

DATE: 5 June 2025
DESIGNER: Alex Naper
PROJECT No: SES 07625
PROJECT NAME: St. Mochtas LRD



Client: Castlethorn Developments Luttrellstown.

MF derived from: 0.92 x 0.90 x 0.99 (LMF (Low pollution environment & 72 month cleaning cycle) x LLMF x LSF)
LLMF & LSF values @ 100,000 hours & 25 degrees C Ta.

Residential area designed in accordance with EN13201-2:2015 Category P4.

Cycle route designed in accordance with EN13201-2:2015 Category P4.

Type E to be supplied 4000K colour temp.

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
D11 VN59
Phone Number: 01 8110875
Contact: Graham Sheehan
eMail: graham@sabrelighting.ie

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	706035.86	737674.26	90.00	101.70	1.50	1.50
2	Grid 2	706103.72	737624.98	117.00	120.00	1.50	1.50
3	Grid 3	706091.09	737586.98	116.90	45.00	1.50	1.50
4	Grid 4	706059.38	737494.10	116.90	99.00	1.50	1.50
5	Grid 5	705991.14	737534.34	87.00	237.00	1.50	1.50
6	Grid 6	706070.53	737496.87	150.00	262.00	1.50	1.50
7	Grid 7	705980.94	737540.66	90.00	129.00	1.50	1.50

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	E950-28-F2A-740-B2-C0600-15W
Lamp(s)	740N
Lamp Flux (klm)	1.78
File Name	E950-28-F2A-740-B2-C0600-15W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	708.0, 79.8, 0.4
No. in Project	3

Luminaire B Data



Supplier	C U Phosco
Type	E950-28-P4A-740-C0600-15W
Lamp(s)	740N
Lamp Flux (klm)	2.17
File Name	E950-28-P4A-740-C0600-15W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	30

Luminaire D Data



Supplier	C U Phosco
Type	E950-28-P4A-740-C450-11W
Lamp(s)	740N
Lamp Flux (klm)	1.68
File Name	E950-28-P4A-740-C0450-11W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	33

Luminaire E Data

Supplier	Acrospire
Type	Chelsea SCL 12-300mA 730
Lamp(s)	LED
LampFlux(klm)/Colour	1.82 3000/>70
File Name	Chelsea SCL 12-300mA 730.ltd
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	808.8, 1043.2, 38.6
No. in Project	12

Luminaires



Luminaire H Data

Supplier	C U Phosco
Type	E950-28-P4A-740-C600-15W
Lamp(s)	740N
Lamp Flux (klm)	2.17
File Name	E950-28-P4A-740-C0600-15W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	3

