DATE:	**11 December 2025**
DESIGNER:	**Andrew Smyth**
PROJECT No:	**3223**
PROJECT NAME:	**Housing Development, Darndale, Co. Dublin**

LIGHTING REALITY

The scheme has been designed to:

Roads and footpaths // BS5489-1:2020, P3 7.50 - 11.25 lux average, 1.5 lux minimum.

Roads and footpaths // BS5489-1:2020, P4 5.00 - 7.50 lux average, 1.0 lux minimum.

Car Park // BS EN 12464-2:2014,5.9.1 , 5 lux average, 25% uniformity.

Maintenance factor calculated as per GN11: 0.81

Note: Existing Lighting within vicinity of site proposed to be retired. See SMK Site LTG drawing for more details.

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	P4 - Footpath	-604.88	1514.71	29.81	55.40	1.49	1.50
2	P3 - Road	-629.48	1490.74	22.99	96.03	1.44	1.48
3	P3 - Footpath/road 6	-368.54	1505.81	54.02	23.85	1.46	1.49
4	P3- Road 1	-606.52	1569.77	31.85	16.91	1.45	1.41
5	P3 - Road 2	-606.24	1490.78	31.78	24.21	1.44	1.42
6	P3 - Road 3	-574.62	1490.90	188.54	95.71	1.37	1.50
7	P3 - Road 4	-368.60	1529.56	47.11	15.36	1.47	1.40
8	P4 - Footpath 2	-385.86	1538.67	16.89	18.99	1.41	1.46
9	P3 - Road 5	-386.04	1527.96	17.56	10.71	1.46	1.34

Luminaires

Luminaire B Data

Supplier	Urbis Schreder
Type	YOA MIDI 5121 Flat glass 8 XP-G3@400mA NW 740 230V 437312
Lamp(s)	8 XP-G3@400mA NW 740 230V
LampFlux(klm)/Colour	1.34 NW 4000K/70
File Name	YOA MIDI 5121 8 XP-G3 400mA NW 740 1 1.1W 437312 Flat glass 230V TF.ldt
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	346.8, 34.5, 0.0
No. in Project	8

Luminaire C Data

Supplier	Urbis Schreder
Type	AXIA 2.1 5167 Integrated lenses 24 OSLON SQUARE GIANT@350mA
Lamp(s)	24 OSLON SQUARE GIANT@350mA NW 740 230V 00-36-646
LampFlux(klm)/Colour	3.99 NW 4000K/70
File Name	AXIA 2.1 5167 24 OSLON SQUARE GIANT 350mA NW 740 26W 434362 Integrated le...
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	1162.3, 202.9, 3.0
No. in Project	42

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	C	-618.82	1568.74	6.00	182.00	5.00	0.00	0.30			
2	C	-615.43	1576.93	6.00	90.00	5.00	0.00	0.30			
3	C	-618.81	1550.89	6.00	180.00	5.00	0.00	0.30			
4	C	-618.86	1532.08	6.00	180.00	5.00	0.00	0.30			
5	C	-618.18	1514.46	6.00	182.00	5.00	0.00	0.30			
6	C	-606.46	1511.14	6.00	269.00	5.00	0.00	0.30			
7	C	-606.01	1570.88	6.00	89.00	5.00	0.00	0.30			
8	C	-574.49	1572.19	6.00	89.00	5.00	0.00	0.30			
9	C	-561.31	1571.81	6.00	0.00	5.00	0.00	0.30			
10	C	-561.29	1553.00	6.00	0.00	5.00	0.00	0.30			
11	C	-575.65	1514.41	6.00	271.00	5.00	0.00	0.30			
12	C	-564.34	1510.88	6.00	273.00	5.00	0.00	0.30			

