

DATE: 3 November 2025
DESIGNER: Jonathan Greene
PROJECT No: P25-2384
PROJECT NAME: Sutton Benger Lighting

**LIGHTING
REALITY**

Outdoor Lighting Report

Rev P1 - First Issue - JG - 03.11.2025

Lighting Residential Roads - Designed in Accordance with BS5489-1 2020
Note: The main purpose of lighting for subsidiary roads, namely access roads, residential roads and associated pedestrian areas, footpaths and cycle tracks and areas associated with those roads is to enable pedestrians and cyclists to orientate themselves and detect vehicular and other hazards, and to discourage crime against people and property. The lighting on such roads can provide some guidance for motorists, but is unlikely to be sufficient for revealing objects on the road without the use of headlights.

P4 - Eav = 5.00-7.50 Lux, Emin 1.00 Lux
≤6.00m in environmental zones E1 or E2 from BS5489 LMF = 0.92
Maintenance factor = LLMF x LMF = 0.95 x 0.92 = 0.87

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Grid Origin 394902.0m x 178703.0m
Area 300.0m x 225.0m
Sample Spacing 1.50m x 1.50m

Luminaires



Luminaire A Data

Supplier	TRT Lighting
Type	OPN12_LED-V1_15W_GR5 (Blue)_2700K_EXP
Lamp(s)	42 0015 0000 100
Lamp Flux (klm)	2.00
File Name	OPN12_LED-V1_15W_GR5 (Blue)_2700K_EXP.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	787.0, 199.8, 0.0
No. in Project	28

Layout

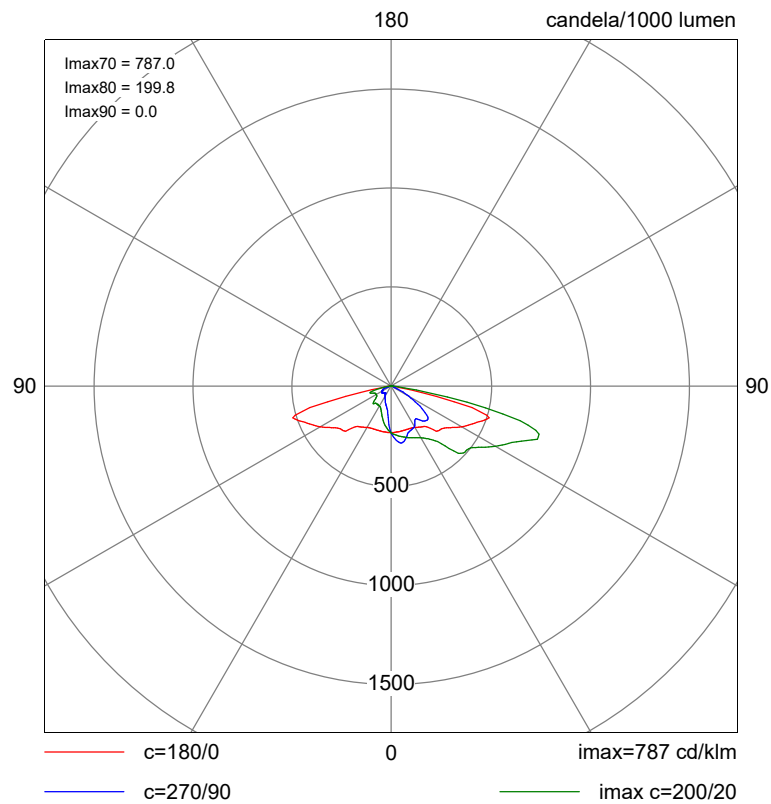
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	395028.56	178883.60	6.00	287.00	0.00	0.00	0.35			
2	A	395066.24	178895.61	6.00	290.00	0.00	0.00	0.35			
3	A	394973.21	178866.59	6.00	290.00	0.00	0.00	0.35			
4	A	394967.70	178839.58	6.00	239.00	0.00	0.00	0.35			
5	A	394991.57	178826.59	6.00	238.00	0.00	0.00	0.35			
6	A	394941.28	178782.75	6.00	8.00	0.00	0.00	0.35			
7	A	394934.66	178834.48	6.00	338.00	0.00	0.00	0.35			
8	A	395003.85	178790.74	6.00	174.00	0.00	0.00	0.35			
9	A	395037.89	178791.05	6.00	61.00	0.00	0.00	0.35			
10	A	395065.81	178775.60	6.00	59.00	0.00	0.00	0.35			
11	A	395097.48	178739.81	6.00	191.00	0.00	0.00	0.35			
12	A	395130.61	178781.13	6.00	17.00	0.00	0.00	0.35			
13	A	395115.99	178792.25	6.00	288.00	0.00	0.00	0.35			
14	A	395032.13	178741.89	6.00	100.00	0.00	0.00	0.35			
15	A	394998.53	178744.42	6.00	71.00	0.00	0.00	0.35			
16	A	394997.17	178768.99	6.00	8.00	0.00	0.00	0.35			
17	A	395063.94	178837.92	6.00	287.00	0.00	0.00	0.35			
18	A	395110.47	178849.30	6.00	201.00	0.00	0.00	0.35			
19	A	395028.01	178858.61	6.00	18.00	0.00	0.00	0.35			
20	A	395038.56	178815.04	6.00	330.00	0.00	0.00	0.35			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
21	A	395009.04	178868.76	6.00	108.00	0.00	0.00	0.35			
22	A	395017.87	178812.15	6.00	240.00	0.00	0.00	0.35			
23	A	395038.73	178832.14	6.00	45.00	0.00	0.00	0.35			
24	A	395092.32	178837.69	6.00	108.00	0.00	0.00	0.35			
25	A	394935.89	178806.96	6.00	9.00	0.00	0.00	0.35			
26	A	395083.47	178759.29	6.00	21.00	0.00	0.00	0.35			
27	A	395088.85	178779.68	6.00	318.00	0.00	0.00	0.35			
28	A	394950.87	178850.40	6.00	330.00	0.00	0.00	0.35			

