

Ford Lane

Installation : Proposed Lighting

Project number : IJF01097-R1
Customer : MMA Consultancy
Processed by : Ian Forrow
Date : 29.07.2021

Project description:
All lighting has been specified with the surround area in mind.

Downlights within the soffits of porched areas are @ 2.2m AFFL

Wall Lights are a generic fixture and mounted @ 2.5m AFFL

All Lights are below 3.5m.

All Lamps to be 3K, as this has a smaller effect on the local wildlife

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.

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Object : Ford Lane
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Object : Ford Lane
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LIGHTING CONSULTANCY
Illuminating the way forward

1 Luminaire data

1.1 Generic, 10W (Lantern 10W)

1.1.1 Data sheet

Manufacturer: Generic

Lantern 10W 10W

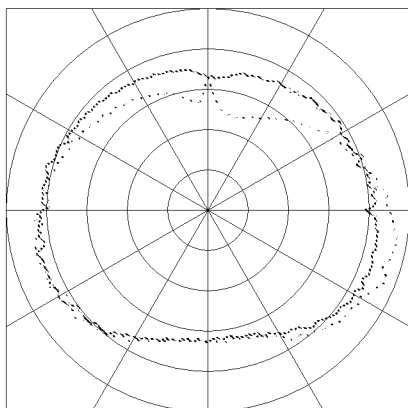
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 100 lm/W
Classification : C22 ↓51.4% ↑48.6%
CIE Flux Codes : 22 47 74 51 100
UGR 4H 8H : 30.5 / 30.5
Power : 10 W
Luminous flux : 1000 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 2700
Luminous flux : 1000 lm
Colour reproduction : 80

Dimensions : 20 mm x 20 mm x 50 mm



Object : Ford Lane
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1 Luminaire data

1.2 Luceco, Carbon Downlight 11W Dimmable (LBDL4D40)

1.2.1 Data sheet

Manufacturer: Luceco

LBDL4D40 Carbon Downlight 11W Dimmable

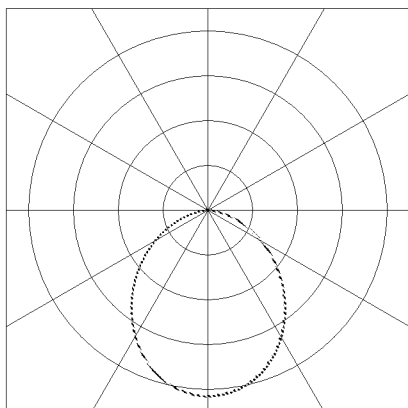
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 90.91 lm/W
Classification : A40 ↓99.0% ↑1.0%
CIE Flux Codes : 53 83 98 99 100
UGR 4H 8H : 27.3 / 27.2
Power : 11 W
Luminous flux : 1000 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 3000K
Luminous flux : 1000 lm
Colour reproduction : 80

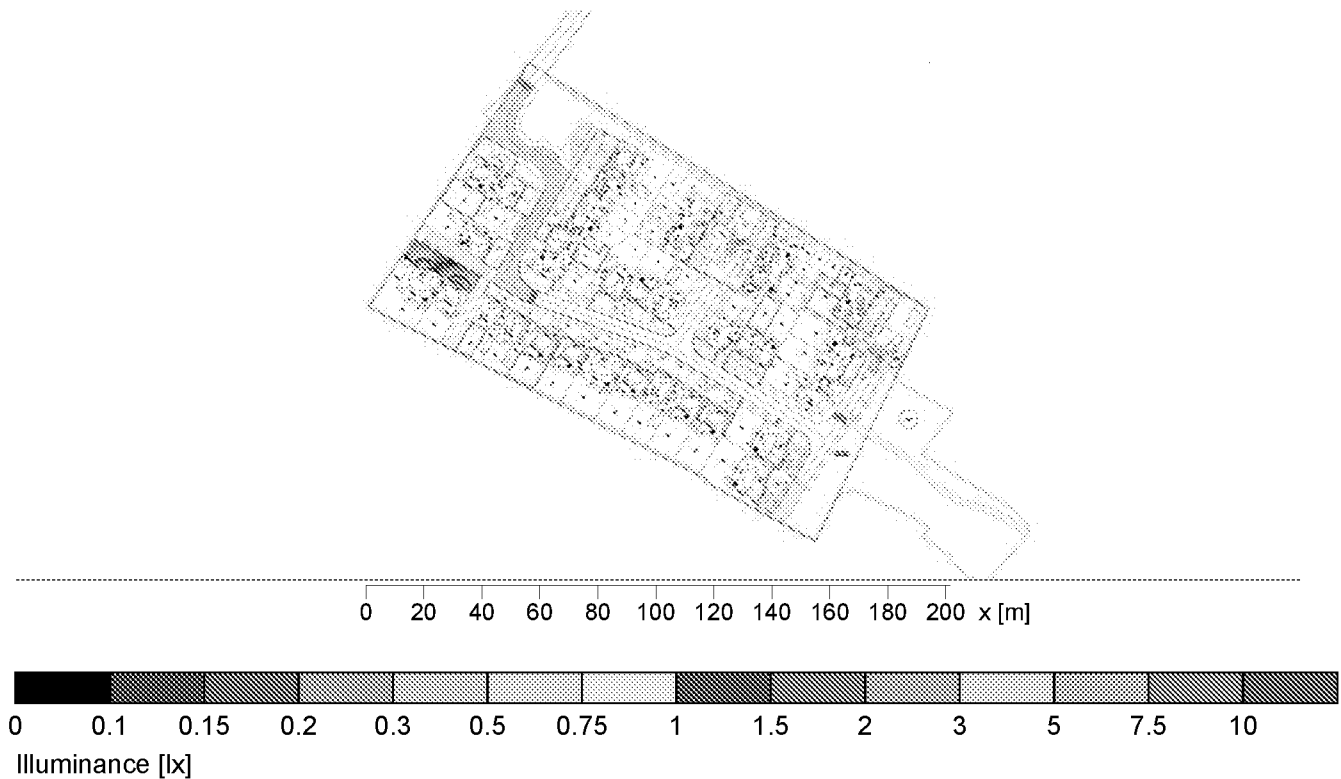
Dimensions : Ø115 mm x 1 mm



2 Exterior 1

2.1 Summary, Exterior 1

2.1.1 Result overview, Plot 41-42 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	0.9 lx
Minimum illuminance	Emin	0.1 lx
Maximum illuminance	Emax	11.1 lx
Uniformity Uo	Emin/Em	1:14.2 (0.07)
Diversity Ud	Emin/Emax	1:177 (0.01)

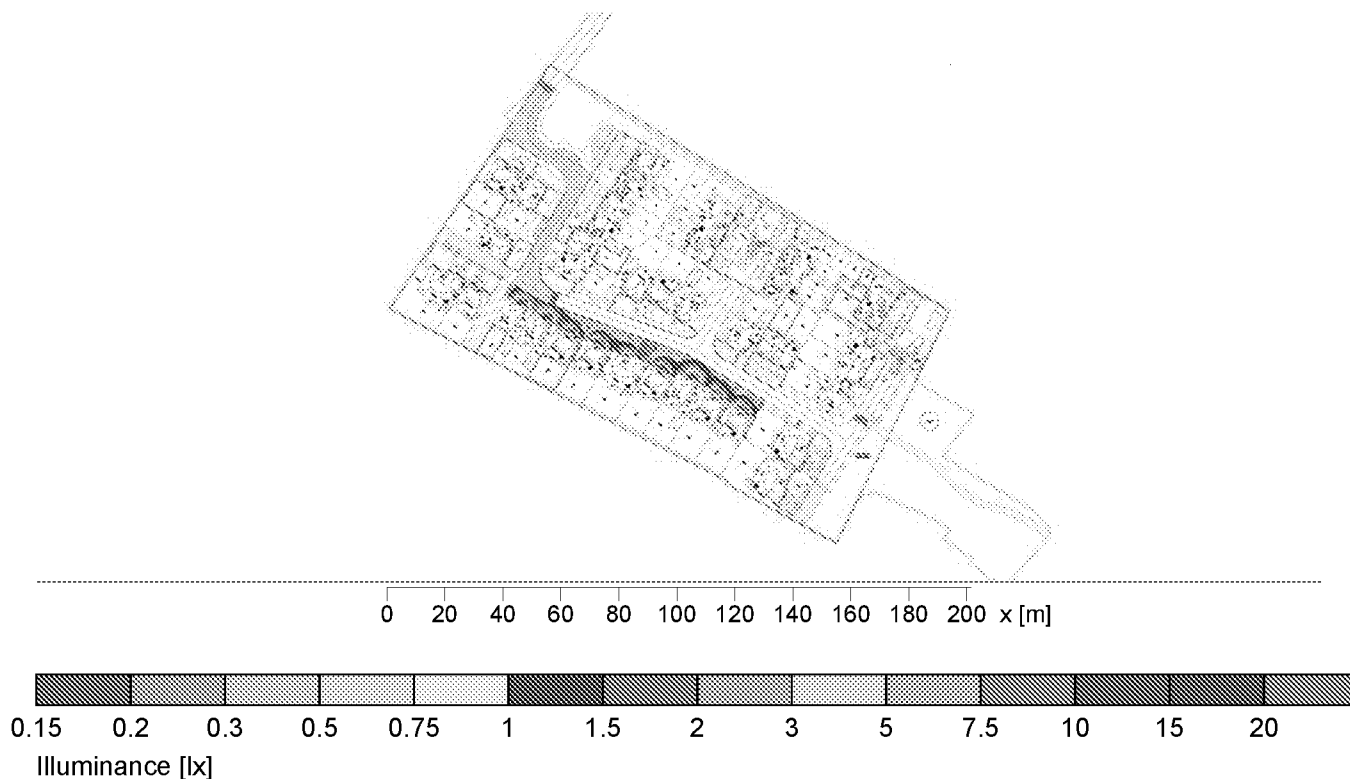
Type No. Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.2 Result overview, Plot 32-40 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	2.1 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	22.4 lx
Uniformity Uo	Emin/Em	1:12 (0.08)
Diversity Ud	Emin/Emax	1:129 (0.01)

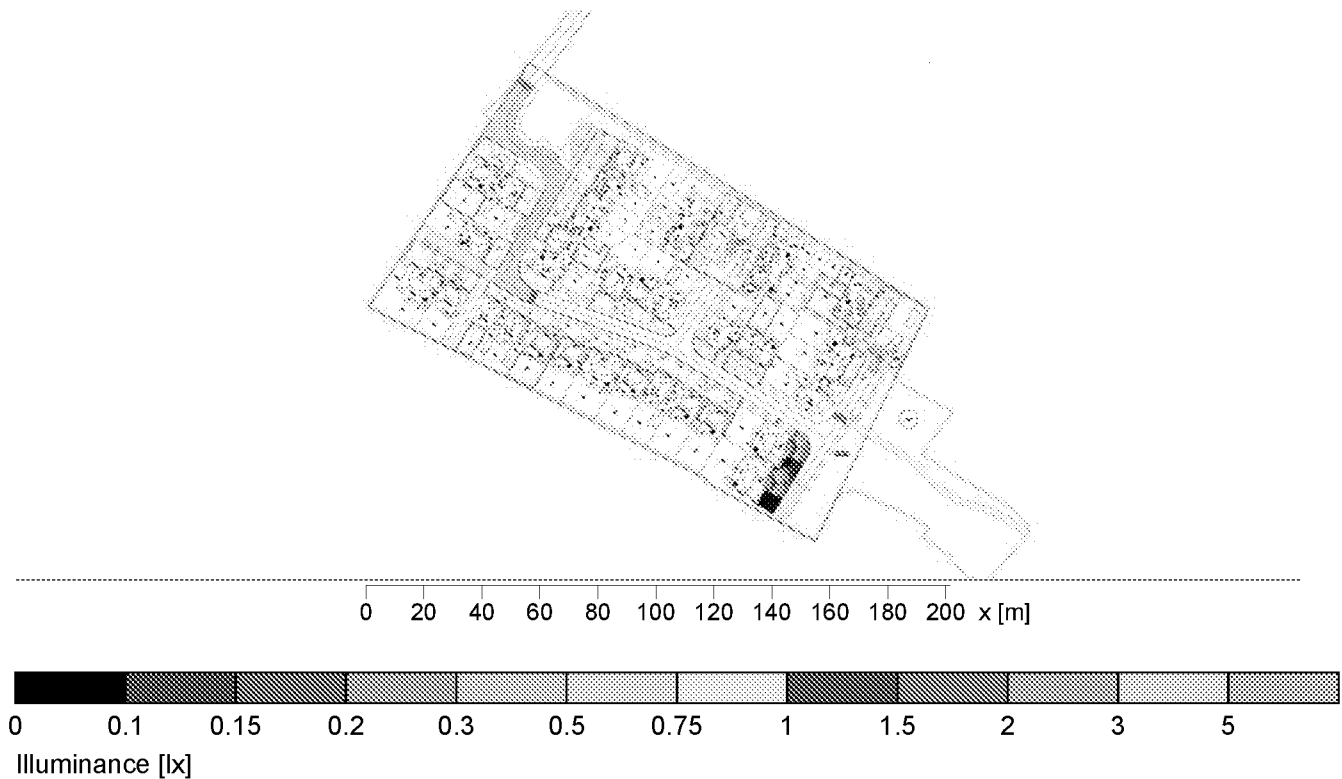
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.3 Result overview, Plot 30-31 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	0.57 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	6.79 lx
Uniformity Uo	Emin/Em	1:242 (0)
Diversity Ud	Emin/Emax	1:2880 (0)

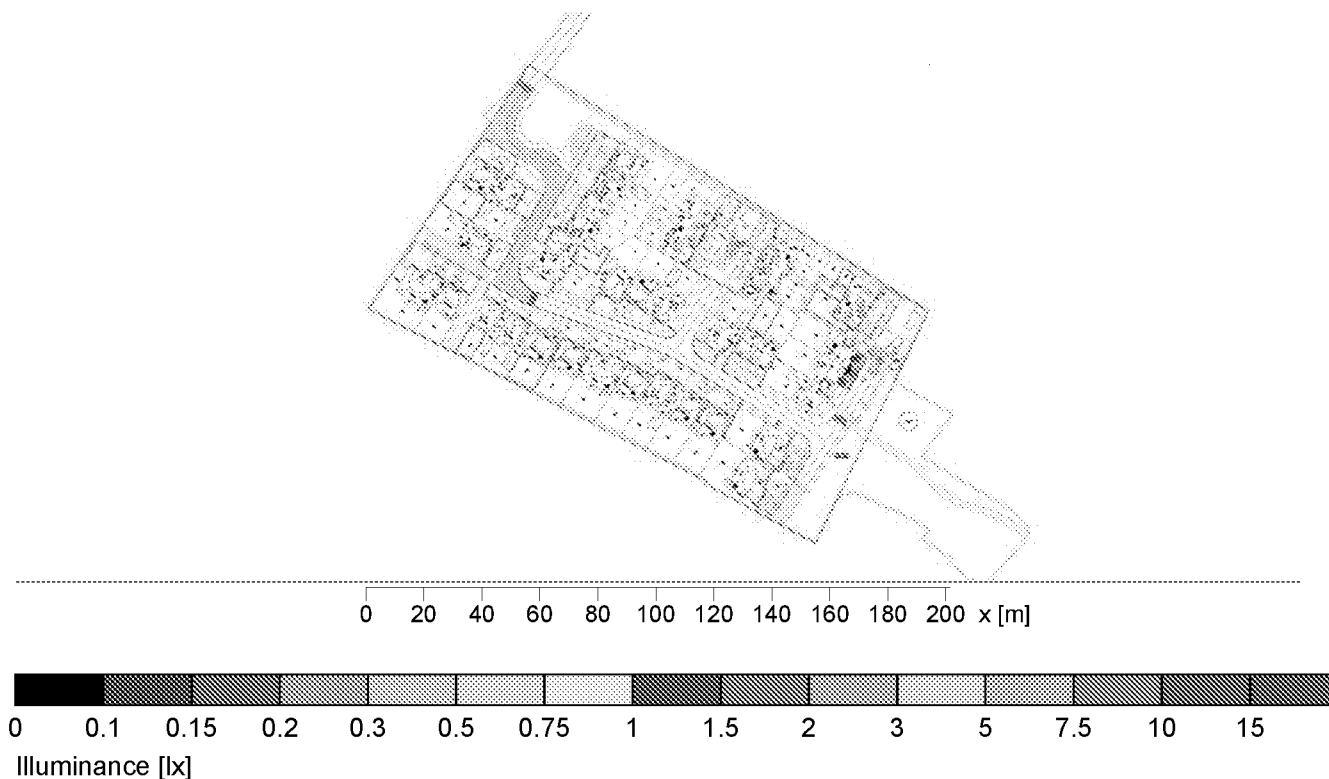
Type No. Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.4 Result overview, Plot 24-25 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

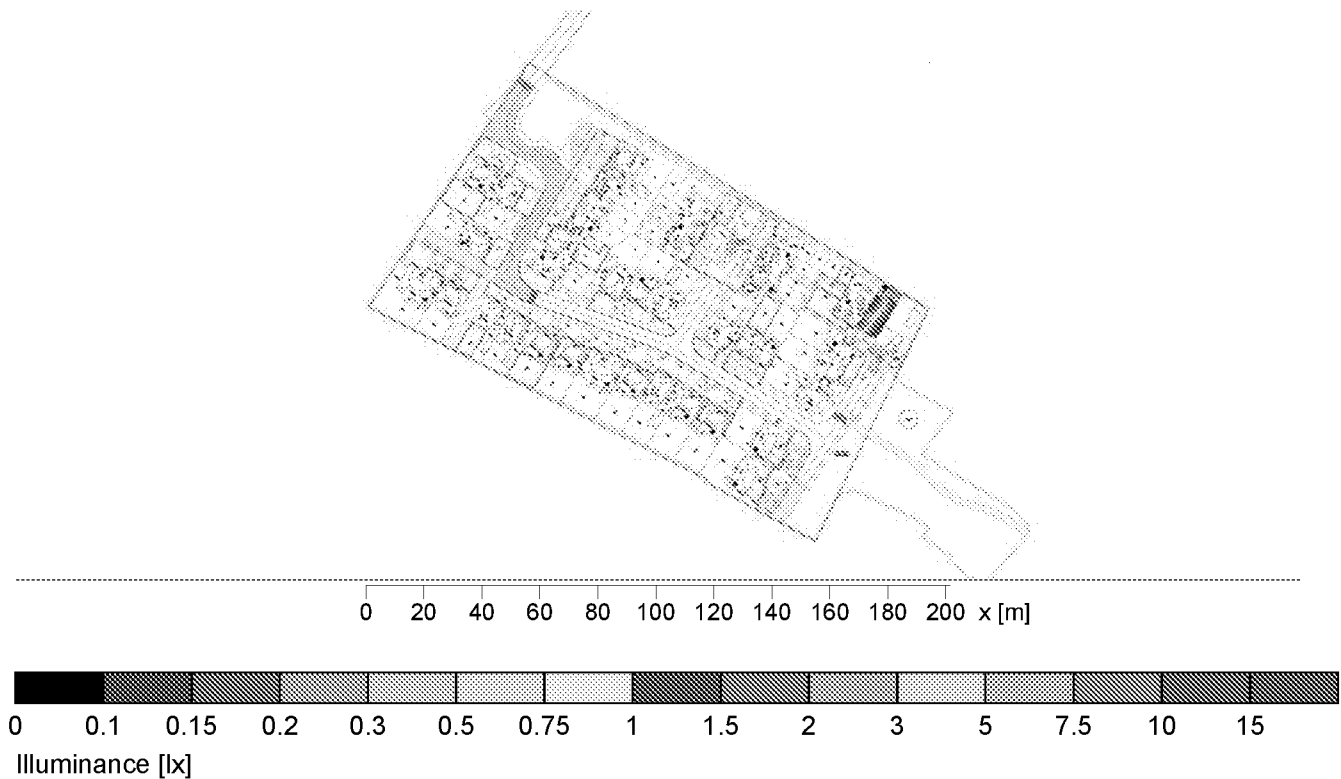
Average illuminance	Em	4.7 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	18.6 lx
Uniformity Uo	Emin/Em	1:--- (---)
Diversity Ud	Emin/Emax	1:--- (---)

Type No.Make

Generic		
1	79	Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm
Luceco		
2	13	Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.5 Result overview, Plot 26-29 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	3.8 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	17.3 lx
Uniformity Uo	Emin/Em	1:--- (---)
Diversity Ud	Emin/Emax	1:--- (---)

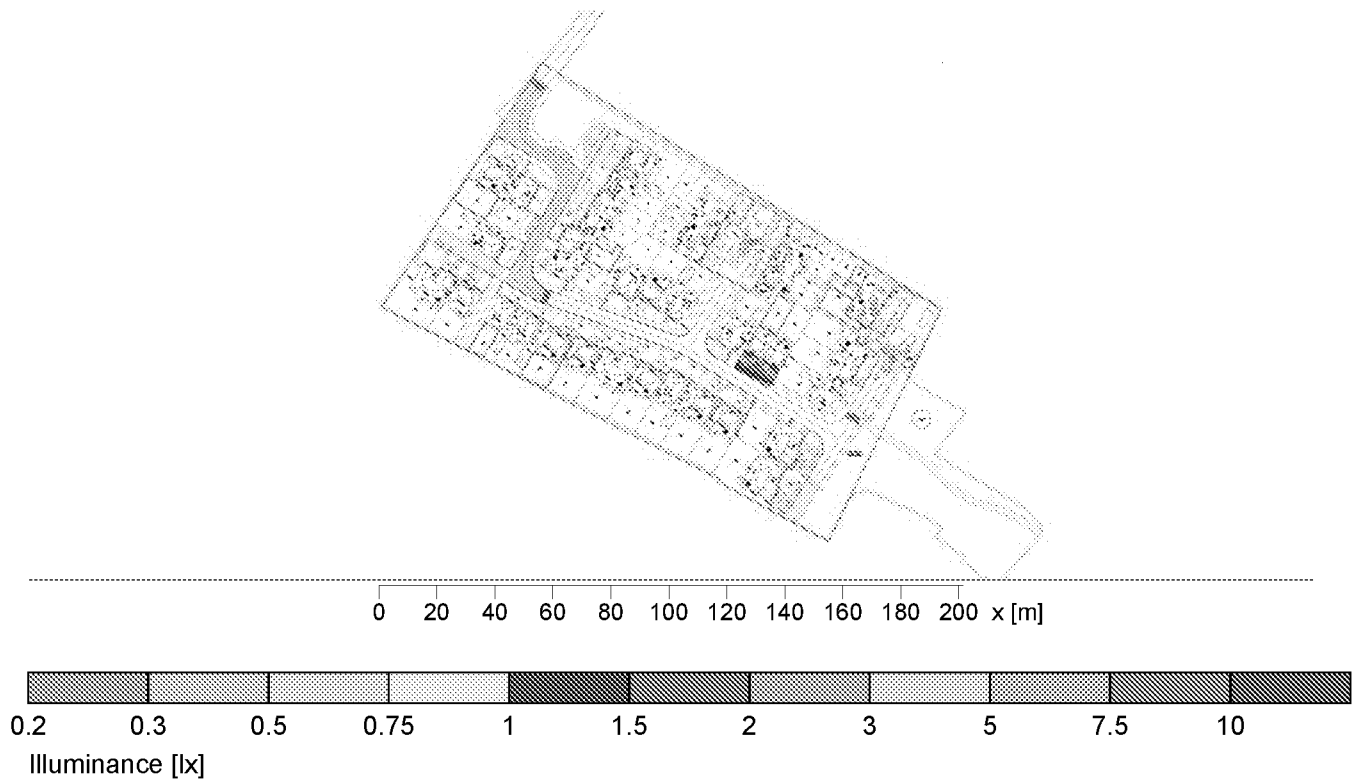
Type No. Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.6 Result overview, Plot 21-22 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	3.1 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	14.7 lx
Uniformity Uo	Emin/Em	1:13.7 (0.07)
Diversity Ud	Emin/Emax	1:63.6 (0.02)

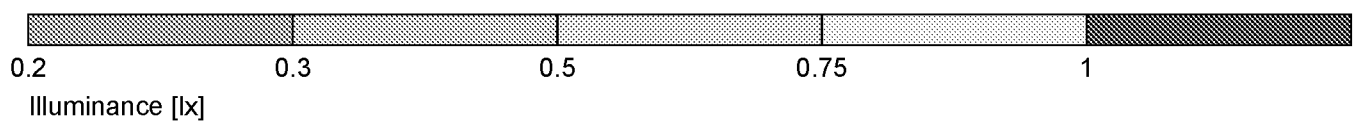
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.7 Result overview, Plot 20 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	0.5 lx
Minimum illuminance	Emin	0.25 lx
Maximum illuminance	Emax	1.07 lx
Uniformity Uo	Emin/Em	1:2.02 (0.5)
Diversity Ud	Emin/Emax	1:4.37 (0.23)

