

4 - Axis - Office

Installation : Novaluna_Recessed mounted149_Eldacon

Project number : Standard example

Customer :

Processed by : Siteco

Date : 08.2007

Project description:

Room dimensions L/ B/ H: 5,4/ 5,4/ 2,7 m

Building axis 1,35 m

According to DIN EN 12 464

Maintenance factor 0,67

Lighting direct

Die Ermittlung der Beleuchtungsergebnisse erfolgte verkaufsunterstützend mit größter Sorgfalt auf Basis der uns vorliegenden Unterlagen mit Hilfe von marktüblichen Berechnungsverfahren (z.B. Relux, Dialux).

Eine Garantie / Gewährleistung / Haftung für diese kostenlose Errechnung wird von SITECO nicht übernommen. Wir verweisen in diesem Zusammenhang auf die Leistungen der Lichtplanungs- u. Ingenieurbüros.

The determination of the lighting results is performed on a sales support basis, with great thoroughness, using the documents at our disposal and with the aid of calculating procedures customary in the market (e.g. Relux, Dialux).

A guarantee / warranty / liability for this free calculation is not provided by SITECO. In this respect, we refer to the services of the light planning and engineering office.

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.

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1 Luminaire data

1.1 Siteco, Novaluna (5MC 12B 7-1FS)

1.1.1 Data sheet

Manufacturer: Siteco

5MC 12B 7-1FS Einzelleuchte für Deckeneinbau Novaluna

Gehäuse aus Stahlblech, weißaluminium (RAL 9006)

mit ELDAICON-Lichtlenkung

BAP65 (L <= 1000 cd/m² rundum)

Schutzart:IP 20

Schutzklasse: SK I

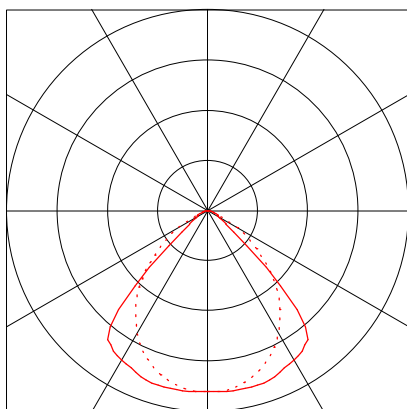
Montageart: Einbau Modul 600

Luminaire data

Luminaires efficiency : 72.8% (A50)
Control gear : EVG
System power : 54 W
Length : 1497 mm
Width : 297 mm

Equipped with

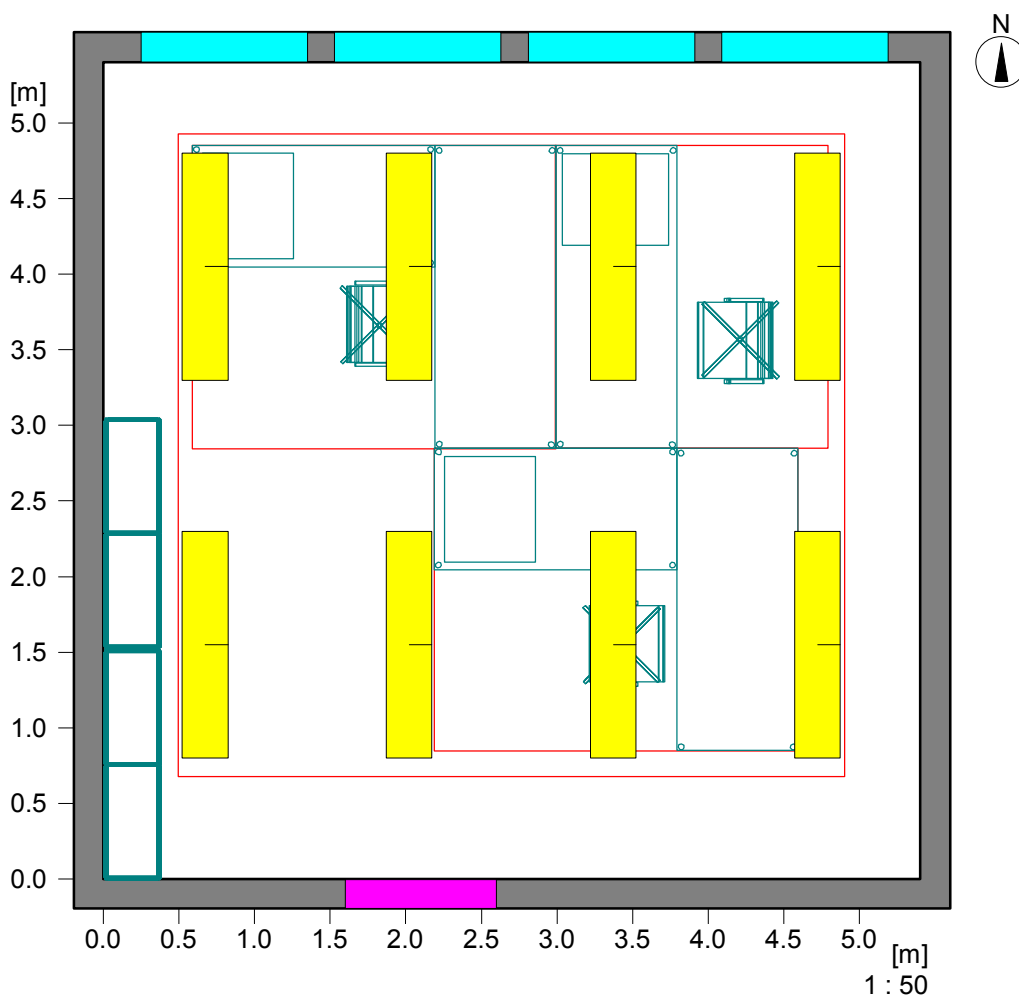
Number of : 1
Designation : FDH
Power : 49 W
Colour :
Luminous flux : 4300 lm



