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**PUBLIC LIGHTING REPORT**  
**FOR**  
**PROPOSED RESIDENTIAL DEVELOPMENT**  
**AT**  
**STEEPLES ROAD, DULEEK, Co. MEATH**  
**FOR**  
**DAVY TARGET INVESTMENTS ICAV**

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Project Reference:	J596
Revision Ref:	0
Date Issued:	7 <sup>th</sup> May 2020

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**DATE:** 13 May 2020  
**DESIGNER:** Dan Staunton  
**PROJECT No:** 20-03-19-01C  
**PROJECT NAME:** Steeples Road, Duleek

**Veelite**

Residential Development,  
Steeples Road, Duleek, Co. Meath

IS EN 13201 / BS 5489  
Class P4

## Outdoor Lighting Report

Based On:  
Lumen Output at 100,000 hours  
Spot Lamp Replacement  
Normal Environment  
6 Year Cleaning Cycle  
Ground is Level

**PREPARED BY:** Dan Staunton  
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## Layout Report

### General Data

Dimensions in Metres Angles in Degrees

Grid Origin -5.1m x -7.8m

Area 373.6m x 275.2m

Sample Spacing 1.49m x 1.50m

### Luminaires

#### **Luminaire A Data**

Supplier	
Type	Veelite Metro Streetlight 28w LED Street Optic R03
Lamp(s)	12LED 4K
Lamp Flux (klm)	3.18
File Name	5MTA10LGA-R03.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	537.8, 56.5, 0.3
Lamp S/P Ratio	1.40
No. in Project	32

#### **Luminaire B Data**

Supplier	
Type	Veelite Metro Streetlight 28w LED Forward Throw Optic A14
Lamp(s)	12LED 4K
Lamp Flux (klm)	3.00
File Name	5MTA10LGA-FT-A14.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	515.0, 204.0, 0.0
Lamp S/P Ratio	1.40
No. in Project	16

#### **Luminaire C Data**

Supplier	
Type	Veelite Quad Series 36w LED Symmetric Optic
Lamp(s)	16LED 4K
Lamp Flux (klm)	4.05
File Name	5QDA08LGA.ies
Maintenance Factor	0.76
Lum. Int. Class	G4
Lamp S/P Ratio	1.40
No. in Project	5

### Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	92.21	200.91	6.00	31.00	5.00	0.00	0.50			
2	B	116.01	190.37	6.00	214.00	0.00	0.00	0.50			
3	B	118.04	163.39	6.00	47.00	0.00	0.00	0.50			
4	B	141.70	150.82	6.00	215.00	5.00	0.00	0.50			
5	B	142.92	125.20	6.00	36.00	0.00	0.00	0.50			
6	B	156.28	104.37	6.00	39.00	0.00	0.00	0.50			
7	A	17.53	215.14	6.00	197.00	0.00	0.00	0.50			
8	A	28.76	190.86	6.00	208.00	0.00	0.00	0.50			
9	A	45.19	164.58	6.00	215.00	0.00	0.00	0.50			
10	A	64.79	134.30	6.00	213.00	0.00	0.00	0.50			

