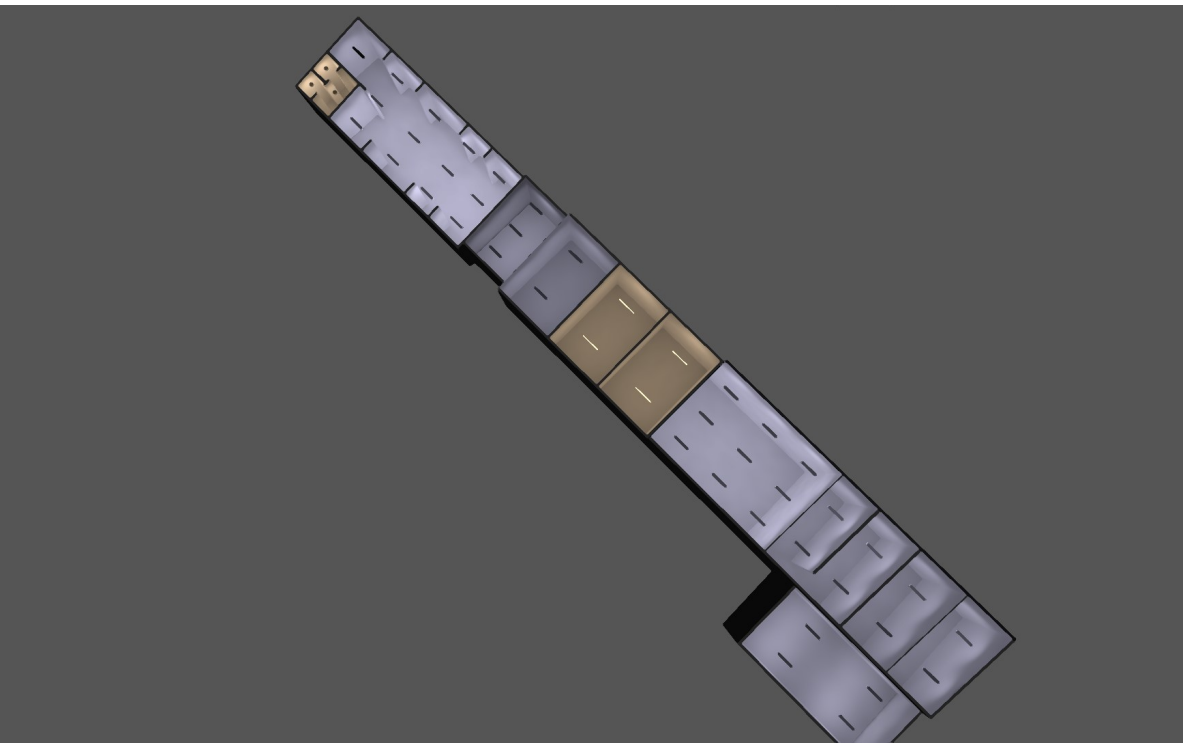


AF09_Luminotécnico

Created with DIALux

DIALux

Building 1

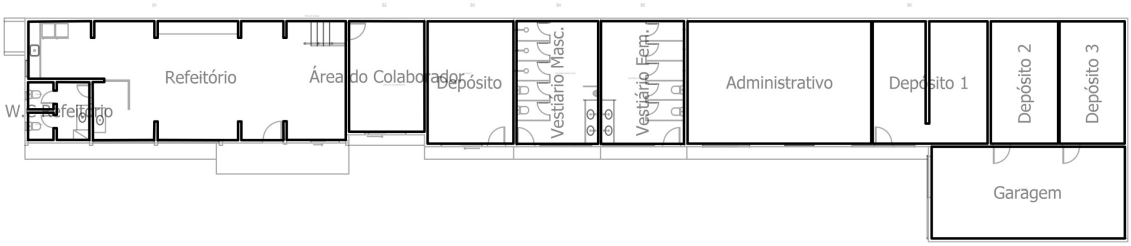
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
160465 lm	1480.8 W	108.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
39	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W
4	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm	111.5 lm/W
3	Not yet a DIALux member		MITOTAURO EVO PE 24W 3000K	24.0 W	1751 lm	73.0 lm/W

Building 1 · AF09 (Light scene 1)

Room List



Building 1 · AF09 (Light scene 1)

Room List

Administrativo

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
288.0 W	53.37 m²	5.40 W/m² = 1.06 W/m²/100 lx (Room)	510 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
9	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Área do Colaborador

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
96.0 W	19.79 m²	4.85 W/m² = 1.29 W/m²/100 lx (Room)	377 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
3	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Depósito 1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
128.0 W	32.48 m²	3.94 W/m² = 1.13 W/m²/100 lx (Room)	348 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Building 1 · AF09 (Light scene 1)

Room List

Depósito 2

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
64.0 W	19.55 m²	3.27 W/m² = 1.05 W/m²/100 lx (Room)	311 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Depósito 3

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
64.0 W	18.92 m²	3.38 W/m² = 1.07 W/m²/100 lx (Room)	316 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Depósito

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
64.0 W	24.94 m²	2.57 W/m² = 0.96 W/m²/100 lx (Room)	266 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

DIALux

Building 1 · AF09 (Light scene 1)

Room List

Garagem

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
128.0 W	42.11 m²	3.04 W/m² = 0.76 W/m²/100 lx (Room)	400 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Refeitório

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
416.0 W	79.20 m²	5.25 W/m² = 0.87 W/m²/100 lx (Room)	603 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
13	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm

Vestiário Fem.

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
80.4 W	24.19 m²	3.32 W/m² = 1.12 W/m²/100 lx (Room)	297 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm

Building 1 · AF09 (Light scene 1)

Room List

Vestiário Masc.

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
80.4 W	23.80 m²	3.38 W/m² = 1.15 W/m²/100 lx (Room)	293 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm

W.C Refeitório

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
72.0 W	7.97 m²	9.03 W/m² = 2.68 W/m²/100 lx (Room)	337 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
3	Not yet a DIALux member		MITOTAURO EVO PE 24W 3000K	24.0 W	1751 lm

DIALux

Building 1 · AF09

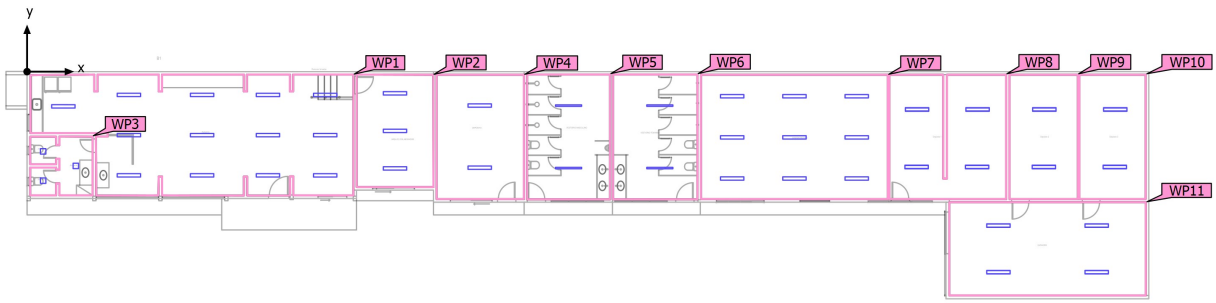
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
160465 lm	1480.8 W	108.4 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
39	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W
4	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm	111.5 lm/W
3	Not yet a DIALux member		MITOTAURO EVO PE 24W 3000K	24.0 W	1751 lm	73.0 lm/W

Building 1 · AF09 (Light scene 1)

Calculation objects



Building 1 · AF09 (Light scene 1)

Calculation objects

Working planes

Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Refeitório) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	603 lx (≥ 300 lx) ✓	274 lx	824 lx	0.45	0.33	WP1
Working plane (Área do Colaborador) Perpendicular illuminance (adaptive) Height: 1.550 m, Wall zone: 0.000 m	377 lx (≥ 300 lx) ✓	213 lx	535 lx	0.56	0.40	WP2
Working plane (W.C Refeitório) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	337 lx (≥ 200 lx) ✓	220 lx	425 lx	0.65	0.52	WP3
Working plane (Depósito) Perpendicular illuminance (adaptive) Height: 1.830 m, Wall zone: 0.000 m	266 lx (≥ 200 lx) ✓	176 lx	341 lx	0.66	0.52	WP4
Working plane (Vestiário Masc.) Perpendicular illuminance (adaptive) Height: 1.960 m, Wall zone: 0.000 m	293 lx (≥ 200 lx) ✓	217 lx	355 lx	0.74	0.61	WP5
Working plane (Vestiário Fem.) Perpendicular illuminance (adaptive) Height: 2.090 m, Wall zone: 0.000 m	297 lx (≥ 200 lx) ✓	212 lx	367 lx	0.71	0.58	WP6
Working plane (Administrativo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	510 lx (≥ 500 lx) ✓	395 lx	585 lx	0.77	0.68	WP7
Working plane (Depósito 1) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	348 lx (≥ 200 lx) ✓	228 lx	426 lx	0.66	0.54	WP8
Working plane (Depósito 2) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	311 lx (≥ 200 lx) ✓	203 lx	372 lx	0.65	0.55	WP9
Working plane (Depósito 3) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	316 lx (≥ 200 lx) ✓	208 lx	379 lx	0.66	0.55	WP10

DIALux

Building 1 · AF09 (Light scene 1)

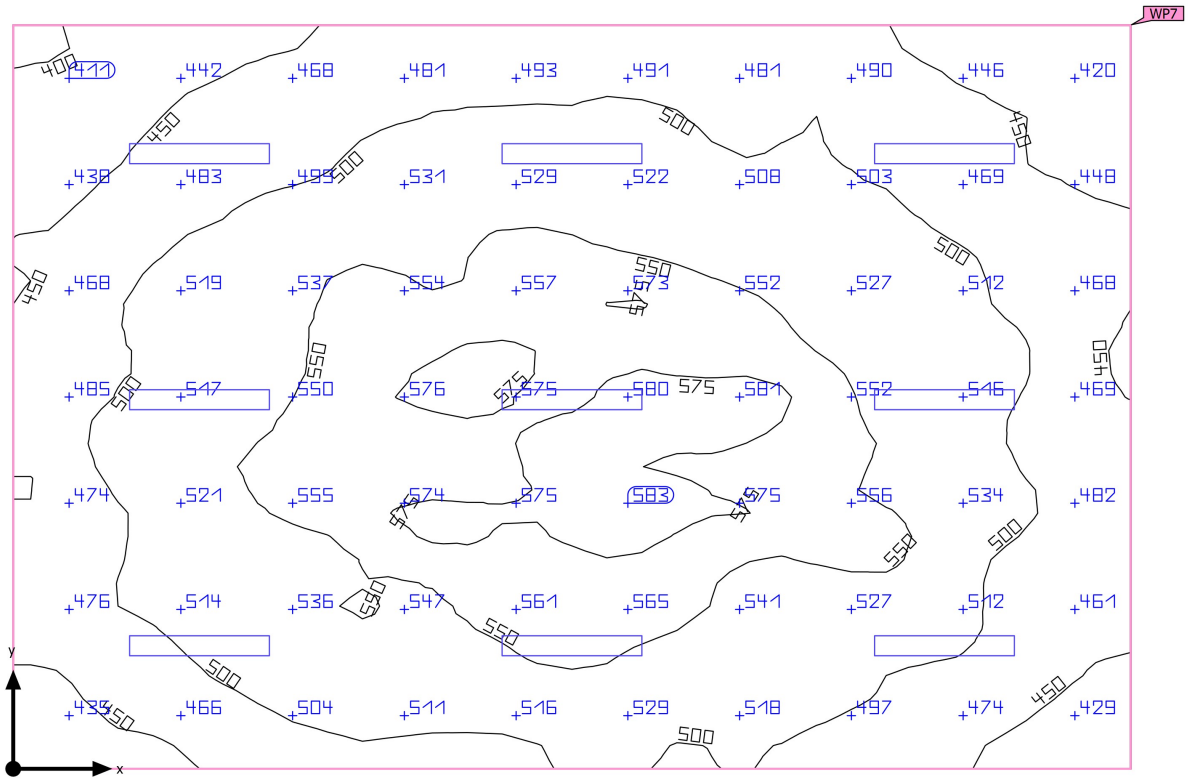
Calculation objects

Working plane (Garagem) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	400 lx (≥ 300 lx) ✓	178 lx	744 lx	0.45	0.24	WP11

DIALux

Building 1 · AF09 · Administrativo (Light scene 1)

Summary



Ground area: 53.37 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 6.207 m | Mounting height: 5.428 m - 6.039 m

Building 1 · AF09 · Administrativo (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	510 lx	≥ 500 lx	✓	WP7
	g_1	0.77	-	-	WP7
Consumption values	Consumption	790 kWh/a	max. 1900 kWh/a	✓	
Room	Lighting power density	5.40 W/m²	-	-	
		1.06 W/m²/100 lx	-	-	

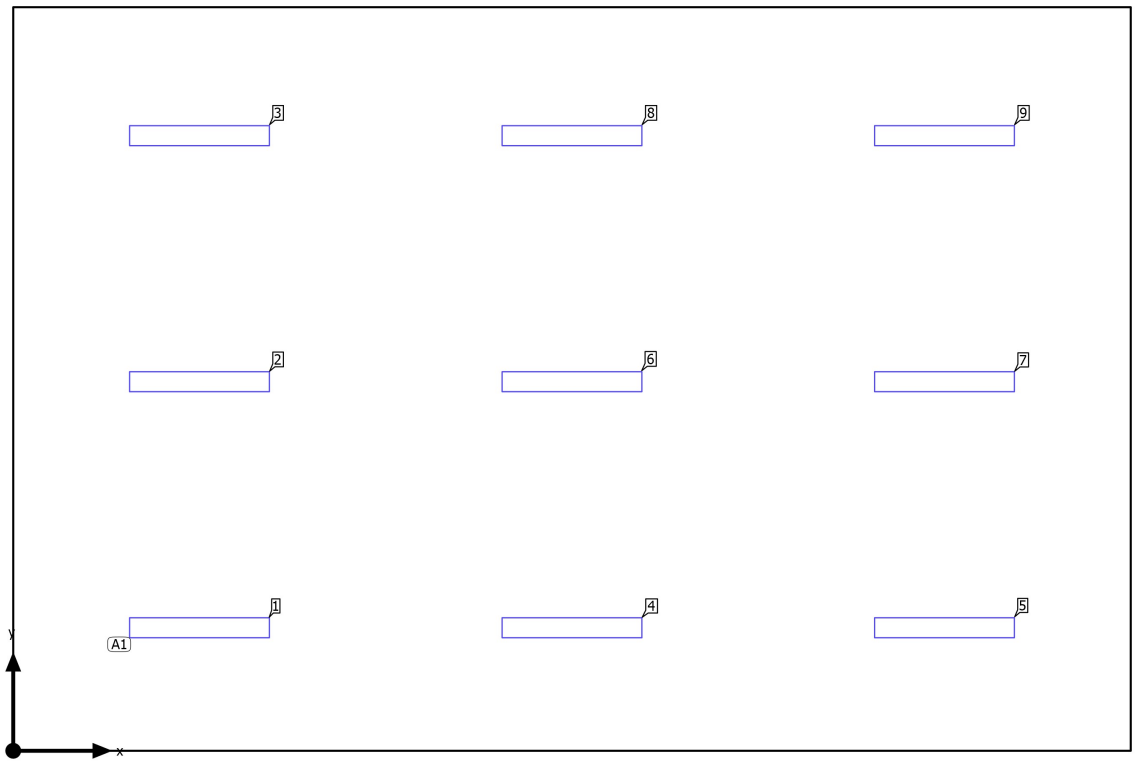
Utilisation profile: Offices, Writing, typewriting, reading, data processing

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
9	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Administrativo

Luminaire layout plan



Building 1 · AF09 · Administrativo

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
1.493 m	0.986 m	5.428 m	0.95	1
1.493 m	2.958 m	5.734 m	0.95	2
1.493 m	4.930 m	6.039 m	0.95	3
4.478 m	0.986 m	5.428 m	0.95	4
7.463 m	0.986 m	5.428 m	0.95	5
4.478 m	2.958 m	5.734 m	0.95	6
7.463 m	2.958 m	5.734 m	0.95	7
4.478 m	4.930 m	6.039 m	0.95	8
7.463 m	4.930 m	6.039 m	0.95	9

Building 1 · AF09 · Administrativo

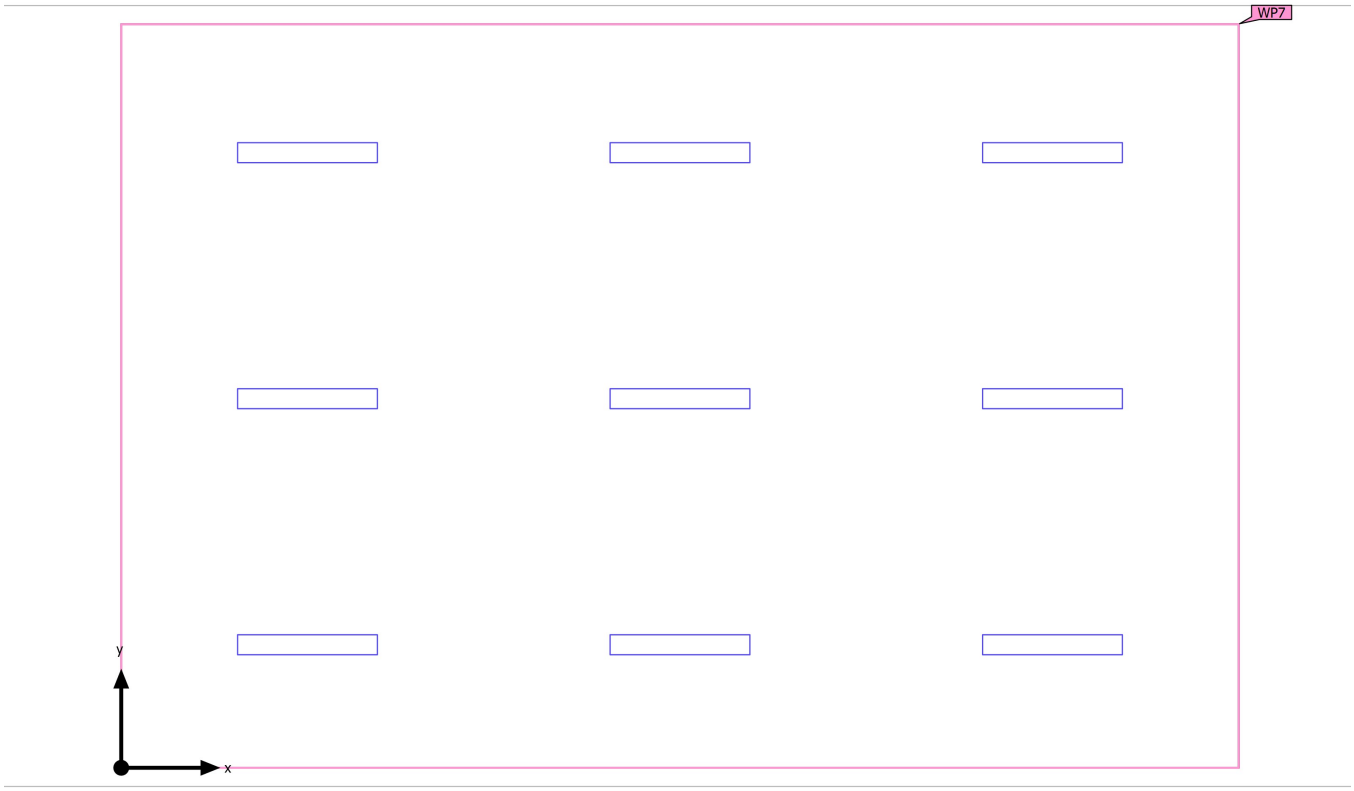
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
31680 lm	288.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
9	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Administrativo (Light scene 1)

