

DATE: 13 August 2024
DESIGNER: Alex Naper
PROJECT No: SES 08824 Rev A
PROJECT NAME: Blessington LRD - Waterman Moylan



Residential Spine road designed in accordance with EN13201-2:2015 Category P3.

Residential areas designed in accordance with EN13201-2:2015 category P4.

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.

Rev A: Updated site layout.

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	3713.16	-235.42	102.00	15.00	1.50	1.50
2	Grid 2	3752.85	-284.93	318.76	290.42	1.50	1.50
3	Grid 3	3749.90	-266.31	128.89	48.00	1.50	1.50
4	Grid 4	3688.36	-237.38	168.00	149.55	1.50	1.50

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	E950-28-P6A-730-SD0725-31W
Lamp(s)	730SA
Lamp Flux (klm)	4.06
File Name	E950-28-P6A-730-SD0725-31W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	803.0, 171.3, 0.0
No. in Project	4

Luminaire B Data



Supplier	C U Phosco
Type	E950-28-N1P-730-C200-7W
Lamp(s)	730N
Lamp Flux (klm)	0.74
File Name	E950-28-N1P-730-C0200-7W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	351.4, 17.6, 0.3
No. in Project	16

Luminaire C Data



Supplier	C U Phosco
Type	E950-28-P4A-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.25
File Name	E950-28-P4A-730-C0600-16W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	37

Luminaire D Data



Supplier	C U Phosco
Type	E950-28-P4A-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.25
File Name	E950-28-P4A-730-C0600-16W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	4

Luminaire E Data



Supplier	C U Phosco
Type	E950-28-R3P-730-C250-8W
Lamp(s)	730N
Lamp Flux (klm)	0.95
File Name	E950-28-R3P-730-C0250-8W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	900.6, 60.7, 0.3
No. in Project	23

Luminaire F Data



Supplier	C U Phosco
Type	E950-28-F2A-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.28
File Name	E950-28-F2A-730-C0600-16W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	623.6, 113.9, 0.3
No. in Project	2

Luminaires



Luminaire G Data

Supplier	C U Phosco
Type	E950-28-A2A-730-C550-14W
Lamp(s)	730N
Lamp Flux (klm)	1.90
File Name	E950-28-A2A-730-C0550-14W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	470.3, 22.7, 0.9
No. in Project	2



Luminaire H Data

Supplier	TRT Lighting
Type	VIA ASY 297mA CLO 3000K LED
Lamp(s)	42 0010 0000 100
Lamp Flux (klm)	0.45
File Name	VIA_ASY_297mA_CLO_450LM_3K.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	615.1, 393.5, 54.6
No. in Project	3

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	3719.82	-227.33	6.00	135.00	0.00	0.00	0.40			
2	A	3739.33	-206.50	6.00	139.00	0.00	0.00	0.40			
3	A	3759.45	-185.48	6.00	135.00	0.00	0.00	0.40			
4	A	3778.63	-164.78	6.00	140.00	0.00	0.00	0.40			
5	C	3729.44	-182.03	6.00	225.00	0.00	0.00	0.40			
6	C	3813.35	-129.82	6.00	313.00	0.00	0.00	0.40			
7	C	3797.31	-146.79	6.00	316.00	0.00	0.00	0.40			
8	C	3706.29	-160.50	6.00	225.00	0.00	0.00	0.40			
9	C	3689.32	-144.74	6.00	225.00	0.00	0.00	0.40			
10	C	3694.47	-129.23	6.00	139.00	0.00	0.00	0.40			
11	C	3711.66	-110.75	6.00	132.00	0.00	0.00	0.40			
12	C	3713.75	-90.55	6.00	225.00	0.00	0.00	0.40			
13	C	3743.55	-118.35	6.00	221.00	0.00	0.00	0.40			
14	C	3762.48	-137.83	6.00	227.00	0.00	0.00	0.40			
15	C	3780.67	-154.91	6.00	225.00	0.00	0.00	0.40			
16	C	3752.71	-113.58	6.00	323.00	0.00	0.00	0.40			
17	C	3795.91	-74.63	6.00	135.00	0.00	0.00	0.40			
18	D	3750.56	-221.10	6.00	44.00	0.00	0.00	0.40			
19	C	3819.99	-49.25	6.00	135.00	0.00	0.00	0.40			
20	C	3830.16	-107.21	6.00	312.00	0.00	0.00	0.40			
21	C	3860.88	-87.86	6.00	136.00	0.00	0.00	0.40			
22	C	3857.78	-68.15	6.00	44.00	0.00	0.00	0.40			
23	C	3884.85	-73.78	6.00	314.00	0.00	0.00	0.40			
24	C	3908.90	-44.74	6.00	328.00	0.00	0.00	0.40			
25	C	3914.98	-28.63	6.00	64.00	0.00	0.00	0.40			
26	C	3887.23	-12.21	6.00	55.00	0.00	0.00	0.40			
27	C	3858.37	5.30	6.00	62.00	0.00	0.00	0.40			
28	C	3828.91	23.19	6.00	64.00	0.00	0.00	0.40			
29	C	3797.51	35.08	6.00	87.00	0.00	0.00	0.40			
30	C	3772.11	35.73	6.00	351.00	0.00	0.00	0.40			
31	C	3768.60	4.60	6.00	351.00	0.00	0.00	0.40			
32	C	3764.81	-26.70	6.00	351.00	0.00	0.00	0.40			
33	C	3755.73	-39.56	6.00	270.00	0.00	0.00	0.40			
34	C	3720.55	-35.29	6.00	260.00	0.00	0.00	0.40			
35	C	3697.85	-28.48	6.00	254.00	0.00	0.00	0.40			
36	C	3718.08	-21.09	6.00	171.00	0.00	0.00	0.40			

