

Islington Wharf, Phase 4

IW4-AME-XX-XX-CA-E-63-0001

Lighting Calculations

Rev. C03

Ref	Date	Description	By
P01	21.08.21	Preliminary Issue	B.C.
C01	11.07.22	Construction Issue	C.P.
C02	13.07.22	External Lighting Plots Amended	B.C.
C03	16.11.22	External Lighting Plots Amended	B.C.

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Islington Wharf, Phase 4

IW4-AME-XX-XX-CA-E-63-0001

Internal Lighting Calculations

Rev. C03





Innovation. Collaboration. Illumination.

Islington Wharf

Light Calculations



Lift Lobby

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 23.08.2021

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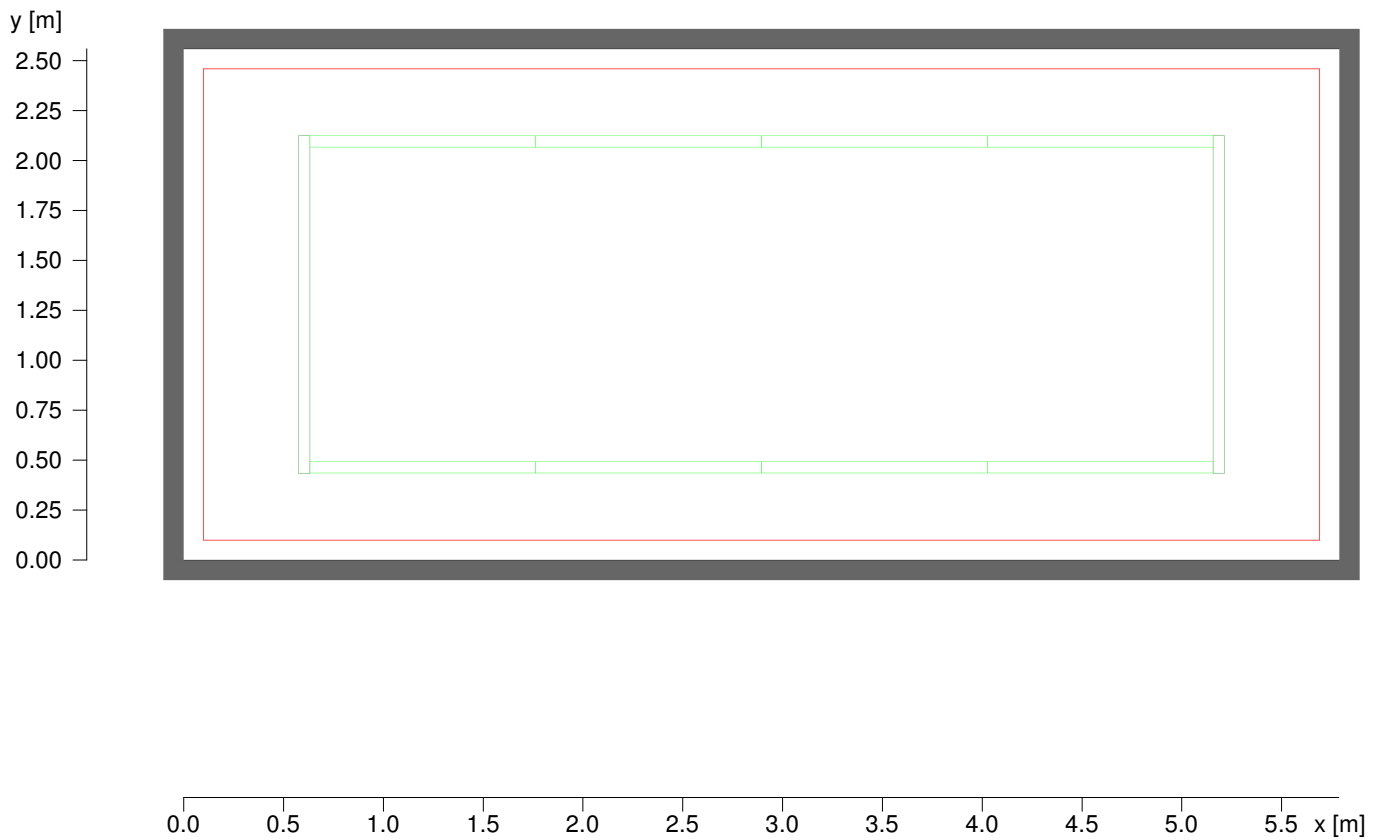
Object : Lift Lobby
 Installation : Islington Wharf
 Project number :
 Date : 23.08.2021



2 Lift Lobby

2.1 Description, Lift Lobby

2.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	5.79 m	0.00 m	5.79 m	50.0 %
2	5.79 m	2.56 m	2.56 m	50.0 %
3	0.00 m	2.56 m	5.79 m	50.0 %
4	-0.00 m	0.00 m	2.56 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.20 m		
Height of ref. plane		0.00 m		

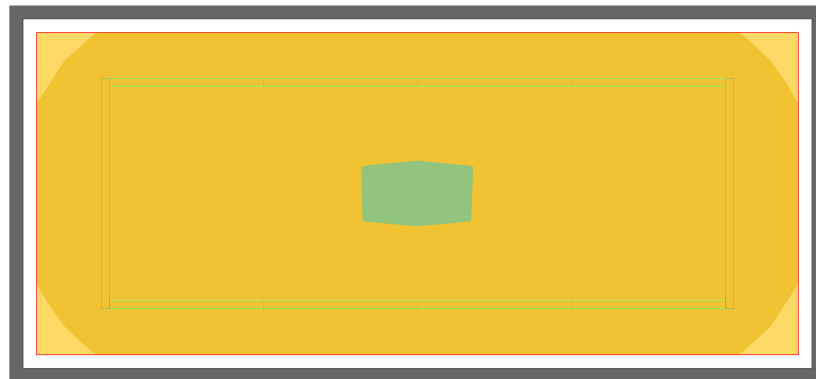
Object : Lift Lobby
 Installation : Islington Wharf
 Project number :
 Date : 23.08.2021



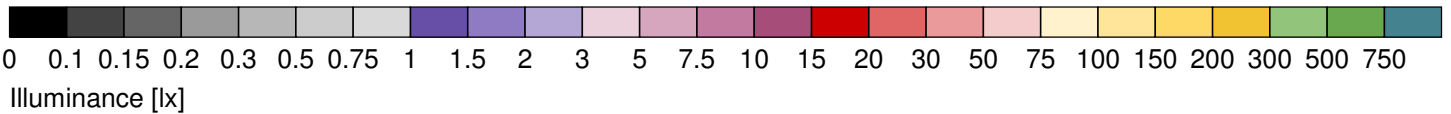
2 Lift Lobby

2.2 Summary, Lift Lobby

2.2.1 Result overview, Evaluation area 1



0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 x [m]



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.20 m
Maintenance factor	0.80
Total luminous flux of all lamps	10646.00 lm
Total power	84.9 W
Total power per area (14.81 m ²)	5.73 W/m ² (2.30 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal
Em	249 lx
Emin	188 lx
Emin/Em (Uo)	0.76
Emin/Emax (Ud)	0.66
Position	0.00 m

Type No. \ Make

LDL	
1	4
Order No.	: MIL/R/22/OP/1900/4/75
Luminaire name	: MILLIE Recessed 2250mm OPAL 1900lm 16w 840 75mA
Equipment	: 1 x LED Backlight 15.76 W / 1904 lm
2	2
Order No.	: MIL/R/16/OP/1515/4
Luminaire name	: MILLIE Recessed 1690mm OPAL 1515lm 11w 840 75mA
Equipment	: 1 x LED Backlight 10.94 W / 1515 lm

LDL lighting

Unit 3 Stonehouse Road, Martland Park, Wigan, WN5 0LE



Circulation

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 23.08.2021

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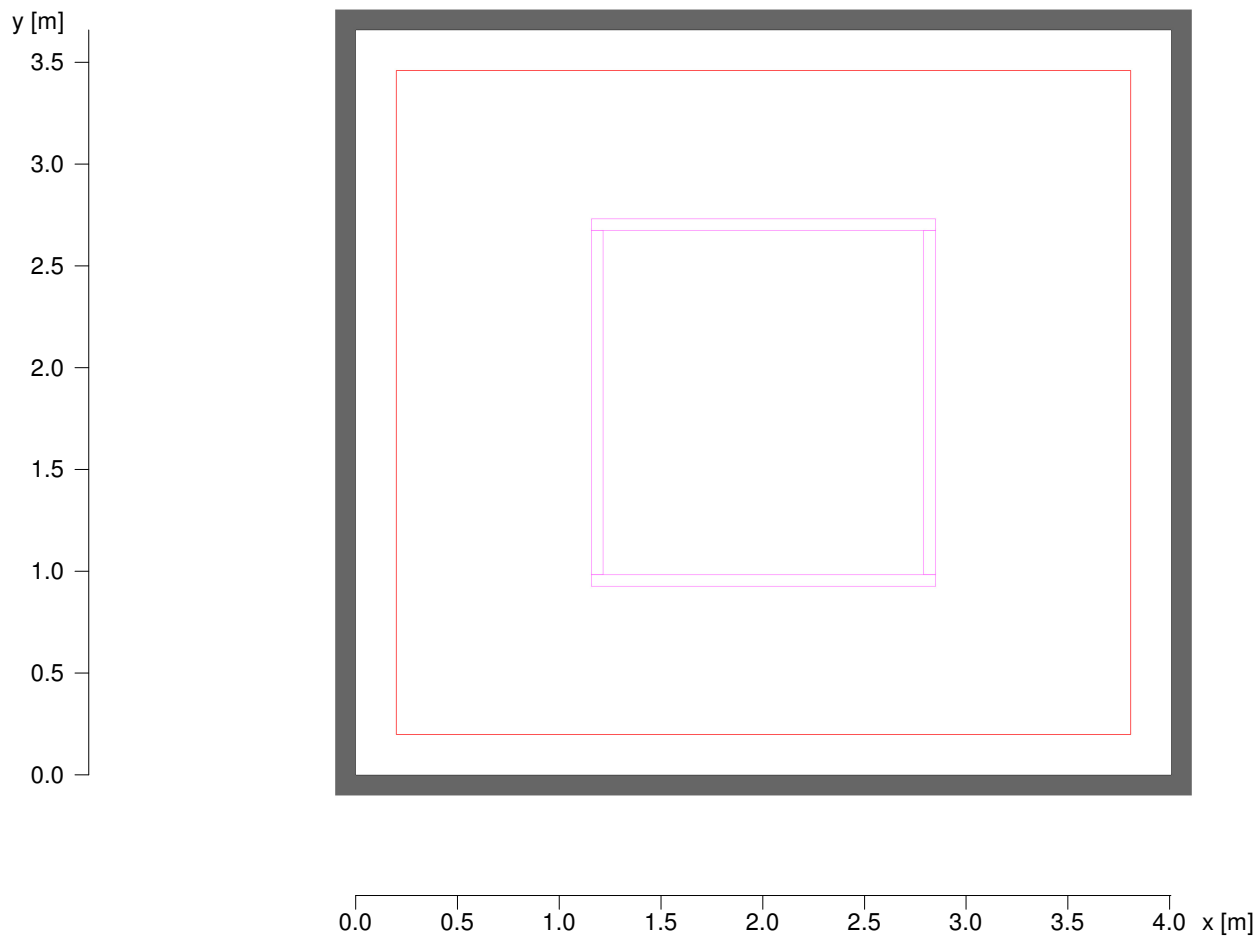
Object : Circulation
Installation : Islington Wharf
Project number :
Date : 23.08.2021



3 Circulation

3.1 Description, Circulation

3.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4.01 m	0.00 m	4.01 m	50.0 %
2	4.01 m	3.66 m	3.66 m	50.0 %
3	0.00 m	3.66 m	4.01 m	50.0 %
4	0.00 m	0.00 m	3.66 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.20 m		
Height of ref. plane		0.00 m		

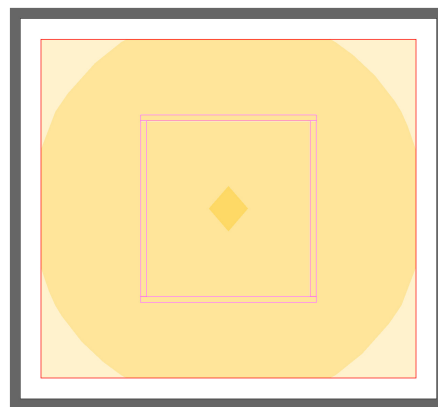
Object : Circulation
Installation : Islington Wharf
Project number :
Date : 23.08.2021



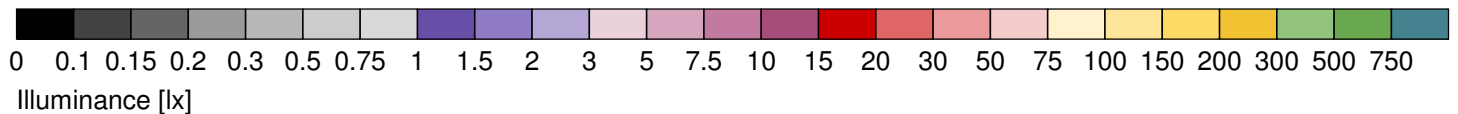
3 Circulation

3.2 Summary, Circulation

3.2.1 Result overview, Evaluation area 1



0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 x [m]



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.20 m
Maintenance factor	0.80
Total luminous flux of all lamps	4040.00 lm
Total power	28.0 W
Total power per area (14.66 m ²)	1.91 W/m ² (1.64 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	117 lx
Emin/Em (Uo)	88 lx
Emin/Em (Uo)	0.75
Emin/Emax (Ud)	0.61
Position	0.00 m

Type No. \ Make

4	4	LDL
		Order No. : MIL/R/16/OP/1010/4
		Luminaire name : MILLIE Recessed 1690mm OPAL 1010lm 7w 840 50mA
		Equipment : 1 x LED Backlight 7 W / 1010 lm



Foyer

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 23.08.2021

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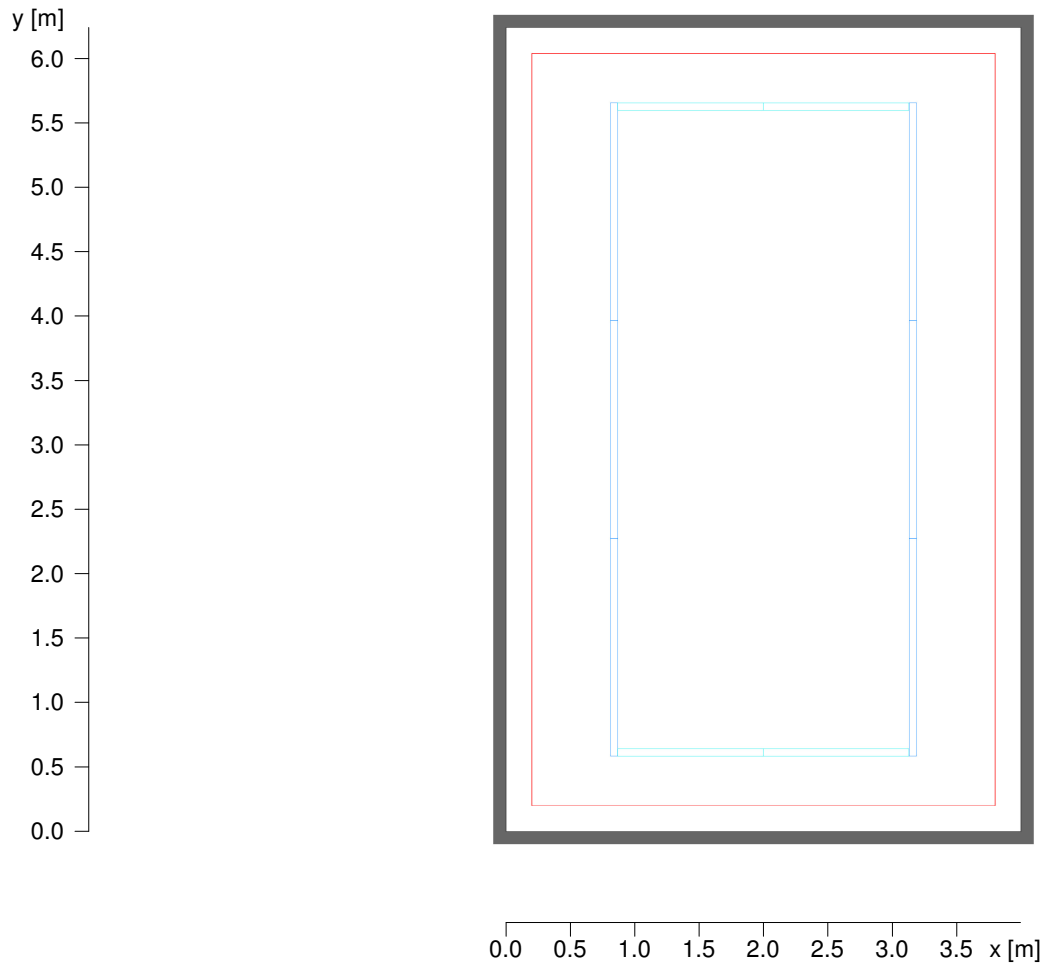
Object : Foyer
Installation : Islington Wharf
Project number :
Date : 23.08.2021



4 Foyer

4.1 Description, Foyer

4.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4.00 m	-0.00 m	4.00 m	50.0 %
2	4.00 m	6.24 m	6.24 m	50.0 %
3	0.00 m	6.24 m	4.00 m	50.0 %
4	0.00 m	-0.00 m	6.24 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.20 m		
Height of ref. plane		0.00 m		

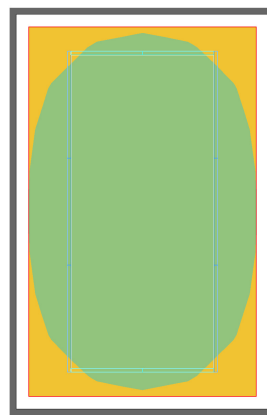
Object : Foyer
 Installation : Islington Wharf
 Project number :
 Date : 23.08.2021



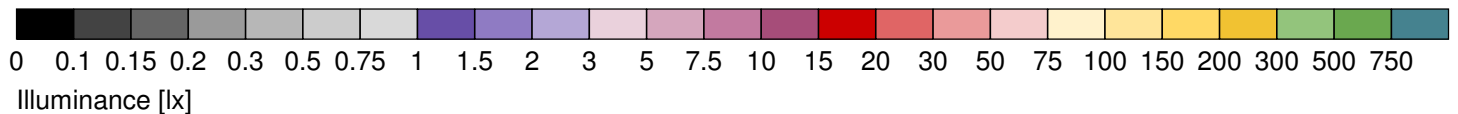
4 Foyer

4.2 Summary, Foyer

4.2.1 Result overview, Evaluation area 1



0.0 1.0 2.0 3.0 x [m]



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.20 m
Maintenance factor	0.80
Total luminous flux of all lamps	17180.00 lm
Total power	132.4 W
Total power per area (24.94 m ²)	5.31 W/m ² (1.67 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	318 lx
Emin/Em (Uo)	256 lx
Emin/Emax (Ud)	0.81
Position	0.71
	0.00 m

Type No. \ Make

LDL	
5	2
Order No. : MIL/R/22/OP/2540/4	
Luminaire name : MILLIE Recessed 2250mm OPAL 2540lm 19w 840 100mA	
Equipment : 1 x LED Backlight 19 W / 2540 lm	
6	6
Order No. : MIL/R/16/OP/2020/4	
Luminaire name : MILLIE Recessed 1690mm OPAL 2020lm 15w 840 100mA	
Equipment : 1 x LED Backlight 14.88 W / 2020 lm	

LDL lighting

Unit 3 Stonehouse Road, Martland Park, Wigan, WN5 0LE

Cycle Store

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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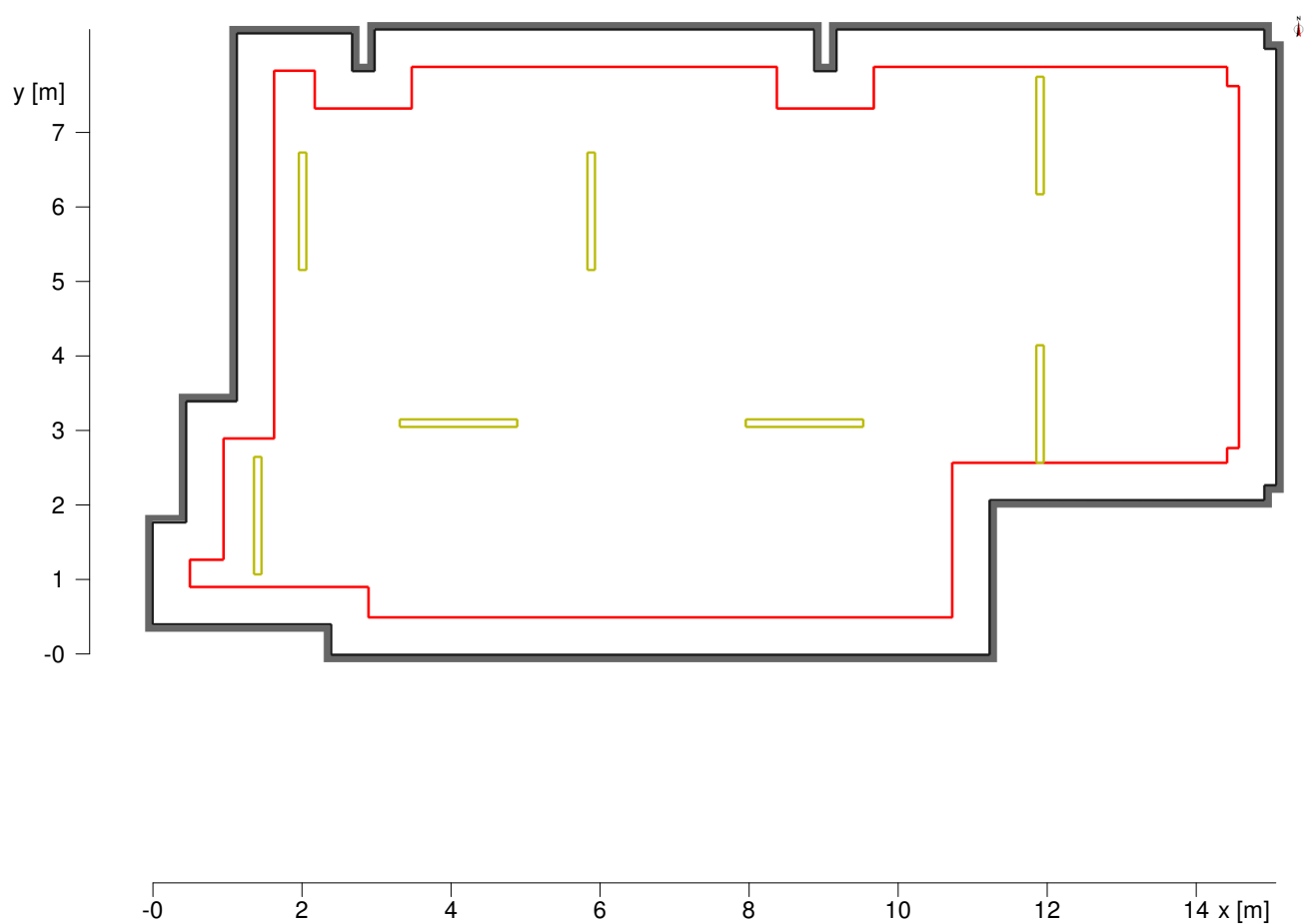
Object : Cycle Store
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Cycle Store

