

LiDL Hollinwood Avenue, Moston

Installation : Carpark

Project number :

Customer : LiDL

Processed by : AG

Date : 05.09.2025

Project description:

Maintenance Factor 0.79

No obstructions are considered in these lighting calculations.

Lighting levels to 15 Lux Ave with 25% uniformity.

The nominal values shown in this report are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.

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.

NOT FOR CONSTRUCTION

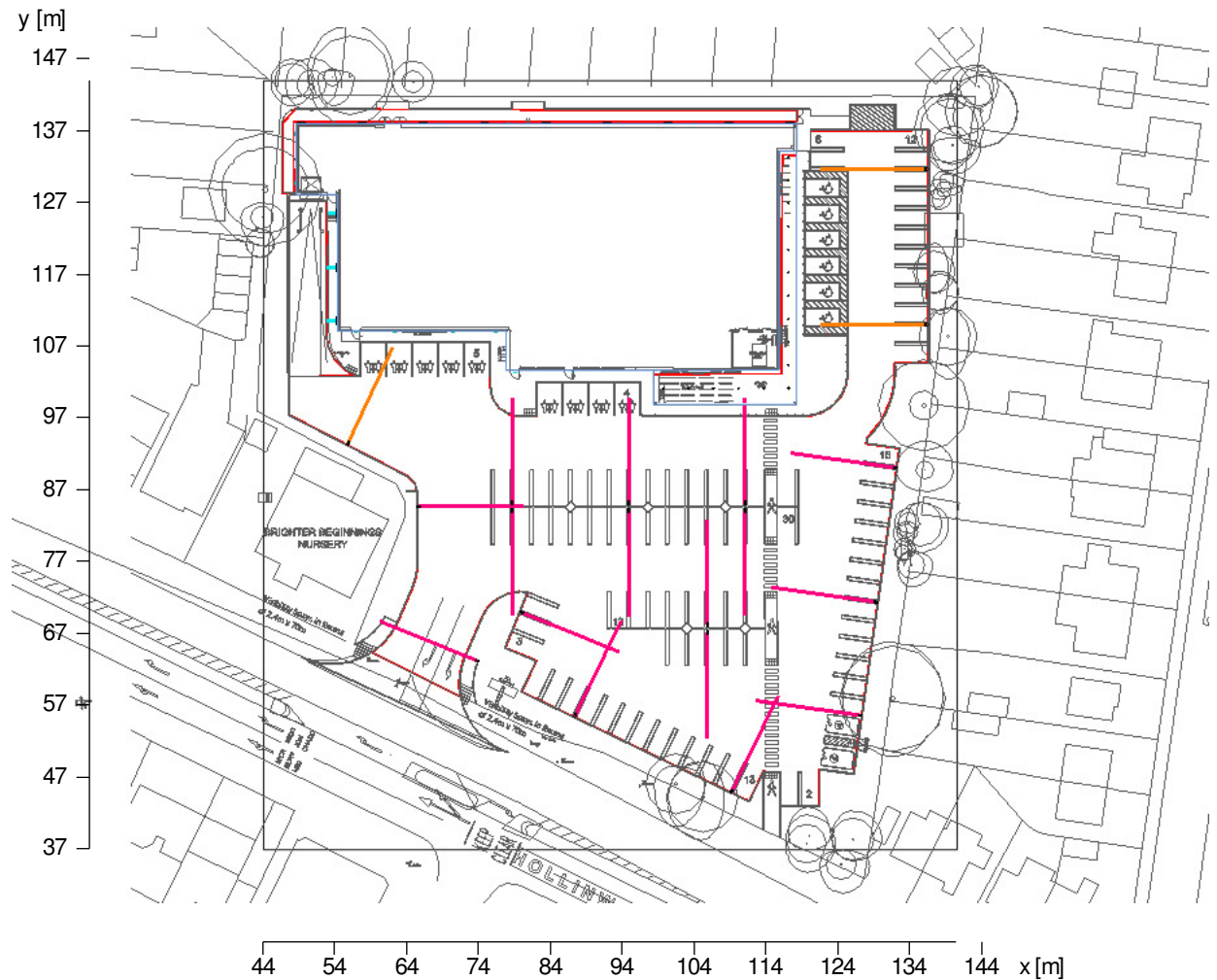
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1 Carpark

