

DATE: 24 August 2022
DESIGNER: Alex Naper
PROJECT No: SES 11721 Rev C
PROJECT NAME: Omni Plaza SHD - Serendale Limited



Residential area designed in accordance with EN13201-2:2015 Category P3.
Access road section designed in accordance with EN13201-2:2015 Category C3.
Retail/Amenity area designed in accordance with EN13201-2:2015 Category P2.
Car parking area designed in accordance with recommended illuminance levels of EN12464-2:2014 5.9.3 (Heavy Traffic).
Step sections designed in accordance with I.S.EN17210-2021 with illuminance levels as per the recommendations of BS8300-1:2018 Table 5 Stairways and ramps (open) in the external environment.
Rev A: Client name updated.
Rev B: Updated site layout.
Rev C: Additional area added.

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
Phone Number: 01 8110875
Contact: Graham Sheehan
eMail: graham@sabrelighting.ie

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	716382.65	739542.46	129.00	54.00	1.50	1.50
2	Grid 2	716376.76	739593.80	141.00	51.00	1.50	1.50
3	Grid 3	716317.81	739600.65	166.02	112.49	1.50	1.50
4	Grid 4	716393.63	739596.78	5.76	4.91	1.44	0.31
5	Grid 5	716448.26	739591.00	5.76	4.91	1.44	0.31
6	Grid 6 Steps	716474.08	739613.93	4.24	8.34	0.04	0.11
7	Grid 7	716580.52	739565.68	93.00	84.00	1.50	1.50
8	Grid 8	716548.37	739568.69	33.00	78.00	1.50	1.50
9	Grid 9	716659.36	739602.82	2.07	3.60	0.35	0.90

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	P863-128-F2B-740-W5-700-89W
Lamp(s)	740SS
Lamp Flux (klm)	13.20
File Name	P863-128-F2B-740-W5-700-89W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	461.8, 61.8, 0.8
No. in Project	10

Luminaire B Data



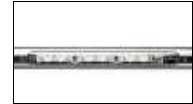
Supplier	Urbis Schreder
Type	FLEXIA TOP MIDI 5345 [Deep shape PC], [Lum. shape-related, PI]
Lamp(s)	40 LH351C@300mA NW 740 230V 00-53-404
LampFlux(klm)/Colour	6.61 NW 4000K/70
File Name	FLEXIA TOP MIDI 5345 40 LH351C 300mA NW 740 37.8W 47508S [Deep shape PC], ...
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	435.4, 331.9, 29.1
No. in Project	4

Luminaire C Data



Supplier	Urbis Schreder
Type	FLEXIA TOP 5308 Deep shape PC 20 LH351C@400mA NW 740 230V
Lamp(s)	20 LH351C@400mA NW 740 230V
LampFlux(klm)/Colour	3.58 NW 4000K/70
File Name	FLEXIA TOP 5308 20 LH351C 400mA NW 740 26W 445452 Deep shape PC 230V TF...
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	434.0, 92.0, 40.8
No. in Project	4

Luminaire E Data



Supplier	Urbis Schreder
Type	ALINEA Handrail 5121 - 3 LED 350mA WW Profiled Poly Clear, Sm
Lamp(s)	3 LEDs WW
Lamp Flux (klm)	0.37
File Name	ALINEA Handrail 5121 3 LED 350mA WW Profiled Poly Clear Smooth WO7314.Idt
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	230.6, 22.2, 4.1
No. in Project	15

Luminaires

Luminaire F Data

Supplier	C U Phosco
Type	E950-28-P4A-740-C350-10W
Lamp(s)	740N
Lamp Flux (klm)	1.32
File Name	E950-28-P4A-740-C0350-10W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	29

