

DATE: 8 April 2022  
DESIGNER: Graham Sheehan  
PROJECT No: SES 03822 Rev A  
PROJECT NAME: Tandy's Lane 2 Quintain



Designed in accordance with ISEN13201-2:2015 Class P4

Rev A: Some columns relocated to facilitate landscaping etc. Type C lantern added.

Rev B: Revised landscape background used.

## Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.  
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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	702036.00	733563.00	250.00	350.00	1.50	1.50
2	Grid 2	702281.00	733515.00	181.00	273.00	1.50	1.50
3	Grid 3	702103.00	733906.00	280.00	201.00	1.50	1.50

### Luminaires

#### Luminaire A Data



Supplier	C U Phosco
Type	P852-12-P4-NW-CB0450-18W
Lamp(s)	740C NW
Lamp Flux (klm)	2.28
File Name	P852-12-P4-NW-CB0450-18W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	760.6, 161.3, 0.8
No. in Project	105

#### Luminaire B Data



Supplier	C U Phosco
Type	P852-12-R3B-NW-CB0200-9W
Lamp(s)	740C NW
Lamp Flux (klm)	1.11
File Name	P852-12-R3B-NW-CB0200-9W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	896.4, 62.1, 1.9
No. in Project	12

#### Luminaire C Data



Supplier	C U Phosco
Type	P852-12-F2-NW-CB0650-25W
Lamp(s)	740C NW
Lamp Flux (klm)	3.09
File Name	P852-12-F2-NW-CB0650-25W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	761.9, 260.5, 34.9
No. in Project	4

### Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	702388.16	733996.02	6.00	155.00	5.00	0.00	0.40			
2	A	702371.86	733990.93	6.00	334.00	5.00	0.00	0.40			
3	A	702376.49	733961.20	6.00	156.00	5.00	0.00	0.40			
4	A	702365.85	733929.92	6.00	155.00	5.00	0.00	0.40			
5	A	702358.11	733950.44	6.00	339.00	5.00	0.00	0.40			
6	A	702348.17	733921.32	6.00	339.00	5.00	0.00	0.40			
7	A	702357.77	733905.37	6.00	155.00	5.00	0.00	0.40			
8	A	702333.93	733904.82	6.00	262.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
9	A	702344.92	733884.21	6.00	166.00	5.00	0.00	0.40			
10	A	702335.87	733862.13	6.00	176.00	5.00	0.00	0.40			
11	A	702327.51	733880.53	6.00	348.00	5.00	0.00	0.40			
12	A	702327.93	733821.14	6.00	172.00	5.00	0.00	0.40			
13	A	702320.03	733841.53	6.00	344.00	5.00	0.00	0.40			
14	A	702314.40	733812.83	6.00	343.00	5.00	0.00	0.40			
15	A	702321.14	733785.65	6.00	169.00	5.00	0.00	0.40			
16	A	702316.79	733764.00	6.00	164.00	5.00	0.00	0.40			
17	A	702320.76	733744.36	6.00	152.00	5.00	0.00	0.40			
18	A	702310.17	733718.27	6.00	155.00	5.00	0.00	0.40			
19	A	702291.49	733703.64	6.00	341.00	5.00	0.00	0.40			
20	A	702295.50	733682.17	6.00	155.00	5.00	0.00	0.40			
21	A	702274.47	733662.74	6.00	99.00	5.00	0.00	0.40			
22	A	702255.31	733658.69	6.00	143.00	5.00	0.00	0.40			
23	A	702240.00	733636.95	6.00	148.00	5.00	0.00	0.40			
24	A	702222.17	733611.41	6.00	154.00	5.00	0.00	0.40			
25	A	702154.17	733663.98	6.00	336.00	5.00	0.00	0.40			
26	A	702175.23	733678.04	6.00	165.00	5.00	0.00	0.40			
27	A	702161.37	733648.70	6.00	155.00	5.00	0.00	0.40			
28	A	702163.33	733695.66	6.00	347.00	5.00	0.00	0.40			
29	A	702180.60	733705.49	6.00	168.00	5.00	0.00	0.40			
30	A	702193.06	733706.38	6.00	77.00	5.00	0.00	0.40			
31	A	702221.78	733700.84	6.00	80.00	5.00	0.00	0.40			
32	C	702152.01	733716.02	6.00	78.00	5.00	0.00	0.40			
34	C	702122.63	733721.58	6.00	76.00	5.00	0.00	0.40			
36	A	702177.53	733731.40	6.00	159.00	5.00	0.00	0.40			
37	A	702172.16	733766.03	6.00	343.00	5.00	0.00	0.40			
38	A	702186.88	733779.26	6.00	168.00	5.00	0.00	0.40			
39	A	702156.53	733779.63	6.00	79.00	5.00	0.00	0.40			
40	A	702123.63	733785.96	6.00	78.00	5.00	0.00	0.40			
41	A	702144.99	733796.70	6.00	258.00	5.00	0.00	0.40			
42	A	702181.99	733797.34	6.00	166.00	5.00	0.00	0.40			
43	A	702172.70	733820.26	6.00	342.00	5.00	0.00	0.40			
44	A	702185.86	733832.76	6.00	172.00	5.00	0.00	0.40			
45	A	702193.71	733873.39	6.00	170.00	5.00	0.00	0.40			
46	A	702161.73	733850.97	6.00	352.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
47	B	702173.74	733873.86	6.00	256.00	0.00	0.00	0.40			
48	B	702150.31	733879.24	6.00	254.00	0.00	0.00	0.40			
49	A	702175.96	733859.25	6.00	346.00	5.00	0.00	0.40			
50	A	702187.99	733899.47	6.00	346.00	5.00	0.00	0.40			
51	A	702205.98	733909.33	6.00	165.00	5.00	0.00	0.40			
52	A	702197.19	733824.24	6.00	258.00	5.00	0.00	0.40			
53	A	702213.79	733806.11	6.00	80.00	5.00	0.00	0.40			
54	A	702240.17	733816.01	6.00	258.00	5.00	0.00	0.40			
55	A	702253.41	733900.38	6.00	347.00	5.00	0.00	0.40			
56	A	702265.90	733878.56	6.00	163.00	5.00	0.00	0.40			
57	A	702249.97	733854.64	6.00	349.00	5.00	0.00	0.40			
58	A	702256.61	733827.00	6.00	167.00	5.00	0.00	0.40			
59	A	702255.87	733792.92	6.00	167.00	5.00	0.00	0.40			
60	A	702237.50	733787.19	6.00	344.00	5.00	0.00	0.40			
61	A	702234.51	733758.94	6.00	346.00	5.00	0.00	0.40			
62	A	702228.88	733729.84	6.00	347.00	5.00	0.00	0.40			
63	A	702239.09	733705.74	6.00	175.00	5.00	0.00	0.40			
