

Date

2/17/2023



CALC_159391_GD_UCL SW2207 PHYSICS BUILDING CORRIDORS_R0

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Site 1 - Building 1 - Story 1

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Site 1 - Building 1 - Story 1

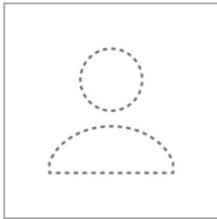
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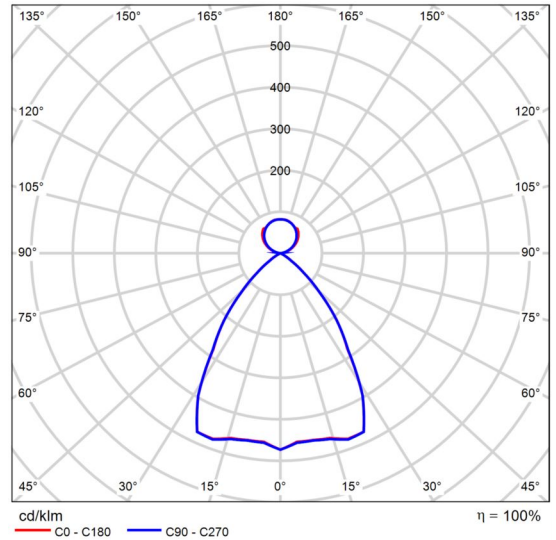
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Product data sheet

Not yet a DIALux member - OPTIX S 1200 2L D/I 4K ALU DA



Article No.	2023725
P	23.2 W
Φ_{Lamp}	3280 lm
$\Phi_{Luminaire}$	3280 lm
η	100.00 %
Luminous efficacy	141.4 lm/W
CCT	4000 K
CRI	80



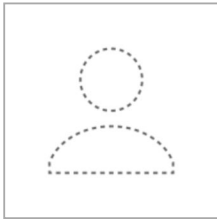
Polar LDC

Glare evaluation according to UGR												
		70	70	50	50	30	70	70	50	50	30	
p Ceiling		50	30	50	30	30	50	30	50	30	30	
p Walls		20	20	20	20	20	20	20	20	20	20	
p Floor		20	20	20	20	20	20	20	20	20	20	
Room size	Viewing direction at right angles to lamp axis	Viewing direction parallel to lamp axis										
X Y												
2H	2H	11.9	12.7	12.5	13.2	13.9	11.8	12.6	12.4	13.2	13.8	
	3H	11.6	12.3	12.3	12.9	13.6	11.6	12.3	12.2	12.9	13.6	
	4H	11.5	12.2	12.2	12.8	13.5	11.5	12.1	12.1	12.7	13.5	
	6H	11.4	12.0	12.1	12.7	13.4	11.3	12.0	12.0	12.6	13.3	
	8H	11.4	11.9	12.0	12.6	13.4	11.3	11.9	12.0	12.5	13.3	
12H	11.3	11.9	12.0	12.5	13.3	11.2	11.8	11.9	12.4	13.2		
4H	2H	11.6	12.3	12.3	12.9	13.6	11.5	12.2	12.2	12.8	13.5	
	3H	11.4	11.9	12.1	12.6	13.4	11.3	11.9	12.0	12.5	13.3	
	4H	11.3	11.7	12.0	12.4	13.2	11.2	11.7	11.9	12.4	13.2	
	6H	11.1	11.6	11.9	12.3	13.1	11.1	11.5	11.8	12.2	13.1	
	8H	11.1	11.5	11.8	12.2	13.1	11.0	11.4	11.8	12.1	13.0	
12H	11.0	11.4	11.8	12.1	13.0	10.9	11.3	11.7	12.0	12.9		
8H	4H	11.1	11.5	11.8	12.2	13.1	11.0	11.4	11.8	12.1	13.0	
	6H	11.0	11.3	11.7	12.0	12.9	10.9	11.2	11.7	12.0	12.9	
	8H	10.9	11.2	11.7	12.0	12.9	10.8	11.1	11.6	11.9	12.8	
	12H	10.8	11.1	11.7	11.9	12.8	10.7	11.0	11.6	11.8	12.7	
	12H	11.0	11.4	11.8	12.1	13.0	10.9	11.3	11.7	12.0	12.9	
12H	4H	11.0	11.4	11.8	12.1	13.0	10.9	11.3	11.7	12.0	12.9	
	6H	10.9	11.2	11.7	11.9	12.9	10.8	11.1	11.6	11.9	12.8	
	8H	10.8	11.1	11.6	11.9	12.8	10.7	11.0	11.6	11.8	12.7	
Variation of the observer position for the luminaire distances S												
S = 1.0H		+2.5 / -5.7					+2.5 / -6.0					
S = 1.5H		+3.7 / -11.8					+3.8 / -13.6					
S = 2.0H		+5.6 / -15.8					+5.7 / -19.4					
Standard table		BK00					BK00					
Correction Summand		-6.2					-6.2					
Corrected glare indices referring to 3280lm Total luminous flux												

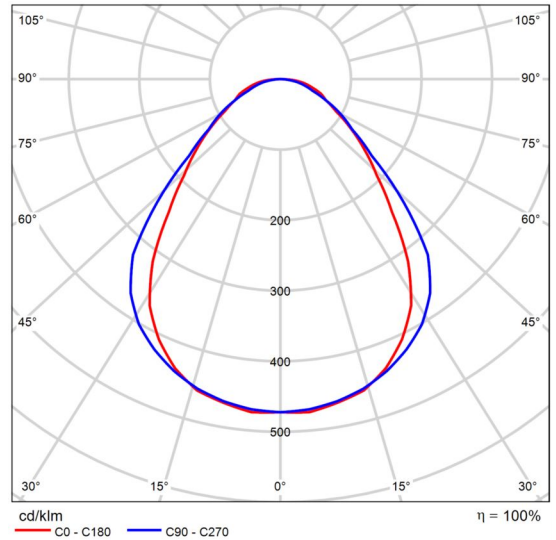
UGR diagram (SHR: 0.25)

Product data sheet

Not yet a DIALux member - RUBICO LED 600 HE 4K DALI



Article No.	0044276
P	24.8 W
Φ_{Lamp}	2805 lm
$\Phi_{Luminaire}$	2805 lm
η	100.00 %
Luminous efficacy	113.1 lm/W
CCT	4000 K
CRI	80



