

# LU Dabas zinātņu akadēmiskais centrs, 706\_707

Installation : Sestais Sils/Silica/Siteco

Project number : 12

Customer : Sestais Sils

Processed by : Jānis Kārklīšs

Date : 25.07.2011

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.

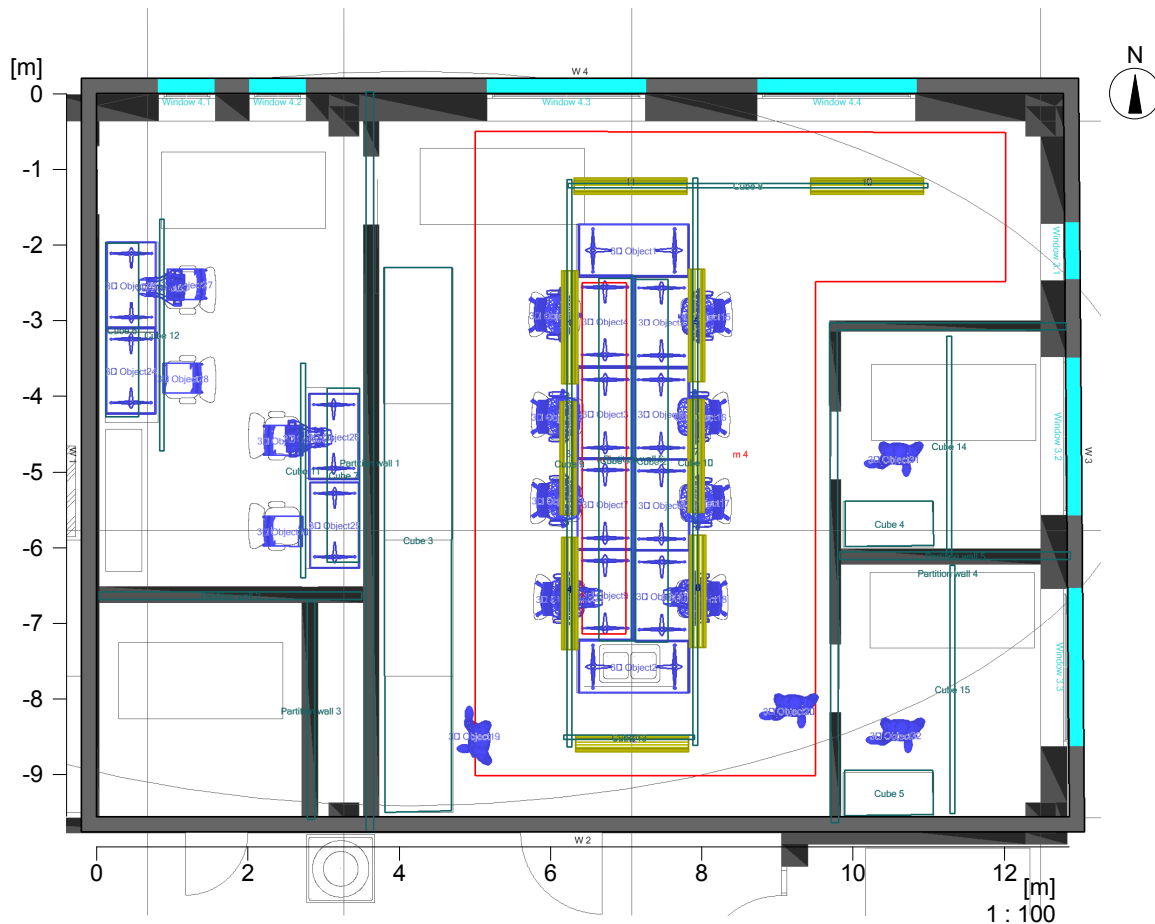
Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

Object : LU Dabas zinātņu akadēmiskais centrs, 706\_707  
 Installation : Sestais Sils/Silica/Siteco  
 Project number : 12  
 Date : 25.07.2011

