

## Llogaritjet Fotometrike\_Shkolla Shefki Kuleta

## Preliminary remarks

Notes on planning:

The energy consumption quantities do not take into account light scenes and their dimming levels.

## Content

Cover page .....	1
Preliminary remarks .....	2
Content .....	3
Description .....	9
Luminaire list .....	10

## Product data sheets

Not yet a DIALux member - Start eco Surface IP44 PIR 1900lm 840 DualTone (1x 0043438) .....	11
Not yet a DIALux member - START Panel 600x600 HE 4100Lm 830 LILO (1x LED) .....	12
Not yet a DIALux member - START Panel 1200x300 HE 4100Lm 840 LILO (1x LED) .....	13

Site 1

### Building 1

Luminaire list .....	14
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Site 1 - Building 1

### Story 1

Room List / Light scene 1 .....	15
Luminaire list .....	23
Calculation objects / Light scene 1 .....	24

Site 1 - Building 1 - Story 1

### Depo

Summary / Light scene 1 .....	27
Luminaire layout plan .....	29
Luminaire list .....	31
Calculation objects / Light scene 1 .....	32
Working plane (Depo) / Light scene 1 / Perpendicular illuminance (adaptive) .....	34

Site 1 - Building 1 - Story 1

### Depo

Summary / Light scene 1 .....	35
Luminaire layout plan .....	37
Luminaire list .....	39
Calculation objects / Light scene 1 .....	40

## Content

Working plane (Depo) / Light scene 1 / Perpendicular illuminance (adaptive) .....	42
---	----

Site 1 - Building 1 - Story 1

### Hyrje

Summary / Light scene 1 .....	43
Luminaire layout plan .....	45
Luminaire list .....	47
Calculation objects / Light scene 1 .....	48
Working plane (Hyrje) / Light scene 1 / Perpendicular illuminance (adaptive) .....	50

Site 1 - Building 1 - Story 1

### Klase

Summary / Light scene 1 .....	51
Luminaire layout plan .....	53
Luminaire list .....	55
Calculation objects / Light scene 1 .....	56
Working plane (Klase) / Light scene 1 / Perpendicular illuminance (adaptive) .....	58

Site 1 - Building 1 - Story 1

### Klase

Summary / Light scene 1 .....	59
Luminaire layout plan .....	61
Luminaire list .....	63
Calculation objects / Light scene 1 .....	64
Working plane (Klase) / Light scene 1 / Perpendicular illuminance (adaptive) .....	66

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1 .....	67
Luminaire layout plan .....	69
Luminaire list .....	71
Calculation objects / Light scene 1 .....	72
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive) .....	74



## Content

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1	75
Luminaire layout plan	77
Luminaire list	79
Calculation objects / Light scene 1	80
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive)	82

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1	83
Luminaire layout plan	85
Luminaire list	87
Calculation objects / Light scene 1	88
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive)	90

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1	91
Luminaire layout plan	93
Luminaire list	95
Calculation objects / Light scene 1	96
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive)	98

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1	99
Luminaire layout plan	101
Luminaire list	103
Calculation objects / Light scene 1	104
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive)	106

## Content

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1 .....	107
Luminaire layout plan .....	109
Luminaire list .....	111
Calculation objects / Light scene 1 .....	112
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive) .....	114

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1 .....	115
Luminaire layout plan .....	117
Luminaire list .....	119
Calculation objects / Light scene 1 .....	120
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive) .....	122

Site 1 - Building 1 - Story 1

### Klase/Classroom

Summary / Light scene 1 .....	123
Luminaire layout plan .....	125
Luminaire list .....	127
Calculation objects / Light scene 1 .....	128
Working plane (Klase/Classroom) / Light scene 1 / Perpendicular illuminance (adaptive) .....	130

Site 1 - Building 1 - Story 1

### Koridor

Summary / Light scene 1 .....	131
Luminaire layout plan .....	133
Luminaire list .....	135
Calculation objects / Light scene 1 .....	136
Working plane (Koridor) / Light scene 1 / Perpendicular illuminance (adaptive) .....	138

Site 1 - Building 1 - Story 1

### Koridor

Summary / Light scene 1 .....	139
-------------------------------	-----

## Content

Luminaire layout plan .....	141
Luminaire list .....	143
Calculation objects / Light scene 1 .....	144
Working plane (Koridor) / Light scene 1 / Perpendicular illuminance (adaptive) .....	146

Site 1 - Building 1 - Story 1

### Koridor

Summary / Light scene 1 .....	147
Luminaire layout plan .....	149
Luminaire list .....	151
Calculation objects / Light scene 1 .....	152
Working plane (Koridor) / Light scene 1 / Perpendicular illuminance (adaptive) .....	154

Site 1 - Building 1 - Story 1

### Koridor

Summary / Light scene 1 .....	155
Luminaire layout plan .....	157
Luminaire list .....	160
Calculation objects / Light scene 1 .....	161
Working plane (Koridor) / Light scene 1 / Perpendicular illuminance (adaptive) .....	163

Site 1 - Building 1 - Story 1

### Tualet

Summary / Light scene 1 .....	164
Luminaire layout plan .....	166
Luminaire list .....	168
Calculation objects / Light scene 1 .....	169
Working plane (Tualet) / Light scene 1 / Perpendicular illuminance (adaptive) .....	171

Site 1 - Building 1 - Story 1

### Tualet

Summary / Light scene 1 .....	172
Luminaire layout plan .....	174
Luminaire list .....	178
Calculation objects / Light scene 1 .....	179
Working plane (Tualet) / Light scene 1 / Perpendicular illuminance (adaptive) .....	181

## Content

Site 1 - Building 1 - Story 1

### Zyre

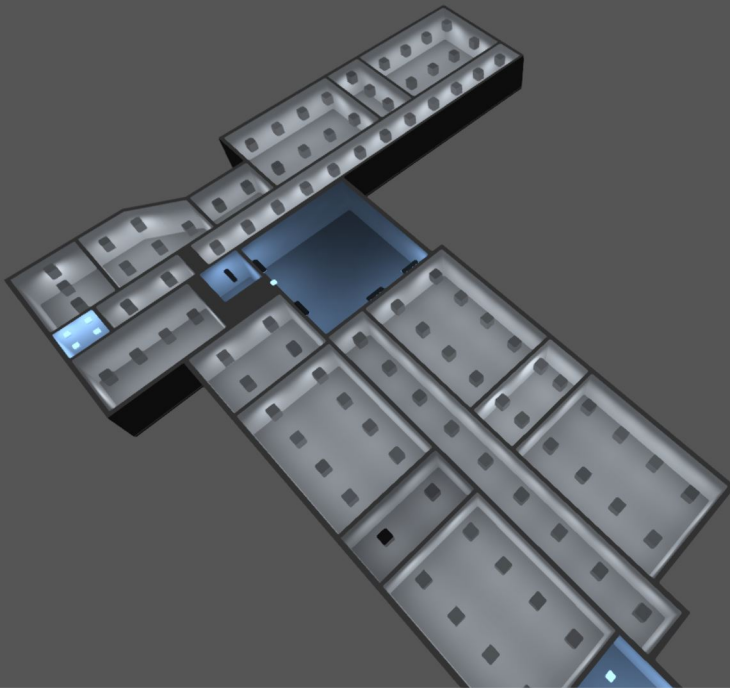
Summary / Light scene 1 .....	182
Luminaire layout plan .....	184
Luminaire list .....	186
Calculation objects / Light scene 1 .....	187
Working plane (Zyre) / Light scene 1 / Perpendicular illuminance (adaptive) .....	189

Site 1 - Building 1 - Story 1

### Zyre Drejtorit

Summary / Light scene 1 .....	190
Luminaire layout plan .....	192
Luminaire list .....	194
Calculation objects / Light scene 1 .....	195
Working plane (Zyre Drejtorit) / Light scene 1 / Perpendicular illuminance (adaptive) .....	197

Glossary .....	198
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## Description

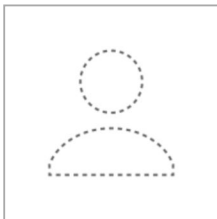
## Luminaire list

$\Phi_{\text{total}}$ 450028 lm	$P_{\text{total}}$ 3930.4 W	Luminous efficacy 114.5 lm/W
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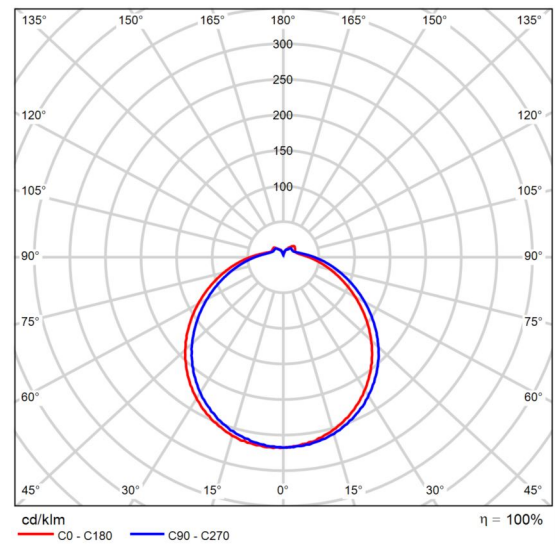
pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
98	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W
5	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm	115.6 lm/W
18	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

## Product data sheet

Not yet a DIALux member - Start eco Surface IP44 PIR 1900lm 840 DualTone



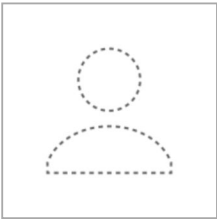
Article No.	0043438
P	23.8 W
$\Phi_{\text{Lamp}}$	1800 lm
$\Phi_{\text{Luminaire}}$	1800 lm
$\eta$	100.00 %
Luminous efficacy	75.6 lm/W
CCT	4000 K
CRI	80



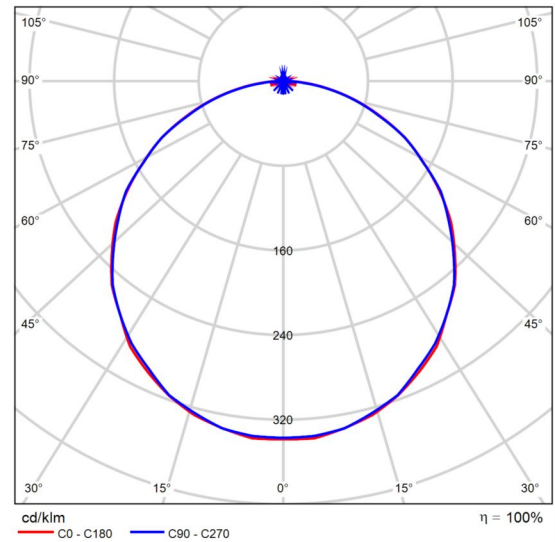
Polar LDC

Product data sheet

Not yet a DIALux member - START Panel 600x600 HE 4100Lm 830 LILO



Article No.	0042872
P	34.0 W
$\Phi_{Lamp}$	4051 lm
$\Phi_{Luminaire}$	4061 lm
$\eta$	100.25 %
Luminous efficacy	119.4 lm/W
CCT	3000 K
CRI	80



Polar LDC

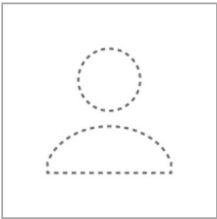
Glare evaluation according to UGR												
p Ceiling	70	70	50	50	30	70	70	50	50	30		
p Walls	50	30	50	30	30	50	30	50	30	30		
p Floor	20	20	20	20	20	20	20	20	20	20		
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	17.3	18.7	17.7	19.0	19.2	17.3	18.7	17.6	18.9	19.2	
	3H	19.0	20.2	19.3	20.5	20.8	18.9	20.1	19.2	20.4	20.7	
	4H	19.7	20.8	20.0	21.1	21.5	19.6	20.8	19.9	21.1	21.4	
	6H	20.2	21.3	20.6	21.6	22.0	20.1	21.2	20.5	21.5	21.9	
	8H	20.4	21.5	20.8	21.8	22.1	20.3	21.3	20.7	21.7	22.0	
	12H	20.5	21.6	20.9	21.9	22.3	20.4	21.4	20.8	21.7	22.1	
4H	2H	18.0	19.2	18.4	19.5	19.8	18.0	19.2	18.3	19.5	19.8	
	3H	19.9	20.9	20.3	21.2	21.6	19.8	20.8	20.2	21.2	21.5	
	4H	20.7	21.6	21.1	22.0	22.4	20.6	21.5	21.1	21.9	22.3	
	6H	21.4	22.2	21.8	22.6	23.0	21.3	22.1	21.7	22.5	22.9	
	8H	21.6	22.4	22.1	22.8	23.2	21.5	22.2	22.0	22.7	23.1	
	12H	21.8	22.5	22.3	23.0	23.4	21.7	22.3	22.1	22.8	23.2	
8H	4H	21.0	21.8	21.5	22.2	22.6	21.0	21.7	21.4	22.1	22.6	
	6H	21.9	22.5	22.4	22.9	23.4	21.8	22.4	22.3	22.8	23.3	
	8H	22.2	22.8	22.7	23.3	23.7	22.1	22.6	22.6	23.1	23.6	
	12H	22.5	23.0	23.1	23.5	24.0	22.3	22.8	22.8	23.3	23.8	
12H	4H	21.1	21.7	21.5	22.2	22.6	21.0	21.7	21.5	22.1	22.6	
	6H	22.0	22.5	22.5	23.0	23.5	21.9	22.4	22.4	22.9	23.4	
	8H	22.4	22.8	22.9	23.3	23.8	22.2	22.7	22.7	23.2	23.7	
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.2 / -0.3					+0.2 / -0.3					
S = 2.0H		+0.3 / -0.6					+0.3 / -0.6					
Standard table		BK06					BK06					
Correction Summand		5.0					4.9					
Corrected glare indices referring to 4051lm Total luminous flux												

UGR diagram (SHR: 0.25)

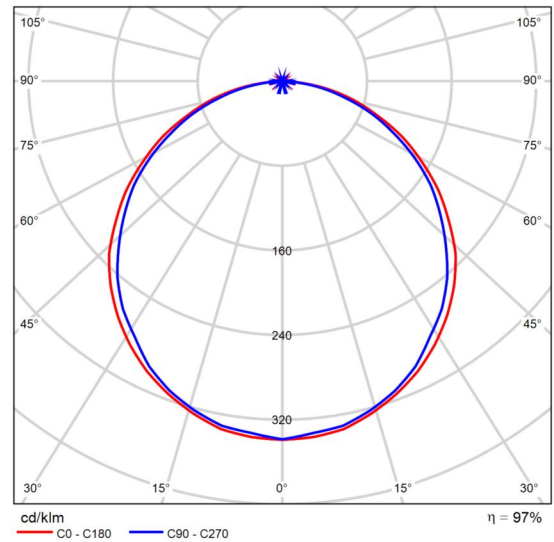


Product data sheet

Not yet a DIALux member - START Panel 1200x300 HE 4100Lm 840 LILO



Article No.	0042879
P	34.0 W
$\Phi_{Lamp}$	4053 lm
$\Phi_{Luminaire}$	3930 lm
$\eta$	96.96 %
Luminous efficacy	115.6 lm/W
CCT	4000 K
CRI	80



Polar LDC

Glare evaluation according to UGR												
p Ceiling	70	70	50	50	30	70	70	50	50	30	30	
p Walls	50	30	50	30	30	50	30	50	30	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	20	
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	17.0	18.4	17.3	18.6	18.9	17.1	18.5	17.4	18.7	19.0	
	3H	18.5	19.7	18.8	20.0	20.3	18.6	19.8	18.9	20.1	20.4	
	4H	19.1	20.2	19.4	20.5	20.9	19.2	20.3	19.5	20.6	20.9	
	6H	19.5	20.6	19.9	20.9	21.2	19.6	20.7	19.9	21.0	21.3	
	8H	19.6	20.6	20.0	21.0	21.3	19.7	20.7	20.1	21.1	21.4	
	12H	19.6	20.6	20.0	21.0	21.3	19.7	20.7	20.1	21.1	21.4	
4H	2H	17.7	18.8	18.0	19.1	19.4	17.7	18.9	18.1	19.2	19.5	
	3H	19.3	20.3	19.7	20.7	21.0	19.4	20.4	19.8	20.7	21.1	
	4H	20.0	20.9	20.4	21.3	21.7	20.1	21.0	20.5	21.3	21.7	
	6H	20.5	21.3	21.0	21.7	22.1	20.6	21.4	21.0	21.8	22.2	
	8H	20.7	21.4	21.1	21.8	22.3	20.7	21.5	21.2	21.9	22.3	
	12H	20.8	21.4	21.2	21.9	22.3	20.8	21.5	21.3	21.9	22.4	
8H	4H	20.3	21.0	20.7	21.4	21.8	20.3	21.0	20.8	21.4	21.9	
	6H	20.9	21.5	21.4	21.9	22.4	20.9	21.5	21.4	22.0	22.4	
	8H	21.1	21.6	21.6	22.1	22.6	21.1	21.7	21.6	22.1	22.6	
	12H	21.2	21.7	21.8	22.2	22.7	21.3	21.7	21.8	22.2	22.7	
12H	4H	20.3	20.9	20.7	21.4	21.8	20.3	21.0	20.8	21.4	21.9	
	6H	20.9	21.5	21.4	21.9	22.4	21.0	21.5	21.5	22.0	22.5	
	8H	21.2	21.6	21.7	22.1	22.6	21.2	21.7	21.7	22.1	22.7	
	8H	21.2	21.6	21.7	22.1	22.6	21.2	21.7	21.7	22.1	22.7	
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.2 / -0.4					+0.2 / -0.3					
S = 2.0H		+0.5 / -0.7					+0.5 / -0.6					
Standard table		BK05					BK05					
Correction Summand		3.6					3.6					
Corrected glare indices referring to 4053lm Total luminous flux												

UGR diagram (SHR: 0.25)

Building 1

**Luminaire list** $\Phi_{\text{total}}$ 

450028 lm

 $P_{\text{total}}$ 

3930.4 W

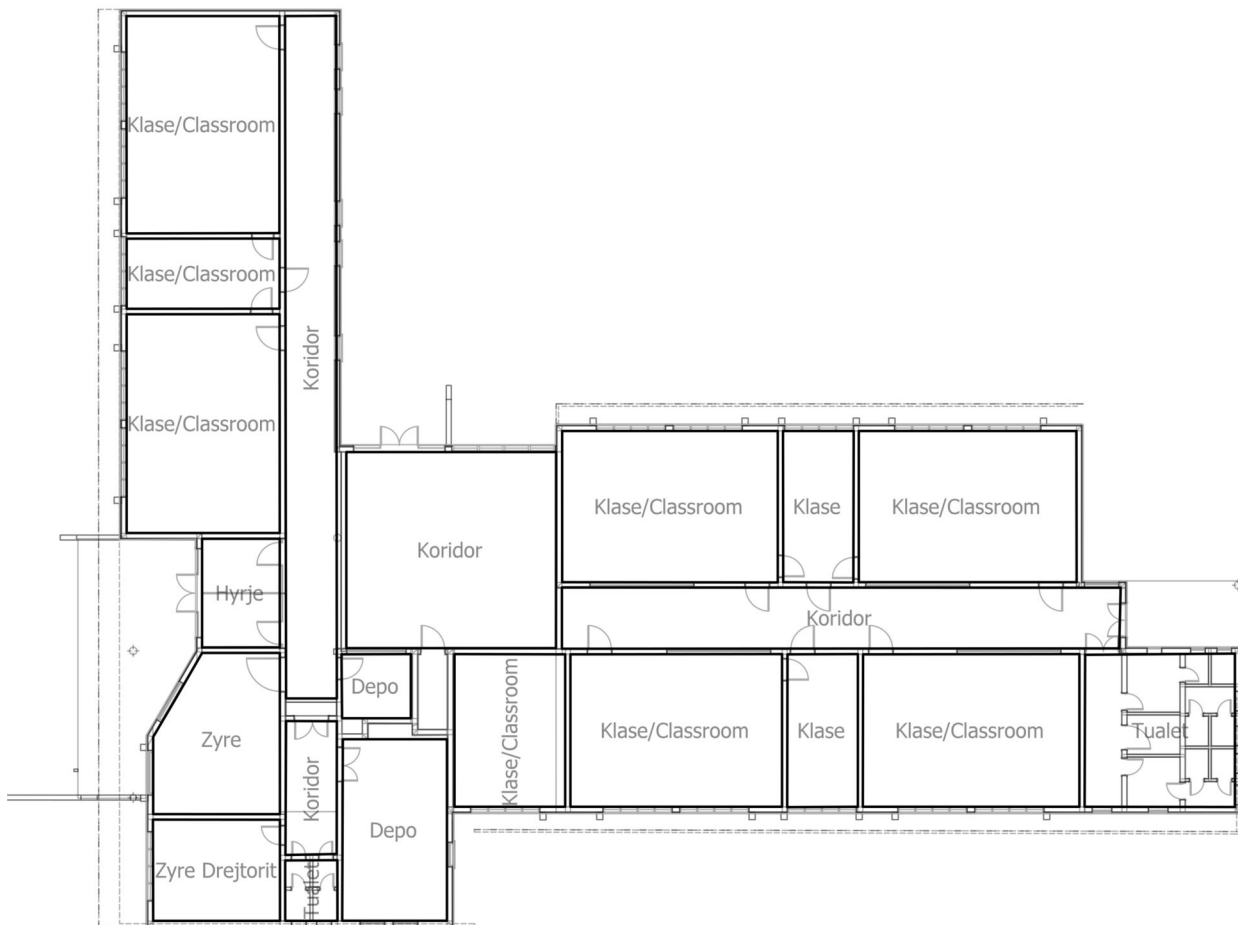
Luminous efficacy

114.5 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
98	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W
5	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm	115.6 lm/W
18	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 (Light scene 1)

## Room List



Building 1 · Story 1 (Light scene 1)

**Room List**

Depo

<b>P<sub>total</sub></b> 136.0 W	<b>A<sub>Room</sub></b> 30.87 m <sup>2</sup>	<b>Lighting power density</b> 4.41 W/m <sup>2</sup> = 1.18 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 373 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Depo

<b>P<sub>total</sub></b> 34.0 W	<b>A<sub>Room</sub></b> 7.20 m <sup>2</sup>	<b>Lighting power density</b> 4.72 W/m <sup>2</sup> = 1.90 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 249 lx
------------------------------------	--	---	--

pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
1	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm

Hyrje

<b>P<sub>total</sub></b> 68.0 W	<b>A<sub>Room</sub></b> 13.74 m <sup>2</sup>	<b>Lighting power density</b> 4.95 W/m <sup>2</sup> = 1.34 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 369 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Building 1 · Story 1 (Light scene 1)

**Room List**

Klase

<b>P<sub>total</sub></b> 68.0 W	<b>A<sub>Room</sub></b> 17.54 m <sup>2</sup>	<b>Lighting power density</b> 3.88 W/m <sup>2</sup> = 1.30 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 299 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Klase

<b>P<sub>total</sub></b> 136.0 W	<b>A<sub>Room</sub></b> 17.35 m <sup>2</sup>	<b>Lighting power density</b> 7.84 W/m <sup>2</sup> = 1.41 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 557 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Klase/Classroom

<b>P<sub>total</sub></b> 272.0 W	<b>A<sub>Room</sub></b> 54.07 m <sup>2</sup>	<b>Lighting power density</b> 5.03 W/m <sup>2</sup> = 1.14 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 443 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Building 1 · Story 1 (Light scene 1)

**Room List**

Klase/Classroom

<b>P<sub>total</sub></b> 102.0 W	<b>A<sub>Room</sub></b> 17.46 m <sup>2</sup>	<b>Lighting power density</b> 5.84 W/m <sup>2</sup> = 1.34 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 437 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
3	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Klase/Classroom

<b>P<sub>total</sub></b> 272.0 W	<b>A<sub>Room</sub></b> 54.51 m <sup>2</sup>	<b>Lighting power density</b> 4.99 W/m <sup>2</sup> = 1.14 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 439 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Klase/Classroom

<b>P<sub>total</sub></b> 272.0 W	<b>A<sub>Room</sub></b> 52.56 m <sup>2</sup>	<b>Lighting power density</b> 5.17 W/m <sup>2</sup> = 1.14 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 454 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Building 1 · Story 1 (Light scene 1)

**Room List**

Klase/Classroom

<b>P<sub>total</sub></b> 272.0 W	<b>A<sub>Room</sub></b> 53.76 m <sup>2</sup>	<b>Lighting power density</b> 5.06 W/m <sup>2</sup> = 1.14 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 446 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Klase/Classroom

<b>P<sub>total</sub></b> 272.0 W	<b>A<sub>Room</sub></b> 53.59 m <sup>2</sup>	<b>Lighting power density</b> 5.08 W/m <sup>2</sup> = 1.14 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 447 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Klase/Classroom

<b>P<sub>total</sub></b> 272.0 W	<b>A<sub>Room</sub></b> 53.11 m <sup>2</sup>	<b>Lighting power density</b> 5.12 W/m <sup>2</sup> = 1.14 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 450 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Building 1 · Story 1 (Light scene 1)

**Room List**

Klase/Classroom

<b>P<sub>total</sub></b> 136.0 W	<b>A<sub>Room</sub></b> 27.50 m <sup>2</sup>	<b>Lighting power density</b> 4.95 W/m <sup>2</sup> = 1.22 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 406 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Koridor

<b>P<sub>total</sub></b> 68.0 W	<b>A<sub>Room</sub></b> 11.08 m <sup>2</sup>	<b>Lighting power density</b> 6.14 W/m <sup>2</sup> = 2.09 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 294 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Koridor

<b>P<sub>total</sub></b> 306.0 W	<b>A<sub>Room</sub></b> 55.46 m <sup>2</sup>	<b>Lighting power density</b> 5.52 W/m <sup>2</sup> = 1.64 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 337 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
9	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm



Building 1 · Story 1 (Light scene 1)

**Room List**

Koridor

<b>P<sub>total</sub></b> 408.0 W	<b>A<sub>Room</sub></b> 56.66 m <sup>2</sup>	<b>Lighting power density</b> 7.20 W/m <sup>2</sup> = 1.82 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 397 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
12	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Koridor

<b>P<sub>total</sub></b> 159.8 W	<b>A<sub>Room</sub></b> 66.95 m <sup>2</sup>	<b>Lighting power density</b> 2.39 W/m <sup>2</sup> = 1.98 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 121 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
4	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm
1	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm

Tualet

<b>P<sub>total</sub></b> 95.2 W	<b>A<sub>Room</sub></b> 5.15 m <sup>2</sup>	<b>Lighting power density</b> 18.49 W/m <sup>2</sup> = 4.77 W/m <sup>2</sup> /100 lx (Room)	<b>E<sub>perpendicular</sub> (Working plane)</b> 388 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ <sub>Luminaire</sub>
4	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm

Building 1 · Story 1 (Light scene 1)

**Room List**

Tualet

$P_{total}$ 309.4 W	$A_{Room}$ 37.30 m <sup>2</sup>	Lighting power density 8.30 W/m <sup>2</sup> = 2.50 W/m <sup>2</sup> /100 lx (Room)	$\bar{E}_{perpendicular}$ (Working plane) 332 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
13	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm

Zyre

$P_{total}$ 170.0 W	$A_{Room}$ 29.90 m <sup>2</sup>	Lighting power density 5.69 W/m <sup>2</sup> = 1.23 W/m <sup>2</sup> /100 lx (Room)	$\bar{E}_{perpendicular}$ (Working plane) 464 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
5	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Zyre Drejtorit

$P_{total}$ 102.0 W	$A_{Room}$ 20.91 m <sup>2</sup>	Lighting power density 4.88 W/m <sup>2</sup> = 1.25 W/m <sup>2</sup> /100 lx (Room)	$\bar{E}_{perpendicular}$ (Working plane) 391 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
3	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm

Building 1 · Story 1

**Luminaire list** $\Phi_{\text{total}}$ 

450028 lm

 $P_{\text{total}}$ 

3930.4 W

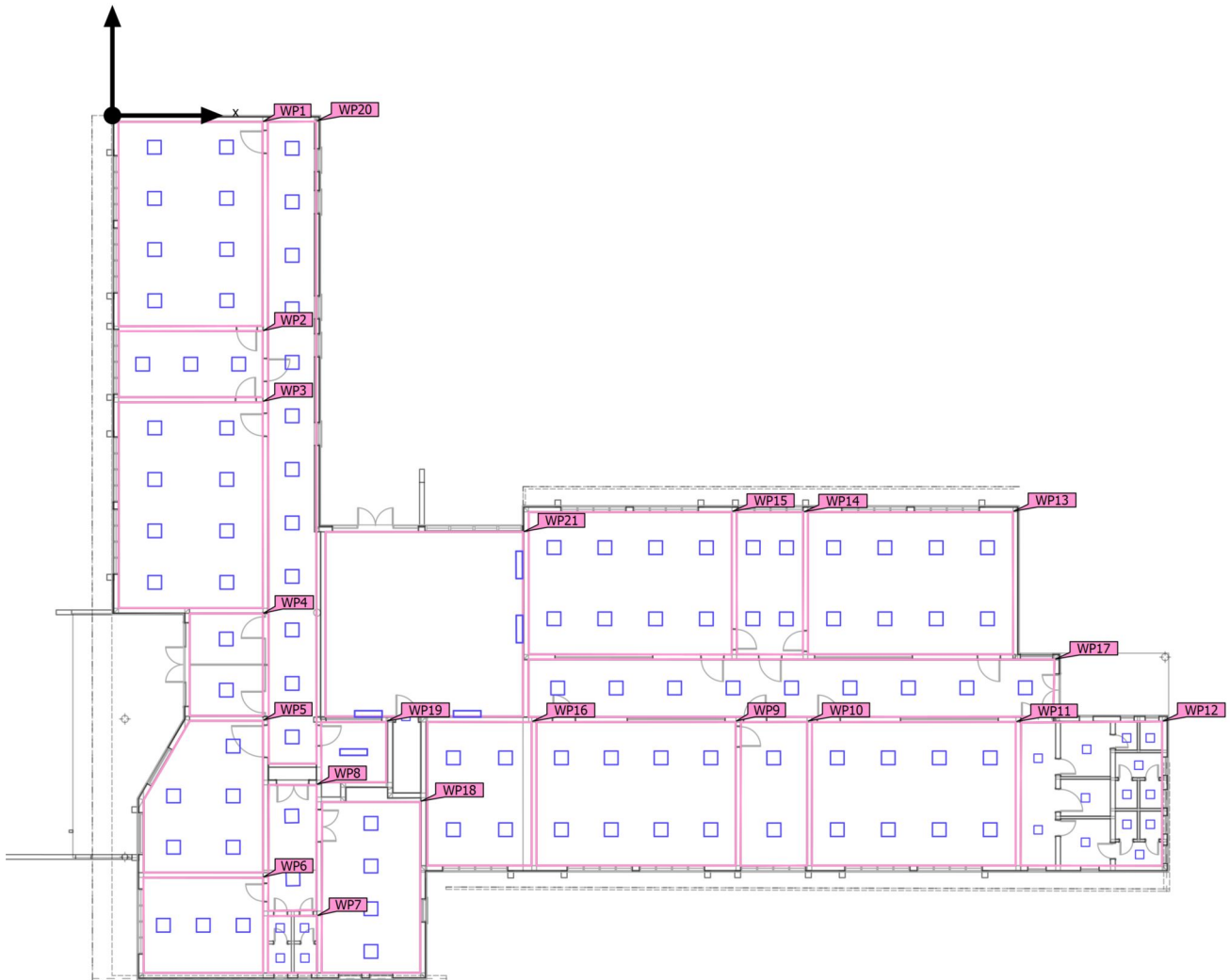
Luminous efficacy

114.5 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
98	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W
5	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm	115.6 lm/W
18	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 (Light scene 1)

## Calculation objects



Building 1 · Story 1 (Light scene 1)

**Calculation objects**

## Working planes

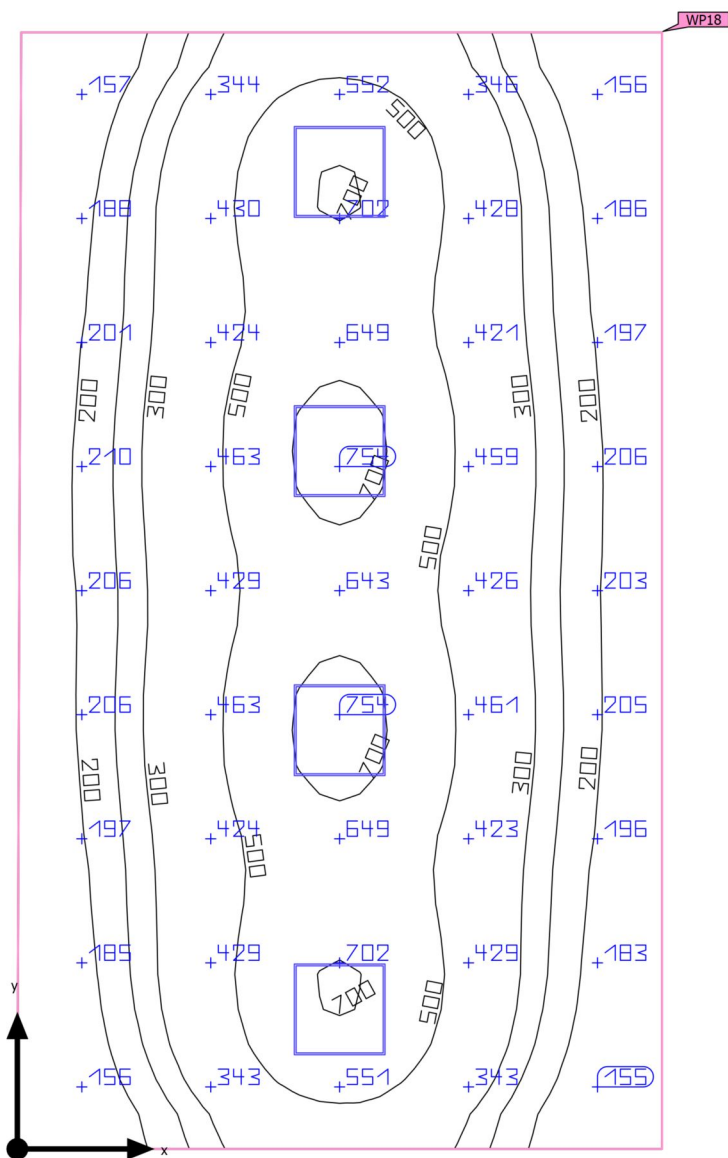
Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	443 lx ( $\geq 300$ lx) ✓	179 lx	719 lx	0.40	0.25	WP1
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	437 lx ( $\geq 300$ lx) ✓	196 lx	723 lx	0.45	0.27	WP2
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	439 lx ( $\geq 300$ lx) ✓	178 lx	716 lx	0.41	0.25	WP3
Working plane (Hyrje) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	369 lx ( $\geq 200$ lx) ✓	160 lx	649 lx	0.43	0.25	WP4
Working plane (Zyre) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	464 lx ( $\geq 300$ lx) ✓	145 lx	749 lx	0.31	0.19	WP5
Working plane (Zyre Drejtorit) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	391 lx ( $\geq 200$ lx) ✓	131 lx	789 lx	0.34	0.17	WP6
Working plane (Tualet) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	388 lx ( $\geq 200$ lx) ✓	284 lx	465 lx	0.73	0.61	WP7
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	294 lx ( $\geq 100$ lx) ✓	199 lx	355 lx	0.68	0.56	WP8
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	454 lx ( $\geq 300$ lx) ✓	186 lx	732 lx	0.41	0.25	WP9
Working plane (Klase) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	299 lx ( $\geq 290$ lx) ✓	116 lx	617 lx	0.39	0.19	WP10
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	446 lx ( $\geq 300$ lx) ✓	177 lx	733 lx	0.40	0.24	WP11

## Building 1 · Story 1 (Light scene 1)

## Calculation objects

Working plane (Tualet) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	332 lx (≥ 200 lx) ✓	130 lx	528 lx	0.39	0.25	WP12
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	447 lx (≥ 300 lx) ✓	185 lx	721 lx	0.41	0.26	WP13
Working plane (Klase) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	557 lx (≥ 300 lx) ✓	256 lx	849 lx	0.46	0.30	WP14
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	450 lx (≥ 300 lx) ✓	179 lx	736 lx	0.40	0.24	WP15
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	406 lx (≥ 300 lx) ✓	162 lx	695 lx	0.40	0.23	WP16
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	337 lx (≥ 100 lx) ✓	194 lx	410 lx	0.58	0.47	WP17
Working plane (Depo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	373 lx (≥ 300 lx) ✓	120 lx	749 lx	0.32	0.16	WP18
Working plane (Depo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	249 lx (≥ 100 lx) ✓	150 lx	337 lx	0.60	0.45	WP19
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	397 lx (≥ 100 lx) ✓	248 lx	454 lx	0.62	0.55	WP20
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	121 lx (≥ 100 lx) ✓	23.2 lx	235 lx	0.19	0.099	WP21

Building 1 · Story 1 · Depo (Light scene 1)

**Summary**

Building 1 · Story 1 · Depo (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	373 lx	$\geq 300$ lx	✓	WP18
	$g_1$	0.32	-	-	WP18
Consumption values	Consumption	310 kWh/a	max. 1100 kWh/a	✓	
Room	Lighting power density	4.41 W/m <sup>2</sup>	-	-	
		1.18 W/m <sup>2</sup> /100 lx	-	-	

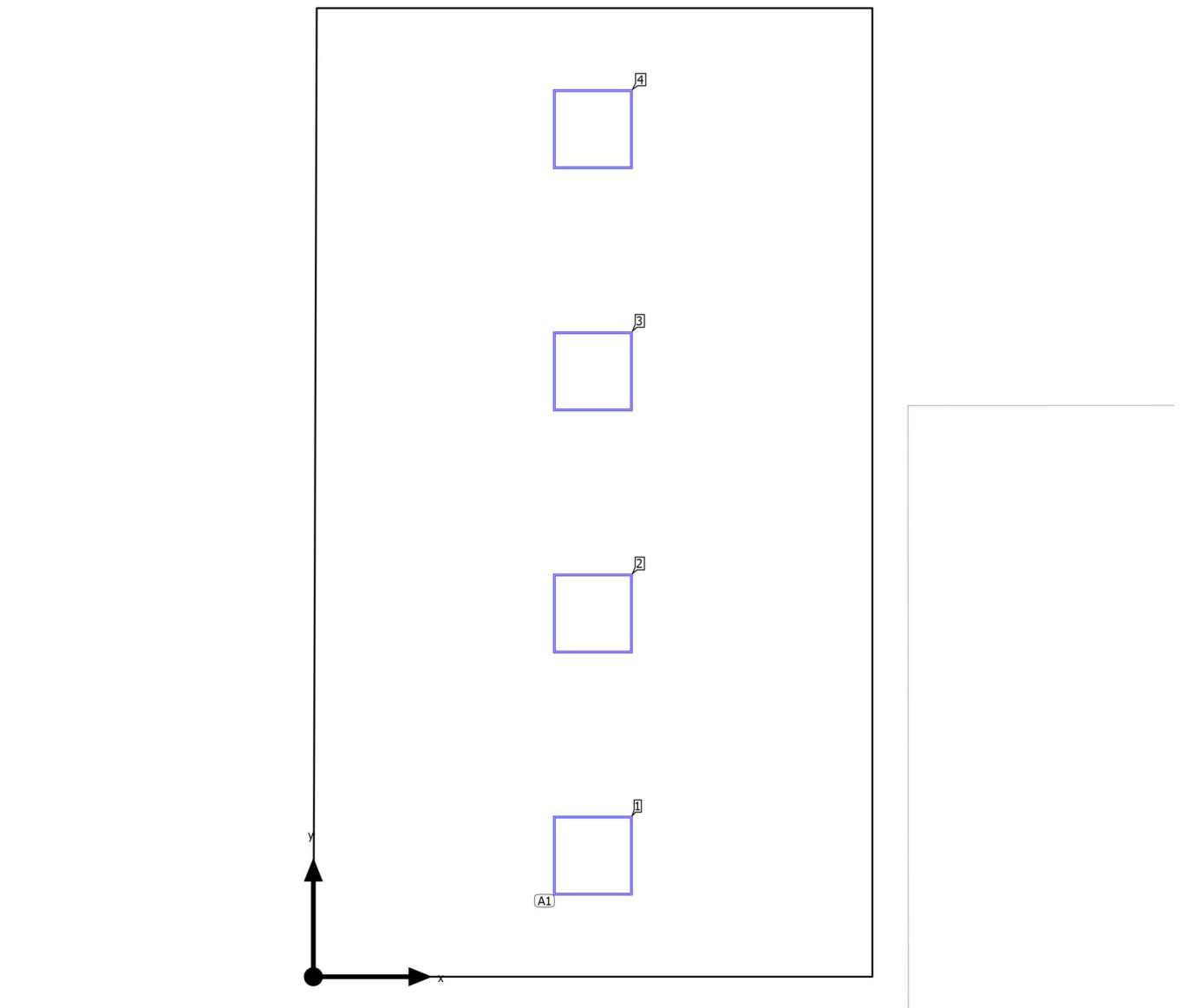
Utilization profile: Industrial activities and crafts - Electrical and electronics industry, Coil impregnating