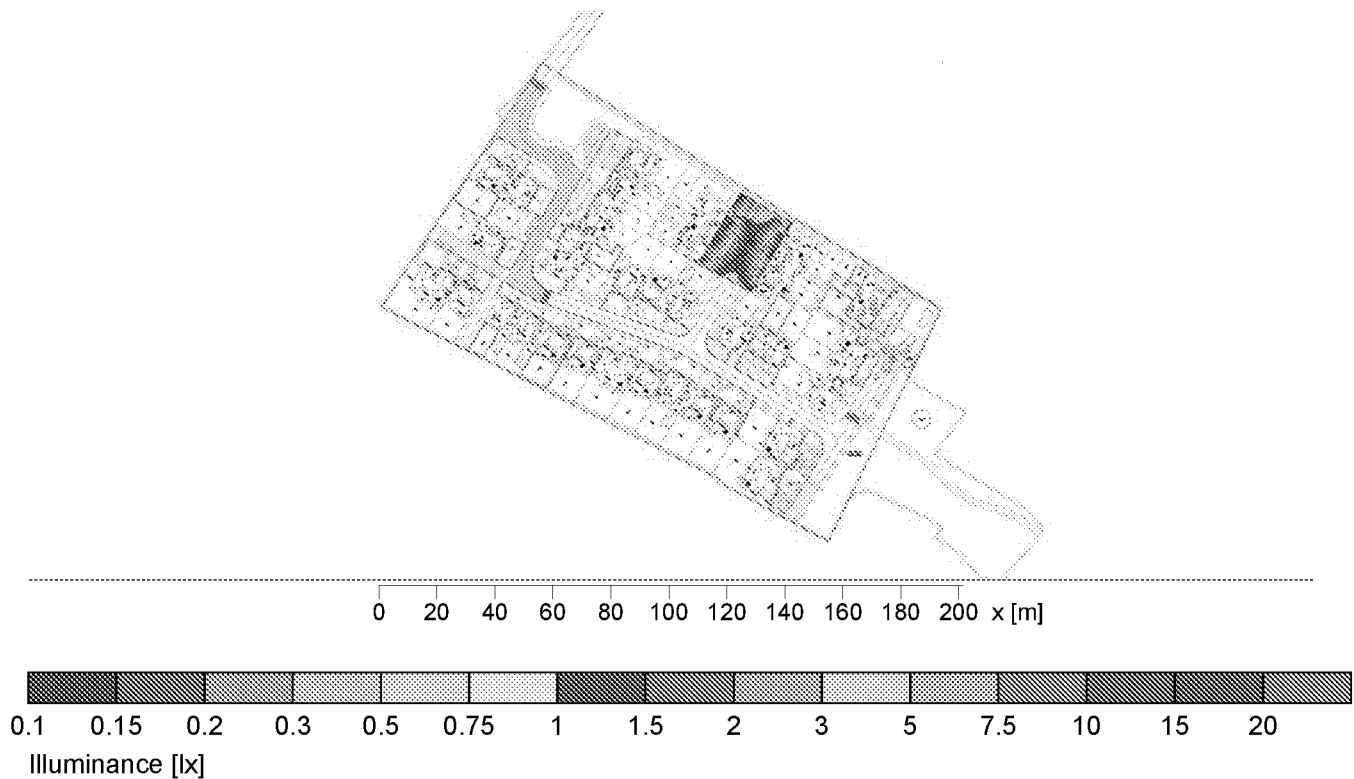
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.8 Result overview, Plot 10-14 & 15-19 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	3.4 lx
Minimum illuminance	Emin	0.1 lx
Maximum illuminance	Emax	22 lx
Uniformity Uo	Emin/Em	1:27.9 (0.04)
Diversity Ud	Emin/Emax	1:181 (0.01)

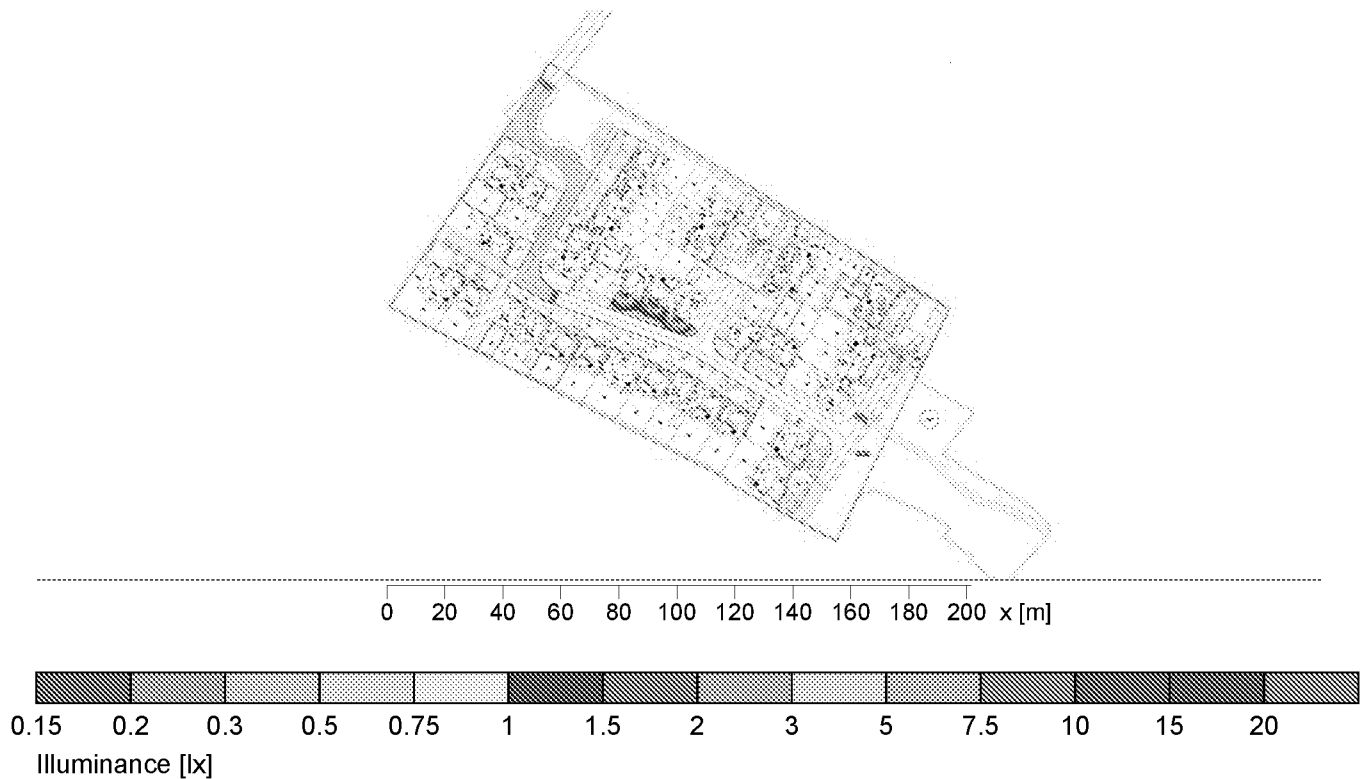
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.9 Result overview, Plot 7-9 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	2.6 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	20.7 lx
Uniformity Uo	Emin/Em	1:14.9 (0.07)
Diversity Ud	Emin/Emax	1:117 (0.01)

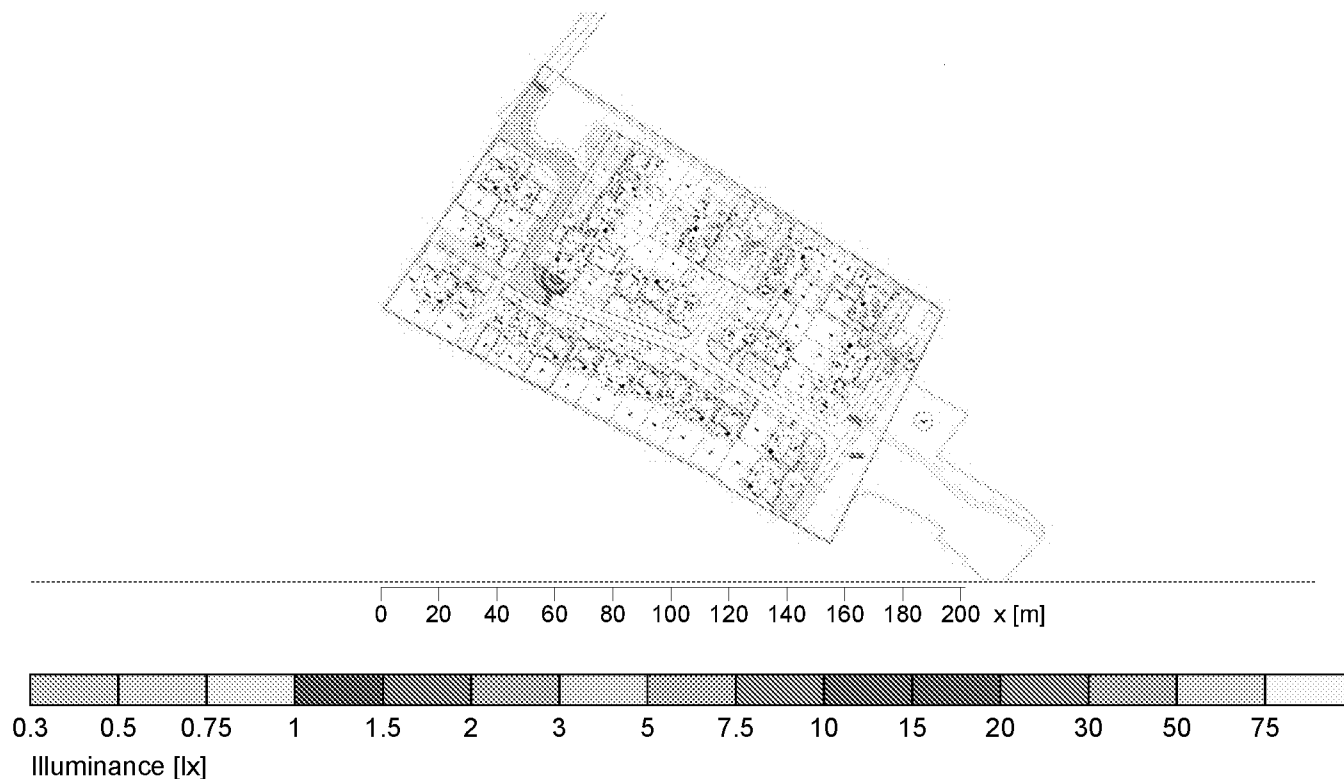
Type No. Make

Generic	
1 79	Order No. : Lantern 10W
	Luminaire name : 10W
	Equipment : 1 x LED 10 W / 1000 lm

Luceco	
2 13	Order No. : LBDL4D40
	Luminaire name : Carbon Downlight 11W Dimmable
	Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.10 Result overview, Plot 6 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	6.4 lx
Minimum illuminance	Emin	0.4 lx
Maximum illuminance	Emax	81 lx
Uniformity Uo	Emin/Em	1:15.6 (0.06)
Diversity Ud	Emin/Emax	1:197 (0.01)

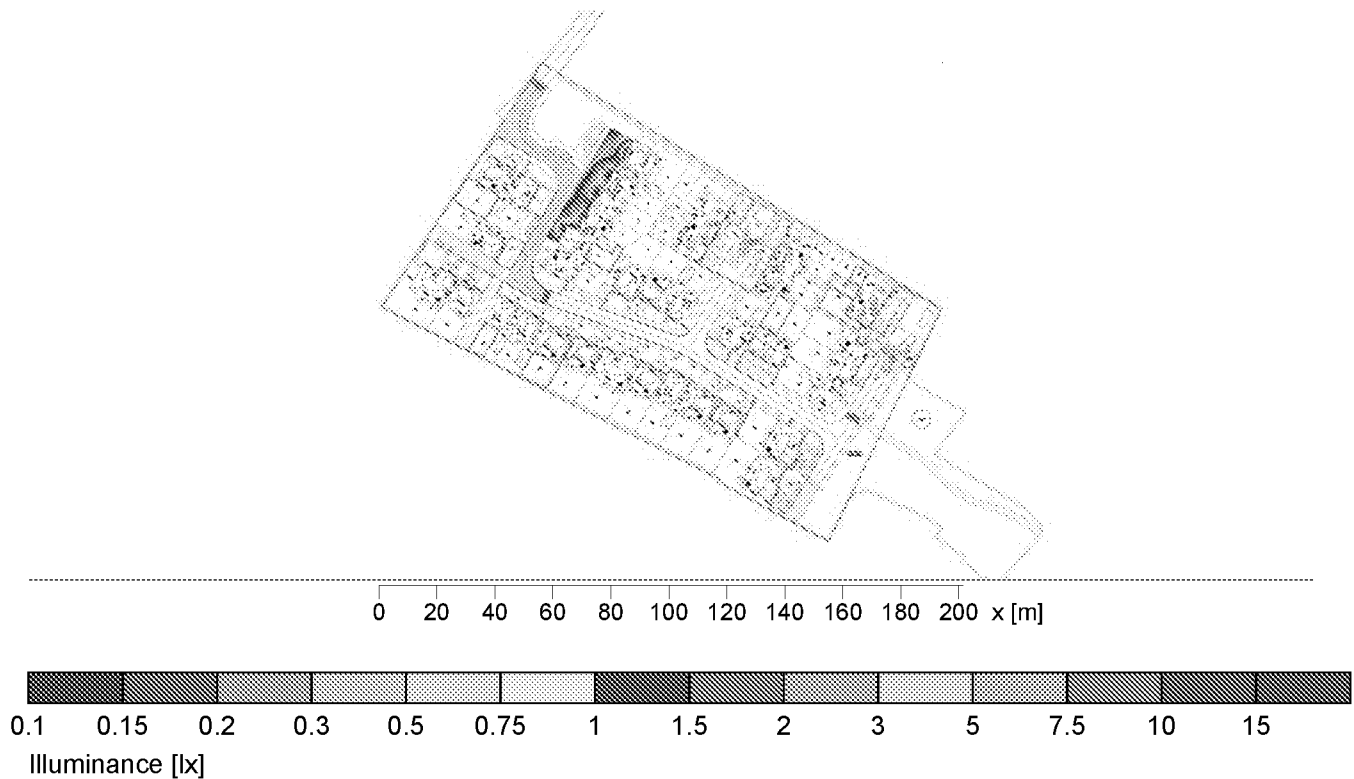
Type No. Make

Generic	
1	79
Order No.	: Lantern 10W
Luminaire name	: 10W
Equipment	: 1 x LED 10 W / 1000 lm

Luceco	
2	13
Order No.	: LBDL4D40
Luminaire name	: Carbon Downlight 11W Dimmable
Equipment	: 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.11 Result overview, Plot 1-5 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	2.6 lx
Minimum illuminance	Emin	0.1 lx
Maximum illuminance	Emax	17.4 lx
Uniformity Uo	Emin/Em	1:18.7 (0.05)
Diversity Ud	Emin/Emax	1:126 (0.01)

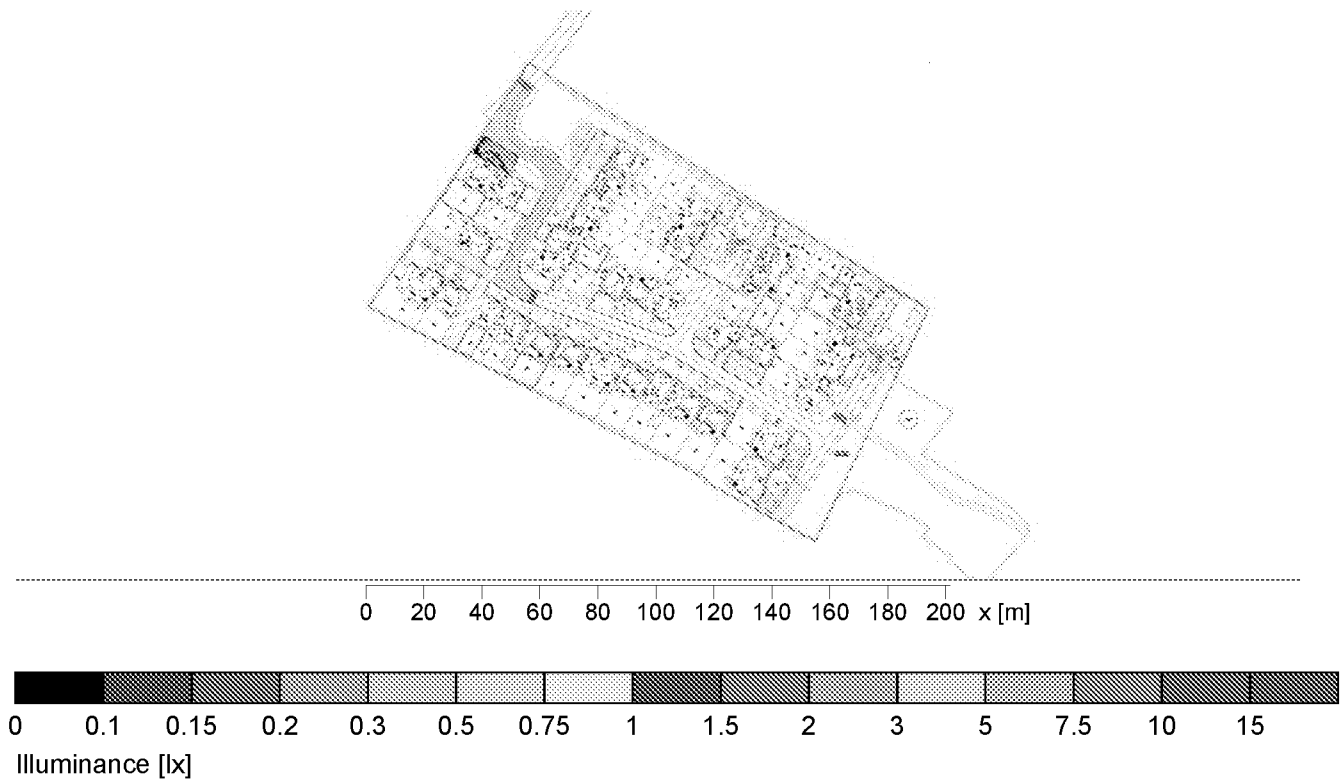
Type No. Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.12 Result overview, Plot 45 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	1.4 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	16.3 lx
Uniformity Uo	Emin/Em	1:155 (0.01)
Diversity Ud	Emin/Emax	1:1830 (0)

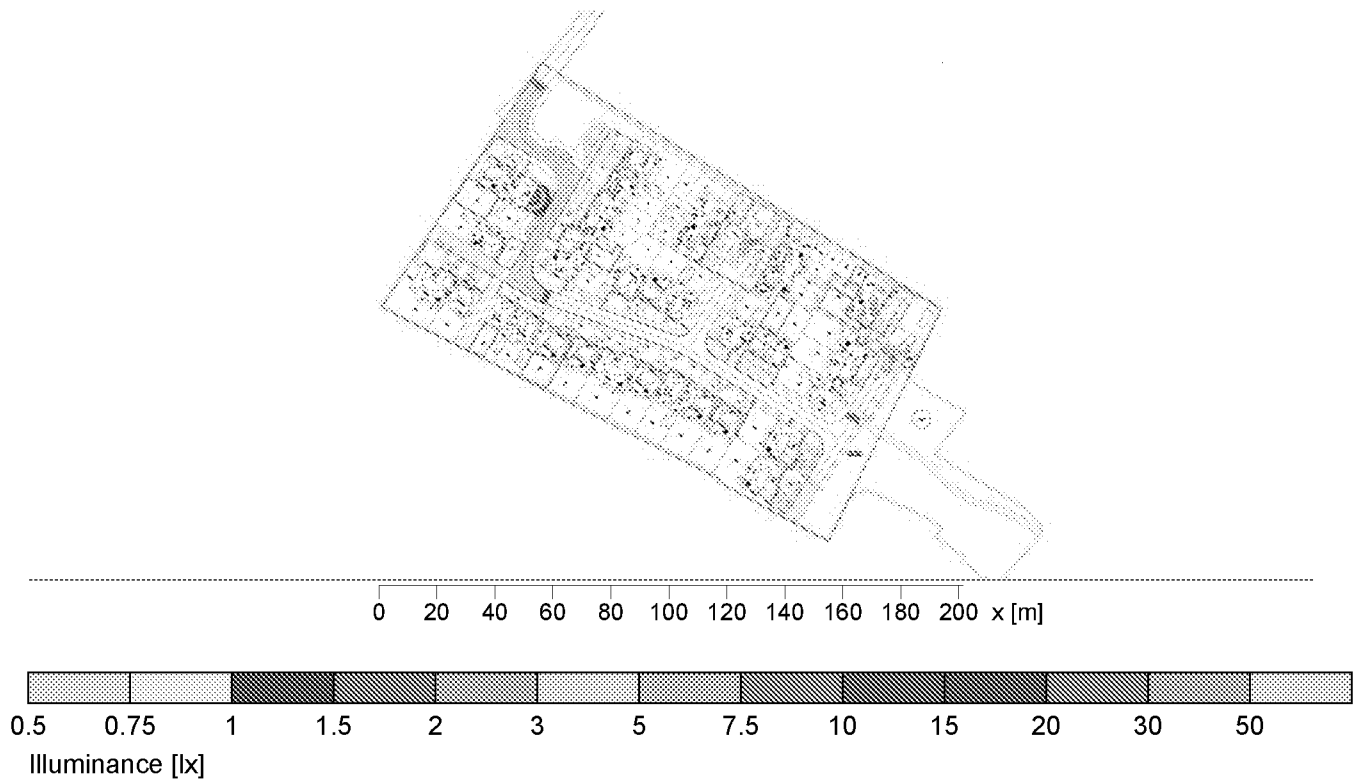
Type No. Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.13 Result overview, Plot 44 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	6.7 lx
Minimum illuminance	Emin	0.6 lx
Maximum illuminance	Emax	64.2 lx
Uniformity Uo	Emin/Em	1:10.5 (0.1)
Diversity Ud	Emin/Emax	1:100 (0.01)

Type No.\Make

1	79	Generic	
		Order No.	: Lantern 10W
		Luminaire name	: 10W
		Equipment	: 1 x LED 10 W / 1000 lm

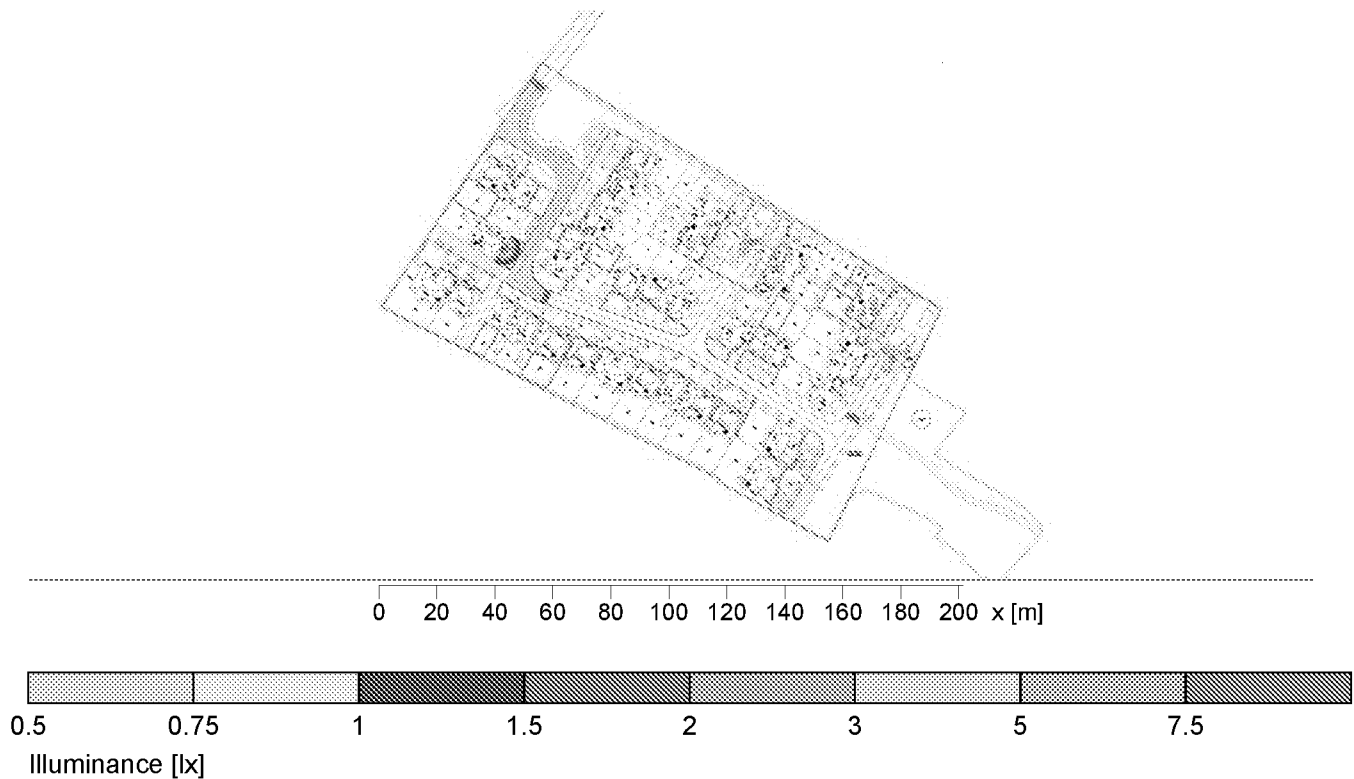


2	13	Luceco	
		Order No.	: LBDL4D40
		Luminaire name	: Carbon Downlight 11W Dimmable
		Equipment	: 1 x LED 11 W / 1000 lm



2.1 Summary, Exterior 1

2.1.14 Result overview, Plot 43 Front



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	2.36 lx
Minimum illuminance	Emin	0.62 lx
Maximum illuminance	Emax	9.96 lx
Uniformity Uo	Emin/Em	1:3.79 (0.26)
Diversity Ud	Emin/Emax	1:16 (0.06)