# 1 Room 1

## 1.1 Description, Room 1

### 1.1.1 Floor plan

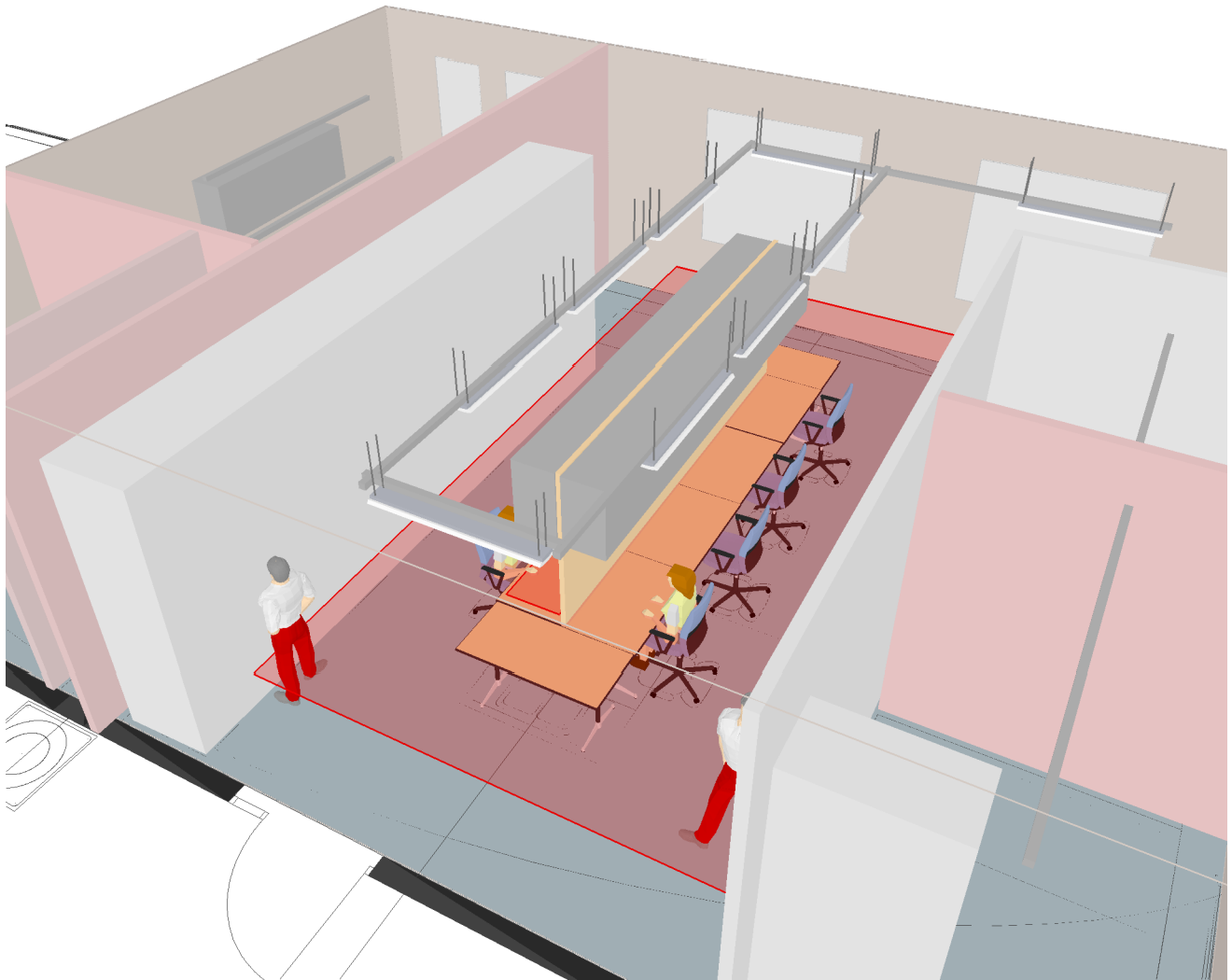


Wall	x	y	Length	Reflectance	Structural elements
1	55.98 m	49.70 m	9.55 m	70.0 %	Pi : Pillar
2	68.83 m	49.70 m	12.85 m	70.0 %	Tr : Partition
3	68.76 m	59.26 m	9.55 m	70.0 %	Wo : Real working surface
4	55.98 m	59.26 m	12.78 m	70.0 %	m : Virtual measuring area
Floor				50.0 %	S : Skylight
Ceiling				80.0 %	W : Picture
Room height		3.50 m			Wi : Window
Height of reference plane		----			DF : Door
					F : Furniture

