

INDUSTRIAL ESTATE

320180236P

Installation : PARKING - CIRCULATION LIGHTING

Project number : 547
Customer :
Processed by : D ARMSTRONG
Date : 13.06.2018

Project description:

ALL FITTINGS ARE ASSUMED TO BE SWITCHED BY LANDLORDS SUPPLY AS WE DONT KNOW THE QUANTITY OF UNITS IN EACH BLOCK - AREA.

ROAD LIGHTING BY OTHERS.

EXCLUDED AT THIS STAGE ARE PARKING BAYS OFF THE MAIN ROAD - BICYCLE AND MOTORBIKE BAYS. AND ALSO AREA BUILDING 1 AS THESE APPEAR TO BE FINISHED.

BUILDING 1 EXCLUDED

PARKING BAYS AND CIRCULATION BETWEEN UNITS LIT TO 20 LUX AVERAGE FOR SAFE TRANSFER BETWEEN UNITS - PARKING - LOADING UN- LOADING ETC.

FITTINGS ANGLED AT BETWEEN 5-10 DEGREE OPEN FROM 90 DEGREE FLAT TO PREVENT LIGHT POLLUTION AND GIVE UNIFORM LIGHT ACROSS AREAS.

SERVICE YARD LIT TO 30 LUX AVERAGE

The following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergences can occur.

Guarantee claims for luminaire data are excluded.

Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

1 Luminaire data

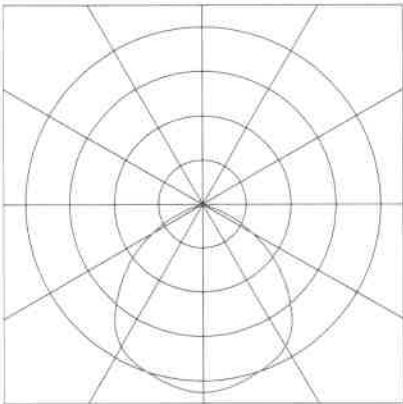
1.1 Disano Illuminazione SpA, 1710 Cripto COB small ... (1710 LED 38w CL...)

1.1.1 Data sheet

Manufacturer: Disano Illuminazione SpA

1710 LED 38w CLD CELL 1710 Cripto COB small - diffondente

Luminaire data		Equipped with	
Luminaire efficiency	: 100%	Quantity	: 1
Luminaire efficacy	: 96 lm/W	Designation	: cob4700_1710
Classification	: A50 ↓100.0% ↑0.0%	Colour	: 4000
CIE Flux Codes	: 58 91 100 100 100	Luminous flux	: 3907 lm
UGR 4H 8H	: 28.3 / 28.3	Colour reproduction	: 90
Power	: 40.7 W		
Luminous flux	: 3907 lm		
Dimensions	: 218 mm x 322 mm x 60 mm		



Object : INDUSTRIAL ESTATE
 Installation : PARKING - CIRCULATION LIGHTING
 Project number : 547
 Date : 13.06.2018

2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Product data:

Type No. \ Make

Disano Illuminazione SpA

Order No. : 1710 LED 38w CLD CELL
 Luminaire name : 1710 Cripto COB small - diffondente
 Equipment : 1 x cob4700_1710 40.7 W / 3907 lm

No.	Centre point			Rotation angle			Target coordinates		
	X [m]	Y [m]	Z [m]	Z [°]	C0 [°]	C90 [°]	Xa [m]	Ya [m]	Za [m]
Disano Illuminazione SpA 1710 Cripto COB small - diffondente 1710 LED 38w CLD CELL									
1.1	2705.73	209.33	5.96	172.80	0.00	10.00	2706.77	209.20	0.00
1.2	2707.07	220.00	5.96	172.80	0.00	10.00	2708.11	219.86	0.00
1.3	2708.42	230.66	5.96	172.80	0.00	10.00	2709.46	230.53	0.00
1.4	2709.77	241.33	5.96	172.80	0.00	10.00	2710.81	241.19	0.00
1.5	2711.11	251.99	5.96	172.80	0.00	10.00	2712.16	251.86	0.00
2.1	2723.70	207.20	5.97	172.20	0.00	-10.00	2722.66	207.35	0.00
2.2	2724.95	217.88	5.97	172.20	0.00	-10.00	2723.91	218.02	0.00
2.3	2726.21	228.55	5.97	172.20	0.00	-10.00	2725.16	228.69	0.00
2.4	2727.46	239.23	5.97	172.20	0.00	-10.00	2726.41	239.37	0.00
2.5	2728.71	249.90	5.97	172.20	0.00	-10.00	2727.66	250.04	0.00
3.1	2696.33	272.47	5.97	262.14	0.00	-10.00	2696.19	271.43	0.00
3.2	2708.28	271.02	5.97	262.14	0.00	-10.00	2708.13	269.97	0.00
3.3	2720.22	269.56	5.97	262.14	0.00	-10.00	2720.08	268.52	0.00
3.4	2732.17	268.10	5.97	262.14	0.00	-10.00	2732.03	267.06	0.00
3.5	2744.12	266.64	5.97	262.14	0.00	-10.00	2743.98	265.60	0.00
4.1	2746.14	267.86	5.97	172.96	0.00	10.00	2747.18	267.73	0.00
4.2	2747.34	277.66	5.97	172.96	0.00	10.00	2748.39	277.53	0.00
4.3	2748.55	287.45	5.97	172.96	0.00	10.00	2749.60	287.32	0.00
4.4	2749.76	297.25	5.97	172.96	0.00	10.00	2750.81	297.12	0.00
5.1	2763.35	275.79	5.97	353.62	0.10	10.00	2762.31	275.92	0.00
5.2	2764.36	284.05	5.97	353.62	0.10	10.00	2763.32	284.18	0.00
5.3	2765.37	292.31	5.97	353.62	0.10	10.00	2764.33	292.44	0.00
5.4	2766.38	300.57	5.97	353.62	0.10	10.00	2765.34	300.70	0.00
1	2762.69	267.57	5.97	352.85	0.00	10.00	2761.64	267.70	0.00
2	2763.35	267.56	5.97	173.57	0.00	10.00	2764.39	267.44	0.00
3	2761.07	242.03	5.97	264.64	0.00	10.00	2761.17	243.08	0.00
4	2750.81	243.03	5.97	264.64	0.00	10.00	2750.91	244.08	0.00
5	2753.83	199.29	5.97	247.99	0.00	10.00	2754.23	200.27	0.00
6	2746.46	183.60	5.97	68.77	0.00	10.00	2746.08	182.62	0.00
6.1	2683.46	188.17	5.97	82.60	-0.12	10.00	2683.34	187.12	0.00
6.2	2694.15	186.91	5.97	82.60	-0.12	10.00	2694.02	185.86	0.00
6.3	2704.84	185.65	5.97	82.60	-0.12	10.00	2704.71	184.60	0.00
6.4	2715.52	184.39	5.97	82.60	-0.12	10.00	2715.40	183.34	0.00
6.5	2726.21	183.12	5.97	82.60	-0.12	10.00	2726.09	182.08	0.00
6.6	2736.90	181.86	5.97	82.60	-0.12	10.00	2736.78	180.82	0.00

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018



2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

7	2746.67	216.14	5.97	80.00	0.00	10.00	2746.49	215.10	0.00
8	2758.15	214.78	5.97	80.00	0.00	10.00	2757.96	213.74	0.00
9	2694.84	258.12	5.97	264.64	0.00	10.00	2694.94	259.17	0.00
10	2710.11	256.41	5.97	264.64	0.00	10.00	2710.20	257.46	0.00
11	2732.83	253.53	5.97	262.00	0.00	10.00	2732.98	254.57	0.00
12	2742.15	252.29	5.97	262.00	0.00	10.00	2742.30	253.33	0.00
13	2752.55	215.41	5.97	80.00	0.00	10.00	2752.37	214.37	0.00

Structural elements

Virtual measuring surface

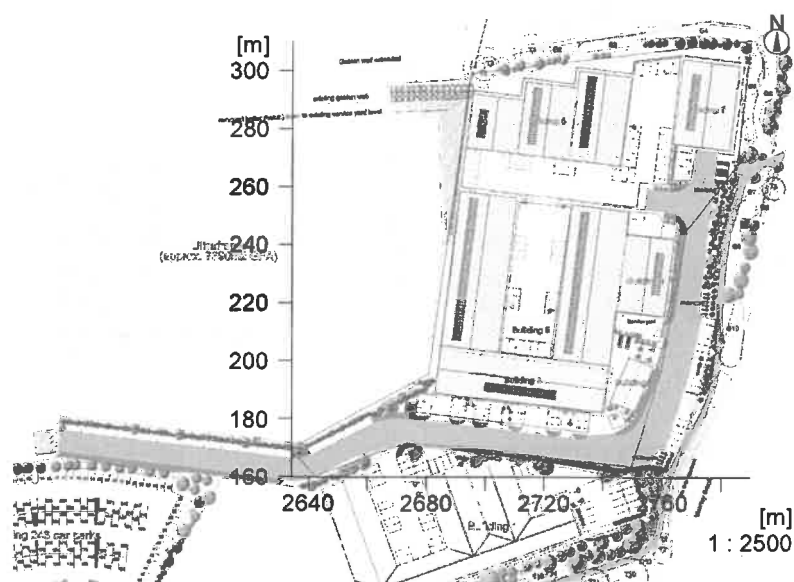
No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle	
							L axis	Q axis
Ref. plane	1.1							
	2634.81	170.00	0.00	176.20	222.65	246.95	0.00	0.00
PARKING BUILDINGS 5								
m 1	2711.50	254.50	0.00	23.99	54.14	82.81	0.00	0.00
PARKING BUILDING 4								
m 2	2748.97	251.38	0.00	17.37	10.18	83.10	0.00	0.00
SERVICE YARD								
m 3	2744.77	216.60	0.00	17.15	10.67	353.11	0.00	0.00
DISABLED PARKING BAYS BELOW BUILDING 3								
m 4	2741.75	180.68	0.00	6.16	6.18	20.00	0.00	0.00
DISABLED PARKING BUILDING 3								
m 5	2753.99	205.74	0.00	7.61	7.47	74.12	0.00	0.00
PARKING TO FRONT OF BUILDING 2								
m 6	2682.97	188.06	0.00	59.94	13.62	356.11	0.00	0.00
MAIN PARK BAYS BUILDING 6-7								
m 7	2750.70	303.02	0.00	76.00	63.00	82.33	0.00	0.00
5 PARK BAYS FRONT BUILDING 7								
m 8	2764.94	274.30	0.00	8.01	13.06	83.11	0.00	0.00

Others

No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle	
							L axis	Q axis
A 1	2710.63	255.98	-0.99	82.32	78.69	83.11	0.00	0.00
A 2	2750.77	182.01	0.00	14.93	19.05	337.48	0.00	0.00
A 3	2695.50	291.82	0.00	56.31	37.22	353.12	0.00	0.00
A 4	2766.93	303.73	0.00	23.12	31.60	83.12	0.00	0.00
Pi 1	2762.77	267.32	-0.64	0.10	0.10	0.00	0.00	0.00
Pi 2	2692.88	314.11	0.00	0.50	0.50	0.00	0.00	0.00