9750549126

Layout Continued

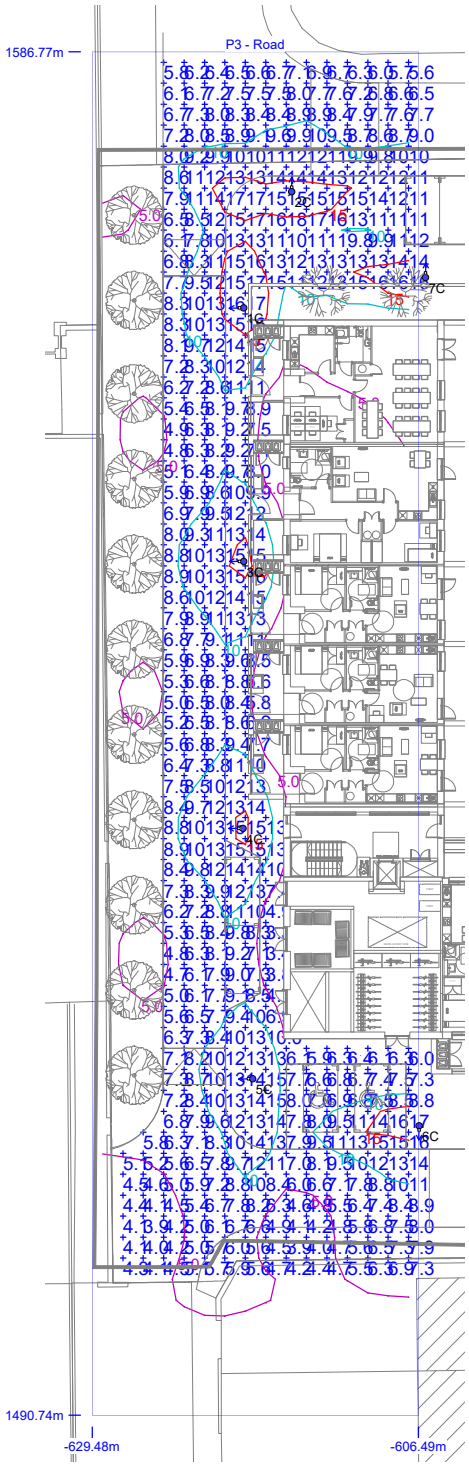
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
13	C	-550.80	1535.55	6.00	181.00	5.00	0.00	0.30			
14	C	-550.89	1516.53	6.00	181.00	5.00	0.00	0.30			
15	C	-544.14	1510.93	6.00	272.00	5.00	0.00	0.30			
16	C	-529.34	1496.21	6.00	1.00	5.00	0.00	0.30			
17	C	-509.68	1503.05	6.00	119.00	5.00	0.00	0.30			
18	C	-502.70	1517.85	6.00	180.00	5.00	0.00	0.30			
19	C	-535.02	1539.40	6.00	89.00	5.00	0.00	0.30			
20	C	-502.61	1539.03	6.00	183.00	5.00	0.00	0.30			
21	C	-492.88	1539.50	6.00	89.00	5.00	0.00	0.30			
22	C	-475.13	1539.52	6.00	89.00	5.00	0.00	0.30			
23	C	-465.18	1538.71	6.00	359.00	5.00	0.00	0.30			
24	C	-453.53	1534.47	6.00	182.00	5.00	0.00	0.30			
25	C	-453.11	1507.34	6.00	180.00	5.00	0.00	0.30			
26	C	-453.27	1552.71	6.00	182.00	5.00	0.00	0.30			
27	C	-447.12	1557.85	6.00	89.00	5.00	0.00	0.30			
28	C	-425.43	1555.34	6.00	89.00	5.00	0.00	0.30			
29	C	-398.38	1557.88	6.00	89.00	5.00	0.00	0.30			
30	C	-395.78	1551.54	6.00	359.00	5.00	0.00	0.30			
31	C	-392.29	1530.36	6.00	90.00	5.00	0.00	0.30			
32	C	-355.94	1530.26	6.00	89.00	5.00	0.00	0.30			
33	C	-337.07	1530.44	6.00	89.00	5.00	0.00	0.30			
34	C	-331.02	1526.91	6.00	356.00	5.00	0.00	0.30			
35	C	-360.95	1514.38	6.00	271.00	0.00	0.00	0.10			
36	C	-345.94	1514.38	6.00	272.00	5.00	0.00	0.30			
37	C	-589.55	1570.78	6.00	89.00	5.00	0.00	0.30			
38	C	-593.71	1514.49	6.00	269.00	5.00	0.00	0.30			
39	C	-435.08	1506.39	6.00	269.00	5.00	0.00	0.30			
40	C	-444.84	1521.11	6.00	180.00	5.00	0.00	0.30			
41	C	-375.71	1530.40	6.00	92.00	5.00	0.00	0.30			
42	B	-598.66	1561.32	6.00	180.00	0.00	0.00	0.10			
43	B	-596.98	1550.81	6.00	91.00	0.00	0.00	0.10			
44	B	-597.54	1542.51	6.00	180.00	0.00	0.00	0.10			
45	B	-596.46	1534.32	6.00	269.00	0.00	0.00	0.10			
46	B	-583.55	1534.38	6.00	270.00	0.00	0.00	0.10			
47	B	-582.69	1542.48	6.00	2.00	0.00	0.00	0.10			
48	B	-583.61	1550.78	6.00	90.00	0.00	0.00	0.10			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
49	B	-581.67	1523.11	6.00	0.00	0.00	0.00	0.10			
50	C	-331.91	1514.33	6.00	272.00	0.00	0.00	0.10			