Object : LU Dabas zinātņu akadēmiskais centrs, 706\_707  
Installation : Sestais Sils/Silica/Siteco  
Project number : 12  
Date : 25.07.2011

## 1.1 Description, Room 1

### 1.1.2 3D view, View 1

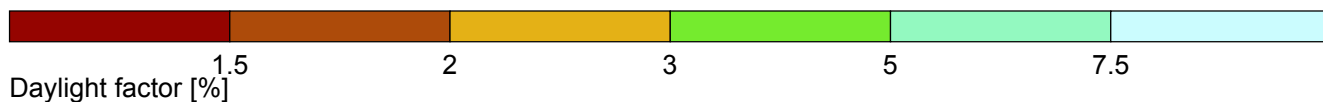
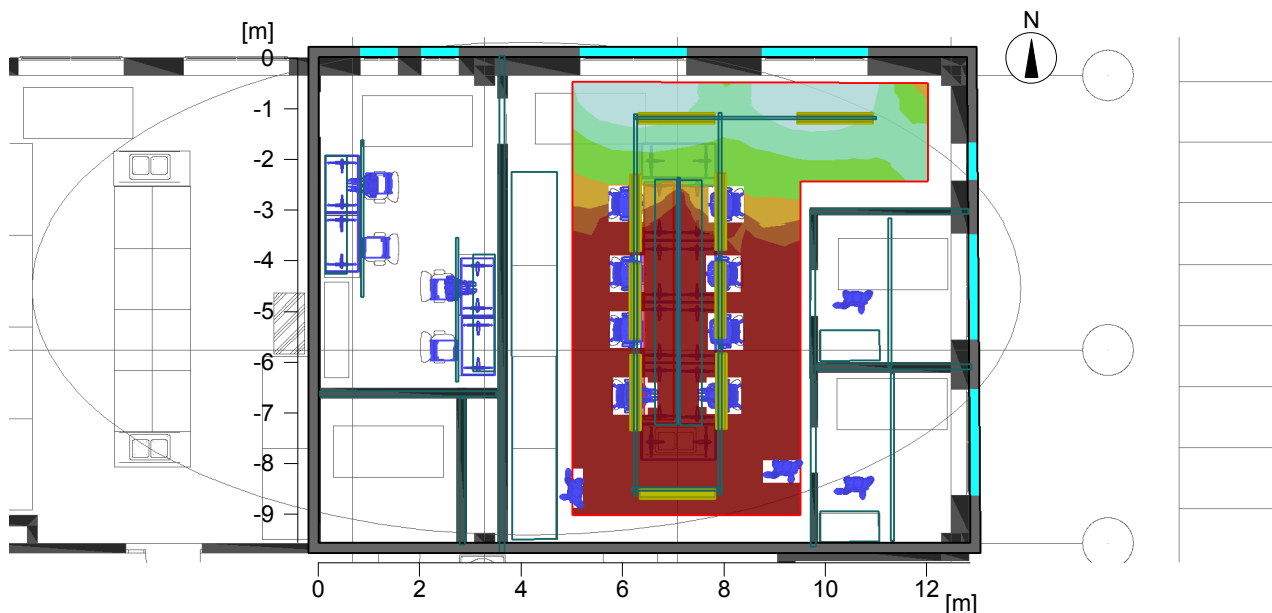


Object : LU Dabas zinātņu akadēmiskais centrs, 706\_707  
 Installation : Sestais Sils/Silica/Siteco  
 Project number : 12  
 Date : 25.07.2011

# 1 Room 1

## 1.2 Summary, Room 1

### 1.2.2 Result overview, Measuring area (virtual) 4



#### General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	3.00 m
Calculation mode used:	Overcast sky acc. CIE

Date, Time: 21.03. 10:28 (TST 10:34)

#### Geographical data:

Location	: Riga
Latitude (degrees)	: 42.30 °
Longitude (degrees)	: 18.20 °
North angle	: 0.00 °