RELUX®
light simulation tools

2.1.2 Floor plan

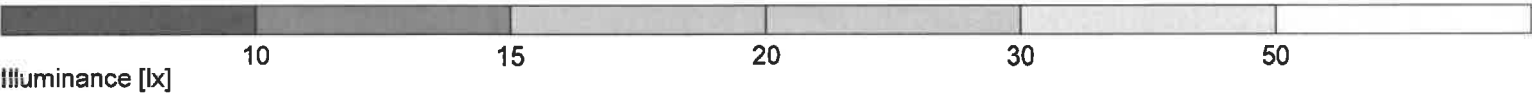
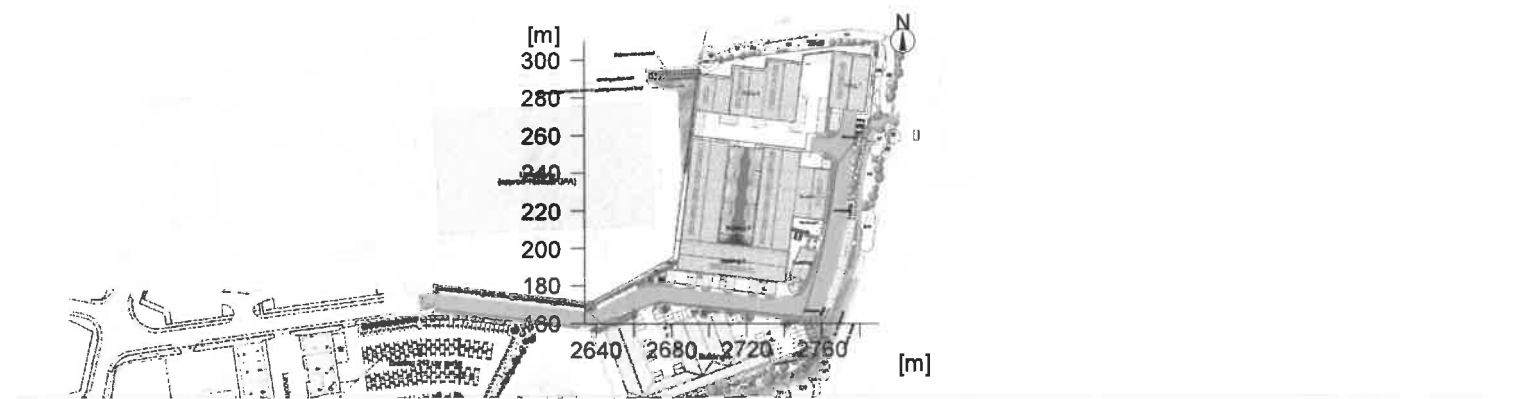


Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, PARKING BUILDINGS 5



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	
164094 lm	
Total power	1709.4 W
Total power per area (12266.89 m²)	0.14 W/m²

Illuminance	
Average illuminance	Eav 20.1 lx
Minimum illuminance	Emin 5.2 lx
Maximum illuminance	Emax 43.1 lx
Uniformity Uo	Emin/Em 1:3.86 (0.26)
Diversity Ud	Emin/Emax 1:8.3 (0.12)

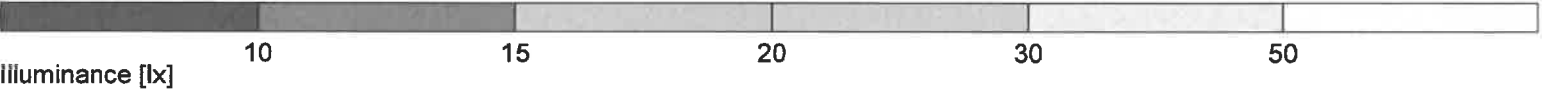
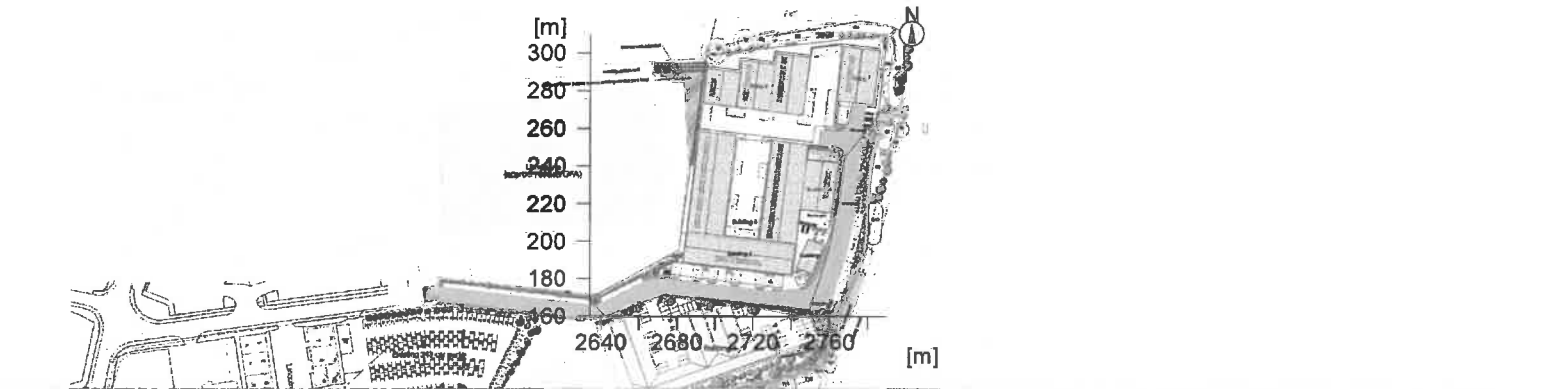
Type No.\Make

7 42		Disano Illuminazione SpA
		Order No. : 1710 LED 38w CLD CELL
		Luminaire name : 1710 Cripto COB small - diffondente
		Equipment : 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.2 Result overview, PARKING BUILDING 4



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	
164094 lm	
Total power	
1709.4 W	
Total power per area (12266.89 m²)	
0.14 W/m²	

Illuminance		
Average illuminance	Eav	22.7 lx
Minimum illuminance	Emin	8.7 lx
Maximum illuminance	Emax	40.2 lx
Uniformity Uo	Emin/Em	1:2.6 (0.39)
Diversity Ud	Emin/Emax	1:4.59 (0.22)

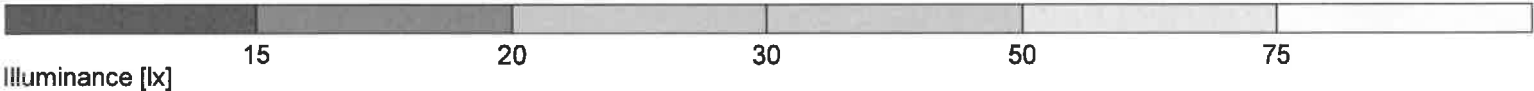
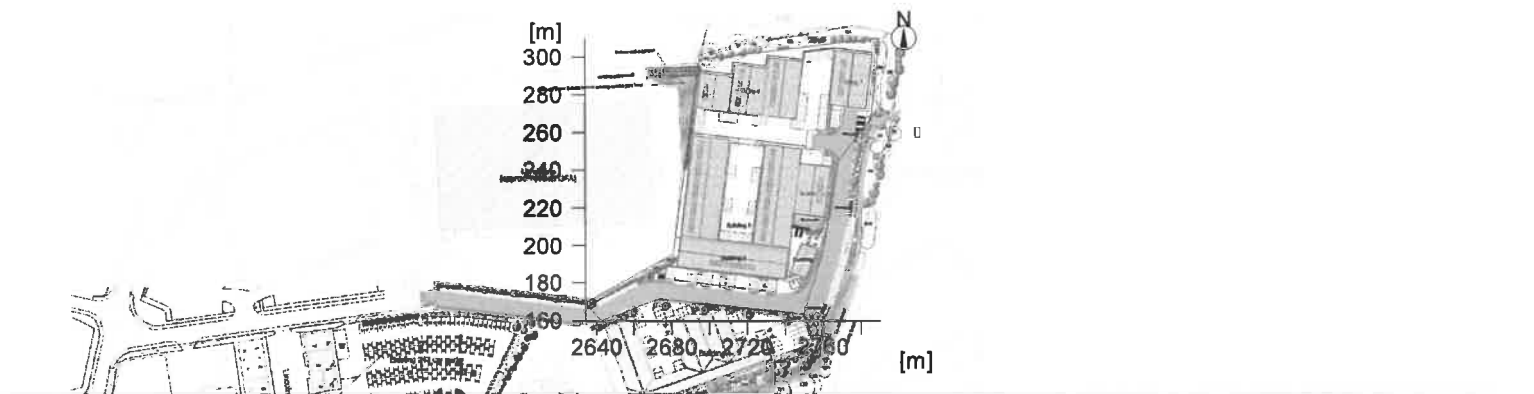
Type No.\Make

7		42	Disano Illuminazione SpA
			Order No. : 1710 LED 38w CLD CELL
			Luminaire name : 1710 Cripto COB small - diffondente
			Equipment : 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.3 Result overview, SERVICE YARD



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80

Total luminous flux of all lamps	164094 lm
Total power	1709.4 W
Total power per area (12266.89 m²)	0.14 W/m²

Illuminance			
Average illuminance	Eav	35.3 lx	
Minimum illuminance	Emin	14.6 lx	
Maximum illuminance	Emax	58.3 lx	
Uniformity Uo	Emin/Em	1:2.41 (0.41)	
Diversity Ud	Emin/Emax	1:3.99 (0.25)	

