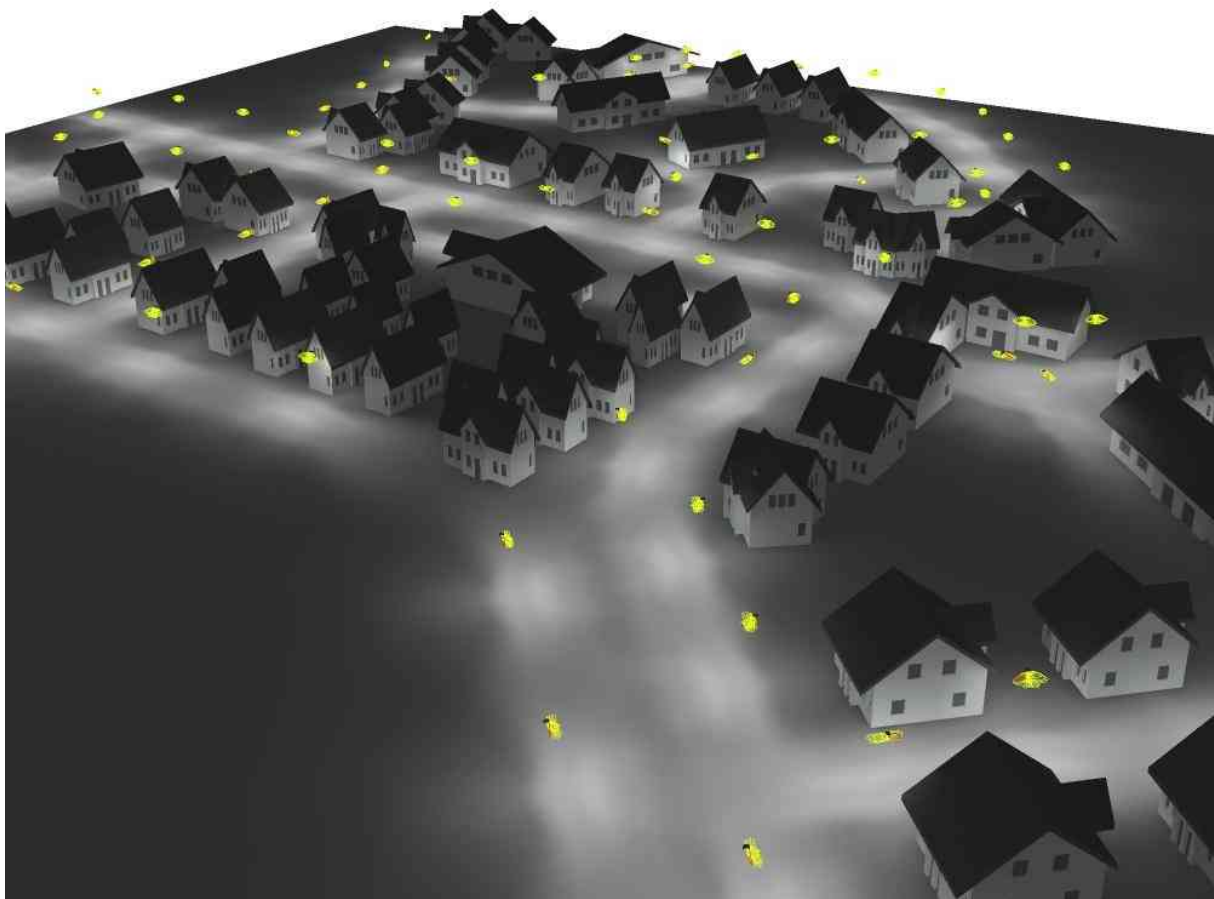


1012052 - Warblington Meadows, Emsworth



ISSUE HISTORY

-	03/03/2017	ISSUE FOR PLANNING	MA	EN	CO
ISSUE	DATE	DESCRIPTION	By	Chkd	Verfd



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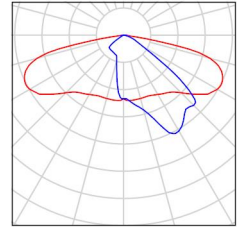
1012052 - Warblington Meadows, Emsworth

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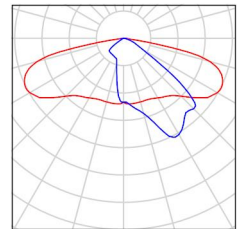
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1012052 - Warblington Meadows, Emsworth / Luminaire parts list

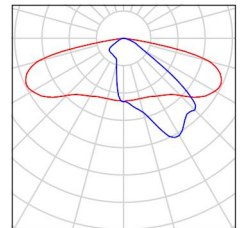
5 Pieces TRILUX Cuvia 40-AB2L-LRA/1000-740 2G1S ET
 Article No.: Cuvia 40-AB2L-LRA/1000-740 2G1S
 Luminous flux (Luminaire): 1000 lm
 Luminous flux (Lamps): 1000 lm
 Luminaire Wattage: 10.0 W
 Luminaire classification according to CIE: 100
 CIE flux code: 35 70 95 100 100
 Fitting: 1 x User defined (Correction Factor 1.000).



21 Pieces TRILUX Cuvia 40-AB2L-LRA/1500-740 2G1S ET
 Article No.: Cuvia 40-AB2L-LRA/1500-740 2G1S
 Luminous flux (Luminaire): 1500 lm
 Luminous flux (Lamps): 1500 lm
 Luminaire Wattage: 14.0 W
 Luminaire classification according to CIE: 100
 CIE flux code: 35 70 95 100 100
 Fitting: 1 x User defined (Correction Factor 1.000).



93 Pieces TRILUX Cuvia 40-AB2L-LRA/2400-740 4G1S ET
 Article No.: Cuvia 40-AB2L-LRA/2400-740 4G1S
 Luminous flux (Luminaire): 2400 lm
 Luminous flux (Lamps): 2400 lm
 Luminaire Wattage: 22.0 W
 Luminaire classification according to CIE: 100
 CIE flux code: 35 70 95 100 100
 Fitting: 1 x User defined (Correction Factor 1.000).



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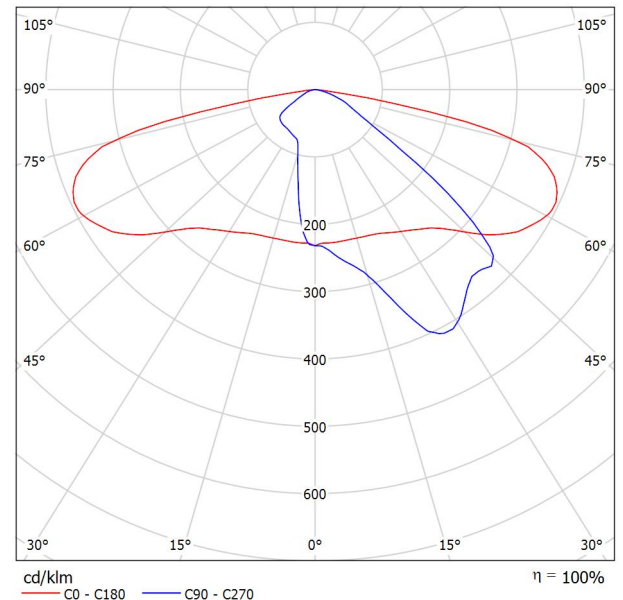
TRILUX Cuvia 40-AB2L-LRA/2400-740 4G1S ET / Luminaire Data Sheet