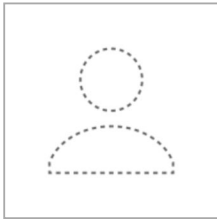
Polar LDC

Glare evaluation according to UGR												
		70	70	50	50	30	70	70	50	50	30	
p Ceiling		50	30	50	30	30	50	30	50	30	30	
p Walls		20	20	20	20	20	20	20	20	20	20	
p Floor		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
Room size	X Y											
2H	2H	14.1	15.3	14.4	15.6	15.8	14.5	15.7	14.8	15.9	16.1	
	3H	15.4	16.5	15.7	16.7	17.0	15.4	16.5	15.7	16.7	17.0	
	4H	16.0	17.0	16.3	17.3	17.6	15.8	16.8	16.1	17.1	17.3	
	6H	16.6	17.6	17.0	17.9	18.2	16.1	17.0	16.4	17.3	17.6	
	8H	16.9	17.8	17.2	18.1	18.4	16.2	17.1	16.5	17.4	17.7	
4H	12H	17.1	18.0	17.5	18.3	18.7	16.2	17.1	16.6	17.4	17.8	
	2H	14.5	15.6	14.9	15.9	16.1	14.8	15.9	15.2	16.1	16.4	
	3H	16.0	16.9	16.4	17.2	17.5	16.0	16.9	16.3	17.2	17.5	
	4H	16.8	17.6	17.2	18.0	18.3	16.5	17.3	16.9	17.7	18.0	
	6H	17.6	18.3	18.1	18.7	19.1	17.0	17.7	17.4	18.0	18.4	
8H	8H	18.0	18.7	18.4	19.0	19.5	17.1	17.8	17.6	18.2	18.6	
	12H	18.3	18.9	18.8	19.3	19.8	17.2	17.8	17.7	18.2	18.7	
	4H	17.1	17.7	17.5	18.1	18.6	16.8	17.5	17.3	17.9	18.3	
	6H	18.1	18.6	18.6	19.1	19.5	17.4	18.0	17.9	18.4	18.8	
	8H	18.6	19.1	19.1	19.5	20.0	17.7	18.2	18.2	18.6	19.1	
12H	12H	19.1	19.5	19.6	20.0	20.5	17.9	18.3	18.4	18.7	19.2	
	4H	17.1	17.7	17.6	18.1	18.6	16.9	17.5	17.3	17.9	18.3	
	6H	18.2	18.7	18.7	19.1	19.6	17.6	18.0	18.0	18.5	18.9	
8H	18.8	19.2	19.2	19.6	20.1	17.9	18.3	18.4	18.7	19.2		
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.2 / -0.2					+0.3 / -0.4					
S = 1.5H		+0.3 / -0.6					+0.6 / -0.8					
S = 2.0H		+0.5 / -0.9					+1.2 / -1.2					
Standard table		BK06					BK04					
Correction Summand		1.2					-0.1					
Corrected glare indices referring to 2805lm Total luminous flux												

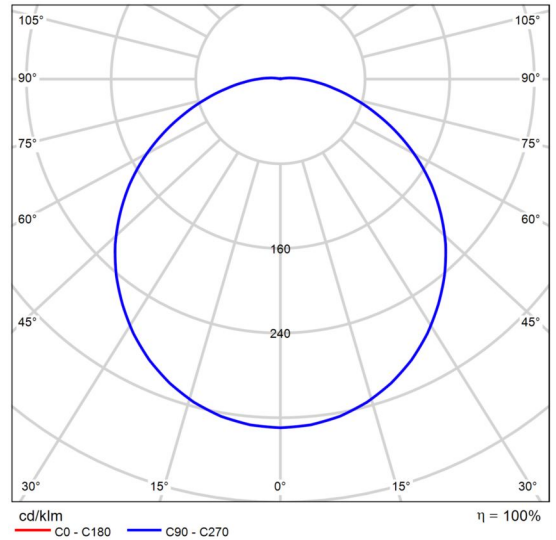
UGR diagram (SHR: 0.25)

Product data sheet

Not yet a DIALux member - SAT4G431W40WH-01



Article No.	SAT4G431W40WH-01
P	31.0 W
Φ_{Lamp}	3811 lm
$\Phi_{Luminaire}$	3812 lm
η	100.02 %
Luminous efficacy	123.0 lm/W
CCT	3991 K
CRI	84

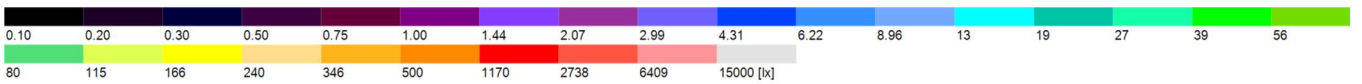
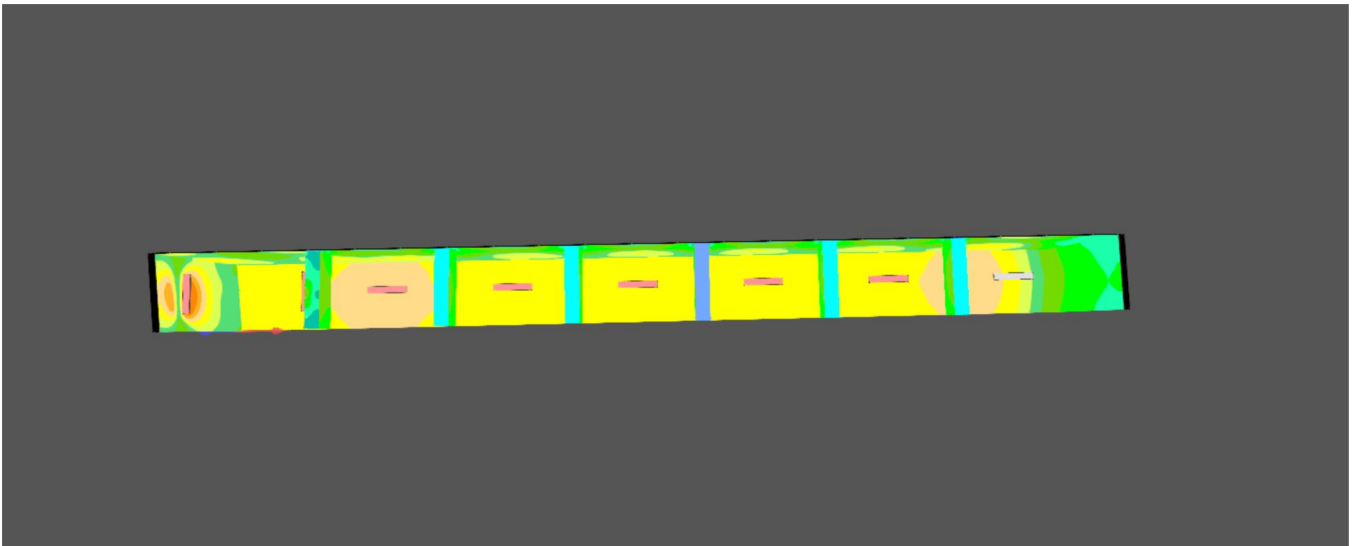
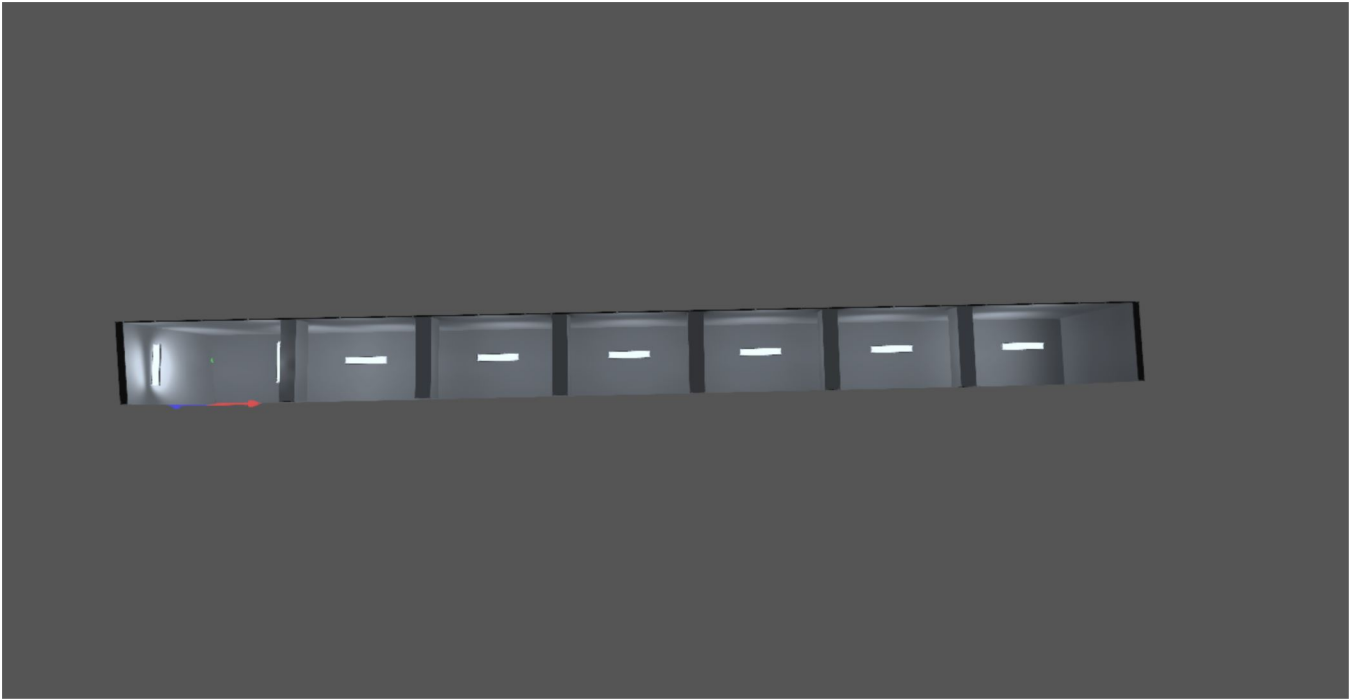


