

Ground Floor

Installation : Lighting

Project number : Library - Lipjan

Customer : European Commission

Processed by : Urban Plus

Date : 28.03.2014

The following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergences can occur.

Guarantee claims for luminaire data are excluded.

Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

1 Luminaire data

1.1 Siteco, Compact DL (5LR37772LA61)

1.1.1 Data sheet

Manufacturer: Siteco



5LR37772LA61 downlight-ceiling recessed Compact DL

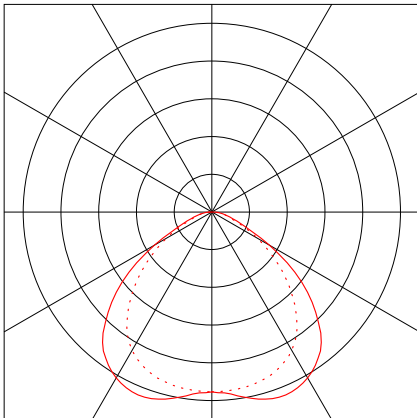
Compact DL, downlight, light control with reflector, of plastic, white, 2 x TC-TEL 26W, control gear: ECG, with terminal, 2-pole, max. 2.5mm², mains connection: 230V, AC, 50Hz, luminaire housing, of plastic, black, length: 318 mm, diameter: 230 mm, recess depth: 105 mm, clamping range: 5..25mm, protection rating (complete): IP20, insulation class (complete): insulation class II (safety insulation), certification: CE, ENEC in preparation, protection symbol: F, permissible ambient temperature for indoor applications: <= +25°C, standard: EN 50419,

Luminaire data

Luminaire efficiency	: 53.7%
Luminaire efficacy	: 34.52 lm/W
Classification	: A40 ↓100.0% ↑0.0%
CIE Flux Codes	: 55 88 98 100 54
UGR 4H 8H (20%, 50%, 70%)	
C0 / C90	: 24.6 / 23.8
Control gear	: ECG
System power	: 56 W
Diameter	: 230 mm

Equipped with

Quantity	: 2
Designation	: TC-DEL 26W/840 (OSRAM)
Power	: 26W
Colour	:
Luminous flux	: 1800 lm



1 Luminaire data

1.2 Siteco, Siteco® Rasterleuchte Plus (5LP12771C)

1.2.1 Data sheet

Manufacturer: Siteco



5LP12771C linear fluorescent luminaire-ceiling recessed Siteco® Rasterleuchte Plus

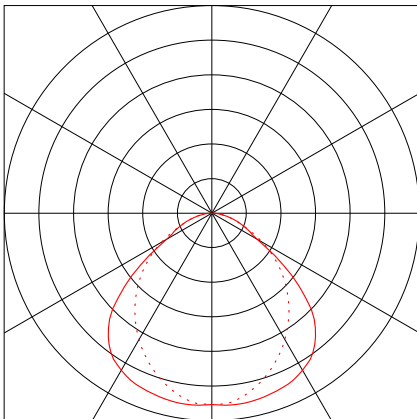
Siteco® louvre luminaire Plus, linear fluorescent luminaire, primary anti-glare with louvre, of aluminium, coated, white, light emission: direct distribution, primary light characteristic: symmetric, installation type: recessed, lay-in mounting, for 1 x T26 36W, control gear: ECG, with terminal, 3-pole, max. 2.5mm², mains connection: 230V, AC, 50Hz, luminaire housing, of sheet steel, coil coated, pure white, module: M600, length: 1.197 mm, width: 182 mm, height: 110mm, recess depth: 81 mm, protection rating (complete): IP20, insulation class (complete): insulation class I (protective earthing), certification: CE, ENEC 10, VDE, protection symbol: F, permissible ambient temperature for indoor applications: <= +25°C, standard: EN 50419, packaging unit: 1 piece,

Luminaire data

Luminaire efficiency	: 69.2%
Luminaire efficacy	: 61.51 lm/W
Classification	: A40 ↓100.0% ↑0.0%
CIE Flux Codes	: 54 86 97 100 69
UGR 4H 8H (20%, 50%, 70%)	
C0 / C90	: 19.3 / 19.3
Control gear	: ECG
System power	: 36 W
Length	: 1197 mm
Width	: 182 mm

