

DATE: 11 October 2021
DESIGNER: Brendan Grogan
PROJECT No: 20131
PROJECT NAME: Enniscorthy Public Lighting

**LIGHTING
REALITY**

Designed in accordance with BS 5489-1:
2013, Lighting Class P4
S/P Ratio 1.61.

Public Lighting Design Report

PREPARED BY: Delap and Waller,
Bloomfiel House,
Bloomfield Avenue,
Dublin 8

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Local Origin at 349252.92m x 320127.33m

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1	-209.35	-219.66	310.62	254.46	1.49	1.50
2	Grid 2	-328.50	-87.01	165.17	184.71	1.49	1.49
3	Grid 3	-189.77	-161.58	38.86	178.16	1.49	1.50
4	Grid 4	-110.90	-76.21	129.30	50.08	1.49	1.47
5	Grid 5	-367.37	-138.10	335.61	52.33	1.50	1.50

Luminaires

Luminaire A Data

Supplier	
Type	P852K-12-F2-NW-CB0700-27W
Lamp(s)	740C NW
Lamp Flux (klm)	3.28
File Name	P852K-12-F2-NW-CB0700-27W.Idt
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	762.8, 260.8, 35.0
Lamp S/P Ratio	0.00
No. in Project	73

Luminaire B Data

Supplier	
Type	P852K-12-F2-NW-CB0350-15W
Lamp(s)	740C NW
Lamp Flux (klm)	1.79
File Name	P852K-12-F2-NW-CB0350-15W.Idt
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	762.3, 260.7, 34.9
Lamp S/P Ratio	0.00
No. in Project	21

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	-32.31	-287.16	6.00	26.00	0.00	0.00	0.55			
2	A	-28.68	-268.23	6.00	213.00	0.00	0.00	0.55			
3	A	50.37	-281.52	6.00	300.00	0.00	0.00	0.55			
4	A	76.19	-270.85	6.00	294.00	0.00	0.00	0.55			
5	A	26.66	-297.64	6.00	28.00	0.00	0.00	0.55			
6	A	18.26	-281.36	6.00	28.00	0.00	0.00	0.55			
7	A	10.48	-266.66	6.00	25.00	0.00	0.00	0.55			
8	A	-0.94	-246.36	6.00	35.00	0.00	0.00	0.55			
9	A	-26.48	-195.21	6.00	297.00	0.00	0.00	0.55			
10	A	-13.87	-222.42	6.00	29.00	0.00	0.00	0.55			
11	A	-6.65	-197.80	6.00	118.00	0.00	0.00	0.55			
12	A	18.29	-192.94	6.00	119.00	0.00	0.00	0.55			
13	A	36.29	-179.84	6.00	121.00	0.00	0.00	0.55			
14	A	32.12	-149.79	6.00	19.00	0.00	0.00	0.55			
15	A	49.41	-135.42	6.00	207.00	0.00	0.00	0.55			
16	A	55.56	-167.76	6.00	207.00	0.00	0.00	0.55			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
17	A	47.55	-193.30	6.00	21.00	0.00	0.00	0.55			
18	A	55.31	-212.66	6.00	18.00	0.00	0.00	0.55			
19	A	70.52	-233.24	6.00	25.00	0.00	0.00	0.55			
20	A	100.81	-267.34	6.00	199.00	0.00	0.00	0.55			
21	A	78.89	-253.18	6.00	21.00	0.00	0.00	0.55			
22	A	-30.54	-174.23	6.00	11.00	0.00	0.00	0.55			
23	A	-41.69	-148.83	6.00	24.00	0.00	0.00	0.55			
24	A	-56.27	-135.76	6.00	38.00	0.00	0.00	0.55			
25	A	-45.76	-119.02	6.00	222.00	0.00	0.00	0.55			
26	A	-77.47	-115.15	6.00	45.00	0.00	0.00	0.55			
27	A	-96.01	-100.06	6.00	54.00	0.00	0.00	0.55			
28	A	-73.45	-82.90	6.00	145.00	0.00	0.00	0.55			
29	A	-70.74	-95.37	6.00	224.00	0.00	0.00	0.55			
31	A	-48.21	-260.75	6.00	20.00	0.00	0.00	0.55			
32	A	-63.96	-238.84	6.00	36.00	0.00	0.00	0.55			
33	A	-60.65	-210.17	6.00	309.00	0.00	0.00	0.55			
34	A	-81.28	-217.52	6.00	42.00	0.00	0.00	0.55			
35	A	-136.38	-171.65	6.00	59.00	0.00	0.00	0.55			
36	A	-163.81	-155.02	6.00	62.00	0.00	0.00	0.55			
37	A	-142.38	-145.12	6.00	238.00	0.00	0.00	0.55			
38	A	-11.78	-292.66	6.00	212.00	0.00	0.00	0.55			
39	A	-36.33	-111.73	6.00	123.00	0.00	0.00	0.55			
40	B	-44.94	-86.32	6.00	47.00	0.00	0.00	0.55			
41	B	-24.94	-105.20	6.00	33.00	0.00	0.00	0.55			
42	B	-13.49	-122.17	6.00	27.00	0.00	0.00	0.55			
43	B	-84.71	-56.14	6.00	50.00	0.00	0.00	0.55			
44	B	-62.68	-71.46	6.00	52.00	0.00	0.00	0.55			
45	A	8.81	-176.23	6.00	297.00	0.00	0.00	0.55			
49	B	-97.65	-201.54	6.00	40.00	0.00	0.00	0.55			
50	A	-110.56	-189.63	6.00	45.00	0.00	0.00	0.55			
51	A	-112.16	-166.12	6.00	228.00	0.00	0.00	0.55			
52	A	-17.41	-309.63	6.00	18.00	0.00	0.00	0.55			
53	A	-45.67	-239.33	6.00	210.00	0.00	0.00	0.55			
55	A	-95.36	-77.17	6.00	234.00	0.00	0.00	0.55			
56	A	-119.29	-78.99	6.00	51.00	0.00	0.00	0.55			
57	B	-152.80	-126.81	6.00	342.00	0.00	0.00	0.55			