2.1 Description, Cycle Store

2.1.1 Floor plan



Object : Cycle Store
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



2 Cycle Store

2.1 Description, Cycle Store

2.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	2.39 m	0.00 m	2.39 m	40.0 %
2	2.39 m	-0.41 m	0.41 m	40.0 %
3	11.22 m	-0.41 m	8.83 m	40.0 %
4	11.22 m	1.66 m	2.07 m	40.0 %
5	14.91 m	1.66 m	3.68 m	40.0 %
6	14.91 m	1.86 m	0.20 m	40.0 %
7	15.07 m	1.86 m	0.16 m	40.0 %
8	15.07 m	7.72 m	5.85 m	40.0 %
9	14.91 m	7.72 m	0.16 m	40.0 %
10	14.91 m	7.98 m	0.26 m	40.0 %
11	9.17 m	7.98 m	5.74 m	40.0 %
12	9.17 m	7.42 m	0.56 m	40.0 %
13	8.87 m	7.42 m	0.30 m	40.0 %
14	8.87 m	7.98 m	0.56 m	40.0 %
15	2.98 m	7.98 m	5.89 m	40.0 %
16	2.98 m	7.42 m	0.56 m	40.0 %
17	2.68 m	7.42 m	0.30 m	40.0 %
18	2.68 m	7.92 m	0.51 m	40.0 %
19	1.13 m	7.92 m	1.55 m	40.0 %
20	1.13 m	2.99 m	4.93 m	40.0 %
21	0.45 m	2.99 m	0.68 m	40.0 %
22	0.45 m	1.37 m	1.63 m	40.0 %
23	-0.00 m	1.37 m	0.45 m	40.0 %
24	-0.00 m	0.00 m	1.37 m	40.0 %
Floor				20.0 %
Ceiling				40.0 %
Room height		3.50 m		
Height of ref. plane		0.00 m		

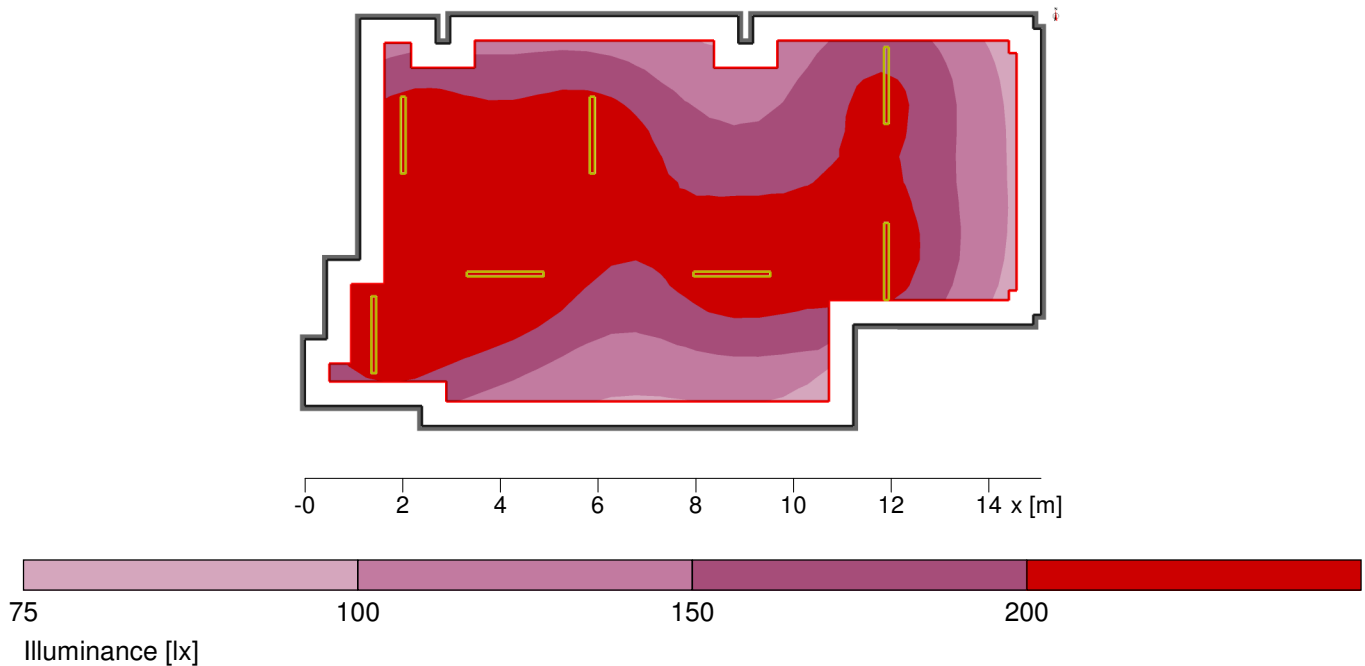
Object : Cycle Store
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Cycle Store

2.2 Summary, Cycle Store

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	31584.00 lm
Total power	212.2 W
Total power per area (110.54 m ²)	1.92 W/m ² (1.05 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	184 lx
Emin/Em (Uo)	84 lx
Emin/Emax (Ud)	0.46
Position	0.32
	0.00 m

Type No. \Make

1	7	LDL
		Order No. : WPZ/5/4510/4
		Luminaire name : WPZ 1575mm 4512lm 30w 840 250mA
		Equipment : 1 x LED Backlight 30.31 W / 4512 lm

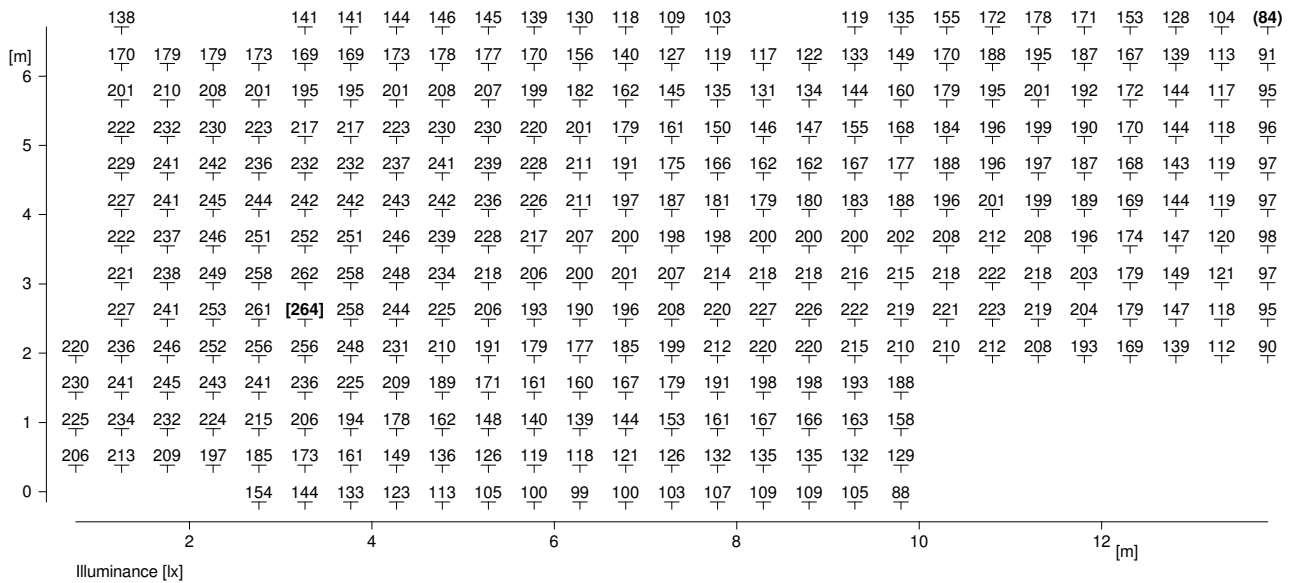
Object : Cycle Store
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



2 Cycle Store

2.3 Calculation results, Cycle Store

2.3.1 Table, Reference plane 1.1 (E)



Height reference plane : 0.00 m
 Average illuminance Em : 184 lx
 Minimum illuminance Emin : 84 lx
 Maximum illuminance Emax : 264 lx
 Uniformity Uo Emin/Em : 1 : 2.18 (0.46)
 Diversity Ud Emin/Emax : 1 : 3.13 (0.32)

Bin Store

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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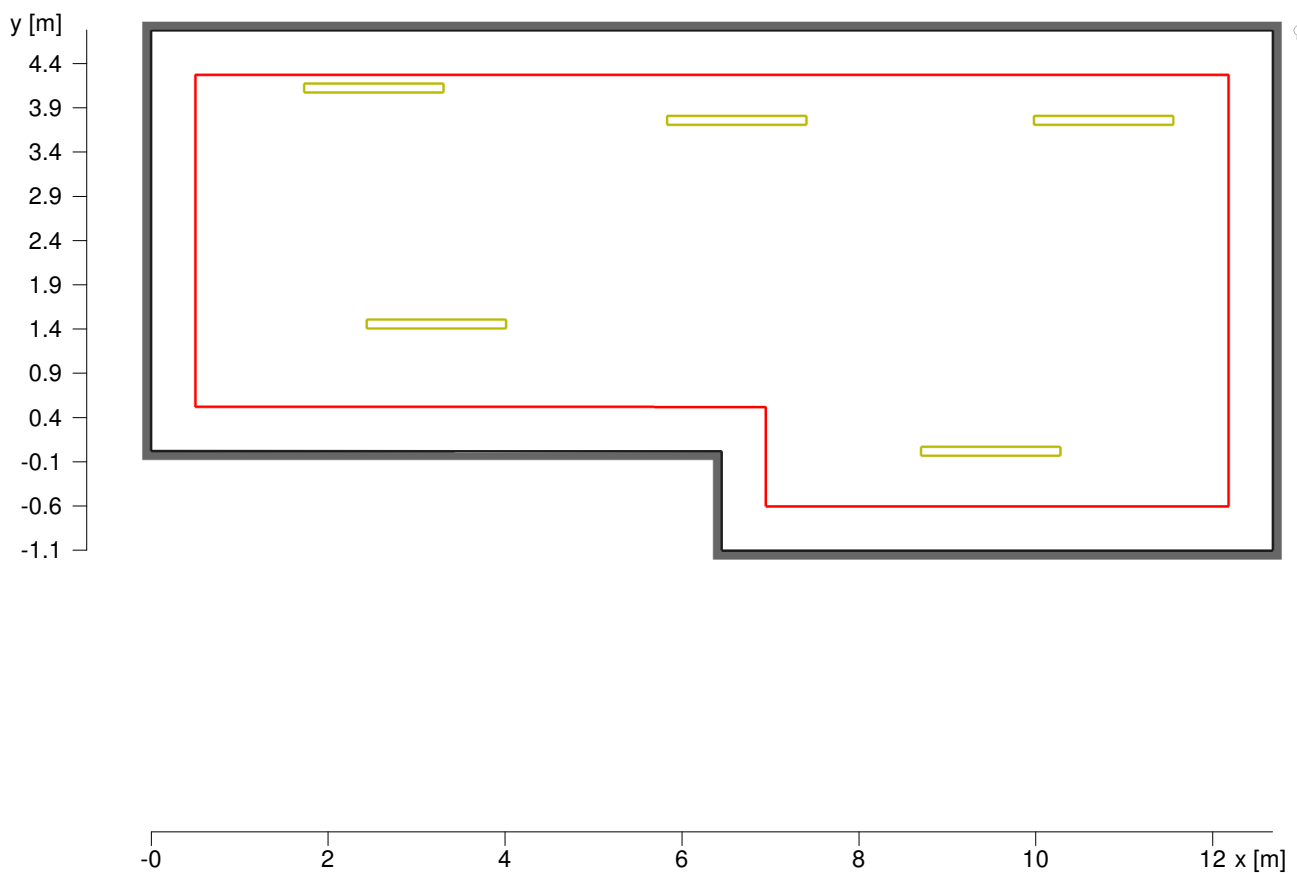
Object : Bin Store
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



3 Bin Store

3.1 Description, Bin Store

3.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	6.45 m	-0.00 m	6.45 m	40.0 %
2	6.45 m	-1.12 m	1.12 m	40.0 %
3	12.67 m	-1.13 m	6.23 m	40.0 %
4	12.67 m	4.75 m	5.88 m	40.0 %
5	0.00 m	4.75 m	12.67 m	40.0 %
6	0.00 m	0.00 m	4.75 m	40.0 %
Floor				20.0 %
Ceiling				40.0 %
Room height		3.50 m		
Height of ref. plane		----		

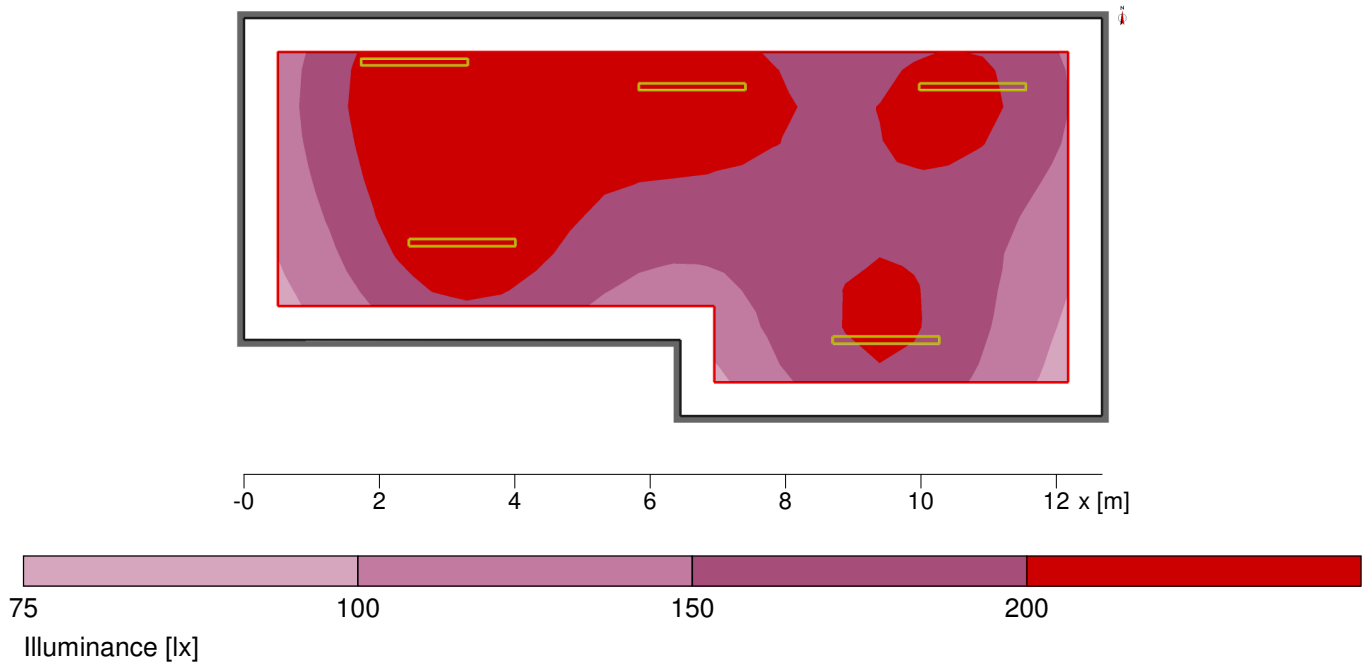
Object : Bin Store
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



3 Bin Store

3.2 Summary, Bin Store

3.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	22560.00 lm
Total power	151.6 W
Total power per area (67.21 m ²)	2.25 W/m ² (1.24 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal
Em	181 lx
Emin	91 lx
Emin/Em (Uo)	0.50
Emin/Emax (Ud)	0.37
Position	0.00 m (rot: 0°/0.02°)

Type No. \ Make

	LDL	
1	Order No.	: WPZ/5/4510/4
5	Luminaire name	: WPZ 1575mm 4512lm 30w 840 250mA
	Equipment	: 1 x LED Backlight 30.31 W / 4512 lm

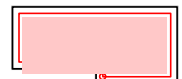
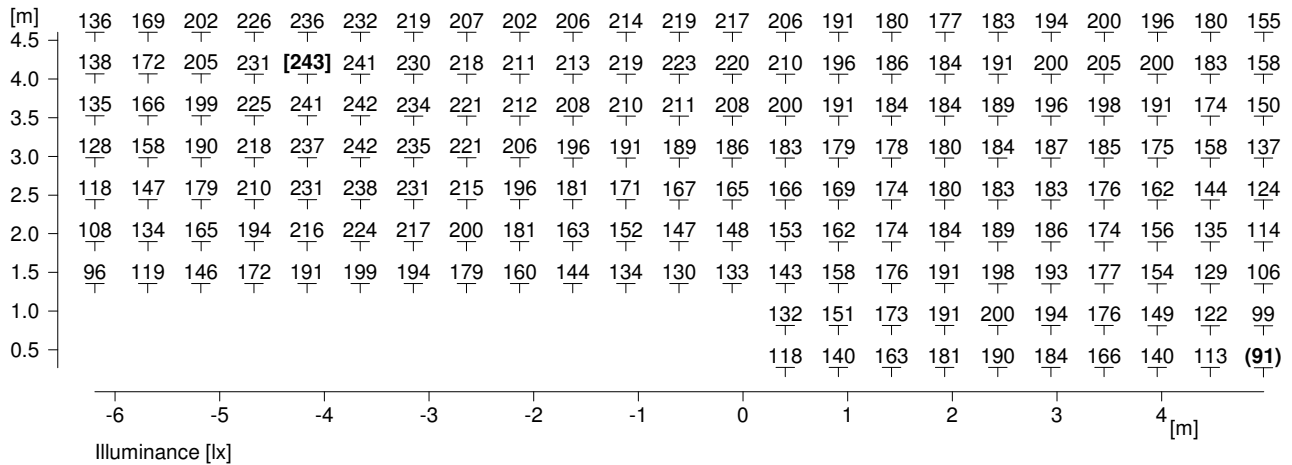
Object : Bin Store
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



3 Bin Store

3.3 Calculation results, Bin Store

3.3.1 Table, Reference plane 1.1 (E)



Average illuminance	Em	: 181 lx
Minimum illuminance	Emin	: 91 lx
Maximum illuminance	Emax	: 243 lx
Uniformity Uo	Emin/Em	: 1 : 2.00 (0.50)
Diversity Ud	Emin/Emax	: 1 : 2.68 (0.37)

Water Tank Room

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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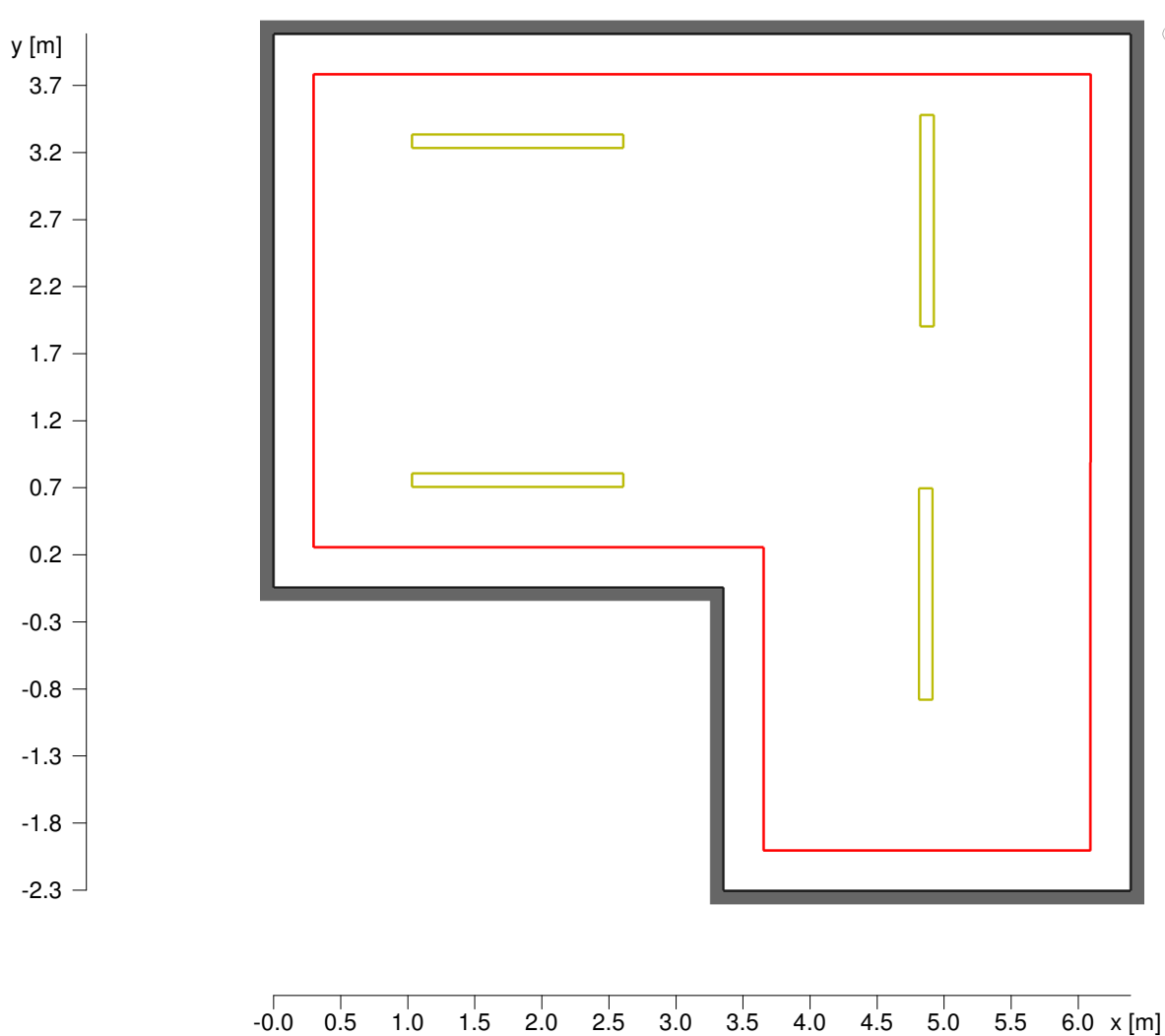
Object : Water Tank Room
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



