

## Conference / seminar room

Installation : Quadrature\_Einbau235 + Lunis E

Project number : Standard example

Customer :

Processed by : Siteco

Date : 01.2007

### Project description:

Room dimensions L/B/H: 8,1/12,15/2,7 m

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, Ceilingwasher (5LM 702 7-1F)

#### 1.1.1 Data sheet

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##### Manufacturer: Siteco

##### 5LM 702 7-1F Wandinbaudeckenfluter Ceilingwasher

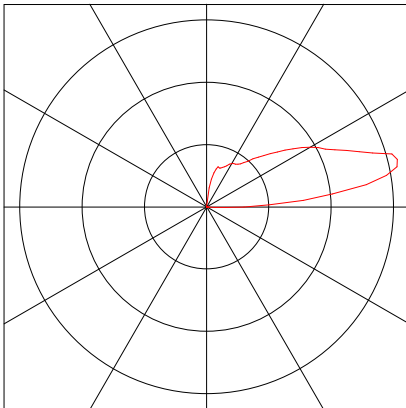
Gehäuse aus Stahlblech, leuchtenweiß lackiert  
Evolventen-Reflektor, seidenmatt  
asymmetrisch strahlend  
Schutzart: IP 20  
Schutzklasse: SK I  
Montageart: Einbau

##### Luminaire data

Luminaire efficiency : 63.9% (E11)  
Control gear : EVG  
System power : 55 W  
Length : 1520 mm  
Width : 58 mm  
Height : 165 mm

##### Equipped with

Number of : 1  
Designation : T16  
Power : 49 W  
Colour :  
Luminous flux : 4300 lm



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## 1 Luminaire data

### 1.2 Siteco, Quadrature (5LM 512 7-2RW)

#### 1.2.1 Data sheet

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**Manufacturer: Siteco**

**5LM 512 7-2RW Einbauleuchte Quadrature**

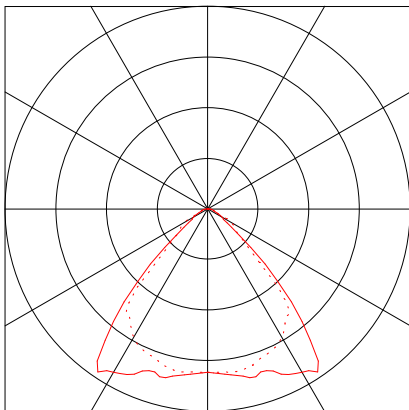
Gehäuse aus Stahlblech, weiß lackiert, sichtbarer Rahmen aus strangepresstem Aluminium, klassische Bauform  
ELDACON-Lichtlenkung über Mikroprismenstruktur  
BAP60 ( $L \leq 1000 \text{ cd/m}^2$ )  
Schutzart: IP 20  
Schutzklasse: SK I  
Montageart: Einbau Modul 600

**Luminaire data**

Luminaires efficiency : 69.7% (A50)  
Control gear : EVG  
System power : 79 W  
Length : 1497 mm  
Width : 353 mm  
Height : 42 mm

**Equipped with**

Number of : 2  
Designation : T16  
Power : 35 W  
Colour :  
Luminous flux : 3300 lm



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## 1 Luminaire data

### 1.3 Siteco, Lunis E (5LR 425 0-1AA61)

#### 1.3.1 Data sheet

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##### Manufacturer: Siteco

##### 5LR 425 0-1AA61 Einbaudownlight Lunis E

Wallwasher-Reflektor mit VirtualSource Lichttechnik, mattglänzend

asymmetrisch tief strahlend

Schutzart:IP 23

Schutzklasse: SK I

Montageart: Einbau

##### Luminaire data

Luminaire efficiency : 70% (A60)

Control gear : KEIN

System power : 150 W

Diameter : 230 mm

Height : 300 mm

##### Equipped with

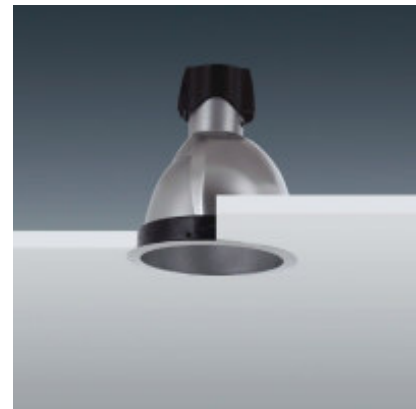
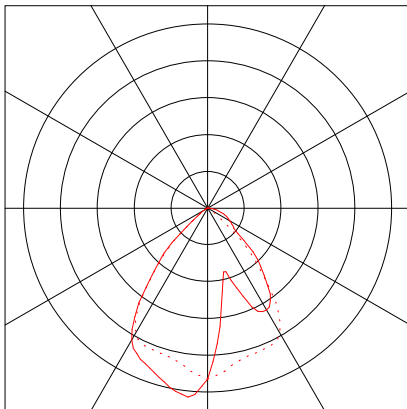
Number of : 1