2 Raum

2.1 Description, Raum

2.1.1 Floor plan



Room data:

W1 :	5.40	50.0 %
W2 :	5.40	50.0 %
W3 :	5.40	50.0 %
W4 :	5.40	50.0 %
W5 :	----	----
W6 :	----	----
Floor:	----	20.0 %
Ceiling:	----	70.0 %
Room height [m]:	2.70	
Height of reference plane [m]:	0.75	
Height of luminaire plane [m]:	2.70	

Reflectance:

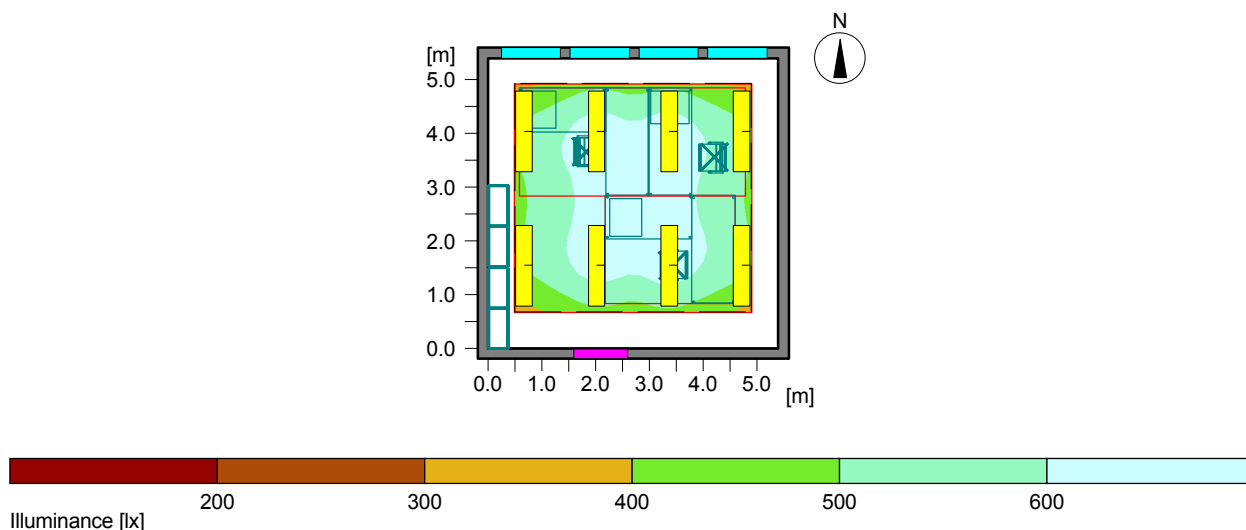
Structural elements

Pi :	Pillar
Tr :	Partition
Wo :	Real working surface
m :	Virtual measuring area
S :	Skylight
W :	Picture
Wi :	Window
DF :	Door
F :	Furniture

2 Raum

2.2 Summary, Raum

2.2.1 Result overview, Reference plane 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.70 m
Maintenance factor	0.67
Total luminous flux of all lamps	34400 lm
Total power	432 W
Total power per area (29.16 m ²)	14.81 W/m ² (2.61 W/m ² /100lx)

