

Devonshire Lighting Report

An 'as built' lux lighting survey was undertaken on Tuesday 10th March at approx. 7.30pm to determine the lux levels in comparison to the original design intention. Attached appendix 1.

The Lux levels were assessed and found to perform as intended and within the acceptable parameters.

The lighting levels were found to illuminate the area sufficiently whilst still being within the acceptable reduction of night time light pollution. All fittings were energy efficient. The upward light ration (ULR) was also under the acceptable 5% margin.

Breeam Summary;

BREEAM®

												Light Engine				BPM-GN01 - Table 1 & Table 7				Subtotal Only 4		CO ² Calculation For A Year		
Darkside Luminaire (L7000)	Luminaire Image	Qty	Luminaire	Light Source	Watts (W)	Luminaire Lumens (lm)	lm/W	LOH	Total Lumens	ULOR	Upward Lumens	Colour Temperature (K)	L Value	B Value	Rated Life (hrs)	CRI	Beam Angle	Day Glow Effect	Glare Effect	Source Intensity at 2.0m (lx) (80° to <90°)	% of luminaire lumens (100°-130°)	** ARI Hours Per Day	CO ² (Tonnes)	Kwh/Year
		2	VIVA-CITY Pro	vcp - 30w LED FWH70	10.0	846	84.60	100%	1692	0.0%	0	2700	L80	820	100,000	≥70	62.5°	Minimum	Some	16	n/a	12	0.02	87.60
		1	VIVA-CITY Pro	vcp - 20w LED FWH70	20.0	1955	97.75	100%	1955	0.0%	0	2700	L80	820	100,000	≥70	62.5°	Minimum	Some	37	n/a	12	0.02	87.60
		7	SEMITA Urban	smu - 6w LED ST	6.0	244	124.00	100%	5208	0.0%	0	2700	L80	810	100,000	≥70	67.5°	Minimum	Some	244	n/a	12	0.04	163.96
		1	SEMITA Urban	smu - 6w LED OC	6.0	762	127.00	100%	762	0.0%	0	2700	L80	810	100,000	≥70	70°	Minimum	Some	307	n/a	12	0.01	26.28

BREEAM Summary

GN01 - 2021

*** Environmental Zone to be confirmed by assessor **

Environmental Zone

E3

Upward Light Ratio (ULR) - Table 6

Target	Achieved	Status
5.0%	0.0%	Pass

Note - Not a BREEAM requirement for Cut-Off Lanterns (See POL4 Assessment Criteria above)

Table 4 - Source Intensity (candelas)

Pre Cut-off - A ₀ > 0.5	10,000	Pass
Pre Cut-off - A ₀ > 0.5	1,000	Pass

Table 5 - Light Trespass Into Windows (Lux)

Pre Cut-off	10	Pass
Post Cut-off		

Total Installation Lumens9617

Total Upward Light0.0%

Total CO2 Per Year (Tonnes)0

Total Electric Consumption (kwh)0

Total Electric Consumption Per Year (kwh)385

Average Luminaire Lumens Per Circuit Watt109

Compliance Status Summary

Pol 04	Reduction Of Night Time Light Pollution	Pass
Enx 03	Energy Efficient External Lighting	Pass
Hea 01	Internal And External Lighting Levels	Pass

Note - HEA01 in this report only applies to exterior lighting
= A01 - Average Sun Time

Note - Not a BREEAM requirement for Cut-Off Lanterns (See POL4 Assessment Criteria above)

Table 2 - Source Intensity (candelas)

Pre-Cut-Off - A₀ > 0.5

10,000

Pass

Pre-Cut-Off - A₀ > 0.5

1,000

Pass

Table 3 - Light Trespass Into Windows (lux)

Pre-Cut-Off

10

Pass

Post-Cut-Off

2

Pass

Compliance Status Summary

Pol 04	Reduction Of Night Time Light Pollution	Pass
Ene 02	Energy Efficient External Lighting	Pass
Hea 01	Internal And External Lighting Levels	Pass

Note - HEA01 in this report only applies to exterior lighting
*** ARI = (Average Run Time)