

Barnsley Council - Parkside Sports Pavilion

Installation : Thorlux Lighting Proposal

Project number : 570691

Customer :

Processed by : William Saville

Date : 23.08.2023

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.

1 Luminaire data

1.1 Thorlux, STARBEAM LED AREA (SB031A2)

1.1.1 Data sheet

Manufacturer: Thorlux

SB031A2 STARBEAM LED AREA

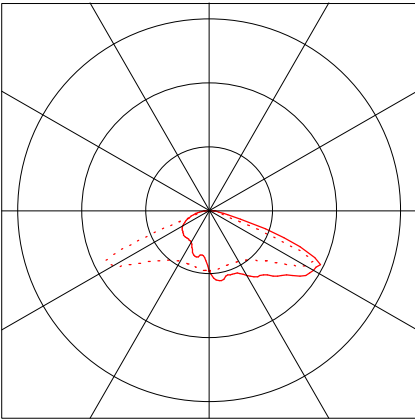
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 95 lm/W
Classification : A30 ↓100.0% ↑0.0%
CIE Flux Codes : 28 62 96 100 100
UGR 4H 8H : 30.1 / 26.4
Power : 35 W
Luminous flux : 3325 lm

Equipped with

Quantity : 1
Designation : 31W LED
Colour : 4000
Luminous flux : 3325 lm
Colour reproduction : 70

Dimensions : 351 mm x 413 mm x 70 mm



1 Luminaire data

1.2 Thorlux, REALTA WIDE LED POLY COVER SMART (!WRL19069)

1.2.1 Data sheet

Manufacturer: Thorlux

!WRL19069 REALTA WIDE LED POLY COVER SMART

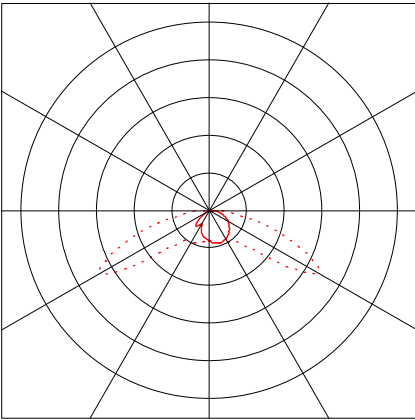
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 120 lm/W
Classification : A30 ↓98.3% ↑1.7%
CIE Flux Codes : 26 60 91 98 100
UGR 4H 8H : 24.2 / 33.5
Power : 11 W
Luminous flux : 1320 lm

Equipped with

Quantity : 1
Designation : 8W LED
Colour : 4000
Luminous flux : 1320 lm
Colour reproduction : 80