64	A	702229.93	733691.18	6.00	167.00	5.00	0.00	0.40			
65	B	702192.16	733688.06	6.00	79.00	0.00	0.00	0.40			
66	B	702267.72	733677.70	6.00	250.00	0.00	0.00	0.40			
67	B	702238.75	733673.59	6.00	55.00	0.00	0.00	0.40			
68	B	702252.10	733674.92	6.00	343.00	0.00	0.00	0.40			
69	A	702275.16	733809.15	6.00	254.00	5.00	0.00	0.40			
70	A	702303.44	733803.81	6.00	259.00	5.00	0.00	0.40			
71	A	702288.44	733791.72	6.00	79.00	5.00	0.00	0.40			
72	B	702145.67	733843.71	6.00	253.00	0.00	0.00	0.40			
73	A	702281.76	733573.56	6.00	320.00	5.00	0.00	0.40			
74	A	702292.22	733563.62	6.00	138.00	5.00	0.00	0.40			
75	A	702304.02	733593.00	6.00	312.00	5.00	0.00	0.40			
76	A	702324.92	733594.87	6.00	140.00	5.00	0.00	0.40			
77	A	702313.03	733611.47	6.00	233.00	5.00	0.00	0.40			
78	A	702291.96	733628.60	6.00	234.00	5.00	0.00	0.40			
79	A	702281.15	733637.33	6.00	231.00	5.00	0.00	0.40			
80	A	702166.54	733792.59	6.00	257.00	5.00	0.00	0.40			
81	A	702352.36	733614.28	6.00	135.00	5.00	0.00	0.40			
82	A	702362.99	733603.13	6.00	37.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
83	A	702380.55	733579.54	6.00	41.00	5.00	0.00	0.40			
84	A	702393.71	733590.37	6.00	217.00	5.00	0.00	0.40			
85	A	702368.49	733631.46	6.00	155.00	5.00	0.00	0.40			
86	A	702383.14	733655.63	6.00	155.00	5.00	0.00	0.40			
87	A	702406.21	733679.16	6.00	141.00	5.00	0.00	0.40			
88	A	702402.46	733670.21	6.00	219.00	5.00	0.00	0.40			
89	A	702418.33	733653.36	6.00	223.00	5.00	0.00	0.40			
90	A	702452.75	733688.49	6.00	103.00	5.00	0.00	0.40			
91	A	702473.55	733678.12	6.00	64.00	5.00	0.00	0.40			
92	A	702427.99	733687.84	6.00	101.00	5.00	0.00	0.40			
93	A	702184.45	733918.89	6.00	82.00	5.00	0.00	0.40			
94	A	702150.17	733925.37	6.00	88.00	5.00	0.00	0.40			
95	A	702160.77	733940.43	6.00	255.00	5.00	0.00	0.40			
96	A	702203.81	733932.11	6.00	259.00	5.00	0.00	0.40			
97	A	702224.80	733946.27	6.00	169.00	5.00	0.00	0.40			
98	B	702222.42	733925.95	6.00	347.00	0.00	0.00	0.40			
99	B	702222.96	733914.05	6.00	77.00	0.00	0.00	0.40			
100	B	702247.79	733909.25	6.00	77.00	0.00	0.00	0.40			
101	A	702230.22	733974.40	6.00	167.00	5.00	0.00	0.40			
102	A	702223.19	733993.73	6.00	349.00	5.00	0.00	0.40			
103	C	702210.50	733994.13	6.00	76.00	0.00	0.00	0.40			
104	C	702180.38	734000.01	6.00	77.00	0.00	0.00	0.40			
105	A	702227.50	734014.65	6.00	348.00	5.00	0.00	0.40			
106	A	702233.68	734053.32	6.00	335.00	5.00	0.00	0.40			
107	A	702248.69	734041.96	6.00	169.00	5.00	0.00	0.40			
108	A	702241.36	733999.58	6.00	255.00	5.00	0.00	0.40			
109	A	702269.66	733993.98	6.00	260.00	5.00	0.00	0.40			
110	A	702294.38	733989.22	6.00	258.00	5.00	0.00	0.40			
111	A	702320.16	733984.30	6.00	254.00	5.00	0.00	0.40			
112	A	702350.91	733976.45	6.00	252.00	5.00	0.00	0.40			
113	A	702354.89	733963.28	6.00	84.00	5.00	0.00	0.40			
114	A	702301.77	733965.79	6.00	166.00	5.00	0.00	0.40			
115	A	702286.45	733941.33	6.00	345.00	5.00	0.00	0.40			
116	A	702276.61	733935.08	6.00	259.00	5.00	0.00	0.40			
117	A	702238.49	733942.46	6.00	256.00	5.00	0.00	0.40			
118	A	702279.25	733903.60	6.00	83.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
119	A	702292.56	733917.36	6.00	167.00	5.00	0.00	0.40			
120	A	702306.24	733909.08	6.00	258.00	5.00	0.00	0.40			
121	A	702318.18	733890.54	6.00	82.00	5.00	0.00	0.40			
122	A	702328.07	733969.94	6.00	79.00	5.00	0.00	0.40			
123	B	702215.50	733663.39	6.00	80.00	0.00	0.00	0.40			
124	B	702245.16	733686.93	6.00	248.00	0.00	0.00	0.40			