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Dimmed to	Target X	Target Y	Target Z
1	H	706030.03	737661.59	6.00	63.00	0.00	0.00	0.40	100%			
2	A	706061.64	737664.57	6.00	262.00	0.00	0.00	0.40	100%			
3	A	706069.22	737646.96	6.00	67.00	0.00	0.00	0.40	100%			
4	D	706042.17	737641.31	6.00	338.00	0.00	0.00	0.40	100%			
5	D	706057.25	737677.87	6.00	166.00	0.00	0.00	0.40	100%			
6	A	706090.72	737654.74	6.00	252.00	0.00	0.00	0.40	100%			
7	B	706115.37	737650.05	6.00	167.00	0.00	0.00	0.40	100%			
8	B	706105.78	737672.01	6.00	337.00	0.00	0.00	0.40	100%			
9	B	706128.57	737690.99	6.00	165.00	0.00	0.00	0.40	100%			
10	B	706112.38	737688.82	6.00	343.00	0.00	0.00	0.40	100%			
11	B	706127.16	737722.37	6.00	325.00	0.00	0.00	0.40	100%			
12	B	706135.22	737710.89	6.00	158.00	0.00	0.00	0.40	100%			
13	B	706151.94	737733.28	6.00	248.00	0.00	0.00	0.40	100%			
14	B	706093.24	737633.45	6.00	342.00	0.00	0.00	0.40	100%			
15	B	706102.49	737610.60	6.00	159.00	0.00	0.00	0.40	100%			
16	B	706094.18	737584.52	6.00	165.00	0.00	0.00	0.40	100%			
17	D	706084.63	737604.00	6.00	335.00	0.00	0.00	0.40	100%			
18	B	706075.73	737576.22	6.00	348.00	0.00	0.00	0.40	100%			
19	B	706087.83	737557.35	6.00	164.00	0.00	0.00	0.40	100%			
20	B	706067.06	737549.99	6.00	335.00	0.00	0.00	0.40	100%			
21	B	706078.94	737529.70	6.00	161.00	0.00	0.00	0.40	100%			
22	H	706051.29	737524.39	6.00	257.00	0.00	0.00	0.40	100%			
23	B	706061.63	737535.36	6.00	335.00	0.00	0.00	0.40	100%			
24	B	706142.12	737672.85	6.00	257.00	0.00	0.00	0.40	100%			
25	D	706116.80	737729.17	6.00	252.00	0.00	0.00	0.40	100%			
26	D	706074.44	737732.12	6.00	331.00	0.00	0.00	0.40	100%			
27	D	706091.50	737737.45	6.00	252.00	0.00	0.00	0.40	100%			
28	D	706068.53	737702.69	6.00	157.00	0.00	0.00	0.40	100%			
29	D	706124.81	737735.11	6.00	349.00	0.00	0.00	0.40	100%			
30	D	706151.97	737733.38	6.00	66.00	0.00	0.00	0.40	100%			
31	B	706178.46	737724.56	6.00	242.00	0.00	0.00	0.40	100%			
32	D	706178.42	737724.52	6.00	69.00	0.00	0.00	0.40	100%			
33	B	706212.67	737713.56	6.00	251.00	0.00	0.00	0.40	100%			
34	D	706212.79	737713.72	6.00	76.00	0.00	0.00	0.40	100%			
35	D	706248.90	737707.38	6.00	252.00	0.00	0.00	0.40	100%			
36	B	706239.37	737684.38	6.00	158.00	0.00	0.00	0.40	100%			

