

Installation : Waterside Road, Bury

Project number :

Customer : HATTRELL DS ONE ARCHITECTS LLP

Processed by : Liam Parkinson

Date : 27.09.2022

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Liam Parkinson

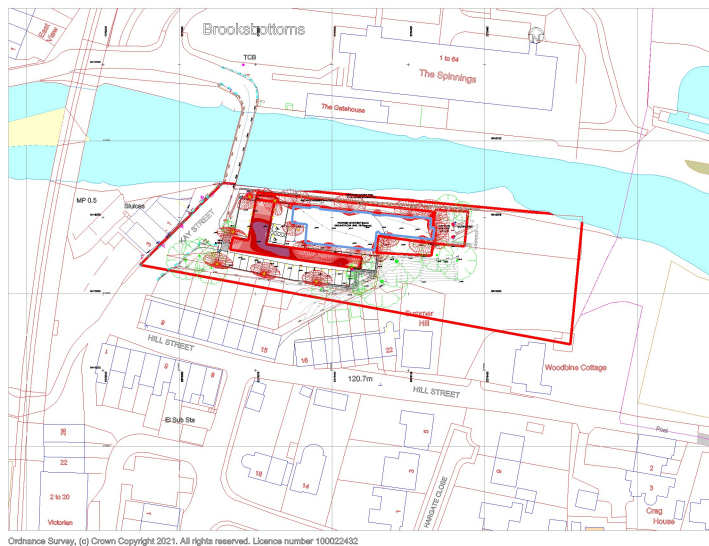
Steon Ltd, Bridgewater Court, Network 65 Business Park, Burnley, Lancashire, BB11 5ST

Object :
Installation : Waterside Road, Bury
Project number :
Date : 27.09.2022

1 Exterior 1

1.1 Summary, Exterior 1

1.1.1 Result overview, Measuring area 1



43 63 83 103 123 143 163 183 203 x [m]



0 0.10.150.20.30.50.75 1 1.5 2 3 5 7.5 10 15 20 30 50 75 10015020030050075010001502003005007500
Illuminance [lx]

General

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

Total luminous flux : 84777.6 lm
Total power : 652.8 W
Total power per area (4730.43 m²) : 0.14 W/m²

Illuminance

Average illuminance : Em : 26 lx
Minimum illuminance : Emin : 8 lx
Maximum illuminance : Emax : 182 lx
Uniformity Uo : Emin/Em : 1:3.29 (0.3)
Diversity Ud : Emin/Emax : 1:22.8 (0.04)

Type No. Make

Steon Ltd.

1 6 x
 Order No. : Condor Mini 50W LED - 4000K - Extra Wide.Idt
Luminaire name : Condor Mini 50W LED - 4000K - Extra Wide
Equipment : 1 x LED 49.6 W / 6228.7 lm

2 3 x
 Order No. : 65-281-070-402 /A65-04-02-00
Luminaire name : Monarch 14W LED 4000K CRI 80 - Asymmetrical Shield
Equipment : 1 x / 13.9 W / 891.8 lm

Object :
Installation : Waterside Road, Bury
Project number :
Date : 27.09.2022



1 Exterior 1

1.1 Summary, Exterior 1

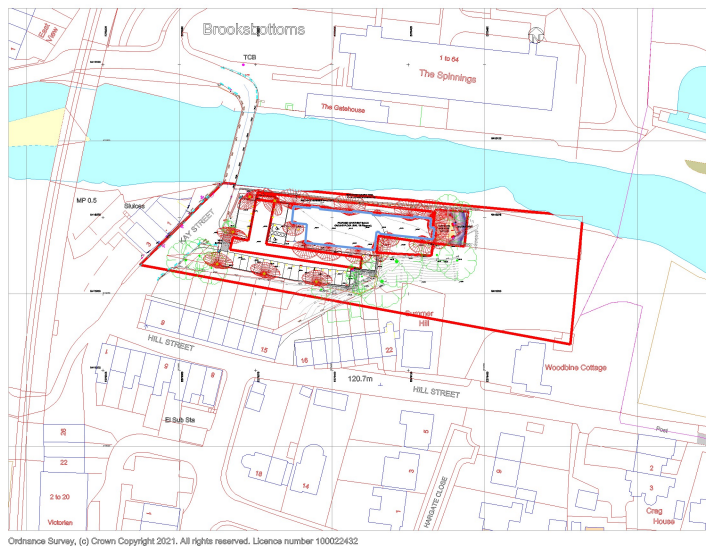
1.1.1 Result overview, Measuring area 1

5	15 x	Order No.	: 65-271-470-402 / 65-271-470-402
		Luminaire name	: Harrier Midi 20W LED - 4000K
		Equipment	: 1 x 20W LED 20.9 W / 2982 lm

