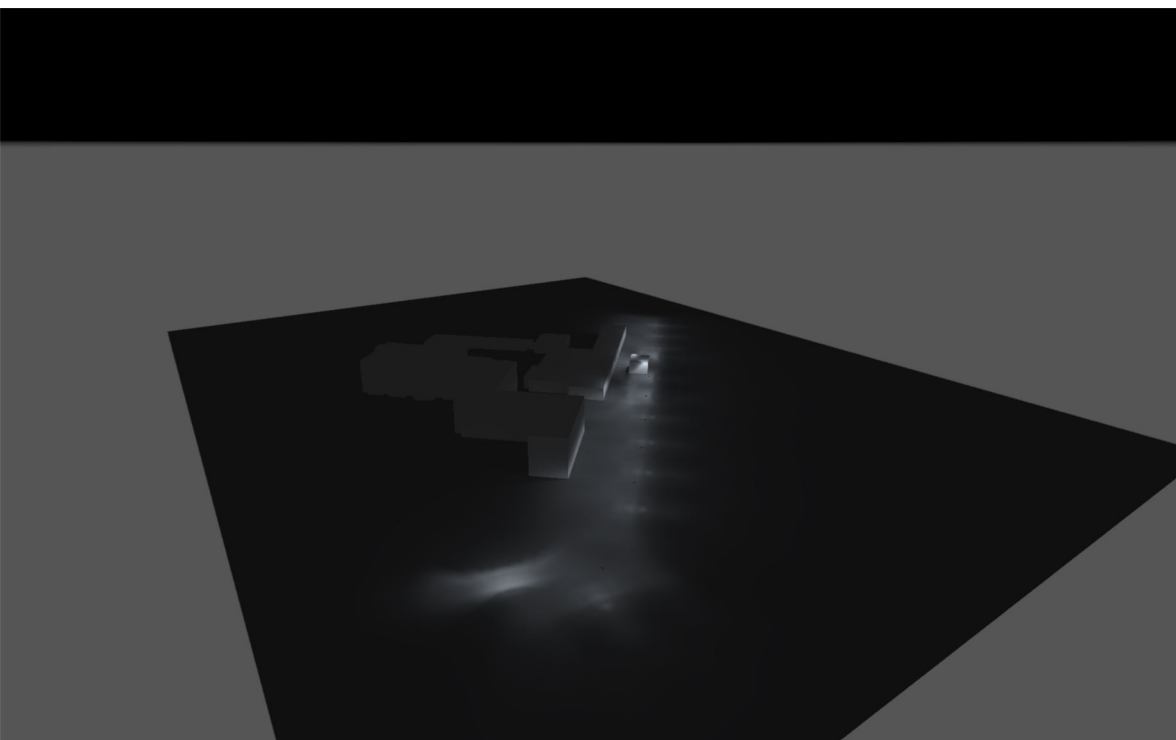




University of Manchester Dalton Ellis Hall Externals

Contacts



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9HH

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F 01527 583200
Ashley.brooks@thorlux.co.uk

Luminaire list

Φ_{total} 57890 lm	P_{total} 490.0 W	Luminous efficacy 118.1 lm/W
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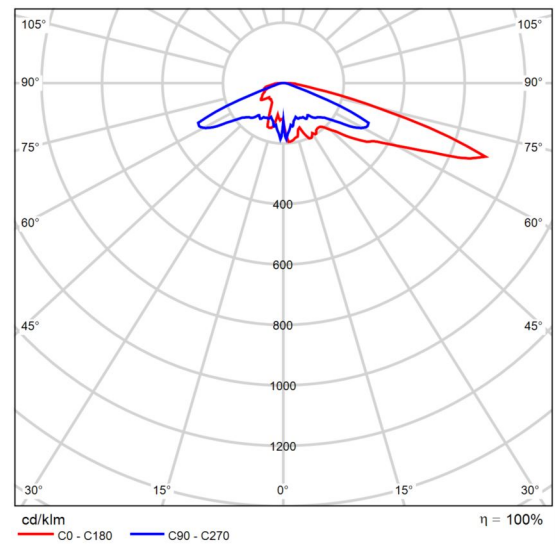
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
14	Thorlux Lighting	SB19677	STARBEAM ECO AREA	35.0 W	4135 lm	118.1 lm/W

Product data sheet

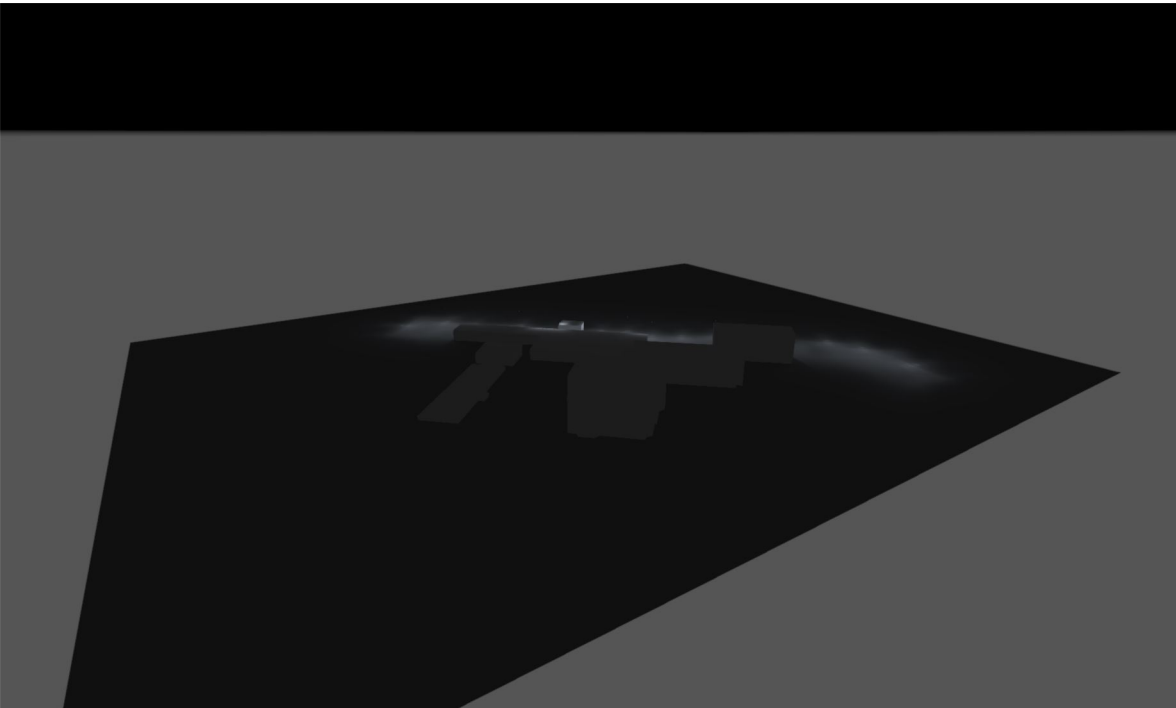
Thorlux Lighting - STARBEAM ECO AREA



Article No.	SB19677
P	35.0 W
Φ_{Lamp}	4135 lm
$\Phi_{\text{Luminaire}}$	4135 lm
η	100.00 %
Luminous efficacy	118.1 lm/W
CCT	4000 K
CRI	70