4 Water Tank Room

4.1 Description, Water Tank Room

4.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	3.35 m	0.00 m	3.35 m	40.0 %
2	3.35 m	-2.26 m	2.26 m	40.0 %
3	6.39 m	-2.26 m	3.04 m	40.0 %
4	6.39 m	4.13 m	6.38 m	40.0 %
5	0.00 m	4.13 m	6.39 m	40.0 %
6	0.00 m	0.00 m	4.13 m	40.0 %
Floor				20.0 %
Ceiling				40.0 %
Room height		3.50 m		
Height of ref. plane		----		

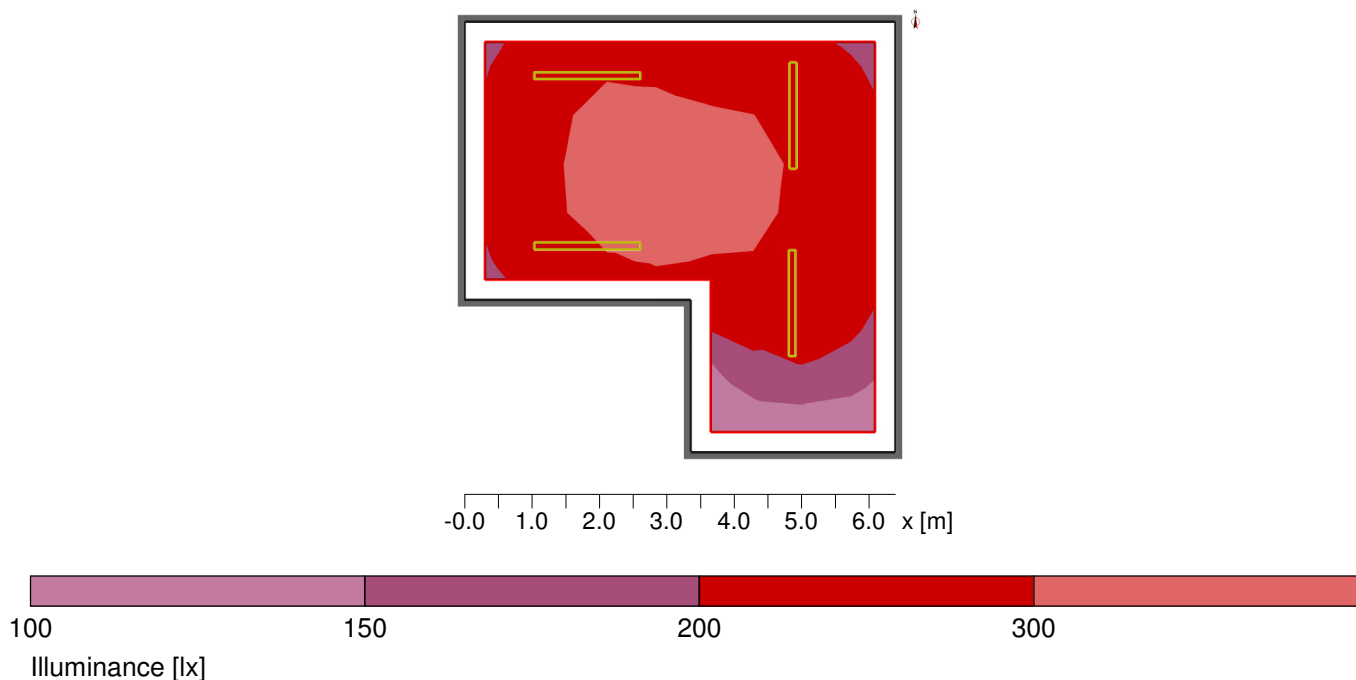
Object : Water Tank Room
Installation : Islington Wharf
Project number :
Date : 01.12.2021



4 Water Tank Room

4.2 Summary, Water Tank Room

4.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	18048.00 lm
Total power	121.2 W
Total power per area (33.22 m ²)	3.65 W/m ² (1.44 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	253 lx
Emin/Em (Uo)	132 lx
Emin/Emax (Ud)	0.52
Position	0.43
	0.00 m (rot: 0°/0°)

Type No. \ Make

1	4	LDL
		Order No. : WPZ/5/4510/4
		Luminaire name : WPZ 1575mm 4512lm 30w 840 250mA
		Equipment : 1 x LED Backlight 30.31 W / 4512 lm

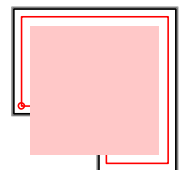
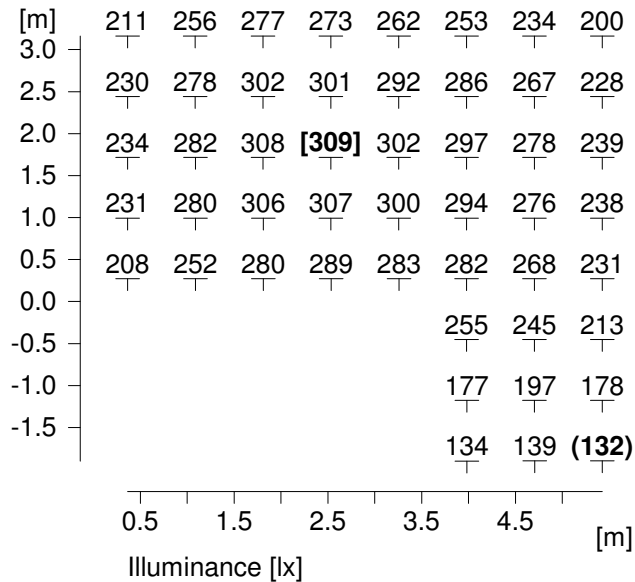
Object : Water Tank Room
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



4 Water Tank Room

4.3 Calculation results, Water Tank Room

4.3.1 Table, Reference plane 1.1 (E)



Average illuminance	Em	: 253 lx
Minimum illuminance	Emin	: 132 lx
Maximum illuminance	Emax	: 309 lx
Uniformity Uo	Emin/Em	: 1 : 1.92 (0.52)
Diversity Ud	Emin/Emax	: 1 : 2.34 (0.43)

Generator Room

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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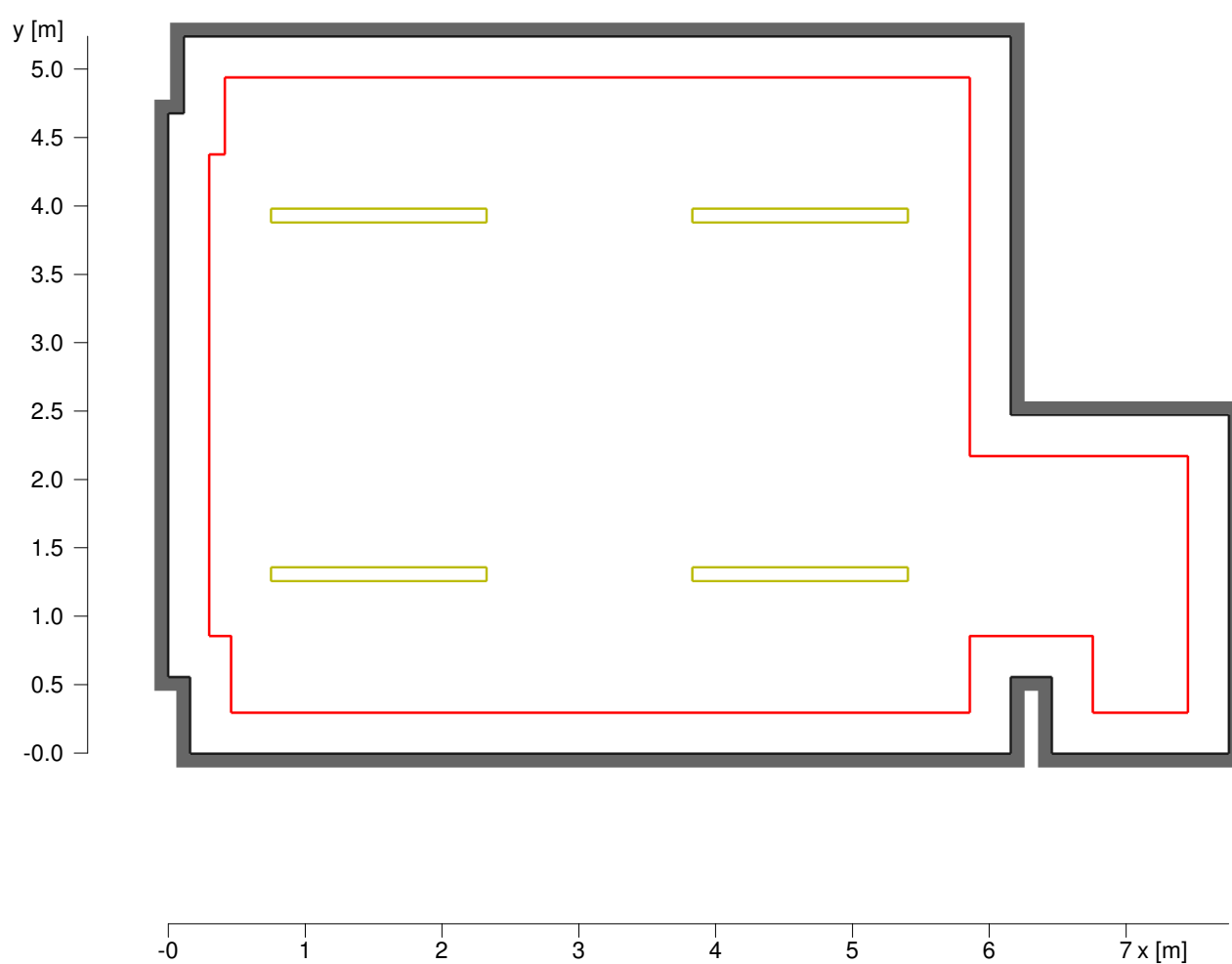
Object : Generator Room
Installation : Islington Wharf
Project number :
Date : 01.12.2021



5 Generator Room

5.1 Description, Generator Room

5.1.1 Floor plan



Object : Generator Room
Installation : Islington Wharf
Project number :
Date : 01.12.2021



5 Generator Room

5.1 Description, Generator Room

5.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	6.00 m	-0.00 m	6.00 m	40.0 %
2	6.00 m	0.56 m	0.56 m	40.0 %
3	6.30 m	0.56 m	0.30 m	40.0 %
4	6.30 m	-0.00 m	0.56 m	40.0 %
5	7.59 m	-0.00 m	1.29 m	40.0 %
6	7.59 m	2.48 m	2.48 m	40.0 %
7	6.00 m	2.48 m	1.59 m	40.0 %
8	6.00 m	5.24 m	2.76 m	40.0 %
9	-0.05 m	5.24 m	6.04 m	40.0 %
10	-0.05 m	4.68 m	0.56 m	40.0 %
11	-0.16 m	4.68 m	0.11 m	40.0 %
12	-0.16 m	0.56 m	4.12 m	40.0 %
13	0.00 m	0.56 m	0.16 m	40.0 %
14	-0.00 m	0.00 m	0.56 m	40.0 %
Floor				20.0 %
Ceiling				40.0 %
Room height		3.50 m		
Height of ref. plane		0.00 m		

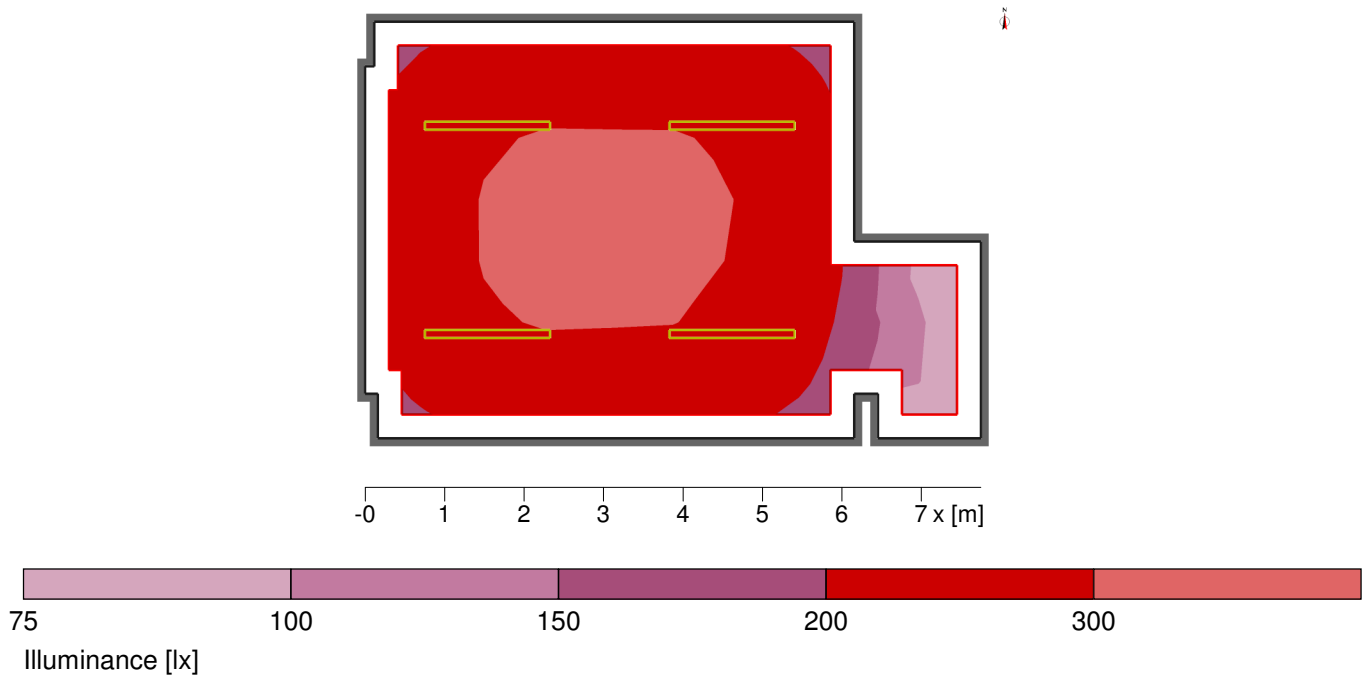
Object : Generator Room
Installation : Islington Wharf
Project number :
Date : 01.12.2021



5 Generator Room

5.2 Summary, Generator Room

5.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	18048.00 lm
Total power	121.2 W
Total power per area (35.88 m ²)	3.38 W/m ² (1.34 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	252 lx
Emin/Em (Uo)	91 lx
Emin/Emax (Ud)	0.36
Position	0.30
	0.00 m

Type No. \ Make

1	4	LDL	
		Order No.	: WPZ/5/4510/4
		Luminaire name	: WPZ 1575mm 4512lm 30w 840 250mA
		Equipment	: 1 x LED Backlight 30.31 W / 4512 lm

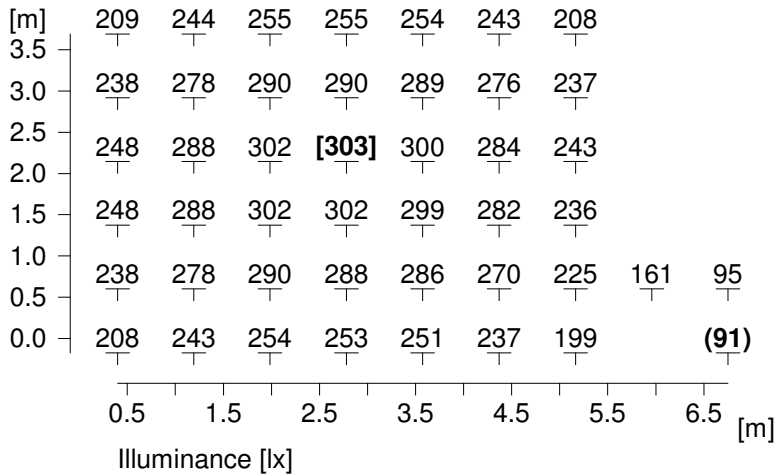
Object : Generator Room
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



5 Generator Room

5.3 Calculation results, Generator Room

5.3.1 Table, Reference plane 1.1 (E)



Height reference plane	: 0.00 m
Average illuminance	Em : 252 lx
Minimum illuminance	Emin : 91 lx
Maximum illuminance	Emax : 303 lx
Uniformity Uo	Emin/Em : 1 : 2.78 (0.36)
Diversity Ud	Emin/Emax : 1 : 3.33 (0.30)

NE LV Switch

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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.

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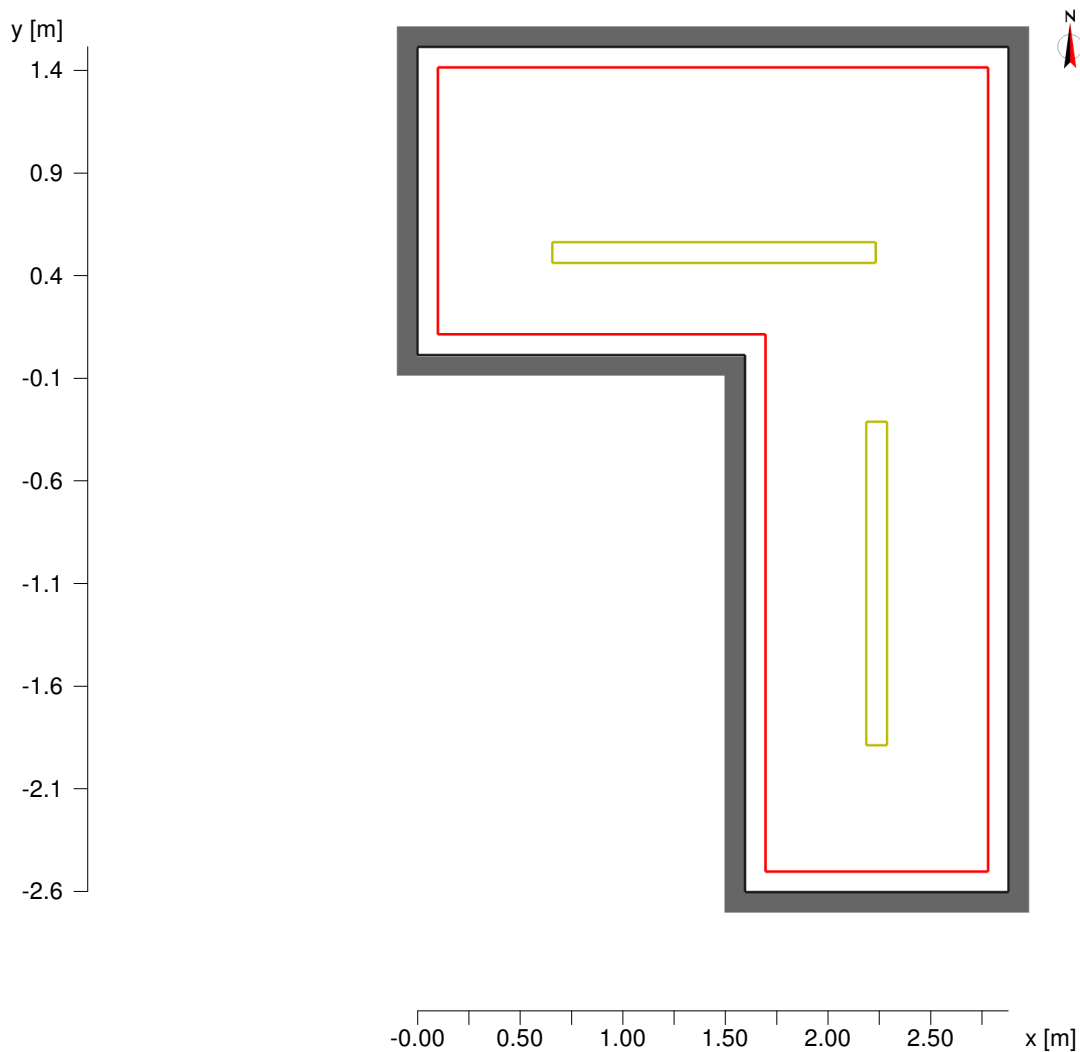
Object : NE LV Switch
Installation : Islington Wharf
Project number :
Date : 01.12.2021



6 NE LV Switch

6.1 Description, NE LV Switch

6.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	1.60 m	0.00 m	1.60 m	40.0 %
2	1.60 m	-2.62 m	2.62 m	40.0 %
3	2.88 m	-2.62 m	1.28 m	40.0 %
4	2.88 m	1.50 m	4.12 m	40.0 %
5	-0.00 m	1.50 m	2.88 m	40.0 %
6	-0.00 m	0.00 m	1.50 m	40.0 %
Floor				20.0 %
Ceiling				40.0 %
Room height		3.50 m		
Height of ref. plane		0.00 m		

