

DATE: 11 September 2023
DESIGNER: MB
PROJECT No: 5221169
PROJECT NAME: Ellis Yard PL

**LIGHTING
REALITY**

Outdoor Lighting Report

- Spring Road is designed in accordance with EN13201-2:2015 to category P2.
- Estate roads are designed in accordance with EN13201-2:2015 to category P3.
- Entrances to development are designed in accordance with EN13201-2:2015 to category C3.
- Walkways / paths are designed in accordance with EN13201-2:2015 to category P4.

Maintenance factor 0.87

PREPARED BY: Atkins, member of the SNC-Lavalin Group
Atkins Limited
150 Airside Business Park
Swords
Co. Dublin, Ireland
<https://www.atkinsglobal.com/>

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	Aisle2	4729.31	-615.56	328.64	166.46	1.49	1.03
2	Main road	4729.19	-618.38	180.42	64.59	1.47	1.44
3	Aisle	4737.36	-554.05	82.29	87.67	1.50	1.44
4	footpath	4927.85	-464.43	42.42	98.38	1.46	1.49
5	T-junction-left	4736.19	-597.92	51.89	43.74	1.48	1.46
6	T-junction- right	4854.39	-614.49	38.70	23.41	1.49	1.46

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	P863-128-P3-730-W3-350-46W
Lamp(s)	730SS
Lamp Flux (klm)	6.19
File Name	P863-128-P3-730-W3-350-46W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	343.1, 133.7, 0.7
No. in Project	10

Luminaire B Data



Supplier	C U Phosco
Type	P852-12-C1-WW-CA0200-9W
Lamp(s)	730C WW
Lamp Flux (klm)	1.05
File Name	P852-12-C1-WW-CA0200-9W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	490.8, 74.7, 0.0
No. in Project	5

Luminaire C Data



Supplier	C U Phosco
Type	E951-24-S1-730-W5-0375-28W
Lamp(s)	730SS
Lamp Flux (klm)	3.56
File Name	E951-24-S1-730-W5-0375-28W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	463.1, 71.7, 0.0
No. in Project	46

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	C	4763.36	-558.94	6.00	185.00	0.00	0.00	0.00			
2	A	4742.19	-568.75	8.00	280.00	0.00	0.00	0.00			
3	A	4778.37	-575.31	8.00	253.00	0.00	0.00	0.00			
4	A	4804.85	-584.95	8.00	248.00	0.00	0.00	0.00			
5	A	4835.94	-597.24	8.00	250.00	0.00	0.00	0.00			

Layout Continued

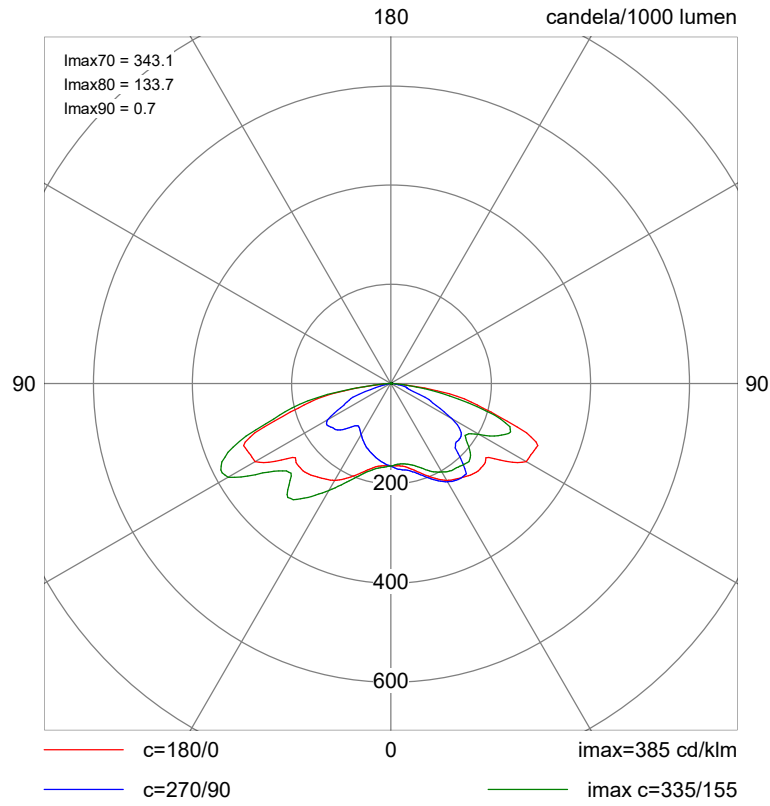
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
6	A	4858.36	-604.07	8.00	259.00	0.00	0.00	0.00			
8	A	4896.20	-606.52	8.00	274.00	0.00	0.00	0.00			
8	C	4760.82	-492.47	6.00	193.00	0.00	0.00	0.00			
9	C	4764.76	-521.09	6.00	193.00	0.00	0.00	0.00			
11	C	4761.69	-545.58	6.00	190.00	0.00	0.00	0.00			
12	C	4785.79	-521.27	6.00	282.00	0.00	0.00	0.00			
13	C	4802.05	-486.64	6.00	12.00	0.00	0.00	0.00			
14	C	4806.08	-515.40	6.00	14.00	0.00	0.00	0.00			
15	C	4811.64	-533.48	6.00	104.00	0.00	0.00	0.00			
16	C	4799.95	-472.18	6.00	10.00	0.00	0.00	0.00			
17	C	4839.07	-466.80	6.00	193.00	0.00	0.00	0.00			
18	C	4843.22	-495.34	6.00	193.00	0.00	0.00	0.00			
19	C	4880.39	-460.82	6.00	8.00	0.00	0.00	0.00			
20	C	4884.66	-489.24	6.00	13.00	0.00	0.00	0.00			
22	C	4828.71	-511.80	6.00	11.00	0.00	0.00	0.00			
23	C	4849.25	-538.26	6.00	195.00	0.00	0.00	0.00			
24	C	4863.81	-492.78	6.00	280.00	0.00	0.00	0.00			
25	C	4890.81	-532.52	6.00	7.00	0.00	0.00	0.00			
26	C	4886.98	-503.67	6.00	6.00	0.00	0.00	0.00			
28	C	4925.52	-465.31	6.00	273.00	0.00	0.00	0.00			
29	C	4904.55	-492.99	6.00	136.00	0.00	0.00	0.00			
30	C	4914.23	-479.48	6.00	138.00	0.00	0.00	0.00			
31	C	4939.27	-473.75	6.00	68.00	0.00	0.00	0.00			
33	C	4963.91	-466.18	6.00	279.00	0.00	0.00	0.00			
34	C	4990.40	-462.14	6.00	281.00	0.00	0.00	0.00			
35	C	5013.37	-458.66	6.00	281.00	0.00	0.00	0.00			
36	C	5034.03	-455.32	6.00	281.00	0.00	0.00	0.00			
37	C	5051.01	-453.14	6.00	280.00	0.00	0.00	0.00			
38	C	4951.68	-486.61	6.00	13.00	0.00	0.00	0.00			
39	C	4954.23	-503.10	6.00	9.00	0.00	0.00	0.00			
40	C	4966.46	-523.20	6.00	84.00	0.00	0.00	0.00			
41	C	4990.79	-532.73	6.00	189.00	0.00	0.00	0.00			
42	C	4985.24	-512.03	6.00	281.00	0.00	0.00	0.00			
43	C	5018.99	-507.12	6.00	281.00	0.00	0.00	0.00			
44	C	5035.92	-504.63	6.00	281.00	0.00	0.00	0.00			
45	C	5047.07	-512.53	6.00	97.00	0.00	0.00	0.00			

