

Barton Peveril College

External Lighting

All calculations unless stated have been based upon an open plan area without any obstructions to the measuring plane.

Please be aware of the fire protection requirements and building regulations to check that conformity has been met where required. Easilume Ltd does not take responsibility to ensure that these specific requirements have been met.

Calculations have been performed according to good design practice. Some differences between measured values and calculated results may occur due to calculation methods, testing procedures, component performance, field conditions and assumptions used to generate the calculations.

Common design parameters as shown in our design report have been used to carry out all calculations. Easilume Ltd will not be held responsible for using specific design parameters that fall outside of these common design parameters unless by special instruction and acknowledgment by a member of the Easilume Ltd team.

Easilume Ltd accepts no liability for the final as-built performance due to the differences or variations that can occur between design and project completion.

Easilume Ltd does not accept design responsibility for free-of-charge lighting calculations or will be held responsible for the subsequent use of this information unless previously agreed.

Any emergency lighting calculations that have been completed have been based on achieving a minimum of 0.5 lux for open areas and 1 lux for escape routes with the measuring plane at floor level where details of escape routes have been given. Additional lighting may be required.

The emergency lighting design will not include additional coverage for safety signage, escape route doors, first aid equipment, fire equipment, call points, disabled equipment, plant/switch or control gear. This is due to the required information being unavailable and the variations that can occur between the design and project completion. If an all-inclusive emergency design is required, this will be subject to special instruction and acknowledgment by a member of the Easilume Ltd team and subject to all required information being available. If all-inclusive emergency design responsibility is required, this will be subject to all required information being available at design stage together with a site survey at project completion stage once all safety equipment is installed to ensure there is no variation between the design and the final as-built project.

It is the responsibility of Easilume Ltd's customer to ensure that that all elements of the design is according to expectations.

If any part of this scheme or luminaire choice within this scheme is deemed not suitable for the application, please contact us for re-calculations prior to an order being placed.

Final quantities are to be confirmed prior to order or installation and Easilume Ltd will not be held responsible for any errors or omissions.

Partner for Contact: EASILUME

Date: 27.03.2024
Operator: Jasper Dixon

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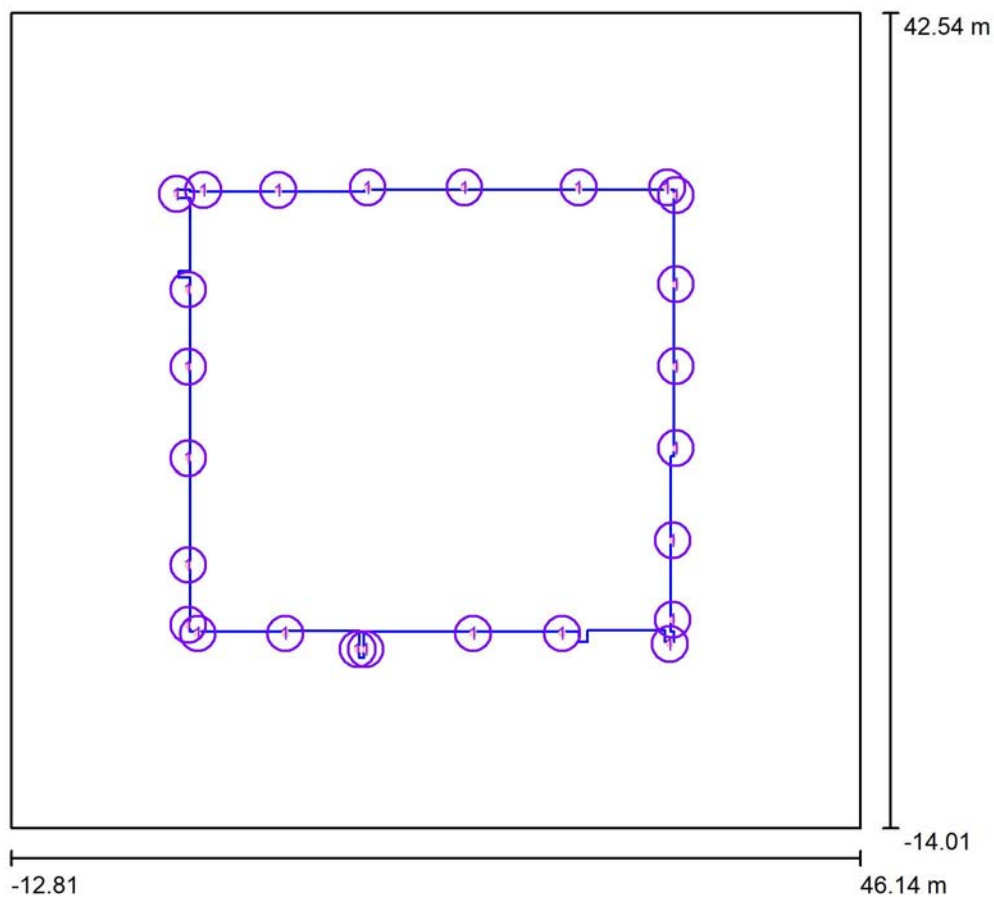
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General Lighting / Planning data



Light loss factor: 0.80, ULR (Upward Light Ratio): 1.5%

Scale 1:525

Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	25	Easilume Ltd WLEX35 -13W-E (1.000)	1755	1757	12.6
Total:			43873	Total: 43925	315.0

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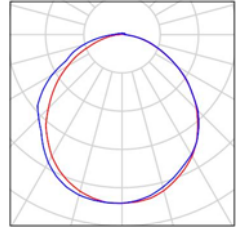
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General Lighting / Luminaire parts list

25 Pieces Easilume Ltd WLEX35 -13W-E
Article No.:
Luminous flux (Luminaire): 1755 lm
Luminous flux (Lamps): 1757 lm
Luminaire Wattage: 12.6 W
Luminaire classification according to CIE: 97
CIE flux code: 48 80 95 97 100
Fitting: 1 x 1 12.60W 1757.03lm (Correction
Factor 1.000).