Layout Continued

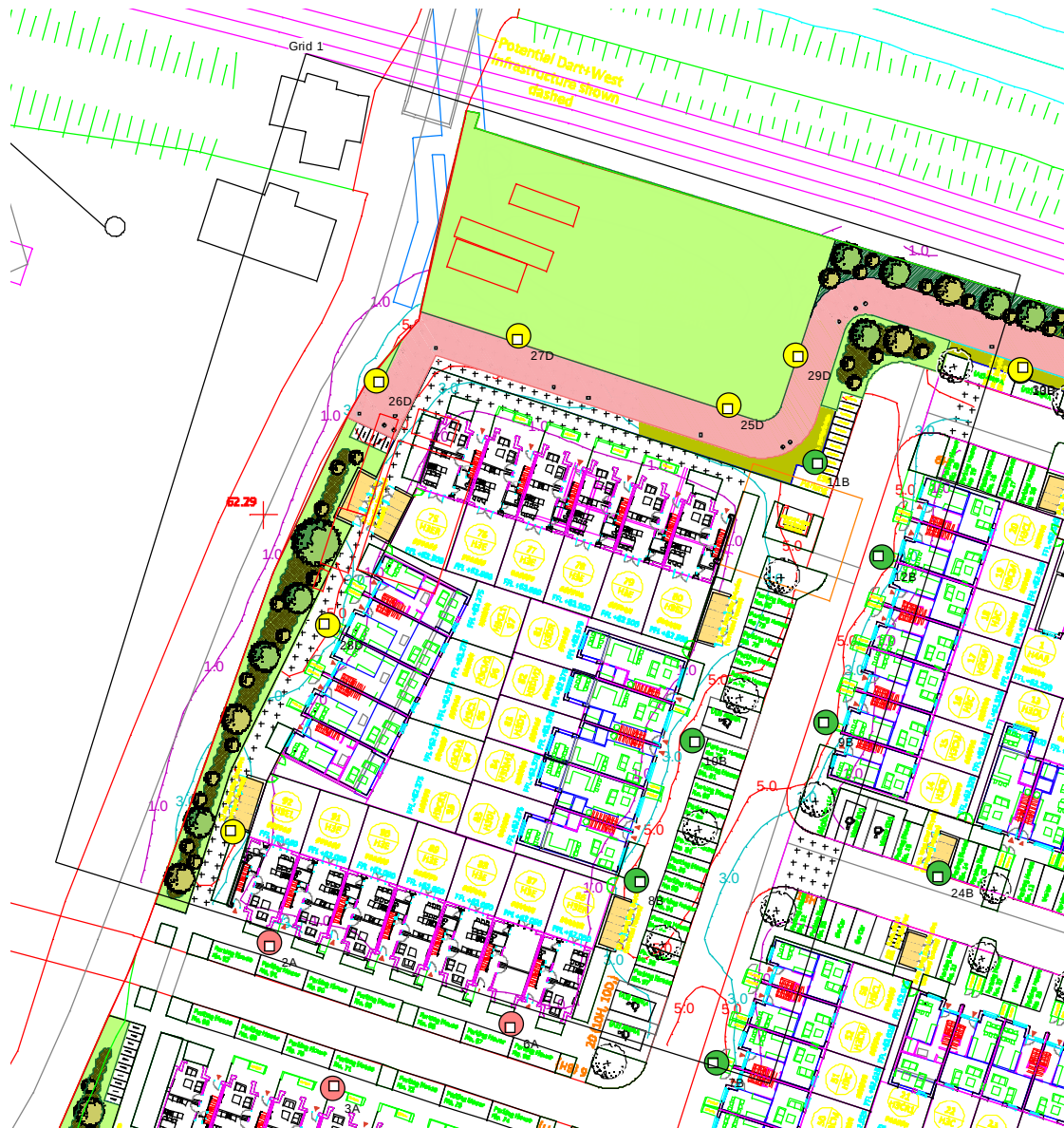
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Dimmed to	Target X	Target Y	Target Z
37	B	706231.26	737696.87	6.00	67.00	0.00	0.00	0.40	100%			
38	B	706226.94	737671.44	6.00	341.00	0.00	0.00	0.40	100%			
39	B	706226.62	737644.72	6.00	164.00	0.00	0.00	0.40	100%			
40	B	706204.41	737652.44	6.00	252.00	0.00	0.00	0.40	100%			
41	B	706169.58	737663.65	6.00	252.00	0.00	0.00	0.40	100%			
42	D	706212.21	737628.58	6.00	336.00	0.00	0.00	0.40	100%			
43	D	706204.85	737606.31	6.00	345.00	0.00	0.00	0.40	100%			
44	B	706124.56	737610.88	6.00	72.00	0.00	0.00	0.40	100%			
45	B	706159.70	737599.87	6.00	73.00	0.00	0.00	0.40	100%			
46	B	706179.78	737590.20	6.00	339.00	0.00	0.00	0.40	100%			
47	B	706169.18	737570.51	6.00	258.00	0.00	0.00	0.40	100%			
48	B	706135.06	737581.28	6.00	253.00	0.00	0.00	0.40	100%			
49	B	706101.07	737592.66	6.00	252.00	0.00	0.00	0.40	100%			
50	D	706184.40	737558.97	6.00	93.00	0.00	0.00	0.40	100%			
51	D	706163.23	737549.23	6.00	317.00	0.00	0.00	0.40	100%			
52	D	706160.82	737532.38	6.00	8.00	0.00	0.00	0.40	100%			
53	D	706169.65	737542.87	6.00	264.00	0.00	0.00	0.40	100%			
54	D	706141.63	737527.52	6.00	303.00	0.00	0.00	0.40	100%			
55	D	706121.48	737506.27	6.00	315.00	0.00	0.00	0.40	100%			
56	E	706096.10	737537.77	4.50	336.00	0.00	0.00	0.40	70%			
57	E	706112.30	737550.80	4.50	253.00	0.00	0.00	0.40	70%			
58	E	706105.35	737527.47	4.50	131.00	0.00	0.00	0.40	70%			