Type No. \ Make

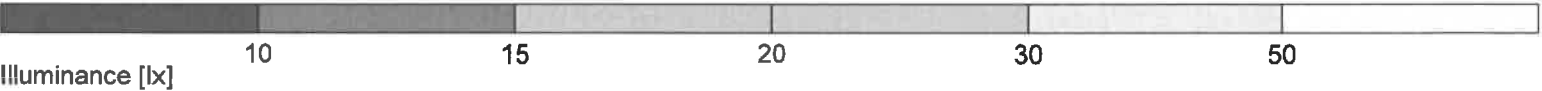
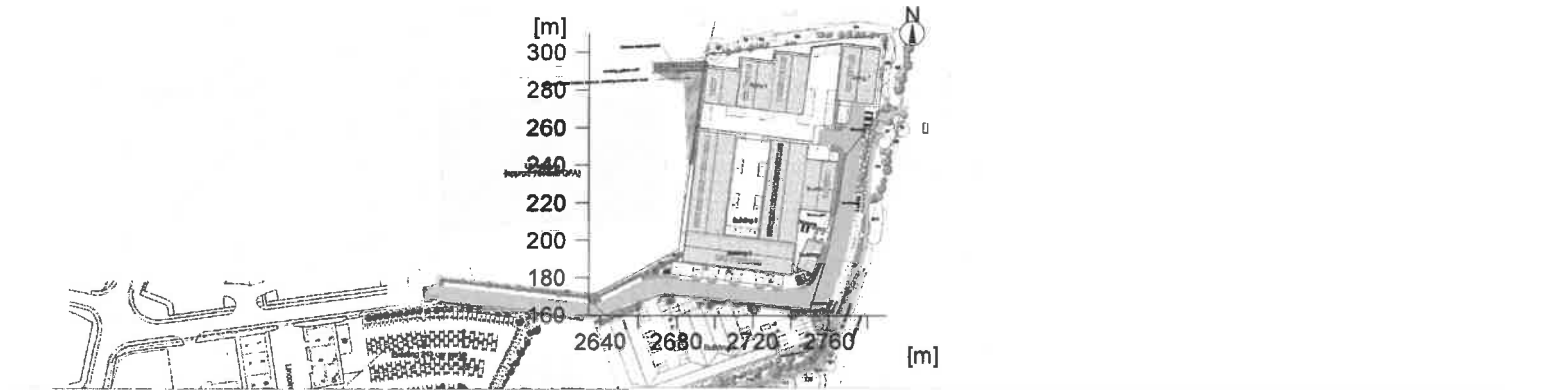
Disano Illuminazione SpA	
Order No.	: 1710 LED 38w CLD CELL
Luminaire name	: 1710 Cripto COB small - diffondente
Equipment	: 1 x cob4700_1710 40.7 W / 3907 lm



Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.4 Result overview, DISABLED PARKING BAYS BELOW BUILDING 3



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	
164094 lm	
Total power	
1709.4 W	
Total power per area (12266.89 m²)	
0.14 W/m²	

Illuminance		
Average illuminance	Eav	21.5 lx
Minimum illuminance	Emin	11.1 lx
Maximum illuminance	Emax	35.3 lx
Uniformity Uo	Emin/Em	1:1.94 (0.52)
Diversity Ud	Emin/Emax	1:3.18 (0.31)

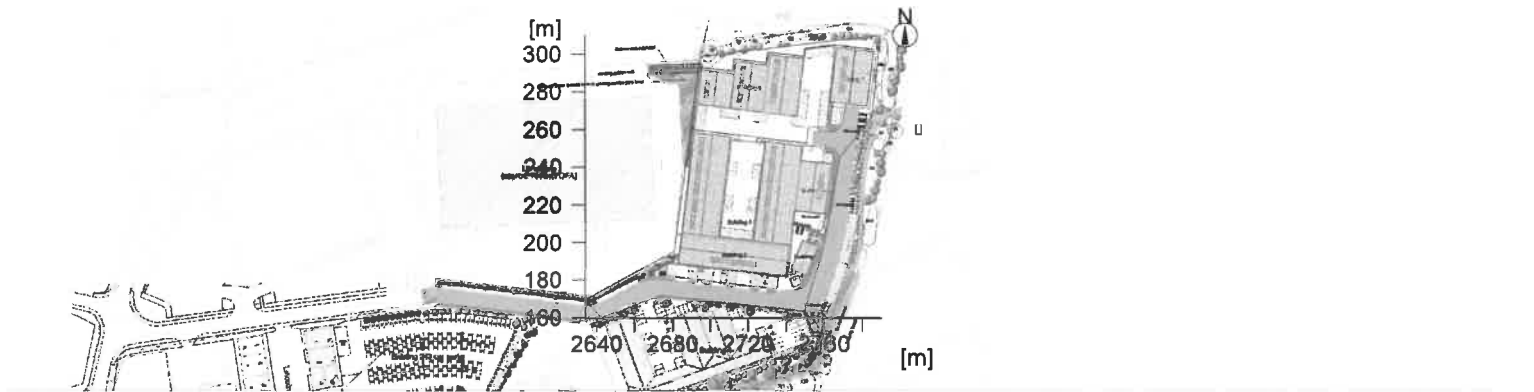
Type No.\Make

7		42	Disano Illuminazione SpA
			Order No. : 1710 LED 38w CLD CELL
			Luminaire name : 1710 Cripto COB small - diffondente
			Equipment : 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.5 Result overview, DISABLED PARKING BUILDING 3



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	
164094 lm	
Total power	
1709.4 W	
Total power per area (12266.89 m²)	
0.14 W/m²	

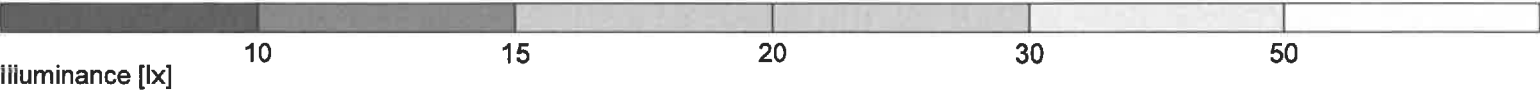
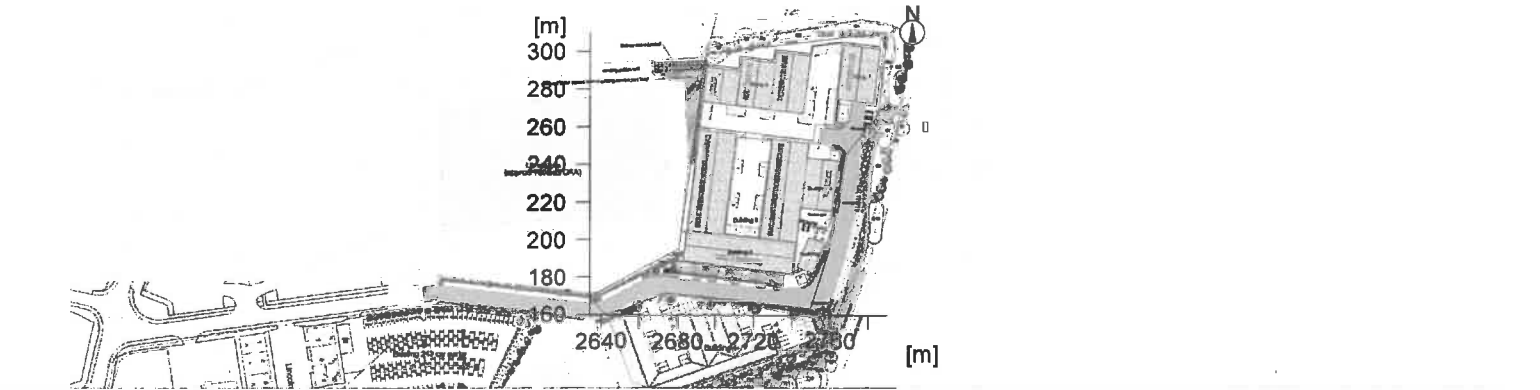
Illuminance			
Average illuminance	Eav		24.7 lx
Minimum illuminance	Emin		11 lx
Maximum illuminance	Emax		40.8 lx
Uniformity Uo	Emin/Em		1:2.25 (0.45)
Diversity Ud	Emin/Emax		1:3.71 (0.27)

Type No.Make

7		42		Disano Illuminazione SpA	
				Order No.	: 1710 LED 38w CLD CELL
				Luminaire name	: 1710 Cripto COB small - diffondente
				Equipment	: 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1
2.2.6 Result overview, PARKING TO FRONT OF BUILDING 2



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	
164094 lm	
Total power	1709.4 W
Total power per area (12266.89 m²)	0.14 W/m²

Illuminance		
Average illuminance	Eav	21.4 lx
Minimum illuminance	Emin	4.1 lx
Maximum illuminance	Emax	40.9 lx
Uniformity Uo	Emin/Em	1:5.29 (0.19)
Diversity Ud	Emin/Emax	1:10.1 (0.1)

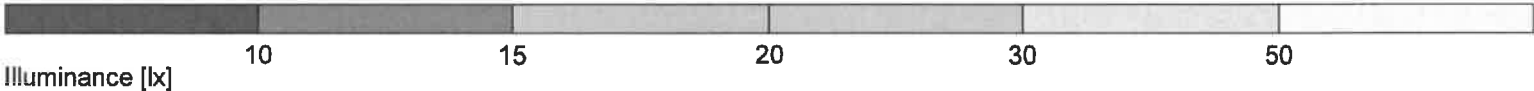
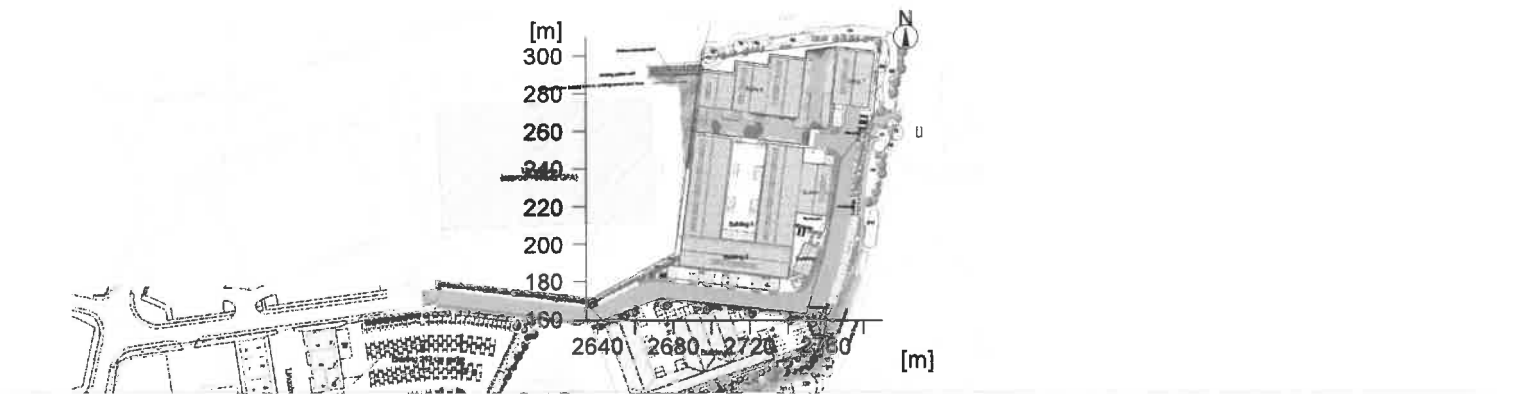
Type No.\Make

7 42		Disano Illuminazione SpA	
		Order No.	: 1710 LED 38w CLD CELL
		Luminaire name	: 1710 Cripto COB small - diffondente
		Equipment	: 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.7 Result overview, MAIN PARK BAYS BUILDING 6-7



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	
164094 lm	
Total power	
1709.4 W	
Total power per area (12266.89 m²)	
0.14 W/m²	

Illuminance		
Average illuminance	Eav	22.5 lx
Minimum illuminance	Emin	4 lx
Maximum illuminance	Emax	46 lx
Uniformity Uo	Emin/Em	1:5.69 (0.18)
Diversity Ud	Emin/Emax	1:11.6 (0.09)