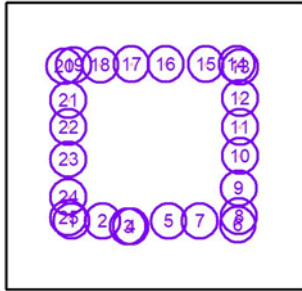
See our luminaire
catalog for an image of
the luminaire.



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e-Mail sales@easilume.co.uk**General Lighting / Luminaires (coordinates list)****Easilume Ltd WLEX35 -13W-E**

1755 lm, 12.6 W, 1 x 1 x 1 12.60W 1757.03lm (Correction Factor 1.000).



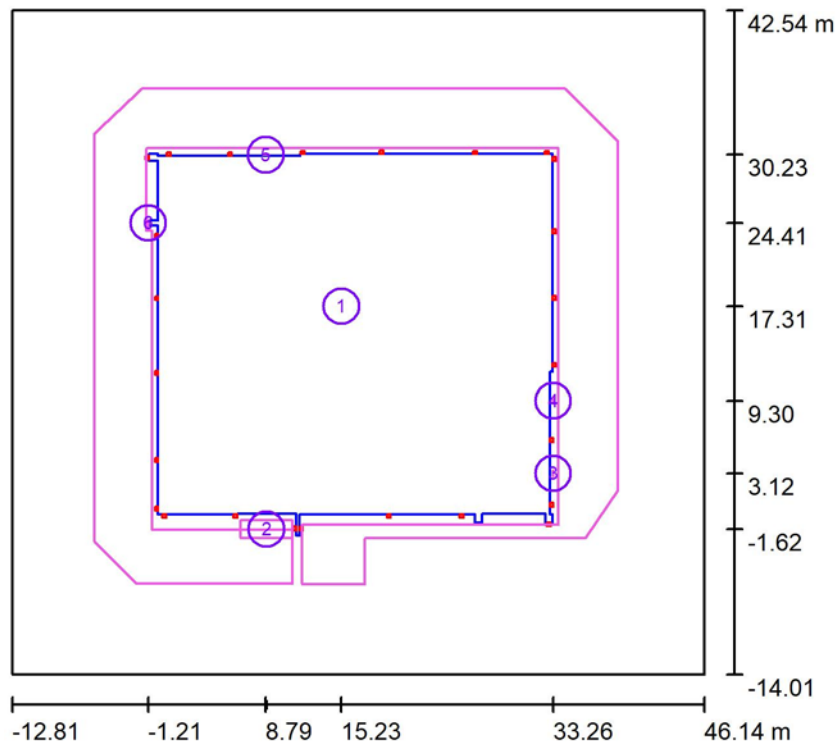
No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	0.146	-0.507	3.500	0.0	0.0	90.0
2	6.217	-0.507	3.500	0.0	0.0	90.0
3	11.244	-1.584	3.500	0.0	0.0	0.0
4	11.808	-1.584	3.500	0.0	0.0	0.0
5	19.273	-0.507	3.500	0.0	0.0	90.0
6	32.909	-1.230	3.500	0.0	0.0	90.0
7	25.441	-0.506	3.500	0.0	0.0	90.0
8	33.122	0.458	4.000	0.0	0.0	0.0
9	33.108	5.955	4.000	0.0	0.0	0.0
10	33.336	12.314	4.000	0.0	0.0	0.0
11	33.337	17.999	4.000	0.0	0.0	0.0
12	33.337	23.712	4.000	0.0	0.0	0.0
13	33.337	29.874	4.000	0.0	0.0	0.0
14	32.726	30.412	4.000	0.0	0.0	90.0
15	26.585	30.412	4.000	0.0	0.0	90.0
16	18.655	30.427	4.000	0.0	0.0	90.0
17	11.948	30.412	4.000	0.0	0.0	90.0
18	5.741	30.259	4.000	0.0	0.0	90.0
19	0.548	30.256	4.000	0.0	0.0	90.0
20	-1.306	29.976	4.000	0.0	0.0	0.0
21	-0.507	23.331	4.000	0.0	0.0	0.0
22	-0.507	17.987	4.000	0.0	0.0	0.0
23	-0.507	11.641	4.000	0.0	0.0	0.0
24	-0.507	4.257	4.000	0.0	0.0	0.0
25	-0.507	0.104	4.000	0.0	0.0	0.0

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General Lighting / Calculation surfaces (results overview)



Scale 1 : 644

Calculation Surface List

No.	Designation	Type	Grid	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u0	E_{min} / E_{max}
1	Perimeter	perpendicular	20 x 12	16	8.44	40	0.540	0.209
2	Entrance	perpendicular	16 x 8	41	32	52	0.778	0.617
3	Bat 1	perpendicular	1 x 1	0.98	0.98	0.98	1.000	1.000
4	Bat 2	perpendicular	1 x 1	1.00	1.00	1.00	1.000	1.000
5	Bird 1	perpendicular	1 x 1	0.97	0.97	0.97	1.000	1.000
6	Bird 2	perpendicular	1 x 1	0.69	0.69	0.69	1.000	1.000

