



Swan Lanes, Navan

Installation : Car Park Lighting

Project number : ALD22141

Customer : Renaissance Engineering

Processed by : BG

Date : 01.09.2022

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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1 Luminaire data

1.1 NORTHCLIFFE, Auva LED1x3250 G092 T7... (!!_270_Auva LED...)

1.1.1 Data sheet

Manufacturer: NORTHCLIFFE

!!_270_Auva LED1x3250 G092 T740 LSS2.ltd

Auva LED1x3250 G092 T740 LSS2

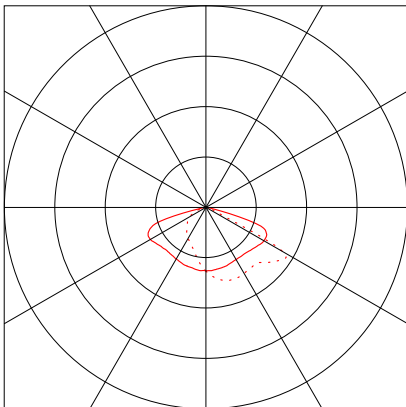
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 115.79 lm/W
Classification : A30 ↓100.0% ↑0.0%
CIE Flux Codes : 37 73 99 100 100
UGR 4H 8H : 32.7 / 21.8
Power : 19 W
Luminous flux : 2200 lm

Equipped with

Quantity : 1
Designation : LED1x3250
T740
Colour : 4000
Luminous flux : 2200 lm
Colour reproduction : 70

Dimensions : 525 mm x 250 mm x 102 mm



Object : Swan Lanes, Navan
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2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Product data:

Type No. Make

2	5 x	Order No.	:	
		Luminaire name	:	Auva on 6M pole
		with	:	1 x !!_270_Auva LED1x3250 G092 T740 LSS2.ltd
		Equipment	:	1 x LED1x3250 T740 19 W / 2200 lm