Polar LDC

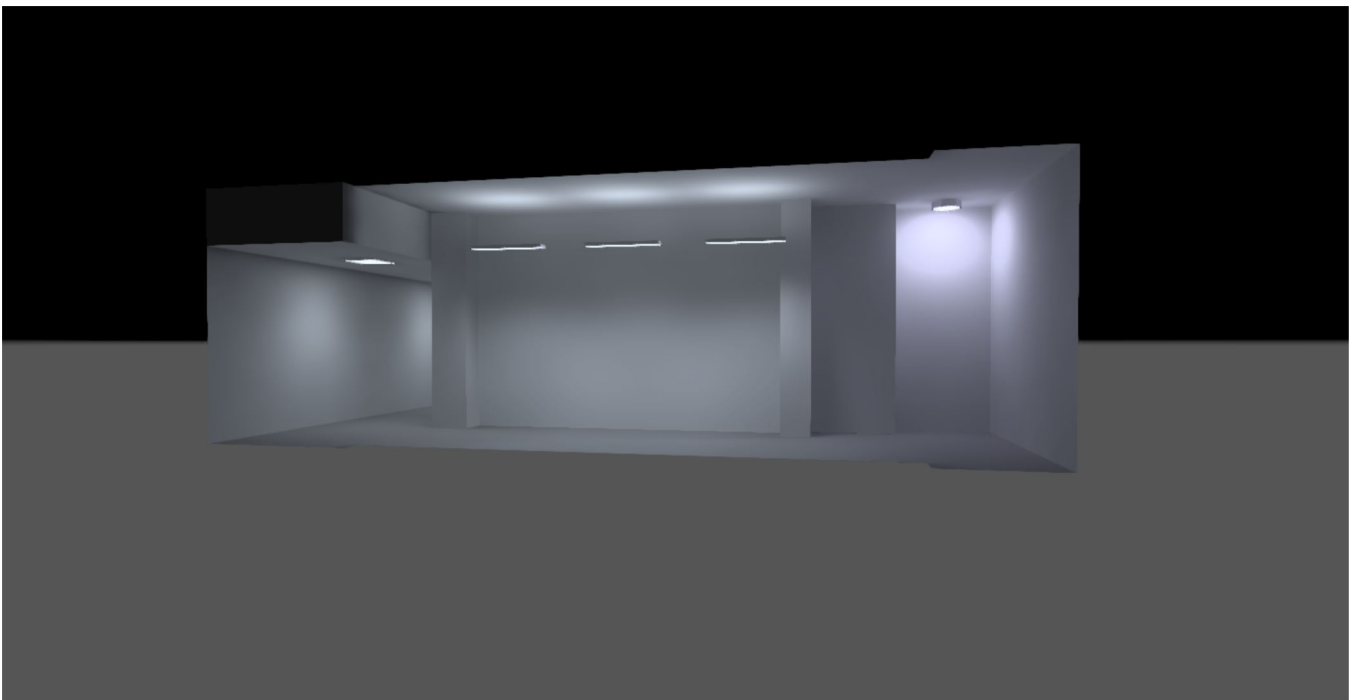
Glare evaluation according to UGR																
		70	70	50	50	30	70	70	50	50	30					
p Ceiling		50	30	50	30	30	50	30	50	30	30					
p Walls		20	20	20	20	20	20	20	20	20	20					
p Floor		20	20	20	20	20	20	20	20	20	20					
Room size	Viewing direction at right angles to lamp axis	Viewing direction parallel to lamp axis														
X Y		2H	3H	4H	6H	8H	12H	2H	3H	4H	6H	8H	12H			
2H	2H	19.4	20.7	19.7	21.0	21.3	19.4	20.7	19.7	21.0	21.3	20.9	22.1	21.2	22.4	22.7
	3H	20.9	22.1	21.2	22.4	22.7	20.9	22.1	21.2	22.4	22.7	21.5	22.6	21.8	23.0	23.3
	4H	21.5	22.6	21.8	23.0	23.3	21.5	22.6	21.8	23.0	23.3	22.0	23.1	22.4	23.4	23.8
	6H	22.0	23.1	22.4	23.4	23.8	22.0	23.1	22.4	23.4	23.8	22.2	23.2	22.6	23.6	23.9
	8H	22.2	23.2	22.6	23.6	23.9	22.2	23.2	22.6	23.6	23.9	22.3	23.3	22.7	23.7	24.1
	12H	22.3	23.3	22.7	23.7	24.1	22.3	23.3	22.7	23.7	24.1	20.0	21.2	20.4	21.5	21.8
4H	2H	20.0	21.2	20.4	21.5	21.8	20.0	21.2	20.4	21.5	21.8	21.7	22.7	22.1	23.1	23.5
	3H	21.7	22.7	22.1	23.1	23.5	21.7	22.7	22.1	23.1	23.5	22.4	23.4	22.9	23.7	24.2
	4H	22.4	23.4	22.9	23.7	24.2	22.4	23.4	22.9	23.7	24.2	23.1	23.9	23.5	24.3	24.7
	6H	23.1	23.9	23.5	24.3	24.7	23.1	23.9	23.5	24.3	24.7	23.3	24.1	23.8	24.5	25.0
	8H	23.3	24.1	23.8	24.5	25.0	23.3	24.1	23.8	24.5	25.0	23.6	24.3	24.0	24.7	25.2
	12H	23.6	24.3	24.0	24.7	25.2	23.6	24.3	24.0	24.7	25.2	22.7	23.5	23.2	23.9	24.4
8H	4H	22.7	23.5	23.2	23.9	24.4	22.7	23.5	23.2	23.9	24.4	23.5	24.2	24.0	24.6	25.1
	6H	23.5	24.2	24.0	24.6	25.1	23.5	24.2	24.0	24.6	25.1	23.9	24.5	24.4	24.9	25.5
	8H	23.9	24.5	24.4	24.9	25.5	23.9	24.5	24.4	24.9	25.5	24.3	24.7	24.8	25.2	25.8
	12H	24.3	24.7	24.8	25.2	25.8	24.3	24.7	24.8	25.2	25.8	22.8	23.5	23.2	23.9	24.4
12H	4H	22.8	23.5	23.2	23.9	24.4	22.8	23.5	23.2	23.9	24.4	23.6	24.2	24.1	24.7	25.2
	6H	23.6	24.2	24.1	24.7	25.2	23.6	24.2	24.1	24.7	25.2	24.0	24.5	24.6	25.0	25.6
	8H	24.0	24.5	24.6	25.0	25.6	24.0	24.5	24.6	25.0	25.6	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		+0.4 / -0.7					+0.4 / -0.7									
Standard table		BK06					BK06									
Correction Summand		6.8					6.8									
Corrected glare indices referring to 3811lm Total luminous flux																

