



Exterior

Installation : Tredgenna Hotel (R3)

Project number : 22566

Customer :

Processed by : D Baxter

Date : 15.05.2026

Project description:

All calculations unless stated have been based upon an open plan area without any obstructions above the working plane. With regards to CIBSE/ BS EN 12464-1:2021 we have shown illuminance levels and ratios for your ultimate approval. UGR and luminance values are available for your approval if necessary. It may be necessary in some instances to check UGR values even if the luminance values are below the compliant threshold.

Emergency lighting has been designed in accordance with BS5266-1:2021 but is an indicative layout only - additional lighting may be required. All emergency lighting is to be checked and confirmed with a local building/fire control officer and ultimately approved by the owner of the building. Any emergency lighting calculations that have been completed have been based on 0.5 lux for open areas and 1 lux for escape routes (where details of escape routes have been given).

Please be aware of L2 requirements and check that conformity has been met where required. In addition, ensuring that fire tents are used where needed to conform to current building regulations is vital; please contact our sales office for a quotation.

All luminaires used are subject to approval/certification of client/end user.

Common design parameters (shown below) have been used in order to carry out all calculations.

If any part of this scheme or luminaire choice within this scheme is deemed not suitable for the application, please contact us for re-calculations to be carried out prior to an order being placed.

All calculations have been based upon rated lumen outputs and may vary with ambient on site temperatures.

Please ensure that this lighting scheme complies with all requirements, and if further details/calculations are required please contact us via the below details.

Final quantities are to be confirmed prior to an order/installation and we will not be held responsible for any errors or omissions.

Nominal Values Used:

Maintenance Factor - 0.8

Reflectance Values (Office Type Interior): 70\50\20

Reflectance Values (Warehouse Type Interior): 50\30\20

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.

David Baxter - Senior Lighting Design Engineer - Tamlite Lighting
Pipers Road, Redditch. B98 0HU - 01952 292 441 - technical@tamlite.co.uk

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1 Exterior

1.1 Description, Exterior

1.1.1 Luminaire data/Room elements

Product data:

Type No.\Make

19	19 x	Tamlite Lighting	
		Order No.	: !CWLA90T4WWGMS
		Luminaire name	: CITY WALL LIGHT A
		Equipment	: 1 x LED 7 W / 900 lm

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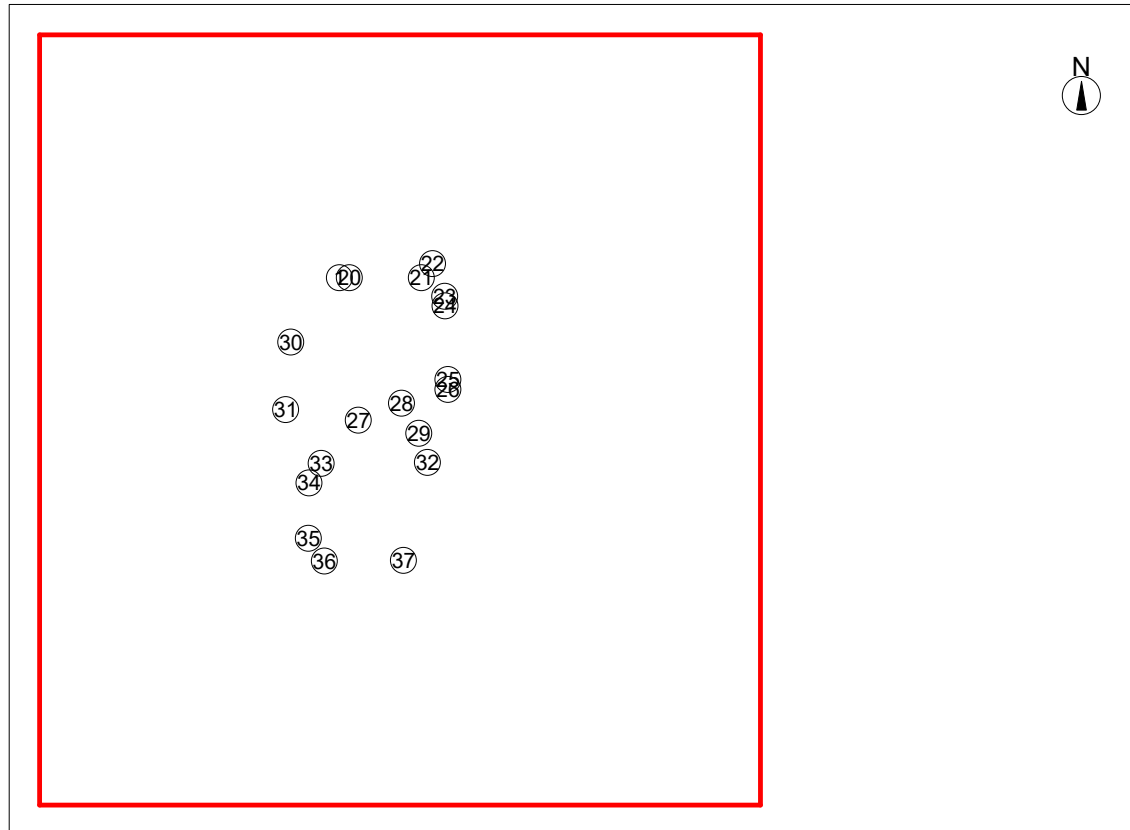