### Luminaire list

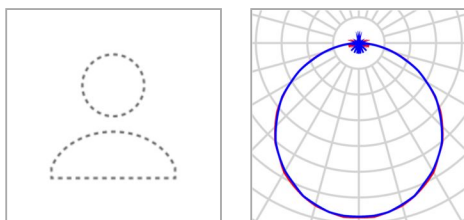
pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W



Building 1 · Story 1 · Depo  
**Luminaire layout plan**



Building 1 · Story 1 · Depo

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

4 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	2.114 m / 0.915 m / 2.800 m	2.114 m	0.915 m	2.800 m	1
X-direction	1 pcs., Center - center, 4.228 m	2.114 m	2.746 m	2.800 m	2
Y-direction	4 pcs., Center - center, 1.831 m	2.114 m	4.577 m	2.800 m	3
		2.114 m	6.407 m	2.800 m	4
Arrangement	A1				

Building 1 · Story 1 · Depo

**Luminaire list** $\Phi_{\text{total}}$ 

16244 lm

 $P_{\text{total}}$ 

136.0 W

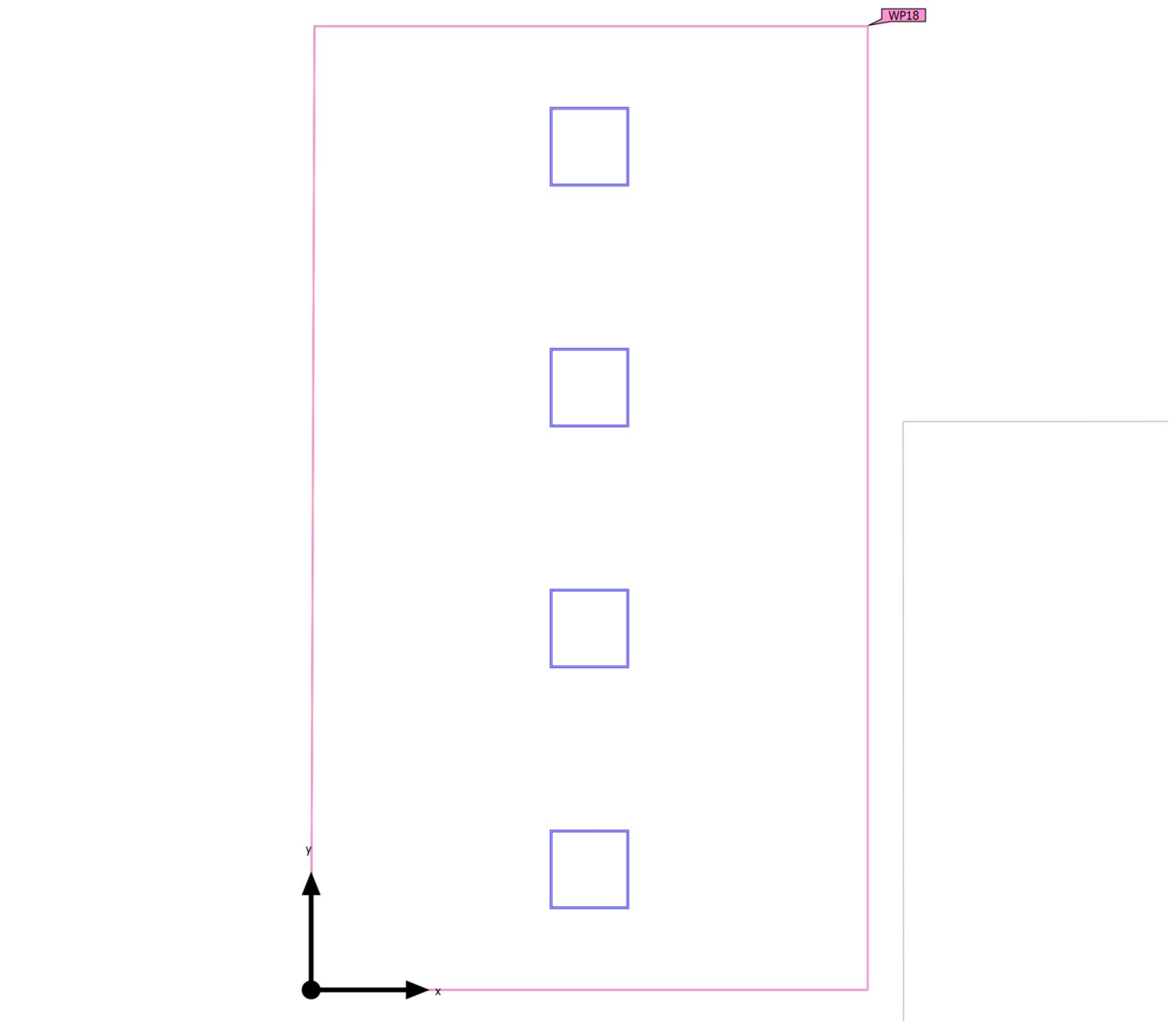
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Depo (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Depo (Light scene 1)

**Calculation objects**

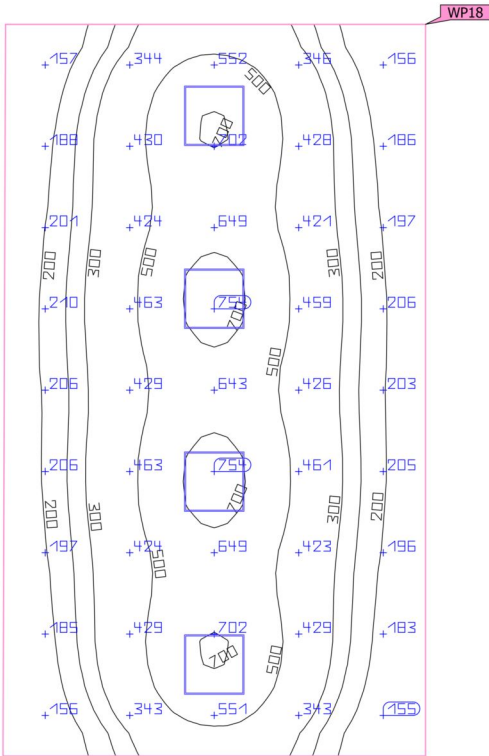
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Depo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	373 lx ( $\geq 300$ lx) ✓	120 lx	749 lx	0.32	0.16	WP18

Utilization profile: Industrial activities and crafts - Electrical and electronics industry, Coil impregnating

Building 1 · Story 1 · Depo (Light scene 1)

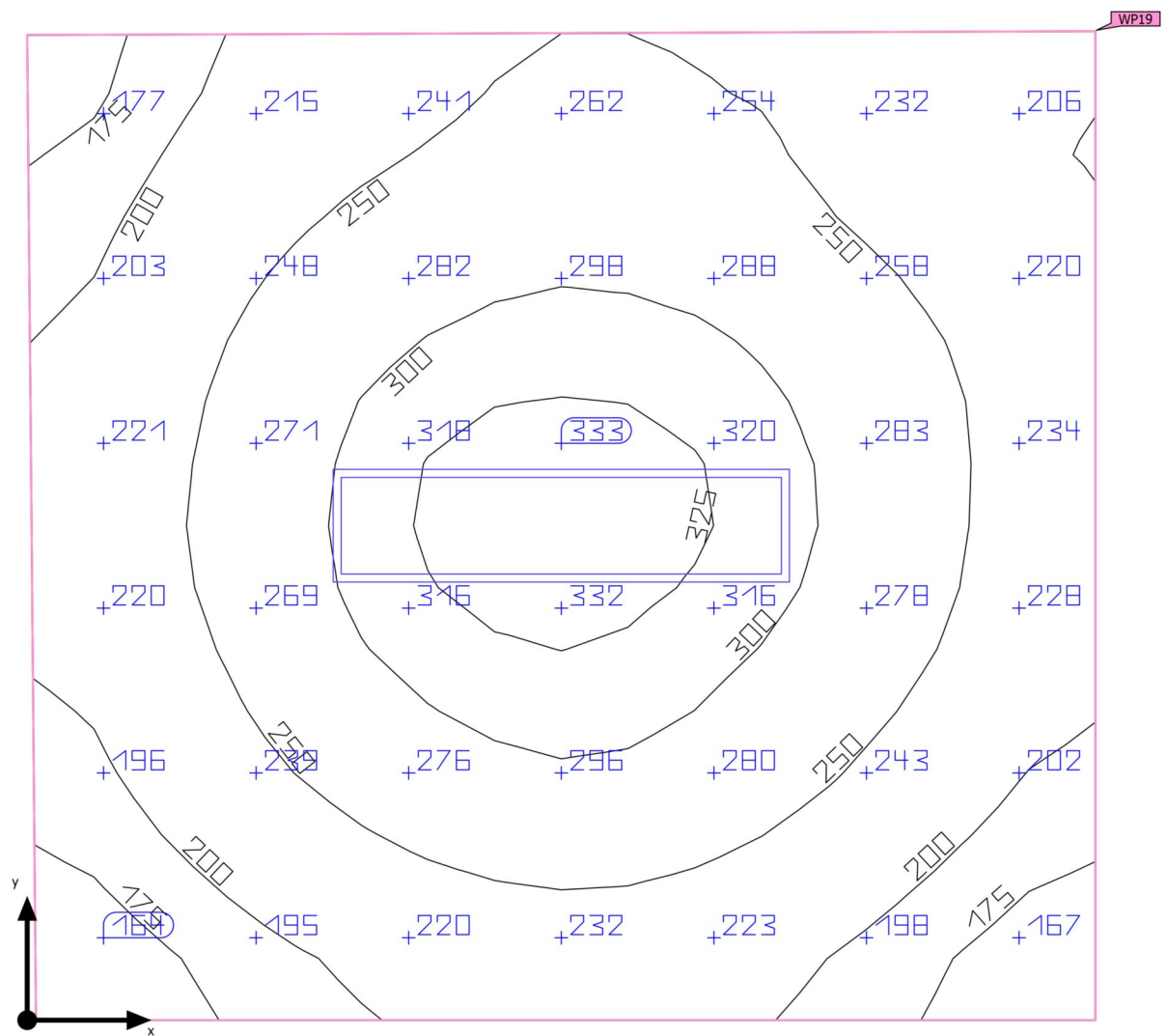
Working plane (Depo)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Depo)	373 lx	120 lx	749 lx	0.32	0.16	WP18
Perpendicular illuminance (adaptive)	(≥ 300 lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Industrial activities and crafts - Electrical and electronics industry, Coil impregnating

Building 1 · Story 1 · Depo (Light scene 1)

**Summary**

Building 1 · Story 1 · Depo (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	249 lx	$\geq 100$ lx	✓	WP19
	$g_1$	0.60	-	-	WP19
Consumption values	Consumption	300 kWh/a	max. 300 kWh/a	✓	
Room	Lighting power density	4.72 W/m <sup>2</sup>	-	-	
		1.90 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Health care premises - Wards, maternity wards, General lighting

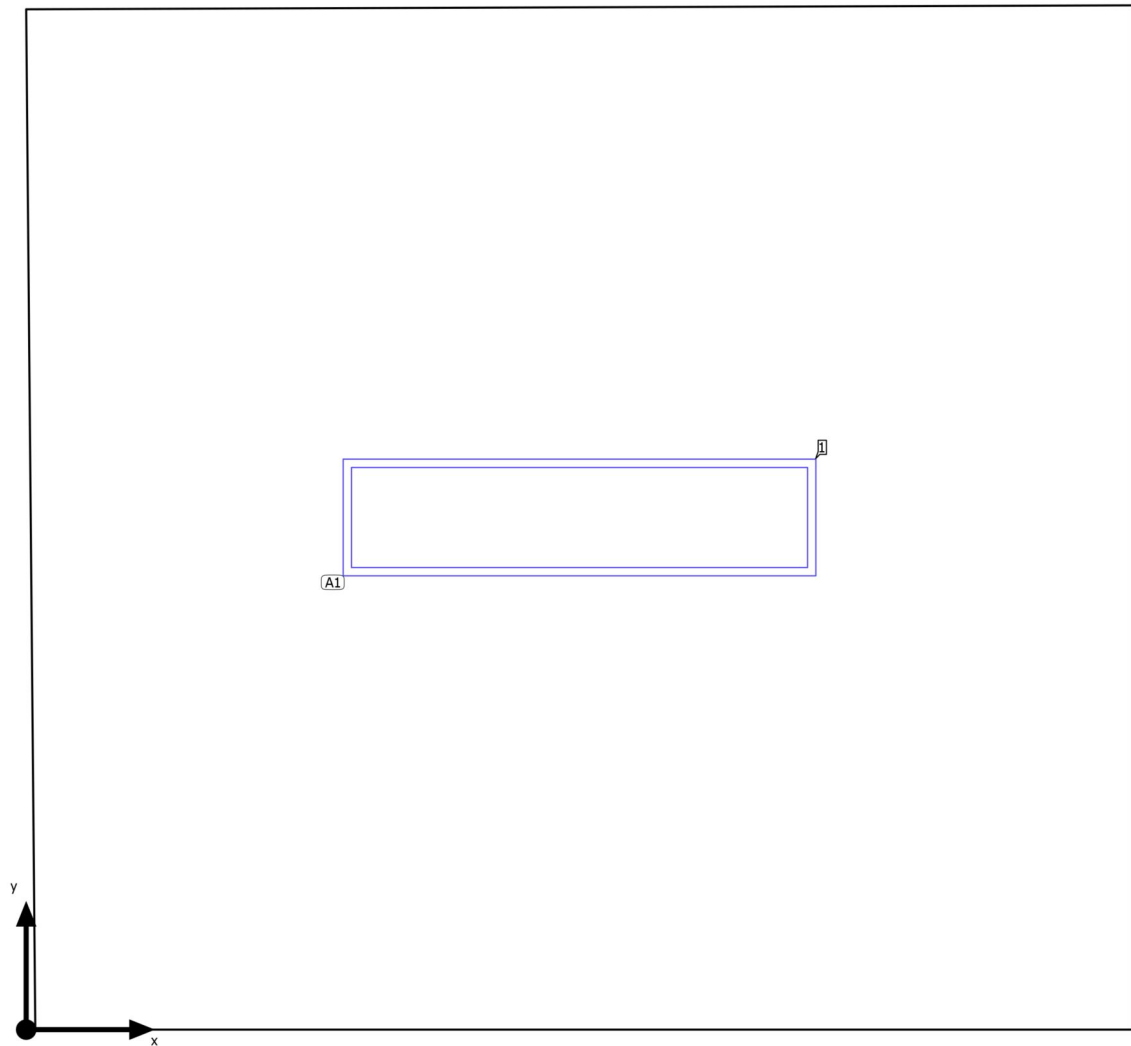
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
1	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm	115.6 lm/W

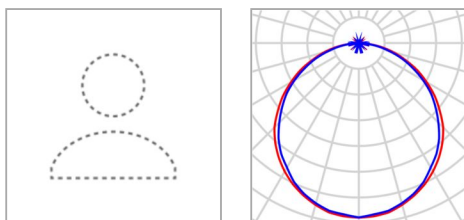


Building 1 · Story 1 · Depo

## Luminaire layout plan



Building 1 · Story 1 · Depo

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042879	$\Phi_{\text{Luminaire}}$	3930 lm
Article name	START Panel 1200x300 HE 4100Lm 840 LILO		
Fitting	1x LED		

1 x Not yet a DIALux member START Panel 1200x300 HE 4100Lm 840 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.399 m / 1.295 m / 2.800 m	1.399 m	1.295 m	2.800 m	1
X-direction	1 pcs., Center - center, 2.798 m				
Y-direction	1 pcs., Center - center, 2.590 m				
Arrangement	A1				

Building 1 · Story 1 · Depo

**Luminaire list** $\Phi_{\text{total}}$ 

3930 lm

 $P_{\text{total}}$ 

34.0 W

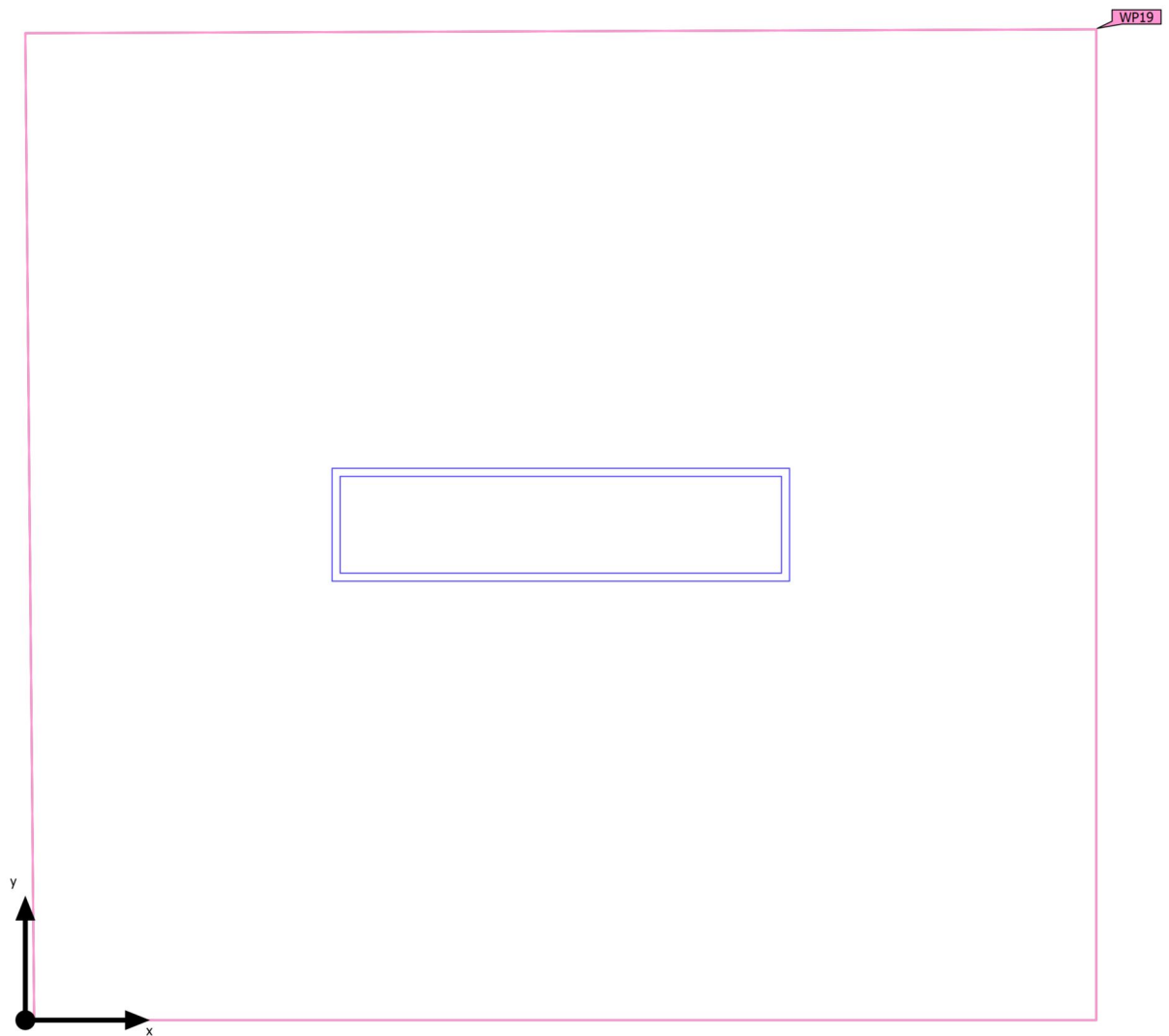
Luminous efficacy

115.6 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
1	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100Lm 840 LILO	34.0 W	3930 lm	115.6 lm/W

Building 1 · Story 1 · Depo (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Depo (Light scene 1)

**Calculation objects**

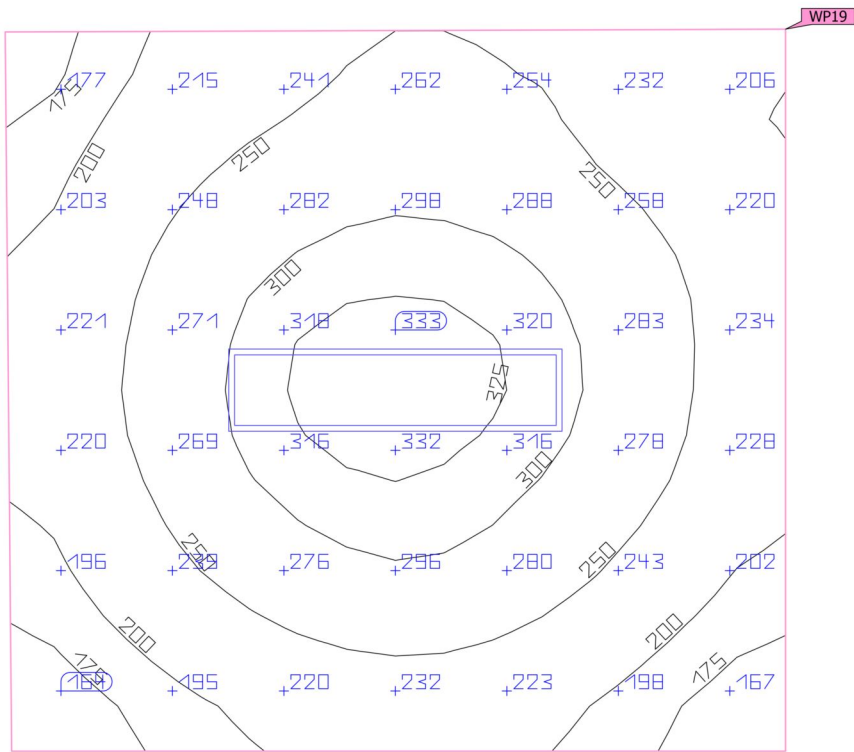
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Depo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	249 lx ( $\geq 100$ lx) ✓	150 lx	337 lx	0.60	0.45	WP19

Utilization profile: Health care premises - Wards, maternity wards, General lighting

Building 1 · Story 1 · Depo (Light scene 1)

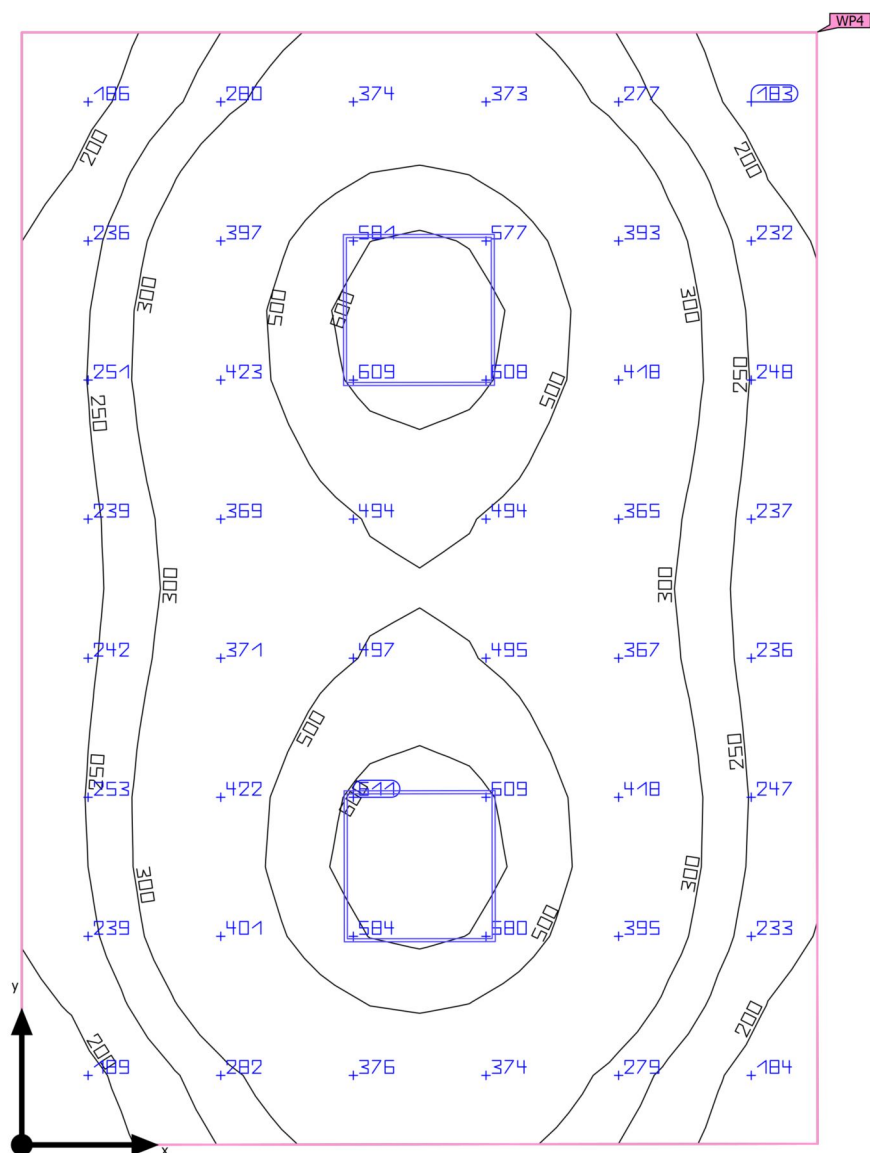
Working plane (Depo)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Depo)	249 lx	150 lx	337 lx	0.60	0.45	WP19
Perpendicular illuminance (adaptive)	( $\geq 100$ lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Health care premises - Wards, maternity wards, General lighting

Building 1 · Story 1 · Hyrje (Light scene 1)

**Summary**

Building 1 · Story 1 · Hyrje (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	369 lx	$\geq 200$ lx	✓	WP4
	$g_1$	0.43	-	-	WP4
Consumption values	Consumption	130 kWh/a	max. 500 kWh/a	✓	
Room	Lighting power density	4.95 W/m <sup>2</sup>	-	-	
		1.34 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Entrance halls

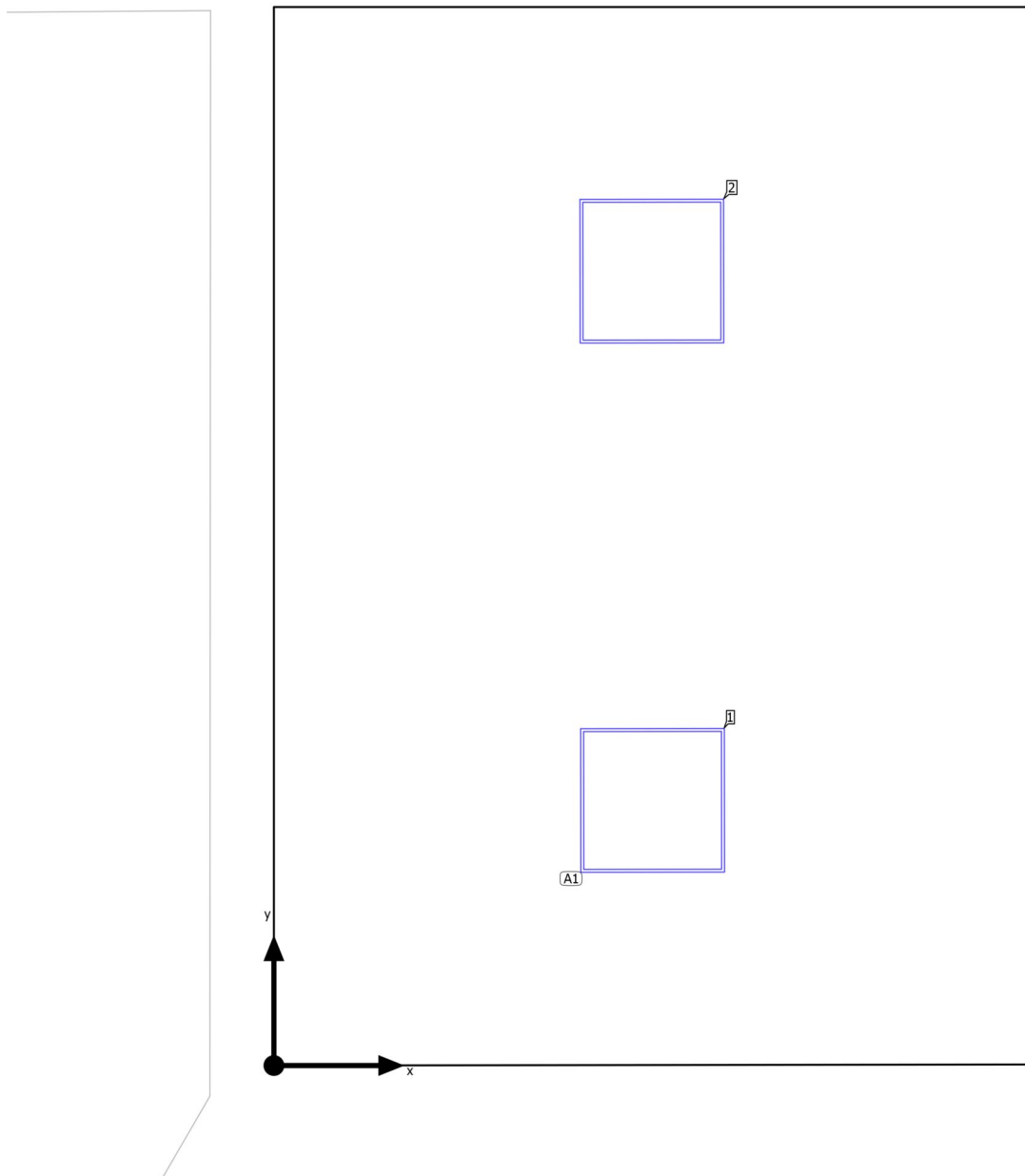
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

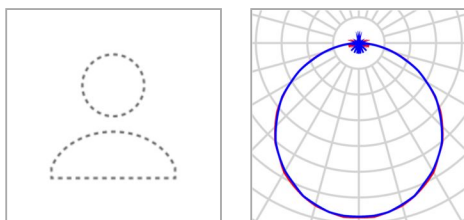


Building 1 · Story 1 · Hyrje

## Luminaire layout plan



Building 1 · Story 1 · Hyrje

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

2 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.568 m / 1.098 m / 2.800 m	1.568 m	1.098 m	2.800 m	1
X-direction	1 pcs., Center - center, 3.140 m	1.565 m	3.291 m	2.800 m	2
Y-direction	2 pcs., Center - center, 2.192 m				
Arrangement	A1				

Building 1 · Story 1 · Hyrje

**Luminaire list** $\Phi_{\text{total}}$ 

8122 lm

 $P_{\text{total}}$ 

68.0 W

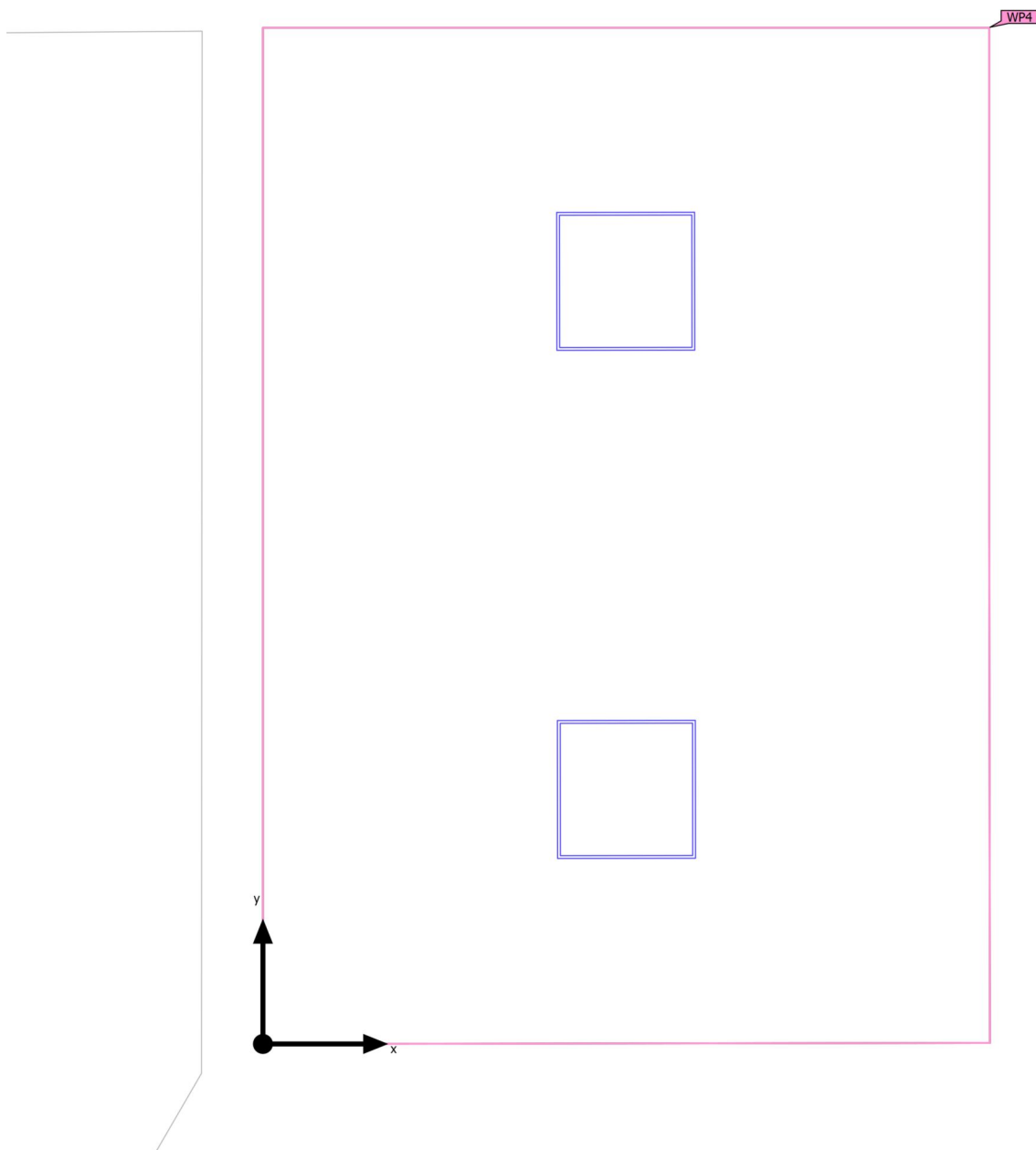
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Hyrje (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Hyrje (Light scene 1)

**Calculation objects**

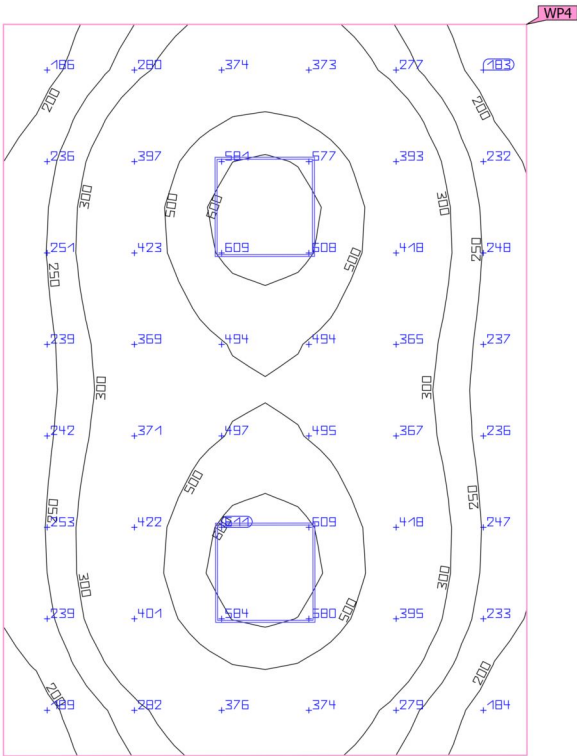
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Hyrje) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	369 lx ( $\geq 200$ lx) ✓	160 lx	649 lx	0.43	0.25	WP4

Utilization profile: Educational premises - Educational buildings, Entrance halls

Building 1 · Story 1 · Hyrje (Light scene 1)

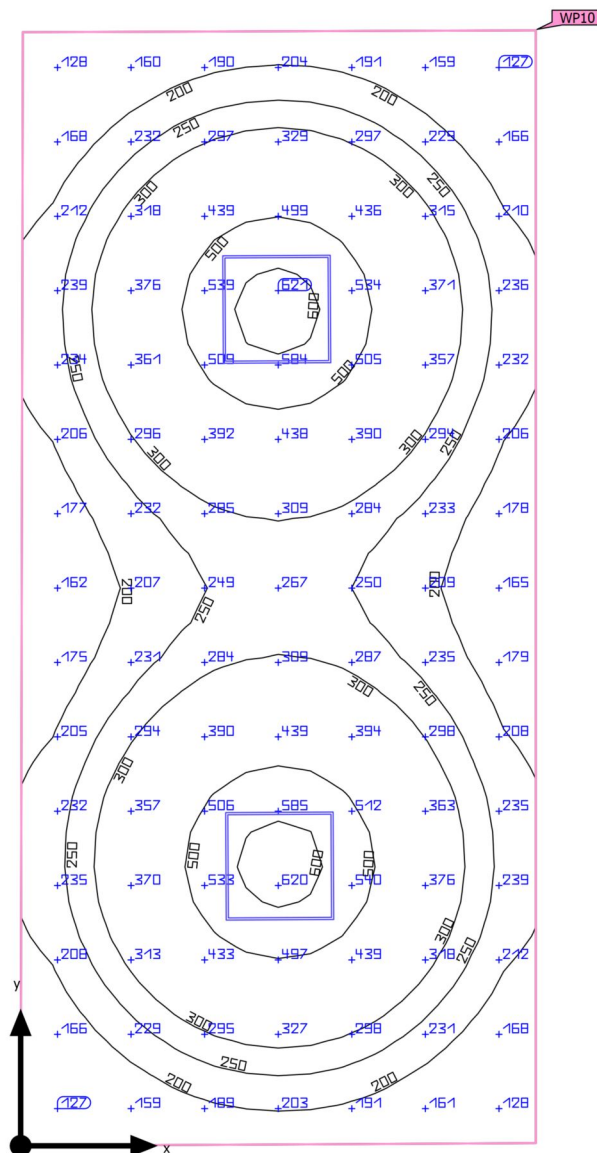
Working plane (Hyrje)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Hyrje)	369 lx	160 lx	649 lx	0.43	0.25	WP4
Perpendicular illuminance (adaptive)	( $\geq 200$ lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Entrance halls