Dimensions : 360 mm x 260 mm x 320 mm



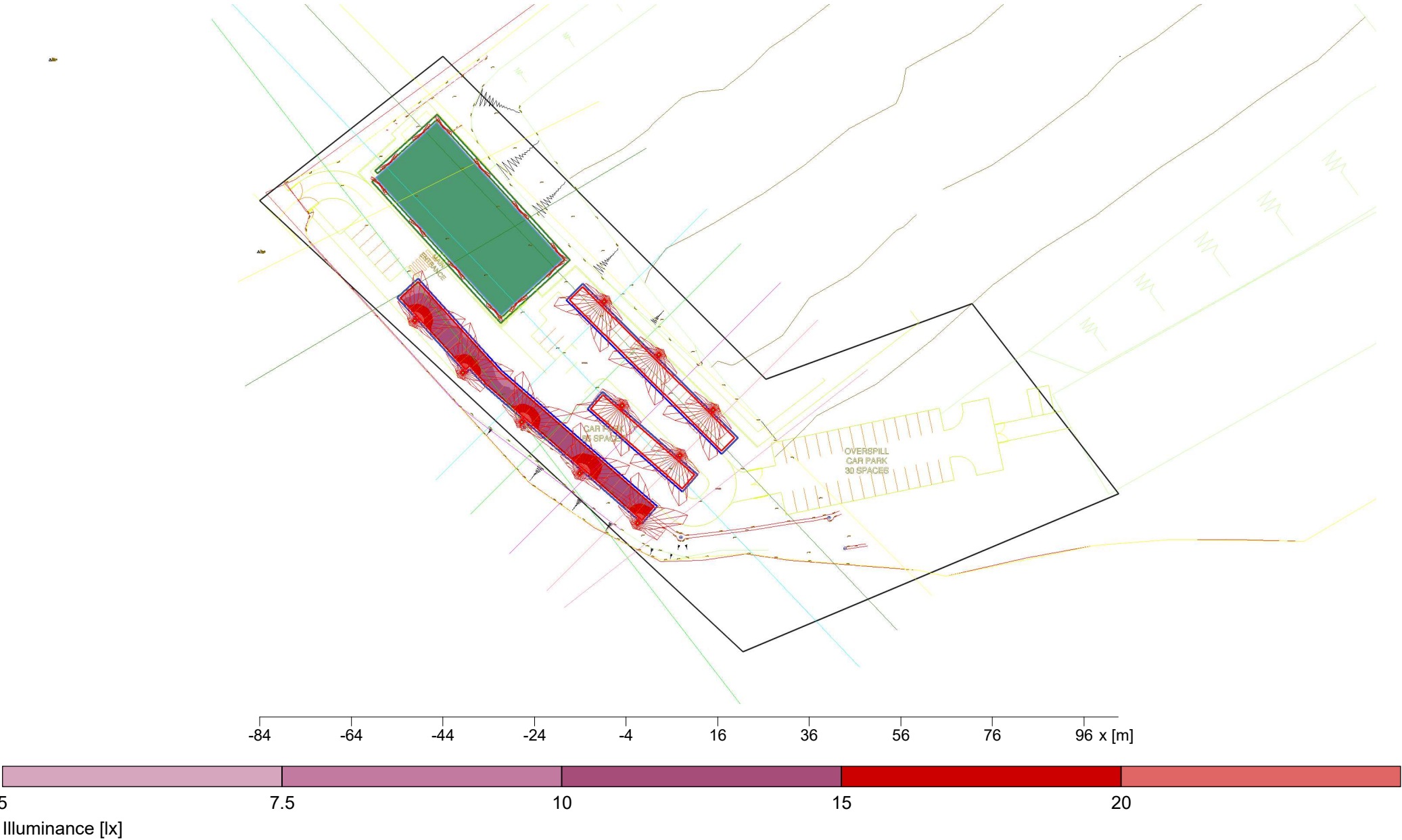
Emergency Lighting

Light source from normal operation with reduced flux
Luminous flux : 385 lm

2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, Car Park