1 Exterior

1.1 Description, Exterior

1.1.1 Luminaire data/Room elements

Floor with luminaire and sensor positions:



No.	Centre point			Rotation angle			Target coordinates		
	X [m]	Y [m]	Z [m]	Z [°]	C0 [°]	C90 [°]	Xa [m]	Ya [m]	Za [m]
Tamlite Lighting CITY WALL LIGHT A !CWLA90T4WWGMS									
1	41.68	73.15	2.90	270.00	0.00	0.00	41.68	67.92	0.00
20	43.04	73.15	2.90	270.00	0.00	0.00	43.04	67.92	0.00
21	53.08	73.15	2.90	270.00	0.00	0.00	53.08	67.92	0.00
22	54.64	75.12	2.90	270.00	0.00	0.00	54.64	69.89	0.00
23	56.25	70.64	2.90	181.95	0.00	0.00	51.02	70.46	0.00
24	56.28	69.30	2.90	181.95	0.00	0.00	51.06	69.12	0.00
25	56.66	59.10	2.90	181.95	0.00	0.00	51.43	58.92	0.00
26	56.69	57.70	2.90	181.95	0.00	0.00	51.47	57.52	0.00
27	44.31	53.51	2.90	90.95	0.00	0.00	44.22	58.74	0.00
28	50.32	55.86	2.90	90.95	0.00	0.00	50.23	61.09	0.00
29	52.78	51.64	2.90	0.95	0.00	0.00	58.01	51.73	0.00
30	34.98	64.31	2.90	354.39	0.00	0.00	40.19	63.79	0.00
31	34.27	54.90	2.90	354.39	0.00	0.00	39.47	54.39	0.00
32	53.92	47.64	2.90	90.00	0.00	0.00	53.92	52.87	0.00
33	39.14	47.52	2.90	90.00	0.00	0.00	39.14	52.75	0.00
34	37.35	44.72	2.90	180.00	0.00	0.00	32.12	44.72	0.00
35	37.29	37.03	2.10	180.00	0.00	0.00	33.50	37.03	0.00
36	39.58	33.79	2.10	270.00	0.00	0.00	39.58	30.40	0.22
37	50.56	33.88	2.10	270.00	0.00	0.00	50.56	30.89	0.44

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1.1 Description, Exterior

1.1.1 Luminaire data/Room elements

Measuring surface

							Rotation angle	
No.	xm[m]	ym[m]	zm[m]	Length	Width	Height	z axis	L axis
Parking								
M 1	35.95	71.21	0.00	19.74	13.64	0.00	359.88	0.00
Pathway								
M 2	36.41	72.79	0.00	20.02	24.28	0.00	0.21	0.00
Entrance Driveway								
M 3	33.28	30.88	0.00	19.98	28.70	0.00	286.15	0.00

Others

No.	xm[m]	ym[m]	zm[m]	Length	Width	Height	Rotation angle		
							z axis	L axis	Q axis
A 1	35.40	77.97	0.00	26.30	25.47	3.50	359.89	0.00	0.00
A 2	39.91	53.37	0.00	25.14	15.44	6.00	0.69	0.00	0.00
A 3	31.92	30.73	0.00	19.55	42.91	3.00	344.90	0.00	0.00
A 4	38.32	31.04	0.00	26.37	25.95	1.20	40.67	0.00	0.00
A 5	37.27	40.57	0.00	24.95	6.99	2.50	0.59	0.00	0.00