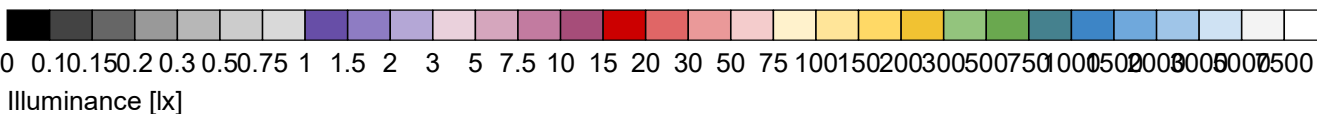
Object :
 Installation : Waterside Road, Bury
 Project number :
 Date : 27.09.2022

1.1 Summary, Exterior 1

1.1.2 Result overview, Measuring area 2



43 63 83 103 123 143 163 183 203 x [m]



General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 0.00 m
 0.80

Total luminous flux
 Total power
 Total power per area (4730.43 m²)

84777.6 lm
 652.8 W
 0.14 W/m²

Illuminance

Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U₀
 Diversity U_d

Em
 Emin
 Emax
 Emin/Em
 Emin/Emax

37 lx
 1 lx
 154 lx
 1:54.1 (0.02)
 1:225 (0)

Type No. Make

Steon Ltd.

1 6 x


Order No. : Condor Mini 50W LED - 4000K - Extra Wide.Idt
 Luminaire name : Condor Mini 50W LED - 4000K - Extra Wide
 Equipment : 1 x LED 49.6 W / 6228.7 lm

2 3 x


Order No. : 65-281-070-402 /A65-04-02-00
 Luminaire name : Monarch 14W LED 4000K CRI 80 - Asymmetrical Shield
 Equipment : 1 x / 13.9 W / 891.8 lm

Object :
Installation : Waterside Road, Bury
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1.1 Summary, Exterior 1

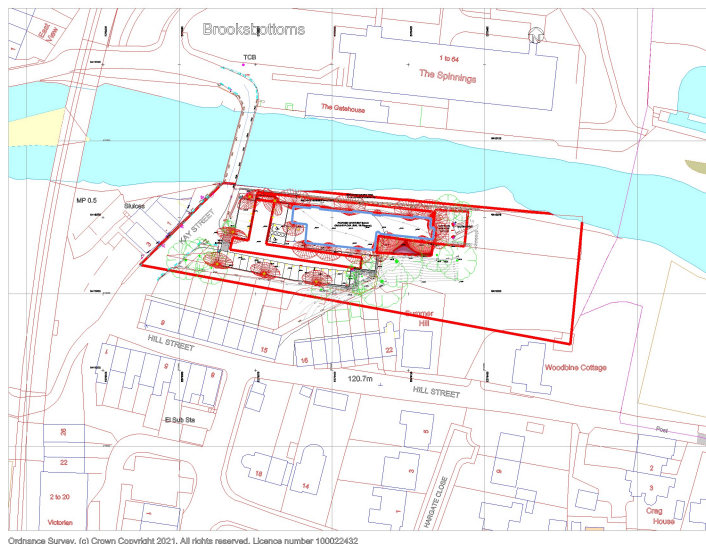
1.1.2 Result overview, Measuring area 2

5	15 x	Order No.	: 65-271-470-402 / 65-271-470-402
		Luminaire name	: Harrier Midi 20W LED - 4000K
		Equipment	: 1 x 20W LED 20.9 W / 2982 lm

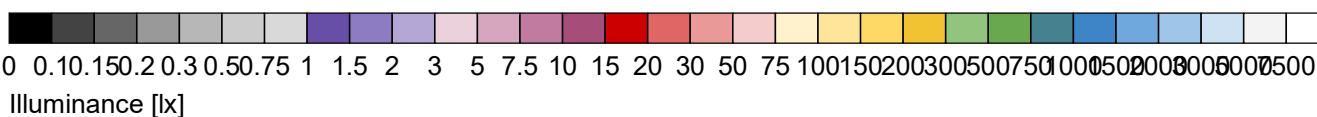
Object :
 Installation : Waterside Road, Bury
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 Date : 27.09.2022

1.1 Summary, Exterior 1

1.1.3 Result overview, Measuring area 3



43 63 83 103 123 143 163 183 203 x [m]



General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 0.00 m
 0.80

Total luminous flux
 Total power
 Total power per area (4730.43 m²)

84777.6 lm
 652.8 W
 0.14 W/m²

Illuminance

Average illuminance	Em	36.8 lx
Minimum illuminance	Emin	6.9 lx
Maximum illuminance	Emax	89.8 lx
Uniformity Uo	Emin/Em	1:5.3 (0.19)
Diversity Ud	Emin/Emax	1:12.9 (0.08)

Type No. Make

Steon Ltd.	
1 6 x	Order No. : Condor Mini 50W LED - 4000K - Extra Wide.Idt
	Luminaire name : Condor Mini 50W LED - 4000K - Extra Wide
	Equipment : 1 x LED 49.6 W / 6228.7 lm
2 3 x	Order No. : 65-281-070-402 /A65-04-02-00
	Luminaire name : Monarch 14W LED 4000K CRI 80 - Asymmetrical Shield
	Equipment : 1 x / 13.9 W / 891.8 lm