#### Daylight factor:

Average daylight ratio	Dav	: 2.8
Minimum daylight ratio	Dmin	: 0.1
Maximum daylight ratio	Dmax	: 13.7

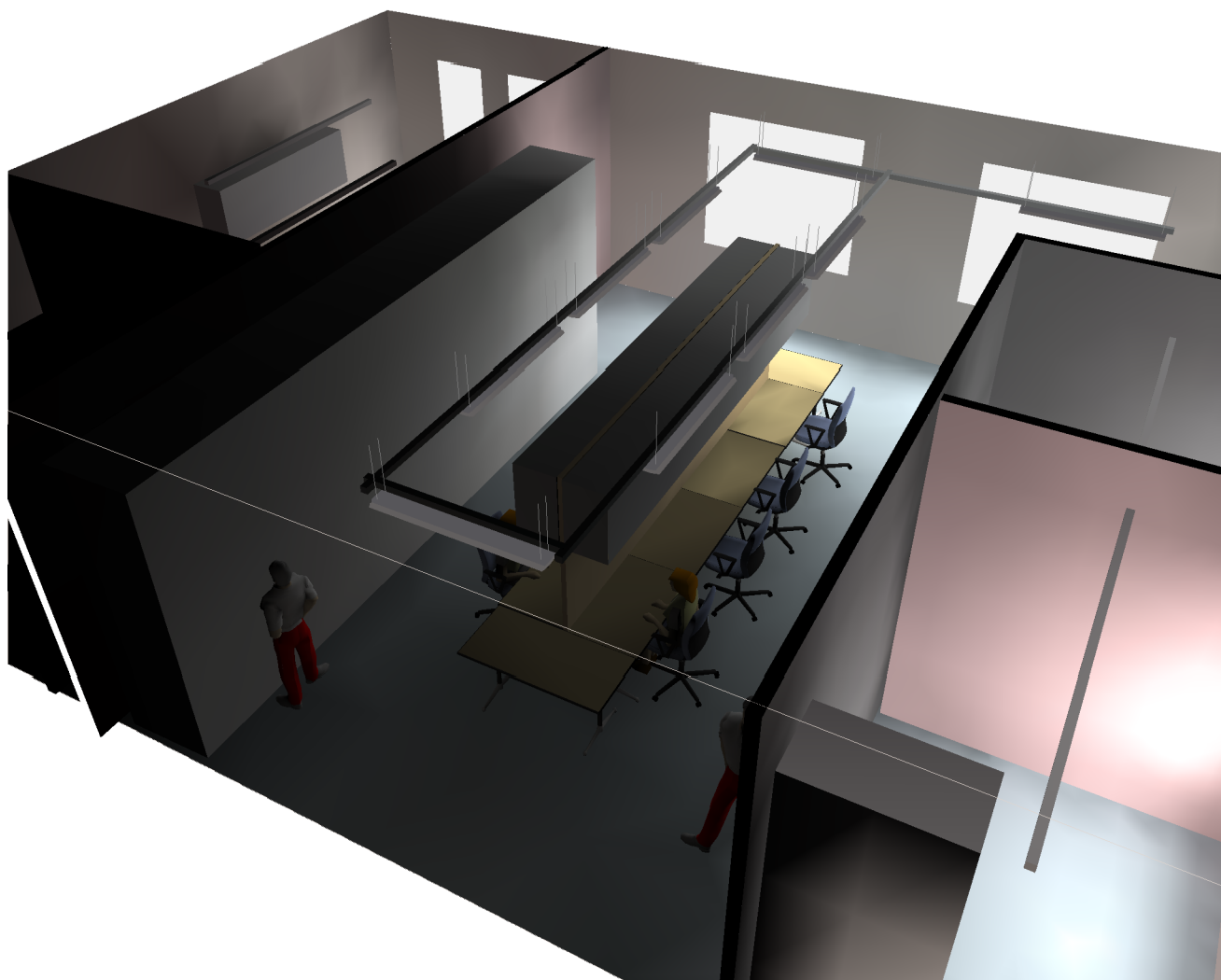
Object : LU Dabas zinātņu akadēmiskais centrs, 706\_707  
Installation : Sestais Sils/Silica/Siteco  
Project number : 12  
Date : 25.07.2011