**Layout Continued**

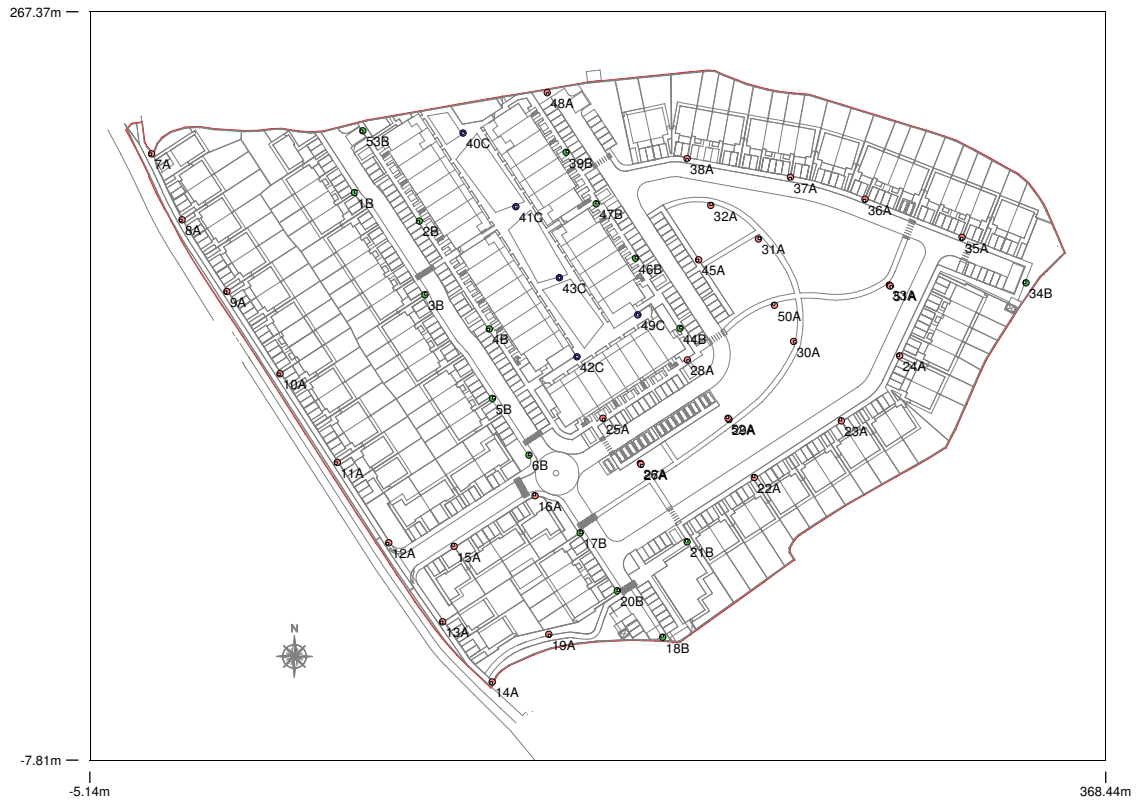
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
11	A	85.80	101.69	6.00	206.00	0.00	0.00	0.50			
12	A	104.76	72.11	6.00	211.00	0.00	0.00	0.50			
13	A	124.54	43.16	6.00	218.00	0.00	0.00	0.50			
14	A	142.80	20.98	6.00	224.00	0.00	0.00	0.50			
15	A	128.74	70.92	6.00	126.00	0.00	0.00	0.50			
16	A	158.50	89.44	6.00	117.00	0.00	0.00	0.50			
17	B	175.07	75.77	6.00	40.00	5.00	0.00	0.50			
18	B	205.53	37.48	6.00	123.00	5.00	0.00	0.50			
19	A	163.64	38.54	6.00	289.00	0.00	0.00	0.50			
20	B	188.73	54.51	6.00	33.00	5.00	0.00	0.50			
21	B	214.46	72.47	6.00	116.00	0.00	0.00	0.50			
22	A	239.11	96.15	6.00	119.00	0.00	0.00	0.50			
23	A	271.11	117.03	6.00	125.00	0.00	0.00	0.50			
24	A	292.49	140.93	6.00	151.00	0.00	0.00	0.50			
25	A	183.43	117.91	6.00	304.00	5.00	0.00	0.50			
26	A	197.27	101.34	6.00	130.00	5.00	0.00	0.50			
27	A	197.51	100.94	6.00	309.00	5.00	0.00	0.50			
28	A	214.48	139.36	6.00	311.00	0.00	0.00	0.50			
29	A	229.82	117.50	6.00	319.00	0.00	0.00	0.50			
30	A	253.63	146.21	6.00	344.00	0.00	0.00	0.50			
31	A	240.62	183.78	6.00	41.00	0.00	0.00	0.50			
