

Co-Op Cuckfield Whitemans Green

Installation : Exterior Spill Light Analysis

Project number :
Customer : Greene King
Processed by : HSR
Date : 02.09.2025

Project description:
Spill Light Maintenance Factor 1

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.

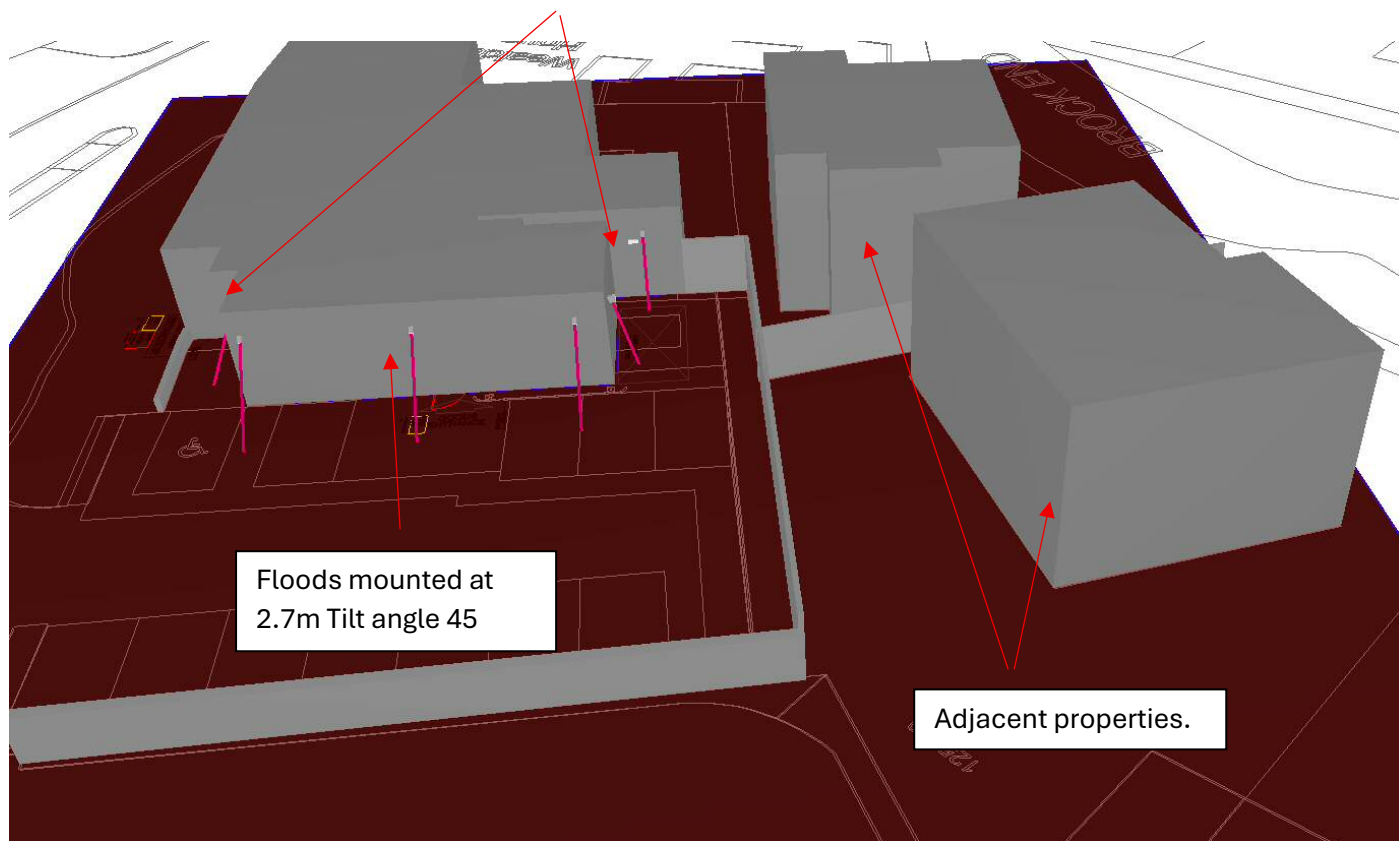
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Proposed Mounting Heights

Floods mounted at
2.7m Tilt angle 20

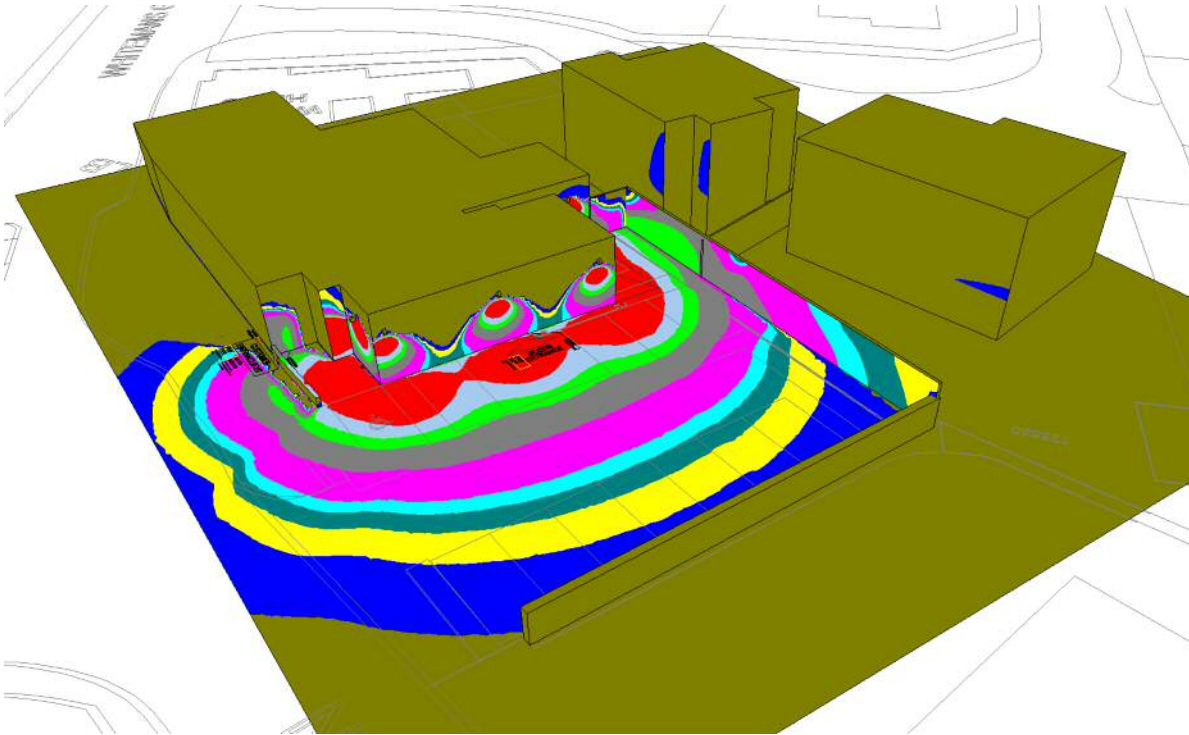
All emergency bulkheads
mounted @ 2.3m.