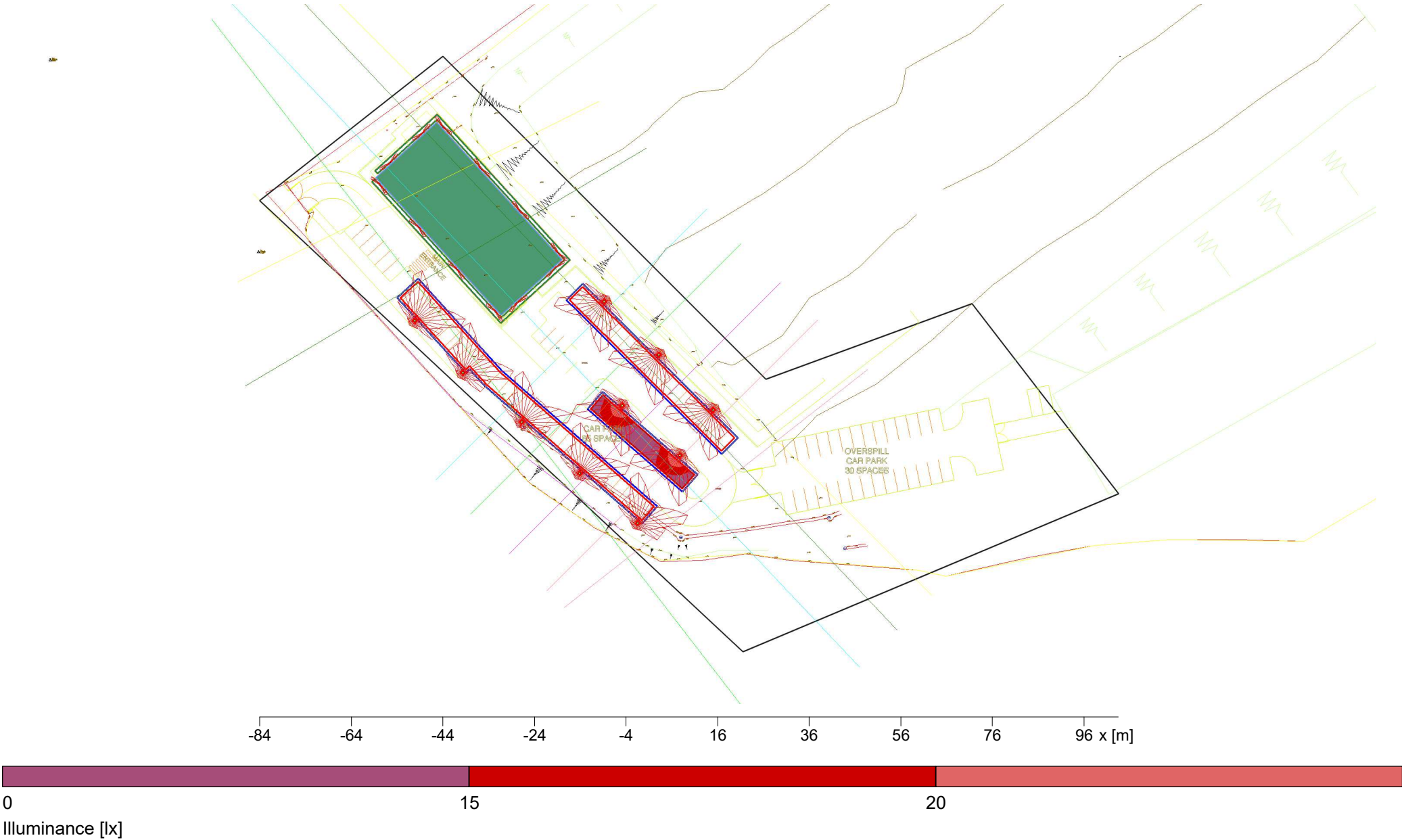
General	
Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80

Car Park	
Em	Horizontal
Emin	12.6 lx
Emin/Em (Uo)	7.7 lx
Emin/Emax (Ud)	4.3 lx
Ec/Eh	0.51
Position	0.28
	0.51
	1.60 m