1.1 Description, Carpark

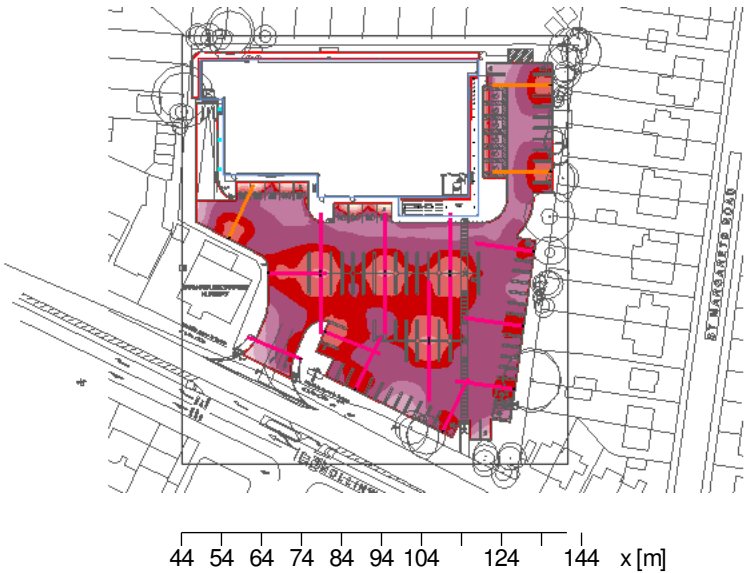
1.1.1 Floor plan



1 Carpark

1.2 Summary, Carpark

1.2.1 Result overview, Carpark



General	
Calculation algorithm used	Average indirect fraction
Maintenance factor	0.79
Total luminous flux	
218960 lm	
Total power	
1793.3 W	
Total power per area (10325.50 m²)	
0.17 W/m²	
Upward light ratio (RUL)	
1 %	

Illuminance	
Average illuminance	$\bar{E}_m$ 14.7 lx
Minimum illuminance	E_{min} 4.2 lx
Maximum illuminance	E_{max} 93.7 lx
Uniformity U_0	$E_{min}/\bar{E}_m$ 1:3.53 (0.28)
Diversity U_d	E_{min}/E_{max} 1:22.6 (0.04)

Type No.\Make

1 3 x		PHILIPS/2025-01-06 Eulumdat/1 B-Tilt = 0.00	
		Order No.	:
		Luminaire name	: LL-C 3000K
		Equipment	: 1 x LED75-4S/830 51.8 W / 7500 lm
2 16 x			
		Order No.	:
		Luminaire name	: LL-A 3000K
		Equipment	: 1 x LED49-4S/830 35.4 W / 4900 lm

The ULR value has been calculated without obstruction by other objects.