Building 1 · Story 1 · Klase (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	299 lx	$\geq 290$ lx	✓	WP10
	$g_1$	0.39	-	-	WP10
Consumption values	Consumption	90 kWh/a	max. 650 kWh/a	✓	
Room	Lighting power density	3.88 W/m <sup>2</sup>	-	-	
		1.30 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

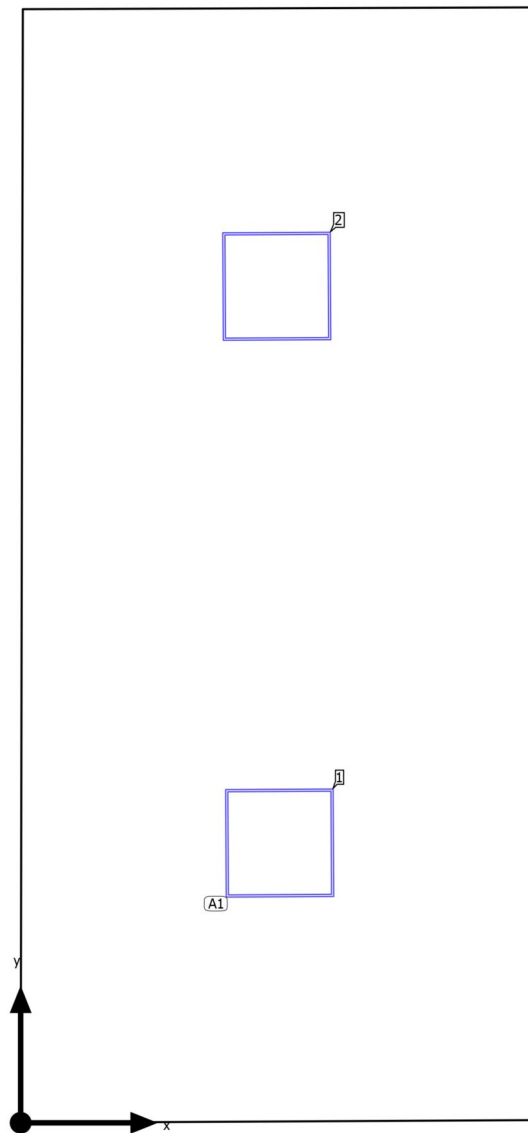
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

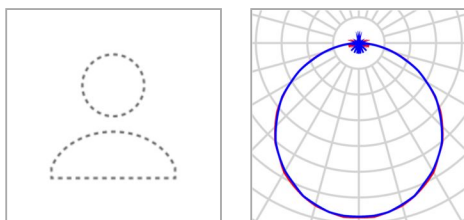


Building 1 · Story 1 · Klase

## Luminaire layout plan



Building 1 · Story 1 · Klase

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

2 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.434 m / 1.549 m / 2.800 m	1.434 m	1.549 m	2.800 m	1
X-direction	1 pcs., Center - center, 2.885 m	1.418 m	4.631 m	2.800 m	2
Y-direction	2 pcs., Center - center, 3.082 m				
Arrangement	A1				

Building 1 · Story 1 · Klase

**Luminaire list** $\Phi_{\text{total}}$ 

8122 lm

 $P_{\text{total}}$ 

68.0 W

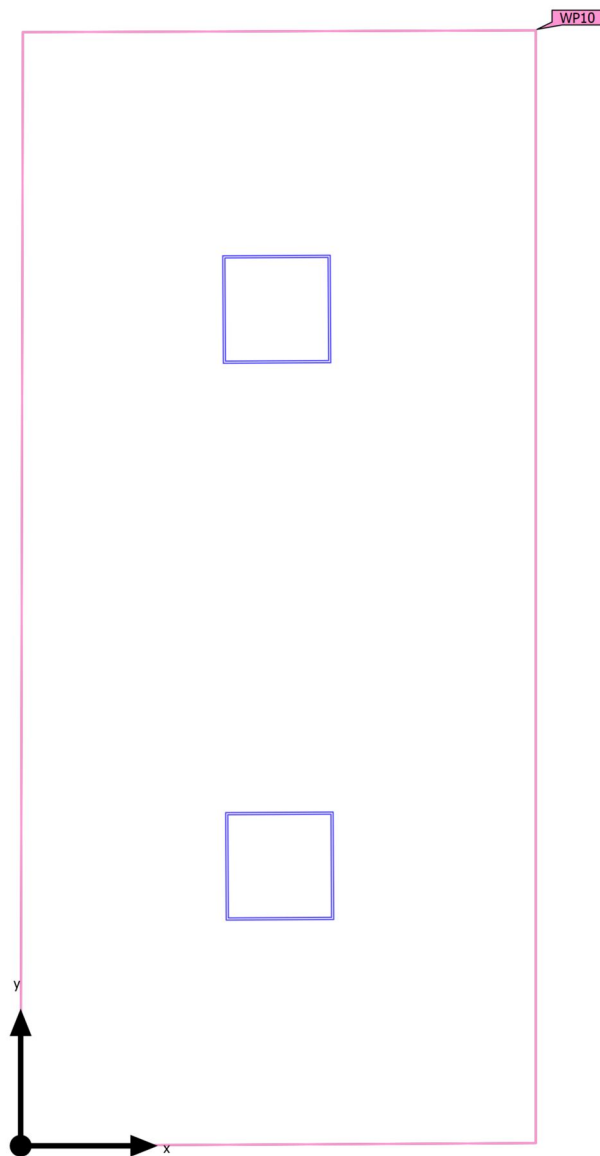
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase (Light scene 1)

**Calculation objects**

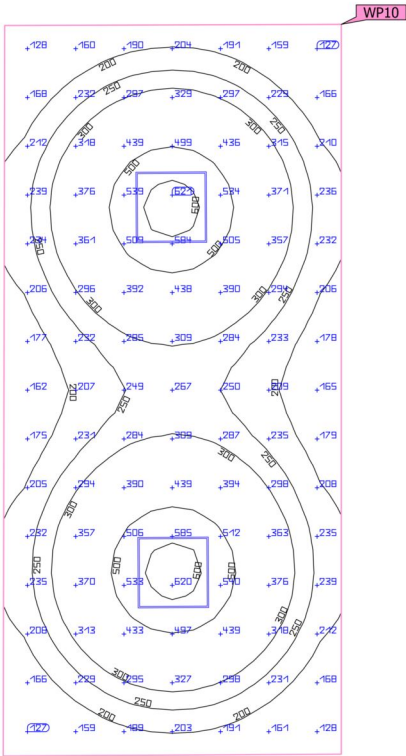
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	299 lx ( $\geq 290$ lx) ✓	116 lx	617 lx	0.39	0.19	WP10

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase (Light scene 1)

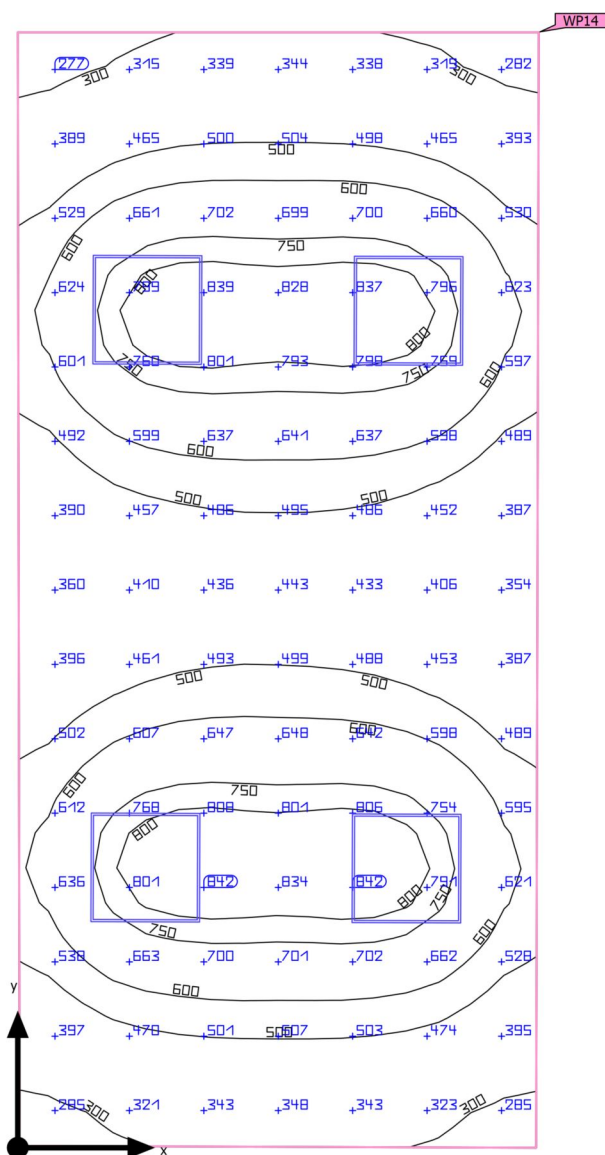
Working plane (Klase)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase)	299 lx	116 lx	617 lx	0.39	0.19	WP10
Perpendicular illuminance (adaptive)	$\geq 290$ lx					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	557 lx	$\geq 300$ lx	✓	WP14
	$g_1$	0.46	-	-	WP14
Consumption values	Consumption	180 kWh/a	max. 650 kWh/a	✓	
Room	Lighting power density	7.84 W/m <sup>2</sup>	-	-	
		1.41 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

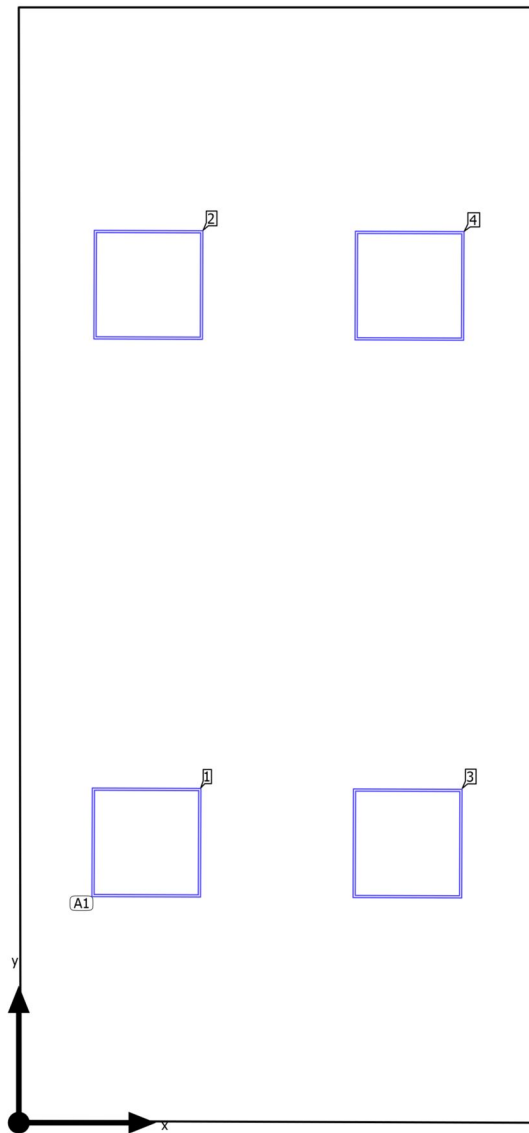
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

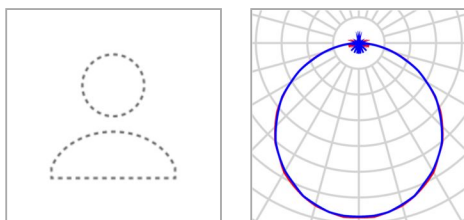


Building 1 · Story 1 · Klase

## Luminaire layout plan



Building 1 · Story 1 · Klase

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

4 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	0.699 m / 1.535 m / 2.800 m	0.699 m	1.535 m	2.800 m	1
X-direction	2 pcs., Center - center, 1.431 m	0.710 m	4.590 m	2.800 m	2
Y-direction	2 pcs., Center - center, 3.055 m	2.130 m	1.530 m	2.800 m	3
Arrangement	A1	2.141 m	4.585 m	2.800 m	4

Building 1 · Story 1 · Klase

**Luminaire list** $\Phi_{\text{total}}$ 

16244 lm

 $P_{\text{total}}$ 

136.0 W

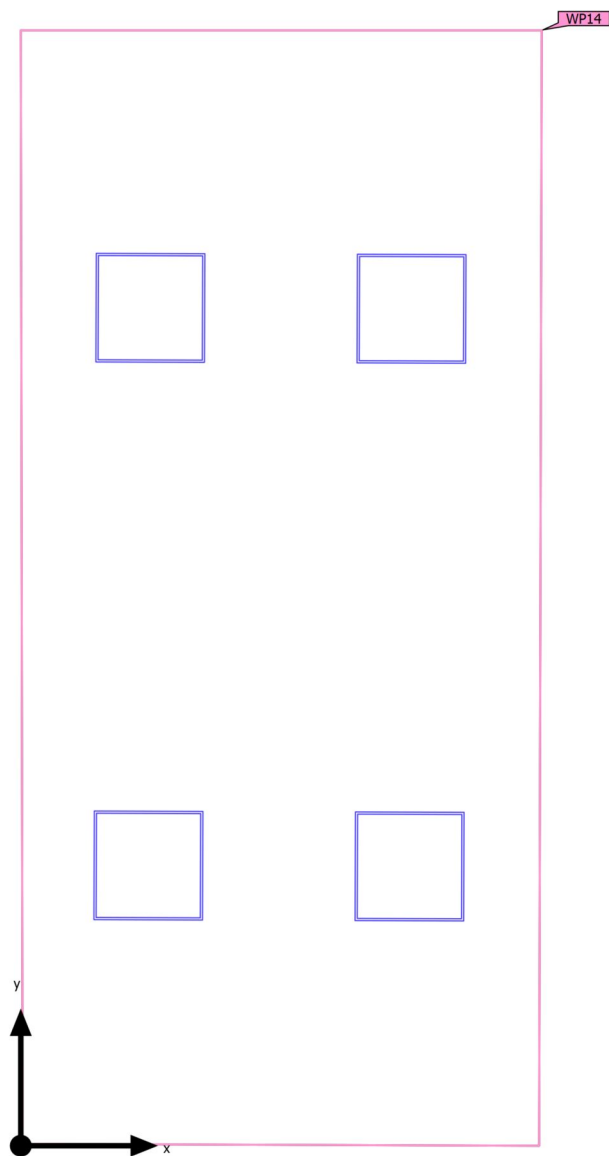
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase (Light scene 1)

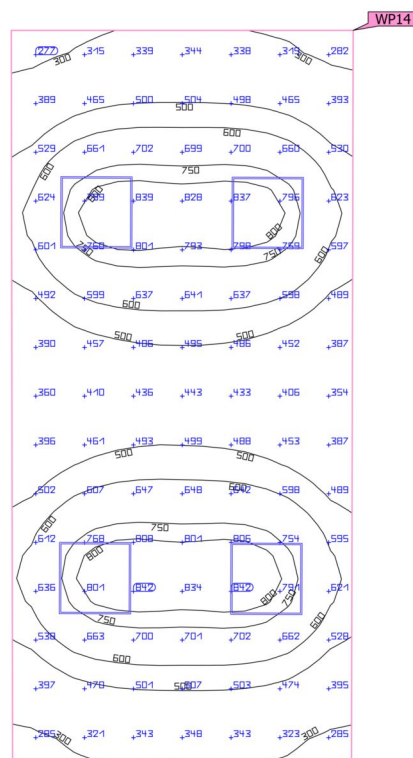
**Calculation objects**

## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	557 lx ( $\geq 300$ lx) ✓	256 lx	849 lx	0.46	0.30	WP14

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

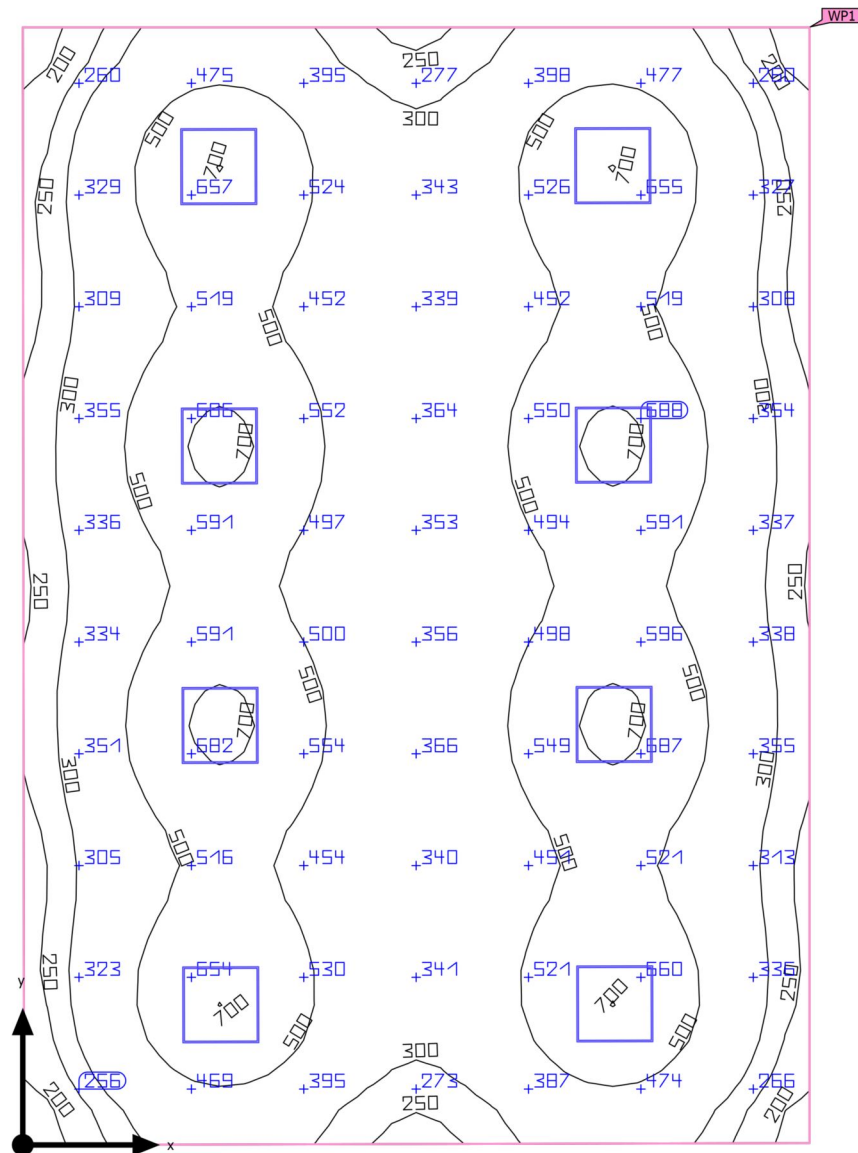
Building 1 · Story 1 · Klase (Light scene 1)

**Working plane (Klase)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase)	557 lx	256 lx	849 lx	0.46	0.30	WP14
Perpendicular illuminance (adaptive)	( $\geq 300$ lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	443 lx	$\geq 300$ lx	✓	WP1
	$g_1$	0.40	-	-	WP1
Consumption values	Consumption	360 kWh/a	max. 1900 kWh/a	✓	
Room	Lighting power density	5.03 W/m <sup>2</sup>	-	-	
		1.14 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

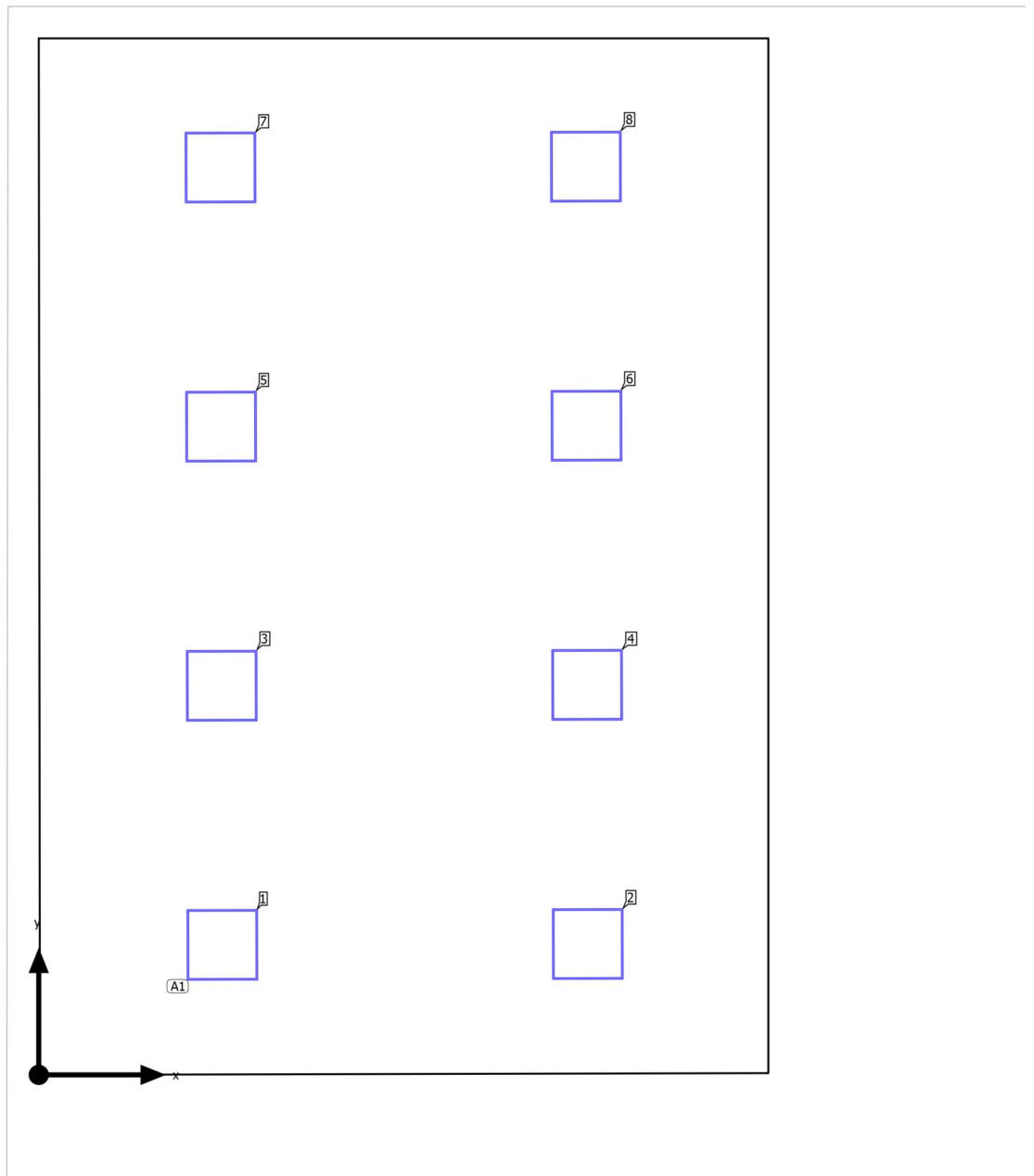
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

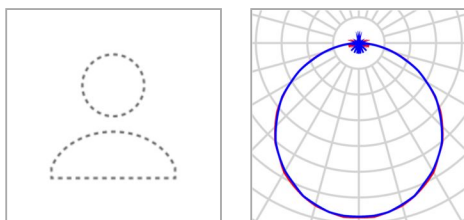


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

8 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.554 m / 1.100 m / 2.800 m	1.554 m	1.100 m	2.800 m	1
X-direction	2 pcs., Center - center, 3.093 m	4.647 m	1.107 m	2.800 m	2
Y-direction	4 pcs., Center - center, 2.193 m	1.549 m	3.293 m	2.800 m	3
Arrangement	A1	4.642 m	3.300 m	2.800 m	4
		1.543 m	5.485 m	2.800 m	5
		4.636 m	5.493 m	2.800 m	6
		1.538 m	7.678 m	2.800 m	7
		4.631 m	7.686 m	2.800 m	8

Building 1 · Story 1 · Klase/Classroom

**Luminaire list** $\Phi_{\text{total}}$ 

32488 lm

 $P_{\text{total}}$ 

272.0 W

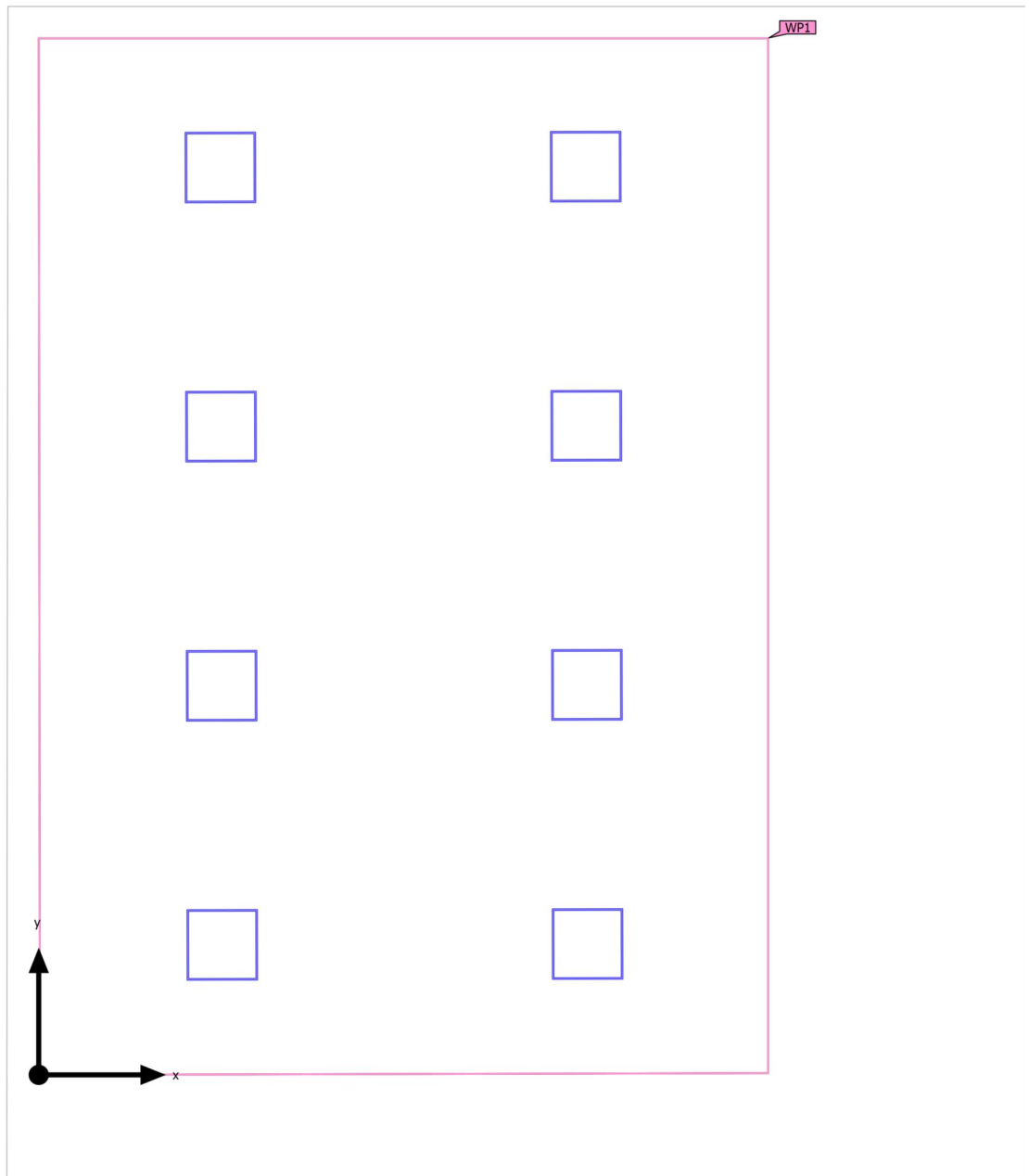
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

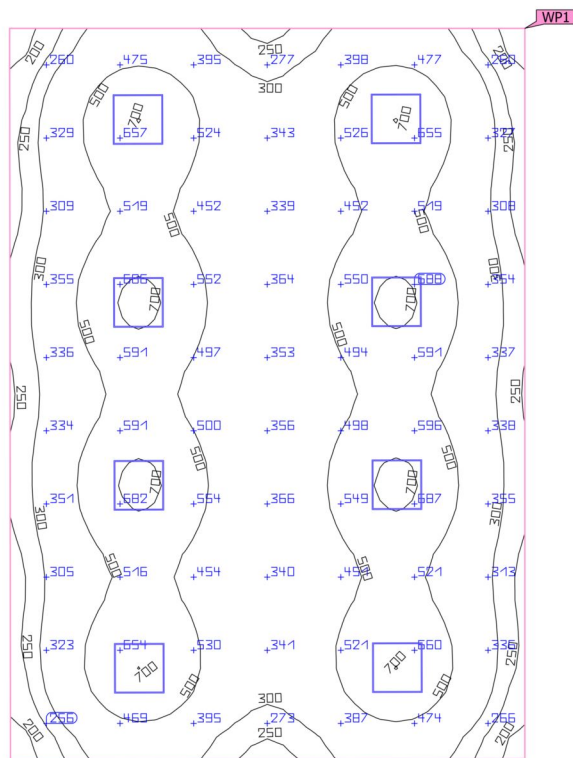
**Calculation objects**

## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	443 lx ( $\geq 300$ lx) ✓	179 lx	719 lx	0.40	0.25	WP1

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

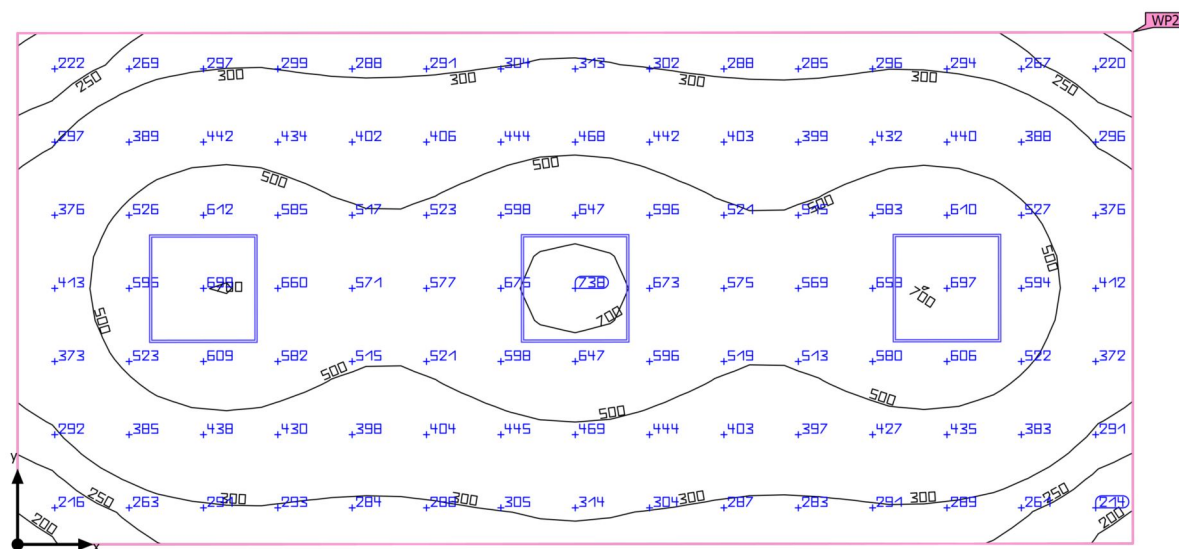
Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Working plane (Klase/Classroom)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom)	443 lx	179 lx	719 lx	0.40	0.25	WP1
Perpendicular illuminance (adaptive)	(≥ 300 lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	437 lx	$\geq 300$ lx	✓	WP2
	$g_1$	0.45	-	-	WP2
Consumption values	Consumption	140 kWh/a	max. 650 kWh/a	✓	
Room	Lighting power density	5.84 W/m <sup>2</sup>	-	-	
		1.34 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

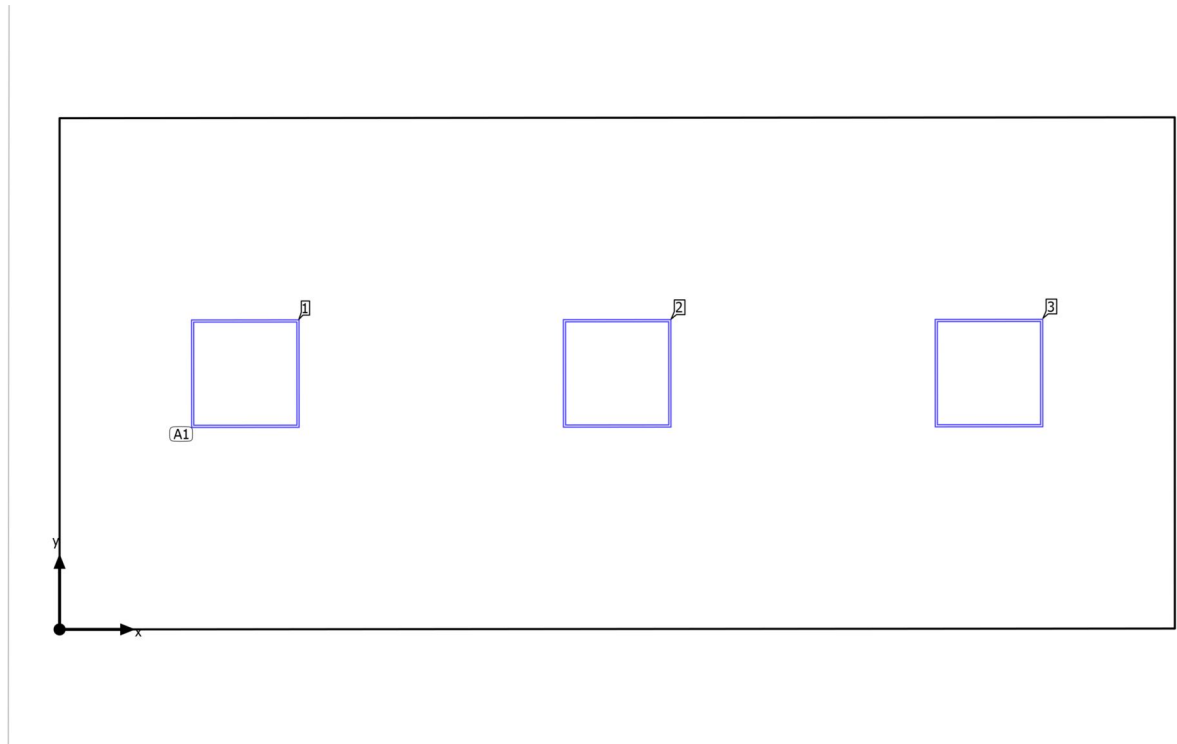
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
3	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

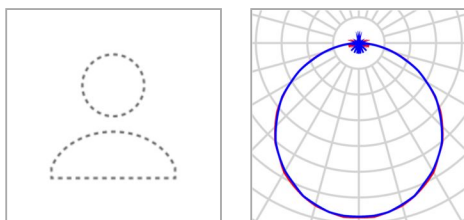


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

3 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.028 m / 1.416 m / 2.800 m	1.028 m	1.416 m	2.800 m	1
X-direction	3 pcs., Center - center, 2.058 m	3.086 m	1.417 m	2.800 m	2
Y-direction	1 pcs., Center - center, 2.830 m	5.143 m	1.419 m	2.800 m	3
Arrangement	A1				

Building 1 · Story 1 · Klase/Classroom

**Luminaire list** $\Phi_{\text{total}}$ 

12183 lm

 $P_{\text{total}}$ 

102.0 W

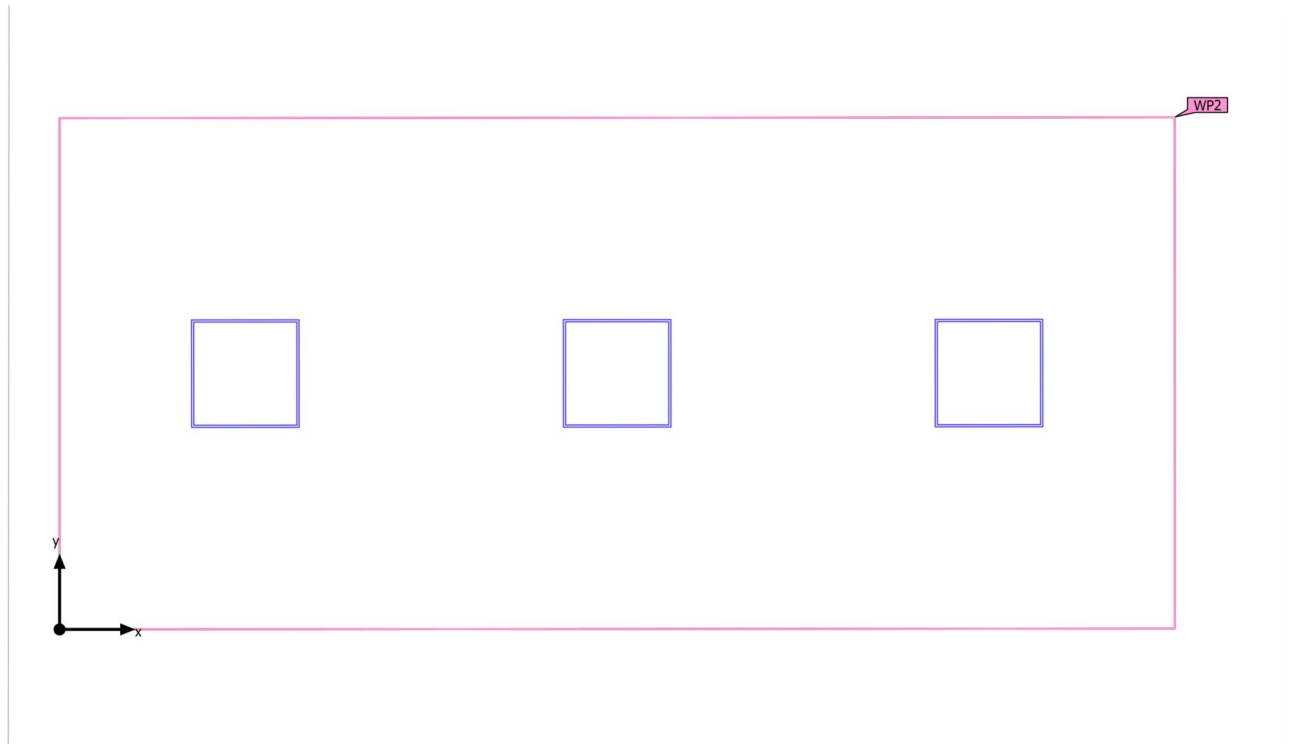
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
3	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

