

DATE: 8 September 2023
DESIGNER: M Bray
PROJECT No: GC/4481
PROJECT NAME: LLanwern - Cedars 3

**LIGHTING
REALITY**

Design layout complies with BS 5489-1:2020
& BS EN 13201:2015
Class P4 (site) and Class P3 (Spine road)

Outdoor Lighting Report

Design layout complies with BS 5489-1:2020 &
BS EN 13201:2015, Class P4

PREPARED BY: Design Software from:
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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	Grid 1	336446.70	188913.22	210.42	65.43	1.49	1.49
2	Grid 2	336477.41	188953.38	70.37	95.25	1.50	1.49
3	Grid 3	336640.69	188771.26	150.46	151.29	1.49	1.50

Luminaires

Luminaire A Data



Supplier	Thorn Lighting UK & Ireland
Type	Isaro Pro Small 24LED 500mA EWR optic
Lamp(s)	LED 3000K CRI 70
LampFlux(klm)/Colour	3.40 3000/70
File Name	IP24L50EWR730.LDT
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	540.7, 73.4, 0.0
No. in Project	6

Luminaire B Data



Supplier	Thorn Lighting UK & Ireland
Type	Isaro Pro Small 24LED 500mA EWR optic
Lamp(s)	LED 3000K CRI 70
LampFlux(klm)/Colour	3.80 3000/70
File Name	IP24L50EWR730.LDT
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	540.7, 73.4, 0.0
No. in Project	3

Luminaire C Data



Supplier	Thorn Lighting UK & Ireland
Type	Isaro Pro Small 24LED 700mA EWS optic
Lamp(s)	LED 3000K CRI 70
LampFlux(klm)/Colour	6.75 3000/70
File Name	IP24L70EWS730.LDT
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	660.9, 199.6, 0.0
No. in Project	5

Luminaire E Data



Supplier	Thorn Lighting UK & Ireland
Type	Isaro Pro Small 24LED 700mA EWS optic
Lamp(s)	LED 3000K CRI 70
LampFlux(klm)/Colour	6.75 3000/70
File Name	IP24L70EWS730.LDT
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	660.9, 199.6, 0.0
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	336593.95	188870.35	6.00	315.00	5.00	0.00	0.30			
2	A	336608.50	188894.27	6.00	335.00	5.00	0.00	0.30			
3	A	336630.89	188887.72	6.00	253.00	5.00	0.00	0.30			
4	A	336652.75	188881.17	6.00	254.00	5.00	0.00	0.30			
5	A	336709.20	188861.51	6.00	249.00	5.00	0.00	0.30			
6	A	336680.38	188873.01	6.00	254.00	5.00	0.00	0.30			
7	B	336508.40	188945.37	6.00	322.00	5.00	0.00	0.30			
8	B	336523.35	188969.87	6.00	333.00	5.00	0.00	0.30			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
9	B	336542.82	188989.00	6.00	155.00	5.00	0.00	0.30			
10	C	336593.25	188836.18	8.00	189.00	5.00	0.00	0.30			
11	C	336577.02	188867.36	8.00	222.00	5.00	0.00	0.30			
12	C	336555.91	188892.02	8.00	219.00	5.00	0.00	0.30			
13	C	336530.98	188916.80	8.00	235.00	5.00	0.00	0.30			
14	C	336500.78	188924.05	8.00	60.00	5.00	0.00	0.30			
15	E	336583.64	188799.04	8.00	4.00	5.00	0.00	0.30			

Horizontal Illuminance (lux)