Calculation objects



Building 1 · AF09 · Administrativo (Light scene 1)

Calculation objects

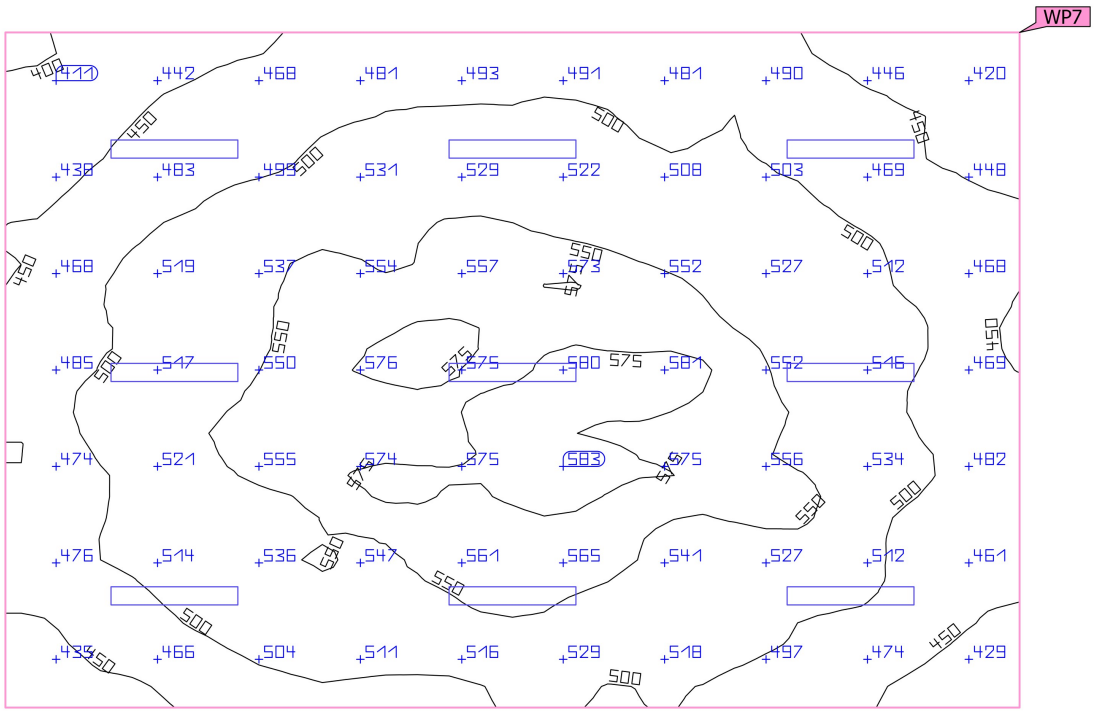
Working planes

Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Administrativo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	510 lx (≥ 500 lx) ✓	395 lx	585 lx	0.77	0.68	WP7

Utilisation profile: Offices, Writing, typewriting, reading, data processing

Building 1 · AF09 · Administrativo (Light scene 1)

Working plane (Administrativo)

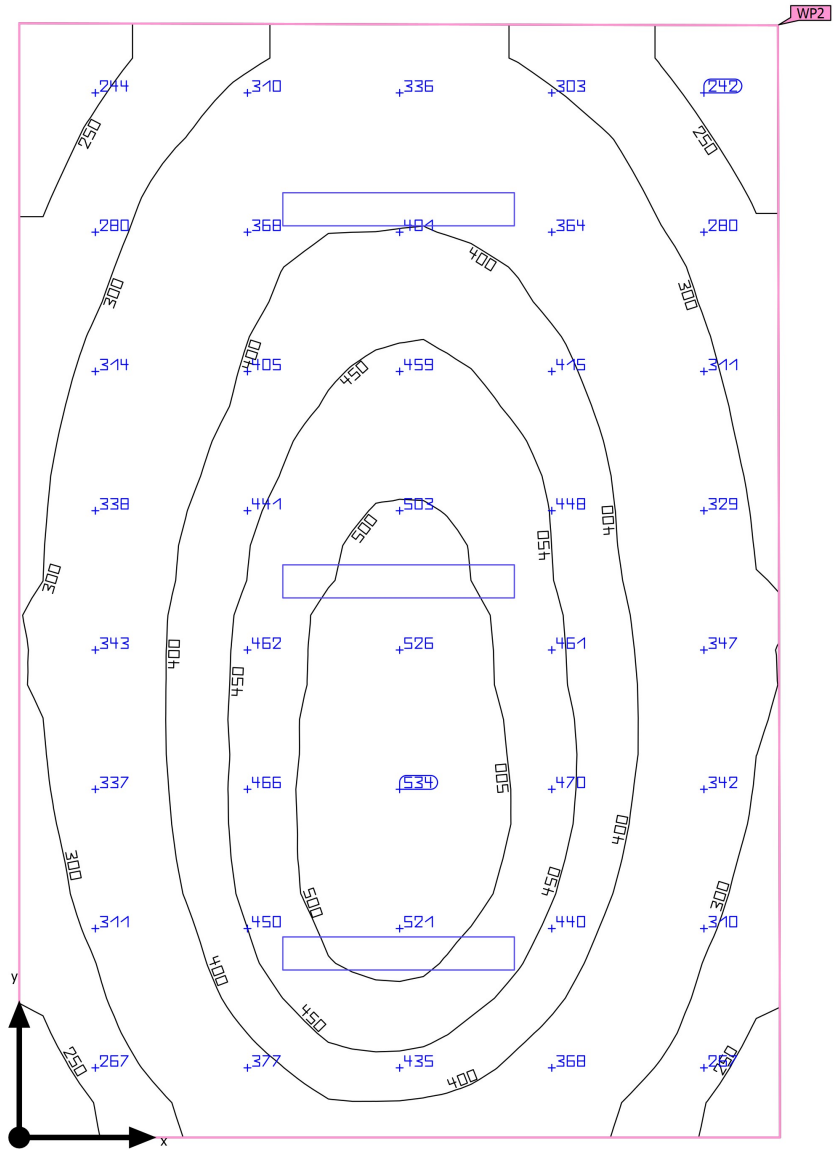


Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Administrativo) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	510 lx (≥ 500 lx) ✓	395 lx	585 lx	0.77	0.68	WP7

Utilisation profile: Offices, Writing, typewriting, reading, data processing

Building 1 · AF09 · Área do Colaborador (Light scene 1)

Summary



Ground area: 19.79 m² | Reflection factors: Ceiling: 70.0 %, Walls: 50.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 3.022 m - 3.858 m | Mounting height: 3.903 m - 4.461 m

Building 1 · AF09 · Área do Colaborador (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	377 lx	≥ 300 lx	✓	WP2
	g_1	0.56	-	-	WP2
Consumption values	Consumption	180 kWh/a	max. 700 kWh/a	✓	
Room	Lighting power density	4.85 W/m²	-	-	
		1.29 W/m²/100 lx	-	-	

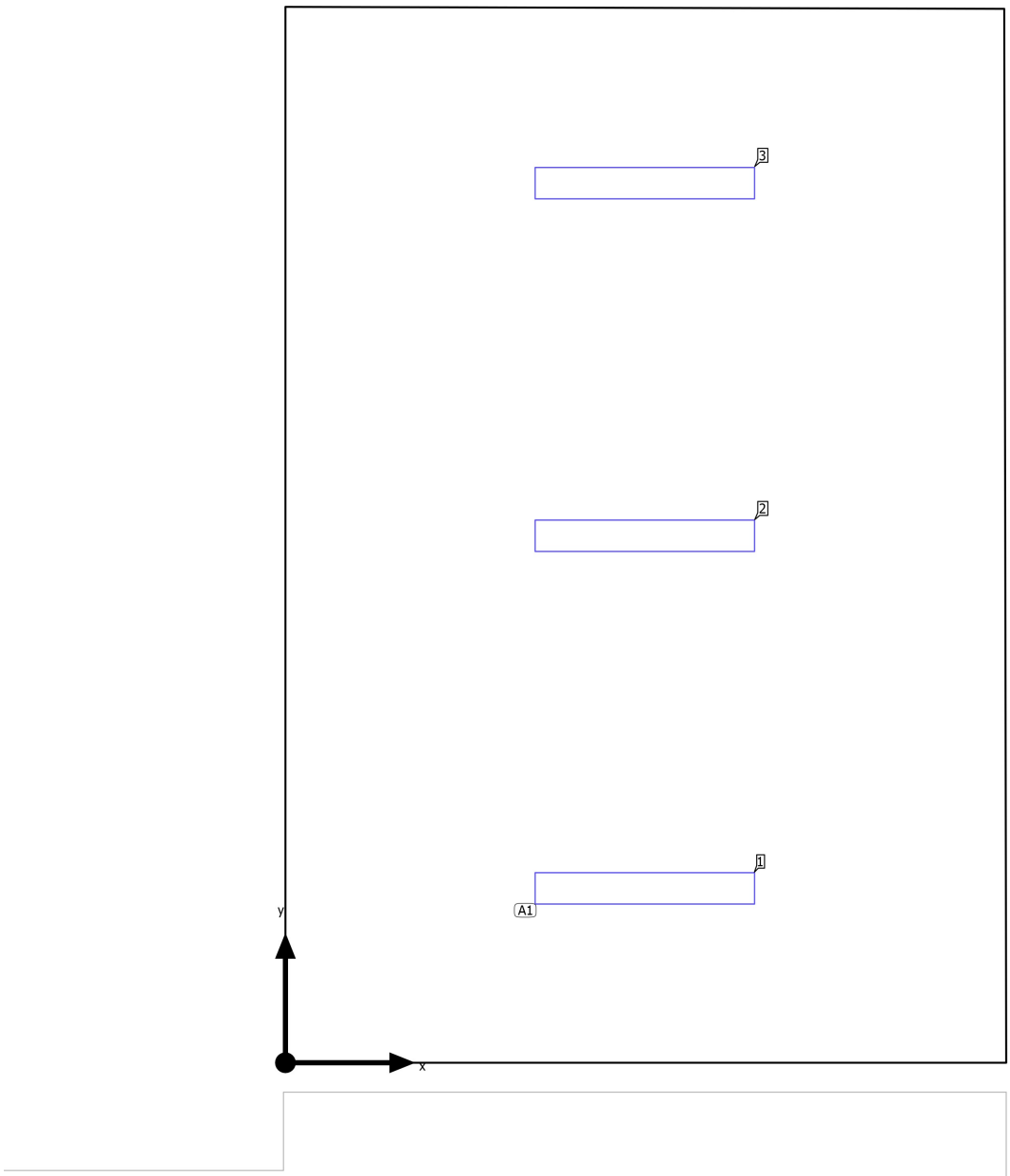
Utilisation profile: Health care premises - Staff rooms, Staff rooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
3	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Área do Colaborador

Luminaire layout plan



Building 1 · AF09 · Área do Colaborador

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
1.835 m	0.890 m	3.903 m	0.95	1
1.835 m	2.690 m	4.182 m	0.95	2
1.835 m	4.490 m	4.461 m	0.95	3

Building 1 · AF09 · Área do Colaborador

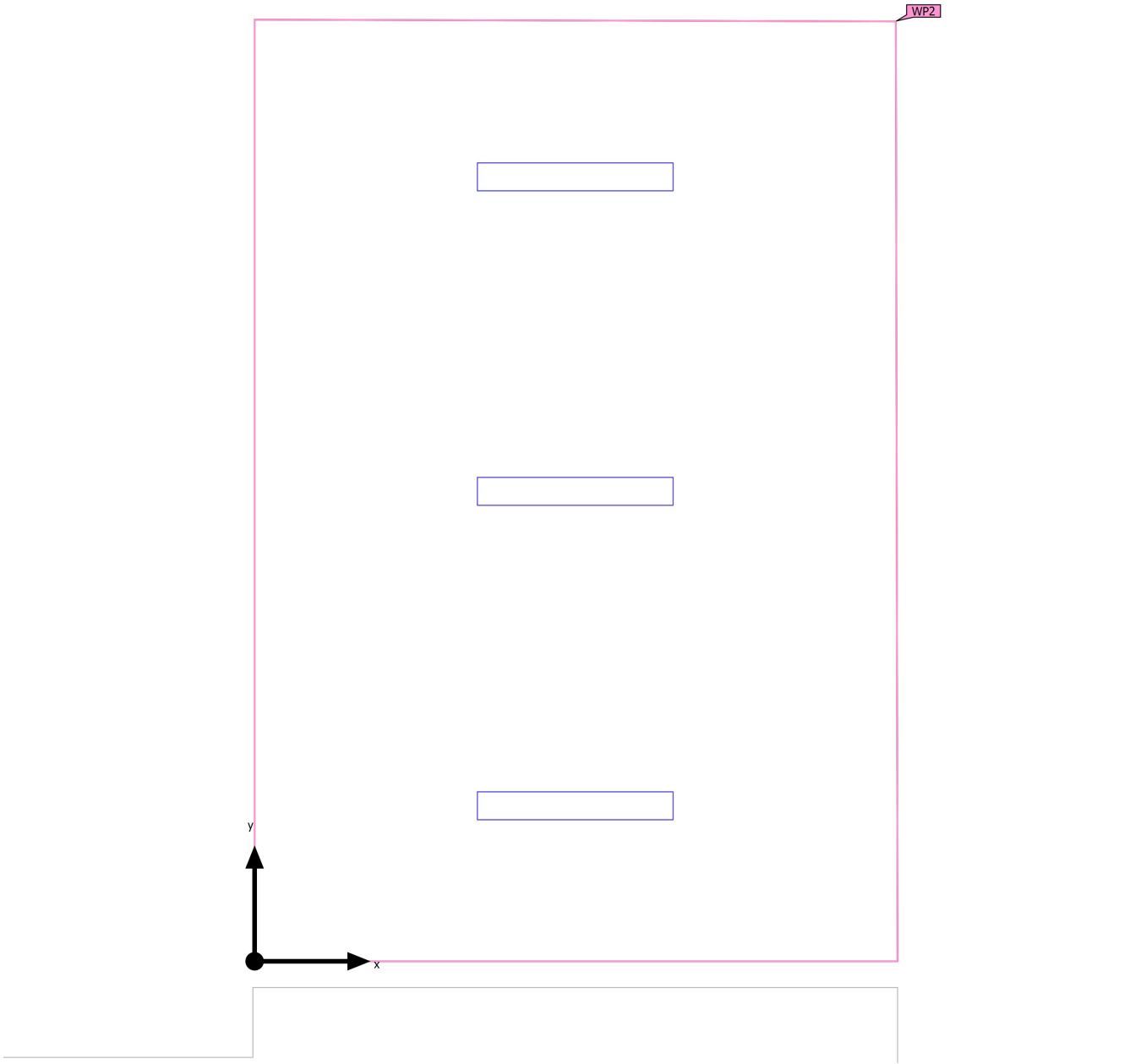
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
10560 lm	96.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
3	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Área do Colaborador (Light scene 1)

Calculation objects



Building 1 · AF09 · Área do Colaborador (Light scene 1)

Calculation objects

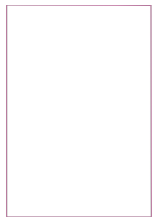
Working planes

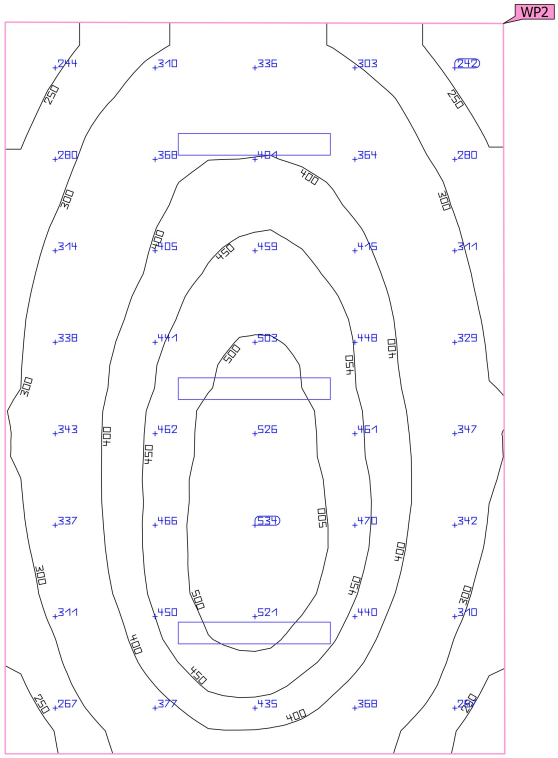
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Área do Colaborador) Perpendicular illuminance (adaptive) Height: 1.550 m, Wall zone: 0.000 m	377 lx (≥ 300 lx) ✓	213 lx	535 lx	0.56	0.40	WP2

Utilisation profile: Health care premises - Staff rooms, Staff rooms

Building 1 · AF09 · Área do Colaborador (Light scene 1)

Working plane (Área do Colaborador)