Layout Continued

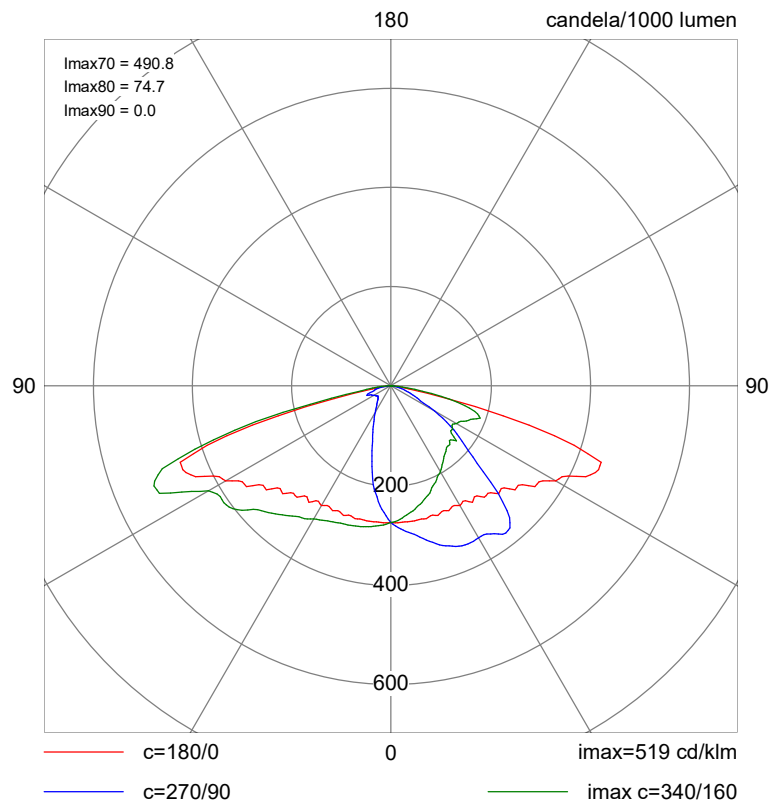
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
46	C	5033.54	-526.47	6.00	14.00	0.00	0.00	0.00			
44	B	4932.86	-450.73	6.00	181.00	0.00	0.00	0.00			
45	B	4935.70	-435.37	6.00	162.00	0.00	0.00	0.00			
47	B	4944.22	-419.17	6.00	156.00	0.00	0.00	0.00			
50	B	4953.49	-400.62	6.00	163.00	0.00	0.00	0.00			
52	B	4957.66	-384.59	6.00	172.00	0.00	0.00	0.00			
53	C	4923.65	-486.17	6.00	6.00	0.00	0.00	0.00			
54	C	4926.11	-504.80	6.00	6.00	0.00	0.00	0.00			
55	C	4928.67	-523.44	6.00	6.00	0.00	0.00	0.00			
56	C	4925.19	-540.33	6.00	311.00	0.00	0.00	0.00			
57	C	4903.94	-546.94	6.00	287.00	0.00	0.00	0.00			
58	C	4889.38	-559.77	6.00	310.00	0.00	0.00	0.00			
59	C	4879.11	-576.88	6.00	331.00	0.00	0.00	0.00			
66	C	4758.71	-478.31	6.00	188.00	0.00	0.00	0.00			
60	A	4757.28	-577.65	8.00	74.00	0.00	0.00	0.00			
63	A	4877.15	-613.04	8.00	83.00	0.00	0.00	0.00			
62	A	4872.18	-594.25	8.00	351.00	0.00	0.00	0.00			
65	C	5002.17	-509.49	6.00	280.00	0.00	0.00	0.00			
60	C	4845.35	-509.72	6.00	188.00	0.00	0.00	0.00			
61	A	4778.52	-585.22	8.00	70.00	0.00	0.00	0.00			

Polar Diagrams

Luminaire A P863-128-P3-730-W3-350-46W

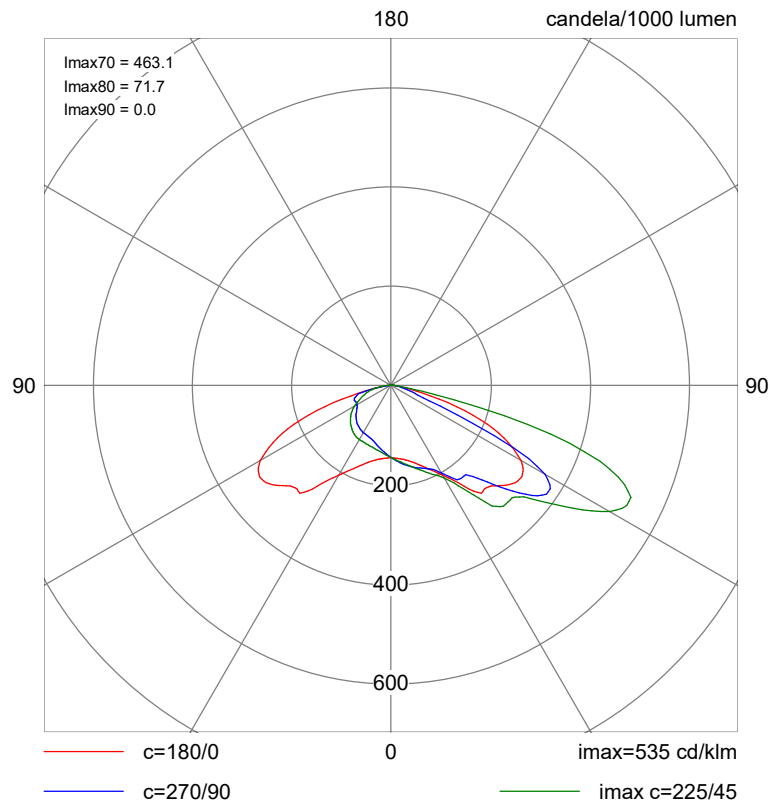


Luminaire B P852-12-C1-WW-CA0200-9W



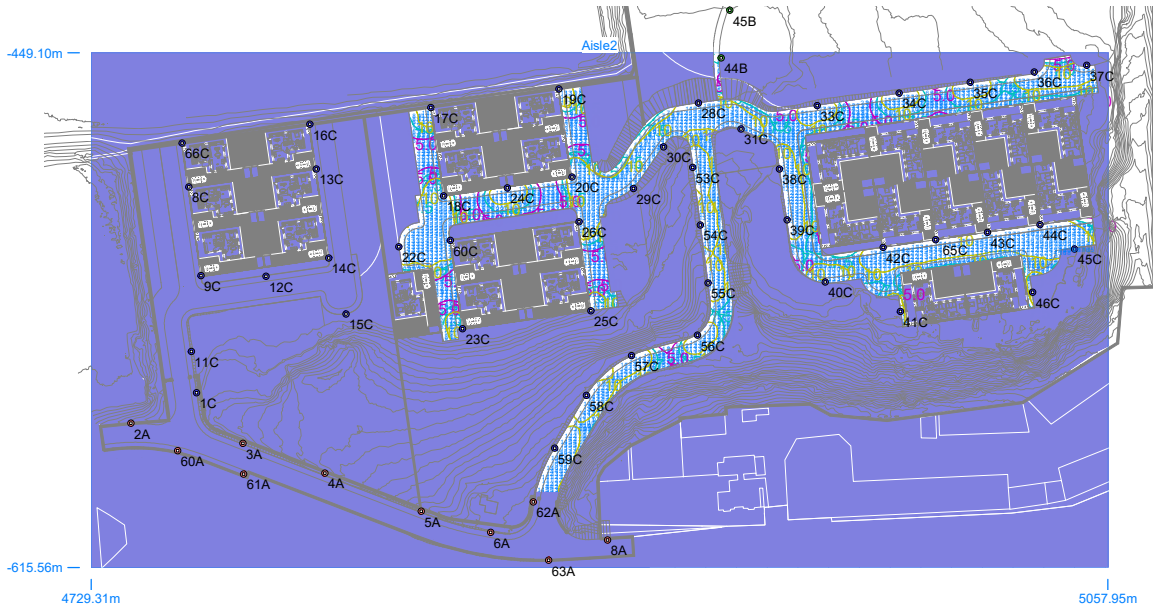
Polar Diagrams Continued

Luminaire C E951-24-S1-730-W5-0375-28W



Horizontal Illuminance (lux)