Summary of Results

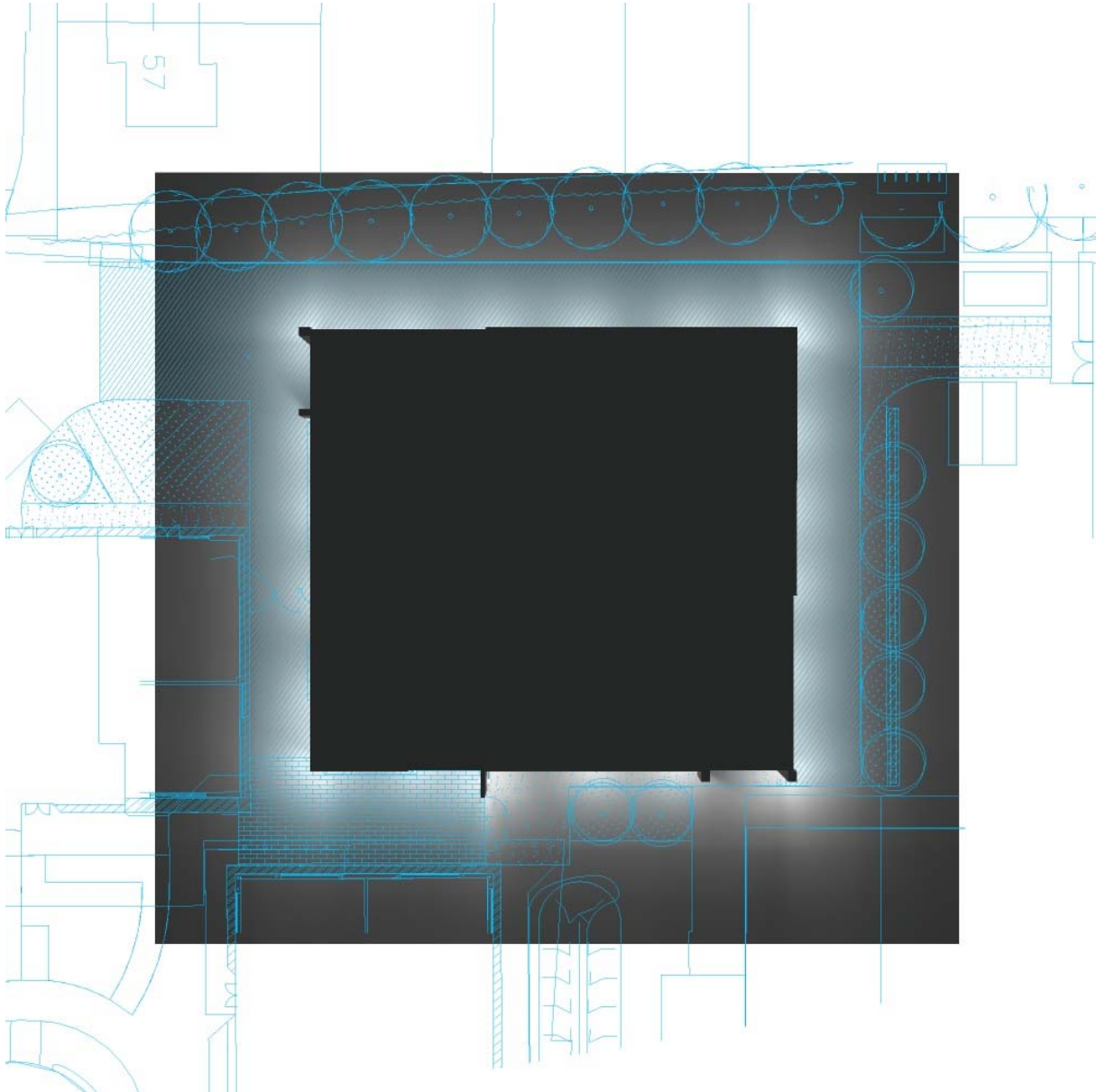
Type	Quantity	Average [lx]	Min [lx]	Max [lx]	u0	E_{min} / E_{max}
perpendicular	6	16	0.69	52	0.04	0.01

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General Lighting / 3D Rendering