Type No. \Make

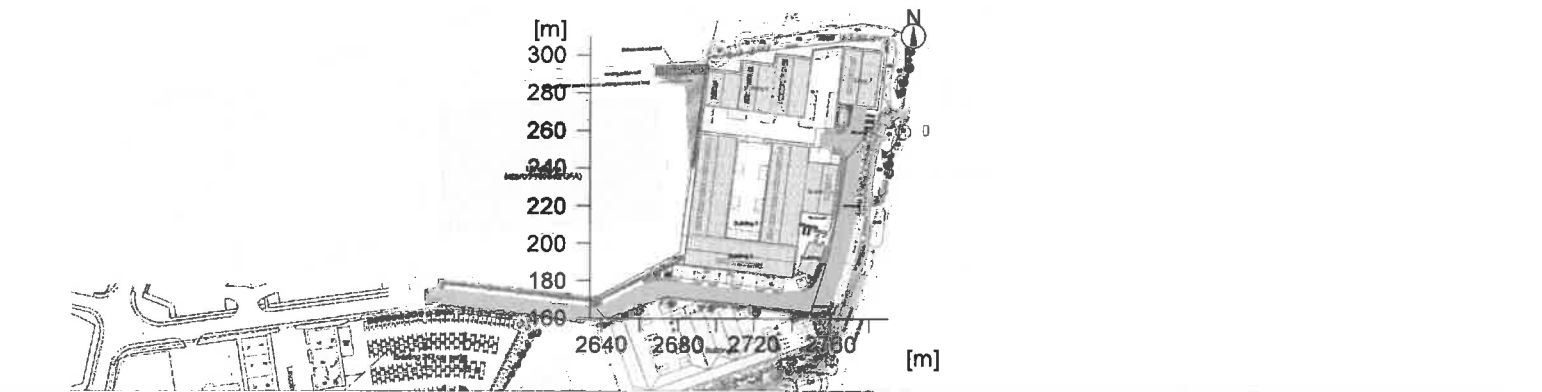
Disano Illuminazione SpA
Order No. : 1710 LED 38w CLD CELL
Luminaire name : 1710 Cripto COB small - diffondente
Equipment : 1 x cob4700_1710 40.7 W / 3907 lm



Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.8 Result overview, 5 PARK BAYS FRONT BUILDING 7



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	5.96 m
Maintenance factor	0.80

Total luminous flux of all lamps	164094 lm
Total power	1709.4 W
Total power per area (12266.89 m²)	0.14 W/m²

Illuminance

Average illuminance	Eav	23.2 lx
Minimum illuminance	Emin	4.8 lx
Maximum illuminance	Emax	64.5 lx
Uniformity Uo	Emin/Em	1:4.83 (0.21)
Diversity Ud	Emin/Emax	1:13.4 (0.07)

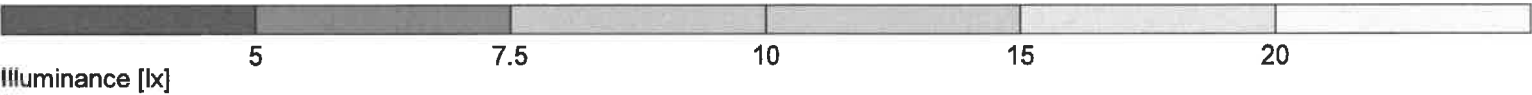
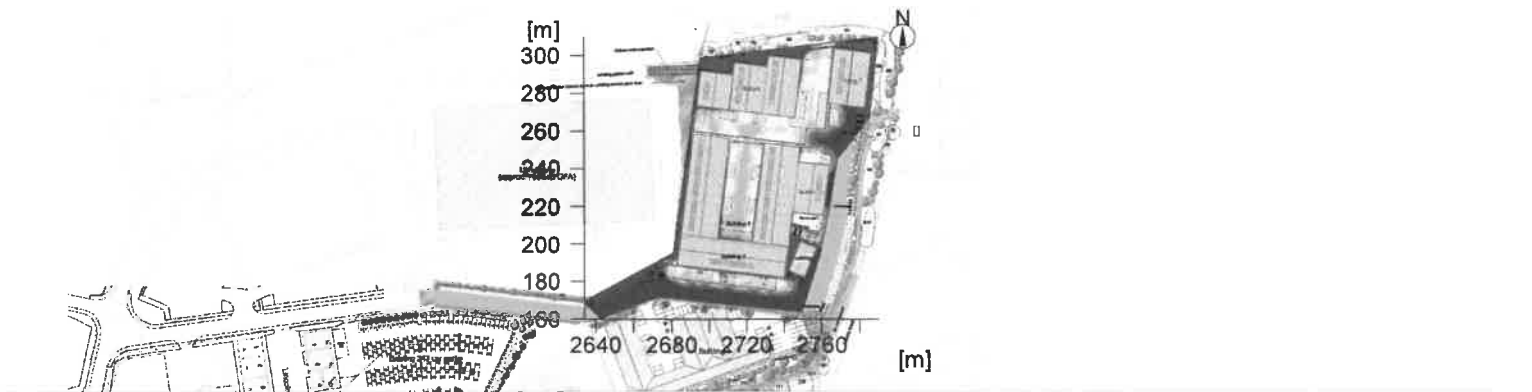
Type No.Make

7	42	Disano Illuminazione SpA
		Order No. : 1710 LED 38w CLD CELL
		Luminaire name : 1710 Cripto COB small - diffondente
		Equipment : 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.2 Summary, Exterior 1

2.2.9 Result overview, Evaluation area 1



General	
Calculation algorithm used	Average indirect fraction
photometric centre height.	5.96 m
Maintenance factor	0.80
Total luminous flux of all lamps	164094 lm
Total power	1709.4 W
Total power per area (12266.89 m²)	0.14 W/m² (1.16 W/m²/100lx)

Evaluation area 1	Reference plane 1.1
	Horizontal
Em	12 lx
Emin	0 lx
Emin/Eav (Uo)	---
Emin/Emax (Ud)	---
Position	0.00 m

Type No. \Make

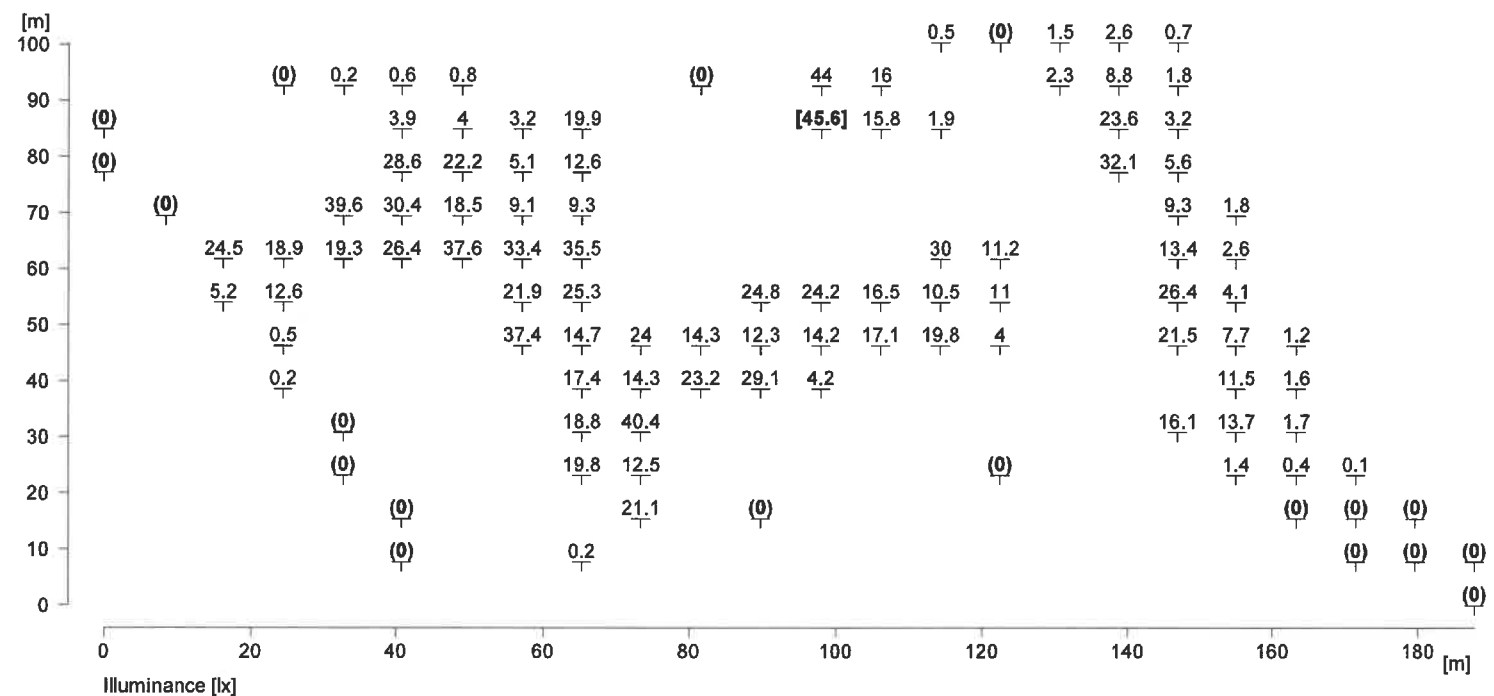
Disano Illuminazione SpA	
Order No.	: 1710 LED 38w CLD CELL
Luminaire name	: 1710 Cripto COB small - diffondente
Equipment	: 1 x cob4700_1710 40.7 W / 3907 lm

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2 Exterior 1

2.3 Calculation results, Exterior 1

2.3.1 Table, Reference plane 1.1 (E)



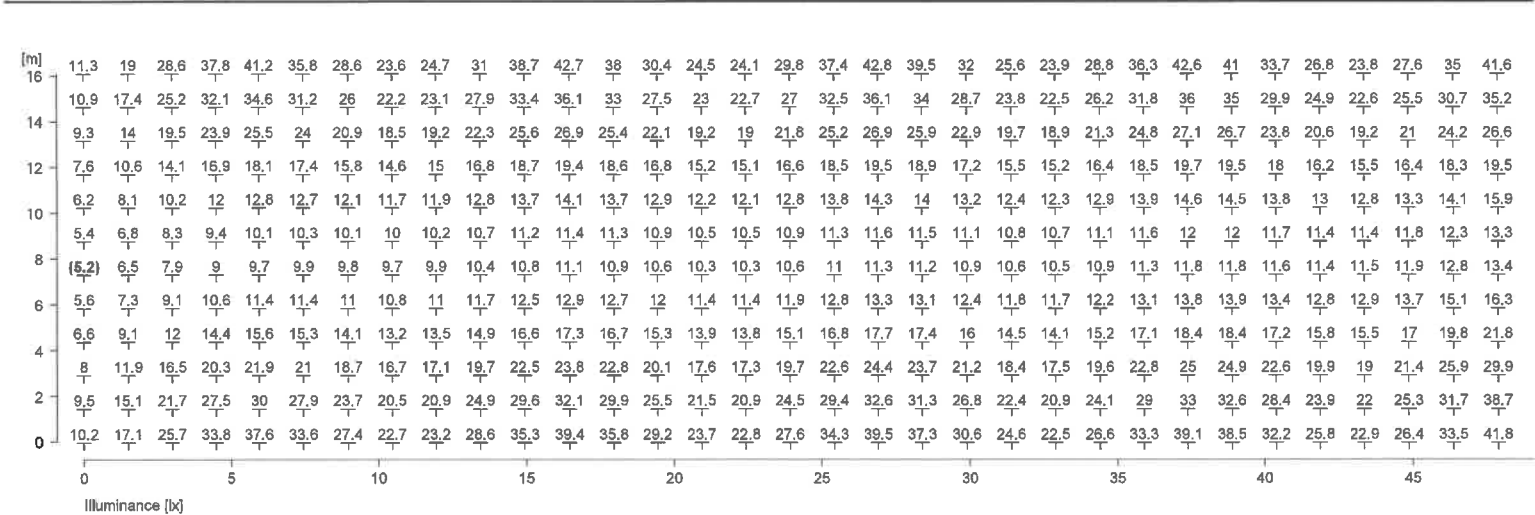
Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 45.6 lx
Uniformity Uo	Emin/Eav	: ---
Diversity Ud	Emin/Emax	: ---