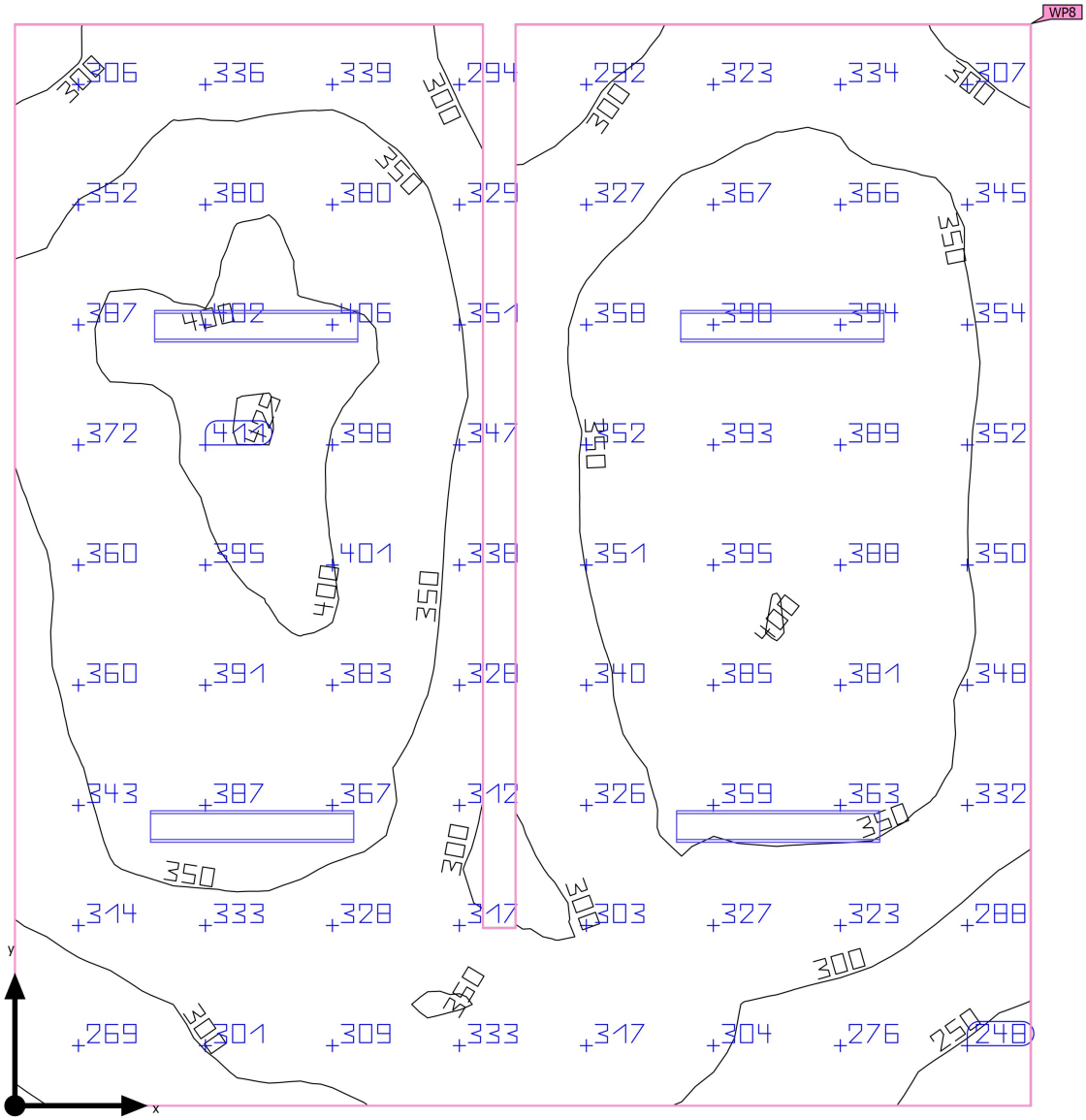


Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Área do Colaborador) Perpendicular illuminance (adaptive) Height: 1.550 m, Wall zone: 0.000 m	377 lx (≥ 300 lx) ✓	213 lx	535 lx	0.56	0.40	WP2

Utilisation profile: Health care premises - Staff rooms, Staff rooms

Building 1 · AF09 · Depósito 1 (Light scene 1)

Summary



Ground area: 32.48 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 5.283 m - 6.207 m | Mounting height: 5.512 m

Building 1 · AF09 · Depósito 1 (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	348 lx	≥ 200 lx	✓	WP8
	g_1	0.66	-	-	WP8
Consumption values	Consumption	21 kWh/a	max. 1150 kWh/a	✓	
Room	Lighting power density	3.94 W/m²	-	-	
		1.13 W/m²/100 lx	-	-	

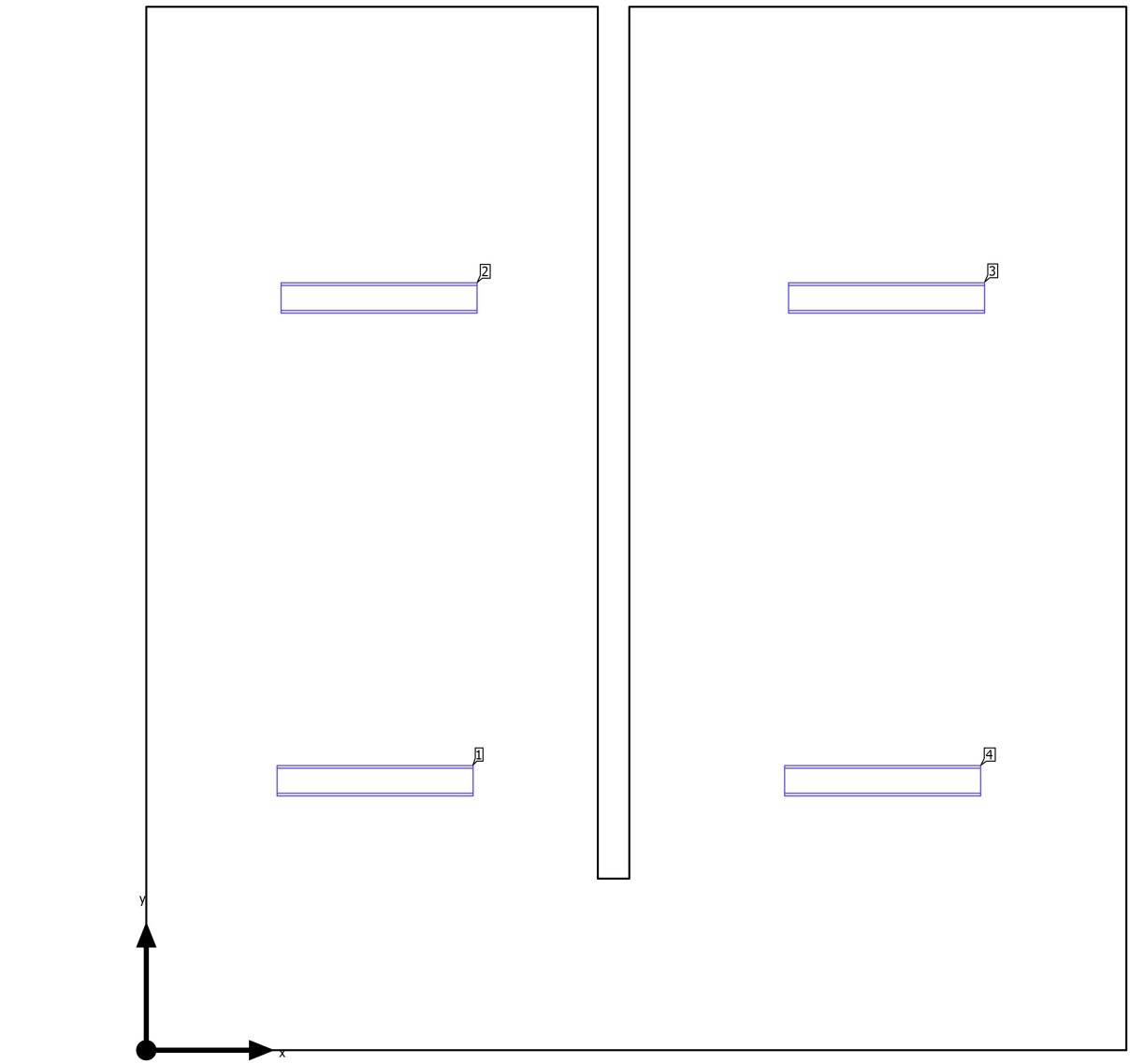
Utilisation profile: Offices, Archives

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Depósito 1

Luminaire layout plan



Building 1 · AF09 · Depósito 1

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
1.308 m	1.531 m	5.512 m	0.95	1
1.330 m	4.289 m	5.512 m	0.95	2
4.230 m	4.289 m	5.512 m	0.95	3
4.208 m	1.531 m	5.512 m	0.95	4

Building 1 · AF09 · Depósito 1

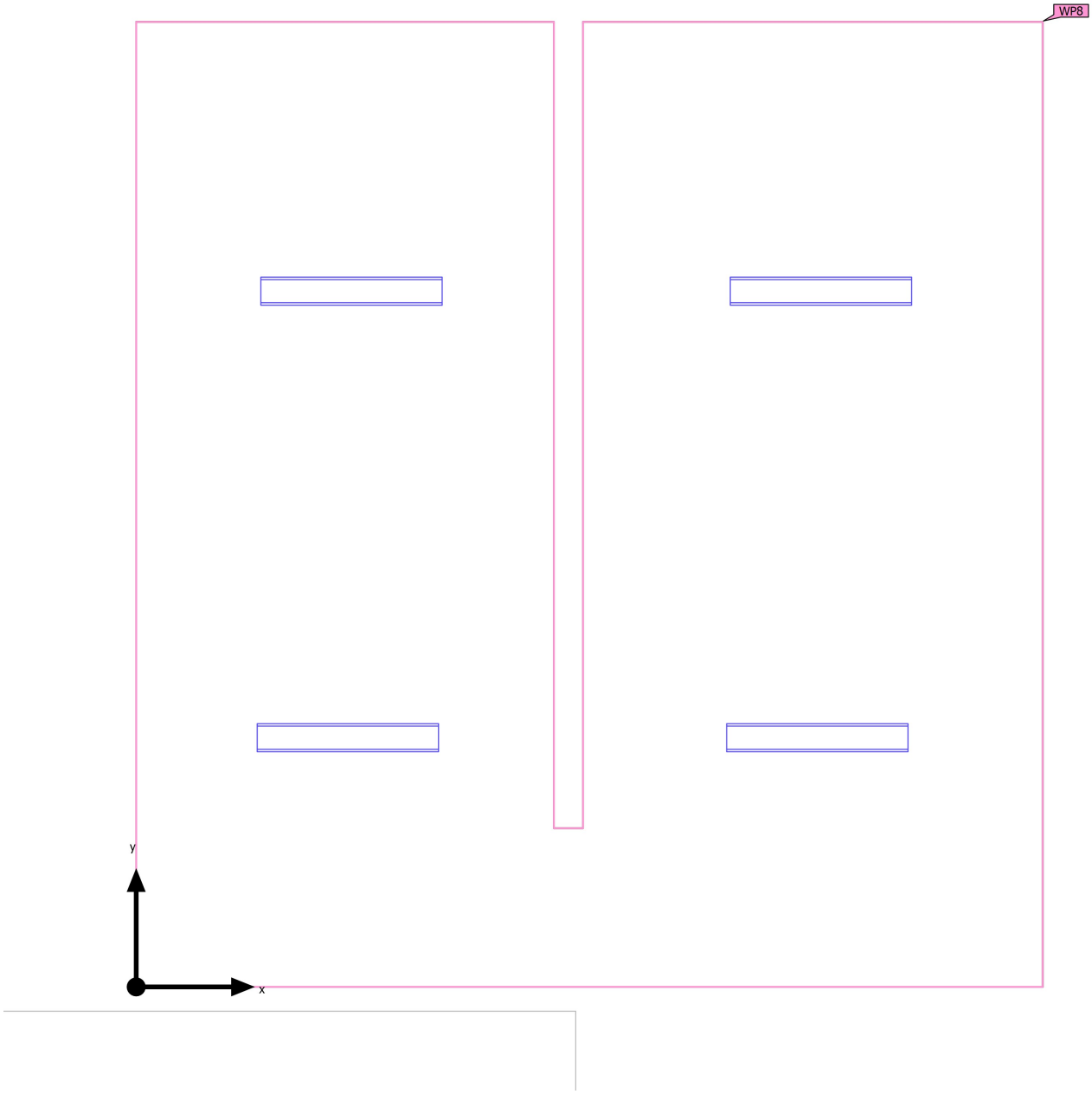
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
14080 lm	128.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Depósito 1 (Light scene 1)

Calculation objects



Building 1 · AF09 · Depósito 1 (Light scene 1)

Calculation objects

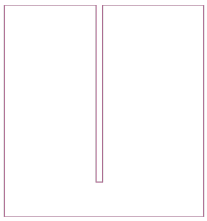
Working planes

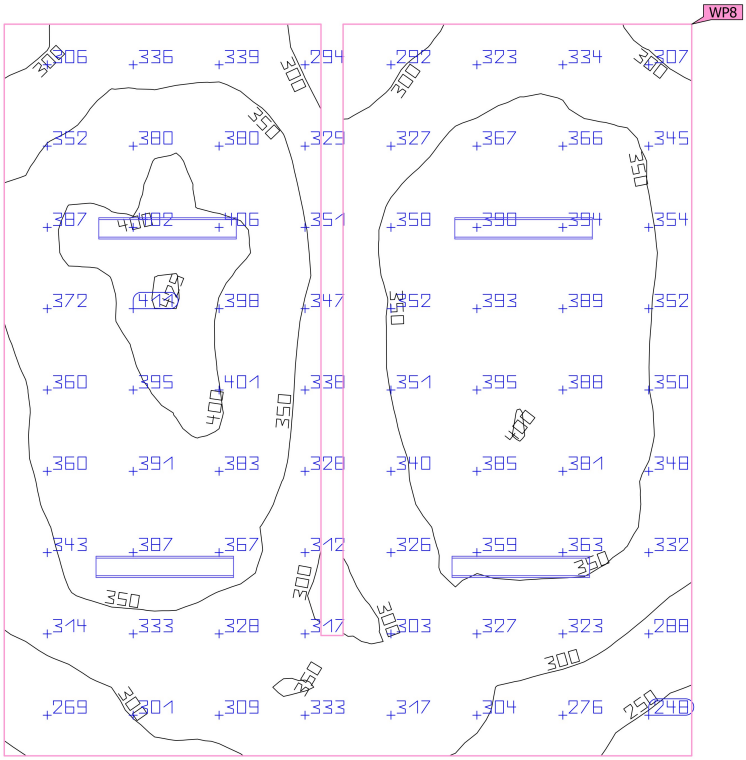
Properties	$\bar{E}$ (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito 1) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	348 lx (≥ 200 lx) ✓	228 lx	426 lx	0.66	0.54	WP8

Utilisation profile: Offices, Archives

Building 1 · AF09 · Depósito 1 (Light scene 1)

Working plane (Depósito 1)



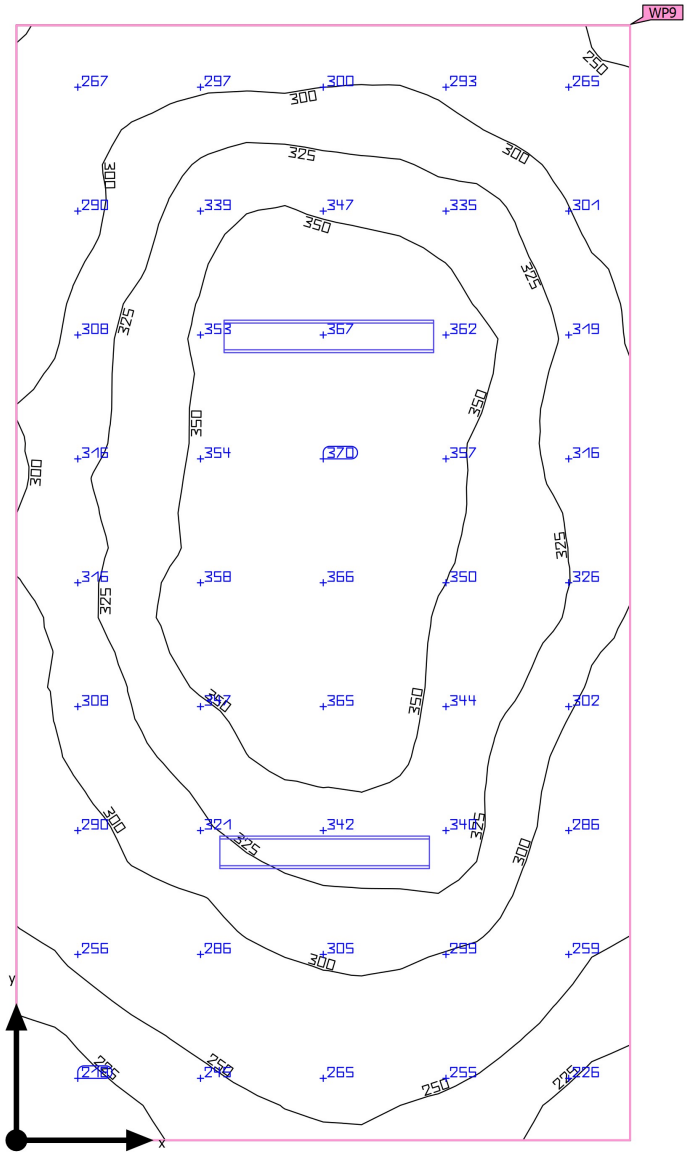


Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito 1) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	348 lx (≥ 200 lx) ✓	228 lx	426 lx	0.66	0.54	WP8

Utilisation profile: Offices, Archives

Building 1 · AF09 · Depósito 2 (Light scene 1)

Summary



Ground area: 19.55 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 4.657 m | Mounting height: 5.512 m

Building 1 · AF09 · Depósito 2 (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	311 lx	≥ 200 lx	✓	WP9
	g_1	0.65	-	-	WP9
Consumption values	Consumption	11 kWh/a	max. 700 kWh/a	✓	
Room	Lighting power density	3.27 W/m²	-	-	
		1.05 W/m²/100 lx	-	-	

Utilisation profile: Offices, Archives

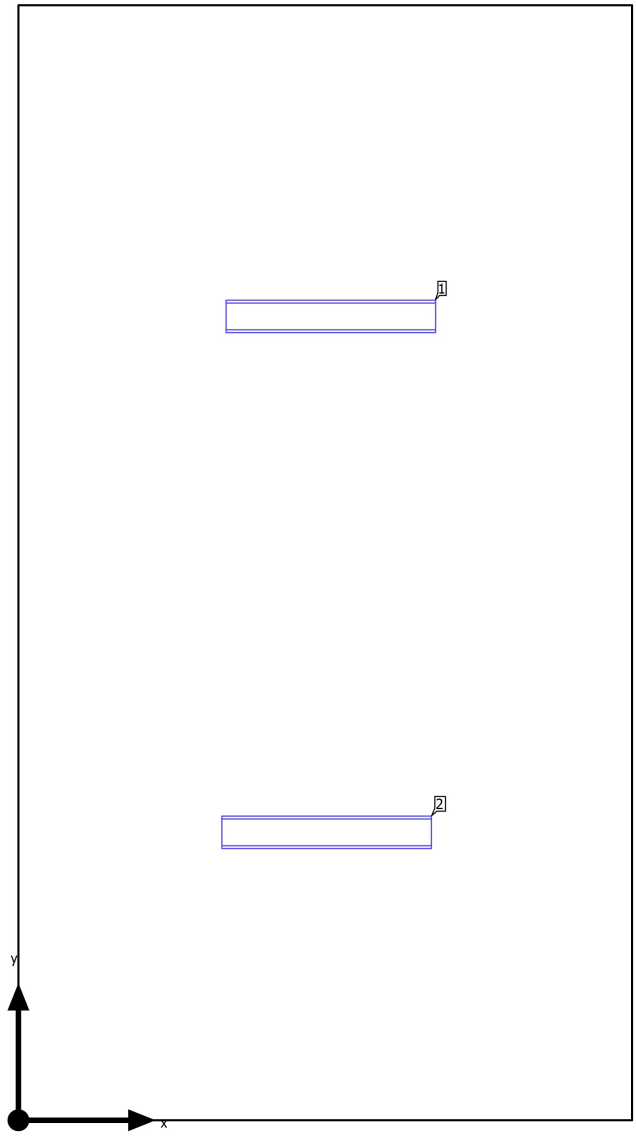
Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