Type No.\Make

2.2 Summary, Exterior 1

2.2.2 Result overview, Car Park



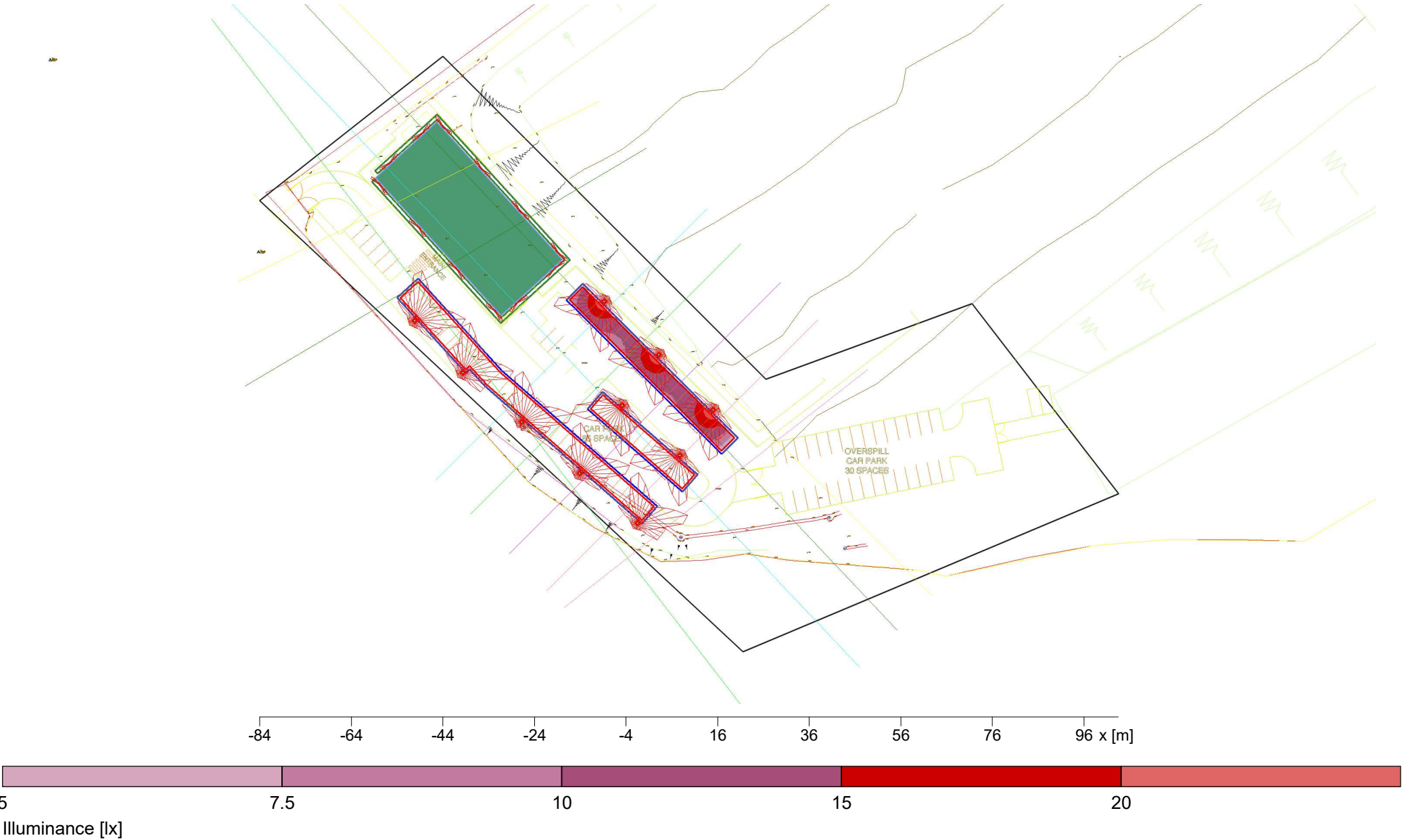
General	
Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80

Car Park	
Em	Horizontal
Emin	14.8 lx
Emin/Em (Uo)	8.2 lx
Emin/Emax (Ud)	5.4 lx
Ec/Eh	0.68
Position	0.44
	0.47
	1.60 m

Type No.\Make

2.2 Summary, Exterior 1

2.2.3 Result overview, Car PArk



General		
Calculation algorithm used	Average indirect fraction	
Maintenance factor	0.80	

Car PArk		
Em	Horizontal	cylindrical
Emin	12.3 lx	7.5 lx
Emin/Em (Uo)	6.3 lx	4.2 lx
Emin/Emax (Ud)	0.51	0.56
Ec/Eh	0.29	0.48
Position	0.00 m	1.60 m

Type No.\Make

2.2 Summary, Exterior 1

2.2.4 Result overview, Pavillion



General	
Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux	2640.00 lm
Total power	22.0 W
Total power per area (119.63 m²)	0.18 W/m² (0.84 W/m²/100lx)

Pavillion	Pavillion	
	Horizontal	cylindrical
Em	21.8 lx	22.2 lx
Emin	16.1 lx	5.3 lx
Emin/Em (Uo)	0.74	0.24
Emin/Emax (Ud)	0.43	
Ec/Eh		0.53
Position	0.00 m	1.60 m