Layout Continued

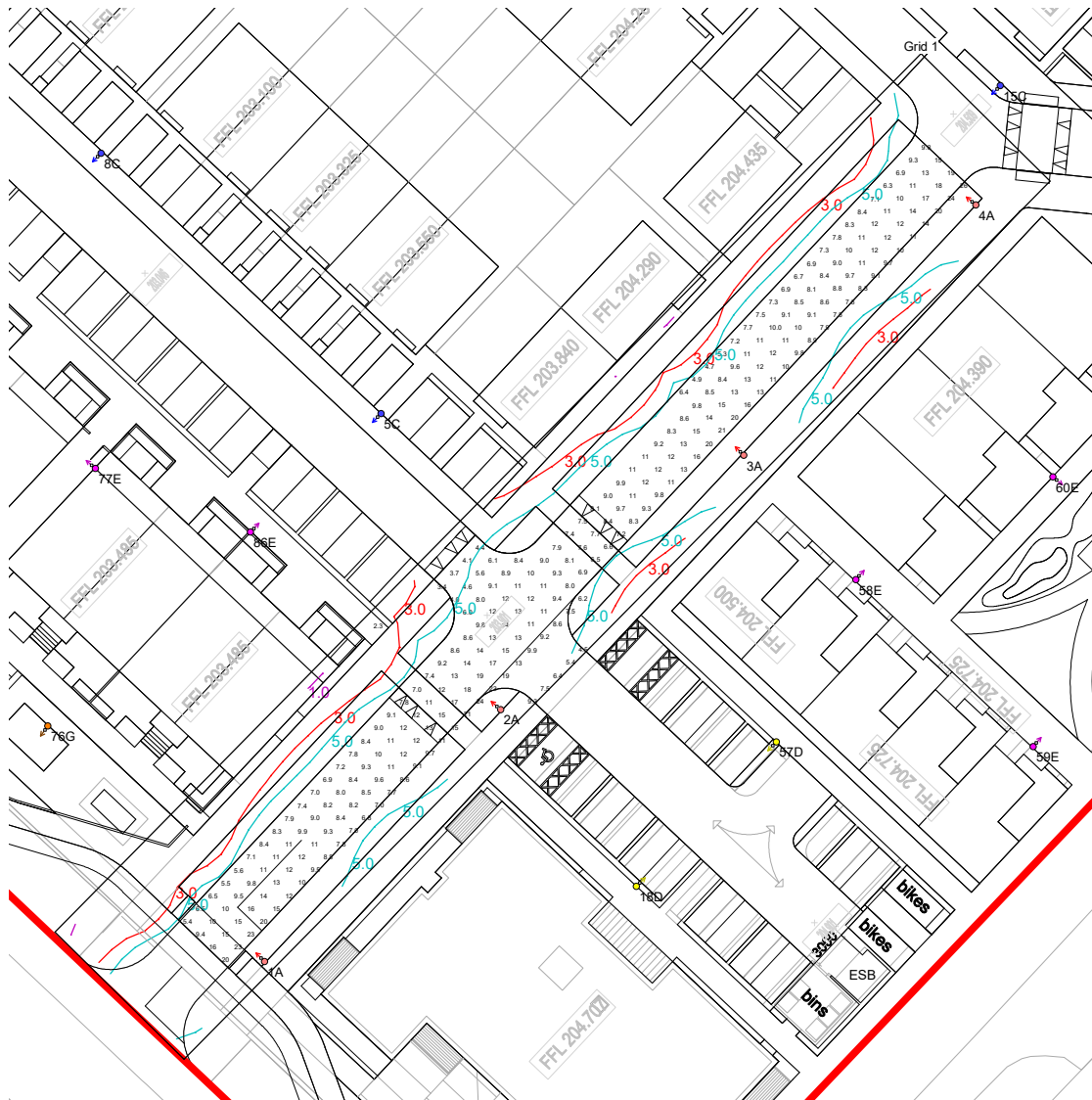
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	C	3721.65	9.98	6.00	171.00	0.00	0.00	0.40			
38	C	3725.37	41.63	6.00	168.00	0.00	0.00	0.40			
39	C	3787.62	-11.18	6.00	260.00	0.00	0.00	0.40			
40	C	3817.91	-25.88	6.00	243.00	0.00	0.00	0.40			
41	C	3837.54	-37.42	6.00	241.00	0.00	0.00	0.40			
42	B	3697.01	-50.35	5.00	86.00	0.00	0.00	0.40			
43	B	3720.86	-52.41	5.00	83.00	0.00	0.00	0.40			
44	B	3745.77	-52.02	5.00	265.00	0.00	0.00	0.40			
45	B	3764.86	-60.49	5.00	45.00	0.00	0.00	0.40			
46	B	3789.74	-54.48	5.00	105.00	0.00	0.00	0.40			
47	B	3771.10	-45.00	5.00	321.00	0.00	0.00	0.40			
48	B	3778.57	-23.40	5.00	174.00	0.00	0.00	0.40			
49	B	3874.08	-91.48	5.00	72.00	0.00	0.00	0.40			
50	B	3720.20	54.93	5.00	83.00	0.00	0.00	0.40			
51	B	3745.13	52.08	5.00	83.00	0.00	0.00	0.40			
52	B	3768.28	49.56	5.00	83.00	0.00	0.00	0.40			
53	B	3783.70	56.55	5.00	268.00	0.00	0.00	0.40			
54	B	3832.14	-159.64	5.00	62.00	0.00	0.00	0.40			
55	B	3814.92	-147.91	5.00	35.00	0.00	0.00	0.40			
56	C	3770.17	-93.01	6.00	328.00	0.00	0.00	0.40			
57	D	3762.14	-209.19	6.00	226.00	0.00	0.00	0.40			
58	E	3768.72	-195.75	5.00	48.00	0.00	0.00	0.40			
59	E	3783.37	-209.55	5.00	48.00	0.00	0.00	0.40			
60	E	3785.02	-187.26	5.00	320.00	0.00	0.00	0.40			
61	E	3804.31	-180.72	5.00	225.00	0.00	0.00	0.40			
62	F	3809.61	-160.90	6.00	48.00	0.00	0.00	0.40			
63	F	3827.48	-161.70	6.00	213.00	0.00	0.00	0.40			
64	E	3744.44	-67.18	5.00	48.00	0.00	0.00	0.40			