Horizontal Illuminance (lux)

P3 - Road

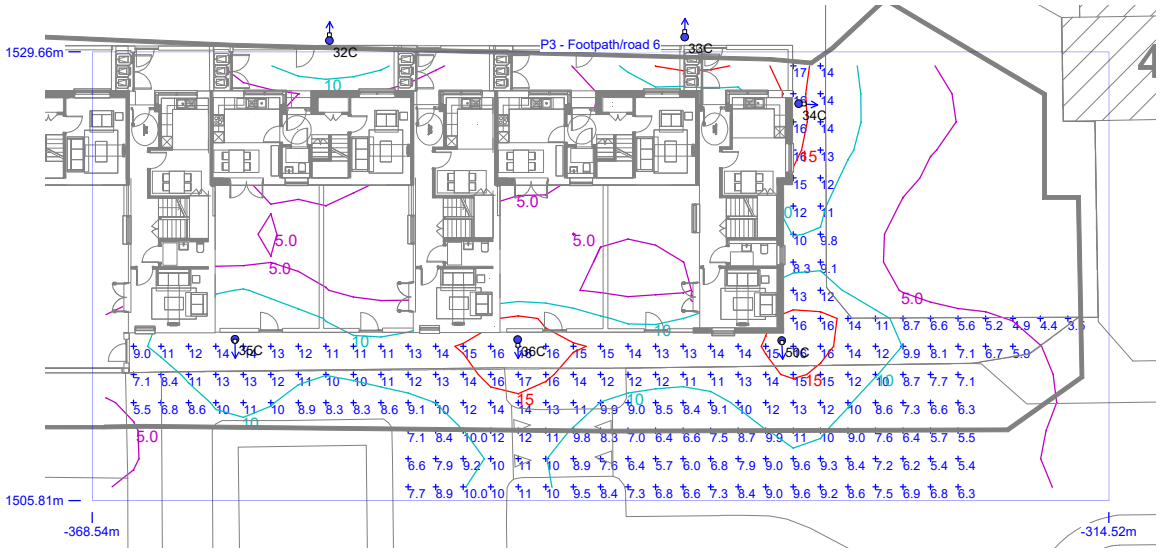


Results

Eav	9.21
Emin	3.33
Emax	17.80
Emin/Emax	0.19
Emin/Eav	0.36

Horizontal Illuminance (lux)