## Horizontal Illuminance (lux)

Grid 1



### Results

Eav	5.43
Emin	1.09
E <sub>max</sub>	15.86
E <sub>min</sub> /E <sub>max</sub>	0.07
E <sub>min</sub> /E <sub>av</sub>	0.20

## Horizontal Illuminance (lux)

Grid 1



### Results

Eav	5.43
Emin	1.09
E <sub>max</sub>	15.86
E <sub>min</sub> /E <sub>max</sub>	0.07
E <sub>min</sub> /E <sub>av</sub>	0.20



### Horizontal Illuminance (lux)

Grid 2

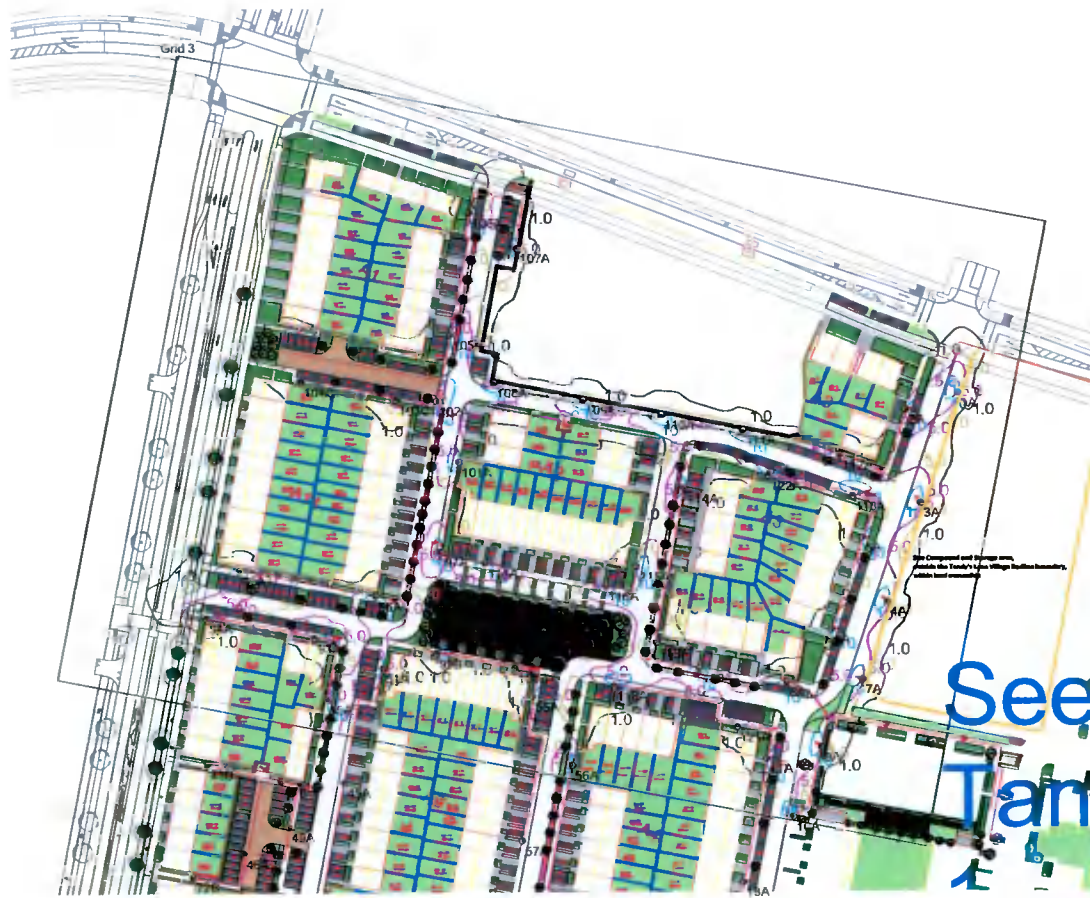