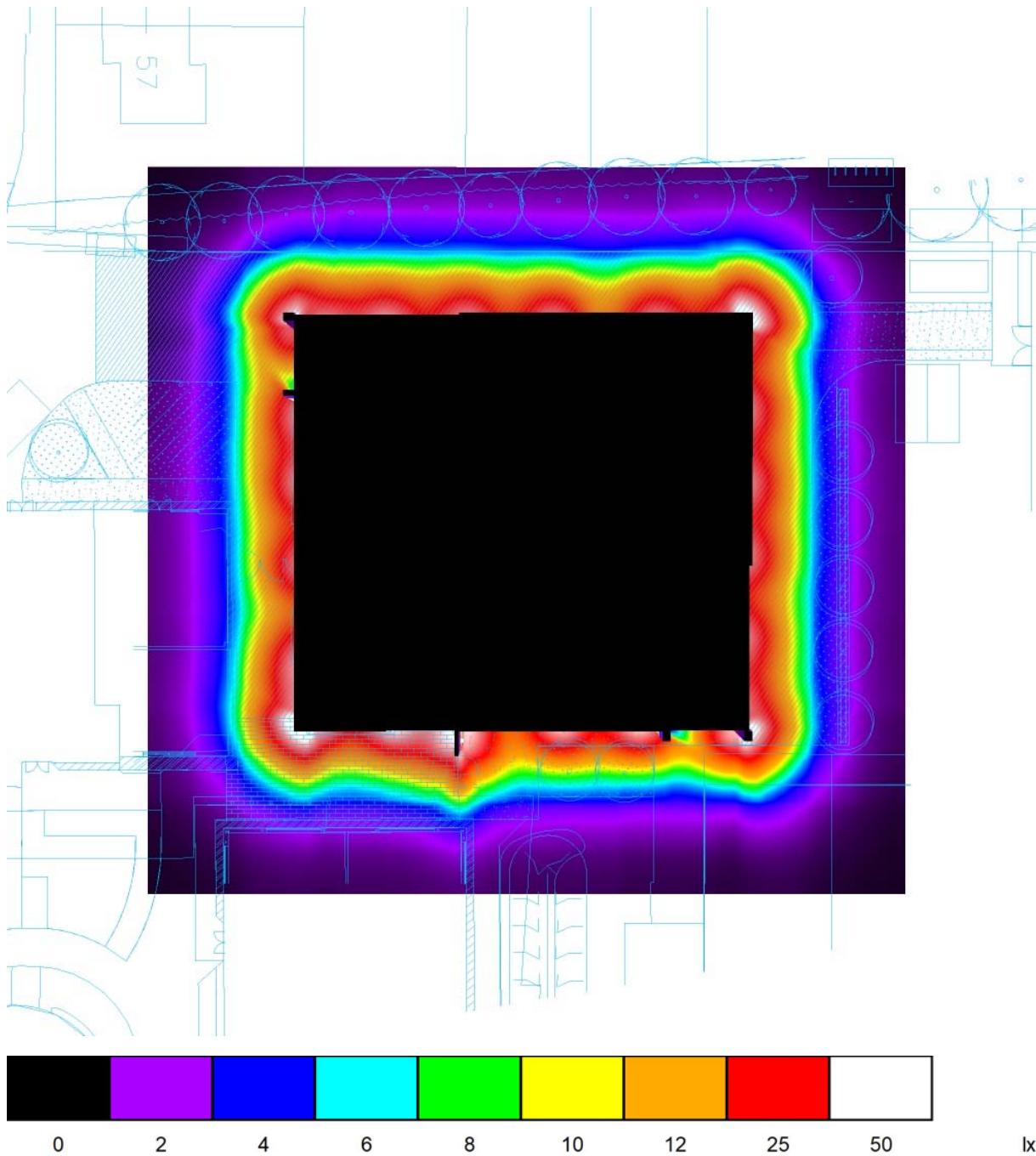


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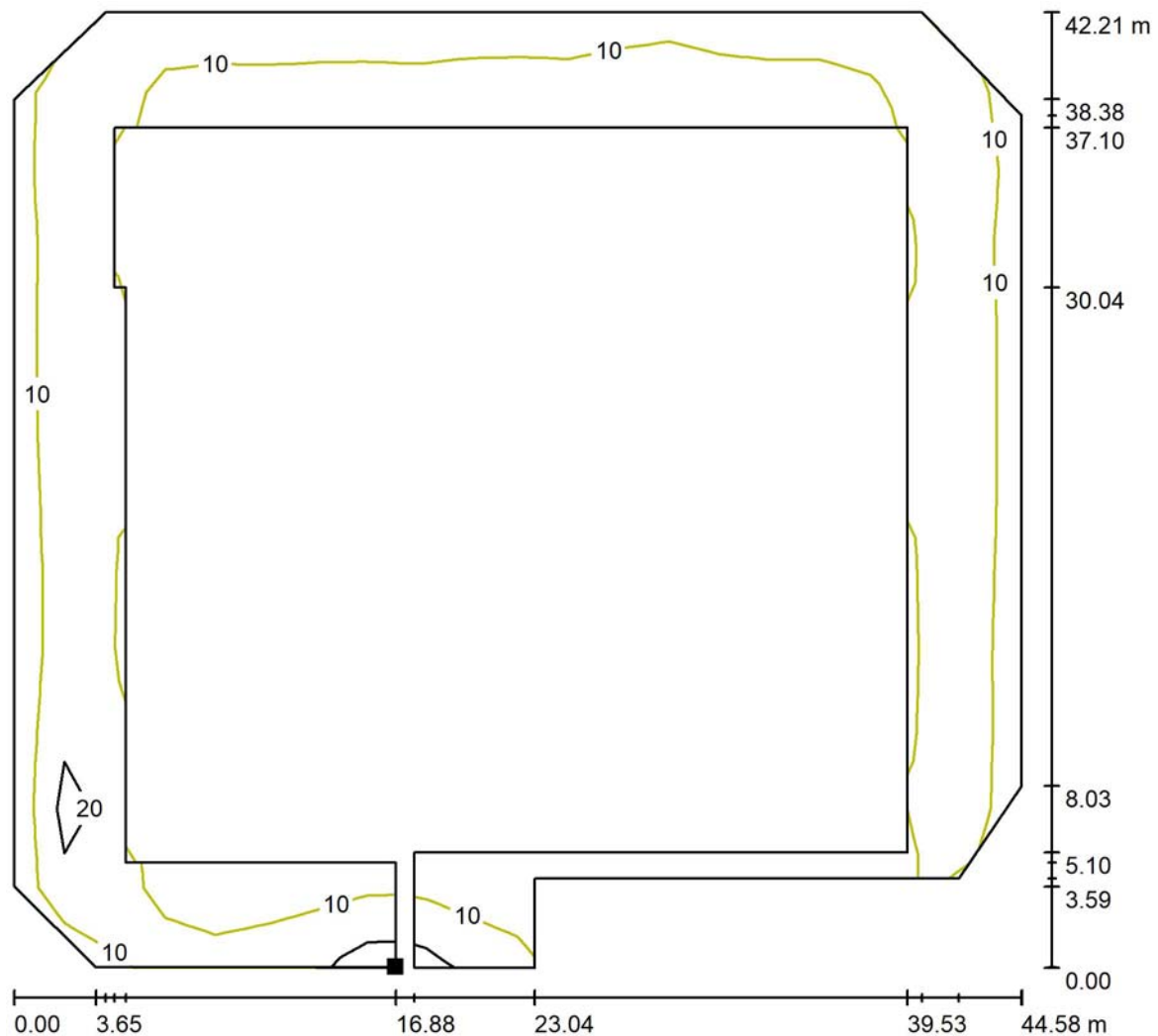
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General Lighting / False Color Rendering