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1 Carpark

1.2 Summary, Carpark

1.2.1 Result overview, Carpark

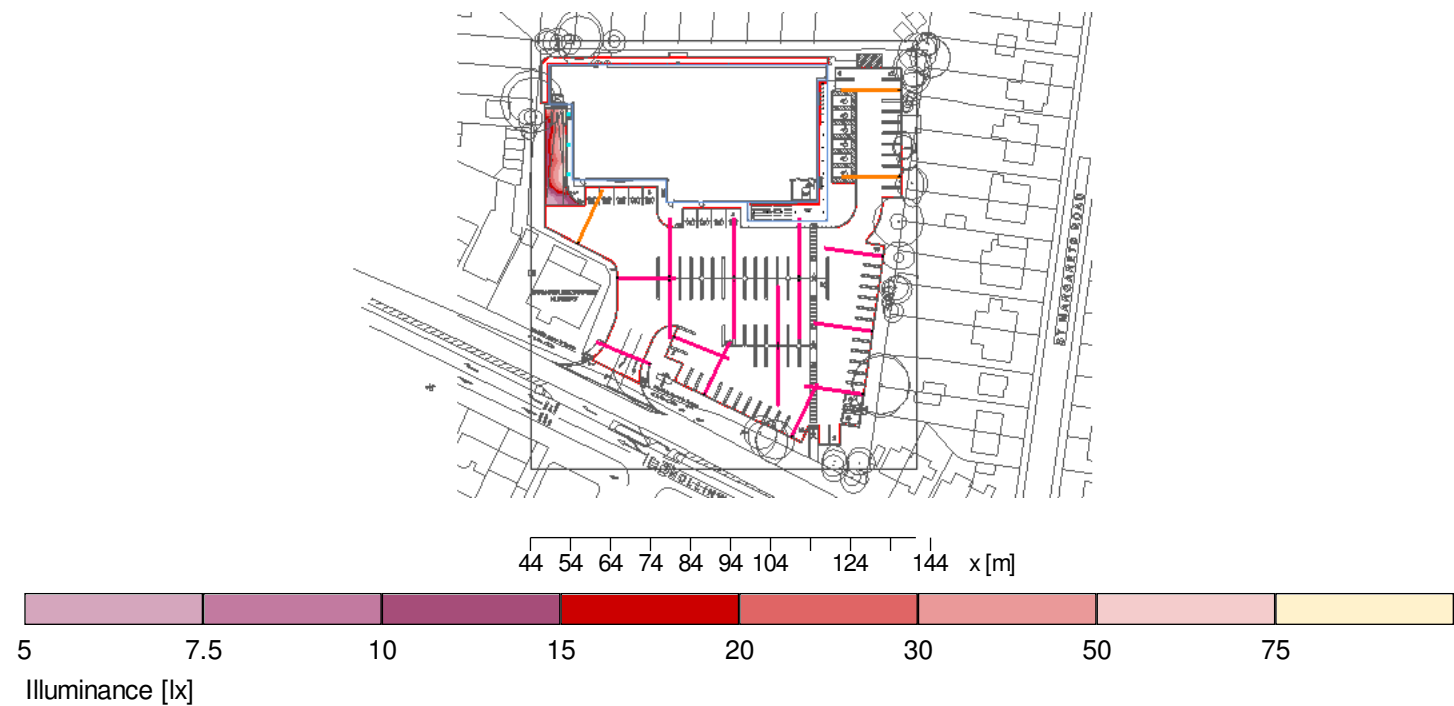
4 21 x Order No. :
 Luminaire name : LL-E 3000K
Equipment : 1 x LED42S/830 25.5 W / 3900 lm

Philips Lighting

3 16 x Order No. : !
 Luminaire name : LL-Canopy
Equipment : 1 x DLED-4000 33.5 W / 2260 lm

1.2 Summary, Carpark

1.2.2 Result overview, Lorry Bay



General	
Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.79
Total luminous flux	218960 lm
Total power	1793.3 W
Total power per area (10325.50 m²)	0.17 W/m²
Upward light ratio (RUL)	1 %

Illuminance	
Average illuminance	$\bar{E}_m$ 33.4 lx
Minimum illuminance	E_{min} 5.2 lx
Maximum illuminance	E_{max} 97.4 lx
Uniformity U_0	$E_{min}/\bar{E}_m$ 1:6.4 (0.16)
Diversity U_d	E_{min}/E_{max} 1:18.7 (0.05)

Type No.\Make

PHILIPS/2025-01-06 Eulumdat/1 B-Tilt = 0.00	
1 3 x	Order No. :
	Luminaire name : LL-C 3000K
	Equipment : 1 x LED75-4S/830 51.8 W / 7500 lm

The ULR value has been calculated without obstruction by other objects.