UGR diagram (SHR: 0.25)

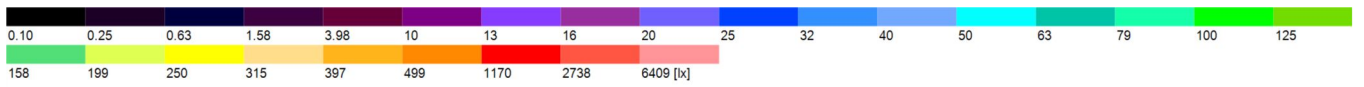
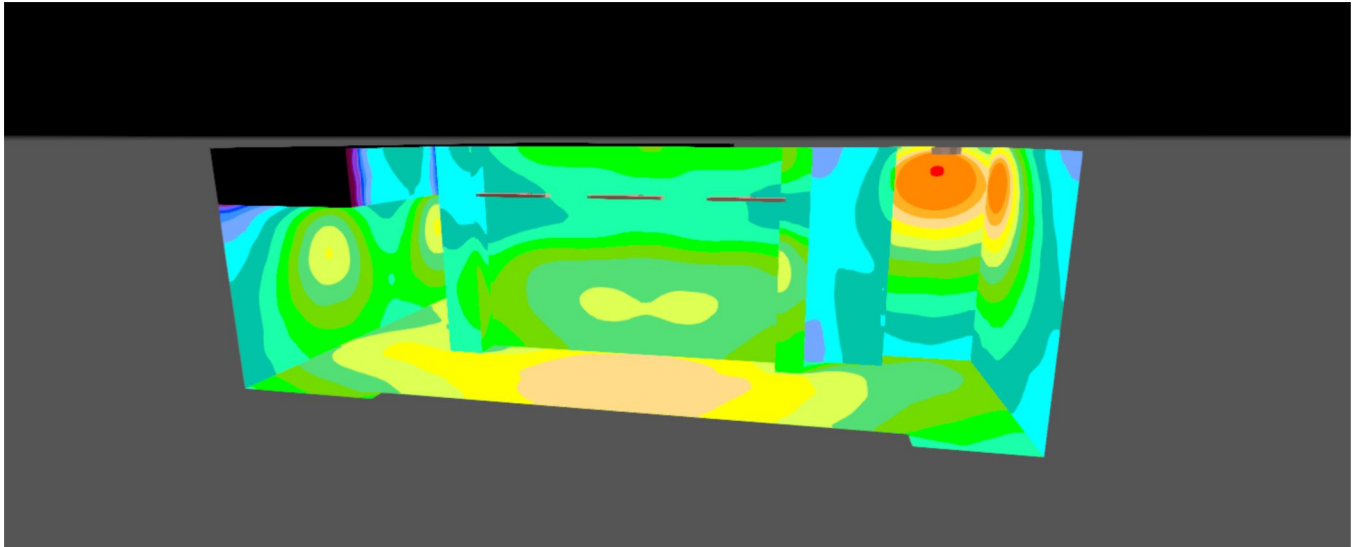
Images



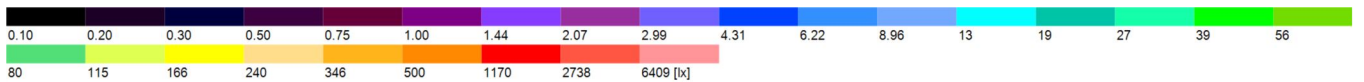
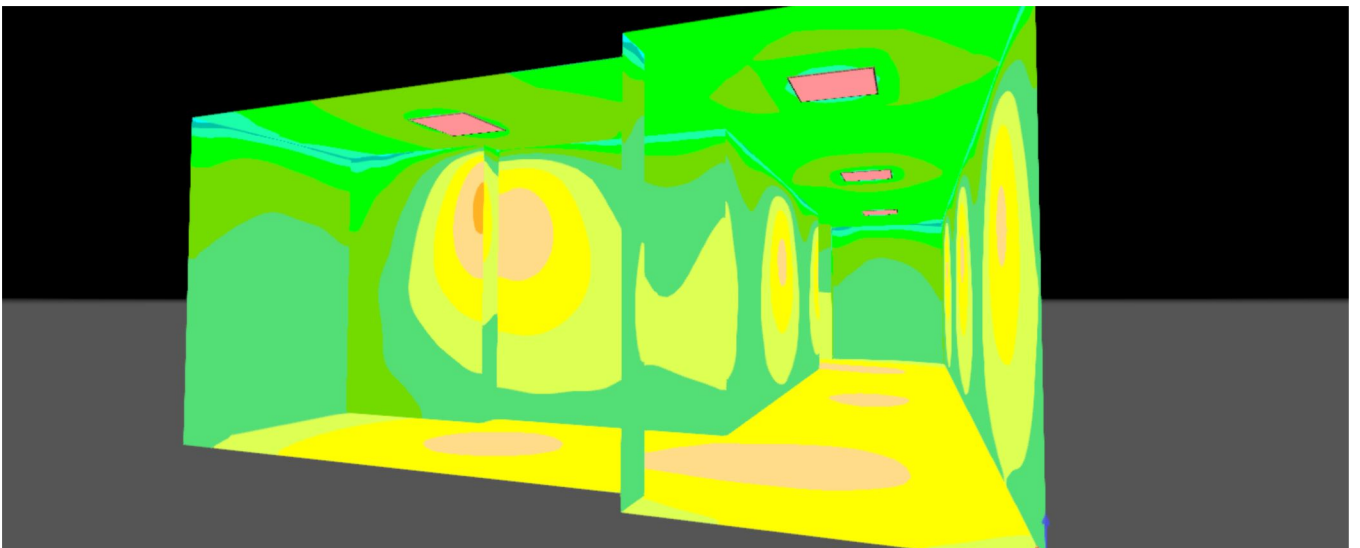
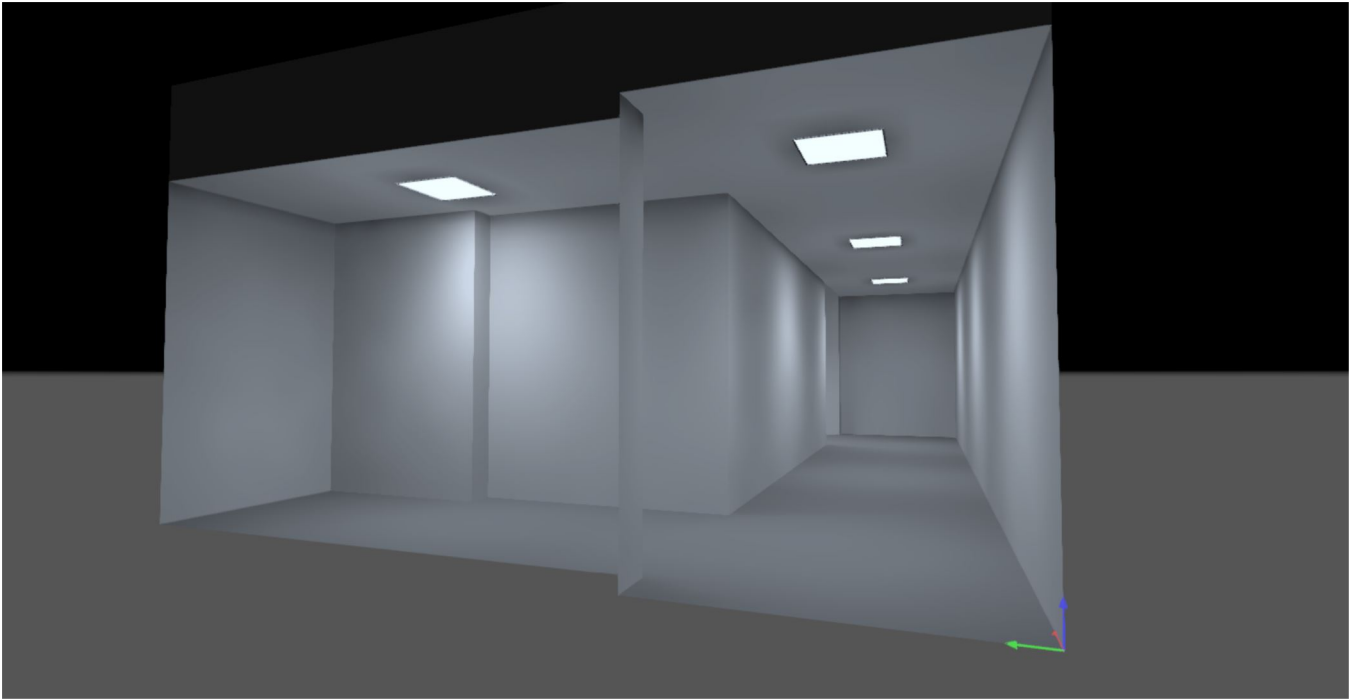
Images