DIALux

Building 1 · AF09 · Depósito 2

Luminaire layout plan



Building 1 · AF09 · Depósito 2

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
1.670 m	4.289 m	5.512 m	0.95	1
1.648 m	1.531 m	5.512 m	0.95	2

Building 1 · AF09 · Depósito 2

Luminaire list

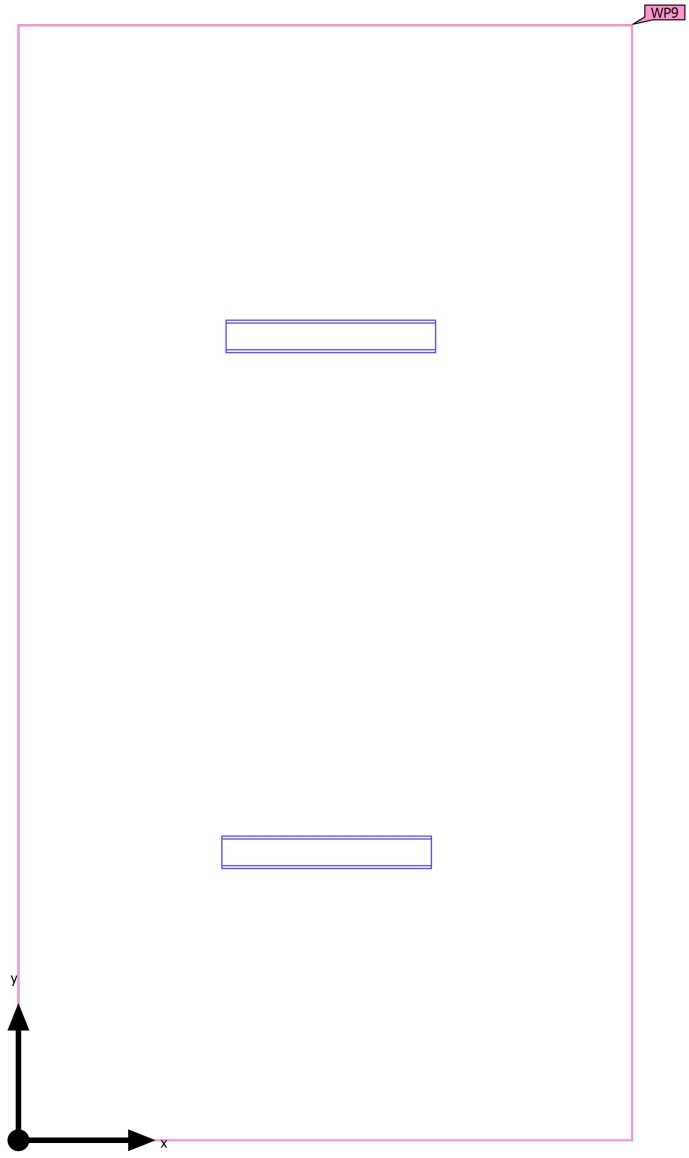
Φ_{total}	P_{total}	Luminous efficacy
7040 lm	64.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

DIALux

Building 1 · AF09 · Depósito 2 (Light scene 1)

Calculation objects



Building 1 · AF09 · Depósito 2 (Light scene 1)

Calculation objects

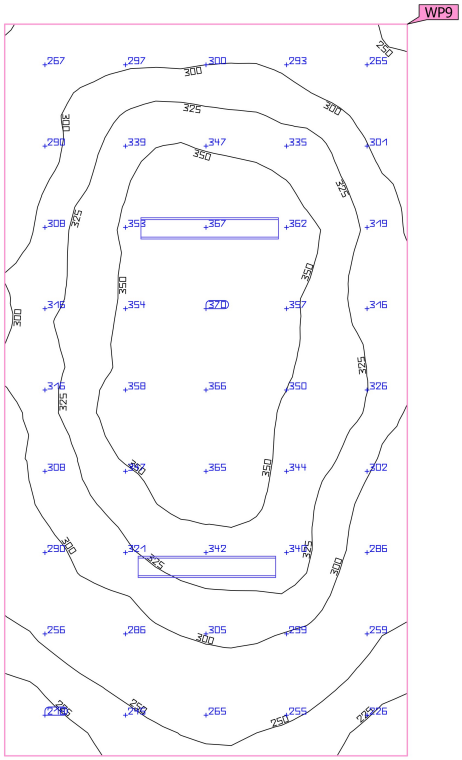
Working planes

Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito 2) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	311 lx (≥ 200 lx) ✓	203 lx	372 lx	0.65	0.55	WP9

Utilisation profile: Offices, Archives

Building 1 · AF09 · Depósito 2 (Light scene 1)

Working plane (Depósito 2)

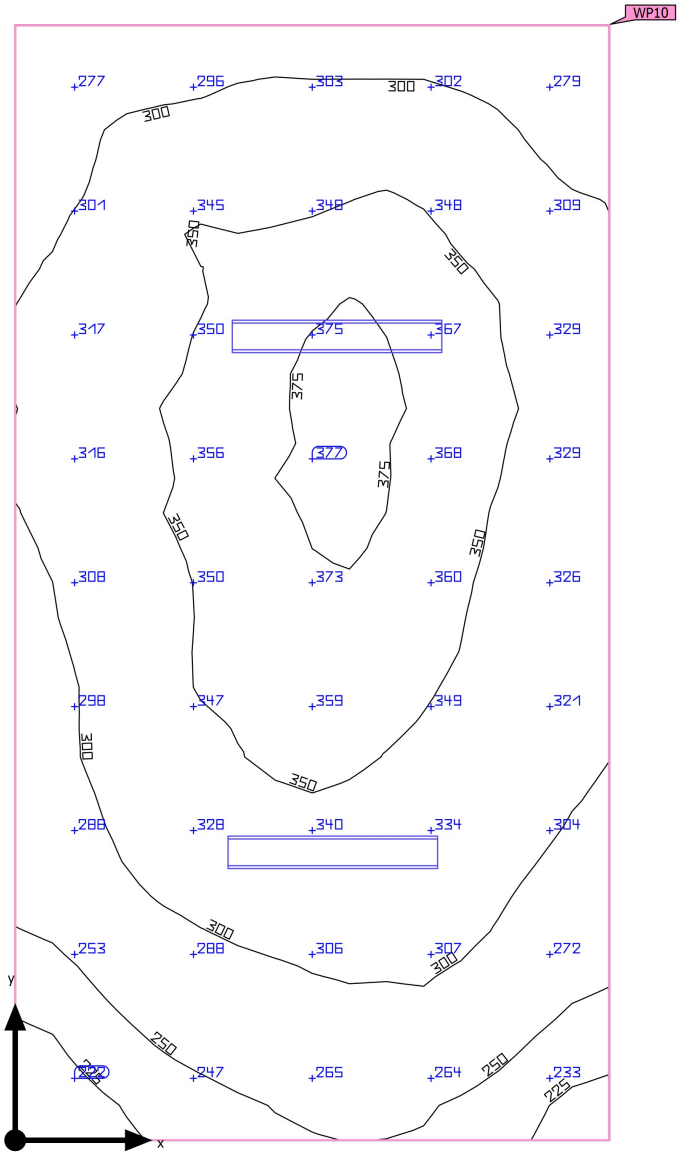


Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito 2) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	311 lx (≥ 200 lx) ✓	203 lx	372 lx	0.65	0.55	WP9

Utilisation profile: Offices, Archives

Building 1 · AF09 · Depósito 3 (Light scene 1)

Summary



Ground area: 18.92 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 6.207 m | Mounting height: 5.512 m

Building 1 · AF09 · Depósito 3 (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	316 lx	≥ 200 lx	✓	WP10
	g_1	0.66	-	-	WP10
Consumption values	Consumption	11 kWh/a	max. 700 kWh/a	✓	
Room	Lighting power density	3.38 W/m²	-	-	
		1.07 W/m²/100 lx	-	-	

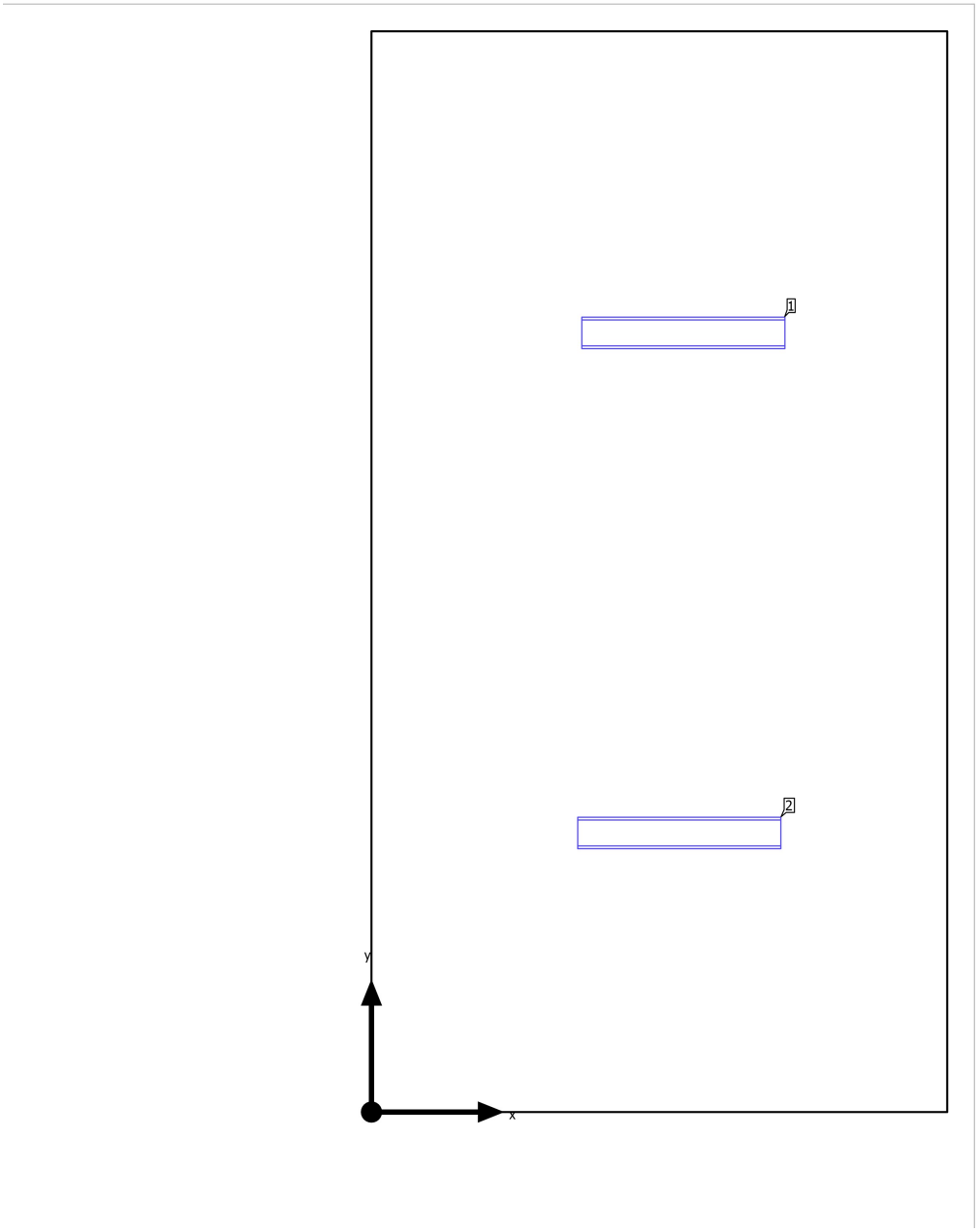
Utilisation profile: Offices, Archives

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Depósito 3

Luminaire layout plan



Building 1 · AF09 · Depósito 3

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
1.720 m	4.289 m	5.512 m	0.95	1
1.697 m	1.531 m	5.512 m	0.95	2

Building 1 · AF09 · Depósito 3

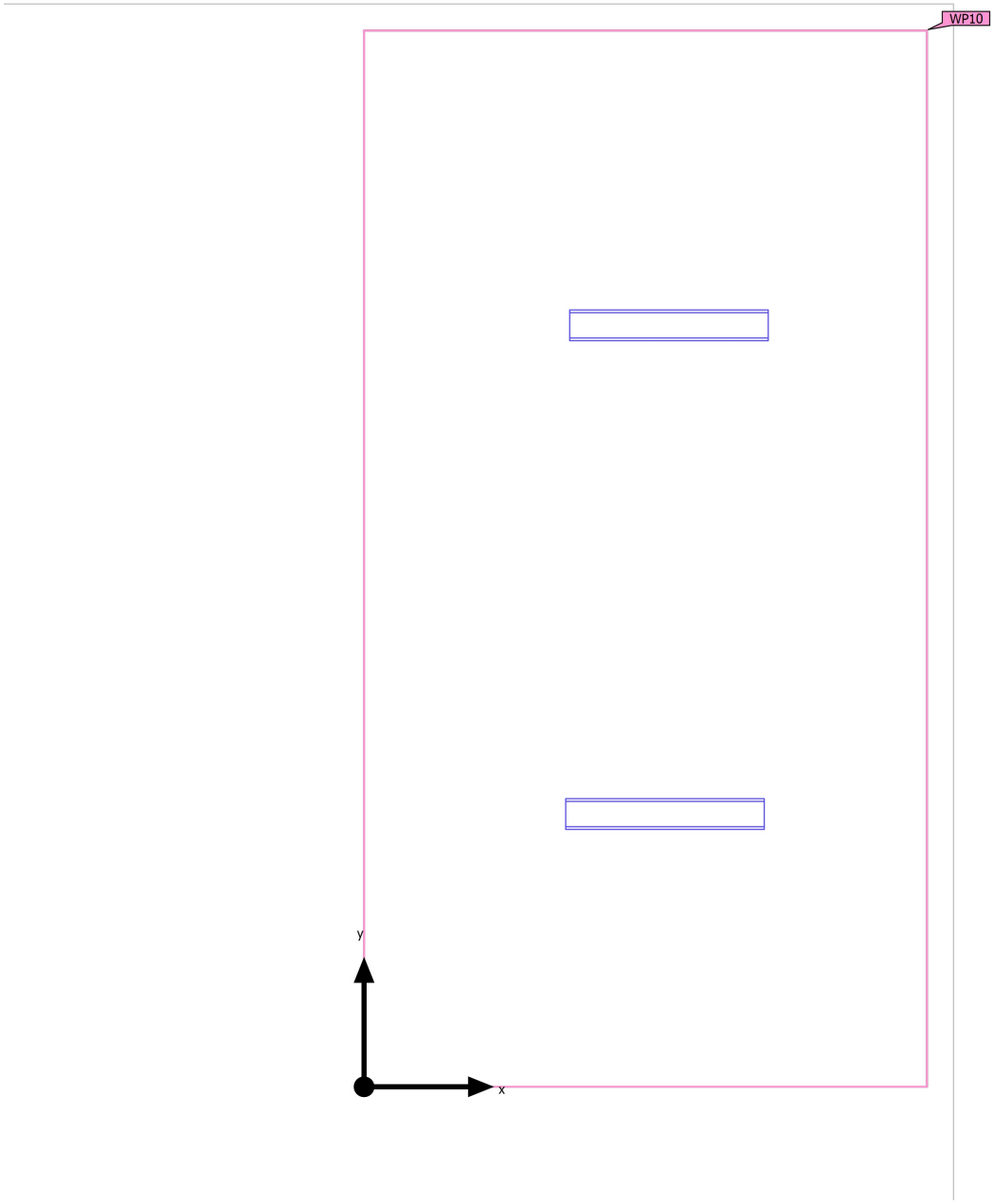
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
7040 lm	64.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Depósito 3 (Light scene 1)

Calculation objects



Building 1 · AF09 · Depósito 3 (Light scene 1)

Calculation objects

Working planes

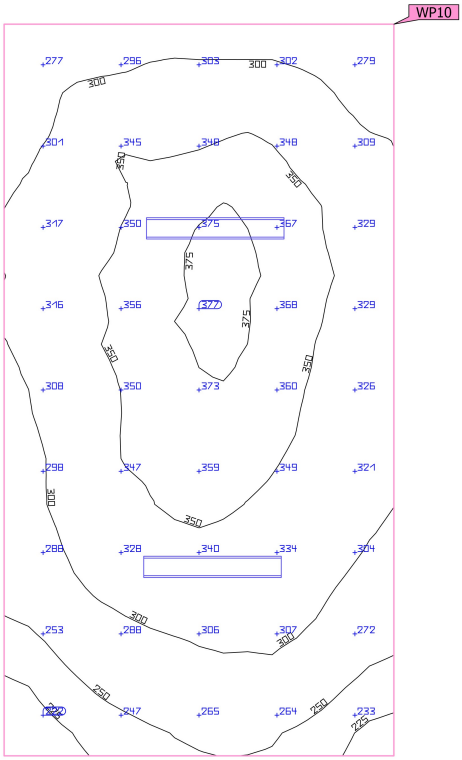
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito 3) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	316 lx (≥ 200 lx) ✓	208 lx	379 lx	0.66	0.55	WP10

Utilisation profile: Offices, Archives

DIALux

Building 1 · AF09 · Depósito 3 (Light scene 1)

Working plane (Depósito 3)

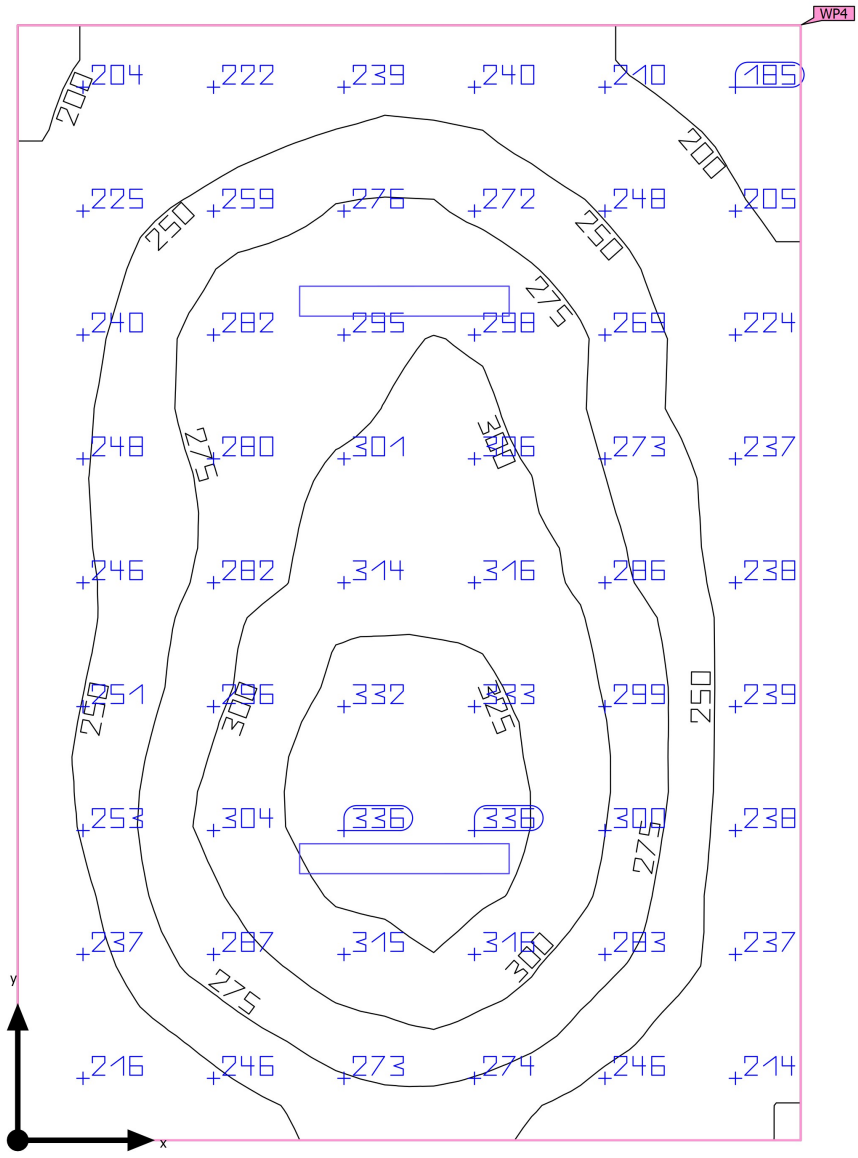


Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito 3) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	316 lx (≥ 200 lx) ✓	208 lx	379 lx	0.66	0.55	WP10

