

DATE: 16 May 2023
DESIGNER: Cristina Zentilin
PROJECT No: OP220207 LD18838
PROJECT NAME: Car Park - Stamullen

Schröder
Experts in lightability™

Designed to BS5489-1:2020
Car Park and Play Ground: Table 4, Medium Traffic Flow
10lux Average Illuminance & 25% Overall Uniformity

Roads and footpaths
P3 - 1.5 lux Emin & between 7.5 lux - 11.25 lux Eave

Maintenance Factor calculated to BS5489 TS22012 & GN11
fLF = Luminous flux factor for 100,000hours - 100%
fS = Survival factor - 0.97% (representing 3% failures)
fLM = Mounting height: 6m or less, Cleaning frequency - 72
months, Environmental zone – E1/E2 - 0.92
fSM = Surface factor - 1 (Exterior Lighting only)
Overall fM = 0.89 (CLO N/A)

Outdoor Lighting Report

This design has been prepared in accordance with the HEA/HEMSA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 for an outline design. The information in this report does not account for installation considerations, site conditions or provide any form of risk assessment. Urbis' design service is advisory only and it is the responsibility of the recipient of this information to verify that the design is suitable for the intended application. No account is taken for the blocking effect caused by buildings, trees etc. The calculation shown assumes that the whole area considered is in the same plane.

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Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	1. C3	824.61	581.64	187.00	109.52	1.50	1.50
2	2. P3	840.68	510.96	240.52	186.12	1.50	1.50

Luminaires

Luminaire A Data



Supplier	Urbis Schreder
Type	AXIA 3.2 5266 Integrated lenses 24 OSLO N SQUARE GIANT@500mA
Lamp(s)	24 OSLO N SQUARE GIANT@500mA WW 730 230V
LampFlux(klm)/Colour	5.03 WW 3000K/70
File Name	AXIA 3.2 5266 24 OSLO N SQUARE GIANT 500mA WW 730 37.2W 430082 Integrated ...
Maintenance Factor	0.89
Imax70,80,90(cd/klm)	1211.8, 139.9, 0.0
No. in Project	13

Luminaire B Data



Supplier	Urbis Schreder
Type	AXIA 3.2 5293 Integrated lenses 24 OSLO N SQUARE GIANT@590mA
Lamp(s)	24 OSLO N SQUARE GIANT@590mA WW 730 230V
LampFlux(klm)/Colour	5.81 WW 3000K/70
File Name	AXIA 3.2 5293 24 OSLO N SQUARE GIANT 590mA WW 730 44W 444502 Integrated I...
Maintenance Factor	0.89
Imax70,80,90(cd/klm)	625.2, 21.3, 0.0
No. in Project	11