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	716417.18	739591.19	8.00	263.00	0.00	0.00	0.45			
2	A	716448.38	739589.28	8.00	267.00	0.00	0.00	0.45			
3	A	716496.57	739586.24	8.00	263.00	0.00	0.00	0.45			
4	A	716417.37	739573.27	8.00	263.00	0.00	0.00	0.45			
5	A	716472.75	739570.49	8.00	263.00	0.00	0.00	0.45			
6	A	716495.58	739569.26	8.00	262.00	0.00	0.00	0.45			
7	A	716446.88	739572.21	8.00	267.00	0.00	0.00	0.45			
8	A	716390.74	739580.68	8.00	347.00	0.00	0.00	0.45			
9	A	716473.79	739588.08	8.00	272.00	0.00	0.00	0.45			
10	B	716430.53	739596.54	5.00	278.00	0.00	0.00	0.45			
11	B	716464.71	739600.04	5.00	266.00	0.00	0.00	0.45			
12	C	716435.26	739633.00	5.00	358.00	0.00	0.00	0.45			
13	B	716441.75	739616.46	5.00	270.00	0.00	0.00	0.45			
14	B	716465.44	739616.39	5.00	279.00	0.00	0.00	0.45			
15	C	716402.16	739623.44	5.00	279.00	0.00	0.00	0.45			
16	C	716397.77	739606.94	5.00	212.00	0.00	0.00	0.45			
17	C	716386.81	739622.73	5.00	0.00	0.00	0.00	0.45			
19	F	716438.64	739641.89	5.00	268.00	0.00	0.00	0.45			
19	E	716393.50	739601.02	1.00	4.00	0.00	0.00	0.10			
20	F	716438.46	739666.04	5.00	270.00	0.00	0.00	0.45			
21	F	716466.53	739691.55	5.00	98.00	0.00	0.00	0.45			
22	F	716424.47	739690.78	5.00	95.00	0.00	0.00	0.45			
23	F	716405.20	739689.90	5.00	91.00	0.00	0.00	0.45			
24	F	716384.96	739689.31	5.00	94.00	0.00	0.00	0.45			
25	F	716364.90	739682.45	5.00	347.00	0.00	0.00	0.45			
26	F	716344.18	739663.97	5.00	264.00	0.00	0.00	0.45			
27	F	716390.38	739673.50	5.00	3.00	0.00	0.00	0.45			
28	F	716429.80	739682.93	5.00	0.00	0.00	0.00	0.45			
29	F	716470.41	739685.10	5.00	358.00	0.00	0.00	0.45			
30	F	716471.14	739658.93	5.00	0.00	0.00	0.00	0.45			
31	F	716399.53	739639.31	5.00	92.00	0.00	0.00	0.45			
32	F	716396.93	739659.46	5.00	274.00	0.00	0.00	0.45			
33	F	716441.85	739692.00	5.00	90.00	0.00	0.00	0.45			
34	F	716347.44	739637.56	5.00	273.00	0.00	0.00	0.45			
35	F	716355.93	739628.16	5.00	358.00	0.00	0.00	0.45			
36	F	716430.70	739660.32	5.00	352.00	0.00	0.00	0.45			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	E	716393.67	739597.48	1.00	4.00	0.00	0.00	0.10			
38	E	716399.41	739601.38	1.00	184.00	0.00	0.00	0.10			
39	E	716399.30	739597.61	1.00	181.00	0.00	0.00	0.10			
40	E	716393.55	739599.42	1.00	4.00	0.00	0.00	0.10			
41	E	716399.46	739599.73	1.00	181.00	0.00	0.00	0.10			
42	E	716448.27	739592.62	1.00	1.00	0.00	0.00	0.10			
43	E	716453.68	739593.81	1.00	170.00	0.00	0.00	0.10			
44	E	716453.46	739592.15	1.00	172.00	0.00	0.00	0.10			
45	E	716448.08	739594.17	1.00	4.00	0.00	0.00	0.10			
46	E	716475.32	739617.44	1.00	84.00	0.00	0.00	0.10			
47	E	716476.04	739621.37	1.00	260.00	0.00	0.00	0.10			
48	E	716475.21	739614.18	1.00	90.00	0.00	0.00	0.10			
49	F	716330.34	739651.63	5.00	356.00	0.00	0.00	0.45			
50	F	716366.22	739632.29	5.00	182.00	0.00	0.00	0.45			
51	F	716391.10	739648.70	5.00	356.00	0.00	0.00	0.45			
52	F	716359.61	739667.64	5.00	0.00	0.00	0.00	0.45			
53	F	716473.15	739636.32	5.00	0.00	0.00	0.00	0.45			
54	F	716588.74	739611.76	5.00	287.00	0.00	0.00	0.45			
55	F	716609.15	739615.36	5.00	274.00	0.00	0.00	0.45			
56	F	716628.80	739614.59	5.00	249.00	0.00	0.00	0.45			
57	F	716642.47	739607.22	5.00	232.00	0.00	0.00	0.45			
58	F	716656.43	739601.92	5.00	287.00	0.00	0.00	0.45			
59	A	716577.94	739609.18	8.00	216.00	0.00	0.00	0.45			
60	F	716656.26	739602.42	5.00	106.00	0.00	0.00	0.45			
61	E	716661.17	739604.39	1.00	87.00	0.00	0.00	0.00			
63	E	716660.04	739604.54	1.00	264.00	0.00	0.00	0.00			