32	A	223.12	196.15	6.00	78.00	0.00	0.00	0.50			
33	A	288.75	166.88	6.00	136.00	0.00	0.00	0.50			
34	B	338.99	167.76	6.00	159.00	5.00	0.00	0.50			
35	A	315.54	184.43	6.00	244.00	5.00	0.00	0.50			
36	A	279.79	198.39	6.00	252.00	0.00	0.00	0.50			
37	A	252.38	206.49	6.00	261.00	0.00	0.00	0.50			
38	A	214.44	213.40	6.00	261.00	0.00	0.00	0.50			
39	B	170.00	215.66	6.00	39.00	5.00	0.00	0.50			
40	C	132.01	222.82	6.00	36.00	0.00	0.00	0.00			
41	C	151.53	195.73	6.00	29.00	0.00	0.00	0.00			
42	C	173.99	140.47	6.00	35.00	0.00	0.00	0.00			
43	C	167.47	169.56	6.00	108.00	0.00	0.00	0.00			
44	B	211.78	150.95	6.00	29.00	0.00	0.00	0.50			
45	A	218.61	176.21	6.00	212.00	0.00	0.00	0.50			
46	B	195.42	176.74	6.00	38.00	5.00	0.00	0.50			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
47	B	180.98	196.79	6.00	37.00	5.00	0.00	0.50			
48	A	163.03	237.60	6.00	284.00	0.00	0.00	0.50			
49	C	196.30	156.00	6.00	0.00	0.00	0.00	0.00			
50	A	246.49	159.43	6.00	106.00	0.00	0.00	0.50			
51	A	289.12	166.51	6.00	319.00	5.00	0.00	0.50			
52	A	229.50	117.93	6.00	126.00	5.00	0.00	0.50			
53	B	95.19	223.63	6.00	209.00	5.00	0.00	0.50			