Grid 1

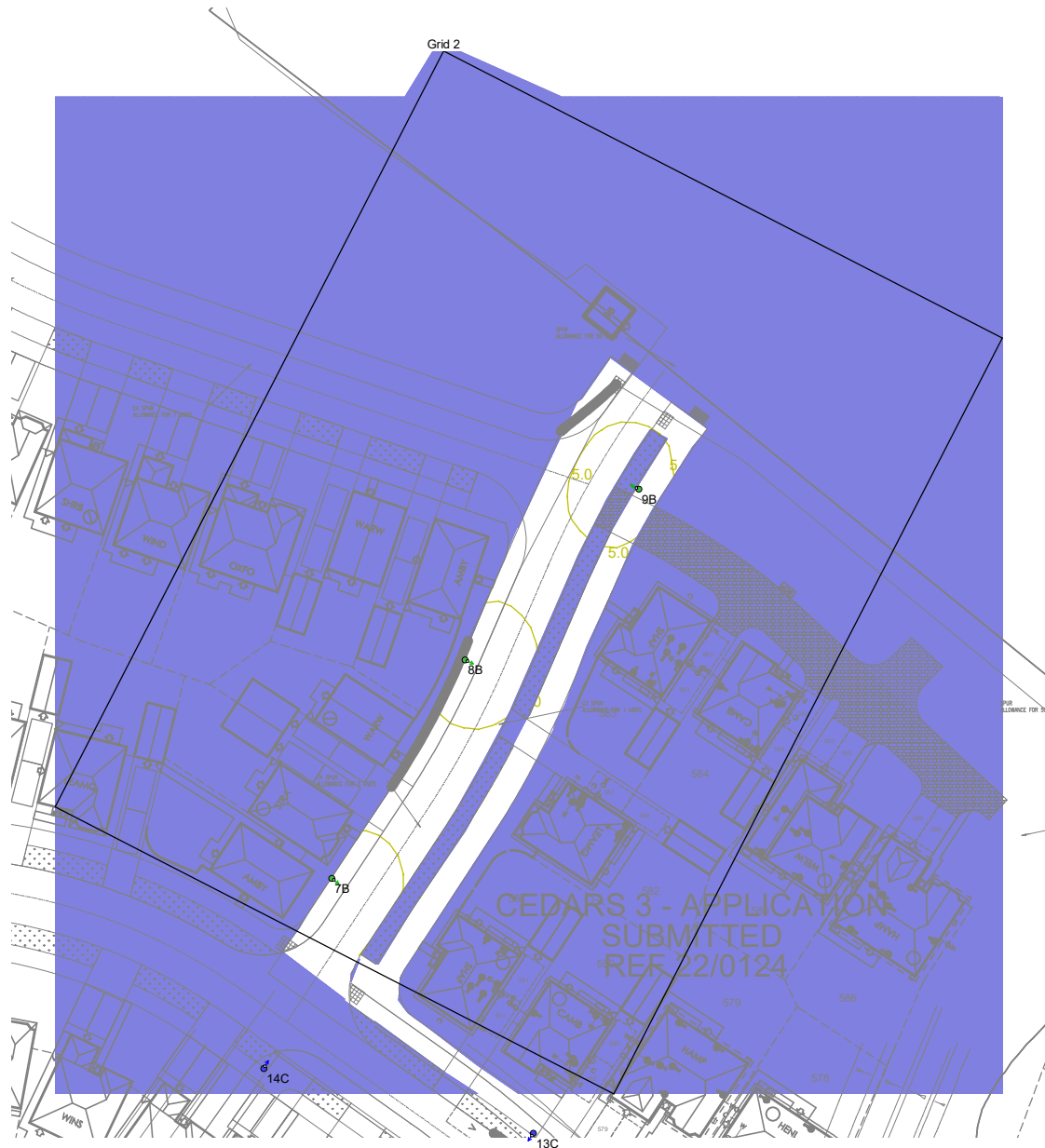


Results

Eav	7.67
Emin	1.99
Emax	18.62
Emin/Emax	0.11
Emin/Eav	0.26

Horizontal Illuminance (lux)