Aisle2

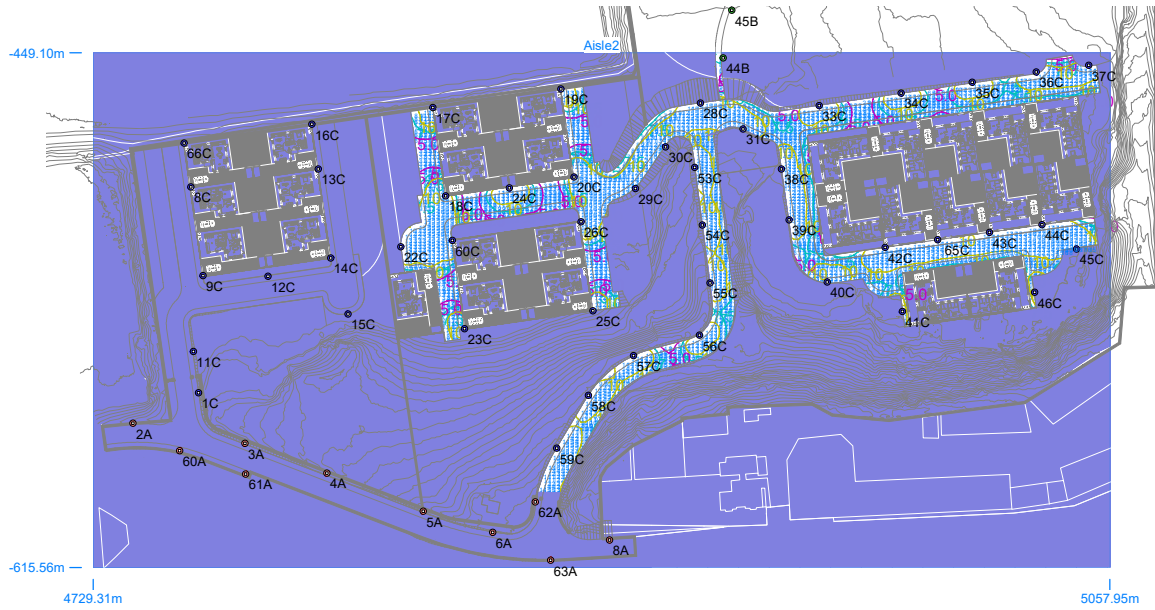


Results

Eav	10.10
Emin	2.24
Emax	20.90
Emin/Emax	0.11
Emin/Eav	0.22

Horizontal Illuminance (lux)

Aisle2

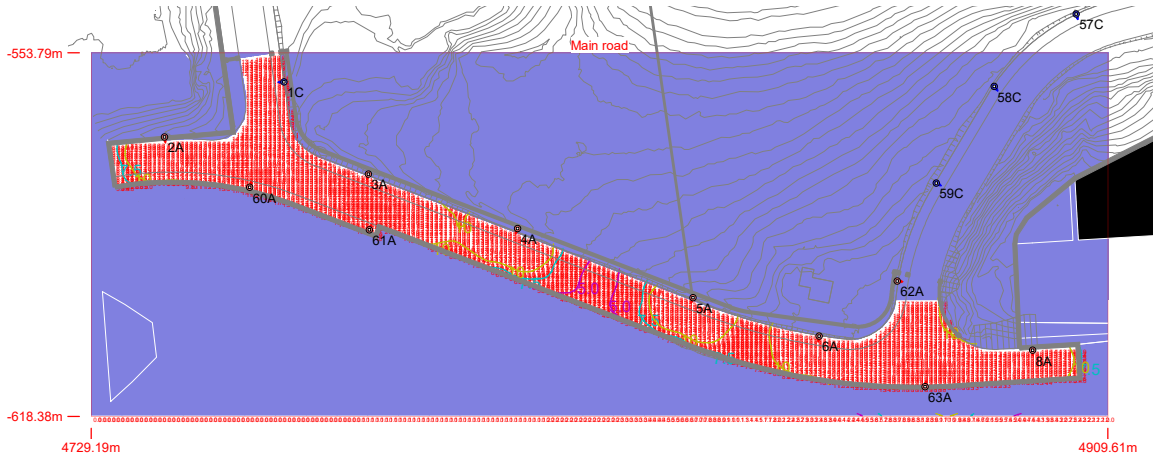


Results

Eav	10.10
Emin	2.24
Emax	20.90
Emin/Emax	0.11
Emin/Eav	0.22

Horizontal Illuminance (lux)

Main road

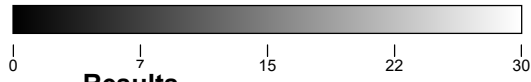
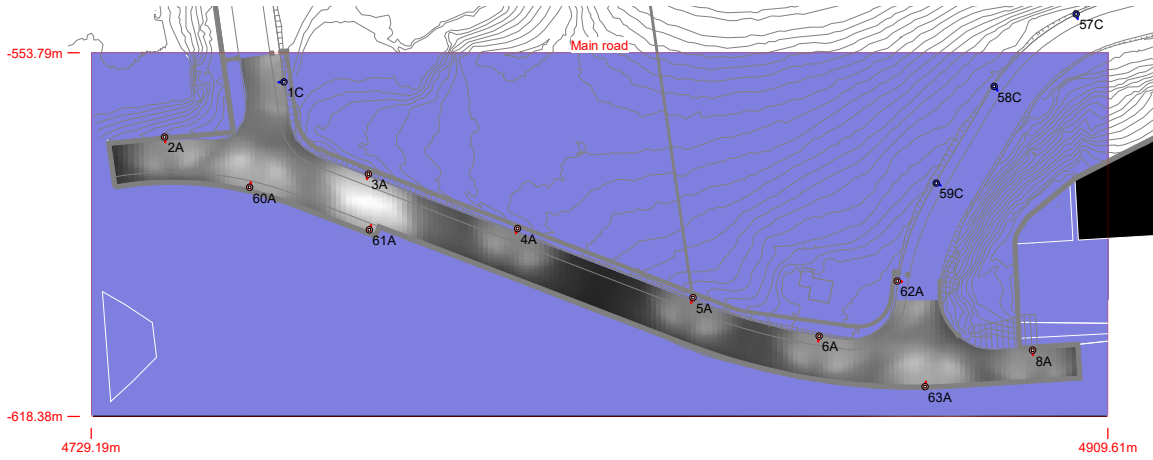


Results

Eav	13.64
Emin	0.01
Emax	29.58
Emin/Emax	0.00
Emin/Eav	0.00

Horizontal Illuminance (lux)