Object :
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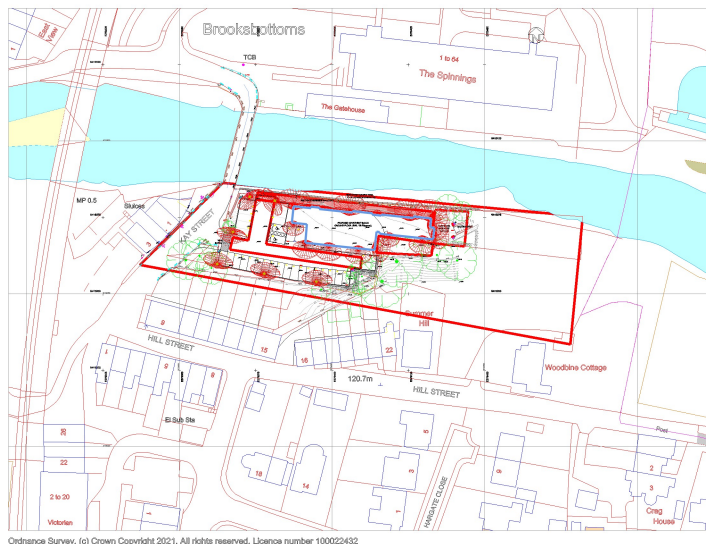
1.1 Summary, Exterior 1

1.1.3 Result overview, Measuring area 3

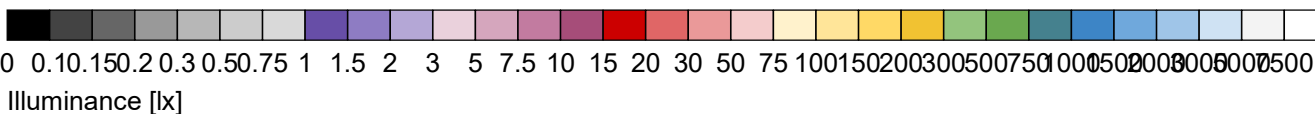
5	15 x	Order No.	: 65-271-470-402 / 65-271-470-402
		Luminaire name	: Harrier Midi 20W LED - 4000K
		Equipment	: 1 x 20W LED 20.9 W / 2982 lm

1.1 Summary, Exterior 1

1.1.4 Result overview, Measuring area 4



43 63 83 103 123 143 163 183 203 x [m]



General

Calculation algorithm used
 Height of evaluation surface
 Maintenance factor

Average indirect fraction
 0.00 m
 0.80

Total luminous flux
 Total power
 Total power per area (4730.43 m²)

84777.6 lm
 652.8 W
 0.14 W/m²

Illuminance

Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U₀
 Diversity U_d

Em
 Emin
 Emax
 Emin/Em
 Emin/Emax

41 lx
 19.3 lx
 92.2 lx
 1:2.12 (0.47)
 1:4.77 (0.21)

Type No. Make

Steon Ltd.		
1	6 x	Order No. : Condor Mini 50W LED - 4000K - Extra Wide.Idt
		Luminaire name : Condor Mini 50W LED - 4000K - Extra Wide
		Equipment : 1 x LED 49.6 W / 6228.7 lm
2	3 x	Order No. : 65-281-070-402 /A65-04-02-00
		Luminaire name : Monarch 14W LED 4000K CRI 80 - Asymmetrical Shield
		Equipment : 1 x / 13.9 W / 891.8 lm

Object :
Installation : Waterside Road, Bury
Project number :
Date : 27.09.2022



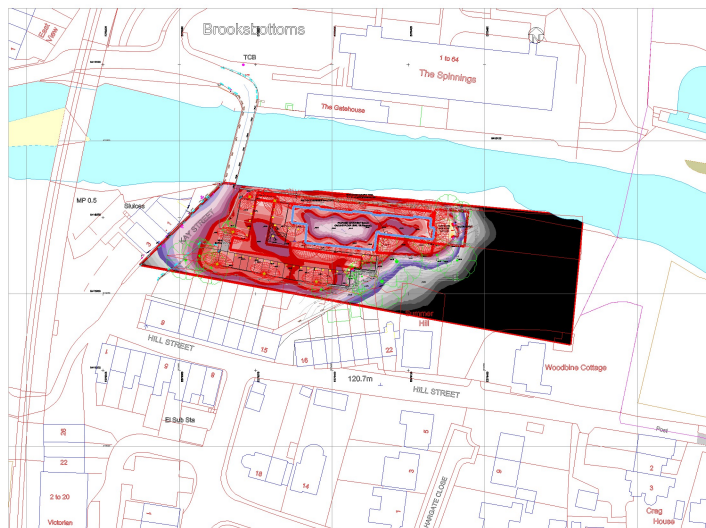
1.1 Summary, Exterior 1

1.1.4 Result overview, Measuring area 4

5	15 x	Order No.	: 65-271-470-402 / 65-271-470-402
		Luminaire name	: Harrier Midi 20W LED - 4000K
		Equipment	: 1 x 20W LED 20.9 W / 2982 lm