Luminaire classification according to CIE: 100
 CIE flux code: 35 70 95 100 100

Post-top or bracket-mounted luminaire with flat cover. Post-top and bracket-mounted luminaire for mast spigot Ø 76 mm. Inclination angle for post-top mounting 0°, 10°, for bracket mounting -10°, 0° adjustable. Mast mounting via two stainless steel fixing screws in accordance with EN 60598-2-3. Also suitable for mounting to masts with spigot Ø 42, 48 and 60 mm via reduction pieces to be ordered separately. With asymmetrical wide light intensity distribution. Optical system with Multi-Lens Technology. With PMMA cover, clear. Retrofitting a rear shielding is possible, available as accessory to be ordered separately. Further beam characteristics are available for flexible adaptation to customer-specific lighting tasks. Luminaire luminous flux 2400 lm, connected load 22 W, luminous efficiency of luminaire 109 lm/W. Light colour neutral white, colour temperature 4000 K, colour rendering index Ra > 70. Service life L80(tq 25 °C) = 100,000 h. The modular luminaire consists of the basis module and optical module. The mechanical and electrical connection of the modules is achieved without use of tools. With sulphur-free sealings. Luminaire body of die-cast aluminium. Colour anthracite, similar to DB 703. Further colour variants possible from RAL or DB colour codes. Windage area Fw 0,040 m². Weight includes connection cable 7,1 kg. Safety class II, protection rating IP66. Electrical block with all electrical components integrated in base unit and replaceable. With 3-pole terminal to 2.5 mm² and insulated terminal point for earth conductor. M20 gland as cable strain relief for cable diameter 6 mm to 12 mm. With connected 8,000 mm connection cable. With electronic transformer, switchable. Configurable ballast with luminous flux stabilising (CLO). Connected load at the end of service life: 25 W. With self-sufficient power reduction via integral evaluation electronics. Reduction of luminaire luminous flux to 50 % for a time period of 7 hours (-2 h/+5 h).

Luminous emittance 1:

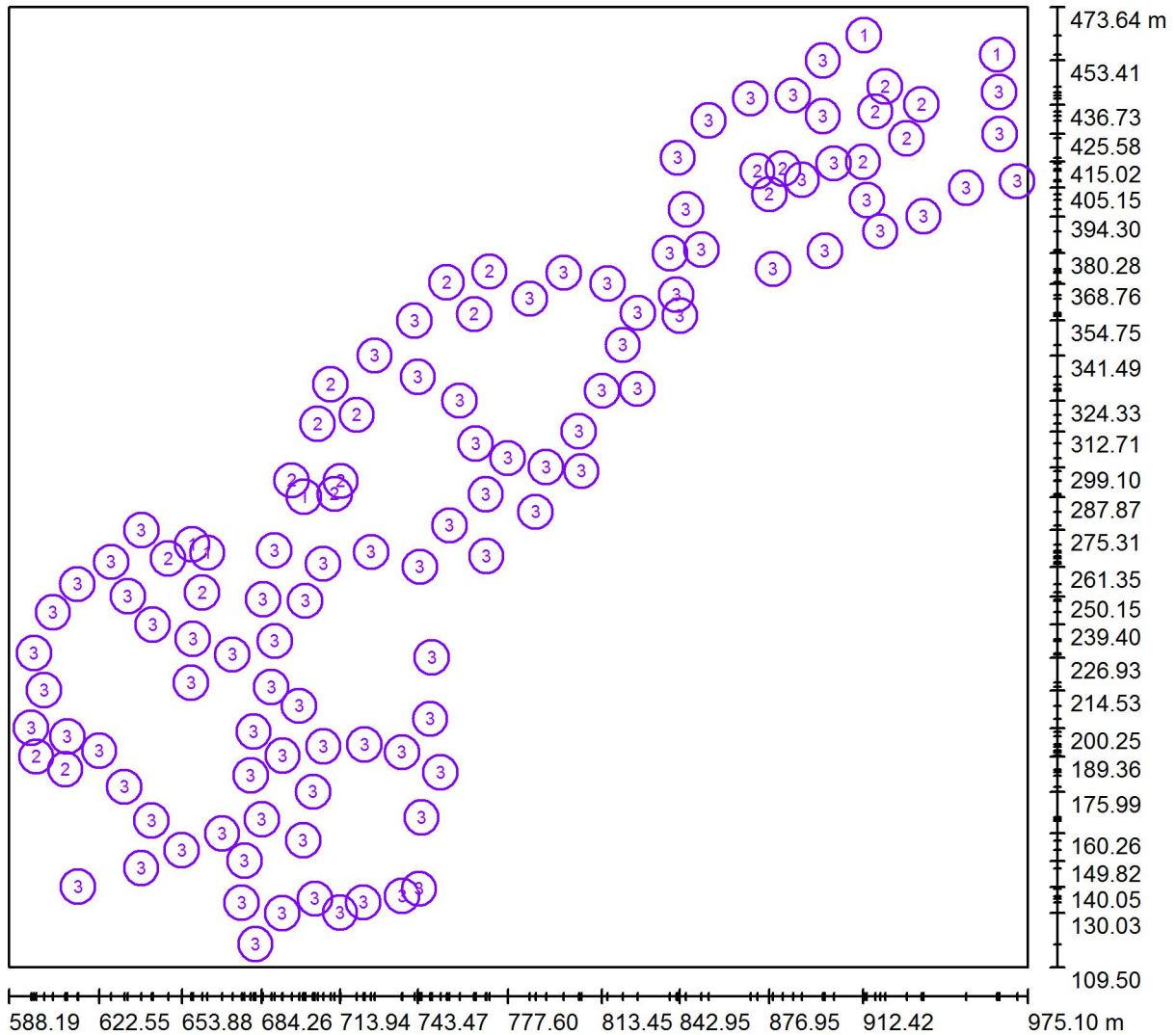


Due to missing symmetry properties, no UGR table can be displayed for this luminaire.



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Exterior Scene 1 / Luminaires (layout plan)



Scale 1 : 2767

Luminaire Parts List

No.	Pieces	Designation
1	5	TRILUX Cuvia 40-AB2L-LRA/1000-740 2G1S ET
2	21	TRILUX Cuvia 40-AB2L-LRA/1500-740 2G1S ET
3	93	TRILUX Cuvia 40-AB2L-LRA/2400-740 4G1S ET

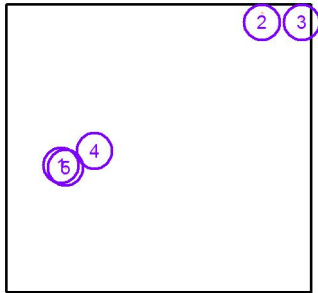


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Exterior Scene 1 / Luminaires (coordinates list)

TRILUX Cuvia 40-AB2L-LRA/1000-740 2G1S ET

1000 lm, 10.0 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	657.807	269.810	6.000	9.4	-3.5	-138.6
2	912.838	462.974	6.000	0.0	0.0	-151.6
3	963.427	455.597	6.000	0.0	0.0	109.8
4	700.221	287.873	6.000	0.0	0.0	-75.9
5	663.531	266.737	6.000	-0.4	10.0	-50.0

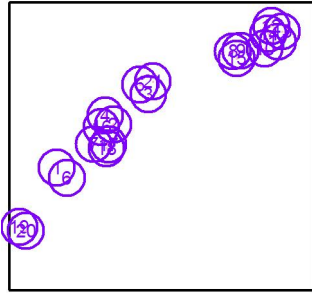


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Exterior Scene 1 / Luminaires (coordinates list)

TRILUX Cuvia 40-AB2L-LRA/1500-740 2G1S ET

1500 lm, 14.0 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	648.691	264.518	6.000	0.0	0.0	-47.9
2	720.300	319.000	6.000	0.0	0.0	37.5
3	764.924	357.222	6.000	0.0	0.0	40.7
4	710.331	330.544	6.000	0.0	0.0	-140.5
5	754.421	369.292	6.000	0.0	0.0	-137.6
6	661.640	251.624	6.000	10.0	0.0	42.4
7	695.571	294.204	6.000	0.0	0.0	-48.3
8	872.326	411.549	6.000	0.0	0.0	-153.3
9	882.068	412.368	6.000	10.0	0.0	114.9
10	912.422	415.019	6.000	0.0	0.0	24.7
11	929.000	423.900	6.000	10.0	0.0	27.8
12	920.817	443.534	6.000	10.0	0.0	-157.2
13	934.629	436.731	6.000	10.0	0.0	107.8
14	917.132	434.019	6.000	9.9	1.0	-73.2
15	876.949	402.681	6.000	0.0	0.0	26.7
16	705.423	315.661	6.000	0.0	0.0	-49.0
17	714.201	293.943	6.000	10.0	0.0	40.1
18	711.922	288.987	6.000	10.0	0.0	84.6
19	598.654	189.365	6.000	0.0	0.0	-26.6
20	609.619	184.489	6.000	0.0	0.0	-26.6
21	770.650	373.371	6.000	10.0	0.0	131.0