59	E	706133.52	737554.58	4.50	144.00	0.00	0.00	0.40	70%			
60	E	706113.00	737544.58	4.50	230.00	0.00	0.00	0.40	70%			
61	D	706274.22	737688.65	6.00	74.00	0.00	0.00	0.40	100%			
62	D	706251.14	737686.18	6.00	76.00	0.00	0.00	0.40	100%			
63	D	706268.17	737675.15	6.00	176.00	0.00	0.00	0.40	100%			
64	D	706256.42	737641.85	6.00	150.00	0.00	0.00	0.40	100%			
65	D	706236.59	737619.42	6.00	141.00	0.00	0.00	0.40	100%			
66	D	706219.63	737593.39	6.00	142.00	0.00	0.00	0.40	100%			
67	D	706200.50	737566.91	6.00	142.00	0.00	0.00	0.40	100%			
68	D	706182.25	737538.35	6.00	142.00	0.00	0.00	0.40	100%			
69	D	706159.12	737510.34	6.00	142.00	0.00	0.00	0.40	100%			
70	D	706137.92	737491.16	6.00	133.00	0.00	0.00	0.40	100%			
71	D	706116.76	737497.57	6.00	222.00	0.00	0.00	0.40	100%			
72	D	706090.33	737519.17	6.00	246.00	0.00	0.00	0.40	100%			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Dimmed to	Target X	Target Y	Target Z
73	D	706235.06	737639.92	6.00	67.00	0.00	0.00	0.40	100%			
74	E	706052.07	737613.53	4.50	80.00	0.00	0.00	0.00	70%			
75	E	706057.62	737621.39	4.50	174.00	0.00	0.00	0.00	70%			
76	E	706051.10	737631.79	4.50	245.00	0.00	0.00	0.00	70%			
77	E	706064.70	737599.94	4.50	339.00	0.00	0.00	0.00	70%			
78	E	706049.39	737553.03	4.50	346.00	0.00	0.00	0.00	70%			
79	E	706057.48	737577.57	4.50	338.00	0.00	0.00	0.00	70%			
80	H	706021.06	737532.58	6.00	257.00	0.00	0.00	0.40	100%			
81	E	706051.82	737539.12	4.50	255.00	0.00	0.00	0.00	70%			