# Horizontal Illuminance (lux)

Road

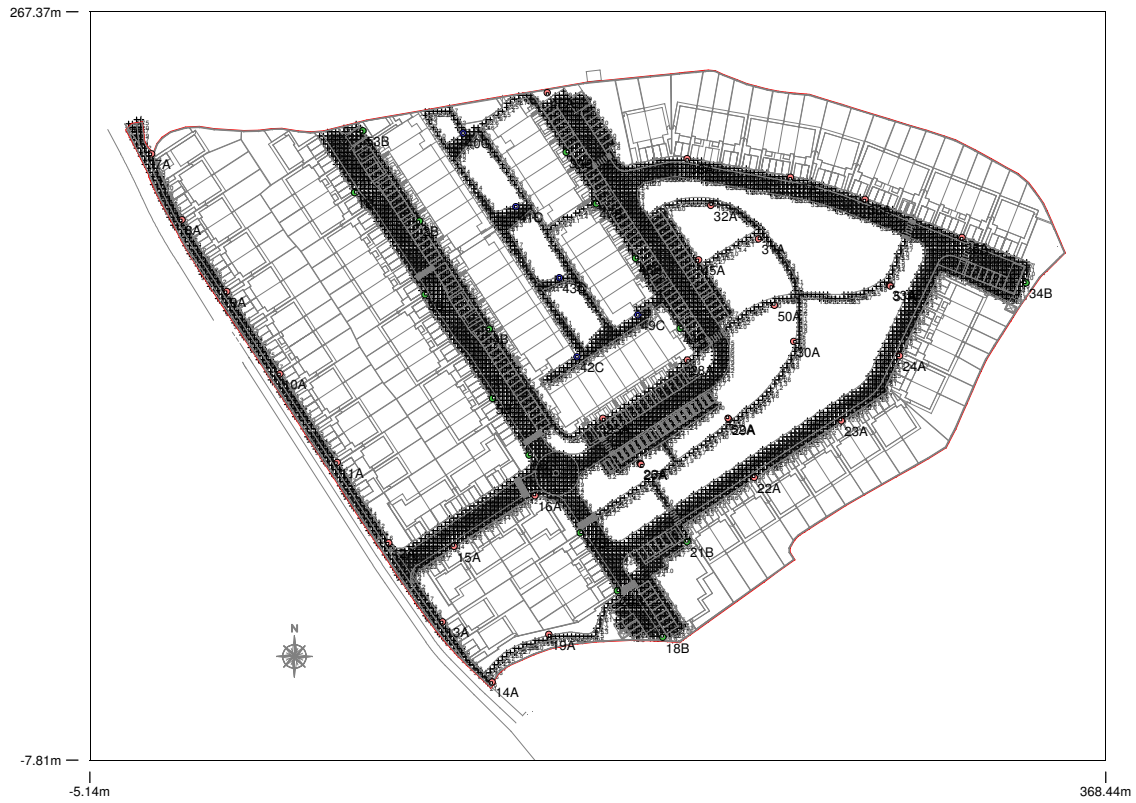


## Results

Eav	5.50
Emin	1.00
Emax	24.19
Emin/Emax	0.04
Emin/Eav	0.18

## Horizontal Illuminance (lux)

Road

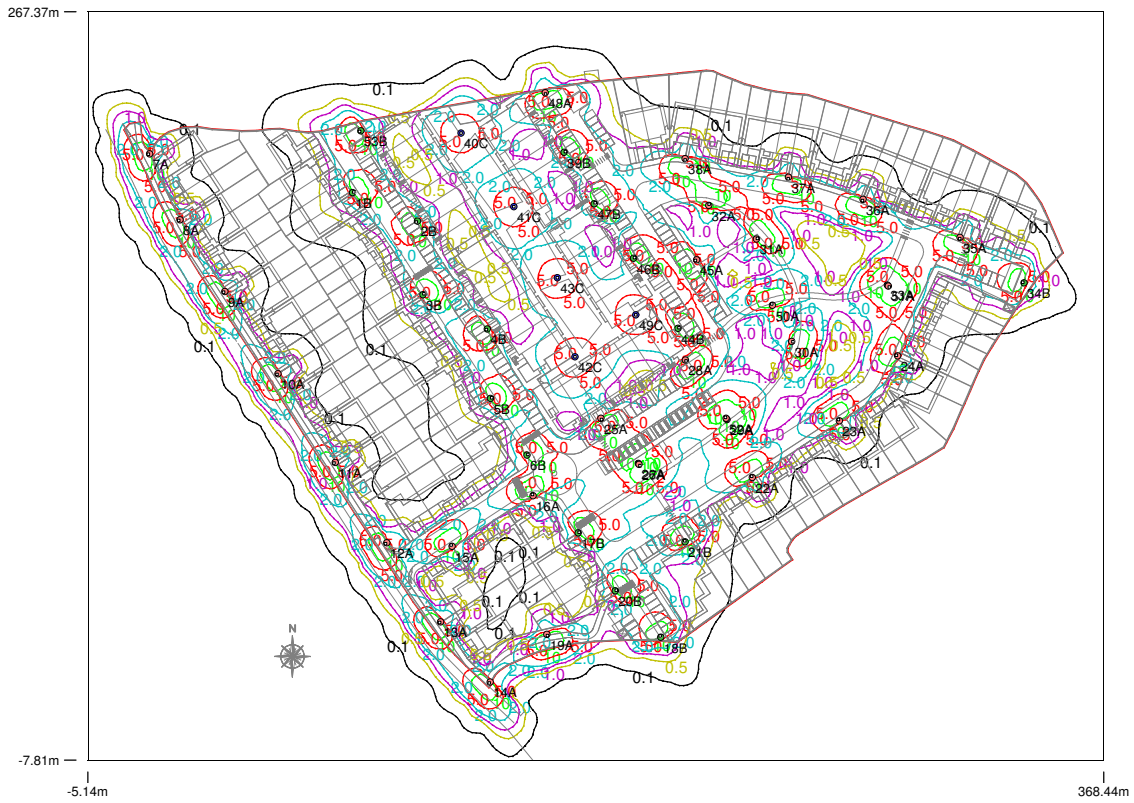


### Results

Eav	5.50
Emin	1.00
Emax	24.19
Emin/Emax	0.04
Emin/Eav	0.18