65	E	3760.22	-82.01	5.00	48.00	0.00	0.00	0.40			
66	E	3709.42	-61.19	5.00	337.00	0.00	0.00	0.40			
67	E	3698.89	-79.95	5.00	328.00	0.00	0.00	0.40			
68	E	3686.94	-101.11	5.00	328.00	0.00	0.00	0.40			
69	E	3669.30	-104.06	5.00	55.00	0.00	0.00	0.40			
70	E	3663.69	-110.79	5.00	136.00	0.00	0.00	0.40			
71	E	3653.90	-121.87	5.00	234.00	0.00	0.00	0.40			
72	E	3672.76	-139.29	5.00	222.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
73	E	3664.80	-153.11	5.00	138.00	0.00	0.00	0.40			
74	E	3666.00	-172.64	5.00	216.00	0.00	0.00	0.40			
75	G	3682.12	-189.29	5.00	225.00	0.00	0.00	0.40			
76	G	3701.89	-207.86	5.00	234.00	0.00	0.00	0.40			
77	E	3705.82	-186.56	5.00	140.00	0.00	0.00	0.40			
78	E	3678.91	-166.40	5.00	312.00	0.00	0.00	0.40			
79	E	3693.62	-110.04	5.00	314.00	0.00	0.00	0.40			
80	E	3676.48	-116.03	5.00	40.00	0.00	0.00	0.40			
81	E	3721.58	-61.90	5.00	135.00	0.00	0.00	0.40			
82	E	3699.04	-97.41	5.00	51.00	0.00	0.00	0.40			
83	H	3732.27	-63.07	1.13	319.00	0.00	0.00	0.00			
84	H	3726.77	-62.93	1.13	217.00	0.00	0.00	0.00			
85	E	3697.47	-171.94	5.00	46.00	0.00	0.00	0.40			
86	E	3718.64	-191.82	5.00	46.00	0.00	0.00	0.40			
87	H	3702.50	-54.65	1.13	248.00	0.00	0.00	0.00			
88	D	3728.59	-239.47	5.00	50.00	0.00	0.00	0.40			
89	D	3741.31	-251.50	5.00	51.00	0.00	0.00	0.40			
90	B	3771.48	-68.88	5.00	153.00	0.00	0.00	0.40			
91	B	3782.71	-47.26	5.00	41.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	10.49
Emin	2.33
Emax	25.67
Emin/Emax	0.09
Emin/Eav	0.22