Horizontal Illuminance (lux)

Grid 1

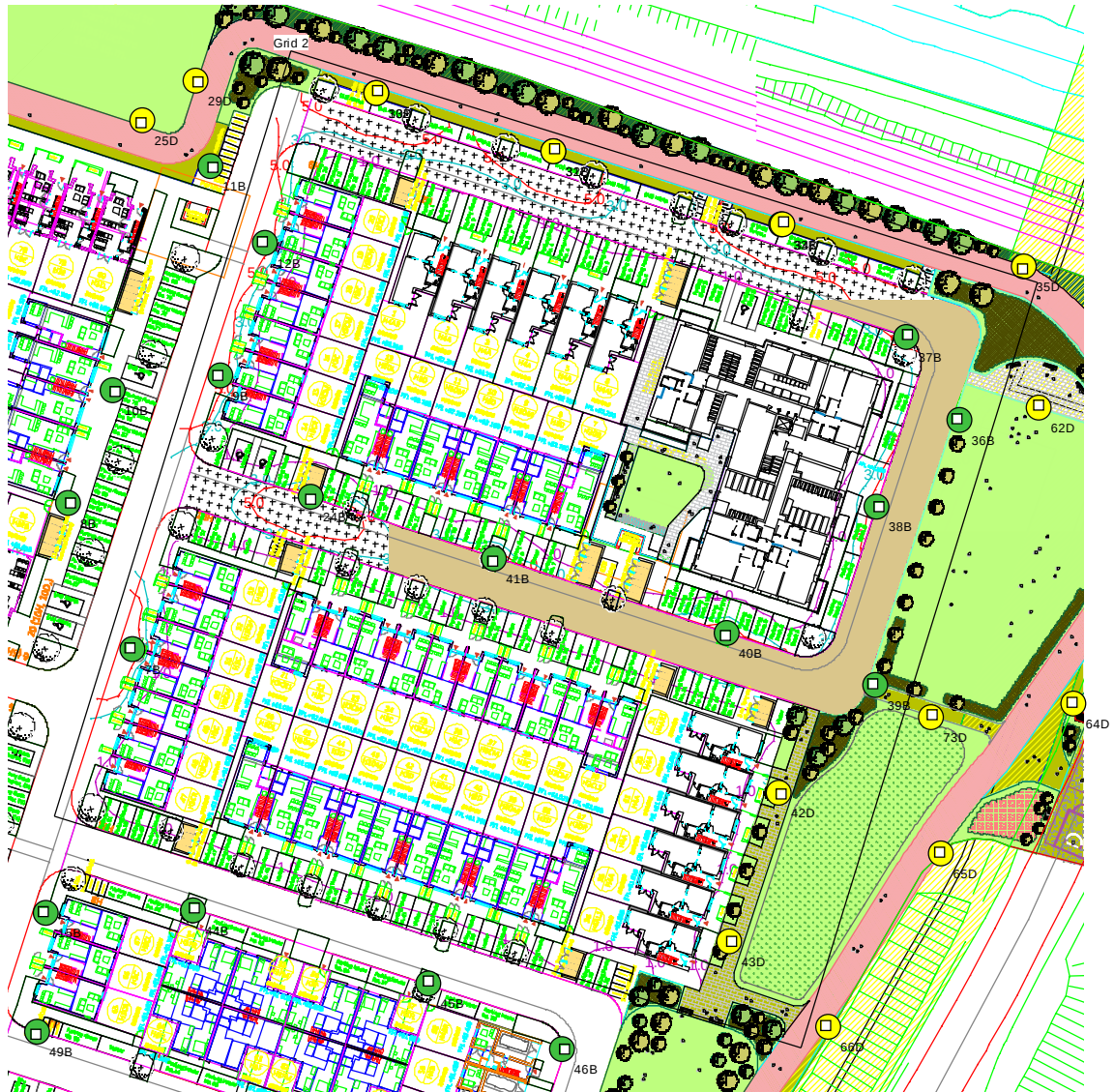


Results

Eav	5.09
Emin	1.55
Emax	11.91
Emin/Emax	0.13
Emin/Eav	0.30

Horizontal Illuminance (lux)

Grid 2

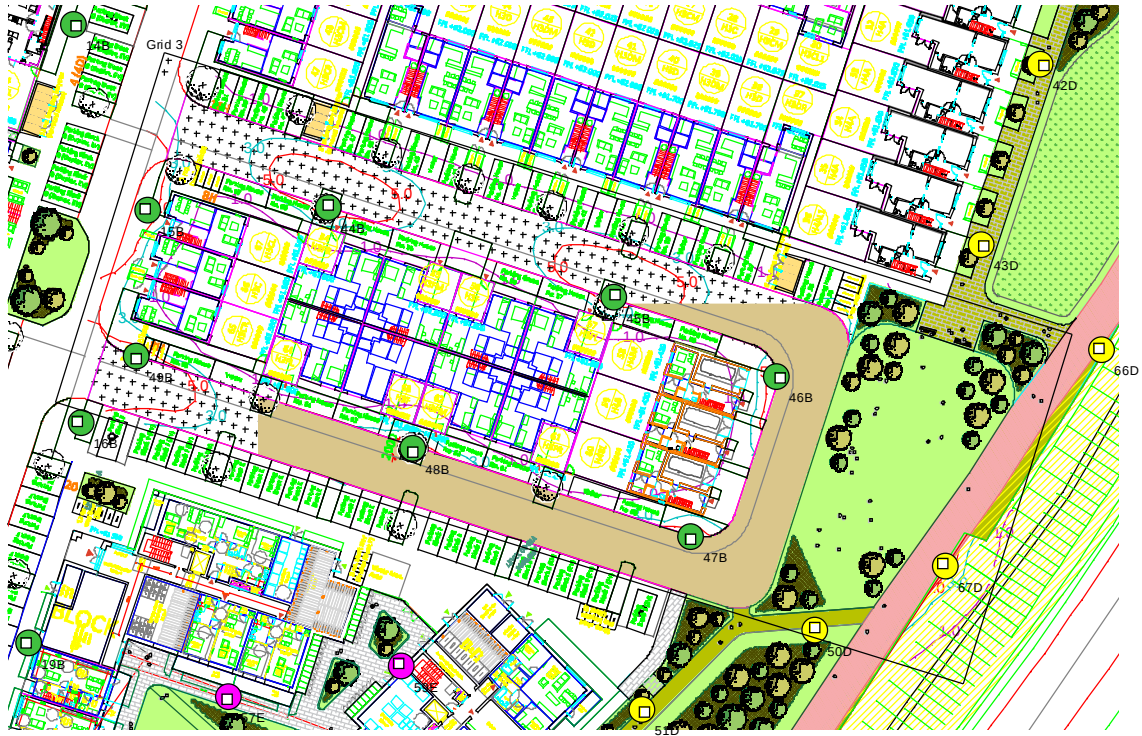


Results

Eav	5.62
Emin	1.10
Emax	17.60
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3



Results

Eav	5.17
Emin	1.21
Emax	15.44
Emin/Emax	0.08
Emin/Eav	0.23

Horizontal Illuminance (lux)