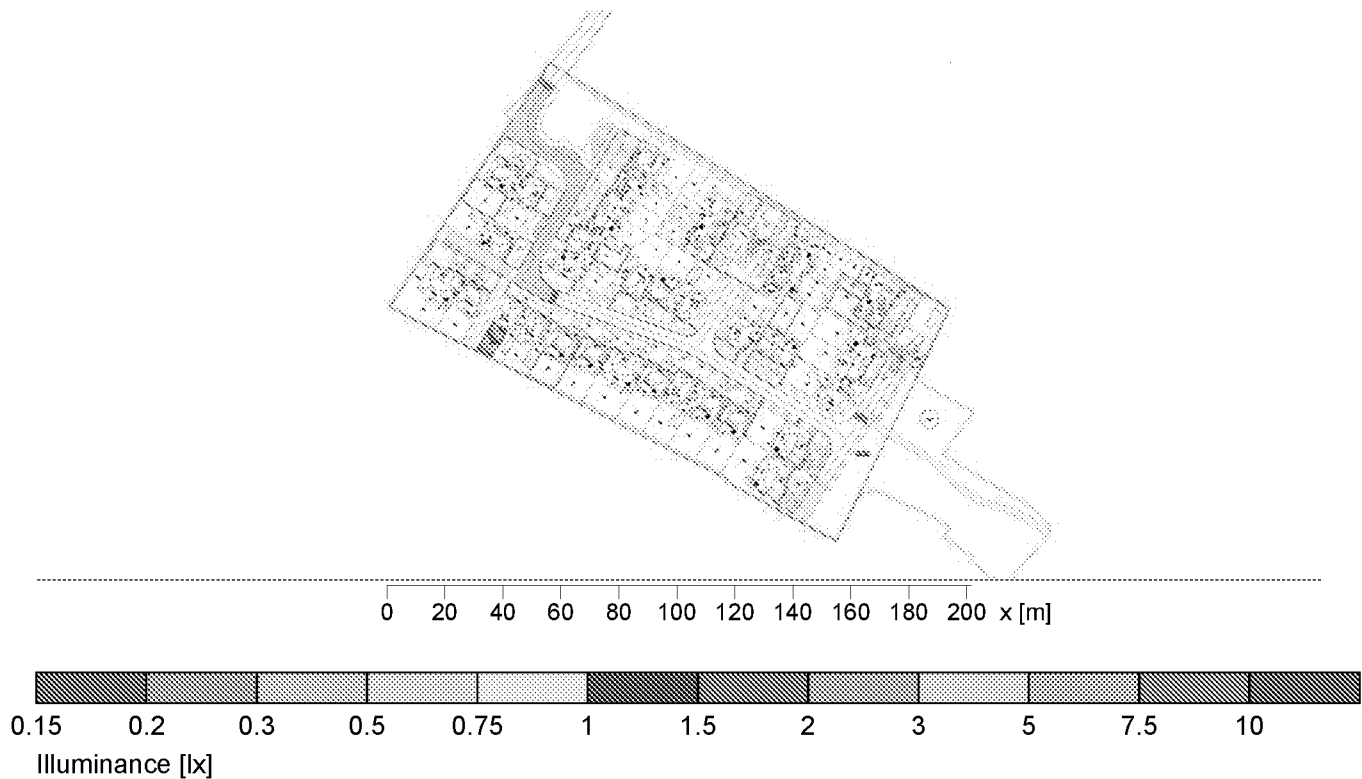
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.15 Result overview, TYP Plot 40 Rear



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	2.2 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	11.8 lx
Uniformity Uo	Emin/Em	1:11 (0.09)
Diversity Ud	Emin/Emax	1:59.6 (0.02)

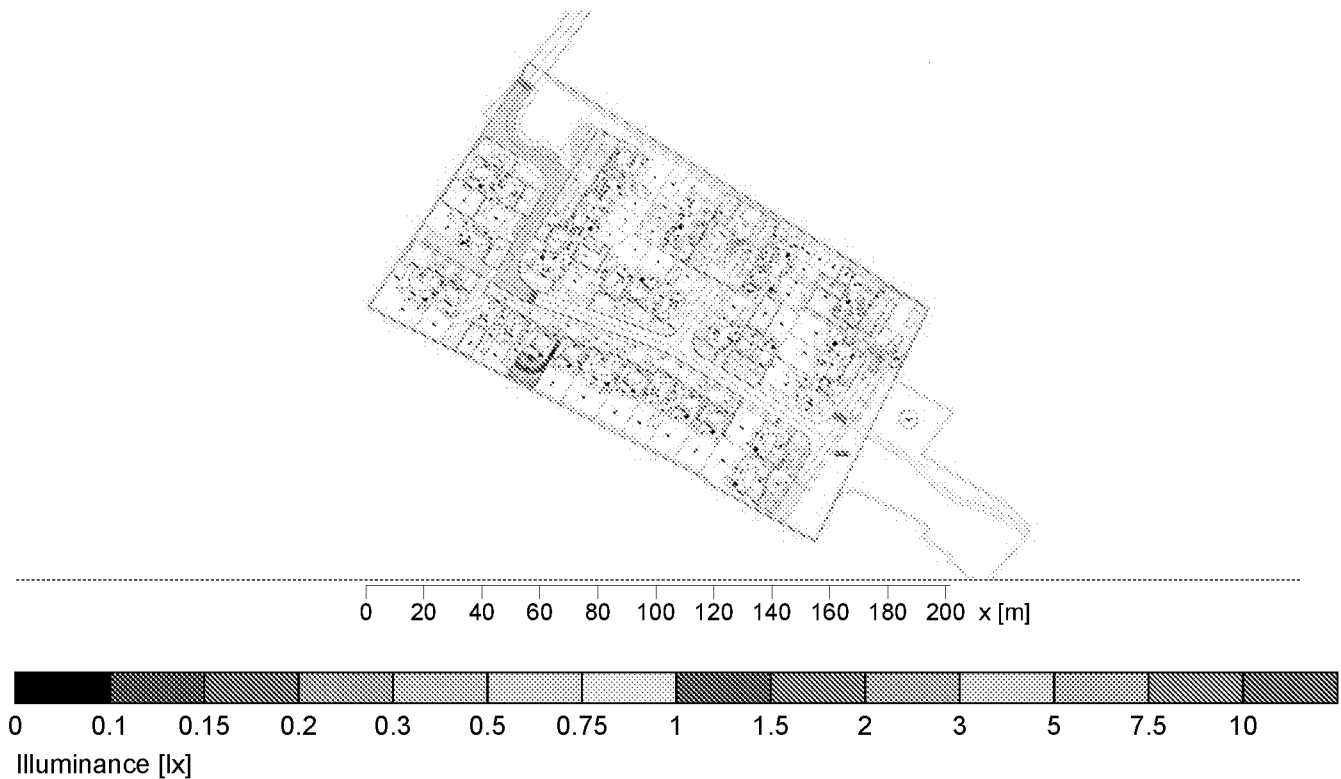
Type No.\Make

Generic	
1	79
	Order No. : Lantern 10W
	Luminaire name : 10W
	Equipment : 1 x LED 10 W / 1000 lm

Luceco	
2	13
	Order No. : LBDL4D40
	Luminaire name : Carbon Downlight 11W Dimmable
	Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.16 Result overview, TYP Plot 38 Rear and Side



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	2 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	11.9 lx
Uniformity Uo	Emin/Em	1:62.3 (0.02)
Diversity Ud	Emin/Emax	1:379 (0)

Type No.\Make

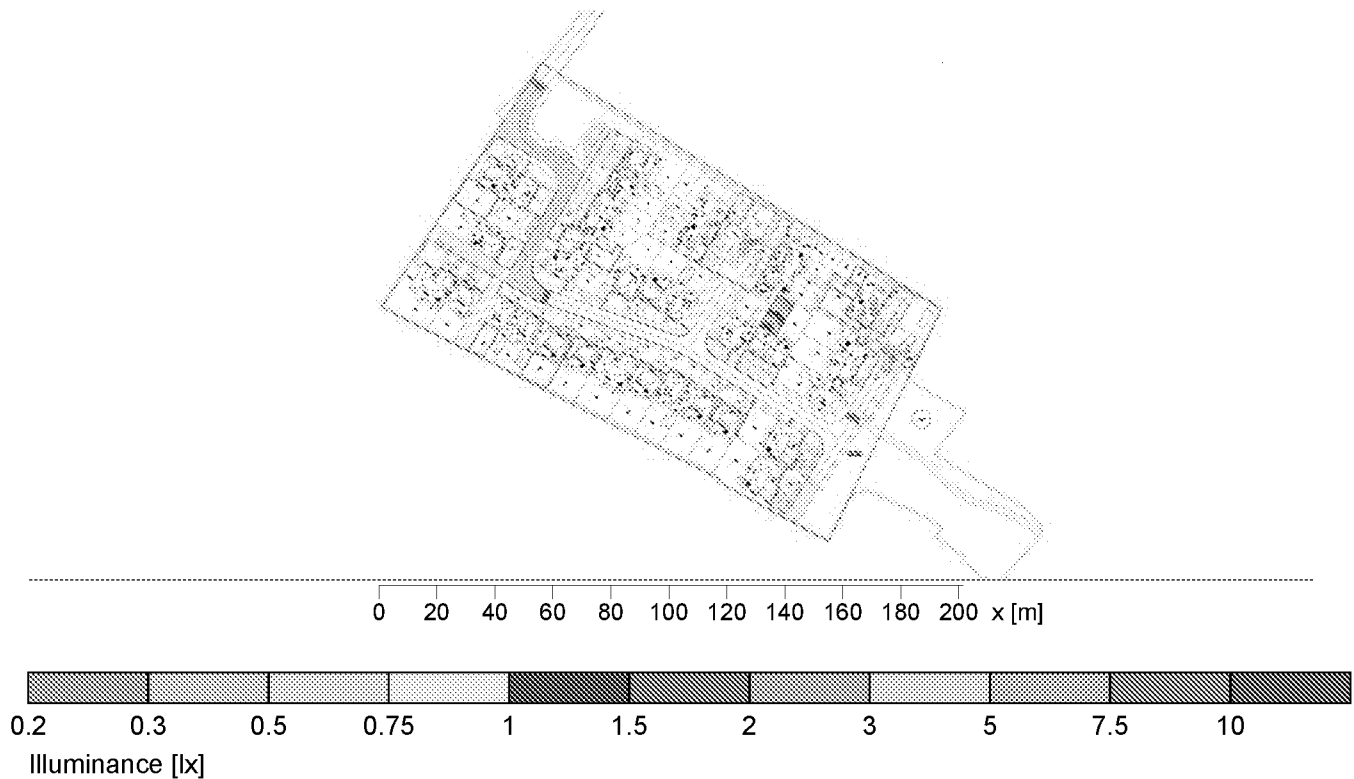
1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

Object : Ford Lane
 Installation : Proposed Lighting
 Project number : IJF01097-R1
 Date : 29.07.2021

2.1 Summary, Exterior 1

2.1.17 Result overview, TYP Plot 21 Rear



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	2.6 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	13.3 lx
Uniformity Uo	Emin/Em	1:11.2 (0.09)
Diversity Ud	Emin/Emax	1:58 (0.02)

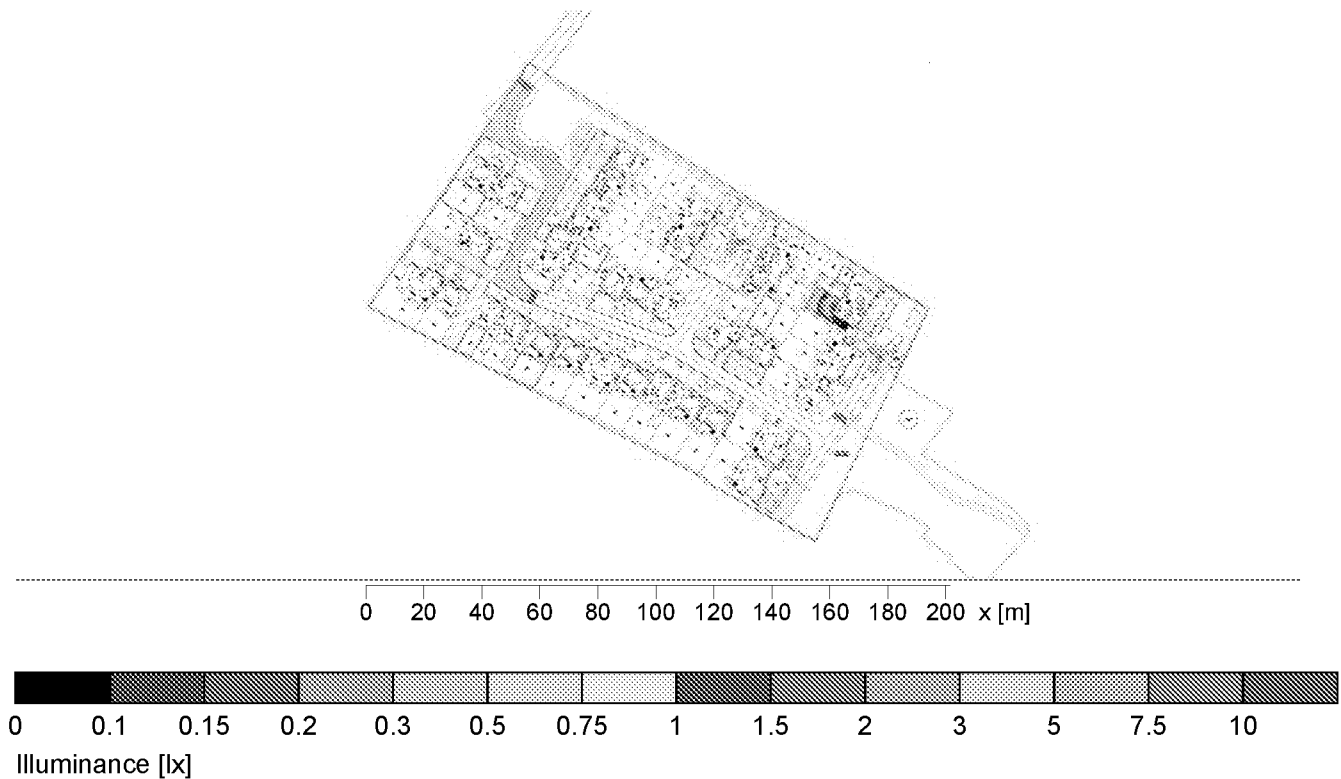
Type No.\Make

1	79		Generic
			Order No. : Lantern 10W
			Luminaire name : 10W
			Equipment : 1 x LED 10 W / 1000 lm

2	13		Luceco
			Order No. : LBDL4D40
			Luminaire name : Carbon Downlight 11W Dimmable
			Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.18 Result overview, TYP Plot 26 Rear and Side



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80
Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	2.1 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	12.5 lx
Uniformity Uo	Emin/Em	1:85.6 (0.01)
Diversity Ud	Emin/Emax	1:503 (0)

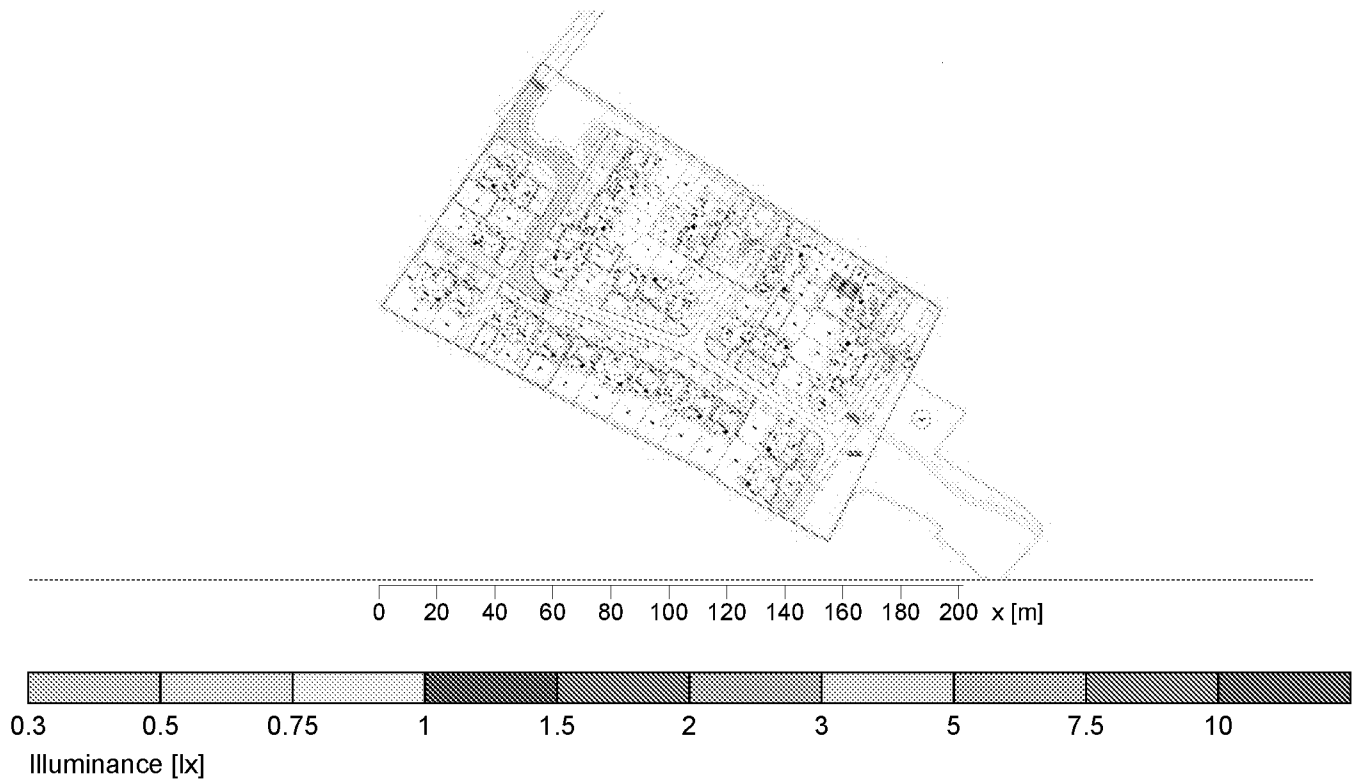
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.19 Result overview, TYP Plot 27 Rear



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	3.2 lx
Minimum illuminance	Emin	0.3 lx
Maximum illuminance	Emax	13.1 lx
Uniformity Uo	Emin/Em	1:10.5 (0.1)
Diversity Ud	Emin/Emax	1:42.4 (0.02)

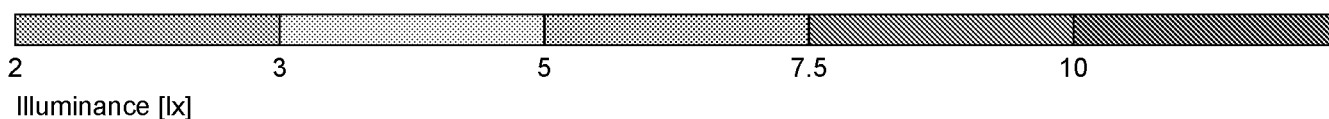
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.20 Result overview, TYP Plot 28 Rear



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	5.8 lx
Minimum illuminance	Emin	2 lx
Maximum illuminance	Emax	12.4 lx
Uniformity Uo	Emin/Em	1:2.88 (0.35)
Diversity Ud	Emin/Emax	1:6.16 (0.16)

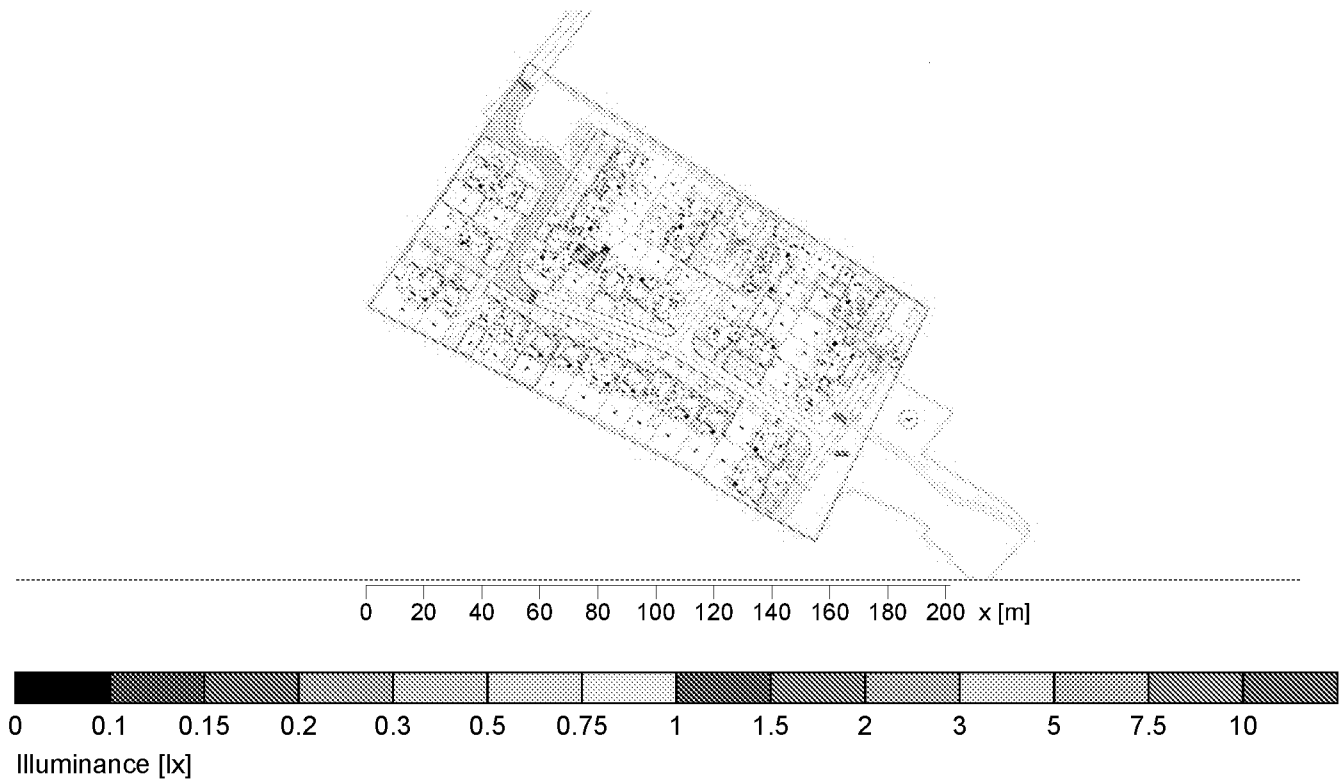
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.21 Result overview, TYP Plot 5 Rear



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m²)	0.06 W/m²

Illuminance

Average illuminance	Em	2.8 lx
Minimum illuminance	Emin	0.1 lx
Maximum illuminance	Emax	12.8 lx
Uniformity Uo	Emin/Em	1:54.5 (0.02)
Diversity Ud	Emin/Emax	1:252 (0)

Type No. Make

1	79	Generic	
		Order No.	: Lantern 10W
		Luminaire name	: 10W
		Equipment	: 1 x LED 10 W / 1000 lm

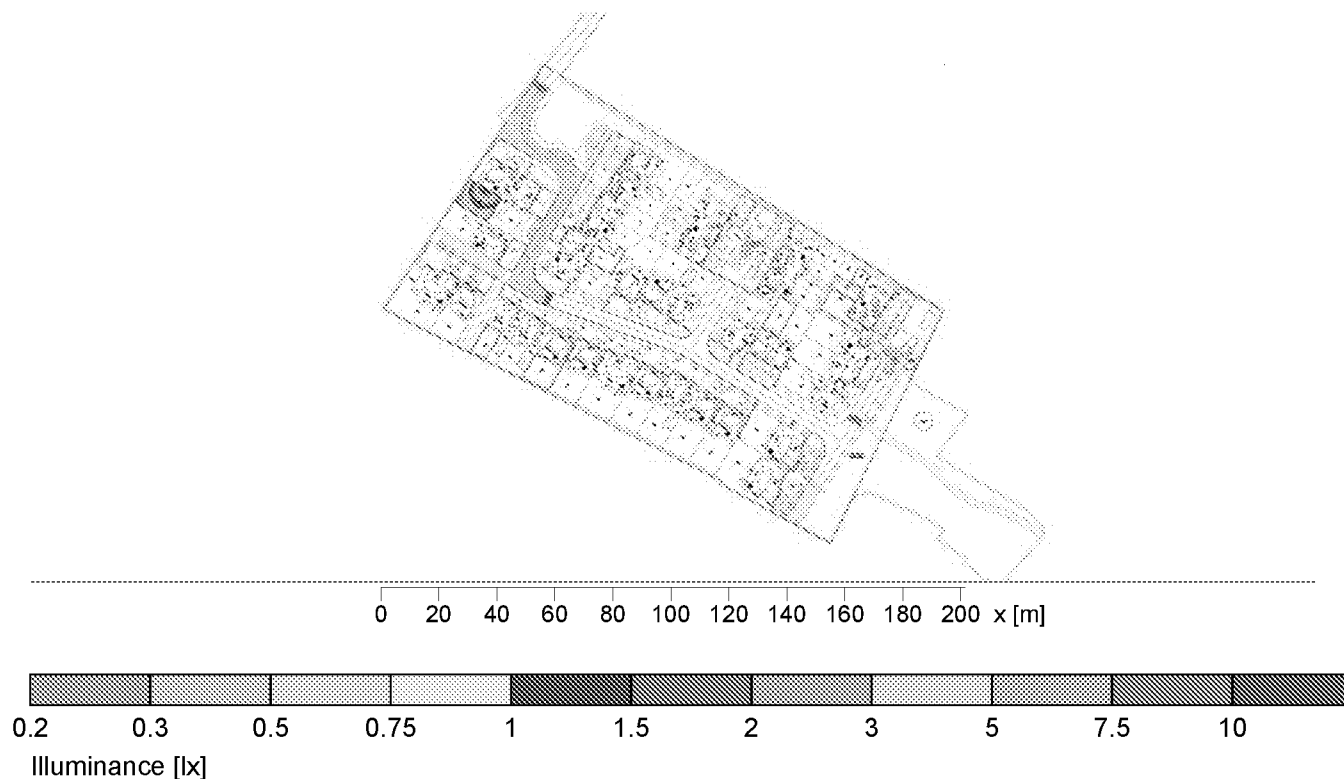


2	13	Luceco	
		Order No.	: LBDL4D40
		Luminaire name	: Carbon Downlight 11W Dimmable
		Equipment	: 1 x LED 11 W / 1000 lm