Horizontal Illuminance (lux)

Grid 1

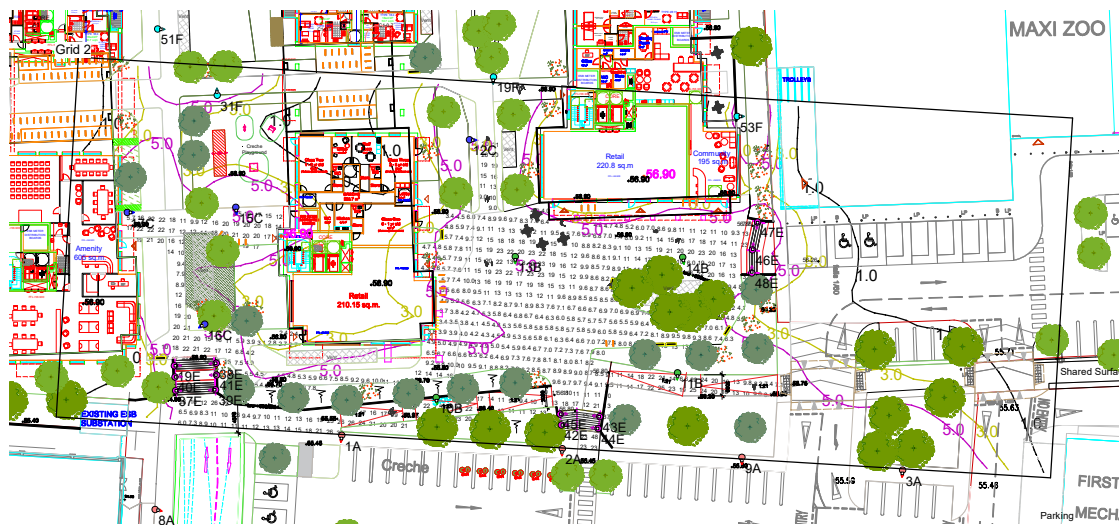


Results

Eav	20.19
Emin	5.82
Emax	35.45
Emin/Emax	0.16
Emin/Eav	0.29

Horizontal Illuminance (lux)