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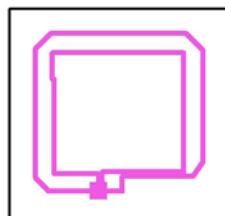
The Stable, Manor Farm Barns, Baines Lane, Seaton, Rutland, LE15
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e-Mail sales@easilume.co.uk**General Lighting / Perimeter / Isolines (E, Perpendicular)**

Values in Lux, Scale 1 : 331

Position of surface in external scene:

Marked point:

(11.062 m, -6.291 m, 0.000 m)



Grid: 20 x 12 Points

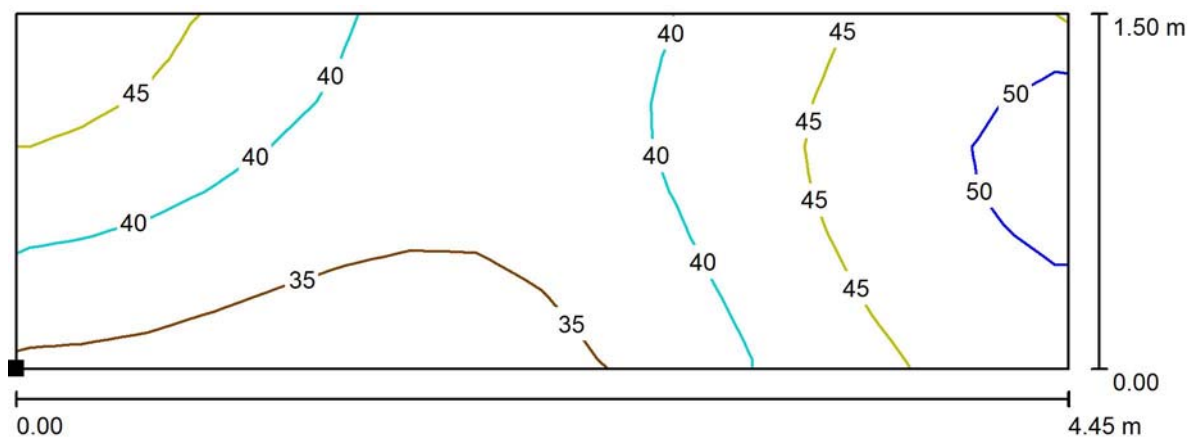
 E_{av} [lx]
16 E_{min} [lx]
8.44 E_{max} [lx]
40 u_0
0.540 E_{min} / E_{max}
0.209

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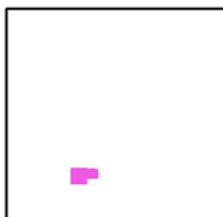
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General Lighting / Entrance / Isolines (E, Perpendicular)



Values in Lux, Scale 1 : 32

Position of surface in external scene:
Marked point:
(6.630 m, -2.374 m, 0.000 m)