Equipped with

Quantity	: 1
Designation	: T26 36W/840 (OSRAM)
Power	: 36W
Colour	:
Luminous flux	: 3200 lm



1 Luminaire data

1.3 Siteco, Siteco® Rasterleuchte Plus (5LP12772C)

1.3.1 Data sheet

Manufacturer: Siteco



5LP12772C linear fluorescent luminaire-ceiling recessed Siteco® Rasterleuchte Plus

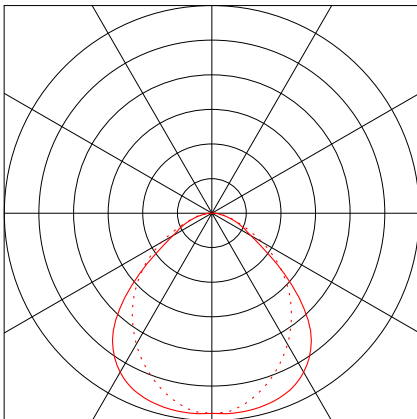
Siteco® louvre luminaire Plus, linear fluorescent luminaire, primary anti-glare with louvre, of aluminium, coated, white, light emission: direct distribution, primary light characteristic: symmetric, installation type: recessed, lay-in mounting, for 2 x T26 36W, control gear: ECG, with terminal, 3-pole, max. 2.5mm², mains connection: 230V, AC, 50Hz, luminaire housing, of sheet steel, coil coated, pure white, module: M600, length: 1.197 mm, width: 297 mm, height: 87mm, recess depth: 81 mm, protection rating (complete): IP20, insulation class (complete): insulation class I (protective earthing), certification: CE, ENEC 10, VDE, protection symbol: F, permissible ambient temperature for indoor applications: <= +25°C, standard: EN 50419, packaging unit: 1 piece,

Luminaire data

Luminaire efficiency	: 67.5%
Luminaire efficacy	: 60.85 lm/W
Classification	: A50 ↓100.0% ↑0.0%
CIE Flux Codes	: 56 87 97 100 67
UGR 4H 8H (20%, 50%, 70%)	
C0 / C90	: 18.8 / 19.4
Control gear	: ECG
System power	: 71 W
Length	: 1197 mm
Width	: 297 mm

Equipped with

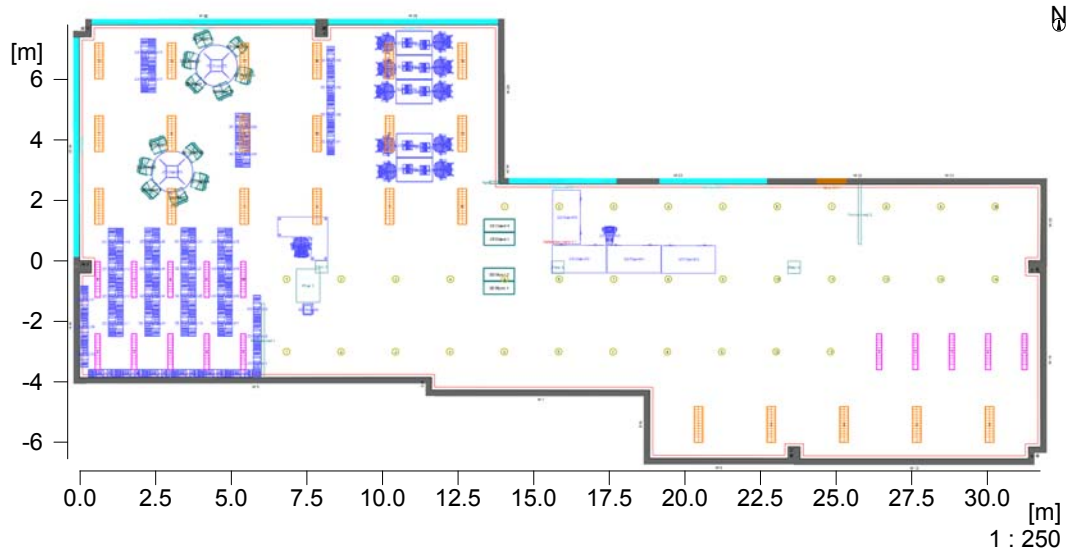
Quantity	: 2
Designation	: T26 36W/840 (OSRAM)
Power	: 36W
Colour	:
Luminous flux	: 3200 lm