Designation : QT 32

Power : 150 W

Colour :

Luminous flux : 2400 lm

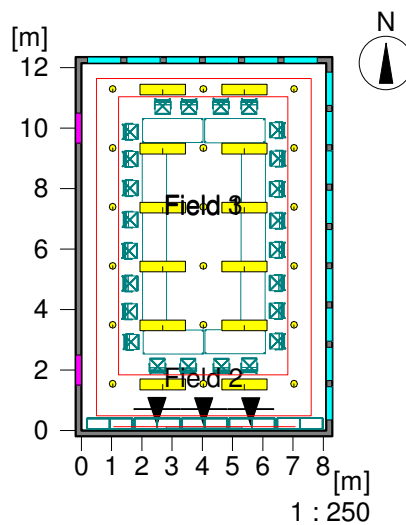


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## 2 Raum

### 2.1 Description, Raum

#### 2.1.1 Floor plan



#### Room data:

W1 : 8.10  
 W2 : 12.15  
 W3 : 8.10  
 W4 : 12.15  
 W5 : ----  
 W6 : ----  
 Floor: ----  
 Ceiling: ----  
 Room height [m]:  
 Height of reference plane [m]:  
 Height of luminaire plane [m]:

#### Reflectance:

50.0 %  
 50.0 %  
 50.0 %  
 50.0 %  
 ----  
 ----  
 20.0 %  
 70.0 %  
 2.70  
 0.75  
 2.70

#### Structural elements

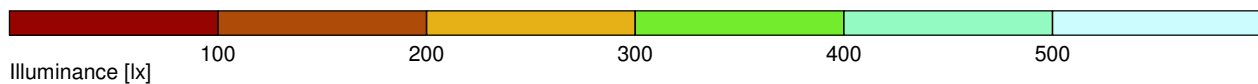
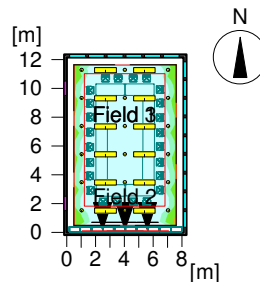
Pi : Pillar  
 Tr : Partition  
 Wo : Real working surface  
 m : Virtual measuring area  
 S : Skylight  
 Pc : Picture  
 Wi : Window  
 DF : Door  
 F : Furniture

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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	2.70 m
Maintenance factor	0.67
Total luminous flux of all lamps	135300 lm
Total power	3813 W
Total power per area (98.42 m <sup>2</sup> )	38.74 W/m <sup>2</sup> (5.70 W/m <sup>2</sup> /100lx)

#### Illuminance

Average illuminance	Eav	680 lx
Minimum illuminance	Emin	294 lx
Maximum illuminance	Emax	906 lx
Uniformity g1	Emin/Em	1:2.31 (0.43)
Uniformity g2	Emin/Emax	1:3.08 (0.32)

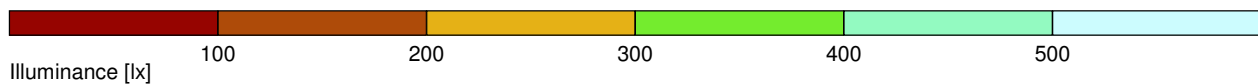
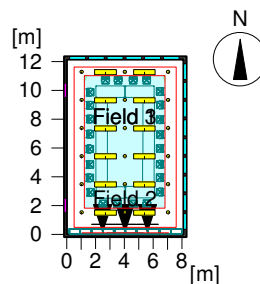
#### Type No.\Make

		<b>Siteco</b>	
1	3	Order No.	: 5LM 702 7-1F
		Luminaire name	: Ceilingwasher
		Equipment	: 1 x T16 49 W / 4300 lm
2	12	Order No.	: 5LM 512 7-2RW
		Luminaire name	: Quadrature
		Equipment	: 2 x T16 35 W / 3300 lm

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## 2.2 Summary, Raum

### 2.2.2 Result overview, Measuring area (virtual) 1



#### General

Calculation algorithm used	High 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	135300 lm
Total power	3813 W
Total power per area (98.42 m <sup>2</sup> )	38.74 W/m <sup>2</sup>

#### Illuminance

Average illuminance	Eav	757 lx
Minimum illuminance	Emin	436 lx
Maximum illuminance	Emax	903 lx
Uniformity g1	Emin/Em	1:1.74 (0.58)
Uniformity g2	Emin/Emax	1:2.07 (0.48)

#### Type No.\Make

		<b>Siteco</b>	
1	3	Order No.	: 5LM 702 7-1F
		Luminaire name	: Ceilingwasher
		Equipment	: 1 x T16 49 W / 4300 lm
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		Equipment	: 2 x T16 35 W / 3300 lm

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## 2 Raum

### 2.3 Calculation results, Raum

#### 2.3.2 3D luminance, View from the left



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Luminance in the scene

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

Maximum: : 301 cd/m<sup>2</sup>