Utilisation profile: Offices, Archives

Building 1 · AF09 · Depósito (Light scene 1)

Summary



Ground area: 24.94 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 4.467 m | Mounting height: 4.799 m - 5.260 m

Building 1 · AF09 · Depósito (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	266 lx	≥ 200 lx	✓	WP4
	g_1	0.66	-	-	WP4
Consumption values	Consumption	11 kWh/a	max. 900 kWh/a	✓	
Room	Lighting power density	2.57 W/m²	-	-	
		0.96 W/m²/100 lx	-	-	

Utilisation profile: Offices, Archives

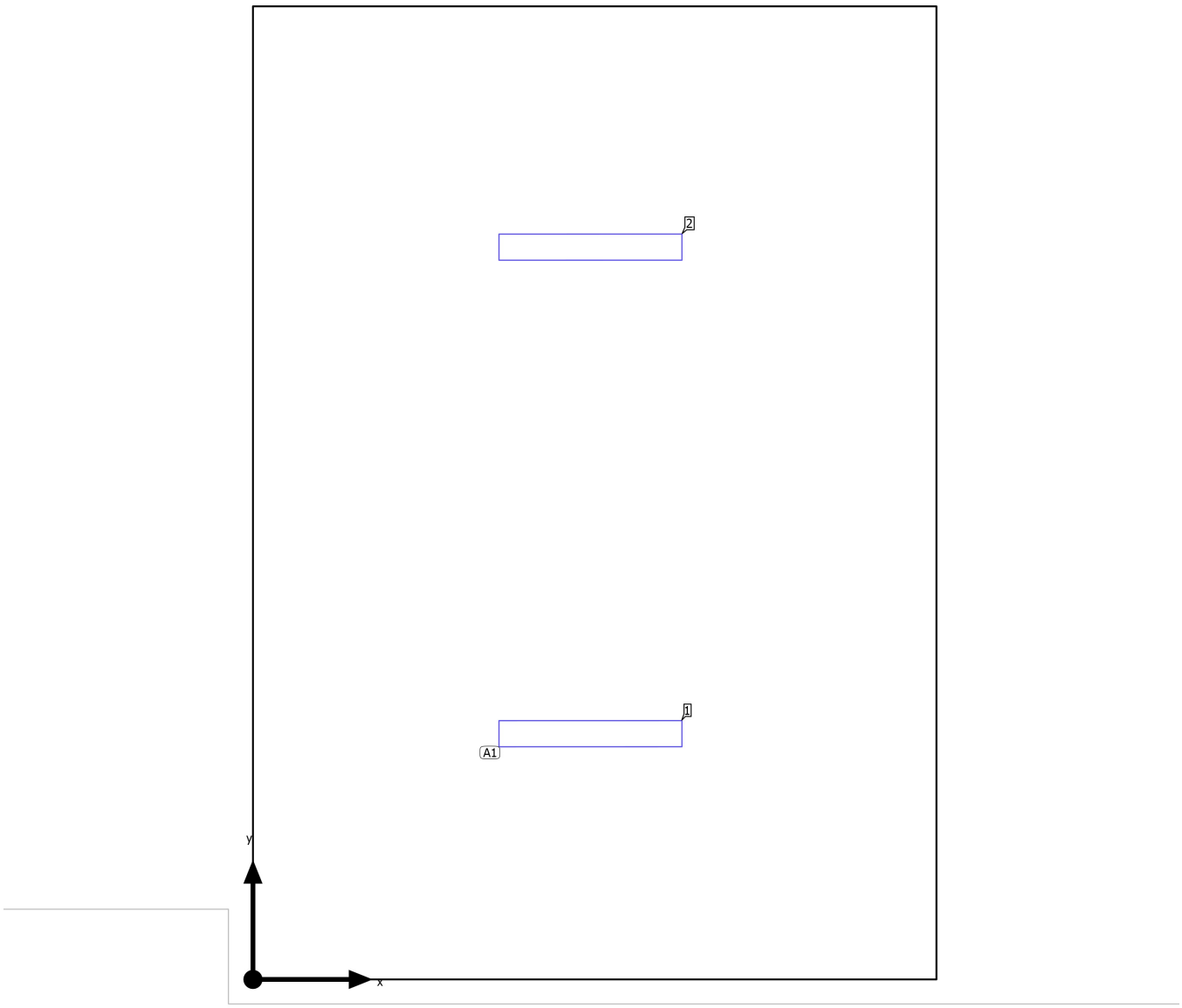
Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

DIALux

Building 1 · AF09 · Depósito

Luminaire layout plan



Building 1 · AF09 · Depósito

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
2.067 m	1.505 m	4.799 m	0.95	1
2.067 m	4.485 m	5.260 m	0.95	2

Building 1 · AF09 · Depósito

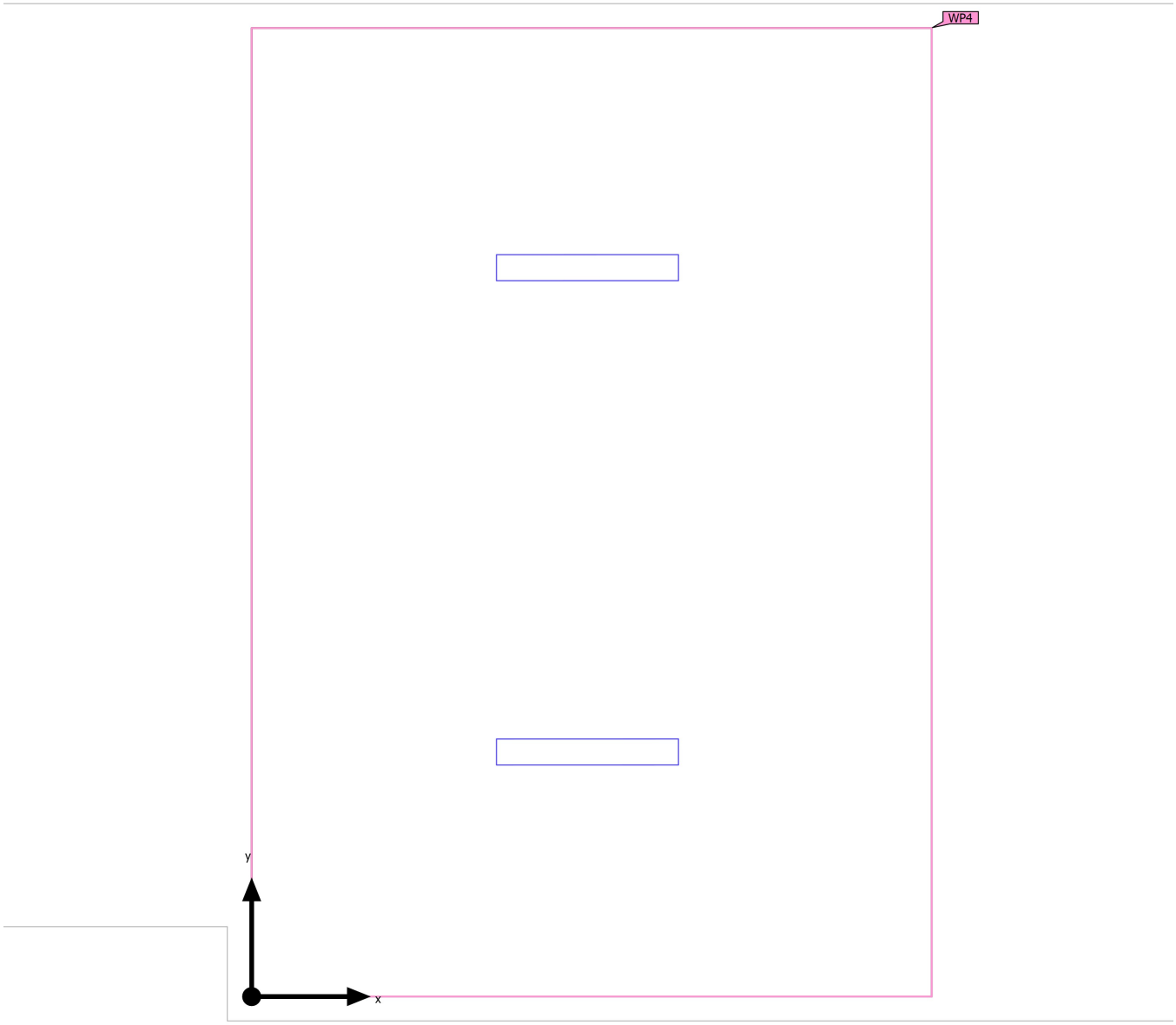
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
7040 lm	64.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Depósito (Light scene 1)

Calculation objects



Building 1 · AF09 · Depósito (Light scene 1)

Calculation objects

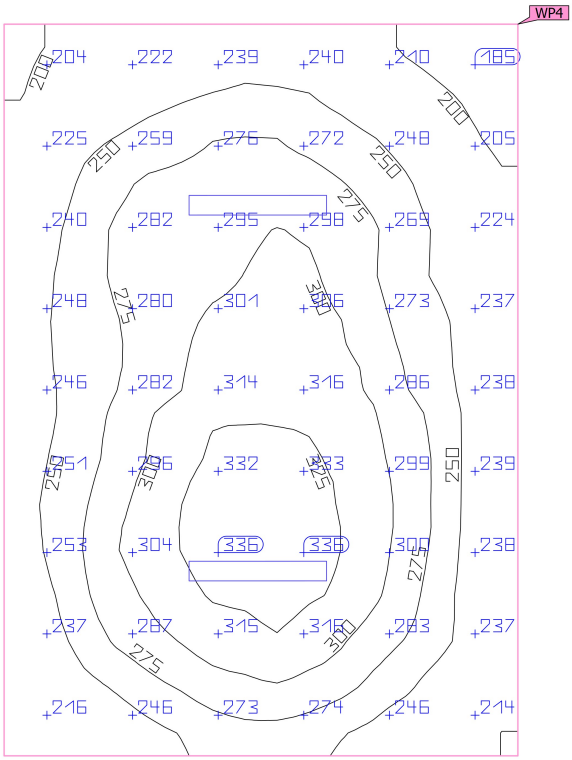
Working planes

Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito) Perpendicular illuminance (adaptive) Height: 1.830 m, Wall zone: 0.000 m	266 lx (≥ 200 lx) ✓	176 lx	341 lx	0.66	0.52	WP4

Utilisation profile: Offices, Archives

Building 1 · AF09 · Depósito (Light scene 1)

Working plane (Depósito)



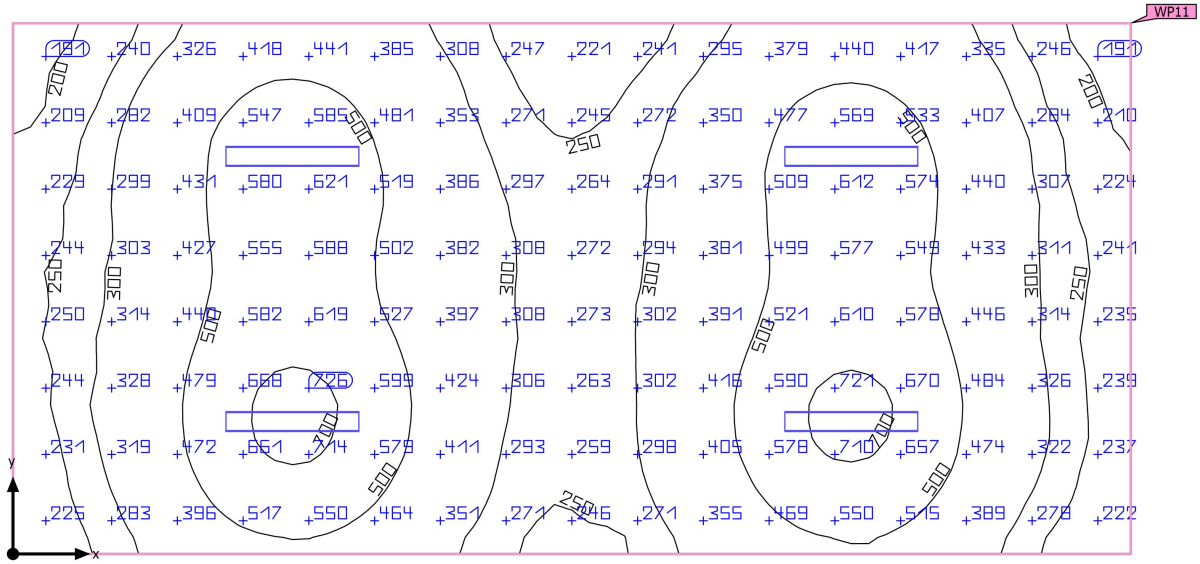
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Depósito) Perpendicular illuminance (adaptive) Height: 1.830 m, Wall zone: 0.000 m	266 lx (≥ 200 lx) ✓	176 lx	341 lx	0.66	0.52	WP4

Utilisation profile: Offices, Archives

DIALux

Building 1 · AF09 · Garagem (Light scene 1)

Summary



Ground area: 42.11 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 2.456 m - 4.350 m | Mounting height: 4.088 m - 4.260 m

Building 1 · AF09 · Garagem (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	400 lx	≥ 300 lx	✓	WP11
	g_1	0.45	-	-	WP11
Consumption values	Consumption	290 kWh/a	max. 1500 kWh/a	✓	
Room	Lighting power density	3.04 W/m²	-	-	
		0.76 W/m²/100 lx	-	-	

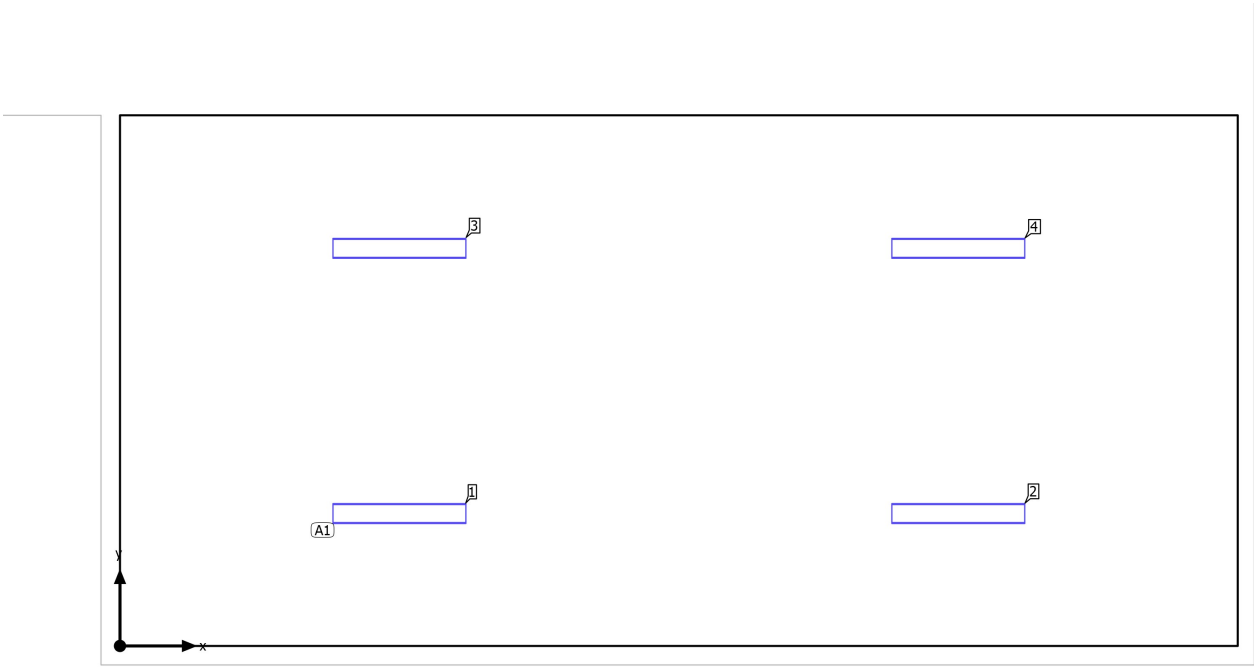
Utilisation profile: Industrial activities and crafts - Woodworking and processing, Work at joiner's bench, gluing, assembly

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Garagem

Luminaire layout plan



Building 1 · AF09 · Garagem

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
2.355 m	1.119 m	4.088 m	0.95	1
7.065 m	1.119 m	4.088 m	0.95	2
2.355 m	3.353 m	4.260 m	0.95	3
7.065 m	3.353 m	4.260 m	0.95	4

DIALux

Building 1 · AF09 · Garagem

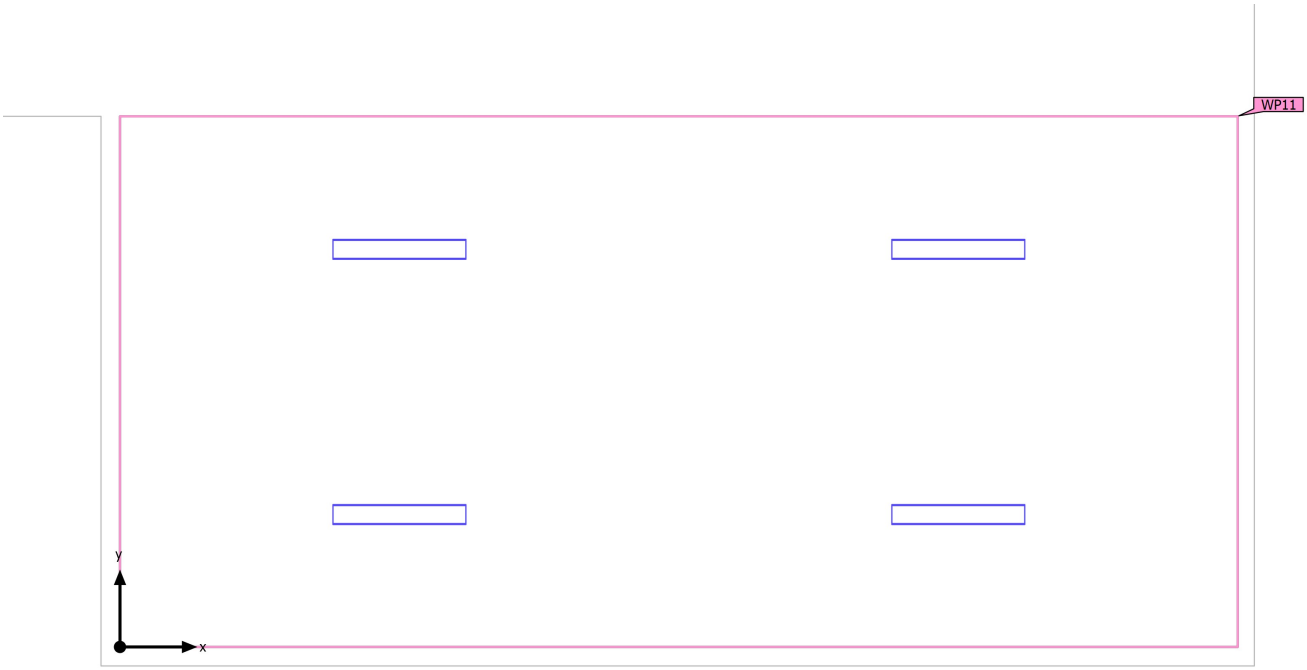
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
14080 lm	128.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Garagem (Light scene 1)