Images

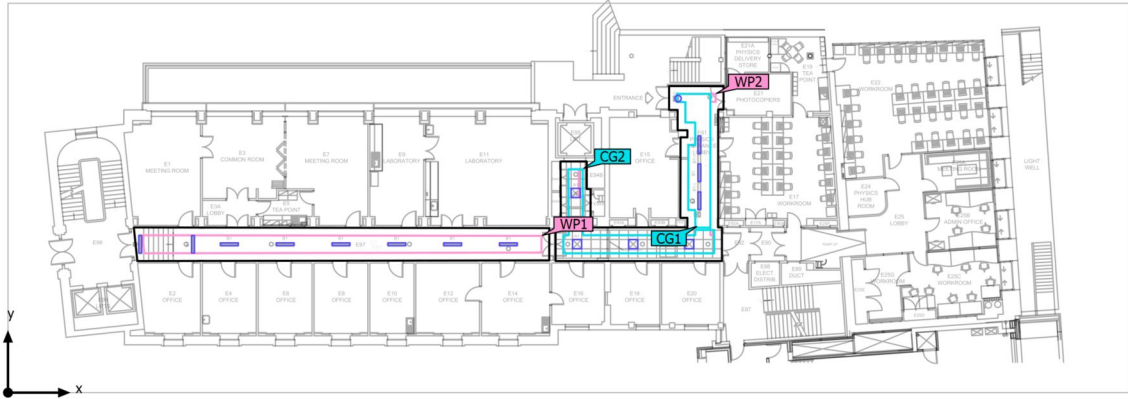


Images



Building 1 · Story 1 (Light scene 1)

Calculation objects



Building 1 · Story 1 (Light scene 1)

Calculation objects

Working planes

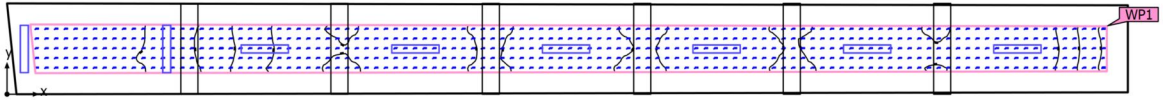
Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Main Circ Perpendicular illuminance Height: 0.000 m, Wall zone: 0.500 m	221 lx	95.5 lx	325 lx	0.43	0.29	WP1
Working plane (Circ 2) Perpendicular illuminance Height: 0.000 m, Wall zone: 0.500 m	229 lx	137 lx	364 lx	0.60	0.38	WP2

Calculation surfaces

Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Physics Entrance Lobby Perpendicular illuminance Height: 0.000 m	282 lx	137 lx	374 lx	0.49	0.37	CG1
Grid Ceiling Circ Perpendicular illuminance Height: 0.000 m	183 lx	137 lx	227 lx	0.75	0.60	CG2

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

Summary



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

Summary

Results

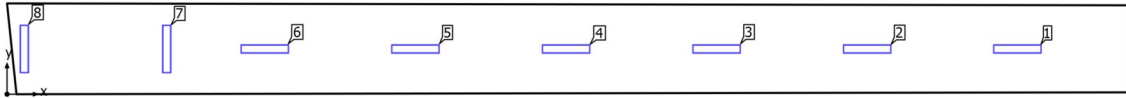
	Symbol	Calculated	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	221 lx	WP1
	g_1	0.43	WP1
	Lighting power density	6.52 W/m ² 2.94 W/m ² /100 lx	
Consumption values	Consumption	510 kWh/a	
Room	Lighting power density	3.31 W/m ² 1.49 W/m ² /100 lx	

Utilization profile: DIALux presetting, Standard (office)

Luminaire list

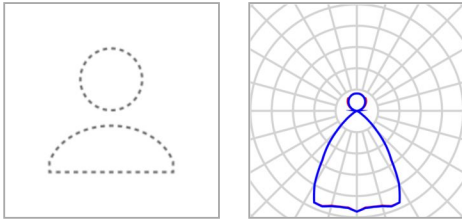
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
8	Not yet a DIALux member	2023725	OPTIX S 1200 2L D/I 4K ALU DA	23.2 W	3280 lm	141.4 lm/W

Building 1 · Story 1 · Circ 1
Luminaire layout plan



Building 1 · Story 1 · Circ 1

Luminaire layout plan



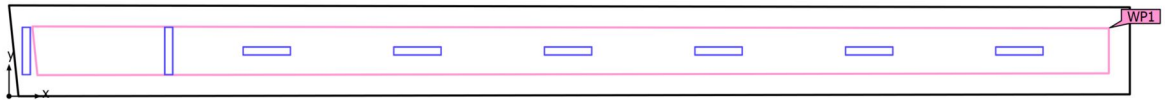
Manufacturer	Not yet a DIALux member	P	23.2 W
Article No.	2023725	Φ Luminaire	3280 lm
Article name	OPTIX S 1200 2L D/I 4K ALU DA		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
24.034 m	1.076 m	2.700 m	1
20.461 m	1.076 m	2.700 m	2
16.878 m	1.076 m	2.700 m	3
13.298 m	1.076 m	2.700 m	4
9.715 m	1.076 m	2.700 m	5
6.131 m	1.076 m	2.700 m	6
3.799 m	1.076 m	2.700 m	7
0.411 m	1.076 m	2.700 m	8