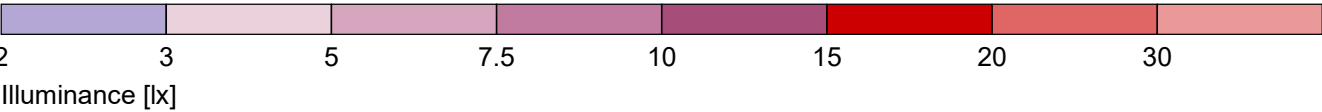
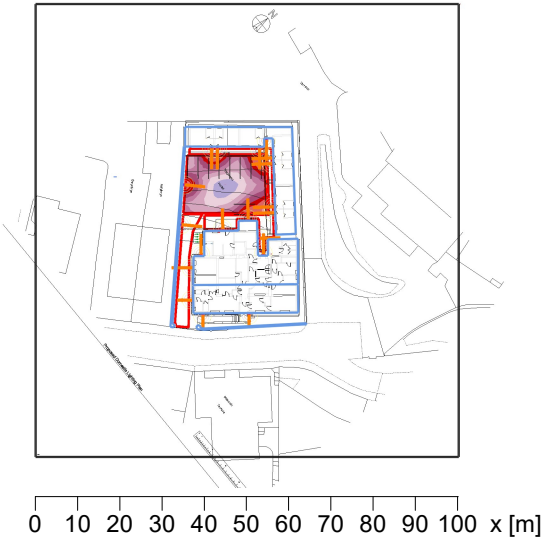
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1 Exterior

1.2 Summary, Exterior

1.2.1 Result overview, Parking



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	17100 lm
Total power	133 W
Total power per area (10715.75 m²)	0.01 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	10.2 lx
Minimum illuminance	E_{min}	2.1 lx
Maximum illuminance	E_{max}	48 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:4.92 (0.2)
Diversity U_d	E_{min}/E_{max}	1:23.1 (0.04)

Type No.\Make

Tamlite Lighting

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1.2 Summary, Exterior

1.2.1 Result overview, Parking

19 19 x Order No. : !CWLA90T4WWGMS
 Luminaire name : CITY WALL LIGHT A
Equipment : 1 x LED 7 W / 900 lm

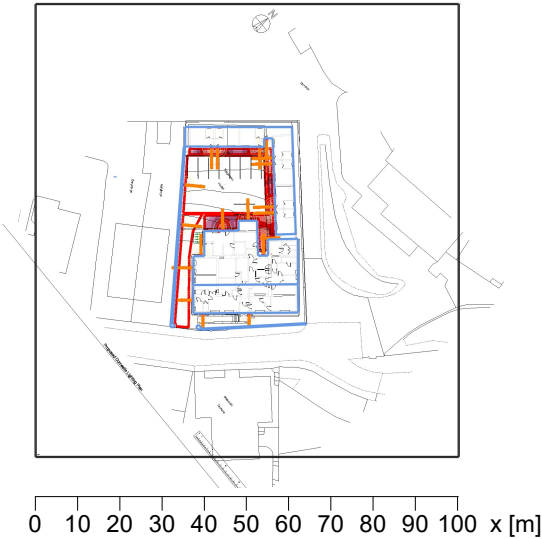


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1.2 Summary, Exterior

1.2.2 Result overview, Pathway



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux	17100 lm
Total power	133 W
Total power per area (10715.75 m²)	0.01 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	23.6 lx
Minimum illuminance	E_{min}	5.6 lx
Maximum illuminance	E_{max}	55.5 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:4.22 (0.24)
Diversity U_d	E_{min}/E_{max}	1:9.91 (0.1)

Type No. \Make

Tamlite Lighting

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1.2 Summary, Exterior

1.2.2 Result overview, Pathway

19 19 x Order No. : !CWLA90T4WWGMS
 Luminaire name : CITY WALL LIGHT A
Equipment : 1 x LED 7 W / 900 lm

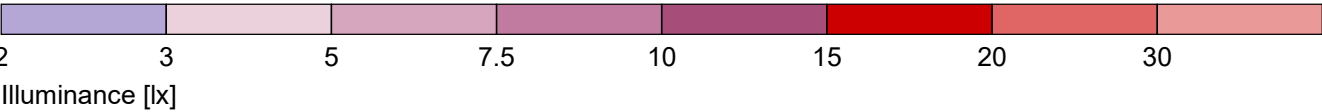
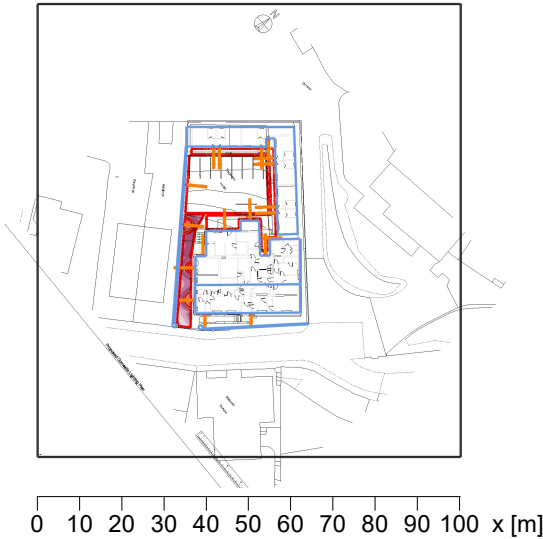


