

Installation : Prime Point - Knowsley

Project number : Units D,E,F & G

Customer : The Prime Group

Processed by : Dave Wood

Date : 29.01.2025

Project description:

We have the pleasure in attaching our Lighting Design for the aforementioned project for your approval. Illuminance and uniformity levels are shown for your approval with calculations having been carried out as per the information, drawings and / or specifications details provided. Please check to confirm that all details are correct, especially dimensions of the room(s) and fitting specification to ensure these are as required. In the absence of a written specification areas will be illuminated to the recommended standards according to their primary function. Areas are generally to be open without any obstructions above the working plane unless otherwise advised.

Where applicable the design conforms to the latest recommendations and guidelines. If conformity to LG7 is to be proved with exact figure, we may need to add or change the luminaire types. We have used common design parameters for ceiling heights and reflectance's of room surfaces- (wall 50% ceiling 70% floor 20%) as well as maintenance factors (LED light source up to 0.9), in our calculations unless details were provided otherwise.

Please note that it is the installers responsibility to check and confirm TP(a) and TP(b) requirements as per Building Regulations Approved Document B Fire Safety 2006 with amendments 2010-2013. Compliant luminaires will generally be proposed dependant on the application and / or area type. Should the product specified by us be subsequently replaced with an inferior / non compliant product type - any liability and / or cost incurred for subsequent remedial work required would be the responsibility of the client.

Emergency lighting will be designed to the recommended guidelines set out in BS5266. Provision for High Risk areas will be made ONLY where obvious and / or those identified by the client. It is the responsibility of the Purchaser / Installer to ensure that the design complies with local fire and health and safety regulations. In the event that the design is not found to comply we will adjust the design in consultation with the customer to ensure that it does comply with such regulations. Please be aware of the Part L2 requirements and check that conformity has been met where required.

The following calculations are based on manufacturer lamp / luminaire data however, in practice gradual divergencies can occur. Specific site conditions (such as ambient temperature) can also effect the performance of luminaires and any such adverse conditions should be detailed prior to calculations being carried out to ensure adequate provision has been made for these.

Whilst every effort will be made to adhere to the written or product specification provided, it is always the responsibility of the customer to ensure that any design scheme, specification and / or product supplied satisfies fully and complies with the end users requirements and is suitable for the installation. - If unsure of any suggested fittings it is advisable to order samples in advance following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergencies can occur.

The following values are based on precise calculations performed on calibrated lamp and luminaires, and their configurations, whereby gradual unavoidable deviations can occur in practise. 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.

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.

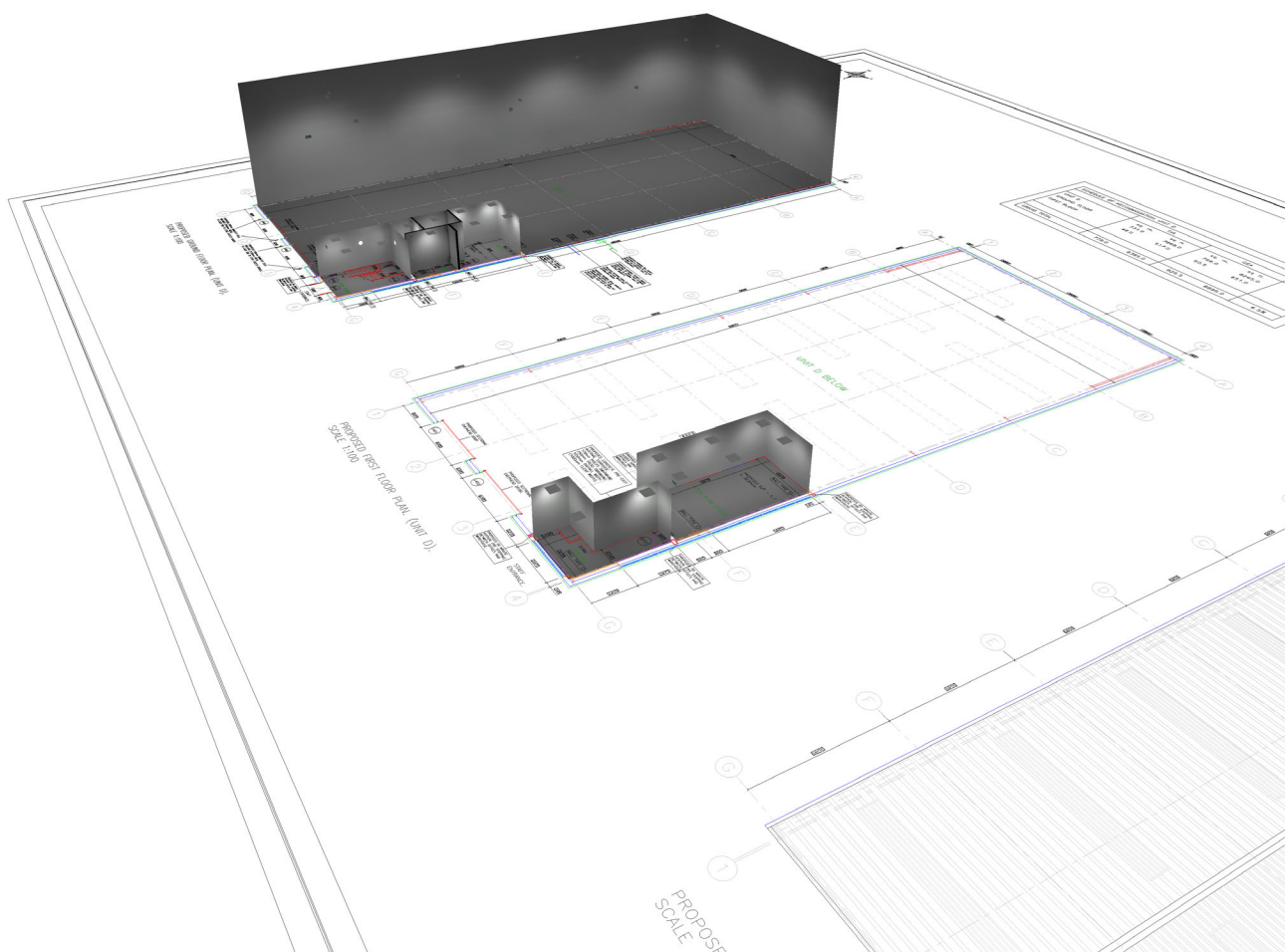
This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



Description, Unit D

.1 Floor 3D





UKLED LIGHTING DESIGN

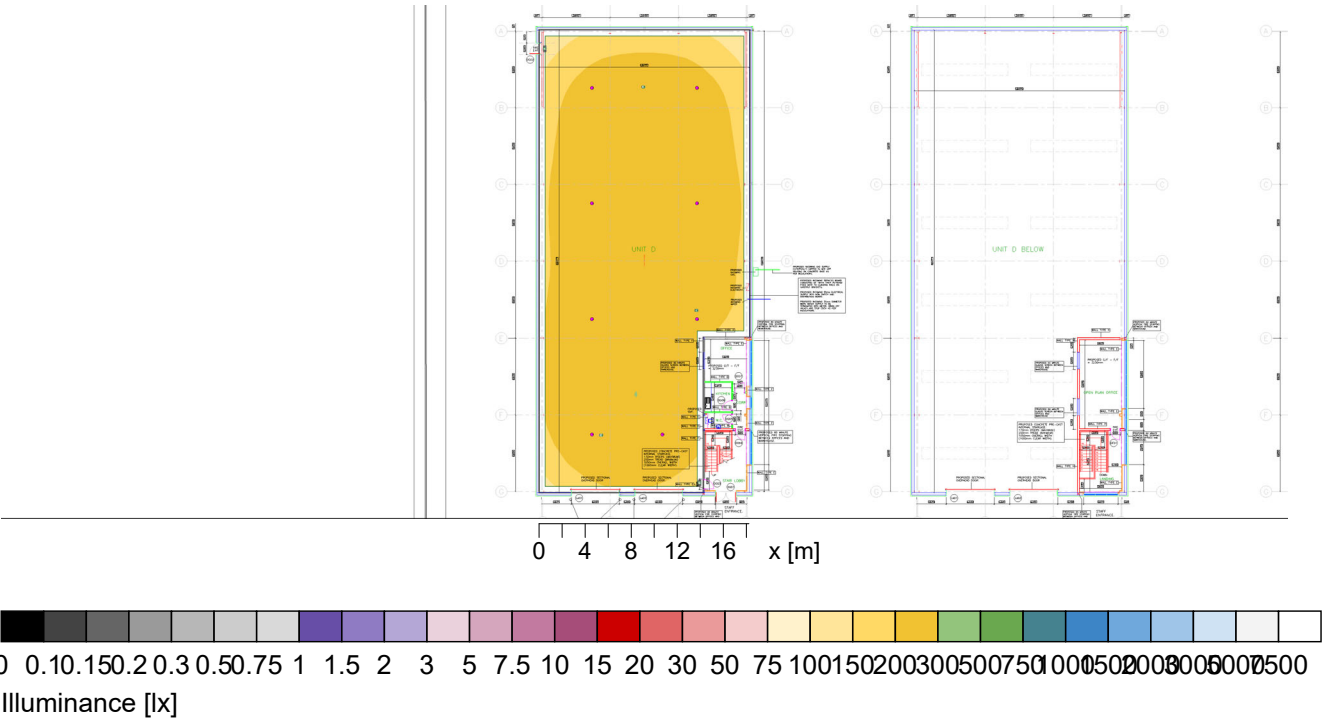
.2 Floor plan



1 Warehouse

1.1 Summary, Warehouse

1.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux	256000.00 lm
Total power	1600.0 W
Total power per area (675.70 m²)	2.37 W/m² (0.97 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	245 lx	102 lx
E_{min}	135 lx	68 lx
$E_{min}/\bar{E}_m (U_o)$	0.55	0.66
$E_{min}/E_{max} (U_d)$	0.45	
E_z/E_h		0.38
Position	0.00 m	1.60 m
RUG (5.3H 2.4H)	30.0	
Luminaire : (AREA BAY 200W, HBA3V)		
Hints: - The RUG value has been limited to the upper bound of 30.		

Major surfaces	$\bar{E}_m$	U_o
----------------	-------------	-------

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1 Warehouse

1.1 Summary, Warehouse

1.1.1 Result overview, Evaluation area 1

Type No.\Make

1	8 x	Collingwood Lighting
		Order No. : HBA3V
		Luminaire name : AREA BAY 200W
		Equipment : 1 x LED 200 W / 32000 lm
		Emergency : 650 lm (2.0 %)

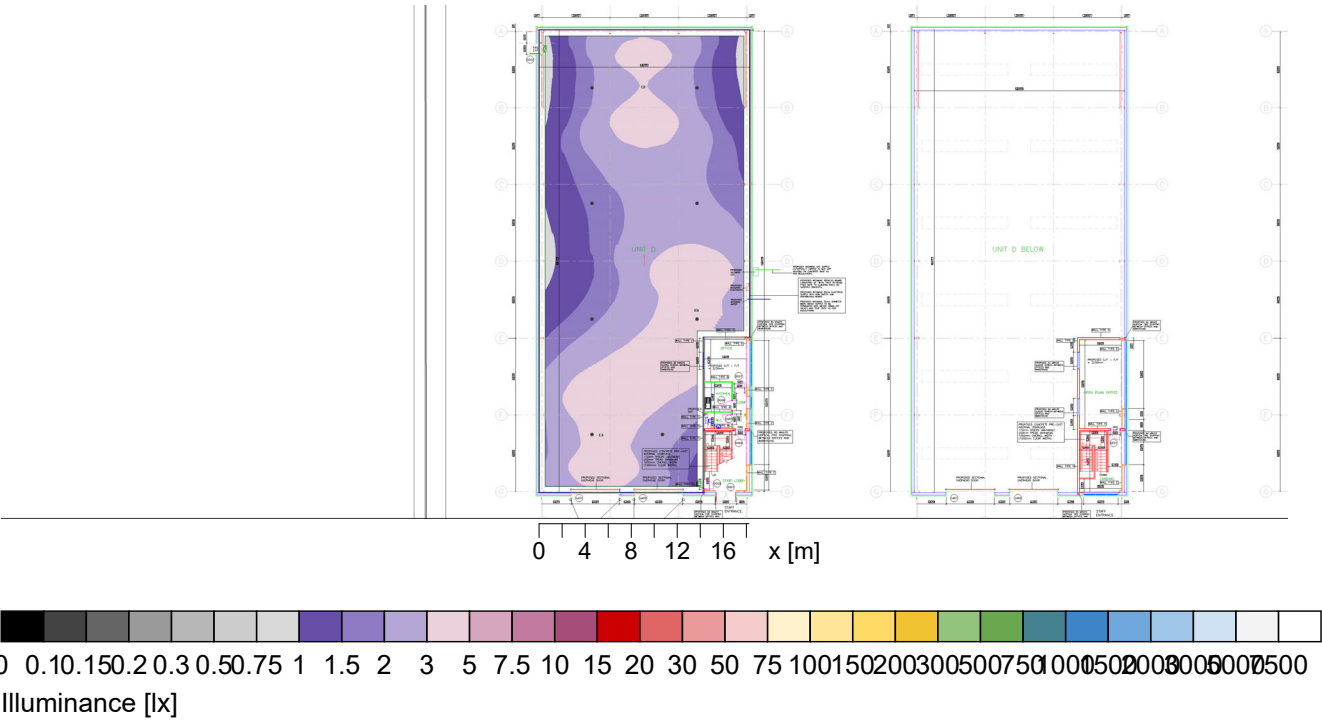
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1 Warehouse

1.2 Summary, Warehouse

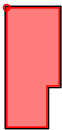
1.2.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 420 cd

Anti panic area:

No.	Surface Emin [lx]	Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 39.07m x 17.22m (27 x 12 pts), Height = 0.00m			
1	0.86 lx	4.19 lx	1: 4.85
	>= 0.5 lx		>= 1 : 40



Type No. \ Make

2 3E x		Collingwood Lighting		-- Emergency Lighting --
	Order No.	: !EMBMAX/EMBMAX_1000		
	Luminaire name	: Salvus Max		
	Equipment	: 1 x LED 6.9 W / 1500 lm (0%)		
	Emergency	: 1500 lm		

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1 Warehouse

1.2 Summary, Warehouse

1.2.1.1 Result overview (emergency lighting)

8	2E x	ANSELL	
		Order No.	: AADL/3M/W -- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign
		Equipment	: 1 x LED 2 W / 1 lm (0%)
		Emergency	: 1 lm

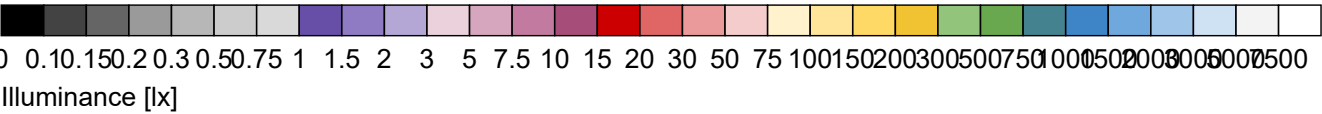
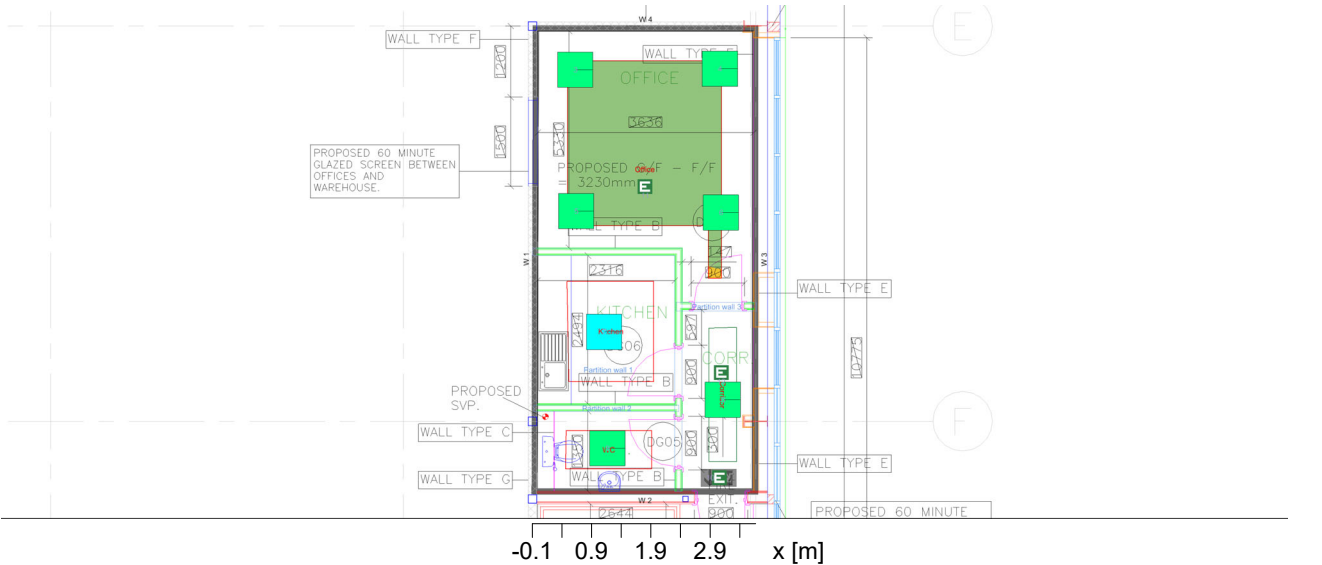
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