Grid 2

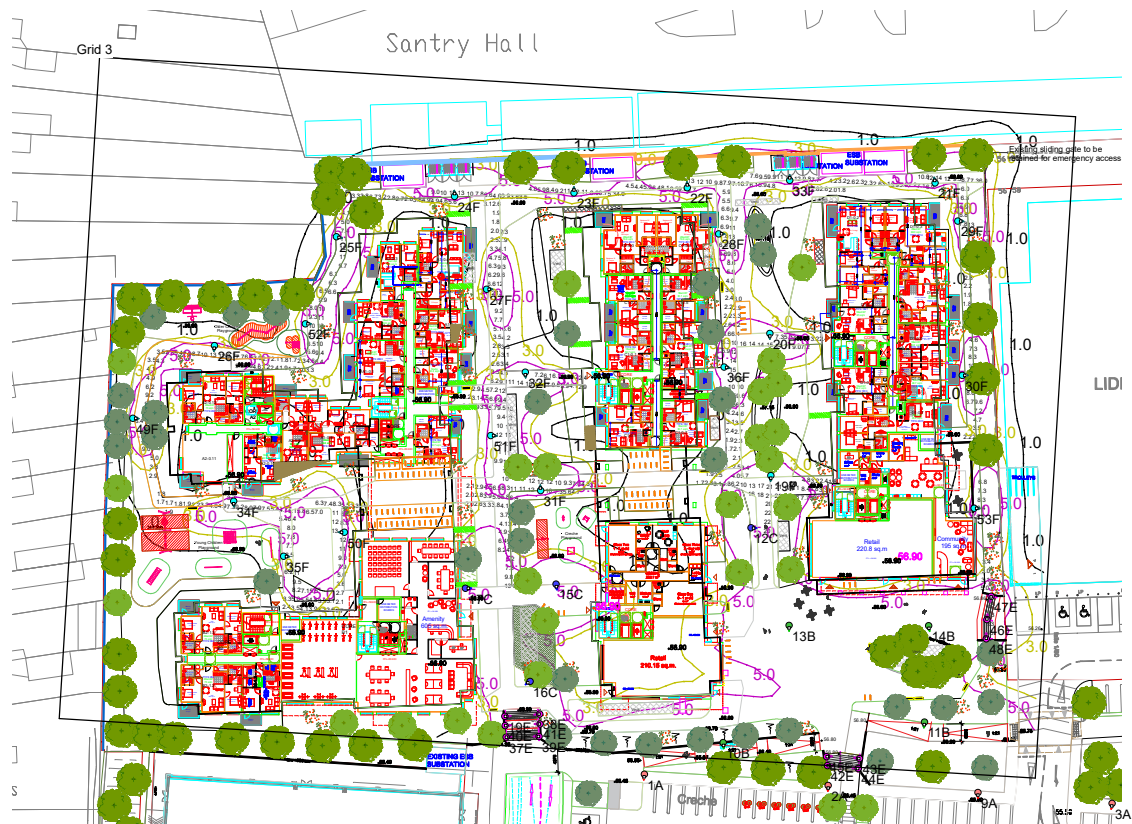


Results

Eav	12.17
Emin	2.43
Emax	60.54
Emin/Emax	0.04
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3