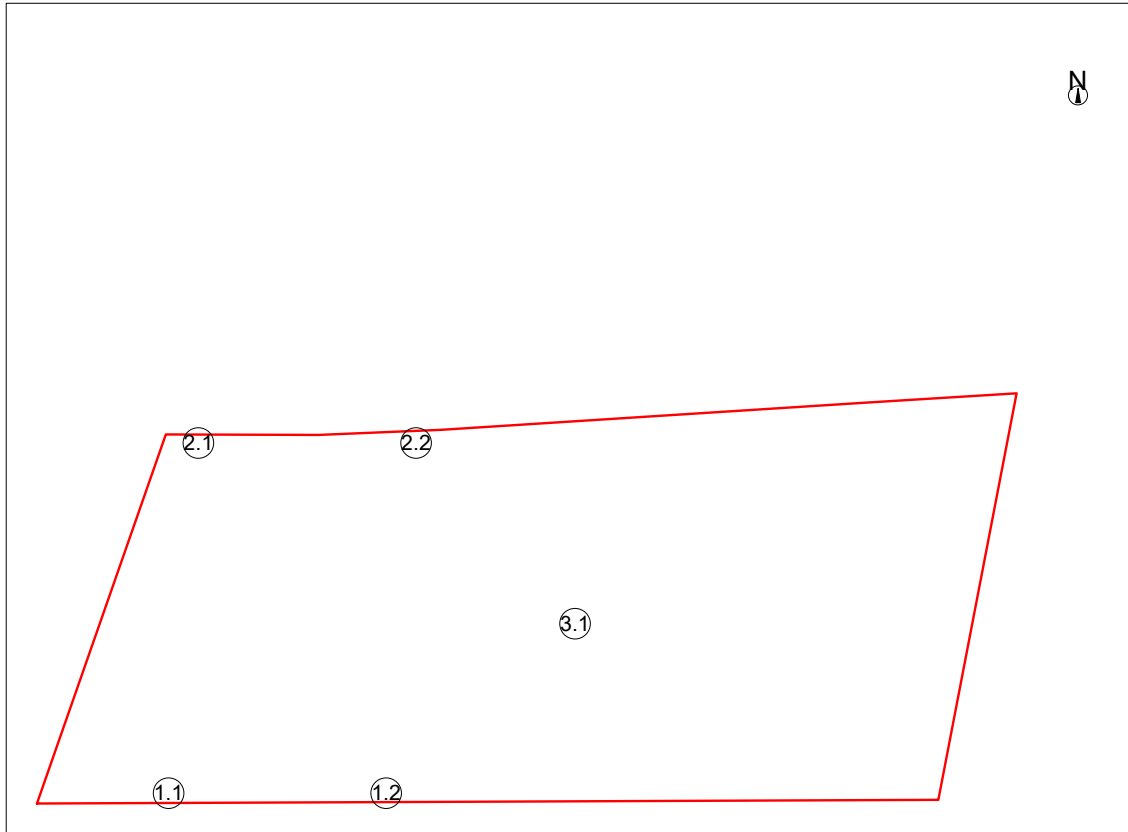


2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Floor with luminaire and sensor positions:



	Position			Rotation		
	x[m]	y[m]	z[m]	za	xa	ya
Auva on 6M pole (19W)						
1	7.82	0.61	0.00	0.0°	0.0°	0.0°
2	20.73	0.61	0.00	0.0°	0.0°	0.0°
1	9.59	21.40	0.00	180.0°	0.0°	0.0°
Orientation	Target coordinates			Rotation		
1!!_270_Auva LED1x3250 G092	7.82	0.61	0.00	180.0°	5.0°	0.0°
2	22.51	21.40	0.00	180.0°	0.0°	0.0°
Orientation	Target coordinates			Rotation		
1!!_270_Auva LED1x3250 G092	22.51	21.40	0.02	180.0°	5.0°	0.0°
1	31.94	10.67	0.00	90.0°	0.0°	0.0°
Orientation	Target coordinates			Rotation		
1!!_270_Auva LED1x3250 G092	31.94	10.67	1.07	90.0°	5.0°	0.0°

Structural elements



2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Face

No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle		rho[%]
							L axis	Q axis	
Parking Area									
Wo 2	3.10	6.00	0.00	28.12	21.62	0.00	0.00	0.00	---
Wo 3	5.73	16.10	0.00	9.66	9.85	319.44	0.00	0.00	---
Wo 4	0.03	0.07	-0.00	8.59	5.97	359.79	0.00	0.00	---

Measuring surface

No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle	
							L axis	Q axis
Ref. plane 1.1								
	0.00	-0.00	0.00	58.34	24.36	0.24	0.00	0.00
Parking Area								
M 1	3.10	6.00	-0.00	28.12	21.62	0.00	0.00	0.00