2 Office Areas

2.1 Summary, Office Areas

2.1.1 Result overview, Office



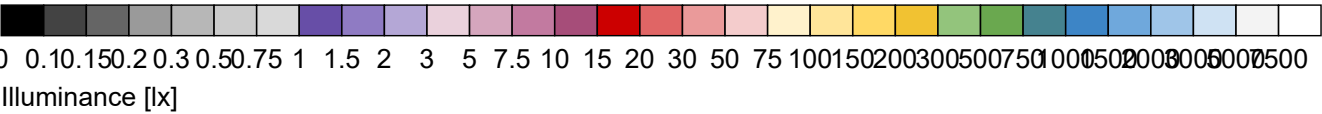
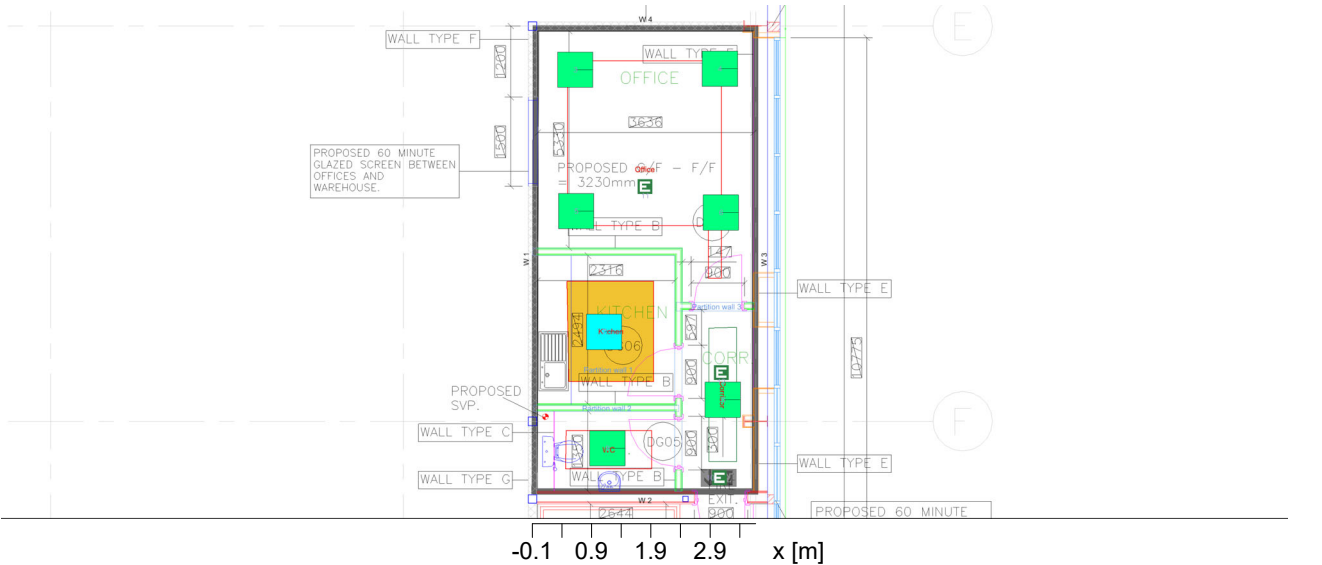
General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.80 m
Maintenance factor	0.80
Total luminous flux	25300 lm
Total power	220 W
Total power per area (27.79 m²)	7.92 W/m²

Illuminance	
Average illuminance	$\bar{E}_m$ 484 lx
Minimum illuminance	E_{min} 467 lx
Maximum illuminance	E_{max} 496 lx
Uniformity U_o	$E_{min}/\bar{E}_m$ 1:1.04 (0.97)
Diversity U_d	E_{min}/E_{max} 1:1.06 (0.94)

Type No. Make

Collingwood	
5 1 x	Order No. : EDM243-A
	Luminaire name : EDM243
	Equipment : 1 x LED 40 W / 4600 lm
6 6 x	Order No. : UKLD0226
	Luminaire name : UKLD0226
	Equipment : 1 x LED 30 W / 3450 lm

2.1 Summary, Office Areas
2.1.2 Result overview, Kitchen



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height of luminaire plane	2.80 m
Maintenance factor	0.80
Total luminous flux	25300 lm
Total power	220 W
Total power per area (27.79 m²)	7.92 W/m²

Illuminance

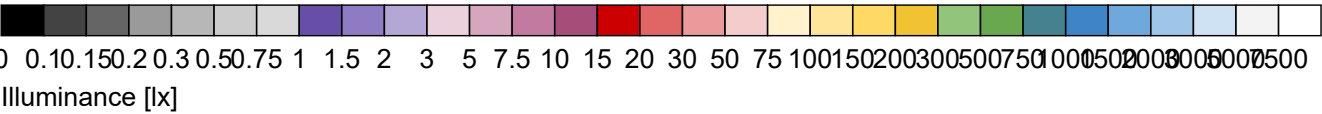
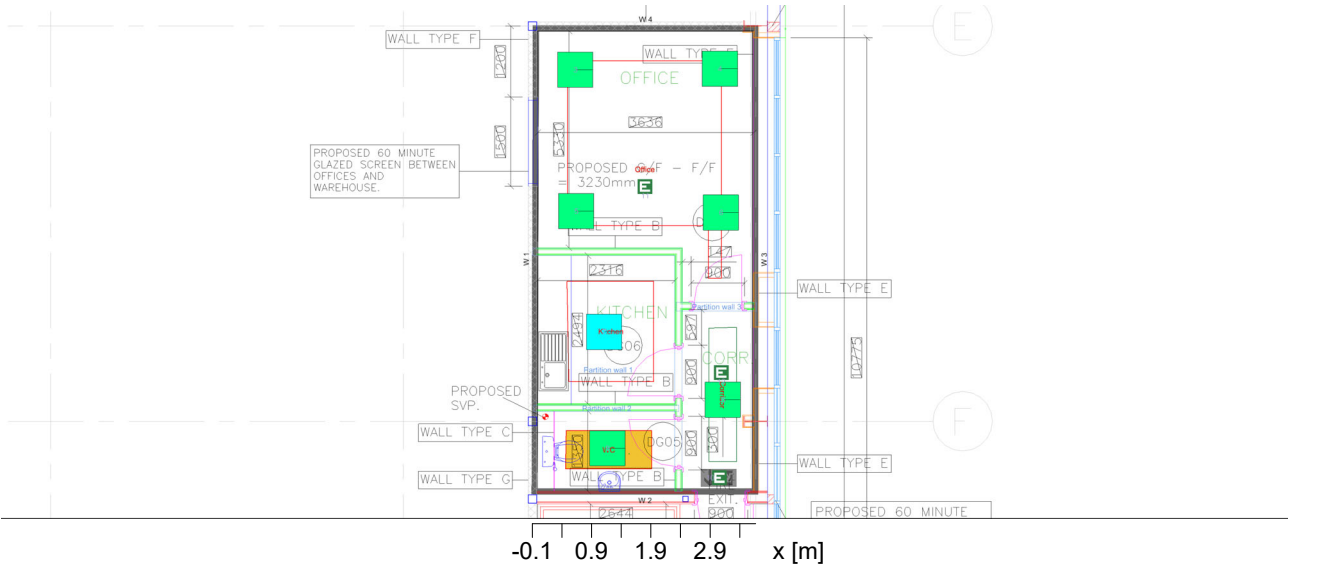
Average illuminance	$\bar{E}_m$	272 lx
Minimum illuminance	E_{min}	244 lx
Maximum illuminance	E_{max}	291 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.11 (0.9)
Diversity U_d	E_{min}/E_{max}	1:1.19 (0.84)

Type No. Make

5	1 x	Collingwood	
		Order No.	: EDM243-A
		Luminaire name	: EDM243
		Equipment	: 1 x LED 40 W / 4600 lm
6	6 x		
		Order No.	: UKLD0226
		Luminaire name	: UKLD0226
		Equipment	: 1 x LED 30 W / 3450 lm

2.1 Summary, Office Areas

2.1.3 Result overview, WC



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height of luminaire plane	2.80 m
Maintenance factor	0.80
Total luminous flux	25300 lm
Total power	220 W
Total power per area (27.79 m²)	7.92 W/m²

Illuminance	
Average illuminance	$\bar{E}_m$ 233 lx
Minimum illuminance	E_{min} 219 lx
Maximum illuminance	E_{max} 244 lx
Uniformity U_o	$E_{min}/\bar{E}_m$ 1:1.07 (0.94)
Diversity U_d	E_{min}/E_{max} 1:1.11 (0.9)

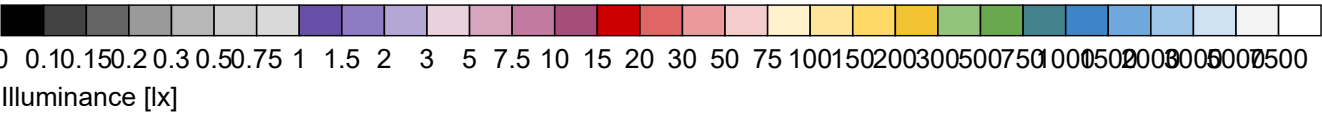
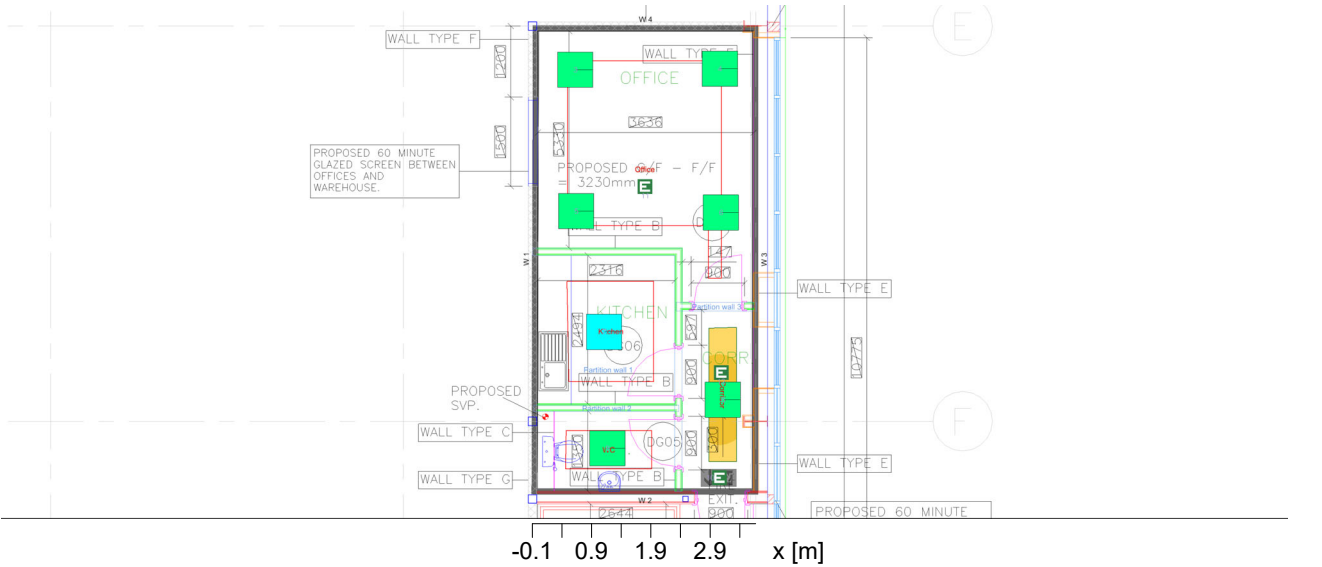
Type No. Make

		Collingwood	
5	1 x	Order No.	: EDM243-A
		Luminaire name	: EDM243
		Equipment	: 1 x LED 40 W / 4600 lm
6	6 x	Order No.	: UKLD0226
		Luminaire name	: UKLD0226
		Equipment	: 1 x LED 30 W / 3450 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



2.1 Summary, Office Areas
2.1.4 Result overview, Corridor



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height of luminaire plane	2.80 m
Maintenance factor	0.80
Total luminous flux	25300 lm
Total power	220 W
Total power per area (27.79 m²)	7.92 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	205 lx
Minimum illuminance	E_{min}	171 lx
Maximum illuminance	E_{max}	224 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.2 (0.83)
Diversity U_d	E_{min}/E_{max}	1:1.31 (0.77)

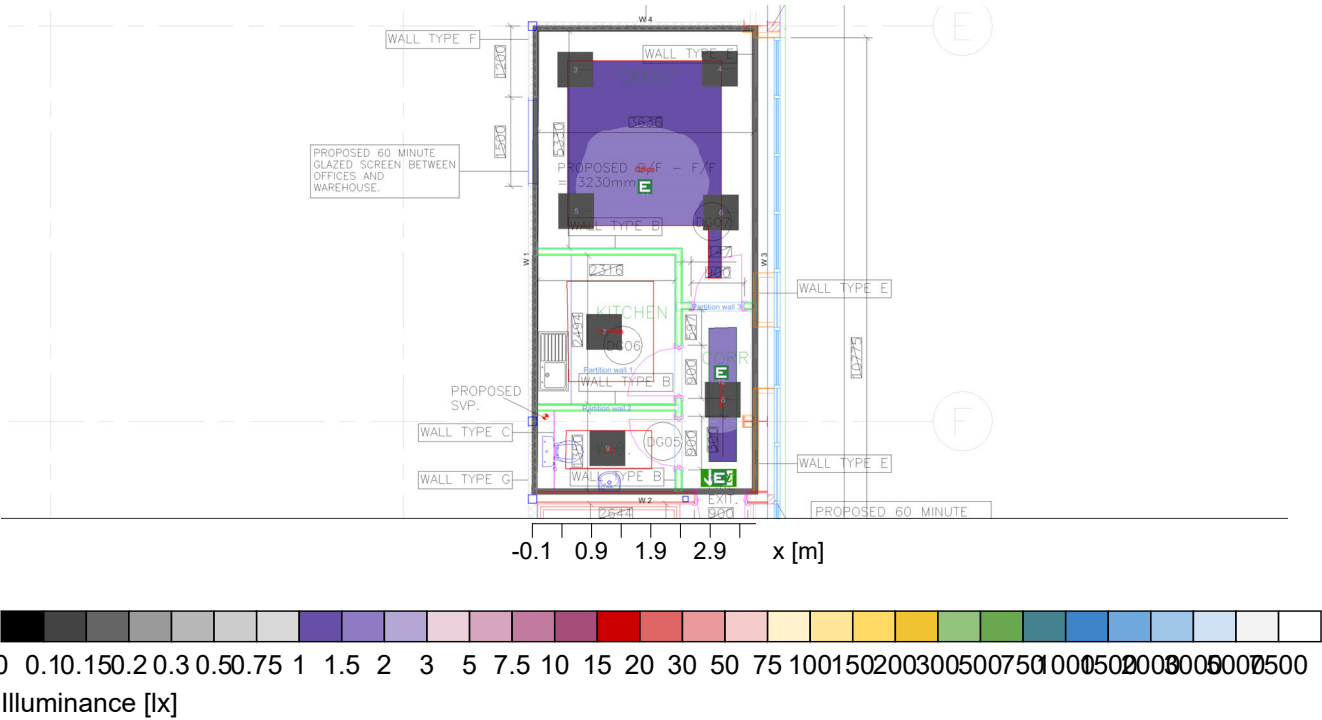
Type No. Make

Collingwood	
5	1 x
	Order No. : EDM243-A Luminaire name : EDM243 Equipment : 1 x LED 40 W / 4600 lm
6	6 x
	Order No. : UKLD0226 Luminaire name : UKLD0226 Equipment : 1 x LED 30 W / 3450 lm

2 Office Areas

2.2 Summary, Office Areas

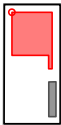
2.2.1.1 Result overview (emergency lighting)



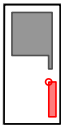
General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : 2.80 m
Maximum I : 100 cd <= 900 cd

Anti panic area:

No.	Surface		Ud	
	Emin [lx]	Emax [lx]		
5 Office				
Calculation field: 2.59m x 3.66m (5 x 7 pts), Height = 0.00m				
1	1.01 lx	1.92 lx	1: 1.91	
	>= 0.5 lx		>= 1 : 40	



5 Corridor			
Calculation field: 2.26m x 0.47m (19 x 4 pts), Height = 0.00m			
2	1.28 lx	1.92 lx	1: 1.51
	>= 0.5 lx		>= 1 : 40