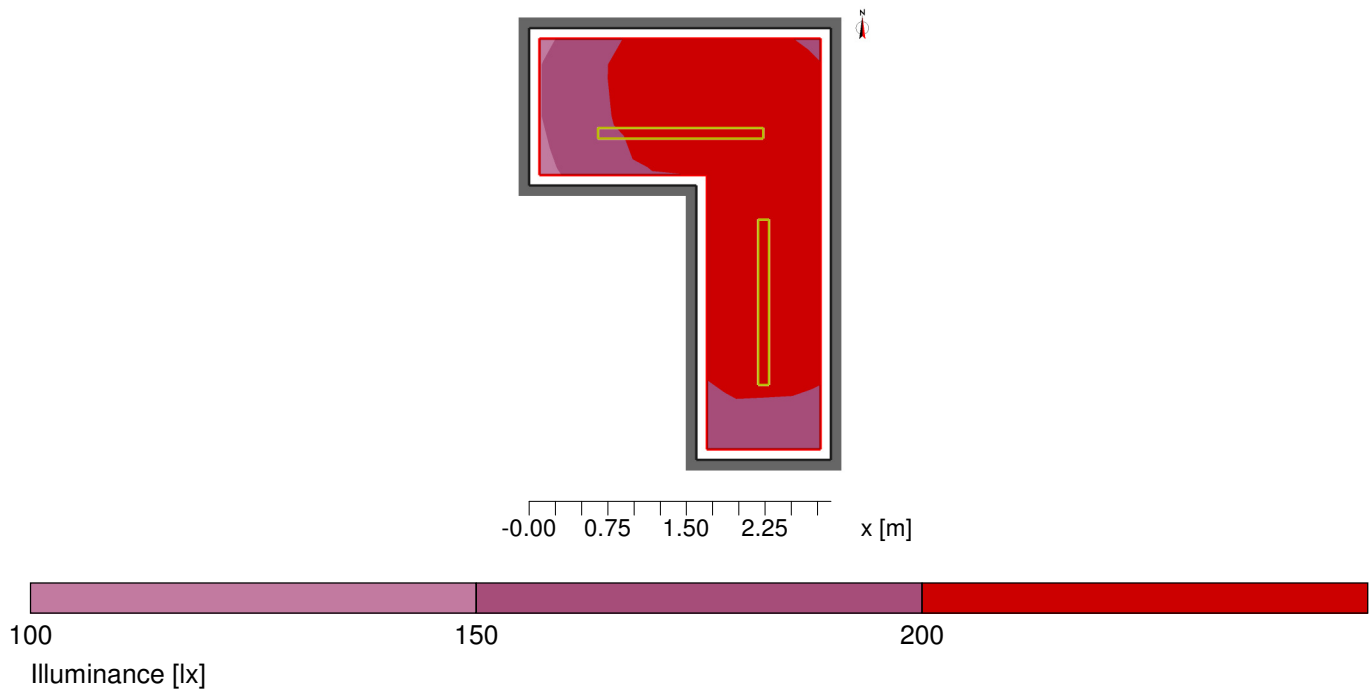
Object : NE LV Switch
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



6 NE LV Switch

6.2 Summary, NE LV Switch

6.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	9024.00 lm
Total power	60.6 W
Total power per area (7.67 m ²)	7.90 W/m ² (3.55 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	222 lx
Emin/Em (Uo)	148 lx
Emin/Emax (Ud)	0.67
Position	0.51
	0.00 m

Type No. \ Make

1	2	LDL	
		Order No.	: WPZ/5/4510/4
		Luminaire name	: WPZ 1575mm 4512lm 30w 840 250mA
		Equipment	: 1 x LED Backlight 30.31 W / 4512 lm

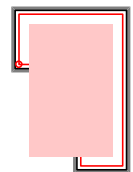
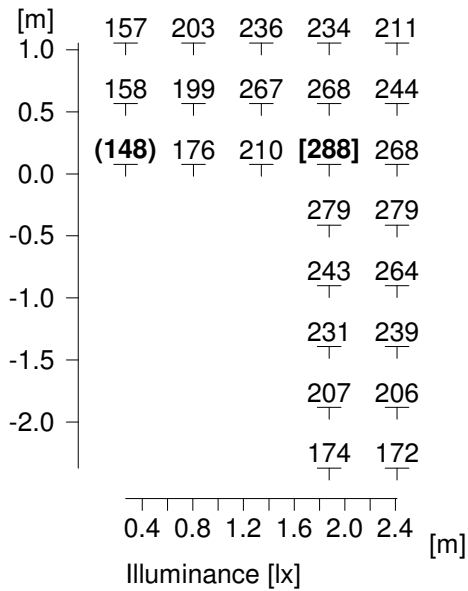
Object : NE LV Switch
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



6 NE LV Switch

6.3 Calculation results, NE LV Switch

6.3.1 Table, Reference plane 1.1 (E)



Height reference plane	: 0.00 m
Average illuminance	Em : 222 lx
Minimum illuminance	Emin : 148 lx
Maximum illuminance	Emax : 288 lx
Uniformity Uo	Emin/Em : 1 : 1.50 (0.67)
Diversity Ud	Emin/Emax : 1 : 1.94 (0.51)

E LV Switch

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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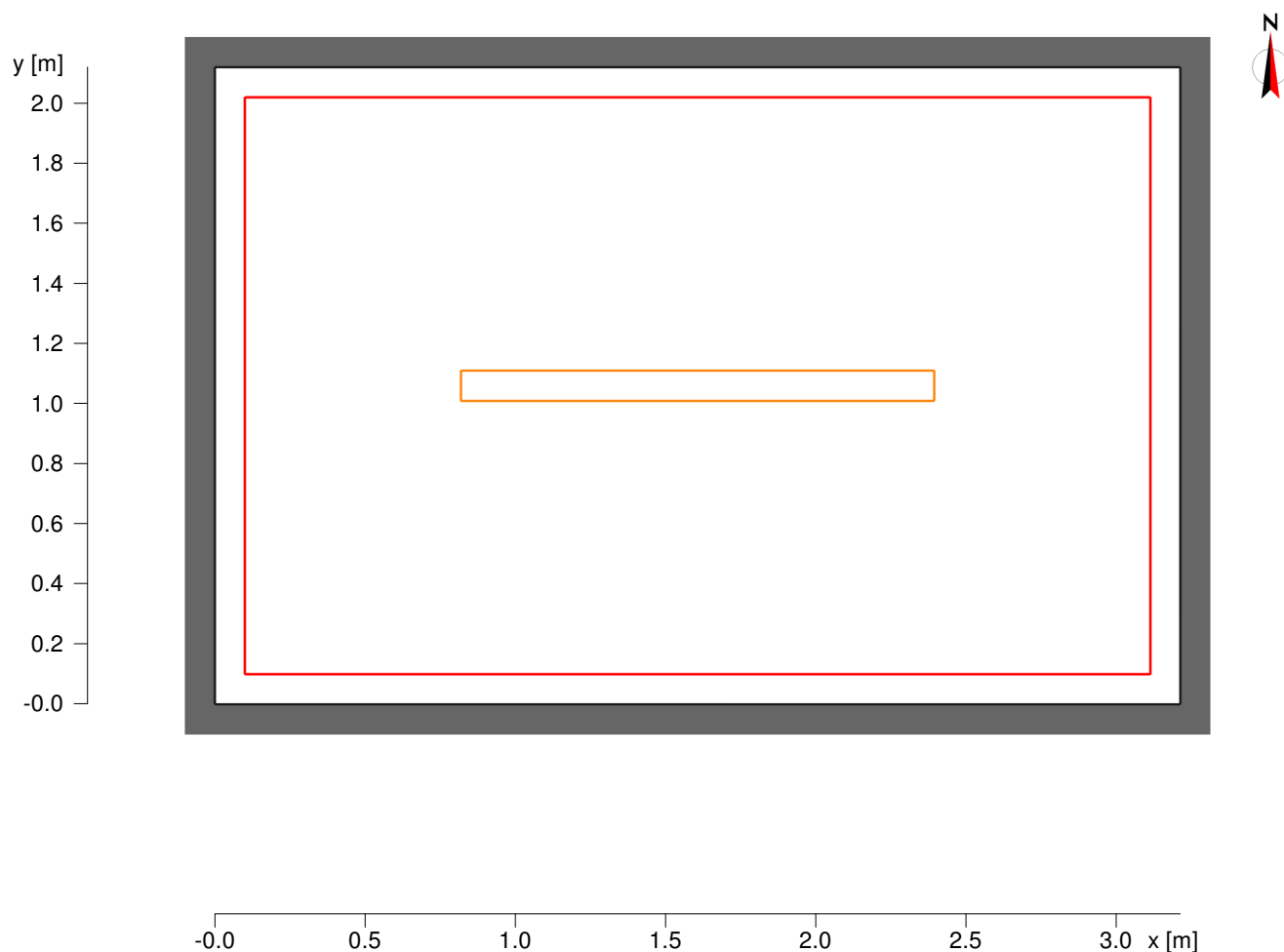
Object : E LV Switch
Installation : Islington Wharf
Project number :
Date : 01.12.2021



7 E LV Switch

7.1 Description, E LV Switch

7.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	3.21 m	-0.00 m	3.21 m	40.0 %
2	3.21 m	2.12 m	2.12 m	40.0 %
3	-0.00 m	2.12 m	3.21 m	40.0 %
4	0.00 m	0.00 m	2.12 m	40.0 %
Floor				20.0 %
Ceiling				40.0 %
Room height		3.50 m		
Height of ref. plane		----		

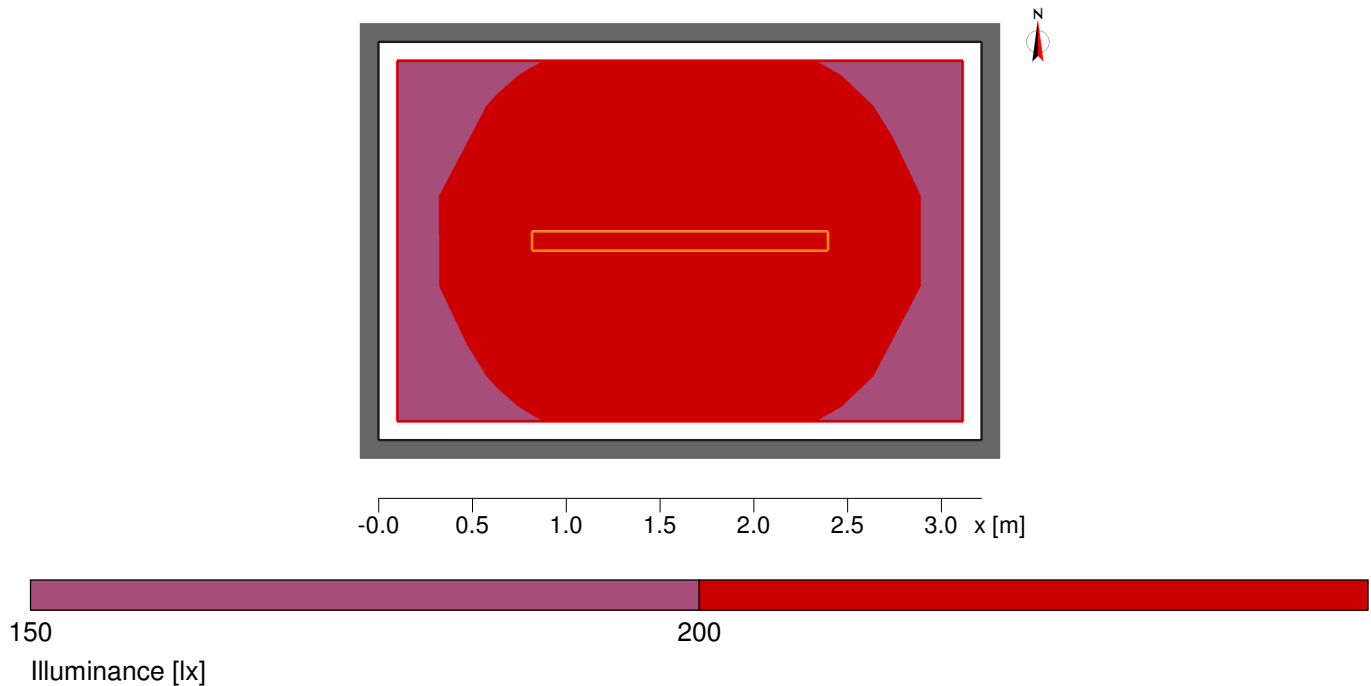
Object : E LV Switch
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



7 E LV Switch

7.2 Summary, E LV Switch

7.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	6211.00 lm
Total power	42.4 W
Total power per area (6.81 m ²)	6.22 W/m ² (2.94 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	212 lx
Emin/Em (Uo)	173 lx
Emin/Emax (Ud)	0.81
Position	0.69
	0.00 m (rot: 0°/0°)

Type No. \ Make

3	1	LDL	
		Order No.	: WPZ/5/6210/4
		Luminaire name	: WPZ 1575mm 6211lm 42w 840 350mA
		Equipment	: 1 x LED Backlight 42.4 W / 6211 lm

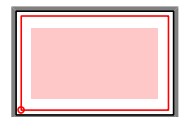
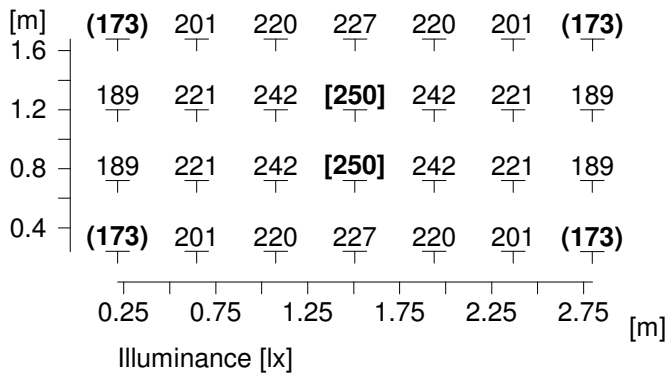
Object : E LV Switch
Installation : Islington Wharf
Project number :
Date : 01.12.2021



7 E LV Switch

7.3 Calculation results, E LV Switch

7.3.1 Table, Reference plane 1.1 (E)



Average illuminance	Em	: 212 lx
Minimum illuminance	Emin	: 173 lx
Maximum illuminance	Emax	: 250 lx
Uniformity Uo	Emin/Em	: 1 : 1.23 (0.81)
Diversity Ud	Emin/Emax	: 1 : 1.45 (0.69)

Ground Floor - WC

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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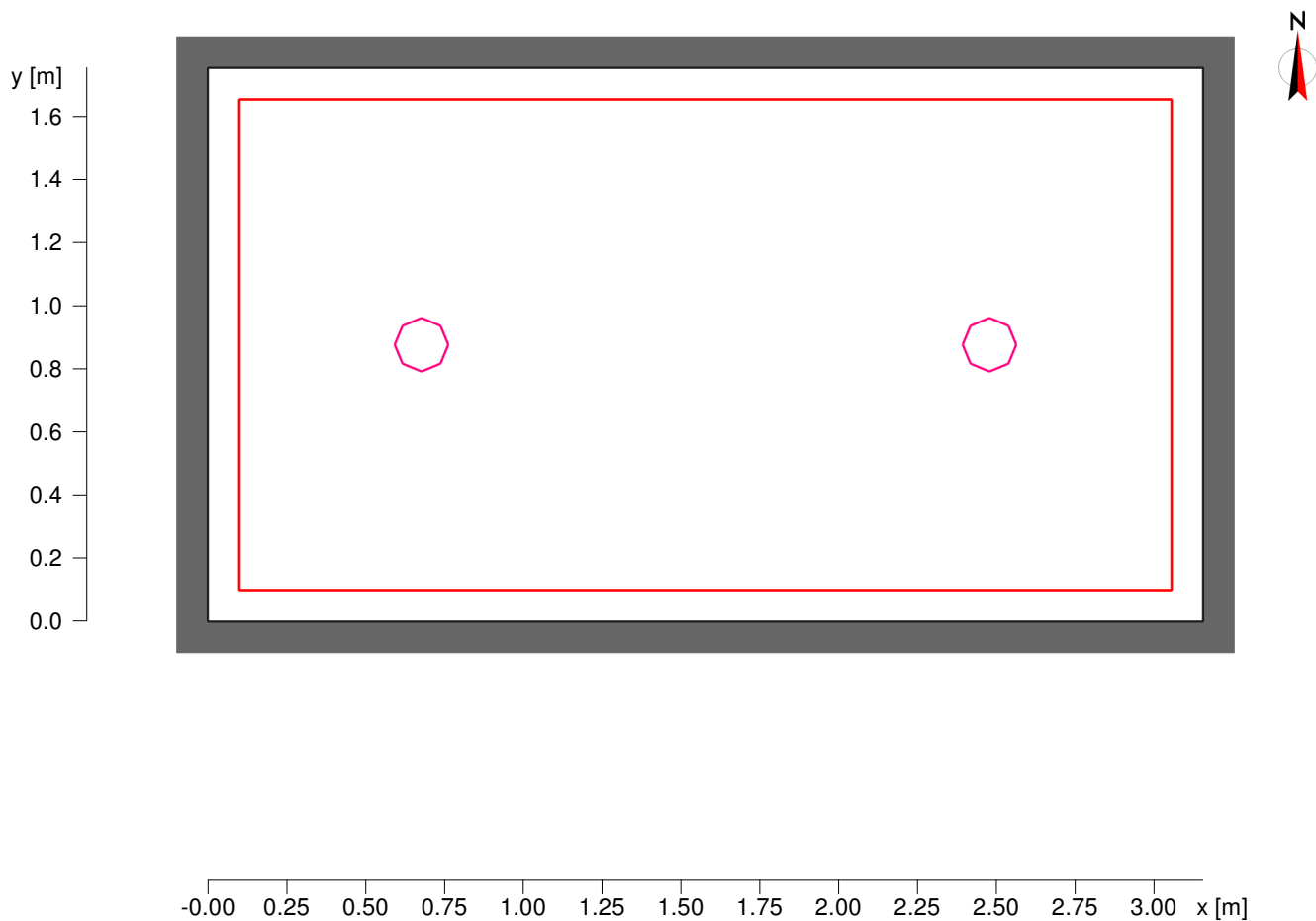
Object : Ground Floor - WC
Installation : Islington Wharf
Project number :
Date : 01.12.2021



8 Ground Floor - WC

8.1 Description, Ground Floor - WC

8.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	3.15 m	0.00 m	3.15 m	50.0 %
2	3.15 m	1.75 m	1.75 m	50.0 %
3	-0.00 m	1.75 m	3.15 m	50.0 %
4	-0.00 m	0.00 m	1.75 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.40 m		
Height of ref. plane		0.00 m		

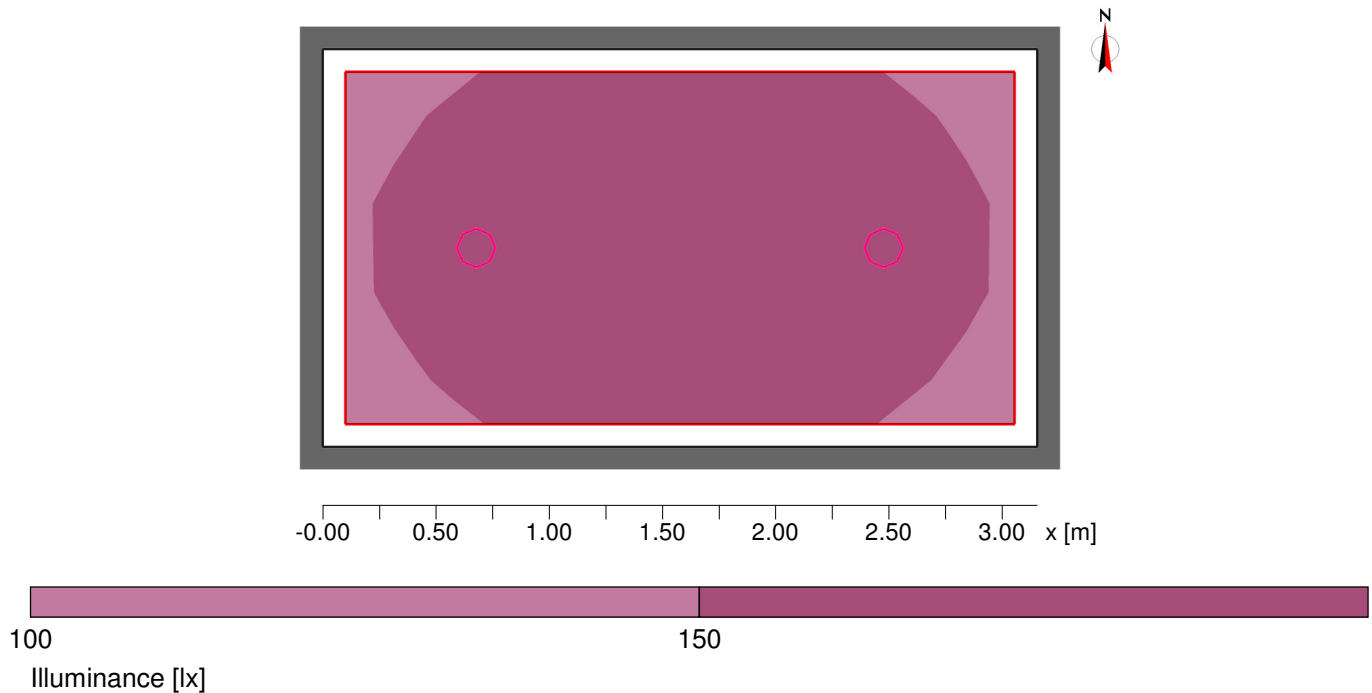
Object : Ground Floor - WC
Installation : Islington Wharf
Project number :
Date : 01.12.2021



8 Ground Floor - WC

8.2 Summary, Ground Floor - WC

8.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux of all lamps	2240.06 lm
Total power	20.2 W
Total power per area (5.54 m ²)	3.65 W/m ² (2.25 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	162 lx
Emin/Em (Uo)	134 lx
Emin/Emax (Ud)	0.82
Position	0.72
	0.00 m

Type No. \ Make

4	2	LDL	
		Order No.	: ELL/2/1000/4/90
		Luminaire name	: ELLIE 170mm 1120lm 10w 4000K 90DEG
		Equipment	: 1 x LED MODULE 10.1 W / 1120.03 lm

