



Project No: 2537

Project: Barchester, Copthorne

External Lighting Calculations

Document Ref: 2537-HCL-ZZ-XX-CA-E-0003

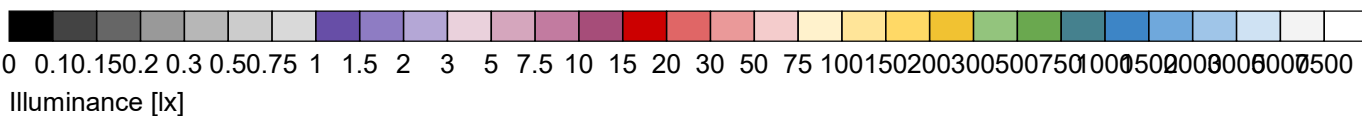
Issue Status: For Information

Revision Details				
Rev	Date	Description	By	Checked
P01	17/03/2025	Issued for information	JR	TB

2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, Measuring area 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	2.01 m
Maintenance factor	0.80

Total luminous flux	61895 lm
Total power	510 W
Total power per area (8519.93 m²)	0.06 W/m²
Upward light ratio (ULR)	0.01

Illuminance

Average illuminance	Em	10 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	626 lx
Uniformity Uo	Emin/Em	1:200 (0)
Diversity Ud	Emin/Emax	1:12900 (0)

Type No. \ Make

- | | |
|---|---|
| Luceco PLC | |
| 1 9 x | Order No. : VCYP-AY70-4.3-15D |
|  | Luminaire name : Kingfisher - Viva City Pro |
| | Equipment : 1 x LED 15 W / 1983 lm |
| | |
| 2 7 x | Order No. : DEC15 |
|  | Luminaire name : Kingfisher - Deco Bollard |
| | Equipment : 1 x LED 15 W / 1500 lm |

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

Object :
Installation :
Project number : 2537
Date : 03.03.2025



2 Exterior 1

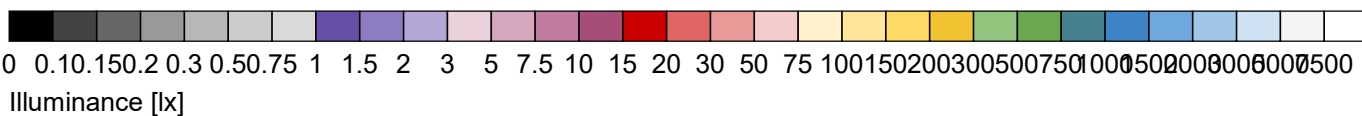
2.2 Summary, Exterior 1

2.2.1 Result overview, Measuring area 1

Ansell		
4	31 x	Order No. : AWOLF/MINI/BLK/SM3 (CW 8W)
		Luminaire name : BULKHEADS - Wolf Mini Black 4000K
		Equipment : 1 x LED single 840 8 W / 990 lm
5	2 x	Order No. : AGALED (11W 3000K)
		Luminaire name : DOWNLIGHTS - Galaxy
		Equipment : 1 x LED 11 W / 1429 lm

2.2 Summary, Exterior 1

2.2.2 Result overview, Measuring area 2



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	61895 lm
Total power	510 W
Total power per area (8519.93 m²)	0.06 W/m²
Upward light ratio (ULR)	0.01

Illuminance

Average illuminance	Em	12.7 lx
Minimum illuminance	Emin	0.2 lx
Maximum illuminance	Emax	62.5 lx
Uniformity Uo	Emin/Em	1:74.4 (0.01)
Diversity Ud	Emin/Emax	1:367 (0)

Type No. \ Make

Luceco PLC	
1 9 x	Order No. : VCYP-AY70-4.3-15D
	Luminaire name : Kingfisher - Viva City Pro
	Equipment : 1 x LED 15 W / 1983 lm
2 7 x	Order No. : DEC15
	Luminaire name : Kingfisher - Deco Bollard
	Equipment : 1 x LED 15 W / 1500 lm