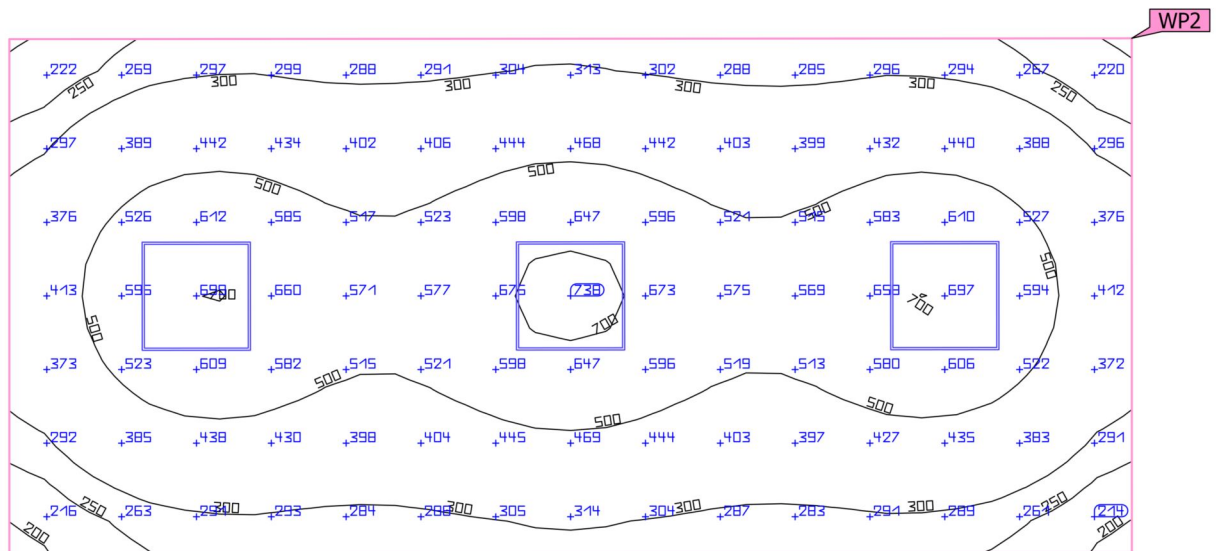
**Calculation objects**

Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	437 lx ( $\geq 300$ lx) ✓	196 lx	723 lx	0.45	0.27	WP2

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

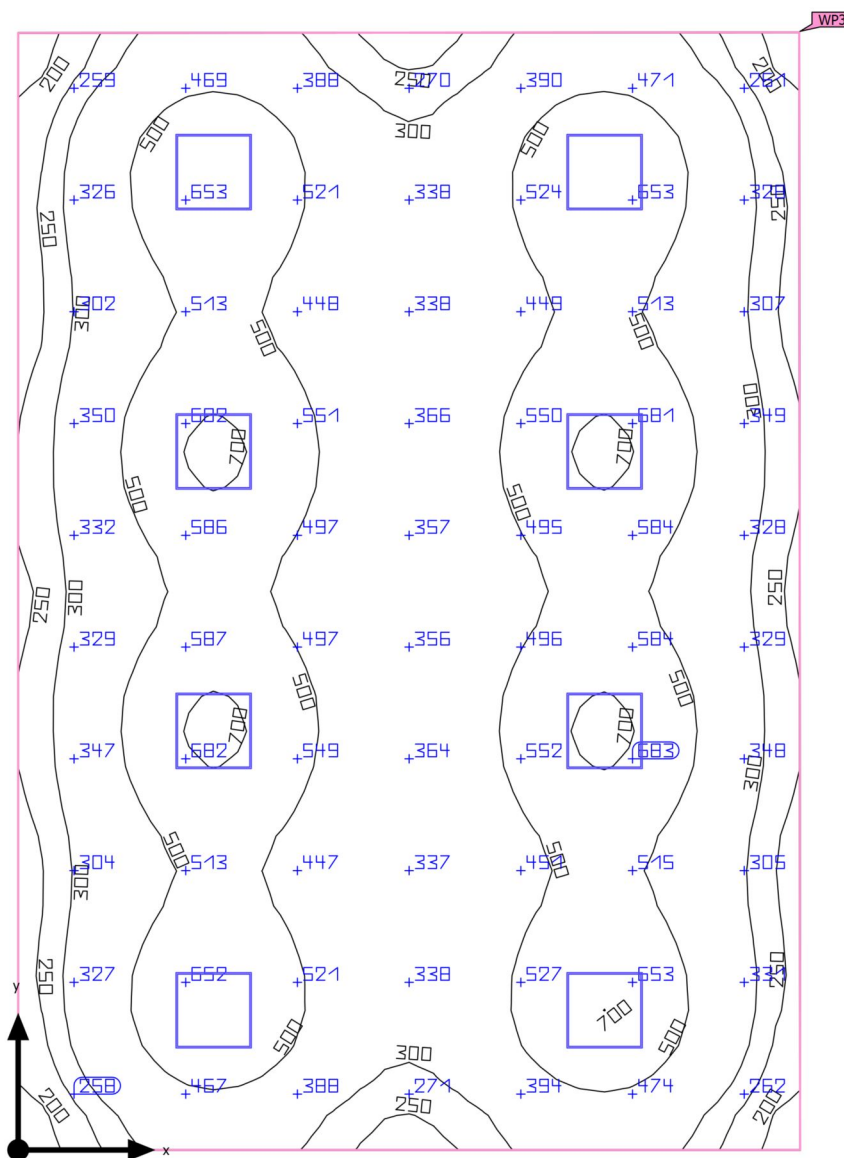
Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Working plane (Klase/Classroom)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom)	437 lx	196 lx	723 lx	0.45	0.27	WP2
Perpendicular illuminance (adaptive)	$\geq 300$ lx					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	439 lx	$\geq 300$ lx	✓	WP3
	$g_1$	0.41	-	-	WP3
Consumption values	Consumption	360 kWh/a	max. 1950 kWh/a	✓	
Room	Lighting power density	4.99 W/m <sup>2</sup>	-	-	
		1.14 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

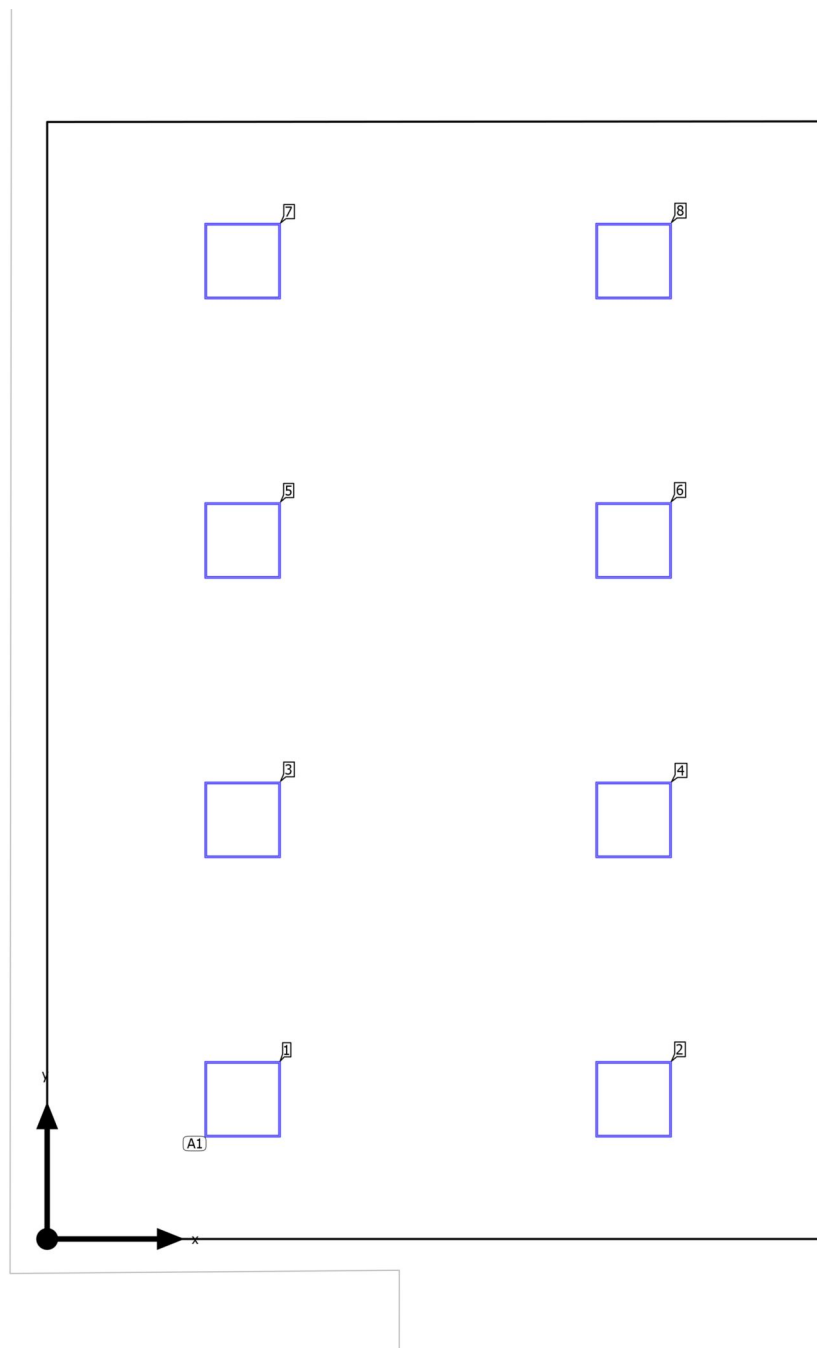
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

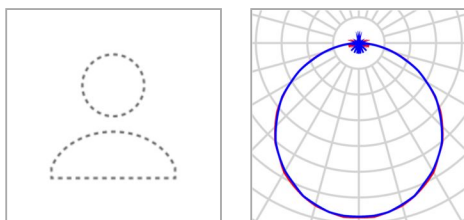


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

8 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.545 m / 1.104 m / 2.800 m	1.545 m	1.104 m	2.800 m	1
X-direction	2 pcs., Center - center, 3.089 m	4.634 m	1.104 m	2.800 m	2
Y-direction	4 pcs., Center - center, 2.207 m	1.545 m	3.311 m	2.800 m	3
		4.634 m	3.311 m	2.800 m	4
Arrangement	A1	1.545 m	5.519 m	2.800 m	5
		4.634 m	5.519 m	2.800 m	6
		1.545 m	7.726 m	2.800 m	7
		4.634 m	7.726 m	2.800 m	8

Building 1 · Story 1 · Klase/Classroom

**Luminaire list** $\Phi_{\text{total}}$ 

32488 lm

 $P_{\text{total}}$ 

272.0 W

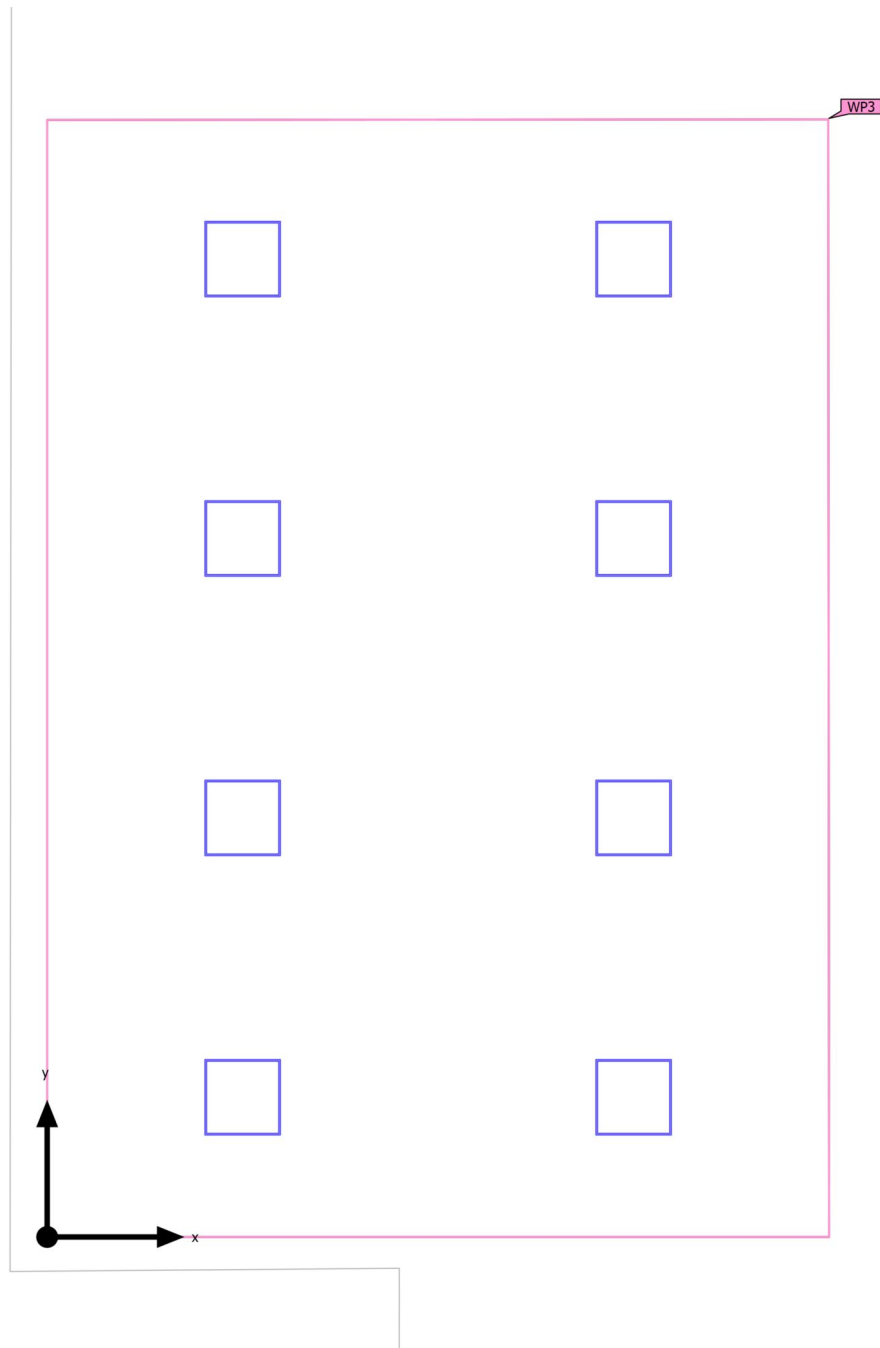
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Calculation objects**

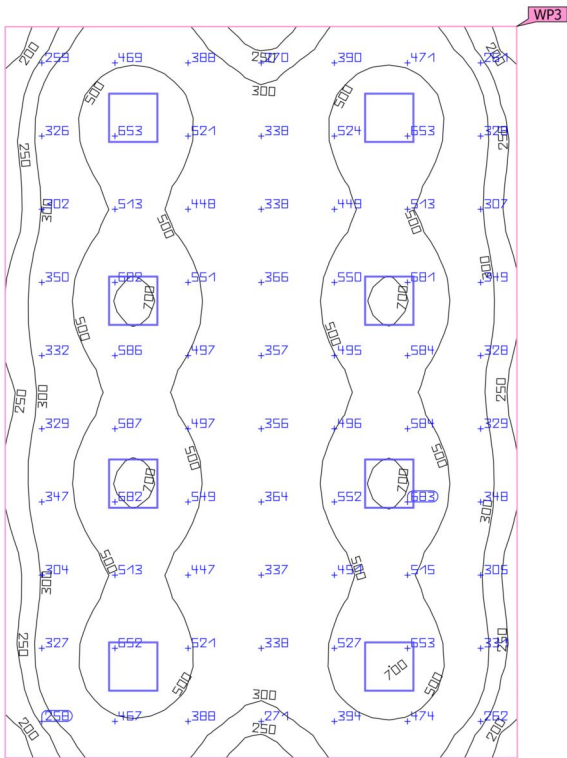
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	439 lx ( $\geq 300$ lx) ✓	178 lx	716 lx	0.41	0.25	WP3

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

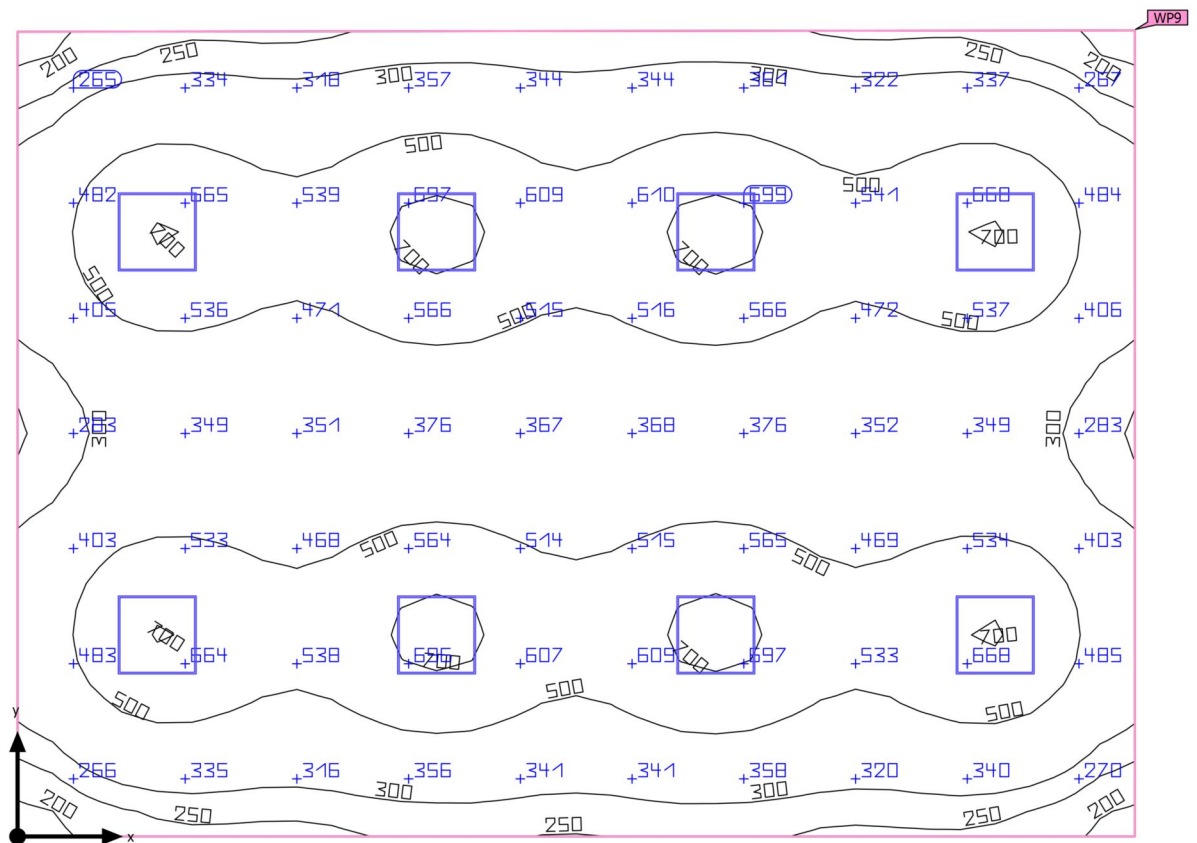
Working plane (Klase/Classroom)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	439 lx (≥ 300 lx) ✓	178 lx	716 lx	0.41	0.25	WP3

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	454 lx	$\geq 300$ lx	✓	WP9
	$g_1$	0.41	-	-	WP9
Consumption values	Consumption	360 kWh/a	max. 1850 kWh/a	✓	
Room	Lighting power density	5.17 W/m <sup>2</sup>	-	-	
		1.14 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

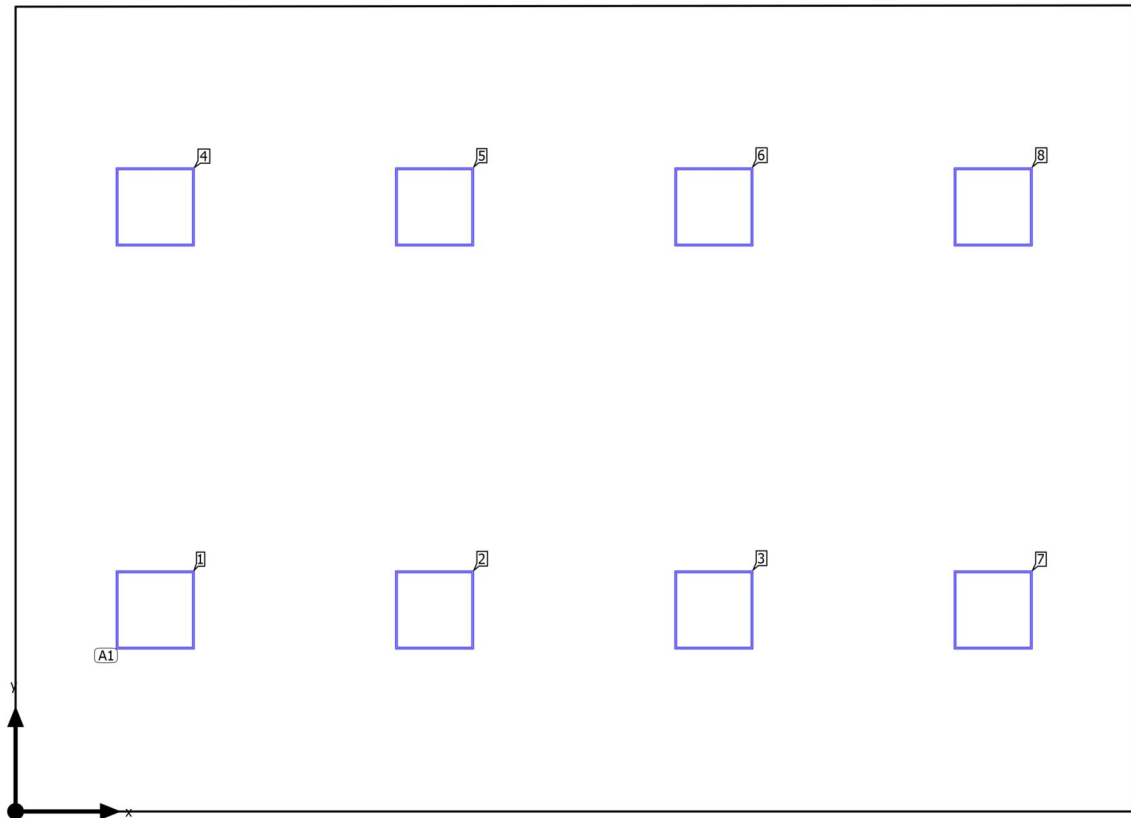
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

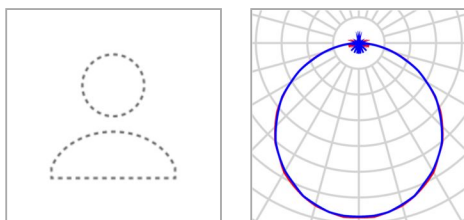


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

8 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.067 m / 1.540 m / 2.800 m	1.067 m	1.540 m	2.800 m	1
X-direction	4 pcs., Center - center, 2.135 m	3.203 m	1.540 m	2.800 m	2
Y-direction	2 pcs., Center - center, 3.080 m	5.338 m	1.540 m	2.800 m	3
Arrangement	A1	1.067 m	4.620 m	2.800 m	4
		3.203 m	4.620 m	2.800 m	5
		5.338 m	4.620 m	2.800 m	6
		7.473 m	1.540 m	2.800 m	7
		7.473 m	4.620 m	2.800 m	8

Building 1 · Story 1 · Klase/Classroom

**Luminaire list** $\Phi_{\text{total}}$ 

32488 lm

 $P_{\text{total}}$ 

272.0 W

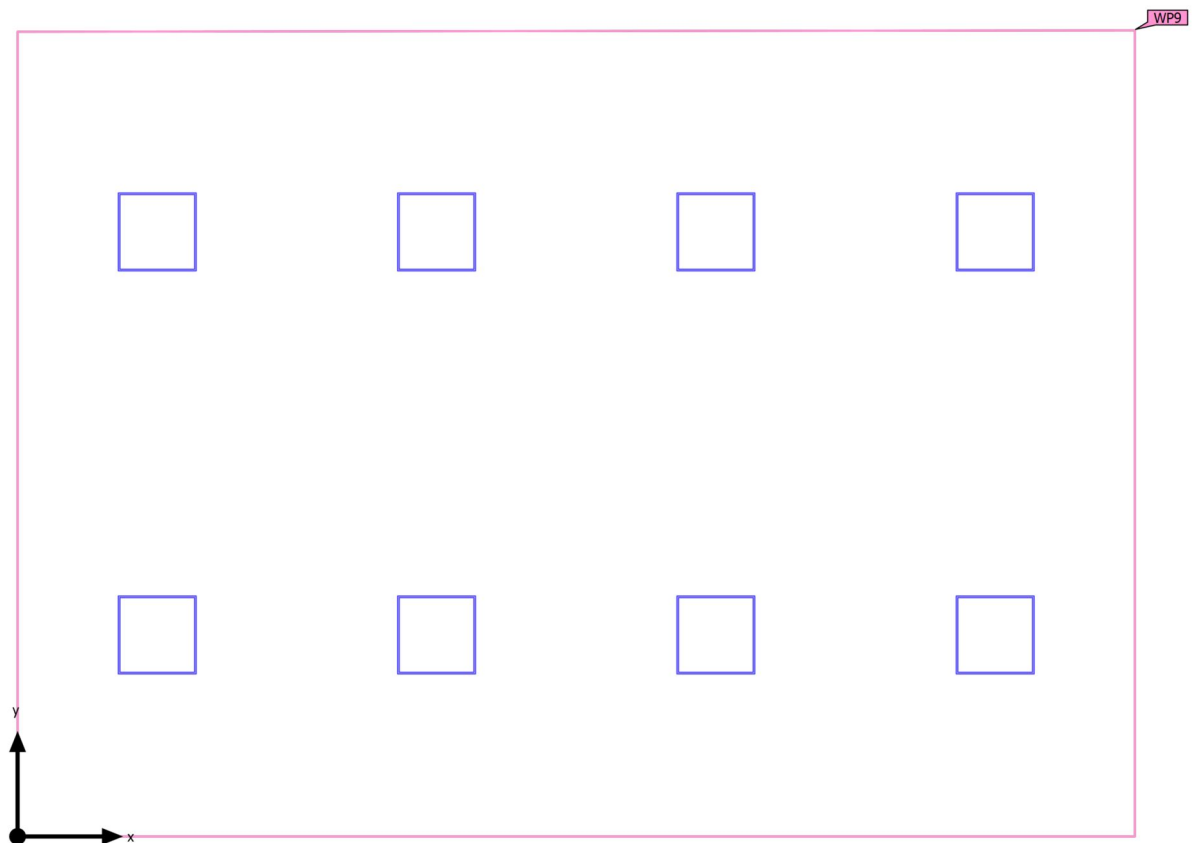
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

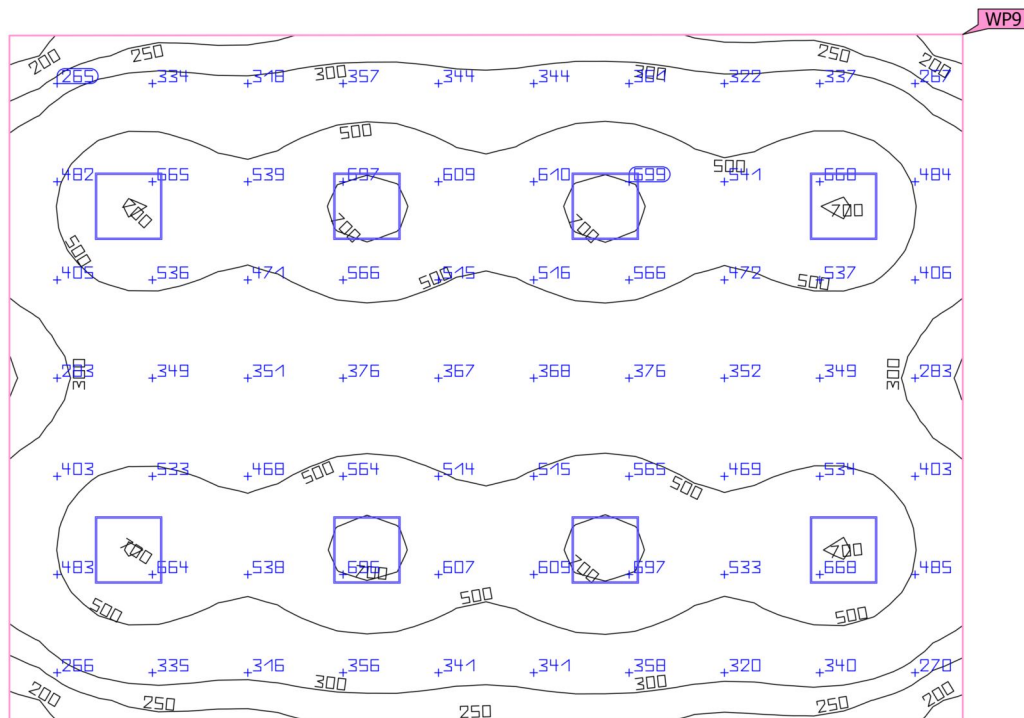
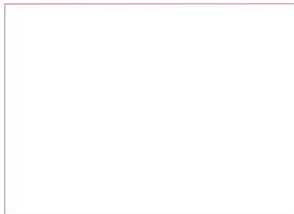
**Calculation objects**

## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	454 lx ( $\geq 300$ lx) ✓	186 lx	732 lx	0.41	0.25	WP9

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

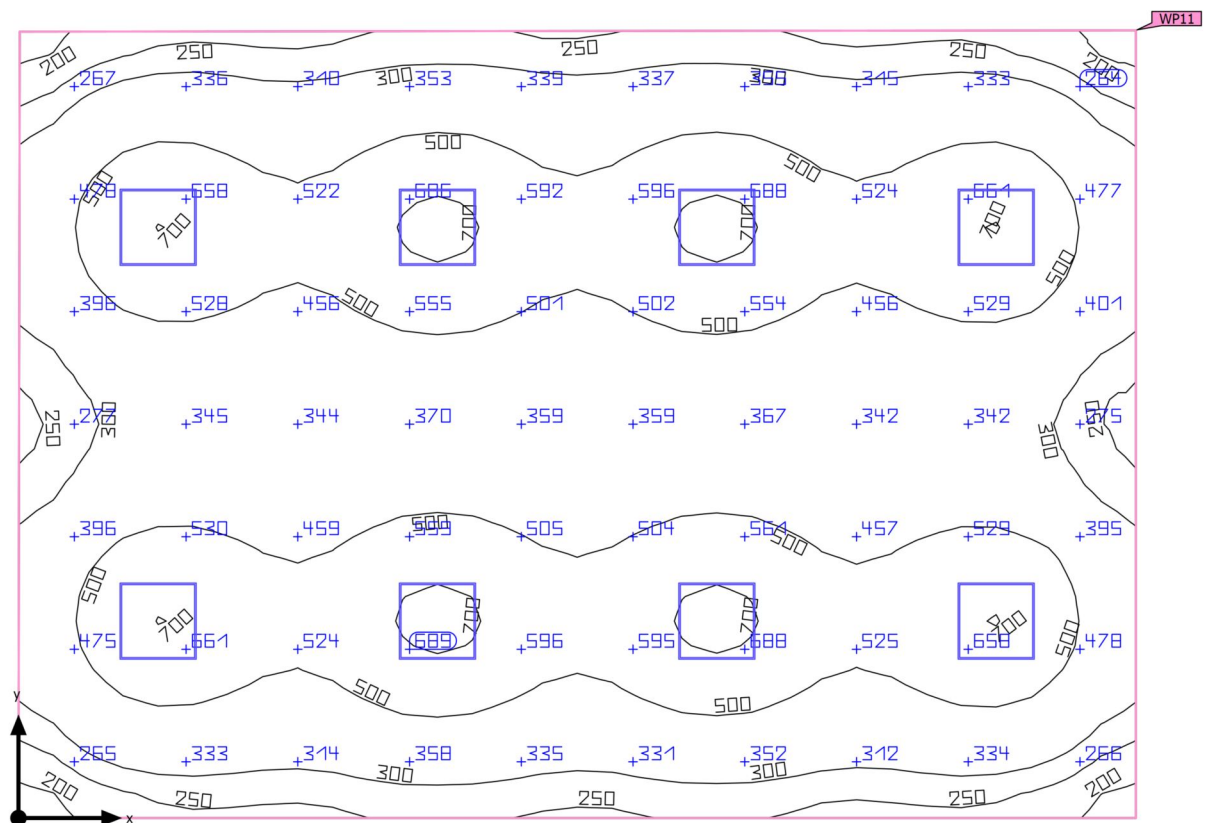
Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Working plane (Klase/Classroom)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom)	454 lx	186 lx	732 lx	0.41	0.25	WP9
Perpendicular illuminance (adaptive)	(≥ 300 lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	446 lx	$\geq 300$ lx	✓	WP11
	$g_1$	0.40	-	-	WP11
Consumption values	Consumption	360 kWh/a	max. 1900 kWh/a	✓	
Room	Lighting power density	5.06 W/m <sup>2</sup>	-	-	
		1.14 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

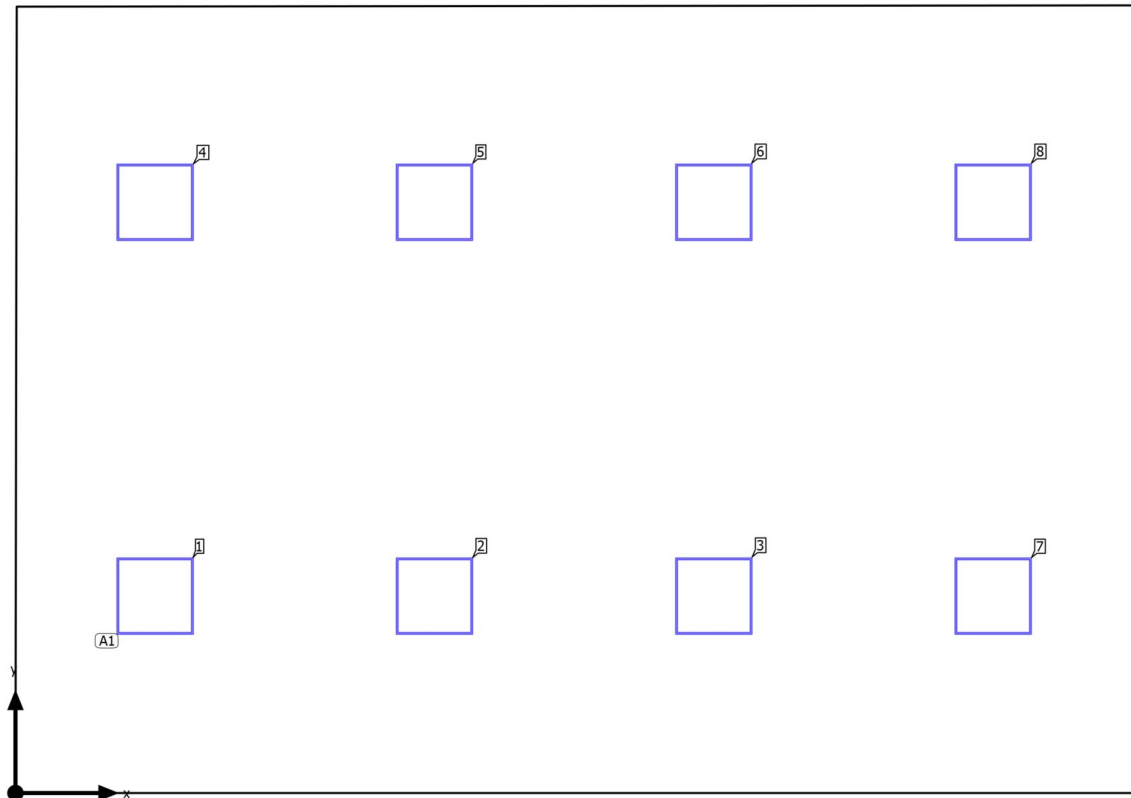
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

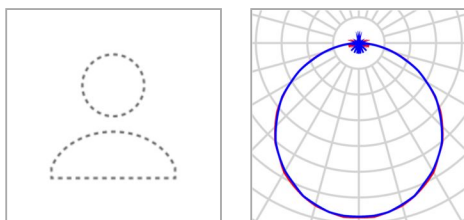


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member
Article No.	0042872
Article name	START Panel 600x600 HE 4100Lm 830 LILO
Fitting	1x LED

P	34.0 W
$\Phi_{\text{Luminaire}}$	4061 lm

8 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.093 m / 1.540 m / 2.800 m	1.093 m	1.540 m	2.800 m	1
X-direction	4 pcs., Center - center, 2.185 m	3.278 m	1.540 m	2.800 m	2
Y-direction	2 pcs., Center - center, 3.080 m	5.463 m	1.540 m	2.800 m	3
Arrangement	A1	1.093 m	4.620 m	2.800 m	4
		3.278 m	4.620 m	2.800 m	5
		5.463 m	4.620 m	2.800 m	6
		7.648 m	1.540 m	2.800 m	7
		7.648 m	4.620 m	2.800 m	8

Building 1 · Story 1 · Klase/Classroom

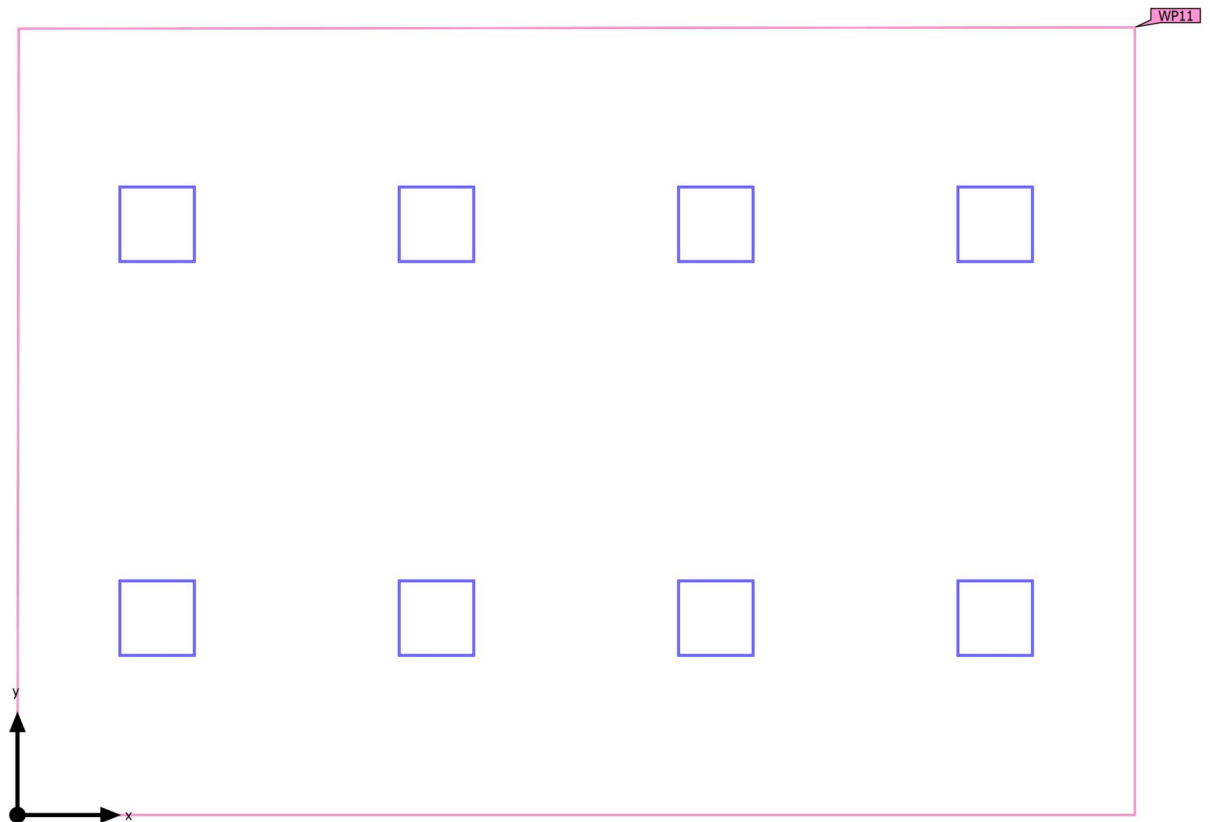
**Luminaire list**

$\Phi_{\text{total}}$ 32488 lm	$P_{\text{total}}$ 272.0 W	Luminous efficacy 119.4 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