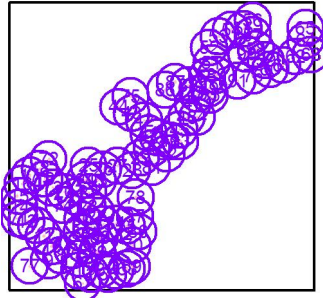


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Exterior Scene 1 / Luminaires (coordinates list)

TRILUX Cuvia 40-AB2L-LRA/2400-740 4G1S ET

2400 lm, 22.0 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	676.616	134.001	6.000	0.0	0.0	-95.3
2	691.974	130.025	6.000	0.0	0.0	10.0
3	704.383	135.495	6.000	0.0	0.0	3.3
4	722.800	134.100	6.000	0.0	0.0	-10.8
5	677.678	149.821	6.000	0.0	0.0	-92.9
6	684.257	165.625	6.000	0.0	0.0	86.0
7	669.205	160.264	6.000	0.0	0.0	177.9
8	653.876	153.906	6.000	0.0	0.0	7.9
9	638.473	147.055	6.000	0.0	0.0	27.0
10	642.409	165.085	6.000	0.0	0.0	112.0
11	632.039	177.915	6.000	0.0	0.0	-65.4
12	622.554	191.625	6.000	0.0	0.0	154.7
13	610.431	197.005	6.000	0.0	0.0	157.8
14	601.648	214.529	6.000	0.0	0.0	86.8
15	597.764	228.615	6.000	0.0	0.0	-95.3
16	604.984	244.107	6.000	0.0	0.0	-126.7
17	614.233	254.806	6.000	0.0	0.0	-144.3
18	627.054	263.184	6.000	0.0	0.0	-137.3
19	633.356	250.151	6.000	0.0	0.0	-48.3
20	658.059	234.001	6.000	0.0	0.0	162.4
21	673.114	228.052	6.000	0.0	0.0	-3.5
22	689.138	233.210	6.000	0.0	0.0	86.1
23	687.873	215.726	6.000	0.0	0.0	86.1
24	684.727	248.963	6.000	0.0	0.0	-93.6
25	689.019	267.469	6.000	0.0	0.0	-135.6
26	707.491	262.494	6.000	0.0	0.0	-3.3
27	725.757	266.923	6.000	0.0	0.0	176.2
28	744.247	261.350	6.000	0.0	0.0	21.8



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Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
29	755.476	277.009	6.000	0.0	0.0	-140.1
30	681.120	198.826	6.000	0.0	0.0	-94.9
31	692.112	189.726	6.000	0.0	0.0	-5.6
32	680.043	182.138	6.000	0.0	0.0	-95.8
33	707.665	193.240	6.000	0.0	0.0	175.6
34	723.277	193.986	6.000	0.0	0.0	175.4
35	737.421	191.054	6.000	0.0	0.0	177.5
36	752.090	183.412	6.000	0.0	0.0	86.6
37	748.185	203.622	6.000	0.0	0.0	-91.6
38	769.282	288.801	6.000	0.0	0.0	-139.4
39	777.604	302.599	6.000	0.0	0.0	135.4
40	792.133	299.099	6.000	0.0	0.0	39.7
41	765.450	308.165	6.000	0.0	0.0	-48.9
42	759.341	324.326	6.000	0.0	0.0	131.2
43	743.473	333.464	6.000	0.0	0.0	-49.9
44	727.037	341.487	6.000	0.0	0.0	-137.6
45	804.594	312.708	6.000	0.0	0.0	41.5
46	813.449	328.121	6.000	0.0	0.0	-117.7
47	821.279	345.434	6.000	0.0	0.0	85.3
48	827.026	357.697	6.000	0.0	0.0	24.7
49	841.589	364.525	6.000	0.0	0.0	49.8
50	839.203	380.285	6.000	0.0	0.0	-93.7
51	845.251	396.937	6.000	0.0	0.0	85.2
52	842.136	416.525	6.000	0.0	0.0	-101.0
53	853.853	430.654	6.000	0.0	0.0	-149.2
54	869.726	439.002	6.000	0.0	0.0	-150.1
55	885.921	440.107	6.000	0.0	0.0	-15.6
56	897.245	453.406	6.000	0.0	0.0	-151.7
57	897.268	432.361	6.000	0.0	0.0	119.6
58	901.361	414.359	6.000	0.0	0.0	-63.0
59	913.922	400.436	6.000	0.0	0.0	105.3
60	919.052	388.650	6.000	0.0	0.0	18.7
61	935.477	394.301	6.000	0.0	0.0	18.7
62	951.553	405.145	6.000	0.0	0.0	-160.8
63	970.958	407.618	6.000	0.0	0.0	45.6
64	964.347	425.583	6.000	0.0	0.0	-72.8
65	964.095	441.427	6.000	0.0	0.0	118.8
66	713.939	130.192	6.000	0.0	0.0	73.8



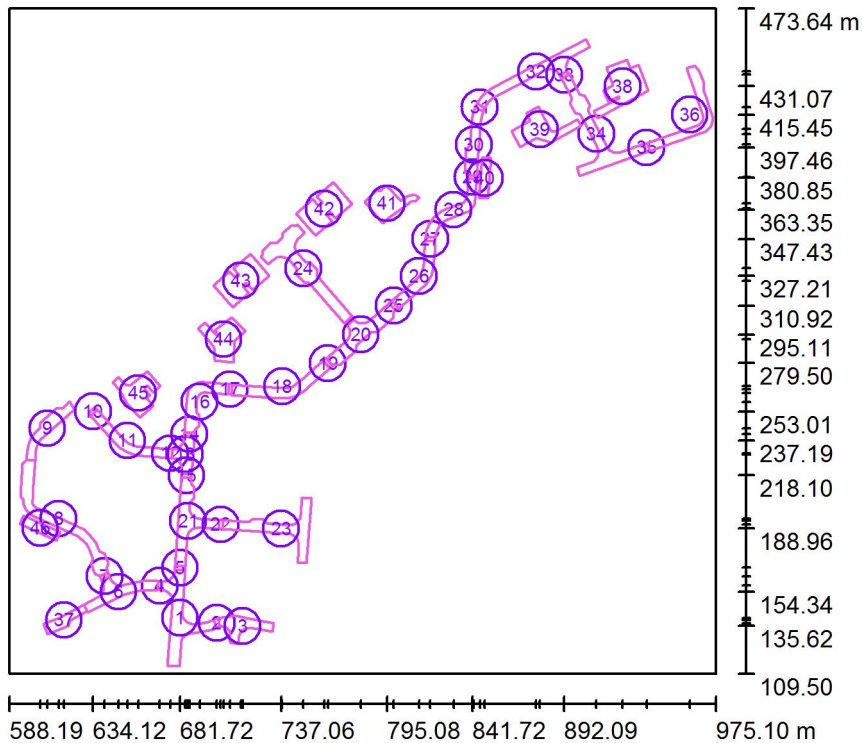
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Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
67	681.839	118.195	6.000	0.0	0.0	85.6
68	737.527	136.471	6.000	0.0	0.0	170.9
69	743.976	139.204	6.000	0.0	0.0	-99.3
70	744.842	166.322	6.000	0.0	0.0	-105.7
71	596.711	200.255	6.000	0.0	0.0	-81.6
72	638.530	275.306	6.000	0.0	0.0	-137.3
73	642.900	239.400	6.000	0.0	0.0	-48.3
74	657.402	217.415	6.000	0.0	0.0	67.4
75	742.283	354.754	6.000	0.0	0.0	-137.6
76	898.020	381.215	6.000	0.0	0.0	18.7
77	614.521	140.049	6.000	0.0	0.0	-155.6
78	748.737	226.932	6.000	0.0	0.0	-95.4
79	700.000	157.600	6.000	0.0	0.0	-96.7
80	703.690	175.986	6.000	0.0	0.0	85.0
81	769.476	265.390	6.000	0.0	0.0	41.6
82	788.202	282.153	6.000	0.0	0.0	41.6
83	805.641	297.661	6.000	0.0	0.0	41.6
84	826.787	328.827	6.000	0.0	0.0	83.5
85	842.950	356.565	6.000	0.0	0.0	18.5
86	785.951	363.050	4.000	10.0	0.0	-49.5
87	798.837	372.915	4.000	10.0	0.0	130.5
88	815.495	368.762	6.000	0.0	0.0	141.8
89	851.165	381.671	6.000	0.0	0.0	85.6
90	889.238	408.167	6.000	0.0	0.0	-153.2
91	878.344	374.291	6.000	0.0	0.0	6.8
92	698.386	208.551	6.000	0.0	0.0	-95.6
93	700.796	248.423	6.000	0.0	0.0	-93.4

