

Office hall

Installation : Novaluna_Pendant mounted254_Eldacon

Project number : Standard example

Customer :

Processed by : Siteco

Date : 08.2007

Project description:

Room dimensions L/ B/ H: 8,10/ 12,15/ 2,7 m

Building axis 1,35 m

According to DIN EN 12 464

Maintenance factor 0,67

Lighting direct/ indirect

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 254 6-2HS1)

1.1.1 Data sheet

Manufacturer: Siteco

5MC 254 6-2HS1 Einzelleuchte für abgehängte Montage oder Deckenanbau Novaluna

Gehäuse aus Aluminium-Strangpreßprofil

mit ELDAICON-Lichtlenkung

BAP65 (L <= 1000 cd/m² rundum)

Schutzart: IP 20

Schutzklasse: SK I

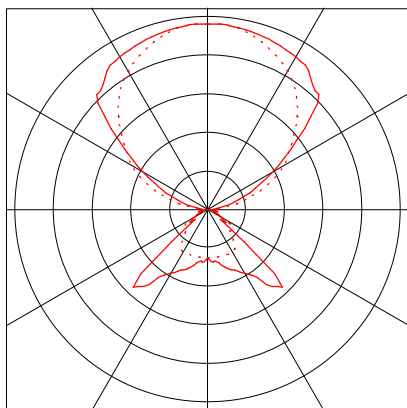
Montageart: Anbau, abgehängt

Luminaire data

Luminaires efficiency : 93.9% (D43)
Control gear : EVG-Dynamic
System power : 118 W
Length : 1196 mm
Width : 365 mm
Height : 32 mm

Equipped with

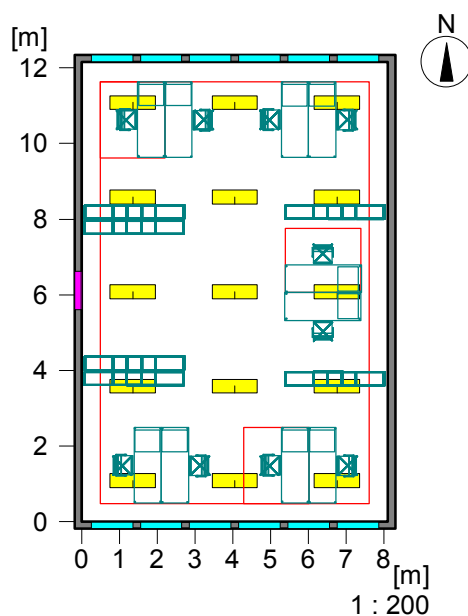
Number of : 2
Designation : FDH
Power : 54 W
Colour :
Luminous flux : 4450 lm



2 Raum

2.1 Description, Raum

2.1.1 Floor plan



Room data:

W1 :	8.10	50.0 %
W2 :	12.15	50.0 %
W3 :	8.10	50.0 %
W4 :	12.15	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]:		2.30

Reflectance:

Structural elements

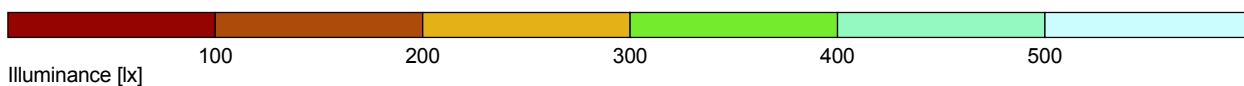
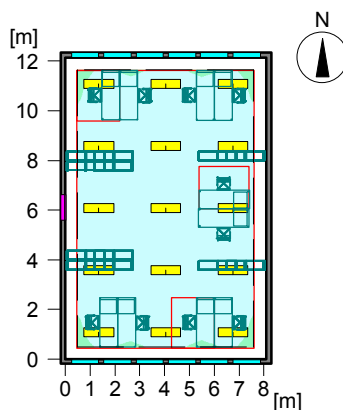
Pi :	Pillar
Tr :	Partition
Wo :	Real working surface
m :	Virtual measuring area
S :	Skylight
W :	Picture
Wi :	Window
DF :	Door
F :	Furniture

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2 Raum

2.2 Summary, Raum

2.2.1 Result overview, Reference plane 1



General

Calculation algorithm used	High indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.30 m
Maintenance factor	0.67
Total luminous flux of all lamps	133500 lm
Total power	1770 W
Total power per area (98.42 m ²)	17.99 W/m ² (2.75 W/m ² /100lx)