2 Ground Floor

2.1 Description, Ground Floor

2.1.1 Floor plan



Object : Graund Floor
Installation : Lighting
Project number : Library - Lipjan
Date : 28.03.2014

2 Graund Floor

2.1 Description, Graund Floor

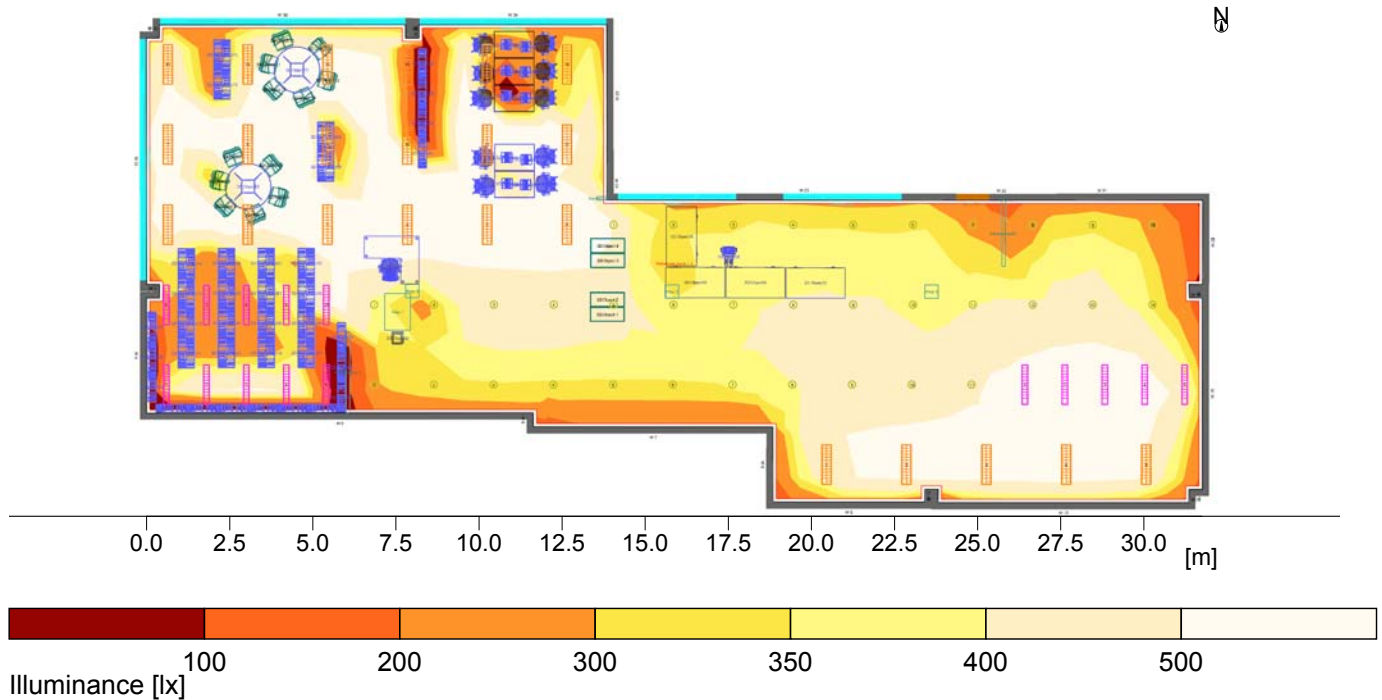
2.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4.94 m	11.91 m	0.39 m	50.0 %
2	4.94 m	11.51 m	0.41 m	50.0 %
3	4.55 m	11.51 m	0.39 m	50.0 %
4	4.55 m	8.05 m	3.46 m	50.0 %
5	16.17 m	8.06 m	11.62 m	50.0 %
6	16.18 m	7.64 m	0.42 m	50.0 %
7	23.38 m	7.64 m	7.20 m	50.0 %
8	23.38 m	5.38 m	2.25 m	50.0 %
9	27.94 m	5.38 m	4.57 m	50.0 %
10	27.94 m	5.77 m	0.39 m	50.0 %
11	28.35 m	5.77 m	0.41 m	50.0 %
12	28.34 m	5.37 m	0.40 m	50.0 %
13	35.88 m	5.37 m	7.54 m	50.0 %
14	35.89 m	5.76 m	0.40 m	50.0 %
15	36.29 m	5.76 m	0.40 m	50.0 %
16	36.29 m	11.51 m	5.75 m	50.0 %
17	35.90 m	11.52 m	0.39 m	50.0 %
18	35.89 m	11.92 m	0.40 m	50.0 %
19	36.29 m	11.91 m	0.40 m	50.0 %
20	36.30 m	14.45 m	2.53 m	50.0 %
21	30.25 m	14.44 m	6.05 m	50.0 %
22	30.24 m	14.44 m	0.01 m	50.0 %
23	18.39 m	14.45 m	11.85 m	50.0 %
24	18.39 m	15.44 m	0.99 m	50.0 %
25	18.39 m	19.72 m	4.28 m	50.0 %
26	12.74 m	19.72 m	5.65 m	50.0 %
27	12.74 m	19.31 m	0.40 m	50.0 %
28	12.34 m	19.31 m	0.40 m	50.0 %
29	12.34 m	19.72 m	0.40 m	50.0 %
30	4.94 m	19.71 m	7.40 m	50.0 %
31	4.93 m	19.31 m	0.40 m	50.0 %
32	4.54 m	19.32 m	0.39 m	50.0 %
33	4.55 m	11.92 m	7.40 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.70 m		
Height of reference plane		0.75 m		