Main road

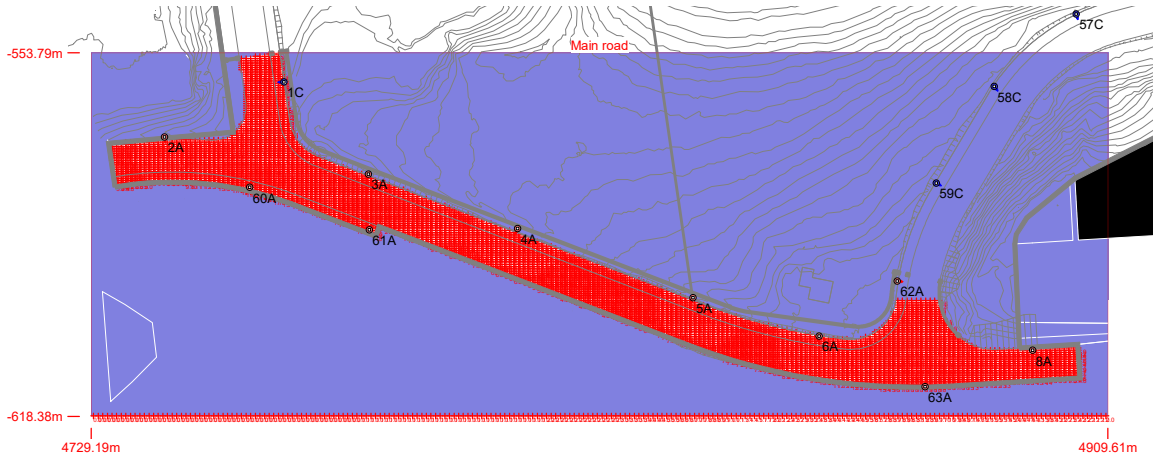


Results

Eav	13.64
Emin	0.01
Emax	29.58
Emin/Emax	0.00
Emin/Eav	0.00

Horizontal Illuminance (lux)

Main road

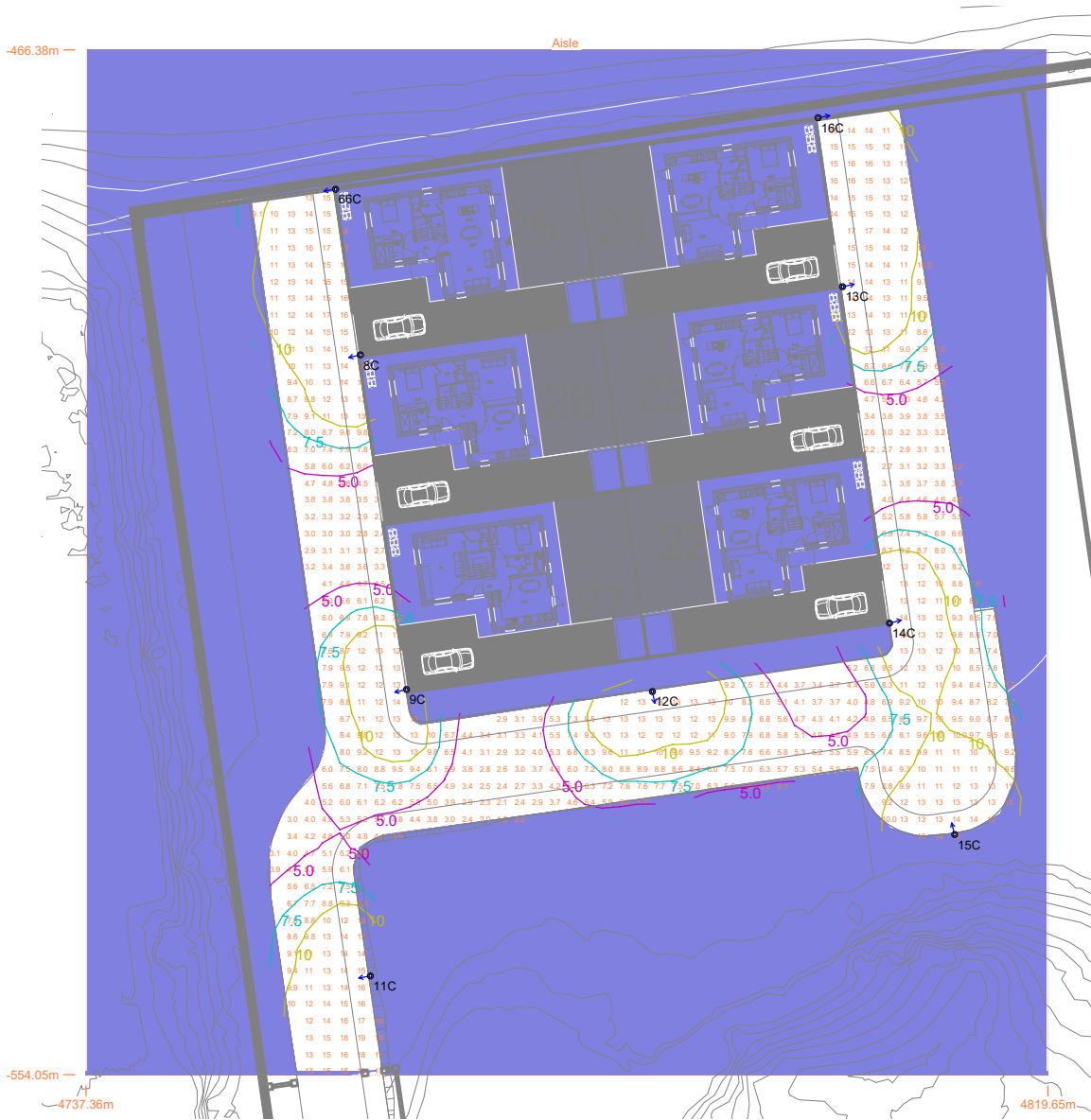


Results

Eav	13.64
Emin	0.01
Emax	29.58
Emin/Emax	0.00
Emin/Eav	0.00

Horizontal Illuminance (lux)