Layout Continued

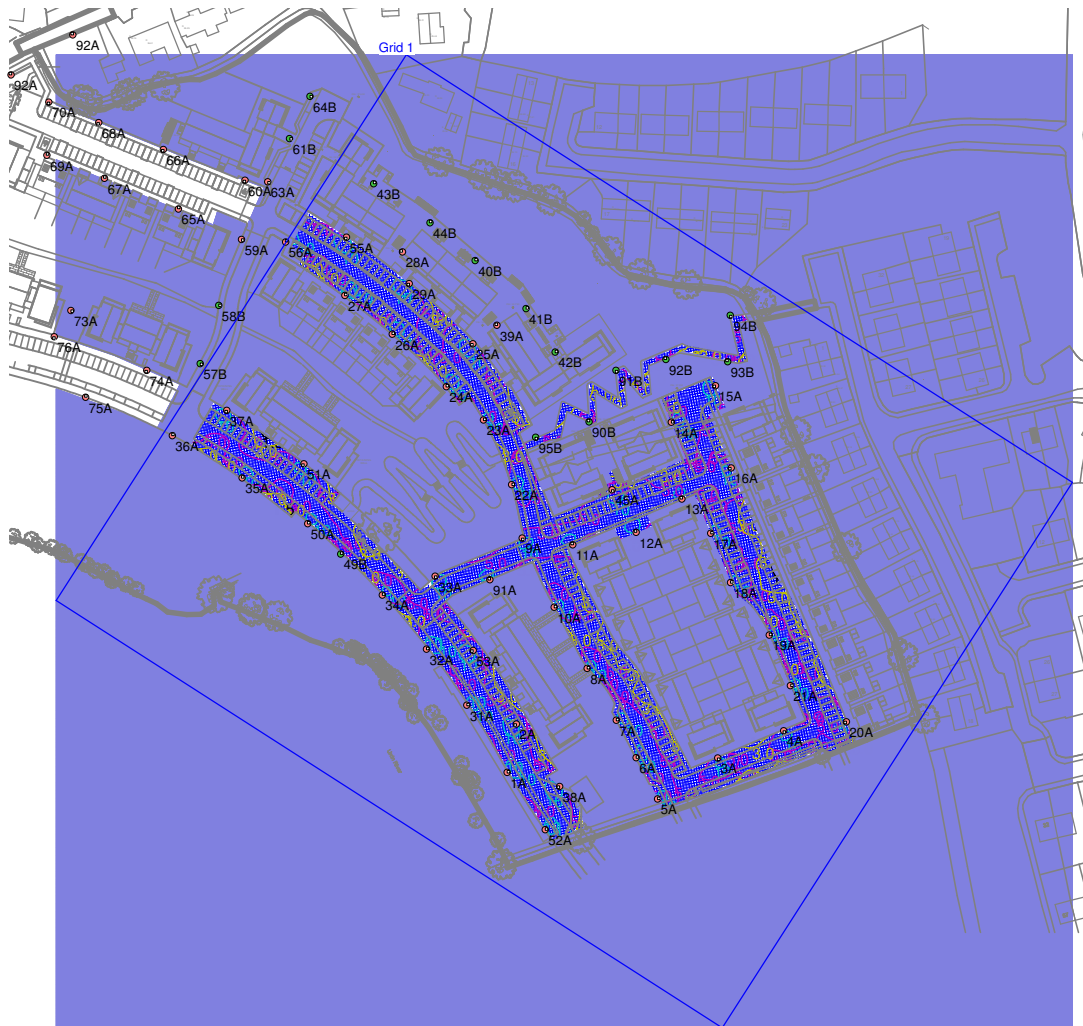
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
58	B	-145.53	-103.83	6.00	0.00	0.00	0.00	0.55			
59	A	-136.61	-78.02	6.00	337.00	0.00	0.00	0.55			
60	A	-135.29	-54.78	6.00	249.00	0.00	0.00	0.55			
61	B	-117.73	-38.49	6.00	346.00	0.00	0.00	0.55			
63	A	-126.34	-55.45	6.00	329.00	0.00	0.00	0.55			
64	B	-109.78	-21.83	6.00	338.00	0.00	0.00	0.55			
65	A	-161.42	-66.02	6.00	70.00	0.00	0.00	0.55			
66	A	-167.30	-42.75	6.00	248.00	0.00	0.00	0.55			
67	A	-190.41	-54.01	6.00	72.00	0.00	0.00	0.55			
68	A	-192.68	-32.19	6.00	247.00	0.00	0.00	0.55			
69	A	-212.93	-45.03	6.00	71.00	0.00	0.00	0.55			
70	A	-212.21	-24.12	6.00	247.00	0.00	0.00	0.55			
71	B	-231.54	-38.26	6.00	157.00	0.00	0.00	0.55			
72	B	-246.64	-47.34	6.00	306.00	0.00	0.00	0.55			
73	A	-203.61	-105.92	6.00	335.00	0.00	0.00	0.55			
74	A	-173.84	-129.45	6.00	247.00	0.00	0.00	0.55			
75	A	-197.85	-140.01	6.00	70.00	0.00	0.00	0.55			
76	A	-210.10	-116.23	6.00	255.00	0.00	0.00	0.55			
77	A	-231.68	-129.95	6.00	68.00	0.00	0.00	0.55			
79	A	-245.70	-104.74	6.00	247.00	0.00	0.00	0.55			