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018



2.3 Calculation results, Exterior 1
2.3.2 Table, PARKING BUILDINGS 5 (E)



Part1

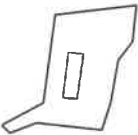
Height of the reference plane		
Average illuminance	Eav	: 20.1 lx
Minimum illuminance	Emin	: 5.2 lx
Maximum illuminance	Emax	: 43.1 lx
Uniformity Uo	Emin/Eav	: 1 : 3.86 (0.26)
Diversity Ud	Emin/Emax	: 1 : 8.30 (0.12)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.2 Table, PARKING BUILDINGS 5 (E)

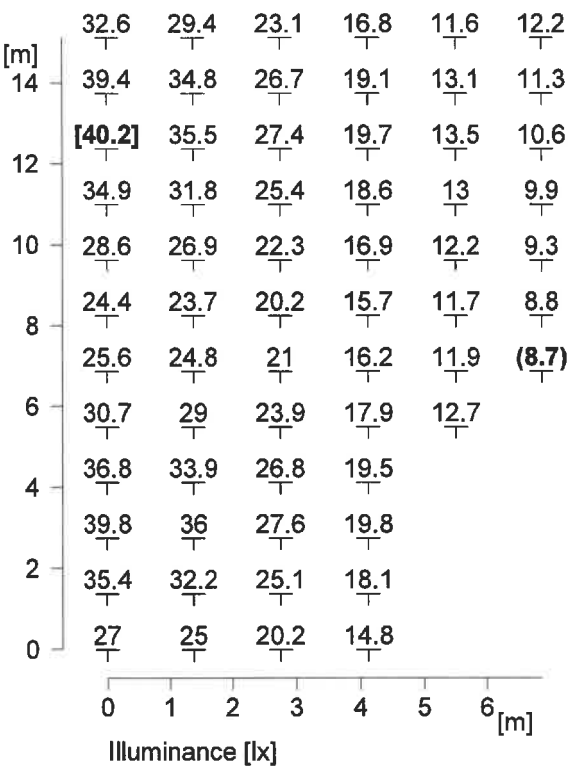
1.1	33
4.6	42.4
26	30.5
2.2	21.3
6.2	15.5
3.4	12.8
3.5	12.8
6.5	15.4
2.1	20.1
0.5	27.5
0.1	34.9
3.1	36
50	[m]



Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.3 Table, PARKING BUILDING 4 (E)



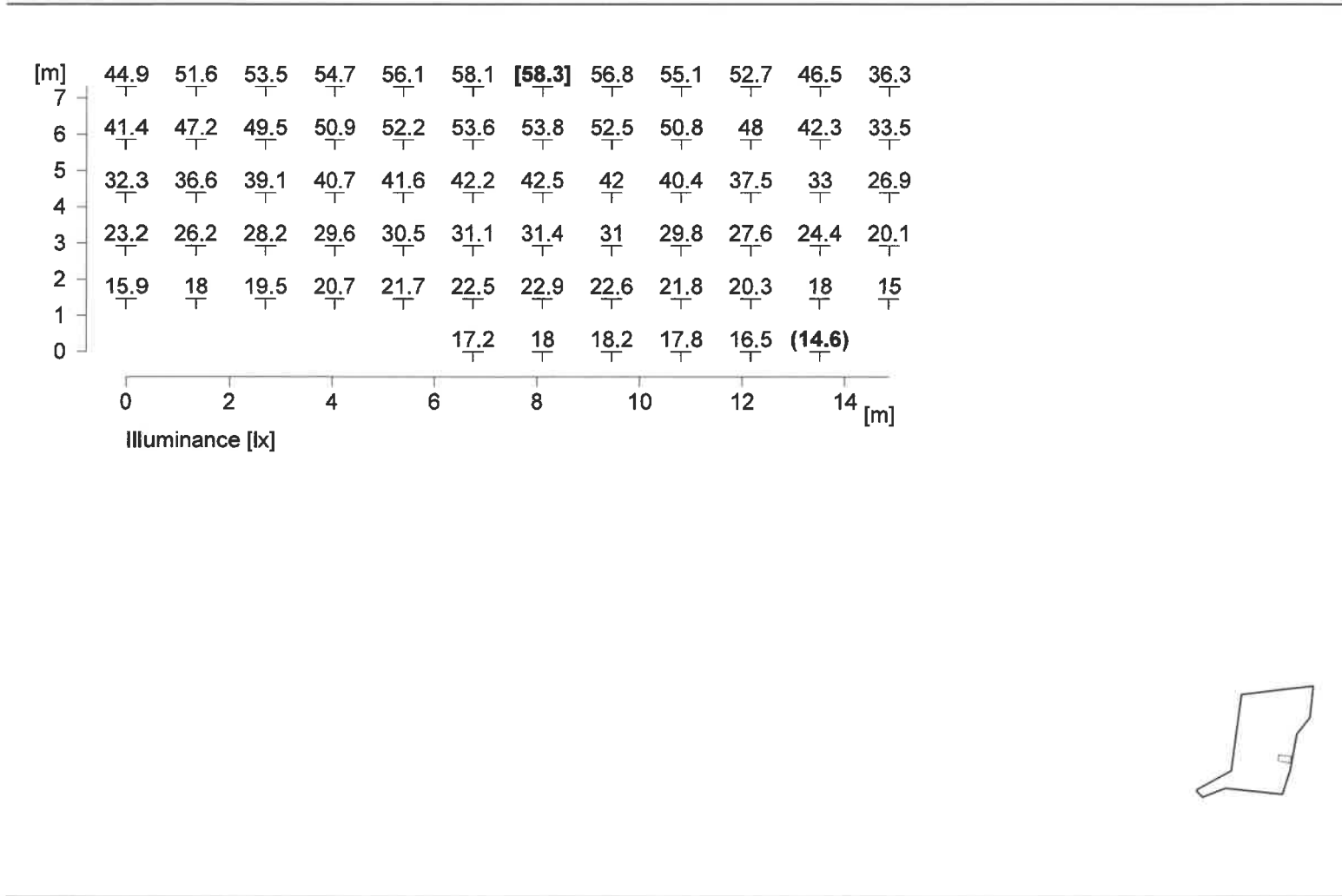
Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 22.7 lx
Maximum illuminance	Emax	: 8.7 lx
Uniformity Uo	Emin/Eav	: 40.2 lx
Diversity Ud	Emin/Emax	: 1 : 2.60 (0.39)
		: 1 : 4.59 (0.22)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.4 Table, SERVICE YARD (E)



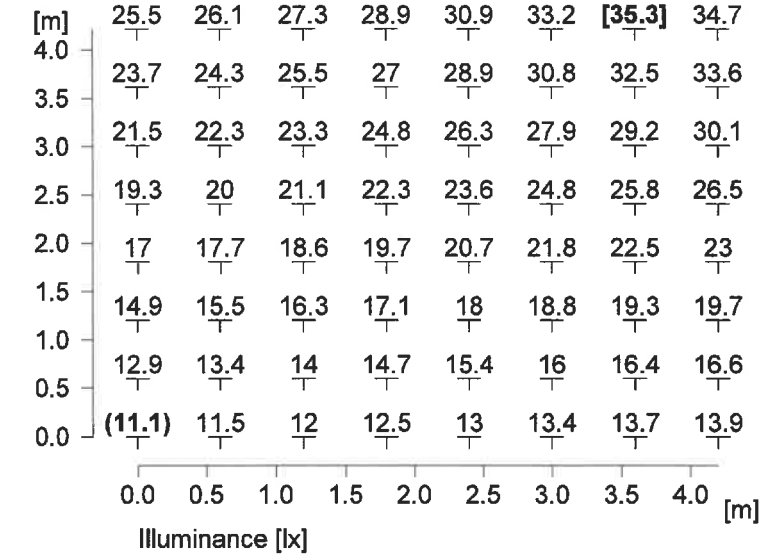
Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 35.3 lx
Maximum illuminance	Emax	: 14.6 lx
Uniformity Uo	Emin/Eav	: 58.3 lx
Diversity Ud	Emin/Eav	: 1 : 2.41 (0.41)
	Emin/Emax	: 1 : 3.99 (0.25)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.5 Table, DISABLED PARKING BAYS BELOW BUILDING 3 (E)