Aisle

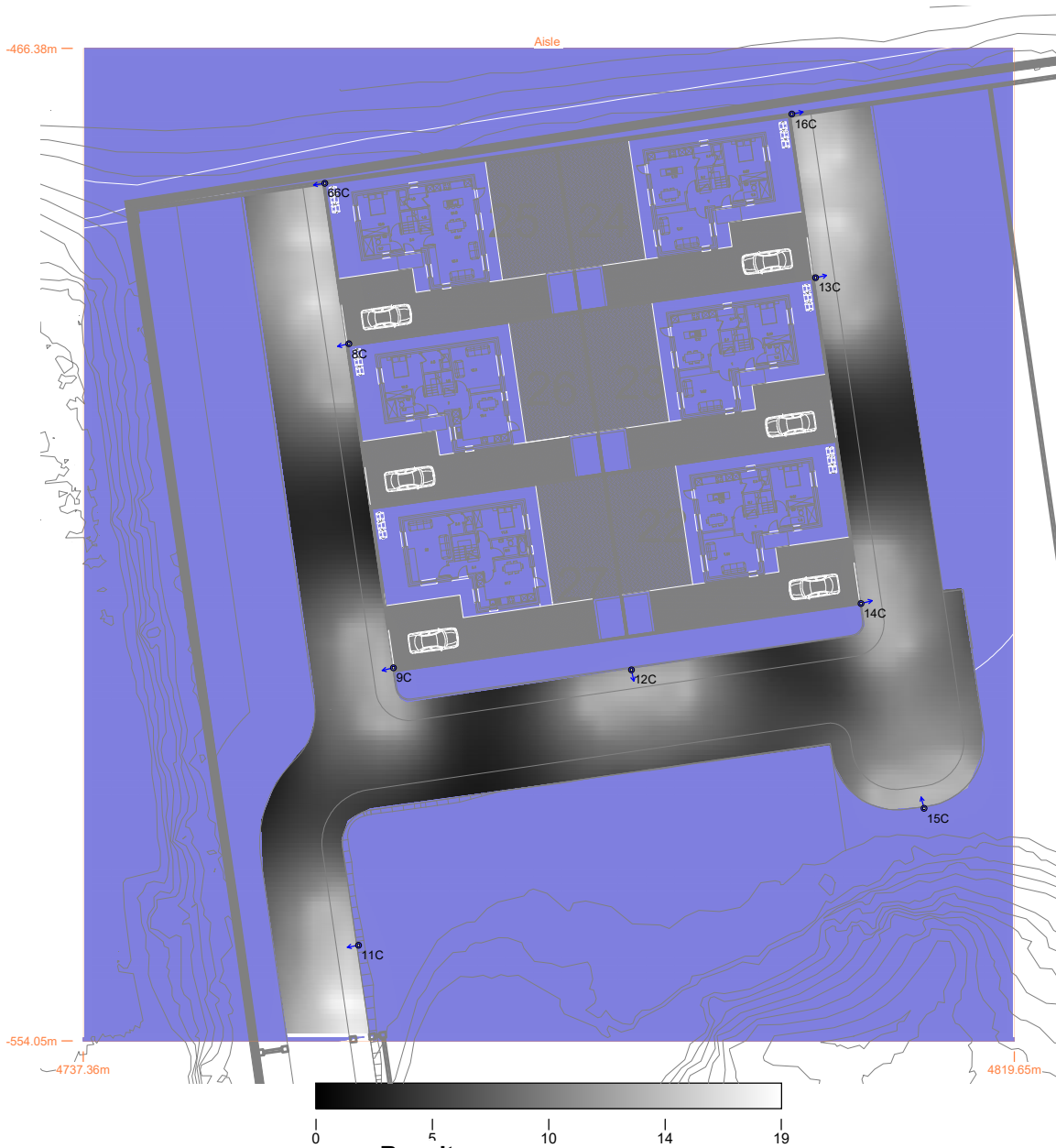


Results

Eav	8.93
Emin	1.92
Emax	19.09
Emin/Emax	0.10
Emin/Eav	0.22

Horizontal Illuminance (lux)

Aisle

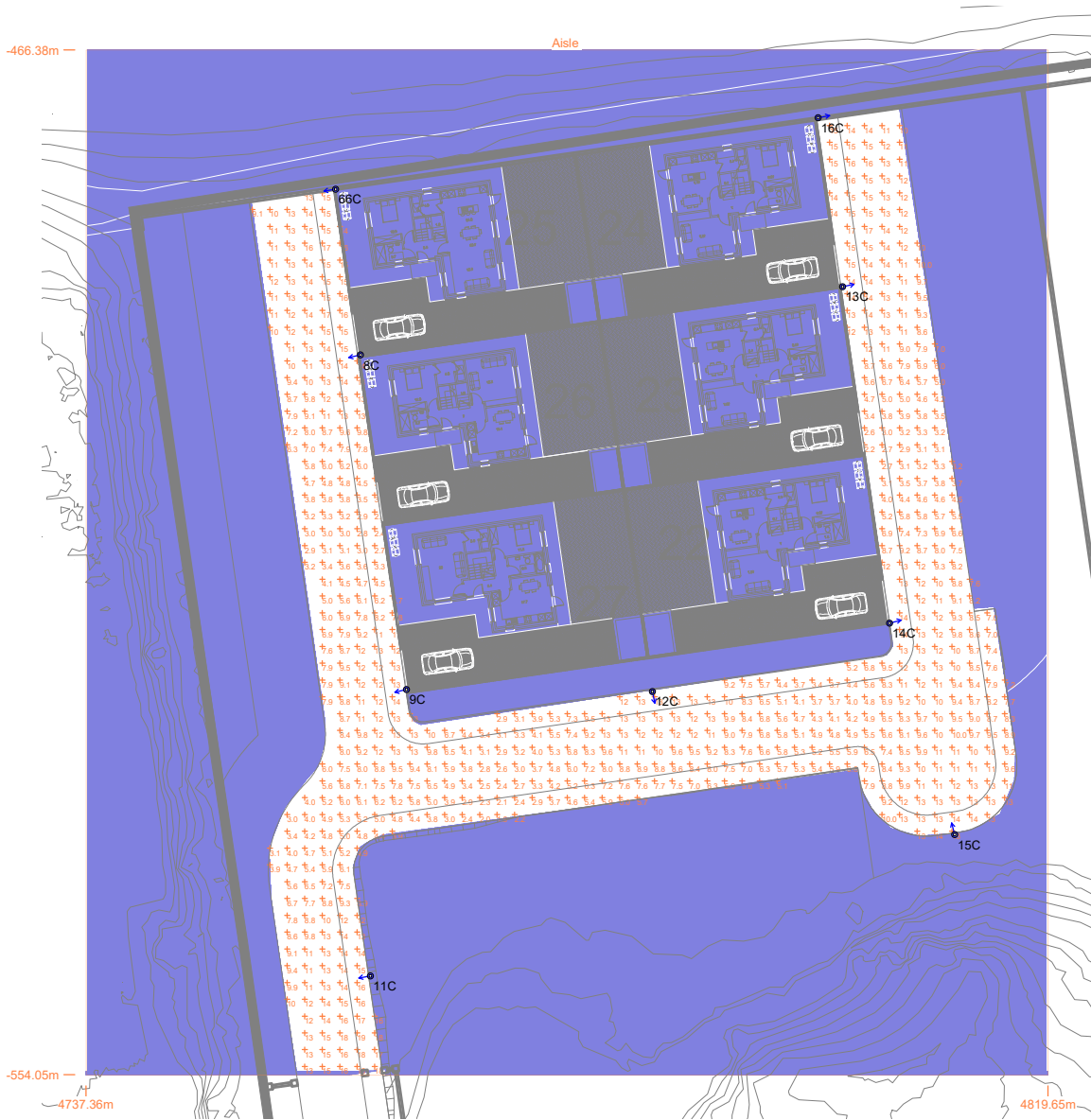


Results

Eav	8.93
Emin	1.92
Emax	19.09
Emin/Emax	0.10
Emin/Eav	0.22

Horizontal Illuminance (lux)

Aisle



Results

Eav	8.93
Emin	1.92
Emax	19.09
Emin/Emax	0.10
Emin/Eav	0.22

Horizontal Illuminance (lux)