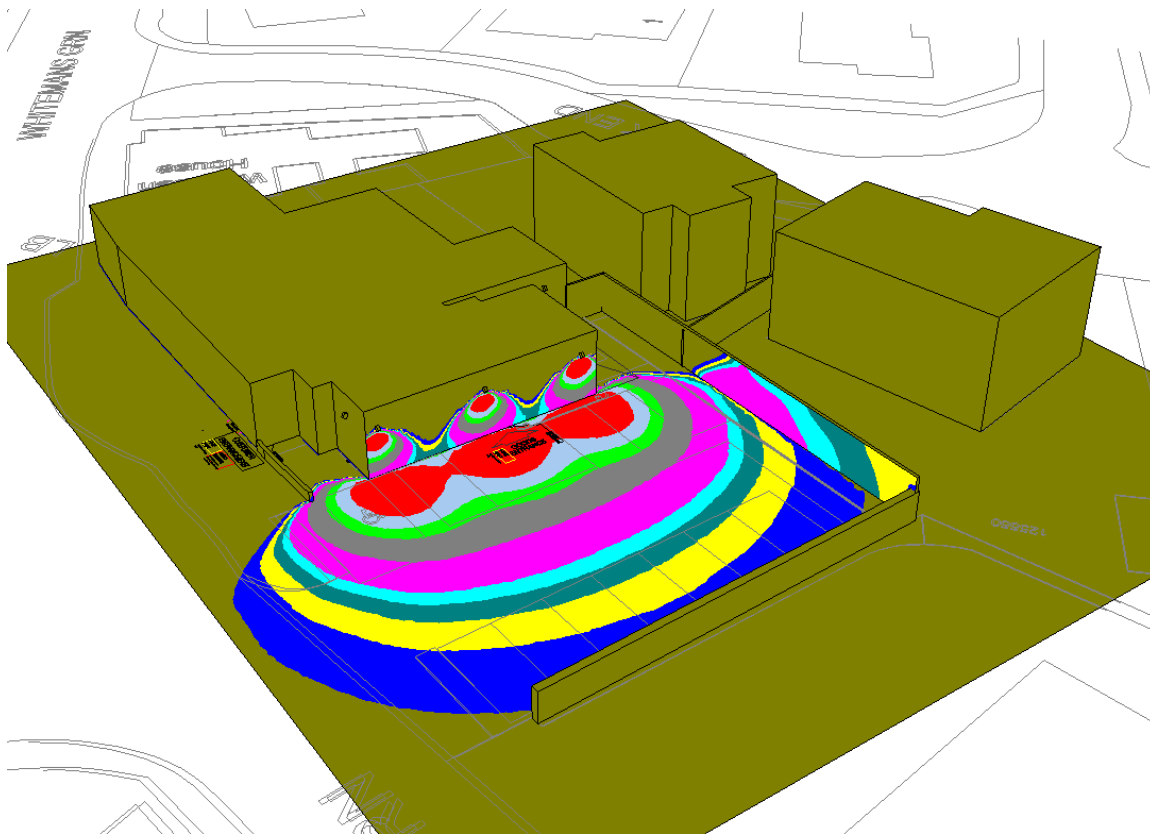
Plant lighting only used during maintenance

Post-Curfew spill light levels based on plant lighting, and the entrance is switched off at a predetermined time.

Pre-Curfew Spill Light Analysis.



Post-Curfew Spill Light Analysis.



Lux

1 Exterior Pre-Curfue

1.1 Description, Exterior Pre-Curfue

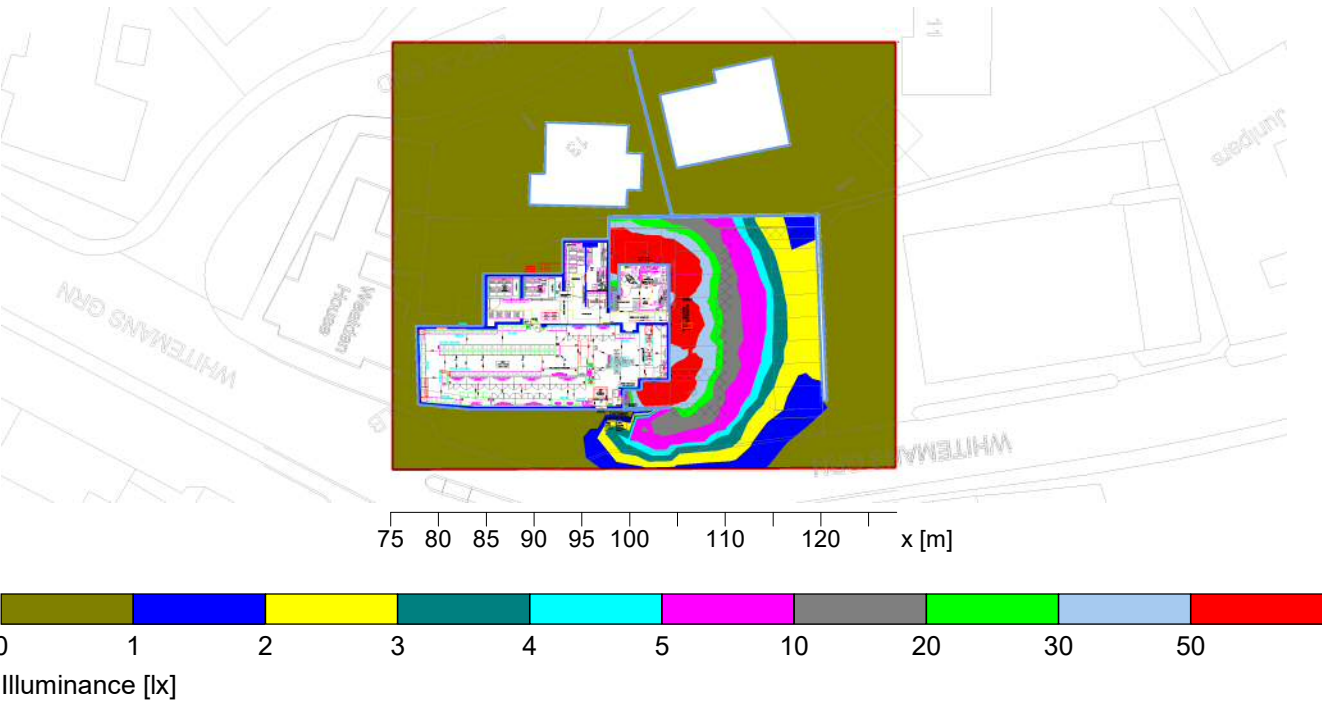
1.1.1 Floor plan



1 Exterior Pre-Curfue

1.2 Summary, Exterior Pre-Curfue

1.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	1.00
Total lamp luminous flux	15000.00 lm
Luminaire luminous flux	14994.51 lm
Total power	210.0 W
Total power per area (2344.72 m²)	0.09 W/m² (1.77 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal
$\bar{E}_m$	5.05 lx
E_{min}	0 lx
$E_{min}/\bar{E}_m (U_o)$	---
$E_{min}/E_{max} (U_d)$	---
Position	0.00 m