Polar LDC

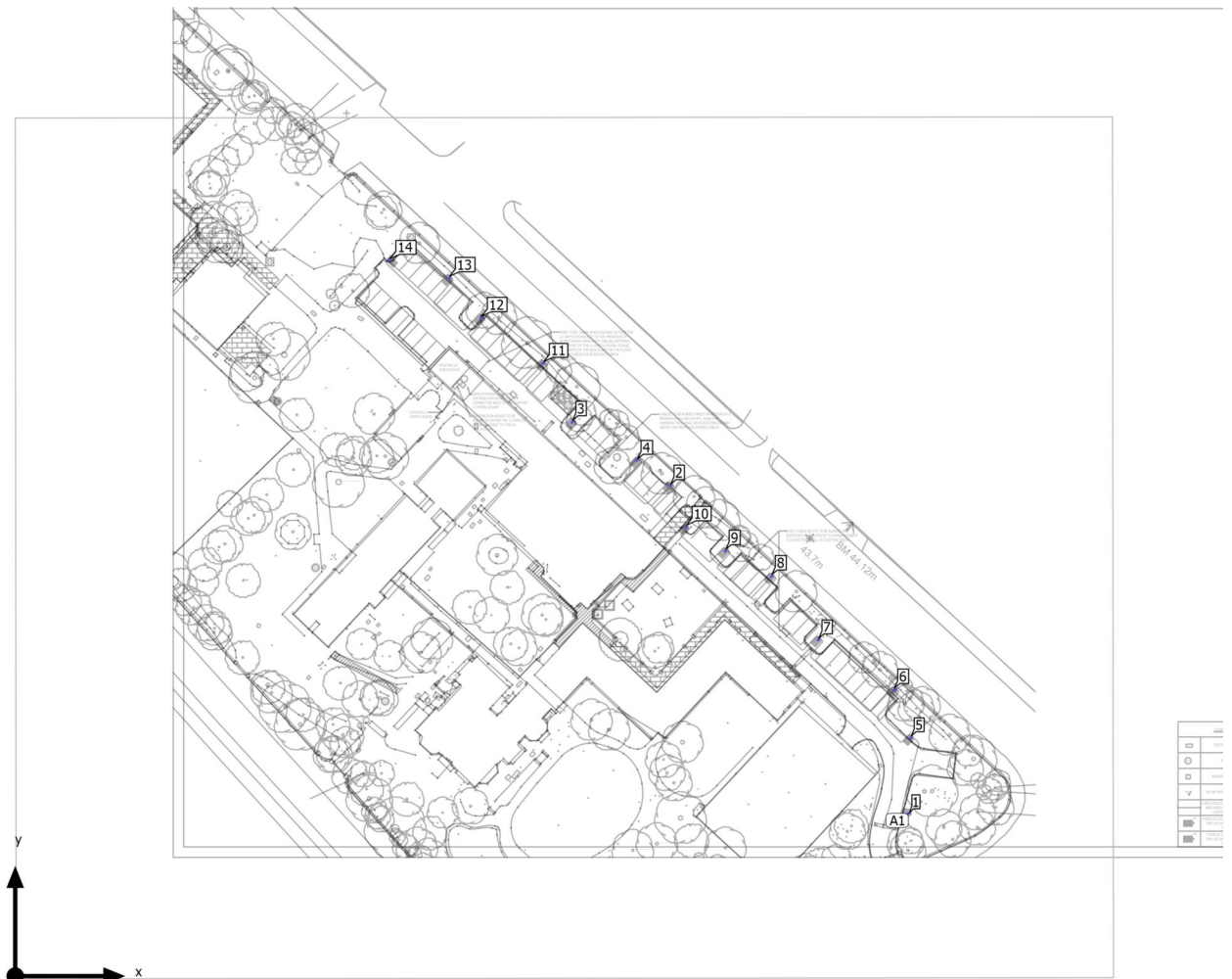


Site 1

Description

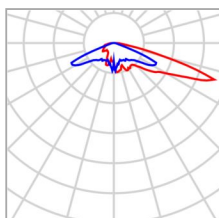
Site 1

Luminaire layout plan



Site 1

Luminaire layout plan



Manufacturer	Thorlux Lighting	P	35.0 W
Article No.	SB19677	$\Phi_{\text{Luminaire}}$	4135 lm
Article name	STARBEAM ECO AREA		
Fitting	1x 31W LED		

1 x Thorlux Lighting STARBEAM ECO AREA

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	170.795 m / 31.040 m / 5.000 m	170.795 m	31.040 m	5.000 m	1
X-direction	1 pcs., Centre - centre, 15.028 m				
Arrangement	A1				

Individual luminaires

X	Y	Mounting height	Luminaire
125.269 m	93.740 m	5.000 m	2
106.518 m	105.848 m	5.000 m	3
118.878 m	98.602 m	5.000 m	4
171.216 m	45.502 m	5.000 m	5
168.080 m	54.677 m	5.000 m	6
153.548 m	64.295 m	5.000 m	7

Site 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
144.609 m	76.374 m	5.000 m	8
135.781 m	81.219 m	5.000 m	9
128.230 m	85.772 m	5.000 m	10
100.976 m	117.138 m	5.000 m	11
89.086 m	125.811 m	5.000 m	12
82.971 m	133.351 m	5.000 m	13
71.662 m	136.822 m	5.000 m	14

Site 1

Luminaire list

Φ_{total} 57890 lm	P_{total} 490.0 W	Luminous efficacy 118.1 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
14	Thorlux Lighting	SB19677	STARBEAM ECO AREA	35.0 W	4135 lm	118.1 lm/W

Site 1 (Light scene 1)

Calculation objects



Site 1 (Light scene 1)

Calculation objects

Calculation surfaces

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	10.7 lx	6.30 lx	14.6 lx	0.59	0.43	CG1
Parking Perpendicular illuminance Height: 0.000 m	21.6 lx	15.1 lx	33.1 lx	0.70	0.46	CG2
Parking Perpendicular illuminance Height: 0.000 m	16.2 lx	12.7 lx	25.5 lx	0.78	0.50	CG3
Bin Storage Perpendicular illuminance Height: 0.000 m	25.0 lx	20.9 lx	29.5 lx	0.84	0.71	CG4
Parking Perpendicular illuminance Height: 0.000 m	18.5 lx	13.4 lx	27.4 lx	0.72	0.49	CG5
Parking Perpendicular illuminance Height: 0.000 m	12.9 lx	7.42 lx	16.8 lx	0.58	0.44	CG6
Parking Perpendicular illuminance Height: 0.000 m	12.7 lx	6.34 lx	20.1 lx	0.50	0.32	CG7
Crossing Perpendicular illuminance Height: 0.000 m	29.3 lx	24.1 lx	35.2 lx	0.82	0.68	CG8
Pedestrian walkway Perpendicular illuminance Height: 0.000 m	20.0 lx	6.60 lx	33.7 lx	0.33	0.20	CG9
Roadway Perpendicular illuminance Height: 0.000 m	18.1 lx	5.40 lx	27.0 lx	0.30	0.20	CG10
Roadway Perpendicular illuminance Height: 0.000 m	14.8 lx	6.08 lx	29.4 lx	0.41	0.21	CG11