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

Object :
Installation :
Project number : 2537
Date : 03.03.2025



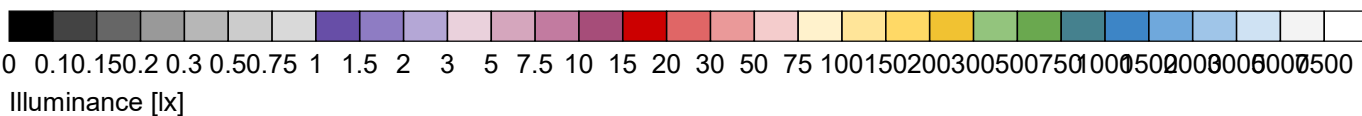
2.2 Summary, Exterior 1

2.2.2 Result overview, Measuring area 2

		Ansell	
4	31 x	Order No.	: AWOLF/MINI/BLK/SM3 (CW 8W)
		Luminaire name	: BULKHEADS - Wolf Mini Black 4000K
		Equipment	: 1 x LED single 840 8 W / 990 lm
5	2 x	Order No.	: AGALED (11W 3000K)
		Luminaire name	: DOWNLIGHTS - Galaxy
		Equipment	: 1 x LED 11 W / 1429 lm

2.2 Summary, Exterior 1

2.2.3 Result overview, Measuring area 4



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	1.01 m
Maintenance factor	0.80
Total luminous flux	61895 lm
Total power	510 W
Total power per area (8519.93 m²)	0.06 W/m²
Upward light ratio (ULR)	0.01

Illuminance

Average illuminance	Em	25.2 lx
Minimum illuminance	Emin	21.3 lx
Maximum illuminance	Emax	27.3 lx
Uniformity Uo	Emin/Em	1:1.19 (0.84)
Diversity Ud	Emin/Emax	1:1.28 (0.78)

Type No. \ Make

Luceco PLC	
1 9 x	Order No. : VCYP-AY70-4.3-15D
	Luminaire name : Kingfisher - Viva City Pro
	Equipment : 1 x LED 15 W / 1983 lm
2 7 x	Order No. : DEC15
	Luminaire name : Kingfisher - Deco Bollard
	Equipment : 1 x LED 15 W / 1500 lm

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

Object :
Installation :
Project number : 2537
Date : 03.03.2025



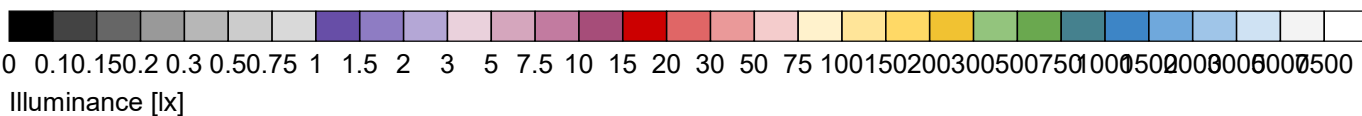
2.2 Summary, Exterior 1

2.2.3 Result overview, Measuring area 4

Ansell			
4	31 x	Order No.	: AWOLF/MINI/BLK/SM3 (CW 8W)
		Luminaire name	: BULKHEADS - Wolf Mini Black 4000K
		Equipment	: 1 x LED single 840 8 W / 990 lm
5	2 x	Order No.	: AGALED (11W 3000K)
		Luminaire name	: DOWNLIGHTS - Galaxy
		Equipment	: 1 x LED 11 W / 1429 lm

2.2 Summary, Exterior 1

2.2.4 Result overview, Measuring area 5



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	1.01 m
Maintenance factor	0.80
Total luminous flux	61895 lm
Total power	510 W
Total power per area (8519.93 m²)	0.06 W/m²
Upward light ratio (ULR)	0.01

Illuminance

Average illuminance	Em	25.5 lx
Minimum illuminance	Emin	21.1 lx
Maximum illuminance	Emax	28.3 lx
Uniformity Uo	Emin/Em	1:1.21 (0.83)
Diversity Ud	Emin/Emax	1:1.34 (0.74)

Type No. \ Make

Luceco PLC	
1 9 x	Order No. : VCYP-AY70-4.3-15D
	Luminaire name : Kingfisher - Viva City Pro
	Equipment : 1 x LED 15 W / 1983 lm
2 7 x	Order No. : DEC15
	Luminaire name : Kingfisher - Deco Bollard
	Equipment : 1 x LED 15 W / 1500 lm

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

Object :
Installation :
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Date : 03.03.2025



2.2 Summary, Exterior 1

2.2.4 Result overview, Measuring area 5

		Ansell	
4	31 x	Order No.	: AWOLF/MINI/BLK/SM3 (CW 8W)
		Luminaire name	: BULKHEADS - Wolf Mini Black 4000K
		Equipment	: 1 x LED single 840 8 W / 990 lm
5	2 x	Order No.	: AGALED (11W 3000K)
		Luminaire name	: DOWNLIGHTS - Galaxy
		Equipment	: 1 x LED 11 W / 1429 lm