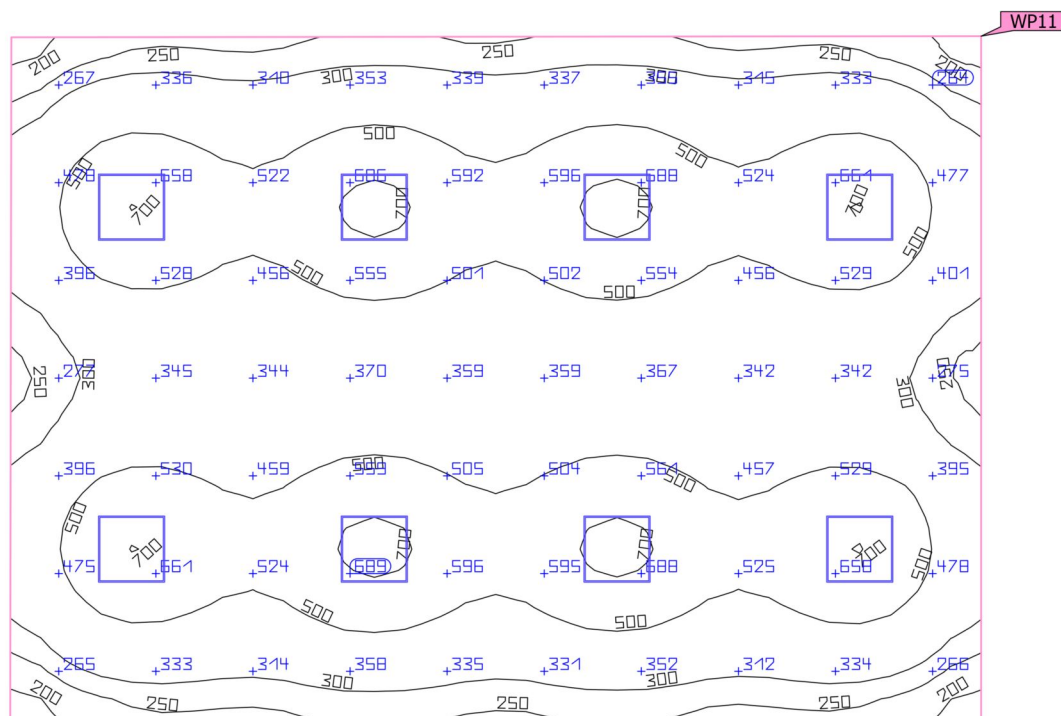
**Calculation objects**

Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	446 lx ( $\geq 300$ lx) ✓	177 lx	733 lx	0.40	0.24	WP11

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

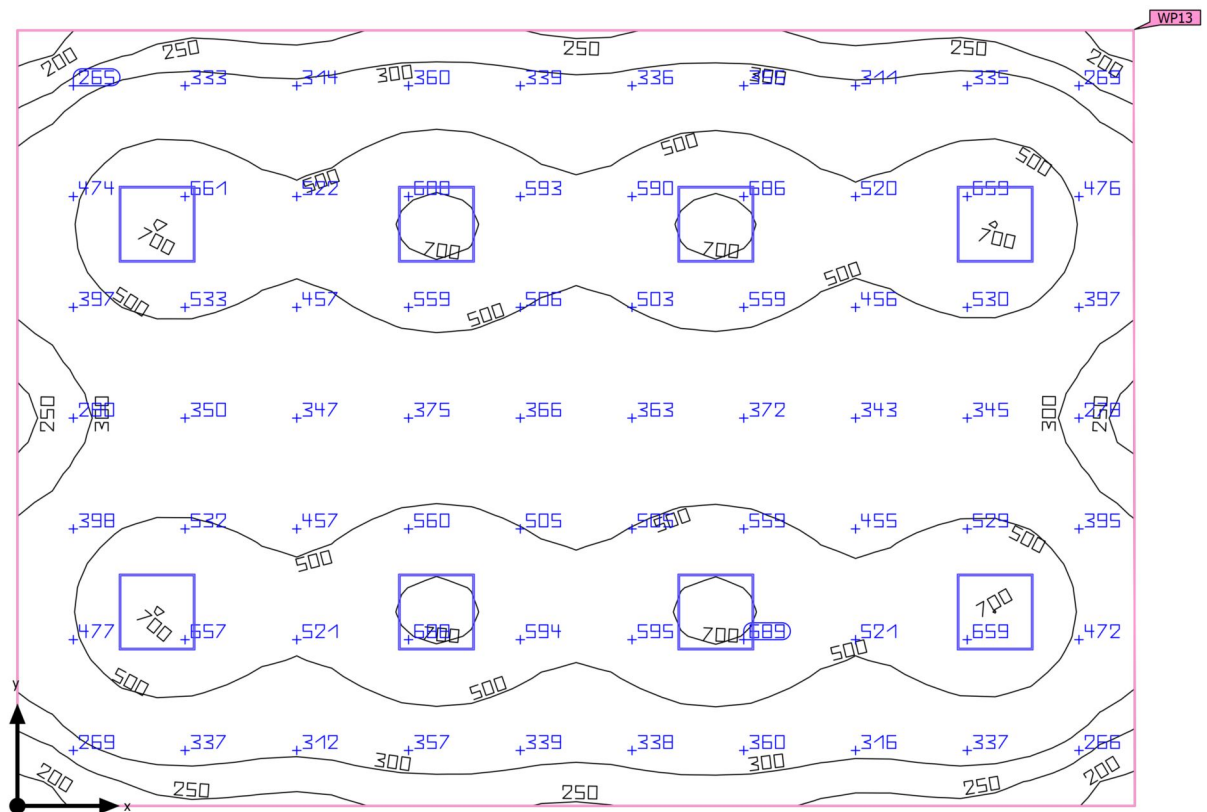
**Working plane (Klase/Classroom)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom)	446 lx	177 lx	733 lx	0.40	0.24	WP11
Perpendicular illuminance (adaptive)	( $\geq 300$ lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	447 lx	$\geq 300$ lx	✓	WP13
	$g_1$	0.41	-	-	WP13
Consumption values	Consumption	360 kWh/a	max. 1900 kWh/a	✓	
Room	Lighting power density	5.08 W/m <sup>2</sup>	-	-	
		1.14 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

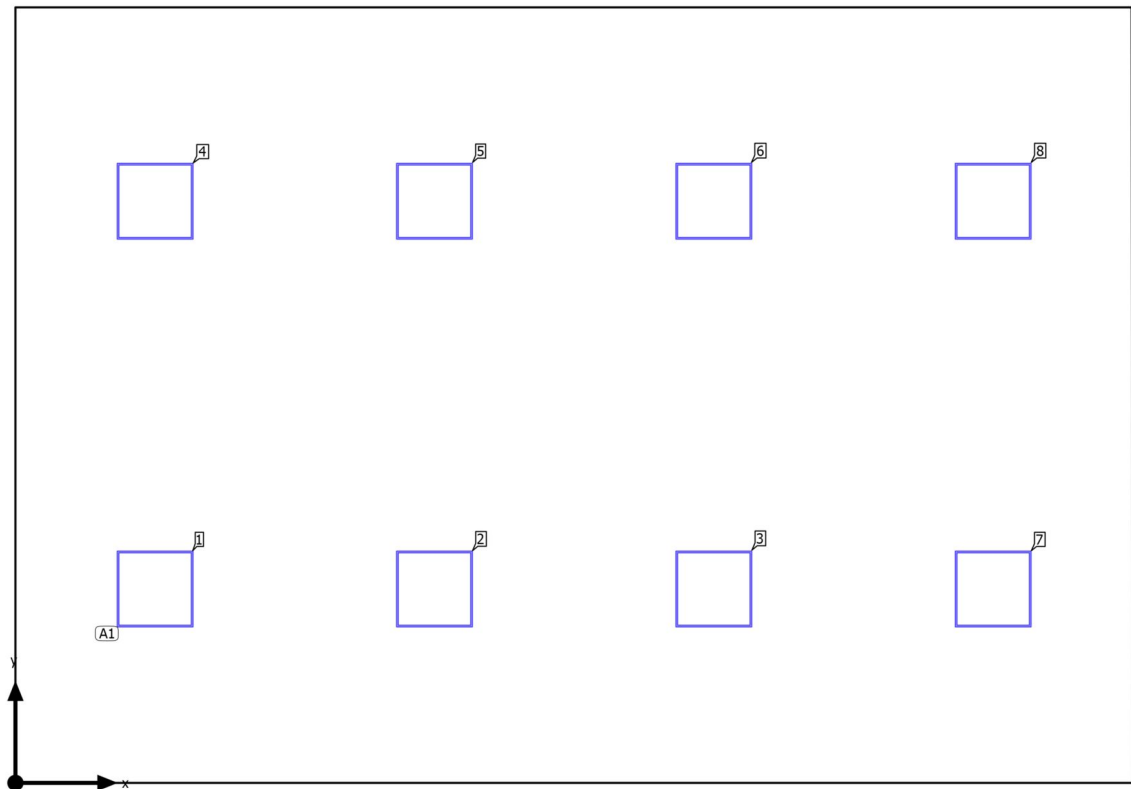
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

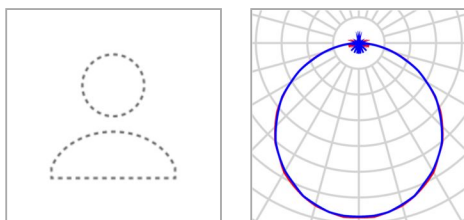


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member
Article No.	0042872
Article name	START Panel 600x600 HE 4100Lm 830 LILO
Fitting	1x LED

P	34.0 W
$\Phi_{\text{Luminaire}}$	4061 lm

8 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.099 m / 1.525 m / 2.800 m	1.099 m	1.525 m	2.800 m	1
X-direction	4 pcs., Center - center, 2.198 m	3.296 m	1.525 m	2.800 m	2
Y-direction	2 pcs., Center - center, 3.050 m	5.494 m	1.525 m	2.800 m	3
Arrangement	A1	1.099 m	4.575 m	2.800 m	4
		3.296 m	4.575 m	2.800 m	5
		5.494 m	4.575 m	2.800 m	6
		7.691 m	1.525 m	2.800 m	7
		7.691 m	4.575 m	2.800 m	8

Building 1 · Story 1 · Klase/Classroom

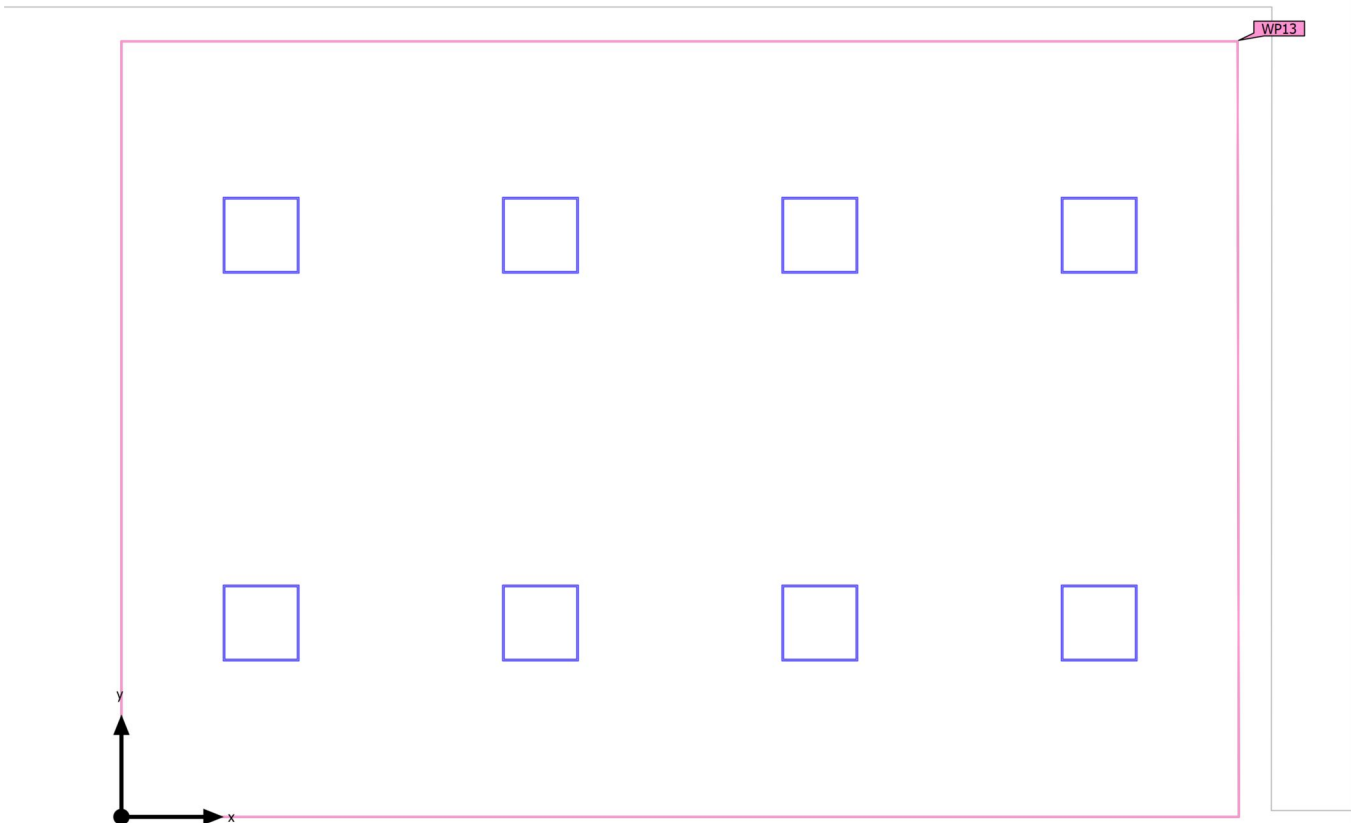
**Luminaire list**

$\Phi_{\text{total}}$ 32488 lm	$P_{\text{total}}$ 272.0 W	Luminous efficacy 119.4 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

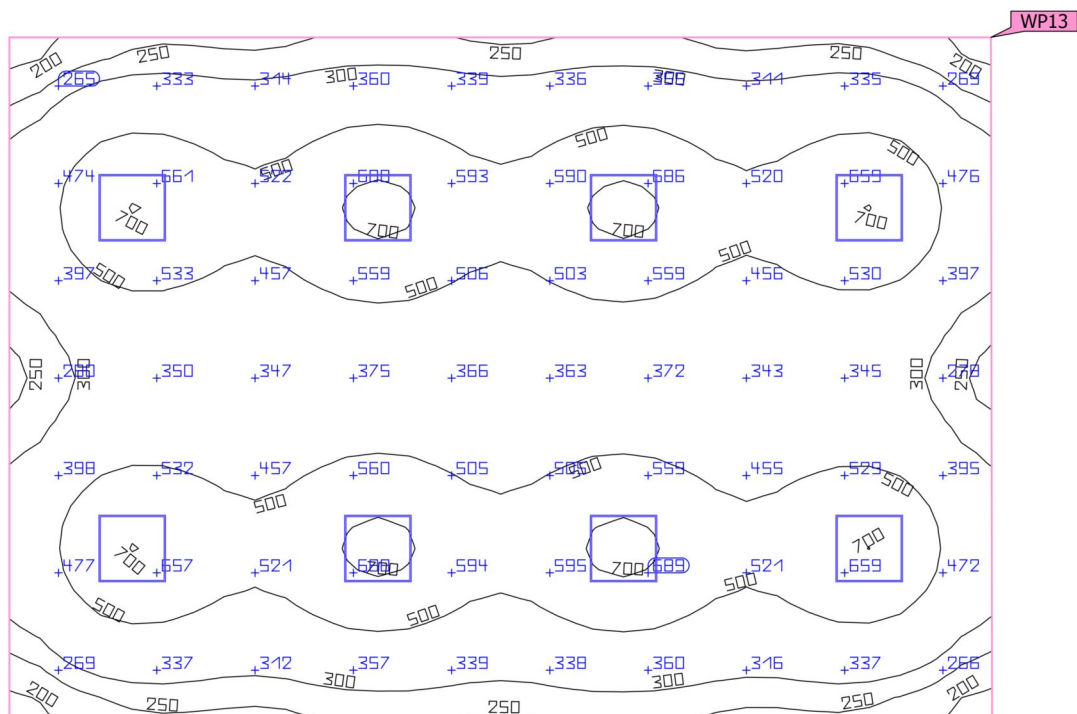
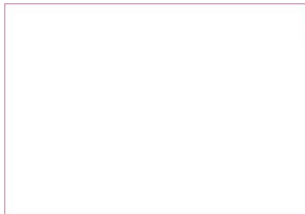
**Calculation objects**

## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	447 lx ( $\geq 300$ lx) ✓	185 lx	721 lx	0.41	0.26	WP13

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

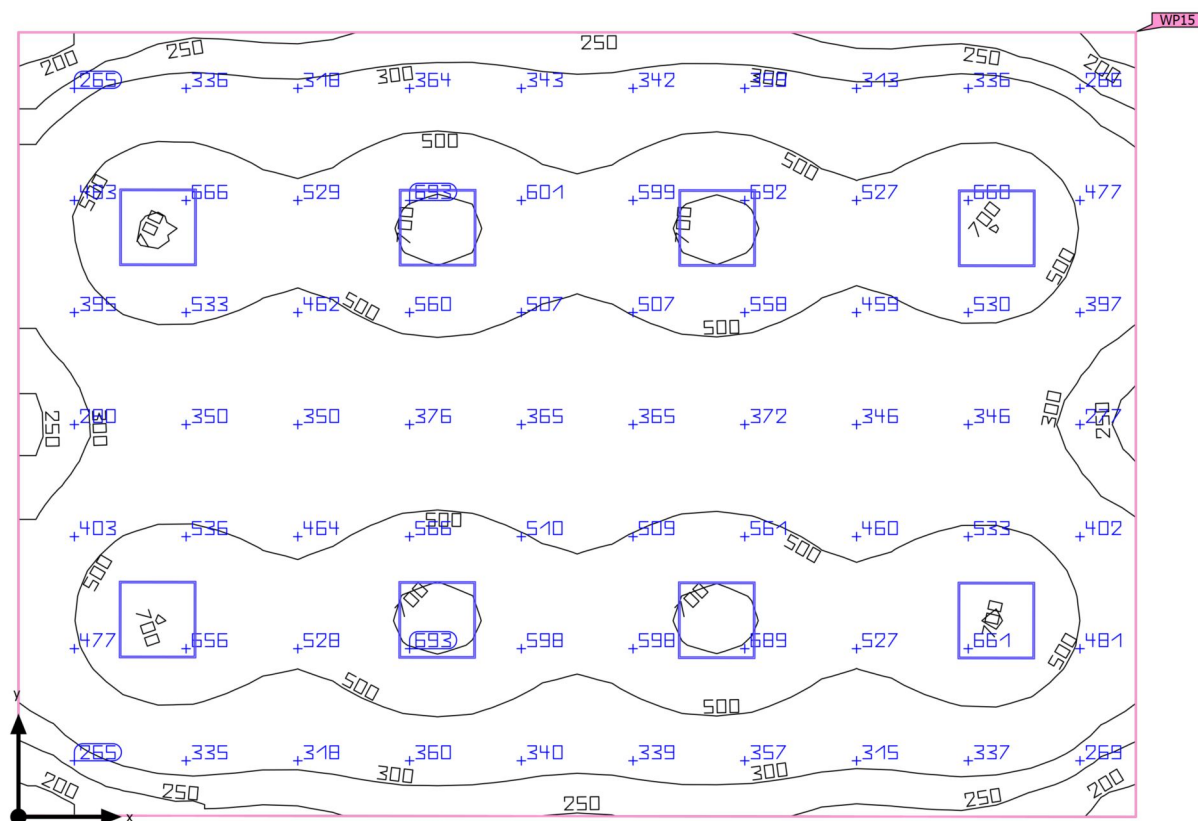
Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Working plane (Klase/Classroom)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom)	447 lx	185 lx	721 lx	0.41	0.26	WP13
Perpendicular illuminance (adaptive)	(≥ 300 lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	450 lx	$\geq 300$ lx	✓	WP15
	$g_1$	0.40	-	-	WP15
Consumption values	Consumption	360 kWh/a	max. 1900 kWh/a	✓	
Room	Lighting power density	5.12 W/m <sup>2</sup>	-	-	
		1.14 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

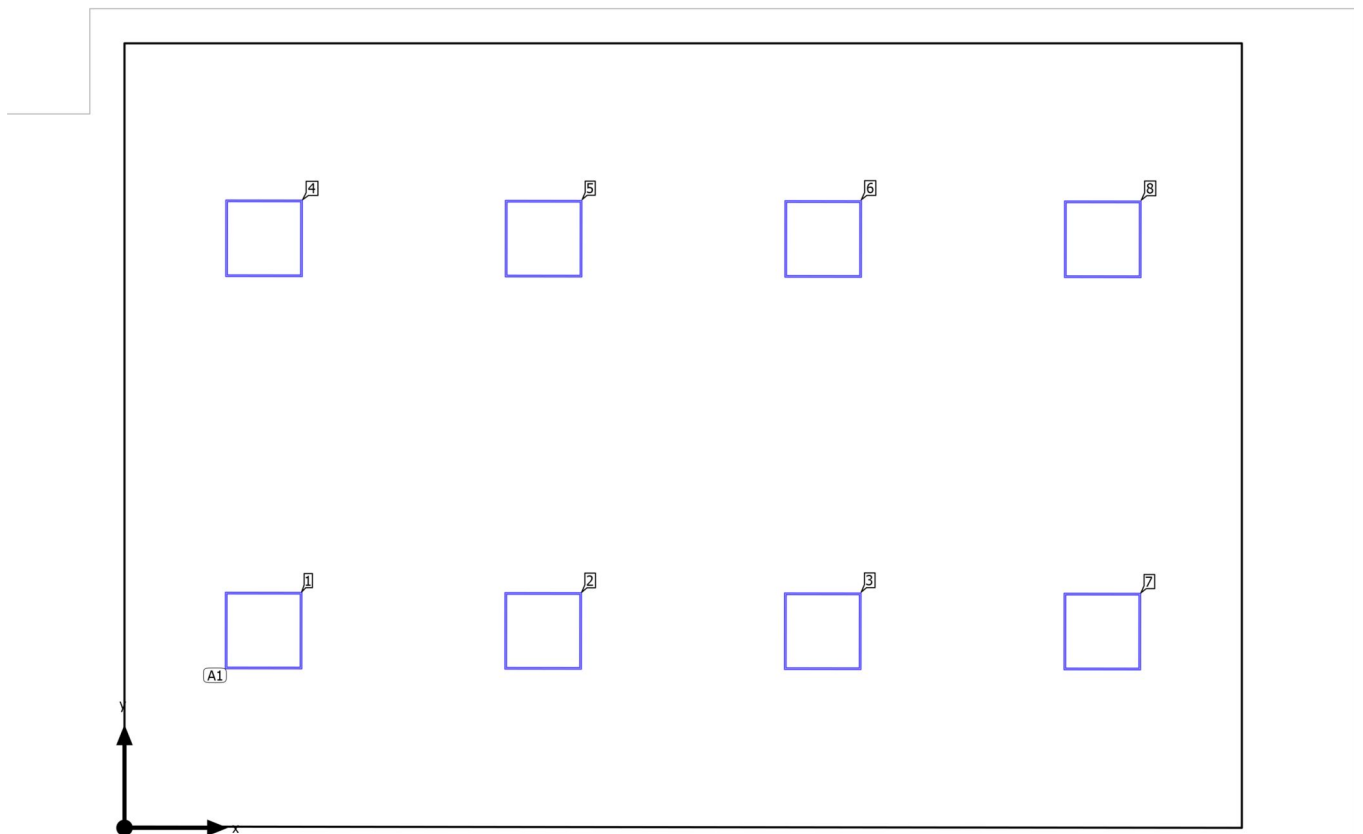
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

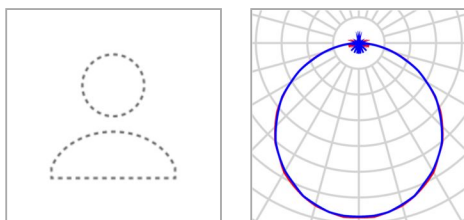


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

8 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.083 m / 1.536 m / 2.800 m	1.083 m	1.536 m	2.800 m	1
X-direction	4 pcs., Center - center, 2.177 m	3.260 m	1.534 m	2.800 m	2
		5.437 m	1.531 m	2.800 m	3
Y-direction	2 pcs., Center - center, 3.055 m	1.087 m	4.591 m	2.800 m	4
Arrangement	A1	3.263 m	4.589 m	2.800 m	5
		5.440 m	4.586 m	2.800 m	6
		7.613 m	1.529 m	2.800 m	7
		7.617 m	4.584 m	2.800 m	8

Building 1 · Story 1 · Klase/Classroom

**Luminaire list** $\Phi_{\text{total}}$ 

32488 lm

 $P_{\text{total}}$ 

272.0 W

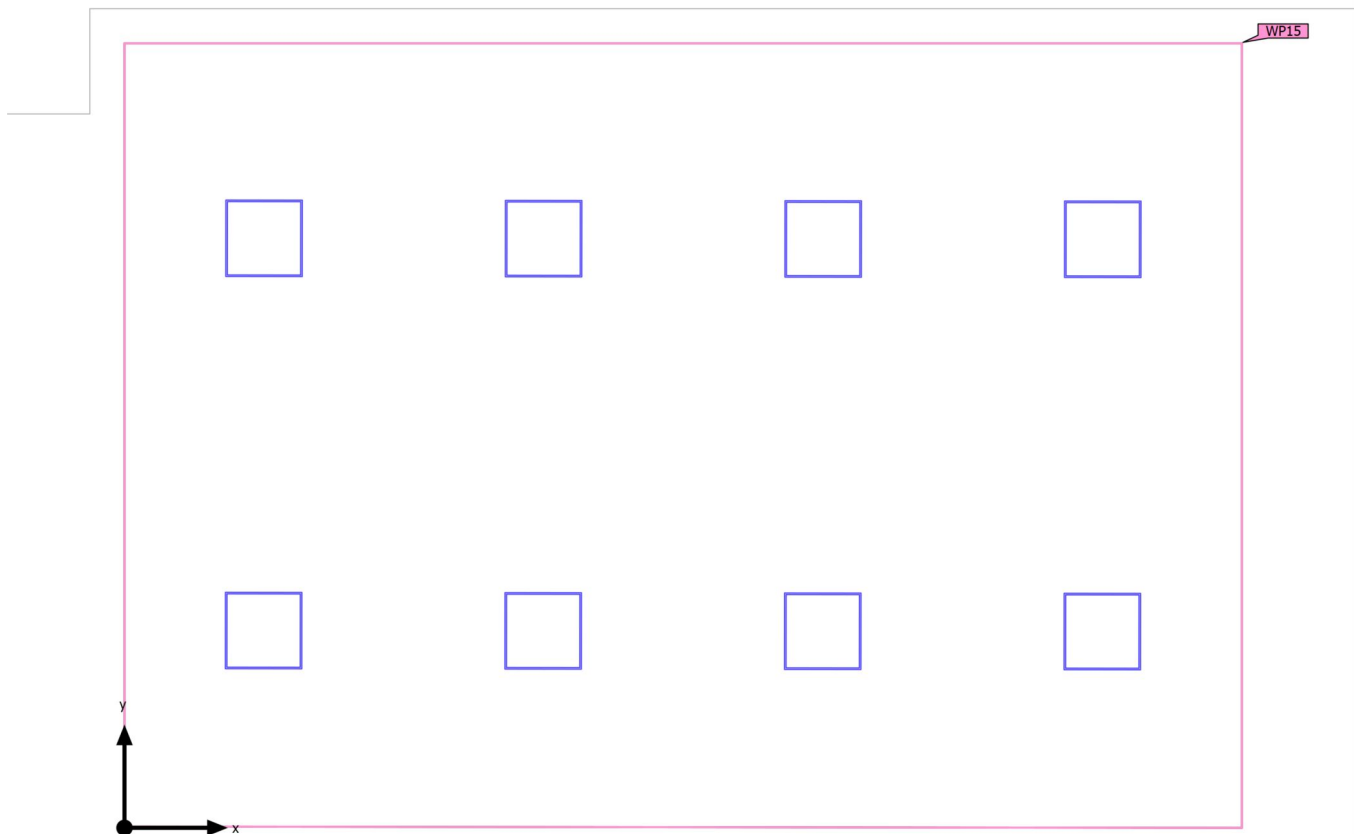
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
8	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

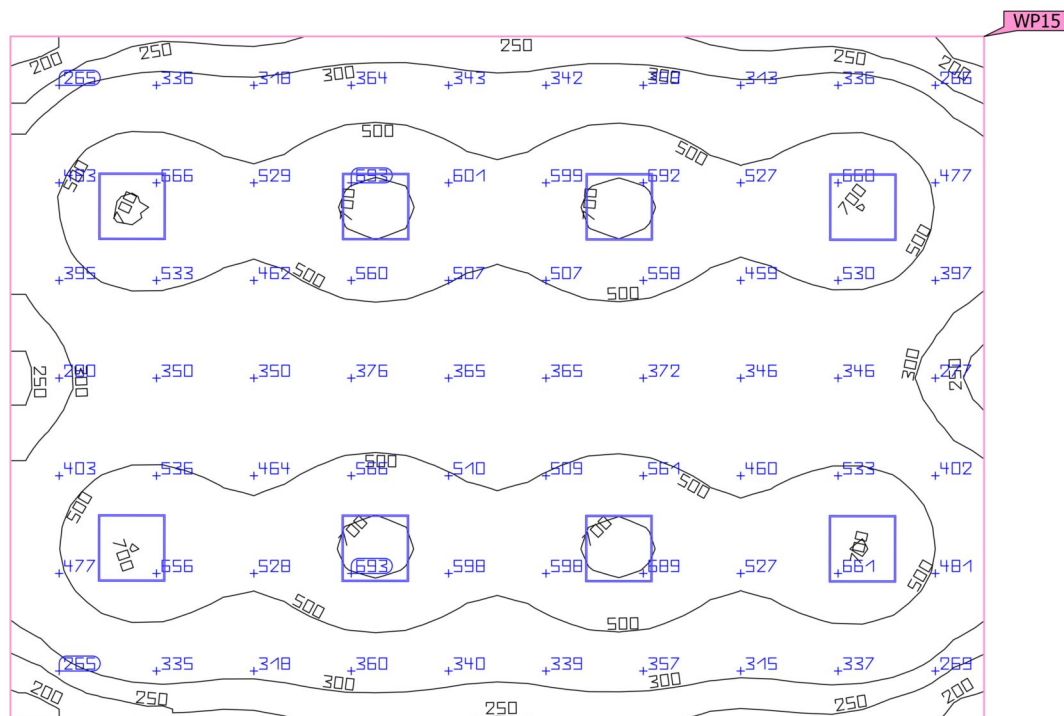
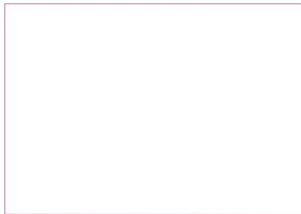
**Calculation objects**

## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	450 lx ( $\geq 300$ lx) ✓	179 lx	736 lx	0.40	0.24	WP15

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

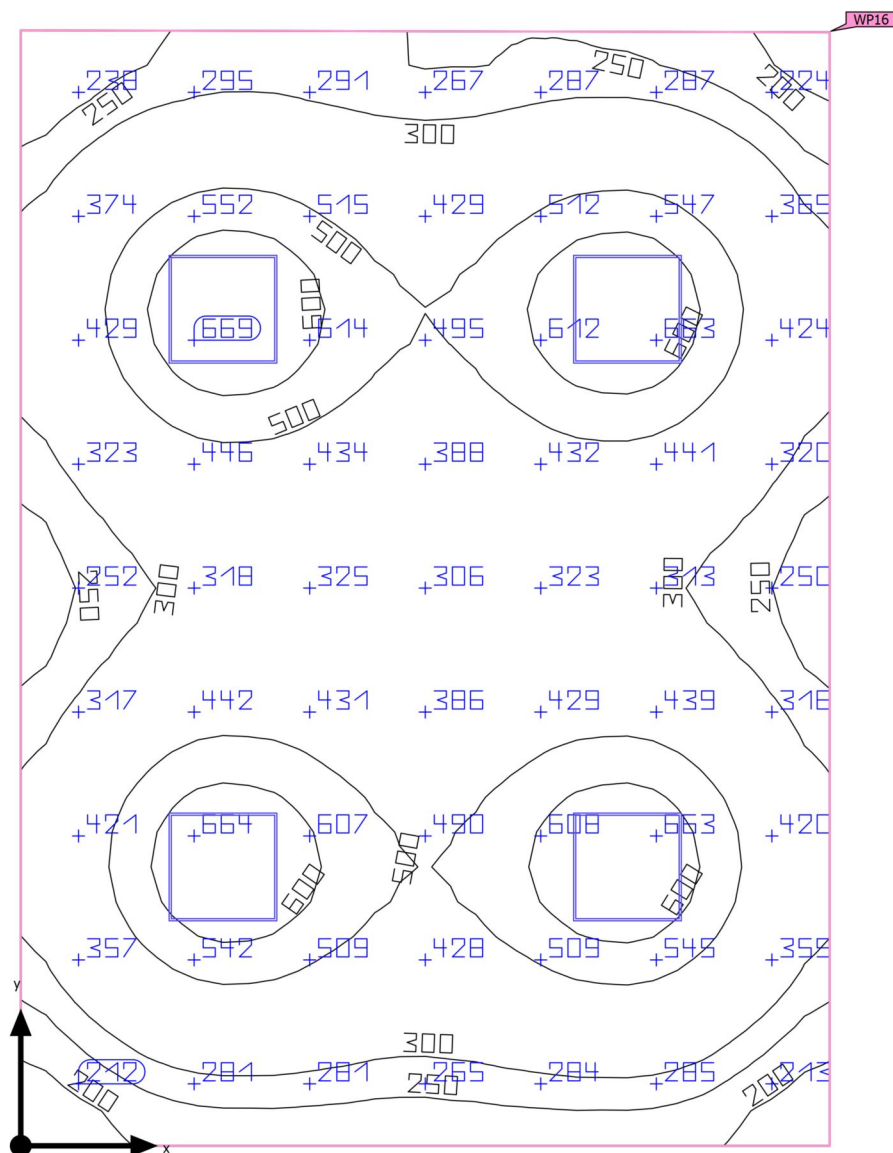
Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Working plane (Klase/Classroom)**

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom)	450 lx	179 lx	736 lx	0.40	0.24	WP15
Perpendicular illuminance (adaptive)	$\geq 300$ lx					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Summary**

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	406 lx	$\geq 300$ lx	✓	WP16
	$g_1$	0.40	-	-	WP16
Consumption values	Consumption	180 kWh/a	max. 1000 kWh/a	✓	
Room	Lighting power density	4.95 W/m <sup>2</sup>	-	-	
		1.22 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

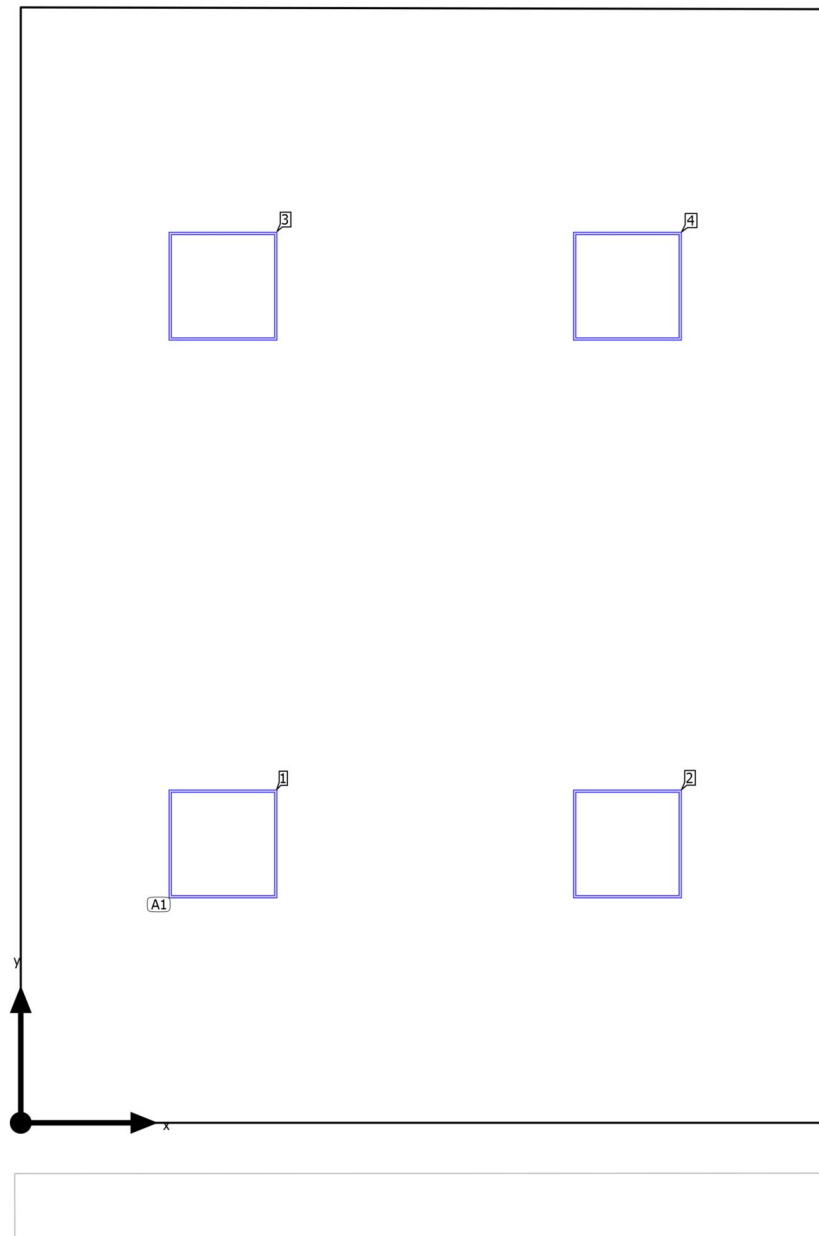
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

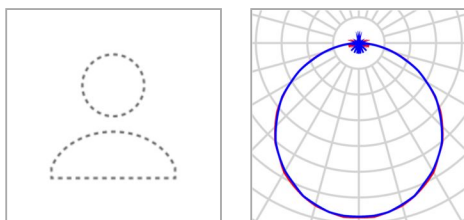


Building 1 · Story 1 · Klase/Classroom

## Luminaire layout plan



Building 1 · Story 1 · Klase/Classroom

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

4 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.117 m / 1.540 m / 2.800 m	1.117 m	1.540 m	2.800 m	1
X-direction	2 pcs., Center - center, 2.234 m	3.351 m	1.540 m	2.800 m	2
Y-direction	2 pcs., Center - center, 3.080 m	1.117 m	4.620 m	2.800 m	3
		3.351 m	4.620 m	2.800 m	4
Arrangement	A1				