## 1 Room 1

### 1.3 Calculation results, Room 1

#### 1.3.1 3D luminance, View 1

---



---

Luminance in the scene

Minimum: : 0 cd/m<sup>2</sup>

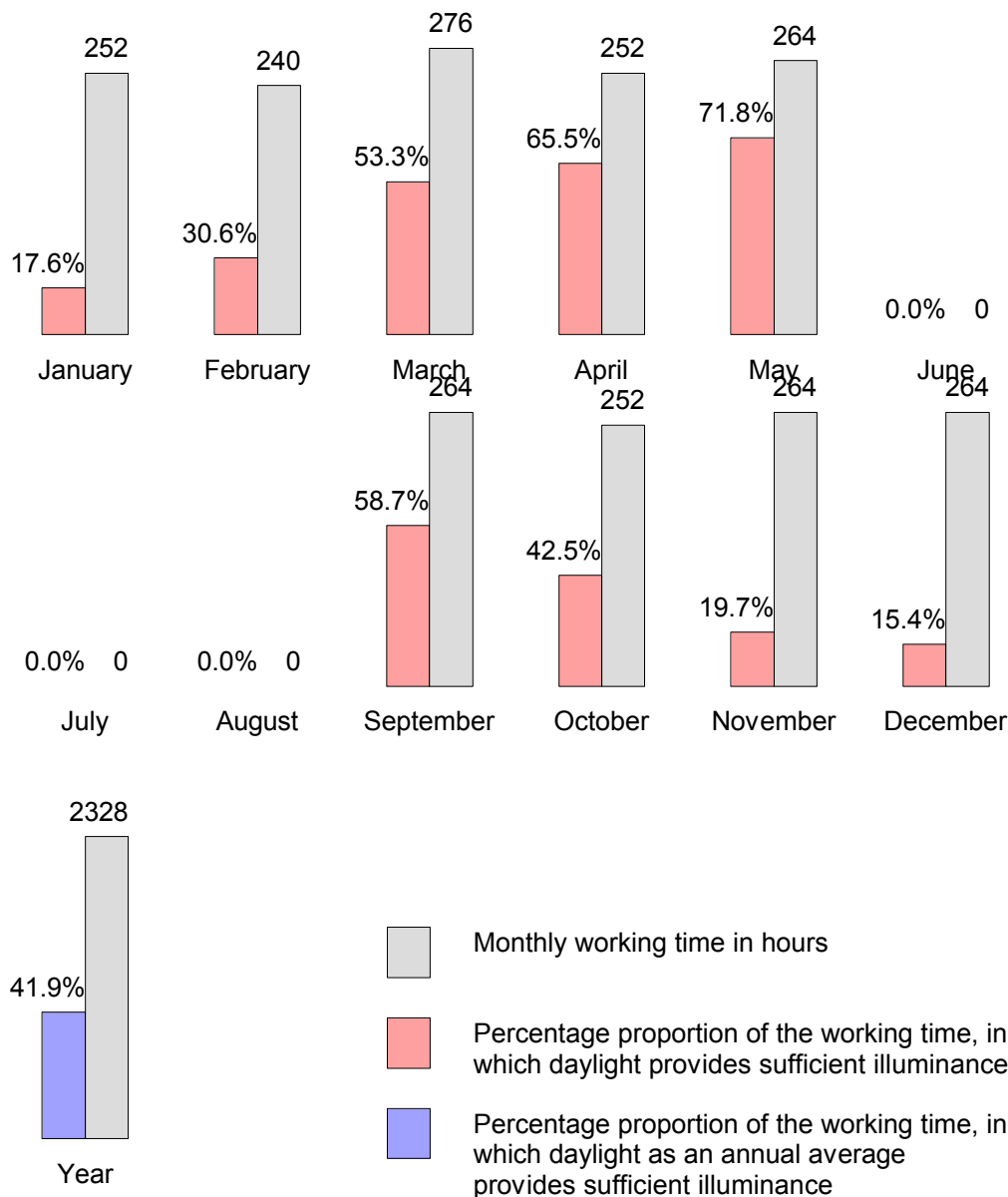
Maximum: : 1480 cd/m<sup>2</sup>

Object : LU Dabas zinatņu akadēmiskais centrs, 706\_707  
 Installation : Sestais Sils/Silica/Siteco  
 Project number : 12  
 Date : 25.07.2011