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Exterior Scene 1 / Calculation surfaces (results overview)



Scale 1 : 4144

Calculation Surface List

No.	Designation	Type	Grid	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0	E_{min} / E_{max}
1	Calculation Surface 12	perpendicular	128 x 128	12	5.91	20	0.489	0.297
2	Calculation Surface 13	perpendicular	16 x 8	15	8.31	18	0.566	0.470
3	Calculation Surface 14	perpendicular	128 x 128	13	4.55	18	0.352	0.247
4	Calculation Surface 15	perpendicular	8 x 16	14	11	16	0.836	0.702
5	Calculation Surface 16	perpendicular	16 x 8	14	12	17	0.804	0.665
6	Calculation Surface 17	perpendicular	128 x 128	11	4.67	17	0.409	0.271
7	Calculation Surface 19	perpendicular	16 x 8	14	12	17	0.846	0.715
8	Calculation Surface 21	perpendicular	128 x 128	13	4.08	20	0.318	0.200
9	Calculation Surface 25	perpendicular	128 x 64	13	5.90	18	0.464	0.322



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Exterior Scene 1 / Calculation surfaces (results overview)

Calculation Surface List

No.	Designation	Type	Grid	E _{av} [lx]	E _{min} [lx]	E _{max} [lx]	u0	E _{min} / E _{max}
10	Calculation Surface 27	perpendicular	16 x 8	14	12	17	0.843	0.719
11	Calculation Surface 28	perpendicular	128 x 64	13	6.58	19	0.513	0.340
12	Calculation Surface 29	perpendicular	16 x 8	12	8.48	15	0.714	0.576
13	Calculation Surface 30	perpendicular	32 x 32	12	5.12	19	0.443	0.267
14	Calculation Surface 31	perpendicular	4 x 8	9.88	8.24	11	0.834	0.766
15	Calculation Surface 32	perpendicular	16 x 8	13	10	16	0.785	0.639
16	Calculation Surface 33	perpendicular	64 x 64	11	5.54	17	0.519	0.317
17	Calculation Surface 34	perpendicular	16 x 8	14	11	17	0.763	0.636
18	Calculation Surface 35	perpendicular	128 x 64	11	5.89	17	0.556	0.349
19	Calculation Surface 36	perpendicular	8 x 4	8.32	7.12	9.80	0.856	0.727
20	Calculation Surface 37	perpendicular	128 x 64	10	5.18	18	0.505	0.285
21	Calculation Surface 38	perpendicular	128 x 128	12	4.07	20	0.328	0.206
22	Calculation Surface 39	perpendicular	16 x 8	15	13	18	0.832	0.713
23	Calculation Surface 40	perpendicular	128 x 128	11	5.06	19	0.442	0.267
24	Calculation Surface 41	perpendicular	128 x 128	10	3.36	19	0.321	0.181
25	Calculation Surface 43	perpendicular	16 x 8	9.06	6.91	11	0.763	0.638
26	Calculation Surface 44	perpendicular	128 x 64	11	4.49	17	0.410	0.259
27	Calculation Surface 45	perpendicular	16 x 8	13	9.88	16	0.754	0.620
28	Calculation Surface 46	perpendicular	128 x 64	13	5.63	20	0.428	0.287
29	Calculation Surface 47	perpendicular	8 x 16	16	12	19	0.765	0.647
30	Calculation Surface 48	perpendicular	128 x 32	11	3.76	18	0.342	0.213
31	Calculation Surface 49	perpendicular	8 x 16	12	9.84	15	0.814	0.638
32	Calculation Surface 50	perpendicular	128 x 64	11	5.22	19	0.474	0.274
33	Calculation Surface 51	perpendicular	4 x 8	9.29	7.31	11	0.786	0.650
34	Calculation Surface 52	perpendicular	128 x 128	11	4.23	21	0.374	0.201
35	Calculation Surface 53	perpendicular	16 x 8	13	11	16	0.814	0.669
36	Calculation Surface 54	perpendicular	128 x 128	11	4.92	17	0.461	0.288
37	Calculation Surface 55	perpendicular	64 x 16	7.84	3.70	15	0.471	0.242
38	Calculation Surface 56 (CP)	perpendicular	64 x 64	7.86	2.23	14	0.284	0.164
39	Calculation Surface 57 (CP)	perpendicular	64 x 64	9.37	2.47	17	0.264	0.147



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Exterior Scene 1 / Calculation surfaces (results overview)

Calculation Surface List

No.	Designation	Type	Grid	E _{av} [lx]	E _{min} [lx]	E _{max} [lx]	u0	E _{min} / E _{max}
40	Calculation Surface 58 (CP)	perpendicular	16 x 64	11	3.53	19	0.324	0.185
41	Calculation Surface 59 (CP)	perpendicular	128 x 128	9.88	3.01	26	0.304	0.117
42	Calculation Surface 60 (CP)	perpendicular	64 x 64	6.12	1.73	10	0.283	0.166
43	Calculation Surface 61 (CP)	perpendicular	64 x 64	6.35	1.75	12	0.276	0.145
44	Calculation Surface 62 (CP)	perpendicular	64 x 64	8.28	2.60	13	0.314	0.194
45	Calculation Surface 63 (CP)	perpendicular	64 x 64	7.36	2.25	13	0.306	0.172
46	Calculation Surface 64 (CP)	perpendicular	64 x 16	13	5.96	19	0.458	0.319