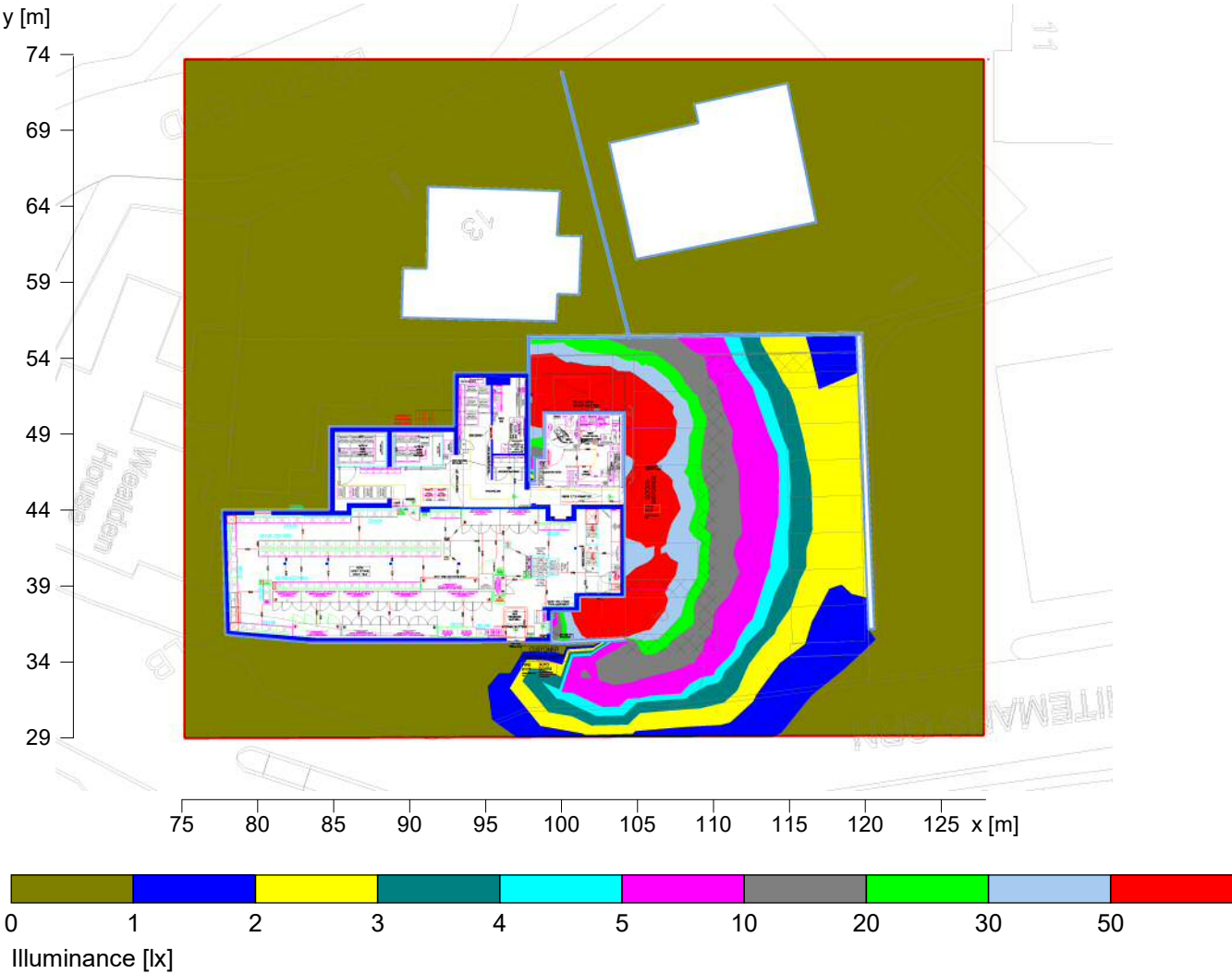
Type No.Make

20	6 x	Philips Lighting
		Order No. : !911401852483 BVP164 LED24/840 PSU 20W SWB CE
		Luminaire name : B17
		Equipment : 1 x LED25/740/- 35 W / 2500 lm

1 Exterior Pre-Curfue

1.3 Calculation results, Exterior Pre-Curfue

1.3.1 Pseudo colours, Reference plane 1.1 (E)



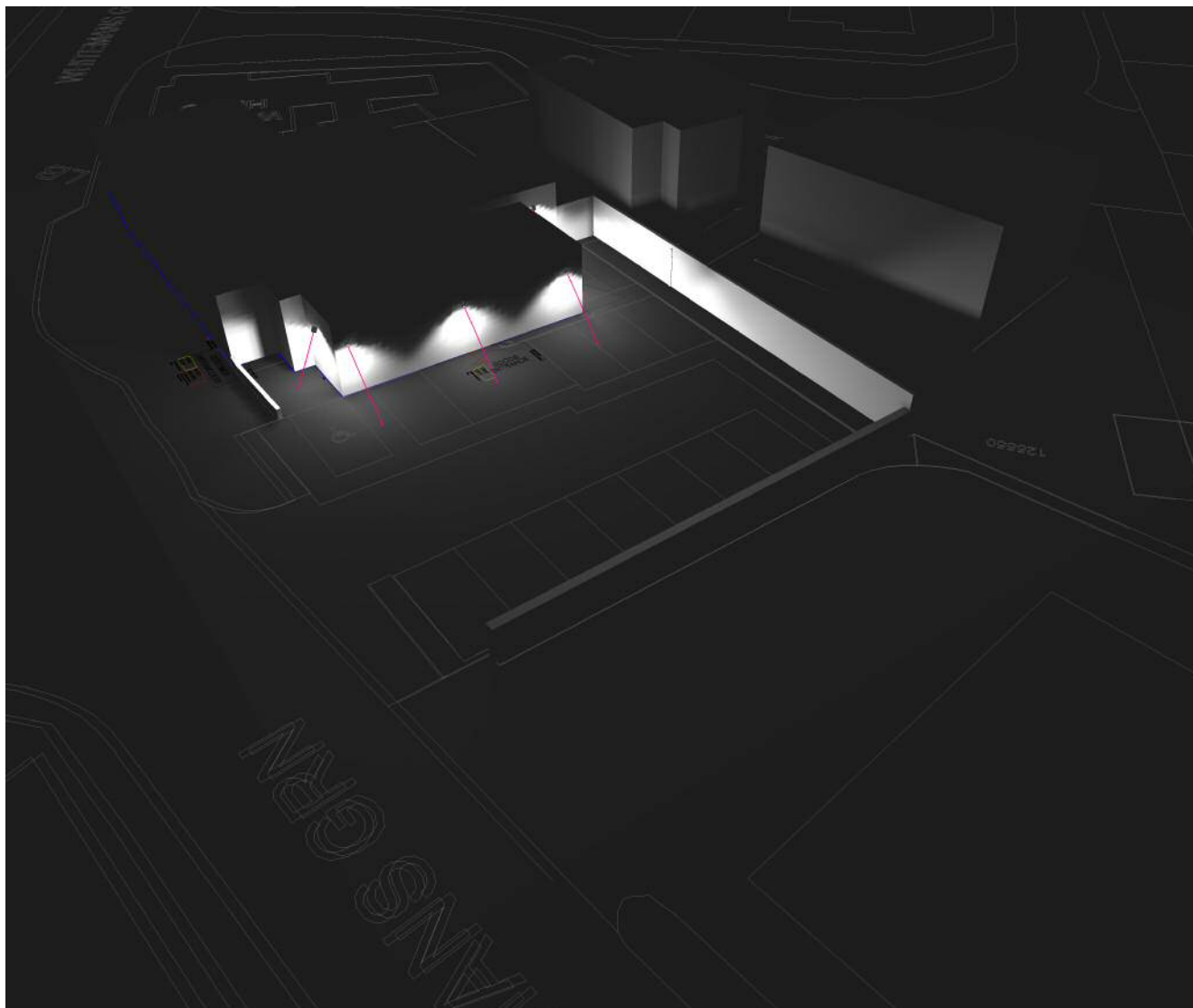
Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 5 lx
Minimum illuminance	E_{min}	: 0 lx
Maximum illuminance	E_{max}	: 156 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: ---
Diversity U_d	E_{min}/E_{max}	: ---