Building 1 · Story 1 · Klase/Classroom

**Luminaire list** $\Phi_{\text{total}}$ 

16244 lm

 $P_{\text{total}}$ 

136.0 W

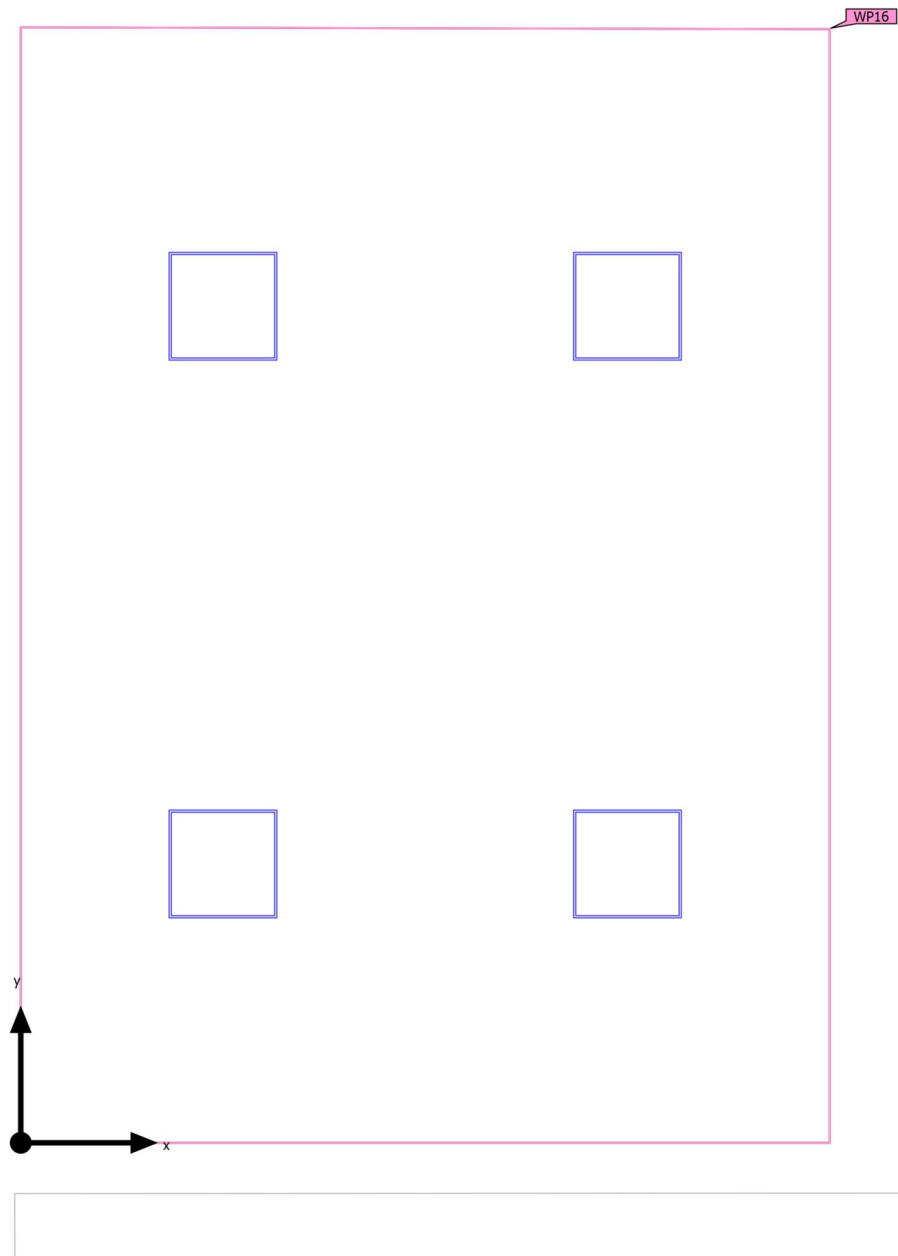
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Klase/Classroom (Light scene 1)


## Calculation objects



Building 1 · Story 1 · Klase/Classroom (Light scene 1)

**Calculation objects**

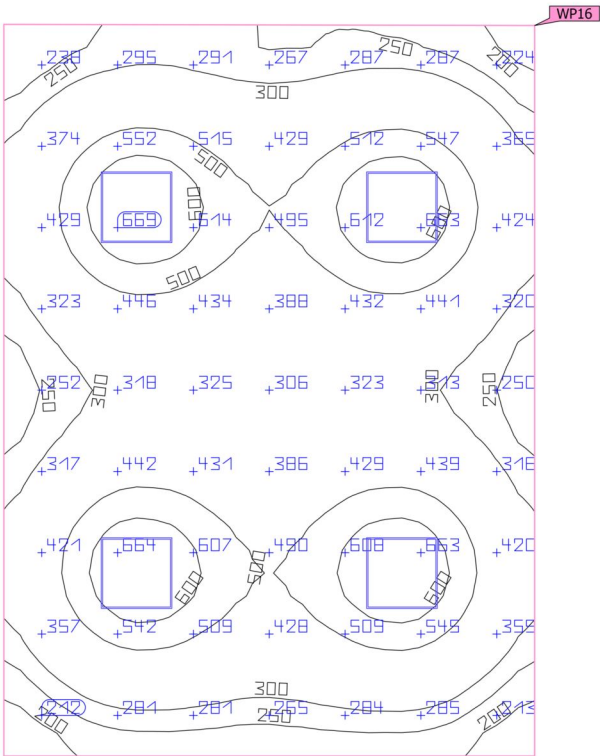
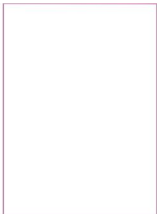
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	406 lx ( $\geq 300$ lx) 	162 lx	695 lx	0.40	0.23	WP16

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Klase/Classroom (Light scene 1)

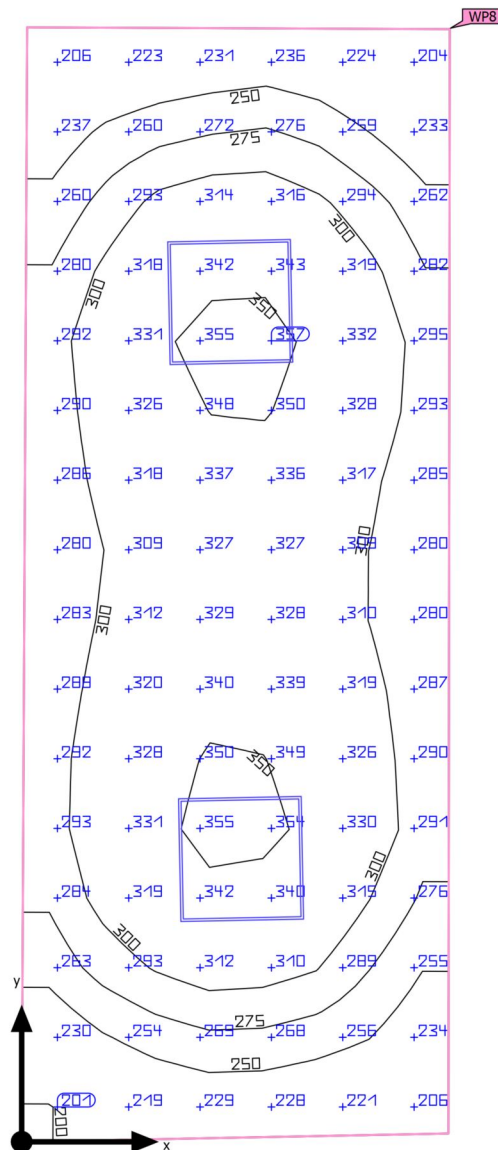
Working plane (Klase/Classroom)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Klase/Classroom) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	406 lx (≥ 300 lx) ✓	162 lx	695 lx	0.40	0.23	WP16

Utilization profile: Educational premises - Educational buildings, Classrooms, tutorial rooms

Building 1 · Story 1 · Koridor (Light scene 1)

**Summary**

Building 1 · Story 1 · Koridor (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	294 lx	$\geq 100$ lx	✓	WP8
	$g_1$	0.68	-	-	WP8
Consumption values	Consumption	75 kWh/a	max. 400 kWh/a	✓	
Room	Lighting power density	6.14 W/m <sup>2</sup>	-	-	
		2.09 W/m <sup>2</sup> /100 lx	-	-	

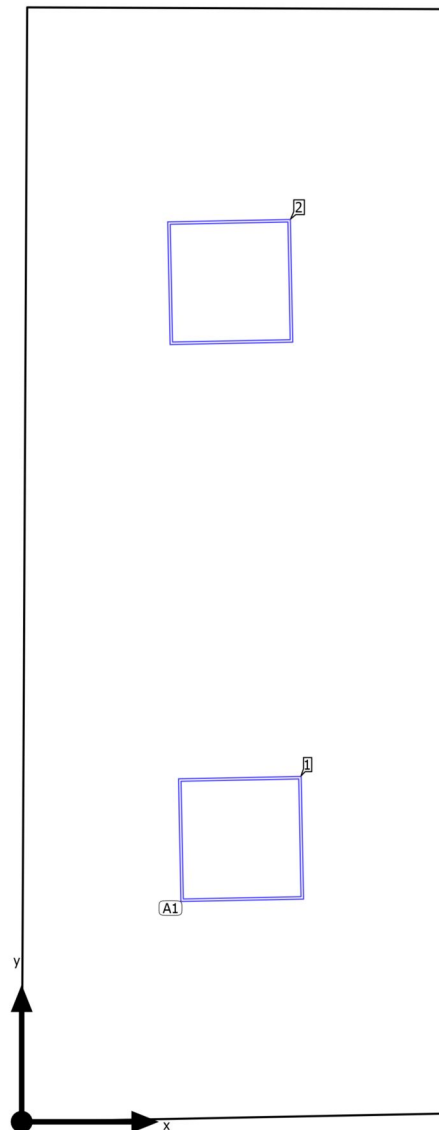
Utilization profile: Health care premises - Rooms for general use, Corridors: Cleaning

### Luminaire list

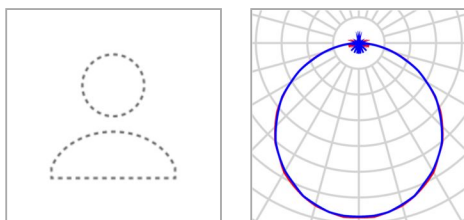
pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W



Building 1 · Story 1 · Koridor  
**Luminaire layout plan**



Building 1 · Story 1 · Koridor

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member
Article No.	0042872
Article name	START Panel 600x600 HE 4100Lm 830 LILO
Fitting	1x LED

P	34.0 W
$\Phi_{\text{Luminaire}}$	4061 lm

2 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.064 m / 1.372 m / 2.800 m	1.064 m	1.372 m	2.800 m	1
X-direction	1 pcs., Center - center, 2.181 m	1.012 m	4.073 m	2.800 m	2
Y-direction	2 pcs., Center - center, 2.702 m				
Arrangement	A1				

Building 1 · Story 1 · Koridor

**Luminaire list** $\Phi_{\text{total}}$ 

8122 lm

 $P_{\text{total}}$ 

68.0 W

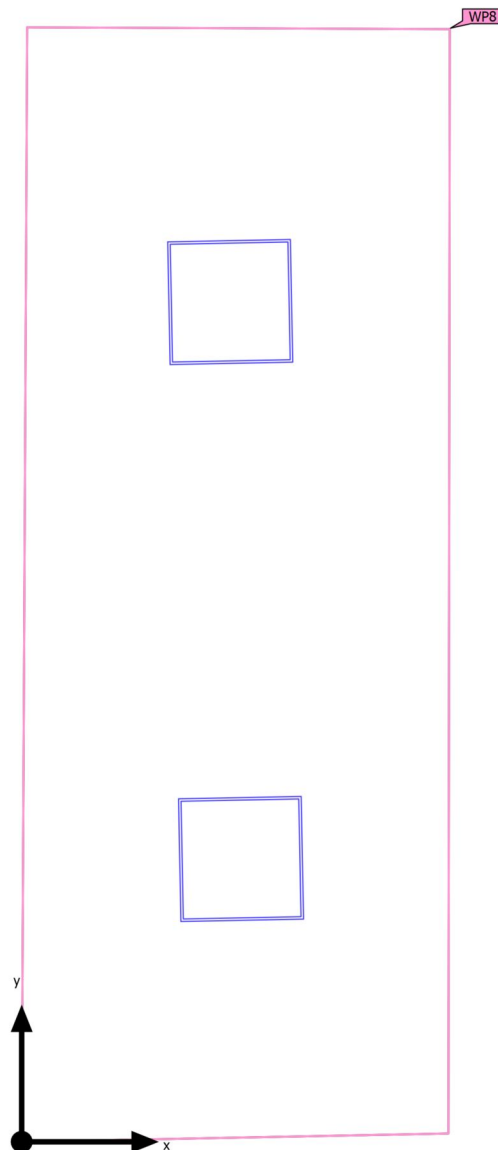
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
2	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Koridor (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Koridor (Light scene 1)

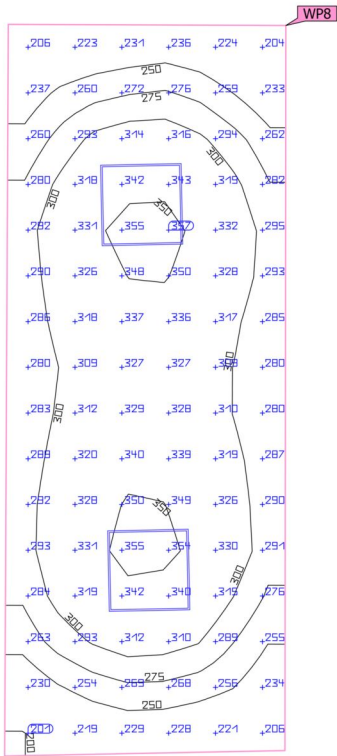
**Calculation objects**

## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	294 lx ( $\geq 100$ lx) ✓	199 lx	355 lx	0.68	0.56	WP8

Utilization profile: Health care premises - Rooms for general use, Corridors: Cleaning

Building 1 · Story 1 · Koridor (Light scene 1)  
**Working plane (Koridor)**

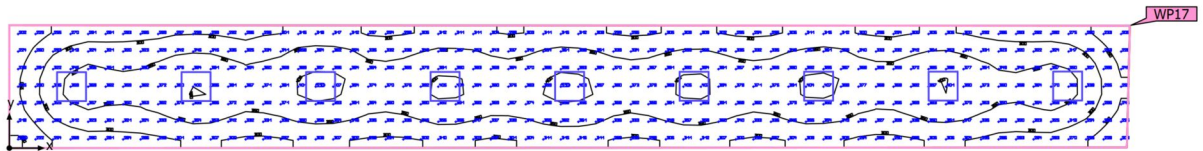


Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	294 lx (≥ 100 lx) ✓	199 lx	355 lx	0.68	0.56	WP8

Utilization profile: Health care premises - Rooms for general use, Corridors: Cleaning

Building 1 · Story 1 · Koridor (Light scene 1)

## Summary



Building 1 · Story 1 · Koridor (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	337 lx	$\geq 100$ lx	✓	WP17
	$g_1$	0.58	-	-	WP17
Consumption values	Consumption	340 kWh/a	max. 1950 kWh/a	✓	
Room	Lighting power density	5.52 W/m <sup>2</sup>	-	-	
		1.64 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Health care premises - Rooms for general use, Corridors: Cleaning

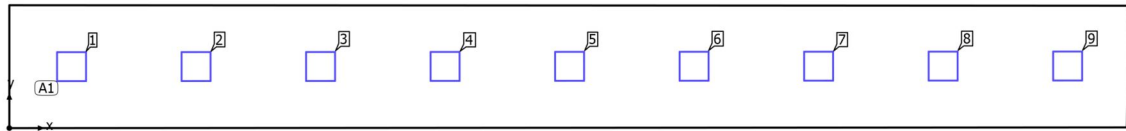
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
9	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

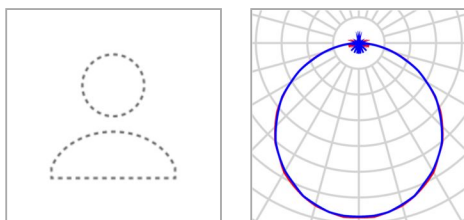


Building 1 · Story 1 · Koridor

## Luminaire layout plan



Building 1 · Story 1 · Koridor

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member
Article No.	0042872
Article name	START Panel 600x600 HE 4100Lm 830 LILO
Fitting	1x LED

P	34.0 W
$\Phi_{\text{Luminaire}}$	4061 lm

9 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.252 m / 1.238 m / 2.800 m	1.252 m	1.238 m	2.800 m	1
X-direction	9 pcs., Center - center, 2.505 m	3.757 m	1.240 m	2.800 m	2
Y-direction	1 pcs., Center - center, 2.475 m	6.263 m	1.241 m	2.800 m	3
Arrangement	A1	8.768 m	1.243 m	2.800 m	4
		11.273 m	1.244 m	2.800 m	5
		13.779 m	1.246 m	2.800 m	6
		16.284 m	1.248 m	2.800 m	7
		18.790 m	1.249 m	2.800 m	8
		21.295 m	1.251 m	2.800 m	9

Building 1 · Story 1 · Koridor

**Luminaire list** $\Phi_{\text{total}}$ 

36549 lm

 $P_{\text{total}}$ 

306.0 W

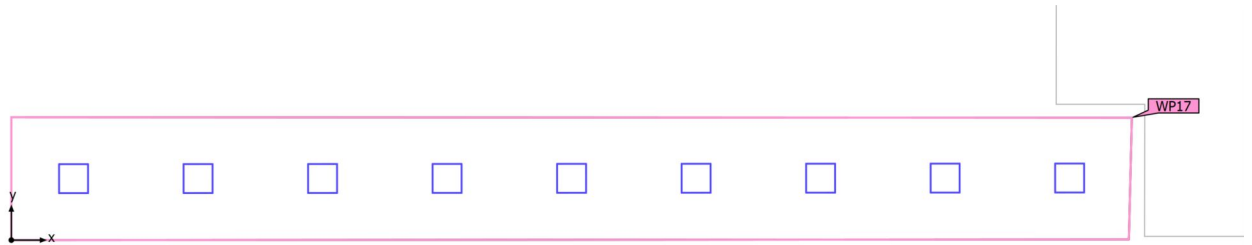
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
9	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Koridor (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Koridor (Light scene 1)

Calculation objects

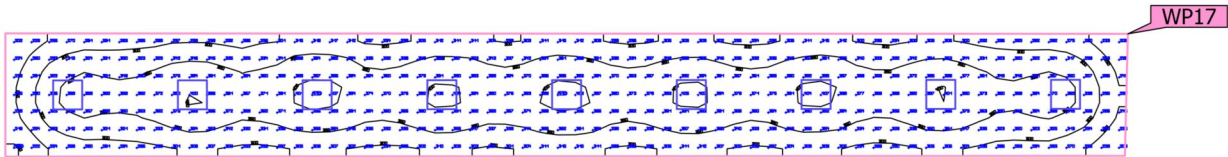
Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	337 lx (≥ 100 lx) ✓	194 lx	410 lx	0.58	0.47	WP17

Utilization profile: Health care premises - Rooms for general use, Corridors: Cleaning

Building 1 · Story 1 · Koridor (Light scene 1)

Working plane (Koridor)

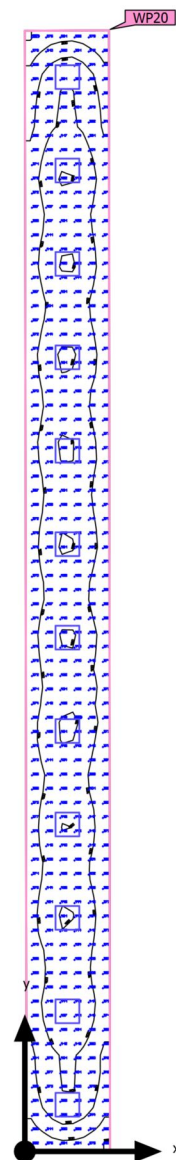


Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	337 lx (≥ 100 lx) ✓	194 lx	410 lx	0.58	0.47	WP17

Utilization profile: Health care premises - Rooms for general use, Corridors: Cleaning

Building 1 · Story 1 · Koridor (Light scene 1)

## Summary



Building 1 · Story 1 · Koridor (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	397 lx	$\geq 100$ lx	✓	WP20
	$g_1$	0.62	-	-	WP20
Consumption values	Consumption	450 kWh/a	max. 2000 kWh/a	✓	
Room	Lighting power density	7.20 W/m <sup>2</sup>	-	-	
		1.82 W/m <sup>2</sup> /100 lx	-	-	

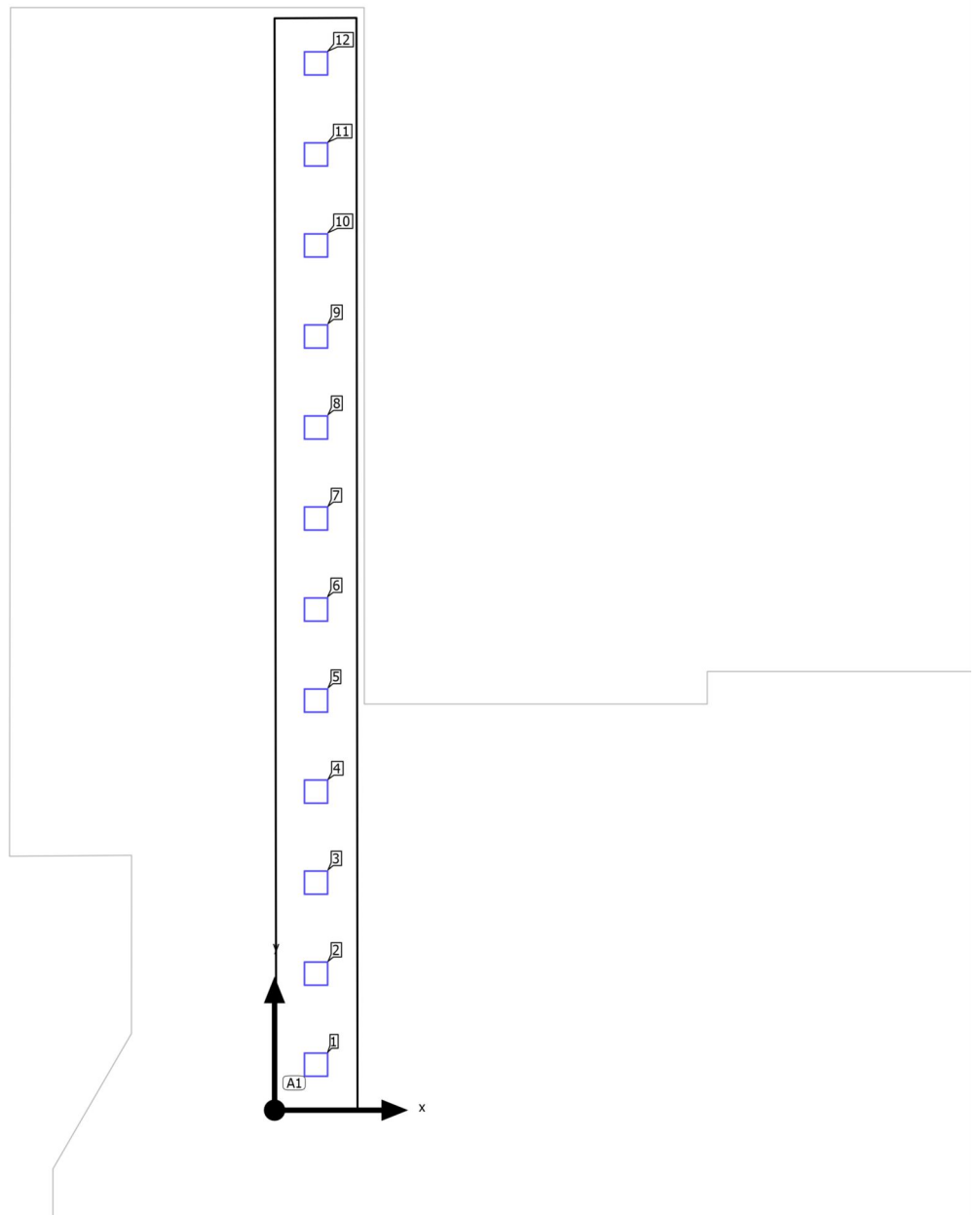
Utilization profile: Health care premises - Rooms for general use, Corridors: During the day

### Luminaire list

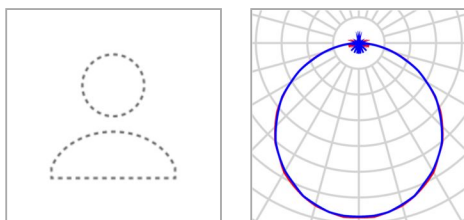
pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
12	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W



Building 1 · Story 1 · Koridor  
**Luminaire layout plan**



Building 1 · Story 1 · Koridor

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

12 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.046 m / 1.148 m / 2.800 m	1.046 m	1.148 m	2.800 m	1
X-direction	1 pcs., Center - center, 2.093 m	1.046 m	3.443 m	2.800 m	2
Y-direction	12 pcs., Center - center, 2.295 m	1.046 m	5.738 m	2.800 m	3
Arrangement	A1	1.046 m	8.033 m	2.800 m	4
		1.046 m	10.328 m	2.800 m	5
		1.046 m	12.623 m	2.800 m	6
		1.046 m	14.918 m	2.800 m	7
		1.046 m	17.213 m	2.800 m	8
		1.046 m	19.508 m	2.800 m	9
		1.046 m	21.803 m	2.800 m	10
		1.046 m	24.098 m	2.800 m	11
		1.046 m	26.393 m	2.800 m	12

Building 1 · Story 1 · Koridor

**Luminaire list** $\Phi_{\text{total}}$ 

48732 lm

 $P_{\text{total}}$ 

408.0 W

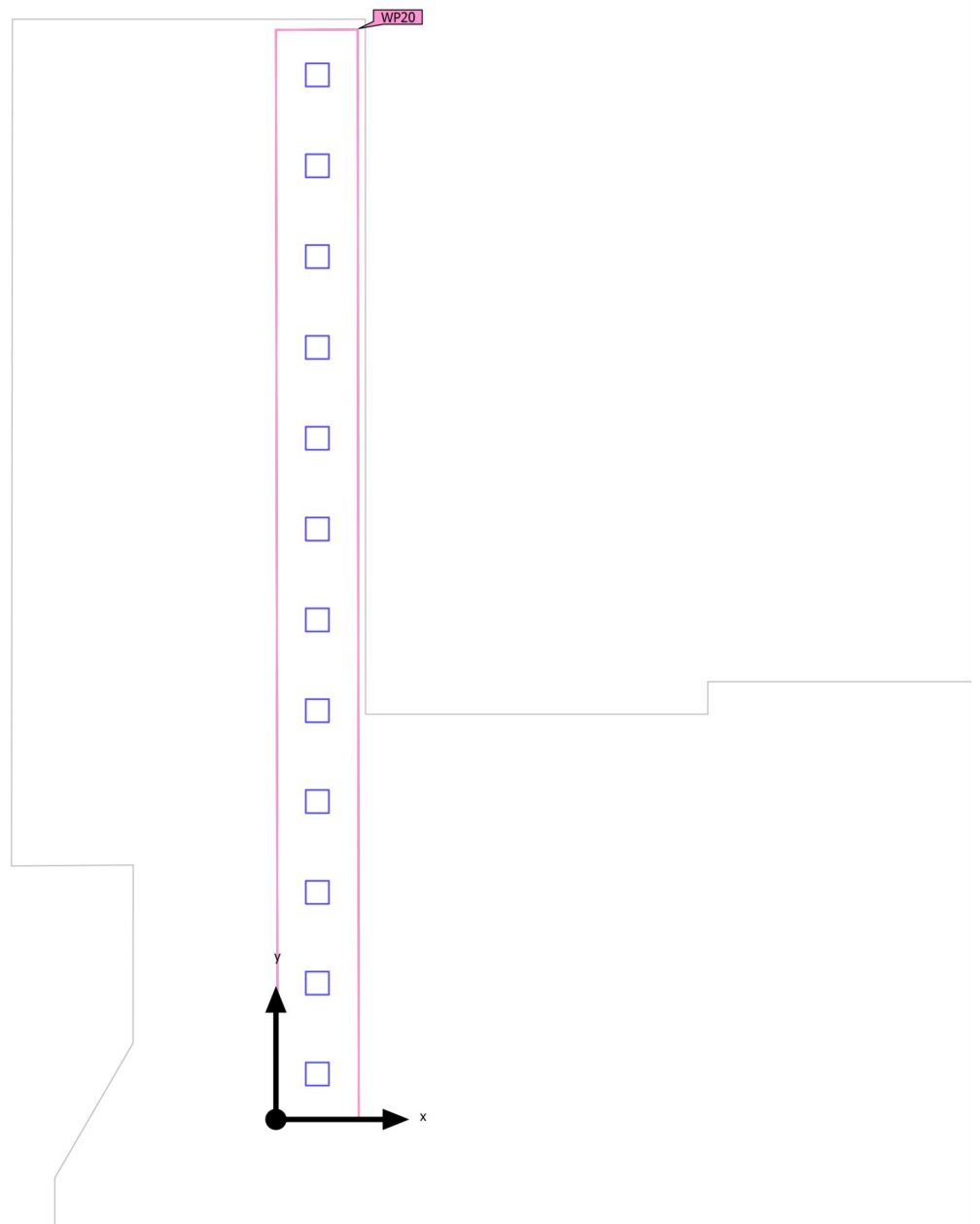
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
12	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Koridor (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Koridor (Light scene 1)

**Calculation objects**

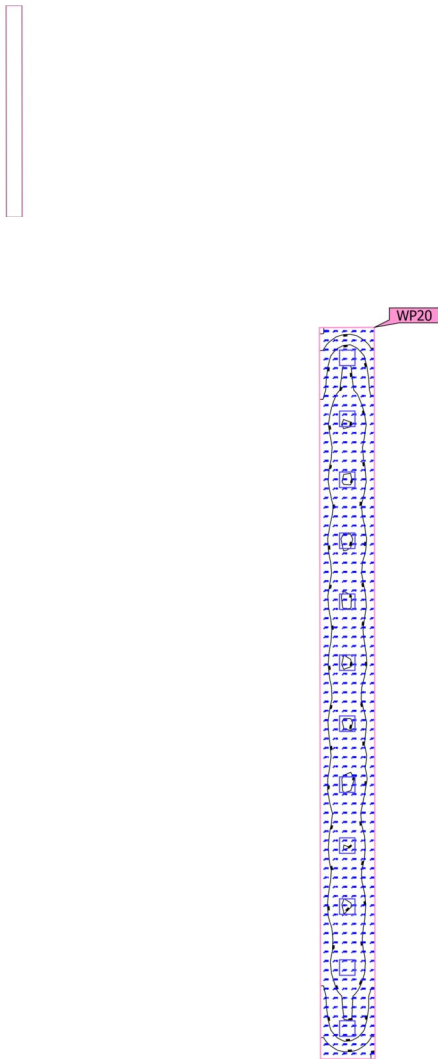
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	397 lx ( $\geq 100$ lx) ✓	248 lx	454 lx	0.62	0.55	WP20

Utilization profile: Health care premises - Rooms for general use, Corridors: During the day

Building 1 · Story 1 · Koridor (Light scene 1)

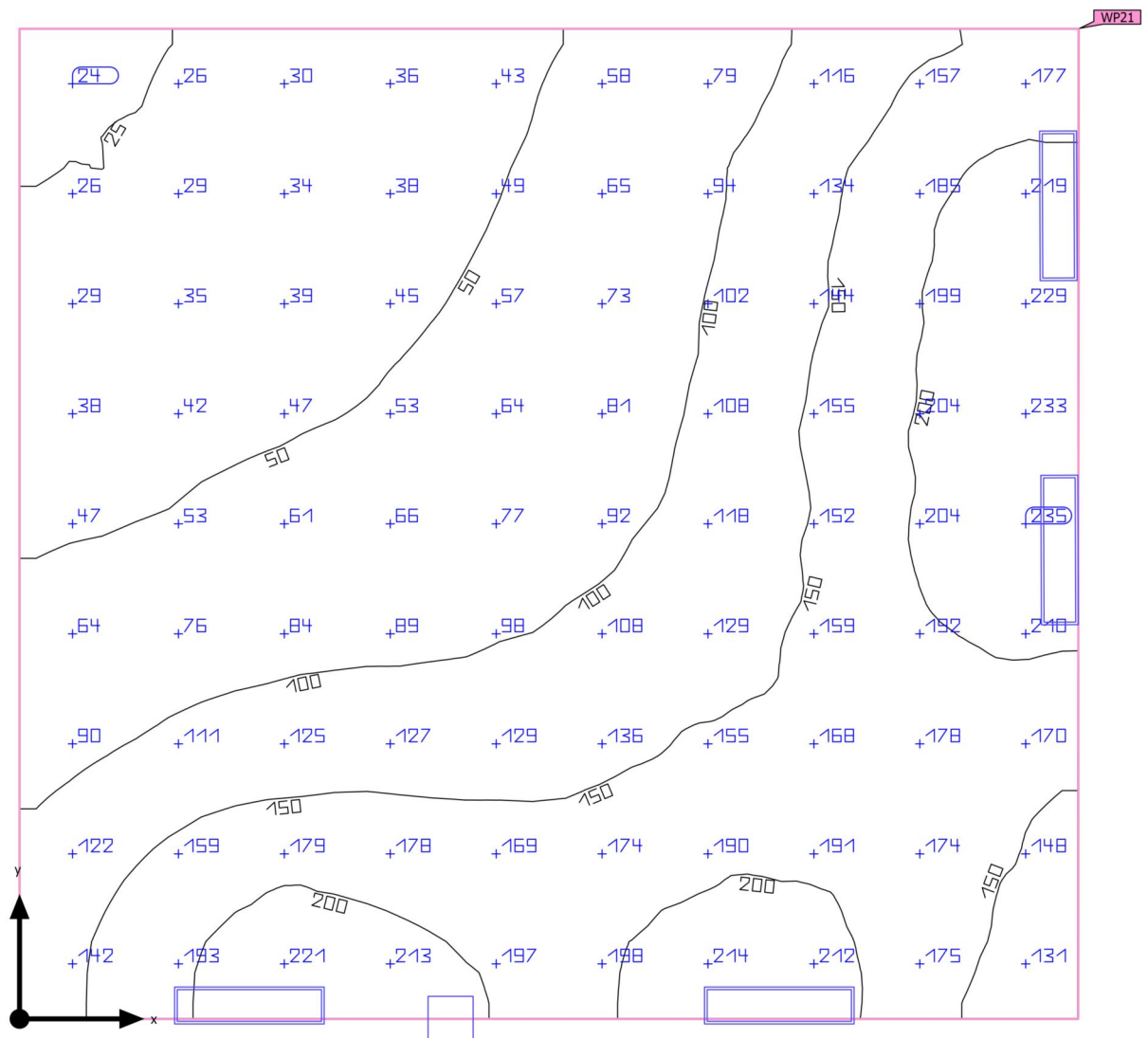
Working plane (Koridor)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	397 lx (≥ 100 lx) ✓	248 lx	454 lx	0.62	0.55	WP20

Utilization profile: Health care premises - Rooms for general use, Corridors: During the day

Building 1 · Story 1 · Koridor (Light scene 1)

**Summary**

Building 1 · Story 1 · Koridor (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	121 lx	$\geq 100$ lx	✓	WP21
	$g_1$	0.19	-	-	WP21
Consumption values	Consumption	180 kWh/a	max. 2350 kWh/a	✓	
Room	Lighting power density	2.39 W/m <sup>2</sup>	-	-	
		1.98 W/m <sup>2</sup> /100 lx	-	-	

Utilization profile: Health care premises - Rooms for general use, Corridors: During the day

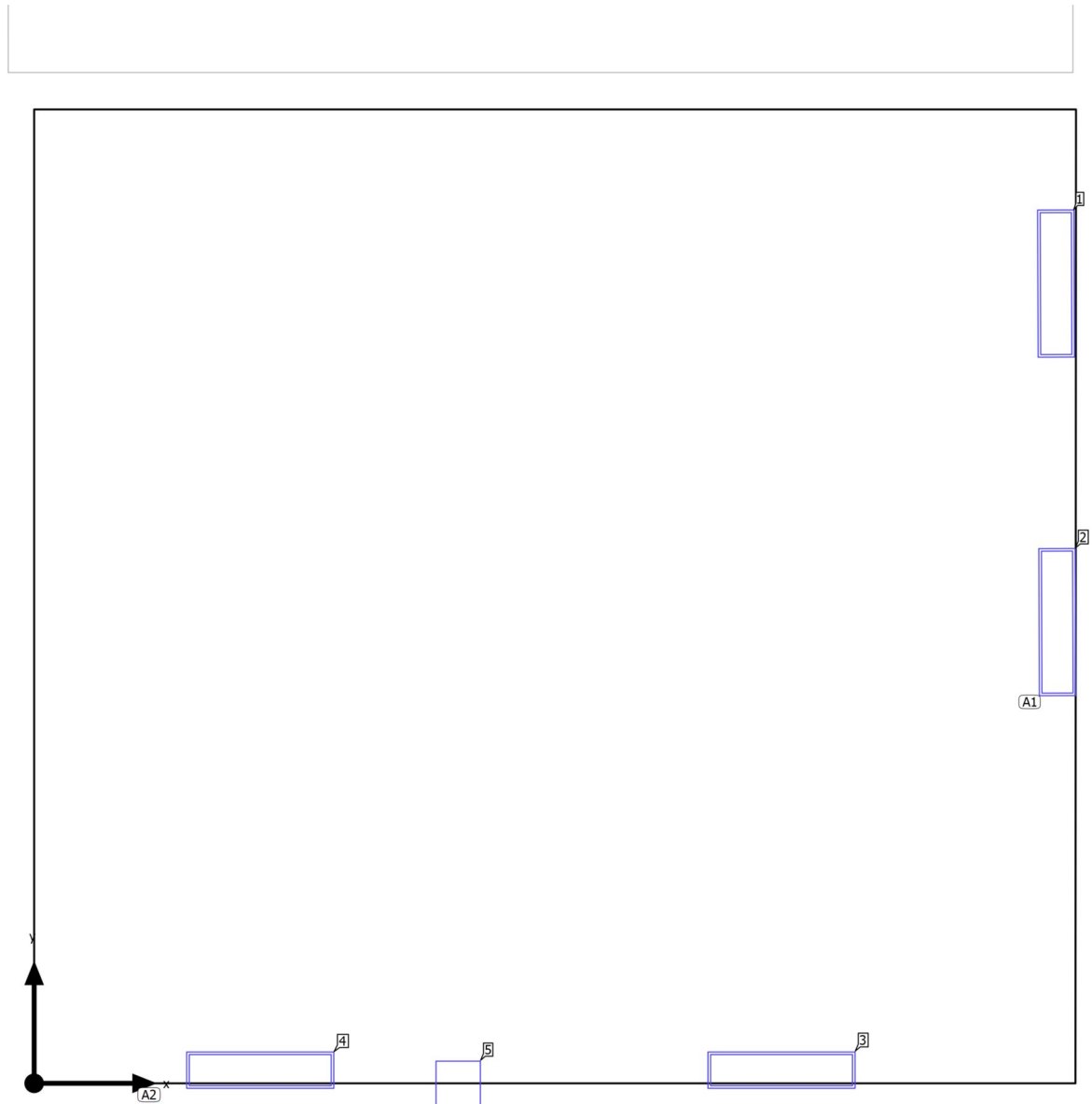
### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100lm 840 LILO	34.0 W	3930 lm	115.6 lm/W
1	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

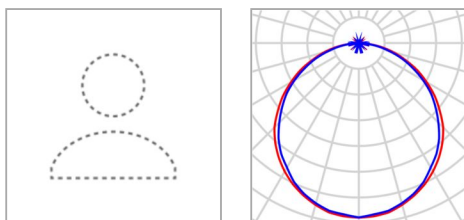


Building 1 · Story 1 · Koridor

## Luminaire layout plan



Building 1 · Story 1 · Koridor

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042879	$\Phi_{\text{Luminaire}}$	3930 lm
Article name	START Panel 1200x300 HE 4100Lm 840 LILO		
Fitting	1x LED		

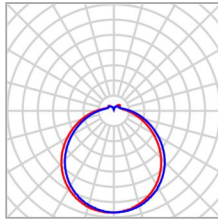
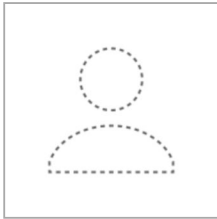
2 x Not yet a DIALux member START Panel 1200x300 HE 4100Lm 840 LILO