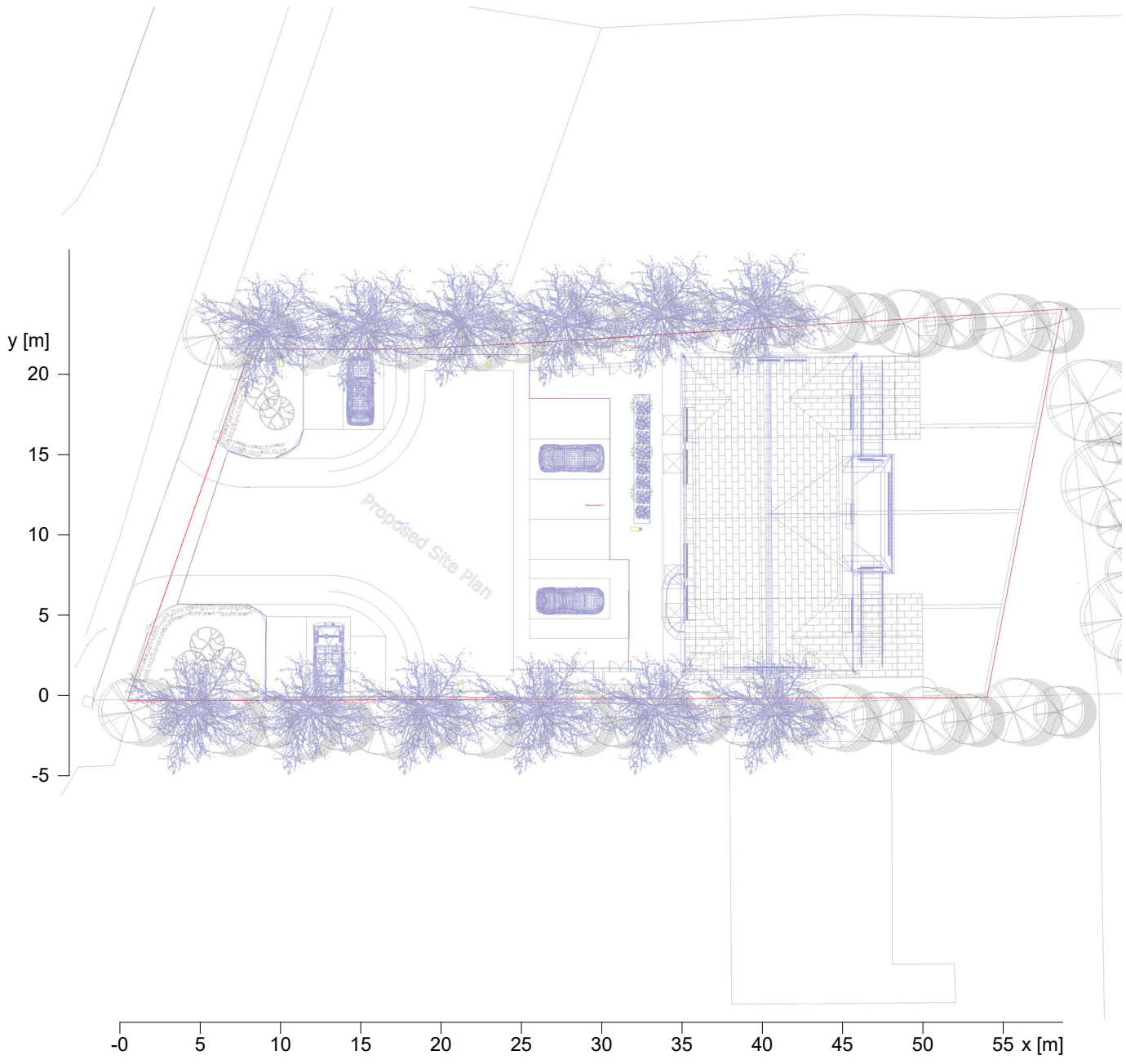
Others

No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle		rho[%]
							L axis	Q axis	
A 1	25.12	20.51	0.00	6.84	2.11	2.86	0.00	0.00	50
A 2	25.03	0.24	0.00	6.86	1.78	0.00	0.00	0.01	50
A 1	31.53	11.04	0.00	1.00	8.00	0.00	0.00	0.00	---



