

**DATE:** 16 June 2021  
**DESIGNER:** Fiachra O' Sullivan  
**PROJECT No:** 19083HD  
**PROJECT NAME:** Residential Development, Cloghroe, Cork

**LIGHTING  
REALITY**

Lighting Classification

Grid 1: Main Estate Roads - P3

Grid 2: R617 - C3

Grid 3: Retail & Creche - C4

Grid 4: Minor Estate Roads, Apartments & Amenity Areas - P4

## Outdoor Lighting Report

## 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	557179.41	574495.48	288.47	381.86	1.49	1.53
2	Grid 2	557417.40	574383.02	79.18	357.53	1.58	1.55
3	Grid 3	557351.42	574417.98	93.48	73.29	1.48	1.50
4	Grid 4	557075.17	574503.06	425.40	463.54	1.70	1.85

### Luminaires

#### **Luminaire A Data**

Supplier	
Type	BGP623 DW50
Lamp(s)	LED-HB 5S/740
Lamp Flux (klm)	13.50
File Name	Luma1_BGP623_DW50_13500_80LED_30 6mA_5S_CLO_L90_NW.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	595.5, 51.0, 0.0
No. in Project	15

#### **Luminaire B Data**

Supplier	
Type	BGP623 DX10
Lamp(s)	LED-HB 5S/740
Lamp Flux (klm)	12.00
File Name	Luma1_BGP623_DX10_12000_80LED_27 1mA_5S_CLO_L90_NW.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	522.9, 97.5, 0.0
No. in Project	6

#### **Luminaire C Data**

Supplier	
Type	BGP702 DM50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.80
File Name	Luma Gen2 Micro_BGP702_DM50_3800_2 0LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	921.3, 65.9, 0.0
No. in Project	53

#### **Luminaire D Data**

Supplier	
Type	BGP701 DRXN0
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	2.00
File Name	Luma Gen2 Nano_BGP701_DRXN0_2000_ 10LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	1419.1, 20.0, 0.0
No. in Project	24

#### **Luminaire E Data**

Supplier	
Type	BGP701 DX50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	2.00
File Name	Luma Gen2 Nano_BGP701_DX50_2000_1 0LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	563.2, 53.2, 0.0
No. in Project	1