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	8.302 m / 6.497 m / 2.800 m	8.302 m	6.497 m	2.800 m	1
X-direction	2 pcs., Center - center, 2.750 m	8.312 m	3.747 m	2.800 m	2
Arrangement	A1				

2 x Not yet a DIALux member START Panel 1200x300 HE 4100Lm 840 LILO

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	6.072 m / 0.107 m / 2.800 m	6.072 m	0.107 m	2.800 m	3
X-direction	2 pcs., Center - center, 4.235 m	1.837 m	0.107 m	2.800 m	4
Arrangement	A2				

Building 1 · Story 1 · Koridor

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	23.8 W
Article No.	0043438	$\Phi_{\text{Luminaire}}$	1800 lm
Article name	Start eco Surface IP44 PIR 1900lm 840 DualTone		
Fitting	1x 0043438		

## Individual luminaires

X	Y	Mounting height	Luminaire
3.445 m	0.000 m	2.800 m	5

Building 1 · Story 1 · Koridor

**Luminaire list** $\Phi_{\text{total}}$ 

17520 lm

 $P_{\text{total}}$ 

159.8 W

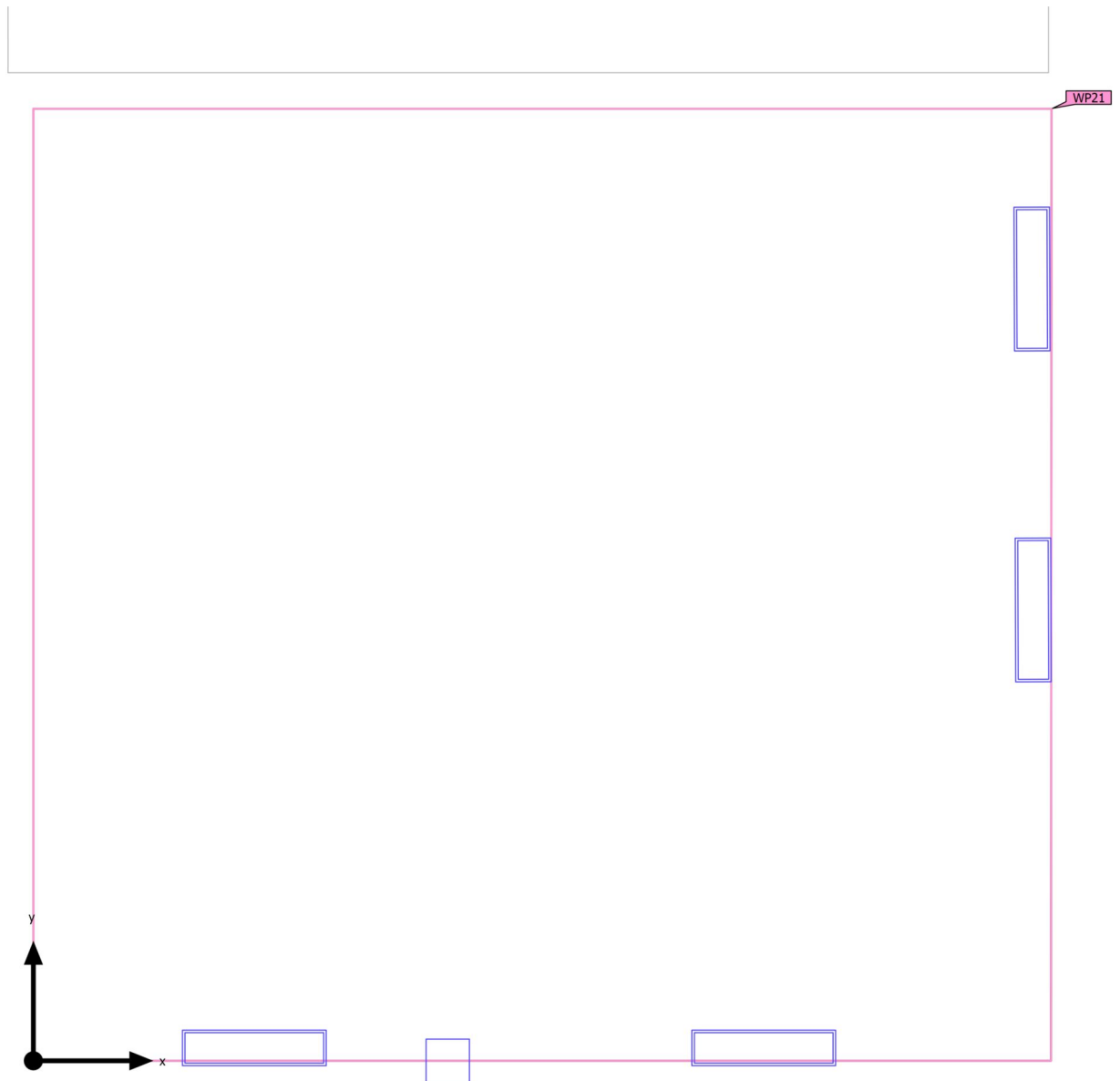
Luminous efficacy

109.6 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0042879	START Panel 1200x300 HE 4100lm 840 LILO	34.0 W	3930 lm	115.6 lm/W
1	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 · Koridor (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Koridor (Light scene 1)

**Calculation objects**

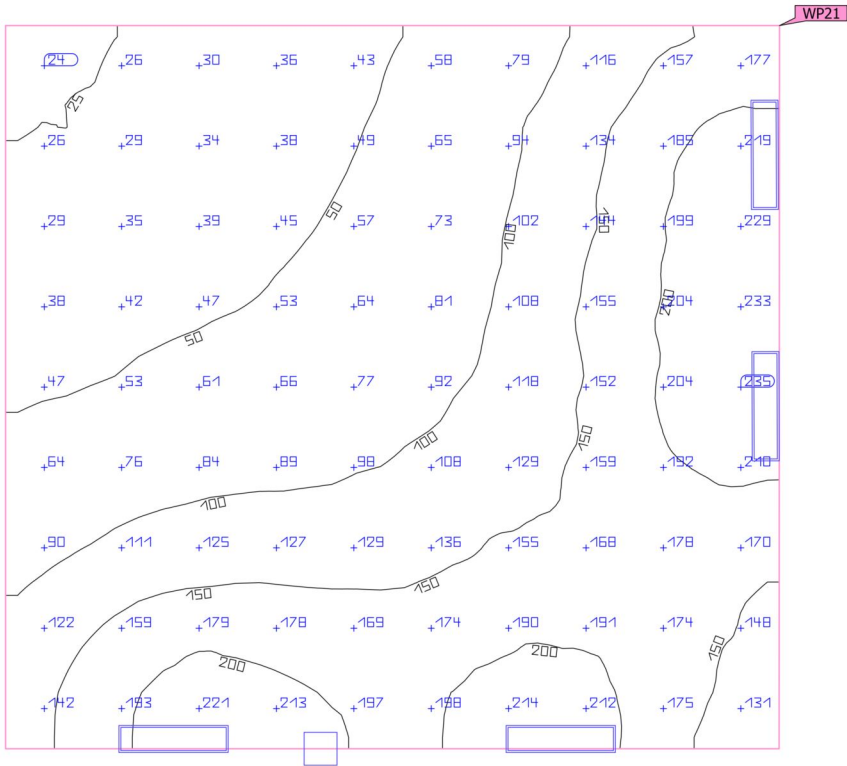
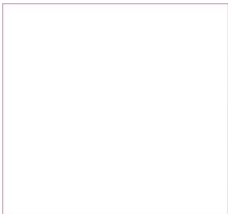
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	121 lx ( $\geq 100$ lx) ✓	23.2 lx	235 lx	0.19	0.099	WP21

Utilization profile: Health care premises - Rooms for general use, Corridors: During the day

Building 1 · Story 1 · Koridor (Light scene 1)

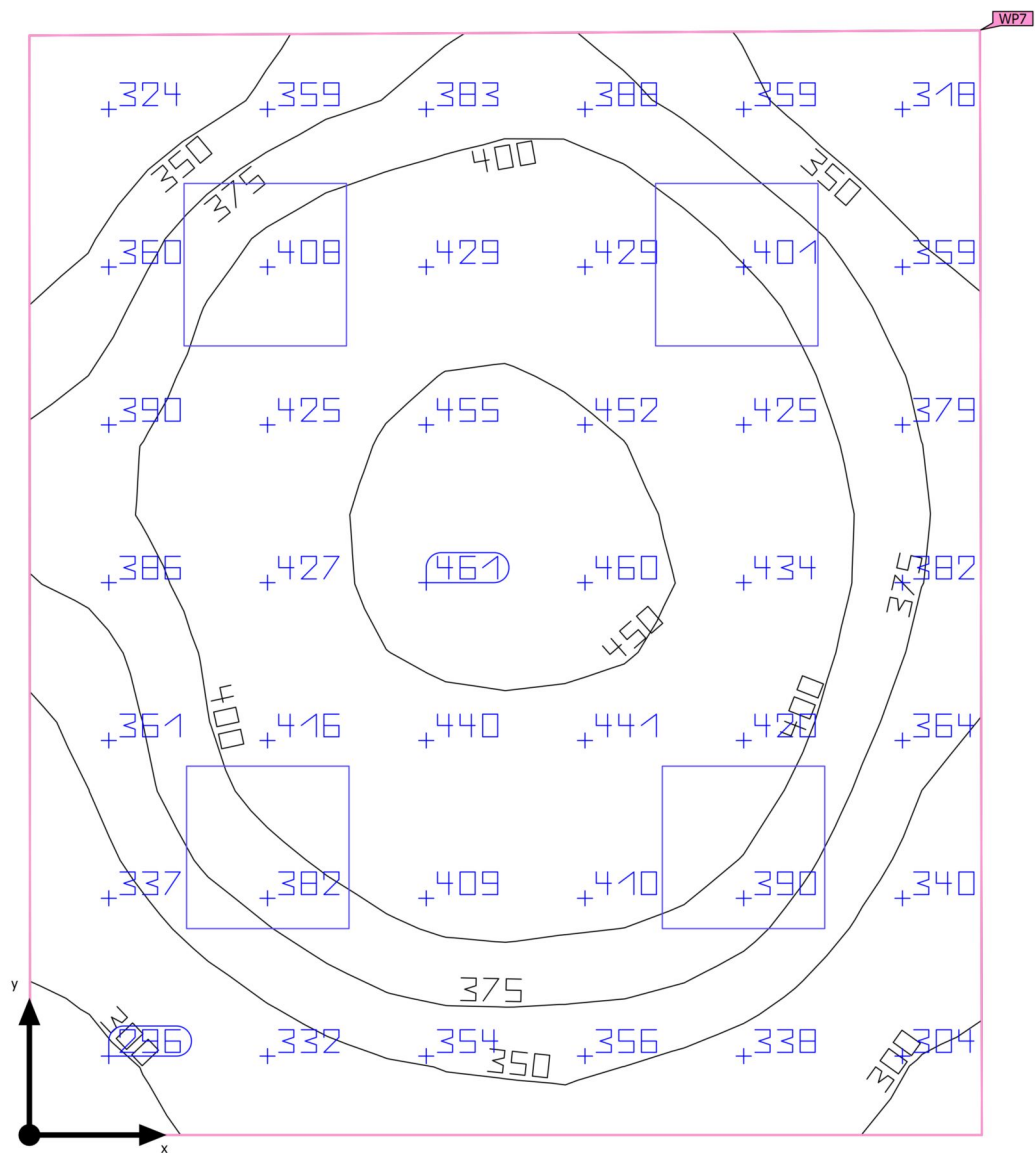
Working plane (Koridor)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Koridor) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	121 lx (≥ 100 lx) ✓	23.2 lx	235 lx	0.19	0.099	WP21

Utilization profile: Health care premises - Rooms for general use, Corridors: During the day

Building 1 · Story 1 · Tualet (Light scene 1)

**Summary**



Building 1 · Story 1 · Tualet (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	388 lx	$\geq 200$ lx	✓	WP7
	$g_1$	0.73	-	-	WP7
Consumption values	Consumption	79 kWh/a	max. 200 kWh/a	✓	
Room	Lighting power density	18.49 W/m <sup>2</sup>	-	-	
		4.77 W/m <sup>2</sup> /100 lx	-	-	

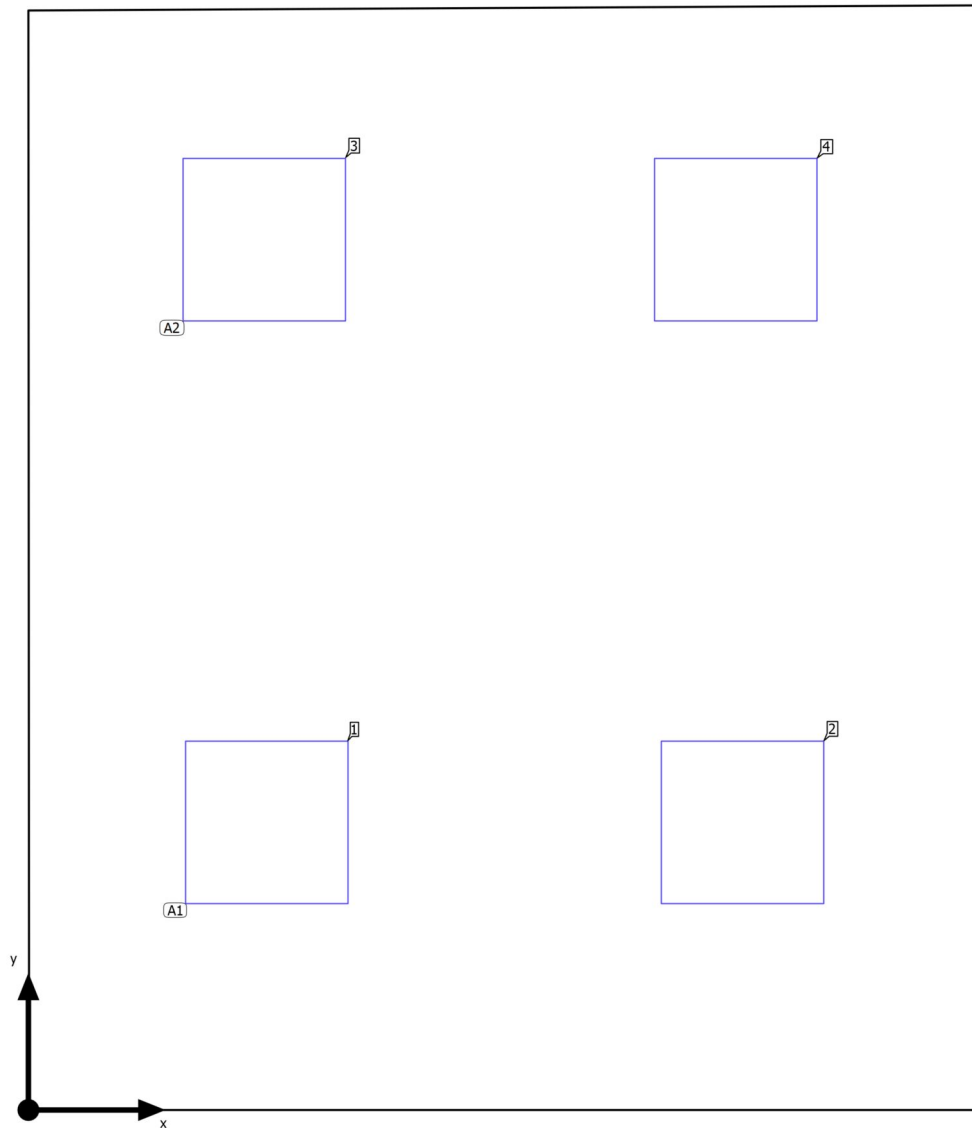
Utilization profile: Health care premises - Wards, maternity wards, Bathrooms and toilets for patients

### Luminaire list

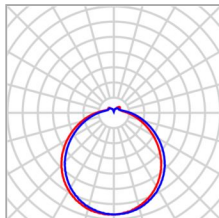
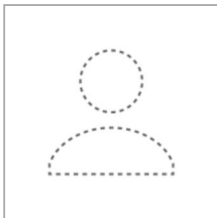
pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 · Tualet

## Luminaire layout plan



Building 1 · Story 1 · Tualet

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member
Article No.	0043438
Article name	Start eco Surface IP44 PIR 1900lm 840 DualTone
Fitting	1x 0043438

P	23.8 W
$\Phi_{\text{Luminaire}}$	1800 lm

2 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	0.528 m / 0.637 m / 2.800 m	0.528 m	0.637 m	2.800 m	1
X-direction	2 pcs., Center - center, 1.054 m	1.583 m	0.637 m	2.800 m	2
Arrangement	A1				

2 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	0.523 m / 1.929 m / 2.800 m	0.523 m	1.929 m	2.800 m	3
X-direction	2 pcs., Center - center, 1.045 m	1.568 m	1.929 m	2.800 m	4
Arrangement	A2				

Building 1 · Story 1 · Tualet

**Luminaire list** $\Phi_{\text{total}}$ 

7200 lm

 $P_{\text{total}}$ 

95.2 W

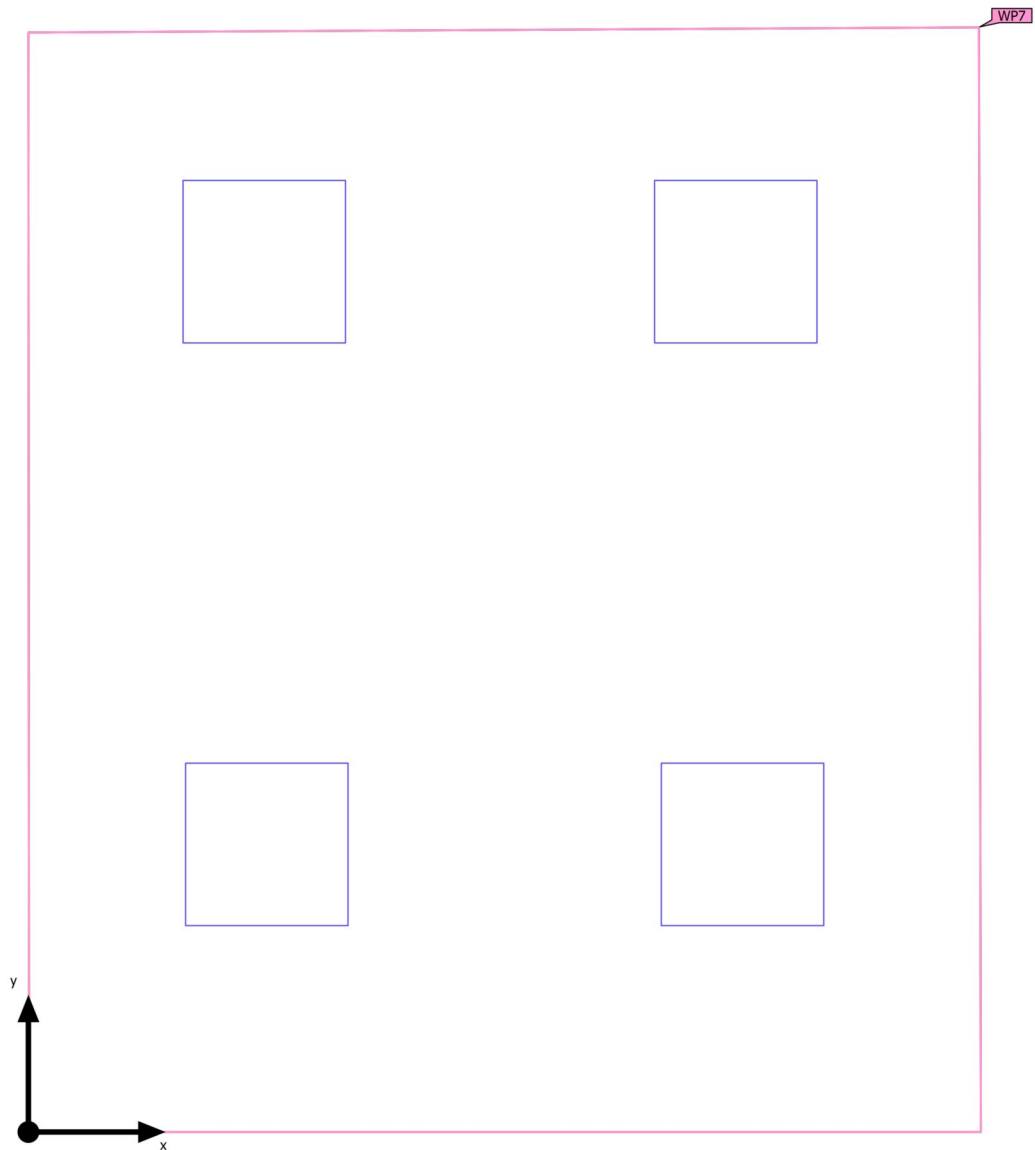
Luminous efficacy

75.6 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
4	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 · Tualet (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Tualet (Light scene 1)

**Calculation objects**

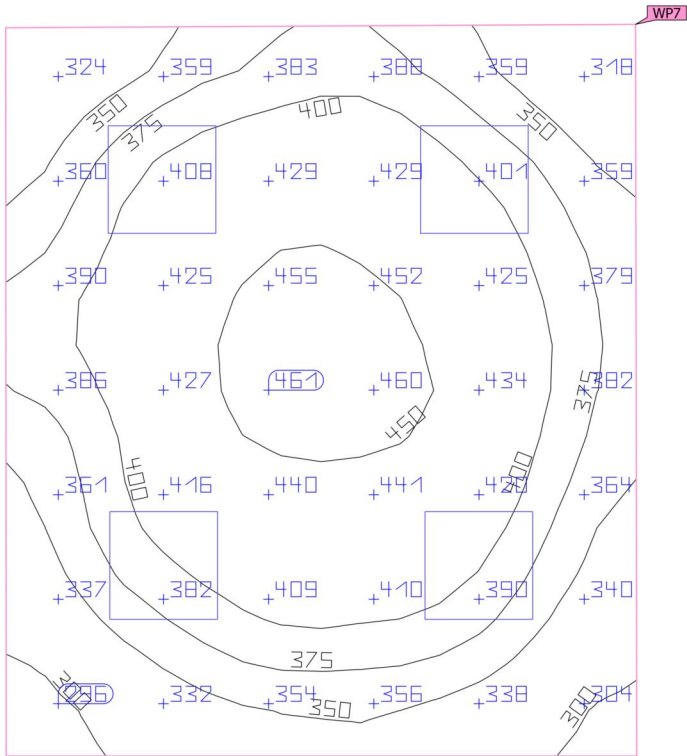
## Working planes

Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Tualet) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	388 lx ( $\geq 200$ lx) ✓	284 lx	465 lx	0.73	0.61	WP7

Utilization profile: Health care premises - Wards, maternity wards, Bathrooms and toilets for patients

Building 1 · Story 1 · Tualet (Light scene 1)

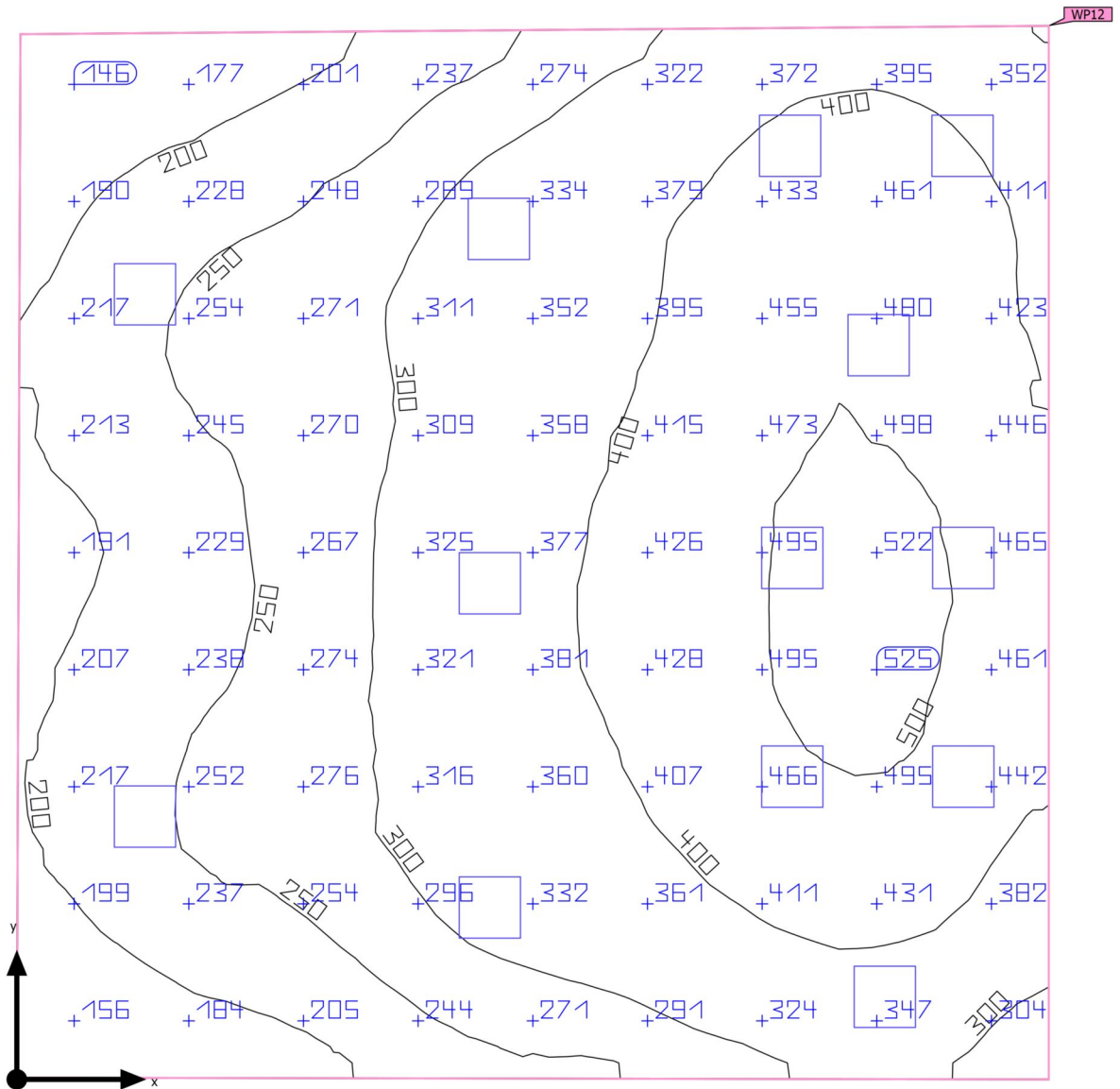
Working plane (Tualet)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Tualet)	388 lx	284 lx	465 lx	0.73	0.61	WP7
Perpendicular illuminance (adaptive)	(≥ 200 lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Health care premises - Wards, maternity wards, Bathrooms and toilets for patients

Building 1 · Story 1 · Tualet (Light scene 1)

**Summary**



Building 1 · Story 1 · Tualet (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	332 lx	$\geq 200$ lx	✓	WP12
	$g_1$	0.39	-	-	WP12
Consumption values	Consumption	260 kWh/a	max. 1350 kWh/a	✓	
Room	Lighting power density	8.30 W/m <sup>2</sup>	-	-	
		2.50 W/m <sup>2</sup> /100 lx	-	-	

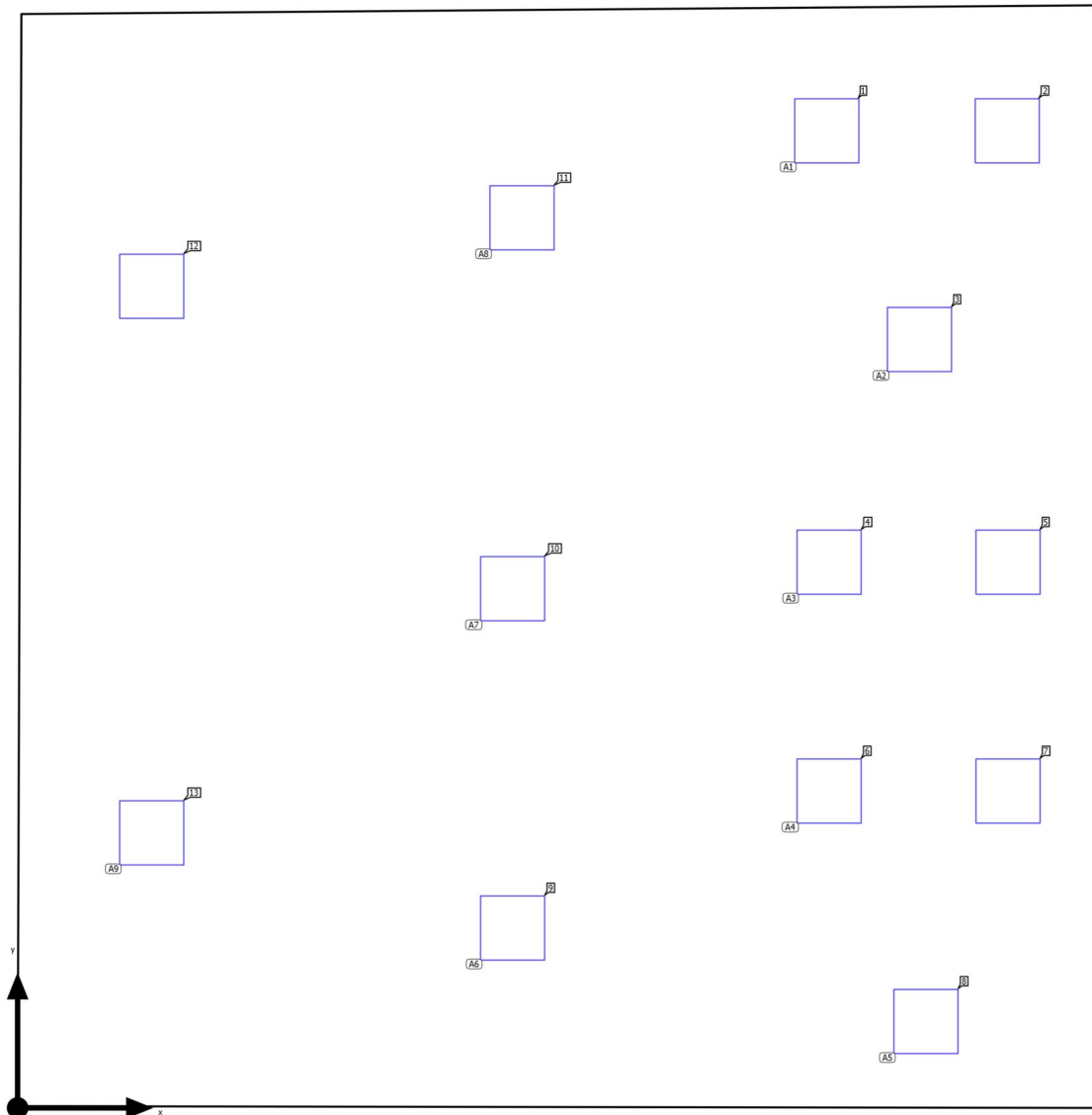
Utilization profile: Health care premises - Wards, maternity wards, Bathrooms and toilets for patients

### Luminaire list

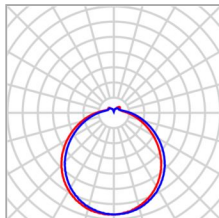
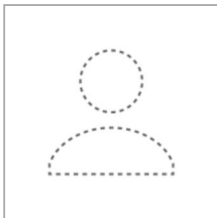
pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
13	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 · Tualet

## Luminaire layout plan



Building 1 · Story 1 · Tualet

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member
Article No.	0043438
Article name	Start eco Surface IP44 PIR 1900lm 840 DualTone
Fitting	1x 0043438

P	23.8 W
$\Phi_{\text{Luminaire}}$	1800 lm

2 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	4.545 m / 5.485 m / 2.800 m	4.545 m	5.485 m	2.800 m	1
X-direction	2 pcs., Center - center, 1.014 m	5.558 m	5.485 m	2.800 m	2
Arrangement	A1				

1 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	5.065 m / 4.314 m / 2.800 m	5.065 m	4.314 m	2.800 m	3
X-direction	1 pcs., Center - center, 2.000 m				
Arrangement	A2				

2 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Building 1 · Story 1 · Tualet

**Luminaire layout plan**

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	4.557 m / 3.064 m / 2.800 m	4.557 m	3.064 m	2.800 m	4
X-direction	2 pcs., Center - center, 1.005 m	5.562 m	3.064 m	2.800 m	5
Arrangement	A3				

2 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	4.557 m / 1.779 m / 2.800 m	4.557 m	1.779 m	2.800 m	6
X-direction	2 pcs., Center - center, 1.005 m	5.562 m	1.779 m	2.800 m	7
Arrangement	A4				

1 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	5.101 m / 0.485 m / 2.800 m	5.101 m	0.485 m	2.800 m	8
X-direction	1 pcs., Center - center, 1.927 m				
Arrangement	A5				

1 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	2.780 m / 1.010 m / 2.800 m	2.780 m	1.010 m	2.800 m	9
X-direction	1 pcs., Center - center, 2.000 m				
Arrangement	A6				

Building 1 · Story 1 · Tualet

**Luminaire layout plan**

1 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	2.780 m / 2.915 m / 2.800 m	2.780 m	2.915 m	2.800 m	10
X-direction	1 pcs., Center - center, 1.590 m				
Arrangement	A7				

1 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	2.833 m / 4.997 m / 2.800 m	2.833 m	4.997 m	2.800 m	11
X-direction	1 pcs., Center - center, 2.334 m				
Arrangement	A8				

2 x Not yet a DIALux member Start eco Surface IP44 PIR 1900lm 840 DualTone

Type	Line arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	0.753 m / 4.613 m / 2.800 m	0.753 m	4.613 m	2.800 m	12
X-direction	2 pcs., Center - center, 3.068 m	0.753 m	1.544 m	2.800 m	13
Arrangement	A9				

Building 1 · Story 1 · Tualet

**Luminaire list** $\Phi_{\text{total}}$ 

23400 lm

 $P_{\text{total}}$ 

309.4 W

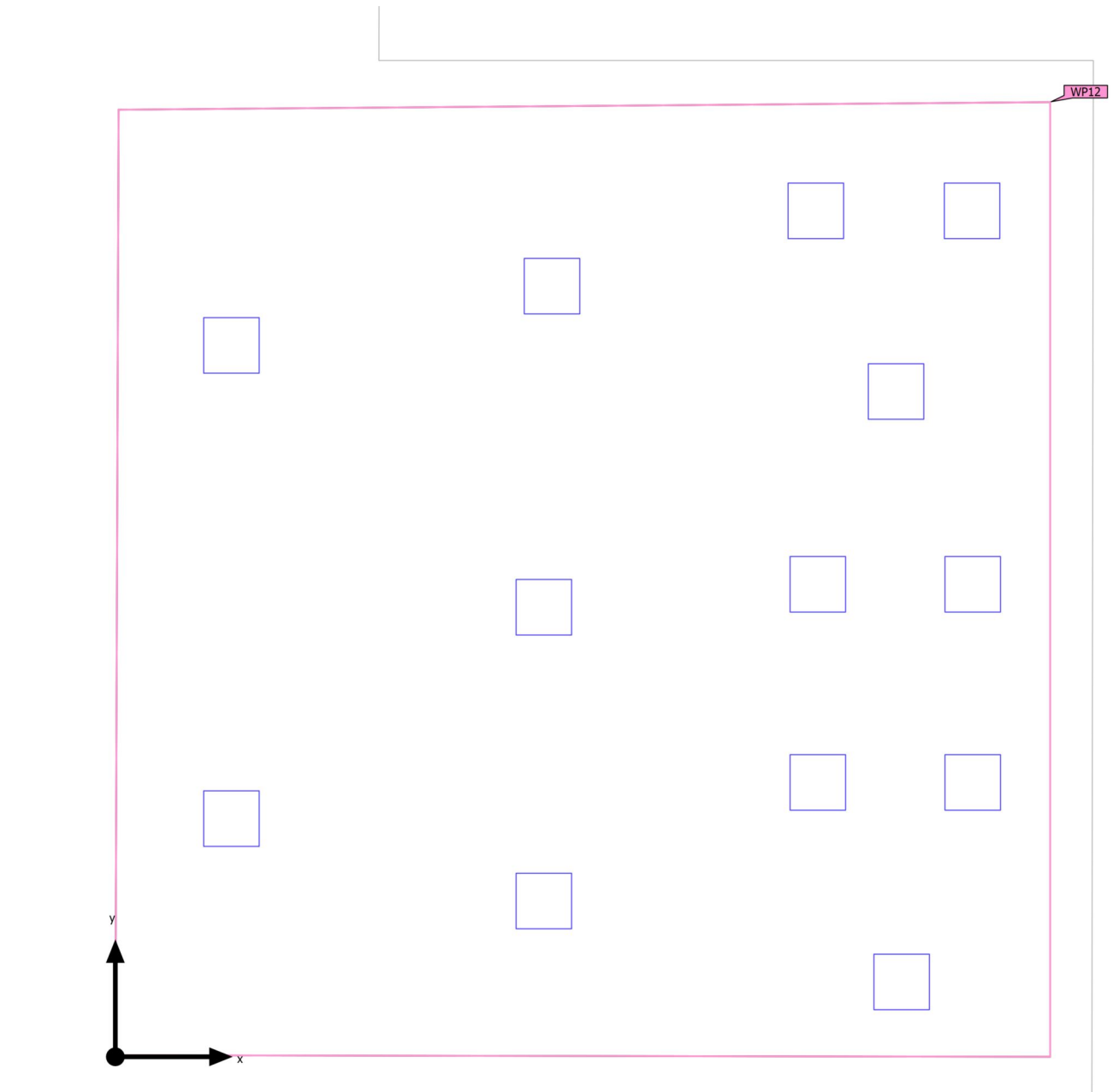
Luminous efficacy

75.6 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
13	Not yet a DIALux member	0043438	Start eco Surface IP44 PIR 1900lm 840 DualTone	23.8 W	1800 lm	75.6 lm/W

Building 1 · Story 1 · Tualet (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Tualet (Light scene 1)

**Calculation objects**

## Working planes

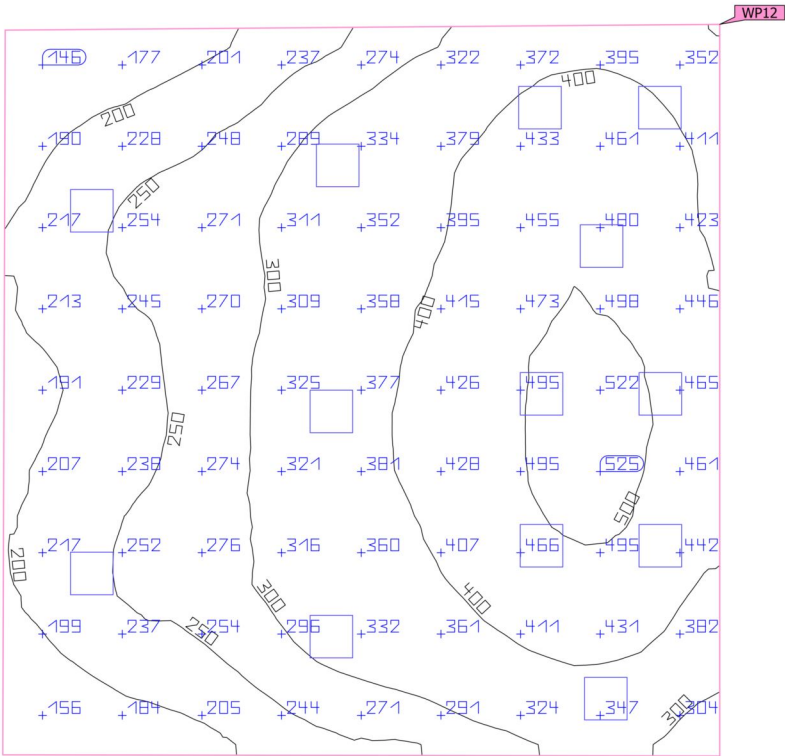
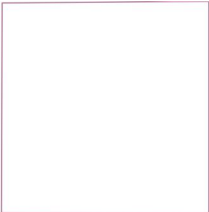
Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Tualet) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	332 lx ( $\geq 200$ lx) ✓	130 lx	528 lx	0.39	0.25	WP12