2.1 Description, Exterior 1

2.1.2 Floor plan

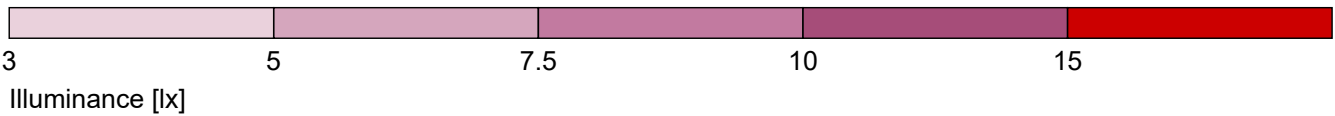
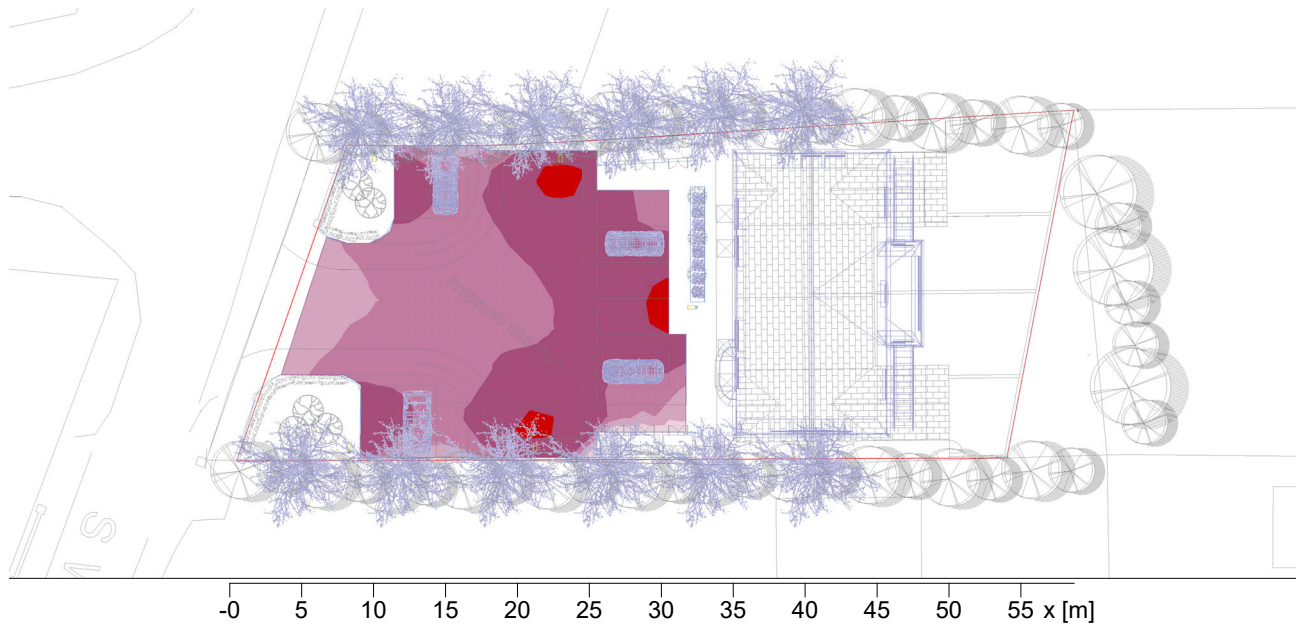




2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, Parking Area




General

Calculation algorithm used	Average indirect fraction
Height (phot centre) [m]:	6.00 m
Maintenance factor	0.80
Total luminous flux	11000 lm
Total power	95 W
Total power per area (1174.63 m ²)	0.08 W/m ²

Illuminance

Average illuminance	Em	9.5 lx
Minimum illuminance	Emin	4.2 lx
Maximum illuminance	Emax	15.1 lx
Uniformity Uo	Emin/Em	1:2.28 (0.44)
Diversity Ud	Emin/Emax	1:3.62 (0.28)

Type No. Make

2	5 x	Order No.	:
		Luminaire name	: Auva on 6M pole
		with	: 1 x !!_270_Auva LED1x3250 G092 T740 LSS2.ltd
		Equipment	: 1 x LED1x3250 T740 19 W / 2200 lm

2.2 Summary, Exterior 1

2.2.2 Exterior summary, Exterior 1



General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Measuring areas 1 Parking Area

	Illuminance		Calculation field: 28.12m x 21.62m (18 x 14 pts), Height = 0.00m	
	\bar{E}_m	E_{min}	U_o	U_d
P3	9.50 lx	4.17 lx	0.44	0.28
	≥ 7.50 lx	≥ 1.50 lx		