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1.3 Calculation results, Exterior Pre-Curfue

1.3.2 3D luminance, View 1



Luminance in the scene

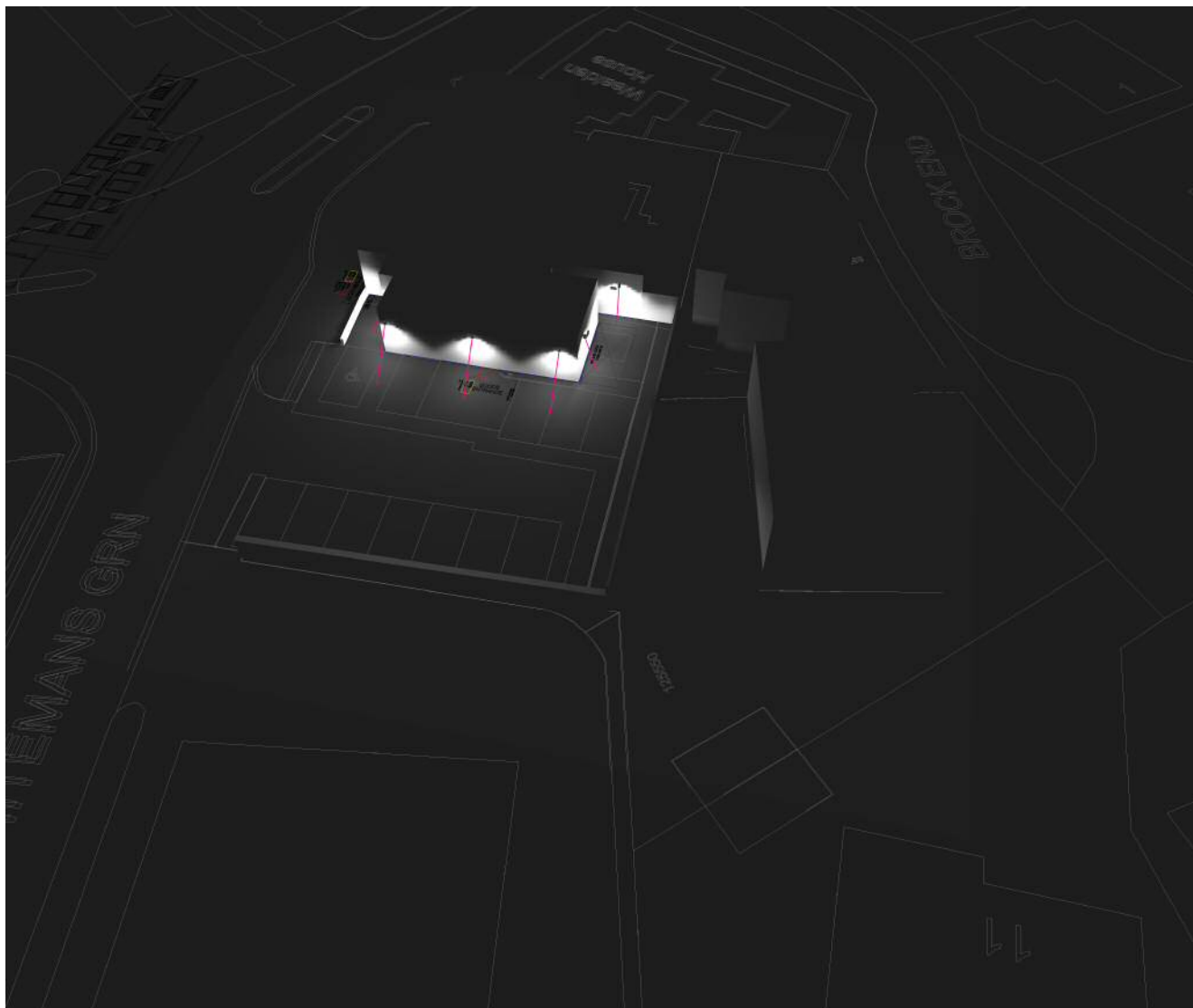
Minimum: : 0 cd/m²

Maximum: : 266 cd/m²

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1.3 Calculation results, Exterior Pre-Curfue