2.1 Summary, Exterior 1

2.1.22 Result overview, TYP Plot 45 Rear



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80

Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ²

Illuminance

Average illuminance	Em	2.1 lx
Minimum illuminance	Emin	0.3 lx
Maximum illuminance	Emax	13.3 lx
Uniformity Uo	Emin/Em	1:8.27 (0.12)
Diversity Ud	Emin/Emax	1:51.4 (0.02)

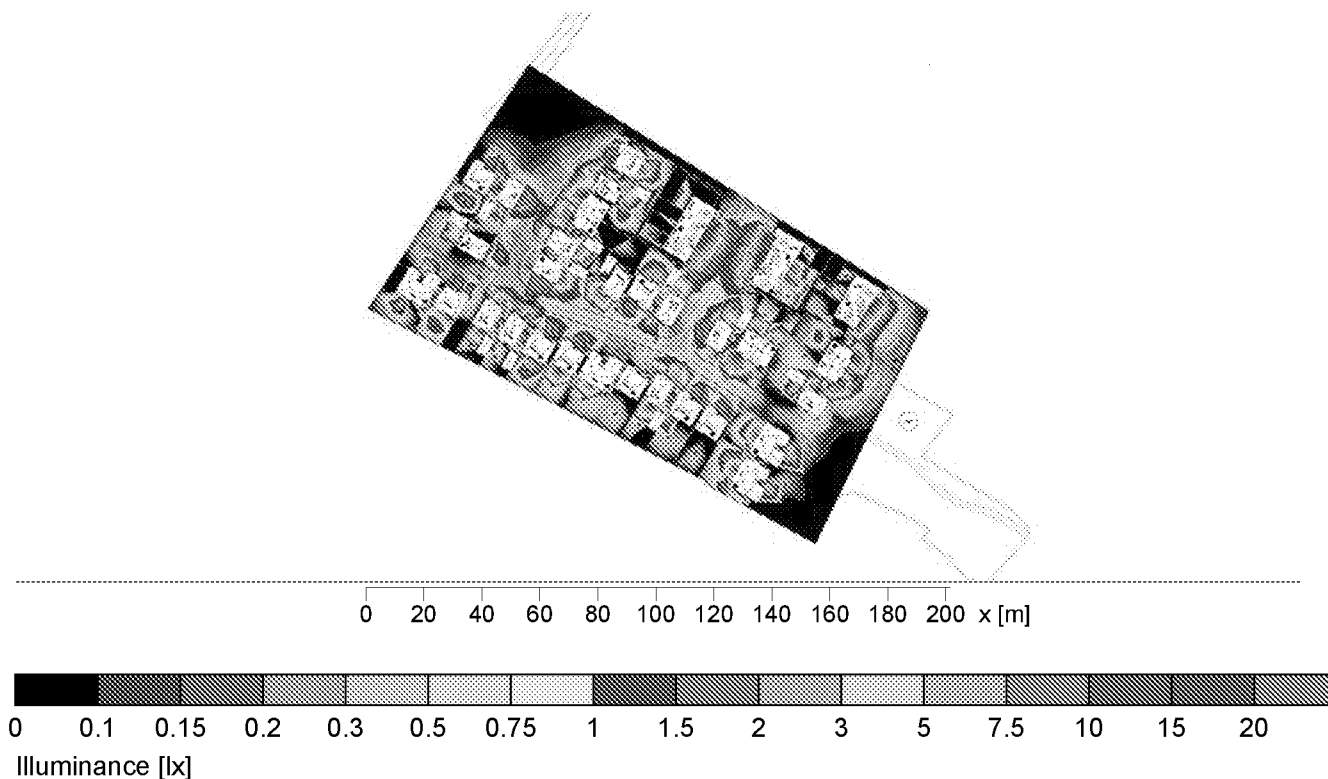
Type No.\Make

1	79	Generic
		Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm

2	13	Luceco
		Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.23 Result overview, Whole site



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.21 m
Maintenance factor	0.80
Total luminous flux of all lamps	92000 lm
Total power	933 W
Total power per area (15806.17 m ²)	0.06 W/m ² (4.06 W/m ² /100lx)

Illuminance

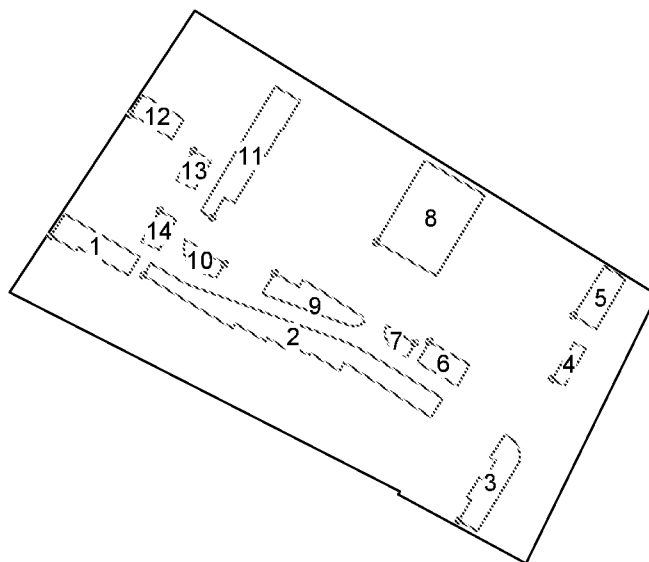
Average illuminance	Em	1.5 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	29.6 lx
Uniformity Uo	Emin/Em	1:--- (---)
Diversity Ud	Emin/Emax	1:--- (---)

Type No.Make

Generic		
1	79	Order No. : Lantern 10W
		Luminaire name : 10W
		Equipment : 1 x LED 10 W / 1000 lm
Luceco		
2	13	Order No. : LBDL4D40
		Luminaire name : Carbon Downlight 11W Dimmable
		Equipment : 1 x LED 11 W / 1000 lm

2.1 Summary, Exterior 1

2.1.24 Result overview, Calcs Front (4)

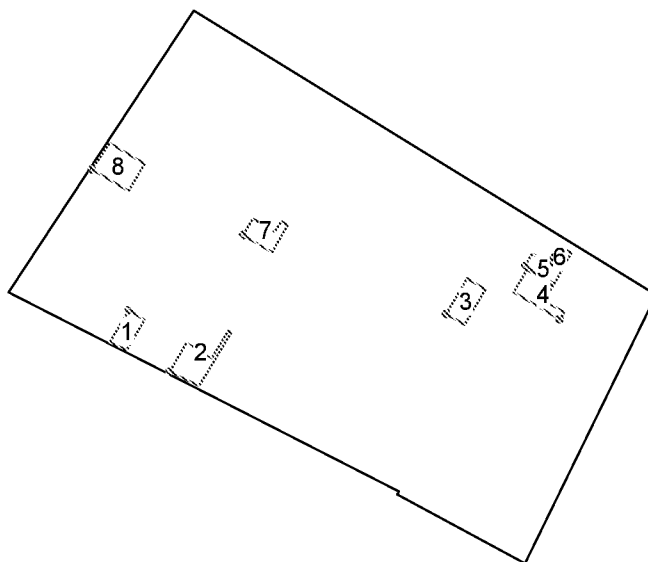


Horizontal illuminance

No.	Measuring surface	Grid	Em	Emin	Emax	Uo	Ud
4.1	Plot 41-42 Front	31 x 9	0.9 lx	0.1 lx	11.1 lx	0.07	0.01
4.2	Plot 32-40 Front	228 x 34	2.1 lx	0.2 lx	22.4 lx	0.08	0.01
4.3	Plot 30-31 Front	33 x 9	0.6 lx	0 lx	6.8 lx	0.00	0.00
4.4	Plot 24-25 Front	24 x 8	4.7 lx	0 lx	18.6 lx	---	---
4.5	Plot 26-29 Front	21 x 9	3.8 lx	0 lx	17.3 lx	---	---
4.6	Plot 21-22 Front	11 x 6	3.1 lx	0.2 lx	14.7 lx	0.07	0.02
4.7	Plot 20 Front	17 x 8	0.5 lx	0.2 lx	1.1 lx	0.50	0.23
4.8	Plot 10-14 & 15-19 Front	10 x 14	3.4 lx	0.1 lx	22 lx	0.04	0.01
4.9	Plot 7-9 Front	31 x 10	2.6 lx	0.2 lx	20.7 lx	0.07	0.01
4.10	Plot 6 Front	20 x 9	6.4 lx	0.4 lx	81 lx	0.06	0.01
4.11	Plot 1-5 Front	46 x 10	2.6 lx	0.1 lx	17.4 lx	0.05	0.01
4.12	Plot 45 Front	19 x 9	1.4 lx	0 lx	16.3 lx	0.01	0.00
4.13	Plot 44 Front	10 x 6	6.7 lx	0.6 lx	64.2 lx	0.10	0.01
4.14	Plot 43 Front	10 x 5	2.4 lx	0.6 lx	10 lx	0.26	0.06
Summary			2.6 lx	0 lx	81 lx	0.00	0.00

2.1 Summary, Exterior 1

2.1.25 Result overview, Calcs Rear (5)



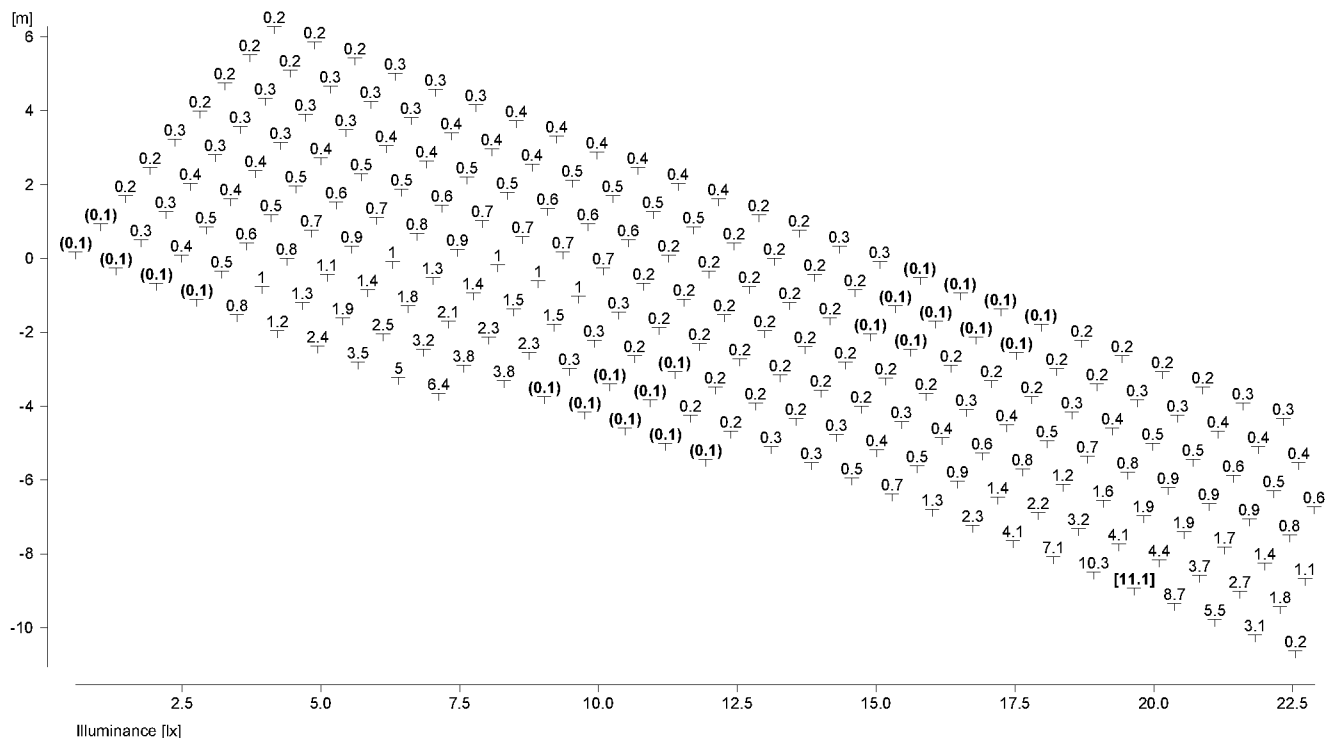
Horizontal illuminance

No.	Measuring surface	Grid	Em	Emin	Emax	Uo	Ud
5.1	TYP Plot 40 Rear	5 x 10	2.2 lx	0.2 lx	11.8 lx	0.09	0.02
5.2	TYP Plot 38 Rear and Side	21 x 34	2 lx	0 lx	11.9 lx	0.02	0.00
5.3	TYP Plot 21 Rear	6 x 11	2.6 lx	0.2 lx	13.3 lx	0.09	0.02
5.4	TYP Plot 26 Rear and Side	19 x 9	2.1 lx	0 lx	12.5 lx	0.01	0.00
5.5	TYP Plot 27 Rear	18 x 8	3.2 lx	0.3 lx	13.1 lx	0.10	0.02
5.6	TYP Plot 28 Rear	7 x 8	5.8 lx	2 lx	12.4 lx	0.35	0.16
5.7	TYP Plot 5 Rear	10 x 9	2.8 lx	0.1 lx	12.8 lx	0.02	0.00
5.8	TYP Plot 45 Rear	11 x 8	2.1 lx	0.3 lx	13.3 lx	0.12	0.02
Summary			2.5 lx	0 lx	13.3 lx	0.01	0.00

2 Exterior 1

2.2 Calculation results, Exterior 1

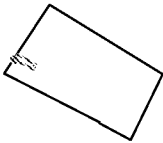
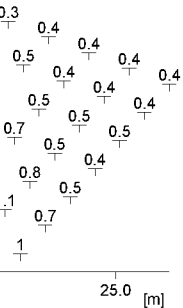
2.2.1 Table, Plot 41-42 Front (E)



Part1

Height reference plane	: 0.21 m
Average illuminance	Em : 0.9 lx
Minimum illuminance	Emin : 0.1 lx
Maximum illuminance	Emax : 11.1 lx
Uniformity Uo	Emin/Em : 1 : 14.20 (0.07)
Diversity Ud	Emin/Emax : 1 : 177.23 (0.01)

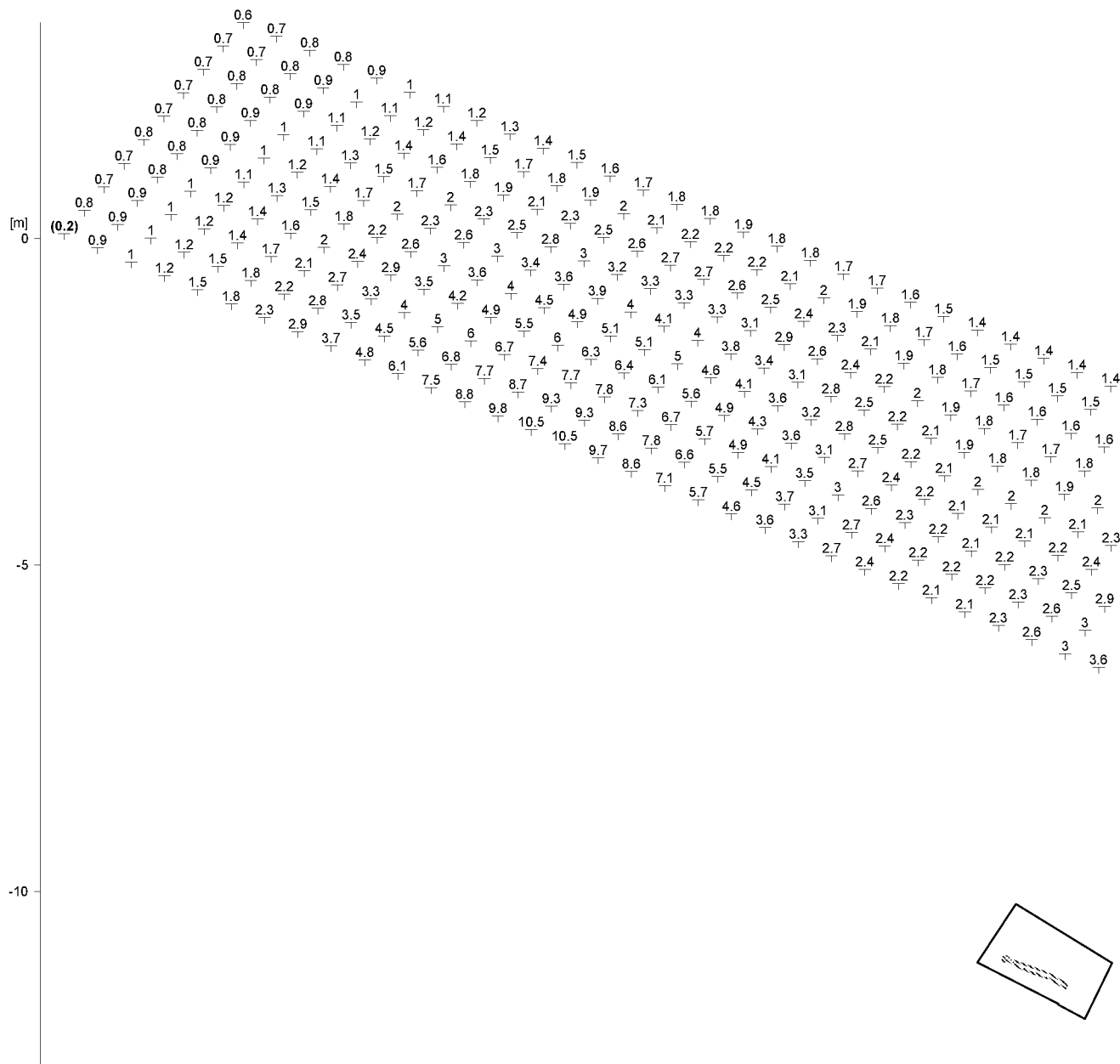
2 Exterior 1
2.2 Calculation results, Exterior 1
2.2.1 Table, Plot 41-42 Front (E)



Part2

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

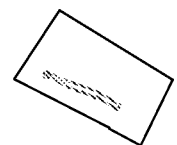
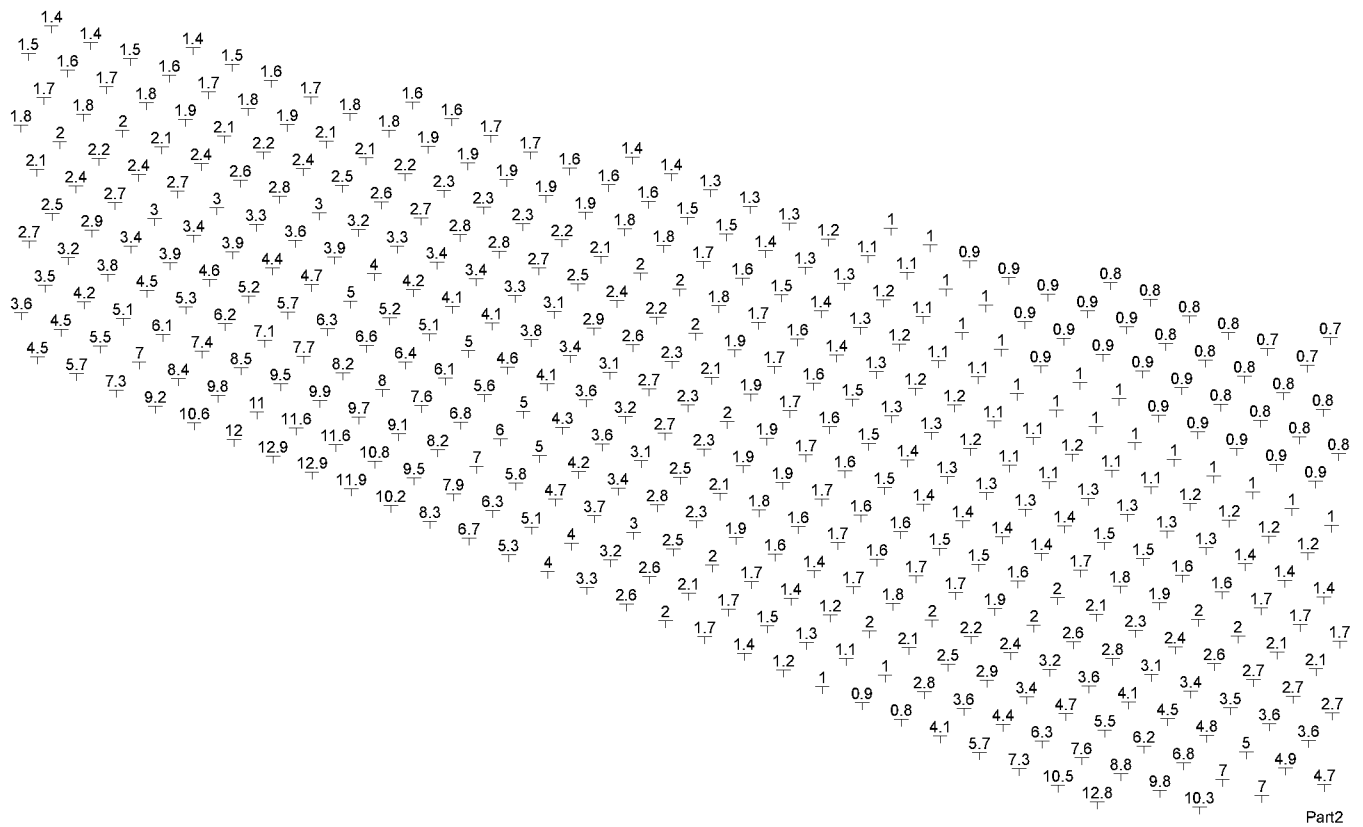


Part1

Height reference plane	: 0.21 m
Average illuminance	Em : 2.1 lx
Minimum illuminance	Emin : 0.2 lx
Maximum illuminance	Emax : 22.4 lx
Uniformity Uo	Emin/Em : 1 : 11.97 (0.08)
Diversity Ud	Emin/Emax : 1 : 128.75 (0.01)

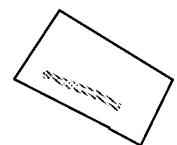
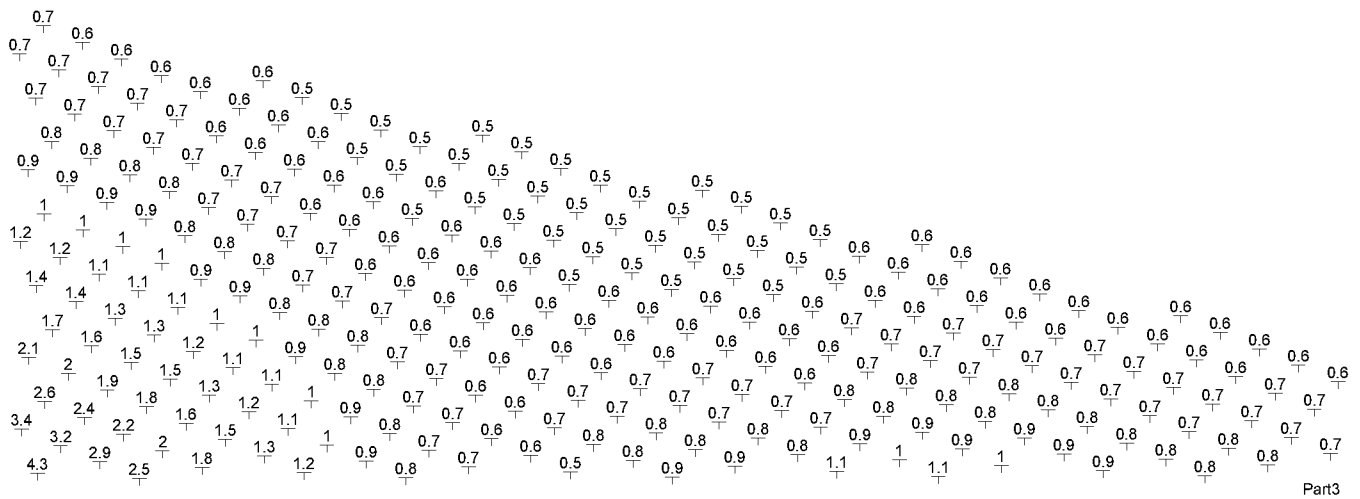
2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)



2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)





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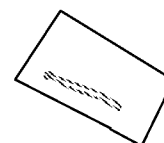
2.2.2 Table, Plot 32-40 Front (E)



Object : Ford Lane
Installation : Proposed Lighting
Project number : IJF01097-R1
Date : 29.07.2021

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

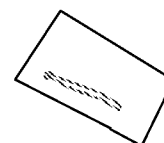


Part5

Object : Ford Lane
Installation : Proposed Lighting
Project number : IJF01097-R1
Date : 29.07.2021

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

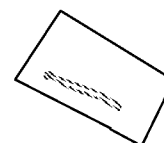


Part6

Object : Ford Lane
Installation : Proposed Lighting
Project number : IJF01097-R1
Date : 29.07.2021

2.2 Calculation results, Exterior 1

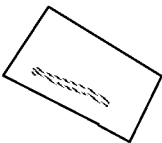
2.2.2 Table, Plot 32-40 Front (E)