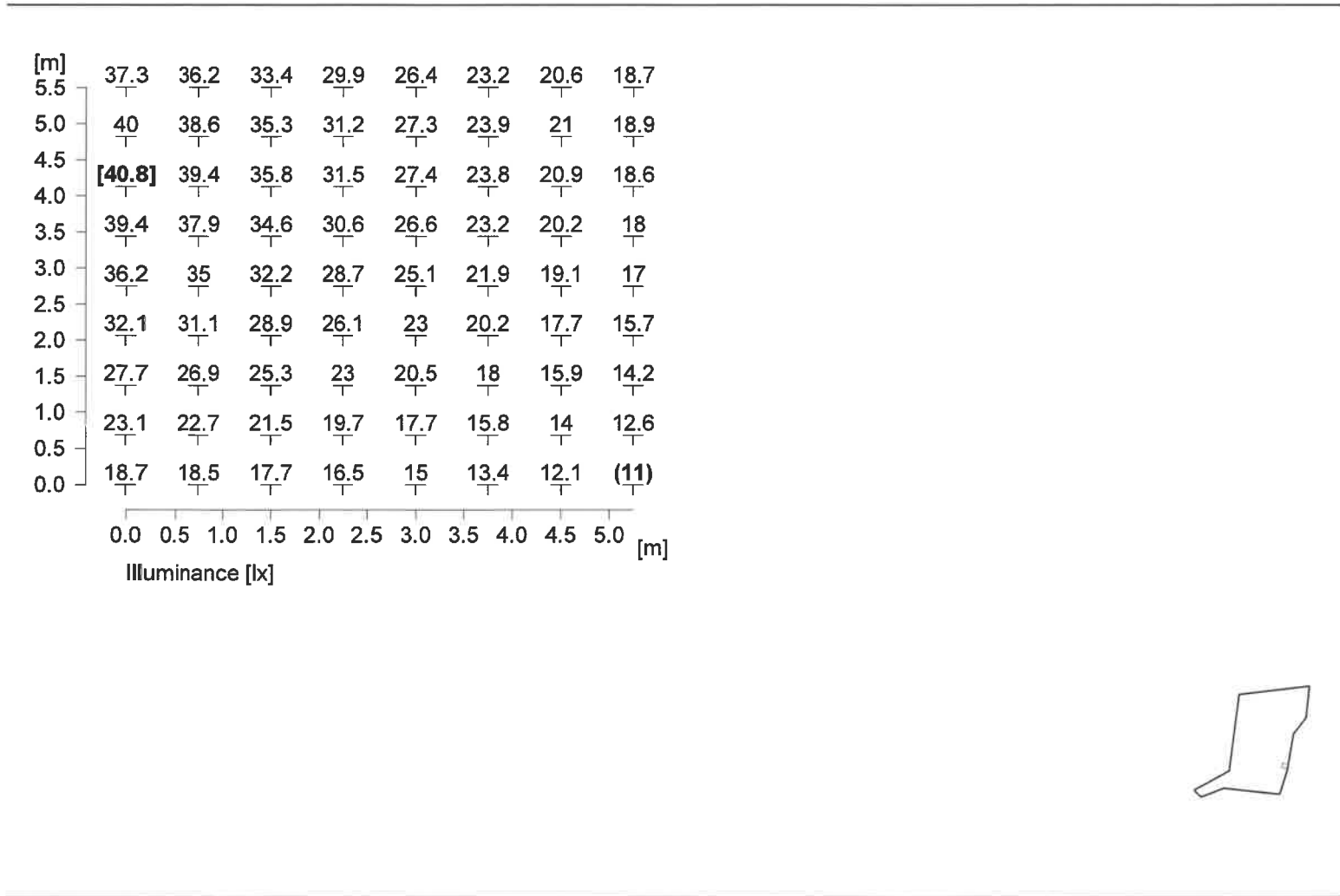
Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 21.5 lx
Maximum illuminance	Emax	: 11.1 lx
Uniformity Uo	Emin/Eav	: 35.3 lx
Diversity Ud	Emin/Emax	: 1 : 1.94 (0.52)
		: 1 : 3.18 (0.31)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.6 Table, DISABLED PARKING BUILDING 3 (E)



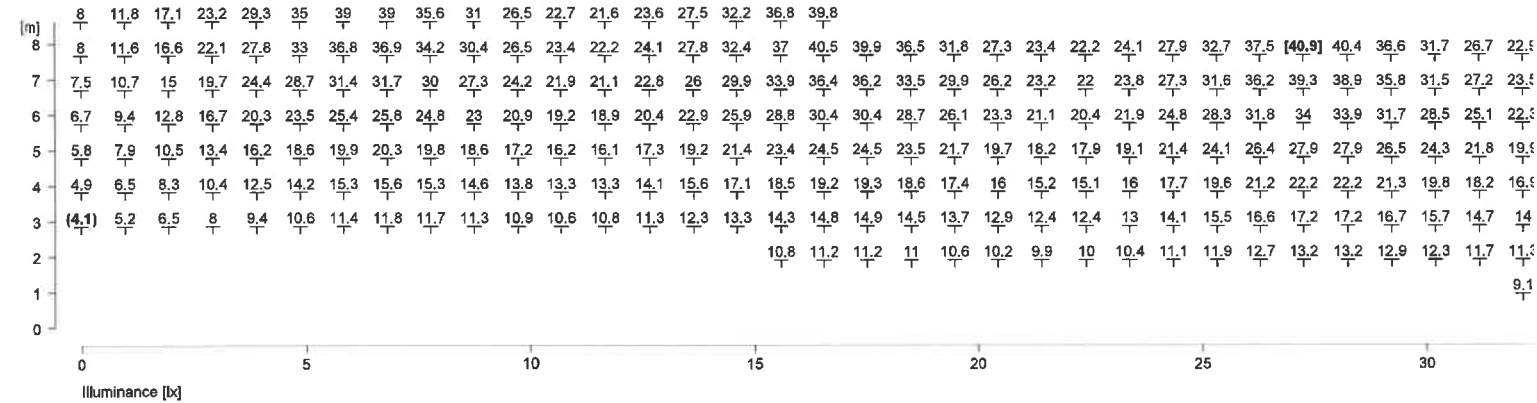
Height of the reference plane		: 0.00 m
Average illuminance	Eav	: 24.7 lx
Minimum illuminance	Emin	: 11 lx
Maximum illuminance	Emax	: 40.8 lx
Uniformity Uo	Emin/Eav	: 1 : 2.25 (0.45)
Diversity Ud	Emin/Emax	: 1 : 3.71 (0.27)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018



2.3 Calculation results, Exterior 1

2.3.7 Table, PARKING TO FRONT OF BUILDING 2 (E)



Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 21.4 lx
Maximum illuminance	Emax	: 4.1 lx
Uniformity Uo	Emin/Eav	: 40.9 lx
Diversity Ud	Emin/Emax	: 1 : 5.29 (0.19)
	Emin/Emax	: 1 : 10.08 (0.10)

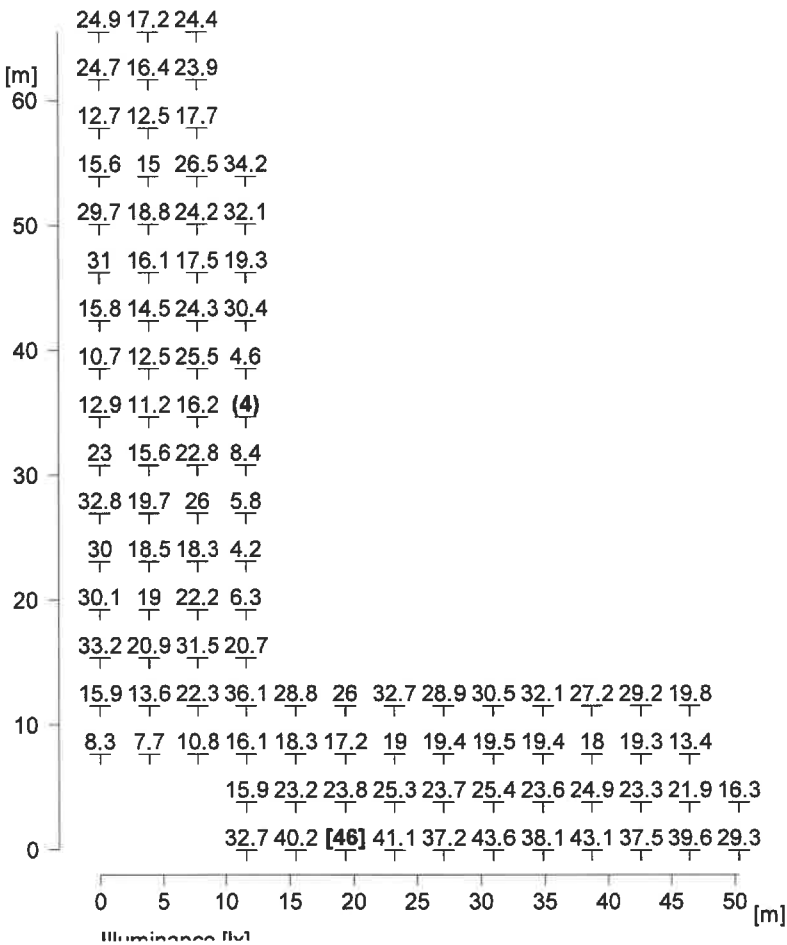
RELUX®
light simulation tools

2.3.7 Table, PARKING TO FRONT OF BUILDING 2 (E)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.8 Table, MAIN PARK BAYS BUILDING 6-7 (E)



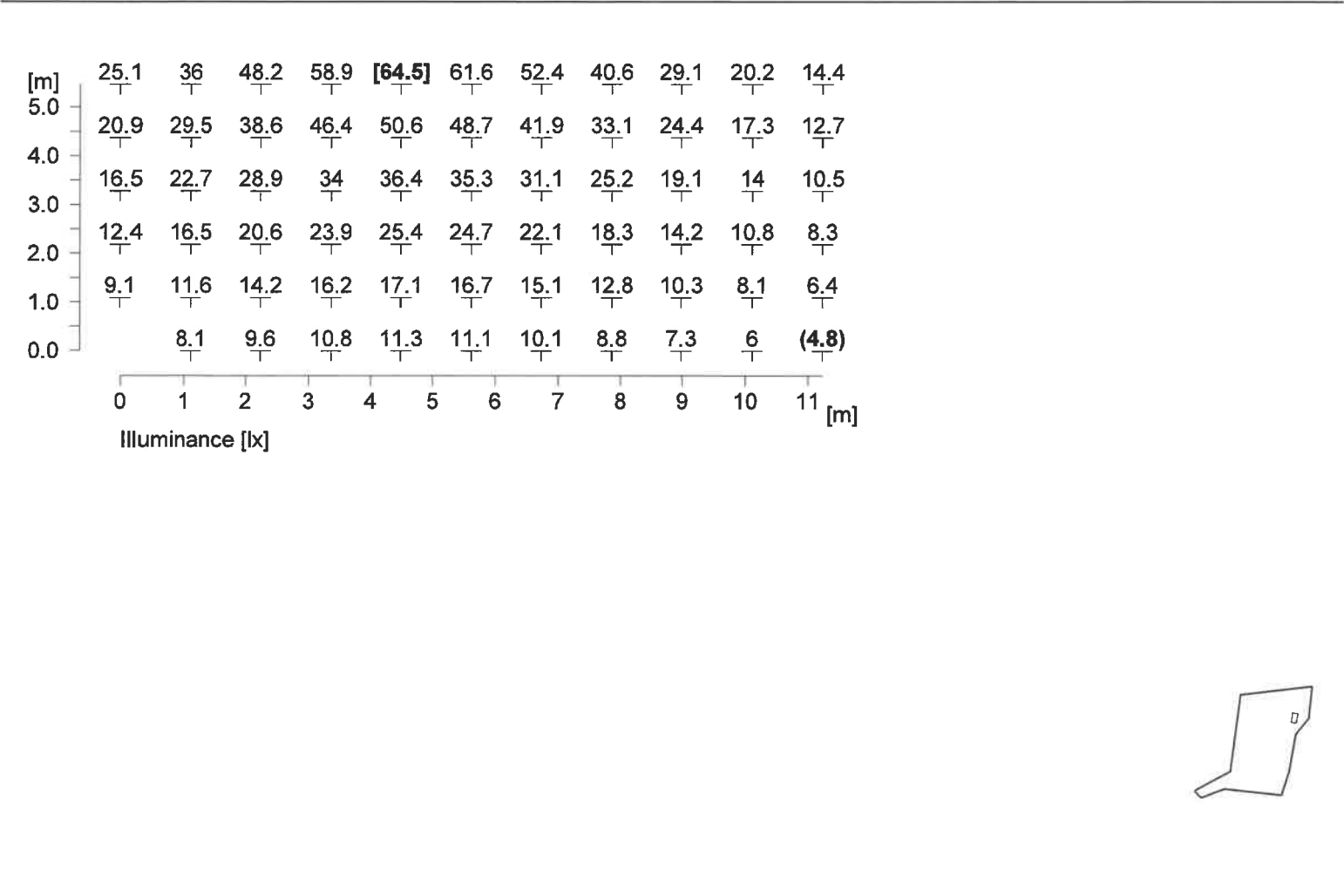
Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 22.5 lx
Maximum illuminance	Emax	: 4 lx
Uniformity Uo	Emin/Eav	: 46 lx
Diversity Ud	Emin/Emax	: 1 : 5.69 (0.18)
		: 1 : 11.64 (0.09)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.9 Table, 5 PARK BAYS FRONT BUILDING 7 (E)