#### Results

Eav	5.62
Emin	1.22
Emax	15.53
Emin/Emax	0.08
Emin/Eav	0.22

## Horizontal Illuminance (lux)

Grid 3



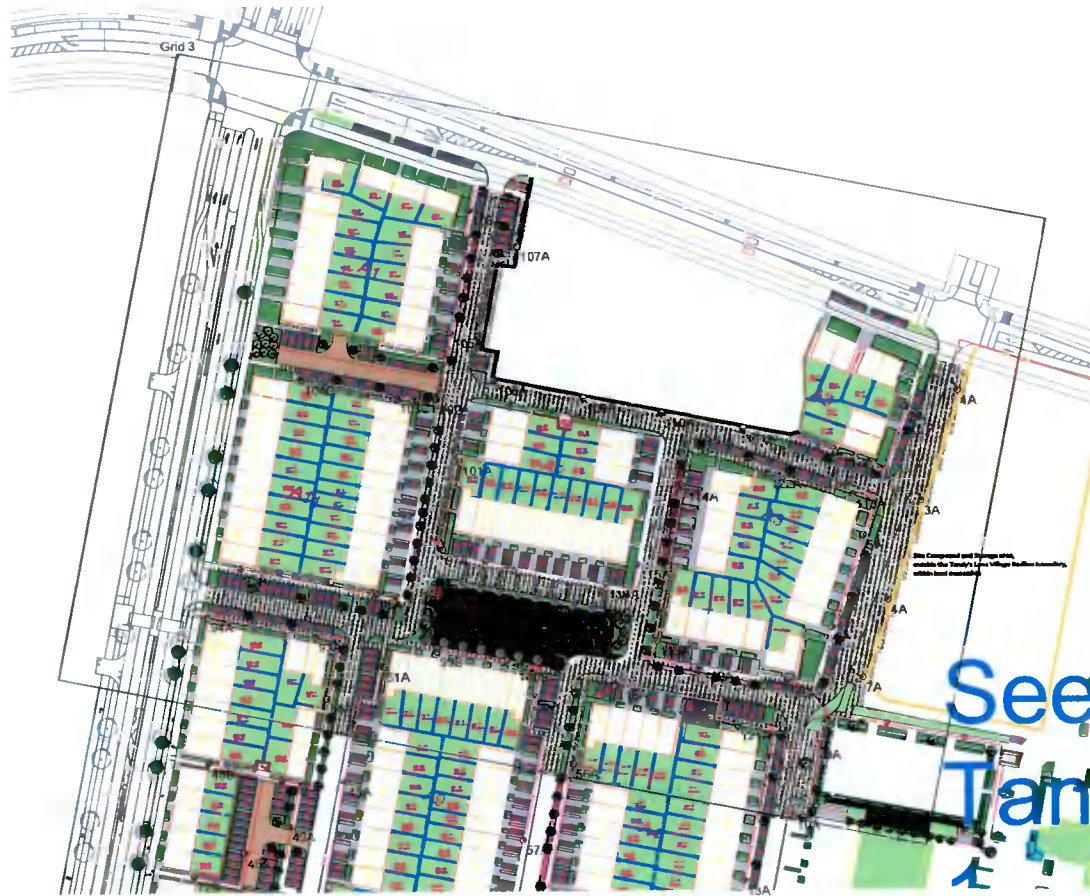
### Results

Eav	5.88
Emin	1.16
E <sub>max</sub>	17.41
E <sub>min</sub> /E <sub>max</sub>	0.07
E <sub>min</sub> /E <sub>av</sub>	0.20



## Horizontal Illuminance (lux)

Grid 3



### Results

Eav	5.88
Emin	1.16
Emax	17.41
Emin/Emax	0.07
Emin/Eav	0.20