1.3.3 3D luminance, View 2



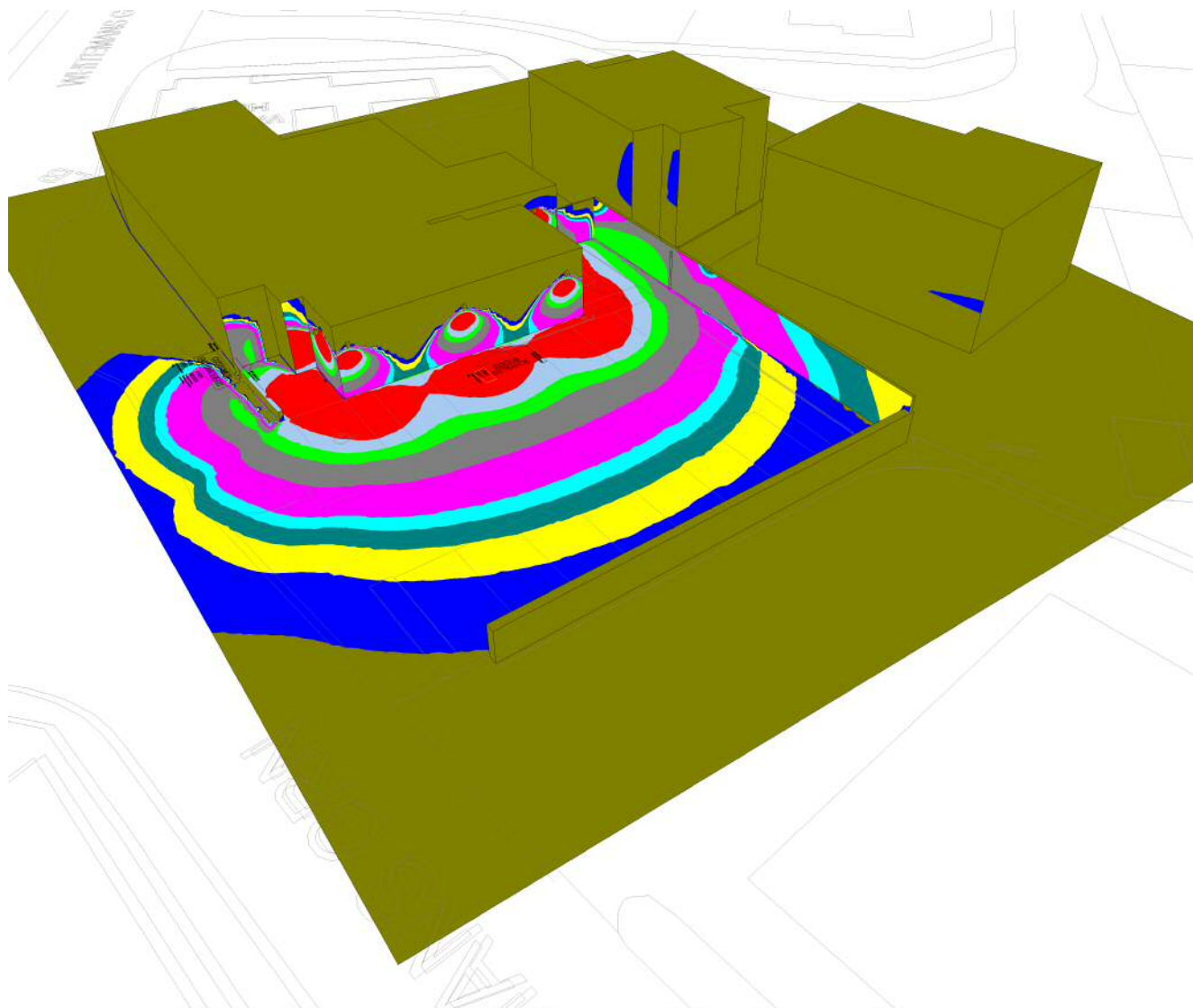
Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 266 cd/m²

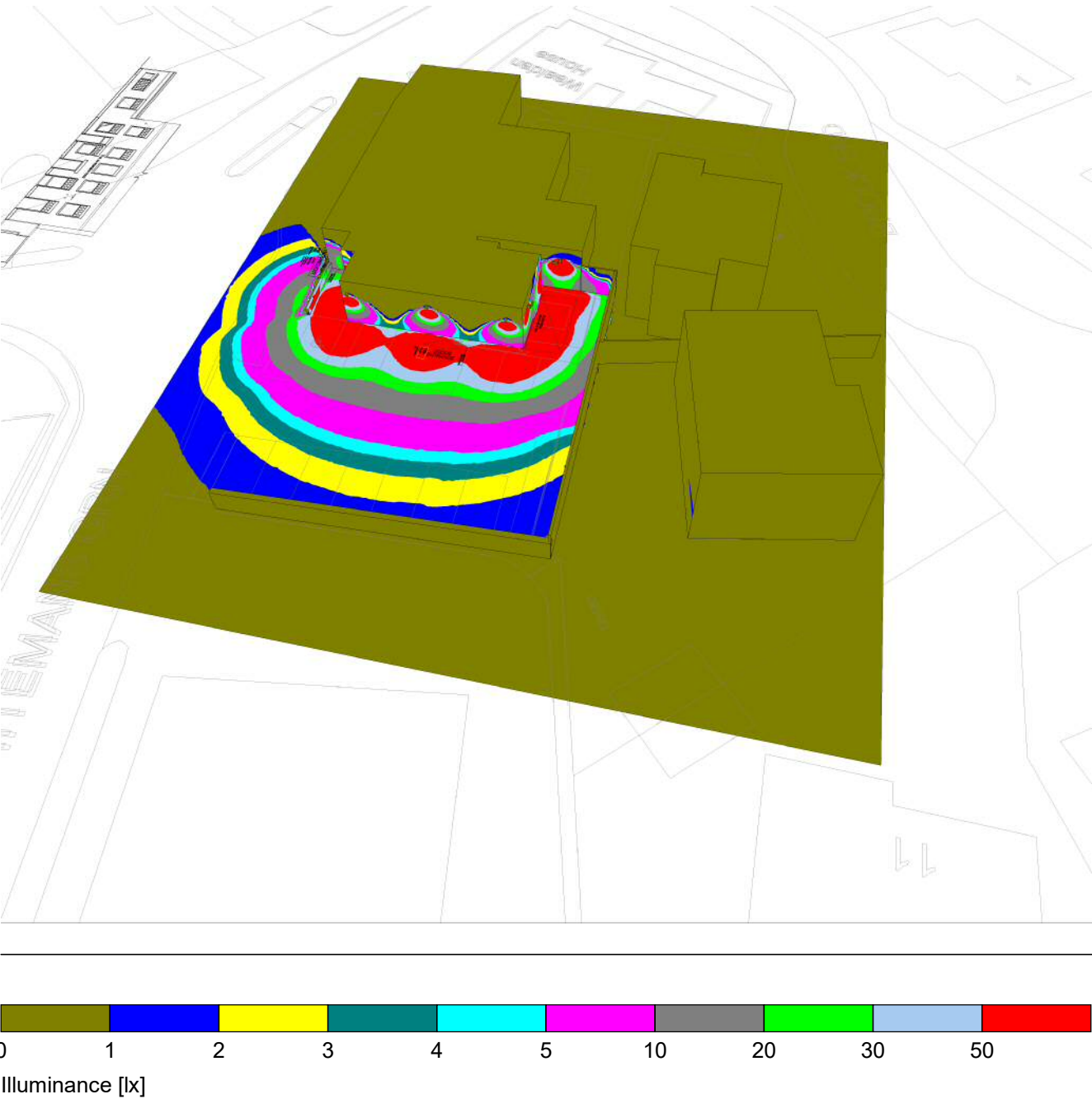
1.3 Calculation results, Exterior Pre-Curfue

1.3.4 3D pseudo colours, View 1 (E)



1.3 Calculation results, Exterior Pre-Curfue

1.3.5 3D pseudo colours, View 2 (E)