Grid 2

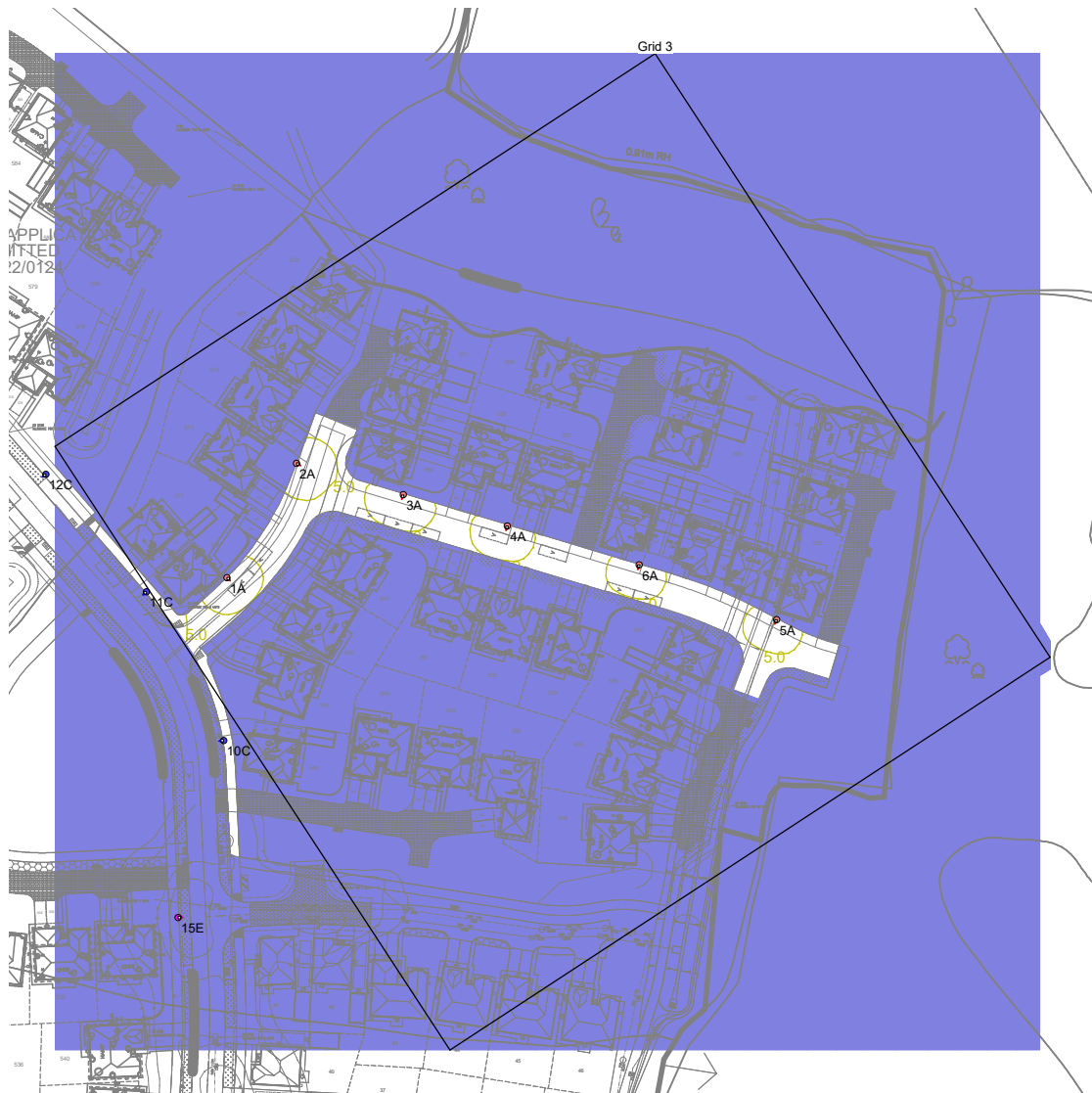


Results

Eav	5.19
Emin	1.67
Emax	14.07
Emin/Emax	0.12
Emin/Eav	0.32

Horizontal Illuminance (lux)

Grid 3



Results

Eav	5.23
Emin	1.16
Emax	12.86
Emin/Emax	0.09
Emin/Eav	0.22