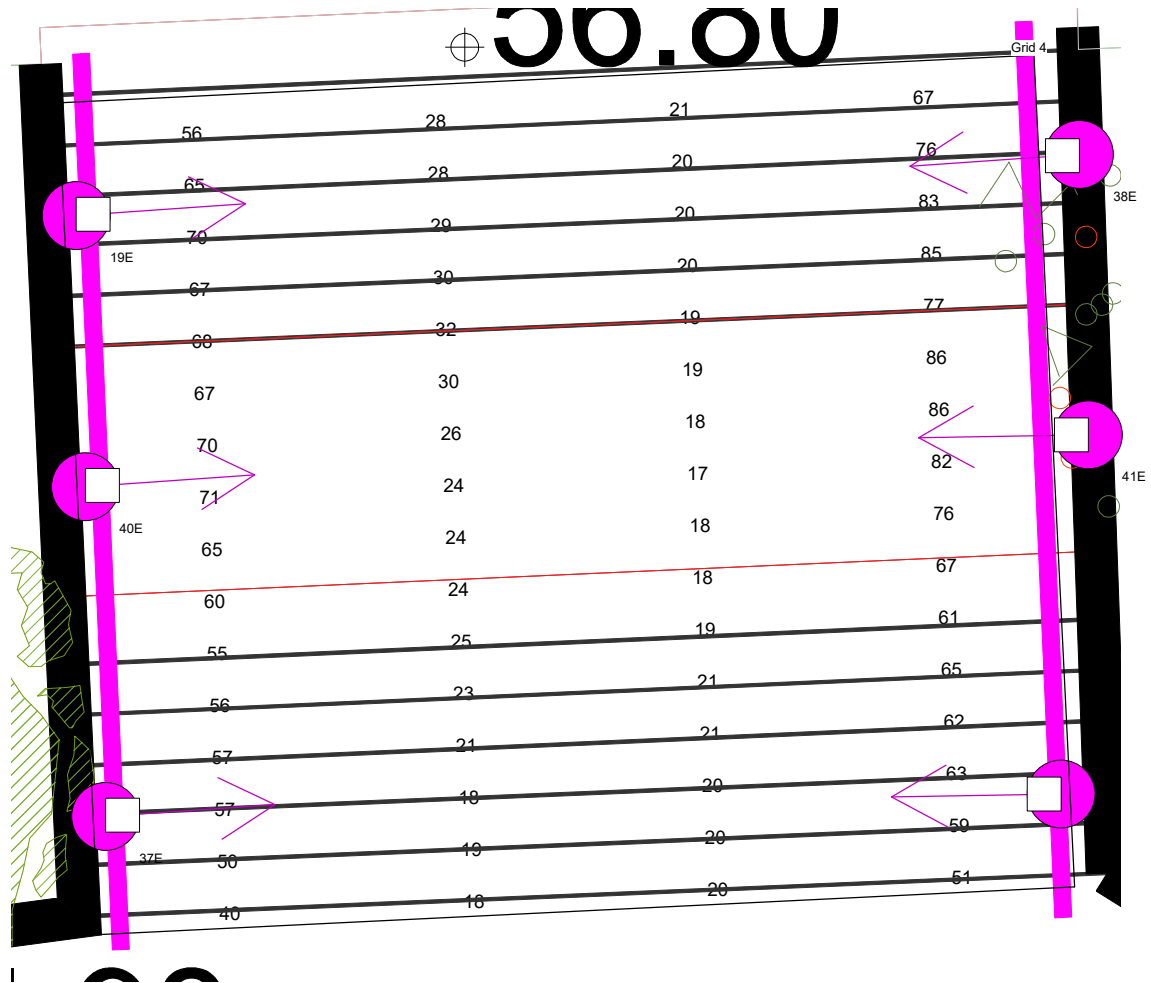


Results

Eav	8.62
Emin	1.70
Emax	86.77
Emin/Emax	0.02
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 4

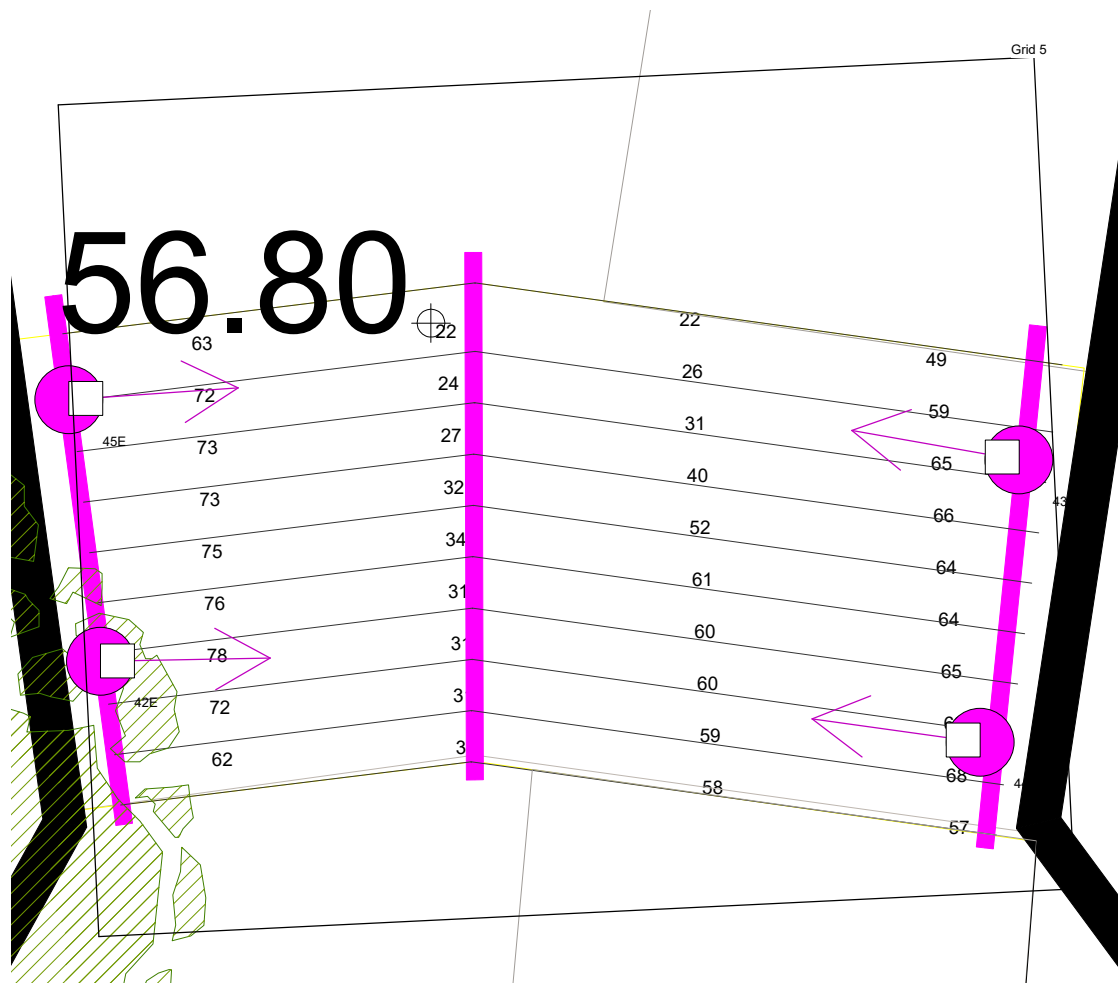


Results

Eav	44.25
Emin	17.48
E _{max}	85.94
E _{min} /E _{max}	0.20
E _{min} /E _{av}	0.40