80	A	-266.54	-115.53	6.00	56.00	0.00	0.00	0.55			
81	A	-264.75	-94.94	6.00	238.00	0.00	0.00	0.55			
83	A	-288.22	-101.84	6.00	48.00	0.00	0.00	0.55			
84	A	-291.61	-75.47	6.00	235.00	0.00	0.00	0.55			
85	A	-311.99	-82.73	6.00	57.00	0.00	0.00	0.55			
87	A	-345.18	-93.17	6.00	116.00	0.00	0.00	0.55			
88	A	-320.39	-77.63	6.00	117.00	0.00	0.00	0.55			
89	A	-303.03	-57.18	6.00	144.00	0.00	0.00	0.55			
90	A	-281.18	-40.28	6.00	110.00	0.00	0.00	0.55			
91	A	-253.19	-26.34	6.00	115.00	0.00	0.00	0.55			
92	A	-227.02	-13.41	6.00	116.00	0.00	0.00	0.55			
92	A	-202.81	2.31	6.00	115.00	0.00	0.00	0.55			
93	B	-185.03	16.18	6.00	115.00	0.00	0.00	0.55			
94	B	-163.55	25.37	6.00	115.00	0.00	0.00	0.55			
95	B	-142.70	33.32	6.00	112.00	0.00	0.00	0.55			
91	A	-39.09	-211.61	6.00	117.00	0.00	0.00	0.55			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
90	B	-0.17	-149.63	6.00	115.00	0.00	0.00	0.55			
91	B	10.33	-129.37	6.00	298.00	0.00	0.00	0.55			
92	B	29.95	-125.15	6.00	115.00	0.00	0.00	0.55			
93	B	54.21	-125.99	6.00	115.00	0.00	0.00	0.55			
94	B	55.22	-107.81	6.00	302.00	0.00	0.00	0.55			
95	B	-21.11	-155.69	6.00	290.00	0.00	0.00	0.55			