footpath

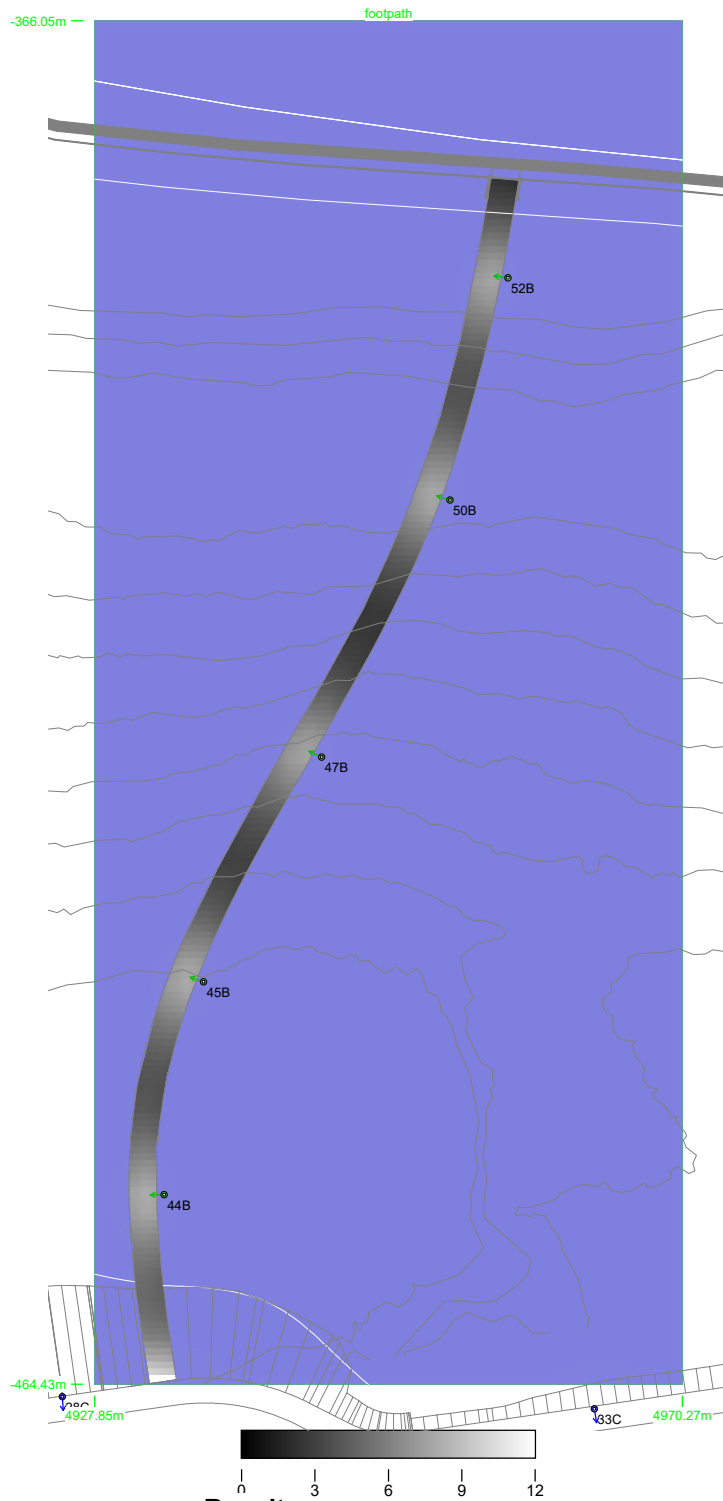


Results

Eav	5.42
Emin	2.68
Emax	10.43
Emin/Emax	0.26
Emin/Eav	0.50

Horizontal Illuminance (lux)

footpath



Results

Eav	5.42
Emin	2.68
Emax	10.43
Emin/Emax	0.26
Emin/Eav	0.50

Horizontal Illuminance (lux)

footpath

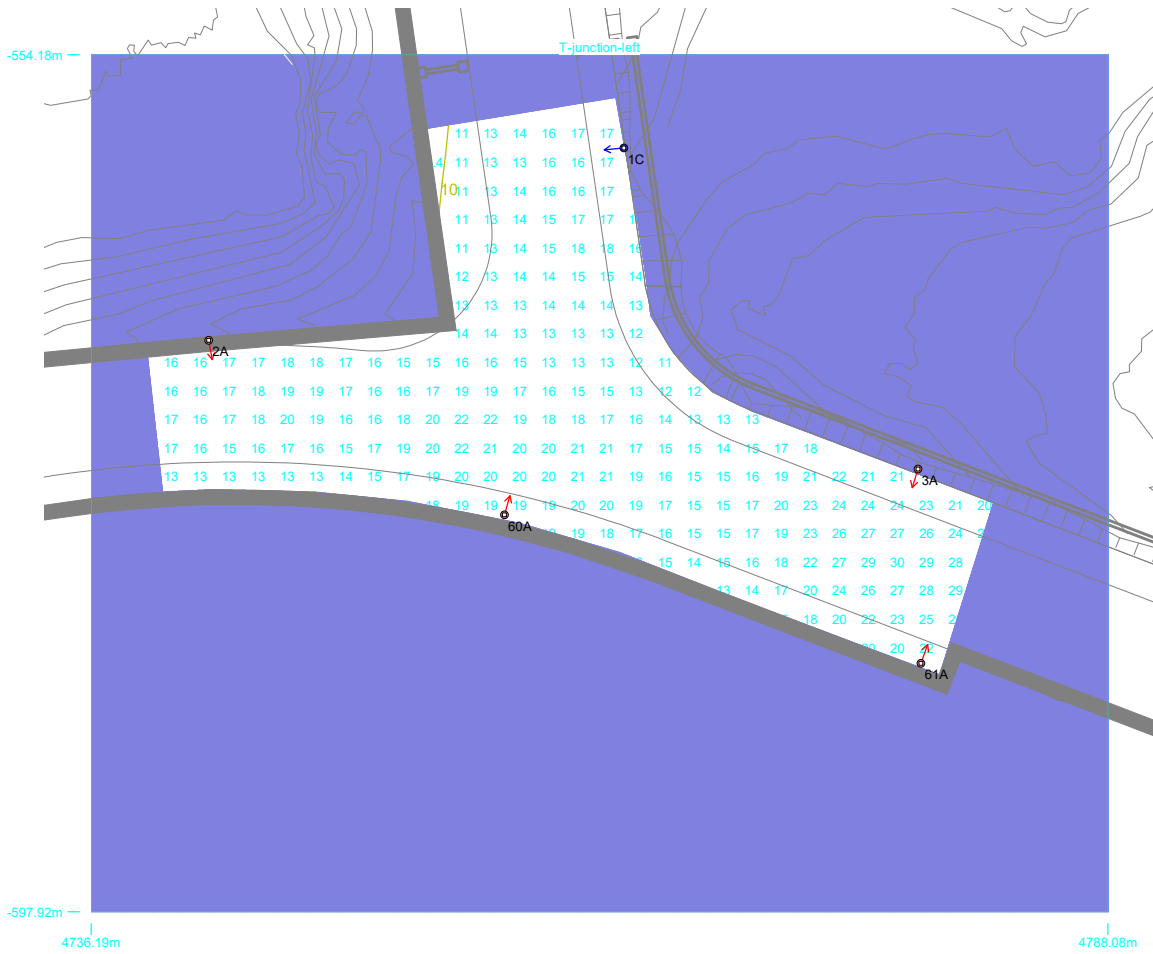


Results

Eav	5.42
Emin	2.68
Emax	10.43
Emin/Emax	0.26
Emin/Eav	0.50

Horizontal Illuminance (lux)