Site 1 (Light scene 1)

Calculation objects

Window-Light Spill Perpendicular illuminance Height: 7.500 m	0.74 lx	0.66 lx	0.81 lx	0.89	0.81	CG12
Window-Light Spill Perpendicular illuminance Height: 5.000 m	1.32 lx	0.88 lx	2.10 lx	0.67	0.42	CG13
Window-Light Spill Perpendicular illuminance Height: 3.375 m	0.60 lx	0.34 lx	0.79 lx	0.57	0.43	CG14
Window-Light Spill Perpendicular illuminance Height: 3.375 m	0.68 lx	0.40 lx	0.87 lx	0.59	0.46	CG15
Light Spill to Properties on other side of Road Perpendicular illuminance Height: 2.500 m	0.81 lx	0.14 lx	1.48 lx	0.17	0.095	CG16

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Parking

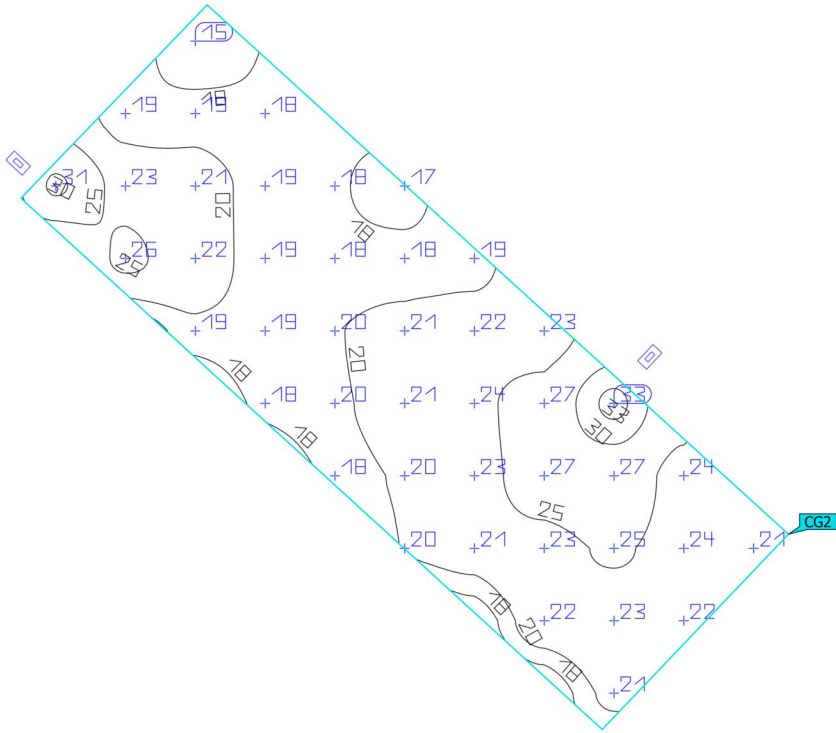
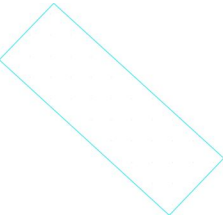


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	10.7 lx	6.30 lx	14.6 lx	0.59	0.43	CG1

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Parking

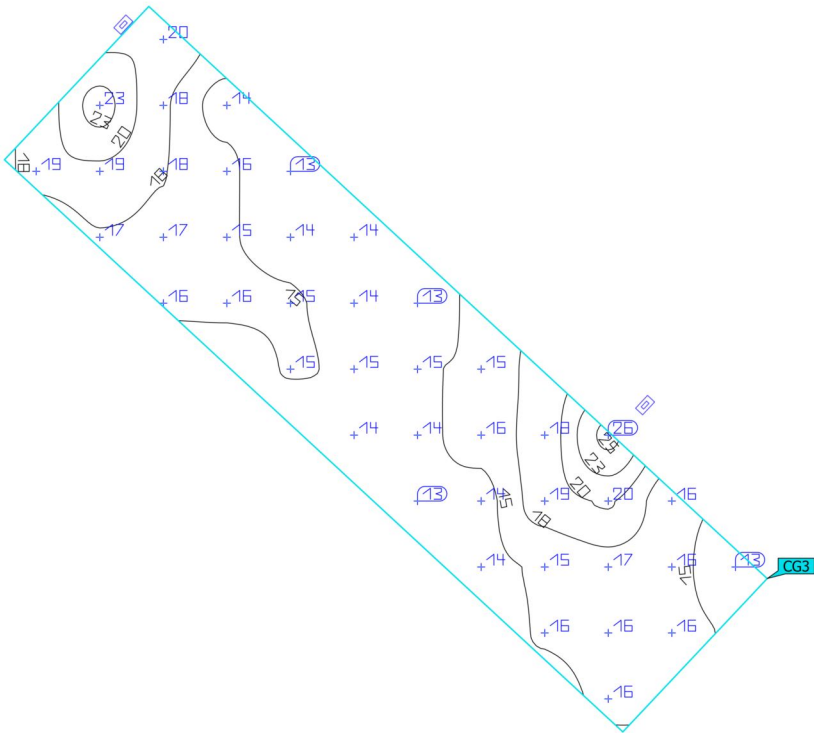
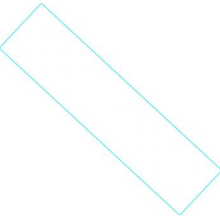


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	21.6 lx	15.1 lx	33.1 lx	0.70	0.46	CG2