Ground Floor - Parcel Room

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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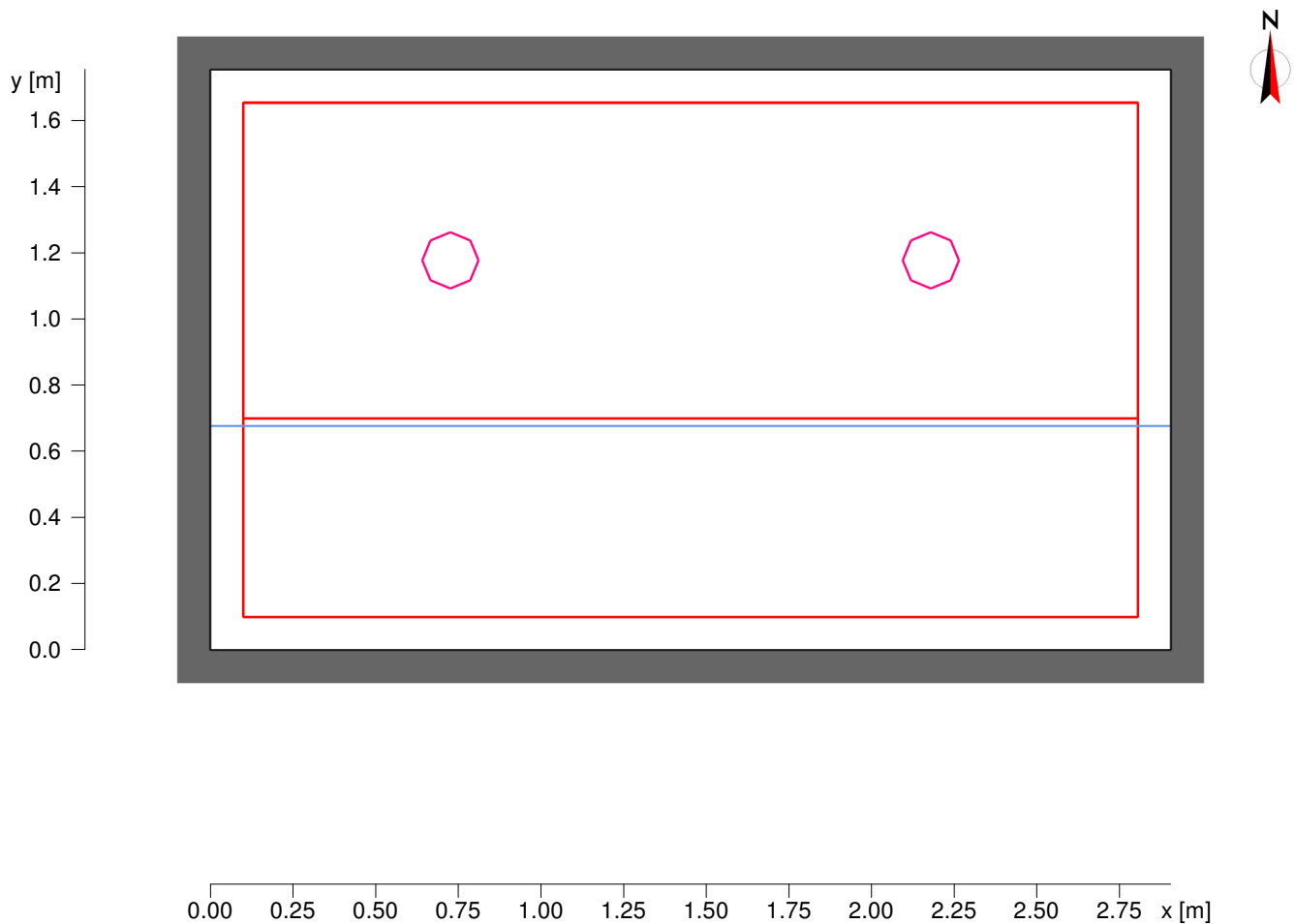
Object : Ground Floor - Parcel Room
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



9 Ground Floor - Parcel Room

9.1 Description, Ground Floor - Parcel Room

9.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	2.90 m	0.00 m	2.90 m	50.0 %
2	2.90 m	1.75 m	1.75 m	50.0 %
3	0.00 m	1.75 m	2.90 m	50.0 %
4	0.00 m	0.00 m	1.75 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.40 m		
Height of ref. plane		0.00 m		

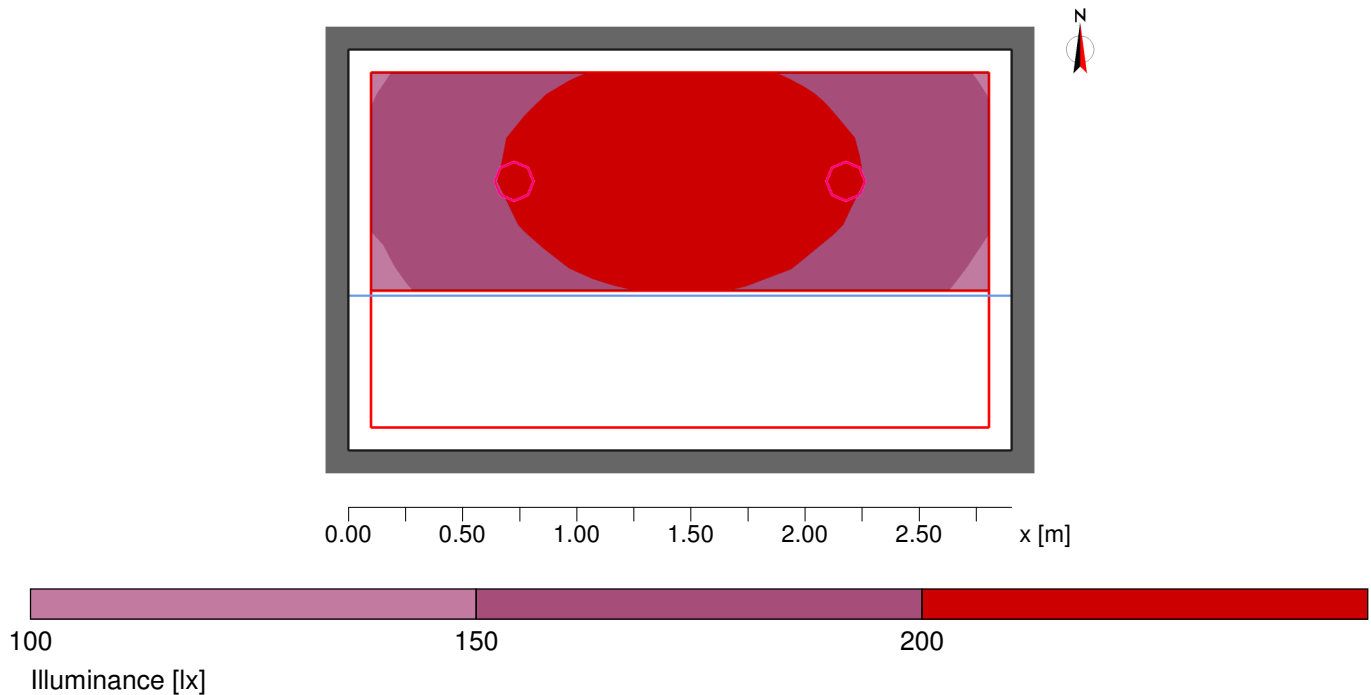
Object : Ground Floor - Parcel Room
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



9 Ground Floor - Parcel Room

9.2 Summary, Ground Floor - Parcel Room

9.2.1 Result overview, Measuring area 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux of all lamps	2240.1 lm
Total power	20.2 W
Total power per area (5.10 m ²)	3.96 W/m ²

Illuminance

Average illuminance	Em	186 lx
Minimum illuminance	Emin	141 lx
Maximum illuminance	Emax	214 lx
Uniformity Uo	Emin/Em	1:1.31 (0.76)
Diversity Ud	Emin/Emax	1:1.52 (0.66)

Type No. Make

4	2	LDL
	Order No.	: ELL/2/1000/4/90
	Luminaire name	: ELLIE 170mm 1120lm 10w 4000K 90DEG
	Equipment	: 1 x LED MODULE 10.1 W / 1120.03 lm



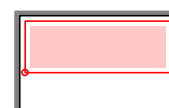
Object : Ground Floor - Parcel Room
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



9.3 Calculation results, Ground Floor - Parcel Room

9.3.2 Table, Measuring area 1 (E)

[m]	149	165	178	187	194	199	203	203	200	194	187	178	165	149
0.7	156	172	185	194	201	208	212	212	208	202	194	185	172	157
0.5	158	173	187	196	203	210	[214]	[214]	211	204	196	187	174	158
0.3	153	169	182	192	199	206	210	210	206	200	192	183	169	153
0.1	(141)	159	174	183	190	196	200	200	196	190	183	174	160	142
	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	[m]			
Illuminance [lx]														



Height reference plane		: 0.00 m
Average illuminance	Em	: 186 lx
Minimum illuminance	Emin	: 141 lx
Maximum illuminance	Emax	: 214 lx
Uniformity Uo	Emin/Em	: 1 : 1.31 (0.76)
Diversity Ud	Emin/Emax	: 1 : 1.52 (0.66)

Ground Floor - Corridor off Stairs

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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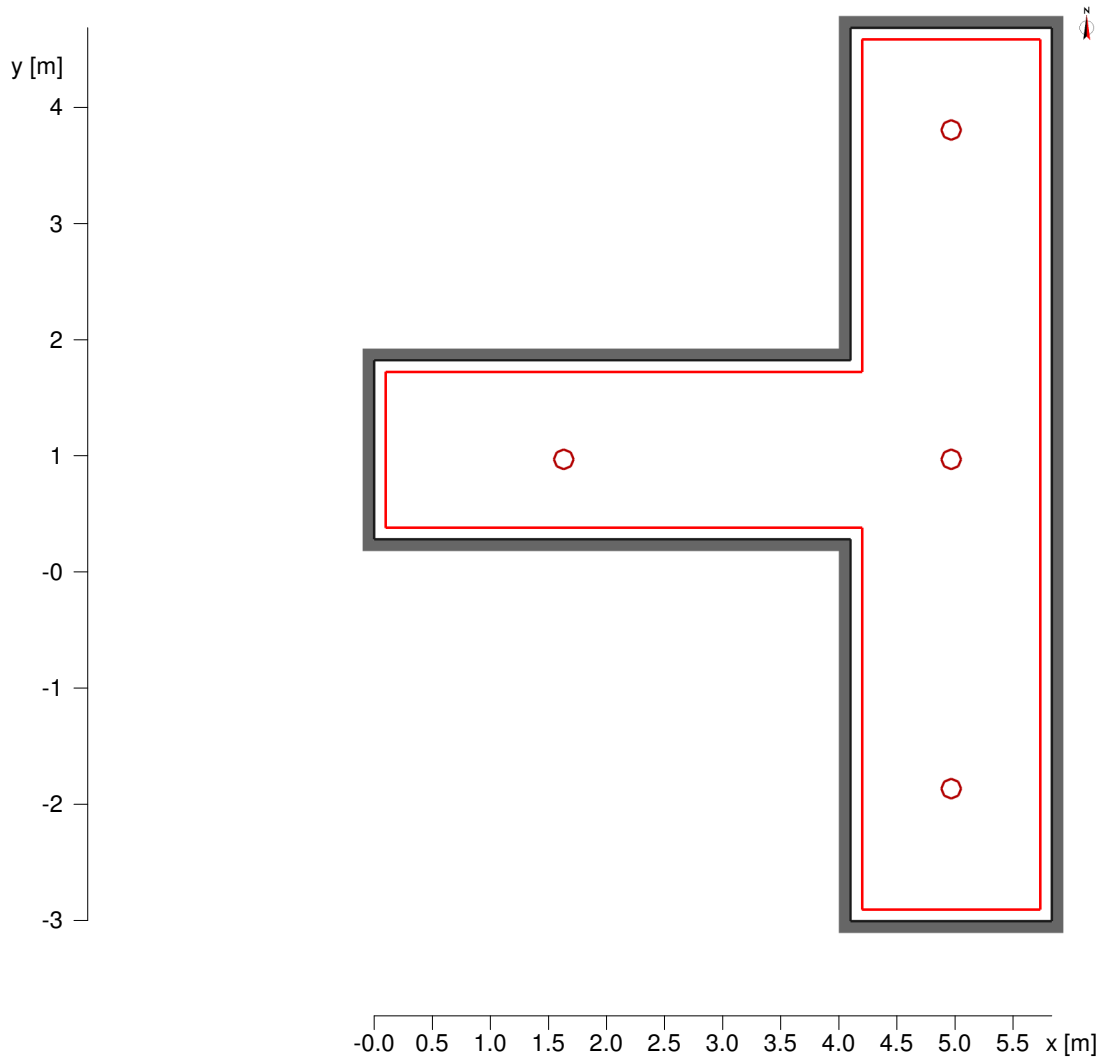
Object : Ground Floor - Corridor off Stairs
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



10 Ground Floor - Corridor off Stairs

10.1 Description, Ground Floor - Corridor off Stairs

10.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4.10 m	-0.00 m	4.10 m	50.0 %
2	4.10 m	-3.29 m	3.29 m	50.0 %
3	5.83 m	-3.29 m	1.73 m	50.0 %
4	5.83 m	4.40 m	7.69 m	50.0 %
5	4.10 m	4.40 m	1.73 m	50.0 %
6	4.10 m	1.54 m	2.86 m	50.0 %
7	0.00 m	1.54 m	4.10 m	50.0 %
8	0.00 m	0.00 m	1.54 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.20 m		
Height of ref. plane		0.00 m		

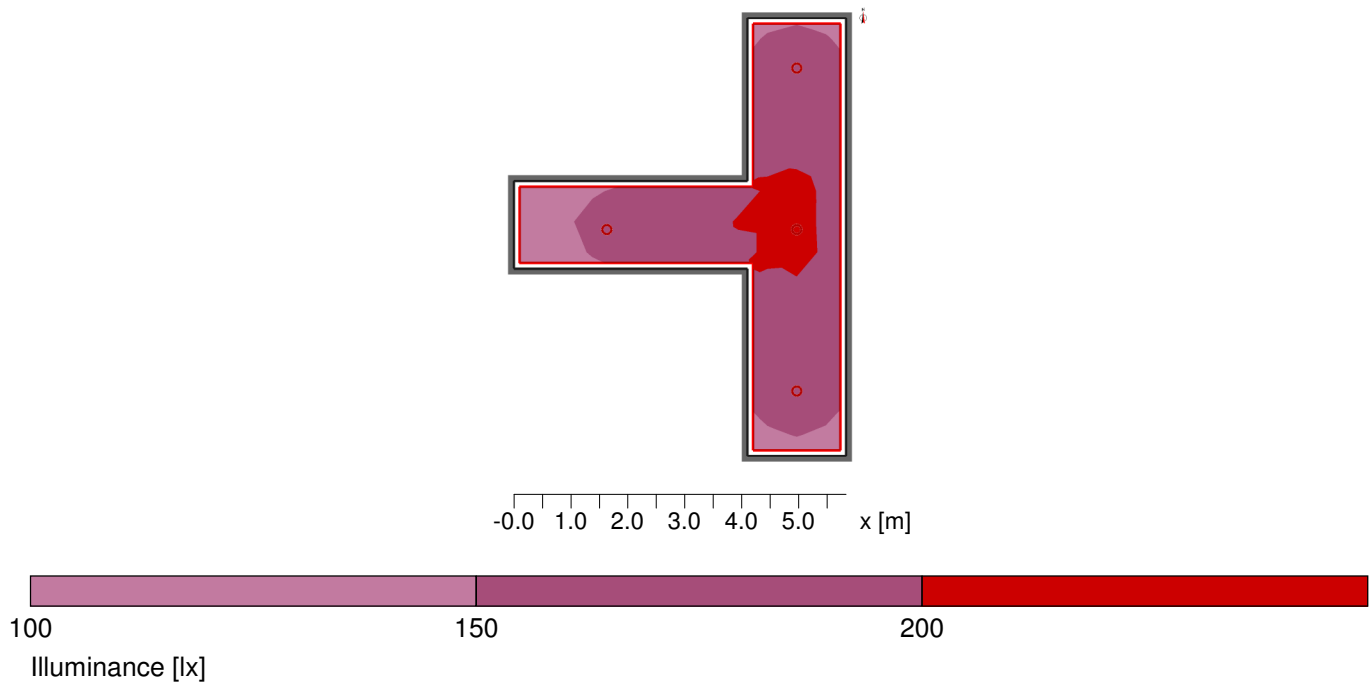
Object : Ground Floor - Corridor off Stairs
Installation : Islington Wharf
Project number :
Date : 01.12.2021



10 Ground Floor - Corridor off Stairs

10.2 Summary, Ground Floor - Corridor off Stairs

10.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.20 m
Maintenance factor	0.80
Total luminous flux of all lamps	8839.84 lm
Total power	80.8 W
Total power per area (19.63 m ²)	4.12 W/m ² (2.49 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal
Em	165 lx
Emin	103 lx
Emin/Em (Uo)	0.63
Emin/Emax (Ud)	0.51
Position	0.00 m

Type No. \ Make

5	4	LDL	
		Order No.	: ELL/2/2000/4/90
		Luminaire name	: ELLIE 170mm 2210lm 20w 4000K 90DEG
		Equipment	: 1 x LED MODULE 20.2 W / 2209.96 lm



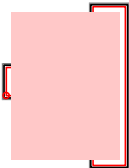
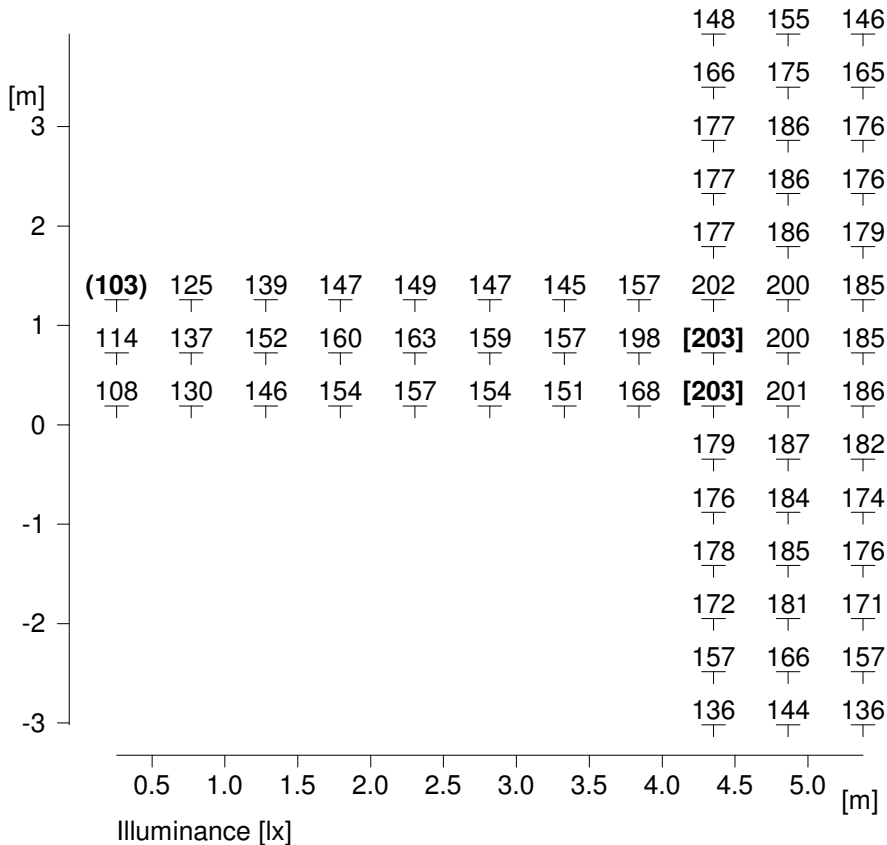
Object : Ground Floor - Corridor off Stairs
Installation : Islington Wharf
Project number :
Date : 01.12.2021



10 Ground Floor - Corridor off Stairs

10.3 Calculation results, Ground Floor - Corridor off Stairs

10.3.1 Table, Reference plane 1.1 (E)



Height reference plane : 0.00 m
Average illuminance Em : 165 lx
Minimum illuminance Emin : 103 lx
Maximum illuminance Emax : 203 lx
Uniformity Uo Emin/Em : 1 : 1.60 (0.63)
Diversity Ud Emin/Emax : 1 : 1.96 (0.51)

Ground Floor - Corridor off Stairs - EMR

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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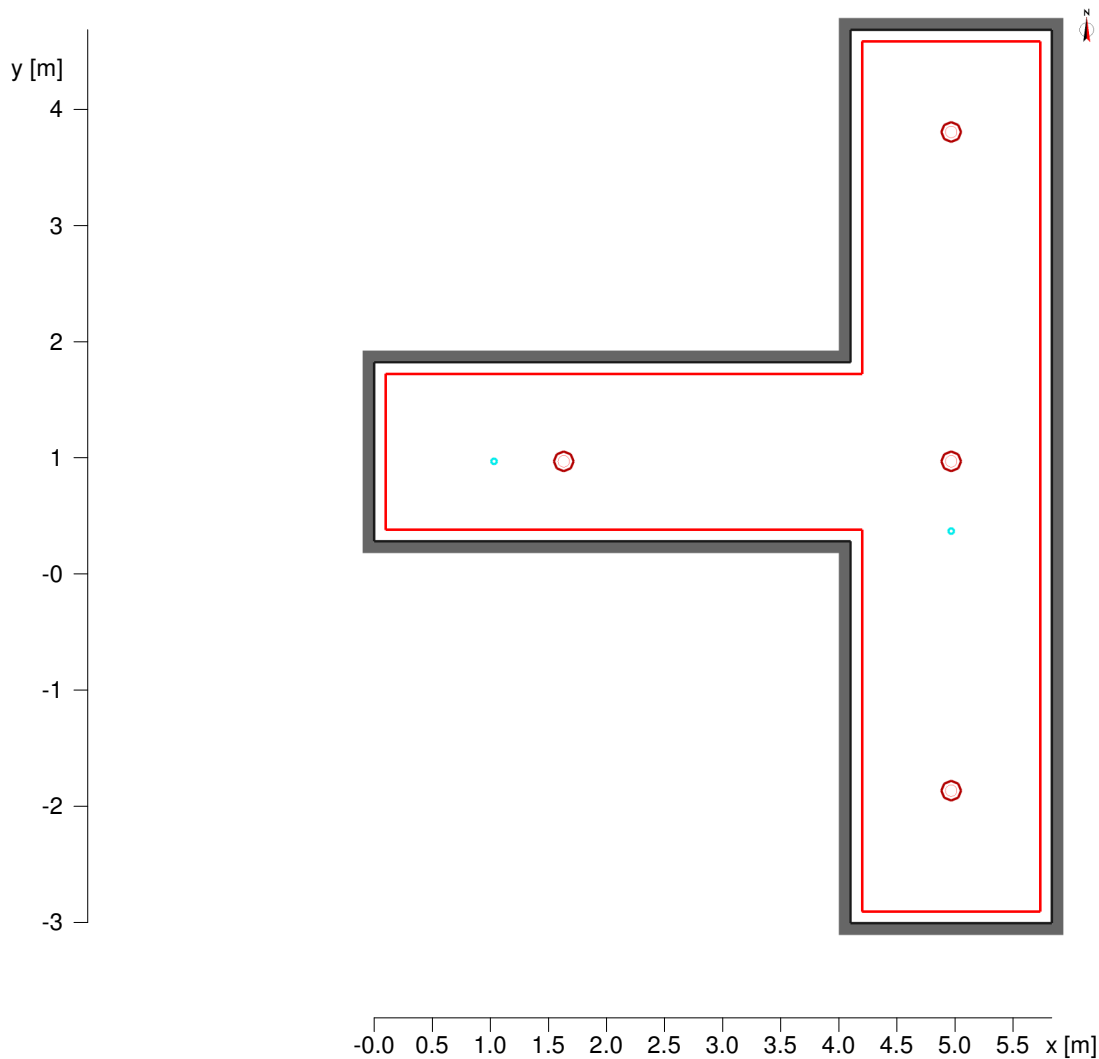
Object : Ground Floor - Corridor off Stairs - EMR
Installation : Islington Wharf
Project number :
Date : 01.12.2021