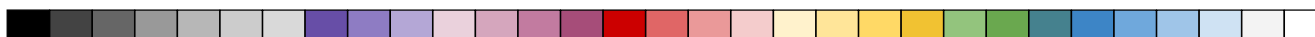
1.1 Summary, Exterior 1

1.1.5 Result overview, Evaluation area 1



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43 63 83 103 123 143 163 183 203 x [m]



0 0.10.150.20.30.50.75 1 1.5 2 3 5 7.5 10 15 20 30 50 75 1001502003005007501000150200300500750
 Illuminance [lx]

General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Total luminous flux
 Total power
 Total power per area (4730.43 m²)

84777.59 lm
 652.8 W
 0.14 W/m² (1.04 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 Em 13.3 lx
 Emin 0 lx
 Emin/Em (Uo) 0.00
 Emin/Emax (Ud) 0.00
 Position 0.00 m

Type No. Make

Steon Ltd.
 1 6 x
 Order No. : Condor Mini 50W LED - 4000K - Extra Wide.Idt
 Luminaire name : Condor Mini 50W LED - 4000K - Extra Wide
 Equipment : 1 x LED 49.6 W / 6228.7 lm

2 3 x
 Order No. : 65-281-070-402 /A65-04-02-00
 Luminaire name : Monarch 14W LED 4000K CRI 80 - Asymmetrical Shield
 Equipment : 1 x / 13.9 W / 891.8 lm

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1.1 Summary, Exterior 1

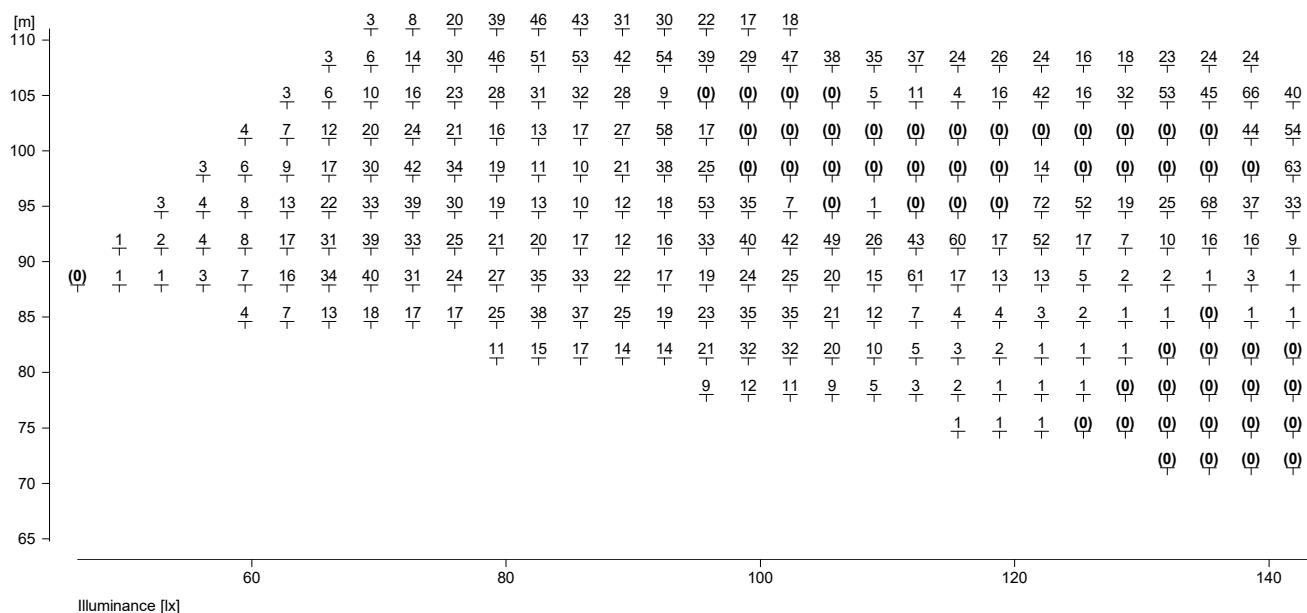
1.1.5 Result overview, Evaluation area 1

5	15 x	Order No.	: 65-271-470-402 / 65-271-470-402
		Luminaire name	: Harrier Midi 20W LED - 4000K
		Equipment	: 1 x 20W LED 20.9 W / 2982 lm