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Parking

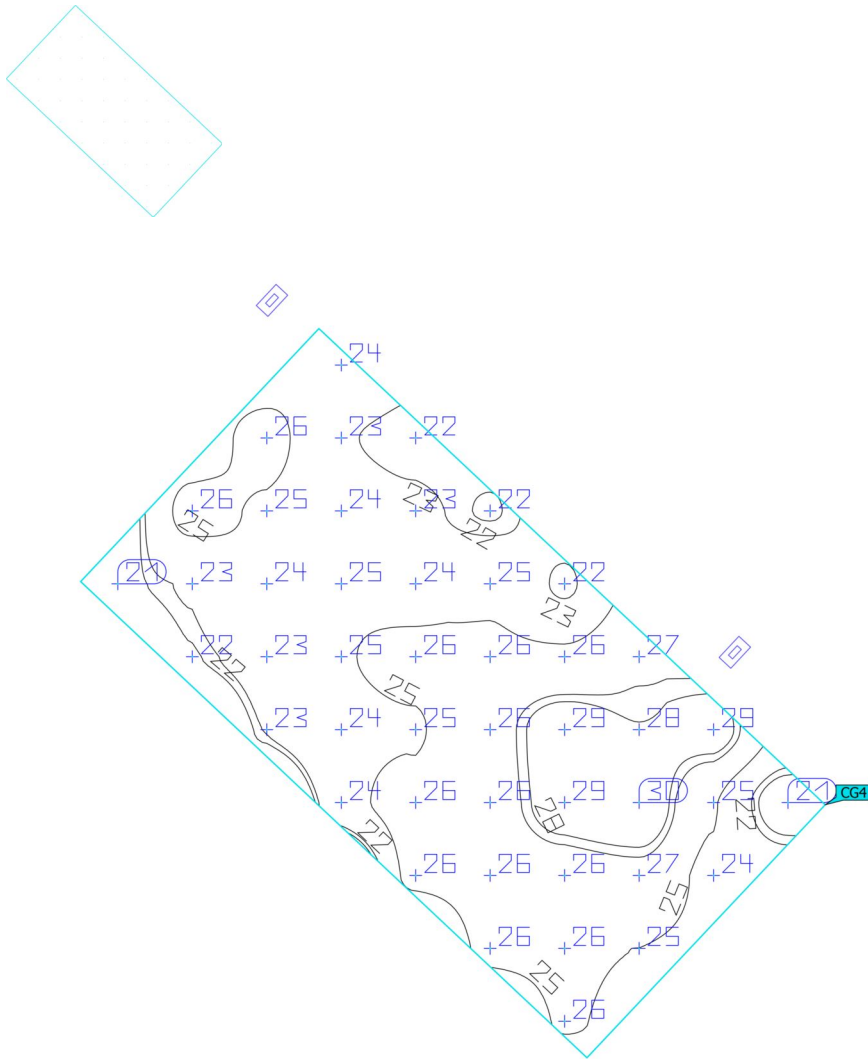


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	16.2 lx	12.7 lx	25.5 lx	0.78	0.50	CG3

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Bin Storage

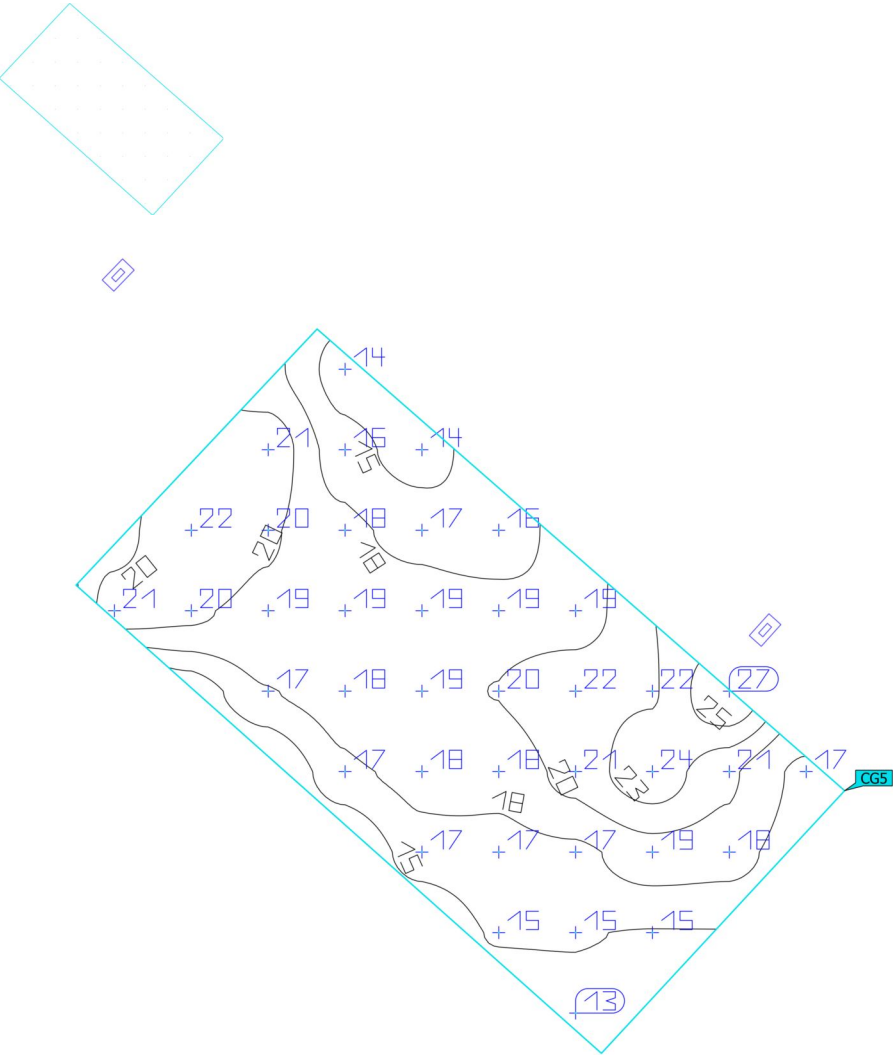


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Bin Storage Perpendicular illuminance Height: 0.000 m	25.0 lx	20.9 lx	29.5 lx	0.84	0.71	CG4

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Parking

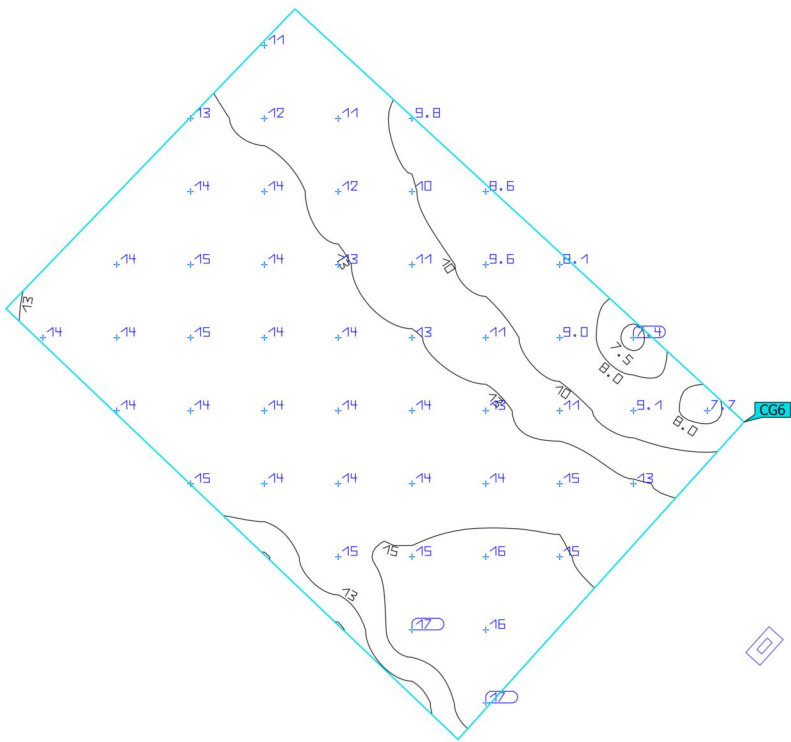
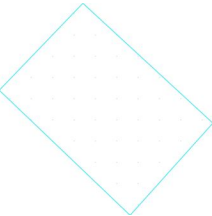