P3 - Footpath/road 6

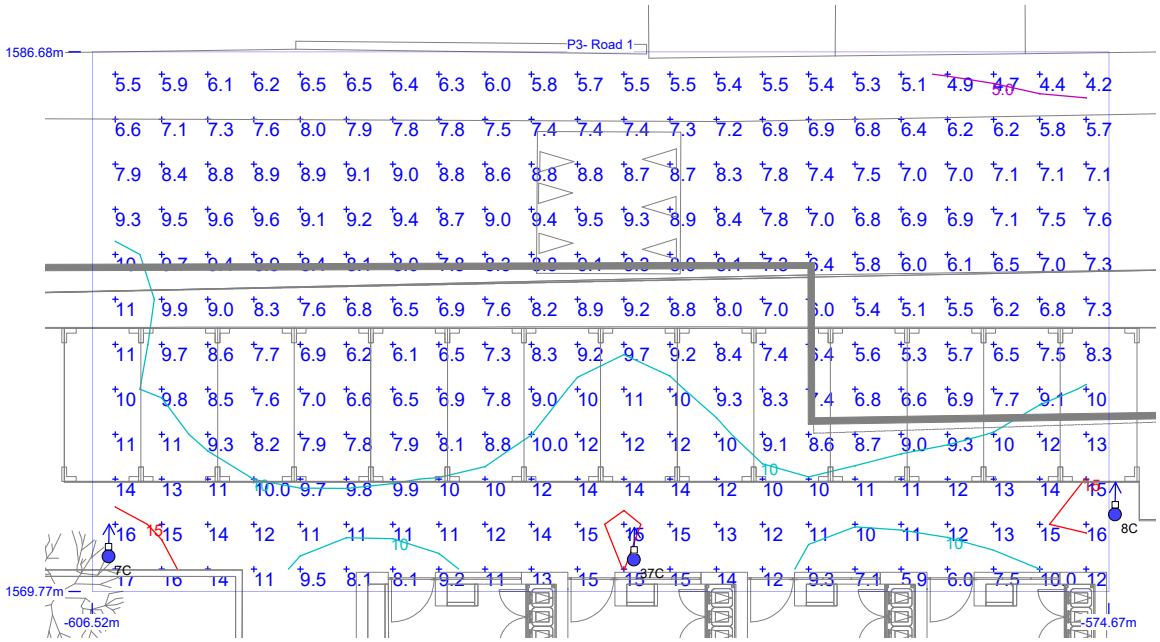


Results

Eav	10.35
Emin	3.50
Emax	16.63
Emin/Emax	0.21
Emin/Eav	0.34

Horizontal Illuminance (lux)