1 Exterior 1

1.2 Calculation results, Exterior 1

1.2.1 Table, Floor (E)



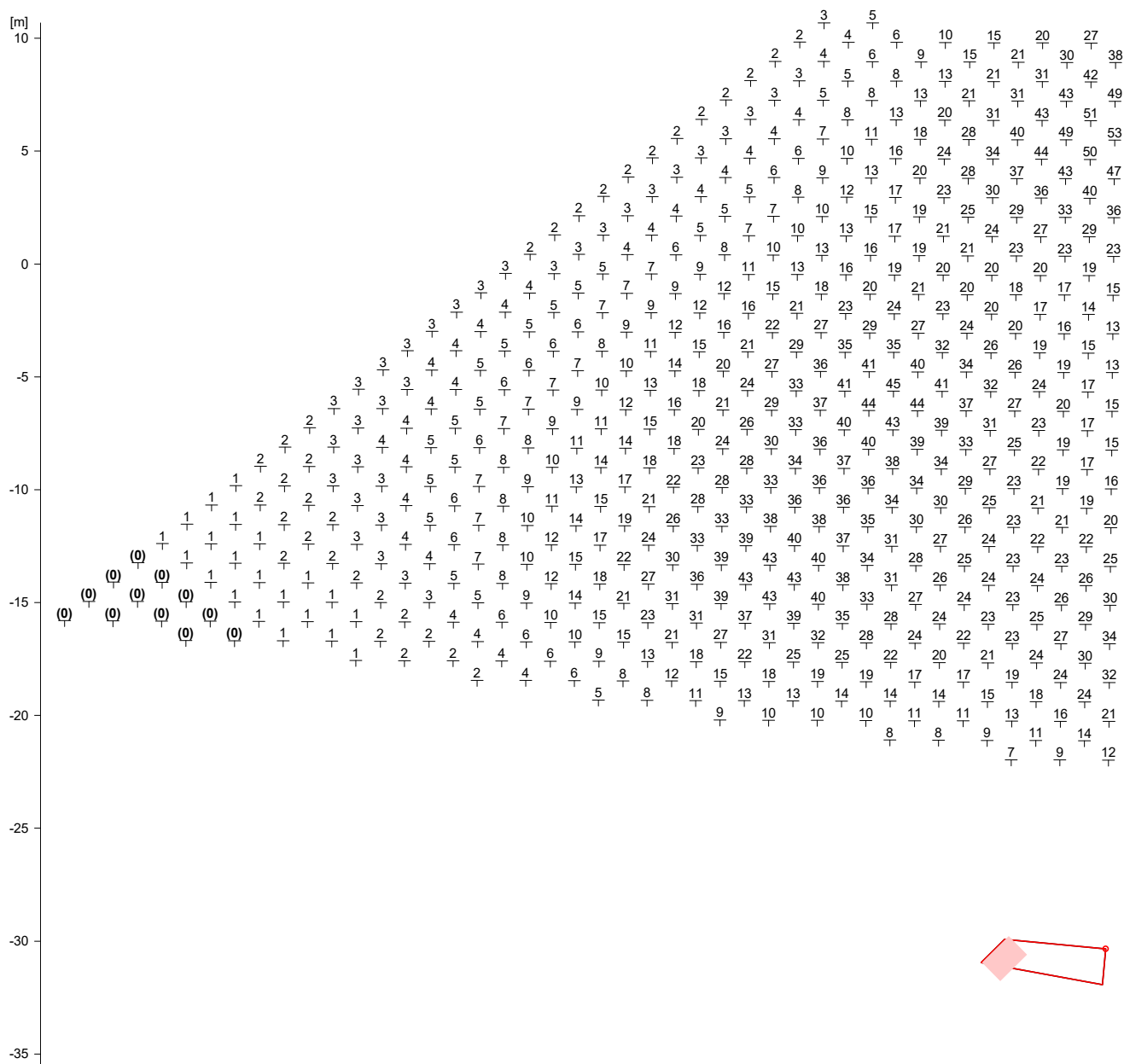
Part1

Average illuminance	Em	: 11 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 134 lx
Uniformity Uo	Emin/Em	: ---
Diversity Ud	Emin/Emax	: ---