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	18.5 lx	13.4 lx	27.4 lx	0.72	0.49	CG5

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Parking

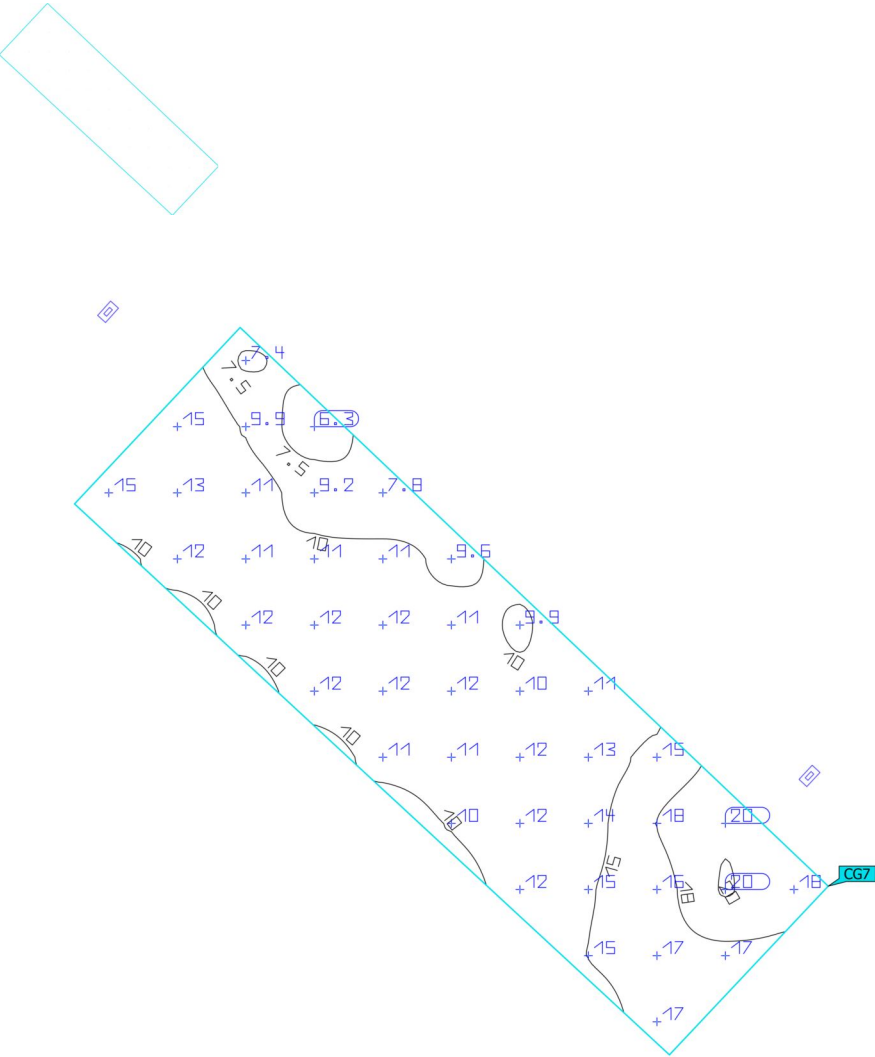


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	12.9 lx	7.42 lx	16.8 lx	0.58	0.44	CG6

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

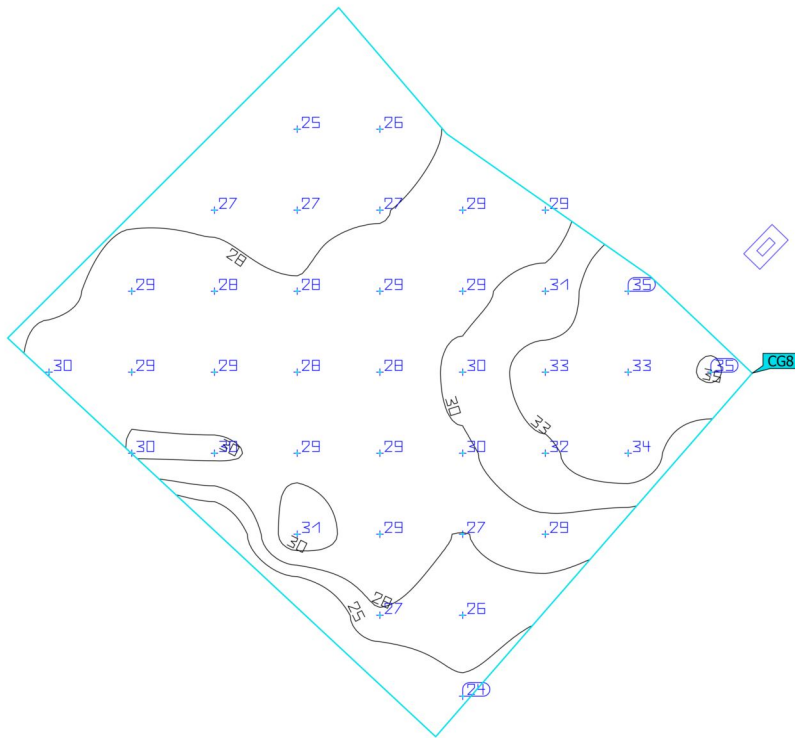
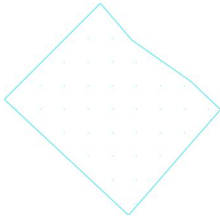
Parking



Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Parking Perpendicular illuminance Height: 0.000 m	12.7 lx	6.34 lx	20.1 lx	0.50	0.32	CG7