**Layout**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	557432.07	574393.13	8.00	355.00	5.00	0.00	1.50			
2	A	557435.79	574425.96	8.00	355.00	3.00	0.00	1.50			
3	A	557442.11	574457.59	8.00	348.00	0.00	0.00	1.50			
4	A	557447.92	574488.81	8.00	346.00	0.00	0.00	1.50			
5	A	557455.12	574519.48	8.00	347.00	0.00	0.00	1.50			
6	A	557467.62	574549.17	8.00	344.00	7.00	0.00	1.50			
7	A	557493.67	574574.37	8.00	182.00	3.00	0.00	0.50			
8	A	557495.53	574608.13	8.00	340.00	5.00	0.00	1.50			
9	A	557479.79	574582.63	8.00	331.00	5.00	0.00	0.50			
10	A	557509.72	574635.08	8.00	328.00	3.00	0.00	1.50			
11	A	557526.93	574661.89	8.00	328.00	3.00	0.00	1.50			
12	A	557545.28	574687.42	8.00	328.00	3.00	0.00	1.50			
13	A	557565.47	574711.57	8.00	326.00	3.00	0.00	1.50			
14	C	557446.36	574535.06	6.00	21.00	0.00	0.00	0.50			
15	B	557425.95	574446.05	8.00	93.00	0.00	0.00	1.50			
16	D	557462.42	574554.50	6.00	135.00	0.00	0.00	0.50			
17	B	557398.34	574462.97	8.00	273.00	0.00	0.00	1.50			
18	B	557351.02	574447.41	8.00	4.00	0.00	0.00	1.50			
19	B	557410.89	574422.41	8.00	95.00	0.00	0.00	1.50			
20	B	557360.28	574420.73	8.00	95.00	0.00	0.00	1.50			
21	D	557458.92	574617.51	6.00	255.00	0.00	0.00	0.50			
22	B	557385.35	574421.37	8.00	90.00	0.00	0.00	1.50			
23	A	557351.31	574478.02	8.00	0.00	0.00	0.00	0.50			
24	C	557438.63	574596.85	6.00	2.00	0.00	0.00	0.50			
25	C	557434.90	574640.23	6.00	211.00	0.00	0.00	0.50			
26	A	557371.83	574465.41	8.00	3.00	0.00	0.00	0.50			
27	C	557439.51	574570.55	6.00	2.00	0.00	0.00	0.50			
28	C	557425.19	574532.70	6.00	97.00	0.00	0.00	0.50			
29	C	557394.12	574531.45	6.00	92.00	0.00	0.00	0.50			
30	C	557368.00	574527.01	6.00	137.00	5.00	0.00	0.50			
31	C	557345.79	574517.11	6.00	97.00	0.00	0.00	0.50			
32	C	557367.48	574508.11	6.00	184.00	0.00	0.00	0.50			
33	C	557433.51	574619.57	6.00	275.00	0.00	0.00	0.50			
34	C	557432.77	574665.43	6.00	172.00	0.00	0.00	0.50			
35	C	557436.65	574692.60	6.00	180.00	0.00	0.00	0.50			
36	C	557416.72	574715.22	6.00	243.00	0.00	0.00	0.50			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	C	557388.25	574724.29	6.00	274.00	0.00	0.00	0.50			
38	C	557361.19	574722.45	6.00	272.00	0.00	0.00	0.50			
39	C	557333.27	574721.57	6.00	270.00	0.00	0.00	0.50			
40	C	557321.62	574741.30	6.00	180.00	0.00	0.00	0.50			
41	D	557349.20	574731.14	6.00	270.00	0.00	0.00	0.50			
42	C	557346.95	574749.03	6.00	94.00	0.00	0.00	0.50			
43	D	557374.22	574728.76	6.00	270.00	0.00	0.00	0.50			
44	D	557324.91	574627.76	6.00	193.00	0.00	0.00	0.50			
45	D	557329.15	574735.95	6.00	182.00	0.00	0.00	0.50			
46	D	557370.37	574736.25	6.00	356.00	0.00	0.00	0.50			
47	D	557370.37	574743.26	6.00	5.00	0.00	0.00	0.50			
48	C	557373.22	574774.24	6.00	182.00	5.00	0.00	0.50			
49	C	557373.13	574805.32	6.00	182.00	3.00	0.00	0.50			
50	C	557363.21	574829.56	6.00	358.00	0.00	0.00	0.50			
51	C	557410.89	574648.98	6.00	90.00	0.00	0.00	0.50			
52	C	557382.31	574647.35	6.00	92.00	0.00	0.00	0.50			
53	C	557356.30	574648.94	6.00	94.00	5.00	0.00	0.50			
54	C	557328.94	574647.76	6.00	91.00	5.00	0.00	0.50			
55	C	557300.66	574649.06	6.00	37.00	0.00	0.00	0.50			
56	C	557284.10	574671.07	6.00	36.00	0.00	0.00	0.50			
57	C	557267.46	574692.84	6.00	31.00	0.00	0.00	0.50			
58	C	557250.91	574714.16	6.00	37.00	0.00	0.00	0.50			
59	C	557239.70	574738.02	6.00	4.00	5.00	0.00	0.50			
60	C	557240.14	574767.70	6.00	0.00	0.00	0.00	0.50			
61	C	557232.68	574787.93	6.00	39.00	0.00	0.00	0.50			
62	C	557263.46	574787.38	6.00	272.00	0.00	0.00	0.50			
63	D	557334.84	574599.33	6.00	4.00	0.00	0.00	0.50			
64	D	557349.27	574570.54	6.00	306.00	0.00	0.00	0.50			
65	D	557332.53	574578.32	6.00	16.00	0.00	0.00	0.50			
66	D	557338.40	574543.40	6.00	3.00	0.00	0.00	0.50			
67	C	557213.16	574807.41	6.00	40.00	0.00	0.00	0.50			
68	C	557194.23	574824.98	6.00	29.00	0.00	0.00	0.50			
69	C	557185.82	574852.09	6.00	15.00	0.00	0.00	0.50			
70	D	557204.40	574804.69	6.00	225.00	0.00	0.00	0.50			
71	C	557277.01	574806.97	6.00	110.00	0.00	0.00	0.50			
72	C	557298.70	574806.34	6.00	7.00	0.00	0.00	0.50			