Part7

2.2 Calculation results, Exterior 1

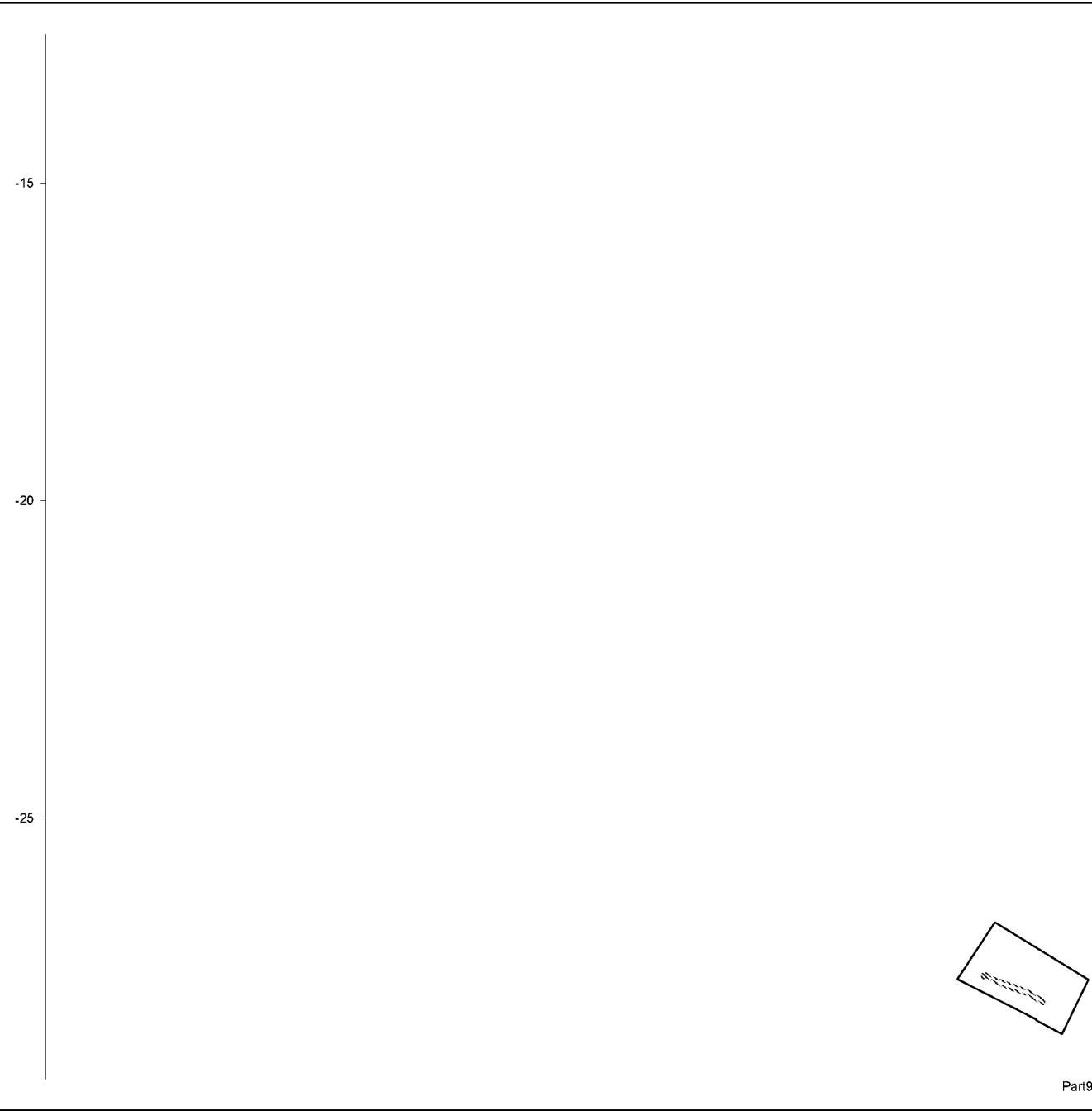
2.2.2 Table, Plot 32-40 Front (E)



Part8

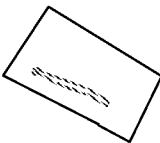
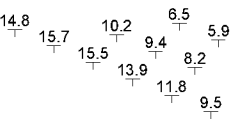
2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)



2.2 Calculation results, Exterior 1

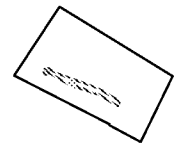
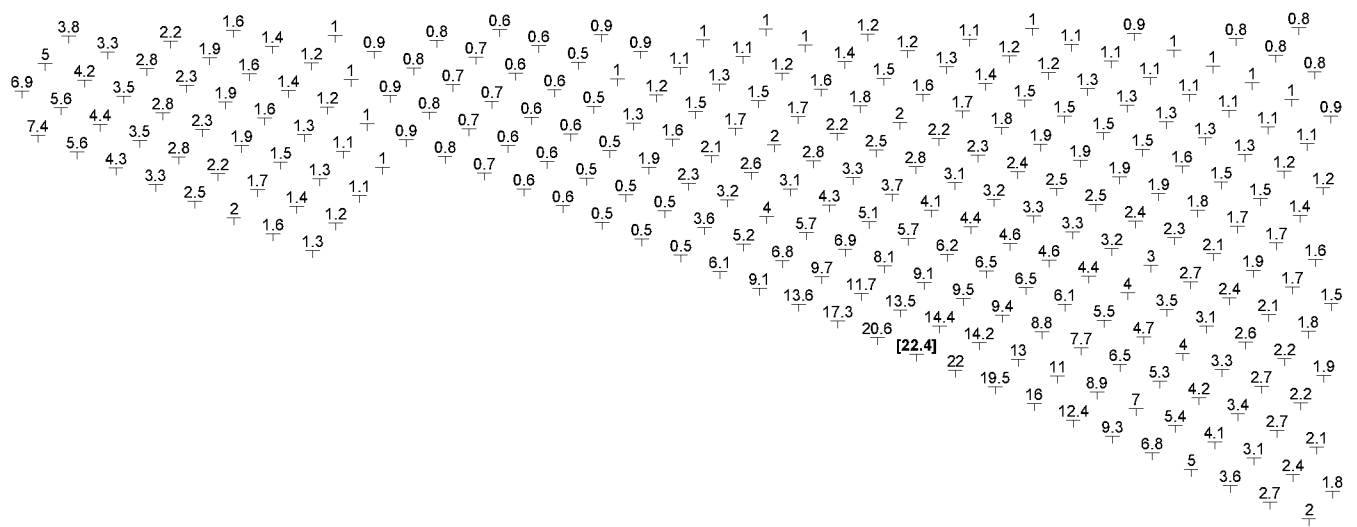
2.2.2 Table, Plot 32-40 Front (E)



Part10

2.2 Calculation results, Exterior 1

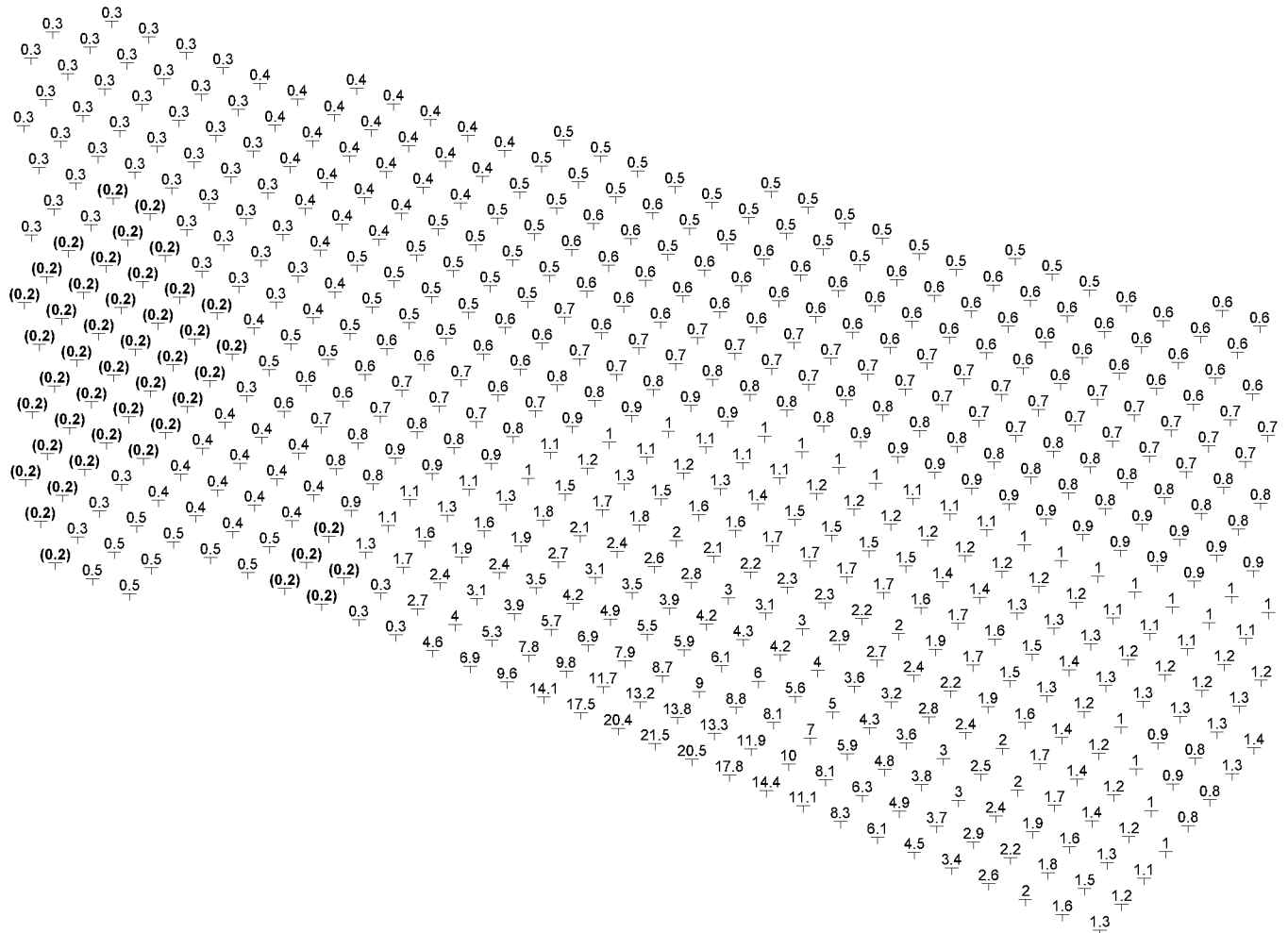
2.2.2 Table, Plot 32-40 Front (E)



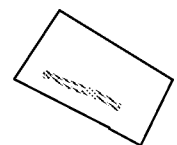
Part11

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

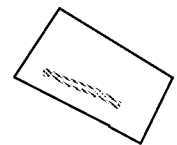
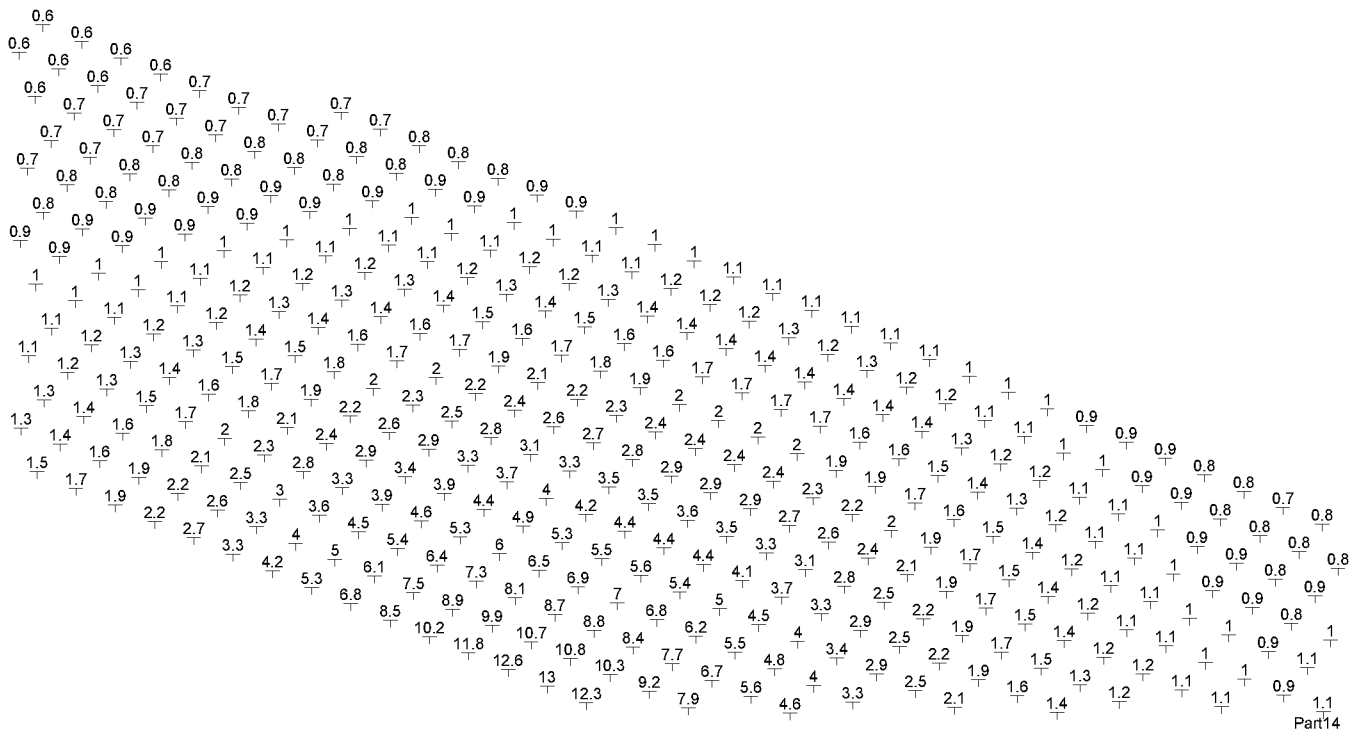


Part13



2.2 Calculation results, Exterior 1

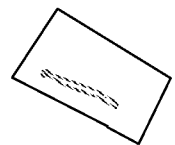
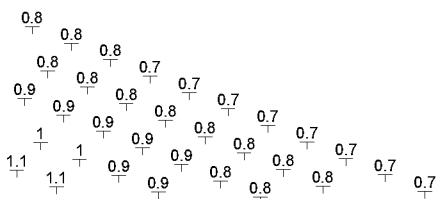
2.2.2 Table, Plot 32-40 Front (E)





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2.2.2 Table, Plot 32-40 Front (E)

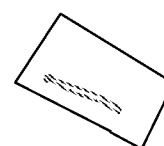


ARUN DISTRICT COUNCIL Y/157/21/DOC

Object : Ford Lane
Installation : Proposed Lighting
Project number : IJF01097-R1
Date : 29.07.2021

2.2 Calculation results, Exterior 1

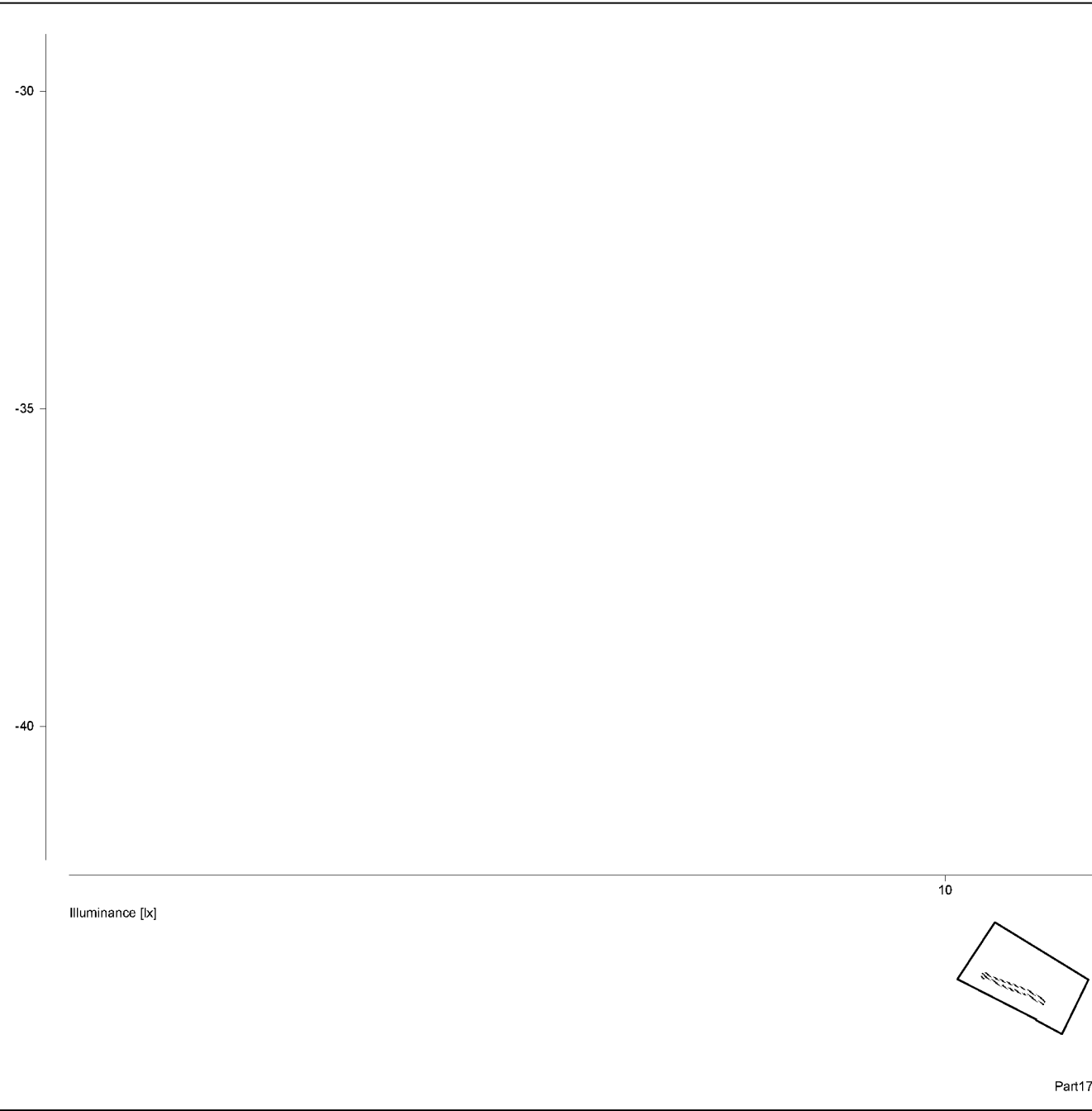
2.2.2 Table, Plot 32-40 Front (E)



Part16

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

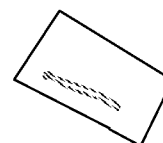


Object : Ford Lane
Installation : Proposed Lighting
Project number : IJF01097-R1
Date : 29.07.2021

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

20

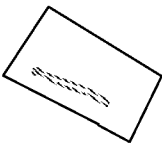


Part18

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

30

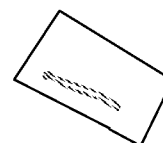


Part19

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

40



Part20

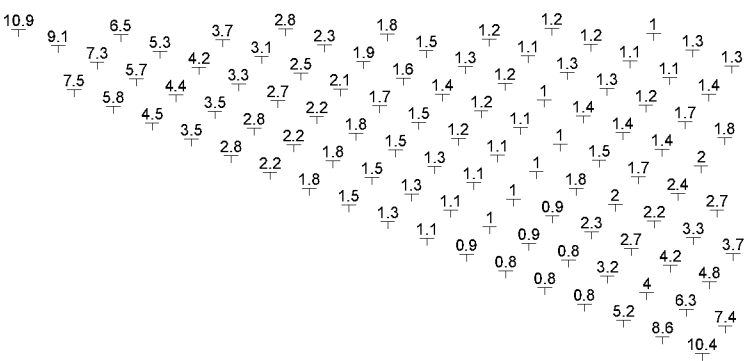
2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)

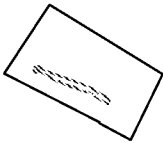


2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)



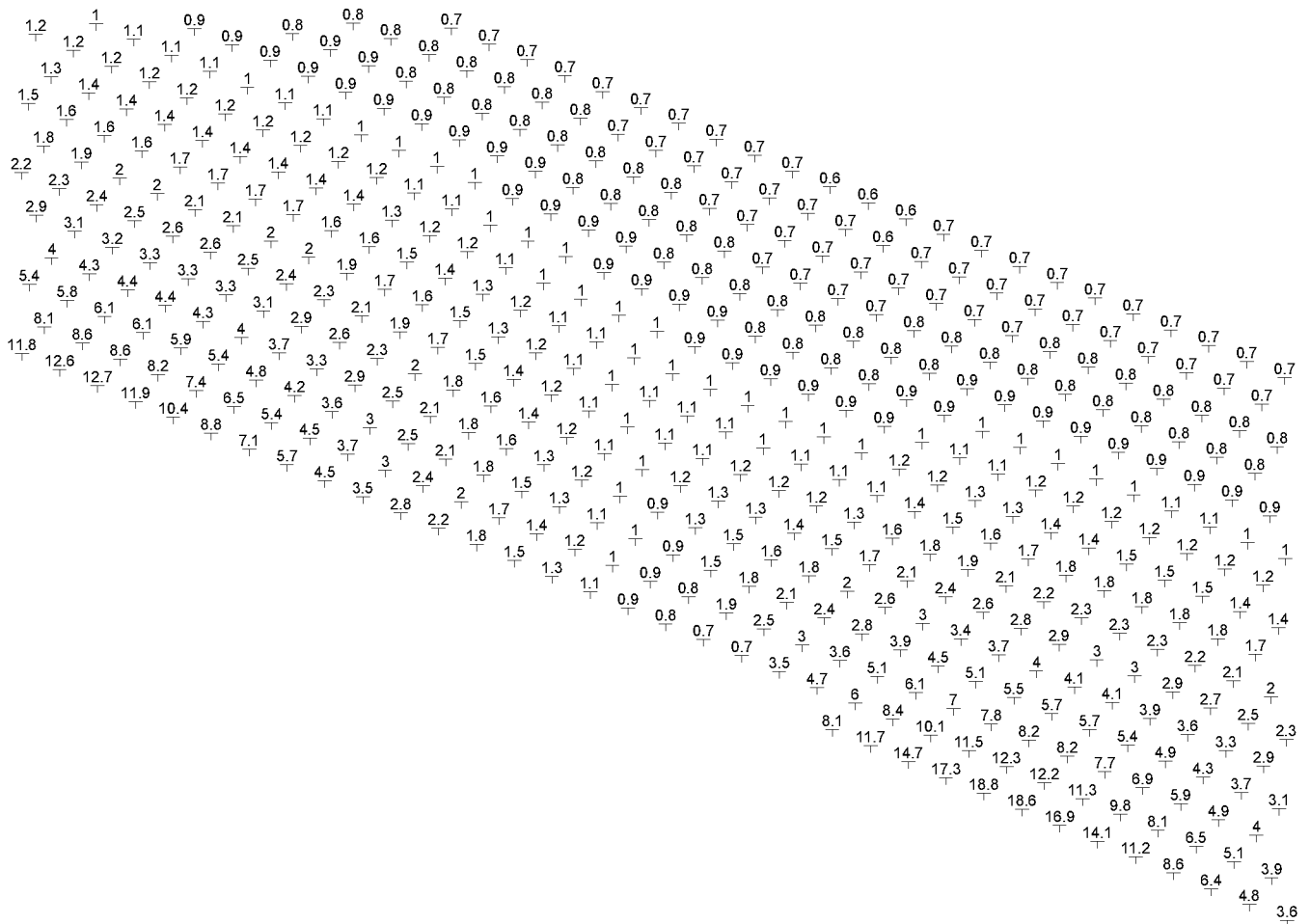
70



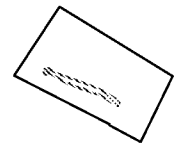
Part22

2.2 Calculation results, Exterior 1

2.2.2 Table, Plot 32-40 Front (E)



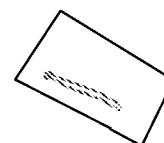
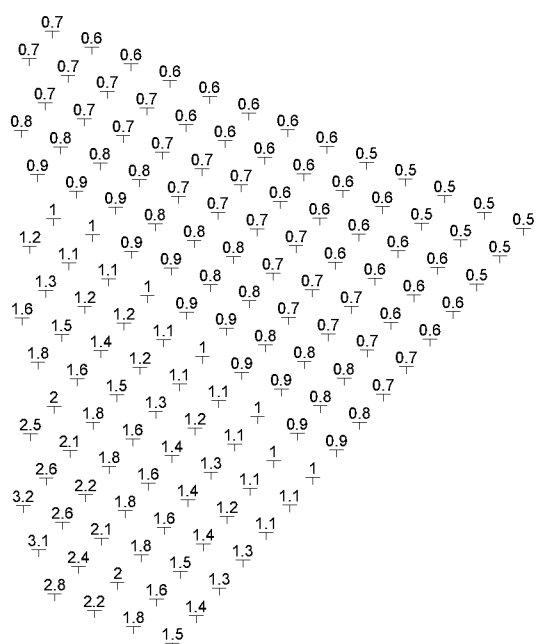
80 [m]