# 1 Room 1

## 1.4 Economics

### 1.4.1 Evaluation of the isolux diagrams



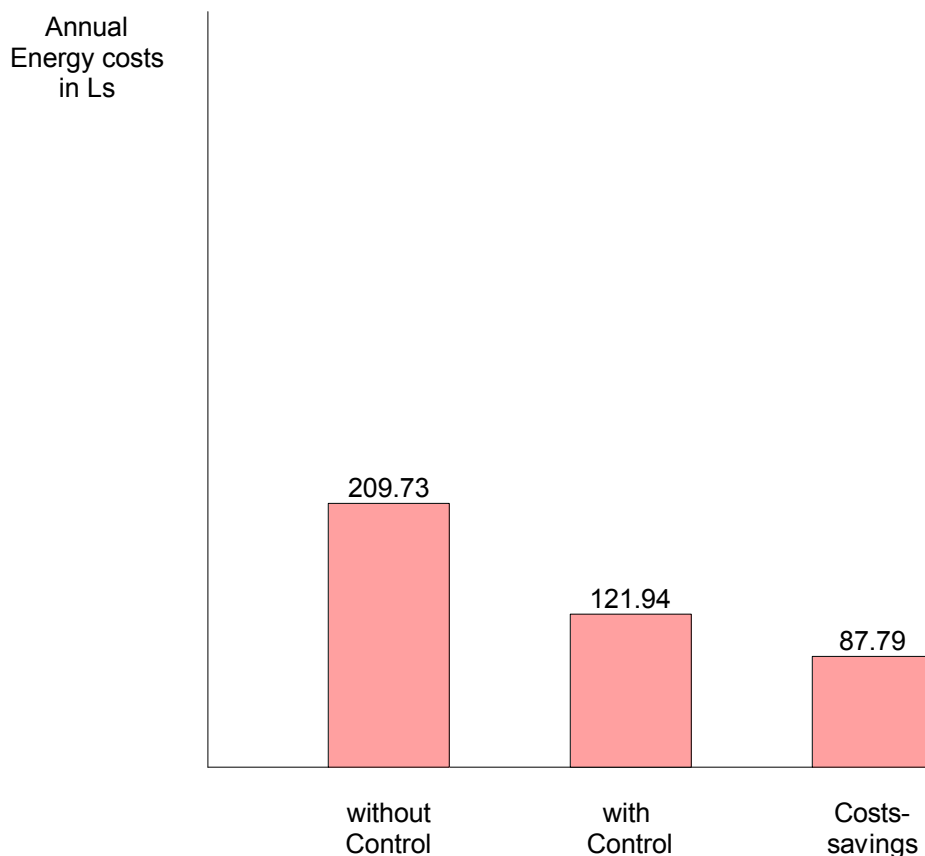
Location:	Riga	Selected minimum illuminance:	500 Lux
Longitude (degrees):	18.2	Daylight factor:	2.80 %
Latitude (degrees):	42.3	Required exterior illuminance:	17857.1 Lux
daily working time:	08:00 - 20:00	1. Holiday periods:	01.06. - 31.08.

Object : LU Dabas zinātņu akadēmiskais centrs, 706\_707  
Installation : Sestais Sils/Silica/Siteco  
Project number : 12  
Date : 25.07.2011

## 1.4 Economics

### 1.4.3 Cost comparison with and without light control

---



---

Location:	Riga	Selected minimum illuminance:	500 Lux
Longitude (degrees):	18.2	Daylight factor:	2.80 %
Latitude (degrees):	42.3	Required exterior illuminance:	17857.1 Lux
daily working time:	08:00 - 20:00	1. Holiday periods:	01.06. - 31.08.
Number of Luminaires:	9		
Total Power/Luminaire:	91 Watts		
Current tariff per KWh:	0.11 Ls		