Grid: 16 x 8 Points

E_{av} [lx]
41

E_{min} [lx]
32

E_{max} [lx]
52

u_0
0.778

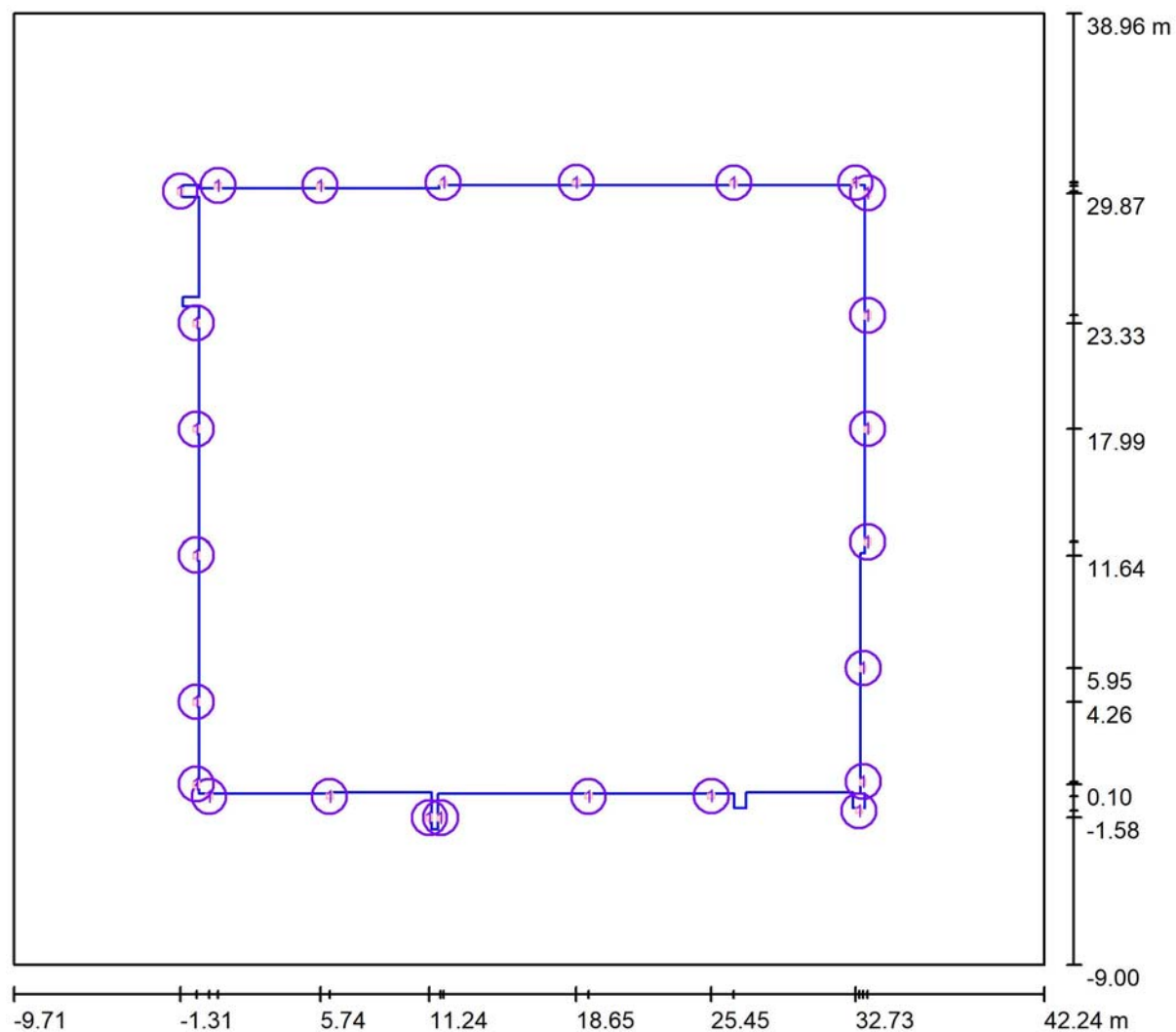
E_{min} / E_{max}
0.617

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Emergency Lighting / Luminaires (layout plan)



Scale 1 : 372

Luminaire Parts List

No.	Pieces	Designation
1	25	Easilume Ltd WLEX35 -13W-E (Type 1)*

*Modified Technical Specifications

EASILUME LTD

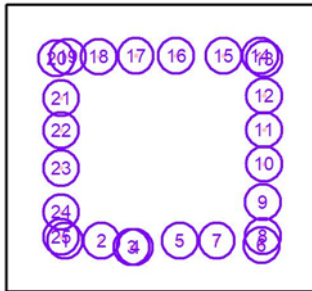
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Emergency Lighting / Luminaires (coordinates list)

Easilume Ltd WLEX35 -13W-E (Type 1)

418 lm, 3.0 W, 1 x 1 x User defined (Correction Factor 1.000).