Horizontal Illuminance (lux)

Grid 5

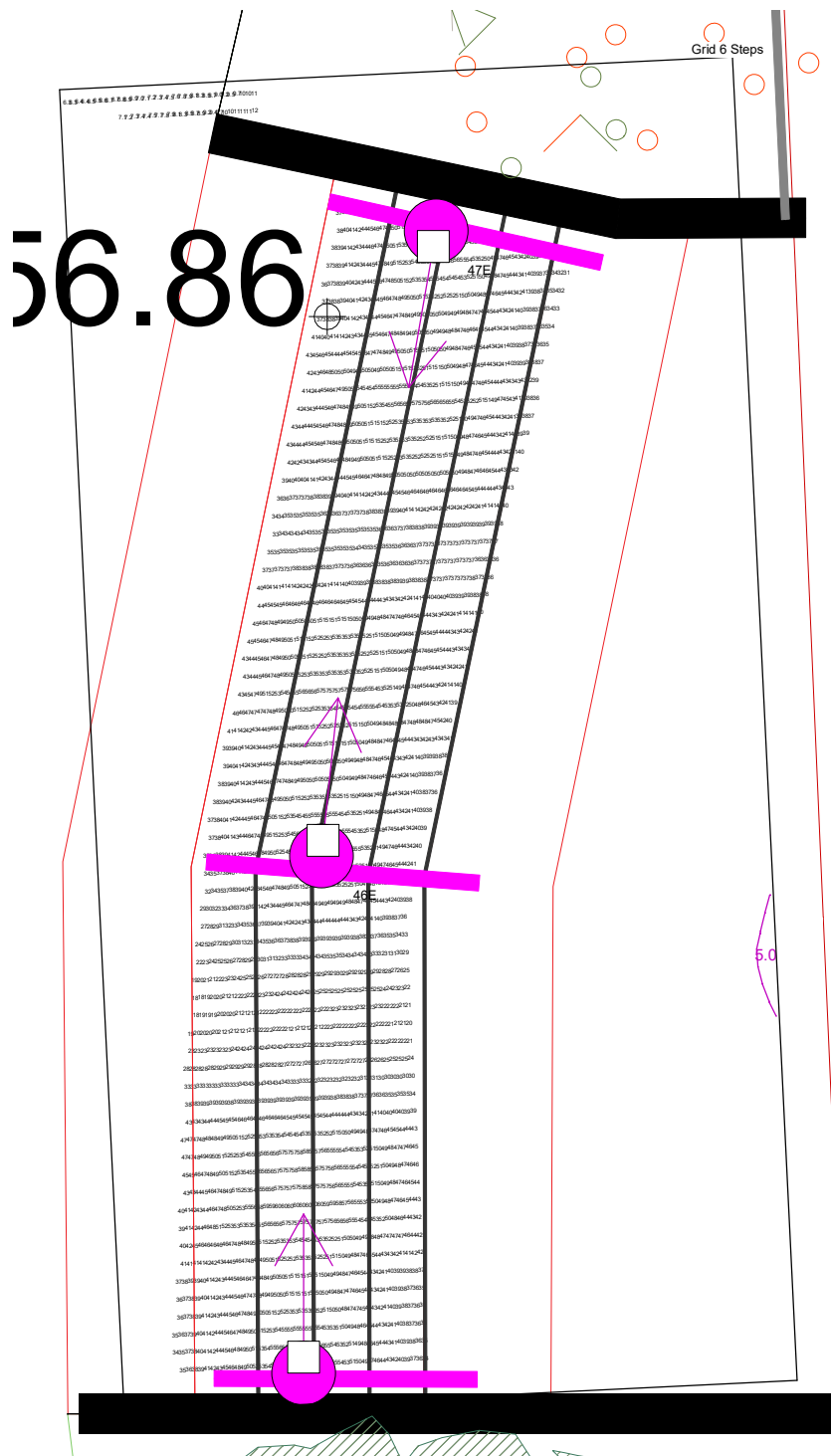


Results

Eav	52.70
Emin	22.28
E _{max}	77.90
E _{min} /E _{max}	0.29
E _{min} /E _{av}	0.42