P3- Road 1

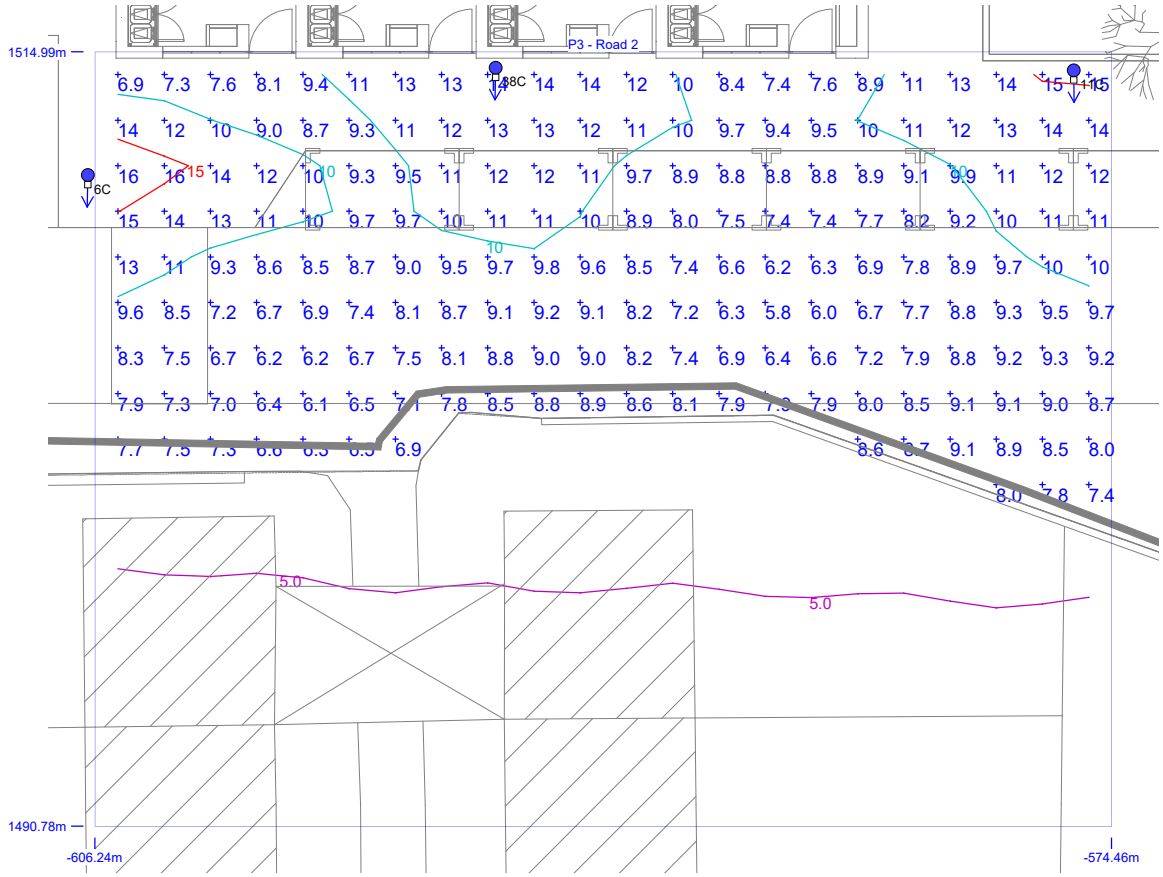


Results

Eav	8.87
Emin	4.20
Emax	16.53
Emin/Emax	0.25
Emin/Eav	0.47

Horizontal Illuminance (lux)

P3 - Road 2

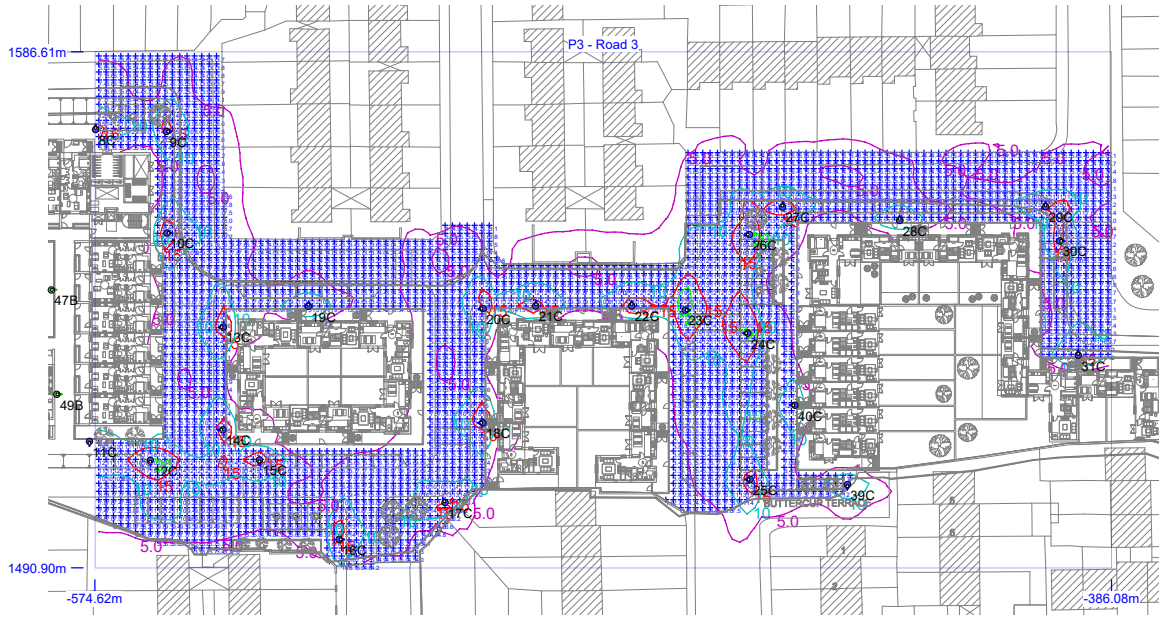


Results

Eav	9.35
Emin	5.84
Emax	16.42
Emin/Emax	0.36
Emin/Eav	0.62

Horizontal Illuminance (lux)