Calculation objects



Building 1 · AF09 · Garagem (Light scene 1)

Calculation objects

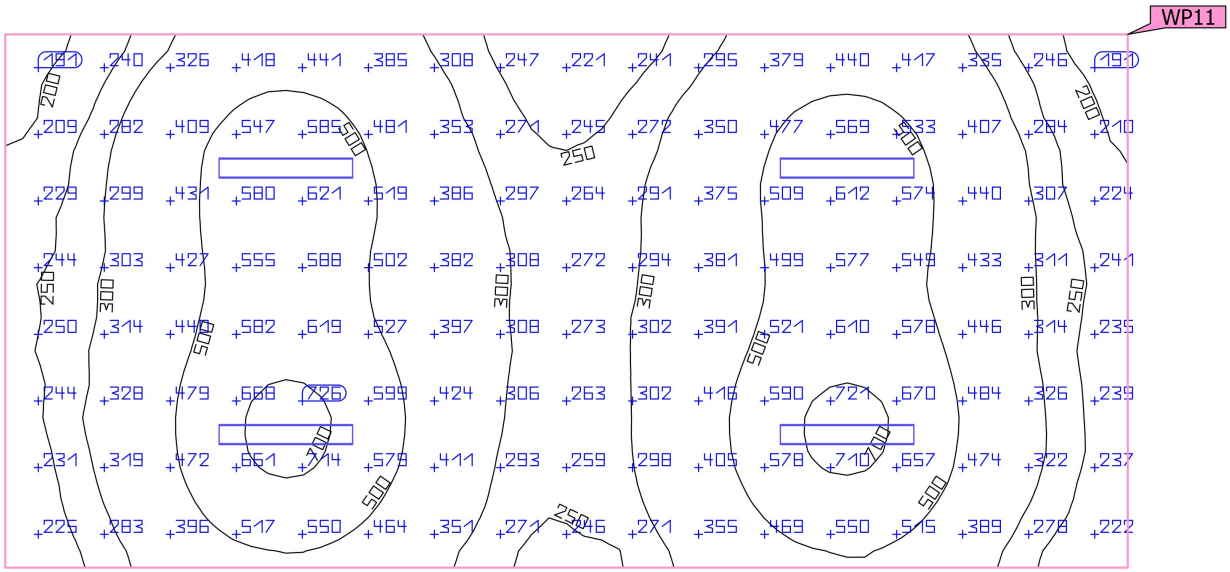
Working planes

Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Garagem) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	400 lx (≥ 300 lx) ✓	178 lx	744 lx	0.45	0.24	WP11

Utilisation profile: Industrial activities and crafts - Woodworking and processing, Work at joiner's bench, gluing, assembly

Building 1 · AF09 · Garagem (Light scene 1)

Working plane (Garagem)



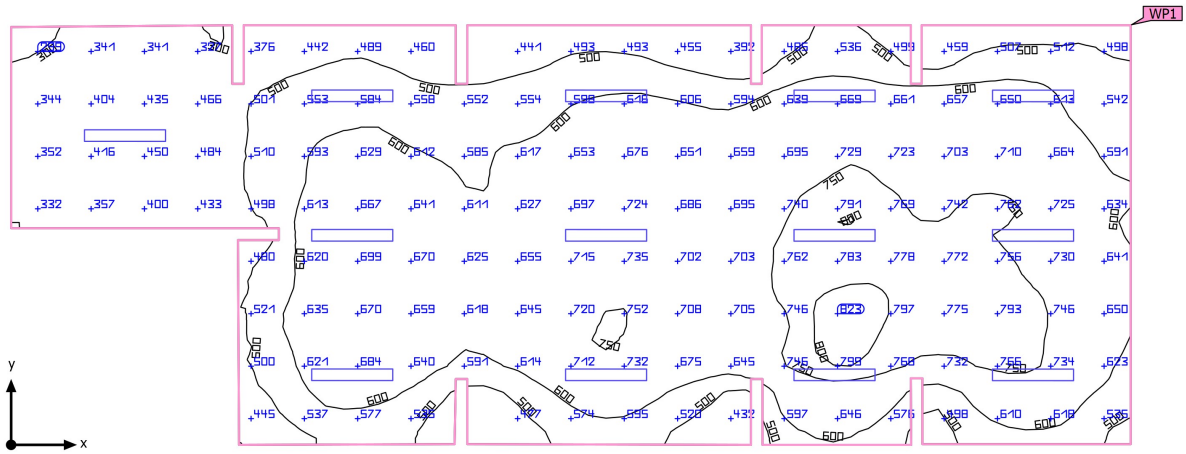
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Garagem) Perpendicular illuminance (adaptive) Height: 2.350 m, Wall zone: 0.000 m	400 lx (≥ 300 lx) ✓	178 lx	744 lx	0.45	0.24	WP11

Utilisation profile: Industrial activities and crafts - Woodworking and processing, Work at joiner's bench, gluing, assembly

DIALux

Building 1 · AF09 · Refeitório (Light scene 1)

Summary



Ground area: 79.20 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 3.092 m - 3.977 m | Mounting height: 3.227 m - 3.821 m

Building 1 · AF09 · Refeitório (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	603 lx	≥ 300 lx	✓	WP1
	g_1	0.45	-	-	WP1
Consumption values	Consumption	1600 kWh/a	max. 2800 kWh/a	✓	
Room	Lighting power density	5.25 W/m²	-	-	
		0.87 W/m²/100 lx	-	-	

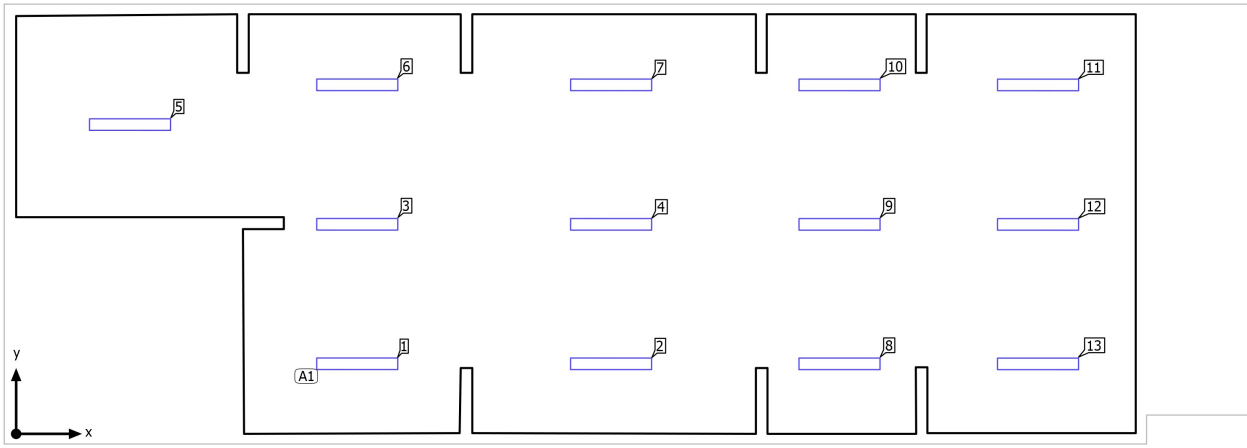
Utilisation profile: Places of public assembly - Restaurants and hotels, Buffet

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
13	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Refeitório

Luminaire layout plan



Building 1 · AF09 · Refeitório

Luminaire layout plan

Not yet a DIALux member - - 3005 RS 4000K 32W 700mA (1487-Gba)
1x LED 4000K

X	Y	Mounting height	MF	Luminaire
4.715 m	0.969 m	3.231 m	0.95	1
8.223 m	0.968 m	3.230 m	0.95	2
4.715 m	2.897 m	3.526 m	0.95	3
8.224 m	2.896 m	3.524 m	0.95	4
1.574 m	4.275 m	3.821 m	0.95	5
4.715 m	4.824 m	3.820 m	0.95	6
8.224 m	4.824 m	3.818 m	0.95	7
11.380 m	0.968 m	3.228 m	0.95	8
11.381 m	2.896 m	3.523 m	0.95	9
11.381 m	4.823 m	3.817 m	0.95	10
14.125 m	4.823 m	3.816 m	0.95	11
14.125 m	2.895 m	3.522 m	0.95	12
14.124 m	0.967 m	3.227 m	0.95	13

Building 1 · AF09 · Refeitório

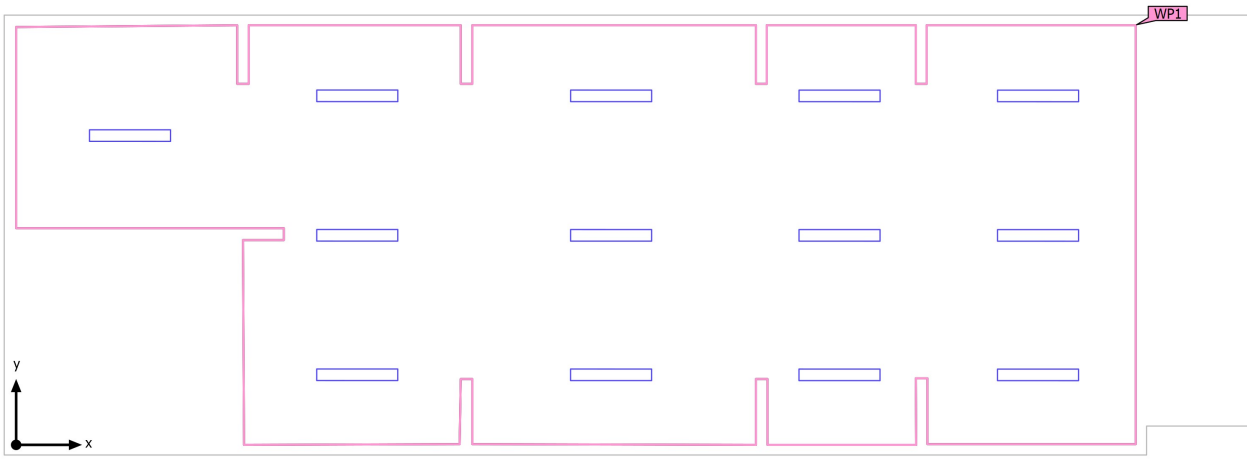
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
45760 lm	416.0 W	110.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
13	Not yet a DIALux member		3005 RS 4000K 32W 700mA (1487-Gba)	32.0 W	3520 lm	110.0 lm/W

Building 1 · AF09 · Refeitório (Light scene 1)

Calculation objects



Building 1 · AF09 · Refeitório (Light scene 1)

Calculation objects

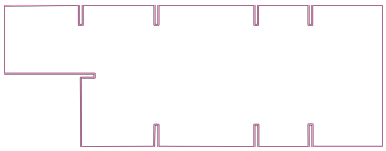
Working planes

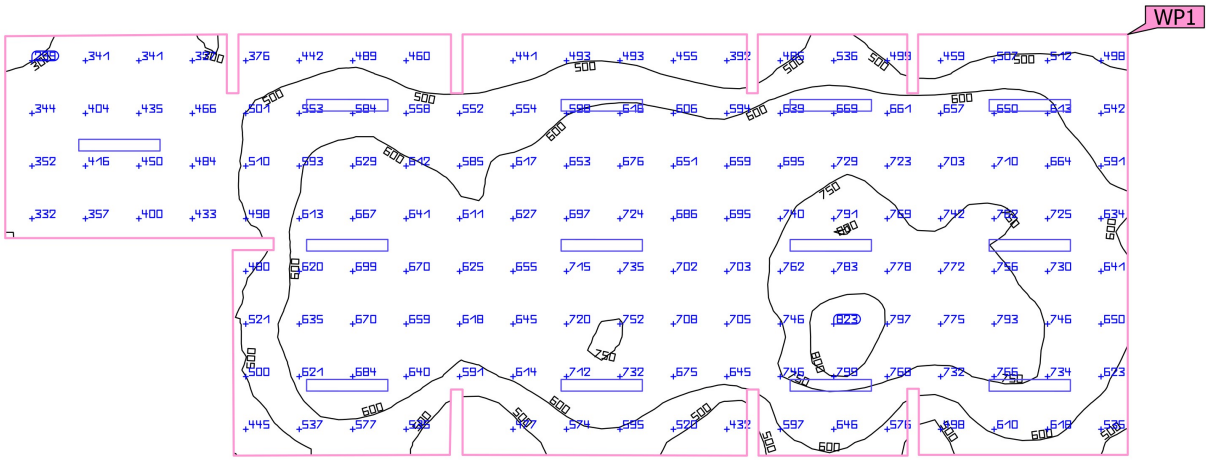
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Refeitório) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	603 lx (≥ 300 lx) ✓	274 lx	824 lx	0.45	0.33	WP1

Utilisation profile: Places of public assembly - Restaurants and hotels, Buffet

Building 1 · AF09 · Refeitório (Light scene 1)

Working plane (Refeitório)



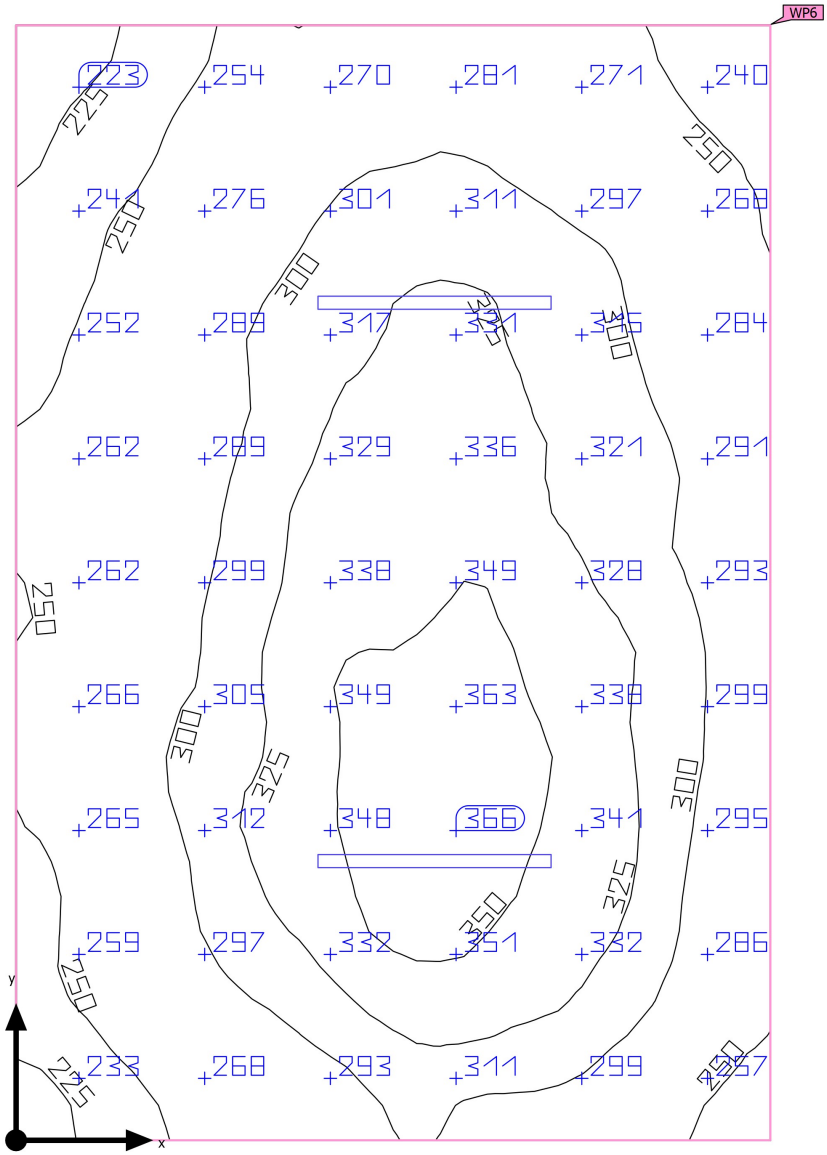


Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Refeitório) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	603 lx (≥ 300 lx) ✓	274 lx	824 lx	0.45	0.33	WP1

Utilisation profile: Places of public assembly - Restaurants and hotels, Buffet

Building 1 · AF09 · Vestiário Fem. (Light scene 1)

Summary



DIALux

Building 1 · AF09 · Vestiário Fem. (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	297 lx	≥ 200 lx	✓	WP6
	g_1	0.71	-	-	WP6
Consumption values	Consumption	66 kWh/a	max. 850 kWh/a	✓	
Room	Lighting power density	3.32 W/m²	-	-	
		1.12 W/m²/100 lx	-	-	

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

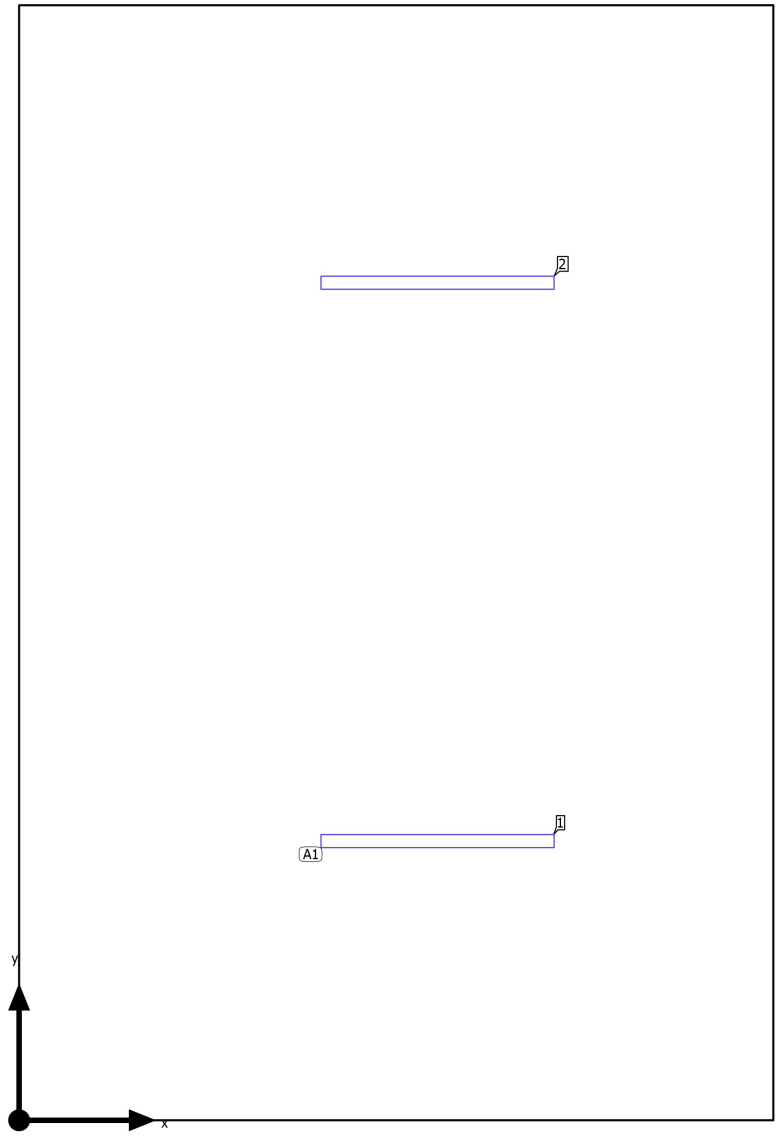
Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm	111.5 lm/W

DIALux

Building 1 · AF09 · Vestiário Fem.