Horizontal Illuminance (lux)

Grid 1

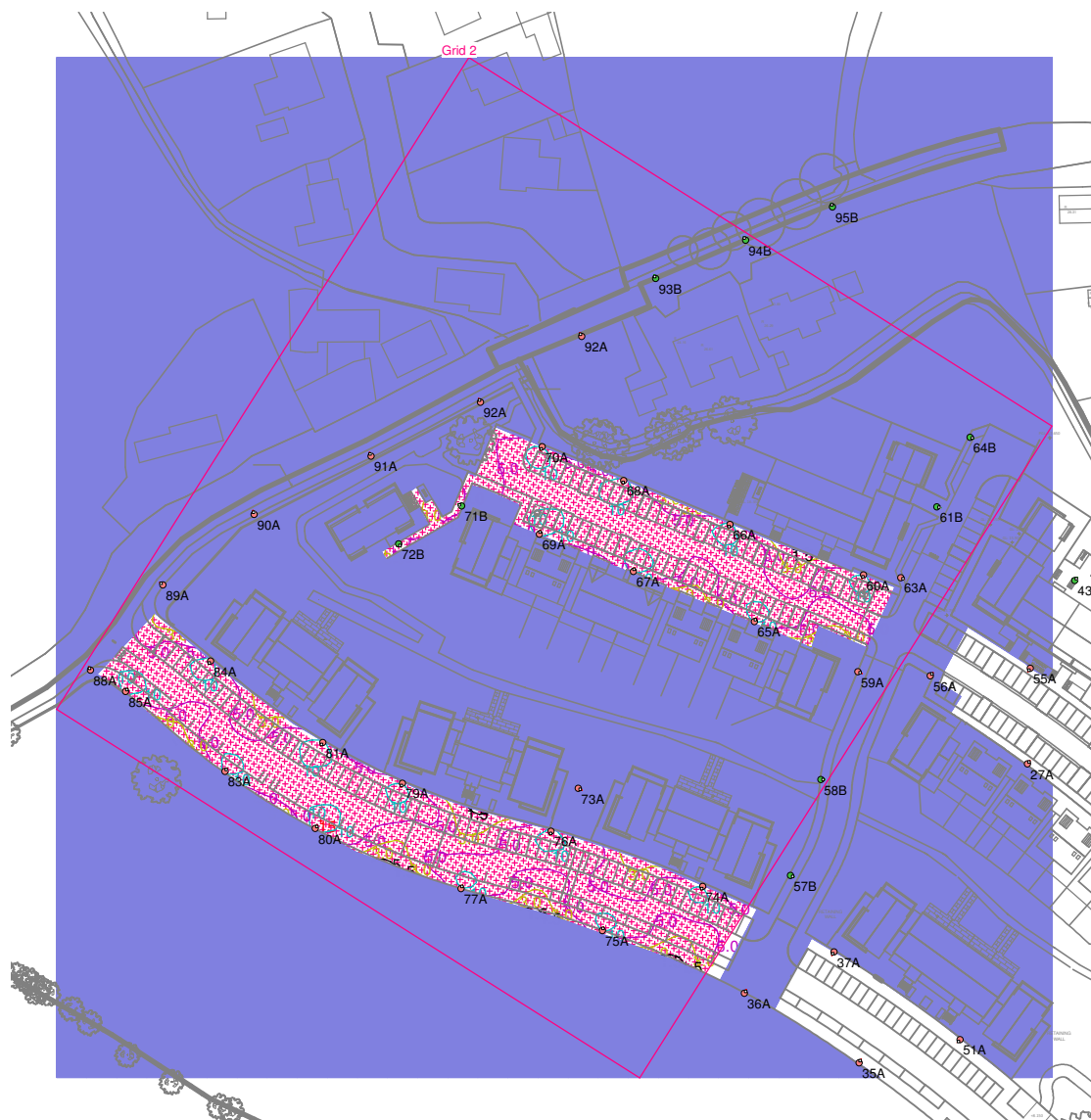


Results

Eav	5.95
Emin	1.42
Emax	14.66
Emin/Emax	0.10
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 2