2 Ground Floor

2.2 Summary, Ground Floor

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.70 m
Maintenance factor	0.80
Total luminous flux of all lamps	321200 lm
Total power	4133.0 W
Total power per area (312.43 m ²)	13.23 W/m ² (3.13 W/m ² /100lx)

Evaluation area 1

Reference plane 1.1

	Horizontal
Em	422 lx
Emin	0 lx
Emin/Eav (U ₀)	---
Emin/Emax (U _d)	---
Position	0.75 m

Type No.\Make

1	35	Siteco	
		Order No.	: 5LR37772LA61
		Luminaire name	: Compact DL
		Equipment	: 2 x TC-DEL 26W/840 (OSRAM) 26W / 1800 lm

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2 Graund Floor

2.2 Summary, Graund Floor

2.2.1 Result overview, Evaluation area 1

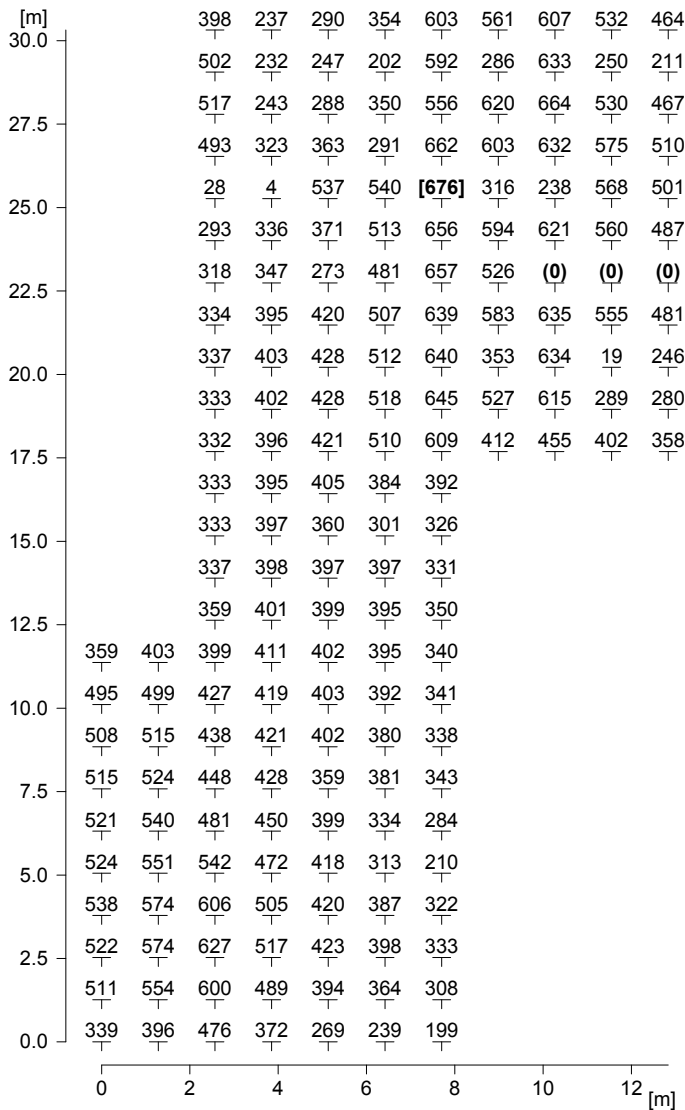
2 15 Order No. : 5LP12771C
[redacted] Luminaire name : Siteco® Rasterleuchte Plus
[redacted] Equipment : 1 x T26 36W/840 (OSRAM) 36W / 3200 lm