T-junction-left

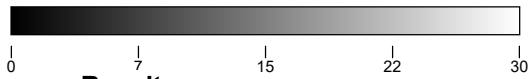
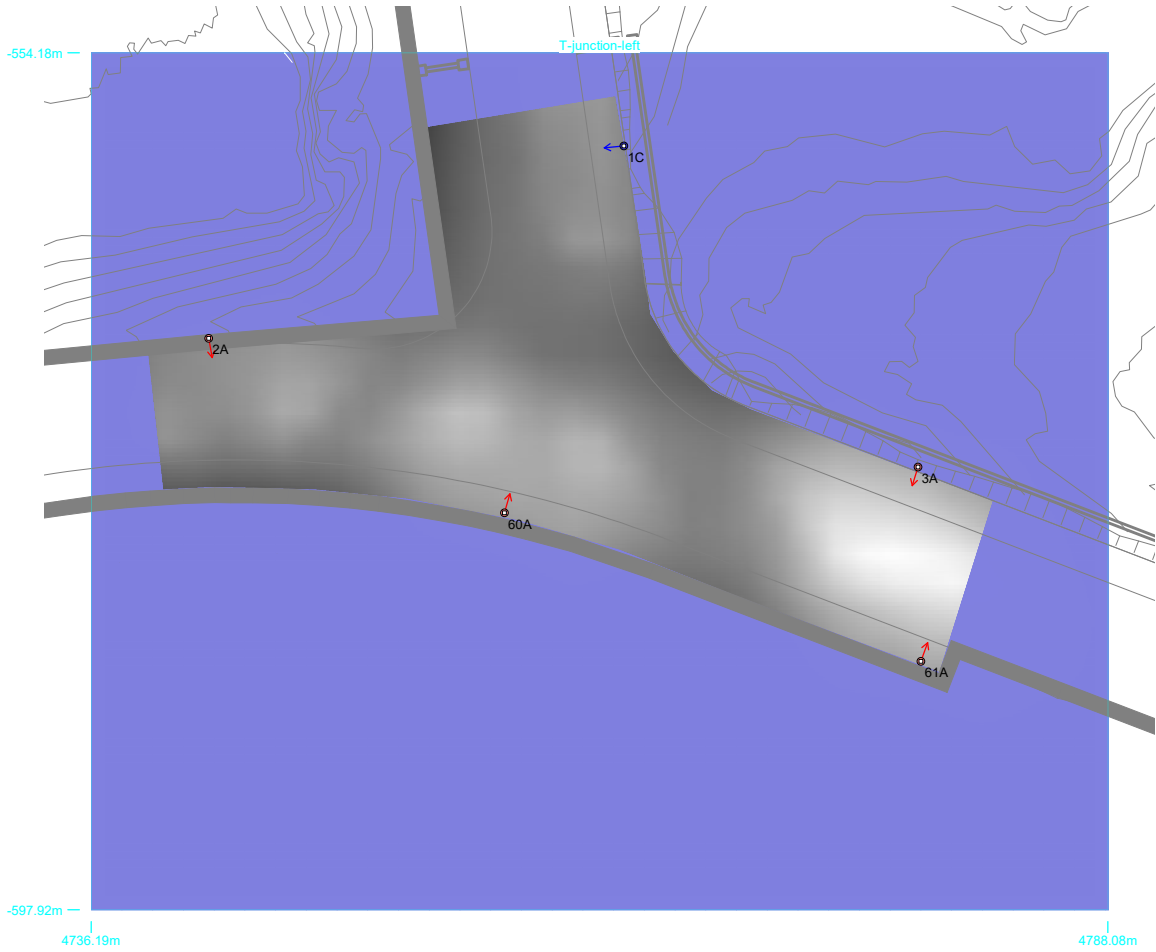


Results

Eav	17.30
Emin	8.37
Emax	29.56
Emin/Emax	0.28
Emin/Eav	0.48

Horizontal Illuminance (lux)

T-junction-left

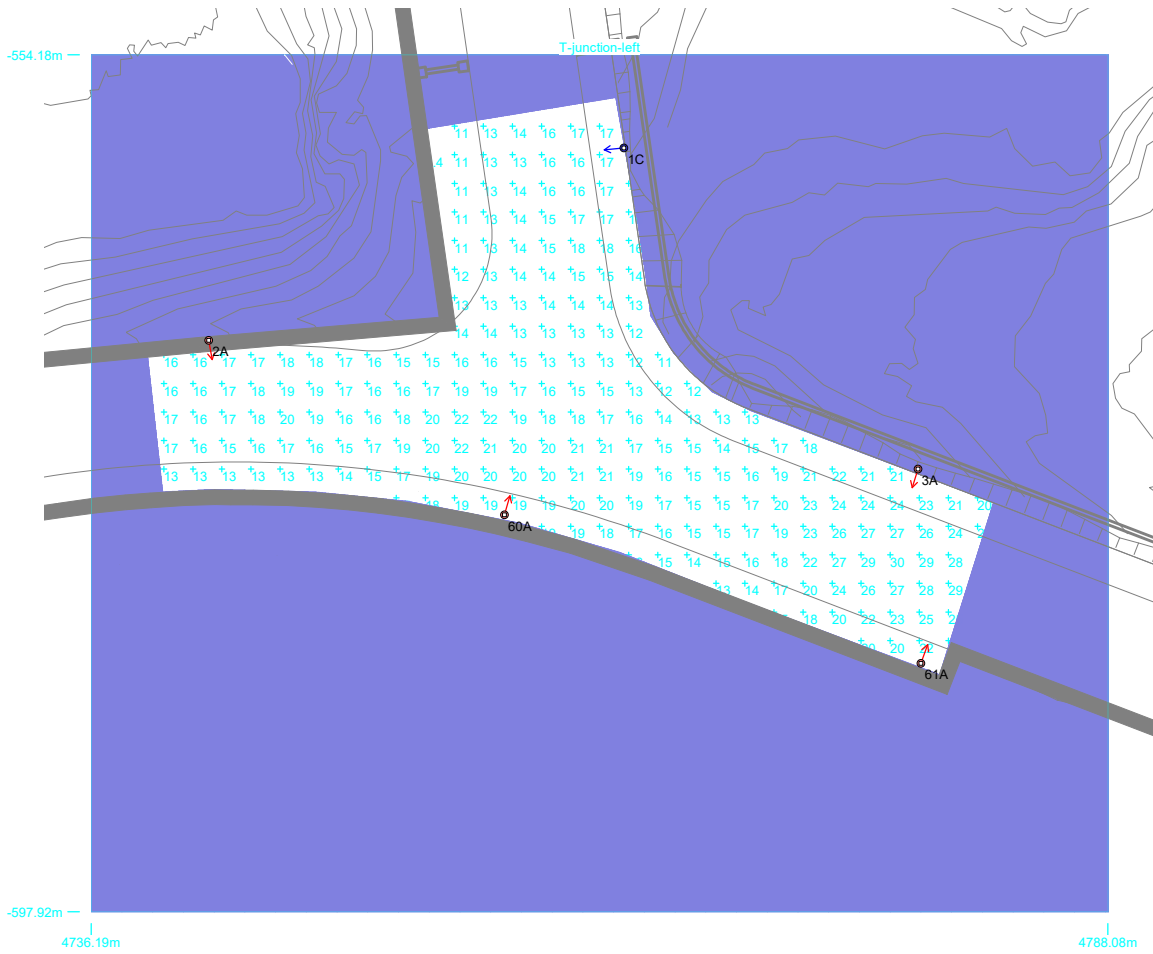


Results

Eav	17.30
Emin	8.37
Emax	29.56
Emin/Emax	0.28
Emin/Eav	0.48

Horizontal Illuminance (lux)