11 Ground Floor - Corridor off Stairs - EMR

11.1 Description, Ground Floor - Corridor off Stairs - EMR

11.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4.10 m	-0.00 m	4.10 m	0.0 %
2	4.10 m	-3.29 m	3.29 m	0.0 %
3	5.83 m	-3.29 m	1.73 m	0.0 %
4	5.83 m	4.40 m	7.69 m	0.0 %
5	4.10 m	4.40 m	1.73 m	0.0 %
6	4.10 m	1.54 m	2.86 m	0.0 %
7	0.00 m	1.54 m	4.10 m	0.0 %
8	0.00 m	0.00 m	1.54 m	0.0 %
Floor				0.0 %
Ceiling				0.0 %
Room height		3.20 m		
Height of ref. plane		0.00 m		

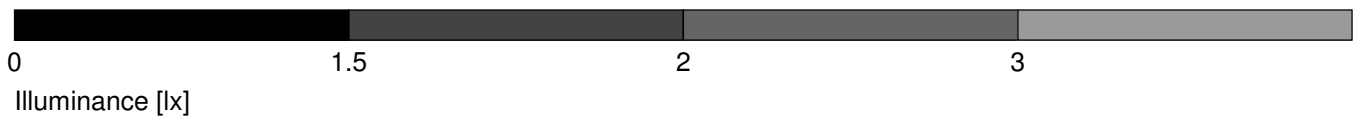
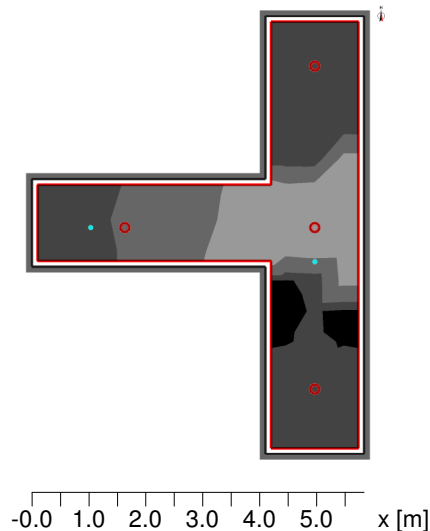
Object : Ground Floor - Corridor off Stairs - EMR
Installation : Islington Wharf
Project number :
Date : 01.12.2021



11 Ground Floor - Corridor off Stairs - EMR

11.2 Summary, Ground Floor - Corridor off Stairs - EMR

11.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.20 m
Maintenance factor	0.80
Total luminous flux of all lamps	475.80 lm
Total power	8.0 W
Total power per area (19.63 m ²)	0.41 W/m ² (19.30 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	2.12 lx
Emin/Em (Uo)	1.36 lx
Emin/Emax (Ud)	0.64
Position	0.41
	0.00 m

Type No. \ Make

6	2	LDL	
		Order No.	: LED3/KIT/CO
		Luminaire name	: LED 3 Corridor Optic 238lm 700mA
		Equipment	: 1 x LED Module 4.02 W / 237.9 lm



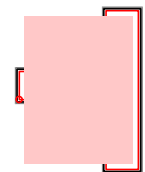
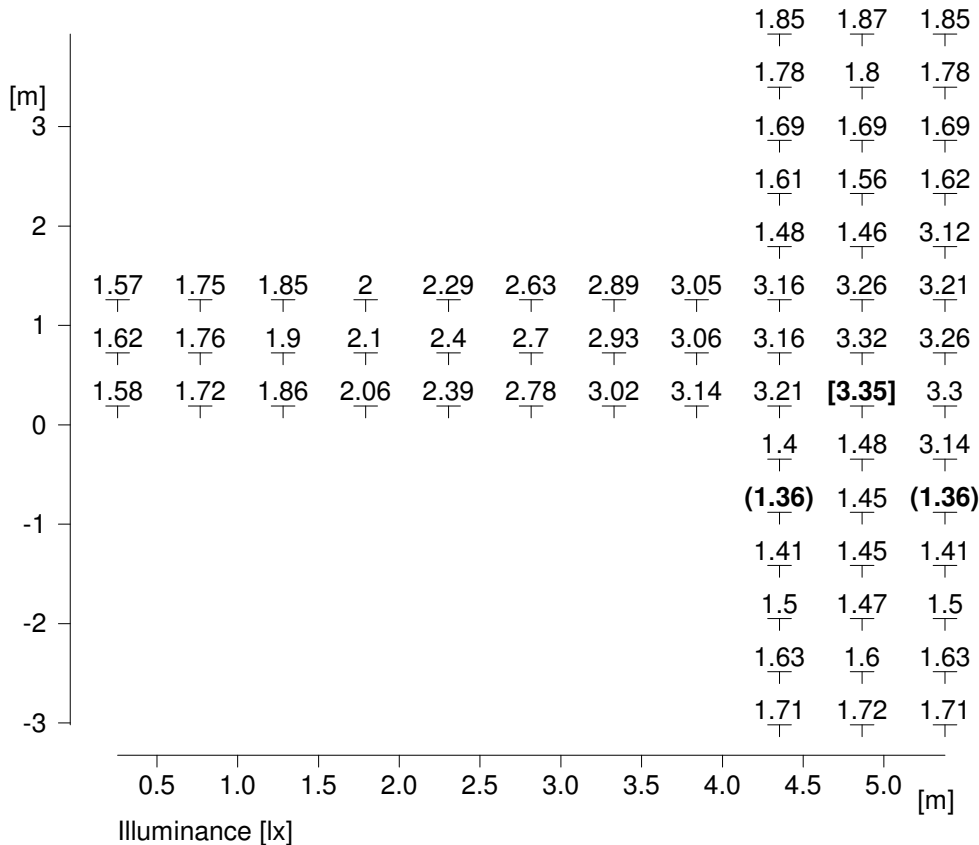
Object : Ground Floor - Corridor off Stairs - EMR
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



11 Ground Floor - Corridor off Stairs - EMR

11.3 Calculation results, Ground Floor - Corridor off Stairs - EMR

11.3.1 Table, Reference plane 1.1 (E)



Height reference plane	: 0.00 m
Average illuminance	Em : 2.12 lx
Minimum illuminance	Emin : 1.36 lx
Maximum illuminance	Emax : 3.35 lx
Uniformity Uo	Emin/Em : 1 : 1.56 (0.64)
Diversity Ud	Emin/Emax : 1 : 2.46 (0.41)

Stairwell

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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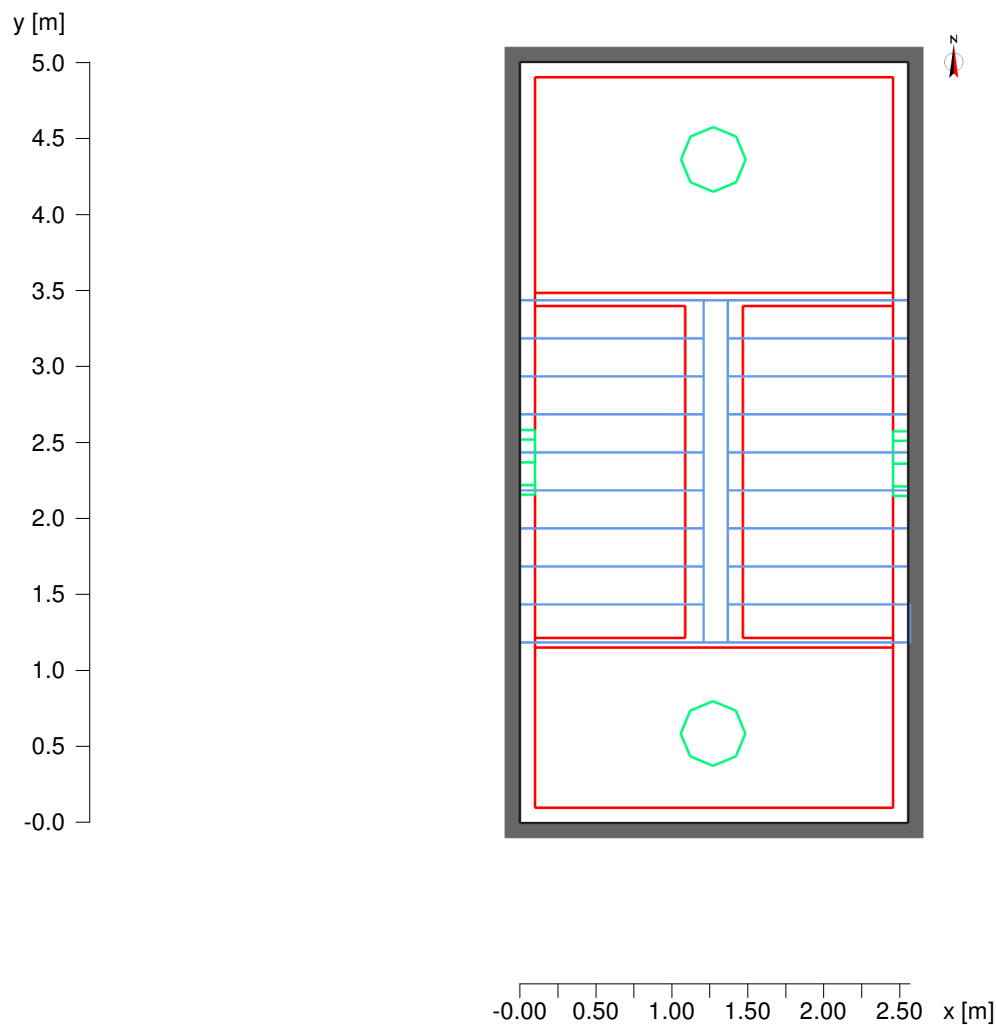
Object : Stairwell
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



12 Stairwell

12.1 Description, Stairwell

12.1.1 Floor plan



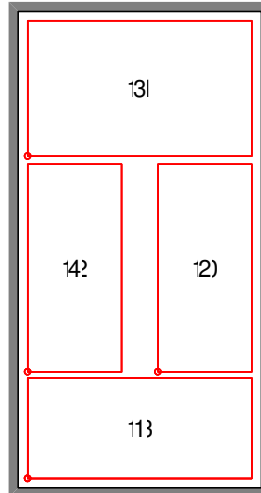
Wall	x	y	Length	Reflectance
1	2.56 m	-0.00 m	2.56 m	50.0 %
2	2.56 m	5.01 m	5.01 m	50.0 %
3	0.00 m	5.01 m	2.56 m	50.0 %
4	0.00 m	0.00 m	5.01 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		14.55 m		
Height of ref. plane		0.00 m		

Object : Stairwell
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



12.2 Summary, Stairwell

12.2.15 Result overview, Group 2



Illuminance

No.	Measuring surface	Grid	Em	Emin	Emax	Uo	Ud
2.1	Ground	11 x 5	154 lx	105 lx	197 lx	0.68	0.53
2.2	Riser 1	5 x 13	177 lx	129 lx	224 lx	0.73	0.57
2.3	Landing 1	6 x 4	160 lx	117 lx	199 lx	0.73	0.59
2.4	Riser 2	5 x 13	190 lx	128 lx	264 lx	0.68	0.49
2.5	First	11 x 5	212 lx	154 lx	272 lx	0.73	0.56
2.6	Riser 3	5 x 13	200 lx	152 lx	242 lx	0.76	0.63
2.7	Landing 2	6 x 4	162 lx	117 lx	202 lx	0.72	0.58
2.8	Riser 4	5 x 13	192 lx	125 lx	265 lx	0.65	0.47
2.9	Second	11 x 5	209 lx	147 lx	272 lx	0.70	0.54
2.10	Riser 5	5 x 13	198 lx	151 lx	241 lx	0.76	0.63
2.11	Landing 3	6 x 4	165 lx	124 lx	202 lx	0.75	0.62
2.12	Riser 6	5 x 13	191 lx	123 lx	262 lx	0.65	0.47
2.13	Third	11 x 5	208 lx	144 lx	264 lx	0.69	0.54

Level 01-10 Corridor

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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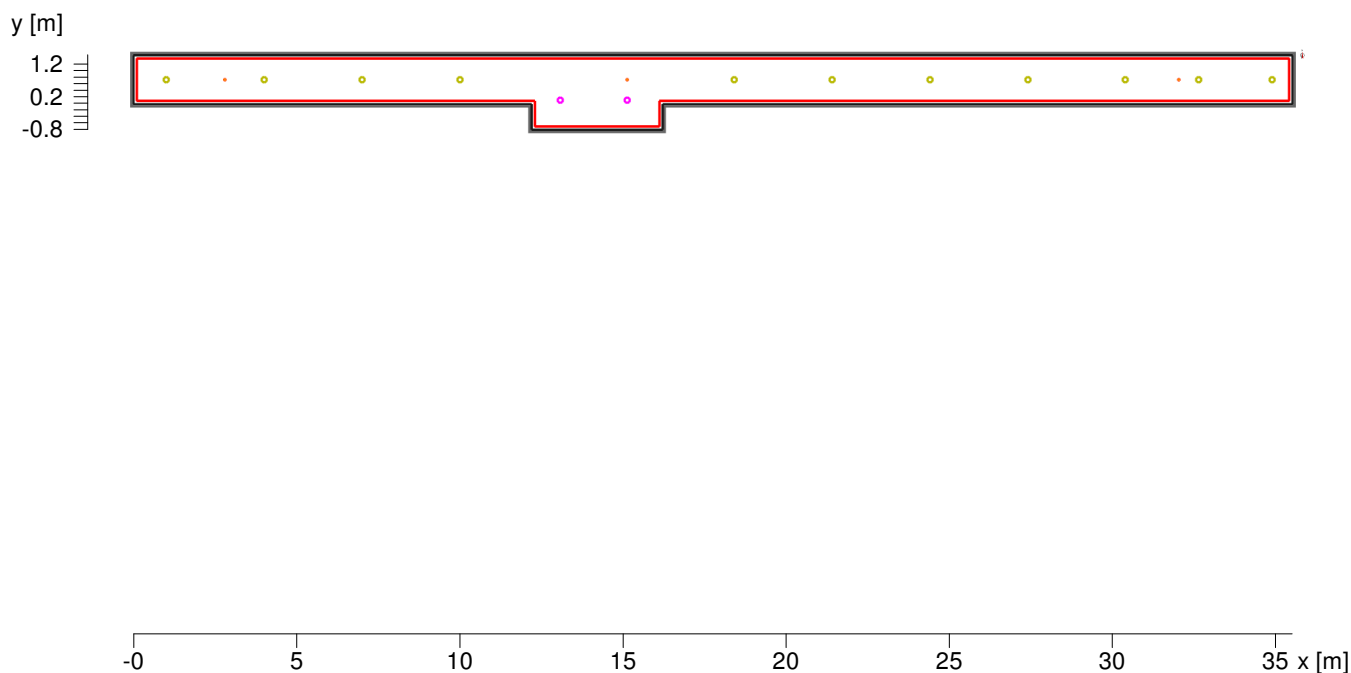
Object : Level 01-10 Corridor
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



2 Corridor 01-10

2.1 Description, Corridor 01-10

2.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	12.20 m	-0.00 m	12.20 m	50.0 %
2	12.20 m	-0.78 m	0.78 m	50.0 %
3	16.21 m	-0.78 m	4.02 m	50.0 %
4	16.21 m	-0.00 m	0.78 m	50.0 %
5	35.51 m	-0.00 m	19.30 m	50.0 %
6	35.51 m	1.50 m	1.50 m	50.0 %
7	0.00 m	1.50 m	35.51 m	50.0 %
8	0.00 m	0.00 m	1.50 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.40 m		
Height of ref. plane		----		

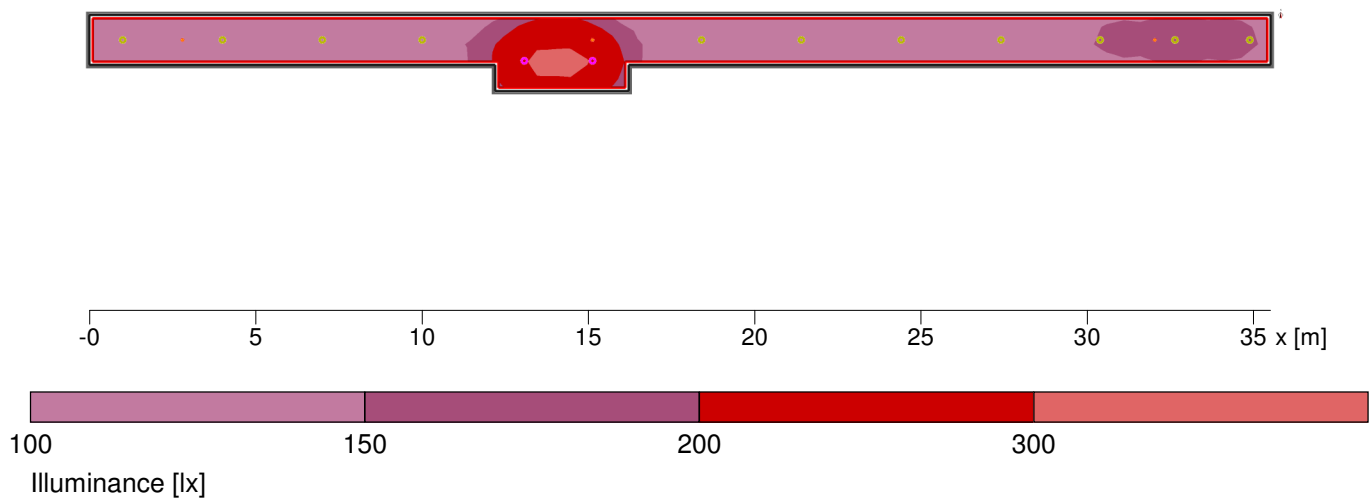
Object : Level 01-10 Corridor
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 01-10

2.2 Summary, Corridor 01-10

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux of all lamps	16740.25 lm
Total power	151.5 W
Total power per area (56.41 m ²)	2.69 W/m ² (1.79 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	150 lx
Emin/Em (Uo)	109 lx
Emin/Emax (Ud)	0.73
Position	0.36
	0.00 m (rot: 0°/0°)

Type No. \ Make

1	11	LDL
		Order No. : ELL/2/1000/4/90
		Luminaire name : ELLIE 170mm 1120lm 10w 4000K 90DEG
		Equipment : 1 x LED MODULE 10.1 W / 1120.03 lm



Object : Level 01-10 Corridor
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 01-10

2.2 Summary, Corridor 01-10

2.2.1 Result overview, Evaluation area 1

2	2	Order No.	: ELL/2/2000/4/90
		Luminaire name	: ELLIE 170mm 2210lm 20w 4000K 90DEG
		Equipment	: 1 x LED MODULE 20.2 W / 2209.96 lm

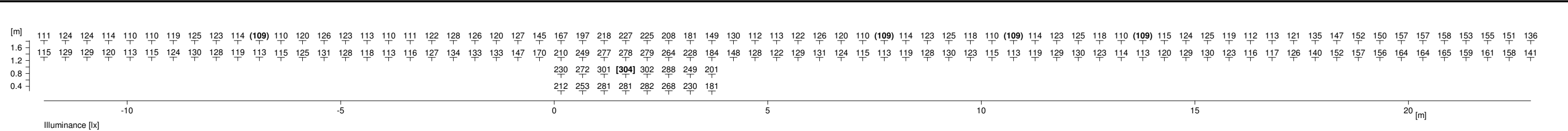
Object : Level 01-10 Corridor
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 01-10

2.3 Calculation results, Corridor 01-10

2.3.1 Table, Reference plane 1.1 (E)



Average illuminance	Em	: 150 lx
Minimum illuminance	Emin	: 109 lx
Maximum illuminance	Emax	: 304 lx
Uniformity Uo	Emin/Em	: 1 : 1.37 (0.73)
Diversity Ud	Emin/Emax	: 1 : 2.78 (0.36)

Level 01-10 Corridor - EMR

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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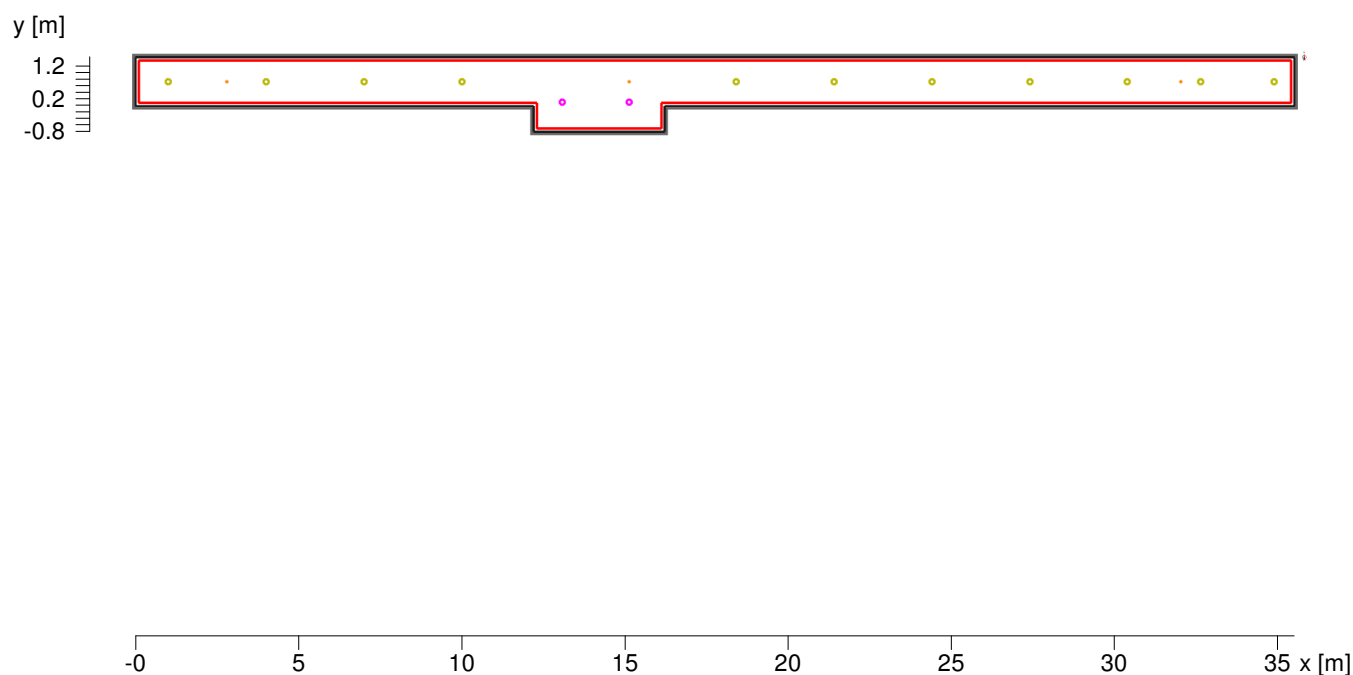
Object : Level 01-10 Corridor - EMR
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