Illuminance

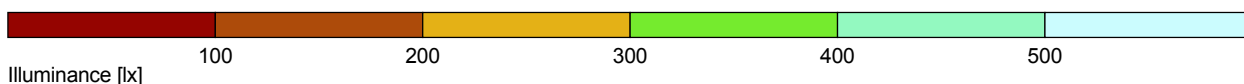
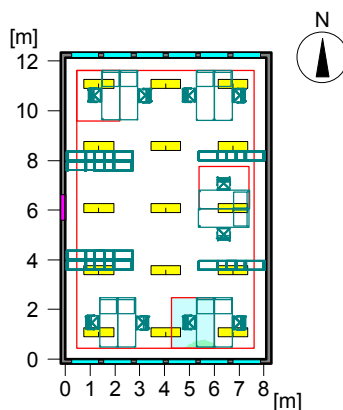
Average illuminance	Eav	654 lx
Minimum illuminance	Emin	470 lx
Maximum illuminance	Emax	913 lx
Uniformity g1	Emin/Em	1:1.39 (0.72)
Uniformity g2	Emin/Emax	1:1.94 (0.52)

Type No.\Make

2	15	Siteco	
		Order No.	: 5MC 254 6-2HS1
		Luminaire name	: Novaluna
		Equipment	: 2 x FDH 54 W / 4450 lm

2.2 Summary, Raum

2.2.2 Result overview, Measuring area (virtual) 14.1



General

Calculation algorithm used	High indirect fraction
Height of evaluation surface	0.75 m
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Maintenance factor	0.67

Total luminous flux of all lamps	133500 lm
Total power	1770 W
Total power per area (98.42 m ²)	17.99 W/m ²

Illuminance

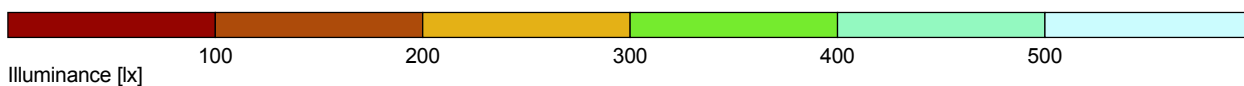
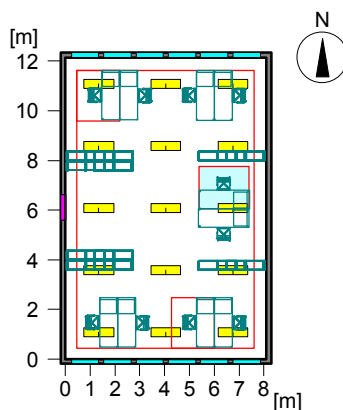
Average illuminance	E _{av}	591 lx
Minimum illuminance	E _{min}	464 lx
Maximum illuminance	E _{max}	739 lx
Uniformity g1	E _{min} /E _{av}	1:1.27 (0.79)
Uniformity g2	E _{min} /E _{max}	1:1.59 (0.63)

Type No.\Make

2	15	Siteco	
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		Luminaire name	: Novaluna
		Equipment	: 2 x FDH 54 W / 4450 lm

2.2 Summary, Raum

2.2.3 Result overview, Measuring area (virtual) 19.1



General

Calculation algorithm used	High indirect fraction
Height of evaluation surface	0.75 m
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Maintenance factor	0.67

Total luminous flux of all lamps	133500 lm
Total power	1770 W
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Illuminance

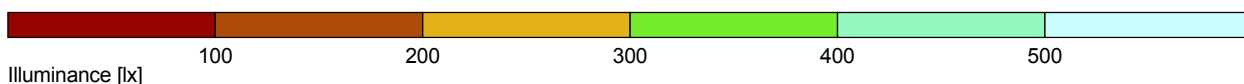
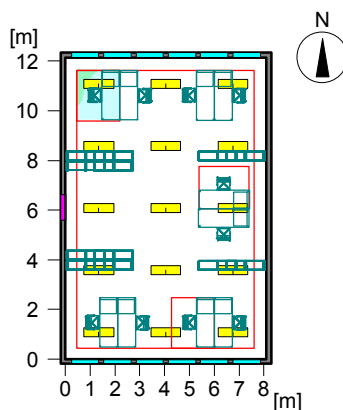
Average illuminance	Eav	664 lx
Minimum illuminance	Emin	546 lx
Maximum illuminance	Emax	750 lx
Uniformity g1	Emin/Em	1:1.22 (0.82)
Uniformity g2	Emin/Emax	1:1.37 (0.73)

Type No.\Make

2	15	Siteco	
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		Equipment	: 2 x FDH 54 W / 4450 lm

2.2 Summary, Raum

2.2.4 Result overview, Measuring area (virtual) 20.1



General

Calculation algorithm used	High indirect fraction
Height of evaluation surface	0.75 m
Height of luminaire plane	2.30 m
Maintenance factor	0.67

Total luminous flux of all lamps	133500 lm
Total power	1770 W
Total power per area (98.42 m ²)	17.99 W/m ²

Illuminance

Average illuminance	Eav	557 lx
Minimum illuminance	Emin	393 lx
Maximum illuminance	E _{max}	708 lx
Uniformity g1	E _{min} /E _m	1:1.42 (0.7)
Uniformity g2	E _{min} /E _{max}	1:1.8 (0.55)

Type No.\Make

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2 Raum

2.3 Calculation results, Raum

2.3.1 3D luminance, Ansicht 1



Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 1740 cd/m²