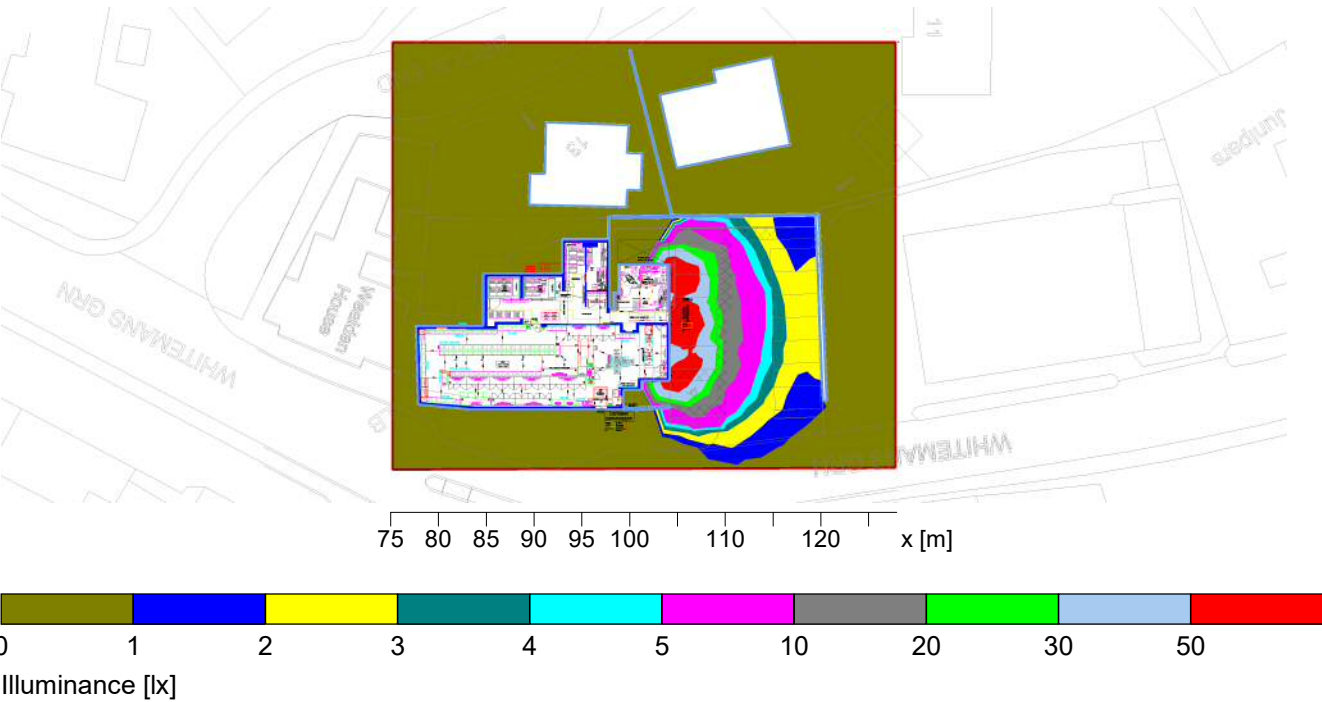


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2 Exterior Post-Curfue

2.2 Summary, Exterior Post-Curfue

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	1.00
Total lamp luminous flux	7500.00 lm
Luminaire luminous flux	7497.26 lm
Total power	105.0 W
Total power per area (2344.72 m²)	0.04 W/m² (1.50 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal
E_{min}	2.99 lx
$E_{min}/\bar{E}_m (U_o)$	0 lx
$E_{min}/E_{max} (U_d)$	---
Position	---
	0.00 m

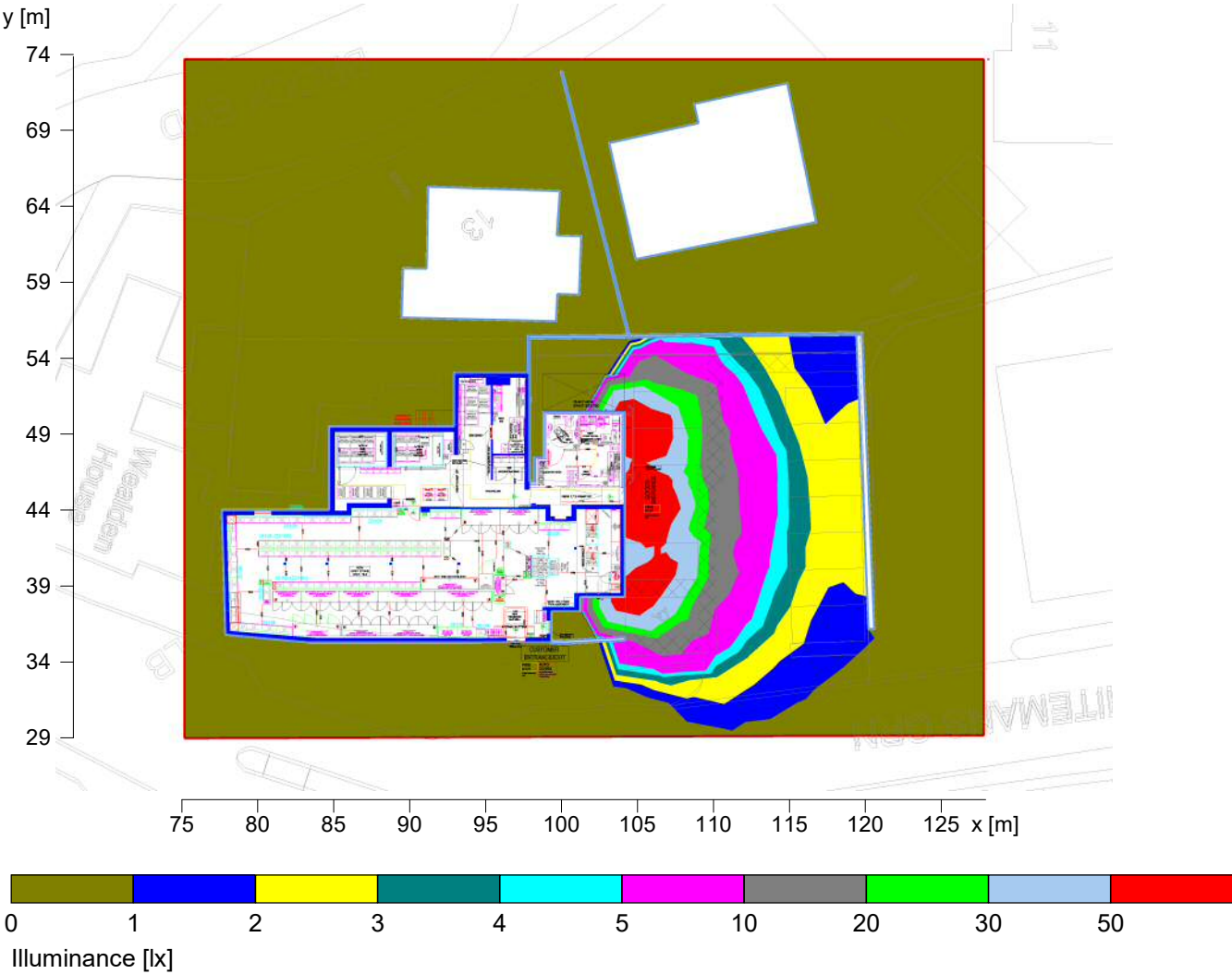
Type No. Make

20	3 x	Philips Lighting
		Order No. : !911401852483 BVP164 LED24/840 PSU 20W SWB CE
		Luminaire name : B17
		Equipment : 1 x LED25/740/- 35 W / 2500 lm