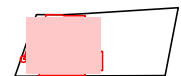
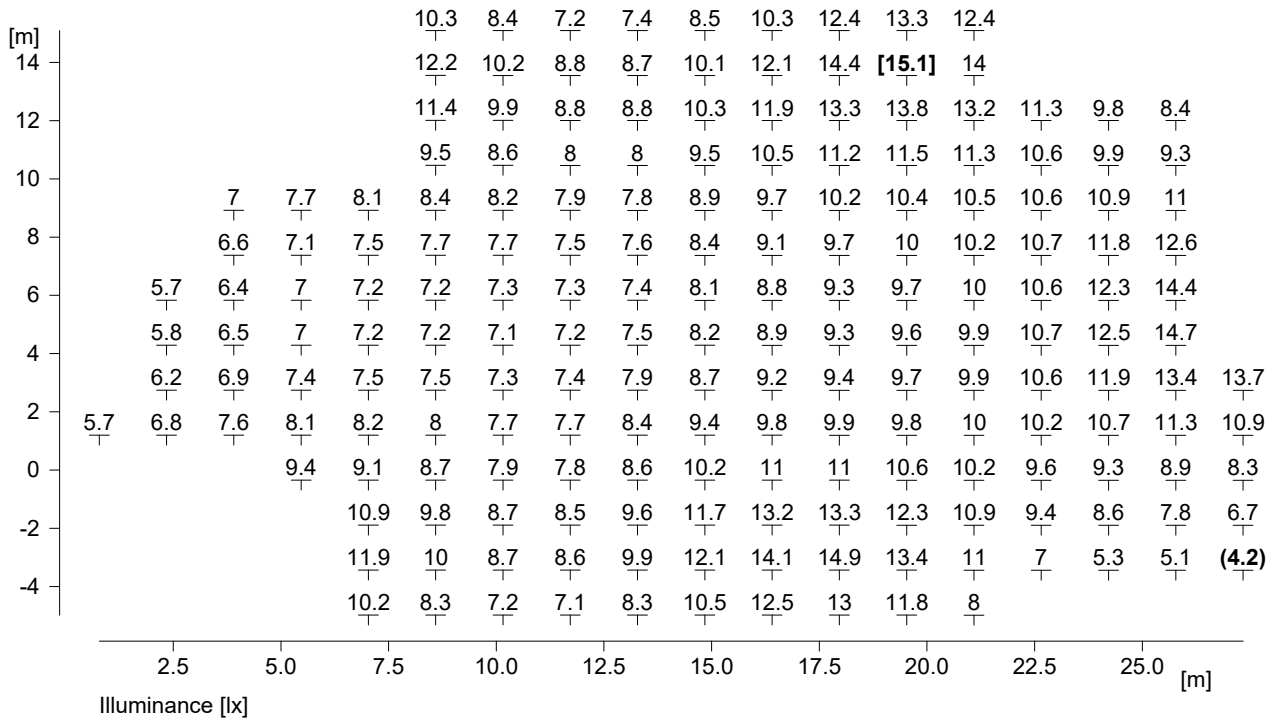




2 Exterior 1

2.3 Calculation results, Exterior 1

2.3.1 Table, Parking Area (E)



Average illuminance	Em	: 9.5 lx
Minimum illuminance	Emin	: 4.2 lx
Maximum illuminance	Emax	: 15.1 lx
Uniformity Uo	Emin/Em	: 1 : 2.28 (0.44)
Diversity Ud	Emin/Emax	: 1 : 3.62 (0.28)

2 Exterior 1

2.4 Calculation results, Exterior 1

2.4.1 3D luminance (raytracing), Variable view



Luminance in the illustration:

Minimum: : 0 cd/m²
Maximum: : 3210 cd/m²

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