Summary of Results

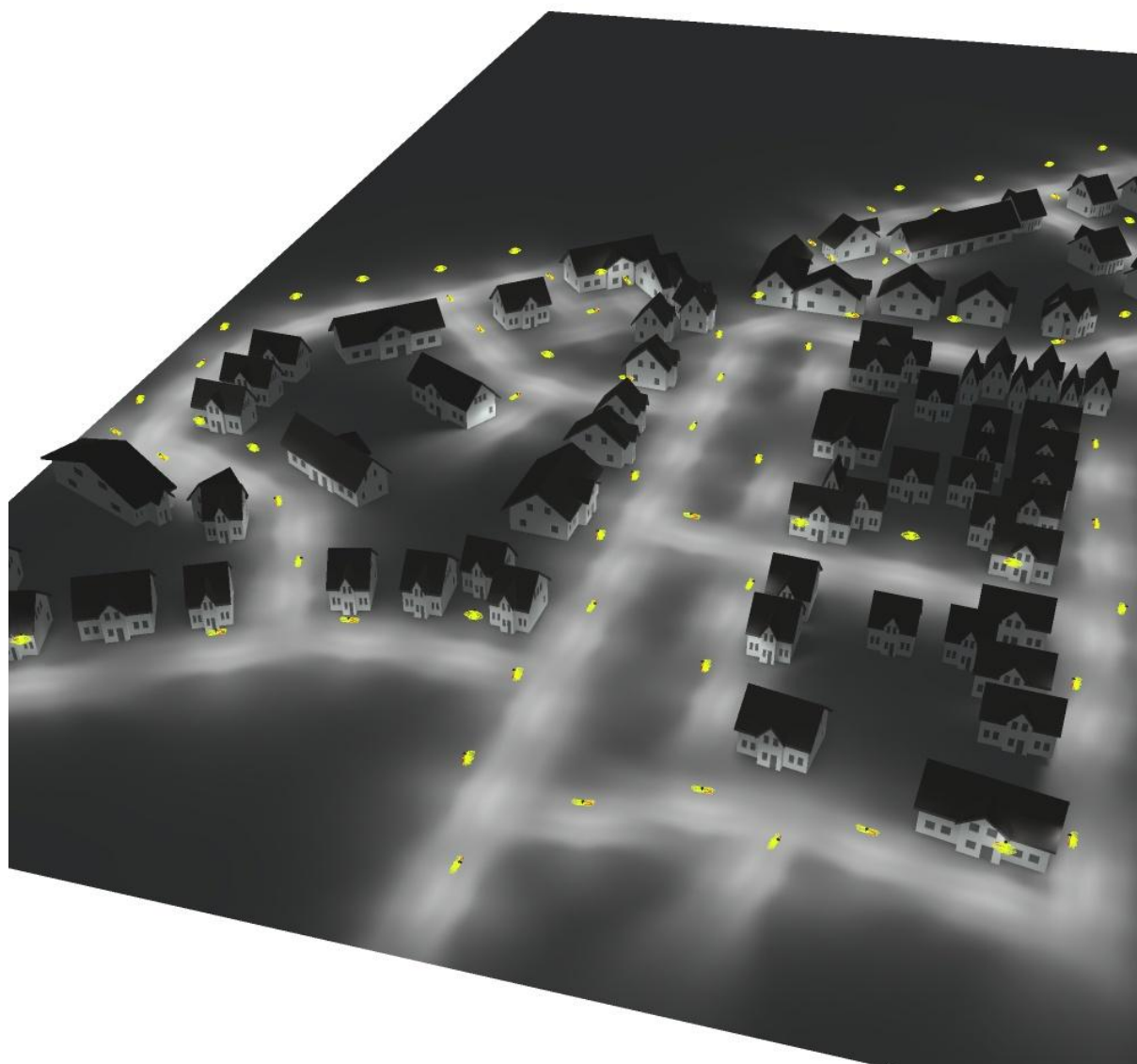
Type	Quantity	Average [lx]	Min [lx]	Max [lx]	u0	E _{min} / E _{max}
perpendicular	46	11	1.73	26	0.16	0.07

3D and False Colour Rendering Images



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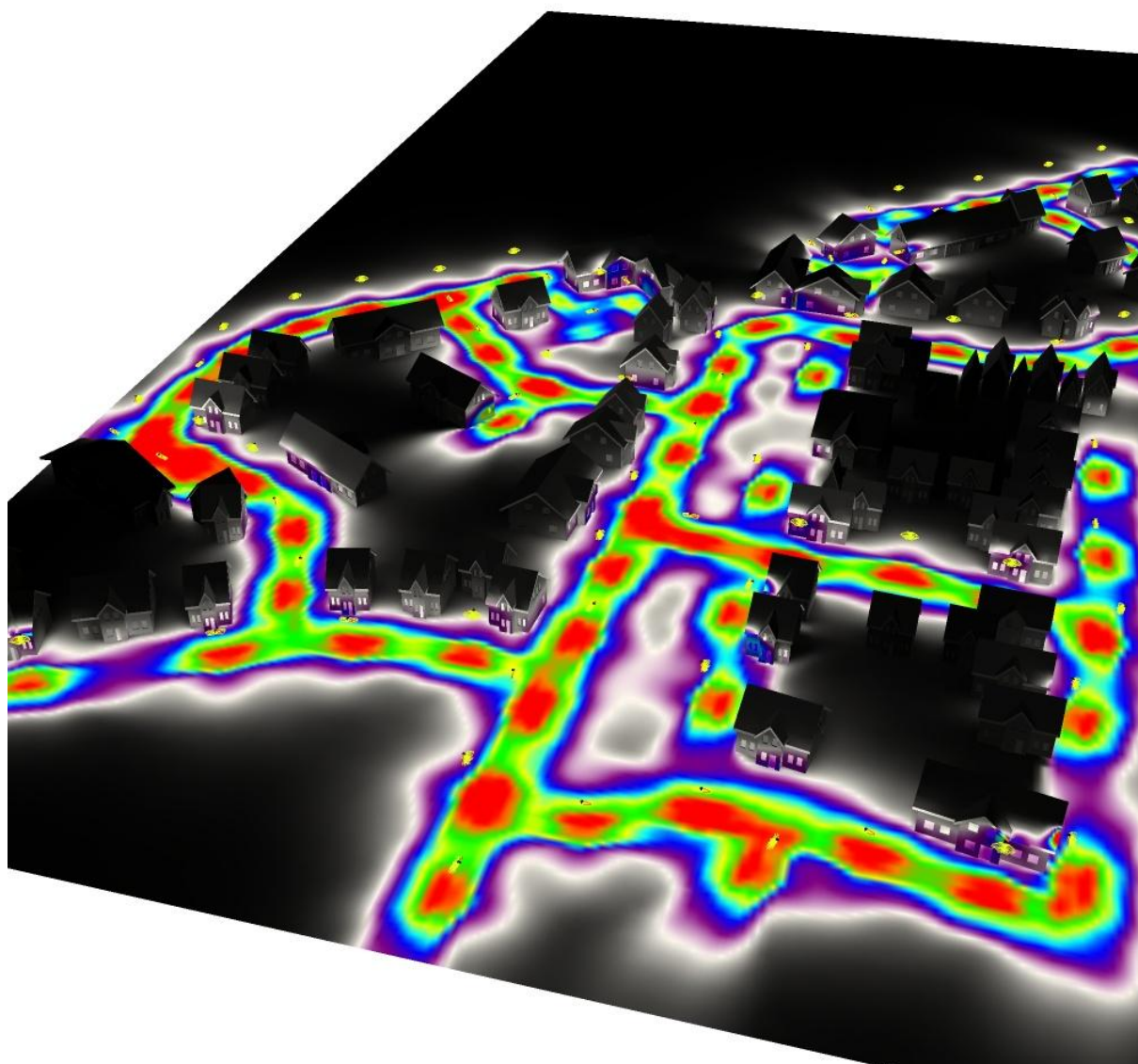
Exterior Scene 1 / 3D Rendering





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Exterior Scene 1 / False Colour Rendering