2 Exterior Post-Curfue

2.3 Calculation results, Exterior Post-Curfue

2.3.1 Pseudo colours, Reference plane 1.1 (E)

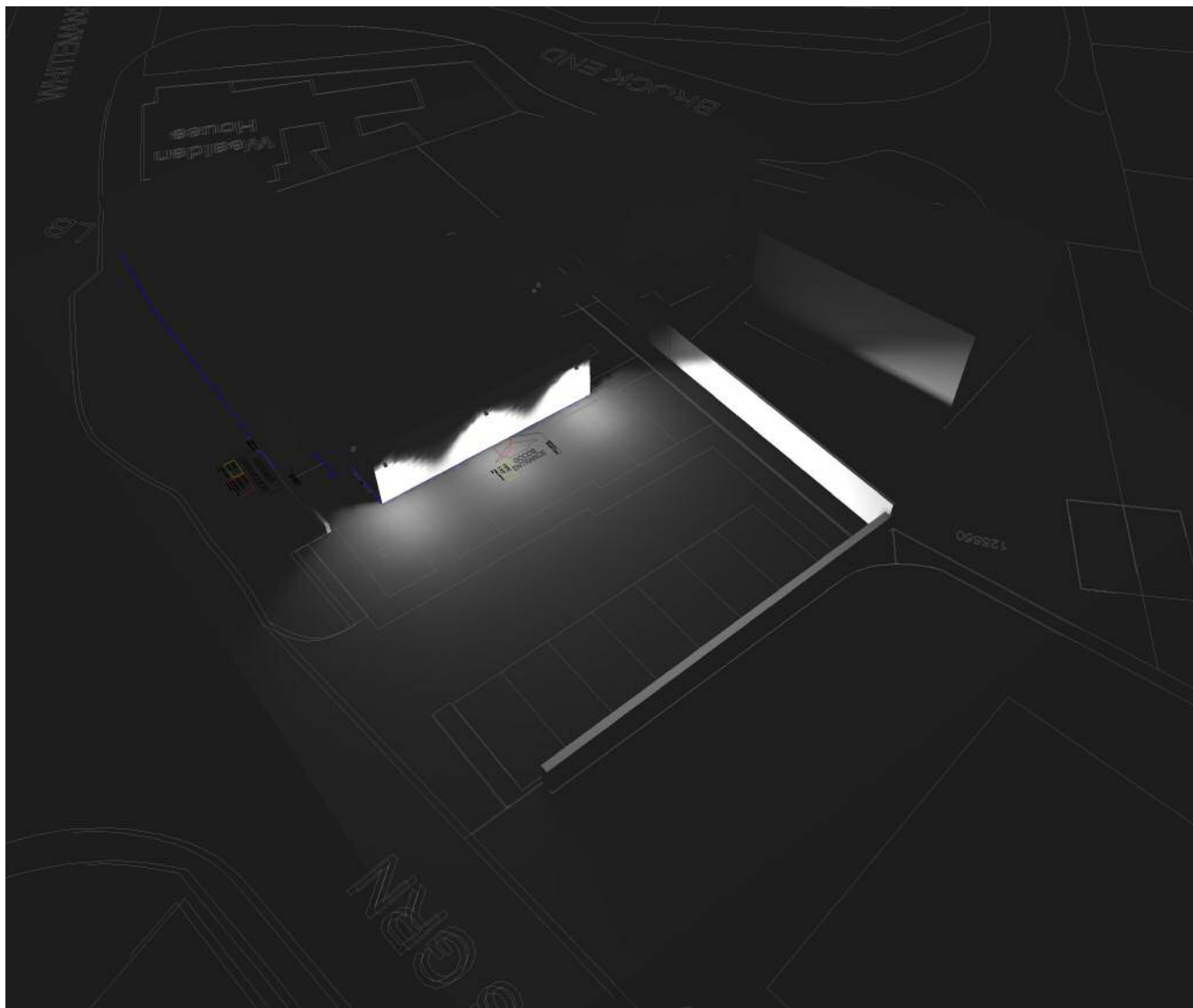


Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 3 lx
Minimum illuminance	E_{min}	: 0 lx
Maximum illuminance	E_{max}	: 78.6 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: ---
Diversity U_d	E_{min}/E_{max}	: ---

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2.3 Calculation results, Exterior Post-Curfue