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

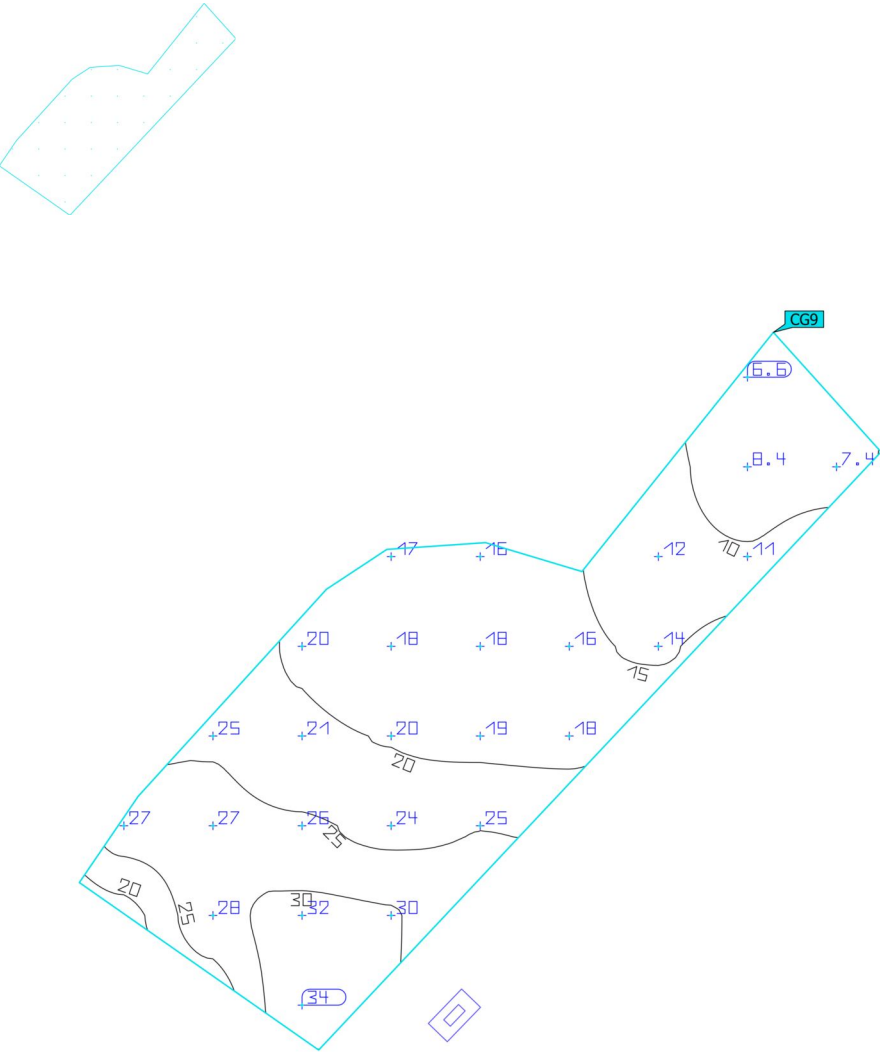
Crossing

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Crossing Perpendicular illuminance Height: 0.000 m	29.3 lx	24.1 lx	35.2 lx	0.82	0.68	CG8

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Pedestrian walkway

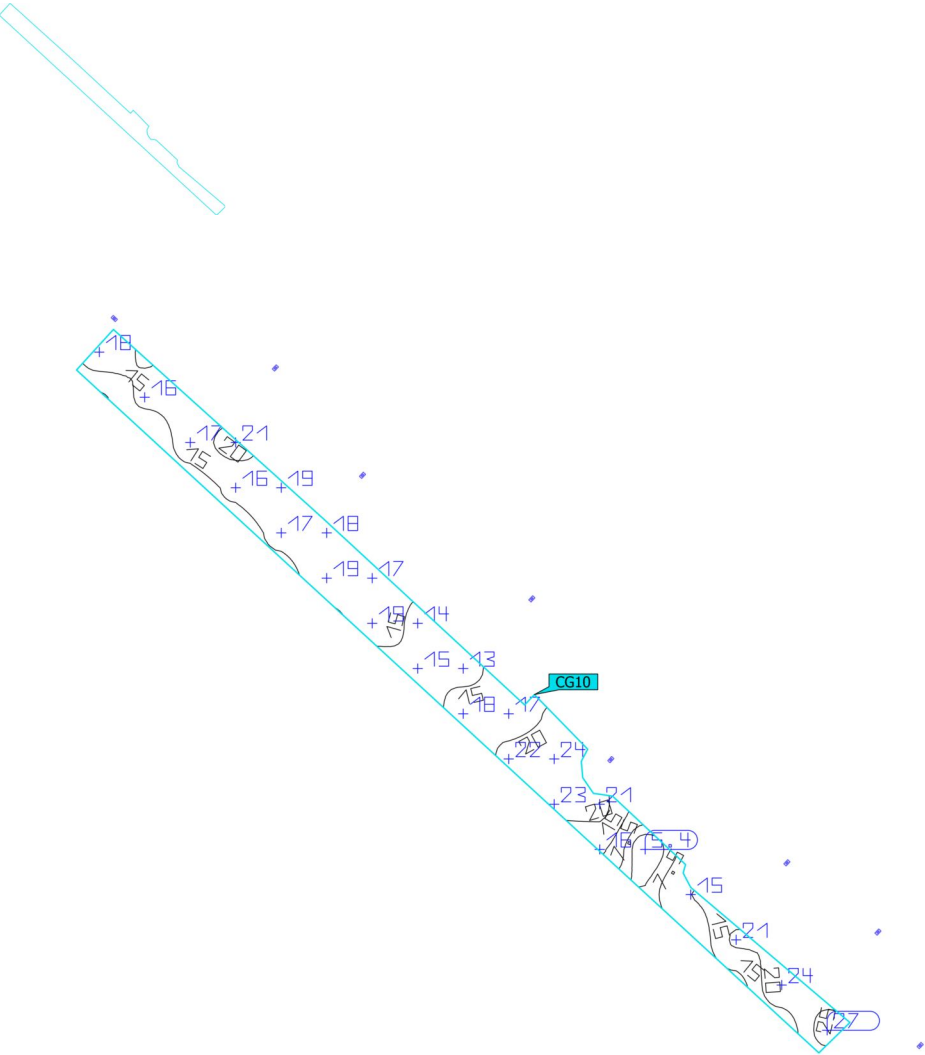


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Pedestrian walkway Perpendicular illuminance Height: 0.000 m	20.0 lx	6.60 lx	33.7 lx	0.33	0.20	CG9