Layout

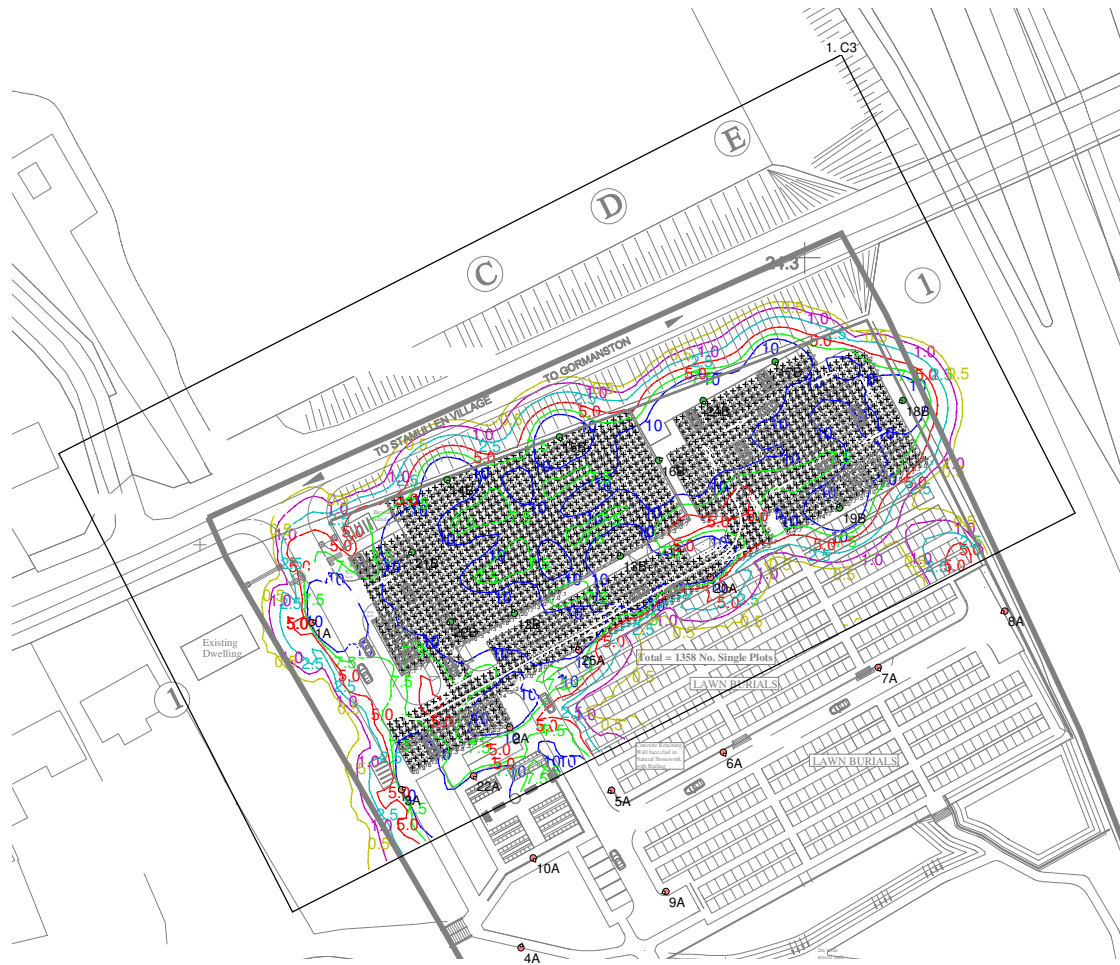
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	828.78	643.25	6.00	23.00	5.00	0.00	0.50			
2	A	870.92	620.92	6.00	117.00	5.00	0.00	0.50			
3	A	847.89	607.68	6.00	24.00	5.00	0.00	0.50			
4	A	873.26	574.00	6.00	77.00	5.00	0.00	0.50			
5	A	892.59	607.51	6.00	206.00	5.00	0.00	0.50			
6	A	916.37	615.62	6.00	299.00	5.00	0.00	0.50			
7	A	949.30	633.72	6.00	301.00	5.00	0.00	0.50			
8	A	976.29	645.73	6.00	206.00	5.00	0.00	0.50			
9	A	904.15	586.01	6.00	205.00	5.00	0.00	0.50			
10	A	875.89	593.14	6.00	297.00	5.00	0.00	0.50			
12	B	871.87	645.25	6.00	120.00	5.00	0.00	0.50			
13	B	894.42	657.42	6.00	121.00	5.00	0.00	0.50			
14	B	857.55	673.65	6.00	297.00	5.00	0.00	0.50			
15	B	881.44	682.73	6.00	299.00	5.00	0.00	0.50			
16	B	902.59	677.78	6.00	26.00	5.00	0.00	0.50			
17	B	927.38	698.80	6.00	299.00	5.00	0.00	0.50			
18	B	954.60	690.54	6.00	208.00	5.00	0.00	0.50			
19	B	941.11	667.65	6.00	119.00	5.00	0.00	0.50			
20	A	913.64	652.83	6.00	117.00	5.00	0.00	0.50			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
21	B	850.10	658.20	6.00	210.00	5.00	0.00	0.50			
22	A	863.23	610.61	6.00	300.00	5.00	0.00	0.50			
22	B	858.28	643.36	6.00	210.00	5.00	0.00	0.50			
24	B	912.05	690.51	6.00	296.00	5.00	0.00	0.50			
25	A	885.55	637.35	6.00	118.00	5.00	0.00	0.50			