Type No.\Make

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



2 Office Areas

2.2 Summary, Office Areas

2.2.1.1 Result overview (emergency lighting)

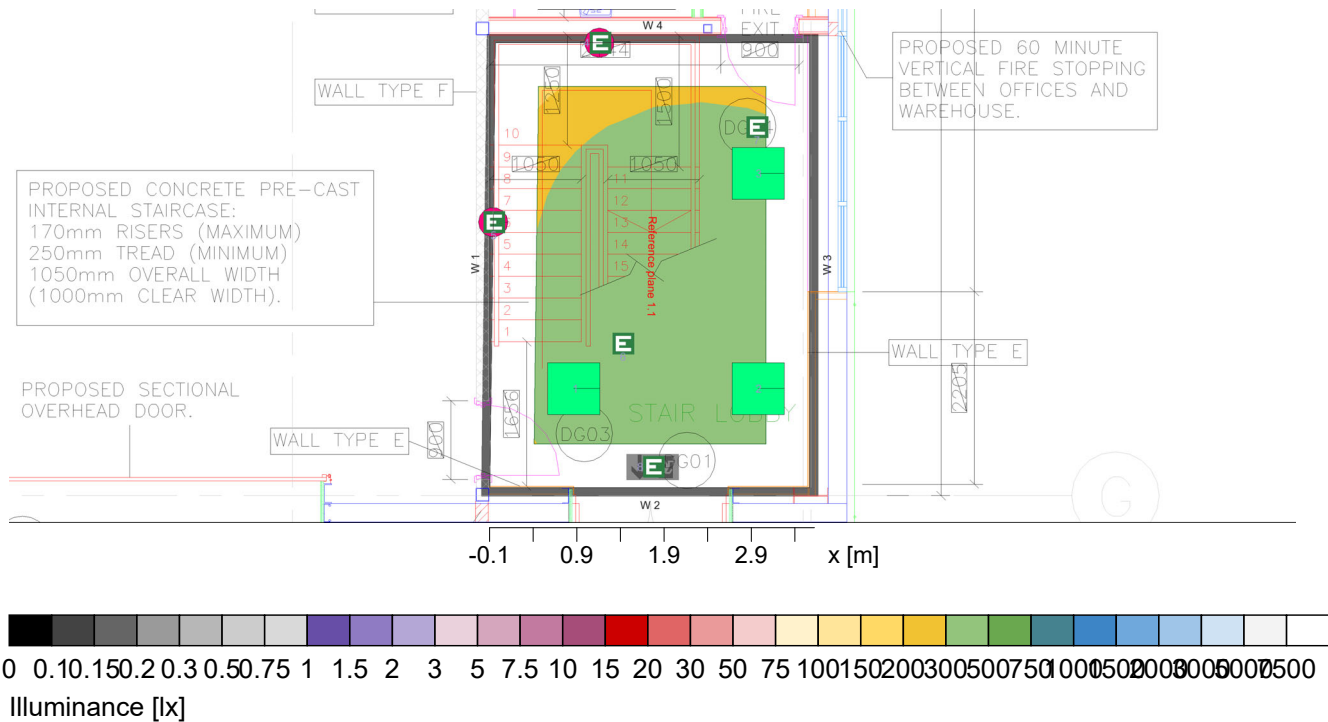
		ANSELL		
8	1E x	Order No.	: AADL/3M/W	-- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign	
		Equipment	: 1 x LED 2 W / 1 lm (0%)	
		Emergency	: 1 lm	
		ROBUS		
7	2E x	Order No.	: RDD1P5LO-01/CCT 5700K	-- Emergency Lighting --
		Luminaire name	: Desmond	
		Equipment	: 1 x LED 1.2 W / 170 lm (0%)	
		Emergency	: 170 lm	

Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025

3 GF Stairs

3.1 Summary, GF Stairs

3.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Total luminous flux
 Total power
 Total power per area (18.49 m²)

14934.00 lm
 122.0 W
 6.60 W/m² (1.75 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 $\bar{E}_m$ 378 lx
 E_{min} 228 lx
 $E_{min}/\bar{E}_m (U_o)$ 0.60
 $E_{min}/E_{max} (U_d)$ 0.51
 E_z/E_h 0.53
 Position 0.00 m
 $R_{UG} (6.1H \ 8.5H)$ ≤ 25.1
 Luminaire :
 (BULKHEADS - Disco Evo 4000K, ADIS2/1/M3 (16W 4000K))

cylindrical
 283 lx
 204 lx
 0.72
 1.60 m

Major surfaces

$\bar{E}_m$

U_o

Type No./Make

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F_G
Date : 29.01.2025



3 GF Stairs

3.1 Summary, GF Stairs

3.1.1 Result overview, Evaluation area 1

3 2E x **ANSELL**
 Order No. : ADIS2/1/M3 (16W 4000K) -- Emergency Lighting --
Luminaire name : BULKHEADS - Disco Evo 4000K
Equipment : 1 x LED single 840 16 W / 2292 lm
Emergency : 190 lm (8.3 %)

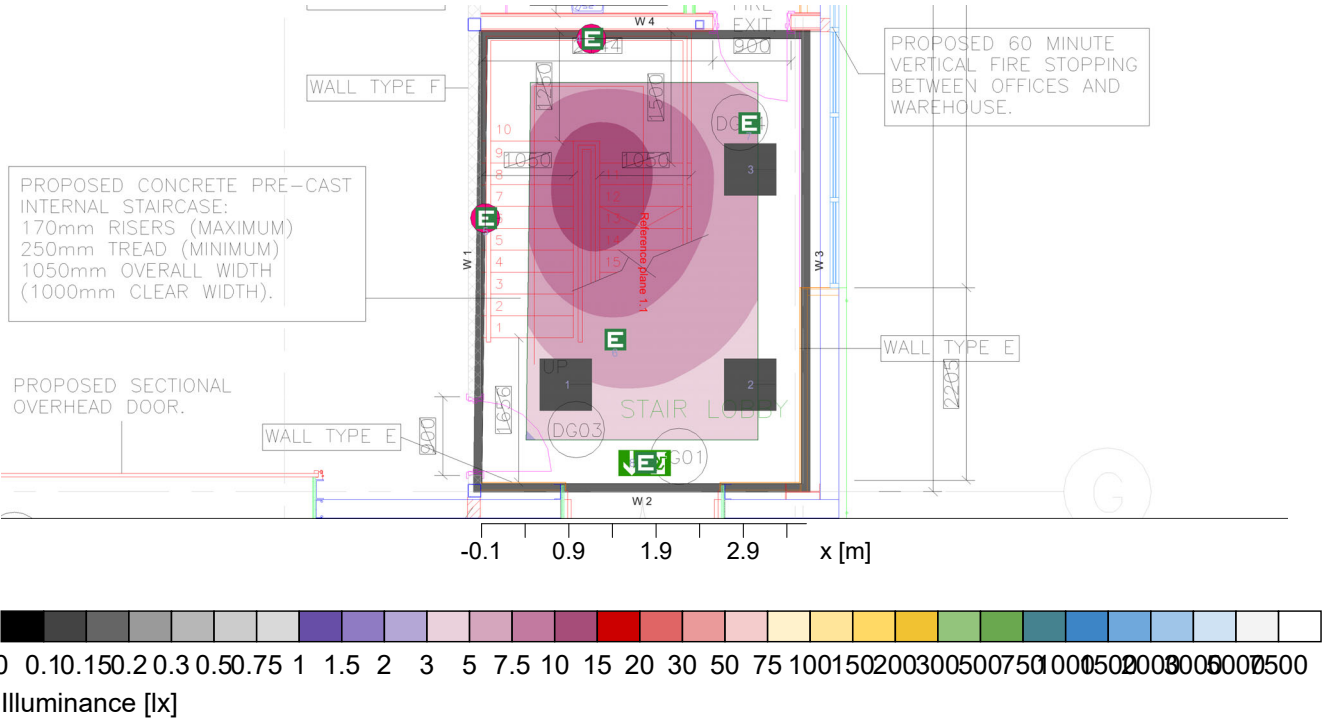
6 3 x **Collingwood**
 Order No. : UKLD0226
Luminaire name : UKLD0226
Equipment : 1 x LED 30 W / 3450 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025

3 GF Stairs

3.2 Summary, GF Stairs

3.2.1.1 Result overview (emergency lighting)

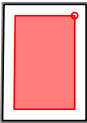


General

Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 100 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 4.13m x 2.65m (8 x 5 pts), Height = 0.00m			
1	2.88 lx	11.36 lx	1: 3.95
	>= 0.5 lx		>= 1 : 40



Type No. \Make

ANSELL			
3	2E x	Order No. : ADIS2/1/M3 (16W 4000K)	-- Emergency Lighting --
		Luminaire name : BULKHEADS - Disco Evo 4000K	
		Equipment : 1 x LED single 840 16 W / 2292 lm	
		Emergency : 190 lm (8.3 %)	

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F_G
Date : 29.01.2025



3 GF Stairs

3.2 Summary, GF Stairs

3.2.1.1 Result overview (emergency lighting)

8 1E x Order No. : AADL/3M/W -- Emergency Lighting --
 Luminaire name : EMERGENCY - Adler Exit Sign
Equipment : 1 x LED 2 W / 1 lm (0%)
Emergency : 1 lm

7 2E x **ROBUS** Order No. : RDD1P5LO-01/CCT 5700K -- Emergency Lighting --
 Luminaire name : Desmond
Equipment : 1 x LED 1.2 W / 170 lm (0%)
Emergency : 170 lm

The logo for UKLED LIGHTING DESIGN. It features the letters 'UKLED' in a large, bold, black sans-serif font. The 'U' has a small orange square above its top left corner. To the right of 'UKLED', the words 'LIGHTING DESIGN' are written in a smaller, orange, sans-serif font, enclosed within a white, rounded rectangular shape that overlaps the 'L' and 'D' of 'UKLED'.

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



4 Open Plan Office

4.1 Summary, Open Plan Office

4.1.1 Result overview, Evaluation area 1

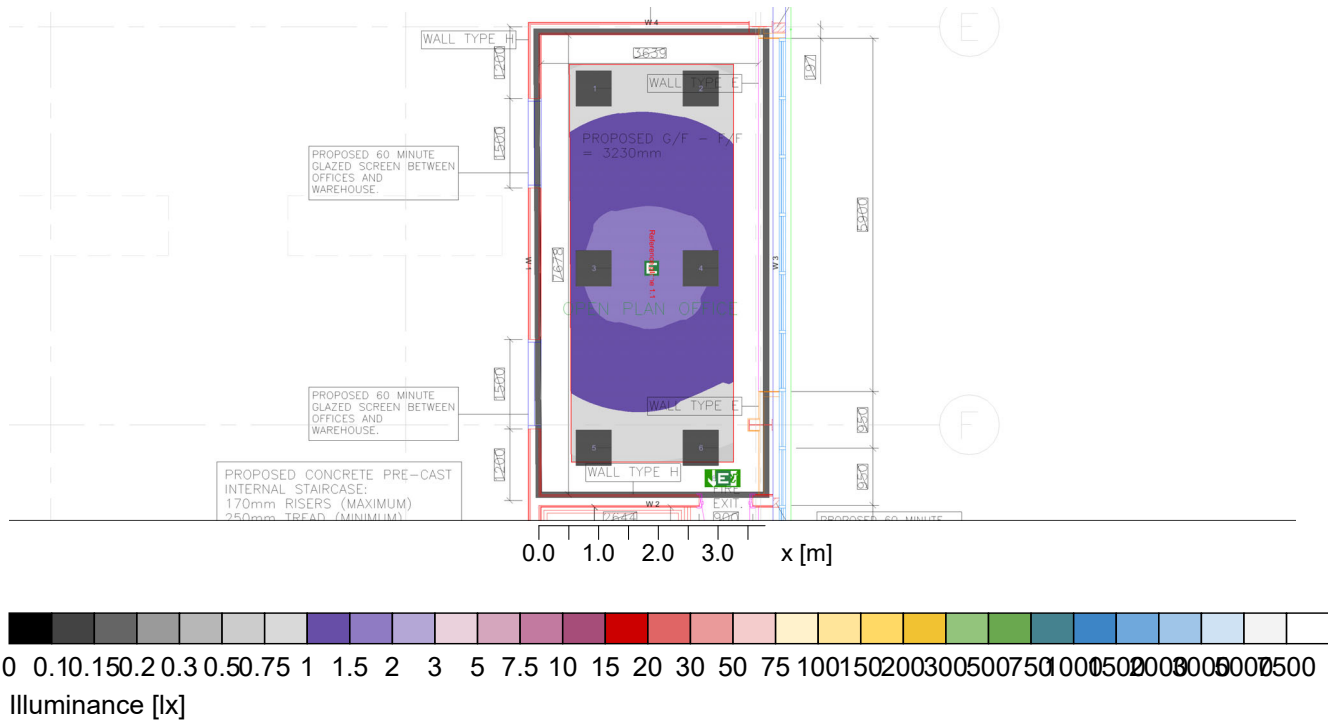
6	6 x	Collingwood	
		Order No.	: UKLD0226
		Luminaire name	: UKLD0226
		Equipment	: 1 x LED 30 W / 3450 lm

Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025

4 Open Plan Office

4.2 Summary, Open Plan Office

4.2.1.1 Result overview (emergency lighting)

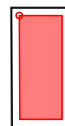


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.80 m
 Maximum I : 100 cd <= 900 cd

Anti panic area:

No.	Surface	Emin [lx]	Emax [lx]	Ud
Anti panic area 1.1				
Calculation field: 6.66m x 2.75m (16 x 7 pts), Height = 0.00m				
1		0.68 lx	1.92 lx	1: 2.83
		>= 0.5 lx		>= 1 : 40



Type No.\Make

8 1E x	ANSELL			
	Order No.	: AADL/3M/W	-- Emergency Lighting --	
	Luminaire name	: EMERGENCY - Adler Exit Sign		
	Equipment	: 1 x LED 2 W / 1 lm (0%)		
	Emergency	: 1 lm		

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



4 Open Plan Office

4.2 Summary, Open Plan Office

4.2.1.1 Result overview (emergency lighting)

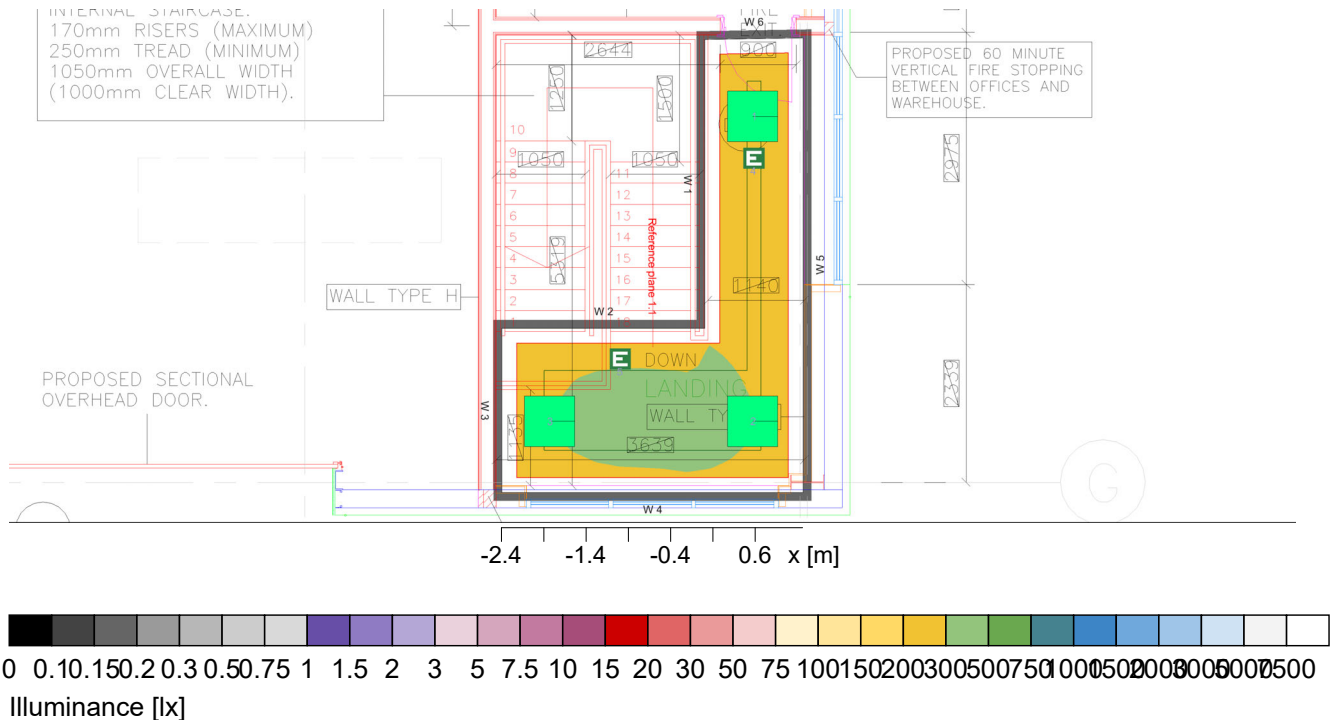
		ROBUS		
7	1E x	Order No.	: RDD1P5LO-01/CCT 5700K	-- Emergency Lighting --
		Luminaire name	: Desmond	
		Equipment	: 1 x LED 1.2 W / 170 lm (0%)	
		Emergency	: 170 lm	

Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F_G
 Date : 29.01.2025

5 1st Floor Landing

5.1 Summary, 1st Floor Landing

5.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.80 m
 0.80

Total luminous flux
 Total power
 Total power per area (10.87 m²)

10350.00 lm
 90.0 W
 8.28 W/m² (3.00 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal	cylindrical
E_{min}	276 lx	180 lx
$E_{min}/\bar{E}_m (U_o)$	214 lx	96 lx
$E_{min}/E_{max} (U_d)$	0.78	0.53
E_z/E_h	0.66	0.32
Position	0.00 m	1.60 m
RUG (--- ---)	---	

Hints:
 - Room dimensions deviate too much from a rectangular room.