Part23

2.2 Calculation results, Exterior 1

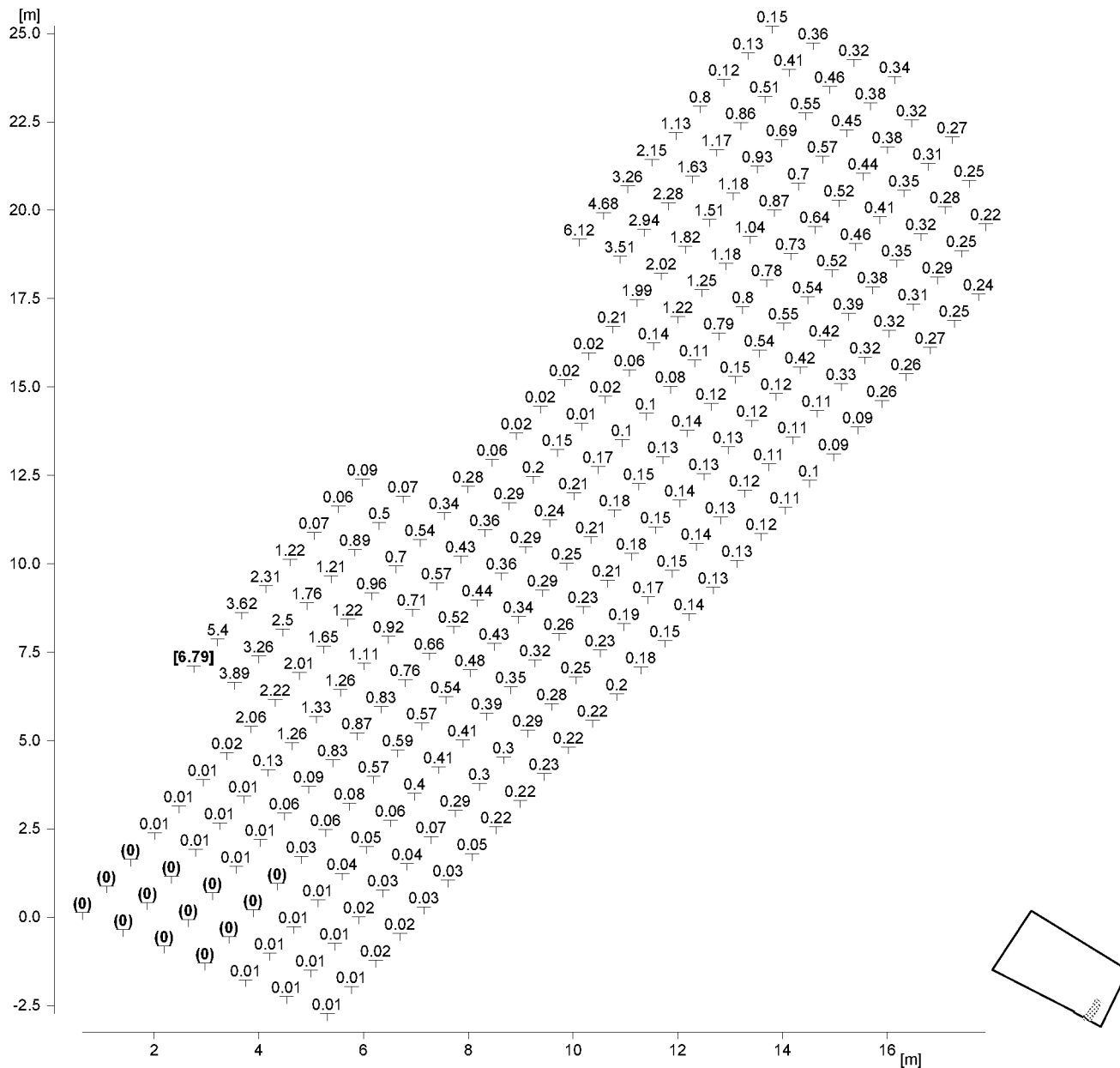
2.2.2 Table, Plot 32-40 Front (E)



Part24

2.2 Calculation results, Exterior 1

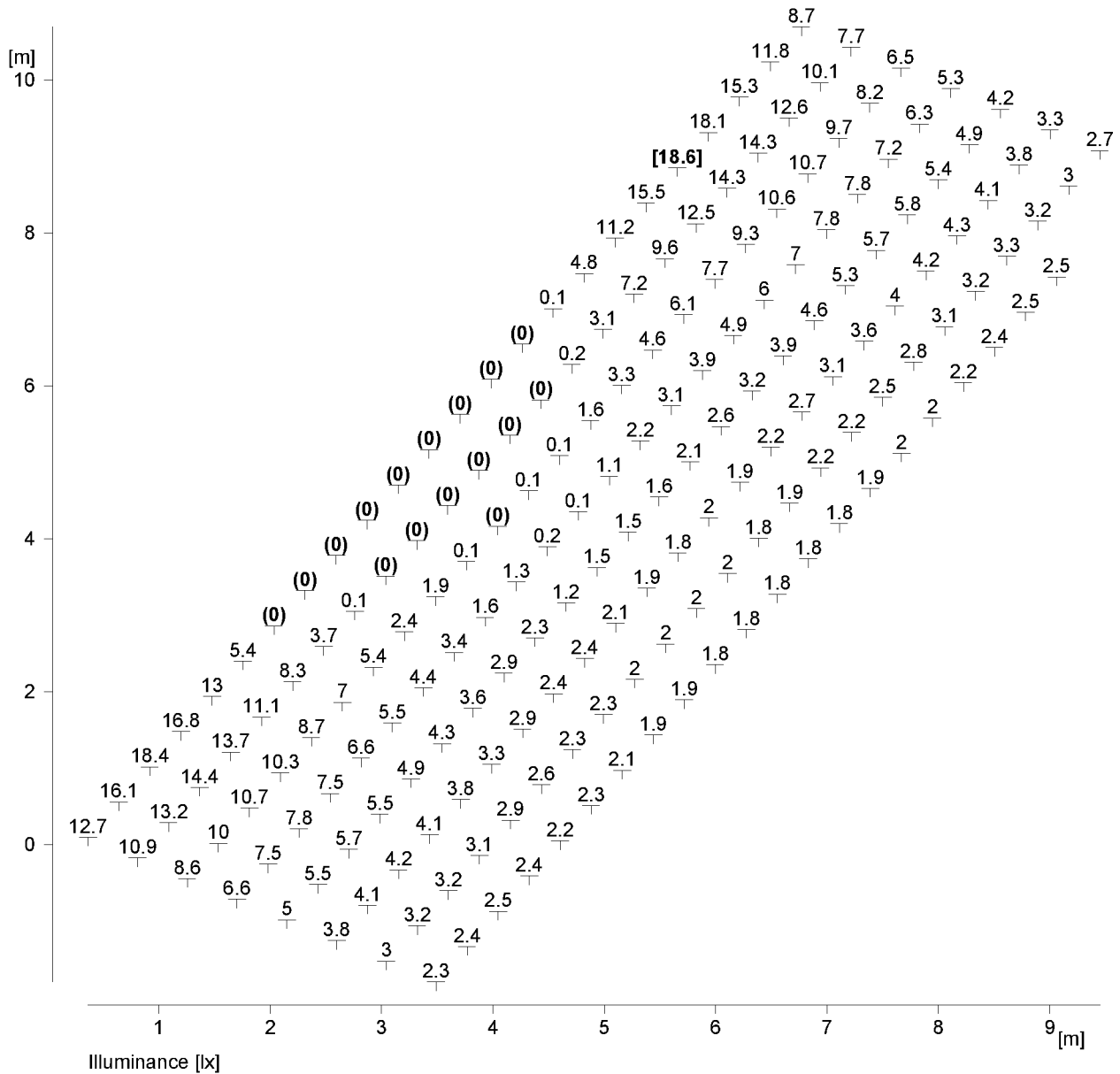
2.2.3 Table, Plot 30-31 Front (E)



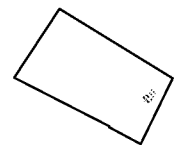
Height reference plane	: 0.21 m
Average illuminance	Em : 0.57 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 6.79 lx
Uniformity Uo	Emin/Em : 1 : 241.94 (0.00)
Diversity Ud	Emin/Emax : 1 : 2876.11 (0.00)

2.2 Calculation results, Exterior 1

2.2.4 Table, Plot 24-25 Front (E)

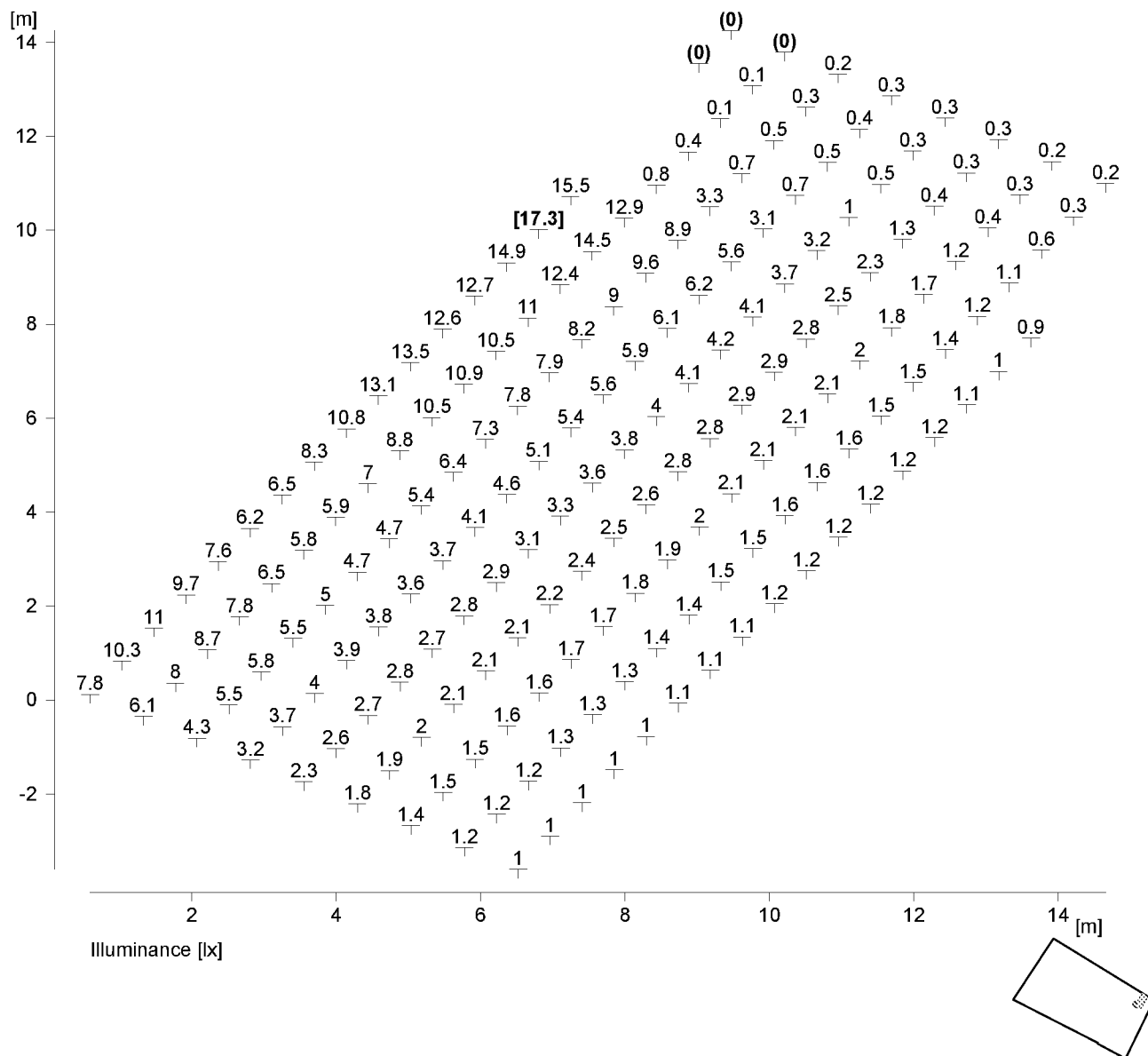


Height reference plane	: 0.21 m
Average illuminance	Em : 4.7 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 18.6 lx
Uniformity Uo	Emin/Em : ---
Diversity Ud	Emin/Emax : ---



2.2 Calculation results, Exterior 1

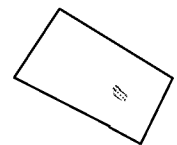
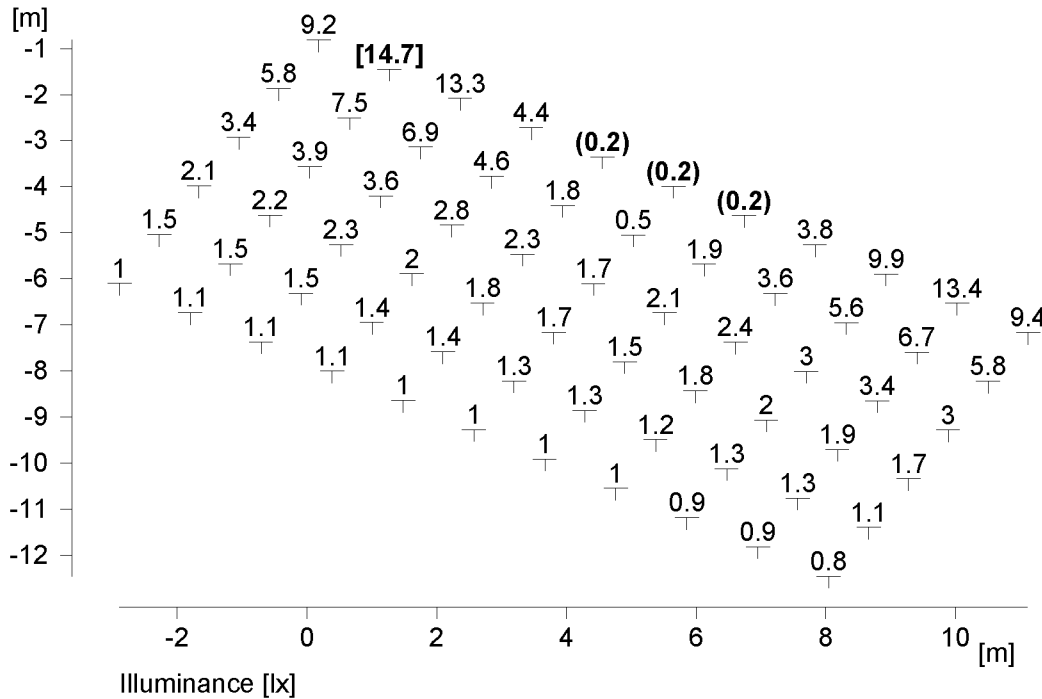
2.2.5 Table, Plot 26-29 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 3.8 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 17.3 lx
Uniformity Uo	Emin/Em : ---
Diversity Ud	Emin/Emax : ---

2.2 Calculation results, Exterior 1

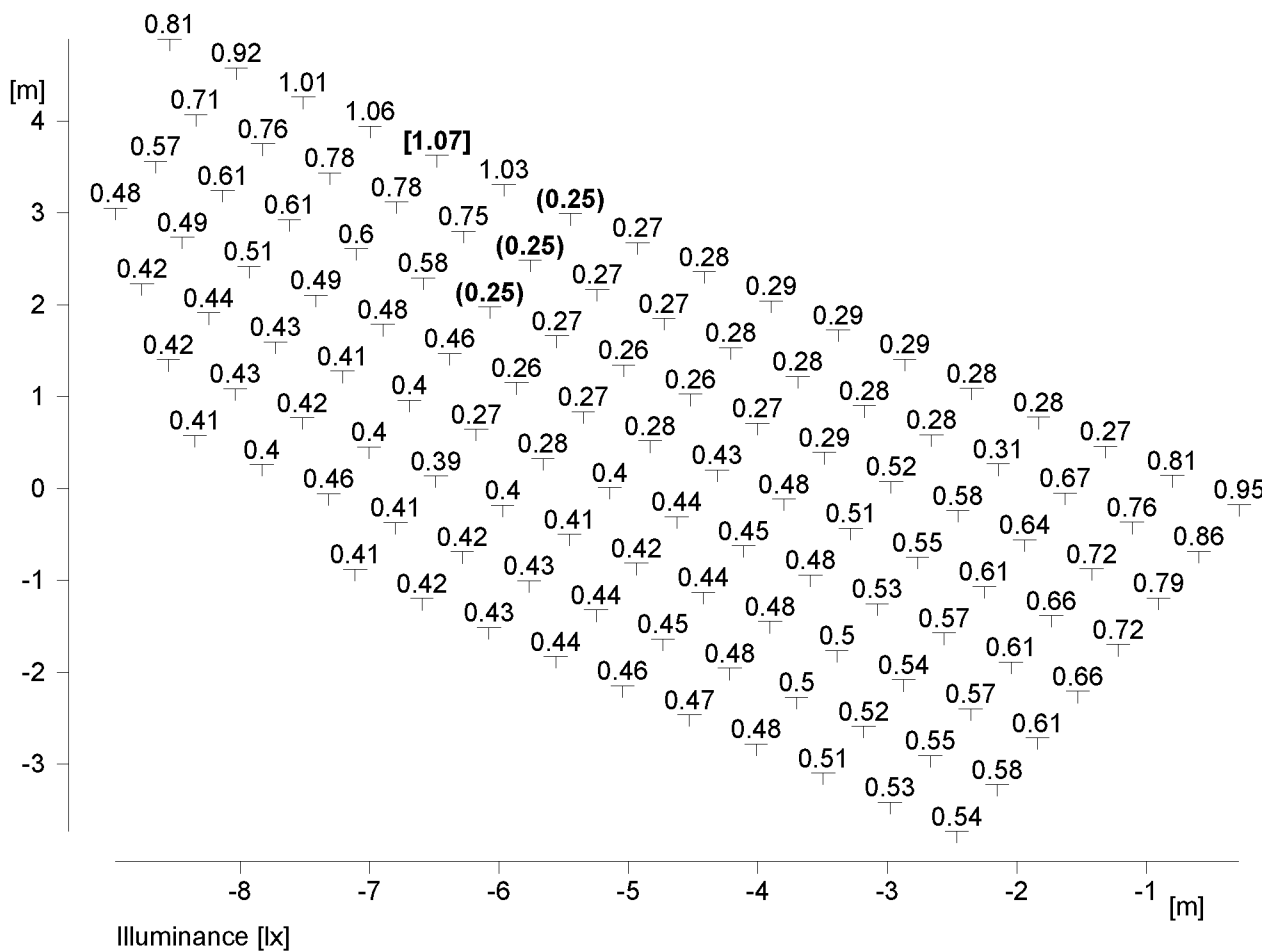
2.2.6 Table, Plot 21-22 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 3.1 lx
Minimum illuminance	Emin : 0.2 lx
Maximum illuminance	Emax : 14.7 lx
Uniformity Uo	Emin/Em : 1 : 13.66 (0.07)
Diversity Ud	Emin/Emax : 1 : 63.58 (0.02)

2.2 Calculation results, Exterior 1

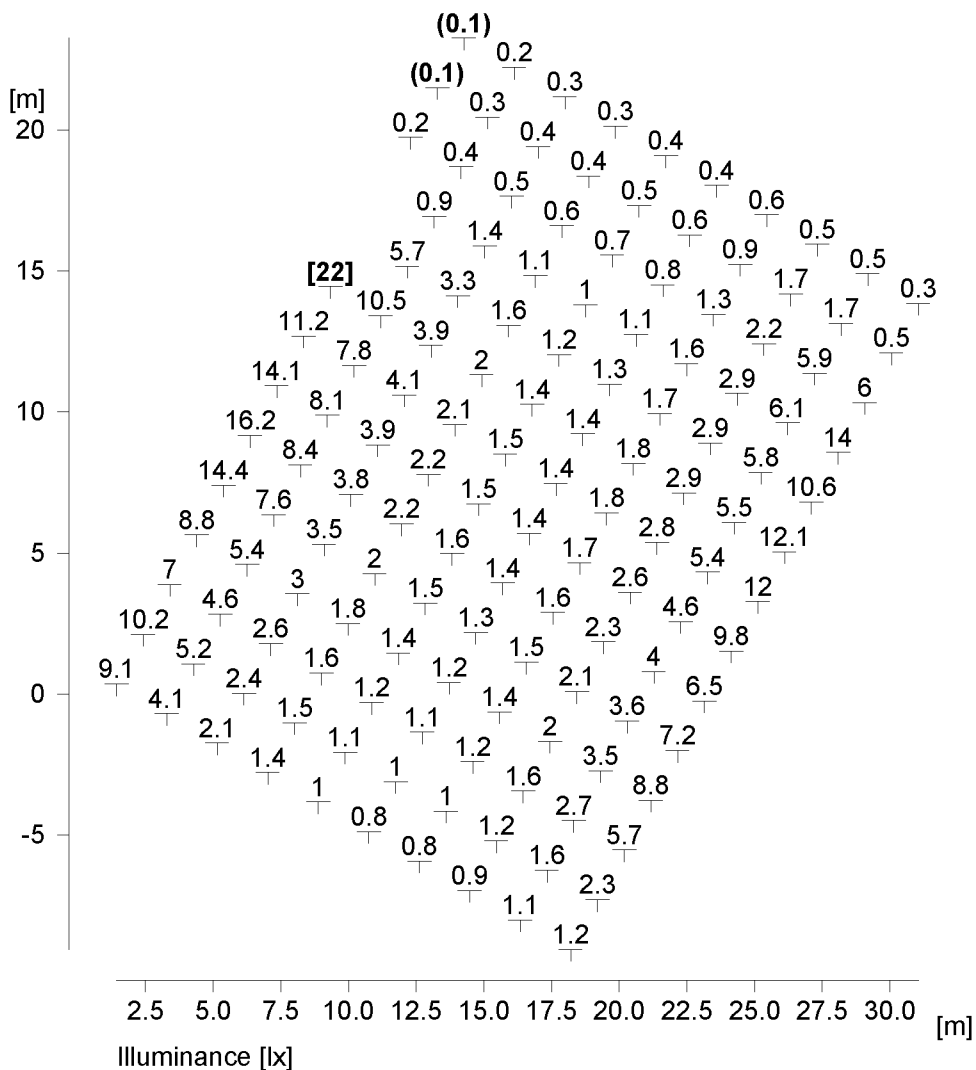
2.2.7 Table, Plot 20 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 0.5 lx
Minimum illuminance	Emin : 0.25 lx
Maximum illuminance	Emax : 1.07 lx
Uniformity Uo	Emin/Em : 1 : 2.02 (0.50)
Diversity Ud	Emin/Emax : 1 : 4.37 (0.23)

2.2 Calculation results, Exterior 1

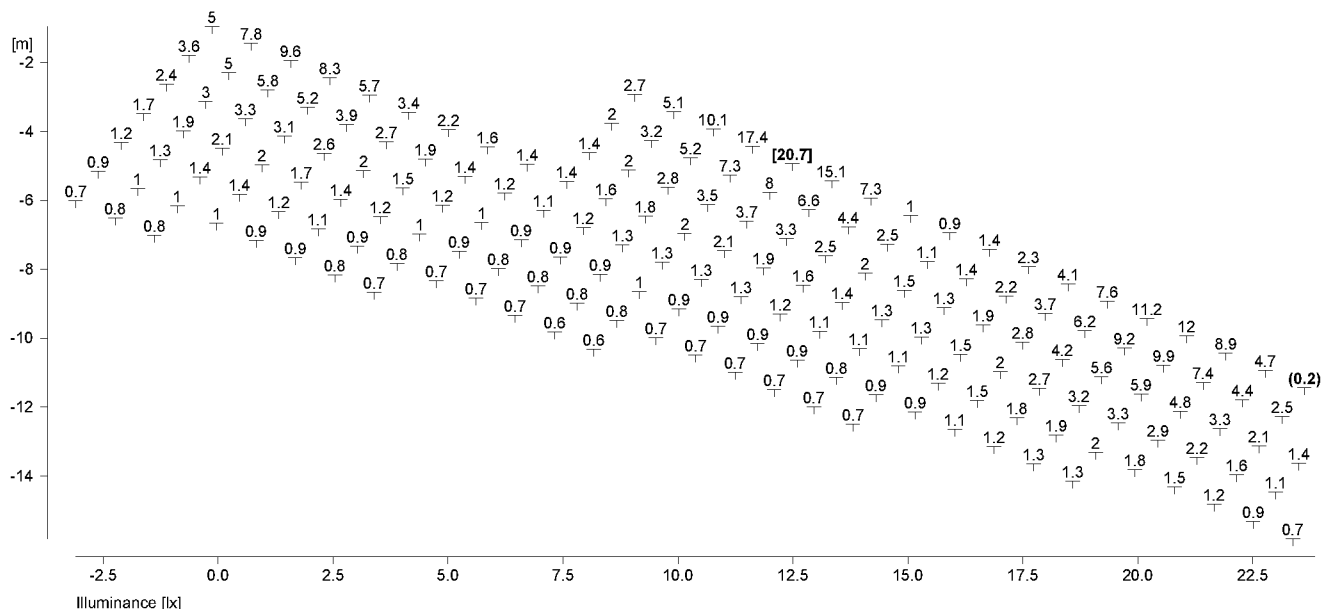
2.2.8 Table, Plot 10-14 & 15-19 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 3.4 lx
Minimum illuminance	Emin : 0.1 lx
Maximum illuminance	Emax : 22 lx
Uniformity Uo	Emin/Em : 1 : 27.89 (0.04)
Diversity Ud	Emin/Emax : 1 : 181.37 (0.01)

2.2 Calculation results, Exterior 1

2.2.9 Table, Plot 7-9 Front (E)

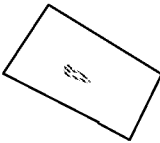
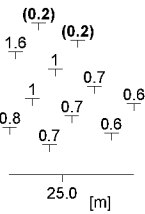


Part1

Height reference plane	: 0.21 m
Average illuminance	Em : 2.6 lx
Minimum illuminance	Emin : 0.2 lx
Maximum illuminance	Emax : 20.7 lx
Uniformity Uo	Emin/Em : 1 : 14.89 (0.07)
Diversity Ud	Emin/Emax : 1 : 116.84 (0.01)