Grid 4

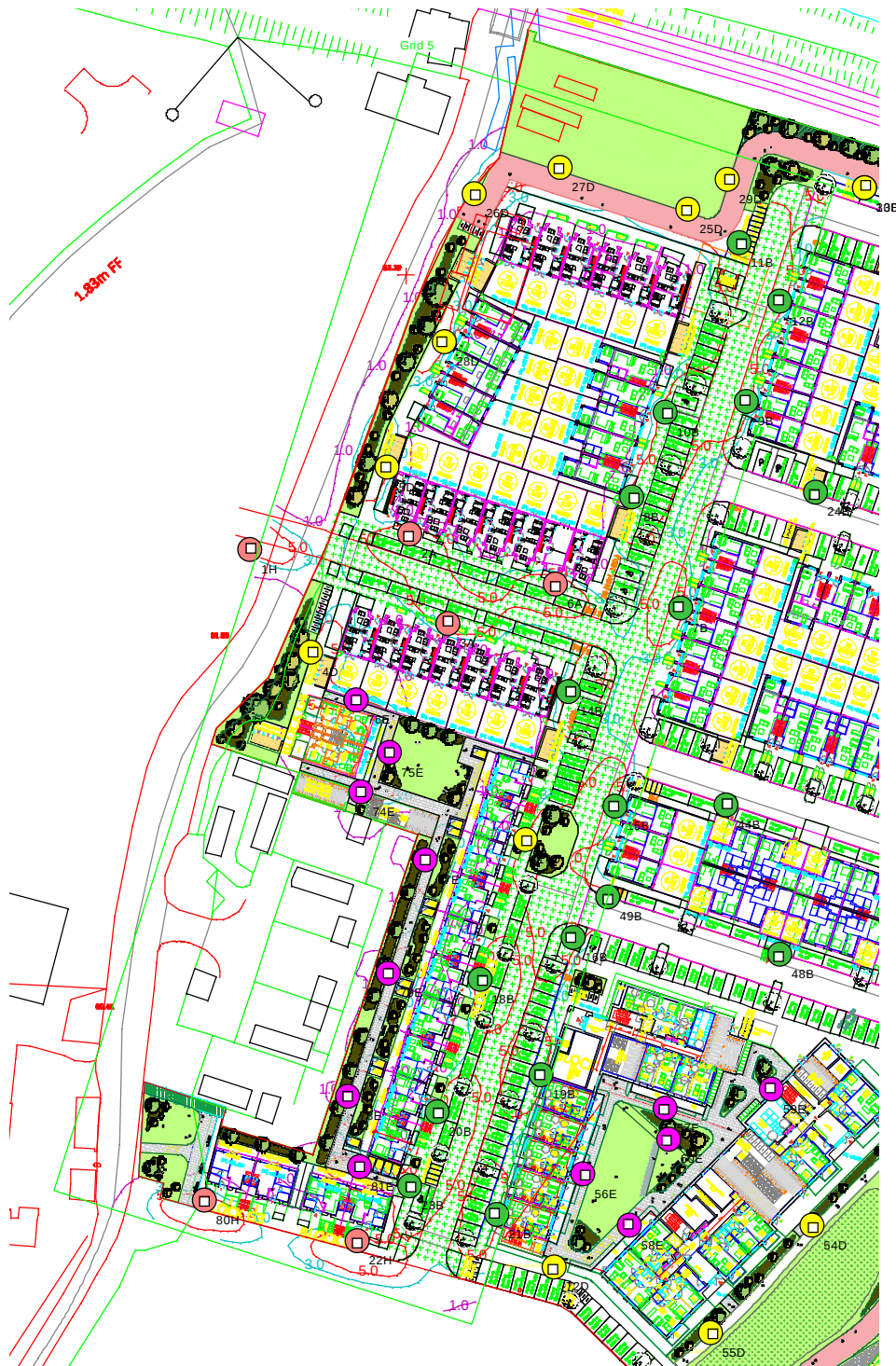


Results

Eav	5.67
Emin	1.11
Emax	13.33
Emin/Emax	0.08
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 5



Results

Eav	5.95
Emin	1.16
Emax	18.22
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 6



Results

Eav	5.27
Emin	1.33
Emax	15.31
Emin/Emax	0.09
Emin/Eav	0.25

Horizontal Illuminance (lux)

Grid 7



Results

Eav	5.14
Emin	1.11
Emax	12.03
Emin/Emax	0.09
Emin/Eav	0.22