Major surfaces

$\bar{E}_m$

U_o

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



5 1st Floor Landing

5.1 Summary, 1st Floor Landing

5.1.1 Result overview, Evaluation area 1

Type No.\Make

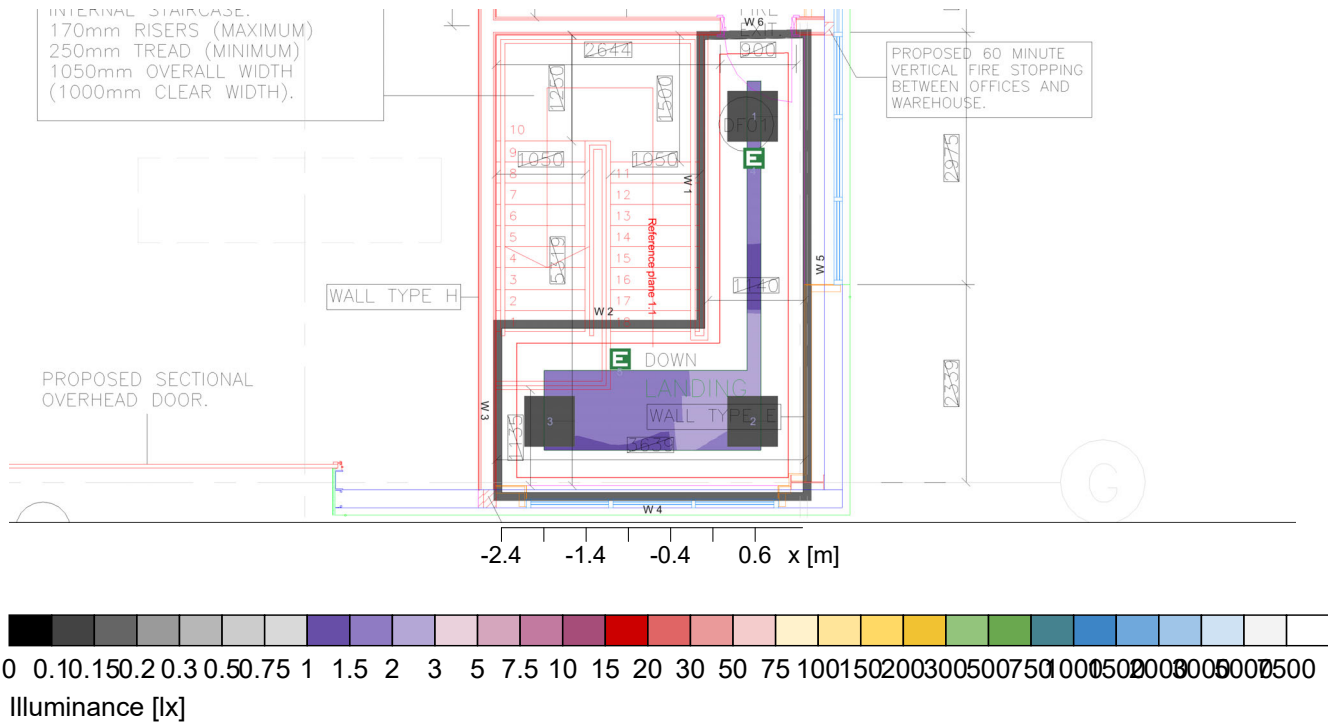
6	3 x	Collingwood	
		Order No.	: UKLD0226
		Luminaire name	: UKLD0226
		Equipment	: 1 x LED 30 W / 3450 lm

Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025

5 1st Floor Landing

5.2 Summary, 1st Floor Landing

5.2.1.1 Result overview (emergency lighting)

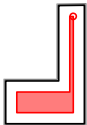


General

Calculation algorithm used : Direct component
 Maintenance factor : 0.8
 Height (phot centre) : 2.80 m
 Maximum I : 100 cd <= 900 cd

Anti panic area:

No.	Surface	Emin [lx]	Emax [lx]	Ud
Anti panic area 1.1				
Calculation field: 4.36m x 2.56m (21 x 12 pts), Height = 0.00m				
1		1.21 lx	2.56 lx	1: 2.11
		>= 0.5 lx		>= 1 : 40

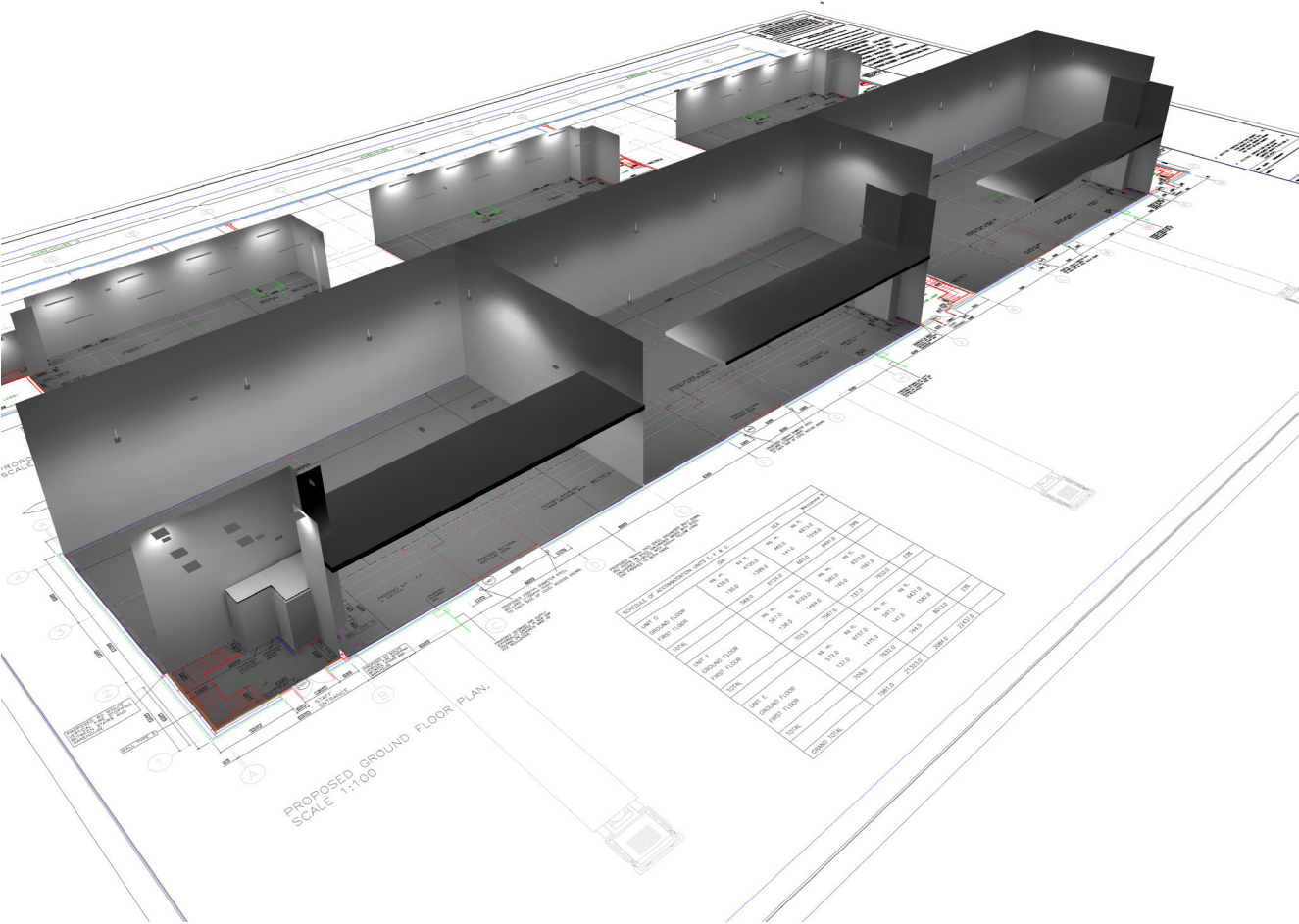


Type No.\Make

7	2E x 	ROBUS		
		Order No.	: RDD1P5LO-01/CCT 5700K	-- Emergency Lighting --
		Luminaire name	: Desmond	
		Equipment	: 1 x LED 1.2 W / 170 lm (0%)	
		Emergency	: 170 lm	

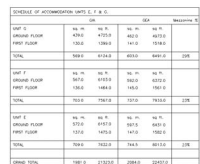
Description, Unit E,F,G

.1 Floor 3D



The logo for UKLED LIGHTING DESIGN. It features the letters 'UKLED' in a large, bold, black sans-serif font. A small orange square is positioned above the 'U'. To the right of 'UKLED', the words 'LIGHTING DESIGN' are written in a smaller, orange, sans-serif font. The 'D' in 'UKLED' is stylized with a white circular cutout in its center.

.2 Floor plan



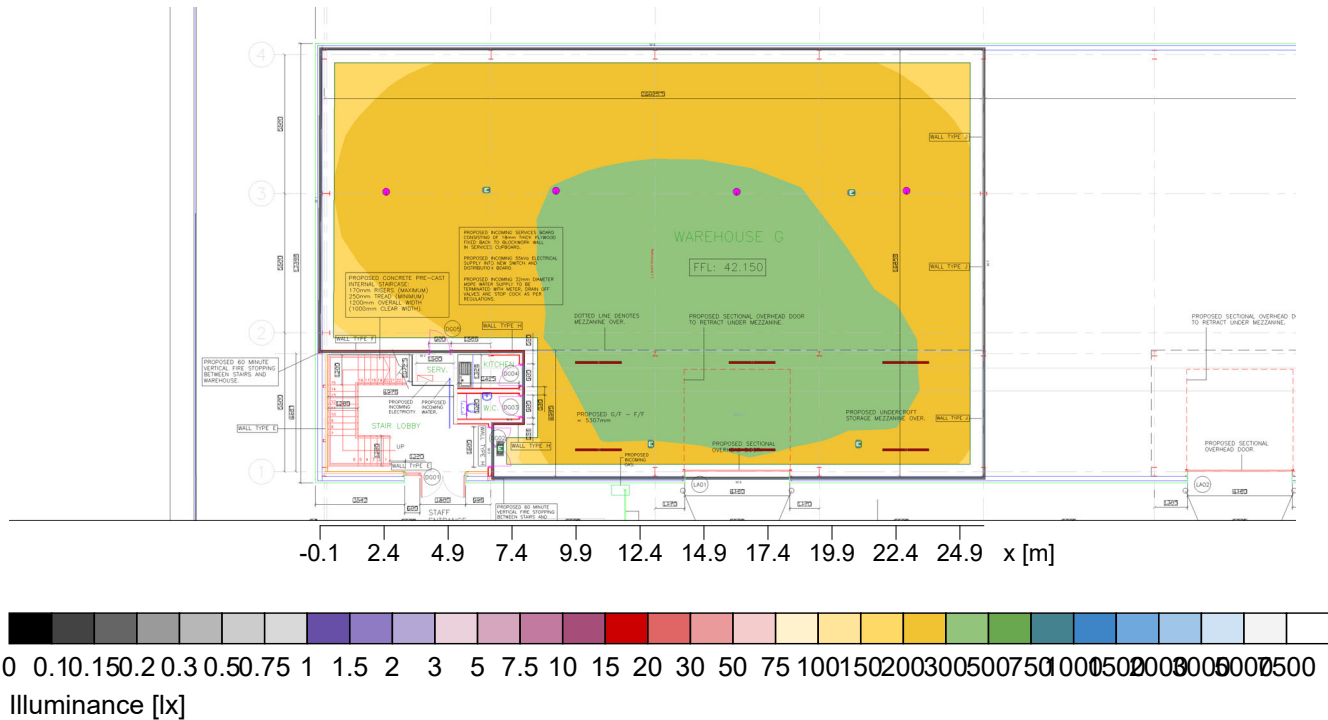
Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025



1 Unit G Warehouse

1.1 Summary, Unit G Warehouse

1.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux	188300.00 lm
Total power	1202.0 W
Total power per area (393.71 m²)	3.05 W/m² (1.08 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal	cylindrical
$\bar{E}_m$	283 lx	128 lx
E_{min}	185 lx	84 lx
$E_{min}/\bar{E}_m (U_o)$	0.65	0.66
$E_{min}/E_{max} (U_d)$	0.51	
E_z/E_h		0.40
Position	0.00 m	1.60 m
RUG (3.4H 2.2H)	30.0	
Luminaire :		
(AREA BAY 200W, HBA3V)		
Hints:		
- The RUG value has been limited to the upper bound of 30.		

Major surfaces

$\bar{E}_m$

U_o

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1 Unit G Warehouse

1.1 Summary, Unit G Warehouse

1.1.1 Result overview, Evaluation area 1

Type No.\Make

1 4 x **Collingwood Lighting**
 Order No. : HBA3V
Luminaire name : AREA BAY 200W
Equipment : 1 x LED 200 W / 32000 lm
Emergency : 650 lm (2.0 %)

4 6 x **Collingwood**
 Order No. : AC6_ 67W-40K-C
Luminaire name : Caiman 1800 33W-67W
Equipment : 1 x LED 67 W / 10050 lm

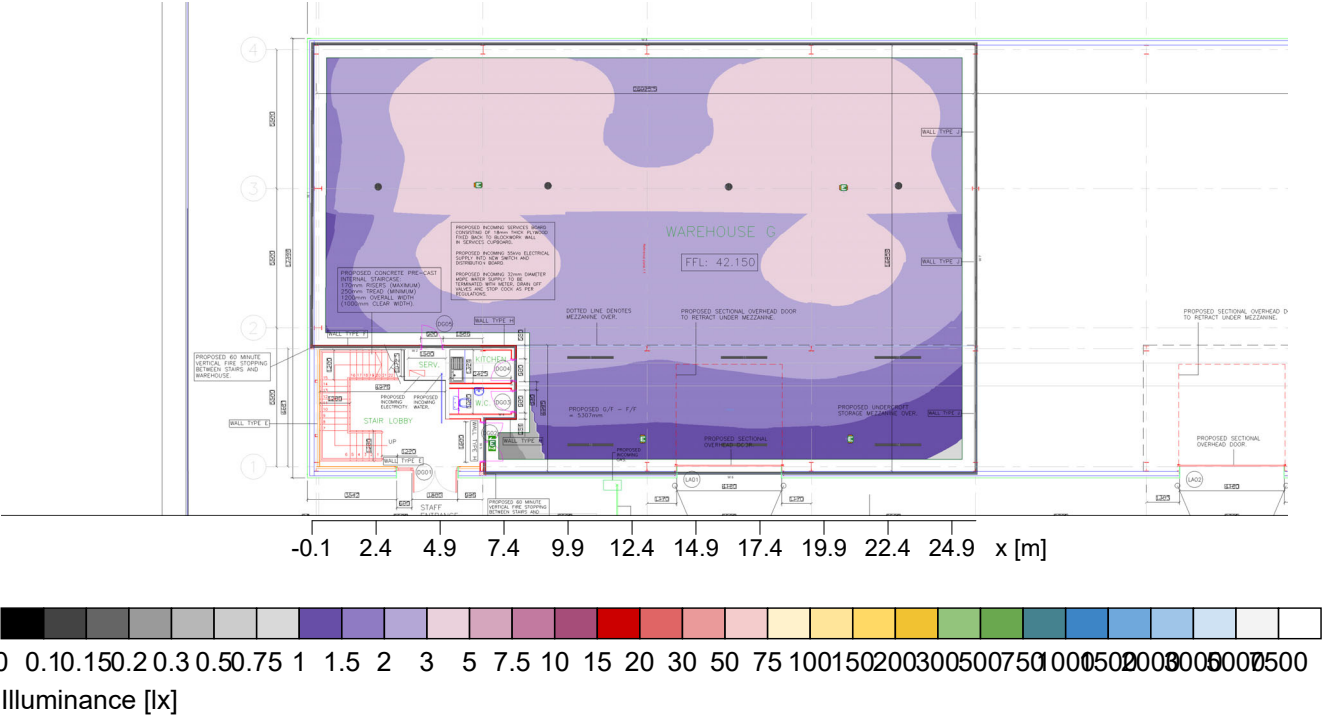
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F_G
Date : 29.01.2025



1 Unit G Warehouse

1.2 Summary, Unit G Warehouse

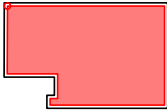
1.2.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 420 cd

Anti panic area:

No.	Surface	Emin [lx]	Emax [lx]	Ud
Anti panic area 1.1				
Calculation field: 15.73m x 24.86m (8 x 13 pts), Height = 0.00m				
1		0.26 lx	4.58 lx	1: 17.83
		>= 0.5 lx		>= 1 : 40



Type No. \Make

Collingwood Lighting		
2	4E x	Order No. : !EMBMX/EMBMX_1000 -- Emergency Lighting --
		Luminaire name : Salvus Max
		Equipment : 1 x LED 6.9 W / 1500 lm (0%)
		Emergency : 1500 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1 Unit G Warehouse

1.2 Summary, Unit G Warehouse

1.2.1.1 Result overview (emergency lighting)

8	1E x	ANSELL	Order No.	: AADL/3M/W	-- Emergency Lighting --
			Luminaire name	: EMERGENCY - Adler Exit Sign	
			Equipment	: 1 x LED 2 W / 1 lm (0%)	
			Emergency	: 1 lm	