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1.2 Summary, Carpark

1.2.2 Result overview, Lorry Bay

2 16 x  Order No. :
Luminaire name : LL-A 3000K
Equipment : 1 x LED49-4S/830 35.4 W / 4900 lm

4 21 x  Order No. :
Luminaire name : LL-E 3000K
Equipment : 1 x LED42S/830 25.5 W / 3900 lm

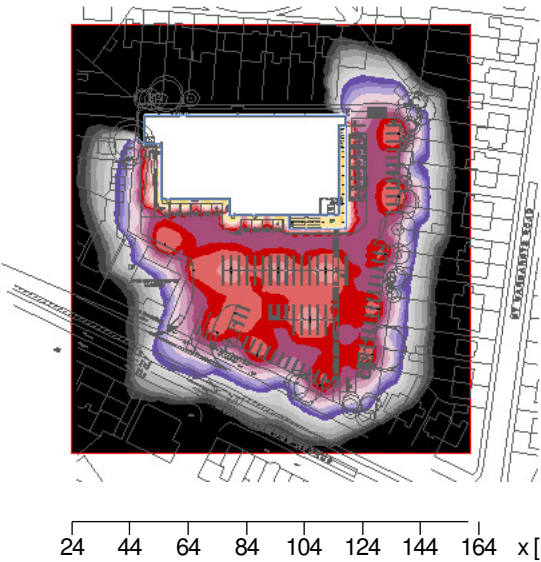
Philips Lighting

3 16 x  Order No. : !
Luminaire name : LL-Canopy
Equipment : 1 x DLED-4000 33.5 W / 2260 lm

2 Carpark Spill Light

2.1 Summary, Carpark Spill Light

2.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	1.00
Total lamp luminous flux	176060.00 lm
Luminaire luminous flux	157806.80 lm
Total power	1512.8 W
Total power per area (20065.50 m²)	0.08 W/m² (0.98 W/m²/100lx)
Upward light ratio (R _{UL})	1 %

Evaluation area 1

Horizontal Spill Light @0M

$\bar{E}_m$	Horizontal
E_{min}	7.73 lx
$E_{min}/\bar{E}_m (U_0)$	0 lx
$E_{min}/E_{max} (U_d)$	---
Position	---
	0.00 m

Type No.\Make

PHILIPS/2025-01-06 Eulumdat/1 B-Tilt = 0.00	
Order No.	1 3 x
Luminaire name	
Equipment	

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2 Carpark Spill Light

2.1 Summary, Carpark Spill Light

2.1.1 Result overview, Evaluation area 1

2 16 x  Order No. :
Luminaire name : LL-A 3000K
Equipment : 1 x LED49-4S/830 35.4 W / 4900 lm

4 10 x  Order No. :
Luminaire name : LL-E 3000K
Equipment : 1 x LED42S/830 25.5 W / 3900 lm