Luminaire layout plan



Building 1 · AF09 · Vestiário Fem.

Luminaire layout plan

Not yet a DIALux member - - LPT 27 LED 1xLED 36W
1x LED

X	Y	Mounting height	MF	Luminaire
2.244 m	1.497 m	4.796 m	0.95	1
2.244 m	4.492 m	5.260 m	0.95	2

Building 1 · AF09 · Vestiário Fem.

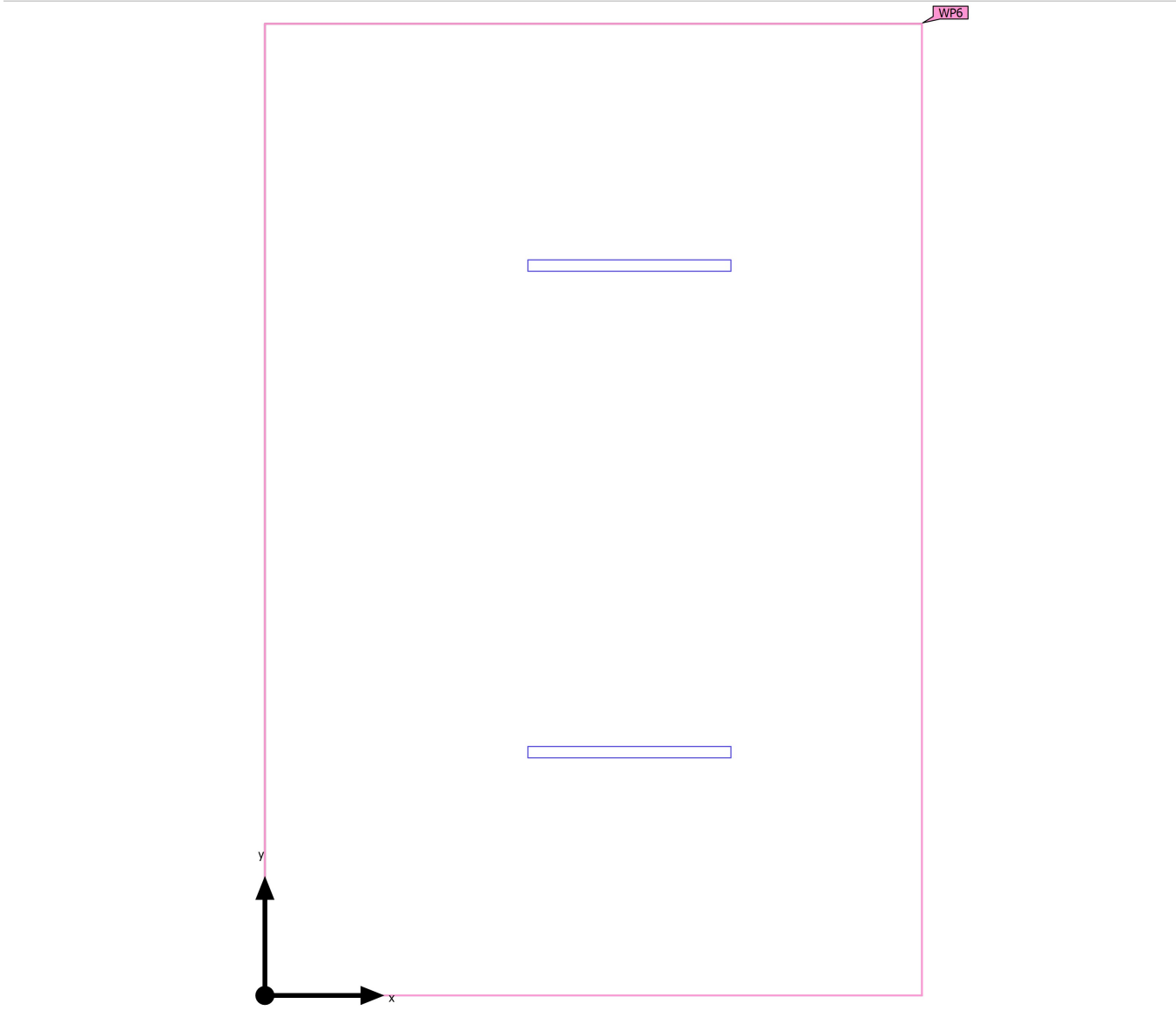
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
8966 lm	80.4 W	111.5 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm	111.5 lm/W

Building 1 · AF09 · Vestiário Fem. (Light scene 1)

Calculation objects



Building 1 · AF09 · Vestiário Fem. (Light scene 1)

Calculation objects

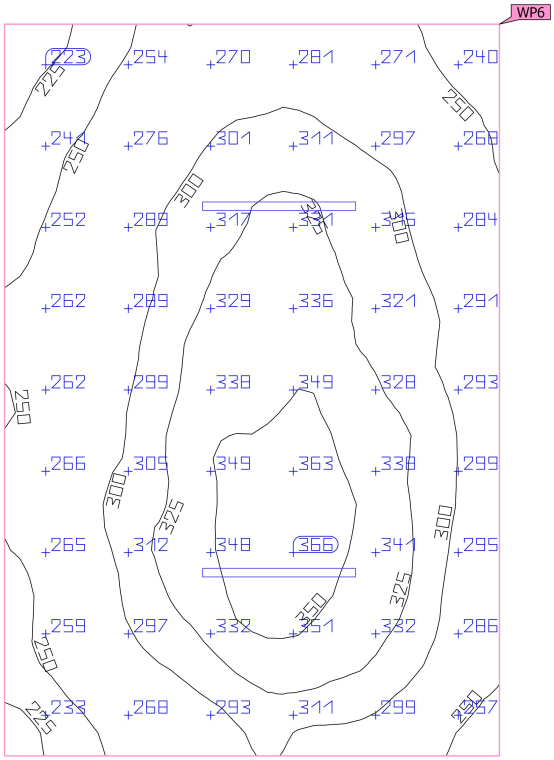
Working planes

Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Vestiário Fem.) Perpendicular illuminance (adaptive) Height: 2.090 m, Wall zone: 0.000 m	297 lx (≥ 200 lx) ✓	212 lx	367 lx	0.71	0.58	WP6

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Building 1 · AF09 · Vestiário Fem. (Light scene 1)

Working plane (Vestiário Fem.)



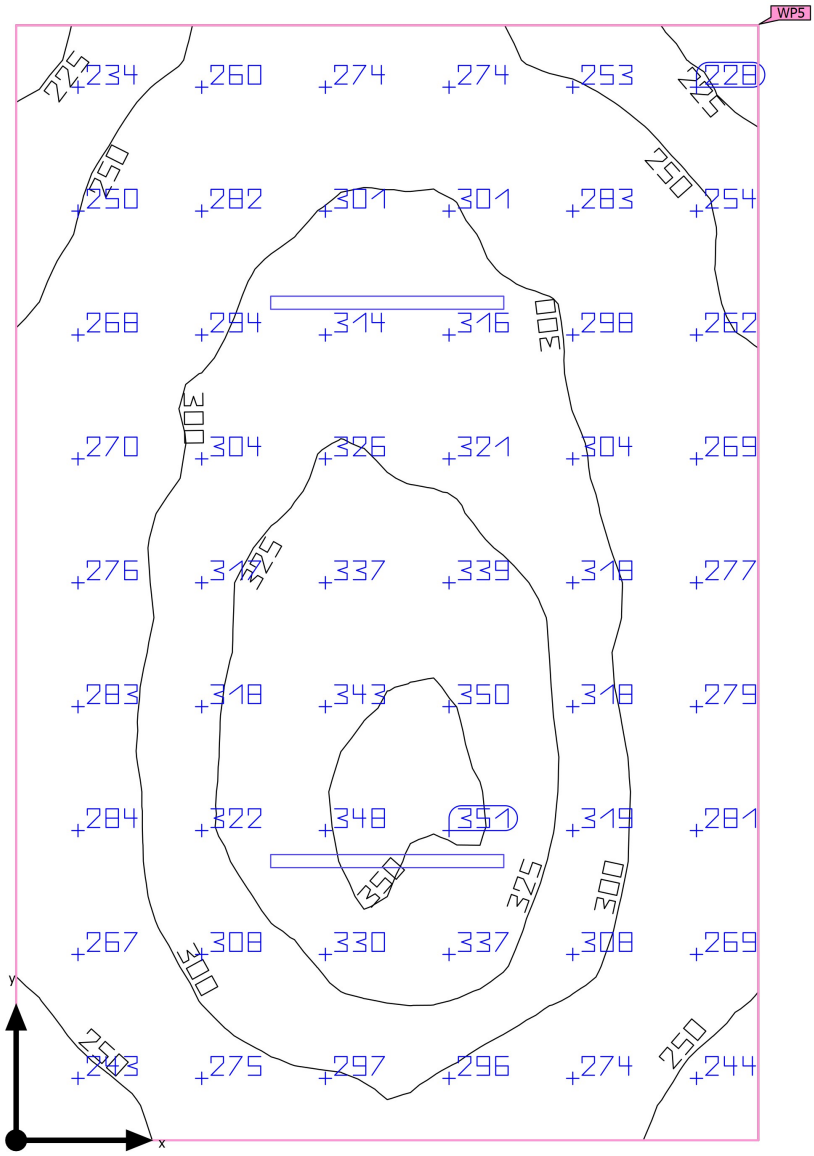
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Vestiário Fem.) Perpendicular illuminance (adaptive) Height: 2.090 m, Wall zone: 0.000 m	297 lx (≥ 200 lx) ✓	212 lx	367 lx	0.71	0.58	WP6

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

DIALux

Building 1 · AF09 · Vestiário Masc. (Light scene 1)

Summary



Ground area: 23.80 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 3.412 m - 4.338 m | Mounting height: 4.796 m - 5.260 m

Building 1 · AF09 · Vestiário Masc. (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	293 lx	≥ 200 lx	✓	WP5
	g_1	0.74	-	-	WP5
Consumption values	Consumption	66 kWh/a	max. 850 kWh/a	✓	
Room	Lighting power density	3.38 W/m²	-	-	
		1.15 W/m²/100 lx	-	-	

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

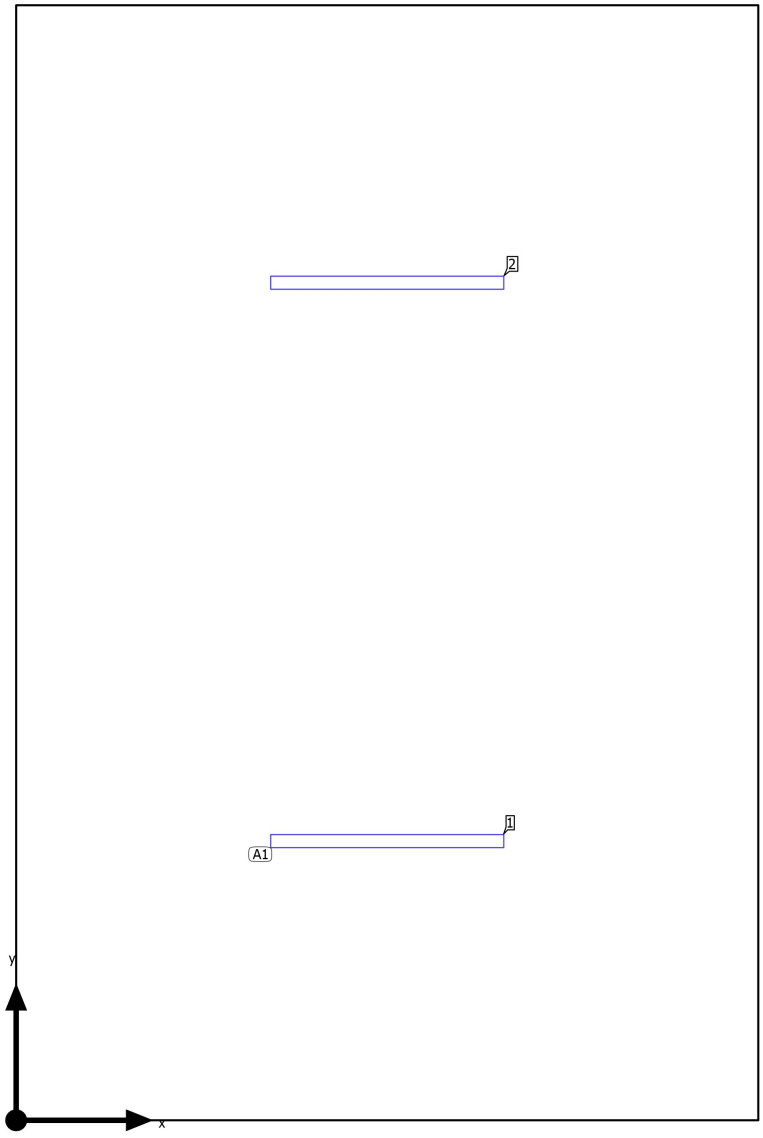
Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm	111.5 lm/W

DIALux

Building 1 · AF09 · Vestiário Masc.

Luminaire layout plan



Building 1 · AF09 · Vestiário Masc.

Luminaire layout plan

Not yet a DIALux member - - LPT 27 LED 1xLED 36W
1x LED

X	Y	Mounting height	MF	Luminaire
1.990 m	1.497 m	4.796 m	0.95	1
1.990 m	4.492 m	5.260 m	0.95	2

Building 1 · AF09 · Vestiário Masc.

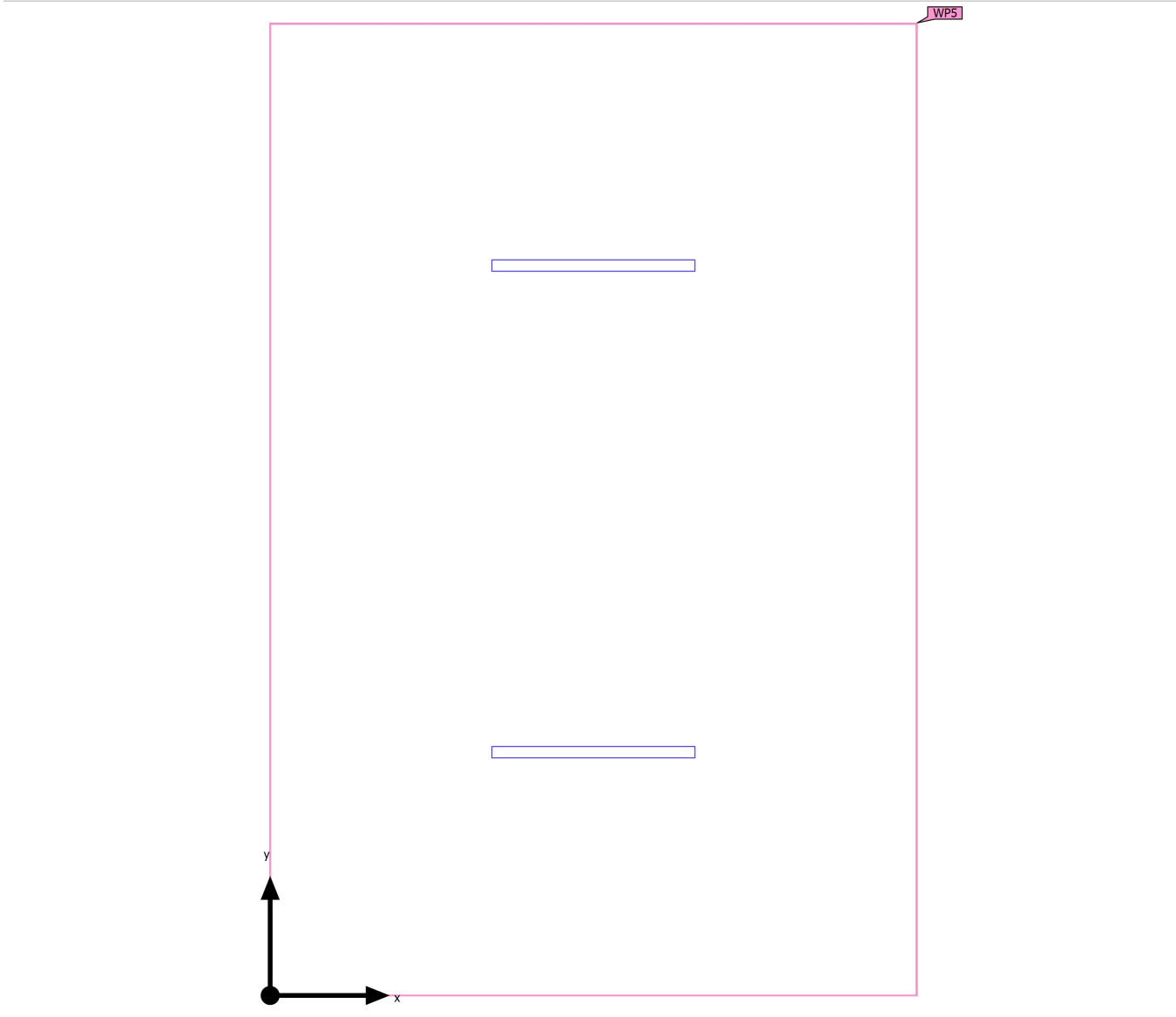
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
8966 lm	80.4 W	111.5 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Not yet a DIALux member		LPT 27 LED 1xLED 36W	40.2 W	4483 lm	111.5 lm/W

Building 1 · AF09 · Vestiário Masc. (Light scene 1)

Calculation objects



Building 1 · AF09 · Vestiário Masc. (Light scene 1)

Calculation objects

Working planes

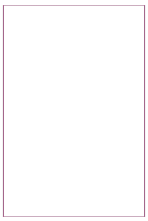
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Vestiário Masc.) Perpendicular illuminance (adaptive) Height: 1.960 m, Wall zone: 0.000 m	293 lx (≥ 200 lx) ✓	217 lx	355 lx	0.74	0.61	WP5

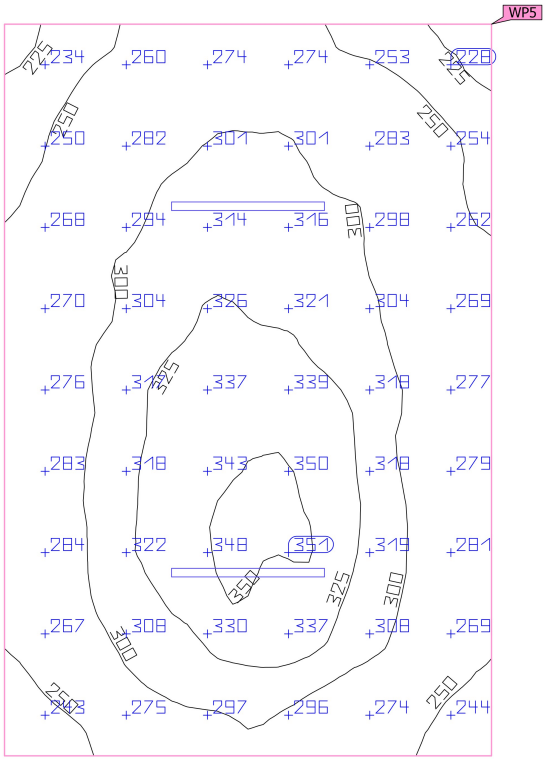
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

DIALux

Building 1 · AF09 · Vestiário Masc. (Light scene 1)

Working plane (Vestiário Masc.)