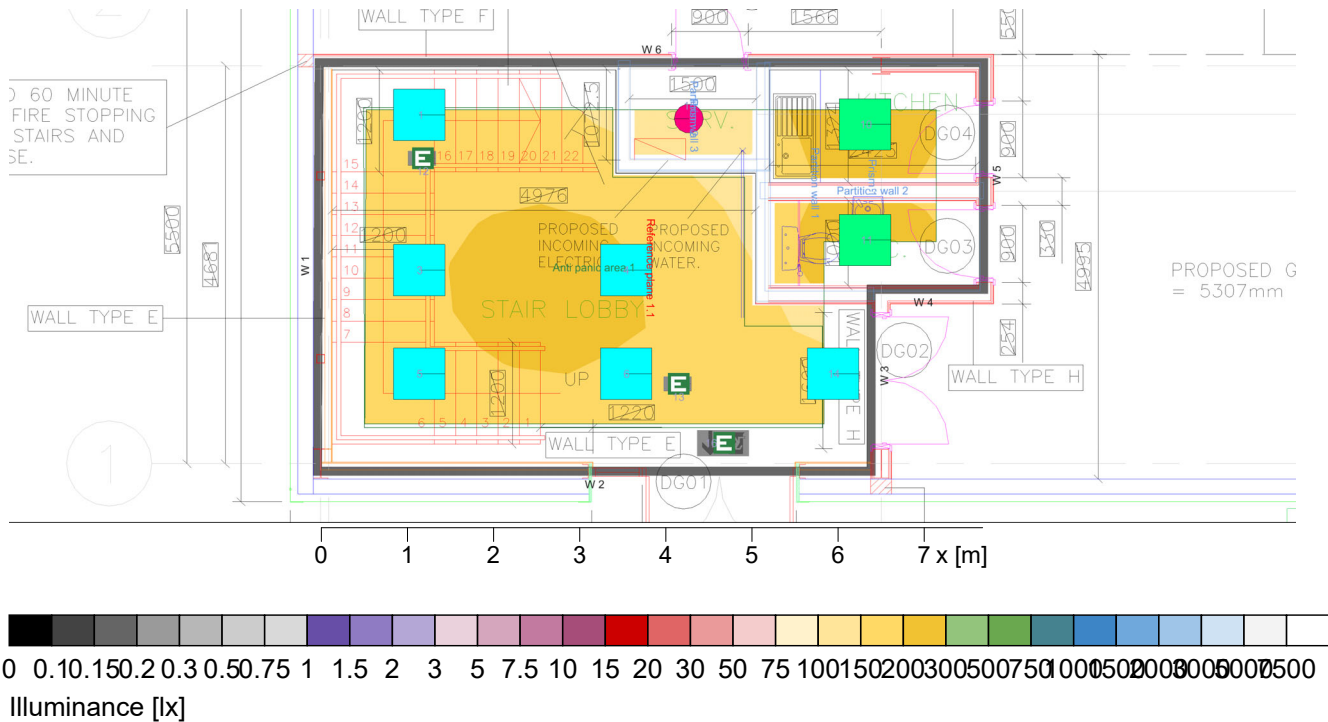
Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025



2 Unit E.F,G, Entrance Area

2.1 Summary, Unit E.F,G, Entrance Area

2.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Total luminous flux
 Total power
 Total power per area (32.62 m²)

36792.00 lm
 316.0 W
 9.69 W/m² (5.18 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 $\bar{E}_m$ 187 lx
 E_{min} 117 lx
 $E_{min}/\bar{E}_m (U_o)$ 0.62
 $E_{min}/E_{max} (U_d)$ 0.52
 E_z/E_h 0.29
 Position 0.00 m
 $R_{UG} (3.0H \ 5.0H)$ ≤ 24.1
 Luminaire :
 (BULKHEADS - Disco Evo 4000K, ADIS2/1/M3 (16W 4000K))

cylindrical
 90 lx
 63 lx
 0.70
 0.29
 1.60 m

Major surfaces

$\bar{E}_m$

U_o

Type No.\Make

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



2 Unit E.F,G, Entrance Area

2.1 Summary, Unit E.F,G, Entrance Area

2.1.1 Result overview, Evaluation area 1

3 1 x  **ANSELL**
Order No. : ADIS2/1/M3 (16W 4000K)
Luminaire name : BULKHEADS - Disco Evo 4000K
Equipment : 1 x LED single 840 16 W / 2292 lm
Emergency : 190 lm (8.3 %)

5 6 x  **Collingwood**
Order No. : EDM243-A
Luminaire name : EDM243
Equipment : 1 x LED 40 W / 4600 lm

6 2 x  **UKLD0226**
Luminaire name : UKLD0226
Equipment : 1 x LED 30 W / 3450 lm

The logo for UKLED LIGHTING DESIGN. It features the letters 'UKLED' in a large, bold, black sans-serif font. A small orange square is positioned above the 'U'. To the right of 'UKLED', the words 'LIGHTING DESIGN' are written in a smaller, orange, sans-serif font. The 'D' in 'UKLED' is stylized with a white circular cutout in its center.

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F_G
Date : 29.01.2025

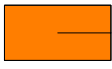


2 Unit E.F,G, Entrance Area

2.2 Summary, Unit E.F,G, Entrance Area

2.2.1.1 Result overview (emergency lighting)

Collingwood Lighting

2 2E x  Order No. : !EMBMAX/EMBMAX_1000 -- Emergency Lighting --
Luminaire name : Salvus Max
Equipment : 1 x LED 6.9 W / 1500 lm (0%)
Emergency : 1500 lm

ANSELL

8 1E x  Order No. : AADL/3M/W -- Emergency Lighting --
Luminaire name : EMERGENCY - Adler Exit Sign
Equipment : 1 x LED 2 W / 1 lm (0%)
Emergency : 1 lm

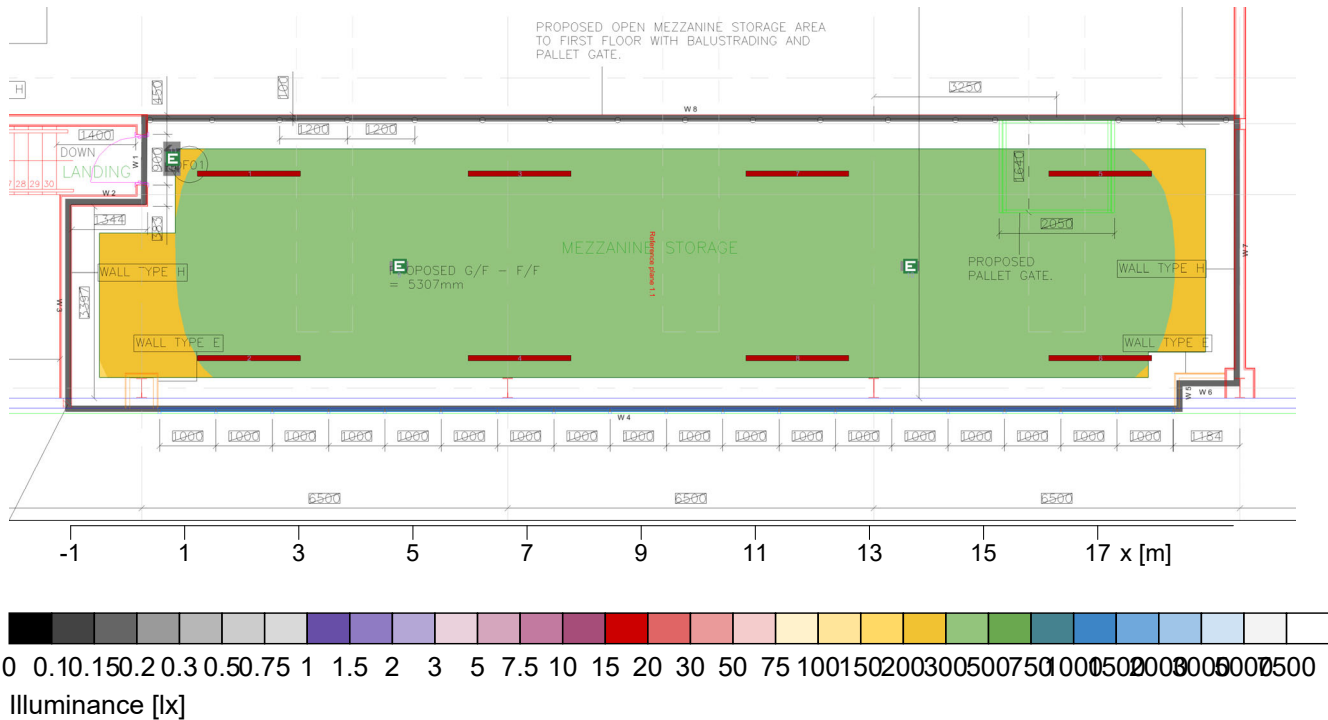
Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025



3 Unit G Mezzanine

3.1 Summary, Unit G Mezzanine

3.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Total luminous flux
 Total power
 Total power per area (99.29 m²)

80400.00 lm
 536.0 W
 5.40 W/m² (1.53 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 $\bar{E}_m$ 352 lx
 E_{min} 213 lx
 $E_{min}/\bar{E}_m (U_o)$ 0.61
 $E_{min}/E_{max} (U_d)$ 0.53
 E_z/E_h 0.42
 Position 0.00 m
 $R_{UG} (1.7H \ 6.9H)$ ≤ 25.5
 Luminaire :
 (Cairman 1800 33W-67W, AC6_ 67W-40K-C)

cylindrical
 189 lx
 132 lx
 0.70
 0.42
 1.60 m

Major surfaces

$\bar{E}_m$

U_o

Type No.\Make

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



3 Unit G Mezzanine

3.1 Summary, Unit G Mezzanine

3.1.1 Result overview, Evaluation area 1

4	8 x	Collingwood	
		Order No.	: AC6_ 67W-40K-C
		Luminaire name	: Caiman 1800 33W-67W
		Equipment	: 1 x LED 67 W / 10050 lm

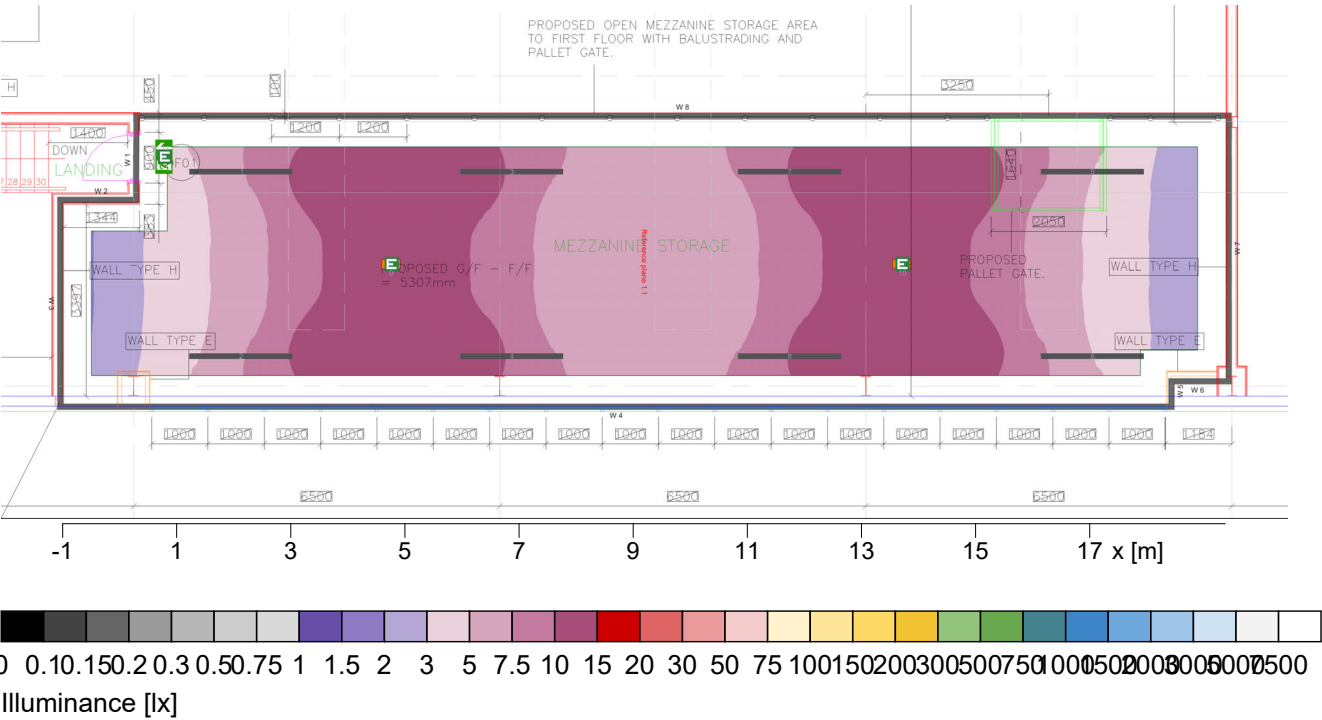
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F_G
Date : 29.01.2025



3 Unit G Mezzanine

3.2 Summary, Unit G Mezzanine

3.2.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 420 cd

Anti panic area:

No.	Surface Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 4.03m x 19.37m (8 x 37 pts), Height = 0.00m			
1	1.96 lx	13.71 lx	1: 7.01
	>= 0.5 lx		>= 1 : 40



Type No. \ Make

Collingwood Lighting			
2	2E x	Order No. : !EMBMX/EMBMX_1000	-- Emergency Lighting --
		Luminaire name : Salvus Max	
		Equipment : 1 x LED 6.9 W / 1500 lm (0%)	
		Emergency : 1500 lm	

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



3 Unit G Mezzanine

3.2 Summary, Unit G Mezzanine

3.2.1.1 Result overview (emergency lighting)

		ANSELL	
8	1E x	Order No.	: AADL/3M/W -- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign
		Equipment	: 1 x LED 2 W / 1 lm (0%)
		Emergency	: 1 lm

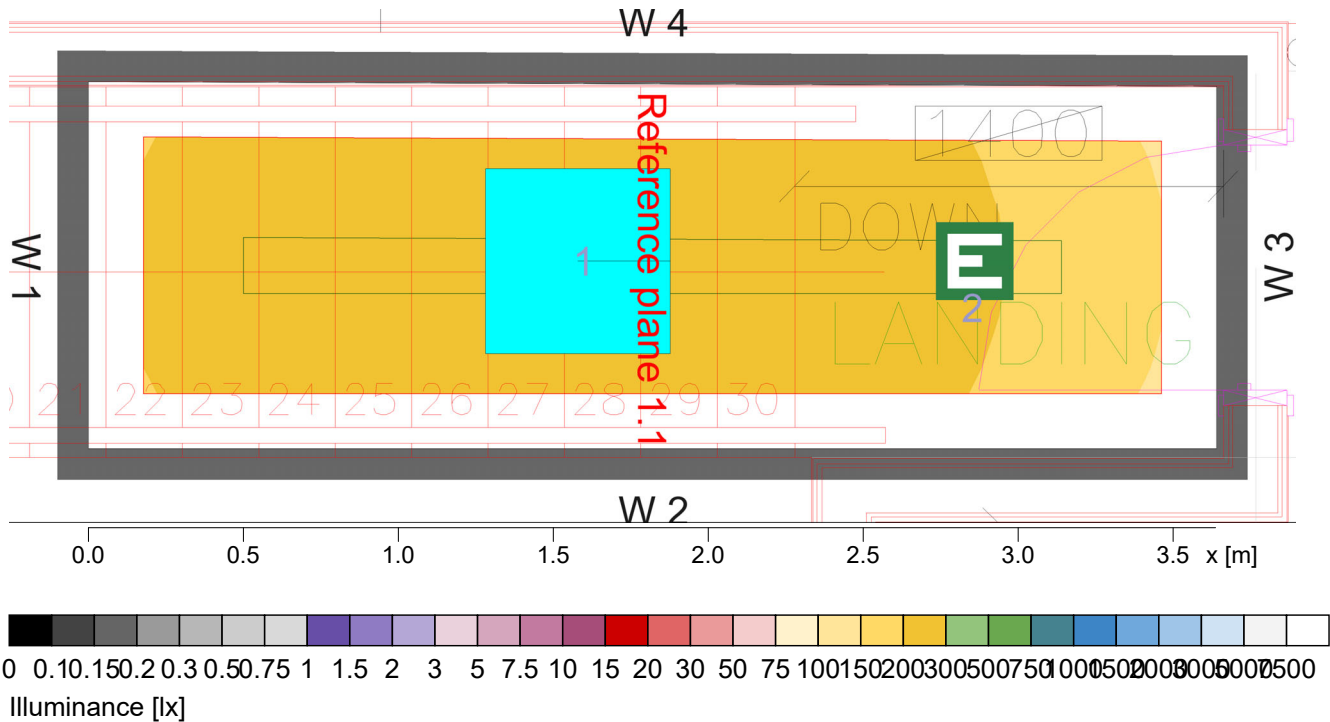
Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F_G
 Date : 29.01.2025



4 Unit E,F,G - Upper Stairs

4.1 Summary, Unit E,F,G - Upper Stairs

4.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.80 m
Maintenance factor	0.80
Total luminous flux	4600.00 lm
Total power	40.0 W
Total power per area (4.27 m²)	9.36 W/m² (3.82 W/m²/100lx)