2.3.2 3D luminance, View 1



Luminance in the scene

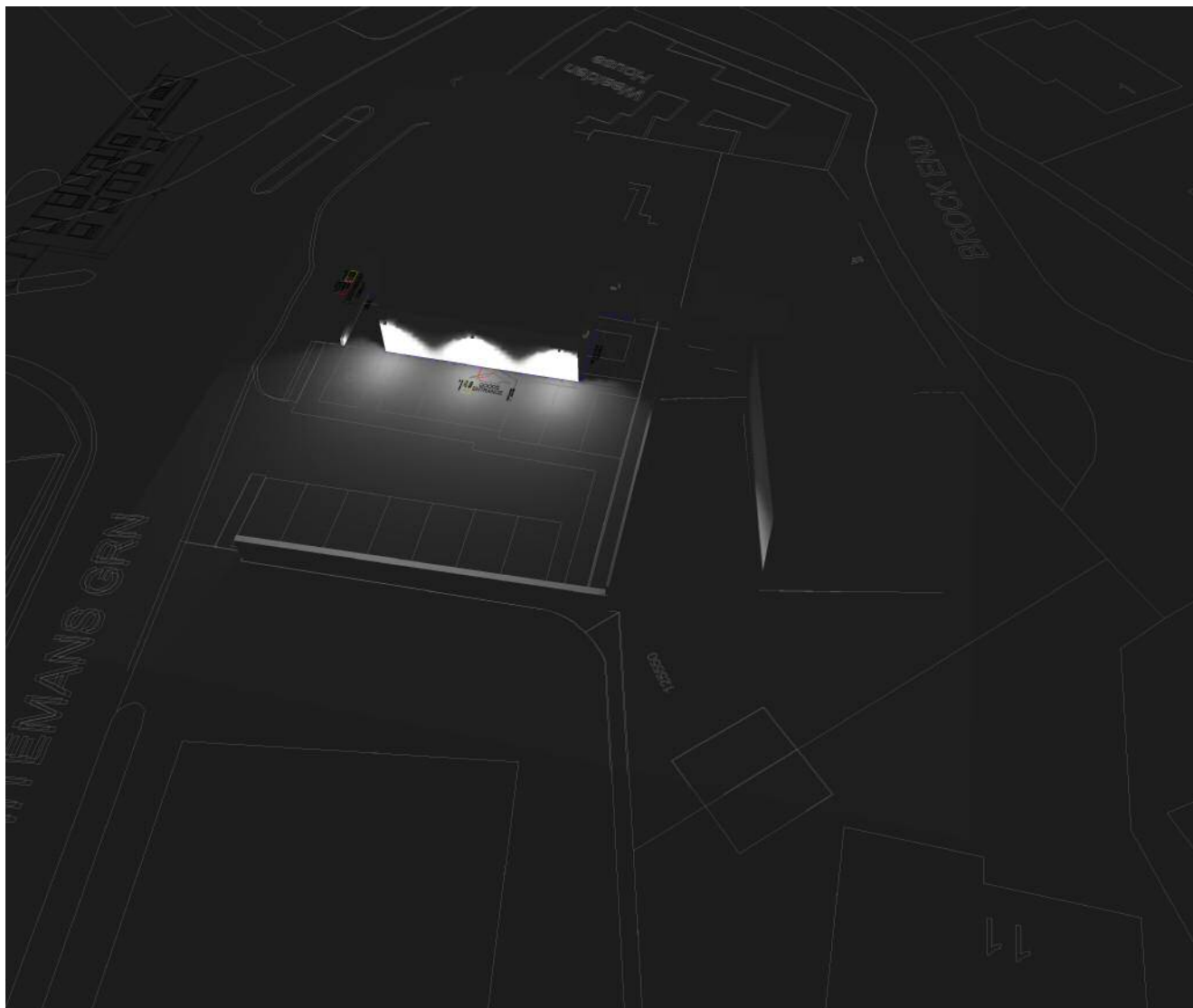
Minimum: : 0 cd/m²

Maximum: : 25.5 cd/m²

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2.3 Calculation results, Exterior Post-Curfue

2.3.3 3D luminance, View 2



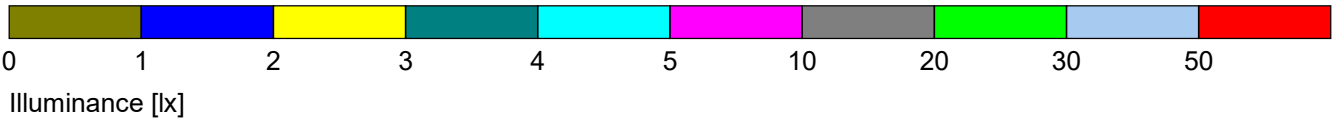
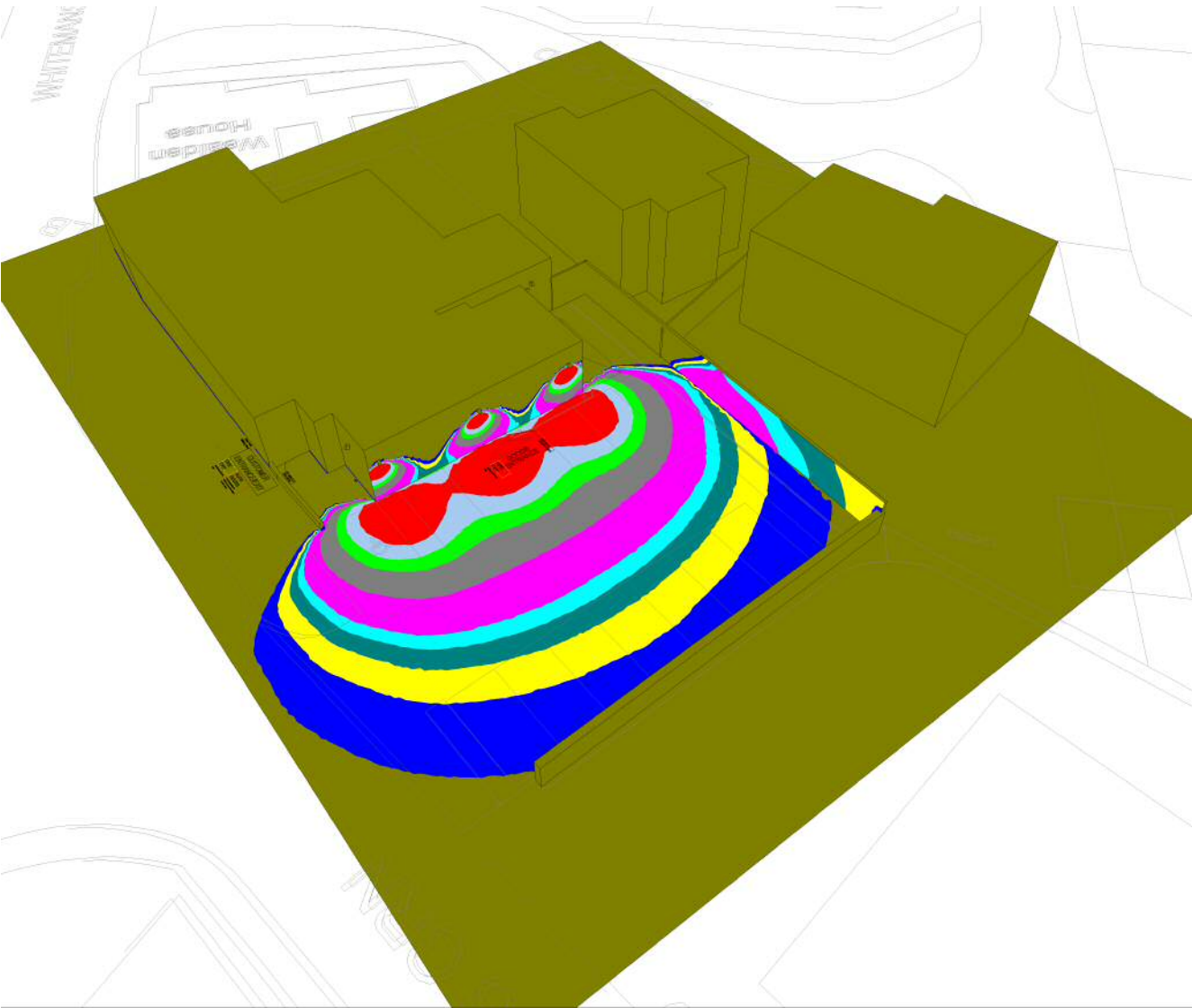
Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 25.5 cd/m²

2.3 Calculation results, Exterior Post-Curfue

2.3.4 3D pseudo colours, View 1 (E)



2.3 Calculation results, Exterior Post-Curfue

2.3.5 3D pseudo colours, View 2 (E)