Horizontal Illuminance (lux)

1. C3

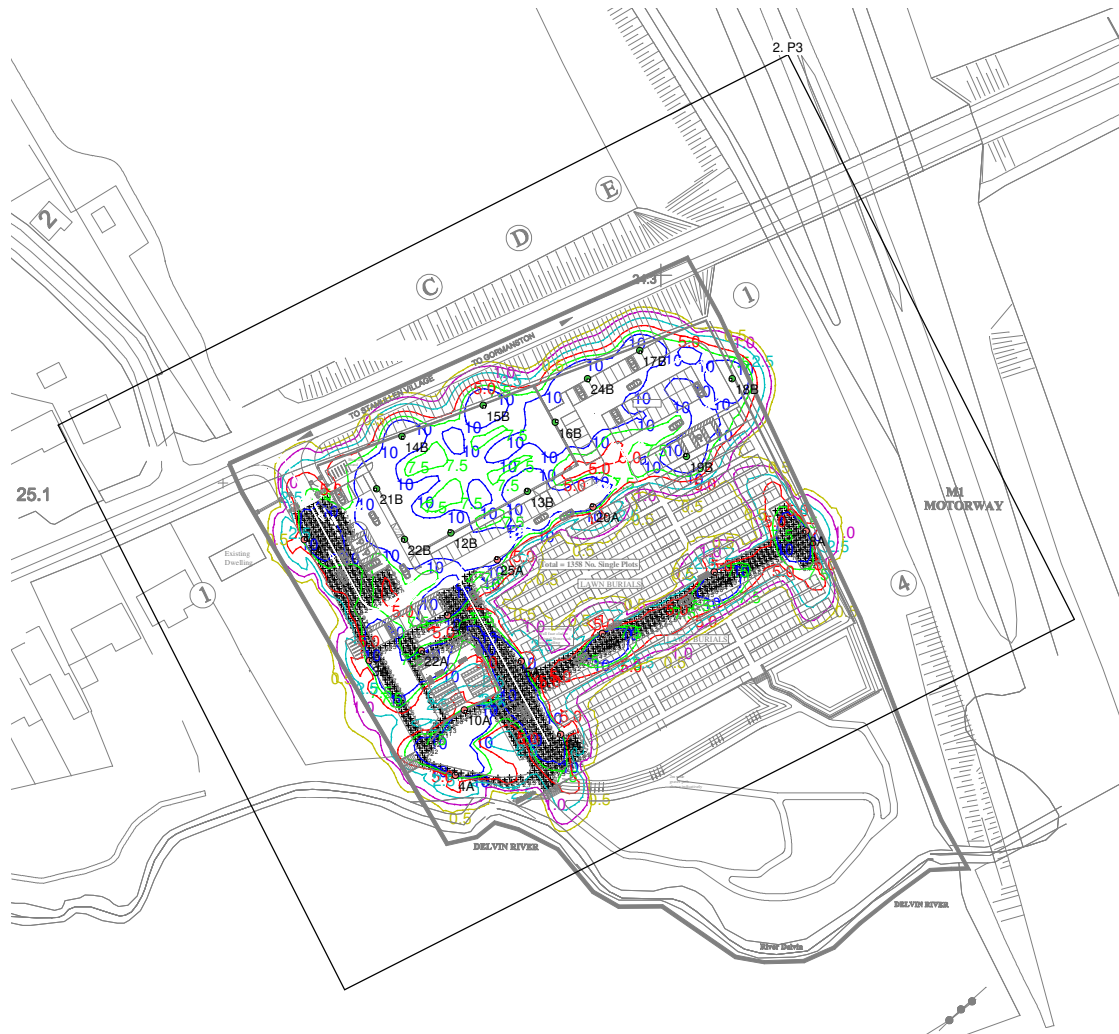


Results

Eav	11.41
Emin	3.84
E _{max}	37.03
E _{min} /E _{max}	0.10
E _{min} /E _{av}	0.34

Horizontal Illuminance (lux)

2. P3



Results

Eav	11.21
Emin	1.55
Emax	37.11
Emin/Emax	0.04
Emin/Eav	0.14