Evaluation area 1

$\bar{E}_m$
 E_{min}
 $E_{min}/\bar{E}_m (U_o)$
 $E_{min}/E_{max} (U_d)$
 E_z/E_h
 Position
 $R_{UG} (0.7H \ 2.3H)$
 Luminaire :
 (EDM243, EDM243-A)

Reference plane 1.1

Horizontal
 245 lx
 154 lx
 0.63
 0.52
 0.29
 0.00 m
 ≤ 16.3

cylindrical
 184 lx
 76 lx
 0.41
 0.29
 1.60 m

Major surfaces

$\bar{E}_m$

U_o

Type No.\Make

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



4 Unit E,F,G - Upper Stairs

4.1 Summary, Unit E,F,G - Upper Stairs

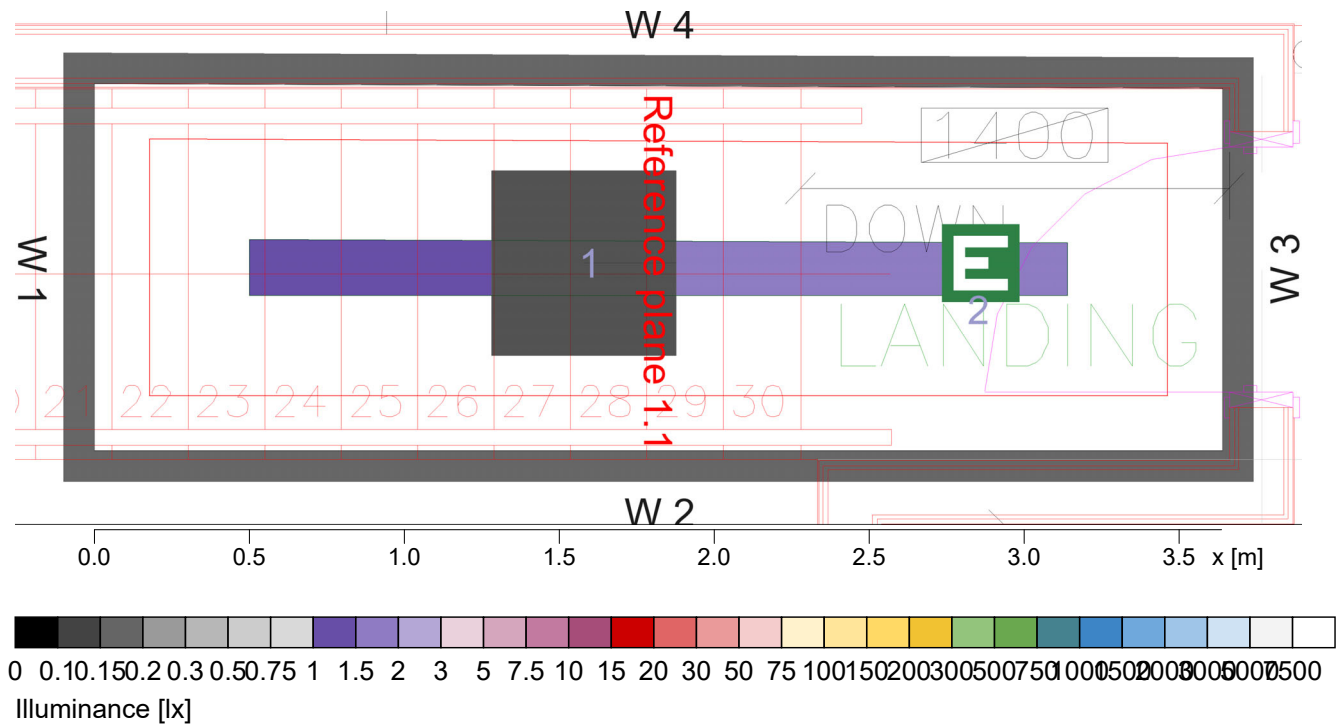
4.1.1 Result overview, Evaluation area 1

5	1 x	Collingwood	
		Order No.	: EDM243-A
		Luminaire name	: EDM243
		Equipment	: 1 x LED 40 W / 4600 lm

4 Unit E,F,G - Upper Stairs

4.2 Summary, Unit E,F,G - Upper Stairs

4.2.1.1 Result overview (emergency lighting)

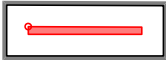


General

Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : 2.80 m
Maximum I : 100 cd <= 900 cd

Anti panic area:

No.	Surface Emin [lx]	Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 0.18m x 2.64m (3 x 44 pts), Height = 0.00m			
1	1.05 lx	1.92 lx	1: 1.82
	>= 0.5 lx		>= 1: 40



Type No. Make

7 1E x	ROBUS		
	Order No.	: RDD1P5LO-01/CCT 5700K	-- Emergency Lighting --
	Luminaire name	: Desmond	
	Equipment	: 1 x LED 1.2 W / 170 lm (0%)	
	Emergency	: 170 lm	

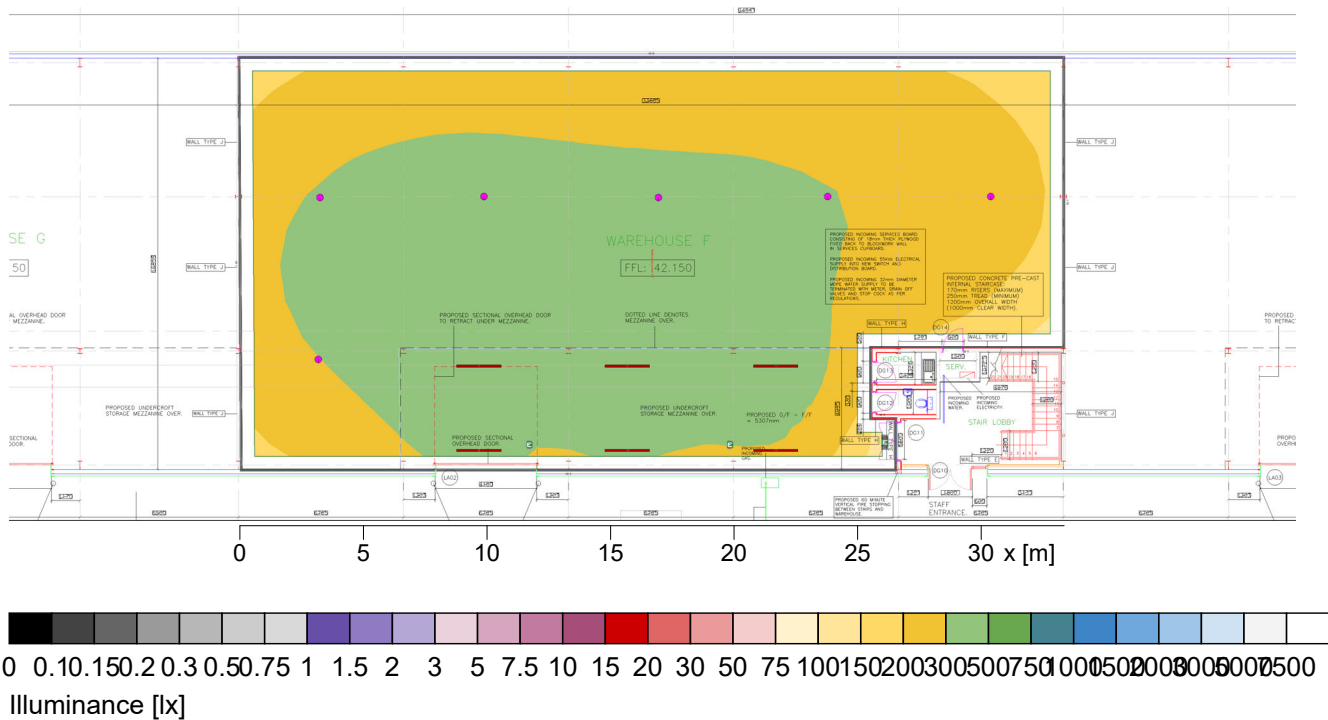
Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025



5 Unit F Warehouse

5.1 Summary, Unit F Warehouse

5.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Total luminous flux
 Total power
 Total power per area (514.27 m²)

252300.00 lm
 1602.0 W
 3.12 W/m² (1.04 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 $\bar{E}_m$ 300 lx
 E_{min} 149 lx
 $E_{min}/\bar{E}_m (U_o)$ 0.50
 $E_{min}/E_{max} (U_d)$ 0.36
 E_z/E_h 0.40
 Position 0.00 m
 RUG (4.4H 2.2H) 30.0
 Luminaire :
 (AREA BAY 200W, HBA3V)
 Hints:
 - The RUG value has been limited to the upper bound of 30.

cylindrical
 134 lx
 82 lx
 0.62
 0.40
 1.60 m

Major surfaces

$\bar{E}_m$

U_o

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



5 Unit F Warehouse

5.1 Summary, Unit F Warehouse

5.1.1 Result overview, Evaluation area 1

Type No.\Make

1 6 x **Collingwood Lighting**
 Order No. : HBA3V
Luminaire name : AREA BAY 200W
Equipment : 1 x LED 200 W / 32000 lm
Emergency : 650 lm (2.0 %)

4 6 x **Collingwood**
 Order No. : AC6_ 67W-40K-C
Luminaire name : Caiman 1800 33W-67W
Equipment : 1 x LED 67 W / 10050 lm

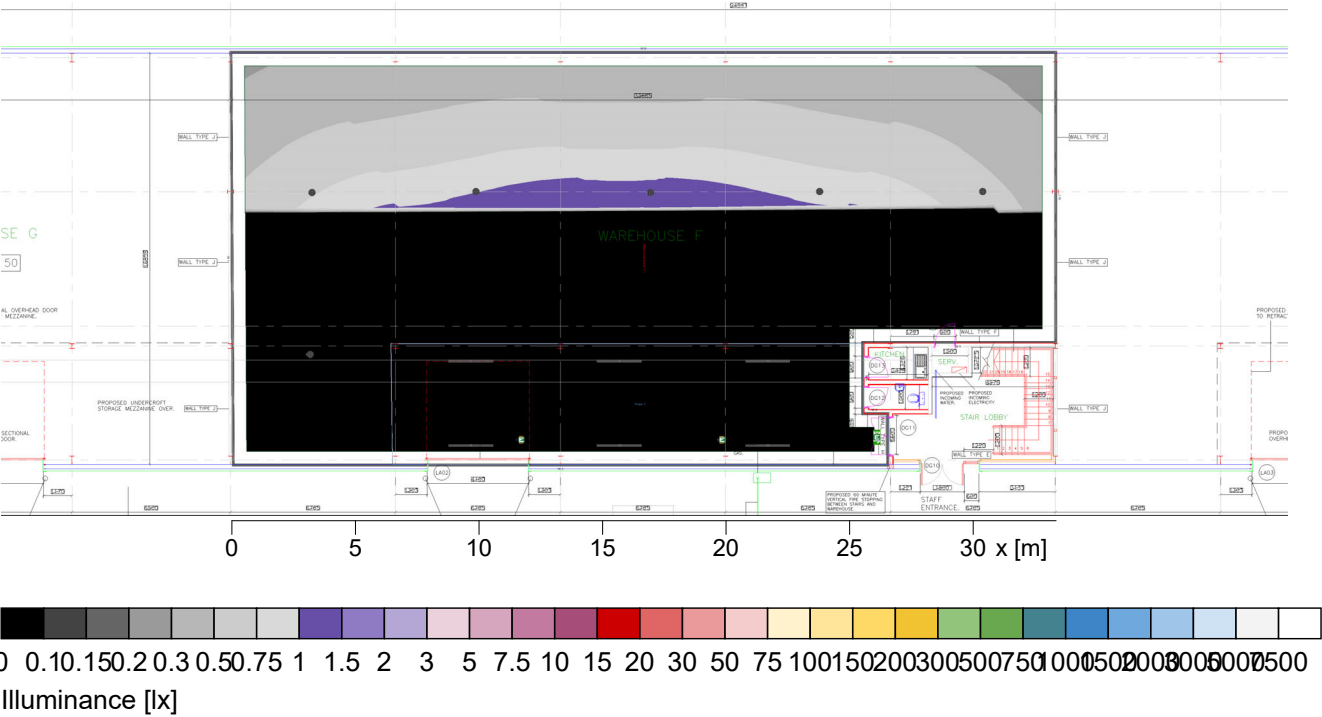
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



5 Unit F Warehouse

5.2 Summary, Unit F Warehouse

5.2.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 420 cd

Anti panic area:

No.	Surface		Ud
	Emin [lx]	Emax [lx]	
Anti panic area 1.1			
Calculation field: 15.73m x 32.26m (11 x 24 pts), Height = 0.00m			
1	0.00 lx	1.33 lx	---
	>= 0.5 lx		>= 1 : 40



Type No.\Make

2 2E x	Collingwood Lighting		
	Order No.	: !EMBMX/EMBMX_1000	-- Emergency Lighting --
	Luminaire name	: Salvus Max	
	Equipment	: 1 x LED 6.9 W / 1500 lm (0%)	
	Emergency	: 1500 lm	

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



5 Unit F Warehouse

5.2 Summary, Unit F Warehouse

5.2.1.1 Result overview (emergency lighting)

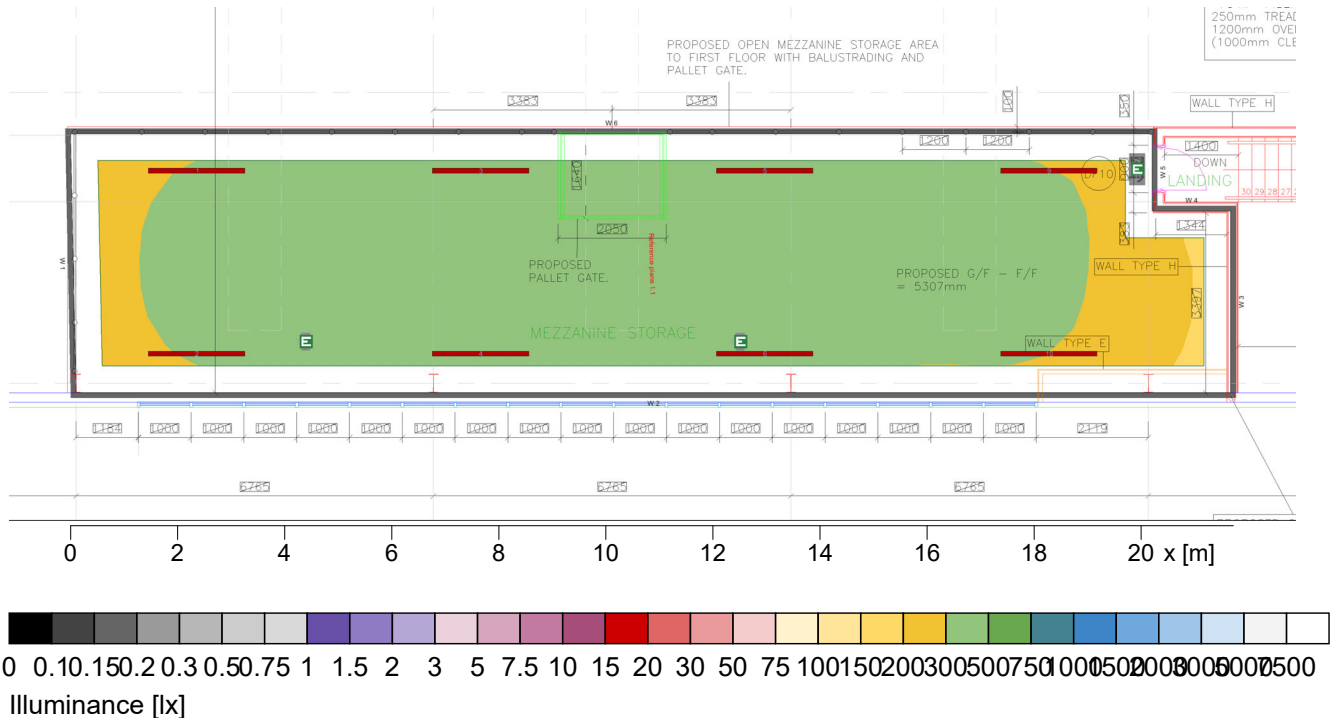
8	1E x	ANSELL	
		Order No.	: AADL/3M/W -- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign
		Equipment	: 1 x LED 2 W / 1 lm (0%)
		Emergency	: 1 lm

Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025

6 Unit F Mezzanine

6.1 Summary, Unit F Mezzanine

6.1.1 Result overview, Evaluation area 1



Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



6 Unit F Mezzanine

6.1 Summary, Unit F Mezzanine

6.1.1 Result overview, Evaluation area 1

		Collingwood	
4	8 x	Order No.	: AC6_ 67W-40K-C
		Luminaire name	: Caiman 1800 33W-67W
		Equipment	: 1 x LED 67 W / 10050 lm