P3 - Road 3

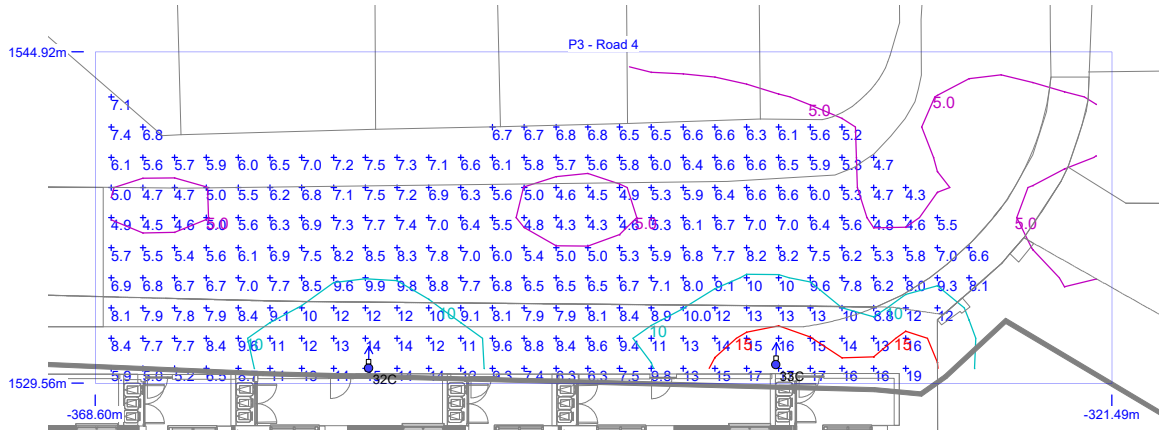


Results

Eav	8.24
Emin	1.69
Emax	22.45
Emin/Emax	0.08
Emin/Eav	0.20

Horizontal Illuminance (lux)