3 Corridor 01-10 - EMR

3.1 Description, Corridor 01-10 - EMR

3.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	12.20 m	-0.00 m	12.20 m	0.0 %
2	12.20 m	-0.78 m	0.78 m	0.0 %
3	16.21 m	-0.78 m	4.02 m	0.0 %
4	16.21 m	-0.00 m	0.78 m	0.0 %
5	35.51 m	-0.00 m	19.30 m	0.0 %
6	35.51 m	1.50 m	1.50 m	0.0 %
7	0.00 m	1.50 m	35.51 m	0.0 %
8	0.00 m	0.00 m	1.50 m	0.0 %
Floor				0.0 %
Ceiling				0.0 %
Room height		2.40 m		
Height of ref. plane		----		

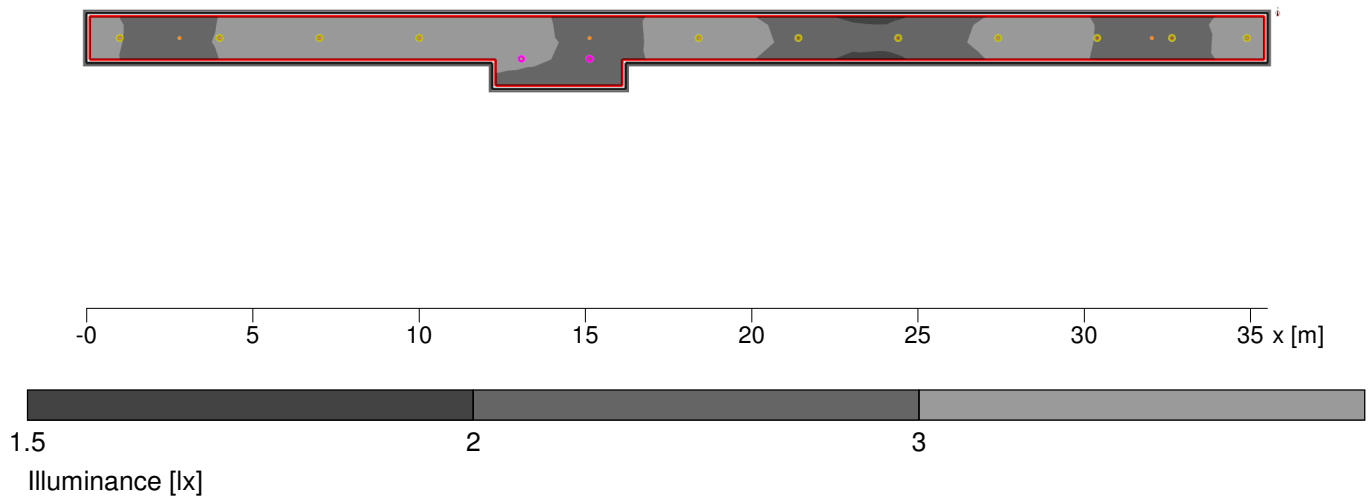
Object : Level 01-10 Corridor - EMR
Installation : Islington Wharf
Project number :
Date : 01.12.2021



3 Corridor 01-10 - EMR

3.2 Summary, Corridor 01-10 - EMR

3.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux of all lamps	713.70 lm
Total power	12.1 W
Total power per area (56.41 m ²)	0.21 W/m ² (6.95 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	3.08 lx
Emin/Em (Uo)	1.91 lx
Emin/Emax (Ud)	0.62
Position	0.44
	0.00 m (rot: 0°/0°)

Type No. \ Make

3	3	LDL
		Order No. : LED3/KIT/CO
		Luminaire name : LED 3 Corridor Optic 238lm 700mA
		Equipment : 1 x LED Module 4.02 W / 237.9 lm

Corridor 11-15

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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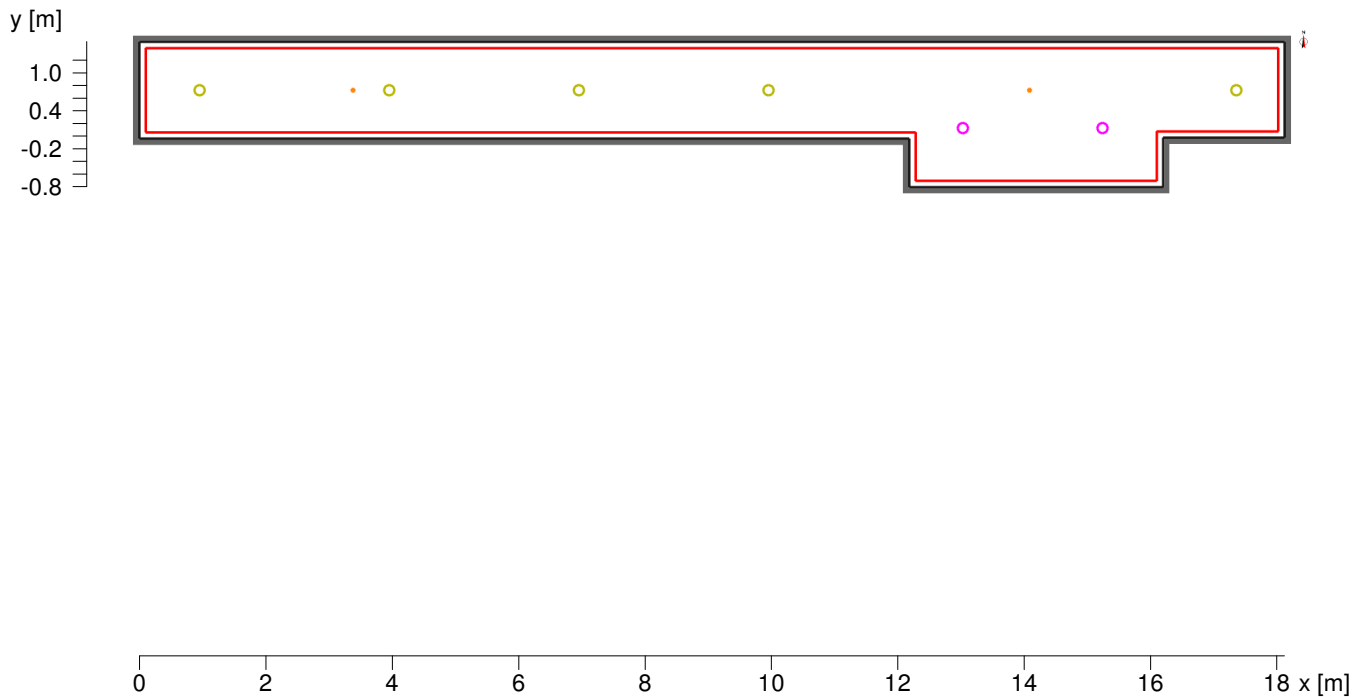
Object : Corridor 11-15
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 11-15

2.1 Description, Corridor 11-15

2.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	12.18 m	0.00 m	12.18 m	50.0 %
2	12.18 m	-0.77 m	0.77 m	50.0 %
3	16.19 m	-0.77 m	4.02 m	50.0 %
4	16.19 m	0.01 m	0.78 m	50.0 %
5	18.12 m	0.02 m	1.92 m	50.0 %
6	18.12 m	1.53 m	1.51 m	50.0 %
7	0.00 m	1.53 m	18.12 m	50.0 %
8	0.00 m	0.00 m	1.53 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.40 m		
Height of ref. plane		0.00 m		

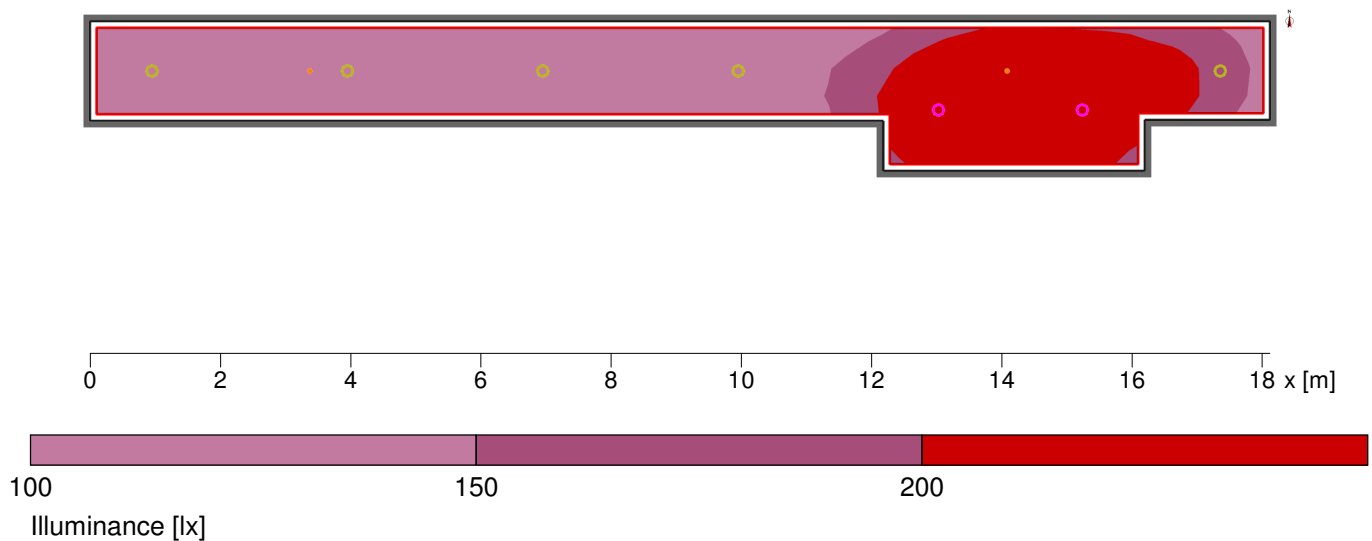
Object : Corridor 11-15
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 11-15

2.2 Summary, Corridor 11-15

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux of all lamps	10020.07 lm
Total power	90.9 W
Total power per area (30.77 m ²)	2.95 W/m ² (1.78 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	166 lx
Emin/Em (Uo)	107 lx
Emin/Emax (Ud)	0.65
Position	0.36
	0.00 m

Type No. \ Make

1	5	LDL
		Order No. : ELL/2/1000/4/90
		Luminaire name : ELLIE 170mm 1120lm 10w 4000K 90DEG
		Equipment : 1 x LED MODULE 10.1 W / 1120.03 lm

Object : Corridor 11-15
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 11-15

2.2 Summary, Corridor 11-15

2.2.1 Result overview, Evaluation area 1

2	2	Order No.	: ELL/2/2000/4/90
		Luminaire name	: ELLIE 170mm 2210lm 20w 4000K 90DEG
		Equipment	: 1 x LED MODULE 20.2 W / 2209.96 lm

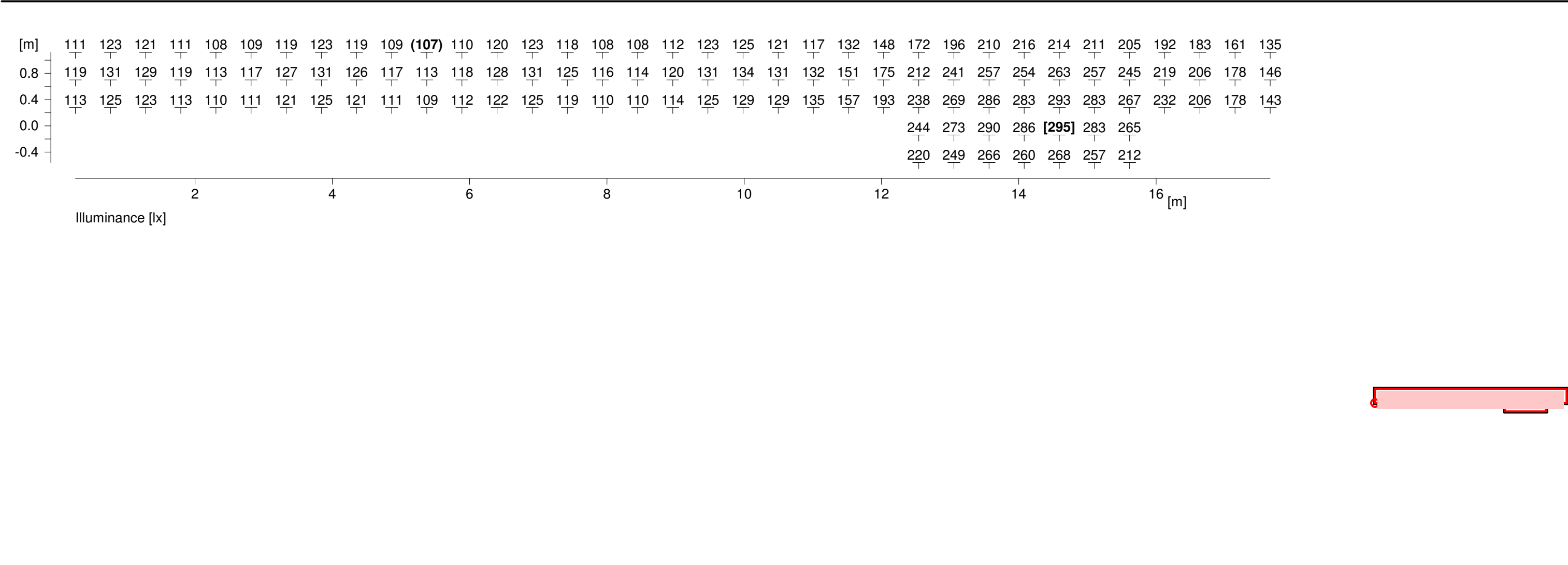
Object : Corridor 11-15
Installation : Islington Wharf
Project number :
Date : 01.12.2021



2 Corridor 11-15

2.3 Calculation results, Corridor 11-15

2.3.1 Table, Reference plane 1.1 (E)



Height reference plane		: 0.00 m
Average illuminance	Em	: 166 lx
Minimum illuminance	Emin	: 107 lx
Maximum illuminance	Emax	: 295 lx
Uniformity Uo	Emin/Em	: 1 : 1.54 (0.65)
Diversity Ud	Emin/Emax	: 1 : 2.75 (0.36)

Corridor 11-15 - EMR

Installation : Islington Wharf

Project number :

Customer : Ameen

Processed by : SH

Date : 01.12.2021

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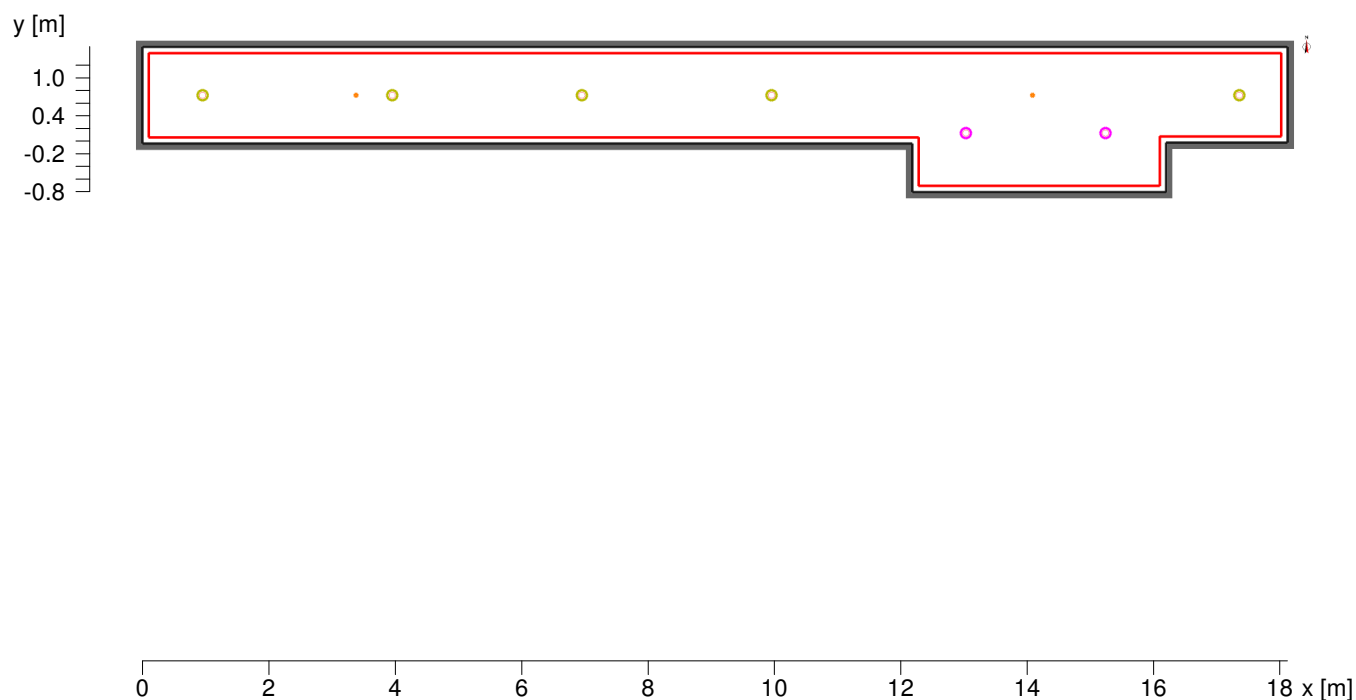
Object : Corridor 11-15 - EMR
 Installation : Islington Wharf
 Project number :
 Date : 01.12.2021



3 Corridor 11-15 - EMR

3.1 Description, Corridor 11-15 - EMR

3.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	12.18 m	0.00 m	12.18 m	0.0 %
2	12.18 m	-0.77 m	0.77 m	0.0 %
3	16.19 m	-0.77 m	4.02 m	0.0 %
4	16.19 m	0.01 m	0.78 m	0.0 %
5	18.12 m	0.02 m	1.92 m	0.0 %
6	18.12 m	1.53 m	1.51 m	0.0 %
7	0.00 m	1.53 m	18.12 m	0.0 %
8	0.00 m	0.00 m	1.53 m	0.0 %
Floor				0.0 %
Ceiling				0.0 %
Room height		2.40 m		
Height of ref. plane		0.00 m		

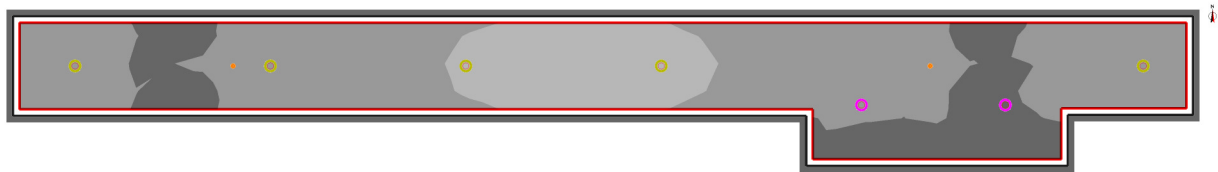
Object : Corridor 11-15 - EMR
Installation : Islington Wharf
Project number :
Date : 01.12.2021



3 Corridor 11-15 - EMR

3.2 Summary, Corridor 11-15 - EMR

3.2.1 Result overview, Evaluation area 1



0 2 4 6 8 10 12 14 16 18 x [m]



Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total luminous flux of all lamps	475.80 lm
Total power	8.0 W
Total power per area (30.77 m ²)	0.26 W/m ² (7.26 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

Em	Horizontal
Emin	3.6 lx
Emin/Em (Uo)	2.24 lx
Emin/Emax (Ud)	0.62
Position	0.42
	0.00 m

Type No. \ Make

3	2	LDL	
		Order No.	: LED3/KIT/CO
		Luminaire name	: LED 3 Corridor Optic 238lm 700mA
		Equipment	: 1 x LED Module 4.02 W / 237.9 lm