Philips Lighting

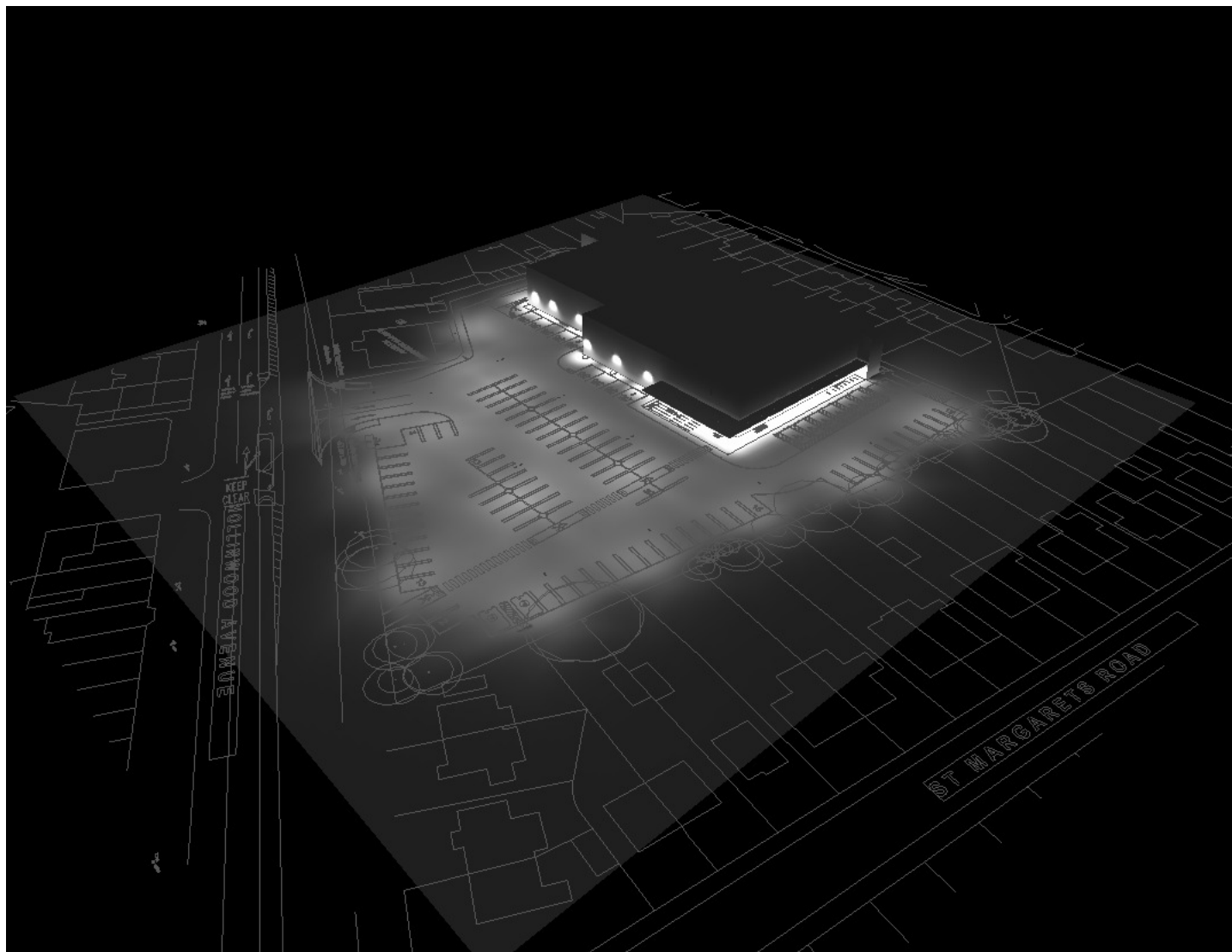
3 16 x  Order No. : !
Luminaire name : LL-Canopy
Equipment : 1 x DLED-4000 33.5 W / 2260 lm