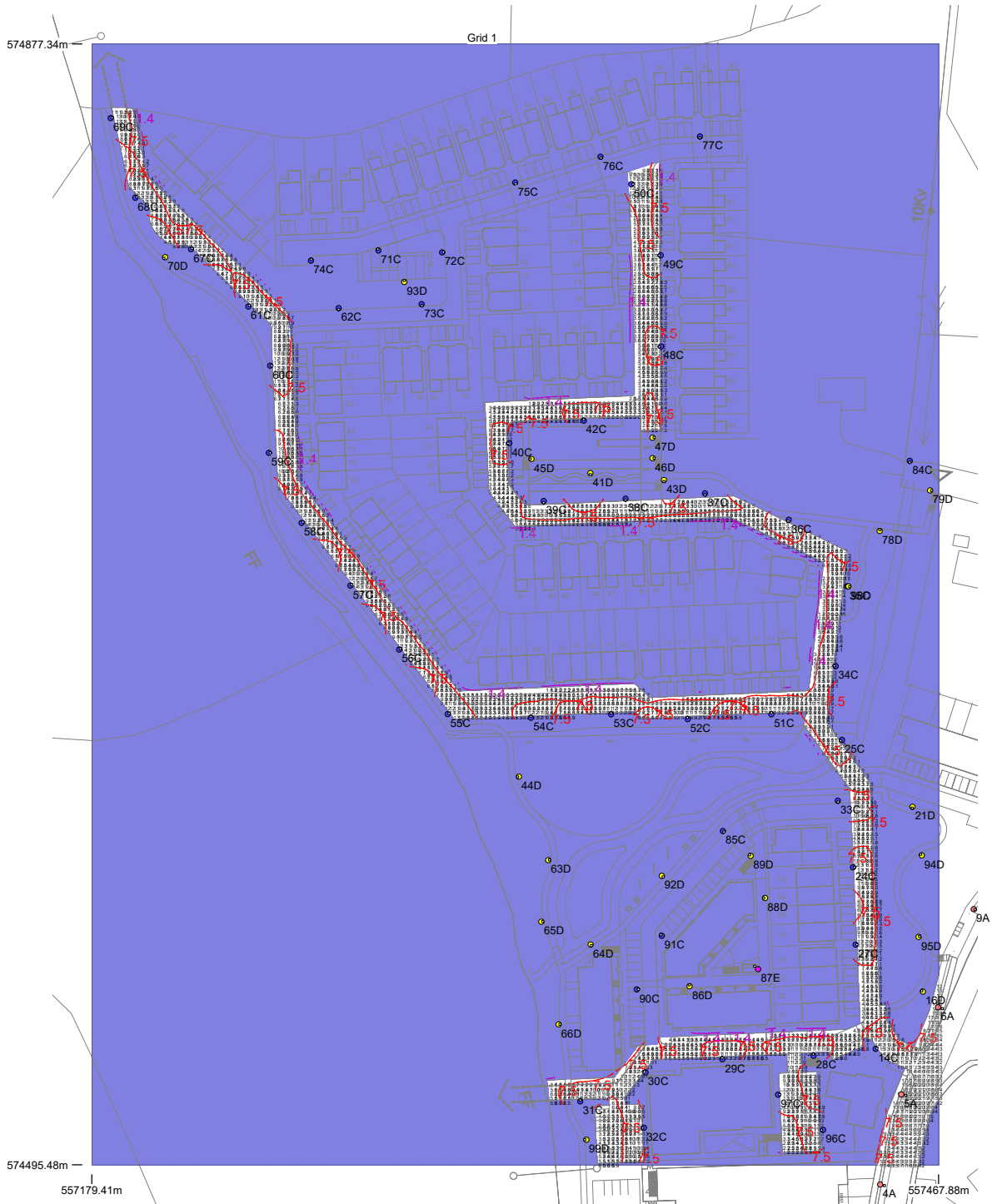


**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
73	C	557291.77	574788.69	6.00	274.00	0.00	0.00	0.50			
74	C	557254.09	574803.49	6.00	89.00	5.00	0.00	0.50			
75	C	557323.59	574830.14	6.00	289.00	5.00	0.00	0.50			
76	C	557352.62	574838.94	6.00	294.00	0.00	0.00	0.50			
77	C	557386.49	574845.86	6.00	270.00	0.00	0.00	0.50			
78	D	557447.70	574711.43	6.00	81.00	0.00	0.00	0.50			
79	D	557464.91	574725.21	6.00	352.00	0.00	0.00	0.50			
80	C	557547.18	574711.78	6.00	261.00	5.00	0.00	0.50			
81	C	557530.52	574719.59	6.00	262.00	5.00	0.00	0.50			
82	C	557508.64	574725.22	6.00	258.00	5.00	0.00	0.50			
83	C	557482.98	574731.32	6.00	255.00	5.00	0.00	0.50			
84	C	557458.02	574735.36	6.00	261.00	5.00	0.00	0.50			
85	C	557394.35	574609.25	6.00	316.00	5.00	0.00	0.50			
86	D	557382.95	574556.32	6.00	92.00	0.00	0.00	0.50			
87	E	557406.32	574562.22	6.00	140.00	0.00	0.00	1.50			
88	D	557408.72	574586.43	6.00	180.00	0.00	0.00	0.50			
89	D	557403.80	574600.76	6.00	136.00	0.00	0.00	0.50			
90	C	557365.03	574555.29	6.00	2.00	0.00	0.00	0.50			
91	C	557373.56	574573.54	6.00	129.00	5.00	0.00	0.50			
92	D	557373.57	574593.93	6.00	321.00	0.00	0.00	0.50			
93	D	557285.83	574796.29	6.00	94.00	0.00	0.00	0.50			
94	D	557462.10	574600.99	6.00	138.00	0.00	0.00	0.50			
95	D	557460.95	574573.13	6.00	29.00	0.00	0.00	0.50			
96	C	557428.44	574507.39	6.00	184.00	0.00	0.00	0.50			
97	C	557413.16	574519.37	6.00	5.00	0.00	0.00	0.50			
98	D	557437.09	574692.55	6.00	346.00	0.00	0.00	0.50			
99	D	557347.84	574504.06	6.00	182.00	0.00	0.00	0.50			