1.2 Calculation results, Exterior 1

1.2.2 Table, Reference plane 1.1 (E)



Part1

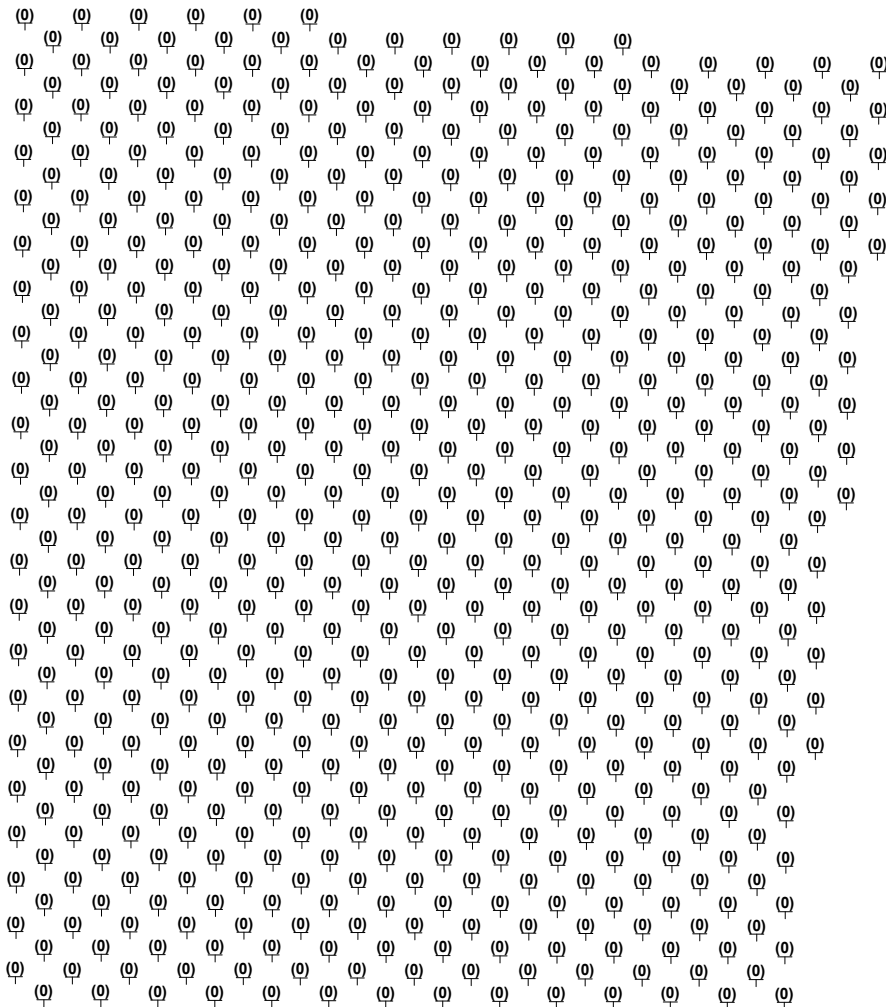
Height reference plane	: 0.00 m
Average illuminance	Em : 13 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 183 lx
Uniformity Uo	Emin/Em : 1 : 8326.58 (0.00)
Diversity Ud	Emin/Emax : 1 : 115135.77 (0.00)

1.2.2 Table, Reference plane 1.1 (E)

[illegible]