Illuminance

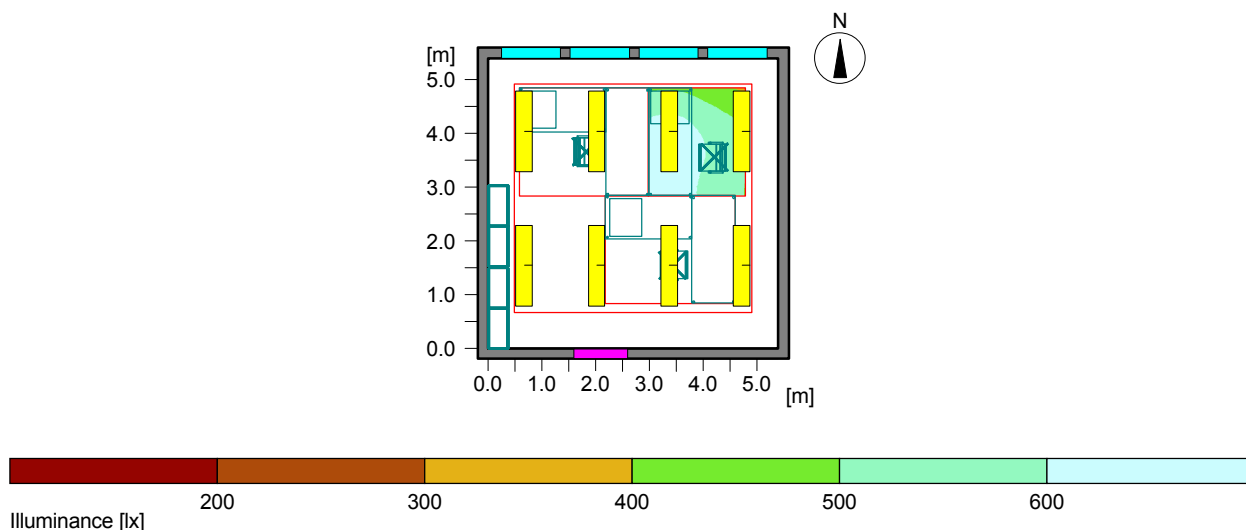
Average illuminance	Eav	568 lx
Minimum illuminance	Emin	375 lx
Maximum illuminance	Emax	666 lx
Uniformity g1	Emin/Em	1:1.51 (0.66)
Uniformity g2	Emin/Emax	1:1.77 (0.56)

Type No.\Make

2	8	Siteco	
		Order No.	: 5MC 12B 7-1FS
		Luminaire name	: Novaluna
		Equipment	: 1 x FDH 49 W / 4300 lm

2.2 Summary, Raum

2.2.2 Result overview, Measuring area (virtual) 1.1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.70 m
Maintenance factor	0.67

Total luminous flux of all lamps	34400 lm
Total power	432 W
Total power per area (29.16 m ²)	14.81 W/m ²

Illuminance

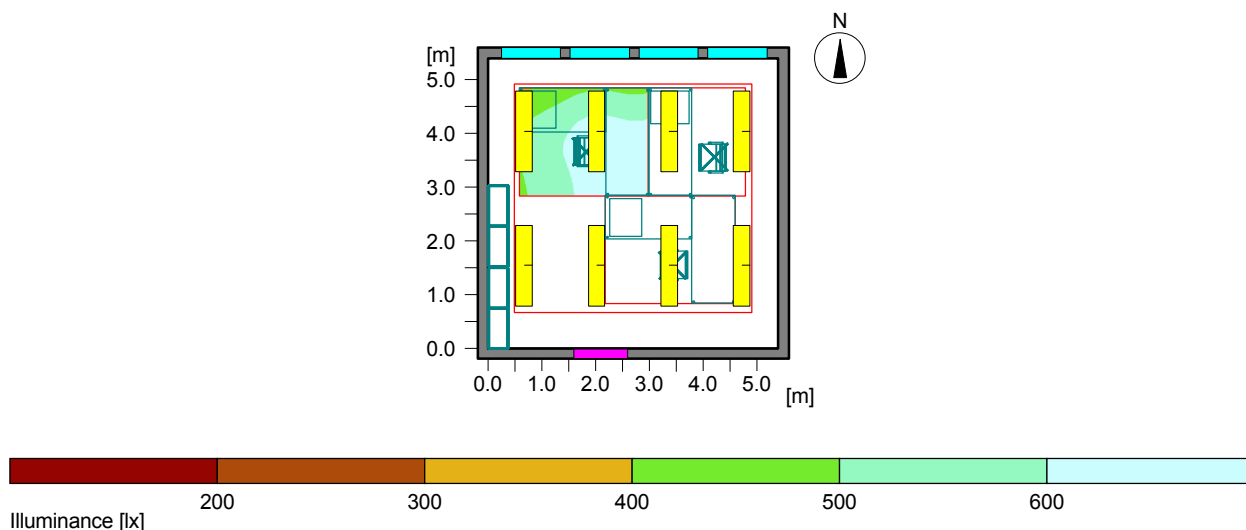
Average illuminance	Eav	573 lx
Minimum illuminance	Emin	398 lx
Maximum illuminance	E _{max}	660 lx
Uniformity g1	E _{min} /E _m	1:1.44 (0.7)
Uniformity g2	E _{min} /E _{max}	1:1.66 (0.6)