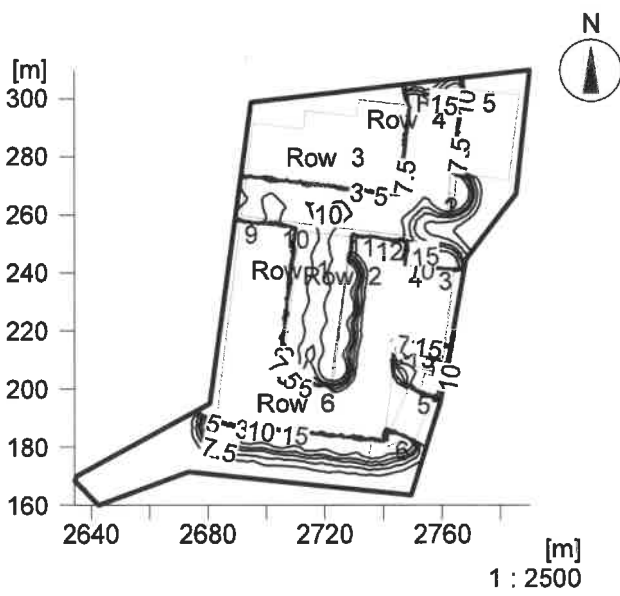


Height of the reference plane	: 0.00 m
Average illuminance	Eav : 23.2 lx
Minimum illuminance	Emin : 4.8 lx
Maximum illuminance	Emax : 64.5 lx
Uniformity Uo	Emin/Eav : 1 : 4.83 (0.21)
Diversity Ud	Emin/Emax : 1 : 13.39 (0.07)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.10 Isolines representation, Floor (E)



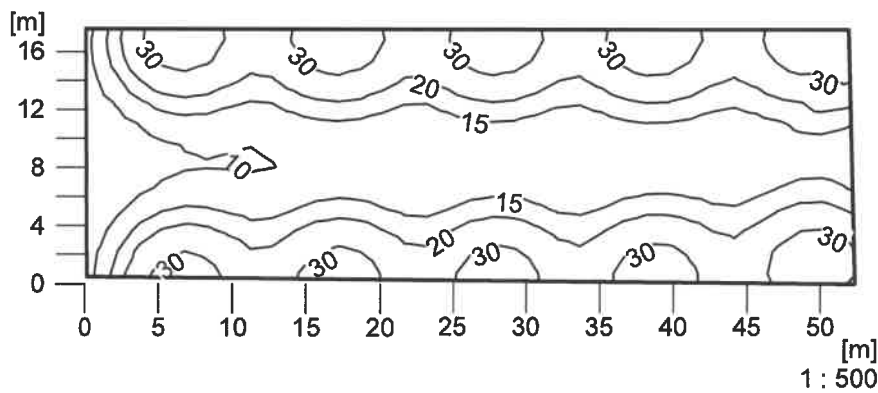
Illuminance [lx]

Average illuminance	Eav	: 7.8 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 60.6 lx
Uniformity Uo	Emin/Eav	: ---
Diversity Ud	Emin/Emax	: ---

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.11 Isolines representation, PARKING BUILDINGS 5 (E)



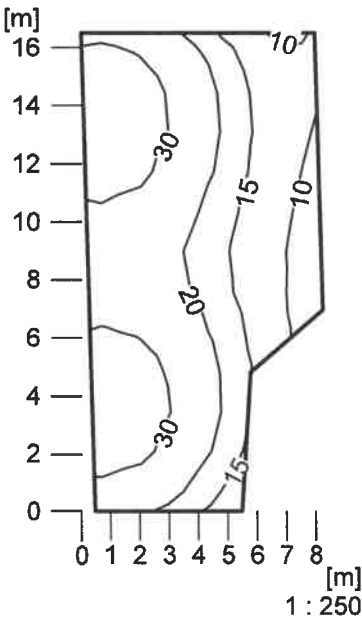
Illuminance [lx]

Height of the reference plane		: 0.00 m
Average illuminance	Eav	: 20.1 lx
Minimum illuminance	Emin	: 5.2 lx
Maximum illuminance	Emax	: 43.1 lx
Uniformity Uo	Emin/Eav	: 1 : 3.86 (0.26)
Diversity Ud	Emin/Emax	: 1 : 8.30 (0.12)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.12 Isolines representation, PARKING BUILDING 4 (E)



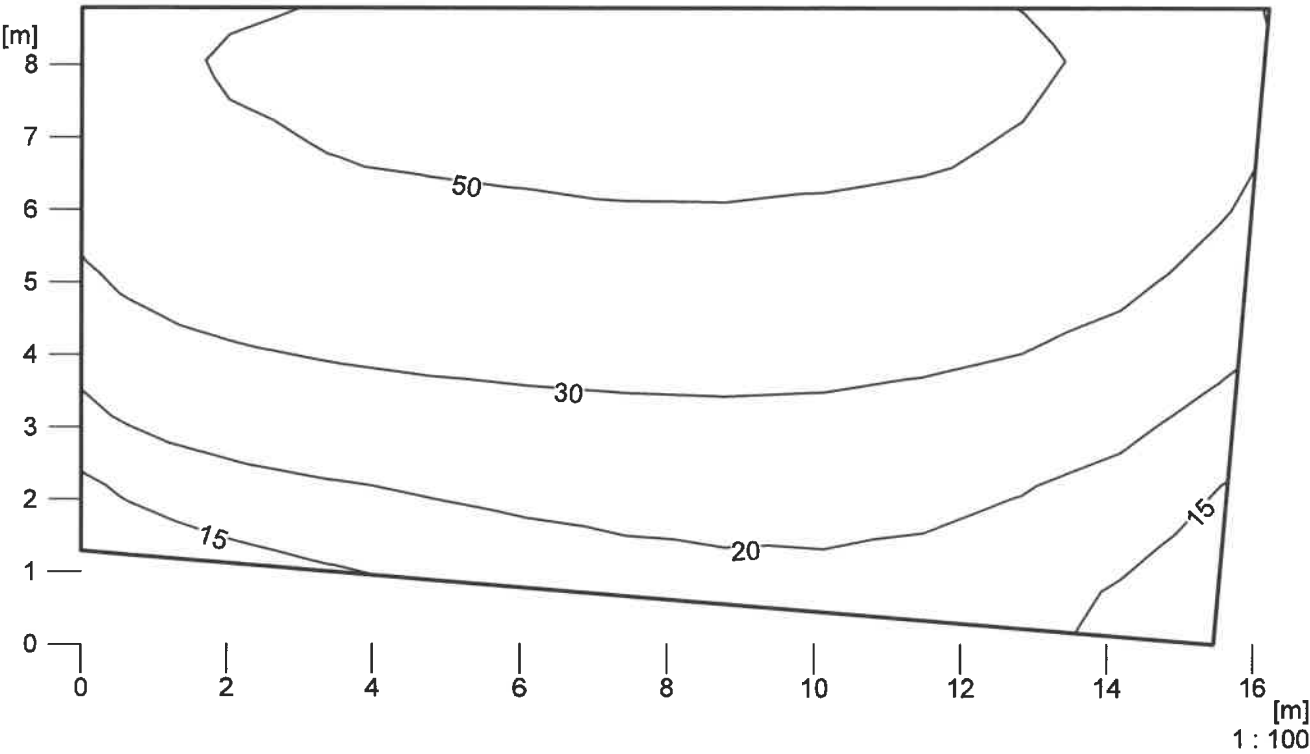
Illuminance [lx]

Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 22.7 lx
Maximum illuminance	Emax	: 8.7 lx
Uniformity Uo	Emin/Eav	: 40.2 lx
Diversity Ud	Emin/Emax	: 1 : 2.60 (0.39)
		: 1 : 4.59 (0.22)

2.3 Calculation results, Exterior 1

2.3.13 Isolines representation, SERVICE YARD (E)



Illuminance [lx]

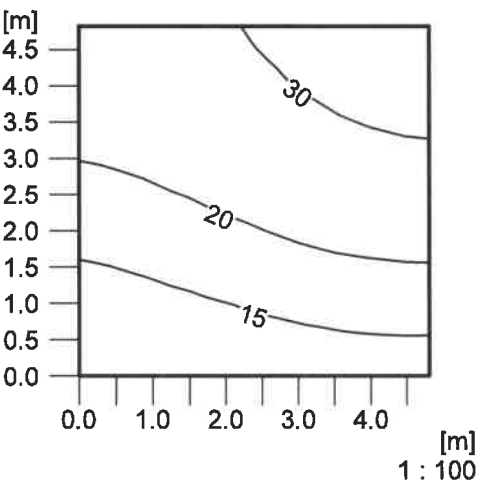
Height of the reference plane

Average illuminance	Eav	: 0.00 m	: 35.3 lx
Minimum illuminance	Emin	: 14.6 lx	
Maximum illuminance	Emax	: 58.3 lx	
Uniformity Uo	Emin/Eav	: 1 : 2.41 (0.41)	
Diversity Ud	Emin/Emax	: 1 : 3.99 (0.25)	

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.14 Isolines representation, DISABLED PARKING BAYS BELOW BUILDING 3 (E)