Horizontal Illuminance (lux)

Grid 6 Steps



Results

Eav	42.61
Emin	6.27
Emax	60.38
Emin/Emax	0.10
Emin/Eav	0.15

Horizontal Illuminance (lux)

Grid 7

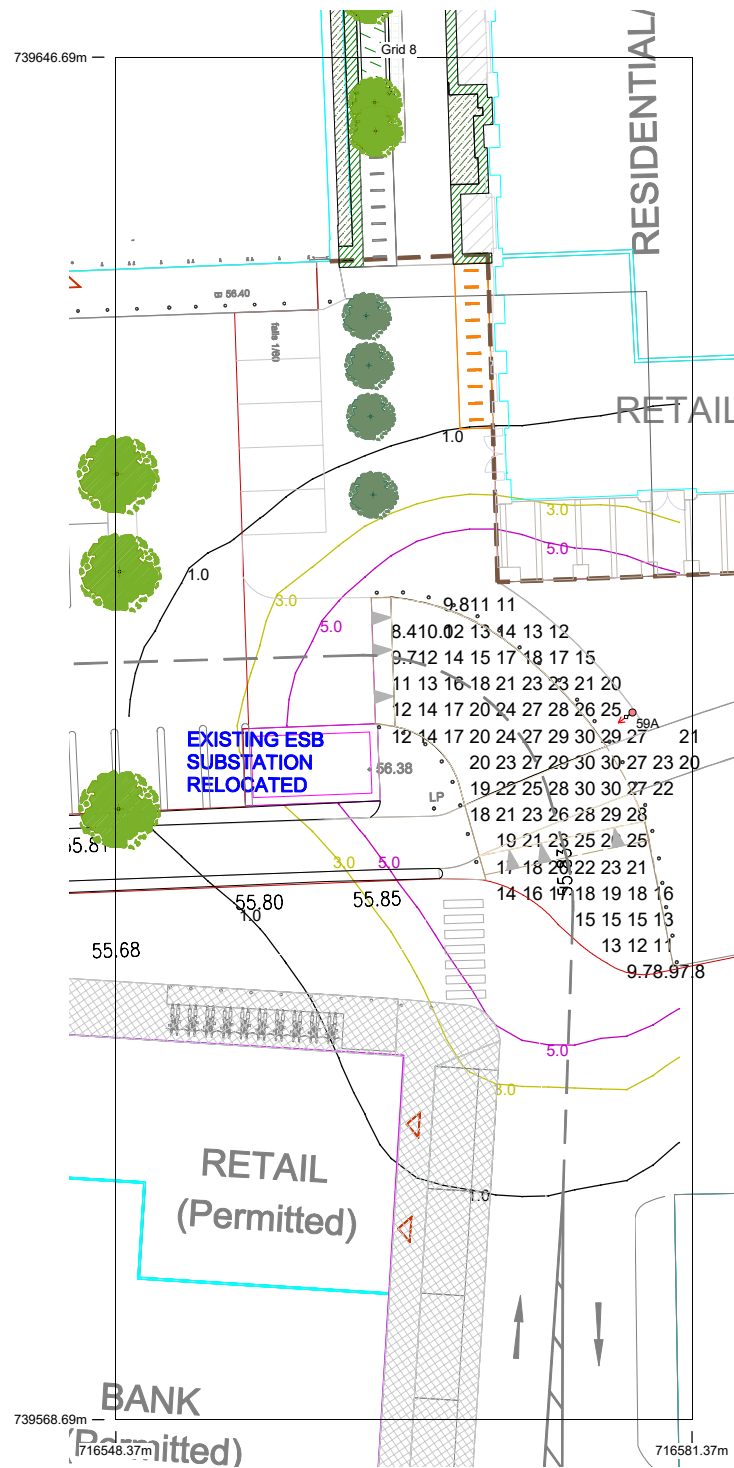


Results

Eav	9.42
Emin	2.88
Emax	46.85
Emin/Emax	0.06
Emin/Eav	0.31

Horizontal Illuminance (lux)