LDL lighting

Unit 3, Stonehouse Road, Martland Park, WN5 0LE

Islington Wharf, Phase 4

IW4-AME-XX-XX-CA-E-63-0001

External Lighting Calculations

Rev. C03



CARBONCONSULTANTS

Object :
Installation :
Project number : IW4
Date : 31.05.2022

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Exterior 1

Description, Exterior 1

Floor plan



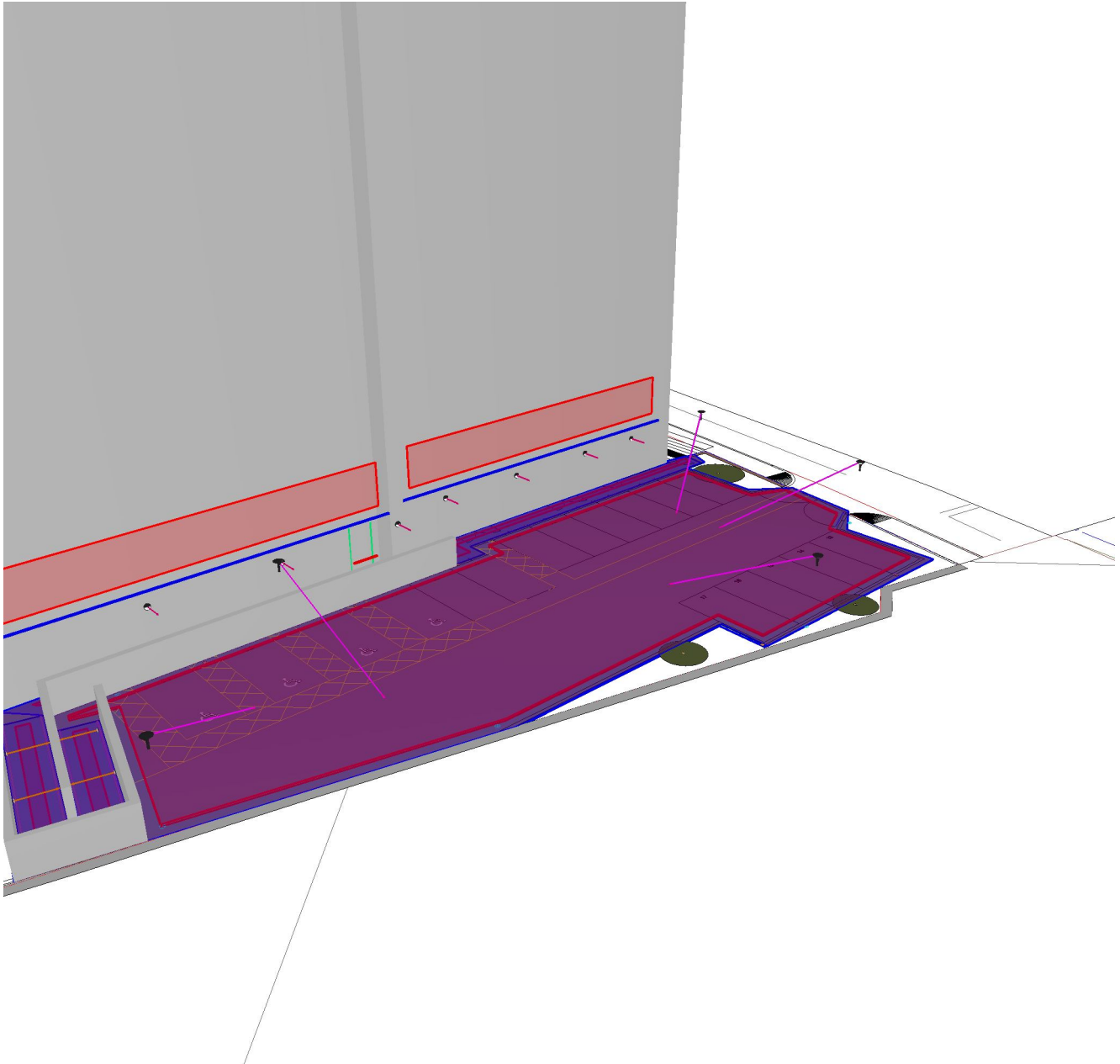
-please put your own address here-

Object :
Installation :
Project number : IW4
Date : 31.05.2022

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Description, Exterior 1

3D view, View 1



-please put your own address here-

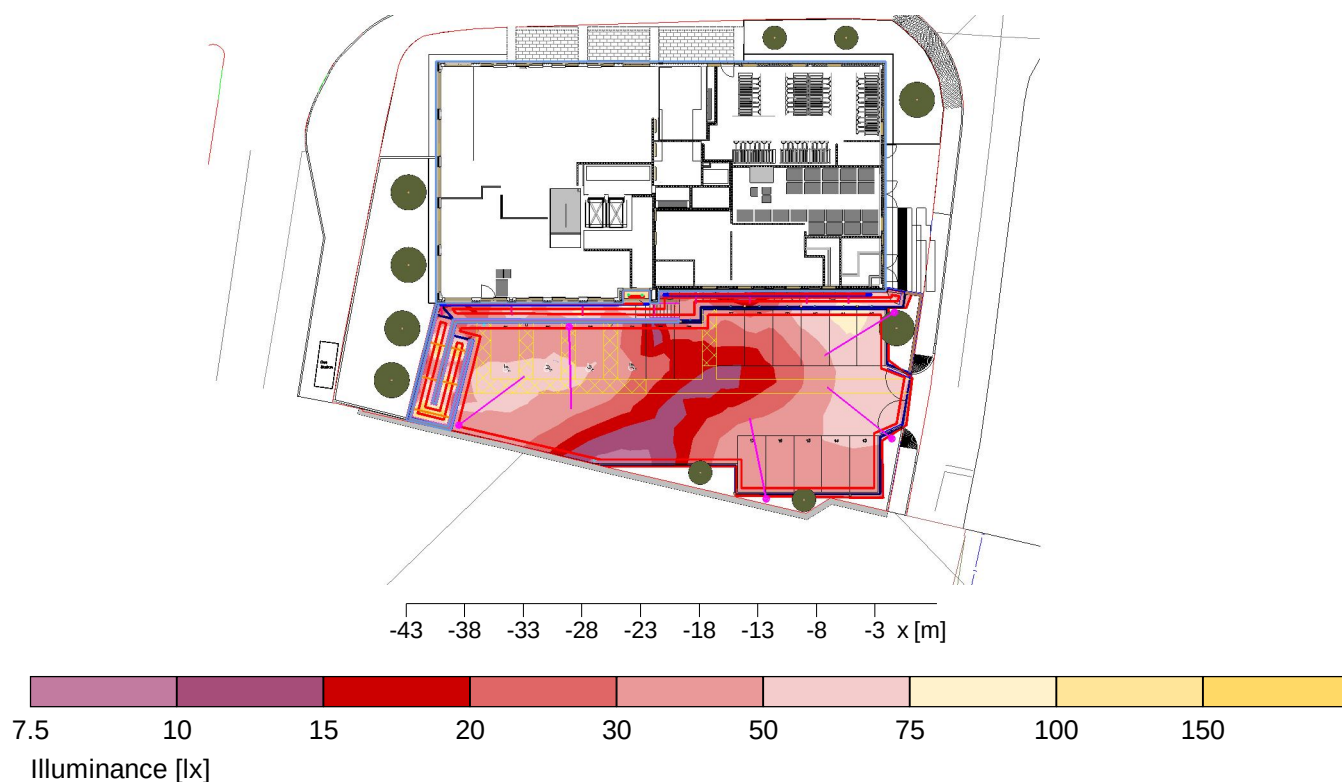
Object :
Installation :
Project number : IW4
Date : 31.05.2022

RELUX®

Exterior 1

Summary, Exterior 1

Result overview, Evaluation area 1



General

Calculation algorithm used
Maintenance factor

Average indirect fraction
0.80

Total luminous flux of all lamps
Total power
Total power per area (590.19 m²)

48566.00 lm
533.6 W
0.90 W/m² (2.34 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
Em 38.7 lx
Emin 8.5 lx
Emin/Em (Uo) 0.22
Emin/Emax (Ud) 0.05
Position 0.00 m

Type No.\Make

ANSELL		
12	3	Order No. : AHPTLED/2 (CW)
		Luminaire name : FLOODLIGHTING - Helix LED CCT Post Top
		Equipment : 1 x LED 75 W / 8516 lm
13	6	Order No. : AHELED/OB (WW)
		Luminaire name : AMENITY - Helder LED CCT Oval Bulkhead
		Equipment : 1 x LED 12 W / 1082 lm

-please put your own address here-

Object :
Installation :
Project number : IW4
Date : 31.05.2022



Exterior 1

Summary, Exterior 1

Result overview, Evaluation area 1

14	8	Order No.	: ALUCLED/B - CW 27W
		Luminaire name	: AMENITY - Lucca LED CCT Black
		Equipment	: 1 x LED 27.2 W / 1947 lm

7	2	Whitecroft Lighting	
		Order No.	: CN5003KFLFW
		Luminaire name	: CONCERT S
		Equipment	: 1 x LED 9.5 W / 475 lm

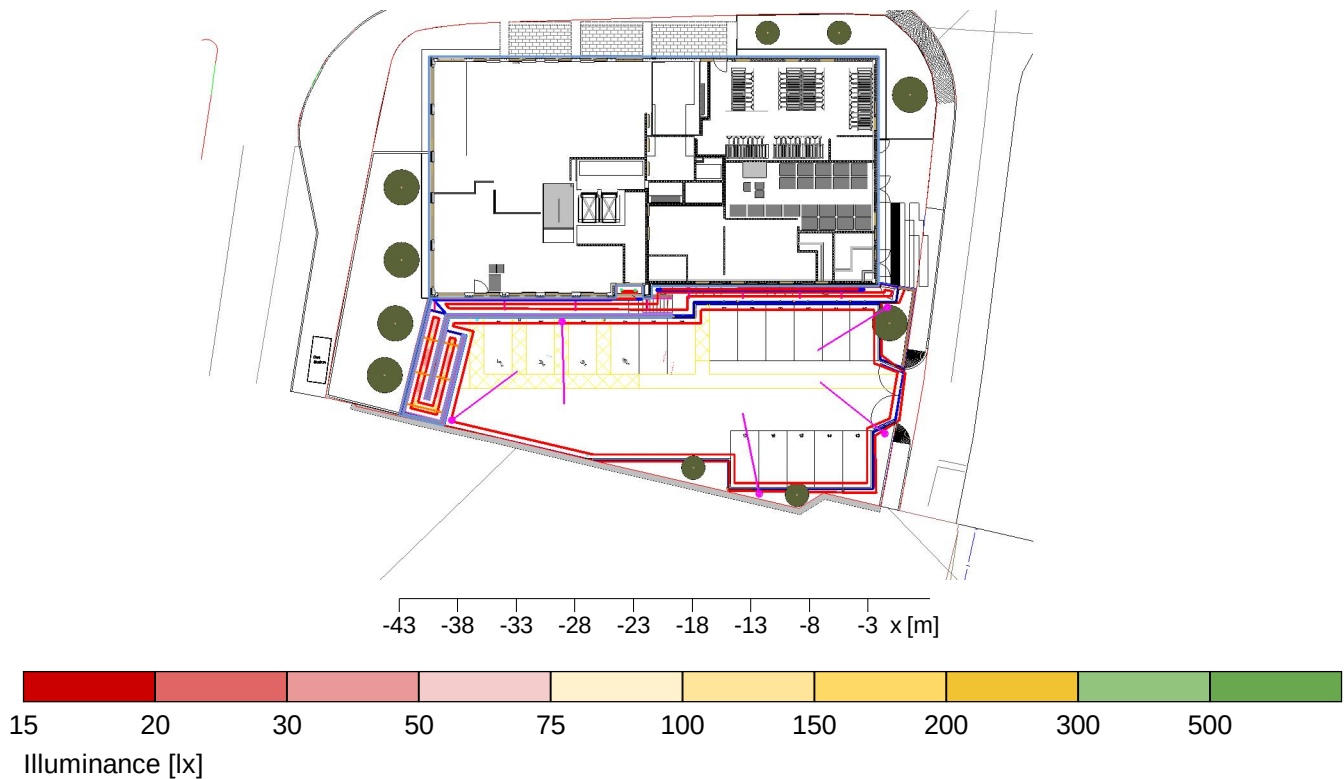
-please put your own address here-

Object :
Installation :
Project number : IW4
Date : 31.05.2022

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Summary, Exterior 1

Result overview, External Ramp



General

Calculation algorithm used
Maintenance factor

Average indirect fraction
0.80

External Ramp

Em
Emin
Emin/Em (Uo)
Emin/Emax (Ud)
Position

Reference plane 2.1

Horizontal
92 lx
19.5 lx
0.21
0.04
0.10 m

Major surfaces

M 2.1 (Ceiling)

Em
15.6 lx

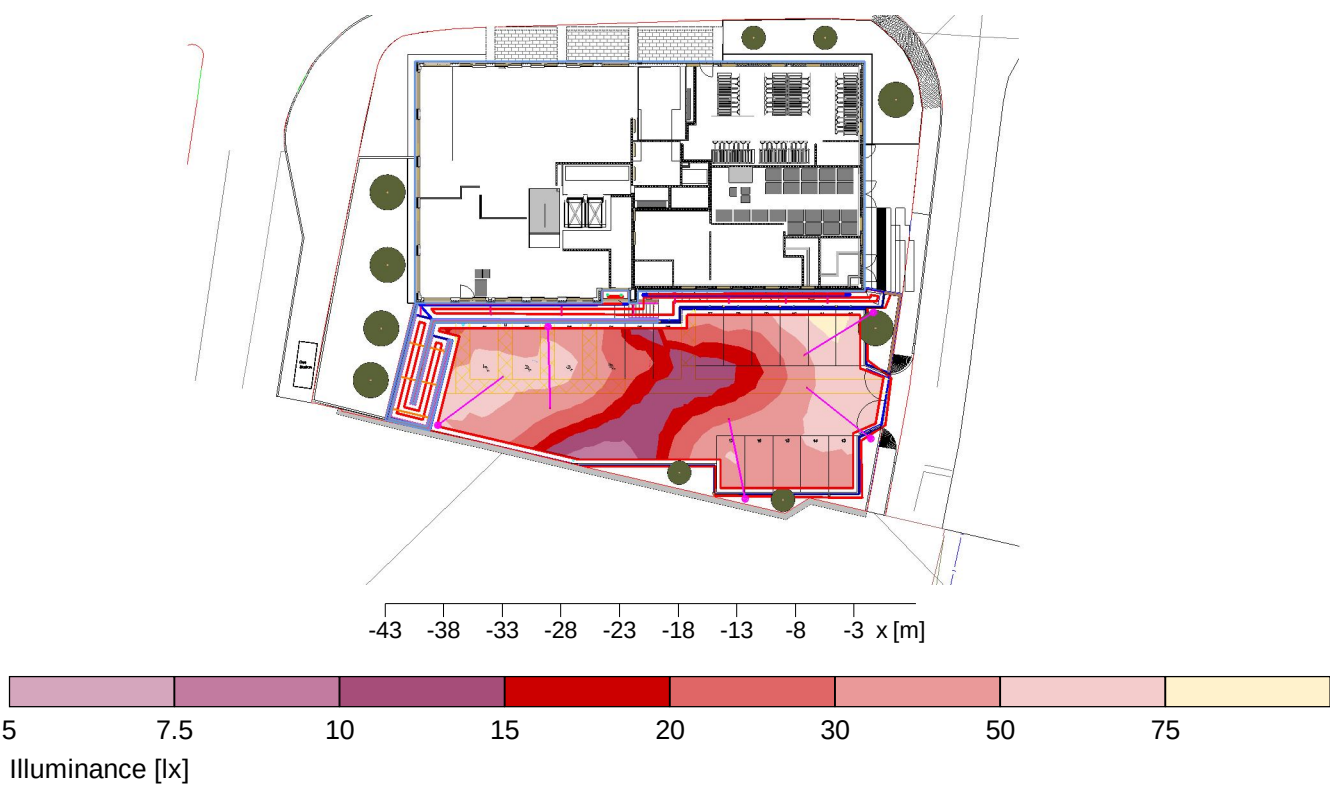
Uo
0.02

Type No.\Make

-please put your own address here-

Summary, Exterior 1

Result overview, Car Park



General
Calculation algorithm used
Maintenance factor
Average indirect fraction
0.80

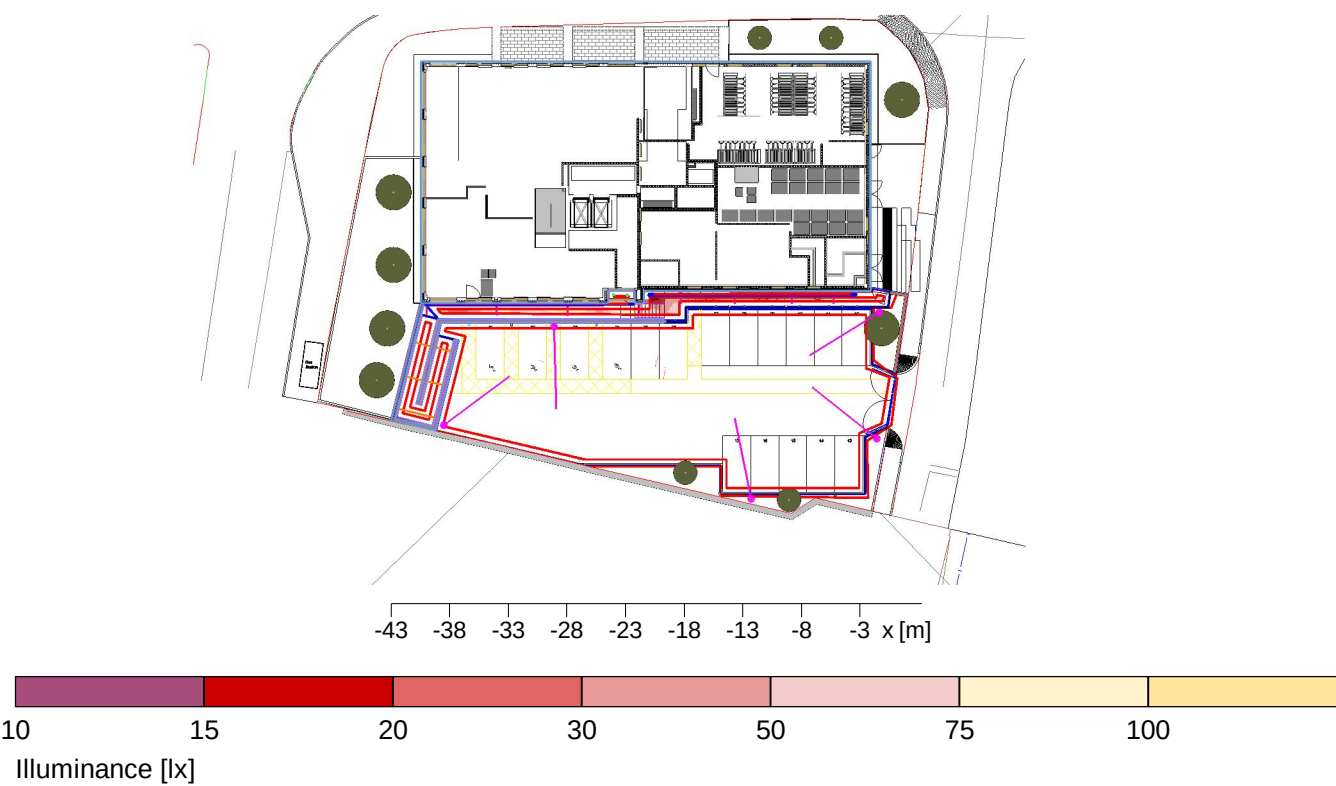
Car Park
Reference plane 3.1
Horizontal
Em
34.8 lx
Emin
6.7 lx
Emin/Em (Uo)
0.19
Emin/Emax (Ud)
0.09
Position
0.20 m

Major surfaces
M 3.1 (Ceiling)
Em
0 lx
Uo

Type No.\Make

Summary, Exterior 1

Result overview, Pedestrian Walkway



General
Calculation algorithm used
Maintenance factor
Average indirect fraction
0.80

Pedestrian Walkway
Reference plane 4.1
Horizontal
Em 53.8 lx
Emin 12.2 lx
Emin/Em (Uo) 0.23
Emin/Emax (Ud) 0.11
Position 0.10 m

Major surfaces
M 4.1 (Ceiling)
Em 7.9 lx
Uo 0.02

Type No. \ Make

Object :
Installation :
Project number : IW4
Date : 31.05.2022



Summary, Exterior 1

Result overview, level 01 apartment windows

General

Calculation algorithm used	Average indirect fraction
Position	3.00 m
Maintenance factor	0.80

Major surfaces

	Em	Uo
M 5.1 (Wall)	5.15 lx	0.46

Type No. Make

-please put your own address here-

Object :
Installation :
Project number : IW4
Date : 31.05.2022



Summary, Exterior 1

Result overview, level 01 apartment windows

General

Calculation algorithm used	Average indirect fraction
Position	3.00 m
Maintenance factor	0.80

Major surfaces

	Em	Uo
M 6.1 (Wall)	2.48 lx	0.78

Type No. Make

-please put your own address here-

Object :
Installation :
Project number : IW4
Date : 31.05.2022



Summary, Exterior 1

Result overview, Secondary Entrance

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80

Major surfaces	Em	Uo
M 7.2 (Ceiling)	19 lx	0.54

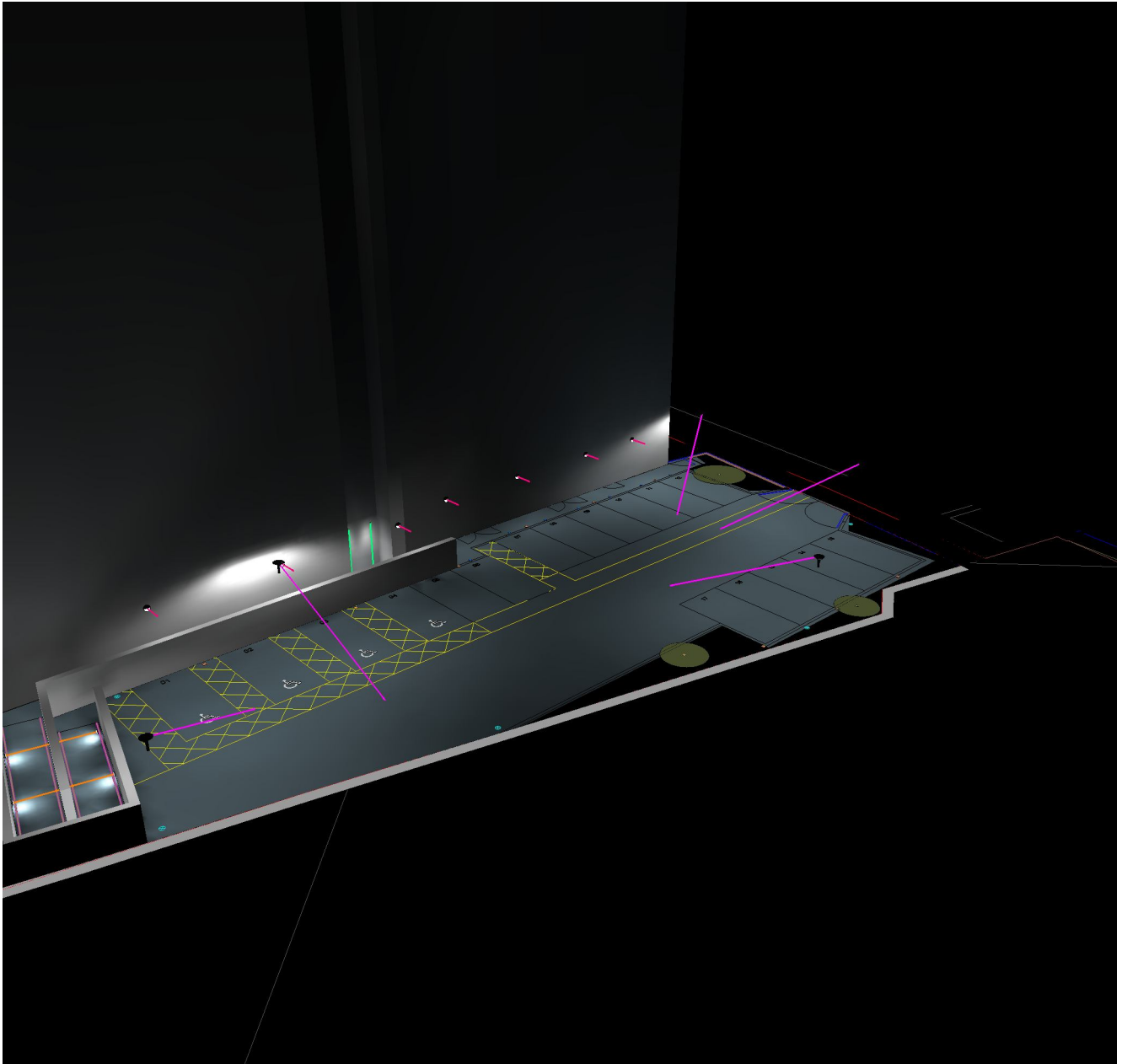
Type No.lMake

Object :
Installation :
Project number : IW4
Date : 31.05.2022

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Calculation results, Exterior 1

3D luminance, View 1



-please put your own address here-