Polar Diagram

Luminaire A OPN12 LED-V1 15W GR5 (Blue) 2700K EXP



Horizontal Illuminance (lux)

Grid 1

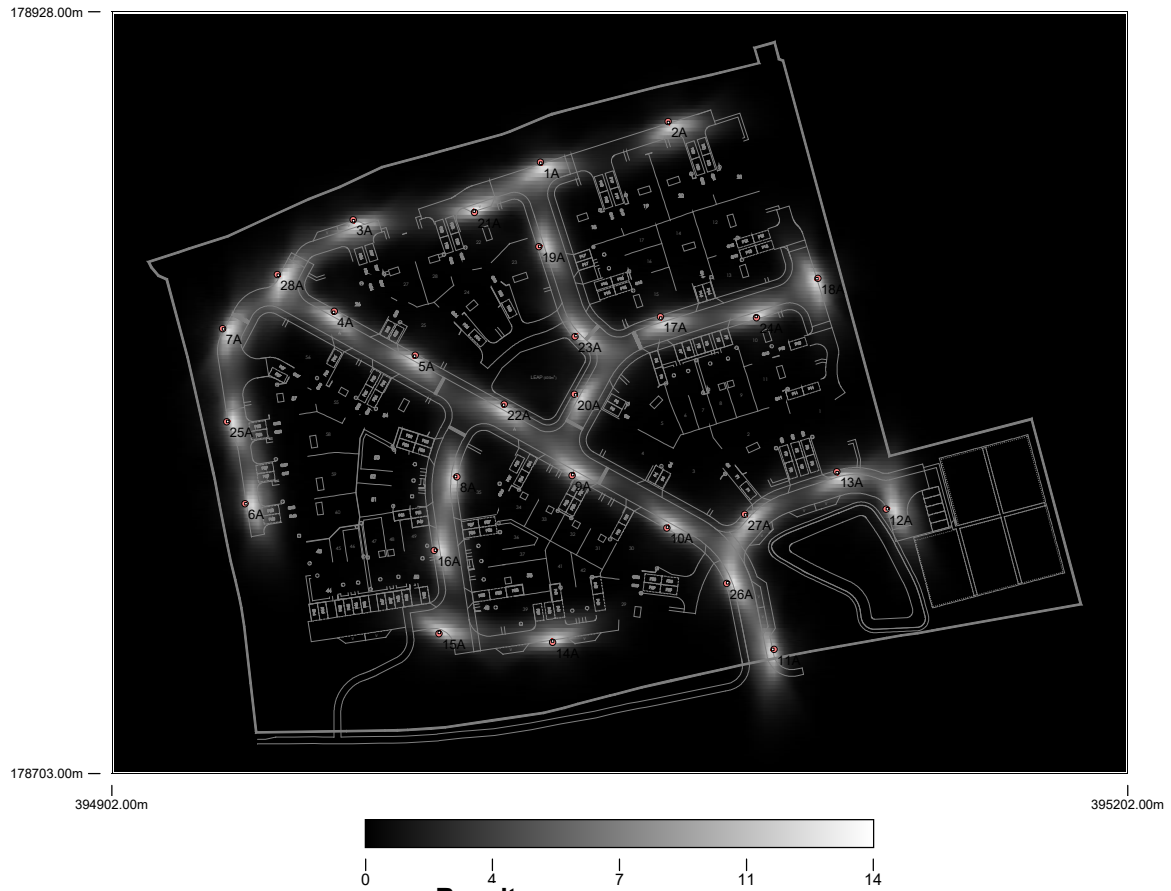


Results

Eav	5.12
Emin	1.03
Emax	14.39
Emin/Emax	0.07
Emin/Eav	0.20

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