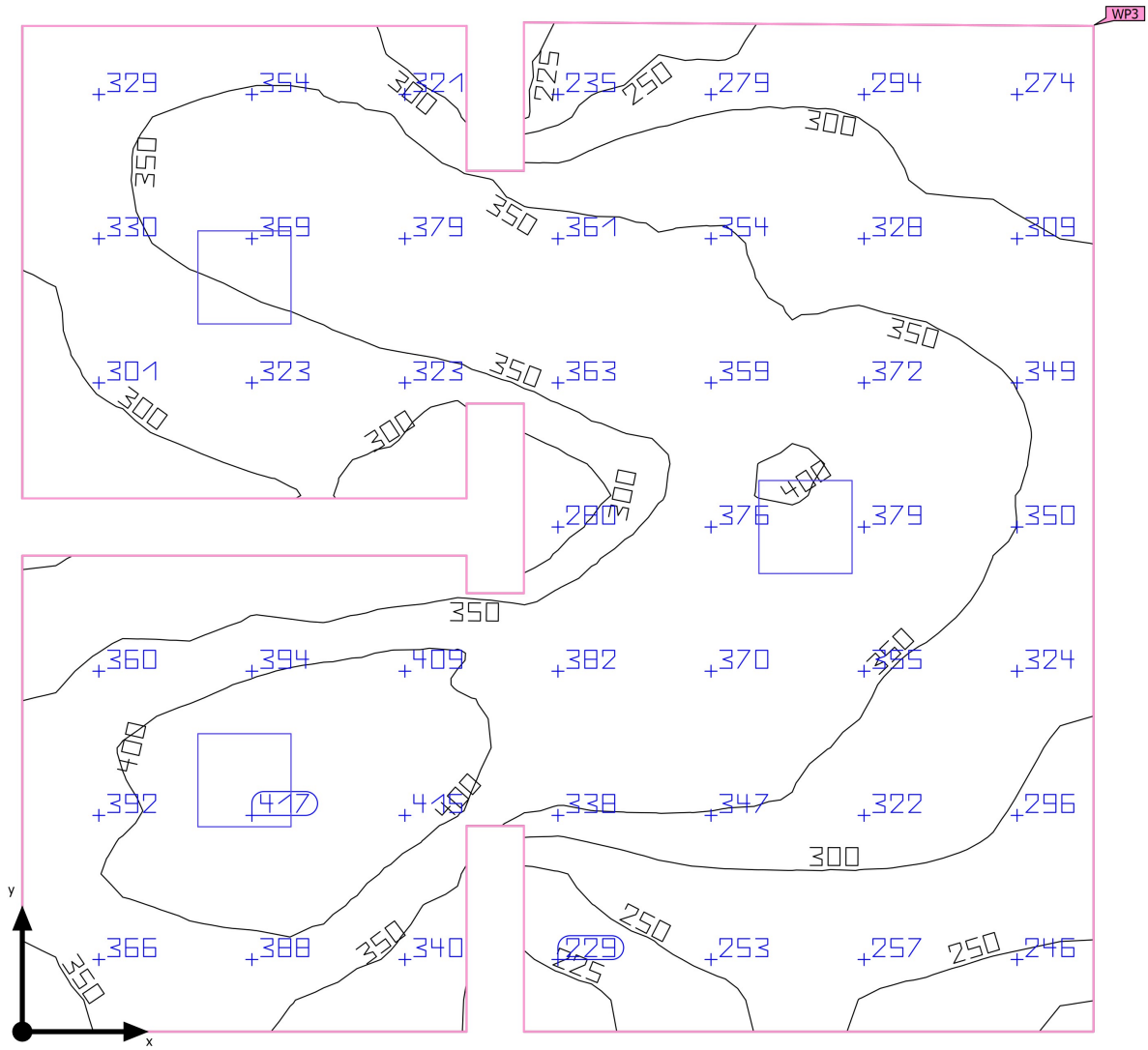
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (Vestiário Masc.) Perpendicular illuminance (adaptive) Height: 1.960 m, Wall zone: 0.000 m	293 lx (≥ 200 lx) ✓	217 lx	355 lx	0.74	0.61	WP5

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

DIALux

Building 1 · AF09 · W.C Refeitório (Light scene 1)

Summary



Ground area: 7.97 m² | Reflection factors: Ceiling: 70.0 %, Walls: 80.0 %, Floor: 50.0 % | Maintenance factor: 0.95 (fixed) | Clearance height: 3.524 m | Mounting height: 3.193 m - 3.407 m

Building 1 · AF09 · W.C Refeitório (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Working plane	$\bar{E}_{perpendicular}$	337 lx	≥ 200 lx	✓	WP3
	g_1	0.65	-	-	WP3
Consumption values	Consumption	59 kWh/a	max. 300 kWh/a	✓	
Room	Lighting power density	9.03 W/m²	-	-	
		2.68 W/m²/100 lx	-	-	

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

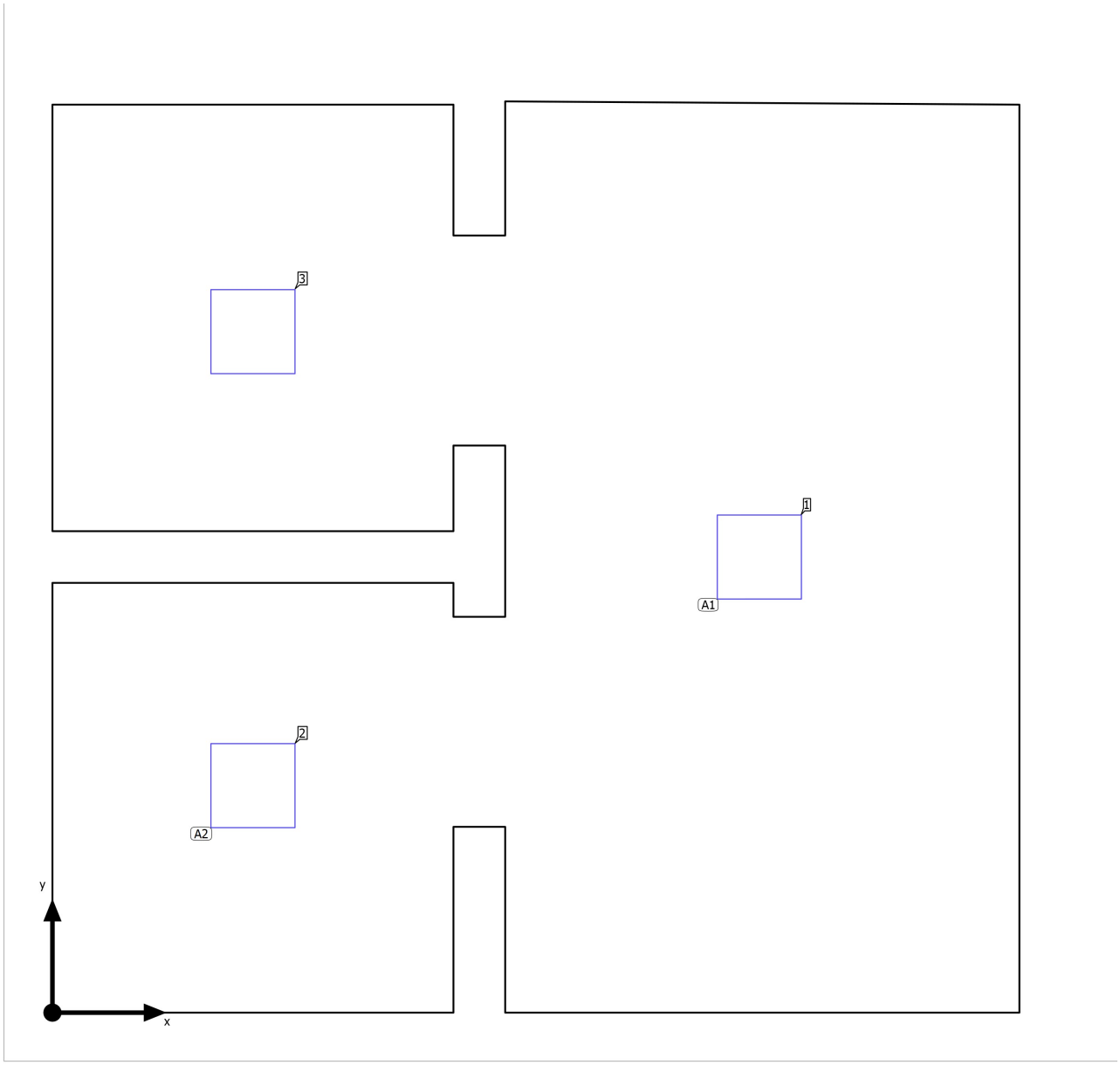
Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
3	Not yet a DIALux member		MITOTAURO EVO PE 24W 3000K	24.0 W	1751 lm	73.0 lm/W

DIALux

Building 1 · AF09 · W.C Refeitório

Luminaire layout plan



Building 1 · AF09 · W.C Refeitório

Luminaire layout plan

Not yet a DIALux member - - MITOTAURO EVO PE 24W 3000K
1x Barra de led 2835 3000K

X	Y	Mounting height	MF	Luminaire
2.186 m	1.410 m	3.301 m	0.95	1
0.620 m	0.702 m	3.193 m	0.95	2
0.620 m	2.107 m	3.407 m	0.95	3

DIALux

Building 1 · AF09 · W.C Refeitório

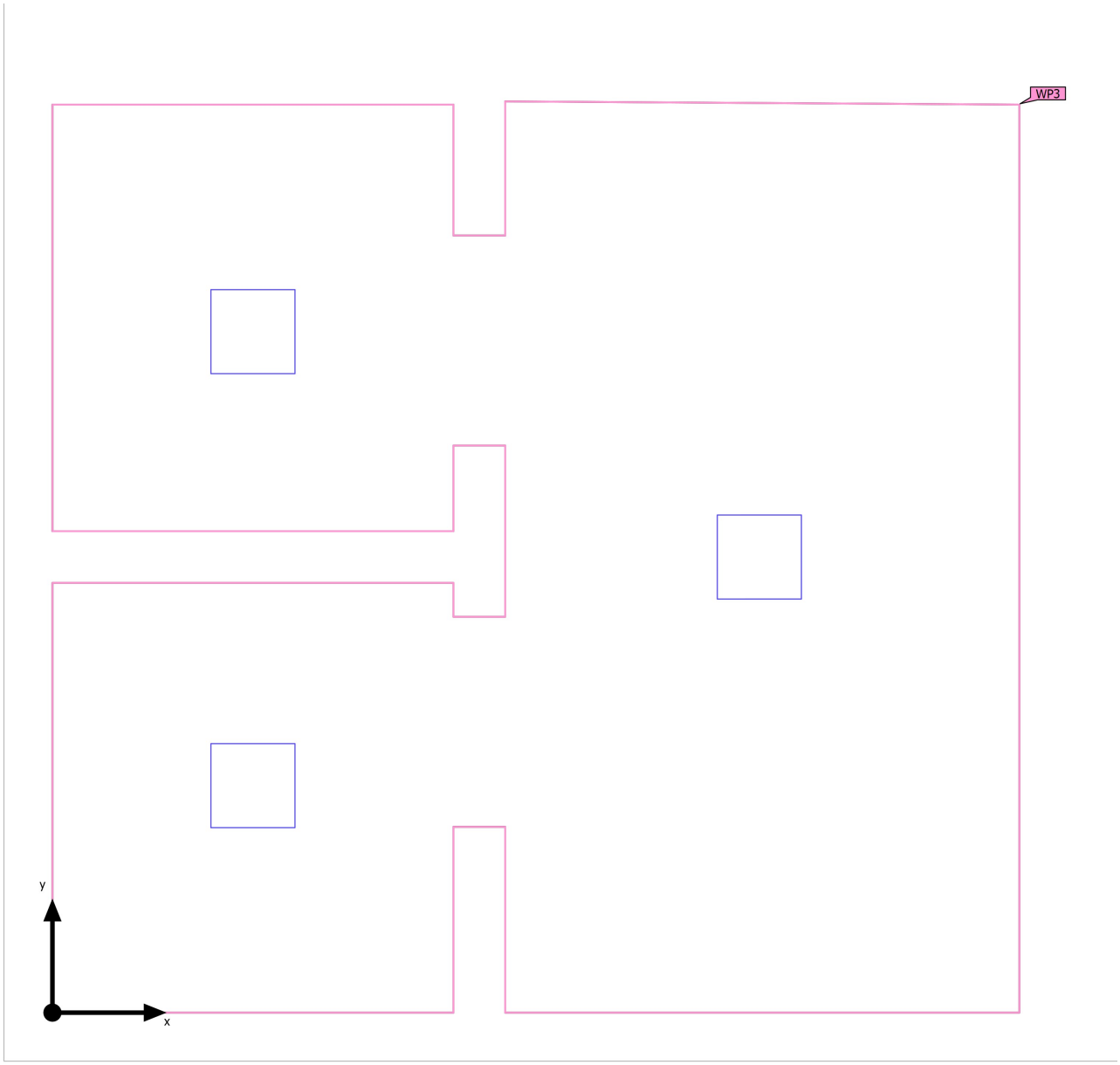
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
5253 lm	72.0 W	73.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
3	Not yet a DIALux member		MITOTAURO EVO PE 24W 3000K	24.0 W	1751 lm	73.0 lm/W

Building 1 · AF09 · W.C Refeitório (Light scene 1)

Calculation objects



Building 1 · AF09 · W.C Refeitório (Light scene 1)

Calculation objects

Working planes

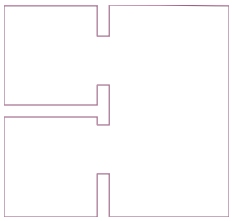
Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (W.C Refeitório) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	337 lx (≥ 200 lx) ✓	220 lx	425 lx	0.65	0.52	WP3

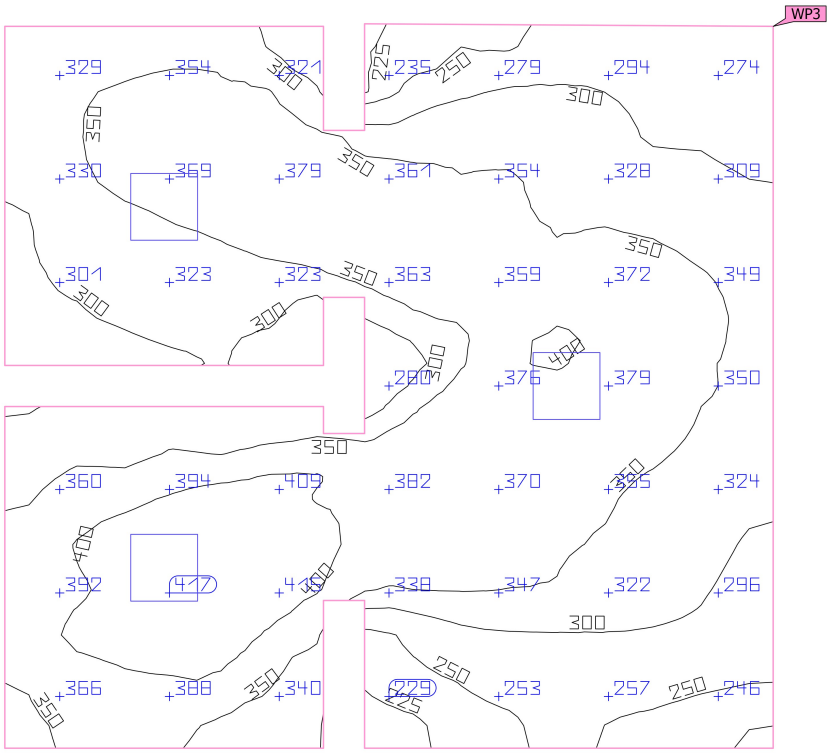
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

DIALux

Building 1 · AF09 · W.C Refeitório (Light scene 1)

Working plane (W.C Refeitório)





Properties	Ē (Target)	E_{min}	E_{max}	g_1	g_2	Index
Working plane (W.C Refeitório) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.000 m	337 lx (≥ 200 lx) ✓	220 lx	425 lx	0.65	0.52	WP3

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

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	(Engl. correlated colour temperature) Body temperature of a thermal radiator which serves to describe its light colour. Unit: Kelvin [K]. The lesser the numerical value the redder; the greater the numerical value the bluer the light colour. The colour temperature of gas-discharge lamps and semi-conductors are termed "correlated colour temperature" in contrast to the colour temperature of thermal radiators. Allocation of the light colours to the colour temperature ranges acc. to EN 12464-1: Light colour - colour 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	(Engl. colour rendering index) Designation for the colour rendering index of a luminaire or a lamp acc. to DIN 6169: 1976 or CIE 13.3: 1995. The general colour 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 colours (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 (Engl. 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 (Engl. 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

Illuminance, vertical	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.

L

LENI	(Engl. lighting energy numeric indicator) Lighting energy numeric indicator acc. to EN 15193 Unit: kWh/m² year
LLMF	(Engl. 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).
LMF	(Engl. 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).
LSF	(Engl. 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).
Luminance	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. Unit: Candela per square metre Abbreviation: cd/m² Formula symbol: L
Luminous efficacy	Ratio of the emitted luminous flux Φ [lm] to the absorbed electrical power P [W] Unit: lm/W. 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).

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

Maintenance factor	See MF
MF	(Engl. 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 x LMF x LLMF x LSF.

P

P	(Engl. 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 colour of the surface.

Glossary

RMF	(Engl. 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 which 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.