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

Calculation objects



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

Calculation objects

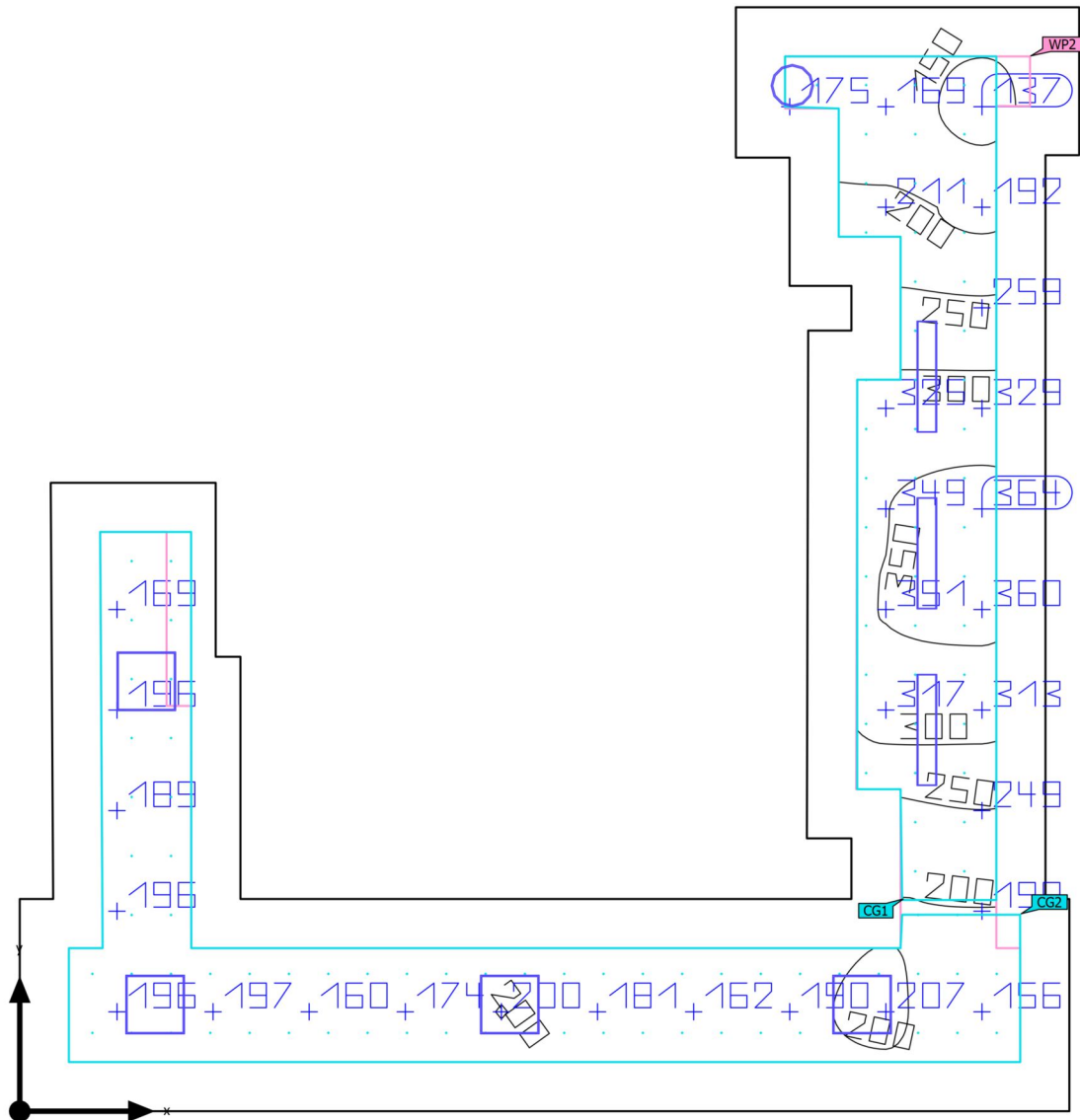
Working planes

Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Main Circ Perpendicular illuminance Height: 0.000 m, Wall zone: 0.500 m	221 lx	95.5 lx	325 lx	0.43	0.29	WP1

Utilization profile: DIALux presetting, Standard (office)

Building 1 · Story 1 · Circ 2 (Light scene 1)

Summary



Building 1 · Story 1 · Circ 2 (Light scene 1)
Summary

Results

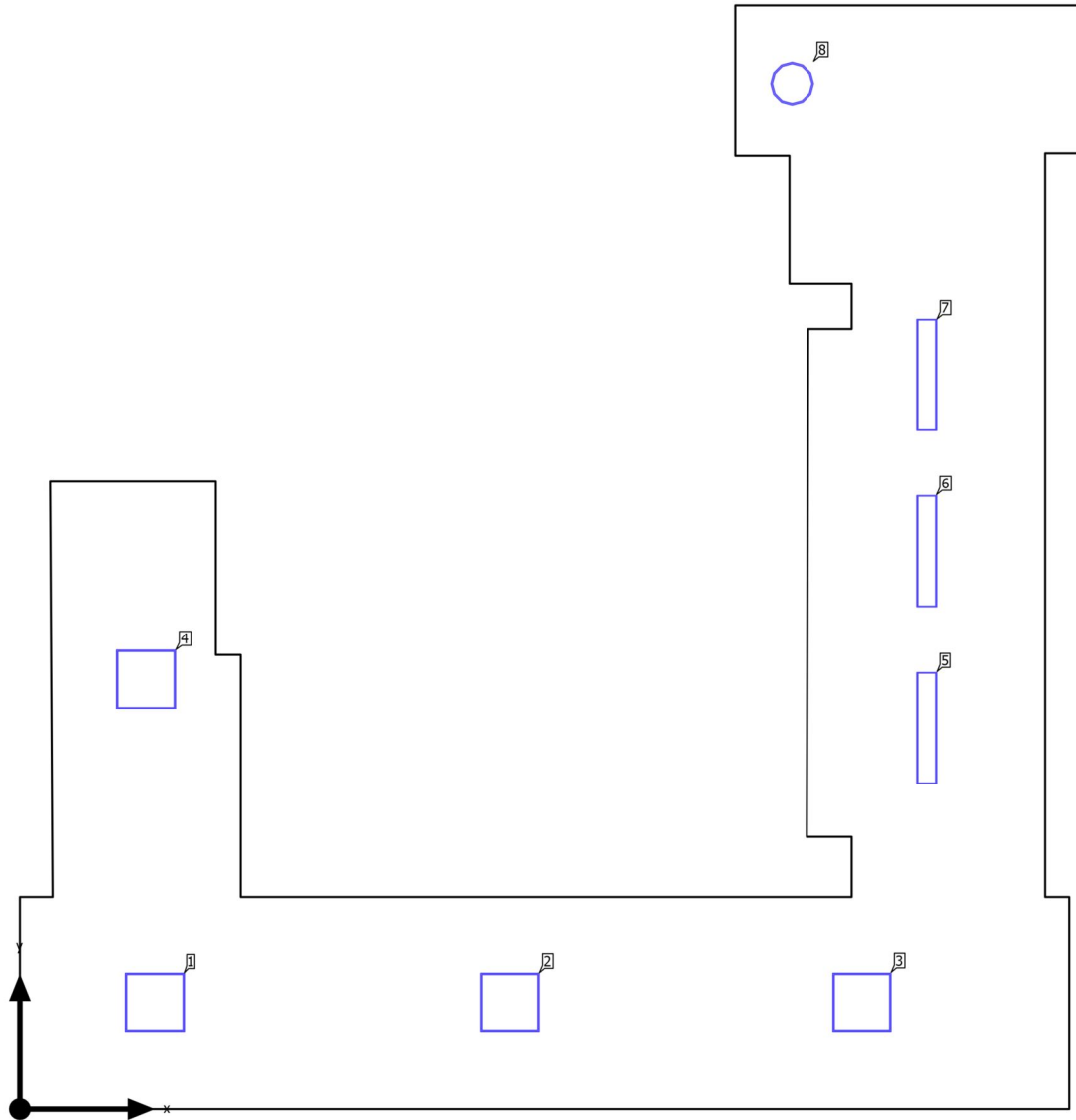
	Symbol	Calculated	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	229 lx	WP2
	g_1	0.60	WP2
	Lighting power density	7.41 W/m ² 3.24 W/m ² /100 lx	
Consumption values	Consumption	550 kWh/a	
Room	Lighting power density	3.69 W/m ² 1.61 W/m ² /100 lx	