Horizontal Illuminance (lux)

Grid 2



Results

Eav	5.44
Emin	1.07
Emax	26.43
Emin/Emax	0.04
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3

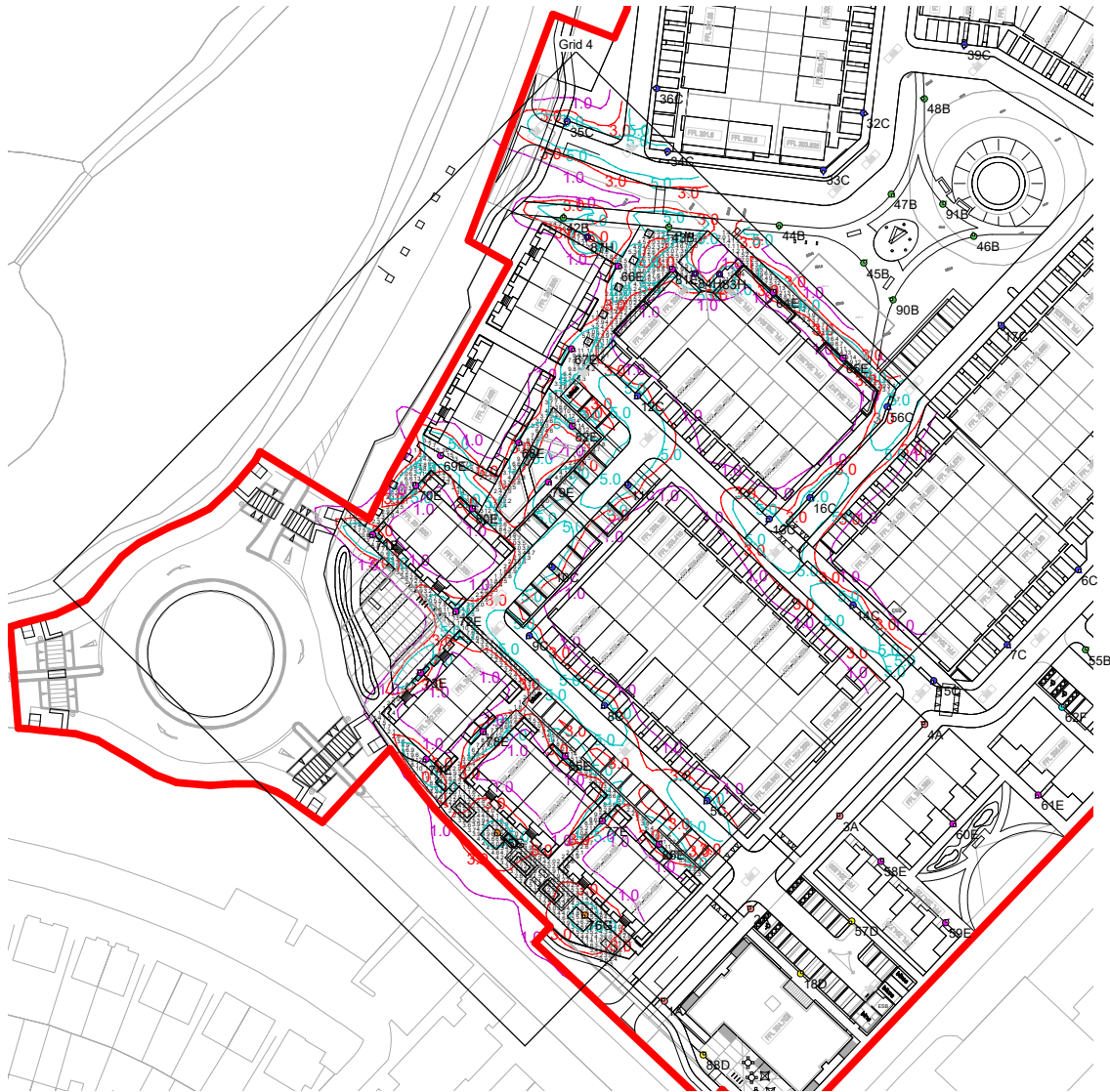


Results

Eav	6.25
Emin	1.28
Emax	22.37
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 4



Results

Eav	5.17
Emin	1.07
Emax	21.34
Emin/Emax	0.05
Emin/Eav	0.21