3 23 Order No. : 5LP12772C
[redacted] Luminaire name : Siteco® Rasterleuchte Plus
[redacted] Equipment : 2 x T26 36W/840 (OSRAM) 36W / 3200 lm

2 Ground Floor

2.3 Calculation results, Ground Floor

2.3.1 Table, Reference plane 1.1 (E)



Height of the reference plane	: 0.75 m
Average illuminance	Eav : 422 lx
Minimum illuminance	Emin : 0 lx
Maximum illuminance	Emax : 676 lx
Uniformity U _o	Emin/Eav : ---
Diversity U _d	Emin/Emax : ---

2.3 Calculation results, Graund Floor

2.3.2 3D luminance, View 1



Luminance in the scene

Minimum: : 0 cd/m²
Maximum: : 442 cd/m²

2.3 Calculation results, Ground Floor

2.3.3 3D luminance, View 2



Luminance in the scene

Minimum: : 0 cd/m²
Maximum: : 442 cd/m²

2.3 Calculation results, Ground Floor

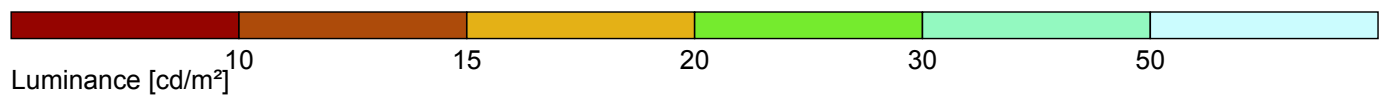
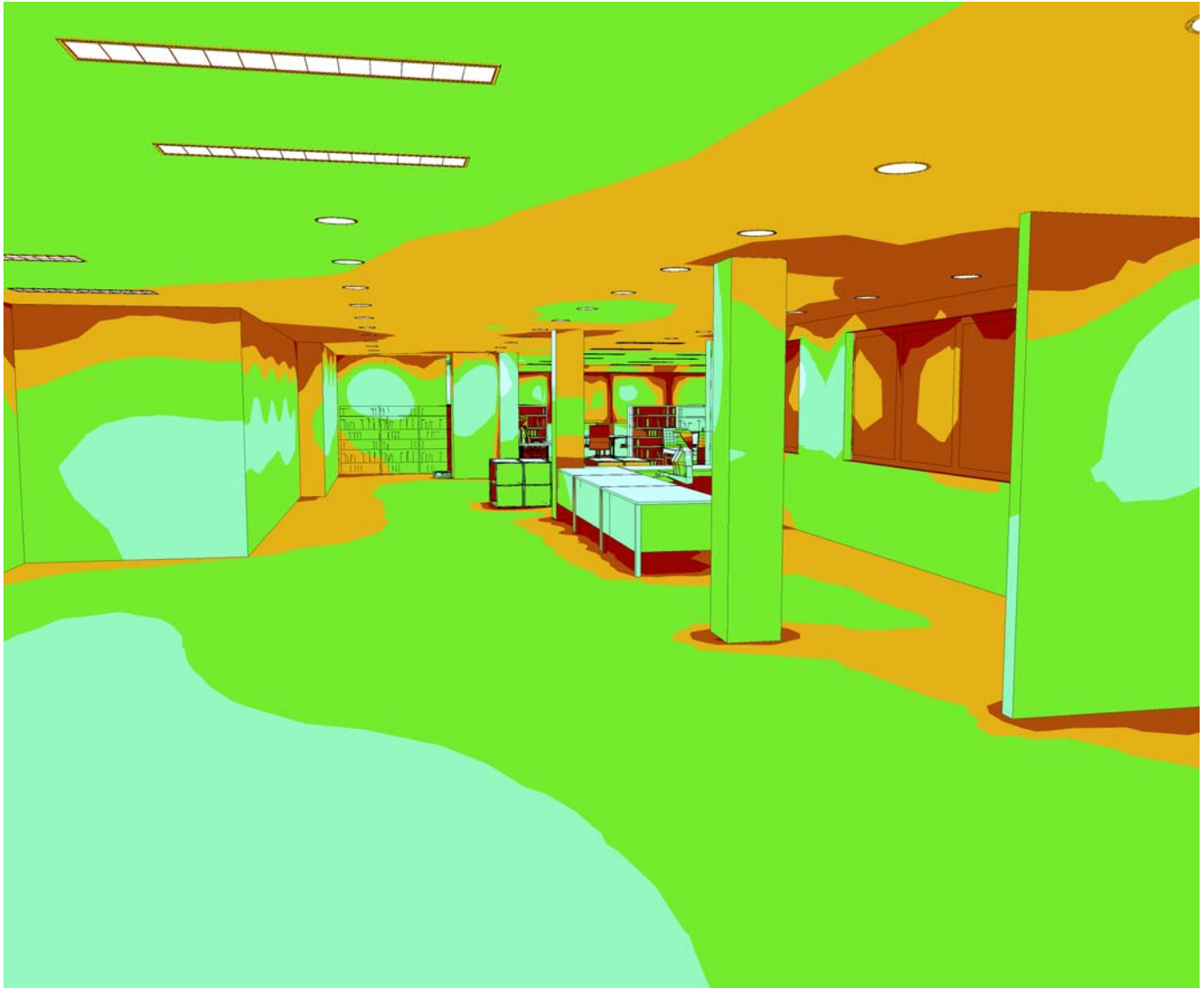
2.3.4 3D luminance, View 3



Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 442 cd/m²

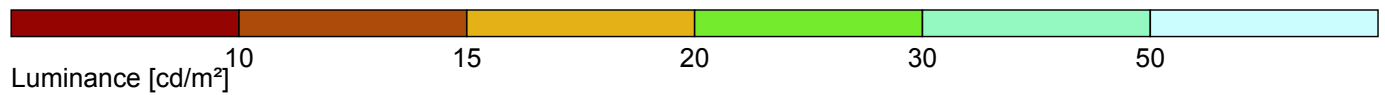
2.3 Calculation results, Ground Floor

2.3.5 3D pseudo colours, View 1 (L)