Utilization profile: DIALux presetting, Standard (office)

Luminaire list

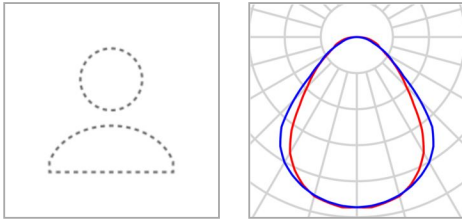
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Not yet a DIALux member	0044276	RUBICO LED 600 HE 4K DALI	24.8 W	2805 lm	113.1 lm/W
3	Not yet a DIALux member	2023725	OPTIX S 1200 2L D/I 4K ALU DA	23.2 W	3280 lm	141.4 lm/W
1	Not yet a DIALux member	SAT4G431 W40WH-01	SAT4G431W40WH-01	31.0 W	3812 lm	123.0 lm/W

Building 1 · Story 1 · Circ 2
Luminaire layout plan



Building 1 · Story 1 · Circ 2

Luminaire layout plan



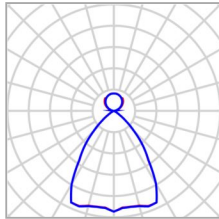
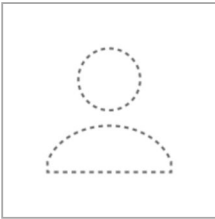
Manufacturer	Not yet a DIALux member	P	24.8 W
Article No.	0044276	$\Phi_{\text{Luminaire}}$	2805 lm
Article name	RUBICO LED 600 HE 4K DALI		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
1.377 m	1.085 m	2.873 m	1
4.985 m	1.085 m	2.873 m	2
8.569 m	1.085 m	2.873 m	3
1.287 m	4.374 m	2.873 m	4

Building 1 · Story 1 · Circ 2

Luminaire layout plan



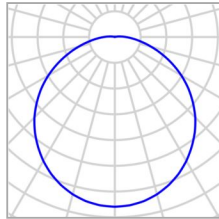
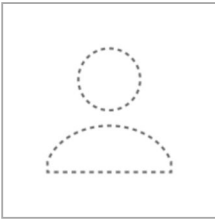
Manufacturer	Not yet a DIALux member	P	23.2 W
Article No.	2023725	Φ Luminaire	3280 lm
Article name	OPTIX S 1200 2L D/I 4K ALU DA		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
9.228 m	3.879 m	2.900 m	5
9.228 m	5.677 m	2.900 m	6
9.228 m	7.474 m	2.900 m	7

Building 1 · Story 1 · Circ 2

Luminaire layout plan



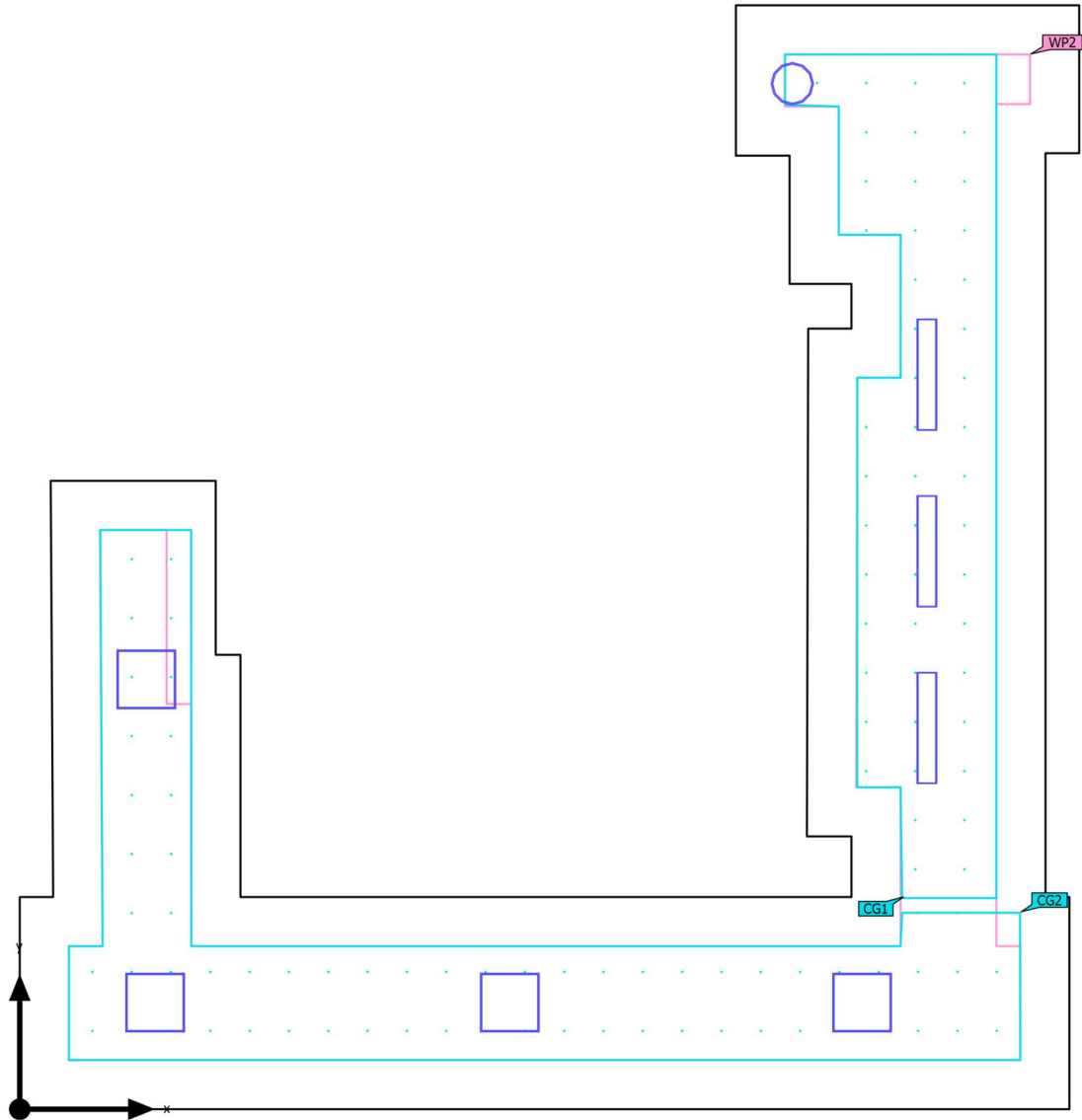
Manufacturer	Not yet a DIALux member	P	31.0 W
Article No.	SAT4G431W40WH-01	Φ Luminaire	3812 lm
Article name	SAT4G431W40WH-01		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
7.859 m	10.436 m	3.600 m	8

Building 1 · Story 1 · Circ 2 (Light scene 1)

