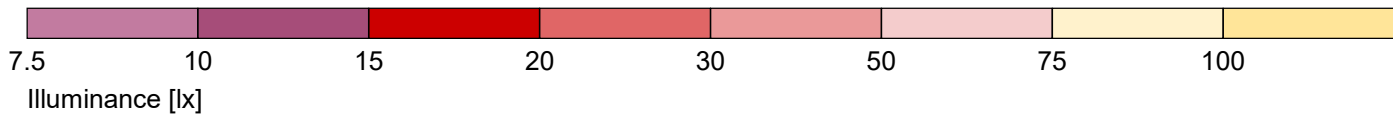
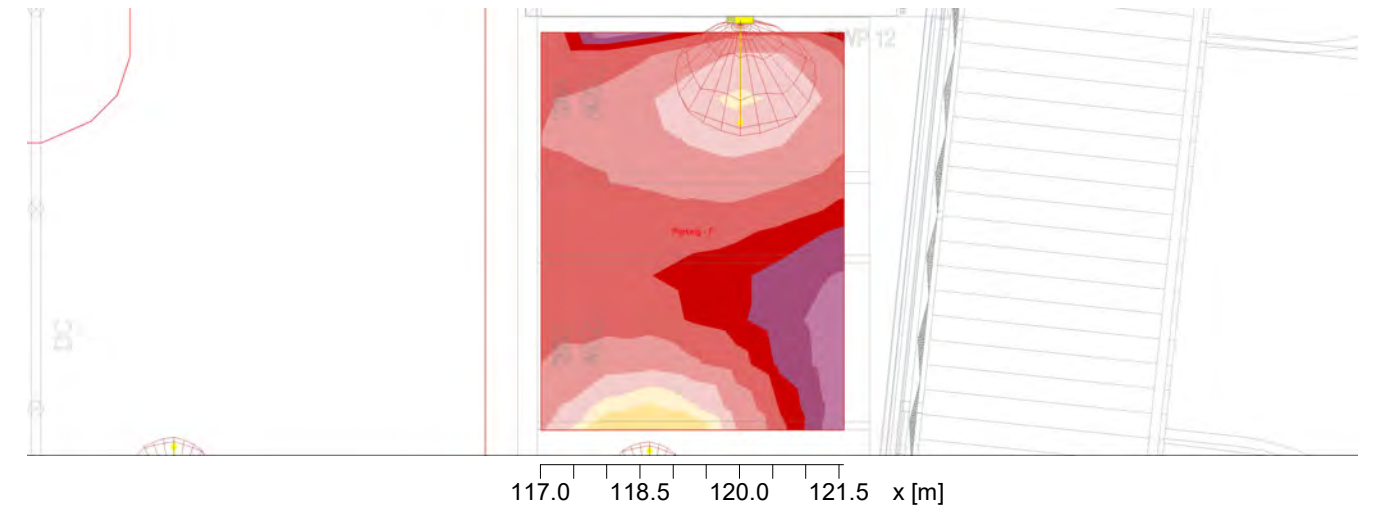
2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

Object : Prestwich Village Master Plan - Plot G MSCP
 Installation : ROOF LEVEL
 Project number : 33401
 Date : 14.10.2025



1.1 Summary, Parking

1.1.7 Result overview, Parking - F



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	see luminaires / maintenance plan

Total luminous flux	293010 lm
Total power	2018 W
Total power per area (4444.75 m²)	0.45 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	34 lx
Minimum illuminance	E_{min}	9 lx
Maximum illuminance	E_{max}	108 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:3.98 (0.25)
Diversity U_d	E_{min}/E_{max}	1:12.6 (0.08)

Type No. \ Make

Whitecroft Lighting	
1	7 x Order No. : K6H44KHB
	Luminaire name : KOLO IP65 HOOD
	Equipment : 1 x LED 14 W / 1008 lm
	Emergency : 200 lm (19.8 %)
	Maintenance factor: 0.75

Object : Prestwich Village Master Plan - Plot G MSCP
Installation : ROOF LEVEL
Project number : 33401
Date : 14.10.2025



1.1 Summary, Parking

1.1.7 Result overview, Parking - F

2	20 x	Order No.	: MIMH44KA
		Luminaire name	: MISTRAL MIDI - AREA OPTIC
		Equipment	: 1 x LED 96 W / 14297.7 lm
		Maintenance factor:	0.87