2.2 Calculation results, Exterior 1

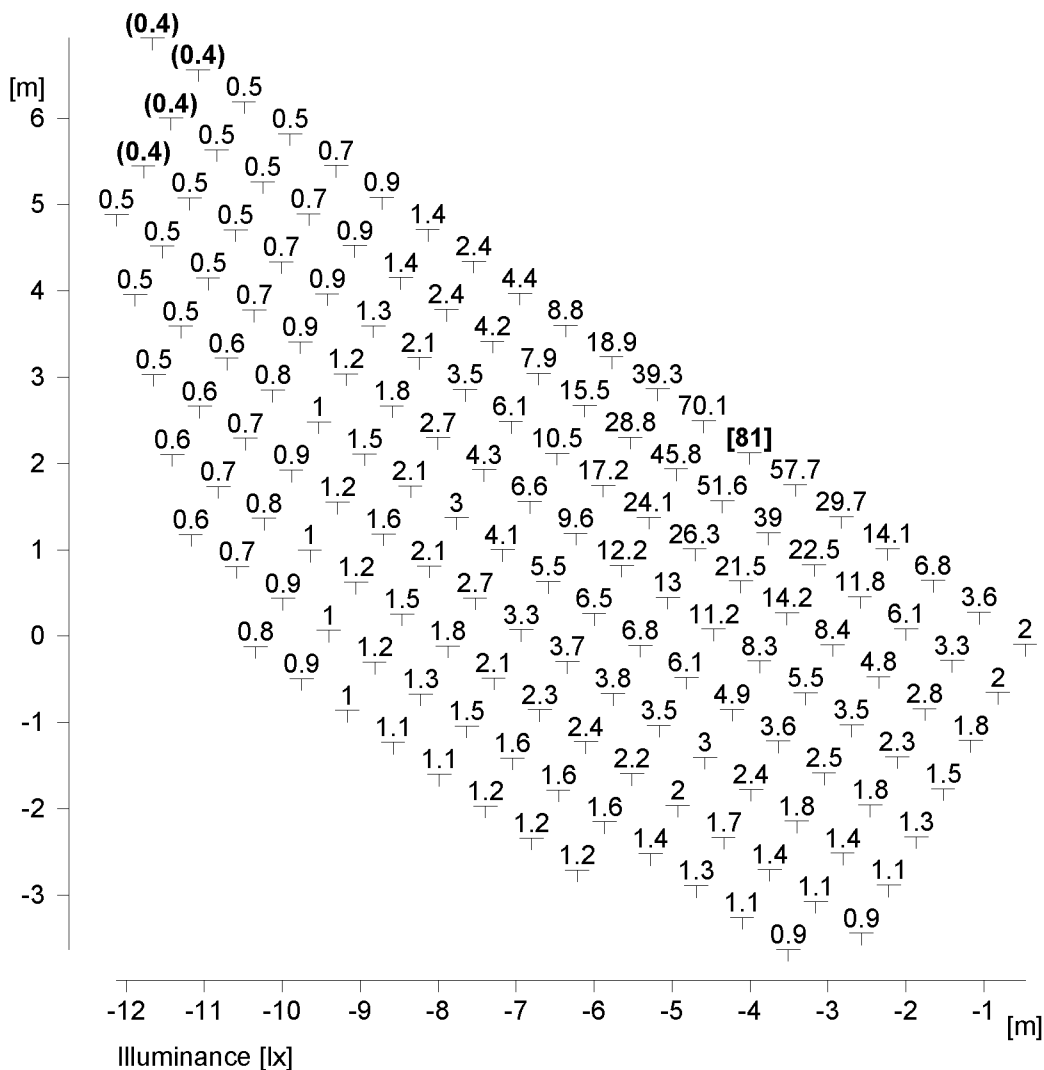
2.2.9 Table, Plot 7-9 Front (E)



Part2

2.2 Calculation results, Exterior 1

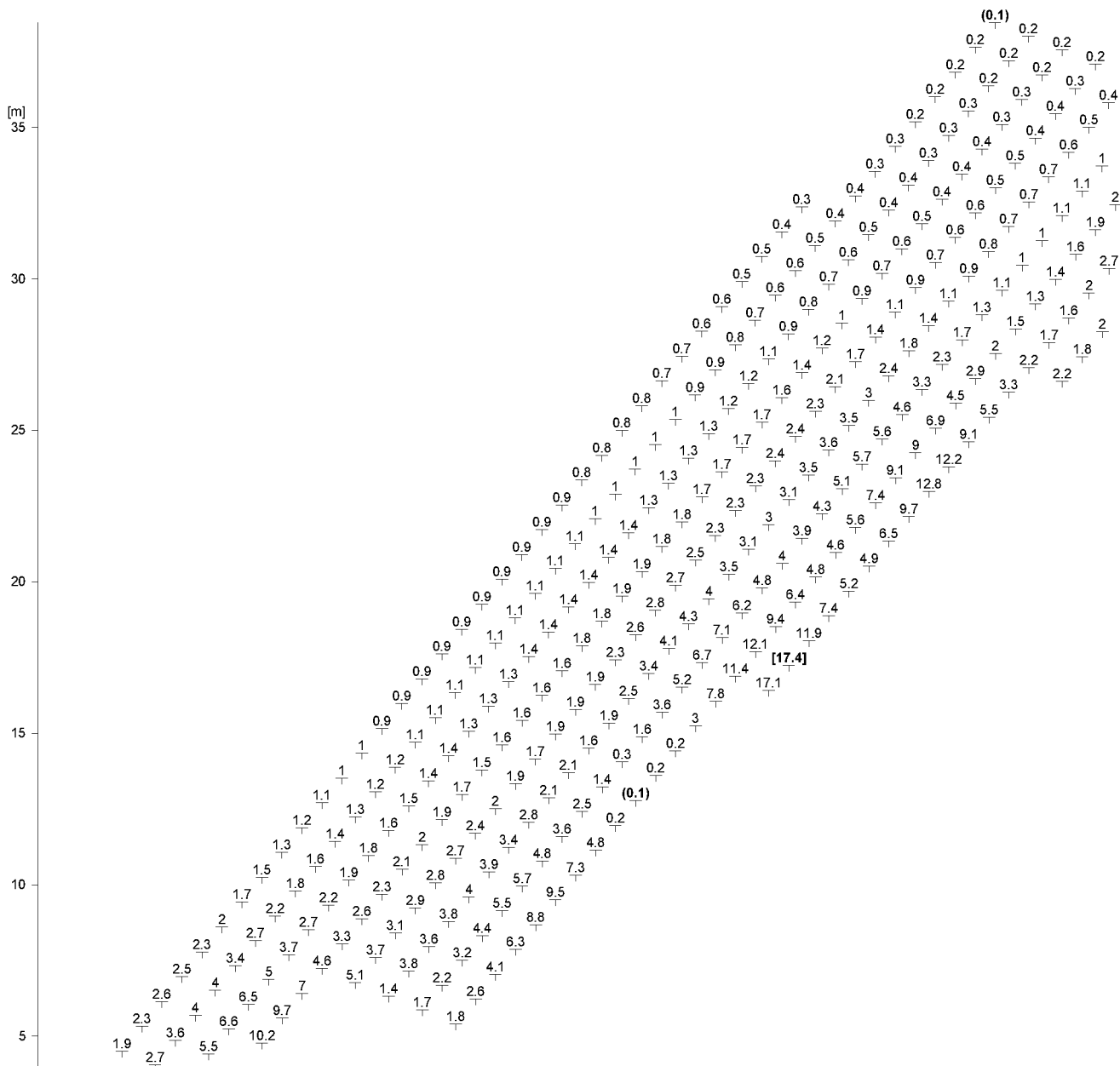
2.2.10 Table, Plot 6 Front (E)



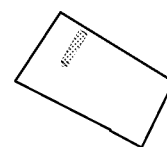
Height reference plane	: 0.21 m
Average illuminance	Em : 6.4 lx
Minimum illuminance	Emin : 0.4 lx
Maximum illuminance	Emax : 81 lx
Uniformity Uo	Emin/Em : 1 : 15.55 (0.06)
Diversity Ud	Emin/Emax : 1 : 196.86 (0.01)

2.2 Calculation results, Exterior 1

2.2.11 Table, Plot 1-5 Front (E)



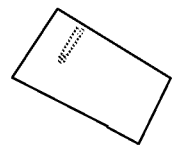
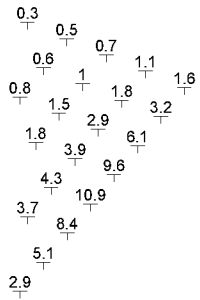
Height reference plane	: 0.21 m
Average illuminance	Em : 2.6 lx
Minimum illuminance	Emin : 0.1 lx
Maximum illuminance	Emax : 17.4 lx
Uniformity Uo	Emin/Em : 1 : 18.72 (0.05)
Diversity Ud	Emin/Emax : 1 : 126.17 (0.01)





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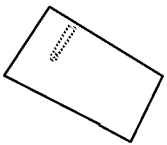
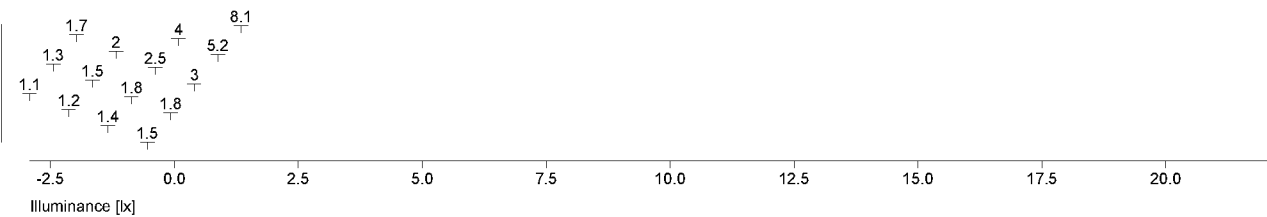
2.2.11 Table, Plot 1-5 Front (E)



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2.2 Calculation results, Exterior 1

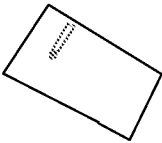
2.2.11 Table, Plot 1-5 Front (E)



Part3

2.2 Calculation results, Exterior 1

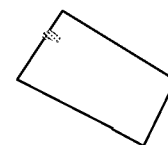
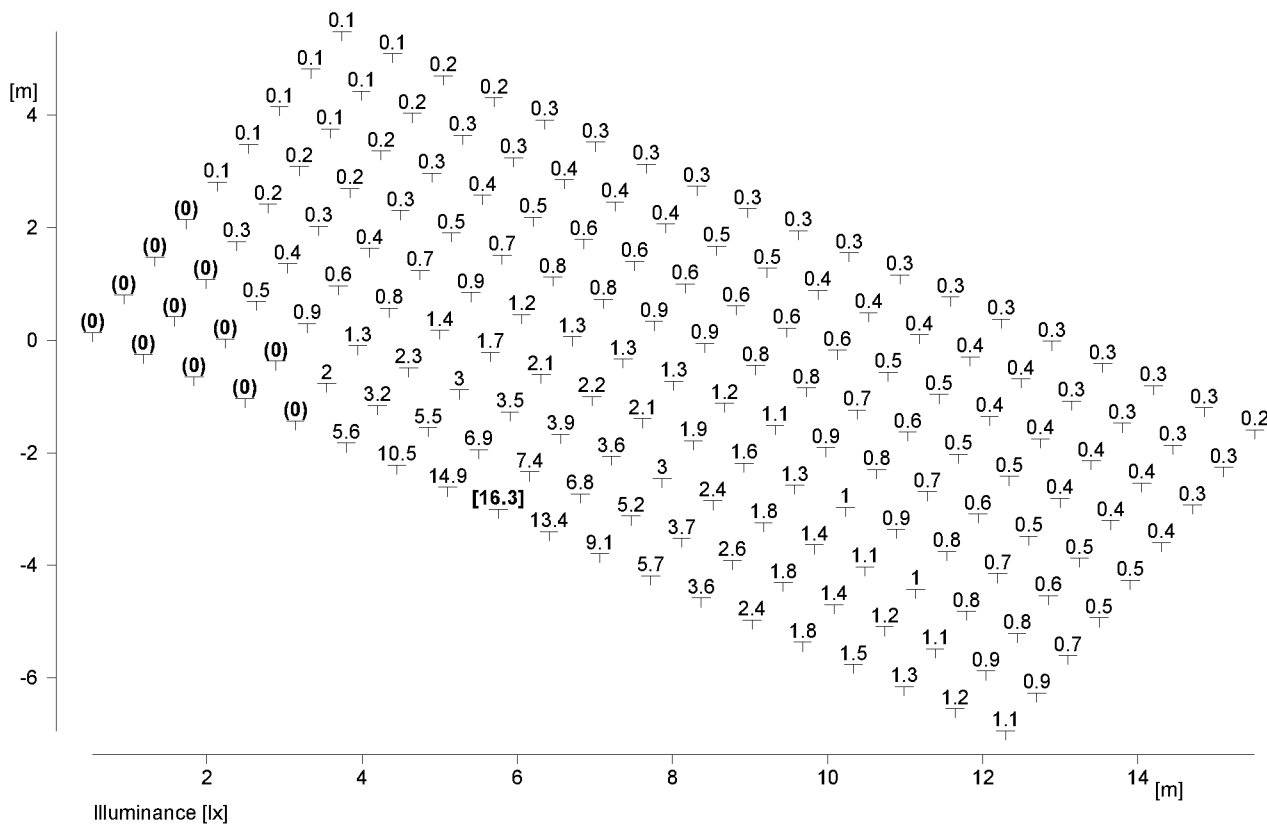
2.2.11 Table, Plot 1-5 Front (E)



Part4

2.2 Calculation results, Exterior 1

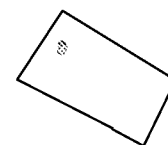
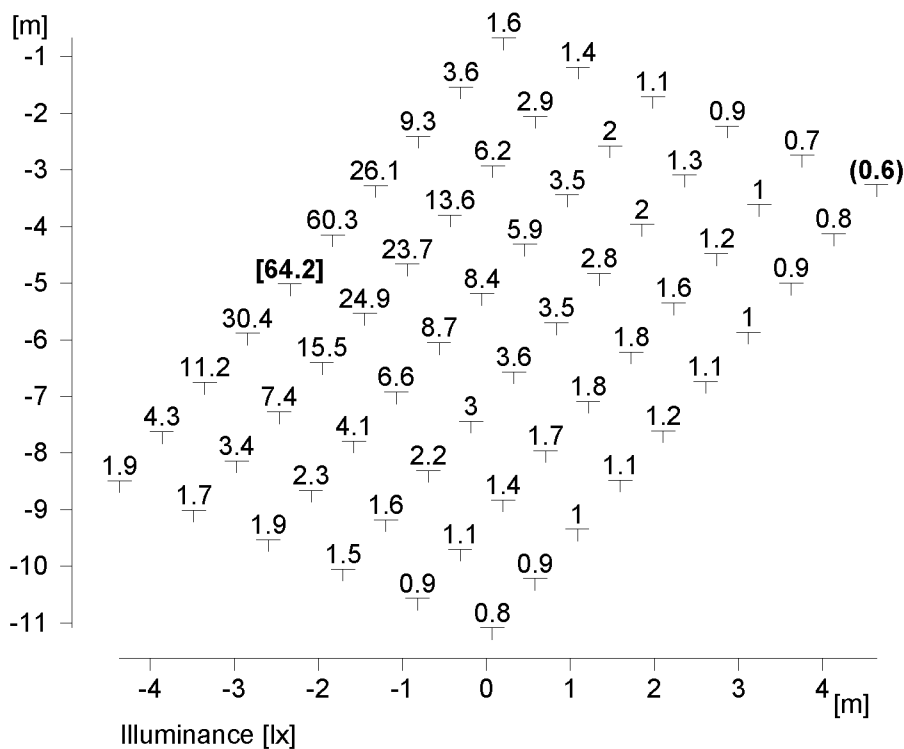
2.2.12 Table, Plot 45 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 1.4 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 16.3 lx
Uniformity Uo	Emin/Em : 1 : 155.23 (0.01)
Diversity Ud	Emin/Emax : 1 : 1825.98 (0.00)

2.2 Calculation results, Exterior 1

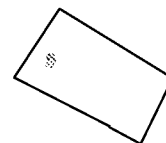
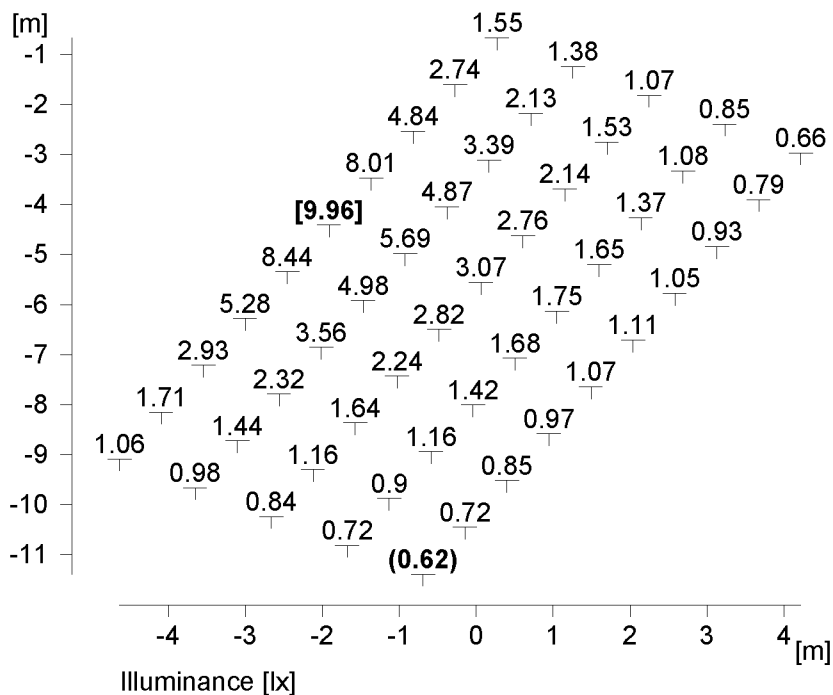
2.2.13 Table, Plot 44 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 6.7 lx
Minimum illuminance	Emin : 0.6 lx
Maximum illuminance	Emax : 64.2 lx
Uniformity Uo	Emin/Em : 1 : 10.46 (0.10)
Diversity Ud	Emin/Emax : 1 : 99.99 (0.01)

2.2 Calculation results, Exterior 1

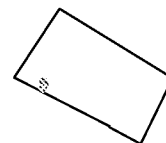
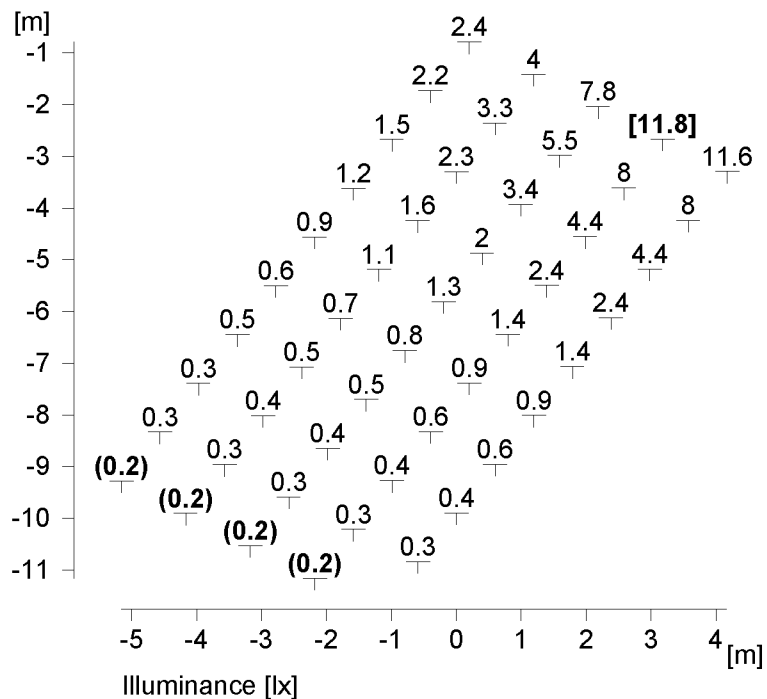
2.2.14 Table, Plot 43 Front (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 2.36 lx
Minimum illuminance	Emin : 0.62 lx
Maximum illuminance	Emax : 9.96 lx
Uniformity Uo	Emin/Em : 1 : 3.79 (0.26)
Diversity Ud	Emin/Emax : 1 : 15.99 (0.06)

2.2 Calculation results, Exterior 1

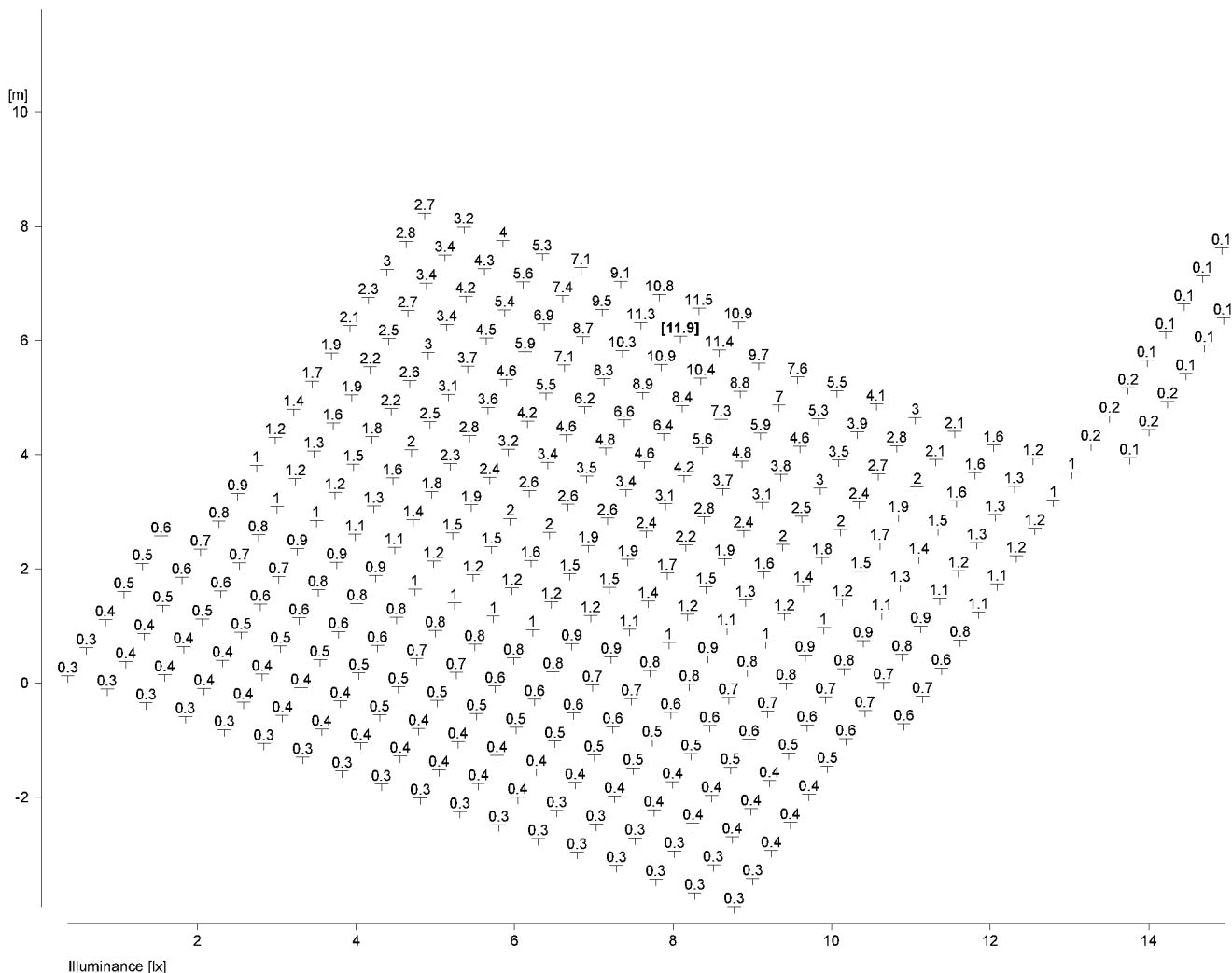
2.2.15 Table, TYP Plot 40 Rear (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 2.2 lx
Minimum illuminance	Emin : 0.2 lx
Maximum illuminance	Emax : 11.8 lx
Uniformity Uo	Emin/Em : 1 : 11.01 (0.09)
Diversity Ud	Emin/Emax : 1 : 59.60 (0.02)

2.2 Calculation results, Exterior 1

2.2.16 Table, TYP Plot 38 Rear and Side (E)



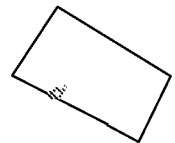
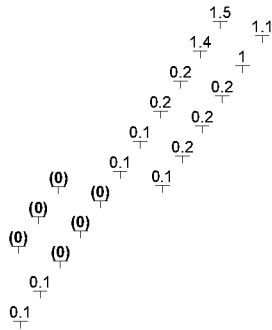
Part1

Height reference plane	: 0.21 m
Average illuminance	Em : 2 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 11.9 lx
Uniformity Uo	Emin/Em : 1 : 62.29 (0.02)
Diversity Ud	Emin/Emax : 1 : 378.84 (0.00)