## Horizontal Illuminance (lux)

Grid 1

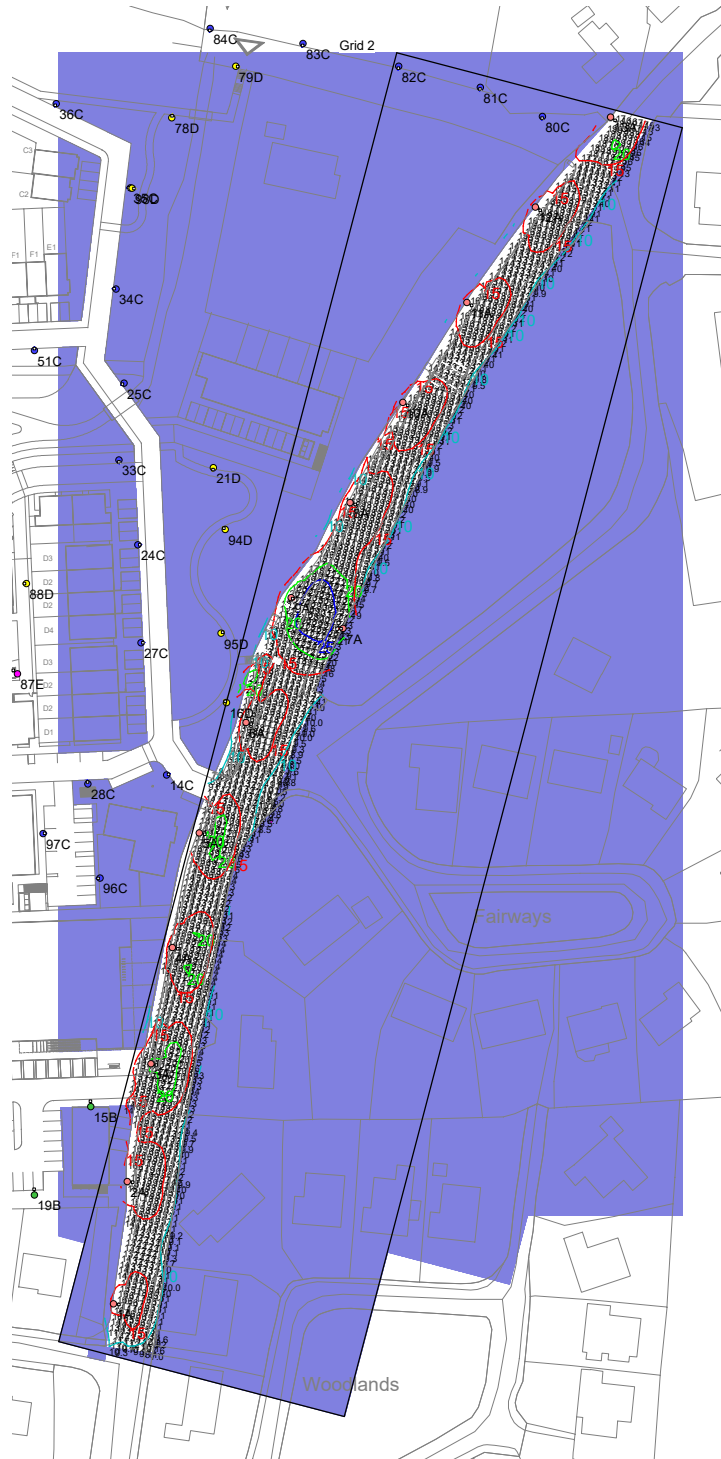


### Results

Eav	8.24
Emin	1.65
Emax	23.27
Emin/Emax	0.07
Emin/Eav	0.20

## Horizontal Illuminance (lux)

Grid 2