Grid 8

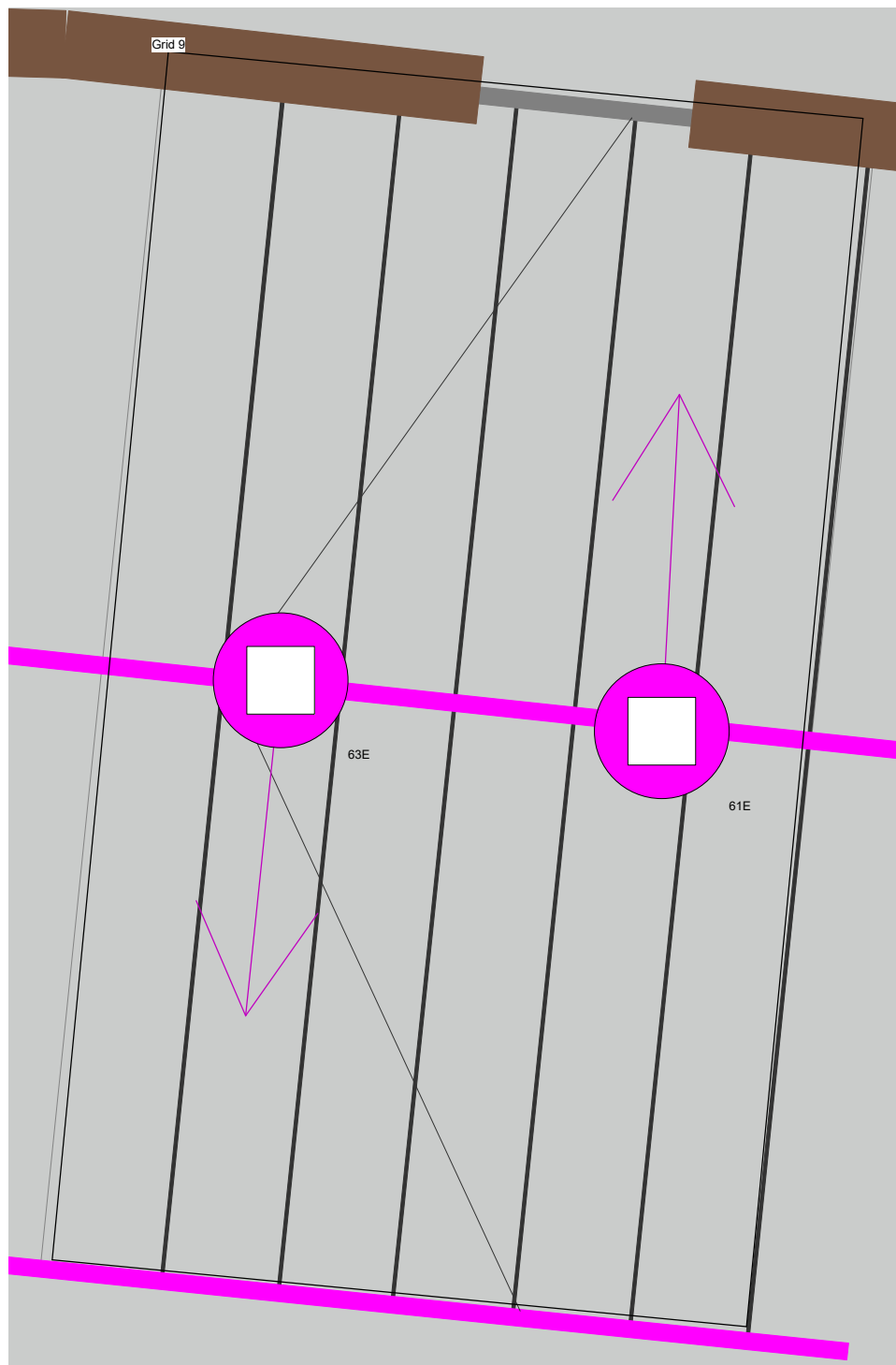


Results

Eav	19.43
Emin	7.82
Emax	30.49
Emin/Emax	0.26
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 9



Results

Eav	56.53
Emin	33.74
E _{max}	73.89
E _{min} /E _{max}	0.46
E _{min} /E _{av}	0.60