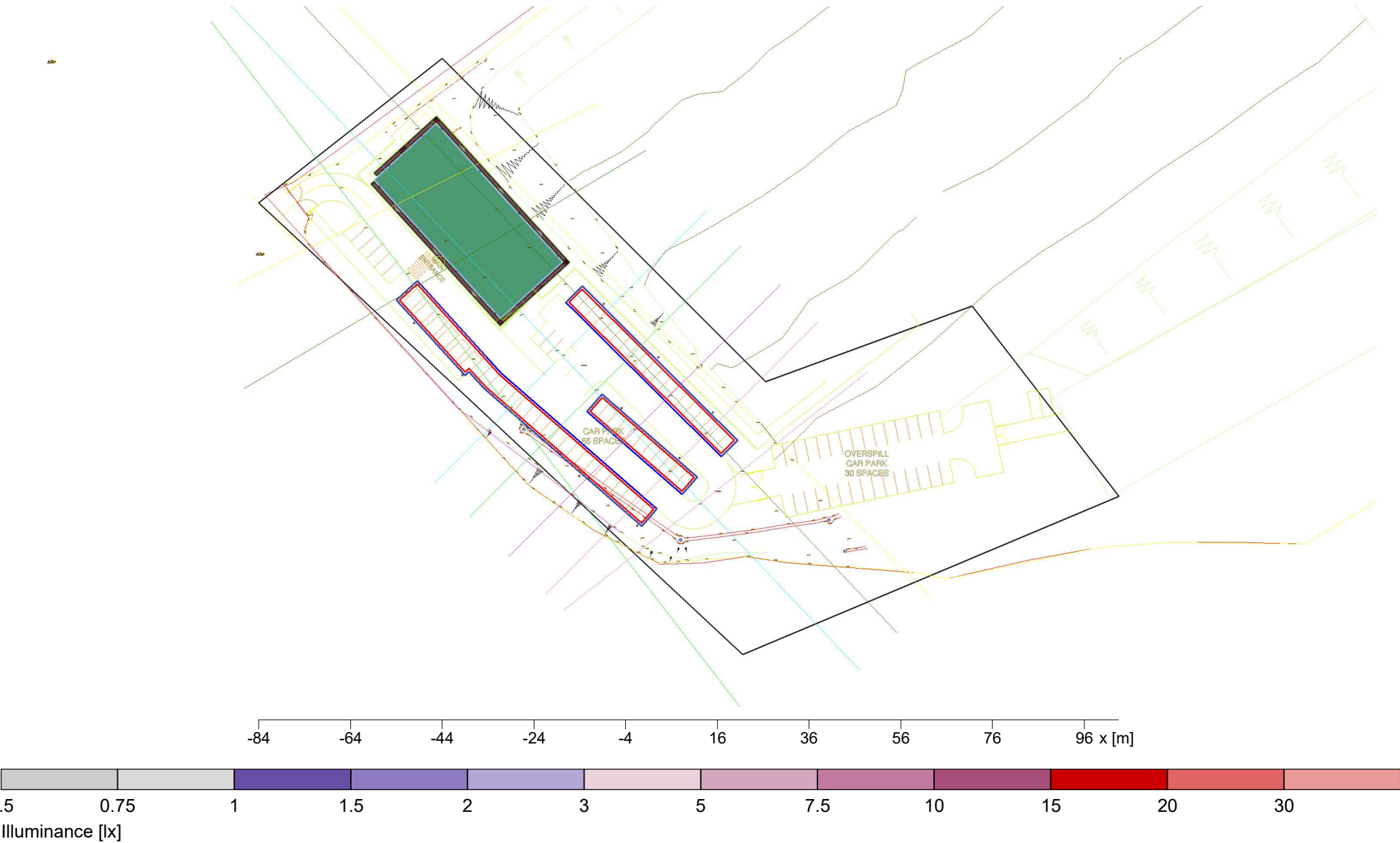
Type No.\Make

Thorlux	
Order No.	: IWRL19069
Luminaire name	: REALTA WIDE LED POLY COVER SMART
Equipment	: 1 x 8W LED 11 W / 1320 lm
Emergency	: 385 lm (29.2 %)

2 Exterior 1

2.4 Summary, Exterior 1

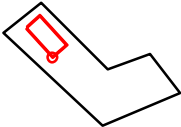
2.4.1.1 Result overview (emergency lighting)



General
Calculation algorithm used : Direct component
Maintenance factor : 0.8
Height (phot centre) : 2.84 m
Maximum I : 390 cd < 900 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1			
Calculation field: 20.42m x 43.03m (34 x 72 pts), Height = 0.00m			
1	3.66 lx	10.76 lx	1: 2.94
	>= 0.5 lx		< 1 : 40



Type No.\Make

2	12 x	Thorlux	
		Order No.	: !WRL19069
		Luminaire name	: REALTA WIDE LED POLY COVER SMART
		Equipment	: 1 x 8W LED 11 W / 1320 lm
		Emergency	: 385 lm (29.2 %)