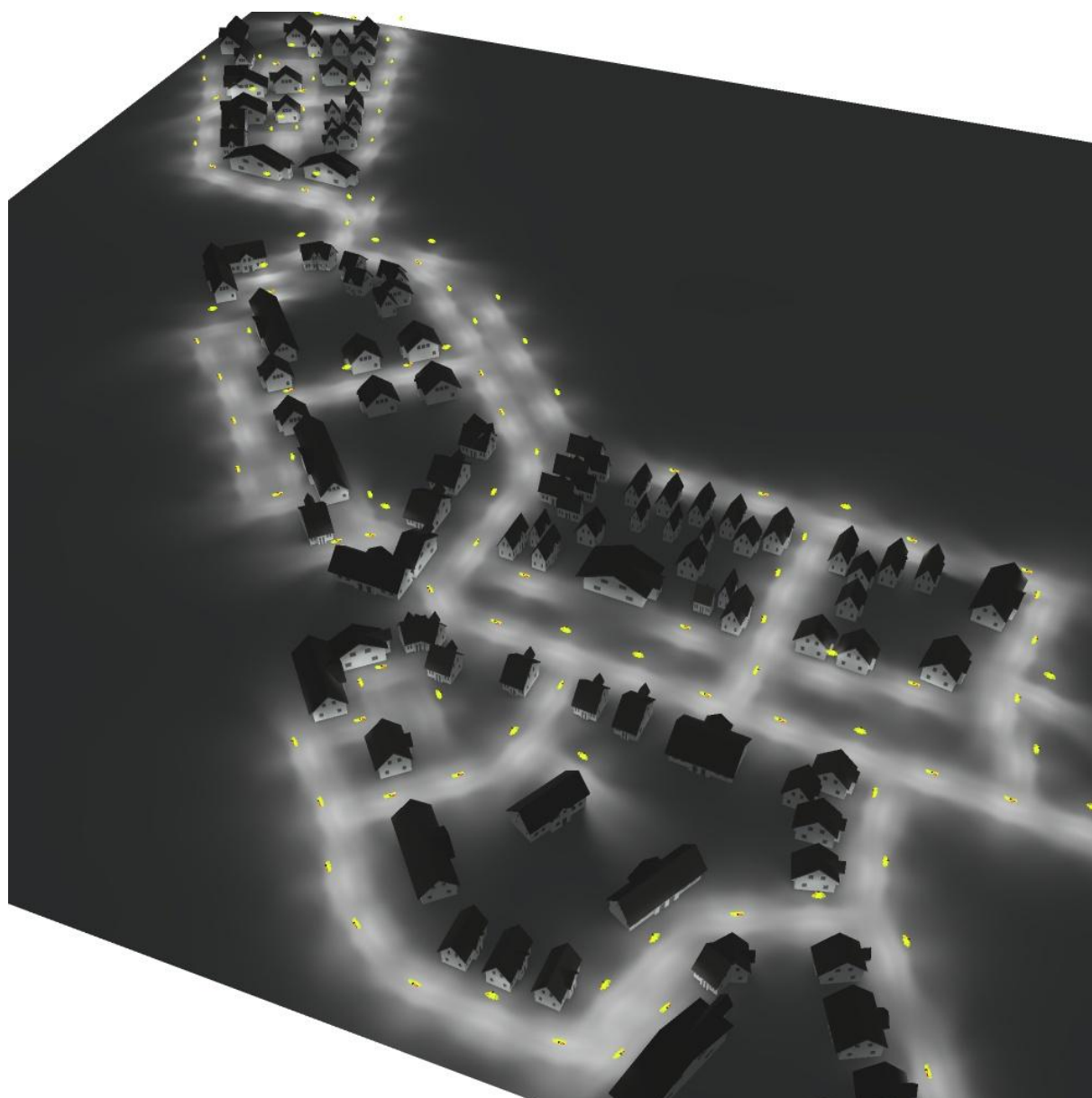


0 1.88 3.75 5.63 7.50 9.38 11.25 13.13 15 lx



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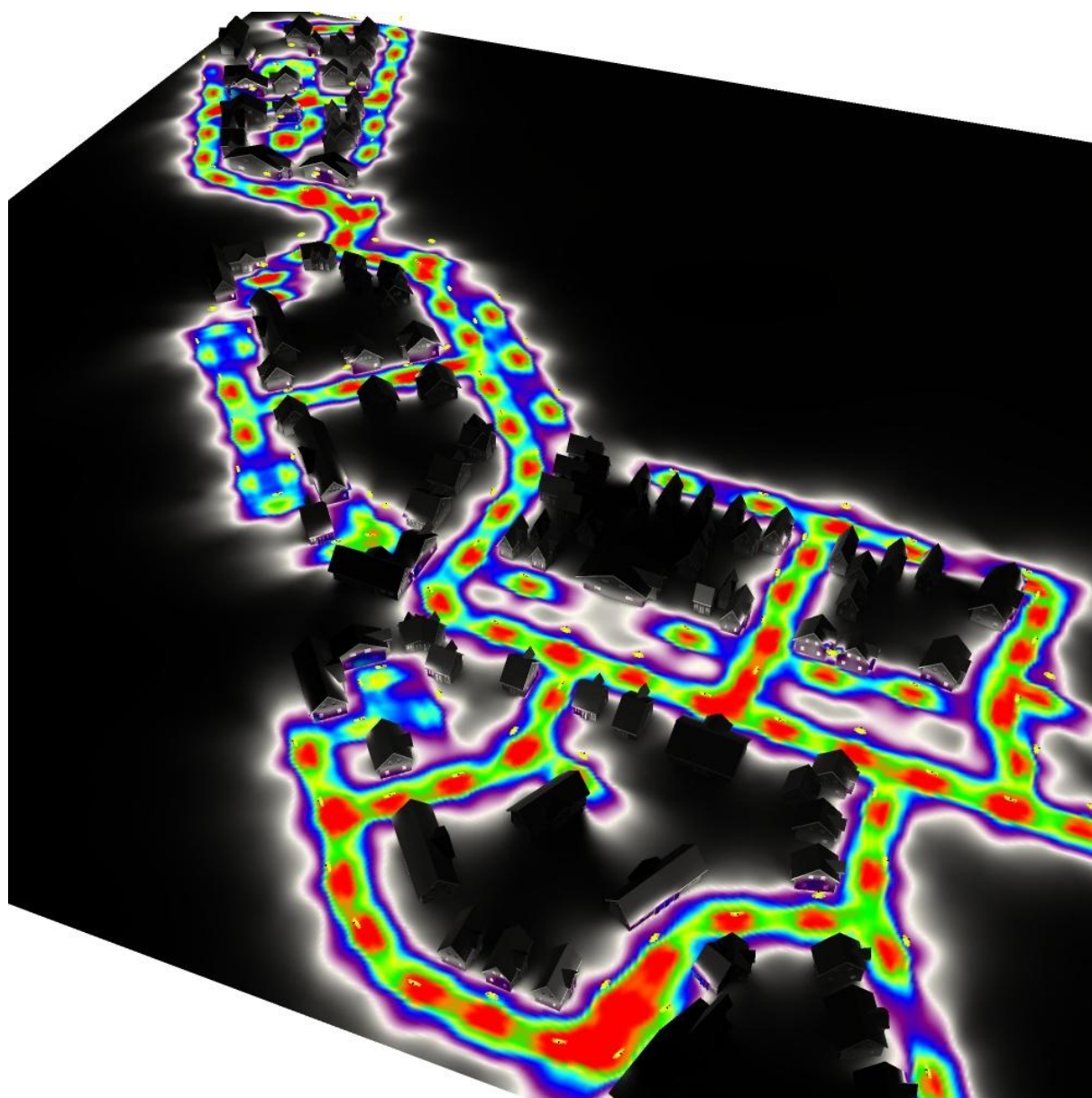
Exterior Scene 1 / 3D Rendering