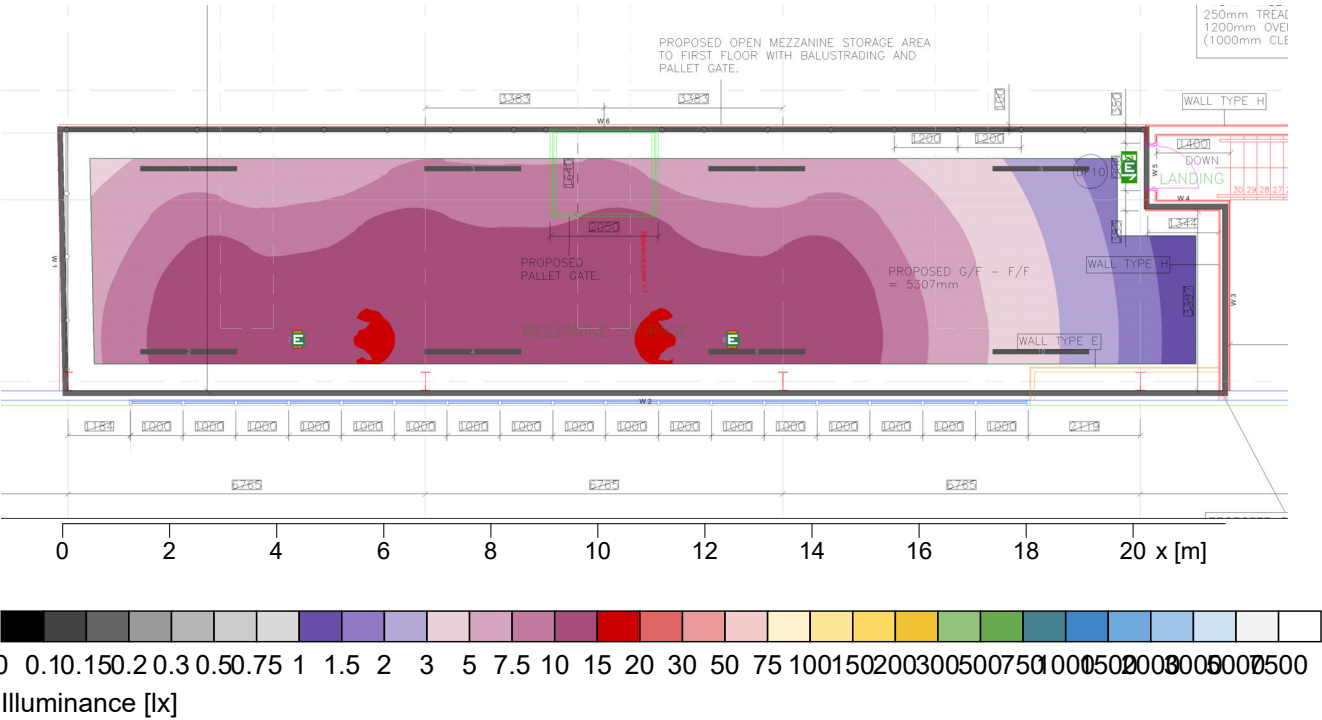
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



6 Unit F Mezzanine

6.2 Summary, Unit F Mezzanine

6.2.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 420 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 4.26m x 20.61m (8 x 37 pts), Height = 0.00m			
1	1.14 lx	15.41 lx	1: 13.57
	>= 0.5 lx		>= 1 : 40



Type No. \ Make

Collingwood Lighting

2	2E x	Order No.	: !EMBMAX/EMBMAX_1000	-- Emergency Lighting --
		Luminaire name	: Salvus Max	
		Equipment	: 1 x LED 6.9 W / 1500 lm (0%)	
		Emergency	: 1500 lm	

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



6 Unit F Mezzanine

6.2 Summary, Unit F Mezzanine

6.2.1.1 Result overview (emergency lighting)

		ANSELL	
8	1E x	Order No.	: AADL/3M/W -- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign
		Equipment	: 1 x LED 2 W / 1 lm (0%)
		Emergency	: 1 lm

The logo for UKLED LIGHTING DESIGN. It features the letters 'UKLED' in a large, bold, black sans-serif font. The letter 'U' has a small orange square above its top left corner. To the right of 'UKLED', the words 'LIGHTING DESIGN' are written in a smaller, orange, sans-serif font, enclosed within a white, rounded rectangular shape that overlaps the 'L' and 'D' of 'UKLED'.

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



7 Unit E Warehouse

7.1 Summary, Unit E Warehouse

7.1.1 Result overview, Evaluation area 1

Type No.\Make

1 6 x  **Collingwood Lighting**
Order No. : HBA3V
Luminaire name : AREA BAY 200W
Equipment : 1 x LED 200 W / 32000 lm
Emergency : 650 lm (2.0 %)

4 6 x  **Collingwood**
Order No. : AC6_ 67W-40K-C
Luminaire name : Caiman 1800 33W-67W
Equipment : 1 x LED 67 W / 10050 lm

The logo for UKLED LIGHTING DESIGN. It features the letters 'UKLED' in a large, bold, black sans-serif font. A small orange square is positioned above the 'U'. To the right of 'UKLED', the words 'LIGHTING DESIGN' are written in a smaller, orange, sans-serif font. The 'D' in 'UKLED' is stylized with a white circular cutout in its center.

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



7 Unit E Warehouse

7.2 Summary, Unit E Warehouse

7.2.1.1 Result overview (emergency lighting)

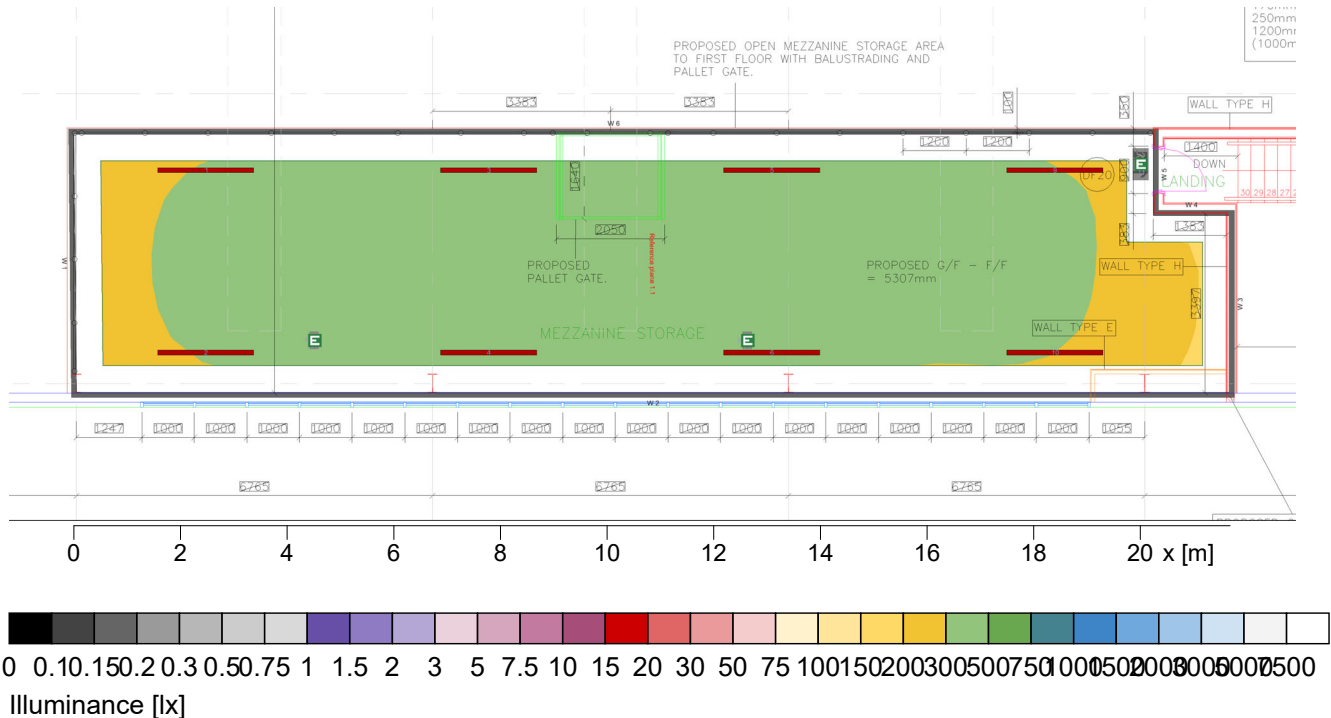
8	1E x	ANSELL	
		Order No.	: AADL/3M/W -- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign
		Equipment	: 1 x LED 2 W / 1 lm (0%)
		Emergency	: 1 lm

Object :
 Installation : Prime Point - Knowsley
 Project number : Units D,E,F _G
 Date : 29.01.2025

8 Unit E Mezzanine

8.1 Summary, Unit E Mezzanine

8.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Maintenance factor

High indirect fraction
 0.80

Total luminous flux
 Total power
 Total power per area (102.39 m²)

80400.00 lm
 536.0 W
 5.23 W/m² (1.61 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 $\bar{E}_m$ 325 lx
 E_{min} 198 lx
 $E_{min}/\bar{E}_m (U_o)$ 0.61
 $E_{min}/E_{max} (U_d)$ 0.54
 E_z/E_h 0.42
 Position 0.00 m
 $R_{UG} (1.4H \ 6.3H)$ ≤ 25.3
 Luminaire :
 (Cairman 1800 33W-67W, AC6_67W-40K-C)

cylindrical
 172 lx
 120 lx
 0.70
 0.42
 1.60 m

Major surfaces

$\bar{E}_m$

U_o

Type No./Make

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



8 Unit E Mezzanine

8.1 Summary, Unit E Mezzanine

8.1.1 Result overview, Evaluation area 1

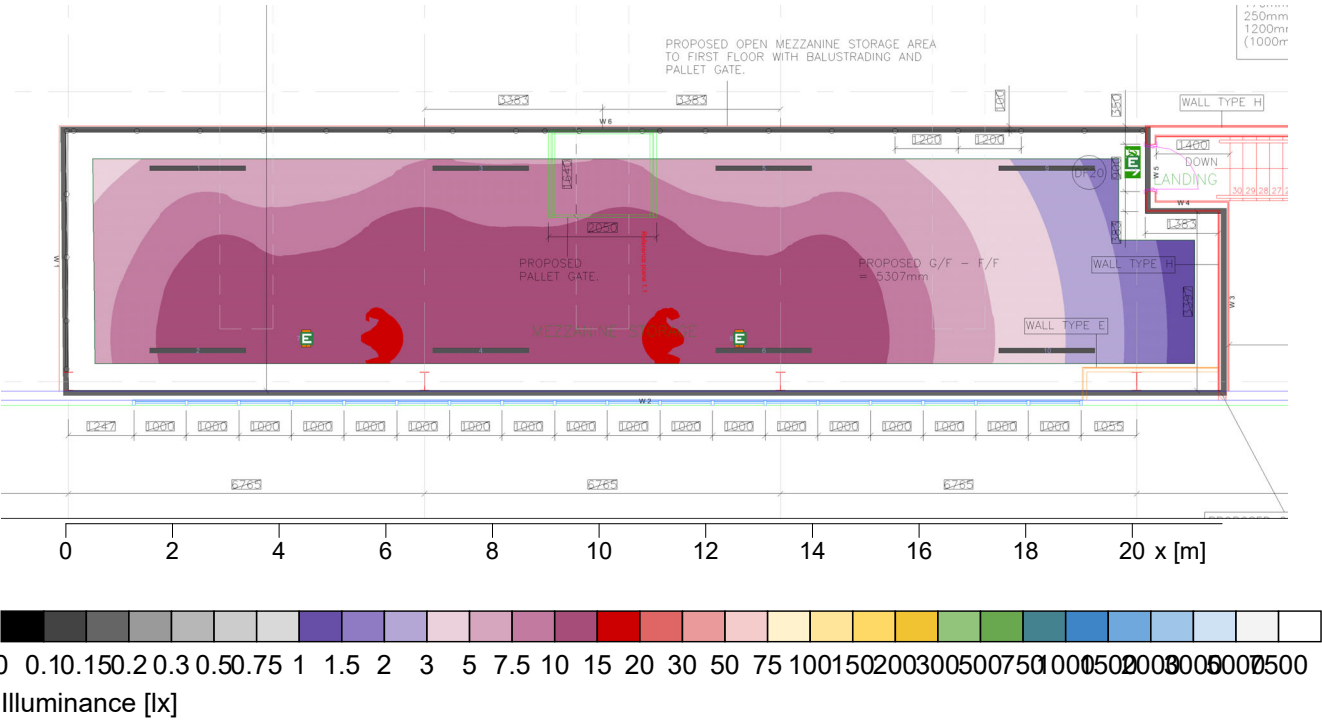
4	8 x	Collingwood	
		Order No.	: AC6_ 67W-40K-C
		Luminaire name	: Caiman 1800 33W-67W
		Equipment	: 1 x LED 67 W / 10050 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025

8 Unit E Mezzanine

8.2 Summary, Unit E Mezzanine

8.2.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : -variable-
Maximum I : 420 cd

Anti panic area:

No.	Surface Emin [lx]	Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 4.06m x 20.62m (8 x 39 pts), Height = 0.00m			
1	1.19 lx	15.41 lx	1: 12.98
	>= 0.5 lx		>= 1 : 40



Type No. \Make

Collingwood Lighting			
2	2E x	Order No. : !EMBMX/EMBMX_1000	-- Emergency Lighting --
		Luminaire name : Salvus Max	
		Equipment : 1 x LED 6.9 W / 1500 lm (0%)	
		Emergency : 1500 lm	

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



8 Unit E Mezzanine

8.2 Summary, Unit E Mezzanine

8.2.1.1 Result overview (emergency lighting)

		ANSELL	
8	1E x	Order No.	: AADL/3M/W -- Emergency Lighting --
		Luminaire name	: EMERGENCY - Adler Exit Sign
		Equipment	: 1 x LED 2 W / 1 lm (0%)
		Emergency	: 1 lm

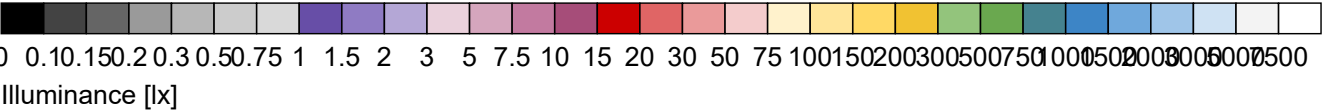
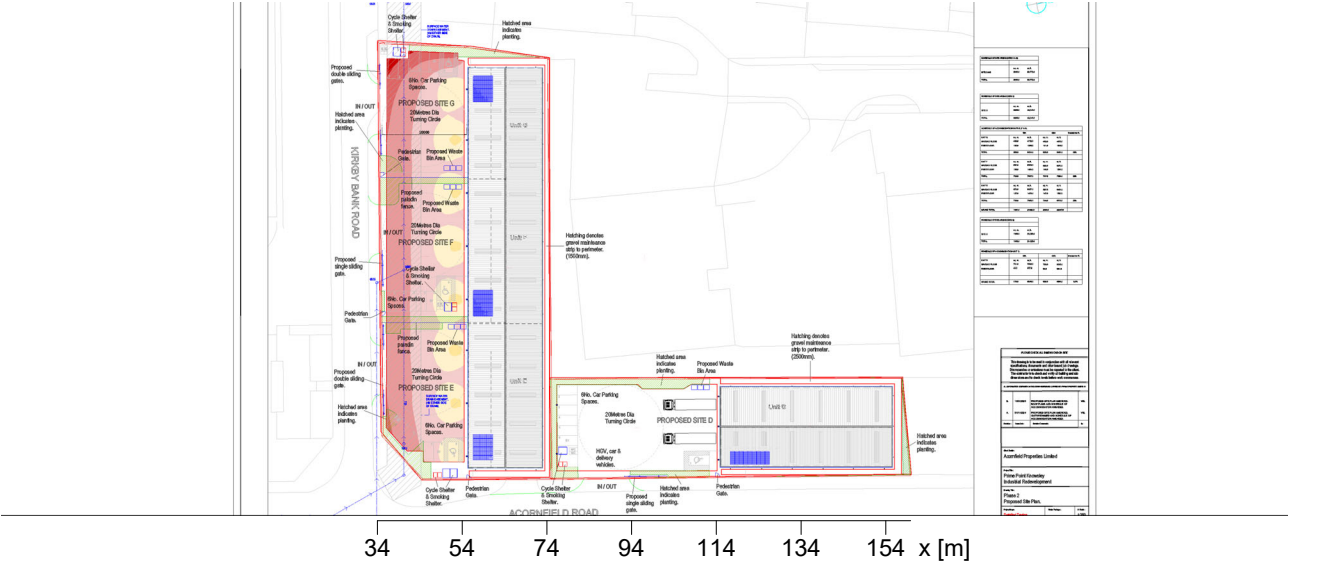
Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1 Exterior 1

1.1 Summary, Exterior 1

1.1.1 Result overview, Units E, F & G Loading/Car Parking



General

Calculation algorithm used : Average indirect fraction
Height of evaluation surface : 0.00 m
Maintenance factor : 0.80

Total luminous flux : 438881.812 lm
Total power : 3001.5 W
Total power per area (6001.17 m²) : 0.50 W/m²

Illuminance

Average illuminance : $\bar{E}_m$: 60 lx
Minimum illuminance : E_{min} : 16 lx
Maximum illuminance : E_{max} : 105 lx
Uniformity U_o : $E_{min}/\bar{E}_m$: 1:3.67 (0.27)
Diversity U_d : E_{min}/E_{max} : 1:6.37 (0.16)