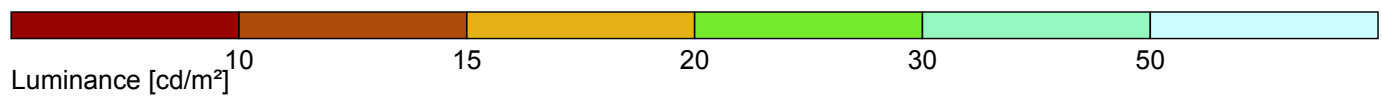
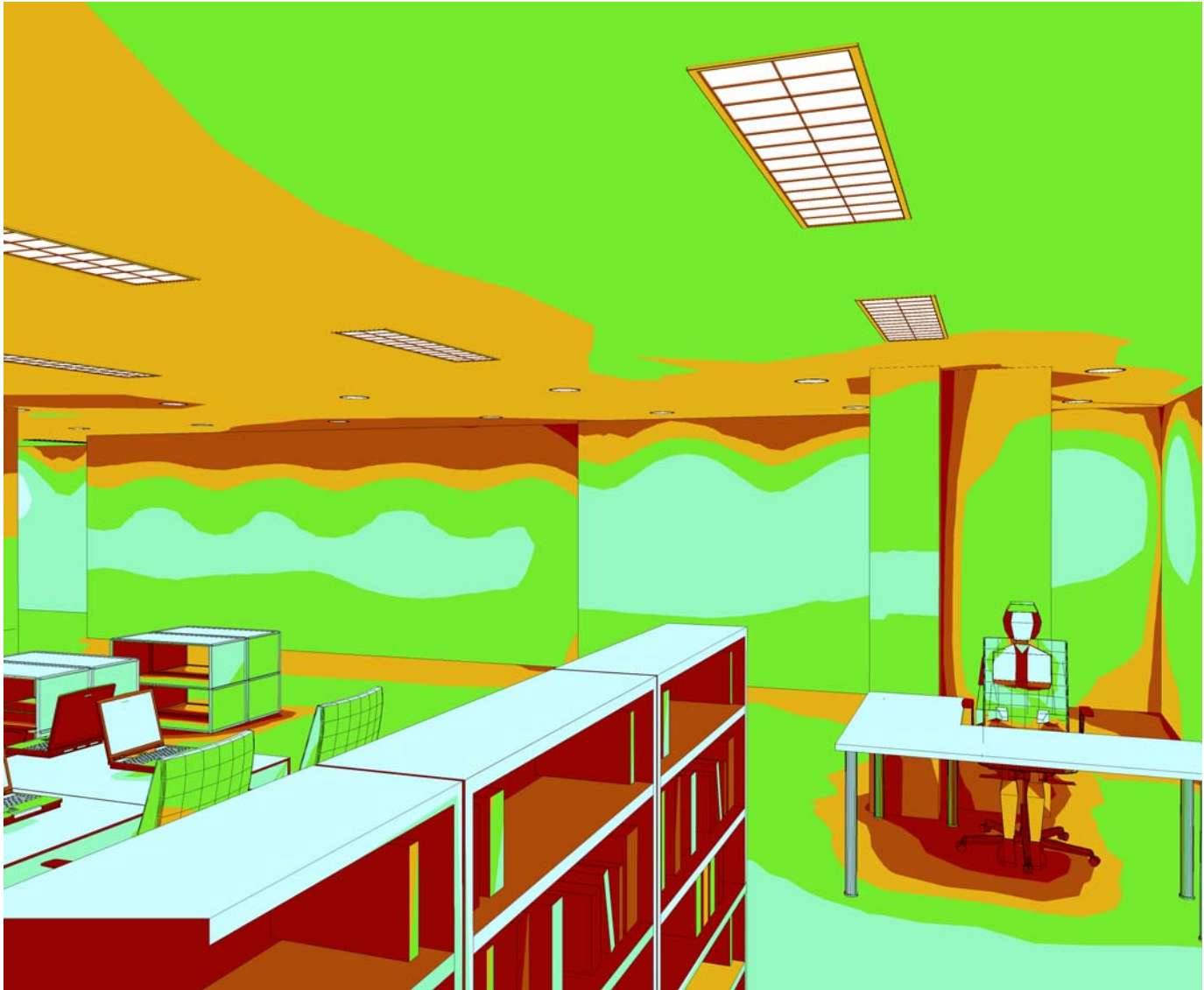
2.3 Calculation results, Ground Floor

2.3.6 3D pseudo colours, View 2 (L)