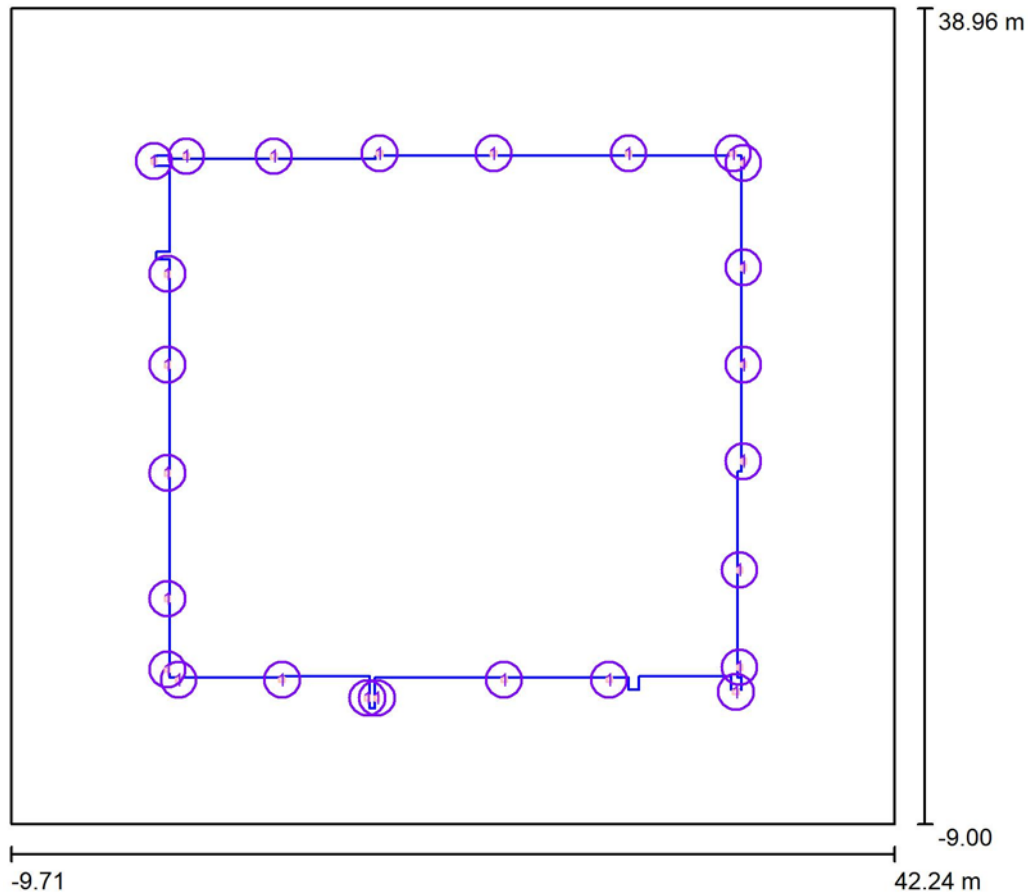
No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	0.146	-0.507	3.500	0.0	0.0	90.0
2	6.217	-0.507	3.500	0.0	0.0	90.0
3	11.244	-1.584	3.500	0.0	0.0	0.0
4	11.808	-1.584	3.500	0.0	0.0	0.0
5	19.273	-0.507	3.500	0.0	0.0	90.0
6	32.909	-1.230	3.500	0.0	0.0	90.0
7	25.450	-0.502	3.500	0.0	0.0	90.0
8	33.108	0.230	4.000	0.0	0.0	0.0
9	33.108	5.955	4.000	0.0	0.0	0.0
10	33.337	12.314	4.000	0.0	0.0	0.0
11	33.337	17.999	4.000	0.0	0.0	0.0
12	33.337	23.712	4.000	0.0	0.0	0.0
13	33.337	29.874	4.000	0.0	0.0	0.0
14	32.726	30.412	4.000	0.0	0.0	90.0
15	26.585	30.412	4.000	0.0	0.0	90.0
16	18.655	30.427	4.000	0.0	0.0	90.0
17	11.948	30.412	4.000	0.0	0.0	90.0
18	5.741	30.259	4.000	0.0	0.0	90.0
19	0.592	30.260	4.000	0.0	0.0	90.0
20	-1.306	29.976	4.000	0.0	0.0	0.0
21	-0.507	23.331	4.000	0.0	0.0	0.0
22	-0.507	17.987	4.000	0.0	0.0	0.0
23	-0.507	11.641	4.000	0.0	0.0	0.0
24	-0.507	4.257	4.000	0.0	0.0	0.0
25	-0.507	0.104	4.000	0.0	0.0	0.0

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Emergency Lighting / Emergency Light scene / Planning data



Light loss factor: 0.80, ULR (Upward Light Ratio): 1.5%

Scale 1:445

Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	25	Easilume Ltd WLEX35 -13W-E (Type 1)* (1.000)	418	418	3.0
Total:			10438	10450	75.0

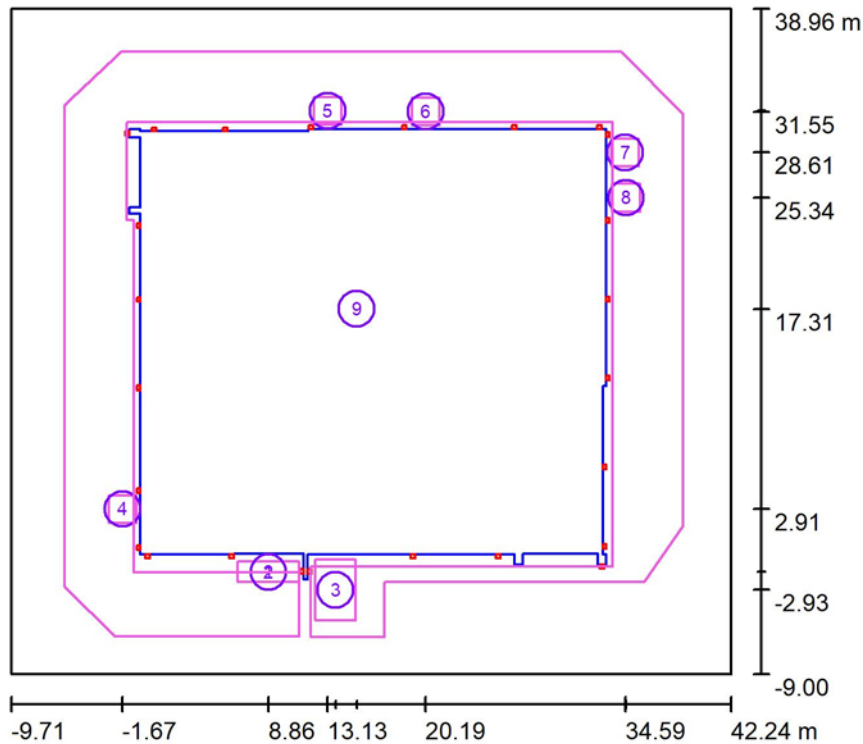
*Modified Technical Specifications

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Emergency Lighting / Emergency Light scene / Calculation surfaces (results overview)