Type No.\Make

ANSELL

9 13 x
 Order No. : AAZT4/ASY/1 (160W 4000K)
Luminaire name : FLOODLIGHTS - Aztec Floodlight Asymetric 4000K
Equipment : 1 x LED 160 W / 28200.9 lm

ROBUS

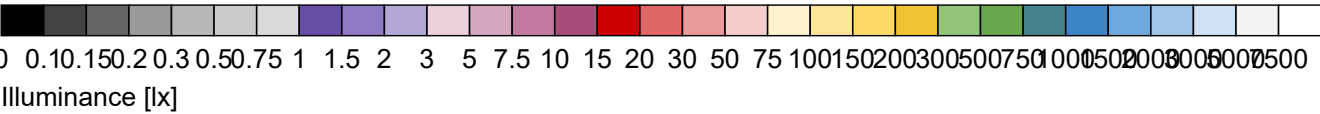
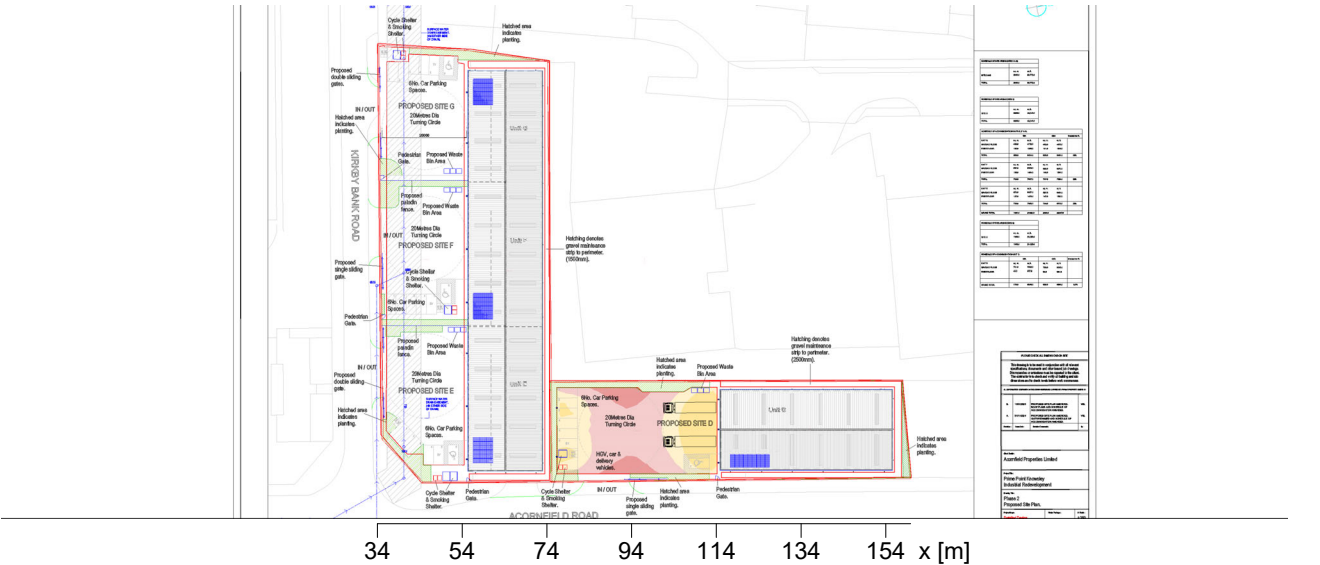
10 33 x
 Order No. : RHL3040-04/CCT 4000K
Luminaire name : Hilume
Equipment : 1 x LED 27.92 W / 2190 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1.1 Summary, Exterior 1

1.1.2 Result overview, Unit D Loading/Car Park



General

Calculation algorithm used : Average indirect fraction
Height of evaluation surface : 0.00 m
Maintenance factor : 0.80

Total luminous flux : 438881.812 lm
Total power : 3001.5 W
Total power per area (6001.17 m²) : 0.50 W/m²

Illuminance

Average illuminance : $\bar{E}_m$: 79 lx
Minimum illuminance : E_{min} : 43 lx
Maximum illuminance : E_{max} : 141 lx
Uniformity U_o : $E_{min}/\bar{E}_m$: 1:1.85 (0.54)
Diversity U_d : E_{min}/E_{max} : 1:3.32 (0.3)

Type No. \ Make

ANSELL

9 13 x
 Order No. : AAZT4/ASY/1 (160W 4000K)
Luminaire name : FLOODLIGHTS - Aztec Floodlight Asymetric 4000K
Equipment : 1 x LED 160 W / 28200.9 lm

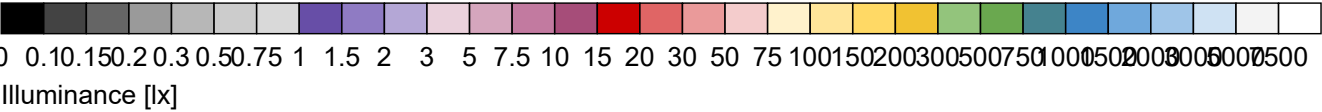
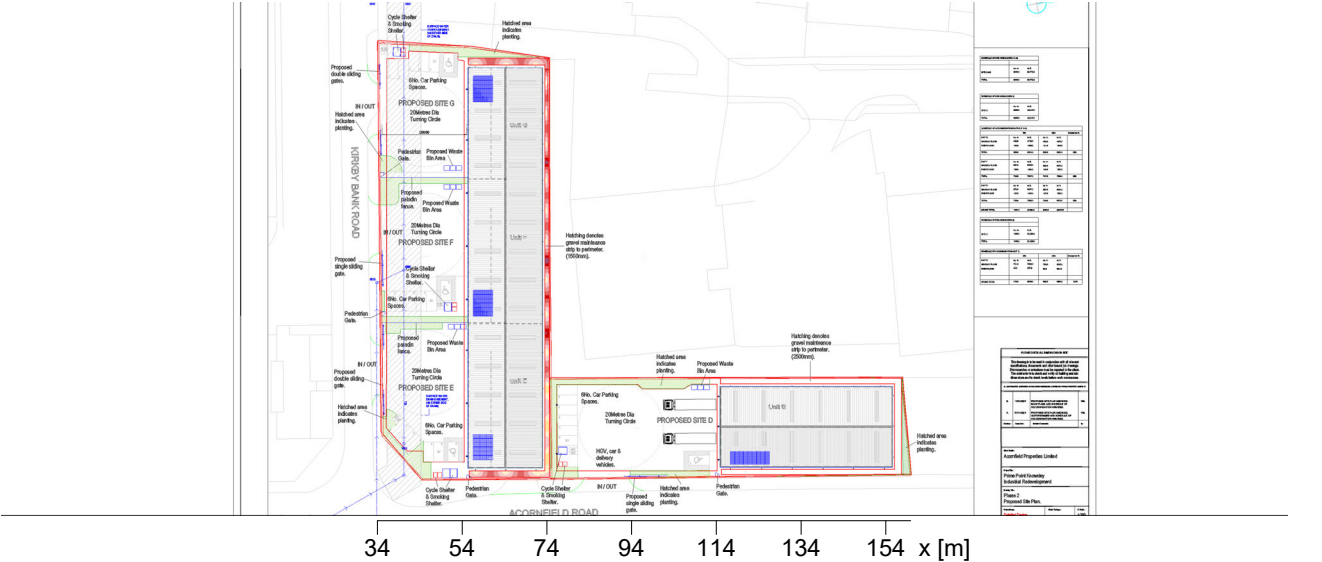
ROBUS

10 33 x
 Order No. : RHL3040-04/CCT 4000K
Luminaire name : Hilume
Equipment : 1 x LED 27.92 W / 2190 lm

The logo for UKLED LIGHTING DESIGN. It features the letters 'UKLED' in a large, bold, black sans-serif font. The 'U' has a small orange square above its top left corner. To the right of 'UKLED', the words 'LIGHTING DESIGN' are written in a smaller, orange, sans-serif font, enclosed within a white, rounded rectangular shape that overlaps the 'LED' part of the main text.

1.1 Summary, Exterior 1

1.1.4 Result overview, Unit E,F & G Perimeter Path



General

Calculation algorithm used : Average indirect fraction
Height of evaluation surface : 0.00 m
Maintenance factor : 0.80

Total luminous flux : 438881.812 lm
Total power : 3001.5 W
Total power per area (6001.17 m²) : 0.50 W/m²

Illuminance

Average illuminance : $\bar{E}_m$: 54 lx
Minimum illuminance : E_{min} : 12 lx
Maximum illuminance : E_{max} : 124 lx
Uniformity U_o : $E_{min}/\bar{E}_m$: 1:4.4 (0.23)
Diversity U_d : E_{min}/E_{max} : 1:10.1 (0.1)

Type No. \ Make

ANSELL

9 13 x
Order No. : AAZT4/ASY/1 (160W 4000K)
Luminaire name : FLOODLIGHTS - Aztec Floodlight Asymetric 4000K
Equipment : 1 x LED 160 W / 28200.9 lm

ROBUS

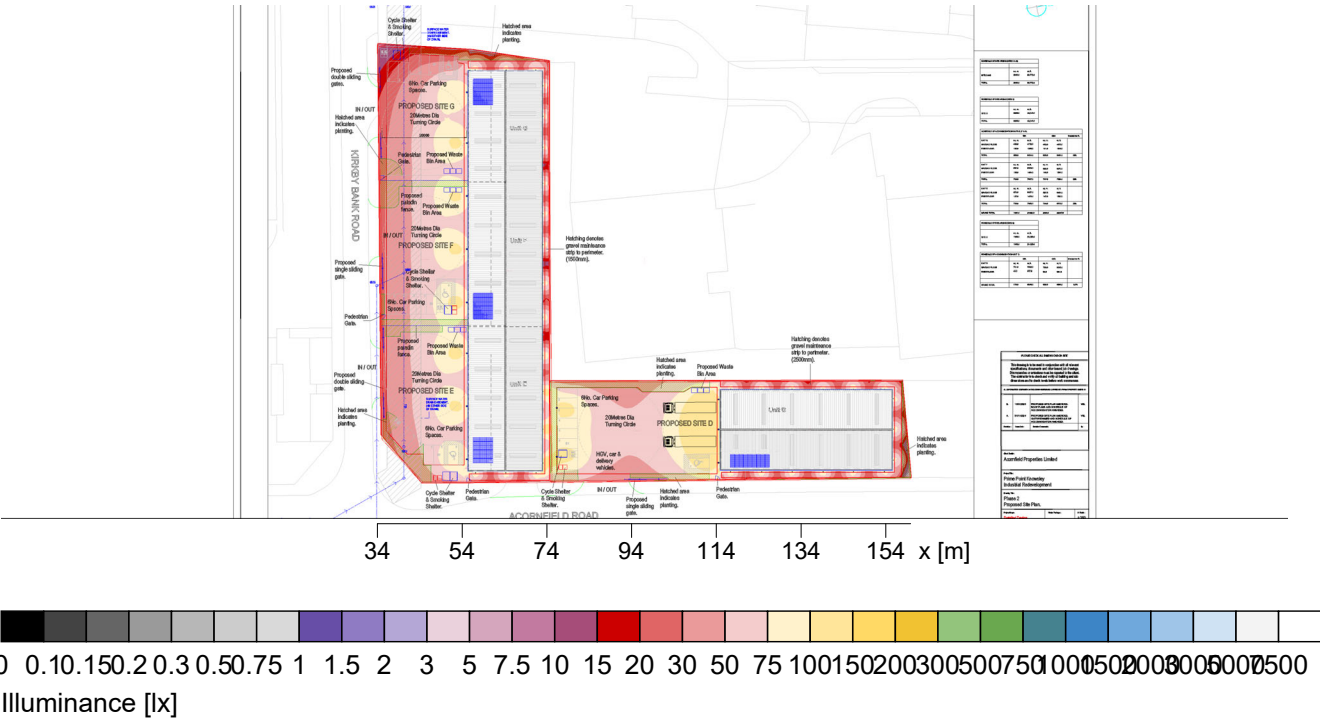
10 33 x
Order No. : RHL3040-04/CCT 4000K
Luminaire name : Hilume
Equipment : 1 x LED 27.92 W / 2190 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1.1 Summary, Exterior 1

1.1.5 Result overview, Evaluation area 1



General

Calculation algorithm used : Average indirect fraction
Maintenance factor : 0.80

Total luminous flux : 438881.75 lm
Total power : 3001.5 W
Total power per area (6001.17 m²) : 0.50 W/m² (0.83 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 $\bar{E}_m$: 60.5 lx
 E_{min} : 5.4 lx
 $E_{min}/\bar{E}_m (U_o)$: 0.09
 $E_{min}/E_{max} (U_d)$: 0.04
Position : 0.00 m

Type No. \ Make

9 13 x **ANSELL**
Order No. : AAZT4/ASY/1 (160W 4000K)
Luminaire name : FLOODLIGHTS - Aztec Floodlight Asymetric 4000K
Equipment : 1 x LED 160 W / 28200.9 lm

Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025



1.1 Summary, Exterior 1

1.1.5 Result overview, Evaluation area 1

10	33 x	ROBUS	
		Order No.	: RHL3040-04/CCT 4000K
		Luminaire name	: Hilume
		Equipment	: 1 x LED 27.92 W / 2190 lm

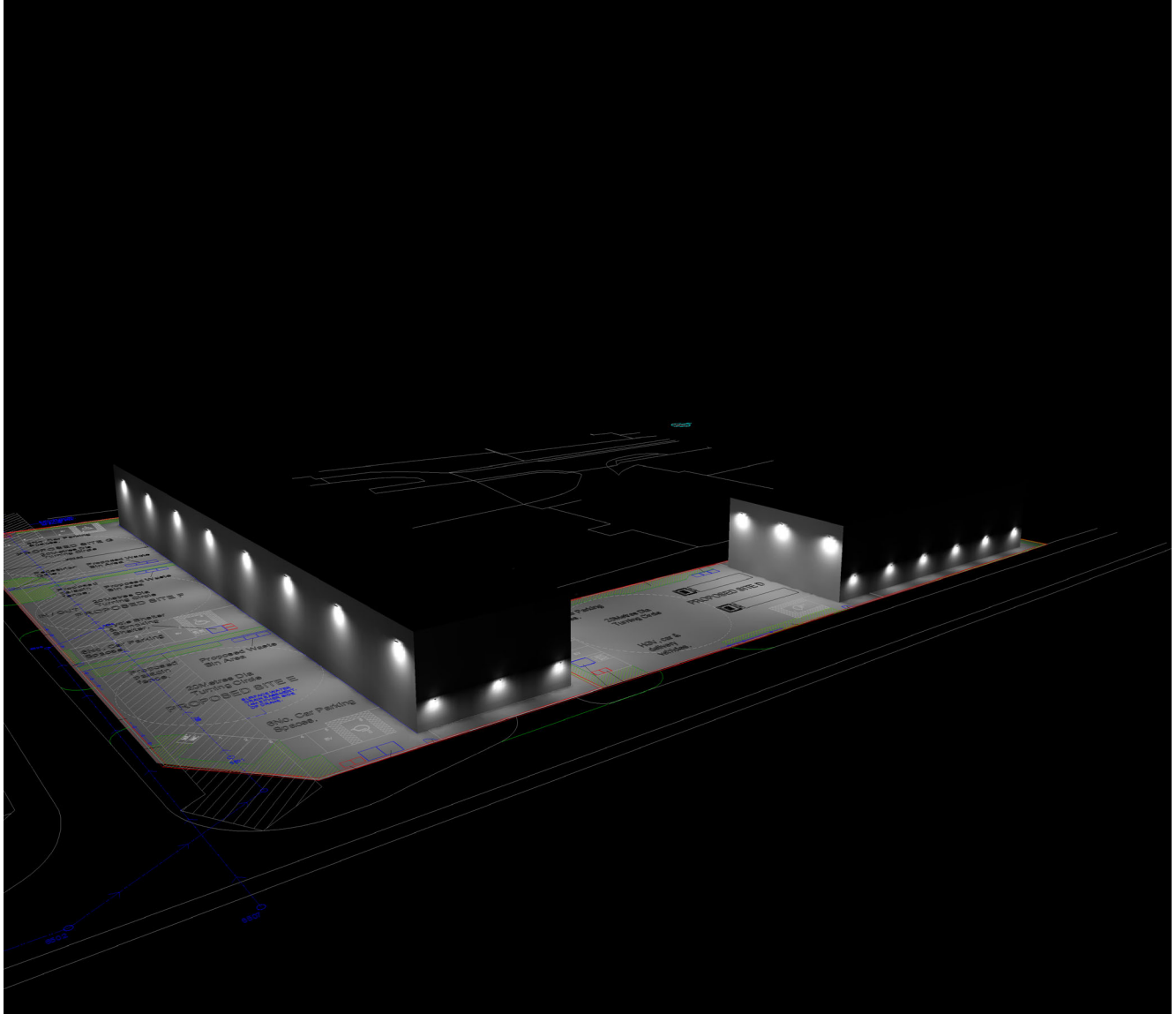


Object :
Installation : Prime Point - Knowsley
Project number : Units D,E,F _G
Date : 29.01.2025

1 Exterior 1

1.2 Calculation results, Exterior 1

1.2.1 3D luminance, View 1



1.2 Calculation results, Exterior 1
1.2.2 3D pseudo colours, View 1 (E)