Calculation objects



Building 1 · Story 1 · Circ 2 (Light scene 1)

Calculation objects

Working planes

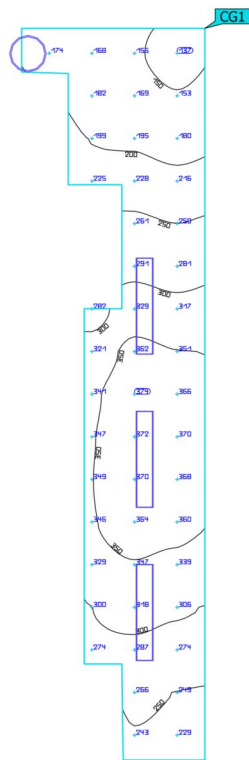
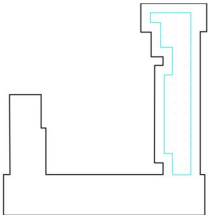
Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Circ 2) Perpendicular illuminance Height: 0.000 m, Wall zone: 0.500 m	229 lx	137 lx	364 lx	0.60	0.38	WP2

Calculation surfaces

Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Physics Entrance Lobby Perpendicular illuminance Height: 0.000 m	282 lx	137 lx	374 lx	0.49	0.37	CG1
Grid Ceiling Circ Perpendicular illuminance Height: 0.000 m	183 lx	137 lx	227 lx	0.75	0.60	CG2

Utilization profile: DIALux presetting, Standard (office)

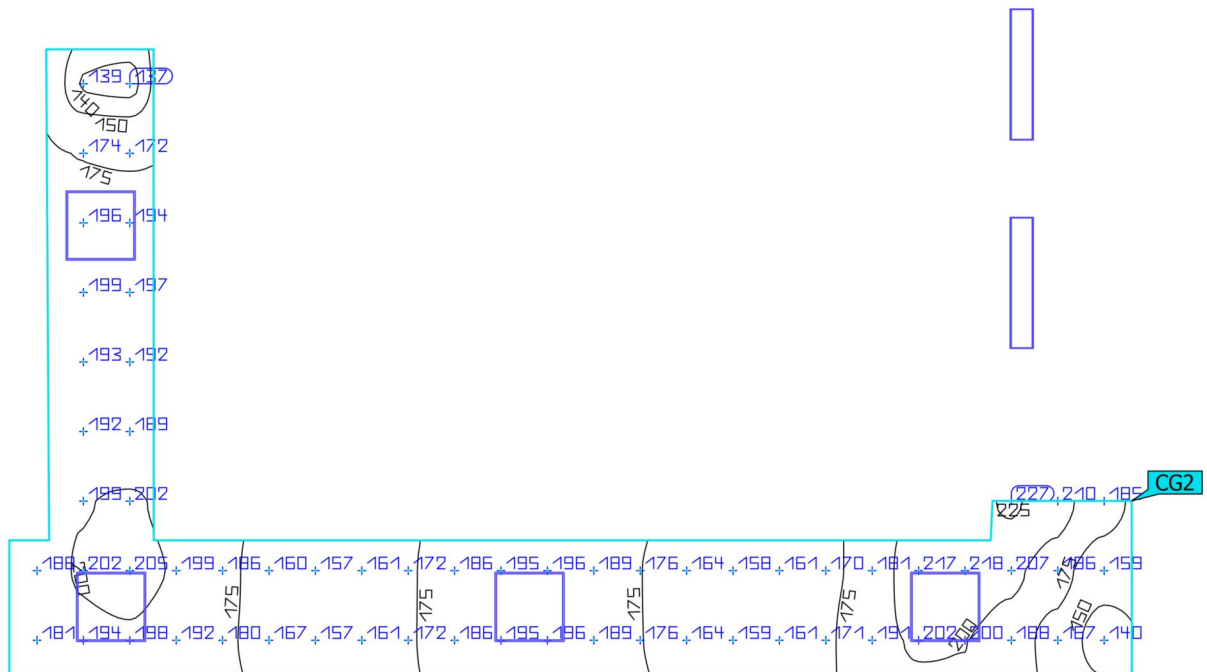
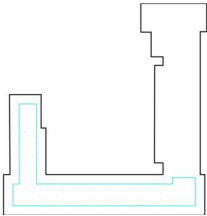
Building 1 · Story 1 · Circ 2 (Light scene 1)
Physics Entrance Lobby



Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Physics Entrance Lobby Perpendicular illuminance Height: 0.000 m	282 lx	137 lx	374 lx	0.49	0.37	CG1

Utilization profile: DIALux presetting, Standard (office)

Building 1 · Story 1 · Circ 2 (Light scene 1)
Grid Ceiling Circ



Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Grid Ceiling Circ Perpendicular illuminance Height: 0.000 m	183 lx	137 lx	227 lx	0.75	0.60	CG2

Utilization profile: DIALux presetting, Standard (office)

Glossary

A

A Formula symbol for a surface in the geometry

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.

C

CCT (correlated color temperature)
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.

Allocation of the light colors to the color temperature ranges acc. to EN 12464-1:

Light color - color temperature [K]
warm white (ww) < 3,300 K
neutral white (nw) ≥ 3,300 – 5,300 K
daylight white (dw) > 5,300 K

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).

CRI (color rendering index)
Designation for the color rendering index of a luminaire or a lamp acc. to DIN 6169: 1976 or CIE 13.3: 1995.

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.

D

Daylight factor 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.

Formula symbol: D (daylight factor)
Unit: %

Glossary

Daylight quotient effective area	A calculation surface within which the daylight quotient is calculated.
E	
Eta (η)	(light output ratio) 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. Unit: %
G	
g_1	Often also U_o (overall uniformity) Designates the overall uniformity of the illuminance on a surface. It is the quotient from E_{min} to \bar{E} and is required, for instance, in standards for illumination of workstations.
g_2	Actually it designates the "non-uniformity" of the illuminance on a surface. It is the quotient of E_{min} to E_{max} and is generally only relevant for certifying the emergency lighting acc. to EN 1838.
I	
Illuminance	Describes the ratio of the luminous flux that strikes a certain surface to the size of this surface ($lm/m^2 = lx$). 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. Unit: Lux Abbreviation: lx Formula symbol: E
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

<p> Illuminance, vertical </p>	<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 E_v. </p>
<hr/>	
<p> L </p>	
<p> LENI </p>	<p> (lighting energy numeric indicator) Lighting energy numeric indicator acc. to EN 15193 </p> <p> Unit: kWh/m² year </p>
<hr/>	
<p> Light loss factor </p>	<p> See MF </p>
<hr/>	
<p> LLMF </p>	<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>
<hr/>	
<p> LMF </p>	<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>
<hr/>	
<p> LSF </p>	<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>
<hr/>	
<p> Luminance </p>	<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/m² Formula symbol: L </p>
<hr/>	
<p> Luminous efficacy </p>	<p> Ratio of the emitted luminous flux Φ [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	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.
	Unit: Lumen Abbreviation: lm Formula symbol: Φ
Luminous intensity	Describes the intensity of the light in a certain direction (emitter value). The luminous intensity is a matter of the luminous flux Φ that is emitted in a certain spherical angle Ω . The radiation characteristics of a light source are presented graphically in a light distribution curve (LDC). The luminous intensity is an SI base unit.
	Unit: Candela Abbreviation: cd Formula symbol: I
M	
MF	(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 $RMF \times LMF \times LLMF \times LSF$.
P	
P	(power) Electric power consumption Unit: watt Abbreviation: W
R	
Reflection factor	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.

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.