Type No.\Make

2	8	Siteco	
		Order No.	: 5MC 12B 7-1FS
		Luminaire name	: Novaluna
		Equipment	: 1 x FDH 49 W / 4300 lm

2.2 Summary, Raum

2.2.3 Result overview, Measuring area (virtual) 1.2



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.70 m
Maintenance factor	0.67

Total luminous flux of all lamps	34400 lm
Total power	432 W
Total power per area (29.16 m ²)	14.81 W/m ²

Illuminance

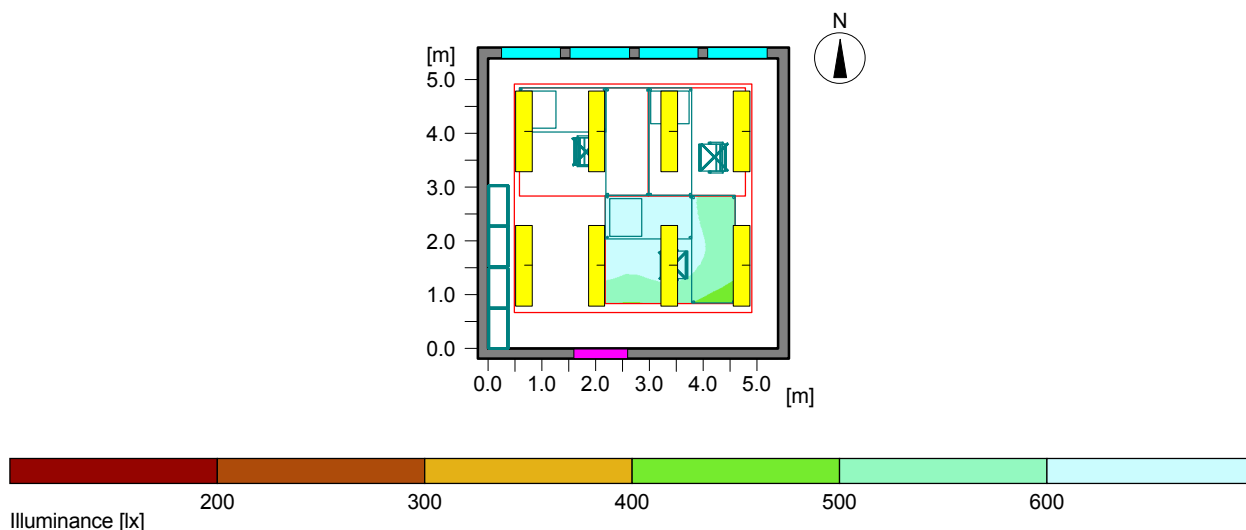
Average illuminance	Eav	576 lx
Minimum illuminance	Emin	400 lx
Maximum illuminance	E _{max}	657 lx
Uniformity g1	E _{min} /E _m	1:1.44 (0.7)
Uniformity g2	E _{min} /E _{max}	1:1.64 (0.61)

Type No.\Make

2	8	Siteco	
		Order No.	: 5MC 12B 7-1FS
		Luminaire name	: Novaluna
		Equipment	: 1 x FDH 49 W / 4300 lm

2.2 Summary, Raum

2.2.4 Result overview, Measuring area (virtual) 1.3



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.70 m
Maintenance factor	0.67

Total luminous flux of all lamps	34400 lm
Total power	432 W
Total power per area (29.16 m ²)	14.81 W/m ²

Illuminance

Average illuminance	Eav	595 lx
Minimum illuminance	Emin	443 lx
Maximum illuminance	Emax	659 lx
Uniformity g1	Emin/Em	1:1.34 (0.75)
Uniformity g2	Emin/Emax	1:1.49 (0.67)

Type No.\Make

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2 Raum

2.3 Calculation results, Raum

2.3.1 3D luminance, Ansicht von vorne



Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 164 cd/m²