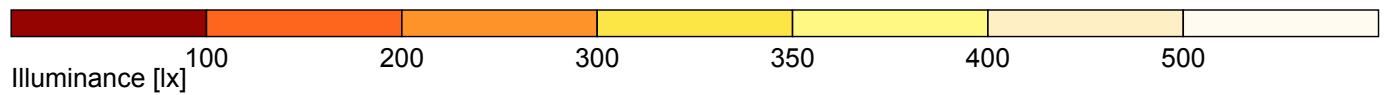
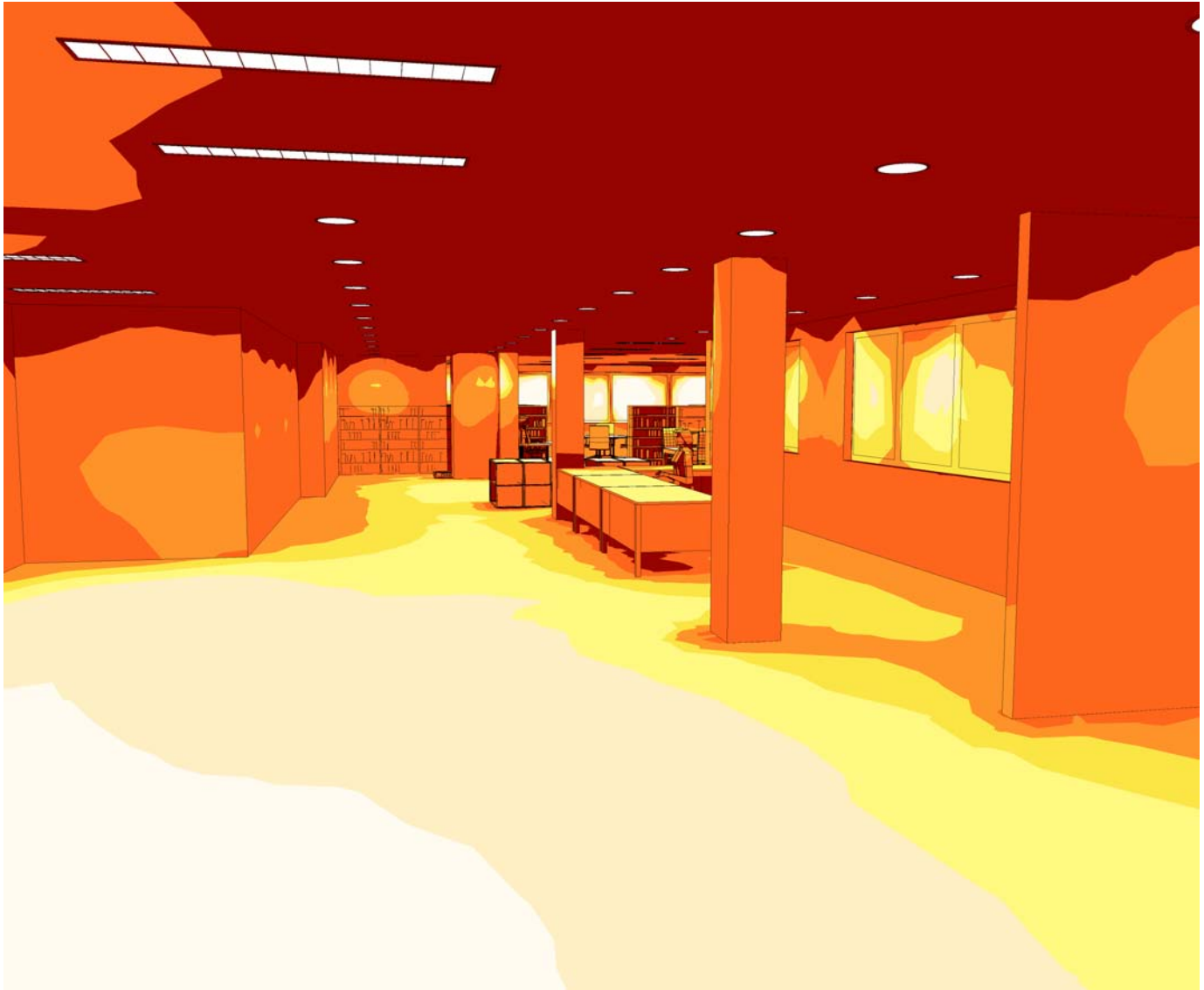
2.3 Calculation results, Ground Floor

2.3.7 3D pseudo colours, View 3 (L)



2.3 Calculation results, Ground Floor

2.3.8 3D pseudo colours, View 1 (E)



2.3 Calculation results, Ground Floor

2.3.9 3D pseudo colours, View 2 (E)