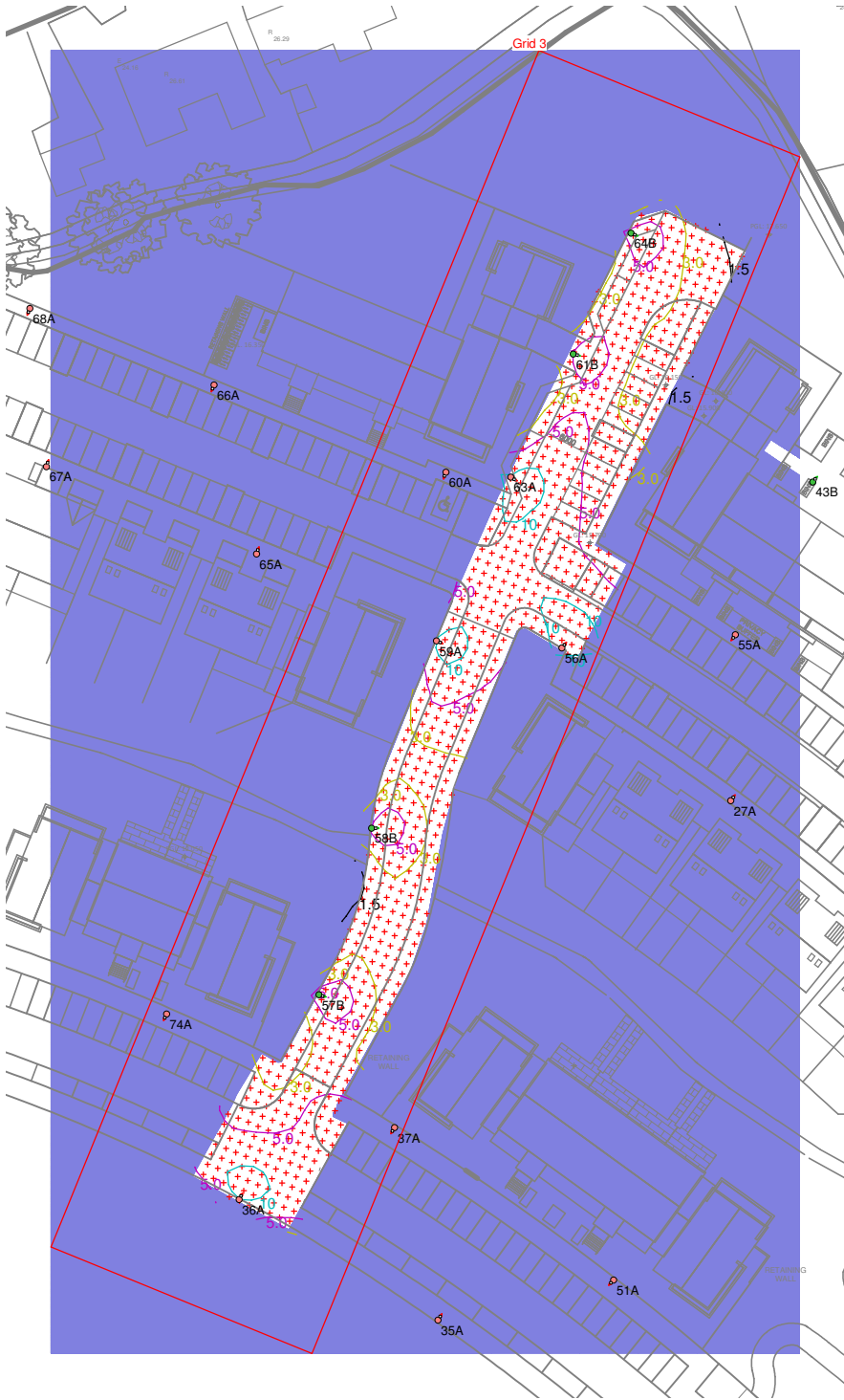


Results

Eav	6.29
Emin	1.34
Emax	15.02
Emin/Emax	0.09
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 3