T-junction-left

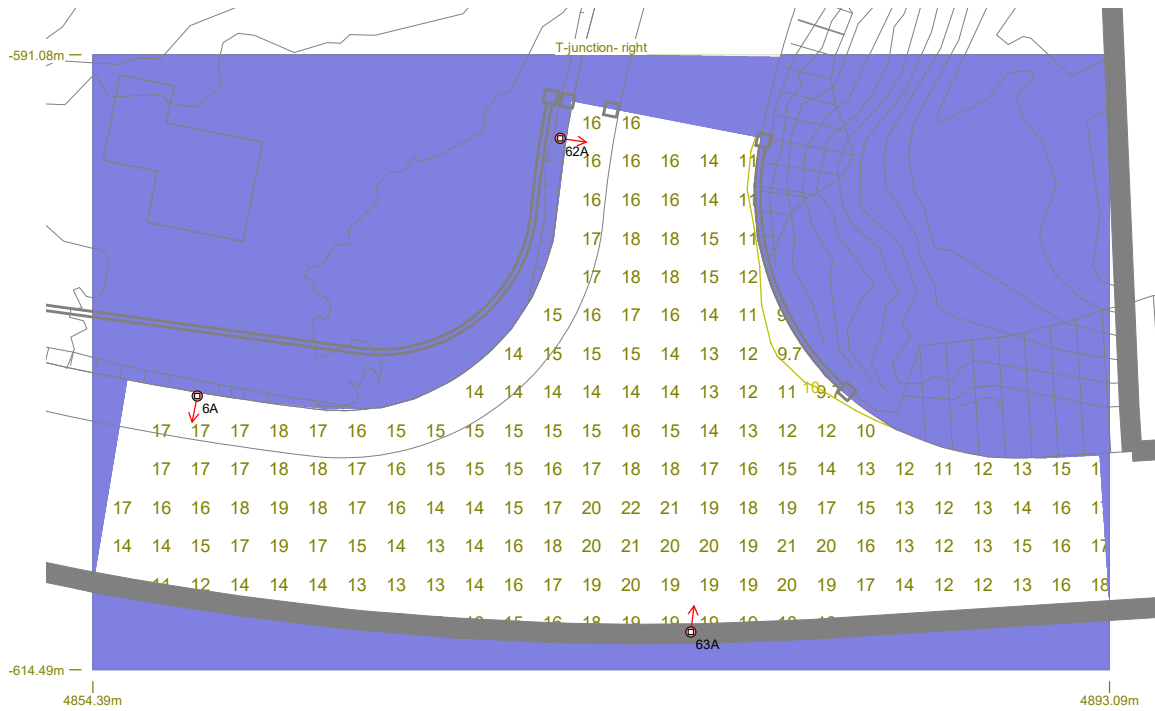


Results

Eav	17.30
Emin	8.37
Emax	29.56
Emin/Emax	0.28
Emin/Eav	0.48

Horizontal Illuminance (lux)

T-junction- right

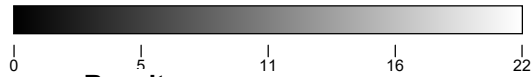
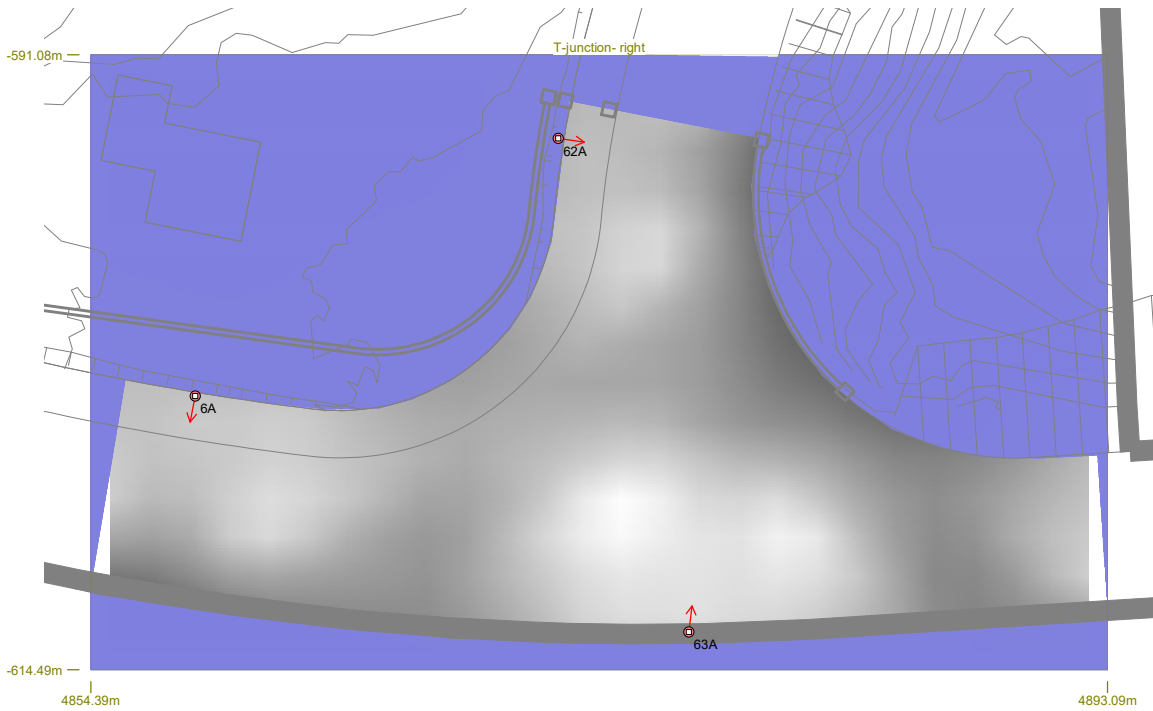


Results

Eav	15.37
Emin	9.02
Emax	21.70
Emin/Emax	0.42
Emin/Eav	0.59

Horizontal Illuminance (lux)

T-junction- right

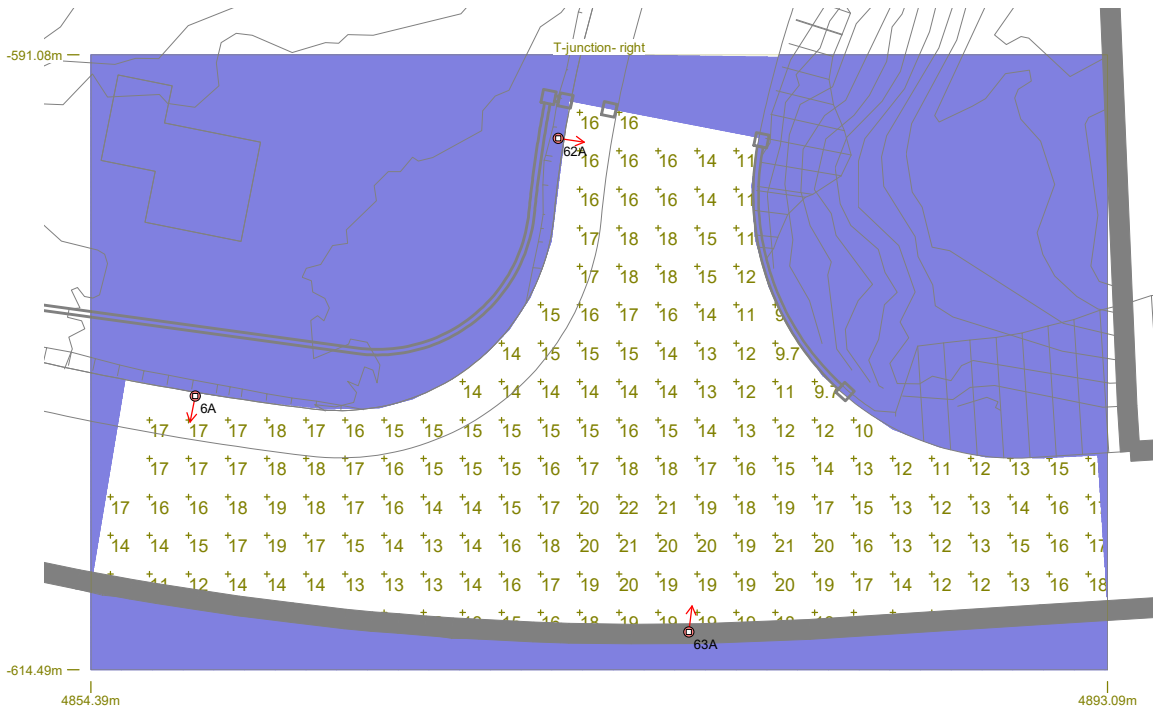


Results

Eav	15.37
Emin	9.02
Emax	21.70
Emin/Emax	0.42
Emin/Eav	0.59

Horizontal Illuminance (lux)

T-junction- right



Results

Eav	15.37
Emin	9.02
Emax	21.70
Emin/Emax	0.42
Emin/Eav	0.59