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Roadway

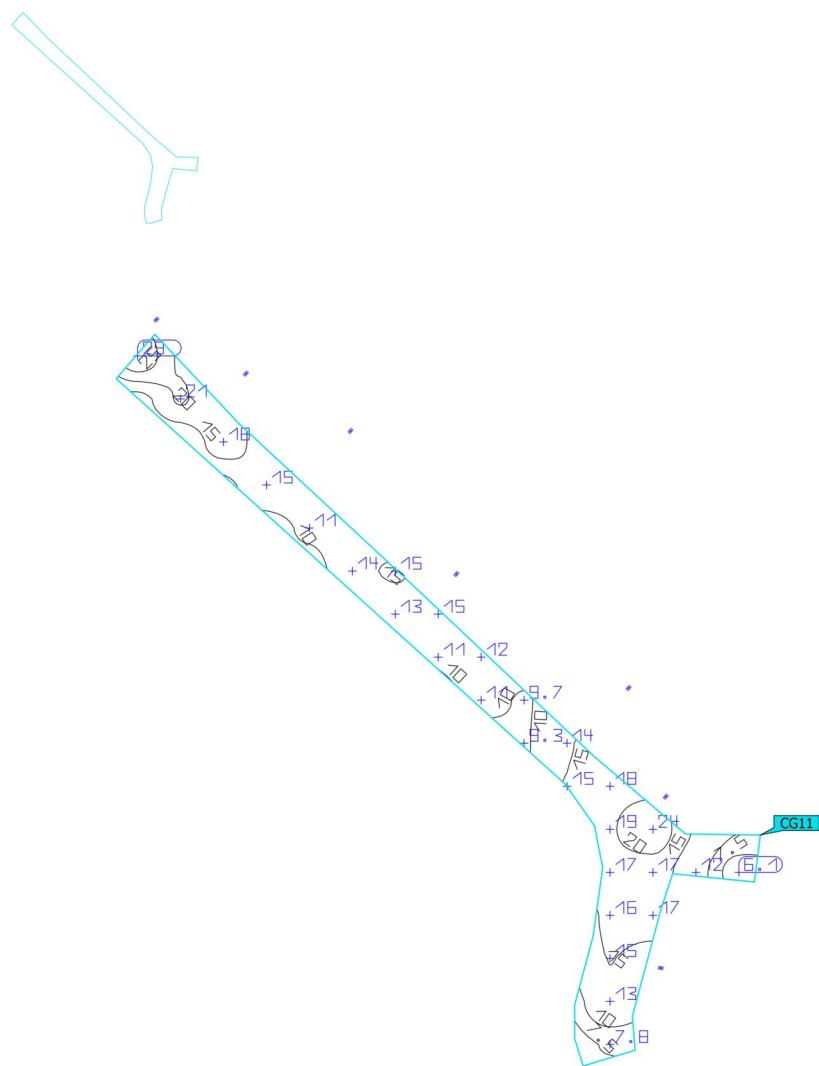


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Roadway Perpendicular illuminance Height: 0.000 m	18.1 lx	5.40 lx	27.0 lx	0.30	0.20	CG10

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

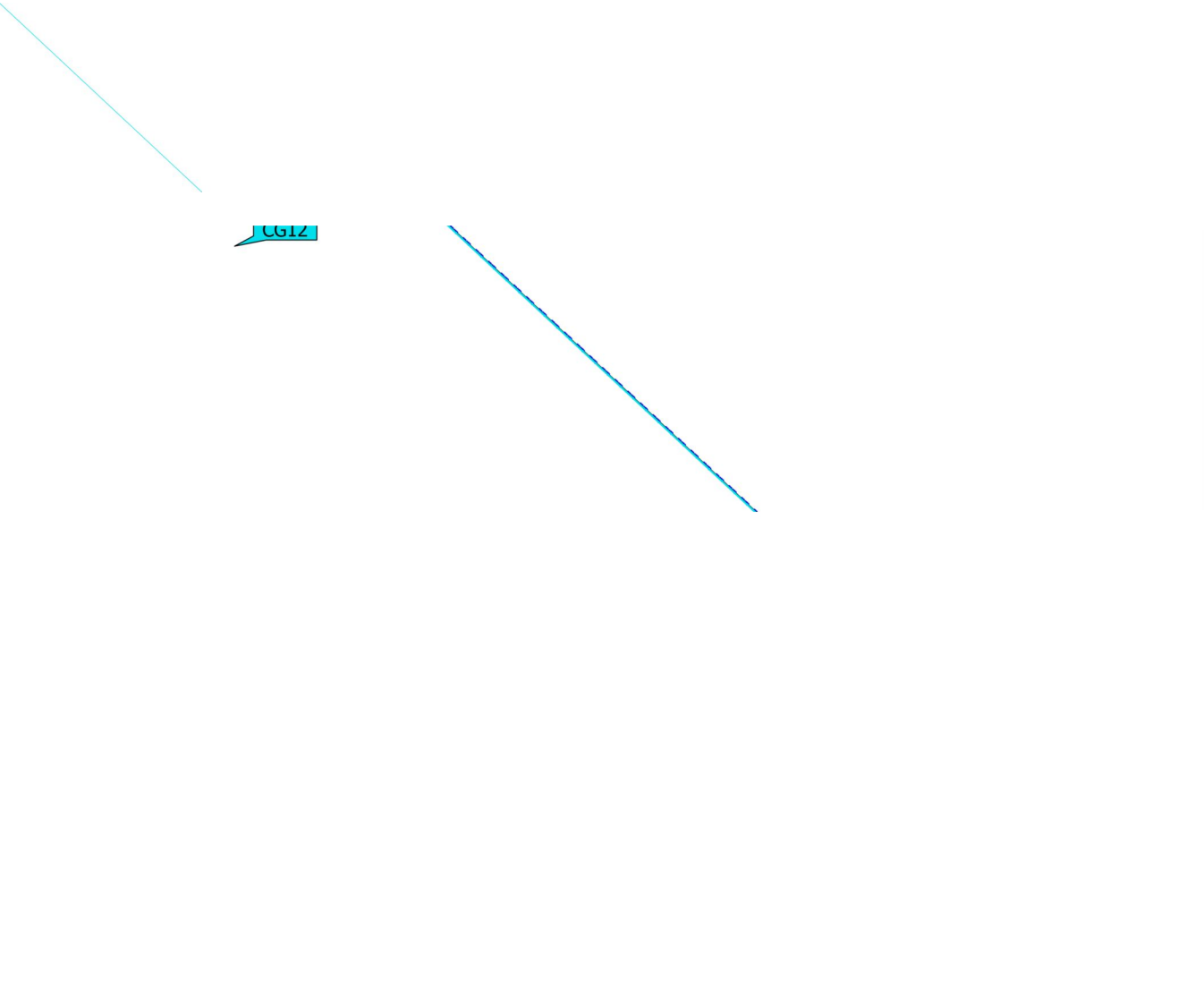
Roadway



Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Roadway Perpendicular illuminance Height: 0.000 m	14.8 lx	6.08 lx	29.4 lx	0.41	0.21	CG11