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1.2 Summary, Exterior

1.2.3 Result overview, Entrance Driveway



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	17100 lm
Total power	133 W
Total power per area (10715.75 m²)	0.01 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	12.3 lx
Minimum illuminance	E_{min}	2.3 lx
Maximum illuminance	E_{max}	36.7 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:5.32 (0.19)
Diversity U_d	E_{min}/E_{max}	1:15.9 (0.06)

Type No. \ Make

Tamlite Lighting

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1.2 Summary, Exterior

1.2.3 Result overview, Entrance Driveway

19 19 x Order No. : !CWLA90T4WWGMS
 Luminaire name : CITY WALL LIGHT A
Equipment : 1 x LED 7 W / 900 lm



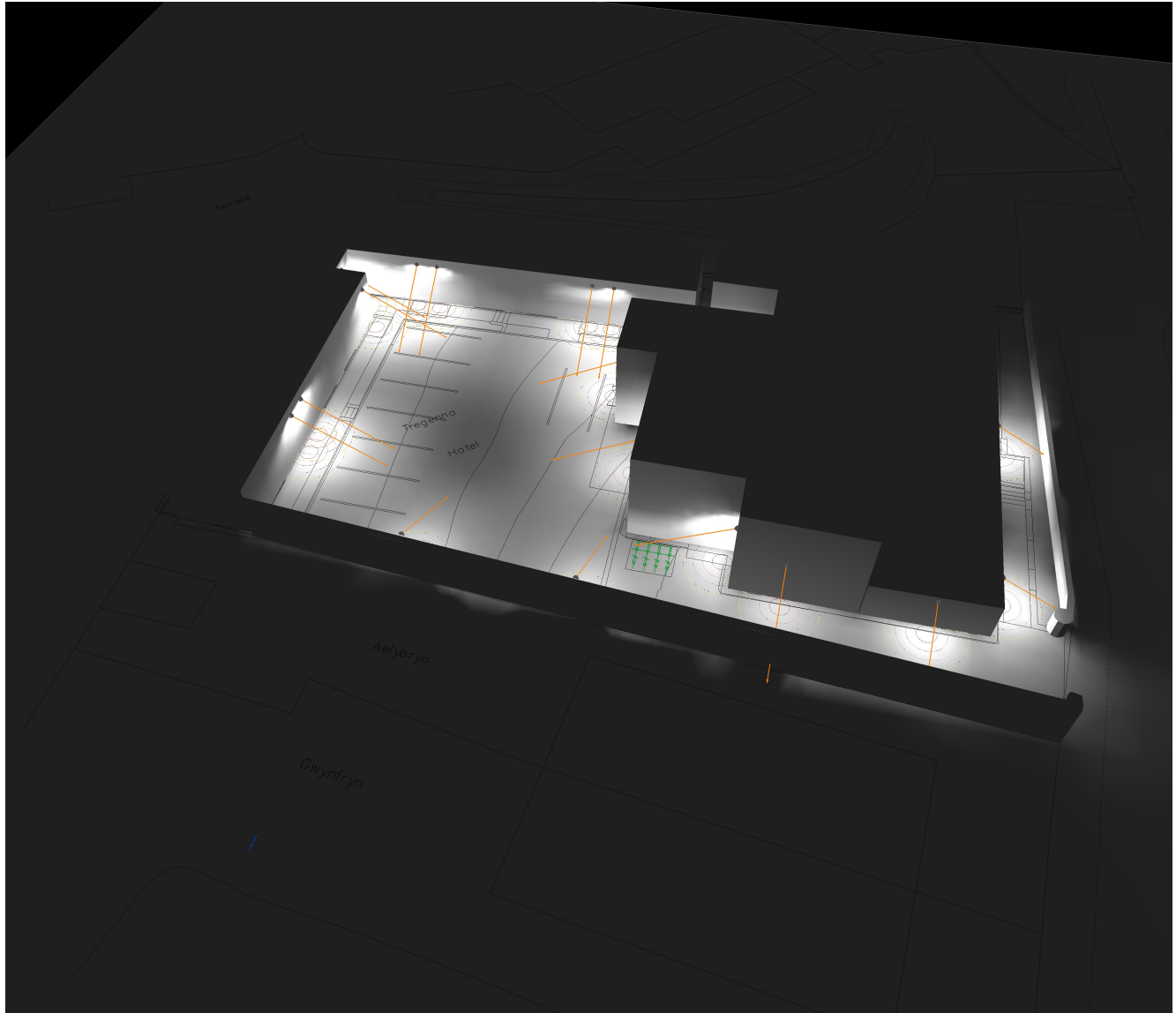
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1.3 Calculation results, Exterior

1.3.1 3D luminance, View 1



Luminance in the scene

Minimum: : 0 cd/m²
Maximum: : 165 cd/m²

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1.3 Calculation results, Exterior

1.3.2 3D pseudo colours, View 1 (E)