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2 Carpark Spill Light

2.2 Calculation results, Carpark Spill Light

2.2.1 3D luminance, View 1



Luminance in the scene

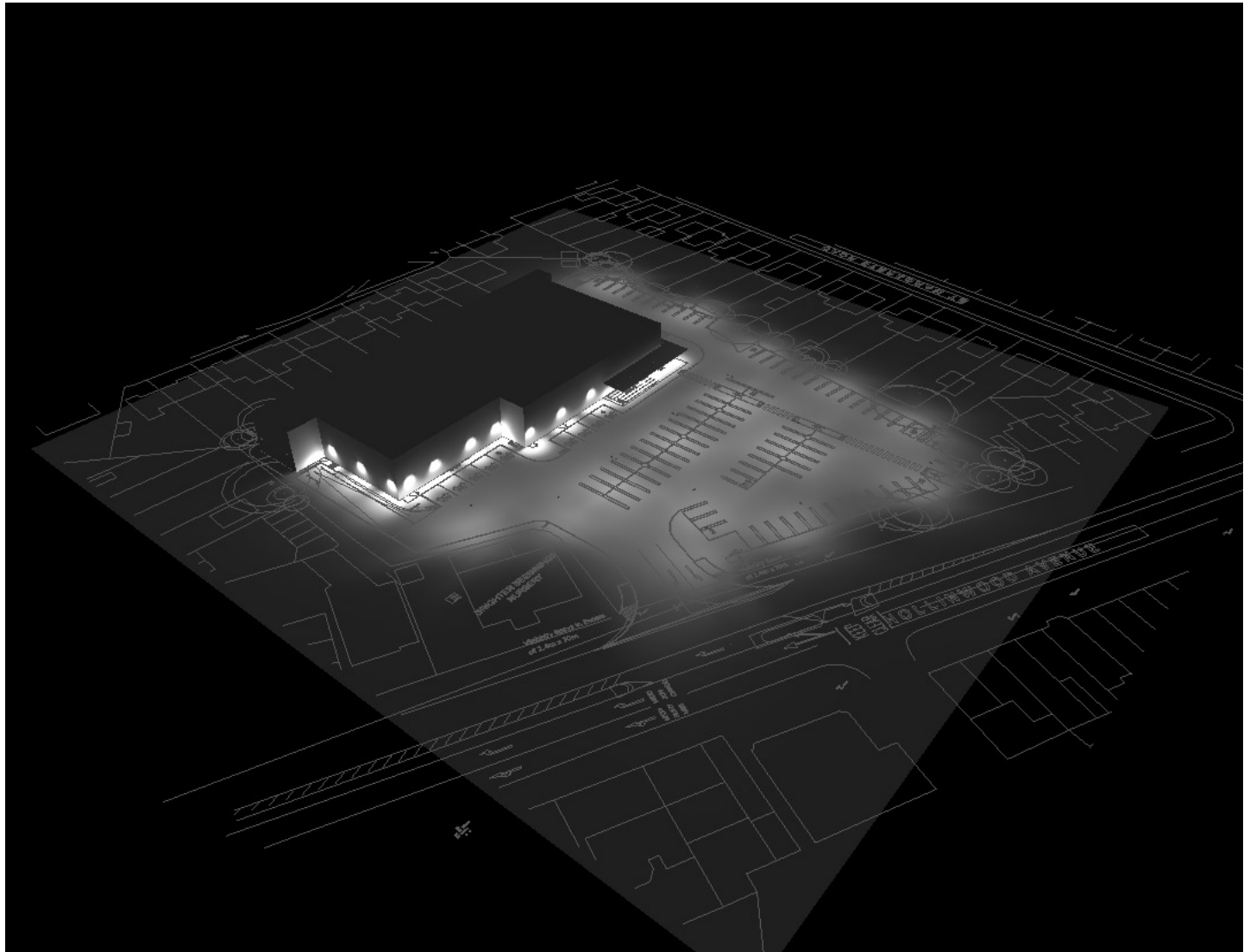
Minimum: : 0 cd/m²

Maximum: : 179 cd/m²

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2.2 Calculation results, Carpark Spill Light