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

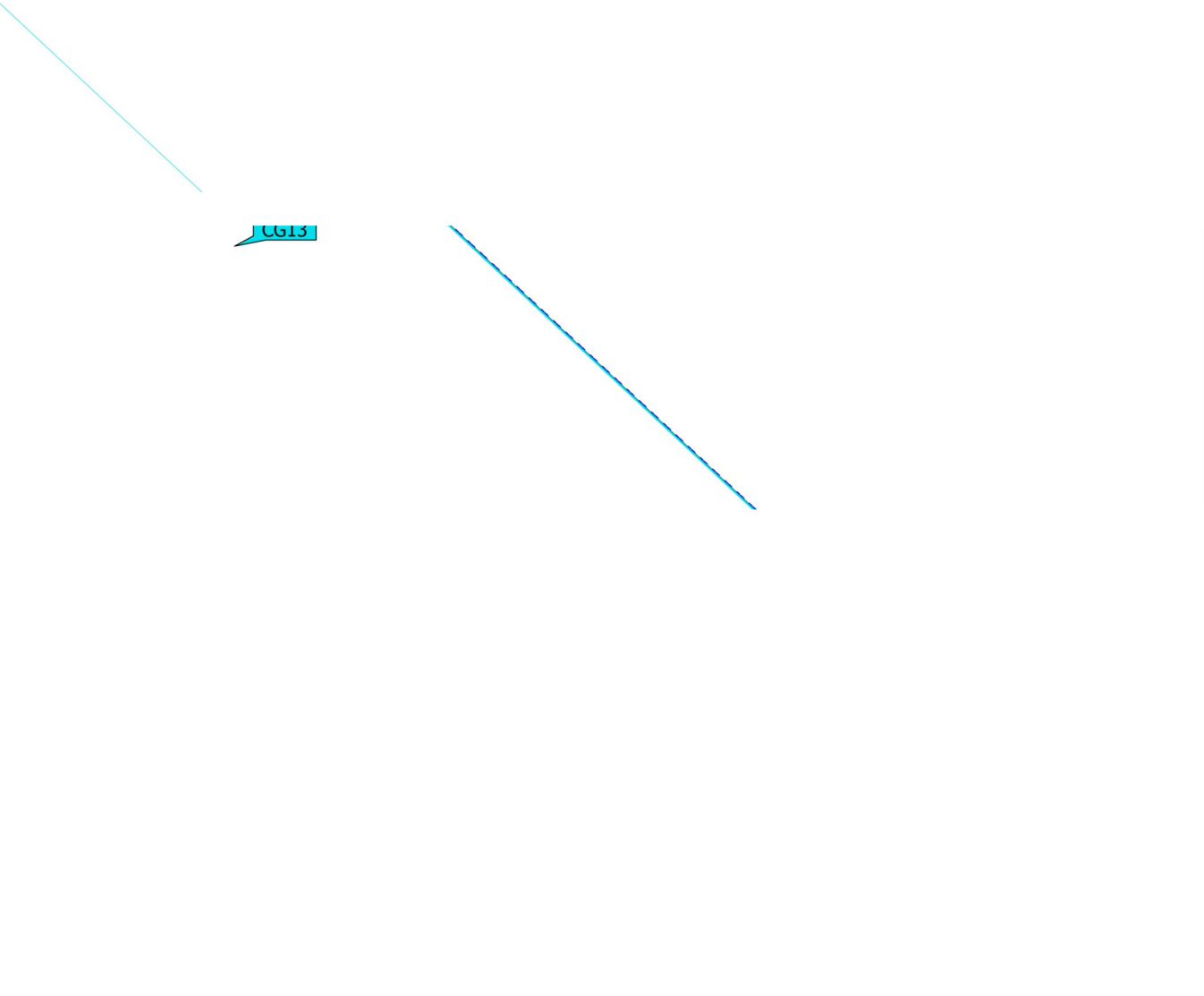
Site 1 (Light scene 1)
Window-Light Spill



Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Window-Light Spill Perpendicular illuminance Height: 7.500 m	0.74 lx	0.66 lx	0.81 lx	0.89	0.81	CG12

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

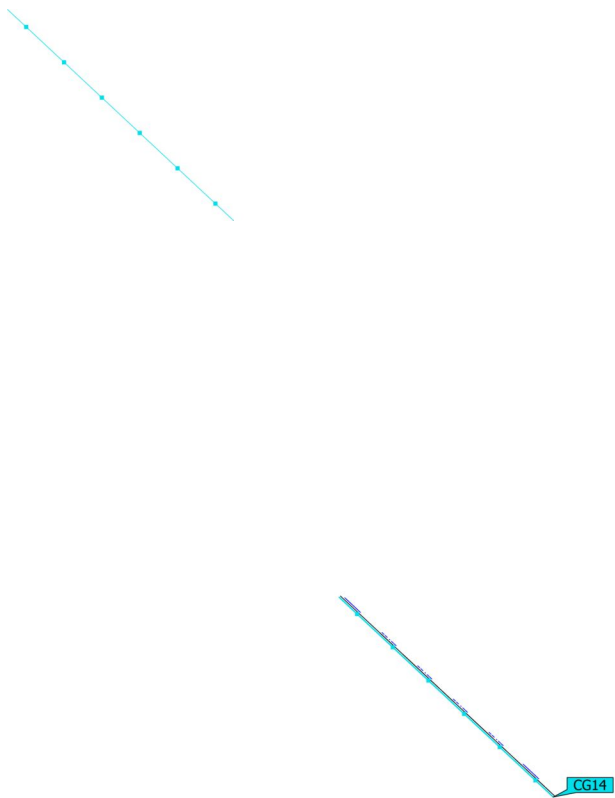
Site 1 (Light scene 1)
Window-Light Spill



Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Window-Light Spill Perpendicular illuminance Height: 5.000 m	1.32 lx	0.88 lx	2.10 lx	0.67	0.42	CG13

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

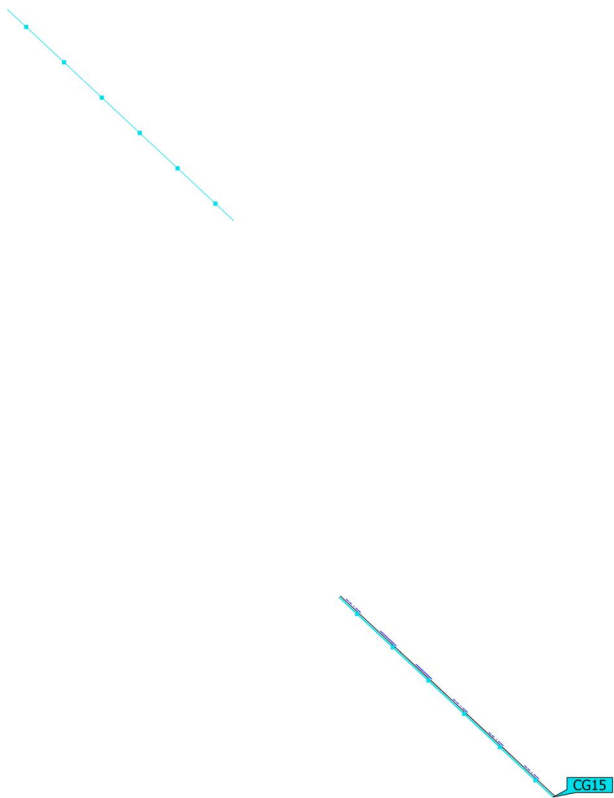
Site 1 (Light scene 1)
Window-Light Spill



Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Window-Light Spill Perpendicular illuminance Height: 3.375 m	0.60 lx	0.34 lx	0.79 lx	0.57	0.43	CG14

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)
Window-Light Spill



Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Window-Light Spill Perpendicular illuminance Height: 3.375 m	0.68 lx	0.40 lx	0.87 lx	0.59	0.46	CG15

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Light Spill to Properties on other side of Road

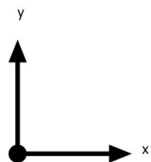


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Light Spill to Properties on other side of Road Perpendicular illuminance Height: 2.500 m	0.81 lx	0.14 lx	1.48 lx	0.17	0.095	CG16

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1

Control group CG 1



Site 1

Control groups

Control group CG 1

Light scene 1 100

Dimming values [%]

pcs.	Manufacturer	Article No.	Article name	P	Index
14	Thorlux Lighting	SB19677	STARBEAM ECO AREA	35.0 W	1