## Horizontal Illuminance (lux)

Road



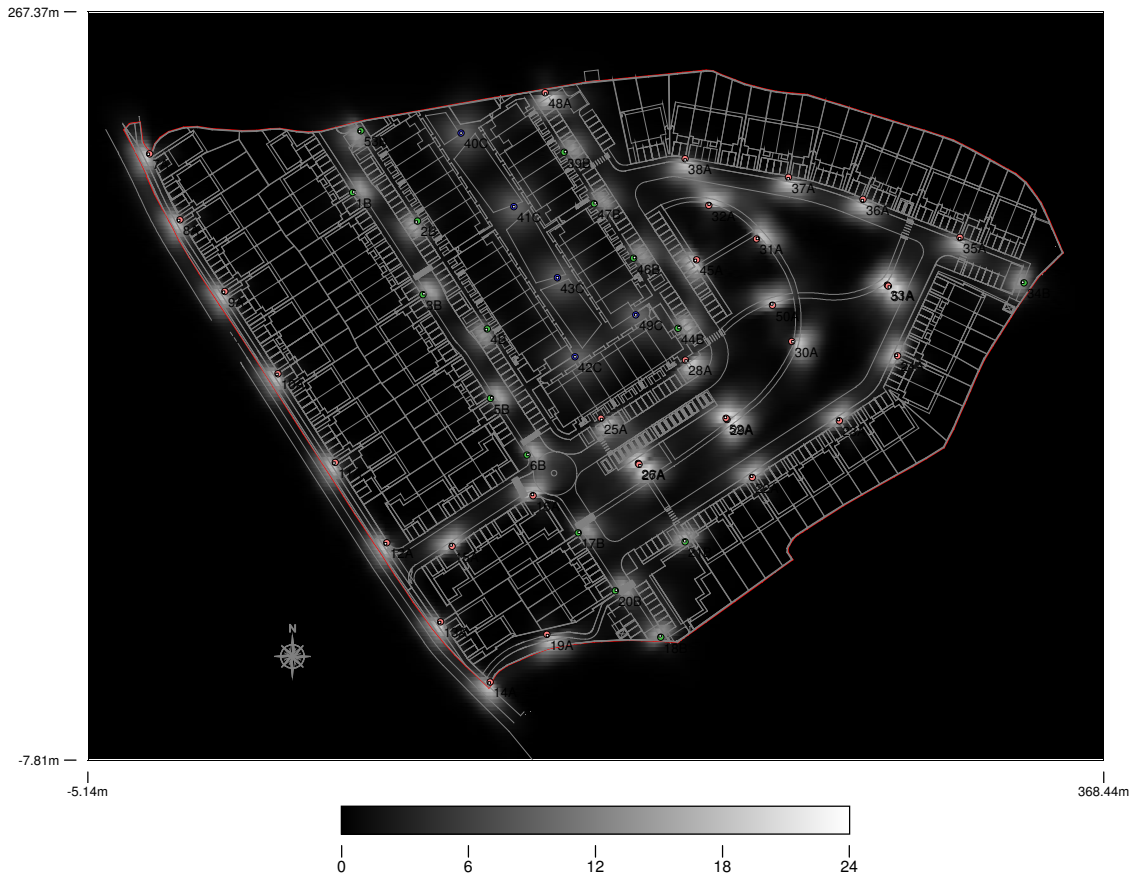
### Results

Eav	5.50
Emin	1.00
Emax	24.19
Emin/Emax	0.04
Emin/Eav	0.18



# Horizontal Illuminance (lux)

Road



## Results

Eav	5.50
Emin	1.00
E <sub>max</sub>	24.19
E <sub>min</sub> /E <sub>max</sub>	0.04
E <sub>min</sub> /E <sub>av</sub>	0.18