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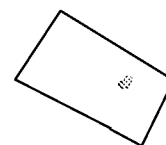
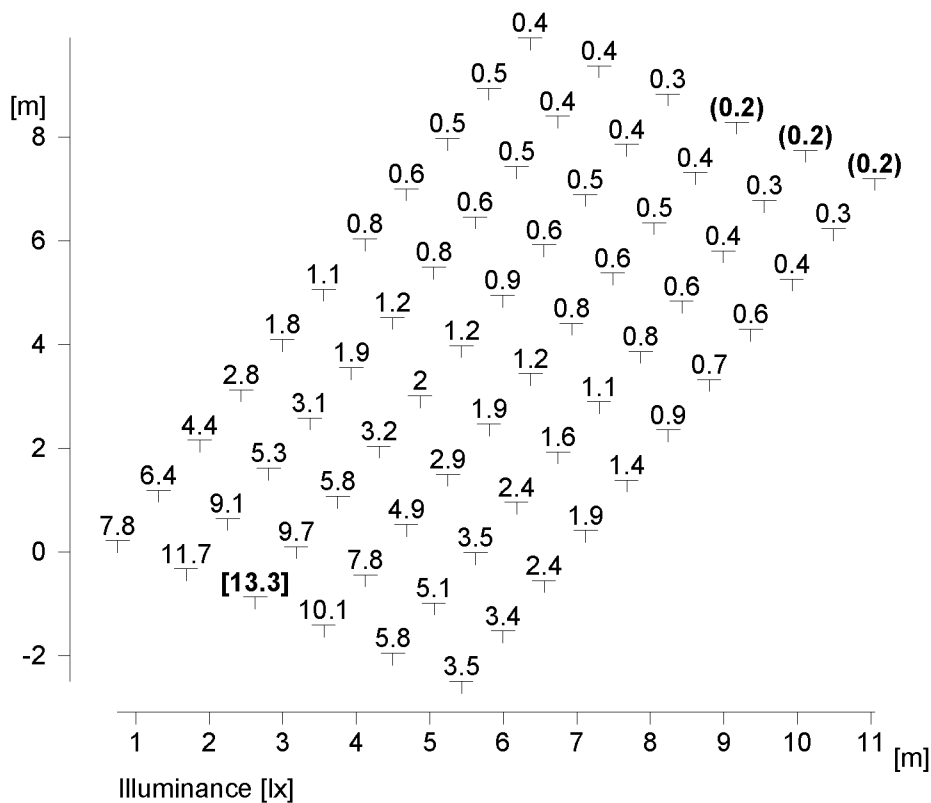
2.2.16 Table, TYP Plot 38 Rear and Side (E)



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2.2 Calculation results, Exterior 1

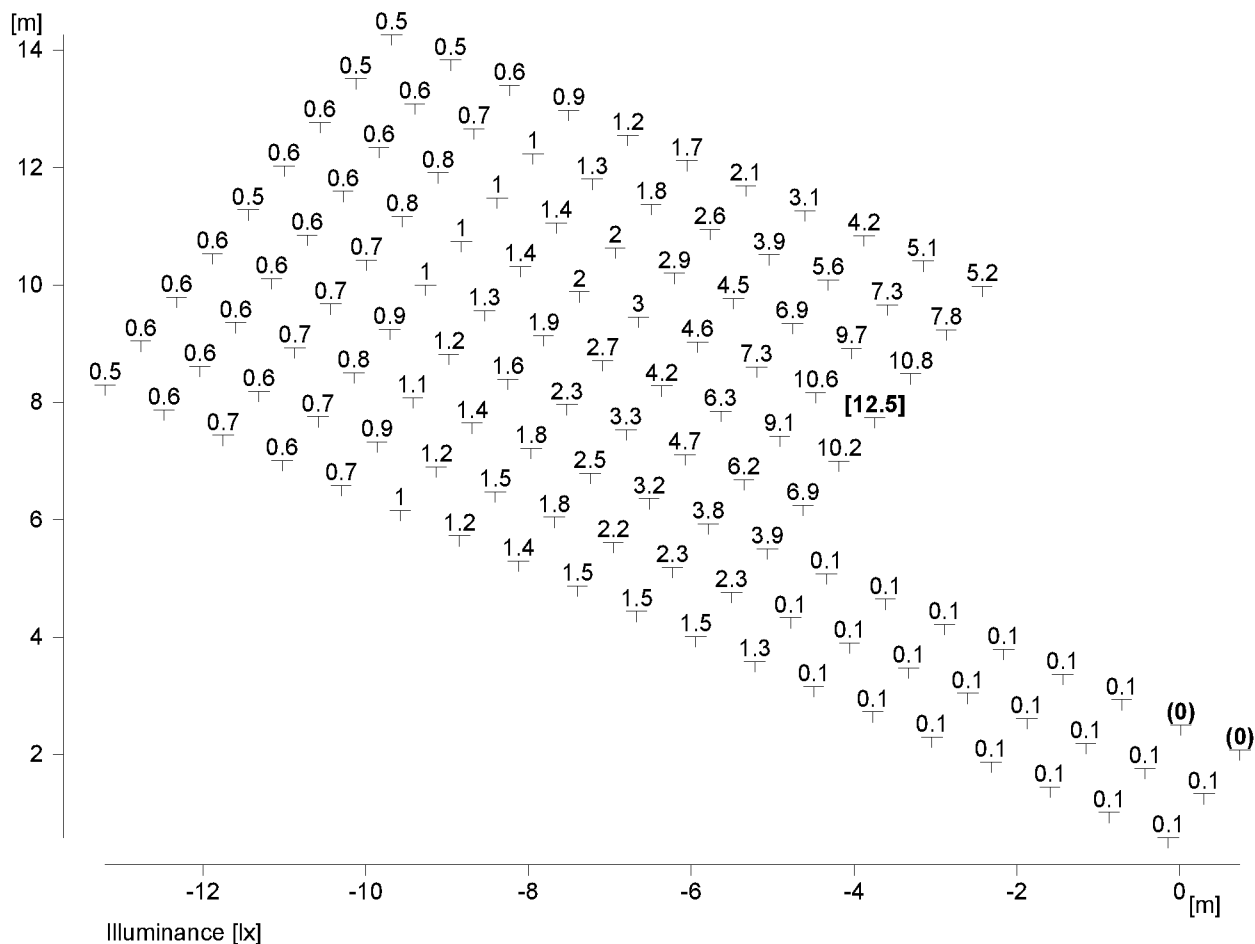
2.2.17 Table, TYP Plot 21 Rear (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 2.6 lx
Minimum illuminance	Emin : 0.2 lx
Maximum illuminance	Emax : 13.3 lx
Uniformity Uo	Emin/Em : 1 : 11.20 (0.09)
Diversity Ud	Emin/Emax : 1 : 57.99 (0.02)

2.2 Calculation results, Exterior 1

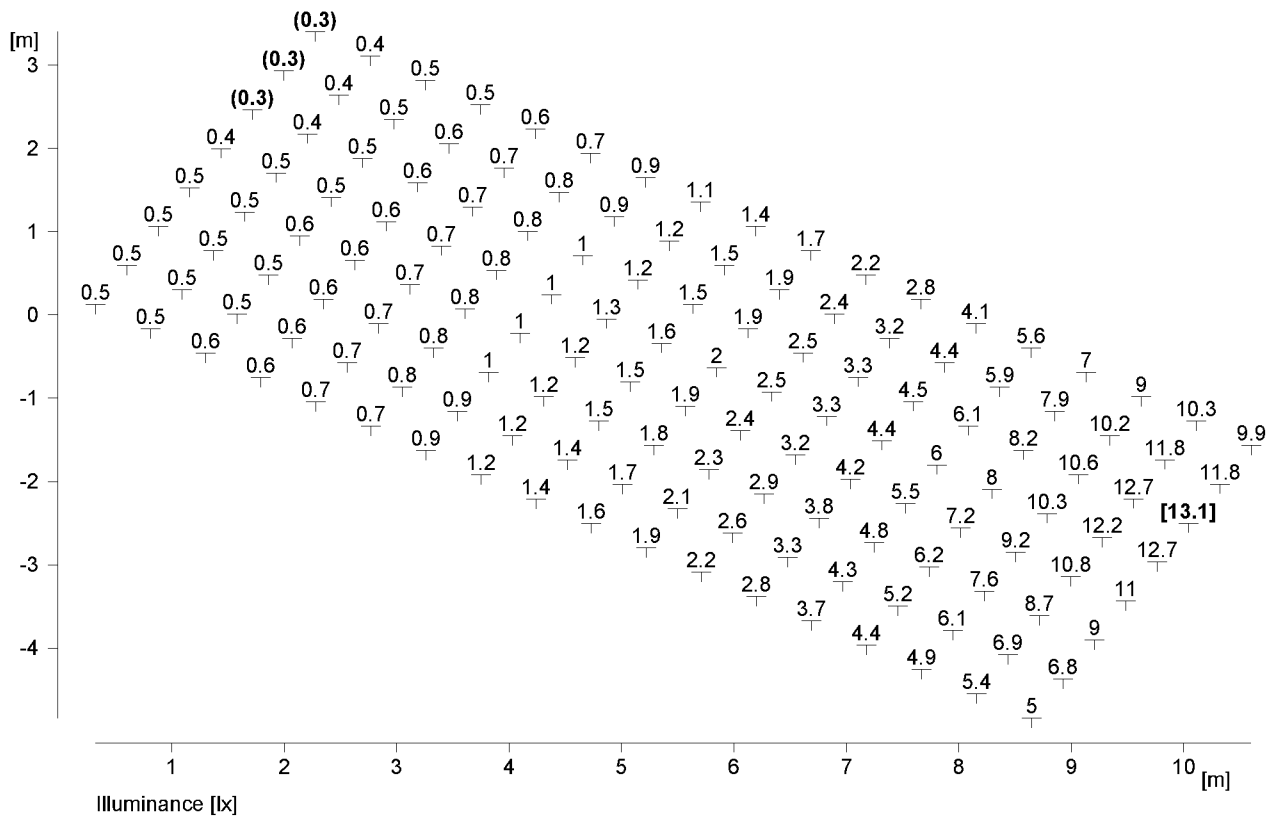
2.2.18 Table, TYP Plot 26 Rear and Side (E)



Height reference plane	: 0.21 m
Average illuminance	E_m : 2.1 lx
Minimum illuminance	E_{min} : 0 lx
Maximum illuminance	E_{max} : 12.5 lx
Uniformity U_o	E_{min}/E_m : 1 : 85.57 (0.01)
Diversity U_d	E_{min}/E_{max} : 1 : 502.73 (0.00)

2.2 Calculation results, Exterior 1

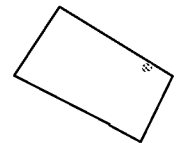
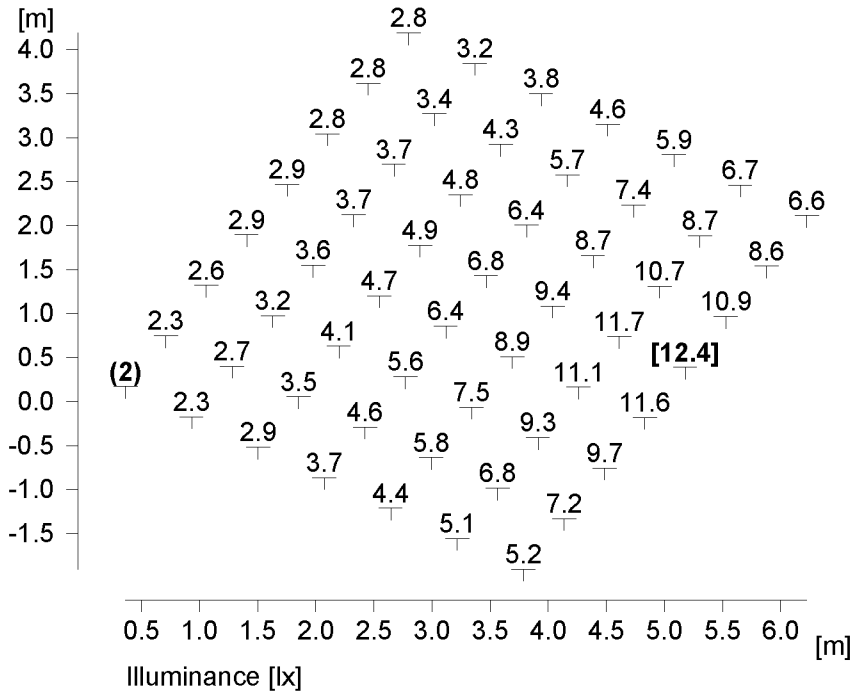
2.2.19 Table, TYP Plot 27 Rear (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 3.2 lx
Minimum illuminance	Emin : 0.3 lx
Maximum illuminance	Emax : 13.1 lx
Uniformity Uo	Emin/Em : 1 : 10.46 (0.10)
Diversity Ud	Emin/Emax : 1 : 42.38 (0.02)

2.2 Calculation results, Exterior 1

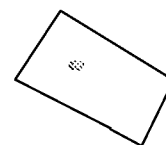
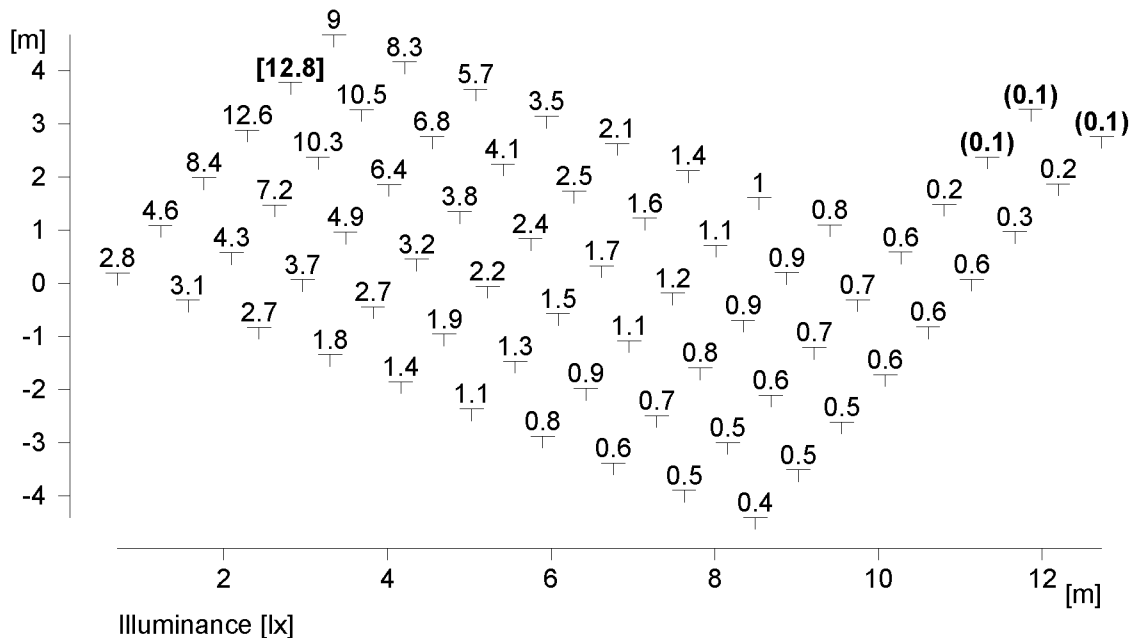
2.2.20 Table, TYP Plot 28 Rear (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 5.8 lx
Minimum illuminance	Emin : 2 lx
Maximum illuminance	Emax : 12.4 lx
Uniformity Uo	Emin/Em : 1 : 2.88 (0.35)
Diversity Ud	Emin/Emax : 1 : 6.16 (0.16)

2.2 Calculation results, Exterior 1

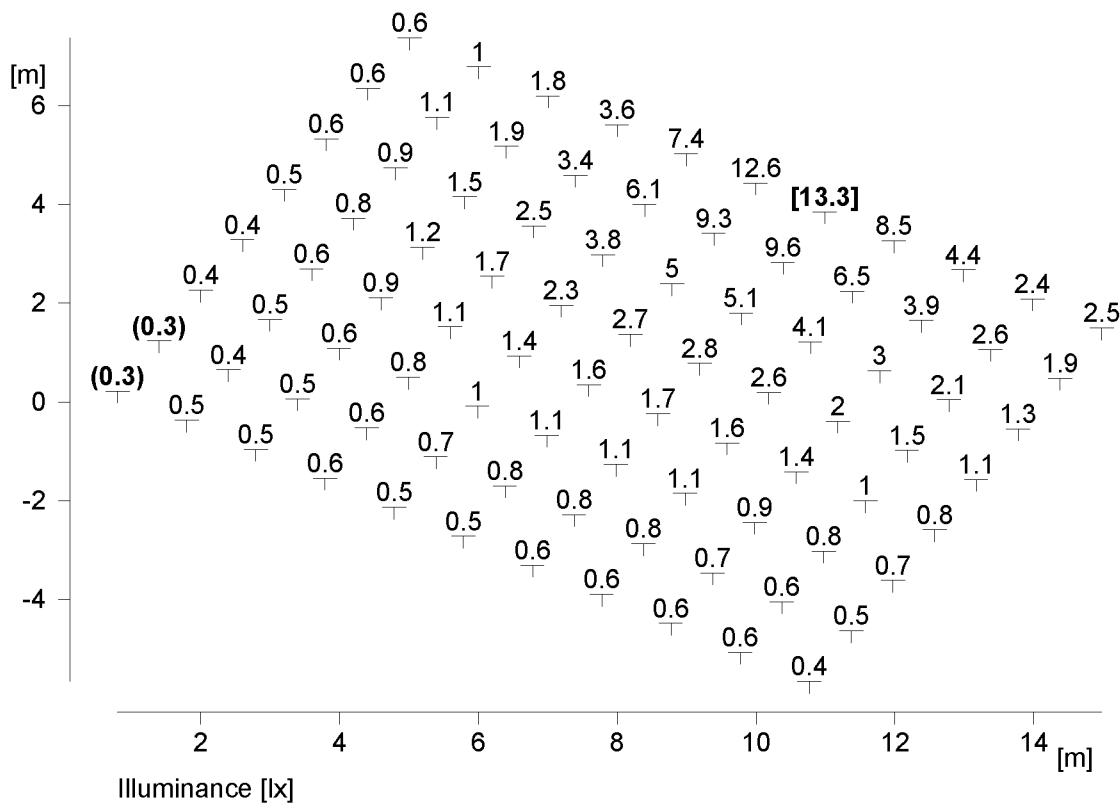
2.2.21 Table, TYP Plot 5 Rear (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 2.8 lx
Minimum illuminance	Emin : 0.1 lx
Maximum illuminance	Emax : 12.8 lx
Uniformity Uo	Emin/Em : 1 : 54.53 (0.02)
Diversity Ud	Emin/Emax : 1 : 252.33 (0.00)

2.2 Calculation results, Exterior 1

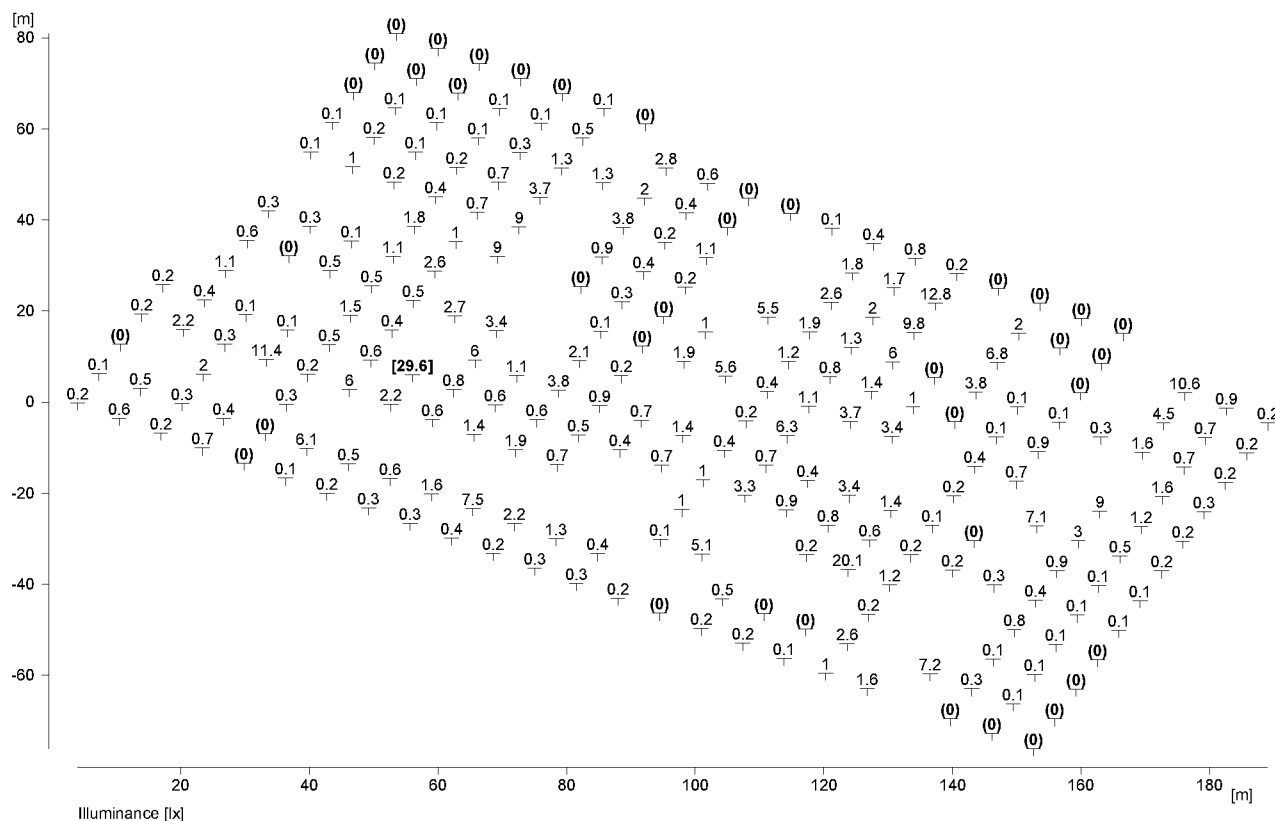
2.2.22 Table, TYP Plot 45 Rear (E)



Height reference plane	: 0.21 m
Average illuminance	Em : 2.1 lx
Minimum illuminance	Emin : 0.3 lx
Maximum illuminance	Emax : 13.3 lx
Uniformity Uo	Emin/Em : 1 : 8.27 (0.12)
Diversity Ud	Emin/Emax : 1 : 51.44 (0.02)

2.2 Calculation results, Exterior 1

2.2.23 Table, Whole site (E)

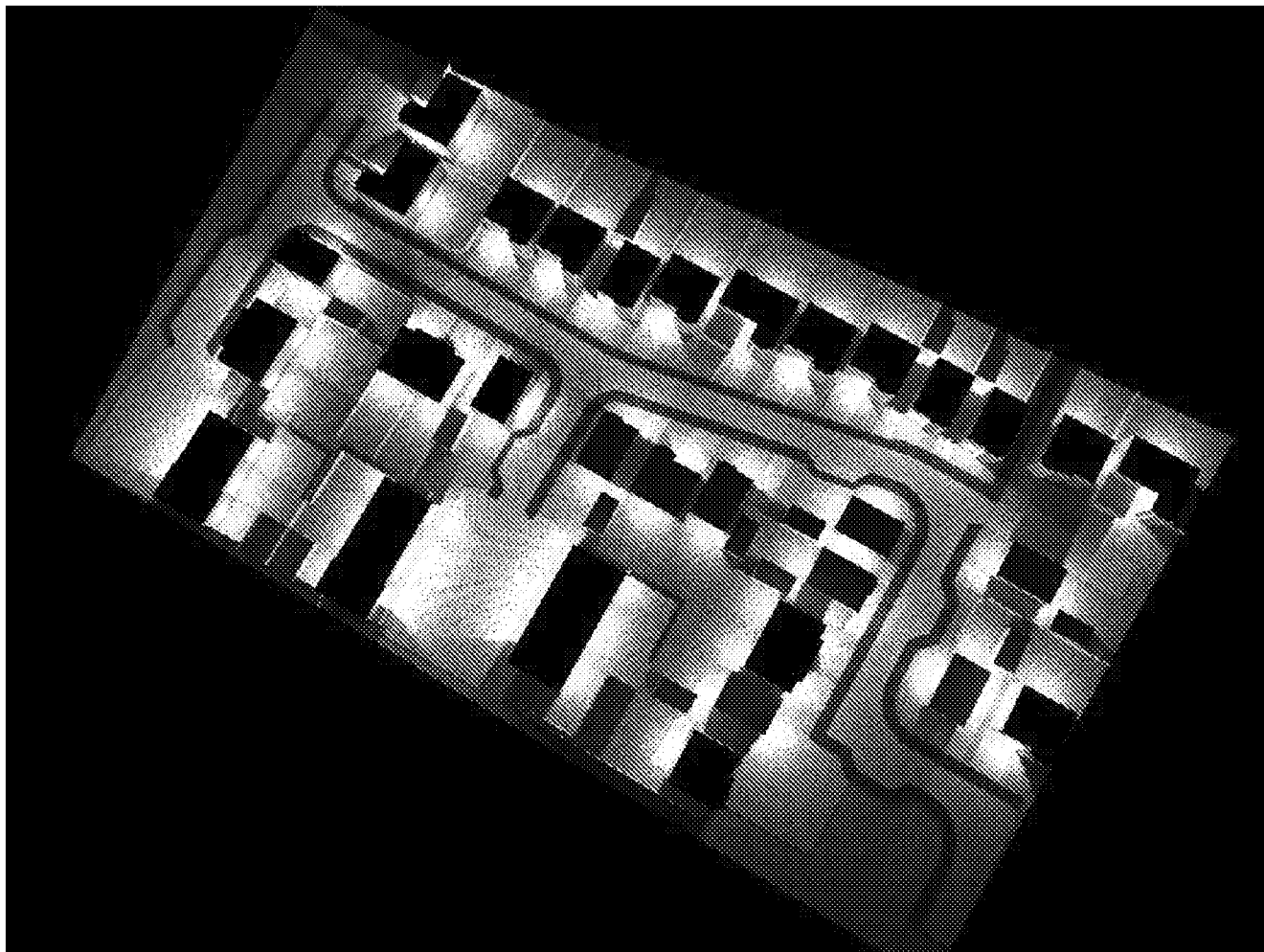


Height reference plane	: 0.21 m
Average illuminance	Em : 1.5 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 29.6 lx
Uniformity Uo	Emin/Em : ---
Diversity Ud	Emin/Emax : ---

2 Exterior 1

2.3 Calculation results, Exterior 1

2.3.1 3D luminance (raytracing), Variable view



Luminance in the illustration:

Minimum: : 0 cd/m²
Maximum: : 53400 cd/m²

Artificial light calculation : Direct part, with 2 inter-reflections