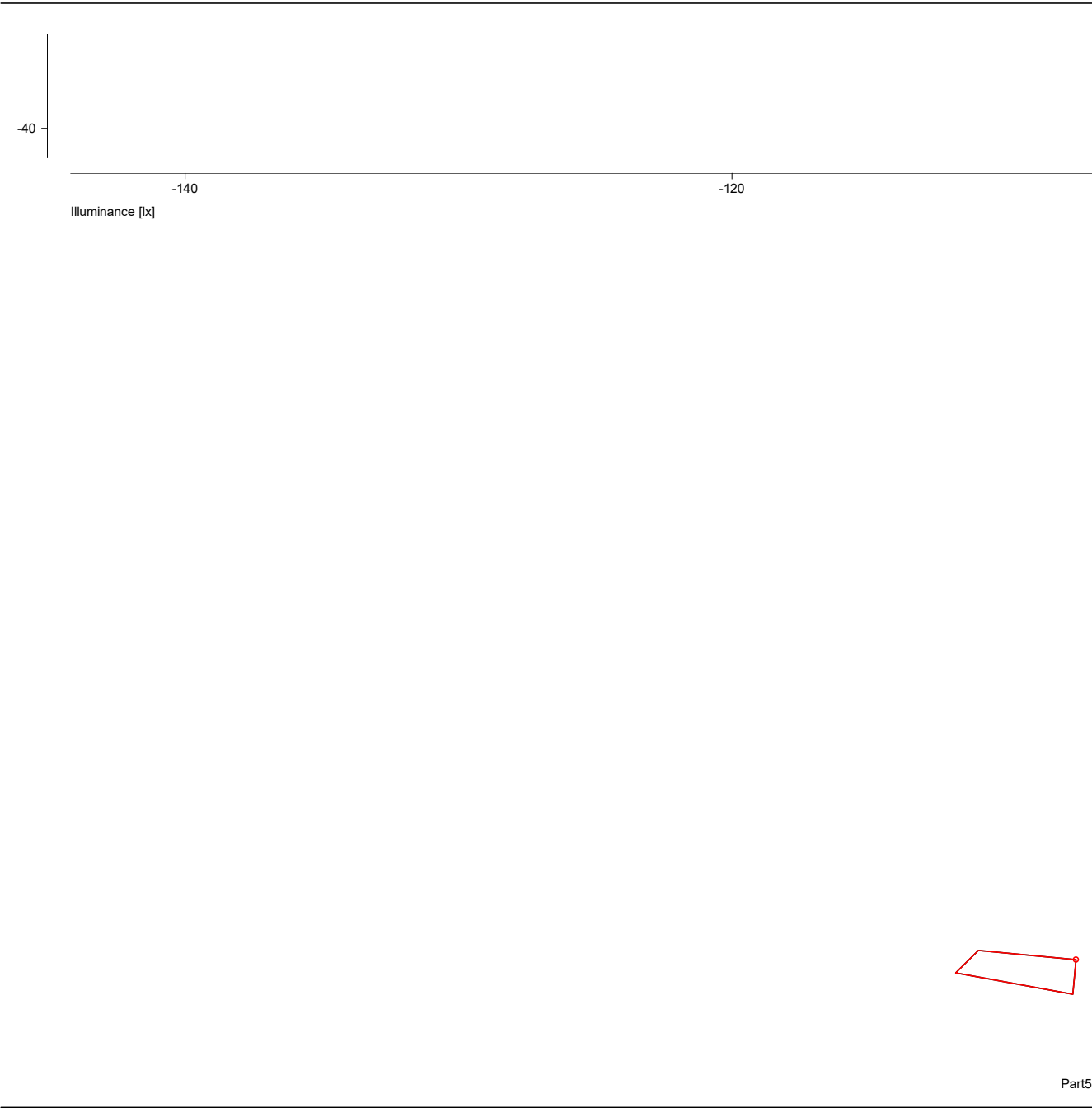
Part2





1.2 Calculation results, Exterior 1

1.2.2 Table, Reference plane 1.1 (E)



Object :
Installation : Waterside Road, Bury
Project number :
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1.2 Calculation results, Exterior 1

1.2.2 Table, Reference plane 1.1 (E)

-100

-80



Part6



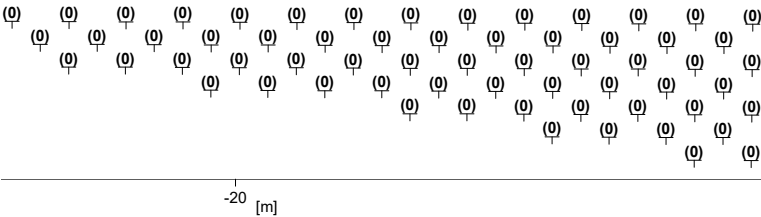
1.2 Calculation results, Exterior 1

1.2.2 Table, Reference plane 1.1 (E)



1.2 Calculation results, Exterior 1

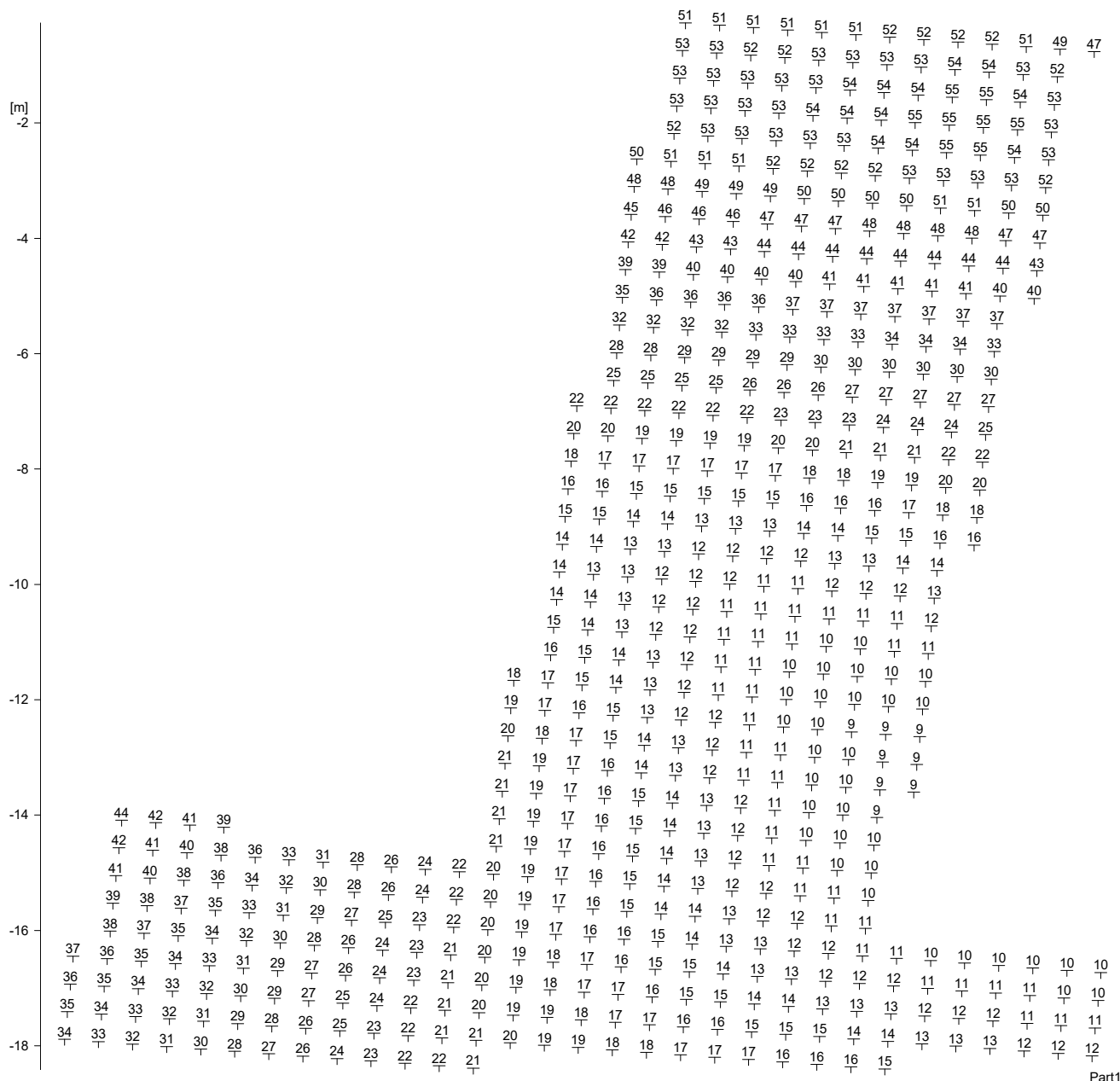
1.2.2 Table, Reference plane 1.1 (E)