2.2.2 3D luminance, View 2



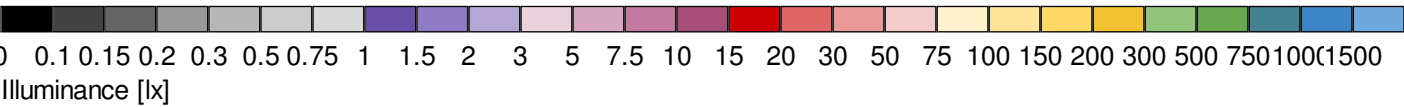
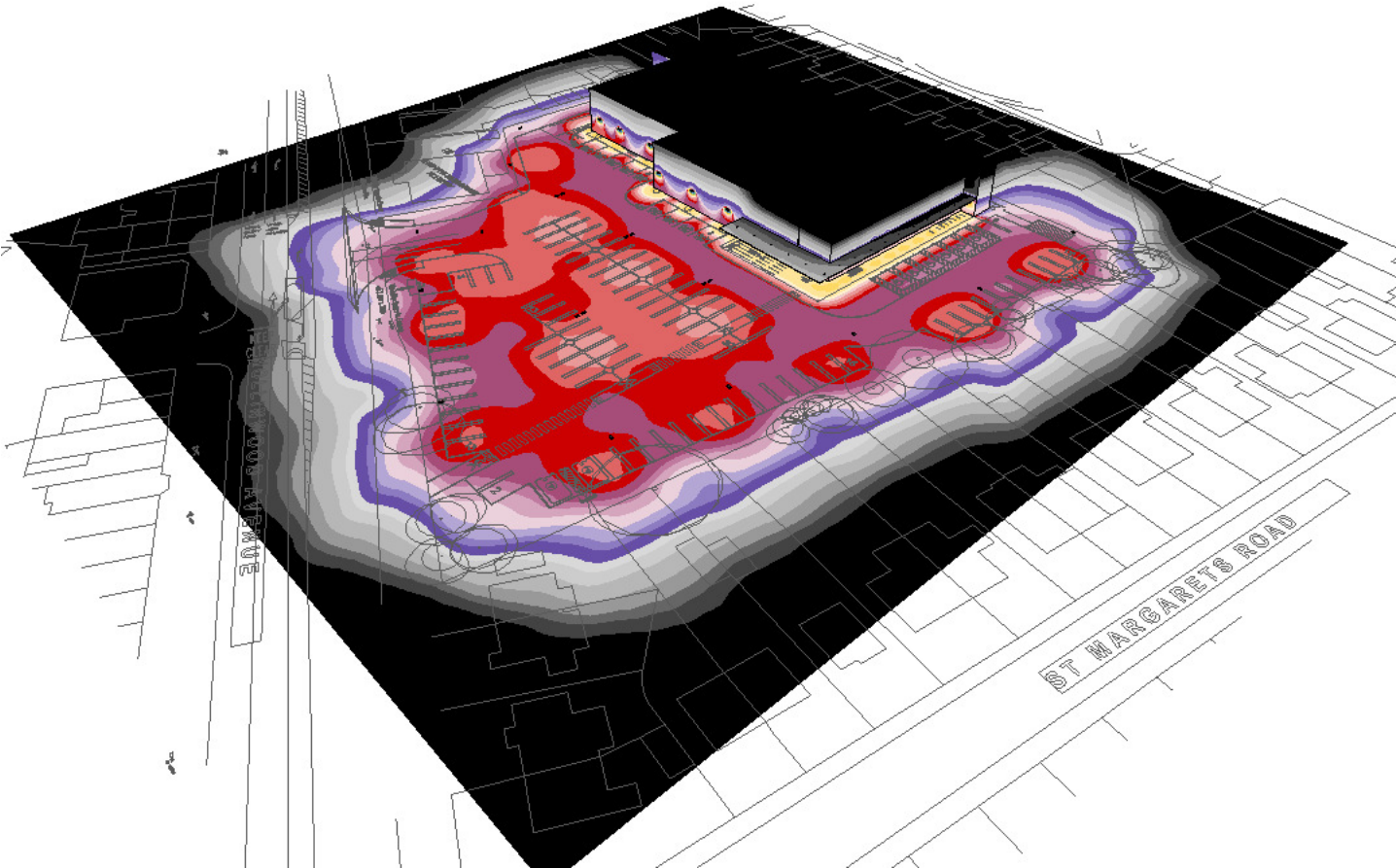
Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 179 cd/m²

2.2 Calculation results, Carpark Spill Light

2.2.3 3D pseudo colours, View 1 (E)



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2.2 Calculation results, Carpark Spill Light

2.2.4 3D pseudo colours, View 2 (E)