Operator Cundall
Telephone
Fax
e-Mail

Exterior Scene 1 / False Colour Rendering

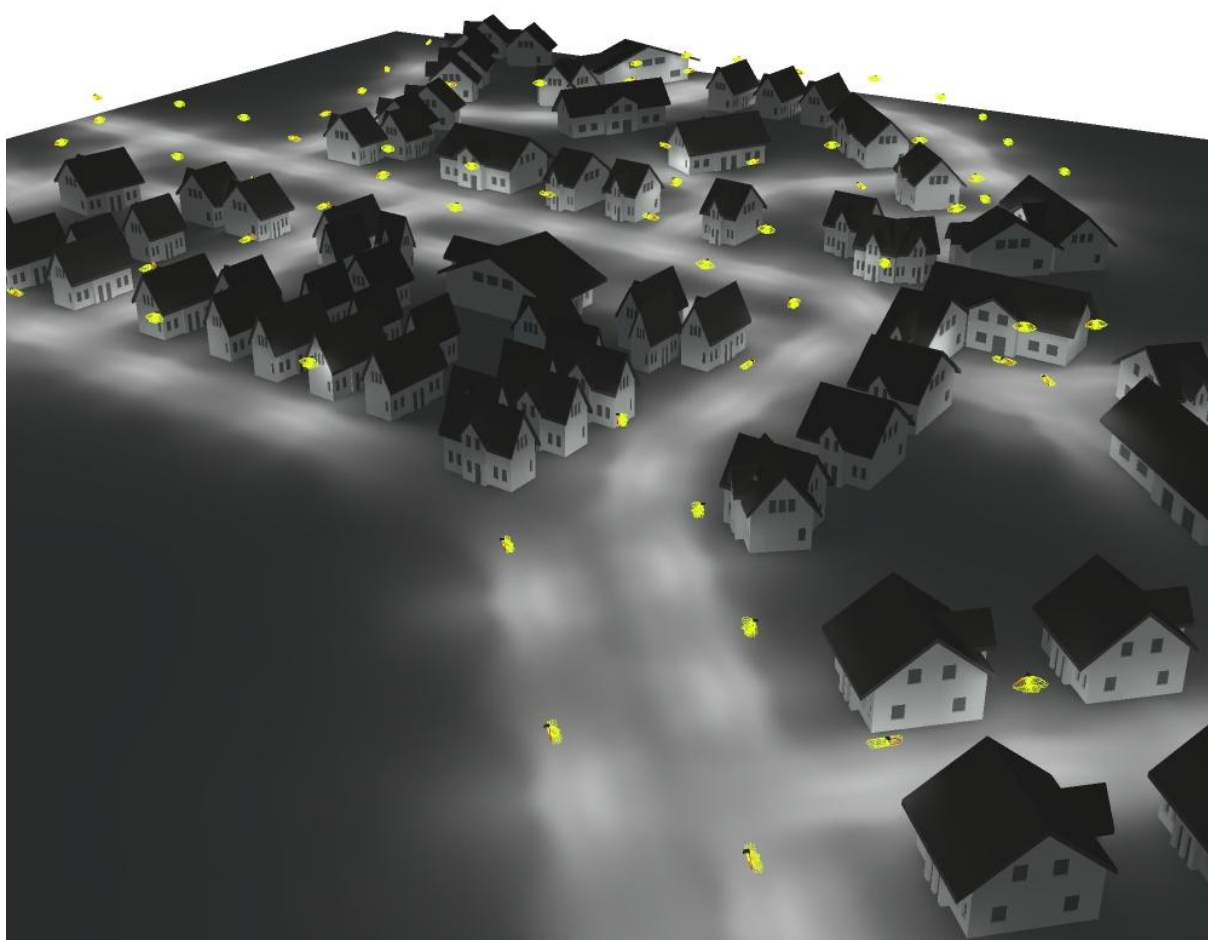


0 1.88 3.75 5.63 7.50 9.38 11.25 13.13 15 lx



Operator Cundall
Telephone
Fax
e-Mail

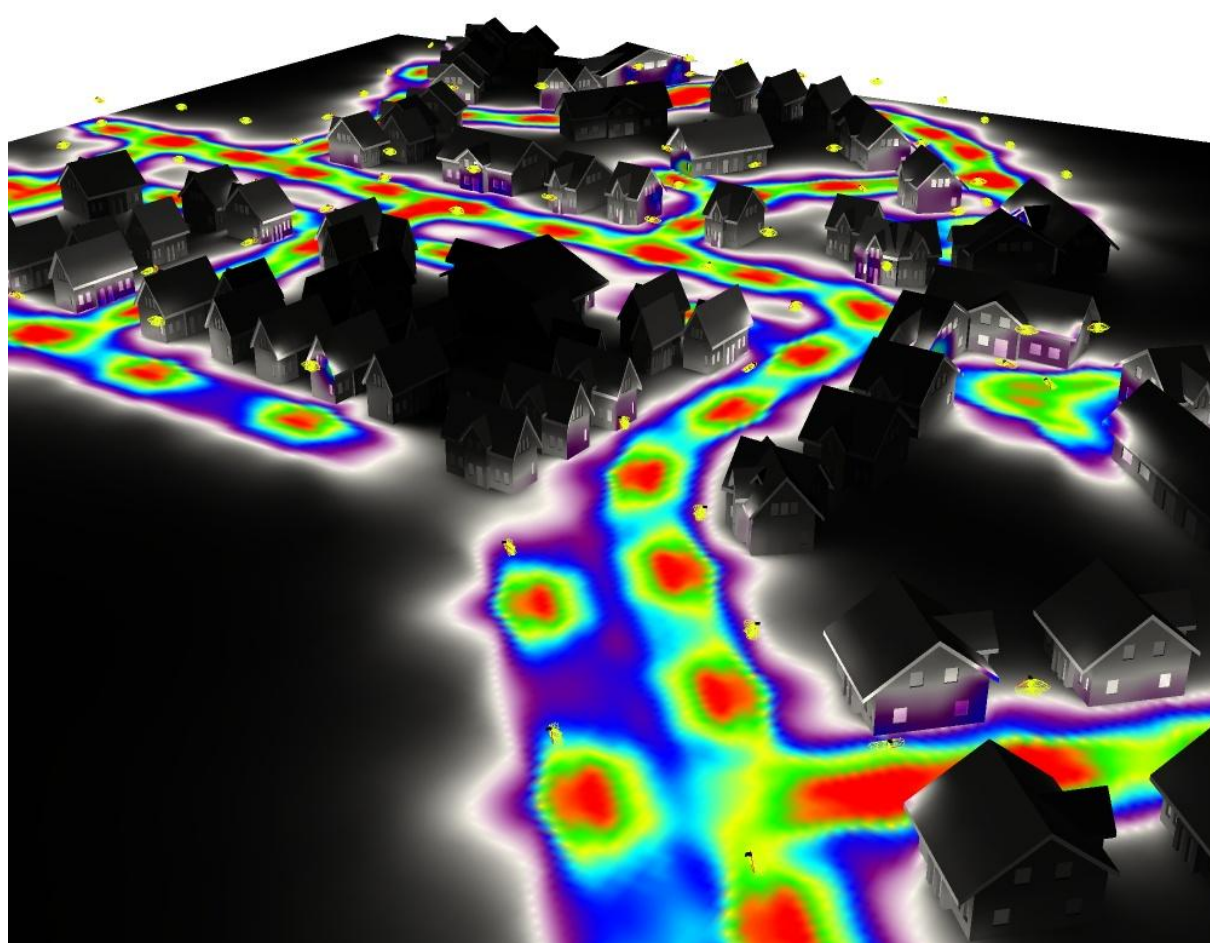
Exterior Scene 1 / 3D Rendering





Operator Cundall
Telephone
Fax
e-Mail

Exterior Scene 1 / False Colour Rendering

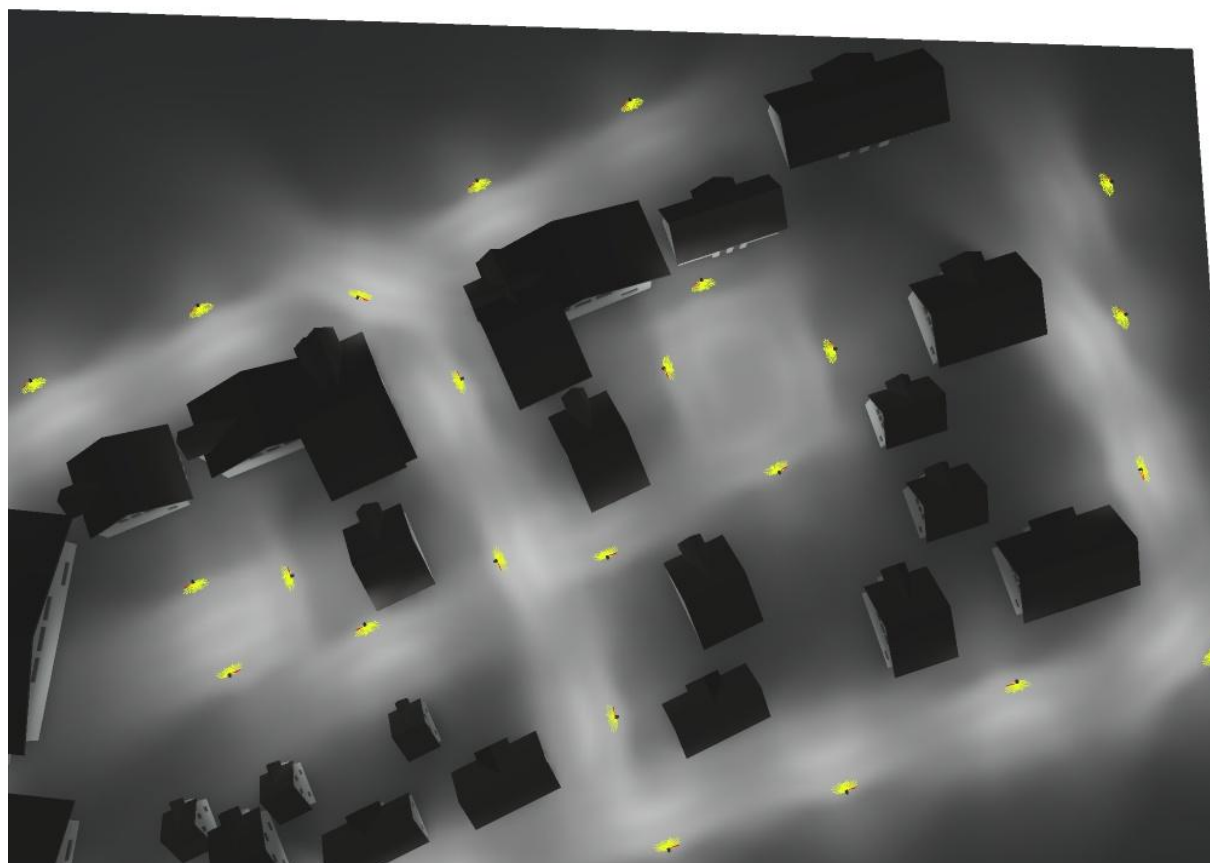


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Operator Cundall
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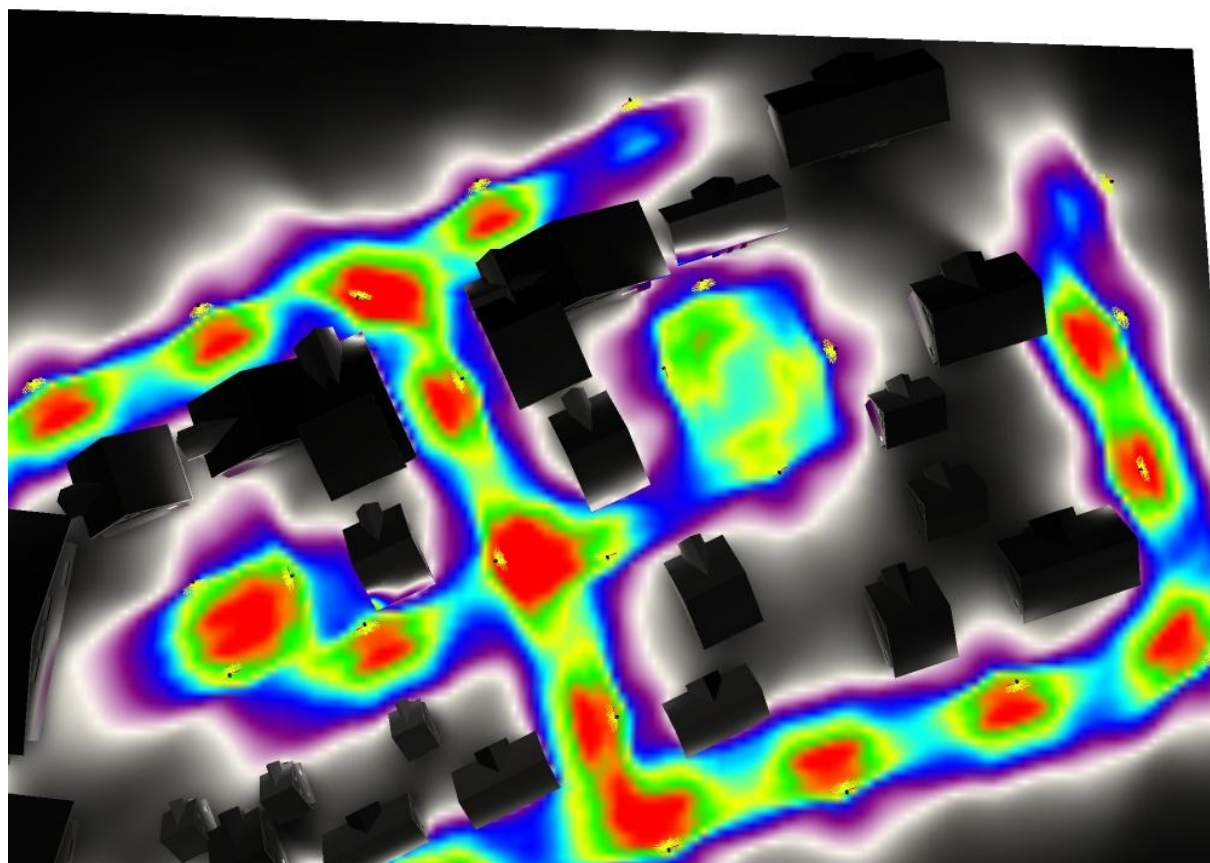
Exterior Scene 1 / 3D Rendering





Operator Cundall
Telephone
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e-Mail

Exterior Scene 1 / False Colour Rendering



0 1.88 3.75 5.63 7.50 9.38 11.25 13.13 15 lx



1012052

A1

Based on:	-	Rev -
Architects Drg No.	-	Rev -
Structural Drg No.	-	Rev -
Survey Drg No.	-	Rev -
Other Drg No.	-	Rev -
Other Drg No.	-	Rev -

DO NOT SCALE FROM THIS DRAWING

- Notes**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL AND ENGINEERING SERVICES DRAWINGS, SPECIFICATIONS, SCHEDULES AND PROJECT SPECIFIC DOCUMENTS.
 - ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED.
 - DO NOT SCALE FROM THIS DRAWING.
 - ALL LAMP POLES ARE 6m HIGH ABOVE THE GROUND LEVEL AND 76mm DIA.
 - THE LAMP POSTS TO BE INSTALLED 0.5m AWAY FROM THE ROAD.
 - THE LAMP POST ON THE MAIN ROAD SHOULD HAVE A BOOM WITH AN ANGLE OF 0 DEGREES TO ENSURE THAT LUMINAIRE IS SITUATED ABOVE THE KERB OF THE ROAD.
 - LAMP POSTS WITH A BOOM SHOULD BE USED WHERE TREES ETC. MAY OBSTRUCT THE LIGHT.

- LEGEND**
- A** LAMP POLE MOUNTED LUMINAIRE (TRILUX CUVIA 40-AB2L-LRA/2400-740 4G1S ET).
 - A1** LAMP POLE MOUNTED LUMINAIRE (TRILUX CUVIA 40-AB2L-LRA/1500-740 2G1S ET).
 - A2** LAMP POLE MOUNTED LUMINAIRE (TRILUX CUVIA 40-AB2L-LRA/1000-740 2G1S ET).

-	03/03/2017	FOR PLANNING	MA		
Issue	Date	Description	By	Chkd	Verfd

Project
**WARBLINGTON MEADOWS,
EMSWORTH**

Client
BARRAT HOMES

Architect
SIMON COOPER

Title
EXTERNAL LIGHTING LAYOUT

Drawing No. BS00(63)9001		Drawing Status FOR PLANNING	
Job No. 1012052		Scale 1:800	
Originator EN	Checked RM	Verified CO	Issue. -

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