Scale 1 : 546

Calculation Surface List

No.	Designation	Type	Grid	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u0	E_{min} / E_{max}
1	Entrance	perpendicular	16 x 8	9.78	7.61	12	0.778	0.617
2	Entrance	perpendicular	16 x 8	9.78	7.61	12	0.778	0.617
3	Em 1	perpendicular	6 x 8	5.57	2.37	10	0.426	0.229
4	Em 2	perpendicular	8 x 8	8.65	6.72	10	0.777	0.657
5	Em 3	perpendicular	8 x 8	6.72	4.63	8.94	0.689	0.518
6	Em 4	perpendicular	8 x 8	5.93	3.89	8.29	0.655	0.469
7	Em 5	perpendicular	8 x 8	6.43	4.56	8.44	0.709	0.540
8	Em 6	perpendicular	8 x 8	6.27	4.49	8.55	0.716	0.526
9	Perimeter	perpendicular	20 x 12	3.71	2.01	9.60	0.542	0.209

Summary of Results

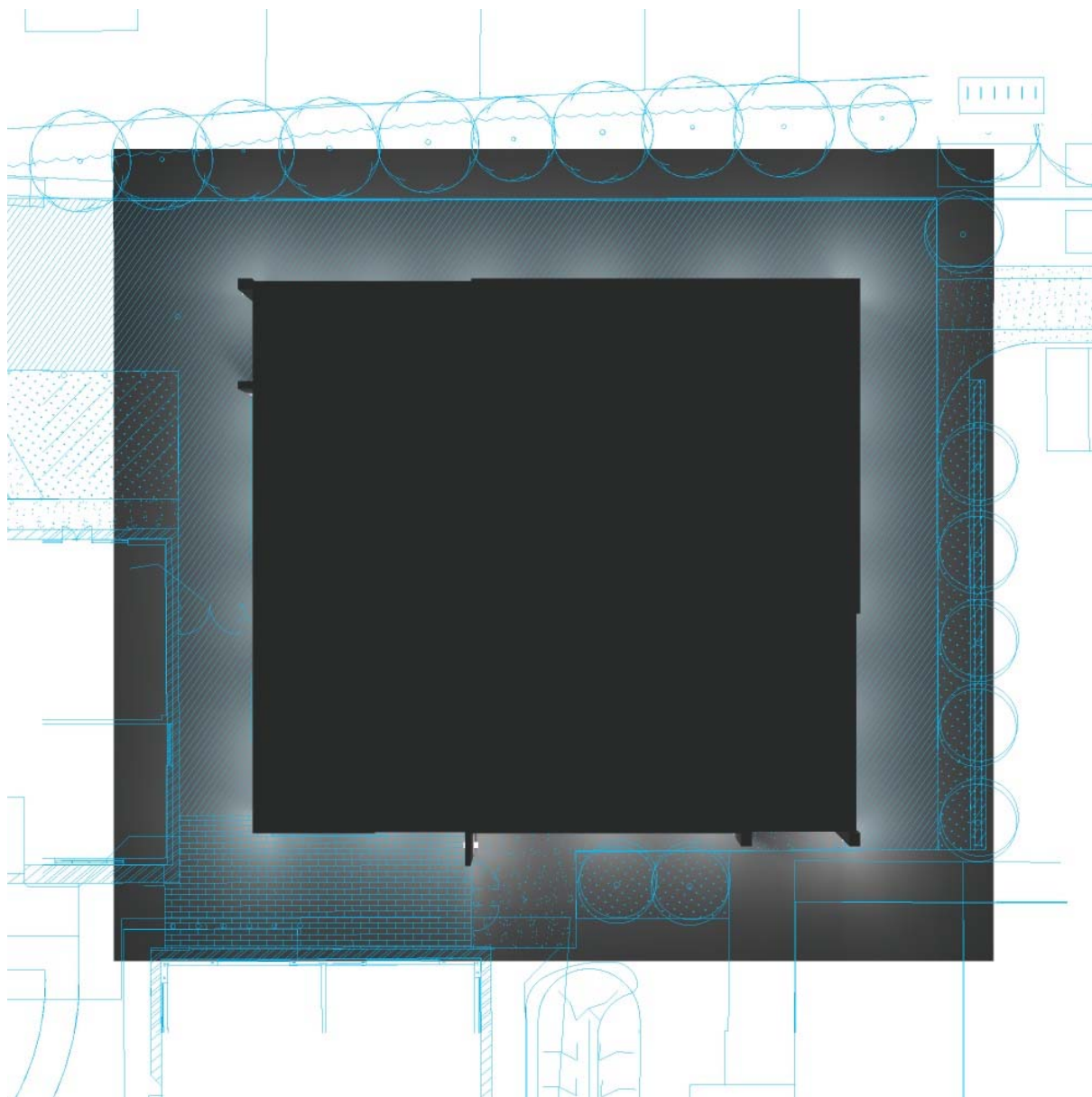
Type	Quantity	Average [lx]	Min [lx]	Max [lx]	u0	E_{min} / E_{max}
perpendicular	9	3.95	2.01	12	0.51	0.16

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Emergency Lighting / Emergency Light scene / 3D Rendering



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Emergency Lighting / Emergency Light scene / False Color Rendering