Part8

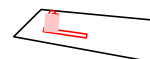
1.2 Calculation results, Exterior 1

1.2.3 Table, Measuring area 1 (E)



Part1

Height reference plane	: 0.00 m
Average illuminance	Em : 26 lx
Minimum illuminance	Emin : 8 lx
Maximum illuminance	Emax : 182 lx
Uniformity Uo	Emin/Em : 1 : 3.29 (0.30)
Diversity Ud	Emin/Emax : 1 : 22.77 (0.04)





1.2.3 Table, Measuring area 1 (E)

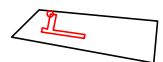
[illegible]

Object :
Installation : Waterside Road, Bury
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1.2 Calculation results, Exterior 1

1.2.3 Table, Measuring area 1 (E)

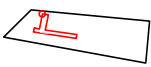
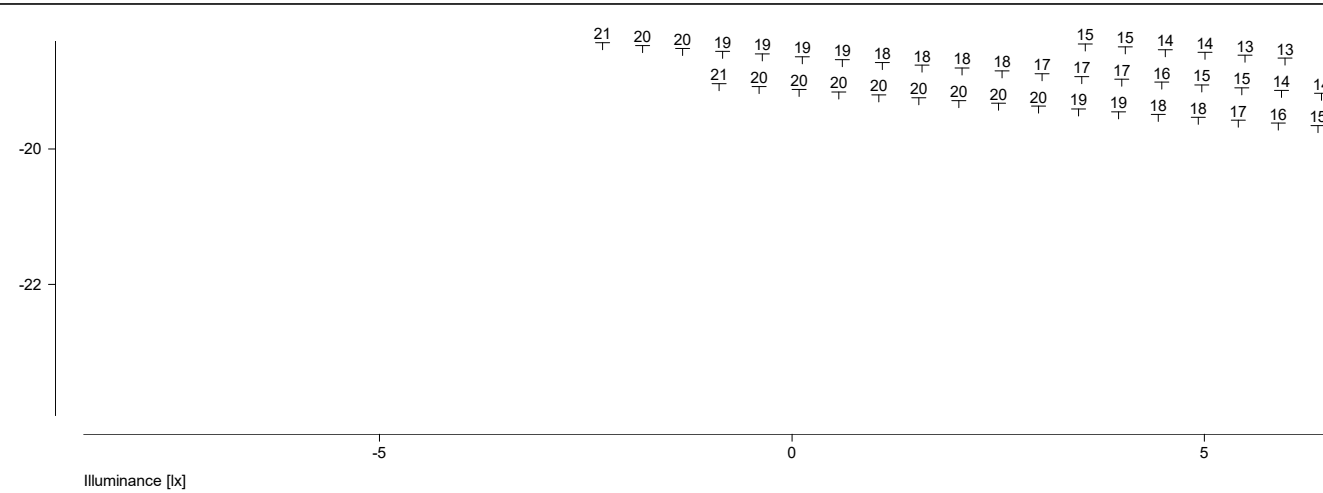


Part3



1.2 Calculation results, Exterior 1

1.2.3 Table, Measuring area 1 (E)



Part4



1.2 Calculation results, Exterior 1

1.2.3 Table, Measuring area 1 (E)