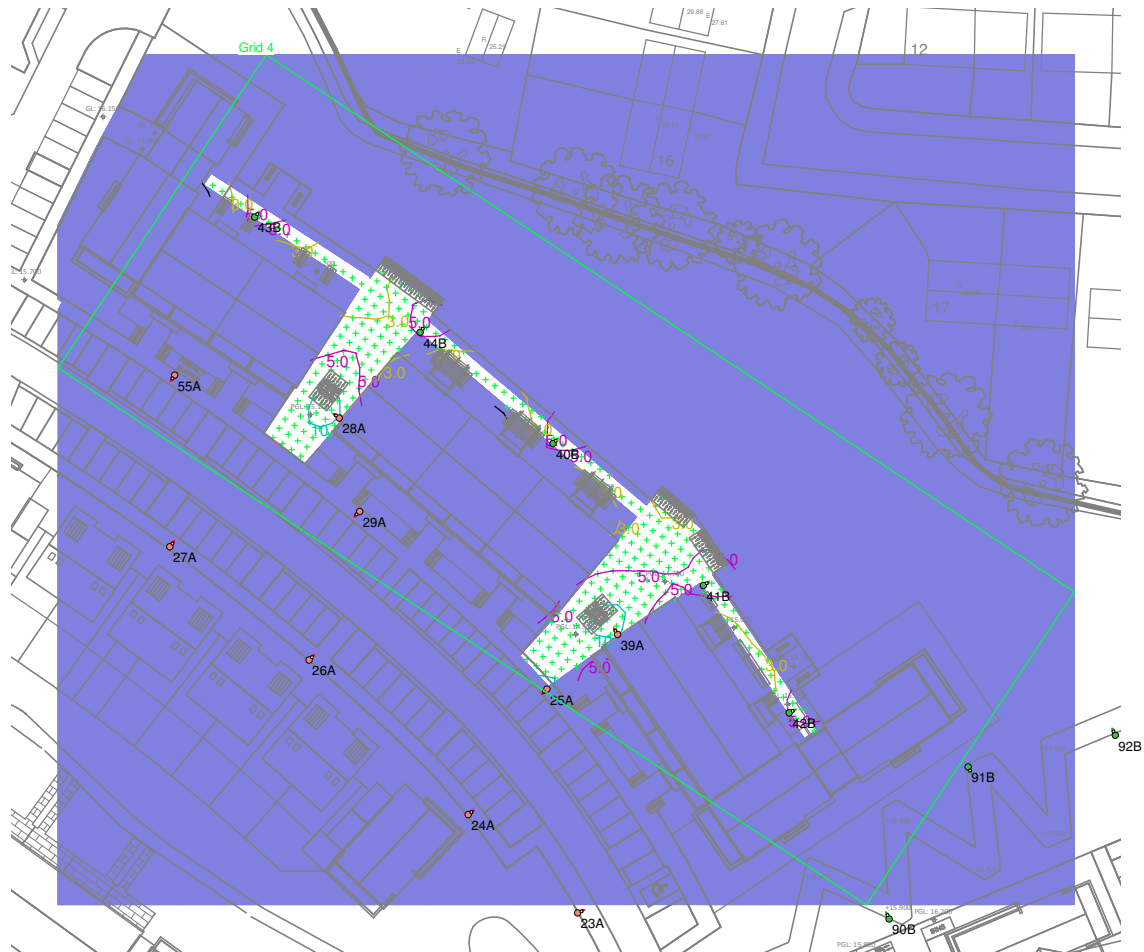
Results

Eav	5.06
Emin	1.23
Emax	14.48
Emin/Emax	0.08
Emin/Eav	0.24

Delap and Waller

Horizontal Illuminance (lux)

Grid 4

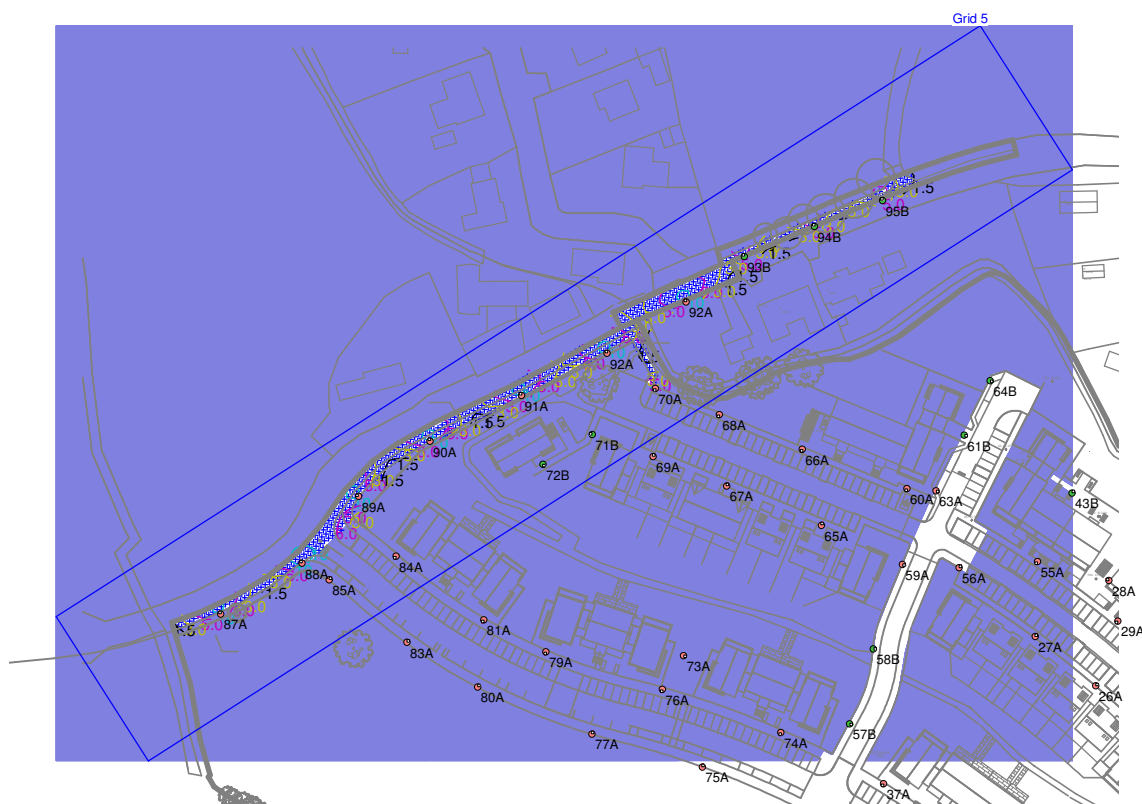


Results

Eav	5.30
Emin	1.76
Emax	13.08
Emin/Emax	0.13
Emin/Eav	0.33

Horizontal Illuminance (lux)

Grid 5



Results

Eav	5.00
Emin	0.99
Emax	14.46
Emin/Emax	0.07
Emin/Eav	0.20