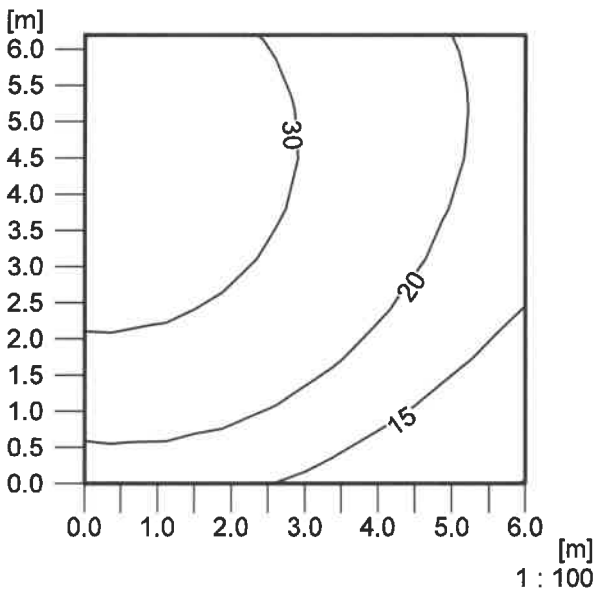


Illuminance [lx]

Height of the reference plane	: 0.00 m
Average illuminance	Eav : 21.5 lx
Minimum illuminance	Emin : 11.1 lx
Maximum illuminance	Emax : 35.3 lx
Uniformity Uo	Emin/Eav : 1 : 1.94 (0.52)
Diversity Ud	Emin/Emax : 1 : 3.18 (0.31)

2.3 Calculation results, Exterior 1

2.3.15 Isolines representation, DISABLED PARKING BUILDING 3 (E)



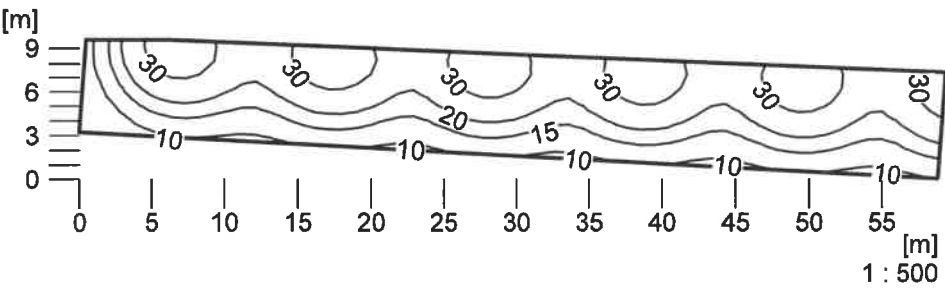
Illuminance [lx]

Height of the reference plane		: 0.00 m
Average illuminance	Eav	: 24.7 lx
Minimum illuminance	Emin	: 11 lx
Maximum illuminance	Emax	: 40.8 lx
Uniformity Uo	Emin/Eav	: 1 : 2.25 (0.45)
Diversity Ud	Emin/Emax	: 1 : 3.71 (0.27)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.16 Isolines representation, PARKING TO FRONT OF BUILDING 2 (E)



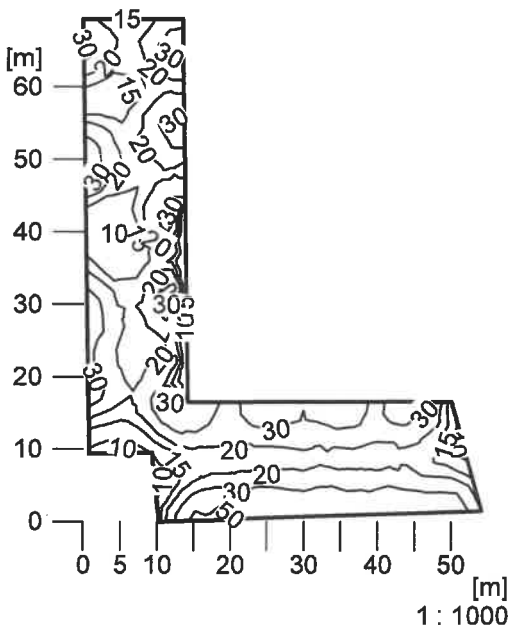
Illuminance [lx]

Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 21.4 lx
Maximum illuminance	Emax	: 4.1 lx
Uniformity Uo	Emin/Eav	: 40.9 lx
Diversity Ud	Emin/Emax	: 1 : 5.29 (0.19)
		: 1 : 10.08 (0.10)

2.3 Calculation results, Exterior 1

2.3.17 Isolines representation, MAIN PARK BAYS BUILDING 6-7 (E)



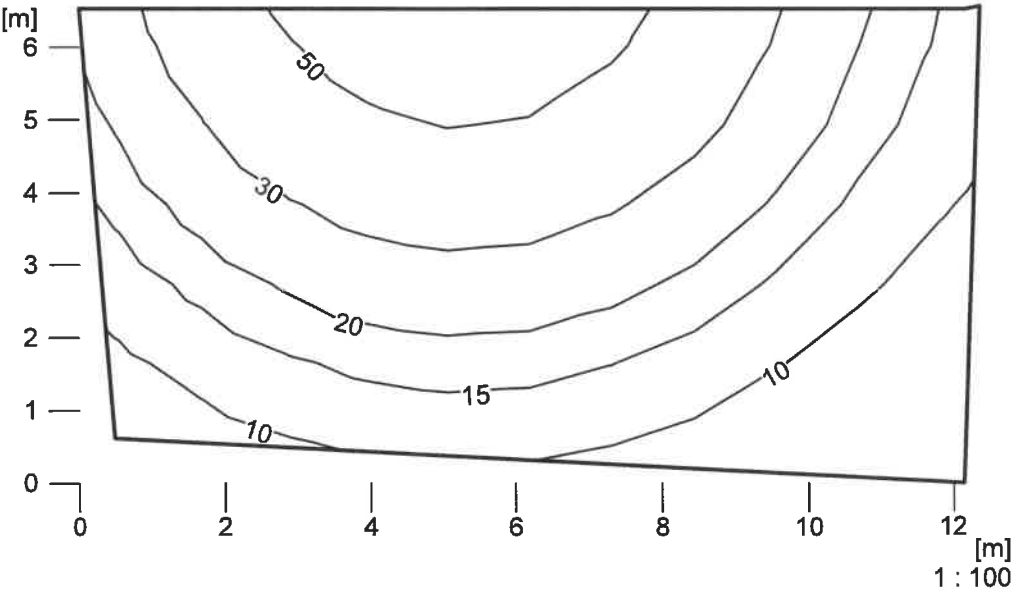
Illuminance [lx]

Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 22.5 lx
Maximum illuminance	Emax	: 4 lx
Uniformity Uo	Emin/Eav	: 46 lx
Diversity Ud	Emin/Emax	: 1 : 5.69 (0.18)
		: 1 : 11.64 (0.09)

2.3 Calculation results, Exterior 1

2.3.18 Isolines representation, 5 PARK BAYS FRONT BUILDING 7 (E)



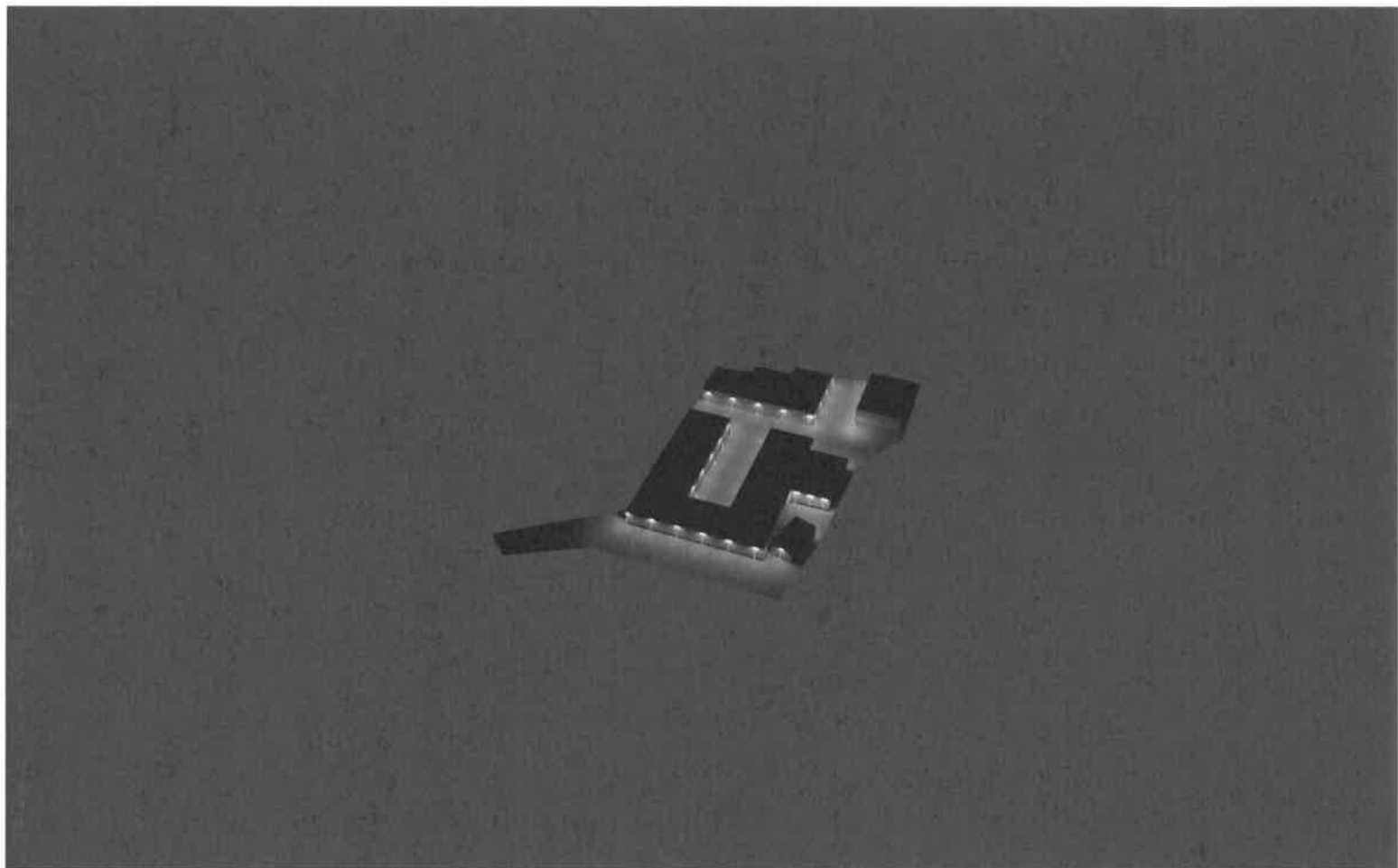
Illuminance [lx]

Height of the reference plane		: 0.00 m
Average illuminance	Eav	: 23.2 lx
Minimum illuminance	Emin	: 4.8 lx
Maximum illuminance	Emax	: 64.5 lx
Uniformity Uo	Emin/Eav	: 1 : 4.83 (0.21)
Diversity Ud	Emin/Emax	: 1 : 13.39 (0.07)

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018

2.3 Calculation results, Exterior 1

2.3.19 3D luminance, View 1



Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 3040 cd/m²

Object : INDUSTRIAL ESTATE
Installation : PARKING - CIRCULATION LIGHTING
Project number : 547
Date : 13.06.2018



2.3 Calculation results, Exterior 1

2.3.20 3D pseudo colours, View 1 (E)