P3 - Road 4

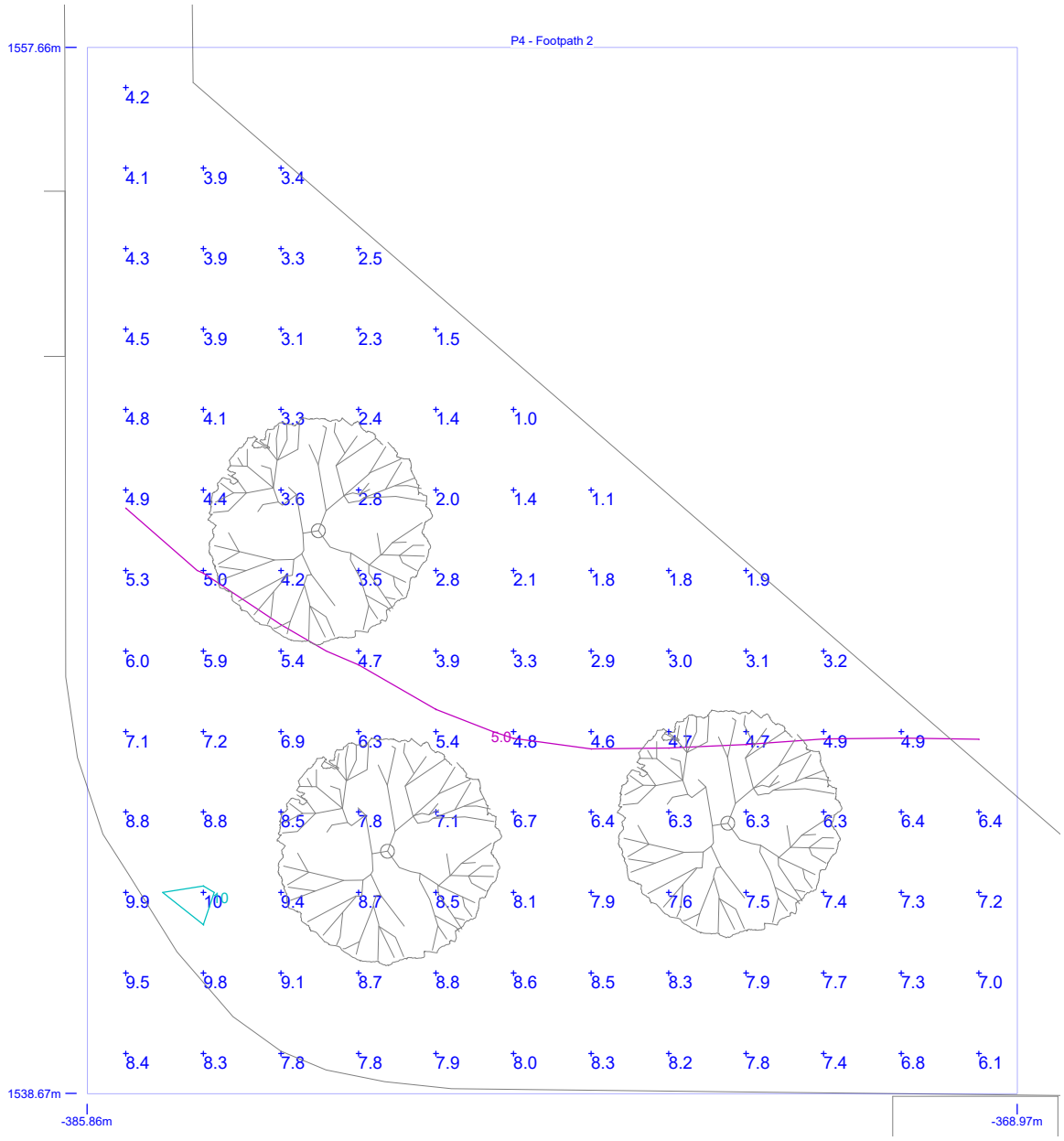


Results

Eav	8.06
Emin	4.27
Emax	18.57
Emin/Emax	0.23
Emin/Eav	0.53

Horizontal Illuminance (lux)

P4 - Footpath 2



Results

Eav	5.70
Emin	0.97
Emax	10.10
Emin/Emax	0.10
Emin/Eav	0.17

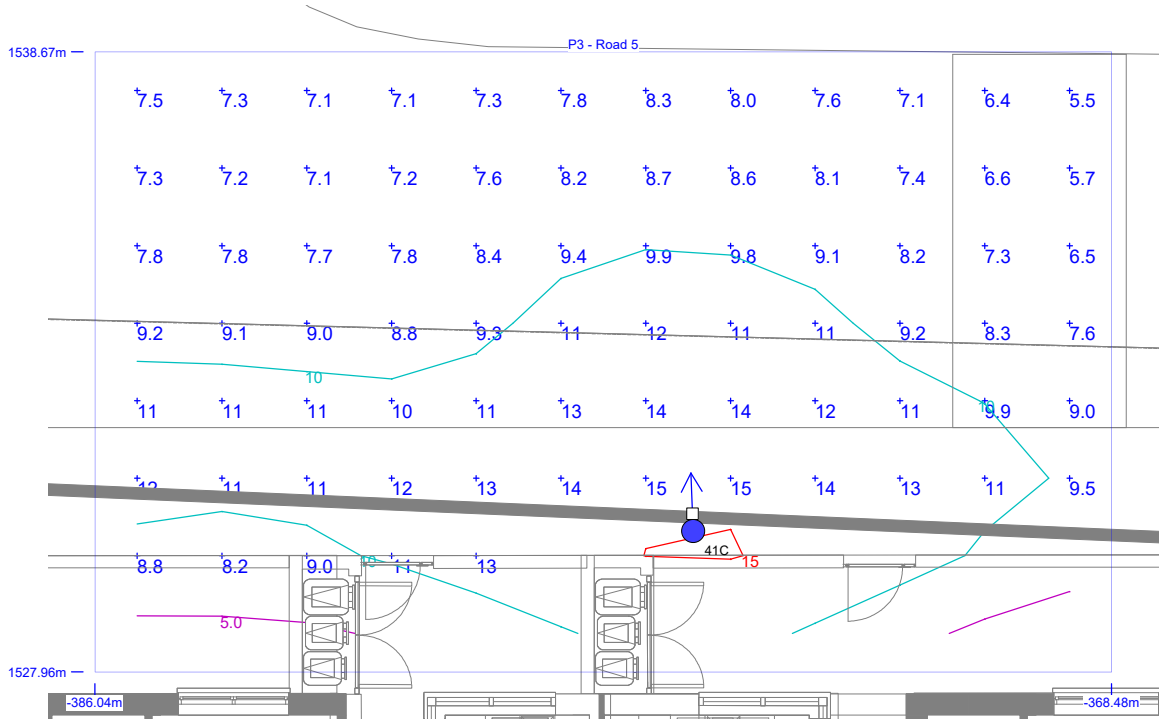
DATE: 11 December 2025 DESIGNER: Andrew Smyth

PROJECT No: 3223 PROJECT NAME: Housing Development, Darndale, Co. Dublin

LIGHTING REALITY

Horizontal Illuminance (lux)

P3 - Road 5



Results

Eav	9.45
Emin	5.54
Emax	14.81
Emin/Emax	0.37
Emin/Eav	0.59

975054912