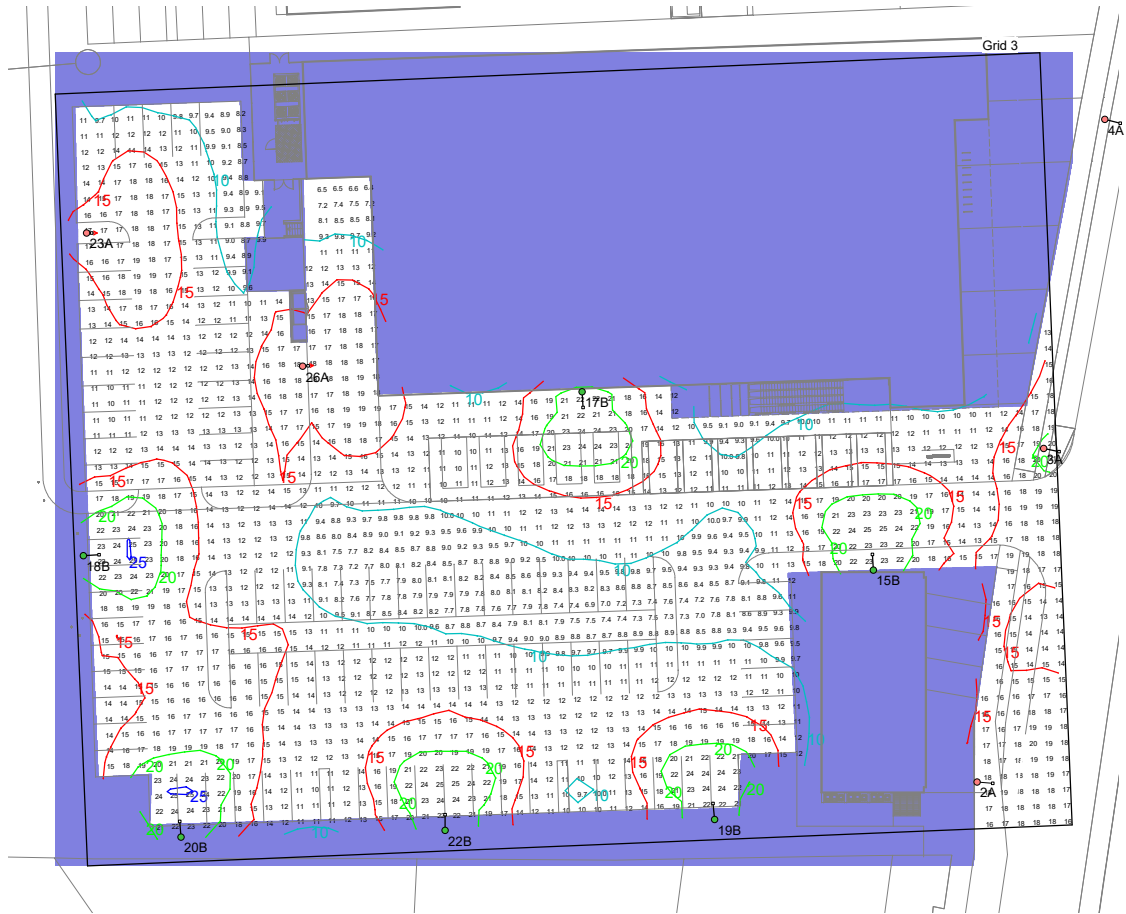


### Results

Eav	15.55
Emin	6.70
Emax	30.79
Emin/Emax	0.22
Emin/Eav	0.43

# Horizontal Illuminance (lux)

Grid 3

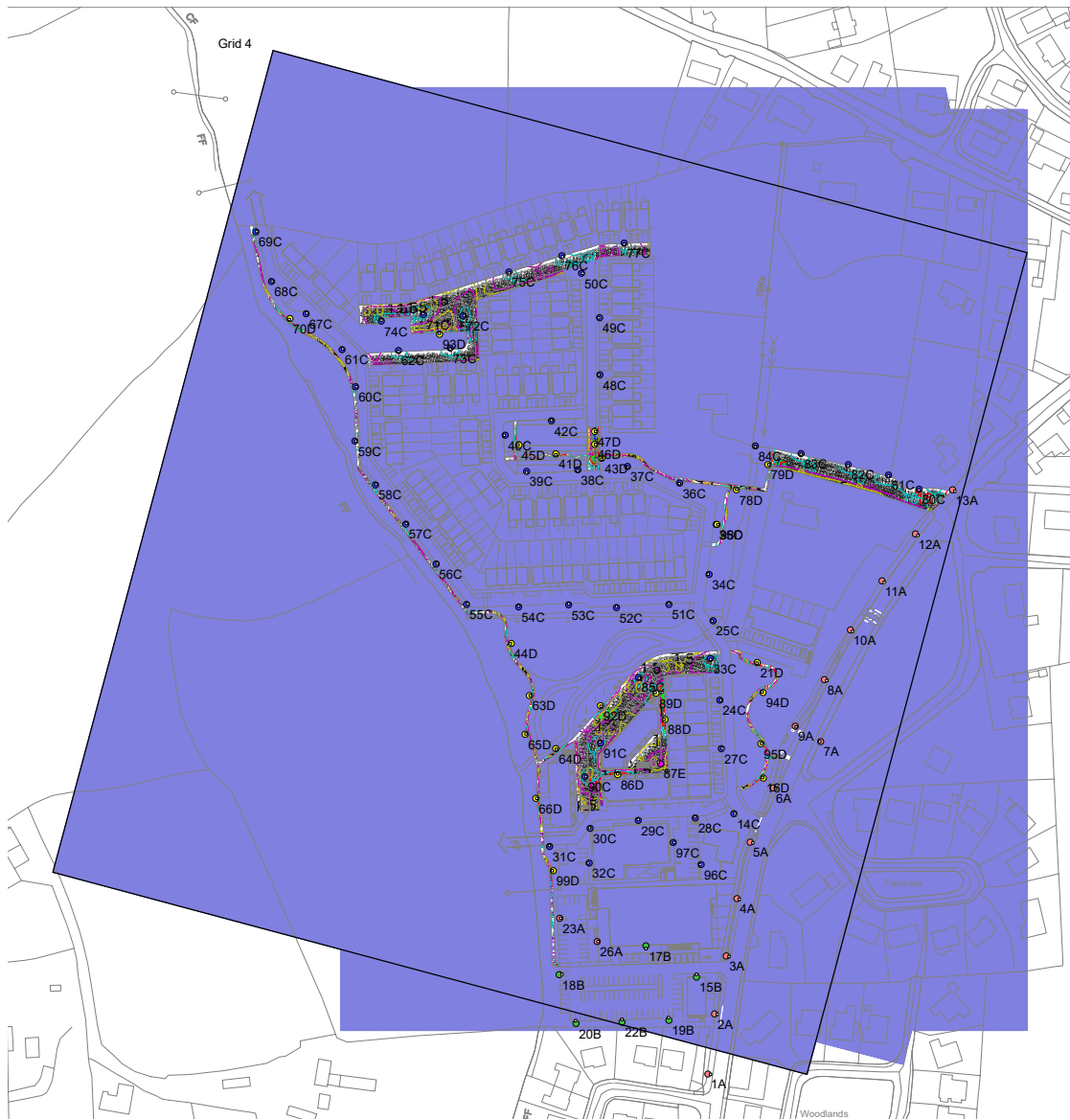


## Results

Eav	13.97
Emin	6.39
Emax	25.37
Emin/Emax	0.25
Emin/Eav	0.46

## Horizontal Illuminance (lux)

Grid 4



### Results

Eav	7.16
Emin	1.40
Emax	36.46
Emin/Emax	0.04
Emin/Eav	0.20