Utilization profile: Health care premises - Wards, maternity wards, Bathrooms and toilets for patients



Building 1 · Story 1 · Tualet (Light scene 1)

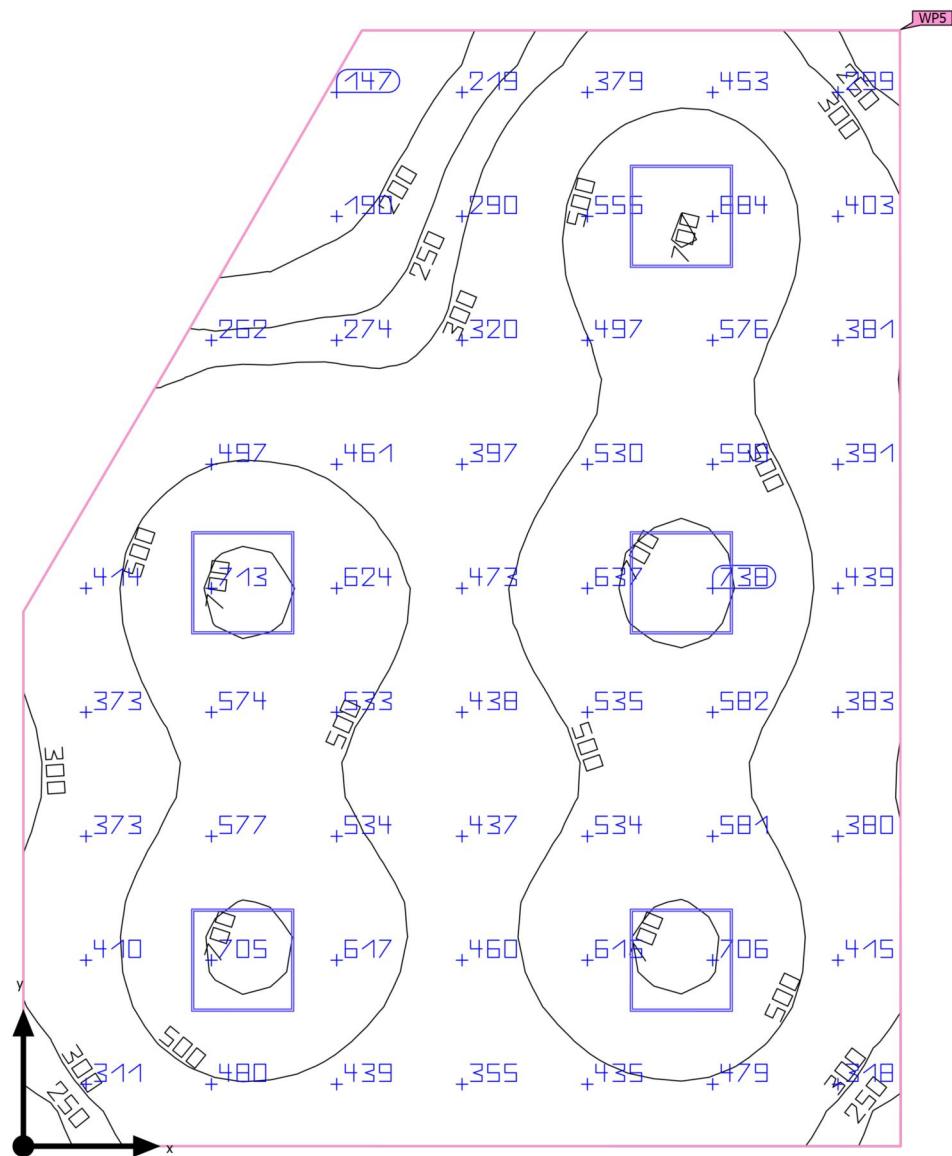
Working plane (Tualet)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Tualet) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	332 lx (≥ 200 lx) ✓	130 lx	528 lx	0.39	0.25	WP12

Utilization profile: Health care premises - Wards, maternity wards, Bathrooms and toilets for patients

Building 1 · Story 1 · Zyre (Light scene 1)

**Summary**

Building 1 · Story 1 · Zyre (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	464 lx	$\geq 300$ lx	✓	WP5
	$g_1$	0.31	-	-	WP5
Consumption values	Consumption	330 kWh/a	max. 1050 kWh/a	✓	
Room	Lighting power density	5.69 W/m <sup>2</sup>	-	-	
		1.23 W/m <sup>2</sup> /100 lx	-	-	

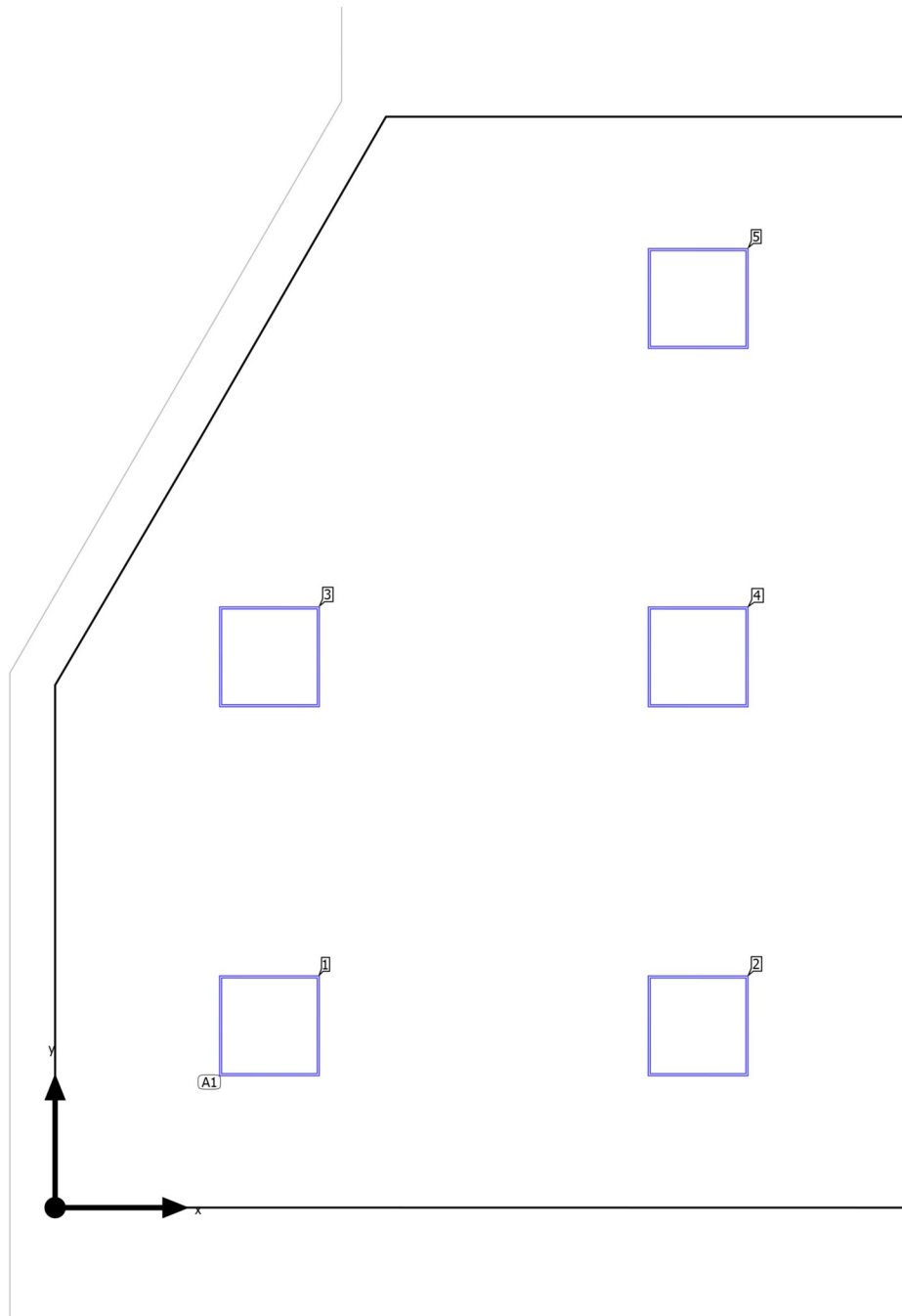
Utilization profile: Educational premises - Educational buildings, Teacher's Staff Common Room

### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
5	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Zyre

## Luminaire layout plan



Building 1 · Story 1 · Zyre

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

5 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	1.279 m / 1.085 m / 2.800 m	1.279 m	1.085 m	2.800 m	1
X-direction	2 pcs., Center - center, Distances not equal	3.837 m	1.084 m	2.800 m	2
		1.279 m	3.285 m	2.800 m	3
Y-direction	3 pcs., Center - center, Distances not equal	3.837 m	3.284 m	2.800 m	4
		3.837 m	5.421 m	2.800 m	5
Arrangement	A1				

Building 1 · Story 1 · Zyre

**Luminaire list** $\Phi_{\text{total}}$ 

20305 lm

 $P_{\text{total}}$ 

170.0 W

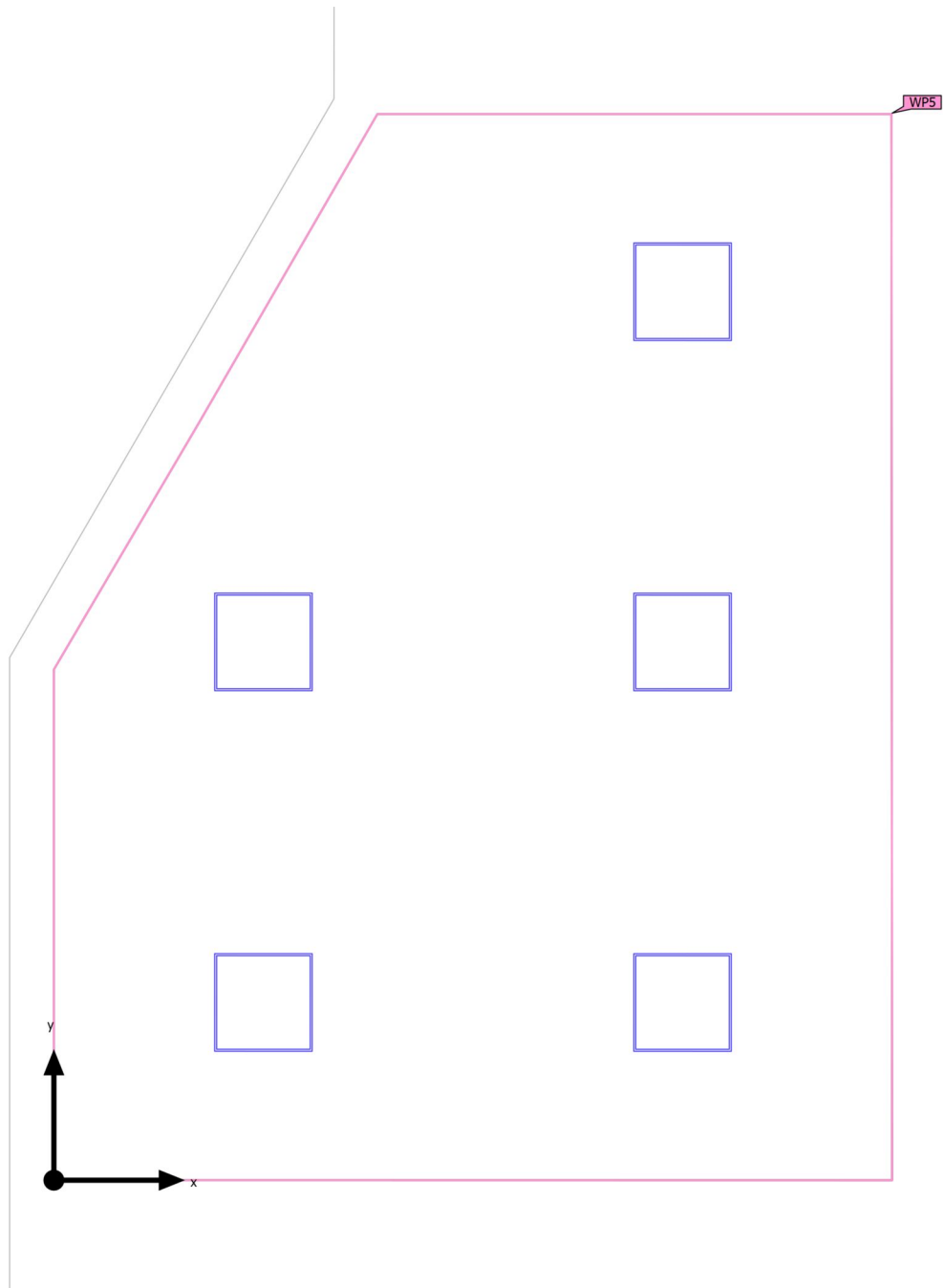
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
5	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Zyre (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Zyre (Light scene 1)

**Calculation objects**

## Working planes

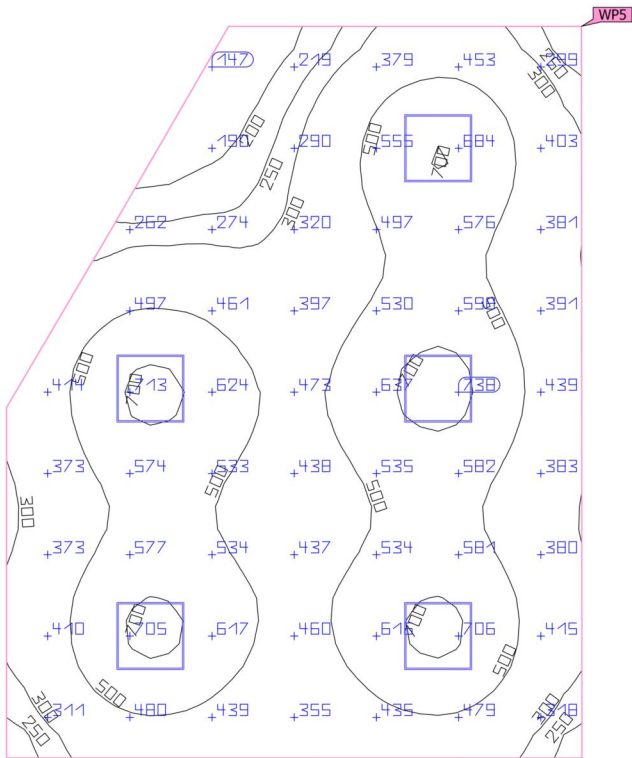
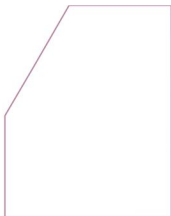
Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Zyre) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	464 lx ( $\geq 300$ lx) ✓	145 lx	749 lx	0.31	0.19	WP5

Utilization profile: Educational premises - Educational buildings, Teacher's Staff Common Room



Building 1 · Story 1 · Zyre (Light scene 1)

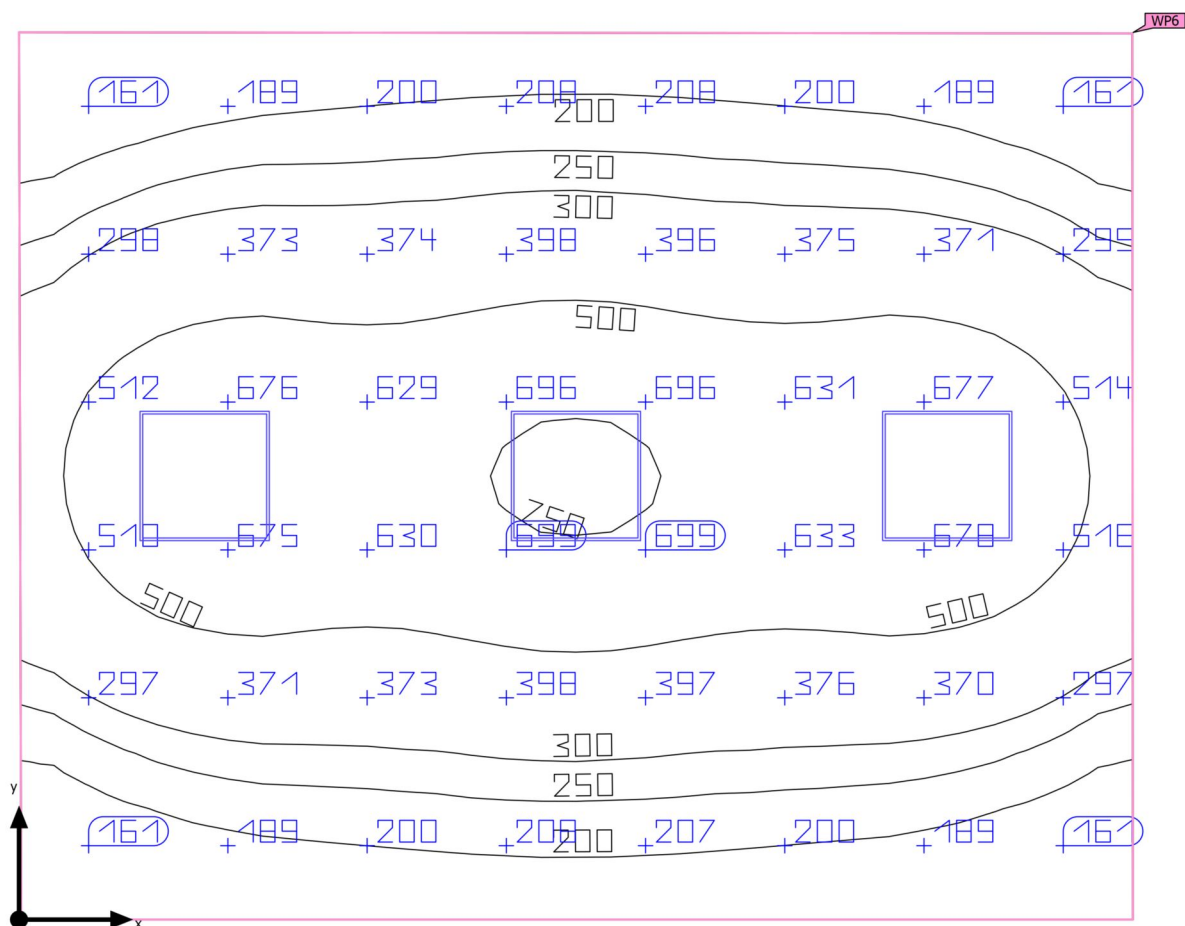
Working plane (Zyre)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Zyre)	464 lx	145 lx	749 lx	0.31	0.19	WP5
Perpendicular illuminance (adaptive)	(≥ 300 lx)					
Height: 0.800 m, Wall zone: 0.000 m	✓					

Utilization profile: Educational premises - Educational buildings, Teacher's Staff Common Room

Building 1 · Story 1 · Zyre Drejtorit (Light scene 1)

**Summary**

Building 1 · Story 1 · Zyre Drejtorit (Light scene 1)

## Summary

### Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	391 lx	$\geq 200$ lx	✓	WP6
	$g_1$	0.34	-	-	WP6
Consumption values	Consumption	17 kWh/a	max. 750 kWh/a	✓	
Room	Lighting power density	4.88 W/m <sup>2</sup>	-	-	
		1.25 W/m <sup>2</sup> /100 lx	-	-	

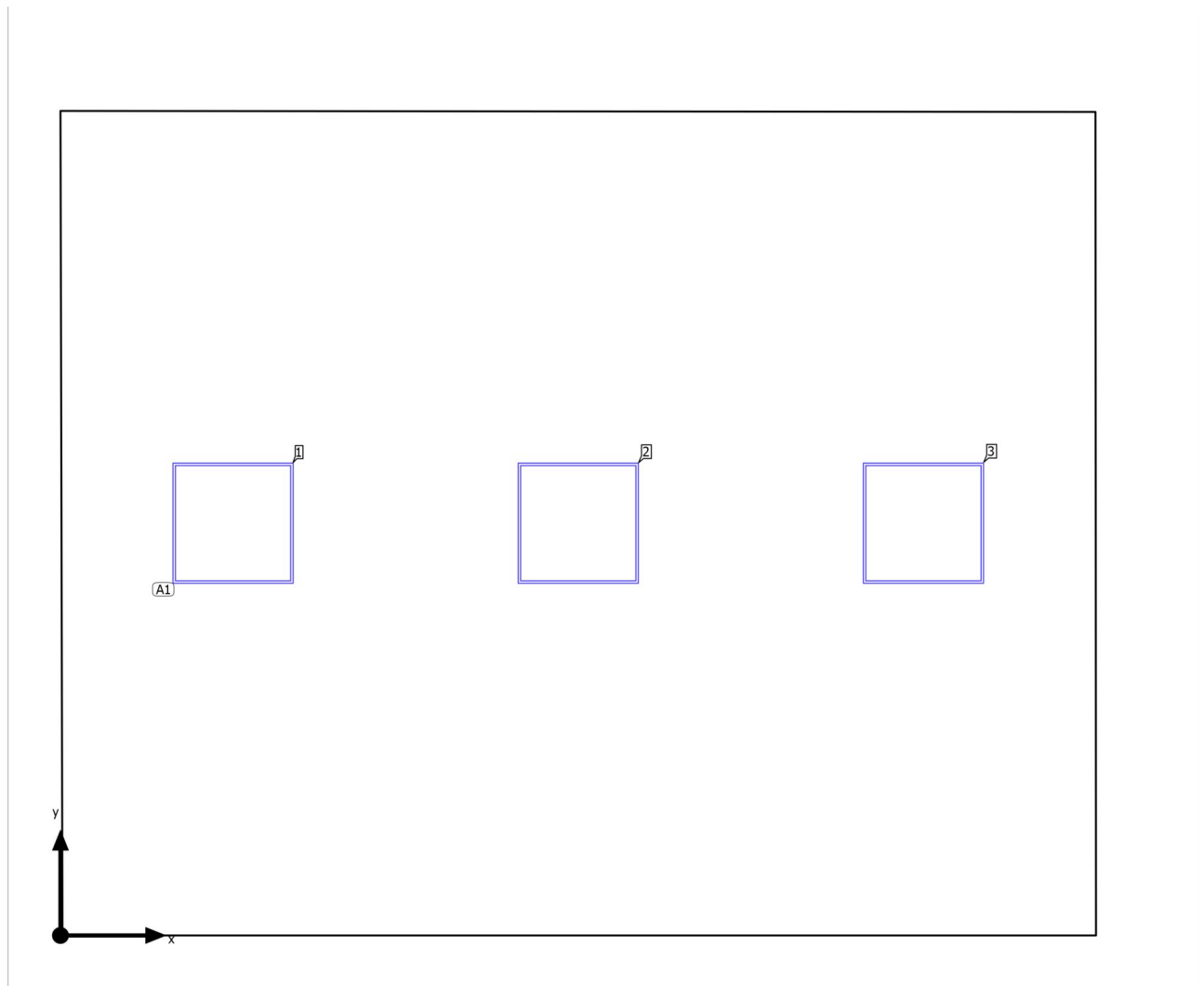
Utilization profile: Offices, Archives

### Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
3	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Zyre Drejtorit

## Luminaire layout plan



Building 1 · Story 1 · Zyre Drejtorit

**Luminaire layout plan**

Manufacturer	Not yet a DIALux member	P	34.0 W
Article No.	0042872	$\Phi_{\text{Luminaire}}$	4061 lm
Article name	START Panel 600x600 HE 4100Lm 830 LILO		
Fitting	1x LED		

3 x Not yet a DIALux member START Panel 600x600 HE 4100Lm 830 LILO

Type	Field Arrangement	X	Y	Mounting height	Luminaire
1st luminaire (X/Y/Z)	0.855 m / 2.043 m / 2.800 m	0.855 m	2.043 m	2.800 m	1
X-direction	3 pcs., Center - center, 1.709 m	2.564 m	2.043 m	2.800 m	2
Y-direction	1 pcs., Center - center, 4.085 m	4.274 m	2.043 m	2.800 m	3
Arrangement	A1				

Building 1 · Story 1 · Zyre Drejtorit

**Luminaire list** $\Phi_{\text{total}}$ 

12183 lm

 $P_{\text{total}}$ 

102.0 W

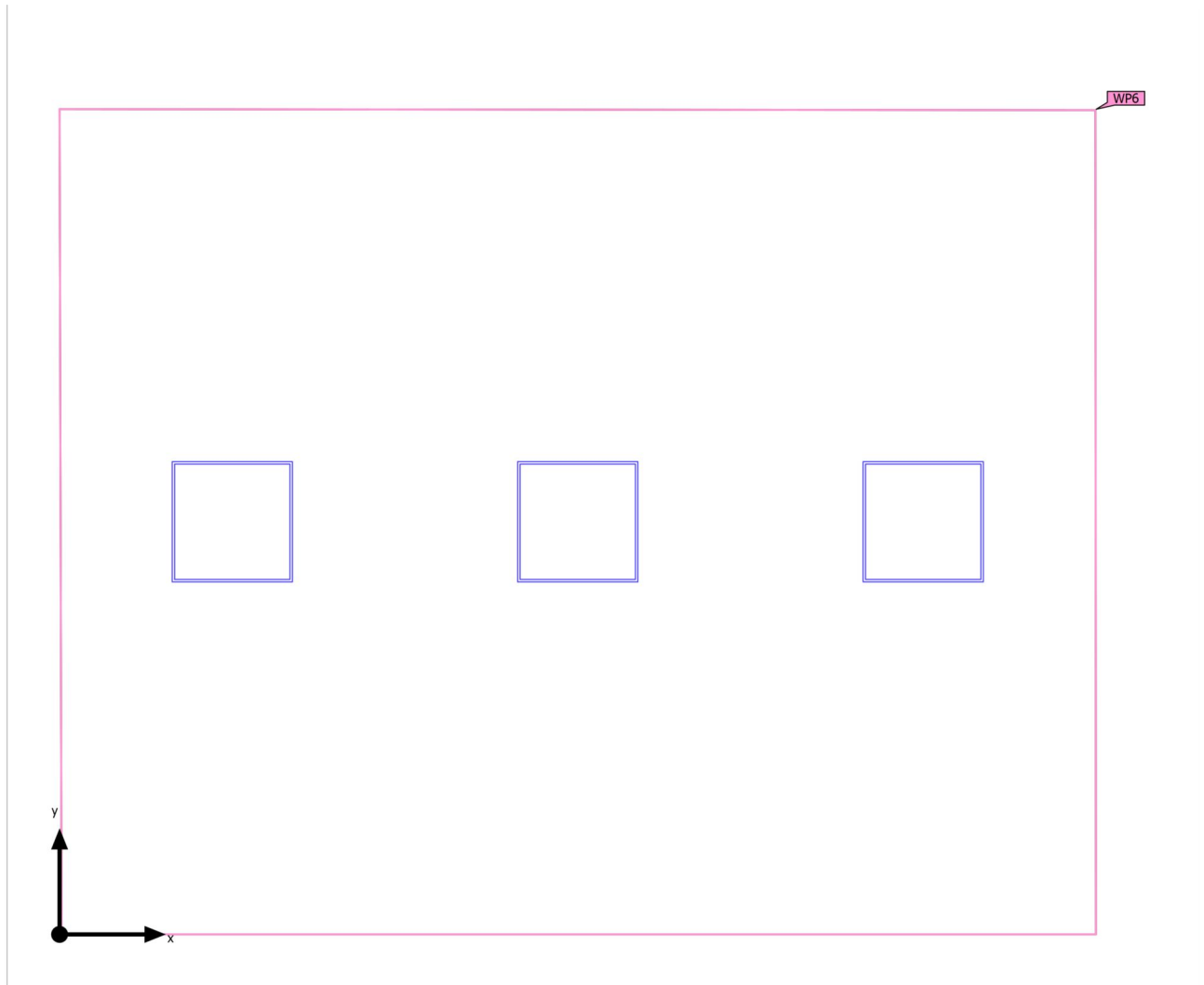
Luminous efficacy

119.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	$\Phi$	Luminous efficacy
3	Not yet a DIALux member	0042872	START Panel 600x600 HE 4100Lm 830 LILO	34.0 W	4061 lm	119.4 lm/W

Building 1 · Story 1 · Zyre Drejtorit (Light scene 1)

## Calculation objects



Building 1 · Story 1 · Zyre Drejtorit (Light scene 1)

**Calculation objects**

## Working planes

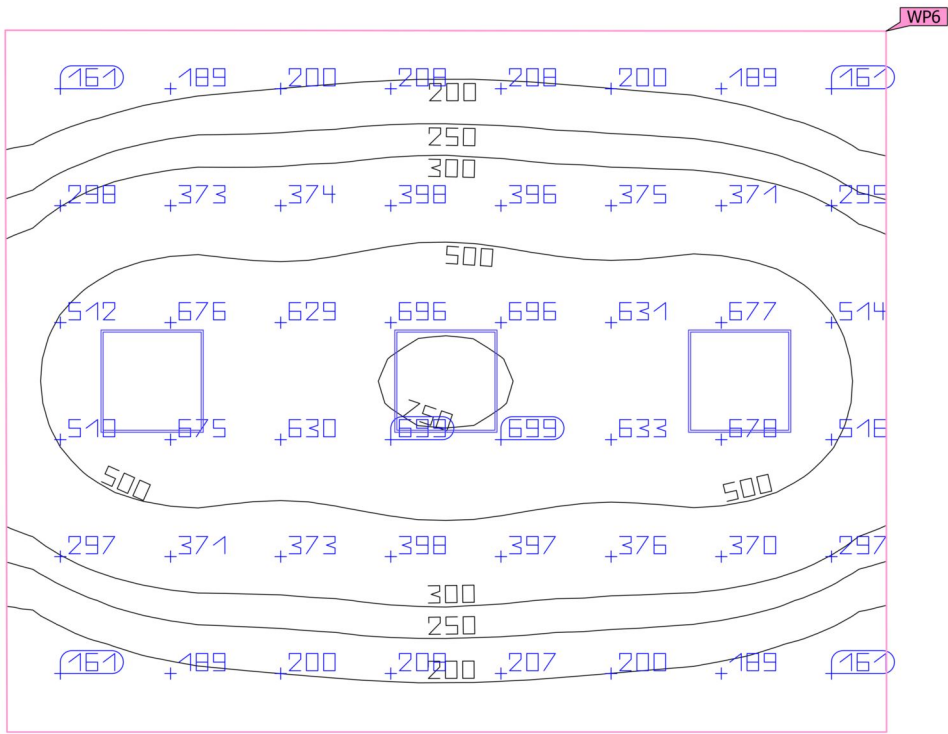
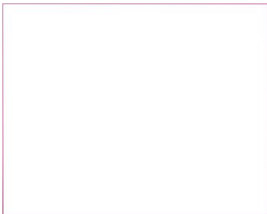
Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Zyre Drejtorit) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	391 lx ( $\geq 200$ lx) ✓	131 lx	789 lx	0.34	0.17	WP6

Utilization profile: Offices, Archives



Building 1 · Story 1 · Zyre Drejtorit (Light scene 1)

Working plane (Zyre Drejtorit)



Properties	$\bar{E}$ (Target)	$E_{min}$	$E_{max}$	$g_1$	$g_2$	Index
Working plane (Zyre Drejtorit) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	391 lx (≥ 200 lx) ✓	131 lx	789 lx	0.34	0.17	WP6

Utilization profile: Offices, Archives

## Glossary

### A

A	Formula symbol for a surface in the geometry
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### B

Background area	The background area borders the direct ambient area according to DIN EN 12464-1 and reaches up to the borders of the room. In larger rooms, the background area is at least 3 m wide. It is located horizontally at floor level.
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### C

CCT	<p>(correlated color temperature)</p> <p>Body temperature of a thermal radiator that serves to describe its light color. Unit: Kelvin [K]. The lesser the numerical value the redder; the greater the numerical value the bluer the light color. The color temperature of gas-discharge lamps and semi-conductors are termed "correlated color temperature" in contrast to the color temperature of thermal radiators.</p> <p>Allocation of the light colors to the color temperature ranges acc. to EN 12464-1:</p> <p>Light color - color temperature [K]  warm white (ww) &lt; 3,300 K  neutral white (nw) ≥ 3,300 – 5,300 K  daylight white (dw) &gt; 5,300 K</p>
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Clearance height	The designation for the distance between upper edge of the floor and bottom edge of the ceiling (in the completely furnished status of room).
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CRI	<p>(color rendering index)</p> <p>Designation for the color rendering index of a luminaire or a lamp acc. to DIN 6169: 1976 or CIE 13.3: 1995.</p> <p>The general color rendering index Ra (or CRI) is a dimensionless figure that describes the quality of a white light source in regards to its similarity with the remission spectra of defined 8 test colors (see DIN 6169 or CIE 1974) to a reference light source.</p>
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### D

Daylight factor	<p>Ratio of the illuminance achieved solely by daylight incidence at a point in the inside to the horizontal illuminance in the outer area under an unobstructed sky.</p> <p>Formula symbol: D (daylight factor)  Unit: %</p>
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## Glossary

Daylight quotient effective area	A calculation surface within which the daylight quotient is calculated.
<b>E</b>	
Eta ( $\eta$ )	<p>(light output ratio)</p> <p>The light output ratio describes what percentage of the luminous flux of a free radiating lamp (or LED module) is emitted by the luminaire when installed.</p> <p>Unit: %</p>
<b>G</b>	
$g_1$	<p>Often also <math>U_o</math> (overall uniformity)</p> <p>Designates the overall uniformity of the illuminance on a surface. It is the quotient from <math>E_{min}</math> to <math>\bar{E}</math> and is required, for instance, in standards for illumination of workstations.</p>
$g_2$	<p>Actually it designates the "non-uniformity" of the illuminance on a surface. It is the quotient of <math>E_{min}</math> to <math>E_{max}</math> and is generally only relevant for certifying the emergency lighting acc. to EN 1838.</p>
<b>I</b>	
Illuminance	<p>Describes the ratio of the luminous flux that strikes a certain surface to the size of this surface (<math>lm/m^2 = lx</math>). The illuminance is not tied to an object surface. It can be determined anywhere in space (inside or outside). The illuminance is not a product feature because it is a recipient value. Luxometers are used for measuring.</p> <p>Unit: Lux</p> <p>Abbreviation: lx</p> <p>Formula symbol: E</p>
Illuminance, adaptive	For the determining of the middle adaptive illuminance on a surface, this is rastered "adaptively". In the area of large illuminance differences within the surface, the raster is subdivided finer; within lesser differences, a rougher classification is made.
Illuminance, horizontal	Illuminance that is calculated or measured on a horizontal (level) surface (this can be for example a table top or the floor). The horizontal illuminance is usually identified by the formula letter $E_h$ .
Illuminance, perpendicular	Illuminance that is calculated or measured plumb-vertical to a surface. This needs to be taken into account for tilted surfaces. If the surface is horizontal or vertical, then there is no difference between the perpendicular and the horizontal or vertical illuminance.

## Glossary

Illuminance, vertical	<p>Illuminance that is calculated or measured on a vertical surface (this can be for example the front of some shelves). The vertical illuminance is usually identified by the formula letter <math>E_v</math>.</p>
L	
LENI	<p>(lighting energy numeric indicator) Lighting energy numeric indicator acc. to EN 15193</p> <p>Unit: kWh/m<sup>2</sup> year</p>
Light loss factor	See MF
LLMF	<p>(lamp lumen maintenance factor)/acc. to CIE 97: 2005 Lamp flux maintenance factor that takes the luminous flux reduction into account of a luminaire or an LED module in the course of the operating time. The lamp flux maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no luminous flux reduction existing).</p>
LMF	<p>(luminaire maintenance factor)/acc. to CIE 97: 2005 Luminaire maintenance factor that takes the soiling into account of the luminaire in the course of the operating time. The luminaire maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no soiling existing).</p>
LSF	<p>(lamp survival factor)/acc. to CIE 97: 2005 Lamp survival factor that takes the total failure into account of a luminaire in the course of the operating time. The lamp survival factor is specified as a decimal digit and can have a maximum value of 1 (no failures existing within the time concerned or prompt replacement after the failure).</p>
Luminance	<p>Dimension for the "brightness impression" that the human eye has of a surface. The surface itself can emit light thereby or light striking it can be reflected (emitter value). It is the only photometric value that the human eye can perceive.</p> <p>Unit: Candela per square meter Abbreviation: cd/m<sup>2</sup> Formula symbol: L</p>
Luminous efficacy	<p>Ratio of the emitted luminous flux <math>\Phi</math> [lm] to the absorbed electrical power P [W] Unit: lm/W.</p> <p>This ratio can be formed for the lamp or LED module (lamp or module light output), the lamp or module with control gear (system light output) and the complete luminaire (luminaire light output).</p>

## Glossary

Luminous flux	<p>Dimension for the total light output that is emitted from one light source in all directions. It is thus an "emitter value" that specifies the entire emitting output. The luminous flux of a light source can only be determined in a laboratory. A difference is made between the lamp or LED module luminous flux and the luminaire luminous flux.</p> <p>Unit: Lumen Abbreviation: lm Formula symbol: <math>\Phi</math></p>
Luminous intensity	<p>Describes the intensity of the light in a certain direction (emitter value). The luminous intensity is a matter of the luminous flux <math>\Phi</math> that is emitted in a certain spherical angle <math>\Omega</math>. The radiation characteristics of a light source are presented graphically in a light distribution curve (LDC). The luminous intensity is an SI base unit.</p> <p>Unit: Candela Abbreviation: cd Formula symbol: I</p>
M	
MF	<p>(maintenance factor)/acc. to CIE 97: 2005 Maintenance factor as decimal number between 0 and 1 that describes the ratio of the new value of a photometric planning parameter (e.g. of the illuminance) to a maintenance value after a certain time. The maintenance factor takes into account the soiling of luminaires and rooms as well as the luminous flux reduction and the failure of light sources. The maintenance factor is taken into account either overall or determined in detail acc. to CIE 97: 2005 by the formula <math>RMF \times LMF \times LLMF \times LSF</math>.</p>
P	
P	<p>(power) Electric power consumption</p> <p>Unit: watt Abbreviation: W</p>
R	
Reflection factor	<p>The reflection factor of a surface describes how much of the striking light is reflected back. The reflection factor is defined by the color of the surface.</p>

## Glossary

RMF	(room maintenance factor)/acc. to CIE 97: 2005 Room maintenance factor that takes the soiling into account of the space encompassing surfaces in the course of the operating time. The room maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no soiling existing).
S	
Surrounding area	The ambient area directly borders the area of the visual task and should be planned with a width of at least 0.5 m according to DIN EN 12464-1. It is at the same height as the area of the visual task.
U	
UGR (max)	(unified glare rating) Measure for the psychological glare effect in interiors. In addition to luminaire luminance, the UGR value also depends on the position of the observer, the viewing direction and the ambient luminance. Among other things, EN 12464-1 specifies maximum permissible UGR values for various indoor workplaces.
UGR observer	Calculation point in the room, for the DIALux the UGR value is determined. The location and height of the calculation point should correspond to the typical observer position (position and eye level of the user).
V	
Visual task area	The area that is needed for carrying out the visual task in accordance with DIN EN 12464-1. The height corresponds with the height at which the visual task is executed.
W	
Wall zone	Circumferential area between working plane and walls that is not taken into account for the calculation.
Working plane	Virtual measuring or calculation surface at the height of the visual task that generally follows the room geometry. The working plane may also feature a wall zone.